

Prüfbericht-Nr.: <i>Test report no.:</i>	DE26RV8X 001	Auftrags-Nr.: <i>Order no.:</i>	1200141 90	Seite 1 von 80 Page 1 of 80
Kunden-Referenz-Nr.: <i>Client reference no.:</i>	665263	Auftragsdatum: <i>Order date:</i>	2025-09-10	
Auftraggeber: <i>Client:</i>	seepex GmbH, Scharnhölzstr. 344, 46240 Bottrop, Deutschland			
Prüfgegenstand: <i>Test item:</i>	Laboratory Equipment / Sensor Gateway			
Bezeichnung / Typ-Nr.: <i>Identification / Type no.:</i>	SGRIQB024DC0000001			
Auftrags-Inhalt: <i>Order content:</i>	Prüfung der Funkparameter nach FCC & ISCED <i>Test of radio parameters acc. to FCC & ISCED</i>			
Prüfgrundlage: <i>Test specification:</i>	Vollprüfung / Complete test FCC CFR 47 Part 15 Subpart C- §15.247 ISCED RSS-247 Issue 4 July 2025			
Wareneingangsdatum: <i>Date of sample receipt:</i>	2026-03-30	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.		
Prüfmuster-Nr.: <i>Test sample no.:</i>	A004236733-001 to 008			
Prüfzeitraum: <i>Testing period:</i>	2026-04-07 - 2026-04-22			
Ort der Prüfung: <i>Place of testing:</i>	Nürnberg Nuremberg			
Prüflaboratorium: <i>Testing laboratory:</i>	Wireless Labor Wireless Test Lab			
Prüfergebnis*: <i>Test result*:</i>	Pass			
geprüft von: <i>tested by:</i>	13.07.2026 	genehmigt von: <i>authorized by:</i>	13.07.2026 	
Datum: <i>Date:</i>	Signiert von: Primoz Erzen	Ausstellungsdatum: <i>Issue date:</i>	Signiert von: Matthias Kraeutlein	
Stellung / Position:	Sachverständige(r)/Expert	Stellung / Position:	Sachverständige(r)/Expert	
Sonstiges / <i>Other:</i>	Product FCC ID: 2BV3O-SGRIQB024DC; Product IC: 35585-SGRIQB024DC			
Zustand des Prüfgegenstandes bei Anlieferung: <i>Condition of the test item at delivery:</i>	Prüfmuster vollständig und unbeschädigt <i>Test item complete and undamaged</i>			
* 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. <i>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.</i>				

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 2 von 80
Page 2 of 80

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. <i>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.</i>
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 <i>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</i>
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. <i>Test clauses with remark of * are subcontracted to qualified subcontractors and described under the respective test clause in the report.</i> <i>Deviations of testing specification(s) or customer requirements are listed in specific test clause in the report.</i>
4	Die Entscheidungsregel für Konformitätserklärungen basierend auf numerischen Messergebnissen 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 bezüglich des Risikos durch diese Entscheidungsregel siehe ILAC G8:2019. <i>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.</i>
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. <i>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.</i>

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 3 von 80
Page 3 of 80

Produktbeschreibung
Product description

1	Test item	Laboratory Equipment / Sensor Gateway
2	Typ-No.	SGRIQB024DC0000001
3	Test sample obtaining	☒ Sampling by customer ☐ Sampling by TÜV Rheinland Group ☐ others:
4	Provided Samples	A004236733-001 to 008
5	Conducted measurements sample	A004236733-008 (cond. sample)
6	Radiated measurements sample	A004236733-003 (rad. Sample)
7	Serial-No.	A004236733-008 (cond. sample): SN1009 A004236733-003 (rad. Sample): SN1003
8	Supported radio technologies evaluated in this report	BLE
9	Supported radio technologies not evaluated in this report	LTE Cat M1; LTE NB-IoT
10	Description of EUT	Dry run protection with IoT monitoring capability
11	Max RF output power (measured)	5.1 dBm (conducted)
12	Operating Frequency (declared)	BLE: 2402 - 2480 MHz
13	Channel Bandwidth (declared)	BLE: 2MHz
14	Number of Channels (declared)	BLE: 40
15	Modulation	BLE: GFSK
16	Rated Voltage / Frequency	24 V DC
17	Antenna Name	Würth 74889602454
18	Antenna Type	☒ Integral antenna (designed as a fixed part of the EUT) ☐ Dedicated antenna (removable, obligation to be used) ☐ Permanent antenna connector
19	Antenna number of chains	1
20	Antenna Gain (declared)	3 dBi
21	Software / Firmware	V1.0 contains BLE: lq_base_nrf52_dtm (07.04.2026) LTE: lq_base_dualmode_rs485log_no_ble (07.04.2026) V2.2.1
22	Hardware	V3.2
23	Companion Device used for radio connection with the EUT	EUT in Test Mode. Therefore, no Companion Device was used.
24	Auxiliary equipment used to set up the EUT	Laptop with USB to Serial adapter and NRF-Connect Software V5.2.1 (Direct Test Mode V. 2.5.3)
25	Accessory Devices used together with the EUT	Power Supply provided by TÜV Rheinland (ID 9077561)
26	Temperature Range	-20 to +60
27	Environment	Indoor and Outdoor

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Absatz Clause	Anforderungen - Prüfungen / Requirements - Tests	Bemerkungen/ Remarks	Ergebnis Result
FCC §15.203 ISED RSS-Gen sec. 6.8	Antenna Requirement		P ☒ F ☐ N/A ☐ N/T ☐
FCC §15.247 (a)(1) ISED RSS-247 sec. 6.2.2.1 a ISED RSS-247 sec. 6.2.3.1 a ISED RSS-247 sec. 6.2.4.1 a	20Bandwidth	Does not apply for DTS equipment	P ☒ F ☐ N/A ☐ N/T ☐
FCC §15.247 (a)(2) ISED RSS-247 sec. 6.3.1 a	6dB Bandwidth	-	
RSS-Gen sec. 6.7	Occupied bandwidth 99%	only to be measured no limits apply	
FCC §15.247 (a)(1) ISED RSS-247 sec. 6.2.2.1.b, c	Number of Hopping Frequencies	Does not apply for DTS equipment	P ☐ F ☐ N/A ☒ N/T ☐
FCC §15.247 (a)(1) ISED RSS-247 sec. 6.2.2.1 b, c	Time of Occupancy	Does not apply for DTS equipment	P ☐ F ☐ N/A ☒ N/T ☐
FCC §15.247 (a)(1) ISED RSS-247 sec. 6.2.3.1	Carrier Frequency Separation	Does not apply for DTS equipment	P ☐ F ☐ N/A ☒ N/T ☐
FCC §15.247 (b) ISED RSS-247 sec. 6.2.2.2 ISED RSS-247 sec. 6.2.3.2 ISED RSS-247 sec. 6.2.4.2 ISED RSS-247 sec. 6.3.2	Maximum Output Power	-	P ☒ F ☐ N/A ☐ N/T ☐
FCC §15.247 (e) ISED RSS-247 sec. 6.3.1 b	Power Spectral Density	-	P ☒ F ☐ N/A ☐ N/T ☐
FCC §15.247 (d) ISED RSS-247 sec. 6.6	Unwanted Emissions	-	P ☒ F ☐ N/A ☐ N/T ☐
FCC §15.207 ISED RSS-Gen sec. 8.8	AC Power Conducted Emissions	-	P ☒ F ☐ N/A ☐ N/T ☐

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 5 von 80
Page 5 of 80

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	Type of equipment	7
3	Test conditions and configurations	7
3.1	Normal environmental test conditions	7
3.2	Extreme environmental test conditions	7
3.3	Equipment modifications	7
3.4	Antenna assemblies	7
3.5	Test Modes Setup	8
3.6	Measurement Uncertainty	9
4	Test results in detail	10
4.1	Antenna Requirement	10
4.2	20dB / 6dB / 99% Bandwidth	11
4.3	Maximum Output Power	23
4.4	Power Spectral Density	29
4.5	Unwanted emissions	33
4.6	AC Power Conducted Emission	69
5	Test Setup Photo	77
6	Application form	78
7	Equipment List Hardware	79
8	Change history	80

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 6 von 80
Page 6 of 80

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
BLE	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 Radiated Emission Limits and Additional Provisions for intentional Radiators operating in the bands 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz (5725-5850 MHz only for FHSS devices according to §15.37(h)).

ISED RSS-247 I4:7/2025 Digital Transmission Systems, Frequency Hopping Systems and Licence-Exempt LAN Devices in 902-928 MHz, 2400-2483.5 MHz, 5150-5350 MHz, and 5470-5895 MHz bands

2.2.2 Test Methods and Guidance Documents

ANSI C63.10:2020 incl. Corrigendum 1:2023

FCC KDB 558074 D01 v05r02:04/2019 DTS Measurement Guidance (ISED accepted alternate)

ISED RSS-Gen I5 incl. Amendment 2:2021 General Requirements for Compliance of Radio Apparatus

ANSI C63.10a:2024 incl. Errata to C63.10a:2024, applied for ISED, only

Unless otherwise specified, in this documentation ANSI C63.10 refers to ANSI C63.10:2020 incl.

Corrigendum 1:2023 for FCC and ANSI C63.10a:2024 incl. Errata C63.10a:2024 for ISED. Any differences are stated where applicable.

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 7 von 80
Page 7 of 80

Prüfdokumentation
Test documentation

2.2.3 System Type

DTS (Digital Transmission System)

2.3 Type of equipment

Equipment that can be used in multiple orientations

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 EUT	V	24 DC
Accessory Device (power supply)*	V	120 AC 60Hz

*If not stated otherwise, the Accessory Device (power supply) was used to power the EUT. For radiated measurements the Accessory Device (power supply) was placed outside the Chamber and the cables were filtered at the point of feed-through.

3.2 Extreme environmental test conditions

Environmental condition	Parameter	Range
Temperature	°C	-20 to +60
Supply voltage	Volts DC	9 – 28

3.3 Equipment modifications

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

3.4 Antenna assemblies

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

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 8 von 80
Page 8 of 80

Prüfdokumentation
Test documentation

3.5 Test Modes Setup

Mode description	Mode configuration
All Modes	For radiated TX measurements below 1GHz, no auxiliary equipment was connected to the EUT during test. The auxiliary equipment was only connected to the EUT before the tests for the mode configuration. For radiated TX measurements above 1GHz, the auxiliary equipment was connected to the EUT outside the chamber during the tests. The connection cables were grounded and filtered at the point of feed-trough. For conducted measurements, the auxiliary equipment was connected to the EUT inside the chamber during the tests. For setting up the EUT, the Software NRF-Connect in direct Test Mode was used.
Mode 1: TX-Mode	The EUT was set to TX-Mode with max Power (8dBm) and Modulation LE 1Mbps or LE 2Mbps with PRBS9 Packets and 37 Bytes packet length on the test channels 2402MHz, 2444MHz and 2480MHz.
Mode 2: N/A	
Mode 3: N/A	
Mode 4: N/A	

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 9 von 80
Page 9 of 80

Prüfdokumentation
Test documentation

3.6 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	$2.7 \cdot 10^{-8}$	Hz	-
Frequency Stability under low voltage conditions			
Time	$1.1 \cdot 10^{-9}$	s	-
Conducted Carrier Power	1.0	dB	9k-1GHz
Conducted Spurious Emissions (RX/TX)	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	$4.6 \cdot 10^{-7}$	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

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 10 von 80
Page 10 of 80

Prüfdokumentation
Test documentation

4 Test results in detail

4.1 Antenna Requirement

4.1.1 Requirements / Limits

FCC Part 15, Subpart C, §15.203:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

ISED RSS-Gen sec. 6.8:

The applicant for equipment certification shall provide a list of all antenna types that may be used with the transmitter, where applicable (i.e. for transmitters with detachable antenna), indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna.

4.1.2 Test Results

The antenna is soldered to a printed circuit board. This is sufficient to demonstrate compliance with the antenna requirement in FCC Part 15, Subpart C, §15.203 (acc. KDB 353028 D01) and ISED RSS-Gen sec. 6.8.

4.1.1 Final test result (Antenna Requirement)

Final test result

Pass

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 11 von 80
Page 11 of 80

Prüfdokumentation
Test documentation

4.2 20dB / 6dB / 99% Bandwidth

4.2.1 Requirements / Limits

	Condition		Limit
☐	FHS	902-928 MHz band	FCC Part 15, Subpart C, §15.247 (a) (1) (i); ISSED RSS-247 sec. 6.2.2.1 a The maximum allowed 20 dB bandwidth of the hopping channel is 500 kHz.
☐	FHS	2400-2483.5 MHz band	FCC Part 15, Subpart C, §15.247 (a) (1) (iii); ISSED RSS-247 sec. 6.2.3.1 a The 20 dB bandwidth will be used for carrier frequencies separation measurements, but no limits apply.
☐	FHS	5725-5850 MHz band	FCC Part 15, Subpart C, §15.247 (a) (1) (ii); ISSED RSS-247 sec. 6.2.4.1 a The maximum allowed 20 dB bandwidth of the hopping channel is 1 MHz.
☒	DTS		FCC Part 15, Subpart C, §15.247 (a) (2); ISSED RSS-247 sec. 6.3.1 a The minimum allowed 6 dB bandwidth is 500 kHz.
☒			ISSED RSS-Gen sec. 6.7 The occupied bandwidth (99%) shall be reported for all equipment in addition to the specified bandwidth required in the applicable RSSs, but no limits apply.

FHS: Frequency hopping systems; DTS: Digital transmission systems incl. Digital modulation techniques

FCC Part 15, Subpart C, §15.215 (c):

Intentional radiators operating under the alternative provisions to the general emission limits, as contained in § 15.247, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated. The requirement to contain the designated bandwidth of the emission within the specified frequency band includes the effects from frequency sweeping, frequency hopping and other modulation techniques that may be employed as well as the frequency stability of the transmitter over expected variations in temperature and supply voltage. If a frequency stability is not specified in the regulations, it is recommended that the fundamental emission be kept within at least the central 80% of the permitted band in order to minimize the possibility of out-of-band operation.

4.2.2 Test Method

The 20dB bandwidth was measured according to ANSI C63.10 clause 6.9.2 and ISSED RSS-Gen sec. 6.7.

The 6dB bandwidth was measured according to ANSI C63.10 clause 11.8.

The 99% bandwidth was measured according to ISSED RSS-Gen sec. 6.7.

For ISSED measurements, a minimum RBW of 100 Hz (9 kHz–30 MHz), 1 kHz (30 MHz–1 GHz), and 10 kHz (above 1 GHz) was used in accordance with ANSI C63.10a, Clause 6.9.1.

For EUTs with permanent or temporary antenna connector conducted method was used to measure the 20dB, 6dB and 99% bandwidth. The EUT was connected to the spectrum analyzer via a coax cable with a known loss.

For EUTs with integral antenna only, radiated method was used under normal conditions and conducted method with a test fixture was used under normal and extreme conditions. The radiated and the conducted measurements at normal conditions have been used to normalize the results of the conducted measurements at extreme conditions.

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 12 von 80
Page 12 of 80

Prüfdokumentation
Test documentation

4.2.3 Test Setup (20dB / 6dB / 99% Bandwidth)

4.2.3.1 Conducted measurements 6dB Bandwidth

EUT		A004236733-008 (cond. sample)
Chamber details		Shielded room
Companion device		EUT in Test Mode. Therefore, no Companion Device was used.
Operation mode		☒ 1: TX-Mode ☐ 2: N/A ☐ 3: N/A ☐ 4: N/A
Spectrum Analyzer	Centre Frequency	2402MHz / 2444MHz / 2480MHz (nominal EUT channel centre frequency)
	Resolution Bandwidth	100kHz (1% to 5% of the OBW; for DTS-Devices min. 100kHz)
	Video Bandwidth	300kHz (min. 3*RBW)
	Span	1Mbps: 2000kHz / 2Mbps: 4000kHz (2*OBW to 5*OBW)
	Sweep time	18.9 µs
Detector		Peak with max-hold
Further parameters		-
Test engineer		Primoz Erzen

4.2.3.2 Conducted measurements 99% Bandwidth

EUT		A004236733-008 (cond. sample)
Chamber details		Shielded room
Companion device		EUT in Test Mode. Therefore, no Companion Device was used.
Operation mode		☒ 1: TX-Mode ☐ 2: N/A ☐ 3: N/A ☐ 4: N/A
Spectrum Analyzer	Centre Frequency	2402MHz / 2444MHz / 2480MHz (nominal EUT channel centre frequency)
	Resolution Bandwidth	1Mbps:10kHz / 2Mbps:20kHz (1% to 5% of the OBW)
	Video Bandwidth	1Mbps:30kHz / 2Mbps:100kHz (min. 3*RBW)
	Span	1Mbps: 2000kHz / 2Mbps: 4000kHz (large enough)
	Sweep time	189.6 µs
Detector		Peak with max-hold
Further parameters		-
Test engineer		Primoz Erzen

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

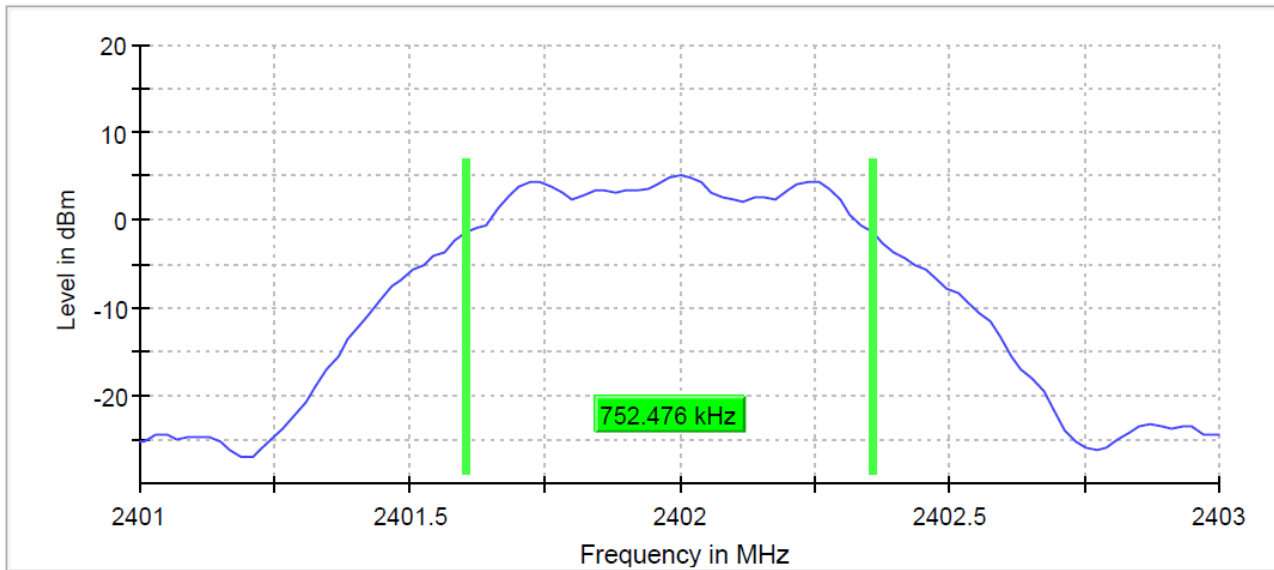
Seite 13 von 80
Page 13 of 80

Prüfdokumentation
Test documentation

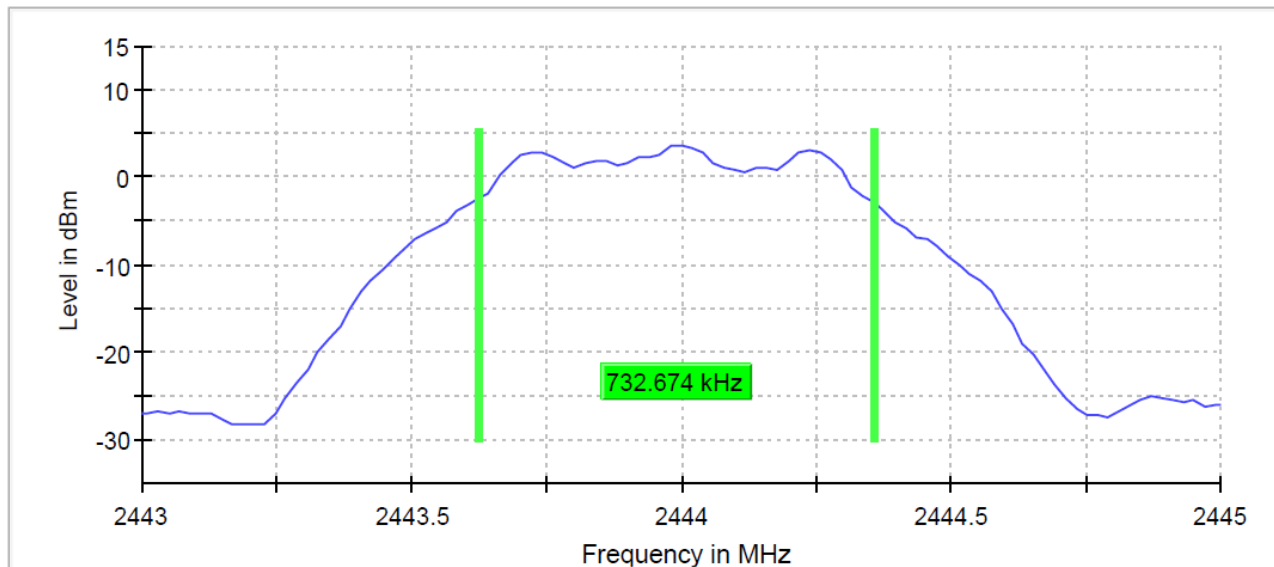
4.2.4 Test Results (20dB / 6dB / 99% Bandwidth)

4.2.4.1 6 dB Bandwidth 1Mbps (does not apply for FHSS-Devices)

4.2.4.1.1 Lowest Channel



4.2.4.1.2 Middle Channel

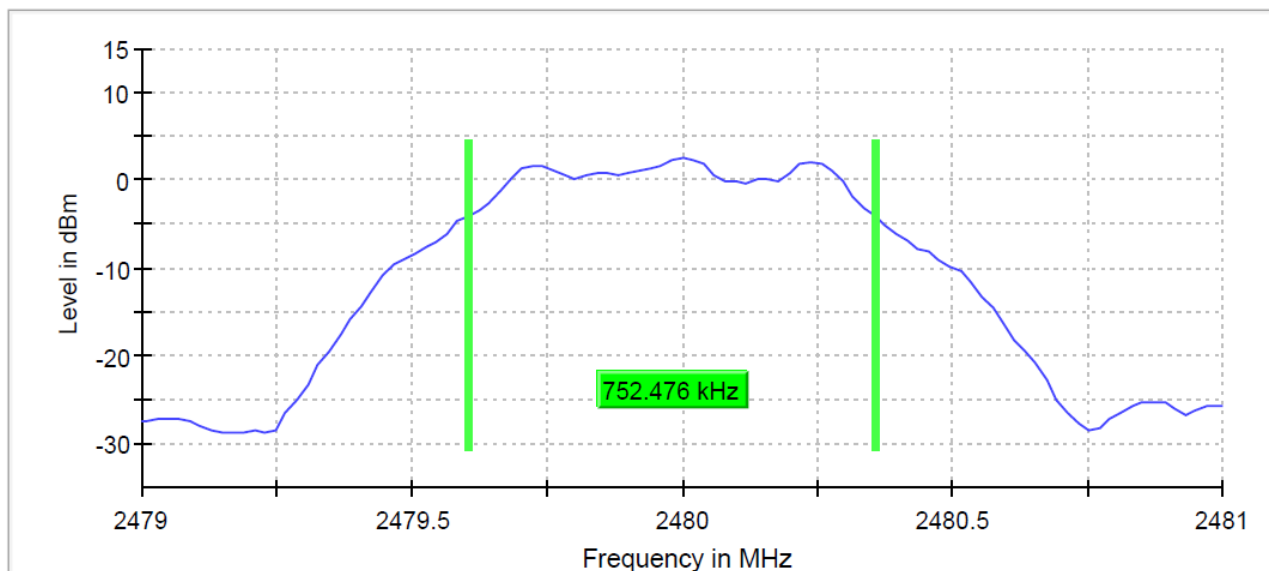


Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 14 von 80
Page 14 of 80

Prüfdokumentation
Test documentation

4.2.4.1.3 Highest Channel



4.2.4.1.4 Measurements results

Frequency [MHz]	6 dB Bandwidth [MHz]	f_L [MHz]	f_H [MHz]	Minimum Bandwidth [kHz]	Limit f_L [MHz]	Limit f_H [MHz]	Test Result
2402	0.752476	2401.603960	2402.356436	500	2400	2483.5	P
2444	0.732674	2443.623762	2444.356436	500	2400	2483.5	P
2480	0.752476	2479.603960	2480.356436	500	2400	2483.5	P

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 15 von 80
Page 15 of 80

Prüfdokumentation
Test documentation

4.2.4.1.5 Conducted measurements at extreme conditions

No frequency stability is specified in the regulations, and the fundamental emission is not kept within at least the central 80% of the permitted band, therefore the 6dB bandwidth of the emission was additionally measured over the expected variations in temperature and supply voltage.

4.2.4.1.5.1 Lowest Channel

Test Conditions T [°C] / U [V]	6 dB Bandwidth [MHz]	f _L [MHz]	f _H [MHz]	Minimum Bandwidth [kHz]	Limit f _L [MHz]	Limit f _H [MHz]	Test Result
+60 / 28	0.752476	2401.584158	2402.336634	500	2400	2483.5	P
+60 / 9	0.732674	2401.603960	2402.336634	500	2400	2483.5	P
-20 / 28	0.732674	2401.643564	2402.376238	500	2400	2483.5	P
-20 / 9	0.732674	2401.643564	2402.376238	500	2400	2483.5	P

4.2.4.1.5.2 Highest Channel

Test Conditions T [°C] / U [V]	6 dB Bandwidth [MHz]	f _L [MHz]	f _H [MHz]	Minimum Bandwidth [kHz]	Limit f _L [MHz]	Limit f _H [MHz]	Test Result
+60 / 28	0.752476	2479.584158	2480.336634	500	2400	2483.5	P
+60 / 9	0.752476	2479.584158	2480.336634	500	2400	2483.5	P
-20 / 28	0.712872	2479.663366	2480.376238	500	2400	2483.5	P
-20 / 9	0.732674	2479.643564	2480.376238	500	2400	2483.5	P

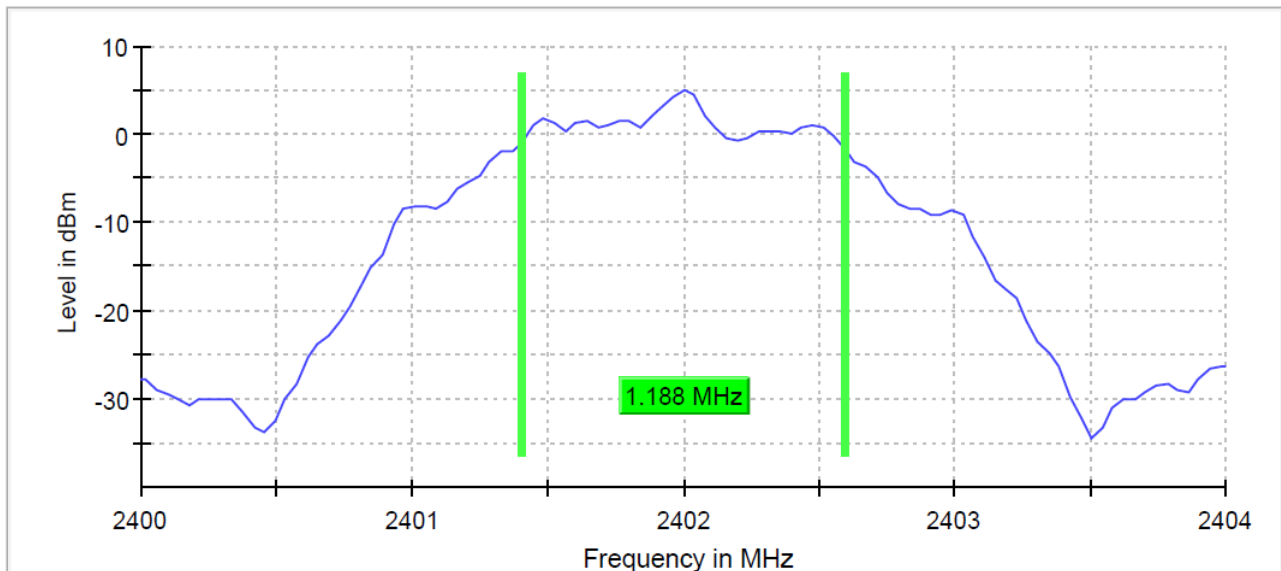
Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 16 von 80
Page 16 of 80

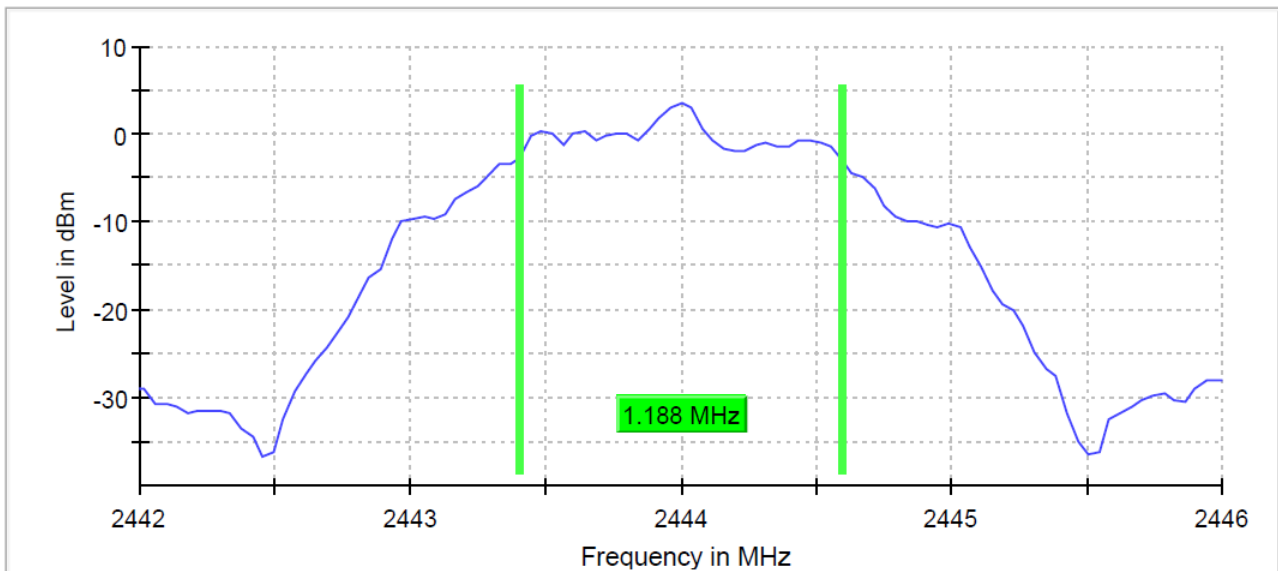
Prüfdokumentation
Test documentation

4.2.4.2 **6 dB Bandwidth 2Mbps** (does not apply for FHSS-Devices)

4.2.4.2.1 Lowest Channel



4.2.4.2.2 Middle Channel

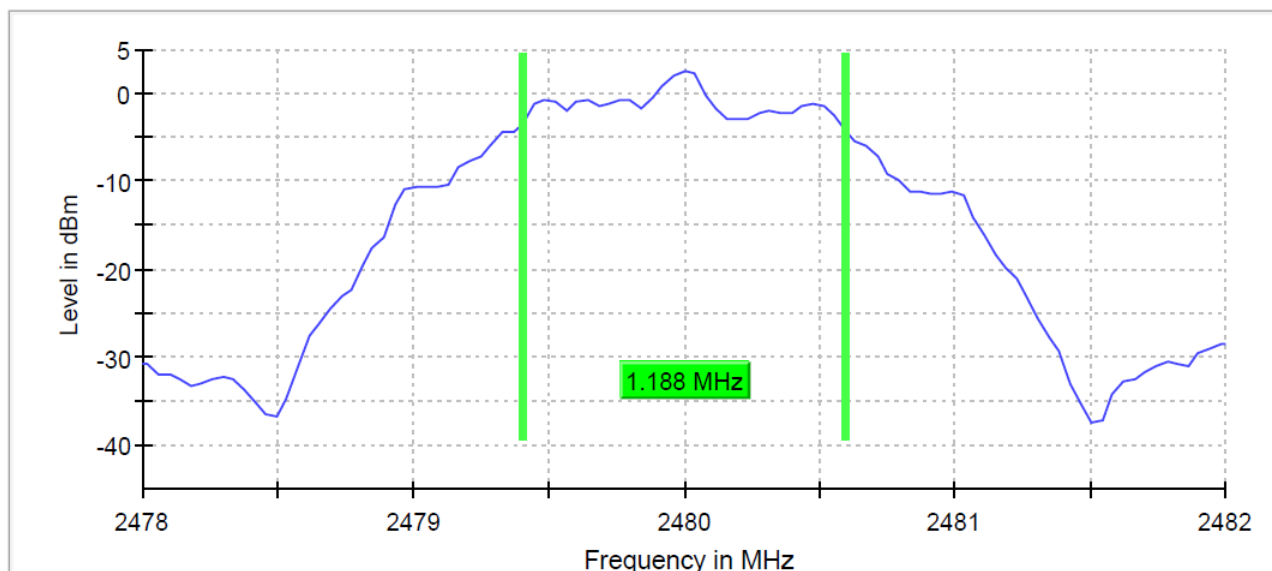


Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 17 von 80
Page 17 of 80

Prüfdokumentation
Test documentation

4.2.4.2.3 Highest Channel



4.2.4.2.4 Measurements results

Frequency [MHz]	6 dB Bandwidth [MHz]	f_L [MHz]	f_H [MHz]	Minimum Bandwidth [kHz]	Limit f_L [MHz]	Limit f_H [MHz]	Test Result
2402	1.188118	2401.405941	2402.594059	500	2400	2483.5	P
2444	1.188118	2443.405941	2444.594059	500	2400	2483.5	P
2480	1.188118	2479.405941	2480.594059	500	2400	2483.5	P

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 18 von 80
Page 18 of 80

Prüfdokumentation
Test documentation

4.2.4.2.5 Conducted measurements at extreme conditions

No frequency stability is specified in the regulations, and the fundamental emission is not kept within at least the central 80% of the permitted band, therefore the 6dB bandwidth of the emission was additionally measured over the expected variations in temperature and supply voltage.

