

Radio Test Report

According to

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

DUT Name: SleepImage
Model No. : SR1
Customer: MyCardio, LLC
Address: 2300 E Cherry S Drive Ste 540, CO 80209 Denver USA
Summary IN COMPLIANCE
Date of Reception: 21.01.2025
Date(s) of Test(s): 21.01.2025 – 13.05.2025

Tested by Test Engineer


Pekka Pulkkinen

Approved by Technical Manager


Jukka Rauma

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Document Version History	Date of issue	Comments	Approved by
v0.1	5.6.2025	Initial version.	
v0.2	9.9.2025	FCC and IC ID's added. Model changed to SR1.	
v1.0	11.9.2025	Final version with signatures	Jukka Rauma
v2.0	3.11.2025	ANSI C63.10 version updated	Jukka Rauma

1. General Information

Test Engineer(s): Arto Kuosmanen, Pekka Pulkkinen

Location:

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

Customer:

MyCardio, LLC

James Hicks

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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: Sleepimage SR1 has an optical module consisting of three green, one red and one infrared LEDs and a photodiode as a detector. The device sends the data of each color channel at a rate of 25 - 75 Hz over Bluetooth to a mobile application. Also the 3D accelerometer data is sent at a rate of 10 Hz. The device has an integrated algorithm calculating SpO2 and heart rate data from the optical data, also this information is sent to the application at 1 Hz rate. All this information is used for sleep apnea analysis.

Test sample (Conducted):

Sample number	Serial number	Manufacturer	DUT Type	Model	HW version	SW version
2500009401	522810038	MyCardio, LLC	Sleepimage SR1 noninvasive pulse oximeter device	SR1	TEN_04	1.2.0

Test sample (Radiated):

Sample number	Serial number	Manufacturer	DUT Type	Model	HW version	SW version
2500009402	AAB00165	MyCardio, LLC	Sleepimage SR1 noninvasive pulse oximeter device	SR1	TEN_04	1.2.0

Auxiliary equipment:

Sample number	Serial number	Manufacturer	DUT Type	Model	
2500009403	N/A	Haltian	Charging cable		
2500009404	N/A	Apple Inc	Charger	A2347	

Description	Information	
Additional model	-	
Brand Names(s)	SleepImage	
PMN	SleepImage SR1	
HVIN	SR1	
FVIN	v1.2.0	
HMN	N/A	
FCC ID	2BOTNUS101	
IC ID	34393-US101	
Equipment type	End product	
Radio type	Bluetooth LE Transceiver	
- operating frequency range:	2400.0 MHz – 2483.5 MHz	
- Nominal Channel Bandwidth:	1 and 2 MHz	
Radio technology / type of equipment	Bluetooth 5.0	
Modulation:	GFSK	
Number of antennas	1	
Bluetooth Specification	LE 1Mbps PHY	Yes
	LE 2Mbps PHY	Yes
	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
Antenna	Type	Integrated
	Model	PCB
	Manufacturer	Haltian
	Gain	-4.4 dBi
Supply voltage	DC 3.8 V	
Type of Power source	Internal Power Supply	
Operating Temperature	TNom = 23°C TMin = 5°C TMax = 42°C	
Manufacturer	MyCardio, LLC 3200 E Cherry S Drive Ste 540, CO 80209 Denver USA	

3. Configuration and Operation Modes

Conducted and radiated emission test:

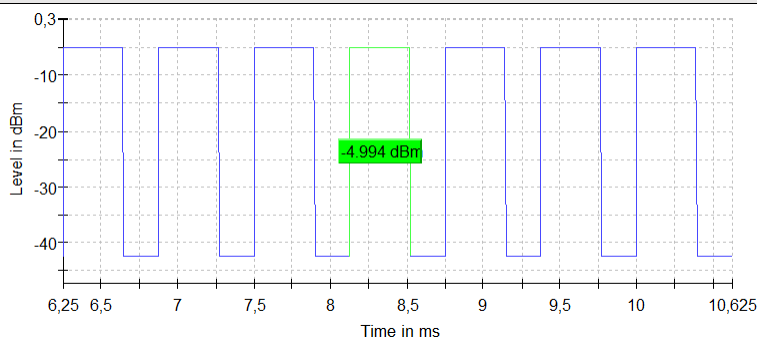
Test modes / description
EUT battery powered, continuous modulated carrier at 2402 MHz, 2442 MHz and 2480 MHz, data rate 1 Mbps and 2Mbps. Power level setting 0 dBm
EUT battery powered, continuous reception at 2442 MHz

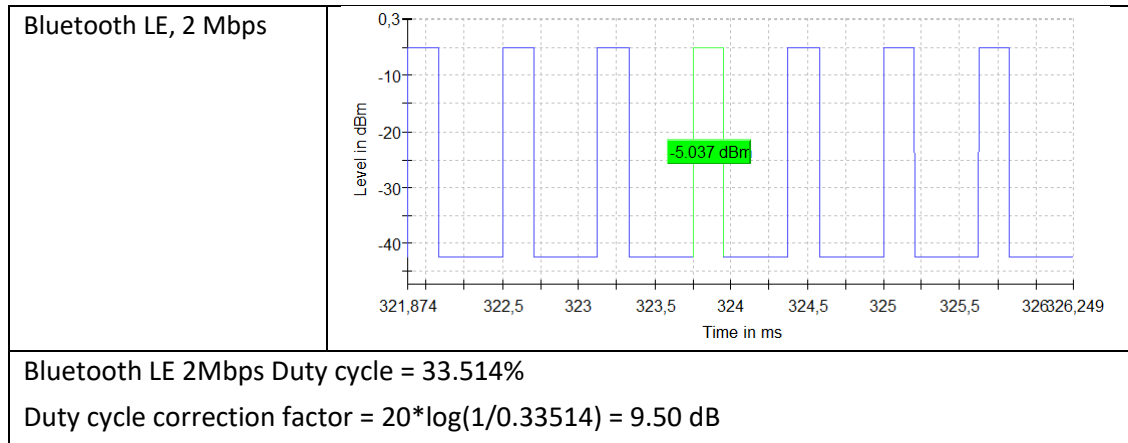
Test/configuration software

Manufacturer	Name	Version
Nordic Semiconductor	nRF Connect	v5.1.0
Haltian	Python test script	-

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	
Bluetooth LE 1Mbps Duty cycle = 63.264% Duty cycle correction factor = $20 \cdot \log(1/0.63264) = 3.98 \text{ dB}$	



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
G4C464	Rohde & Schwarz	OSP150	Open switch and control unit	101135	13.8.2024	13.8.2025
G4C465	Rohde & Schwarz	OSP220	Open switch and control unit	102440	14.8.2024	14.8.2025
G4C466	Rohde & Schwarz	ESW44	EMI test receiver	103103	29.7.2024	29.7.2025
G4C467	Rohde & Schwarz	CMW500	Wideband radio communication tester	171062	29.6.2023	29.6.2025

Radiated emission

New ID	Manufacturer	Equipment type	Description	Serial	Calibration information	Next calibration
G4C265	Rohde & Schwarz	ESW26	EMI test receiver	101324	26.7.2024	26.7.2025
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 Preamplicifier 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
G4C469	Rohde & Schwarz	TS_PRE2	RF Preamplicifier	101541	12.8.2024	12.8.2026
G4C576	Rohde & Schwarz	HF907	Double-Ridged Waveguide Horn Antenna 800MHz-18GHz	100163	9.8.2022	9.8.2025

Conducted emission

New ID	Manufacturer	Equipment type	Description	Serial	Calibration information	Next calibration
G4C265	Rohde & Schwarz	ESW26	EMI test receiver	101324	26.7.2024	26.7.2025
G4C516	Rohde & Schwarz	ENV216	Two-line V-Network LISN	100078	14.5.2024	14.5.2025

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

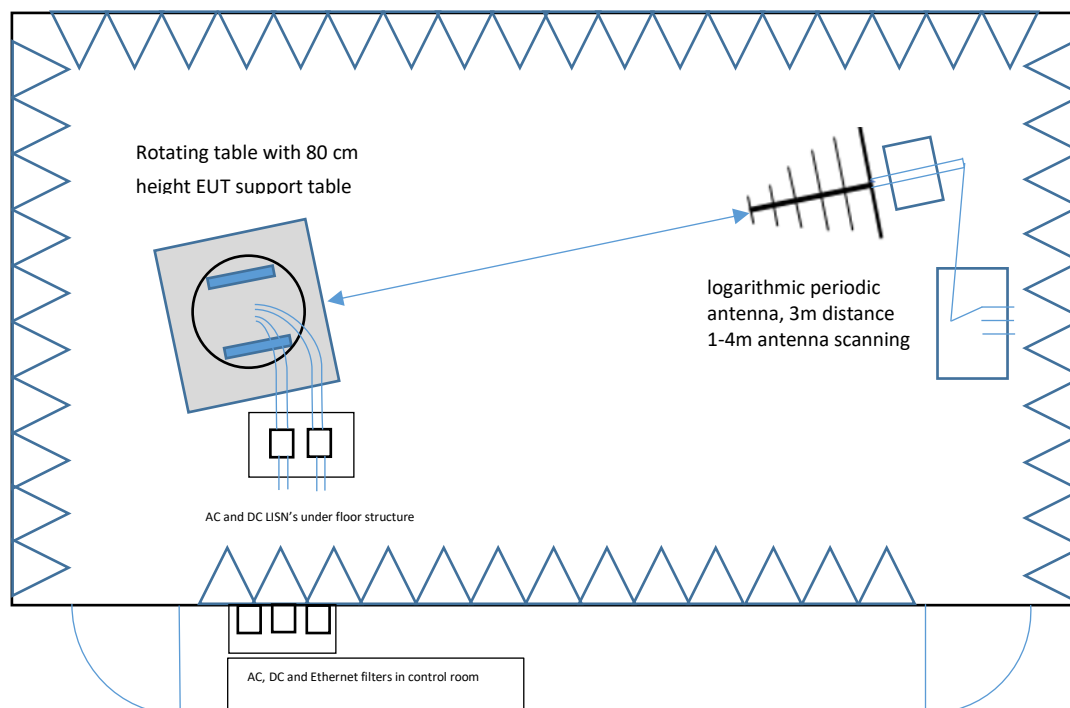
All radiated tests were performed in a semi-anechoic chamber, where the measurement antenna (Bilog antenna for the range between 30 MHz to 1000 MHz, 1 GHz-18 GHz Double-ridged horn antenna and 18 GHz-40 GHz horn antenna) is located at a distance of 3 m.

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.

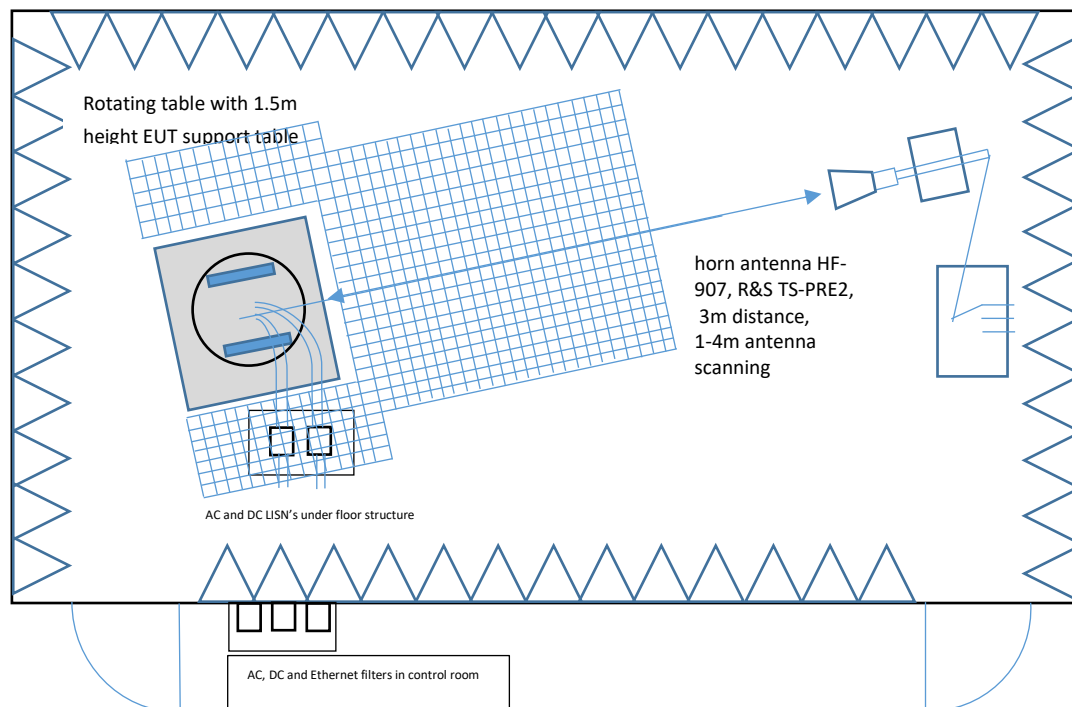
Measurements were made in both horizontal and vertical planes of polarization.

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.

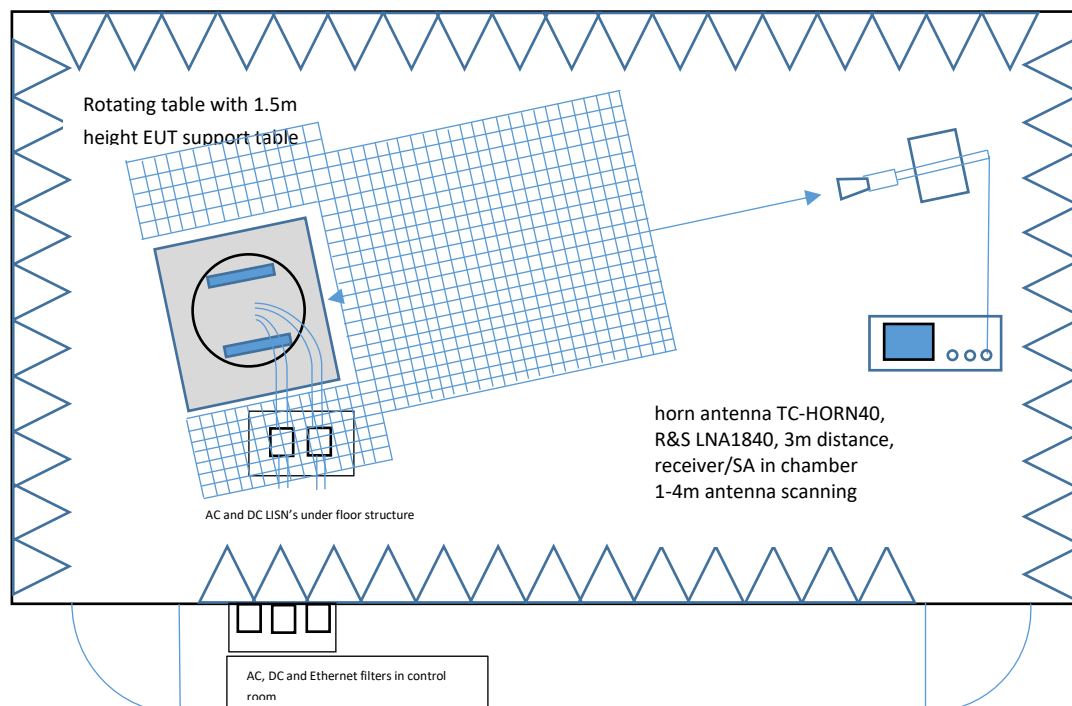
Radiated measurements setup from 30 MHz to 1 GHz:



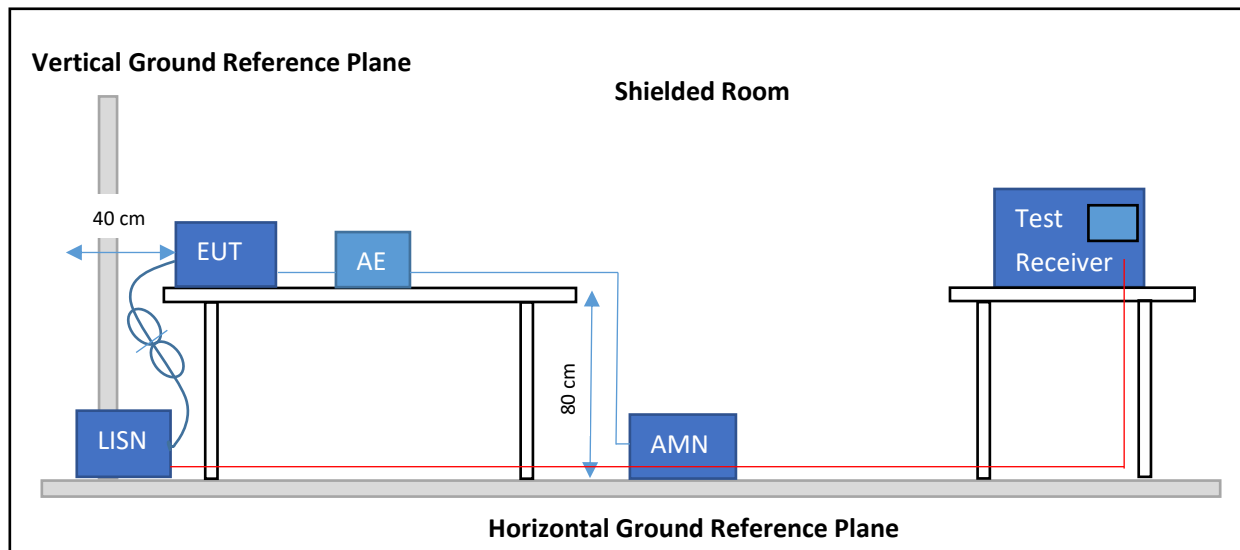
Radiated measurements setup from 1 GHz to 18 GHz:



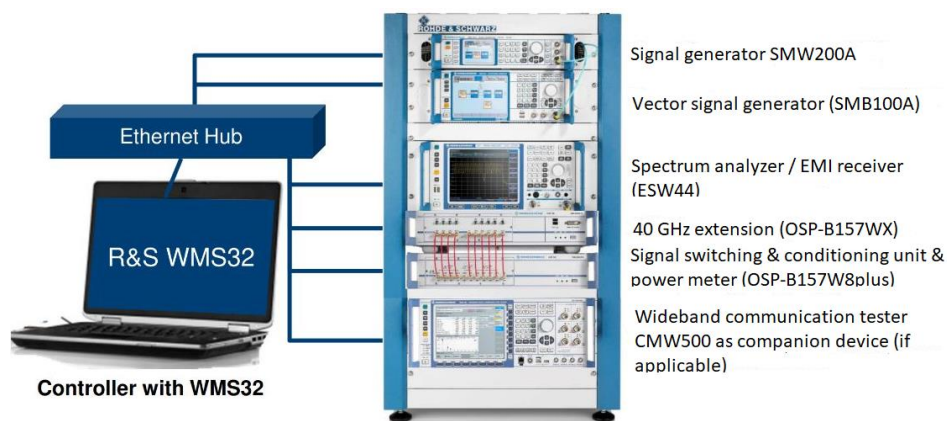
Radiated measurements setup from 18 GHz to 26 / 40 GHz:



Conducted emission setup



Conducted RF measurement system:



9. Summary

Bluetooth LE

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)	ANSI C63.10-2020	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	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)

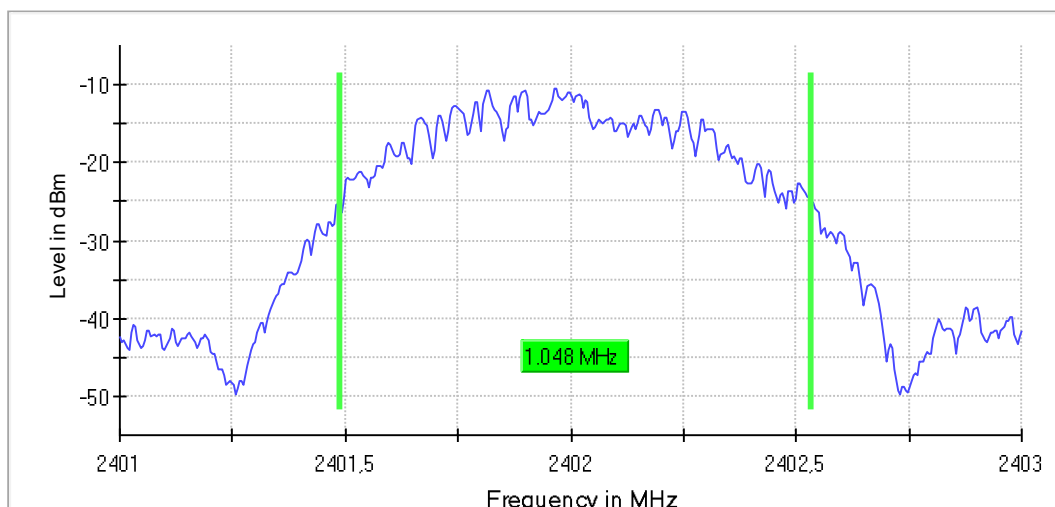
Procedure
1. EUT transmitter is activated in test mode under normal conditions 2. Spectrum analyzer is set to peak detection and maximum hold with a span twice the emission spectrum 3. The resolution bandwidth is set to the range of 1% to 5% of the occupied bandwidth 4. The occupied bandwidth is measured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

Summary:

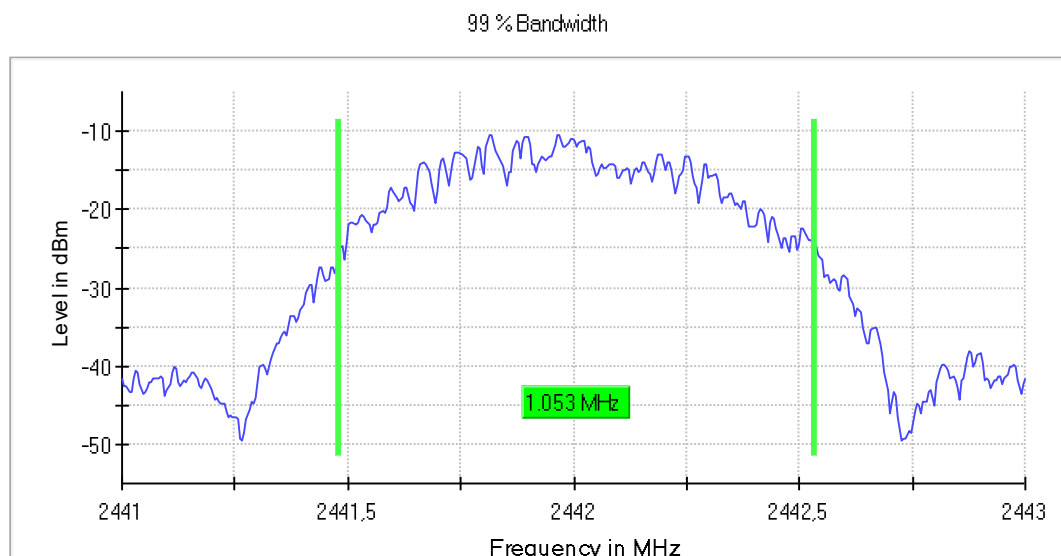
Summary		
Mode / modulation	Frequency (MHz)	Bandwidth (MHz)
Bluetooth LE, 1 Mbps	2402	1.047619
Bluetooth LE, 1 Mbps	2442	1.052632
Bluetooth LE, 1 Mbps	2480	1.052631
Bluetooth LE, 2 Mbps	2402	2.035088
Bluetooth LE, 2 Mbps	2442	2.035088
Bluetooth LE, 2 Mbps	2480	2.045113

Occupied bandwidth, low channel 1Mbps

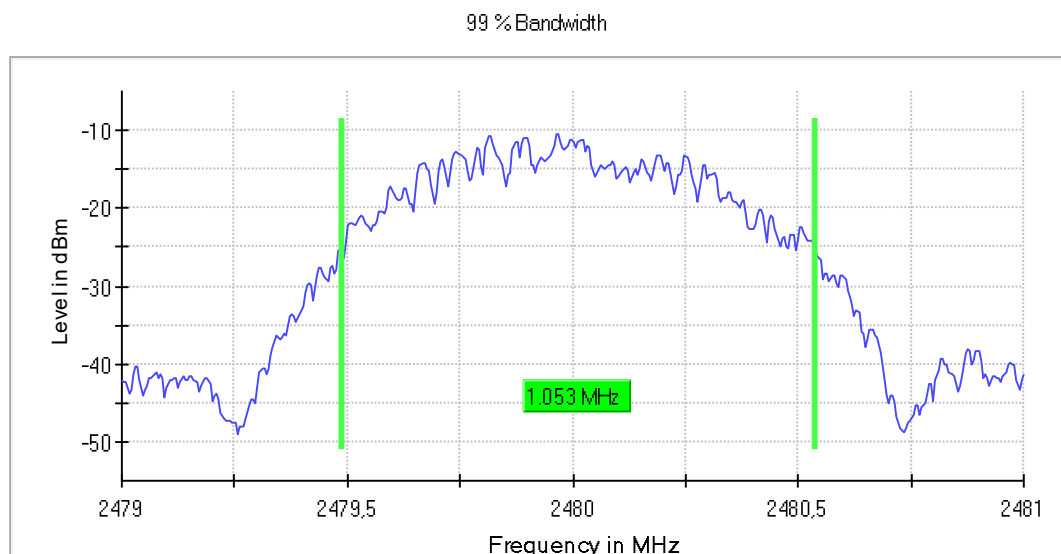
99 % Bandwidth



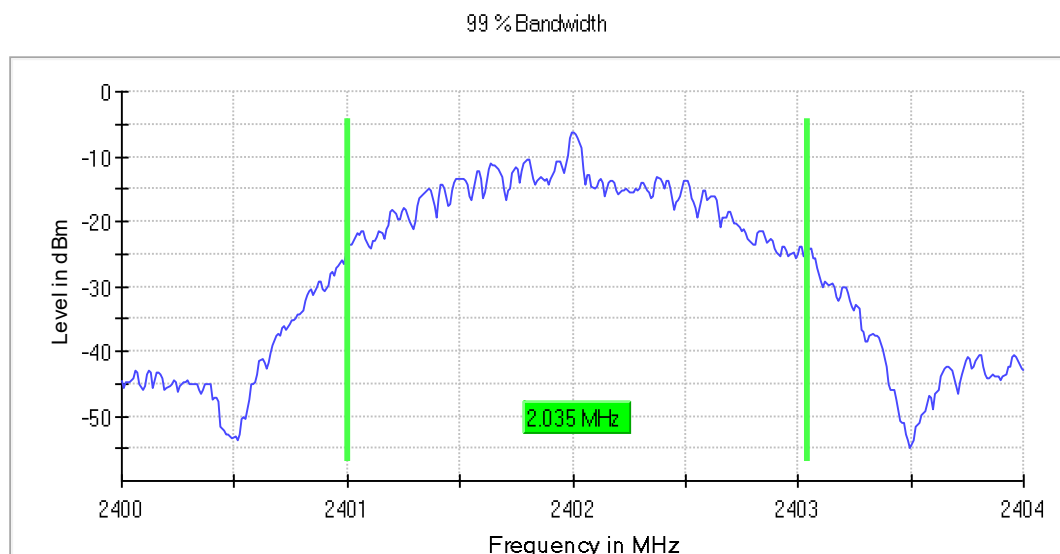
Occupied bandwidth, middle channel 1Mbps



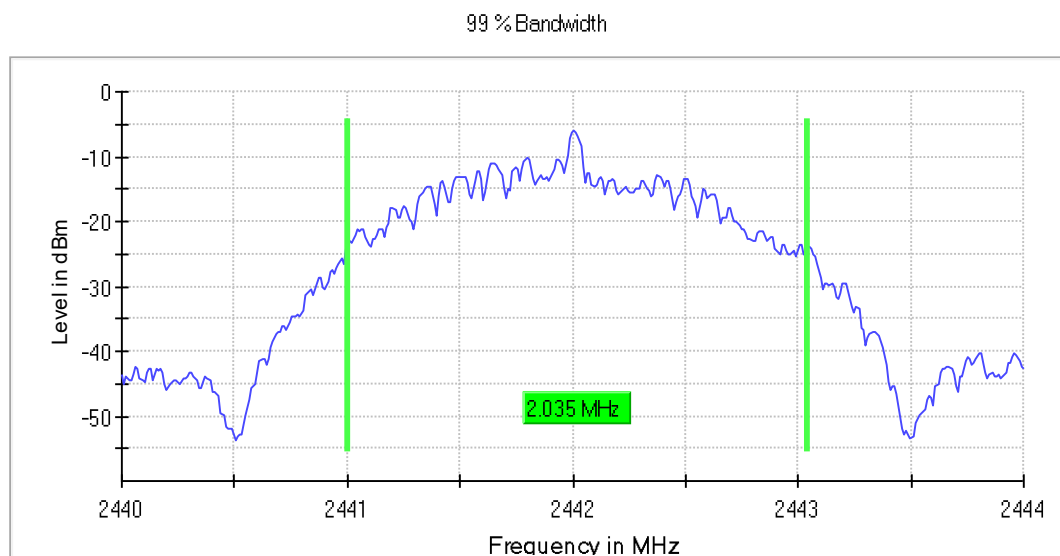
Occupied bandwidth, high channel 1Mbps



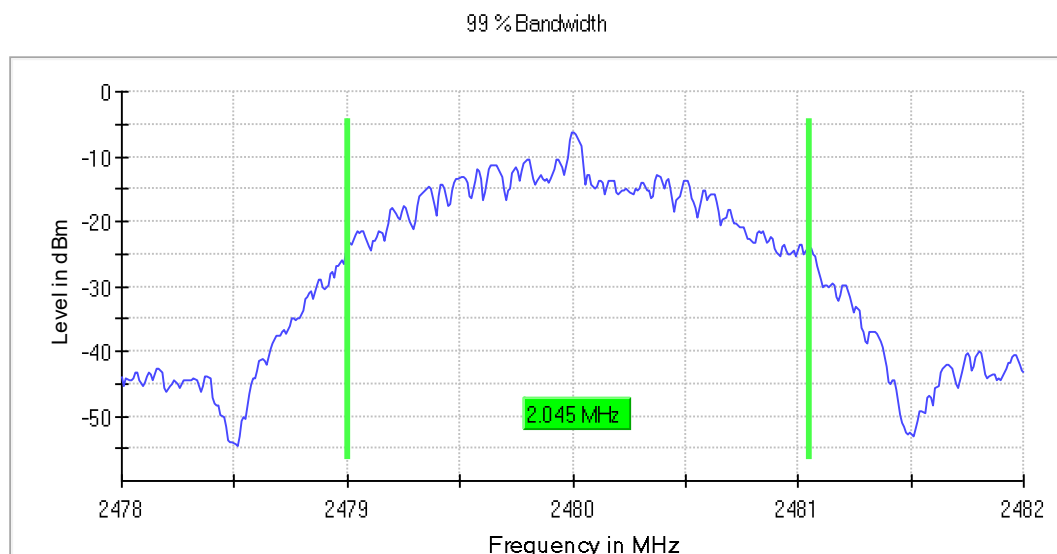
Occupied bandwidth, low channel 2Mbps



Occupied bandwidth, middle channel 2Mbps



Occupied bandwidth, high channel 2Mbps



11. 6 dB bandwidth

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

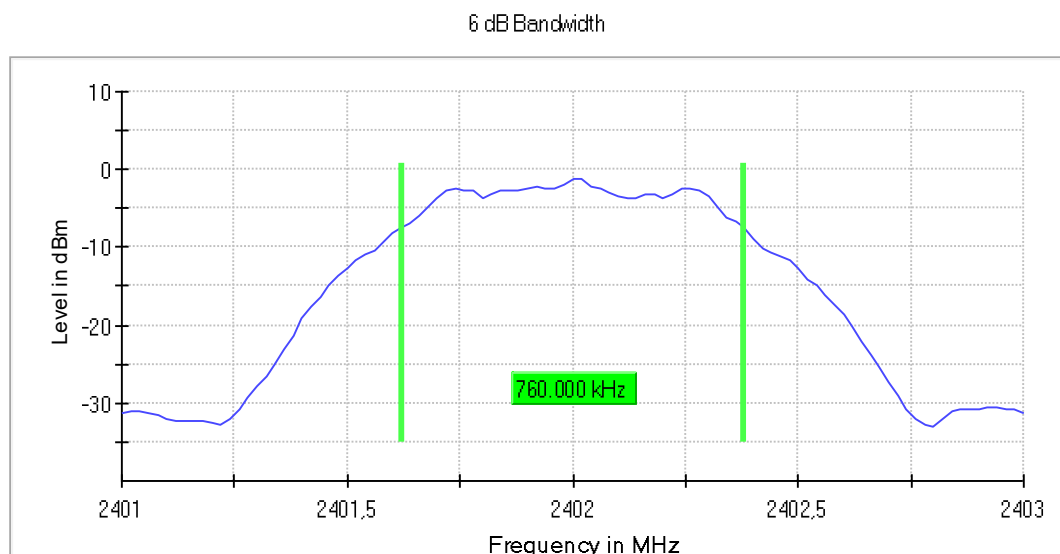
Test method: KDB 558074 D01 DTS Meas Guidance v05r02 and ANSI C63.10-2020+Cor.1-2023 (11.8.1)

