

Radio Test Report

According to

**FCC part 15C,
RSS-247, RSS-Gen**

DUT Name: In-container sensor
Model No. : 4221
Customer: Treon Oy
Address: Visiokatu 3, 33720 Tampere, Finland
Summary IN COMPLIANCE
Date of Reception: 9.9.2025
Date(s) of Test(s): 11.9.2025 – 29.9.2025

Tested by Test Engineer


Pekka Pulkkinen

Approved by Technical Manager


Jukka Rauma

The test report shall not be reproduced except in full, without the written approval of the laboratory. This report is only for the equipment which is described in page 4.

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Document Version History	Date of issue	Comments	Approved by
v0.1	9.10.2025	Initial version	
v1.0	27.10.2025	Approved version	Jukka Rauma

1. General Information

Test Engineer(s): Arto Kuosmanen, Pekka Pulkkinen

Location:

Test Firm Name	Eurofins Electric & Electronics Finland Oy (EEEF)
Test Site	Yrttipellontie, Peltola
Address of Test Site	Yrttipellontie 6, 90230 Oulu, Finland
FCC Designation number	FI0008
FCC site registration number	771880
ISED number	29576
CAB Identifier	T290

Customer: Treon Oy
Mika Sipola
Visiokatu 3, 33720 Tampere, Finland
e-mail: mika.sipola@teon.fi, certification@teon.fi

Climate Conditions: Temperature: 15 - 35 °C
Air pressure: 860 - 1060 hPa
Humidity: 30-60 rH%
These limits were not exceeded during testing.

2. Test Samples

General description:

4221 is a device designed for monitoring conditions inside a confined area such as a trailer or container. 4221 uses several integrated sensors for monitoring environmental conditions as well as changes such as door state and communicates the data using 2.4GHz radio. It has an integrated battery pack (Li-SOCI battery) for energy storage, which is not rechargeable.

Test sample (Conducted):

Sample number	Serial number	Manufacturer	DUT Type	Model	HW version	SW version
2500291504	SB008a3b2dbW0000	Treon Oy	In-container sensor	4221	05	0.1.0.4

Test sample (Radiated):

Sample number	Serial number	Manufacturer	DUT Type	Model	HW version	SW version
2500291503	SB06a6b437bW000	Treon Oy	In-container sensor	4221	05	0.1.0.4

Auxiliary equipment:

Sample number	Serial number	Manufacturer	DUT Type	Model	Comment
-	-	-	-	-	

Description	Information	
Additional model	-	
Brand Names(s)	In-container sensor	
FCC ID	2AR86-AS42	
IC D	-	
Equipment type	End product	
Radio type	Transceiver	
- operating frequency range:	2400.0 MHz – 2483.5 MHz	
- Nominal Channel Bandwidth:	1 MHz	
Radio technology / type of equipment	WirepasMesh (BLE)	
Modulation:	GFSK	
Number of antennas	1	
Bluetooth Specification	LE 1Mbps PHY	Yes
	LE 2Mbps PHY	No
	LE Coded PHY S=2 (500 kbit)	No
	LE Coded PHY S=8 (125 kbit)	No
	Stable Modulation Index - Transmitter	No
	Stable Modulation Index - Reer	No
Radio 1	Type	Bluetooth LE
	Model	nRF52840
	Manufacturer	Nordic Semiconductor ASA
	FCC ID	2AR86-AS42
	IC ID	-
Antenna	Type	Internal PCB trace antenna
	Model	-
	Manufacturer	Treon Oy
	Gain	1.1dBi
Supply voltage	3.6 VDC	
Type of Power source	Internal battery, Li-SOCl	
Operating Temperature	TNom = 20°C TMin = -30°C TMax = 75°C	
Manufacturer	Treon Oy Visiokatu 3, 33720 Tampere, Finland	

3. Configuration and Operation Modes

Conducted and radiated emission test:

Test modes / description
EUT battery powered, continuous modulated carrier at 2402 MHz, 2440 MHz and 2480 MHz, power level setting 8 dBm, data rate 1 Mbps
EUT battery powered, continuous reception at 2440 MHz

Test/configuration software

Manufacturer	Name	Version
Nordic Semiconductor ASA	nRF connect for desktop	V5.2.0

4. Test mode duty cycle

Test information	
Measurement method	FCC 558074 D01 15.247 Meas Guidance v05r02, ANSI C63.10 11.6
Test procedure	R&S WMS32 test software was used to measure the duty cycle

Measurement result

Bluetooth LE, 1 Mbps

MultiView Spectrum Spectrum 2

Ref Level 0.00 dBm Att 10 dB Input 1 AC PS Off RBW 3 MHz VBW 3 MHz Notch Off

Frequency 2.4798500 GHz

1 Zero Span

CF 2.47985 GHz 1001 pts 496.0 μs

Type	Ref	Trc	X-Value	Y-Value	Function	Function Result
M1	M1	1	2.41056 ms	-54.37 dBm		
D2	M1	1	386.88 μs	-0.04 dB		
D3	M1	1	629.92 μs	-0.07 dB		

no deviation from self alignment. Consider 0.4 dB additional level ui

Measuring... 2025-09-12 11:42:47 Ref Level RBW

11:42:48 AM 09/12/2025

Bluetooth LE 1Mbps Duty cycle = 61.42%

Duty cycle correction factor = $20 \cdot \log(1/0.6142) = 4.23 \text{ dB}$

5. Test equipment

Conducted RF tests

R&S TS8997 Test System equipment list:

New ID	Manufacturer	Equipment type	Description	Serial	Calibration information	Next calibration
G4C462	Rohde & Schwarz	SMW200A	Vector signal generator	110578	27.6.2023	27.6.2026
G4C463	Rohde & Schwarz	SMB100A	Signal Generator	183205	27.6.2023	27.6.2026
G4C465	Rohde & Schwarz	OSP220	Open switch and control unit	102440	12.6.2025	12.6.2026
G4C466	Rohde & Schwarz	ESW44	EMI test receiver	103103	10.6.2025	10.6.2026
G4C467	Rohde & Schwarz	CMW500	Wideband radio communication tester	171062	18.6.2025	18.6.2027

Radiated emission

New ID	Manufacturer	Equipment type	Description	Serial	Calibration information	Next calibration
G4C265	Rohde & Schwarz	ESW26	EMI test receiver	101324	15.7.2025	15.7.2026
G4C273	Frankonia	ALX-4000E	Broadband Antenna, 25MHz-4GHz with 6dB (50-A-MFN-06) att.	00816+1531	22.1.2024	22.1.2027
G4C292	Rohde & Schwarz	TS-LNA 1840	RF Preamplifier 18 to 40 GHz	100841	12.8.2024	12.8.2026
G4C294	Rohde & Schwarz	TC-HORN40 + WRD180-2.5	Horn Antenna -> 40GHz	101057 + 100667	4.11.2022	4.11.2025
G4C298	Rohde & Schwarz	CMW500	Wideband radio communication tester	170980	8.7.2025	8.7.2027
G4C469	Rohde & Schwarz	TS_PRE2	RF Preamplifier	101541	12.8.2024	12.8.2026
G4C576	Rohde & Schwarz	HF907	Double-Ridged Waveguide Horn Antenna 800MHz-18GHz	100163	8.7.2025	8.7.2028

Test software

Description	Manufacturer	Name	Version
EMC Software	Rohde & Schwarz	EMC32	10.60.20
RF Software	Rohde & Schwarz	WMS32	12.10.00

6. Uncertainties

Description	Expanded Uncertainty (k=2)
RF Output Power	0,99
Peak Power	0,80
Power Spectral Density	0,99
Accumulated Transmit Time	0,01%
Minimum Frequency Occupation Time	0,01%
Hopping Frequency Separation	0,60%
Occupied Channel Bandwidth	2,08 %
Out-of-band emissions	0,89
Transmitter unwanted emissions in the spurious domain	1,76
AC conducted emission	2,24
Radiated emission ≤ 1 GHz	4,62
Radiated emission > 1 GHz	5,72

7. Sample emission level calculation

The following is a description of term and a sample calculation, as appears in the radiated emissions data table. The numbers used in the calculation are for example only. There is no direct correlation to the specific data taken for the product described in this document:

Reading:

This is the reading obtained on the spectrum analyzer in dBuV.

A.F.:

This is the antenna factor for the receiving antenna. It is a conversion factor, which converts electric fields strength to voltages, which can be measured directly on the spectrum analyzer. It is treated as a loss in dB. RF path losses, including RF cables and preamplifiers, have been included with the A.F to simplify the calculations. The antenna factor is used in calculations as follows:

$$\text{Reading on Analyzer (dBuV)} + \text{A.F. (dB/m)} = \text{Net field strength (dBuV/m)}$$

Net:

This is the net field strength measurement (as shown above).

Limit:

This is the FCC Class B radiated emission limit (in units of dBuV/m). The FCC limits are given in units of uV/m. The following formula is used to convert the units of uV/m to dbuV/m:

$$\text{Limit (dBuV/m)} = 20 * \log(\text{uV/m})$$

Margin :

This is the margin of compliance below the FCC limit. The units are given in dB. A negative margin indicates the emission was below the limit. A positive margin indicates that the emission exceeds the limit.

Example only:

Reading + AF	= Net Reading :	Net reading – FCC limit	= Margin
+ 21.5 dBuV + 26 dB/m	= 47.5 dBuV/m :	47.5 dBuV/m – 57.0 dBuV/m	= -9.5 dB

8. Test conditions

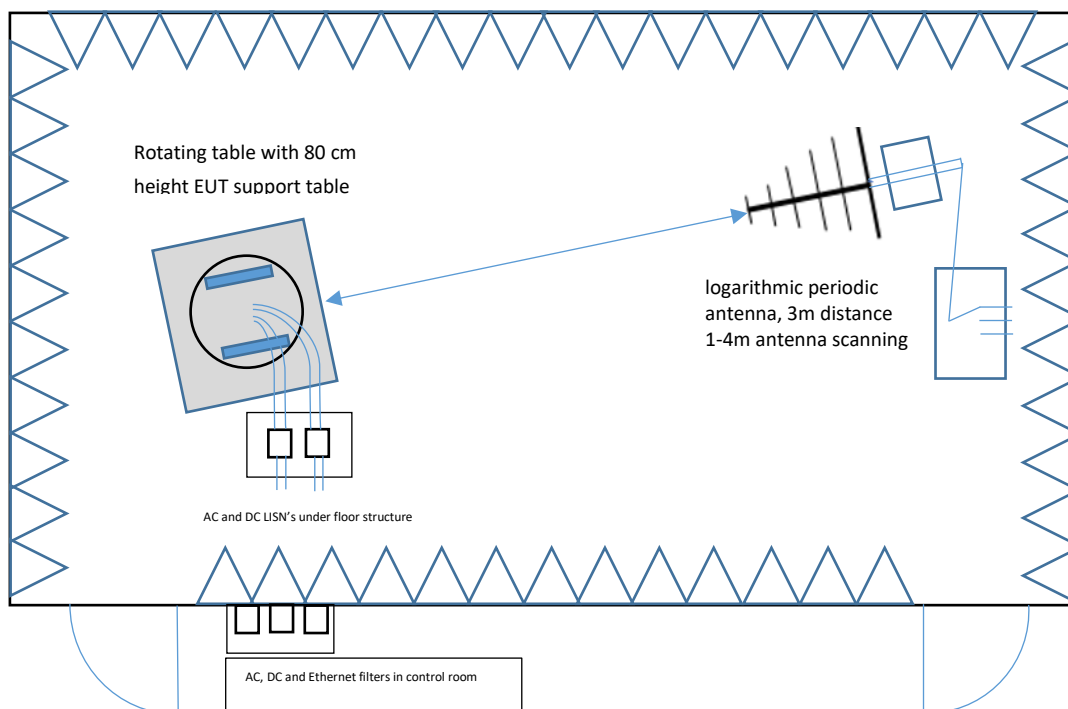
All radiated tests were performed in a semi-anechoic chamber, where the measurement antenna (Bilog antenna for the range between 30 MHz to 1000 MHz, 1 GHz-18 GHz Double-ridged horn antenna and 18 GHz-40 GHz horn antenna) is located at a distance of 3 m.

The equipment under test was set up on a non-conductive platform above the ground plane and the situation and orientation was varied to find the maximum radiated emission. It was also rotated 360° and the antenna height (all antennas) was varied from 1 to 4 meters to find the maximum radiated emission.

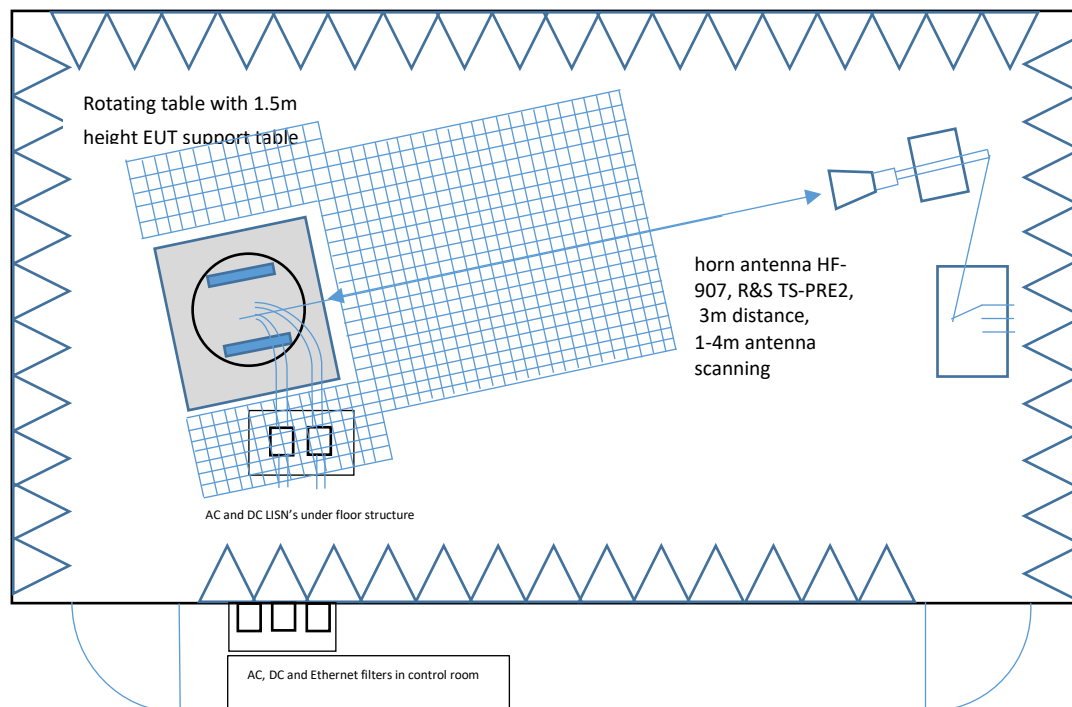
Measurements were made in both horizontal and vertical planes of polarization. To determine worst-case scenario, pre-scan measurements have been conducted in both horizontal and vertical planes of polarization and for portable equipment measurement with all three orthogonal axis. Final test is then performed according to pre-scan results.

A resolution bandwidth / video bandwidth of 100 kHz / 300 kHz was used for frequencies below 1 GHz and 1 MHz / 3 MHz for frequencies above 1 GHz.

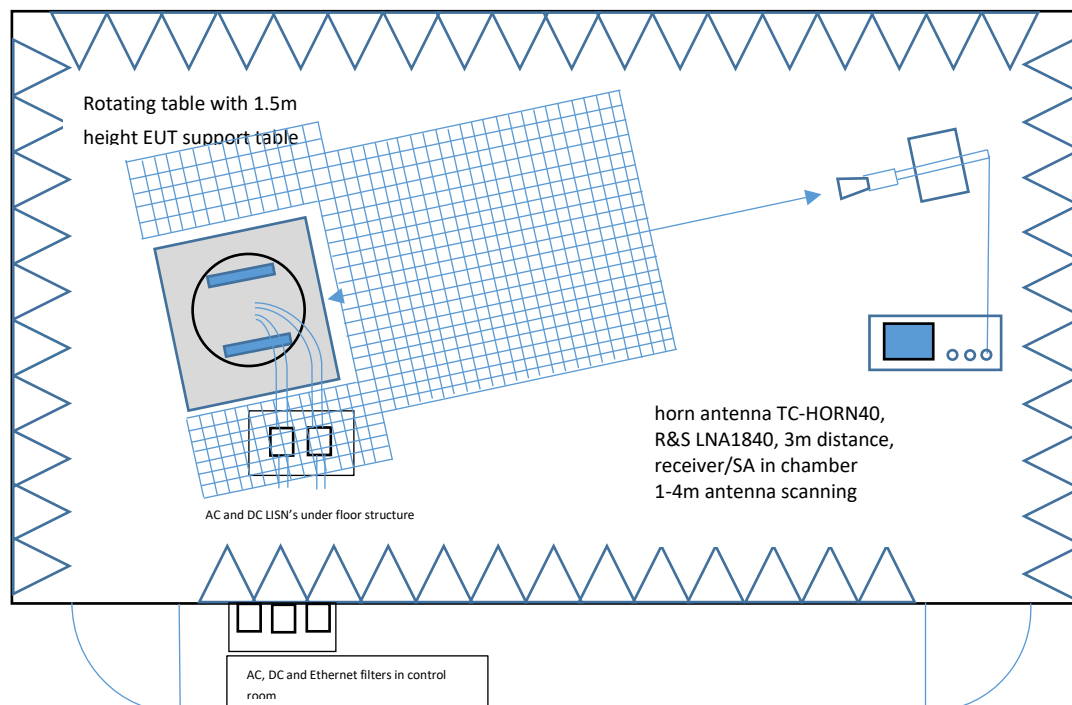
Radiated measurements setup from 30 MHz to 1 GHz:



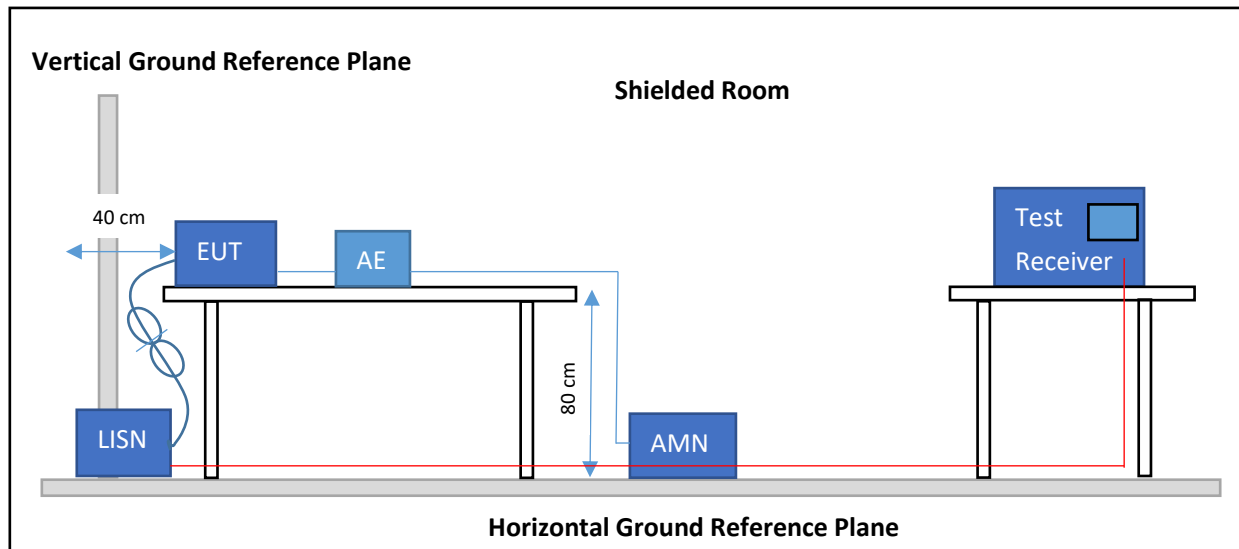
Radiated measurements setup from 1 GHz to 18 GHz:



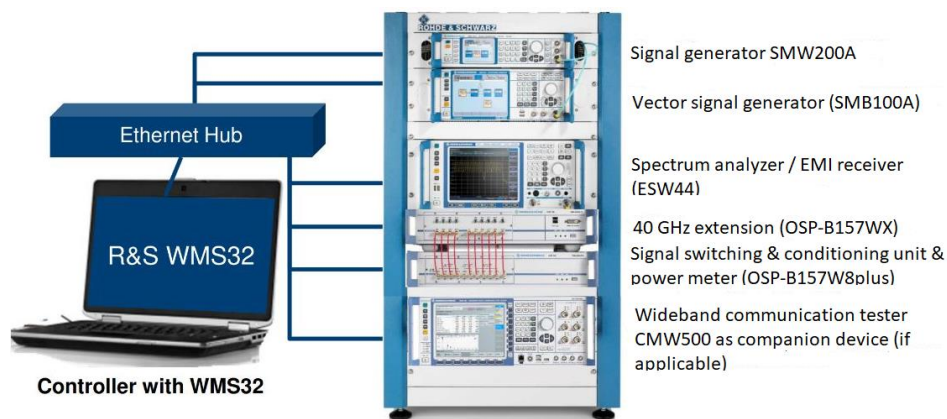
Radiated measurements setup from 18 GHz to 26 / 40 GHz:



Conducted emission setup



Conducted RF measurement system:



9. Summary

FCC/ISED Requirement (15.247 / RSS-247)		Reference method	Result	Remark
Occupied Bandwidth	ISED RSS-Gen, Issue 5 A2 (section 6.7)	ANSI C63.10-2020 + Cor.1-2023	N/R	Informational only
6 dB Bandwidth	FCC § 15.247(a)(2) / RSS-247, Issue 4 (section 5.2 (a))	ANSI C63.10-2020 + Cor.1-2023	PASS	
Maximum peak conducted power	FCC § 15.247(b) / RSS-247, Issue 4 (section 5.4 (d))	ANSI C63.10-2020 + Cor.1-2023	PASS	
Power spectral density	FCC § 15.247(e) / RSS-247, Issue 4 (section 5.2 (b))	ANSI C63.10-2020 + Cor.1-2023	PASS	
AC power line conducted emissions	FCC § 15.207 / RSS-247, Issue 4 (section 3.1)	ANSI C63.10-2020 + Cor.1-2023	PASS	
Band edge compliance	FCC § 15.247(d) / RSS-247, Issue 4 (section 5.5)	ANSI C63.10-2020 + Cor.1-2023	PASS	
Conducted spurious emissions	FCC § 15.247(d) / RSS-247, Issue 4 (section 5.5)	ANSI C63.10-2020 + Cor.1-2023	PASS	
Transmitter radiated spurious emissions	FCC § 15.247(d), FCC § 15.209 / RSS-Gen, Issue 5 A2 (section 6.13)	ANSI C63.10-2020 + Cor.1-2023	PASS	
Receiver radiated spurious emissions	ISED RSS-247, Issue 4 (section 3.1)	ANSI C63.4-2014 + C63.4a-2017	PASS	
Possible test case verdicts: PASS = Tested device meets the requirements FAIL = Tested device does not meet the requirements N/A = Test requirement not applicable for tested device N/T = Test requirement applicable for tested device, but not tested				
Applicable FCC KDB(s): KDB 558074 DO1: DTS measurement guidance v 0502 (Apr 2, 2019)				

10. Occupied bandwidth

Reference: ISED RSS-Gen, Issue 5 A2 (section 6.7)

Test method: ANSI C63.10-2020+Cor.1-2023 (6.9.3)

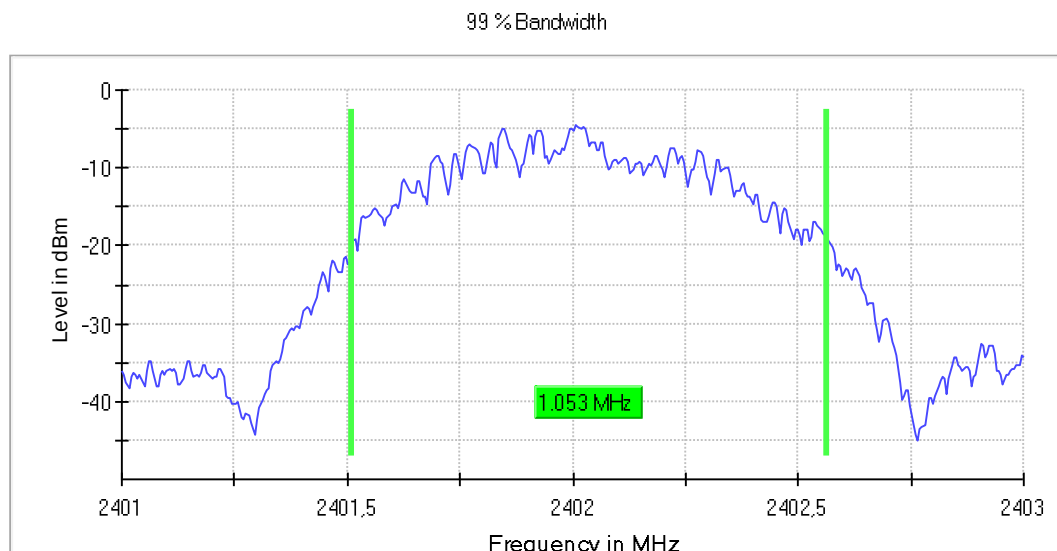
Limits
None (Informational only)

Procedure
1. EUT transmitter is activated in test mode under normal conditions 2. Spectrum analyzer is set to peak detection and maximum hold with a span twice the emission spectrum 3. The resolution bandwidth is set to the range of 1% to 5% of the occupied bandwidth 4. The occupied bandwidth is measured with the build-in analyzer function

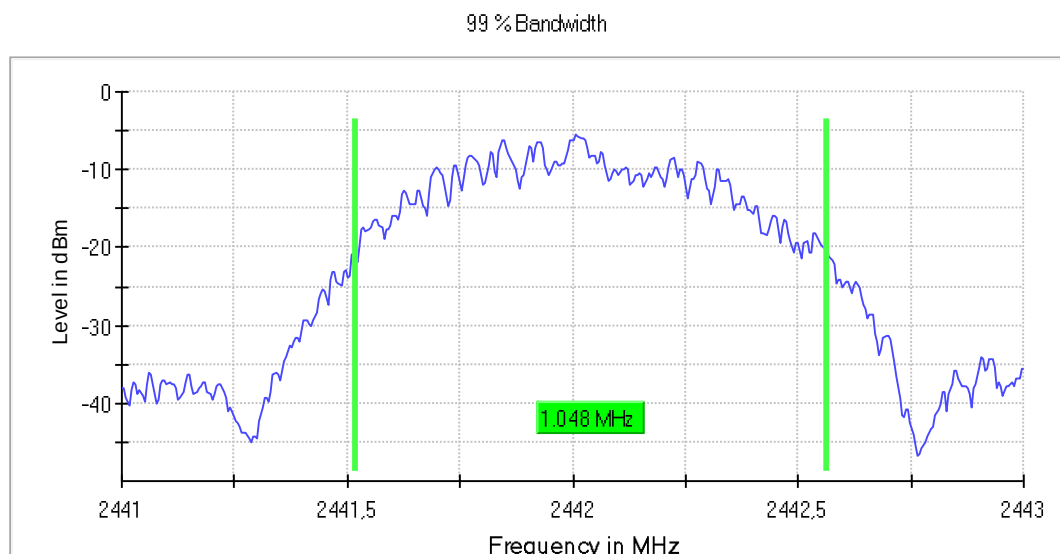
Summary:

Summary		
Mode / modulation	Frequency (MHz)	Bandwidth (MHz)
Bluetooth LE, 1 Mbps	2402	1.052632
Bluetooth LE, 1 Mbps	2442	1.047619
Bluetooth LE, 1 Mbps	2480	1.052631

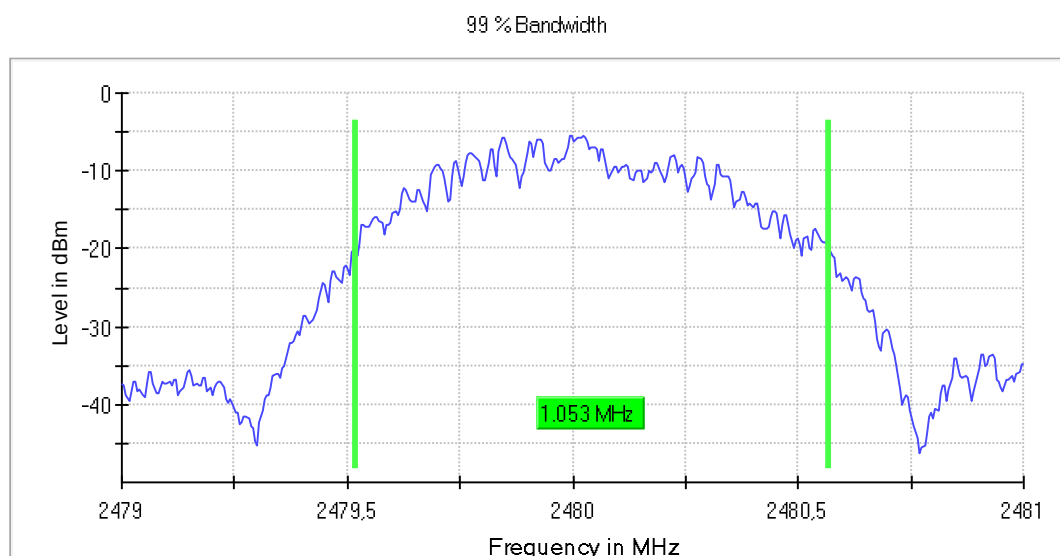
Occupied bandwidth, low channel



Occupied bandwidth, middle channel



Occupied bandwidth, high channel



11. 6 dB bandwidth

Reference: FCC title 47 part 15 §15.247(a), ISED RSS-247, Issue 4 (section 5.2)

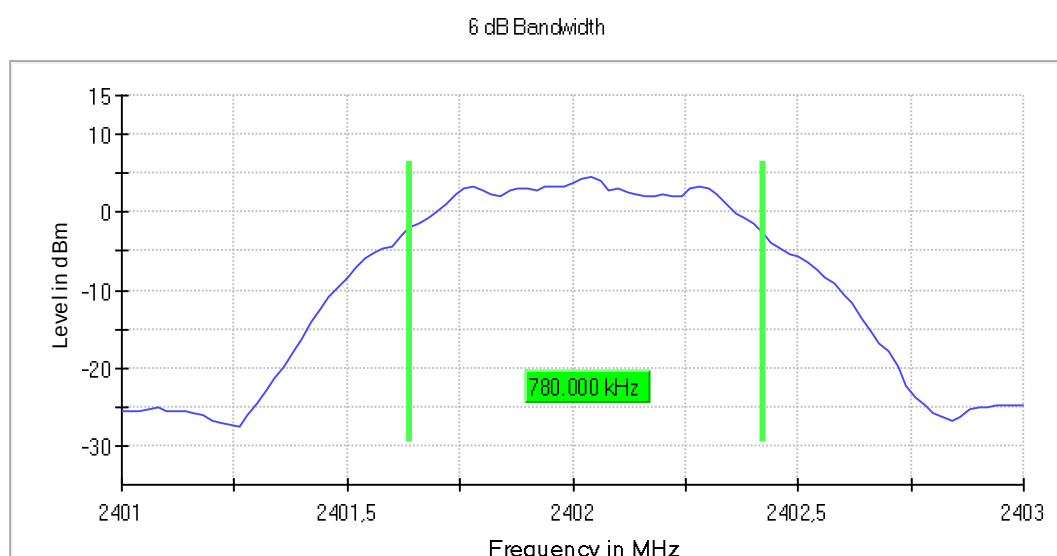
Test method: KDB 558074 D01 DTS Meas Guidance v05r02 and ANSI C63.10-2020+Cor.1-2023 (11.8.1)

Limits
The minimum 6 dB bandwidth shall be at least 500 kHz.

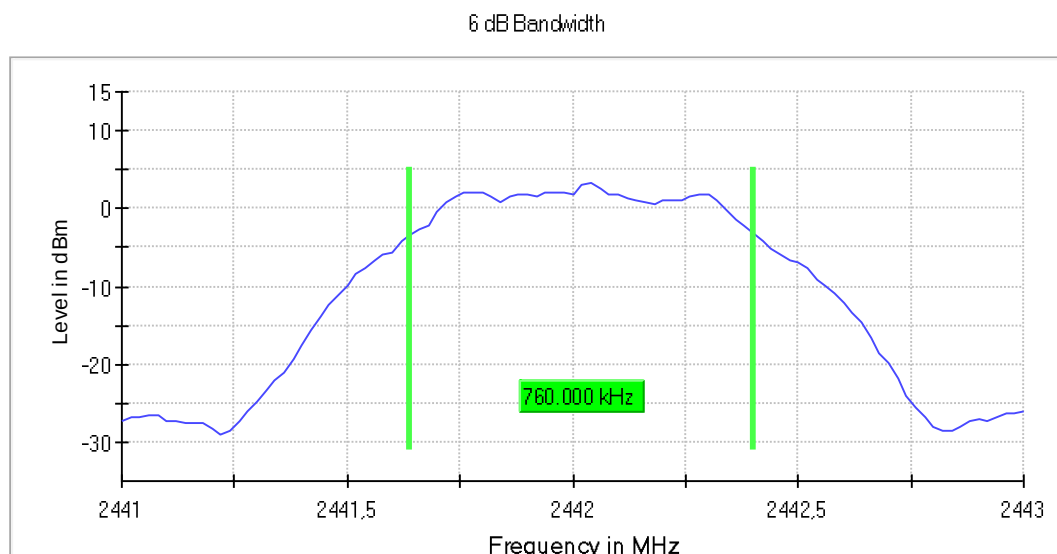
Test procedure
1. EUT set to test mode 2. Span set to at least twice the emission spectrum 3. Detector set to peak and max hold and BW is set to 100 kHz 4. Envelope peak value of emission spectrum is selected 5. Marker on envelope of spectrum is set to level of -6 dB to the left of the peak 6. Marker on envelope of spectrum is set to level of -6 dB to the right of the peak 7. 6 dB bandwidth is determined by marker frequency separation

Mode / modulation	DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)	Max Level (dBm)	Result
Bluetooth LE, 1 Mbps	2402.000000	0.780000	0.500000	---	2401.640000	2402.420000	4.6	PASS
Bluetooth LE, 1 Mbps	2442.000000	0.760000	0.500000	---	2441.640000	2442.400000	3.3	PASS
Bluetooth LE, 1 Mbps	2480.000000	0.760000	0.500000	---	2479.640000	2480.400000	4.1	PASS

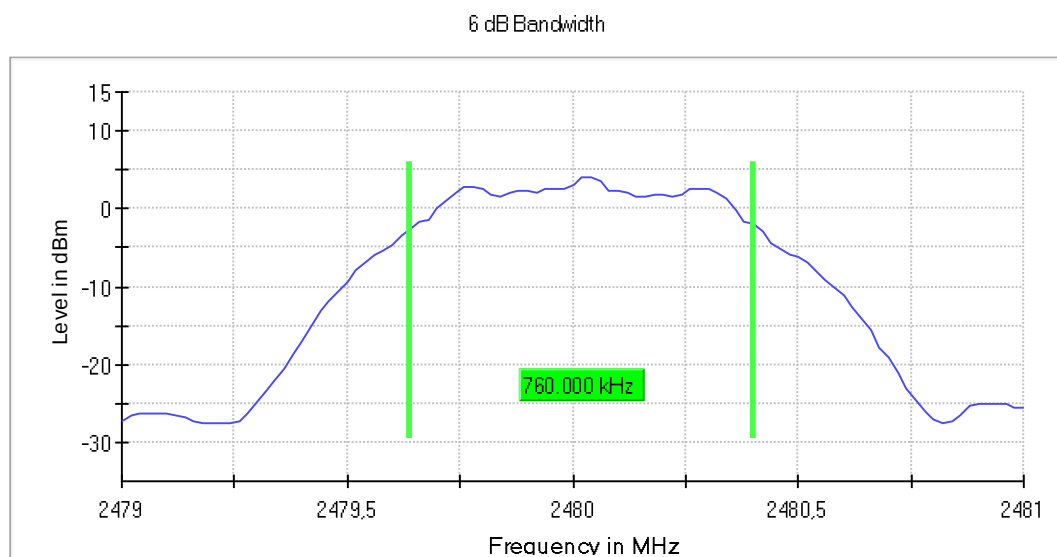
6 dB Bandwidth, low channel:



6 dB Bandwidth, middle channel:



6 dB Bandwidth, high channel:



12. Peak conducted output power

Reference: FCC part 15 §15.247(b), ISD RSS-247, Issue 4 (section 5.4)

Test method: KDB 558074 D01 DTS Meas Guidance v05r02 and ANSI C63.10-2020+Cor.1-2023 (11.9.1.1)

Limits
For systems using digital modulation in the 2400-2483.5 MHz band: 1 watt (30 dBm). The e.i.r.p. shall not exceed 4 W (36 dBm) (Canada).
The conducted output power limit specified above is based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in the table, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

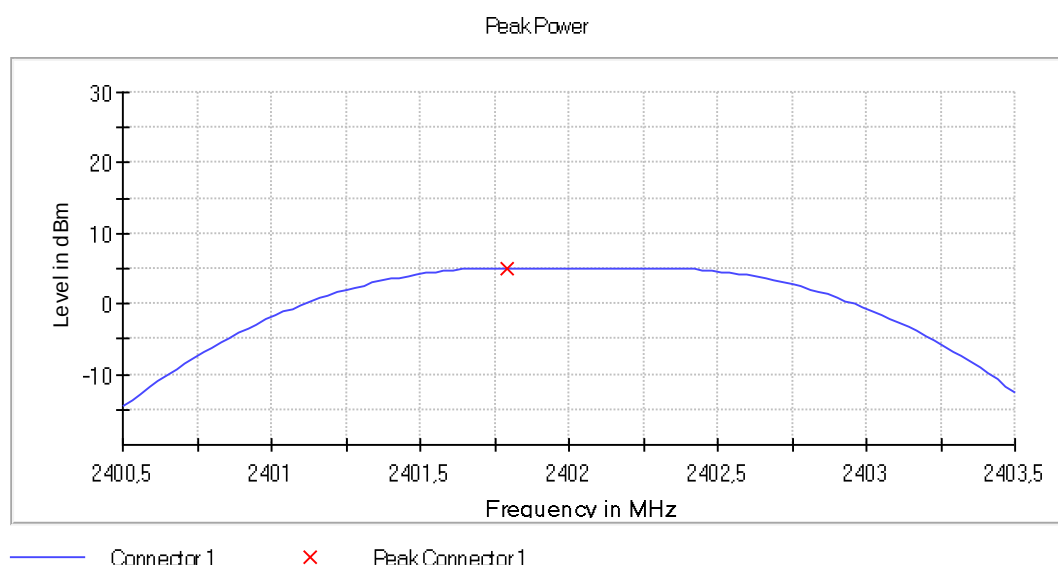
Test procedure
1. EUT set to test mode (communication tested is used if needed) 2. Analyzer resolution bandwidth is set $\geq$ DTS bandwidth 3. Detector set to peak and max hold 4. Sweep time is set to auto 5. After trace has stabilized a marker is set to peak envelope

The EIRP power (dBm) is calculated by adding the declared maximum antenna gain to the measured conducted power.

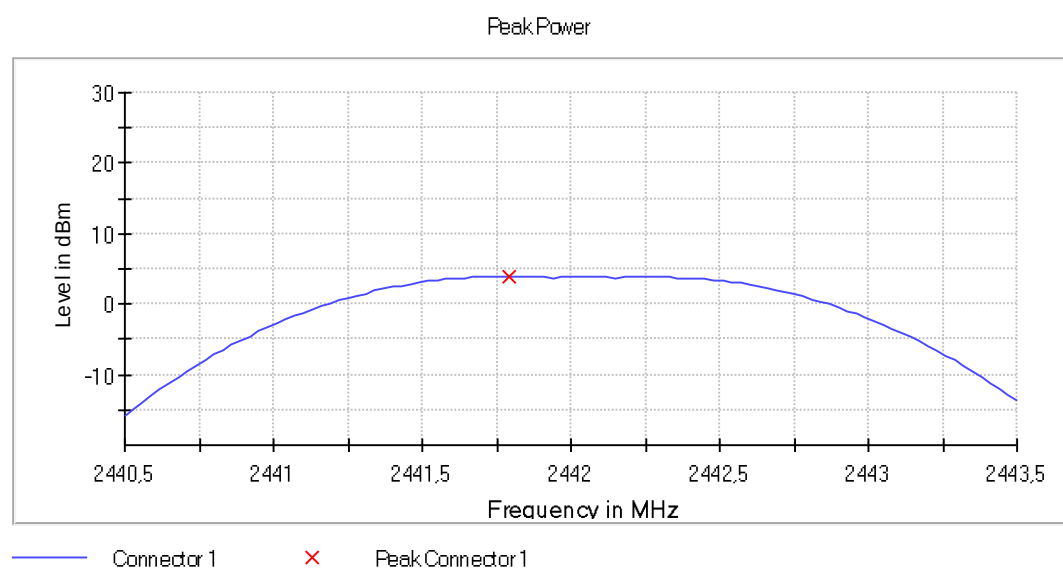
Maximum Declared Antenna Gain: 1.1 dBi

Mode / modulation	DUT Frequency (MHz)	Peak Power (dBm)	EIRP Power (dBm)	Result
Bluetooth LE, 1 Mbps	2402.000000	5.1	6.2	PASS
Bluetooth LE, 1 Mbps	2442.000000	3.9	5.0	PASS
Bluetooth LE, 1 Mbps	2480.000000	4.4	5.5	PASS

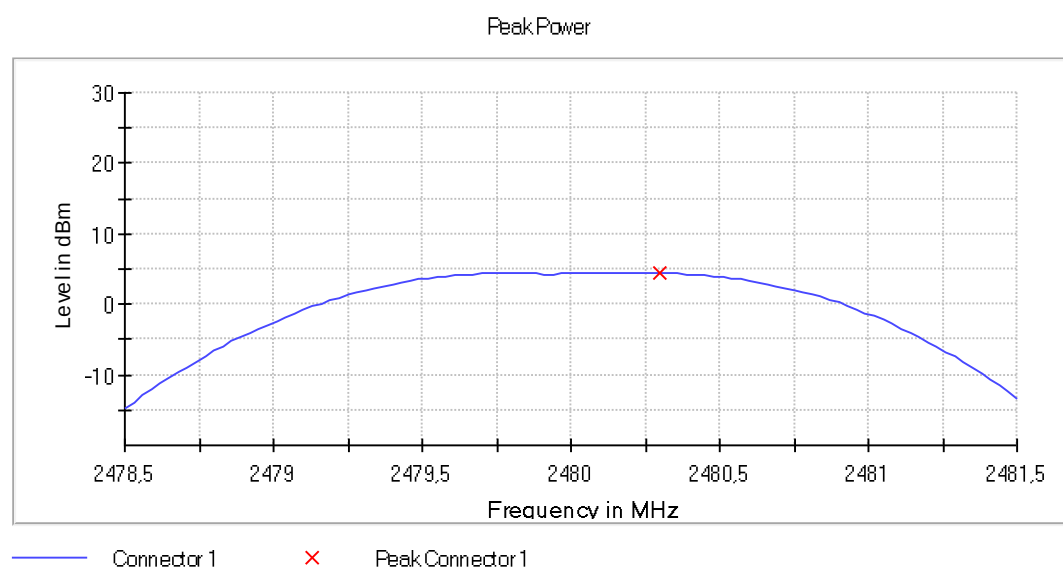
Peak power, low channel



Peak power, middle channel



Peak power, high channel



13. Peak Power Spectral Density

Reference: FCC §15.247(a),(e), ISED RSS-247, Issue 4 (section 5.2)

Test method: KDB 558074 D01 DTS Meas Guidance v05r02 and C63.10-2020+Cor.1-2023 (11.10.2, 14.3.2)

Specification: 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.

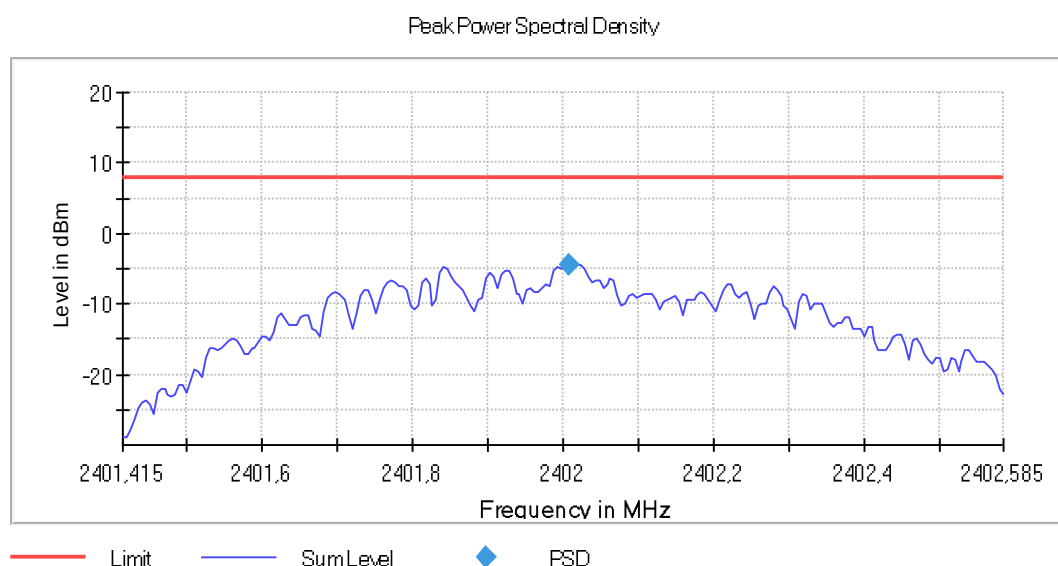
Limits
≤ 8 dBm / 3 kHz

Test procedure
1. EUT set to test mode 2. The analyser is set to DTS channel center frequency with a span of 1.5 times the DTS bandwidth 3. The analyzer is set to 100 kHz with VBW ≥ RBW and the detector is set to peak with max hold 4. After trace has stabilized a marker is set to the envelope maximum 5. If the power spectral density is above the limit the RBW is reduces (not lower than 3 kHz) and the measurement is repeated 6. If the EUT has more than one transmit chain the procedure is repeated for each chain

Summary

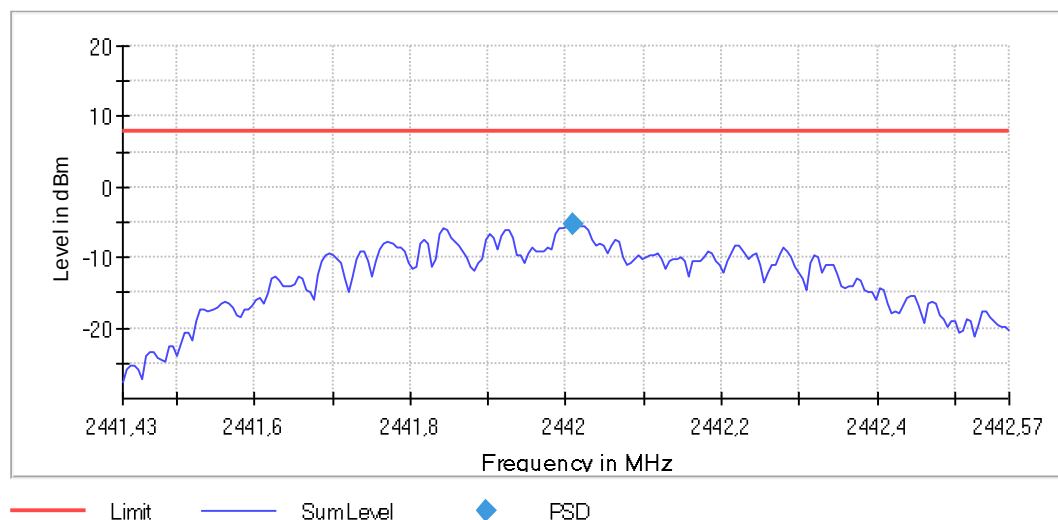
Mode / modulation	DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
Bluetooth LE, 1 Mbps	2402.000000	2402.007532	-4.407	8.0	PASS
Bluetooth LE, 1 Mbps	2442.000000	2442.007533	-5.181	8.0	PASS
Bluetooth LE, 1 Mbps	2480.000000	2479.992467	-5.303	8.0	PASS

Peak power spectral density, low channel



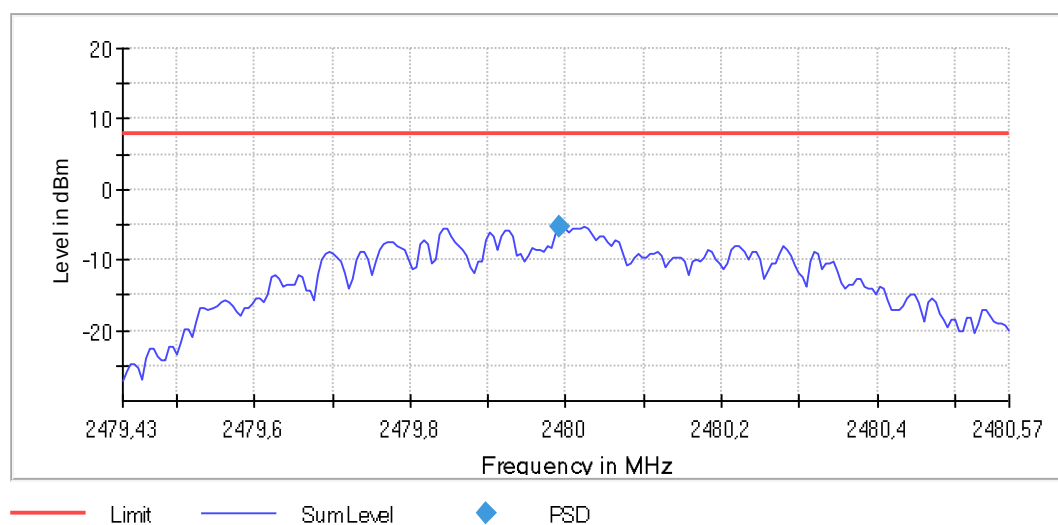
Peak power spectral density, middle channel

Peak Power Spectral Density



Peak power spectral density, high channel:

Peak Power Spectral Density



14. Band edge emissions compliance (transmitter)

Reference: FCC §15.247(d), ISSED RSS-247, Issue 4 (section 5.5)

Test method: KDB 558074 D01 DTS Meas Guidance v05r02 8.7 and ANSI C63.10-2020+Cor.1-2023 (11.13)

Specification: In any 100 kHz bandwidths outside the frequency band in which the 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, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

Limits	
Power measurement	Out-of-band attenuation (dB)
Peak	20
RMS	30

Limits
1. EUT set to test mode (communication tester is used if needed)
2. Span set around lower band edge and detector is set to peak and max hold
3. Resolution bandwidth is set to 100 kHz
4. Peak emission level(s) within frequency band and outside frequency band is measured
5. Band edge attenuation is determined from level difference

Summary

Mode / modulation	DUT Frequency (MHz)	Result
Bluetooth LE, 1 Mbps	2402.000000	PASS
Bluetooth LE, 1 Mbps	2480.000000	PASS

Measurements, band edge low

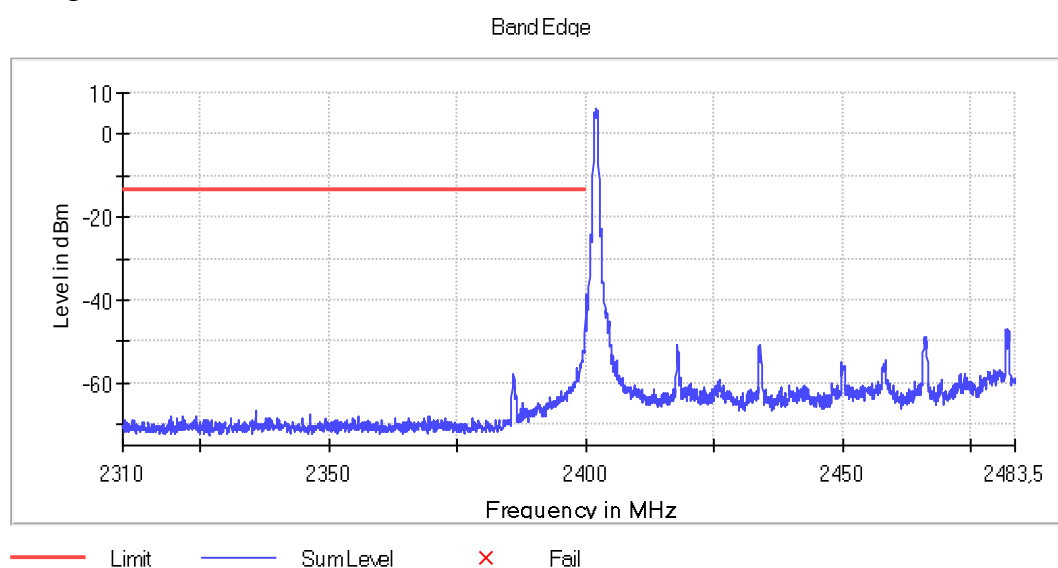
Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2400.000000	-38.5	24.9	-13.6	PASS
2399.949972	-43.0	29.4	-13.6	PASS
2399.899944	-47.8	34.2	-13.6	PASS
2399.849917	-50.1	36.5	-13.6	PASS
2399.799889	-52.0	38.4	-13.6	PASS
2399.499722	-52.0	38.4	-13.6	PASS
2399.549750	-52.1	38.5	-13.6	PASS
2399.649805	-52.1	38.6	-13.6	PASS
2399.749861	-52.2	38.6	-13.6	PASS
2399.599778	-52.4	38.8	-13.6	PASS
2399.699833	-52.5	38.9	-13.6	PASS
2399.449694	-53.1	39.5	-13.6	PASS
2399.249583	-54.3	40.7	-13.6	PASS
2399.199555	-54.4	40.8	-13.6	PASS
2399.399666	-54.9	41.4	-13.6	PASS