4.2.4.2.5.1 Lowest Channel

Test Conditions T [°C] / U [V]	6 dB Bandwidth [MHz]	f _L [MHz]	f _H [MHz]	Minimum Bandwidth [kHz]	Limit f _L [MHz]	Limit f _H [MHz]	Test Result
+60 / 28	1.227722	2401.366337	2402.594059	500	2400	2483.5	P
+60 / 9	1.227722	2401.366337	2402.594059	500	2400	2483.5	P
-20 / 28	1.227722	2401.405941	2402.633663	500	2400	2483.5	P
-20 / 9	1.227722	2401.405941	2402.633663	500	2400	2483.5	P

4.2.4.2.5.2 Highest Channel

Test Conditions T [°C] / U [V]	6 dB Bandwidth [MHz]	f _L [MHz]	f _H [MHz]	Minimum Bandwidth [kHz]	Limit f _L [MHz]	Limit f _H [MHz]	Test Result
+60 / 28	1.227722	2479.366337	2480.594059	500	2400	2483.5	P
+60 / 9	1.188118	2479.366337	2480.554455	500	2400	2483.5	P
-20 / 28	1.227722	2479.405941	2480.633663	500	2400	2483.5	P
-20 / 9	1.227722	2479.405941	2480.633663	500	2400	2483.5	P

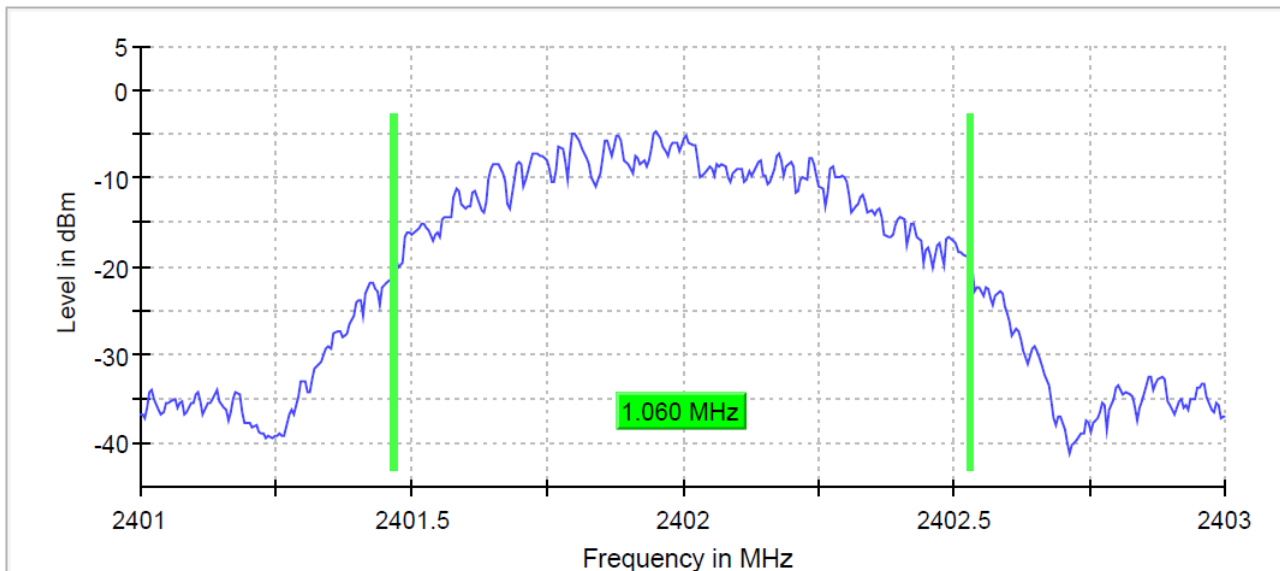
Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 19 von 80
Page 19 of 80

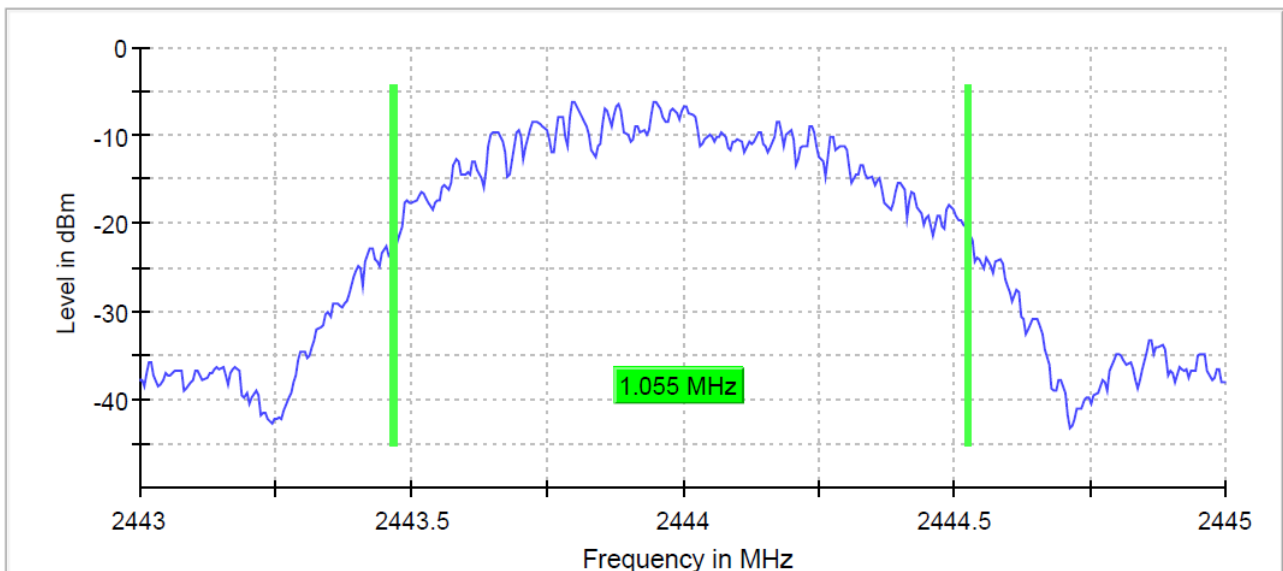
Prüfdokumentation
Test documentation

4.2.4.3 99% Bandwidth 1Mbps

4.2.4.3.1 Lowest Channel



4.2.4.3.2 Middle Channel

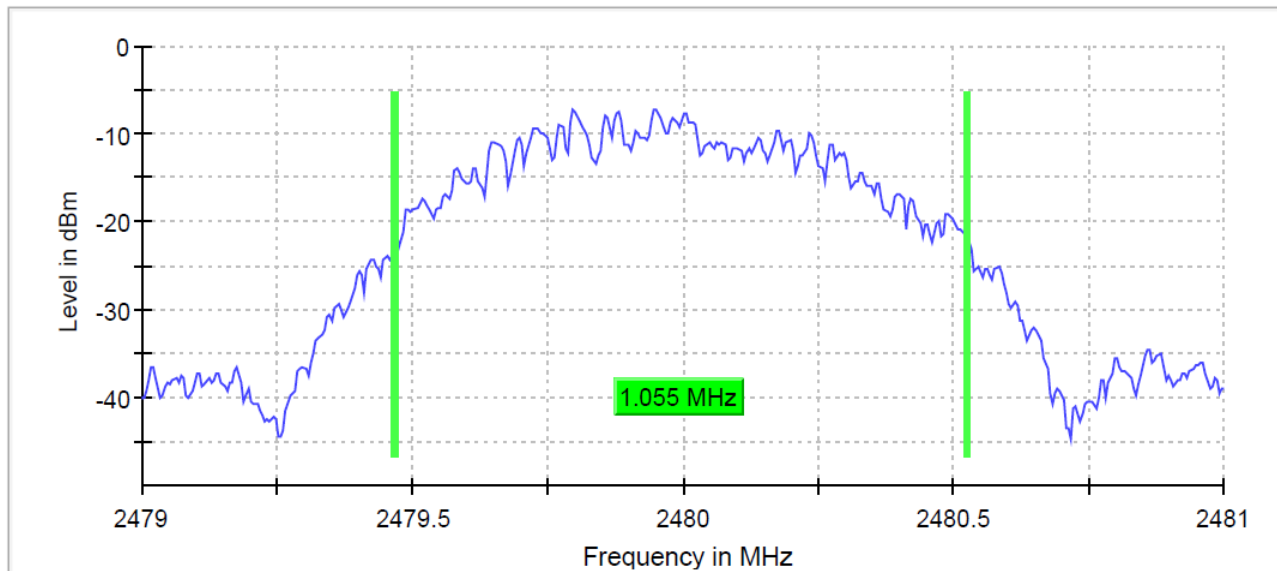


Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 20 von 80
Page 20 of 80

Prüfdokumentation
Test documentation

4.2.4.3.3 Highest Channel



4.2.4.3.4 Measurements results

Frequency [MHz]	Bandwidth 99% [kHz]
2402	1060
2444	1055
2480	1055

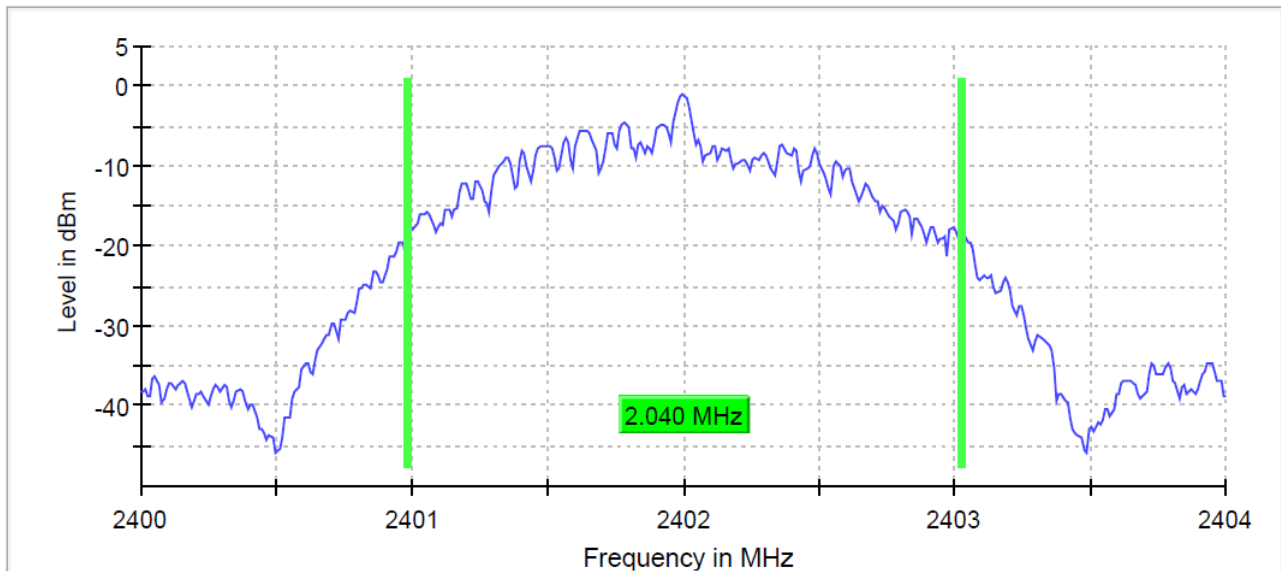
Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 21 von 80
Page 21 of 80

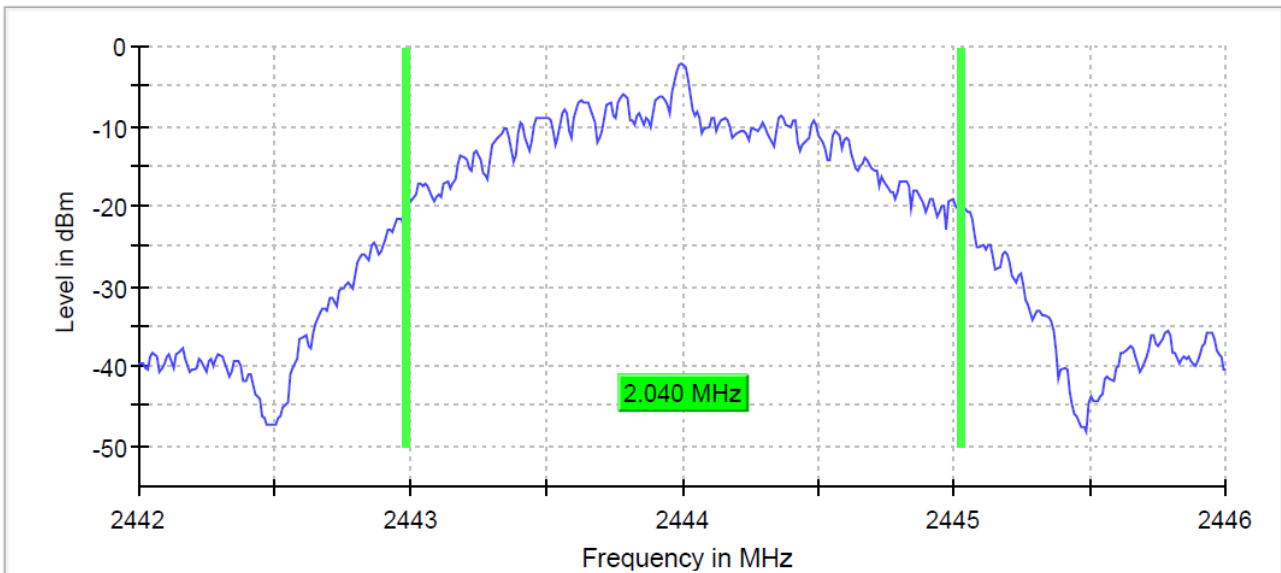
Prüfdokumentation
Test documentation

4.2.4.4 99% Bandwidth 2Mbps

4.2.4.4.1 Lowest Channel



4.2.4.4.2 Middle Channel

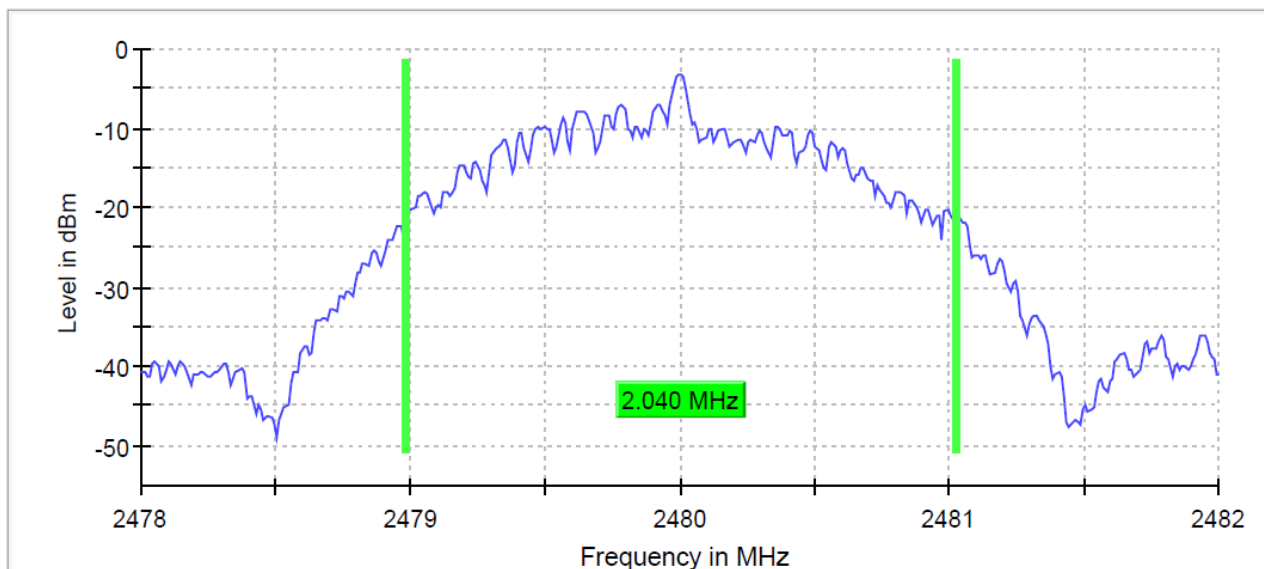


Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 22 von 80
Page 22 of 80

Prüfdokumentation
Test documentation

4.2.4.4.3 Highest Channel



4.2.4.4.4 Measurements results

Frequency [MHz]	Bandwidth 99% [kHz]
2402	2040
2444	2040
2480	2040

4.2.5 Final test result (20dB / 6dB / 99% Bandwidth)

Final test result	Pass
-------------------	------

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 23 von 80
Page 23 of 80

Prüfdokumentation
Test documentation

4.3 Maximum Output Power

4.3.1 Requirements / Limits (Antenna Gain < 6dBi; no Fixed point-to point System)

	Condition			Limit
☐	FHS	902-928 MHz band	Employing less than 50 hopping channels	FCC Part 15, Subpart C, §15.247 (b) (2); ISED RSS-247 sec. 6.2.2.2 b Peak conducted output power: 24 dBm = 0.25W
			Employing at least 50 hopping channels	FCC Part 15, Subpart C, §15.247 (b) (2); ISED RSS-247 sec. 6.2.2.2 a Peak conducted output power: 30 dBm = 1W
☐	FHS	2400-2483.5 MHz band	Employing less than 75 non-overlapping hopping channels	FCC Part 15, Subpart C, §15.247 (b) (1); ISED RSS-247 sec. 6.2.3.2 b Peak conducted output power: 21 dBm = 0.125W
			Employing at least 75 non-overlapping hopping channels	FCC Part 15, Subpart C, §15.247 (b) (1); ISED RSS-247 sec. 6.2.3.2 a Peak conducted output power: 30 dBm = 1W
☐	FHS	5725-5850 MHz band		FCC Part 15, Subpart C, §15.247 (b) (1); ISED RSS-247 sec. 6.2.4.2 a Peak conducted output power: 30 dBm = 1W
☒	DTS	902-928 and 2400-2483.5 MHz bands		FCC Part 15, Subpart C, §15.247 (b) (3); ISED RSS-247 sec. 6.3.2 Peak conducted output power: 30 dBm = 1W Alternatively: (averaged) conducted output power: 30 dBm The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level.
☐	DTS	5725-5850 MHz band		FCC Part 15, Subpart C, §15.247 (b) (3) Peak conducted output power: 30 dBm = 1W Alternatively: (Averaged) conducted output power: 30 dBm The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. ISED RSS-247 sec. 7.3.4.3 conducted output power: 30 dBm = 1W ISED RSS-247 sec. 7.1 The output power and e.i.r.p. of the equipment wanted emission shall be measured in terms of average value. If the transmission is in bursts, the provisions of RSS-Gen for pulsed operation shall apply

FHS: Frequency hopping systems; DTS: Digital transmission systems incl. Digital modulation techniques

DTS devices according ANSI C63.10 clause 11.2 (This is also accepted by ISED for DTS-Devices (see List of Alternate RF Measurement Procedures Accepted by ISED Canada):

The 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 (averaged) conducted output power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level.

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

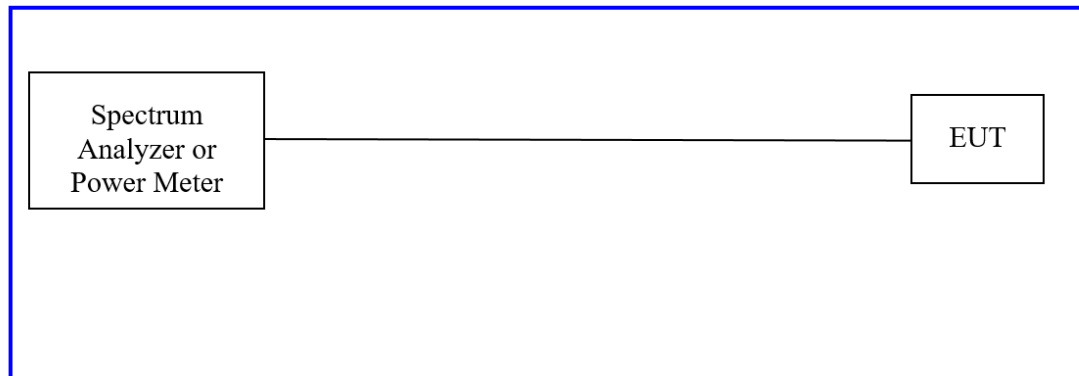
Seite 24 von 80
Page 24 of 80

Prüfdokumentation
Test documentation

4.3.2 Test Method (Maximum Output Power)

4.3.2.1 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 or Power Meter via a coax cable with a known loss.



4.3.3 Test setup (Maximum Output Power)

4.3.3.1 Conducted measurements

EUT		A004236733-008 (cond. sample)
Chamber details		Shielded room
Companion device		EUT in Test Mode. Therefore, no Companion Device was used.
Operation mode		☒ 1: TX-Mode ☐ 2: N/A ☐ 3: N/A ☐ 4: N/A
Spectrum Analyzer	Resolution Bandwidth	1MHz (1Mbps) / 2MHz (2Mbps)
	Video Bandwidth	3MHz (1Mbps) / 6MHz (2Mbps)
	Sweep Time	1,907µs (1Mbps) / 0.953µs (2Mbps) (Max Hold until stable)
	Detector	Peak
Further parameters		-
Test engineer		Primoz Erzen

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

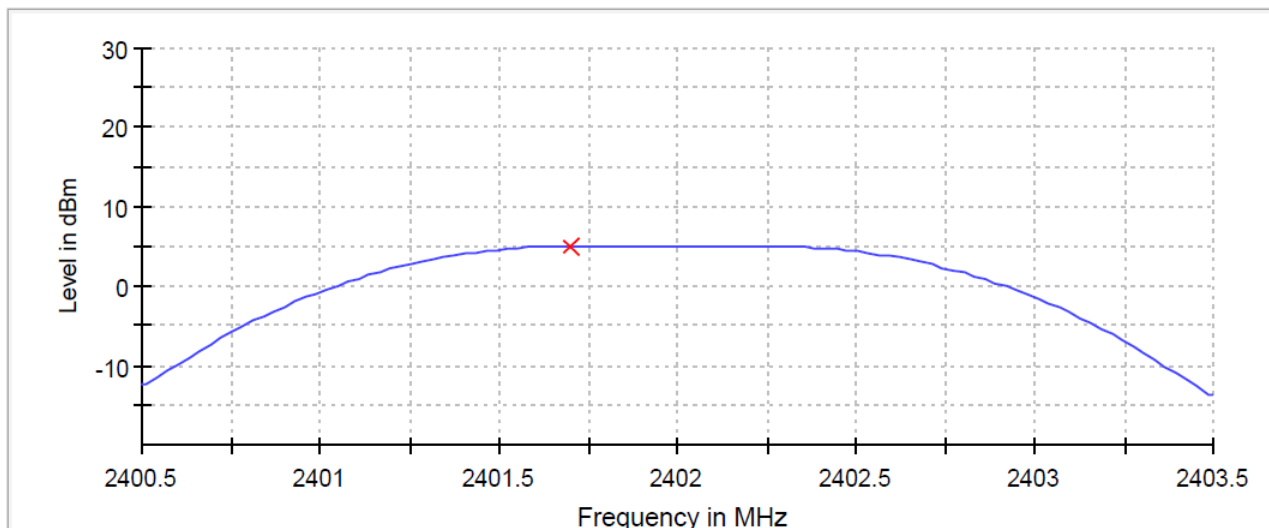
Seite 25 von 80
Page 25 of 80

Prüfdokumentation
Test documentation

4.3.4 Test results (Maximum Output Power)

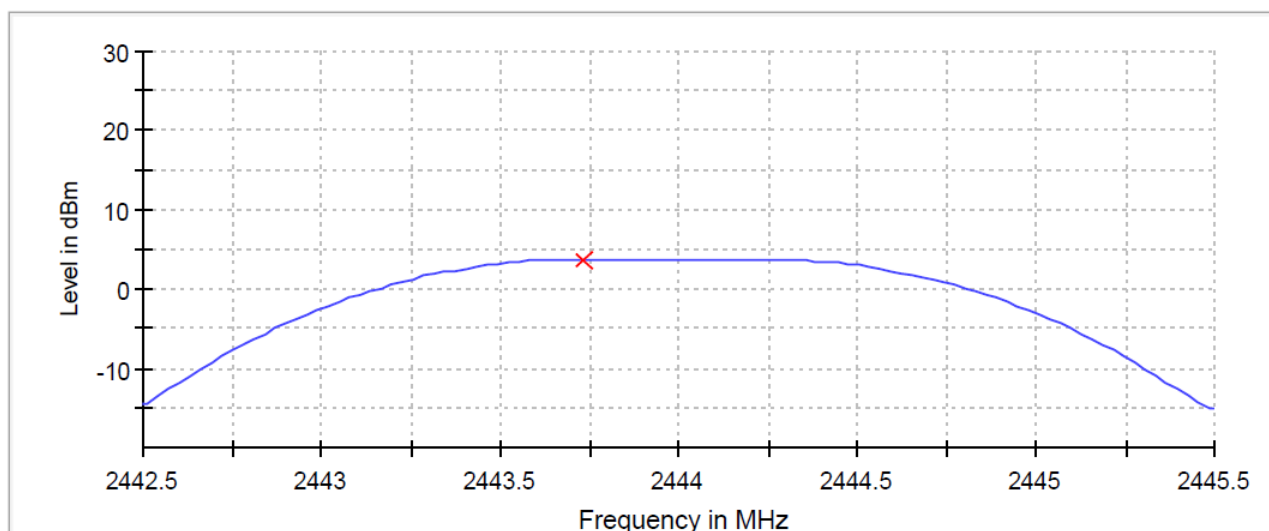
4.3.4.1 Conducted measurements 1Mbps

4.3.4.1.1 Lowest Channel



— Connector 1 X Peak Connector 1

4.3.4.1.2 Middle Channel



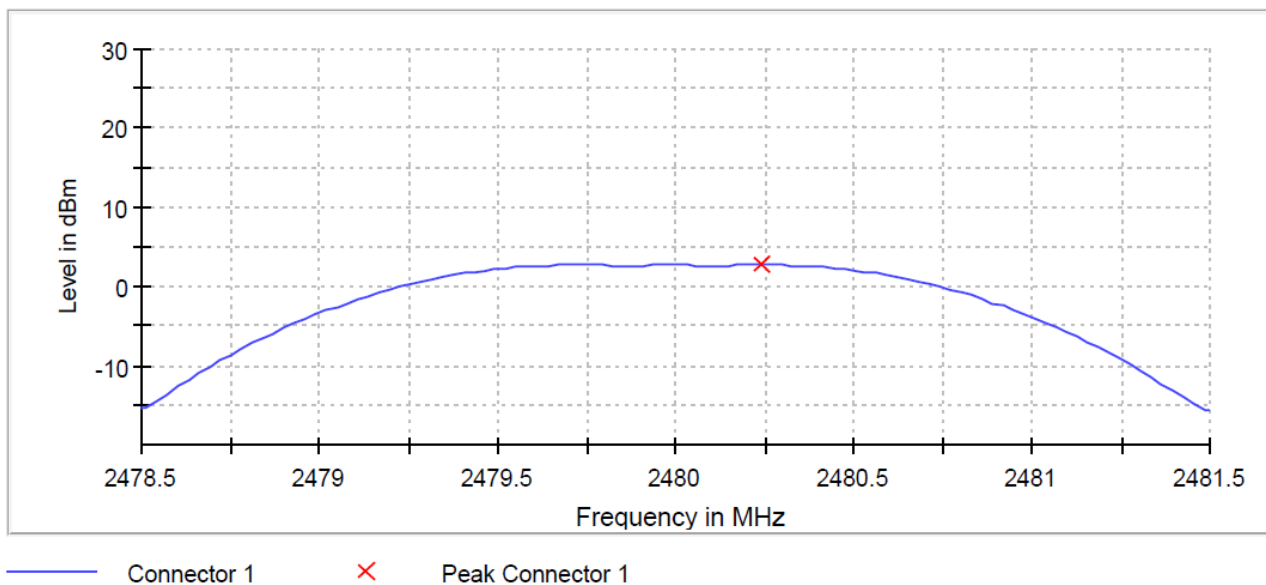
— Connector 1 X Peak Connector 1

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 26 von 80
Page 26 of 80

Prüfdokumentation
Test documentation

4.3.4.1.3 Highest Channel



4.3.4.1.4 Conducted measurements summary

Frequency	Peak conducted output power (dBm)	Limit (dBm)	Margin (dB)	Test Result
Lowest 2402 MHz	5.1	30	24.9	Pass
Middle 2444 MHz	3.7		26.3	Pass
Highest 2480 MHz	2.7		27.3	Pass

