



EUROFINS ELECTRICAL TESTING SERVICE (SHENZHEN) CO., LTD.

RADIO TEST - REPORT

FCC Compliance Test Report for

Product name: Nebulizer

Model name: fn2000m

FCC ID: 2AX79FN2000M

Test Report Number: EFGX20120195-IE-01-E01

General disclaimer:

The above sample(s) and sample information was/were submitted and identified on behalf of the applicant. Eurofins assures objectivity and impartiality of the test, and fulfills the obligation of confidentiality for applicant's commercial information and technical documents.

1	General Information	3
1.1	Notes	3
1.2	Testing laboratory	4
1.3	Details of applicant	4
1.4	Details of manufacturer	4
1.5	Application details	5
1.6	Test item	5
1.7	Test standards	5
2	Technical test	6
2.1	Summary of test results	6
2.2	Test environment	6
2.3	Measurement uncertainty	6
2.4	Test mode	7
2.5	Test equipment utilized	8
2.6	Auxiliary equipment used during test	9
2.7	Test software information	9
2.8	Test setup	10
2.9	Test results	12
3	Technical requirement and result	13
3.1	Conducted emission AC power port	13
3.2	20 dB bandwidth	16
3.3	Radiated emission	19

1 General Information

1.1 Notes

The results of this test report relate exclusively to the item tested as specified in chapter "Description of test item" and are not transferable to any other test items.

Eurofins Electrical Testing Service (Shenzhen) Co., Ltd. is not responsible for any generalisations and conclusions drawn from this report. Any modification of the test item can lead to invalidity of test results and this test report may therefore be not applicable to the modified test item.

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Operator:

2021-05-13

Bruce Zheng / Project Engineer



Date	Eurofins-Lab.	Name / Title	Signature
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Technical responsibility for area of testing:

2021-05-13

Tom Tian / Supervisor

Date	Eurofins	Name / Title	Signature
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1.2 Testing laboratory

Eurofins Electrical Testing Service (Shenzhen) Co., Ltd.

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The Laboratory has passed the Accreditation by the American Association for Laboratory Accreditation (A2LA). The Accreditation number is 5376.01

The Laboratory has been listed by industry Canada to perform electromagnetic emission measurements, The CAB identifier is CN0088

1.3 Details of applicant

Name	:	Convexity Scientific
Address	:	85 Willow Street Fox Building New Haven, CT 06511 United States
Telephone	:	(844) 359-7632
Fax	:	N/A

1.4 Details of manufacturer

Name	:	Comefresh Electronic Industry Co.,Ltd.
Address	:	1-4 Floor, The West Of Comefresh Building, No.35, Xiangyue Road, Torch Hi-Tech Industrial Zone, 361101, Xiang'an, Xiamen, Fujian, P.R. China
Telephone	:	N/A
Fax	:	N/A

1.5 Application details

Date of receipt of application : 2020-12-30
 Date of receipt of test item : 2021-04-01
 Date of test : 2021-04-01 to 2021-04-28
 Date of issue : 2021-05-13

1.6 Test item

Product type : Nebulizer
 Model name : fn2000m
 Brand : N/A
 Serial number : N/A
 Ratings : (internal) Battery: DC 3.7V,
 Adapter: input120V/60Hz, Output DC 5V
 Test voltage : DC 3.7V
 FCC ID : 2AX79FN2000M
 Additional information : N/A

RadioTechnical data

Frequency range : 2402MHz – 2480MHz
 Radio Tech. : Bluetooth Low Energy
 Frequency channel : 40 Channels
 Modulation : GFSK
 Antenna type : PCB antenna
 Antenna gain : -1 dBi

Radio module

Type : BLE module
 Model : BMD-300
 Manufacturer : Rigado

1.7 Test standards

Test Standards	
FCC Part 15 Subpart C	PART 15 - RADIO FREQUENCY DEVICES Subpart C - Intentional Radiators

Test Method

- 1: ANSI C63.4-2014, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz.
- 2: ANSI C63.10-2013, American National Standard for Testing Unlicensed Wireless Devices.

2 Technical test

2.1 Summary of test results

No deviations from the technical specification(s) were ascertained in the course of the tests performed.



or

The deviations as specified were ascertained in the course of the tests performed.



2.2 Test environment

RF Conducted

Enviroment Parameter	Temperature	Relative Humidity
101.2 kPa	24.6 °C	62.6%

Radiated

Enviroment Parameter	Temperature	Relative Humidity
101.2 kPa	23.7 °C	51.7%

2.3 Measurement uncertainty

The uncertainty is calculated using the methods suggested in the "Guide to the Expression of Uncertainty in Measurement" (GUM) published by ISO.

System Measurement Uncertainty	
Test Items	Extended Uncertainty
Uncertainty in conducted measurements	1.96dB
Uncertainty for Conducted RF test	RF Power Conducted: 1.16dB Frequency test involved: 1.05×10 ⁻⁷ or 1%
Uncertainty for Radiated Spurious Emission 25MHz-3000MHz	Horizontal: 4.46dB; Vertical: 4.54dB;
Uncertainty for Radiated Spurious Emission 3000MHz-18000MHz	Horizontal: 4.42dB; Vertical: 4.41dB;
Uncertainty for Radiated Spurious Emission 18000MHz-40000MHz	Horizontal: 4.63dB; Vertical: 4.62dB;

2.4 Test mode

40 channels are provided for BT-LE (GFSK):

CHANNEL	FREQ. (MHZ)	CHAN- NEL	FREQ. (MHZ)	CHAN- NEL	FREQ. (MHZ)	CHAN- NEL	FREQ. (MHZ)
0	2402	10	2422	20	2442	30	2462
1	2404	11	2424	21	2444	31	2464
2	2406	12	2426	22	2446	32	2466
3	2408	13	2428	23	2448	33	2468
4	2410	14	2430	24	2450	34	2470
5	2412	15	2432	25	2452	35	2472
6	2414	16	2434	26	2454	36	2474
7	2416	17	2436	27	2456	37	2476
8	2418	18	2438	28	2458	38	2478
9	2420	19	2440	29	2460	39	2480

The EUT was set at continuously transmitting mode during the test.

The Lowest Channel 0, Middle 19 and Highest 39 were selected for test in the report.

2.5 Test equipment utilized

EQUIPMENT ID	EQUIPMENT NAME	MODEL NO.	CAL. DUE DATE
23-2-13-05	EMI Test Receiver	ESR3	2022-03-15
23-2-13-06	LISN	NNLK 8127 RC	2022-03-15
23-2-10-16	Attenuator	VTSD 9561-F	2022-03-16
23-2-10-63	Temperature & Humidity Meter	COS-03	2022-03-27
23-2-10-65	Barometer	Baro	2022-03-23
23-2-13-12	Signal Analyzer	N9010B-544	2022-03-15
23-2-13-13	BT/WLAN Tester	CMW270	2022-03-15
23-2-13-14	Signal Generator	N5183B-520	2022-03-15
23-2-13-15	Vector Signal Generator	N5182B-506	2022-03-15
23-2-10-43	Switch and Control Unit	ERIT-E-JS0806-2	2021-06-17
23-2-10-44	DC power supply	E3642A	2021-06-03
23-2-10-45	Temperature test chamber	SG-80-CC-2	2022-03-15
23-2-10-50	Temperature & Humidity Meter	COS-03	2022-03-27
23-2-10-66	Barometer	Baro	2022-03-23
23-2-13-01	EMI Test Receiver	ESR7	2022-03-15
23-2-13-02	Signal Analyzer	N9020B-544	2022-03-15
23-2-12-01	Active Loop Antenna	FMZB 1519B	2022-05-13
23-2-12-02	TRILOG Broadband Antenna	VULB9168	2022-04-27
23-2-12-03	Horn Antenna	3117	2022-05-11
23-2-12-04	Horn Antenna	BBHA 9170	2022-05-11
23-2-10-01	Preamplifier	BBV9745	2022-03-16
23-2-10-02	Preamplifier	TAP01018048	2022-03-16
23-2-10-03	Preamplifier	TAP18040048	2022-03-22
23-2-10-62	Temperature & Humidity Meter	COS-03	2022-03-27
23-2-10-64	Barometer	Baro	2022-03-23
23-2-10-14	Switch and Control Unit	ERIT-E-JS0806-SF1	N/A
23-2-13-03	EMI Test Receiver	ESR7	2022-03-16
23-2-13-04	Signal Analyzer	N9020B-526	2022-03-15
23-2-12-06	Active Loop Antenna	FMZB 1519B	2022-05-13
23-2-12-07	TRILOG Broadband Antenna	VULB9168	2022-04-27
23-2-12-08	Horn Antenna	3117	2022-05-11
23-2-10-46	Preamplifier	BBV9745	2022-03-16
23-2-10-47	Preamplifier	TAP01018048	2022-03-16
23-2-10-61	Temperature & Humidity Meter	COS-03	2022-03-27
23-2-10-52	Barometer	Baro	2022-03-23
23-2-10-15	Switch and Control Unit	ERIT-E-JS0806-SF1	N/A

