



TEST REPORT

APPLICANT : Xiamen Padmate Technology Co.,LTD

PRODUCT NAME : Bluetooth Headset

MODEL NAME : X12

BRAND NAME : Padmate

FCC ID : 2AJEO-X12

STANDARD(S) : 47 CFR Part 15 Subpart C

TEST DATE : 2018-12-22 to 2018-12-27

ISSUE DATE : 2018-12-28

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Anne Liu(Supervisor)

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Change History		
Issue	Date	Reason for change
1.0	2018-12-28	First edition



1. Technical Information

Note: Provide by applicant.

1.1. Applicant and Manufacturer Information

Applicant:	Xiamen Padmate Technology Co.,LTD
Applicant Address:	RM 201, Huli Park No.37, Industrial Zone, Tong'an District, Xiamen, China
Manufacturer:	Xiamen Padmate Technology Co.,LTD
Manufacturer Address:	RM 201, Huli Park No.37, Industrial Zone, Tong'an District, Xiamen, China

1.2. Equipment Under Test (EUT) Description

Product Name:	Bluetooth Headset
Serial No:	(N/A, marked #1 by test site)
Hardware Version:	V5.0
Software Version:	V28
Modulation Type:	GFSK
Operating Frequency Range:	The frequency range used is 2402MHz - 2480MHz (40 channels, at intervals of 2MHz);
Bluetooth Version:	Bluetooth LE
Antenna Type:	LDS Antenna
Antenna Gain:	-7.53dBi

Note 1: The EUT contains Bluetooth Module operating at 2.4GHz ISM band; the frequencies is $F(\text{MHz})=2402+2*n$ ($0 \leq n \leq 39$). The lowest, middle, highest channel numbers of the Bluetooth Module used and tested in this report are separately 0 (2402MHz), 19 (2440MHz) and 39 (2480MHz).

Note 2: The right headset and left headset are electrically identical, we selected right headset for fully conducted testing, the differences details was explained in the declaration letter.

Note 3: The right headset and left headset will work simultaneously during normal use, we selected right headset and left headset simultaneous transmission for fully radiated emission testing.

Note 4: The EUT connected to the serial port of the computer with a serial communication cable, we use the dedicated software to control the EUT continuous transmission.

Note 5: For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.



1.3. Test Standards and Results

The objective of the report is to perform testing according to 47 CFR Part 15 Subpart C (Bluetooth, 2.4GHz ISM band radiators) for the EUT FCC ID Certification:

No	Identity	Document Title
1	47 CFR Part 15 (10-1-15 Edition)	Radio Frequency Devices

Test detailed items/section required by FCC rules and results are as below:

No.	Section	Description	Test Date	Test Engineer	Result
1	15.203	Antenna Requirement	N/A	N/A	<u>PASS</u>
2	15.247(b)	Peak Output Power	Dec 23, 2018	Scott Chen	<u>PASS</u>
3	15.247(a)	Bandwidth	Dec 23, 2018	Scott Chen	<u>PASS</u>
4	15.247(d)	Conducted Spurious Emission and Band Edge	Dec 23, 2018	Scott Chen	<u>PASS</u>
5	15.247(e)	Power spectral density (PSD)	Dec 23, 2018	Scott Chen	<u>PASS</u>
6	15.247(d)	Restricted Frequency Bands	Dec 27, 2018	Jinxin Huang	<u>PASS</u>
7	15.207	Conducted Emission	Dec 27, 2018	Jinxin Huang	<u>PASS</u>
8	15.209, 15.247(d)	Radiated Emission	Dec 27, 2018	Jinxin Huang	<u>PASS</u>

Note: The tests were performed according to the method of measurements prescribed in ANSIC63.10-2013 and KDB558074 D01 v04 (04/05/2017).

1.4. Environmental Conditions

During the measurement, the environmental conditions were within the listed ranges:

Temperature (°C):	15 - 35
Relative Humidity (%):	30 -60
Atmospheric Pressure (kPa):	86-106

2. 47 CFR Part 15C Requirements

2.1. Antenna requirement

2.1.1. Applicable Standard

According to FCC 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

2.1.2. Result: Compliant

The EUT has a permanently and irreplaceable attached antenna. Please refer to the EUT internal photos.

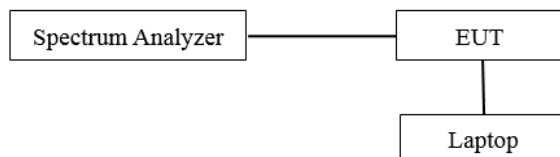
2.2. Peak Output Power

2.2.1. Requirement

According to FCC section 15.247(b)(3), For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: The maximum peak conducted output power of the intentional radiator shall not exceed 1 Watt.

2.2.2. Test Description

A. Test Setup:



The EUT (Equipment under the test) is coupled to the Spectrum analyzer; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading, all test result in Spectrum analyzer.

B. Equipments List:

Please refer ANNEX B(4).



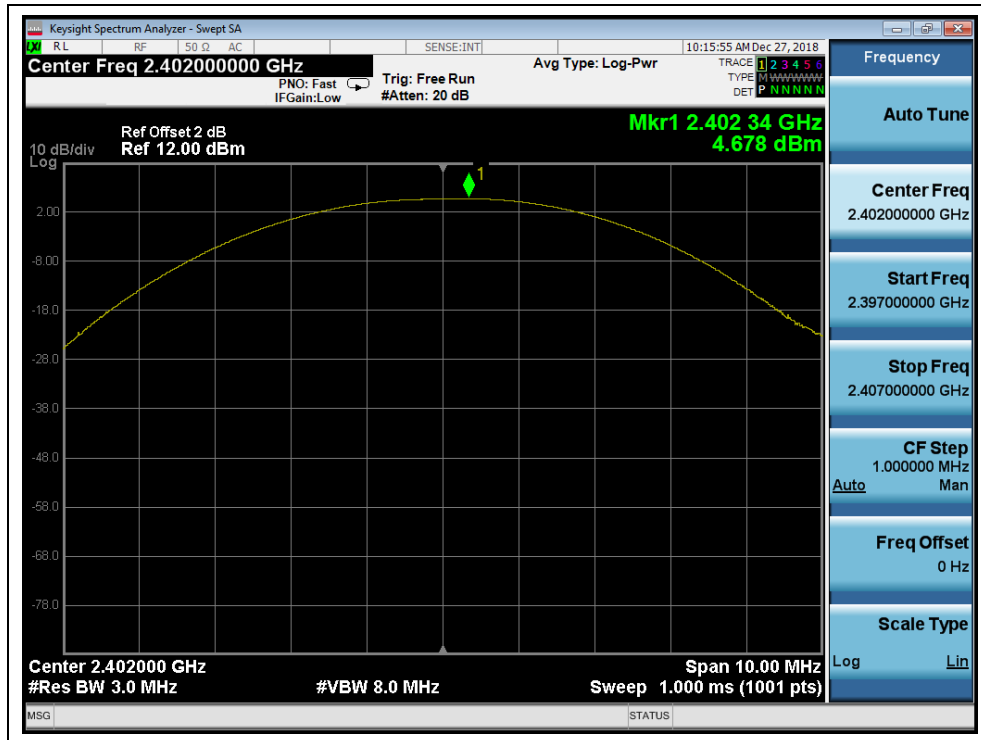
2.2.3. Test Result

The lowest, middle and highest chnnels are selected to perform testing to verify the conducted RF output peak power of the Module.

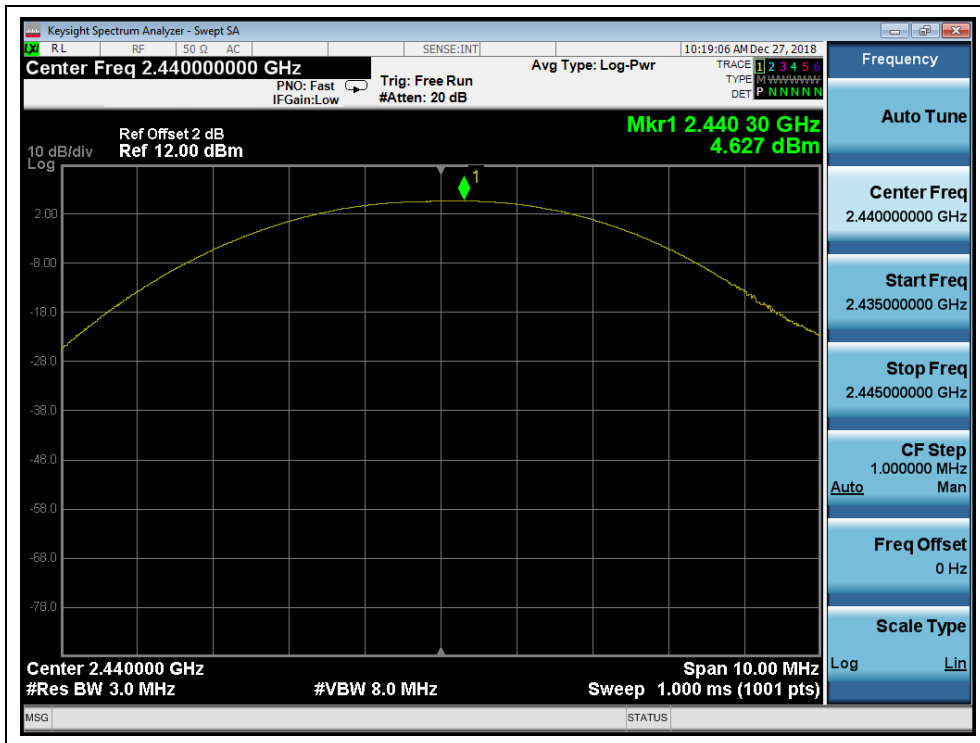
A. Test Verdict:

Channel	Frequency (MHz)	Measured Output Peak Power		Limit		Verdict
		dBm	W	dBm	W	
0	2402	4.678	0.0029	30	1	PASS
19	2440	4.627	0.0029			PASS
39	2480	4.639	0.0029			PASS

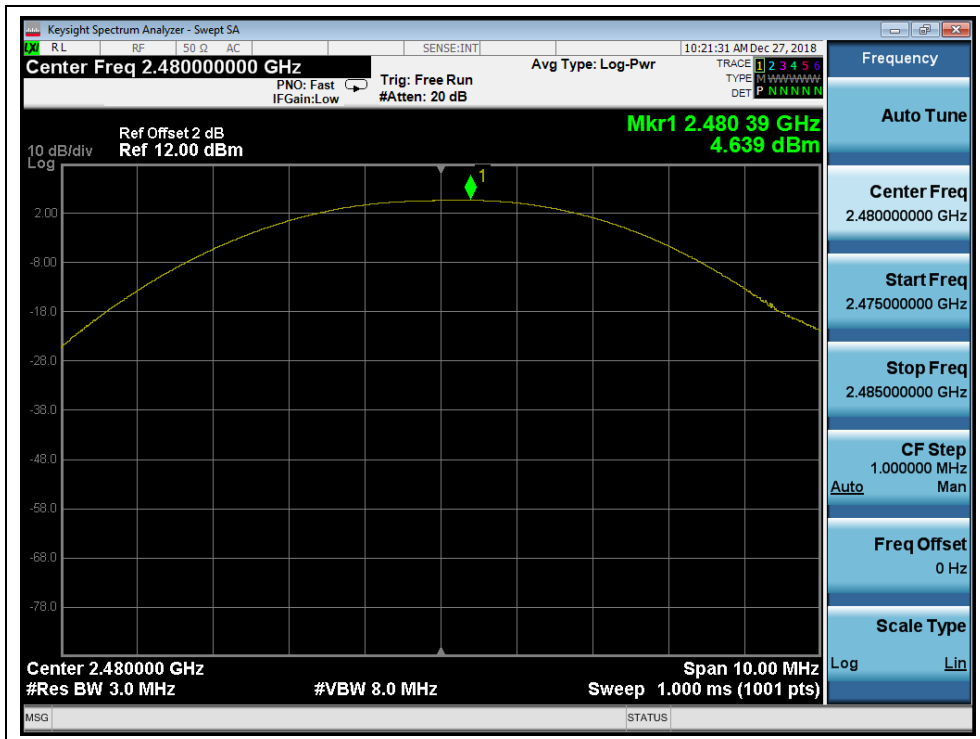
B. Test Plots:



(Channel 0, 2402MHz)



(Channel 19, 2440MHz)



(Channel 39, 2480MHz)

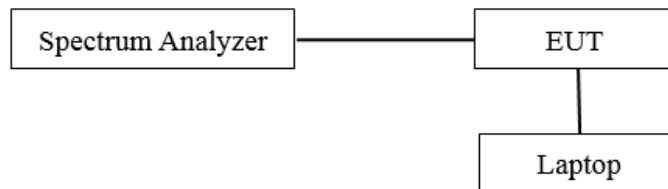
2.3.6dB Bandwidth

2.3.1. Requirement

According to FCC section 15.247(a) (2), Systems using digital modulation techniques may operate in the 902 - 928 MHz, 2400 - 2483.5 MHz, and 5725 - 5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

2.3.2. Test Description

A. Test Set:



The EUT (Equipment under the test) is coupled to the Spectrum analyzer; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading, all test result in Spectrum analyzer.

B. Equipments List:

Please refer ANNEX B(4).

2.3.3. Test Result

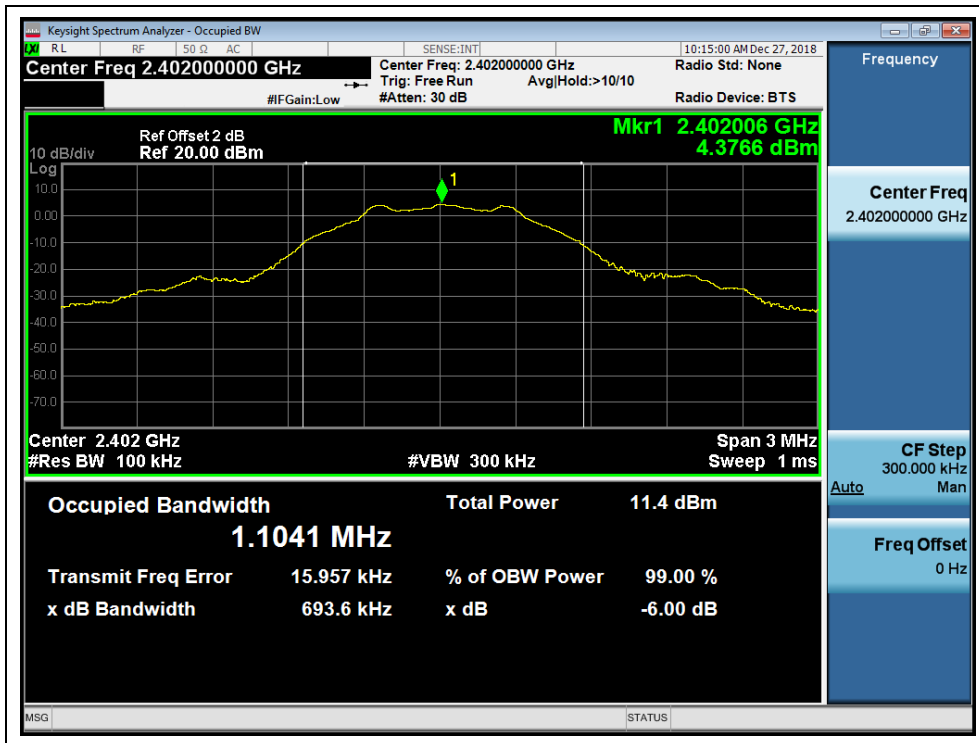
The lowest, middle and highest channels are selected to perform testing to record the 6 dB bandwidth of the module.

A. Test Verdict:

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Limits(kHz)	Result
0	2402	0.6936	≥500	PASS
19	2440	0.6826	≥500	PASS
39	2480	0.6846	≥500	PASS



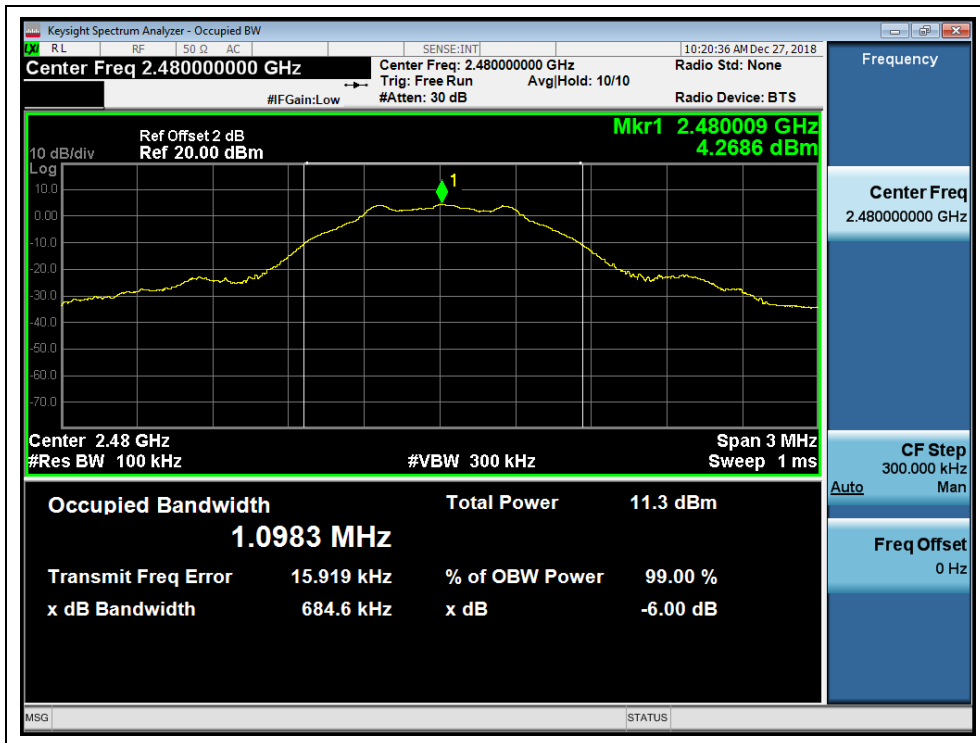
B. Test Plots:



(Channel 0: 2402MHz)



(Channel 19: 2440 MHz)



(Channel 39: 2480MHz)

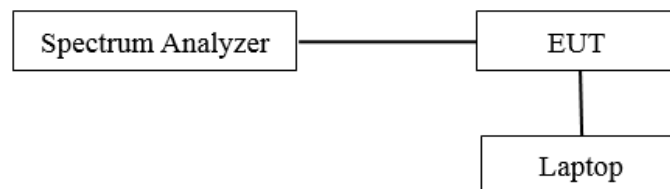
2.4. Conducted Spurious Emissions and Band Edge

2.4.1. Requirement

According to FCC section 15.247(d), in any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.

2.4.2. Test Description

A. Test Set:



The EUT (Equipment under the test) is coupled to the Spectrum analyzer; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading, all test result in Spectrum analyzer.

B. Equipments List:

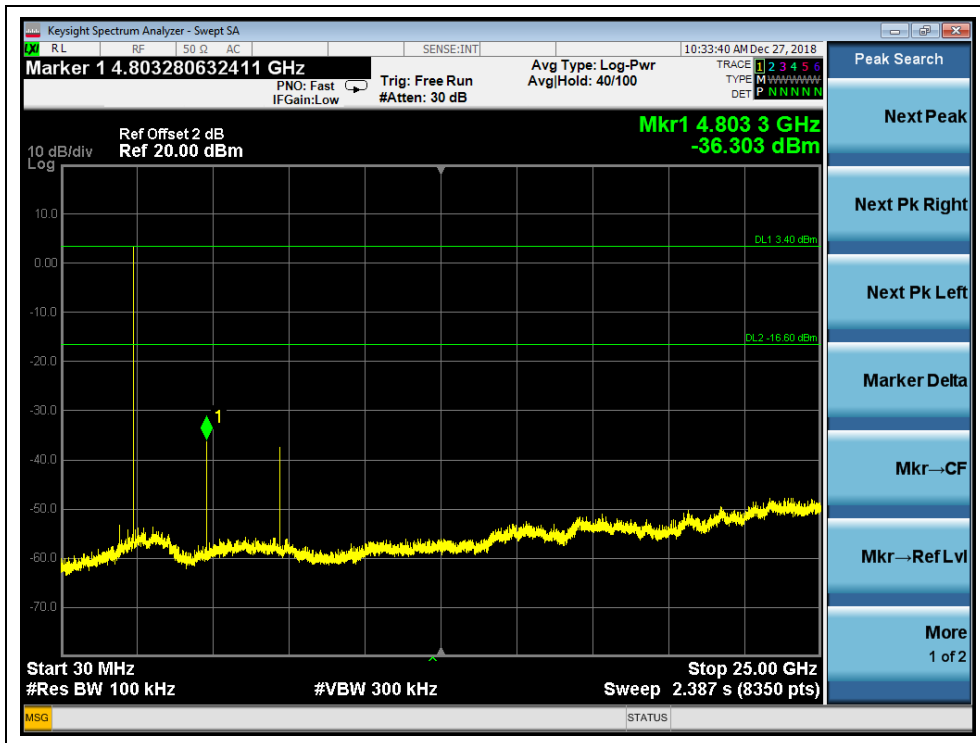
Please refer ANNEX B (4).

2.4.3. Test Result

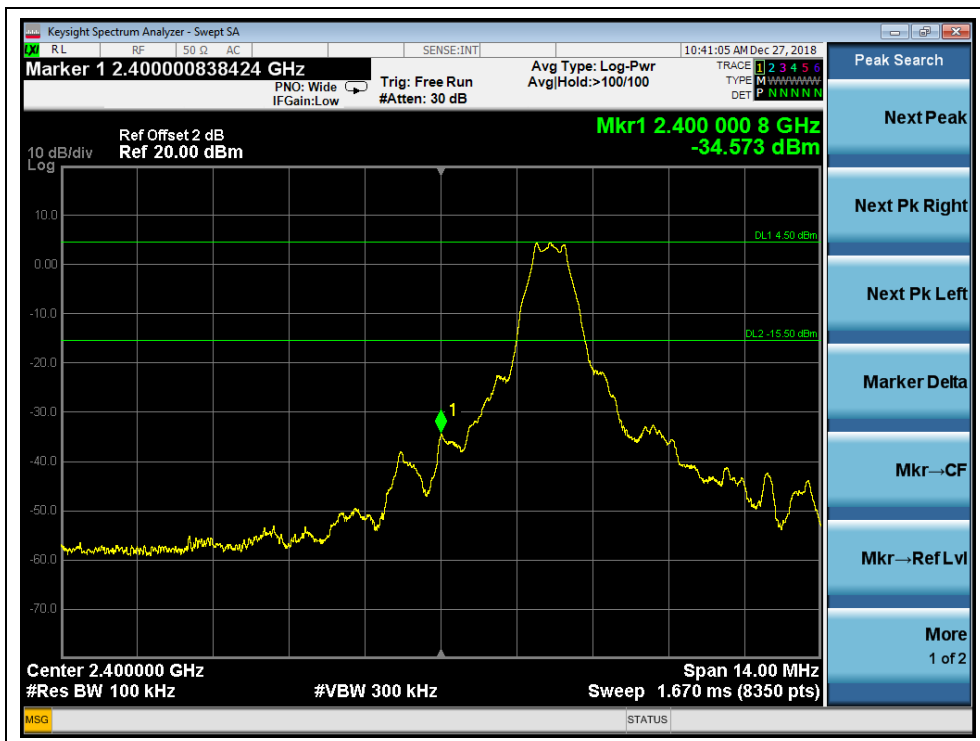
The measurement frequency range is from 30MHz to the 10th harmonic of the fundamental frequency. The lowest, middle and highest channels are tested to verify the spurious emissions.

