Prüfbericht-Nr.: *Test report no.:*	**DE25MYMO 001**	**Auftrags-Nr.:** *Order no.:*	1169982 210	Seite 1 von 41 *Page 1 of 41*
Kunden-Referenz-Nr.: *Client reference no.:*	-	**Auftragsdatum:** *Order date:*	2024-03-07	
Auftraggeber: *Client:*	Siemens AG GWA, Werner von Siemens Strasse 48, Amberg 92220 Germany			
Prüfgegenstand: *Test item:*	MCCB with Electronic Trip Unit (3VA2plus, 3VA6plus)			
Bezeichnung / Typ-Nr.: *Identification / Type no.:*	ETU760 LSIG			
Auftrags-Inhalt: *Order content:*	Prüfung der Funkparameter nach FCC & ISED *Test of radio parameters acc. to FCC & ISED*			
Prüfgrundlage: *Test specification:*	Vollprüfung / Complete test FCC CFR 47 Part 15 Subpart C- §15.247 ISED RSS-247:2025 Issue 4			

Wareneingangsdatum: *Date of sample receipt:*	2024-11-08
Prüfmuster-Nr.: *Test sample no:*	A003859606-001 to 018
Prüfzeitraum: *Testing period:*	2025-02-11 - 2025-03-28
Ort der Prüfung: *Place of testing:*	Nürnberg *Nuremberg*
Prüflaboratorium: *Testing laboratory:*	Wireless Labor *Wireless Test Lab*
Prüfergebnis*: *Test result*:*	Pass

For reasons of confidentiality, no photos of the EUT are included in this report.
For EUT and test setup photos please see the Photo Documentation to this report Number.

zusammengestellt von: *compiled by:* **Datum:** *Date:*	2/24/2026 X Signed by: Shrinivas Naikar	**genehmigt von:** *authorized by:* **Ausstellungsdatum:** *Issue date:*	04.03.2026 X Signiert von: Matthias Kraeutlein
Stellung / Position:	Sachverständige(r)/Expert	**Stellung** / Position:	Sachverständige(r)/Expert

Sonstiges / *Other:* -

Zustand des Prüfgegenstandes bei Anlieferung: *Condition of the test item at delivery:*	Prüfmuster vollständig und unbeschädigt *Test item complete and undamaged*

* Legende:	P(ass) = entspricht o.g. Prüfgrundlage(n)	F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	N/A = nicht anwendbar	N/T = nicht getestet
* *Legend:*	*P(ass) = passed a.m. test specification(s)*	*F(ail) = failed a.m. test specification(s)*	*N/A = not applicable*	*N/T = not tested*

Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.
This test report only relates to the above mentioned test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.

Anmerkungen
Remarks

1	Alle eingesetzten Prüfmittel waren zum angegebenen Prüfzeitraum gemäß eines festgelegten Kalibrierungsprogramms unseres Prüfhauses kalibriert. Sie entsprechen den in den Prüfprogrammen hinterlegten Anforderungen. Die Rückverfolgbarkeit der eingesetzten Prüfmittel ist durch die Einhaltung der Regelungen unseres Managementsystems gegeben. Detaillierte Informationen bezüglich Prüfkonditionen, Prüfequipment und Messunsicherheiten sind im Prüflabor vorhanden und können auf Wunsch bereitgestellt werden. *The equipment used during the specified testing period was calibrated according to our test laboratory calibration program. The equipment fulfils the requirements included in the relevant standards. The traceability of the test equipment used is ensured by compliance with the regulations of our management system.* *Detailed information regarding test conditions, equipment and measurement uncertainty is available in the test laboratory and could be provided on request.*
2	Wie vertraglich vereinbart, wurde dieses Dokument nur digital unterzeichnet. Der TÜV Rheinland hat nicht überprüft, welche rechtlichen oder sonstigen diesbezüglichen Anforderungen für dieses Dokument gelten. Diese Überprüfung liegt in der Verantwortung des Benutzers dieses Dokuments. Auf Verlangen des Kunden kann der TÜV Rheinland die Gültigkeit der digitalen Signatur durch ein gesondertes Dokument bestätigen. Diese Anfrage ist an unseren Vertrieb zu richten. Eine Umweltgebühr für einen solchen zusätzlichen Service wird erhoben. Informationen zur Verifizierung der Authentizität unserer Dokumente erhalten Sie auf folgender Webseite: go.tuv.com/digital-signature *As contractually agreed, this document has been signed digitally only. TUV Rheinland has not verified and unable to verify which legal or other pertaining requirements are applicable for this document. Such verification is within the responsibility of the user of this document. Upon request by its client, TUV Rheinland can confirm the validity of the digital signature by a separate document. Such request shall be addressed to our Sales department. An environmental fee for such additional service will be charged. For information on verifying the authenticity of our documents, please visit the following website: go.tuv.com/digital-signature*
3	Prüfklausel mit der Note * wurden an qualifizierte Unterauftragnehmer vergeben und sind unter der jeweiligen Prüfklausel des Berichts beschrieben. Abweichungen von Prüfspezifikation(en) oder Kundenanforderungen sind in der jeweiligen Prüfklausel im Bericht aufgeführt. *Test clauses with remark of * are subcontracted to qualified subcontractors and descripted under the respective test clause in the report.* *Deviations of testing specification(s) or customer requirements are listed in specific test clause in the report.*
4	Die Entscheidungsregel für Konformitätserklärungen basierend auf numerischen Messergebnisen in diesem Prüfbericht basiert auf der "Null-Grenzwert-Regel" und der "Einfachen Akzeptanz" gemäß ILAC G8:2019 und IEC Guide 115:2023, es sei denn, in der auf Seite 1 dieses Berichts genannten angewandten Norm ist etwas anderes festgelegt oder vom Kunden gewünscht. Dies bedeutet, dass die Messunsicherheit nicht berücksichtigt wird und daher auch nicht im Prüfbericht angegeben wird. Zu weiteren Informationen bezüdglich des Risikos durch diese Entscheidungsregel siehe ILAC G8:2019. The decision rule for statements of conformity, based on numerical measurement results, in this test report is based on the “Zero Guard Band Rule” and “Simple Acceptance” in accordance with ILAC G8:2019 and IEC Guide 115:2023, unless otherwise specified in the applied standard mentioned on Page 1 of this report or requested by the customer. This means that measurement uncertainty is not taken in account and hence also not declared in the test report. For additional information to the resulting risk based of this decision rule please refer to ILAC G8:2019.
5	Wenn auf dem Bericht kein Akkreditierungshinweis aufgebracht ist, wurde der Bericht nicht im akkreditierten Bereich erstellt und ist folglich auch nicht vom EA MLA abgedeckt. Unabhängig davon wurde der Bericht auf Basis der allgemeinen Regeln der ISO/IEC 17000er Reihe erstellt. Mit "#" gekennzeichnete Prüfungen sind nicht Bestandteil der Akkreditierung D-PL-14169-03-00. *If there is no accreditation notice on the report, the report has not been produced in the accredited area and is consequently not covered by the EA MLA. Regardless of this, the report has been prepared based on the general rules of the ISO/IEC 17000 series. Tests marked with "#" are not covered by the accreditation D-PL-14169-03-00.*

Produktbeschreibung
Product description

1	**Test item**	MCCB with Electronic Trip Unit (3VA2plus, 3VA6plus)
2	**Typ-No.**	ETU760 LSIG (Tested)
3	**Identical Types**	ETU750 LSI
4	**Test sample obtaining**	☒ Sampling by customer ☐ Sampling by TÜV Rheinland Group ☐ others:
5	**Serial-No.**	-
6	**Supported radio technologies evaluated in this report**	ZigBee 2.4GHz
7	**Supported radio technologies not evaluated in this report**	BLE 5.0
8	**Description of EUT**	Molded Case Breaker (MCCB)
9	**Max RF output power (measured)**	-7.9 dBm
10	**Operating Frequency (declared)**	ZigBee: 2405-2480MHz
11	**Channel Bandwidth (declared)**	ZigBee: 5MHz
12	**Number of Channels**	ZigBee:16
13	**Modulation**	ZigBee:OQPSK
14	**Rated Voltage / Frequency**	24V DC
15	**Radio IC details**	EFR32MG24A410F1536IM40-BR
16	**FCC ID details**	FCC ID:2AJRO-ETU7
17	**IC & HVIN Details**	IC: 22001-ETU7 & HVIN:ETU7
18	**Radio Module / Antenna Type**	☒ Radio module with antenna on module PCB ☐ Radio module with dedicated antenna ☐ Radio module with user accessible antenna connector
19	**Antenna Name**	Yageo/ ANT3216LL00R2400A
20	**Antenna Type**	☒ Integral antenna (designed as a fixed part of the EUT) ☐ Dedicated antenna (removable, obligation to be used) ☐ Permanent antenna connector
21	**Antenna number of chains**	1
22	**Antenna Gain (declared)**	5.05 dBi
23	**Software / Firmware Version**	ETU_SDK422_ChipSet 6.sdk
24	**Hardware Version**	TL2
25	**Provided Samples**	A003859606-001 to 018
26	**Conducted measurements sample**	A003859606-014
27	**Radiated measurements sample**	A003859606-008
28	**Companion Device** used for radio connection with the EUT	EUT in Test Mode. Therefore, no Companion Device was used.
29	**Auxiliary equipment** used to set up the EUT	Customer Laptop with Config Tool V16
30	**Data Cable**	USB type C cable was used to configure the Radio
31	**Temperature Range**	-25°C - +70°C
32	**Environment**	Indoor

Absatz *Clause*	**Anforderungen - Prüfungen /** *Requirements - Tests*	**Bemerkungen/** *Remarks*	**Ergebnis** *Result*
FCC 15.247 (a)(1) RSS-247 sec. 6.2.3.1 (a)	20 dB Bandwidth	Does not apply for DTS equipment	P ☐ F ☐ N/A ☒ N/T ☐
FCC 15.247 (a)(1) RSS-247 sec. 6.2.3.1 (b)	Number of Hopping Frequencies	Does not apply for DTS equipment	P ☐ F ☐ N/A ☒ N/T ☐
FCC 15.247 (a)(1) RSS-247 sec. 6.2.3.1 (b)	Time of Occupancy	Does not apply for DTS equipment	P ☐ F ☐ N/A ☒ N/T ☐
FCC 15.247 (a)(1) RSS-247 sec. 6.2.3.1 (a)	Carrier Frequency Separation	Does not apply for DTS equipment	P ☐ F ☐ N/A ☒ N/T ☐
FCC 15.247 (b) RSS-247 sec. 6.3.2	Maximum Output Power	-	P ☒ F ☐ N/A ☐ N/T ☐
FCC 15.247 (e) RSS-247 sec. 6.3.1 (b)	Power Spectral Density	-	P ☒ F ☐ N/A ☐ N/T ☐
FCC 15.247 (a)(2) RSS-247 sec. 6.3.1 (a)	6dB Bandwidth	-	P ☒ F ☐ N/A ☐ N/T ☐
FCC 15.247 (d) RSS-247 sec. 6.6	Unwanted Emissions	-	P ☒ F ☐ N/A ☐ N/T ☐
FCC 15.207 RSS-Gen sec. 8.8	AC Power Conducted Emissions	-	P ☒ F ☐ N/A ☐ N/T ☐

Prüfdokumentation
Test documentation

Contents

1 Registration 6
2 EUT Classification 6
2.1 Wireless technologies and frequencies supported by the EUT. 6
2.2 Standard specific classification of the EUT 6
2.3 System Type 6
3 Test conditions and configurations 7
3.1 Normal environmental test conditions 7
3.2 Equipment modifications 7
3.3 Antenna assemblies 7
3.4 Test Modes 7
3.5 Measurement Uncertainty 8
4 Test results in detail 9
4.1 Maximum Output Power 9
4.2 Power Spectral Density 13
4.3 6 dB Bandwidth / DTS bandwidth and 99% Occupied Channel Bandwidth 16
4.4 Unwanted emissions 18
4.5 AC Power Conducted Emission 36
5 Test Setup Photo 39
6 Equipment List 40
6.1 Hardware 40
6.2 Software 40
7 Change history 41

Prüfdokumentation
Test documentation

1 Registration

The measurement facilities for conducted and radiated disturbance measurements of the TÜV Rheinland LGA Products have been found to be in compliance with the requirements of Section 2.948 of the FCC Rules. Measurement data will be accepted in conjunction with applications for Certification under Parts 15 and 18 of the Commission's Rules.
FCC Registration Number: 939976
Bundesnetzagentur Registration Number: BNetzA-CAB-17/21-16
The measurement facilities are also recognized by Innovation, Science and Economic Development (ISED) Canada to test to Canadian radio equipment requirements.
Company Number: 11235A
CAB Identifier: DE0018

2 EUT Classification

2.1 Wireless technologies and frequencies supported by the EUT.

The named technologies are only those falling in the specification of the applied standard.

Technology	Frequency Range (TX)	TX Function	Supported by the EUT	Evaluated in this report
802.11b	2400 – 2483.5 MHz	SISO	☐	☐
802.11g	2400 – 2483.5 MHz	SISO	☐	☐
802.11n (20MHz)	2400 – 2483.5 MHz	SISO	☐	☐
802.11n (40MHz)	2400 – 2483.5 MHz	SISO	☐	☐
BLE 5.0	2400 – 2483.5 MHz	SISO	☒	☐
ZigBee	2400 – 2483.5 MHz	SISO	☒	☒
Non-specific SRD	2400 – 2483.5 MHz	SISO	☐	☐

SISO: Single Input Single Output

2.2 Standard specific classification of the EUT

2.2.1 Applied standards

FCC CFR 47 Part 15 Subpart C - §15.247
ISED RSS-247:2025 Issue 4

2.2.2 Test Methods and Guidance Documents

ANSI C63.10:2013
ANSI C63.10-2020 + Corrigendum 1-2023 + Amendment 1-2024
KDB 558074 D01 DTS Measurement Guidance v05
KDB 662911 D01 Multiple Transmitter Output v02r01

2.3 System Type

DTS (Digital Transmission System)

2.3.1 Type of equipment

Tabletop Equipment

3 Test conditions and configurations

3.1 Normal environmental test conditions

Environmental condition	Parameter	Range during test
Temperature	°C	21-24
Relative humidity	%	20-60
Supply voltage	DC	24

3.2 Equipment modifications

No modifications were found to be necessary to perform the tests or to achieve compliance.