2.6 Auxiliary equipment used during test

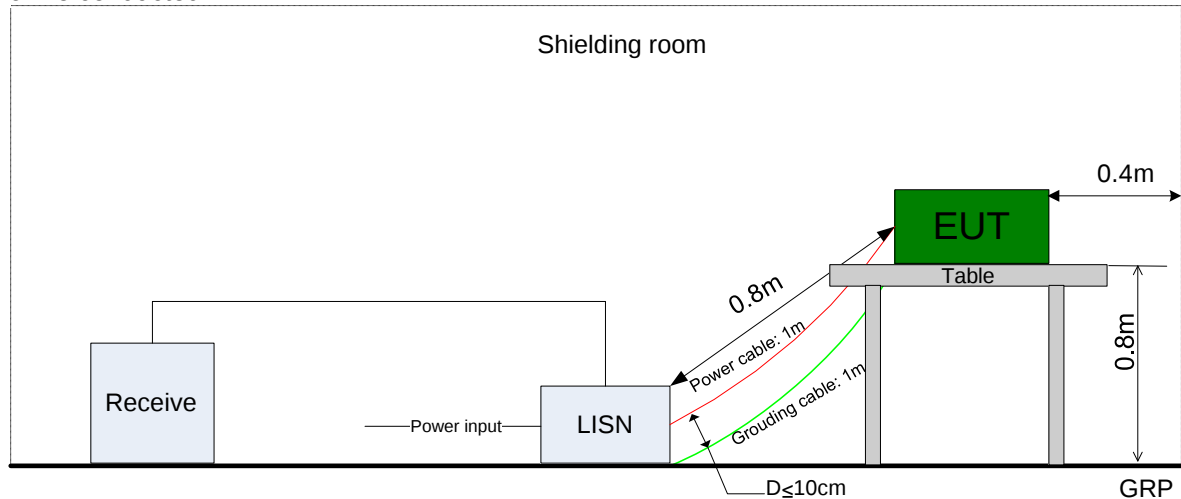
DESCRIPTION	MANUFACTURER	MODEL NO.	S/N
Laptop	LENOVO	TP00096A	PF-1QH0LV

2.7 Test software information

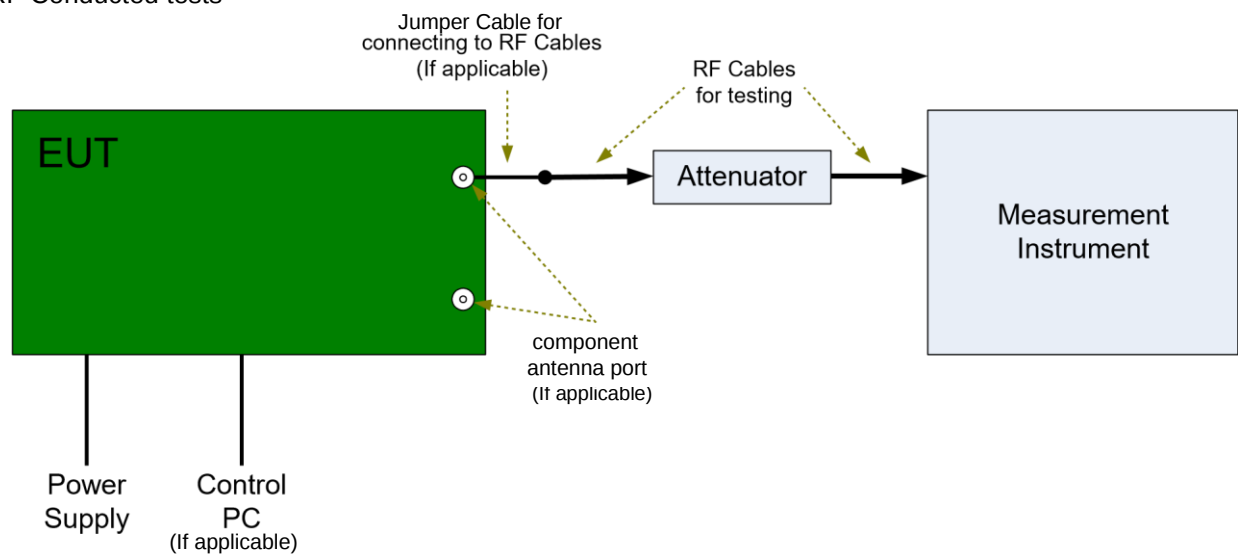
Test Software & Version	nRFgo Studio / V1.21.2.10		
Modulation	Setting TX Power	TX Pattern	Packet Type
default	default	PRBS9	1M