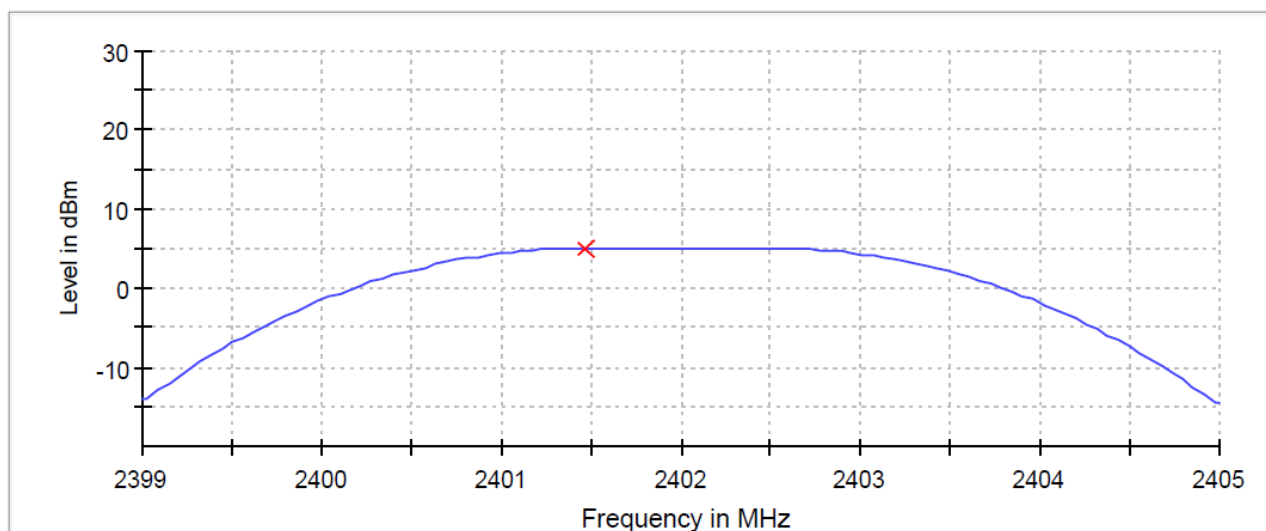
Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 27 von 80
Page 27 of 80

Prüfdokumentation
Test documentation

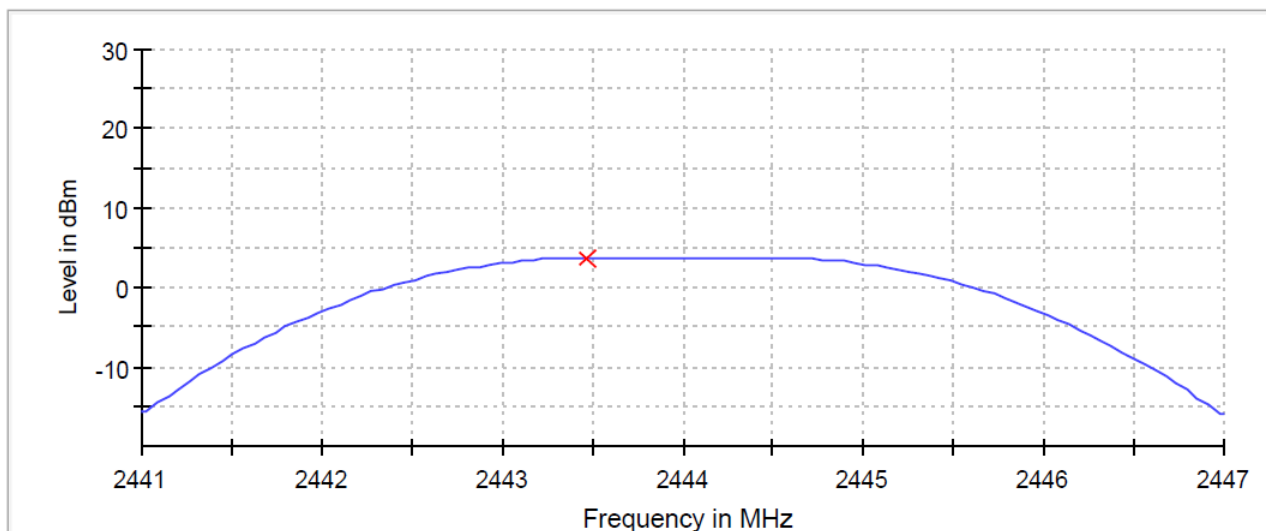
4.3.4.2 Conducted measurements 2Mbps

4.3.4.2.1 Lowest Channel



— Connector 1 × Peak Connector 1

4.3.4.2.2 Middle Channel



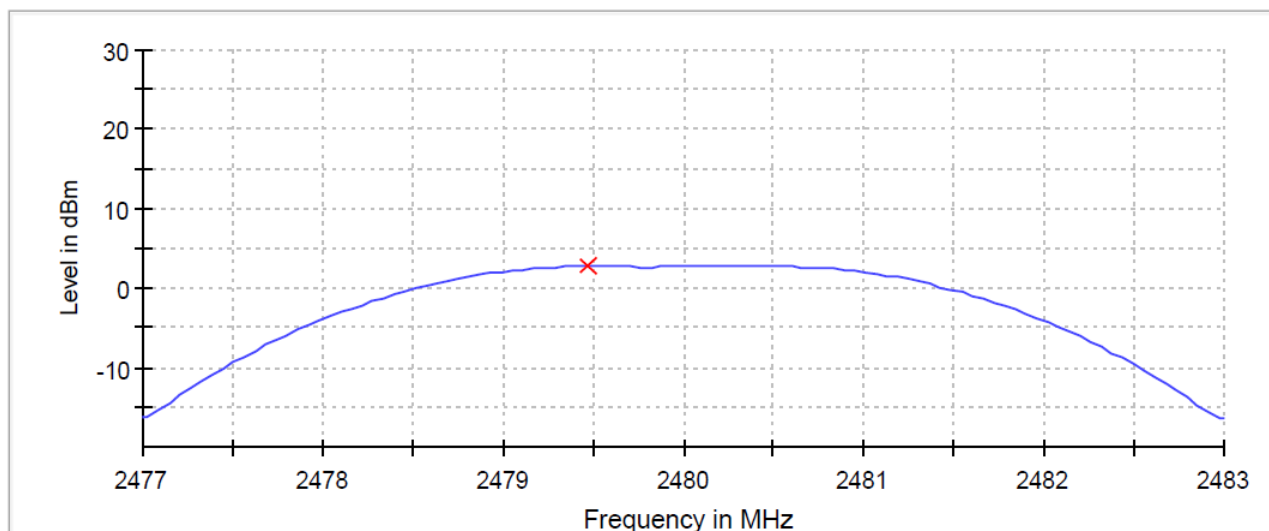
— Connector 1 × Peak Connector 1

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 28 von 80
Page 28 of 80

Prüfdokumentation
Test documentation

4.3.4.2.3 Highest Channel



— Connector 1 × Peak Connector 1

4.3.4.2.4 Conducted measurements summary

Frequency	Peak conducted output power (dBm)	Limit (dBm)	Margin (dB)	Test Result
Lowest 2402 MHz	5.1	30	24.9	Pass
Middle 2444 MHz	3.7		26.3	Pass
Highest 2480 MHz	2.8		27.2	Pass

4.3.5 Final test result (Maximum Output Power)

Measured overall (equivalent, if measured radiated) maximum Output Power : 5.1 dBm (conducted)

Final test result	Pass
-------------------	------

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 29 von 80
Page 29 of 80

Prüfdokumentation
Test documentation

4.4 Power Spectral Density

4.4.1 Requirements / Limits

FCC Part 15, Subpart C, §15.247 (e), ISSED RSS-247 sec. 6.3.1 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.

4.4.2 Test Method

According to ANSI C63.10 clause 11.10.2 peak PSD.

(The same method of determining the output power shall be used to determine the power spectral density)

4.4.3 Test setup

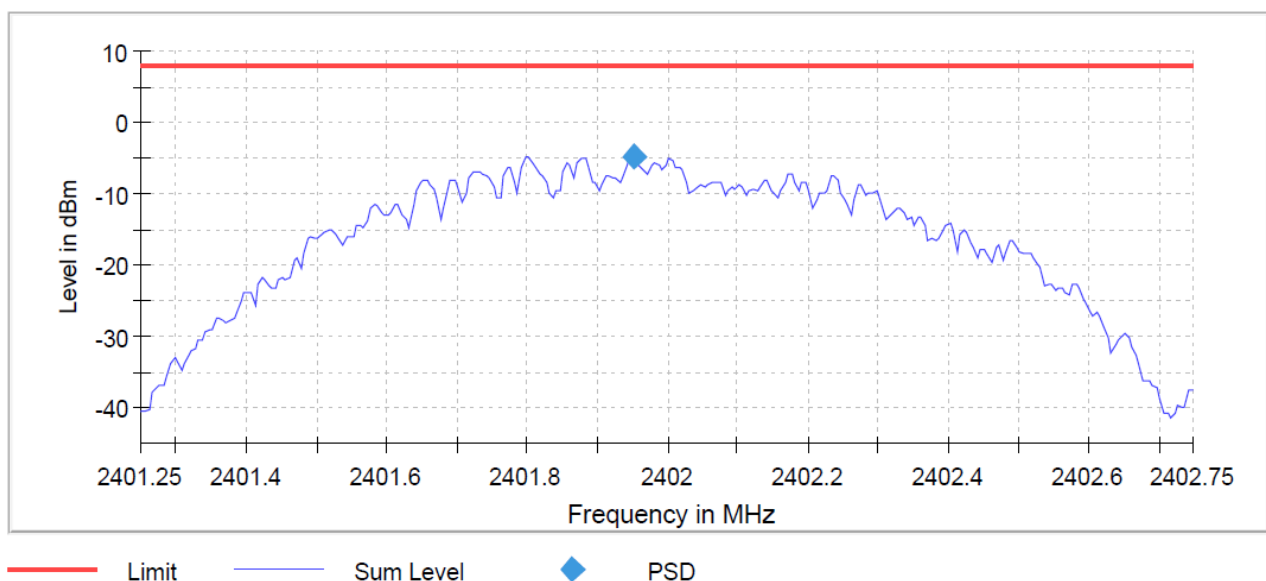
4.4.3.1 Conducted measurements

EUT		A004236733-008 (cond. sample)
Chamber details		Shielded room
Companion device		EUT in Test Mode. Therefore, no Companion Device was used.
Operation mode		☒ 1: TX-Mode ☐ 2: N/A ☐ 3: N/A ☐ 4: N/A
Spectrum Analyzer	Resolution Bandwidth	10kHz
	Video Bandwidth	30kHz
	Sweep Time	1,5ms (1Mbps) / 3ms (2Mbps) (Max Hold until stable)
	Detector	Peak
Further parameters		-
Test engineer		Primoz Erzen

4.4.4 Test results (Power Spectral Density)

4.4.4.1 Conducted measurements 1Mbps

4.4.4.1.1 Lowest Channel

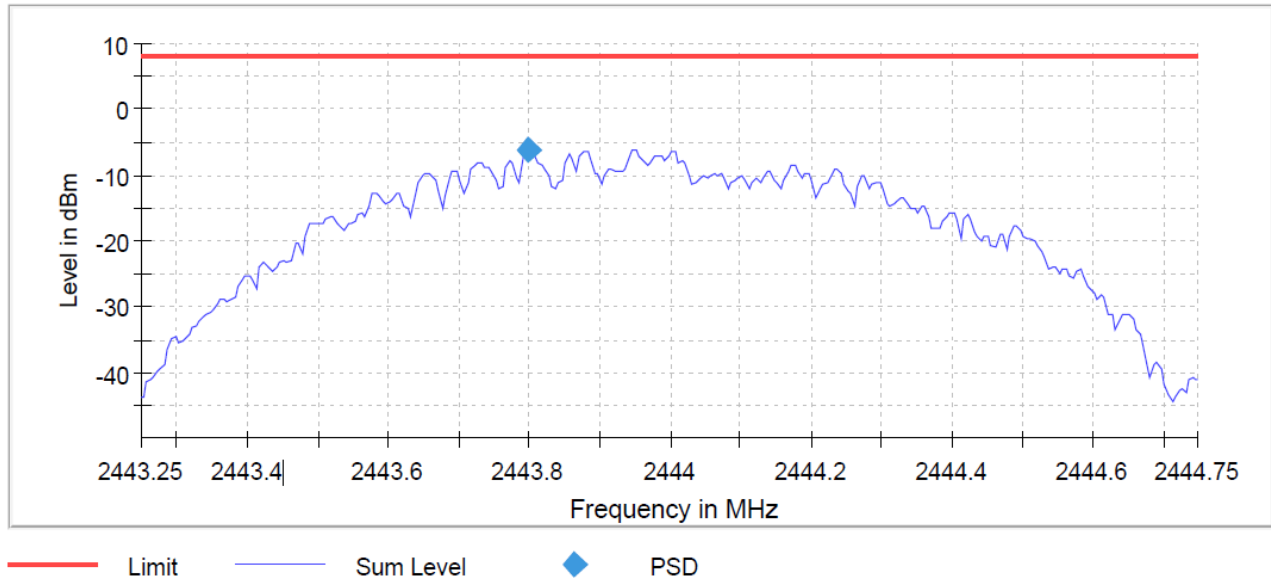


Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

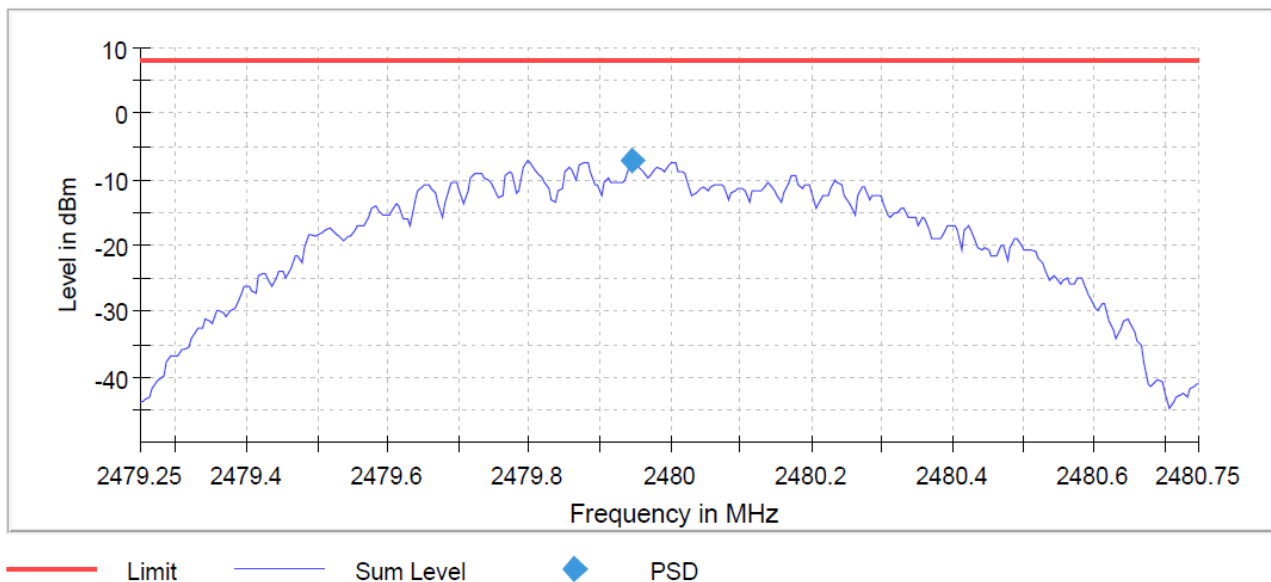
Seite 30 von 80
Page 30 of 80

Prüfdokumentation
Test documentation

4.4.4.1.2 Middle Channel



4.4.4.1.3 Highest Channel



4.4.4.1.4 Conducted measurements summary

Frequency	Peak conducted power spectral density (dBm/MHz)	Limit (dBm)	Margin (dB)	Test Result
Lowest	-4.659	8	12.659	Pass
Middle	-6.009		14.009	Pass
Highest	-7.127		15.127	Pass

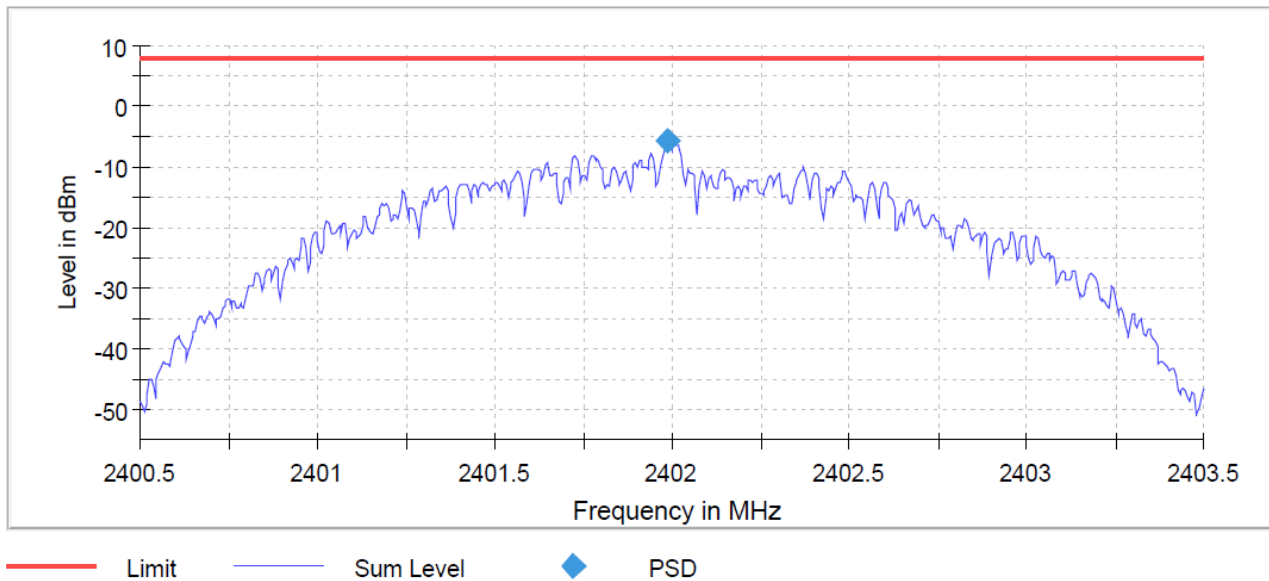
Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 31 von 80
Page 31 of 80

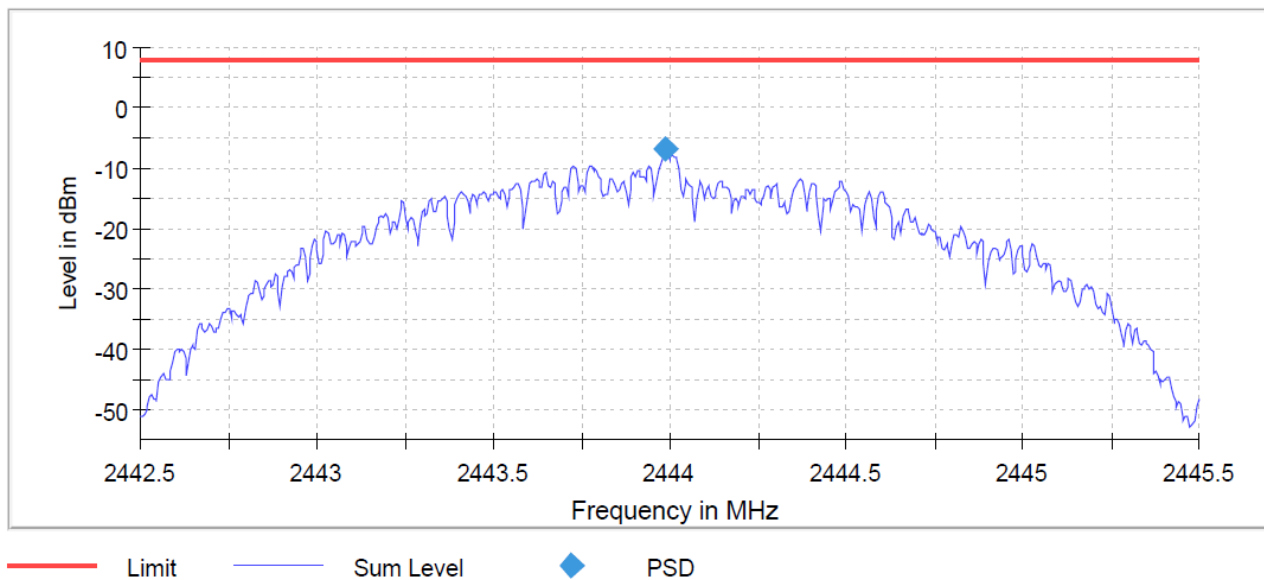
Prüfdokumentation
Test documentation

4.4.4.2 Conducted measurements 2Mbps

4.4.4.2.1 Lowest Channel



4.4.4.2.2 Middle Channel

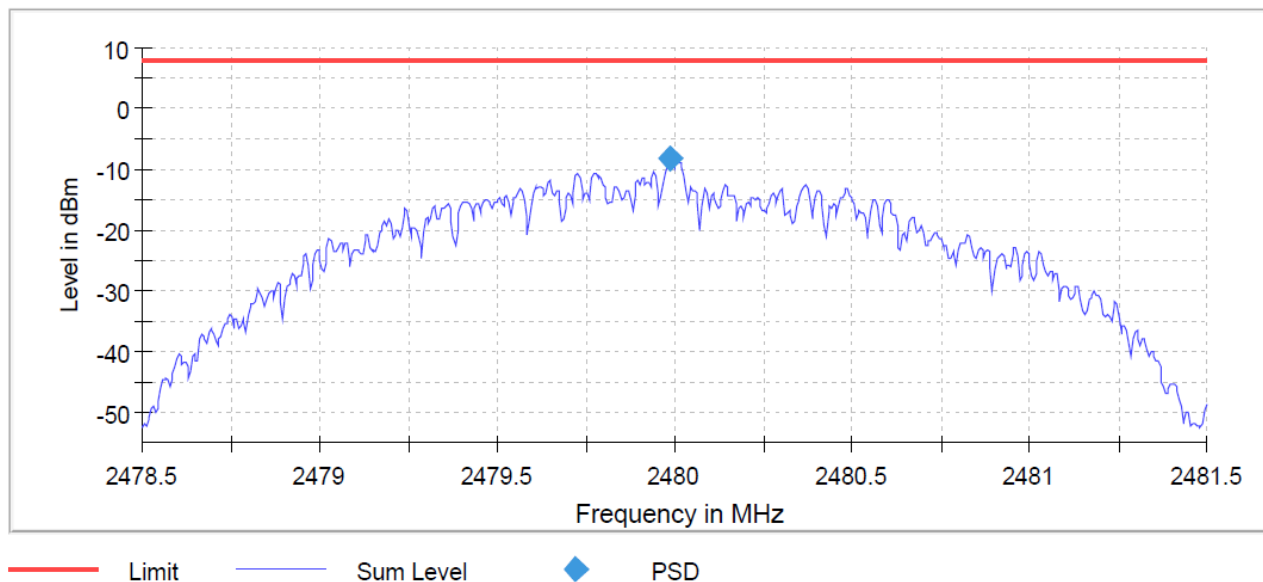


Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 32 von 80
Page 32 of 80

Prüfdokumentation
Test documentation

4.4.4.2.3 Highest Channel



4.4.4.2.4 Conducted measurements summary

Frequency	Peak conducted power spectral density (dBm/MHz)	Limit (dBm)	Margin (dB)	Test Result
Lowest	-5.702	8	13.702	Pass
Middle	-6.924		14.924	Pass
Highest	-8.116		16.116	Pass

4.4.5 Final test result (Power Spectral Density)

Final test result	Pass
-------------------	------

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 33 von 80
Page 33 of 80

Prüfdokumentation
Test documentation

4.5 Unwanted emissions

4.5.1 Requirements / Limits

☒	FCC Part 15, Subpart C, §15.247 (d); RSS-247 sec. 6.6: 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) and RSS-Gen sec. 8.9 is not required. Radiated emissions which fall in the restricted bands, as defined in § 15.205(a) and RSS-Gen sec.8.10, must comply with the radiated emission limits specified in § 15.209(a) and RSS-Gen sec. 8.9.
☐	FCC Part 15, Subpart C, §15.247 (d); RSS-247 sec. 6.6: 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 [μA/m]	Limit [μV/m]	Limit [dBμV/m]	Limit AVG @3m [dBμV/m]	Detector
0.009 – 0.09	300	6.37/F	2400/F	48.5 ... 28.5	128.5 ... 108.5	AVG (+ Pk)
0.09 – 0.11	300	6.37/F	2400/F	28.5 ... 26.8	108.5 ... 106.8	QP
0.11 – 0.49	300	6.37/F	2400/F	26.8 ... 13.8	106.8 ... 93.8	AVG (+ Pk)
0.49 – 1.705	30	63.7/F	24000/F	33.8 ... 23.0	73.8 ... 63.0	QP
1.705 – 30	30	0.08	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)

F: Frequency in kHz

Used conversion factor [μA/m]->[μV/m]: Limit[μV/m] = Limit[μA/m] * 376.7Ohm

Used conversion factor [μV/m]->[dBμV/m]: Limit [dBμV/m] = 20 log (Limit [μV/m] / 1[μV/m])

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

FCC Part 15, Subpart A, §15.33 (a)(1); ANSI C63.10 clause 5.5; RSS-Gen sec. 6.13.2:

For an intentional radiator operating below 10 GHz, the spectrum shall be investigated from the lowest radio frequency signal generated in the device, without going below 9 kHz, up to at least the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.

FCC Part 15, Subpart C, §15.31 (f); RSS-Gen sec. 6.5, 6.6:

When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 40 dB/decade for frequencies below 30MHz and 20 dB/decade for frequencies at or above 30MHz.

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 34 von 80
Page 34 of 80

Prüfdokumentation
Test documentation

For this documentation the distance extrapolation factor was added to the limit that was calculated using this formula:

$$Emission\ limit_{meas} \left(\frac{dB\mu V}{m} \right) = Emission\ limit + EF * \log \left(\frac{d_1}{d_2} \right)$$

Where

d_1 : standard distance (e. g. 30 m)

d_2 : measurement distance (e. g. 3 m)

EF: extrapolation factor (20 or 40)

The field strength E_{final} is calculated using the following equation:

$$E_{final} = RawRec + Corr$$

While

$$Corr = AF + SigPathAtt + PreampAtt$$

Were

E_{final} : final average electric field value

RawRec: Receiver reading

AF: Antenna factor

SigPathAtt: Signalpath losses

PreampAtt: Preamplifier losses

For example, if a Receiver reading of 1dBμV was measured and the Antenna factor is 2 dB/m, the Signalpath losses are 3dB and the Preamplifier losses are -10dB, then the Correction is calculated to:

Corr = (2+3-10) dB= -5dB and the Final electric field strength E_{Final} is calculated to:

$E_{Final} = (1 + (-5))\ dB\mu V/m = -4\ dB\mu V/m$

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 35 von 80
Page 35 of 80

Prüfdokumentation
Test documentation

4.5.2 Radiated measurements with general limit (Unwanted emissions)

4.5.2.1 Test Method

Radiated unwanted Emissions were tested against the general limits specified in § 15.209(a) and 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) and RSS-247 sec. 6.6

A test program that controls instrumentation and data logging was used to automate the preliminary RF emission test procedure. Preliminary emission testing was performed inside the anechoic chamber. The 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.

Final testing was performed on an SVSWR compliant test site.

For 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.

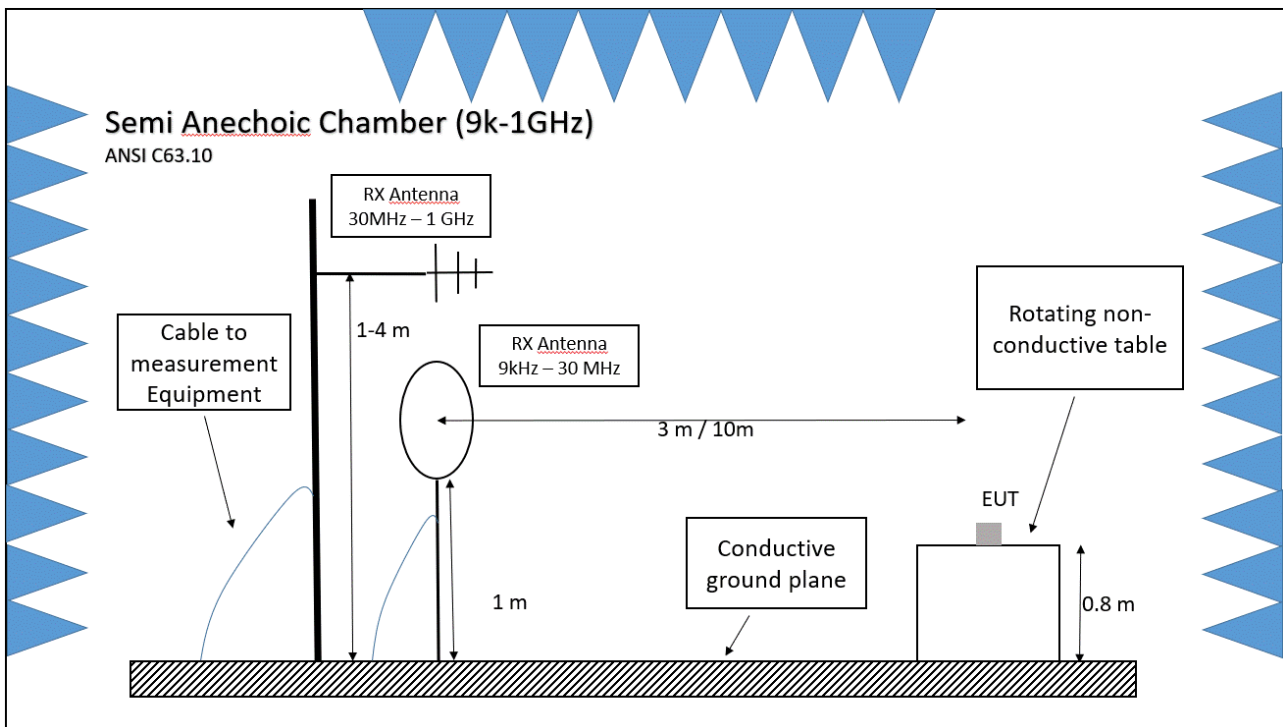
For the measurements in the frequency range 30 MHz to 1 GHz the EUT was rotated from 0° to 360°, the measurement antenna height scanned between 1 m and 4 m and set for both the horizontal and vertical polarizations.

For measurement above 1 GHz the antenna height was fixed to 1.5m.

