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RF EXPOSURE PART 1 TEST REPORT

Applicant Name:
Samsung Electronics Co., Ltd.
129, Samsung-ro, Maetan dong,
Yeongtong-gu, Suwon-si
Gyeonggi-do, 16677, Korea

Date of Testing:
04/23/2026 – 06/02/2026
Test Site/Locations:
Element, Columbia, MD, USA
Element, Suwon, Korea
Document Serial No.:
1M2604240033-20.A3L (Rev2)

FCC ID: **A3LSMF776JPN**

APPLICANT: **SAMSUNG ELECTRONICS CO., LTD.**

DUT Type: Portable Handset
Application Type: Certification
FCC Rule Part(s): CFR §2.1093
Model(s): SC-55G
Additional Model(s): SCG40

Equipment Class	Band & Mode	Tx Frequency	SAR		
			1g Head (W/kg)	1g Body-Worn (W/kg)	1g Body (W/kg)
PCE	GSM/GPRS/EDGE 850	824.20 - 848.80 MHz	0.72	1.19	1.19
PCE	GSM/GPRS/EDGE 1900	1850.20 - 1909.80 MHz	<0.1	1.16	1.19
PCE	UMTS 850	826.40 - 846.60 MHz	0.68	**1.23**	**1.23**
PCE	LTE Band 12	699.7 - 715.3 MHz	0.82	0.94	0.94
PCE	LTE Band 13	779.5 - 784.5 MHz	**0.84**	1.19	1.19
PCE	LTE Band 5	824.7 - 848.3 MHz	0.64	1.18	1.18
PCE	LTE Band 66	1710.7 - 1779.3 MHz	0.77	0.89	1.03
PCE	LTE Band 4	1710.7 - 1754.3 MHz	N/A	N/A	N/A
PCE	LTE Band 25	1850.7 - 1914.3 MHz	0.51	1.02	1.11
PCE	LTE Band 2	1850.7 - 1909.3 MHz	N/A	N/A	N/A
PCE	LTE Band 41	2498.5 - 2687.5 MHz	0.46	1.19	1.19
PCE	NR Band n5	826.5 - 846.5 MHz	0.76	1.20	1.20
PCE	NR Band n66	1712.5 - 1777.5 MHz	0.63	0.70	0.91
PCE	NR Band n41	2501.01 - 2685 MHz	0.47	1.21	1.21
DTS	2.4 GHz WIFI	2412 - 2472 MHz	**1.21**	**0.89**	**1.06**
NII	5 GHz WIFI	U-NII-1: 5180 - 5240 MHz U-NII-2A: 5260 - 5320 MHz U-NII-2C: 5500 - 5720 MHz U-NII-3: 5745 - 5825 MHz U-NII-4: 5845 - 5885 MHz	**0.97**	**0.83**	**1.17**
6CD/6VL	6 GHz WIFI	U-NII-5: 5935 - 6415 MHz U-NII-6: 6435 - 6515 MHz U-NII-7: 6535 - 6875 MHz U-NII-8: 6895 - 7115 MHz	**1.09**	**0.58**	**0.58**
DSS	2.4 GHz Bluetooth	2402 - 2480 MHz	**0.65**	**0.80**	**0.82**
DXX	NFC	13.56 MHz	N/A	N/A	**<0.1**
Simultaneous SAR per KDB 690783 D01v01r03:			**1.59**	1.57	1.57

Equipment Class	Band & Mode	Tx Frequency	APD (W/m^2)			Reported PD (W/m^2)
			Head	Body-Worn	Body	
6CD/6VL	6 GHz WIFI	U-NII-5: 5935 - 6415 MHz U-NII-6: 6435 - 6515 MHz U-NII-7: 6535 - 6875 MHz U-NII-8: 6895 - 7115 MHz	**7.43**	**3.90**	**3.90**	8.01

Overall SAR Summary				
RF Exposure Position	Head	Body-worn	Product Specific (Wireless Router)	Simultaneous Transmission
SAR (W/kg)	1.21	1.23	1.23	1.59
Distance (mm)	0	0	0	N/A

This wireless portable device has been shown to be capable of compliance for localized specific absorption rate (SAR) for uncontrolled environment/general population exposure limits specified in ANSI/IEEE C95.1-1992 and has been tested in accordance with the measurement procedures specified in Section 2.9 of this report; for North American frequency bands only.

I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them. Test results reported herein relate only to the item(s) tested.

RJ Ortanez
VP – Connected Technologies

The SAR Tick is an initiative of the Mobile & Wireless Forum (MWF). While a product may be considered eligible, use of the SAR Tick logo requires an agreement with the MWF. Further details can be obtained by emailing: sartick@mwfai.info.

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Revision	Description	Issue Date	Revised By
-	Initial Release	06/05/2026	**WKR005792**
Rev1	Update per TCB/R&D comments	06/10/2026	**WKR0000016173 WKR023918**
Rev2	Update per TCB comments	06/18/2026	**WKR0000016173**

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1 TEST LABORATORY INFORMATION

1.1 Introduction

This test report for device subject to testing at an accredited testing laboratory has been generated by the testing laboratory that tested the device. Measurements were performed at various locations within Element Materials Technology. Detailed location and accredited information regarding the testing laboratories are provided below.

1.2 Test Laboratories Information

1.2.1 Testing Laboratory 1

Test Firm Name	ELEMENT MATERIALS TECHNOLOGY WASHINGTON DC LLC
Test Lab Location	7185 Oakland Mills Road, Columbia, MD 21046, United States Tel. +1.410.290.6652 / Fax +1.410.290.6654
Accreditation Info.	Lab Code. (ISED): 2451B
	CAB Identifier (NIST): US0110
	ISO/IEC 17025 (A2LA): CERT #2041.01
	ilac-MRA A2LA ACCREDITED CERT #2041.01
Measurement system No.	G, L, M, N, S

1.2.2 Testing Laboratory 2

Test Firm Name	ELEMENT MATERIALS TECHNOLOGY SUWON, LTD.
Test Lab Location	**Suwon:** P136, Tower A, 13, Heungdeok 1-ro, Giheung-gu, Yongin-si, Gyeonggi-do, Republic of Korea **Unhak2:** 5, Dongbu-ro 221beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, Republic of Korea Tel. +82.31.660.7391 / Fax +82)31-660-7318
Accreditation Info.	Lab Code. (ISED): 26168
	CAB Identifier (NIST): KR0169
	ISO/IEC 17025 (A2LA): CERT #2041.04
	ilac-MRA A2LA ACCREDITED CERT #2041.04
Measurement system No.	S1, S3, S5, S6, S7

Note: For each test performed, the test site can be verified with the probe serial numbers specified in the table of Test System Verification and Equipment List.

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2 DEVICE UNDER TEST

2.1 Device Overview

Band & Mode	Operating Modes	Tx Frequency
GSM/GPRS/EDGE 850	Voice/Data	824.20 - 848.80 MHz
GSM/GPRS/EDGE 1900	Voice/Data	1850.20 - 1909.80 MHz
UMTS 850	Voice/Data	826.40 - 846.60 MHz
LTE Band 12	Voice/Data	699.7 - 715.3 MHz
LTE Band 13	Voice/Data	779.5 - 784.5 MHz
LTE Band 5	Voice/Data	824.7 - 848.3 MHz
LTE Band 66	Voice/Data	1710.7 - 1779.3 MHz
LTE Band 4	Voice/Data	1710.7 - 1754.3 MHz
LTE Band 25	Voice/Data	1850.7 - 1914.3 MHz
LTE Band 2	Voice/Data	1850.7 - 1909.3 MHz
LTE Band 41	Voice/Data	2498.5 - 2687.5 MHz
NR Band n5	Voice/Data	826.5 - 846.5 MHz
NR Band n66	Voice/Data	1712.5 - 1777.5 MHz
NR Band n41	Voice/Data	2501.01 - 2685 MHz
2.4 GHz WIFI	Voice/Data	2412 - 2472 MHz
5 GHz WIFI	Voice/Data	U-NII-1: 5180 - 5240 MHz U-NII-2A: 5260 - 5320 MHz U-NII-2C: 5500 - 5720 MHz U-NII-3: 5745 - 5825 MHz U-NII-4: 5845 - 5885 MHz
6 GHz WIFI	Voice/Data	U-NII-5: 5935 - 6415 MHz U-NII-6: 6435 - 6515 MHz U-NII-7: 6535 - 6875 MHz U-NII-8: 6895 - 7115 MHz
2.4 GHz Bluetooth	Data	2402 - 2480 MHz
NFC	Data	13.56 MHz
WPT	N/A	110 kHz - 145 kHz

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2.2 Data Referencing

Reference Device	Variant Device	Equipment Class	Mode	Comments
FCC: A3LSMF776U	FCC: A3LSMF776JPN	PCE	GSM 850	See Section 12 for fully tested data and Section 13 for spot-check data
			GSM 1900	See Section 13 for spot-check data
			UMTS Band 5	See Section 13 for spot-check data
			LTE Band 12	See Section 12 for fully tested data and Section 13 for spot-check data
			LTE Band 13	See Section 12 for fully tested data and Section 13 for spot-check data
			LTE Band 66	See Section 12 for fully tested data and Section 13 for spot-check data
			LTE Band 25	See Section 12 for fully tested data and Section 13 for spot-check data
			LTE Band 41	See Section 12 for fully tested data and Section 13 for spot-check data
			NR Band n66	See Section 12 for fully tested data and Section 13 for spot-check data
			NR Band n41	See Section 12 for fully tested data and Section 13 for spot-check data
		DTS	2.4 GHz WIFI	See Section 13 for spot-check data
		NII	5 GHz WIFI	See Section 12 for fully tested data and Section 13 for spot-check data
		6CD	6 GHz WIFI	See Section 12 for fully tested data and Section 13 for spot-check data
		DXX	NFC	Section 13 for spot-check data

Per the manufacturer's declaration, FCC ID: A3LSMF776U (parent model) and FCC ID: A3LSMF776JPN (variant model) are substantially identical with respect to materials, form factor, circuit design, antenna configuration and placement, and tune-up tolerances.

Based on the RF Exposure Data Referencing Test Plan and FCC KDB 484596, a complete SAR compliance evaluation was performed on the parent model, FCC ID: A3LSMF776U, while SAR spot-check verification was performed on the variant model, FCC ID: A3LSMF776JPN. Spot-check testing was conducted using the identified worst-case exposure configurations for each applicable exposure condition.

The variant model spot-check results were compared against the corresponding parent model SAR values in accordance with the acceptance criteria defined in the test plan. The worst SAR obtained from either the parent model or the variant model spot-check measurements was used for SAR CHAR and simultaneous transmission evaluations, as applicable.

A summary of the parent-to-variant comparison is provided in Section 13. Complete SAR compliance data for the parent model, including unlicensed transmitter evaluations, are provided in Appendix K.

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2.3 Time-Averaging Algorithm for RF Exposure Compliance

2.3.1 Time-Averaged Algorithm

This device has an open and closed configuration. For the open configuration, the device is enabled with the Qualcomm® Smart Transmit Plus, EFS v24 feature with antenna grouping and a *multi_tx_factor* of 1.27. In the closed configuration, the device is enabled with the Qualcomm® Smart Transmit Gen1 feature. These features perform time-averaging algorithm in real time to control and manage transmitting power and ensure the time-averaged RF exposure is in compliance with FCC requirements all the time. Refer to Compliance Summary document for detailed description of Qualcomm® Smart Transmit feature (report SN could be found in Section 2.11– Bibliography).

The Smart Transmit algorithm maintains the time-averaged transmit power, in turn, time-averaged RF exposure of *SAR_design_target*, below the predefined time-averaged power limit (i.e., P_{limit} for WWAN sub-6/WLAN/BT radio), for each characterized technology and band. Characterization is achieved by determining P_{limit} for WWAN sub-6/WLAN/BT that corresponds to the exposure design targets after accounting for all device design related uncertainties, i.e., SAR_design_target (<FCC SAR Limit) for sub-6 radio. The SAR characterization is denoted as SAR char in this report (see SAR Summary Section).

Smart Transmit allows the device to transmit at higher power instantaneously, as high as P_{max}, when needed, but enforces power limiting to maintain time-averaged transmit power to P_{limit}. Below table shows P_{limit} EFS settings and maximum tune up output power P_{max} configured for this EUT for various transmit conditions (Device State Index DSI). Note that the device uncertainty for WWAN sub-6/WLAN/BT is 1.0dB for this EUT.

Based on Qualcomm guidance, for *multi_tx_factor* > 1.0, the reported SAR for each tech/band/ant/DSI is scaled using min{P_{limit} **multi_tx_factor*10^(sub6 device uncertainty/10), P_{max}} in simultaneous transmission evaluations. For this device, the manufacturer declared a *multi_tx_factor* of 1.27.

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Exposure Scenario			Maximum Tune-Up Output Power*	Open / Freespace / Hotspot	RCV on	Closed / Freespace / Hotspot
Averaging Volume				1g	1g	1g
Spacing				10mm, 5 mm 0 mm	0 mm	5 mm
DSI				0 / 2	1	3 / 4
Technology/Band	Antenna	Antenna Group	P_{max}	P_{limit}	P_{limit}	P_{limit}
GSM 850	A	AG0	25.3	20.8	26.0	21.8
GSM 850	E	AG1	22.3	26.4	22.0	26.1
GSM 1900	B	AG0	19.8	18.3	26.0	18.3
UMTS 850	A	AG0	24.0	22.0	22.0	22.5
UMTS 850	E	AG1	24.5	23.0	22.0	23.5
LTE Band 12	A	AG0	24.0	22.5	26.0	23.5
LTE Band 12	E	AG1	24.0	23.0	22.0	23.5
LTE Band 13	A	AG0	24.0	22.5	26.0	23.5
LTE Band 13	E	AG1	24.0	21.0	20.0	21.0
LTE Band 5	A	AG0	23.5	21.0	25.9	22.0
LTE Band 5	E	AG1	24.5	22.5	21.5	23.0
LTE Band 66/4	B	AG0	24.0	18.5	26.0	19.0
LTE Band 66/4	H	AG1	24.5	21.0	19.0	21.5
LTE Band 25/2	B	AG0	24.0	17.5	30.3	19.0
LTE Band 25/2	H	AG1	24.5	20.5	18.5	20.5
LTE Band 41	B	AG0	22.5	19.5	28.0	20.5
LTE Band 41	H	AG1	23.0	19.0	16.5	19.0
NR Band n5	A	AG0	23.5	21.0	26.6	22.0
NR Band n5	E	AG1	24.5	22.5	21.5	23.0
NR Band n66	B	AG0	24.0	18.5	29.9	19.0
NR Band n66	H	AG1	24.5	21.0	19.0	21.5
NR Band n41 PC2	B	AG0	26.5	19.5	30.5	20.5
NR Band n41 PC2	H	AG1	27.0	19.0	16.5	19.0
2.4 GHz WIFI	G	AG1	19.0	20.4	17.5	17.0
2.4 GHz WIFI	C	AG0	19.0	19.7	17.5	17.0
2.4 GHz WIFI MIMO	G	AG1	19.0	19.7	17.5	17.0
2.4 GHz WIFI MIMO	C	AG0	19.0	19.7	17.5	17.0
5 GHz WIFI	F	AG1	17.0	17.7	15.0	17.8
5 GHz WIFI	I	AG1	17.0	18.6	15.0	17.3
5 GHz WIFI	MIMO	AG1	17.0	17.1	15.0	17.1
6 GHz WIFI	F	AG1	16.0	11.0	15.0	18.5
6 GHz WIFI	I	AG1	16.0	11.0	15.0	20.3
6 GHz WIFI	MIMO	AG1	16.0	11.0	15.0	20.1
2.4 GHz Bluetooth	G	AG1	16.0	21.2	18.8	22.0
2.4 GHz Bluetooth	C	AG0	17.4	18.0	21.9	19.0
2.4 GHz Bluetooth MIMO	G	AG1	10.5	18.0	18.8	17.8
2.4 GHz Bluetooth MIMO	C	AG0	9.9	18.0	18.8	17.8

Notes:

1. When $P_{max} < P_{limit}$ EFS, the DUT will operate at a power level up to P_{max}
2. All P_{limit} EFS and maximum tune-up output power P_{max} levels entered in above Table correspond to average power levels after accounting for duty cycle in the case of GMSK, TDD, or OFDM modulation schemes (e.g. GSM, LTE TDD, WLAN, BT).
3. Maximum tune-up output power P_{max} is used to configure EUT during RF tune up procedure. The maximum allowed output power is equal to maximum tune-up output power + 1dB device design uncertainty.
4. WLAN MIMO P_{max} and P_{limit} are defined per antenna chain.
5. Based on Qualcomm guidance, for multi_tx_factor > 1.0, the reported SAR for each tech/band/ant/DSI is scaled using min{Plimit *multi_tx_factor*10^(sub6 device uncertainty/10), Pmax} in simultaneous transmission evaluations. For this device, the manufacturer declared a multi_tx_factor of 1.27.
6. For Closed configuration, there are no separate antenna groups.

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2.4 Nominal and Maximum Output Power Specifications

This device operates using the following maximum and nominal output power specifications. SAR values were scaled to the maximum allowed power to determine compliance per KDB Publication 447498 D04v01.

Note: Targets for 802.11ax/be RU operations can be found in 802.11ax/be RU SAR Exclusion Appendix.

2.4.1 Licensed Output Power

GSM/GPRS/EDGE 850										
Antenna A										
Power Level		Voice (in dBm)	Data - Burst Average GMSK (in dBm)				Data - Burst Average 8-PSK (in dBm)			
		1 TX Slot	1 TX Slots	2 TX Slots	3 TX Slots	4 TX Slots	1 TX Slots	2 TX Slots	3 TX Slots	4 TX Slots
Pmax	Max Allowed Power	33.5	33.5	32.5	30.5	28.5	26.8	24.8	22.8	21.8
	Nominal	32.5	32.5	31.5	29.5	27.5	25.8	23.8	21.8	20.8
DSI = 0 (Open / Freespace)	Max Allowed Power	31.0	31.0	28.0	26.2	25.0	26.8	24.8	22.8	21.8
	Nominal	30.0	30.0	27.0	25.2	24.0	25.8	23.8	21.8	20.8
DSI = 1 (RCV on)	Max Allowed Power	33.5	33.5	32.5	30.5	28.5	26.8	24.8	22.8	21.8
	Nominal	32.5	32.5	31.5	29.5	27.5	25.8	23.8	21.8	20.8
DSI = 2 (Open / Hotspot)	Max Allowed Power	N/A	31.0	28.0	26.2	25.0	26.8	24.8	22.8	21.8
	Nominal	N/A	30.0	27.0	25.2	24.0	25.8	23.8	21.8	20.8
DSI = 3 (Closed / Freespace)	Max Allowed Power	32.0	32.0	29.0	27.2	26.0	26.8	24.8	22.8	21.8
	Nominal	31.0	31.0	28.0	26.2	25.0	25.8	23.8	21.8	20.8
DSI = 4 (Closed / Hotspot)	Max Allowed Power	N/A	32.0	29.0	27.2	26.0	26.8	24.8	22.8	21.8
	Nominal	N/A	31.0	28.0	26.2	25.0	25.8	23.8	21.8	20.8

GSM/GPRS/EDGE 850										
Antenna E										
Power Level		Voice (in dBm)	Data - Burst Average GMSK (in dBm)				Data - Burst Average 8-PSK (in dBm)			
		1 TX Slot	1 TX Slots	2 TX Slots	3 TX Slots	4 TX Slots	1 TX Slots	2 TX Slots	3 TX Slots	4 TX Slots
Pmax	Max Allowed Power	32.5	32.5	29.5	27.7	26.5	28.0	26.0	24.0	23.0
	Nominal	31.5	31.5	28.5	26.7	25.5	27.0	25.0	23.0	22.0
DSI = 0 (Open / Freespace)	Max Allowed Power	32.5	32.5	29.5	27.7	26.5	28.0	26.0	24.0	23.0
	Nominal	31.5	31.5	28.5	26.7	25.5	27.0	25.0	23.0	22.0
DSI = 1 (RCV on)	Max Allowed Power	32.2	32.2	29.2	27.4	26.2	28.0	26.0	24.0	23.0
	Nominal	31.2	31.2	28.2	26.4	25.2	27.0	25.0	23.0	22.0
DSI = 2 (Open / Hotspot)	Max Allowed Power	N/A	32.5	29.5	27.7	26.5	28.0	26.0	24.0	23.0
	Nominal	N/A	31.5	28.5	26.7	25.5	27.0	25.0	23.0	22.0
DSI = 3 (Closed / Freespace)	Max Allowed Power	32.5	32.5	29.5	27.7	26.5	28.0	26.0	24.0	23.0
	Nominal	31.5	31.5	28.5	26.7	25.5	27.0	25.0	23.0	22.0
DSI = 4 (Closed / Hotspot)	Max Allowed Power	N/A	32.5	29.5	27.7	26.5	28.0	26.0	24.0	23.0
	Nominal	N/A	31.5	28.5	26.7	25.5	27.0	25.0	23.0	22.0

GSM/GPRS/EDGE 1900										
Antenna B										
Power Level		Voice (in dBm)	Data - Burst Average GMSK (in dBm)				Data - Burst Average 8-PSK (in dBm)			
		1 TX Slot	1 TX Slots	2 TX Slots	3 TX Slots	4 TX Slots	1 TX Slots	2 TX Slots	3 TX Slots	4 TX Slots
Pmax	Max Allowed Power	30.0	30.0	27.0	25.2	24.0	25.0	23.0	21.0	20.0
	Nominal	29.0	29.0	26.0	24.2	23.0	24.0	22.0	20.0	19.0
DSI = 0 (Open / Freespace)	Max Allowed Power	28.5	28.5	25.5	23.7	22.5	25.0	23.0	21.0	20.0
	Nominal	27.5	27.5	24.5	22.7	21.5	24.0	22.0	20.0	19.0
DSI = 1 (RCV on)	Max Allowed Power	30.0	30.0	27.0	25.2	24.0	25.0	23.0	21.0	20.0
	Nominal	29.0	29.0	26.0	24.2	23.0	24.0	22.0	20.0	19.0
DSI = 2 (Open / Hotspot)	Max Allowed Power	N/A	28.5	25.5	23.7	22.5	25.0	23.0	21.0	20.0
	Nominal	N/A	27.5	24.5	22.7	21.5	24.0	22.0	20.0	19.0
DSI = 3 (Closed / Freespace)	Max Allowed Power	28.5	28.5	25.5	23.7	22.5	25.0	23.0	21.0	20.0
	Nominal	27.5	27.5	24.5	22.7	21.5	24.0	22.0	20.0	19.0
DSI = 4 (Closed / Hotspot)	Max Allowed Power	N/A	28.5	25.5	23.7	22.5	25.0	23.0	21.0	20.0
	Nominal	N/A	27.5	24.5	22.7	21.5	24.0	22.0	20.0	19.0

For GSM, the above powers listed are GSM burst average values.

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UMTS Band 5 (850 MHz)				
Antenna A				
Power Level		Modulated Average Output Power (in dBm)		
		3GPP WCDMA Rel 99	3GPP HSDPA Rel 5	3GPP HSUPA Rel 6
Pmax	Max Allowed Power	25.0	24.0	24.0
	Nominal	24.0	23.0	23.0
DSI = 0 (Open / Freespace)	Max Allowed Power	23.0	22.0	22.0
	Nominal	22.0	21.0	21.0
DSI = 1 (RCV on)	Max Allowed Power	23.0	22.0	22.0
	Nominal	22.0	21.0	21.0
DSI = 2 (Open / Hotspot)	Max Allowed Power	23.0	22.0	22.0
	Nominal	22.0	21.0	21.0
DSI = 3 (Closed / Freespace)	Max Allowed Power	23.5	22.5	22.5
	Nominal	22.5	21.5	21.5
DSI = 4 (Closed / Hotspot)	Max Allowed Power	23.5	22.5	22.5
	Nominal	22.5	21.5	21.5
UMTS Band 5 (850 MHz)				
Antenna E				
Power Level		Modulated Average Output Power (in dBm)		
		3GPP WCDMA Rel 99	3GPP HSDPA Rel 5	3GPP HSUPA Rel 6
Pmax	Max Allowed Power	25.5	24.5	24.5
	Nominal	24.5	23.5	23.5
DSI = 0 (Open / Freespace)	Max Allowed Power	24.0	23.0	23.0
	Nominal	23.0	22.0	22.0
DSI = 1 (RCV on)	Max Allowed Power	23.0	22.0	22.0
	Nominal	22.0	21.0	21.0
DSI = 2 (Open / Hotspot)	Max Allowed Power	24.0	23.0	23.0
	Nominal	23.0	22.0	22.0
DSI = 3 (Closed / Freespace)	Max Allowed Power	24.5	23.5	23.5
	Nominal	23.5	22.5	22.5
DSI = 4 (Closed / Hotspot)	Max Allowed Power	24.5	23.5	23.5
	Nominal	23.5	22.5	22.5

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Mode / Band	Antenna		Modulated Average Output Power (in dBm)					
			Pmax	DSI = 0 (Open / Freespace)	DSI = 1 (RCV on)	DSI = 2 (Open / Hotspot)	DSI = 3 (Closed / Freespace)	DSI = 4 (Closed / Hotspot)
LTE Band 12	A	Max Allowed Power	25.0	23.5	25.0	23.5	24.5	24.5
		Nominal	24.0	22.5	24.0	22.5	23.5	23.5
LTE Band 12	E	Max Allowed Power	25.0	24.0	23.0	24.0	24.5	24.5
		Nominal	24.0	23.0	22.0	23.0	23.5	23.5
LTE Band 13	A	Max Allowed Power	25.0	23.5	25.0	23.5	24.5	24.5
		Nominal	24.0	22.5	24.0	22.5	23.5	23.5
LTE Band 13	E	Max Allowed Power	25.0	22.0	21.0	22.0	22.0	22.0
		Nominal	24.0	21.0	20.0	21.0	21.0	21.0
LTE Band 5	A	Max Allowed Power	24.5	22.0	24.5	22.0	23.0	23.0
		Nominal	23.5	21.0	23.5	21.0	22.0	22.0
LTE Band 5	E	Max Allowed Power	25.5	23.5	22.5	23.5	24.0	24.0
		Nominal	24.5	22.5	21.5	22.5	23.0	23.0
LTE Band 66/4	B	Max Allowed Power	25.0	19.5	25.0	19.5	20.0	20.0
		Nominal	24.0	18.5	24.0	18.5	19.0	19.0
LTE Band 66/4	H	Max Allowed Power	25.5	22.0	20.0	22.0	22.5	22.5
		Nominal	24.5	21.0	19.0	21.0	21.5	21.5
LTE Band 25/2	B	Max Allowed Power	25.0	18.5	25.0	18.5	20.0	20.0
		Nominal	24.0	17.5	24.0	17.5	19.0	19.0
LTE Band 25/2	H	Max Allowed Power	25.5	21.5	19.5	21.5	21.5	21.5
		Nominal	24.5	20.5	18.5	20.5	20.5	20.5
LTE Band 41	B	Max Allowed Power	25.5	22.5	25.5	22.5	23.5	23.5
		Nominal	24.5	21.5	24.5	21.5	22.5	22.5
LTE Band 41	H	Max Allowed Power	26.0	22.0	19.5	22.0	22.0	22.0
		Nominal	25.0	21.0	18.5	21.0	21.0	21.0

For LTE TDD, the above powers listed are TDD burst average values.

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Mode / Band	Antenna		Modulated Average Output Power (in dBm)					
			Pmax	DSI = 0 (Open / Freespace)	DSI = 1 (RCV on)	DSI = 2 (Open / Hotspot)	DSI = 3 (Closed / Freespace)	DSI = 4 (Closed / Hotspot)
NR Band n5	A	Max Allowed Power	24.5	22.0	24.5	22.0	23.0	23.0
		Nominal	23.5	21.0	23.5	21.0	22.0	22.0
NR Band n5	E	Max Allowed Power	25.5	23.5	22.5	23.5	24.0	24.0
		Nominal	24.5	22.5	21.5	22.5	23.0	23.0
NR Band n66	B	Max Allowed Power	25.0	19.5	25.0	19.5	20.0	20.0
		Nominal	24.0	18.5	24.0	18.5	19.0	19.0
NR Band n66	H	Max Allowed Power	25.5	22.0	20.0	22.0	22.5	22.5
		Nominal	24.5	21.0	19.0	21.0	21.5	21.5
NR Band n41 PC2	B	Max Allowed Power	27.5	20.5	27.5	20.5	21.5	21.5
		Nominal	26.5	19.5	26.5	19.5	20.5	20.5
NR Band n41 PC2	H	Max Allowed Power	28.0	20.0	17.5	20.0	20.0	20.0
		Nominal	27.0	19.0	16.5	19.0	19.0	19.0

For NR TDD, the above powers listed are TDD burst average and framed average values

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2.4.2 2.4 GHz WLAN Output Power

The below table is applicable in the following conditions:

- Pmax
- DSI=0/2 (Open, Free, Hotspot)

Band	IEEE 802.11 Modulated Output Power (in dBm)																																			
	SISO Antenna G														SISO Antenna C														SISO in MIMO									
	b		g		n		ac		ax (6G)		be (6G)				b		g		n		ac		ax (6G)		be (6G)													
Maximum / Nominal Power	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.
2.45 GHz	20.0	19.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	20.0	19.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	20.0	19.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0
	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0
	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0

The below table is applicable in the following conditions:

- DSI=1 (RCV On)

Band	IEEE 802.11 Modulated Output Power (in dBm)																																			
	SISO Antenna G														SISO Antenna C														SISO in MIMO									
	b		g		n		ac		ax (6G)		be (6G)				b		g		n		ac		ax (6G)		be (6G)													
Maximum / Nominal Power	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.
2.45 GHz	18.5	17.5	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.5	17.5	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.5	17.5	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0
	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0
	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0

The below table is applicable in the following conditions:

- DSI=3/4 (Closed, Free, Hotspot)

Band	IEEE 802.11 Modulated Output Power (in dBm)																																			
	SISO Antenna G														SISO Antenna C														SISO in MIMO									
	b		g		n		ac		ax (6G)		be (6G)				b		g		n		ac		ax (6G)		be (6G)													
Maximum / Nominal Power	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.
2.45 GHz	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0
	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0	ch. 12	1.0
	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0	ch. 13	1.0

2.4.3 5 GHz WLAN Output Power

The below table is applicable in the following conditions:

- Pmax
- DSI = 0/2 (Open, Free, Hotspot)
- DSI = 3/4 (Closed, Free, Hotspot)

Mode	Band	IEEE 802.11 Modulated Output Power (in dBm)																																			
		SISO Antenna F														SISO Antenna I														SISO in MIMO MIMO									
		a		n		ac		ax (6G)		be (6G)				a		n		ac		ax (6G)		be (6G)				a (CDD + STBC)		n (CDD + STBC, SDM)		ac (CDD + STBC, SDM)		ax (6G) (CDD + STBC, SDM)		be (6G) (CDD + STBC, SDM)			
Maximum / Nominal Power		Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.
5 GHz WiFi (20MHz BW)	UNII-1	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0
	UNII-2A	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0
	UNII-2C	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0
	UNII-3	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0
	UNII-4	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0
5 GHz WiFi (40MHz BW)	UNII-1			18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0					18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0					18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0
				ch. 38: 15.0	14.0	ch. 38: 15.0	14.0	ch. 38: 13.5	12.5	ch. 38: 13.5	12.5					ch. 38: 15.0	14.0	ch. 38: 15.0	14.0	ch. 38: 13.5	12.5	ch. 38: 13.5	12.5					ch. 38: 15.0	14.0	ch. 38: 15.0	14.0	ch. 38: 13.5	12.5	ch. 38: 13.5	12.5		
	UNII-2A			18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0					18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0					18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0
	UNII-2C			18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0					18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0					18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0
	UNII-3			18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0					18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0					18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0
	UNII-4			18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0					18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0					18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0
5 GHz WiFi (80MHz BW)	UNII-1					16.0	15.0	14.5	13.5	14.5	13.5					16.0	15.0	14.5	13.5	14.5	13.5							16.0	15.0	14.5	13.5	14.5	13.5				
	UNII-2A					18.0	17.0	18.0	17.0	18.0	17.0					18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0					18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0
	UNII-2C					18.0	17.0	18.0	17.0	18.0	17.0					18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0					18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0
	UNII-3					18.0	17.0	18.0	17.0	18.0	17.0					18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0					18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0
	UNII-4					18.0	17.0	18.0	17.0	18.0	17.0					18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0					18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0	17.0
5 GHz WiFi (160MHz BW)	UNII-1/2A					17.0	16.0	16.0	15.0	16.0	15.0					17.0	16.0	16.0	15.0	16.0	15.0							17.0	16.0	16.0	15.0	16.0	15.0				
	UNII-2C					18.0	17.0	15.0	14.0	15.0	14.0					18.0	17.0	15.0	14.0	15.0	14.0							18.0	17.0	15.0	14.0	15.0	14.0				
	UNII-3/4					18.0	17.0	15.5	14.5	15.5	14.5					18.0	17.0	15.5	14.5	15.5	14.5							18.0	17.0	15.5	14.5	15.5	14.5				

The below table is applicable in the following conditions:

- DSI=1 (RCV On)

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Mode	Band	IEEE 802.11 Modulated Output Power (in dBm)																													
		SISO Antenna F										SISO Antenna I										SISO in MIMO MIMO									
		a		n		ac		ax (SU)		be (SU)		a		n		ac		ax (SU)		be (SU)		a (CDD + STBC)		n (CDD + STBC, SDM)		ac (CDD + STBC, SDM)		ax (SU) (CDD + STBC, SDM)		be (SU) (CDD + STBC, SDM)	
Maximum / Nominal Power		Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.
5 GHz WiFi (20MHz BW)	UNII-1	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0
	UNII-2A	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0
	UNII-2C	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0
	UNII-3	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0
	UNII-4	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0
5 GHz WiFi (40MHz BW)	UNII-1			16.0 ch. 38: 15.0	15.0 14.0	16.0 ch. 38: 15.0	15.0 14.0	16.0 ch. 38: 13.5	15.0 12.5	16.0 ch. 38: 13.5	15.0 12.5			16.0 ch. 38: 15.0	15.0 14.0	16.0 ch. 38: 15.0	15.0 14.0	16.0 ch. 38: 13.5	15.0 12.5	16.0 ch. 38: 13.5	15.0 12.5			16.0 ch. 38: 15.0	15.0 14.0	16.0 ch. 38: 15.0	15.0 14.0	16.0 ch. 38: 13.5	15.0 12.5	16.0 ch. 38: 13.5	15.0 12.5
	UNII-2A			16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0			16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0			16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0
	UNII-2C			16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0			16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0			16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0
	UNII-3			16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0			16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0			16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0
	UNII-4			16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0			16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0			16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0
5 GHz WiFi (80MHz BW)	UNII-1					16.0	15.0	14.5	13.5	14.5	13.5					16.0	15.0	14.5	13.5	14.5	13.5					16.0	15.0	14.5	13.5	14.5	13.5
	UNII-2A					16.0	15.0	16.0	15.0	16.0	15.0					16.0	15.0	16.0	15.0	16.0	15.0					16.0	15.0	16.0	15.0	16.0	15.0
	UNII-2C					16.0	15.0	16.0	15.0	16.0	15.0					16.0	15.0	16.0	15.0	16.0	15.0					16.0	15.0	16.0	15.0	16.0	15.0
	UNII-3					16.0	15.0	16.0	15.0	16.0	15.0					16.0	15.0	16.0	15.0	16.0	15.0					16.0	15.0	16.0	15.0	16.0	15.0
	UNII-4					16.0	15.0	16.0	15.0	16.0	15.0					16.0	15.0	16.0	15.0	16.0	15.0					16.0	15.0	16.0	15.0	16.0	15.0
5 GHz WiFi (160MHz BW)	UNII-1/2A					16.0	15.0	16.0	15.0	16.0	15.0					16.0	15.0	16.0	15.0	16.0	15.0					16.0	15.0	16.0	15.0	16.0	15.0
	UNII-2C					16.0	15.0	15.0	14.0	15.0	14.0					16.0	15.0	15.0	14.0	15.0	14.0					16.0	15.0	15.0	14.0	15.0	14.0
	UNII-3/4					16.0	15.0	15.5	14.5	15.5	14.5					16.0	15.0	15.5	14.5	15.5	14.5					16.0	15.0	15.5	14.5	15.5	14.5

2.4.4 6 GHz WLAN Output Power

The below table is applicable in the following conditions:

- Pmax
- DSI = 3/4 (Closed , Free ,Hotspot)

Mode	Band	IEEE 802.11 Modulated Output Power (in dBm)																													
		SISO Antenna F										SISO Antenna I										SISO in MIMO MIMO									
		a		ax (SU)		be (SU)						a		ax (SU)		be (SU)						a (CDD + STBC)		ax (SU) (CDD + STBC, SDM)		be (SU) (CDD + STBC, SDM)					
Maximum / Nominal Power		Max	Nom.	Max	Nom.	Max	Nom.					Max	Nom.	Max	Nom.	Max	Nom.					Max	Nom.	Max	Nom.	Max	Nom.				
6 GHz WIFI (20MHz BW) - LPI	UNII-5	11.0 ch. 2: 7.5	10.0 6.5	11.0 ch. 2: 8.0	10.0 7.0	11.0 ch. 2: 8.0	10.0 7.0					11.0 ch. 2: 7.5	10.0 6.5	11.0 ch. 2: 8.0	10.0 7.0	11.0 ch. 2: 8.0	10.0 7.0					11.0 ch. 2: 7.5	10.0 6.5	11.0 ch. 2: 8.0	10.0 7.0	11.0 ch. 2: 8.0	10.0 7.0				
	UNII-6	11.0	10.0	11.0	10.0	11.0	10.0					11.0	10.0	11.0	10.0	11.0	10.0					11.0	10.0	11.0	10.0	11.0	10.0				
	UNII-7	11.0	10.0	11.0	10.0	11.0	10.0					11.0	10.0	11.0	10.0	11.0	10.0					11.0	10.0	11.0	10.0	11.0	10.0				
	UNII-8	11.0	10.0	11.0	10.0	11.0	10.0					11.0	10.0	11.0	10.0	11.0	10.0					11.0	10.0	11.0	10.0	11.0	10.0				
6 GHz WIFI (40MHz BW) - LPI	UNII-5			13.0	12.0	13.0	12.0							13.0	12.0	13.0	12.0							13.0	12.0	13.0	12.0				
	UNII-6			13.0	12.0	13.0	12.0							13.0	12.0	13.0	12.0							13.0	12.0	13.0	12.0				
	UNII-7			13.0	12.0	13.0	12.0							13.0	12.0	13.0	12.0							13.0	12.0	13.0	12.0				
	UNII-8			13.0	12.0	13.0	12.0							13.0	12.0	13.0	12.0							13.0	12.0	13.0	12.0				
6 GHz WIFI (80MHz BW) - LPI	UNII-5			16.0	15.0	16.0	15.0							16.0	15.0	16.0	15.0							16.0	15.0	16.0	15.0				
	UNII-6			16.0	15.0	16.0	15.0							16.0	15.0	16.0	15.0							16.0	15.0	16.0	15.0				
	UNII-7			16.0	15.0	16.0	15.0							16.0	15.0	16.0	15.0							16.0	15.0	16.0	15.0				
	UNII-8			16.0	15.0	16.0	15.0							16.0	15.0	16.0	15.0							16.0	15.0	16.0	15.0				
6 GHz WIFI (160MHz BW) - LPI	UNII-5			15.0	14.0	15.0	14.0							15.0	14.0	15.0	14.0							15.0	14.0	15.0	14.0				
	UNII-6			15.0	14.0	15.0	14.0							15.0	14.0	15.0	14.0							15.0	14.0	15.0	14.0				
	UNII-7			15.0	14.0	15.0	14.0							15.0	14.0	15.0	14.0							15.0	14.0	15.0	14.0				
	UNII-8			15.0	14.0	15.0	14.0							15.0	14.0	15.0	14.0							15.0	14.0	15.0	14.0				
6 GHz WIFI (320MHz BW) - LPI	UNII-5					15.0	14.0									15.0	14.0									15.0	14.0				
	UNII-6					15.0	14.0									15.0	14.0									15.0	14.0				
	UNII-7					15.0	14.0									15.0	14.0									15.0	14.0				
	UNII-8					15.0	14.0									15.0	14.0									15.0	14.0				
Mode	Band	IEEE 802.11 Modulated Output Power (in dBm)																													
		SISO Antenna F										SISO Antenna I										SISO in MIMO MIMO									
		a		ax (SU)		be (SU)						a		ax (SU)		be (SU)						a (CDD + STBC)		ax (SU) (CDD + STBC, SDM)		be (SU) (CDD + STBC, SDM)					
Maximum / Nominal Power		Max	Nom.	Max	Nom.	Max	Nom.					Max	Nom.	Max	Nom.	Max	Nom.					Max	Nom.	Max	Nom.	Max	Nom.				
6 GHz WIFI (20MHz BW) - SP	UNII-5	17.0 ch. 2: 7.5	16.0 6.5	17.0 ch. 2: 8.0	16.0 7.0	17.0 ch. 2: 8.0	16.0 7.0					17.0 ch. 2: 7.5	16.0 6.5	17.0 ch. 2: 8.0	16.0 7.0	17.0 ch. 2: 8.0	16.0 7.0					17.0 ch. 2: 7.5	16.0 6.5	17.0 ch. 2: 8.0	16.0 7.0	17.0 ch. 2: 8.0	16.0 7.0				
	UNII-7	17.0	16.0	17.0	16.0	17.0	16.0					17.0	16.0	17.0	16.0	17.0	16.0					17.0	16.0	17.0	16.0	17.0	16.0				
6 GHz WIFI (40MHz BW) - SP	UNII-5			17.0	16.0	17.0	16.0							17.0	16.0	17.0	16.0							17.0	16.0	17.0	16.0				
	UNII-7			17.0	16.0	17.0	16.0							17.0	16.0	17.0	16.0							17.0	16.0	17.0	16.0				
6 GHz WIFI (80MHz BW) - SP	UNII-5			16.0	15.0	16.0	15.0							16.0	15.0	16.0	15.0							16.0	15.0	16.0	15.0				
	UNII-7			16.0	15.0	16.0	15.0							16.0	15.0	16.0	15.0							16.0	15.0	16.0	15.0				
6 GHz WIFI (160MHz BW) - SP	UNII-5			15.0	14.0	15.0	14.0							15.0	14.0	15.0	14.0							15.0	14.0	15.0	14.0				
	UNII-7			15.0	14.0	15.0	14.0							15.0	14.0	15.0	14.0							15.0	14.0	15.0	14.0				
6 GHz WIFI (320MHz BW) - SP	UNII-5					15.0	14.0									15.0	14.0									15.0	14.0				

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Mode	Band	IEEE 802.11 Modulated Output Power (in dBm)																	
		SISO Antenna F						SISO Antenna I						SISO in MIMO					
		a		ax (SU)		be (SU)		a		ax (SU)		be (SU)		a (CDD + STBC)		ax (SU) (CDD + STBC, SDM)		be (SU) (CDD + STBC, SDM)	
Maximum / Nominal Power		Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.
6 GHz WIFI (20MHz BW) - VLP	UNII-5	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0
	UNII-6	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0
	UNII-7	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0
	UNII-8	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0
6 GHz WIFI (40MHz BW) - VLP	UNII-5			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0
	UNII-6			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0
	UNII-7			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0
	UNII-8			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0
6 GHz WIFI (80MHz BW) - VLP	UNII-5			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
	UNII-6			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
	UNII-7			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
	UNII-8			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
6 GHz WIFI (160MHz BW) - VLP	UNII-5			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
	UNII-6			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
	UNII-7			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
	UNII-8			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
6 GHz WIFI (320MHz BW) - VLP	UNII-5					12.0	11.0					12.0	11.0					12.0	11.0
	UNII-6					12.0	11.0					12.0	11.0					12.0	11.0
	UNII-7					12.0	11.0					12.0	11.0					12.0	11.0
	UNII-8					12.0	11.0					12.0	11.0					12.0	11.0

The below table is applicable in the following conditions:

- DSI = 0/2 (Open, Free, Hotspot)

Mode	Band	IEEE 802.11 Modulated Output Power (in dBm)																	
		SISO Antenna F						SISO Antenna I						SISO in MIMO					
		a		ax (SU)		be (SU)		a		ax (SU)		be (SU)		a (CDD + STBC)		ax (SU) (CDD + STBC, SDM)		be (SU) (CDD + STBC, SDM)	
Maximum / Nominal Power		Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.
6 GHz WIFI (20MHz BW) - LPI	UNII-5	11.0 ch. 2: 7.5	10.0 6.5	11.0 ch. 2: 8.0	10.0 7.0	11.0 ch. 2: 8.0	10.0 7.0	11.0 ch. 2: 7.5	10.0 6.5	11.0 ch. 2: 8.0	10.0 7.0	11.0 ch. 2: 8.0	10.0 7.0	11.0 ch. 2: 7.5	10.0 6.5	11.0 ch. 2: 8.0	10.0 7.0	11.0 ch. 2: 8.0	10.0 7.0
	UNII-6	11.0	10.0	11.0	10.0	11.0	10.0	11.0	10.0	11.0	10.0	11.0	10.0	11.0	10.0	11.0	10.0	11.0	10.0
	UNII-7	11.0	10.0	11.0	10.0	11.0	10.0	11.0	10.0	11.0	10.0	11.0	10.0	11.0	10.0	11.0	10.0	11.0	10.0
	UNII-8	11.0	10.0	11.0	10.0	11.0	10.0	11.0	10.0	11.0	10.0	11.0	10.0	11.0	10.0	11.0	10.0	11.0	10.0
6 GHz WIFI (40MHz BW) - LPI	UNII-5			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
	UNII-6			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
	UNII-7			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
	UNII-8			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
6 GHz WIFI (80MHz BW) - LPI	UNII-5			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
	UNII-6			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
	UNII-7			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
	UNII-8			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
6 GHz WIFI (160MHz BW) - LPI	UNII-5			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
	UNII-6			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
	UNII-7			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
	UNII-8			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
6 GHz WIFI (320MHz BW) - LPI	UNII-5					12.0	11.0					12.0	11.0					12.0	11.0
	UNII-6					12.0	11.0					12.0	11.0					12.0	11.0
	UNII-7					12.0	11.0					12.0	11.0					12.0	11.0
	UNII-8					12.0	11.0					12.0	11.0					12.0	11.0

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Mode	Band	IEEE 802.11 Modulated Output Power (in dBm)																	
		SISO Antenna F						SISO Antenna I						SISO in MIMO MIMO					
		a		ax (SU)		be (SU)		a		ax (SU)		be (SU)		a (CDD + STBC)		ax (SU) (CDD + STBC, SDM)		be (SU) (CDD + STBC, SDM)	
Maximum / Nominal Power		Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.
6 GHz WIFI (20MHz BW) - SP	UNII-5	12.0 ch. 2: 7.5	11.0 6.5	12.0 ch. 2: 8.0	11.0 7.0	12.0 ch. 2: 8.0	11.0 7.0	12.0 ch. 2: 7.5	11.0 6.5	12.0 ch. 2: 8.0	11.0 7.0	12.0 ch. 2: 8.0	11.0 7.0	12.0 ch. 2: 7.5	11.0 6.5	12.0 ch. 2: 8.0	11.0 7.0	12.0 ch. 2: 8.0	11.0 7.0
	UNII-7	12.0	11.0	12.0	11.0	12.0	11.0	12.0	11.0	12.0	11.0	12.0	11.0	12.0	11.0	12.0	11.0	12.0	11.0
6 GHz WIFI (40MHz BW) - SP	UNII-5			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
	UNII-7			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
6 GHz WIFI (80MHz BW) - SP	UNII-5			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
	UNII-7			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
6 GHz WIFI (160MHz BW) - SP	UNII-5			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
	UNII-7			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
6 GHz WIFI (320MHz BW) - SP	UNII-5					12.0	11.0					12.0	11.0					12.0	11.0

Mode	Band	IEEE 802.11 Modulated Output Power (in dBm)																	
		SISO Antenna F						SISO Antenna I						SISO in MIMO MIMO					
		a		ax (SU)		be (SU)		a		ax (SU)		be (SU)		a (CDD + STBC)		ax (SU) (CDD + STBC, SDM)		be (SU) (CDD + STBC, SDM)	
Maximum / Nominal Power		Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.
6 GHz WIFI (20MHz BW) - VLP	UNII-5	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0
	UNII-6	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0
	UNII-7	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0
	UNII-8	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0
6 GHz WIFI (40MHz BW) - VLP	UNII-5			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0
	UNII-6			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0
	UNII-7			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0
	UNII-8			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0
6 GHz WIFI (80MHz BW) - VLP	UNII-5			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
	UNII-6			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
	UNII-7			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
	UNII-8			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
6 GHz WIFI (160MHz BW) - VLP	UNII-5			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
	UNII-6			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
	UNII-7			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
	UNII-8			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
6 GHz WIFI (320MHz BW) - VLP	UNII-5					12.0	11.0					12.0	11.0					12.0	11.0
	UNII-6					12.0	11.0					12.0	11.0					12.0	11.0
	UNII-7					12.0	11.0					12.0	11.0					12.0	11.0
	UNII-8					12.0	11.0					12.0	11.0					12.0	11.0

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The below table is applicable in the following conditions:

- DSI = 1 (RCV On)