A. Test Plots:

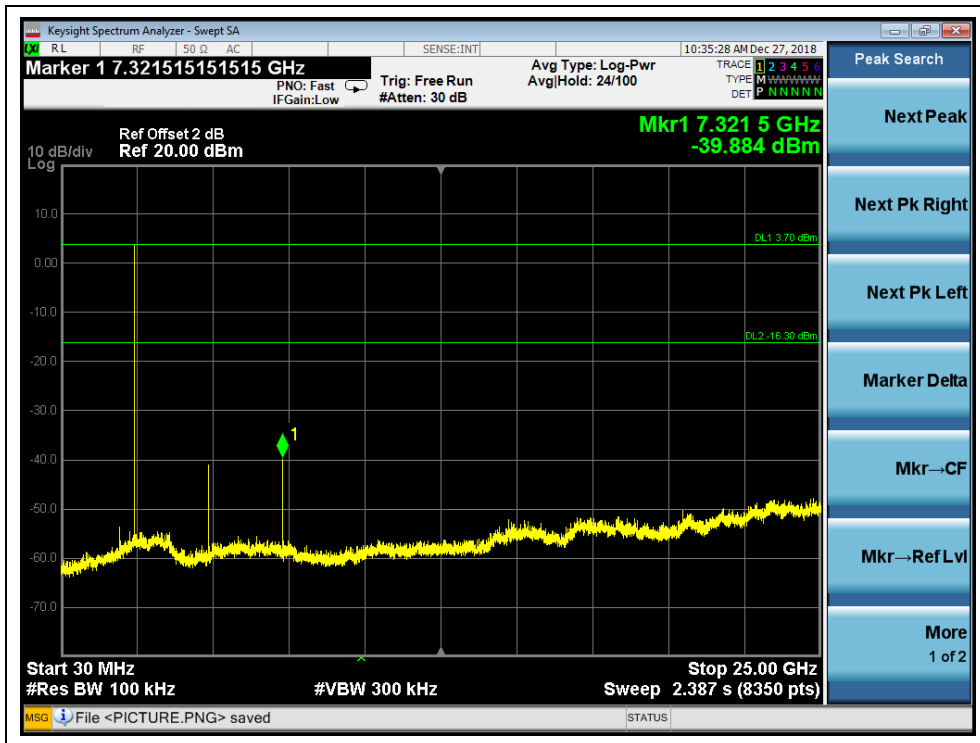
Note: the power of the Module transmitting frequency should be ignored.



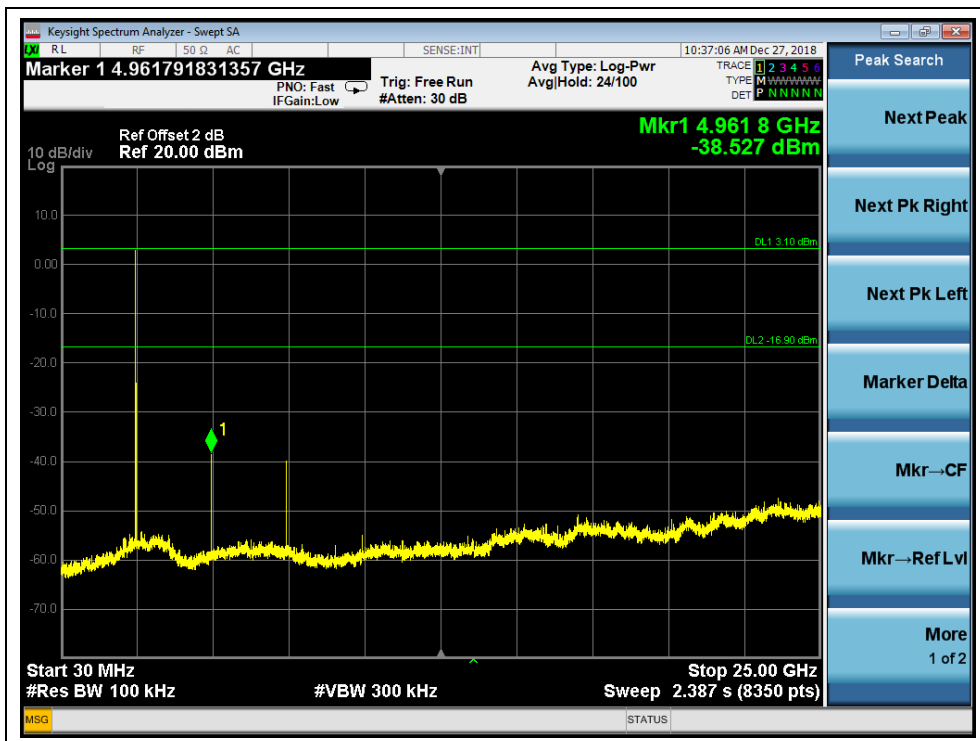
(Channel = 0, 30MHz to 25GHz)



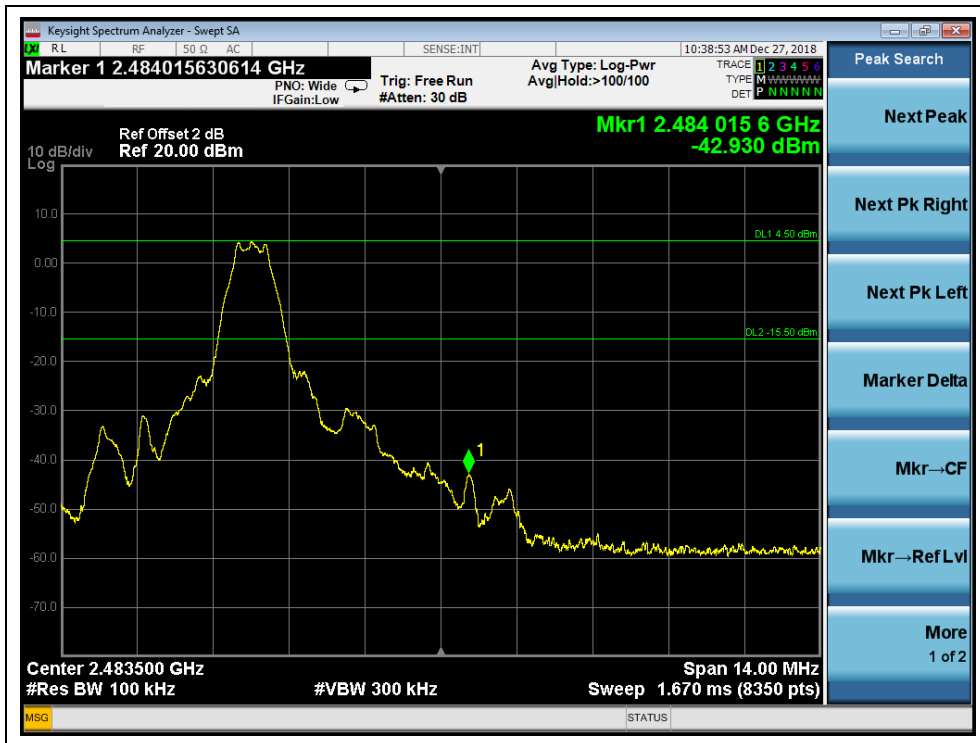
(Band Edge, Channel = 0)



(Channel = 19, 30MHz to 25GHz)



(Channel = 39, 30MHz to 25GHz)



(Band Edge, Channel = 39)

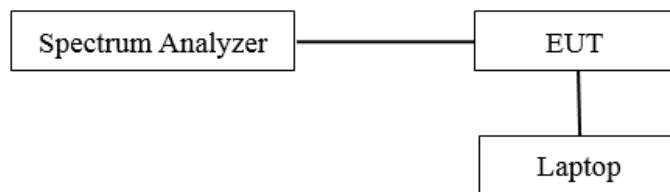
2.5. Power spectral density (PSD)

2.5.1. Requirement

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

2.5.2. Test Description

A. Test Set:



The EUT (Equipment under the test) is coupled to the Spectrum analyzer; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading, all test result in Spectrum analyzer.

B. Equipments List:

Please refer ANNEX B (4).

2.5.3. Test Result

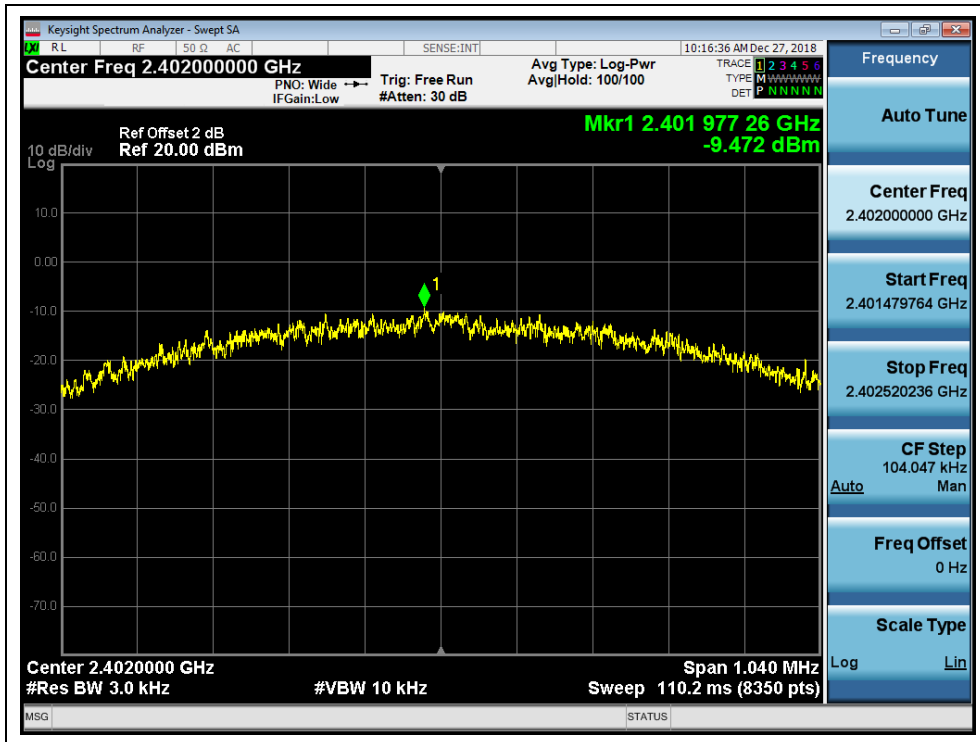
The lowest, middle and highest channels are tested.

A. Test Verdict:

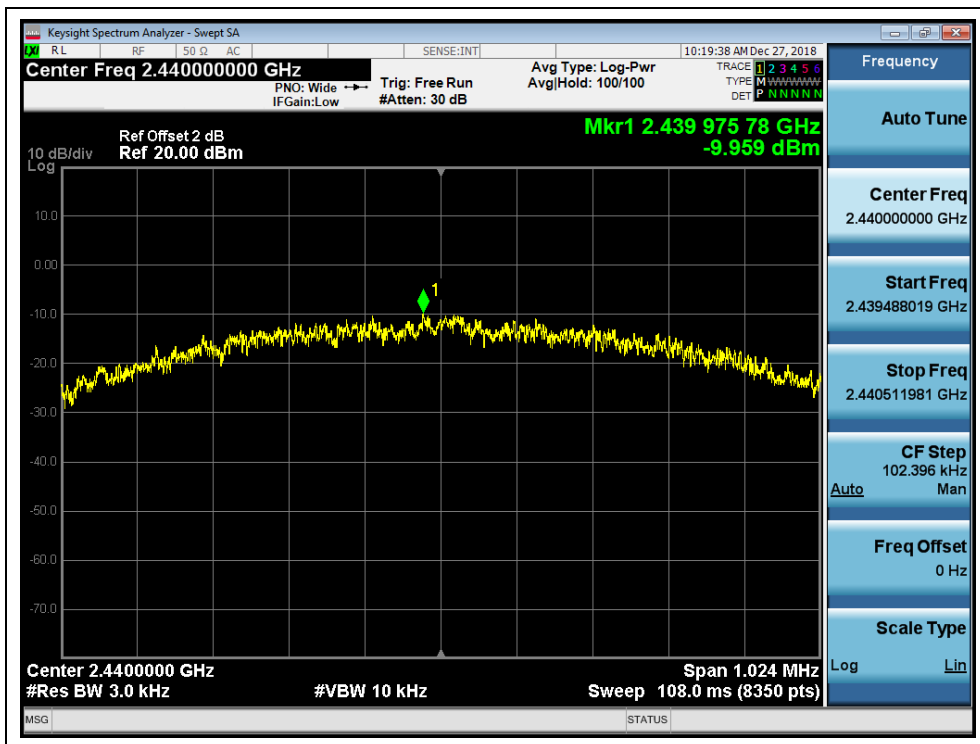
Spectral power density (dBm/3kHz)				
Channel	Frequency (MHz)	Measured PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
0	2402	-9.472	8	PASS
19	2440	-9.959	8	PASS
39	2480	-9.812	8	PASS



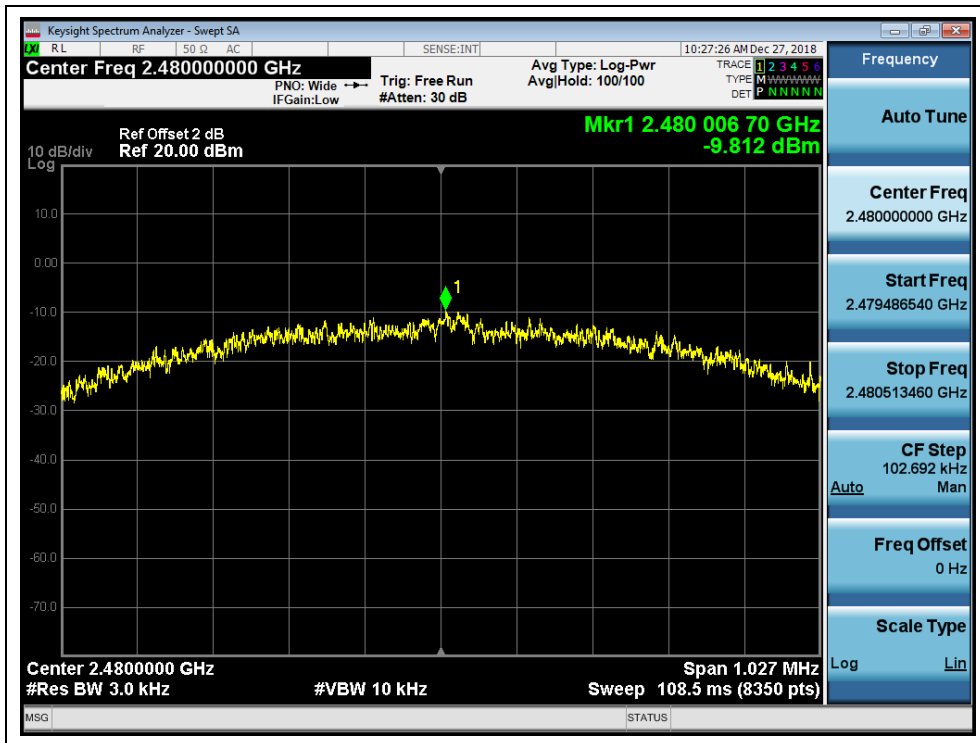
B. Test Plots:



(Channel = 0, 2402MHz)



(Channel = 19, 2440MHz)



(Channel = 39, 2480MHz)

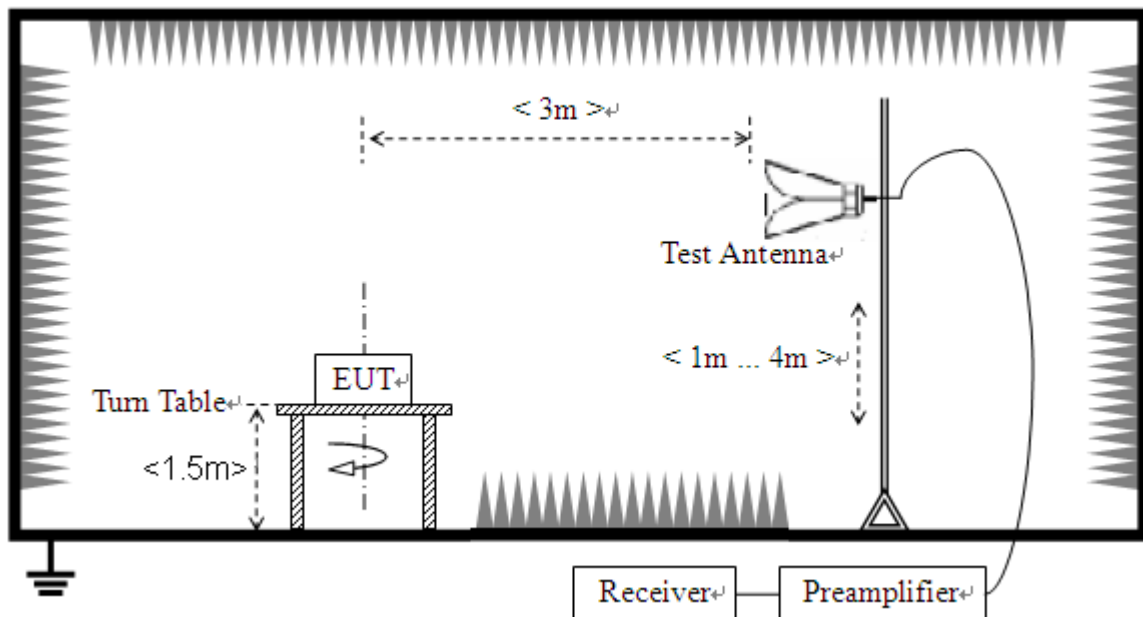
2.6. Restricted Frequency Bands

2.6.1. Requirement

According to FCC section 15.247(d), in any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, In addition, radiated emissions which fall in the restricted bands, as defined in 15.205(a), must also comply with the radiated emission limits specified in 15.209(a).

2.6.2. Test Description

A. Test Setup



The EUT is located in a 3m Semi-Anechoic Chamber; the antenna factors, cable loss and so on of the site as factors are calculated to correct the reading.

For the Test Antenna:

Test Antenna is 3m away from the EUT. Test Antenna height is varied from 1m to 4m above the ground to determine the maximum value of the field strength.



B. Equipments List:

Please refer ANNEX B(4).

2.6.3. Test Result

The lowest and highest channels are tested to verify Restricted Frequency Bands.

The measurement results are obtained as below:

$$E \text{ [dB}\mu\text{V/m]} = U_R + A_T + A_{\text{Factor}} \text{ [dB]}; AT = L_{\text{Cable loss}} \text{ [dB]} - G_{\text{preamp}} \text{ [dB]}$$

AT: Total correction Factor except Antenna

UR: Receiver Reading

Gpreamp: Preamplifier Gain

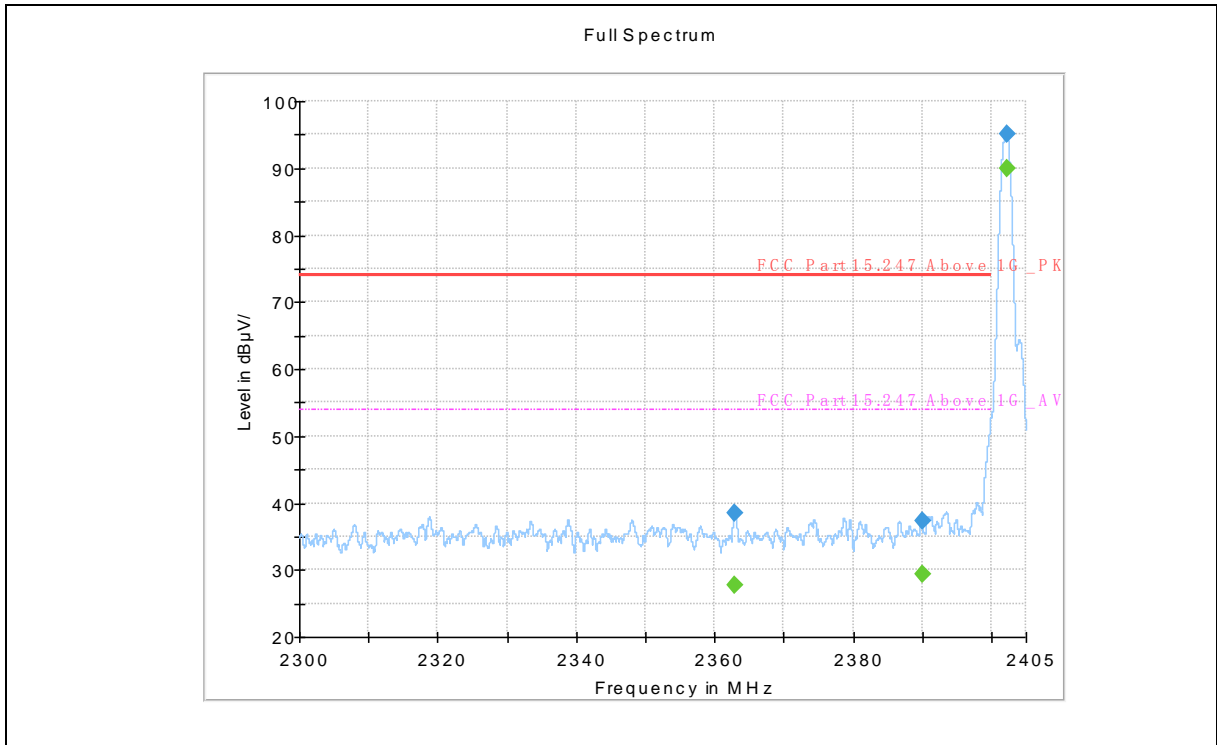
AFactor: Antenna Factor at 3m

Note: The right headset and left headset will work simultaneously during normal use, we selected right headset and left headset simultaneous transmission for fully radiated emission testing.