3.3 Antenna assemblies

Antenna connector is prepared so tests were done in conducted and radiated mode.

3.4 Test Modes

The EUT was rotated in all orientations (elevation and azimuth) with the help of a positioning device.

Test case	Worst case Configuration
All conducted test cases	2405MHz, 2440MHz, 2480MHz
Radiated Spurious Emissions < 30 MHz	2405MHz
Radiated Spurious Emissions 30 MHz – 1 GHz	2405MHz
Radiated Spurious Emissions > 1 GHz	2405MHz, 2440MHz, 2480MHz

Mode description	Mode configuration
All Modes	The auxiliary equipment was only connected to the EUT before the tests for the mode configuration. During the test the auxiliary equipment was disconnected from the EUT.
Mode 1: TX-Mode	The ZigBee Continues Stream transmission was enabled on LOW, Mid and High channels, Frequency:2405MHz,2440MHz and 2480MHz, Bandwidth was set to 5MHz, and power was set to 0dBm in the configuration tool. ConfigTool_Com120 V16 ETU-Verknüpfung was used to configure the radio.
Mode 2: TX-Mode	Continuous ZigBee stream transmission was activated on the LOW channel. The power amplifier was powered with an input of 120 VAC at 60 Hz through LISN. and the 24VDC output of power amplifier was connected to the device. Note: The Power amplifier used for the test is from TRLP lab.
Mode 3: N/A	-
Mode 4: N/A	-

3.5 Measurement Uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to ETSI TR 100 028-1/-2 and ETSI TS 103 051 (radiated measurements) and is documented in the quality system acc. to ISO/IEC 17025:2017.
Furthermore, component and process variability of devices similar to that tested may result in additional deviation.
The stated values are the expanded uncertainty values, the measured value lies within the assigned range of values with a probability of 95% (k = 1.96).
The manufacturer has the sole responsibility of continued compliance of the device.

Test	Value	Unit	Range
Frequency Error	2.7 *10^{-8}	Hz	-
Frequency Stability under low voltage conditions			
Time	1.1*10^{-9}	s	-
Conducted Carrier Power Conducted Spurious Emissions (RX/TX)	1.0	dB	9k-1GHz
	1.7	dB	1GHz-6GHz
	2.8	dB	6GHz-40GHz
Occupied Bandwidth (OBW)	0.1	%	-
TX Power Spectral Density	4.2	mW	9kHz - 6GHz
	1.6	dB	9kHz - 6GHz
Dwell Time	4.6 *10^{-7}	Hz	-
Frequency Separation			-
Measurement of conducted emissions at the power supply connection to LISN	2.3	dB	9kHz – 150kHz
	2.2	dB	150kHz – 30MHz
Measurement of the field strength at distance 3m	1.6	dB	9k-150kHz
	4.5	dB	30-1000MHz
	5	dB	1-6GHz
	5.3	dB	6-40GHz
Temperature	0.8	K	-
Humidity	4	%	-
Voltage (AC/DC)	1.0	%	-

Measured value	Limit	Extended measurement uncertainty (k=1.96)	Confidence interval (95%)
19 dBm @ 2.48GHz	20 dBm	1.7 dB	17.3 dBm – 20.7 dBm

4 Test results in detail

4.1 Maximum Output Power

4.1.1 Requirements / Limits

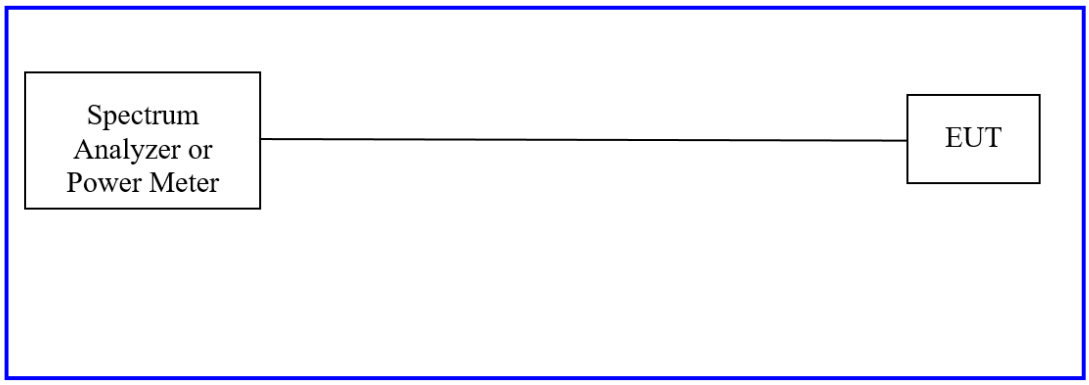
The maximum output power limit is expressed in terms of either maximum peak conducted output power or maximum conducted output power.
The maximum peak conducted output power is defined as the maximum power level measured with a peak detector using a filter with width and shape of which is sufficient to accept the full signal bandwidth.
The maximum conducted output power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signalling alphabet when the transmitter is operating at its maximum power control level.

	Condition		Limit
☒	Systems using digital modulation techniques in the 902-928 MHz, 2400-2483.5 MHz and 5725-5850 MHz bands		*FCC Part 15, Subpart C, §15.247 (b) (3)* 1 watt = 30dBm. Maximum conducted peak output power: 30 dBm (excluding antenna gain, if antennas with directional gains that do not exceed 6 dBi are used).
☐	Frequency hopping systems operating 2400-2483.5 MHz band.	Employing less than 75 non-overlapping hopping channels	*FCC Part 15, Subpart C, §15.247 (b) (1)* 0.125 watt = 21dBm.
☐		Employing at least 75 non-overlapping hopping channels	*FCC Part 15, Subpart C, §15.247 (b) (1)* 1 watt = 30dBm.
☐	Frequency hopping systems operating 5725-5850 MHz band.		*FCC Part 15, Subpart C, §15.247 (b) (1)* 1 watt = 30dBm.
☐	Frequency hopping systems operating 902-928 MHz band.	Employing less than 50 but at least 25 hopping channels	*FCC Part 15, Subpart C, §15.247 (b) (2)* 0.25 watt = 24dBm.
☐		Employing at least 50 hopping channels	*FCC Part 15, Subpart C, §15.247 (b) (2)* 1 watt = 30dBm
☐	Antenna gain greater than 6dBi		*FCC Part 15, Subpart C, §15.247 (b) (4)* The conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3), as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi

4.1.2 **Test Method** (Maximum Output Power)

4.1.2.1 Conducted measurements

Measurements were done according to ANSI C63.10 clause 11.9.1.1 peak power (RBW > DTS bandwidth).
The EUT was connected to the spectrum analyzer via a coax cable with a known loss.



4.1.2.2 Radiated measurements

Measurements were done according to ANSI C63.10 clause 11.9.1.1 peak power (RBW > DTS bandwidth).

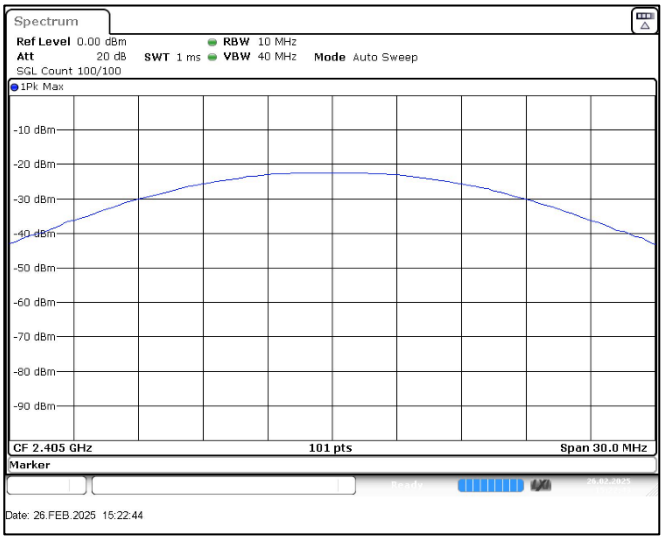
4.1.3 **Test setup** (Maximum Output Power)

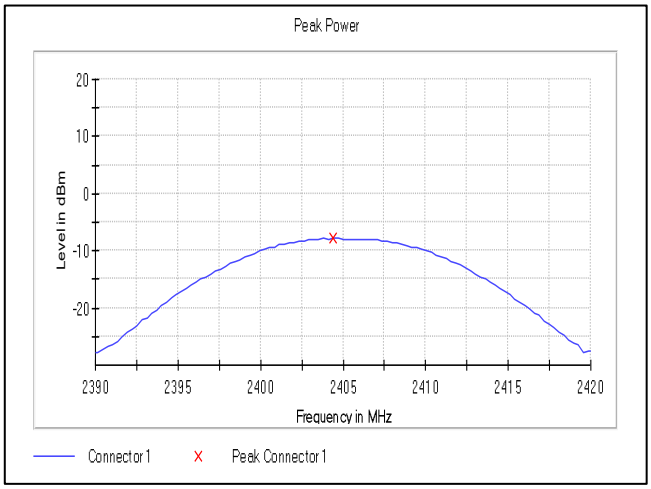
4.1.3.1 Conducted measurements

EUT		A003859606-014
Chamber details		Shielded room
Companion device		EUT in Test Mode. Therefore, no Companion Device was used.
Operation mode		☒ 1: TX-Mode; worst-case modulation ☐ 2: RX-Mode ☐ 3: TX-Modes for worst case evaluation ☐ 4: N/A
Spectrum Analyzer	**Resolution Bandwidth**	≥ DTS bandwidth.
	Video Bandwidth	≥ 3 × RBW
	Span	≥ 3 × RBW
	Sweep Time	Auto
	Trace	Max hold
	Detector	Peak
Further parameters		-
Test engineer		Shrinivas Naikar

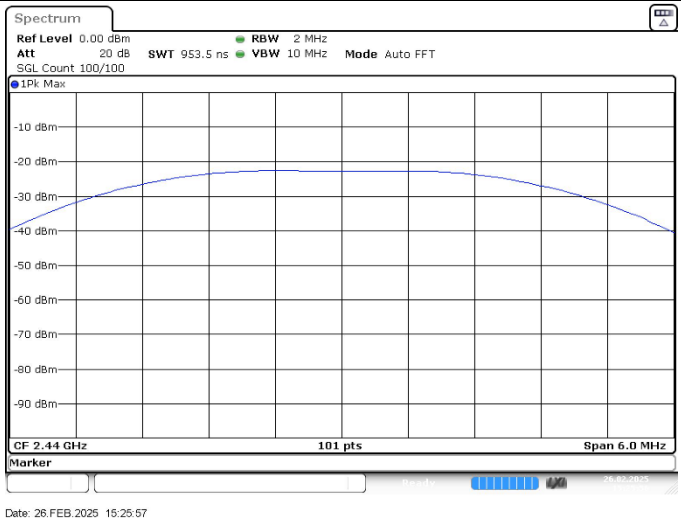
4.1.4 **Test results** (Maximum Output Power)

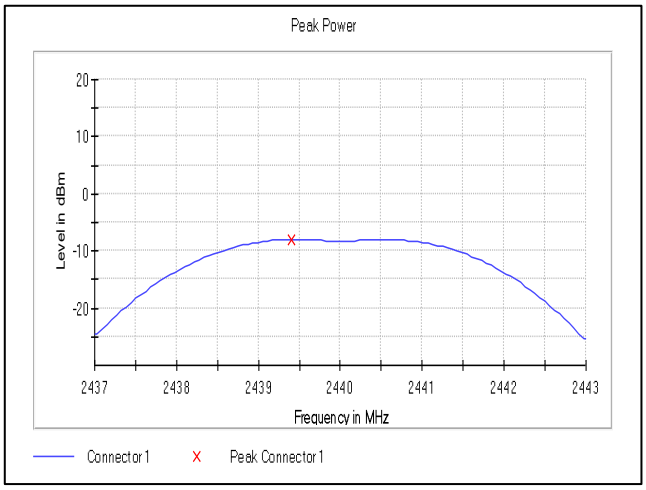
4.1.4.1 **Conducted measurements**





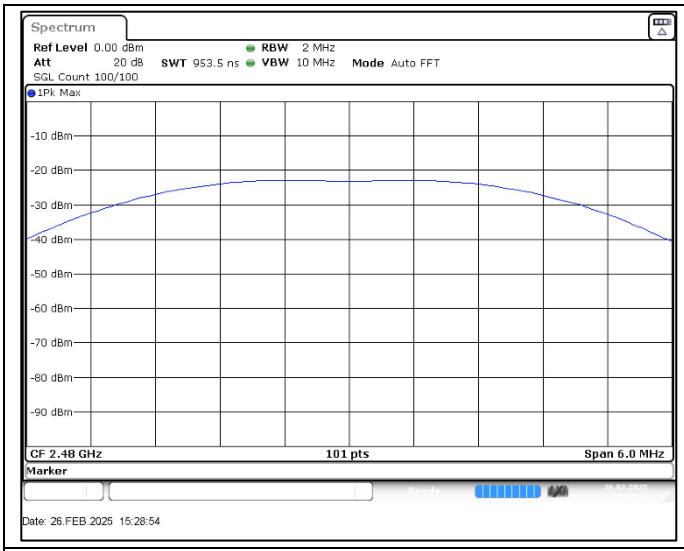
Frequency:2405MHz

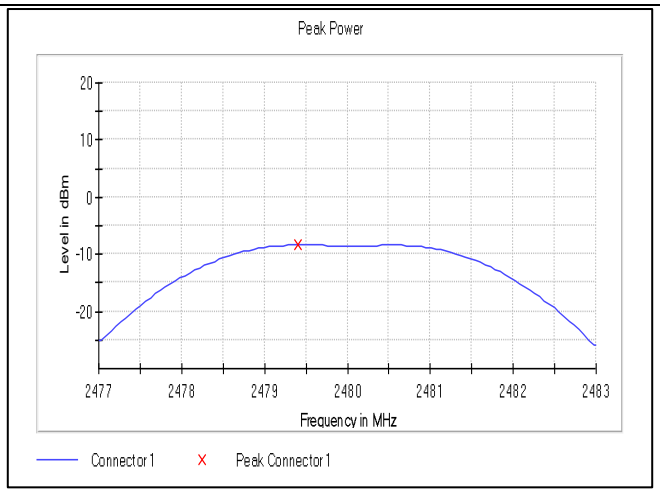




Frequency:2440MHz

Prüfdokumentation
Test documentation





Frequency:2480MHz

4.1.4.1.1 Conducted measurements summary

Frequency (MHz)	Data rate (Kbps)	Peak conducted output power (dBm)	Limit (dBm)	Test Result
2405	250	-7.9	30	Pass
2440		-8.0		Pass
2480		-8.3		Pass