Mode	Band	IEEE 802.11 Modulated Output Power (in dBm)																	
		SISO Antenna F						SISO Antenna I						SISO in MIMO					
		a		ax (SU)		be (SU)		a		ax (SU)		be (SU)		a (CDD + STBC)		ax (SU) (CDD + STBC, SDM)		be (SU) (CDD + STBC, SDM)	
Maximum / Nominal Power		Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.
6 GHz WIFI (20MHz BW) - LPI	UNII-5	11.0 ch. 2: 7.5	10.0 6.5	11.0 ch. 2: 8.0	10.0 7.0	11.0 ch. 2: 8.0	10.0 7.0	11.0 ch. 2: 7.5	10.0 6.5	11.0 ch. 2: 8.0	10.0 7.0	11.0 ch. 2: 8.0	10.0 7.0	11.0 ch. 2: 7.5	10.0 6.5	11.0 ch. 2: 8.0	10.0 7.0	11.0 ch. 2: 8.0	10.0 7.0
	UNII-6	11.0	10.0	11.0	10.0	11.0	10.0	11.0	10.0	11.0	10.0	11.0	10.0	11.0	10.0	11.0	10.0	11.0	10.0
	UNII-7	11.0	10.0	11.0	10.0	11.0	10.0	11.0	10.0	11.0	10.0	11.0	10.0	11.0	10.0	11.0	10.0	11.0	10.0
	UNII-8	11.0	10.0	11.0	10.0	11.0	10.0	11.0	10.0	11.0	10.0	11.0	10.0	11.0	10.0	11.0	10.0	11.0	10.0
6 GHz WIFI (40MHz BW) - LPI	UNII-5			13.0	12.0	13.0	12.0			13.0	12.0	13.0	12.0			13.0	12.0	13.0	12.0
	UNII-6			13.0	12.0	13.0	12.0			13.0	12.0	13.0	12.0			13.0	12.0	13.0	12.0
	UNII-7			13.0	12.0	13.0	12.0			13.0	12.0	13.0	12.0			13.0	12.0	13.0	12.0
	UNII-8			13.0	12.0	13.0	12.0			13.0	12.0	13.0	12.0			13.0	12.0	13.0	12.0
6 GHz WIFI (80MHz BW) - LPI	UNII-5			16.0	15.0	16.0	15.0			16.0	15.0	16.0	15.0			16.0	15.0	16.0	15.0
	UNII-6			16.0	15.0	16.0	15.0			16.0	15.0	16.0	15.0			16.0	15.0	16.0	15.0
	UNII-7			16.0	15.0	16.0	15.0			16.0	15.0	16.0	15.0			16.0	15.0	16.0	15.0
	UNII-8			16.0	15.0	16.0	15.0			16.0	15.0	16.0	15.0			16.0	15.0	16.0	15.0
6 GHz WIFI (160MHz BW) - LPI	UNII-5			15.0	14.0	15.0	14.0			15.0	14.0	15.0	14.0			15.0	14.0	15.0	14.0
	UNII-6			15.0	14.0	15.0	14.0			15.0	14.0	15.0	14.0			15.0	14.0	15.0	14.0
	UNII-7			15.0	14.0	15.0	14.0			15.0	14.0	15.0	14.0			15.0	14.0	15.0	14.0
	UNII-8			15.0	14.0	15.0	14.0			15.0	14.0	15.0	14.0			15.0	14.0	15.0	14.0
6 GHz WIFI (320MHz BW) - LPI	UNII-5					15.0	14.0					15.0	14.0					15.0	14.0
	UNII-6					15.0	14.0					15.0	14.0					15.0	14.0
	UNII-7					15.0	14.0					15.0	14.0					15.0	14.0
	UNII-8					15.0	14.0					15.0	14.0					15.0	14.0

Mode	Band	IEEE 802.11 Modulated Output Power (in dBm)																	
		SISO Antenna F						SISO Antenna I						SISO in MIMO					
		a		ax (SU)		be (SU)		a		ax (SU)		be (SU)		a (CDD + STBC)		ax (SU) (CDD + STBC, SDM)		be (SU) (CDD + STBC, SDM)	
Maximum / Nominal Power		Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.
6 GHz WIFI (20MHz BW) - SP	UNII-5	16.0 ch. 2: 7.5	15.0 6.5	16.0 ch. 2: 8.0	15.0 7.0	16.0 ch. 2: 8.0	15.0 7.0	16.0 ch. 2: 7.5	15.0 6.5	16.0 ch. 2: 8.0	15.0 7.0	16.0 ch. 2: 8.0	15.0 7.0	16.0 ch. 2: 7.5	15.0 6.5	16.0 ch. 2: 8.0	15.0 7.0	16.0 ch. 2: 8.0	15.0 7.0
	UNII-7	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0
6 GHz WIFI (40MHz BW) - SP	UNII-5			16.0	15.0	16.0	15.0			16.0	15.0	16.0	15.0			16.0	15.0	16.0	15.0
	UNII-7			16.0	15.0	16.0	15.0			16.0	15.0	16.0	15.0			16.0	15.0	16.0	15.0
6 GHz WIFI (80MHz BW) - SP	UNII-5			16.0	15.0	16.0	15.0			16.0	15.0	16.0	15.0			16.0	15.0	16.0	15.0
	UNII-7			16.0	15.0	16.0	15.0			16.0	15.0	16.0	15.0			16.0	15.0	16.0	15.0
6 GHz WIFI (160MHz BW) - SP	UNII-5			15.0	14.0	15.0	14.0			15.0	14.0	15.0	14.0			15.0	14.0	15.0	14.0
	UNII-7			15.0	14.0	15.0	14.0			15.0	14.0	15.0	14.0			15.0	14.0	15.0	14.0
6 GHz WIFI (320MHz BW) - SP	UNII-5					15.0	14.0					15.0	14.0					15.0	14.0

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Mode	Band	IEEE 802.11 Modulated Output Power (in dBm)																	
		SISO Antenna F						SISO Antenna I						SISO in MIMO MIMO					
		a		ax (SU)		be (SU)		a		ax (SU)		be (SU)		a (CDD + STBC)		ax (SU) (CDD + STBC, SDM)		be (SU) (CDD + STBC, SDM)	
Maximum / Nominal Power		Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.
6 GHz WIFI (20MHz BW) - VLP	UNII-5	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0
	UNII-6	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0
	UNII-7	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0
	UNII-8	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0
6 GHz WIFI (40MHz BW) - VLP	UNII-5			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0
	UNII-6			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0
	UNII-7			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0
	UNII-8			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0
6 GHz WIFI (80MHz BW) - VLP	UNII-5			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
	UNII-6			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
	UNII-7			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
	UNII-8			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
6 GHz WIFI (160MHz BW) - VLP	UNII-5			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
	UNII-6			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
	UNII-7			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
	UNII-8			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
6 GHz WIFI (320MHz BW) - VLP	UNII-5					12.0	11.0					12.0	11.0					12.0	11.0
	UNII-6					12.0	11.0					12.0	11.0					12.0	11.0
	UNII-7					12.0	11.0					12.0	11.0					12.0	11.0
	UNII-8					12.0	11.0					12.0	11.0					12.0	11.0

2.4.5 2.4 GHz Maximum Bluetooth Output Power

The below table is applicable in the following conditions:

- Pmax For all DSI

Mode	Data Rate	Modulated Output Power (in dBm)							
		Single Antenna				Each Chain in Dual Mode			
		Antenna G		Antenna C		Antenna G		Antenna C	
Maximum / Nominal Power		Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.
Bluetooth	1Mbps	18.0	17.0	19.0	18.0	12.5	11.5	11.5	10.5
Bluetooth EDR	2Mbps	14.5	13.5	16.0	15.0	9.5	8.5	9.0	8.0
Bluetooth EDR	3Mbps	14.5	13.5	16.0	15.0	9.5	8.5	9.0	8.0
Bluetooth LE	1Mbps	17.0	16.0	19.0	18.0	11.5	10.5	11.5	10.5
Bluetooth LE	2Mbps	17.0	16.0	19.0	18.0	11.5	10.5	11.5	10.5
Bluetooth LE	125kbps	8.0	7.0	9.0	8.0	N/A	N/A	N/A	N/A
Bluetooth LE	500kbps	8.0	7.0	9.0	8.0	N/A	M/A	N/A	N/A

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2.5 DUT Antenna Locations

A diagram showing the location of the device antennas for both open and closed configurations can be found in DUT Antenna Diagram and SAR Test Setup Photographs Appendix. When the device is open, the overall dimensions of this device are > 9 x 5 cm. Since the diagonal dimension of this device when open is > 160 mm and <200 mm, it is considered a “phablet.” and operates similar to a traditional portable handset. In the closed configuration, only a simple display/interaction of notifications occurs and overall dimensions are < 9 x5 cm. Therefore, when the device is closed, the only testing considered is for body-worn and hotspot.

Table 2-1
Device Edges/Sides for Open Configuration SAR Testing

Antenna	Back	Front	Top	Bottom	Right	Left
A	Yes	Yes	No	Yes	Yes	No
B	Yes	Yes	No	Yes	No	Yes
C	Yes	Yes	No	Yes	No	Yes
E	Yes	Yes	Yes	No	No	Yes
F	Yes	Yes	Yes	No	No	Yes
G	Yes	Yes	Yes	No	No	Yes
I	Yes	Yes	Yes	No	Yes	No
F+I MIMO	Yes	Yes	Yes	No	Yes	Yes
NFC	Yes	Yes	Yes	Yes	Yes	Yes

Table 2-2
Device Edges/Sides for Closed Configuration SAR Testing

Antenna	Back	Front	Top	Bottom	Right	Left
A	Yes	Yes	No	Yes	Yes	No
B	Yes	Yes	No	Yes	No	Yes
C	Yes	Yes	Yes	Yes	No	Yes
E	Yes	Yes	Yes	Yes	No	Yes
F	Yes	Yes	No	Yes	No	Yes
G	Yes	Yes	No	Yes	No	Yes
I	Yes	Yes	Yes	Yes	Yes	No
F+I MIMO	Yes	Yes	Yes	Yes	Yes	Yes
NFC	Yes	Yes	Yes	Yes	Yes	Yes

Note: Particular DUT edges were not required to be evaluated for wireless router SAR or phablet SAR if the edges were greater than 2.5 cm from the transmitting antenna according to FCC KDB Publication 648474 D04. The distances between the transmit antennas and the edges of the device are included in the filing. When wireless router mode is enabled UNII- 2A, U-NII-2C, U-NII-4, and WIFI6E SP/LPI operations are disabled.

2.6 Near Field Communications (NFC) Antenna

This DUT has NFC operations. The NFC antenna is integrated into the device for this model. Therefore, all SAR tests were performed with the device which already incorporates the NFC antenna. A diagram showing the location of the NFC antenna can be found in DUT Antenna Diagram & SAR Test Setup Photographs Appendix.

2.7 Simultaneous Transmission Capabilities

According to FCC KDB Publication 447498 D04v01, transmitters are considered to be operating simultaneously when there is overlapping transmission, with the exception of transmissions during network hand-offs with maximum hand-off duration less than 30 seconds.

This device contains multiple transmitters that may operate simultaneously, and therefore requires a simultaneous transmission analysis according to FCC KDB Publication 447498 D04v01 procedures.

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Table 2-3
Simultaneous Transmission Scenarios

No.	Capable Transmit Configuration	Head	Body-Worn Accessory	Wireless Router	Hotspot	Notes
1	GSM voice + 2.4 GHz WLAN MIMO + 5 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
2	GSM voice + 2.4 GHz WLAN MIMO + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
3	GSM voice + 2.4 GHz WLAN MIMO + 5 GHz WLAN SISO	Yes	Yes	N/A	Yes	
4	GSM voice + 2.4 GHz WLAN MIMO + 6 GHz WLAN SISO	Yes	Yes	N/A	Yes	
5	GSM voice + 2.4 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
6	GSM voice + 2.4 GHz WLAN SISO	Yes	Yes	N/A	Yes	
7	GSM voice + 2.4 GHz WLAN SISO + 5 GHz WLAN SISO	Yes	Yes	N/A	Yes	
8	GSM voice + 2.4 GHz WLAN SISO + 6 GHz WLAN SISO	Yes	Yes	N/A	Yes	
9	GSM voice + 2.4 GHz WLAN SISO + 5 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
10	GSM voice + 2.4 GHz WLAN SISO + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
11	GSM voice + 5 GHz WLAN SISO	Yes	Yes	N/A	Yes	
12	GSM voice + 6 GHz WLAN SISO	Yes	Yes	N/A	Yes	
13	GSM voice + 5 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
14	GSM voice + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
15	GSM voice + 2.4 GHz Bluetooth Ant G + 2.4 GHz WLAN Ant C + 5 GHz WLAN MIMO	Yes*	Yes	N/A	Yes	* Bluetooth Tethering is considered for Antenna G
16	GSM voice + 2.4 GHz Bluetooth Ant G + 2.4 GHz WLAN Ant C + 6 GHz WLAN MIMO	Yes*	Yes	N/A	Yes	* Bluetooth Tethering is considered for Antenna G
17	GSM voice + 2.4 GHz Bluetooth Ant G + 2.4 GHz WLAN Ant C + 5 GHz WLAN SISO	Yes*	Yes	N/A	Yes	* Bluetooth Tethering is considered for Antenna G
18	GSM voice + 2.4 GHz Bluetooth Ant G + 2.4 GHz WLAN Ant C + 6 GHz WLAN SISO	Yes*	Yes	N/A	Yes	* Bluetooth Tethering is considered for Antenna G
19	GSM voice + 2.4 GHz Bluetooth Ant G + 2.4 GHz WLAN Ant C	Yes*	Yes	N/A	Yes	* Bluetooth Tethering is considered for Antenna G
20	GSM voice + 2.4 GHz Bluetooth Ant G + 5 GHz WLAN SISO	Yes*	Yes	N/A	Yes	* Bluetooth Tethering is considered for Antenna G
21	GSM voice + 2.4 GHz Bluetooth Ant G + 5 GHz WLAN SISO	Yes*	Yes	N/A	Yes	* Bluetooth Tethering is considered for Antenna G
22	GSM voice + 2.4 GHz Bluetooth Ant G + 5 GHz WLAN MIMO	Yes*	Yes	N/A	Yes	* Bluetooth Tethering is considered for Antenna G
23	GSM voice + 2.4 GHz Bluetooth Ant G + 6 GHz WLAN MIMO	Yes*	Yes	N/A	Yes	* Bluetooth Tethering is considered for Antenna G
24	GSM voice + 2.4 GHz Bluetooth Ant G	Yes*	Yes	N/A	Yes	* Bluetooth Tethering is considered for Antenna G
25	GSM voice + 2.4 GHz Bluetooth MIMO + 5 GHz WLAN SISO	Yes	Yes	N/A	Yes	
26	GSM voice + 2.4 GHz Bluetooth MIMO + 6 GHz WLAN SISO	Yes	Yes	N/A	Yes	
27	GSM voice + 2.4 GHz Bluetooth MIMO	Yes	Yes	N/A	Yes	
28	GSM voice + 2.4 GHz Bluetooth MIMO + 5 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
29	GSM voice + 2.4 GHz Bluetooth MIMO + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
30	GSM voice + 2.4 GHz Bluetooth Ant C	Yes	Yes	N/A	Yes	
31	GSM voice + 2.4 GHz Bluetooth Ant C + 5 GHz WLAN SISO	Yes	Yes	N/A	Yes	
32	GSM voice + 2.4 GHz Bluetooth Ant C + 6 GHz WLAN SISO	Yes	Yes	N/A	Yes	
33	GSM voice + 2.4 GHz Bluetooth Ant C + 5 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
34	GSM voice + 2.4 GHz Bluetooth Ant C + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
35	UMTS + 2.4 GHz WLAN MIMO + 5 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
36	UMTS + 2.4 GHz WLAN MIMO + 6 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
37	UMTS + 2.4 GHz WLAN MIMO + 5 GHz WLAN SISO	Yes	Yes	Yes	Yes	
38	UMTS + 2.4 GHz WLAN MIMO + 6 GHz WLAN SISO	Yes	Yes	Yes	Yes	
39	UMTS + 2.4 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
40	UMTS + 2.4 GHz WLAN SISO	Yes	Yes	Yes	Yes	
41	UMTS + 2.4 GHz WLAN SISO + 5 GHz WLAN SISO	Yes	Yes	Yes	Yes	
42	UMTS + 2.4 GHz WLAN SISO + 6 GHz WLAN SISO	Yes	Yes	Yes	Yes	
43	UMTS + 2.4 GHz WLAN SISO + 5 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
44	UMTS + 2.4 GHz WLAN SISO + 6 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
45	UMTS + 5 GHz WLAN SISO	Yes	Yes	Yes	Yes	
46	UMTS + 6 GHz WLAN SISO	Yes	Yes	Yes	Yes	
47	UMTS + 5 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
48	UMTS + 6 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
49	UMTS + 2.4 GHz Bluetooth Ant G + 2.4 GHz WLAN Ant C + 5 GHz WLAN MIMO	Yes*	Yes	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
50	UMTS + 2.4 GHz Bluetooth Ant G + 2.4 GHz WLAN Ant C + 6 GHz WLAN MIMO	Yes*	Yes	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
51	UMTS + 2.4 GHz Bluetooth Ant G + 2.4 GHz WLAN Ant C + 5 GHz WLAN SISO	Yes*	Yes	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
52	UMTS + 2.4 GHz Bluetooth Ant G + 2.4 GHz WLAN Ant C + 6 GHz WLAN SISO	Yes*	Yes	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
53	UMTS + 2.4 GHz Bluetooth Ant G + 2.4 GHz WLAN Ant C	Yes*	Yes	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
54	UMTS + 2.4 GHz Bluetooth Ant G + 5 GHz WLAN SISO	Yes*	Yes	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
55	UMTS + 2.4 GHz Bluetooth Ant G + 6 GHz WLAN SISO	Yes*	Yes	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
56	UMTS + 2.4 GHz Bluetooth Ant G + 5 GHz WLAN MIMO	Yes*	Yes	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
57	UMTS + 2.4 GHz Bluetooth Ant G + 6 GHz WLAN MIMO	Yes*	Yes	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
58	UMTS + 2.4 GHz Bluetooth Ant G	Yes*	Yes	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
59	UMTS + 2.4 GHz Bluetooth MIMO + 5 GHz WLAN SISO	Yes	Yes	N/A	Yes	
60	UMTS + 2.4 GHz Bluetooth MIMO + 6 GHz WLAN SISO	Yes	Yes	N/A	Yes	
61	UMTS + 2.4 GHz Bluetooth MIMO	Yes	Yes	N/A	Yes	
62	UMTS + 2.4 GHz Bluetooth MIMO + 5 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
63	UMTS + 2.4 GHz Bluetooth MIMO + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
64	UMTS + 2.4 GHz Bluetooth Ant C	Yes	Yes	N/A	Yes	
65	UMTS + 2.4 GHz Bluetooth Ant C + 5 GHz WLAN SISO	Yes	Yes	N/A	Yes	
66	UMTS + 2.4 GHz Bluetooth Ant C + 6 GHz WLAN SISO	Yes	Yes	N/A	Yes	
67	UMTS + 2.4 GHz Bluetooth Ant C + 5 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
68	UMTS + 2.4 GHz Bluetooth Ant C + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
69	LTE + 2.4 GHz WLAN MIMO + 5 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
70	LTE + 2.4 GHz WLAN MIMO + 6 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
71	LTE + 2.4 GHz WLAN MIMO + 5 GHz WLAN SISO	Yes	Yes	Yes	Yes	
72	LTE + 2.4 GHz WLAN MIMO + 6 GHz WLAN SISO	Yes	Yes	Yes	Yes	
73	LTE + 2.4 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
74	LTE + 2.4 GHz WLAN SISO	Yes	Yes	Yes	Yes	
75	LTE + 2.4 GHz WLAN SISO + 5 GHz WLAN SISO	Yes	Yes	Yes	Yes	
76	LTE + 2.4 GHz WLAN SISO + 6 GHz WLAN SISO	Yes	Yes	Yes	Yes	
77	LTE + 2.4 GHz WLAN SISO + 5 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
78	LTE + 2.4 GHz WLAN SISO + 6 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
79	LTE + 5 GHz WLAN SISO	Yes	Yes	Yes	Yes	
80	LTE + 6 GHz WLAN SISO	Yes	Yes	Yes	Yes	
81	LTE + 5 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
82	LTE + 6 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
83	LTE + 2.4 GHz Bluetooth Ant G + 2.4 GHz WLAN Ant C + 5 GHz WLAN MIMO	Yes*	Yes	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
84	LTE + 2.4 GHz Bluetooth Ant G + 2.4 GHz WLAN Ant C + 6 GHz WLAN MIMO	Yes*	Yes	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
85	LTE + 2.4 GHz Bluetooth Ant G + 2.4 GHz WLAN Ant C + 5 GHz WLAN SISO	Yes*	Yes	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
86	LTE + 2.4 GHz Bluetooth Ant G + 2.4 GHz WLAN Ant C + 6 GHz WLAN SISO	Yes*	Yes	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
87	LTE + 2.4 GHz Bluetooth Ant G + 2.4 GHz WLAN Ant C	Yes*	Yes	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
88	LTE + 2.4 GHz Bluetooth Ant G + 5 GHz WLAN SISO	Yes*	Yes	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
89	LTE + 2.4 GHz Bluetooth Ant G + 6 GHz WLAN SISO	Yes*	Yes	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
90	LTE + 2.4 GHz Bluetooth Ant G + 5 GHz WLAN MIMO	Yes*	Yes	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
91	LTE + 2.4 GHz Bluetooth Ant G + 6 GHz WLAN MIMO	Yes*	Yes	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
92	LTE + 2.4 GHz Bluetooth Ant G	Yes*	Yes	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
93	LTE + 2.4 GHz Bluetooth MIMO + 5 GHz WLAN SISO	Yes	Yes	N/A	Yes	
94	LTE + 2.4 GHz Bluetooth MIMO + 6 GHz WLAN SISO	Yes	Yes	N/A	Yes	
95	LTE + 2.4 GHz Bluetooth MIMO	Yes	Yes	N/A	Yes	
96	LTE + 2.4 GHz Bluetooth MIMO + 5 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
97	LTE + 2.4 GHz Bluetooth MIMO + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
98	LTE + 2.4 GHz Bluetooth Ant C	Yes	Yes	N/A	Yes	
99	LTE + 2.4 GHz Bluetooth Ant C + 5 GHz WLAN SISO	Yes	Yes	N/A	Yes	
100	LTE + 2.4 GHz Bluetooth Ant C + 6 GHz WLAN SISO	Yes	Yes	N/A	Yes	
101	LTE + 2.4 GHz Bluetooth Ant C + 5 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
102	LTE + 2.4 GHz Bluetooth Ant C + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
103	LTE + NR	Yes	Yes	Yes	Yes	
104	LTE + NR + 2.4 GHz WLAN MIMO + 5 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
105	LTE + NR + 2.4 GHz WLAN MIMO + 6 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
106	LTE + NR + 2.4 GHz WLAN MIMO + 5 GHz WLAN SISO	Yes	Yes	Yes	Yes	
107	LTE + NR + 2.4 GHz WLAN MIMO + 6 GHz WLAN SISO	Yes	Yes	Yes	Yes	
108	LTE + NR + 2.4 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
109	LTE + NR + 2.4 GHz WLAN SISO	Yes	Yes	Yes	Yes	
110	LTE + NR + 2.4 GHz WLAN SISO + 5 GHz WLAN SISO	Yes	Yes	Yes	Yes	
111	LTE + NR + 2.4 GHz WLAN SISO + 6 GHz WLAN SISO	Yes	Yes	Yes	Yes	
112	LTE + NR + 2.4 GHz WLAN SISO + 5 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
113	LTE + NR + 2.4 GHz WLAN SISO + 6 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
114	LTE + NR + 5 GHz WLAN SISO	Yes	Yes	Yes	Yes	
115	LTE + NR + 6 GHz WLAN SISO	Yes	Yes	Yes	Yes	
116	LTE + NR + 5 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
117	LTE + NR + 6 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
118	LTE + NR + 2.4 GHz Bluetooth Ant G + 2.4 GHz WLAN Ant C + 5 GHz WLAN MIMO	Yes*	Yes	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
119	LTE + NR + 2.4 GHz Bluetooth Ant G + 2.4 GHz WLAN Ant C + 6 GHz WLAN MIMO	Yes*	Yes	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
120	LTE + NR + 2.4 GHz Bluetooth Ant G + 2.4 GHz WLAN Ant C + 5 GHz WLAN SISO	Yes*	Yes	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
121	LTE + NR + 2.4 GHz Bluetooth Ant G + 2.4 GHz WLAN Ant C + 6 GHz WLAN SISO	Yes*	Yes	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
122	LTE + NR + 2.4 GHz Bluetooth Ant G + 2.4 GHz WLAN Ant C	Yes*	Yes	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
123	LTE + NR + 2.4 GHz Bluetooth Ant G + 5 GHz WLAN SISO	Yes*	Yes	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
124	LTE + NR + 2.4 GHz Bluetooth Ant G + 6 GHz WLAN SISO	Yes*	Yes	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
125	LTE + NR + 2.4 GHz Bluetooth Ant G + 5 GHz WLAN MIMO	Yes*	Yes	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
126	LTE + NR + 2.4 GHz Bluetooth Ant G + 6 GHz WLAN MIMO	Yes*	Yes	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
127	LTE + NR + 2.4 GHz Bluetooth Ant G	Yes*	Yes	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
128	LTE + NR + 2.4 GHz Bluetooth MIMO + 5 GHz WLAN SISO	Yes	Yes	N/A	Yes	
129	LTE + NR + 2.4 GHz Bluetooth MIMO + 6 GHz WLAN SISO	Yes	Yes	N/A	Yes	
130	LTE + NR + 2.4 GHz Bluetooth MIMO	Yes	Yes	N/A	Yes	
131	LTE + NR + 2.4 GHz Bluetooth MIMO + 5 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
132	LTE + NR + 2.4 GHz Bluetooth MIMO + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
133	LTE + NR + 2.4 GHz Bluetooth Ant C	Yes	Yes	N/A	Yes	
134	LTE + NR + 2.4 GHz Bluetooth Ant C + 5 GHz WLAN SISO	Yes	Yes	N/A	Yes	
135	LTE + NR + 2.4 GHz Bluetooth Ant C + 6 GHz WLAN SISO	Yes	Yes	N/A	Yes	
136	LTE + NR + 2.4 GHz Bluetooth Ant C + 5 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
137	LTE + NR + 2.4 GHz Bluetooth Ant C + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
138	NR + 2.4 GHz WLAN MIMO + 5 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
139	NR + 2.4 GHz WLAN MIMO + 6 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
140	NR + 2.4 GHz WLAN MIMO + 5 GHz WLAN SISO	Yes	Yes	Yes	Yes	
141	NR + 2.4 GHz WLAN MIMO + 6 GHz WLAN SISO	Yes	Yes	Yes	Yes	
142	NR + 2.4 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
143	NR + 2.4 GHz WLAN SISO	Yes	Yes	Yes	Yes	
144	NR + 2.4 GHz WLAN SISO + 5 GHz WLAN SISO	Yes	Yes	Yes	Yes	
145	NR + 2.4 GHz WLAN SISO + 6 GHz WLAN SISO	Yes	Yes	Yes	Yes	
146	NR + 2.4 GHz WLAN SISO + 5 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
147	NR + 2.4 GHz WLAN SISO + 6 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
148	NR + 5 GHz WLAN SISO	Yes	Yes	Yes	Yes	
149	NR + 6 GHz WLAN SISO	Yes	Yes	Yes	Yes	
150	NR + 5 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
151	NR + 6 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
152	NR + 2.4 GHz Bluetooth Ant G + 2.4 GHz WLAN Ant C + 5 GHz WLAN MIMO	Yes*	Yes	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
153	NR + 2.4 GHz Bluetooth Ant G + 2.4 GHz WLAN Ant C + 6 GHz WLAN MIMO	Yes*	Yes	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
154	NR + 2.4 GHz Bluetooth Ant G + 2.4 GHz WLAN Ant C + 5 GHz WLAN SISO	Yes*	Yes	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
155	NR + 2.4 GHz Bluetooth Ant G + 2.4 GHz WLAN Ant C + 6 GHz WLAN SISO	Yes*	Yes	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
156	NR + 2.4 GHz Bluetooth Ant G + 2.4 GHz WLAN Ant C	Yes*	Yes	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
157	NR + 2.4 GHz Bluetooth Ant G + 5 GHz WLAN SISO	Yes*	Yes	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
158	NR + 2.4 GHz Bluetooth Ant G + 6 GHz WLAN SISO	Yes*	Yes	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
159	NR + 2.4 GHz Bluetooth Ant G + 5 GHz WLAN MIMO	Yes*	Yes	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
160	NR + 2.4 GHz Bluetooth Ant G + 6 GHz WLAN MIMO	Yes*	Yes	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
161	NR + 2.4 GHz Bluetooth Ant G	Yes*	Yes	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
162	NR + 2.4 GHz Bluetooth MIMO + 5 GHz WLAN SISO	Yes	Yes	N/A	Yes	
163	NR + 2.4 GHz Bluetooth MIMO + 6 GHz WLAN SISO	Yes	Yes	N/A	Yes	
164	NR + 2.4 GHz Bluetooth MIMO	Yes	Yes	N/A	Yes	
165	NR + 2.4 GHz Bluetooth MIMO + 5 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
166	NR + 2.4 GHz Bluetooth MIMO + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
167	NR + 2.4 GHz Bluetooth Ant C	Yes	Yes	N/A	Yes	
168	NR + 2.4 GHz Bluetooth Ant C + 5 GHz WLAN SISO	Yes	Yes	N/A	Yes	
169	NR + 2.4 GHz Bluetooth Ant C + 6 GHz WLAN SISO	Yes	Yes	N/A	Yes	
170	NR + 2.4 GHz Bluetooth Ant C + 5 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
171	NR + 2.4 GHz Bluetooth Ant C + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
172	GPRS/EDGE + 2.4 GHz WLAN MIMO + 5 GHz WLAN MIMO	N/A	N/A	Yes	Yes	
173	GPRS/EDGE + 2.4 GHz WLAN MIMO + 6 GHz WLAN MIMO	N/A	N/A	Yes	Yes	
174	GPRS/EDGE + 2.4 GHz WLAN MIMO + 5 GHz WLAN SISO	N/A	N/A	Yes	Yes	
175	GPRS/EDGE + 2.4 GHz WLAN MIMO + 6 GHz WLAN SISO	N/A	N/A	Yes	Yes	
176	GPRS/EDGE + 2.4 GHz WLAN MIMO	N/A	N/A	Yes	Yes	
177	GPRS/EDGE + 2.4 GHz WLAN SISO	N/A	N/A	Yes	Yes	
178	GPRS/EDGE + 2.4 GHz WLAN SISO + 5 GHz WLAN SISO	N/A	N/A	Yes	Yes	
179	GPRS/EDGE + 2.4 GHz WLAN SISO + 6 GHz WLAN SISO	N/A	N/A	Yes	Yes	
180	GPRS/EDGE + 2.4 GHz WLAN SISO + 5 GHz WLAN MIMO	N/A	N/A	Yes	Yes	
181	GPRS/EDGE + 2.4 GHz WLAN SISO + 6 GHz WLAN MIMO	N/A	N/A	Yes	Yes	
182	GPRS/EDGE + 5 GHz WLAN SISO	N/A	N/A	Yes	Yes	
183	GPRS/EDGE + 6 GHz WLAN SISO	N/A	N/A	Yes	Yes	
184	GPRS/EDGE + 5 GHz WLAN MIMO	N/A	N/A	Yes	Yes	
185	GPRS/EDGE + 6 GHz WLAN MIMO	N/A	N/A	Yes	Yes	
186	GPRS/EDGE + 2.4 GHz Bluetooth Ant G + 2.4 GHz WLAN Ant C + 5 GHz WLAN MIMO	N/A	N/A	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
187	GPRS/EDGE + 2.4 GHz Bluetooth Ant G + 2.4 GHz WLAN Ant C + 6 GHz WLAN MIMO	N/A	N/A	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
188	GPRS/EDGE + 2.4 GHz Bluetooth Ant G + 2.4 GHz WLAN Ant C + 5 GHz WLAN SISO	N/A	N/A	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
189	GPRS/EDGE + 2.4 GHz Bluetooth Ant G + 2.4 GHz WLAN Ant C + 6 GHz WLAN SISO	N/A	N/A	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
190	GPRS/EDGE + 2.4 GHz Bluetooth Ant G + 2.4 GHz WLAN Ant C	N/A	N/A	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
191	GPRS/EDGE + 2.4 GHz Bluetooth Ant G + 5 GHz WLAN SISO	N/A	N/A	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
192	GPRS/EDGE + 2.4 GHz Bluetooth Ant G + 6 GHz WLAN SISO	N/A	N/A	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
193	GPRS/EDGE + 2.4 GHz Bluetooth Ant G + 5 GHz WLAN MIMO	N/A	N/A	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
194	GPRS/EDGE + 2.4 GHz Bluetooth Ant G + 6 GHz WLAN MIMO	N/A	N/A	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
195	GPRS/EDGE + 2.4 GHz Bluetooth Ant G	N/A	N/A	Yes*	Yes	* Bluetooth Tethering is considered for Antenna G
196	GPRS/EDGE + 2.4 GHz Bluetooth MIMO + 5 GHz WLAN SISO	N/A	N/A	N/A	Yes	
197	GPRS/EDGE + 2.4 GHz Bluetooth MIMO + 6 GHz WLAN SISO	N/A	N/A	N/A	Yes	
198	GPRS/EDGE + 2.4 GHz Bluetooth MIMO	N/A	N/A	N/A	Yes	
199	GPRS/EDGE + 2.4 GHz Bluetooth MIMO + 5 GHz WLAN MIMO	N/A	N/A	N/A	Yes	
200	GPRS/EDGE + 2.4 GHz Bluetooth MIMO + 6 GHz WLAN MIMO	N/A	N/A	N/A	Yes	
201	GPRS/EDGE + 2.4 GHz Bluetooth Ant C	N/A	N/A	N/A	Yes	
202	GPRS/EDGE + 2.4 GHz Bluetooth Ant C + 5 GHz WLAN SISO	N/A	N/A	N/A	Yes	
203	GPRS/EDGE + 2.4 GHz Bluetooth Ant C + 6 GHz WLAN SISO	N/A	N/A	N/A	Yes	
204	GPRS/EDGE + 2.4 GHz Bluetooth Ant C + 5 GHz WLAN MIMO	N/A	N/A	N/A	Yes	
205	GPRS/EDGE + 2.4 GHz Bluetooth Ant C + 6 GHz WLAN MIMO	N/A	N/A	N/A	Yes	

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1. SISO represents 2.4 GHz WLAN/BT transmission on Ant G or Ant C, and 5/6 GHz transmission on Ant F or Ant I.
2. When the user utilizes multiple services in UMTS 3G mode it uses multi-Radio Access Bearer or multi-RAB. The power control is based on a physical control channel (Dedicated Physical Control Channel [DPCCH]) and power control will be adjusted to meet the needs of both services. Therefore, the UMTS+WLAN scenario also represents the UMTS Voice/DATA + WLAN Hotspot scenario.
3. Per the manufacturer, WIFI Direct is not expected to be used in conjunction with a held-to-ear or body-worn accessory voice call. Therefore, there are no simultaneous transmission scenarios involving WIFI direct beyond that listed in the above table.
4. 5 GHz Wireless Router is only supported for U-NII-1 and U-NII-3 by S/W, therefore U-NII-2A, U-NII-2C, and U-NII-4 were not evaluated for wireless router conditions.
5. 6 GHz Wireless Router is only supported for VLP mode, therefore SP and LPI were not evaluated for wireless router conditions.
6. This device supports 2x2 MIMO Tx for WLAN 802.11a/g/n/ac/ax/be. 802.11a/g/n/ac/ax/be supports CDD and STBC and 802.11n/ac/ax/be additionally supports SDM.
7. This device supports VoWIFI.
8. This device supports Bluetooth Tethering on Ant G only.
9. This device supports VoLTE.
10. This device supports VoNR.
11. LTE + 5G NR FR1 Scenarios are limited to EN-DC combinations with anchor bands as shown in the NR FR1 checklist.
12. WPT and NFC were evaluated for phablet based on expected usage conditions.

2.8 Miscellaneous SAR Test Considerations

(A) WIFI/BT

Since U-NII-1 and U-NII-2A bands have the same maximum output power and the highest reported SAR for U-NII-2A is less than 1.2 W/kg, head and body-worn SAR is not required for U-NII-1 band according to FCC KDB Publication 248227 D01v02r02.

Since Wireless Router operations are not allowed by the chipset firmware using U-NII-2A, U-NII-2C, U-NII-4 WIFI and 6 GHz SP/LPI, only 2.4 GHz WIFI, 2.4 GHz Bluetooth Ant C, U-NII-1 and U-NII-3 WIFI, and 6 GHz VLP WIFI Hotspot SAR tests and combinations are considered for SAR with respect to Wireless Router configurations according to FCC KDB 941225 D06v02r01.

This device supports IEEE 802.11ax/be with the following features:

a) Up to 320 MHz Bandwidth only for 6GHz
b) Up to 160 MHz Bandwidth only for 5 GHz
c) Up to 20 MHz Bandwidth only for 2.4 GHz
d) 2 Tx antenna output
e) Up to 4KQAM is supported
f) TDWR and Band gap channels are supported for 5/6 GHz
g) MU-MIMO UL Operations are not supported

Per FCC KDB Publication 648474 D04, this device is considered a "phablet" in open configuration since the display diagonal dimension is greater than 150mm and less than 200mm. Phablet SAR tests are required when wireless router mode does not apply or if wireless router 1g SAR > 1.2 W/kg. Because wireless router operations are not supported for 2.4 GHz Bluetooth Antenna G, 2.4 GHz Bluetooth MIMO, U-NII-2A, U-NII-2C, U-NII-4 WIFI and 6 GHz SP and LPI, phablet SAR tests were required.

Per October 2024 TCB Workshop notes, phablet SAR testing can be conservatively covered by SAR testing at 5 mm. Because hotspot testing uses the same distance and power level, both scan types are consolidated under a single "Body" exposure condition in SAR data tables.

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Per April 2019 TCB Workshop Notes and FCC guidance, SAR testing for 802.11ax/be follows initial test configuration procedures of KDB 248227, with 802.11ax/be considered a higher order 802.11 mode.

Per FCC guidance, SAR was performed using 6.5 GHz SAR probe calibration factors for WIFI 6GHz/UWB and 8GHz SAR probe calibration factors for UWB. FCC KDB 648474, FCC KDB 941225 D07 and FCC KDB 248227 were followed for test positions, distances, and modes. Absorbed power density (APD) using a $4cm^2$ averaging area is reported based on SAR measurements. Incident power density is evaluated at 2mm ensuring that the resolution is sufficient such that integrated power density (iPD) between d=2mm and d=λ/5mm is ≥ -1dB per equipment manufacturer guidance. Power density results are scaled up for uncertainty above 30%. Per TCB workshop October 2020 notes, 5 channels were tested for WIFI 6 GHz.

(B) Licensed Transmitter(s)

GSM/GPRS/EDGE DTM is not supported for US bands. Therefore, the GSM Voice modes in this report do not transmit simultaneously with GPRS/EDGE Data.

This device is only capable of QPSK HSUPA in the uplink. Therefore, no additional SAR tests are required beyond that described for devices with HSUPA in KDB 941225 D01v03r01.

LTE SAR for the higher modulations and lower bandwidths were not tested since the maximum average output power of all required channels and configurations was not more than 0.5 dB higher than the highest bandwidth; and the reported LTE SAR for the highest bandwidth was less than 1.45 W/kg for all configurations according to FCC KDB 941225 D05v02r04.

This device supports downlink LTE Carrier Aggregation (CA), downlink 4x4 MIMO operations for some LTE Bands, and 4x4 MIMO downlink carrier aggregation. Per October 2024 TCB Workshop notes, additional analysis is not required for downlink carrier aggregation.

Per FCC KDB Publication 648474 D04, this device is considered a "phablet" since the display diagonal dimension is greater than 150mm and less than 200mm. Therefore, phablet SAR tests are required when wireless router mode does not apply or if wireless router 1g SAR > 1.2 W/kg.

This device supports LTE/NR capabilities with overlapping transmission frequency ranges. When the supported frequency range of an LTE/NR Band falls completely within an LTE/NR band with a larger transmission frequency range, both LTE/NR bands have the same target power (or the band with the larger transmission frequency range has a higher target power), and both LTE/NR bands share the same transmission path and signal characteristics, SAR was only assessed for the band with the larger transmission frequency range.

This device can transmit with antenna switching for bands/modes on antenna A, B, E and H. SAR tests were performed for each antenna where switching is used per band/mode to ensure compliance. Antennas and indicated band/modes are included in section 2.4.1 of this report.

NR implementation supports SA and NSA mode. In EN-DC mode, NR operates with the LTE Bands shown in the NR FR1 checklist acting as anchor bands. Per FCC guidance, SAR tests for NR Bands and LTE Anchors Bands were performed separately due to limitations in SAR probe calibration factors.

SRS was tested with CW signal per Qualcomm guidance in 80-w2112-4.

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2.9 Guidance Applied

- IEEE 1528-2013
- FCC KDB Publication 941225 D01v03r01, D05v02r05, D05Av01r02, D06v02r01 (2G/3G/4G and Hotspot)
- FCC KDB Publication 248227 D01v02r02 (SAR Considerations for 802.11 Devices)
- FCC KDB Publication 447498 D04v01 (General SAR Guidance)
- FCC KDB Publication 865664 D01v01r04, D02v01r02 (SAR Measurements up to 6 GHz)
- FCC KDB Publication 648474 D04 (Phablet Procedures)
- October 2013 TCB Workshop Notes (GPRS Testing Considerations)
- May 2017 TCB Workshop Notes (LTE 4x4 Downlink MIMO)
- November 2017, April 2018, October 2018, October 2024 TCB Workshop Notes (LTE Carrier Aggregation)
- April 2025 TCB Workshop Notes (Dynamic Antenna Tuning)
- April 2019 TCB Workshop Notes (IEEE 802.11ax)
- October 2024 TCB Workshop Notes (Extremity Exclusions)
- November 2017, October 2018, April 2019, November 2019, October 2020 TCBC Workshop Notes (6-8 GHz)
- SPEAG DASY6 Application Note (Interim Procedures for Devices Operating at 6-10 GHz) (Nov 2021)
- IEC/IEEE 63195-1:2022
- IEC 62479:2010

2.10 Device Serial Numbers

Several samples with identical hardware were used to support SAR testing. The manufacturer has confirmed that the device(s) tested have the same physical, mechanical and thermal characteristics and are within operational tolerances expected for production units. The serial numbers used for each test are indicated alongside the results in Section 12 and Section 13.

2.11 Bibliography

Report Type	Report Serial Number
RF Exposure Part 2 Test Report	1M2604240033-21.A3L
RF Exposure Compliance Summary Report	1M2604240033-24.A3L
RF Exposure Part 0 Test Report	1M2604240033-23.A3L

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3 LTE AND NR INFORMATION

LTE Information					
Form Factor	Portable Handset				
Frequency Range of each LTE transmission band	LTE Band 12: 699.7 - 715.3 MHz				
	LTE Band 13: 779.5 - 784.5 MHz				
	LTE Band 5: 824.7 - 848.3 MHz				
	LTE Band 66: 1710.7 - 1779.3 MHz				
	LTE Band 4: 1710.7 - 1754.3 MHz				
	LTE Band 25: 1850.7 - 1914.3 MHz				
	LTE Band 2: 1850.7 - 1909.3 MHz				
	LTE Band 41: 2498.5 - 2687.5 MHz				
Channel Bandwidths	LTE Band 12: 1.4 MHz, 3 MHz, 5 MHz, 10 MHz				
	LTE Band 13: 5 MHz, 10 MHz				
	LTE Band 5: 1.4 MHz, 3 MHz, 5 MHz, 10 MHz				
	LTE Band 66: 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 4: 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 25: 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 2: 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 41: 5 MHz, 10 MHz, 15 MHz, 20 MHz				
Channel Numbers and Frequencies (MHz)	Low	Low-Mid	Mid	Mid-High	High
LTE Band 12: 1.4 MHz	699.7 (23017)		707.5 (23095)	715.3 (23173)	
LTE Band 12: 3 MHz	700.5 (23025)		707.5 (23095)	714.5 (23165)	
LTE Band 12: 5 MHz	701.5 (23035)		707.5 (23095)	713.5 (23155)	
LTE Band 12: 10 MHz	704 (23060)		707.5 (23095)	711 (23130)	
LTE Band 13: 5 MHz	779.5 (23205)		782 (23230)	784.5 (23255)	
LTE Band 13: 10 MHz	(N/A)		782 (23230)	(N/A)	
LTE Band 5: 1.4 MHz	824.7 (20407)		836.5 (20525)	848.3 (20643)	
LTE Band 5: 3 MHz	825.5 (20415)		836.5 (20525)	847.5 (20635)	
LTE Band 5: 5 MHz	826.5 (20425)		836.5 (20525)	846.5 (20625)	
LTE Band 5: 10 MHz	829 (20450)		836.5 (20525)	844 (20600)	
LTE Band 66: 1.4 MHz	1710.7 (131979)		1745 (132322)	1779.3 (132665)	
LTE Band 66: 3 MHz	1711.5 (131987)		1745 (132322)	1778.5 (132657)	
LTE Band 66: 5 MHz	1712.5 (131997)		1745 (132322)	1777.5 (132647)	
LTE Band 66: 10 MHz	1715 (132022)		1745 (132322)	1775 (132622)	
LTE Band 66: 15 MHz	1717.5 (132047)		1745 (132322)	1772.5 (132597)	
LTE Band 66: 20 MHz	1720 (132072)		1745 (132322)	1770 (132572)	
LTE Band 4: 1.4 MHz	1710.7 (19957)		1732.5 (20175)	1754.3 (20393)	
LTE Band 4: 3 MHz	1711.5 (19965)		1732.5 (20175)	1753.5 (20385)	
LTE Band 4: 5 MHz	1712.5 (19975)		1732.5 (20175)	1752.5 (20375)	
LTE Band 4: 10 MHz	1715 (20000)		1732.5 (20175)	1750 (20350)	
LTE Band 4: 15 MHz	1717.5 (20025)		1732.5 (20175)	1747.5 (20325)	
LTE Band 4: 20 MHz	1720 (20050)		1732.5 (20175)	1745 (20300)	
LTE Band 25: 1.4 MHz	1850.7 (26047)		1882.5 (26365)	1914.3 (26683)	
LTE Band 25: 3 MHz	1851.5 (26055)		1882.5 (26365)	1913.5 (26675)	
LTE Band 25: 5 MHz	1852.5 (26065)		1882.5 (26365)	1912.5 (26665)	
LTE Band 25: 10 MHz	1855 (26090)		1882.5 (26365)	1910 (26640)	
LTE Band 25: 15 MHz	1857.5 (26115)		1882.5 (26365)	1907.5 (26615)	
LTE Band 25: 20 MHz	1860 (26140)		1882.5 (26365)	1905 (26590)	
LTE Band 2: 1.4 MHz	1850.7 (18607)		1880 (18900)	1909.3 (19193)	
LTE Band 2: 3 MHz	1851.5 (18615)		1880 (18900)	1908.5 (19185)	
LTE Band 2: 5 MHz	1852.5 (18625)		1880 (18900)	1907.5 (19175)	
LTE Band 2: 10 MHz	1855 (18650)		1880 (18900)	1905 (19150)	
LTE Band 2: 15 MHz	1857.5 (18675)		1880 (18900)	1902.5 (19125)	
LTE Band 2: 20 MHz	1860 (18700)		1880 (18900)	1900 (19100)	
LTE Band 41: 5 MHz	2506 (39750)	2549.5 (40185)	2593 (40620)	2636.5 (41055)	2680 (41490)
LTE Band 41: 10 MHz	2506 (39750)	2549.5 (40185)	2593 (40620)	2636.5 (41055)	2680 (41490)
LTE Band 41: 15 MHz	2506 (39750)	2549.5 (40185)	2593 (40620)	2636.5 (41055)	2680 (41490)
LTE Band 41: 20 MHz	2506 (39750)	2549.5 (40185)	2593 (40620)	2636.5 (41055)	2680 (41490)
UE Category	UL UE Cat 13, DL UE Cat 20				
Modulations Supported in UL	QPSK, 16QAM, 64QAM				
LTE MPR Permanently implemented per 3GPP TS 36.101 section 6.2.3~6.2.5? (manufacturer attestation to be provided)	YES				
A-MPR (Additional MPR) disabled for SAR Testing?	YES				
LTE Carrier Aggregation Possible Combinations	The technical description includes all the possible carrier aggregation combinations				
LTE Additional Information	This device does not support full CA features on 3GPP Release 17. It supports carrier aggregation and downlink MIMO features. All uplink communications are identical to the Release 8 Specifications. Uplink communications are done on the PCC. The following LTE Release 17 Features are not supported: Relay, HetNet, Enhanced MIMO, eICIC, eMBMS, Wifi Offloading, Cross-Carrier Scheduling, Enhanced SC-FDMA.				

