REPORT No.: SZ25080020W01

TEST REPORT

APPLICANT	:	Realme Chongqing Mobile Telecommunications Corp., Ltd.
PRODUCT NAME	:	Wireless Earphone
MODEL NAME	:	RMA2418
BRAND NAME	:	realme
FCC ID	:	2AUYFRMA2418
STANDARD(S)	:	47 CFR Part 15 Subpart C
RECEIPT DATE	:	2025-08-04
TEST DATE	:	2025-08-08 to 2025-08-17
ISSUE DATE	:	2025-09-08

Edited by: Zeng Xiaoying (Rapporteur)

Approved by: Shen Junsheng (Supervisor)

MORLAB

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DIRECTORY

Change History		
Version	**Date**	**Reason for change**
1.0	2025-09-08	First edition

1. Summary of Test Result

No.	Section	Description	Test Date	Test Engineer	Result	Remark
1	15.203	Antenna Requirement	N/A	N/A	PASS	/
2	N/A	Duty Cycle of Test Signal	Aug. 09, 2025	Li Xinpeng	PASS	/
3	15.247(b)	Maximum Peak Conducted Output Power	Aug. 09, 2025	Li Xinpeng	PASS	/
4	15.247(b)	Maximum Average Conducted Output Power	Aug. 09, 2025	Li Xinpeng	PASS	/
5	15.247(a)	Bandwidth	Aug. 09, 2025	Li Xinpeng	PASS	/
6	15.247(d)	Conducted Spurious Emission and Band Edge	Aug. 09, 2025	Li Xinpeng	PASS	/
7	15.247(e)	Power Spectral Density	Aug. 09, 2025	Li Xinpeng	PASS	/
8	15.207	Conducted Emission	Aug. 15, 2025	Wang Yapeng	PASS	/
9	15.247(d)	Restricted Frequency Bands	Aug. 19, 2025	Wang Deyong	PASS	/
10	15.209, 15.247(d)	Radiated Emission	Aug. 19, 2025	Wang Deyong	PASS	/

Note 1: The tests were performed according to the method of measurements prescribed in ANSI C63.10-2020 and KDB 558074 D01 v05r02.

Note 2: Any additions, deviation, or exclusions from the method shall be noted in the “Remark”.

1.1. Testing Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

• 47 CFR Part 15 Subpart C Radio Frequency Devices

1.2. Test Equipment List

1.2.1 Conducted Test Equipment

Equipment	Serial No.	Type	Manufacturer	Cal. Date	Due Date
EXA Signal Analzyer	MY53470836	N9010A	Agilent	2025.01.15	2026.01.14
RF Cable (30MHz-26GHz)	CB01	RF01	Morlab	N/A	N/A
SMA Connector	CN01	RF03	HUBER-SUHNER	N/A	N/A

1.2.2 Conducted Emission Test Equipment

Equipment	Serial No.	Type	Manufacturer	Cal. Date	Due Date
Receiver	101052	ESPI	R&S	2025.05.15	2026.05.14
LISN	103131	ENV 216	R&S	2025.03.20	2026.03.19
RF Coaxial Cable (DC-100MHz)	EMC-CE-00514	N/A	N/A	2025.05.06	2026.05.05

1.2.3 List of Software Used

Description	Manufacturer	Software Version
Test System	MaiWei	2.0.0.0
JS32-RE	Tonscend	5.0.0
TS+ -[JS32-CE]	Tonscend	2.5.0.0

1.2.4 Radiated Test Equipment

Equipment	Serial No.	Type	Manufacturer	Cal. Date	Due Date
Signal Analyzer	MY56060145	N9020A	Agilent	2025.05.13	2026.05.12
Test Antenna - Bi-Log	9163-274	VULB 9163	Schwarzbeck	2025.06.28	2026.06.27
Test Antenna - Loop	1519-022	FMZB1519	Schwarzbeck	2025.05.16	2026.05.15
Test Antenna – Horn	01774	BBHA 9120D	Schwarzbeck	2025.06.20	2026.06.19
Test Antenna – Horn	BBHA9170#773	BBHA9170	Schwarzbeck	2025.06.20	2026.06.19
Preamplifier (10MHz-6GHz)	46732	S10M100L3802	LUCIX CORP.	2025.05.13	2026.05.12
Preamplifier (2GHz-18GHz)	61171/61172	S020180L3203	LUCIX CORP.	2025.05.13	2026.05.12
Preamplifier (18GHz-40GHz)	DS77209	DCLNA0118-40C-S	Decentest	2025.05.13	2026.05.12
RF Coaxial Cable (DC-18GHz)	MRE001	PE330	Pasternack	2025.05.13	2026.05.12
RF Coaxial Cable (DC-18GHz)	MRE002	CLU18	Pasternack	2025.05.13	2026.05.12
RF Coaxial Cable (DC-18GHz)	MRE003	CLU18	Pasternack	2025.05.13	2026.05.12
RF Coaxial Cable (DC-40GHz)	22290045	QA360-40-KK-0.5	Qualwave	2024.09.11	2025.09.10
RF Coaxial Cable (DC-40GHz)	22290046	QA360-40-KKF-2	Qualwave	2024.09.11	2025.09.10
RF Coaxial Cable (DC-18GHz)	22120181	QA500-18-NN-5	Qualwave	2024.09.11	2025.09.10
Notch Filter	N/A	WRCG-2400-2483.5-60SS	Wainwright	N/A	N/A
Anechoic Chamber	N/A	9m*6m*6m	CRT	2025.06.21	2028.06.20
Anechoic Chamber	N/A	9m*6m*6m	CRT	2022.11.30	2025.11.29

1.3. Measurement Uncertainty

Test Items	Uncertainty	Remark
Peak Output Power	±2.22dB	Confidence levels of 95%
Power Spectral Density	±2.22dB	Confidence levels of 95%
Bandwidth	±5%	Confidence levels of 95%
Conducted Spurious Emission	±2.77dB	Confidence levels of 95%
Restricted Frequency Bands	±5%	Confidence levels of 95%
Radiated Emission	±2.95dB	Confidence levels of 95%
Conducted Emission	±2.44dB	Confidence levels of 95%

1.4. Testing Laboratory

Laboratory Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Laboratory Address:	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China
Telephone:	+86 755 36698555
Facsimile:	+86 755 36698525
FCC Designation Number:	CN1192
FCC Test Firm Registration Number:	226174