2.8 Test setup

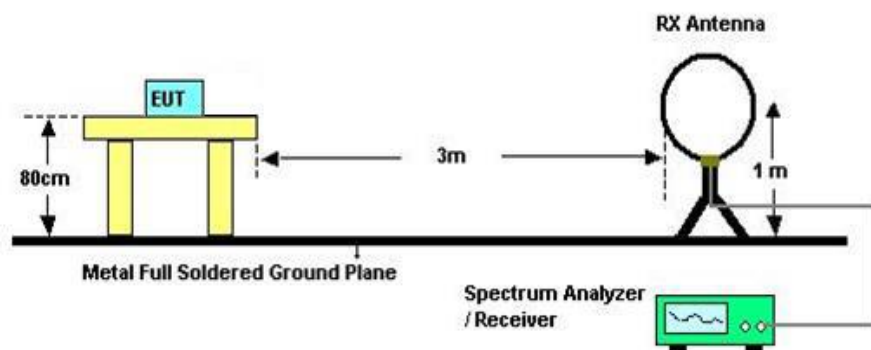
Ac line conducted



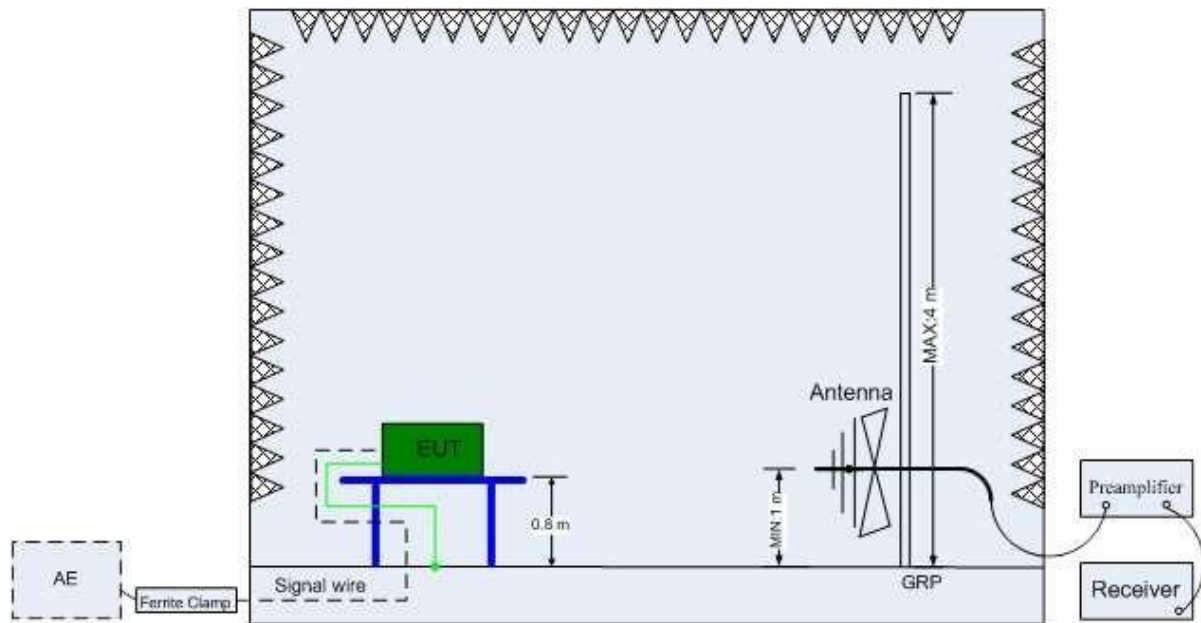
RF Conducted tests



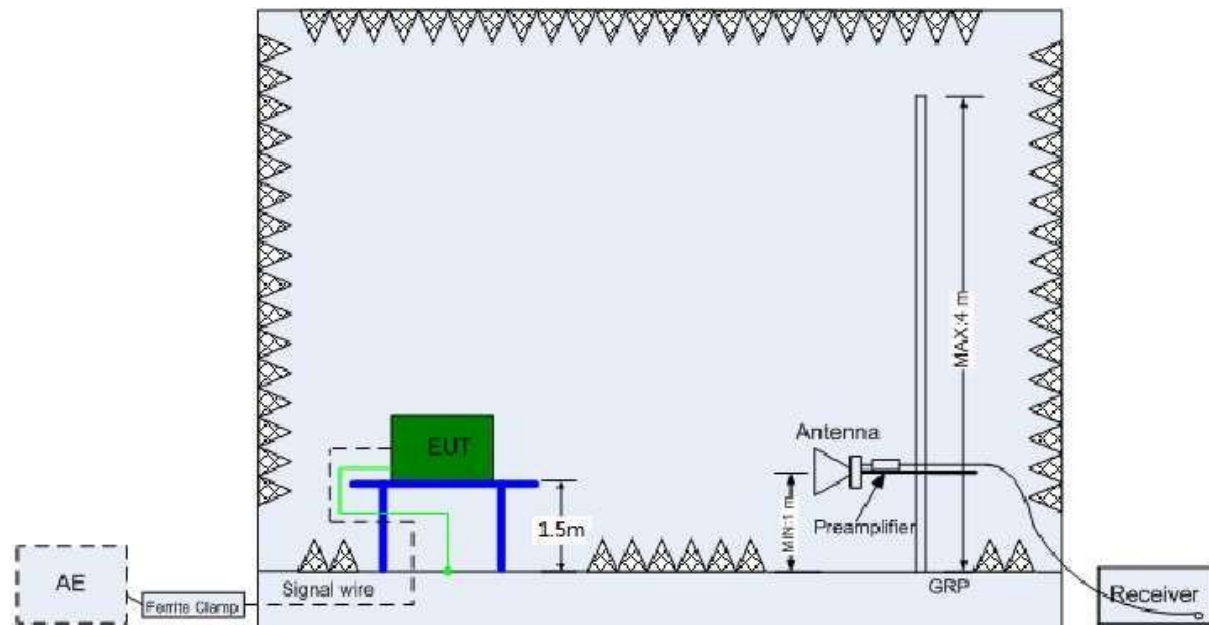
Radiated tests below 30MHz



Radiated tests below 1GHz



Radiated tests above 1GHz



2.9 Test results

☒ 1st test

☐ test after modification

☐ production test

Technical Requirements				
FCC Part 15 Subpart C				
Test Condition		Test Result	Verdict	Test Site
§15.207	Conducted emission AC power port	See Page 14	Pass	Site 1
§15.215(c)(1)	20dB bandwidth	See page 17	Pass	Site 1
§15.249(a)&(d) & §15.209 & §15.205	Radiated emission	See page 21	Pass	Site 1
§15.203	Antenna requirement	See note 1	Pass	--

Note 1: The EUT uses an PCB antenna, the gain: -1 dBi. According to §15.203, it is considered sufficiently to comply with the provisions of this section.

3 Technical requirement and result

3.1 Conducted emission AC power port

Test Method:

The test method was referred to the subclause 6.2 of ANSI C63.10-2013.

The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.10.

The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

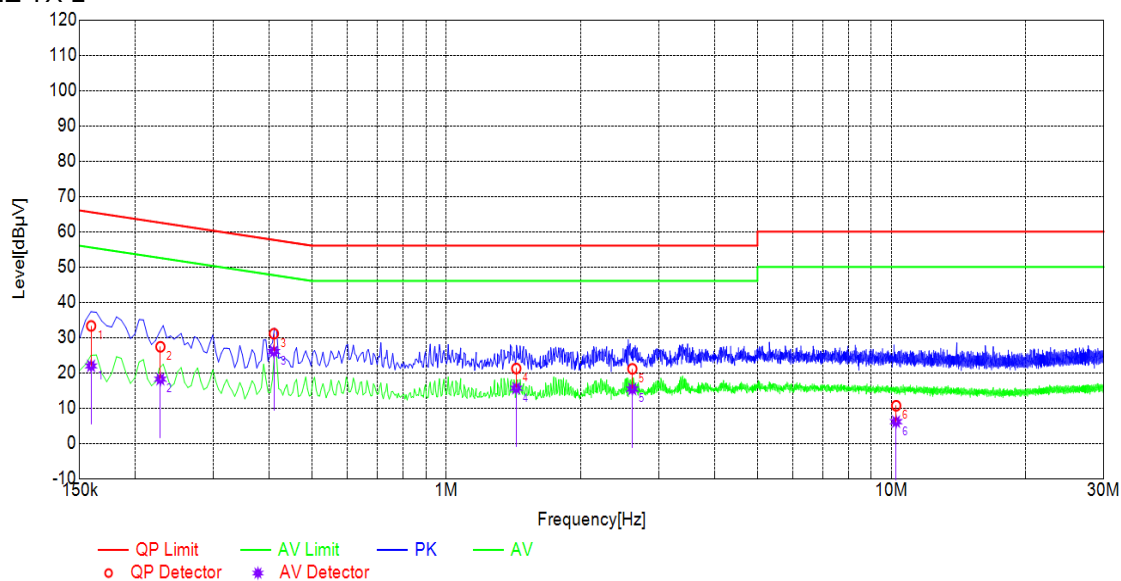
Line conducted data is recorded for both Neutral and Live lines.

Limit:

FCC §15.207 (a)

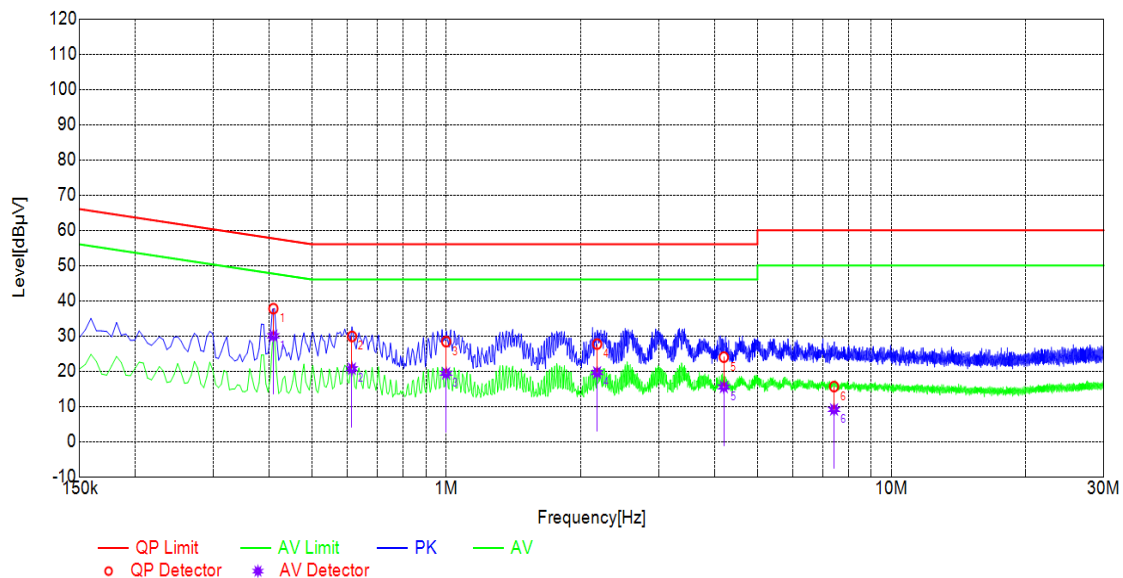
Frequency	QP Limit	AV Limit
MHz	dB μ V	dB μ V
0.150-0.500	66-56*	56-46*
0.500-5	56	46
5-30	60	50

Decreasing linear.

Test Result:
BLE TX L


Final Data List									
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV]	QP Limit [dBμV]	QP Margin [dB]	AV Value [dBμV]	AV Limit [dBμV]	AV Margin [dB]	Verdict
1	0.1591	10.25	33.28	65.51	32.23	21.95	55.51	33.56	PASS
2	0.2277	10.25	27.37	62.53	35.16	18.19	52.53	34.34	PASS
3	0.4096	10.27	31.07	57.66	26.59	26.03	47.66	21.63	PASS
4	1.4356	10.32	21.21	56.00	34.79	15.62	46.00	30.38	PASS
5	2.6166	10.37	21.12	56.00	34.88	15.39	46.00	30.61	PASS
6	10.2437	10.54	10.67	60.00	49.33	6.14	50.00	43.86	PASS

BLE TX N



Final Data List									
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV]	QP Limit [dBμV]	QP Margin [dB]	AV Value [dBμV]	AV Limit [dBμV]	AV Margin [dB]	Verdict
1	0.4085	10.27	37.75	57.68	19.93	30.05	47.68	17.63	PASS
2	0.6134	10.27	29.86	56.00	26.14	20.70	46.00	25.30	PASS
3	0.9987	10.28	28.39	56.00	27.61	19.39	46.00	26.61	PASS
4	2.1808	10.30	27.69	56.00	28.31	19.63	46.00	26.37	PASS
5	4.2014	10.35	23.97	56.00	32.03	15.51	46.00	30.49	PASS
6	7.4303	10.41	15.62	60.00	44.38	9.13	50.00	40.87	PASS

Corrector factor = Attenuator loss + Cable Loss

3.2 20 dB bandwidth

Test Method:

The test method was referred to the subclause 6.9.2 of ANSI C63.10-2013.

The occupied bandwidth is measured as the width of the spectral envelope of the modulated signal, at an amplitude level reduced from a reference value by a specified ratio (or in decibels, a specified number of dB down from the reference value). Typical ratios, expressed in dB, are -6 dB, -20 dB, and -26 dB, corresponding to 6 dB BW, 20 dB BW, and 26 dB BW, respectively. In this subclause, the ratio is designated by “-xx dB.” The reference value is either the level of the unmodulated carrier or the highest level of the spectral envelope of the modulated signal, as stated by the applicable requirement. Some requirements might specify a specific maximum or minimum value for the “-xx dB” bandwidth; other requirements might specify that the “-xx dB” bandwidth be entirely contained within the authorized or designated frequency band.