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NR Information						
Form Factor	Portable Handset					
Frequency Range of each NR transmission band	NR Band n5: 826.5 - 846.5 MHz					
	NR Band n66: 1712.5 - 1777.5 MHz					
	NR Band n41: 2501.01 - 2685 MHz					
Channel Bandwidths	NR Band n5: 5 MHz, 10 MHz, 15 MHz, 20 MHz					
	NR Band n66: 5 MHz, 10 MHz, 15 MHz, 20 MHz, 25 MHz, 30 MHz, 35 MHz, 40 MHz, 45 MHz					
	NR Band n41: 10 MHz, 15 MHz, 20 MHz, 25 MHz, 30 MHz, 35 MHz, 40 MHz, 45 MHz, 50 MHz, 60 MHz, 70 MHz, 80 MHz, 90 MHz, 100 MHz					
Channel Numbers and Frequencies (MHz)						
NR Band n5: 5 MHz	826.5 (165300)		836.5 (167300)		846.5 (169300)	
NR Band n5: 10 MHz	829 (165800)		836.5 (167300)		844 (168800)	
NR Band n5: 15 MHz	831.5 (166300)		836.5 (167300)		841.5 (168300)	
NR Band n5: 20 MHz	834 (166800)		836.5 (167300)		839 (167800)	
NR Band n66: 5 MHz	1712.5 (342500)		1745 (349000)		1777.5 (355500)	
NR Band n66: 10 MHz	1715 (343000)		1745 (349000)		1775 (355000)	
NR Band n66: 15 MHz	1717.5 (343500)		1745 (349000)		1772.5 (354500)	
NR Band n66: 20 MHz	1720 (344000)		1745 (349000)		1770 (354000)	
NR Band n66: 25 MHz	1722.5 (344500)		1745 (349000)		1767.5 (353500)	
NR Band n66: 30 MHz	1725 (345000)		1745 (349000)		1765 (353000)	
NR Band n66: 35 MHz	1727.5 (345500)		1745 (349000)		1762.5 (352500)	
NR Band n66: 40 MHz	1730 (346000)		1745 (349000)		1760 (352000)	
NR Band n66: 45 MHz	1732.5 (346500)		1745 (349000)		1757.5 (351500)	
NR Band n41: 10 MHz	2501.01 (500202)	2547 (509400)	2592.99 (518598)		2639.01 (527802)	2685 (537000)
NR Band n41: 15 MHz	2503.5 (500700)	2548.26 (509652)	2592.99 (518598)		2637.75 (527550)	2682.51 (536502)
NR Band n41: 20 MHz	2506.02 (501204)	2549.49 (509898)	2592.99 (518598)		2636.49 (527298)	2679.99 (535998)
NR Band n41: 25 MHz	2508.51 (501702)	2550.75 (510150)	2592.99 (518598)		2635.26 (527052)	2677.5 (535500)
NR Band n41: 30 MHz	2511 (502200)	2552.01 (510402)	2592.99 (518598)		2634 (526800)	2674.98 (534996)
NR Band n41: 35 MHz	2513.52 (502704)	2553.24 (510648)	2592.99 (518598)		2632.74 (526548)	2672.49 (534498)
NR Band n41: 40 MHz	2616.01 (523202)	2567.34 (513468)	(N/A)		2618.67 (523734)	2670 (534000)
NR Band n41: 45 MHz	2518.5 (503700)	2568.18 (513636)	(N/A)		2617.83 (523566)	2667.48 (533496)
NR Band n41: 50 MHz	2521.02 (504204)		2592.99 (518598)		2664.99 (532998)	
NR Band n41: 60 MHz	2526 (505200)		2592.99 (518598)		2659.98 (531996)	
NR Band n41: 70 MHz	2531.01 (506202)		(N/A)		2655 (531000)	
NR Band n41: 80 MHz	2536.02 (507204)		(N/A)		2649.99 (529998)	
NR Band n41: 90 MHz	2541 (508200)		(N/A)		2644.98 (528996)	
NR Band n41: 100 MHz	2546.01 (509202)		2592.99 (518598)		2640 (528000)	
SCS for NR Band n5, n66	15 kHz					
SCS for NR Band n41	30 kHz					
Modulations Supported in UL	DFT-s-OFDM: π/2-BPSK, QPSK, 16QAM, 64QAM, 256QAM CP-OFDM: QPSK, 16QAM, 64QAM, 256QAM					
A-MPR (Additional MPR) disabled for SAR Testing?	YES					
EN-DC and NR Carrier Aggregation Possible Combinations	The technical description includes all the possible carrier aggregation combinations					
LTE Anchor Bands for NR Band n5	2/4/66					
LTE Anchor Bands for NR Band n66	2/5/12/13					
LTE Anchor Bands for NR Band n41	2/4/5/12/66					

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4 INTRODUCTION

The FCC and Innovation, Science, and Economic Development Canada have adopted the guidelines for evaluating the environmental effects of radio frequency (RF) radiation in ET Docket 93-62 on Aug. 6, 1996 and Health Canada Safety Code 6 to protect the public and workers from the potential hazards of RF emissions due to FCC-regulated portable devices. [1]

The safety limits used for the environmental evaluation measurements are based on the criteria published by the American National Standards Institute (ANSI) for localized specific absorption rate (SAR) in IEEE/ANSI C95.1-1992 Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz [3] and Health Canada RF Exposure Guidelines Safety Code 6 [22]. The measurement procedure described in IEEE/ANSI C95.3-2002 Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields - RF and Microwave [4] is used for guidance in measuring the Specific Absorption Rate (SAR) due to the RF radiation exposure from the Equipment Under Test (EUT). These criteria for SAR evaluation are similar to those recommended by the International Committee for Non-Ionizing Radiation Protection (ICNIRP) in Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields," Report No. Vol 74. SAR is a measure of the rate of energy absorption due to exposure to an RF transmitting source. SAR values have been related to threshold levels for potential biological hazards.

4.1 SAR Definition

Specific Absorption Rate is defined as the time derivative (rate) of the incremental energy (dU) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dV) of a given density (ρ). It is also defined as the rate of RF energy absorption per unit mass at a point in an absorbing body (see Equation 4-1).

Equation 4-1
SAR Mathematical Equation

$$SAR = \frac{d}{dt}\left(\frac{dU}{dm}\right) = \frac{d}{dt}\left(\frac{dU}{\rho dv}\right)$$

SAR is expressed in units of Watts per Kilogram (W/kg).

$$SAR = \frac{\sigma \cdot E^2}{\rho}$$

where:

σ = conductivity of the tissue-simulating material (S/m)
ρ = mass density of the tissue-simulating material (kg/m^3)
E = Total RMS electric field strength (V/m)

NOTE: The primary factors that control rate of energy absorption were found to be the wavelength of the incident field in relation to the dimensions and geometry of the irradiated organism, the orientation of the organism in relation to the polarity of field vectors, the presence of reflecting surfaces, and whether conductive contact is made by the organism with a ground plane.[6]

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5 DOSIMETRIC ASSESSMENT

5.1 Measurement Procedure

The evaluation was performed using the following procedure compliant to FCC KDB Publication 865664 D01v01r04 and IEEE 1528-2013:

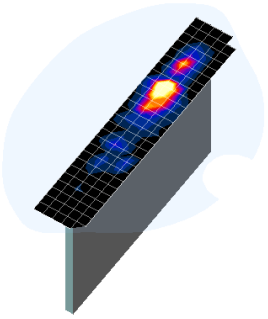

Figure 5-1
Sample SAR Area Scan

1. The SAR distribution at the exposed side of the head or body was measured at a distance no greater than 5.0 mm from the inner surface of the shell. The area covered the entire dimension of the device-head and body interface and the horizontal grid resolution was determined per FCC KDB Publication 865664 D01v01r04 (See Table 5-1) and IEEE 1528-2013.
2. The point SAR measurement was taken at the maximum SAR region determined from Step 1 to enable the monitoring of SAR fluctuations/drifts during the 1g/10g cube evaluation. SAR at this fixed point was measured and used as a reference value.
3. Based on the area scan data, the peak of the region with maximum SAR was determined by spline interpolation. Around this point, a volume was assessed according to the measurement resolution and volume size requirements of FCC KDB Publication 865664 D01v01r04 (See Table 5-1) and IEEE 1528-2013. On the basis of this data set, the spatial peak SAR value was evaluated with the following procedure (see references or the DASY manual online for more details):

   a. SAR values at the inner surface of the phantom are extrapolated from the measured values along the line away from the surface with spacing no greater than that in Table 5-1. The extrapolation was based on a least-squares algorithm. A polynomial of the fourth order was calculated through the points in the z-axis (normal to the phantom shell).

   b. After the maximum interpolated values were calculated between the points in the cube, the SAR was averaged over the spatial volume (1g or 10g) using a 3D-Spline interpolation algorithm. The 3D-spline is composed of three one-dimensional splines with the “Not a knot” condition (in x, y, and z directions). The volume was then integrated with the trapezoidal algorithm. One thousand points (10 x 10 x 10) were obtained through interpolation, in order to calculate the averaged SAR.

   c. All neighboring volumes were evaluated until no neighboring volume with a higher average value was found.
4. The SAR reference value, at the same location as step 2, was re-measured after the zoom scan was complete to calculate the SAR drift. If the drift deviated by more than 5%, the SAR test and drift measurements were repeated.

Table 5-1
Area and Zoom Scan Resolutions per FCC KDB Publication 865664 D01v01r04*

Frequency	Maximum Area Scan Resolution (mm) (Δx_{area}, Δy_{area})	Maximum Zoom Scan Resolution (mm) (Δx_{zoom}, Δy_{zoom})	Maximum Zoom Scan Spatial Resolution (mm)			Minimum Zoom Scan Volume (mm) (x,y,z)
			Uniform Grid	Graded Grid		
			$\Delta z_{zoom}(n)$	$\Delta z_{zoom}(1)$*	$\Delta z_{zoom}(n>1)$*	
≤ 2 GHz	≤ 15	≤ 8	≤ 5	≤ 4	≤ 1.5*Δz_{zoom}(n-1)	≥ 30
2-3 GHz	≤ 12	≤ 5	≤ 5	≤ 4	≤ 1.5*Δz_{zoom}(n-1)	≥ 30
3-4 GHz	≤ 12	≤ 5	≤ 4	≤ 3	≤ 1.5*Δz_{zoom}(n-1)	≥ 28
4-5 GHz	≤ 10	≤ 4	≤ 3	≤ 2.5	≤ 1.5*Δz_{zoom}(n-1)	≥ 25
5-6 GHz	≤ 10	≤ 4	≤ 2	≤ 2	≤ 1.5*Δz_{zoom}(n-1)	≥ 22

*Also compliant to IEEE 1528-2013 Table 6

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6 DEFINITION OF REFERENCE POINTS

6.1 EAR REFERENCE POINT

Figure 6-2 shows the front, back and side views of the SAM Twin Phantom. The point "M" is the reference point for the center of the mouth, "LE" is the left ear reference point (ERP), and "RE" is the right ERP. The ERP is 15mm posterior to the entrance to the ear canal (EEC) along the B-M line (Back-Mouth), as shown in Figure 6-1. The plane passing through the two ear canals and M is defined as the Reference Plane. The line N-F (Neck-Front), also called the Reference Pivoting Line, is not perpendicular to the reference plane (see Figure 6-1). Line B-M is perpendicular to the N-F line. Both N-F and B-M lines are marked on the external phantom shell to facilitate handset positioning [5].

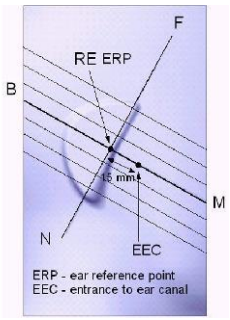

Figure 6-1
Close-Up Side view of ERP

6.2 HANDSET REFERENCE POINTS

Two imaginary lines on the handset were established: the vertical centerline and the horizontal line. The test device was placed in a normal operating position with the acoustic output located along the "vertical centerline" on the front of the device aligned to the "ear reference point" (See Figure 6-3). The acoustic output was than located at the same level as the center of the ear reference point. The test device was positioned so that the "vertical centerline" was bisecting the front surface of the handset at its top and bottom edges, positioning the "ear reference point" on the outer surface of the both the left and right head phantoms on the ear reference point.

Figure 6-2
Front, back and side view of SAM Twin Phantom

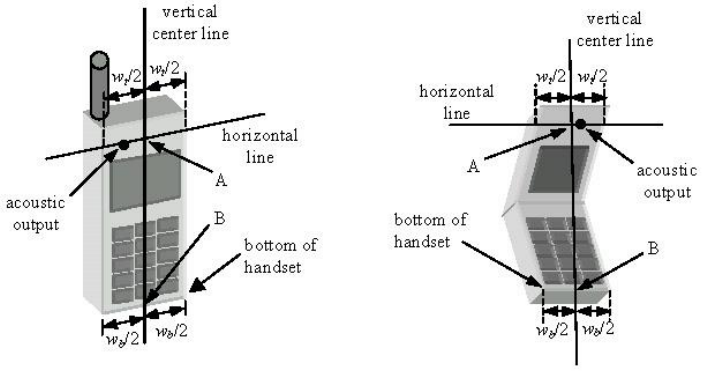

Figure 6-3
Handset Vertical Center & Horizontal Line Reference Points

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7 TEST CONFIGURATION POSITIONS

7.1 Device Holder

The device holder is made out of low-loss POM material having the following dielectric parameters: relative permittivity ε = 3 and loss tangent δ = 0.02.

7.2 Positioning for Cheek

1. The test device was positioned with the device close to the surface of the phantom such that point A is on the (virtual) extension of the line passing through points RE and LE on the phantom (see Figure 7-1), such that the plane defined by the vertical center line and the horizontal line of the phone is approximately parallel to the sagittal plane of the phantom.

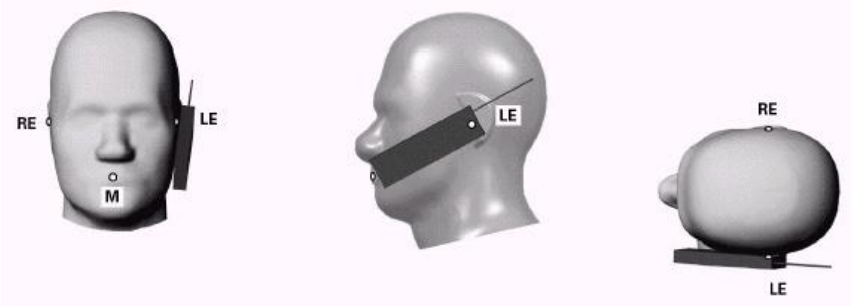

Figure 7-1 Front, Side and Top View of Cheek Position

2. The handset was translated towards the phantom along the line passing through RE & LE until the handset touches the pinna.
3. While maintaining the handset in this plane, the handset was rotated around the LE-RE line until the vertical centerline was in the reference plane.
4. The phone was then rotated around the vertical centerline until the phone (horizontal line) was symmetrical was respect to the line NF.
5. While maintaining the vertical centerline in the reference plane, keeping point A on the line passing through RE and LE, and maintaining the device contact with the ear, the device was rotated about the NF line until any point on the handset made contact with a phantom point below the ear (cheek) (See Figure 7-2).

7.3 Positioning for Ear / 15º Tilt

With the test device aligned in the “Cheek Position”:

1. While maintaining the orientation of the phone, the phone was retracted parallel to the reference plane far enough to enable a rotation of the phone by 15degrees.
2. The phone was then rotated around the horizontal line by 15 degrees.
3. While maintaining the orientation of the phone, the phone was moved parallel to the reference plane until any part of the handset touched the head. (In this position, point A was located on the line RE-LE). The tilted position is obtained when the contact is on the pinna. If the contact was at any location other than the pinna, the angle of the phone would then be reduced. In this situation, the tilted position was obtained when any part of the phone was in contact of the ear as well as a second part of the phone was in contact with the head (see Figure 7-2).

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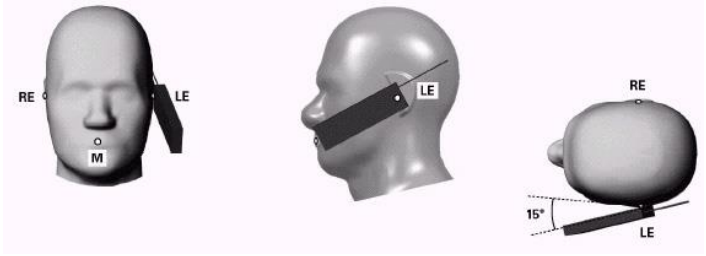

Figure 7-2 Front, Side and Top View of Ear/15º Tilt Position

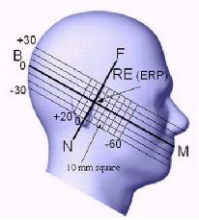

Figure 7-3
Side view w/ relevant markings

7.4 SAR Evaluations near the Mouth/Jaw Regions of the SAM Phantom

Antennas located near the bottom of a phone may require SAR measurements around the mouth and jaw regions of the SAM head phantom. This typically applies to clam-shell style phones that are generally longer in the unfolded normal use positions or to certain older style long rectangular phones. Per IEEE 1528-2013, a rotated SAM phantom is necessary to allow probe access to such regions. Both SAM heads of the TwinSAM-Chin20 are rotated 20 degrees around the NF line. Each head can be removed from the table for emptying and cleaning.

Under these circumstances, the following procedures apply, adopted from the FCC guidance on SAR handsets document FCC KDB Publication 648474 D04. The SAR required in these regions of SAM should be measured using a flat phantom. The phone should be positioned with a separation distance of 4 mm between the ear reference point (ERP) and the outer surface of the flat phantom shell. While maintaining this distance at the ERP location, the low (bottom) edge of the phone should be lowered from the phantom to establish the same separation distance between the peak SAR location identified by the truncated partial SAR distribution measured with the SAM phantom. The distance from the peak SAR location to the phone is determined by the straight line passing perpendicularly through the phantom surface. When it is not feasible to maintain 4 mm separation at the ERP while also establishing the required separation at the peak SAR location, the top edge of the phone will be allowed to touch the phantom with a separation < 4 mm at the ERP. The phone should not be tilted to the left or right while placed in this inclined position to the flat phantom.

7.5 Body-Worn Accessory Configurations

Body-worn operating configurations are tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in a normal use configuration (see Figure 7-4). Per FCC KDB Publication 648474 D04, Body-worn accessory exposure is typically related to voice mode operations when handsets are carried in body-worn accessories. The body-worn accessory procedures in FCC KDB Publication 447498 D04v01 should be used to test for body-worn accessory SAR compliance, without a headset connected to it. This enables the test results for such configuration to be compatible with that required for hotspot mode when the body-worn accessory test separation distance is greater than or equal to that required for hotspot mode, when applicable. When the reported SAR for a body-worn accessory, measured without a headset connected to the handset, is > 1.2 W/kg, the highest reported SAR configuration for that wireless mode and frequency band should be repeated for that body-worn accessory with a headset attached to the handset.

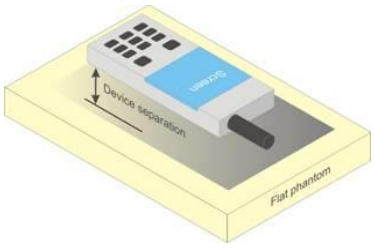

Figure 7-4
Sample Body-Worn Diagram

Accessories for Body-worn operation configurations are divided into two categories: those that do not contain metallic components and those that do contain metallic components. When multiple accessories that do not contain metallic components are supplied with the device, the device is tested with only the accessory that

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dictates the closest spacing to the body. Then multiple accessories that contain metallic components are tested with the device with each accessory. If multiple accessories share an identical metallic component (i.e. the same metallic belt-clip used with different holsters with no other metallic components) only the accessory that dictates the closest spacing to the body is tested.

Body-worn accessories may not always be supplied or available as options for some devices intended to be authorized for body-worn use. In this case, a test configuration with a separation distance between the back of the device and the flat phantom is used. Test position spacing was documented.
Transmitters that are designed to operate in front of a person's face, as in push-to-talk configurations, are tested for SAR compliance with the front of the device positioned to face the flat phantom in head fluid. For devices that are carried next to the body such as a shoulder, waist or chest-worn transmitters, SAR compliance is tested with the accessories, including headsets and microphones, attached to the device and positioned against a flat phantom in a normal use configuration.

7.6 Extremity Exposure Configurations

Devices that are designed or intended for use on extremities or mainly operated in extremity only exposure conditions; i.e., hands, wrists, feet and ankles, may require extremity SAR evaluation. When the device also operates in close proximity to the user's body, SAR compliance for the body is also required. The 1g body and 10g extremity SAR Exclusion Thresholds found in KDB Publication 447498 D04v01 should be applied to determine SAR test requirements.

Per KDB Publication 447498 D04v01, Cell phones (handsets) are not normally designed to be used on extremities or operated in extremity only exposure conditions. The maximum output power levels of handsets generally do not require extremity SAR testing to show compliance. Therefore, extremity SAR was not evaluated for this device.

7.7 Wireless Router Configurations

Some battery-operated handsets have the capability to transmit and receive user data through simultaneous transmission of WIFI simultaneously with a separate licensed transmitter. The FCC has provided guidance in FCC KDB Publication 941225 D06v02r01 where SAR test considerations for handsets (L x W ≥ 9 cm x 5 cm) are based on a composite test separation distance of 10 mm from the front, back and edges of the device containing transmitting antennas within 2.5 cm of their edges, determined from general mixed use conditions for this type of devices. Since the hotspot SAR results may overlap with the body-worn accessory SAR requirements, the more conservative configurations can be considered, thus excluding some body-worn accessory SAR tests.

When the user enables the personal wireless router functions for the handset, actual operations include simultaneous transmission of both the WIFI transmitter and another licensed transmitter. Both transmitters often do not transmit at the same transmitting frequency and thus cannot be evaluated for SAR under actual use conditions due to the limitations of the SAR assessment probes. Therefore, SAR must be evaluated for each frequency transmission and mode separately and spatially summed with the WIFI transmitter according to FCC KDB Publication 447498 D04v01 procedures. The "Portable Hotspot" feature on the handset was NOT activated during SAR assessments, to ensure the SAR measurements were evaluated for a single transmission frequency RF signal at a time.

7.8 Phablet Configurations

For smart phones with a display diagonal dimension > 150 mm or an overall diagonal dimension > 160 mm that provide similar mobile web access and multimedia support found in mini-tablets or UMPC mini-tablets that support voice calls next to the ear, the phablets procedures outlined in KDB Publication 648474 D04 should be applied to evaluate SAR compliance. A device marketed as phablets, regardless of form factors and operating

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characteristics must be tested as a phablet to determine SAR compliance. In addition to the normally required head and body-worn accessory SAR test procedures required for handsets, the UMPC mini-tablet procedures must also be applied to test the SAR of all surfaces and edges with an antenna <=25 mm from that surface or edge, in direct contact with the phantom, for 10g SAR. The UMPC mini-tablet 1g SAR at 5 mm is not required. When hotspot mode applies, 10g SAR is required only for the surfaces and edges with hotspot mode 1g SAR > 1.2 W/kg and/or when body SAR is tested at >5mm.

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8 RF EXPOSURE LIMITS

8.1 Uncontrolled Environment

UNCONTROLLED ENVIRONMENTS are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure. The general population/uncontrolled exposure limits are applicable to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Members of the general public would come under this category when exposure is not employment-related; for example, in the case of a wireless transmitter that exposes persons in its vicinity.

8.2 Controlled Environment

CONTROLLED ENVIRONMENTS are defined as locations where there is exposure that may be incurred by persons who are aware of the potential for exposure, (i.e. as a result of employment or occupation). In general, occupational/controlled exposure limits are applicable to situations in which persons are exposed as a consequence of their employment, who have been made fully aware of the potential for exposure and can exercise control over their exposure. This exposure category is also applicable when the exposure is of a transient nature due to incidental passage through a location where the exposure levels may be higher than the general population/uncontrolled limits, but the exposed person is fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

Table 8-1
SAR Human Exposure Specified in ANSI/IEEE C95.1-1992 and Health Canada Safety Code 6

HUMAN EXPOSURE LIMITS		
	UNCONTROLLED ENVIRONMENT *General Population* (W/kg) or (mW/g)	CONTROLLED ENVIRONMENT *Occupational* (W/kg) or (mW/g)
Peak Spatial Average SAR Head	1.6	8.0
Whole Body SAR	0.08	0.4
Peak Spatial Average SAR Hands, Feet, Ankle, Wrists, etc.	4.0	20

1. The Spatial Peak value of the SAR averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.
2. The Spatial Average value of the SAR averaged over the whole body.
3. The Spatial Peak value of the SAR averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.

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8.3 RF Exposure Limits for Frequencies above 6 GHz

Per §1.1310 (d)(3), the MPE limits are applied for frequencies above 6 GHz. Power Density is expressed in units of W/m^2 or mW/cm^2.

Peak Spatially Averaged Power Density was evaluated over a circular area of 4 cm^2 per interim FCC Guidance for near-field power density evaluations per October 2018 TCB Workshop notes.

Table 8-2
Human Exposure Limits Specified in FCC 47 CFR §1.1310

Human Exposure to Radiofrequency (RF) Radiation Limits		
Frequency Range [MHz]	**Power Density** [mW/cm^2]	**Average Time** [Minutes]
(A) Limits For Occupational / Controlled Environments		
1,500 – 100,000	5.0	6
(B) Limits For General Population / Uncontrolled Environments		
1,500 – 100,000	1.0	30

Note: 1.0 mW/cm^2 is 10 W/m^2

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9 FCC MEASUREMENT PROCEDURES

Power measurements for licensed transmitters are performed using a base station simulator under digital average power.

9.1 Measured and Reported SAR

Per FCC KDB Publication 447498 D04v01, when SAR is not measured at the maximum power level allowed for production units, the results must be scaled to the maximum tune-up tolerance limit according to the power applied to the individual channels tested to determine compliance. For simultaneous transmission, the measured aggregate SAR must be scaled according to the sum of the differences between the maximum tune-up tolerance and actual power used to test each transmitter. When SAR is measured at or scaled to the maximum tune-up tolerance limit, the results are referred to as *reported* SAR. The highest *reported* SAR results are identified on the grant of equipment authorization according to procedures in KDB 690783 D01v01r03.

9.2 3G SAR Test Reduction Procedure

In FCC KDB Publication 941225 D01v03r01, certain transmission modes within a frequency band and wireless mode evaluated for SAR are defined as primary modes. The equivalent modes considered for SAR test reduction are denoted as secondary modes. When the maximum output power including tune-up tolerance specified for production units in a secondary mode is ≤ 0.25 dB higher than the primary mode or when the highest reported SAR of the primary mode, scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode, is ≤ 1.2 W/kg, SAR measurements are not required for the secondary mode. These criteria are referred to as the 3G SAR test reduction procedure. When the 3G SAR test reduction procedure is not satisfied, SAR measurements are additionally required for the secondary mode.

9.3 Procedures Used to Establish RF Signal for SAR

The following procedures are according to FCC KDB Publication 941225 D01v03r01 “3G SAR Measurement Procedures.”

The device is placed into a simulated call using a base station simulator in a RF shielded chamber. Establishing connections in this manner ensure a consistent means for testing SAR and are recommended for evaluating SAR [4]. Devices under test are evaluated prior to testing, with a fully charged battery and were configured to operate at maximum output power. In order to verify that the device is tested throughout the SAR test at maximum output power, the SAR measurement system measures a “point SAR” at an arbitrary reference point at the start and end of the 1 gram SAR evaluation, to assess for any power drifts during the evaluation. If the power drift deviates by more than 5%, the SAR test and drift measurements are repeated.

9.4 SAR Measurement Conditions for UMTS

9.4.1 Output Power Verification

Maximum output power is verified on the High, Middle and Low channels according to the general descriptions in section 5.2 of 3GPP TS 34.121, using the appropriate RMC with TPC (transmit power control) set to all “1s” or applying the required inner loop power control procedures to maintain maximum output power while HSUPA is active. Results for all applicable physical channel configurations (DPCCH, DPDCHn and spreading codes, HS-DPCCH etc) are tabulated in this test report. All configurations that are not supported by the DUT or cannot be measured due to technical or equipment limitations are identified.

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9.4.2 Head SAR Measurements

SAR for next to the ear head exposure is measured using a 12.2 kbps RMC with TPC bits configured to all "1's". The 3G SAR test reduction procedure is applied to AMR configurations with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured for 12.2 kbps AMR in 3.4 kbps SRB (signaling radio bearer) using the highest reported SAR configuration in 12.2 kbps RMC for head exposure.

9.4.3 Body SAR Measurements

SAR for body exposure configurations is measured using the 12.2 kbps RMC with the TPC bits all "1s". The 3G SAR test reduction procedure is applied to other spreading codes and multiple $DPDCH_n$ configurations supported by the handset with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured using an applicable RMC configuration with the corresponding spreading code or $DPDCH_n$, for the highest reported SAR configuration in 12.2 kbps RMC.

9.4.4 SAR Measurements with Rel 5 HSDPA

The 3G SAR test reduction procedure is applied to HSDPA body configurations with 12.2 kbps RMC as the primary mode. Otherwise, Body SAR for HSDPA is measured using an FRC with H-Set 1 in Sub-test 1 and a 12.2 kbps RMC configured in Test Loop Mode 1, for the highest reported SAR configuration in 12.2 kbps RMC without HSDPA. Handsets with both HSDPA and HSUPA are tested according to Release 6 HSPA test procedures.

9.4.5 SAR Measurements with Rel 6 HSUPA

The 3G SAR test reduction procedure is applied to HSPA (HSUPA/HSDPA with RMC) body configurations with 12.2 kbps RMC as the primary mode. Otherwise, Body SAR for HSPA is measured with E-DCH Sub-test 5, using H-Set 1 and QPSK for FRC and a 12.2 kbps RMC configured in Test Loop Mode 1 and power control algorithm 2, according to the highest reported body SAR configuration in 12.2 kbps RMC without HSPA.

When VOIP applies to head exposure, the 3G SAR test reduction procedure is applied with 12.2 kbps RMC as the primary mode; otherwise, the same HSPA configuration used for body SAR measurements are applied to head exposure testing.

9.5 SAR Measurement Conditions for LTE

LTE modes are tested according to FCC KDB 941225 D05v02r04 publication. Establishing connections with base station simulators ensure a consistent means for testing SAR and are recommended for evaluating SAR [4]. The R&S CMW500 or Anritsu MT8820C simulators are used for LTE output power measurements and SAR testing. Closed loop power control was used so the UE transmits with maximum output power during SAR testing. SAR tests were performed with the same number of RB and RB offsets transmitting on all TTI frames (maximum TTI).

9.5.1 Spectrum Plots for RB Configurations

A properly configured base station simulator was used for SAR tests and power measurements. Therefore, spectrum plots for RB configurations were not required to be included in this report.

9.5.2 MPR

MPR is permanently implemented for this device by the manufacturer. The specific manufacturer target MPR is indicated alongside the SAR results. MPR is enabled for this device, according to 3GPP TS36.101 Section 6.2.3 – 6.2.5 under Table 6.2.3-1.

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9.5.3 A-MPR

A-MPR (Additional MPR) has been disabled for all SAR tests by setting NS=01 on the base station simulator.

9.5.4 Required RB Size and RB Offsets for SAR Testing

According to FCC KDB 941225 D05v02r04:

a. Per Section 5.2.1, SAR is required for QPSK 1 RB Allocation for the largest bandwidth
   i. The required channel and offset combination with the highest maximum output power is required for SAR.
   ii. When the reported SAR is ≤ 0.8 W/kg, testing of the remaining RB offset configurations and required test channels is not required. Otherwise, SAR is required for the remaining required test channels using the RB offset configuration with highest output power for that channel.
   iii. When the reported SAR for a required test channel is > 1.45 W/kg, SAR is required for all RB offset configurations for that channel.
b. Per Section 5.2.2, SAR is required for 50% RB allocation using the largest bandwidth following the same procedures outlined in Section 5.2.1.
c. Per Section 5.2.3, QPSK SAR is not required for the 100% allocation when the highest maximum output power for the 100% allocation is less than the highest maximum output power of the 1 RB and 50% RB allocations and the reported SAR for the 1 RB and 50% RB allocations is < 0.8 W/kg.
d. Per Section 5.2.4 and 5.3, SAR tests for higher order modulations and lower bandwidths configurations are not required when the conducted power of the required test configurations determined by Sections 5.2.1 through 5.2.3 is less than or equal to ½ dB higher than the equivalent configuration using QPSK modulation and when the QPSK SAR for those configurations is <1.45 W/kg.

9.5.5 TDD

LTE TDD testing is performed using the SAR test guidance provided in FCC KDB 941225 D05v02r04. TDD is tested at the highest duty factor using UL-DL configuration 0 with special subframe configuration 6 and applying the FDD LTE procedures in KDB 941225 D05v02r04. SAR testing is performed using the extended cyclic prefix listed in 3GPP TS 36.211 Section 4.

9.5.6 Downlink Only Carrier Aggregation

Conducted power measurements with LTE Carrier Aggregation (CA) (downlink only) active are made in accordance to KDB Publication 941225 D05Av01r02. The RRC connection is only handled by one cell, the primary component carrier (PCC) for downlink and uplink communications. After making a data connection to the PCC, the UE device adds secondary component carrier(s) (SCC) on the downlink only. All uplink communications and acknowledgements remain identical to specifications when downlink carrier aggregation is inactive on the PCC. Additional conducted output powers are measured with the downlink carrier aggregation active for the configuration with highest measured maximum conducted power with downlink carrier aggregation inactive measured among the channel bandwidth, modulation, and RB combinations in each frequency band. Per FCC KDB Publication 941225 D05Av01r02, no SAR measurements are required for downlink only carrier aggregation configurations when the average output power with downlink only carrier aggregation active is not more than 0.25 dB higher than the average output power with downlink only carrier aggregation inactive.

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9.6 SAR Testing with 802.11 Transmitters

The normal network operating configurations of 802.11 transmitters are not suitable for SAR measurements. Unpredictable fluctuations in network traffic and antenna diversity conditions can introduce undesirable variations in SAR results. The SAR for these devices should be measured using chipset based test mode software to ensure the results are consistent and reliable. See KDB Publication 248227 D01v02r02 for more details.

9.6.1 General Device Setup

Chipset based test mode software is hardware dependent and generally varies among manufacturers. The device operating parameters established in test mode for SAR measurements must be identical to those programmed in production units, including output power levels, amplifier gain settings and other RF performance tuning parameters.

A periodic duty factor is required for current generation SAR systems to measure SAR. When 802.11 frame gaps are accounted for in the transmission, a maximum transmission duty factor of 92 - 96% is typically achievable in most test mode configurations. A minimum transmission duty factor of 85% is required to avoid certain hardware and device implementation issues related to wide range SAR scaling. The reported SAR is scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit.

9.6.2 U-NII-1 and U-NII-2A

For devices that operate in both U-NII-1 and U-NII-2A bands, when the same maximum output power is specified for both bands, SAR measurement using OFDM SAR test procedures is not required for U-NII-1 unless the highest reported SAR for U-NII-2A is > 1.2 W/kg. When different maximum output powers are specified for the bands, SAR measurement for the U-NII band with the lower maximum output power is not required unless the highest reported SAR for the U-NII band with the higher maximum output power, adjusted by the ratio of lower to higher specified maximum output power for the two bands, is > 1.2 W/kg. When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

9.6.3 U-NII-2C and U-NII-3

The frequency range covered by U-NII-2C and U-NII-3 is 380 MHz (5.47 – 5.85 GHz), which requires a minimum of at least two SAR probe calibration frequency points to support SAR measurements. When Terminal Doppler Weather Radar (TDWR) restriction applies, the channels at 5.60 – 5.65 GHz in U-NII-2C band must be disabled with acceptable mechanisms and documented in the equipment certification. Unless band gap channels are permanently disabled, SAR must be considered for these channels. Each band is tested independently according to the normally required OFDM SAR measurement and probe calibration frequency points requirements.

9.6.4 Initial Test Position Procedure

For exposure conditions with multiple test positions, such as handset operating next to the ear, devices with hotspot mode or UMPC mini-tablet, procedures for initial test position can be applied. Using the transmission mode determined by the DSSS procedure or initial test configuration, area scans are measured for all positions in an exposure condition. The test position with the highest extrapolated (peak) SAR is used as the initial test position. When reported SAR for the initial test position is ≤ 0.4 W/kg, no additional testing for the remaining test positions is required. Otherwise, SAR is evaluated at the subsequent highest peak SAR positions until the reported SAR result is ≤ 0.8 W/kg or all test positions are measured. When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

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9.6.5 2.4 GHz SAR Test Requirements

SAR is measured for 2.4 GHz 802.11b DSSS using either the fixed test position or, when applicable, the initial test position procedure. SAR test reduction is determined according to the following:

1) When the reported SAR of the highest measured maximum output power channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required for 802.11b DSSS in that exposure configuration.

2) When the reported SAR is > 0.8 W/kg, SAR is required for that position using the next highest measured output power channel. When any reported SAR is > 1.2 W/kg, SAR is required for the third channel; i.e., all channels require testing.

2.4 GHz 802.11 g/n/ax OFDM are additionally evaluated for SAR if the highest reported SAR for 802.11b, adjusted by the ratio of the OFDM to DSSS specified maximum output power, is > 1.2 W/kg. When SAR is required for OFDM modes in 2.4 GHz band, the Initial Test Configuration Procedures should be followed. When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

9.6.6 OFDM Transmission Mode and SAR Test Channel Selection

When the same maximum output power was specified for multiple OFDM transmission mode configurations in a frequency band or aggregated band, SAR is measured using the configuration with the largest channel bandwidth, lowest order modulation and lowest data rate. When the maximum output power of a channel is the same for equivalent OFDM configurations; for example, 802.11a, 802.11n and 802.11ac or 802.11g and 802.11n with the same channel bandwidth, modulation and data rate etc., the lower order 802.11 mode i.e., 802.11a, then 802.11n and 802.11ac or 802.11g then 802.11n, is used for SAR measurement. Per April 2019 TCB Workshop and FCC guidance, 802.11ax/be was considered the highest order 802.11 mode. When the maximum output power are the same for multiple test channels, either according to the default or additional power measurement requirements, SAR is measured using the channel closest to the middle of the frequency band or aggregated band. When there are multiple channels with the same maximum output power, SAR is measured using the higher number channel.

9.6.7 Initial Test Configuration Procedure

For OFDM, an initial test configuration is determined for each frequency band and aggregated band, according to the transmission mode with the highest maximum output power specified for SAR measurements. When the same maximum output power is specified for multiple OFDM transmission mode configurations in a frequency band or aggregated band, SAR is measured using the configuration(s) with the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order IEEE 802.11 mode. The channel of the transmission mode with the highest average RF output conducted power will be the initial test configuration.

When the reported SAR is ≤ 0.8 W/kg, no additional measurements on other test channels are required. Otherwise, SAR is evaluated using the subsequent highest average RF output channel until the reported SAR result is ≤ 1.2 W/kg or all channels are measured. When there are multiple untested channels having the same subsequent highest average RF output power, the channel with higher frequency from the lowest 802.11 mode is considered for SAR measurements (See Section 9.6.6). When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

9.6.8 Subsequent Test Configuration Procedures

For OFDM configurations in each frequency band and aggregated band, SAR is evaluated for initial test configuration using the fixed test position or the initial test position procedure. When the highest reported SAR

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(for the initial test configuration), adjusted by the ratio of the specified maximum output power of the subsequent test configuration to initial test configuration, is ≤ 1.2 W/kg, no additional SAR tests for the subsequent test configurations are required. When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

9.6.9 MIMO SAR considerations

Per KDB Publication 248227 D01v02r02, the simultaneous SAR provisions in KDB Publication 447498 D04v01 should be applied to determine simultaneous transmission SAR test exclusion for WIFI MIMO. If the sum of 1g single transmission chain SAR measurements is <1.6 W/kg, no additional SAR measurements for MIMO are required. Alternatively, SAR for MIMO can be measured with all antennas transmitting simultaneously at the specified maximum output power of MIMO operation. When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

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10 RF CONDUCTED POWERS

All conducted power measurements for Sub6 WWAN technologies and bands in this section were performed with Smart Transmit Peak exposure mode enabled such that the EUT transmitted continuously at the maximum time-averaged transmit power limit (Plimit) or the maximum tune-up power (Pmax), whichever is lower.

10.1 GSM Conducted Powers

Table 10-1
Measured P_{Limit} for DSI = 3/4 (Closed, Free, Hotspot) for GSM 850 Ant A

Maximum Burst-Averaged Output Power										
		Voice	*GPRS/EDGE Data (GMSK)*				*EDGE Data (8-PSK)*			
Band	**Channel**	**GSM [dBm] CS (1 Slot)**	**GPRS [dBm] 1 Tx Slot**	**GPRS [dBm] 2 Tx Slot**	**GPRS [dBm] 3 Tx Slot**	**GPRS [dBm] 4 Tx Slot**	**EDGE [dBm] 1 Tx Slot**	**EDGE [dBm] 2 Tx Slot**	**EDGE [dBm] 3 Tx Slot**	**EDGE [dBm] 4 Tx Slot**
GSM 850	128	31.08	31.17	28.14	26.35	**25.02**	25.60	24.18	22.05	21.07
	190	31.37	31.44	28.45	26.58	**25.31**	26.17	24.48	22.41	21.22
	251	31.52	31.62	28.35	26.60	**25.43**	26.06	24.44	22.21	21.38
Calculated Maximum Frame-Averaged Output Power										
		Voice	*GPRS/EDGE Data (GMSK)*				*EDGE Data (8-PSK)*			
Band	**Channel**	**GSM [dBm] CS (1 Slot)**	**GPRS [dBm] 1 Tx Slot**	**GPRS [dBm] 2 Tx Slot**	**GPRS [dBm] 3 Tx Slot**	**GPRS [dBm] 4 Tx Slot**	**EDGE [dBm] 1 Tx Slot**	**EDGE [dBm] 2 Tx Slot**	**EDGE [dBm] 3 Tx Slot**	**EDGE [dBm] 4 Tx Slot**
GSM 850	128	21.88	21.97	21.95	21.92	**21.84**	16.40	17.99	17.62	17.89
	190	22.17	22.24	22.26	22.15	**22.13**	16.97	18.29	17.98	18.04
	251	22.32	22.42	22.16	22.17	**22.25**	16.86	18.25	17.78	18.20
GSM 850	**Frame Avg.Targets:**	21.80	21.80	21.81	21.77	**21.82**	16.60	17.61	17.37	17.62

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Note:

1. Both burst-averaged and calculated frame-averaged powers are included. Frame-averaged power was calculated from the measured burst-averaged power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
2. GPRS/EDGE (GMSK) output powers were measured with coding scheme setting of 1 (CS1) on the base station simulator. CS1 was configured to measure GPRS output power measurements and SAR to ensure GMSK modulation in the signal. Our Investigation has shown that CS1 - CS4 settings do not have any impact on the output levels or modulation in the GPRS modes.
3. EDGE (8-PSK) output powers were measured with MCS7 on the base station simulator. MCS7 coding scheme was used to measure the output powers for EDGE since investigation has shown that choosing MCS7 coding scheme will ensure 8-PSK modulation. It has been shown that MCS levels that produce 8-PSK modulation do not have an impact on output power.

GSM Class: B
GPRS Multislot class: 33 (Max 4 Tx uplink slots)
EDGE Multislot class: 33 (Max 4 Tx uplink slots)
DTM Multislot Class: N/A

Figure 10-1
Power Measurement Setup

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10.2 LTE Conducted Powers

Note: Per FCC KDB Publication 941225 D05v02r05, LTE SAR for the lower bandwidths was not required for testing since the maximum average output power of all required channels and configurations was not more than 0.5 dB higher than the highest bandwidth and the reported LTE SAR for the highest bandwidth was less than 1.45 W/kg. Lower bandwidth conducted powers for all LTE bands can be found in LTE and NR Lower Bandwidth RF Conducted Powers Appendix.

Note: Some bands do not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

LTE Carrier Aggregation Notes:

1. This device supports uplink carrier aggregation for LTE CA_ 41C, with a maximum of two component carriers. For intraband contiguous carrier aggregation scenarios, 3GPP 36.101 Table 6.2.2A-1 specifies that the aggregate maximum allowed output power is equivalent to the single carrier scenario. 3GPP 36.101 6.2.3A allows for several dB of MPR to be applied when non-contiguous RB allocation is implemented. The conducted powers and MPR settings in this device are permanently implemented per the above 3GPP requirements.
2. Per FCC Guidance, the output power with uplink CA active was measured for the configuration with the highest reported SAR with single carrier for each exposure condition. The power was measured with wideband signal integration over both component carriers.

10.2.1 LTE Band 12

Table 10-2
LTE Band 12 Ant E Measured P_{Limit} for DSI = 0/2 (Open, Free, Hotspot) - 10 MHz Bandwidth

LTE Band 12 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23095.0 (707.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	23.21	0	0
	1	25	23.20		0
	1	49	**23.30**		0
	25	0	23.10	0-1	0
	25	12	**23.32**		0
	25	25	23.21		0
	50	0	23.04		0
16QAM	1	0	23.21	0-1	0
	1	25	23.54		0
	1	49	23.10		0
	25	0	23.15	0-2	0
	25	12	23.16		0
	25	25	23.28		0
	50	0	23.29		0
64QAM	1	0	23.22	0-2	0
	1	25	23.64		0
	1	49	23.53		0
	25	0	22.35	0-3	1
	25	12	22.44		1
	25	25	22.51		1
	50	0	22.47		1

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Table 10-3
LTE Band 12 Ant E Measured P_{Limit} for DSI = 1 (Head) - 10 MHz Bandwidth

LTE Band 12 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23095.0 (707.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	22.29	0	0
	1	25	**22.31**		0
	1	49	22.22		0
	25	0	22.27	0-1	0
	25	12	22.29		0
	25	25	**22.30**		0
	50	0	22.22		0
16QAM	1	0	22.34	0-1	0
	1	25	22.38		0
	1	49	22.42		0
	25	0	22.20	0-2	0
	25	12	22.19		0
	25	25	22.24		0
	50	0	22.21		0
64QAM	1	0	22.32	0-2	0
	1	25	22.36		0
	1	49	22.33		0
	25	0	22.18	0-3	0
	25	12	22.21		0
	25	25	22.25		0
	50	0	22.13		0

Table 10-4
LTE Band 12 Ant E Measured P_{Limit} for DSI = 3/4 (Closed, Free, Hotspot) - 10 MHz Bandwidth

LTE Band 12 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23095.0 (707.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	23.46	0	0
	1	25	23.58		0
	1	49	**23.60**		0
	25	0	23.56	0-1	0
	25	12	23.57		0
	25	25	**23.65**		0
	50	0	23.59		0
16QAM	1	0	23.74	0-1	0
	1	25	23.66		0
	1	49	23.74		0
	25	0	23.26	0-2	0.5
	25	12	23.38		0.5
	25	25	23.39		0.5
	50	0	23.35		0.5
64QAM	1	0	23.30	0-2	0.5
	1	25	23.39		0.5
	1	49	23.42		0.5
	25	0	22.34	0-3	1.5
	25	12	22.31		1.5
	25	25	22.33		1.5
	50	0	22.26		1.5

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10.2.2 LTE Band 13

Table 10-5
LTE Band 13 Ant A Measured P_{Limit} for DSI = 3/4 (Closed, Free, Hotspot) - 10 MHz Bandwidth

LTE Band 13 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23230.0 (782.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**23.70**	0	0
	1	25	23.55		0
	1	49	23.60		0
	25	0	**23.42**	0-1	0.5
	25	12	23.34		0.5
	25	25	23.37		0.5
	50	0	23.40		0.5
16QAM	1	0	23.48	0-1	0.5
	1	25	23.37		0.5
	1	49	23.32		0.5
	25	0	22.31	0-2	1.5
	25	12	22.32		1.5
	25	25	22.35		1.5
	50	0	22.25		1.5
64QAM	1	0	22.44	0-2	1.5
	1	25	22.42		1.5
	1	49	22.17		1.5
	25	0	21.39	0-3	2.5
	25	12	21.29		2.5
	25	25	21.27		2.5
	50	0	21.44		2.5

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10.2.3 LTE Band 5

Table 10-6
LTE Band 5 (Cell) Ant A Measured P_{Limit} for DSI = 0/2 (Open, Free, Hotspot) - 10 MHz Bandwidth

LTE Band 5 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 20525.0 (836.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**21.79**	0	0
	1	25	21.54		0
	1	49	21.45		0
	25	0	21.64	0-1	0
	25	12	**21.78**		0
	25	25	21.66		0
	50	0	21.66		0
16QAM	1	0	21.78	0-1	0
	1	25	21.71		0
	1	49	21.84		0
	25	0	21.72	0-2	0
	25	12	21.63		0
	25	25	21.66		0
	50	0	21.60		0
64QAM	1	0	21.78	0-2	0
	1	25	21.84		0
	1	49	21.59		0
	25	0	21.27	0-3	0.5
	25	12	21.35		0.5
	25	25	21.32		0.5
	50	0	21.25		0.5

Table 10-7
LTE Band 5 (Cell) Ant A Measured P_{Max} for DSI = 1 (RCV On) - 10 MHz Bandwidth

LTE Band 5 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 20525.0 (836.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**24.34**	0	0
	1	25	23.91		0
	1	49	24.11		0
	25	0	23.21	0-1	1
	25	12	**23.25**		1
	25	25	23.14		1
	50	0	23.23		1
16QAM	1	0	23.38	0-1	1
	1	25	23.34		1
	1	49	23.26		1
	25	0	22.20	0-2	2
	25	12	22.24		2
	25	25	22.21		2
	50	0	22.23		2
64QAM	1	0	22.47	0-2	2
	1	25	22.48		2
	1	49	22.41		2
	25	0	21.47	0-3	3
	25	12	21.37		3
	25	25	21.42		3
	50	0	21.33		3

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Table 10-8
LTE Band 5 (Cell) Ant A Measured P_{Limit} for DSI = 3/4 (Closed, Free, Hotspot) - 10 MHz Bandwidth

LTE Band 5 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 20525.0 (836.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**22.84**	0	0
	1	25	22.68		0
	1	49	22.67		0
	25	0	22.58	0-1	0
	25	12	**22.72**		0
	25	25	22.57		0
	50	0	22.71		0
16QAM	1	0	22.84	0-1	0
	1	25	22.74		0
	1	49	22.92		0
	25	0	22.37	0-2	0.5
	25	12	22.48		0.5
	25	25	22.47		0.5
	50	0	22.45		0.5
64QAM	1	0	22.44	0-2	0.5
	1	25	22.41		0.5
	1	49	22.36		0.5
	25	0	21.37	0-3	1.5
	25	12	21.45		1.5
	25	25	21.47		1.5
	50	0	21.30		1.5

Table 10-9
LTE Band 5 (Cell) Ant E Measured P_{Limit} for DSI = 0/2 (Open, Free, Hotspot) - 10 MHz Bandwidth

LTE Band 5 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 20525.0 (836.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**22.61**	0	0
	1	25	22.58		0
	1	49	22.60		0
	25	0	**22.60**	0-1	0
	25	12	22.48		0
	25	25	22.54		0
	50	0	22.57		0
16QAM	1	0	22.89	0-1	0
	1	25	22.99		0
	1	49	22.86		0
	25	0	22.61	0-2	0
	25	12	22.66		0
	25	25	22.72		0
	50	0	22.55		0
64QAM	1	0	22.65	0-2	0
	1	25	22.53		0
	1	49	22.81		0
	25	0	21.79	0-3	1
	25	12	21.86		1
	25	25	21.83		1
	50	0	21.91		1

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Table 10-10
LTE Band 5 (Cell) Ant E Measured P_{Limit} for DSI = 1 (RCV On) - 10 MHz Bandwidth

LTE Band 5 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 20525.0 (836.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**21.76**	0	0
	1	25	21.45		0
	1	49	21.61		0
	25	0	**21.68**	0-1	0
	25	12	21.66		0
	25	25	21.63		0
	50	0	21.58		0
16QAM	1	0	21.95	0-1	0
	1	25	21.72		0
	1	49	21.91		0
	25	0	21.61	0-2	0
	25	12	21.52		0
	25	25	21.68		0
	50	0	21.55		0
64QAM	1	0	21.60	0-2	0
	1	25	21.79		0
	1	49	21.76		0
	25	0	21.58	0-3	0
	25	12	21.56		0
	25	25	21.71		0
	50	0	21.32		0

Table 10-11
LTE Band 5 (Cell) Ant E Measured P_{Limit} for DSI = 3/4 (Closed, Free, Hotspot) - 10 MHz Bandwidth

LTE Band 5 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 20525.0 (836.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**23.20**	0	0
	1	25	23.07		0
	1	49	22.98		0
	25	0	**23.07**	0-1	0
	25	12	22.97		0
	25	25	23.05		0
	50	0	22.96		0
16QAM	1	0	23.43	0-1	0
	1	25	23.50		0
	1	49	23.08		0
	25	0	22.85	0-2	0.5
	25	12	22.85		0.5
	25	25	22.90		0.5
	50	0	22.71		0.5
64QAM	1	0	23.09	0-2	0.5
	1	25	23.19		0.5
	1	49	22.88		0.5
	25	0	21.91	0-3	1.5
	25	12	21.83		1.5
	25	25	21.87		1.5
	50	0	21.91		1.5

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10.2.4 LTE Band 66

Table 10-12
LTE Band 66 (AWS) Ant H Measured P_{Limit} for DSI = 0/2 (Open, Free, Hotspot) - 20 MHz Bandwidth

LTE Band 66 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 132072.0 (1720.0 MHz)	Mid Channel 132322.0 (1745.0 MHz)	High Channel 132572.0 (1770.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	21.26	21.48	21.18	0	0
	1	50	21.07	**21.63**	21.04		0
	1	99	20.95	21.11	21.20		0
	50	0	21.10	21.10	21.02	0-1	0
	50	25	21.19	**21.26**	20.94		0
	50	50	21.25	21.16	20.94		0
	100	0	21.12	21.14	20.96		0
16QAM	1	0	21.25	21.06	21.01	0-1	0
	1	50	21.36	21.34	21.23		0
	1	99	21.00	21.13	21.25		0
	50	0	21.12	21.06	20.94	0-2	0
	50	25	21.23	21.13	21.04		0
	50	50	21.35	21.20	21.02		0
	100	0	21.19	20.97	20.99		0
64QAM	1	0	21.41	21.51	21.26	0-2	0
	1	50	21.40	21.62	21.35		0
	1	99	21.20	21.25	21.16		0
	50	0	21.24	21.18	21.32	0-3	0
	50	25	21.30	21.14	21.13		0
	50	50	21.19	21.19	20.82		0
	100	0	21.17	21.09	20.96		0

10.2.5 LTE Band 25

Table 10-13
LTE Band 25 (PCS) Ant B Measured P_{Max} for DSI = 1 (RCV On) - 20 MHz Bandwidth

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LTE Band 25 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel	Mid Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			26140.0 (1860.0 MHz)	26365.0 (1882.5 MHz)	26590.0 (1905.0 MHz)		
			Conducted Power [dBm]				
QPSK	1	0	23.11	23.03	23.19	0	0
	1	50	23.18	23.06	23.17		0
	1	99	**23.25**	23.11	23.20		0
	50	0	22.08	22.23	22.12	0-1	1
	50	25	22.22	22.27	22.23		1
	50	50	**22.29**	22.28	22.26		1
	100	0	22.21	22.18	22.13		1
16QAM	1	0	22.44	22.37	22.28	0-1	1
	1	50	22.52	22.52	22.41		1
	1	99	22.53	22.40	22.32		1
	50	0	21.10	21.22	21.19	0-2	2
	50	25	21.20	21.01	21.30		2
	50	50	21.21	21.26	21.25		2
	100	0	21.19	21.15	21.25		2
64QAM	1	0	21.31	21.16	21.47	0-2	2
	1	50	21.45	21.25	21.56		2
	1	99	21.43	21.34	21.48		2
	50	0	20.01	20.18	20.11	0-3	3
	50	25	20.13	20.22	20.30		3
	50	50	20.17	20.23	20.23		3
	100	0	20.17	20.19	20.22		3

10.2.6 LTE Band 41

Table 10-14
LTE Band 41 Ant H Measured P_{Limit} for DSI = 0/2 (Open, Free, Hotspot), DSI =3/4 (Closed, Free, Hotspot) - 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			39750.0 (2506.0 MHz)	40185.0 (2549.5 MHz)	40620.0 (2593.0 MHz)	41055.0 (2636.5 MHz)	41490.0 (2680.0 MHz)		
			Conducted Power [dBm]						
QPSK	1	0	21.42	21.28	21.14	21.27	21.23	0	0
	1	50	**21.60**	21.31	21.18	21.35	21.21		0
	1	99	21.26	21.30	21.06	21.17	21.11		0
	50	0	**21.74**	21.35	21.55	21.53	21.48	0-1	0
	50	25	21.73	21.47	21.56	21.52	21.52		0
	50	50	21.60	21.45	21.45	21.43	21.38		0
	100	0	21.58	21.35	21.50	21.50	21.45		0
16QAM	1	0	21.76	21.48	21.60	21.42	21.44	0-1	0
	1	50	21.90	21.40	21.42	21.58	21.53		0
	1	99	21.69	21.53	21.35	21.36	21.50		0
	50	0	21.75	21.35	21.55	21.54	21.55	0-2	0
	50	25	21.74	21.49	21.58	21.58	21.56		0
	50	50	21.62	21.48	21.45	21.41	21.38		0
	100	0	21.61	21.39	21.53	21.50	21.49		0
64QAM	1	0	21.74	21.49	21.56	21.59	21.56	0-2	0
	1	50	21.88	21.58	21.56	21.60	21.51		0
	1	99	21.55	21.43	21.49	21.36	21.36		0
	50	0	21.78	21.39	21.59	21.54	21.54	0-3	0
	50	25	21.79	21.49	21.60	21.56	21.56		0
	50	50	21.62	21.48	21.48	21.43	21.43		0
	100	0	21.65	21.37	21.58	21.53	21.51		0

Table 10-15
LTE Band 41 Ant H Uplink Carrier Aggregation Measured P_{Limit} for DSI = 0/2 (Open, Free, Hotspot), DSI =3/4 (Closed, Free, Hotspot) - 20 MHz Bandwidth

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	PCC									SCC									Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC UL Channel	PCC UL Frequency [MHz]	PCC DL Channel	PCC DL Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC UL Channel	SCC UL Frequency [MHz]	SCC DL Channel	SCC DL Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41C	LTE Band 41	20	39750	2506	39750	2506	QPSK	1	99	LTE Band 41	20	39948	2525.8	39948	2525.8	QPSK	1	0	21.18	21.26

Figure 10-2
Power Measurement Setup

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10.3 NR Conducted Powers

Per October 2020 TCB Workshop Guidance, NR FR1 SAR evaluations are being generally based on adapting the existing LTE SAR procedures (FCC KDB Publication 941225 D05v02r05). Therefore, NR SAR for the lower bandwidths was not required for testing based on the measured output power and the reported NR SAR for the highest bandwidth. Lower bandwidth conducted powers for all NR bands can be found in LTE and NR Lower Bandwidth RF Conducted Powers Appendix.