A. Test Verdict:

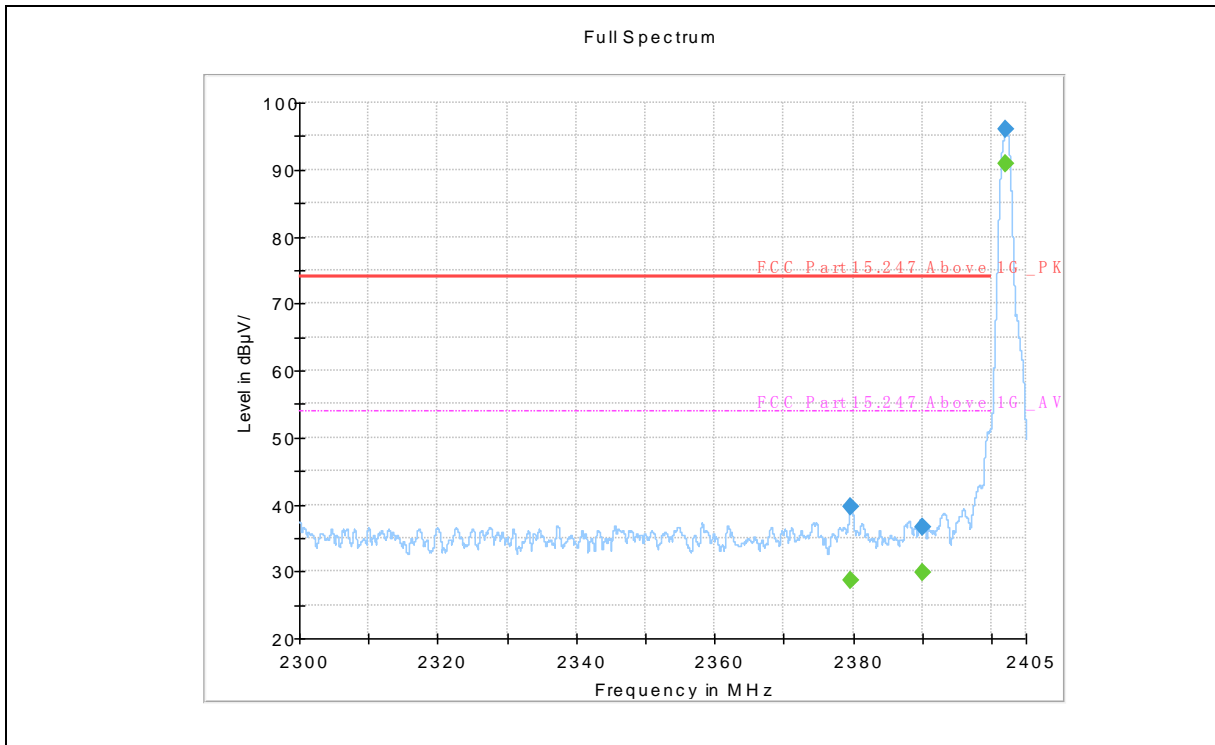
Mode	Channel	Limit (dBμV/m)	Antenna	Verdict
GFSK	0	PK: 74 AV: 54	Horizontal	Pass
	0		Vertical	Pass
	39		Horizontal	Pass
	39		Vertical	Pass

B. Test Plots:



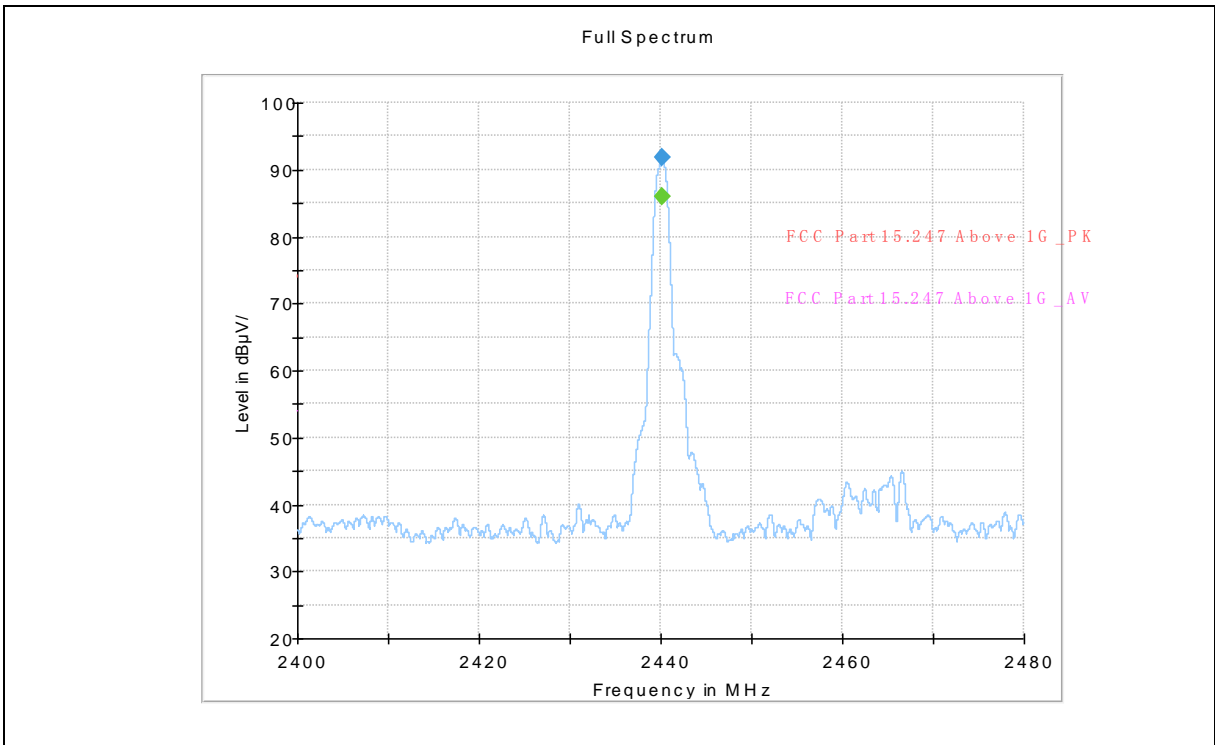
(GFSK _2402MHz, Antenna Horizontal)

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Corr. (dB/m)
2362.900833	---	27.68	54.00	26.32	H	7.5
2362.900833	38.58	---	74.00	35.42	H	7.5
2390.008333	---	29.28	54.00	24.72	H	8.0
2390.008333	37.33	---	74.00	36.67	H	8.0
2402.176667	---	89.83	---	---	H	8.7
2402.176667	95.17	---	---	---	H	8.7



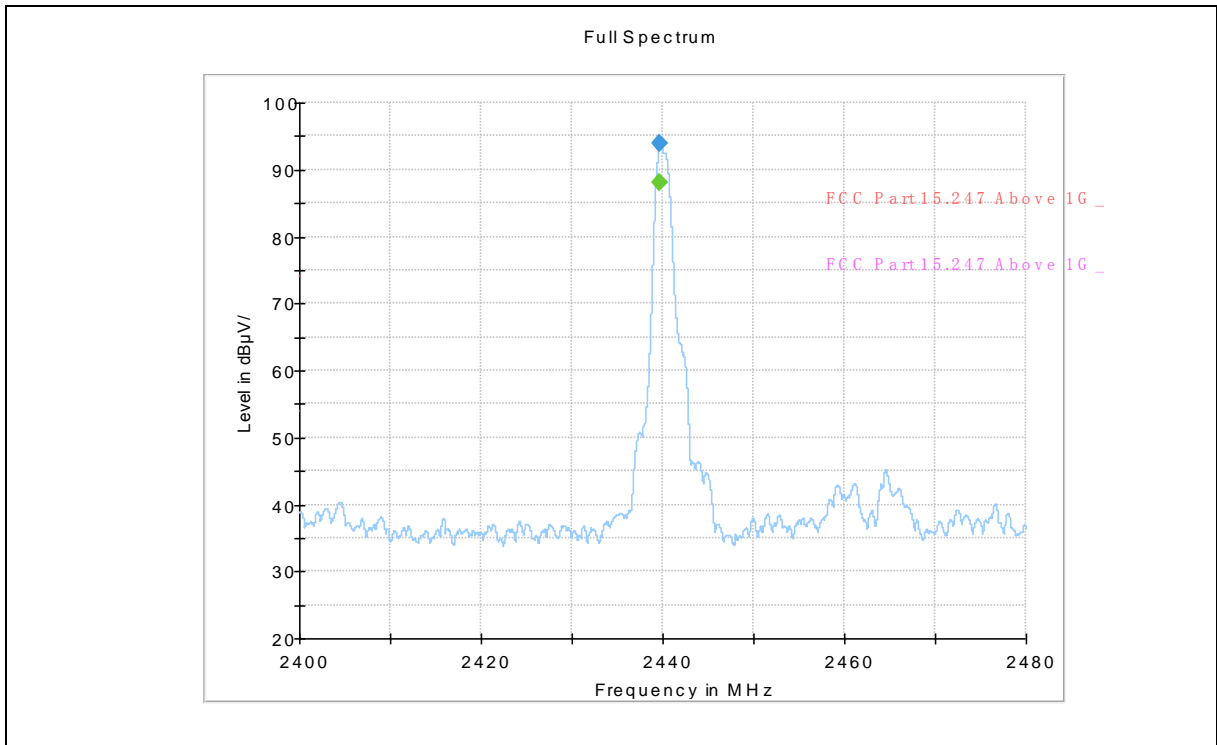
(GFSK_2402MHz, Antenna Vertical)

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Corr. (dB/m)
2379.735833	---	28.57	54.00	25.43	V	7.3
2379.735833	39.57	---	74.00	34.43	V	7.3
2390.002500	36.71	---	74.00	37.29	V	8.0
2390.002500	---	29.84	54.00	24.16	V	8.0
2402.165000	96.05	---	---	---	V	8.7
2402.165000	---	90.82	---	---	V	8.7



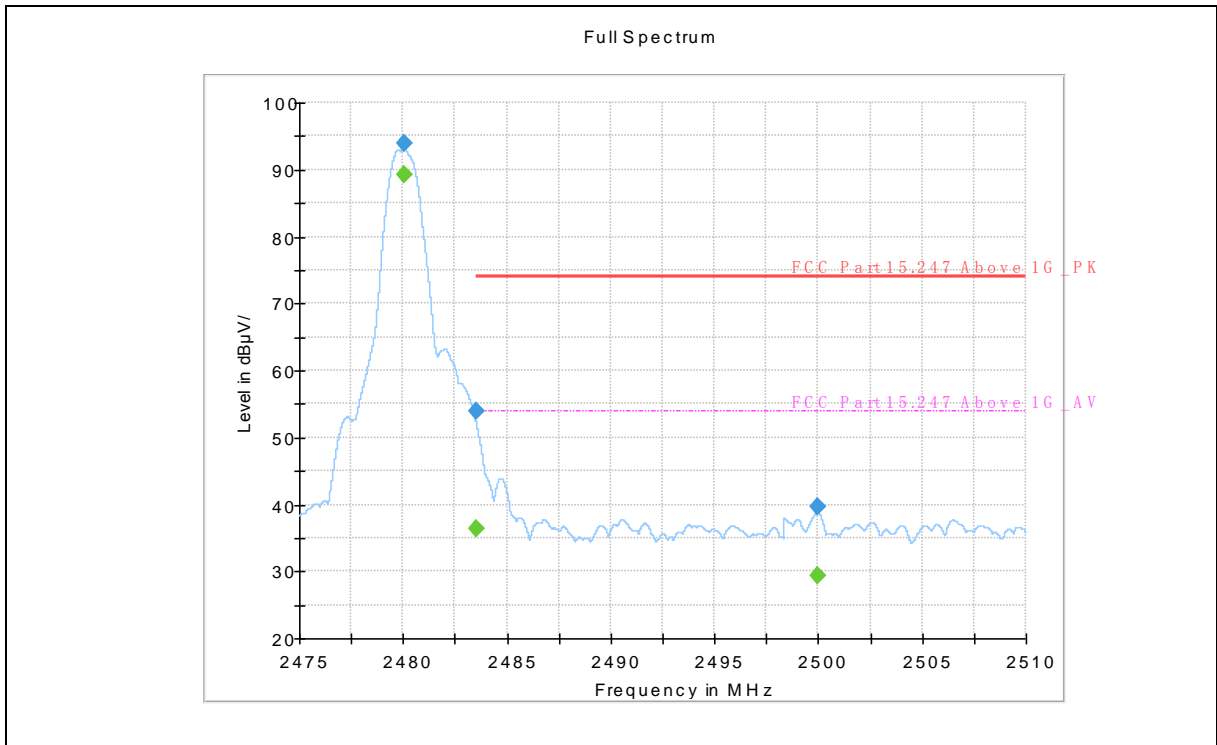
(GFSK _2440MHz, Antenna Horizontal)

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Corr. (dB/m)
2440.231111	---	85.96	---	---	H	7.9
2440.231111	91.74	---	---	---	H	7.9



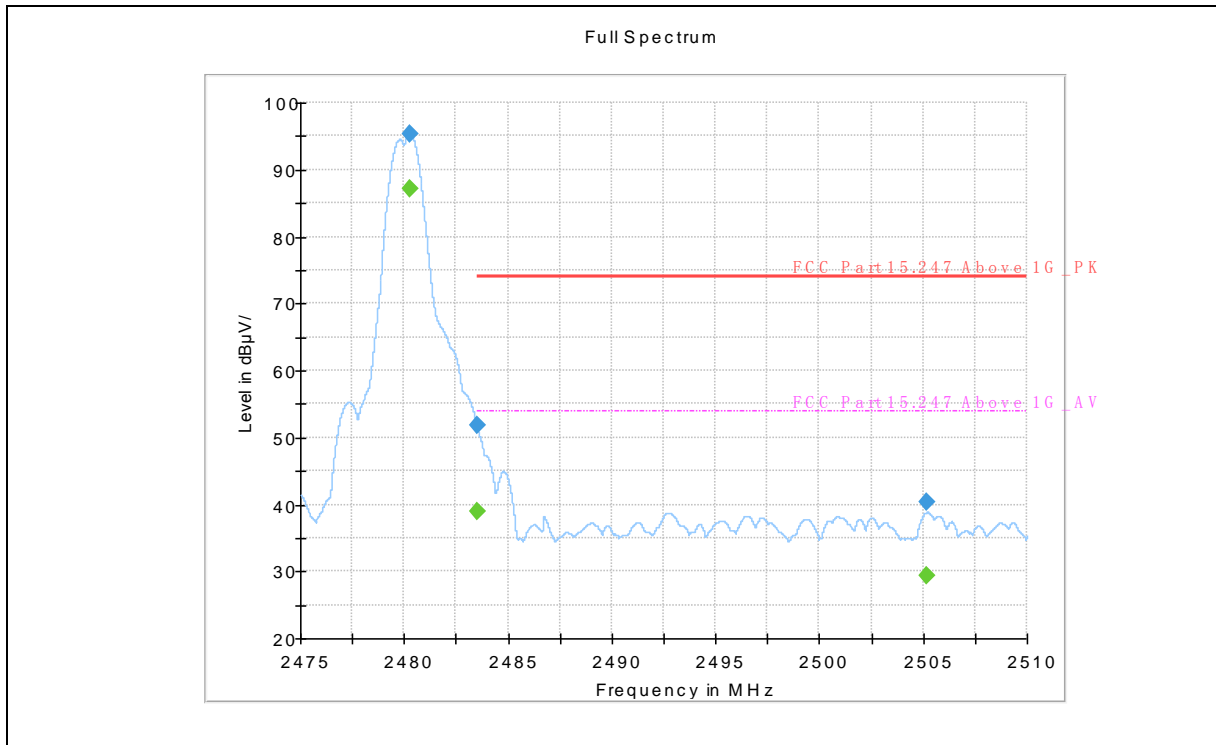
(GFSK_2440MHz, Antenna Vertical)

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Corr. (dB/m)
2439.737778	---	88.17	---	---	V	7.9
2439.737778	93.85	---	---	---	V	7.9



(GFSK_2480MHz, Antenna Horizontal)

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Corr. (dB/m)
2480.028333	93.81	---	---	---	H	8.2
2480.028333	---	89.17	---	---	H	8.2
2483.501111	53.90	---	74.00	20.10	H	8.3
2483.501111	---	36.28	54.00	17.72	H	8.3
2499.939445	---	29.41	54.00	24.59	H	8.4
2499.939445	39.66	---	74.00	34.34	H	8.4



(GFSK_2480MHz, Antenna Vertical)

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Corr. (dB/m)
2480.263611	95.42	---	---	---	V	8.2
2480.263611	---	87.23	---	---	V	8.2
2483.501111	---	39.06	54.00	14.94	V	8.3
2483.501111	51.83	---	74.00	22.17	V	8.3
2505.193333	40.43	---	74.00	33.57	V	8.3
2505.193333	---	29.29	54.00	24.71	V	8.3

2.7. Conducted Emission

2.7.1. Requirement

According to FCC section 15.207, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency within the band 150kHz to 30MHz shall not exceed the limits in the following table, as measured using a 50 μ H/50 Ω line impedance stabilization network (LISN).

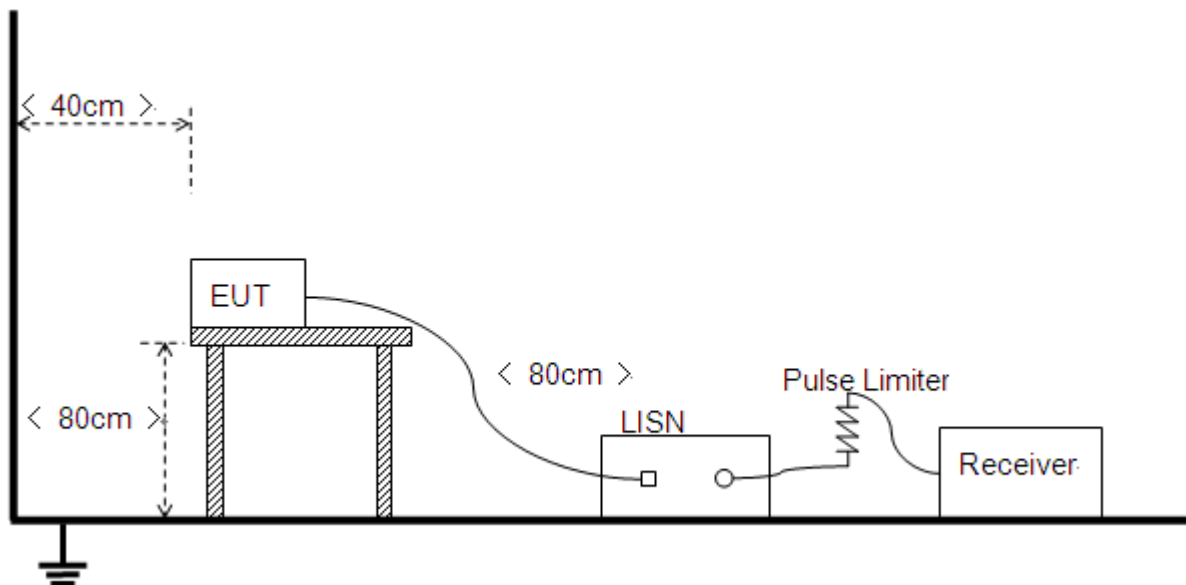
Frequency range (MHz)	Conducted Limit (dB μ V)	
	Quai-peak	Average
0.15 - 0.50	66 to 56	56 to 46
0.50 - 5	56	46
5 - 30	60	50

NOTE:

- (a) The lower limit shall apply at the band edges.
- (b) The limit decreases linearly with the logarithm of the frequency in the range 0.15 - 0.50MHz.

2.7.2. Test Description

A. Test Setup:



The Table-top EUT was placed upon a non-metallic table 0.8m above the horizontal metal reference ground plane. EUT was connected to LISN and LISN was connected to reference Ground Plane. EUT was 80cm from LISN. The set-up and test methods were according to ANSI C63.10: 2013.



B. Equipments List:

Please refer ANNEX B(4).

2.7.3. Test Result

The maximum conducted interference is searched using Peak (PK), if the emission levels more than the AV and QP limits, and that have narrow margins from the AV and QP limits will be re-measured with AV and QP detectors. Tests for both L phase and N phase lines of the power mains connected to the EUT are performed. Refer to recorded points and plots below.

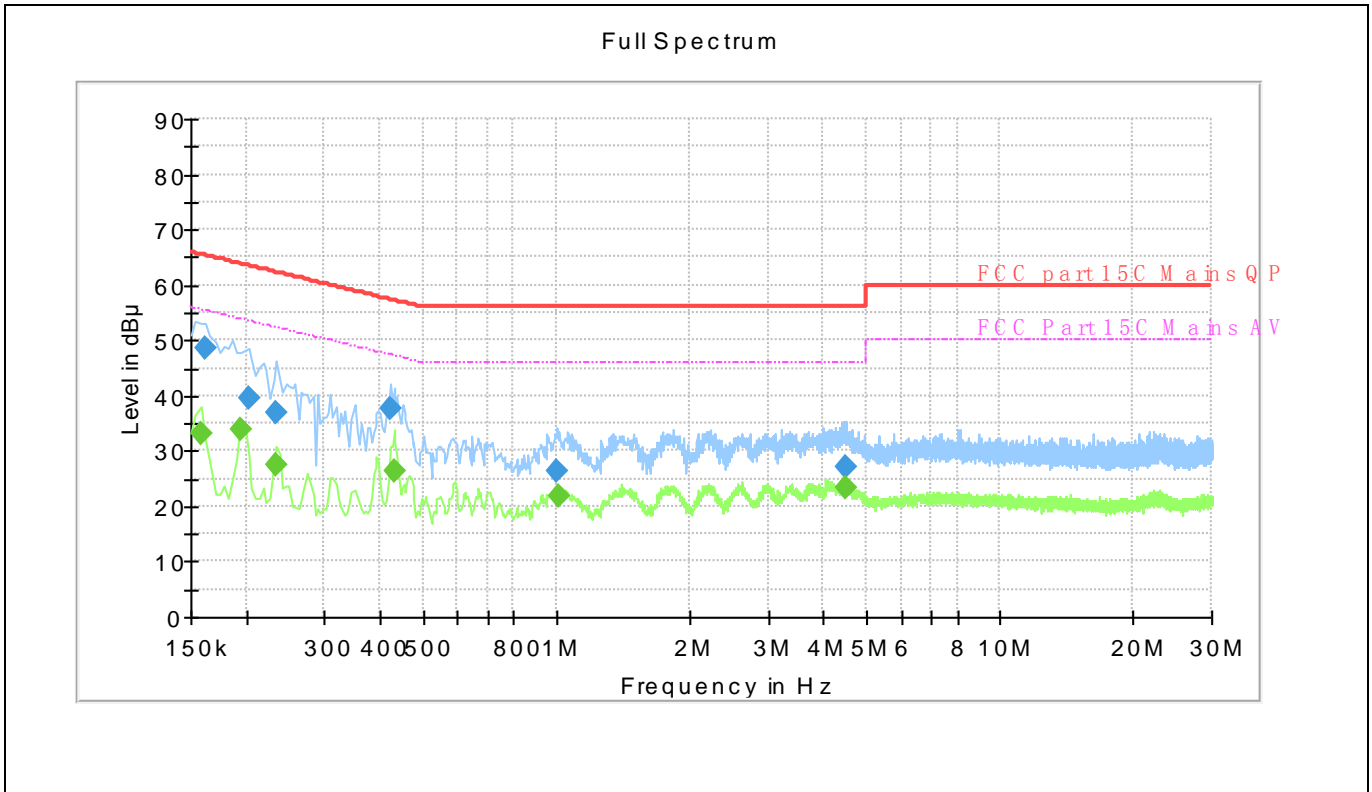
Note: Both of the test voltage AC 120V/60Hz and AC 230V/50Hz were considered and tested respectively, only the results of the worst case AC 120V/60Hz were recorded in this report.