Measurements, band edge high

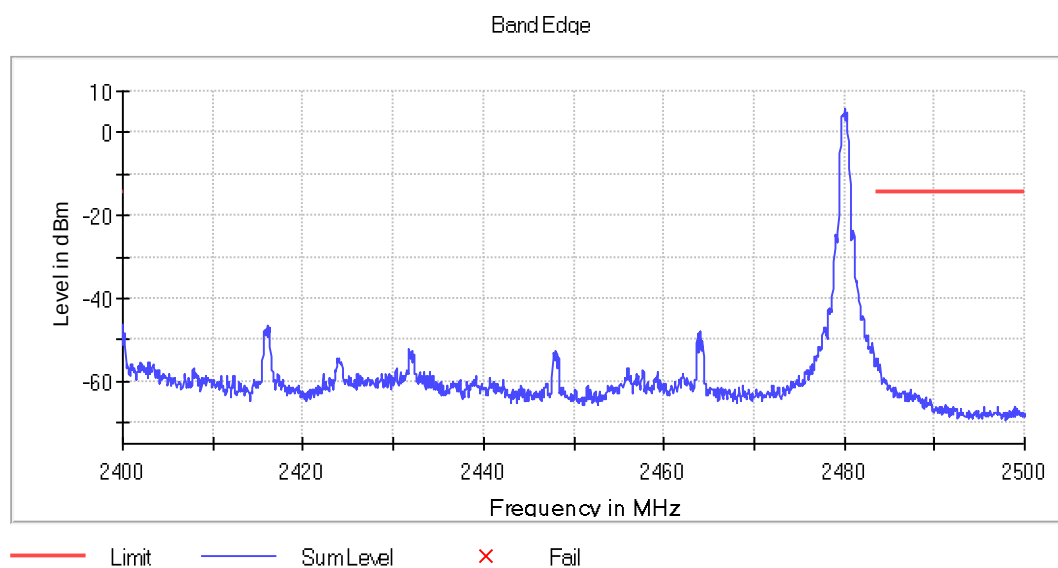
Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2400.000000	-46.1	31.9	-14.3	PASS

2483.650456	-54.7	40.4	-14.3	PASS
2483.700608	-54.9	40.7	-14.3	PASS
2483.550152	-55.2	40.9	-14.3	PASS
2483.600304	-55.4	41.1	-14.3	PASS
2483.951368	-56.0	41.8	-14.3	PASS
2484.001520	-56.0	41.8	-14.3	PASS
2483.800912	-56.5	42.3	-14.3	PASS
2483.851064	-56.6	42.3	-14.3	PASS
2483.750760	-57.4	43.2	-14.3	PASS
2483.901216	-57.6	43.3	-14.3	PASS
2484.402736	-58.9	44.6	-14.3	PASS
2484.452888	-58.9	44.7	-14.3	PASS
2484.653495	-59.4	45.2	-14.3	PASS
2484.101824	-59.4	45.2	-14.3	PASS

Band edge, low channel



Band edge, high channel



15. Tx spurious emissions, conducted

Reference: FCC §15.247(d), ISED RSS-247, Issue 4 (section 5.5)

Test method: KDB 558074 D01 DTS Meas Guidance v05r02 8.5 and ANSI C63.10-2020+Cor.1-2023 (11.11.2 & 11.11.3)

Limits	
Power measurement	Out-of-band attenuation (dB)
Peak	20
RMS	30

Test procedure
1. EUT set to test mode (communication tester is used if needed) 2. Span set around lower band edge and detector is set to peak and max hold 3. Resolution bandwidth is set to 100 kHz 4. Markers are set to peak emission levels outside frequency band

Mode / modulation	DUT Frequency (MHz)	Result
Bluetooth LE, 1 Mbps	2402.000000	PASS
Bluetooth LE, 1 Mbps	2440.000000	PASS
Bluetooth LE, 1 Mbps	2480.000000	PASS

Pre Measurements, low channel

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
2390.000000	-58.0	44.4	-13.7
9602.440476	-65.6	51.9	-13.7
19780.925595	-68.2	54.5	-13.7
19740.931548	-68.7	55.0	-13.7
19690.938988	-68.8	55.1	-13.7
19720.934524	-69.0	55.3	-13.7
19710.936012	-69.0	55.3	-13.7
19750.930060	-69.0	55.3	-13.7
19700.937500	-69.1	55.4	-13.7
19670.941964	-69.1	55.5	-13.7
19630.947917	-69.3	55.6	-13.7
19770.927083	-69.3	55.6	-13.7
19760.928571	-69.4	55.8	-13.7
19730.933036	-69.5	55.8	-13.7
19580.955357	-69.8	56.1	-13.7

Pre Measurements, middle channel

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
9762.416667	-60.4	44.8	-15.6
2390.000000	-65.8	50.1	-15.6
19740.931548	-68.6	53.0	-15.6
19730.933036	-68.7	53.1	-15.6
19790.924107	-68.7	53.1	-15.6
19700.937500	-68.8	53.2	-15.6
19760.928571	-68.9	53.3	-15.6
19720.934524	-69.0	53.3	-15.6
19690.938988	-69.0	53.4	-15.6
19780.925595	-69.2	53.5	-15.6
19710.936012	-69.5	53.9	-15.6
19750.930060	-69.6	54.0	-15.6

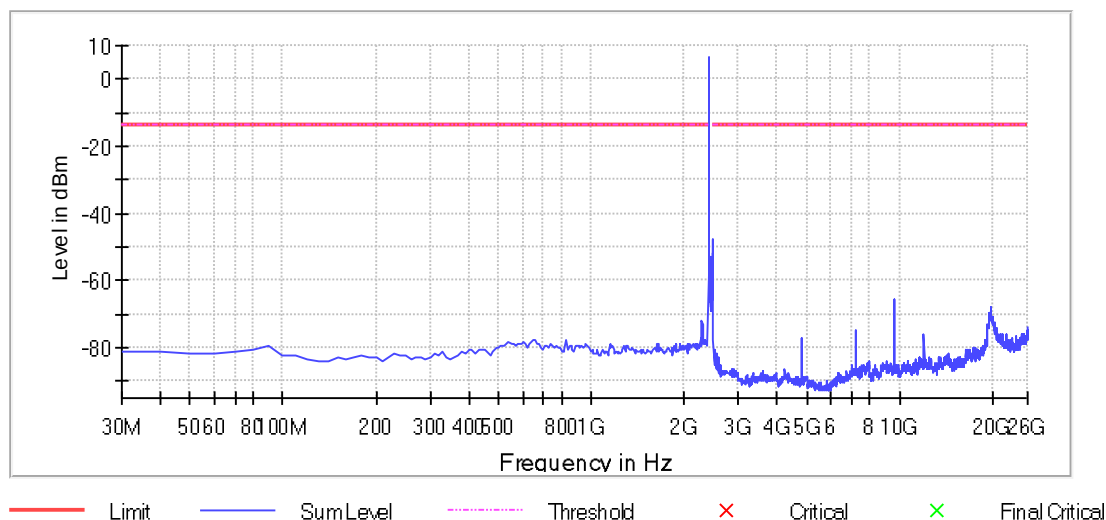
19670.941964	-69.7	54.1	-15.6
19770.927083	-69.7	54.1	-15.6
19810.921131	-69.8	54.1	-15.6

Pre Measurements, top channel

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
19690.938988	-58.6	44.2	-14.4
19720.934524	-58.7	44.3	-14.4
19760.928571	-58.7	44.3	-14.4
19730.933036	-58.8	44.4	-14.4
19680.940476	-58.9	44.5	-14.4
19710.936012	-59.0	44.6	-14.4
19780.925595	-59.0	44.6	-14.4
19700.937500	-59.1	44.7	-14.4
19800.922619	-59.3	44.9	-14.4
19790.924107	-59.6	45.2	-14.4
19740.931548	-59.7	45.3	-14.4
19810.921131	-59.7	45.4	-14.4
19770.927083	-59.9	45.5	-14.4
19820.919643	-59.9	45.5	-14.4
19610.950893	-60.0	45.6	-14.4

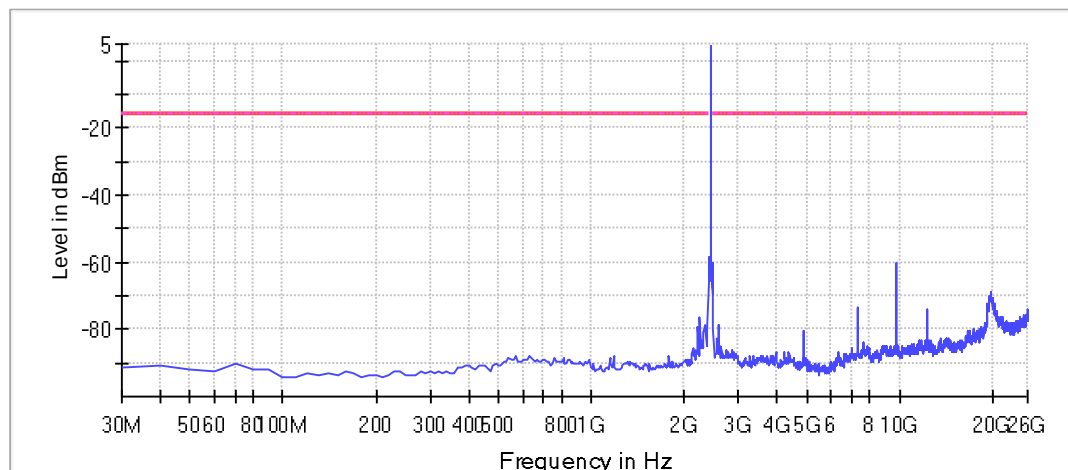
Low channel

Spurious



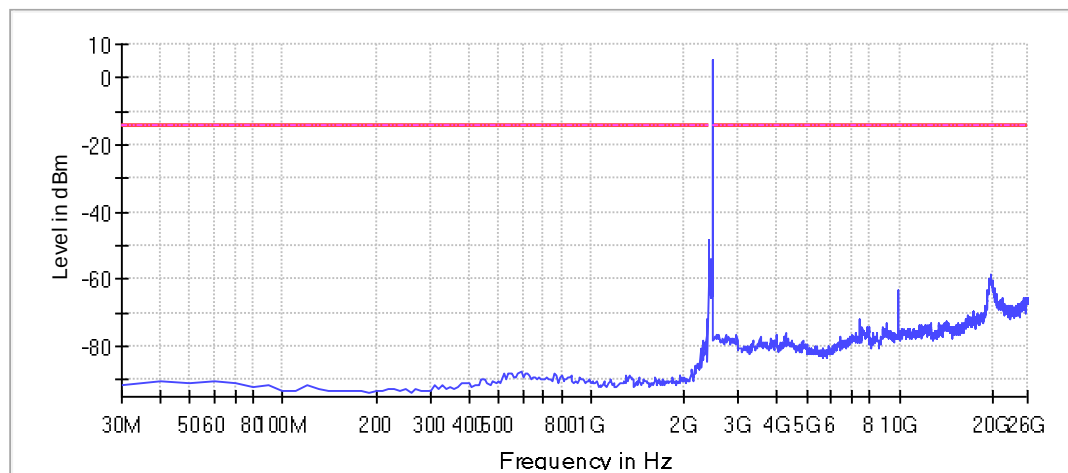
Middle channel

Spurious



High channel

Spurious



16. Emissions in restricted frequency bands

Reference: FCC §15.247(d), ISSED RSS-247, Issue 4 (section 6.2)

Test method: KDB 558074 D01 DTS Meas Guidance v05r02 8.6 and ANSI C63.10-2020+Cor.1-2023 (11.12)

Limits	
Power measurement	Out-of-band attenuation (dB)
Peak	according to FCC §15.209 and FCC §15.205

Test procedure
1. EUT set to test mode (communication tester is used if needed)
2. Span set around lower band edge and detector is set to peak and max hold
3. Resolution bandwidth is set to 300 Hz
4. Markers are set to peak emission levels outside frequency band

Mode / modulation	DUT Frequency (MHz)	Result
Bluetooth LE, 1 Mbps	2402.000000	PASS
Bluetooth LE, 1 Mbps	2440.000000	PASS
Bluetooth LE, 1 Mbps	2480.000000	PASS

Pre Measurements, Low channel

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
2483.500000	-50.5	29.3	-21.2
2484.000018	-51.4	30.2	-21.2
2486.500111	-52.5	31.3	-21.2
2484.500037	-55.2	34.0	-21.2
2486.000092	-55.4	34.2	-21.2
2485.500074	-55.4	34.2	-21.2
2485.000055	-55.9	34.7	-21.2
2386.495177	-56.3	35.1	-21.2
2487.500148	-56.8	35.6	-21.2
2487.000129	-56.9	35.7	-21.2
2386.995355	-57.2	36.0	-21.2
19702.685134	-57.4	36.2	-21.2
19762.688134	-57.5	36.3	-21.2
19763.188159	-57.5	36.3	-21.2
2385.994998	-57.5	36.3	-21.2
2483.500000	-50.5	29.3	-21.2

Pre Measurements, middle channel

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
2483.500000	-52.9	31.7	-21.2
2485.000055	-54.3	33.1	-21.2
2484.500037	-54.3	33.1	-21.2
2389.996427	-54.8	33.6	-21.2
2486.000092	-54.9	33.7	-21.2
2490.000240	-55.1	33.9	-21.2

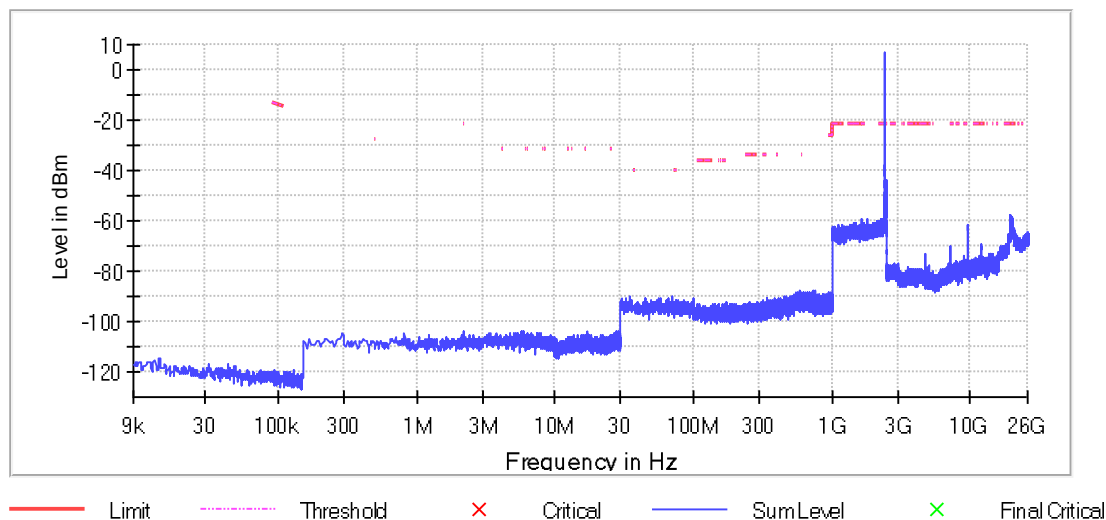
2488.500185	-55.4	34.2	-21.2
2488.000166	-55.6	34.4	-21.2
2489.500222	-56.0	34.8	-21.2
2388.996070	-56.3	35.1	-21.2
2484.000018	-56.5	35.3	-21.2
2388.495891	-56.7	35.5	-21.2
2387.495534	-57.0	35.8	-21.2
2485.500074	-57.0	35.8	-21.2
2487.000129	-57.1	35.9	-21.2

Pre Measurements, top channel

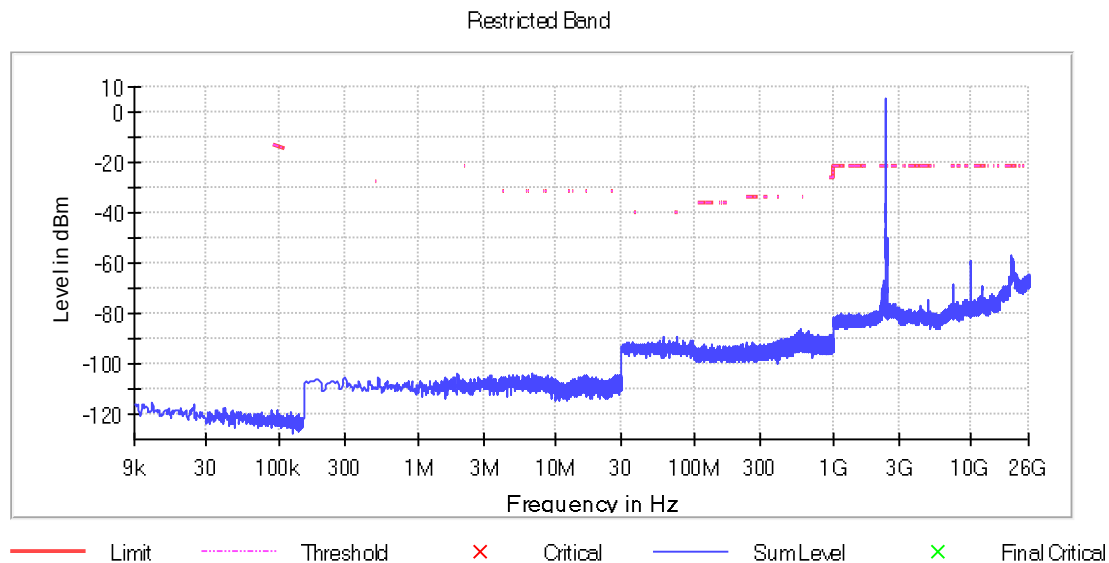
Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
2483.500000	-46.4	25.2	-21.2
2484.000018	-50.2	29.0	-21.2
2485.000055	-52.0	30.8	-21.2
2389.996427	-52.3	31.1	-21.2
2388.996070	-52.5	31.3	-21.2
2484.500037	-52.9	31.7	-21.2
2388.495891	-53.3	32.1	-21.2
15608.485517	-53.3	32.1	-21.2
12577.873409	-53.4	32.2	-21.2
15892.996042	-53.5	32.3	-21.2
15892.496023	-53.6	32.4	-21.2
12479.369765	-53.6	32.4	-21.2
2485.500074	-53.7	32.5	-21.2
15545.983205	-53.8	32.6	-21.2
15862.494913	-53.8	32.6	-21.2