2. General Description

2.1. Information of Applicant and Manufacturer

Applicant:	Realme Chongqing Mobile Telecommunications Corp., Ltd.
Applicant Address:	No.178 Yulong Avenue, Yufengshan, Yubei District, Chongqing, China
Manufacturer:	Realme Chongqing Mobile Telecommunications Corp., Ltd.
Manufacturer Address:	No.178 Yulong Avenue, Yufengshan, Yubei District, Chongqing, China

2.2. Information of EUT

Product Name:	Wireless Earphone	
Sample No.:	1#, 5#, 6#	
Hardware Version:	Charging case: V013 Earphone: V1.1.14	
Software Version:	Charging case: V1.2 Earphone: V1.1	
Equipment Type:	Bluetooth LE	
Bluetooth Version:	5.4	
Modulation Type:	GFSK	
Data Rate:	1Mbps	
Operating Frequency Range:	2402MHz-2480MHz	
Antenna Type:	FPC Antenna	
Antenna Gain:	Left: -2.15dBi; Right: -2.07dBi	
Accessory Information:	Battery (Charging case)	
	Brand Name:	N/A
	Model No.:	801830PF8
	Serial No.:	N/A
	Capacity:	530mAh
	Rated Voltage:	3.89V
	Charge Limit:	4.48V
	Manufacturer:	Chongqing VDL Electronics Co., Ltd.
	Battery (Earphone)	
	Brand Name:	N/A
	Model No.:	M1045S1

	Serial No.:	N/A
	Capacity:	40mAh
	Rated Voltage:	3.85V
	Charge Limit:	4.40V
	Manufacturer:	Guangdong Mic-power New Energy Co., Ltd.

Note 1: The EUT description presented in the report are provided by applicant and/or manufacturer, and the test laboratory is not responsible for the accuracy of the information. For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.

2.3. Channel List of EUT

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (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**

Note 1: The black bold channels were selected for test.

2.4. Test Configuration of EUT

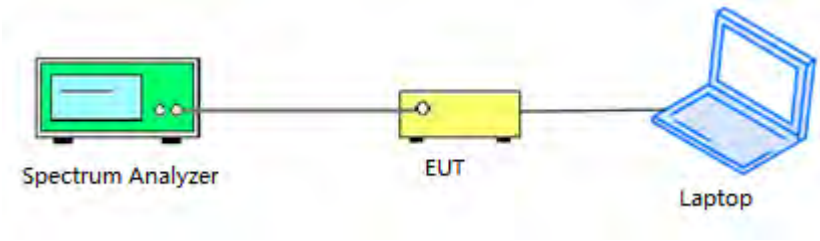
Test mode is used to control the EUT under the maximum power level during test.

2.5. Test Conditions

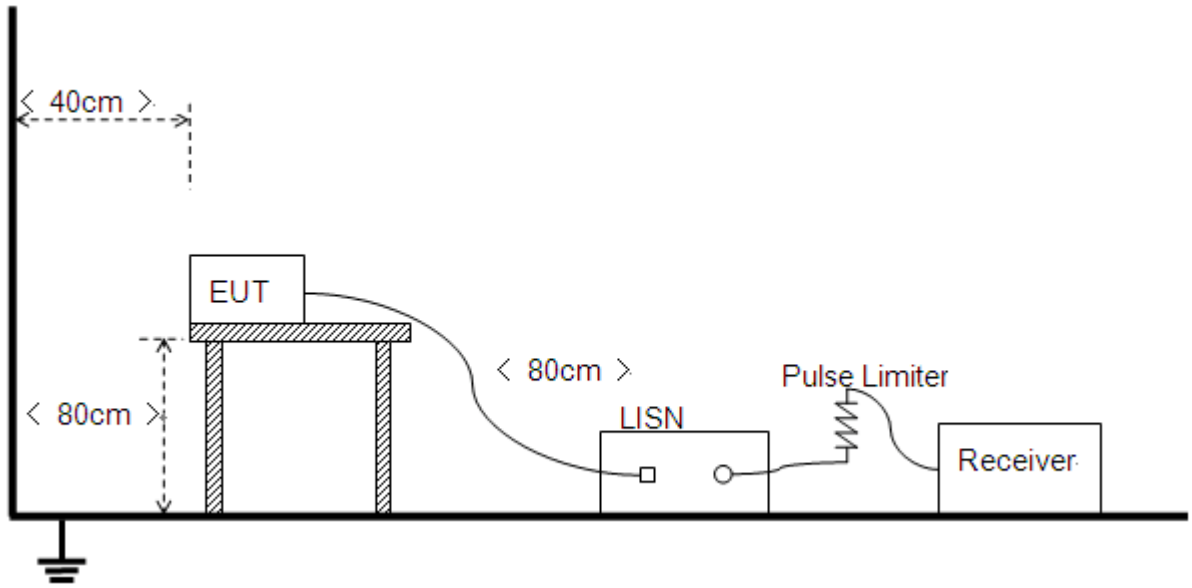
Temperature (°C):	15-35
Relative Humidity (%):	30-60
Atmospheric Pressure (kPa):	86-106