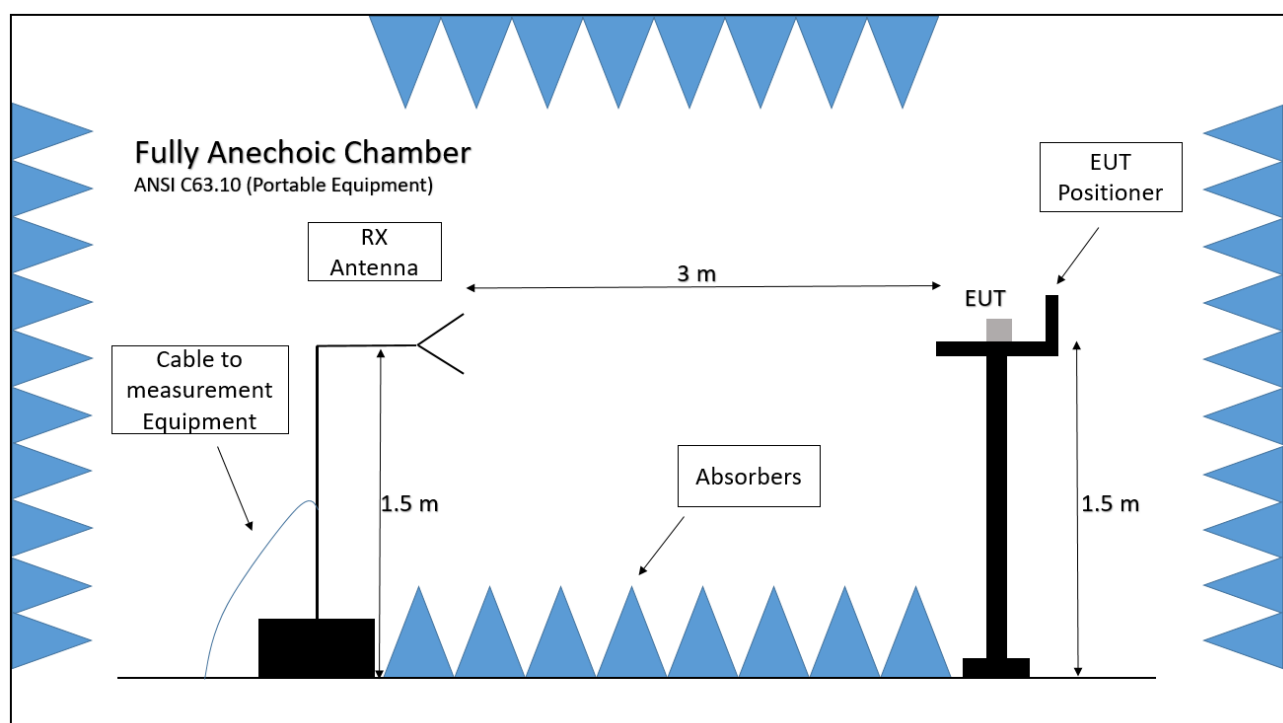
Continuous rotation, with the analyzer's sweep time set to the time it takes for the table to rotate 10 degrees or fixed Turntable step size of 10deg was used. The positioner step size was set to 30deg.

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

4.5.2.2.1 EUT positioning below 1GHz



4.5.2.2.2 EUT positioning above 1GHz; Device that can be used in multiple orientations



Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 37 von 80
Page 37 of 80

Prüfdokumentation
Test documentation

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

4.5.2.3.1 Measurement Setup 9kHz - 30MHz

Test Site	SAC (Semi Anechoic Chamber)
Receiving Antenna	Loop antenna (HFH 2)
Receiving Antenna Height	1m (lowest height 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

4.5.2.3.2 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

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 38 von 80
Page 38 of 80

Prüfdokumentation
Test documentation

4.5.2.3.3 Measurement Setup above 1GHz; Device that can be used in multiple orientations

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
EUT Positioner	40cm x 60cm non-conductive positioner 1.5m above the floor Step size elevation angle 30°
EUT Turn Table Step Size	Continuous rotation with less than 10deg per sweep
Spectrum Analyzer	Average and peak detectors
	RBW: 1 MHz
	Sweep Time: 60s during exploratory tests Sweep Time: 10s for final measurements

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

EUT	A004236733-003 (rad. Sample)
Companion device	EUT in Test Mode. Therefore, no Companion Device was used.
Operation mode	☒ 1: TX-Mode ☐ 2: N/A ☐ 3: N/A ☐ 4: N/A
Further parameters	-
Test engineer	Primoz Erzen

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

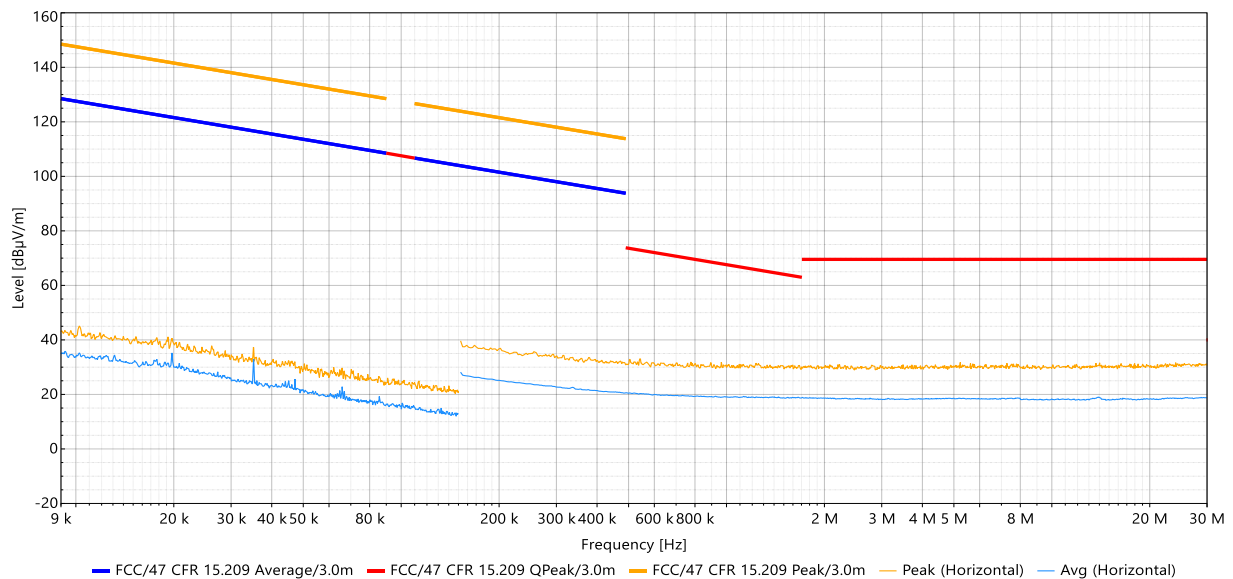
Seite 39 von 80
Page 39 of 80

Prüfdokumentation
Test documentation

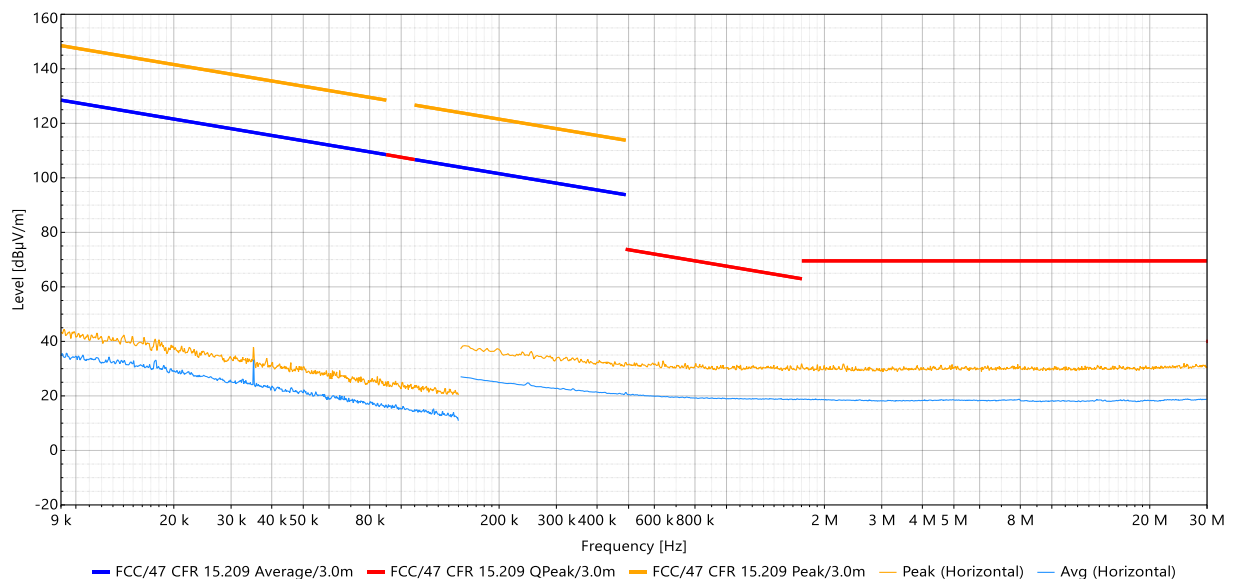
4.5.2.5 Test results (Radiated measurements with general limit; Unwanted emissions)

4.5.2.5.1 9 kHz to 30 MHz, lowest Channel 2402MHz; 1Mbps

4.5.2.5.1.1 Perpendicular Polarization



4.5.2.5.1.2 Parallel Polarization



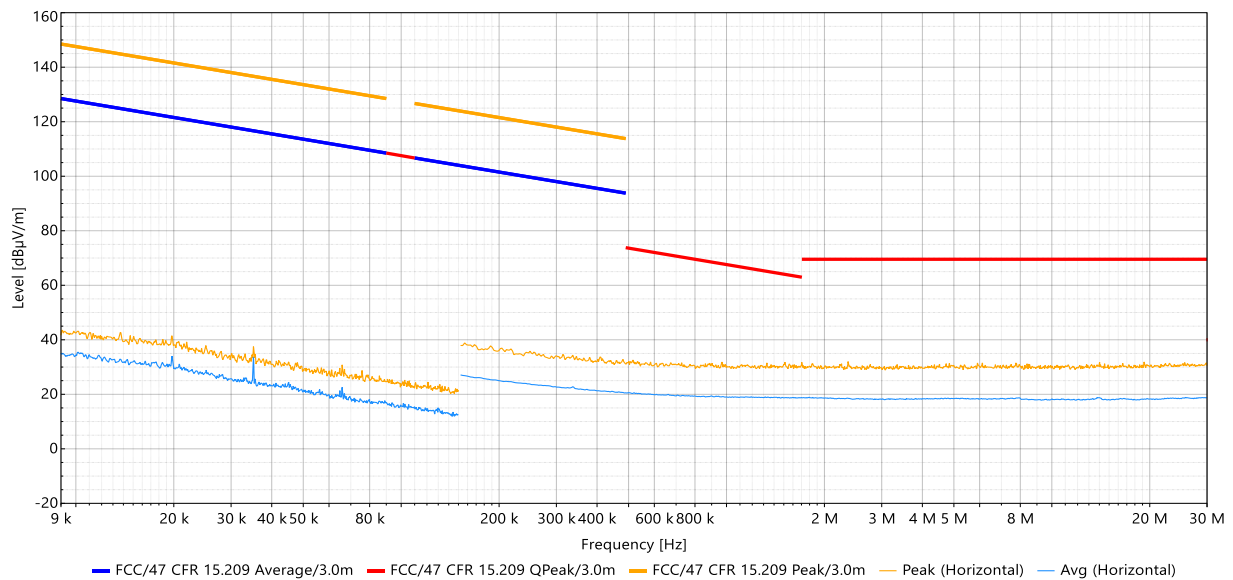
Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 40 von 80
Page 40 of 80

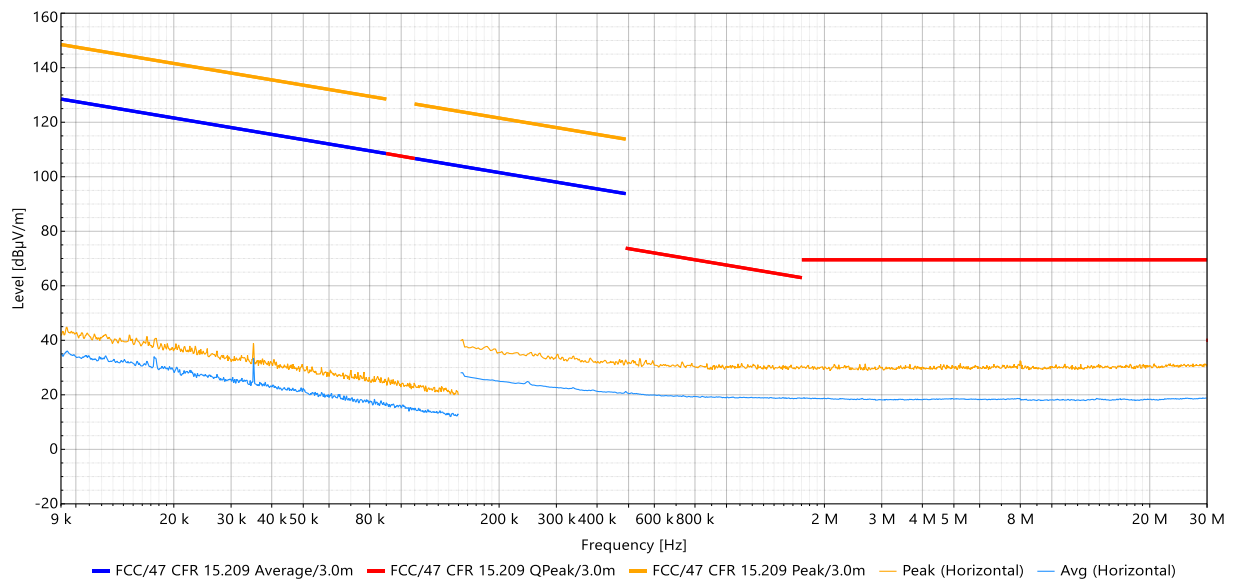
Prüfdokumentation
Test documentation

4.5.2.5.2 9 kHz to 30 MHz, middle Channel 2444MHz; 1Mbps

4.5.2.5.2.1 Perpendicular Polarization



4.5.2.5.2.2 Parallel Polarization



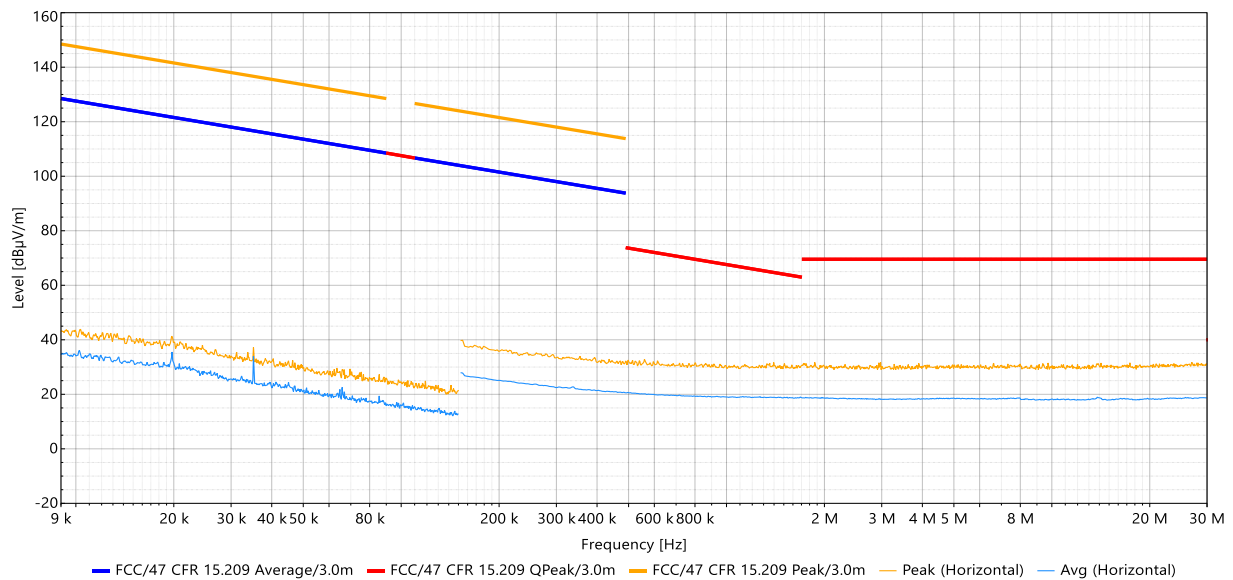
Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 41 von 80
Page 41 of 80

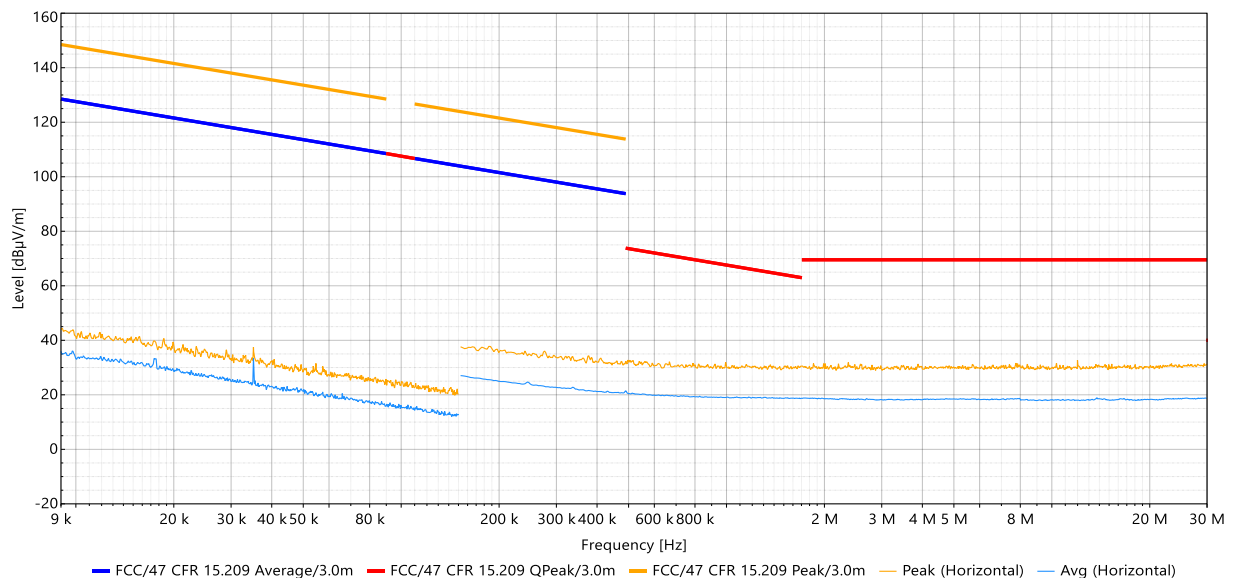
Prüfdokumentation
Test documentation

4.5.2.5.3 9 kHz to 30 MHz, highest Channel 2480MHz; 1Mbps

4.5.2.5.3.1 Perpendicular Polarization



4.5.2.5.3.2 Parallel Polarization



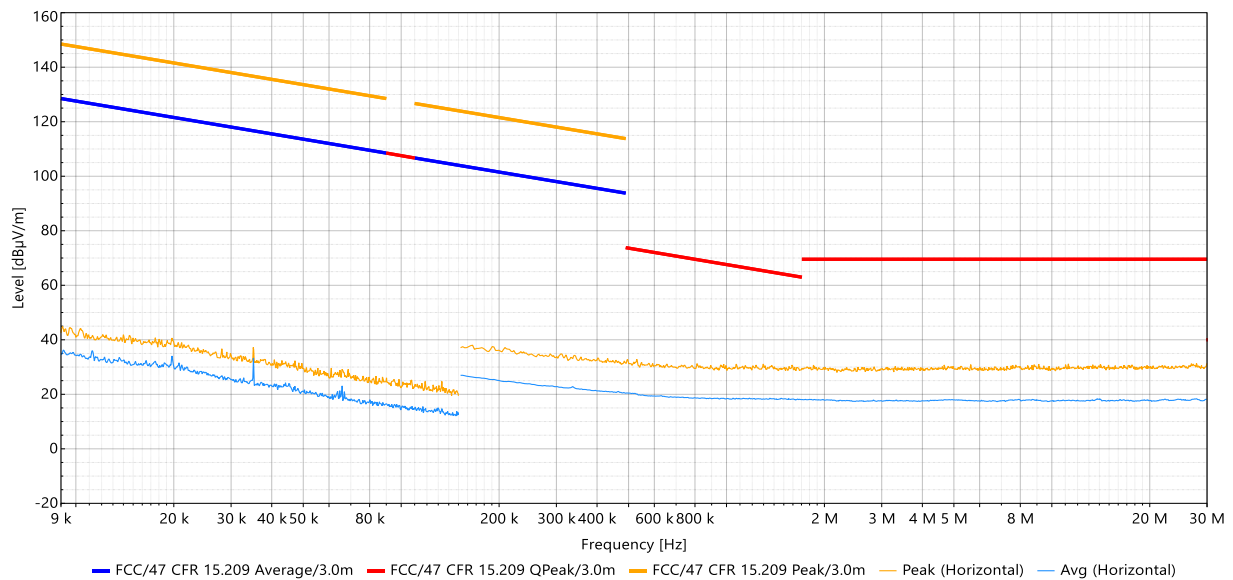
Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 42 von 80
Page 42 of 80

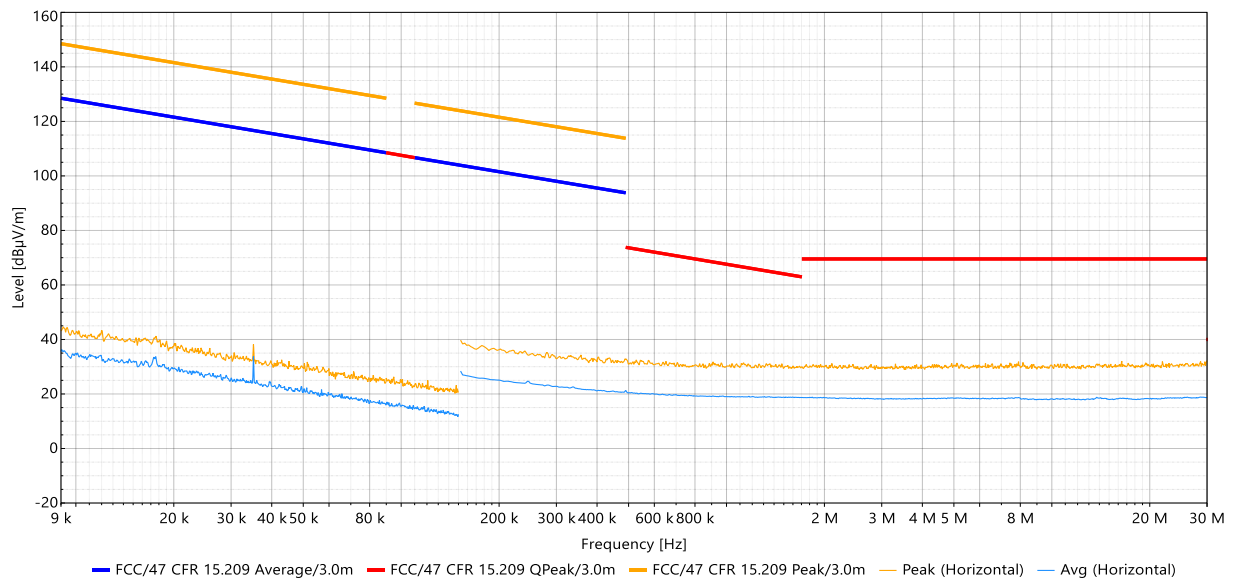
Prüfdokumentation
Test documentation

4.5.2.5.4 9 kHz to 30 MHz, lowest Channel 2402MHz; 2Mbps

4.5.2.5.4.1 Perpendicular Polarization



4.5.2.5.4.2 Parallel Polarization



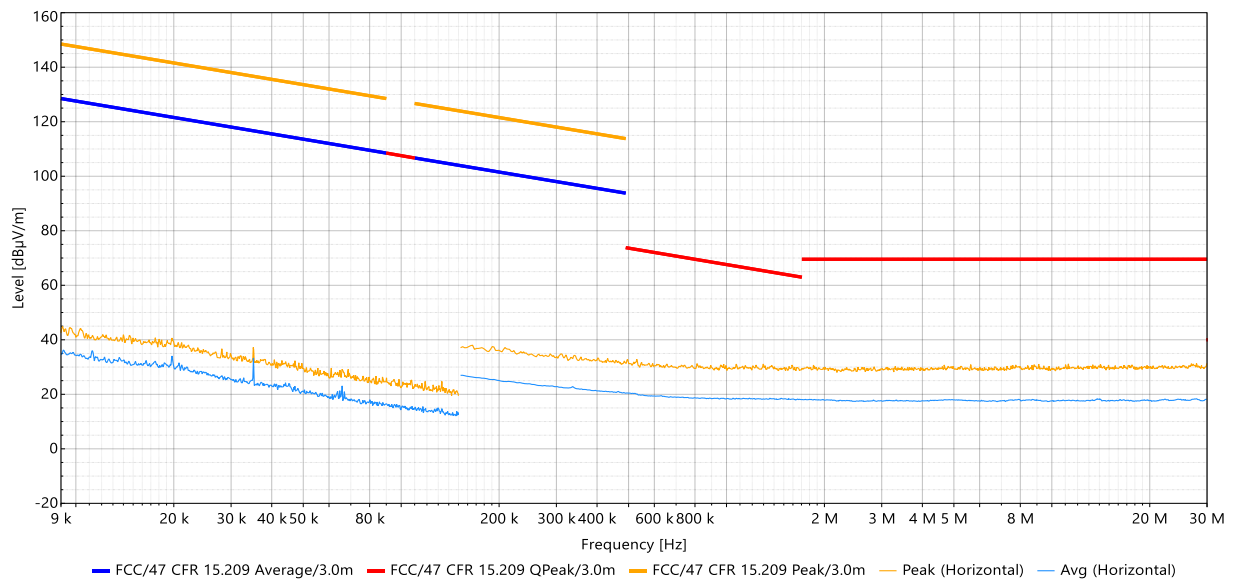
Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 43 von 80
Page 43 of 80

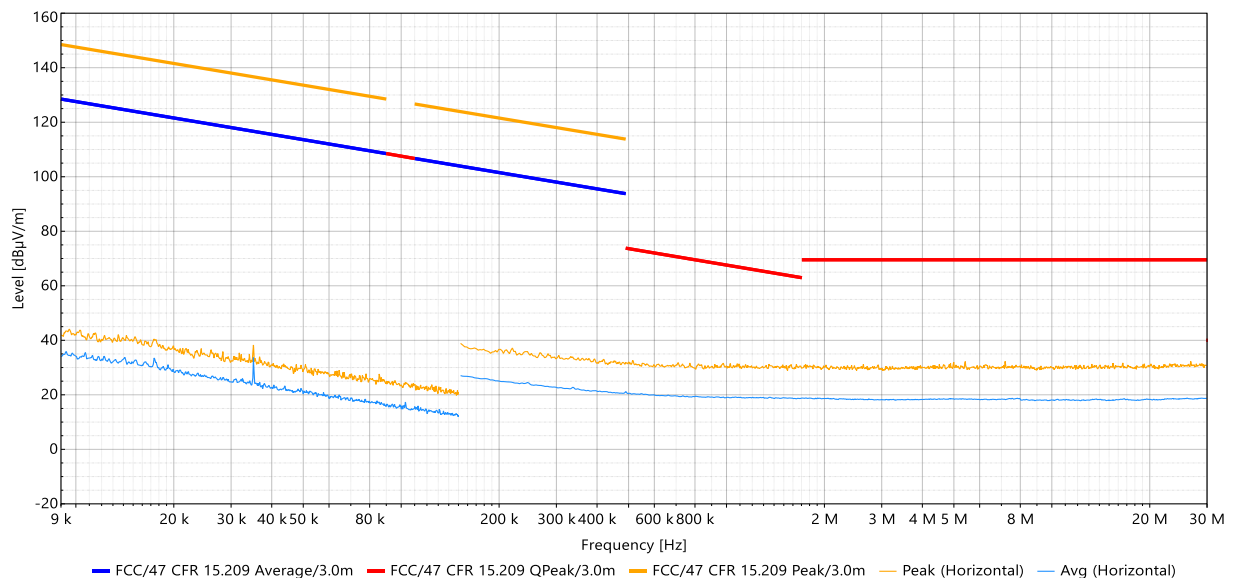
Prüfdokumentation
Test documentation

4.5.2.5.5 9 kHz to 30 MHz, middle Channel 2444MHz; 2Mbps

4.5.2.5.5.1 Perpendicular Polarization



4.5.2.5.5.2 Parallel Polarization



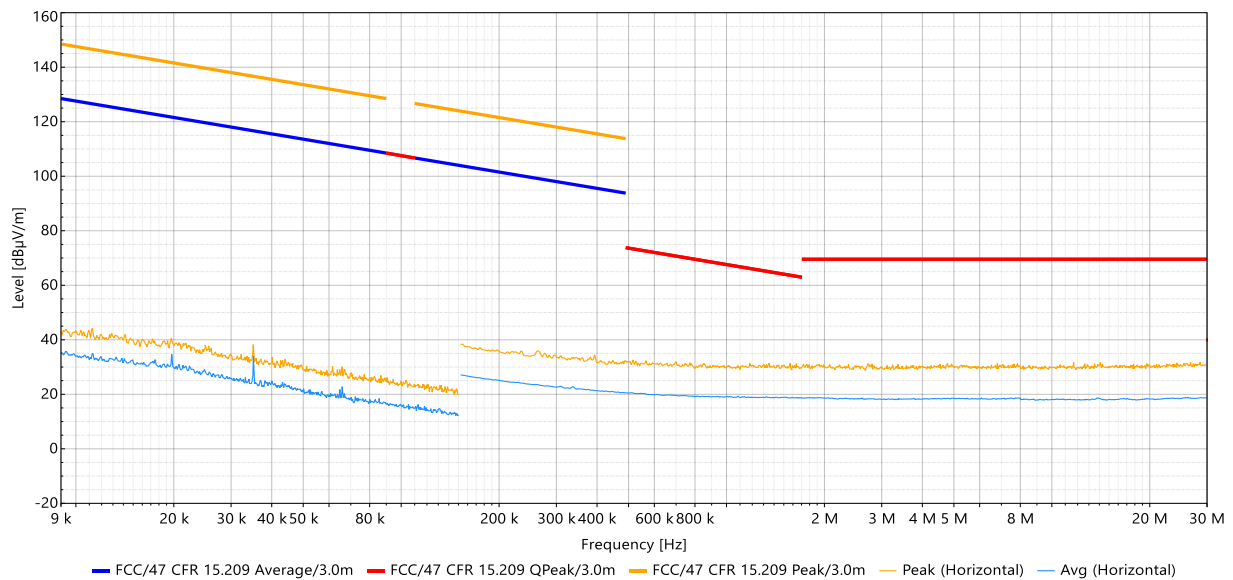
Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 44 von 80
Page 44 of 80