A. Test setup:

The EUT configuration of the emission tests is EUT +Laptop.

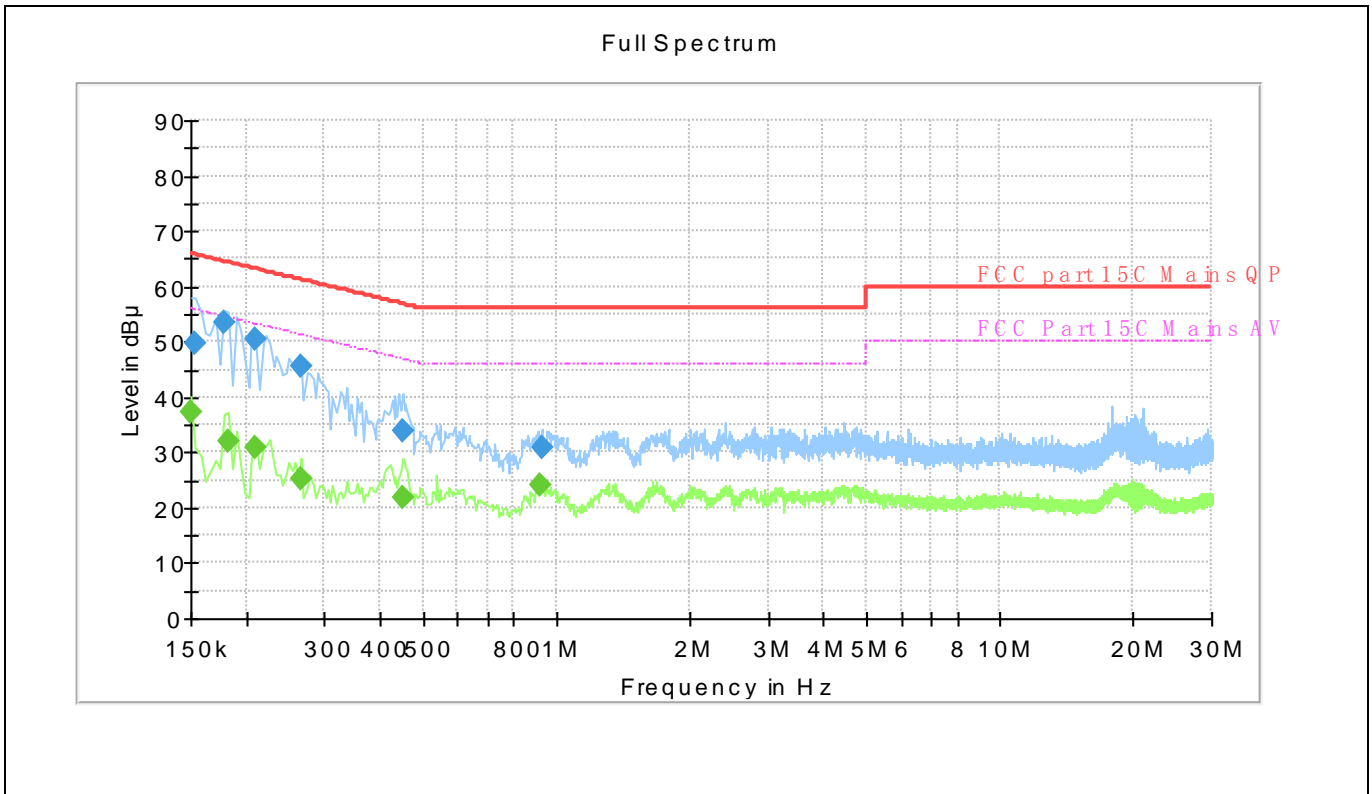
Note: The test voltage is AC 120V/60Hz.

B. Test Plots:



(Plot A: L Phase)

Frequency (MHz)	MaxPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)
0.158000	---	33.25	55.57	22.32	L	10.2
0.162000	48.56	---	65.36	16.80	L	10.2
0.194000	---	33.83	53.86	20.04	L	10.2
0.202000	39.40	---	63.53	24.13	L	10.2
0.234000	---	27.62	52.31	24.69	L	10.2
0.234000	36.81	---	62.31	25.50	L	10.2
0.422000	37.52	---	57.41	19.89	L	10.2
0.430000	---	26.26	47.25	20.99	L	10.2
1.006000	26.47	---	56.00	29.53	L	10.3
1.014000	---	22.00	46.00	24.00	L	10.3
4.470000	---	23.36	46.00	22.64	L	10.4
4.502000	27.11	---	56.00	28.89	L	10.4



(Plot A: N Phase)

Frequency (MHz)	MaxPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)
0.150000	---	37.15	56.00	18.85	N	10.2
0.154000	49.70	---	65.78	16.08	N	10.2
0.178000	53.55	---	64.58	11.03	N	10.2
0.182000	---	32.05	54.39	22.34	N	10.2
0.210000	---	30.80	53.21	22.40	N	10.2
0.210000	50.47	---	63.21	12.73	N	10.2
0.266000	45.66	---	61.24	15.58	N	10.2
0.266000	---	25.17	51.24	26.07	N	10.2
0.450000	33.98	---	56.88	22.89	N	10.2
0.450000	---	21.79	46.88	25.08	N	10.2
0.918000	---	24.02	46.00	21.98	N	10.3
0.926000	31.05	---	56.00	24.95	N	10.3



2.8. Radiated Emission

2.8.1. Requirement

According to FCC section 15.247(d), radiated emission outside the frequency band attenuation below the general limits specified in FCC section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in FCC section 15.205(a), must also comply with the radiated emission limits specified in FCC section 15.209(a).

According to FCC section 15.209 (a), except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength ($\mu\text{V}/\text{m}$)	Measurement Distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

Note:

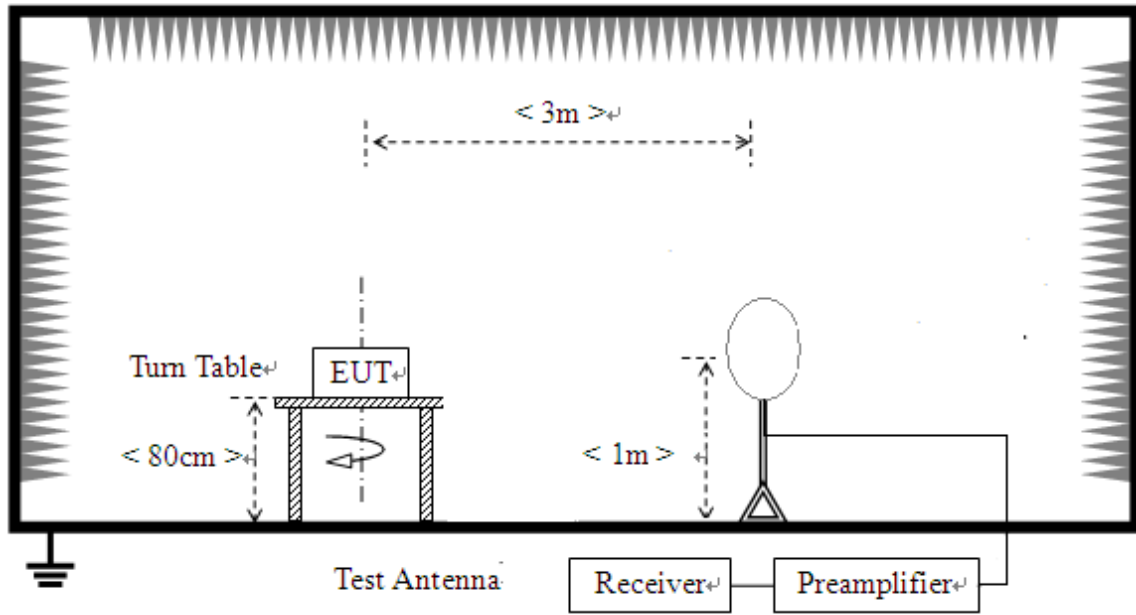
1. For Above 1000MHz, the emission limit in this paragraph is based on measurement instrumentation employing an average detector, measurement using instrumentation with a peak detector function, corresponding to 20dB above the maximum permitted average limit.
2. For above 1000MHz, limit field strength of harmonics: 54dBuV/m@3m (AV) and 74dBuV/m@3m (PK)

In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), also should comply with the radiated emission limits specified in Section 15.209(a)(above table)

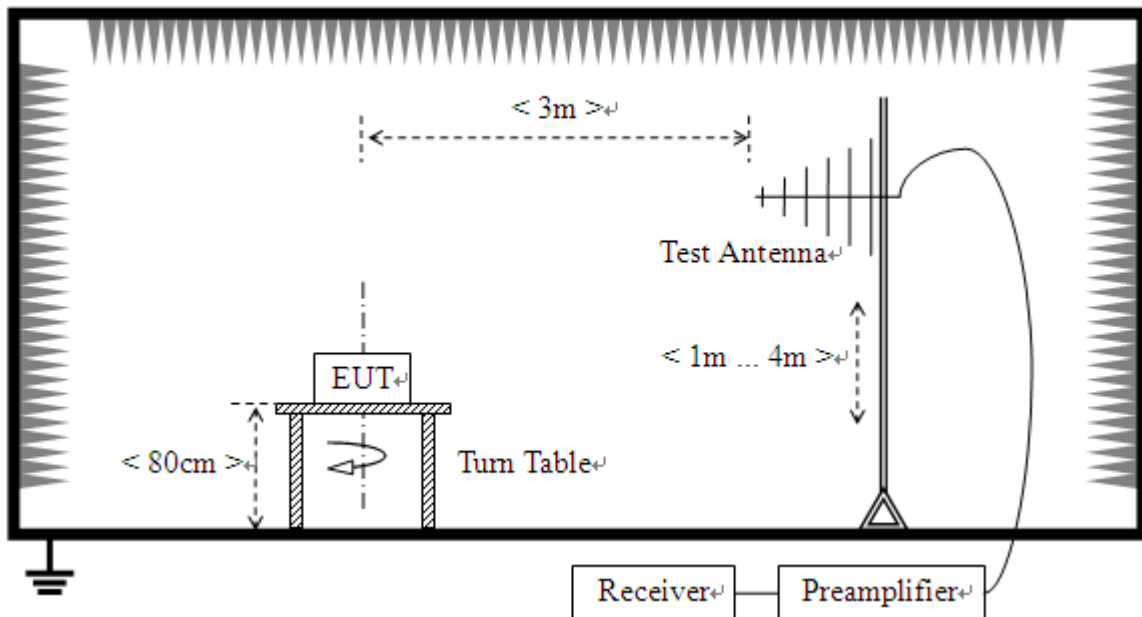
2.8.2. Test Description

A. Test Setup:

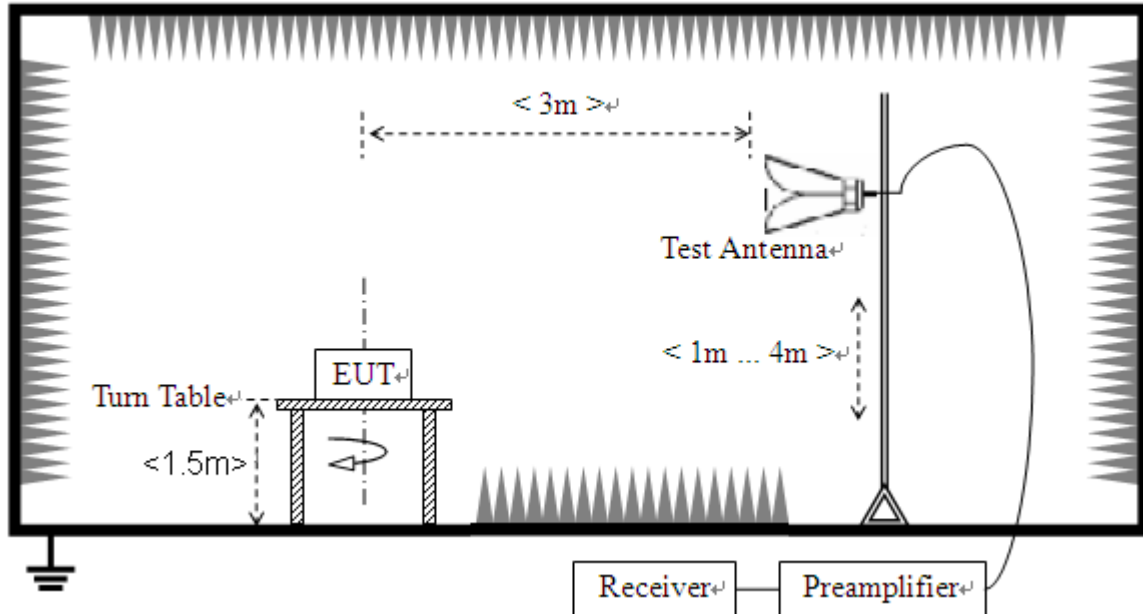
- 1) For radiated emissions from 9kHz to 30MHz



- 2) For radiated emissions from 30MHz to 1GHz



3) For radiated emissions above 1GHz



The RF absorbing material used on the reference ground plane and on the turntable have a maximum height (thickness) of 30 cm (12 in) and have a minimum-rated attenuation of 20 dB at all frequencies from 1 GHz to 18 GHz. Test site have a minimum area of the ground plane covered with RF absorbing material as specified in Figure 6 of ANSI C63.4: 2014.

The test site semi-anechoic chamber has met the requirement of NSA tolerance 4dB according to the standards: ANSI C63.10:2013. For radiated emissions below or equal to 1GHz, The EUT was set-up on insulator 80cm above the Ground Plane, For radiated emissions above 1GHz, The EUT was set-up on insulator 150cm above the Ground Plane. The set-up and test methods were according to ANSI C63.10:2013.

The EUT is located in a 3m Semi-Anechoic Chamber; the antenna factors, cable loss and so on of the site as factors are calculated to correct the reading.

For the Test Antenna:

- (a) In the frequency range of 9kHz to 30MHz, magnetic field is measured with Loop Test Antenna. The Test Antenna is positioned with its plane vertical at 1m distance from the EUT. The center of the Loop Test Antenna is 1m above the ground. During the measurement the Loop Test Antenna rotates about its vertical axis for maximum response at each azimuth about the EUT.
- (b) In the frequency range above 30MHz, Bi-Log Test Antenna (30MHz to 1GHz) and Horn Test Antenna (above 1GHz) are used. Place the test antenna at 3m away from area of the EUT, while keeping the test antenna aimed at the source of emissions at each frequency of significant



emissions, with polarization oriented for maximum response. The test antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final test antenna elevation shall be that which maximizes the emissions. The test antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane. The emission levels at both horizontal and vertical polarizations should be tested.

B. Equipments List:

Please refer ANNEX B(4).

2.8.3. Test Result

According to ANSI C63.10, because of peak detection will yield amplitudes equal to or greater than amplitudes measured with the quasi-peak (or average) detector, the measurement data from a spectrum analyzer peak detector will represent the worst-case results, if the peak measured value complies with the quasi-peak limit, it is unnecessary to perform a quasi-peak measurement.

The measurement results are obtained as below:

$$E \text{ [dB}\mu\text{V/m]} = U_R + A_T + A_{\text{Factor}} \text{ [dB]}; A_T = L_{\text{Cable loss}} \text{ [dB]} - G_{\text{preamp}} \text{ [dB]}$$

A_T : Total correction Factor except Antenna

U_R : Receiver Reading

G_{preamp} : Preamplifier Gain

A_{Factor} : Antenna Factor at 3m

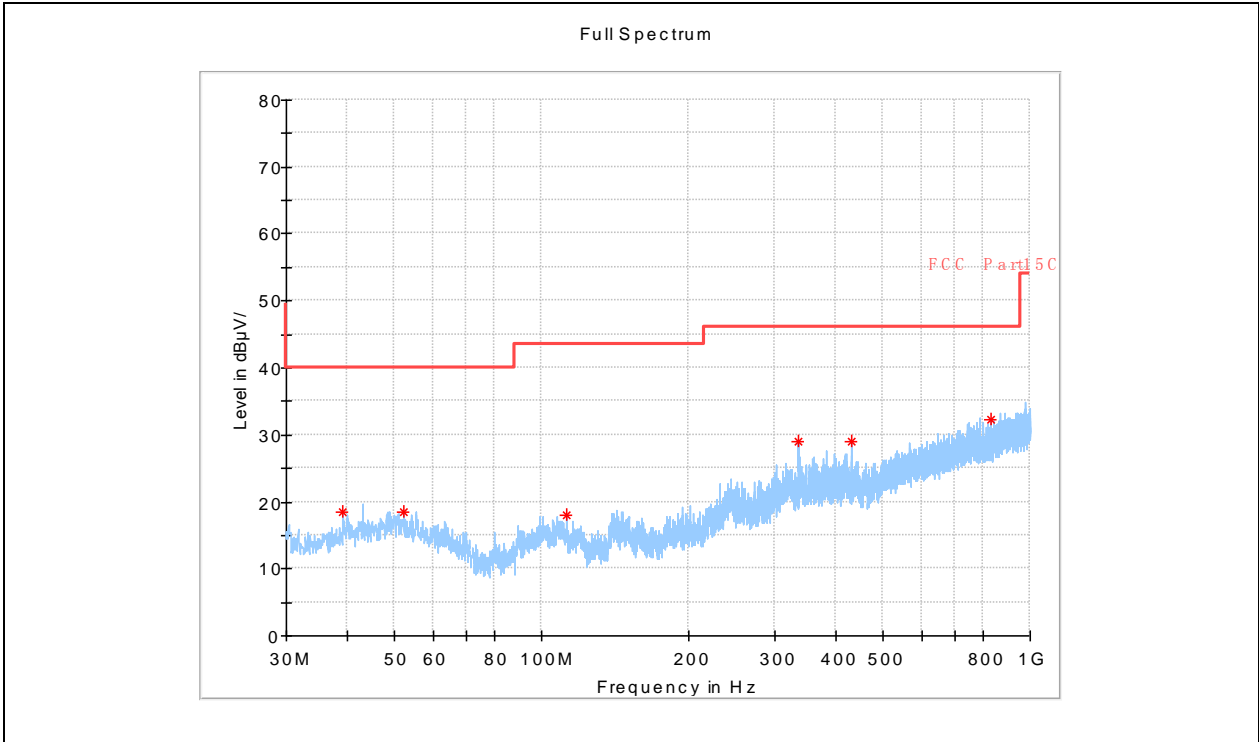
During the test, the total correction Factor A_T and A_{Factor} were built in test software.

Note1: All radiated emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

Note2: For the frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit was not recorded.

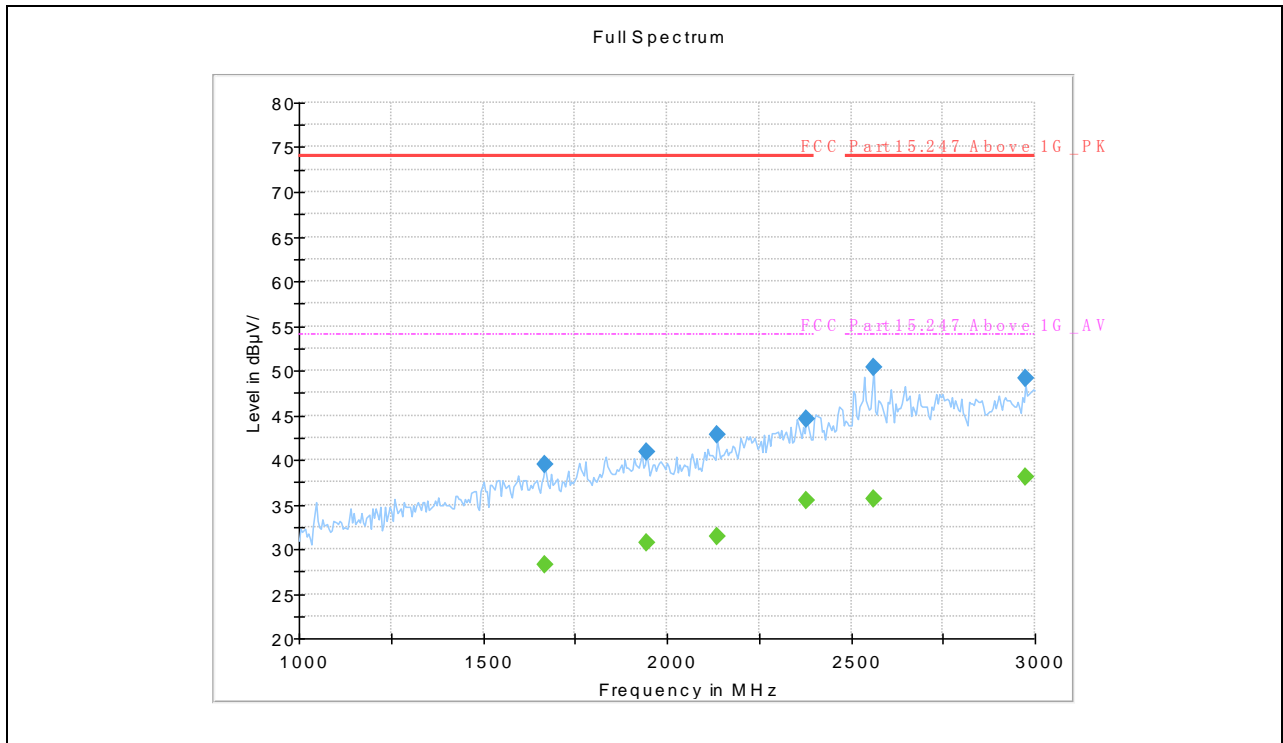
Note3: For the frequency, which started from 25GHz to 40GHz, was pre-scanned and the result which was 10dB lower than the limit was not recorded.