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

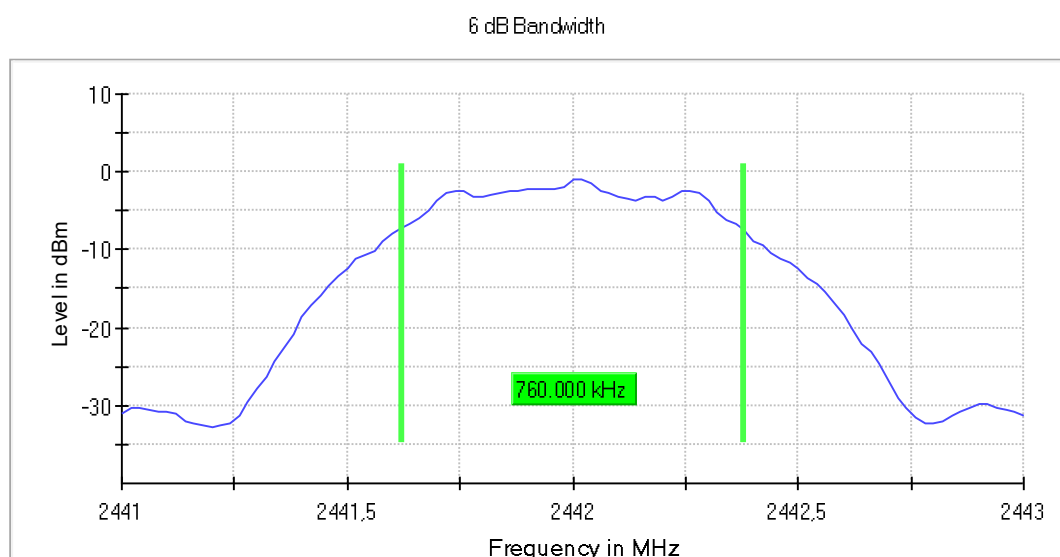
Test procedure
1. EUT set to test mode 2. Span set to at least twice the emission spectrum 3. Detector set to peak and max hold and BW is set to 100 kHz 4. Envelope peak value of emission spectrum is selected 5. Marker on envelope of spectrum is set to level of -6 dB to the left of the peak 6. Marker 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	0.760000	0.500000	---	2401.620000	2402.380000	-1.2	PASS
Bluetooth LE, 1 Mbps	2442.000000	0.760000	0.500000	---	2441.620000	2442.380000	-0.9	PASS
Bluetooth LE, 1 Mbps	2480.000000	0.740000	0.500000	---	2479.640000	2480.380000	-0.8	PASS
Bluetooth LE, 2 Mbps	2402.000000	1.200000	0.500000	---	2401.400000	2402.600000	-1.1	PASS
Bluetooth LE, 2 Mbps	2442.000000	1.200000	0.500000	---	2441.400000	2442.600000	-0.9	PASS
Bluetooth LE, 2 Mbps	2480.000000	1.200000	0.500000	---	2479.400000	2480.600000	-0.8	PASS

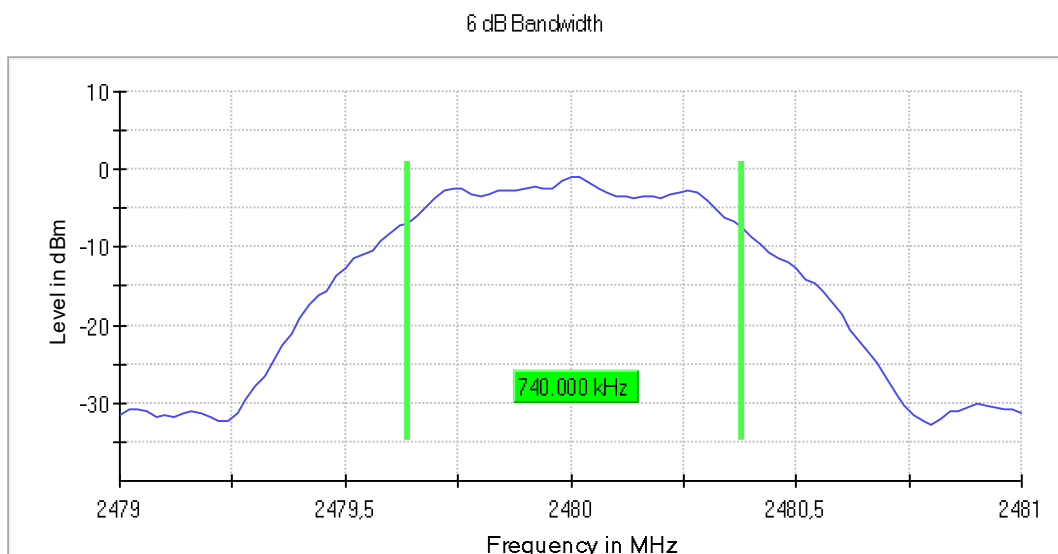
6 dB Bandwidth, low channel 1Mbps:



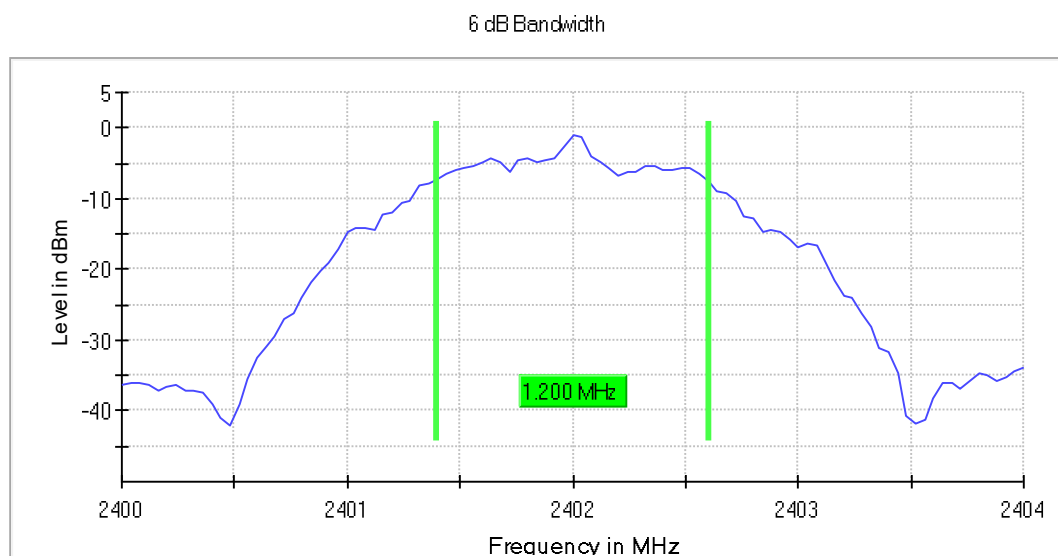
6 dB Bandwidth, middle channel 1Mbps:



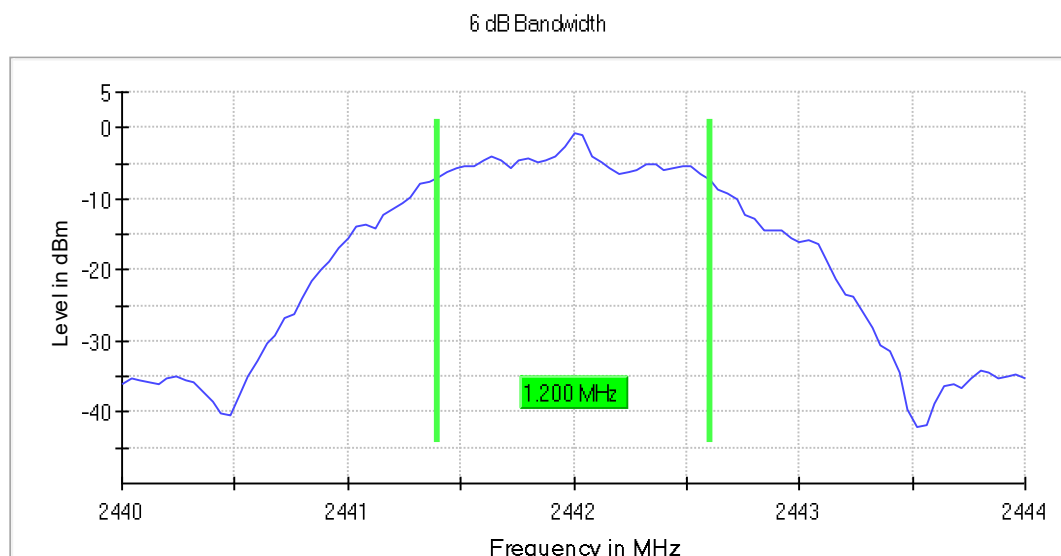
6 dB Bandwidth, high channel 1Mbps:



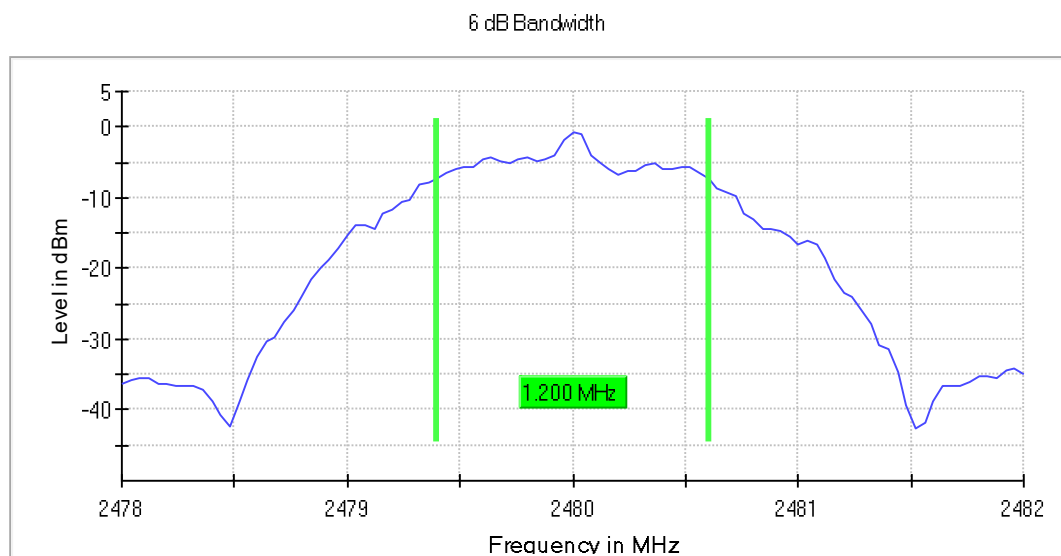
6 dB Bandwidth, low channel 2Mbps:



6 dB Bandwidth, middle channel 2Mbps:



6 dB Bandwidth, high channel 2Mbps:



12. Peak conducted output power

Reference: FCC part 15 §15.247(b), ISED 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.

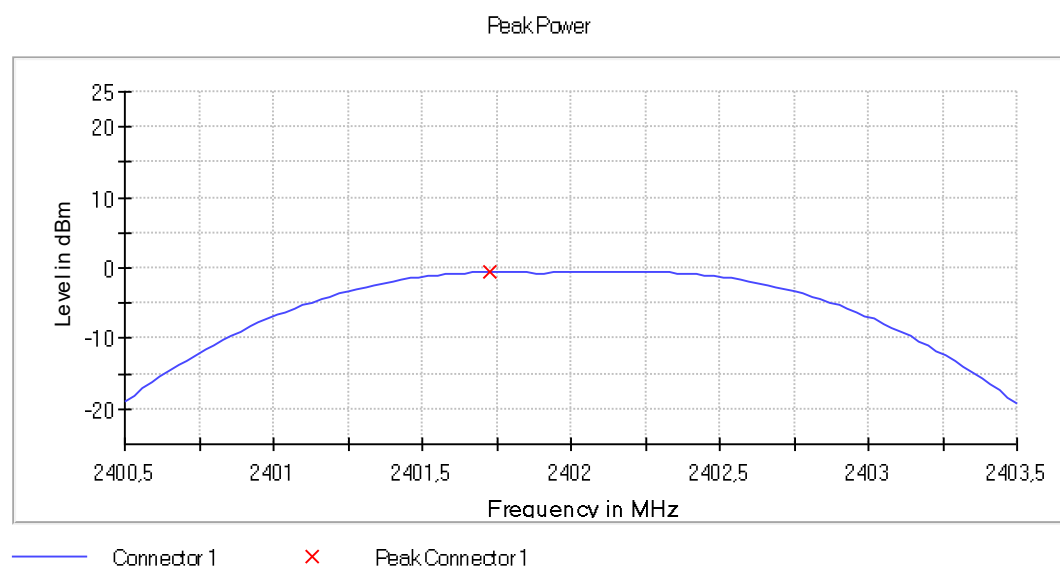
Test procedure
1. EUT set to test mode (communication tested is used if needed) 2. Analyzer resolution bandwidth is set $\geq$ DTS bandwidth 3. Detector set to peak and max hold 4. Sweep time is set to auto 5. After trace has stabilized a marker is set to peak envelope

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

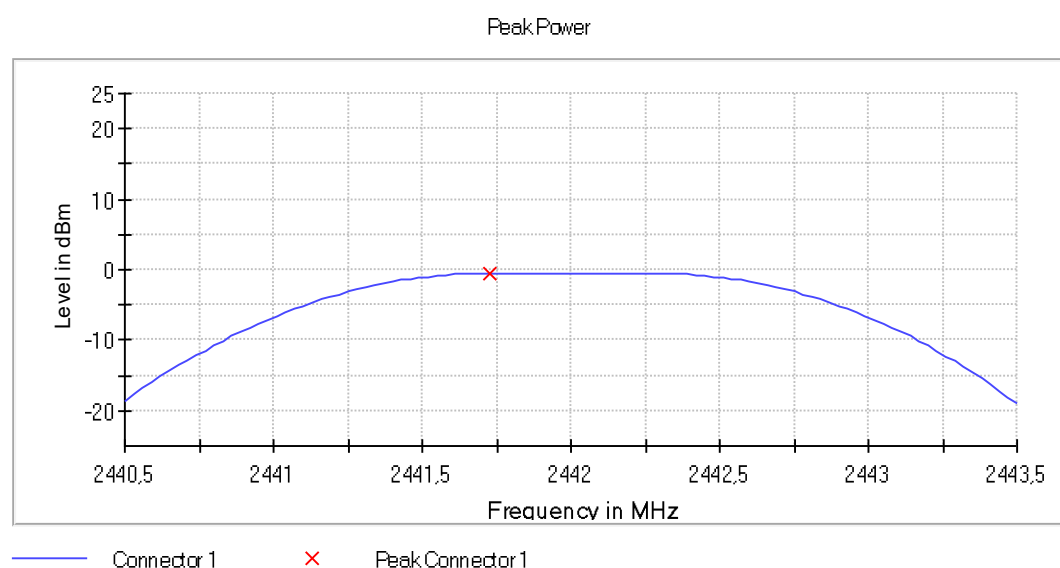
Maximum Declared Antenna Gain: -4.4 dBi

Mode / modulation	DUT Frequency (MHz)	Peak Power (dBm)	EIRP Power (dBm)	Result
Bluetooth LE, 1 Mbps	2402.000000	-0.6	-5.00	PASS
Bluetooth LE, 1 Mbps	2442.000000	-0.5	-4.90	PASS
Bluetooth LE, 1 Mbps	2480.000000	-0.6	-5.00	PASS
Bluetooth LE, 2 Mbps	2402.000000	-0.6	-5.00	PASS
Bluetooth LE, 2 Mbps	2442.000000	-0.5	-4.90	PASS
Bluetooth LE, 2 Mbps	2480.000000	-0.5	-4.90	PASS

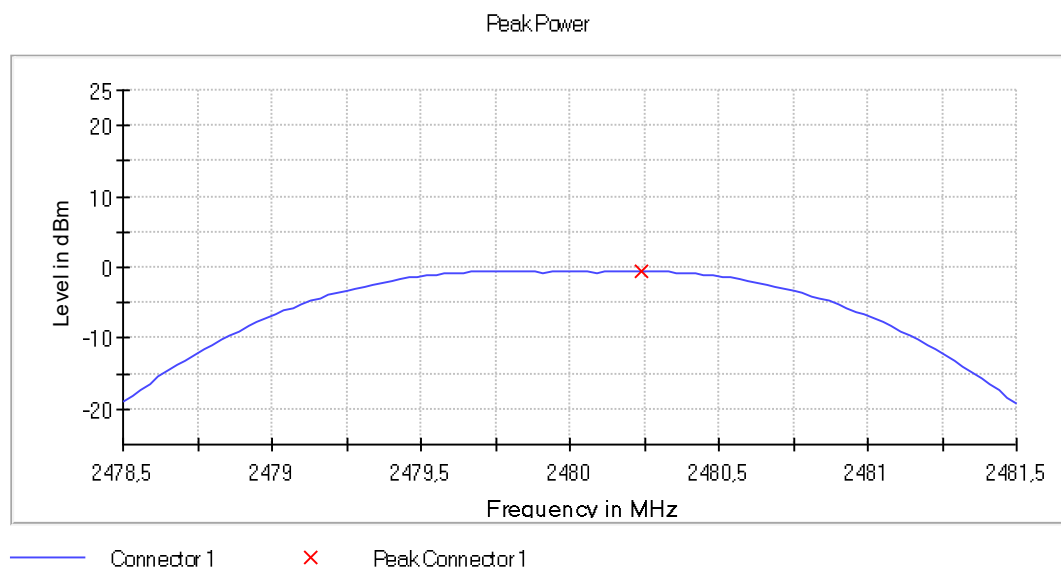
Peak power, low channel 1Mbps:



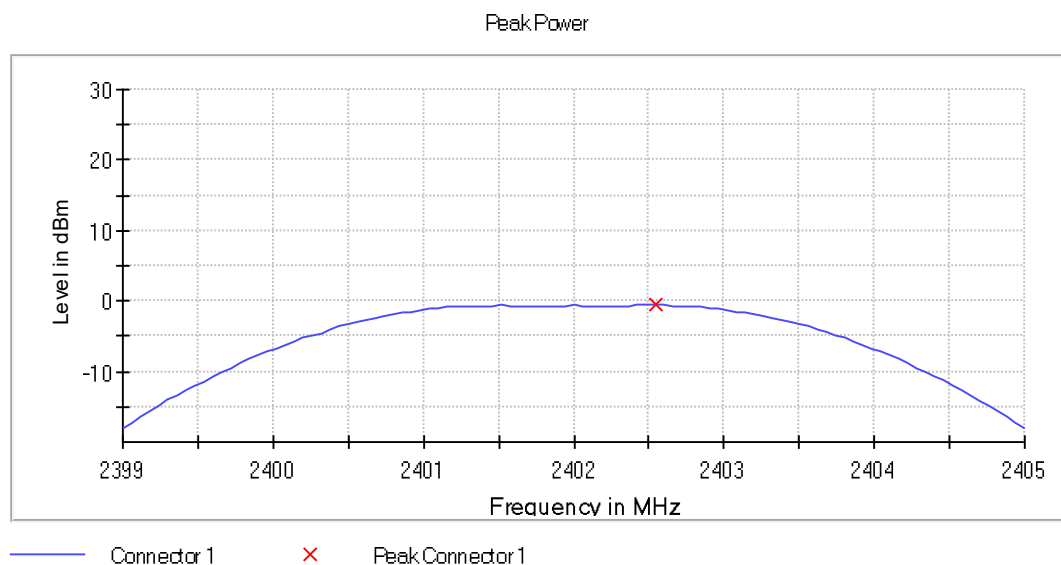
Peak power, middle channel 1Mbps:



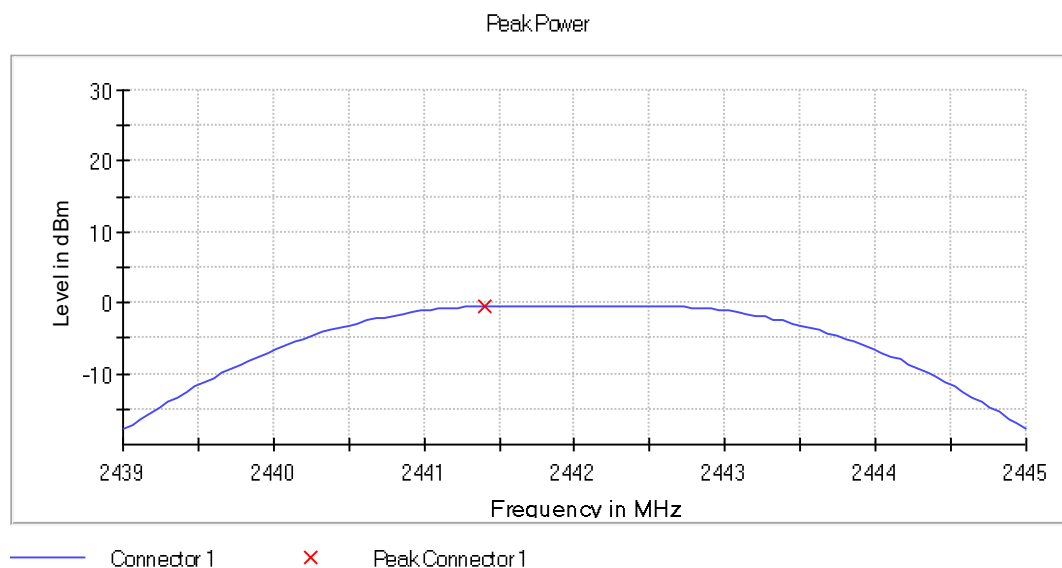
Peak power, high channel 1Mbps:



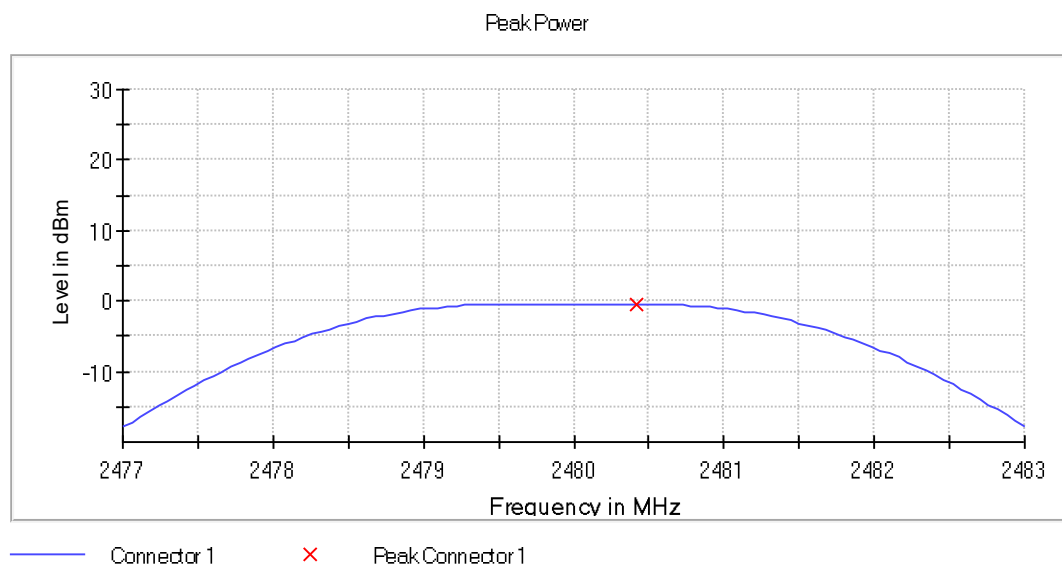
Peak power, low channel 2Mbps



Peak power, middle channel 2Mbps



Peak power, high channel 2Mbps



13. Peak Power Spectral Density

Reference: FCC part 15 §15.247(b), ISSED 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)

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.

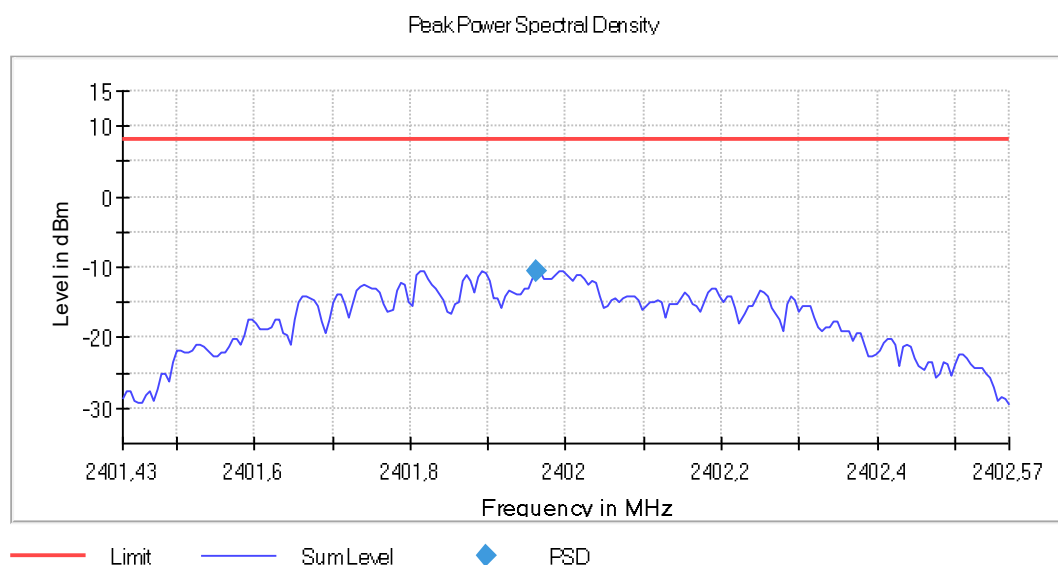
Limits
$\leq 8 \text{ dBm} / 3 \text{ kHz}$

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 $\geq$ 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

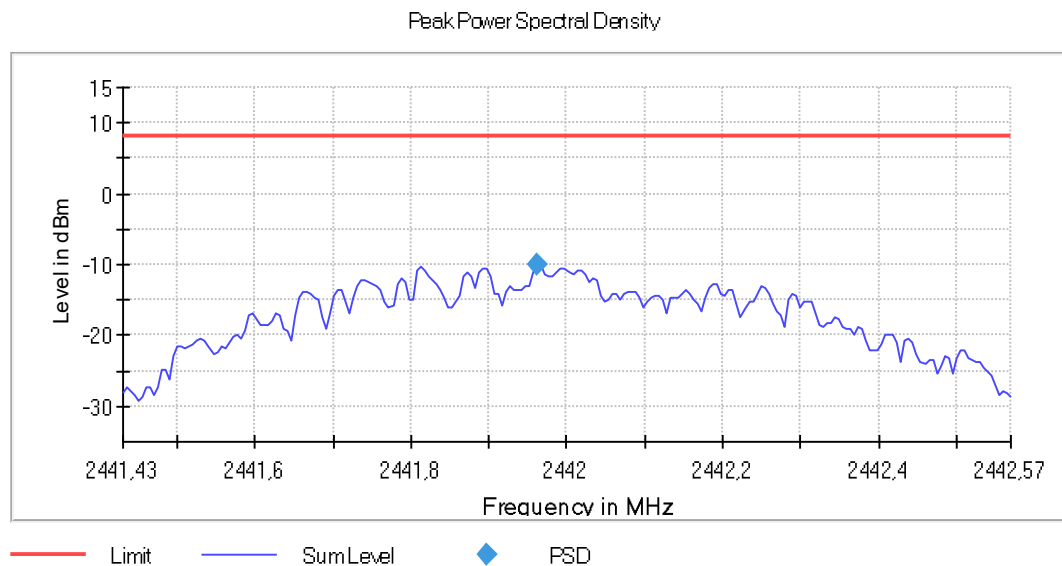
Summary

Mode / modulation	DUT Frequency (MHz)	Frequency (MHz)	PSD (dBm)	Limit Max (dBm)	Result
Bluetooth LE, 1 Mbps	2402.000000	2401.746656	-10.424	8.0	PASS
Bluetooth LE, 1 Mbps	2442.000000	2441.746656	-10.098	8.0	PASS
Bluetooth LE, 1 Mbps	2480.000000	2479.741639	-10.324	8.0	PASS
Bluetooth LE, 2 Mbps	2402.000000	2401.997493	-10.743	8.0	PASS
Bluetooth LE, 2 Mbps	2442.000000	2441.997493	-10.513	8.0	PASS
Bluetooth LE, 2 Mbps	2480.000000	2479.997493	-10.801	8.0	PASS