Note: Some bands do not support non-overlapping channels. Per FCC Guidance, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

10.3.1 NR Band n5

Table 10-16
NR Band n5 Ant A Measured P_{Limit} for DSI = 0/2 (Open, Free, Hotspot) - 20 MHz Bandwidth

NR Band n5 20 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	167300 (836.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	21.28	0	0.0
	1	53	21.35		0.0
	1	104	**21.41**		0.0
	50	0	21.32	0-1	0.0
	50	28	**21.44**	0	0.0
	50	56	21.40	0-1	0.0
	100	0	21.22		0.0
DFT-s-OFDM 16QAM	1	1	21.01	0-1	0.0
CP-OFDM QPSK	1	1	21.29	0-1.5	0.0

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Table 10-17
NR Band n5 Ant A Measured P_{Max} for DSI = 1 (RCV On) - 20 MHz Bandwidth

NR Band n5 20 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	167300 (836.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	23.98	0	0.0
	1	53	24.05		0.0
	1	104	**24.21**		0.0
	50	0	23.02	0-1	1.0
	50	28	**24.14**	0	0.0
	50	56	23.12	0-1	1.0
	100	0	23.01		1.0
DFT-s-OFDM 16QAM	1	1	22.89	0-1	1.0
CP-OFDM QPSK	1	1	22.51	0-1.5	1.5

Table 10-18
NR Band n5 Ant A Measured P_{Limit} for DSI = 3/4 (Closed, Free, Hotspot) - 20 MHz Bandwidth

NR Band n5 20 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	167300 (836.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	22.46	0	0.0
	1	53	22.56		0.0
	1	104	**22.68**		0.0
	50	0	22.52	0-1	0.0
	50	28	22.60	0	0.0
	50	56	**22.71**	0-1	0.0
	100	0	22.65		0.0
DFT-s-OFDM 16QAM	1	1	22.37	0-1	0.0
CP-OFDM QPSK	1	1	22.55	0-1.5	0.0

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Table 10-19
NR Band n5 Ant E Measured P_{Limit} for DSI = 0/2 (Open, Free, Hotspot) - 20 MHz Bandwidth

NR Band n5 20 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	167300 (836.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	22.03	0	0.0
	1	53	**22.09**		0.0
	1	104	22.02		0.0
	50	0	22.04	0-1	0.0
	50	28	22.07	0	0.0
	50	56	**22.13**	0-1	0.0
	100	0	22.08		0.0
DFT-s-OFDM 16QAM	1	1	21.86	0-1	0.0
CP-OFDM QPSK	1	1	21.94	0-1.5	0.0

Table 10-20
NR Band n5 Ant E Measured P_{Limit} for DSI = 1 (RCV On) - 20 MHz Bandwidth

NR Band n5 20 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	167300 (836.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	21.04	0	0.0
	1	53	**21.10**		0.0
	1	104	21.02		0.0
	50	0	21.08	0-1	0.0
	50	28	21.04	0	0.0
	50	56	**21.13**	0-1	0.0
	100	0	21.09		0.0
DFT-s-OFDM 16QAM	1	1	20.77	0-1	0.0
CP-OFDM QPSK	1	1	21.16	0-1.5	0.0

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Table 10-21
NR Band n5 Ant E Measured P_{Limit} for DSI = 3/4 (Closed, Free, Hotspot) - 20 MHz Bandwidth

NR Band n5 20 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	167300 (836.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	22.51	0	0.0
	1	53	**22.55**		0.0
	1	104	22.47		0.0
	50	0	22.57	0-1	0.0
	50	28	22.62	0	0.0
	50	56	**22.64**	0-1	0.0
	100	0	22.54		0.0
DFT-s-OFDM 16QAM	1	1	22.32	0-1	0.0
CP-OFDM QPSK	1	1	22.47	0-1.5	0.0

10.3.2 NR Band n66

Table 10-22
NR Band n66 Ant B Measured P_{Limit} for DSI = 0/2 (Open, Free, Hotspot) - 45 MHz Bandwidth

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NR Band n66 45 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	349000 (1745 MHz)		
			Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	19.18	0	0.0
	1	121	**19.25**		0.0
	1	240	19.13		0.0
	120	0	**19.26**	0-1	0.0
	120	61	19.23	0	0.0
	120	122	19.21	0-1	0.0
	240	0	19.14		0.0
DFT-s-OFDM 16QAM	1	1	19.12	0-1	0.0
CP-OFDM QPSK	1	1	19.33	0-1.5	0.0

Table 10-23
NR Band n66 Ant B Measured P_{Max} for DSI = 1 (RCV On) - 45 MHz Bandwidth

NR Band n66 45 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	349000 (1745 MHz)		
			Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	**24.60**	0	0.0
	1	121	24.57		0.0
	1	240	24.28		0.0
	120	0	23.63	0-1	1.0
	120	61	**24.55**	0	0.0
	120	122	23.54	0-1	1.0
	240	0	23.56		1.0
DFT-s-OFDM 16QAM	1	1	23.51	0-1	1.0
CP-OFDM QPSK	1	1	22.92	0-1.5	1.5

Table 10-24
NR Band n66 Ant H Measured P_{Limit} for DSI = 3/4 (Closed, Free, Hotspot) - 45 MHz Bandwidth

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NR Band n66 45 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	349000 (1745 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	21.54	0	0.0
	1	121	**21.74**		0.0
	1	240	21.64		0.0
	120	0	21.77	0-1	0.0
	120	61	21.79	0	0.0
	120	122	**21.84**	0-1	0.0
	240	0	21.73		0.0
DFT-s-OFDM 16QAM	1	1	21.85	0-1	0.0
CP-OFDM QPSK	1	1	21.76	0-1.5	0.0

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10.3.3 NR Band n41

Table 10-25
NR Band n41 PC2 Ant B Measured P_{Max} for DSI = 1 (RCV On) - 100 MHz Bandwidth

NR Band n41 100 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	518598 (2592.99 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	**26.27**	0	0.0
	1	137	26.10		0.0
	1	271	25.84		0.0
	135	0	25.12	0-1	1.0
	135	69	**26.16**	0	0.0
	135	138	25.29	0-1	1.0
	270	0	25.24		1.0
DFT-s-OFDM 16QAM	1	1	25.00	0-1	1.0
CP-OFDM QPSK	1	1	24.82	0-1.5	1.5

Table 10-26
NR Band n41 PC2 Ant H Measured P_{Limit} for DSI = 1 (RCV On) - 100 MHz Bandwidth

NR Band n41 100 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	518598 (2592.99 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	17.12	0	0.0
	1	137	17.17		0.0
	1	271	**17.31**		0.0
	135	0	17.11	0-1	0.0
	135	69	17.13	0	0.0
	135	138	**17.20**	0-1	0.0
	270	0	17.15		0.0
DFT-s-OFDM 16QAM	1	1	17.36	0-1	0.0
CP-OFDM QPSK	1	1	17.34	0-1.5	0.0

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Figure 10-3
Power Measurement Setup – NR FDD

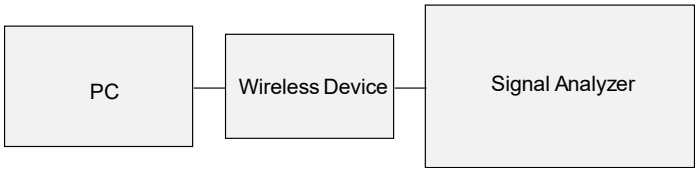

Figure 10-4
Power Measurement Setup – NR TDD

10.4 WLAN Conducted Powers

Table 10-27
2.4 GHz WLAN Measured P_{max} Average RF Power for DSI = 0/2 (Open, Free, Hotspot) – Ant G

2.4GHz WIFI (20MHz 802.11b SISO ANT G)			
Freq. [MHz]	**Channel**	**Detector**	**Conducted Power [dBm]**
2412	1	Average	19.69
2437	6		18.93
2462	11		19.20

Table 10-28
2.4 GHz WLAN Measured P_{Limit} Average RF Power for DSI = 3/4 (Closed, Free, Hotspot) – Ant G

2.4GHz WIFI (20MHz 802.11b SISO ANT G)			
Freq. [MHz]	**Channel**	**Detector**	**Conducted Power [dBm]**
2412	1	Average	17.99
2437	6		17.31
2462	11		17.56

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Table 10-29
6 GHz WLAN Measured P_{max} Average RF Power for DSI = 3/4 (Closed, Free, Hotspot) – MIMO

6GHz WIFI (40MHz 802.11ax MIMO)					
Band	Freq [MHz]	Channel	Avg. Conducted Powers [dBm]		
			ANT1	ANT2	MIMO
UNII-5	5965	3	16.27	15.51	18.92
	6285	67	15.99	16.50	19.26
UNII-7	6685	147	16.11	16.60	19.37
6GHz WIFI (80MHz 802.11ax MIMO)					
Band	Freq [MHz]	Channel	Avg. Conducted Powers [dBm]		
			ANT1	ANT2	MIMO
UNII-6	6465	103	14.30	15.94	18.21
UNII-8	7025	215	14.85	15.58	18.24
6GHz WIFI (160MHz 802.11ax MIMO) - VLP					
Band	Freq [MHz]	Channel	Avg. Conducted Powers [dBm]		
			ANT1	ANT2	MIMO
UNII-5	6025	15	11.62	11.47	14.56
	6345	79	10.82	11.92	14.42
UNII-6	6505	111	10.24	11.06	13.68
UNII-7	6665	143	10.97	11.65	14.33
UNII-8	6985	207	10.78	11.54	14.19
6GHz WIFI (160MHz 802.11be MIMO) - VLP					
Band	Freq [MHz]	Channel	Avg. Conducted Powers [dBm]		
			ANT1	ANT2	MIMO
UNII-5	6025	15	10.87	10.73	13.81
	6345	79	10.06	11.23	13.69
UNII-6	6505	111	10.11	10.79	13.47
UNII-7	6665	143	10.25	10.91	13.60
UNII-8	6985	207	10.07	10.84	13.48

Justification for test configurations for WLAN per KDB Publication 248227 D01v02r02:

- Power measurements were performed for the transmission mode configuration with the highest maximum output power specified for production units.
- For transmission modes with the same maximum output power specification, powers were measured for the largest channel bandwidth, lowest order modulation and lowest data rate.
- For transmission modes with identical maximum specified output power, channel bandwidth, modulation and data rates, power measurements were required for all identical configurations.
- For each transmission mode configuration, powers were measured for the highest and lowest channels; and at the mid-band channel(s) when there were at least 3 channels supported. For configurations with multiple mid-band channels, due to an even number of channels, both channels were measured.

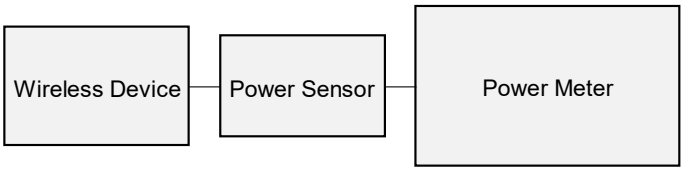

Figure 10-5
Power Measurement Setup

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10.5 Bluetooth Conducted Powers

Table 10-30
Bluetooth Measured P_{max} Average RF Power for All DSI – Ant G

Frequency [MHz]	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
			[dBm]	[mW]
2402	1.0	0	17.76	59.704
2441	1.0	39	17.26	53.211
2480	1.0	78	16.40	43.652
2402	2.0	0	14.24	26.546
2441	2.0	39	13.81	24.044
2480	2.0	78	13.02	20.045
2402	3.0	0	14.33	27.102
2441	3.0	39	13.91	24.604
2480	3.0	78	13.33	21.528

Table 10-31
Bluetooth Measured P_{max} Average RF Power for All DSI – Ant C

Frequency [MHz]	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
			[dBm]	[mW]
2402	1.0	0	18.77	75.336
2441	1.0	39	18.64	73.114
2480	1.0	78	18.65	73.282
2402	2.0	0	15.14	32.659
2441	2.0	39	14.96	31.333
2480	2.0	78	15.26	33.574
2402	3.0	0	15.29	33.806
2441	3.0	39	15.08	32.211
2480	3.0	78	15.38	34.514

Table 10-32
Bluetooth Measured P_{max} Average RF Power for All DSI –Dual Tx

Frequency [MHz]	Data Rate [Mbps]	Channel No.	ANT1 Avg Conducted Power		ANT2 Avg Conducted Power		Dual Avg Conducted Power	
			[dBm]	[mW]	[dBm]	[mW]	[dBm]	[mW]
2402	1.0	0	12.11	16.255	11.00	12.589	14.60	28.845
2441	1.0	39	10.92	12.359	11.49	14.093	14.22	26.452
2480	1.0	78	11.52	14.191	9.72	9.376	13.72	23.566
2402	2.0	0	9.11	8.147	8.41	6.934	11.78	15.081
2441	2.0	39	7.76	5.970	8.89	7.745	11.37	13.715
2480	2.0	78	8.75	7.499	7.04	5.058	10.99	12.557
2402	3.0	0	9.09	8.110	8.43	6.966	11.78	15.076
2441	3.0	39	7.88	6.138	8.96	7.870	11.46	14.008
2480	3.0	78	8.83	7.638	7.03	5.047	11.03	12.685

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Table 10-33
Bluetooth LE Measured P_{max} Average RF Power for DSI = 0/2 (Open. Free, Hotspot), DSI = 3/4 (Closed, Free, Hotspot) – Ant C

Frequency [MHz]	Data Rate [Mbps]	Channel No.	Bluetooth Mode	Peak Conducted Power	
				[dBm]	[mW]
2402	125 kbps	0	LE	8.69	7.396
2440	125 kbps	19	LE	8.54	7.145
2480	125 kbps	39	LE	7.61	5.768
2402	500 kbps	0	LE	8.66	7.345
2440	500 kbps	19	LE	8.54	7.145
2480	500 kbps	39	LE	7.55	5.689
2402	1 Mbps	0	LE	18.32	67.920
2440	1 Mbps	19	LE	18.38	68.865
2480	1 Mbps	39	LE	18.41	69.343
2402	2 Mbps	0	LE	18.48	70.469
2440	2 Mbps	19	LE	18.46	70.146
2480	2 Mbps	39	LE	18.72	74.473

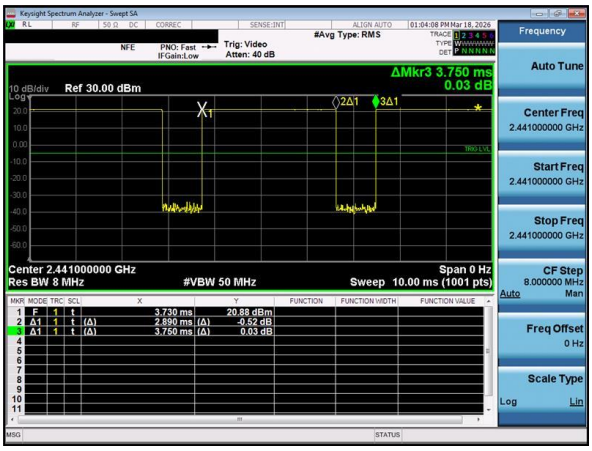

Figure 10-6
Bluetooth Antenna G Transmission Plot

Equation 10-1
Bluetooth Antenna G Duty Cycle Calculation

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.89ms}{3.75ms} * 100\% = 77.07\%$$

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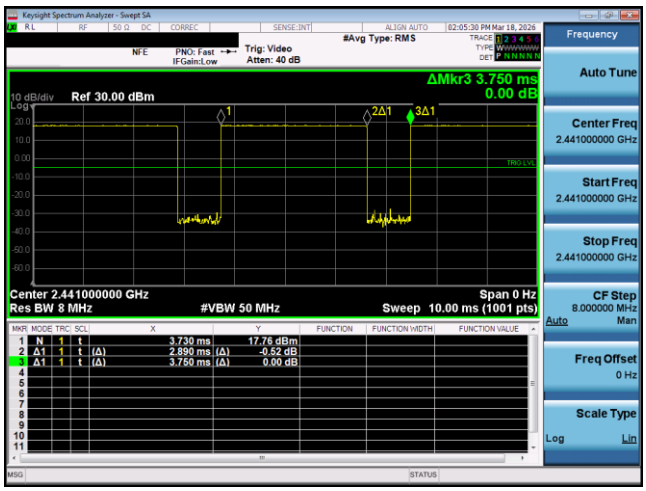

Figure 10-7
Bluetooth Antenna C Transmission Plot

Equation 10-2
Bluetooth Antenna C Duty Cycle Calculation

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.89ms}{3.75ms} * 100\% = 77.07\%$$

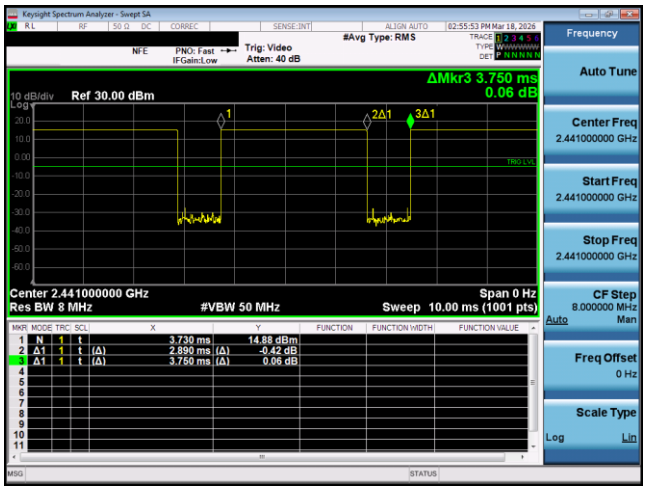

Figure 10-8
Bluetooth MIMO Transmission Plot

Equation 10-3
Bluetooth MIMO Duty Cycle Calculation

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.890ms}{3.750ms} * 100\% = 77.07\%$$

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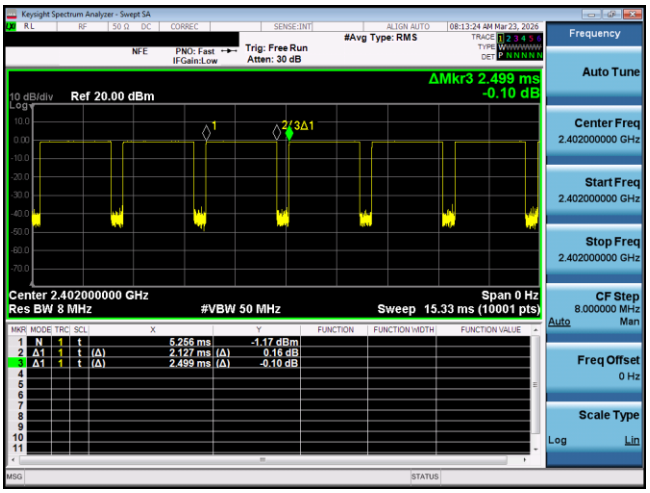

Figure 10-9
Bluetooth LE Antenna G Transmission Plot

Equation 10-4
Bluetooth LE Antenna G Duty Cycle Calculation

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.127ms}{2.499ms} * 100\% = 85.11\%$$

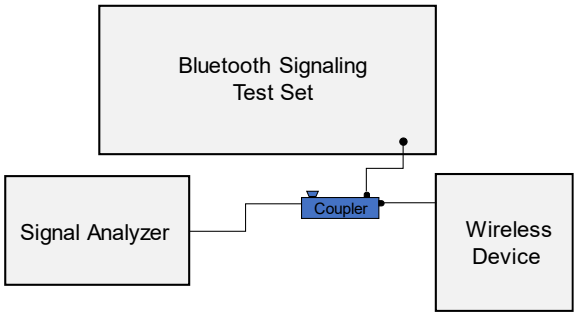

Figure 10-10
Power Measurement Setup

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11 SYSTEM VERIFICATION

11.1 Tissue Verification

Table 11-1
Measured Head Tissue Properties

Calibrated for Tests Performed on:	Tissue Type	Tissue Temp During Calibration (°C)	Measured Frequency (MHz)	Measured Conductivity, σ (S/m)	Measured Dielectric Constant, ε	TARGET Conductivity, σ (S/m)	TARGET Dielectric Constant, ε	% dev σ	% dev ε
04/23/2026	30 Head	20.0	12	0.786	52.451	0.750	55.000	4.80%	-4.63%
			13	0.786	53.074	0.750	55.000	4.80%	-3.50%
			14	0.786	53.447	0.750	55.000	4.80%	-2.82%
04/27/2026	750 Head	20.5	680	0.845	42.652	0.888	42.305	-4.84%	0.82%
			695	0.849	42.593	0.889	42.227	-4.50%	0.87%
			700	0.851	42.575	0.889	42.201	-4.27%	0.89%
			710	0.854	42.542	0.890	42.149	-4.04%	0.93%
			725	0.859	42.498	0.891	42.071	-3.59%	1.01%
			750	0.867	42.432	0.894	41.942	-3.02%	1.17%
			770	0.874	42.377	0.895	41.838	-2.35%	1.29%
			785	0.879	42.329	0.896	41.760	-1.90%	1.36%
			800	0.884	42.280	0.897	41.682	-1.45%	1.43%
04/29/2026	750 Head	20.2	680	0.844	42.974	0.888	42.305	-4.95%	1.58%
			695	0.849	42.919	0.889	42.227	-4.50%	1.64%
			700	0.850	42.901	0.889	42.201	-4.39%	1.66%
			710	0.853	42.867	0.890	42.149	-4.16%	1.70%
			725	0.858	42.821	0.891	42.071	-3.70%	1.78%
			750	0.867	42.757	0.894	41.942	-3.02%	1.94%
			770	0.874	42.702	0.895	41.838	-2.35%	2.07%
			785	0.879	42.653	0.896	41.760	-1.90%	2.14%
			800	0.884	42.602	0.897	41.682	-1.45%	2.21%
05/13/2026	750 Head	22.5	680	0.847	43.150	0.888	42.305	-4.62%	2.00%
			695	0.852	43.090	0.889	42.227	-4.16%	2.04%
			700	0.853	43.069	0.889	42.201	-4.05%	2.06%
			710	0.857	43.028	0.890	42.149	-3.71%	2.09%
			725	0.861	42.975	0.891	42.071	-3.37%	2.15%
			750	0.869	42.898	0.894	41.942	-2.80%	2.28%
			770	0.875	42.836	0.895	41.838	-2.23%	2.39%
			785	0.880	42.792	0.896	41.760	-1.79%	2.47%
			800	0.885	42.749	0.897	41.682	-1.34%	2.56%
05/18/2026	750 Head	22.6	680	0.847	42.552	0.888	42.305	-4.62%	0.58%
			695	0.853	42.485	0.889	42.227	-4.05%	0.61%
			700	0.855	42.470	0.889	42.201	-3.82%	0.64%
			710	0.859	42.450	0.890	42.149	-3.48%	0.71%
			725	0.863	42.433	0.891	42.071	-3.14%	0.86%
			750	0.869	42.377	0.894	41.942	-2.80%	1.04%
			770	0.876	42.293	0.895	41.838	-2.12%	1.09%
			785	0.884	42.227	0.896	41.760	-1.34%	1.12%
			800	0.891	42.173	0.897	41.682	-0.67%	1.18%
05/28/2026	750 Head	23.8	680	0.851	42.239	0.888	42.305	-4.17%	-0.16%
			695	0.856	42.190	0.889	42.227	-3.71%	-0.09%
			710	0.861	42.132	0.890	42.149	-3.26%	-0.04%
			725	0.866	42.075	0.891	42.071	-2.81%	0.01%
			750	0.874	41.995	0.894	41.942	-2.24%	0.13%
			770	0.880	41.941	0.895	41.838	-1.68%	0.25%
			785	0.885	41.900	0.896	41.760	-1.23%	0.34%
			800	0.891	41.857	0.897	41.682	-0.67%	0.42%
05/06/2026	835 Head	21.4	815	0.893	41.675	0.898	41.594	-0.56%	0.19%
			820	0.895	41.661	0.899	41.578	-0.44%	0.20%
			835	0.900	41.625	0.900	41.500	0.00%	0.30%
			850	0.906	41.589	0.916	41.500	-1.09%	0.21%
05/11/2026	835 Head	24.0	815	0.892	40.053	0.898	41.594	-0.67%	-3.70%
			820	0.893	40.039	0.899	41.578	-0.67%	-3.70%
			835	0.898	40.003	0.900	41.500	-0.22%	-3.61%
			850	0.902	39.973	0.916	41.500	-1.53%	-3.68%
05/11/2026	835 Head	21.2	815	0.892	43.036	0.898	41.594	-0.67%	3.47%
			820	0.893	43.022	0.899	41.578	-0.67%	3.47%
			835	0.899	42.983	0.900	41.500	-0.11%	3.57%
			850	0.904	42.951	0.916	41.500	-1.31%	3.50%
05/13/2026	835 Head	22.5	815	0.890	42.708	0.898	41.594	-0.89%	2.68%
			820	0.892	42.695	0.899	41.578	-0.78%	2.69%
			835	0.897	42.656	0.900	41.500	-0.33%	2.79%
			850	0.902	42.620	0.916	41.500	-1.53%	2.70%

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Table 11-2
Measured Head Tissue Properties

Calibrated for Tests Performed on:	Tissue Type	Tissue Temp During Calibration (˚C)	Measured Frequency (MHz)	Measured Conductivity, σ (S/m)	Measured Dielectric Constant, ε	TARGET Conductivity, σ (S/m)	TARGET Dielectric Constant, ε	% dev σ	% dev ε
05/18/2026	835 Head	22.6	815	0.896	42.137	0.898	41.594	-0.22%	1.31%
			820	0.898	42.127	0.899	41.578	-0.11%	1.32%
			835	0.902	42.095	0.900	41.500	0.22%	1.43%
			850	0.906	42.044	0.916	41.500	-1.09%	1.31%
05/20/2026	835 Head	22.8	815	0.899	42.432	0.898	41.594	0.11%	2.01%
			820	0.901	42.417	0.899	41.578	0.22%	2.02%
			835	0.905	42.383	0.900	41.500	0.56%	2.13%
			850	0.910	42.353	0.916	41.500	-0.66%	2.06%
05/28/2026	835 Head	23.8	815	0.896	41.817	0.898	41.594	-0.22%	0.54%
			820	0.897	41.805	0.899	41.578	-0.22%	0.55%
			835	0.903	41.773	0.900	41.500	0.33%	0.66%
			850	0.908	41.743	0.916	41.500	-0.87%	0.59%
04/27/2026	1750 Head	20.9	1700	1.317	39.976	1.343	40.145	-1.94%	-0.42%
			1705	1.320	39.968	1.345	40.141	-1.86%	-0.43%
			1710	1.324	39.958	1.348	40.136	-1.78%	-0.44%
			1720	1.331	39.938	1.354	40.126	-1.70%	-0.47%
			1745	1.349	39.883	1.368	40.087	-1.39%	-0.51%
			1750	1.353	39.874	1.371	40.079	-1.31%	-0.51%
			1770	1.367	39.839	1.383	40.047	-1.16%	-0.52%
			1790	1.381	39.796	1.394	40.016	-0.93%	-0.55%
04/30/2026	1750 Head	22.9	1700	1.278	42.047	1.343	40.145	-4.84%	4.74%
			1705	1.281	42.037	1.345	40.141	-4.76%	4.72%
			1710	1.283	42.026	1.348	40.136	-4.82%	4.71%
			1720	1.289	42.006	1.354	40.126	-4.80%	4.69%
			1745	1.302	41.960	1.368	40.087	-4.82%	4.67%
			1750	1.305	41.952	1.371	40.079	-4.81%	4.67%
			1770	1.315	41.918	1.383	40.047	-4.92%	4.67%
			1790	1.325	41.885	1.394	40.016	-4.95%	4.67%
05/11/2026	1750 Head	20.2	1710	1.312	41.498	1.348	40.142	-2.67%	3.38%
			1720	1.318	41.481	1.354	40.126	-2.66%	3.38%
			1745	1.334	41.434	1.368	40.087	-2.49%	3.36%
			1750	1.337	41.424	1.371	40.079	-2.48%	3.36%
			1770	1.350	41.388	1.383	40.047	-2.39%	3.35%
			1790	1.362	41.356	1.394	40.016	-2.30%	3.35%
05/14/2026	1750 Head	20.4	1700	1.294	39.582	1.343	40.145	-3.65%	-1.40%
			1705	1.296	39.572	1.345	40.141	-3.64%	-1.42%
			1710	1.299	39.561	1.348	40.136	-3.64%	-1.43%
			1720	1.305	39.539	1.354	40.126	-3.62%	-1.46%
			1745	1.318	39.494	1.368	40.087	-3.65%	-1.48%
			1750	1.321	39.487	1.371	40.079	-3.65%	-1.48%
			1770	1.332	39.466	1.383	40.047	-3.69%	-1.45%
			1790	1.343	39.447	1.394	40.016	-3.66%	-1.42%
05/18/2026	1750 Head	21.4	1700	1.292	39.762	1.343	40.145	-3.80%	-0.95%
			1705	1.296	39.759	1.345	40.141	-3.64%	-0.95%
			1710	1.300	39.757	1.348	40.136	-3.56%	-0.94%
			1720	1.307	39.748	1.354	40.126	-3.47%	-0.94%
			1745	1.322	39.704	1.368	40.087	-3.36%	-0.96%
			1750	1.325	39.693	1.371	40.079	-3.36%	-0.96%
			1770	1.336	39.634	1.383	40.047	-3.40%	-1.03%
			1790	1.348	39.573	1.394	40.016	-3.30%	-1.11%
05/21/2026	1750 Head	20.1	1700	1.337	40.130	1.343	40.145	-0.45%	-0.04%
			1705	1.340	40.116	1.345	40.141	-0.37%	-0.06%
			1710	1.343	40.103	1.348	40.136	-0.37%	-0.08%
			1720	1.348	40.077	1.354	40.126	-0.44%	-0.12%
			1745	1.363	40.022	1.368	40.087	-0.37%	-0.16%
			1750	1.366	40.013	1.371	40.079	-0.36%	-0.16%
			1770	1.377	39.981	1.383	40.047	-0.43%	-0.16%
			1790	1.389	39.953	1.394	40.016	-0.36%	-0.16%
04/27/2026	1900 Head	20.9	1850	1.421	39.645	1.400	40.000	1.50%	-0.89%
			1860	1.428	39.631	1.400	40.000	2.00%	-0.92%
			1880	1.442	39.605	1.400	40.000	3.00%	-0.99%
			1900	1.455	39.572	1.400	40.000	3.93%	-1.07%
			1905	1.459	39.563	1.400	40.000	4.21%	-1.09%
			1910	1.462	39.552	1.400	40.000	4.43%	-1.12%
			1920	1.469	39.527	1.400	40.000	4.93%	-1.18%
04/30/2026	1900 Head	22.9	1850	1.357	41.799	1.400	40.000	-3.07%	4.50%
			1860	1.362	41.786	1.400	40.000	-2.71%	4.47%
			1880	1.373	41.760	1.400	40.000	-1.93%	4.40%
			1900	1.385	41.735	1.400	40.000	-1.07%	4.34%
			1905	1.388	41.730	1.400	40.000	-0.86%	4.32%
			1910	1.391	41.724	1.400	40.000	-0.64%	4.31%
			1920	1.397	41.714	1.400	40.000	-0.21%	4.29%
05/11/2026	1900 Head	20.2	1850	1.401	41.260	1.400	40.000	0.07%	3.15%
			1860	1.408	41.242	1.400	40.000	0.57%	3.10%
			1880	1.422	41.206	1.400	40.000	1.57%	3.02%
			1900	1.435	41.170	1.400	40.000	2.50%	2.93%
			1905	1.439	41.161	1.400	40.000	2.79%	2.90%
			1910	1.442	41.151	1.400	40.000	3.00%	2.88%

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Table 11-3
Measured Head Tissue Properties

Calibrated for Tests Performed on:	Tissue Type	Tissue Temp During Calibration (°C)	Measured Frequency (MHz)	Measured Conductivity, σ (S/m)	Measured Dielectric Constant, ε	TARGET Conductivity, σ (S/m)	TARGET Dielectric Constant, ε	% dev σ	% dev ε
05/14/2026	1900 Head	20.4	1850	1.380	39.383	1.400	40.000	-1.43%	-1.54%
			1860	1.387	39.374	1.400	40.000	-0.93%	-1.56%
			1880	1.400	39.349	1.400	40.000	0.00%	-1.63%
			1900	1.415	39.314	1.400	40.000	1.07%	-1.72%
			1905	1.418	39.304	1.400	40.000	1.29%	-1.74%
			1910	1.422	39.295	1.400	40.000	1.57%	-1.76%
			1920	1.429	39.275	1.400	40.000	2.07%	-1.81%
05/18/2026	1900 Head	21.4	1850	1.383	39.479	1.400	40.000	-1.21%	-1.30%
			1860	1.388	39.465	1.400	40.000	-0.86%	-1.34%
			1880	1.400	39.433	1.400	40.000	0.00%	-1.42%
			1900	1.414	39.398	1.400	40.000	1.00%	-1.50%
			1905	1.418	39.389	1.400	40.000	1.29%	-1.53%
			1910	1.421	39.380	1.400	40.000	1.50%	-1.55%
			1920	1.428	39.364	1.400	40.000	2.00%	-1.59%
05/21/2026	1900 Head	19.9	1850	1.342	40.794	1.400	40.000	-4.14%	1.98%
			1860	1.349	40.776	1.400	40.000	-3.64%	1.94%
			1880	1.362	40.740	1.400	40.000	-2.71%	1.85%
			1900	1.375	40.705	1.400	40.000	-1.79%	1.76%
			1905	1.379	40.696	1.400	40.000	-1.50%	1.74%
			1910	1.382	40.688	1.400	40.000	-1.29%	1.72%
			1920	1.389	40.670	1.400	40.000	-0.79%	1.68%
05/26/2026	1900 Head	19.9	1850	1.363	38.732	1.400	40.000	-2.64%	-3.17%
			1860	1.369	38.725	1.400	40.000	-2.21%	-3.19%
			1880	1.382	38.709	1.400	40.000	-1.29%	-3.23%
			1900	1.397	38.687	1.400	40.000	-0.21%	-3.28%
			1905	1.401	38.681	1.400	40.000	0.07%	-3.30%
			1910	1.404	38.675	1.400	40.000	0.29%	-3.31%
			1920	1.412	38.662	1.400	40.000	0.86%	-3.35%
05/27/2026	1900 Head	21.2	1850	1.343	41.787	1.400	40.000	-4.07%	4.47%
			1860	1.348	41.773	1.400	40.000	-3.71%	4.43%
			1880	1.360	41.746	1.400	40.000	-2.86%	4.37%
			1900	1.373	41.716	1.400	40.000	-1.93%	4.29%
			1905	1.376	41.708	1.400	40.000	-1.71%	4.27%
			1910	1.379	41.700	1.400	40.000	-1.50%	4.25%
			1920	1.386	41.684	1.400	40.000	-1.00%	4.21%
04/27/2026	2450 Head	20.7	2300	1.679	39.287	1.670	39.500	0.54%	-0.54%
			2310	1.686	39.276	1.679	39.480	0.42%	-0.52%
			2320	1.694	39.265	1.687	39.460	0.41%	-0.49%
			2400	1.755	39.186	1.756	39.289	-0.06%	-0.26%
			2450	1.796	39.129	1.800	39.200	-0.22%	-0.18%
			2480	1.819	39.091	1.833	39.162	-0.76%	-0.18%
			2500	1.836	39.061	1.855	39.136	-1.02%	-0.19%
			2510	1.845	39.047	1.866	39.123	-1.13%	-0.19%
			2535	1.867	39.016	1.893	39.092	-1.37%	-0.19%
			2550	1.879	38.997	1.909	39.073	-1.57%	-0.19%
			2560	1.888	38.983	1.920	39.060	-1.67%	-0.20%
			2600	1.923	38.921	1.964	39.009	-2.09%	-0.23%
			2650	1.968	38.841	2.018	38.945	-2.48%	-0.27%
			2680	1.995	38.783	2.051	38.907	-2.73%	-0.32%
			2700	2.013	38.745	2.073	38.882	-2.89%	-0.35%
04/30/2026	2450 Head	20.0	2300	1.669	38.783	1.670	39.500	-0.06%	-1.82%
			2310	1.677	38.767	1.679	39.480	-0.12%	-1.81%
			2320	1.685	38.751	1.687	39.460	-0.12%	-1.80%
			2400	1.750	38.617	1.756	39.289	-0.34%	-1.71%
			2450	1.790	38.522	1.800	39.200	-0.56%	-1.73%
			2480	1.814	38.462	1.833	39.162	-1.04%	-1.79%
			2500	1.829	38.422	1.855	39.136	-1.40%	-1.82%
			2510	1.837	38.403	1.866	39.123	-1.55%	-1.84%
			2535	1.857	38.357	1.893	39.092	-1.90%	-1.88%
			2550	1.869	38.329	1.909	39.073	-2.10%	-1.90%
			2560	1.877	38.310	1.920	39.060	-2.24%	-1.92%
			2600	1.909	38.234	1.964	39.009	-2.80%	-1.99%
			2650	1.948	38.142	2.018	38.945	-3.47%	-2.06%
			2680	1.972	38.085	2.051	38.907	-3.85%	-2.11%
			2700	1.987	38.052	2.073	38.882	-4.15%	-2.13%
05/06/2026	2450 Head	20.8	2300	1.723	38.678	1.670	39.500	3.17%	-2.08%
			2310	1.731	38.666	1.679	39.480	3.10%	-2.06%
			2320	1.739	38.656	1.687	39.460	3.08%	-2.04%
			2400	1.802	38.544	1.756	39.289	2.62%	-1.90%
			2450	1.842	38.471	1.800	39.200	2.33%	-1.86%
			2480	1.866	38.416	1.833	39.162	1.80%	-1.90%
			2500	1.883	38.386	1.855	39.136	1.51%	-1.92%
			2510	1.892	38.372	1.866	39.123	1.39%	-1.92%
			2535	1.913	38.332	1.893	39.092	1.06%	-1.94%
			2550	1.925	38.301	1.909	39.073	0.84%	-1.98%
			2560	1.934	38.281	1.920	39.060	0.73%	-1.99%
			2600	1.969	38.209	1.964	39.009	0.25%	-2.05%
			2650	2.011	38.101	2.018	38.945	-0.35%	-2.17%
			2680	2.038	38.037	2.051	38.907	-0.63%	-2.24%
			2700	2.054	37.996	2.073	38.882	-0.92%	-2.28%

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Table 11-4
Measured Head Tissue Properties

Calibrated for Tests Performed on:	Tissue Type	Tissue Temp During Calibration (°C)	Measured Frequency (MHz)	Measured Conductivity, σ (S/m)	Measured Dielectric Constant, ε	TARGET Conductivity, σ (S/m)	TARGET Dielectric Constant, ε	% dev σ	% dev ε
05/07/2026	2450 Head	20.7	2300	1.679	39.374	1.670	39.500	0.54%	-0.32%
			2310	1.686	39.358	1.679	39.480	0.42%	-0.31%
			2320	1.693	39.341	1.687	39.460	0.36%	-0.30%
			2400	1.753	39.251	1.756	39.289	-0.17%	-0.10%
			2450	1.791	39.158	1.800	39.200	-0.50%	-0.11%
			2480	1.814	39.108	1.833	39.162	-1.04%	-0.14%
			2500	1.829	39.084	1.855	39.136	-1.40%	-0.13%
			2510	1.836	39.070	1.866	39.123	-1.61%	-0.14%
			2535	1.855	39.029	1.893	39.092	-2.01%	-0.16%
			2550	1.868	39.002	1.909	39.073	-2.15%	-0.18%
			2560	1.877	38.981	1.920	39.060	-2.24%	-0.20%
			2600	1.909	38.921	1.964	39.009	-2.80%	-0.23%
			2650	1.946	38.846	2.018	38.945	-3.57%	-0.25%
			2680	1.972	38.791	2.051	38.907	-3.85%	-0.30%
			2700	1.987	38.767	2.073	38.882	-4.15%	-0.30%
05/11/2026	2450 Head	20.6	2300	1.671	38.298	1.670	39.500	0.06%	-3.04%
			2310	1.678	38.288	1.679	39.480	-0.06%	-3.02%
			2320	1.686	38.279	1.687	39.460	-0.06%	-2.99%
			2400	1.750	38.195	1.756	39.289	-0.34%	-2.78%
			2450	1.793	38.124	1.800	39.200	-0.39%	-2.74%
			2480	1.817	38.068	1.833	39.162	-0.87%	-2.79%
			2500	1.834	38.032	1.855	39.136	-1.13%	-2.82%
			2510	1.842	38.015	1.866	39.123	-1.29%	-2.83%
			2535	1.863	37.972	1.893	39.092	-1.58%	-2.87%
			2550	1.875	37.942	1.909	39.073	-1.78%	-2.89%
			2560	1.884	37.922	1.920	39.060	-1.88%	-2.91%
			2600	1.917	37.848	1.964	39.009	-2.39%	-2.98%
			2650	1.958	37.746	2.018	38.945	-2.97%	-3.08%
			2680	1.982	37.687	2.051	38.907	-3.36%	-3.14%
			2700	1.998	37.650	2.073	38.882	-3.62%	-3.17%
05/11/2026	2450 Head	19.0	2300	1.677	38.988	1.670	39.500	0.42%	-1.30%
			2310	1.686	38.978	1.679	39.480	0.42%	-1.27%
			2320	1.694	38.972	1.687	39.460	0.41%	-1.24%
			2400	1.752	38.843	1.756	39.289	-0.23%	-1.14%
			2450	1.791	38.789	1.800	39.200	-0.50%	-1.05%
			2480	1.810	38.719	1.833	39.162	-1.25%	-1.13%
			2500	1.826	38.669	1.855	39.136	-1.56%	-1.19%
			2510	1.835	38.649	1.866	39.123	-1.66%	-1.21%
			2535	1.857	38.623	1.893	39.092	-1.90%	-1.20%
			2550	1.869	38.611	1.909	39.073	-2.10%	-1.18%
			2560	1.876	38.597	1.920	39.060	-2.29%	-1.19%
			2600	1.905	38.501	1.964	39.009	-3.00%	-1.30%
			2650	1.948	38.423	2.018	38.945	-3.47%	-1.34%
			2680	1.971	38.379	2.051	38.907	-3.90%	-1.36%
			2700	1.986	38.334	2.073	38.882	-4.20%	-1.41%
05/13/2026	2450 Head	20.9	2300	1.694	39.570	1.670	39.500	1.44%	0.18%
			2310	1.701	39.556	1.679	39.480	1.31%	0.19%
			2320	1.709	39.540	1.687	39.460	1.30%	0.20%
			2400	1.774	39.419	1.756	39.289	1.03%	0.33%
			2450	1.815	39.330	1.800	39.200	0.83%	0.33%
			2480	1.839	39.271	1.833	39.162	0.33%	0.28%
			2500	1.856	39.231	1.855	39.136	0.05%	0.24%
			2510	1.865	39.212	1.866	39.123	-0.05%	0.23%
			2535	1.885	39.164	1.893	39.092	-0.42%	0.18%
			2550	1.898	39.134	1.909	39.073	-0.58%	0.16%
			2560	1.906	39.114	1.920	39.060	-0.73%	0.14%
			2600	1.939	39.032	1.964	39.009	-1.27%	0.06%
			2650	1.980	38.928	2.018	38.945	-1.88%	-0.04%
			2680	2.005	38.863	2.051	38.907	-2.24%	-0.11%
			2700	2.021	38.823	2.073	38.882	-2.51%	-0.15%
05/18/2026	2450 Head	20.1	2300	1.702	38.023	1.670	39.500	1.92%	-3.74%
			2310	1.709	38.015	1.679	39.480	1.79%	-3.71%
			2320	1.716	38.006	1.687	39.460	1.72%	-3.68%
			2400	1.772	37.875	1.756	39.289	0.91%	-3.60%
			2450	1.815	37.819	1.800	39.200	0.83%	-3.52%
			2480	1.833	37.756	1.833	39.162	0.00%	-3.59%
			2500	1.846	37.711	1.855	39.136	-0.49%	-3.64%
			2510	1.854	37.688	1.866	39.123	-0.64%	-3.67%
			2535	1.876	37.642	1.893	39.092	-0.90%	-3.71%
			2550	1.891	37.622	1.909	39.073	-0.94%	-3.71%
			2560	1.900	37.607	1.920	39.060	-1.04%	-3.72%
			2600	1.927	37.553	1.964	39.009	-1.88%	-3.73%
			2650	1.963	37.424	2.018	38.945	-2.73%	-3.91%
			2680	1.992	37.381	2.051	38.907	-2.88%	-3.92%
			2700	2.008	37.377	2.073	38.882	-3.14%	-3.87%
05/21/2026	2450 Head	20.1	2310	1.671	37.513	1.679	39.480	-0.48%	-4.98%
			2320	1.679	37.493	1.687	39.460	-0.47%	-4.98%
			2400	1.738	37.405	1.756	39.289	-1.03%	-4.80%
			2450	1.776	37.355	1.800	39.200	-1.33%	-4.71%
			2480	1.797	37.315	1.833	39.162	-1.96%	-4.72%
			2500	1.810	37.279	1.855	39.136	-2.43%	-4.74%
			2510	1.817	37.263	1.866	39.123	-2.63%	-4.75%
			2535	1.837	37.209	1.893	39.092	-2.96%	-4.82%
			2550	1.849	37.181	1.909	39.073	-3.14%	-4.84%
			2560	1.857	37.154	1.920	39.060	-3.28%	-4.88%
			2600	1.887	37.071	1.964	39.009	-3.92%	-4.97%