2.6. Test Setup Layout Diagram

2.6.1.Conducted Measurement

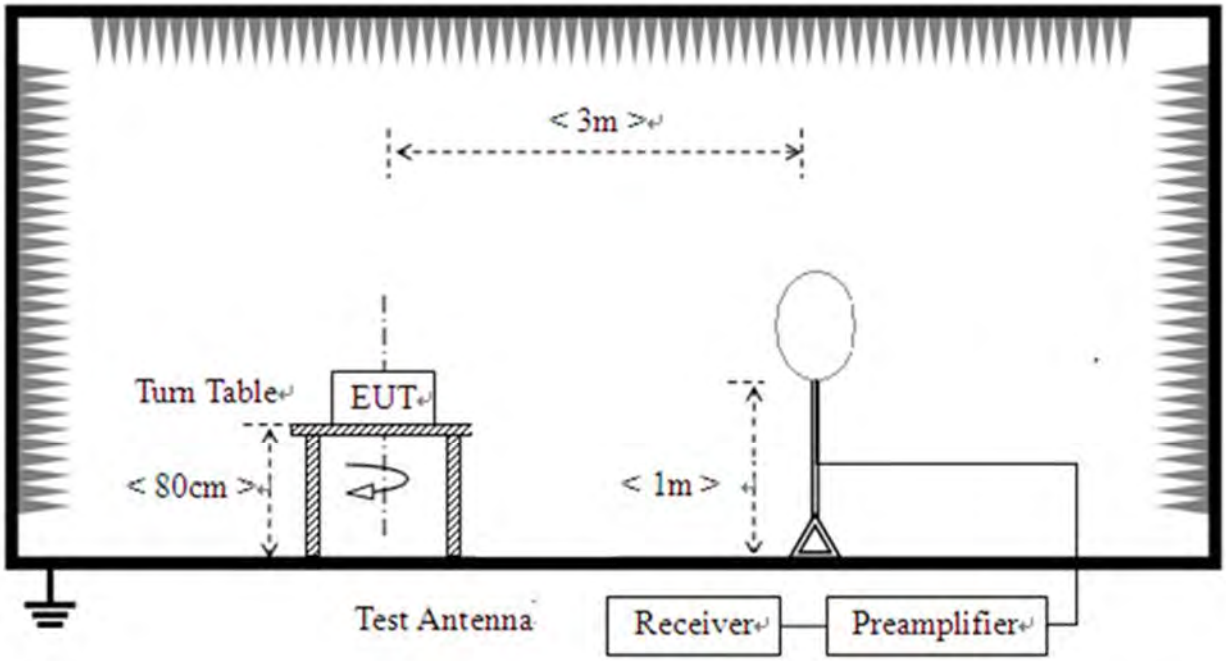


2.6.2.Conducted Emission Measurement

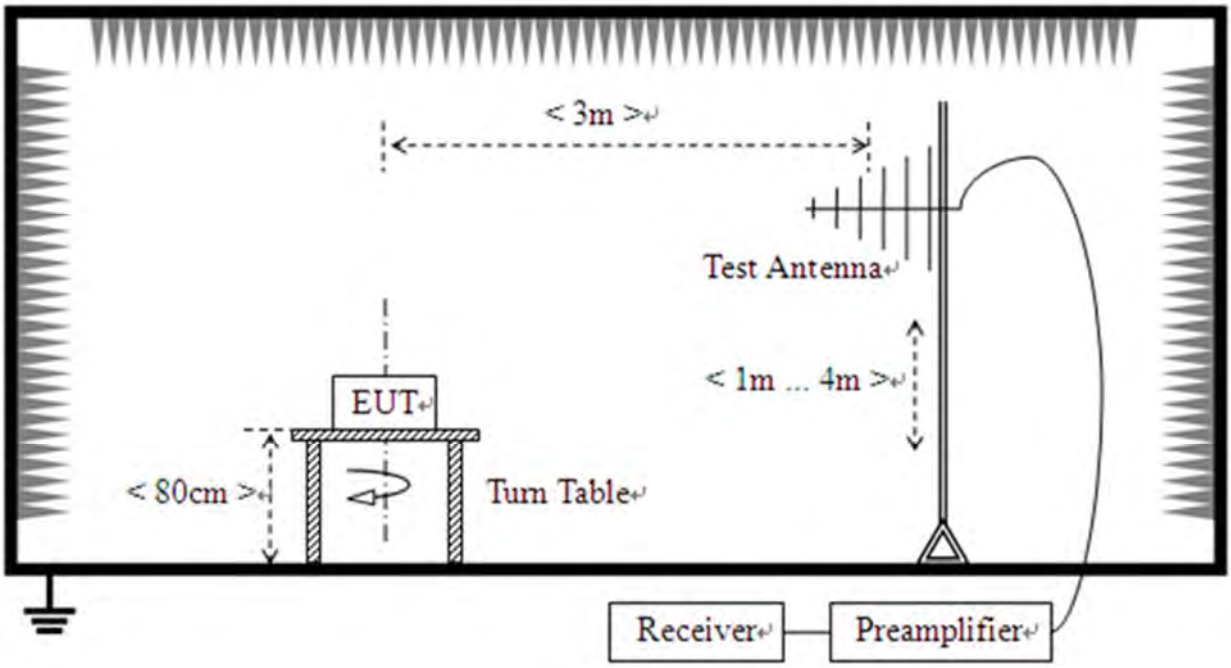


2.6.3.Radiation Measurement

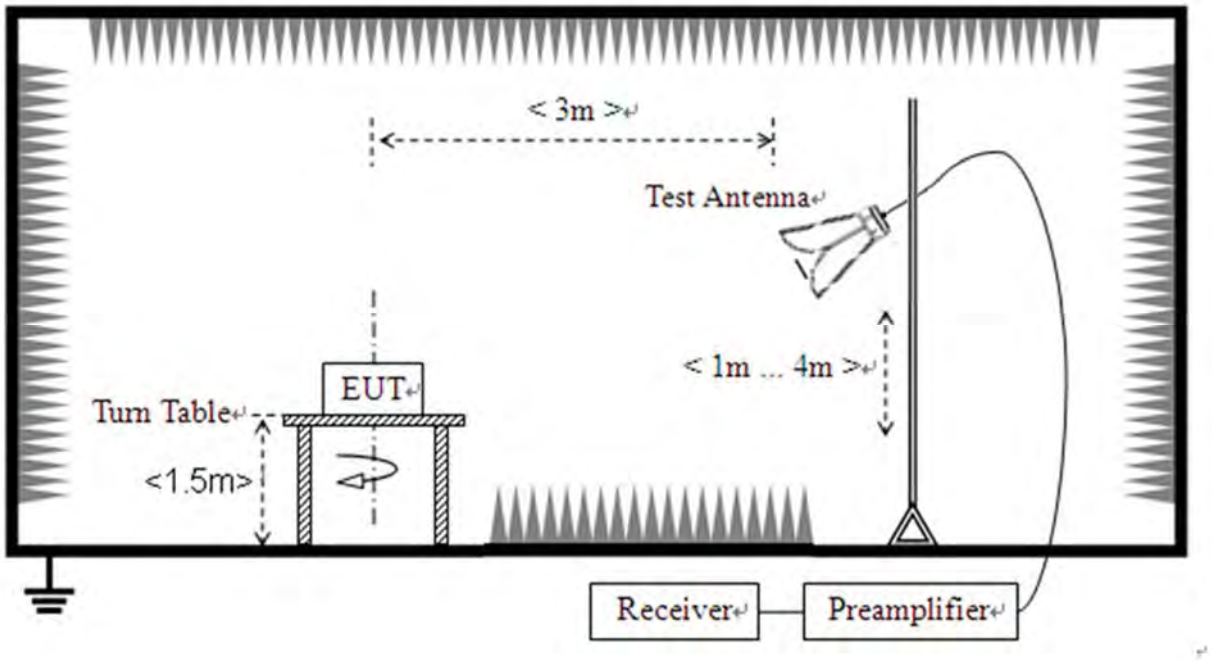
1) For radiated emissions from 9kHz to 30MHz



2) For radiated emissions from 30MHz to1GHz



3) For radiated emissions above 1GHz



3. Test Results

3.1. Antenna Requirement

3.1.1.Requirement

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.