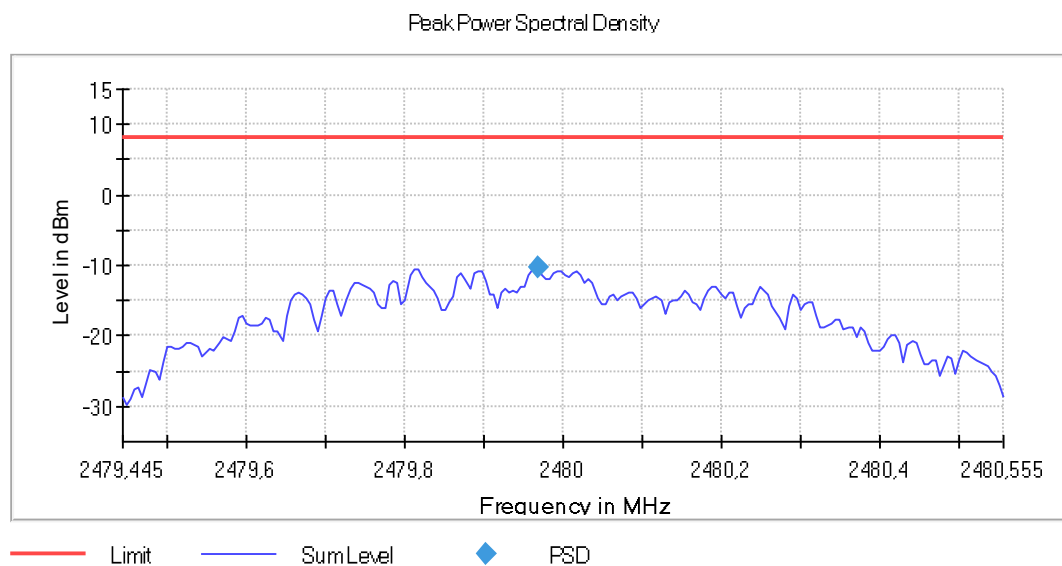
Peak power spectral density, low channel 1Mbps:



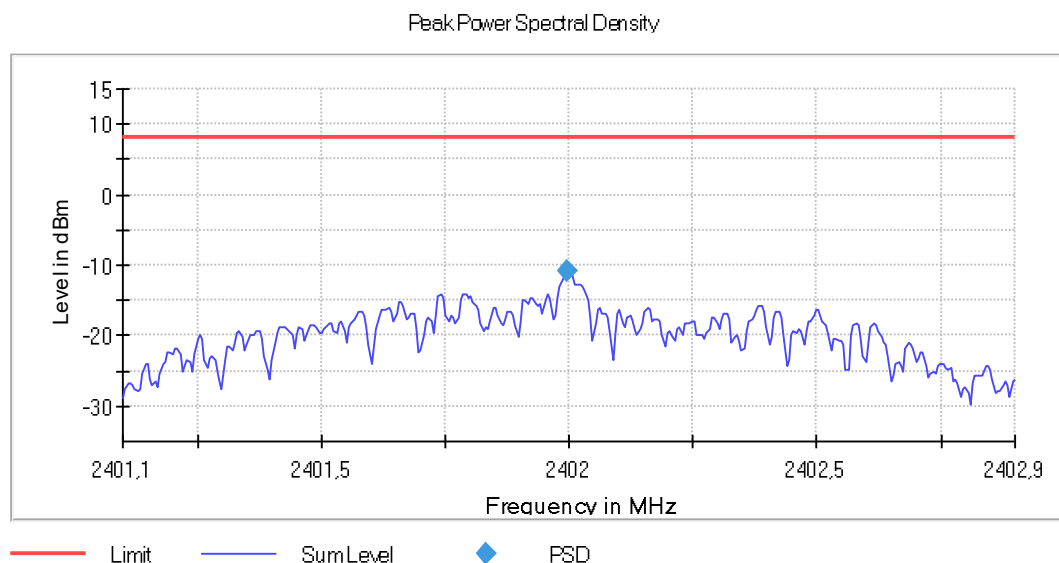
Peak power spectral density, middle channel 1Mbps:



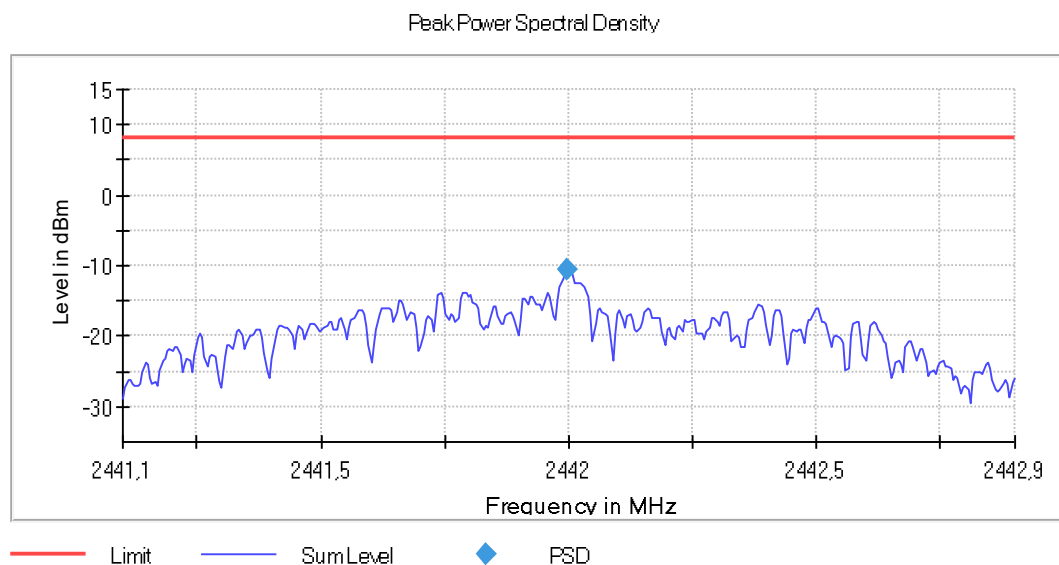
Peak power spectral density, high channel 1Mbps:



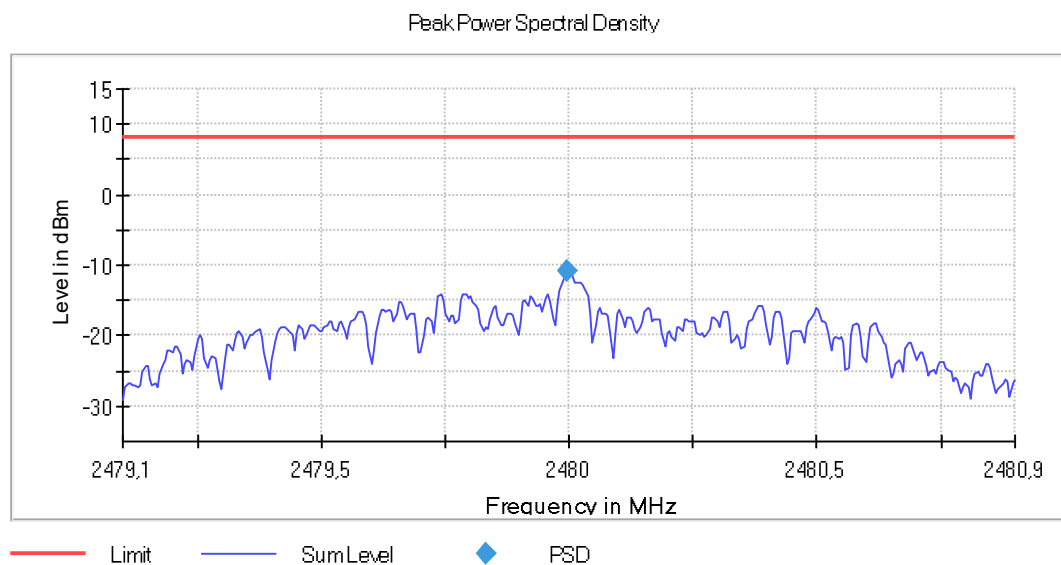
Peak power spectral density, low channel 2Mbps:



Peak power spectral density, middle channel 2Mbps:



Peak power spectral density, high channel 2Mbps:



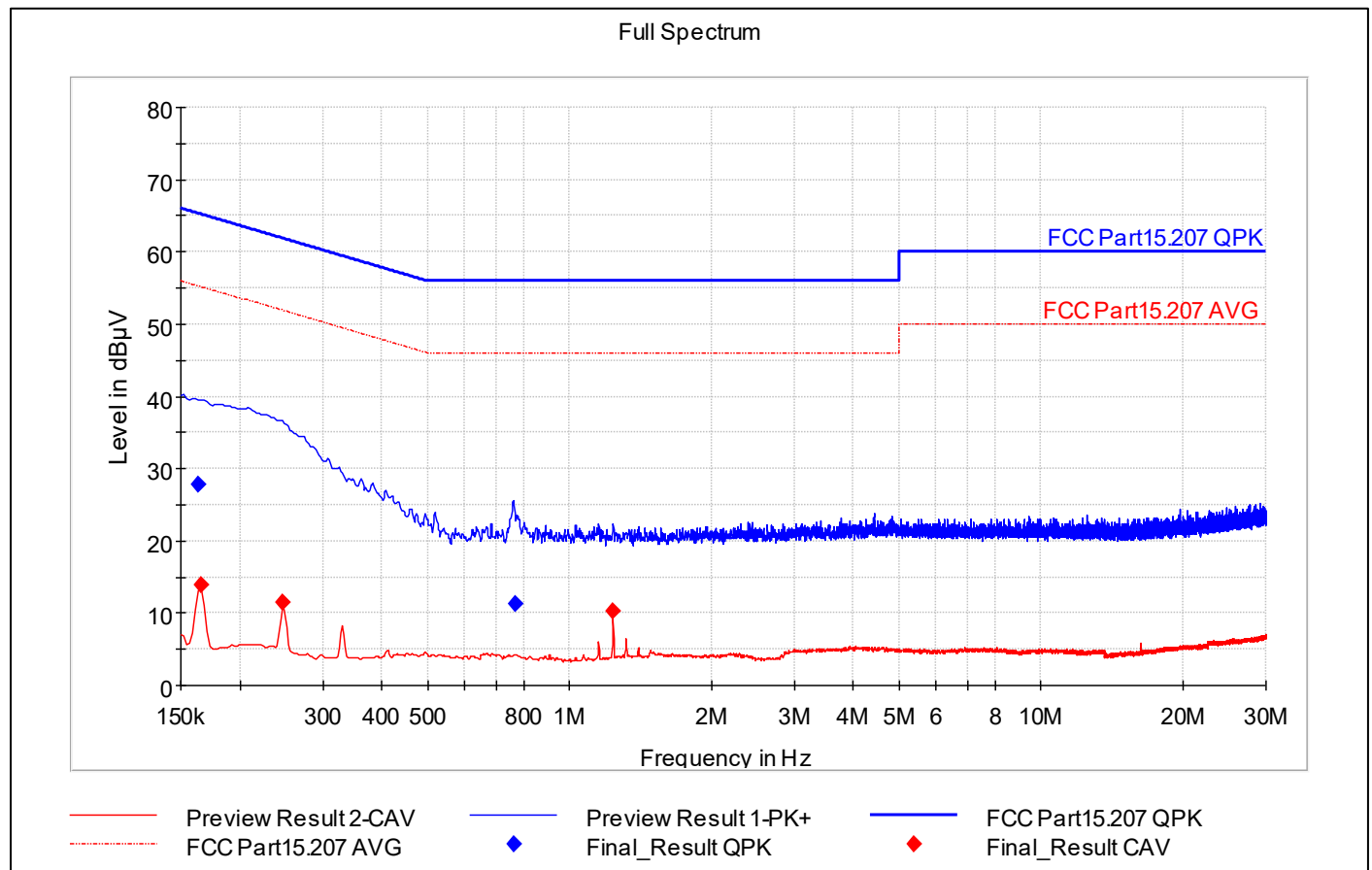
14. AC power line conducted emissions

Reference: FCC §15.207, ISED RSS-247, Issue 4 (section 3.1)

Test method: ANSI C63.10-2020+Cor.1-2023 (6.2)

Limits		
Frequency (MHz)	Quasi-Peak (dBuV)	Average (dBuV)
0.15 – 0.5	66 -56*	56 – 46*
0.5 – 5	56	46
5 - 30	60	50
*Limit decreases linearly with the logarithm of the frequency		

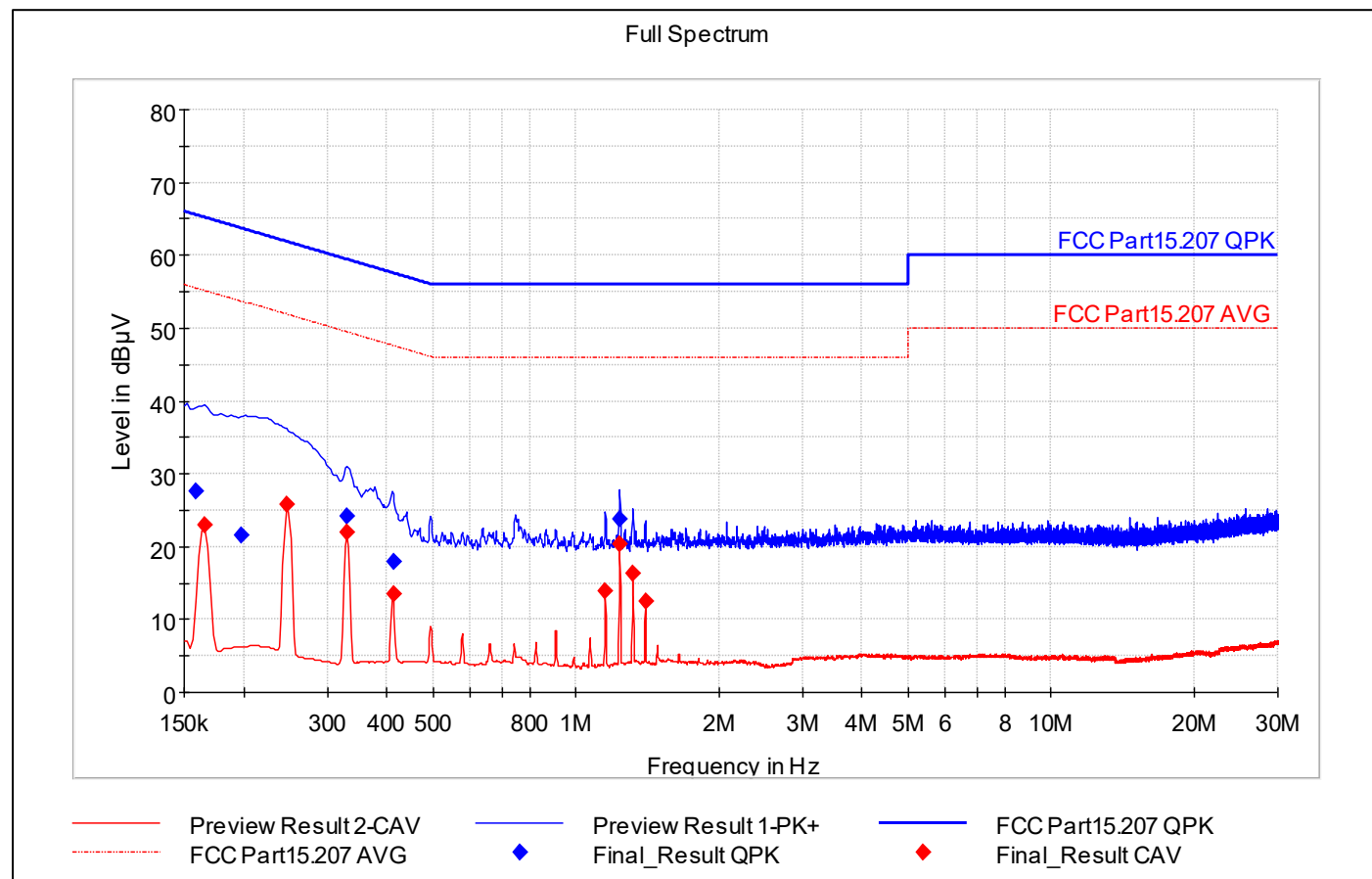
Operation mode(s)	Configuration	Test Verdict
Bluetooth LE TX, 1 Mbps	Mid channel, 2442 MHz	PASS

Conducted emission at the mains power port according to 47 CFR Part 15.207, Phase line, BLE 2442 MHz


Final Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)	Comment
0.163500	27.72	---	65.28	37.56	15000.0	9.000	L1	ON	9.8	PASS
0.165750	---	13.87	55.17	41.30	15000.0	9.000	L1	ON	9.8	PASS
0.246750	---	11.39	51.87	40.48	15000.0	9.000	L1	ON	9.8	PASS
0.768750	11.32	---	56.00	44.68	15000.0	9.000	L1	ON	9.9	PASS
1.236750	---	10.32	46.00	35.68	15000.0	9.000	L1	ON	9.8	PASS

Conducted emission at the mains power port according to 47 CFR Part 15.207, Neutral line, BLE 2442 MHz



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)	Comment
0.159000	27.65	---	65.52	37.87	15000.0	9.000	N	ON	9.8	PASS
0.165750	---	22.88	55.17	32.29	15000.0	9.000	N	ON	9.8	PASS
0.197250	21.52	---	63.73	42.21	15000.0	9.000	N	ON	9.8	PASS
0.246750	---	25.71	51.87	26.16	15000.0	9.000	N	ON	9.8	PASS
0.330000	24.15	---	59.45	35.30	15000.0	9.000	N	ON	9.8	PASS
0.330000	---	21.89	49.45	27.56	15000.0	9.000	N	ON	9.8	PASS
0.413250	---	13.42	47.58	34.16	15000.0	9.000	N	ON	9.8	PASS
0.413250	17.98	---	57.58	39.61	15000.0	9.000	N	ON	9.8	PASS
1.153500	---	13.92	46.00	32.08	15000.0	9.000	N	ON	9.8	PASS
1.236750	---	20.25	46.00	25.75	15000.0	9.000	N	ON	9.8	PASS
1.236750	23.72	---	56.00	32.28	15000.0	9.000	N	ON	9.8	PASS
1.320000	---	16.33	46.00	29.67	15000.0	9.000	N	ON	9.8	PASS
1.401000	---	12.57	46.00	33.43	15000.0	9.000	N	ON	9.8	PASS

15. 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
Bluetooth LE, 2 Mbps	2402.000000	PASS
Bluetooth LE, 2 Mbps	2480.000000	PASS

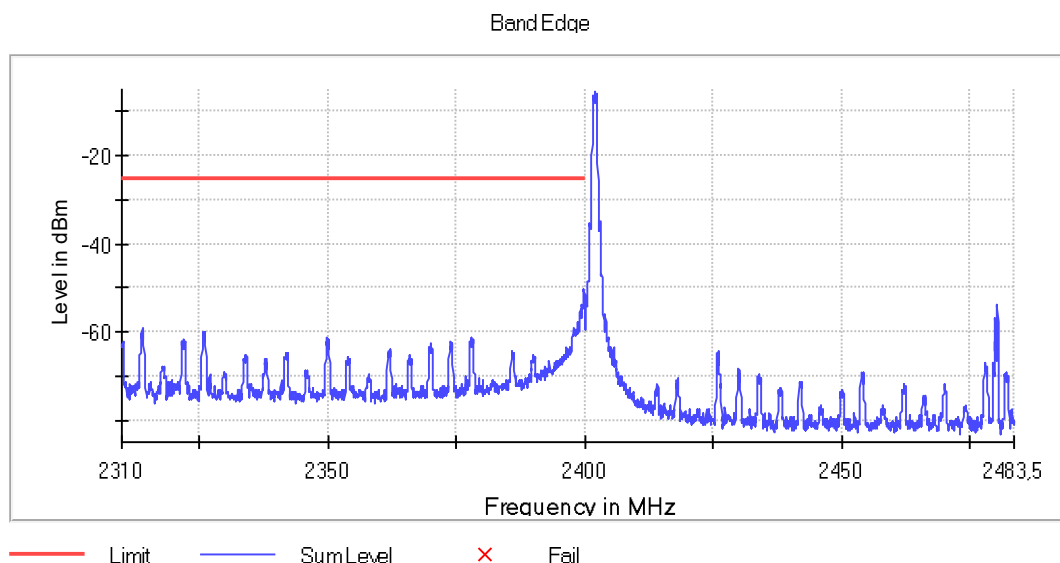
Measurements, band edge low 1Mbps:

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2399.799889	-50.5	25.2	-25.3	PASS
2399.749861	-50.5	25.2	-25.3	PASS
2399.899944	-50.6	25.3	-25.3	PASS
2399.849917	-50.8	25.5	-25.3	PASS
2399.949972	-51.5	26.1	-25.3	PASS
2399.699833	-51.6	26.3	-25.3	PASS
2399.649805	-53.3	28.0	-25.3	PASS
2399.499722	-54.0	28.7	-25.3	PASS
2399.549750	-54.1	28.8	-25.3	PASS
2399.599778	-54.6	29.3	-25.3	PASS
2399.199555	-54.7	29.4	-25.3	PASS
2399.449694	-55.0	29.7	-25.3	PASS
2399.149528	-55.3	30.0	-25.3	PASS
2399.249583	-55.4	30.1	-25.3	PASS
2399.099500	-55.5	30.2	-25.3	PASS

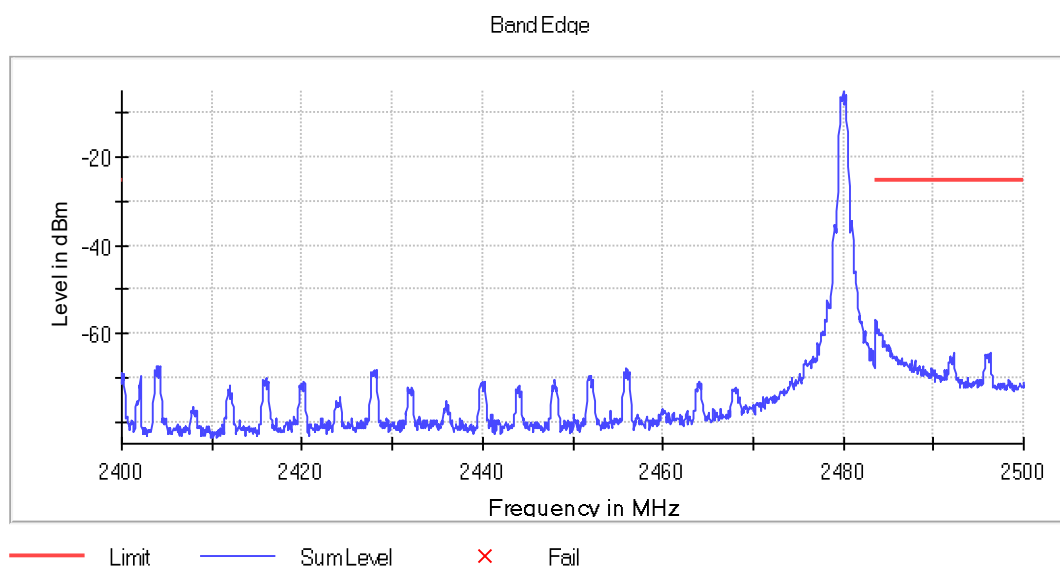
Measurements, band edge high 1Mbps:

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2483.600304	-57.0	31.9	-25.2	PASS
2483.650456	-57.4	32.2	-25.2	PASS
2483.550152	-58.9	33.7	-25.2	PASS
2483.800912	-58.9	33.7	-25.2	PASS
2483.851064	-59.1	33.9	-25.2	PASS
2483.700608	-59.5	34.3	-25.2	PASS
2483.901216	-59.9	34.7	-25.2	PASS
2484.202128	-60.0	34.8	-25.2	PASS
2484.252280	-60.1	34.9	-25.2	PASS
2484.051672	-60.1	34.9	-25.2	PASS
2483.750760	-60.1	34.9	-25.2	PASS
2484.001520	-60.2	35.1	-25.2	PASS
2483.951368	-60.2	35.1	-25.2	PASS
2484.101824	-60.3	35.1	-25.2	PASS
2484.151976	-60.5	35.3	-25.2	PASS

Band edge, low channel 1Mbps:



Band edge, high channel 1Mbps:



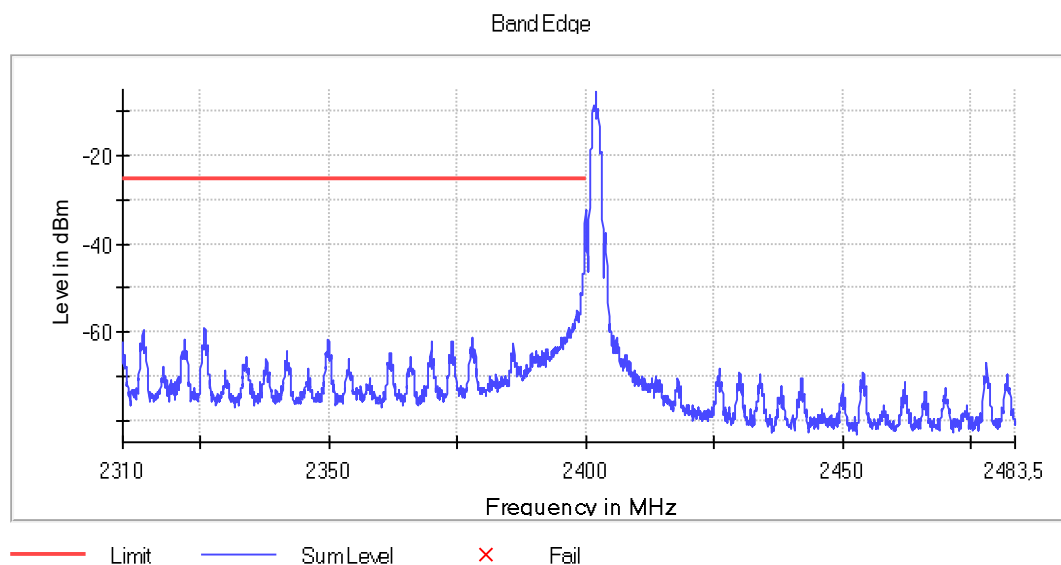
Measurements, band edge low 2Mbps:

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2399.949972	-32.5	7.1	-25.4	PASS
2399.899944	-35.2	9.9	-25.4	PASS
2399.849917	-37.7	12.4	-25.4	PASS
2400.000000	-37.8	12.5	-25.4	PASS
2399.799889	-39.1	13.7	-25.4	PASS
2399.749861	-40.1	14.7	-25.4	PASS
2399.699833	-42.4	17.0	-25.4	PASS
2399.649805	-45.0	19.6	-25.4	PASS
2399.599778	-46.8	21.5	-25.4	PASS
2399.549750	-46.9	21.6	-25.4	PASS
2399.499722	-48.1	22.7	-25.4	PASS
2399.399666	-50.8	25.4	-25.4	PASS
2399.449694	-50.8	25.5	-25.4	PASS
2399.099500	-51.0	25.6	-25.4	PASS
2399.349639	-51.0	25.7	-25.4	PASS

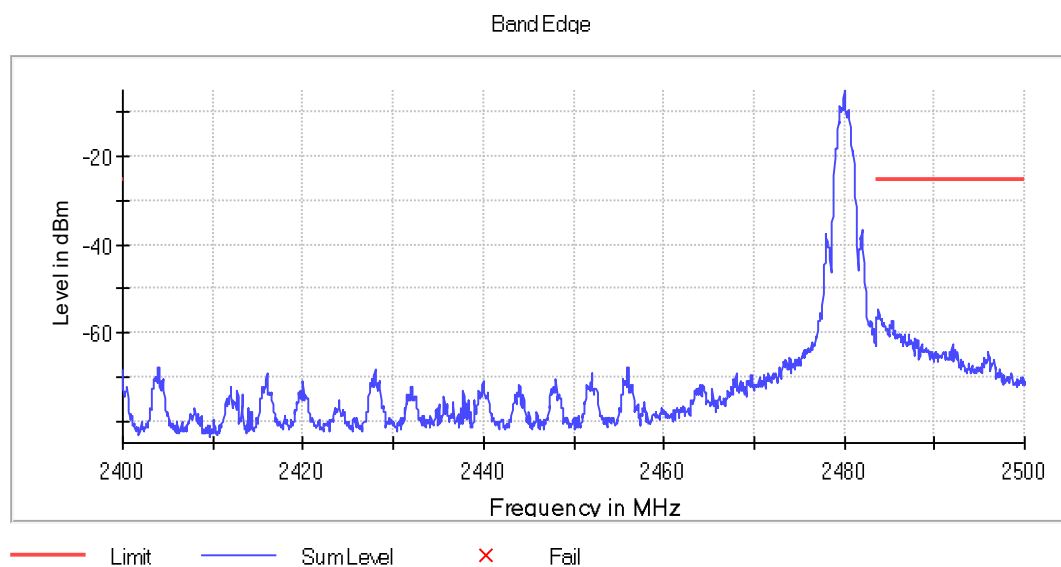
Measurements, band edge high 2Mbps:

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)	Result
2483.800912	-54.7	29.5	-25.2	PASS
2483.750760	-55.8	30.6	-25.2	PASS
2483.851064	-56.1	30.9	-25.2	PASS
2483.600304	-56.5	31.3	-25.2	PASS
2484.001520	-56.7	31.5	-25.2	PASS
2483.951368	-56.7	31.5	-25.2	PASS
2483.550152	-56.8	31.6	-25.2	PASS
2484.101824	-56.9	31.7	-25.2	PASS
2484.151976	-57.0	31.8	-25.2	PASS
2483.700608	-57.0	31.8	-25.2	PASS
2483.901216	-57.1	31.9	-25.2	PASS
2483.650456	-57.1	31.9	-25.2	PASS
2485.305471	-57.4	32.2	-25.2	PASS
2484.051672	-57.5	32.3	-25.2	PASS
2485.355623	-57.5	32.3	-25.2	PASS

Band edge, high channel 2Mbps:



Band edge, high channel 2Mbps:



16. Tx spurious emissions, conducted

Reference: FCC §15.247(d), ISSED 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	2442.000000	PASS
Bluetooth LE, 1 Mbps	2480.000000	PASS
Bluetooth LE, 2 Mbps	2402.000000	PASS
Bluetooth LE, 2 Mbps	2442.000000	PASS
Bluetooth LE, 2 Mbps	2480.000000	PASS

Pre Measurements, low channel 1Mbps:

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
4803.154762	-48.8	22.6	-26.1
2300.000000	-59.1	32.9	-26.1
2210.000000	-59.2	33.1	-26.1
2270.000000	-60.3	34.1	-26.1
2290.000000	-60.3	34.2	-26.1
2320.000000	-60.4	34.3	-26.1
2330.000000	-60.5	34.4	-26.1
2503.497024	-61.1	34.9	-26.1
2513.495536	-61.2	35.1	-26.1
2913.436012	-61.3	35.2	-26.1
2533.492560	-61.5	35.4	-26.1
2190.000000	-61.6	35.4	-26.1
2593.483631	-61.8	35.7	-26.1
2310.000000	-61.9	35.7	-26.1
2380.000000	-62.3	36.1	-26.1