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Table 11-5
Measured Head Tissue Properties

Calibrated for Tests Performed on:	Tissue Type	Tissue Temp During Calibration (˚C)	Measured Frequency (MHz)	Measured Conductivity, σ (S/m)	Measured Dielectric Constant, ε	TARGET Conductivity, σ (S/m)	TARGET Dielectric Constant, ε	% dev σ	% dev ε
05/26/2026	2450 Head	19.0	2300	1.666	41.208	1.670	39.500	-0.24%	4.32%
			2310	1.674	41.187	1.679	39.480	-0.30%	4.32%
			2320	1.682	41.171	1.687	39.460	-0.30%	4.34%
			2400	1.743	41.047	1.756	39.289	-0.74%	4.47%
			2450	1.785	40.960	1.800	39.200	-0.83%	4.49%
			2480	1.809	40.938	1.833	39.162	-1.31%	4.54%
			2500	1.823	40.911	1.855	39.136	-1.73%	4.54%
			2510	1.829	40.888	1.866	39.123	-1.98%	4.51%
			2535	1.848	40.821	1.893	39.092	-2.38%	4.42%
			2550	1.862	40.788	1.909	39.073	-2.46%	4.39%
			2560	1.871	40.775	1.920	39.060	-2.55%	4.39%
			2600	1.907	40.760	1.964	39.009	-2.90%	4.49%
			2650	1.944	40.629	2.018	38.945	-3.67%	4.32%
			2680	1.974	40.573	2.051	38.907	-3.75%	4.28%
			2700	1.992	40.568	2.073	38.882	-3.91%	4.34%
05/26/2026	2450 Head	19.6	2300	1.665	38.789	1.670	39.500	-0.30%	-1.80%
			2310	1.672	38.778	1.679	39.480	-0.42%	-1.78%
			2320	1.680	38.766	1.687	39.460	-0.41%	-1.76%
			2400	1.740	38.661	1.756	39.289	-0.91%	-1.60%
			2450	1.776	38.587	1.800	39.200	-1.33%	-1.56%
			2480	1.797	38.551	1.833	39.162	-1.96%	-1.56%
			2500	1.812	38.526	1.855	39.136	-2.32%	-1.56%
			2510	1.818	38.515	1.866	39.123	-2.57%	-1.55%
			2535	1.839	38.487	1.893	39.092	-2.85%	-1.55%
			2550	1.851	38.452	1.909	39.073	-3.04%	-1.59%
			2560	1.858	38.429	1.920	39.060	-3.23%	-1.62%
			2600	1.891	38.332	1.964	39.009	-3.72%	-1.74%
			2650	1.932	38.253	2.018	38.945	-4.26%	-1.78%
			2680	1.960	38.192	2.051	38.907	-4.44%	-1.84%
			2700	1.978	38.149	2.073	38.882	-4.58%	-1.89%
06/02/2026	2450 Head	19.8	2300	1.657	40.454	1.670	39.500	-0.78%	2.42%
			2310	1.664	40.442	1.679	39.480	-0.89%	2.44%
			2320	1.672	40.430	1.687	39.460	-0.89%	2.46%
			2400	1.735	40.342	1.756	39.289	-1.20%	2.68%
			2450	1.777	40.271	1.800	39.200	-1.28%	2.73%
			2480	1.801	40.218	1.833	39.162	-1.75%	2.70%
			2500	1.818	40.181	1.855	39.136	-1.99%	2.67%
			2510	1.827	40.164	1.866	39.123	-2.09%	2.66%
			2535	1.848	40.121	1.893	39.092	-2.38%	2.63%
			2550	1.860	40.092	1.909	39.073	-2.57%	2.61%
			2560	1.869	40.072	1.920	39.060	-2.66%	2.59%
			2600	1.902	39.998	1.964	39.009	-3.16%	2.54%
			2650	1.943	39.904	2.018	38.945	-3.72%	2.46%
			2680	1.968	39.849	2.051	38.907	-4.05%	2.42%
			2700	1.984	39.816	2.073	38.882	-4.29%	2.40%
05/04/2026	5200-5800 Head	19.3	5150	4.393	34.851	4.608	36.050	-4.67%	-3.33%
			5160	4.403	34.835	4.618	36.040	-4.66%	-3.34%
			5170	4.413	34.812	4.629	36.030	-4.67%	-3.38%
			5180	4.426	34.787	4.635	36.009	-4.51%	-3.39%
			5190	4.437	34.757	4.645	35.998	-4.48%	-3.45%
			5200	4.450	34.747	4.655	35.986	-4.40%	-3.44%
			5210	4.462	34.742	4.666	35.975	-4.37%	-3.43%
			5220	4.467	34.731	4.676	35.963	-4.47%	-3.43%
			5240	4.492	34.679	4.696	35.940	-4.34%	-3.51%
			5250	4.504	34.663	4.706	35.929	-4.29%	-3.52%
			5260	4.517	34.656	4.717	35.917	-4.24%	-3.51%
			5270	4.528	34.656	4.727	35.906	-4.21%	-3.48%
			5280	4.539	34.637	4.737	35.894	-4.18%	-3.50%
			5290	4.551	34.604	4.748	35.883	-4.15%	-3.56%
			5300	4.559	34.579	4.758	35.871	-4.18%	-3.60%
			5310	4.567	34.558	4.768	35.860	-4.22%	-3.63%
			5320	4.581	34.540	4.778	35.849	-4.12%	-3.65%
			5500	4.772	34.190	4.963	35.643	-3.85%	-4.08%
			5510	4.781	34.179	4.973	35.632	-3.86%	-4.08%
			5520	4.791	34.160	4.983	35.620	-3.85%	-4.10%
			5530	4.798	34.140	4.994	35.609	-3.92%	-4.13%
			5540	4.809	34.105	5.004	35.597	-3.90%	-4.19%
			5550	4.822	34.066	5.014	35.586	-3.83%	-4.27%
			5560	4.832	34.031	5.024	35.574	-3.82%	-4.34%
			5580	4.860	33.980	5.045	35.551	-3.67%	-4.42%
			5600	4.886	33.950	5.065	35.529	-3.53%	-4.44%
			5610	4.894	33.938	5.076	35.518	-3.59%	-4.45%
			5620	4.902	33.936	5.086	35.506	-3.62%	-4.42%
			5640	4.916	33.910	5.106	35.483	-3.72%	-4.43%
			5660	4.942	33.860	5.127	35.460	-3.61%	-4.51%
			5670	4.957	33.833	5.137	35.449	-3.50%	-4.56%
			5680	4.968	33.808	5.147	35.437	-3.48%	-4.60%
			5690	4.979	33.780	5.158	35.426	-3.47%	-4.65%
			5700	4.990	33.757	5.168	35.414	-3.44%	-4.68%
			5710	5.001	33.742	5.178	35.403	-3.42%	-4.69%
			5720	5.010	33.728	5.188	35.391	-3.43%	-4.70%
			5745	5.032	33.681	5.214	35.363	-3.49%	-4.76%
			5750	5.037	33.675	5.219	35.357	-3.49%	-4.76%
			5755	5.043	33.671	5.224	35.351	-3.46%	-4.75%
			5765	5.055	33.660	5.234	35.340	-3.42%	-4.75%
			5775	5.067	33.646	5.245	35.329	-3.39%	-4.76%
			5785	5.077	33.615	5.255	35.317	-3.39%	-4.82%
			5795	5.085	33.584	5.265	35.305	-3.42%	-4.87%
			5805	5.094	33.573	5.275	35.294	-3.43%	-4.88%
			5825	5.118	33.537	5.296	35.271	-3.36%	-4.92%
			5835	5.129	33.502	5.305	35.230	-3.32%	-4.90%
			5845	5.139	33.482	5.315	35.210	-3.31%	-4.91%
			5850	5.144	33.481	5.320	35.200	-3.31%	-4.88%
			5855	5.147	33.477	5.325	35.197	-3.34%	-4.89%
			5875	5.166	33.456	5.347	35.183	-3.39%	-4.91%
			5885	5.176	33.437	5.357	35.177	-3.38%	-4.95%
			5905	5.203	33.413	5.379	35.163	-3.27%	-4.98%

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Table 11-6
Measured Head Tissue Properties

Calibrated for Tests Performed on:	Tissue Type	Tissue Temp During Calibration (°C)	Measured Frequency (MHz)	Measured Conductivity, σ (S/m)	Measured Dielectric Constant, ε	TARGET Conductivity, σ (S/m)	TARGET Dielectric Constant, ε	% dev σ	% dev ε
05/26/2026	5200-5800 Head	19.0	5150	4.408	36.640	4.608	36.050	-4.34%	1.64%
			5160	4.419	36.639	4.618	36.040	-4.31%	1.66%
			5170	4.431	36.628	4.629	36.030	-4.28%	1.66%
			5180	4.441	36.600	4.635	36.009	-4.19%	1.64%
			5190	4.449	36.573	4.645	35.998	-4.22%	1.60%
			5200	4.457	36.554	4.655	35.986	-4.25%	1.58%
			5210	4.465	36.542	4.666	35.975	-4.31%	1.58%
			5220	4.477	36.510	4.676	35.963	-4.26%	1.52%
			5240	4.508	36.451	4.696	35.940	-4.00%	1.42%
			5250	4.524	36.437	4.706	35.929	-3.87%	1.41%
			5260	4.535	36.436	4.717	35.917	-3.86%	1.44%
			5270	4.542	36.427	4.727	35.906	-3.91%	1.45%
			5280	4.551	36.406	4.737	35.894	-3.93%	1.43%
			5290	4.563	36.385	4.748	35.883	-3.90%	1.40%
			5300	4.575	36.371	4.758	35.871	-3.85%	1.39%
			5310	4.583	36.349	4.768	35.860	-3.88%	1.36%
			5320	4.593	36.331	4.778	35.849	-3.87%	1.34%
			5500	4.786	35.967	4.963	35.643	-3.57%	0.91%
			5510	4.800	35.955	4.973	35.632	-3.48%	0.91%
			5520	4.812	35.934	4.983	35.620	-3.43%	0.88%
			5530	4.820	35.913	4.994	35.609	-3.48%	0.85%
			5540	4.832	35.893	5.004	35.597	-3.44%	0.83%
			5550	4.846	35.879	5.014	35.586	-3.35%	0.82%
			5560	4.858	35.854	5.024	35.574	-3.30%	0.79%
			5580	4.882	35.824	5.045	35.551	-3.23%	0.77%
			5600	4.909	35.788	5.065	35.529	-3.08%	0.73%
			5610	4.919	35.778	5.076	35.518	-3.09%	0.73%
			5620	4.928	35.772	5.086	35.506	-3.11%	0.75%
			5640	4.951	35.720	5.106	35.483	-3.04%	0.67%
			5660	4.977	35.677	5.127	35.460	-2.93%	0.61%
			5670	4.987	35.672	5.137	35.449	-2.92%	0.63%
			5680	4.998	35.663	5.147	35.437	-2.89%	0.64%
			5690	5.012	35.639	5.158	35.426	-2.83%	0.60%
			5700	5.026	35.631	5.168	35.414	-2.75%	0.61%
			5710	5.039	35.609	5.178	35.403	-2.68%	0.58%
			5720	5.046	35.595	5.188	35.391	-2.74%	0.58%
			5745	5.069	35.540	5.214	35.363	-2.78%	0.50%
			5750	5.074	35.528	5.219	35.357	-2.78%	0.48%
			5755	5.082	35.518	5.224	35.351	-2.72%	0.47%
			5765	5.095	35.490	5.234	35.340	-2.66%	0.42%
			5775	5.110	35.475	5.245	35.329	-2.57%	0.41%
			5785	5.124	35.460	5.255	35.317	-2.49%	0.40%
			5795	5.136	35.453	5.265	35.305	-2.45%	0.42%
			5805	5.150	35.436	5.275	35.294	-2.37%	0.40%
			5825	5.168	35.414	5.296	35.271	-2.42%	0.41%
			5835	5.178	35.403	5.305	35.230	-2.39%	0.49%
			5845	5.189	35.386	5.315	35.210	-2.37%	0.50%
			5850	5.194	35.376	5.320	35.200	-2.37%	0.50%
			5855	5.200	35.368	5.325	35.197	-2.35%	0.49%
			5875	5.218	35.334	5.347	35.183	-2.41%	0.43%
			5885	5.229	35.308	5.357	35.177	-2.39%	0.37%
			5905	5.257	35.251	5.379	35.163	-2.27%	0.25%
05/04/2026	6000 Head	20.5	5935	5.236	33.986	5.411	35.143	-3.23%	-3.29%
			5970	5.264	33.942	5.448	35.120	-3.38%	-3.35%
			5985	5.276	33.908	5.464	35.110	-3.44%	-3.42%
			6000	5.264	33.867	5.480	35.100	-3.94%	-3.51%
			6025	5.295	33.773	5.510	35.070	-3.90%	-3.70%
			6065	5.365	33.699	5.557	35.022	-3.46%	-3.78%
			6075	5.369	33.655	5.569	35.010	-3.59%	-3.87%
			6085	5.373	33.632	5.580	34.998	-3.71%	-3.90%
			6185	5.509	33.490	5.698	34.878	-3.32%	-3.98%
			6275	5.624	33.317	5.805	34.770	-3.12%	-4.18%
			6285	5.625	33.335	5.816	34.758	-3.28%	-4.09%
			6305	5.651	33.358	5.840	34.734	-3.24%	-3.96%
			6345	5.713	33.258	5.887	34.686	-2.96%	-4.12%
			6475	5.875	33.054	6.041	34.530	-2.75%	-4.27%
			6485	5.888	33.073	6.052	34.518	-2.71%	-4.19%
			6500	5.908	33.105	6.070	34.500	-2.67%	-4.04%
			6505	5.908	33.119	6.076	34.494	-2.76%	-3.99%
			6545	5.929	33.058	6.122	34.446	-3.15%	-4.03%
			6665	6.047	32.862	6.265	34.302	-3.48%	-4.20%
			6675	6.073	32.824	6.273	34.290	-3.19%	-4.28%
			6685	6.103	32.776	6.285	34.278	-2.90%	-4.38%
			6715	6.138	32.781	6.319	34.242	-2.86%	-4.27%
			6785	6.213	32.655	6.400	34.158	-2.92%	-4.40%
			6825	6.288	32.597	6.447	34.110	-2.47%	-4.44%
			6985	6.451	32.407	6.633	33.918	-2.74%	-4.45%
			6995	6.444	32.428	6.644	33.906	-3.01%	-4.36%
			7000	6.445	32.430	6.650	33.900	-3.08%	-4.34%
			7005	6.450	32.418	6.656	33.894	-3.09%	-4.35%
			7025	6.486	32.267	6.680	33.870	-2.90%	-4.73%

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Table 11-7
Measured Head Tissue Properties

Calibrated for Tests Performed on:	Tissue Type	Tissue Temp During Calibration (°C)	Measured Frequency (MHz)	Measured Conductivity, σ (S/m)	Measured Dielectric Constant, ε	TARGET Conductivity, σ (S/m)	TARGET Dielectric Constant, ε	% dev σ	% dev ε
05/26/2026	6000 Head	20.5	5935	5.256	35.393	5.411	35.143	-2.86%	0.71%
			5970	5.280	35.288	5.448	35.120	-3.08%	0.48%
			5985	5.304	35.270	5.464	35.110	-2.93%	0.46%
			6000	5.292	35.238	5.480	35.100	-3.43%	0.39%
			6025	5.320	35.132	5.510	35.070	-3.45%	0.18%
			6065	5.388	35.092	5.557	35.022	-3.04%	0.20%
			6075	5.387	35.058	5.569	35.010	-3.27%	0.14%
			6085	5.386	35.036	5.580	34.998	-3.48%	0.11%
			6185	5.526	34.802	5.698	34.878	-3.02%	-0.22%
			6275	5.651	34.670	5.805	34.770	-2.65%	-0.29%
			6285	5.652	34.680	5.816	34.758	-2.82%	-0.22%
			6305	5.673	34.673	5.840	34.734	-2.86%	-0.18%
			6345	5.729	34.576	5.887	34.686	-2.68%	-0.32%
			6475	5.876	34.286	6.041	34.530	-2.73%	-0.71%
			6485	5.888	34.310	6.052	34.518	-2.71%	-0.60%
			6500	5.916	34.348	6.070	34.500	-2.54%	-0.44%
			6505	5.913	34.361	6.076	34.494	-2.68%	-0.39%
			6545	5.933	34.272	6.122	34.446	-3.09%	-0.51%
			6665	6.032	34.015	6.265	34.302	-3.72%	-0.84%
			6675	6.055	33.986	6.273	34.290	-3.48%	-0.89%
			6685	6.076	33.938	6.285	34.278	-3.33%	-0.99%
			6715	6.113	33.925	6.319	34.242	-3.26%	-0.93%
			6785	6.178	33.767	6.400	34.158	-3.47%	-1.14%
			6825	6.253	33.718	6.447	34.110	-3.01%	-1.15%
			6985	6.397	33.530	6.633	33.918	-3.56%	-1.14%
			6995	6.380	33.537	6.644	33.906	-3.97%	-1.09%
			7000	6.376	33.532	6.650	33.900	-4.12%	-1.09%
			7005	6.379	33.513	6.656	33.894	-4.16%	-1.12%
			7025	6.434	33.392	6.680	33.870	-3.68%	-1.41%

The above measured tissue parameters were used in the DASY software. The DASY software was used to perform interpolation to determine the dielectric parameters at the SAR test device frequencies (per KDB Publication 865664 D01v01r04 and IEEE 1528-2013 6.6.1.2. The tissue parameters listed in the SAR test plots may slightly differ from the table above due to significant digit rounding in the software.

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11.2 SAR Test System Verification

Prior to SAR assessment, the system is verified to ±10% of the SAR measurement on the reference dipole at the time of calibration by the calibration facility. Full system validation status and result summary can be found in SAR System Validation Appendix.

Table 11-8
System Verification Results – Head

System Verification TARGET & MEASURED																				
SAR System	Tissue Frequency (MHz)	Tissue Type	Date	Amb. Temp. (C)	Liquid Temp. (C)	Input Power (W)	Source SN	Probe SN	DAE	Measured SAR 1g (W/kg)	1W Target SAR 1g (W/kg)	1W Normalized SAR 1g (W/kg)	Deviation 1g (%)	Measured SAR 10g (W/kg)	1W Target SAR 10g (W/kg)	1W Normalized SAR 10g (W/kg)	Deviation 10g (%)	Measured 4cm2 APD (W/m2)	1W Target 4cm2 APD (W/m2)	1W Normalized 4cm2 APD (W/m2)	Deviation 4cm2 APD (%)
G	13	HEAD	04-23-2026	20.7	21.3	1.00	1002	7570	859	0.49	0.50	0.49	-2.39%	0.30	0.32	0.30	-5.06%	N/A	N/A	N/A	N/A
S6	750	HEAD	04-27-2026	21.1	20.5	0.20	1046	7803	1583	1.61	8.60	8.05	-6.40%	1.08	5.61	5.40	-3.74%	N/A	N/A	N/A	N/A
S6	750	HEAD	04-29-2026	20.7	20.2	0.20	1046	7803	1583	1.61	8.60	8.05	-6.40%	1.08	5.61	5.40	-3.74%	N/A	N/A	N/A	N/A
S6	750	HEAD	05-13-2026	21.8	20.8	0.20	1046	7803	1583	1.64	8.60	8.20	-4.65%	1.10	5.61	5.50	-1.96%	N/A	N/A	N/A	N/A
S6	750	HEAD	05-18-2026	22.1	22.6	0.20	1046	7803	1583	1.63	8.60	8.15	-5.23%	1.09	5.61	5.45	-2.85%	N/A	N/A	N/A	N/A
S5	750	HEAD	05-28-2026	23.6	23.8	0.20	1046	7565	1466	1.56	8.60	7.80	-9.30%	1.04	5.61	5.20	-7.31%	N/A	N/A	N/A	N/A
S1	835	HEAD	05-06-2026	20.7	21.4	0.20	4d180	7637	1652	1.94	9.51	9.70	2.00%	1.28	6.17	6.40	3.73%	N/A	N/A	N/A	N/A
S1	835	HEAD	05-11-2026	22.8	21.2	0.20	4d180	7637	1652	1.89	9.51	9.45	-0.63%	1.24	6.17	6.20	0.49%	N/A	N/A	N/A	N/A
S6	835	HEAD	05-11-2026	22.7	22.3	0.20	4d180	7803	1583	2.01	9.51	10.05	5.68%	1.34	6.17	6.70	8.59%	N/A	N/A	N/A	N/A
S6	835	HEAD	05-13-2026	21.8	20.8	0.20	4d180	7803	1583	1.96	9.51	9.80	3.05%	1.30	6.17	6.50	5.35%	N/A	N/A	N/A	N/A
S6	835	HEAD	05-18-2026	22.1	22.6	0.20	4d119	7803	1583	1.99	9.67	9.95	2.90%	1.31	6.37	6.55	2.83%	N/A	N/A	N/A	N/A
S6	835	HEAD	05-20-2026	22.7	22.8	0.20	4d119	7803	1583	1.93	9.67	9.65	-0.21%	1.28	6.37	6.40	0.47%	N/A	N/A	N/A	N/A
S7	1750	HEAD	04-27-2026	20.8	20.9	0.10	1092	7409	1333	3.48	36.70	34.80	-5.18%	1.91	19.50	19.10	-2.05%	N/A	N/A	N/A	N/A
S7	1750	HEAD	04-30-2026	20.8	22.9	0.10	1092	7409	1333	3.68	36.70	36.80	0.27%	2.02	19.50	20.20	3.59%	N/A	N/A	N/A	N/A
S7	1750	HEAD	05-11-2026	21.4	20.2	0.10	1092	7409	1333	3.58	36.70	35.80	-2.45%	1.95	19.50	19.50	0.00%	N/A	N/A	N/A	N/A
S7	1750	HEAD	05-14-2026	20.8	20.4	0.10	1092	7409	1333	3.75	36.70	37.50	2.18%	2.05	19.50	20.50	5.13%	N/A	N/A	N/A	N/A
S7	1750	HEAD	05-18-2026	22.4	21.4	0.10	1092	7409	1333	3.53	36.70	35.30	-3.81%	1.92	19.50	19.20	-1.54%	N/A	N/A	N/A	N/A
S7	1750	HEAD	05-21-2026	20.8	20.1	0.10	1092	7409	1333	3.68	36.70	36.80	0.27%	2.02	19.50	20.20	3.59%	N/A	N/A	N/A	N/A
S7	1900	HEAD	05-14-2026	20.8	20.4	0.10	5d026	7409	1333	4.30	39.60	43.00	8.59%	2.28	21.00	22.80	8.57%	N/A	N/A	N/A	N/A
S7	1900	HEAD	05-18-2026	22.4	21.4	0.10	5d026	7409	1333	4.15	39.60	41.50	4.80%	2.20	21.00	22.00	4.76%	N/A	N/A	N/A	N/A
S7	1900	HEAD	05-21-2026	20.6	19.9	0.10	5d026	7409	1333	3.94	39.60	39.40	-0.51%	2.10	21.00	21.00	0.00%	N/A	N/A	N/A	N/A
S7	1900	HEAD	05-26-2026	21.1	19.9	0.10	5d026	7409	1333	4.08	39.60	40.80	3.03%	2.17	21.00	21.70	3.33%	N/A	N/A	N/A	N/A
S3	1900	HEAD	05-27-2026	21.7	21.2	0.10	5d141	7558	1364	4.11	40.60	41.10	1.23%	2.16	21.50	21.60	0.47%	N/A	N/A	N/A	N/A
S5	2450	HEAD	05-06-2026	21.3	20.8	0.10	945	7565	1466	5.18	52.90	51.80	-2.08%	2.42	25.00	24.20	-3.20%	N/A	N/A	N/A	N/A
L	2450	HEAD	05-07-2026	20.9	20.7	0.10	719	7539	1450	5.37	52.20	53.70	2.87%	2.51	24.60	25.10	2.03%	N/A	N/A	N/A	N/A
S5	2450	HEAD	05-11-2026	21.2	20.6	0.10	945	7565	1466	5.41	52.90	54.10	2.27%	2.52	25.00	25.20	0.80%	N/A	N/A	N/A	N/A
L	2450	HEAD	05-11-2026	21.4	20.6	0.10	719	7539	1450	5.44	52.20	54.40	4.21%	2.54	24.60	25.40	3.25%	N/A	N/A	N/A	N/A
S5	2450	HEAD	05-13-2026	21.9	20.9	0.10	882	7565	1466	5.36	51.40	53.60	4.28%	2.52	24.00	25.20	5.00%	N/A	N/A	N/A	N/A
L	2450	HEAD	05-18-2026	20.7	20.1	0.10	719	7539	1450	5.61	52.20	56.10	7.47%	2.62	24.60	26.20	6.50%	N/A	N/A	N/A	N/A
L	2450	HEAD	05-21-2026	19.0	19.1	0.10	719	7539	1450	5.55	52.20	55.50	6.32%	2.57	24.60	25.70	4.47%	N/A	N/A	N/A	N/A
N	2450	HEAD	05-26-2026	21.1	20.5	0.10	719	7670	1449	5.51	52.20	55.10	5.56%	2.63	24.60	26.30	6.91%	N/A	N/A	N/A	N/A
L	2450	HEAD	05-26-2026	22.2	19.6	0.10	719	7539	1450	5.59	52.20	55.90	7.09%	2.62	24.60	26.20	6.50%	N/A	N/A	N/A	N/A
S6	2450	HEAD	06-02-2026	20.2	19.8	0.10	882	7803	1583	5.29	51.40	52.90	2.92%	2.51	24.00	25.10	4.58%	N/A	N/A	N/A	N/A
S5	2600	HEAD	04-27-2026	21.2	20.7	0.10	1126	7565	1466	5.55	55.30	55.50	0.36%	2.51	24.80	25.10	1.21%	N/A	N/A	N/A	N/A
S5	2600	HEAD	04-30-2026	20.9	20.0	0.10	1126	7565	1466	5.56	55.30	55.60	0.54%	2.51	24.80	25.10	1.21%	N/A	N/A	N/A	N/A
S5	2600	HEAD	05-06-2026	21.3	20.8	0.10	1126	7565	1466	5.41	55.30	54.10	-2.17%	2.45	24.80	24.50	-1.21%	N/A	N/A	N/A	N/A
S5	2600	HEAD	05-11-2026	21.2	20.6	0.10	1126	7565	1466	5.68	55.30	56.80	2.71%	2.57	24.80	25.70	3.63%	N/A	N/A	N/A	N/A
S5	2600	HEAD	05-13-2026	21.9	20.9	0.10	1126	7565	1466	5.80	55.30	58.00	4.88%	2.63	24.80	26.30	6.05%	N/A	N/A	N/A	N/A
S	5250	HEAD	05-04-2026	20.2	19.3	0.05	1057	7661	1558	3.68	79.40	73.60	-7.30%	1.06	22.70	21.20	-6.61%	N/A	N/A	N/A	N/A
S	5250	HEAD	05-26-2026	21.4	19.0	0.05	1057	7661	1558	3.72	79.40	74.40	-6.30%	1.07	22.70	21.40	-5.73%	N/A	N/A	N/A	N/A
S	5600	HEAD	05-04-2026	20.2	19.3	0.05	1057	7661	1558	3.86	82.80	77.20	-6.76%	1.10	23.60	22.00	-6.78%	N/A	N/A	N/A	N/A
S	5600	HEAD	05-26-2026	21.4	19.0	0.05	1057	7661	1558	3.77	82.80	75.40	-8.94%	1.07	23.60	21.40	-9.32%	N/A	N/A	N/A	N/A
S	5750	HEAD	05-04-2026	20.2	19.3	0.05	1057	7661	1558	4.00	79.80	80.00	0.25%	1.16	22.70	23.20	2.20%	N/A	N/A	N/A	N/A
S	5750	HEAD	05-26-2026	21.4	19.0	0.05	1057	7661	1558	3.67	79.80	73.40	-8.02%	1.04	22.70	20.80	-8.37%	N/A	N/A	N/A	N/A
S	5850	HEAD	05-04-2026	20.2	19.3	0.05	1057	7661	1558	4.32	81.50	86.40	6.01%	1.23	23.00	24.60	6.96%	N/A	N/A	N/A	N/A
S	5850	HEAD	05-26-2026	21.4	19.0	0.05	1057	7661	1558	3.87	81.50	77.40	-5.03%	1.09	23.00	21.80	-5.22%	N/A	N/A	N/A	N/A
M	6500	HEAD	05-04-2026	21.7	20.5	0.03	1111	7406	1677	7.45	288.00	298.00	3.47%	1.38	53.30	55.20	3.56%	33.50	1350.00	1340.00	-0.74%
M	6500	HEAD	05-26-2026	22.2	20.5	0.03	1111	7406	1677	7.38	288.00	295.20	2.50%	1.36	53.30	54.40	2.06%	33.10	1350.00	1324.00	-1.93%

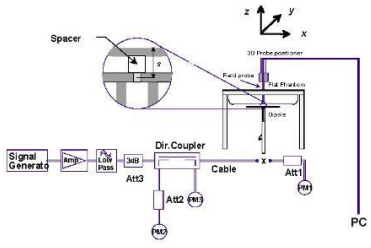

Figure 11-1
System Verification Setup Diagram

Figure 11-2
System Verification Setup Photo

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11.3 Power Density Test System Verification

The system was verified to be within ±0.66 dB of the power density targets on the calibration certificate according to the test system specification in the user's manual and calibration facility recommendation. The 0.66 dB deviation threshold represents the expanded uncertainty for system performance checks using SPEAG's mmWave verification sources. The same spatial resolution and measurement region used in the source calibration was applied during the system check.

The measured power density distribution of verification source was also confirmed through visual inspection to have no noticeable differences, both spatially (shape) and numerically (level) from the distribution provided by the manufacturer, per November 2017 TCBC Workshop Notes.

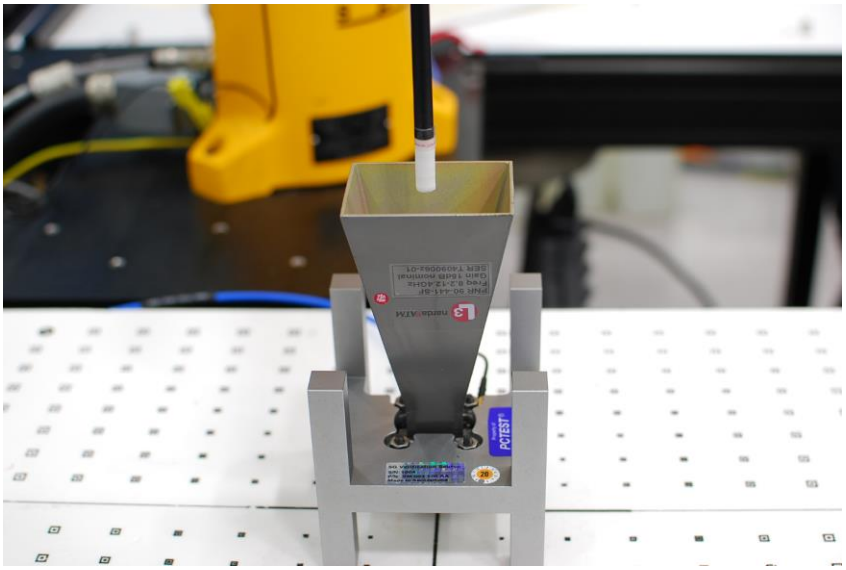

Figure 11-3
System Verification Setup Photo

Table 11-9
10 GHz Verifications

System Verification										
System	Frequency (GHz)	Date	Source S/N	Probe S/N	Normal psPD (W/m² over 4 cm²)		Deviation (dB)	Total psPD (W/m² over 4 cm²)		Deviation (dB)
					Measured	Target		Measured	Target	
Q	10	05/11/26	1004	9389	50.10	54.60	-0.37	50.60	55.60	-0.41

Note: A **10 mm distance spacing** was used from the reference horn antenna aperture to the probe element.

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12 SAR DATA SUMMARY

12.1 GSM 850 Standalone SAR

Table 12-1 Ant A Closed Body | Plot A1

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	GPRS 850	GPRS 4 Tx Slots	A	0998M	1:2.076	-0.15	824.20	128	26.0	25.02	Bottom	5	0.663	1.253	0.831	1.055	0.659		23.6		
Body	GPRS 850	GPRS 4 Tx Slots	A	0998M	1:2.076	-0.14	836.60	190	26.0	25.31	Bottom	5	0.756	1.172	0.886	1.125	0.703		23.3		
Body	GPRS 850	GPRS 4 Tx Slots	A	1001M	1:2.076	0.01	848.80	251	26.0	25.43	Bottom	5	0.775	1.140	0.884	1.122	0.701		23.3		
Body	GPRS 850	GPRS 4 Tx Slots	A	1001M	1:2.076	-0.03	848.80	251	26.0	25.43	Right	5	0.361	1.140	0.412	0.523	0.327		26.6	22.6	21.8
Body-worn/Body	GPRS 850	GPRS 4 Tx Slots	A	1001M	1:2.076	0.09	824.20	128	26.0	25.02	Back	5	0.805	1.253	1.009	1.281	0.801		22.7		
Body-worn/Body	GPRS 850	GPRS 4 Tx Slots	A	1001M	1:2.076	-0.01	836.60	190	26.0	25.31	Back	5	0.878	1.172	1.029	1.307	0.817	Plot	22.6		
Body-worn/Body	GPRS 850	GPRS 4 Tx Slots	A	0998M	1:2.076	-0.08	848.80	251	26.0	25.43	Back	5	0.858	1.140	0.978	1.242	0.776		22.9		
Body-worn/Body	GPRS 850	GPRS 4 Tx Slots	A	1001M	1:2.076	0.01	848.80	251	26.0	25.43	Front	5	0.159	1.140	0.181	0.230	0.144		30.2		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram										

12.2 LTE Band 12 Standalone SAR

Table 12-2 Ant E Head | Plot A2

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	LTE Band 12	10	QPSK	E	0998M	1:1	0.02	707.50	23095	0.0	23.0	22.31	1	25	Right Cheek	0	0.663	1.172	0.777	0.987	0.617		24.0		
Head	LTE Band 12	10	QPSK	E	0998M	1:1	0.02	707.50	23095	0.0	23.0	22.30	25	25	Right Cheek	0	0.695	1.175	0.817	1.037	0.648	Plot	23.8		
Head	LTE Band 12	10	QPSK	E	0998M	1:1	-0.02	707.50	23095	0.0	23.0	22.22	50	0	Right Cheek	0	0.663	1.197	0.794	1.008	0.630		24.0		
Head	LTE Band 12	10	QPSK	E	0998M	1:1	0.02	707.50	23095	0.0	23.0	22.31	1	25	Right Tilt	0	0.262	1.172	0.307	0.390	0.244		28.1		
Head	LTE Band 12	10	QPSK	E	0998M	1:1	-0.02	707.50	23095	0.0	23.0	22.30	25	25	Right Tilt	0	0.274	1.175	0.322	0.409	0.256		27.9	23.8	22.0
Head	LTE Band 12	10	QPSK	E	0998M	1:1	-0.02	707.50	23095	0.0	23.0	22.31	1	25	Left Cheek	0	0.312	1.172	0.366	0.464	0.290		27.3		
Head	LTE Band 12	10	QPSK	E	0998M	1:1	0.06	707.50	23095	0.0	23.0	22.30	25	25	Left Cheek	0	0.330	1.175	0.388	0.492	0.308		27.1		
Head	LTE Band 12	10	QPSK	E	0998M	1:1	-0.03	707.50	23095	0.0	23.0	22.31	1	25	Left Tilt	0	0.148	1.172	0.173	0.220	0.138		30.6		
Head	LTE Band 12	10	QPSK	E	0998M	1:1	-0.02	707.50	23095	0.0	23.0	22.30	25	25	Left Tilt	0	0.153	1.175	0.180	0.228	0.143		30.4		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Head 1.6 W/kg (mW/g) averaged over 1 gram										

Table 12-3 Ant E Open Body | Plot A3, A4

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 12	10	QPSK	E	0998M	1:1	-0.01	707.50	23095	0.0	24.0	23.30	1	49	Top	5	0.064	1.175	0.075	0.096	0.060		35.2		
Body	LTE Band 12	10	QPSK	E	0998M	1:1	-0.08	707.50	23095	0.0	24.0	23.32	25	12	Top	5	0.061	1.169	0.071	0.091	0.057		35.4		
Body	LTE Band 12	10	QPSK	E	0998M	1:1	0.02	707.50	23095	0.0	24.0	23.30	1	49	Left	5	0.713	1.175	0.838	1.064	0.665	Plot	24.7		
Body	LTE Band 12	10	QPSK	E	0998M	1:1	-0.02	707.50	23095	0.0	24.0	23.32	25	12	Left	5	0.665	1.169	0.777	0.987	0.617		25.0		
Body	LTE Band 12	10	QPSK	E	0998M	1:1	-0.02	707.50	23095	0.0	24.0	23.04	50	0	Left	5	0.663	1.247	0.827	1.050	0.656		24.8	24.7	23.0
Body-worn/Body	LTE Band 12	10	QPSK	E	0998M	1:1	0.06	707.50	23095	0.0	24.0	23.30	1	49	Back	5	0.545	1.175	0.640	0.813	0.508		25.9		
Body-worn/Body	LTE Band 12	10	QPSK	E	0998M	1:1	0.02	707.50	23095	0.0	24.0	23.32	25	12	Back	5	0.514	1.169	0.601	0.763	0.477		26.2		
Body-worn/Body	LTE Band 12	10	QPSK	E	0998M	1:1	-0.07	707.50	23095	0.0	24.0	23.30	1	49	Front	5	0.549	1.175	0.645	0.819	0.512	Plot	25.9		
Body-worn/Body	LTE Band 12	10	QPSK	E	0998M	1:1	-0.02	707.50	23095	0.0	24.0	23.32	25	12	Front	5	0.529	1.169	0.618	0.785	0.491		26.0		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 12-4 Ant E Closed Body

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 12	10	QPSK	E	0998M	1:1	0.02	707.50	23095	0.0	24.5	23.60	1	49	Top	5	0.018	1.230	0.022	0.028	0.018		41.0		
Body	LTE Band 12	10	QPSK	E	0998M	1:1	-0.01	707.50	23095	0.0	24.5	23.65	25	25	Top	5	0.020	1.216	0.024	0.031	0.019		40.6		
Body	LTE Band 12	10	QPSK	E	0998M	1:1	-0.17	707.50	23095	0.0	24.5	23.60	1	49	Bottom	5	0.037	1.230	0.046	0.058	0.036		37.9		
Body	LTE Band 12	10	QPSK	E	0998M	1:1	0.03	707.50	23095	0.0	24.5	23.65	25	25	Bottom	5	0.037	1.216	0.045	0.057	0.036		37.9		
Body	LTE Band 12	10	QPSK	E	0998M	1:1	0.03	707.50	23095	0.0	24.5	23.60	1	49	Left	5	0.369	1.230	0.454	0.576	0.360		27.9		
Body	LTE Band 12	10	QPSK	E	0998M	1:1	-0.03	707.50	23095	0.0	24.5	23.65	25	25	Left	5	0.394	1.216	0.479	0.608	0.380		27.6	27.4	23.5
Body-worn/Body	LTE Band 12	10	QPSK	E	0998M	1:1	0.02	707.50	23095	0.0	24.5	23.60	1	49	Back	5	0.119	1.230	0.146	0.186	0.116		32.8		
Body-worn/Body	LTE Band 12	10	QPSK	E	0998M	1:1	0.05	707.50	23095	0.0	24.5	23.65	25	25	Back	5	0.123	1.216	0.150	0.190	0.119		32.7		
Body-worn/Body	LTE Band 12	10	QPSK	E	0998M	1:1	0.01	707.50	23095	0.0	24.5	23.60	1	49	Front	5	0.396	1.230	0.487	0.619	0.387		27.6		
Body-worn/Body	LTE Band 12	10	QPSK	E	0998M	1:1	0.17	707.50	23095	0.0	24.5	23.65	25	25	Front	5	0.420	1.216	0.511	0.649	0.406		27.4		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram										

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12.3 LTE Band 13 Standalone SAR

Table 12-5 Ant A Closed Body | Plot A5

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 13	10	QPSK	A	0998M	1:1	-0.03	782.00	23230	0.0	24.5	23.70	1	0	Bottom	5	32	0.715	1.202	0.859	1.091	0.682		25.1		
Body	LTE Band 13	10	QPSK	A	0998M	1:1	-0.07	782.00	23230	0.5	24.0	23.42	25	0	Bottom	5	32	0.655	1.143	0.749	0.951	0.594		25.2		
Body	LTE Band 13	10	QPSK	A	0998M	1:1	-0.08	782.00	23230	0.5	24.0	23.40	50	0	Bottom	5	32	0.645	1.148	0.740	0.940	0.588		25.3		
Body	LTE Band 13	10	QPSK	A	0998M	1:1	-0.04	782.00	23230	0.0	24.5	23.70	1	0	Right	5	97	0.438	1.202	0.526	0.669	0.418		27.2		
Body	LTE Band 13	10	QPSK	A	0998M	1:1	-0.04	782.00	23230	0.5	24.0	23.42	25	0	Right	5	97	0.421	1.143	0.481	0.611	0.382		27.1		
Body-worn/Body	LTE Band 13	10	QPSK	A	0998M	1:1	0.00	782.00	23230	0.0	24.5	23.70	1	0	Back	5	31	0.992	1.202	1.192	1.514	0.946	Plot	23.7	23.6	23.5
Body-worn/Body	LTE Band 13	10	QPSK	A	0998M	1:1	0.01	782.00	23230	0.0	24.5	23.70	1	0	Back	5	31	1.161	1.202	1.396	1.772	1.107		23.8		
Body-worn/Body	LTE Band 13	10	QPSK	A	0998M	1:1	0.01	782.00	23230	0.5	24.0	23.42	25	0	Back	5	31	0.938	1.143	1.072	1.362	0.851		23.6		
Body-worn/Body	LTE Band 13	10	QPSK	A	0998M	1:1	0.03	782.00	23230	0.5	24.0	23.40	50	0	Back	5	31	0.934	1.148	1.072	1.362	0.851		23.6		
Body-worn/Body	LTE Band 13	10	QPSK	A	0998M	1:1	-0.01	782.00	23230	0.0	24.5	23.70	1	0	Front	5	67	0.138	1.202	0.166	0.211	0.132		32.3		
Body-worn/Body	LTE Band 13	10	QPSK	A	0998M	1:1	-0.08	782.00	23230	0.5	24.0	23.42	25	0	Front	5	67	0.131	1.143	0.150	0.190	0.119		32.2		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram											

Note: Blue entry represents variability measurement

12.4 LTE Band 5 (Cell) Standalone SAR

Table 12-6 Ant A Head

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	LTE Band 5	10	QPSK	A	0998M	1:1	0.10	836.50	20525	0.0	24.5	24.34	1	0	Right Cheek	0	88	0.293	1.038	0.304	0.420	0.263		29.6		
Head	LTE Band 5	10	QPSK	A	0998M	1:1	0.05	836.50	20525	1.0	23.5	23.25	25	12	Right Cheek	0	88	0.234	1.059	0.248	0.431	0.269		29.5		
Head	LTE Band 5	10	QPSK	A	0998M	1:1	-0.02	836.50	20525	0.0	24.5	24.34	1	0	Right Tilt	0	88	0.138	1.038	0.143	0.198	0.124		32.9		
Head	LTE Band 5	10	QPSK	A	0998M	1:1	0.02	836.50	20525	1.0	23.5	23.25	25	12	Right Tilt	0	88	0.106	1.059	0.112	0.195	0.122		32.9	29.5	25.9
Head	LTE Band 5	10	QPSK	A	0998M	1:1	-0.04	836.50	20525	0.0	24.5	24.34	1	0	Left Cheek	0	88	0.183	1.038	0.190	0.262	0.164		31.7		
Head	LTE Band 5	10	QPSK	A	0998M	1:1	0.02	836.50	20525	1.0	23.5	23.25	25	12	Left Cheek	0	88	0.142	1.059	0.150	0.261	0.163		31.7		
Head	LTE Band 5	10	QPSK	A	0998M	1:1	0.05	836.50	20525	0.0	24.5	24.34	1	0	Left Tilt	0	88	0.118	1.038	0.122	0.169	0.106		33.6		
Head	LTE Band 5	10	QPSK	A	0998M	1:1	0.03	836.50	20525	1.0	23.5	23.25	25	12	Left Tilt	0	88	0.092	1.059	0.097	0.169	0.106		33.6		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Head 1.6 W/kg (mW/g) averaged over 1 gram											

Table 12-7 Ant E Head | Plot A6

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	LTE Band 5	10	QPSK	E	0998M	1:1	-0.04	836.50	20525	0.0	22.5	21.76	1	0	Right Cheek	0	0.507	1.186	0.601	0.764	0.478		24.7		
Head	LTE Band 5	10	QPSK	E	0998M	1:1	-0.01	836.50	20525	0.0	22.5	21.68	25	0	Right Cheek	0	0.526	1.208	0.635	0.807	0.504	Plot	24.4		
Head	LTE Band 5	10	QPSK	E	0998M	1:1	-0.04	836.50	20525	0.0	22.5	21.76	1	0	Right Tilt	0	0.166	1.186	0.197	0.250	0.156		29.5		
Head	LTE Band 5	10	QPSK	E	0998M	1:1	-0.03	836.50	20525	0.0	22.5	21.68	25	0	Right Tilt	0	0.172	1.208	0.208	0.264	0.165		29.3	24.4	21.5
Head	LTE Band 5	10	QPSK	E	0998M	1:1	0.12	836.50	20525	0.0	22.5	21.76	1	0	Left Cheek	0	0.278	1.186	0.330	0.419	0.262		27.3		
Head	LTE Band 5	10	QPSK	E	0998M	1:1	0.04	836.50	20525	0.0	22.5	21.68	25	0	Left Cheek	0	0.284	1.208	0.343	0.436	0.273		27.1		
Head	LTE Band 5	10	QPSK	E	0998M	1:1	0.03	836.50	20525	0.0	22.5	21.76	1	0	Left Tilt	0	0.099	1.186	0.117	0.149	0.093		31.8		
Head	LTE Band 5	10	QPSK	E	0998M	1:1	-0.15	836.50	20525	0.0	22.5	21.68	25	0	Left Tilt	0	0.104	1.208	0.126	0.160	0.100		31.5		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Head 1.6 W/kg (mW/g) averaged over 1 gram										

Table 12-8 Ant A Open Body

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 5	10	QPSK	A	0998M	1:1	-0.20	836.50	20525	0.0	22.0	21.79	1	0	Bottom	5	88	0.809	1.050	0.849	1.079	0.674		22.7		
Body	LTE Band 5	10	QPSK	A	0998M	1:1	-0.06	836.50	20525	0.0	22.0	21.78	25	12	Bottom	5	88	0.809	1.052	0.851	1.081	0.676		22.7		
Body	LTE Band 5	10	QPSK	A	0998M	1:1	0.03	836.50	20525	0.0	22.0	21.79	1	0	Right	5	88	0.433	1.050	0.455	0.577	0.361		25.4		
Body	LTE Band 5	10	QPSK	A	0998M	1:1	-0.05	836.50	20525	0.0	22.0	21.78	25	12	Right	5	88	0.400	1.052	0.421	0.534	0.334		25.7		
Body-worn/Body	LTE Band 5	10	QPSK	A	0998M	1:1	0.04	836.50	20525	0.0	22.0	21.79	1	0	Back	5	89	0.951	1.050	0.999	1.268	0.793		22.0	21.8	21.0
Body-worn/Body	LTE Band 5	10	QPSK	A	0998M	1:1	0.10	836.50	20525	0.0	22.0	21.78	25	12	Back	5	89	0.959	1.052	1.009	1.281	0.801		21.9		
Body-worn/Body	LTE Band 5	10	QPSK	A	0998M	1:1	0.00	836.50	20525	0.0	22.0	21.66	50	0	Back	5	89	0.960	1.081	1.038	1.318	0.824		21.8		
Body-worn/Body	LTE Band 5	10	QPSK	A	0998M	1:1	0.01	836.50	20525	0.0	22.0	21.79	1	0	Front	5	88	0.606	1.050	0.636	0.808	0.505		23.9		
Body-worn/Body	LTE Band 5	10	QPSK	A	0998M	1:1	0.00	836.50	20525	0.0	22.0	21.78	25	12	Front	5	88	0.613	1.052	0.645	0.819	0.512		23.9		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram											