4.1.5 **Final test result** (Maximum Output Power)

Final test result	Pass

4.2 Power Spectral Density

4.2.1 Requirements / Limits

FCC Part 15, Subpart C, §15.247 (e) and RSS-247 sec. 5.2 (b)
For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

4.2.2 Test Method

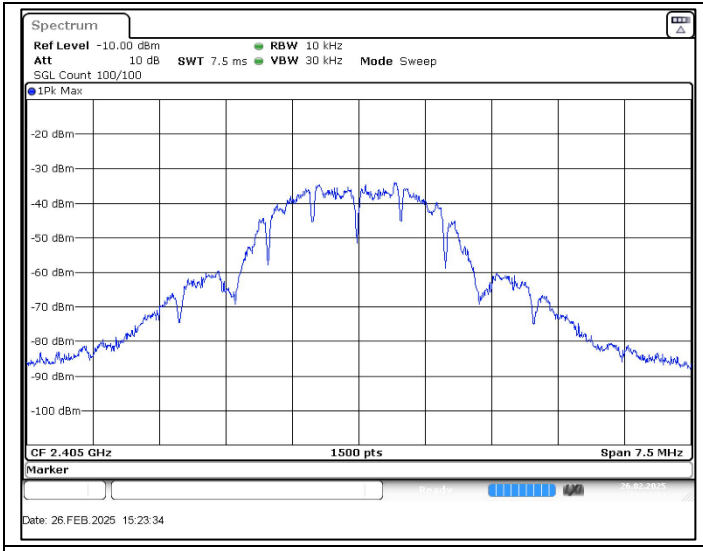
The same method of determining the conducted output power shall be used to determine the power spectral density according to ANSI C63.10 clause 11.10.2 peak PSD.

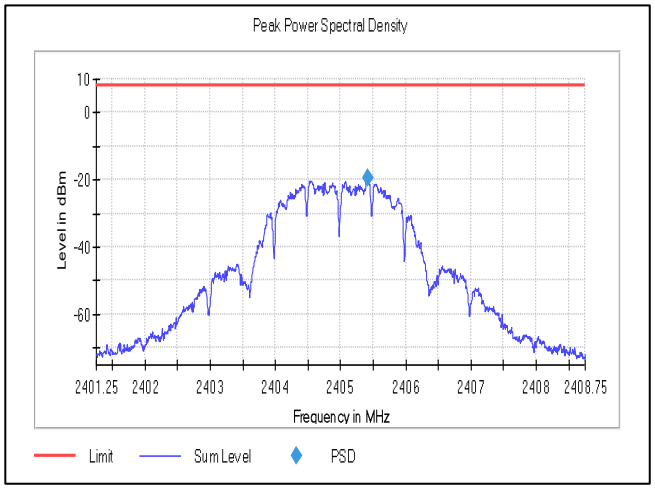
4.2.3 Test setup

EUT		A003859606-014
Chamber details		☐ 3m Fully Anechoic Chamber (FAC) ☐ 10m Semi Anechoic Chamber (SAC) ☒ Shielded room
Measurement positioning		Distance: ☐ 3m ☐ 10m; EUT height: ☐ 1.5m ☐ 0.8m; Antenna height: ☐ 1.5m ☐ 1m to 4m – height scan
		☒ N/A
Companion device		EUT in Test Mode. Therefore, no Companion Device was used.
Operation mode		☒ 1: TX-Mode ☐ 2: TX-Mode ☐ 3: N/A ☐ 4: N/A
Spectrum Settings	**Resolution Bandwidth**	3 kHz ≤ RBW ≤ 100 kHz.
	Video Bandwidth	≥ 3 × RBW
	Span	1.5 times the DTS bandwidth
	Detector	Peak
	Trace	Max hold
	Sweep time	Auto
Further parameters		-
Test engineer		Shrinivas Naikar

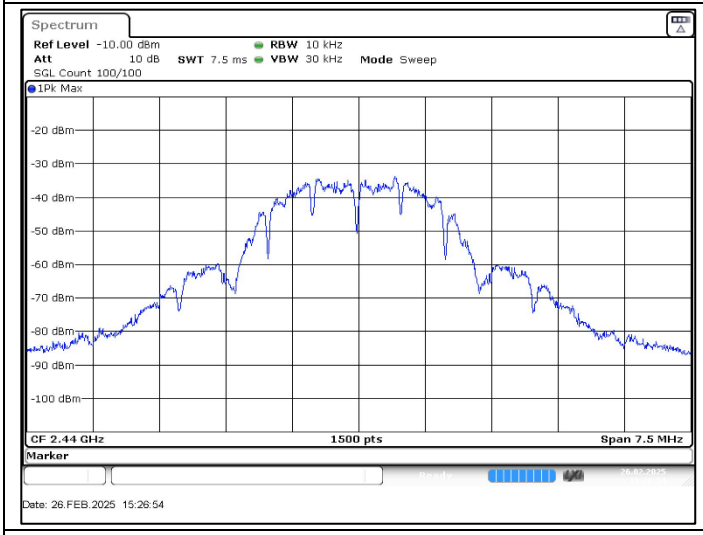
Prüfdokumentation
Test documentation

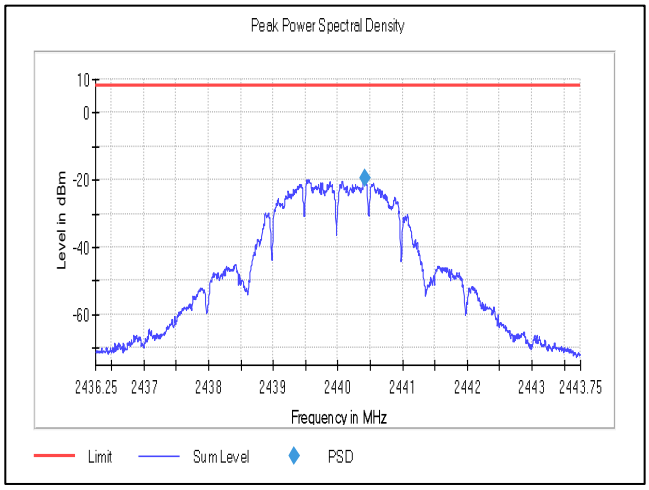
4.2.4 Test results



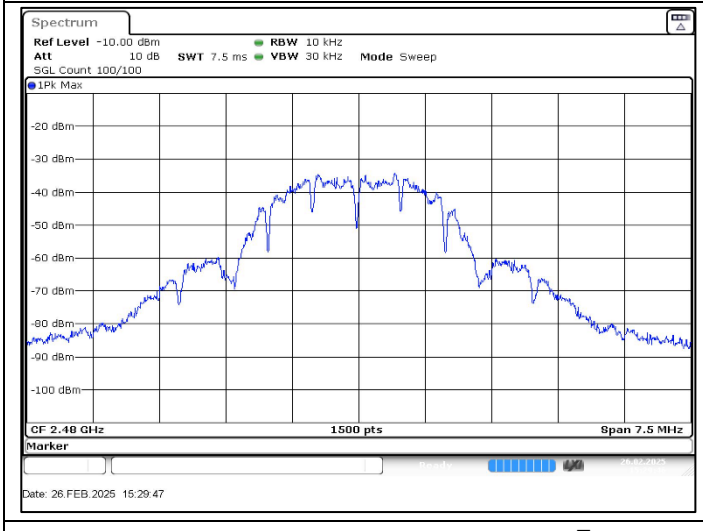


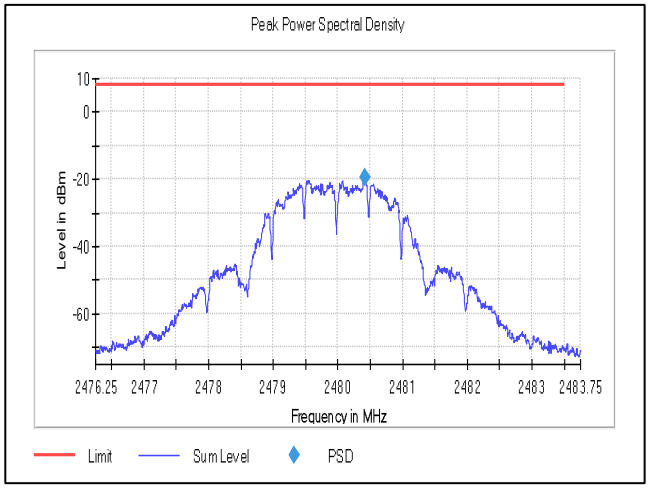
Frequency:2405MHz





Frequency:2440MHz





Frequency:2480MHz

Frequency (MHz)	Data rate (Kbps)	Peak conducted power spectral density (dBm/MHz)	Limit (dBm)	Test Result
2405	250	-19.432	8	Pass
2440		-19.225		Pass
2480		-19.553		Pass

4.2.5 **Final test result** (Power Spectral Density)

Final test result	Pass

4.3 6 dB Bandwidth / DTS bandwidth and 99% Occupied Channel Bandwidth

4.3.1 Requirements / Limits

FCC Part 15, Subpart C, §15.247 (a) (2) and RSS-247 sec. 5.2 (a)
Systems using digital modulation techniques may operate in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

4.3.2 Test Method

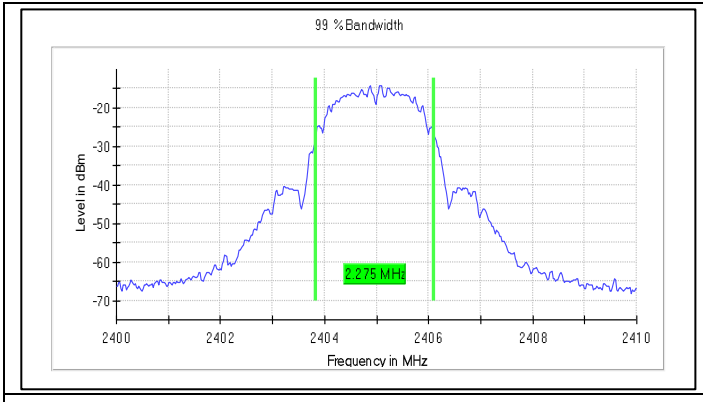
Conducted method was used to measure the 6 dB bandwidth according to ANSI C63.10 clause 11.8.1 and 99% occupied bandwidth according to ANSI C63.10 clause 6.9.3 The EUT was connected to the spectrum analyzer via a coax cable with a known loss

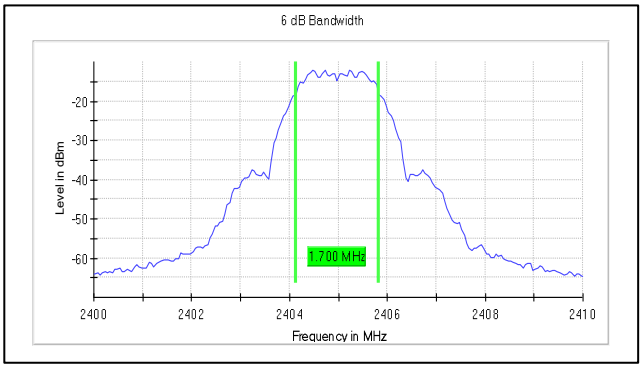
4.3.3 Test setup

EUT		A003859606-014	
Chamber details		☐ 3m Fully Anechoic Chamber (FAC) ☐ 10m Semi Anechoic Chamber (SAC) ☒ Shielded room	
Measurement positioning		Distance: ☐ 3m ☐ 10m EUT height: ☐ 1.5m ☐ 0.8m Antenna height: ☐ 1.5m ☐ 1m to 4m – height scan	
		☒ N/A	
Companion device		EUT in Test Mode. Therefore, no Companion Device was used.	
Operation mode		☒ 1: TX-Mode ☐ 2: TX-Mode ☐ 3: N/A ☐ 4: N/A	
Spectrum Settings		6 dB	99 %
	Resolution Bandwidth	100KHz	1% to 5% of the OBW
	Video Bandwidth	≥ [3 × RBW]	≥ [3 × RBW].
	Span	1.5 ~ 5.0 times the OBW	1.5 ~ 5.0 times the OBW
	Trace	Max hold	Max hold
	Detector	Peak	Peak
	Sweep time	Auto	Auto
Further parameters		-	
Test engineer		Shrinivas Naikar	