3.1.2.Test Result

Antenna location	Antenna Type	Coupling Method
☒Internal ☐External	☒FPC Antenna ☐Spring Antenna ☐Ceramic Antenna ☐Integrated Antenna ☐Dipole Antenna ☐PCB Antenna ☐PIFA Antenna ☐On-board Antenna	☐I-PEX Connector ☐SMA Connector ☐RP-SMA Connector ☒Metal Shrapnel ☐Layout

3.2. Duty Cycle of Test Signal

3.2.1.Requirement

Preferably, all measurements of maximum conducted (average) output power will be performed with the EUT transmitting continuously (i.e., with a duty cycle of greater than or equal to 98%).When continuous operation cannot be realized, then the use of sweep triggering/signal gating techniques can be used to ensure that measurements are made only during transmissions at the maximum power control level. Such sweep triggering/signal gating techniques will require knowledge of the minimum transmission duration(T) over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation. Sweep triggering/signal gating techniques can then be used if the measurement/sweep time of the analyzer can be set such that it does not exceed T at any time that data are being acquired (i.e.,no transmitter OFF-time is to be considered).
When continuous transmission cannot be achieved and sweep triggering/signal gating cannot be implemented, alternative procedures are provided that can be used to measure the average power; however, they will require an additional measurement of the transmitter duty cycle (D). Within this sub clause, the duty cycle refers to the fraction of time over which the transmitter is ON and is transmitting at its maximum power control level. The duty cycle is considered to be constant if variations are less than ±2%; otherwise, the duty cycle is considered to be non constant.

3.2.2.Test Result

Refer to Annex A.1 in this report.

3.3. Maximum Peak Conducted Output Power

3.3.1.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.

3.3.2.Test Procedures

KDB 558074 Section 8.3.1 was used in order to prove compliance.

3.3.3.Test Setup Layout

Refer to chapter 2.6.1 in this report.

3.3.4.Test Result

Refer to Annex A.2 in this report.

3.4. Maximum Average Conducted Output Power

3.4.1.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 average conducted output power of the intentional radiator shall not exceed 1 Watt.

3.4.2.Test Procedures

KDB 558074 Section 8.3.2 was used in order to prove compliance.

3.4.3.Test Setup Layout

Refer to chapter 2.6.1 in this report.

3.4.4.Test Result

Refer to Annex A.3 in this report.

3.5.6 dB Bandwidth

3.5.1.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 6dB bandwidth shall be at least 500 kHz.

3.5.1.Test Procedures

The steps for the first option are as follows:
a) Set analyzer center frequency to channel center frequency
b) Set RBW to100kHz
c) Set VBW to 300kHz
d) Detector = peak.
e) Trace mode = max hold
f) Sweep time = auto couple
g) Allow the trace to fully stabilize
h) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by6 dB relative to the maximum level measured in the fundamental emission
The automatic bandwidth measurement capability of an instrument may be employed using the X dB bandwidth mode with X set to 6 dB, if the functionality described in 11.8.1 (i.e., RBW = 100 kHz, VBW ≥ 3 ×RBW, and peak detector with maximum hold) is implemented by the instrumentation function. When using this capability, care shall be taken so that the bandwidth measurement is not influenced by any intermediate power nulls in the fundamental emission that might be ≥6 dB.

3.5.2.Test Setup Layout

Refer to chapter 2.6.1 in this report.

3.5.3.Test Result

Refer to Annex A.4 in this report.

3.6. Conducted Spurious Emissions and Band Edge

3.6.1.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, based on either an RF conducted or a radiated measurement.

3.6.2.Test Procedures

KDB 558074 Section 8.5 and 8.7 was used in order to prove compliance.

3.6.3.Test Setup Layout

Refer to chapter 2.6.1 in this report.

3.6.4.Test Result

Refer to Annex A.5 and A.6 in this report.

3.7. Power Spectral Density

3.7.1.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.

3.7.2.Test Procedures

The measured power spectral density was calculated by the reading of the spectrum analyzer and calibration. Following is the test procedure for PSD test:
a) Set analyzer center frequency to channel center frequency
b) Set span to1.5 times DTS
c) Set RBW to 3kHz
d) Set VBW to 10kHz
e) Detector = peak
f) Sweep time = auto couple
g) Trace mode = max hold
h) Allow trace to fully stabilize
i) Use the peak marker function to determine the maximum amplitude level within the RBW

3.7.3.Test Setup Layout

Refer to chapter 2.6.1 in this report.

3.7.4.Test Result

Refer to Annex A.7 in this report.

3.8. Conducted Emission

3.8.1.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 50μH/50Ω line impedance stabilization network (LISN).

Frequency Range (MHz)	Conducted Limit (dBμV)	
	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.

3.8.2.Test Procedures

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.

3.8.3.Test Setup Layout

Refer to chapter 2.6.2 in this report.

3.8.4.Test Result

Refer to Annex A.8 in this report.

3.9. Restricted Frequency Bands

3.9.1.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).

3.9.2.Test Procedures

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.
Span = wide enough to fully capture the emission being measured
RBW = 1 MHz for f ≥ 1GHz, 100 kHz for f < 1GHz
VBW = 3 MHz
Sweep = auto
Detector function = peak/average
Trace = max hold
Allow the trace to stabilize

3.9.3.Test Setup Layout

Refer to chapter 2.6.3 in this report.

3.9.4.Test Result

Refer to Annex A.8 in this report.

3.10. Radiated Emission

3.10.1.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 (μV/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

Note1: 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.
Note2: 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).