Table 12-9 Ant A Closed Body | Plot A7

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 5	10	QPSK	A	0998M	1:1	-0.01	836.50	20525	0.0	23.0	22.84	1	0	Bottom	5	115	0.895	1.038	0.929	1.180	0.738		23.3		
Body	LTE Band 5	10	QPSK	A	0998M	1:1	-0.11	836.50	20525	0.0	23.0	22.72	25	12	Bottom	5	115	0.902	1.067	0.962	1.222	0.764		23.1		
Body	LTE Band 5	10	QPSK	A	0998M	1:1	-0.10	836.50	20525	0.0	23.0	22.71	50	0	Bottom	5	115	0.898	1.069	0.960	1.219	0.762		23.1		
Body	LTE Band 5	10	QPSK	A	0998M	1:1	0.07	836.50	20525	0.0	23.0	22.84	1	0	Right	5	114	0.504	1.038	0.523	0.664	0.415		25.8		
Body	LTE Band 5	10	QPSK	A	0998M	1:1	0.02	836.50	20525	0.0	23.0	22.72	25	12	Right	5	114	0.520	1.067	0.555	0.705	0.441		25.5		
Body-worn/Body	LTE Band 5	10	QPSK	A	0998M	1:1	0.03	836.50	20525	0.0	23.0	22.84	1	0	Back	5	114	1.100	1.038	1.142	1.450	0.906		22.4	22.2	22.0
Body-worn/Body	LTE Band 5	10	QPSK	A	0998M	1:1	0.01	836.50	20525	0.0	23.0	22.72	25	12	Back	5	114	1.110	1.067	1.184	1.504	0.940	Plot	22.2		
Body-worn/Body	LTE Band 5	10	QPSK	A	0998M	1:1	0.01	836.50	20525	0.0	23.0	22.71	50	0	Back	5	114	1.090	1.069	1.165	1.480	0.925		22.3		
Body-worn/Body	LTE Band 5	10	QPSK	A	0998M	1:1	0.04	836.50	20525	0.0	23.0	22.84	1	0	Front	5	115	0.158	1.038	0.164	0.208	0.130		30.8		
Body-worn/Body	LTE Band 5	10	QPSK	A	0998M	1:1	-0.14	836.50	20525	0.0	23.0	22.72	25	12	Front	5	115	0.160	1.067	0.171	0.217	0.136		30.6		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram											

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Table 12-10 Ant E Open Body

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 5	10	QPSK	E	0998M	1:1	-0.15	836.50	20525	0.0	23.5	22.61	1	0	Top	5	0.026	1.227	0.032	0.041	0.026		38.4		
Body	LTE Band 5	10	QPSK	E	0998M	1:1	0.10	836.50	20525	0.0	23.5	22.60	25	0	Top	5	0.029	1.230	0.036	0.045	0.028		37.9		
Body	LTE Band 5	10	QPSK	E	0998M	1:1	0.17	836.50	20525	0.0	23.5	22.61	1	0	Left	5	0.460	1.227	0.564	0.717	0.448		25.9		
Body	LTE Band 5	10	QPSK	E	0998M	1:1	0.02	836.50	20525	0.0	23.5	22.60	25	0	Left	5	0.489	1.230	0.601	0.764	0.478		25.7	25.7	22.5
Body-worn/Body	LTE Band 5	10	QPSK	E	0998M	1:1	-0.17	836.50	20525	0.0	23.5	22.61	1	0	Back	5	0.330	1.227	0.405	0.514	0.321		27.4		
Body-worn/Body	LTE Band 5	10	QPSK	E	0998M	1:1	0.08	836.50	20525	0.0	23.5	22.60	25	0	Back	5	0.333	1.230	0.410	0.520	0.325		27.3		
Body-worn/Body	LTE Band 5	10	QPSK	E	0998M	1:1	0.02	836.50	20525	0.0	23.5	22.61	1	0	Front	5	0.313	1.227	0.384	0.488	0.305		27.6		
Body-worn/Body	LTE Band 5	10	QPSK	E	0998M	1:1	-0.01	836.50	20525	0.0	23.5	22.60	25	0	Front	5	0.332	1.230	0.408	0.519	0.324		27.3		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Body 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-11 Ant E Closed Body

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 5	10	QPSK	E	0998M	1:1	0.01	836.50	20525	0.0	24.0	23.20	1	0	Top	5	0.025	1.202	0.030	0.038	0.024		39.2		
Body	LTE Band 5	10	QPSK	E	0998M	1:1	-0.11	836.50	20525	0.0	24.0	23.07	25	0	Top	5	0.023	1.239	0.028	0.036	0.023		39.4		
Body	LTE Band 5	10	QPSK	E	0998M	1:1	0.01	836.50	20525	0.0	24.0	23.20	1	0	Bottom	5	0.025	1.202	0.030	0.038	0.024		39.2		
Body	LTE Band 5	10	QPSK	E	0998M	1:1	0.02	836.50	20525	0.0	24.0	23.07	25	0	Bottom	5	0.029	1.239	0.036	0.046	0.029		38.4		
Body	LTE Band 5	10	QPSK	E	0998M	1:1	-0.04	836.50	20525	0.0	24.0	23.20	1	0	Left	5	0.403	1.202	0.484	0.615	0.384		27.1	26.8	23.0
Body	LTE Band 5	10	QPSK	E	0998M	1:1	0.04	836.50	20525	0.0	24.0	23.07	25	0	Left	5	0.414	1.239	0.513	0.651	0.407		26.8		
Body-worn/Body	LTE Band 5	10	QPSK	E	0998M	1:1	-0.10	836.50	20525	0.0	24.0	23.20	1	0	Back	5	0.116	1.202	0.139	0.177	0.111		32.5		
Body-worn/Body	LTE Band 5	10	QPSK	E	0998M	1:1	-0.01	836.50	20525	0.0	24.0	23.07	25	0	Back	5	0.120	1.239	0.149	0.189	0.118		32.2		
Body-worn/Body	LTE Band 5	10	QPSK	E	0998M	1:1	0.06	836.50	20525	0.0	24.0	23.20	1	0	Front	5	0.390	1.202	0.469	0.595	0.372		27.2		
Body-worn/Body	LTE Band 5	10	QPSK	E	0998M	1:1	0.00	836.50	20525	0.0	24.0	23.07	25	0	Front	5	0.396	1.239	0.491	0.623	0.389		27.0		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Body 1.6 W/kg (mW/g) averaged over 1 gram								

12.5 LTE Band 66 (AWS) Standalone SAR

Table 12-12 Ant H Open Body | Plot A8, A9

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 66	20	QPSK	H	0997M	1:1	0.01	1745.00	132322	0.0	22.0	21.63	1	50	Top	5	0.479	1.089	0.522	0.662	0.414		24.8		
Body	LTE Band 66	20	QPSK	H	0997M	1:1	-0.02	1745.00	132322	0.0	22.0	21.26	50	25	Top	5	0.458	1.186	0.543	0.690	0.431		24.6		
Body	LTE Band 66	20	QPSK	H	0997M	1:1	-0.11	1745.00	132322	0.0	22.0	21.63	1	50	Right	5	0.881	1.089	0.959	1.218	0.761	Plot	22.1		
Body	LTE Band 66	20	QPSK	H	0997M	1:1	0.08	1745.00	132322	0.0	22.0	21.63	1	50	Right	5	0.873	1.089	0.951	1.210	0.756		22.2		
Body	LTE Band 66	20	QPSK	H	0997M	1:1	-0.02	1745.00	132322	0.0	22.0	21.26	50	25	Right	5	0.863	1.186	1.024	1.300	0.813		21.8	21.8	21.0
Body	LTE Band 66	20	QPSK	H	0997M	1:1	-0.02	1745.00	132322	0.0	22.0	21.14	100	0	Right	5	0.847	1.219	1.032	1.311	0.819		21.8		
Body-worn/Body	LTE Band 66	20	QPSK	H	0997M	1:1	0.01	1745.00	132322	0.0	22.0	21.63	1	50	Back	5	0.635	1.089	0.692	0.878	0.549	Plot	23.6		
Body-worn/Body	LTE Band 66	20	QPSK	H	0997M	1:1	-0.07	1745.00	132322	0.0	22.0	21.26	50	25	Back	5	0.605	1.186	0.718	0.911	0.569		23.4		
Body-worn/Body	LTE Band 66	20	QPSK	H	0997M	1:1	-0.01	1745.00	132322	0.0	22.0	21.63	1	50	Front	5	0.572	1.089	0.623	0.791	0.494		24.0		
Body-worn/Body	LTE Band 66	20	QPSK	H	0997M	1:1	0.01	1745.00	132322	0.0	22.0	21.26	50	25	Front	5	0.580	1.186	0.688	0.874	0.546		23.6		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Body 1.6 W/kg (mW/g) averaged over 1 gram								

Note: Blue entry represents variability measurement

12.6 LTE Band 25 (PCS) Standalone SAR

Table 12-13 Ant B Head | Plot A10

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	LTE Band 25	20	QPSK	B	1182M	1:1	-0.21	1860.00	26140	0.0	25.0	23.25	1	99	Right Cheek	0	0.066	1.496	0.099	0.335	0.209	Plot	35.0		
Head	LTE Band 25	20	QPSK	B	1182M	1:1	0.06	1860.00	26140	1.0	24.0	22.29	50	50	Right Cheek	0	0.053	1.483	0.079	0.335	0.209		35.0		
Head	LTE Band 25	20	QPSK	B	1182M	1:1	-0.21	1860.00	26140	0.0	25.0	23.25	1	99	Right Tilt	0	0.031	1.496	0.046	0.157	0.098		38.3		
Head	LTE Band 25	20	QPSK	B	1182M	1:1	-0.14	1860.00	26140	1.0	24.0	22.29	50	50	Right Tilt	0	0.026	1.483	0.039	0.164	0.103		38.1	35.0	30.3
Head	LTE Band 25	20	QPSK	B	1182M	1:1	0.03	1860.00	26140	0.0	25.0	23.25	1	99	Left Cheek	0	0.060	1.496	0.090	0.304	0.190		35.4		
Head	LTE Band 25	20	QPSK	B	1182M	1:1	0.03	1860.00	26140	1.0	24.0	22.29	50	50	Left Cheek	0	0.051	1.483	0.076	0.323	0.202		35.2		
Head	LTE Band 25	20	QPSK	B	1182M	1:1	0.04	1860.00	26140	0.0	25.0	23.25	1	99	Left Tilt	0	0.047	1.496	0.070	0.238	0.149		36.5		
Head	LTE Band 25	20	QPSK	B	1182M	1:1	0.03	1860.00	26140	1.0	24.0	22.29	50	50	Left Tilt	0	0.040	1.483	0.059	0.253	0.158		36.2		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Head 1.6 W/kg (mW/g) averaged over 1 gram								

12.7 LTE Band 41 Standalone SAR

Table 12-14 Ant H Closed Body | Plot A11, A12

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Add'l Info	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 41	20	QPSK	H	N/A	1000M	1:1.58	-0.02	2506.00	39750	0.0	22.0	21.60	1	50	Bottom	5	0.127	1.096	0.139	0.177	0.111		28.5		
Body	LTE Band 41	20	QPSK	H	N/A	1000M	1:1.58	0.04	2506.00	39750	0.0	22.0	21.74	50	0	Bottom	5	0.128	1.062	0.136	0.173	0.108		28.6		
Body	LTE Band 41	20	QPSK	H	N/A	1000M	1:1.58	-0.07	2506.00	39750	0.0	22.0	21.60	1	50	Right	5	0.332	1.096	0.364	0.462	0.289		24.4		
Body	LTE Band 41	20	QPSK	H	N/A	1001M	1:1.58	0.00	2506.00	39750	0.0	22.0	21.26	1	99	Right	5	0.396	1.186	0.470	0.596	0.373	Plot	23.2		
Body	LTE Band 41	20	QPSK	H	N/A	1000M	1:1.58	-0.04	2506.00	39750	0.0	22.0	21.74	50	0	Right	5	0.338	1.062	0.359	0.456	0.285		24.4		
Body-worn/Body	LTE Band 41	20	QPSK	H	N/A	1000M	1:1.58	0.07	2506.00	39750	0.0	22.0	21.60	1	50	Back	5	0.047	1.096	0.052	0.065	0.041		32.8	23.2	19.0
Body-worn/Body	LTE Band 41	20	QPSK	H	N/A	1000M	1:1.58	-0.09	2506.00	39750	0.0	22.0	21.74	50	0	Back	5	0.050	1.062	0.053	0.067	0.042		32.7		
Body-worn/Body	LTE Band 41	20	QPSK	H	N/A	1000M	1:1.58	0.02	2506.00	39750	0.0	22.0	21.60	1	50	Front	5	0.181	1.096	0.198	0.252	0.158		27.0		
Body-worn/Body	LTE Band 41	20	QPSK	H	N/A	1000M	1:1.58	-0.03	2506.00	39750	0.0	22.0	21.74	50	0	Front	5	0.186	1.062	0.198	0.251	0.157	Plot	27.0		
Body	LTE Band 41	20	QPSK	H	ULCA 41C	1001M	1:1.58	-0.02	2506.00	39750	0.0	22.0	21.18	1	99	Right	5	0.330	1.208	0.399	0.507	0.317		24.0		
		20							2525.80	39948				1	0											
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Body 1.6 W/kg (mW/g) averaged over 1 gram								

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12.8 NR Band n5 Standalone SAR

Table 12-15 Ant A Head

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	NR Band n5	20	QPSK	A	0998M	1:1	-0.03	836.50	167300	DFT-s-OFDM	0.0	24.5	24.21	1	104	Right Cheek	0	89	0.222	1.069	0.237	0.385	0.241		30.7		
Head	NR Band n5	20	QPSK	A	0998M	1:1	0.00	836.50	167300	DFT-s-OFDM	0.0	24.5	24.14	50	28	Right Cheek	0	89	0.211	1.086	0.229	0.372	0.233		30.8		
Head	NR Band n5	20	QPSK	A	0998M	1:1	0.05	836.50	167300	CP-OFDM	1.5	23.0	22.51	1	1	Right Cheek	0	89	0.166	1.119	0.186	0.426	0.266		30.3		
Head	NR Band n5	20	QPSK	A	0998M	1:1	0.01	836.50	167300	DFT-s-OFDM	0.0	24.5	24.21	1	104	Right Tilt	0	88	0.098	1.069	0.105	0.170	0.106		34.2		
Head	NR Band n5	20	QPSK	A	0998M	1:1	-0.04	836.50	167300	DFT-s-OFDM	0.0	24.5	24.14	50	28	Right Tilt	0	88	0.098	1.086	0.106	0.173	0.108		34.2	30.3	26.6
Head	NR Band n5	20	QPSK	A	0998M	1:1	-0.11	836.50	167300	DFT-s-OFDM	0.0	24.5	24.21	1	104	Left Cheek	0	89	0.144	1.069	0.154	0.250	0.156		32.6		
Head	NR Band n5	20	QPSK	A	0998M	1:1	-0.03	836.50	167300	DFT-s-OFDM	0.0	24.5	24.14	50	28	Left Cheek	0	89	0.137	1.086	0.149	0.241	0.151		32.7		
Head	NR Band n5	20	QPSK	A	0998M	1:1	-0.08	836.50	167300	DFT-s-OFDM	0.0	24.5	24.21	1	104	Left Tilt	0	89	0.085	1.069	0.091	0.147	0.092		34.9		
Head	NR Band n5	20	QPSK	A	0998M	1:1	0.01	836.50	167300	DFT-s-OFDM	0.0	24.5	24.14	50	28	Left Tilt	0	89	0.086	1.086	0.093	0.152	0.095		34.7		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Head 1.6 W/kg (mW/g) averaged over 1 gram											

Table 12-16 Ant E Head | Plot A13

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	NR Band n5	20	QPSK	E	0998M	1:1	-0.04	836.50	167300	DFT-s-OFDM	0.0	22.5	21.10	1	53	Right Cheek	0	0.533	1.380	0.736	0.934	0.584		23.8		
Head	NR Band n5	20	QPSK	E	0998M	1:1	0.00	836.50	167300	DFT-s-OFDM	0.0	22.5	21.13	50	56	Right Cheek	0	0.531	1.371	0.728	0.925	0.578		23.8		
Head	NR Band n5	20	QPSK	E	0998M	1:1	-0.01	836.50	167300	CP-OFDM	0.0	22.5	21.16	1	1	Right Cheek	0	0.560	1.361	0.762	0.968	0.605	Plot	23.6		
Head	NR Band n5	20	QPSK	E	0998M	1:1	-0.03	836.50	167300	DFT-s-OFDM	0.0	22.5	21.10	1	53	Right Tilt	0	0.173	1.380	0.239	0.303	0.189		28.7		
Head	NR Band n5	20	QPSK	E	0998M	1:1	0.01	836.50	167300	DFT-s-OFDM	0.0	22.5	21.13	50	56	Right Tilt	0	0.183	1.371	0.251	0.319	0.199		28.5	23.6	21.5
Head	NR Band n5	20	QPSK	E	0998M	1:1	0.02	836.50	167300	DFT-s-OFDM	0.0	22.5	21.10	1	53	Left Cheek	0	0.266	1.380	0.367	0.466	0.291		26.8		
Head	NR Band n5	20	QPSK	E	0998M	1:1	-0.01	836.50	167300	DFT-s-OFDM	0.0	22.5	21.13	50	56	Left Cheek	0	0.269	1.371	0.369	0.468	0.293		26.8		
Head	NR Band n5	20	QPSK	E	0998M	1:1	-0.04	836.50	167300	DFT-s-OFDM	0.0	22.5	21.10	1	53	Left Tilt	0	0.099	1.380	0.137	0.174	0.109		31.1		
Head	NR Band n5	20	QPSK	E	0998M	1:1	-0.02	836.50	167300	DFT-s-OFDM	0.0	22.5	21.13	50	56	Left Tilt	0	0.104	1.371	0.143	0.181	0.113		30.9		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Head 1.6 W/kg (mW/g) averaged over 1 gram										

Table 12-17 Ant A Open Body

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n5	20	QPSK	A	0998M	1:1	0.02	836.50	167300	DFT-s-OFDM	0.0	22.0	21.41	1	104	Bottom	5	79	0.791	1.146	0.906	1.151	0.719		22.4		
Body	NR Band n5	20	QPSK	A	0998M	1:1	-0.01	836.50	167300	DFT-s-OFDM	0.0	22.0	21.44	50	28	Bottom	5	79	0.819	1.138	0.932	1.184	0.740		22.3		
Body	NR Band n5	20	QPSK	A	0998M	1:1	-0.04	836.50	167300	DFT-s-OFDM	0.0	22.0	21.22	100	0	Bottom	5	79	0.809	1.197	0.968	1.230	0.769		22.1		
Body	NR Band n5	20	QPSK	A	0998M	1:1	-0.03	836.50	167300	DFT-s-OFDM	0.0	22.0	21.41	1	104	Right	5	88	0.432	1.146	0.495	0.629	0.393		25.0		
Body	NR Band n5	20	QPSK	A	0998M	1:1	0.02	836.50	167300	DFT-s-OFDM	0.0	22.0	21.44	50	28	Right	5	88	0.423	1.138	0.481	0.611	0.382		25.1		
Body-worn/Body	NR Band n5	20	QPSK	A	0998M	1:1	-0.03	836.50	167300	DFT-s-OFDM	0.0	22.0	21.41	1	104	Back	5	88	0.942	1.146	1.080	1.371	0.857		21.6	21.5	21.0
Body-worn/Body	NR Band n5	20	QPSK	A	0998M	1:1	-0.03	836.50	167300	DFT-s-OFDM	0.0	22.0	21.44	50	28	Back	5	88	0.947	1.138	1.078	1.369	0.856		21.6		
Body-worn/Body	NR Band n5	20	QPSK	A	0998M	1:1	0.00	836.50	167300	DFT-s-OFDM	0.0	22.0	21.22	100	0	Back	5	88	0.936	1.197	1.120	1.423	0.889		21.5		
Body-worn/Body	NR Band n5	20	QPSK	A	0998M	1:1	-0.03	836.50	167300	CP-OFDM	0.0	22.0	21.29	1	1	Back	5	88	0.904	1.178	1.065	1.352	0.845		21.7		
Body-worn/Body	NR Band n5	20	QPSK	A	0998M	1:1	0.13	836.50	167300	DFT-s-OFDM	0.0	22.0	21.41	1	104	Front	5	88	0.545	1.146	0.625	0.793	0.496		24.0		
Body-worn/Body	NR Band n5	20	QPSK	A	0998M	1:1	0.14	836.50	167300	DFT-s-OFDM	0.0	22.0	21.44	50	28	Front	5	88	0.579	1.138	0.659	0.837	0.523		23.8		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 12-18 Ant A Closed Body | Plot A14

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n5	20	QPSK	A	0998M	1:1	-0.08	836.50	167300	DFT-s-OFDM	0.0	23.0	22.68	1	104	Bottom	5	115	0.825	1.076	0.888	1.127	0.704		23.5		
Body	NR Band n5	20	QPSK	A	0998M	1:1	-0.21	836.50	167300	DFT-s-OFDM	0.0	23.0	22.71	50	56	Bottom	5	115	0.836	1.069	0.894	1.135	0.709		23.4		
Body	NR Band n5	20	QPSK	A	0998M	1:1	0.02	836.50	167300	DFT-s-OFDM	0.0	23.0	22.65	100	0	Bottom	5	115	0.827	1.084	0.896	1.139	0.712		23.4		
Body	NR Band n5	20	QPSK	A	0998M	1:1	-0.07	836.50	167300	DFT-s-OFDM	0.0	23.0	22.68	1	104	Right	5	115	0.451	1.076	0.485	0.616	0.385		26.1		
Body	NR Band n5	20	QPSK	A	0998M	1:1	-0.17	836.50	167300	DFT-s-OFDM	0.0	23.0	22.71	50	56	Right	5	115	0.446	1.069	0.477	0.606	0.379		26.2		
Body-worn/Body	NR Band n5	20	QPSK	A	0998M	1:1	-0.01	836.50	167300	DFT-s-OFDM	0.0	23.0	22.68	1	104	Back	5	114	1.110	1.076	1.194	1.517	0.948		22.2	22.2	22.0
Body-worn/Body	NR Band n5	20	QPSK	A	0998M	1:1	-0.05	836.50	167300	DFT-s-OFDM	0.0	23.0	22.71	50	56	Back	5	114	1.120	1.069	1.197	1.521	0.951	Plot	22.2		
Body-worn/Body	NR Band n5	20	QPSK	A	0998M	1:1	-0.02	836.50	167300	DFT-s-OFDM	0.0	23.0	22.71	50	56	Back	5	114	1.080	1.069	1.155	1.466	0.916		22.3		
Body-worn/Body	NR Band n5	20	QPSK	A	0998M	1:1	-0.08	836.50	167300	DFT-s-OFDM	0.0	23.0	22.65	100	0	Back	5	114	1.100	1.084	1.192	1.514	0.946		22.2		
Body-worn/Body	NR Band n5	20	QPSK	A	0998M	1:1	0.19	836.50	167300	CP-OFDM	0.0	23.0	22.55	1	1	Back	5	114	1.080	1.109	1.198	1.521	0.951		22.2		
Body-worn/Body	NR Band n5	20	QPSK	A	0998M	1:1	0.01	836.50	167300	DFT-s-OFDM	0.0	23.0	22.68	1	104	Front	5	115	0.168	1.076	0.181	0.230	0.144		30.4		
Body-worn/Body	NR Band n5	20	QPSK	A	0998M	1:1	0.00	836.50	167300	DFT-s-OFDM	0.0	23.0	22.71	50	56	Front	5	115	0.167	1.069	0.179	0.227	0.142		30.4		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Body 1.6 W/kg (mW/g) averaged over 1 gram										

Note: Blue entry represents variability measurement

Table 12-19 Ant E Open Body

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n5	20	QPSK	E	0998M	1:1	0.08	836.50	167300	DFT-s-OFDM	0.0	23.5	22.09	1	53	Top	5	0.041	1.384	0.057	0.072	0.045		35.9		
Body	NR Band n5	20	QPSK	E	0998M	1:1	0.03	836.50	167300	DFT-s-OFDM	0.0	23.5	22.13	50	56	Top	5	0.040	1.371	0.055	0.070	0.044		36.1		
Body	NR Band n5	20	QPSK	E	0998M	1:1	-0.03	836.50	167300	DFT-s-OFDM	0.0	23.5	22.09	1	53	Left	5	0.539	1.384	0.746	0.947	0.592		24.7		
Body	NR Band n5	20	QPSK	E	0998M	1:1	0.02	836.50	167300	DFT-s-OFDM	0.0	23.5	22.13	50	56	Left	5	0.565	1.371	0.775	0.984	0.615		24.6		
Body	NR Band n5	20	QPSK	E	0998M	1:1	-0.02	836.50	167300	CP-OFDM	0.0	23.5	21.94	1	1	Left	5	0.553	1.432	0.792	1.006	0.629		24.5	24.5	22.5
Body-worn/Body	NR Band n5	20	QPSK	E	0998M	1:1	-0.09	836.50	167300	DFT-s-OFDM	0.0	23.5	22.09	1	53	Back	5	0.429	1.384	0.594	0.754	0.471		25.7		
Body-worn/Body	NR Band n5	20	QPSK	E	0998M	1:1	-0.04	836.50	167300	DFT-s-OFDM	0.0	23.5	22.13	50	56	Back	5	0.425	1.371	0.583	0.740	0.463		25.8		
Body-worn/Body	NR Band n5	20	QPSK	E	0998M	1:1	-0.16	836.50	167300	DFT-s-OFDM	0.0	23.5	22.09	1	53	Front	5	0.379	1.384	0.525	0.666	0.416		26.3		
Body-worn/Body	NR Band n5	20	QPSK	E	0998M	1:1	-0.11	836.50	167300	DFT-s-OFDM	0.0	23.5	22.13	50	56	Front	5	0.430	1.371	0.590	0.749	0.468		25.7		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 12-20 Ant E Closed Body

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n5	20	QPSK	E	0998M	1:1	-0.01	836.50	167300	DFT-s-OFDM	0.0	24.0	22.55	1	53	Top	5	0.025	1.396	0.035	0.044	0.028		38.5		
Body	NR Band n5	20	QPSK	E	0998M	1:1	-0.06	836.50	167300	DFT-s-OFDM	0.0	24.0	22.64	50	56	Top	5	0.028	1.368	0.038	0.049	0.031		38.1		
Body	NR Band n5	20	QPSK	E	0998M	1:1	-0.01	836.50	167300	DFT-s-OFDM	0.0	24.0	22.55	1	53	Bottom	5	0.030	1.396	0.042	0.053	0.033		37.7		
Body	NR Band n5	20	QPSK	E	0998M	1:1	0.05	836.50	167300	DFT-s-OFDM	0.0	24.0	22.64	50	56	Bottom	5	0.031	1.368	0.042	0.054	0.034		37.7		
Body	NR Band n5	20	QPSK	E	0998M	1:1	-0.10	836.50	167300	DFT-s-OFDM	0.0	24.0	22.55	1	53	Left	5	0.395	1.396	0.551	0.700	0.438		26.5	26.5	23.0
Body	NR Band n5	20	QPSK	E	0998M	1:1	-0.12	836.50	167300	DFT-s-OFDM	0.0	24.0	22.64	50	56	Left	5	0.401	1.368	0.549	0.697	0.436		26.6		
Body-worn/Body	NR Band n5	20	QPSK	E	0998M	1:1	0.05	836.50	167300	DFT-s-OFDM	0.0	24.0	22.55	1	53	Back	5	0.132	1.396	0.184	0.234	0.146		31.3		
Body-worn/Body	NR Band n5	20	QPSK	E	0998M	1:1	0.18	836.50	167300	DFT-s-OFDM	0.0	24.0	22.64	50	56	Back	5	0.186	1.368	0.186	0.236	0.148		31.3		
Body-worn/Body	NR Band n5	20	QPSK	E	0998M	1:1	-0.04	836.50	167300	DFT-s-OFDM	0.0	24.0	22.55	1	53	Front	5	0.397	1.396	0.554	0.704	0.440		26.5		
Body-worn/Body	NR Band n5	20	QPSK	E	0998M	1:1	-0.07	836.50	167300	DFT-s-OFDM	0.0	24.0	22.64	50	56	Front	5	0.405	1.368	0.554	0.704	0.440		26.5		
Body-worn/Body	NR Band n5	20	QPSK	E	0998M	1:1	-0.01	836.50	167300	CP-OFDM	0.0	24.0	22.47	1	1	Front	5	0.375	1.422	0.533	0.677	0.423		26.7		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Body 1.6 W/kg (mW/g) averaged over 1 gram										

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12.9 NR Band n66 Standalone SAR

Table 12-21 Ant B Head | Plot A15

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	PSlimit [dBm]	Overall PSlimit [dBm]	EFS PSlimit [dBm]
Head	NR Band n66	45	QPSK	B	1000M	1:1	-0.19	1745.00	349000	DFT-s-OFDM	0.0	25.0	24.60	1	1	Right Cheek	0	0.094	1.096	0.103	0.318	0.199		34.8		
Head	NR Band n66	45	QPSK	B	1000M	1:1	0.02	1745.00	349000	DFT-s-OFDM	0.0	25.0	24.55	120	61	Right Cheek	0	0.095	1.109	0.105	0.326	0.204	Plot	34.7		
Head	NR Band n66	45	QPSK	B	1000M	1:1	0.03	1745.00	349000	CP-OFDM	1.5	23.5	22.92	1	1	Right Cheek	0	0.072	1.143	0.082	0.359	0.224		34.3		
Head	NR Band n66	45	QPSK	B	1000M	1:1	-0.04	1745.00	349000	DFT-s-OFDM	0.0	25.0	24.60	1	1	Right Tilt	0	0.036	1.096	0.039	0.122	0.076		39.0		
Head	NR Band n66	45	QPSK	B	1000M	1:1	0.03	1745.00	349000	DFT-s-OFDM	0.0	25.0	24.55	120	61	Right Tilt	0	0.036	1.109	0.040	0.123	0.077		38.9	34.3	29.9
Head	NR Band n66	45	QPSK	B	1000M	1:1	-0.04	1745.00	349000	DFT-s-OFDM	0.0	25.0	24.60	1	1	Left Cheek	0	0.078	1.096	0.085	0.264	0.165		35.6		
Head	NR Band n66	45	QPSK	B	1000M	1:1	-0.04	1745.00	349000	DFT-s-OFDM	0.0	25.0	24.55	120	61	Left Cheek	0	0.094	1.109	0.104	0.322	0.201		34.8		
Head	NR Band n66	45	QPSK	B	1000M	1:1	-0.01	1745.00	349000	DFT-s-OFDM	0.0	25.0	24.60	1	1	Left Tilt	0	0.038	1.096	0.042	0.129	0.081		38.8		
Head	NR Band n66	45	QPSK	B	1000M	1:1	0.21	1745.00	349000	DFT-s-OFDM	0.0	25.0	24.55	120	61	Left Tilt	0	0.048	1.109	0.053	0.165	0.103		37.7		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Head 1.6 W/kg (mW/g) averaged over 1 gram										

Table 12-22 Ant B Open Body | Plot A16, A17

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	PSlimit [dBm]	Overall PSlimit [dBm]	EFS PSlimit [dBm]
Body	NR Band n66	45	QPSK	B	1000M	1:1	0.01	1745.00	349000	DFT-s-OFDM	0.0	19.5	19.25	1	121	Bottom	5	0.785	1.059	0.831	1.056	0.660		20.3		
Body	NR Band n66	45	QPSK	B	1000M	1:1	-0.01	1745.00	349000	DFT-s-OFDM	0.0	19.5	19.26	120	0	Bottom	5	0.804	1.057	0.850	1.079	0.674	Plot	20.2		
Body	NR Band n66	45	QPSK	B	1000M	1:1	0.00	1745.00	349000	DFT-s-OFDM	0.0	19.5	19.14	240	0	Bottom	5	0.791	1.086	0.859	1.091	0.682		20.1		
Body	NR Band n66	45	QPSK	B	1000M	1:1	0.14	1745.00	349000	CP-OFDM	0.0	19.5	19.33	1	1	Bottom	5	0.752	1.040	0.782	0.993	0.621		20.5		
Body	NR Band n66	45	QPSK	B	1000M	1:1	-0.15	1745.00	349000	DFT-s-OFDM	0.0	19.5	19.25	1	121	Left	5	0.248	1.059	0.263	0.334	0.209		25.3		
Body	NR Band n66	45	QPSK	B	1000M	1:1	-0.02	1745.00	349000	DFT-s-OFDM	0.0	19.5	19.26	120	0	Left	5	0.258	1.057	0.273	0.346	0.216		25.1	20.1	18.5
Body-worn/Body	NR Band n66	45	QPSK	B	1000M	1:1	-0.08	1745.00	349000	DFT-s-OFDM	0.0	19.5	19.25	1	121	Back	5	0.661	1.059	0.700	0.889	0.556		21.0		
Body-worn/Body	NR Band n66	45	QPSK	B	1000M	1:1	-0.02	1745.00	349000	DFT-s-OFDM	0.0	19.5	19.26	120	0	Back	5	0.665	1.057	0.703	0.893	0.558	Plot	21.0		
Body-worn/Body	NR Band n66	40	QPSK	B	1000M	1:1	0.00	1745.00	349000	DFT-s-OFDM	0.0	19.5	19.25	1	121	Front	5	0.418	1.059	0.443	0.562	0.351		23.0		
Body-worn/Body	NR Band n66	40	QPSK	B	1000M	1:1	-0.14	1745.00	349000	DFT-s-OFDM	0.0	19.5	19.26	120	0	Front	5	0.418	1.057	0.442	0.561	0.351		23.0		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 12-23 Ant H Closed Body

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	PSlimit [dBm]	Overall PSlimit [dBm]	EFS PSlimit [dBm]
Body	NR Band n66	45	QPSK	H	1000M	1:1	-0.03	1745.00	349000	DFT-s-OFDM	0.0	22.5	21.74	1	121	Bottom	5	0.249	1.191	0.297	0.377	0.236		27.7		
Body	NR Band n66	45	QPSK	H	1000M	1:1	-0.18	1745.00	349000	DFT-s-OFDM	0.0	22.5	21.84	120	122	Bottom	5	0.251	1.164	0.292	0.371	0.232		27.8		
Body	NR Band n66	45	QPSK	H	1000M	1:1	0.09	1745.00	349000	DFT-s-OFDM	0.0	22.5	21.74	1	121	Right	5	0.395	1.191	0.470	0.597	0.373		25.7		
Body	NR Band n66	45	QPSK	H	1000M	1:1	0.06	1745.00	349000	DFT-s-OFDM	0.0	22.5	21.84	120	122	Right	5	0.405	1.164	0.471	0.599	0.374		25.7		
Body-worn/Body	NR Band n66	45	QPSK	H	1000M	1:1	0.03	1745.00	349000	DFT-s-OFDM	0.0	22.5	21.74	1	121	Back	5	0.080	1.193	0.095	0.121	0.076		32.7	24.7	21.5
Body-worn/Body	NR Band n66	45	QPSK	H	1000M	1:1	0.07	1745.00	349000	DFT-s-OFDM	0.0	22.5	21.84	120	122	Back	5	0.080	1.164	0.093	0.118	0.074		32.8		
Body-worn/Body	NR Band n66	45	QPSK	H	1000M	1:1	-0.06	1745.00	349000	DFT-s-OFDM	0.0	22.5	21.74	1	121	Front	5	0.495	1.191	0.590	0.749	0.468		24.7		
Body-worn/Body	NR Band n66	45	QPSK	H	1000M	1:1	0.07	1745.00	349000	DFT-s-OFDM	0.0	22.5	21.84	120	122	Front	5	0.444	1.164	0.517	0.656	0.410		25.3		
Body-worn/Body	NR Band n66	45	QPSK	H	1000M	1:1	0.06	1745.00	349000	CP-OFDM	0.0	22.5	21.76	1	1	Front	5	0.427	1.186	0.506	0.643	0.402		25.4		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Body 1.6 W/kg (mW/g) averaged over 1 gram										

12.10 NR Band n41 Standalone SAR

Table 12-24 Ant B Head

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	PSlimit [dBm]	Overall PSlimit [dBm]	EFS PSlimit [dBm]
Head	NR Band n41	100	QPSK	B	1000M	1:1	-0.05	2592.99	518598	DFT-s-OFDM	0.0	27.5	26.27	1	1	Right Cheek	0	0.064	1.327	0.085	0.170	0.106		38.2		
Head	NR Band n41	100	QPSK	B	1000M	1:1	0.07	2592.99	518598	DFT-s-OFDM	0.0	27.5	26.16	135	69	Right Cheek	0	0.057	1.361	0.078	0.155	0.097		38.6		
Head	NR Band n41	100	QPSK	B	1000M	1:1	0.01	2592.99	518598	DFT-s-OFDM	0.0	27.5	26.27	1	1	Right Tilt	0	0.019	1.327	0.025	0.050	0.031		43.4		
Head	NR Band n41	100	QPSK	B	1001M	1:1	0.01	2592.99	518598	DFT-s-OFDM	0.0	27.5	26.16	135	69	Right Tilt	0	0.030	1.361	0.041	0.081	0.051		41.3		
Head	NR Band n41	100	QPSK	B	1000M	1:1	0.00	2592.99	518598	DFT-s-OFDM	0.0	27.5	26.27	1	1	Left Cheek	0	0.074	1.327	0.098	0.196	0.123		37.5	35.4	30.5
Head	NR Band n41	100	QPSK	B	1000M	1:1	0.02	2592.99	518598	DFT-s-OFDM	0.0	27.5	26.16	135	69	Left Cheek	0	0.118	1.361	0.161	0.320	0.200		35.4		
Head	NR Band n41	100	QPSK	B	1001M	1:1	0.02	2592.99	518598	CP-OFDM	1.5	26.0	24.82	1	1	Left Cheek	0	0.058	1.312	0.076	0.214	0.134		37.1		
Head	NR Band n41	100	QPSK	B	1001M	1:1	0.04	2592.99	518598	DFT-s-OFDM	0.0	27.5	26.27	1	1	Left Tilt	0	0.026	1.327	0.035	0.069	0.043		42.1		
Head	NR Band n41	100	QPSK	B	1001M	1:1	0.04	2592.99	518598	DFT-s-OFDM	0.0	27.5	26.16	135	69	Left Tilt	0	0.025	1.361	0.034	0.068	0.043		42.1		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Head 1.6 W/kg (mW/g) averaged over 1 gram										

Table 12-25 Ant H Head | Plot A18

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	PSlimit [dBm]	Overall PSlimit [dBm]	EFS PSlimit [dBm]
Head	NR Band n41	100	QPSK	H	1001M	1:1	0.01	2592.99	518598	DFT-s-OFDM	0.0	17.5	17.31	1	271	Right Cheek	0	0.088	1.045	0.092	0.117	0.073		27.8		
Head	NR Band n41	100	QPSK	H	1001M	1:1	-0.03	2592.99	518598	DFT-s-OFDM	0.0	17.5	17.20	135	138	Right Cheek	0	0.088	1.072	0.094	0.120	0.075		27.7		
Head	NR Band n41	100	QPSK	H	1001M	1:1	0.02	2592.99	518598	DFT-s-OFDM	0.0	17.5	17.31	1	271	Right Tilt	0	0.077	1.045	0.080	0.102	0.064		28.4		
Head	NR Band n41	100	QPSK	H	1001M	1:1	-0.04	2592.99	518598	DFT-s-OFDM	0.0	17.5	17.20	135	138	Right Tilt	0	0.076	1.072	0.081	0.103	0.064		28.3		
Head	NR Band n41	100	QPSK	H	1001M	1:1	0.11	2592.99	518598	DFT-s-OFDM	0.0	17.5	17.31	1	271	Left Cheek	0	0.404	1.045	0.422	0.536	0.335		21.2	20.8	16.5
Head	NR Band n41	100	QPSK	H	1001M	1:1	0.01	2592.99	518598	DFT-s-OFDM	0.0	17.5	17.20	135	138	Left Cheek	0	0.407	1.072	0.436	0.554	0.346		21.1		
Head	NR Band n41	100	QPSK	H	1001M	1:1	0.00	2592.99	518598	CP-OFDM	0.0	17.5	17.34	1	1	Left Cheek	0	0.448	1.038	0.465	0.591	0.369	Plot	20.8		
Head	NR Band n41	100	QPSK	H	1001M	1:1	0.03	2592.99	518598	DFT-s-OFDM	0.0	17.5	17.31	1	271	Left Tilt	0	0.255	1.045	0.266	0.338	0.211		23.2		
Head	NR Band n41	100	QPSK	H	1001M	1:1	0.05	2592.99	518598	DFT-s-OFDM	0.0	17.5	17.20	135	138	Left Tilt	0	0.251	1.072	0.269	0.342	0.214		23.2		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Head 1.6 W/kg (mW/g) averaged over 1 gram										

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12.11 2.4 GHz WIFI SISO Standalone SAR

Table 12-26 Ant G Open Body | Plot A19, A20

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	2.4 GHz WIFI/ IEEE 802.11b	22	DSSS	G	1048M	98.86	-0.08	2412.00	1	1.0	20.0	19.69	Top	5	0.838	1.074	1.012	0.911	0.999	0.624	Plot	20.4	20.4	20.4
Body	2.4 GHz WIFI/ IEEE 802.11b	22	DSSS	G	1048M	98.86	-0.04	2412.00	1	1.0	20.0	18.93	Top	5	0.703	1.074	1.012	0.764	0.838	0.523		20.4		
Body	2.4 GHz WIFI/ IEEE 802.11b	22	DSSS	G	1048M	98.86	-0.04	2437.00	6	1.0	20.0	18.93	Top	5	0.703	1.279	1.012	0.910	0.998	0.624		20.4		
Body	2.4 GHz WIFI/ IEEE 802.11b	22	DSSS	G	1048M	98.86	0.01	2462.00	11	1.0	20.0	19.20	Top	5	0.691	1.202	1.012	0.841	0.922	0.576		20.7		
Body	2.4 GHz WIFI/ IEEE 802.11b	22	DSSS	G	1048M	98.86	-0.01	2412.00	1	1.0	20.0	19.69	Left	5	0.195	1.074	1.012	0.212	0.232	0.145		26.7		
Body-worn/Body	2.4 GHz WIFI/ IEEE 802.11b	22	DSSS	G	1048M	98.86	-0.07	2412.00	1	1.0	20.0	19.69	Back	5	0.554	1.074	1.012	0.602	0.660	0.413		22.2		
Body-worn/Body	2.4 GHz WIFI/ IEEE 802.11b	22	DSSS	G	1048M	98.86	-0.05	2412.00	1	1.0	20.0	19.69	Front	5	0.684	1.074	1.012	0.743	0.815	0.509	Plot	21.2		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram											

Note: Blue entry represents variability measurement

Table 12-27 Ant G Closed Body

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	2.4 GHz WIFI/ IEEE 802.11b	22	DSSS	G	1048M	98.86	-0.03	2412.00	1	1.0	18.0	17.99	Bottom	5	0.329	1.002	1.012	0.334	0.424	0.265		22.7	22.7	17.0
Body	2.4 GHz WIFI/ IEEE 802.11b	22	DSSS	G	1048M	98.86	-0.04	2412.00	1	1.0	18.0	17.99	Left	5	0.173	1.002	1.012	0.175	0.223	0.139		25.5		
Body-worn/Body	2.4 GHz WIFI/ IEEE 802.11b	22	DSSS	G	1048M	98.86	-0.03	2412.00	1	1.0	18.0	17.99	Back	5	0.086	1.002	1.012	0.087	0.111	0.069		28.5		
Body-worn/Body	2.4 GHz WIFI/ IEEE 802.11b	22	DSSS	G	1048M	98.86	-0.04	2412.00	1	1.0	18.0	17.99	Front	5	0.230	1.002	1.012	0.233	0.296	0.185		24.3		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram											

12.12 6 GHz WIFI MIMO Standalone SAR and APD

Table 12-28 Closed Body | Plot A21

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	U-NII band	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Max Allowed Power (2nd ant) [dBm]	Conducted Power (2nd ant) [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	6 GHz WIFI/ IEEE 802.11ax	160	OFDM	MIMO	1048M	99.69	0.05	6025.00	15	U-NII-5	136.1	12.0	11.62	12.0	11.47	Top	5	0.002	1.130	1.003	0.002	0.015	0.009		38.4		
Body	6 GHz WIFI/ IEEE 802.11ax	160	OFDM	MIMO	1048M	99.69	-0.14	6025.00	15	U-NII-5	136.1	12.0	11.62	12.0	11.47	Bottom	5	0.029	1.130	1.003	0.033	0.212	0.133		26.8		
Body	6 GHz WIFI/ IEEE 802.11ax	160	OFDM	MIMO	1048M	99.69	-0.01	6025.00	15	U-NII-5	136.1	12.0	11.62	12.0	11.47	Right	5	0.084	1.130	1.003	0.095	0.615	0.384		22.2		
Body	6 GHz WIFI/ IEEE 802.11ax	160	OFDM	MIMO	1048M	99.69	0.07	6025.00	15	U-NII-5	136.1	12.0	11.62	12.0	11.47	Left	5	0.086	1.130	1.003	0.097	0.629	0.393		22.1		
Body-worn/Body	6 GHz WIFI/ IEEE 802.11ax	40	OFDM	MIMO	1048M	99.71	0.04	6685.00	147	U-NII-7	32.5	17.0	16.11	17.0	16.60	Back	5	0.056	1.227	1.003	0.069	0.141	0.088		28.6	20.1	20.1
Body-worn/Body	6 GHz WIFI/ IEEE 802.11ax	40	OFDM	MIMO	1048M	99.71	0.06	5965.00	3	U-NII-5	32.5	17.0	16.27	17.0	15.51	Front	5	0.070	1.409	1.003	0.099	0.202	0.126		27.0		
Body-worn/Body	6 GHz WIFI/ IEEE 802.11ax	40	OFDM	MIMO	1048M	99.71	-0.19	6285.00	67	U-NII-5	32.5	17.0	15.99	17.0	16.50	Front	5	0.204	1.262	1.003	0.258	0.527	0.329	Plot	22.8		
Body-worn/Body	6 GHz WIFI/ IEEE 802.11ax	80	OFDM	MIMO	1048M	99.71	-0.08	6465.00	103	U-NII-6	65.1	16.0	14.30	16.0	15.94	Front	5	0.166	1.479	1.003	0.246	0.633	0.396		22.0		
Body-worn/Body	6 GHz WIFI/ IEEE 802.11ax	40	OFDM	MIMO	1048M	99.71	0.05	6685.00	147	U-NII-7	32.5	17.0	16.11	17.0	16.60	Front	5	0.124	1.227	1.003	0.153	0.312	0.195		25.1		
Body-worn/Body	6 GHz WIFI/ IEEE 802.11ax	80	OFDM	MIMO	1048M	99.71	0.01	7025.00	215	U-NII-8	65.1	16.0	14.85	16.0	15.58	Front	5	0.076	1.303	1.003	0.099	0.255	0.159		26.0		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Body 1.6 W/kg (mW/g) averaged over 1 gram										

Note: To achieve the 15 dBm maximum allowed MIMO power for VLP shown in the documentation, each antenna transmits at a maximum allowed power of 12 dBm.
Note: To achieve the 20 dBm maximum allowed MIMO power for SP shown in the documentation, each antenna transmits at a maximum allowed power of 17 dBm.

Exposure	Band/ Mode	Bandwidth [MHz]	Service/ Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	U-NII band	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Max Allowed Power (2nd ant) [dBm]	Conducted Power (2nd ant) [dBm]	Test Position	Spacing [mm]	Measured APD [W/m² (4cm²)]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported APD [W/m² (4cm²)]	Adjusted APD [W/m² (4cm²)]	APD Exposure Ratio	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	6 GHz WIFI/ IEEE 802.11ax	160	OFDM	MIMO	1048M	99.69	0.05	6025.00	15	U-NII-5	136.1	12.0	11.62	12.0	11.47	Top	5	0.020	1.130	1.003	0.023	0.146	0.007		39.4		
Body	6 GHz WIFI/ IEEE 802.11ax	160	OFDM	MIMO	1048M	99.69	-0.14	6025.00	15	U-NII-5	136.1	12.0	11.62	12.0	11.47	Bottom	5	0.147	1.130	1.003	0.167	1.076	0.054		30.7		
Body	6 GHz WIFI/ IEEE 802.11ax	160	OFDM	MIMO	1048M	99.69	-0.01	6025.00	15	U-NII-5	136.1	12.0	11.62	12.0	11.47	Right	5	0.611	1.130	1.003	0.693	4.471	0.224		24.6		
Body	6 GHz WIFI/ IEEE 802.11ax	160	OFDM	MIMO	1048M	99.69	0.07	6025.00	15	U-NII-5	136.1	12.0	11.62	12.0	11.47	Left	5	0.507	1.130	1.003	0.575	3.710	0.186		25.4		
Body-worn/Body	6 GHz WIFI/ IEEE 802.11ax	40	OFDM	MIMO	1048M	99.71	0.04	6685.00	147	U-NII-7	32.5	17.0	16.11	17.0	16.60	Back	5	0.369	1.227	1.003	0.454	0.927	0.046		31.4		
Body-worn/Body	6 GHz WIFI/ IEEE 802.11ax	40	OFDM	MIMO	1048M	99.71	0.06	5965.00	3	U-NII-5	32.5	17.0	16.27	17.0	15.51	Front	5	0.000	1.409	1.003	0.000	0.000	0.000		66.5		
Body-worn/Body	6 GHz WIFI/ IEEE 802.11ax	40	OFDM	MIMO	1048M	99.71	-0.19	6285.00	67	U-NII-5	32.5	17.0	15.99	17.0	16.50	Front	5	1.360	1.262	1.003	1.721	3.514	0.176		25.6		
Body-worn/Body	6 GHz WIFI/ IEEE 802.11ax	80	OFDM	MIMO	1048M	99.71	-0.08	6465.00	103	U-NII-6	65.1	16.0	14.30	16.0	15.94	Front	5	1.330	1.479	1.003	1.973	5.072	0.254		24.0		
Body-worn/Body	6 GHz WIFI/ IEEE 802.11ax	40	OFDM	MIMO	1048M	99.71	0.05	6685.00	147	U-NII-7	32.5	17.0	16.11	17.0	16.60	Front	5	1.050	1.227	1.003	1.292	2.639	0.132		26.8	22.8	20.1
Body-worn/Body	6 GHz WIFI/ IEEE 802.11ax	80	OFDM	MIMO	1048M	99.71	0.01	7025.00	215	U-NII-8	65.1	16.0	14.85	16.0	15.58	Front	5	0.589	1.303	1.003	0.770	1.979	0.099		28.1		

Note: To achieve the 15 dBm maximum allowed MIMO power for VLP shown in the documentation, each antenna transmits at a maximum allowed power of 12 dBm.
Note: To achieve the 20 dBm maximum allowed MIMO power for SP shown in the documentation, each antenna transmits at a maximum allowed power of 17 dBm.