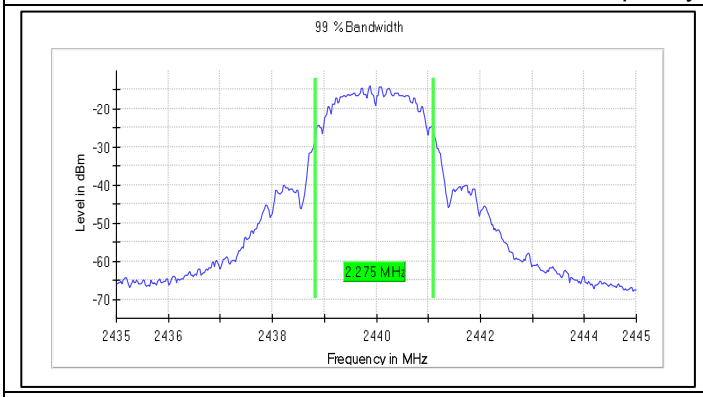
Prüfdokumentation
Test documentation

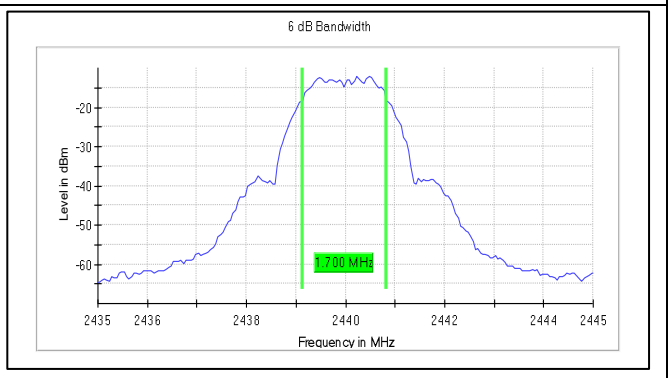
4.3.4 Test results



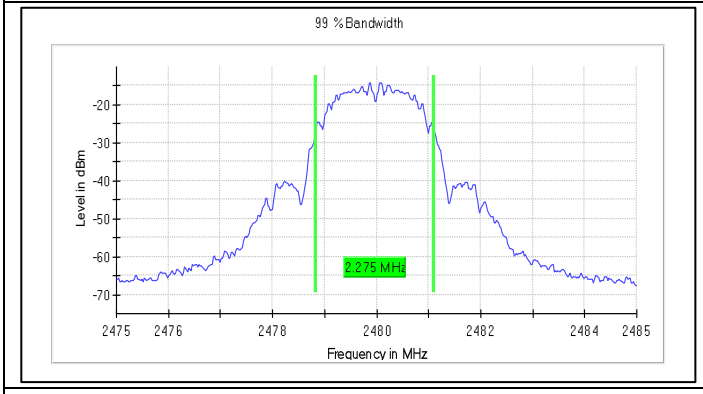


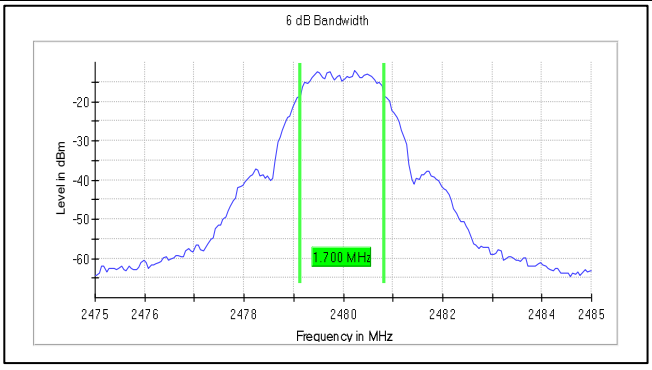
Frequency:2405MHz





Frequency:2440MHz





Frequency:2480MHz

Frequency	Data Rate (Mbps)	99% bandwidth (MHz)	6 dB Bandwidth (MHz)	Minimum bandwidth (MHz)	Test Result
2405	1	2.275	1.700	0.500	Pass
2440		2.275	1.700		Pass
2480		2.275	1.700		Pass

4.3.5 Final test result

Final test result	Pass

4.4 Unwanted emissions

4.4.1 Requirements / Limits

☒	FCC Part 15, Subpart C, §15.247 (d); [RSS-247 sec. 5.5]: In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in § 15.209(a) [RSS-Gen sec. 8.9] is not required. Radiated emissions which fall in the restricted bands, as defined in § 15.205(a) [RSS-Gen sec.8.10], must comply with the radiated emission limits specified in § 15.209(a) [RSS-Gen sec. 8.9].
☐	FCC Part 15, Subpart C, §15.247 (d); [RSS-247 sec. 5.5]: If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this test shall be 30 dB instead of 20 dB.

FCC Part 15, Subpart C, §15.209; [RSS-Gen sec. 8.9]; Radiated Emission Limits

Frequency [MHz]	Measurement distance [m]	Limit [µV/m]	Limit [dBµV/m]	Limit @3m [dBµV/m]	Detector
0.009 – 0.09	300	2400/F(kHz)	48.5 … 28.5	128.5 … 108.5	AVG(Pk)
0.09 – 0.11	300	2400/F(kHz)	28.5 … 26.8	108.5 … 106.8	QP
0.11 – 0.49	300	2400/F(kHz)	26.8 … 13.8	106.8 … 93.8	AVG(Pk)
0.49 – 1.705	30	24000/F(kHz)	33.8 … 23.0	73.8 … 63.0	QP
1.705 – 30	30	30	29.5	69.5	QP
30 – 88	3	100	40.0	40.0	QP
88 – 216	3	150	43.5	43.5	QP
216 – 960	3	200	46.0	46.0	QP
960 - 1000	3	500	54.0	54.0	QP
1000 - 40000	3	500	54.0	54.0	AVG(Pk)

Used conversion factor µV/m->dBµV/m: $\text{Limit}\,[\text{dB}\mu\text{V/m}] = 20\log(\text{Limit}\,[\mu\text{V/m}] / 1\mu\text{V/m})$
At frequencies below 30MHz, the measured values are corrected with an inverse linear distance extrapolation factor (40dB/decade) according to FCC 15.31 (f)(2).

The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9–90kHz, 110–490kHz and above 1000MHz. Radiated emission limits in these three bands are based on measurements employing a linear average detector.

FCC Part 15, Subpart C, §15.35(b) [RSS-Gen sec. 8.1]:
..., there is also a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit....

ANSI C63.10 clause 5.5:
The spectrum shall be investigated from the lowest radio frequency signal generated in the device and up to at least the 10th harmonic of the highest fundamental frequency or to 40 GHz whichever is lower.
However, frequencies below 9 kHz do not need to be investigated.

4.4.2 Radiated measurements with general limit (Unwanted emissions)

4.4.2.1 Test Method

Radiated unwanted Emissions were tested against the general limits specified in § 15.209(a) [RSS-Gen sec. 8.9]. Emissions that fall inside the frequency band in which the intentional radiator is operating were excluded.
Emissions that exceed the general limits were additionally tested for the further requirements of §15.247 (d); [RSS-247 sec. 5.5]

A test program that controls instrumentation and data logging was used to automate the preliminary RF emission test procedure. Measurement equipment was located outside of the chamber. A video camera was placed inside the chamber to view the EUT. The different measurement setups for each frequency range are shown below.

For the final testing, the placement of EUT and cables were the same as for preliminary testing. The six highest emissions relative to the limit were measured unless such emissions were more than 20 dB below the limit. If less than six emissions are within 20 dB of the limit, than the noise level of the receiver is measured at frequencies where emissions are expected. Multiples of all oscillator and microprocessor frequencies were also checked. For the measurements in the frequency range 30 MHz to 1 GHz for each measured frequency the peak emission was maximized by manipulating the receiving antenna from 1 to 4 meters above the ground plane and placing it at the position that produced the maximum signal strength reading. The turntable was then rotated through 360° while observing the peak signal and placing the EUT at the position that produced maximum radiation.

For measurement above 1 GHz the turntable was set to continues rotation and positioner step sizes were set to a range of 45° and the antenna height is fixed.

For the measurements in the frequency ranges (90-110kHz, 490 kHz-1 GHz) quasi-peak detector is used, while average and peak detectors are used in other ranges.

Final testing was performed on an SVSWR compliant test site.
The final average electric field value (E_{final}) is calculated in the final measurement table using the following equation:

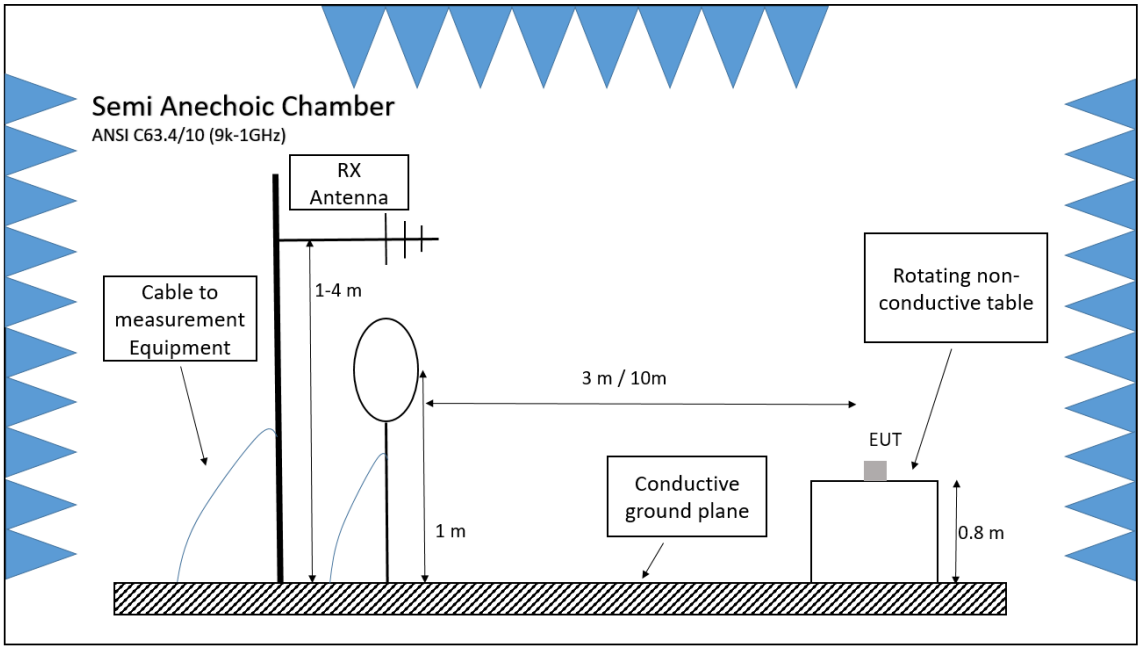
$$E_{final} = \mathrm{RawRec} + \mathrm{Corr.}$$

While

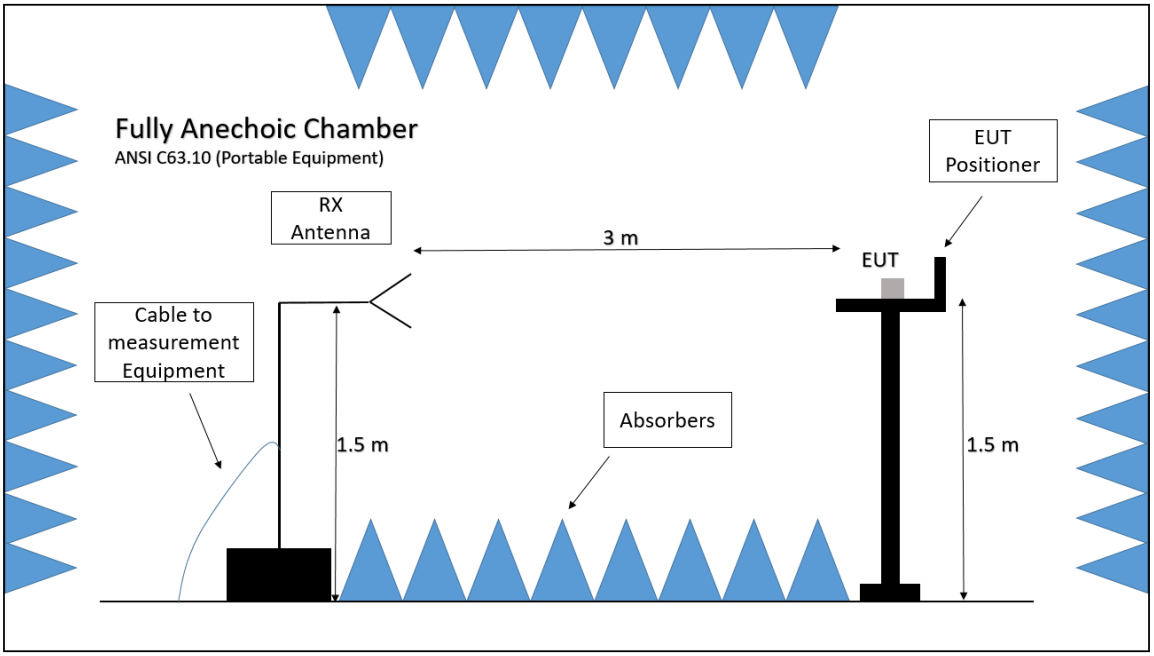
$$\mathrm{Corr.} = \mathrm{Trd.\ Corr.} + \mathrm{Sig\ Path} + \mathrm{Preamp}$$

4.4.2.2 EUT positioning (Radiated measurements with general limit; Unwanted emissions)

4.4.2.2.1 EUT positioning below 1GHz



4.4.2.2.2 EUT positioning above 1GHz



4.4.2.3 Measurement Setup (Radiated measurements with general limit; Unwanted emissions)

4.4.2.3.1 Measurement Setup 9kHz - 30MHz

Test Site	SAC (Semi Anechoic Chamber)
Receiving Antenna	Loop antenna (HFH 2)
Receiving Antenna Height	1m (center of Loop antenna)
Receiving Antenna Polarization	Parallel and perpendicular to the EUT (EUT without Loop antenna) According to ANSI C63.10 clause 6.4.6
EUT Table	1.0m x 1.5m non-conductive table 80cm above the floor
EUT Turn Table Step Size	22.5° during exploratory tests Linear during maximizations for final measurements
Receiver Configurations	Average and peak detectors (9-90kHz and 110-490kHz) Quasi Peak detector (90-110kHz and 490kHz-30MHz)
	RBW: 200Hz (9 - 150kHz) and 9 kHz (150kHz – 30MHz)
	Step Size: 50Hz (9-150kHz) and 2.25kHz (150k-30MHz)
	Sweep Time: 100ms (FFT) during exploratory tests Sweep Time: 1s for final measurements

