



FCC RF Test Report

APPLICANT : CHEP
EQUIPMENT : Asset Tracker
BRAND NAME : CHEP
MODEL NAME : Gen 4 Ultra Wide, Gen 4 Ultra Wide QP
FCC ID : 2APRD-GEN4WIDE
STANDARD : 47 CFR Part 22(H), 24(E), 27(L), 27(H), 27(F), 27(N)
CLASSIFICATION : PCS Licensed Transmitter (PCB)
TEST DATE(S) : Nov. 20, 2025 ~ Dec. 18, 2025

This product installed a RF module (Brand Name: Quectel, Model Name: BG95-M3, FCC ID: XMR201910BG95M3) during the test, only Conducted Power, ERP/EIRP and RSE test items are tested in this report, all the other test results are leveraged from module RF report.

We, Sporton International Inc. (ShenZhen), would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.26-2015 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. (ShenZhen), the test report shall not be reproduced except in full.

Fly Liang

Approved by: Fly Liang



Sporton International Inc. (ShenZhen)

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People's Republic of China



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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG5O2210B	Rev. 01	Initial issue of report	Dec. 22, 2025



SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	-	PASS	-
	§22.913(a)(5)	Effective Radiated Power (Band 5) (Band 26)	ERP < 7 Watt		-
	§27.50(b)(10) §27.50(c)(10)	Effective Radiated Power (Band 12) (Band 13) (Band 71) (Band 85)	ERP < 3 Watt		-
	§24.232(c)	Equivalent Isotropic Radiated Power (Band 2) (Band 25)	EIRP < 2Watt		-
	§27.50(d)(4)	Equivalent Isotropic Radiated Power (Band 4) (Band 66)	EIRP < 1Watt		-
-	§24.232(d)	Peak-to-Average Ratio	<13 dB	PASS	1
-	§2.1049	Occupied Bandwidth	-	PASS	1
-	§2.1051 §22.917(a) §24.238(a) §27.53(c)(2)(4) §27.53(g) §27.53(h)	Conducted Band Edge Measurement (Band 2) (Band 4) (Band 5) (Band 12) (Band 13) (Band 25) (Band 26) (Band 66) (Band 71)(Band 85)	< 43+10log ₁₀ (P[Watts])	PASS	1
-	§2.1051 §22.917(a) §24.238(a) §27.53(c)(2) §27.53(g) §27.53(h)	Conducted Spurious Emission (Band 2) (Band 4) (Band 5) (Band 12) (Band 13) (Band 25) (Band 26) (Band 66) (Band 71)(Band 85)	< 43+10log ₁₀ (P[Watts])	PASS	1
-	§2.1055 §22.355	Frequency Stability Temperature & Voltage	< 2.5 ppm for Part 22	PASS	1
	§2.1055 §24.235 §27.54		Within Authorized Band		
4.4	§2.1053 §22.917(a) §24.238(a) §27.53(c)(2) §27.53(f) §27.53(g) §27.53(h)	Radiated Spurious Emission (Band 2) (Band 4) (Band 5) (Band 12) (Band 13) (Band 25) (Band 26) (Band 66) (Band 71)(Band 85)	< 43+10log ₁₀ (P[Watts])	PASS	Under limit 6.34 dB at 1559.50 MHz

Remark 1: Test results are leveraged from module RF report No “R1907A0446-R1V1”, “R1907A0446-R2”, “R1907A0446-R3V1”, “R1907A0446-R4”, “R1907A0446-R5”, “R1907A0446-R6V2”, “R1907A0446-R7”, “R1907A0446-R9”.

Conformity Assessment Condition:

- The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
- The measurement uncertainty please refer to each test result in the section “Measurement Uncertainty”

Disclaimer:

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.



1 General Description

1.1 Applicant

CHEP

2901 Tasman Drive Suite 101 Santa Clara, CA 95054

1.2 Manufacturer

MINEWING VIET NAM ELECTRONICS CO., LTD

Lot CN-09, Hoa Phu Industrial Park, Xuan Cam Commune, Bac Ninh Province, Vietnam

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Asset Tracker
Brand Name	CHEP
Model Name	Gen 4 Ultra Wide, Gen 4 Ultra Wide QP
FCC ID	2APRD-GEN4WIDE
IMEI Code	860813078502361
HW Version	v14
SW Version	v10.01.0006-P
EUT Stage	Production Unit

Remark:

1. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.
2. The only difference between the two models is the shape of the plastic enclosure.

1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	LTE Band 2 : 1850 MHz ~ 1910 MHz LTE Band 4 : 1710 MHz ~ 1755 MHz LTE Band 5 : 824 MHz ~ 849 MHz LTE Band 12 : 699 MHz ~ 716 MHz LTE Band 13 : 777 MHz ~ 787 MHz LTE Band 25 : 1850 MHz ~ 1915 MHz LTE Band 26 : 824 MHz ~ 849 MHz LTE Band 66 : 1710 MHz ~ 1780 MHz LTE Band 71: 663 MHz ~ 698 MHz LTE Band 85: 698 MHz ~ 716 MHz
Rx Frequency	LTE Band 2 : 1930 MHz ~ 1990 MHz LTE Band 4 : 2110 MHz ~ 2155 MHz LTE Band 5 : 869 MHz ~ 894 MHz LTE Band 12 : 729 MHz ~ 746 MHz LTE Band 13 : 746 MHz ~ 756 MHz LTE Band 25 : 1930 MHz ~ 1995 MHz

	LTE Band 26 : 869 MHz ~ 894 MHz LTE Band 66 : 2110 MHz~ 2180 MHz LTE Band 71: 617 MHz ~ 652 MHz LTE Band 85 : 728 MHz ~ 746 MHz
Bandwidth	LTE Category M1: LTE Band 2 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 4 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 5 : 1.4MHz / 3MHz / 5MHz / 10MHz LTE Band 12 : 1.4MHz / 3MHz / 5MHz / 10MHz LTE Band 13 : 5MHz / 10MHz LTE Band 25 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 26 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz LTE Band 66 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 85 : 5MHz / 10MHz NB-IOT Category NB2: 200kHz
Sub-carrier Speacing	NB-IOT Category NB2: 3.75KHz /15 KHz
Maximum Output Power to Antenna	LTE Category M1: LTE Band 2 : 19.94 dBm LTE Band 4 : 19.88 dBm LTE Band 5 : 20.30 dBm LTE Band 12 : 20.45 dBm LTE Band 13 : 20.30 dBm LTE Band 25 : 17.78 dBm LTE Band 26 : 20.31 dBm LTE Band 66 : 19.98 dBm LTE Band 85 : 19.85 dBm NB-IOT Category NB2: NB-IOT Band 2 : 20.36 dBm NB-IOT Band 4 : 20.00 dBm NB-IOT Band 5 : 20.40 dBm NB-IOT Band 12 : 20.31 dBm NB-IOT Band 13 : 20.53 dBm NB-IOT Band 25 : 18.56 dBm NB-IOT Band 66 : 19.72 dBm NB-IOT Band 71 : 20.49 dBm NB-IOT Band 85 : 20.45 dBm
Antenna Gain	LTE Band 2 : 3.5 dBi LTE Band 4 : 3.5 dBi LTE Band 5 : 1.6 dBi LTE Band 12 : 0.4 dBi LTE Band 13 : 0.4 dBi LTE Band 25 : 3.5 dBi LTE Band 26 : 1.6 dBi LTE Band 66 : 3.5 dBi LTE Band 71 : 0.4 dBi LTE Band 85 : 0.4 dBi
Type of Modulation	LTE Category M1: QPSK / 16QAM NB-IOT Category NB2 : BPSK / QPSK

Note: LTE Band 71 only support NB-IOT, LTE Band 26 only support Cat M1, the other bands support both Cat M1 & NB-IOT.



1.5 Modification of EUT

No modifications are made to the EUT during all test items.

1.6 Maximum ERP/EIRP

LTE Category M1:

LTE Band 2		QPSK	16QAM
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Maximum EIRP(W)
1.4	1850.7 ~ 1909.3	0.2148	0.1671
3	1851.5 ~ 1908.5	0.2188	0.1675
5	1852.5 ~ 1907.5	0.2193	0.2168
10	1855.0 ~ 1905.0	0.2208	0.2208
15	1857.5 ~ 1902.5	0.2138	0.2042
20	1860.0 ~ 1900.0	0.2208	0.2046
LTE Band 25		QPSK	16QAM
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Maximum EIRP(W)
1.4	1850.7 ~ 1914.3	0.1291	0.1023
3	1851.5 ~ 1913.5	0.1271	0.1012
5	1852.5 ~ 1912.5	0.1306	0.1199
10	1855.0 ~ 1910.0	0.1321	0.1242
15	1857.5 ~ 1907.5	0.1300	0.1279
20	1860.0 ~ 1905.0	0.1337	0.1343
LTE Band 4		QPSK	16QAM
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Maximum EIRP(W)
1.4	1710.7 ~ 1754.3	0.2143	0.1807
3	1711.5 ~ 1753.5	0.2133	0.1778
5	1712.5 ~ 1752.5	0.2148	0.2173
10	1715.0 ~ 1750.0	0.2183	0.2158
15	1717.5 ~ 1747.5	0.2173	0.2051
20	1720.0 ~ 1745.0	0.2178	0.2080



LTE Band 5		QPSK	16QAM
BW (MHz)	Frequency Range (MHz)	Maximum ERP(W)	Maximum ERP(W)
1.4	824.7 ~ 848.3	0.0891	0.0883
3	825.5 ~ 847.5	0.0883	0.0881
5	826.5 ~ 846.5	0.0887	0.0889
10	829.0 ~ 844.0	0.0920	0.0944
LTE Band 12		QPSK	16QAM
BW (MHz)	Frequency Range (MHz)	Maximum ERP(W)	Maximum ERP(W)
1.4	699.7 ~ 715.3	0.0692	0.0581
3	700.5 ~ 714.5	0.0695	0.0579
5	701.5 ~ 713.5	0.0693	0.0698
10	704.0 ~ 711.0	0.0735	0.0741
LTE Band 13		QPSK	16QAM
BW (MHz)	Frequency Range (MHz)	Maximum ERP(W)	Maximum ERP(W)
5	779.5 ~ 784.5	0.0673	0.0684
10	782.0	0.0706	0.0716
LTE Band 26		QPSK	16QAM
BW (MHz)	Frequency Range (MHz)	Maximum ERP(W)	Maximum ERP(W)
1.4	824.7 ~ 848.3	0.0863	0.0697
3	825.5 ~ 847.5	0.0871	0.0698
5	826.5 ~ 846.5	0.0867	0.0869
10	829.0 ~ 844.0	0.0867	0.0867
15	831.5 ~ 841.5	0.0933	0.0946
CH26790	824.0	0.0804	0.0822
LTE Band 66		QPSK	16QAM
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Maximum EIRP(W)
1.4	1710.7 ~ 1779.3	0.2118	0.1663
3	1711.5 ~ 1778.5	0.2099	0.1679
5	1712.5 ~ 1777.5	0.2128	0.2089
10	1715.0 ~ 1775.0	0.2123	0.2198
15	1717.5 ~ 1772.5	0.2223	0.2094
20	1720.0 ~ 1770.0	0.2228	0.2138



LTE Band 85		QPSK	16QAM
BW (MHz)	Frequency Range (MHz)	Maximum ERP(W)	Maximum ERP(W)
5	700.5 ~ 713.5	0.0587	0.0558
10	703.0 ~ 711.0	0.0614	0.0646

NB-IOT Category NB2:

Band 2		BPSK/QPSK
Sub-carrier Spacing (KHz)	Frequency Range (MHz)	Maximum EIRP(W)
3.75	1850.1 ~ 1909.9	0.2350
15	1850.1 ~ 1909.9	0.2432
Band 25		BPSK/QPSK
Sub-carrier Spacing (KHz)	Frequency Range (MHz)	Maximum EIRP(W)
3.75	1850.1 ~ 1914.9	0.1545
15	1850.1 ~ 1914.9	0.1607
Band 4		BPSK/QPSK
Sub-carrier Spacing (KHz)	Frequency Range (MHz)	Maximum EIRP(W)
3.75	1710.1 ~ 1754.9	0.2239
15	1710.1 ~ 1754.9	0.2228
Band 5		BPSK/QPSK
Sub-carrier Spacing (KHz)	Frequency Range (MHz)	Maximum ERP(W)
3.75	824.1 ~ 848.9	0.0966
15	824.1 ~ 848.9	0.0955
Band 12		BPSK/QPSK
Sub-carrier Spacing (KHz)	Frequency Range (MHz)	Maximum ERP(W)
3.75	699.1 ~ 715.9	0.0718
15	699.1 ~ 715.9	0.0708
Band 13		BPSK/QPSK
Sub-carrier Spacing (KHz)	Frequency Range (MHz)	Maximum ERP(W)
3.75	777.1 ~ 786.9	0.0750
15	777.1 ~ 786.9	0.0755

Band 66		BPSK/QPSK
Sub-carrier Spacing (KHz)	Frequency Range (MHz)	Maximum EIRP(W)
3.75	1710.1 ~ 1779.9	0.2094
15	1710.1 ~ 1779.9	0.2099
Band 71		BPSK/QPSK
Sub-carrier Spacing (KHz)	Frequency Range (MHz)	Maximum ERP(W)
3.75	663.1 ~ 697.9	0.0748
15	663.1 ~ 697.9	0.0710
Band 85		BPSK/QPSK
Sub-carrier Spacing (KHz)	Frequency Range (MHz)	Maximum ERP(W)
3.75	698.1 ~ 715.9	0.0731
15	698.1 ~ 715.9	0.0741

1.7 Testing Location

Sporton International Inc. (ShenZhen) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.01.