Note 4: The right headset and left headset will work simultaneously during normal use, we selected right headset and left headset simultaneous transmission for fully radiated emission testing.



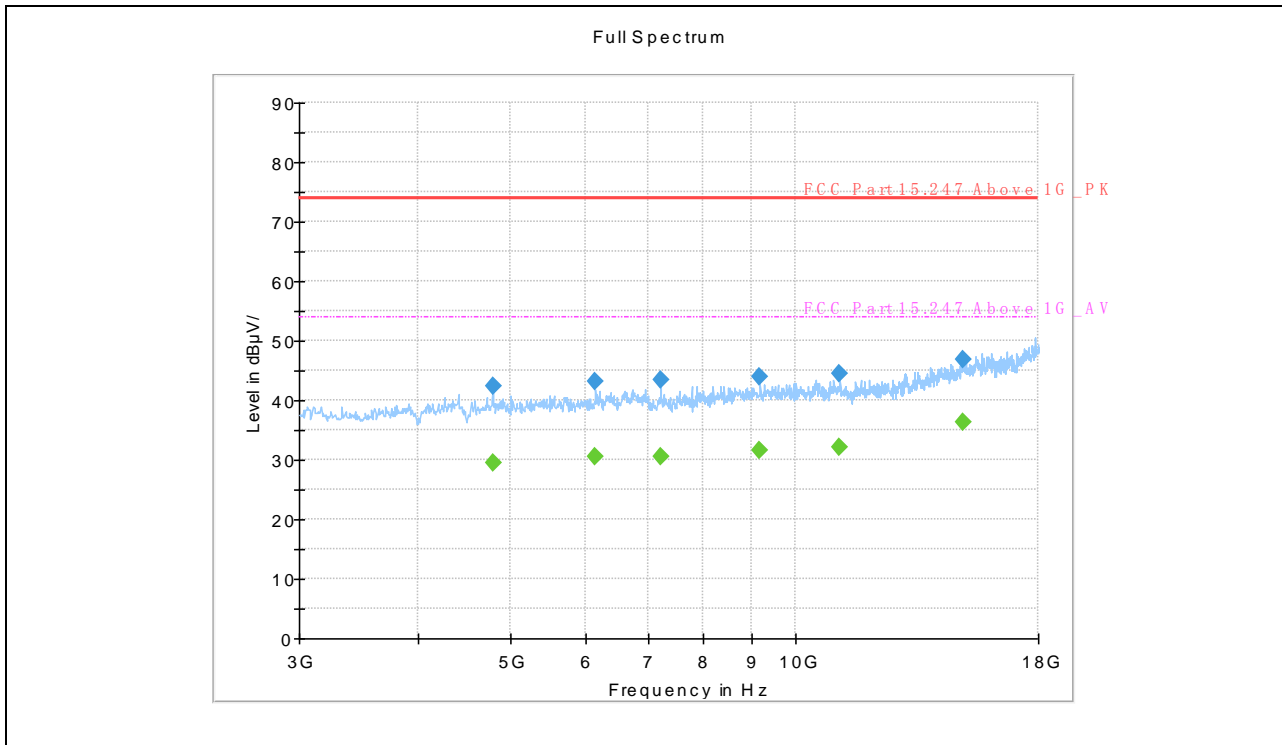
(GFSK_2402MHz, Antenna Horizontal, 30MHz to 1GHz)

Frequency (MHz)	MaxPeak (dBµV/m)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Corr. (dB/m)
39.268889	18.44	---	40.00	21.56	H	14.6
52.202222	18.51	---	40.00	21.49	H	15.5
112.288333	18.07	---	43.50	25.43	H	14.0
335.657778	29.01	---	46.00	16.99	H	17.6
431.418333	29.06	---	46.00	16.94	H	19.3
831.058333	32.34	---	46.00	13.66	H	26.5



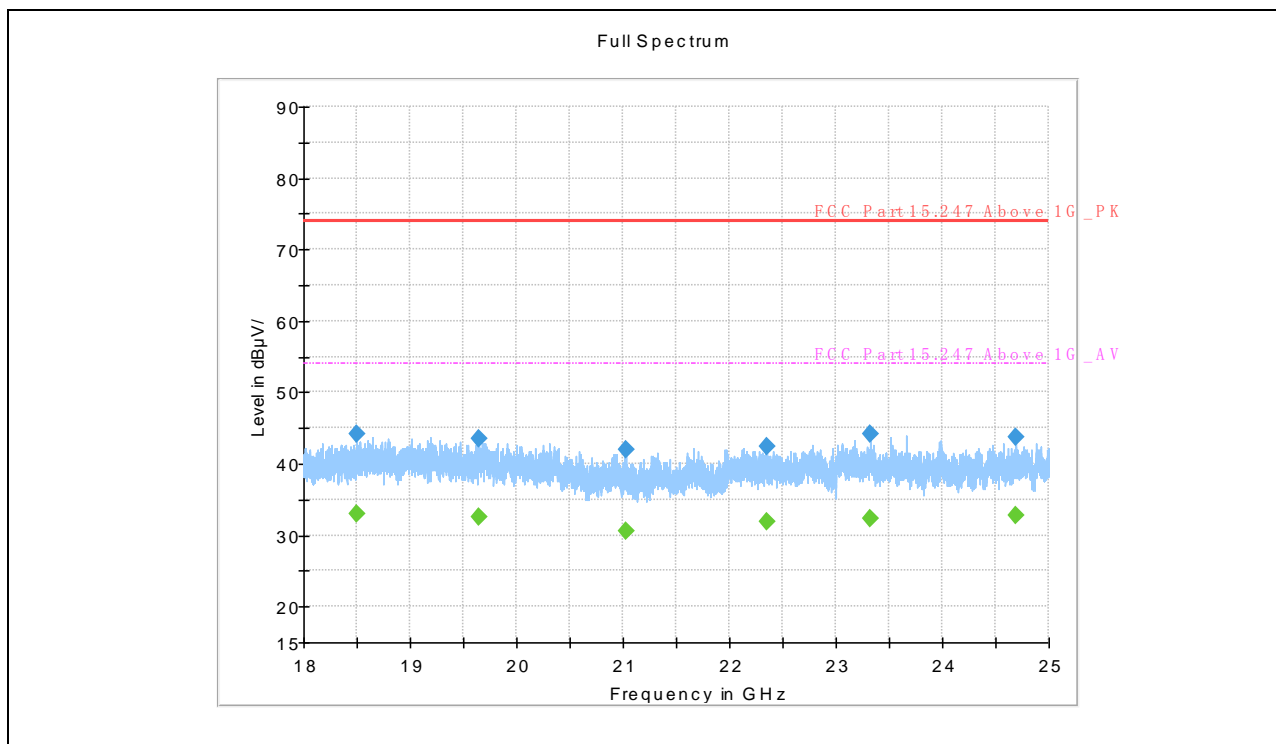
(GFSK_2402MHz, Antenna Horizontal, 1GHz to 3GHz)

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Corr. (dB/m)
1670.000000	39.46	---	74.00	34.54	H	3.3
1670.000000	---	28.31	54.00	25.69	H	3.3
1945.000000	---	30.75	54.00	23.25	H	6.8
1945.000000	40.94	---	74.00	33.06	H	6.8
2135.000000	42.78	---	74.00	31.22	H	8.2
2135.000000	---	31.49	54.00	22.51	H	8.2
2380.000000	44.61	---	74.00	29.40	H	12.0
2380.000000	---	35.41	54.00	18.59	H	12.0
2560.000000	---	35.57	54.00	18.43	H	14.0
2560.000000	50.31	---	74.00	23.69	H	14.0
2975.000000	49.14	---	74.00	24.86	H	16.3
2975.000000	---	38.04	54.00	15.96	H	16.3



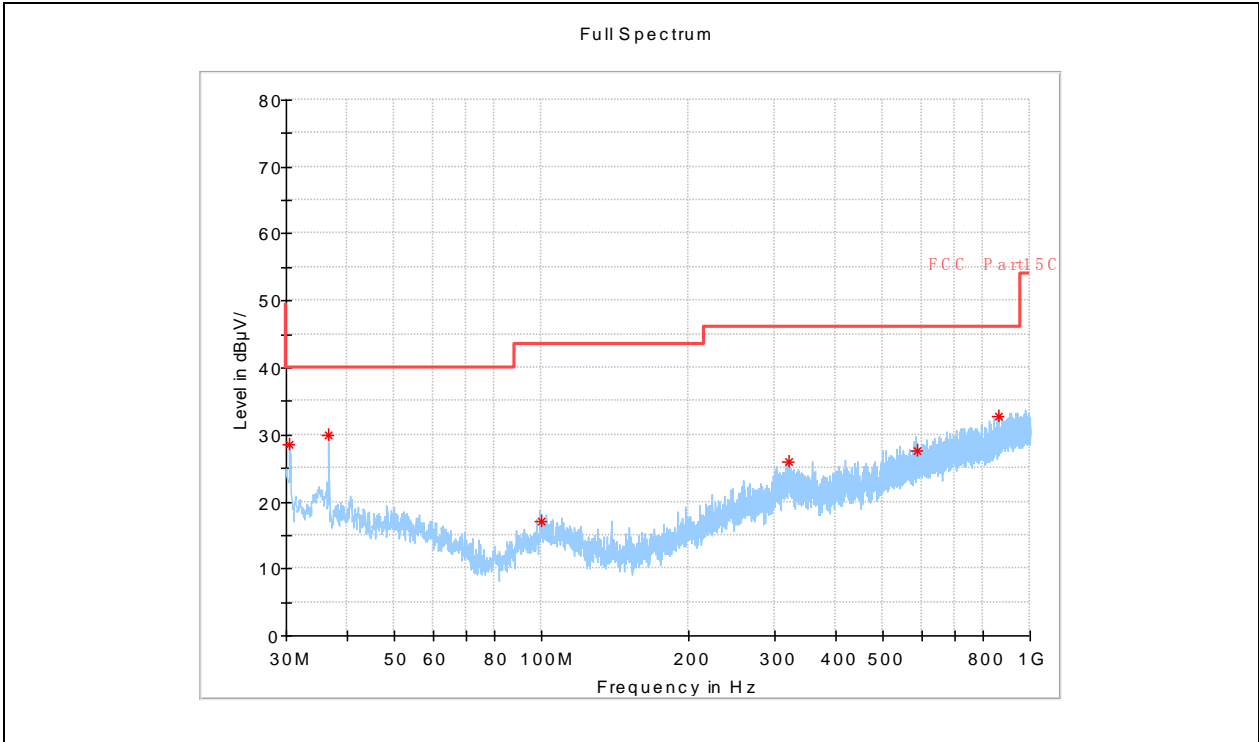
(GFSK _2402MHz, Antenna Horizontal, 3GHz to 18GHz)

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Corr. (dB/m)
4800.000000	---	29.41	54.00	24.59	H	-3.4
4800.000000	42.38	---	74.00	31.62	H	-3.4
6157.500000	---	30.52	54.00	23.48	H	-1.8
6157.500000	43.27	---	74.00	30.73	H	-1.8
7207.500000	---	30.46	54.00	23.54	H	-0.4
7207.500000	43.37	---	74.00	30.63	H	-0.4
9172.500000	43.83	---	74.00	30.17	H	1.5
9172.500000	---	31.48	54.00	22.52	H	1.5
11130.000000	44.41	---	74.00	29.59	H	3.2
11130.000000	---	32.06	54.00	21.94	H	3.2
14992.500000	---	36.24	54.00	17.76	H	10.4
14992.500000	46.88	---	74.00	27.12	H	10.4



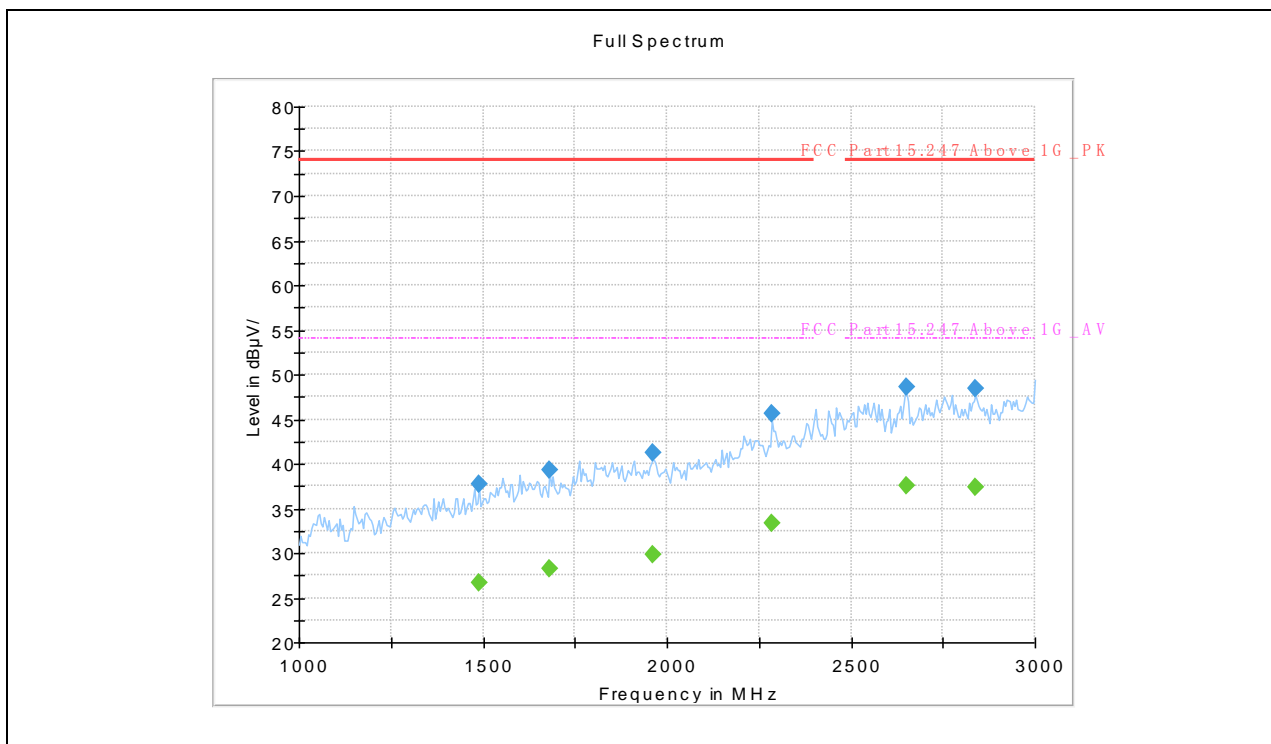
(GFSK_2402MHz, Antenna Horizontal, 18GHz to 25GHz)

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Corr. (dB/m)
18497.000000	---	32.89	54.00	21.11	H	-5.2
18497.000000	44.20	---	74.00	29.80	H	-5.2
19648.111111	43.56	---	74.00	30.44	H	-5.3
19648.111111	---	32.46	54.00	21.54	H	-5.3
21028.666667	41.97	---	74.00	32.03	H	-5.1
21028.666667	---	30.62	54.00	23.38	H	-5.1
22347.777778	42.42	---	74.00	31.58	H	-4.9
22347.777778	---	31.99	54.00	22.01	H	-4.9
23330.500000	44.20	---	74.00	29.80	H	-5.0
23330.500000	---	32.38	54.00	21.62	H	-5.0
24686.944444	---	32.77	54.00	21.23	H	-4.8
24686.944444	43.63	---	74.00	30.37	H	-4.8



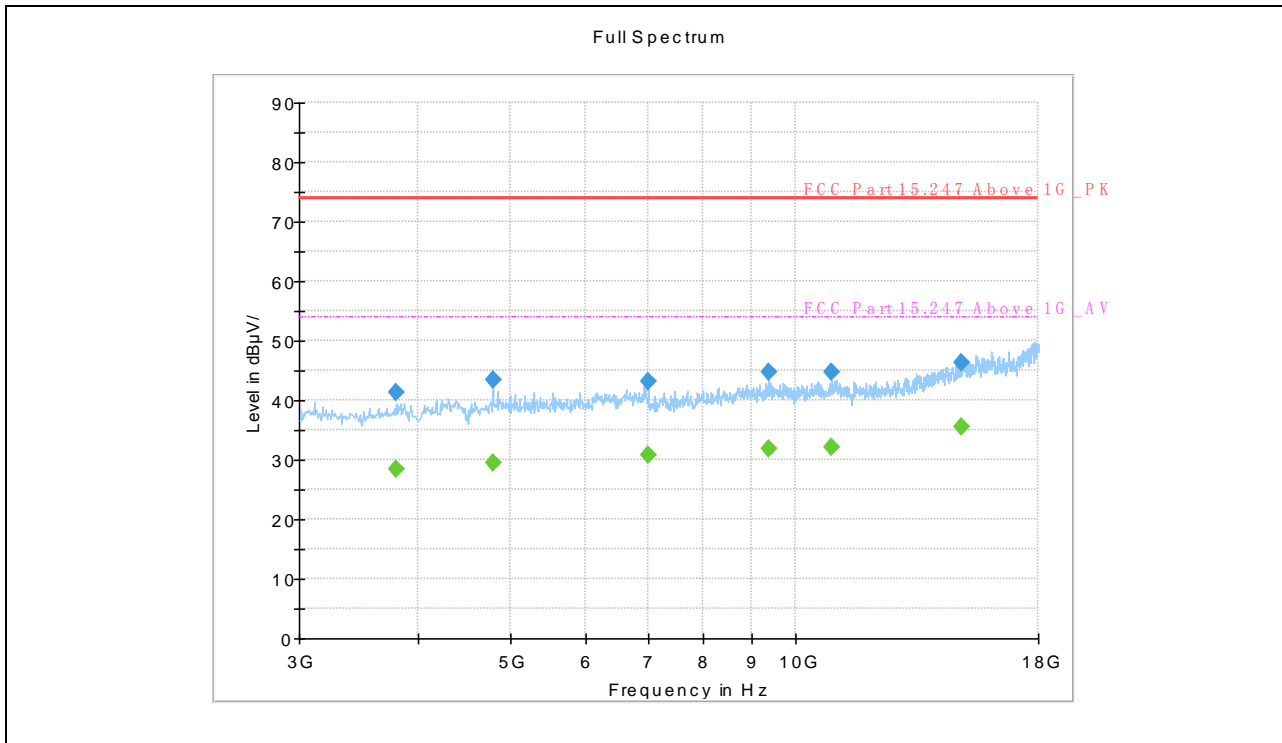
(GFSK_2402MHz, Antenna Vertical, 30MHz to 1GHz)

Frequency (MHz)	MaxPeak (dBµV/m)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Corr. (dB/m)
30.538889	28.49	---	40.00	11.51	V	12.9
36.682222	29.87	---	40.00	10.13	V	13.4
99.947778	16.99	---	43.50	26.51	V	15.2
320.784444	25.96	---	46.00	20.04	V	17.9
587.103333	27.55	---	46.00	18.45	V	23.2
863.122222	32.76	---	46.00	13.24	V	27.0



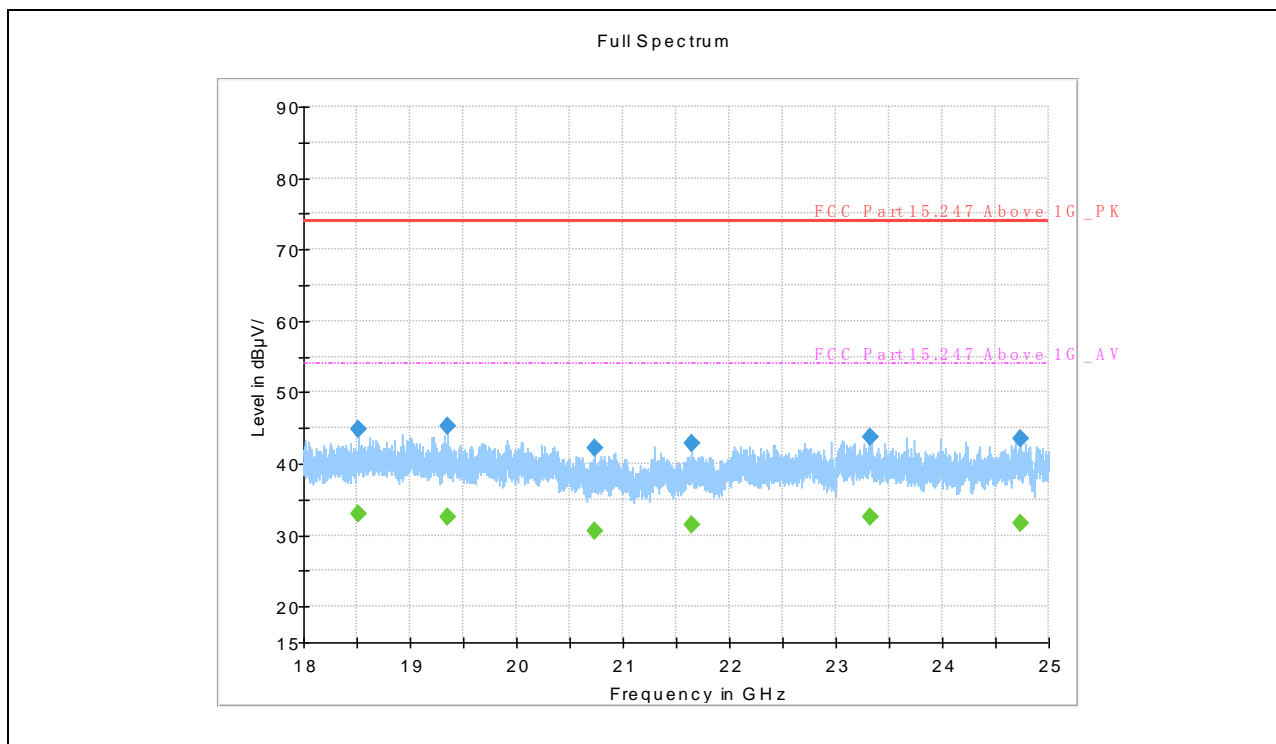
(GFSK_2402MHz, Antenna Vertical , 1GHz to 3GHz)

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Corr. (dB/m)
1490.000000	37.77	---	74.00	36.23	V	1.8
1490.000000	---	26.59	54.00	27.41	V	1.8
1680.000000	39.27	---	74.00	34.73	V	3.5
1680.000000	---	28.22	54.00	25.78	V	3.5
1960.000000	41.20	---	74.00	32.80	V	6.4
1960.000000	---	29.90	54.00	24.10	V	6.4
2285.000000	---	33.31	54.00	20.69	V	10.2
2285.000000	45.63	---	74.00	28.37	V	10.2
2650.000000	---	37.62	54.00	16.38	V	15.6
2650.000000	48.53	---	74.00	25.47	V	15.6
2840.000000	48.40	---	74.00	25.60	V	15.5
2840.000000	---	37.37	54.00	16.63	V	15.5