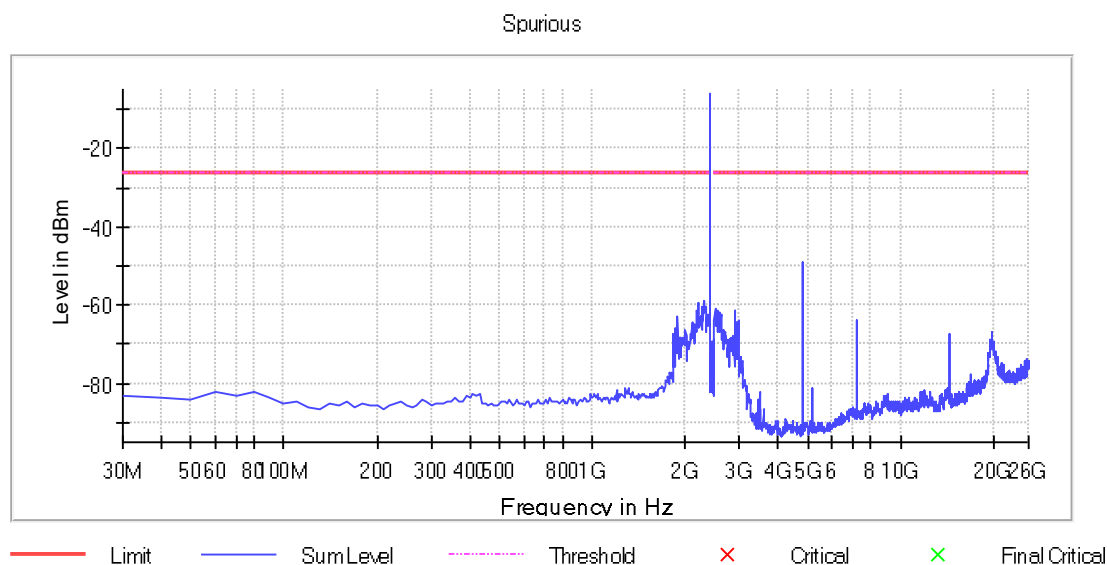
Pre Measurements, middle channel 1Mbps:

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
4883.142857	-50.9	24.6	-26.3
2250.000000	-58.5	32.2	-26.3
2330.000000	-58.5	32.2	-26.3
2543.491071	-59.5	33.2	-26.3
2983.425595	-59.8	33.5	-26.3
2340.000000	-60.1	33.8	-26.3
2633.477679	-60.3	34.0	-26.3
2360.000000	-60.4	34.1	-26.3
2953.430060	-60.6	34.3	-26.3
2310.000000	-60.8	34.5	-26.3
2553.489583	-60.9	34.6	-26.3
2523.494048	-61.5	35.2	-26.3
2350.000000	-61.8	35.4	-26.3
1930.000000	-61.9	35.6	-26.3
2370.000000	-62.1	35.7	-26.3

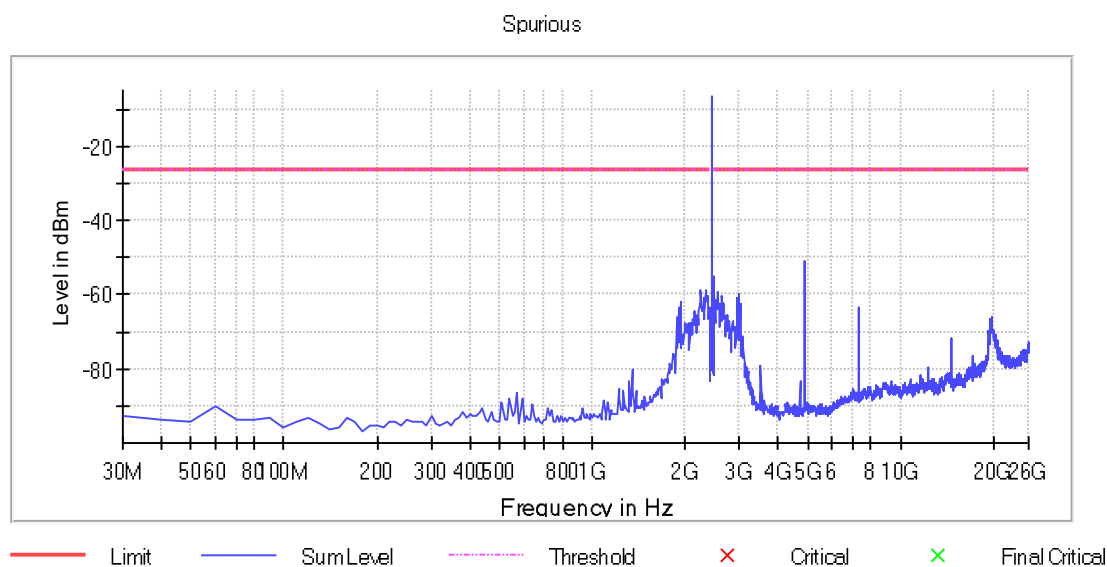
Pre Measurements, top channel 1Mbps:

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
4953.132440	-51.9	26.0	-25.9
19770.927083	-56.7	30.9	-25.9
19710.936012	-57.0	31.1	-25.9
19720.934524	-57.0	31.2	-25.9
19750.930060	-57.4	31.5	-25.9
3023.419643	-57.6	31.7	-25.9
19740.931548	-57.6	31.8	-25.9
19900.907738	-57.7	31.8	-25.9
19660.943452	-57.7	31.9	-25.9
19700.937500	-57.8	32.0	-25.9
19730.933036	-57.8	32.0	-25.9
19780.925595	-57.9	32.1	-25.9
19860.913690	-58.3	32.5	-25.9
19670.941964	-58.4	32.5	-25.9
19760.928571	-58.5	32.7	-25.9

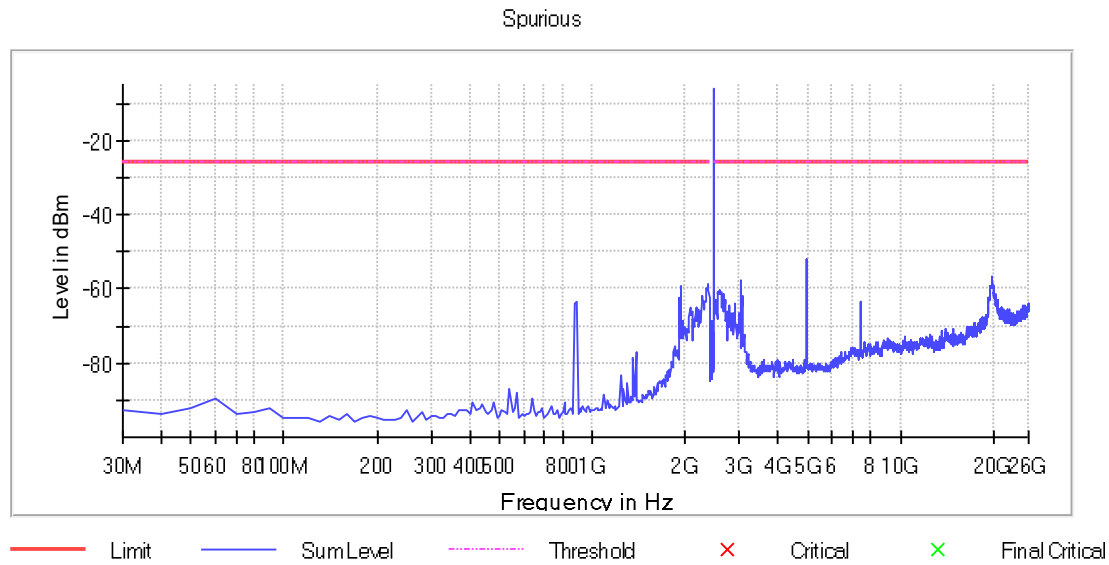
Low channel 1Mbps:



Middle channel 1Mbps:



High channel 1Mbps:



Pre Measurements, low channel 2Mbps:

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
4803.154762	-50.7	22.3	-28.4
2210.000000	-59.1	30.7	-28.4
2290.000000	-60.6	32.2	-28.4
2270.000000	-61.0	32.7	-28.4
2320.000000	-61.0	32.7	-28.4
2503.497024	-61.6	33.3	-28.4
2330.000000	-62.1	33.8	-28.4
2533.492560	-62.2	33.8	-28.4
2300.000000	-62.4	34.1	-28.4
2973.427083	-62.6	34.3	-28.4
2593.483631	-62.7	34.4	-28.4
2513.495536	-63.2	34.8	-28.4
2380.000000	-63.3	34.9	-28.4
2613.480655	-63.4	35.0	-28.4
2240.000000	-63.5	35.1	-28.4

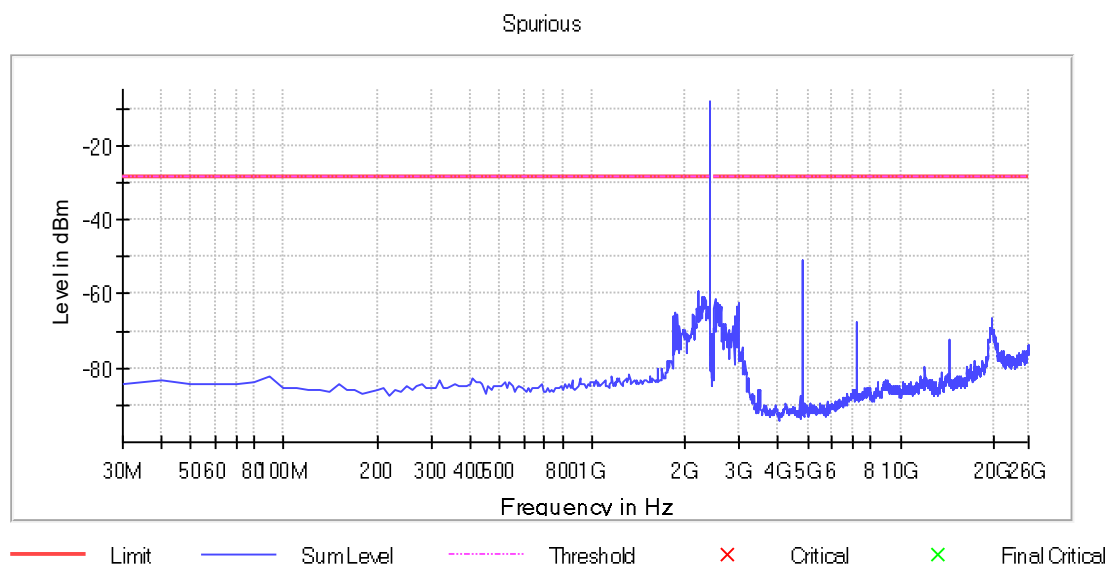
Pre Measurements, middle channel 2Mbps:

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
4883.142857	-49.0	23.0	-26.0
2250.000000	-58.1	32.0	-26.0
2330.000000	-58.4	32.4	-26.0
2953.430060	-59.7	33.7	-26.0
2340.000000	-59.8	33.7	-26.0
2310.000000	-59.8	33.8	-26.0
2543.491071	-60.1	34.1	-26.0
2983.425595	-60.2	34.1	-26.0
2633.477679	-60.2	34.2	-26.0
2553.489583	-60.9	34.9	-26.0
2523.494048	-61.0	34.9	-26.0
2360.000000	-61.7	35.6	-26.0
1930.000000	-61.9	35.9	-26.0
2370.000000	-62.0	36.0	-26.0
1900.000000	-62.4	36.4	-26.0

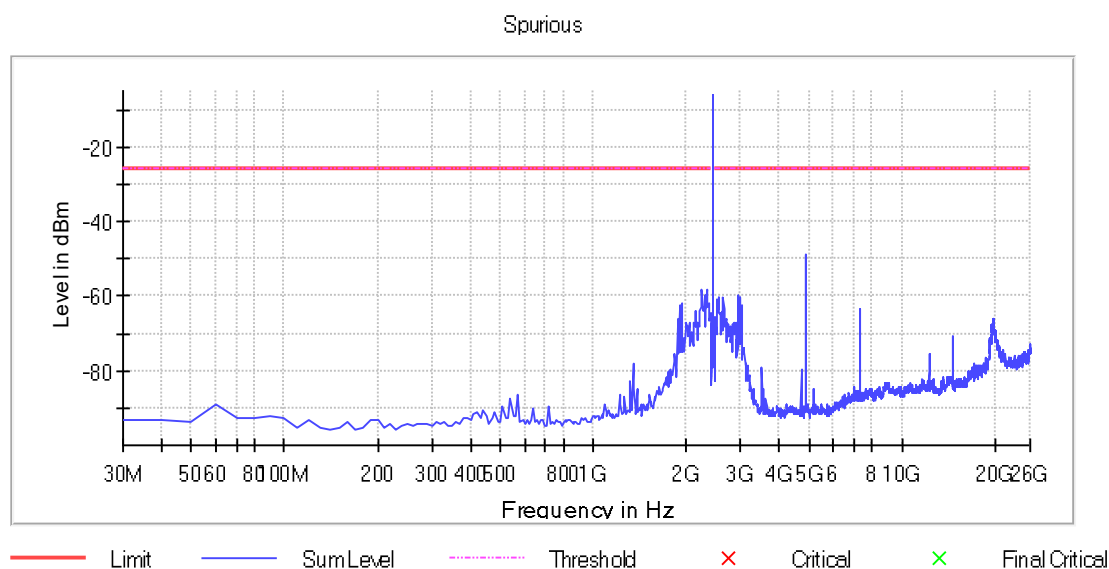
Pre Measurements, top channel 2Mbps:

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
4953.132440	-51.1	25.3	-25.8
19680.940476	-57.3	31.5	-25.8
19750.930060	-57.3	31.5	-25.8
19740.931548	-57.3	31.5	-25.8
19760.928571	-57.3	31.6	-25.8
19720.934524	-57.7	32.0	-25.8
19710.936012	-58.2	32.5	-25.8
19780.925595	-58.3	32.5	-25.8
19770.927083	-58.4	32.6	-25.8
3023.419643	-58.4	32.7	-25.8
19610.950893	-58.4	32.7	-25.8
19810.921131	-58.5	32.7	-25.8
19640.946429	-58.5	32.8	-25.8
19820.919643	-58.7	32.9	-25.8
19830.918155	-58.8	33.0	-25.8

Low channel 2Mbps:

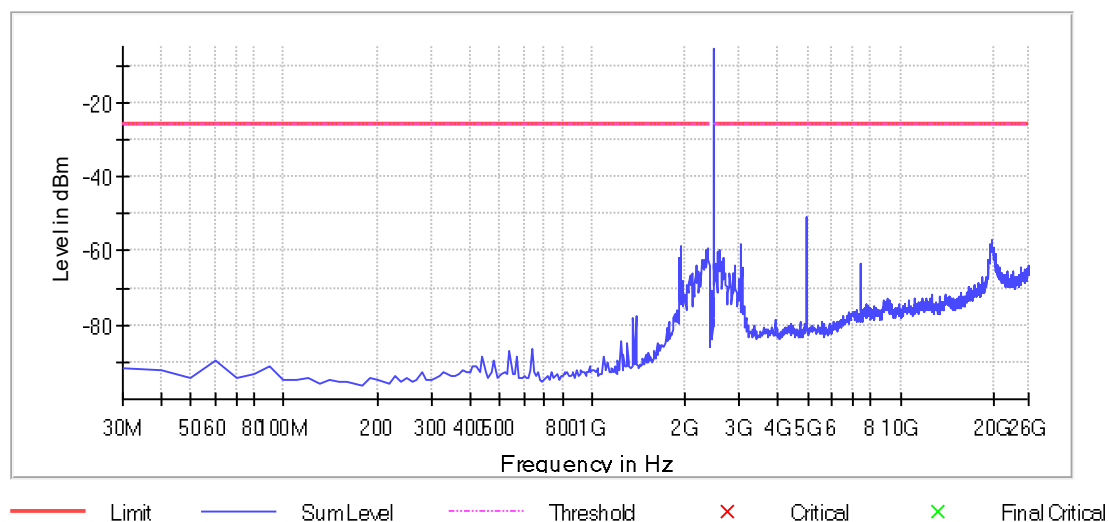


Middle channel 2Mbps:



High channel 2Mbps:

Spurious



17. 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

Summary		
Mode / modulation	Frequency (MHz)	Bandwidth (MHz)
Bluetooth LE, 1 Mbps	2402.000000	PASS
Bluetooth LE, 1 Mbps	2442.000000	PASS
Bluetooth LE, 1 Mbps	2480.000000	PASS
Bluetooth LE, 2 Mbps	2402.000000	PASS
Bluetooth LE, 2 Mbps	2442.000000	PASS
Bluetooth LE, 2 Mbps	2480.000000	PASS

Pre Measurements, low channel 1 Mbps:

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
4803.585824	-48.0	26.8	-21.2
4803.085806	-48.0	26.8	-21.2
4804.585861	-48.1	26.9	-21.2
4804.085843	-48.1	26.9	-21.2
4805.085880	-50.5	29.3	-21.2
4802.585787	-51.5	30.3	-21.2
2209.932119	-55.5	34.3	-21.2
2285.959271	-55.6	34.4	-21.2
2289.960700	-55.8	34.6	-21.2
19730.686534	-55.8	34.6	-21.2
2210.432297	-55.9	34.7	-21.2
2298.463737	-56.0	34.8	-21.2
2290.961058	-56.1	34.9	-21.2
2262.450875	-56.1	34.9	-21.2
2290.460879	-56.2	35.0	-21.2
4803.585824	-48.0	26.8	-21.2

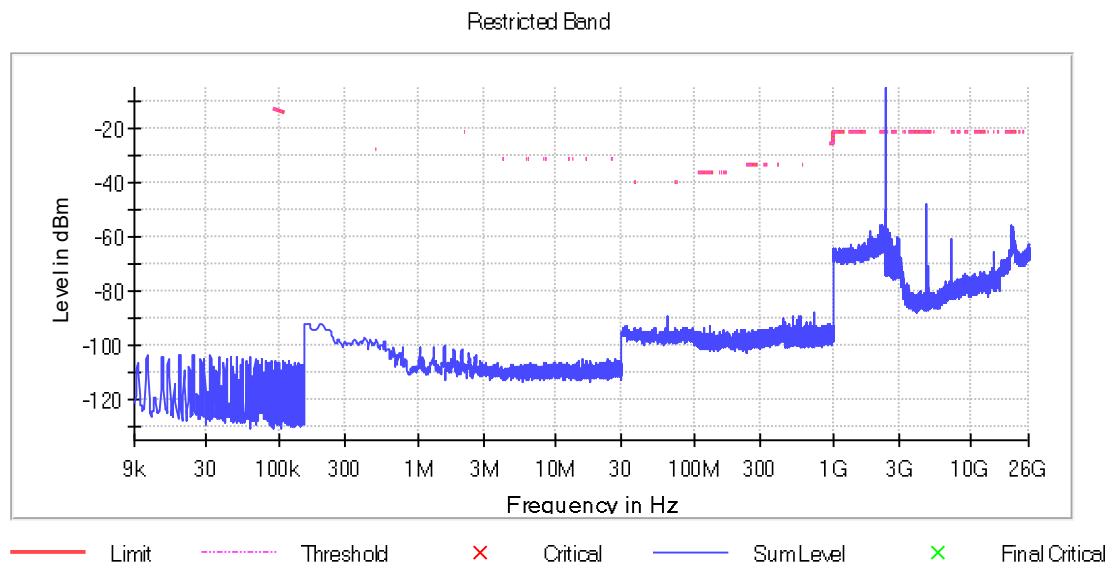
Pre Measurements, middle channel 1 Mbps:

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
4883.588784	-48.1	26.9	-21.2
4883.088765	-48.2	27.0	-21.2
4884.588821	-48.2	27.0	-21.2
4884.088802	-48.3	27.1	-21.2
4885.088839	-50.1	28.9	-21.2
4882.588747	-51.8	30.6	-21.2
2330.975348	-55.6	34.4	-21.2
2330.475170	-55.8	34.6	-21.2
2250.446588	-56.0	34.8	-21.2
2250.946767	-56.1	34.9	-21.2
19749.687484	-56.2	35.0	-21.2
19717.685884	-56.3	35.1	-21.2
19749.187459	-56.4	35.2	-21.2
2249.946409	-56.4	35.2	-21.2
19714.685734	-56.4	35.2	-21.2

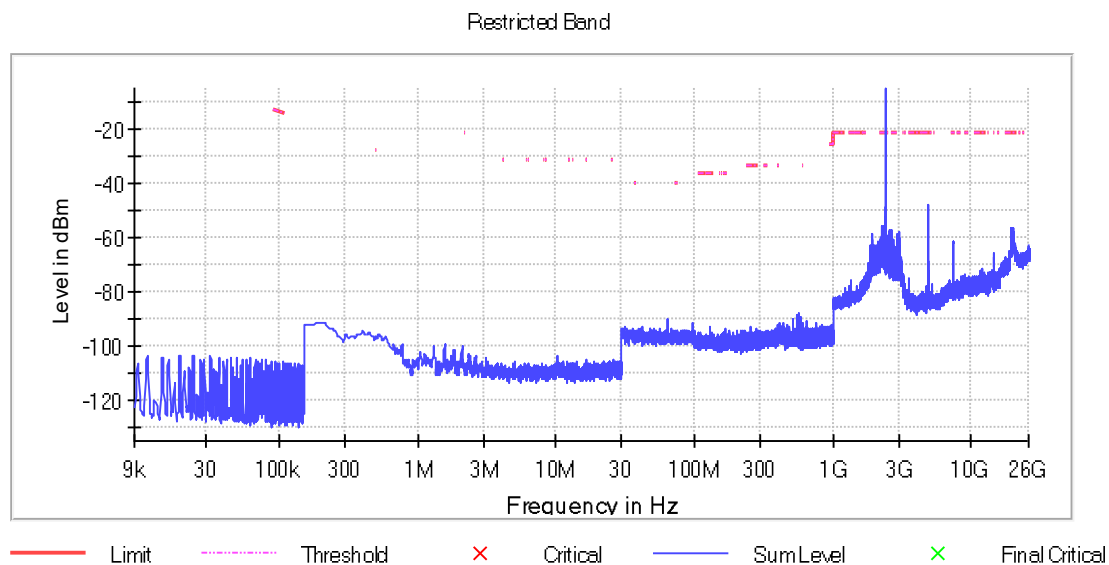
Pre Measurements, hig channel 1 Mbps:

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
2484.000018	-44.8	23.6	-21.2
2485.000055	-47.9	26.7	-21.2
2485.500074	-48.4	27.2	-21.2
4959.091577	-48.4	27.2	-21.2
4959.591595	-48.5	27.3	-21.2
4960.591632	-48.6	27.4	-21.2
4960.091614	-49.1	27.9	-21.2
4961.091651	-51.3	30.1	-21.2
2486.000092	-51.7	30.5	-21.2
4958.591558	-51.8	30.6	-21.2
15642.986793	-52.2	31.0	-21.2
15475.480597	-52.4	31.2	-21.2
12073.854765	-52.5	31.3	-21.2
15569.984093	-52.7	31.5	-21.2
15616.485813	-52.7	31.5	-21.2

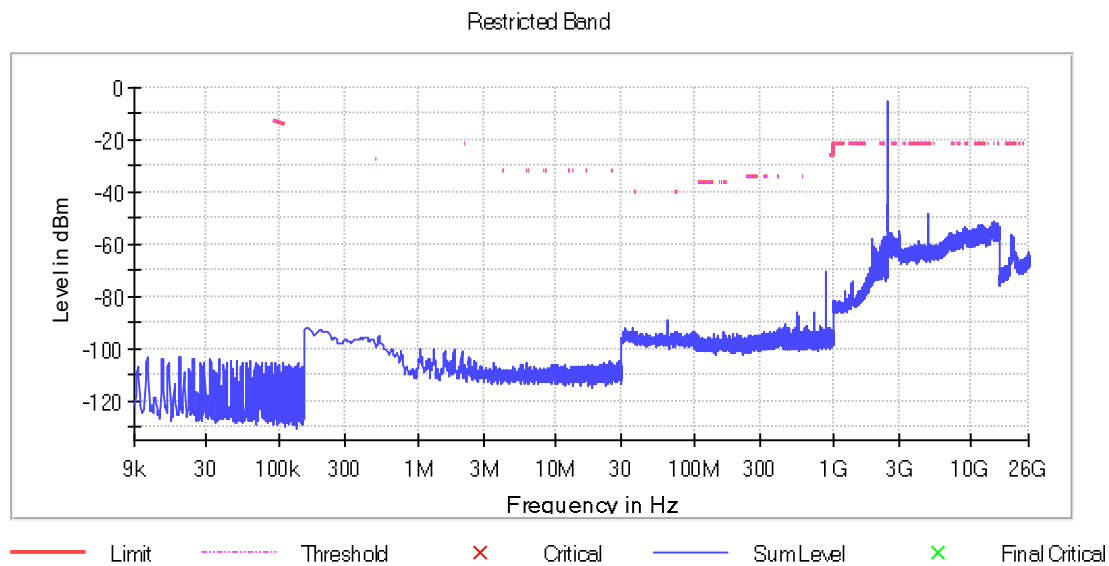
Pre Measurements, low channel 1 Mbps:



Pre Measurements, middle channel 1 Mbps:



Pre Measurements, top channel 1 Mbps:



Pre Measurements, low channel 2 Mbps:

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
4804.085843	-47.7	26.5	-21.2
4803.085806	-47.8	26.6	-21.2
4803.585824	-47.8	26.6	-21.2
4802.585787	-47.8	26.6	-21.2
4805.085880	-48.1	26.9	-21.2
4804.585861	-48.1	26.9	-21.2
4802.085769	-51.3	30.1	-21.2
4805.585898	-52.3	31.1	-21.2
2262.450875	-55.6	34.4	-21.2
2262.951054	-55.7	34.5	-21.2
19748.687434	-56.4	35.2	-21.2
19782.189109	-56.4	35.2	-21.2
19725.186259	-56.4	35.2	-21.2
19737.686884	-56.5	35.3	-21.2
2209.932119	-56.6	35.4	-21.2

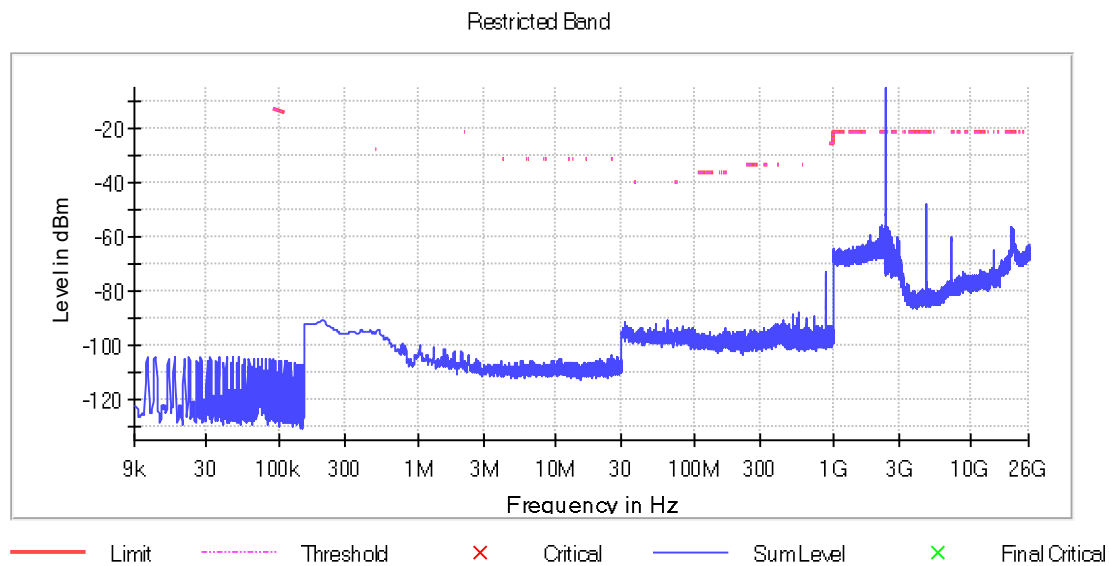
Pre Measurements, middle channel 2 Mbps:

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
4883.088765	-47.9	26.7	-21.2
4885.088839	-48.1	26.9	-21.2
4884.588821	-48.2	27.0	-21.2
4882.588747	-48.2	27.0	-21.2
4883.588784	-49.1	27.9	-21.2
4884.088802	-49.1	27.9	-21.2
4885.588858	-50.7	29.5	-21.2
4882.088728	-51.5	30.3	-21.2
19724.186209	-56.0	34.8	-21.2
19729.186459	-56.1	34.9	-21.2
19744.187209	-56.3	35.1	-21.2
2249.946409	-56.3	35.1	-21.2
19711.185559	-56.4	35.2	-21.2
19752.687634	-56.5	35.3	-21.2
2250.446588	-56.5	35.3	-21.2

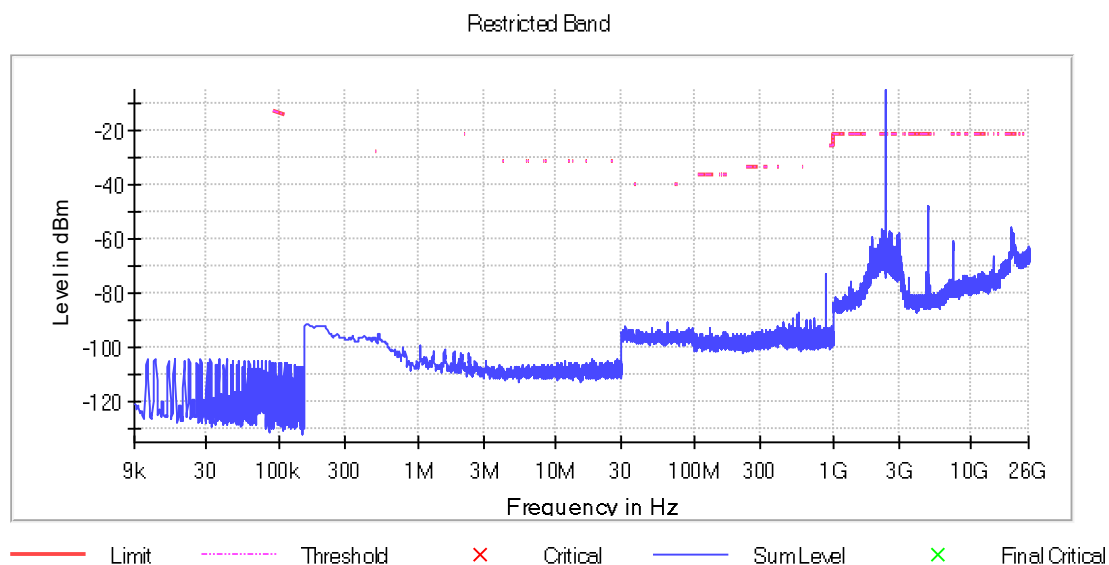
Pre Measurements, top channel 2 Mbps:

Frequency (MHz)	Level (dBm)	Margin (dB)	Limit (dBm)
2484.000018	-44.1	22.9	-21.2
2483.500000	-44.9	23.7	-21.2
2484.500037	-45.9	24.7	-21.2
4961.091651	-48.8	27.6	-21.2
4960.091614	-49.3	28.1	-21.2
4958.591558	-49.5	28.3	-21.2
4959.091577	-49.5	28.3	-21.2
4959.591595	-49.6	28.4	-21.2
4960.591632	-50.1	28.9	-21.2
2485.500074	-51.1	29.9	-21.2
2486.000092	-51.2	30.0	-21.2
11586.336731	-51.9	30.7	-21.2
15625.486146	-51.9	30.7	-21.2
15741.990456	-52.1	30.9	-21.2
2485.000055	-52.1	30.9	-21.2

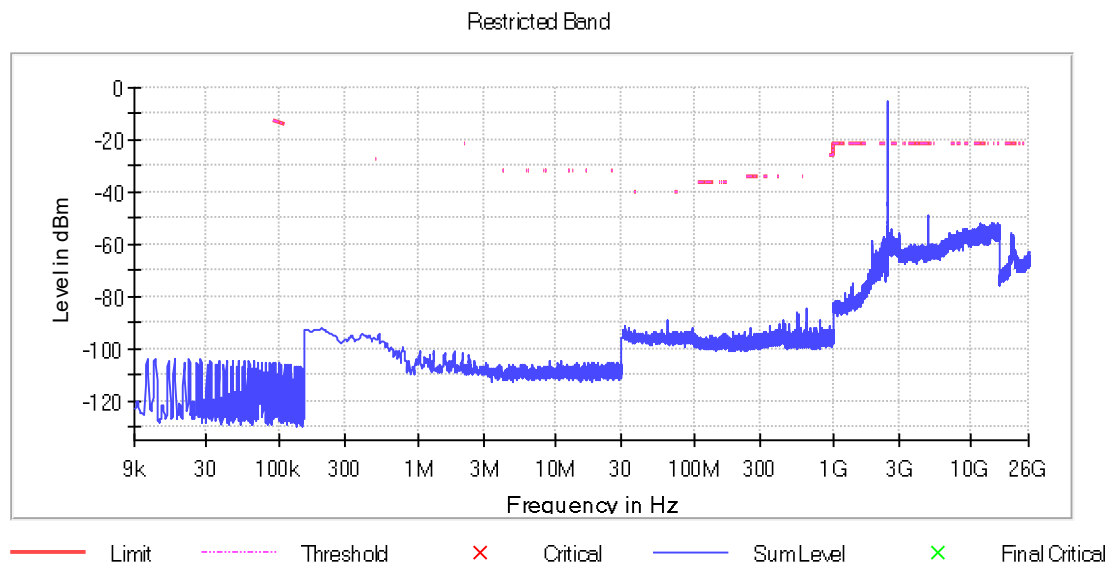
Pre Measurements, bottom channel 2 Mbps:



Pre Measurements, middle channel 2 Mbps:



Pre Measurements, top channel 2 Mbps:



18. 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.

