LGAI Technological Center, S.A. (APPLUS)
Campus de la UAB. Ronda de la Font del Carme, s/n.
08193 Bellaterra (Barcelona) (Spain)
T +34 93 567 20 00 / F +34 93 520 20 01
www.appluslaboratories.com

File Number **26/36400693**

TEST REPORT
Radiofrequency

Petitioner's Reference:	ENKOA SYSTEM S.L.		
Company Address:	POLIGONO ERRAMONE 45, 20850 MENDARO SPAIN		
Equipment:	DNDMURindicator		
Brand:	ENKOA	HW version/HMN:	DMTxIVF
Sample #1:	DMTEIVF10303000	Applus Id:	41878-0003
Sample #2:	DMTEIVF10303007	Applus Id:	41878-0007
Result:	**complies**		
It has been tested and complies with the applicable standard. See test result summary section.			
Applicable Standard:			
RF standard/s:	**FCC Title 47 Part 15 – Subpart C (October 2024)** **RSS- 247 Issue 4 (July 2025)** **KDB 558074 D01 Meas Guidance v05r02 (April 2019)** **ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024** **RSS-Gen Issue 5 (April 2018) + Amd.1 (March 2019) + Amd.2 (February 2021)**		
[1] *The latest modifications of the standard, published at the date of the tests reported in this document, have been considered.*			
Dates and Test Site:	Applus Barcelona, Bellaterra		
Equipment Reception Date	March 19, 2026		
Test Initial Date:	March 25, 2026		
Test Final Date:	April 22, 2026		

Test Manager: Javier Miguel Nadales Lisbona
Date of issue: Bellaterra, April 30, 2026

Firmado digitalmente por JAIME BARRANQUERO GOMEZ
Fecha: 2026.04.30 10:28:29 +02'00'

EMC & Wireless Technical Manager
Electrical and Electronics
LGAI Technological Center S.A.

ilac-MRA ENAC ENSAYO ISO 17025 Nº9 / LE894

1 TEST RESULTS SUMMARY

Test Description	Sample #	DUT Test Modes	Results	Criteria Note
ANTENNA REQUIEREMENTS (FCC Part 15.203, RSS-GEN 6.8)	#1	N/A	PASS	N/A
OCCUPIED BANDWIDTH (99%) (FCC Part 15.247 (a), RSS-247 5.2)	#2	Mode 1	PASS	CN4
6 dB BANDWITDH (FCC Part 15.247 (a), RSS-247 5.2)	#2	Mode 1	PASS	CN4
MAXIMUM PEAK CONDUCTED OUTPUT POWER (FCC Part 15.247 (c), RSS-247 5.4)	#2	Mode 1	PASS	CN4
POWER SPECTRAL DENSITY (FCC Part 15.247 (b), RSS-247 5.4)	#2	Mode 1	PASS	CN3
BAND EDGE (FCC Part 15.247 (d), RSS-247 5.5)	#2	Mode 1	PASS	CN4
RADIOFREQUENCY RADIATED EMISSIONS (FCC Part 15.247 (d), RSS-247 5.5)	#1	Mode 1	PASS	CN3

The test results are shown in detail on the following pages.

The criteria to give conformity in those cases where it is not implicit in the standard or specification will be, for EMC emissions tests, a non-simple binary decision rule will be followed with a safety zone equal to the value of the uncertainty (w = U).

In this case, the upper limit of the value of the probability of false acceptance, according to ILAC G8, is 2.5 % and the criteria notes are:

CN1: The measured results are above the upper limit, even considering the uncertainty interval.
CN2: The measured results are above the specified limits, but within the uncertainty interval. It is therefore not possible to state compliance based on the 95% level of confidence. However, the results indicate that non-compliance is more probable than compliance.
CN3: The measured results are below the specified limits, but within the uncertainty interval. It is therefore not possible to state compliance based on the 95% level of confidence. However, the results indicate that compliance is more probable than non-compliance.
CN4: The measured results are within the limits, including the uncertainty interval.

2 INDEX

3 GENERAL DESCRIPTION OF TEST ITEMS

3.1 EQUIPMENT DESCRIPTION

This information has been provided by the customer and it is not covered by the accreditation. LGAI does not assume any responsibility from it.

EQUIPMENT DESCRIPTION			
Description	DND / MUR "Touch" Indicator (outside room)		
EUT Version	**FVIN**		**HVIN**
			DMTxIVF
Power supply	1 PH + N	100 – 240 V~	50/60 Hz
Equipment Size	**Length**	**Width**	**Height**
	80.5 mm	80.5 mm	20.6mm
Modulation	O-QPSK (per IEEE 802.15.4)		
Operating Frequency Band	2405–2480 MHz (IEEE 802.15.4 at 2.4 GHz ISM band)		
Maximum RF Output Power [dBm]	20.0 dBm		
Operating Channel(s) Width(s) [MHz]	5 MHz		
Antenna Gain [dBi]	3.3		
Pigtail losses [dB]	0		
Equipment Type	DTS		
Number of Hopping Channels	N/A		
Emission Designator			
FCC ID	2ASEQDMTXIVF		

Table 1: Equipment description

RF FEATURES					
Description	**Communication Technology**	**Radio Chipset**	**Brand**	**Module Model**	**Antenna Gain[dBi]**
	IEEE 802.15.4 @ 2.4 GHz	Microchip AT86RF231 / AT86RF233	Microchip	Integrated on PCB (not a module)	3.3 dBi (inverted-F PCB antenna)

Table 2: RF Features

3.2 TEST CONFIGURATION

DUT Operation Modes	
Mode #	**Description**
1	Continuous Modulated transmission on single channel.

Table 3. Test Configuration

3.3 PHOTOGRAPHS

Photographs identifying the equipment under test and its auxiliaries, as well as assembly photographs for radiated and conducted tests, can be found in the document: 26/36400729

3.4 TEST FACILITIES ID

TEST FACILITIES ID	
FCC Test Firm Registration Number:	507478
ISED Assigned Code:	5766A
CABID	ES0001

Table 4: Test facilities ID

3.5 COMPETENCES AND GUARANTEES

LGAI Technological Center, S.A. is a testing laboratory accredited by the National Accreditation Body (ENAC -Entidad Nacional de Acreditación), to perform the tests indicated in the Certificate No. 9/LE894.
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4 TEST RESULTS

4.1 ANTENNA REQUIREMENT

4.1.1 Test Setup Required

Not applicable

4.1.2 Test Procedure

Not applicable

4.1.3 Test Parameters

4.1.3.1 Requirements

For intentional device, according to FCC 47 CFR Section 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. This requirement does not apply to carrier current devices or to devices operated under the provisions of §§ 15.211, 15.213, 15.217, 15.219, 15.221, or § 15.236. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with § 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

For intentional device, according to RSS-Gen issue 5 section 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. The test report shall demonstrate the compliance of the transmitter with the limit for maximum equivalent isotropically radiated power (e.i.r.p.) specified in the applicable RSS, when the transmitter is equipped with any antenna type, selected from this list.

4.1.4 EMI Receiver configuration

Not applicable

4.1.5 Test Environmental Conditions

Not applicable

4.1.6 Summary Test Results

Not applicable

4.1.7 Test Results

4.1.8 Test Equipment Used

Not applicable

4.1.9 Uncertainty

Not applicable

4.2 OCCUPIED CHANNEL BANDWIDTH (99%)

4.2.1 Test Setup Required

4.2.1.1 Tabletop equipment

Fig. 1: Occupied Channel Bandwidth setup of table top equipment.

4.2.2 Test Procedure

1. The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for EMI receiver shall be between 1.5 times and 5 times the OBW.
2. The nominal IF filter bandwidth shall be in the range of 1% and 5% of the OBW and video bandwidth shall be approximately three times the RBW, unless otherwise by applicable requirement.
3. Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for lineal operation.
4. Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth
5. Set detection mode to peak and mode to max hold. Allow the trace to stabilize.

4.2.3 Test Parameters

4.2.3.1 Requirements

The frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission. In some cases, for example multichannel frequency-division systems, the percentage of 0.5 percent may lead to certain difficulties in the practical application of the definitions of occupied and necessary bandwidth; in such cases a different percentage may prove useful

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.

4.2.4 EMI Receiver configuration

During the conducted test, the EMI receiver was set with the following configurations:

Central frequency [MHz]	Span [MHz]	Detector	Resolution Bandwidth [kHz]	Video Bandwidth [kHz]
Channel frequency	4	Max Peak	20	100

Table 5: EMI Receiver configuration – Occupied Channel Bandwidth 99%

4.2.5 Test Environmental Conditions

Test Date	Technician	Supervisor	Temperature [ºC]	Humidity [%]	Atm. Pressure [mbar]
22/04/2026	A. Moliner	Javier Miguel Nadales	23.3	43.2	1017.8

Table 6: Test environmental conditions – Occupied Channel Bandwidth 99%

4.2.6 Summary Test Results

Channel	Description	Central Frequency [MHz]	99% Bandwidth [MHz]	Band Edge Left [MHz]	Band Edge Right [MHz]	Limit [MHz]	Results
11	IEEE 802.15.4	2405	2.205513	2403.892231	2406.097744	--	PASS
18	IEEE 802.15.4	2440	2.215538	2438.882206	2441.097744		PASS
26	IEEE 802.15.4	2480	2.255639	2478.862155	2481.117794	--	PASS

Table 7: Summary Test Results – Occupied Channel Bandwidth 99%

4.2.7 Test Results

4.2.7.1 Sample #1. Mode 1. Channel Low

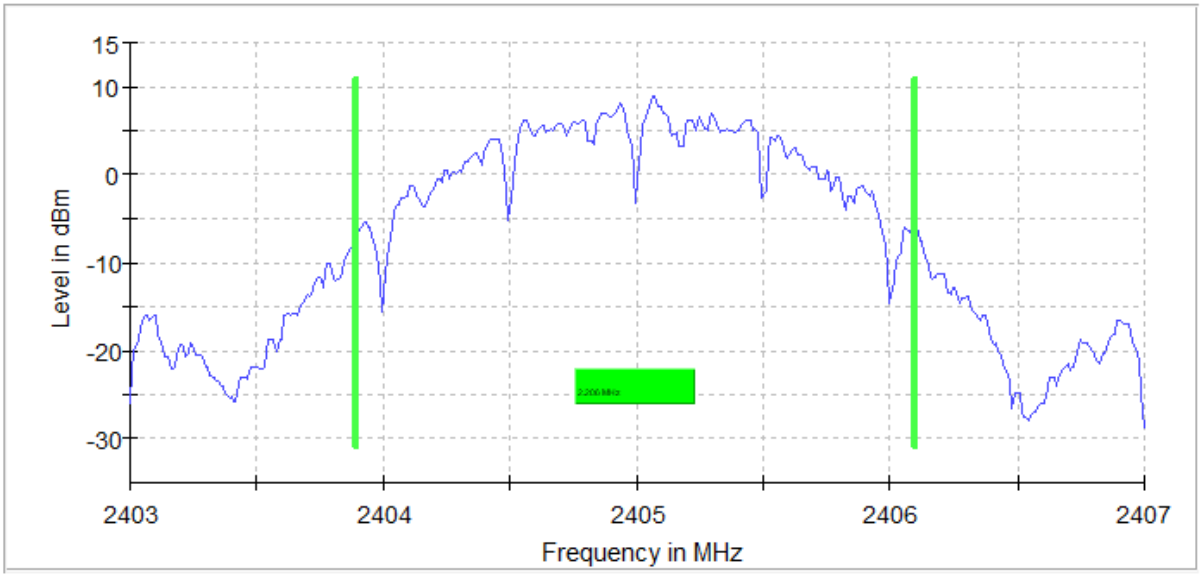


Fig. 2: – Channel Low - 99% Occupied Channel Bandwidth

4.2.7.2 Sample #1. Mode 1. Channel Middle

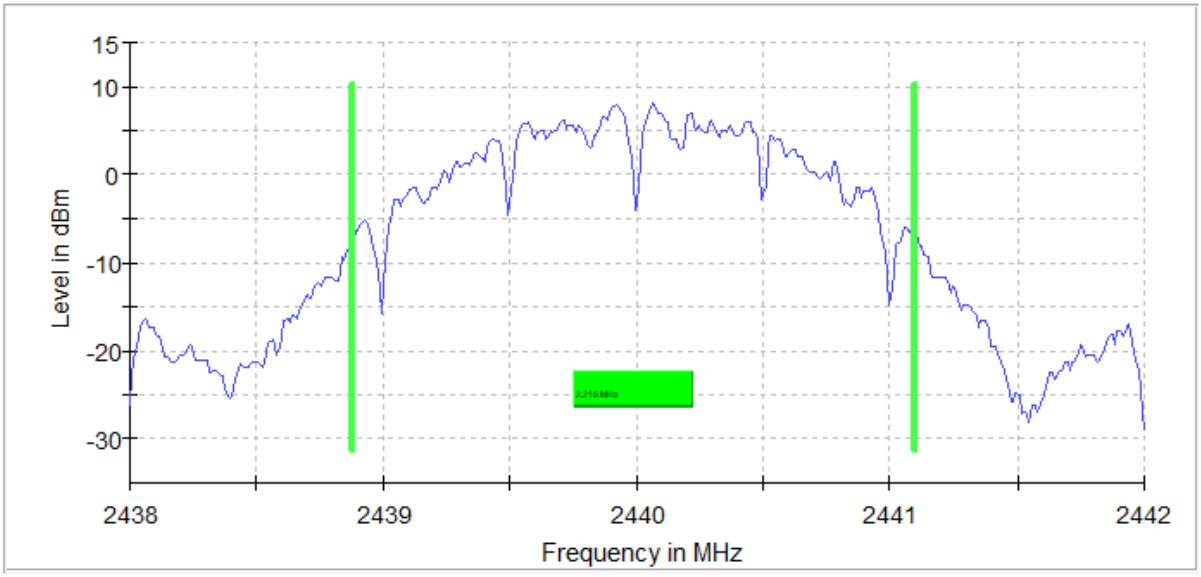


Fig. 3: – Channel Middle - 99% Occupied Channel Bandwidth

4.2.7.3 Sample #1. Mode 1. Channel High

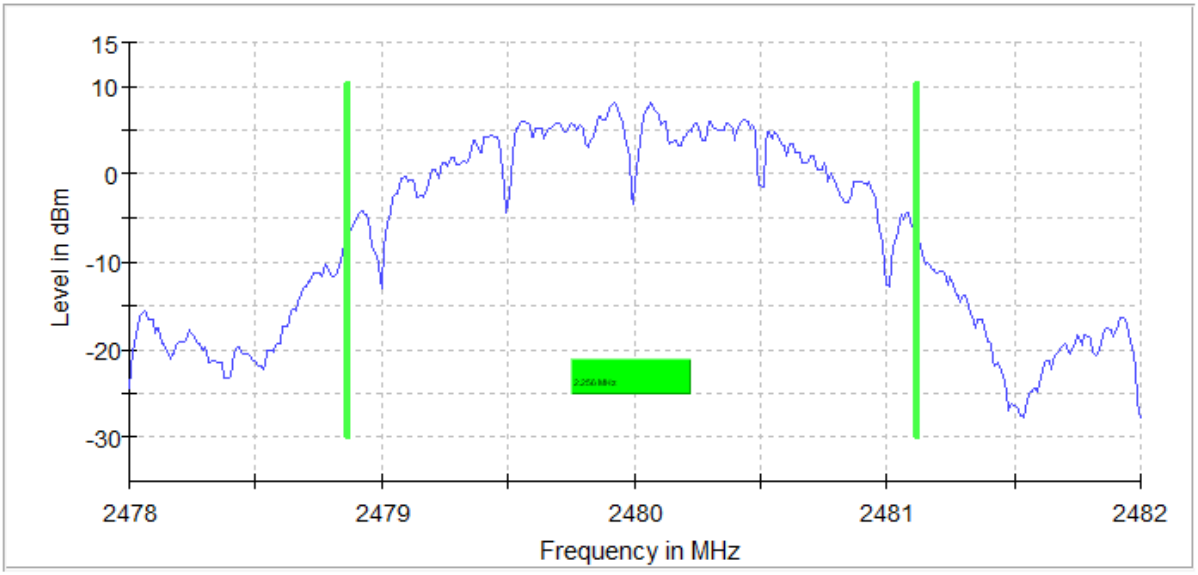


Fig. 4: Channel - High 99% Occupied Channel Bandwidth

4.2.8 Test Equipment Used

Equipment	Brand	Model	Applus Ref.	Last Calibration	Next Calibration
RF SWITCH	ROHDE & SCHWARZ	OSP120	1042701	08/11/2024	08/11/2026
SIGNAL SPECTRUM ANALYZER	ROHDE & SCHWARZ	FSVA3044	1042700	07/01/2025	07/01/2027
CABLE RF 40 GHz*	HUBERSUHNER	SF102	1042545	11/04/2025	11/04/2026
RF CABLE	HUBER+SUHNER (Astrolab)	ST26/SMAm/SMAm/24inch	1041825	24/04/2025	24/04/2026

Table 8: Test Instruments – DTS Bandwidth

*Note: *Internal verifications performed to guarantee consistency of the test results while the calibration process is completed.*

4.2.9 Uncertainty

Test Type	Test Description	Uncertainty
Emission	RF bandwidth measurements	±75.54 Hz

Table 9: 99% Occupied Channel Bandwidth Uncertainties

The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by a coverage factor k=2, which for normal distribution corresponds to a coverage probability of approximately 95%.