Low channel

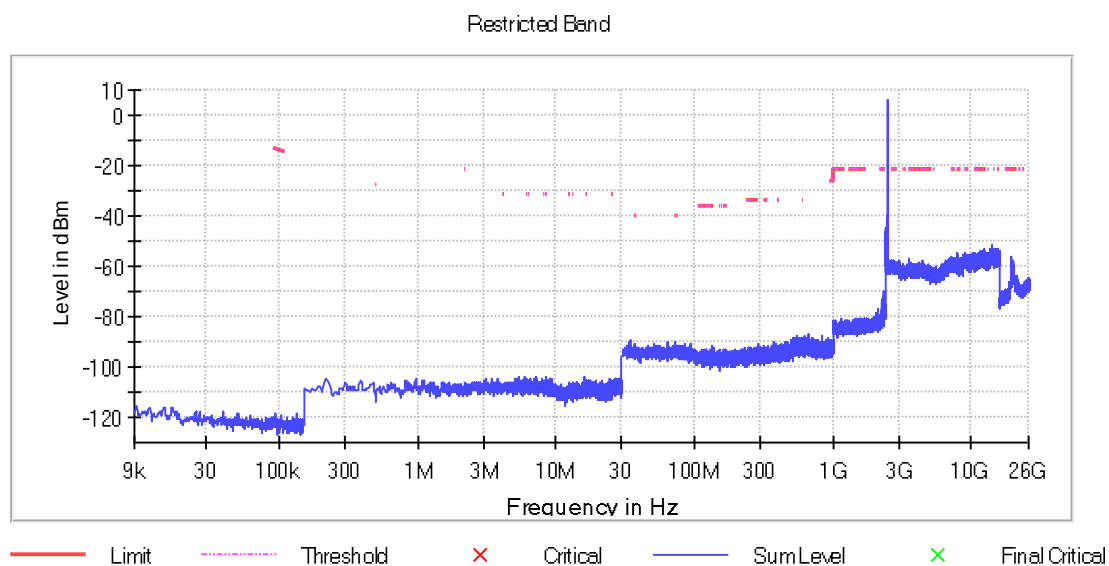
Restricted Band



Middle channel



High channel



17. Tx spurious emissions, radiated

Reference: FCC §15.247(d), FCC §15.209, ISSED RSS-Gen Issue 5 A2 (section 6.13)

Test method: KDB 558074 D01 DTS Meas Guidance v05r02 8.5 and ANSI C63.10-2020+Cor.1-2023 (6.4, 6.5, 6.6 & 11.12)

Specification: Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)/RSS-Gen):

Limits				
Frequency range (MHz)	Detector	Field strength (uV/m)	Field strength (dBuV/m)	Measurement distance (m)
0.009 – 0.09	Average	2400/F(kHz)	-	300
0.09 – 0.110	Quasi-Peak	2400/F(kHz)	-	300
0.110 – 0.490	Average	2400/F(kHz)	-	300
0.490 – 1.705	Quasi-Peak	24000/F(kHz)	-	30
1.705 – 30.0	Quasi-Peak	30	-	30
30 - 88	Quasi-Peak	100	40	3
88 – 216	Quasi-Peak	150	43.5	3
216 – 960	Quasi-Peak	200	46	3
960 - 1000	Quasi-Peak	500	54	3
>1000	Average	500	54	3

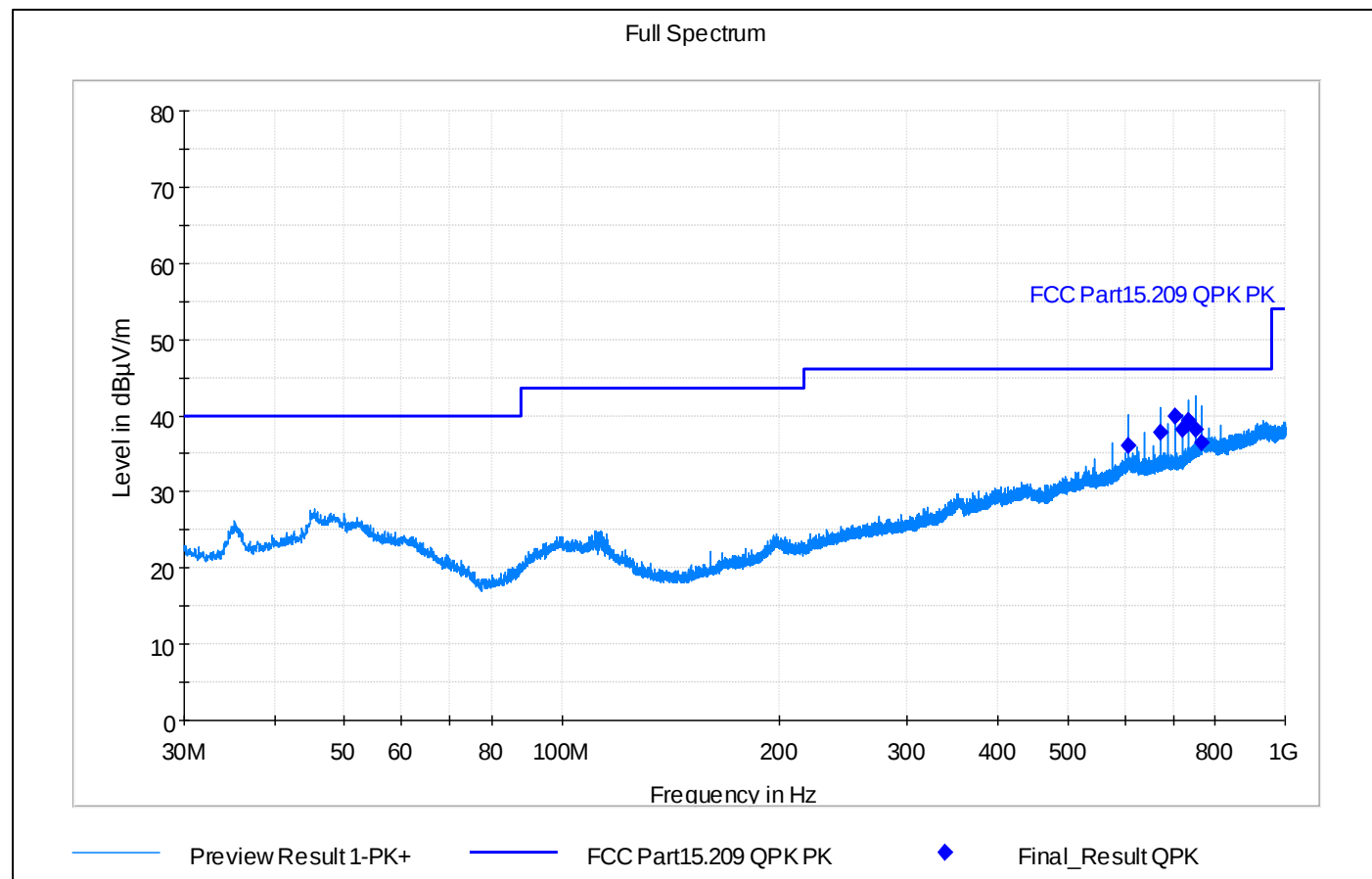
Test procedure 30 MHz -1 GHz	
1.	EUT is placed on a non conducting support at the center of a turn table 0.8m above the ground
2.	EUT set to test mode
3.	The receiver is set to peak detection with max hold
4.	The EUT is rotated through 360 degrees (orientation varied), measurements were made in both horizontal and vertical planes of polarization
5.	Found peak values were further maximized by adjusting turntable position $\pm 22,5$ degrees around detected value and scanning the antenna height 1 to 4m
6.	For maximized values, final measurement was done with the corresponding final detector.

Test procedure > 1 GHz	
1.	EUT is placed on a non conducting support at the center of a turn table 1.5m above the ground
2.	EUT set to test mode
3.	The receiver is set to peak detection with max hold
4.	The EUT is rotated through 360 degrees (orientation varied), measurements were made in both horizontal and vertical planes of polarization.
5.	Found peak values were further maximized by adjusting turntable position $\pm 22,5$ degrees around detected value and scanning the antenna height 1 to 4m
6.	For maximized values, final measurement was done with the corresponding final detector.

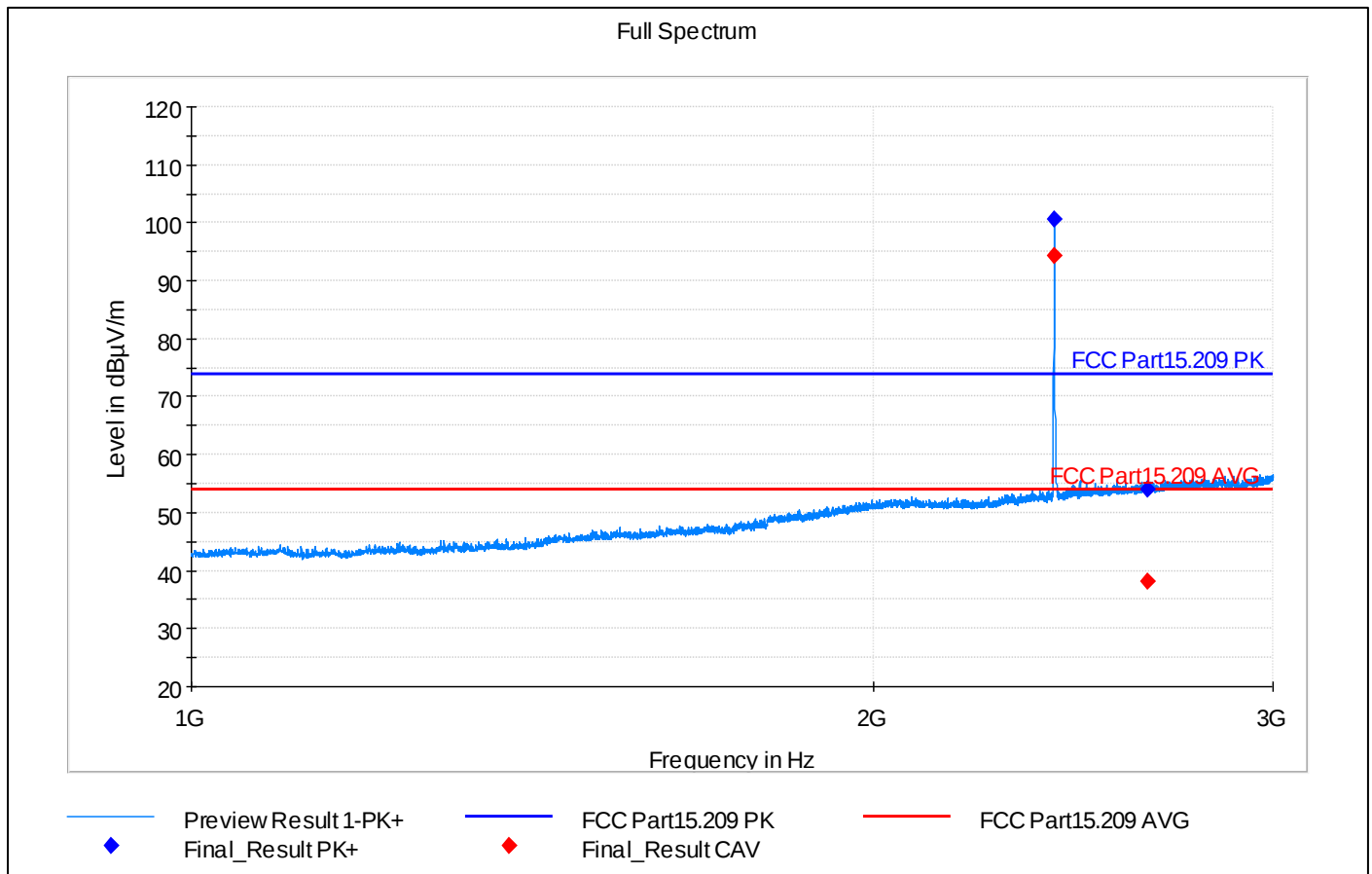
For average radiated emission measurements above 1000 MHz, there is also a limit corresponding to 20 dB above the indicated values in the table is specified when measuring with peak detector function. RSS-247: Attenuation below the general field strength limits specified in RSS-Gen is not required.

The field strength is calculated by adding correction factor to the measured level from the spectrum analyzer. This correction factor includes antenna factor, cable loss and pre-amplifiers gain.

Operation mode(s)	Configuration	Test Verdict
Bluetooth LE TX, 1 Mbps	Low channel, 2402 MHz	PASS
Bluetooth LE TX, 1 Mbps	Mid channel, 2440 MHz	PASS
Bluetooth LE TX, 1 Mbps	High channel, 2480 MHz	PASS

Low channel, 30 MHz – 1 GHz

Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB/m)	Comment
608.010	36.07	46.0	9.93	15000	120	98.0	V	12	90	30.0	PASS
672.000	37.84	46.0	8.16	15000	120	98.0	V	292	90	30.4	PASS
704.010	39.84	46.0	6.16	15000	120	114.0	H	59	0	30.6	PASS
720.000	38.15	46.0	7.85	15000	120	118.0	H	46	0	30.7	PASS
735.990	39.27	46.0	6.73	15000	120	115.0	H	46	0	31.5	PASS
752.010	38.15	46.0	7.85	15000	120	100.0	H	245	0	32.0	PASS
768.000	36.35	46.0	9.65	15000	120	102.0	H	226	0	32.1	PASS

Low channel, 1 – 3 GHz


Note: Frequency 2402,250 MHz is excluded from spurious domain measurements and ignored. See table below.

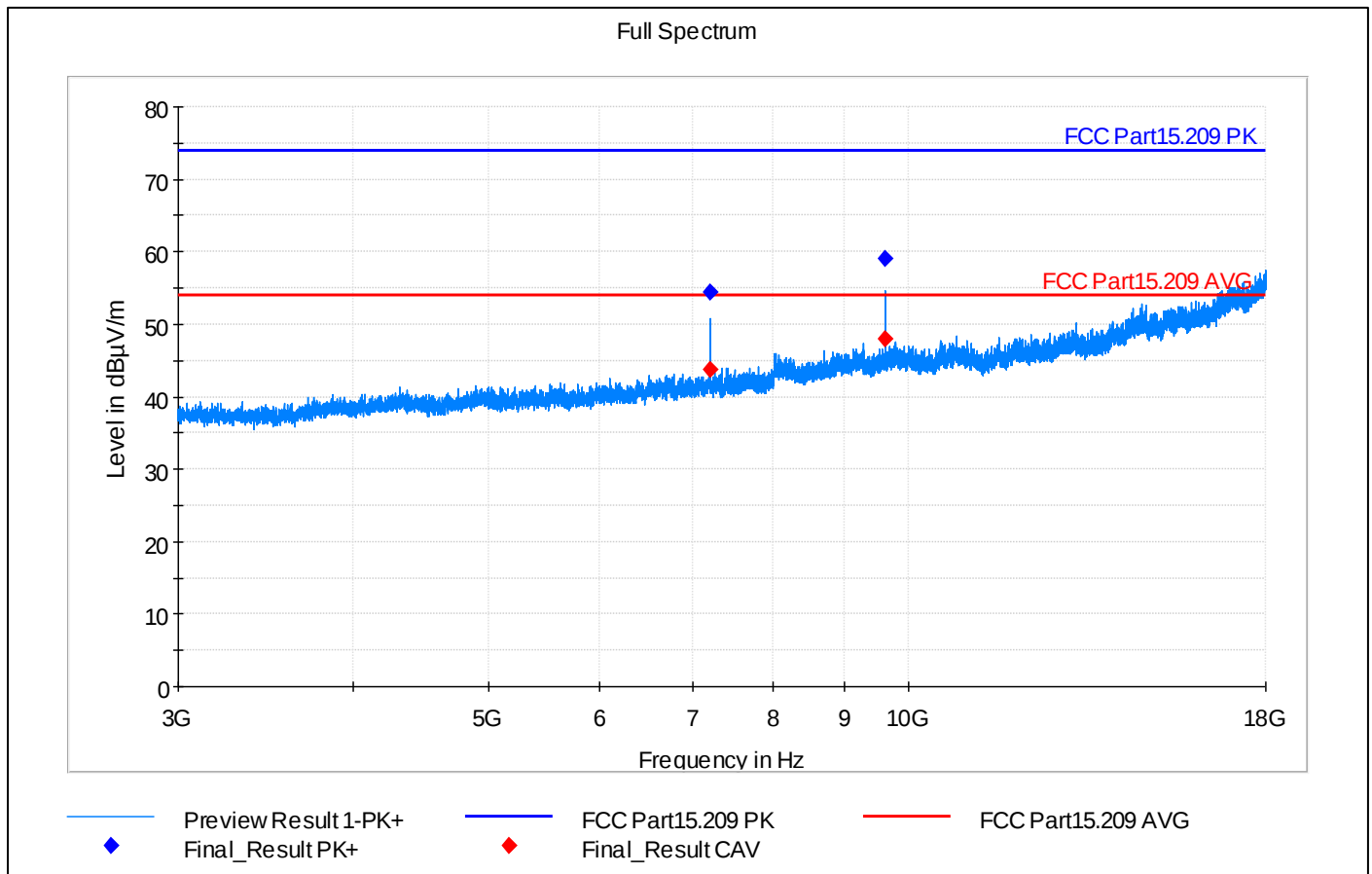
All CAverage values contain correction factor of 4.23 dB, according ANSI C63.10 section 11.12.2.5.2.

Final_Result

Frequency (MHz)	MaxPeak (dBμV/m)	CAverage (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB/m)	Comment
2402.250	---	94.18	54.0	-40.18	100	1000	203.0	H	192	0	38.6	Fundamental TX signal
2402.250	100.55	---	74.0	-26.55	100	1000	203.0	H	192	0	38.6	Fundamental TX signal
2641.500	---	38.15	54.0	15.85	100	1000	356.0	H	221	0	40.0	PASS
2641.500	54.11	---	74.0	19.89	100	1000	356.0	H	221	0	40.0	PASS

Duty cycle corrected average values, according to ANSI C63.10 section 11.12.2.5.2.