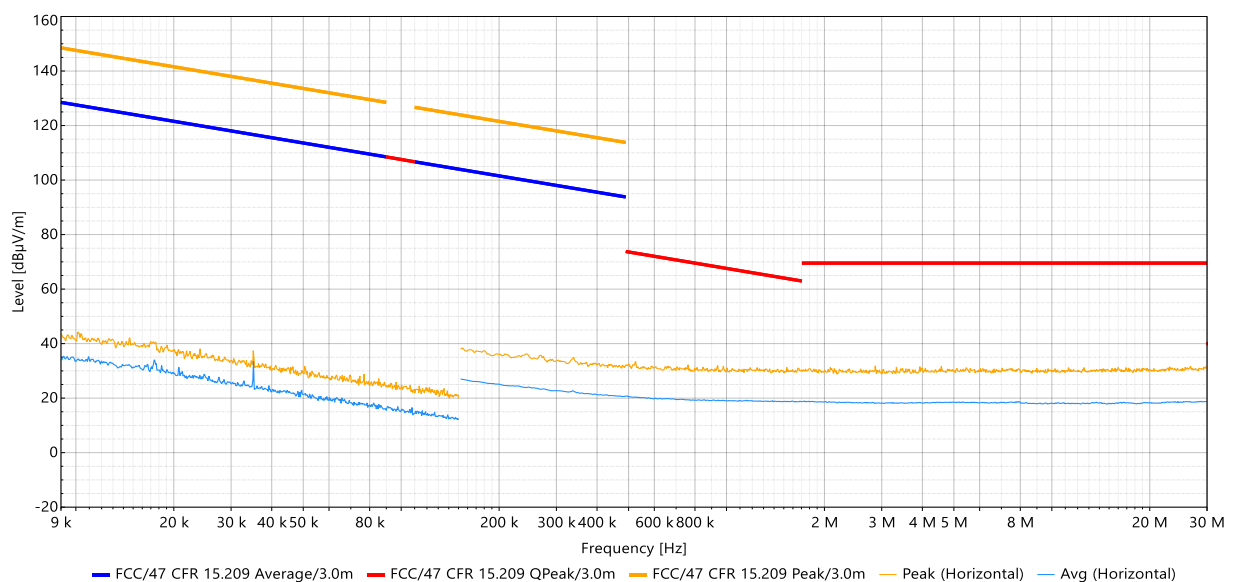
Prüfdokumentation
Test documentation

4.5.2.5.6 9 kHz to 30 MHz, highest Channel 2480MHz; 2Mbps

4.5.2.5.6.1 Perpendicular Polarization



4.5.2.5.6.2 Parallel Polarization



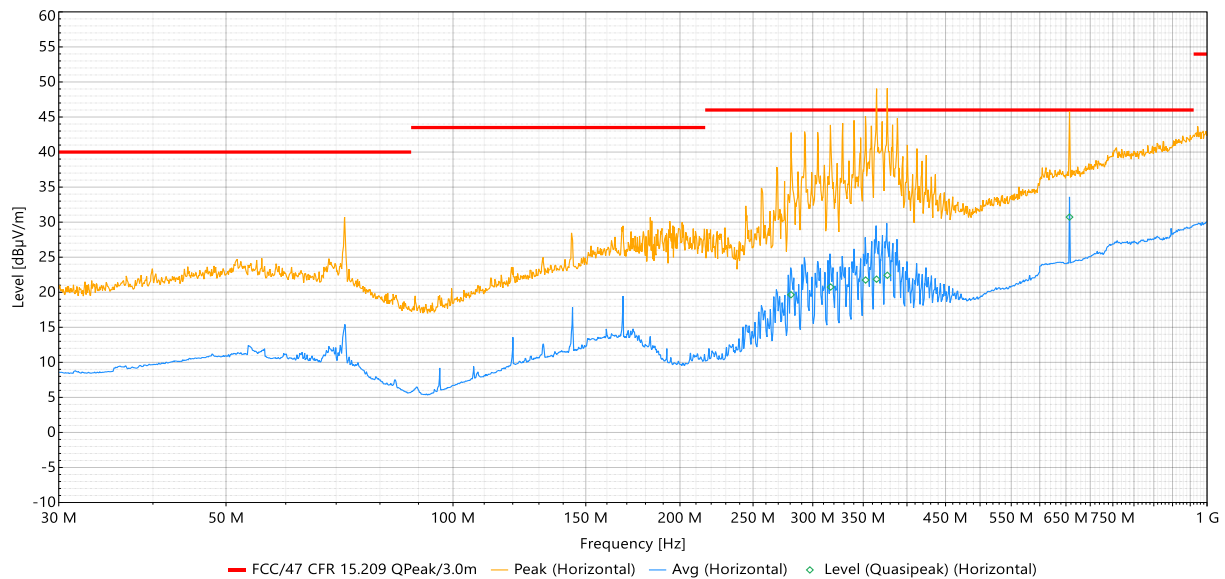
Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 45 von 80
Page 45 of 80

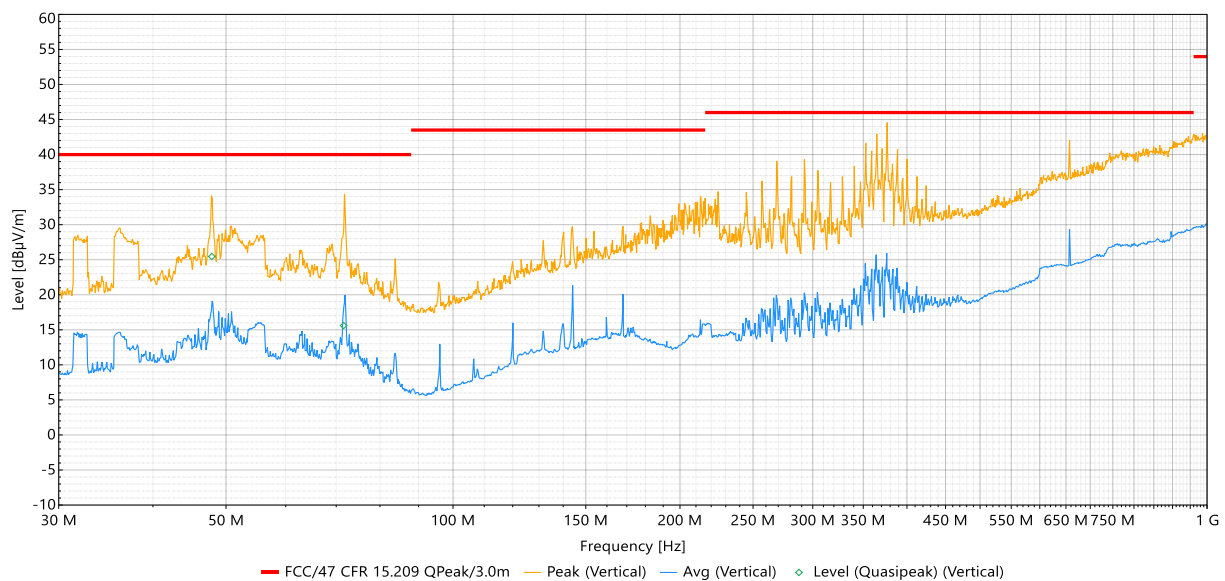
Prüfdokumentation
Test documentation

4.5.2.5.7 30 MHz to 1 GHz, lowest Channel 2402MHz; 1Mbps
Measured in Simultaneous-Mode with NB-IOT Band 66
The auxiliary equipment was connected to the EUT inside the chamber during the tests

4.5.2.5.7.1 Horizontal Polarization



4.5.2.5.7.2 Vertical Polarization



Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 46 von 80
Page 46 of 80

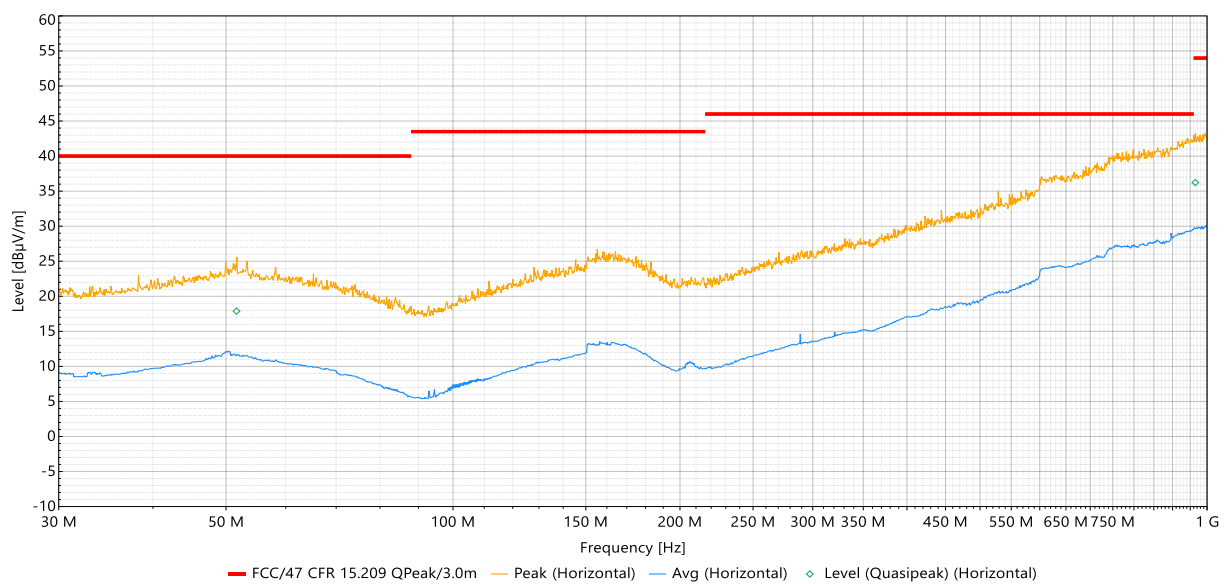
Prüfdokumentation
Test documentation

4.5.2.5.7.3 Results

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Azimuth (deg)	Height (m)	Corr. (dB)
47.88	25.5	40.0	-14.5	V	216.0	1.50	20.7
71.6	15.6	40.0	-24.4	V	114.3	3.56	18.4
280.678	19.6	46.0	-26.4	H	101.8	1.61	21.3
316.803	20.7	46.0	-25.3	H	160.4	3.98	22.3
352.526	21.7	46.0	-24.3	H	286.8	2.81	23.2
364.486	21.9	46.0	-24.1	H	119.9	3.24	23.3
376.718	22.4	46.0	-23.6	H	111.7	2.75	23.8
657.076	30.7	46.0	-15.3	H	225.5	3.08	30.0

4.5.2.5.8 30 MHz to 1 GHz, Middle Channel 2444MHz; 1Mbps

4.5.2.5.8.1 Horizontal Polarization

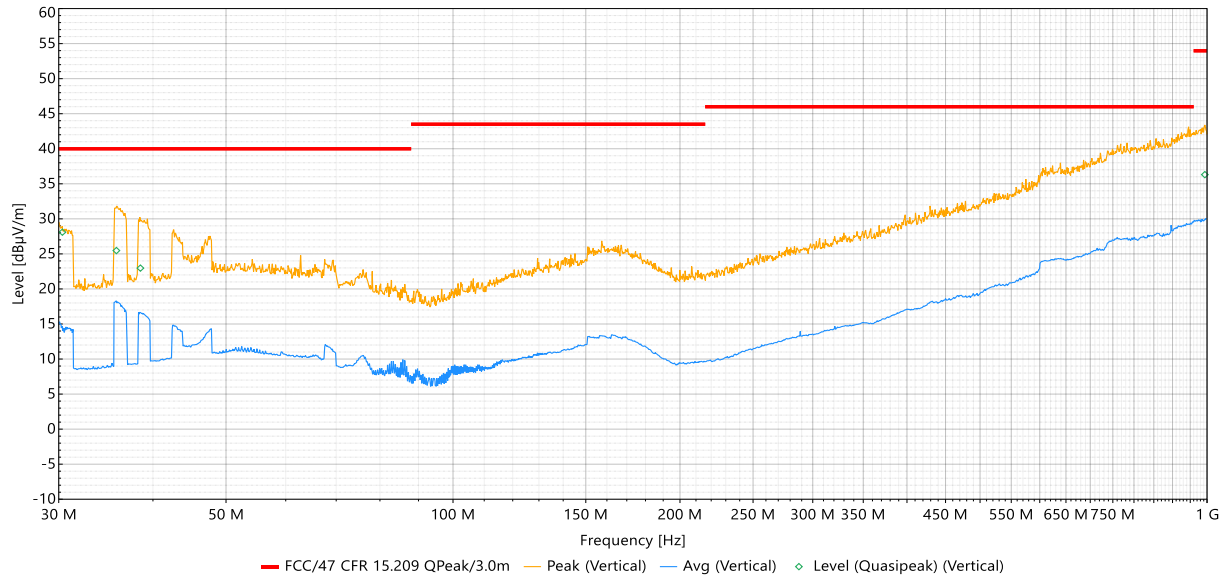


Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 47 von 80
Page 47 of 80

Prüfdokumentation
Test documentation

4.5.2.5.8.2 Vertical Polarization



4.5.2.5.8.3 Results

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Azimuth (deg)	Height (m)	Corr. (dB)
30.335 M	28.1	40.0	-11.9	V	128.5	1.12	18.7
35.776 M	25.5	40.0	-14.5	V	101.6	1.71	19.0
38.498 M	23.0	40.0	-17.0	V	168.2	1.81	19.5
51.625 M	17.9	40.0	-22.1	H	214.2	3.94	20.7
965.013 M	36.2	54.0	-17.8	H	84.6	2.88	35.0
993.348 M	36.3	54.0	-17.7	V	227.7	4.00	34.9

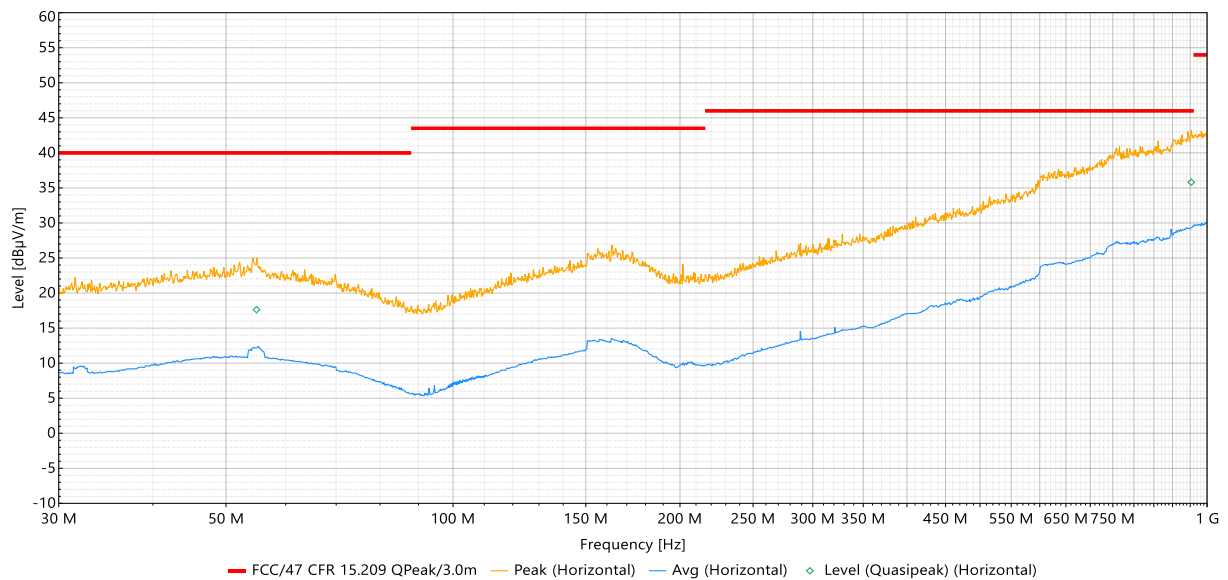
Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 48 von 80
Page 48 of 80

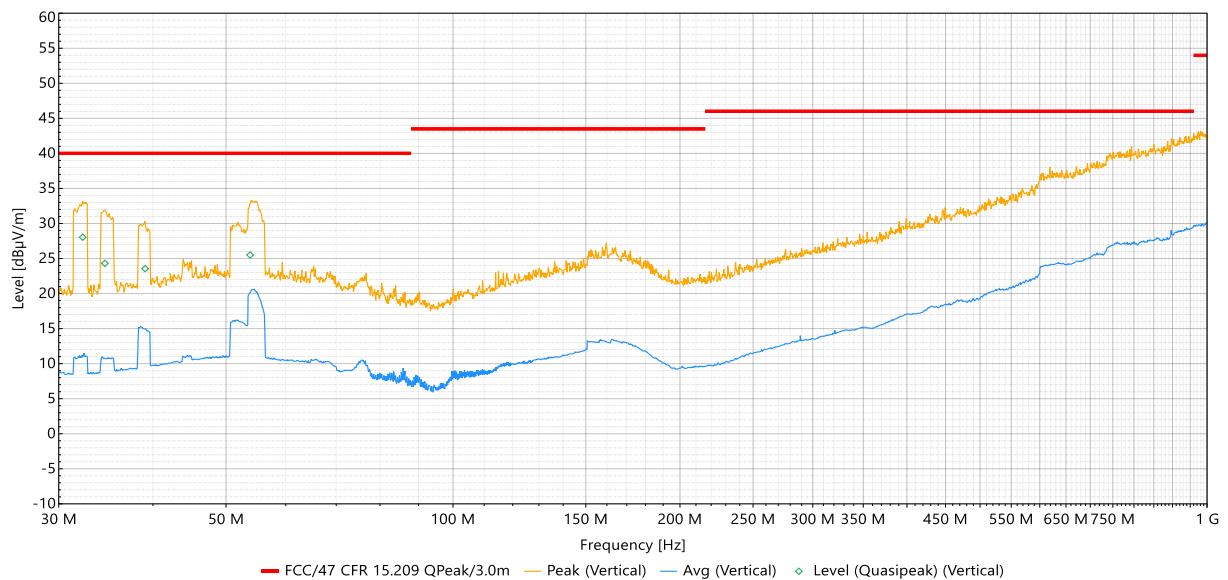
Prüfdokumentation
Test documentation

4.5.2.5.9 30 MHz to 1 GHz, Highest Channel 2480MHz; 1Mbps

4.5.2.5.9.1 Horizontal Polarization



4.5.2.5.9.2 Vertical Polarization



Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 49 von 80
Page 49 of 80

Prüfdokumentation
Test documentation

4.5.2.5.9.3 Results

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Azimuth (deg)	Height (m)	Corr. (dB)
32.276 M	28.0	40.0	-12.0	V	21.6	1.23	18.6
34.536 M	24.3	40.0	-15.7	V	217.9	2.27	18.8
39.057 M	23.6	40.0	-16.4	V	283.9	1.44	19.6
53.822 M	25.5	40.0	-14.5	V	34.5	2.10	20.6
54.884 M	17.6	40.0	-22.4	H	254.1	3.78	20.5
952.95 M	35.8	46.0	-10.2	H	229.8	3.80	34.7

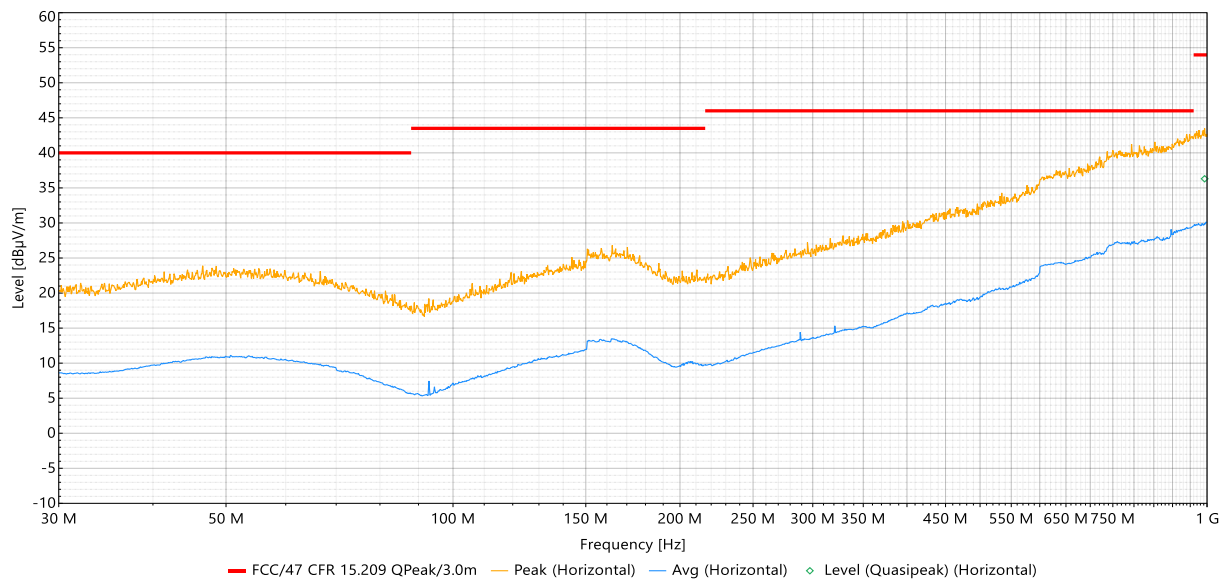
Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 50 von 80
Page 50 of 80

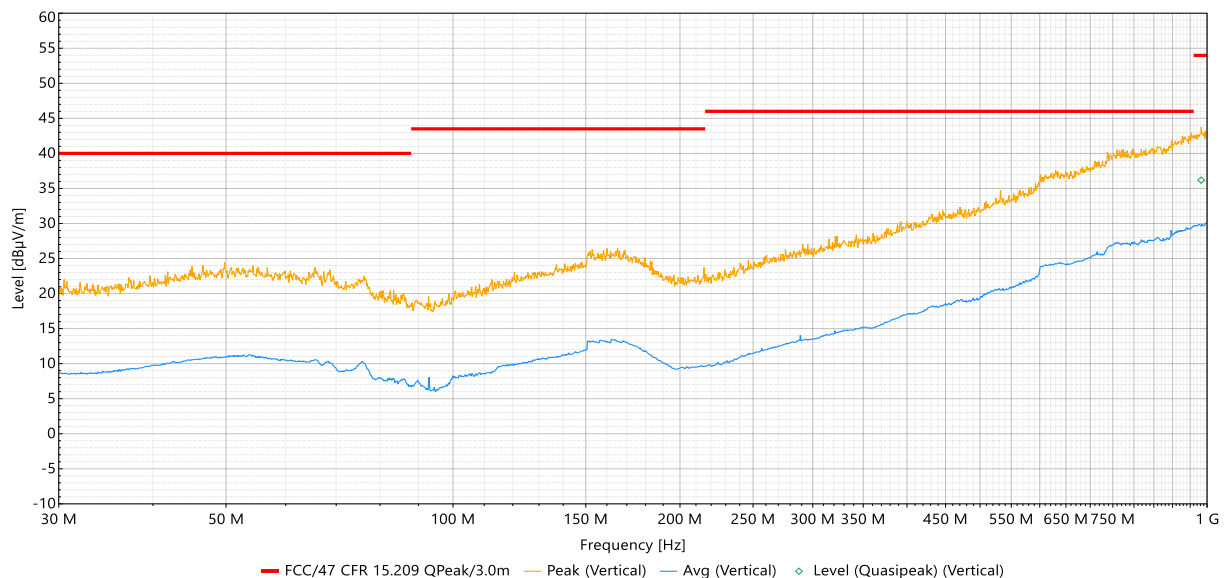
Prüfdokumentation
Test documentation

4.5.2.5.10 30 MHz to 1 GHz, Lowest Channel 2402MHz; 2Mbps

4.5.2.5.10.1 Horizontal Polarization



4.5.2.5.10.2 Vertical Polarization



4.5.2.5.10.3 Results

Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Pol	Azimuth (deg)	Height (m)	Corr. (dB)
982.322 M	36.2	54.0	-17.8	V	283.7	2.58	34.8
992.689 M	36.3	54.0	-17.7	H	81.0	1.01	34.9

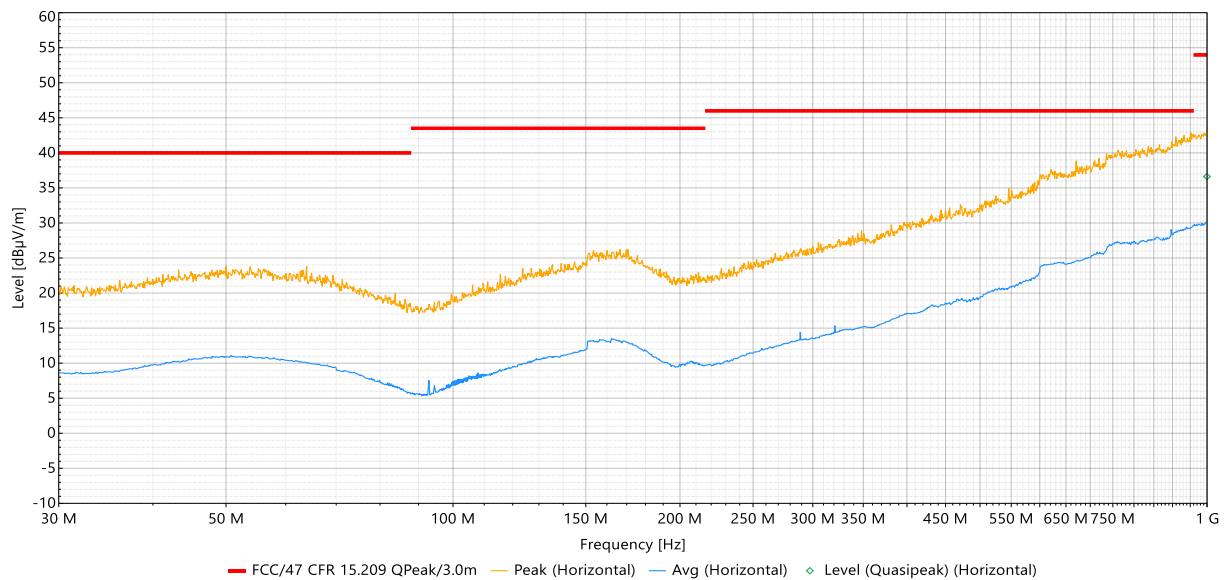
Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 51 von 80
Page 51 of 80

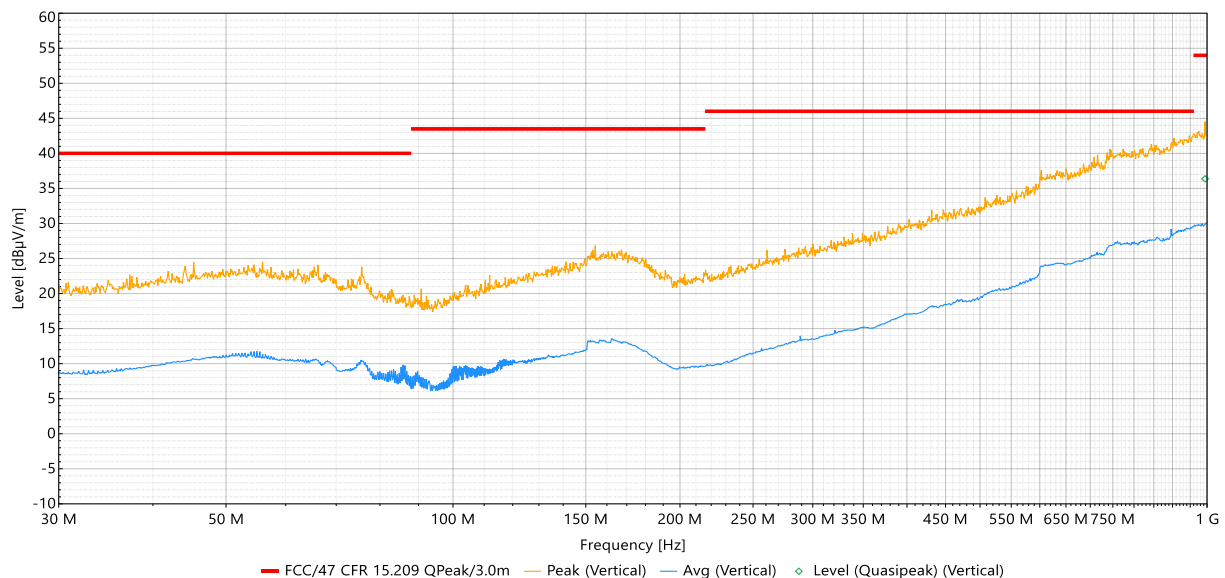
Prüfdokumentation
Test documentation

4.5.2.5.11 30 MHz to 1 GHz, Middle Channel 2444MHz; 2Mbps

4.5.2.5.11.1 Horizontal Polarization



4.5.2.5.11.2 Vertical Polarization



4.5.2.5.11.3 Results

Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Azimuth (deg)	Height (m)	Corr. (dB)
994.106 M	36.4	54.0	-17.6	V	290.6	1.70	35.0
999.646 M	36.6	54.0	-17.4	H	290.5	1.02	35.2

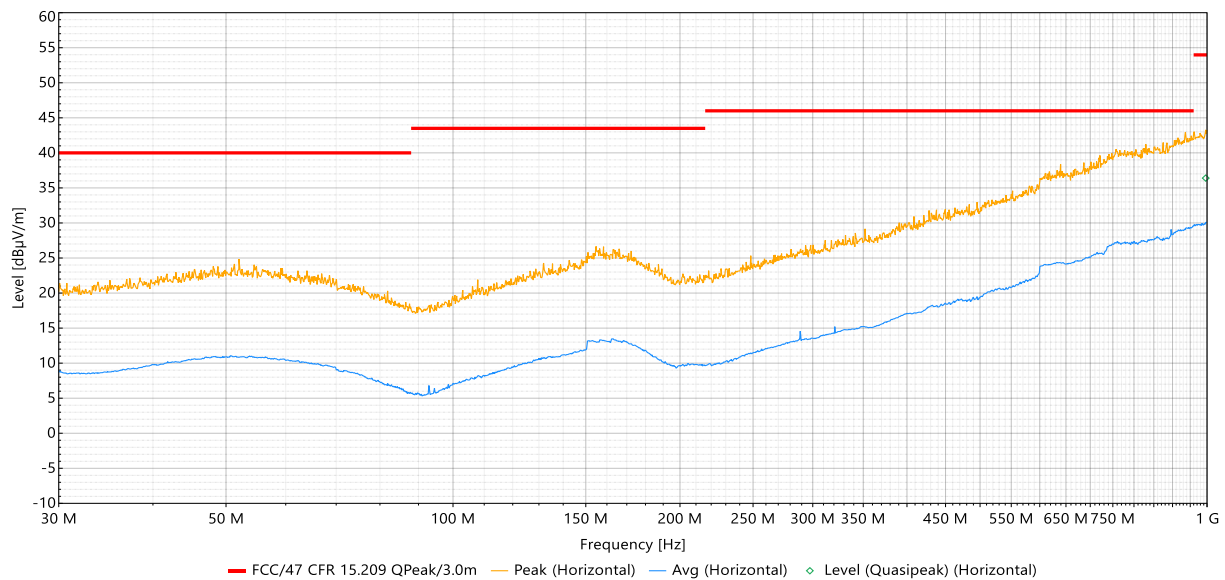
Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 52 von 80
Page 52 of 80