- a) The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the EMI receiver or spectrum analyzer shall be between two times and five times the OBW.
- b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW and video bandwidth (VBW) shall be approximately three times RBW, unless otherwise specified by the applicable requirement.
- c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than $[10 \log (OBW/RBW)]$ below the reference level. Specific guidance is given in 4.1.5.2.
- d) Steps a) through c) might require iteration to adjust within the specified tolerances.
- e) The dynamic range of the instrument at the selected RBW shall be more than 10 dB below the target “-xx dB down” requirement; that is, if the requirement calls for measuring the -20 dB OBW, the instrument noise floor at the selected RBW shall be at least 30 dB below the reference value.
- f) Set detection mode to peak and trace mode to max hold.
- g) Determine the reference value: Set the EUT to transmit an unmodulated carrier or modulated signal, as applicable. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace (this is the reference value).
- h) Determine the “-xx dB down amplitude” using $[(\text{reference value}) - xx]$. Alternatively, this calculation may be made by using the marker-delta function of the instrument.
- i) If the reference value is determined by an unmodulated carrier, then turn the EUT modulation ON, and either clear the existing trace or start a new trace on the spectrum analyzer and allow the new trace to stabilize. Otherwise, the trace from step g) shall be used for step j).
- j) Place two markers, one at the lowest frequency and the other at the highest frequency of the envelope of the spectral display, such that each marker is at or slightly below the “ixx dB down amplitude” determined in step h). If a marker is below this “-xx dB down amplitude” value, then it shall be as close as possible to this value. The occupied bandwidth is the frequency difference between the two markers. Alternatively, set a marker at the lowest frequency of the envelope of the spectral display, such that the marker is at or slightly below the “ixx dB down amplitude” determined in step h). Reset the marker-delta function and move the marker to the other side of the emission until the delta marker amplitude is at the same level as the reference marker amplitude. The marker-delta frequency reading at this point is the specified emission bandwidth.
- k) The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

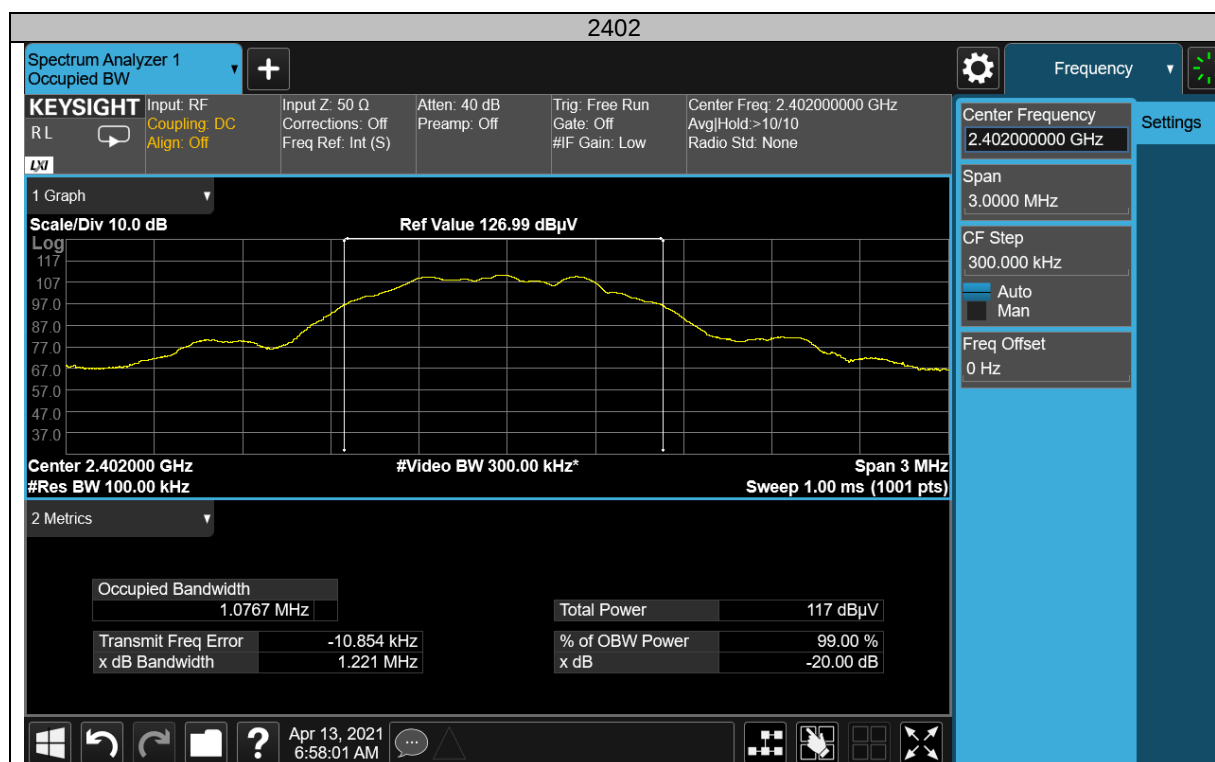
Limit:

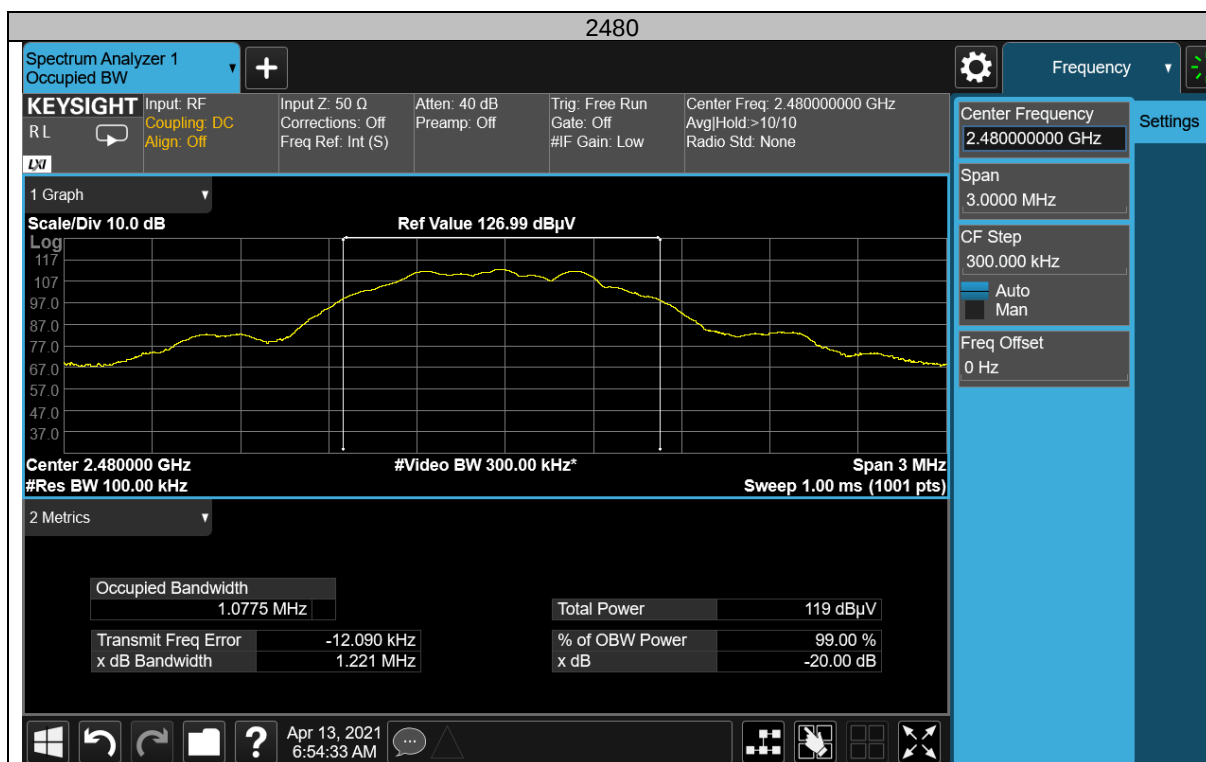
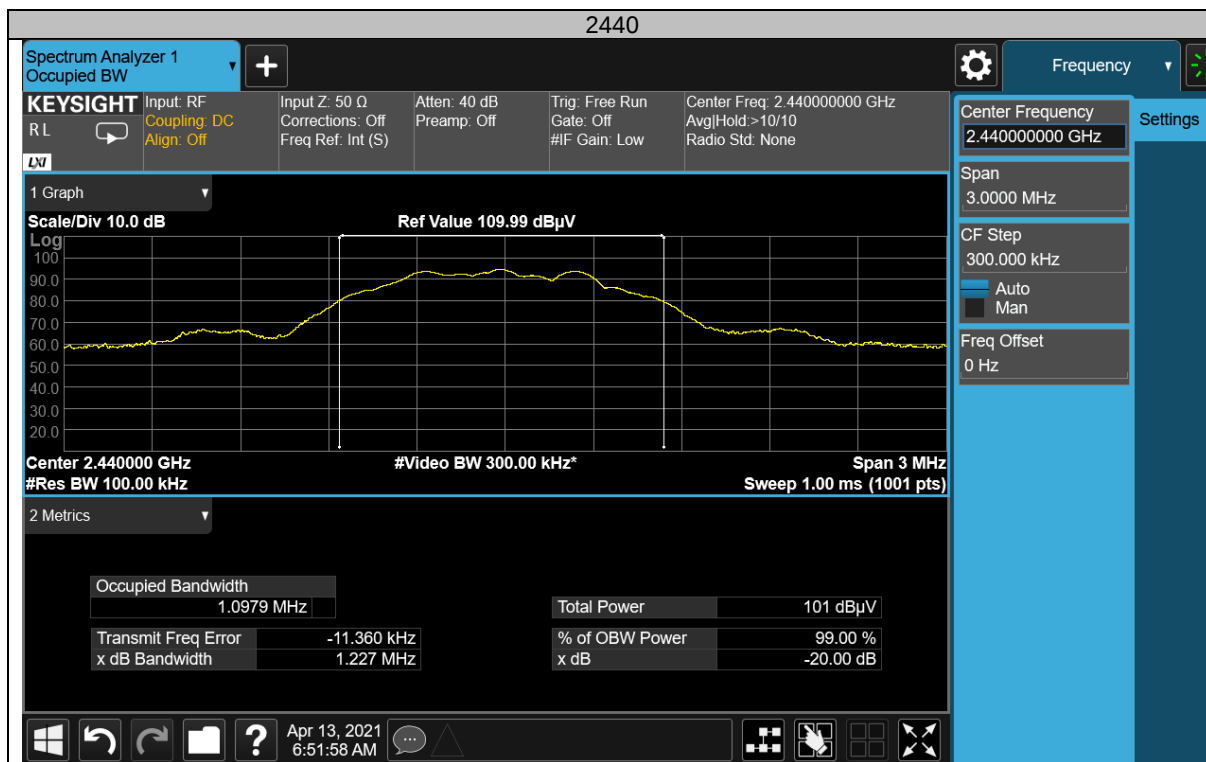
None; for reporting purposes only.