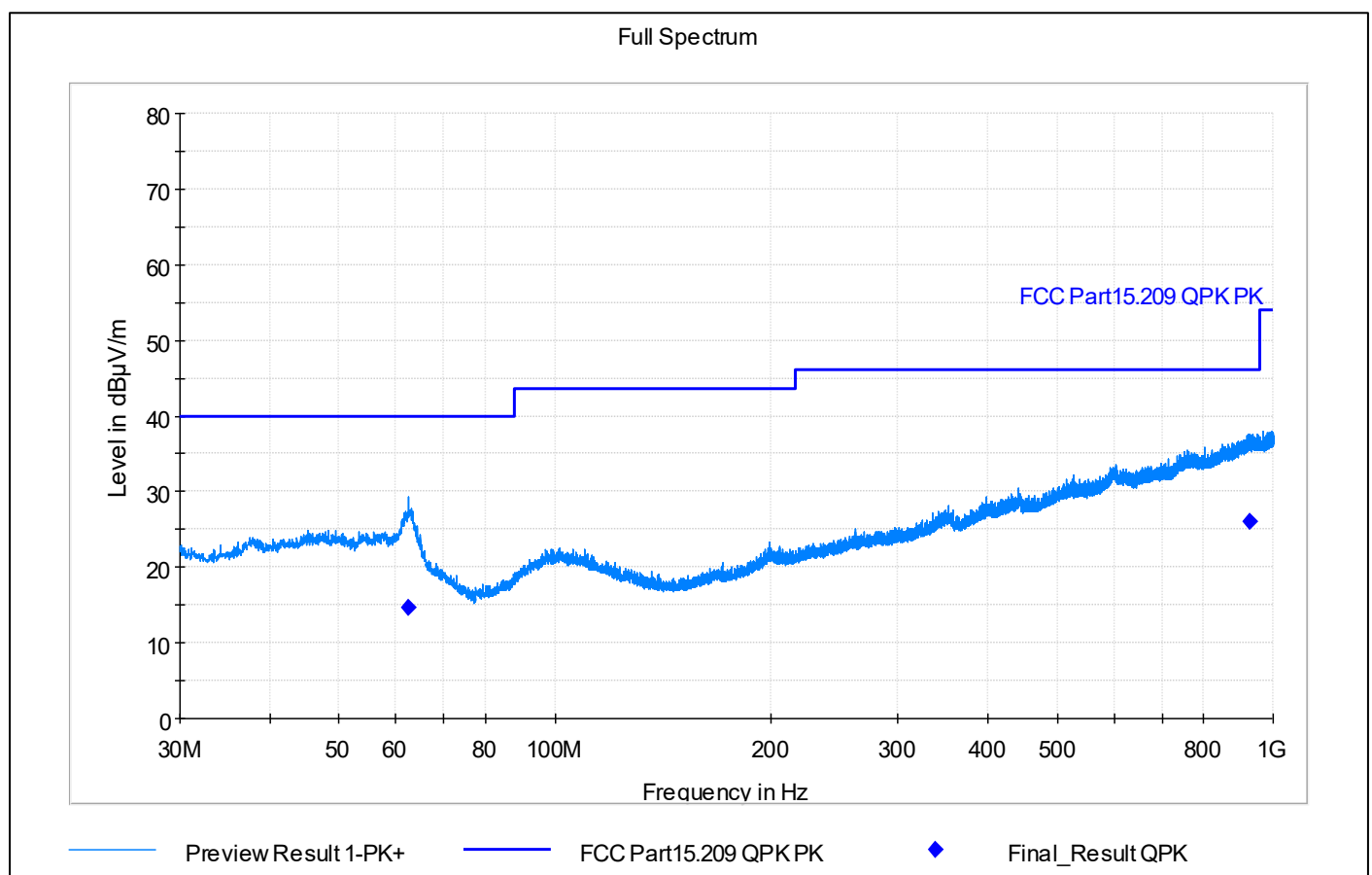
Test procedure > 1 GHz
1. EUT is placed on a non conducting support at the center of a turn table 1.5m above the ground 2. EUT set to test mode 3. The receiver is set to peak detection with max hold 4. The EUT is rotated through 360 degrees (orientation varied), measurements were made in both horizontal 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.

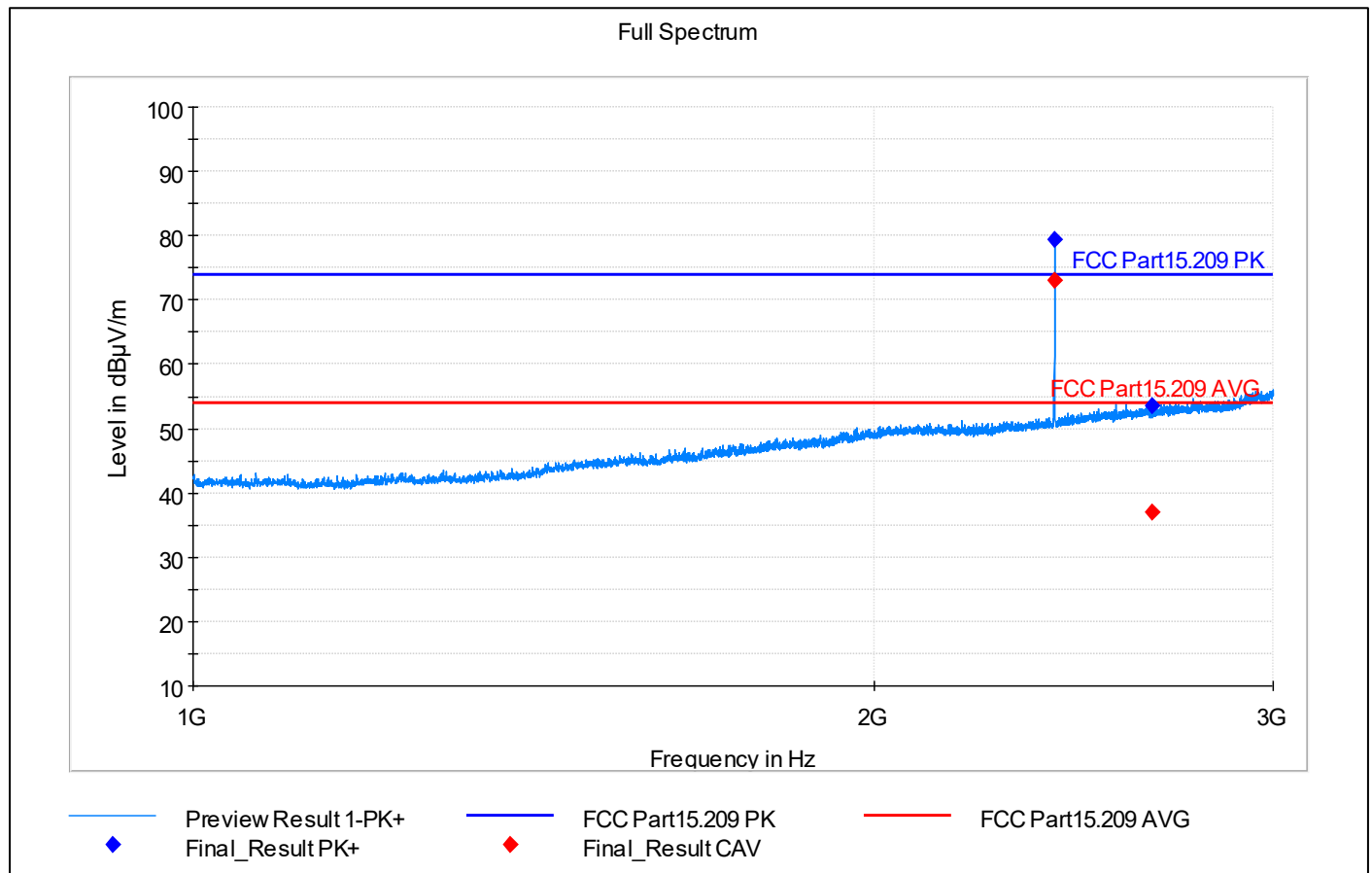
Operation mode(s)	Configuration	Test Verdict
Bluetooth LE TX, 1 Mbps	Low channel, 2402 MHz	PASS
Bluetooth LE TX, 1 Mbps	Mid channel, 2442 MHz	PASS
Bluetooth LE TX, 1 Mbps	High channel, 2480 MHz	PASS
Bluetooth LE TX, 2 Mbps	Low channel, 2402 MHz	PASS
Bluetooth LE TX, 2 Mbps	Mid channel, 2442 MHz	PASS
Bluetooth LE TX, 2 Mbps	High channel, 2480 MHz	PASS

Low channel, 30 MHz – 1 GHz, 1Mbps



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
62.490000	14.57	40.00	25.43	15000.0	120.000	98.0	V	23.0	0.0	19.4	PASS
928.560000	26.10	46.00	19.90	15000.0	120.000	351.0	H	292.0	90.0	34.0	PASS

Low channel, 1 – 3 GHz, 1Mbps


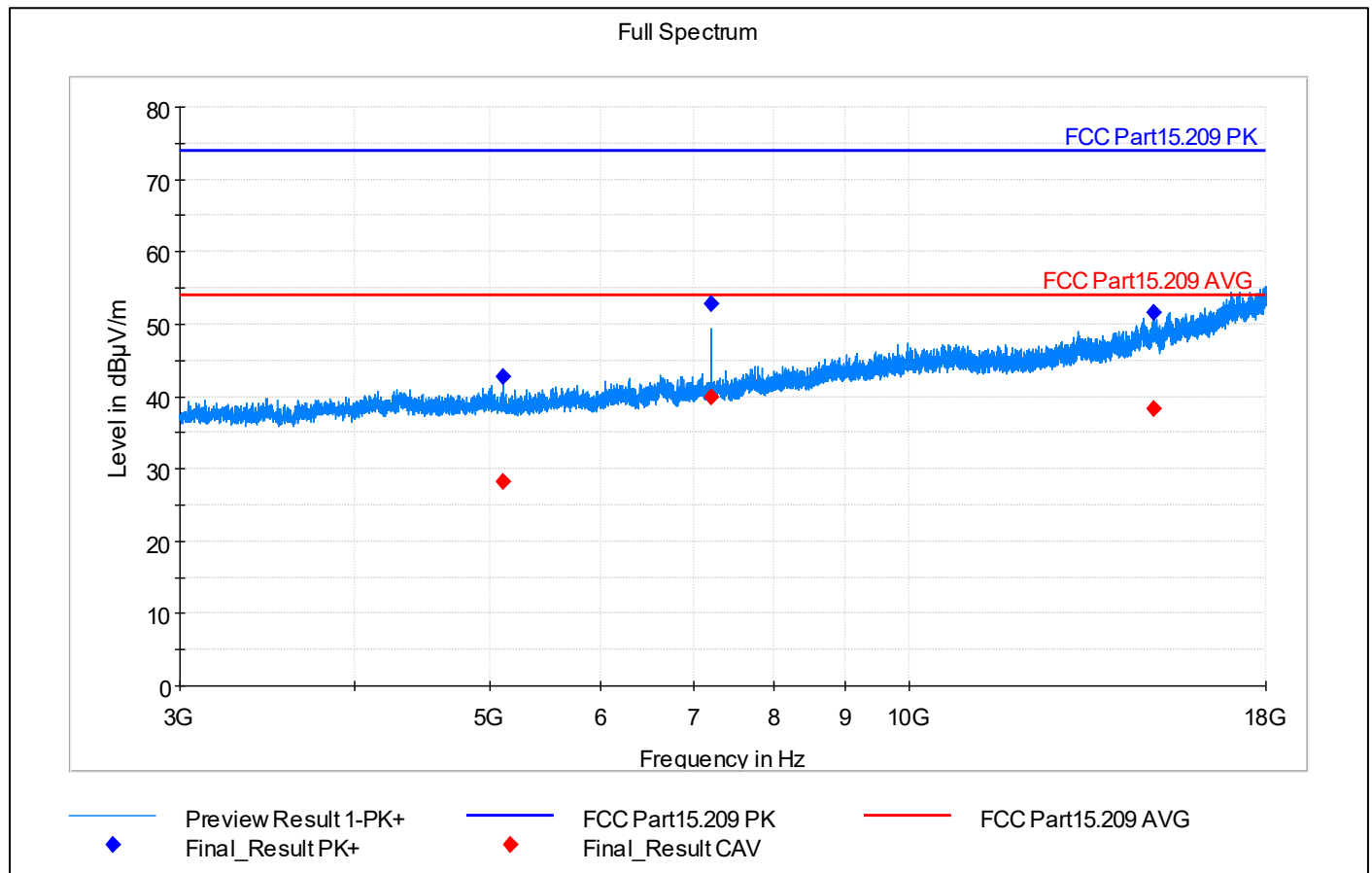
Note: Frequency 2401,750 MHz is excluded from spurious domain measurements and ignored. See table below.

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
2401.750000	---	73.01	54.00	-19.01	15000.0	1000.000	150.0	V	180.0	0.0	38.6	Fundamental TX signal ***IGNORED***
2401.750000	79.40	---	74.00	-5.40	15000.0	1000.000	150.0	V	180.0	0.0	38.6	Fundamental TX signal ***IGNORED
2652.000000	---	36.90	54.00	17.10	15000.0	1000.000	322.0	H	132.0	90.0	40.0	PASS
2652.000000	53.60	---	74.00	20.40	15000.0	1000.000	322.0	H	132.0	90.0	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
2401.750	73.01	76.99			38.6	3.98	Fundamental TX signal
2652.000	36.90	40.88	54	13.12	40.0	3.98	PASS

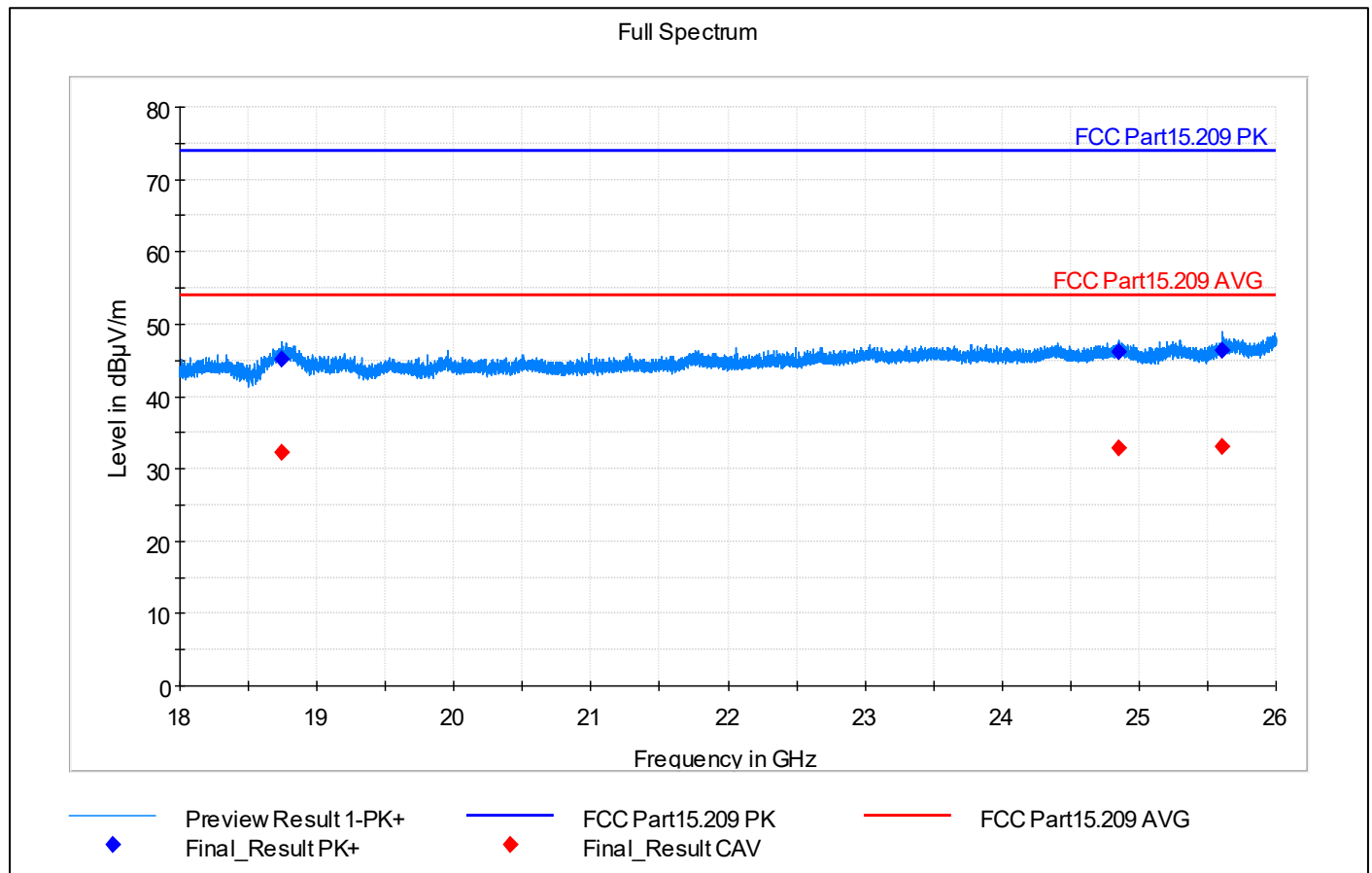
Low channel, 3 – 18 GHz, 1Mbps

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
5114.750000	---	28.15	54.00	25.85	15000.0	1000.000	196.0	H	359.0	90.0	9.8	PASS
5114.750000	42.63	---	74.00	31.37	15000.0	1000.000	196.0	H	359.0	90.0	9.8	PASS
7206.750000	52.78	---	74.00	21.22	15000.0	1000.000	251.0	H	4.0	0.0	14.9	PASS
7206.750000	---	39.88	54.00	14.12	15000.0	1000.000	251.0	H	4.0	0.0	14.9	PASS
14968.000000	51.52	---	74.00	22.48	15000.0	1000.000	258.0	H	22.0	0.0	30.5	PASS
14968.000000	---	38.25	54.00	15.75	15000.0	1000.000	258.0	H	22.0	0.0	30.5	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
5114.750	28.15	32.13	54	21.87	9.8	3.98	PASS
7206.750	39.88	43.86	54	10.14	14.9	3.98	PASS
14968.000	38.25	42.23	54	11.77	30.5	3.98	PASS

Low channel, 18 – 26 GHz, 1Mbps



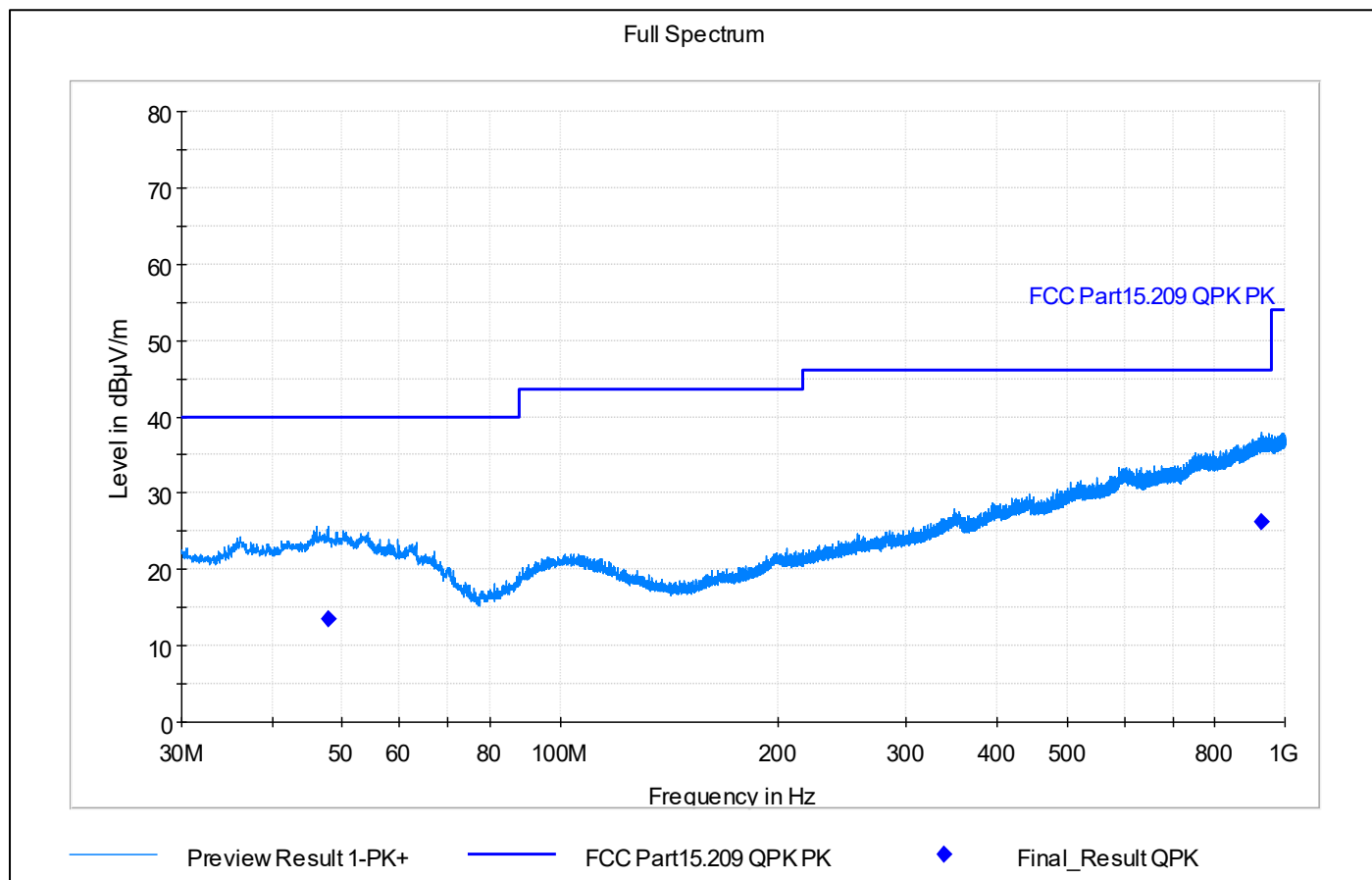
Final_Result

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
18742.500000	45.09	---	74.00	28.91	3000.0	1000.000	246.0	V	160.0	90.0	23.5	PASS
18742.500000	---	32.20	54.00	21.80	3000.0	1000.000	246.0	V	160.0	90.0	23.5	PASS
24853.000000	---	32.89	54.00	21.11	3000.0	1000.000	254.0	H	290.0	90.0	26.5	PASS
24853.000000	46.11	---	74.00	27.89	3000.0	1000.000	254.0	H	290.0	90.0	26.5	PASS
25611.750000	46.44	---	74.00	27.56	3000.0	1000.000	320.0	V	74.0	0.0	26.6	PASS
25611.750000	---	33.03	54.00	20.97	3000.0	1000.000	320.0	V	74.0	0.0	26.6	PASS

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

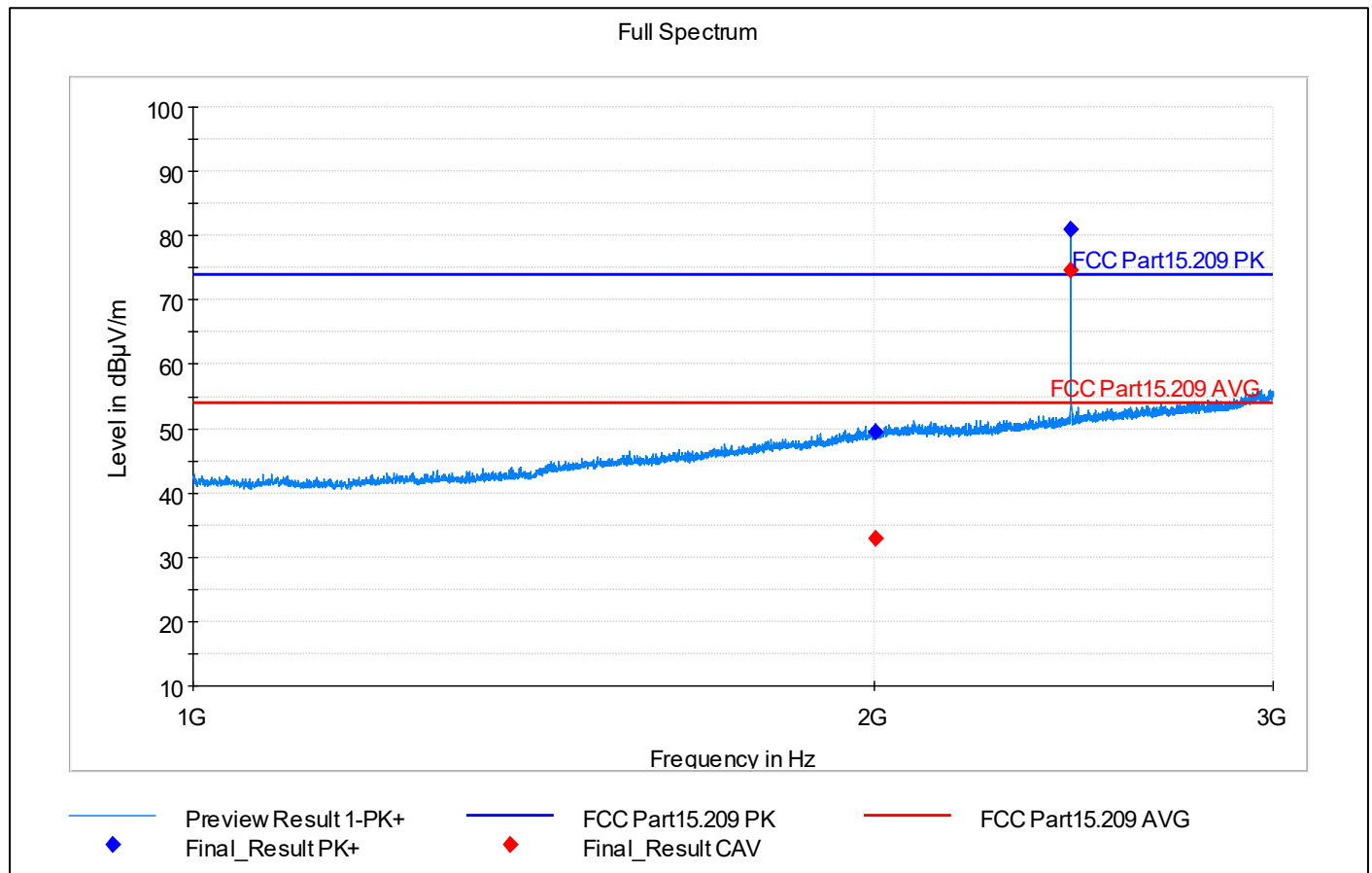
Frequency (MHz)	CAverage (dBμV/m)	Corrected level (dBuV/m)	Limit (dBμV/m)	Margin (dB)	Corr. (dB/m)	DC correction	Comment
18742.500	32.20	36.18	54	17.82	23.5	3.98	PASS
24853.000	32.89	36.70	54	17.3	26.5	3.98	PASS
25611.750	33.03	37.01	54	20.97	26.6	3.98	PASS

Mid channel, 30 MHz – 1 GHz, 1Mbps



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
47.880000	13.56	40.00	26.44	15000.0	120.000	118.0	V	51.0	0.0	21.1	PASS
927.240000	26.15	46.00	19.85	15000.0	120.000	398.0	V	194.0	0.0	34.0	PASS

Mid channel, 1-3 GHz, 1Mbps


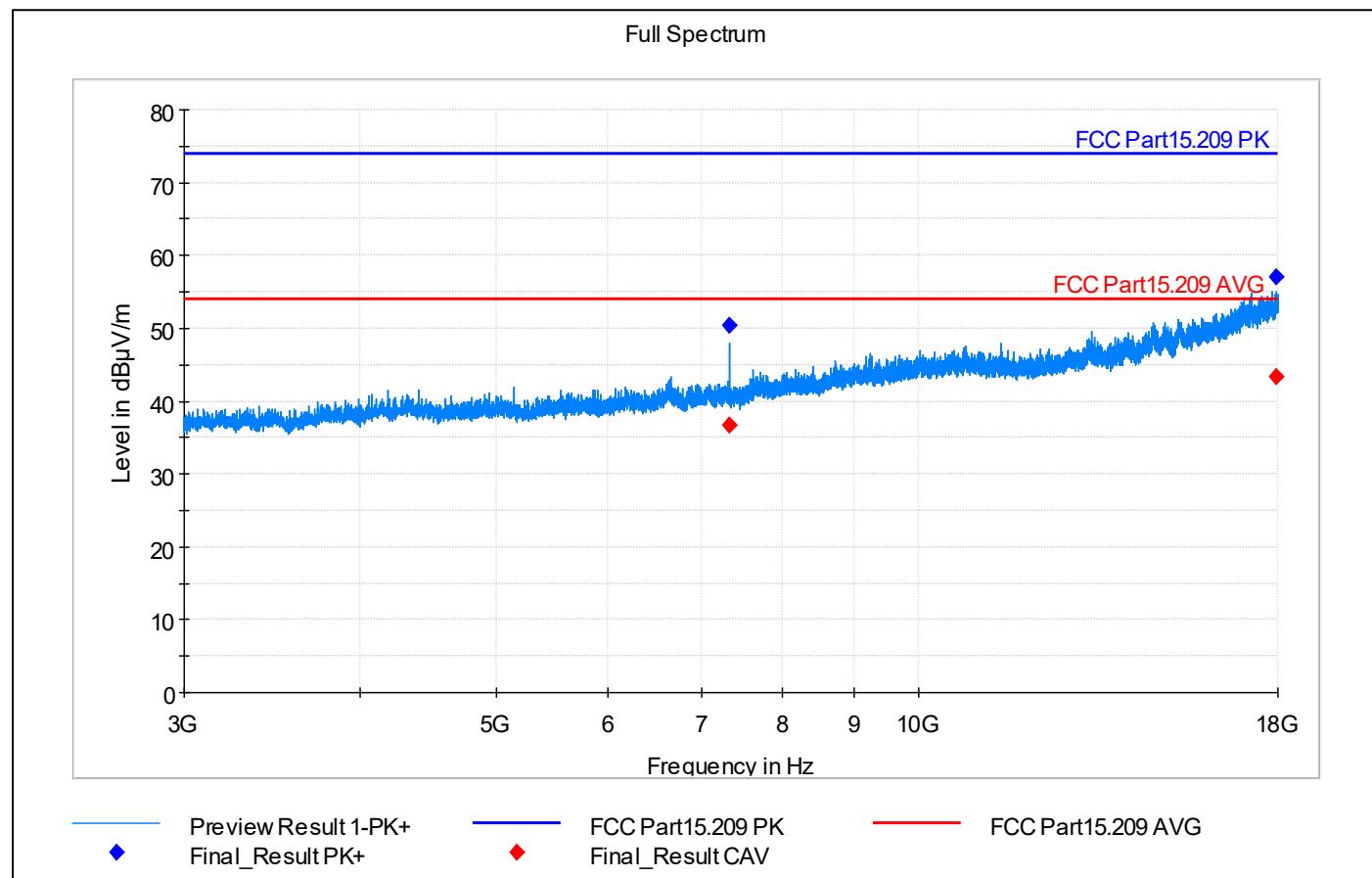
Note: Frequency 2441,750 MHz is excluded from spurious domain measurements and ignored. See table below.