Test Firm	Sporton International Inc. (ShenZhen)		
Test Site Location	101, 1st Floor, Block B, Building 1, No. 2, Tengfeng 4th Road, Fenghuang Community, Fuyong Street, Baoan District, Shenzhen City, Guangdong Province 518103 People's Republic of China TEL: +86-755-86066985		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	TH01-SZ 03CH02-SZ	CN1256	421272

1.8 Test Software

Item	Site	Manufacturer	Name	Version
1.	03CH02-SZ	AUDIX	E3	6.2009-8-24a



1.9 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ 47 CFR Part 22(H), 24(E), 27(L), 27(H), 27(F), 27(N)
- ♦ ANSI C63.26-2015
- ♦ FCC KDB 971168 D01 Power Meas License Digital Systems v03r01
- ♦ FCC KDB 412172 D01 Determining ERP and EIRP v01r01

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.



2 Test Configuration of Equipment Under Test

2.1 Test Mode

Antenna port conducted and radiated test items listed below are performed according to KDB 971168

D01 Power Meas License Digital Systems v03r01 with maximum output power.

Radiated measurements are performed by rotating the EUT in three different orthogonal test planes to find the maximum emission.

LTE Category M1:

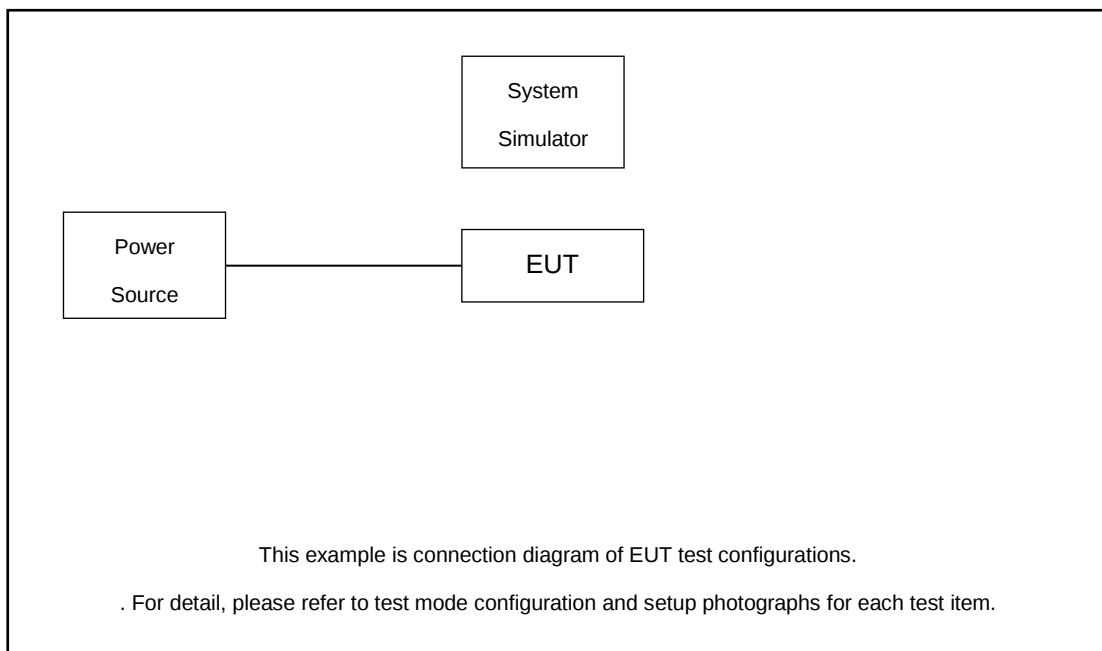
Test Items	Band	Bandwidth (MHz)						Modulation			RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16 QAM	64 QAM	1	Half	Full	L	M	H
Max. Output Power	2	v	v	v	v	v	v	v	v	-	v	v	v	v	v	v
	4	v	v	v	v	v	v	v	v	-	v	v	v	v	v	v
	5	v	v	v	v	-	-	v	v	-	v	v	v	v	v	v
	12	v	v	v	v	-	-	v	v	-	v	v	v	v	v	v
	13	-	-	v	v	-	-	v	v	-	v	v	v	v	v	v
	25	v	v	v	v	v	v	v	v	-	v	v	v	v	v	v
	26	v	v	v	v	v	-	v	v	-	v	v	v	v	v	v
	66	v	v	v	v	v	v	v	v	-	v	v	v	v	v	v
	85	-	-	v	v	-	-	v	v	-	v	v	v	v	v	v
E.R.P / E.I.R.P	2	v	v	v	v	v	v	v	v	-	v	v	v	v	v	v
	4	v	v	v	v	v	v	v	v	-	v	v	v	v	v	v
	5	v	v	v	v	-	-	v	v	-	v	v	v	v	v	v
	12	v	v	v	v	-	-	v	v	-	v	v	v	v	v	v
	13	-	-	v	v	-	-	v	v	-	v	v	v	v	v	v
	25	v	v	v	v	v	v	v	v	-	v	v	v	v	v	v
	26	v	v	v	v	v	-	v	v	-	v	v	v	v	v	v
	66	v	v	v	v	v	v	v	v	-	v	v	v	v	v	v
	85	-	-	v	v	-	-	v	v	-	v	v	v	v	v	v
Radiated Spurious Emission	2	Worst Case													v	
	4	Worst Case													v	
	5	Worst Case													v	
	12	Worst Case													v	
	13	Worst Case													v	
	25	Worst Case													v	
	26	Worst Case													v	
	66	Worst Case													v	
	85	Worst Case													v	
Note	1. The mark "v " means that this configuration is chosen for testing															
	2. The mark "- " means that this bandwidth is not supported.															
	3. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported.															



NB-IOT Category NB2:

Test Items	Band	Sub-carrier Speacing(KHz)		Modulation			RB #			Test Channel		
		3.75	15	BPSK	QPSK	16QAM	1	Half	Full	L	M	H
Max. Output Power	2	v	v	v	v	-	v		v	v	v	v
	4	v	v	v	v	-	v		v	v	v	v
	5	v	v	v	v	-	v		v	v	v	v
	12	v	v	v	v	-	v		v	v	v	v
	13	v	v	v	v	-	v		v	v	v	v
	25	v	v	v	v	-	v		v	v	v	v
	66	v	v	v	v	-	v		v	v	v	v
	71	v	v	v	v	-	v		v	v	v	v
	85	v	v	v	v	-	v		v	v	v	v
E.R.P / E.I.R.P	2	v	v	v	v	-	v		v	v	v	v
	4	v	v	v	v	-	v		v	v	v	v
	5	v	v	v	v	-	v		v	v	v	v
	12	v	v	v	v	-	v		v	v	v	v
	13	v	v	v	v	-	v		v	v	v	v
	25	v	v	v	v	-	v		v	v	v	v
	66	v	v	v	v	-	v		v	v	v	v
	71	v	v	v	v	-	v		v	v	v	v
	85	v	v	v	v	-	v		v	v	v	v
Radiated Spurious Emission	2	Worst Case									v	
	4	Worst Case									v	
	5	Worst Case									v	
	12	Worst Case									v	
	13	Worst Case									v	
	25	Worst Case									v	
	66	Worst Case									v	
	71	Worst Case									v	
	85	Worst Case									v	
Note	1. The mark “v ” means that this configuration is chosen for testing											
	2. The mark “-” means that this bandwidth is not supported.											
	3. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported.											

2.2 Connection Diagram of Test System



2.3 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	System Simulator	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m



2.4 Frequency List of Low/Middle/High Channels

LTE Category M1:

LTE Band 2 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	18700	18900	19100
	Frequency	1860	1880	1900
15	Channel	18675	18900	19125
	Frequency	1857.5	1880	1902.5
10	Channel	18650	18900	19150
	Frequency	1855	1880	1905
5	Channel	18625	18900	19175
	Frequency	1852.5	1880	1907.5
3	Channel	18615	18900	19185
	Frequency	1851.5	1880	1908.5
1.4	Channel	18607	18900	19193
	Frequency	1850.7	1880	1909.3

LTE Band 4 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	20050	20175	20300
	Frequency	1720	1732.5	1745
15	Channel	20025	20175	20325
	Frequency	1717.5	1732.5	1747.5
10	Channel	20000	20175	20350
	Frequency	1715	1732.5	1750
5	Channel	19975	20175	20375
	Frequency	1712.5	1732.5	1752.5
3	Channel	19965	20175	20385
	Frequency	1711.5	1732.5	1753.5
1.4	Channel	19957	20175	20393
	Frequency	1710.7	1732.5	1754.3



LTE Band 5 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
10	Channel	20450	20525	20600
	Frequency	829	836.5	844
5	Channel	20425	20525	20625
	Frequency	826.5	836.5	846.5
3	Channel	20415	20525	20635
	Frequency	825.5	836.5	847.5
1.4	Channel	20407	20525	20643
	Frequency	824.7	836.5	848.3

LTE Band 12 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
10	Channel	23060	23095	23130
	Frequency	704	707.5	711
5	Channel	23035	23095	23155
	Frequency	701.5	707.5	713.5
3	Channel	23025	23095	23165
	Frequency	700.5	707.5	714.5
1.4	Channel	23017	23095	23173
	Frequency	699.7	707.5	715.3

LTE Band 13 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
10	Channel	-	23230	-
	Frequency	-	782	-
5	Channel	23205	23230	23255
	Frequency	779.5	782	784.5



LTE Band 25 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	26140	26340	26590
	Frequency	1860	1880	1905
15	Channel	26115	26340	26615
	Frequency	1857.5	1880	1907.5
10	Channel	26090	26340	26640
	Frequency	1855	1880	1910
5	Channel	26065	26340	26665
	Frequency	1852.5	1880	1912.5
3	Channel	26055	26340	26675
	Frequency	1851.5	1880	1913.5
1.4	Channel	26047	26340	26683
	Frequency	1850.7	1880	1914.3

LTE Band 26 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
15	Channel	26865	26915	26965
	Frequency	831.5	836.5	841.5
10	Channel	26840	26915	26990
	Frequency	829	836.5	844
5	Channel	26815	26915	27015
	Frequency	826.5	836.5	846.5
3	Channel	26805	26915	27025
	Frequency	825.5	836.5	847.5
1.4	Channel	26797	26915	27033
	Frequency	824.7	836.5	848.3



LTE Band 66 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	132072	132322	132572
	Frequency	1720	1745	1770
15	Channel	132047	132322	132597
	Frequency	1717.5	1745	1772.5
10	Channel	132022	132322	132622
	Frequency	1715	1745	1775
5	Channel	131997	132322	132647
	Frequency	1712.5	1745	1777.5
3	Channel	131987	132322	132657
	Frequency	1711.5	1745	1778.5
1.4	Channel	131979	132322	132665
	Frequency	1710.7	1745	1779.3

LTE Band 85 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
10	Channel	134052	134092	134132
	Frequency	703	707	711
5	Channel	134027	134092	134157
	Frequency	700.5	707	713.5

NB-IOT Category NB2:

Band 2 Channel and Frequency List				
Sub-carrier Speacing (kHz)	Channel / Frequency (MHz)	Lowest	Middle	Highest
3.75	Channel	18601	18900	19199
	Frequency	1850.1	1880	1909.9
15	Channel	18601	18900	19199
	Frequency	1850.1	1880	1909.9



Band 4 Channel and Frequency List				
Sub-carrier Speacing (kHz)	Channel / Frequency (MHz)	Lowest	Middle	Highest
3.75	Channel	19952	20175	20398
	Frequency	1710.2	1732.5	1754.8
15	Channel	19952	20175	20398
	Frequency	1710.2	1732.5	1754.8

Band 5 Channel and Frequency List				
Sub-carrier Speacing (kHz)	Channel / Frequency (MHz)	Lowest	Middle	Highest
3.75	Channel	20410	20525	20649
	Frequency	824.1	836.5	848.9
15	Channel	20410	20525	20649
	Frequency	824.1	836.5	848.9