4.3 DTS BANDWIDTH

4.3.1 Test Setup Required

4.3.1.1 Tabletop equipment

Fig. 5: DTS Bandwidth setup of table top equipment.

4.3.2 Test Procedure

a) Set RBW = 100 kHz.

b) Set the VBW ≥ [3 × RBW].

c) Detector = peak.

d) Trace mode = max hold.

e) Sweep = auto couple.

f) Allow the trace to stabilize.

g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

4.3.3 Test Parameters

4.3.3.1 Requirements

The frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission. In some cases, for example multichannel frequency-division systems, the percentage of 0.5 percent may lead to certain difficulties in the practical application of the definitions of occupied and necessary bandwidth; in such cases a different percentage may prove useful

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.

4.3.4 EMI Receiver configuration

During the conducted test, the EMI receiver was set with the following configurations:

Central frequency [MHz]	Span [MHz]	Detector	Resolution Bandwidth [kHz]	Video Bandwidth [kHz]
Channel frequency	4	Max Peak	20	100

Table 10: EMI Receiver configuration – DTS Bandwidth

4.3.5 Test Environmental Conditions

Test Date	Technician	Supervisor	Temperature [ºC]	Humidity [%]	Atm. Pressure [mbar]
22/04/2026	A. Moliner	Javier Miguel Nadales	23.3	43.2	1017.8

Table 11: Test environmental conditions – DTS Bandwidth

4.3.6 Summary Test Results

Channel	Description	Central Frequency [MHz]	DTS Bandwidth [MHz]	Band Edge Left [MHz]	Band Edge Right [MHz]	Limit [MHz]	Results
11	IEEE 802.15.4	2405	1.400000	2404.280000	2405.680000	--	PASS
18	IEEE 802.15.4	2440	1.520000	2439.280000	2440.800000	--	PASS
26	IEEE 802.15.4	2480	1.600000	2479.240000	2480.840000	--	PASS

Table 12: Summary Test Results – DTS Bandwidth

4.3.7 Test Results

4.3.7.1 Sample #1. Mode 1. Channel Low

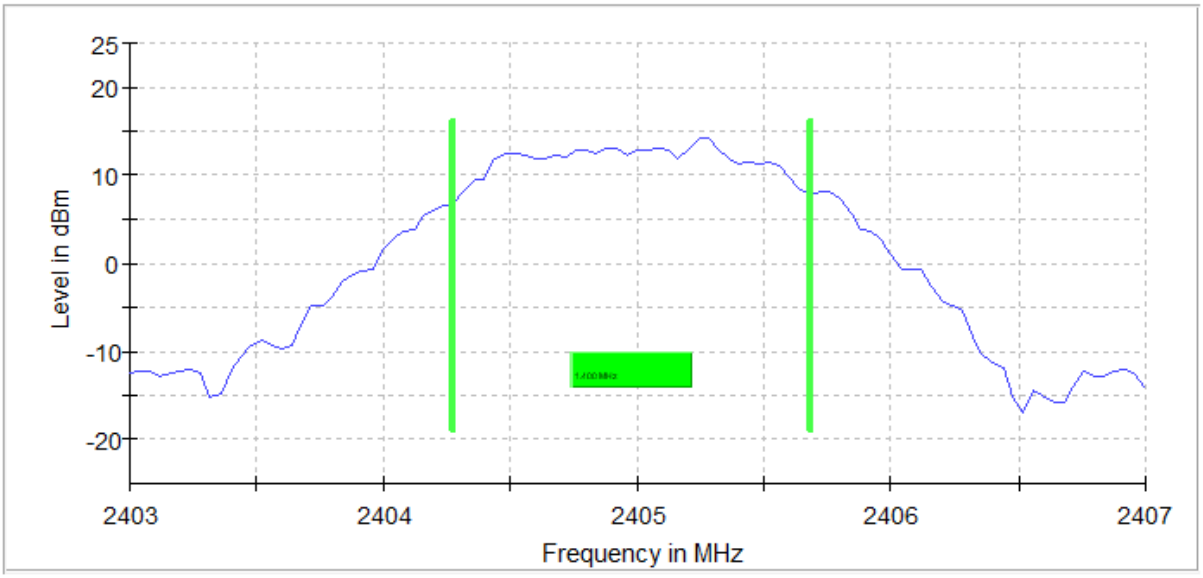


Fig. 6: Channel Low - DTS Bandwidth

4.3.7.2 Sample #1. Mode 1. Channel Middle

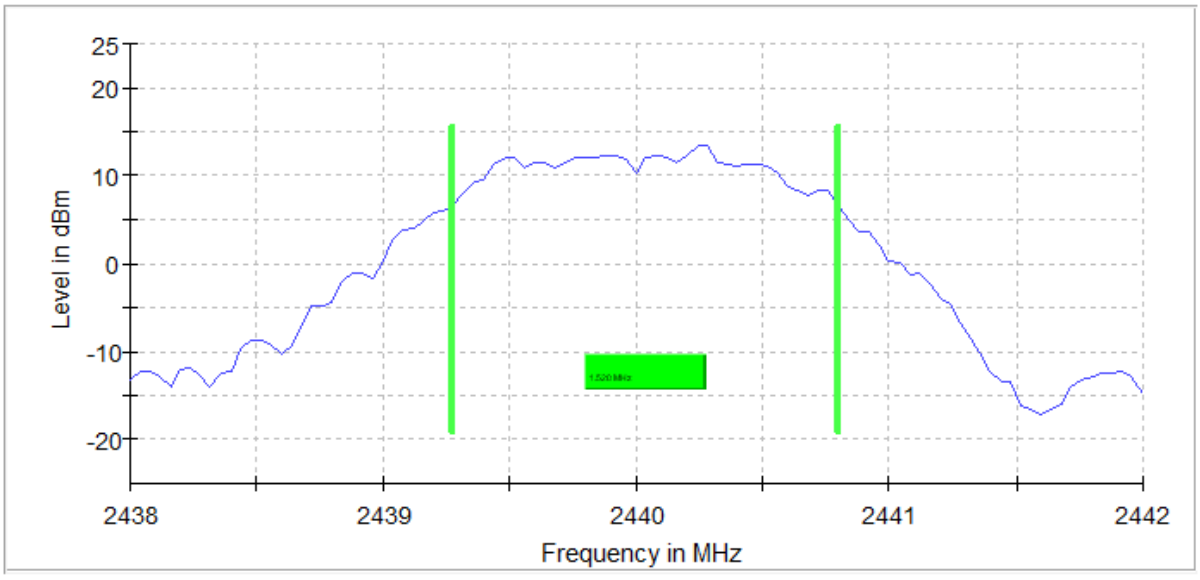


Fig. 7: Channel Middle -DTS Bandwidth

4.3.7.3 Sample #1. Mode 1. Channel High

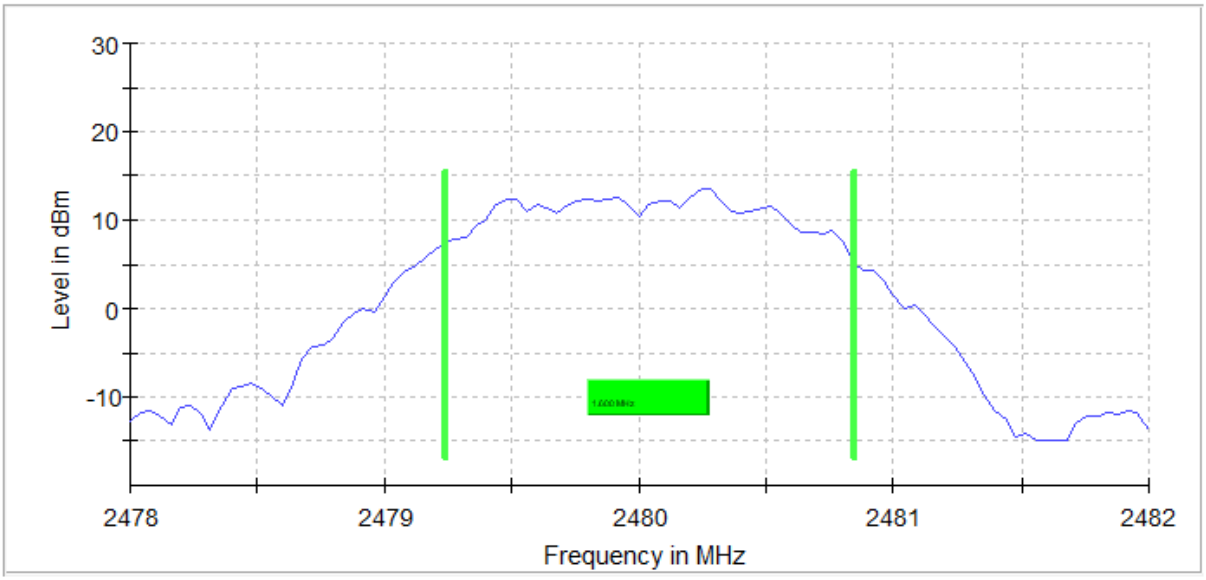


Fig. 8: Channel High - DTS Bandwidth

4.3.8 Test Equipment Used

Equipment	Brand	Model	Applus Ref.	Last Calibration	Next Calibration
RF SWITCH	ROHDE & SCHWARZ	OSP120	1042701	08/11/2024	08/11/2026
SIGNAL SPECTRUM ANALYZER	ROHDE & SCHWARZ	FSVA3044	1042700	07/01/2025	07/01/2027
CABLE RF 40 GHz*	HUBERSUHNER	SF102	1042545	11/04/2025	11/04/2026
RF CABLE	HUBER+SUHNER (Astrolab)	ST26/SMAm/SMAm/24inch	1041825	24/04/2025	24/04/2026

Table 13: Test Instruments – DTS Bandwidth

*Note: *Internal verifications performed to guarantee consistency of the test results while the calibration process is completed.*

4.3.9 Uncertainty

Test Type	Test Description	Uncertainty
Emission	RF bandwidth measurements	±75.54 Hz

Table 14: DTS Bandwidth Uncertainties

The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by a coverage factor k=2, which for normal distribution corresponds to a coverage probability of approximately 95%.

4.4 MAXIMUM PEAK CONDUCTED OUTPUT POWER

4.4.1 Test Setup Required

4.4.1.1 Tabletop equipment

Fig. 9: Maximum Peak Conducted Output Power setup of table top equipment.

4.4.2 Test Procedure

1. The EUT is configured to transmit continuously, or to transmit with a constant duty cycle.
2. At all times when the EUT is transmitting, it shall be transmitting at its máximum power control level.
3. The integration period of the power meter exceeds the repetition period of the transmitted signal by at least a factor of five
4. If the transmitter does not transmit continuously, measure the duty cycle, D.
5. Measure the average power of the transmitter. This measurement is an average over both the ON and OFF periods of the transmitter.
6. Adjust the measurement in dBm by adding [10 log (1 / D)], where D is the duty cycle.

4.4.3 Test Parameters

4.4.3.1 Requirements

For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum 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. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.

4.4.4 EMI Receiver / Power Meter configuration

During the conducted test, the OSP Power Meter was setting as follow:

Measurement Time [s]	Points	Time Resolution [µs]
Channel frequency	Max Peak	100

Table 15: Power Meter configuration – Maximum Peak Conducted Output Power

4.4.5 Test Environmental Conditions

Test Date	Technician	Supervisor	Temperature [ºC]	Humidity [%]	Atm. Pressure [mbar]
22/04/2026	A. Moliner	Javier Miguel Nadales	23.3	43.2	1017.8

Table 16: Test environmental conditions – Maximum Peak Conducted Output Power

4.4.6 Summary Test Results

Channel	Description	Central Frequency [MHz]	Peak Power [dBm]	Antenna Gain [dBi]	E.I.R.P [dBm]	Limit [dBm]	Results
11	IEEE 802.15.4	2405	16.7	3.3	20.0	30	PASS
18	IEEE 802.15.4	2440	16.2	3.3	19.5	30	PASS
26	IEEE 802.15.4	2480	16.5	3.3	19.8	30	PASS