4.4.2.3.2 Measurement Setup 30MHz - 1GHz

Test Site	Semi-anechoic chamber
Receiving Antenna	Hybrid Antenna VULB 9168
Receiving Antenna height	Varied (1m to 4m, step size 1m) during exploratory tests Linear during maximizations for final measurements
Receiving Antenna Polarization	Horizontal and Vertical
EUT Table	1.0m x 1.5m non-conductive table 80cm above the floor
EUT Turn Table Step Size	45° during exploratory tests Linear during maximizations for final measurements
Receiver Configurations	Average and peak detector
	RBW :120 kHz
	Step Size: 30kHz (30-1000MHz)
	Sweep Time: 100ms (FFT) during exploratory tests Sweep Time: 1s for final measurements

Prüfdokumentation
Test documentation

4.4.2.3.3 Measurement Setup above 1GHz

Test Site	Fully anechoic chamber
Receiving Antenna	Horn Antenna HF907 (1-18GHz), 3116C-PA (18-40GHz)
Receiving Antenna Height	1.5m
Receiving Antenna Polarization	Horizontal + Vertical in one Plot
EUT Positioner	40cm x 60cm non-conductive positioner 1.5m above the floor Step size elevation angle 45°
EUT Turn Table Step Size	45°
Spectrum Analyzer	Average and peak detectors
	RBW: 1 MHz
	Sweep Time: 60s during exploratory tests Sweep Time: 10s for final measurements

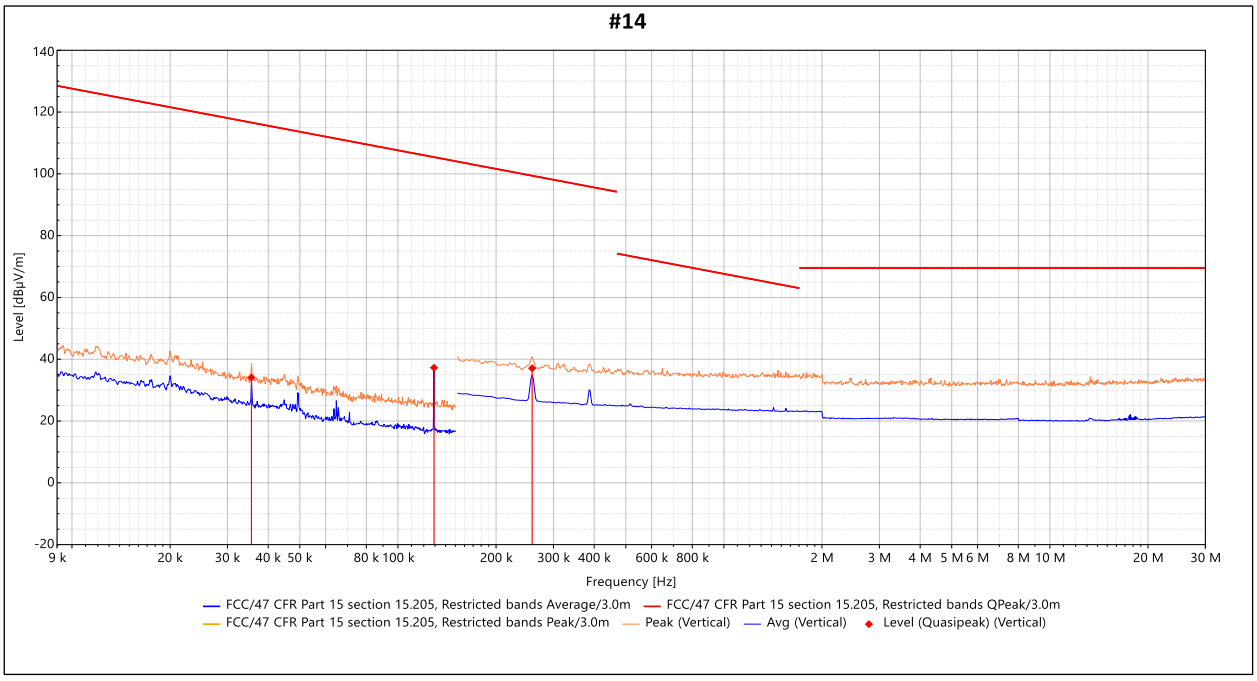
4.4.2.4 Test Setup (Radiated measurements with general limit; Unwanted emissions)

EUT	A003859606-008	
Companion device	EUT in Test Mode. Therefore, no Companion Device was used.	
Operation mode	☒ 1: TX-Mode	☐ 2: TX-Mode
	☐ 3: N/A	☐ 4: N/A
Further parameters	-	
Test engineer	Shrinivas Naikar	