Band 12 Channel and Frequency List				
Sub-carrier Speacing (kHz)	Channel / Frequency (MHz)	Lowest	Middle	Highest
3.75	Channel	23011	23095	23179
	Frequency	699.1	707.5	715.9
15	Channel	23011	23095	23179
	Frequency	699.1	707.5	715.9

Band 13 Channel and Frequency List				
Sub-carrier Speacing (kHz)	Channel / Frequency (MHz)	Lowest	Middle	Highest
3.75	Channel	23181	23230	23279
	Frequency	777.1	782	786.9
15	Channel	23181	23230	23279
	Frequency	777.1	782	786.9



Band 25 Channel and Frequency List				
Sub-carrier Speacing (kHz)	Channel / Frequency (MHz)	Lowest	Middle	Highest
3.75	Channel	26041	26365	26689
	Frequency	1850.1	1882.5	1914.9
15	Channel	26041	26365	26689
	Frequency	1850.1	1882.5	1914.9

Band 66 Channel and Frequency List				
Sub-carrier Speacing (kHz)	Channel / Frequency (MHz)	Lowest	Middle	Highest
3.75	Channel	131973	132322	132671
	Frequency	1710.1	1745	1779.9
15	Channel	131973	132322	132671
	Frequency	1710.1	1745	1779.9

Band 71 Channel and Frequency List				
Sub-carrier Speacing (kHz)	Channel / Frequency (MHz)	Lowest	Middle	Highest
3.75	Channel	133122	133322	133471
	Frequency	663.1	683	697.9
15	Channel	133122	133322	133471
	Frequency	663.1	683	697.9

Band 85 Channel and Frequency List				
Sub-carrier Speacing (kHz)	Channel / Frequency (MHz)	Lowest	Middle	Highest
3.75	Channel	134002	134092	134181
	Frequency	698.1	707	715.9
15	Channel	134002	134092	134181
	Frequency	698.1	707	715.9

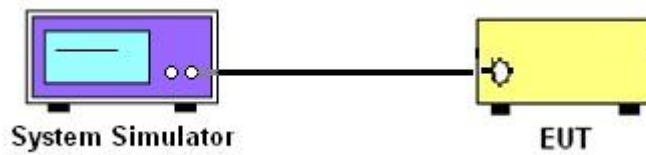
3 Conducted Test Items

3.1 Measuring Instruments

See list of measuring instruments of this test report.

3.2 Test Setup

3.2.1 Conducted Output Power



3.3 Test Result of Conducted Test

Please refer to Appendix A.

3.4 Conducted Output Power and ERP/EIRP

3.4.1 Description of the Conducted Output Power Measurement and ERP/EIRP Measurement

A system simulator was used to establish communication with the EUT. Its parameters were set to force the EUT transmitting at maximum output power. The measured power in the radio frequency on the transmitter output terminals shall be reported.

The ERP of mobile transmitters must not exceed 7 Watts for Band 5 and Band 26.

The ERP of mobile transmitters must not exceed 3 Watts for Band 12, Band 13, Band 71 and Band 85.

The EIRP of mobile transmitters must not exceed 2 Watts for Band 2 and Band 25

The EIRP of mobile transmitters must not exceed 1 Watts for Band 4 and Band 66.

According to KDB 412172 D01 Power Approach,

$EIRP = P_T + G_T - L_C$, $ERP = EIRP - 2.15$, where

P_T = transmitter output power in dBm

G_T = gain of the transmitting antenna in dBi

L_C = signal attenuation in the connecting cable between the transmitter and antenna in dB

3.4.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.2
2. The transmitter output port was connected to the system simulator.
3. Set EUT at maximum power through the system simulator.
4. Select lowest, middle, and highest channels for each band and different modulation.
5. Measure and record the power level from the system simulator.

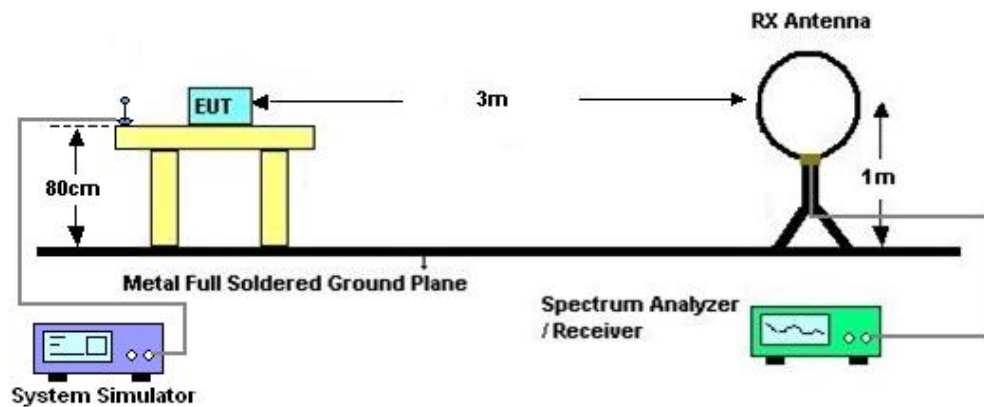
4 Radiated Test Items

4.1 Measuring Instruments

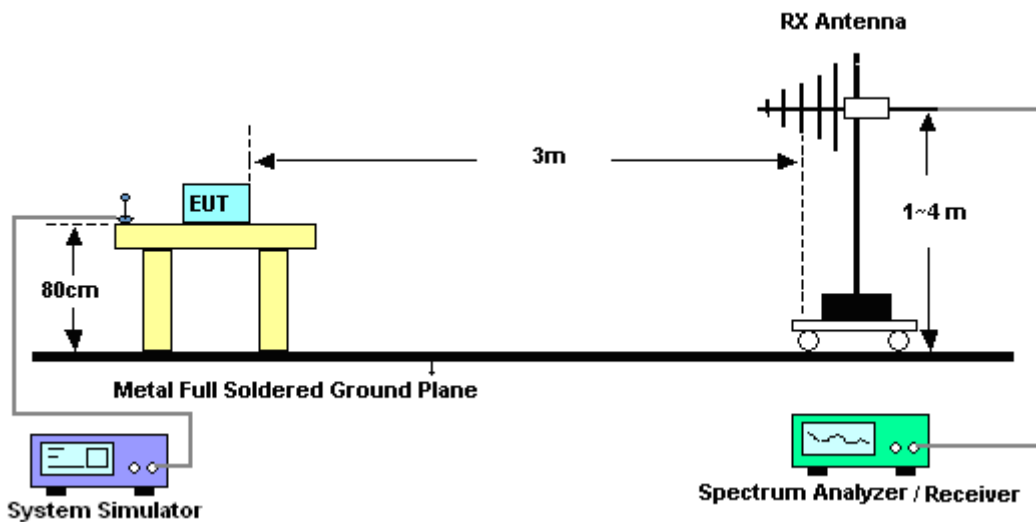
See list of measuring instruments of this test report.

4.2 Test Setup

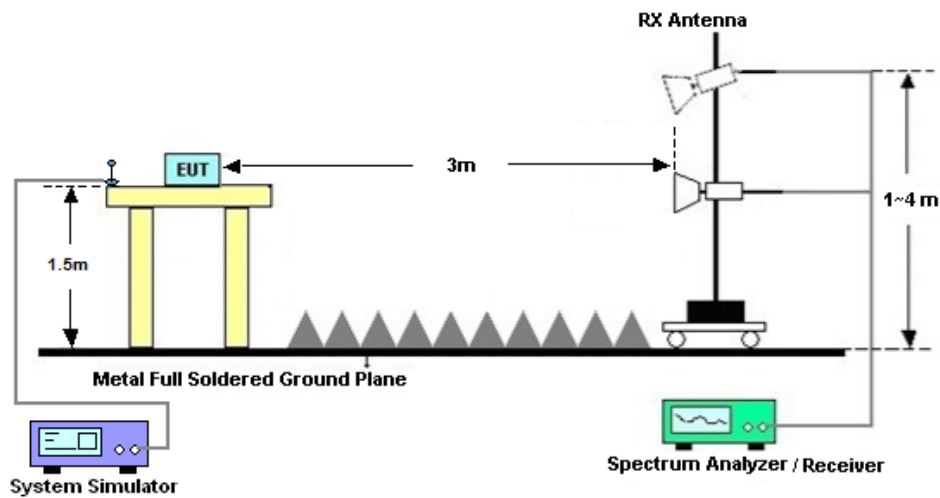
4.2.1 For radiated test below 30MHz



4.2.2 For radiated test from 30MHz to 1GHz



4.2.3 For radiated test above 1GHz



4.3 Test Result of Radiated Test

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

Please refer to Appendix B.



4.4 Radiated Spurious Emission

4.4.1 Description of Radiated Spurious Emission

The radiated spurious emission was measured by substitution method according to ANSI C63.26. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB.

For LTE Band 13

For operations in the 746-758 MHz, 775-788 MHz, and 805-806 MHz bands, emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth.

The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

4.4.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.5
2. The EUT was placed on a turntable with 0.8 meter height for frequency below 1GHz and 1.5 meter height for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the receiving antenna mounted on the antenna tower.
4. The table was rotated 360 degrees to determine the position of the highest spurious emission.
5. The height of the receiving antenna is varied between 1m to 4m to search the maximum spurious emission for both horizontal and vertical polarizations.
6. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power.
7. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
8. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
9. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
10. $EIRP \text{ (dBm)} = S.G. \text{ Power} - Tx \text{ Cable Loss} + Tx \text{ Antenna Gain}$
11. $ERP \text{ (dBm)} = EIRP - 2.15$
12. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P(Watts)
 $= P(W) - [43 + 10\log(P)] \text{ (dB)}$
 $= [30 + 10\log(P)] \text{ (dBm)} - [43 + 10\log(P)] \text{ (dB)}$
 $= -13\text{dBm}.$



5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101078	10Hz~40GHz	Apr. 02, 2025	Dec. 11, 2025~Dec. 18, 2025	Apr. 01, 2026	Conducted (TH01-SZ)
DC Power Supply	TTI	PL330P	290070	Max 32V , 3A	Oct. 13, 2025	Dec. 11, 2025~Dec. 18, 2025	Oct. 12, 2026	Conducted (TH01-SZ)
Power Divider	Titan	P02N005180	923402	0.4GHz~26.5GHz	Nov. 07, 2025	Dec. 11, 2025~Dec. 18, 2025	Nov. 06, 2026	Conducted (TH01-SZ)
Thermal Chamber	Ten Billion Hongzhangroup	LP-150U	H2014081803	-40~+150°C	Jul. 02, 2025	Dec. 11, 2025~Dec. 18, 2025	Jul. 01, 2026	Conducted (TH01-SZ)
EXA Spectrum Analyzer	KEYSIGHT	N9010A	MY55150213	10Hz~44GHz	Jul. 03, 2025	Nov. 20, 2025~Dec. 11, 2025	Jul. 02, 2026	Radiation (03CH02-SZ)
Loop Antenna	R&S	HFH2-Z2E	101141	9kHz~30MHz	Dec. 28, 2024	Nov. 20, 2025~Dec. 11, 2025	Dec. 27, 2025	Radiation (03CH02-SZ)
Bilog Antenna	TeseQ	CBL6112D	35407	30MHz-2GHz	Oct. 24, 2025	Nov. 20, 2025~Dec. 11, 2025	Oct. 23, 2027	Radiation (03CH02-SZ)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00119436	1GHz~18GHz	Jul. 04, 2025	Nov. 20, 2025~Dec. 11, 2025	Jul. 04, 2026	Radiation (03CH02-SZ)
HF Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz	Jul. 03, 2025	Nov. 20, 2025~Dec. 11, 2025	Jul. 03, 2026	Radiation (03CH02-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18Ghz-40GHz	Apr. 03, 2025	Nov. 20, 2025~Dec. 11, 2025	Apr. 02, 2027	Radiation (03CH02-SZ)
LF Amplifier	EM Electronics	EM330	060788	20MHz-3GHz	Dec. 25, 2024	Nov. 20, 2025~Dec. 11, 2025	Dec. 24, 2025	Radiation (03CH02-SZ)
HF Amplifier	KEYSIGHT	83017A	MY53270105	0.5GHz~26.5Ghz	Oct. 14, 2025	Nov. 20, 2025~Dec. 11, 2025	Oct. 13, 2026	Radiation (03CH02-SZ)
AC Power Source	Chroma	61601	616010003043	N/A	Oct. 18, 2025	Nov. 20, 2025~Dec. 11, 2025	Oct. 17, 2026	Radiation (03CH02-SZ)
Turn Table	Chaintek	T-200	N/A	0~360 degree	NCR	Nov. 20, 2025~Dec. 11, 2025	NCR	Radiation (03CH02-SZ)
Antenna Mast	Chaintek	MBS-400	N/A	1 m~4 m	NCR	Nov. 20, 2025~Dec. 11, 2025	NCR	Radiation (03CH02-SZ)