Table 17: Summary Test Results – Maximum Peak Conducted Output Power

4.4.7 Test Results

4.4.7.1 Sample #1. Mode 1. Channel Low

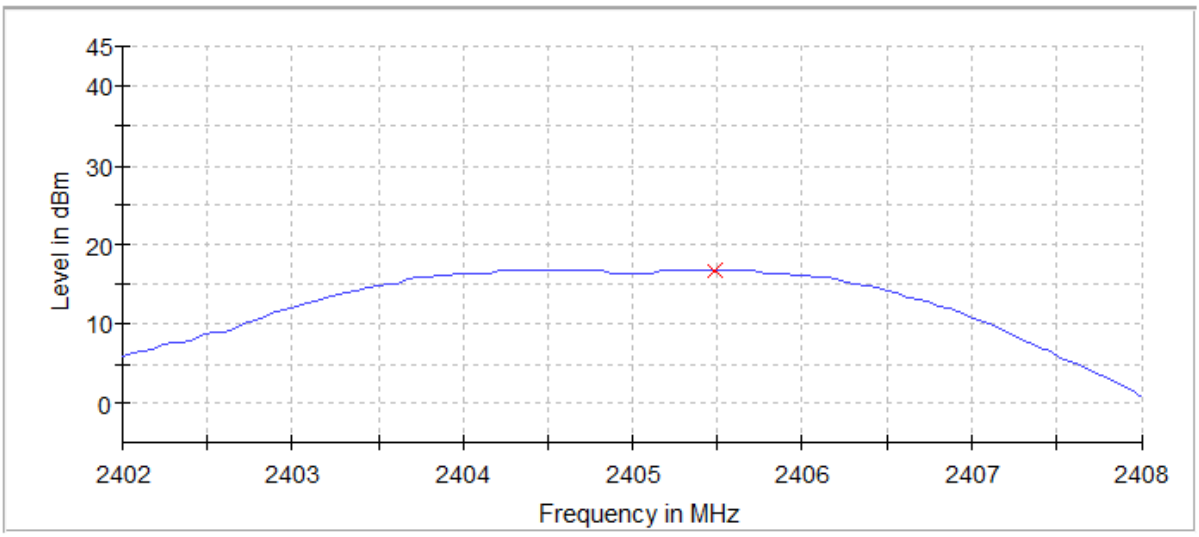


Fig. 10: Channel Low- Maximum Peak Conducted Output Power

4.4.7.2 Sample #1. Mode 1. Channel Middle

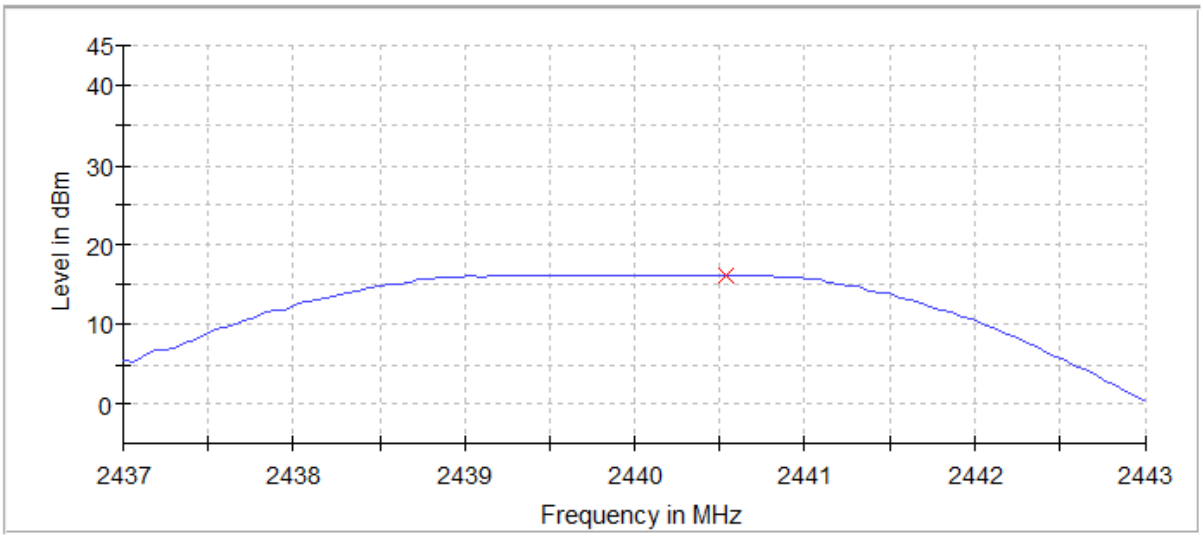


Fig. 11: Channel Middle - Maximum Peak Conducted Output Power

4.4.7.3 Sample #1. Mode 1. Channel High

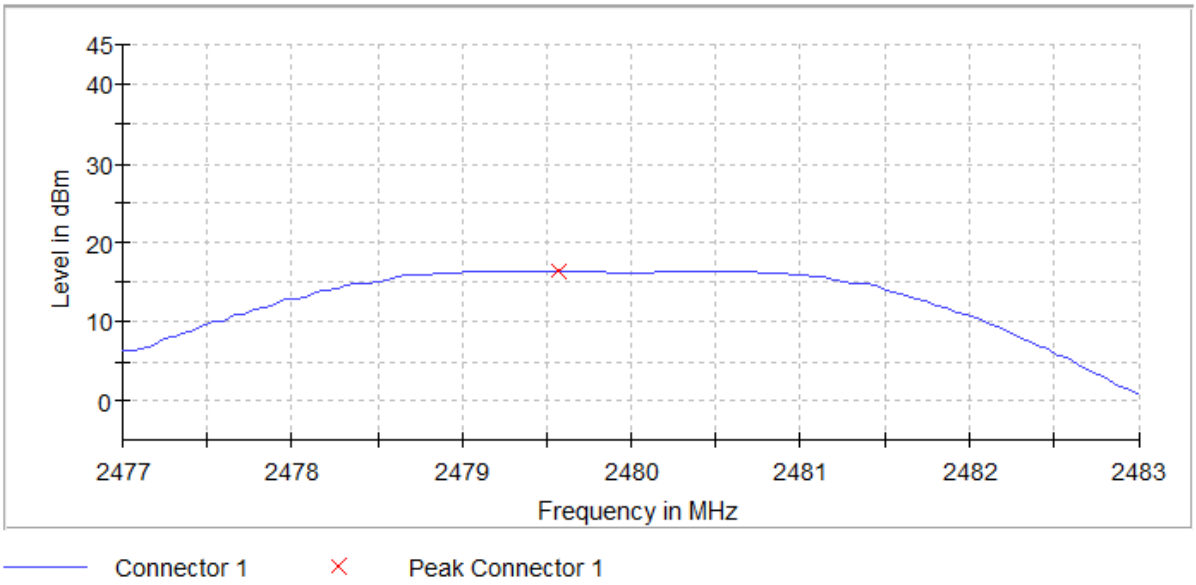


Fig. 12: Channel High - Maximum Peak Conducted Output Power

4.4.8 Test Equipment Used

Equipment	Brand	Model	Applus Ref.	Last Calibration	Next Calibration
RF SWITCH	ROHDE & SCHWARZ	OSP120	1042701	08/11/2024	08/11/2026
SIGNAL SPECTRUM ANALYZER	ROHDE & SCHWARZ	FSVA3044	1042700	07/01/2025	07/01/2027
CABLE RF 40 GHz*	HUBERSUHNER	SF102	1042545	11/04/2025	11/04/2026
RF CABLE	HUBER+SUHNER (Astrolab)	ST26/SMAm/SMAm/24inch	1041825	24/04/2025	24/04/2026

Table 18: Test Instruments – DTS Bandwidth

*Note: *Internal verifications performed to guarantee consistency of the test results while the calibration process is completed.*

4.4.9 Uncertainty

Test Type	Test Description	Uncertainty
Emissions	RF output power measurements [Conducted]	±1.22 dB

Table 19: Maximum Peak Conducted Output Power Uncertainties

The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by a coverage factor k=2, which for normal distribution corresponds to a coverage probability of approximately 95%.

4.5 POWER SPECTRAL DENSITY

4.5.1 Test Setup Required

4.5.1.1 Tabletop equipment

Fig. 13: Power Spectral Density setup of table top equipment.

4.5.2 Test Procedure

a) Set instrument center frequency to DTS channel center frequency.

b) Set span to at least 1.5 times the OBW.

c) Set RBW to: 3 kHz ≤ RBW ≤ 100 kHz.

d) Set VBW ≥ [3 × RBW].

e) Detector = power averaging (rms) or sample detector (when rms not available).

f) Ensure that the number of measurement points in the sweep ≥ [2 × span / RBW].

g) Sweep time = auto couple.

h) Employ trace averaging (rms) mode over a minimum of 100 traces.

i) Use the peak marker function to determine the maximum amplitude level.

j) If the measured value exceeds requirement, then reduce RBW (but no less than 3 kHz) and repeat (note that this may require zooming in on the emission of interest and reducing the span to meet the minimum measurement point requirement as the RBW is reduced).

4.5.3 Test Parameters

4.5.3.1 Requirements

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. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

4.5.4 EMI Receiver configuration

During the conducted test, the EMI receiver was set with the following configurations:

Central frequency [MHz]	Span [MHz]	Detector	Resolution Bandwidth [kHz]	Video Bandwidth [kHz]
Channel frequency	2.1	RMS	10	30

Table 20: EMI Receiver configuration – Power Spectral Density

4.5.5 Test Environmental Conditions

Test Date	Technician	Supervisor	Temperature [ºC]	Humidity [%]	Atm. Pressure [mbar]
22/04/2026	A. Moliner	Javier Miguel Nadales	23.3	43.2	1017.8

Table 21: Test environmental conditions – Power Spectral Density

4.5.6 Summary Test Results

Channel	Description	Central Frequency [MHz]	PSD [dBm]	Limit [dBm]	Results
11	IEEE 802.15.4	2405	7.8	8.0	PASS
18	IEEE 802.15.4	2440	7.3	8.0	PASS
26	IEEE 802.15.4	2480	7.1	8.0	PASS

Table 22: Summary Test Results – Power Spectral Density

4.5.7 Test Results

4.5.7.1 Sample #1. Mode 1. Channel Low

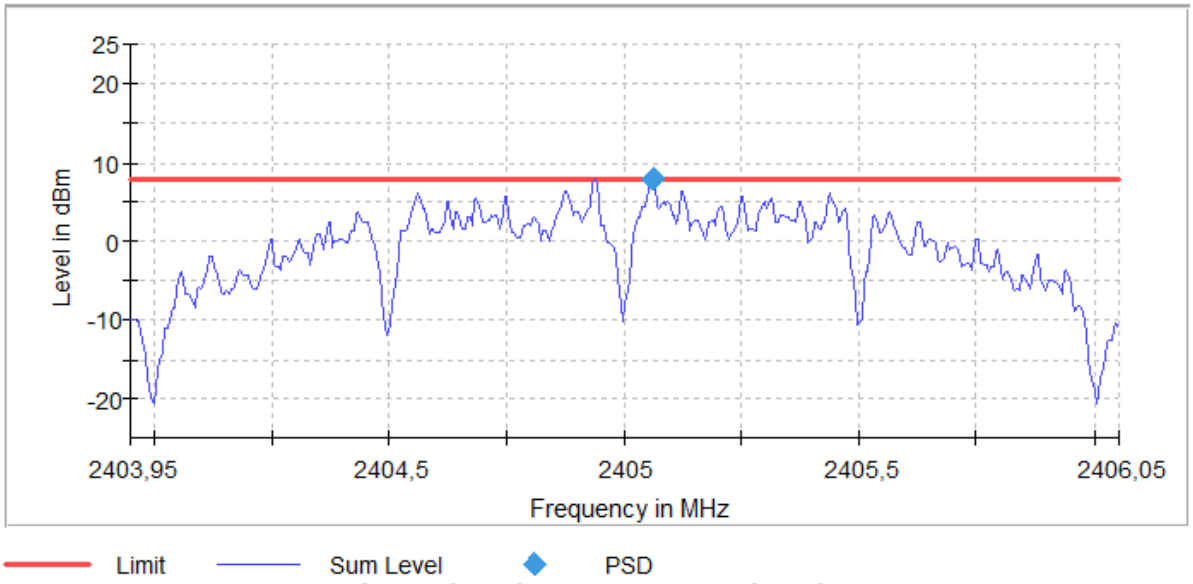


Fig. 14: Channel Low - Power Spectral Density

4.5.7.2 Sample #1. Mode 1. Channel Middle

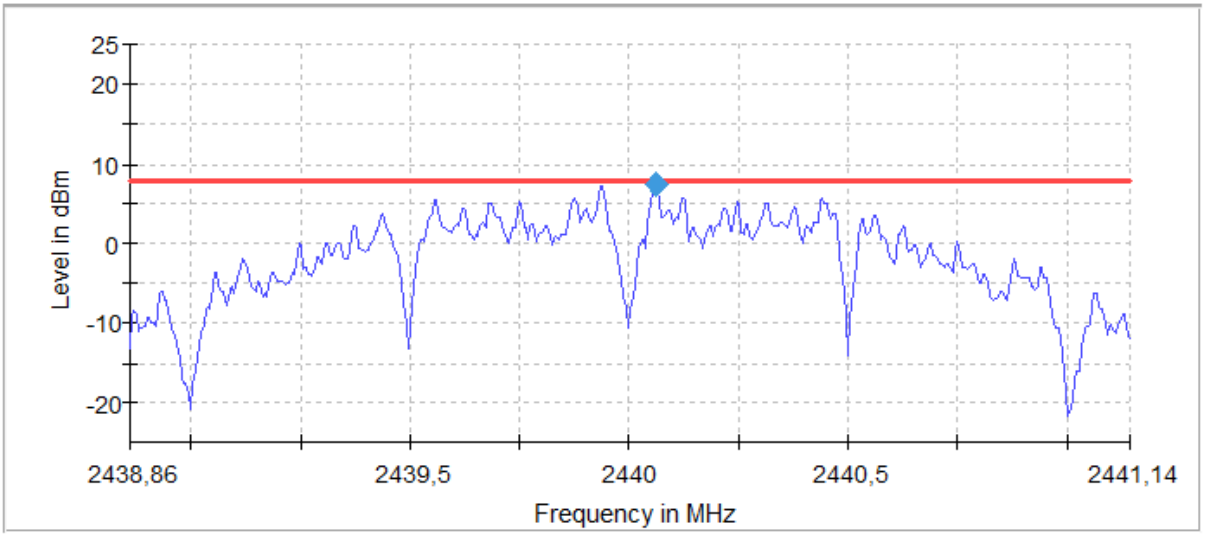


Fig. 15: Channel Middle - Power Spectral Density

4.5.7.3 Sample #1. Mode 1. Channel High

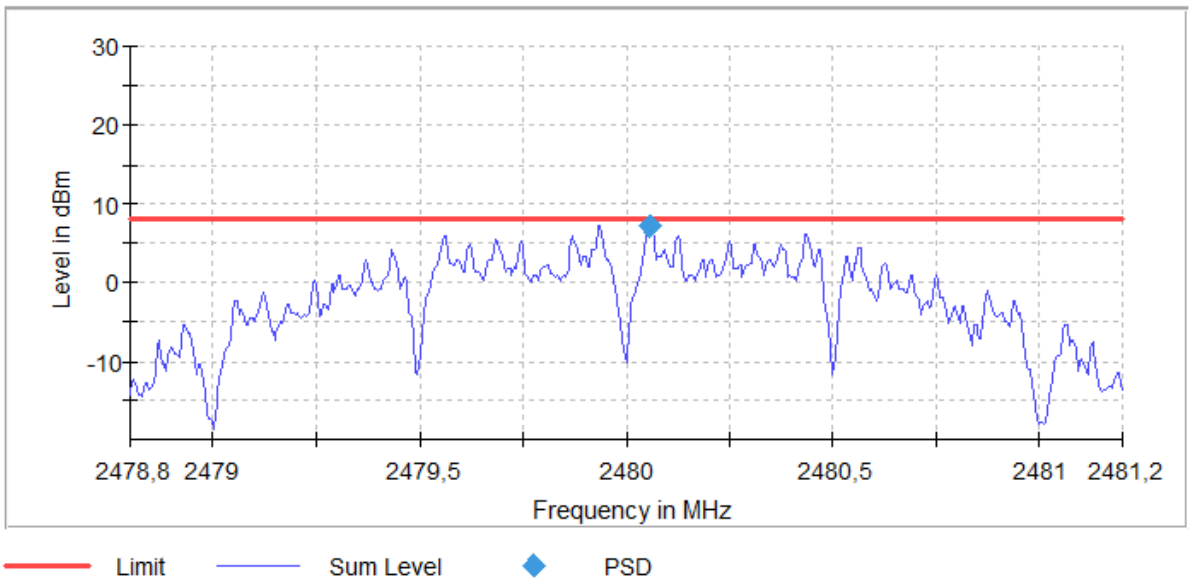


Fig. 16: Channel High- Power Spectral Density

4.5.8 Test Equipment Used

Equipment	Brand	Model	Applus Ref.	Last Calibration	Next Calibration
RF SWITCH	ROHDE & SCHWARZ	OSP120	1042701	08/11/2024	08/11/2026
SIGNAL SPECTRUM ANALYZER	ROHDE & SCHWARZ	FSVA3044	1042700	07/01/2025	07/01/2027
CABLE RF 40 GHz*	HUBERSUHNER	SF102	1042545	11/04/2025	11/04/2026
RF CABLE	HUBER+SUHNER (Astrolab)	ST26/SMAm/SMAm/24inch	1041825	24/04/2025	24/04/2026

Table 23: Test Instruments – DTS Bandwidth

*Note: *Internal verifications performed to guarantee consistency of the test results while the calibration process is completed.*

4.5.9 Uncertainty

Test Type	Test Description	Uncertainty
Emissions	Power spectral density measurements [Conducted]	±2.56 dB

Table 24: Power Spectral Density Uncertainties

The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by a coverage factor k=2, which for normal distribution corresponds to a coverage probability of approximately 95%.

4.6 BAND EDGE

4.6.1 Test Setup Required

4.6.1.1 Tabletop equipment

Fig. 17: Band Edge setup of table top equipment.

4.6.2 Test Procedure

a) Set instrument center frequency to the frequency of the emission to be measured (must be within 2 MHz of the authorized band edge).

b) Set span to 2 MHz.

c) RBW = 100 kHz.

d) VBW ≥ [3 × RBW].

e) Detector = peak.

f) Sweep time = auto.

g) Trace mode = max hold.

h) Allow sweep to continue until the trace stabilizes (required measurement time may increase for low-duty-cycle applications).

i) Compute the power by integrating the spectrum over 1 MHz using the analyzer's band power measurement function with band limits set equal to the emission frequency (femission) ± 0.5 MHz.

j) If the instrument does not have a band power function, then sum the amplitude levels (in power units) at 100 kHz intervals extending across the 1 MHz spectrum defined by femission ± 0.5 MHz.

4.6.3 Test Parameters

4.6.3.1 Requirements

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, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in § 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).