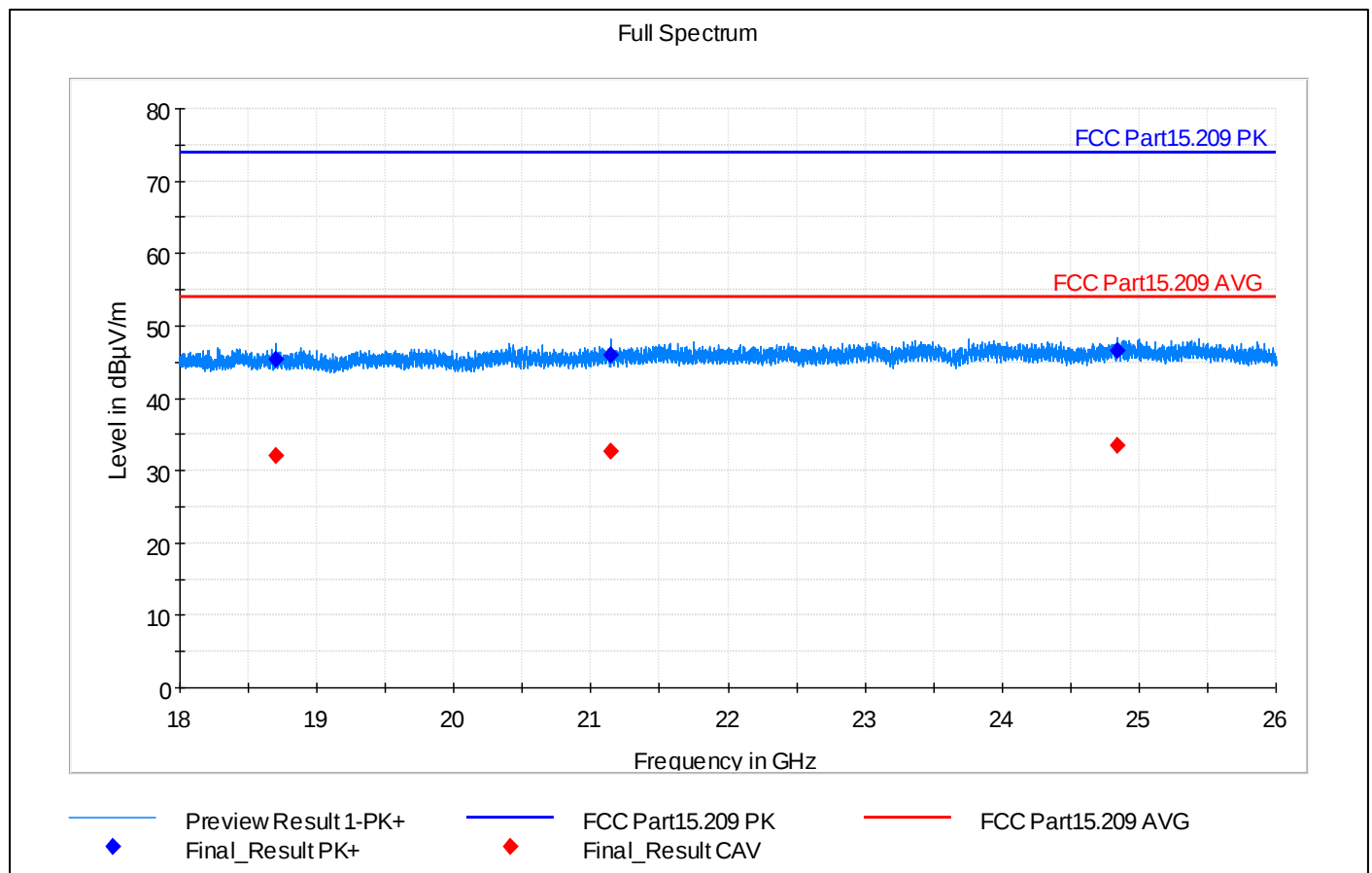
Frequency (MHz)	CAverage (dBμV/m)	Corrected level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Corr. (dB/m)	DC correction	Comment
2402.250	94.18	98.41			38.6	4.23	Fundamental TX signal
2641.500	38.15	42.38	54	11.62	40.0	4.23	PASS

Low channel, 3 – 18 GHz

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	CAverage (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Comment
7205.500	54.38	---	74.0	19.62	100	1000	98.0	V	349	90	15.5	PASS
7205.500	---	43.82	54.0	10.18	100	1000	98.0	V	349	90	15.5	PASS
9607.250	59.04	---	74.0	14.96	100	1000	210.0	V	299	0	19.6	PASS
9607.250	---	47.94	54.0	6.06	100	1000	210.0	V	299	0	19.6	PASS

Duty cycle corrected average values, according to ANSI C63.10 section 11.12.2.5.2.

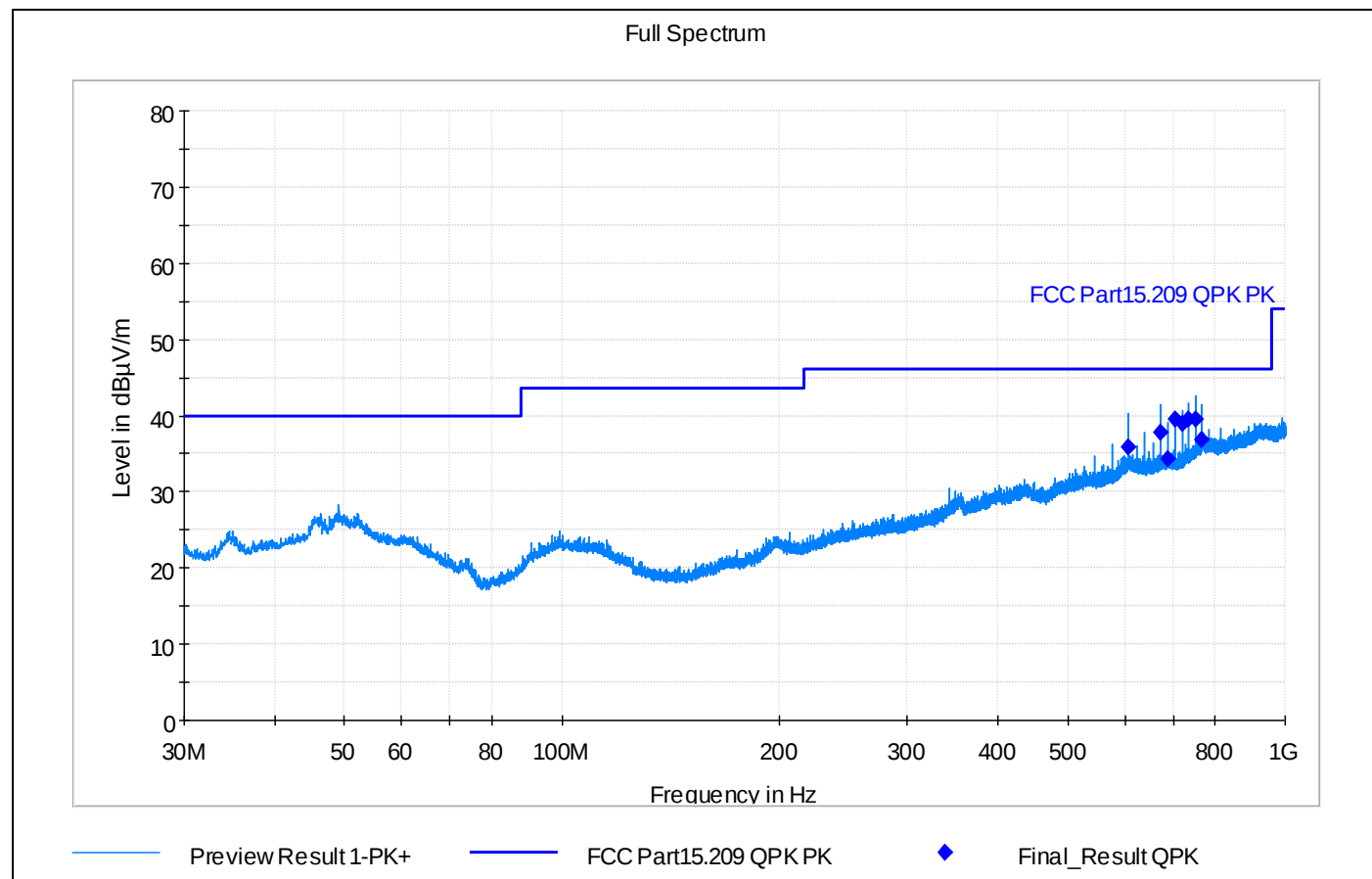
Frequency (MHz)	CAverage (dBμV/m)	Corrected level (dBuV/m)	Limit (dBμV/m)	Margin (dB)	Corr. (dB/m)	DC correction	Comment
7205.500	43.82	48.05	54	5.95	15.5	4.23	PASS
9607.250	47.94	52.17	54	1.83	19.6	4.23	PASS

Low channel, 18 – 26 GHz

Final_Result

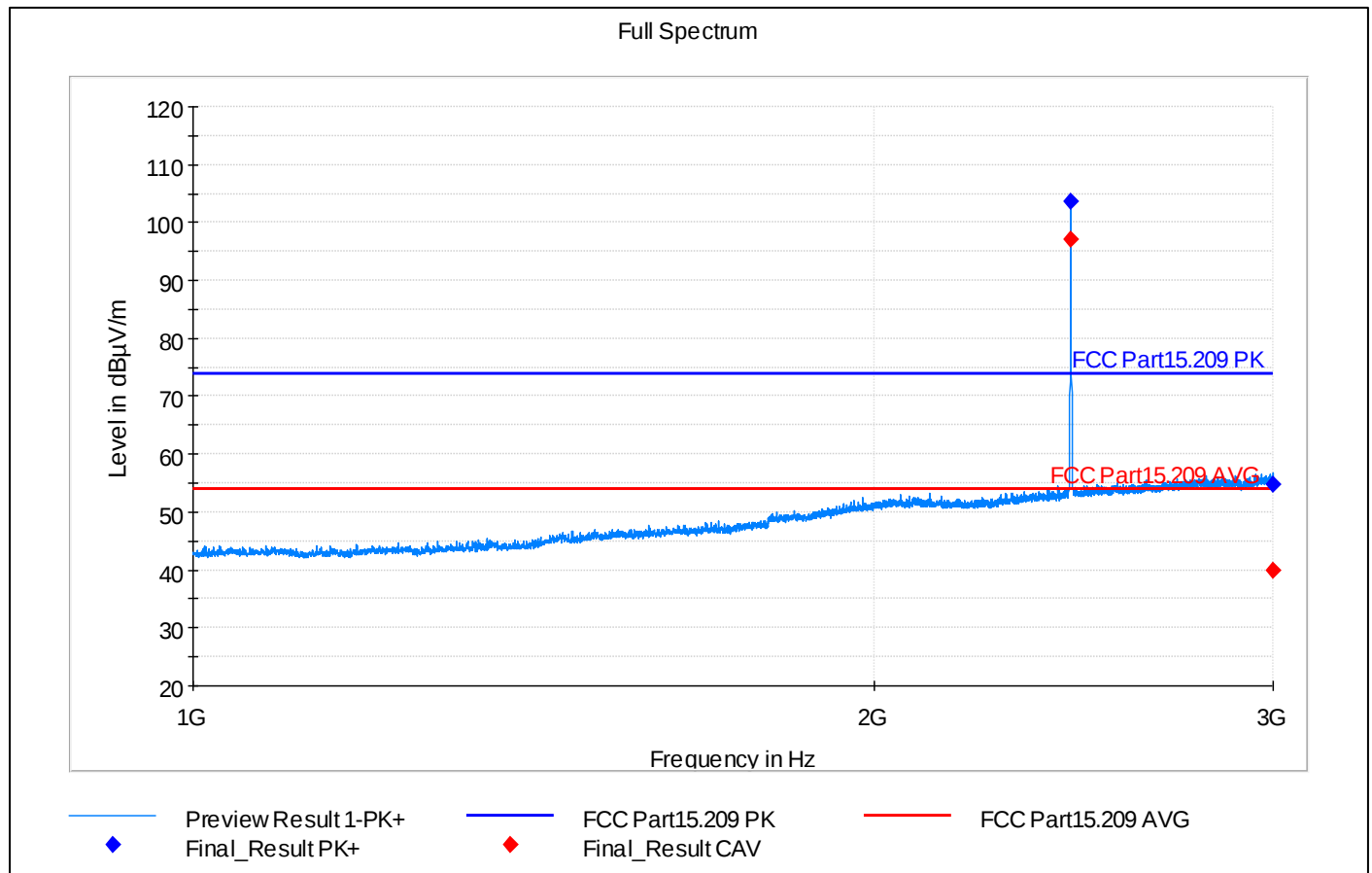
Frequency (MHz)	MaxPeak (dBμV/m)	CAverage (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB/m)	Comment
18698.250	45.36	---	74.0	28.64	3000	1000	211.0	V	174	90	23.5	PASS
18698.250	---	32.00	54.0	22.00	3000	1000	211.0	V	174	90	23.5	PASS
21147.500	45.87	---	74.0	28.13	3000	1000	366.0	V	162	90	24.5	PASS
21147.500	---	32.67	54.0	21.33	3000	1000	366.0	V	162	90	24.5	PASS
24844.000	---	33.42	54.0	20.58	3000	1000	124.0	H	181	90	26.6	PASS
24844.000	46.50	---	74.0	27.50	3000	1000	124.0	H	181	90	26.6	PASS

Duty cycle corrected average values, according to ANSI C63.10 section 11.12.2.5.2.

Frequency (MHz)	CAverage (dBμV/m)	Corrected level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Corr. (dB/m)	DC correction	Comment
18698.250	32.00	36.23	54	17.77	23.5	4.23	PASS
21147.500	32.67	36.90	54	17.10	24.5	4.23	PASS
24844.000	33.42	37.65	54	16.35	26.6	4.23	PASS

Mid channel, 30 MHz – 1 GHz

Final_Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB/m)	Comment
607.980	35.81	46.0	10.19	15000	120	100.0	V	123	0	30.0	PASS
672.000	37.72	46.0	8.28	15000	120	100.0	V	55	0	30.4	PASS
687.990	34.29	46.0	11.71	15000	120	184.0	V	290	90	30.5	PASS
704.010	39.53	46.0	6.47	15000	120	117.0	H	112	90	30.6	PASS
720.000	38.86	46.0	7.14	15000	120	115.0	H	50	0	30.7	PASS
735.990	39.55	46.0	6.45	15000	120	115.0	H	307	90	31.5	PASS
752.010	39.52	46.0	6.48	15000	120	102.0	H	67	0	32.0	PASS
768.000	36.85	46.0	9.15	15000	120	100.0	H	46	0	32.1	PASS

Mid channel, 1-3 GHz


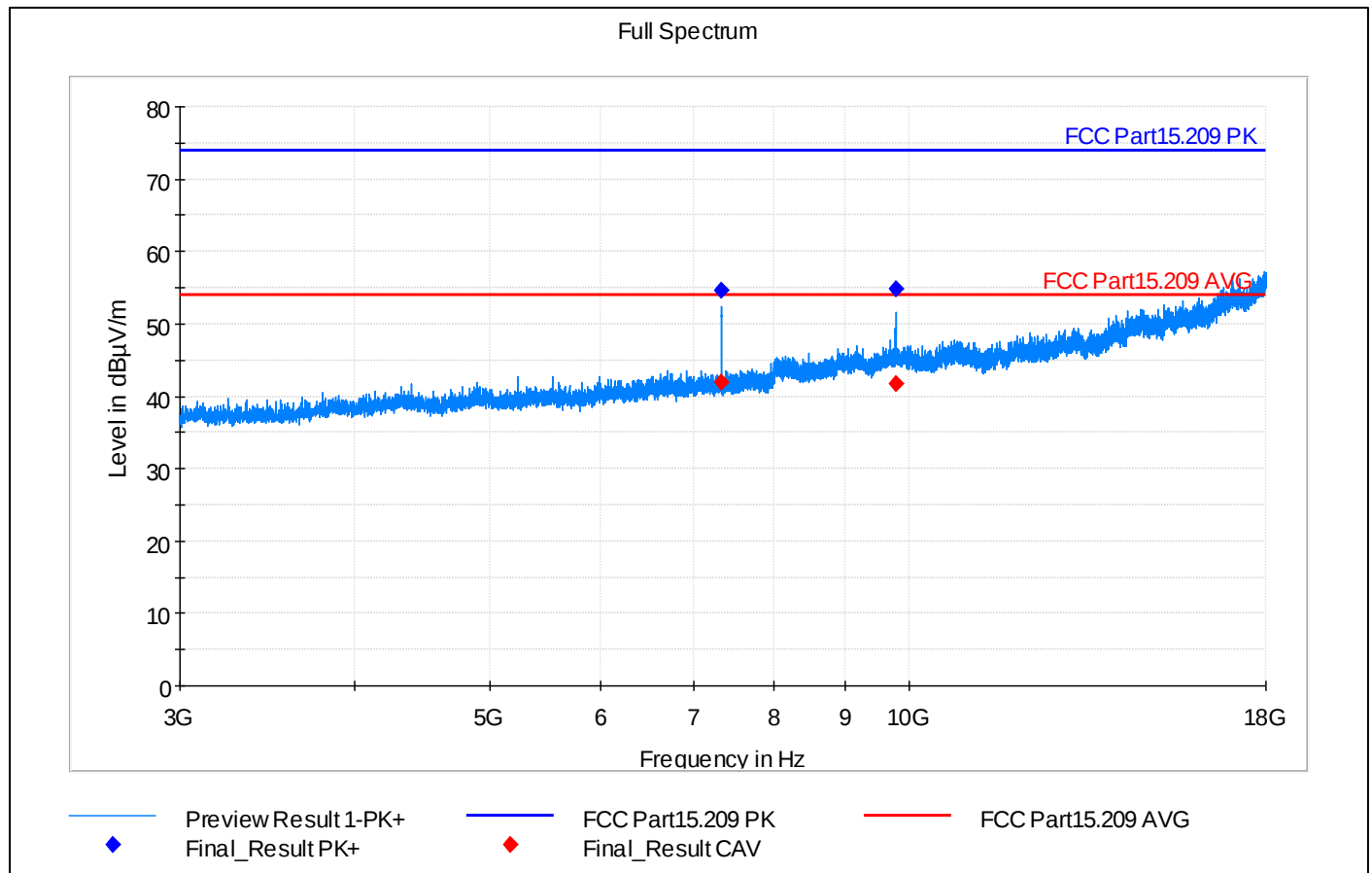
Note: Frequency 2441,750 MHz is excluded from spurious domain measurements and ignored. See table below.