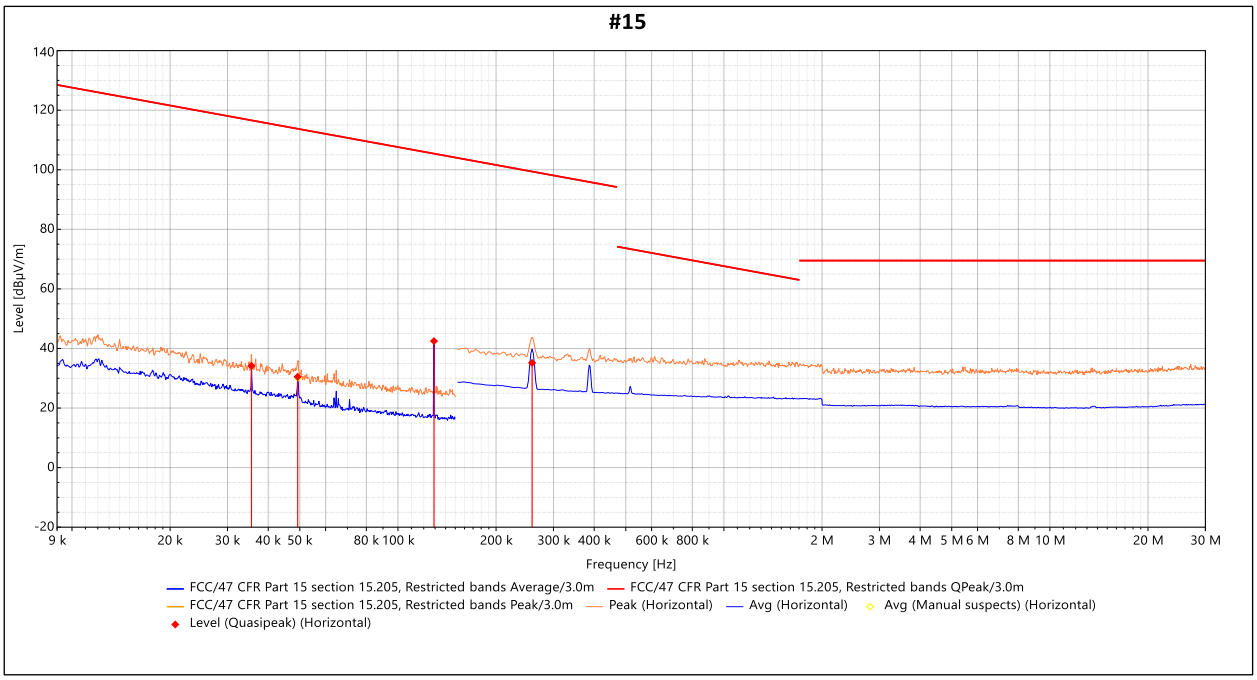
Prüfdokumentation
Test documentation

4.4.2.5 Worst case Test results
4.4.2.6 9 kHz to 30 MHz, lowest Channel

4.4.2.6.1 Perpendicular Polarization



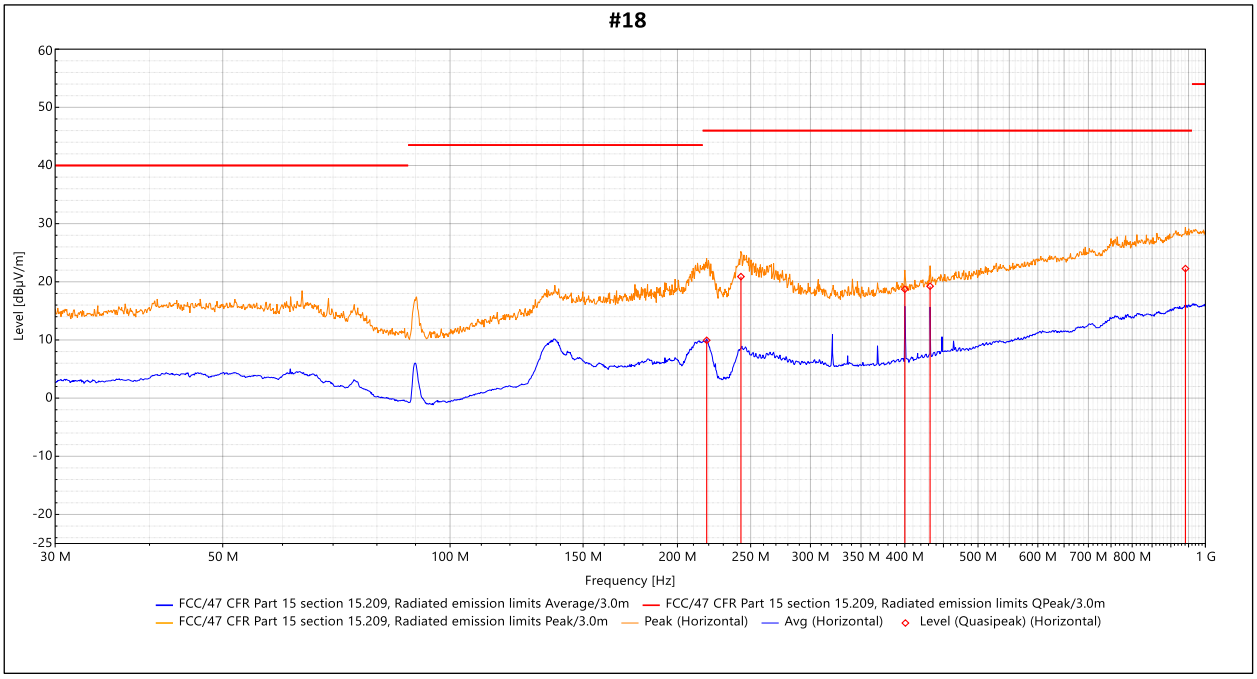
4.4.2.6.2 Parallel Polarization



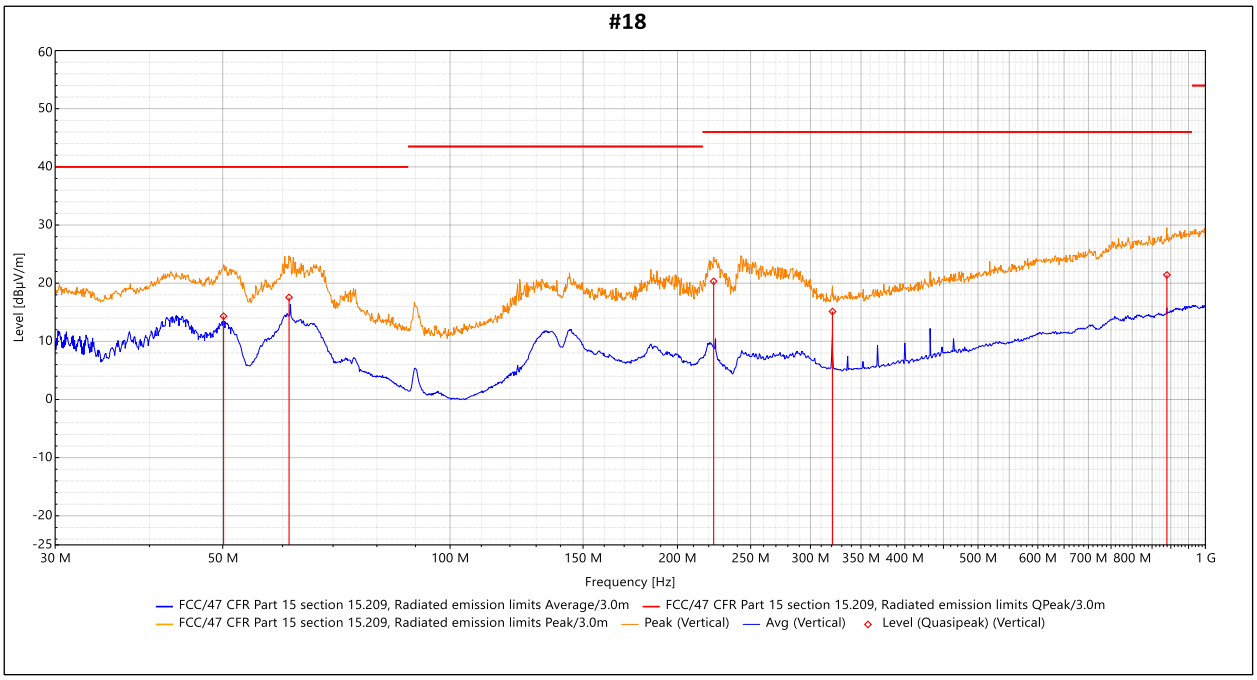
Prüfdokumentation
Test documentation

4.4.2.7 30 MHz to 1 GHz, lowest Channel

4.4.2.7.1 Horizontal Polarization



4.4.2.7.2 Vertical Polarization

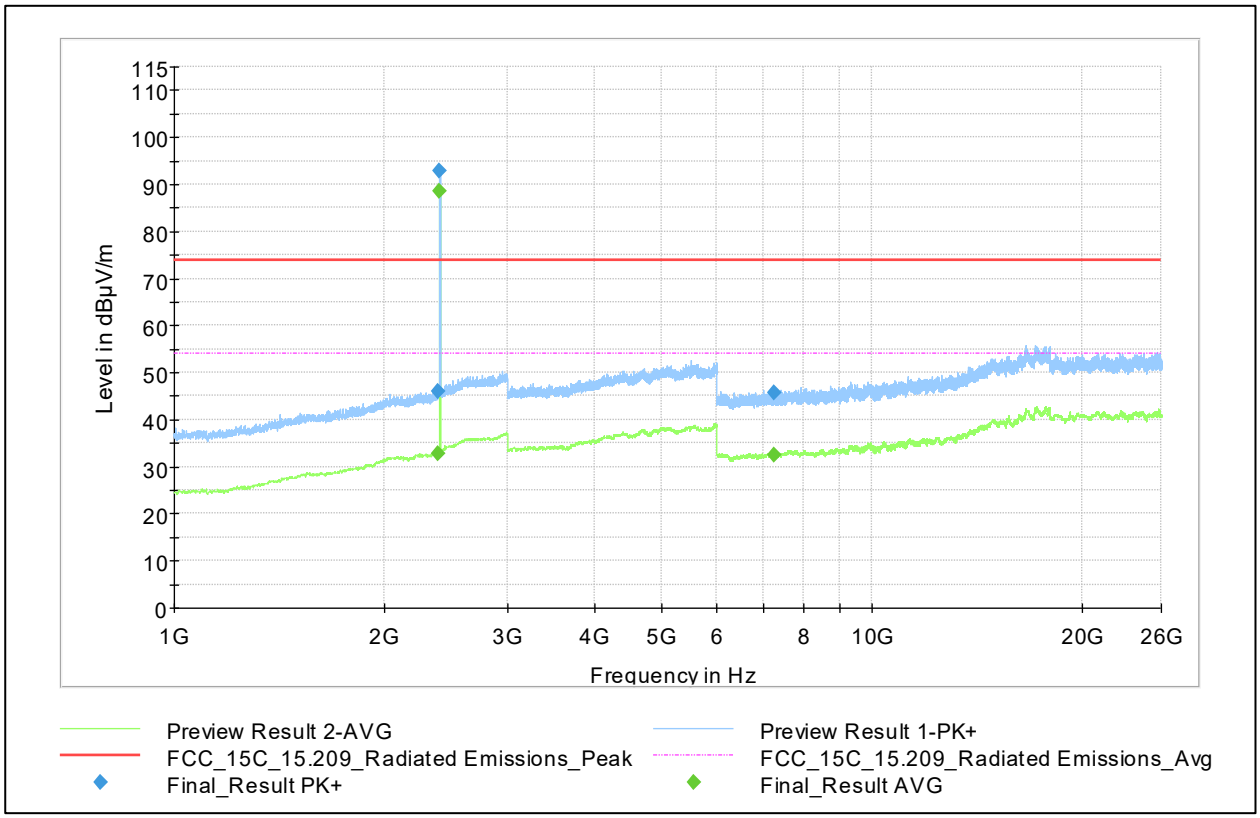


Prüfdokumentation
Test documentation

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Azimuth (deg)	Height (m)	Corr. (dB)
218.648	9.9	46.0	-36.1	H	181.1	3.33	-13.4
320.855	15.1	46.0	-30.9	V	96.1	1.80	-9.2
400.028	18.7	46.0	-27.3	H	105.7	2.79	-7.3
432.03	19.2	46.0	-26.8	H	21.8	1.00	-6.4
223.329	20.3	46.0	-25.7	V	167.4	1.02	-13.5
50.132	14.3	40.0	-25.7	V	170.7	3.30	-10.2
242.714	20.9	46.0	-25.1	H	90.9	1.73	-11.8
889.301	21.4	46.0	-24.6	V	104.0	1.17	1.2
941.032	22.3	46.0	-23.7	H	107.5	2.53	2.1
61.213	17.6	40.0	-22.4	V	218.1	1.53	-10.9

Prüfdokumentation
Test documentation

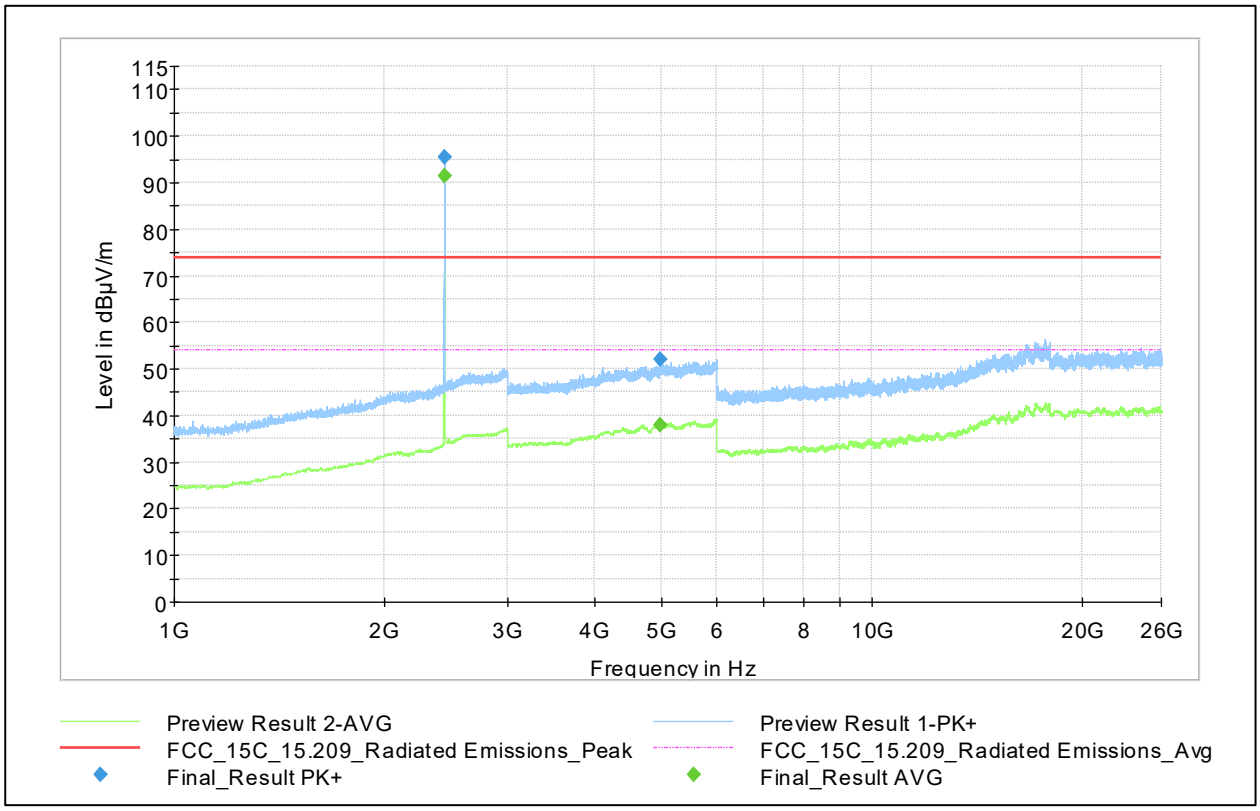
4.4.2.8 **1 to 26GHz, Lowest Channel**



Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Band width (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
2390.000	---	32.75	54.00	21.25	1000	1000	150.0	V	179.0	30.0	12.6
2390.000	46.00	---	74.00	28.00	1000	1000	150.0	V	179.0	30.0	12.6
2404.428	92.76	---	Fundamental frequency			1000	150.0	H	171.0	-12.0	12.7
2404.428	---	88.49	Fundamental frequency			1000	150.0	H	171.0	-12.0	12.7
7237.922	45.68	---	74.00	28.32	1000	1000	150.0	V	160.0	18.0	-3.0
7237.922	---	32.45	54.00	21.55	1000	1000	150.0	V	160.0	18.0	-3.0

Prüfdokumentation
Test documentation

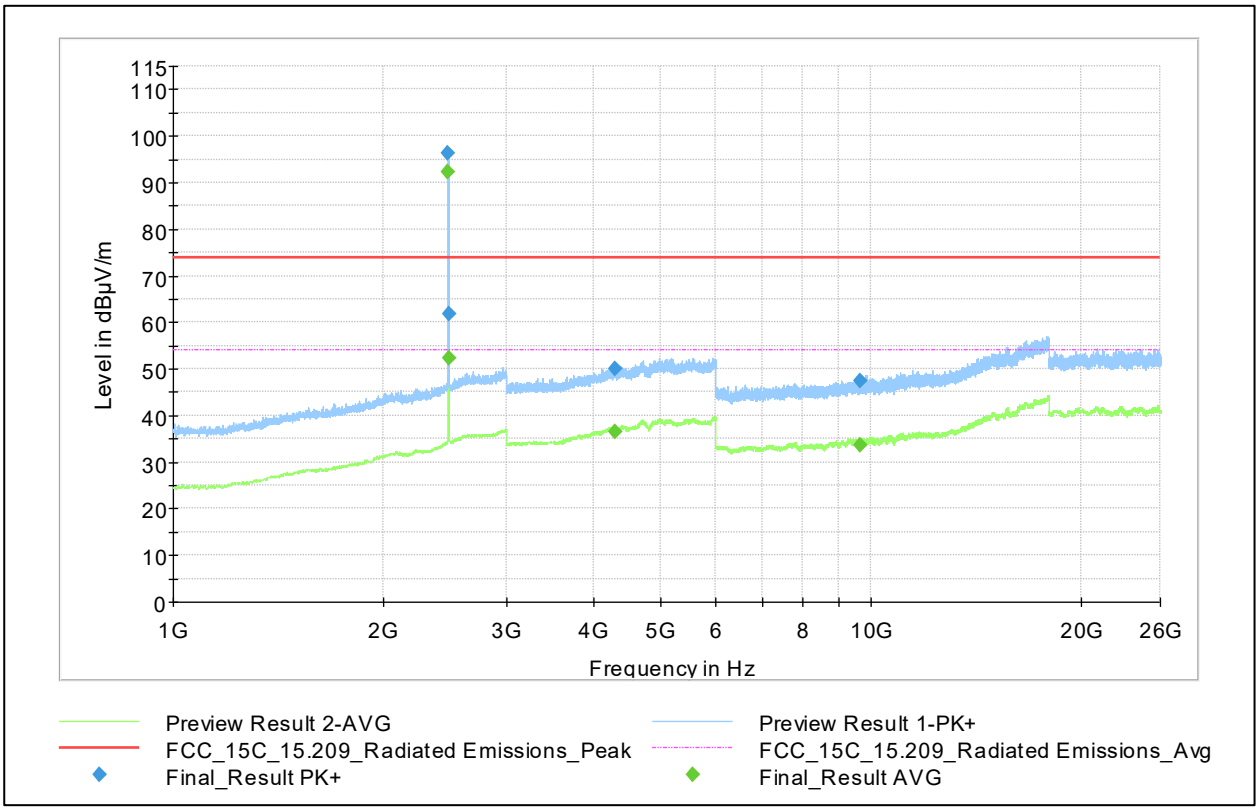
4.4.2.9 1 to 26GHz, Middle Channel



Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Band width (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
2440.506	95.47	---	Fundamental frequency			1000.	150.0	V	133.0	80.0	13.2
2440.506	---	91.45	Fundamental frequency			1000.	150.0	V	133.0	80.0	13.2
4985.396	51.92	---	74.00	22.08	1000	1000.	150.0	H	208.0	16.0	10.1
4985.396	---	37.88	54.00	16.12	1000	1000.	150.0	H	208.0	16.0	10.1

Prüfdokumentation
Test documentation

4.4.2.10 1 to 26GHz, Highest Channel



Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Band width (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
2479.441	96.26	---	Fundamental frequency			1000.	150.0	H	315.0	32.0	13.8
2479.441	---	92.15	Fundamental frequency			1000.	150.0	H	315.0	32.0	13.8
2483.500	61.95	---	74.00	12.05	1000	1000.	150.0	H	204.0	-9.0	13.5
2483.500	---	52.30	54.00	1.70	1000	1000.	150.0	H	204.0	-9.0	13.5
4297.623	50.10	---	74.00	23.90	1000	1000.	150.0	H	15.0	11.0	7.7
4297.623	---	36.58	54.00	17.42	1000	1000.	150.0	H	15.0	11.0	7.7
9666.967	47.38	---	74.00	26.62	1000	1000.	150.0	V	205.0	-25.0	0.0
9666.967	---	33.77	54.00	20.23	1000	1000.	150.0	V	205.0	-25.0	0.0

4.4.3 Band Edge Measurement and conducted spurious emission (Unwanted emissions)

4.4.3.1 Test Method

Unwanted emissions close to the operating band were additionally tested here.
Antenna connector is prepared, so conducted method was used according to ANSI C63.10 clause 6.10. The maximum in-band antenna gain, or 2 dBi, whichever is greater was used outside the operating band.
The EUT was connected to the spectrum analyzer via a coax cable with a known loss. The measurements were done with EUT configured to the lowest and highest channels, and in hopping mode (in case of FHSS device).