NCR: No Calibration Required



6 Measurement Uncertainty

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI 63.26-2015. All the measurement uncertainty value were shown with a coverage K=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

Uncertainty of Conducted Measurement

Test Item	Uncertainty
Conducted Power	±1.34 dB

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.47dB
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Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.31dB
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Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.72dB
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----- THE END -----



Appendix A. Test Results of Conducted Test

Test Engineer :	Khan Zhen	Temperature :	22~23°C
		Relative Humidity :	40~42%

Conducted Output Power(Average power) and ERP/EIRP

LTE Cat M1:

LTE Band 2:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP(W)		
Channel				18700	18900	19100			
Frequency (MHz)				1860	1880	1900	L	M	H
20	QPSK	1	0	19.94	19.87	19.85	0.2208	0.2173	0.2163
20	QPSK	1	5	19.85	19.83	19.85	0.2163	0.2153	0.2163
20	QPSK	3	0	19.78	19.76	19.68	0.2128	0.2118	0.2080
20	QPSK	3	3	19.66	19.73	19.70	0.2070	0.2104	0.2089
20	QPSK	6	0	19.66	19.75	19.78	0.2070	0.2113	0.2128
20	16QAM	1	0	19.47	19.53	19.61	0.1982	0.2009	0.2046
20	16QAM	1	5	19.16	19.10	19.08	0.1845	0.1820	0.1811
20	16QAM	3	0	19.61	19.57	19.53	0.2046	0.2028	0.2009
20	16QAM	3	3	19.41	19.44	19.52	0.1954	0.1968	0.2004
20	16QAM	5	0	19.59	19.61	19.55	0.2037	0.2046	0.2018
Channel				18675	18900	19125	EIRP(W)		
Frequency (MHz)				1857.5	1880	1902.5	L	M	H
15	QPSK	1	0	19.80	19.77	19.79	0.2138	0.2123	0.2133
15	QPSK	1	5	19.78	19.76	19.77	0.2128	0.2118	0.2123
15	QPSK	3	0	19.72	19.71	19.66	0.2099	0.2094	0.2070
15	QPSK	3	3	19.59	19.59	19.67	0.2037	0.2037	0.2075
15	QPSK	6	0	19.60	19.68	19.77	0.2042	0.2080	0.2123
15	16QAM	1	0	19.33	19.39	19.56	0.1919	0.1945	0.2023
15	16QAM	1	5	19.05	19.02	19.00	0.1799	0.1786	0.1778
15	16QAM	3	0	19.49	19.57	19.43	0.1991	0.2028	0.1963
15	16QAM	3	3	19.36	19.44	19.53	0.1932	0.1968	0.2009
15	16QAM	5	0	19.47	19.60	19.46	0.1982	0.2042	0.1977
Channel				18650	18900	19150	EIRP(W)		
Frequency (MHz)				1855	1880	1905	L	M	H
10	QPSK	1	0	19.84	19.84	19.84	0.2158	0.2158	0.2158
10	QPSK	1	5	19.85	19.84	19.80	0.2163	0.2158	0.2138
10	QPSK	3	0	19.92	19.81	19.71	0.2198	0.2143	0.2094
10	QPSK	3	3	19.94	19.72	19.72	0.2208	0.2099	0.2099
10	QPSK	6	0	18.72	18.75	18.70	0.1667	0.1679	0.1660



10	16QAM	1	0	19.83	19.84	19.81	0.2153	0.2158	0.2143
10	16QAM	1	5	19.94	19.87	19.82	0.2208	0.2173	0.2148
10	16QAM	3	0	19.83	19.81	19.77	0.2153	0.2143	0.2123
10	16QAM	3	3	19.94	19.87	19.72	0.2208	0.2173	0.2099
10	16QAM	5	0	18.65	18.62	18.65	0.1641	0.1629	0.1641
Channel				18625	18900	19175	EIRP(W)		
Frequency (MHz)				1852.5	1880	1907.5	L	M	H
5	QPSK	1	0	19.91	19.84	19.74	0.2193	0.2158	0.2109
5	QPSK	1	5	19.81	19.73	19.72	0.2143	0.2104	0.2099
5	QPSK	3	0	18.60	18.60	18.55	0.1622	0.1622	0.1603
5	QPSK	3	3	18.64	18.61	18.60	0.1637	0.1626	0.1622
5	QPSK	6	0	18.65	18.72	18.69	0.1641	0.1667	0.1656
5	16QAM	1	0	19.86	19.86	19.80	0.2168	0.2168	0.2138
5	16QAM	1	5	19.80	19.74	19.78	0.2138	0.2109	0.2128
5	16QAM	3	0	18.62	18.69	18.62	0.1629	0.1656	0.1629
5	16QAM	3	3	18.62	18.69	18.62	0.1629	0.1656	0.1629
5	16QAM	5	0	17.72	17.76	17.74	0.1324	0.1337	0.1330
Channel				18615	18900	19185	EIRP(W)		
Frequency (MHz)				1851.5	1880	1908.5	L	M	H
3	QPSK	1	0	19.90	19.76	19.79	0.2188	0.2118	0.2133
3	QPSK	1	5	19.79	19.73	19.81	0.2133	0.2104	0.2143
3	QPSK	3	0	18.68	18.67	18.66	0.1652	0.1648	0.1644
3	QPSK	3	3	18.59	18.61	18.58	0.1618	0.1626	0.1614
3	QPSK	6	0	17.65	17.70	17.66	0.1303	0.1318	0.1306
3	16QAM	1	0	18.73	18.62	18.62	0.1671	0.1629	0.1629
3	16QAM	1	5	18.70	18.74	18.56	0.1660	0.1675	0.1607
3	16QAM	3	0	17.69	17.62	17.65	0.1315	0.1294	0.1303
3	16QAM	3	3	17.66	17.68	17.63	0.1306	0.1312	0.1297
3	16QAM	5	0	17.60	17.76	17.65	0.1288	0.1337	0.1303
Channel				18607	18900	19193	EIRP(W)		
Frequency (MHz)				1850.7	1880	1909.3	L	M	H
1.4	QPSK	1	0	19.80	19.79	19.73	0.2138	0.2133	0.2104
1.4	QPSK	1	5	19.82	19.80	19.74	0.2148	0.2138	0.2109
1.4	QPSK	3	0	18.59	18.67	18.57	0.1618	0.1648	0.1611
1.4	QPSK	3	3	18.71	18.74	18.66	0.1663	0.1675	0.1644
1.4	QPSK	6	0	17.58	17.62	17.60	0.1282	0.1294	0.1288
1.4	16QAM	1	0	18.60	18.70	18.59	0.1622	0.1660	0.1618
1.4	16QAM	1	5	18.73	18.63	18.59	0.1671	0.1633	0.1618
1.4	16QAM	3	0	17.69	17.62	17.67	0.1315	0.1294	0.1309
1.4	16QAM	3	3	17.66	17.76	17.69	0.1306	0.1337	0.1315
1.4	16QAM	5	0	17.59	17.66	17.62	0.1285	0.1306	0.1294



LTE Band 4:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP(W)		
Channel				20050	20175	20300			
Frequency (MHz)				1720	1732.5	1745	L	M	H
20	QPSK	1	0	19.80	19.88	19.86	0.2138	0.2178	0.2168
20	QPSK	1	5	19.45	19.55	19.58	0.1972	0.2018	0.2032
20	QPSK	3	0	19.74	19.76	19.70	0.2109	0.2118	0.2089
20	QPSK	3	3	19.74	19.75	19.76	0.2109	0.2113	0.2118
20	QPSK	6	0	19.72	19.74	19.76	0.2099	0.2109	0.2118
20	16QAM	1	0	19.46	19.55	19.54	0.1977	0.2018	0.2014
20	16QAM	1	5	19.23	19.30	19.28	0.1875	0.1905	0.1897
20	16QAM	3	0	19.60	19.59	19.53	0.2042	0.2037	0.2009
20	16QAM	3	3	19.56	19.55	19.60	0.2023	0.2018	0.2042
20	16QAM	5	0	19.57	19.64	19.68	0.2028	0.2061	0.2080
Channel				20025	20175	20325	EIRP(W)		
Frequency (MHz)				1717.5	1732.5	1747.5	L	M	H
15	QPSK	1	0	19.66	19.73	19.87	0.2070	0.2104	0.2173
15	QPSK	1	5	19.40	19.53	19.51	0.1950	0.2009	0.2000
15	QPSK	3	0	19.65	19.66	19.71	0.2065	0.2070	0.2094
15	QPSK	3	3	19.68	19.61	19.71	0.2080	0.2046	0.2094
15	QPSK	6	0	19.65	19.71	19.70	0.2065	0.2094	0.2089
15	16QAM	1	0	19.47	19.45	19.51	0.1982	0.1972	0.2000
15	16QAM	1	5	19.21	19.30	19.25	0.1866	0.1905	0.1884
15	16QAM	3	0	19.54	19.45	19.54	0.2014	0.1972	0.2014
15	16QAM	3	3	19.41	19.41	19.47	0.1954	0.1954	0.1982
15	16QAM	5	0	19.42	19.61	19.62	0.1959	0.2046	0.2051
Channel				20000	20175	20350	EIRP(W)		
Frequency (MHz)				1715	1732.5	1750	L	M	H
10	QPSK	1	0	19.68	19.88	19.84	0.2080	0.2178	0.2158
10	QPSK	1	5	19.66	19.87	19.75	0.2070	0.2173	0.2113
10	QPSK	3	0	19.72	19.89	19.74	0.2099	0.2183	0.2109
10	QPSK	3	3	19.73	19.87	19.77	0.2104	0.2173	0.2123
10	QPSK	6	0	19.10	19.02	19.05	0.1820	0.1786	0.1799
10	16QAM	1	0	19.74	19.77	19.74	0.2109	0.2123	0.2109
10	16QAM	1	5	19.76	19.78	19.77	0.2118	0.2128	0.2123
10	16QAM	3	0	19.73	19.84	19.83	0.2104	0.2158	0.2153
10	16QAM	3	3	19.76	19.79	19.78	0.2118	0.2133	0.2128
10	16QAM	5	0	19.10	18.96	19.00	0.1820	0.1762	0.1778
Channel				19975	20175	20375	EIRP(W)		
Frequency (MHz)				1712.5	1732.5	1752.5	L	M	H
5	QPSK	1	0	19.69	19.78	19.73	0.2084	0.2128	0.2104
5	QPSK	1	5	19.71	19.78	19.82	0.2094	0.2128	0.2148



5	QPSK	3	0	18.97	18.98	18.90	0.1766	0.1770	0.1738
5	QPSK	3	3	18.98	18.96	19.01	0.1770	0.1762	0.1782
5	QPSK	6	0	18.96	18.92	18.95	0.1762	0.1746	0.1758
5	16QAM	1	0	19.77	19.75	19.87	0.2123	0.2113	0.2173
5	16QAM	1	5	19.68	19.73	19.74	0.2080	0.2104	0.2109
5	16QAM	3	0	19.11	19.03	19.03	0.1824	0.1791	0.1791
5	16QAM	3	3	18.98	18.91	18.90	0.1770	0.1742	0.1738
5	16QAM	5	0	18.01	18.05	18.03	0.1416	0.1429	0.1422
Channel				19965	20175	20385	EIRP(W)		
Frequency (MHz)				1711.5	1732.5	1753.5	L	M	H
3	QPSK	1	0	19.73	19.78	19.78	0.2104	0.2128	0.2128
3	QPSK	1	5	19.79	19.78	19.76	0.2133	0.2128	0.2118
3	QPSK	3	0	19.09	18.98	18.91	0.1816	0.1770	0.1742
3	QPSK	3	3	19.05	18.98	18.91	0.1799	0.1770	0.1742
3	QPSK	6	0	17.86	17.98	17.97	0.1368	0.1406	0.1403
3	16QAM	1	0	19.00	18.90	18.92	0.1778	0.1738	0.1746
3	16QAM	1	5	18.96	18.99	18.97	0.1762	0.1774	0.1766
3	16QAM	3	0	17.92	18.03	17.90	0.1387	0.1422	0.1380
3	16QAM	3	3	17.88	18.02	17.93	0.1374	0.1419	0.1390
3	16QAM	5	0	17.90	17.93	17.93	0.1380	0.1390	0.1390
Channel				19950	20175	20393	EIRP(W)		
Frequency (MHz)				1710	1732.5	1754.3	L	M	H
1.4	QPSK	1	0	19.68	19.81	19.73	0.2080	0.2143	0.2104
1.4	QPSK	1	5	19.75	19.78	19.76	0.2113	0.2128	0.2118
1.4	QPSK	3	0	18.96	18.93	19.04	0.1762	0.1750	0.1795
1.4	QPSK	3	3	19.00	18.91	19.04	0.1778	0.1742	0.1795
1.4	QPSK	6	0	17.96	17.97	18.04	0.1400	0.1403	0.1426
1.4	16QAM	1	0	19.07	18.94	18.90	0.1807	0.1754	0.1738
1.4	16QAM	1	5	18.96	18.98	18.92	0.1762	0.1770	0.1746
1.4	16QAM	3	0	17.92	18.06	17.89	0.1387	0.1432	0.1377
1.4	16QAM	3	3	17.96	18.03	18.00	0.1400	0.1422	0.1413
1.4	16QAM	5	0	17.88	17.96	17.94	0.1374	0.1400	0.1393