4.6.4 EMI Receiver configuration

During the conducted test, the EMI receiver was set with the following configurations:

Central frequency [MHz]	Span [MHz]	Detector	Resolution Bandwidth [kHz]	Video Bandwidth [kHz]
Channel frequency	80.0	Max Peak	100	300

Table 25: EMI Receiver configuration – Band Edge

4.6.5 Test Environmental Conditions

Test Date	Technician	Supervisor	Temperature [ºC]	Humidity [%]	Atm. Pressure [mbar]
22/04/2026	A. Moliner	Javier Miguel Nadales	23.3	43.2	1017.8

Table 26: Test environmental conditions – Band Edge

4.6.6 Summary Test Results

Channel	Description	Central Frequency [MHz]	Band Edge	Limit [dBm]	Results
11	IEEE 802.15.4	2405	Limit - I <= PK < Limit	-6.4	PASS
26	IEEE 802.15.4	2480	Limit - I <= PK < Limit	-6.5	PASS

Table 27: Summary Test Results – Band Edge

4.6.7 Test Results

4.6.7.1 Sample #1. Mode 1. Channel Low

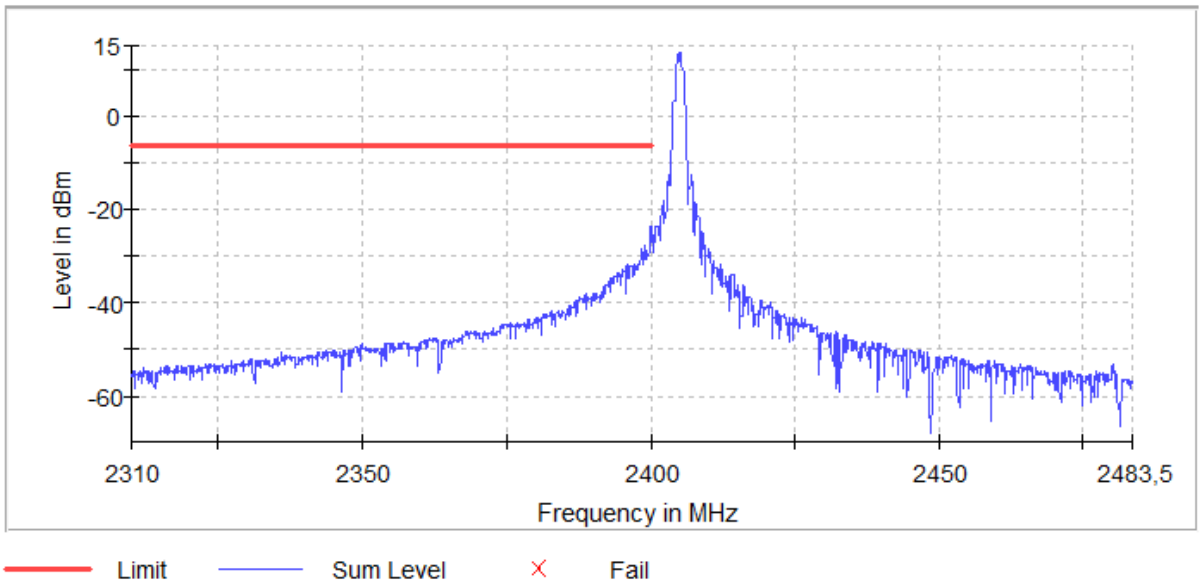


Fig. 18: Channel - Low Band Edge

FINAL MEASUREMENTS

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2399.949972	-23.9	17.5	-6.4	PASS
2399.899944	-23.9	17.5	-6.4	PASS
2399.849917	-25.4	19.0	-6.4	PASS
2399.099500	-27.8	21.4	-6.4	PASS
2399.149528	-27.9	21.5	-6.4	PASS
2399.799889	-28.1	21.8	-6.4	PASS
2399.049472	-28.2	21.9	-6.4	PASS
2399.649805	-28.3	21.9	-6.4	PASS
2399.699833	-28.3	21.9	-6.4	PASS
2398.999444	-28.3	21.9	-6.4	PASS
2399.749861	-28.3	21.9	-6.4	PASS
2398.949416	-28.3	21.9	-6.4	PASS
2398.299055	-28.5	22.1	-6.4	PASS
2398.249027	-28.6	22.2	-6.4	PASS
2399.599778	-28.9	22.5	-6.4	PASS

Table 28: Channel Low - Band Edge

4.6.7.2 Sample #1. Mode 1. Channel High

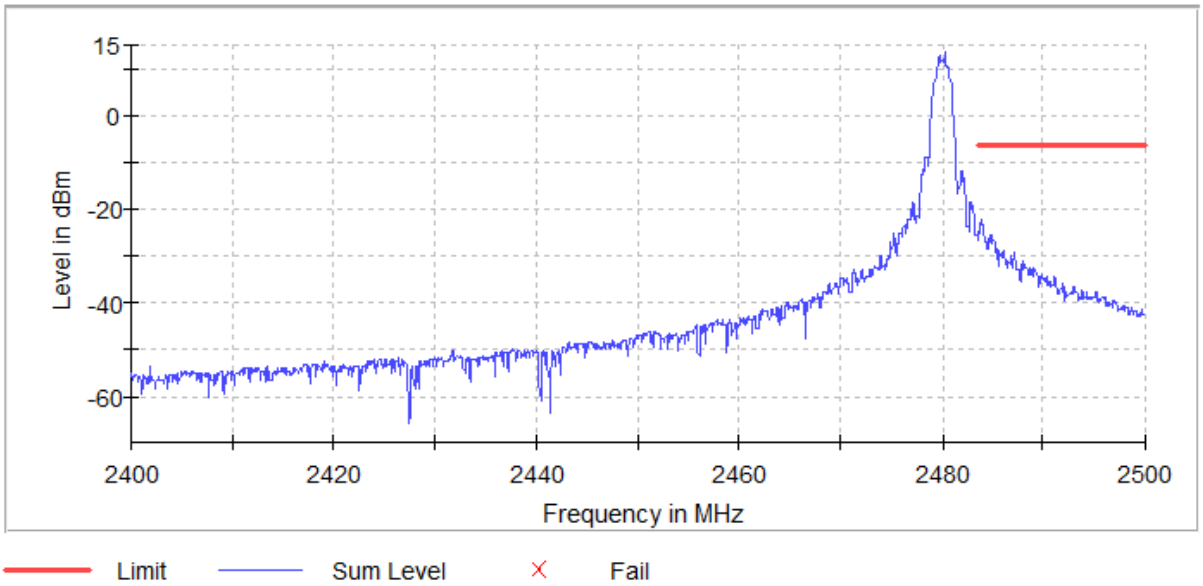


Fig. 19: Channel High - Band Edge

FINAL MEASUREMENTS

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2483.851064	-22.4	15.8	-6.5	PASS
2483.901216	-22.4	15.9	-6.5	PASS
2483.951368	-23.2	16.7	-6.5	PASS
2484.051672	-23.3	16.7	-6.5	PASS
2484.101824	-23.3	16.8	-6.5	PASS
2484.001520	-23.3	16.8	-6.5	PASS
2483.800912	-23.5	17.0	-6.5	PASS
2483.750760	-24.0	17.4	-6.5	PASS
2483.700608	-24.1	17.6	-6.5	PASS
2483.550152	-24.7	18.2	-6.5	PASS
2484.202128	-24.8	18.3	-6.5	PASS
2484.252280	-25.0	18.5	-6.5	PASS
2483.650456	-25.1	18.5	-6.5	PASS
2484.151976	-25.4	18.9	-6.5	PASS
2484.954407	-25.7	19.2	-6.5	PASS

Table 29. Channel High - Band Edge

4.6.8 Test Equipment Used

Equipment	Brand	Model	Applus Ref.	Last Calibration	Next Calibration
RF SWITCH	ROHDE & SCHWARZ	OSP120	1042701	08/11/2024	08/11/2026
SIGNAL SPECTRUM ANALYZER	ROHDE & SCHWARZ	FSVA3044	1042700	07/01/2025	07/01/2027
CABLE RF 40 GHz*	HUBERSUHNER	SF102	1042545	11/04/2025	11/04/2026
RF CABLE	HUBER+SUHNER (Astrolab)	ST26/SMAm/SMAm/24inch	1041825	24/04/2025	24/04/2026

Table 30: Test Instruments – DTS Bandwidth

*Note: *Internal verifications performed to guarantee consistency of the test results while the calibration process is completed.*

4.6.9 Uncertainty

Test Type	Test Description	Uncertainty
Emissions	RF output power measurements	1.22 dB

Table 31: Band Edge Uncertainties

The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by a coverage factor k=2, which for normal distribution corresponds to a coverage probability of approximately 95%.

4.7 RADIO-FREQUENCY RADIATED EMISSIONS

4.7.1 Test Setup Required

4.7.1.1 Tabletop equipment

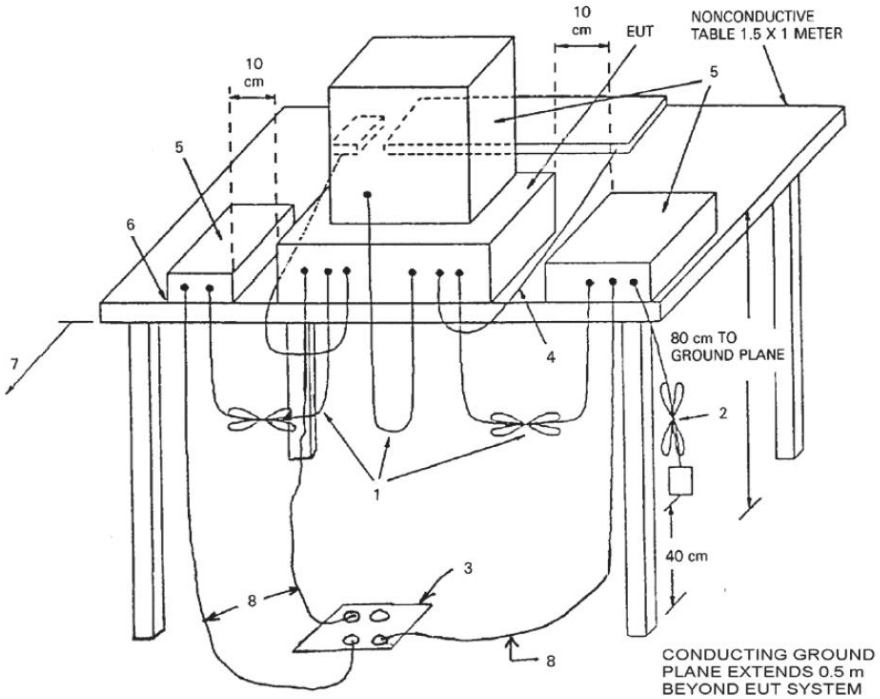


Fig. 20: Radio-frequency radiated emissions setup of table top equipment.

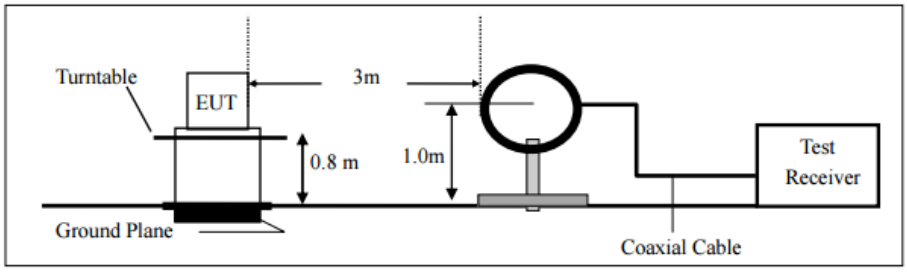


Fig. 21: Radio-frequency radiated emissions of table top equipment from 9 kHz to 30 MHz

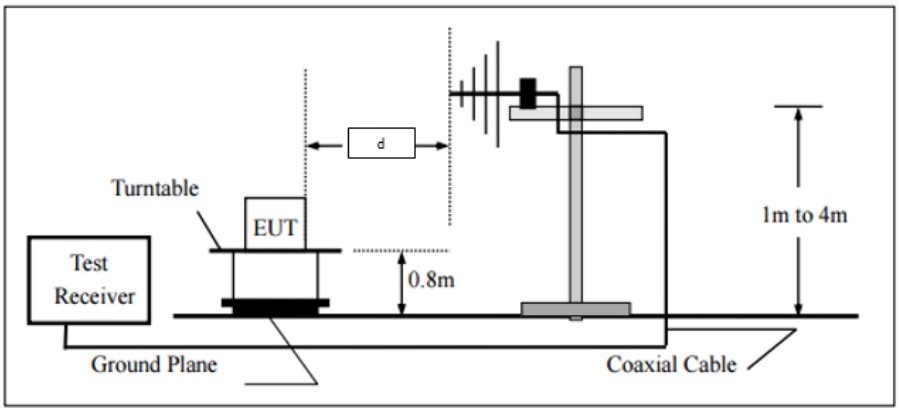


Fig. 22: Radio-frequency radiated emissions of table top equipment from 30 MHz to 1000 MHz

Distance "d" depends on test chamber.

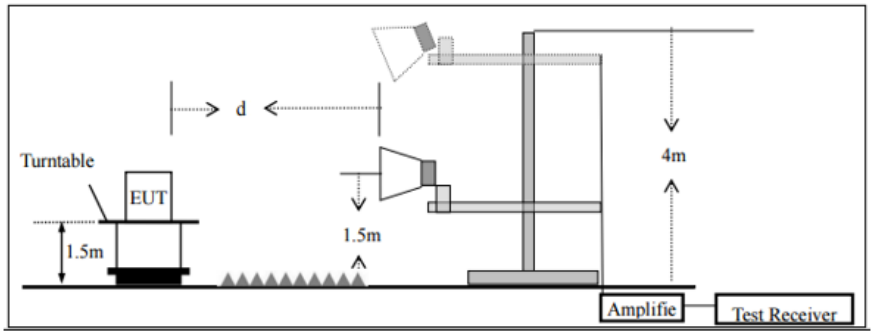


Fig. 23: Radio-frequency radiated emissions setup of table top equipment above 1 GHz

Distance "d" depends on test chamber.

4.7.1.2 Floor standing equipment

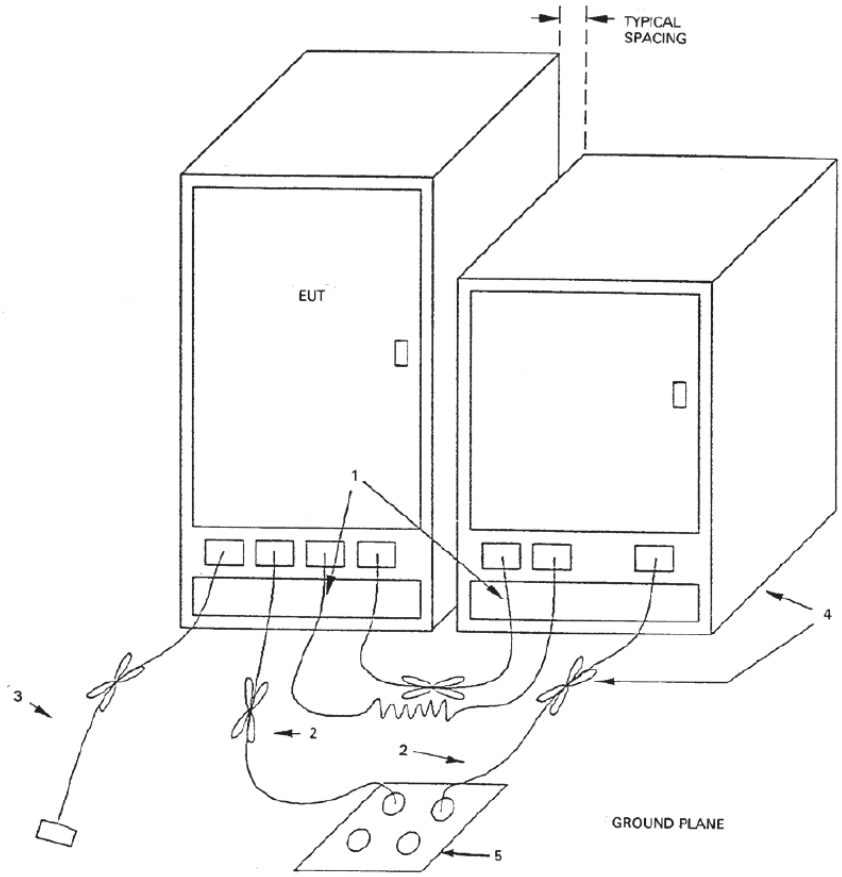


Fig. 24: Radio-frequency radiated emissions of floor-standing setup equipment.