3.10.2.Test Procedures

The EUT is placed on a non-conducting table 80 cm above the ground plane for measurement below 1GHz; 1.5 m above the ground plane for measurement above 1GHz.The antenna to EUT distance is 3meters. The EUT is configured in accordance with ANSI C63.10. The EUT is set to transmit in a continuous mode.

For measurements below 30MHz, the emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9kHz-90 kHz, 110kHz-490 kHz. Radiated emission limits in these two bands are based on measurements employing an average detector.

For measurements below 1GHz the resolution bandwidth is set to 100kHz for peak detection measurements or 120kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1GHz the resolution bandwidth is set to 1MHz, the video band width is set to 3MHz for peak measurements and as applicable for average measurements.

The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions. For measurements above 1 GHz, keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response.

3.10.3.Test Setup Layout

Refer to chapter 2.6.3 in this report.

3.10.4.Test Result

Refer to Annex A.9 in this report.

Annex A Test Data and Result

A.1. Duty Cycle of Test Signal

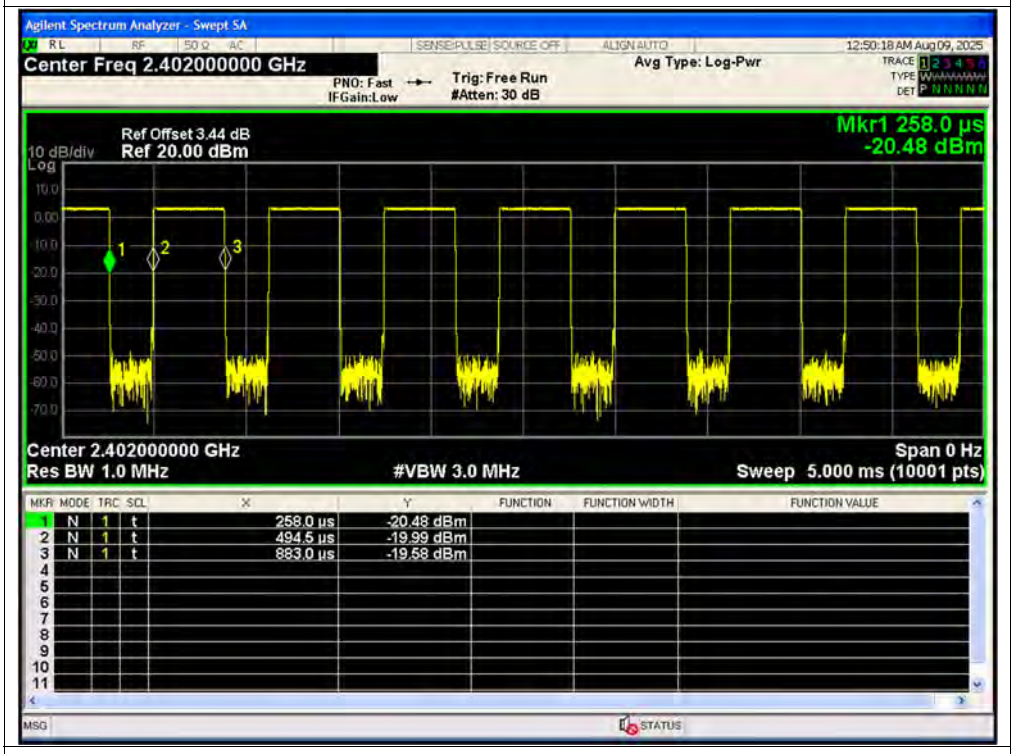
Left:

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	BLE 1M	2402	Ant1	62.16	2.06	2.57
NVNT	BLE 1M	2440	Ant1	62.24	2.06	2.57
NVNT	BLE 1M	2480	Ant1	62.24	2.06	2.57

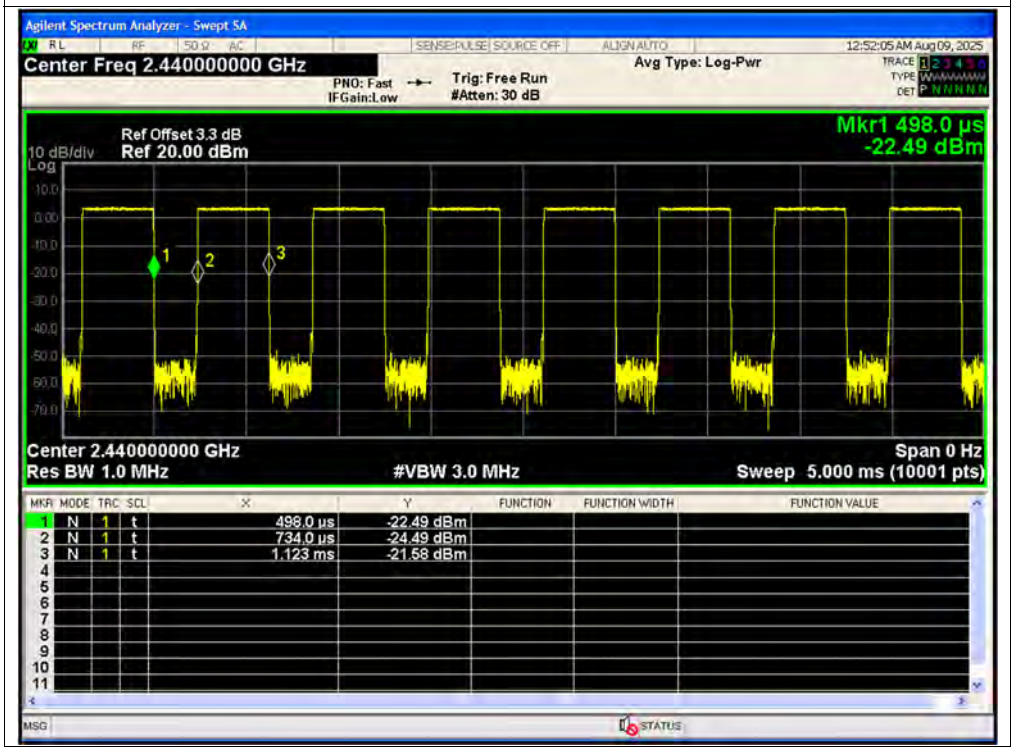
Right:

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	BLE 1M	2402	Ant1	62.24	2.06	2.57
NVNT	BLE 1M	2440	Ant1	62.24	2.06	2.57
NVNT	BLE 1M	2480	Ant1	62.24	2.06	2.57