LTE Band 5:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	ERP(W)		
Channel				20450	20525	20600			
Frequency (MHz)				829	836.5	844	L	M	H
10	QPSK	1	0	20.04	20.03	19.88	0.0889	0.0887	0.0857
10	QPSK	1	5	19.83	19.99	20.00	0.0847	0.0879	0.0881
10	QPSK	3	0	20.19	20.19	20.09	0.0920	0.0920	0.0899
10	QPSK	3	3	20.07	20.14	20.07	0.0895	0.0910	0.0895
10	QPSK	6	0	19.95	19.96	20.03	0.0871	0.0873	0.0887
10	16QAM	1	0	20.05	20.11	20.00	0.0891	0.0904	0.0881
10	16QAM	1	5	19.82	19.75	19.66	0.0845	0.0832	0.0815
10	16QAM	3	0	20.19	20.24	20.30	0.0920	0.0931	0.0944
10	16QAM	3	3	20.26	20.26	20.28	0.0935	0.0935	0.0940
10	16QAM	5	0	20.15	20.18	20.29	0.0912	0.0918	0.0942
Channel				20425	20525	20625	ERP(W)		
Frequency (MHz)				826.5	836.5	846.5	L	M	H
5	QPSK	1	0	20.00	19.98	19.86	0.0881	0.0877	0.0853
5	QPSK	1	5	20.03	19.95	19.87	0.0887	0.0871	0.0855
5	QPSK	3	0	19.86	19.92	19.88	0.0853	0.0865	0.0857
5	QPSK	3	3	19.81	19.81	19.89	0.0843	0.0843	0.0859
5	QPSK	6	0	19.93	19.84	19.90	0.0867	0.0849	0.0861
5	16QAM	1	0	20.02	20.04	19.80	0.0885	0.0889	0.0841
5	16QAM	1	5	20.02	20.04	19.81	0.0885	0.0889	0.0843
5	16QAM	3	0	19.84	19.95	20.02	0.0849	0.0871	0.0885
5	16QAM	3	3	19.95	19.90	20.01	0.0871	0.0861	0.0883
5	16QAM	5	0	18.93	18.95	18.91	0.0689	0.0692	0.0685
Channel				20415	20525	20635	ERP(W)		
Frequency (MHz)				825.5	836.5	847.5	L	M	H
3	QPSK	1	0	20.01	19.94	19.77	0.0883	0.0869	0.0836
3	QPSK	1	5	19.91	20.01	19.76	0.0863	0.0883	0.0834
3	QPSK	3	0	19.87	19.95	19.93	0.0855	0.0871	0.0867
3	QPSK	3	3	19.92	19.81	20.00	0.0865	0.0843	0.0881
3	QPSK	6	0	18.92	18.82	18.78	0.0687	0.0671	0.0665
3	16QAM	1	0	19.87	19.88	19.92	0.0855	0.0857	0.0865
3	16QAM	1	5	19.84	19.93	20.00	0.0849	0.0867	0.0881
3	16QAM	3	0	18.94	18.95	18.82	0.0690	0.0692	0.0671
3	16QAM	3	3	18.94	18.93	18.78	0.0690	0.0689	0.0665
3	16QAM	5	0	18.92	18.94	18.86	0.0687	0.0690	0.0678
Channel				20407	20525	20643	ERP(W)		
Frequency (MHz)				824.7	836.5	848.3	L	M	H
1.4	QPSK	1	0	19.94	19.88	19.86	0.0869	0.0857	0.0853
1.4	QPSK	1	5	20.05	20.01	19.87	0.0891	0.0883	0.0855



1.4	QPSK	3	0	19.93	19.87	19.94	0.0867	0.0855	0.0869
1.4	QPSK	3	3	19.83	19.94	19.99	0.0847	0.0869	0.0879
1.4	QPSK	6	0	18.92	18.93	18.82	0.0687	0.0689	0.0671
1.4	16QAM	1	0	19.82	19.97	19.88	0.0845	0.0875	0.0857
1.4	16QAM	1	5	19.93	19.87	20.01	0.0867	0.0855	0.0883
1.4	16QAM	3	0	18.94	18.95	18.83	0.0690	0.0692	0.0673
1.4	16QAM	3	3	18.94	18.89	18.92	0.0690	0.0682	0.0687
1.4	16QAM	5	0	18.83	18.93	18.91	0.0673	0.0689	0.0685

LTE Band 12:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	ERP(W)		
Channel				23060	23095	23130			
Frequency (MHz)				704	707.5	711	L	M	H
10	QPSK	1	0	20.18	20.15	20.15	0.0697	0.0692	0.0692
10	QPSK	1	5	19.95	19.93	19.93	0.0661	0.0658	0.0658
10	QPSK	3	0	20.37	20.32	20.41	0.0728	0.0719	0.0735
10	QPSK	3	3	20.32	20.34	20.20	0.0719	0.0723	0.0700
10	QPSK	6	0	19.48	19.38	19.40	0.0593	0.0579	0.0582
10	16QAM	1	0	20.17	20.23	20.22	0.0695	0.0705	0.0703
10	16QAM	1	5	19.96	19.94	20.06	0.0662	0.0659	0.0678
10	16QAM	3	0	20.40	20.45	20.42	0.0733	0.0741	0.0736
10	16QAM	3	3	20.42	20.33	20.43	0.0736	0.0721	0.0738
10	16QAM	5	0	20.41	20.40	20.31	0.0735	0.0733	0.0718
Channel				23035	23095	23155	ERP(W)		
Frequency (MHz)				701.5	707.5	713.5	L	M	H
5	QPSK	1	0	20.16	20.13	20.16	0.0693	0.0689	0.0693
5	QPSK	1	5	20.11	20.12	20.06	0.0685	0.0687	0.0678
5	QPSK	3	0	19.34	19.32	19.31	0.0574	0.0571	0.0570
5	QPSK	3	3	19.33	19.37	19.32	0.0573	0.0578	0.0571
5	QPSK	6	0	19.46	19.33	19.26	0.0590	0.0573	0.0564
5	16QAM	1	0	20.19	20.07	20.04	0.0698	0.0679	0.0675
5	16QAM	1	5	20.18	20.15	20.13	0.0697	0.0692	0.0689
5	16QAM	3	0	19.48	19.37	19.33	0.0593	0.0578	0.0573
5	16QAM	3	3	19.35	19.37	19.40	0.0575	0.0578	0.0582
5	16QAM	5	0	18.43	18.45	18.40	0.0466	0.0468	0.0462
Channel				23025	23095	23165	ERP(W)		
Frequency (MHz)				700.5	707.5	714.5	L	M	H
3	QPSK	1	0	20.17	20.12	20.16	0.0695	0.0687	0.0693
3	QPSK	1	5	20.10	20.07	20.05	0.0684	0.0679	0.0676
3	QPSK	3	0	19.42	19.24	19.32	0.0585	0.0561	0.0571
3	QPSK	3	3	19.33	19.25	19.25	0.0573	0.0562	0.0562
3	QPSK	6	0	18.31	18.36	18.32	0.0453	0.0458	0.0454



3	16QAM	1	0	19.34	19.30	19.38	0.0574	0.0569	0.0579
3	16QAM	1	5	19.34	19.27	19.27	0.0574	0.0565	0.0565
3	16QAM	3	0	18.42	18.37	18.31	0.0465	0.0459	0.0453
3	16QAM	3	3	18.41	18.34	18.31	0.0463	0.0456	0.0453
3	16QAM	5	0	18.28	18.31	18.34	0.0450	0.0453	0.0456
Channel				23017	23095	23173	ERP(W)		
Frequency (MHz)				699.7	707.5	715.3	L	M	H
1.4	QPSK	1	0	20.12	20.03	20.03	0.0687	0.0673	0.0673
1.4	QPSK	1	5	20.15	20.09	20.04	0.0692	0.0682	0.0675
1.4	QPSK	3	0	19.34	19.35	19.33	0.0574	0.0575	0.0573
1.4	QPSK	3	3	19.43	19.34	19.30	0.0586	0.0574	0.0569
1.4	QPSK	6	0	18.43	18.32	18.26	0.0466	0.0454	0.0448
1.4	16QAM	1	0	19.36	19.35	19.25	0.0577	0.0575	0.0562
1.4	16QAM	1	5	19.39	19.36	19.30	0.0581	0.0577	0.0569
1.4	16QAM	3	0	18.38	18.44	18.25	0.0460	0.0467	0.0447
1.4	16QAM	3	3	18.32	18.37	18.31	0.0454	0.0459	0.0453
1.4	16QAM	5	0	18.34	18.35	18.38	0.0456	0.0457	0.0460

LTE Band 13:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	ERP(W)		
Channel				23230					
Frequency (MHz)				782				M	
10	QPSK	1	0		20.09			0.0682	
10	QPSK	1	5		19.82			0.0641	
10	QPSK	3	0		20.24			0.0706	
10	QPSK	3	3		20.19			0.0698	
10	QPSK	6	0		19.30			0.0569	
10	16QAM	1	0		20.11			0.0685	
10	16QAM	1	5		19.86			0.0647	
10	16QAM	3	0		20.30			0.0716	
10	16QAM	3	3		20.28			0.0713	
10	16QAM	5	0		20.26			0.0710	
Channel				23205	23230	23255	ERP(W)		
Frequency (MHz)				779.5	782	784.5	L	M	H
5	QPSK	1	0	19.96	20.03	20.00	0.0662	0.0673	0.0668
5	QPSK	1	5	20.00	19.94	19.97	0.0668	0.0659	0.0664
5	QPSK	3	0	19.17	19.25	19.23	0.0552	0.0562	0.0560
5	QPSK	3	3	19.18	19.19	19.30	0.0553	0.0555	0.0569
5	QPSK	6	0	19.31	19.25	19.23	0.0570	0.0562	0.0560
5	16QAM	1	0	20.10	19.97	19.96	0.0684	0.0664	0.0662
5	16QAM	1	5	19.96	20.03	19.96	0.0662	0.0673	0.0662
5	16QAM	3	0	19.15	19.25	19.20	0.0550	0.0562	0.0556



5	16QAM	3	3	19.27	19.25	19.27	0.0565	0.0562	0.0565
5	16QAM	5	0	18.29	18.32	18.27	0.0451	0.0454	0.0449

LTE Band 25:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP(W)		
Channel				26140	26340	26590			
Frequency (MHz)				1860	1880	1905	L	M	H
20	QPSK	1	0	17.63	17.54	17.55	0.1297	0.1271	0.1274
20	QPSK	1	5	17.39	17.39	17.31	0.1227	0.1227	0.1205
20	QPSK	3	0	17.68	17.64	17.58	0.1312	0.1300	0.1282
20	QPSK	3	3	17.61	17.49	17.46	0.1291	0.1256	0.1247
20	QPSK	6	0	17.76	17.52	17.60	0.1337	0.1265	0.1288
20	16QAM	1	0	17.63	17.45	17.38	0.1297	0.1245	0.1225
20	16QAM	1	5	17.40	17.21	17.14	0.1230	0.1178	0.1159
20	16QAM	3	0	17.76	17.65	17.78	0.1337	0.1303	0.1343
20	16QAM	3	3	17.61	17.58	17.62	0.1291	0.1282	0.1294
20	16QAM	5	0	17.51	17.62	17.58	0.1262	0.1294	0.1282
Channel				26115	26340	26615	EIRP(W)		
Frequency (MHz)				1857.5	1880	1907.5	L	M	H
15	QPSK	1	0	17.57	17.62	17.55	0.1279	0.1294	0.1274
15	QPSK	1	5	17.60	17.58	17.60	0.1288	0.1282	0.1288
15	QPSK	3	0	17.62	17.64	17.58	0.1294	0.1300	0.1282
15	QPSK	3	3	17.51	17.47	17.46	0.1262	0.1250	0.1247
15	QPSK	6	0	16.58	16.55	16.53	0.1019	0.1012	0.1007
15	16QAM	1	0	17.28	17.24	17.26	0.1197	0.1186	0.1191
15	16QAM	1	5	17.20	17.22	17.29	0.1175	0.1180	0.1199
15	16QAM	3	0	17.57	17.56	17.55	0.1279	0.1276	0.1274
15	16QAM	3	3	17.32	17.30	17.33	0.1208	0.1202	0.1211
15	16QAM	5	0	17.47	17.49	17.50	0.1250	0.1256	0.1259
Channel				26090	26340	26640	EIRP(W)		
Frequency (MHz)				1855	1880	1910	L	M	H
10	QPSK	1	0	17.48	17.55	17.48	0.1253	0.1274	0.1253
10	QPSK	1	5	17.54	17.48	17.46	0.1271	0.1253	0.1247
10	QPSK	3	0	17.71	17.61	17.64	0.1321	0.1291	0.1300
10	QPSK	3	3	17.44	17.48	17.53	0.1242	0.1253	0.1268
10	QPSK	6	0	16.41	16.53	16.58	0.0979	0.1007	0.1019
10	16QAM	1	0	17.26	17.37	17.44	0.1191	0.1222	0.1242
10	16QAM	1	5	17.21	17.15	17.03	0.1178	0.1161	0.1130
10	16QAM	3	0	17.34	17.43	17.42	0.1213	0.1239	0.1236
10	16QAM	3	3	17.18	17.28	17.18	0.1169	0.1197	0.1169
10	16QAM	5	0	17.29	17.33	17.34	0.1199	0.1211	0.1213
Channel				26065	26340	26665	EIRP(W)		