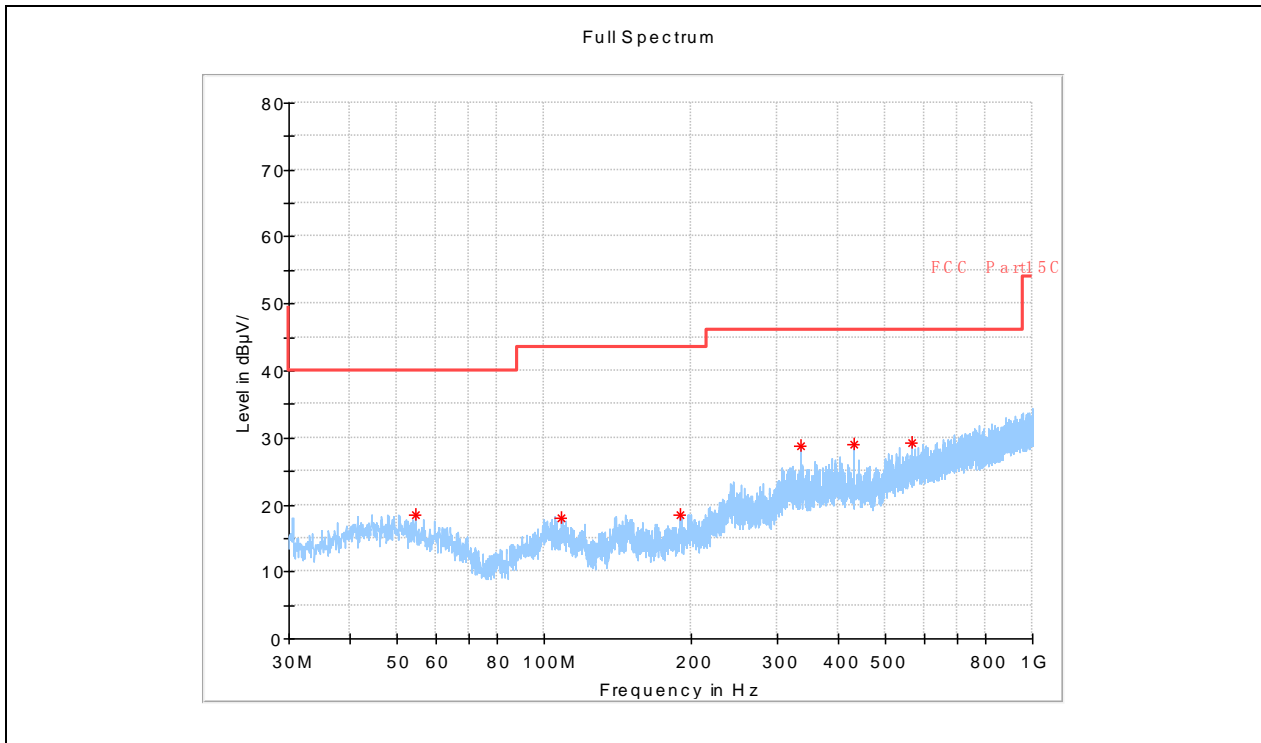
(GFSK _2402MHz, Antenna Vertical, 3GHz to 18GHz)

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Corr. (dB/m)
3802.500000	41.22	---	74.00	32.78	V	-5.0
3802.500000	---	28.55	54.00	25.45	V	-5.0
4800.000000	---	29.51	54.00	24.49	V	-3.4
4800.000000	43.49	---	74.00	30.51	V	-3.4
6990.000000	43.25	---	74.00	30.75	V	-0.8
6990.000000	---	30.86	54.00	23.14	V	-0.8
9375.000000	44.63	---	74.00	29.37	V	2.0
9375.000000	---	31.95	54.00	22.05	V	2.0
10890.00000	44.69	---	74.00	29.31	V	3.1
10890.00000	---	32.20	54.00	21.80	V	3.1
14947.50000	---	35.63	54.00	18.37	V	9.7
14947.50000	46.37	---	74.00	27.63	V	9.7



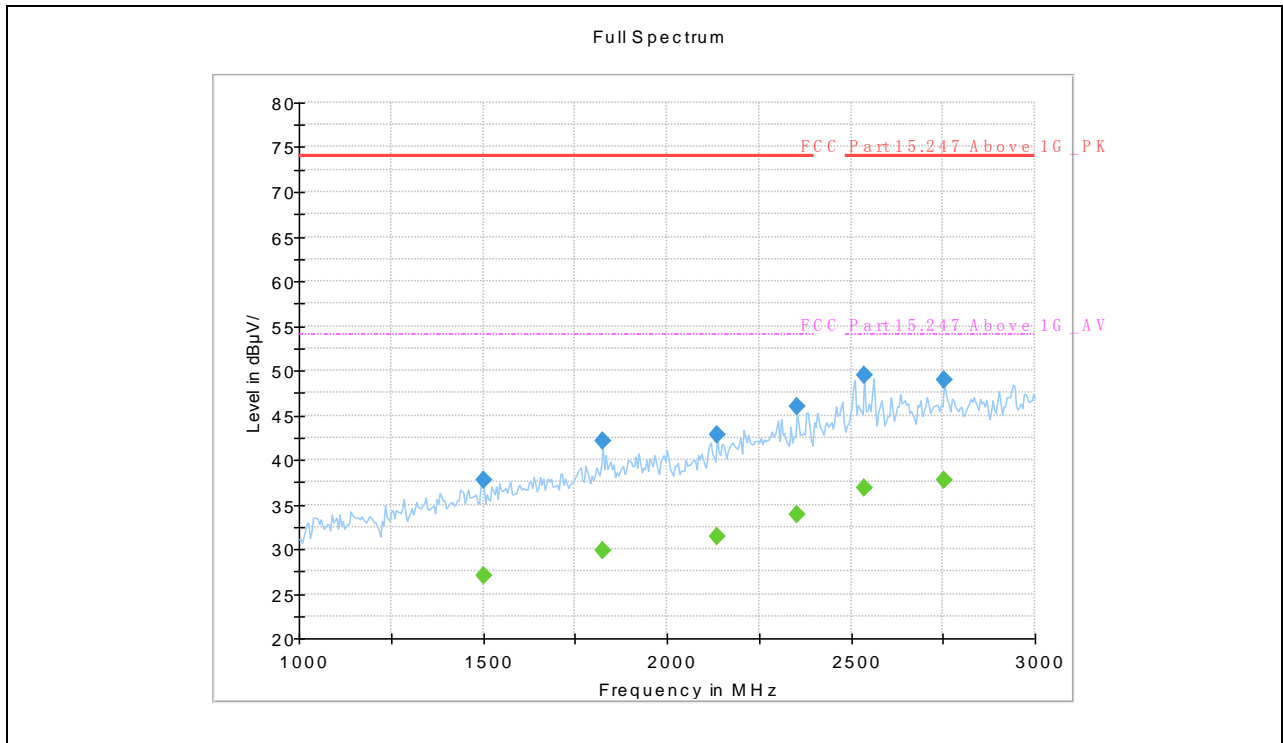
(GFSK_2402MHz, Antenna Vertical, 18GHz to 25GHz)

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Corr. (dB/m)
18515.277778	44.88	---	74.00	29.12	V	-5.2
18515.277778	---	32.92	54.00	21.08	V	-5.2
19346.333333	45.24	---	74.00	28.76	V	-5.4
19346.333333	---	32.52	54.00	21.48	V	-5.4
20730.388889	42.29	---	74.00	31.71	V	-5.2
20730.388889	---	30.57	54.00	23.43	V	-5.2
21640.000000	---	31.52	54.00	22.48	V	-5.1
21640.000000	42.78	---	74.00	31.22	V	-5.1
23321.944444	---	32.61	54.00	21.39	V	-5.0
23321.944444	43.81	---	74.00	30.19	V	-5.0
24731.666667	43.56	---	74.00	30.44	V	-4.8
24731.666667	---	31.71	54.00	22.29	V	-4.8



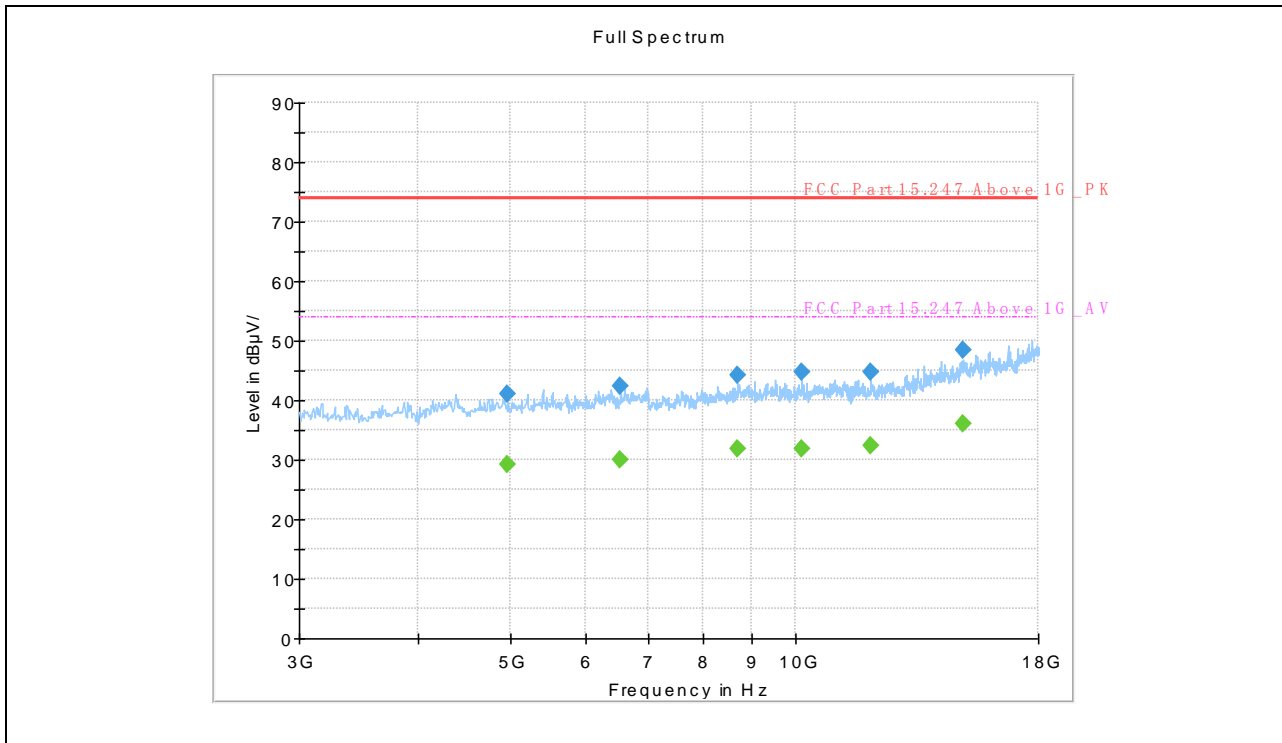
(GFSK_2440MHz, Antenna Horizontal, 30MHz to 1GHz)

Frequency (MHz)	MaxPeak (dBµV/m)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Corr. (dB/m)
54.357778	18.43	---	40.00	21.57	H	15.3
108.138889	18.02	---	43.50	25.48	H	14.6
189.942222	18.44	---	43.50	25.06	H	13.5
335.226667	28.82	---	46.00	17.18	H	17.5
431.580000	28.95	---	46.00	17.05	H	19.3
565.817222	29.33	---	46.00	16.67	H	22.9



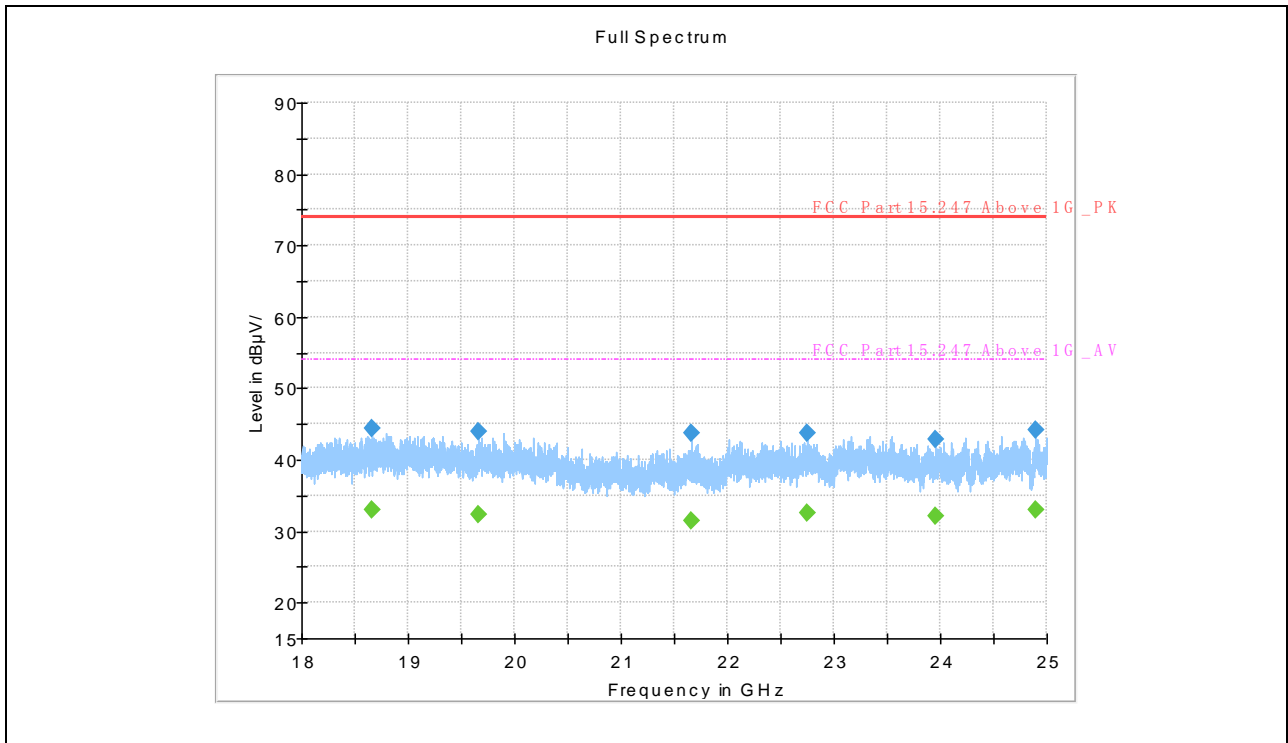
(GFSK_2440MHz, Antenna Horizontal, 1GHz to 3GHz)

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Corr. (dB/m)
1500.000000	---	26.93	54.00	27.07	H	2.0
1500.000000	37.74	---	74.00	36.26	H	2.0
1825.000000	42.08	---	74.00	31.92	H	5.7
1825.000000	---	29.79	54.00	24.21	H	5.7
2135.000000	42.89	---	74.00	31.11	H	8.2
2135.000000	---	31.48	54.00	22.52	H	8.2
2355.000000	45.95	---	74.00	28.05	H	11.5
2355.000000	---	33.93	54.00	20.07	H	11.5
2535.000000	---	36.93	54.00	17.07	H	14.2
2535.000000	49.52	---	74.00	24.48	H	14.2
2755.000000	48.96	---	74.00	25.04	H	15.1
2755.000000	---	37.65	54.00	16.35	H	15.1



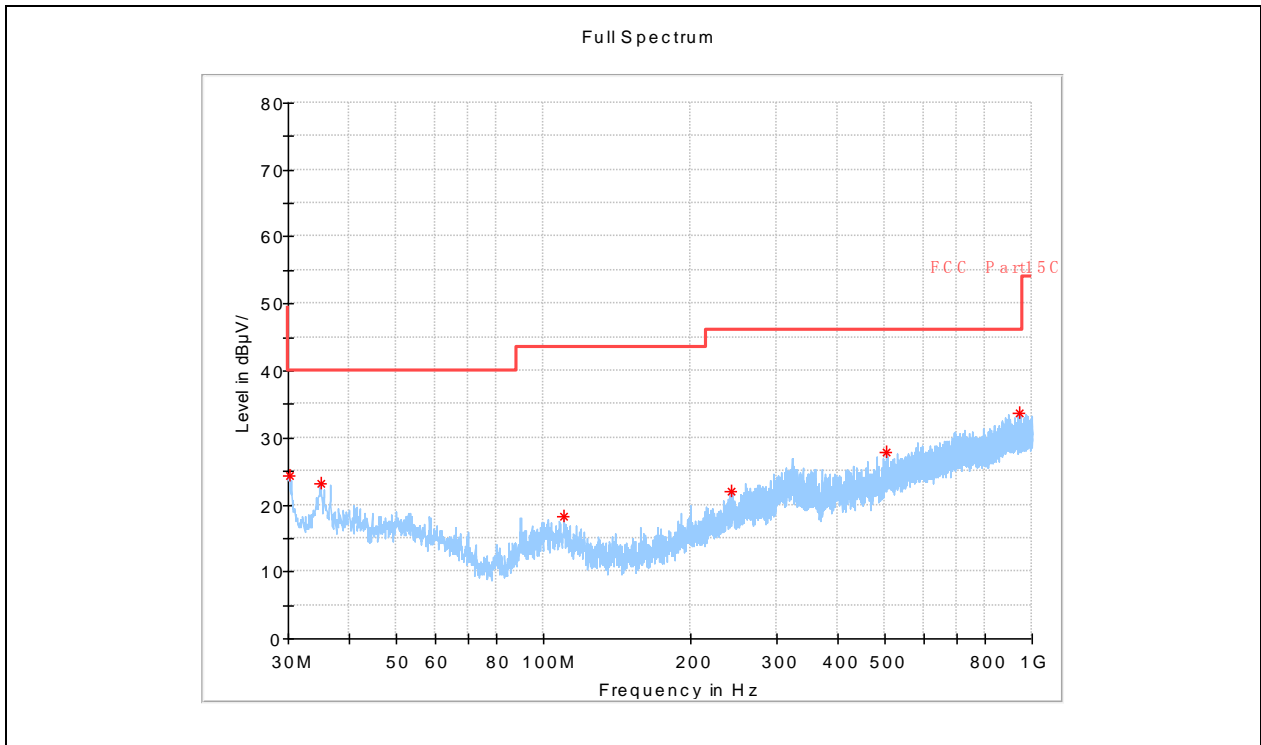
(GFSK _2440MHz, Antenna Horizontal, 3GHz to 18GHz)

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Corr. (dB/m)
4972.500000	40.95	---	74.00	33.05	H	-3.2
4972.500000	---	29.21	54.00	24.79	H	-3.2
6540.000000	42.39	---	74.00	31.61	H	-1.3
6540.000000	---	30.07	54.00	23.93	H	-1.3
8700.000000	---	31.89	54.00	22.11	H	1.3
8700.000000	44.13	---	74.00	29.87	H	1.3
10147.50000	44.76	---	74.00	29.24	H	2.1
10147.50000	---	31.73	54.00	22.27	H	2.1
12000.00000	44.77	---	74.00	29.23	H	3.8
12000.00000	---	32.43	54.00	21.57	H	3.8
14977.50000	---	36.11	54.00	17.89	H	10.1
14977.50000	48.42	---	74.00	25.58	H	10.1



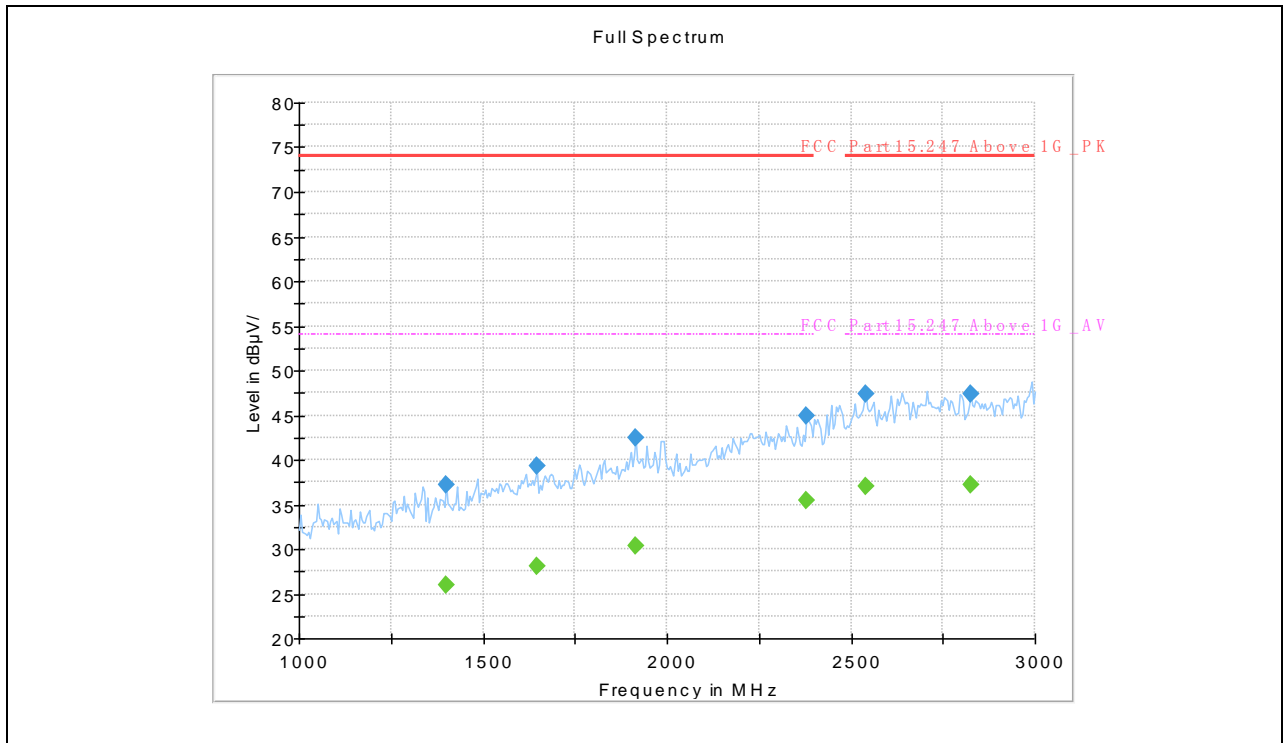
(GFSK_2440MHz, Antenna Horizontal, 18GHz to 25GHz)