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
2002.500000	49.46	---	74.00	24.54	15000.0	1000.000	296.0	H	157.0	90.0	37.2	PASS
2002.500000	---	32.95	54.00	21.05	15000.0	1000.000	296.0	H	157.0	90.0	37.2	PASS
2441.750000	81.01	---	74.00	-7.01	15000.0	1000.000	125.0	H	48.0	90.0	38.9	Fundamental TX signal ***IGNORED***
2441.750000	---	74.66	54.00	-20.66	15000.0	1000.000	125.0	H	48.0	90.0	38.9	Fundamental TX signal ***IGNORED

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

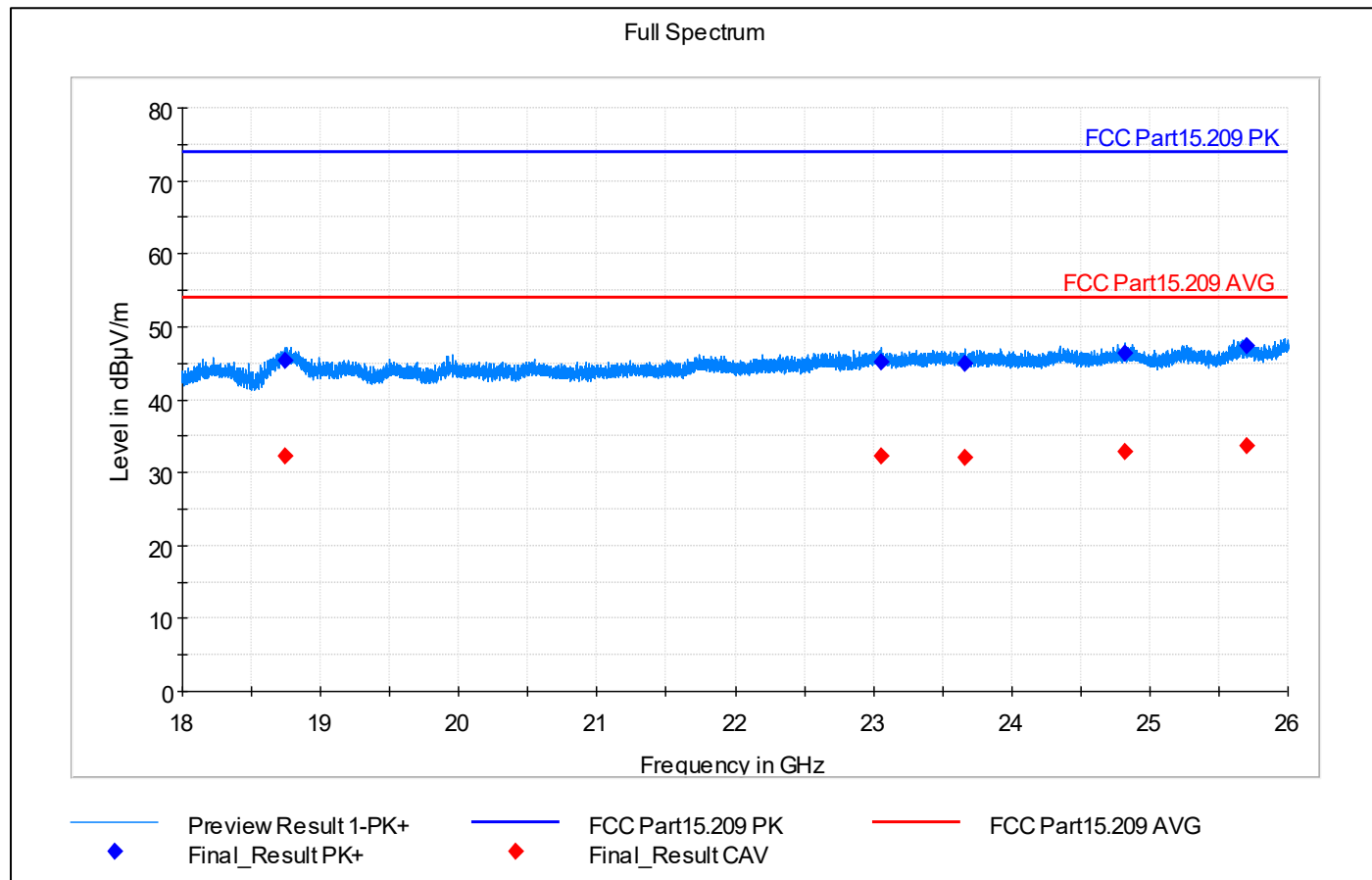
Frequency (MHz)	CAverage (dBμV/m)	Corrected level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Corr. (dB/m)	DC correction	Comment
2002,500	32,95	36.93	54	17.07	37,2	3.98	PASS
2441,750	74,66	78.64			38,9	3.98	Fundamental TX signal

Mid channel, 3–18 GHz, 1Mbps

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
7326.000000	---	36.70	54.00	17.30	15000.0	1000.000	233.0	H	177.0	0.0	15.4	PASS
7326.000000	50.31	---	74.00	23.69	15000.0	1000.000	233.0	H	177.0	0.0	15.4	PASS
17971.000000	---	43.41	54.00	10.59	15000.0	1000.000	258.0	V	295.0	0.0	39.4	PASS
17971.000000	57.10	---	74.00	16.90	15000.0	1000.000	258.0	V	295.0	0.0	39.4	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
7326.000	36.70	40.68	54	13.32	15.4	3.98	PASS
17971.000	43.41	47.39	54	6.61	39.4	3.98	PASS

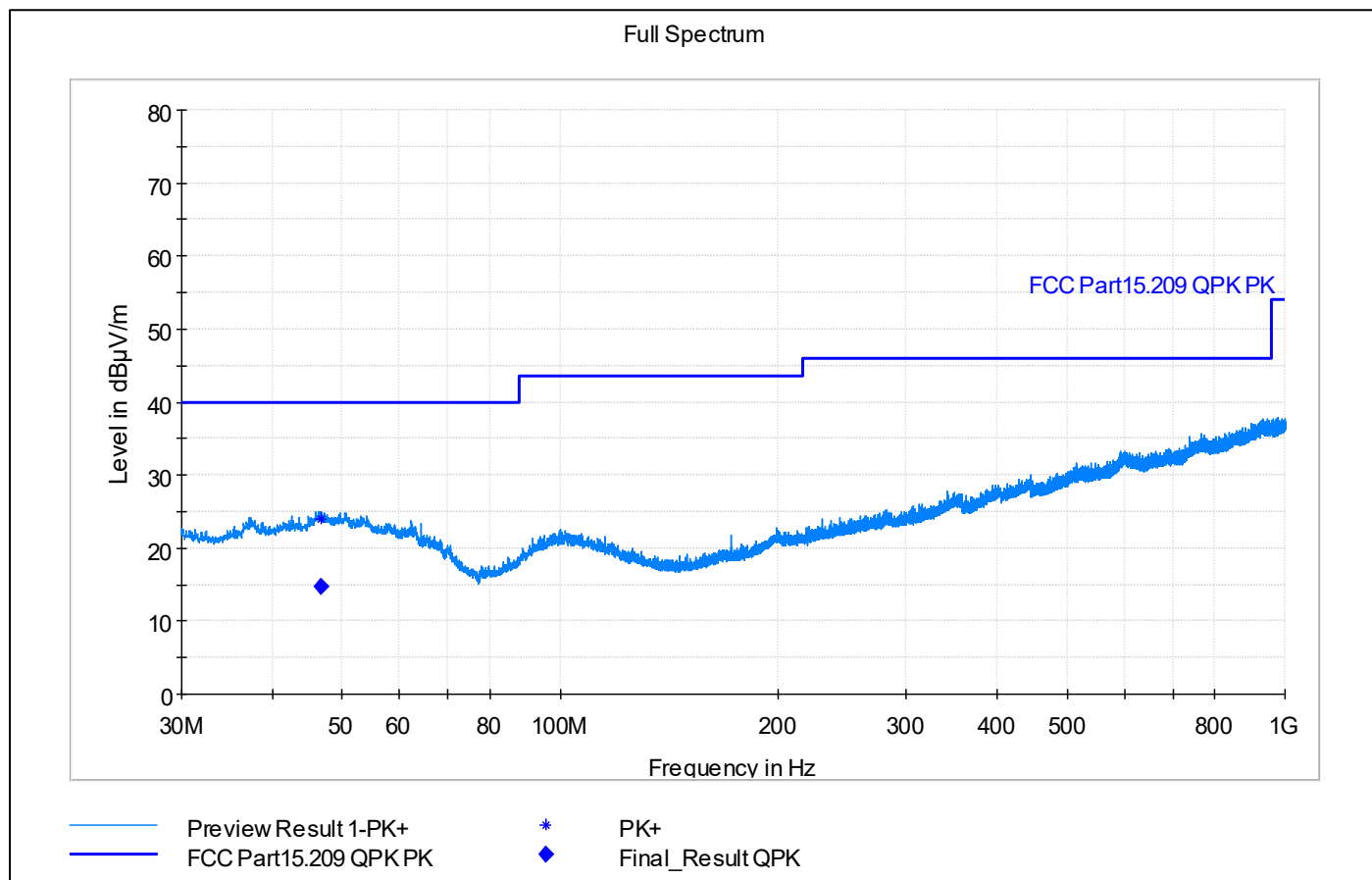
Mid channel, 18–26 GHz, 1Mbps

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
18738.500000	45.30	---	74.00	28.70	3000.0	1000.000	195.0	H	181.0	0.0	23.5	PASS
18738.500000	---	32.19	54.00	21.81	3000.0	1000.000	195.0	H	181.0	0.0	23.5	PASS
23054.250000	---	32.32	54.00	21.68	3000.0	1000.000	203.0	H	216.0	90.0	25.5	PASS
23054.250000	45.16	---	74.00	28.84	3000.0	1000.000	203.0	H	216.0	90.0	25.5	PASS
23663.250000	44.95	---	74.00	29.05	3000.0	1000.000	230.0	V	143.0	90.0	25.8	PASS
23663.250000	---	32.09	54.00	21.91	3000.0	1000.000	230.0	V	143.0	90.0	25.8	PASS
24822.000000	---	32.78	54.00	21.22	3000.0	1000.000	205.0	H	157.0	0.0	26.5	PASS
24822.000000	46.37	---	74.00	27.63	3000.0	1000.000	205.0	H	157.0	0.0	26.5	PASS
25706.500000	---	33.59	54.00	20.41	3000.0	1000.000	173.0	V	222.0	90.0	26.8	PASS
25706.500000	47.28	---	74.00	26.72	3000.0	1000.000	173.0	V	222.0	90.0	26.8	PASS

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

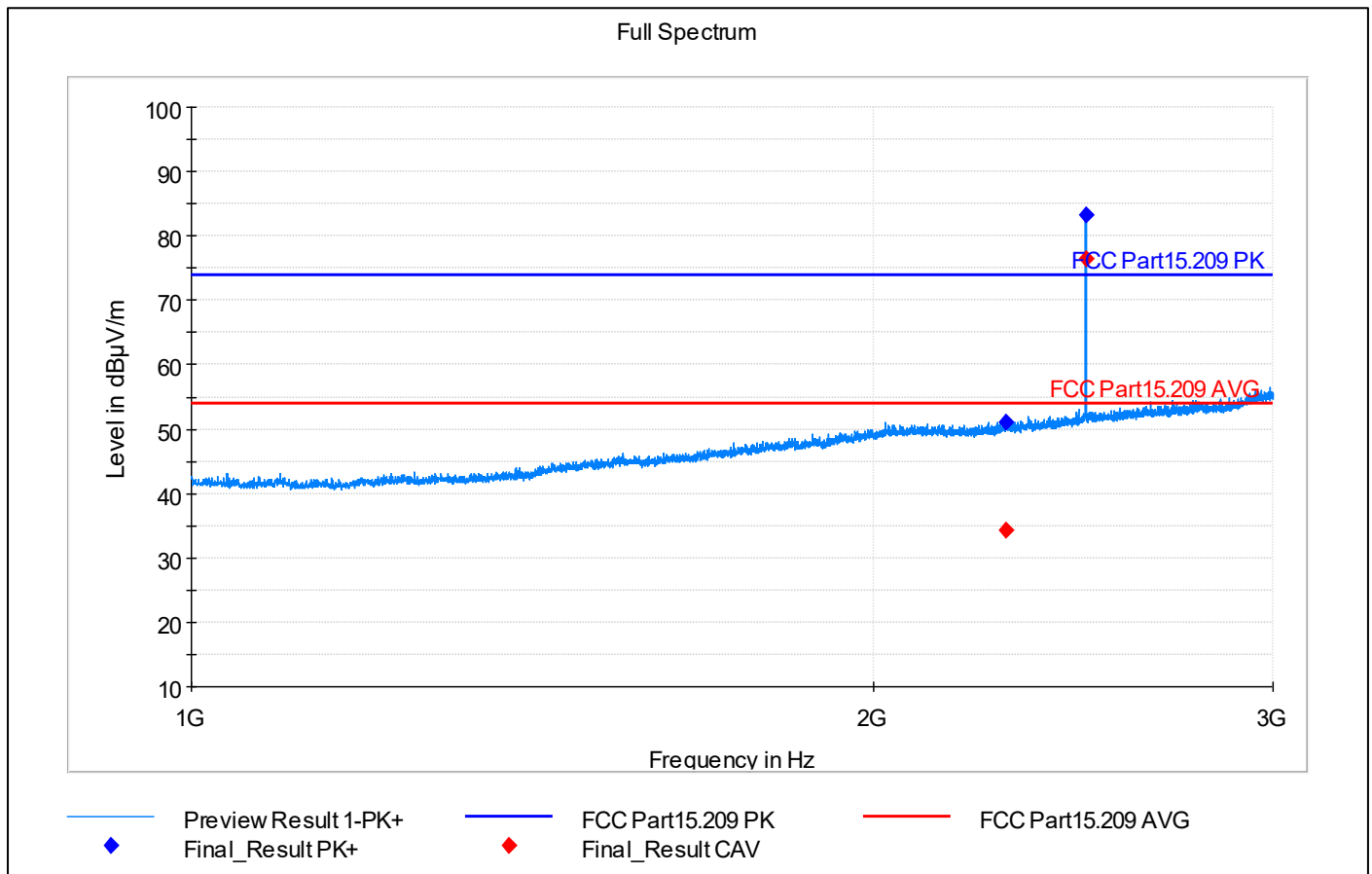
Frequency (MHz)	CAverage (dBμV/m)	Corrected level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Corr. (dB/m)	DC correction	Comment
18738.500	32.19	36.17	54	17.83	23.5	3.98	PASS
23054.250	32.32	36.30	54	17.70	25.5	3.98	PASS
23663.250	32.09	36.07	54	17.97	25.8	3.98	PASS
24822.000	32.78	36.76	54	17.22	26.5	3.98	PASS
25706.500	33.59	37.57	54	16.43	26.8	3.98	PASS

High channel, 30 MHz – 1 GHz, 1Mbps



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
46.680000	14.64	40.00	25.36	15000.0	120.000	100.0	V	100.0	0.0	21.0	PASS

High channel, 1 – 3 GHz, 1Mbps


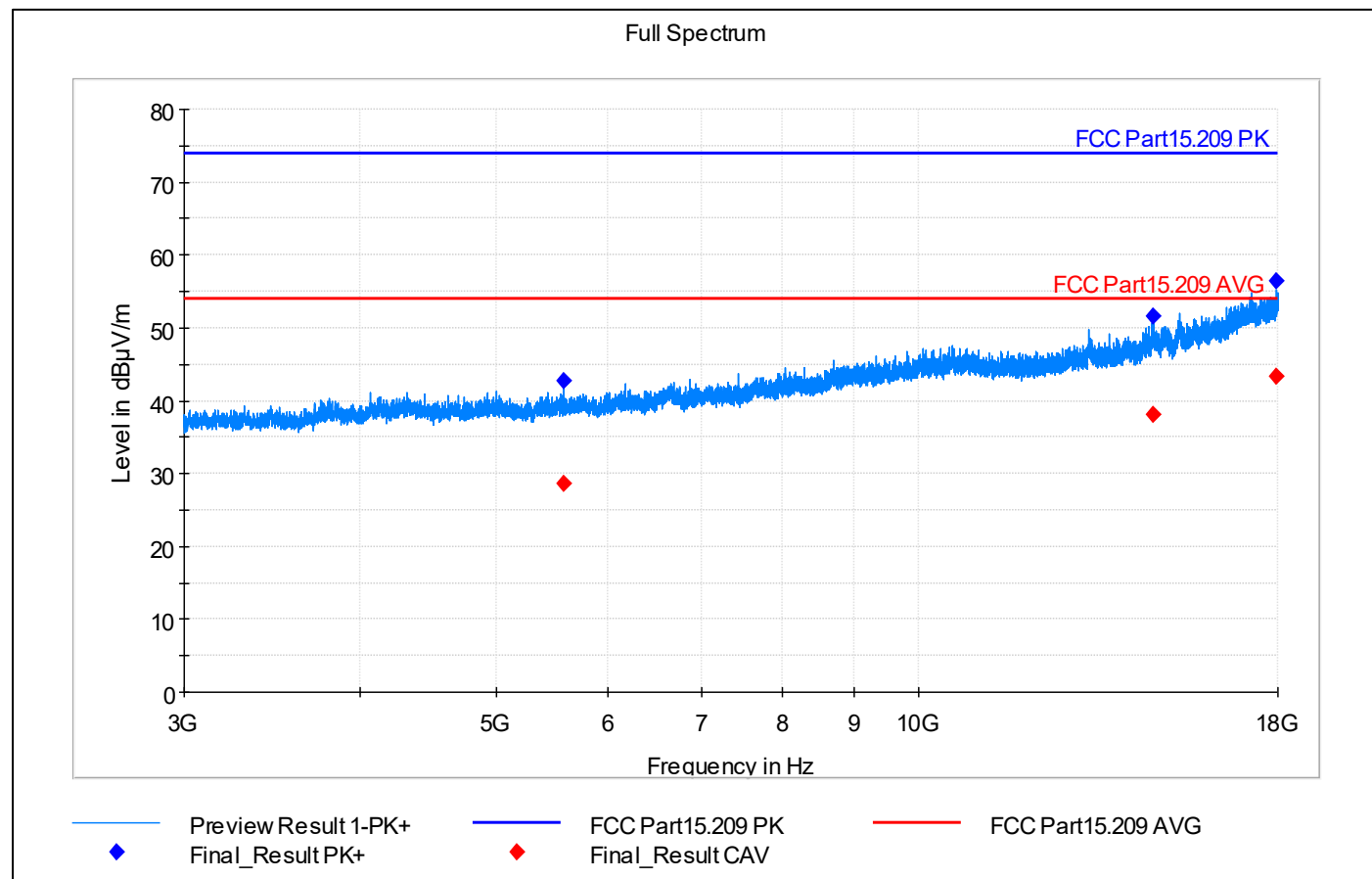
Note: Frequency 2480,250 MHz is excluded from spurious domain measurements and ignored. See table below.

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
2286.500000	50.96	---	74.00	23.04	15000.0	1000.000	375.0	V	182.0	0.0	38.1	PASS
2286.500000	---	34.18	54.00	19.82	15000.0	1000.000	375.0	V	182.0	0.0	38.1	PASS
2480.250000	83.25	---	74.00	-9.25	15000.0	1000.000	294.0	V	-1.0	0.0	39.3	Fundamental TX signal ***IGNORED***
2480.250000	---	76.34	54.00	-22.34	15000.0	1000.000	294.0	V	-1.0	0.0	39.3	Fundamental TX signal ***IGNORED

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

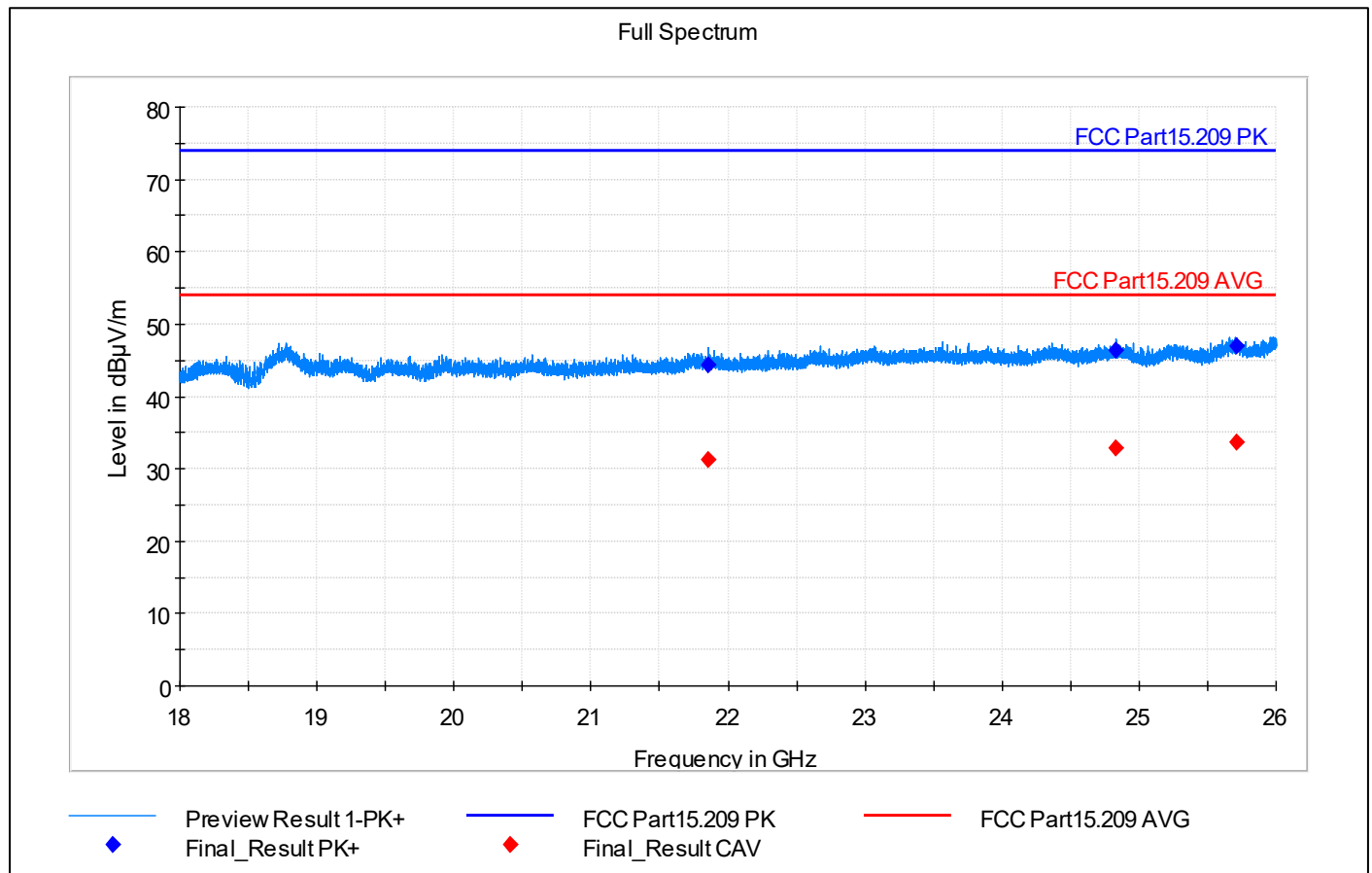
Frequency (MHz)	CAverage (dBμV/m)	Corrected level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Corr. (dB/m)	DC correction	Comment
2286.500	34.18	38.16	54	15.84	38.1	3.98	PASS
2480.250	76.34	80.32			39.3	3.98	Fundamental TX signal

High channel, 3 – 18 GHz, 1Mbps

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
5583.250000	---	28.60	54.00	25.40	15000.0	1000.000	306.0	H	154.0	90.0	11.0	PASS
5583.250000	42.67	---	74.00	31.33	15000.0	1000.000	306.0	H	154.0	90.0	11.0	PASS
14671.000000	---	38.01	54.00	15.99	15000.0	1000.000	230.0	H	291.0	90.0	30.0	PASS
14671.000000	51.58	---	74.00	22.42	15000.0	1000.000	230.0	H	291.0	90.0	30.0	PASS
17967.250000	---	43.29	54.00	10.71	15000.0	1000.000	290.0	V	248.0	90.0	39.4	PASS
17967.250000	56.44	---	74.00	17.56	15000.0	1000.000	290.0	V	248.0	90.0	39.4	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
5583.250	28.60	32.58	54	21.42	11.0	3.98	PASS
14671.000	38.01	41.99	54	12.01	30.0	3.98	PASS
17967.250	43.29	47.27	54	6.73	39.4	3.98	PASS

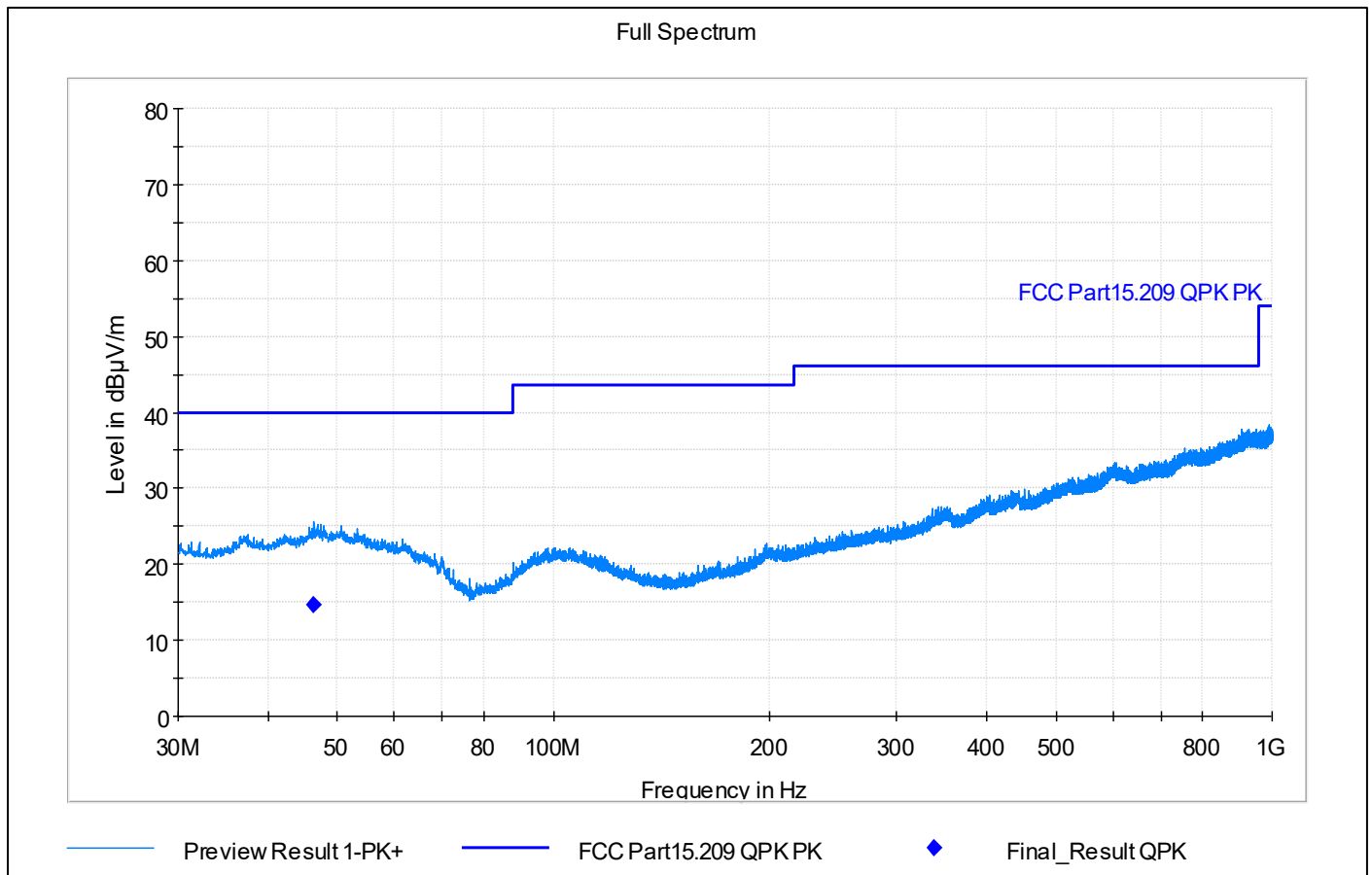
High channel, 18 – 26 GHz, 1Mbps

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
21860.750000	---	31.24	54.00	22.76	3000.0	1000.000	332.0	V	231.0	0.0	24.9	PASS
21860.750000	44.30	---	74.00	29.70	3000.0	1000.000	332.0	V	231.0	0.0	24.9	PASS
24836.500000	46.44	---	74.00	27.56	3000.0	1000.000	177.0	H	202.0	0.0	26.5	PASS
24836.500000	---	32.85	54.00	21.15	3000.0	1000.000	177.0	H	202.0	0.0	26.5	PASS
25711.250000	46.86	---	74.00	27.14	3000.0	1000.000	300.0	V	-6.0	0.0	26.7	PASS
25711.250000	---	33.61	54.00	20.39	3000.0	1000.000	300.0	V	-6.0	0.0	26.7	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
21860.750	31.24	35.22	54	18.78	24.9	3.98	PASS
24836.500	32.85	36.83	54	17.17	26.5	3.98	PASS
25711.250	33.61	37.59	54	16.41	26.7	3.98	PASS