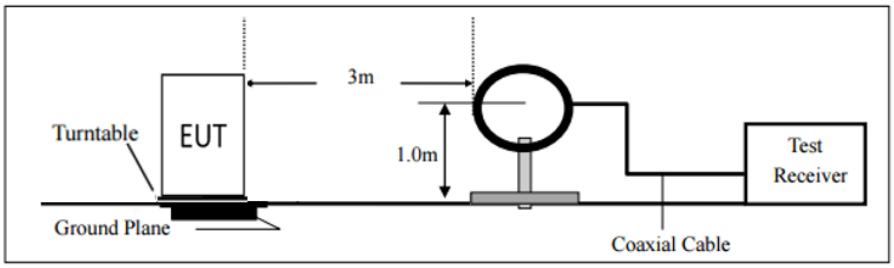


Fig. 25: Radio-frequency radiated emissions of floor-standing setup equipment from 9 kHz to 30 MHz

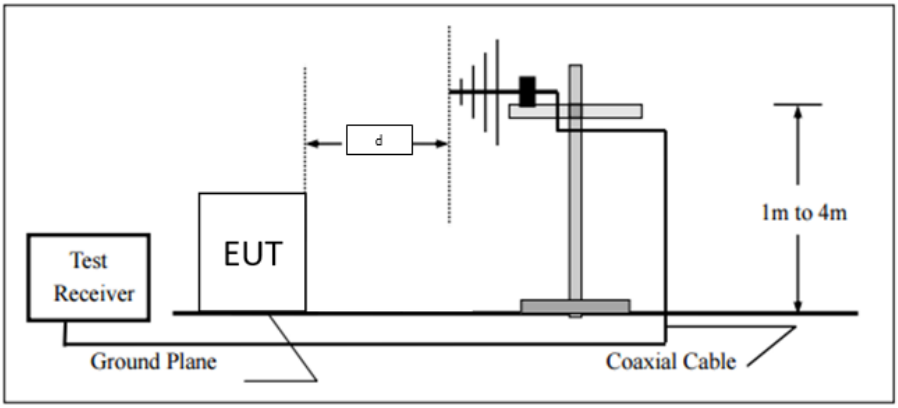


Fig. 26: Radio-frequency radiated emissions of floor-standing setup equipment from 30 MHz to 1000 MHz

Distance "d" depends on test chamber.

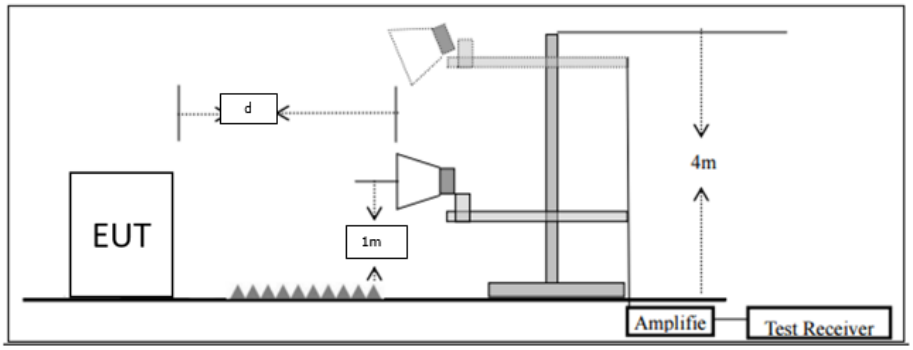


Fig. 27: Radio-frequency radiated emissions of floor-standing setup equipment above 1 GHz

Distance "d" depends on test chamber.

4.7.2 Test Procedure

a) Set the center frequency and span to encompass frequency range to be measured

b) Set the RBW = 100 kHz.

c) Set the VBW ≥ [3 × RBW].

d) Detector = peak.

e) Sweep time = auto couple.

f) Trace mode = max hold.

g) Allow trace to fully stabilize.

h) Use the peak marker function to determine the maximum amplitude level.

4.7.3 Requirements

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, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in § 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a)

Only spurious emissions are permitted in any of the frequency bands listed below:

Frequency [MHz]	Frequency [MHz]	Frequency [MHz]	Frequency [GHz)]
0.090–0.110	16.42–16.423	399.9–410	4.5–5.15
(1)0.495–0.505	16.69475–16.69525	608–614	5.35–5.46
2.1735–2.1905	16.80425–16.80475	960–1240	7.25–7.75
4.125–4.128	25.5–25.67	1300–1427	8.025–8.5
4.17725–4.17775	37.5–38.25	1435–1626.5	9.0–9.2
4.20725–4.20775	73–74.6	1645.5–1646.5	9.3–9.5
6.215–6.218	74.8–75.2	1660–1710	10.6–12.7
6.26775–6.26825	108–121.94	1718.8–1722.2	13.25–13.4
6.31175–6.31225	123–138	2200–2300	14.47–14.5
8.291–8.294	149.9–150.05	2310–2390	15.35–16.2
8.362–8.366	156.52475–156.52525	2483.5–2500	17.7–21.4
8.37625–8.38675	156.7–156.9	2690–2900	22.01–23.12
8.41425–8.41475	162.0125–167.17	3260–3267	23.6–24.0
12.29–12.293	167.72–173.2	3332–3339	31.2–31.8
12.51975–12.52025	240–285	3345.8–3358	36.43–36.5
12.57675–12.57725	322–335.4	3600–4400	(2)
13.36–13.41			

Table 32. Restricted bands of operation

1 Until February 1, 1999, this restricted band shall be 0.490–0.510 MHz.
2 Above 38.6

According to § 15.209(a) and RSS-Gen section 8.9, the radiated emission limits for restricted bands are:

Frequency Range [MHz]	Quasi-peak detector (QP) [dBµV/m]	Peak detector (PK) [dBµV/m]		Average detector (AVG) [dBµV/m]	
	3 m measuring distance	3 m measuring distance	1 m measuring distance[1]	3 m measuring distance	1 m measuring distance[1]
0.009 – 0.490	20log(2400/F[kHz]) + 80	N/A	N/A	N/A	N/A
0.490 – 1.705	20log(24000/F[kHz]) + 40	N/A	N/A	N/A	N/A
1.705 - 30	20log(24000/F[kHz]) + 40	N/A	N/A	N/A	N/A
30 – 88	40.0	N/A	N/A	N/A	N/A
88 – 216	43.5	N/A	N/A	N/A	N/A
216 – 960	46.0	N/A	N/A	N/A	N/A
960 – 1000	54.0	N/A	N/A	N/A	N/A
1000 – 18000	N/A	74	N/A	54	N/A
18000 - 40000	N/A	N/A	83.54	N/A	63.54

Table 33: Radio-frequency radiated emissions requirements

Note 1: The limits has been modified according to the applicable standard applying the formula: $L_2 = L_1 - 20log(d_2/d_1)$*, where:*
L_2: New Limit.
L_1: Limit at 3 meters.

d_1: 3 meters (standard distance).
d_2: 1 meter (new measurement distance).

According to FCC Part 15 Subpart C FCC 15.247, the limits for unrestricted bands are:

Frequency Range [MHz]	Test Mode	Field strength [µV/m]	Measurement distance [m]
30 – 88	Peak power / RMS averaging	-20 dBc / -30 dBc	3
88 – 216			
216 – 960			
Above 960			

Table 34. Radiated Emission limits. Unrestricted bands

4.7.3.1 Receiver Parameters

According to standard ANSI C63.4:2014:

Frequency Range [MHz]	Detector	Resolution Bandwidth [MHz]	Video Bandwidth [MHz]
0.009 – 0.15	Quasi-peak (QP)	$200 \cdot 10^{-6}$	$1 \cdot 10^{-3}$
0.15 – 30	Quasi-peak (QP)	$9 \cdot 10^{-3}$	$30 \cdot 10^{-3}$
30 – 1000	Quasi-peak (QP)	0.12	0.30
Above 1000	Peak (PK)	1	3
	Average (AVG)	1	10

Table 35: Receiver parameters – Radio-frequency radiated emissions

4.7.3.2 Sample Calculations for Field Strength Measurements

Field Strength is calculated from the Receiver readings, based on the following equation:

$$Final\ Result\ [dB\mu V/m] = Raw\ Rec\ [dB\mu V] + Corr.\ [dB/m]$$

$$Final\ Result\ [dB\mu V/m] = Raw\ Rec\ [dB\mu V] + Trd\ Corr\ [dB/m] + Preamp\ [dB] + Sig\ Path\ [dB]$$

Equation 1: Equation for Calculation for Field Strength

Where:

- *Raw Rec – Measured reading in dBµV.*
- *Sig Path – Cable Loss + External Amplifier in dB.*
- *Preamp - Internal Amplifier in dB.*
- *Trd Corr – Antenna Factor in dB/m.*
- *Corr [dB/m] = Sig Path [dB] + Preamp [dB] + Trd Corr [dB/m]*

Example calculation from primary register taken from EMC-32 Test Software:

Frequency [MHz]	MaxPeak [dBµV/m]	CAverage [dBµV/m]	Limit [dBµV/m]	Corr. [dB/m]	Raw Rec [dBµV]	Sig Path [dB]	Preamp [dB]	Trd Corr. [dB/m]
1060.000	61.2	---	74.0	26.4	34.8	2.0	0.0	24.4
1060.000	---	22.8	54.0	26.4	-3.6	2.0	0.0	24.4

Table 36: Sample Calculation for Field Strength

$$MaxPeak\ [dB\mu V/m] = 34.8 + 24.4 + 0 + 2 = 61.2\ [dB\mu V/m]$$

$$CAverage\ [dB\mu V/m] = -3.6 + 24.4 + 0 + 2 = 22.8\ [dB\mu V/m]$$

Equation 2: Sample Calculation for Field Strength

4.7.4 Test Environmental Conditions

Test Date	Technician	Supervisor	Temperature [ºC]	Humidity [%]	Atm. Pressure [mbar]
25/03/2026	A. Moliner	Javier Miguel Nadales	23.3	43.5	1017.3
27/03/2026	A. Pérez	Javier Miguel Nadales	21.8	50.8	1005.6
22/04/2026	A. Pérez	Javier Miguel Nadales	22.1	48.1	999.4

Table 37: Test environmental conditions – Radio-frequency radiated emissions

4.7.5 Summary Test Results

Frequency Range [MHz]	Test Area	Distance [m]	Emissions	Results
9 kHz – 30 MHz	SAC 1	3 m	--	N/A[1]
30 MHz – 1 GHz	SAC 1	3 m	QP < Limit - I	PASS
1 GHz – 3.5 GHz	SAC 1	3 m	PK < Limit - I AVG < Limit - I	PASS
3.5 GHz – 18 GHz	SAC 1	3 m	Limit - I <= PK < Limit Limit - I <= AVG < Limit	PASS
18 GHz – 26 GHz	SAC 1	1 m	PK < Limit - I AVG < Limit - I	PASS

Table 38: Summary test results – Radio-frequency radiated emissions

Note 1: According to RSS-Gen section 6.13.2 and ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024as the lowest radio frequency generated by the equipment is above 30 MHz, the spectrum shall be investigated from 30 MHz.