Final_Result

Frequency (MHz)	MaxPeak (dBμV/m)	CAverage (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB/m)	Comment
2441.750	103.62	---	74.0	-29.62	100	1000	200.0	H	182	0	38.9	Fundamental TX signal
2441.750	---	97.04	54.0	-43.04	100	1000	200.0	H	182	0	38.9	Fundamental TX signal
2999.000	54.77	---	74.0	19.23	100	1000	326.0	H	-8	0	41.7	PASS
2999.000	---	39.87	54.0	14.13	100	1000	326.0	H	-8	0	41.7	PASS

Duty cycle corrected average values, according to ANSI C63.10 section 11.12.2.5.2.

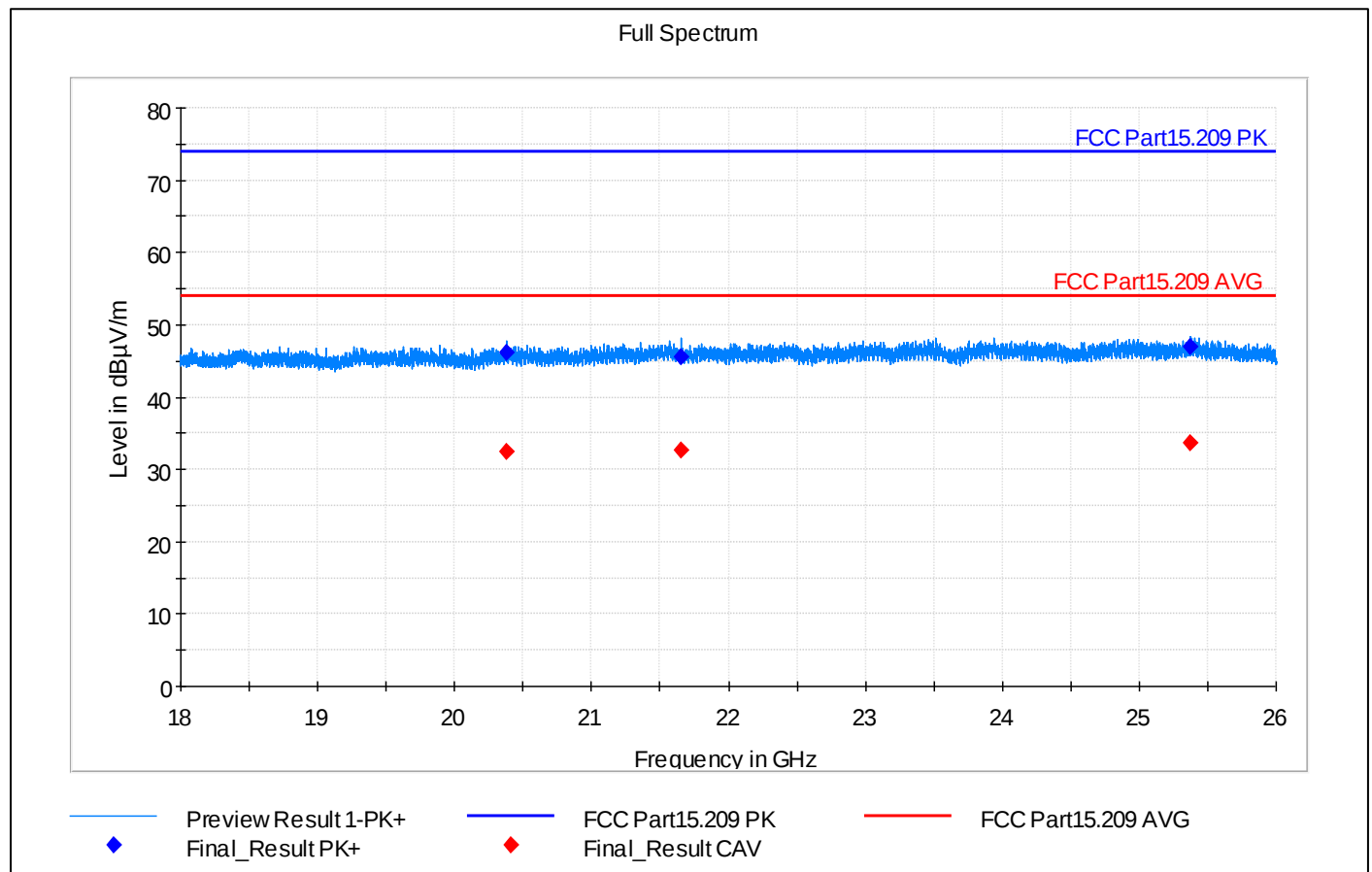
Frequency (MHz)	CAverage (dBμV/m)	Corrected level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Corr. (dB/m)	DC correction	Comment
2441.750	97.04	101.27			38.9	4.23	Fundamental TX signal
2999.000	39.87	44.10	54	9.90	41.7	4.23	PASS

Mid channel, 3–18 GHz

Final_Result

Frequency (MHz)	MaxPeak (dBμV/m)	CAverage (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Comment
7327.000	54.58	---	74.0	19.42	100	1000	152.0	V	49	90	15.8	PASS
7327.000	---	41.93	54.0	12.07	100	1000	152.0	V	49	90	15.8	PASS
9769.250	54.72	---	74.0	19.28	100	1000	110.0	H	302	90	19.9	PASS
9769.250	---	41.76	54.0	12.24	100	1000	110.0	H	302	90	19.9	PASS

Duty cycle corrected average values, according to ANSI C63.10 section 11.12.2.5.2.

Frequency (MHz)	CAverage (dBμV/m)	Corrected level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Corr. (dB/m)	DC correction	Comment
7327.000	41.93	46.16	54	7.84	15.8	4.23	PASS
9769.250	41.76	45.99	54	8.01	19.9	4.23	PASS

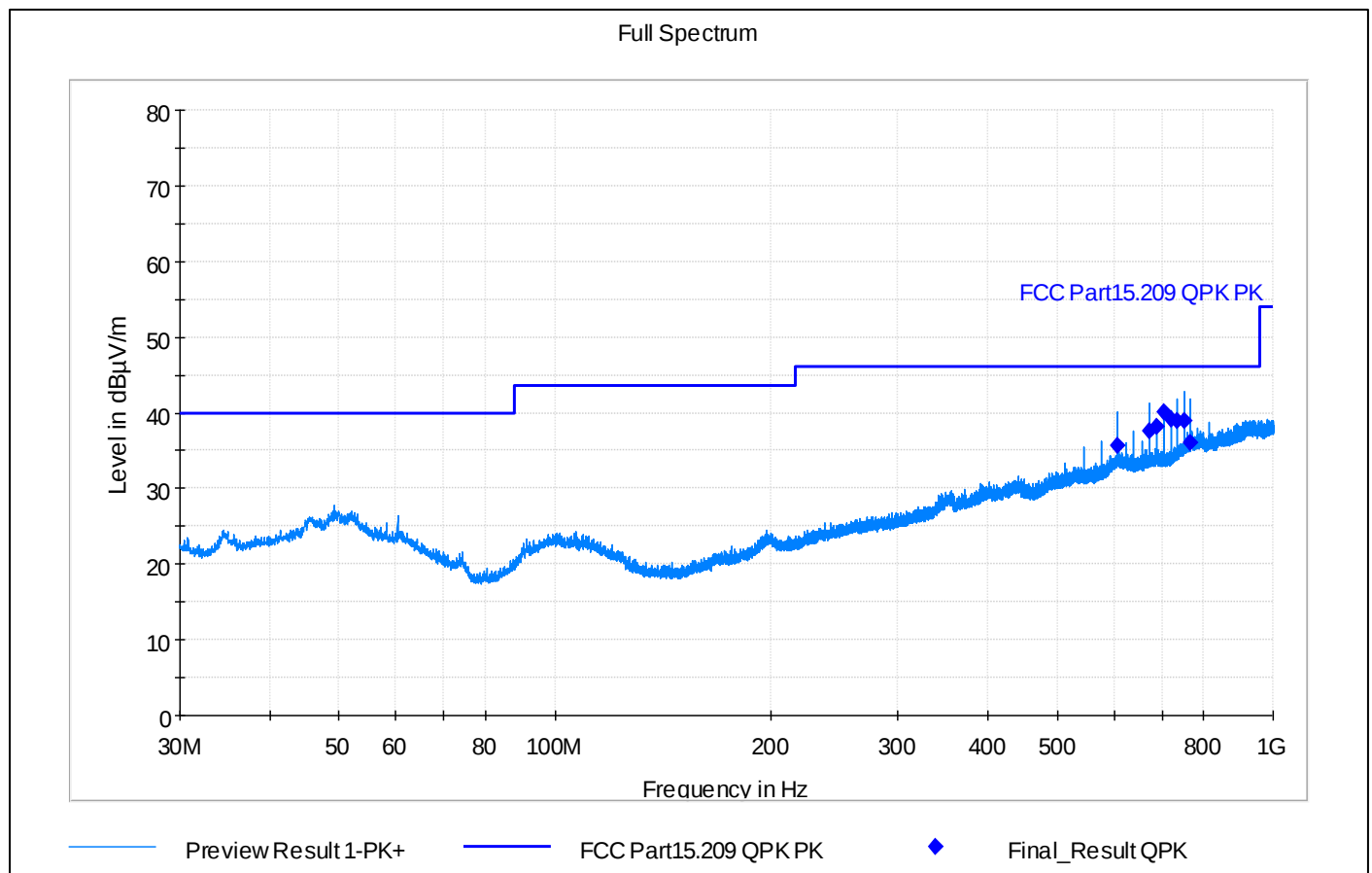
Mid channel, 18–26 GHz

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	CAverage (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB/m)	Comment
20375.750	46.16	---	74.0	27.84	3000	1000	278.0	V	162	90	24.2	PASS
20375.750	---	32.53	54.0	21.47	3000	1000	278.0	V	162	90	24.2	PASS
21657.500	45.58	---	74.0	28.42	3000	1000	279.0	V	250	90	24.7	PASS
21657.500	---	32.60	54.0	21.40	3000	1000	279.0	V	250	90	24.7	PASS
25374.750	---	33.60	54.0	20.40	3000	1000	326.0	V	137	90	26.8	PASS
25374.750	46.87	---	74.0	27.14	3000	1000	326.0	V	137	90	26.8	PASS

Duty cycle corrected average values, according to ANSI C63.10 section 11.12.2.5.2.

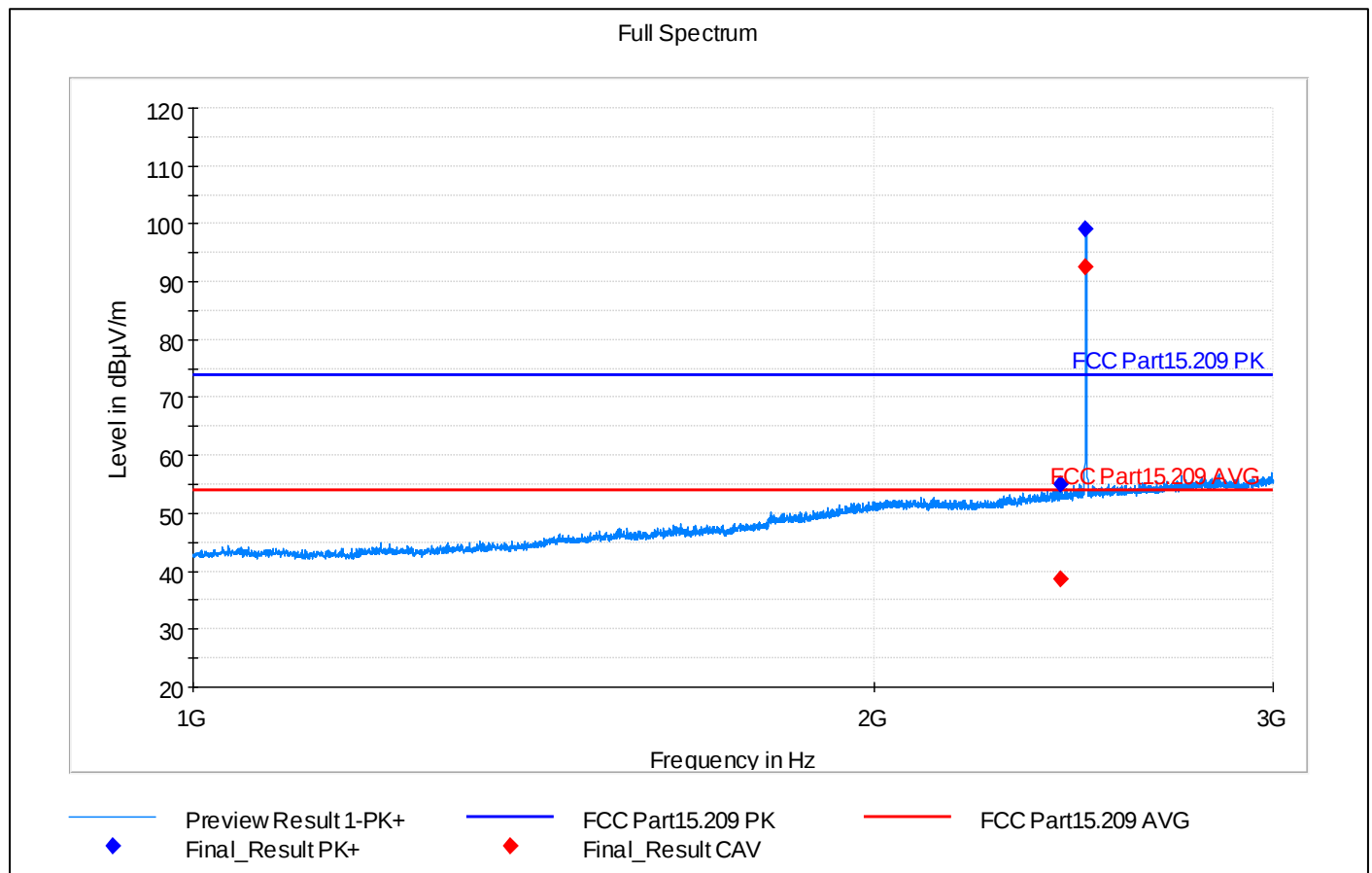
Frequency (MHz)	CAverage (dBμV/m)	Corrected level (dBuV/m)	Limit (dBμV/m)	Margin (dB)	Corr. (dB/m)	DC correction	Comment
20375.750	32.53	36.76	54	17.24	24.2	4.23	PASS
21657.500	32.60	36.83	54	17.17	24.7	4.23	PASS
25374.750	33.60	37.83	54	16.17	26.8	4.23	PASS

High channel, 30 MHz – 1 GHz



Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB/m)	Comment
608.010	35.59	46.0	10.41	15000	120	101.0	V	136	0	30.0	PASS
672.000	37.62	46.0	8.38	15000	120	176.0	V	317	90	30.4	PASS
687.990	38.17	46.0	7.83	15000	120	117.0	H	244	0	30.5	PASS
704.010	40.13	46.0	5.87	15000	120	115.0	H	266	0	30.6	PASS
720.000	39.10	46.0	6.90	15000	120	117.0	H	64	0	30.7	PASS
735.990	38.93	46.0	7.07	15000	120	100.0	H	67	0	31.5	PASS
752.010	38.95	46.0	7.05	15000	120	101.0	H	248	0	32.0	PASS
768.000	35.99	46.0	10.01	15000	120	98.0	H	235	0	32.1	PASS

High channel, 1 – 3 GHz


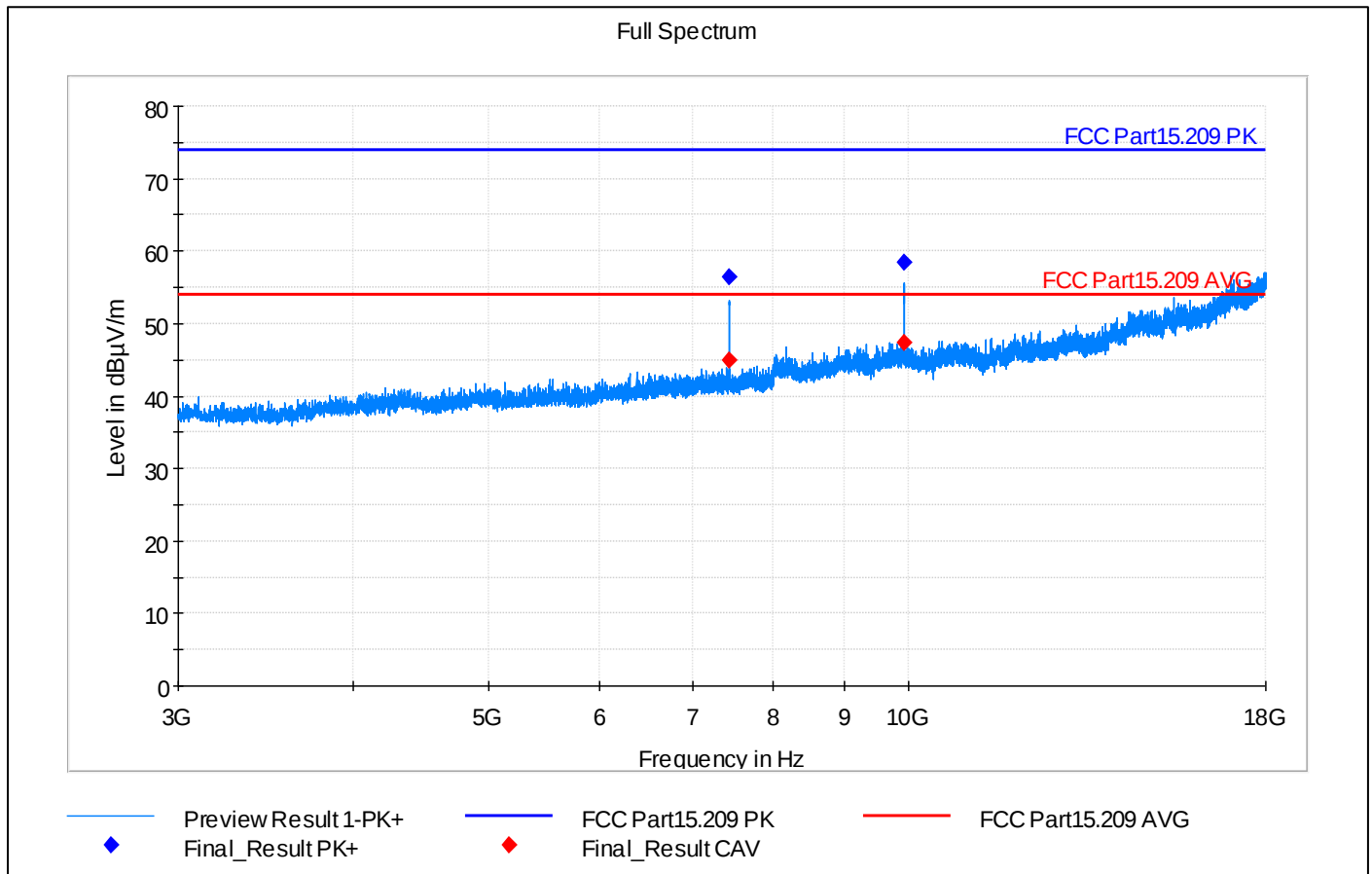
Note: Frequency 2479,750 MHz is excluded from spurious domain measurements and ignored. See table below.