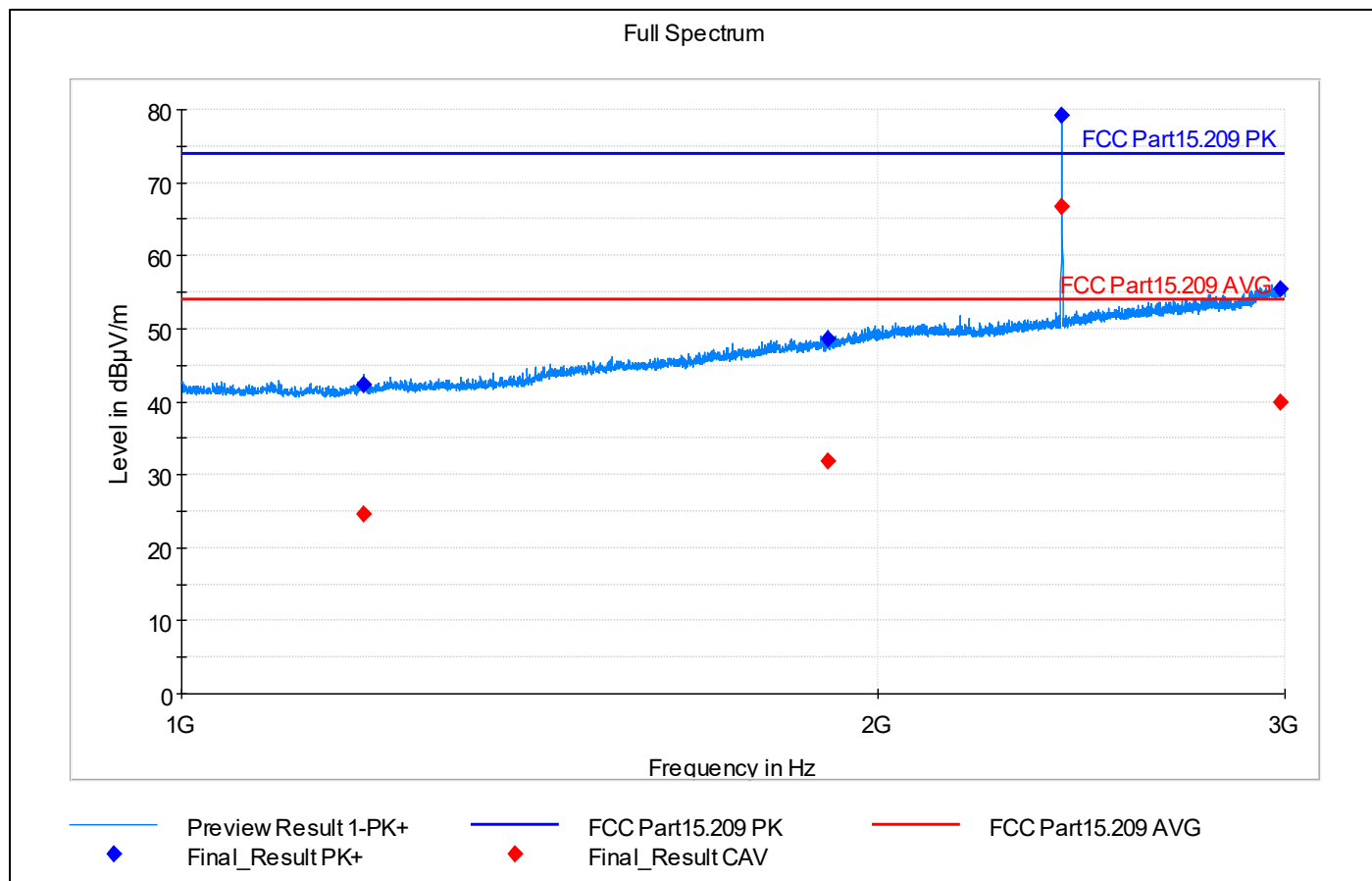
Low channel, 30 MHz – 1 GHz, 2Mbps



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
46.410000	14.65	40.00	25.35	15000.0	120.000	100.0	V	73.0	0.0	21.0	PASS

Low channel, 1 – 3 GHz, 2Mbps



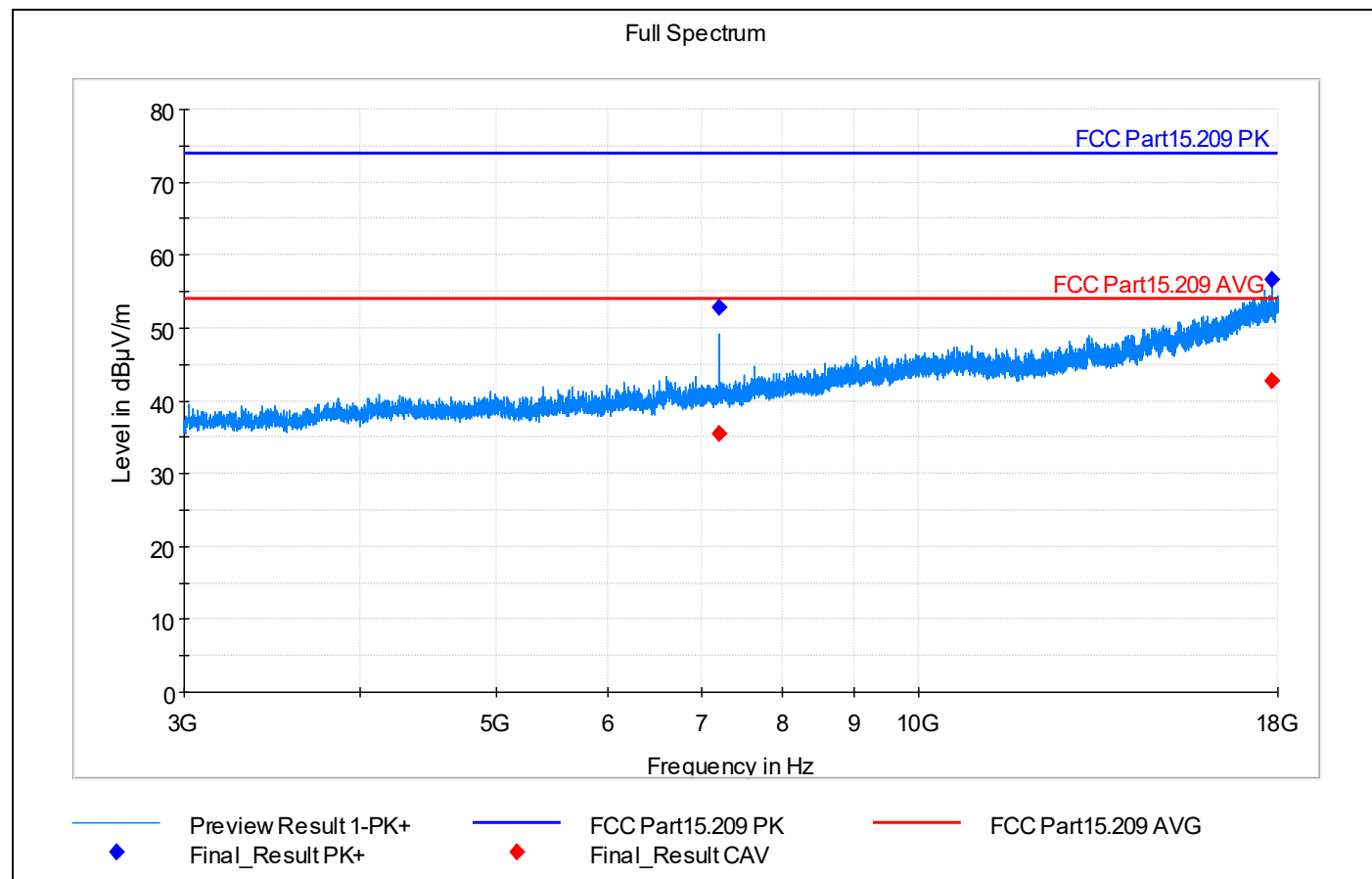
Note: Frequency 2402,000 MHz is excluded from spurious domain measurements and ignored. See table below.

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
1198.500000	---	24.65	54.00	29.35	15000.0	1000.000	239.0	H	235.0	0.0	31.3	PASS
1198.500000	42.35	---	74.00	31.65	15000.0	1000.000	239.0	H	235.0	0.0	31.3	PASS
1904.000000	48.65	---	74.00	25.35	15000.0	1000.000	153.0	H	221.0	90.0	36.1	PASS
1904.000000	---	31.78	54.00	22.22	15000.0	1000.000	153.0	H	221.0	90.0	36.1	PASS
2402.000000	79.19	---	74.00	-5.19	15000.0	1000.000	118.0	V	-2.0	0.0	38.6	Fundamental TX signal ***IGNORED***
2402.000000	---	66.73	54.00	-12.73	15000.0	1000.000	118.0	V	-2.0	0.0	38.6	Fundamental TX signal ***IGNORED***
2986.750000	---	39.82	54.00	14.18	15000.0	1000.000	155.0	V	286.0	90.0	41.5	PASS
2986.750000	55.47	---	74.00	18.53	15000.0	1000.000	155.0	V	286.0	90.0	41.5	PASS

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

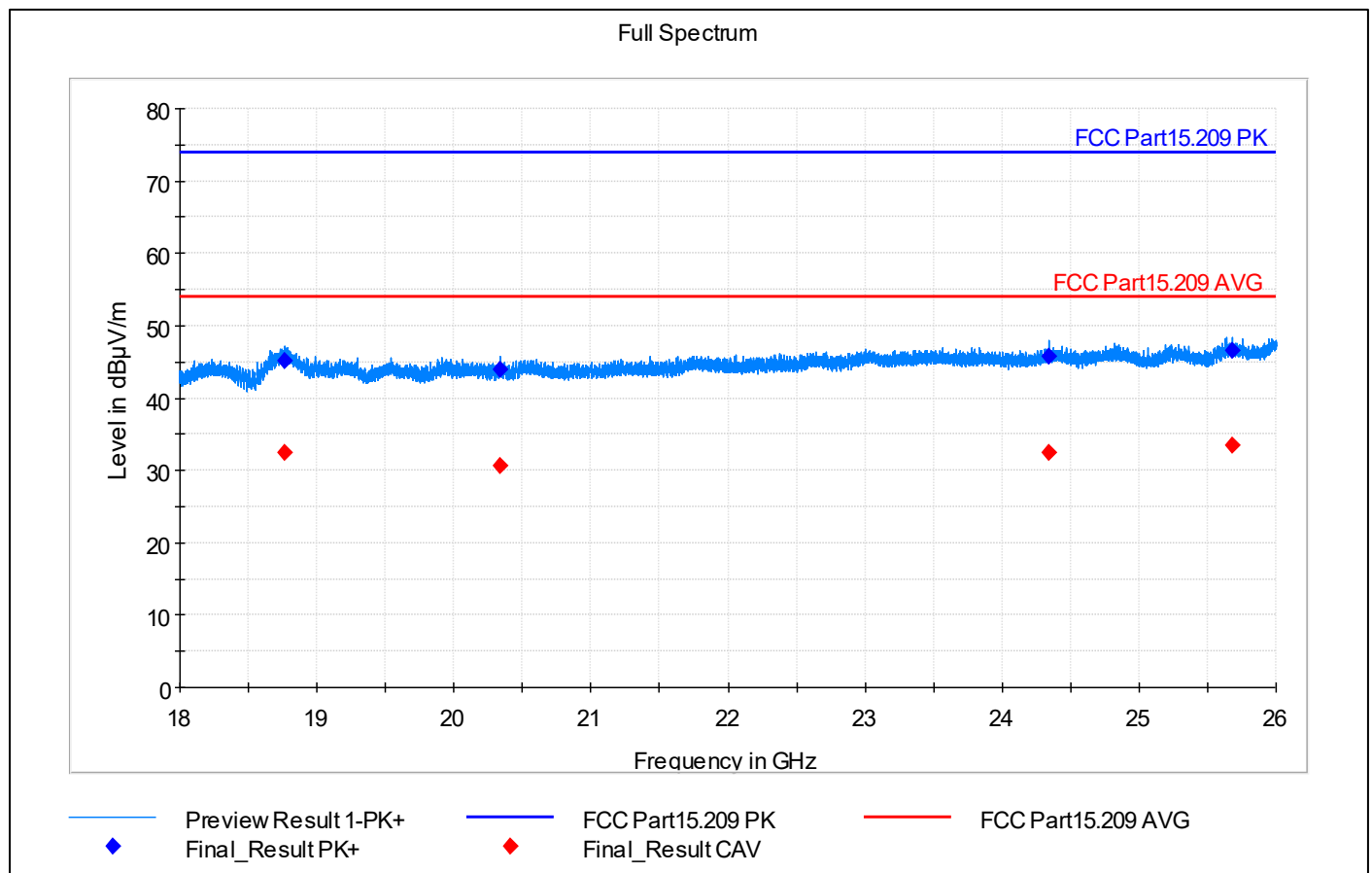
Frequency (MHz)	CAverage (dBμV/m)	Corrected level (dBuV/m)	Limit (dBμV/m)	Margin (dB)	Corr. (dB/m)	DC correction	Comment
1198.500	24.65	33.15	54	20.85	31.3	9.50	PASS
1904.000	31.78	31.28	54	22.72	36.1	9.50	PASS
2402.000	66.73	75.23			38.6	9.50	Fundamental TX signal
2986.750	39.82	49.32	54	4.68	41.5	9.50	PASS

Low channel, 3 – 18 GHz, 2Mbps

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
7207.500000	52.74	---	74.00	21.26	15000.0	1000.000	103.0	V	299.0	90.0	14.9	PASS
7207.500000	---	35.54	54.00	18.46	15000.0	1000.000	103.0	V	299.0	90.0	14.9	PASS
17824.000000	56.71	---	74.00	17.29	15000.0	1000.000	228.0	V	234.0	0.0	38.7	PASS
17824.000000	---	42.66	54.00	11.34	15000.0	1000.000	228.0	V	234.0	0.0	38.7	PASS

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

Frequency (MHz)	CAverage (dBμV/m)	Corrected level (dBuV/m)	Limit (dBμV/m)	Margin (dB)	Corr. (dB/m)	DC correction	Comment
7207.500	35.54	45.04	54	8.96	14.9	9.50	PASS
17824.000	42.66	52.16	54	1.84	38.7	9.50	PASS

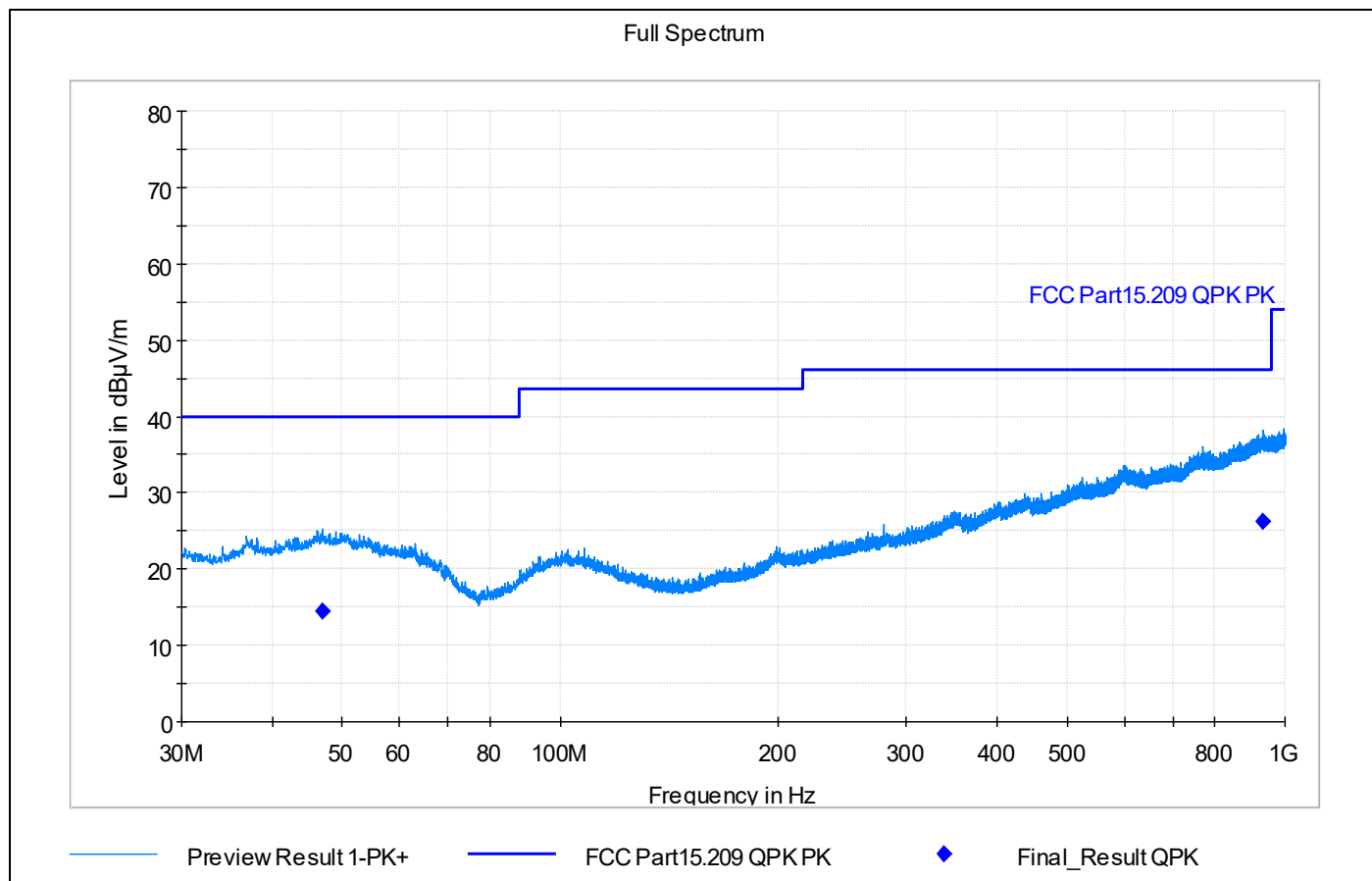
Low channel, 18 – 26 GHz, 2Mbps

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
18764.750000	---	32.35	54.00	21.65	3000.0	1000.000	188.0	V	237.0	0.0	23.5	PASS
18764.750000	45.08	---	74.00	28.92	3000.0	1000.000	188.0	V	237.0	0.0	23.5	PASS
20337.500000	43.85	---	74.00	30.15	3000.0	1000.000	254.0	H	96.0	0.0	24.1	PASS
20337.500000	---	30.63	54.00	23.37	3000.0	1000.000	254.0	H	96.0	0.0	24.1	PASS
24346.750000	45.80	---	74.00	28.20	3000.0	1000.000	161.0	V	54.0	0.0	26.0	PASS
24346.750000	---	32.44	54.00	21.56	3000.0	1000.000	161.0	V	54.0	0.0	26.0	PASS
25681.000000	---	33.43	54.00	20.57	3000.0	1000.000	120.0	V	251.0	0.0	26.8	PASS
25681.000000	46.65	---	74.00	27.35	3000.0	1000.000	120.0	V	251.0	0.0	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
18764.750	32.35	41.85	54	12.15	23.5	9.50	PASS
20337.500	30.63	40.13	54	13.87	24.1	9.50	PASS
24346.750	32.44	41.94	54	12.06	26.0	9.50	PASS
25681.000	33.43	42.93	54	20.57	26.8	9.50	PASS

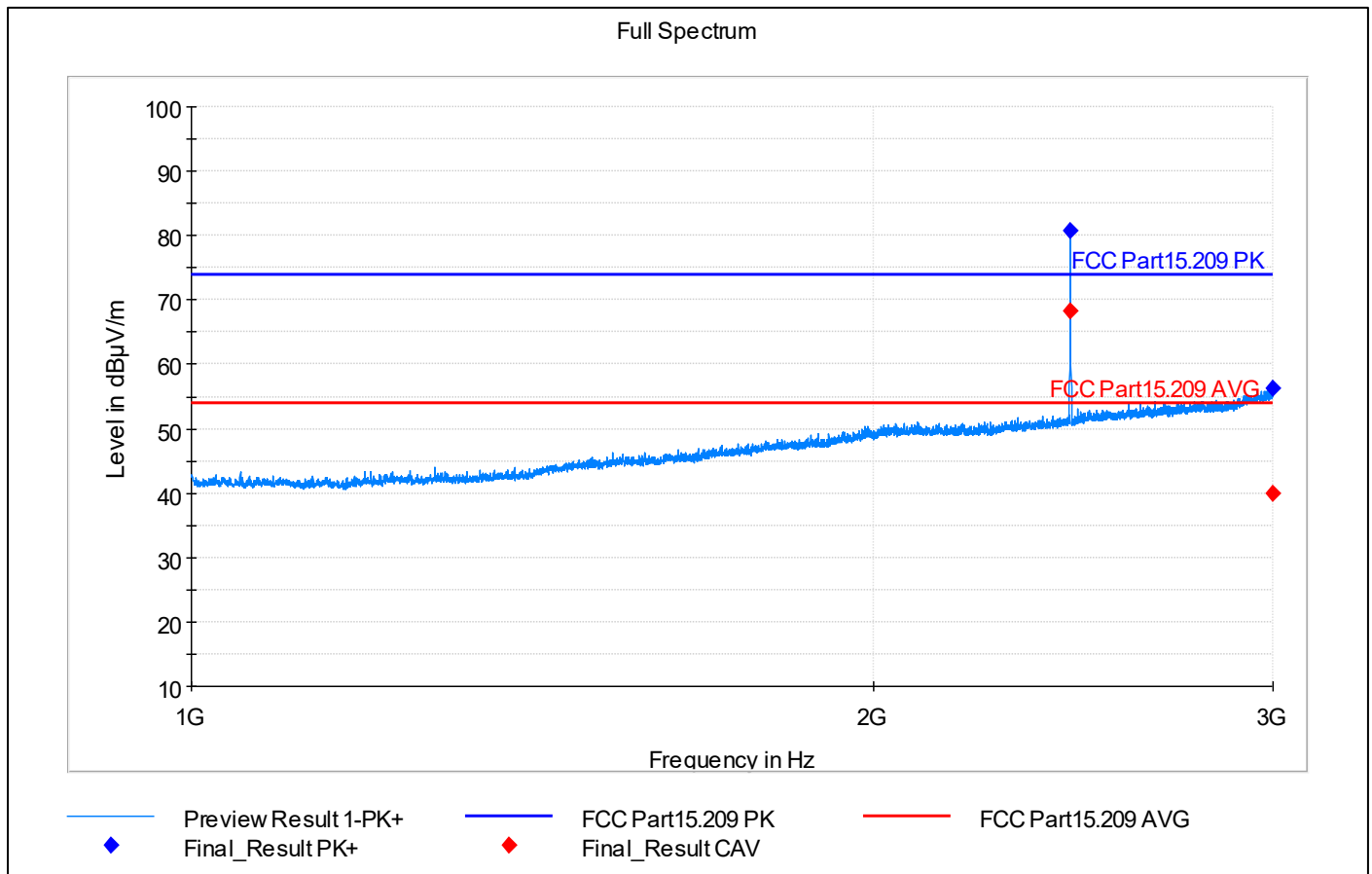
Mid channel, 30 MHz – 1 GHz, 2Mbps



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
46.920000	14.38	40.00	25.62	15000.0	120.000	104.0	V	158.0	0.0	21.0	PASS
930.300000	26.15	46.00	19.85	15000.0	120.000	299.0	V	202.0	90.0	34.0	PASS

Mid channel, 1-3 GHz, 2Mbps



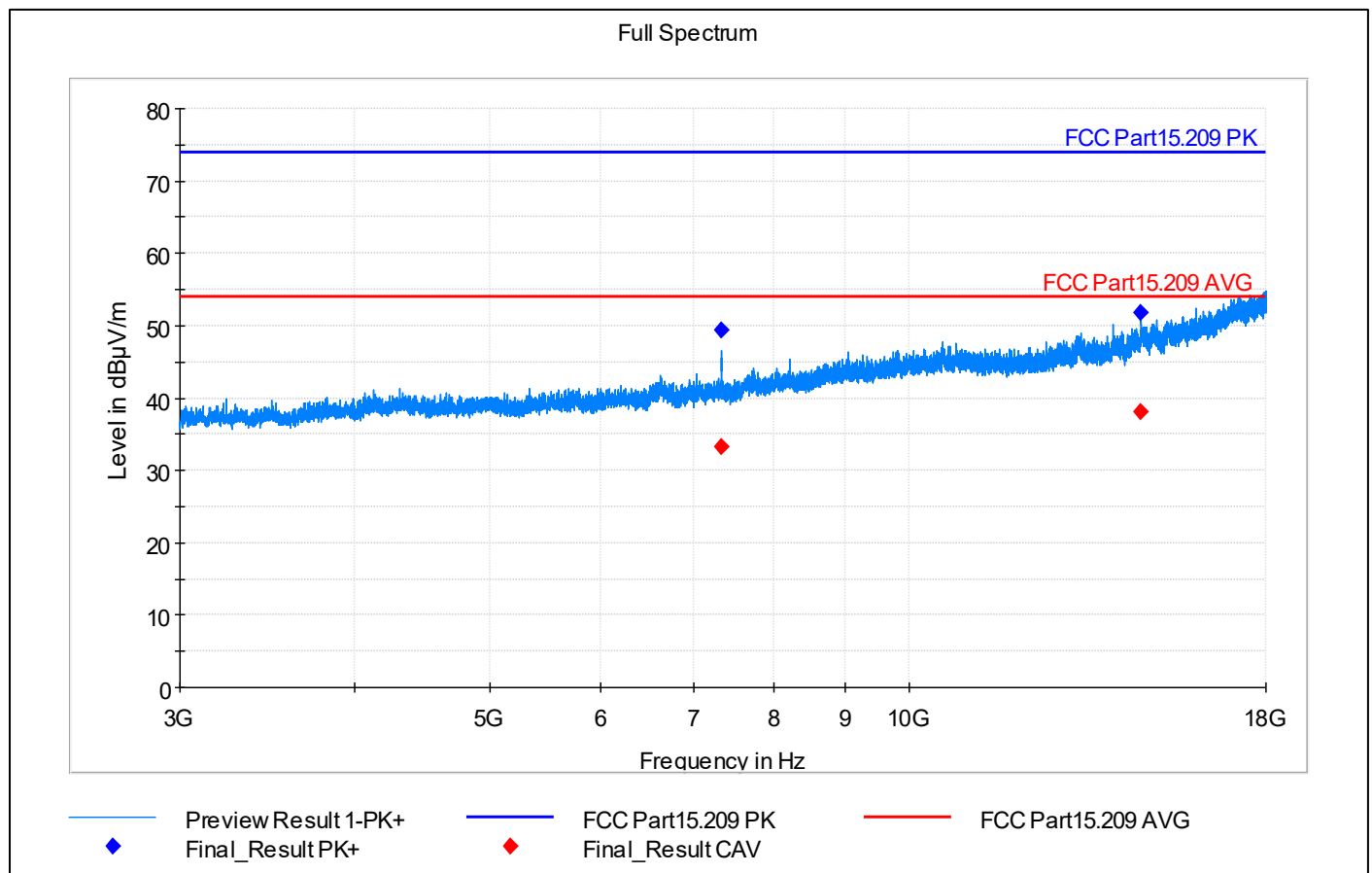
Note: Frequency 2442,000 MHz is excluded from spurious domain measurements and ignored. See table below.