4.7.6 Test Results

4.7.6.1 Ambient Levels. Frequency range: 30 MHz – 1 GHz

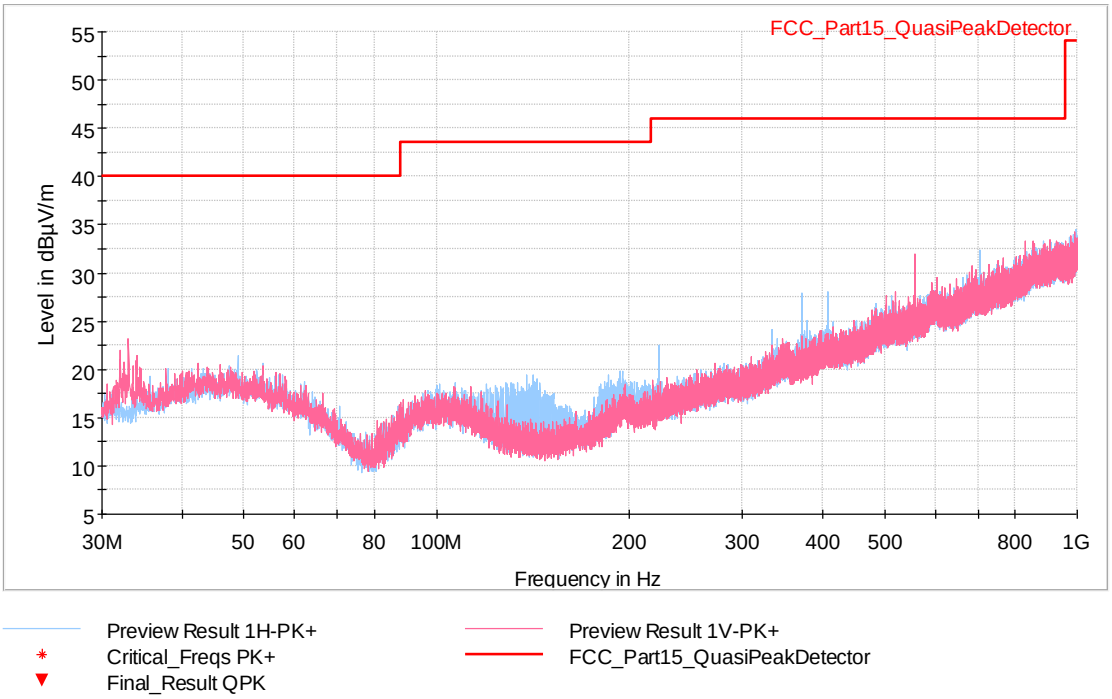


Fig. 28: Ambient level. Frequency range: 30 MHz – 1 GHz

4.7.6.2 Ambient Levels. Frequency range: 1 GHz – 3.5 GHz

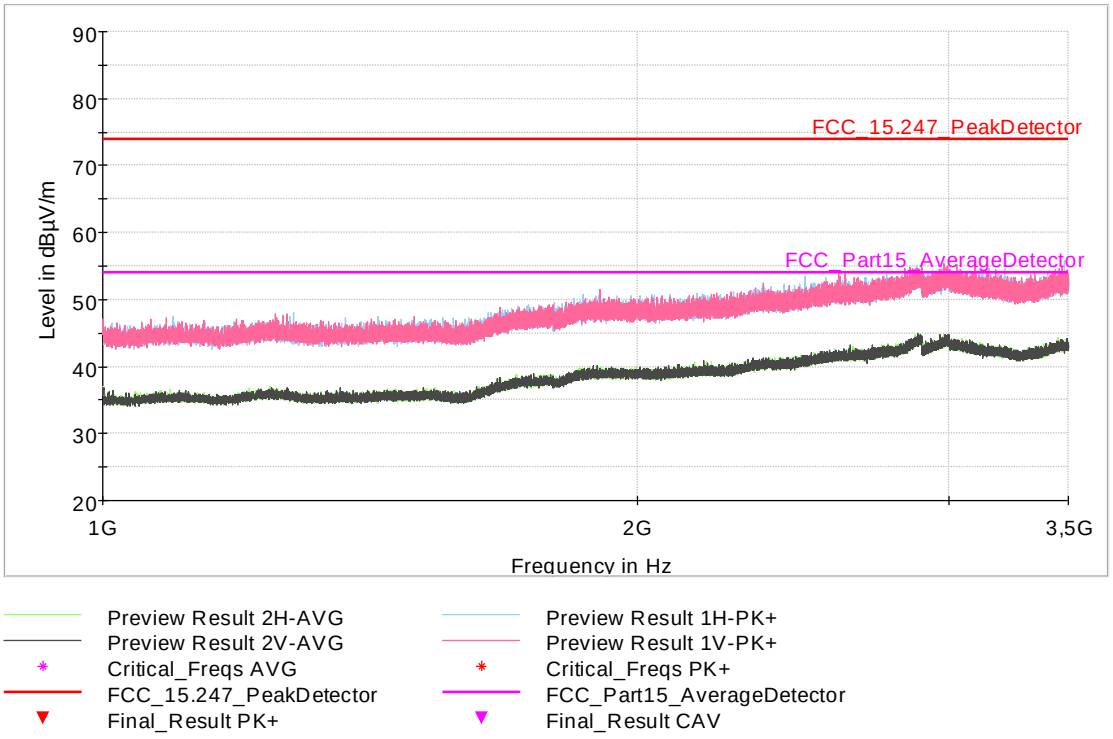


Fig. 29: Ambient level. Frequency range: 1 GHz – 3.5 GHz

4.7.6.3 Ambient Levels. Frequency range: 3.5 GHz – 18 GHz

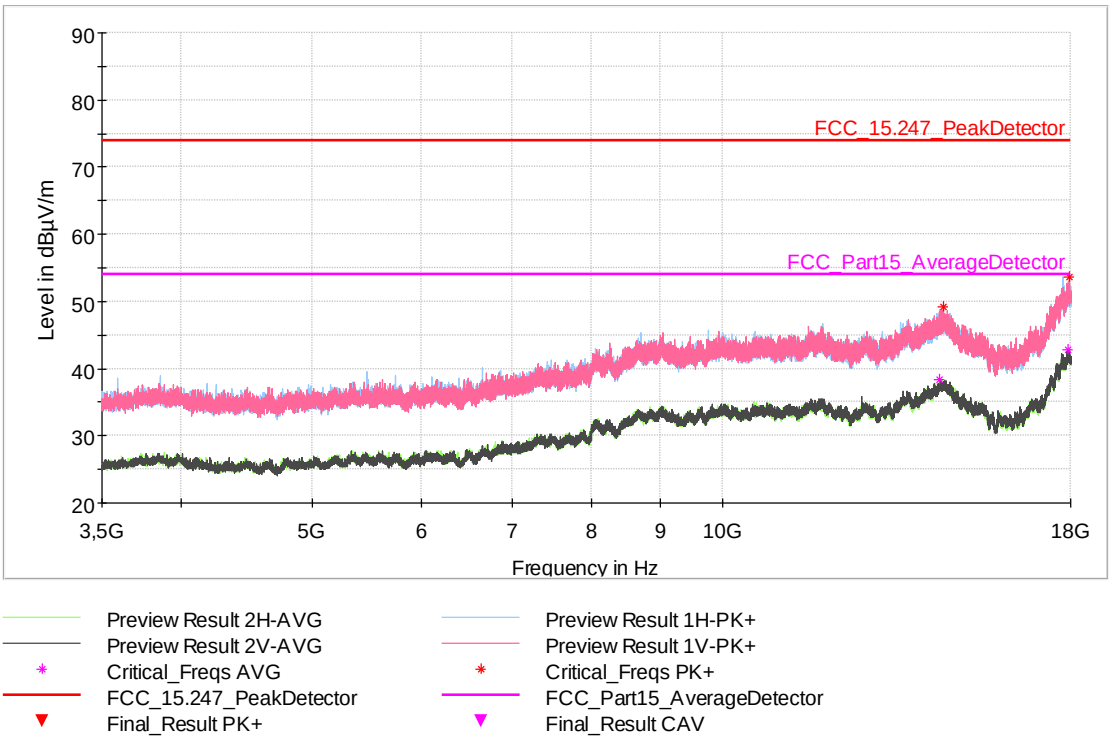


Fig. 30: Ambient level. Frequency range: 3.5 GHz – 18 GHz

4.7.6.4 Ambient Levels. Frequency range: 18 GHz – 26 GHz

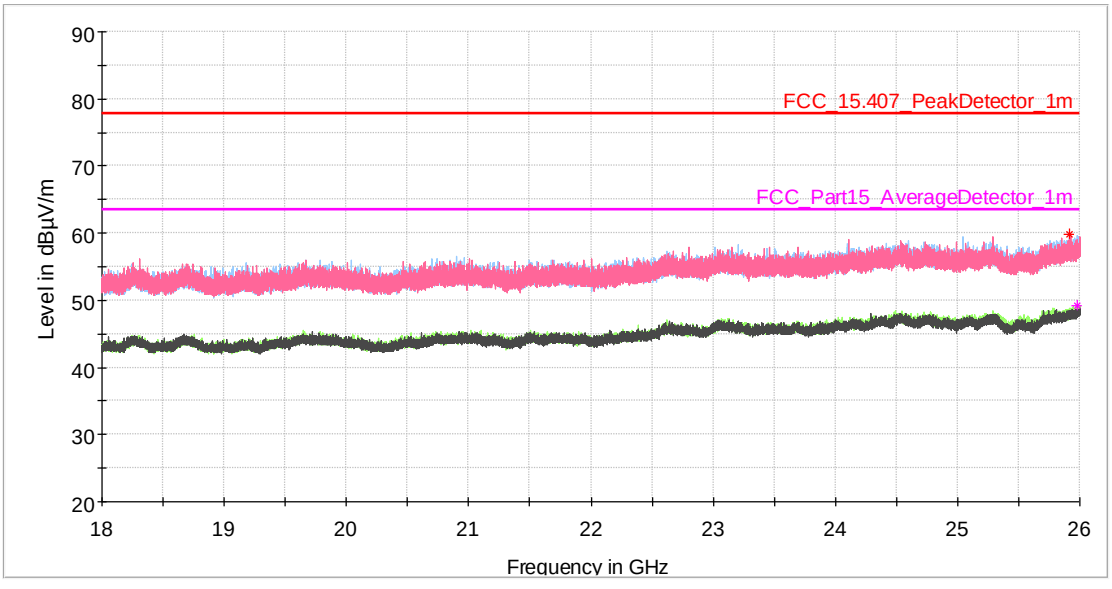


Fig. 31: Ambient level. Frequency range: 18 GHz – 26 GHz

4.7.6.5 Sample #1. Mode 1. Frequency range: 30 MHz – 1 GHz. Channel Low

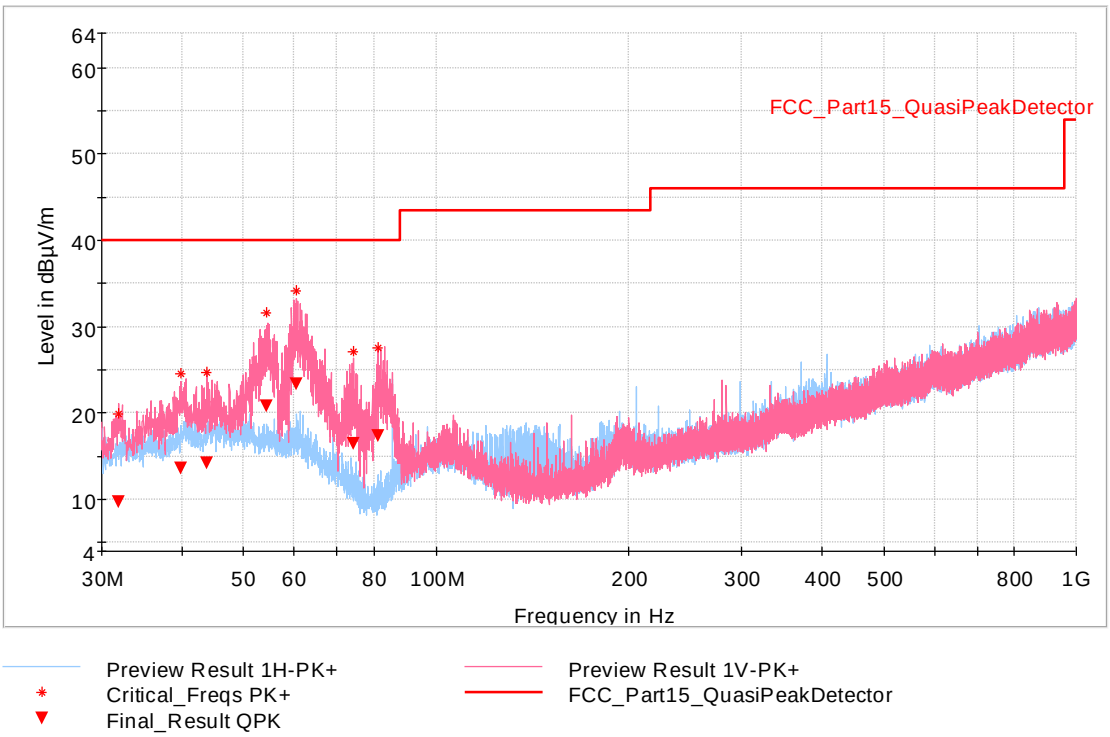


Fig. 32: Sample #1. Mode 1. Frequency range: 30 MHz – 1 GHz. Channel Low

FINAL MEASUREMENTS

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
31.843000	9.71	40.00	30.29	100.000	100.0	V	79.0	13.9
39.926333	13.66	40.00	26.34	100.000	115.0	V	0.0	16.6
43.806333	14.22	40.00	25.78	100.000	104.0	V	338.0	17.5
54.347000	20.84	40.00	19.16	100.000	104.0	V	0.0	17.6
60.361000	23.42	40.00	16.58	100.000	108.0	V	67.0	16.5
74.296667	16.47	40.00	23.53	100.000	117.0	V	294.0	11.8
80.925000	17.33	40.00	22.67	100.000	105.0	V	183.0	11.0

Table 39: Sample #1. Mode 1. Frequency range: 30 MHz – 1 GHz. Channel Low

4.7.6.6 Sample #1. Mode 1. Frequency range: 30 MHz – 1 GHz. Channel Middle

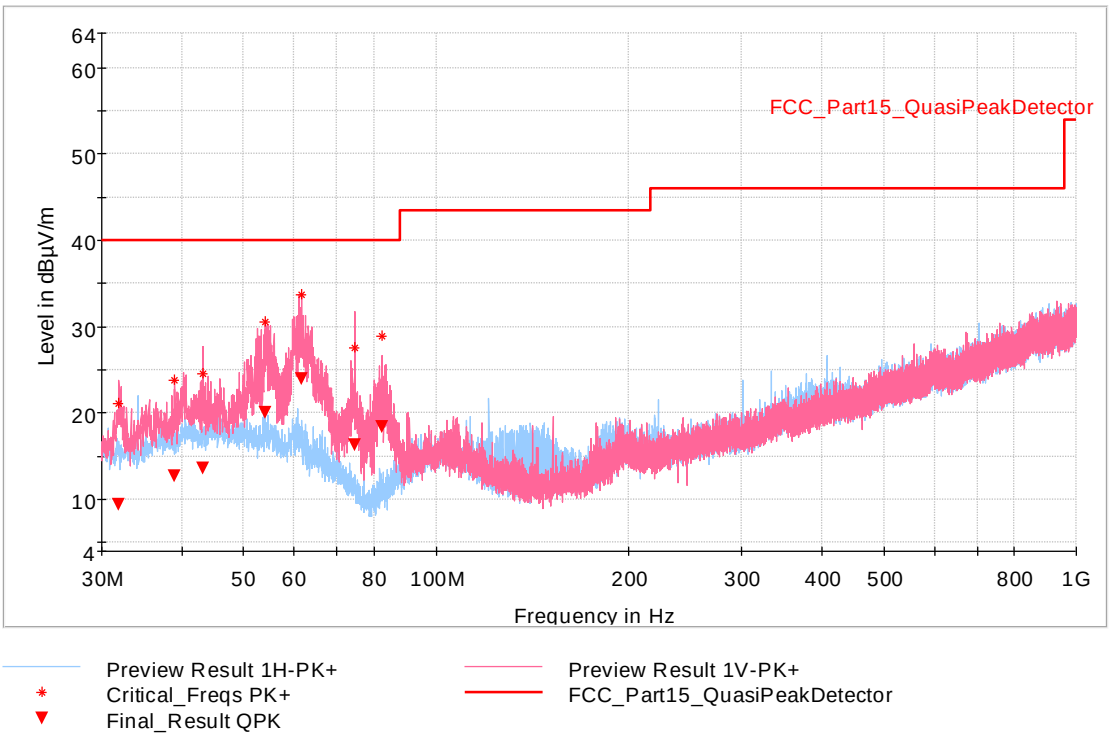


Fig. 33: Sample #1. Mode 1. Frequency range: 30 MHz – 1 GHz. Channel Middle

FINAL MEASUREMENTS

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
31.940000	9.45	40.00	30.55	100.000	134.0	V	87.0	13.9
39.053333	12.74	40.00	27.26	100.000	125.0	V	351.0	16.4
43.192000	13.64	40.00	26.36	100.000	129.0	V	168.0	17.4
53.991333	20.02	40.00	19.98	100.000	103.0	V	110.0	17.7
61.622000	23.90	40.00	16.10	100.000	105.0	V	0.0	16.2
74.587667	16.34	40.00	23.66	100.000	132.0	V	277.0	11.6
82.347667	18.46	40.00	21.54	100.000	139.0	V	255.0	11.4

Table 40: Sample #1. Mode 1. Frequency range: 30 MHz – 1 GHz. Channel Middle

4.7.6.7 Sample #1. Mode 1. Frequency range: 30 MHz – 1 GHz. Channel High

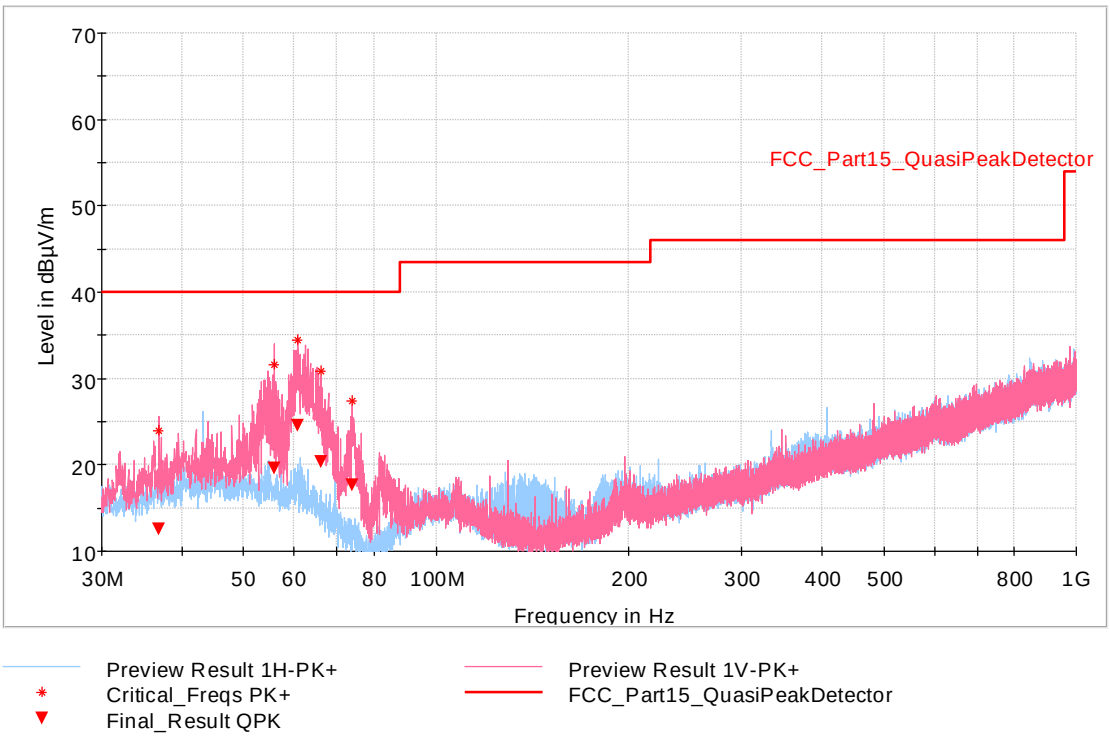


Fig. 34: Sample #1. Mode 1. Frequency range: 30 MHz – 1 GHz. Channel High

FINAL MEASUREMENTS

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
36.887000	12.48	40.00	27.52	20.0	100.000	100.0	V	281.0	15.6
55.834333	19.58	40.00	20.42	20.0	100.000	103.0	V	0.0	17.4
60.684333	24.62	40.00	15.38	20.0	100.000	108.0	V	228.0	16.4
65.954667	20.42	40.00	19.58	20.0	100.000	104.0	V	347.0	14.9
73.876333	17.67	40.00	22.33	20.0	100.000	137.0	V	0.0	11.9