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Corr. (dB/m)
18659.166667	---	33.01	54.00	20.99	H	-5.3
18659.166667	44.32	---	74.00	29.68	H	-5.3
19657.055556	43.91	---	74.00	30.09	H	-5.3
19657.055556	---	32.26	54.00	21.74	H	-5.3
21662.555556	---	31.53	54.00	22.47	H	-5.1
21662.555556	43.63	---	74.00	30.37	H	-5.1
22754.555556	---	32.59	54.00	21.41	H	-4.9
22754.555556	43.67	---	74.00	30.33	H	-4.9
23957.388889	42.95	---	74.00	31.05	H	-4.7
23957.388889	---	32.07	54.00	21.93	H	-4.7
24903.555556	---	33.05	54.00	20.95	H	-4.8
24903.555556	44.07	---	74.00	29.93	H	-4.8



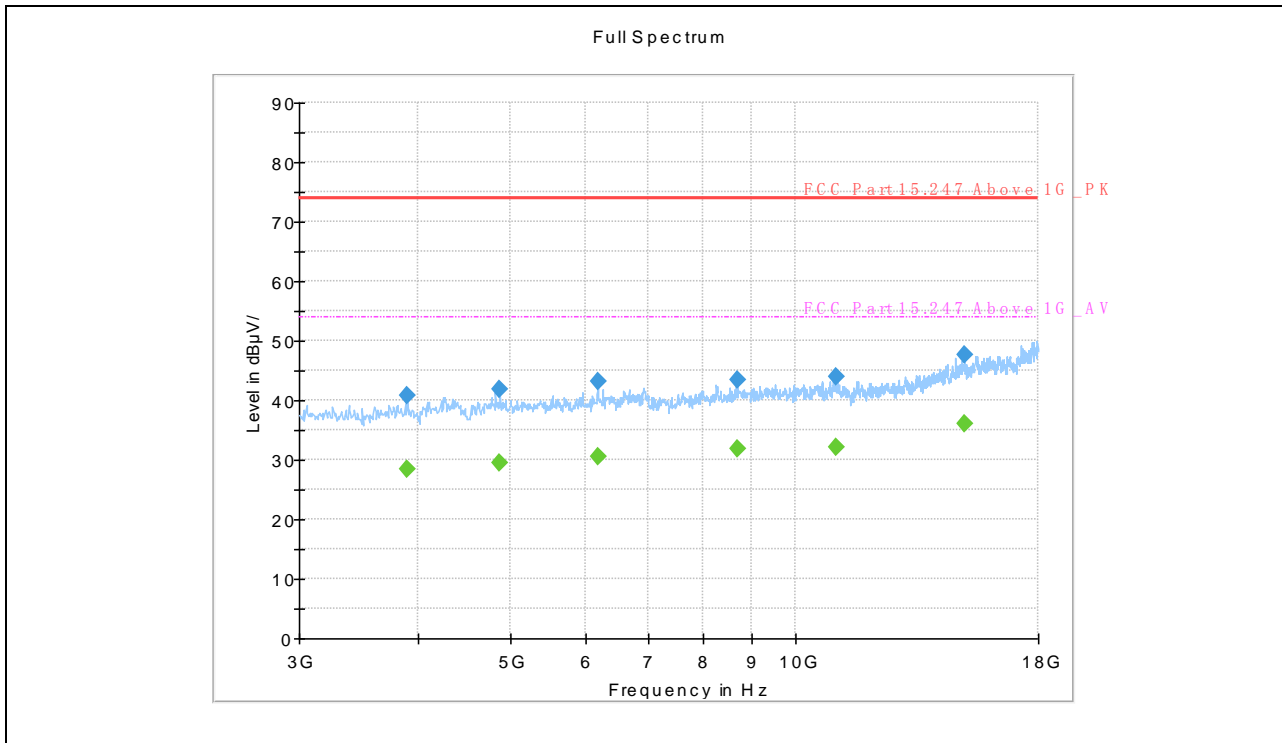
(GFSK_2440MHz, Antenna Vertical, 30MHz to 1GHz)

Frequency (MHz)	MaxPeak (dBµV/m)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Corr. (dB/m)
30.215556	24.39	---	40.00	15.61	V	13.5
34.903889	23.25	---	40.00	16.75	V	12.7
110.078889	18.19	---	43.50	25.31	V	14.9
241.998889	22.00	---	46.00	24.00	V	15.1
504.761111	27.73	---	46.00	18.27	V	22.0
942.177222	33.77	---	46.00	12.23	V	28.4



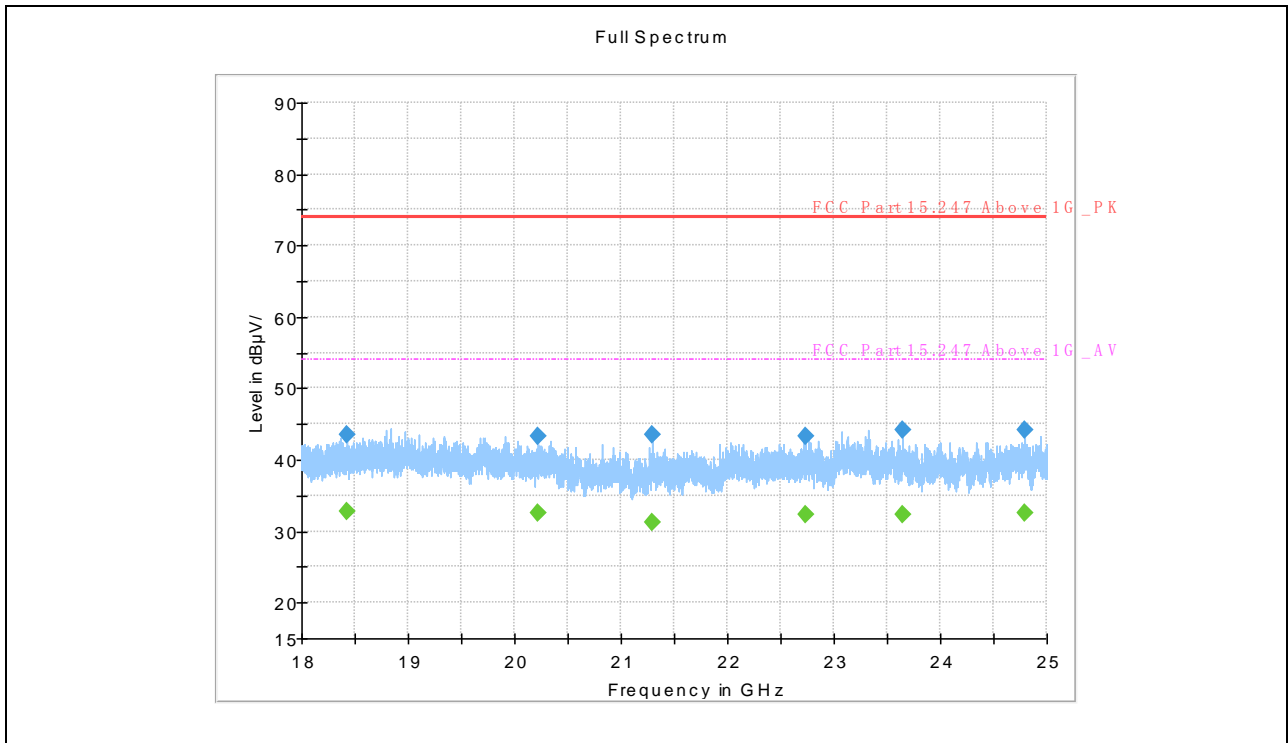
(GFSK _2440MHz, Antenna Vertical , 1GHz to 3GHz)

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Corr. (dB/m)
1400.000000	37.27	---	74.00	36.73	V	0.8
1400.000000	---	26.05	54.00	27.95	V	0.8
1645.000000	---	28.15	54.00	25.85	V	3.4
1645.000000	39.25	---	74.00	34.75	V	3.4
1915.000000	42.38	---	74.00	31.62	V	6.2
1915.000000	---	30.35	54.00	23.65	V	6.2
2380.000000	44.86	---	74.00	29.14	V	12.0
2380.000000	---	35.39	54.00	18.61	V	12.0
2540.000000	---	36.96	54.00	17.04	V	14.4
2540.000000	47.45	---	74.00	26.55	V	14.4
2825.000000	47.46	---	74.00	26.54	V	15.1
2825.000000	---	37.25	54.00	16.75	V	15.1



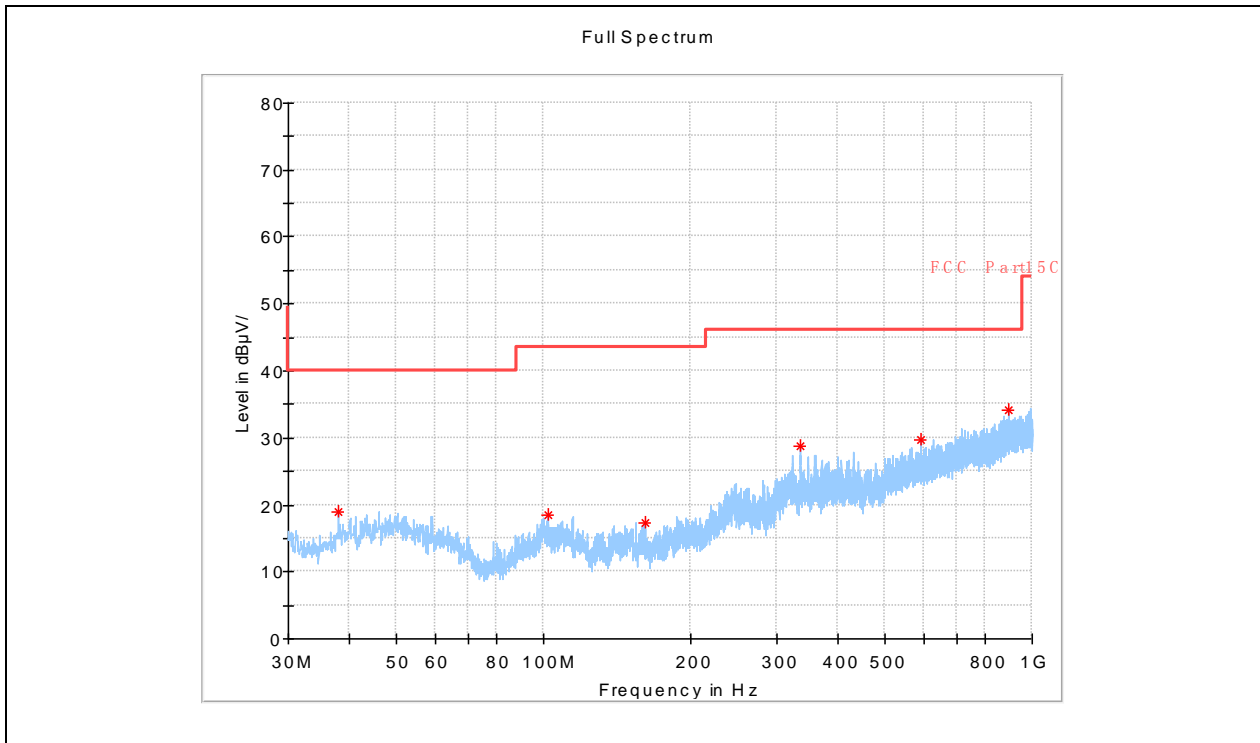
(GFSK _2440MHz, Antenna Vertical, 3GHz to 18GHz)

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Corr. (dB/m)
3900.000000	40.87	---	74.00	33.13	V	-4.8
3900.000000	---	28.48	54.00	25.52	V	-4.8
4882.500000	41.84	---	74.00	32.16	V	-2.8
4882.500000	---	29.60	54.00	24.40	V	-2.8
6187.500000	43.21	---	74.00	30.79	V	-1.5
6187.500000	---	30.60	54.00	23.40	V	-1.5
8692.500000	43.53	---	74.00	30.47	V	1.3
8692.500000	---	31.91	54.00	22.09	V	1.3
11032.500000	44.03	---	74.00	29.97	V	3.5
11032.500000	---	32.01	54.00	21.99	V	3.5
15045.000000	47.60	---	74.00	26.40	V	10.4
15045.000000	---	36.03	54.00	17.97	V	10.4



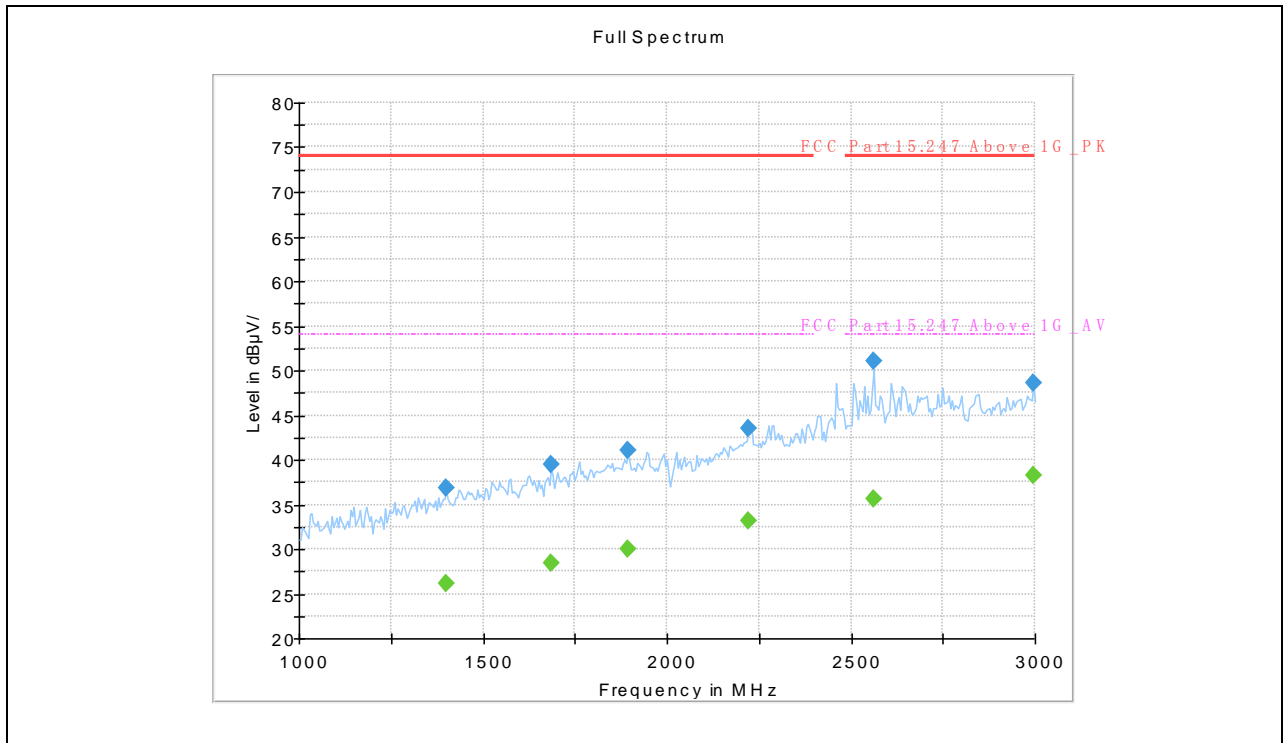
(GFSK _2440MHz, Antenna Vertical, 18GHz to 25GHz)

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Corr. (dB/m)
18420.388889	---	32.72	54.00	21.28	V	-5.3
18420.388889	43.56	---	74.00	30.44	V	-5.3
20225.611111	---	32.60	54.00	21.40	V	-5.0
20225.611111	43.25	---	74.00	30.75	V	-5.0
21295.444444	43.42	---	74.00	30.58	V	-4.9
21295.444444	---	31.28	54.00	22.72	V	-4.9
22737.444444	43.30	---	74.00	30.70	V	-4.9
22737.444444	---	32.24	54.00	21.76	V	-4.9
23652.888889	---	32.36	54.00	21.64	V	-5.0
23652.888889	44.27	---	74.00	29.73	V	-5.0
24790.777778	---	32.62	54.00	21.38	V	-4.8
24790.777778	44.28	---	74.00	29.72	V	-4.8



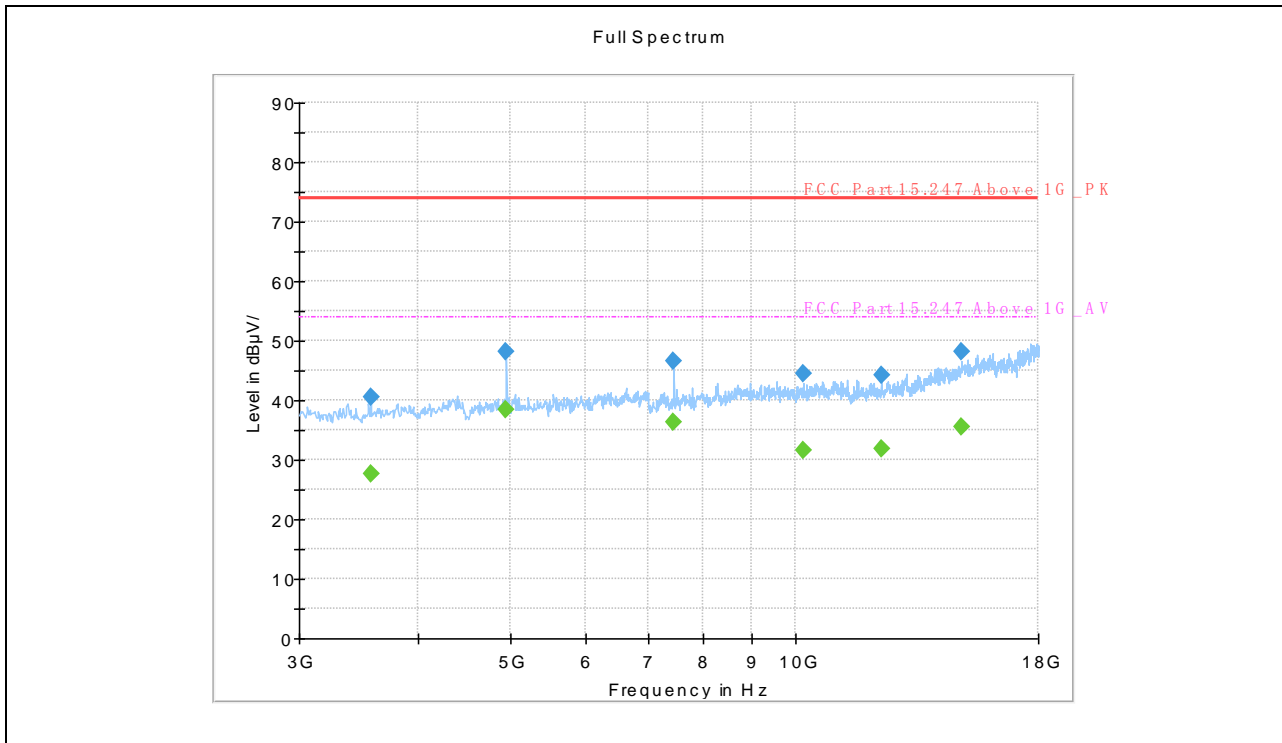
(GFSK_2480MHz, Antenna Horizontal, 30MHz to 1GHz)

Frequency (MHz)	MaxPeak (dBµV/m)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Corr. (dB/m)
37.921667	18.90	---	40.00	21.10	H	13.9
101.833889	18.40	---	43.50	25.10	H	14.8
160.896111	17.23	---	43.50	26.27	H	12.1
335.981111	28.66	---	46.00	17.34	H	17.6
592.707778	29.81	---	46.00	16.19	H	23.4
896.371667	34.09	---	46.00	11.91	H	28.0



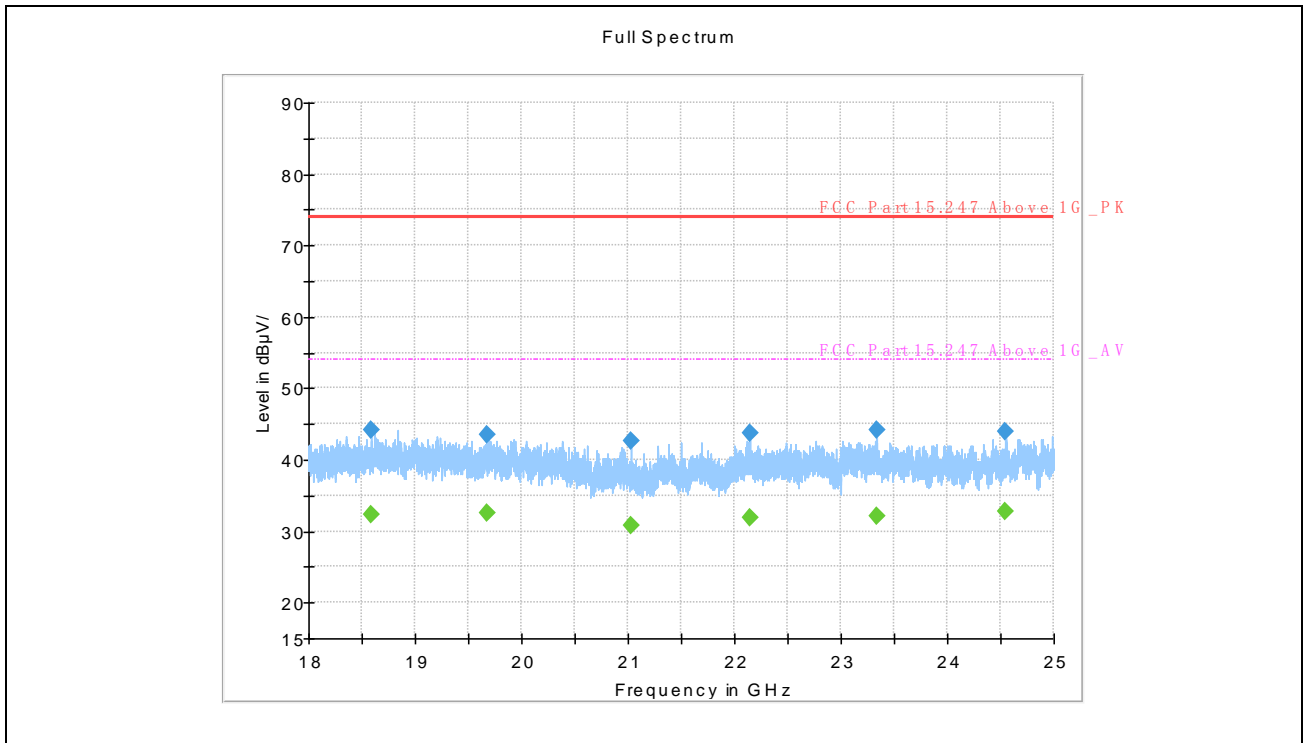
(GFSK_2480MHz, Antenna Horizontal, 1GHz to 3GHz)