Test Result:

Channel	20db EBW[MHz]	Verdict
2402	1.221	PASS
2440	1.227	PASS
2480	1.221	PASS

Test Graphs





3.3 Radiated emission

Test Method:

The test method was referred to the subclause 11.11/11.12 of ANSI C63.10-2013.

- 1: The EUT was placed on a turn table which is 1.5m above ground plane for above 1GHz and 0.8m above ground for below 1GHz at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- 2: The EUT was set 3 meters away from the interference – receiving antenna, which was mounted on the top of a variable – height antenna tower.
- 3: The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- 4: For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- 5: Use the following spectrum analyzer settings According to C63.10:

For Above 1GHz

Span = wide enough to capture the peak level of the in-band emission and all spurious
RBW = 1MHz, VBW ≥ RBW for peak measurement, Sweep = auto, Detector function = peak,
Trace = max hold.

For Below 1GHz

Use the following spectrum analyzer settings:

Span = wide enough to capture the peak level of the in-band emission and all spurious
RBW = 100 KHz, VBW ≥ RBW for peak measurement, Sweep = auto, Detector function = peak,
Trace = max hold.

For Below 30MHz

Use the following spectrum analyzer settings:

Span = wide enough to capture the peak level of the in-band emission and all spurious
RBW = 200 Hz, VBW ≥ RBW from 9KHz to 0.15MHz, RBW 9KHz VBW ≥ RBW from 0.15MHz to 30MHz for peak measurement, Sweep = auto, Detector function = peak, Trace = max hold.

Note:

- 1: The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 KHz for Quasi-peak detection (QP) at frequency below 1GHz.
- 2: The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for peak detection (PK) at frequency above 1GHz.
- 3: The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for RMS Average ((duty cycle < 98%) for Average detection (AV) at frequency above 1GHz, then the measurement results was added to a correction factor ($20\log(1/\text{duty cycle})$).
- 4: The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz (duty cycle > 98%) for Average detection (AV) at frequency above 1GHz.
- 5: When duty cycle < 98%, The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is $\text{VBW} \geq 1 / T$, the T is transmission duration (T).

Limit:

FCC §15.205 and §15.209

Frequency Range	Field Strength Limit	Field Strength Limit
(MHz)	($\mu\text{V/m}$) at 3 m	(dB $\mu\text{V/m}$) at 3 m
0.009-0.490	2400/F(kHz) @ 300 m	-
0.490-1.705	24000/F(kHz) @ 30 m	-
1.705 - 30	30 @ 30m	-
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

§15.205 Restricted bands of operation

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

FCC §15.249(a)

Fundamental frequency	Field strength of fundamental (mV/m)	Field strength of fundamental (dB $\mu\text{V/m}$)	Field strength of harmonics ($\mu\text{V/m}$)	Field strength of harmonics (dB $\mu\text{V/m}$)
902-928 MHz	50	94	500	54
2400-2483.5 MHz	50	94	500	54
5725-5875 MHz	50	94	500	54
24.0-24.25 GHz	250	128	2500	68

Test Result:

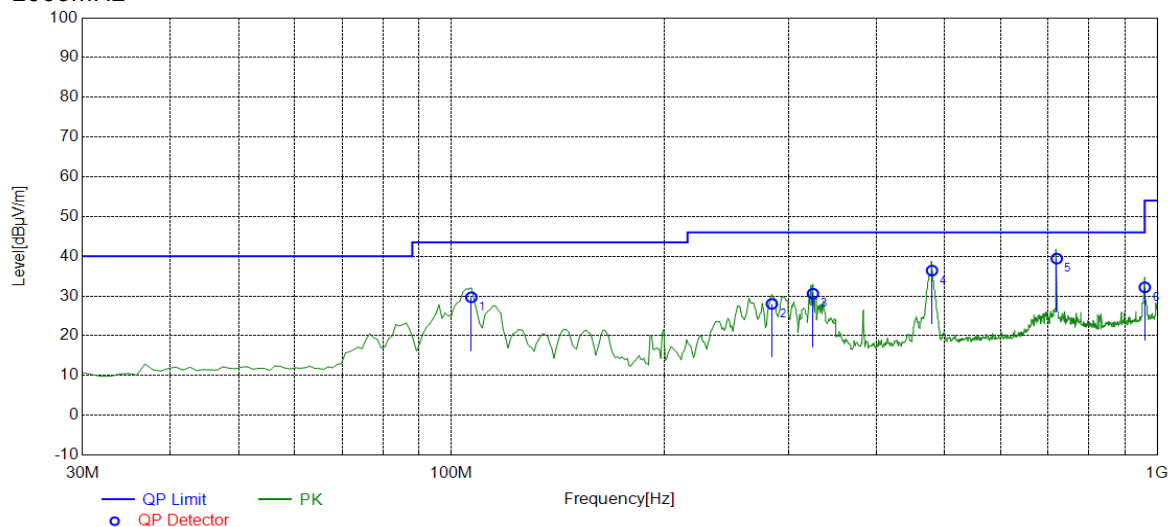
The report only records the worst case.

The low frequency, which started from 9 kHz to 30MHz with X/Y/Z axis, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.

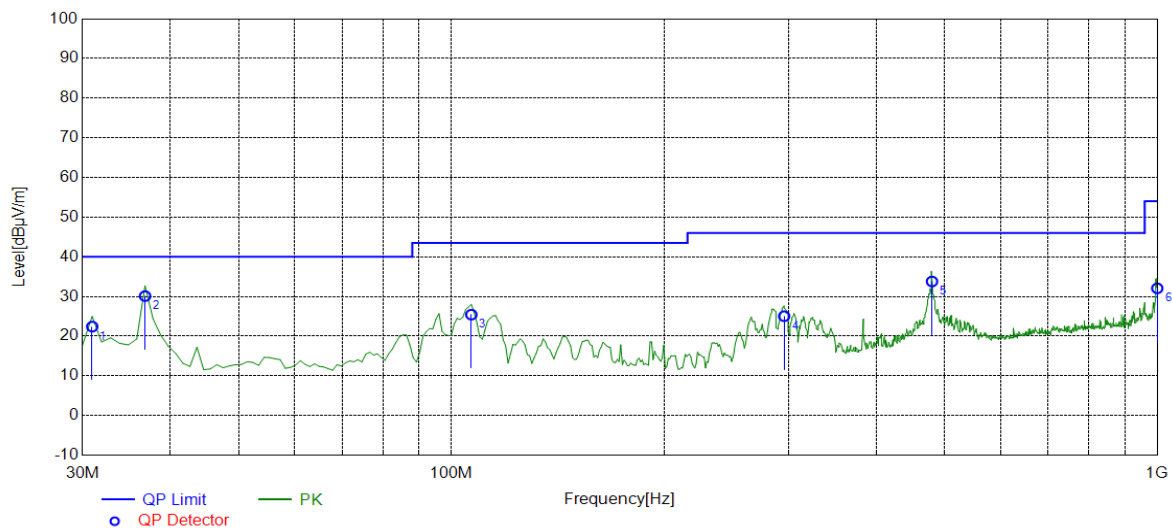
According to C63.10, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement, so AV emission value did not show in below table if the peak value complies with average limit. "-" means 20db below the limit

2402MHz Test Result

30-1000MHz



Final Data List								
NO.	Freq. [MHz]	Factor [dB/m]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	106.7067	-19.79	29.70	43.50	13.80	100	147	Horizontal
2	284.3944	-15.83	28.03	46.00	17.97	100	325	Horizontal
3	325.1752	-15.01	30.60	46.00	15.40	100	344	Horizontal
4	479.5596	-11.80	36.41	46.00	9.59	100	194	Horizontal
5	720.3604	-7.70	39.43	46.00	6.57	100	147	Horizontal
6	960.1902	-4.72	32.21	54.00	21.79	100	344	Horizontal



Final Data List								
NO.	Freq. [MHz]	Factor [dB/m]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	30.9710	-18.36	22.41	40.00	17.59	100	344	Vertical
2	36.7968	-17.11	30.11	40.00	9.89	100	21	Vertical
3	106.7067	-19.79	25.43	43.50	18.07	100	16	Vertical
4	296.0460	-15.40	25.05	46.00	20.95	100	16	Vertical
5	479.5596	-11.80	33.80	46.00	12.20	100	133	Vertical
6	1000.0000	-4.15	32.07	54.00	21.93	100	140	Vertical

Note 1: Result Level= Read Level + Corrector Factor.