Table 41: Sample #1. Mode 1. Frequency range: 30 MHz – 1 GHz. Channel High

4.7.6.8 Sample #1. Mode 1. Frequency range: 1 GHz – 3.5 GHz. Channel Low

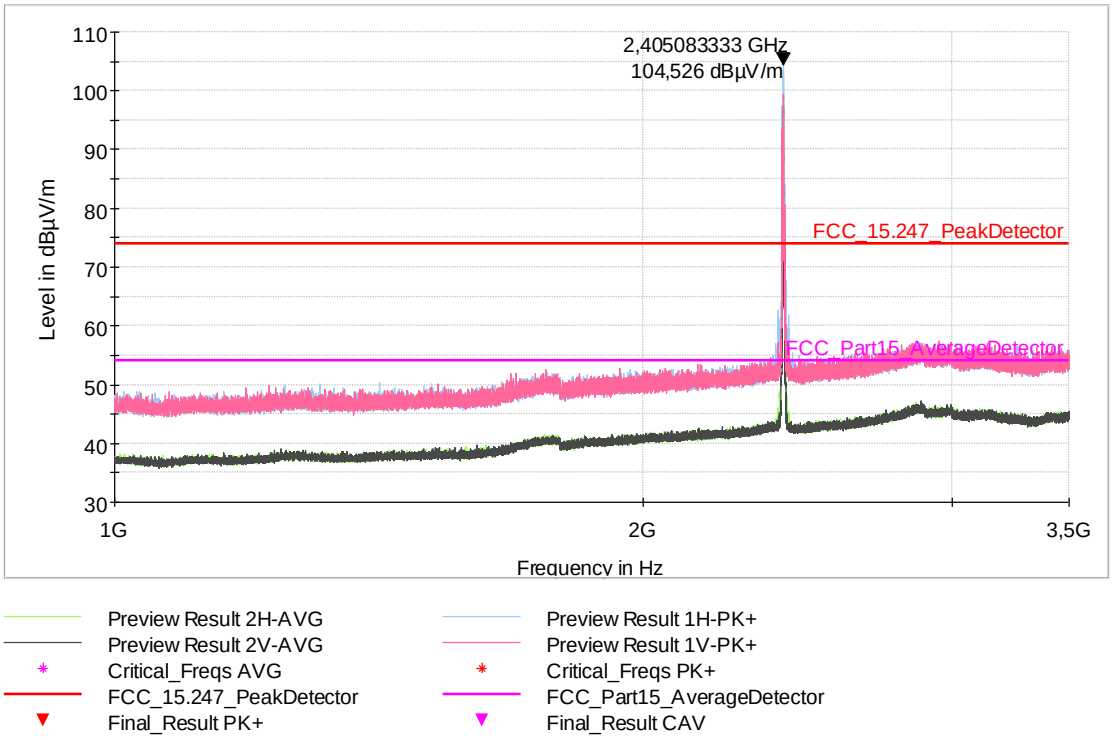


Fig. 35: Sample #1. Mode 1. Frequency range: 1 GHz – 3.5 GHz. Channel Low

Note 1: 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, provided the transmitter demonstrates compliance with the peak conducted power limits. See section 4.4.6.
Maximum Peak Power (dBm) + 95.25 -20 (dB) > Spurious Levels Emission

Note 2: Radiated emissions which fall in the restricted bands, must also comply with the radiated emission limits specified in Table 36.

4.7.6.9 Sample #1. Mode 1. Frequency range: 1 GHz – 3.5 GHz. Channel Middle

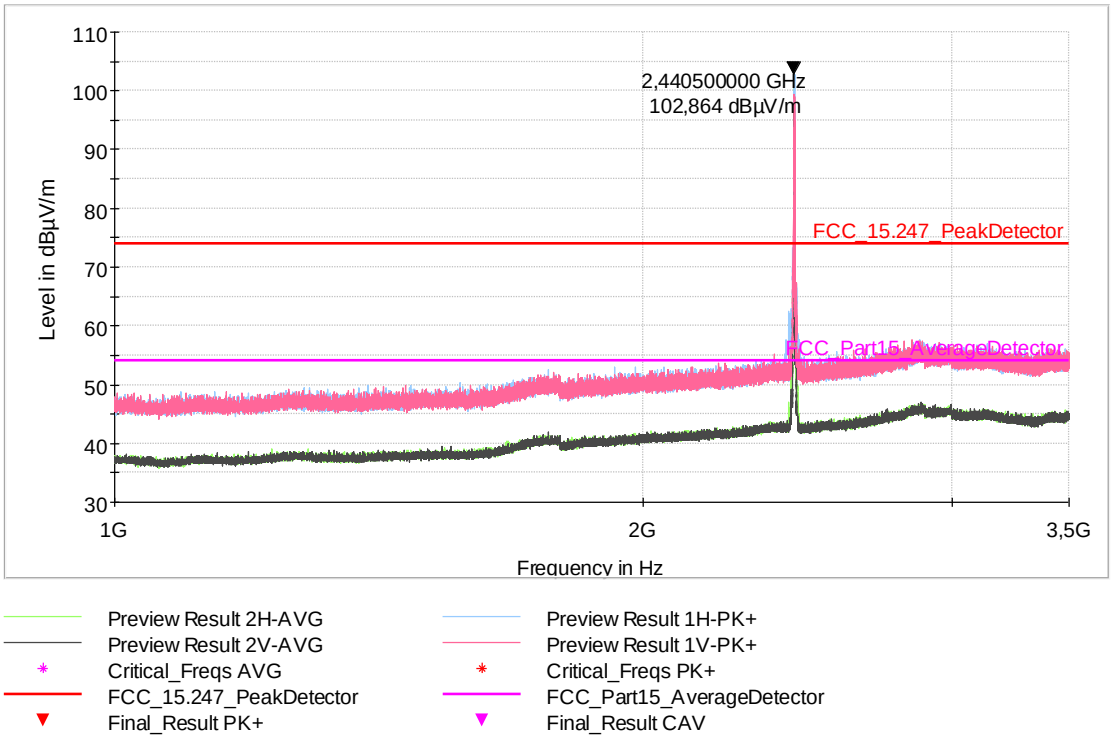


Fig. 36: Sample #1. Mode 1. Frequency range: 1 GHz – 3.5 GHz. Channel Middle

Note 1: 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, provided the transmitter demonstrates compliance with the peak conducted power limits. See section 4.4.6.
Maximum Peak Power (dBm) + 95.25 -20 (dB) > Spurious Levels Emission

Note 2: Radiated emissions which fall in the restricted bands, must also comply with the radiated emission limits specified in Table 36.

4.7.6.10 Sample #1. Mode 1. Frequency range: 1 GHz – 3.5 GHz. Channel High

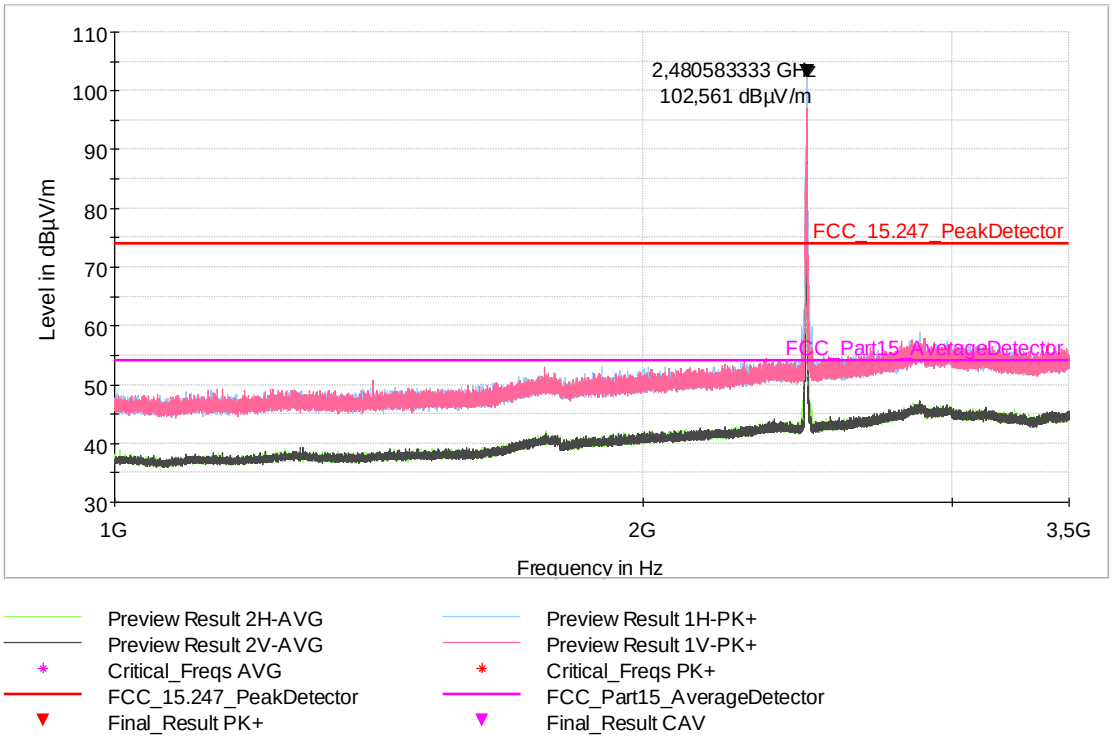


Fig. 37: Sample #1. Mode 1. Frequency range: 1 GHz – 3.5 GHz. Channel High

Note 1: 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, provided the transmitter demonstrates compliance with the peak conducted power limits. See section 4.4.6.
Maximum Peak Power (dBm) + 95.25 -20 (dB) > Spurious Levels Emission

Note 2: Radiated emissions which fall in the restricted bands, must also comply with the radiated emission limits specified in Table 36.

4.7.6.11 Sample #1. Mode 1. Frequency range: 3.5 GHz – 18 GHz. Channel Low

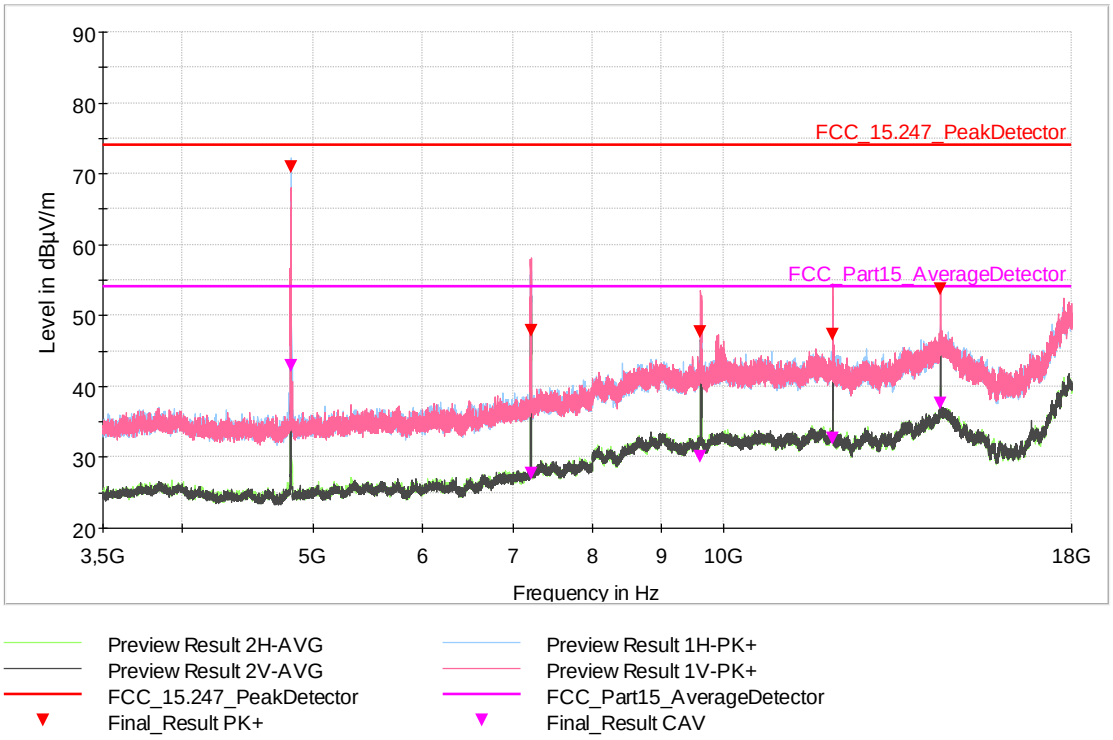


Fig. 38: Sample #1. Mode 1. Frequency range: 3.5 GHz – 18 GHz. Channel Low

FINAL MEASUREMENTS

Frequency (MHz)	MaxPeak (dBµV/m)	CAverage (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
4808.866667	70.93	---	74.00	3.07	1000.000	150.0	H	132.0
4809.833333	---	42.82	54.00	11.18	1000.000	150.0	H	132.0
7216.350000	---	27.63	54.00	26.37	1000.000	150.0	H	249.0
7216.350000	47.84	---	74.00	26.16	1000.000	150.0	V	221.0
9618.033333	---	30.11	54.00	23.89	1000.000	150.0	H	316.0
9618.033333	47.61	---	74.00	26.39	1000.000	150.0	V	349.0
12027.450000	47.25	---	74.00	26.75	1000.000	150.0	V	304.0
12027.450000	---	32.64	54.00	21.36	1000.000	150.0	H	196.0
14433.000000	---	37.62	54.00	16.38	1000.000	150.0	H	0.0
14433.483333	53.70	---	74.00	20.30	1000.000	150.0	V	94.0

4.7.6.12 Sample #1. Mode 1. Frequency range: 3.5 GHz – 18 GHz. Channel Middle

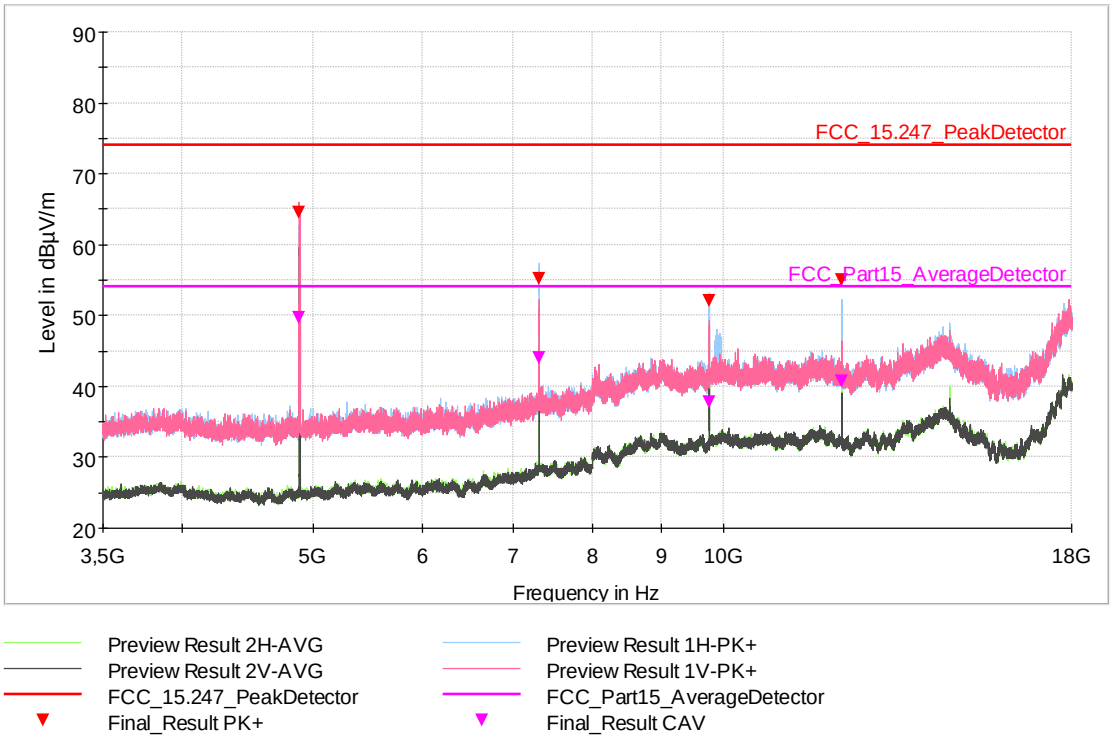


Fig. 39: Sample #1. Mode 1. Frequency range: 3.5 GHz – 18 GHz. Channel Middle

FINAL MEASUREMENTS

Frequency (MHz)	MaxPeak (dBµV/m)	CAverage (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
4880.883333	64.46	---	74.00	9.54	1000.000	150.0	V	234.0
4880.883333	---	49.76	54.00	4.24	1000.000	150.0	H	194.0
7318.333333	55.21	---	74.00	18.79	1000.000	150.0	H	336.0
7321.233333	---	43.97	54.00	10.03	1000.000	150.0	H	290.0
9758.200000	52.12	---	74.00	21.88	1000.000	150.0	H	129.0
9758.200000	---	37.80	54.00	16.20	1000.000	150.0	H	129.0
12202.416667	55.05	---	74.00	18.95	1000.000	150.0	H	210.0
12202.416667	---	40.66	54.00	13.34	1000.000	150.0	H	210.0