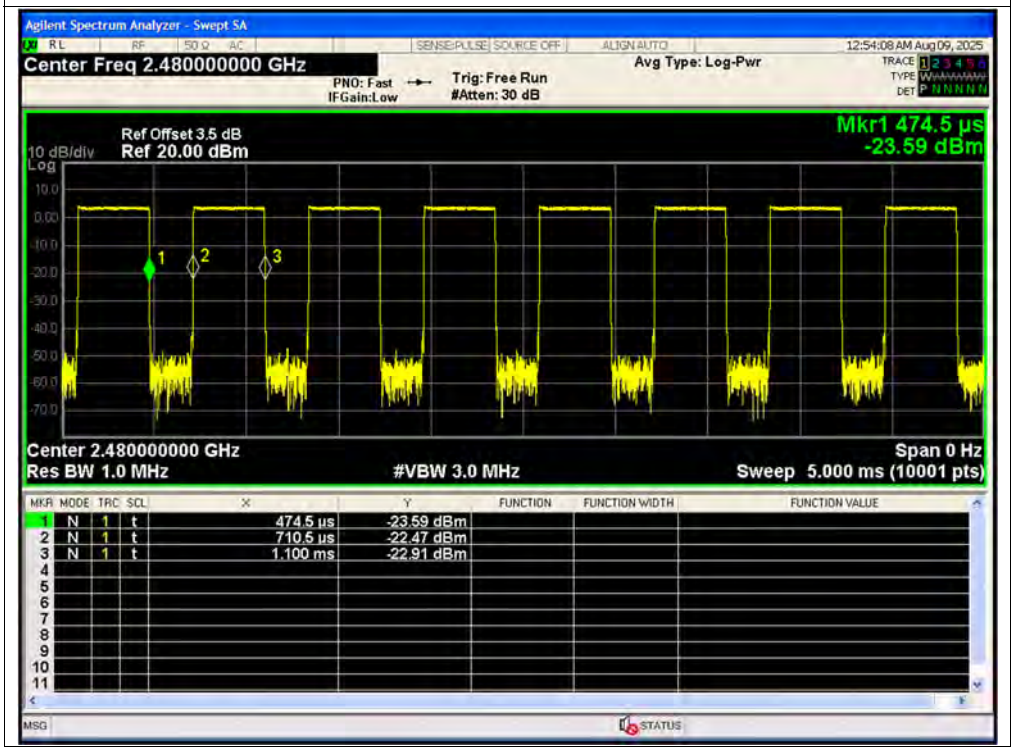
Left
Test Graphs
Duty Cycle NVNT BLE 1M 2402MHz Ant1