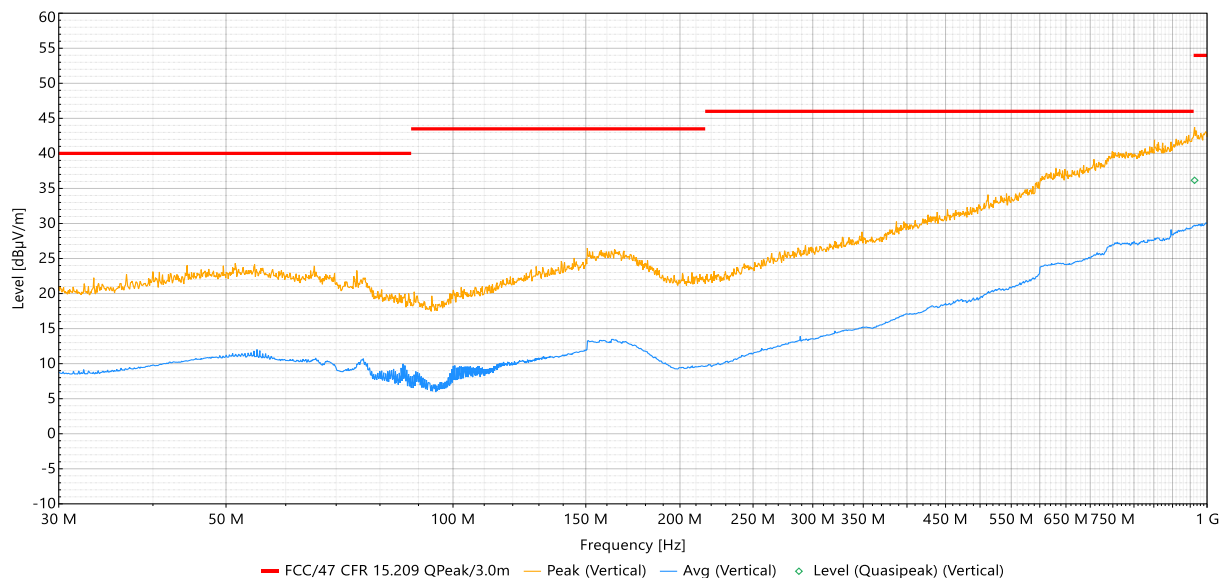
Prüfdokumentation
Test documentation

4.5.2.5.12 30 MHz to 1 GHz, Middle Channel 2480MHz; 2Mbps

4.5.2.5.12.1 Horizontal Polarization



4.5.2.5.12.2 Vertical Polarization



4.5.2.5.12.3 Results

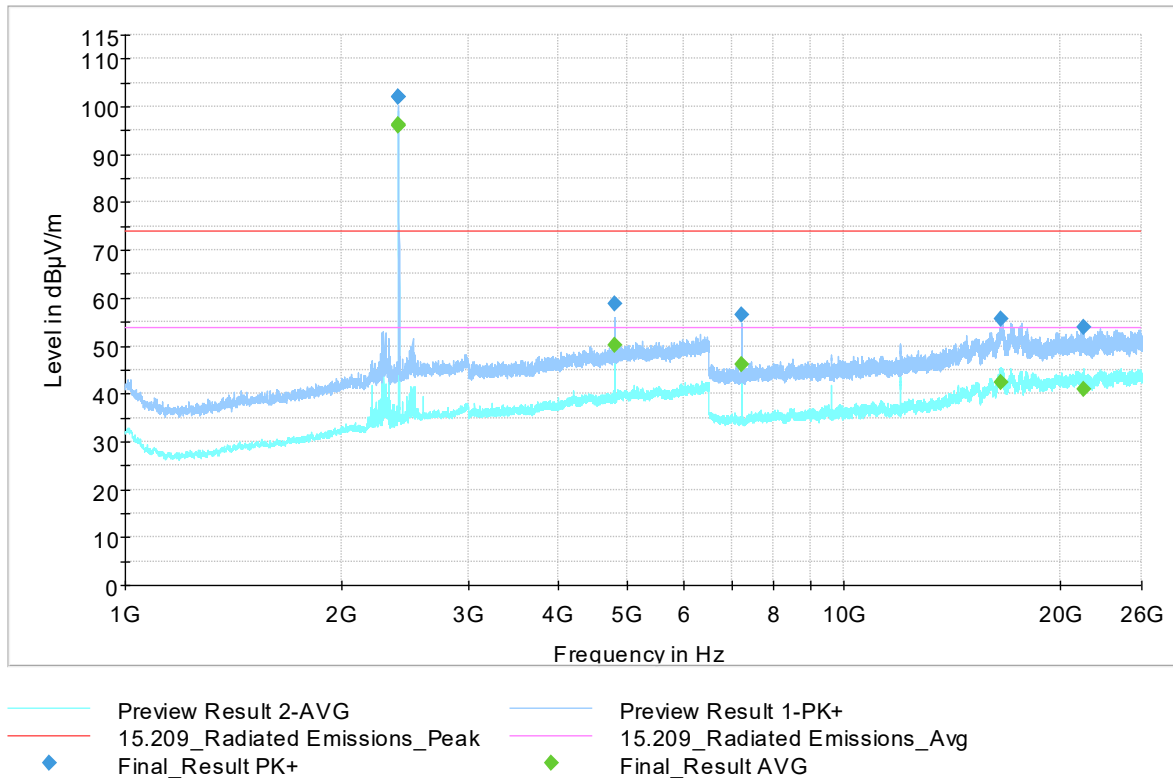
Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Azimuth (deg)	Height (m)	Corr. (dB)
962.676 M	36.2	54.0	-17.8	V	25.5	3.16	35.0
996.018 M	36.4	54.0	-17.6	H	152.5	2.48	35.0

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 53 von 80
Page 53 of 80

Prüfdokumentation
Test documentation

4.5.2.5.13 1 to 26GHz, Lowest Channel 2402MHz; 1Mbps



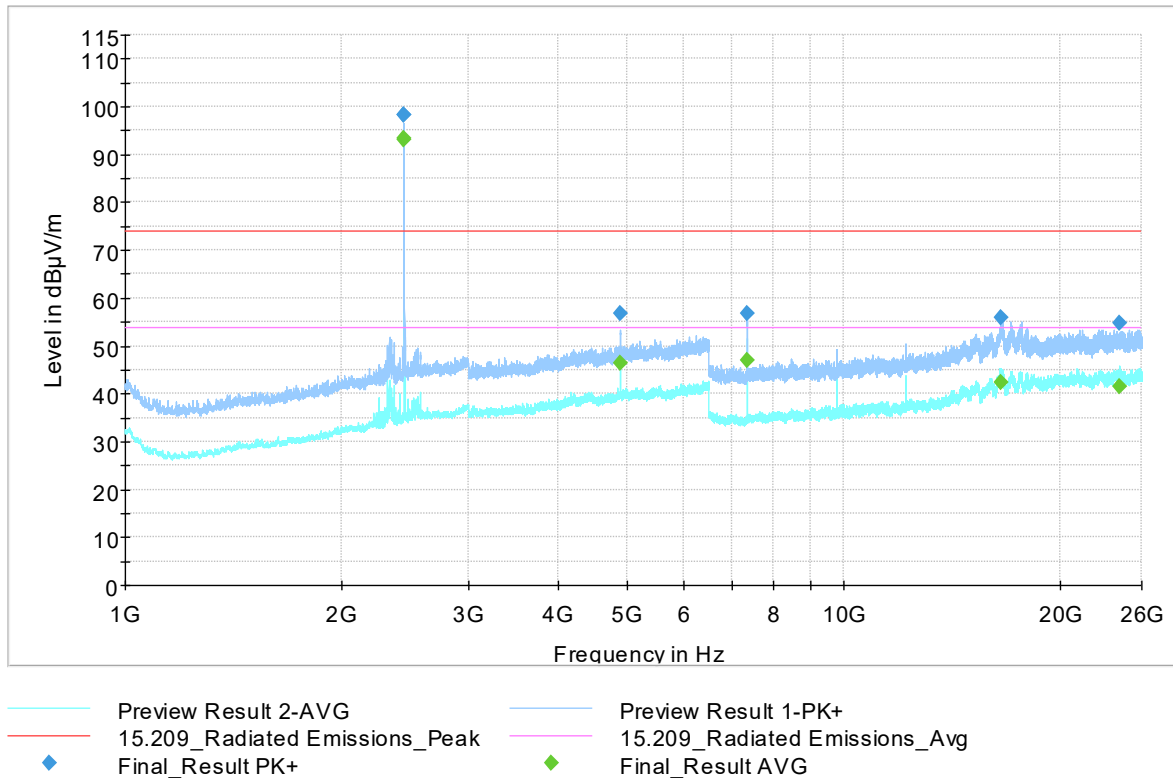
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
2402.14935	Wanted Tx-Signal				10000.0	1000.000	150.0	H	212.0	8.0	10.7
2402.14935					10000.0	1000.000	150.0	H	212.0	8.0	10.7
4804.25974	---	50.07	54.00	3.93	10000.0	1000.000	150.0	H	234.0	47.0	8.3
4804.25974	58.91	---	74.00	15.09	10000.0	1000.000	150.0	H	234.0	47.0	8.3
7206.50649	---	46.14	54.00	7.86	10000.0	1000.000	150.0	V	75.0	87.0	-5.0
7206.50649	56.38	---	74.00	17.62	10000.0	1000.000	150.0	V	75.0	87.0	-5.0
16547.9481	---	42.39	54.00	11.61	10000.0	1000.000	150.0	V	300.0	-23.0	9.2
16547.9481	55.73	---	74.00	18.27	10000.0	1000.000	150.0	V	300.0	-23.0	9.2
21605.8600	---	41.02	54.00	12.98	10000.0	1000.000	150.0	H	153.0	29.0	20.1
21605.8600	53.96	---	74.00	20.04	10000.0	1000.000	150.0	H	153.0	29.0	20.1

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 54 von 80
Page 54 of 80

Prüfdokumentation
Test documentation

4.5.2.5.14 1 to 26GHz, Middle Channel 2444MHz; 1Mbps



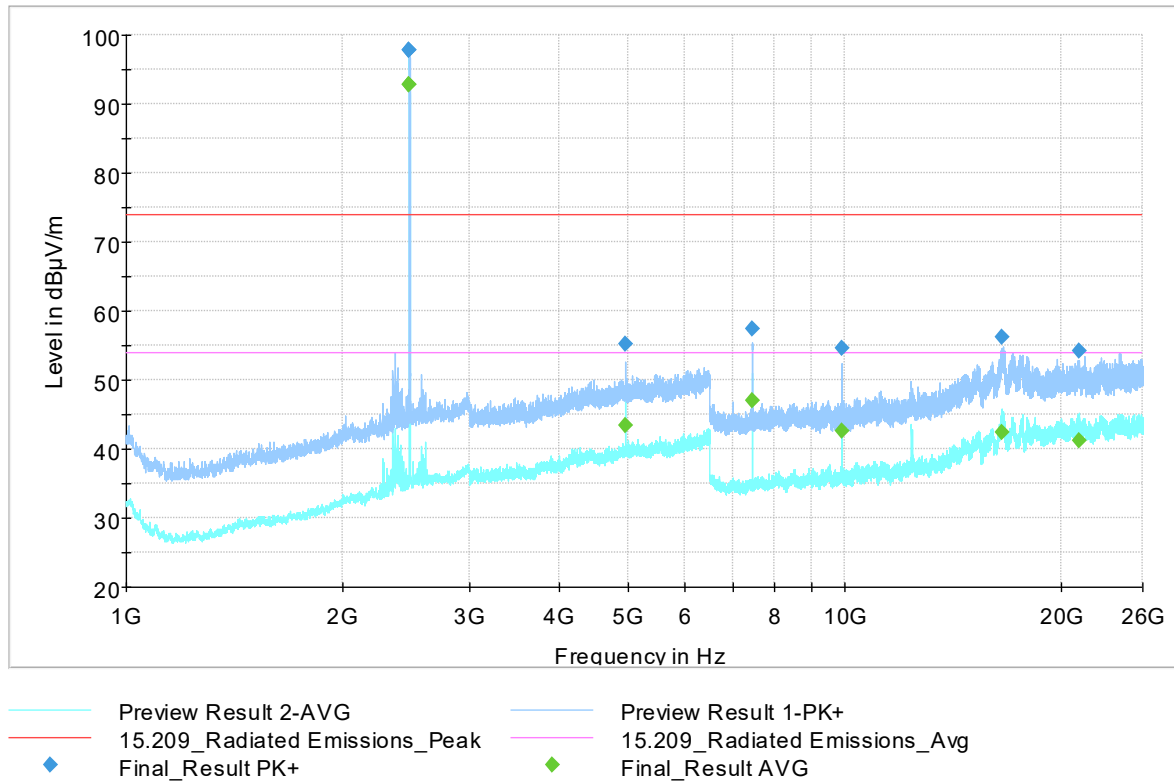
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
2444.02597	Wanted Tx-Signal				10000.0	1000.000	150.0	H	210.0	4.0	10.9
2444.02597					10000.0	1000.000	150.0	H	210.0	4.0	10.9
4888.25974	---	46.44	54.00	7.56	10000.0	1000.000	150.0	H	268.0	64.0	8.6
4888.25974	56.67	---	74.00	17.33	10000.0	1000.000	150.0	H	268.0	64.0	8.6
7331.96753	---	46.87	54.00	7.13	10000.0	1000.000	150.0	V	63.0	84.0	-4.9
7331.96753	56.74	---	74.00	17.26	10000.0	1000.000	150.0	V	63.0	84.0	-4.9
16533.8636	---	42.44	54.00	11.56	10000.0	1000.000	150.0	V	221.0	14.0	9.0
16533.8636	55.91	---	74.00	18.09	10000.0	1000.000	150.0	V	221.0	14.0	9.0
24255.4000	---	41.53	54.00	12.47	10000.0	1000.000	150.0	V	293.0	22.0	22.9
24255.4000	54.68	---	74.00	19.32	10000.0	1000.000	150.0	V	293.0	22.0	22.9

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 55 von 80
Page 55 of 80

Prüfdokumentation
Test documentation

4.5.2.5.15 1 to 26GHz, Highest Channel 2480MHz; 1Mbps



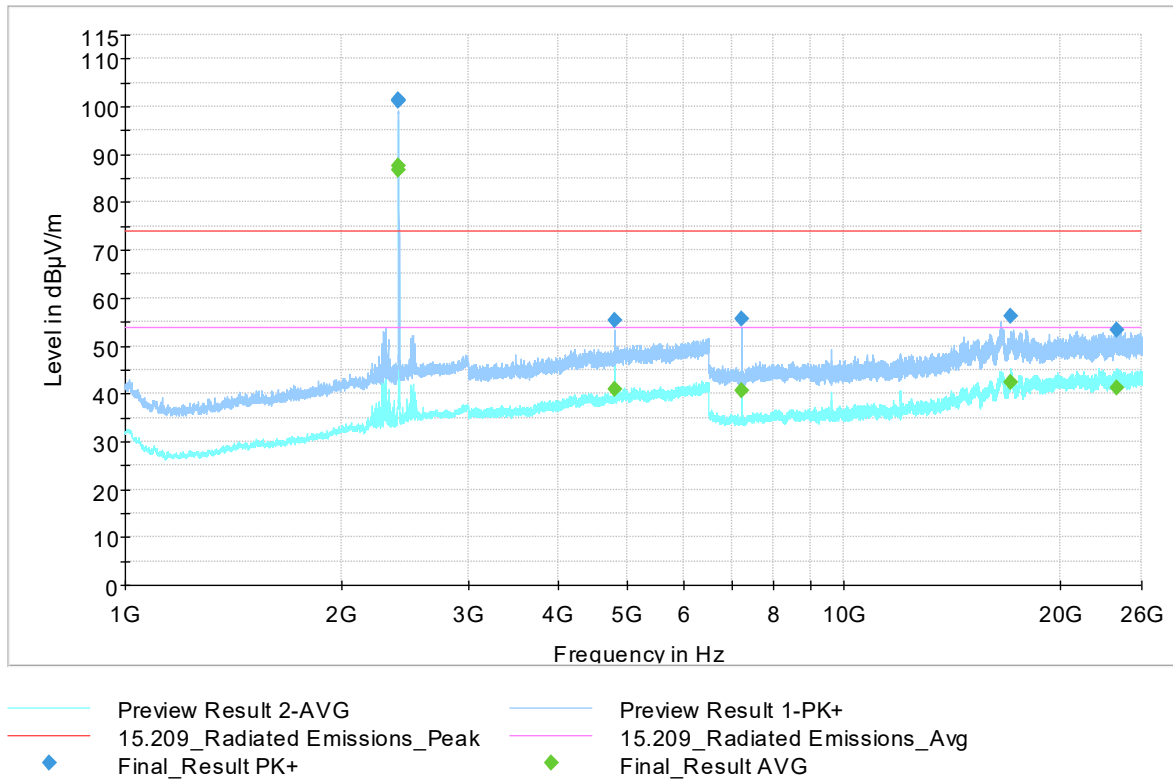
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
2480.07792	Wanted TX-Signal				10000.0	1000.000	150.0	V	204.0	92.0	11.6
2480.07792					10000.0	1000.000	150.0	V	204.0	92.0	11.6
4959.40259	---	43.41	54.00	10.59	10000.0	1000.000	150.0	V	115.0	-5.0	8.7
4959.40259	55.23	---	74.00	18.77	10000.0	1000.000	150.0	V	115.0	-5.0	8.7
7439.28571	---	46.92	54.00	7.08	10000.0	1000.000	150.0	V	28.0	104.0	-4.2
7439.28571	57.45	---	74.00	16.55	10000.0	1000.000	150.0	V	28.0	104.0	-4.2
9920.79220	---	42.59	54.00	11.41	10000.0	1000.000	150.0	H	100.0	84.0	-1.6
9920.79220	54.56	---	74.00	19.44	10000.0	1000.000	150.0	H	100.0	84.0	-1.6
16537.7142	56.25	---	74.00	17.75	10000.0	1000.000	150.0	H	17.0	25.0	9.0
16537.7142	---	42.35	54.00	11.65	10000.0	1000.000	150.0	H	17.0	25.0	9.0
21174.3000	54.17	---	74.00	19.83	10000.0	1000.000	150.0	V	137.0	75.0	20.2
21174.3000	---	41.13	54.00	12.87	10000.0	1000.000	150.0	V	137.0	75.0	20.2

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 56 von 80
Page 56 of 80

Prüfdokumentation
Test documentation

4.5.2.5.16 1 to 26GHz, Lowest Channel 2402MHz; 2Mbps



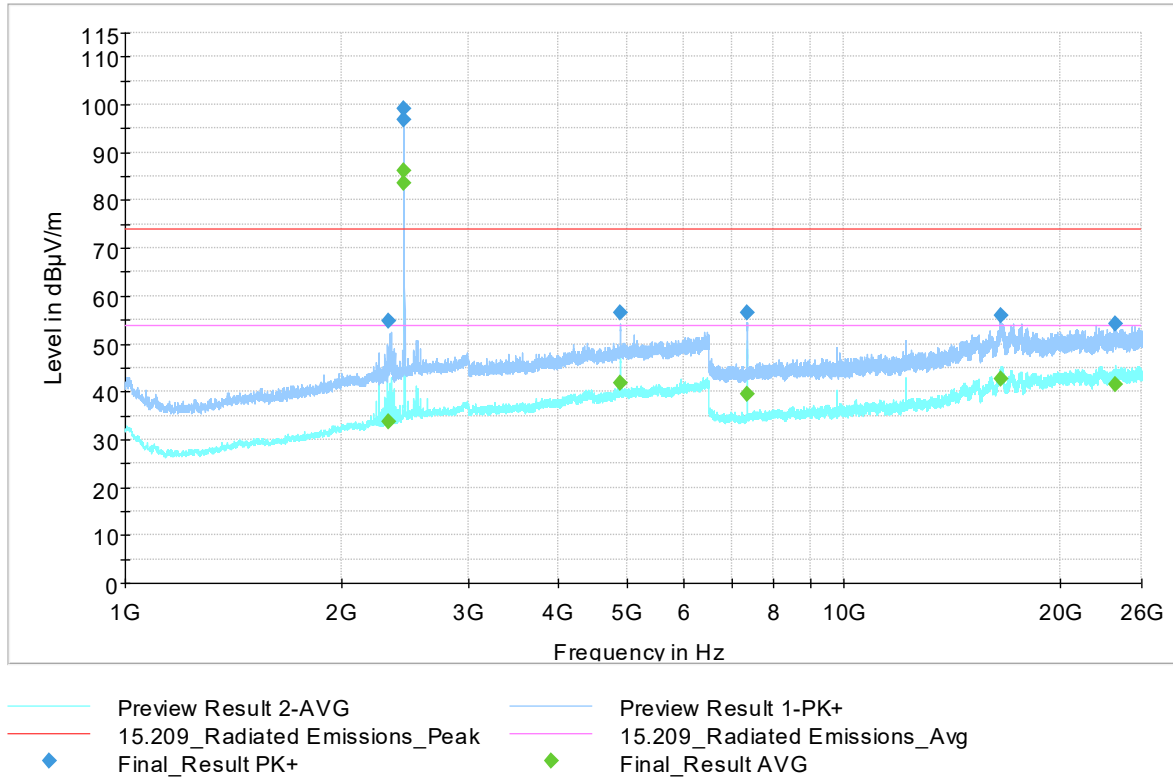
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
2402.55194	Wanted TX-Signal				10000.0	1000.000	150.0	H	234.0	1.0	10.7
2402.55194					10000.0	1000.000	150.0	H	234.0	1.0	10.7
4803.20779	55.39	---	74.00	18.61	10000.0	1000.000	150.0	H	21.0	96.0	8.2
4803.20779	---	40.90	54.00	13.10	10000.0	1000.000	150.0	H	21.0	96.0	8.2
7204.69480	55.75	---	74.00	18.25	10000.0	1000.000	150.0	H	306.0	66.0	-5.0
7204.69480	---	40.63	54.00	13.37	10000.0	1000.000	150.0	H	306.0	66.0	-5.0
17116.1233	56.15	---	74.00	17.85	10000.0	1000.000	150.0	V	130.0	59.0	9.3
17116.1233	---	42.38	54.00	11.62	10000.0	1000.000	150.0	V	130.0	59.0	9.3
24053.2600	53.44	---	74.00	20.56	10000.0	1000.000	150.0	V	-36.0	-21.0	22.9
24053.2600	---	41.21	54.00	12.79	10000.0	1000.000	150.0	V	-36.0	-21.0	22.9

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 57 von 80
Page 57 of 80

Prüfdokumentation
Test documentation

4.5.2.5.17 1 to 26GHz, Middle Channel 2444MHz; 2Mbps



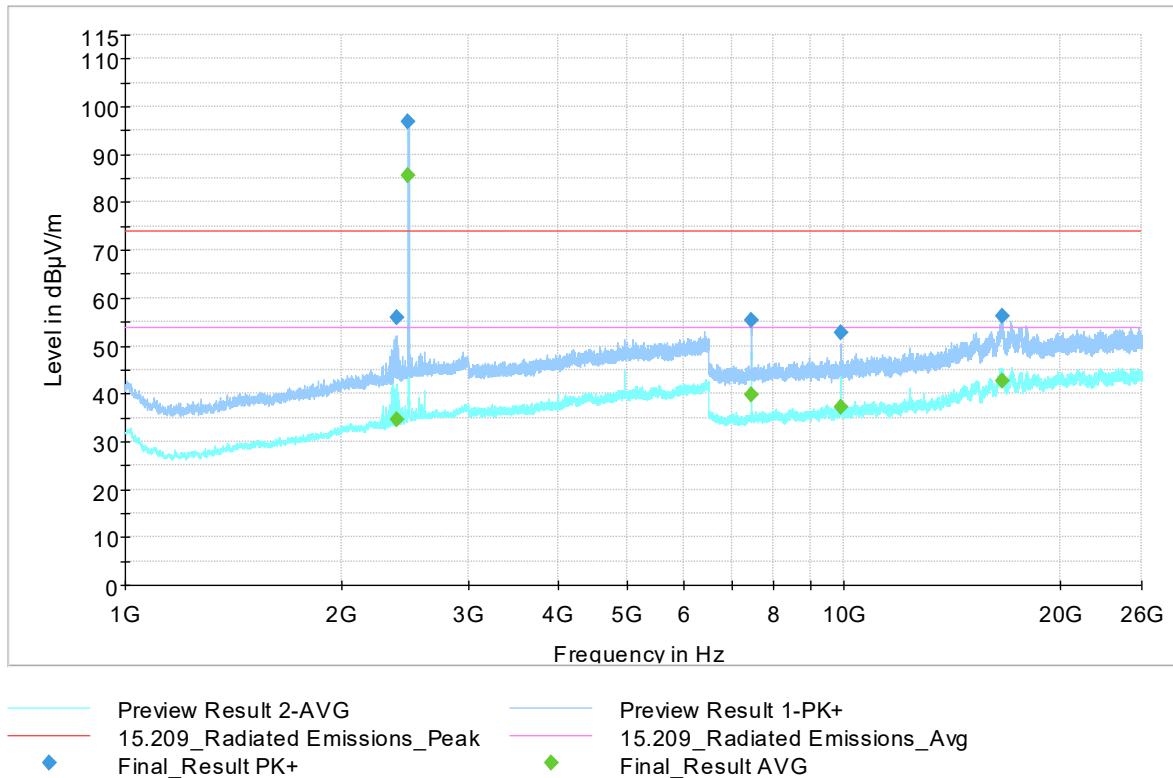
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
2331.64285	54.82	---	74.00	19.18	10000.0	1000.000	150.0	H	173.0	-4.0	10.3
2331.64285	---	33.79	54.00	20.21	10000.0	1000.000	150.0	H	173.0	-4.0	10.3
2443.50649	Wanted TX-Signal				10000.0	1000.000	150.0	H	230.0	11.0	10.9
2443.50649					10000.0	1000.000	150.0	H	230.0	11.0	10.9
4887.14285	56.56	---	74.00	17.44	10000.0	1000.000	150.0	H	271.0	75.0	8.6
4887.14285	---	41.77	54.00	12.23	10000.0	1000.000	150.0	H	271.0	75.0	8.6
7332.16883	---	39.54	54.00	14.46	10000.0	1000.000	150.0	H	24.0	32.0	-4.9
7332.16883	56.38	---	74.00	17.62	10000.0	1000.000	150.0	H	24.0	32.0	-4.9
16559.7402	---	42.53	54.00	11.47	10000.0	1000.000	150.0	H	170.0	-30.0	9.3
16559.7402	55.81	---	74.00	18.19	10000.0	1000.000	150.0	H	170.0	-30.0	9.3
23925.7600	54.24	---	74.00	19.76	10000.0	1000.000	150.0	H	343.0	-15.0	22.8
23925.7600	---	41.49	54.00	12.51	10000.0	1000.000	150.0	H	343.0	-15.0	22.8

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 58 von 80
Page 58 of 80

Prüfdokumentation
Test documentation

4.5.2.5.18 1 to 26GHz, Highest Channel 2480MHz; 2Mbps



Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
2383.85714	---	34.61	54.00	19.39	10000.0	1000.000	150.0	H	235.0	-1.0	10.3
2383.85714	55.86	---	74.00	18.14	10000.0	1000.000	150.0	H	235.0	-1.0	10.3
2479.94805	Wanted TX-Signal				10000.0	1000.000	150.0	H	158.0	40.0	11.6
2479.94805					10000.0	1000.000	150.0	H	158.0	40.0	11.6
7438.49350	---	39.78	54.00	14.22	10000.0	1000.000	150.0	V	245.0	35.0	-4.2
7438.49350	55.47	---	74.00	18.53	10000.0	1000.000	150.0	V	245.0	35.0	-4.2
9921.72727	52.66	---	74.00	21.34	10000.0	1000.000	150.0	H	88.0	71.0	-1.6
9921.72727	---	37.05	54.00	16.95	10000.0	1000.000	150.0	H	88.0	71.0	-1.6
16625.1753	56.24	---	74.00	17.76	10000.0	1000.000	150.0	H	329.0	23.0	9.5
16625.1753	---	42.70	54.00	11.30	10000.0	1000.000	150.0	H	329.0	23.0	9.5

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 59 von 80
Page 59 of 80

Prüfdokumentation
Test documentation

4.5.3 Authorized-band band edge measurement (Unwanted emissions)

4.5.3.1 Test Method

These procedures are applicable for determining compliance at authorized band edges where the requirements are expressed as a value relative to the in-band signal level.

Attenuation below the general limits specified in § 15.209(a) and RSS-Gen sec. 8.9 is not required.

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).

4.5.3.2 Test Setup

EUT		A004236733-008 (cond. sample)
Chamber details		Shielded room
Companion device		EUT in Test Mode. Therefore, no Companion Device was used.
Operation mode		☒ 1: TX-Mode ☐ 2: N/A ☐ 3: N/A ☐ 4: N/A
Spectrum Analyzer	Centre Frequency	2402Mhz; 2480MHz (lowest and highest)
	Resolution Bandwidth	100kHz
	Video Bandwidth	300kHz
	Sweep time	113.7µs (Max Hold until stable)
Further parameters		-
Test engineer		Primoz Erzen

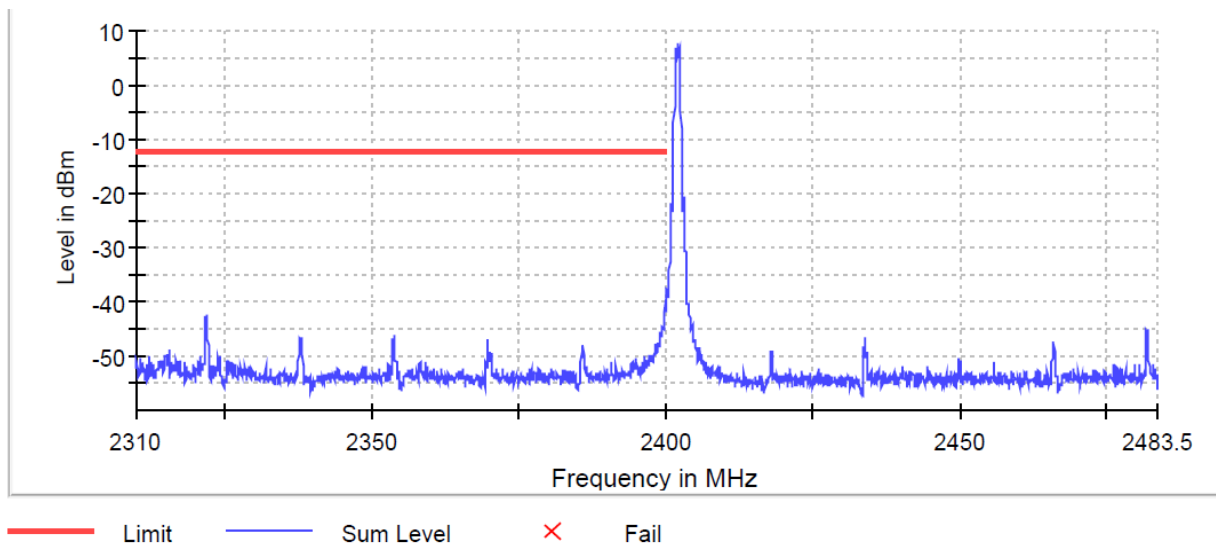
Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 60 von 80
Page 60 of 80

Prüfdokumentation
Test documentation

4.5.3.3 Test results (Unwanted emissions; Authorized-band band edge measurement)

4.5.3.3.1 Lowest Channel 2402MHz; 1Mbps



Inband Peak

Frequency [MHz]	Level [dBm]
2402.025000	7.8

Measurements

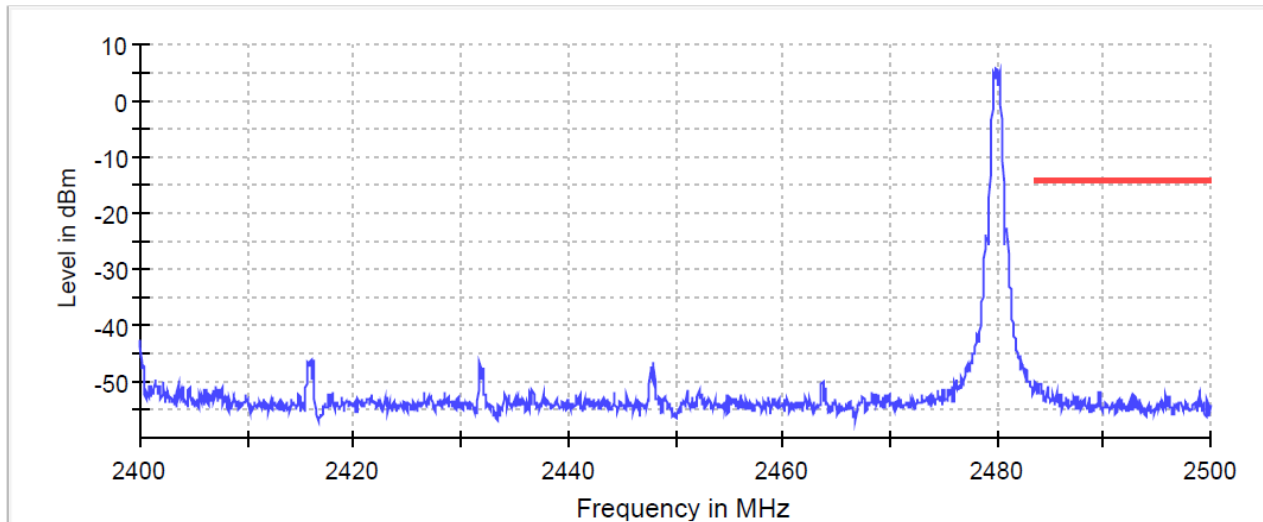
Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2399.975000	-39.4	27.2	-12.2	PASS
2399.925000	-41.8	29.6	-12.2	PASS
2399.825000	-42.4	30.2	-12.2	PASS
2321.975000	-42.4	30.2	-12.2	PASS
2399.775000	-42.4	30.2	-12.2	PASS
2399.875000	-42.5	30.4	-12.2	PASS
2322.025000	-42.8	30.6	-12.2	PASS
2321.725000	-42.8	30.6	-12.2	PASS
2321.775000	-43.1	30.9	-12.2	PASS
2399.725000	-43.3	31.1	-12.2	PASS
2321.675000	-43.4	31.2	-12.2	PASS
2321.925000	-43.5	31.4	-12.2	PASS
2399.675000	-44.2	32.1	-12.2	PASS
2399.475000	-44.6	32.4	-12.2	PASS
2399.525000	-44.8	32.6	-12.2	PASS