Final_Result

Frequency (MHz)	MaxPeak (dBμV/m)	CAverage (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB/m)	Comment
2416.250	---	38.58	54.0	15.42	100	1000	308.0	H	182	0	38.8	PASS
2416.250	55.10	---	74.0	18.90	100	1000	308.0	H	182	0	38.8	PASS
2479.750	---	92.52	54.0	-38.52	100	1000	153.0	V	92	90	39.3	Fundamental TX signal
2479.750	99.13	---	74.0	-25.13	100	1000	153.0	V	92	90	39.3	Fundamental TX signal

Duty cycle corrected average values, according to ANSI C63.10 section 11.12.2.5.2.

Frequency (MHz)	CAverage (dBμV/m)	Corrected level (dBuV/m)	Limit (dBμV/m)	Margin (dB)	Corr. (dB/m)	DC correction	Comment
2416.250	38.58	42.81	54	11.19	38.8	4.23	PASS
2479.750	92.52	96.75			39.3	4.23	Fundamental TX signal

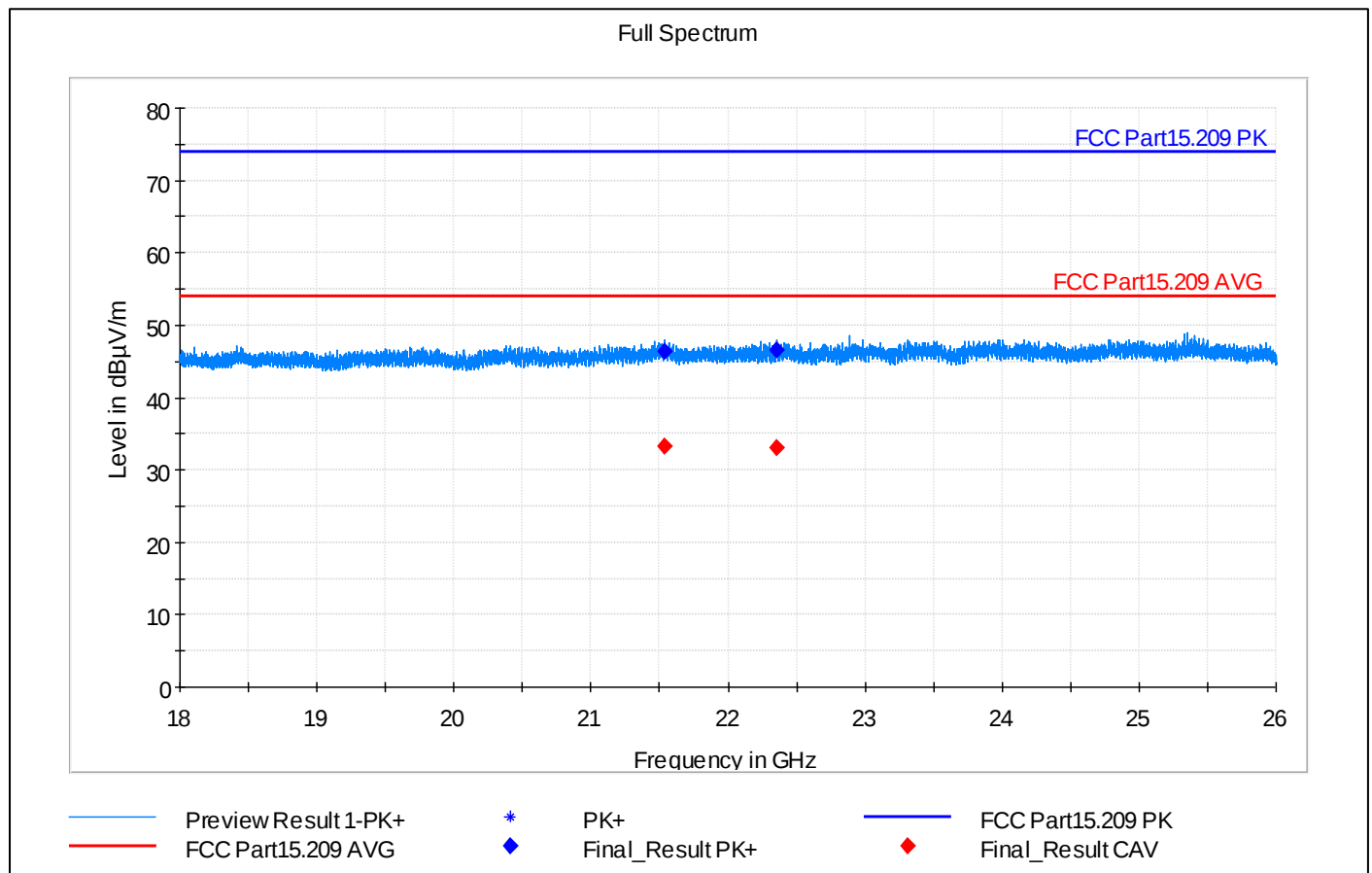
High channel, 3 – 18 GHz

Final_Result

Frequency (MHz)	MaxPeak (dBμV/m)	CAverage (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB/m)	Comment
7440.750	---	44.97	54.0	9.03	100	1000	102.0	H	63	90	15.7	PASS
7440.750	56.33	---	74.0	17.67	100	1000	102.0	H	63	90	15.7	PASS
9919.250	---	47.38	54.0	6.62	100	1000	115.0	H	303	90	20.1	PASS
9919.250	58.45	---	74.0	15.55	100	1000	115.0	H	303	90	20.1	PASS

Duty cycle corrected average values, according to ANSI C63.10 section 11.12.2.5.2.

Frequency (MHz)	CAverage (dBμV/m)	Corrected level (dBuV/m)	Limit (dBμV/m)	Margin (dB)	Corr. (dB/m)	DC correction	Comment
7440.750	44.97	49.20	54	4.80	15.7	4.23	PASS
9919.250	47.38	51.61	54	2.39	20.1	4.23	PASS

High channel, 18 – 26 GHz



Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	CAverage (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB/m)	Comment
21538.250	---	33.17	54.0	20.83	3000	1000	170.0	H	117	90	24.7	PASS
21538.250	46.42	---	74.0	27.58	3000	1000	170.0	H	117	90	24.7	PASS
22353.500	---	33.14	54.0	20.86	3000	1000	302.0	H	85	90	25.0	PASS
22353.500	46.48	---	74.0	27.52	3000	1000	302.0	H	85	90	25.0	PASS

Duty cycle corrected average values, according to ANSI C63.10 section 11.12.2.5.2.

Frequency (MHz)	CAverage (dBμV/m)	Corrected level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Corr. (dB/m)	DC correction	Comment
21538.250	33.17	37.40	54	16.60	24.7	4.23	PASS
22353.500	33.14	37.37	54	16.63	25.0	4.23	PASS

18. Receiver spurious emissions, radiated

Reference: ISED RSS-247, Issue 4 (section 3.1)

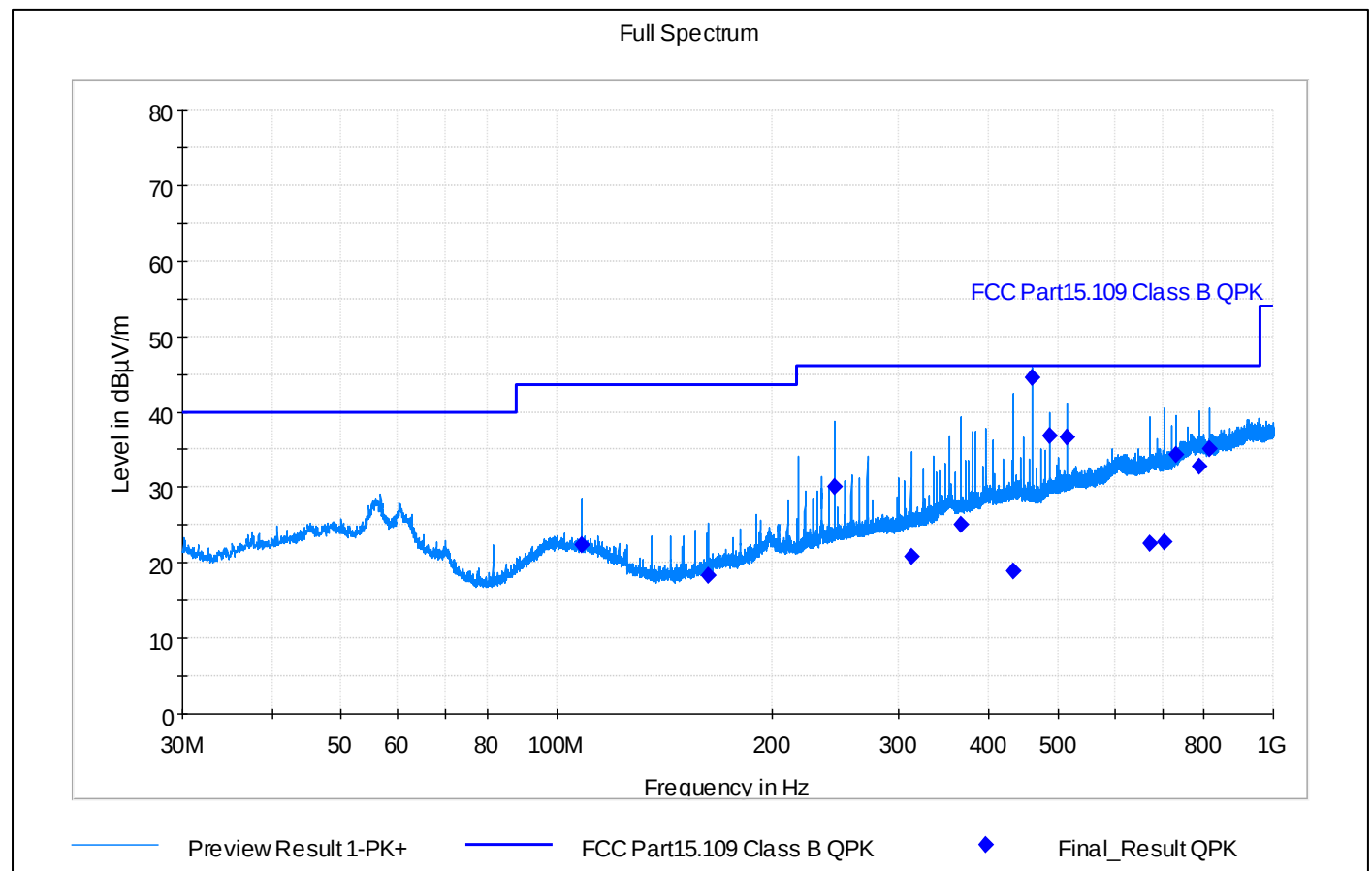
Test method: ANSI C63.4-2014 + C63.4a-2017 (8.1 – 8.3)

Limits			
Frequency (MHz)	Detector	Field strength (uV/m)	Measurement distance (m)
30 – 88	Quasi-Peak	100	3
88 - 216	Quasi-Peak	150	3
216 - 960	Quasi-Peak	200	3
960 - 1000	Quasi-Peak	500	3
> 1000	Average	500	3

Test procedure	
1. EUT is placed on a non conducting support at the center of a turn table 0.8m above the ground 2. EUT set to test mode 3. The receiver is set to peak detection with max hold 4. The EUT is rotated through 360 degrees (orientation varied), measurements were made in both horizontal and vertical planes of polarization 5. Found peak values were further maximized by adjusting turntable position $\pm 22,5$ degrees around detected value and scanning the antenna height 1 to 4m 6. For maximized values, final measurement was done with the corresponding final detector.	

Operation mode(s)	Configuration	Test Verdict
Bluetooth LE RX	Mid channel, 2440 MHz	PASS

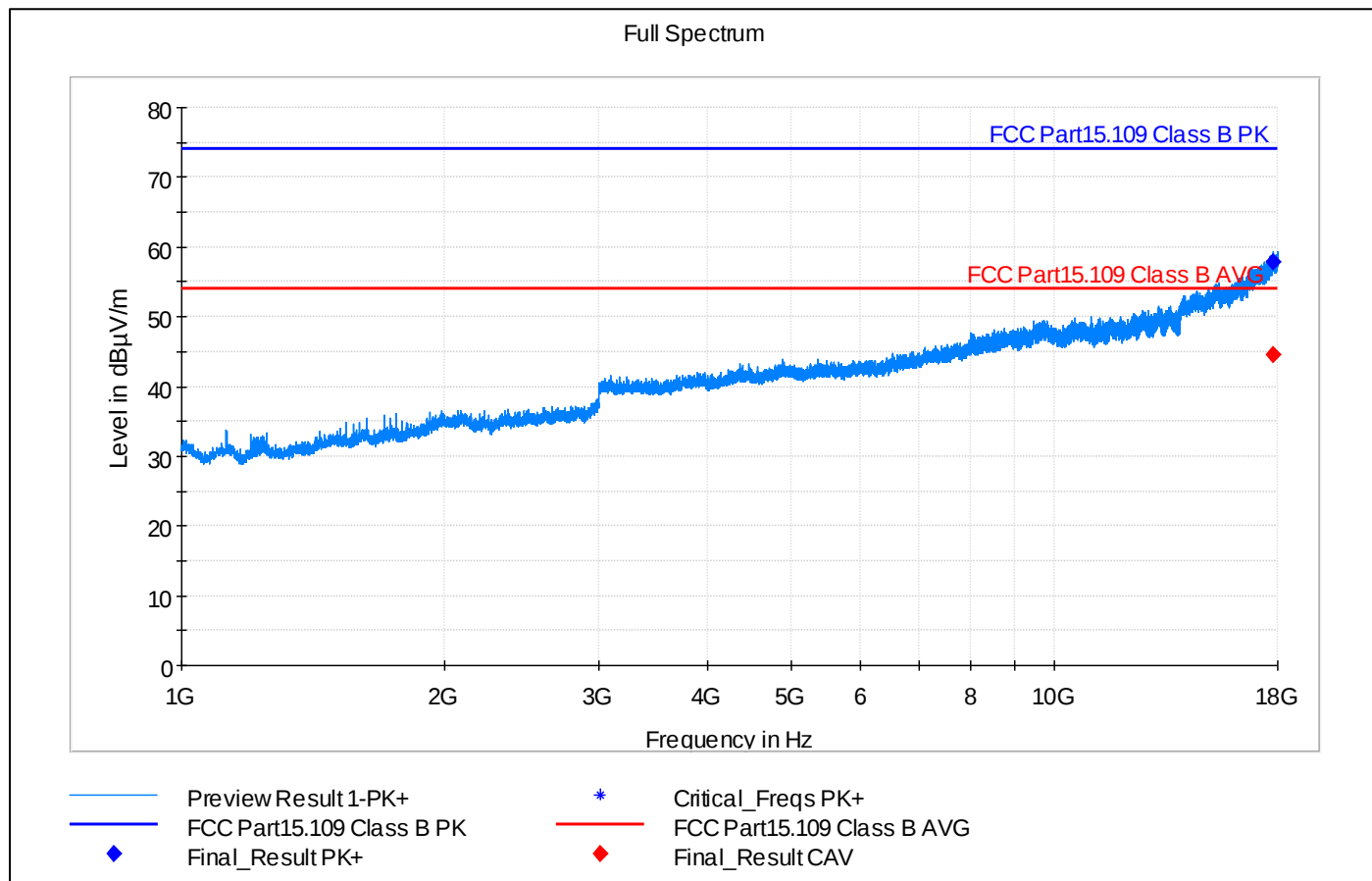
Mid channel, 30 MHz – 1 GHz



Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB/m)	Comment
108.480	22.29	43.5	21.21	15000	120	141.0	V	283	0	19.3	PASS
162.750	18.41	43.5	25.09	15000	120	170.0	H	41	0	16.9	PASS
244.020	30.08	46.0	15.92	15000	120	102.0	V	331	0	21.1	PASS
312.000	20.74	46.0	25.26	15000	120	100.0	H	263	0	22.6	PASS
366.210	25.03	46.0	20.97	15000	120	100.0	H	71	0	24.0	PASS
433.800	18.93	46.0	27.07	15000	120	260.0	H	286	0	26.0	PASS
461.040	44.55	46.0	1.45	15000	120	125.0	V	42	0	26.2	PASS
488.160	36.84	46.0	9.16	15000	120	102.0	V	113	0	27.0	PASS
515.280	36.71	46.0	9.29	15000	120	101.0	V	117	0	27.6	PASS
671.910	22.55	46.0	23.45	15000	120	356.0	H	106	0	30.3	PASS
703.860	22.75	46.0	23.25	15000	120	379.0	H	97	0	30.6	PASS
732.240	34.26	46.0	11.74	15000	120	98.0	V	326	0	31.3	PASS
786.480	32.69	46.0	13.31	15000	120	154.0	V	127	0	32.0	PASS
813.600	35.10	46.0	10.90	15000	120	152.0	V	67	0	32.2	PASS

Mid channel, 1 GHz – 18 GHz



Final_Result

Frequency (MHz)	MaxPeak (dBμV/m)	CAverage (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)	Comment
17803.500	---	44.49	54.0	9.51	500	1000	264.0	V	57	38.6	PASS
17803.500	57.83	---	74.0	16.17	500	1000	264.0	V	57	38.6	PASS