Note 2: Below 1GHz: Corrector factor = Antenna Factor + Cable Loss- Amplifier Gain.

Above 1GHz

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	4800.9005	47.67	-14.79	74.00	26.33	150	17	Horizontal
2	4800.9005	/	-14.76	54.00	/	/	/	Horizontal
3	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-

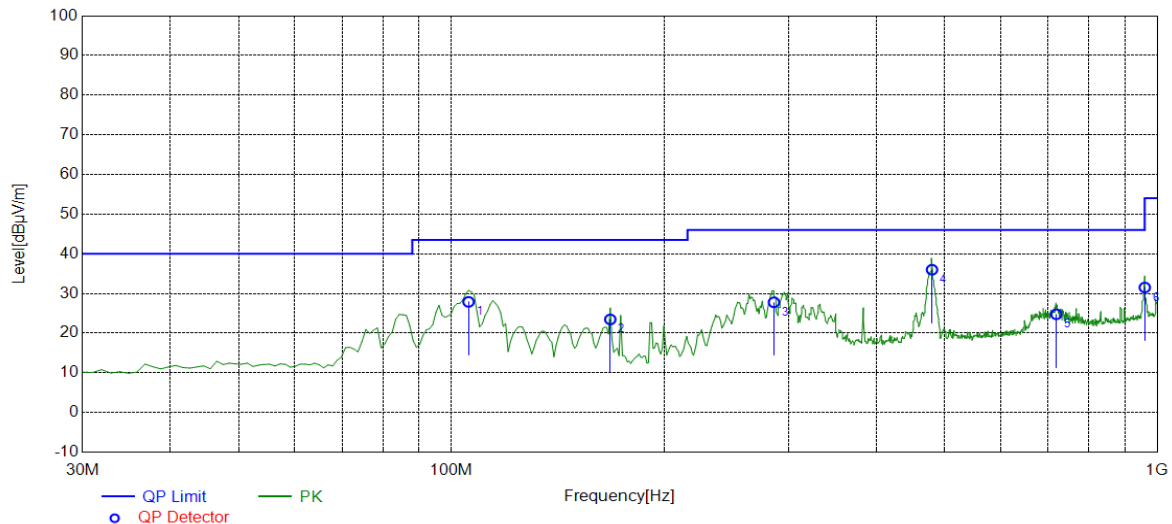
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	4800.9005	46.64	-14.76	74.00	27.36	150	176	Vertical
2	4800.9005	/	-14.76	54.00	/	/	/	Vertical
3	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-

Note 1: Result Level= Read Level + Corrector Factor.

Note 2: Above 1GHz: Corrector factor = Antenna Factor + Cable Loss- Amplifier Gain.

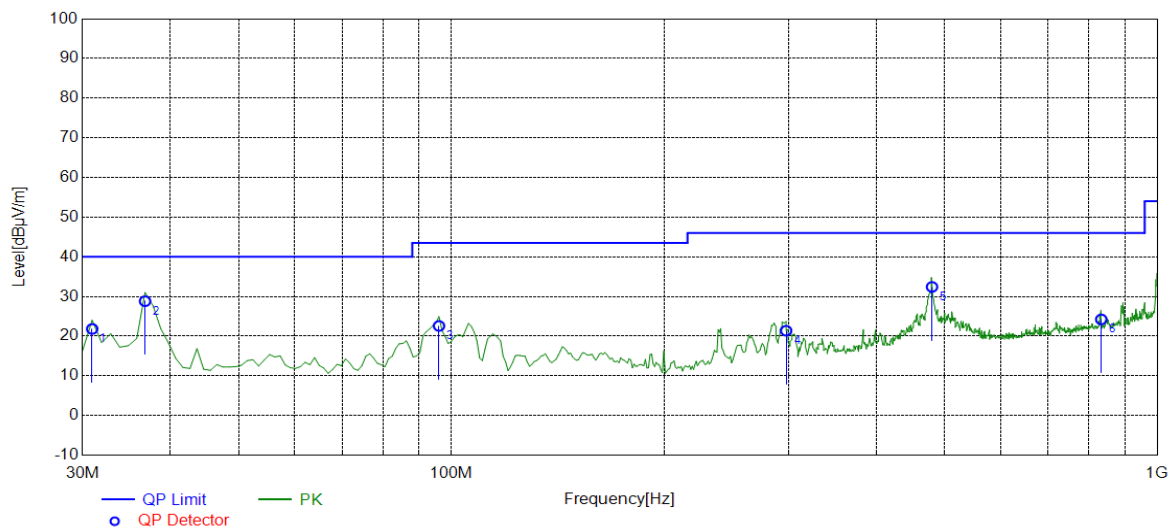
2440MHz Test Result

30-1000MHz



Final Data List

NO.	Freq. [MHz]	Factor [dB/m]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	105.7357	-19.93	27.90	43.50	15.60	100	14	Horizontal
2	167.8779	-15.23	23.48	43.50	20.02	100	344	Horizontal
3	286.3363	-15.76	27.79	46.00	18.21	100	329	Horizontal
4	479.5596	-11.80	36.00	46.00	10.00	100	194	Horizontal
5	719.3894	-7.71	24.78	46.00	21.22	100	60	Horizontal
6	960.1902	-4.72	31.52	54.00	22.48	100	344	Horizontal



Final Data List								
NO.	Freq. [MHz]	Factor [dB/m]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	30.9710	-18.36	21.84	40.00	18.16	100	350	Vertical
2	36.7968	-17.11	28.82	40.00	11.18	100	24	Vertical
3	96.0260	-20.80	22.58	43.50	20.92	100	105	Vertical
4	297.9880	-15.33	21.37	46.00	24.63	100	16	Vertical
5	479.5596	-11.80	32.42	46.00	13.58	100	83	Vertical
6	832.9930	-6.17	24.24	46.00	21.76	100	57	Vertical

Note 1: Result Level= Read Level + Corrector Factor.

Note 2: Below 1GHz: Corrector factor = Antenna Factor + Cable Loss- Amplifier Gain.

Above 1GHz

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	4875.9380	46.94	-14.81	74.00	27.06	150	260	Horizontal
2	4875.9380	/	-14.87	54.00	/	/	/	Horizontal
3	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-

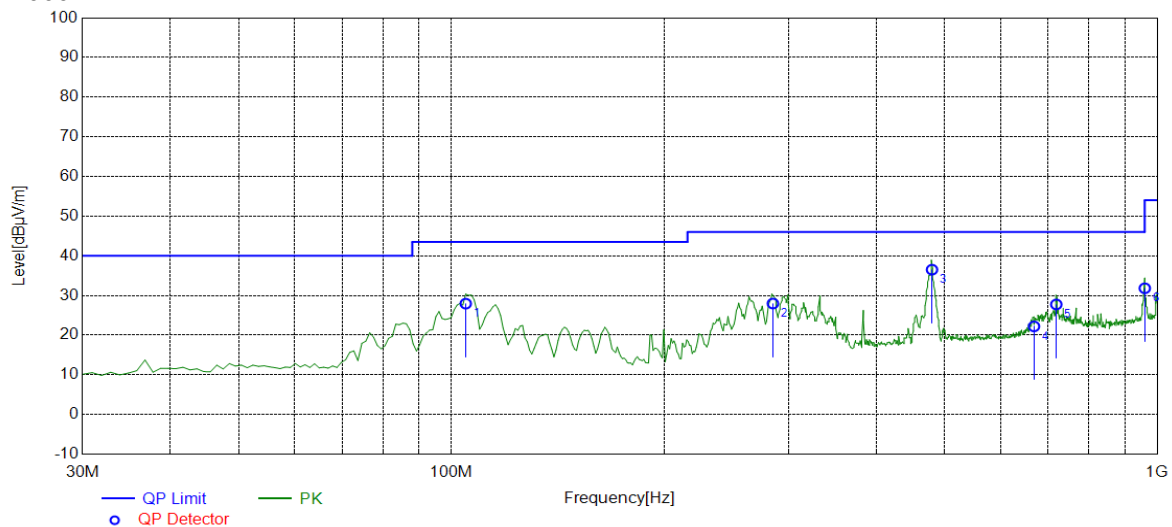
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	4875.9380	48.33	-14.87	74.00	25.67	150	140	Vertical
2	4875.9380	/	-14.87	/	/	/	/	Vertical
3	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-

Note 1: Result Level= Read Level + Corrector Factor.