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 61 von 80
Page 61 of 80

Prüfdokumentation
Test documentation

4.5.3.3.2 Highest Channel 2480MHz; 1Mbps



— Limit — Sum Level × Fail

Inband Peak

Frequency [MHz]	Level [dBm]
2479.975000	5.6

Measurements

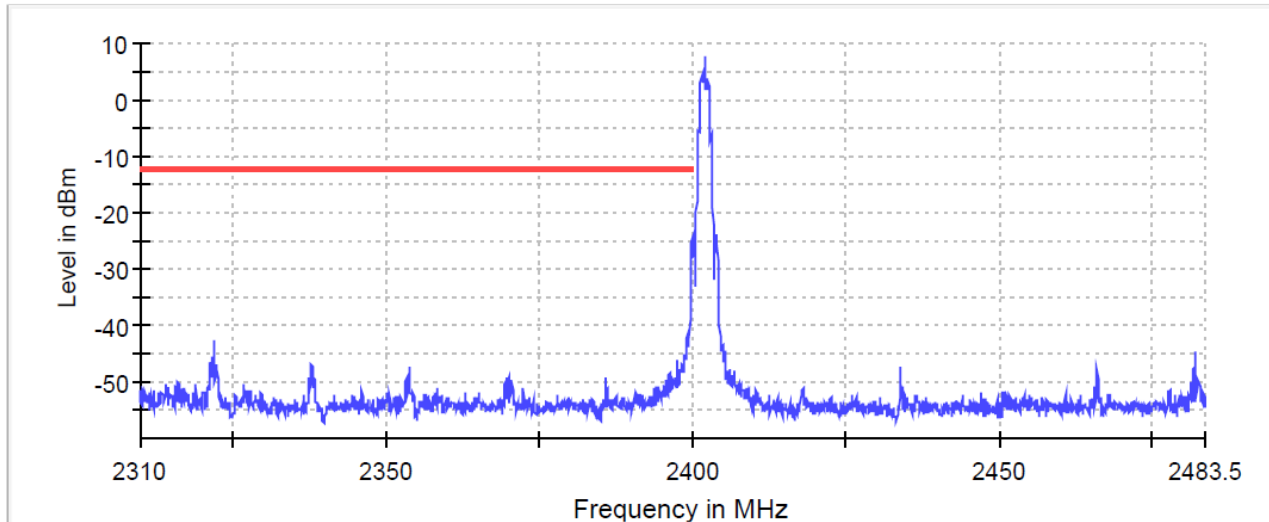
Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2483.575000	-50.0	35.6	-14.4	PASS
2483.525000	-50.4	36.0	-14.4	PASS
2483.625000	-50.4	36.0	-14.4	PASS
2484.025000	-50.5	36.1	-14.4	PASS
2484.075000	-50.6	36.2	-14.4	PASS
2484.775000	-50.8	36.4	-14.4	PASS
2484.725000	-50.8	36.4	-14.4	PASS
2483.725000	-51.4	37.0	-14.4	PASS
2483.775000	-51.4	37.0	-14.4	PASS
2483.825000	-51.5	37.1	-14.4	PASS
2484.225000	-51.6	37.2	-14.4	PASS
2484.325000	-51.7	37.3	-14.4	PASS
2484.275000	-51.7	37.3	-14.4	PASS
2485.575000	-51.8	37.4	-14.4	PASS
2483.975000	-51.8	37.4	-14.4	PASS

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 62 von 80
Page 62 of 80

Prüfdokumentation
Test documentation

4.5.3.3.3 Lowest Channel 2402MHz; 2Mbps



— Limit — Sum Level × Fail

Inband Peak

Frequency [MHz]	Level [dBm]
2402.025000	7.8

Measurements

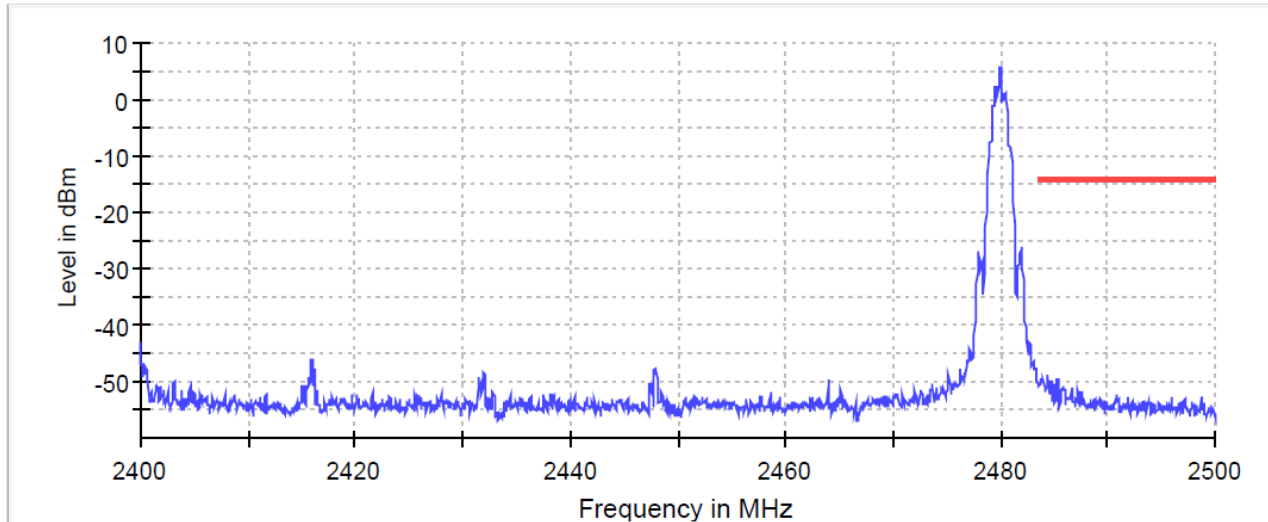
Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2399.975000	-24.4	12.2	-12.2	PASS
2399.925000	-25.4	13.2	-12.2	PASS
2399.875000	-28.1	15.9	-12.2	PASS
2399.825000	-30.8	18.6	-12.2	PASS
2399.775000	-31.9	19.7	-12.2	PASS
2399.725000	-33.1	20.9	-12.2	PASS
2399.675000	-36.0	23.8	-12.2	PASS
2399.625000	-36.7	24.5	-12.2	PASS
2399.575000	-38.7	26.5	-12.2	PASS
2399.275000	-41.3	29.1	-12.2	PASS
2399.225000	-41.3	29.1	-12.2	PASS
2399.325000	-41.5	29.3	-12.2	PASS
2399.525000	-42.2	30.0	-12.2	PASS
2399.175000	-42.4	30.2	-12.2	PASS
2399.375000	-42.4	30.3	-12.2	PASS

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 63 von 80
Page 63 of 80

Prüfdokumentation
Test documentation

4.5.3.3.4 Highest Channel 2480MHz; 2Mbps



Inband Peak

Frequency [MHz]	Level [dBm]
2479.975000	5.6

Measurements

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2484.425000	-48.8	34.4	-14.4	PASS
2484.475000	-49.3	34.9	-14.4	PASS
2485.325000	-49.5	35.1	-14.4	PASS
2484.025000	-49.6	35.2	-14.4	PASS
2483.825000	-49.6	35.2	-14.4	PASS
2483.875000	-49.7	35.3	-14.4	PASS
2485.375000	-49.7	35.3	-14.4	PASS
2483.975000	-49.7	35.3	-14.4	PASS
2483.675000	-49.8	35.3	-14.4	PASS
2484.375000	-49.9	35.5	-14.4	PASS
2483.775000	-49.9	35.5	-14.4	PASS
2483.725000	-50.0	35.6	-14.4	PASS
2484.725000	-50.2	35.8	-14.4	PASS
2483.925000	-50.2	35.8	-14.4	PASS
2484.675000	-50.2	35.8	-14.4	PASS

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 64 von 80
Page 64 of 80

Prüfdokumentation
Test documentation

4.5.4 Restricted-band band edge measurement (Unwanted emissions)

4.5.4.1 Test Method

These procedures are applicable for determining compliance when restricted-bands are adjacent to the authorized band-edges.

For frequency hopping systems, the hopping shall be turned OFF during this test.

Measurements shall be done on the lowest and highest frequency channel, for every applicable modulation and for the highest gain of each type of antenna to be used with the EUT.

Measurements shall be done on emission at the restricted band-edge, or on the highest modulation product within the restricted-band, if this level is greater than that at the band-edge

4.5.4.2 Test Setup

EUT		A004236733-008 (cond. sample)
Operation mode		☒ 1: TX-Mode ☐ 2: N/A ☐ 3: N/A ☐ 4: N/A
Companion device		EUT in Test Mode. Therefore, no Companion Device was used.
Chamber details		Fully-anechoic chamber
Receiving Antenna		Horn Antenna HF907 (1-18GHz)
Receiving Antenna Polarization		Horizontal – Vertical
Receiving Antenna Height		1.5m
EUT Positioner		40cm x 60cm non-conductive positioner 1.5m above the floor Step size elevation angle 30°
EUT Turn Table Step Size		45°
Spectrum Analyzer	Centre Frequency	2402Mhz; 2480MHz (lowest and highest)
	Resolution Bandwidth	1MHz
	Video Bandwidth	3MHz
	Detectors	Peak and average
	Sweep time	Sweep Time: 100ms during exploratory tests Sweep Time: 5s for final measurements
Further parameters		-
Test engineer		Primoz Erzen

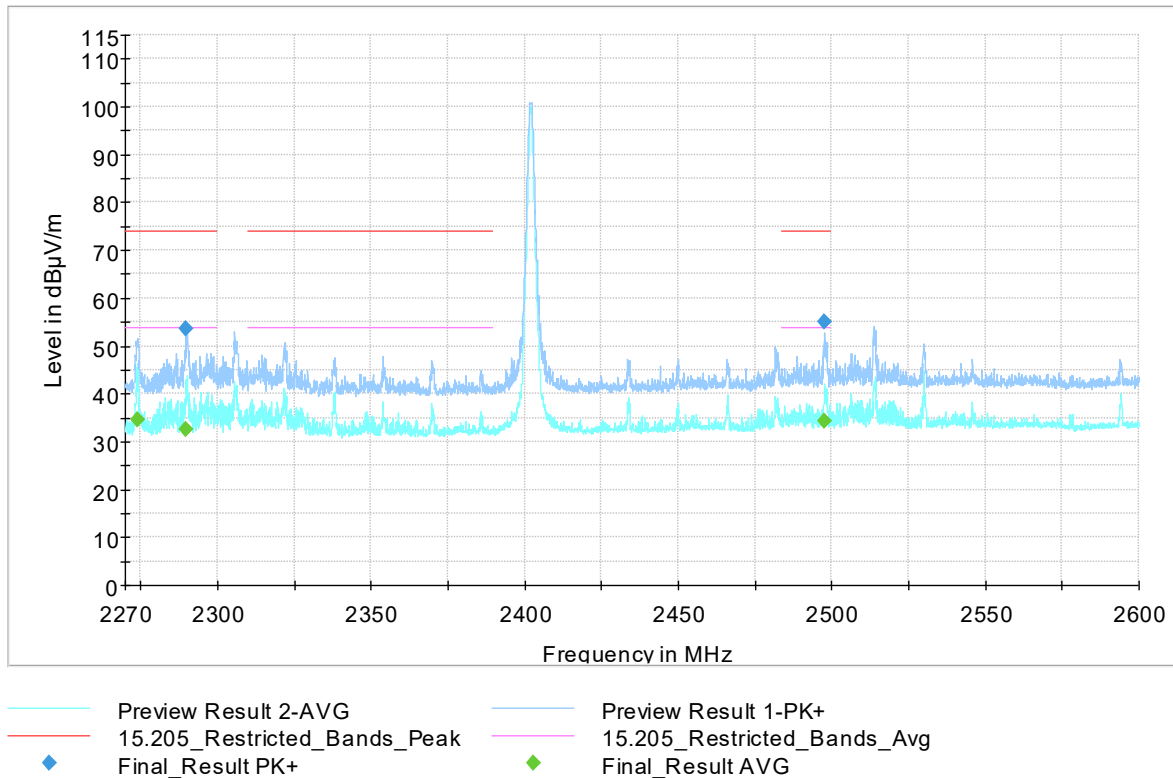
Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 65 von 80
Page 65 of 80

Prüfdokumentation
Test documentation

4.5.4.3 Test results (Unwanted emissions; Restricted-band band edge measurement)

4.5.4.3.1 Lowest Channel 2402MHz; 1Mbps



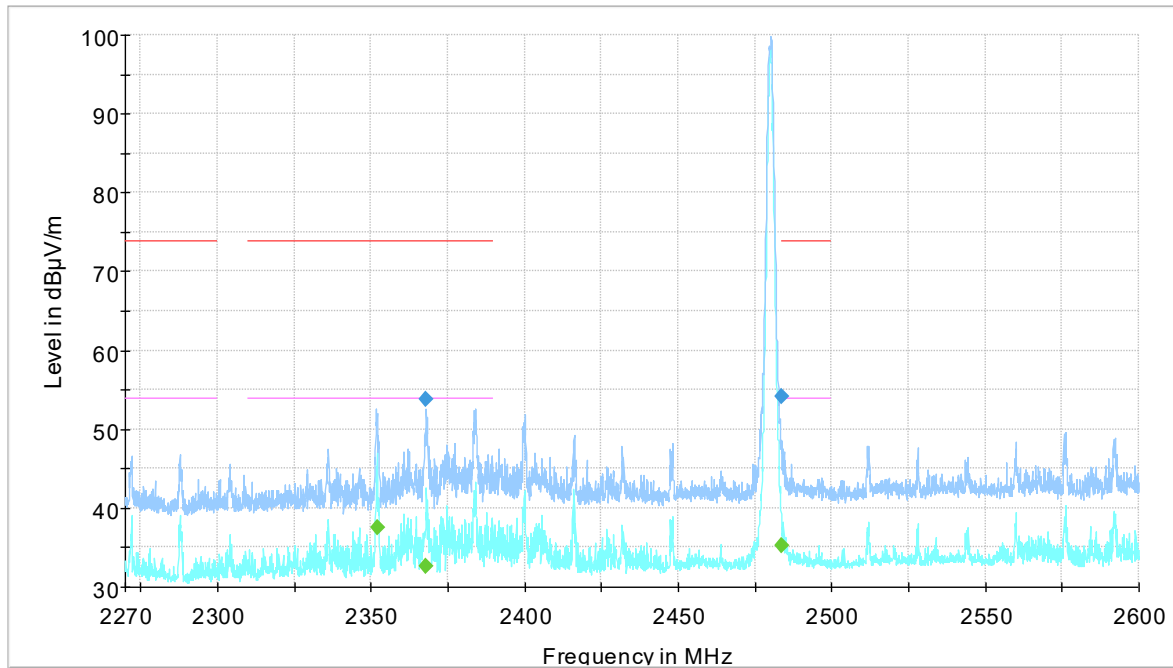
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
2273.96915	---	34.69	54.00	19.31	5000.0	1000.000	150.0	H	176.0	30.0	10.2
2289.69302	53.49	---	74.00	20.51	5000.0	1000.000	150.0	V	166.0	90.0	10.0
2289.69302	---	32.43	54.00	21.57	5000.0	1000.000	150.0	V	166.0	90.0	10.0
2497.70383	---	34.23	54.00	19.77	5000.0	1000.000	150.0	H	177.0	-8.0	11.5
2497.70383	54.96	---	74.00	19.04	5000.0	1000.000	150.0	H	177.0	-8.0	11.5

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 66 von 80
Page 66 of 80

Prüfdokumentation
Test documentation

4.5.4.3.2 Highest Channel 2480MHz; 1Mbps



— Preview Result 2-AVG
— 15.205_Restricted_Bands_Peak
◆ Final_Result PK+
 — Preview Result 1-PK+
— 15.205_Restricted_Bands_Avg
◆ Final_Result AVG

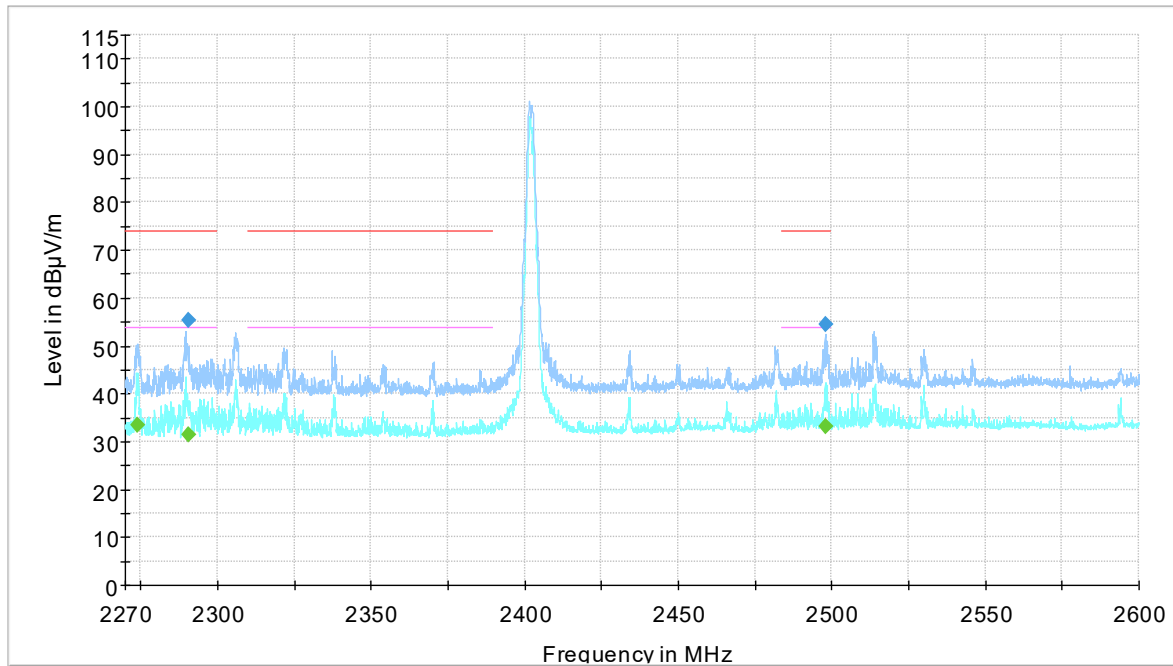
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
2351.966039	---	37.47	54.00	16.53	5000.0	1000.000	150.0	H	213.0	4.0	10.2
2367.712046	53.88	---	74.00	20.12	5000.0	1000.000	150.0	H	177.0	-8.0	10.3
2367.712046	---	32.71	54.00	21.29	5000.0	1000.000	150.0	H	177.0	-8.0	10.3
2483.713636	54.19	---	74.00	19.81	5000.0	1000.000	150.0	H	205.0	17.0	11.4
2483.713636	---	35.24	54.00	18.76	5000.0	1000.000	150.0	H	205.0	17.0	11.4

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 67 von 80
Page 67 of 80

Prüfdokumentation
Test documentation

4.5.4.3.3 Lowest Channel 2402MHz; 2Mbps



— Preview Result 2-AVG
— 15.205_Restricted_Bands_Peak
— Preview Result 1-PK+
— 15.205_Restricted_Bands_Avg
◆ Final_Result PK+
◆ Final_Result AVG

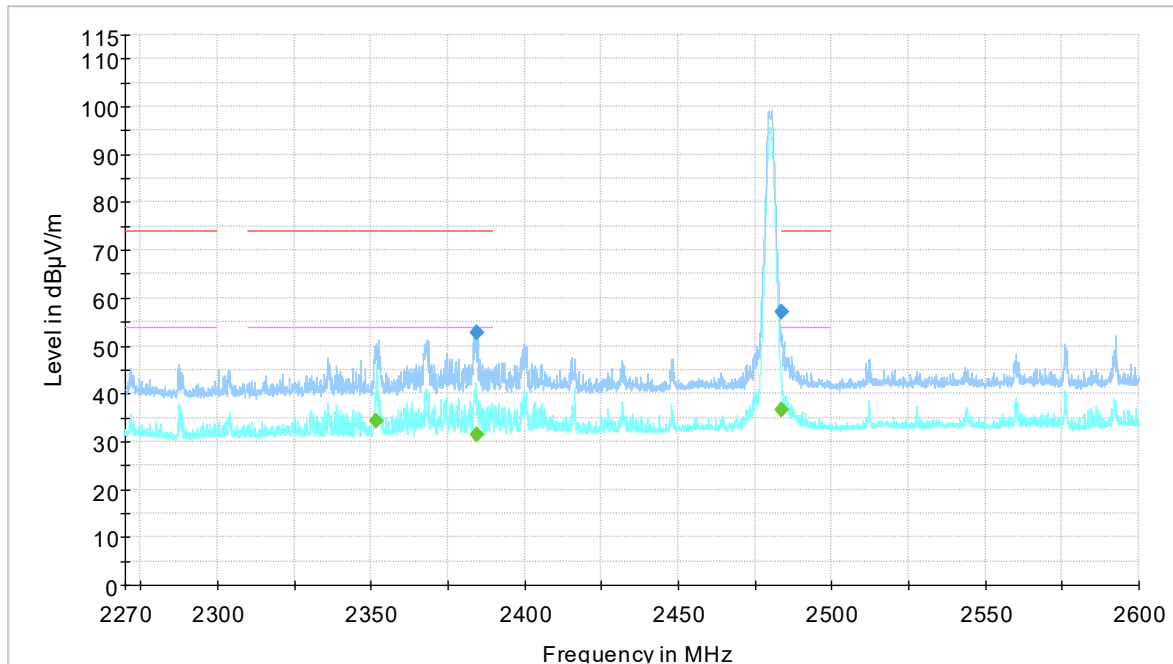
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
2273.88282	---	33.48	54.00	20.52	5000.0	1000.000	150.0	H	180.0	-25.0	10.2
2290.52727	55.29	---	74.00	18.71	5000.0	1000.000	150.0	H	213.0	-1.0	10.0
2290.52727	---	31.39	54.00	22.61	5000.0	1000.000	150.0	H	213.0	-1.0	10.0
2498.03840	54.44	---	74.00	19.56	5000.0	1000.000	150.0	H	176.0	-16.0	11.5
2498.03840	---	33.21	54.00	20.79	5000.0	1000.000	150.0	H	176.0	-16.0	11.5

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 68 von 80
Page 68 of 80

Prüfdokumentation
Test documentation

4.5.4.3.4 Highest Channel 2480MHz; 2Mbps



— Preview Result 2-AVG
— 15.205_Restricted_Bands_Peak
◆ Final_Result PK+
 — Preview Result 1-PK+
— 15.205_Restricted_Bands_Avg
◆ Final_Result AVG

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
2351.90951	---	34.17	54.00	19.83	5000.0	1000.000	150.0	H	208.0	15.0	10.2
2384.35266	52.60	---	74.00	21.40	5000.0	1000.000	150.0	V	175.0	81.0	10.3
2384.35266	---	31.36	54.00	22.64	5000.0	1000.000	150.0	V	175.0	81.0	10.3
2483.53279	57.08	---	74.00	16.92	5000.0	1000.000	150.0	H	211.0	12.0	11.4
2483.53279	---	36.69	54.00	17.31	5000.0	1000.000	150.0	H	211.0	12.0	11.4

4.5.5 Final test result (unwanted emissions)

Final test result	Pass
-------------------	------

4.6 AC Power Conducted Emission

4.6.1 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 μ H/50 ohms line impedance stabilization network (LISN).

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

Frequency [MHz]	Conducted Limit [dB μ V]	
	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)

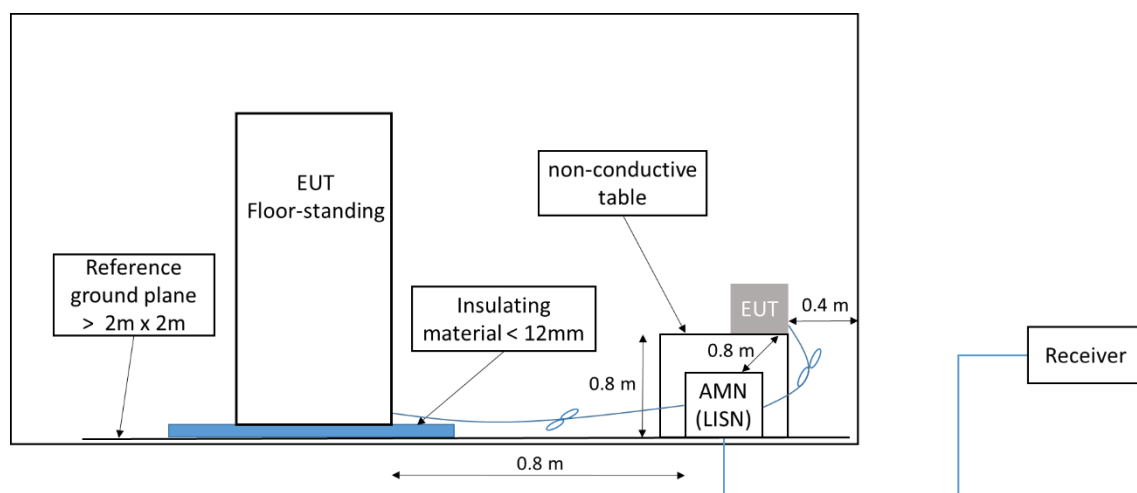
... Devices that include, or make provisions for, the use of battery chargers which permit operating while charging, AC adapters or battery eliminators or that connect to the AC power lines indirectly, obtaining their power through another device which is connected to the AC power lines, shall be tested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

KDB174176 D01 Line Conducted FAQ v01r01:

For a device operating at or below 30 MHz, the FCC will accept measurements performed with a suitable dummy load in lieu of the antenna within the transmitter's fundamental emission band.

4.6.2 Test Method

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



Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 70 von 80
Page 70 of 80

Prüfdokumentation
Test documentation

4.6.3 Test Setup (AC Power Conducted Emission)

EUT	A004236733-008 (cond. sample) A004236733-003 (rad. Sample)
Companion device	EUT in Test Mode. Therefore, no Companion Device was used.
Operation mode	☒ 1: TX-Mode ☐ 2: N/A ☐ 3: N/A ☐ 4: N/A
Further parameters	-
Test engineer	Primoz Erzen

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

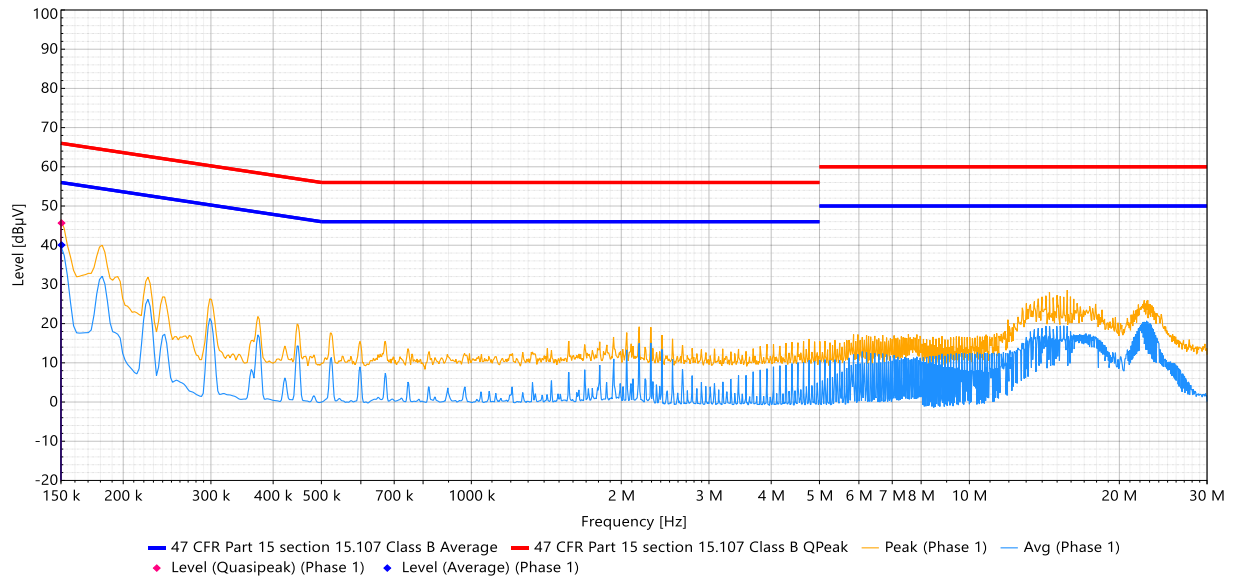
Seite 71 von 80
Page 71 of 80

Prüfdokumentation
Test documentation

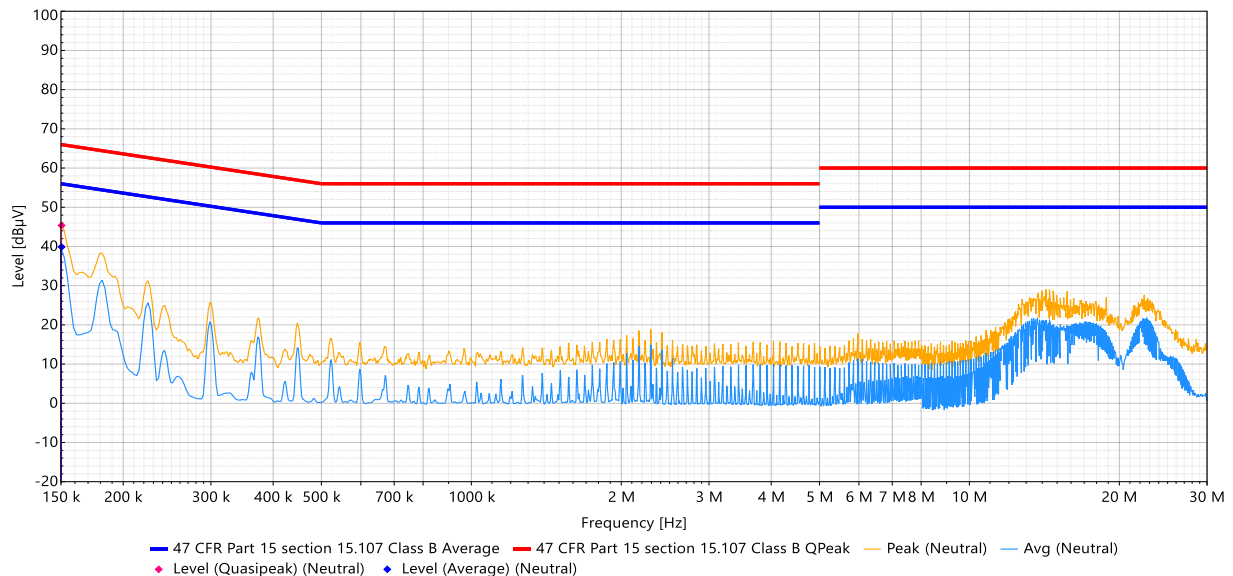
4.6.4 Test results (AC Power Conducted Emission)