4.7.6.13 Sample #1. Mode 1. Frequency range: 3.5 GHz – 18 GHz. Channel High

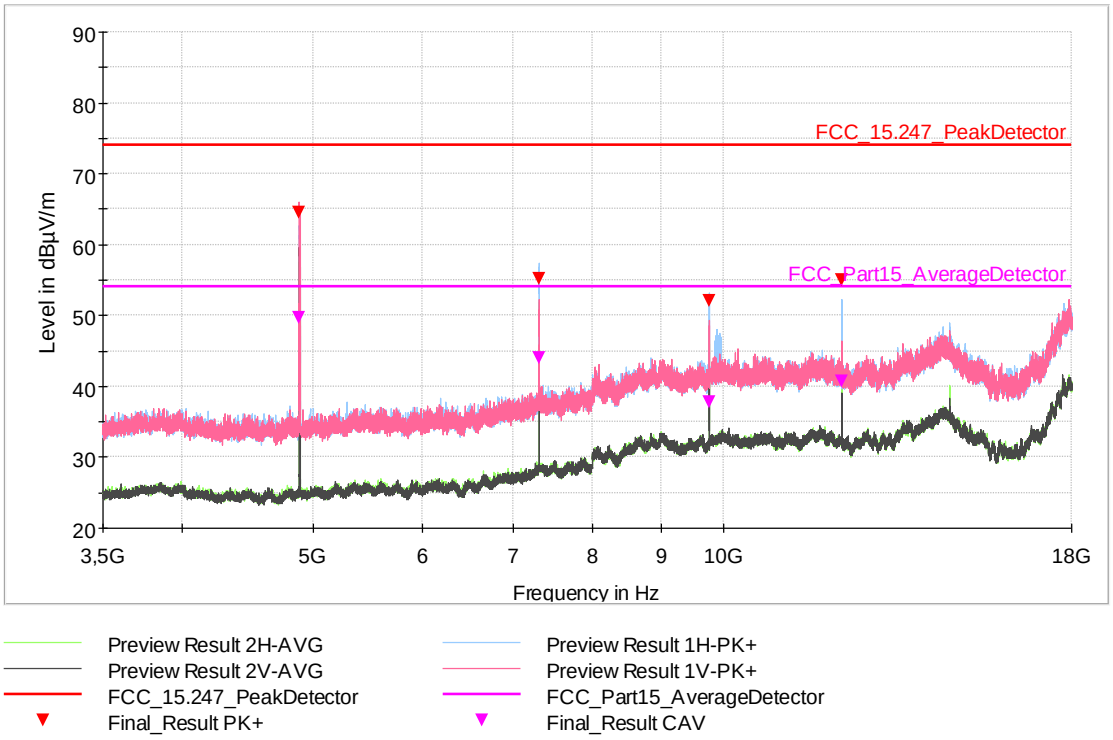
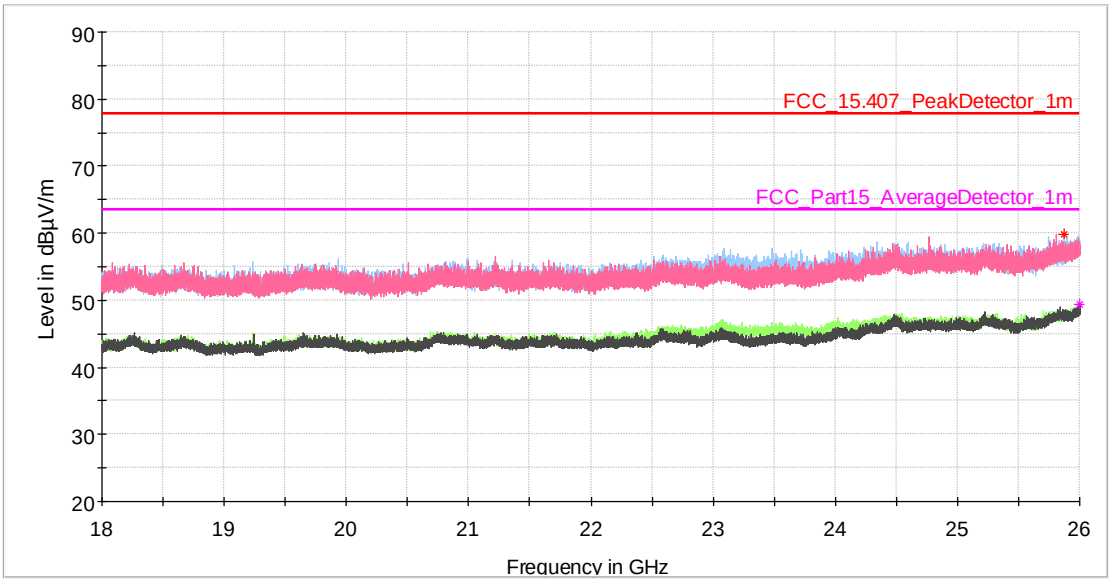


Fig. 40: Sample #1. Mode 1. Frequency range: 3.5 GHz – 18 GHz. Channel High

FINAL MEASUREMENTS

Frequency (MHz)	MaxPeak (dBµV/m)	CAverage (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
4880.883333	64.46	---	74.00	9.54	1000.000	150.0	V	234.0
4880.883333	---	49.76	54.00	4.24	1000.000	150.0	H	194.0
7318.333333	55.21	---	74.00	18.79	1000.000	150.0	H	336.0
7321.233333	---	43.97	54.00	10.03	1000.000	150.0	H	290.0
9758.200000	52.12	---	74.00	21.88	1000.000	150.0	H	129.0
9758.200000	---	37.80	54.00	16.20	1000.000	150.0	H	129.0
12202.416667	55.05	---	74.00	18.95	1000.000	150.0	H	210.0
12202.416667	---	40.66	54.00	13.34	1000.000	150.0	H	210.0

4.7.6.14 Sample #1. Mode 1. Frequency range: 18 GHz – 26 GHz. Channel Low



Preview Result 2H-AVG
Preview Result 2V-AVG
Critical_Freqs AVG
FCC_15.407_PeakDetector_1m
Final_Result PK+
Preview Result 1H-PK+
Preview Result 1V-PK+
Critical_Freqs PK+
FCC_Part15_AverageDetector_1m
Final_Result CAV

Fig. 41: Sample #1. Mode 1. Frequency range: 18 GHz – 26 GHz. Channel Low

FINAL MEASUREMENTS

No spurious detected. All emissions are below of the average limit.

4.7.6.15 Sample #1. Mode 1. Frequency range: 18 GHz – 26 GHz. Channel Middle

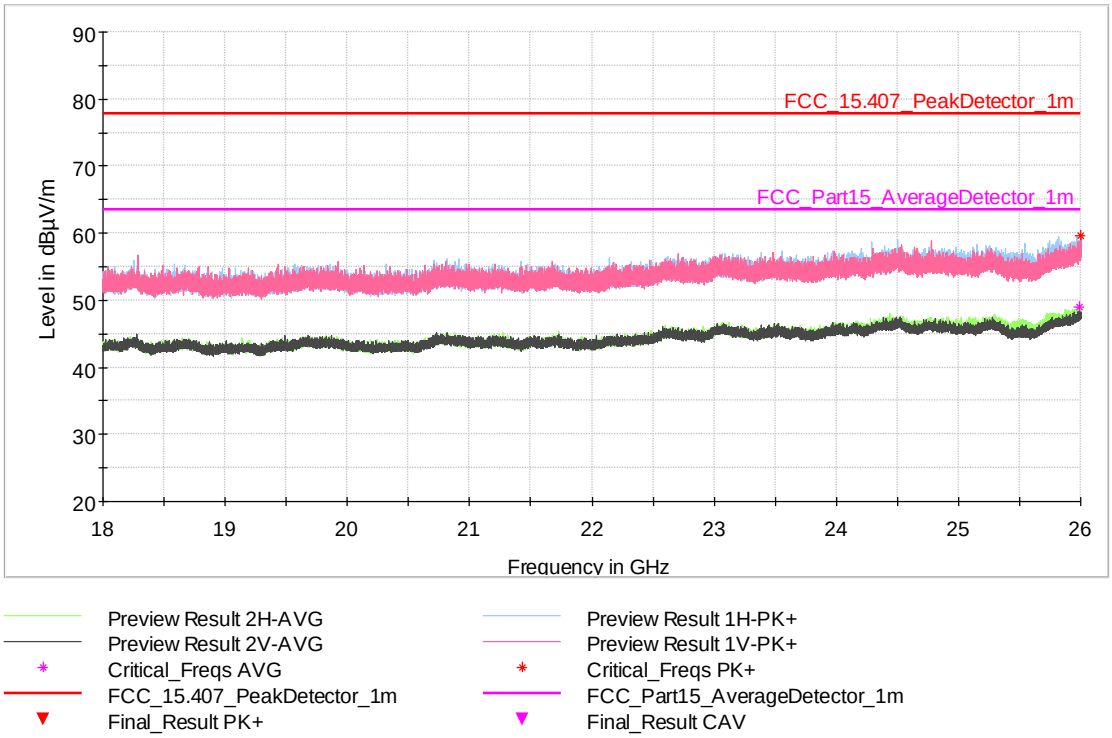
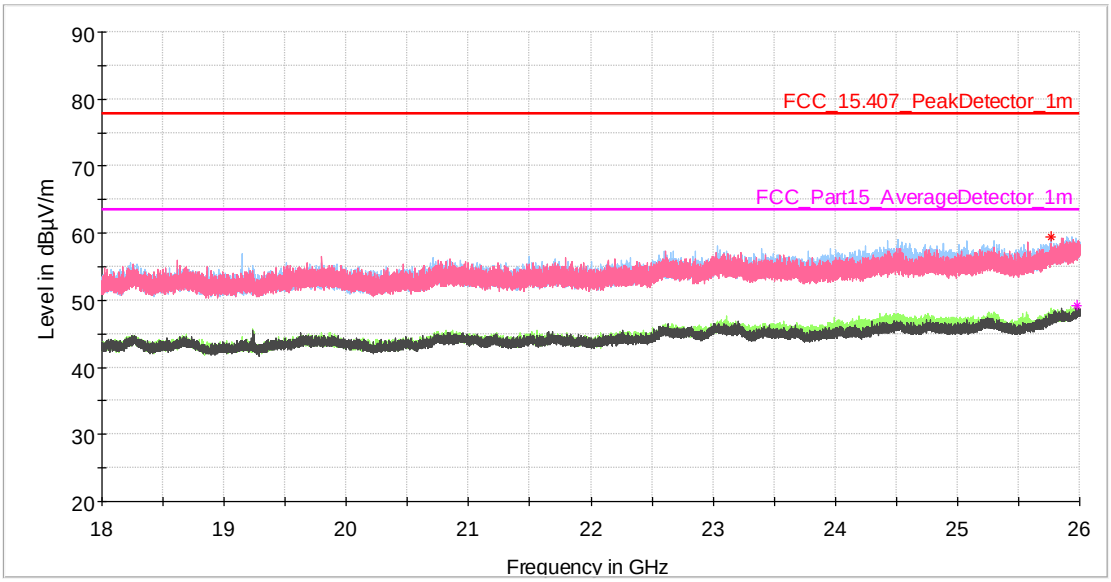


Fig. 42: Sample #1. Mode 1. Frequency range: 18 GHz – 26 GHz. Channel Middle

FINAL MEASUREMENTS

No spurious detected. All emissions are below of the average limit.

4.7.6.16 Sample #1. Mode 1. Frequency range: 18 GHz – 26 GHz. Channel High



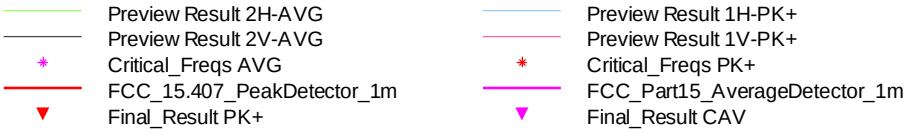


Fig. 43: Sample #1. Mode 1. Frequency range: 18 GHz – 26 GHz. Channel High

FINAL MEASUREMENTS

No spurious detected. All emissions are below of the average limit.

4.7.7 Test Equipment Used

Equipment	Brand	Model	Applus Ref.	Last Calibration	Next Calibration
EMI RECEIVER	ROHDE & SCHWARZ	ESW26	1041791	30/01/2026	30/02/2027
ATTENUATOR	HUBER+SUHNER	6803.17.B	1042020	24/07/2025	24/07/2026
CABLE RF	HUBER+SUHNER	SF 103	1042875	22/08/2025	22/08/2026
CABLE RF	N/A	N/A	104572	24/07/2025	24/07/2026
CABLE RF	HUBER+SUHNER	SF 106	1043041	12/03/2026	12/03/2027
RF ROTARY TRANSITION	SPINNER	BN 835088	1042793	20/06/2025	20/06/2026
BILOG ANTENNA	SCHWARZBECK	VULB 9162	1042229	24/02/2026	24/02/2027
HORN ANTENNA	EMCO	3115	05-ER-182	24/03/2026	24/03/2027
CABLE RF	HUBER+SUHNER	SF104	1042585	21/10/2025	21/10/2026
RF PREAMPLIFIER	BONN ELEKTRONIK	BLMA 0118-M	1042995	15/10/2025	15/10/2026
EMI RECEIVER	ROHDE & SCHWARZ	ESW44	1042953	01/10/2025	01/10/2026
CABLE RF*	HUBER+SUHNER	SF102	1042546	10/04/2025	10/04/2026
RF PREAMPLIFIER	BONN ELEKTRONIK	BLMA 1840-3G	1042763	08/07/2025	08/07/2026
ANTENNA HORN	MVG	EH 1840	1042685	21/06/2024	21/06/2026
CABLE RF*	HUBER+SUHNER	SF 102_E	1042475	10/04/2025	10/04/2026
Highpass Filter*	Wainwright Instruments GmbH	WHNX6-2765-3500-26500-40CC	1042511	10/04/2025	10/04/2026
SEMIANECHOIC CHAMBER	EUROSHIELD	TC2TESTCHAMBER	104563	12/03/2026	12/03/2029
TEST SOFTWARE	R&S	EMC32v.10.50.00	104624_SAC2	-----	-----
MAST-TABLE CONTROLLER	MATURO	NCD/052/8931211	1042758	-----	-----

Table 42: Test Instruments – Radio-frequency radiated emissions

*Note: *Internal verifications performed to guarantee consistency of the test results while the calibration process is completed.*

4.7.8 Uncertainty

Test Type	Test Description	Uncertainty
Emissions	RADIO-FREQUENCY RADIATED EMISSIONS 9 kHz – 30 MHz	± 3.87 dB
Emissions	RADIO-FREQUENCY RADIATED EMISSIONS 30 MHz – 1 GHz	± 5.22 dB
Emissions	RADIO-FREQUENCY RADIATED EMISSIONS 1 GHz – 6 GHz	± 5.22 dB
Emissions	RADIO-FREQUENCY RADIATED EMISSIONS 6 GHz – 18 GHz	± 5.44 dB
Emissions	RADIO-FREQUENCY RADIATED EMISSIONS 18 GHz – 26 GHz	± 5.04 dB

Table 43: Radio-frequency radiated emissions measuring Uncertainties

The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by a coverage factor k=2, which for normal distribution corresponds to a coverage probability of approximately 95%.