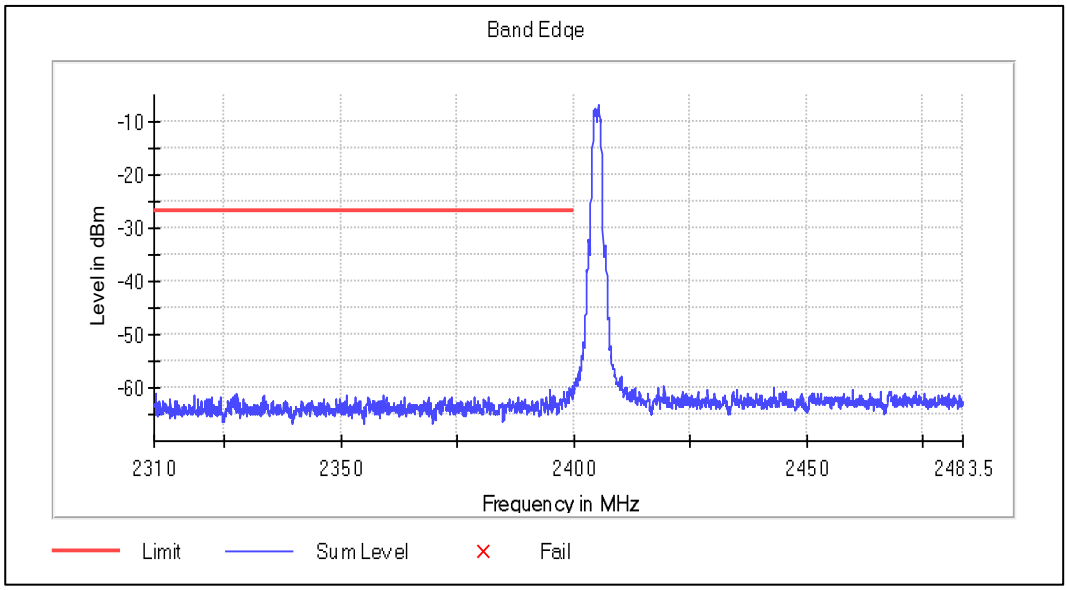
4.4.3.2 Test Setup

EUT		A003859606-014
Chamber details		Shielded room
Companion device		EUT in Test Mode. Therefore, no Companion Device was used.
Operation mode		☒ 1: TX-Mode ☐ 2: TX-Mode ☐ 3: N/A ☐ 4: N/A
Spectrum Analyzer	**Resolution Bandwidth**	100 kHz.
	Video Bandwidth	≥ 3 × RBW
	center frequency and Span	Set to encompass frequency range to be measured
	Detector	Peak
	Trace	Max hold
	Sweep time	Auto couple
Further parameters		-
Test engineer		Shrinivas Naikar

Prüfdokumentation
Test documentation

4.4.3.3 **Test results** (Unwanted emissions; Band Edge Measurement)

4.4.3.3.1 Lowest Channel



Inband Peak

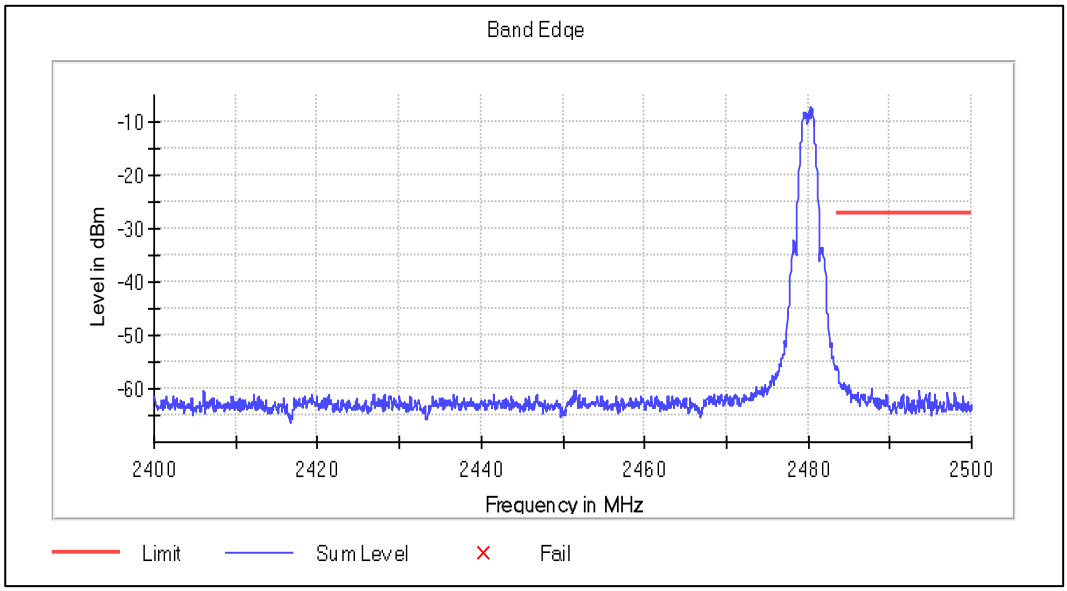
Frequency [MHz]	Level [dBm]
2405.225000	-6.9

Measurements

Frequency [MHz]	Level [dBm]	Margin [dB]	Limit [dBm]	Result
2399.775000	-59.5	32.5	-26.9	PASS
2399.825000	-59.5	32.6	-26.9	PASS
2399.175000	-60.1	33.1	-26.9	PASS
2399.225000	-60.2	33.3	-26.9	PASS
2394.925000	-60.3	33.4	-26.9	PASS
2399.575000	-60.4	33.5	-26.9	PASS
2399.525000	-60.5	33.5	-26.9	PASS
2399.325000	-60.5	33.6	-26.9	PASS
2399.475000	-60.7	33.7	-26.9	PASS
2397.975000	-60.7	33.8	-26.9	PASS
2394.875000	-60.8	33.9	-26.9	PASS
2394.975000	-60.9	33.9	-26.9	PASS
2398.625000	-60.9	33.9	-26.9	PASS
2397.925000	-60.9	34.0	-26.9	PASS
2399.975000	-61.0	34.0	-26.9	PASS

Prüfdokumentation
Test documentation

4.4.3.3.2 Highest Channel



Inband Peak

Frequency [MHz]	Level [dBm]
2480.225000	-7.3

Measurements

Frequency [MHz]	Level [dBm]	Margin [dB]	Limit [dBm]	Result
2483.575000	-55.7	28.5	-27.3	PASS
2483.525000	-56.3	29.0	-27.3	PASS
2483.625000	-56.9	29.6	-27.3	PASS
2483.675000	-57.9	30.6	-27.3	PASS
2483.775000	-58.4	31.1	-27.3	PASS
2483.725000	-58.6	31.3	-27.3	PASS
2483.825000	-58.8	31.5	-27.3	PASS
2483.925000	-59.0	31.7	-27.3	PASS
2483.875000	-59.0	31.7	-27.3	PASS
2484.375000	-59.1	31.8	-27.3	PASS
2484.425000	-59.1	31.8	-27.3	PASS
2484.075000	-59.2	31.9	-27.3	PASS
2483.975000	-59.3	32.0	-27.3	PASS
2484.275000	-59.3	32.1	-27.3	PASS
2484.475000	-59.4	32.1	-27.3	PASS

4.4.4 Conducted unwanted emissions

4.4.4.1 Test Method

Antenna connector is prepared, so conducted method was used to measure the unwanted emissions in frequency range (30MHz to 26GHz) according to ANSI C63.10 clause 11.11.2 and 11.11.3 (DTS) The EUT was connected to the spectrum analyzer via a coax cable with a known loss.

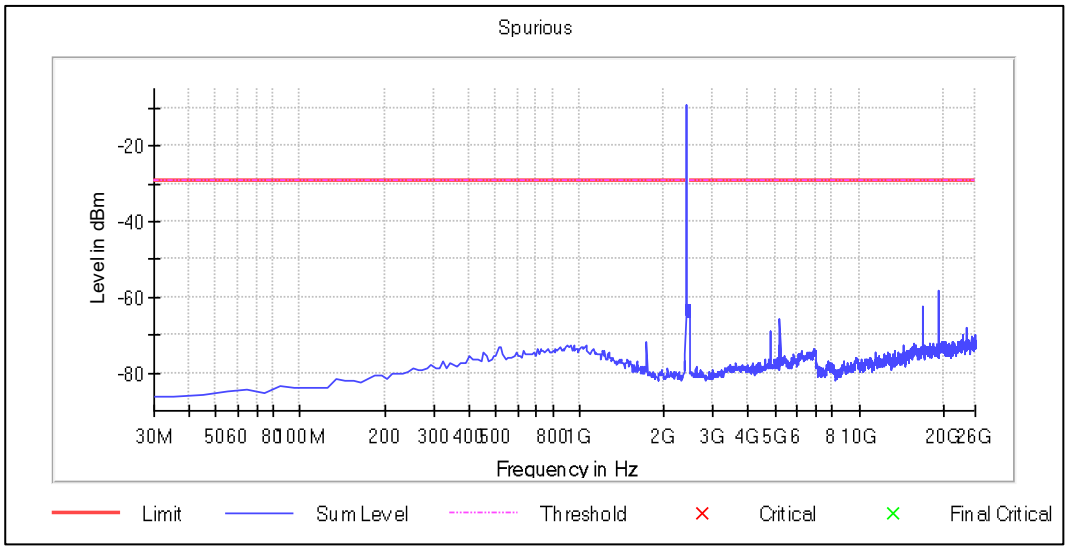
4.4.4.2 Test Setup

EUT		A003859606-014
Chamber details		Shielded room
Companion device		EUT in Test Mode. Therefore, no Companion Device was used.
Operation mode		☒ 1: TX-Mode ☐ 2: TX-Mode ☐ 3: N/A ☐ 4: N/A
Spectrum Analyzer	**Resolution Bandwidth**	100 kHz.
	Video Bandwidth	≥ 3 × RBW
	center frequency and Span	Set to encompass frequency range to be measured
	Detector	Peak
	Trace	Max hold
	Sweep time	Auto couple
Further parameters		-
Test engineer		Shrinivas Naikar

Prüfdokumentation
Test documentation

4.4.4.3 **Test results** (Conducted unwanted emissions)

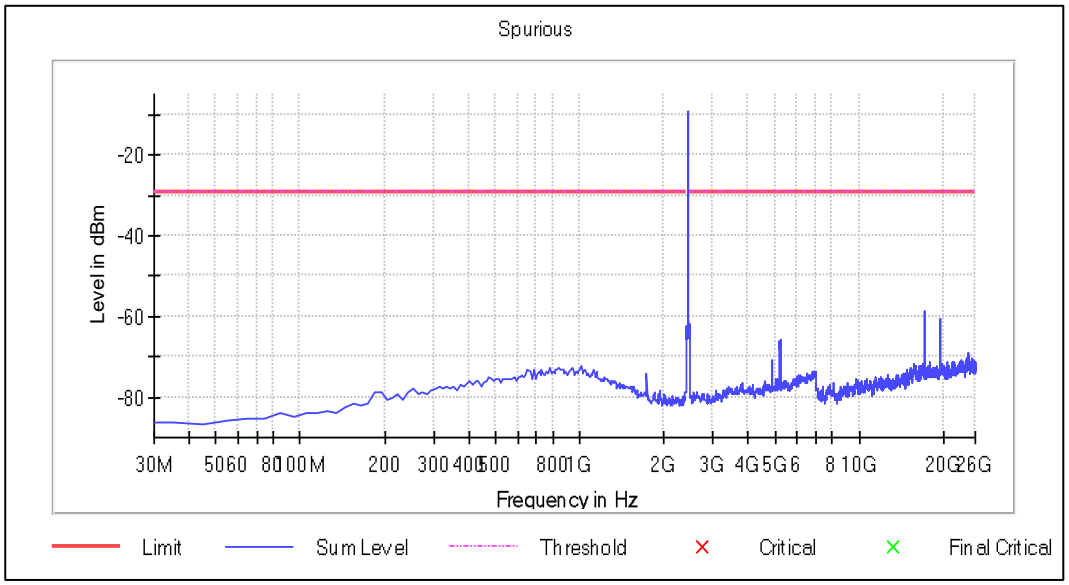
4.4.4.3.1 Lowest Channel



Frequency [MHz]	Level [dBm]	Margin [dB]	Limit [dBm]	Result
19238.881322	-58.4	29.1	-29.3	Pass
19248.875584	-58.5	29.2	-29.3	Pass
16830.264025	-62.3	33.0	-29.3	Pass
16840.258287	-63.9	34.6	-29.3	Pass
2395.021008	-64.8	35.5	-29.3	Pass
5196.942308	-65.6	36.3	-29.3	Pass
24046.121653	-68.1	38.8	-29.3	Pass
4807.166065	-68.9	39.6	-29.3	Pass
25825.100404	-70.0	40.6	-29.3	Pass
23576.391309	-70.0	40.7	-29.3	Pass
25275.415958	-70.3	40.9	-29.3	Pass
25235.438908	-70.7	41.3	-29.3	Pass
23606.374097	-70.8	41.5	-29.3	Pass
23386.500319	-70.8	41.5	-29.3	Pass
25085.524968	-70.9	41.5	-29.3	Pass

Prüfdokumentation
Test documentation

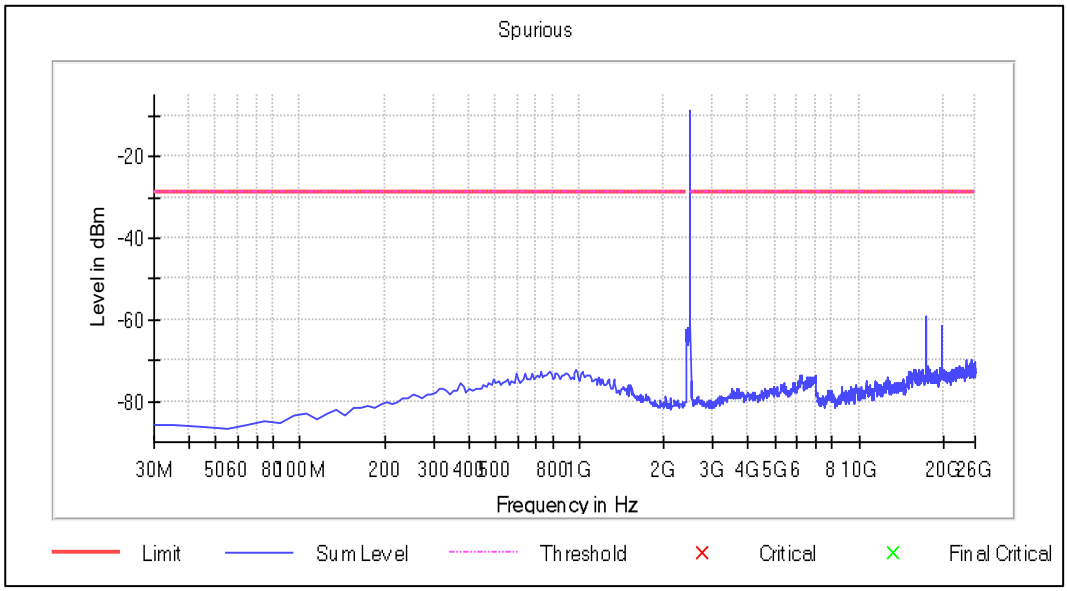
4.4.4.3.2 Middle Channel



Frequency [MHz]	Level [dBm]	Margin [dB]	Limit [dBm]	Result
17080.120591	-58.8	29.8	-29.1	Pass
19528.714938	-60.6	31.5	-29.1	Pass
19518.720676	-60.7	31.6	-29.1	Pass
5206.936570	-65.6	36.6	-29.1	Pass
5176.953782	-66.2	37.1	-29.1	Pass
5196.942308	-66.6	37.5	-29.1	Pass
5186.948045	-67.9	38.8	-29.1	Pass
24575.817573	-69.1	40.0	-29.1	Pass
24395.920846	-69.4	40.3	-29.1	Pass
24405.915108	-69.5	40.4	-29.1	Pass
24555.829048	-70.2	41.1	-29.1	Pass
25255.427433	-70.3	41.2	-29.1	Pass
24126.075754	-70.5	41.4	-29.1	Pass
24615.794624	-70.7	41.6	-29.1	Pass
24625.788887	-70.7	41.7	-29.1	Pass