12.13 2.4 GHz Bluetooth SISO Standalone SAR

Table 12-29 Ant G Head | Plot A22

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	2.4 GHz Bluetooth	FHSS	G	1050M	77.07	0.15	2402.00	0	1	18.0	17.76	Right Cheek	0	0.533	1.057	1.025	0.577	0.874	0.546		19.3		
Head	2.4 GHz Bluetooth	FHSS	G	1050M	77.07	0.11	2402.00	0	1	18.0	17.76	Right Tilt	0	0.601	1.057	1.025	0.651	0.986	0.616	Plot	18.8	18.8	18.8
Head	2.4 GHz Bluetooth	FHSS	G	1050M	77.07	-0.09	2402.00	0	1	18.0	17.76	Left Cheek	0	0.222	1.057	1.025	0.241	0.364	0.228		23.1		
Head	2.4 GHz Bluetooth	FHSS	G	1050M	77.07	0.16	2402.00	0	1	18.0	17.76	Left Tilt	0	0.226	1.057	1.025	0.245	0.371	0.232		23.0		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Head 1.6 W/kg (mW/g) averaged over 1 gram							

Table 12-30 Ant C Head

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	2.4 GHz Bluetooth	FHSS	C	1049M	77.07	0.05	2402.00	0	1	19.0	18.77	Right Cheek	0	0.046	1.054	1.025	0.050	0.122	0.076		31.0		
Head	2.4 GHz Bluetooth	FHSS	C	1049M	77.07	0.04	2402.00	0	1	19.0	18.77	Right Tilt	0	0.035	1.054	1.025	0.038	0.093	0.058		32.1		
Head	2.4 GHz Bluetooth	FHSS	C	1049M	77.07	-0.11	2402.00	0	1	19.0	18.77	Left Cheek	0	0.087	1.054	1.025	0.094	0.231	0.144		28.2	28.2	21.9
Head	2.4 GHz Bluetooth LE	DSSS	C	1050M	85.39	-0.05	2480.00	39	1	19.0	18.41	Left Cheek	0	0.047	1.146	1.019	0.055	0.123	0.077		31.0		
Head	2.4 GHz Bluetooth	FHSS	C	1049M	77.07	-0.14	2402.00	0	1	19.0	18.77	Left Tilt	0	0.019	1.054	1.025	0.021	0.050	0.031		34.8		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Head 1.6 W/kg (mW/g) averaged over 1 gram							

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Table 12-31 Ant G Open Body| Plot A23

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	2.4 GHz Bluetooth	FHSS	G	1049M	77.07	-0.01	2402.00	0	1	18.0	17.76	Top	5	0.280	1.057	1.025	0.303	0.798	0.499		22.1	21.2	21.2
Body	2.4 GHz Bluetooth	FHSS	G	1049M	77.07	-0.14	2402.00	0	1	18.0	17.76	Left	5	0.048	1.057	1.025	0.052	0.137	0.086		29.8		
Body-worn/Body	2.4 GHz Bluetooth	FHSS	G	1049M	77.07	-0.04	2402.00	0	1	18.0	17.76	Back	5	0.203	1.057	1.025	0.220	0.578	0.361		23.5		
Body-worn/Body	2.4 GHz Bluetooth	FHSS	G	1049M	77.07	0.08	2402.00	0	1	18.0	17.76	Front	5	0.344	1.057	1.025	0.373	0.980	0.613	Plot	21.2		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Body 1.6 W/kg (mW/g) averaged over 1 gram											

Table 12-32 Ant G Closed Body

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	2.4 GHz Bluetooth	FHSS	G	1049M	77.07	-0.04	2402.00	0	1	18.0	17.76	Bottom	5	0.289	1.057	1.025	0.313	0.990	0.619		22.0	22.0	22.0
Body	2.4 GHz Bluetooth	FHSS	G	1049M	77.07	-0.03	2402.00	0	1	18.0	17.76	Left	5	0.092	1.057	1.025	0.100	0.315	0.197		26.9		
Body-worn/Body	2.4 GHz Bluetooth	FHSS	G	1049M	77.07	-0.19	2402.00	0	1	18.0	17.76	Back	5	0.062	1.057	1.025	0.067	0.212	0.133		28.7		
Body-worn/Body	2.4 GHz Bluetooth	FHSS	G	1049M	77.07	0.02	2402.00	0	1	18.0	17.76	Front	5	0.185	1.057	1.025	0.200	0.634	0.396		23.9		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Body 1.6 W/kg (mW/g) averaged over 1 gram											

12.14 2.4 GHz Bluetooth MIMO Standalone SAR

Table 12-33 Closed Body

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Max Allowed Power (2nd ant) [dBm]	Conducted Power (2nd ant) [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	MIMO Plimit Ant G [dBm]	MIMO Plimit Ant C [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	2.4 GHz Bluetooth	FHSS	MIMO	1049M	77.07	0.03	2402.00	0	1	12.5	12.11	11.5	11.00	Top	5	0.013	1.122	1.025	0.015	0.080	0.050		30.9	29.8		
Body	2.4 GHz Bluetooth	FHSS	MIMO	1049M	77.07	0.05	2402.00	0	1	12.5	12.11	11.5	11.00	Bottom	5	0.205	1.122	1.025	0.236	1.266	0.791		18.9	17.8		
Body	2.4 GHz Bluetooth	FHSS	MIMO	1049M	77.07	0.00	2402.00	0	1	12.5	12.11	11.5	11.00	Right	5	0.027	1.122	1.025	0.031	0.167	0.104		27.7	26.6		
Body	2.4 GHz Bluetooth	FHSS	MIMO	1049M	77.07	0.05	2402.00	0	1	12.5	12.11	11.5	11.00	Left	5	0.068	1.122	1.025	0.078	0.420	0.263		23.7	22.6	17.8	17.8
Body-worn/Body	2.4 GHz Bluetooth	FHSS	MIMO	1049M	77.07	-0.05	2402.00	0	1	12.5	12.11	11.5	11.00	Back	5	0.176	1.122	1.025	0.202	1.087	0.679		19.6	18.4		
Body-worn/Body	2.4 GHz Bluetooth	FHSS	MIMO	1049M	77.07	-0.14	2402.00	0	1	12.5	12.11	11.5	11.00	Front	5	0.096	1.122	1.025	0.110	0.593	0.371		22.2	21.1		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram												

Note: To achieve the 15.5 dBm maximum allowed MIMO power shown in the documentation, Antenna G transmits at a maximum allowed power of 12.5 dBm and Antenna C transmits at a maximum allowed power of 11.5 dBm.

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13 SAR DATA REFERENCING

13.1 GSM 850 Standalone SAR

Table 13-1 Ant A Head| Plot A24

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	GSM 850	GSM	A	1001M	1:8.3	0.00	848.80	251	33.5	32.22	Right Cheek	0	0.195	1.343	0.262	0.387	0.242	0.194	Plot	30.1	30.1	26.0
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Head 1.6 W/kg (mW/g) averaged over 1 gram											

Table 13-2 Ant E Head| Plot A25

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	GSM 850	GSM	E	0090M	1:8.3	0.02	848.80	251	32.2	31.25	Right Cheek	0	0.576	1.245	0.717	0.911	0.569	0.712	Plot	24.4	24.4	22.0
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Head 1.6 W/kg (mW/g) averaged over 1 gram											

Table 13-3 Ant A Open Body| Plot A26

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Body	GPRS 850	GPRS 4 Tx Slots	A	1001M	1:2.076	0.02	836.60	190	25.0	24.11	Back	5	0.968	1.227	1.188	1.508	0.943	1.154	Plot	21.0	21.0	20.8
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram											

Table 13-4 Ant E Open Body | Plot A27, A28

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	GPRS 850	GPRS 4 Tx Slots	E	0090M	1:2.076	-0.01	848.80	251	26.5	26.03	Left	5	0.238	1.114	0.265	0.541	0.338	0.489	Plot	29.0		
Body-worn/Body	GPRS 850	GPRS 4 Tx Slots	E	0090M	1:2.076	-0.04	848.80	251	26.5	26.03	Front	5	0.141	1.114	0.157	0.321	0.201	0.405	Plot	31.3	29.0	26.4
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram											

Table 13-5 Ant E Closed Body | Plot A29

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Body	GPRS 850	GPRS 4 Tx Slots	E	0090M	1:2.076	-0.06	848.80	251	26.5	26.03	Front	5	0.271	1.114	0.302	0.575	0.359	0.524	Plot	28.5	28.5	26.1
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram											

13.2 GSM 1900 Standalone SAR

Table 13-6 Ant B Head | Plot A30

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	GSM 1900	GSM	B	1000M	1:8.3	0.04	1850.20	512	30.0	28.60	Left Cheek	0	0.031	1.380	0.043	0.142	0.089	0.045	Plot	34.4	34.4	26.0
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Head 1.6 W/kg (mW/g) averaged over 1 gram											

Table 13-7 Ant B Open Body| Plot A31, A32

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	GPRS 1900	GPRS 4 Tx Slots	B	0093M	1:2.076	-0.01	1850.20	512	22.5	21.46	Bottom	5	0.689	1.271	0.876	1.112	0.695	1.188	Plot	19.8		
Body-worn/Body	GPRS 1900	GPRS 4 Tx Slots	B	0093M	1:2.076	0.03	1909.80	810	22.5	21.72	Back	5	0.578	1.197	0.692	0.879	0.549	1.157	Plot	20.9	19.8	18.3
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram											

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Table 13-8 Ant B Closed Body| Plot A33

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Body	GPRS 1900	GPRS 4 Tx Slots	B	0093M	1:2.076	0.04	1909.80	810	22.5	21.72	Back	5	0.480	1.197	0.575	0.730	0.456	0.648	Plot	21.7	21.7	18.3
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram											

13.3 UMTS 850 Standalone SAR

Table 13-9 Ant A Head| Plot A34

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	UMTS 850	RMC	A	1001M	1:1	0.06	836.60	4183	23.0	22.59	Right Cheek	0	125	0.181	1.099	0.199	0.253	0.158	0.152	Plot	30.0	30.0	22.0
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Head 1.6 W/kg (mW/g) averaged over 1 gram												

Table 13-10 Ant E Head| Plot A35

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	UMTS 850	RMC	E	1001M	1:1	0.03	836.60	4183	23.0	21.89	Right Cheek	0	0.530	1.291	0.684	0.869	0.543	0.573	Plot	24.6	24.6	22.0
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Head 1.6 W/kg (mW/g) averaged over 1 gram												

Table 13-11 Ant A Open Body| Plot A36

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Body	UMTS 850	RMC	A	1001M	1:1	0.02	846.60	4233	23.0	22.55	Back	5	50	1.110	1.109	1.231	1.563	0.977	1.189	Plot	22.0	22.0	22.0
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram												

Table 13-12 Ant A Closed Body | Plot A37

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Body	UMTS 850	RMC	A	1001M	1:1	-0.03	836.60	4183	23.5	22.89	Back	5	124	0.984	1.151	1.133	1.438	0.899	1.026	Plot	22.9	22.9	22.5
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram												

Table 13-13 Ant E Open Body | Plot A38, A39

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	UMTS 850	RMC	E	1001M	1:1	-0.02	846.60	4233	24.0	22.88	Left	5	0.574	1.294	0.743	0.943	0.589	0.604	Plot	25.2	25.2	23.0
Body-worn/Body	UMTS 850	RMC	E	1001M	1:1	0.00	846.60	4233	24.0	22.88	Back	5	0.453	1.294	0.586	0.744	0.465	0.533	Plot	26.3		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram												

Table 13-14 Ant E Closed Body | Plot A40, A41

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	UMTS 850	RMC	E	1000M	1:1	-0.01	846.60	4233	24.5	23.12	Left	5	0.444	1.374	0.610	0.775	0.484	0.663	Plot	26.6	26.6	23.5
Body-worn/Body	UMTS 850	RMC	E	1000M	1:1	0.01	846.60	4233	24.5	23.12	Front	5	0.406	1.374	0.558	0.708	0.443	0.707	Plot	27.0		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram												

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13.4 LTE Band 12 Standalone SAR

Table 13-15 Ant A Head | Plot A42

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	LTE Band 12	10	QPSK	A	0998M	1:1	-0.05	707.50	23095	0.0	25.0	24.82	1	25	Right Cheek	0	1	0.216	1.042	0.225	0.283	0.177	0.180	Plot	31.4	31.4	26.0
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Head 1.6 W/kg (mW/g) averaged over 1 gram													

Table 13-16 Ant A Open Body | Plot A43

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Body	LTE Band 12	10	QPSK	A	0998M	1:1	0.06	707.50	23095	0.0	23.5	22.59	1	49	Back	5	28	0.761	1.233	0.938	1.192	0.745	0.892	Plot	23.7	23.7	22.5
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram													

Table 13-17 Ant A Closed Body | Plot A44

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Body	LTE Band 12	10	QPSK	A	0998M	1:1	0.00	707.50	23095	0.0	24.5	24.05	1	25	Back	5	20	0.756	1.109	0.838	1.065	0.666	0.866	Plot	25.2	25.2	23.5
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram													

13.5 LTE Band 13 Standalone SAR

Table 13-18 Ant A Head | Plot A45

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	LTE Band 13	10	QPSK	A	0998M	1:1	0.00	782.00	23230	0.0	25.0	23.95	1	25	Right Cheek	0	0.209	1.274	0.266	0.335	0.209	0.244	Plot	30.7	30.7	26.0
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Head 1.6 W/kg (mW/g) averaged over 1 gram												

Table 13-19 Ant E Head | Plot A46

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	LTE Band 13	10	QPSK	E	0997M	1:1	0.15	782.00	23230	0.0	21.0	20.05	50	0	Right Cheek	0	0.452	1.245	0.563	0.715	0.447	0.837	Plot	23.4	23.4	20.0
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Head 1.6 W/kg (mW/g) averaged over 1 gram												

Table 13-20 Ant A Open Body | Plot A47

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Body	LTE Band 13	10	QPSK	A	0998M	1:1	-0.01	782.00	23230	0.0	23.5	22.48	25	0	Back	5	14	0.840	1.265	1.063	1.350	0.844	1.077	Plot	23.2	23.2	22.5
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram													

Table 13-21 Ant E Open Body | Plot A48, A49

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 13	10	QPSK	E	0997M	1:1	0.15	782.00	23230	0.0	22.0	20.96	1	0	Left	5	0.490	1.271	0.623	0.791	0.494	0.798	Plot	24.0	24.0	21.0
Body-worn/Body	LTE Band 13	10	QPSK	E	0997M	1:1	-0.17	782.00	23230	0.0	22.0	20.96	1	0	Back	5	0.345	1.271	0.438	0.557	0.348	0.606	Plot	25.5		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram													

Table 13-22 Ant E Closed Body | Plot A50

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Body	LTE Band 13	10	QPSK	E	0997M	1:1	-0.17	782.00	23230	0.0	22.0	20.96	1	0	Front	5	0.356	1.271	0.452	0.575	0.359	0.503	Plot	25.4	25.4	21.0
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram													

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13.6 LTE Band 66 (AWS) Standalone SAR

Table 13-23 Ant B Head | Plot A51

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	LTE Band 66	20	QPSK	B	1000M	1:1	0.03	1770.00	132572	0.0	25.0	24.31	1	0	Left Cheek	0	0.089	1.172	0.104	0.131	0.082	0.116	Plot	34.8	34.8	26.0
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Head 1.6 W/kg (mW/g) averaged over 1 gram												

Table 13-24 Ant H Head | Plot A52

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	LTE Band 66	20	QPSK	H	1000M	1:1	0.09	1770.00	132572	0.0	20.0	19.12	1	99	Left Cheek	0	0.561	1.225	0.687	0.873	0.546	0.774	Plot	21.6	21.6	19.0
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Head 1.6 W/kg (mW/g) averaged over 1 gram												

Table 13-25 Ant B Open Body | Plot A53, A54

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 66	20	QPSK	B	1000M	1:1	0.01	1770.00	132572	0.0	19.5	18.75	100	0	Bottom	5	0.674	1.189	0.801	1.018	0.636	0.918	Plot	20.4	20.3	18.5
Body-worn/Body	LTE Band 66	20	QPSK	B	1000M	1:1	0.04	1770.00	132572	0.0	19.5	18.73	50	25	Back	5	0.690	1.194	0.824	1.046	0.654	0.890	Plot	20.3		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram												

Table 13-26 Ant B Closed Body | Plot A55, A56

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 66	20	QPSK	B	1000M	1:1	-0.02	1770.00	132572	0.0	20.0	19.29	100	0	Bottom	5	0.779	1.178	0.918	1.165	0.728	0.979	Plot	20.3	20.3	19.0
Body-worn/Body	LTE Band 66	20	QPSK	B	1000M	1:1	-0.10	1770.00	132572	0.0	20.0	19.56	1	50	Back	5	0.597	1.107	0.661	0.839	0.524	0.750	Plot	21.8		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram												

Table 13-27 Ant H Closed Body | Plot A57, A58

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 66	20	QPSK	H	1000M	1:1	-0.11	1770.00	132572	0.0	22.5	21.50	50	25	Right	5	0.531	1.259	0.669	0.849	0.531	0.559	Plot	24.2	24.2	21.5
Body-worn/Body	LTE Band 66	20	QPSK	H	1000M	1:1	0.15	1770.00	132572	0.0	22.5	21.50	50	25	Front	5	0.365	1.259	0.460	0.584	0.365	0.380	Plot	25.8		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram												

13.7 LTE Band 25 (PCS) Standalone SAR

Table 13-28 Ant H Head | Plot A59

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	LTE Band 25	20	QPSK	H	1182M	1:1	-0.04	1860.00	26140	0.0	19.5	19.16	1	0	Left Cheek	0	0.378	1.081	0.409	0.519	0.324	0.512	Plot	23.3	23.3	18.5
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Head 1.6 W/kg (mW/g) averaged over 1 gram												

Table 13-29 Ant B Open Body | Plot A60, A61

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 25	20	QPSK	B	1182M	1:1	-0.04	1882.50	26365	0.0	18.5	17.63	1	50	Bottom	5	0.830	1.222	1.014	1.288	0.805	1.107	Plot	18.4	18.4	17.5
Body-worn/Body	LTE Band 25	20	QPSK	B	1182M	1:1	0.19	1882.50	26365	0.0	18.5	17.44	50	25	Back	5	0.598	1.276	0.763	0.969	0.606	1.018	Plot	19.6		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram												

Table 13-30 Ant B Closed Body | Plot A62, A63

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 25	20	QPSK	B	1182M	1:1	-0.03	1882.50	26365	0.0	20.0	18.96	50	25	Bottom	5	0.668	1.271	0.849	1.078	0.674	1.059	Plot	20.7	20.7	19.0
Body-worn/Body	LTE Band 25	20	QPSK	B	1182M	1:1	0.07	1860.00	26140	0.0	20.0	19.00	1	50	Back	5	0.531	1.259	0.669	0.849	0.531	0.618	Plot	21.7		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram												

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Table 13-31 Ant H Open Body | Plot A64, A65

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 25	20	QPSK	H	1182M	1:1	0.09	1905.00	26590	0.0	21.5	20.45	1	50	Right	5	0.661	1.274	0.842	1.069	0.668	1.014	Plot	22.2	22.2	20.5
Body-worn/Body	LTE Band 25	20	QPSK	H	1182M	1:1	0.07	1860.00	26140	0.0	21.5	20.51	1	50	Back	5	0.270	1.256	0.339	0.431	0.269	0.562	Plot	26.1		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram											

Table 13-32 Ant H Closed Body | Plot A66, A67

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 25	20	QPSK	H	1182M	1:1	-0.01	1860.00	26140	0.0	21.5	20.51	1	50	Right	5	0.417	1.256	0.524	0.665	0.416	0.605	Plot	24.3	24.3	20.5
Body-worn/Body	LTE Band 25	20	QPSK	H	1182M	1:1	0.02	1860.00	26140	0.0	21.5	20.51	1	50	Front	5	0.285	1.256	0.358	0.455	0.284	0.412	Plot	25.9		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram											

13.8 LTE Band 41 Standalone SAR

Table 13-33 Ant B Head | Plot A68

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Add'l Info	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	LTE Band 41	20	QPSK	B	N/A	1001M	1:1.58	0.05	2593.00	40620	0.0	25.5	24.13	1	99	Left Cheek	0	0.034	1.371	0.047	0.131	0.082	0.045	Plot	36.8		
Head	LTE Band 41	20	QPSK	B	ULCA 41C	1000M	1:1.58	0.06	2593.00	40620	0.0	25.5	23.89	1	99	Left Cheek	0	0.032	1.449	0.046	0.131	0.082	N/A		36.8	36.8	28.0
		20							2612.80	40818				1	0											
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Head 1.6 W/kg (mW/g) averaged over 1 gram											

Table 13-34 Ant H Head | Plot A69

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Add'l Info	#VALUE!	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	LTE Band 41	20	QPSK	H	N/A	N/A	1000M	1:1.58	-0.09	2636.50	41055	0.0	19.5	18.79	1	0	Left Cheek	0	0.389	1.178	0.458	0.582	0.364	0.332	Plot	20.9		
Head	LTE Band 41	20	QPSK	H	ULCA 41C	ULCA	1000M	1:1.58	0.01	2636.50	41055	0.0	19.5	18.52	1	0	Left Cheek	0	0.332	1.253	0.416	0.416	0.260	N/A		21.3	20.9	16.5
		20							2616.70	40857				1	99											
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Head 1.6 W/kg (mW/g) averaged over 1 gram											

Table 13-35 Ant B Open Body | Plot A70, A71

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Add'l Info	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 41	20	QPSK	B	N/A	1001M	1:1.58	0.05	2593.00	40620	0.0	22.5	21.12	50	0	Bottom	5	0.736	1.374	1.011	1.284	0.803	1.068	Plot	20.4		
Body-worn/Body	LTE Band 41	20	QPSK	B	N/A	1001M	1:1.58	0.01	2680.00	41490	0.0	22.5	21.03	1	0	Back	5	0.689	1.403	0.967	1.228	0.768	1.013	Plot	20.6	20.4	19.5
Body	LTE Band 41	20	QPSK	B	ULCA 41C	1001M	1:1.58	-0.03	2593.00	40620	0.0	22.5	21.17	50	0	Bottom	5	0.714	1.358	0.970	0.970	0.606	N/A		20.6		
		20							2573.20	40422				50	50											
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram											

Table 13-36 Ant B Closed Body | Plot A72

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Add'l Info	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Body	LTE Band 41	20	QPSK	B	N/A	1001M	1:1.58	-0.04	2506.00	39750	0.0	23.5	22.45	50	0	Back	5	0.937	1.274	1.194	1.516	0.948	1.172	Plot	20.7		
Body-worn/Body	LTE Band 41	20	QPSK	B	N/A	1000M	1:1.58	-0.14	2506.00	39750	0.0	23.5	22.27	50	50	Back	5	0.834	1.327	1.107	1.406	0.879	N/A		21.0	20.7	20.5
Body-worn/Body	LTE Band 41	20	QPSK	B	ULCA 41C	1000M	1:1.58	-0.13	2506.00	39750	0.0	23.5	22.22	50	50	Back	5	0.848	1.343	1.139	1.139	0.712	N/A		20.9		
		20							2525.80	39948				50	0											
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram											

Table 13-37 Ant H Open Body | Plot A73, A74

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Add'l Info	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	LTE Band 41	20	QPSK	H	N/A	1000M	1:1.58	0.02	2636.50	41055	0.0	22.0	21.27	1	0	Right	5	0.378	1.183	0.447	0.568	0.355	0.542	Plot	23.5		
Body-worn/Body	LTE Band 41	20	QPSK	H	N/A	1000M	1:1.58	-0.02	2636.50	41055	0.0	22.0	21.27	1	0	Back	5	0.245	1.183	0.290	0.368	0.230	0.268	Plot	25.3	23.5	19.0
Body	LTE Band 41	20	QPSK	H	ULCA 41C	1000M	1:1.58	0.00	2636.50	41055	0.0	22.0	21.09	1	0	Right	5	0.361	1.233	0.445	0.445	0.278	N/A		23.5		
		20							2616.70	40857				1	99											
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram											

13.9 NR Band n66 Standalone SAR

Table 13-38 Ant H Head | Plot A75

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	NR Band n66	45	QPSK	H	1000M	1:1	-0.17	1745.00	349000	CP-OFDM	0.0	20.0	19.09	1	1	Left Cheek	0	0.480	1.233	0.592	0.752	0.470	0.632	Plot	22.2	22.2	19.0
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Head 1.6 W/kg (mW/g) averaged over 1 gram											

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Table 13-39 Ant B Closed Body | Plot A76, A77

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n66	45	QPSK	B	1000M	1:1	-0.09	1745.00	349000	DFT-s-OFDM	0.0	20.0	19.63	240	0	Bottom	5	0.764	1.089	0.832	1.057	0.661	0.809	Plot	20.7		
Body-worn/Body	NR Band n66	45	QPSK	B	1000M	1:1	0.00	1745.00	349000	DFT-s-OFDM	0.0	20.0	19.77	120	122	Back	5	0.572	1.054	0.603	0.766	0.479	0.627	Plot	22.1	20.7	19.0
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram											

Table 13-40 Ant H Open Body | Plot A78, A79

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n66	45	QPSK	H	1000M	1:1	-0.11	1745.00	349000	CP-OFDM	0.0	22.0	21.11	1	1	Right	5	0.604	1.227	0.741	0.941	0.588	0.914	Plot	23.2		
Body-worn/Body	NR Band n66	45	QPSK	H	1000M	1:1	0.01	1745.00	349000	DFT-s-OFDM	0.0	22.0	21.22	120	122	Back	5	0.447	1.197	0.535	0.680	0.425	0.556	Plot	24.7	23.2	21.0
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram											

13.10 NR Band n41 Standalone SAR

Table 13-41 Ant B Open Body | Plot A80

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Body	NR Band n41	100	QPSK	B	0997M	1:1	-0.02	2592.99	518598	CP-OFDM	0.0	20.5	19.63	1	1	Back	5	0.938	1.222	1.146	1.456	0.910	1.142	Plot	19.9	19.9	19.5
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram											

Table 13-42 Ant B Closed Body | Plot A81

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Body	NR Band n41	100	QPSK	B	0998M	1:1	0.06	2592.99	518598	DFT-s-OFDM	0.0	21.5	20.86	1	271	Back	5	1.040	1.159	1.205	1.531	0.957	1.159	Plot	20.6	20.6	20.5
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram											

Table 13-43 Ant H Open Body | Plot A82, A83

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n41	100	QPSK	H	1001M	1:1	0.02	2592.99	518598	CP-OFDM	0.0	20.0	19.69	1	1	Right	5	0.498	1.074	0.535	0.679	0.424	0.751	Plot	22.7		
Body-worn/Body	NR Band n41	100	QPSK	H	1001M	1:1	0.00	2592.99	518598	DFT-s-OFDM	0.0	20.0	19.68	135	138	Front	5	0.292	1.076	0.314	0.399	0.249	0.338	Plot	25.0	22.7	19.0
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram											

Table 13-44 Ant H Closed Body | Plot A84, A85

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	NR Band n41	100	QPSK	H	1001M	1:1	0.01	2592.99	518598	DFT-s-OFDM	0.0	20.0	19.88	1	271	Right	5	0.625	1.028	0.643	0.816	0.510	0.617	Plot	21.9		
Body-worn/Body	NR Band n41	100	QPSK	H	1001M	1:1	0.01	2592.99	518598	DFT-s-OFDM	0.0	20.0	19.68	135	138	Front	5	0.270	1.076	0.291	0.369	0.231	0.236	Plot	25.3	21.9	19.0
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram											

13.11 2.4 GHz WIFI SISO Standalone SAR

Table 13-45 Ant G Head | Plot A86

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	2.4 GHz WIFI/ IEEE 802.11b	22	DSSS	G	1047M	98.86	0.07	2437.00	6	1.0	18.5	18.15	Right Cheek	0	1.100	1.084	1.012	1.207	1.533	0.958	1.045	Plot	17.6	17.6	17.5
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Head 1.6 W/kg (mW/g) averaged over 1 gram												

Table 13-46 Ant C Head | Plot A87

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	2.4 GHz WIFI/ IEEE 802.11b	22	DSSS	C	1047M	98.85	0.03	2412.00	1	1.0	18.5	18.32	Left Cheek	0	0.099	1.042	1.012	0.104	0.133	0.083	0.083	Plot	28.3	28.3	17.5
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Head 1.6 W/kg (mW/g) averaged over 1 gram												

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Table 13-47 Ant C Open Body | Plot A88, A89

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	2.4 GHz WiFi/ IEEE 802.11b	22	DSSS	C	1048M	98.85	-0.06	2437.00	6	1.0	20.0	19.83	Left	5	0.739	1.040	1.012	0.778	0.778	0.486	1.058	Plot	21.0	20.4	19.7
Body-worn/Body	2.4 GHz WiFi/ IEEE 802.11b	22	DSSS	C	1048M	98.85	0.02	2412.00	1	1.0	20.0	19.99	Back	5	0.882	1.002	1.012	0.894	0.894	0.559	0.736	Plot	20.4		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram												

Table 13-48 Ant C Closed Body | Plot A90, A91

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	2.4 GHz WiFi/ IEEE 802.11b	22	DSSS	C	1048M	98.85	-0.06	2412.00	1	1.0	18.0	17.99	Left	5	0.517	1.002	1.012	0.524	0.666	0.416	0.503	Plot	20.8	20.8	17.0
Body-worn/Body	2.4 GHz WiFi/ IEEE 802.11b	22	DSSS	C	1048M	98.85	-0.11	2412.00	1	1.0	18.0	17.99	Back	5	0.388	1.002	1.012	0.393	0.500	0.313	0.382	Plot	22.0		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram												

13.12 2.4 GHz WIFI MIMO Standalone SAR

Table 13-49 Closed Body | Plot A92, A93

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Max Allowed Power (2nd ant) [dBm]	Conducted Power (2nd ant) [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	MIMO Plimit Ant C [dBm]	MIMO Plimit Ant C [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	2.4 GHz WiFi/ IEEE 802.11b	22	DSSS	MIMO	1048M	98.84	-0.01	2412.00	1	1.0	18.0	17.95	18.0	17.82	Bottom	5	0.458	1.042	1.012	0.483	0.613	0.383	0.579	Plot	21.2	21.1	21.1	17.0
Body-worn/Body	2.4 GHz WiFi/ IEEE 802.11b	22	DSSS	MIMO	1048M	98.84	-0.01	2412.00	1	1.0	18.0	17.95	18.0	17.82	Front	5	0.307	1.042	1.012	0.324	0.411	0.257	0.455	Plot	23.0	22.8		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram												

Note: To achieve the 21 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 18 dBm.

13.13 5 GHz WIFI SISO Standalone SAR

Table 13-50 Ant F Head | Plot A94

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	U-NII band	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	5 GHz WiFi/ IEEE 802.11ac	80	OFDM	F	1047M	95.86	0.08	5775.00	155	U-NII-3	29.3	16.0	15.36	Right Tilt	0	0.302	1.159	1.043	0.365	0.464	0.290	0.965	Plot	20.3	20.3	15.0
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Head 1.6 W/kg (mW/g) averaged over 1 gram												

Table 13-51 Ant I Head | Plot A95

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	U-NII band	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	5 GHz WiFi/ IEEE 802.11ac	80	OFDM	I	1047M	95.86	-0.01	5855.00	171	U-NII-4	29.3	16.0	15.28	Left Cheek	0	0.707	1.180	1.043	0.870	1.105	0.691	0.888	Plot	16.6	16.6	15.0
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Head 1.6 W/kg (mW/g) averaged over 1 gram												

Table 13-52 Ant F Open Body | Plot A96, A97

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	U-NII band	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	5 GHz WiFi/ IEEE 802.11ac	80	OFDM	F	1047M	95.86	0.17	5690.00	138	U-NII-2C	29.3	18.0	17.06	Left	5	0.502	1.242	1.043	0.650	0.650	0.406	1.069	Plot	19.8	19.8	17.7
Body-worn/Body	5 GHz WiFi/ IEEE 802.11ac	80	OFDM	F	1047M	95.86	-0.08	5690.00	138	U-NII-2C	29.3	18.0	17.06	Back	5	0.383	1.242	1.043	0.496	0.496	0.310	0.678	Plot	21.0		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram												

Table 13-53 Ant F Closed Body | Plot A98, A99

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	U-NII band	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	5 GHz WiFi/ IEEE 802.11n	40	OFDM	F	1047M	96.24	-0.01	5230.00	46	U-NII-1	13.5	18.0	16.84	Left	5	0.572	1.306	1.039	0.776	0.776	0.485	1.035	Plot	19.0	18.9	17.8
Body-worn/Body	5 GHz WiFi/ IEEE 802.11n	40	OFDM	F	1047M	96.24	-0.08	5230.00	46	U-NII-1	13.5	18.0	16.84	Front	5	0.597	1.306	1.039	0.810	0.810	0.506	0.833	Plot	18.9		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram												

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Table 13-54 Ant I Open Body | Plot A100, A101

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	U-NII band	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	5 GHz WiFi / IEEE 802.11ac	80	OFDM	I	1047M	95.86	-0.14	5610.00	122	U-NII-2C	29.3	18.0	16.08	Right	5	0.510	1.556	1.043	0.828	0.950	0.594	0.868	Plot	18.8	18.8	18.6
Body-worn/Body	5 GHz WiFi / IEEE 802.11ac	80	OFDM	I	1047M	95.86	-0.10	5775.00	155	U-NII-3	29.3	18.0	16.60	Front	5	0.287	1.380	1.043	0.413	0.474	0.296	0.601	Plot	21.8		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram												

Table 13-55 Ant I Closed Body | Plot A102, A103

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	U-NII band	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	5 GHz WiFi / IEEE 802.11ac	80	OFDM	I	1047M	95.86	0.09	5855.00	171	U-NII-4	29.3	18.0	16.26	Right	5	0.612	1.493	1.043	0.953	0.953	0.596	1.167	Plot	18.2	18.2	17.3
Body-worn/Body	5 GHz WiFi / IEEE 802.11ac	80	OFDM	I	1047M	95.86	-0.06	5690.00	138	U-NII-2C	29.3	18.0	16.55	Front	5	0.197	1.396	1.043	0.287	0.287	0.179	0.316	Plot	23.4		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram												

13.14 5 GHz WIFI MIMO Standalone SAR

Table 13-56 Head | Plot A104

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	U-NII band	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Max Allowed Power (2nd ant) [dBm]	Conducted Power (2nd ant) [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	5 GHz WiFi / IEEE 802.11ac	80	OFDM	MIMO	1049M	92.29	-0.04	5530.00	106	U-NII-2C	58.5	16.0	14.84	16.0	15.24	Left Cheek	0	0.637	1.306	1.084	0.902	1.145	0.716	0.996	Plot	16.4	16.4	15.0
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Head 1.6 W/kg (mW/g) averaged over 1 gram												

Note: To achieve the 19 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 16 dBm.

Table 13-57 Open Body | Plot A105, A106

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	U-NII band	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Max Allowed Power (2nd ant) [dBm]	Conducted Power (2nd ant) [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	5 GHz WiFi / IEEE 802.11ac	80	OFDM	MIMO	1048M	92.29	0.03	5855.00	171	U-NII-4	58.5	18.0	17.36	18.0	17.10	Left	5	0.344	1.230	1.084	0.459	0.459	0.287	1.186	Plot	21.3	19.3	17.1
Body-worn/Body	5 GHz WiFi / IEEE 802.11n	40	OFDM	MIMO	1047M	94.94	-0.07	5210.00	46	U-NII-1	27.0	18.0	16.76	18.0	16.39	Back	5	0.485	1.449	1.054	0.741	0.741	0.463	1.023	Plot	19.3		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Body 1.6 W/kg (mW/g) averaged over 1 gram												

Note: To achieve the 21 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 18 dBm.

Table 13-58 Closed Body | Plot A107, A108

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	U-NII band	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Max Allowed Power (2nd ant) [dBm]	Conducted Power (2nd ant) [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	5 GHz WiFi / IEEE 802.11ac	80	OFDM	MIMO	1048M	92.29	0.04	5775.00	155	U-NII-3	58.5	18.0	16.40	18.0	16.01	Left	5	0.359	1.581	1.084	0.615	0.615	0.384	1.108	Plot	20.1	19.1	17.1
Body-worn/Body	5 GHz WiFi / IEEE 802.11n	40	OFDM	MIMO	1047M	94.94	-0.09	5210.00	46	U-NII-1	27.0	18.0	16.76	18.0	16.39	Front	5	0.501	1.449	1.054	0.765	0.765	0.476	1.009	Plot	19.1		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Body 1.6 W/kg (mW/g) averaged over 1 gram												

Note: To achieve the 21 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 18 dBm.

13.15 6 GHz WIFI SISO Standalone SAR and APD

Table 13-59 Ant F Head | Plot A109

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	U-NII band	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	6 GHz WiFi / IEEE 802.11ax	80	OFDM	F	1049M	99.67	0.08	6465.00	103	U-NII-6	34.0	16.0	15.30	Right Cheek	0	0.706	1.175	1.003	0.832	1.057	0.661	1.093	Plot	16.7	16.7	15.0
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Head 1.6 W/kg (mW/g) averaged over 1 gram												

Exposure	Band/ Mode	Bandwidth [MHz]	Service/ Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	U-NII band	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured APD [W/m² (4cm²)]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported APD [W/m² (4cm²)]	Adjusted APD [W/m² (4cm²)]	APD Exposure Ratio	Reported APD for Reference Model [W/m² (4cm²)]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	6 GHz WiFi / IEEE 802.11ax	80	OFDM	F	1049M	99.67	0.08	6465.00	103	U-NII-6	34.0	16.0	15.30	Right Cheek	0	4.500	1.175	1.003	5.303	6.735	0.337	6.962	Plot	19.7	19.7	15.0

Table 13-60 Ant I Head | Plot A110

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	U-NII band	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	6 GHz WiFi / IEEE 802.11ax	80	OFDM	I	1049M	99.67	-0.03	5985.00	7	U-NII-5	34.0	16.0	14.71	Left Cheek	0	0.411	1.346	1.003	0.555	0.705	0.441	0.934	Plot	18.5	18.5	15.0
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Head 1.6 W/kg (mW/g) averaged over 1 gram												

Exposure	Band/ Mode	Bandwidth [MHz]	Service/ Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	U-NII band	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured APD [W/m² (4cm²)]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported APD [W/m² (4cm²)]	Adjusted APD [W/m² (4cm²)]	APD Exposure Ratio	Reported APD for Reference Model [W/m² (4cm²)]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	6 GHz WiFi / IEEE 802.11ax	80	OFDM	I	1049M	99.67	-0.03	5985.00	7	U-NII-5	34.0	16.0	14.71	Left Cheek	0	3.090	1.346	1.003	4.172	5.298	0.265	7.434	Plot	20.7	20.7	15.0

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Table 13-61 Ant F Open Body | Plot A111, A112

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	U-NII band	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	6 GHz WIFI / IEEE 802.11ax	160	OFDM	F	1049M	99.69	0.04	6025.00	15	U-NII-5	68.1	12.0	11.65	Left	5	0.087	1.084	1.003	0.095	0.120	0.075	0.141	Plot	22.2		
Body-worn/Body	6 GHz WIFI / IEEE 802.11ax	160	OFDM	F	1049M	99.69	0.05	6025.00	15	U-NII-5	68.1	12.0	11.65	Front	5	0.046	1.084	1.003	0.050	0.064	0.040	0.059	Plot	25.0	22.2	11.0
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram											

Exposure	Band/ Mode	Bandwidth [MHz]	Service/ Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	U-NII band	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured APD [W/m² (4cm²)]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported APD [W/m² (4cm²)]	Adjusted APD [W/m² (4cm²)]	APD Exposure Ratio	Reported APD for Reference Model [W/m² (4cm²)]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	6 GHz WIFI / IEEE 802.11ax	160	OFDM	F	1049M	99.69	0.04	6025.00	15	U-NII-5	68.1	12.0	11.65	Left	5	0.596	1.084	1.003	0.648	0.823	0.041	0.862	Plot	24.8		
Body-worn/Body	6 GHz WIFI / IEEE 802.11ax	160	OFDM	F	1049M	99.69	0.05	6025.00	15	U-NII-5	68.1	12.0	11.65	Front	5	0.285	1.084	1.003	0.310	0.394	0.020	0.340	Plot	28.0	24.8	11.0

Table 13-62 Ant F Closed Body | Plot A113

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	U-NII band	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Body	6 GHz WIFI / IEEE 802.11ax	40	OFDM	F	1049M	99.69	-0.11	6285.00	67	U-NII-5	16.3	17.0	16.70	Front	5	0.277	1.072	1.003	0.298	0.421	0.263	0.584	Plot	22.2	22.2	18.5
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram											

Exposure	Band/ Mode	Bandwidth [MHz]	Service/ Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	U-NII band	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured APD [W/m² (4cm²)]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported APD [W/m² (4cm²)]	Adjusted APD [W/m² (4cm²)]	APD Exposure Ratio	Reported APD for Reference Model [W/m² (4cm²)]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Body	6 GHz WIFI / IEEE 802.11ax	40	OFDM	F	1049M	99.69	-0.11	6285.00	67	U-NII-5	16.3	17.0	16.70	Front	5	1.810	1.072	1.003	1.946	2.749	0.137	3.900	Plot	25.0	25.0	18.5

Table 13-63 Ant I Open Body | Plot A114, A115

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	U-NII band	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	6 GHz WIFI / IEEE 802.11ax	160	OFDM	I	1049M	99.69	0.09	6505.00	111	U-NII-6	68.1	12.0	11.99	Right	5	0.070	1.002	1.003	0.070	0.089	0.056	0.084	Plot	23.5	23.5	11.0
Body-worn/Body	6 GHz WIFI / IEEE 802.11ax	160	OFDM	I	1049M	99.69	0.08	6505.00	111	U-NII-6	68.1	12.0	11.99	Back	5	0.046	1.002	1.003	0.046	0.059	0.037	0.034	Plot	25.3		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram											

Exposure	Band/ Mode	Bandwidth [MHz]	Service/ Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	U-NII band	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured APD [W/m² (4cm²)]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported APD [W/m² (4cm²)]	Adjusted APD [W/m² (4cm²)]	APD Exposure Ratio	Reported APD for Reference Model [W/m² (4cm²)]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	6 GHz WIFI / IEEE 802.11ax	160	OFDM	I	1049M	99.69	0.09	6505.00	111	U-NII-6	68.1	12.0	11.99	Right	5	0.368	1.002	1.003	0.370	0.470	0.024	0.430	Plot	27.2		
Body-worn/Body	6 GHz WIFI / IEEE 802.11ax	160	OFDM	I	1049M	99.69	0.08	6505.00	111	U-NII-6	68.1	12.0	11.99	Back	5	0.357	1.002	1.003	0.359	0.456	0.023	0.278	Plot	27.4	27.2	11.0

Table 13-64 Ant I Closed Body | Plot A116

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	U-NII band	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Body	6 GHz WIFI / IEEE 802.11ax	40	OFDM	I	1049M	99.71	0.12	6285.00	67	U-NII-5	16.3	17.0	15.52	Front	5	0.210	1.406	1.003	0.296	0.633	0.396	0.274	Plot	22.2	22.2	20.3
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram											

Exposure	Band/ Mode	Bandwidth [MHz]	Service/ Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	U-NII band	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured APD [W/m² (4cm²)]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported APD [W/m² (4cm²)]	Adjusted APD [W/m² (4cm²)]	APD Exposure Ratio	Reported APD for Reference Model [W/m² (4cm²)]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Body	6 GHz WIFI / IEEE 802.11ax	40	OFDM	I	1049M	99.71	0.12	6285.00	67	U-NII-5	16.3	17.0	15.52	Front	5	1.510	1.406	1.003	2.129	4.553	0.228	2.291	Plot	24.6	24.6	20.3

13.16 6 GHz WIFI MIMO Standalone SAR and APD

Table 13-65 Head | Plot A117

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	U-NII band	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Max Allowed Power (2nd ant) [dBm]	Conducted Power (2nd ant) [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	6 GHz WIFI / IEEE 802.11ax	80	OFDM	MIMO	1049M	99.71	0.03	6705.00	151	U-NII-7	65.1	16.0	14.41	16.0	15.26	Right Cheek	0	0.247	1.442	1.003	0.357	0.454	0.284	0.833	Plot	20.4	20.4	15.0
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Head 1.6 W/kg (mW/g) averaged over 1 gram												
Note: To achieve the 19 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 16 dBm.																												

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	U-NII band	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Max Allowed Power (2nd ant) [dBm]	Conducted Power (2nd ant) [dBm]	Test Position	Spacing [mm]	Measured APD [W/m² (4cm²)]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported APD [W/m² (4cm²)]	Adjusted APD [W/m² (4cm²)]	APD Exposure Ratio	Reported APD for Reference Model [W/m² (4cm²)]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	6 GHz WIFI / IEEE 802.11ax	80	OFDM	MIMO	1049M	99.71	0.03	6705.00	151	U-NII-7	65.1	16.0	14.41	16.0	15.26	Right Cheek	0	1.330	1.442	1.003	1.924	2.443	0.122	5.523	Plot	24.1	24.1	15.0
Note: To achieve the 19 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 16 dBm.																												

Table 13-66 Open Body | Plot A118

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	U-NII band	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Max Allowed Power (2nd ant) [dBm]	Conducted Power (2nd ant) [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Body	6 GHz WIFI / IEEE 802.11ax	160	OFDM	MIMO	1049M	99.69	0.02	6345.00	79	U-NII-5	136.1	12.0	11.59	12.0	11.61	Front	5	0.071	1.099	1.003	0.078	0.099	0.062	0.274	Plot	23.0	23.0	11.0
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Body 1.6 W/kg (mW/g) averaged over 1 gram												
Note: To achieve the 15 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 12 dBm.																												

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	U-NII band	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Max Allowed Power (2nd ant) [dBm]	Conducted Power (2nd ant) [dBm]	Test Position	Spacing [mm]	Measured APD [W/m² (4cm²)]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported APD [W/m² (4cm²)]	Adjusted APD [W/m² (4cm²)]	APD Exposure Ratio	Reported APD for Reference Model [W/m² (4cm²)]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Body	6 GHz WIFI / IEEE 802.11ax	160	OFDM	MIMO	1049M	99.69	0.02	6345.00	79	U-NII-5	136.1	12.0	11.59	12.0	11.61	Front	5	0.452	1.099	1.003	0.498	0.633	0.032	1.744	Plot	25.9	25.9	11.0
Note: To achieve the 15 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 12 dBm.																												

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13.17 2.4 GHz Bluetooth SISO Standalone SAR

Table 13-67 Ant C Open Body | Plot A119

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Body	2.4 GHz Bluetooth	FHSS	C	1049M	77.07	-0.08	2402.00	0	1	19.0	18.77	Back	5	0.567	1.054	1.025	0.613	0.613	0.383	0.799	Plot	20.1	20.1	18.0
Body-worn/Body	2.4 GHz Bluetooth LE	DSSS	C	1050M	85.39	-0.13	2480.00	39	1	19.0	18.41	Back	5	0.321	1.146	1.019	0.375	0.375	0.234	N/A		22.6		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Body 1.6 W/kg (mW/g) averaged over 1 gram												

Table 13-68 Ant C Closed Body | Plot A120, A121

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Reported 1g SAR for Reference Model [W/kg]	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body	2.4 GHz Bluetooth	FHSS	C	1049M	77.07	-0.08	2402.00	0	1	19.0	18.77	Left	5	0.449	1.054	1.025	0.485	0.611	0.382	0.822	Plot	21.1	21.1	19.0
Body	2.4 GHz Bluetooth LE	DSSS	C	1050M	85.39	-0.12	2480.00	39	1	19.0	18.41	Left	5	0.310	1.146	1.019	0.362	0.415	0.259	N/A		22.8		
Body-worn/Body	2.4 GHz Bluetooth	FHSS	C	1049M	77.07	-0.10	2402.00	0	1	19.0	18.77	Back	5	0.423	1.054	1.025	0.457	0.575	0.359	0.622	Plot	21.3		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Body 1.6 W/kg (mW/g) averaged over 1 gram												

13.18 NFC Standalone SAR

Table 13-69 Open Configuration | Plot A122

Exposure	Band / Mode	Signal Type	Ant.	Serial Number	Power Drift [dB]	Frequency [MHz]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Measured 1g SAR for Reference Model [W/kg]	Plot #
Body	NFC	B	NFC	0994M	0.02	13.60	Back	0	0.018	0.018	Plot
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population							Body 1.6 W/kg (mW/g) averaged over 1 gram				

Table 13-70 Closed Configuration | Plot A123

Exposure	Band / Mode	Signal Type	Ant.	Serial Number	Power Drift [dB]	Frequency [MHz]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Measured 1g SAR for Reference Model [W/kg]	Plot #
Body	NFC	B	NFC	0994M	0.00	13.60	Back	0	0.021	0.020	Plot
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population							Body 1.6 W/kg (mW/g) averaged over 1 gram				

SAR Test Notes

General Notes:

1. The test data reported are the worst-case SAR values according to test procedures specified in IEEE 1528-2013, and FCC KDB Publication 447498 D04v01.
2. Batteries are fully charged at the beginning of the SAR measurements.
3. Liquid tissue depth was at least 15.0 cm for all frequencies.
4. The manufacturer has confirmed that the device(s) tested have the same physical, mechanical and thermal characteristics and are within operational tolerances expected for production units.
5. SAR results were scaled to the maximum allowed power to demonstrate compliance per FCC KDB Publication 447498 D04v01.
6. Device was tested using a fixed spacing for body-worn accessory testing. A separation distance of 5 mm was considered because the manufacturer has determined that there will be body-worn accessories available in the marketplace for users to support this separation distance.