4.6.4.1.1 Lowest Channel 2402MHz; 1Mbps

Line: Phase 1



Line: Neutral



QuasiPeak

Frequency (Hz)	SR #	Level (dBμV)	Limit (dBμV)	Margin (dB)	Pos	Correction (dB)	M. time (s)	Comments
150 k	2	45.4	66.0	-20.6	Neutral	10.0	1.0	Pass
150 k	1	45.6	66.0	-20.4	Phase 1	10.0	1.0	Pass

Average

Frequency (Hz)	SR #	Level (dBμV)	Limit (dBμV)	Margin (dB)	Pos	Correction (dB)	M. time (s)	Comments
150 k	2	39.9	56.0	-16.1	Neutral	10.0	1.0	Pass
150 k	1	40.0	56.0	-16.0	Phase 1	10.0	1.0	Pass

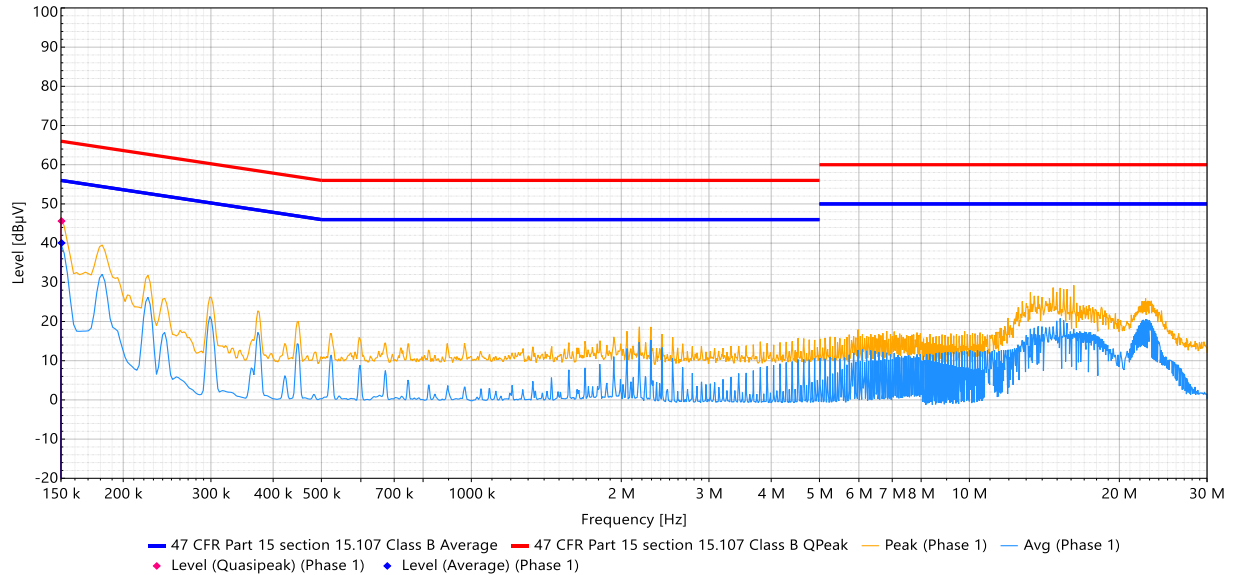
Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 72 von 80
Page 72 of 80

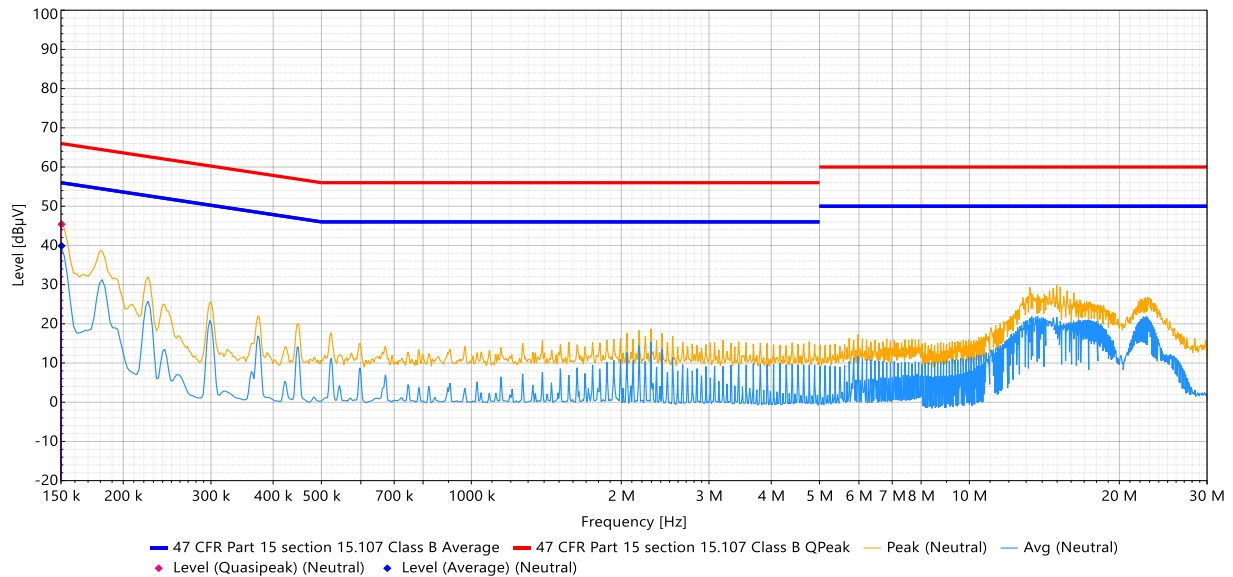
Prüfdokumentation
Test documentation

4.6.4.1.2 Middle Channel 2444MHz; 1Mbps

Line: Phase 1



Line: Neutral



QuasiPeak

Frequency (Hz)	SR #	Level (dBμV)	Limit (dBμV)	Margin (dB)	Pos	Correction (dB)	M. time (s)	Comments
150 k	2	45.4	66.0	-20.6	Neutral	10.0	1.0	Pass
150 k	1	45.6	66.0	-20.4	Phase 1	10.0	1.0	Pass

Average

Frequency (Hz)	SR #	Level (dBμV)	Limit (dBμV)	Margin (dB)	Pos	Correction (dB)	M. time (s)	Comments
150 k	2	39.9	56.0	-16.1	Neutral	10.0	1.0	Pass
150 k	1	40.0	56.0	-16.0	Phase 1	10.0	1.0	Pass

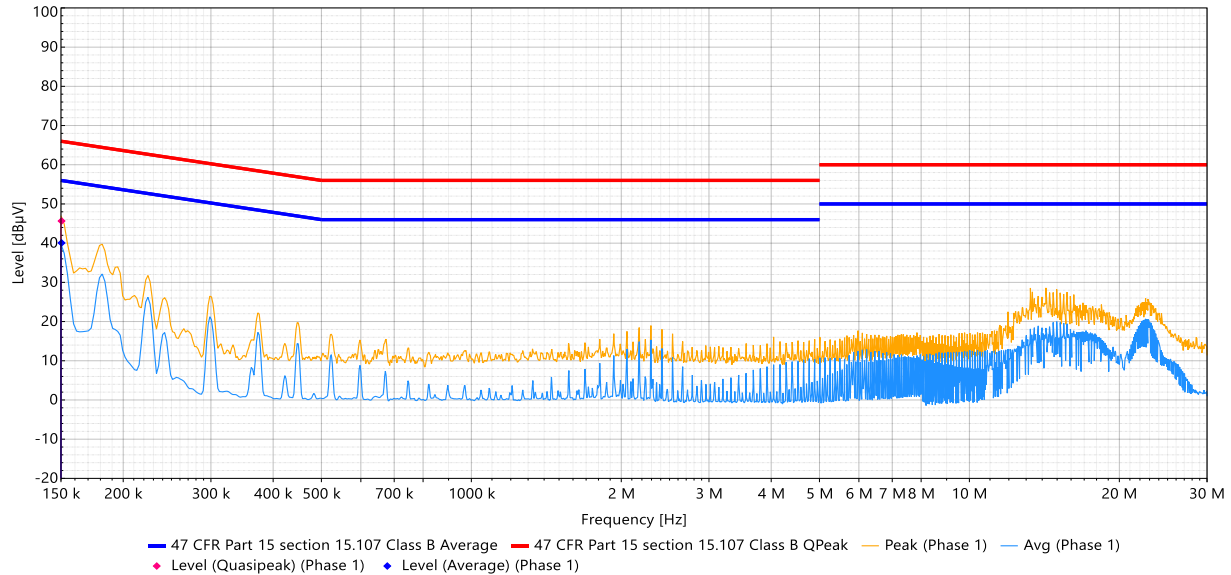
Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 73 von 80
Page 73 of 80

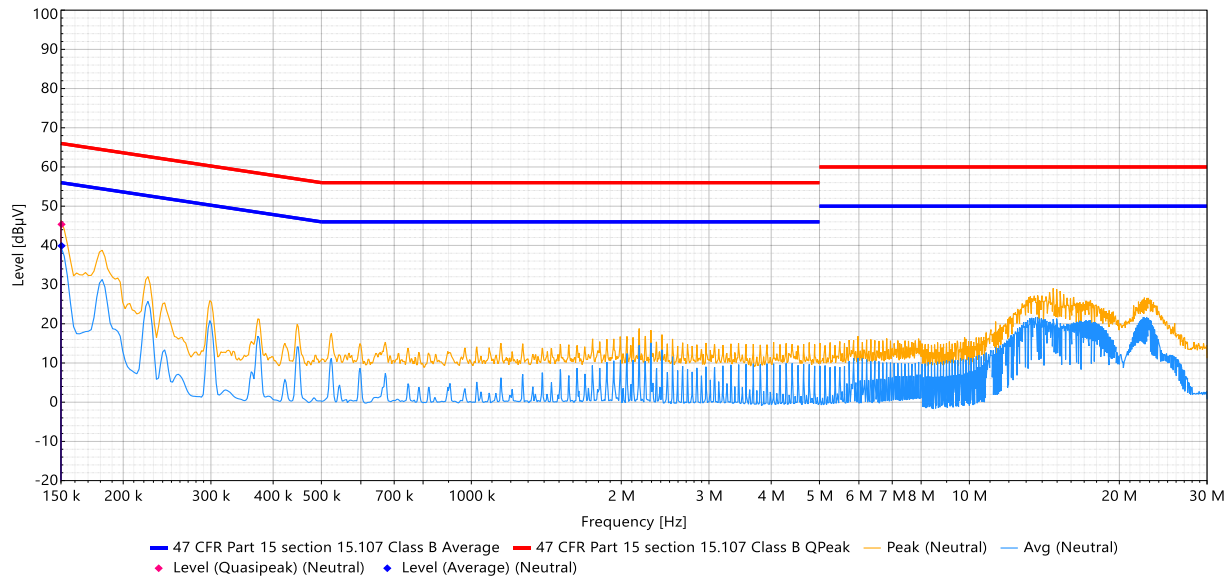
Prüfdokumentation
Test documentation

4.6.4.1.3 Highest Channel 2480MHz; 1Mbps

Line: Phase 1



Line: Neutral



QuasiPeak

Frequency (Hz)	SR #	Level (dBµV)	Limit (dBµV)	Margin (dB)	Pos	Correction (dB)	M. time (s)	Comments
150 k	2	45.4	66.0	-20.6	Neutral	10.0	1.0	Pass
150 k	1	45.7	66.0	-20.3	Phase 1	10.0	1.0	Pass

Average

Frequency (Hz)	SR #	Level (dBµV)	Limit (dBµV)	Margin (dB)	Pos	Correction (dB)	M. time (s)	Comments
150 k	2	39.9	56.0	-16.1	Neutral	10.0	1.0	Pass
150 k	1	40.1	56.0	-15.9	Phase 1	10.0	1.0	Pass

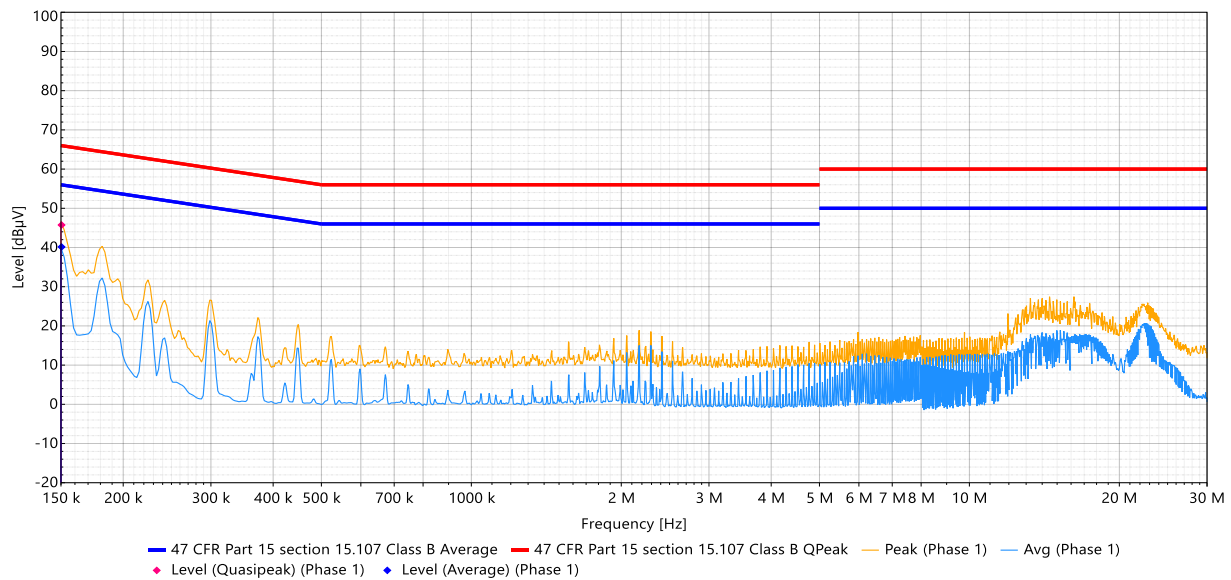
Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 74 von 80
Page 74 of 80

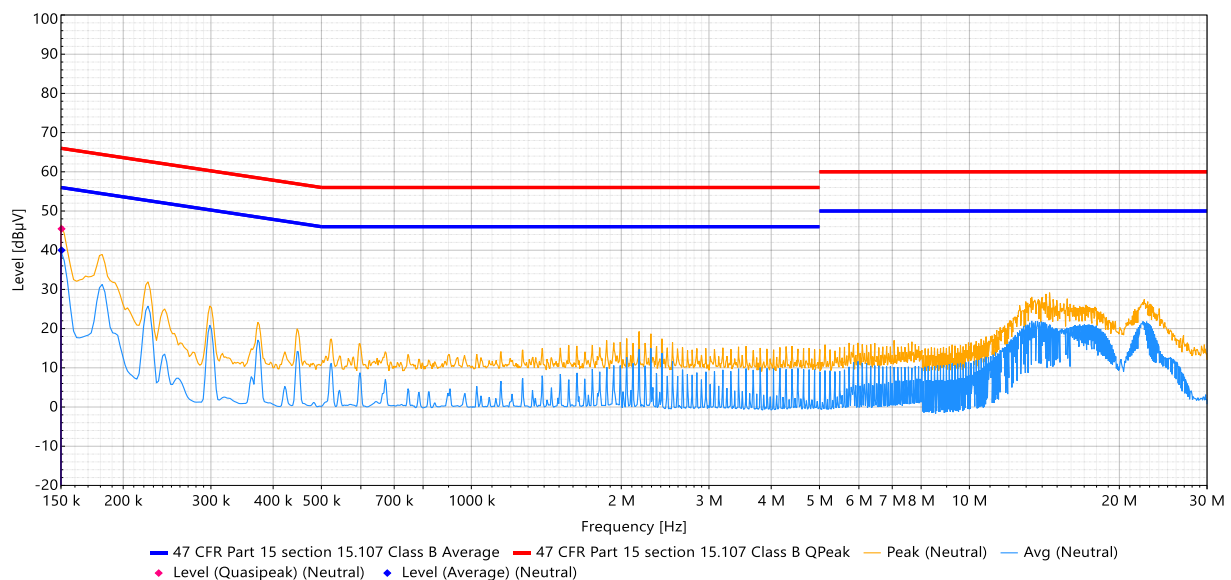
Prüfdokumentation
Test documentation

4.6.4.1.4 Lowest Channel 2402MHz; 2Mbps

Line: Phase 1



Line: Neutral



QuasiPeak

Frequency (Hz)	SR #	Level (dBμV)	Limit (dBμV)	Margin (dB)	Pos	Correction (dB)	M. time (s)	Comments
150 k	2	45.5	66.0	-20.5	Neutral	10.0	1.0	Pass
150 k	1	45.7	66.0	-20.3	Phase 1	10.0	1.0	Pass

Average

Frequency (Hz)	SR #	Level (dBμV)	Limit (dBμV)	Margin (dB)	Pos	Correction (dB)	M. time (s)	Comments
150 k	2	40.0	56.0	-16.0	Neutral	10.0	1.0	Pass
150 k	1	40.1	56.0	-15.9	Phase 1	10.0	1.0	Pass

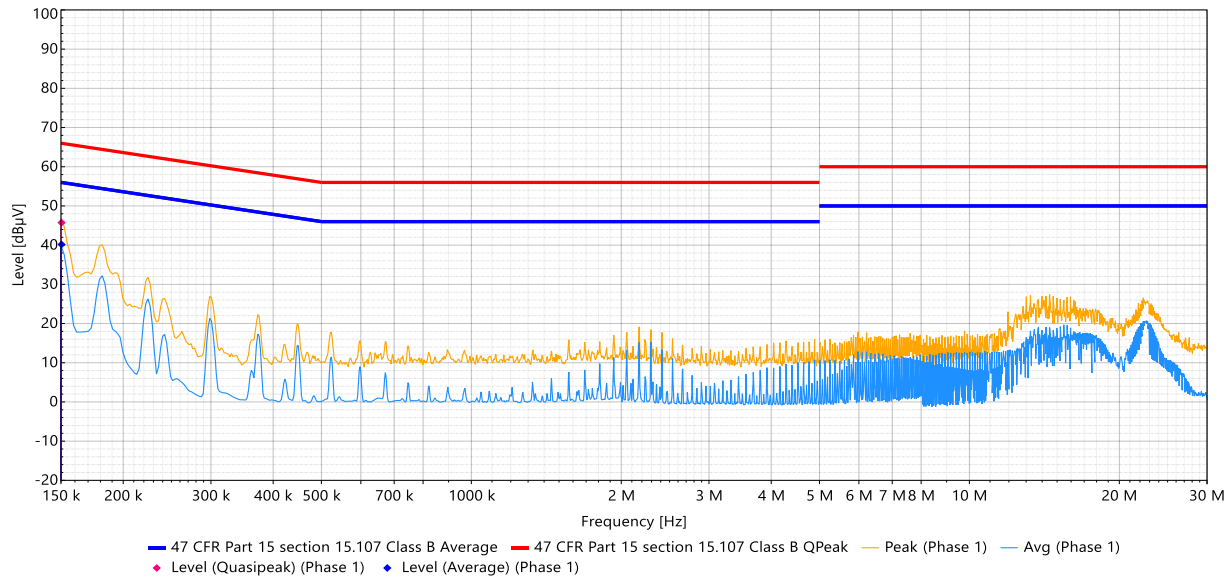
Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 75 von 80
Page 75 of 80

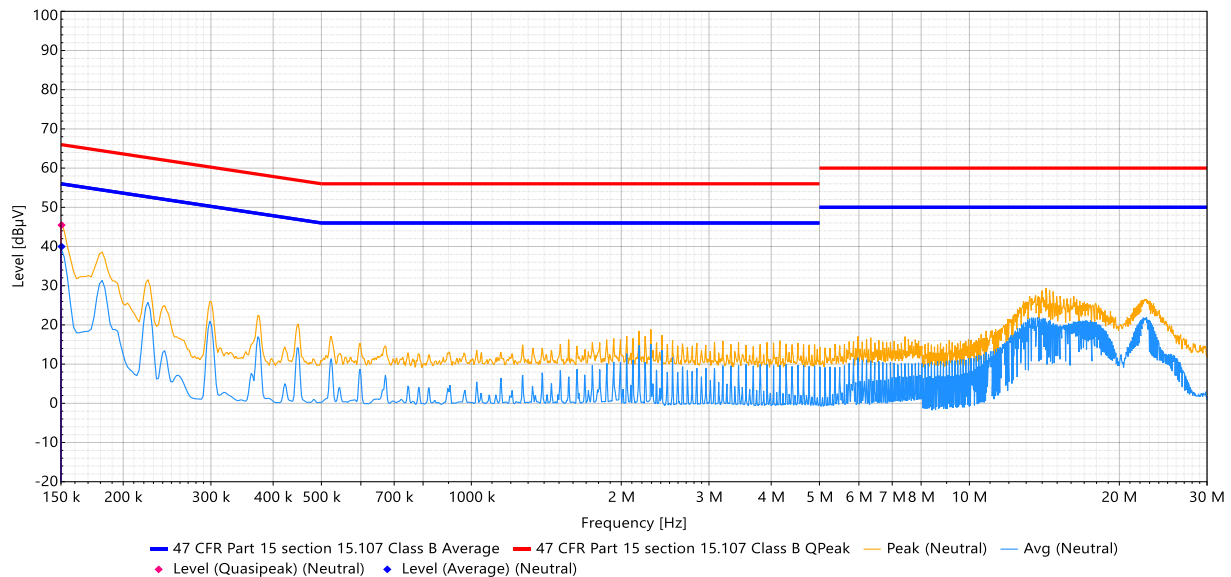
Prüfdokumentation
Test documentation

4.6.4.1.5 Middle Channel 2444MHz; 2Mbps

Line: Phase 1



Line: Neutral



QuasiPeak

Frequency (Hz)	SR #	Level (dBμV)	Limit (dBμV)	Margin (dB)	Pos	Correction (dB)	M. time (s)	Comments
150 k	2	45.5	66.0	-20.5	Neutral	10.0	1.0	Pass
150 k	1	45.7	66.0	-20.3	Phase 1	10.0	1.0	Pass

Average

Frequency (Hz)	SR #	Level (dBμV)	Limit (dBμV)	Margin (dB)	Pos	Correction (dB)	M. time (s)	Comments
150 k	2	40.0	56.0	-16.0	Neutral	10.0	1.0	Pass
150 k	1	40.2	56.0	-15.8	Phase 1	10.0	1.0	Pass

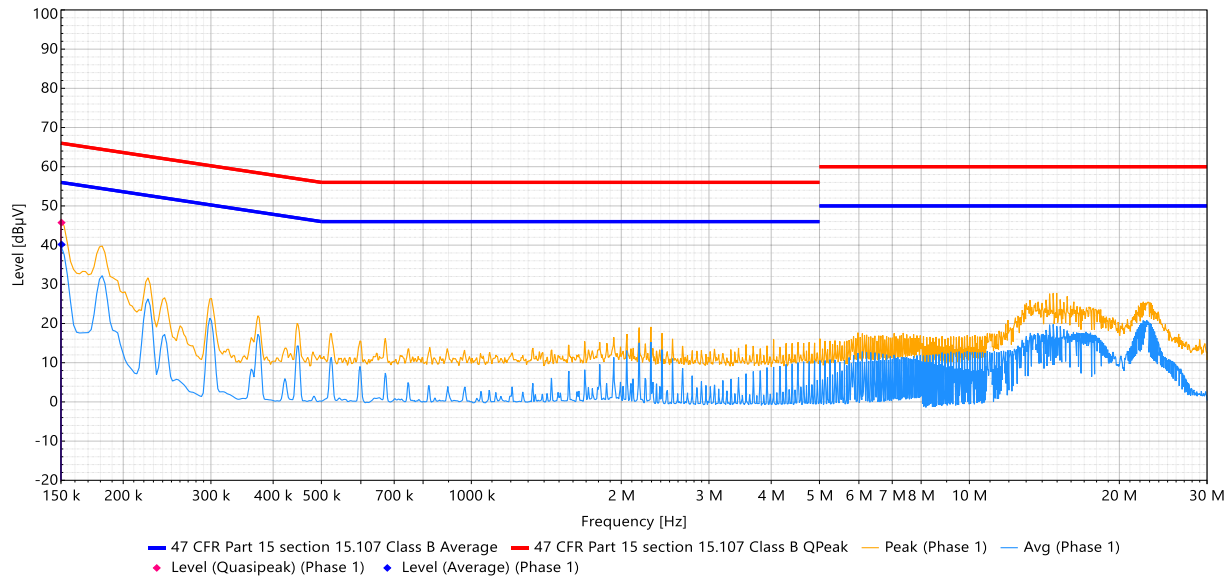
Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 76 von 80
Page 76 of 80

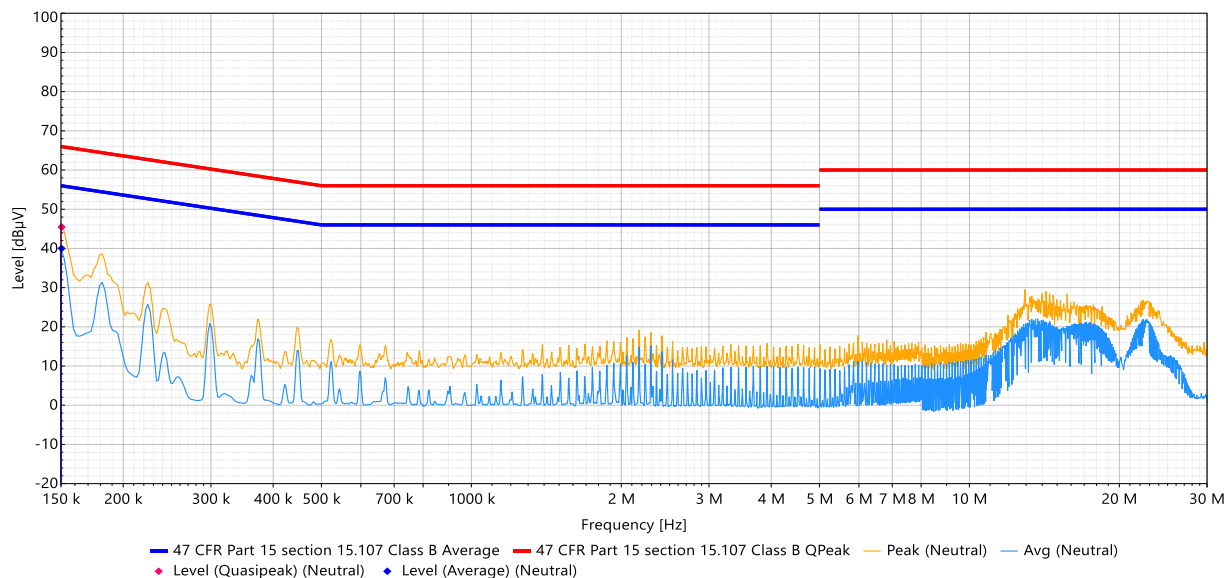
Prüfdokumentation
Test documentation

4.6.4.1.6 Highest Channel 2480MHz; 2Mbps

Line: Phase 1



Line: Neutral



QuasiPeak

Frequency (Hz)	SR #	Level (dBμV)	Limit (dBμV)	Margin (dB)	Pos	Correction (dB)	M. time (s)	Comments
150 k	2	45.5	66.0	-20.5	Neutral	10.0	1.0	Pass
150 k	1	45.7	66.0	-20.3	Phase 1	10.0	1.0	Pass

Average

Frequency (Hz)	SR #	Level (dBμV)	Limit (dBμV)	Margin (dB)	Pos	Correction (dB)	M. time (s)	Comments
150 k	2	40.0	56.0	-16.0	Neutral	10.0	1.0	Pass
150 k	1	40.2	56.0	-15.8	Phase 1	10.0	1.0	Pass

4.6.5 Final test result (AC Power Conducted Emission)

Final test result

Pass

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 77 von 80
Page 77 of 80

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.

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 78 von 80
Page 78 of 80

Zusatzdokumentation
Additional documentation

6 Application form

The following information was provided by the customer and form the basis for the execution of the tests and the assessment of conformity. The given information can affect the results of both.

No application form was provided.

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 79 von 80
Page 79 of 80

Liste der verwendeten Prüfmittel
List of used test equipment

7 Equipment List Hardware

Prüfmittel Test equipment				Kalibrierung Calibration	
			ID	Letzte Last	Nächste Next
E-SC B	Shielded Chamber Test Software: R&S WMS32 10.60.10	-	-	-	-
	FSV-30 Spectrum Analyzer	Rohde & Schwarz	9000268	10.09.2025	10.09.2027
	OSP-B157 WX. (with integrated power meter)	Rohde & Schwarz	9000266	22.10.2024	22.10.2026
	OSP-B157W8	Rohde & Schwarz	9000267	23.10.2024	23.10.2026
	SMB100A Signal Generator	Rohde & Schwarz	9000269	04.04.2025	04.04.2027
	SMBV100A Vector Sig Gen	Rohde & Schwarz	9000270	07.04.2025	07.04.2027
	PL-3-KPH Temperature & Humidity Chamber	Espec	2731999	11.02.2025	11.02.2028
	FHAD46-C2 Temperature & Humidity Logger	Ahlborn	9074532	30.09.2025	30.09.2026
E-FAR 3	Fully Anechoic Room Test software: R&S EMC32 V10.60.20	Albatross Projects	2959749	31.03.2026 *	31.03.2027
	FSU 26 Spectrum Analyzer	Rohde & Schwarz	2844118	20.08.2025	20.08.2027
	UXA N9041B Signal Analyzer	Keysight	2971644	24.06.2024	24.06.2026
	RSE-Filtersystem	Rohde & Schwarz	9002802	23.02.2026 *	23.02.2027
	HF907 Antenna 1-18GHz	Rohde & Schwarz	2856263	10.09.2024	10.09.2027
	3116C-PA Horn Antenna 18-40GHz	ETS LINDGREN	2900393	30.01.2026	30.01.2029
	FHAD46-C2L05 Temperature & Humidity Logger	Ahlborn	9074526	30.09.2025	30.09.2026
	Semi Anechoic Chamber Test Software: NEXIO BAT-EMC V2022.0.19.0	Siemens	9049495	03.09.2025	03.09.2027
E-SAC 10	ESU 26 Receiver	Rohde & Schwarz	2723865	22.10.2025	22.10.2026
	HFH 2 Loop Antenna 9kHz-30MHz	Rohde & Schwarz	2728893	05.08.2024	05.08.2027
	VULB 9168 Antenna 30MHz – 1GHz	Schwarzbeck	2728136	05.10.2023	05.10.2026
	FHAD46-C2 Temperature & Humidity Logger	Ahlborn	9074528	30.09.2025	30.09.2026
	Shielded Chamber Test Software: NEXIO BAT-EMC V2022.0.19.0	-	2728833	-	-
C-SC -CE	ESU 8 Receiver	Rohde & Schwarz	2728844	19.08.2025	19.08.2027
	ESH2-Z5 Line Impedanz Stabilization Network	Rohde & Schwarz	2731908	16.07.2024	16.07.2027
	ESH3-Z2 Limiter	Rohde & Schwarz	9017596	05.09.2024	05.09.2026
	FHAD46-C2 Temperature & Humidity Logger	Ahlborn	9074531	30.09.2025	30.09.2026
	DC Power Supply	Manson	9077561	11.02.2026 *	11.02.2028

*Equipment only verified and not calibrated

Prüfbericht-Nr.: DE26RV8X 001
Test report no.:

Seite 80 von 80
Page 80 of 80

Änderungsverzeichnis
Change history

8 Change history

Revision Number	List of revisions
001	Initial Release
Note: Latest revision report will replace all previous reports.	

Ende des Prüfberichts
End of Test Report