Prüfdokumentation
Test documentation

4.4.4.3.3 Highest Channel



Frequency [MHz]	Level [dBm]	Margin [dB]	Limit [dBm]	Result
17359.959945	-59.2	30.4	-28.9	Pass
2488.497131	-59.3	30.4	-28.9	Pass
19848.531343	-61.5	32.6	-28.9	Pass
19838.537080	-62.9	34.0	-28.9	Pass
25265.421696	-69.8	40.9	-28.9	Pass
25225.444645	-69.8	41.0	-28.9	Pass
24096.092966	-70.1	41.2	-28.9	Pass
25155.484807	-70.3	41.5	-28.9	Pass
25835.094666	-70.4	41.5	-28.9	Pass
25195.461857	-70.5	41.7	-28.9	Pass
24795.691351	-70.9	42.1	-28.9	Pass
25805.111878	-70.9	42.1	-28.9	Pass
25285.410221	-71.0	42.1	-28.9	Pass
24116.081492	-71.0	42.1	-28.9	Pass
25235.438908	-71.0	42.2	-28.9	Pass

4.4.5 **Final test result** (Conducted unwanted emissions)

Final test result	Pass

4.5 AC Power Conducted Emission

4.5.1 Requirements / Limits

AC power-line conducted emission measurements shall be made, unless otherwise specified, over the frequency range from 150 kHz to 30 MHz, to determine the line-to-ground radio-noise voltage that is conducted from all of the EUT current-carrying power input terminals that are directly (or indirectly via separate transformers or power supplies) connected to a public power network.

FCC Part 15, Subpart C, §15.207 (a)
... for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 µH/50 ohms line impedance stabilization network (LISN).

FCC Part 15, Subpart C, §15.207, Conducted Emission Limits

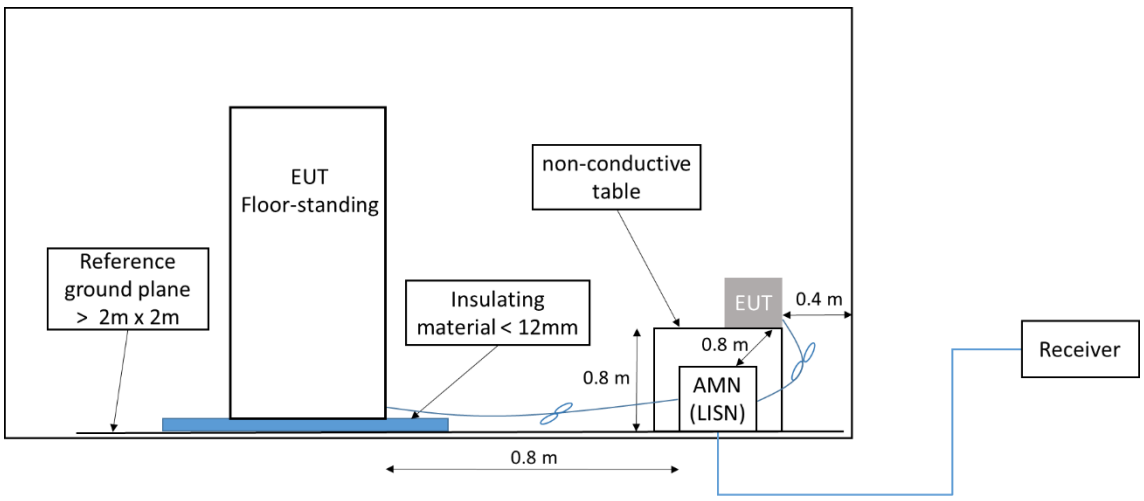
Frequency [MHz]	Conducted Limit [dBµV]	
	Quasi-peak	Average
0.15 – 0.5	66 to 56*	56 to 46*
0.5 – 5	56	46
5 – 30	60	50

*Decreases with logarithm of the frequency

FCC Part 15, Subpart C, §15.207 (c)
... Devices that include, or make provisions for, the use of battery chargers which permit operating while charging, AC adapters or battery eliminators or that connect to the AC power lines indirectly, obtaining their power through another device which is connected to the AC power lines, shall be tested to demonstrate compliance with the conducted limits.

4.5.2 Test Method

The test setup was made according to ANSI C63.10 clauses 6.2.2 & 6.2.3 as shown in the photograph



The EUT was configured to transmit on the lowest channel since it has the highest output power.

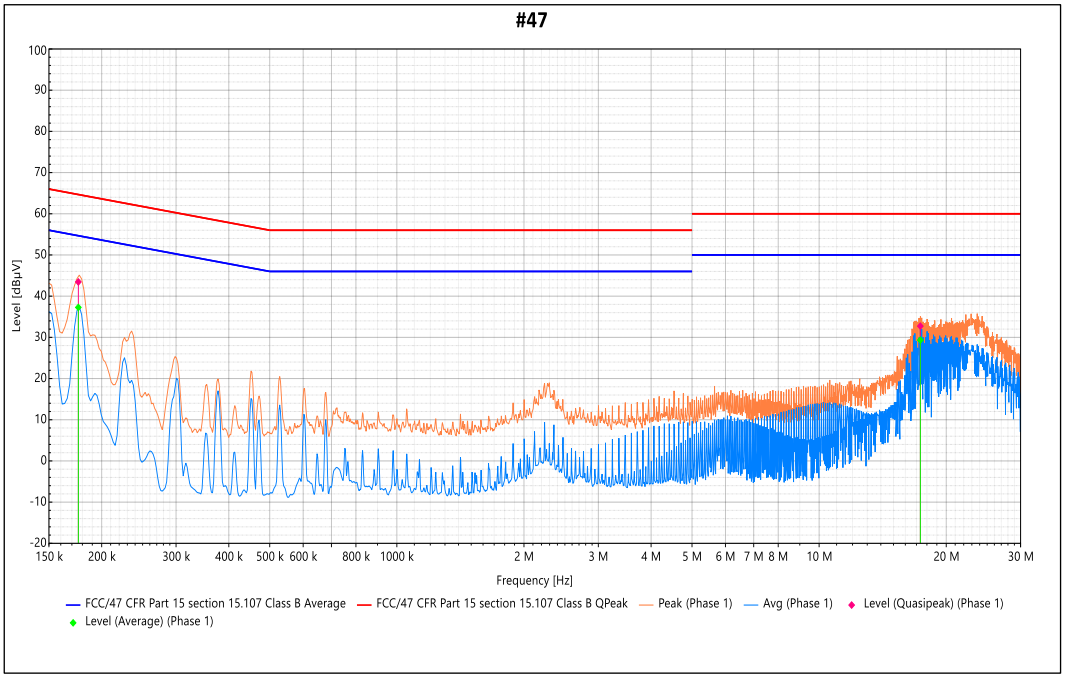
Prüfdokumentation
Test documentation

4.5.3 **Test Setup** (AC Power Conducted Emission)

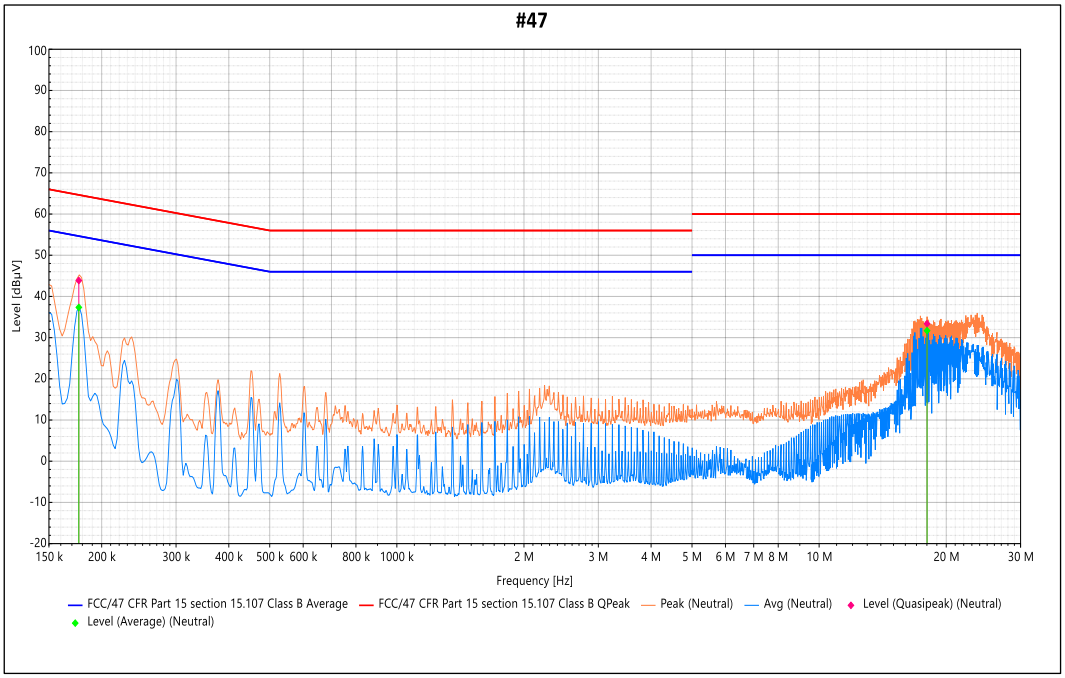
EUT	A003859606-008
Companion device	EUT in Test Mode. Therefore, no Companion Device was used.
Operation mode	☐ 1: TX-Mode ☒ 2: TX-Mode ☐ 3: N/A ☐ 4: N/A
Further parameters	-
Test engineer	Shrinivas Naikar

4.5.4 **Test results** (AC Power Conducted Emission)

Line: Phase 1



Line: Neutral



QuasiPeak:

Frequency (Hz)	Meas. Q-Peak (dBµV)	Limit (dBµV)	Margin (dB)	Line	Correction (dB)	Result
17.368 M	32.7	60.0	-27.3	Phase 1	10.3	Pass
18.014 M	33.4	60.0	-26.6	Neutral	10.5	Pass
176.1 k	43.4	64.6	-21.2	Phase 1	10.0	Pass
176.55 k	43.9	64.6	-20.8	Neutral	10.0	Pass

Average:

Frequency (Hz)	Meas. AVG (dBµV)	Limit (dBµV)	Margin (dB)	Line	Correction (dB)	Result
17.368 M	29.3	50.0	-20.7	Phase 1	10.3	Pass
18.014 M	31.7	50.0	-18.3	Neutral	10.5	Pass
176.1 k	37.3	54.6	-17.4	Phase 1	10.0	Pass
176.55 k	37.3	54.6	-17.3	Neutral	10.0	Pass

4.5.5 **Final test result** (AC Power Conducted Emission)

Final test result	Pass

Fotodokumentation
Photo documentation

5 Test Setup Photo

For reasons of confidentiality, no photos of the EUT are included in this report.
For EUT and test setup photos please see the Photo Documentation to this report Number.

Liste der verwendeten Prüfmittel
List of used test equipment

6 Equipment List

6.1 Hardware

Prüfmittel Test equipment			**Prüfmittel-Nr. / ID- Nr.** Equipment-No. / ID- No.		**Nächste Kalibrierung** Next calibration
TS8997	OSP-B157 WX. (with integrated power meter)	Rohde & Schwarz	9000266		22.10.2026
	OSP-B157W8	Rohde & Schwarz	9000267		23.10.2026
	Spectrum Analyzer: FSV-30	Rohde & Schwarz	9000268		10.08.2025
Fully Anechoic Room		Albatross Projects GmbH	2959749	*	13.02.2026
Signal Analyzer FSU 26		Rohde & Schwarz	2844118		04.08.2025
Signal Analyzer UXA N9041B		Keysight	2971644		24.06.2026
RSE-Filtersystem		Rohde & Schwarz	9002802	*	06.02.2026
Antenna HF907 1-18GHz		Rohde & Schwarz	2856263		10.09.2027
Horn Antenna 3116C-PA 18-40GHz		ETS LINDGREN	2900393		19.12.2025
Semi-Anechoic Chamber 30-1000 MHz		Siemens	2729645		15.06.2025
Receiver ESU 8		Rohde & Schwarz	2728844		18.07.2025
Antenna HFH 2 (Loop) 9kHz-30MHz		Rohde & Schwarz	2728893		05.08.2027
Antenna VULB 9168 30MHz – 1GHz		Schwarzbeck	2728136		05.10.2026
ESR 7		Rohde & Schwarz	9072121		04.10.2025
LISN		Rohde & Schwarz	2731908		16.07.2027
Limitor		Rohde & Schwarz	2732546		21.02.2027
Power Amplifier		Manson (HCS -3202)	9002681		23.08.2025

*Equipment only verified and not calibrated

6.2 Software

Test Software	Developer	Version
EMC32	Rohde & Schwarz	10.60.20
WMS32	Rohde & Schwarz	10.60.10
BAT-EMC	NEXIO	2022.0.19.0

Änderungsverzeichnis
Change history

7 Change history

Revision Number	List of revisions
001	Initial Release

Ende des Prüfberichts
End of Test Report