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7. Per FCC KDB Publication 648474 D04, body-worn SAR was evaluated without a headset connected to the device. Since the standalone reported body-worn SAR was ≤ 1.2 W/kg, no additional body-worn SAR evaluations using a headset cable were required.
8. Per FCC KDB 865664 D01v01r04, variability SAR tests were performed when the measured SAR results for a frequency band were greater than or equal to 0.8 W/kg. Repeated SAR measurements are highlighted in the tables above for clarity. Please see Section 15 for variability analysis.
9. During SAR Testing for the Wireless Router conditions per FCC KDB Publication 941225 D06v02r01, the actual Portable Hotspot operation (with actual simultaneous transmission of a transmitter with WIFI) was not activated (See Section 7.7 for more details).
10. Per FCC KDB Publication 648474 D04, this device is considered a "phablet" when it is in the open configuration since the display diagonal dimension is > 150 mm and < 200 mm. However, because 5 mm body testing excludes 0 mm extremity testing, phablet SAR tests were not required even when wireless router mode does not apply or if wireless router 1g SAR > 1.2 W/kg.
11. This device supports dynamic antenna tuning for some bands. Per FCC Guidance, SAR was measured according to the normally required SAR measurement configurations with tuner active. The auto-tune state determined by the device was verified before and after each SAR measurement and is listed in tables above. Please see Section 16 for supplemental data.
12. Unless otherwise noted, when 10g SAR measurement is considered, a factor of 2.5 is applied to the 1g thresholds for the equivalent test cases.
13. This device uses Qualcomm Smart Transmit for WWAN/WLAN/BT operations to control and manage transmitting power in real time to ensure RF Exposure compliance. Per FCC Guidance, compliance for was assessed at the minimum of the time averaged power and the maximum output power for each band/mode/exposure condition (DSI).
14. Per October 2020 TCB Workshop notes, absorbed power density (APD) using a 4cm2 averaging area is reported based on SAR measurements.

GSM Test Notes:

1. Body-Worn accessory testing is typically associated with voice operations. Per FCC guidance, since the frame average target of GPRS is higher than GSM, GPRS was evaluated for body-worn SAR.
2. Justification for reduced test configurations per KDB Publication 941225 D01v03r01 and October 2013 TCB Workshop Notes: The source-based frame-averaged output power was evaluated for all GPRS/EDGE slot configurations. The configuration with the highest target frame averaged output power was evaluated for hotspot SAR. When the maximum frame-averaged powers are equivalent across two or more slots (within 0.25 dB), the configuration with the most number of time slots was tested.
3. Per FCC KDB Publication 447498 D04v01, if the reported (scaled) SAR measured at the highest output power channel for each test configuration is ≤ 0.8 W/kg for 1g evaluations then testing at the other channels is not required for such test configuration(s).

UMTS Notes:

1. UMTS mode was tested under RMC 12.2 kbps with HSPA Inactive per KDB Publication 941225 D01v03r01. AMR and HSPA SAR was not required per the 3G Test Reduction Procedure in KDB Publication 941225 D01v03r01.
2. Per FCC KDB Publication 447498 D04v01, if the reported (scaled) SAR measured at the highest output power channel for each test configuration is ≤ 0.8 W/kg for 1g evaluations then testing at the other channels is not required for such test configuration(s).

LTE Notes:

1. LTE test configurations are determined according to SAR Evaluation Considerations for LTE Devices in FCC KDB Publication 941225 D05v02r04. The general test procedures used for testing can be found in Section 9.5.4.
2. MPR is permanently implemented for this device by the manufacturer. The specific manufacturer target MPR is indicated alongside the SAR results. MPR is enabled for this device, according to 3GPP TS36.101 Section 6.2.3 – 6.2.5 under Table 6.2.3-1.

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3. A-MPR was disabled for all SAR tests by setting NS=01 and MCC=001 on the base station simulator. SAR tests were performed with the same number of RB and RB offsets transmitting on all TTI frames (maximum TTI).
4. Per FCC KDB Publication 447498 D04v01, when the reported 1g SAR measured at the highest output power channel in a given a test configuration was > 0.6 W/kg for LTE B41, testing at the other channels was required for such test configurations.
5. TDD LTE was tested per the guidance provided in FCC KDB Publication 941225 D05v02r04. Testing was performed using UL-DL configuration 0 with 6 UL subframes and 2 S subframes using extended cyclic prefix only and special subframe configuration 6. SAR tests were performed at maximum output power and worst-case transmission duty factor in extended cyclic prefix. Per 3GPP 36.211 Section 4, the duty factor for special subframe configuration 6 using extended cyclic prefix is 0.633.
6. Per KDB Publication 941225 D05Av01r02, SAR for downlink only LTE CA operations was not needed since the maximum average output power in LTE CA mode was not >0.25 dB higher than the maximum output power when downlink carrier aggregation was inactive.
7. For LTE Band 41 per FCC guidance, SAR was first measured with only a single carrier active in the uplink (carrier aggregation not active). For each exposure condition, the uplink CA scenario with two component carriers was additionally tested for the configuration with the highest SAR when carrier aggregation was not active. The SCC was configured with the closest available contiguous channel. The two component carriers were configured so the resource blocks are physically allocated side by side to achieve the maximum output power.

NR Notes:

1. NR implementation supports SA and NSA mode. In EN-DC mode, NR operates with the LTE Bands shown in the NR FR1 checklist acting as anchor bands. Per FCC guidance, SAR tests for NR Bands and LTE Anchors Bands were performed separately due to limitations in SAR probe calibration factors.
2. Due to test setup limitations, SAR testing for NR TDD was performed using test mode software to establish the connection.
3. Simultaneous transmission analysis for EN-DC operations is addressed in the Part 2 Test Report (Serial Number can be found in the bibliography).
4. This device additionally supports some EN-DC conditions where additional LTE carriers are added on the downlink only.
5. Per FCC Guidance, NR modulations and RB Sizes/Offsets were selected for testing such that configurations with the highest output power were evaluated for SAR tests.
6. Per FCC KDB Publication 447498 D04v01, when the reported NR Band n41 SAR measured at the highest output power channel in a given a test configuration was > 0.6 W/kg for 1g evaluations and > 1.5 W/kg for 10g evaluation, testing at the other channels was required for such test configurations.
7. SRS was tested with CW signal per Qualcomm guidance in 80-w2112-4.
8. For final implementation, NR Band n41 slot configuration is synchronized using maximum duty cycle of 100%. SAR testing was performed using FTM mode with a 100% duty cycle applied to match final duty cycle.

WLAN Notes:

1. For held-to-ear, hotspot, and phablet operations, the initial test position procedures were applied. The test position with the highest extrapolated peak SAR will be used as the initial test position. When reported SAR for the initial test position is ≤ 0.4 W/kg for 1g evaluations, no additional testing for the remaining test positions was required. Otherwise, SAR is evaluated at the subsequent highest peak SAR positions until the reported SAR result is ≤ 0.8 W/kg or all test positions are measured.
2. Justification for test configurations for WLAN per KDB Publication 248227 D01v02r02 for 2.4 GHz WIFI single transmission chain operations, the highest measured maximum output power channel for DSSS was selected for SAR measurement. SAR for OFDM modes (2.4 GHz 802.11g/n/ax) was not required due to the maximum allowed powers and the highest reported DSSS SAR. See Section 9.6.5 for more information.

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3. Justification for test configurations for WLAN per KDB Publication 248227 D01v02r02 for 5 GHz WIFI operations, the initial test configuration was selected according to the transmission mode with the highest maximum allowed powers. Other transmission modes were not investigated since the highest reported SAR for initial test configuration adjusted by the ratio of maximum output powers is less than 1.2 W/kg for 1g evaluations. See Section 9.6.6 for more information.
4. Per KDB Publication 248227 D01v02r02, SAR for MIMO was evaluated by following the simultaneous SAR provisions from KDB Publication 447498 D04v01 by either evaluating the sum of the 1g SAR values of each antenna transmitting independently or making a SAR measurement with both antennas transmitting simultaneously. Please see Multi-TX and Antenna SAR Considerations Appendix for complete analysis.
5. When the maximum reported 1g averaged SAR is ≤0.8 W/kg, SAR testing on additional channels was not required. Otherwise, SAR for the next highest output power channel was required until the reported SAR result was ≤ 1.20 W/kg for 1g evaluations or all test channels were measured.
6. The device was configured to transmit continuously at the required data rate, channel bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools. The reported SAR was scaled to the 100% transmission duty factor to determine compliance. Procedures used to measure the duty factor are identical to that in the associated EMC test reports.
7. When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.
8. Per FCC guidance, SAR was performed using 6.5 GHz SAR probe calibration factor for WIFI 6E. Per October 2020 TCB Workshop notes, 5 channels were tested for WIFI 6E.

Bluetooth Notes

1. Bluetooth SAR was measured with the device connected to a call box with hopping disabled with DH5 operation and Tx Tests test mode type. Per October 2016 TCB Workshop Notes, the reported SAR was scaled to the 79% transmission duty factor for Bluetooth and 87% transmission duty factor for Bluetooth LE to determine compliance. See RF Conducted Power Section for the time domain plot and calculation for the duty factor of the device.
2. Head and Hotspot Bluetooth SAR were evaluated for BT BDR tethering applications on Ant G.
3. The highest frame average power configurations for both Bluetooth and Bluetooth LE were evaluated for SAR. The worst case configuration was used for the remaining test positions as the most conservative scenario.

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14 POWER DENSITY DATA SUMMARY

14.1 6 GHz WIFI Power Density Results

Table 14-1 Open PD Data | Plot A124

MEASUREMENT RESULTS																									
Frequency (MHz)	Channel	Mode	Service	Bandwidth [MHz]	Maximum Allowed Power (Ant 1) [dBm]	Conducted Power (Ant 1) [dBm]	Maximum Allowed Power (Ant 2) [dBm]	Conducted Power (Ant 2) [dBm]	Power Drift (dB)	Spacing (mm)	Peak	Antenna Config.	DUT Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	Grid Step (λ)	Scaling Factor for Measurement Uncertainty per IEC 62479	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Normal psPD (W/m²)	Scaled Normal psPD (W/m²)	Total psPD (W/m²)	Scaled Total psPD (W/m²)	Plot #
6465.00	103	802.11ax	OFDM	80	16.00	15.30	N/A	N/A	-0.04	2	N/A	F	1047M	34.0	Front	99.67	0.05	1.610	1.175	1.003	3.250	6.167	4.220	8.007	Plot
6025.00	15	802.11ax	OFDM	160	12.00	11.65	N/A	N/A	0.18	2	N/A	F	1047M	68.1	Front	99.69	0.044	1.610	1.084	1.003	0.429	0.751	0.580	1.015	
6025.00	15	802.11ax	OFDM	160	12.00	11.65	N/A	N/A	-0.19	2	N/A	F	1047M	68.1	Left	99.69	0.044	1.610	1.084	1.003	1.130	1.978	1.530	2.678	
5985.00	7	802.11ax	OFDM	80	N/A	N/A	16.00	14.71	-0.07	2	N/A	I	1047M	34.0	Front	99.67	0.05	1.610	1.346	1.003	2.820	6.129	3.360	7.303	
6505.00	111	802.11ax	OFDM	160	N/A	N/A	12.00	11.99	-0.10	2	N/A	I	1047M	68.1	Back	99.69	0.044	1.610	1.002	1.003	0.759	1.228	0.894	1.447	
6505.00	111	802.11ax	OFDM	160	N/A	N/A	12.00	11.99	0.17	2	N/A	I	1047M	68.1	Right	99.69	0.044	1.610	1.002	1.003	1.250	2.023	1.600	2.589	
6705.00	151	802.11ax	OFDM	80	16.00	14.41	16.00	15.26	-0.10	2	1	MIMO	1047M	68.1	Front	99.71	0.05	1.610	1.442	1.003	1.550	3.609	2.060	4.797	
6705.00	151	802.11ax	OFDM	80	16.00	14.41	16.00	15.26	-0.07	2	2	MIMO	1047M	68.1	Front	99.71	0.05	1.610	1.442	1.003	2.130	4.960	2.660	6.194	
6345.00	79	802.11ax	OFDM	160	12.00	11.59	12.00	11.61	-0.04	2	1	MIMO	1047M	136.1	Front	99.69	0.044	1.610	1.099	1.003	1.160	2.059	1.350	2.396	
6345.00	79	802.11ax	OFDM	160	12.00	11.59	12.00	11.61	0.12	2	2	MIMO	1047M	136.1	Front	99.69	0.044	1.610	1.099	1.003	1.600	2.840	1.910	3.390	
47 CFR §1.1310 - SAFETY LIMIT Spatial Average Uncontrolled Exposure / General Population																		Power Density 10 W/m² averaged over 4 cm²							

Table 14-2 Closed PD Data

MEASUREMENT RESULTS																									
Frequency (MHz)	Channel	Mode	Service	Bandwidth [MHz]	Maximum Allowed Power (Ant 1) [dBm]	Conducted Power (Ant 1) [dBm]	Maximum Allowed Power (Ant 2) [dBm]	Conducted Power (Ant 2) [dBm]	Power Drift (dB)	Spacing (mm)	Peak	Antenna Config.	DUT Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	Grid Step (λ)	Scaling Factor for Measurement Uncertainty per IEC 62479	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Normal psPD (W/m²)	Scaled Normal psPD (W/m²)	Total psPD (W/m²)	Scaled Total psPD (W/m²)	Plot #
6285.00	67	802.11ax	OFDM	40	17.00	16.70	N/A	N/A	-0.17	2	N/A	F	1047M	16.3	Front	99.69	0.05	1.610	1.072	1.003	2.710	4.691	3.170	5.488	
6285.00	67	802.11ax	OFDM	40	N/A	N/A	17.00	15.52	0.12	2	N/A	I	1047M	16.3	Front	99.71	0.05	1.610	1.406	1.003	1.960	4.450	2.230	5.063	
6285.00	67	802.11ax	OFDM	40	17.00	15.99	17.00	16.50	0.10	2	1	MIMO	1047M	32.5	Front	99.71	0.044	1.610	1.262	1.003	1.520	3.098	1.680	3.424	
6285.00	67	802.11ax	OFDM	40	17.00	15.99	17.00	16.50	0.02	2	2	MIMO	1047M	32.5	Front	99.71	0.044	1.610	1.262	1.003	1.670	3.403	1.990	4.055	
47 CFR §1.1310 - SAFETY LIMIT Spatial Average Uncontrolled Exposure / General Population																		Power Density 10 W/m² averaged over 4 cm²							

Power Density General Notes

1. The manufacturer has confirmed that the devices tested have the same physical, mechanical and thermal characteristics and are within operational tolerances expected for production units.
2. Batteries are fully charged at the beginning of the measurements. The DUT was connected to a wall charger for some measurements due to the test duration. It was confirmed that the charger plugged into this DUT did not impact the near-field PD test results.
3. Power density was calculated by repeated E-field measurements on two measurement planes separated by λ/4.
4. The device was configured to transmit continuously at the required data rate, channel bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools.
5. P Per FCC guidance and equipment manufacturer guidance, power density results were scaled according to IEC 62479:2010 for the portion of the measurement uncertainty > 30%. Total expanded uncertainty of 2.80 dB (90.5%) was used to determine the psPD measurement scaling factor.
6. psPD for MIMO was evaluated by making a measurement with both antennas transmitting simultaneously.
7. PTP-PR algorithm was used during psPD measurement and calculations.
8. PD results were scaled to the maximum allowed power to demonstrate compliance per FCC KDB Publication 447498 D04.

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15 SAR MEASUREMENT VARIABILITY

15.1 Measurement Variability

Per FCC KDB Publication 865664 D01v01r04, SAR measurement variability was assessed for each frequency band, which was determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media were required for SAR measurements in a frequency band, the variability measurement procedures were applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue-equivalent medium. These additional measurements were repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency band. The test device was returned to ambient conditions (normal room temperature) with the battery fully charged before it was re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

SAR Measurement Variability was assessed using the following procedures for each frequency band:

1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.
2) A second repeated measurement was performed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1g SAR limit).
3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.
4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg
5) When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

Table 15-1
Body SAR Measurement Variability Results

BODY VARIABILITY RESULTS															
Band	FREQUENCY		Mode	Service	Side	Spacing	Antenna Config	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	Ratio	3rd Repeated SAR (1g)	Ratio
	MHz	Ch.						(W/kg)	(W/kg)		(W/kg)		(W/kg)	
750	782.00	23230	LTE Band 13, 10 MHz Bandwidth	QPSK, 1 RB 0 RB Offset	Closed Back	5	A	0.992	0.963	1.03	N/A	N/A	N/A	N/A
835	836.50	167300	NR Band n5, 20 MHz Bandwidth	DFT-s-OFDM, QPSK, 50 RB 56 RB Offset	Closed Back	5	A	1.120	1.080	1.04	N/A	N/A	N/A	N/A
1750	1745.00	132322	LTE Band 66, 20 MHz Bandwidth	QPSK, 1 RB 50 RB Ofsset	Open Right	5	H	0.881	0.875	1.01	N/A	N/A	N/A	N/A
2450	2412.00	1	2.4 GHz WIFI/ IEEE 802.11b, 22 MHz Bandwidth	DSSS	Open Top	5	G	0.838	0.767	1.09	N/A	N/A	N/A	N/A
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population					Body 1.6 W/kg (mW/g) averaged over 1 gram									

15.2 Measurement Uncertainty

The measured SAR was <1.5 W/kg for 1g and <3.75 W/kg for 10g for all frequency bands. Therefore, per KDB Publication 865664 D01v01r04, the extended measurement uncertainty analysis per IEEE 1528-2013 was not required.

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16 ADDITIONAL TESTING PER FCC GUIDANCE

16.1 Tuner Testing

Per April 2025 TCB Workshop Notes, the following test procedures were followed to demonstrate that the SAR results in Section 12 represented the appropriate SAR test conditions. For bands with dynamic tuning implemented, SAR was measured according to the required FCC SAR test procedures with the dynamic tuner active to allow the device to automatically tune to the antenna state for the respective RF exposure test configurations. Additional single point SAR time-sweep measurements were evaluated for other tuner states to determine that the other tuner configurations would result in equivalent or lower SAR values. The additional tuner hardware has no influence on the antenna characteristics, other than impedance matching.

For each band, mode, and exposure condition that supports dynamic antenna tuning, the following procedure was followed to determine the validity of the algorithm.

1. Identify the worst-case position and configuration per band/mode per head or body exposure condition.
2. Run an area scan with the auto-tune feature enabled to determine the peak SAR location.
3. With auto-enabled and ensuring no fluctuation in auto-tune state, run a single point SAR measurement at the peak SAR location.
4. Remotely disable the auto-tune feature and run two subsequent single point SAR measurements on the adjacent tune states; i.e. one state above and one state below the auto-tune state used in step 3.
5. Compare the single point SAR measurements
    a. If the single point SAR measurements for the adjacent states are lower than the auto-tune state single point SAR measurement, proceed to step 6.
    b. If the adjacent state single point SAR measurement is higher than the auto-tune state, but within the allowable tolerance, proceed to the next state in the list and run another single point SAR measurement. Repeat until there is a single point SAR measurement less than auto-tune state. Then proceed to step 6
    c. If any single point SAR measurement is more than 5% higher than the auto-tune single point SAR measurement, the DAT is considered inoperative.
6. Once all additional states are run, without moving the DUT, repeat step 3 for a variability measurement. The variability measurement should be within the allowable tolerance to consider the DAT is functioning properly.

Additional tuner testing notes:

- The tuner state was able to be established remotely so that the device was not moved for the entire series of single point SAR for the tuner states in each combination.
- The SAR probe remained stationary at the same position throughout the entire series of single point measurements for each combination.
- When the single point SAR is >1.4 W/kg or 1g SAR was > 1.2 W/kg for a particular band/mode/exposure condition, point SAR measurements were made for all possible tuner states.

The operational description contains more information about the design and implementation of the dynamic antenna tuning.

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Table 16-1
LTE Supplemental Head SAR Data

Supplemental Head SAR Data	
LTE B5	
QPSK, 10 MHz Bandwidth, 1 RB, 0 RB Offset	
Test Position	Right Cheek
Frequency (MHz)	836.50
Channel	20525
Measured 1g SAR (W/kg)	0.293
Average Value of Time Sweep (W/kg)	
Auto-tune (State 88)	
State 87	0.297
State 88	0.307
State 89	0.282
Auto-Tune Variability	0.307

Table 16-2
NR Supplemental Head SAR Data

Supplemental Head SAR Data	
NR Band n5	
DFT-s-OFDM QPSK, 20 MHz Bandwidth, 1 RB, 104 RB Offset	
Test Position	Right Cheek
Frequency (MHz)	836.50
Channel	167300
Measured 1g SAR (W/kg)	0.222
Average Value of Time Sweep (W/kg)	
Auto-tune (State 89)	
State 88	0.315
State 89	0.316
State 90	0.216
Auto-Tune Variability	0.325

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Table 16-3
LTE Supplemental Body SAR Data

Supplemental Body SAR Data		Supplemental Body SAR Data	
LTE B13		LTE B5	
QPSK, 10 MHz Bandwidth, 1 RB, 0 RB Offset		QPSK, 10 MHz Bandwidth, 25 RB, 12 RB Offset	
Test Position	Back	Test Position	Back
Spacing	5 mm	Spacing	5 mm
Frequency (MHz)	782.00	Frequency (MHz)	836.50
Channel	23230	Channel	20525
Measured 1g SAR (W/kg)	1.040	Measured 1g SAR (W/kg)	1.100
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 31)		Auto-tune (State 114)	
State 30	1.270	State 113	1.390
State 31	1.330	State 114	1.390
State 32	1.300	State 115	1.370
Auto-Tune Variability	1.270	Auto-Tune Variability	1.390

Table 16-4
NR Supplemental Body SAR Data

Supplemental Body SAR Data	
NR Band n5	
DFT-s-OFDM QPSK, 20 MHz Bandwidth, 50 RB, 56 RB Offset	
Test Position	Back
Spacing	5 mm
Frequency (MHz)	836.50
Channel	167300
Measured 1g SAR (W/kg)	1.120
Average Value of Time Sweep (W/kg)	
Auto-tune (State 114)	
State 113	1.090
State 114	1.090
State 115	1.080
Auto-Tune Variability	1.100

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17 EQUIPMENT LIST

Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
Agilent	E4404B	Spectrum Analyzer	N/A	N/A	N/A	MY45113242
Agilent	E4438C	ESG Vector Signal Generator	11/2/2025	Annual	11/2/2026	MY45093852
Agilent	N5182A	MXG Vector Signal Generator	4/13/2026	Annual	4/13/2027	MY48180366
Agilent	N5182A	MXG Vector Signal Generator	8/1/2025	Annual	8/1/2026	MY47420651
Agilent	8753ES	S-Parameter Vector Network Analyzer	10/28/2025	Annual	10/28/2026	MY40003841
Agilent	E5515C	Wireless Communications Test Set	CBT	N/A	CBT	GB46310798
Agilent	E5515C	Wireless Communications Test Set	CBT	N/A	CBT	GB41450275
Agilent	N4010A	Wireless Connectivity Test Set	N/A	N/A	N/A	GB46170464
Amplifier Research	15S1G6	Amplifier	CBT	N/A	CBT	433973
Amplifier Research	15S1G6	Amplifier	CBT	N/A	CBT	433974
Amplifier Research	150A100C	Amplifier	CBT	N/A	CBT	350132
Anritsu	MN8110B	I/O Adaptor	CBT	N/A	CBT	6261747881
Anritsu	ML2496A	Power Meter	8/21/2025	Annual	8/21/2026	1138001
Anritsu	ML2496A	Power Meter	6/27/2025	Annual	6/27/2026	1840005
Anritsu	MA2411B	Pulse Power Sensor	10/14/2025	Annual	10/14/2026	1726262
Anritsu	MA2411B	Pulse Power Sensor	10/14/2025	Annual	10/14/2026	1027293
Anritsu	MT8821C	Radio Communication Analyzer	CBT	N/A	CBT	6200901190
Anritsu	MT8821C	Radio Communication Analyzer	6/9/2025	Annual	6/9/2026	6201144418
Anritsu	MT8821C	Radio Communication Analyzer	9/15/2025	Annual	9/15/2026	6201144419
Anritsu	MT8000A	Radio Communication Test Station	3/24/2026	Biennial	3/24/2028	6272337439
Anritsu	MT8000A	Radio Communication Test Station	6/4/2025	Annual	6/4/2026	6261914237
Anritsu	MA24106A	USB Power Sensor	8/4/2025	Annual	8/4/2026	1827530
Anritsu	MA24106A	USB Power Sensor	2/20/2026	Annual	2/20/2027	1520501
Mini-Circuits	PWR-4GHS	USB Power Sensor	1/28/2026	Annual	1/28/2027	11710030062
Control Company	4052	Long Stem Thermometer	12/22/2025	Biennial	12/22/2027	250770121
Control Company	4052	Long Stem Thermometer	12/22/2025	Biennial	12/22/2027	250770096
Control Company	4040	Therm./ Clock/ Humidity Monitor	4/15/2024	Biennial	4/15/2026	240310280
Control Company	4040	Therm./ Clock/ Humidity Monitor	12/29/2025	Biennial	12/29/2027	250778120
Control Company	4040	Therm./ Clock/ Humidity Monitor	10/24/2025	Biennial	10/24/2027	250652331
Keysight Technologies	N9020A	MXA Signal Analyzer	7/7/2025	Annual	7/7/2026	MY48010233
Agilent	N9020A	MXA Signal Analyzer	7/7/2025	Biennial	7/7/2027	MY56470202
MCL	BW-N6W5+	6dB Attenuator	CBT	N/A	CBT	1139
Mini-Circuits	VLF-6000+	Low Pass Filter DC to 6000 MHz	CBT	N/A	CBT	N/A
Mini-Circuits	VLF-6000+	Low Pass Filter DC to 6000 MHz	7/3/2025	Annual	7/3/2026	31634
Mini-Circuits	BW-N20W5+	DC to 18 GHz Precision Fixed 20 dB Attenuator	CBT	N/A	CBT	N/A
Mini-Circuits	NLP-1200+	Low Pass Filter DC to 1000 MHz	CBT	N/A	CBT	N/A
Mini-Circuits	NLP-2950+	Low Pass Filter DC to 2700 MHz	CBT	N/A	CBT	N/A
Mini-Circuits	BW-N20W5	Power Attenuator	CBT	N/A	CBT	1226
Mini-Circuits	ZUDC10-83-S+	Directional Coupler	CBT	N/A	CBT	2050
Narda	4772-3	Attenuator (3dB)	CBT	N/A	CBT	9406
Narda	BW-S3W2	Attenuator (3dB)	CBT	N/A	CBT	120
Seekonk	NC-100	Torque Wrench	CBT	N/A	CBT	22217
Seekonk	NC-100	Torque Wrench	6/4/2025	Biennial	6/4/2027	80791
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	8/27/2024	Biennial	8/27/2026	167085
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	8/21/2025	Annual	8/21/2026	168543
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	10/24/2025	Annual	10/24/2026	131454
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	7/9/2025	Annual	7/9/2026	166462
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	9/26/2024	Biennial	9/26/2026	110553
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	10/23/2025	Annual	10/23/2026	150117
SPEAG	DAK-3.5	Dielectric Assessment Kit	11/10/2025	Annual	11/10/2026	1277

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Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
SPEAG	DAKS-3.5	Portable Dielectric Assessment Kit	7/14/2025	Annual	7/14/2026	1039
SPEAG	DAKS-3.5	Portable Dielectric Assessment Kit	8/5/2025	Annual	8/5/2026	1041
SPEAG	MAIA	Modulation and Audio Interference Analyzer	N/A	N/A	N/A	1237
SPEAG	MAIA	Modulation and Audio Interference Analyzer	N/A	N/A	N/A	1331
SPEAG	MAIA	Modulation and Audio Interference Analyzer	N/A	N/A	N/A	1390
SPEAG	DAK-12	Dielectric Assessment Kit (4MHz - 3GHz)	11/16/2025	Annual	11/16/2026	1220
SPEAG	5G Verification Source 10GHz	10GHz System Verification Antenna	8/6/2025	Annual	8/6/2025	1004
SPEAG	CLA-13	Confined Loop Antenna	9/4/2025	Annual	9/4/2026	1002
SPEAG	D1750V2	1750 MHz SAR Dipole	6/4/2025	Annual	6/4/2026	1092
SPEAG	D1900V2	1900 MHz SAR Dipole	6/3/2025	Annual	6/3/2026	5d026
SPEAG	D1900V2	1900 MHz SAR Dipole	6/3/2025	Annual	6/3/2026	5d141
SPEAG	D2450V2	2450 MHz SAR Dipole	8/7/2024	Biennial	8/7/2026	719
SPEAG	D2450V2	2450 MHz SAR Dipole	2/12/2026	Annual	2/12/2027	882
SPEAG	D2450V2	2450 MHz SAR Dipole	6/3/2025	Annual	6/3/2026	945
SPEAG	D2600V2	2600 MHz SAR Dipole	8/11/2025	Annual	8/11/2026	1126
SPEAG	D5GHzV2	5 GHz SAR Dipole	2/21/2024	Triennial	2/21/2027	1057
SPEAG	D6.5GHzV2	6.5 GHz SAR Dipole	2/10/2026	Annual	2/10/2027	1111
SPEAG	D750V3	750 MHz SAR Dipole	2/3/2026	Annual	2/3/2027	1046
SPEAG	D835V2	835 MHz SAR Dipole	6/3/2025	Annual	6/3/2026	4d180
SPEAG	D835V2	835 MHz SAR Dipole	4/21/2026	Triennial	4/21/2027	4d119
SPEAG	DAE4	Dasy Data Acquisition Electronics	10/13/2025	Annual	10/13/2026	1583
SPEAG	DAE4	Dasy Data Acquisition Electronics	2/9/2026	Annual	2/9/2027	859
SPEAG	DAE4	Dasy Data Acquisition Electronics	6/4/2025	Annual	6/4/2026	1652
SPEAG	DAE4	Dasy Data Acquisition Electronics	6/5/2025	Annual	6/5/2026	1558
SPEAG	DAE4	Dasy Data Acquisition Electronics	9/10/2025	Annual	9/10/2026	1364
SPEAG	DAE4	Dasy Data Acquisition Electronics	6/4/2025	Annual	6/4/2026	1333
SPEAG	DAE4	Dasy Data Acquisition Electronics	1/12/2026	Annual	1/12/2027	1466
SPEAG	DAE4	Dasy Data Acquisition Electronics	10/13/2025	Annual	10/13/2026	1449
SPEAG	DAE4	Dasy Data Acquisition Electronics	11/5/2025	Annual	11/5/2026	1677
SPEAG	DAE4	Dasy Data Acquisition Electronics	3/10/2026	Annual	3/10/2027	1450
SPEAG	DAE4	Dasy Data Acquisition Electronics	2/9/2026	Annual	2/9/2027	1638
SPEAG	EX3DV4	SAR Probe	6/11/2025	Annual	6/11/2026	7409
SPEAG	EX3DV4	SAR Probe	10/13/2025	Annual	10/13/2026	7803
SPEAG	EX3DV4	SAR Probe	3/11/2026	Annual	3/11/2027	7539
SPEAG	EX3DV4	SAR Probe	1/14/2026	Annual	1/14/2027	7565
SPEAG	EX3DV4	SAR Probe	9/15/2025	Annual	9/15/2026	7558
SPEAG	EX3DV4	SAR Probe	10/13/2025	Annual	10/13/2026	7670
SPEAG	EX3DV4	SAR Probe	6/12/2025	Annual	6/12/2026	7637
SPEAG	EX3DV4	SAR Probe	6/11/2025	Annual	6/11/2026	7661
SPEAG	EX3DV4	SAR Probe	11/7/2025	Annual	11/7/2026	7406
SPEAG	EX3DV4	SAR Probe	2/11/2026	Annual	2/11/2027	7570
SPEAG	EUmmWV3	EUmmWV3 Probe	1/14/2026	Annual	1/14/2027	9389

Note: CBT (Calibrated Before Testing). Prior to testing, the measurement paths containing a cable, amplifier, attenuator, coupler or filter were connected to a calibrated source (i.e. a signal generator) to determine the losses of the measurement path. The power meter offset was then adjusted to compensate for the measurement system losses. This level offset is stored within the power meter before measurements are made. This calibration verification procedure applies to the system verification and output power measurements. The calibrated reading is then taken directly from the power meter after compensation of the losses for all final power measurements.
Note: All equipment was used solely within its respective calibration period.

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18 MEASUREMENT UNCERTAINTIES

Note: The tables below represent the worst-case uncertainty budget among the uncertainty budgets of all testing laboratories listed in Section 1.2

Applicable for SAR measurements < 6GHz on a flat phantom:

SAR Uncertainty Budget based on IEEE 1528-2013 and SPEAG (0.3 GHz to 6 GHz)

a	b	c	d	e *f(d,k)*	f	g	h cxf/e	i cxg/e	k
Uncertainty component	**Reference**	**Tol. (± %)**	**Prob. dist.**	**Dvi.**	**ci (1g)**	**ci (10g)**	**1g ui (± %)**	**10g ui (± %)**	**vi**
Measurement system									
Probe calibration	E.2.1	6.55	N	1	1	1	6.55	6.55	∞
Axial isotropy	E.2.2	0.25	N	1	0.707	0.707	0.18	0.18	∞
Hemispherical isotropy	E.2.2	1.30	N	1	0.707	0.707	0.92	0.92	∞
Boundary effect	E.2.3	2.00	R	1.73	1	1	1.15	1.15	∞
Linearity	E.2.4	0.30	R	1.73	1	1	0.17	0.17	∞
System detection limits	E.2.4	0.25	R	1.73	1	1	0.14	0.14	∞
Modulation response	E.2.5	4.80	R	1.73	1	1	2.77	2.77	∞
Readout electronics	E.2.6	0.30	N	1	1	1	0.30	0.30	∞
Response time	E.2.7	1.01	R	1.73	1	1	0.58	0.58	∞
Integration time	E.2.8	2.60	R	1.73	1	1	1.50	1.50	∞
RF ambient conditions - noise	E.6.1	3.00	R	1.73	1	1	1.73	1.73	∞
RF ambient conditions - reflections	E.6.1	3.00	R	1.73	1	1	1.73	1.73	∞
Probe positioner mechanical tolerance	E.6.2	0.04	R	1.73	1	1	0.02	0.02	∞
Probe positioning with respect to phantom shell	E.6.3	0.80	R	1.73	1	1	0.46	0.46	∞
Extrapolation, interpolation, and integration algorithms for max. SAR evaluation	E.5	4.00	R	1.73	1	1	2.31	2.31	∞
Test sample related									
Test sample positioning	E.4.2	3.12	N	1	1	1	3.12	3.12	35
Device holder uncertainty	E.4.1	1.67	N	1	1	1	1.67	1.67	5
Output power variation - SAR drift	E.2.9	5.00	R	1.73	1	1	2.89	2.89	∞
SAR scaling	E.6.5	0.00	R	1.73	1	1	0.00	0.00	∞
Phantom and tissue parameters									
Phantom shell uncertainty - shape, thickness and permittivity	E.3.1	7.60	R	1.73	1	1	4.39	4.39	∞
Uncertainty in SAR correction for deviations in permittivity and conductivity	E.3.2	0.00	N	1	1	1	0.00	0.00	∞
Liquid conductivity measurement	E.3.3	2.50	N	1	0.78	0.71	1.95	1.78	∞
Liquid permittivity measurement	E.3.3	2.50	N	1	0.23	0.26	0.58	0.65	∞
Liquid conductivity - temperature uncertainty	E.3.4	3.36	R	1.73	0.78	0.71	1.51	1.38	∞
Liquid permittivity - temperature uncertainty	E.3.4	0.77	R	1.73	0.23	0.26	0.10	0.12	∞
Liquid Conductivity - deviation from target values	E.3.2	5.00	R	1.73	0.64	0.43	1.85	1.24	∞
Liquid Permittivity - deviation from target values	E.3.2	5.00	R	1.73	0.60	0.49	1.73	1.41	∞
Combined standard uncertainty							**11.0**	**10.8**	**40**
Expanded uncertainty (95% confidence interval)							**21.9**	**21.6**	

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Applicable for SAR measurements > 6GHz on a flat phantom:

SAR Uncertainty Budget based on IEC/IEEE 62209-1528:2020 (4 MHz to 10 GHz)

Symbol	Input quantity X (source of uncertainty)	Ref.	Prob. Dist. PDFi	Unc. a(xi)	Div. qi	u(xi) = a(xi)/qi	ci (1g)	ci (10g)	u(y) = cixu(xi) 1g (± %)	u(y) = cixu(xi) 10g (± %)	vi
	Measurement system errors										
CF	Probe calibration	8.4.1.1	N (k=2)	9.30	1	9.30	1	1	9.30	9.30	∞
CFdrift	Probe calibration drift	8.4.1.2	R	1.70	1.73	0.98	1	1	0.98	0.98	∞
LIN	Probe linearity and detection limit	8.4.1.3	R	4.70	1.73	2.71	1	1	2.71	2.71	∞
BBS	Broadband signal	8.4.1.4	R	2.80	1.73	1.62	1	1	1.62	1.62	∞
ISO	Probe isotropy	8.4.1.5	R	7.60	1.73	4.39	1	1	4.39	4.39	∞
DAE	Other probe and data acquisition errors	8.4.1.6	N	2.40	1	2.40	1	1	2.40	2.40	∞
AMB	RF ambient and noise	8.4.1.7	N	1.80	1	1.80	1	1	1.80	1.80	∞
Δxyz	Probe positioning errors	8.4.1.8	N	0.30	1	0.30	1	1	0.30	0.30	∞
DAT	Data processing errors	8.4.1.9	N	3.50	1.00	3.50	1	1	3.50	3.50	∞
	Phantom and device (DUT or validation antenna) errors										
LIQ(σ)	Measurement of phantom conductivity	8.4.2.1	N	2.50	1	2.50	0.78	0.71	1.95	1.78	∞
LIQ(Tc)	Temperature effects (medium)	8.4.2.2	R	5.40	1.73	3.12	0.78	0.71	2.43	2.21	∞
EPS	Shell permitivitty	8.4.2.3	R	14.00	1.73	8.08	0.5	0.5	4.04	4.04	∞
DIS	Distance between the radiating element of the DUT and the phantom medium	8.4.2.4	N	2.00	1	2.00	2	2	4.00	4.00	∞
Dxyz	Repeatability of positioning the DUT or source against the phantom	8.4.2.5	N	3.12	1	3.12	1	1	3.12	3.12	35
H	Device holder effects	8.4.2.6	N	1.67	1	1.67	1	1	1.67	1.67	5
MOD	Effect of operating mode on probe sensitivity	8.4.2.7	R	2.40	1.73	1.39	1	1	1.39	1.39	∞
TAS	Time-average SAR	8.4.2.8	R	1.73	1.73	1.00	1	1	1.00	1.00	∞
RFdrift	Variation in SAR due to drift in output power of DUT	8.4.2.9	N	2.50	1	2.50	1	1	2.50	2.50	∞
VAL	Validation antenna uncertainty (validation measurement only)	8.4.2.10	N	0.00	1	0.00	1	1	0.00	0.00	∞
Pin	Uncertainty in accepted power (validation measurement only)	8.4.2.11	N	0.00	1	0.00	1	1	0.00	0.00	∞
	Corrections to the SAR result (if applied)										
C(ε′,σ)	Phantom deviation from target	8.4.3.1	R	5.00	1.73	2.89	0.64	0.43	1.85	1.24	∞
C(R)	SAR scaling	8.4.3.2	R	0.00	1.73	0.00	1	1	0.00	0.00	∞
u(ΔSAR)	**Combined uncertainty**								**14.32**	**14.20**	**40**
U	**Expanded unsertainty and effective degrees of freedom**								**28.65**	**28.40**	

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Applicable for Incident Power Density Measurements:

PD Uncertainty Budget based on IEC IEEE 63195-1 for PTP-PR Reconstruction Mode and/or IPD Measurement at d < λ/5 under 24 GHz

Symbol	Source of uncertainty	Description	Unc. ± dB	Prob. Dist.	Div. qi	ci	Standard uncertainty ± dB	vi
	Uncertainty terms dependent on the measurement system							
CAL	Calibration	8.4.1	0.49	N	1	1	0.49	∞
COR	Probe correction	8.4.2	0.00	R	1.73	1	0.00	∞
FRS	Frequency response	8.4.3	0.20	R	1.73	1	0.12	∞
SCC	Sensor cross coupling	8.4.4	0.00	R	1.73	1	0.00	∞
ISO	Isotropy	8.4.5	0.50	R	1.73	1	0.29	∞
LIN	System linearity error	8.4.6	0.20	R	1.73	1	0.12	∞
PSC	Probe scattering	8.4.7	0.00	R	1.73	1	0.00	∞
PPO	Probe positioning offset	8.4.8	0.30	R	1.73	1	0.17	∞
PPR	Probe positioning repeatability	8.4.9	0.04	R	1.73	1	0.02	∞
SMO	Sensor mechanical offset	8.4.10	0.02	R	1.73	1	0.01	∞
PSR	Probe spatial resolution	8.4.11	0.00	R	1.73	1	0.00	∞
FLD	Field impedance dependence	8.4.12	0.00	R	1.73	1	0.00	∞
MED	Measurement drift	8.4.13	0.00	R	1.73	1	0.00	∞
APN	Amplitude and phase noise	8.4.14	0.04	R	1.73	1	0.02	∞
TR	Measurement area truncation	8.4.15	0.10	R	1.73	1	0.06	∞
DAQ	Data acquisition	8.4.16	0.03	N	1	1	0.03	∞
SMP	Sampling	8.4.17	0.00	R	1.73	1	0.00	∞
REC	Field reconstruction	8.4.18	2.00	R	1.73	1	1.15	∞
SNR	Signal-to-noise ratio	8.4.19	0.00	N	1	1	0.00	∞
TRA	Forward and backward transformation	8.4.20	0.70	R	1.73	1	0.40	∞
SCA	Power density scaling	8.4.21	0.00	R	1.73	1	0.00	∞
SAV	Spatial averaging	8.4.22	0.10	R	1.73	1	0.06	∞
COM	Exposure combining	8.4.23	0.00	N	1	1	0.00	∞
SDL	System detection limit		0.04	R	1.73	1	0.02	∞
	Uncertainty terms dependent on the DUT and environmental factors							
PC	Probe coupling with DUT	8.5.1	0.00	R	1.73	1	0.00	∞
MOD	Modulation response	8.5.2	0.40	R	1.73	1	0.23	∞
IT	Integration time	8.5.3	0.00	R	1.73	1	0.00	∞
RT	Response time	8.5.4	0.00	R	1.73	1	0.00	∞
DH	Device holder influence	8.5.5	0.10	R	1.73	1	0.06	∞
DA	DUT alignment	8.5.6	0.00	R	1.73	1	0.00	∞
AC	RF ambient conditions	8.5.7	0.04	R	1.73	1	0.02	∞
TEM	Laboratory temperature	8.5.8	0.00	R	1.73	1	0.00	∞
REF	Reflections in laboratory	8.5.9	0.04	R	1.73	1	0.02	∞
MSI	Immunity / secondary reception	8.5.10	0.00	R	1.73	1	0.00	∞
DRI	DUT drift	8.5.11	0.22	R	1.73	1	0.13	∞
u(ΔSAR)	**Combined uncertainty**						**1.40**	
U	**Expanded unsertainty and effective degrees of freedom (95 % confidence interval)**						**2.80**	

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19 CONCLUSION

19.1 Measurement Conclusion

The SAR evaluation indicates that the EUT complies with the RF radiation exposure limits of the FCC and Innovation, Science, and Economic Development Canada, with respect to all parameters subject to this test. These measurements were taken to simulate the RF effects of RF exposure under worst-case conditions. Precise laboratory measures were taken to assure repeatability of the tests. The results and statements relate only to the item(s) tested.

Please note that the absorption and distribution of electromagnetic energy in the body are very complex phenomena that depend on the mass, shape, and size of the body, the orientation of the body with respect to the field vectors, and the electrical properties of both the body and the environment. Other variables that may play a substantial role in possible biological effects are those that characterize the environment (e.g. ambient temperature, air velocity, relative humidity, and body insulation) and those that characterize the individual (e.g. age, gender, activity level, debilitation, or disease). Because various factors may interact with one another to vary the specific biological outcome of an exposure to electromagnetic fields, any protection guide should consider maximal amplification of biological effects as a result of field-body interactions, environmental conditions, and physiological variables. [3]

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20 REFERENCES

[1] Federal Communications Commission, ET Docket 93-62, Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation, Aug. 1996.

[2] ANSI/IEEE C95.1-2005, American National Standard safety levels with respect to human exposure to radio frequency electromagnetic fields, 3kHz to 300GHz, New York: IEEE, 2006.

[3] ANSI/IEEE C95.1-1992, American National Standard safety levels with respect to human exposure to radio frequency electromagnetic fields, 3kHz to 300GHz, New York: IEEE, Sept. 1992.

[4] ANSI/IEEE C95.3-2002, IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields - RF and Microwave, New York: IEEE, December 2002.

[5] IEEE Standards Coordinating Committee 39 –Standards Coordinating Committee 34 – IEEE Std. 1528-2013, IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques.

[6] NCRP, National Council on Radiation Protection and Measurements, Biological Effects and Exposure Criteria for RadioFrequency Electromagnetic Fields, NCRP Report No. 86, 1986. Reprinted Feb. 1995.

[7] T. Schmid, O. Egger, N. Kuster, Automated E-field scanning system for dosimetric assessments, IEEE Transaction on Microwave Theory and Techniques, vol. 44, Jan. 1996, pp. 105-113.

[8] K. Pokovic, T. Schmid, N. Kuster, Robust setup for precise calibration of E-field probes in tissue simulating liquids at mobile communications frequencies, ICECOM97, Oct. 1997, pp. 1 -124.

[9] K. Pokovic, T. Schmid, and N. Kuster, E-field Probe with improved isotropy in brain simulating liquids, Proceedings of the ELMAR, Zadar, Croatia, June 23-25, 1996, pp. 172-175.

[10] Schmid & Partner Engineering AG, Application Note: Data Storage and Evaluation, June 1998, p2.

[11] V. Hombach, K. Meier, M. Burkhardt, E. Kuhn, N. Kuster, The Dependence of EM Energy Absorption upon Human Modeling at 900 MHz, IEEE Transaction on Microwave Theory and Techniques, vol. 44 no. 10, Oct. 1996, pp. 1865-1873.

[12] N. Kuster and Q. Balzano, Energy absorption mechanism by biological bodies in the near field of dipole antennas above 300MHz, IEEE Transaction on Vehicular Technology, vol. 41, no. 1, Feb. 1992, pp. 17-23.

[13] G. Hartsgrove, A. Kraszewski, A. Surowiec, Simulated Biological Materials for Electromagnetic Radiation Absorption Studies, University of Ottawa, Bioelectromagnetics, Canada: 1987, pp. 29-36.

[14] Q. Balzano, O. Garay, T. Manning Jr., Electromagnetic Energy Exposure of Simulated Users of Portable Cellular Telephones, IEEE Transactions on Vehicular Technology, vol. 44, no.3, Aug. 1995.

[15] W. Gander, Computermathematick, Birkhaeuser, Basel, 1992.

[16] W.H. Press, S.A. Teukolsky, W.T. Vetterling, and B.P. Flannery, Numerical Recipes in C, The Art of Scientific Computing, Second edition, Cambridge University Press, 1992.

[17] N. Kuster, R. Kastle, T. Schmid, Dosimetric evaluation of mobile communications equipment with known precision, IEEE Transaction on Communications, vol. E80-B, no. 5, May 1997, pp. 645-652.

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[18] CENELEC CLC/SC111B, European Prestandard (prENV 50166-2), Human Exposure to Electromagnetic Fields High-frequency: 10kHz-300GHz, Jan. 1995.

[19] Prof. Dr. Niels Kuster, ETH, Eidgenössische Technische Hoschschule Zürich, Dosimetric Evaluation of the Cellular Phone.

[20] IEC 62209-1, Measurement procedure for the assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices - Part 1: Devices used next to the ear (Frequency range of 300 MHz to 6 GHz), July 2016.

[21] Innovation, Science, Economic Development Canada RSS-102 Radio Frequency Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands) Issue 5, March 2015.

[22] Health Canada Safety Code 6 Limits of Human Exposure to Radio Frequency Electromagnetic Fields in the Frequency Range from 3 kHz – 300 GHz, 2015

[23] FCC SAR Test Procedures for 2G-3G Devices, Mobile Hotspot and UMPC Devices KDB Publications 941225, D01-D07

[24] SAR Measurement Guidance for IEEE 802.11 Transmitters, KDB Publication 248227 D01

[25] FCC SAR Considerations for Handsets with Multiple Transmitters and Antennas, KDB Publications 648474 D03-D04

[26] FCC SAR Evaluation Considerations for Laptop, Notebook, Netbook and Tablet Computers, FCC KDB Publication 616217 D04

[27] FCC SAR Measurement and Reporting Requirements for 100MHz – 6 GHz, KDB Publications 865664 D01-D02

[28] FCC General RF Exposure Guidance and SAR Procedures for Dongles, KDB Publication 447498, D01-D04

[29] Anexo à Resolução No. 533, de 10 de Septembro de 2009.

[30] IEC 62209-2, Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices - Human models, instrumentation, and procedures - Part 2: Procedure to determine the specific absorption rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz), Mar. 2010.

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