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Corr. (dB/m)
1400.000000	36.92	---	74.00	37.08	H	0.8
1400.000000	---	26.06	54.00	27.94	H	0.8
1685.000000	39.41	---	74.00	34.59	H	3.6
1685.000000	---	28.38	54.00	25.62	H	3.6
1895.000000	41.07	---	74.00	32.93	H	6.1
1895.000000	---	29.98	54.00	24.02	H	6.1
2220.000000	43.57	---	74.00	30.43	H	9.6
2220.000000	---	33.13	54.00	20.87	H	9.6
2560.000000	---	35.60	54.00	18.40	H	14.0
2560.000000	50.99	---	74.00	23.01	H	14.0
2995.000000	---	38.18	54.00	15.82	H	16.3
2995.000000	48.54	---	74.00	25.46	H	16.3



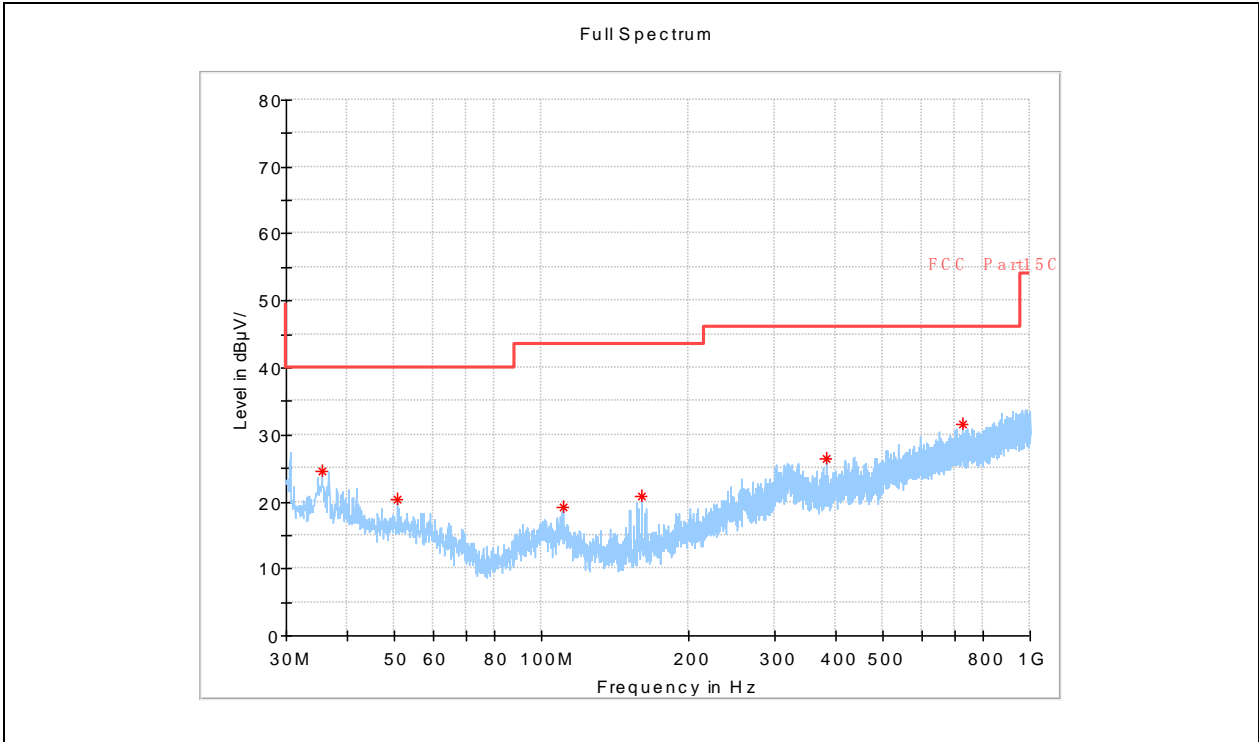
(GFSK _2480MHz, Antenna Horizontal, 3GHz to 18GHz)

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Corr. (dB/m)
3570.000000	---	27.72	54.00	26.28	H	-5.6
3570.000000	40.51	---	74.00	33.49	H	-5.6
4957.500000	---	38.48	54.00	15.52	H	-3.0
4957.500000	48.15	---	74.00	25.85	H	-3.0
7440.000000	46.49	---	74.00	27.51	H	-0.3
7440.000000	---	36.21	54.00	17.79	H	-0.3
10185.000000	44.41	---	74.00	29.59	H	2.0
10185.000000	---	31.70	54.00	22.30	H	2.0
12292.500000	---	31.92	54.00	22.08	H	4.0
12292.500000	44.30	---	74.00	29.70	H	4.0
14932.500000	---	35.53	54.00	18.47	H	9.5
14932.500000	48.22	---	74.00	25.78	H	9.5



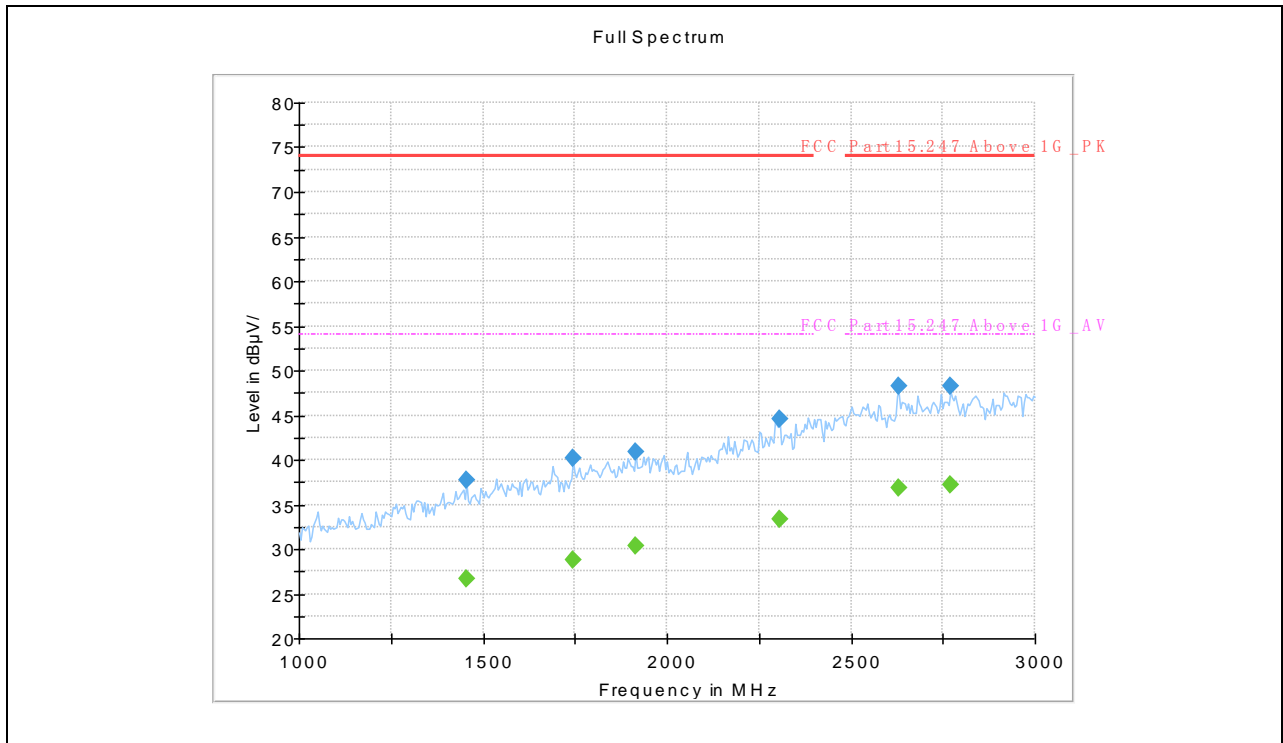
(GFSK_2480MHz, Antenna Horizontal, 18GHz to 25GHz)

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Corr. (dB/m)
18586.444444	44.26	---	74.00	29.74	H	-5.2
18586.444444	---	32.40	54.00	21.60	H	-5.2
19676.500000	43.61	---	74.00	30.39	H	-5.3
19676.500000	---	32.53	54.00	21.47	H	-5.3
21024.388889	42.61	---	74.00	31.39	H	-5.1
21024.388889	---	30.71	54.00	23.29	H	-5.1
22142.833333	43.74	---	74.00	30.26	H	-5.1
22142.833333	---	31.94	54.00	22.06	H	-5.1
23335.555556	---	32.20	54.00	21.80	H	-5.0
23335.555556	44.10	---	74.00	29.90	H	-5.0
24551.222222	---	32.77	54.00	21.23	H	-4.6
24551.222222	44.05	---	74.00	29.95	H	-4.6



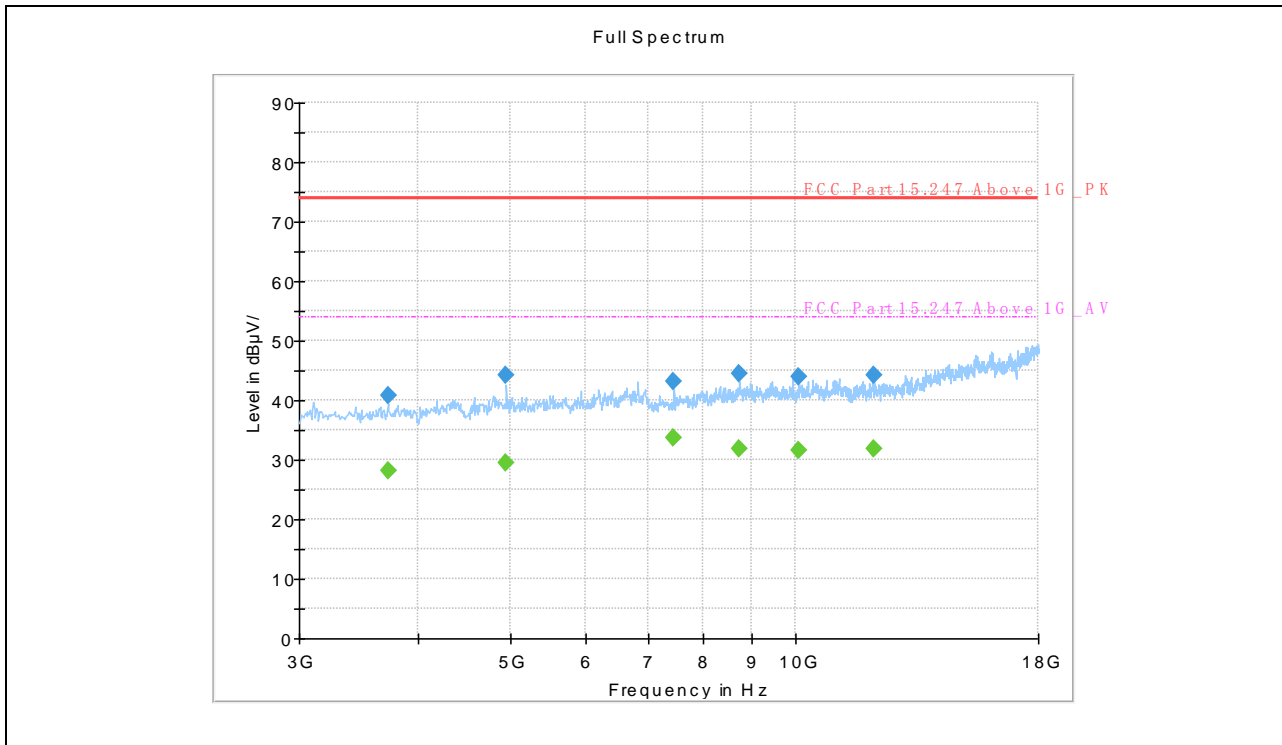
(GFSK_2480MHz, Antenna Vertical, 30MHz to 1GHz)

Frequency (MHz)	MaxPeak (dBµV/m)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Corr. (dB/m)
35.496667	24.66	---	40.00	15.35	V	12.9
50.639444	20.38	---	40.00	19.62	V	16.0
110.671667	19.22	---	43.50	24.28	V	14.6
160.680556	20.90	---	43.50	22.60	V	12.1
383.403333	26.43	---	46.00	19.57	V	18.8
728.992778	31.55	---	46.00	14.45	V	25.3



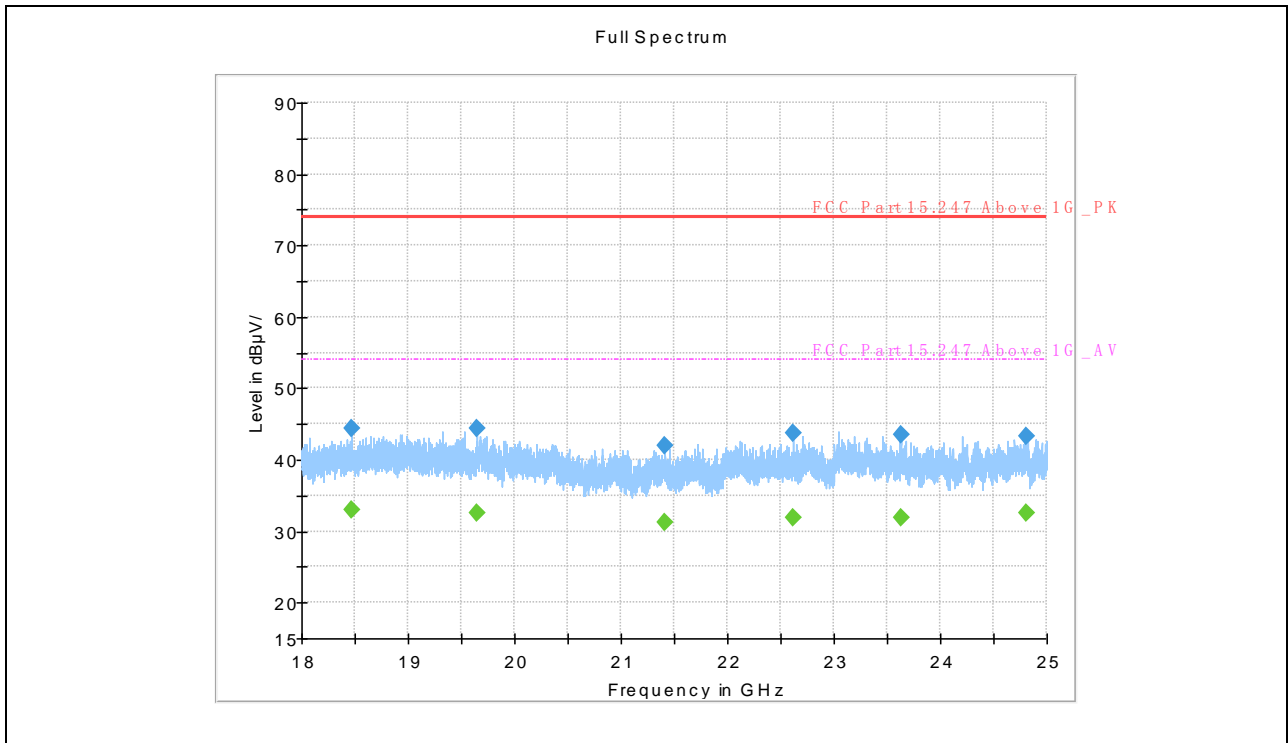
(GFSK_2480MHz, Antenna Vertical , 1GHz to 3GHz)

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Corr. (dB/m)
1455.000000	37.70	---	74.00	36.30	V	1.4
1455.000000	---	26.60	54.00	27.40	V	1.4
1745.000000	---	28.74	54.00	25.26	V	4.2
1745.000000	40.17	---	74.00	32.83	V	4.2
1915.000000	40.95	---	74.00	33.05	V	6.2
1915.000000	---	30.34	54.00	23.66	V	6.2
2305.000000	44.60	---	74.00	29.40	V	10.3
2305.000000	---	33.40	54.00	20.60	V	10.3
2630.000000	48.23	---	74.00	25.77	V	14.6
2630.000000	---	36.80	54.00	17.20	V	14.6
2770.000000	---	37.24	54.00	16.76	V	15.1
2770.000000	48.31	---	74.00	25.69	V	15.1



(GFSK _2480MHz, Antenna Vertical, 3GHz to 18GHz)

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Corr. (dB/m)
3720.000000	40.92	---	74.00	33.08	V	-5.3
3720.000000	---	28.18	54.00	25.82	V	-5.3
4957.500000	44.09	---	74.00	29.91	V	-3.0
4957.500000	---	29.52	54.00	24.48	V	-3.0
7440.000000	43.21	---	74.00	30.79	V	-0.3
7440.000000	---	33.73	54.00	20.27	V	-0.3
8730.000000	44.47	---	74.00	29.53	V	1.4
8730.000000	---	31.72	54.00	22.28	V	1.4
10065.000000	44.04	---	74.00	29.96	V	2.1
10065.000000	---	31.49	54.00	22.51	V	2.1
12105.000000	44.17	---	74.00	29.83	V	3.9
12105.000000	---	31.85	54.00	22.15	V	3.9



(GFSK_2480MHz, Antenna Vertical, 18GHz to 25GHz)

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Pol	Corr. (dB/m)
18476.000000	---	33.00	54.00	21.00	V	-5.2
18476.000000	44.48	---	74.00	29.52	V	-5.2
19650.444444	44.42	---	74.00	29.58	V	-5.3
19650.444444	---	32.49	54.00	21.51	V	-5.3
21412.111111	41.95	---	74.00	32.05	V	-5.0
21412.111111	---	31.13	54.00	22.87	V	-5.0
22616.111111	43.63	---	74.00	30.37	V	-4.9
22616.111111	---	31.94	54.00	22.06	V	-4.9
23625.666667	---	31.93	54.00	22.07	V	-5.0
23625.666667	43.56	---	74.00	30.44	V	-5.0
24816.055556	43.34	---	74.00	30.66	V	-4.8
24816.055556	---	32.55	54.00	21.45	V	-4.8



Annex A Test Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for test performed on the EUT as specified in CISPR 16-1-2:

Test items	Uncertainty
Peak Output Power	$\pm 2.22\text{dB}$
Power spectral density (PSD)	$\pm 2.22\text{dB}$
Bandwidth	$\pm 5\%$
Conducted Spurious Emission	$\pm 2.77\text{ dB}$
Restricted Frequency Bands	$\pm 5\%$
Radiated Emission	$\pm 3.1\text{dB}$
Conducted Emission	$\pm 1.8\text{dB}$

This uncertainty represent an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$



Annex B Testing Laboratory Information

1. Identification of the Responsible Testing Laboratory

Company Name:	Kehu-Morlab Test Laboratory
Address:	Unit 101, No.1732 Gangzhong Road, Xiamen Area, Pilot Free Trade Zone (Fujian), P.R. China
Responsible Test Lab Manager:	Mr. Di Dehai
Telephone:	+86-592-5612050
Facsimile:	+86-592-5612095

2. Identification of the Responsible Testing Location

Name:	Kehu-Morlab Test Laboratory
Address:	Unit 101, No.1732 Gangzhong Road, Xiamen Area, Pilot Free Trade Zone (Fujian), P.R. China

3. Facilities and Accreditations

All measurement facilities used to collect the measurement data are located at Unit 101, No.1732 Gangzhong Road, Xiamen Area, Pilot Free Trade Zone (Fujian), P.R. China.

The test site is constructed in conformance with the requirements of ANSI C63.10-2013 and CISPR Publication 22; the FCC designation number is CN1249.

4. Test Equipments Utilized

4.1 Conducted Test Equipments

No.	Equipment Name	Serial No.	Model No.	Manufacturer	Cal.Date	Cal.Due Date
1	MXA Signal Analyzer	MY53421845	N9020A	Keysight	2018.11.30	2019.11.29
2	RF cable (30MHz-26.5GHz)	RF01	N/A	Morlab	N/A	N/A
3	Coaxial cable	RF02	N/A	Morlab	N/A	N/A
4	SMA connector	RF03	N/A	Xingbo	N/A	N/A

Software Version: Eagle 2.0

4.2 Conducted Emission Test Equipments



No	Equipment Name	Serial No.	Model No.	Manufacturer	Cal.Date	Cal.Due Date
1	EMI Receiver	102174	ESR3	ESR3	2018.11.27	2019.11.26
2	LISN	101338	ENV432	ENV432	2018.11.27	2019.11.26
3	Pulse Limiter (10dB)	317	VTSD 9561 F	VTSD 9561 F	2018.11.27	2019.11.26
4	Coaxial cable(BNC) (30MHz-3GHz)	EMC01	N/A	Morlab	N/A	N/A

4.3 Auxiliary Test Equipment

No	Equipment Name	Serial No.	Model No.	Manufacturer	Cal.Date	Cal. Due Date
1	Laptop	N/A	A1465	Apple Inc.	N/A	N/A

4.4 List of Software Used

No	Model	Version Number	Producer	Test Item
1	EMC32	V10.00.00	Rode&Schwarz	RE
2	EMC32	V10.20.01	Rode&Schwarz	CE

4.5 Radiated Test Equipments

RSE Test System						
No.	Equipment Name	Serial No.	Model No.	Manufacturer	Cal. Date	Cal.Due Date
1	Anechoic Chamber	N/A	9m*6m*6m	ETS-Lindgren	2018.11.27	2019.11.26
2	Signal Analyzer	101294	FSV40	R&S	2018.12.01	2019.11.30
3	Active Ring Antenna	FMZB 1513 #269	FMZB 1513	Schwarzbeck	2018.11.26	2019.11.25
4	Linear Log Periodic Broad Band Antenna	949	VULB 9163	Schwarzbeck	2018.12.03	2019.12.2
5	Ultra-Wideband Horn Antenna	102615	HF907	R&S	2018.12.03	2019.12.2
6	Steatite Antennas	17868	QSH-SL-1 8-26-S-20	Seibersdorf	2018.01.18	2019.01.17
7	RF Switch and Control Platform	N/A	RSC	CDSI	N/A	N/A
8	Coaxial cable	EMC02	N/A	Morlab	N/A	N/A



	(N male) (9kHz -3GHz)					
9	Coaxial cable (N male) (9kHz -3GHz)	EMC03	N/A	Morlab	N/A	N/A
10	Coaxial cable (N male) (1GHz-26.5GHz)	EMC04	N/A	Morlab	N/A	N/A
11	Coaxial cable (N male) (1GHz-26.5GHz)	EMC05	N/A	Morlab	N/A	N/A
12	Pre-amplifier (1GHz-18GHz)	8810011	PAP-1G18	CDSI	2018.11.27	2019.11.26
13	Pre-amplifier (18GHz-40GHz)	17021-17024	PAP-1840	CDSI	2018.07.05	2019.07.04
14	Band stop Filter	EMC11	BJF2400/2 485-60	CDSI	N/A	N/A
15	High Pass Filter	EMC12	HFP-3.0/1 8G-60	CDSI	N/A	N/A

_____ END OF REPORT _____