Frequency (MHz)				1852.5	1880	1912.5	L	M	H
5	QPSK	1	0	17.53	17.49	17.43	0.1268	0.1256	0.1239
5	QPSK	1	5	17.51	17.47	17.50	0.1262	0.1250	0.1259
5	QPSK	3	0	17.66	17.61	17.56	0.1306	0.1291	0.1276
5	QPSK	3	3	17.37	17.41	17.52	0.1222	0.1233	0.1265
5	QPSK	6	0	16.28	16.27	16.20	0.0951	0.0948	0.0933
5	16QAM	1	0	17.28	17.29	17.27	0.1197	0.1199	0.1194
5	16QAM	1	5	17.20	17.06	17.16	0.1175	0.1138	0.1164
5	16QAM	3	0	17.17	17.21	17.20	0.1167	0.1178	0.1175
5	16QAM	3	3	17.21	17.23	17.07	0.1178	0.1183	0.1140
5	16QAM	5	0	16.35	16.33	16.26	0.0966	0.0962	0.0946
Channel				26055	26340	26675	EIRP(W)		
Frequency (MHz)				1851.5	1880	1913.5	L	M	H
3	QPSK	1	0	17.54	17.51	17.48	0.1271	0.1262	0.1253
3	QPSK	1	5	17.53	17.54	17.44	0.1268	0.1271	0.1242
3	QPSK	3	0	16.66	16.58	16.62	0.1038	0.1019	0.1028
3	QPSK	3	3	16.42	16.54	16.52	0.0982	0.1009	0.1005
3	QPSK	6	0	15.37	15.32	15.32	0.0771	0.0762	0.0762
3	16QAM	1	0	16.53	16.54	16.55	0.1007	0.1009	0.1012
3	16QAM	1	5	16.31	16.27	16.24	0.0957	0.0948	0.0942
3	16QAM	3	0	15.76	15.79	15.81	0.0843	0.0849	0.0853
3	16QAM	3	3	15.72	15.68	15.61	0.0836	0.0828	0.0815
3	16QAM	5	0	15.59	15.52	15.52	0.0811	0.0798	0.0798
Channel				26047	26340	26683	EIRP(W)		
Frequency (MHz)				1850.7	1880	1914.3	L	M	H
1.4	QPSK	1	0	17.57	17.61	17.52	0.1279	0.1291	0.1265
1.4	QPSK	1	5	17.54	17.49	17.54	0.1271	0.1256	0.1271
1.4	QPSK	3	0	16.58	16.62	16.55	0.1019	0.1028	0.1012
1.4	QPSK	3	3	16.36	16.49	16.47	0.0968	0.0998	0.0993
1.4	QPSK	6	0	15.54	15.48	15.42	0.0802	0.0791	0.0780
1.4	16QAM	1	0	16.52	16.58	16.60	0.1005	0.1019	0.1023
1.4	16QAM	1	5	16.44	16.38	16.36	0.0986	0.0973	0.0968
1.4	16QAM	3	0	15.80	15.87	15.83	0.0851	0.0865	0.0857
1.4	16QAM	3	3	15.51	15.62	15.53	0.0796	0.0817	0.0800
1.4	16QAM	5	0	15.53	15.47	15.46	0.0800	0.0789	0.0787



LTE Band 26:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	ERP(W)			
Channel				26790	26865	26915	26965				
Frequency (MHz)				824	831.5	836.5	841.5	Straddle Ch	L	M	H
15	QPSK	1	0	19.60	19.90	19.94	19.94	0.0804	0.0861	0.0869	0.0869
15	QPSK	1	5	19.55	19.92	19.93	19.90	0.0794	0.0865	0.0867	0.0861
15	QPSK	3	0	19.53	20.09	20.15	20.25	0.0791	0.0899	0.0912	0.0933
15	QPSK	3	3	19.44	19.98	20.07	20.13	0.0774	0.0877	0.0895	0.0908
15	QPSK	6	0	19.52	20.02	20.05	20.09	0.0789	0.0885	0.0891	0.0899
15	16QAM	1	0	19.44	19.96	20.03	20.13	0.0774	0.0873	0.0887	0.0908
15	16QAM	1	5	19.65	19.81	19.76	19.71	0.0813	0.0843	0.0834	0.0824
15	16QAM	3	0	19.70	20.31	20.26	20.20	0.0822	0.0946	0.0935	0.0923
15	16QAM	3	3	19.62	20.14	20.07	20.08	0.0807	0.0910	0.0895	0.0897
15	16QAM	5	0	19.55	19.91	20.00	19.92	0.0794	0.0863	0.0881	0.0865
Channel				26790	26840	26915	26990	ERP(W)			
Frequency (MHz)				824	829	836.5	844	Straddle Ch	L	M	H
10	QPSK	1	0		19.86	19.81	19.80		0.0853	0.0843	0.0841
10	QPSK	1	5		19.78	19.93	19.90		0.0838	0.0867	0.0861
10	QPSK	3	0		19.81	19.89	19.82		0.0843	0.0859	0.0845
10	QPSK	3	3		19.89	19.83	19.81		0.0859	0.0847	0.0843
10	QPSK	6	0		18.95	18.98	18.93		0.0692	0.0697	0.0689
10	16QAM	1	0		19.75	19.93	19.83		0.0832	0.0867	0.0847
10	16QAM	1	5		19.84	19.80	19.80		0.0849	0.0841	0.0841
10	16QAM	3	0		19.85	19.85	19.89		0.0851	0.0851	0.0859
10	16QAM	3	3		19.82	19.88	19.85		0.0845	0.0857	0.0851
10	16QAM	5	0		18.84	18.95	18.85		0.0675	0.0692	0.0676
Channel				26790	26815	26915	27015	ERP(W)			
Frequency (MHz)				824	826.5	836.5	846.5	Straddle Ch	L	M	H
5	QPSK	1	0		19.91	19.87	19.93		0.0863	0.0855	0.0867
5	QPSK	1	5		19.91	19.86	19.81		0.0863	0.0853	0.0843
5	QPSK	3	0		18.81	18.87	18.85		0.0670	0.0679	0.0676
5	QPSK	3	3		18.87	18.93	18.87		0.0679	0.0689	0.0679
5	QPSK	6	0		18.80	18.88	18.89		0.0668	0.0681	0.0682
5	16QAM	1	0		19.82	19.94	19.80		0.0845	0.0869	0.0841
5	16QAM	1	5		19.83	19.82	19.87		0.0847	0.0845	0.0855
5	16QAM	3	0		18.87	18.90	18.88		0.0679	0.0684	0.0681
5	16QAM	3	3		18.87	18.96	18.85		0.0679	0.0693	0.0676
5	16QAM	5	0		17.98	18.00	17.97		0.0553	0.0556	0.0552
Channel				26790	26815	26915	27025	ERP(W)			
Frequency (MHz)				824	825.5	836.5	847.5	Straddle Ch	L	M	H
3	QPSK	1	0		19.90	19.95	19.79		0.0861	0.0871	0.0839



3	QPSK	1	5		19.85	19.95	19.90		0.0851	0.0871	0.0861
3	QPSK	3	0		18.84	18.95	18.90		0.0675	0.0692	0.0684
3	QPSK	3	3		18.96	18.85	18.94		0.0693	0.0676	0.0690
3	QPSK	6	0		17.90	17.94	17.97		0.0543	0.0548	0.0552
3	16QAM	1	0		18.95	18.88	18.83		0.0692	0.0681	0.0673
3	16QAM	1	5		18.89	18.99	18.78		0.0682	0.0698	0.0665
3	16QAM	3	0		17.98	17.97	17.95		0.0553	0.0552	0.0550
3	16QAM	3	3		17.92	17.99	17.96		0.0546	0.0555	0.0551
3	16QAM	5	0		17.87	17.85	17.93		0.0540	0.0537	0.0547
Channel				26790	26797	26915	27033	ERP(W)			
Frequency (MHz)				824	824.7	836.5	848.3	Straddle Ch	L	M	H
1.4	QPSK	1	0		19.91	19.88	19.81		0.0863	0.0857	0.0843
1.4	QPSK	1	5		19.88	19.82	19.79		0.0857	0.0845	0.0839
1.4	QPSK	3	0		18.88	18.97	18.79		0.0681	0.0695	0.0667
1.4	QPSK	3	3		18.96	18.83	18.80		0.0693	0.0673	0.0668
1.4	QPSK	6	0		17.83	17.94	17.85		0.0535	0.0548	0.0537
1.4	16QAM	1	0		18.88	18.98	18.78		0.0681	0.0697	0.0665
1.4	16QAM	1	5		18.94	18.92	18.86		0.0690	0.0687	0.0678
1.4	16QAM	3	0		17.93	17.87	17.96		0.0547	0.0540	0.0551
1.4	16QAM	3	3		17.86	17.85	17.98		0.0538	0.0537	0.0553
1.4	16QAM	5	0		17.85	18.01	17.84		0.0537	0.0557	0.0536

LTE Band 66:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP(W)			
Channel				132072	132322	132572				
Frequency (MHz)				1720	1745	1770	L	M	H	
20	QPSK	1	0	19.77	19.78	19.73	0.2123	0.2128	0.2104	
20	QPSK	1	5	19.60	19.60	19.69	0.2042	0.2042	0.2084	
20	QPSK	3	0	19.94	19.92	19.98	0.2208	0.2198	0.2228	
20	QPSK	3	3	19.84	19.76	19.67	0.2158	0.2118	0.2075	
20	QPSK	6	0	19.78	19.68	19.75	0.2128	0.2080	0.2113	
20	16QAM	1	0	19.54	19.57	19.63	0.2014	0.2028	0.2056	
20	16QAM	1	5	19.45	19.41	19.35	0.1972	0.1954	0.1928	
20	16QAM	3	0	19.77	19.70	19.80	0.2123	0.2089	0.2138	
20	16QAM	3	3	19.50	19.57	19.52	0.1995	0.2028	0.2004	
20	16QAM	5	0	19.66	19.64	19.62	0.2070	0.2061	0.2051	
Channel				132047	132322	132597	EIRP(W)			
Frequency (MHz)				1717.5	1745	1772.5	L	M	H	
15	QPSK	1	0	19.67	19.77	19.68	0.2075	0.2123	0.2080	
15	QPSK	1	5	19.46	19.57	19.66	0.1977	0.2028	0.2070	
15	QPSK	3	0	19.81	19.88	19.97	0.2143	0.2178	0.2223	
15	QPSK	3	3	19.76	19.69	19.52	0.2118	0.2084	0.2004	