Note 2: Above 1GHz: Corrector factor = Antenna Factor + Cable Loss- Amplifier Gain.

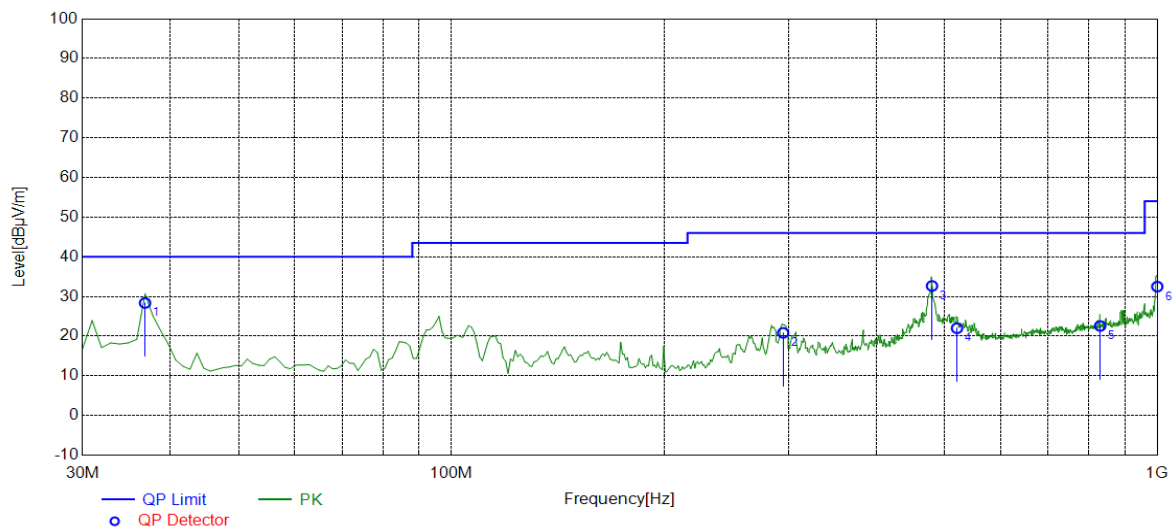
2480MHz Test Result

30-1000MHz



Final Data List

NO.	Freq. [MHz]	Factor [dB/m]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	104.7648	-20.07	27.96	43.50	15.54	100	37	Horizontal
2	285.3654	-15.79	27.98	46.00	18.02	100	334	Horizontal
3	479.5596	-11.80	36.52	46.00	9.48	100	191	Horizontal
4	668.8989	-8.33	22.22	46.00	23.78	100	54	Horizontal
5	719.3894	-7.71	27.76	46.00	18.24	100	73	Horizontal
6	960.1902	-4.72	31.83	54.00	22.17	100	344	Horizontal



Final Data List								
NO.	Freq. [MHz]	Factor [dB/m]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	36.7968	-17.11	28.36	40.00	11.64	100	16	Vertical
2	295.0751	-15.44	20.84	46.00	25.16	100	16	Vertical
3	479.5596	-11.80	32.66	46.00	13.34	100	76	Vertical
4	520.3403	-11.01	22.01	46.00	23.99	100	192	Vertical
5	830.0801	-6.19	22.59	46.00	23.41	100	98	Vertical
6	1000.0000	-4.15	32.50	54.00	21.50	100	166	Vertical

Note 1: Result Level= Read Level + Corrector Factor.

Note 2: Below 1GHz: Corrector factor = Antenna Factor + Cable Loss- Amplifier Gain.

Above 1GHz

NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	4958.4792	52.54	-14.58	74.00	21.46	150	70	Horizontal
2	4958.4792	/	-14.58	54.00	/	/	/	Horizontal
3	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-

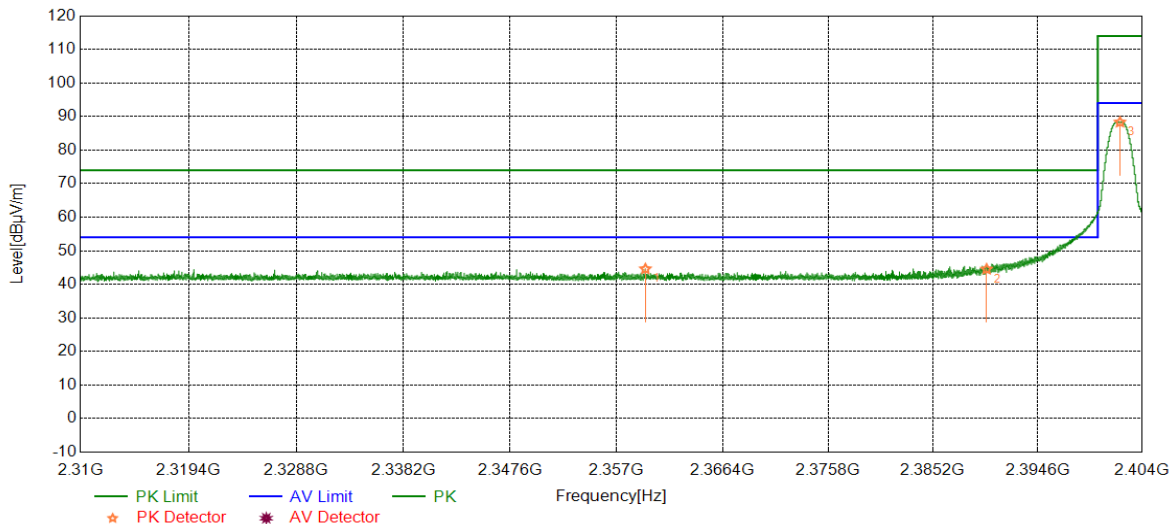
NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	4958.4792	52.89	-14.58	74.00	21.11	150	126	Vertical
2	4958.4792	/	-14.58	54.00	/	/	/	Vertical
3	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-

Note 1: Result Level= Read Level + Corrector Factor.

Note 2: Above 1GHz: Corrector factor = Antenna Factor + Cable Loss- Amplifier Gain.

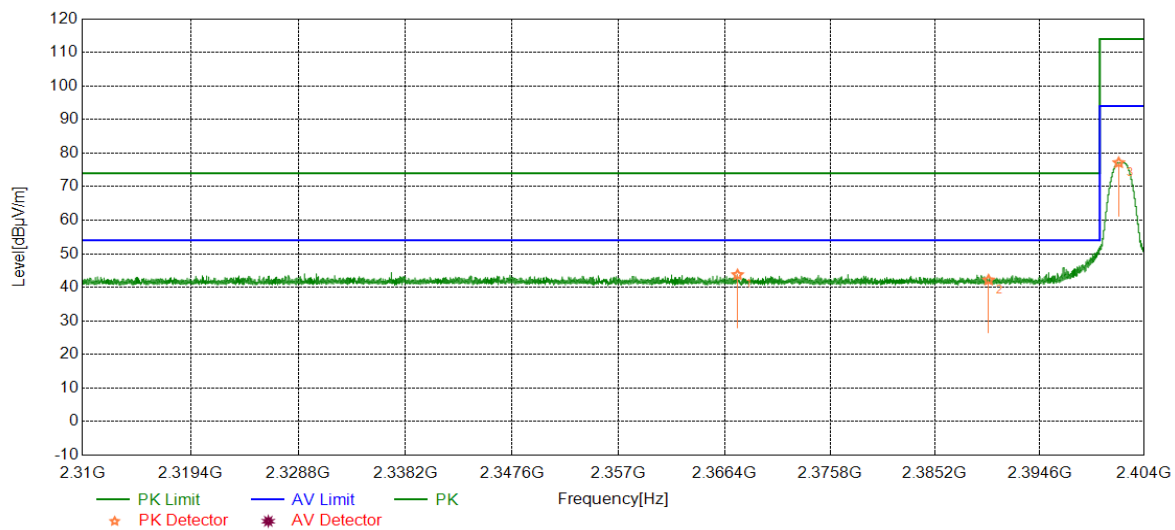
Band-edge and Field strength of fundamental (Radiated)

2402MHz Test Result



PK Final Data List

NO.	Freq. [MHz]	Factor [dB/m]	PK Value [dBμV/m]	PK Limit [dBμV/m]	PK Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2359.5593	-22.90	44.60	74.00	29.40	161.4	40	Horizontal
2	2390.0000	-22.81	44.53	74.00	29.47	161.4	40	Horizontal
3	2402.0071	-22.77	88.31	114.00	25.69	161.4	40	Horizontal