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
2442.000000	80.76	---	74.00	-6.76	15000.0	1000.000	118.0	H	63.0	90.0	38.9	Fundamental TX signal ***IGNORED***
2442.000000	---	68.30	54.00	-14.30	15000.0	1000.000	118.0	H	63.0	90.0	38.9	Fundamental TX signal ***IGNORED***
2999.750000	56.26	---	74.00	17.74	15000.0	1000.000	306.0	H	67.0	0.0	41.7	PASS
2999.750000	---	39.89	54.00	14.11	15000.0	1000.000	306.0	H	67.0	0.0	41.7	PASS

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

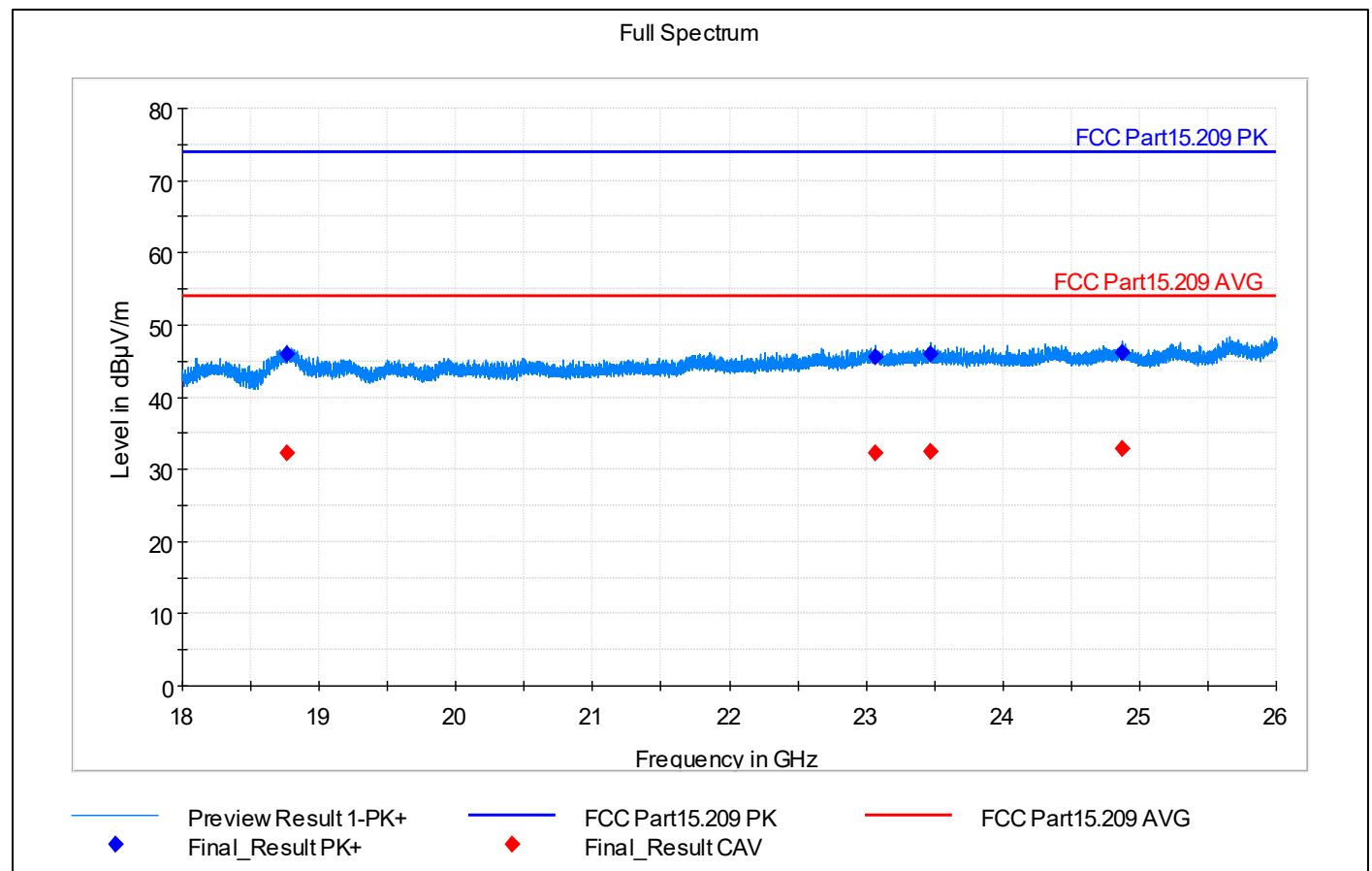
Frequency (MHz)	CAverage (dBμV/m)	Corrected level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Corr. (dB/m)	DC correction	Comment
2442.000	68.30	77.80			38.9	9.50	Fundamental TX signal
2999.750	39.89	49.39	54	4.61	41.7	9.50	PASS

Mid channel, 3–18 GHz, 2Mbps

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
7327.500000	---	33.24	54.00	20.76	15000.0	1000.000	103.0	H	188.0	0.0	15.4	PASS
7327.500000	49.32	---	74.00	24.68	15000.0	1000.000	103.0	H	188.0	0.0	15.4	PASS
14657.750000	---	38.04	54.00	15.96	15000.0	1000.000	174.0	V	306.0	0.0	30.0	PASS
14657.750000	51.74	---	74.00	22.26	15000.0	1000.000	174.0	V	306.0	0.0	30.0	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
7327.500	33.24	42.74	54	11.26	15.4	9.50	PASS
14657.750	38.04	47.54	54	6.46	30.0	9.50	PASS

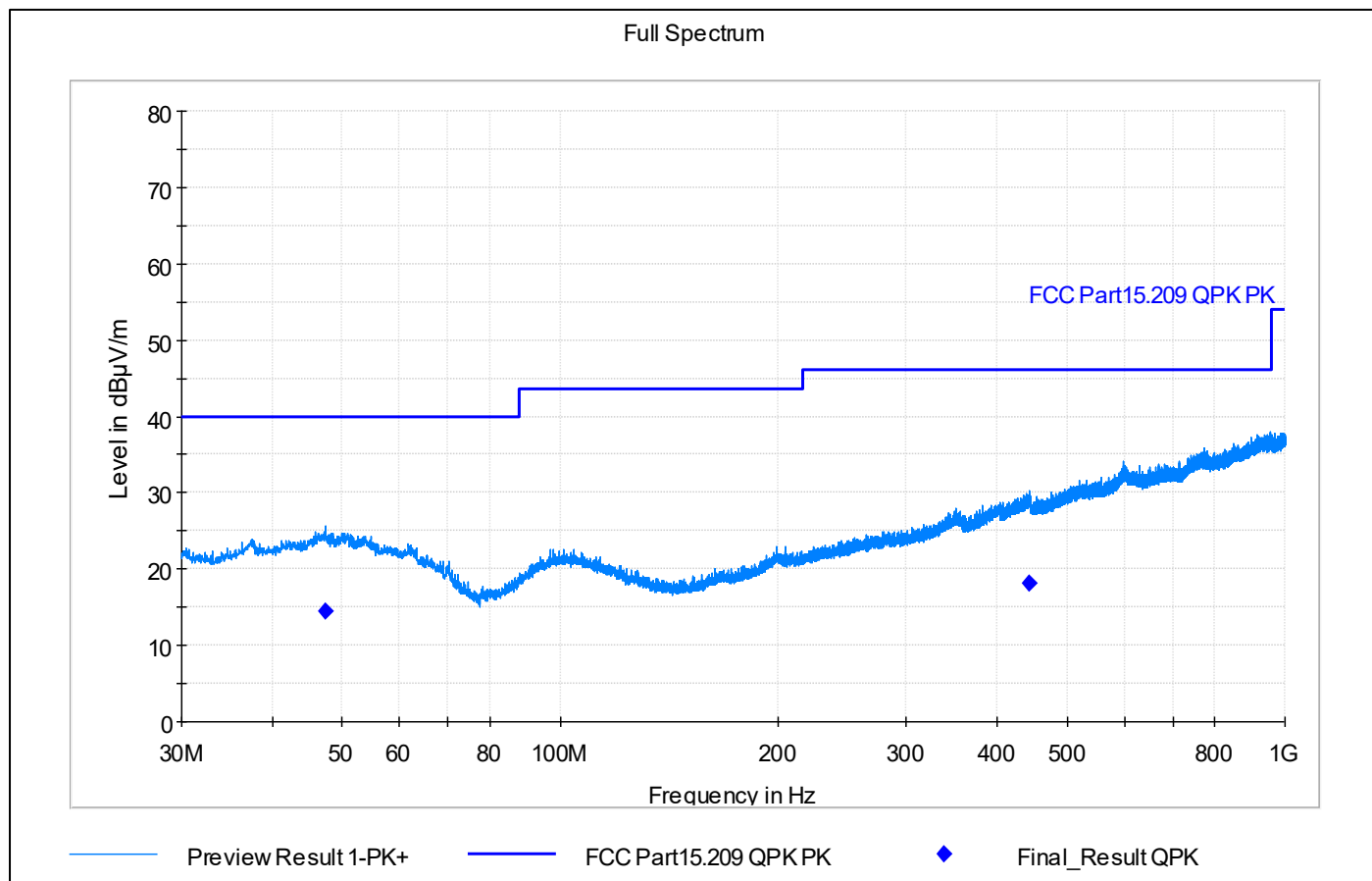
Mid channel, 18–26 GHz, 2Mbps

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
18765.250000	---	32.29	54.00	21.71	3000.0	1000.000	308.0	H	19.0	0.0	23.5	PASS
18765.250000	45.89	---	74.00	28.11	3000.0	1000.000	308.0	H	19.0	0.0	23.5	PASS
23063.500000	45.59	---	74.00	28.41	3000.0	1000.000	146.0	H	301.0	0.0	25.6	PASS
23063.500000	---	32.23	54.00	21.77	3000.0	1000.000	146.0	H	301.0	0.0	25.6	PASS
23468.000000	---	32.46	54.00	21.54	3000.0	1000.000	256.0	V	87.0	0.0	25.8	PASS
23468.000000	45.87	---	74.00	28.13	3000.0	1000.000	256.0	V	87.0	0.0	25.8	PASS
24870.250000	46.16	---	74.00	27.84	3000.0	1000.000	410.0	H	-7.0	0.0	26.6	PASS
24870.250000	---	32.94	54.00	21.06	3000.0	1000.000	410.0	H	-7.0	0.0	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
18765.250000	32.29	41.79	54	12.21	23.5	9.50	PASS
23063.500000	32.23	41.73	54	12.27	25.6	9.50	PASS
23468.000000	32.46	41.96	54	12.04	25.8	9.50	PASS
24870.250000	32.94	42.44	54	11.56	26.6	9.50	PASS

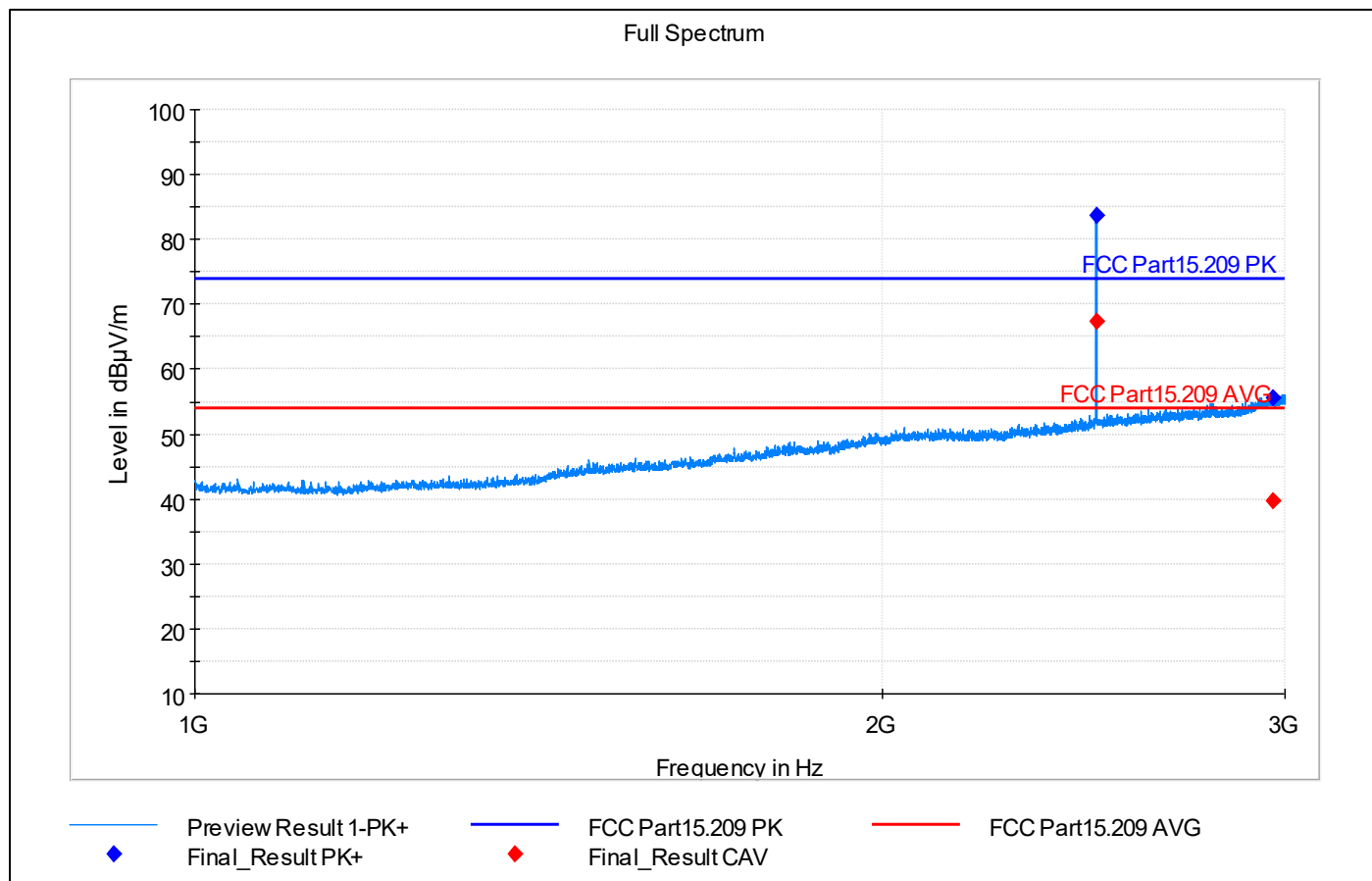
High channel, 30 MHz – 1 GHz, 2Mbps



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
47.400000	14.40	40.00	25.60	15000.0	120.000	100.0	V	285.0	90.0	21.1	PASS
443.880000	18.12	46.00	27.88	15000.0	120.000	156.0	H	127.0	90.0	26.1	PASS

High channel, 1 – 3 GHz, 2Mbps



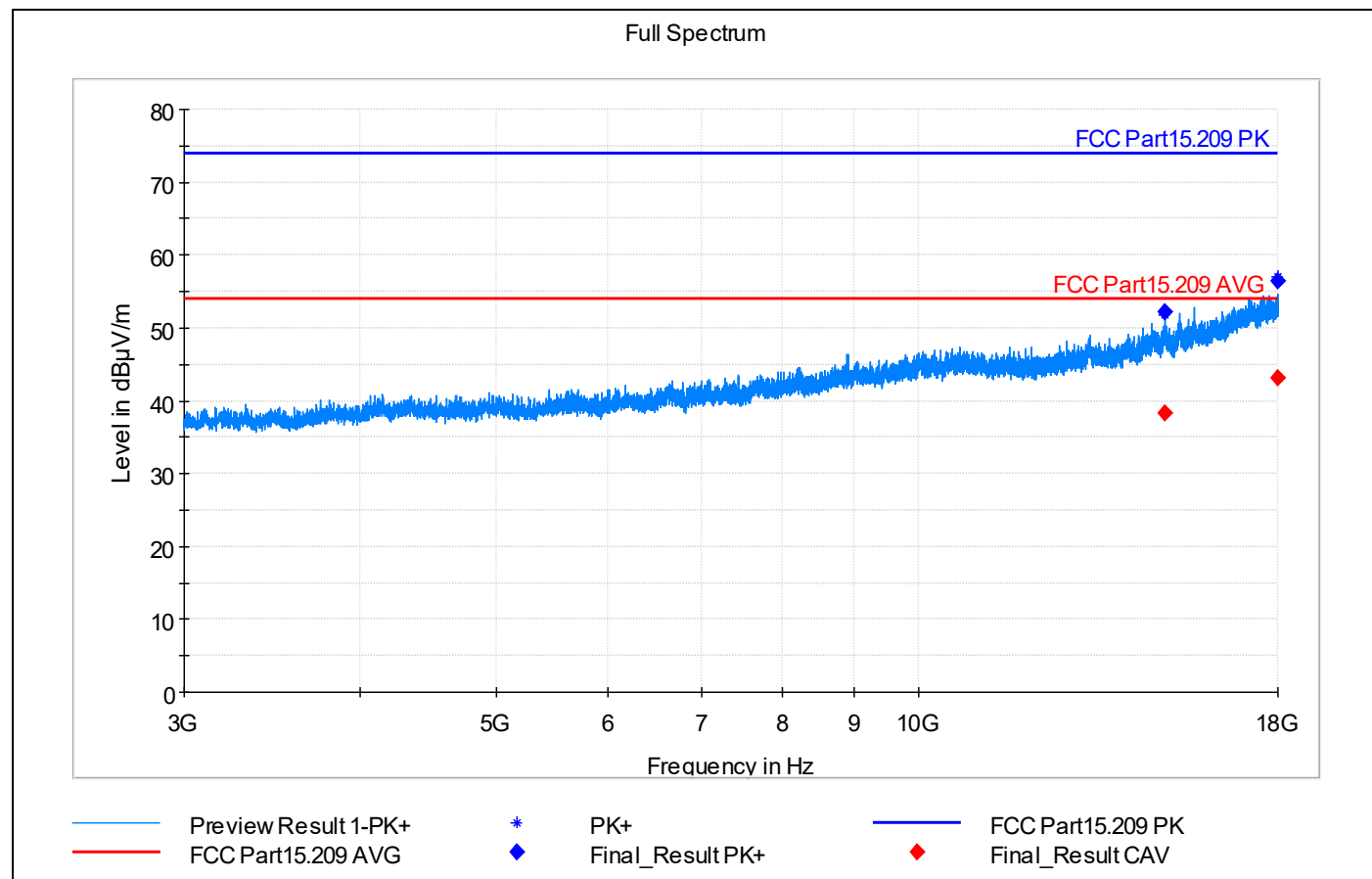
Note: Frequency 2480,500 MHz is excluded from spurious domain measurements and ignored. See table below.

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
2480.500000	83.63	---	74.00	-9.63	15000.0	1000.000	150.0	H	119.0	90.0	39.3	Fundamental TX signal ***IGNORED***
2480.500000	---	67.29	54.00	-13.29	15000.0	1000.000	150.0	H	119.0	90.0	39.3	Fundamental TX signal ***IGNORED***
2962.750000	55.53	---	74.00	18.47	15000.0	1000.000	243.0	H	17.0	90.0	41.2	PASS
2962.750000	---	39.73	54.00	14.27	15000.0	1000.000	243.0	H	17.0	90.0	41.2	PASS

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

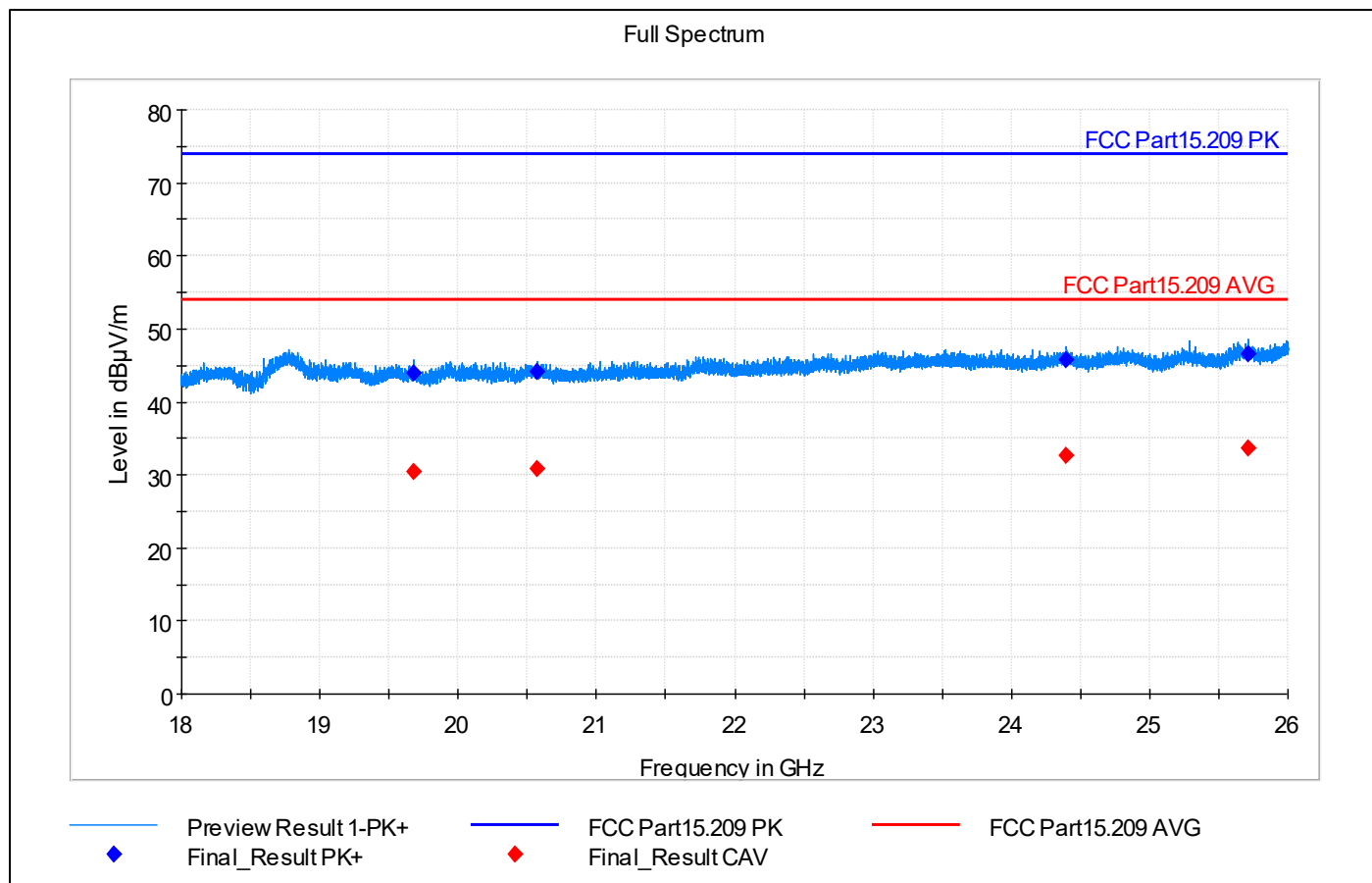
Frequency (MHz)	CAverage (dBµV/m)	Corrected level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Corr. (dB/m)	DC correction	Comment
2480.500000	67.29	76.79			39.3	9.50	Fundamental TX signal
2962.750000	39.73	49.23	54	4.77	41.2	9.50	PASS

High channel, 3 – 18 GHz, 2Mbps

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
14967.250000	52.27	---	74.00	21.73	15000.0	1000.000	189.0	H	306.0	0.0	30.5	PASS
14967.250000	---	38.19	54.00	15.81	15000.0	1000.000	189.0	H	306.0	0.0	30.5	PASS
17994.250000	56.36	---	74.00	17.64	15000.0	1000.000	268.0	H	132.0	0.0	39.5	PASS
17994.250000	---	43.08	54.00	10.92	15000.0	1000.000	268.0	H	132.0	0.0	39.5	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
14967.250	38.19	47.69	54	6.31	30.5	9.50	PASS
17994.250	43.08	52.58	54	1.42	39.5	9.50	PASS

High channel, 18 – 26 GHz, 2Mbps

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
19680.750000	43.87	---	74.00	30.13	3000.0	1000.000	244.0	V	128.0	90.0	23.9	PASS
19680.750000	---	30.44	54.00	23.56	3000.0	1000.000	244.0	V	128.0	90.0	23.9	PASS
20572.250000	---	30.79	54.00	23.21	3000.0	1000.000	258.0	V	8.0	90.0	24.2	PASS
20572.250000	44.09	---	74.00	29.91	3000.0	1000.000	258.0	V	8.0	90.0	24.2	PASS
24400.750000	45.75	---	74.00	28.25	3000.0	1000.000	294.0	H	78.0	90.0	26.2	PASS
24400.750000	---	32.71	54.00	21.29	3000.0	1000.000	294.0	H	78.0	90.0	26.2	PASS
25717.000000	---	33.62	54.00	20.38	3000.0	1000.000	202.0	V	161.0	90.0	26.8	PASS
25717.000000	46.59	---	74.00	27.41	3000.0	1000.000	202.0	V	161.0	90.0	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 (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Corr. (dB/m)	DC correction	Comment
19680.750	30.44	39.94	54	14.06	23.9	9.50	PASS
20572.250	30.79	40.29	54	13.71	24.2	9.50	PASS
24400.750	32.71	42.21	54	11.79	26.2	9.50	PASS
25717.000	33.62	43.12	54	10.88	26.8	9.50	PASS

19. Receiver spurious emissions, radiated

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

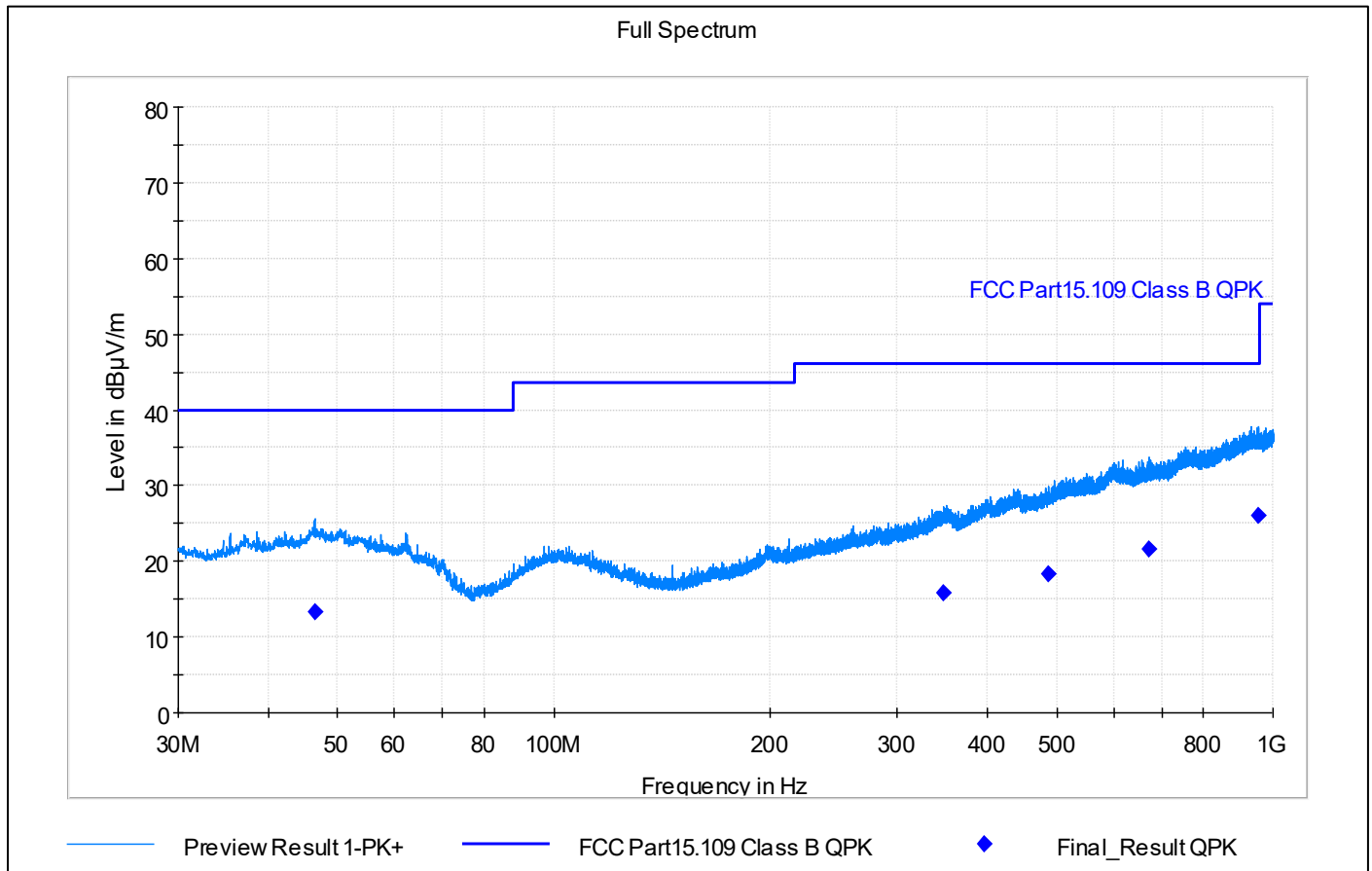
Test method: ANSI C63.4-2014 + C63.4a-2017 (8.1 – 8.3)

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.	

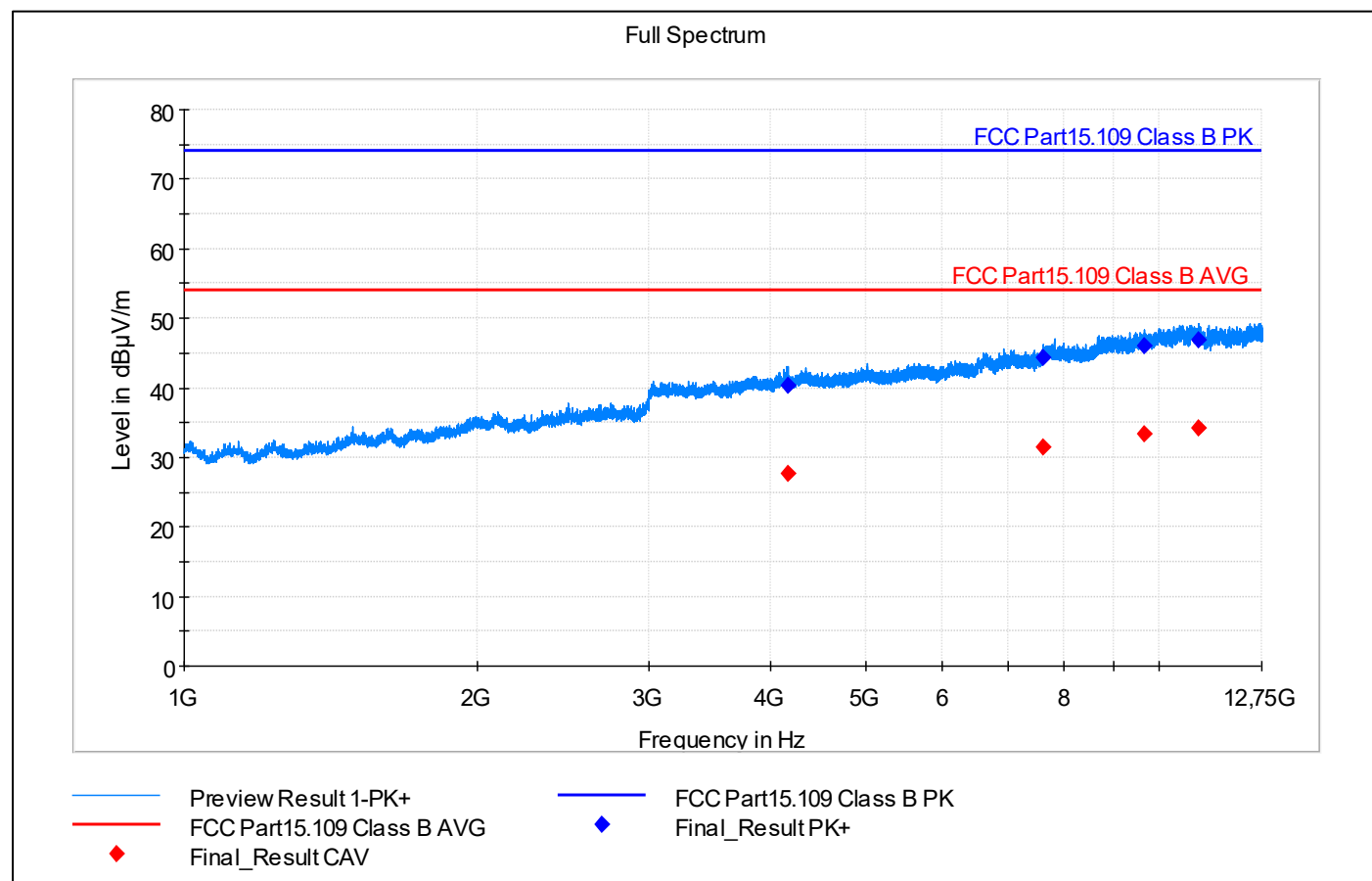
Operation mode(s)	Configuration	Test Verdict
Bluetooth LE RX	Mid channel, 2442 MHz	PASS

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
46.560000	13.30	40.00	26.70	15000.0	120.000	254.0	V	193.0	0.0	21.0	PASS
347.550000	15.87	46.00	30.13	15000.0	120.000	203.0	H	165.0	0.0	24.4	PASS
488.280000	18.27	46.00	27.73	15000.0	120.000	355.0	V	247.0	0.0	27.0	PASS
673.350000	21.68	46.00	24.32	15000.0	120.000	313.0	H	115.0	0.0	30.4	PASS
955.800000	25.98	46.00	20.02	15000.0	120.000	244.0	V	223.0	0.0	34.2	PASS

Mid channel, 1 GHz – 12,75 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
4166.750000	40.24	---	74.00	33.76	500.0	1000.000	242.0	V	337.0	8.5	PASS
4166.750000	---	27.74	54.00	26.26	500.0	1000.000	242.0	V	337.0	8.5	PASS
7623.000000	---	31.52	54.00	22.48	500.0	1000.000	189.0	H	337.0	16.4	PASS
7623.000000	44.35	---	74.00	29.65	500.0	1000.000	189.0	H	337.0	16.4	PASS
9678.250000	---	33.44	54.00	20.56	500.0	1000.000	351.0	H	4.0	20.0	PASS
9678.250000	46.03	---	74.00	27.97	500.0	1000.000	351.0	H	4.0	20.0	PASS
10968.500000	46.84	---	74.00	27.16	500.0	1000.000	375.0	H	337.0	22.4	PASS
10968.500000	---	34.18	54.00	19.82	500.0	1000.000	375.0	H	337.0	22.4	PASS