15	QPSK	6	0	19.73	19.67	19.71	0.2104	0.2075	0.2094
15	16QAM	1	0	19.49	19.50	19.63	0.1991	0.1995	0.2056
15	16QAM	1	5	19.35	19.42	19.34	0.1928	0.1959	0.1923
15	16QAM	3	0	19.71	19.67	19.65	0.2094	0.2075	0.2065
15	16QAM	3	3	19.37	19.42	19.46	0.1936	0.1959	0.1977
15	16QAM	5	0	19.63	19.62	19.59	0.2056	0.2051	0.2037
Channel				132022	132322	132622	EIRP(W)		
Frequency (MHz)				1715	1745	1775	L	M	H
10	QPSK	1	0	19.72	19.77	19.72	0.2099	0.2123	0.2099
10	QPSK	1	5	19.59	19.48	19.67	0.2037	0.1986	0.2075
10	QPSK	3	0	19.63	19.70	19.60	0.2056	0.2089	0.2042
10	QPSK	3	3	19.53	19.59	19.59	0.2009	0.2037	0.2037
10	QPSK	6	0	18.73	18.75	18.71	0.1671	0.1679	0.1663
10	16QAM	1	0	19.64	19.63	19.66	0.2061	0.2056	0.2070
10	16QAM	1	5	19.51	19.54	19.66	0.2000	0.2014	0.2070
10	16QAM	3	0	19.82	19.80	19.92	0.2148	0.2138	0.2198
10	16QAM	3	3	19.81	19.74	19.58	0.2143	0.2109	0.2032
10	16QAM	5	0	18.68	18.70	18.67	0.1652	0.1660	0.1648
Channel				131997	132322	132647	EIRP(W)		
Frequency (MHz)				1712.5	1745	1777.5	L	M	H
5	QPSK	1	0	19.78	19.66	19.61	0.2128	0.2070	0.2046
5	QPSK	1	5	19.53	19.47	19.56	0.2009	0.1982	0.2023
5	QPSK	3	0	18.59	18.66	18.70	0.1618	0.1644	0.1660
5	QPSK	3	3	18.66	18.75	18.64	0.1644	0.1679	0.1637
5	QPSK	6	0	18.70	18.63	18.68	0.1660	0.1633	0.1652
5	16QAM	1	0	19.69	19.70	19.62	0.2084	0.2089	0.2051
5	16QAM	1	5	19.48	19.45	19.55	0.1986	0.1972	0.2018
5	16QAM	3	0	18.61	18.76	18.68	0.1626	0.1683	0.1652
5	16QAM	3	3	18.62	18.71	18.56	0.1629	0.1663	0.1607
5	16QAM	5	0	17.78	17.80	17.77	0.1343	0.1349	0.1340
Channel				131987	132322	132657	EIRP(W)		
Frequency (MHz)				1711.5	1745	1778.5	L	M	H
3	QPSK	1	0	19.66	19.72	19.71	0.2070	0.2099	0.2094
3	QPSK	1	5	19.53	19.51	19.61	0.2009	0.2000	0.2046
3	QPSK	3	0	18.69	18.62	18.57	0.1656	0.1629	0.1611
3	QPSK	3	3	18.63	18.63	18.69	0.1633	0.1633	0.1656
3	QPSK	6	0	17.77	17.71	17.71	0.1340	0.1321	0.1321
3	16QAM	1	0	18.67	18.75	18.65	0.1648	0.1679	0.1641
3	16QAM	1	5	18.58	18.65	18.58	0.1614	0.1641	0.1614
3	16QAM	3	0	17.73	17.74	17.72	0.1327	0.1330	0.1324
3	16QAM	3	3	17.76	17.73	17.71	0.1337	0.1327	0.1321
3	16QAM	5	0	17.65	17.67	17.72	0.1303	0.1309	0.1324
Channel				131979	132322	132665	EIRP(W)		
Frequency (MHz)				1710.7	1745	1779.3	L	M	H
1.4	QPSK	1	0	19.76	19.76	19.69	0.2118	0.2118	0.2084



1.4	QPSK	1	5	19.57	19.56	19.64	0.2028	0.2023	0.2061
1.4	QPSK	3	0	18.62	18.75	18.68	0.1629	0.1679	0.1652
1.4	QPSK	3	3	18.62	18.64	18.60	0.1629	0.1637	0.1622
1.4	QPSK	6	0	17.74	17.67	17.76	0.1330	0.1309	0.1337
1.4	16QAM	1	0	18.70	18.60	18.71	0.1660	0.1622	0.1663
1.4	16QAM	1	5	18.64	18.71	18.59	0.1637	0.1663	0.1618
1.4	16QAM	3	0	17.79	17.78	17.69	0.1346	0.1343	0.1315
1.4	16QAM	3	3	17.74	17.73	17.78	0.1330	0.1327	0.1343
1.4	16QAM	5	0	17.74	17.77	17.77	0.1330	0.1340	0.1340

LTE Band 85:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	ERP(W)		
Channel				134052	134092	134132			
Frequency (MHz)				703	707	711	L	M	H
10	QPSK	1	0	19.46	19.40	19.50	0.0590	0.0582	0.0596
10	QPSK	1	5	19.21	19.26	19.33	0.0557	0.0564	0.0573
10	QPSK	3	0	19.61	19.56	19.59	0.0611	0.0604	0.0608
10	QPSK	3	3	19.50	19.53	19.63	0.0596	0.0600	0.0614
10	QPSK	6	0	18.59	18.53	18.52	0.0483	0.0476	0.0475
10	16QAM	1	0	19.20	19.27	19.19	0.0556	0.0565	0.0555
10	16QAM	1	5	18.96	19.02	19.06	0.0526	0.0533	0.0538
10	16QAM	3	0	19.69	19.67	19.74	0.0622	0.0619	0.0630
10	16QAM	3	3	19.63	19.64	19.72	0.0614	0.0615	0.0627
10	16QAM	5	0	19.85	19.80	19.71	0.0646	0.0638	0.0625
Channel				134027	134092	134207	ERP(W)		
Frequency (MHz)				700.5	707	718.5	L	M	H
5	QPSK	1	0	19.43	19.31	19.37	0.0586	0.0570	0.0578
5	QPSK	1	5	19.44	19.26	19.43	0.0587	0.0564	0.0586
5	QPSK	3	0	18.59	18.40	18.41	0.0483	0.0462	0.0463
5	QPSK	3	3	18.59	18.40	18.49	0.0483	0.0462	0.0472
5	QPSK	6	0	18.53	18.38	18.42	0.0476	0.0460	0.0465
5	16QAM	1	0	19.10	19.22	19.11	0.0543	0.0558	0.0545
5	16QAM	1	5	19.13	19.13	19.19	0.0547	0.0547	0.0555
5	16QAM	3	0	19.16	19.13	19.10	0.0551	0.0547	0.0543
5	16QAM	3	3	19.19	19.18	19.17	0.0555	0.0553	0.0552
5	16QAM	5	0	18.15	18.20	18.13	0.0437	0.0442	0.0435



NB-IOT Cat NB2:

Band 2:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP(W)		
Channel				18601	18900	19199			
Frequency (MHz)				1850.1	1880	1909.9	L	M	H
3.75	BPSK	1	0	20.13	20.21	20.12	0.2307	0.2350	0.2301
3.75	BPSK	1	47	20.01	20.10	20.03	0.2244	0.2291	0.2254
3.75	QPSK	1	0	20.09	20.15	20.12	0.2286	0.2317	0.2301
3.75	QPSK	1	47	20.10	20.11	20.10	0.2291	0.2296	0.2291
15	BPSK	1	0	20.30	20.33	20.18	0.2399	0.2415	0.2333
15	BPSK	1	11	20.18	20.31	20.18	0.2333	0.2404	0.2333
15	QPSK	1	0	20.32	20.36	20.30	0.2410	0.2432	0.2399
15	QPSK	1	11	20.27	20.32	20.19	0.2382	0.2410	0.2339
15	QPSK	12	0	18.86	18.97	18.93	0.1722	0.1766	0.1750

Band 4:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP(W)		
Channel				19951	20175	20399			
Frequency (MHz)				1710.1	1732.5	1754.9	L	M	H
3.75	BPSK	1	0	19.93	19.94	19.88	0.2203	0.2208	0.2178
3.75	BPSK	1	47	19.94	19.95	19.91	0.2208	0.2213	0.2193
3.75	QPSK	1	0	19.92	19.99	19.94	0.2198	0.2234	0.2208
3.75	QPSK	1	47	19.88	19.94	19.92	0.2178	0.2208	0.2198
15	BPSK	1	0	19.97	20.00	19.91	0.2223	0.2239	0.2193
15	BPSK	1	11	19.87	19.97	19.88	0.2173	0.2223	0.2178
15	QPSK	1	0	19.88	19.98	19.87	0.2178	0.2228	0.2173
15	QPSK	1	11	19.90	19.93	19.92	0.2188	0.2203	0.2198
15	QPSK	12	0	18.24	18.36	18.16	0.1493	0.1535	0.1466



Band 5:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	ERP(W)		
Channel				20401	20525	20649			
Frequency (MHz)				824.1	836.5	848.9	L	M	H
3.75	BPSK	1	0	20.34	20.40	20.37	0.0953	0.0966	0.0959
3.75	BPSK	1	47	20.37	20.27	20.26	0.0959	0.0938	0.0935
3.75	QPSK	1	0	20.29	20.38	20.29	0.0942	0.0962	0.0942
3.75	QPSK	1	47	20.37	20.36	20.33	0.0959	0.0957	0.0951
15	BPSK	1	0	20.30	20.20	20.33	0.0944	0.0923	0.0951
15	BPSK	1	11	20.28	20.31	20.34	0.0940	0.0946	0.0953
15	QPSK	1	0	20.33	20.35	20.30	0.0951	0.0955	0.0944
15	QPSK	1	11	20.27	20.29	20.30	0.0938	0.0942	0.0944
15	QPSK	12	0	18.60	18.74	18.61	0.0638	0.0659	0.0640

Band 12:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	ERP(W)		
Channel				23011	23095	23179			
Frequency (MHz)				699.1	707.5	715.9	L	M	H
3.75	BPSK	1	0	20.18	20.30	20.17	0.0697	0.0716	0.0695
3.75	BPSK	1	47	20.18	20.18	20.28	0.0697	0.0697	0.0713
3.75	QPSK	1	0	20.18	20.31	20.27	0.0697	0.0718	0.0711
3.75	QPSK	1	47	20.23	20.20	20.29	0.0705	0.0700	0.0714
15	BPSK	1	0	20.14	20.10	20.17	0.0690	0.0684	0.0695
15	BPSK	1	11	20.18	20.23	20.19	0.0697	0.0705	0.0698
15	QPSK	1	0	20.15	20.25	20.20	0.0692	0.0708	0.0700
15	QPSK	1	11	20.19	20.15	20.22	0.0698	0.0692	0.0703
15	QPSK	12	0	18.21	18.29	18.14	0.0443	0.0451	0.0436

Band 13:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	ERP(W)		
Channel				23181	23230	23279			
Frequency (MHz)				777.1	782	786.9		M	
3.75	BPSK	1	0	20.47	20.39	20.37	0.0745	0.0731	0.0728
3.75	BPSK	1	47	20.48	20.35	20.40	0.0746	0.0724	0.0733
3.75	QPSK	1	0	20.40	20.50	20.48	0.0733	0.0750	0.0746
3.75	QPSK	1	47	20.36	20.48	20.38	0.0726	0.0746	0.0729
15	BPSK	1	0	20.49	20.44	20.42	0.0748	0.0740	0.0736



15	BPSK	1	11	20.42	20.41	20.39	0.0736	0.0735	0.0731
15	QPSK	1	0	20.43	20.53	20.38	0.0738	0.0755	0.0729
15	QPSK	1	11	20.51	20.38	20.48	0.0752	0.0729	0.0746
15	QPSK	12	0	19.18	19.33	19.28	0.0553	0.0573	0.0566

Band 25:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP(W)		
Channel				26041	26365	26689			
Frequency (MHz)				1850.1	1882.5	1914.9	L	M	H
3.75	BPSK	1	0	18.31	18.36	18.33	0.1517	0.1535	0.1524
3.75	BPSK	1	47	18.19	18.25	18.23	0.1476	0.1496	0.1489
3.75	QPSK	1	0	18.30	18.38	18.32	0.1514	0.1542	0.1521
3.75	QPSK	1	47	18.34	18.39	18.34	0.1528	0.1545	0.1528
15	BPSK	1	0	18.37	18.36	18.31	0.1538	0.1535	0.1517
15	BPSK	1	11	18.39	18.40	18.33	0.1545	0.1549	0.1524
15	QPSK	1	0	18.55	18.56	18.54	0.1603	0.1607	0.1600
15	QPSK	1	11	18.46	18.48	18.43	0.1570	0.1578	0.1560
15	QPSK	12	0	16.68	16.71	16.66	0.1042	0.1050	0.1038

Band 66:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP(W)		
Channel				131973	132322	132671			
Frequency (MHz)				1710.1	1745	1779.9	L	M	H
3.75	BPSK	1	0	19.62	19.65	19.64	0.2051	0.2065	0.2061
3.75	BPSK	1	47	19.61	19.65	19.62	0.2046	0.2065	0.2051
3.75	QPSK	1	0	19.68	19.71	19.66	0.2080	0.2094	0.2070
3.75	QPSK	1	47	19.63	19.69	19.61	0.2056	0.2084	0.2046
15	BPSK	1	0	19.70	19.63	19.58	0.2089	0.2056	0.2032
15	BPSK	1	11	19.58	19.63	19.66	0.2032	0.2056	0.2070
15	QPSK	1	0	19.67	19.72	19.63	0.2075	0.2099	0.2056
15	QPSK	1	11	19.70	19.65	19.62	0.2089	0.2065	0.2051
15	QPSK	12	0	18.67	18.78	18.63	0.1648	0.1690	0.1633