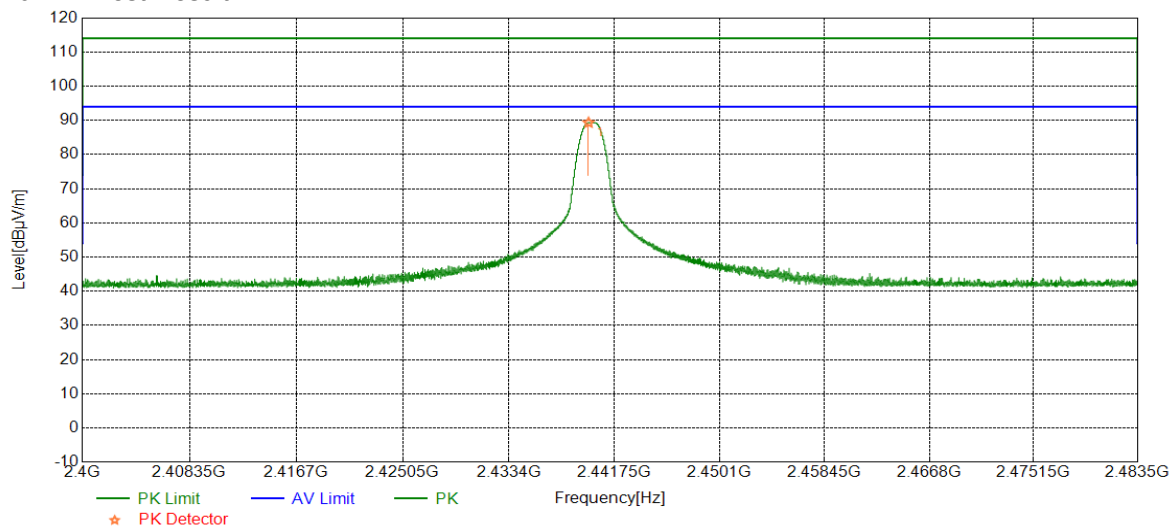


PK Final Data List								
NO.	Freq. [MHz]	Factor [dB/m]	PK Value [dBμV/m]	PK Limit [dBμV/m]	PK Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2367.5638	-22.88	43.76	74.00	30.24	123.8	270	Vertical
2	2390.0000	-22.81	42.18	74.00	31.82	123.8	270	Vertical
3	2401.7110	-22.77	77.13	114.00	36.87	123.8	270	Vertical

Level = Read level + Factor

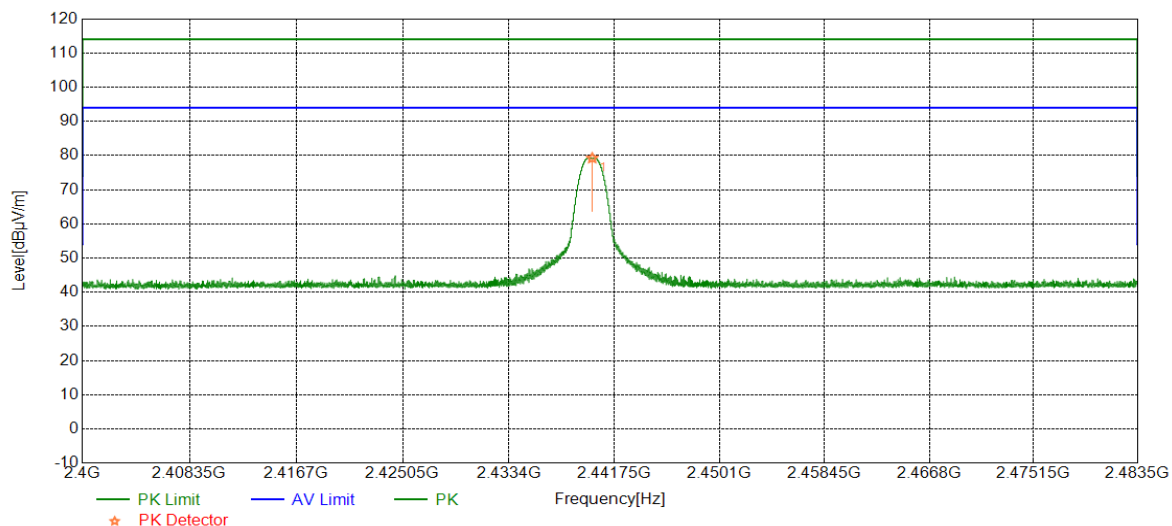
Factor = Antenna Factor + Cable loss – Preamp Factor

2440MHz Test Result



PK Final Data List

NO.	Freq. [MHz]	Factor [dB/m]	PK Value [dBμV/m]	PK Limit [dBμV/m]	PK Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2439.7021	-22.65	89.32	114.00	24.68	150	140	Horizontal



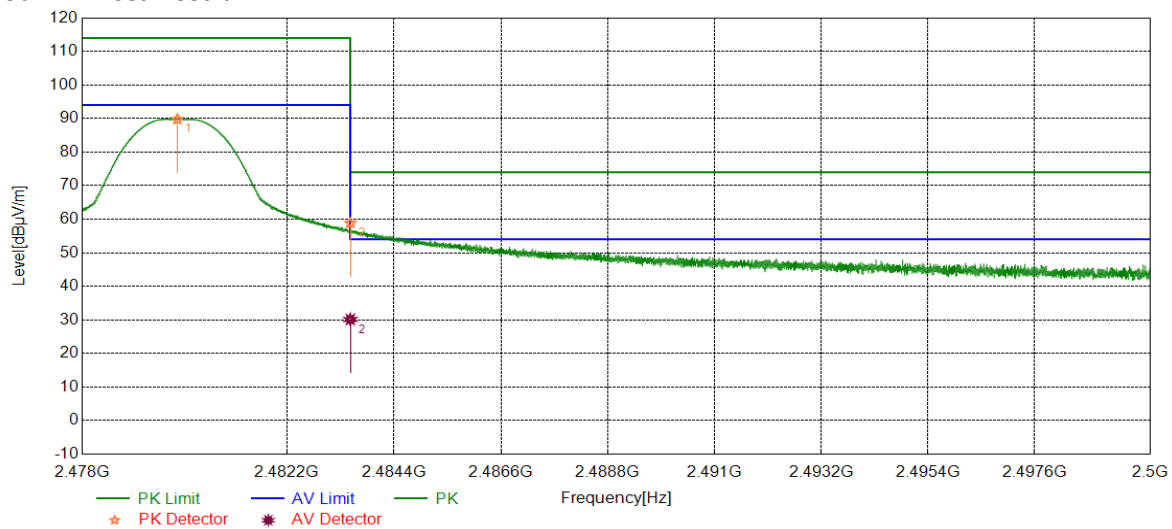
PK Final Data List

NO.	Freq. [MHz]	Factor [dB/m]	PK Value [dBμV/m]	PK Limit [dBμV/m]	PK Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2439.9902	-22.65	79.23	114.00	34.77	150	210	Vertical

Level = Read level + Factor

Factor = Antenna Factor + Cable loss – Preamp Factor

2480MHz Test Result

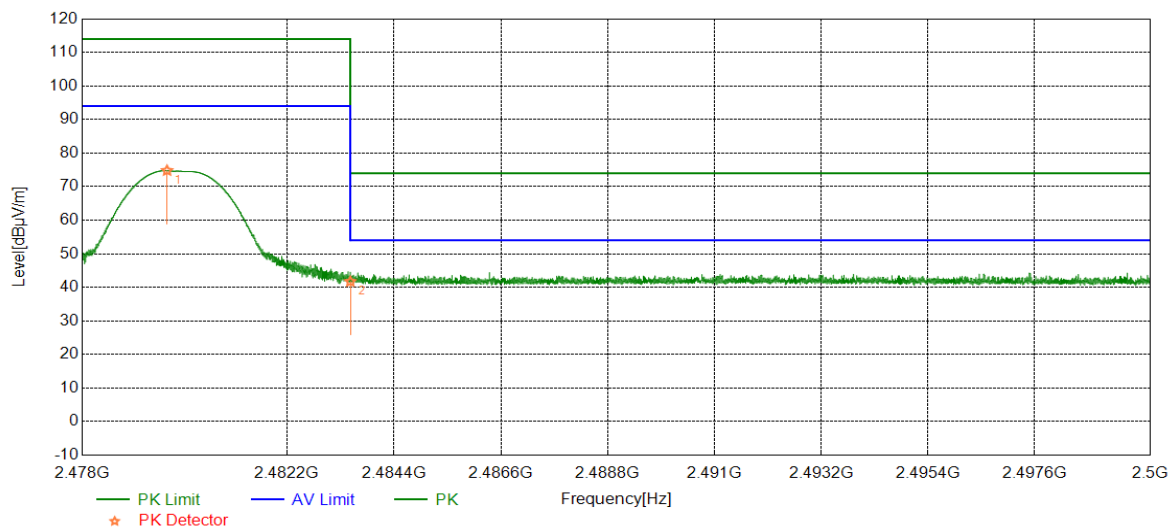


PK Final Data List

NO.	Freq. [MHz]	Factor [dB/m]	PK Value [dBμV/m]	PK Limit [dBμV/m]	PK Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2479.9471	-22.53	89.76	114.00	24.24	161.4	40	Horizontal
2	2483.5000	-22.52	58.85	74.00	15.15	110.9	327.7	Horizontal

AV Final Data List

NO.	Freq. [MHz]	Factor [dB/m]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2479.9471	-22.53	/	94.00	/	/	/	Horizontal
2	2483.5000	-22.52	30.12	54.00	23.88	110.9	327.7	Horizontal



PK Final Data List								
NO.	Freq. [MHz]	Factor [dB/m]	PK Value [dBμV/m]	PK Limit [dBμV/m]	PK Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2479.7370	-22.53	74.79	114.00	39.21	123.8	260	Vertical
2	2483.5000	-22.52	41.73	74.00	32.27	123.8	260	Vertical

Level = Read level + Factor

Factor = Antenna Factor + Cable loss – Preamp Factor

-END of report-