**Band 71:**

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	ERP(W)		
Channel				133123	133297	133471			
Frequency (MHz)				663.1	680.5	697.9	L	M	H
3.75	BPSK	1	0	20.43	20.34	20.47	0.0738	0.0723	0.0745
3.75	BPSK	1	47	20.37	20.47	20.44	0.0728	0.0745	0.0740
3.75	QPSK	1	0	20.36	20.49	20.37	0.0726	0.0748	0.0728
3.75	QPSK	1	47	20.41	20.35	20.40	0.0735	0.0724	0.0733
15	BPSK	1	0	20.20	20.26	20.23	0.0700	0.0710	0.0705
15	BPSK	1	11	20.24	20.14	20.23	0.0706	0.0690	0.0705
15	QPSK	1	0	20.20	20.25	20.19	0.0700	0.0708	0.0698
15	QPSK	1	11	20.14	20.14	20.25	0.0690	0.0690	0.0708
15	QPSK	12	0	18.43	18.46	18.33	0.0466	0.0469	0.0455

Band 85:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	ERP(W)		
Channel				134003	134082	134181			
Frequency (MHz)				698.1	706	715.9	L	M	H
3.75	BPSK	1	0	20.39	20.35	20.34	0.0731	0.0724	0.0723
3.75	BPSK	1	47	20.24	20.32	20.30	0.0706	0.0719	0.0716
3.75	QPSK	1	0	20.31	20.38	20.29	0.0718	0.0729	0.0714
3.75	QPSK	1	47	20.32	20.28	20.31	0.0719	0.0713	0.0718
15	BPSK	1	0	20.34	20.41	20.42	0.0723	0.0735	0.0736
15	BPSK	1	11	20.44	20.36	20.35	0.0740	0.0726	0.0724
15	QPSK	1	0	20.40	20.45	20.38	0.0733	0.0741	0.0729
15	QPSK	1	11	20.31	20.44	20.39	0.0718	0.0740	0.0731
15	QPSK	12	0	18.56	18.55	18.43	0.0480	0.0479	0.0466



Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

Test Engineer :	HuaCong Liang	Temperature :	22~25°C
		Relative Humidity :	48~52%

LTE Cat M1:

LTE Band 25 / 20MHz / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3747	-54.19	-13	-41.19	-60.94	5.85	12.60	H
	5620.5	-58.40	-13	-45.40	-64.20	7.30	13.10	H
	7494	-55.25	-13	-42.25	-58.40	8.35	11.50	H
	3747	-51.75	-13	-38.75	-58.50	5.85	12.60	V
	5620.5	-59.35	-13	-46.35	-65.15	7.30	13.10	V
	7494	-55.56	-13	-42.56	-58.71	8.35	11.50	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE Band 26 / 15MHz / QPSK								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1672	-57.05	-13	-44.05	-60.30	4.00	9.40	H
	2510	-48.24	-13	-35.24	-51.81	4.88	10.60	H
	3346	-62.80	-13	-49.80	-67.73	5.52	12.60	H
	4182	-61.20	-13	-48.20	-65.67	6.00	12.62	H
	1672	-52.92	-13	-39.92	-56.17	4.00	9.40	V
	2510	-41.40	-13	-28.40	-44.97	4.88	10.60	V
	3346	-63.19	-13	-50.19	-68.12	5.52	12.60	V
	4182	-55.45	-13	-42.45	-59.92	6.00	12.62	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE Band 2 / 20MHz / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3742	-53.02	-13	-40.02	-59.77	5.85	12.60	H
	5613	-55.08	-13	-42.08	-60.88	7.30	13.10	H
	7484	-55.09	-13	-42.09	-58.24	8.35	11.50	H
	3742	-52.58	-13	-39.58	-59.33	5.85	12.60	V
	5613	-52.50	-13	-39.50	-58.30	7.30	13.10	V
	7484	-55.28	-13	-42.28	-58.43	8.35	11.50	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE Band 13 / 5MHz / QPSK								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1559.5	-50.84	-42.15	-8.69	-54.09	4.00	9.40	H
	2339.25	-42.82	-13	-29.82	-46.39	4.88	10.60	H
	3119	-61.09	-13	-48.09	-66.02	5.52	12.60	H
	1559.5	-48.49	-42.15	-6.34	-51.74	4.00	9.40	V
	2339.25	-33.98	-13	-20.98	-37.55	4.88	10.60	V
	3119	-60.95	-13	-47.95	-65.88	5.52	12.60	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE Band 13 / 10MHz / QPSK								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1559.5	-53.64	-42.15	-11.49	-56.89	4.00	9.40	H
	2339.25	-42.47	-13	-29.47	-46.04	4.88	10.60	H
	3119	-60.78	-13	-47.78	-65.71	5.52	12.60	H
	1559.5	-51.52	-42.15	-9.37	-54.77	4.00	9.40	V
	2339.25	-34.50	-13	-21.50	-38.07	4.88	10.60	V
	3119	-61.08	-13	-48.08	-66.01	5.52	12.60	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE Band 12 / 10MHz / QPSK								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1406	-50.48	-13	-37.48	-53.73	4.00	9.40	H
	2109	-48.59	-13	-35.59	-52.16	4.88	10.60	H
	2812	-61.50	-13	-48.50	-66.43	5.52	12.60	H
	1406	-59.74	-13	-46.74	-62.99	4.00	9.40	V
	2109	-49.61	-13	-36.61	-53.18	4.88	10.60	V
	2812	-60.38	-13	-47.38	-65.31	5.52	12.60	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



LTE Band 66 / 20MHz / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3472	-52.17	-13	-39.17	-59.02	5.65	12.50	H
	5208	-59.62	-13	-46.62	-65.29	7.13	12.80	H
	6944	-56.73	-13	-43.73	-60.13	8.40	11.80	H
	3472	-48.06	-13	-35.06	-54.91	5.65	12.50	V
	5208	-60.46	-13	-47.46	-66.13	7.13	12.80	V
	6944	-55.96	-13	-42.96	-59.36	8.40	11.80	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE Band 85 / 10MHz / QPSK								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1581.5	-58.10	-13	-45.10	-61.35	4.00	9.40	H
	2372.25	-54.40	-13	-41.40	-57.97	4.88	10.60	H
	3163	-59.38	-13	-46.38	-64.31	5.52	12.60	H
	1581.5	-53.97	-13	-40.97	-57.22	4.00	9.40	V
	2372.25	-49.76	-13	-36.76	-53.33	4.88	10.60	V
	3163	-57.96	-13	-44.96	-62.89	5.52	12.60	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

NB-IOT Cat NB2:

Band 5 / 3.75kHz / BPSK								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1672	-48.04	-13	-35.04	-51.29	4.00	9.40	H
	2510	-41.09	-13	-28.09	-44.66	4.88	10.60	H
	3346	-61.98	-13	-48.98	-66.91	5.52	12.60	H
	1672	-54.18	-13	-41.18	-57.43	4.00	9.40	V
	2510	-26.01	-13	-13.01	-29.58	4.88	10.60	V
	3346	-62.44	-13	-49.44	-67.37	5.52	12.60	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



Band 5 / 15kHz / QPSK								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1672	-54.22	-13	-41.22	-57.47	4.00	9.40	H
	2510	-48.62	-13	-35.62	-52.19	4.88	10.60	H
	3346	-62.85	-13	-49.85	-67.78	5.52	12.60	H
	4182	-60.56	-13	-47.56	-65.03	6.00	12.62	H
	1672	-50.71	-13	-37.71	-53.96	4.00	9.40	V
	2510	-41.36	-13	-28.36	-44.93	4.88	10.60	V
	3346	-62.57	-13	-49.57	-67.50	5.52	12.60	V
	4182	-52.85	-13	-39.85	-57.32	6.00	12.62	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

Band 25 / 15kHz / BPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3747	-57.47	-13	-44.47	-64.22	5.85	12.60	H
	5620.5	-58.23	-13	-45.23	-64.03	7.30	13.10	H
	7494	-55.35	-13	-42.35	-58.50	8.35	11.50	H
	3747	-53.78	-13	-40.78	-60.53	5.85	12.60	V
	5620.5	-58.91	-13	-45.91	-64.71	7.30	13.10	V
	7494	-55.12	-13	-42.12	-58.27	8.35	11.50	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

Band 2 / 15kHz / BPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3760	-53.01	-13	-40.01	-59.76	5.85	12.60	H
	5640	-56.92	-13	-43.92	-62.72	7.30	13.10	H
	7520	-54.99	-13	-41.99	-58.14	8.35	11.50	H
	3760	-52.66	-13	-39.66	-59.41	5.85	12.60	V
	5640	-56.69	-13	-43.69	-62.49	7.30	13.10	V
	7520	-55.65	-13	-42.65	-58.80	8.35	11.50	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

Band 13 / 3.75kHz / BPSK								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1559.5	-56.61	-42.15	-14.46	-59.86	4.00	9.40	H
	2339.25	-44.42	-13	-31.42	-47.99	4.88	10.60	H
	3119	-60.52	-13	-47.52	-65.45	5.52	12.60	H
	1559.5	-49.88	-42.15	-7.73	-53.13	4.00	9.40	V
	2339.25	-34.10	-13	-21.10	-37.67	4.88	10.60	V
	3119	-59.42	-13	-46.42	-64.35	5.52	12.60	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

Band 13 / 15kHz / QPSK								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1559.5	-57.94	-42.15	-15.79	-61.19	4.00	9.40	H
	2339.25	-44.08	-13	-31.08	-47.65	4.88	10.60	H
	3119	-61.49	-13	-48.49	-66.42	5.52	12.60	H
	1559.5	-58.45	-42.15	-16.30	-61.70	4.00	9.40	V
	2339.25	-43.43	-13	-30.43	-47.00	4.88	10.60	V
	3119	-61.28	-13	-48.28	-66.21	5.52	12.60	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

Band 12 / 3.75kHz / BPSK								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1406	-55.47	-13	-42.47	-58.72	4.00	9.40	H
	2109	-48.13	-13	-35.13	-51.70	4.88	10.60	H
	2812	-57.42	-13	-44.42	-62.35	5.52	12.60	H
	1406	-55.51	-13	-42.51	-58.76	4.00	9.40	V
	2109	-53.11	-13	-40.11	-56.68	4.88	10.60	V
	2812	-60.33	-13	-47.33	-65.26	5.52	12.60	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

Band 66 / 15kHz / BPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3472	-59.61	-13	-46.61	-66.46	5.65	12.50	H
	5208	-60.29	-13	-47.29	-65.96	7.13	12.80	H
	6944	-56.00	-13	-43.00	-59.40	8.40	11.80	H
	3472	-58.80	-13	-45.80	-65.65	5.65	12.50	V
	5208	-59.90	-13	-46.90	-65.57	7.13	12.80	V
	6944	-55.44	-13	-42.44	-58.84	8.40	11.80	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

Band 71 / 3.75kHz / QPSK								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1348	-60.97	-13	-47.97	-64.22	4.00	9.40	H
	2022	-45.65	-13	-32.65	-49.22	4.88	10.60	H
	2696	-62.21	-13	-49.21	-67.14	5.52	12.60	H
	1348	-60.75	-13	-47.75	-64.00	4.00	9.40	V
	2022	-50.37	-13	-37.37	-53.94	4.88	10.60	V
	2696	-62.49	-13	-49.49	-67.42	5.52	12.60	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

Band 71 / 15kHz / QPSK								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1348	-65.26	-13	-52.26	-68.51	4.00	9.40	H
	2022	-57.02	-13	-44.02	-60.59	4.88	10.60	H
	2696	-62.71	-13	-49.71	-67.64	5.52	12.60	H
	1348	-65.75	-13	-52.75	-69.00	4.00	9.40	V
	2022	-64.87	-13	-51.87	-68.44	4.88	10.60	V
	2696	-62.39	-13	-49.39	-67.32	5.52	12.60	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

Band 85 / 15kHz / BPSK								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1581.5	-54.45	-13	-41.45	-57.70	4.00	9.40	H
	2372.25	-47.56	-13	-34.56	-51.13	4.88	10.60	H
	3163	-55.50	-13	-42.50	-60.43	5.52	12.60	H
	1581.5	-57.24	-13	-44.24	-60.49	4.00	9.40	V
	2372.25	-51.88	-13	-38.88	-55.45	4.88	10.60	V
	3163	-62.41	-13	-49.41	-67.34	5.52	12.60	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.