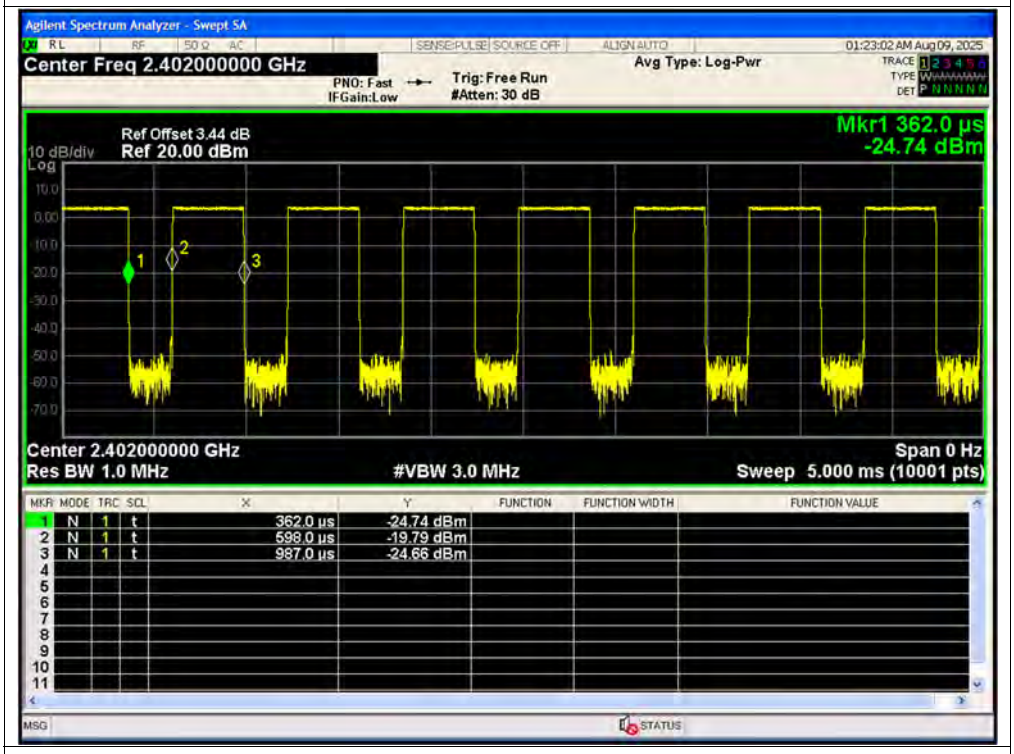
Duty Cycle NVNT BLE 1M 2440MHz Ant1



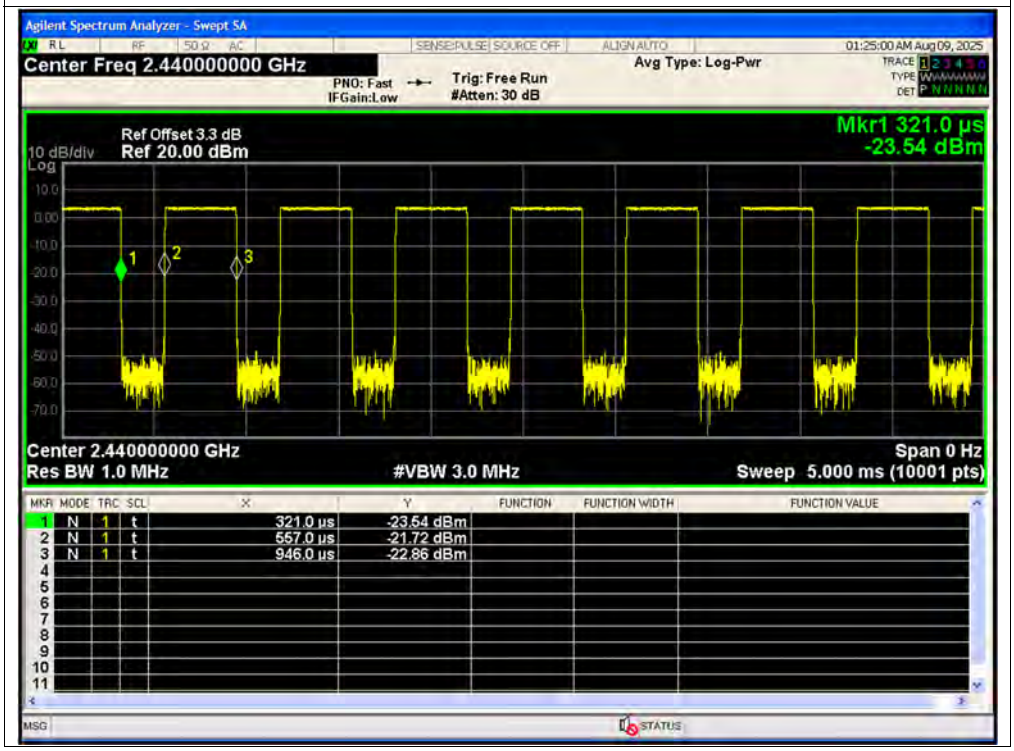
Duty Cycle NVNT BLE 1M 2480MHz Ant1



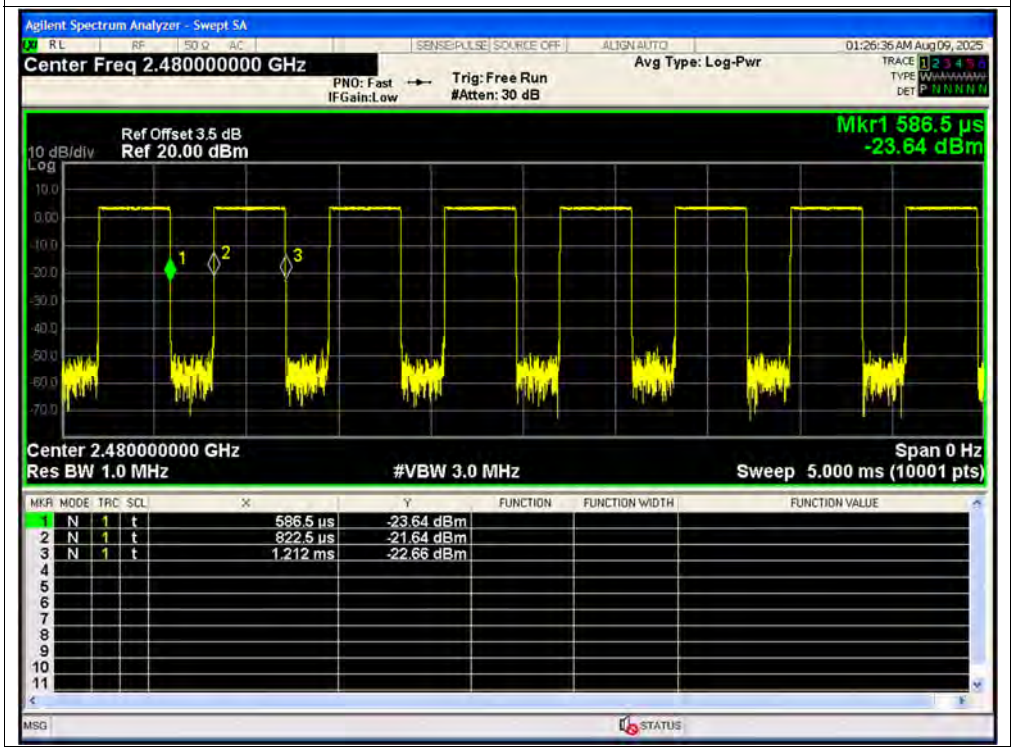
Right
Test Graphs
Duty Cycle NVNT BLE 1M 2402MHz Ant1



Duty Cycle NVNT BLE 1M 2440MHz Ant1



Duty Cycle NVNT BLE 1M 2480MHz Ant1



A.2. Maximum Peak Conducted Output Power

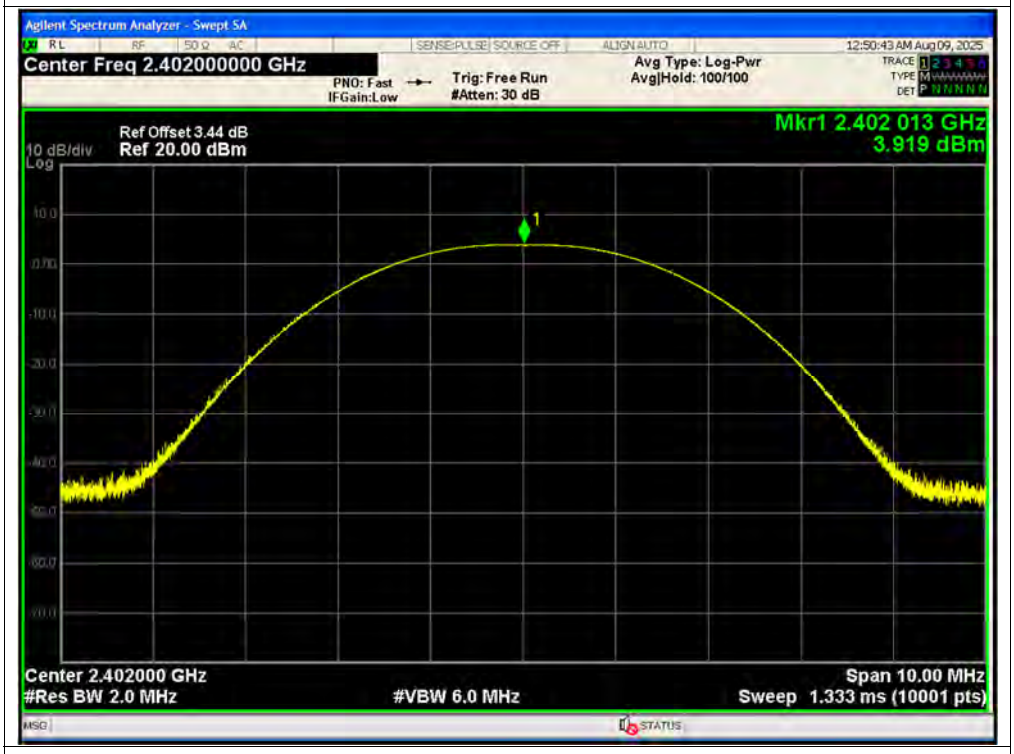
Left:

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Conducted Power (dBm)	Total Conducted Power (W)	Limit Conducted (dBm)	Verdict
NVNT	BLE 1M	2402	Ant1	3.92	0	3.92	0.00247	30	Pass
NVNT	BLE 1M	2440	Ant1	3.98	0	3.98	0.0025	30	Pass
NVNT	BLE 1M	2480	Ant1	4.19	0	4.19	0.00262	30	Pass

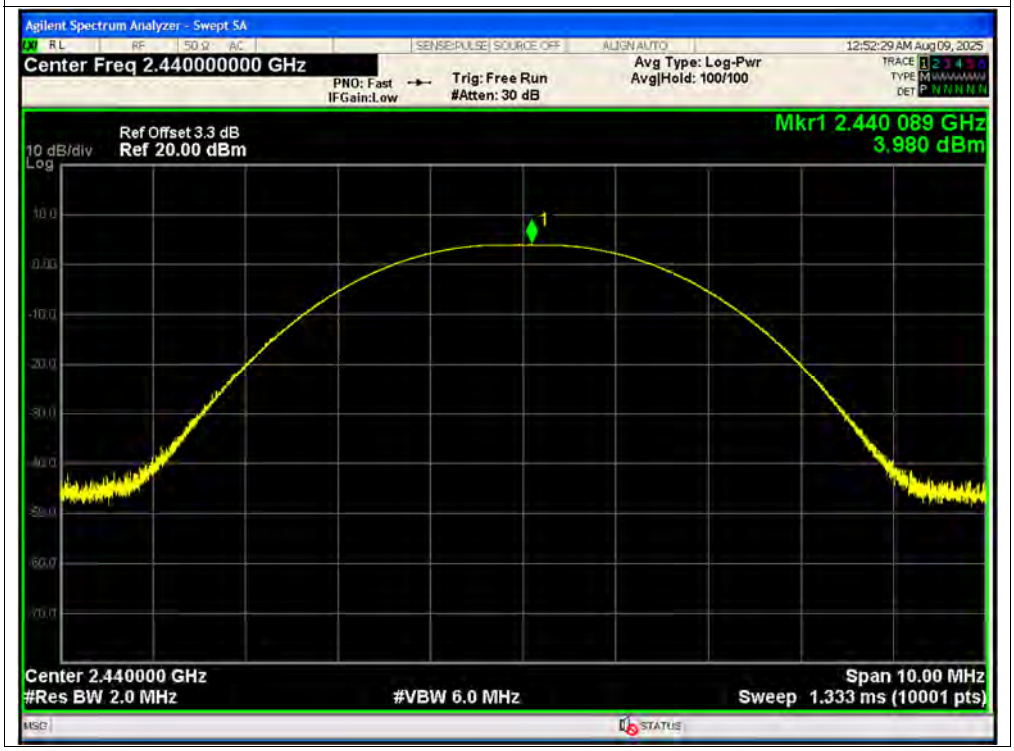
Right:

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Conducted Power (dBm)	Total Conducted Power (W)	Limit Conducted (dBm)	Verdict
NVNT	BLE 1M	2402	Ant1	4.19	0	4.19	0.00262	30	Pass
NVNT	BLE 1M	2440	Ant1	4.11	0	4.11	0.00258	30	Pass
NVNT	BLE 1M	2480	Ant1	4.24	0	4.24	0.00265	30	Pass

Left
Test Graphs
Peak Power NVNT BLE 1M 2402MHz Ant1

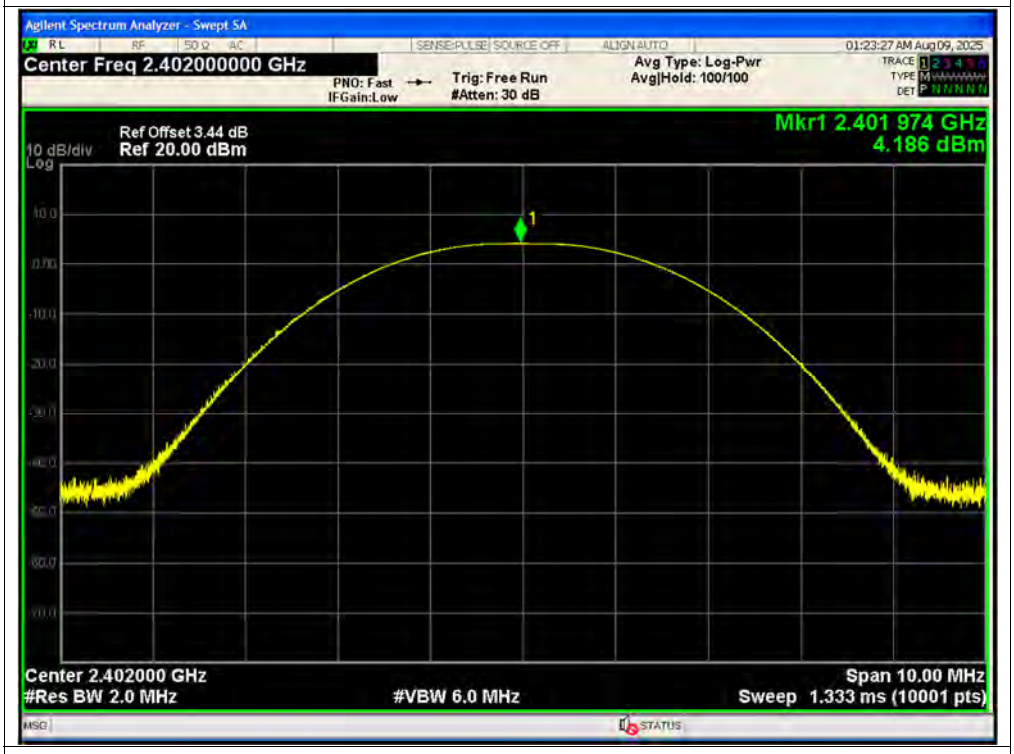


Peak Power NVNT BLE 1M 2440MHz Ant1

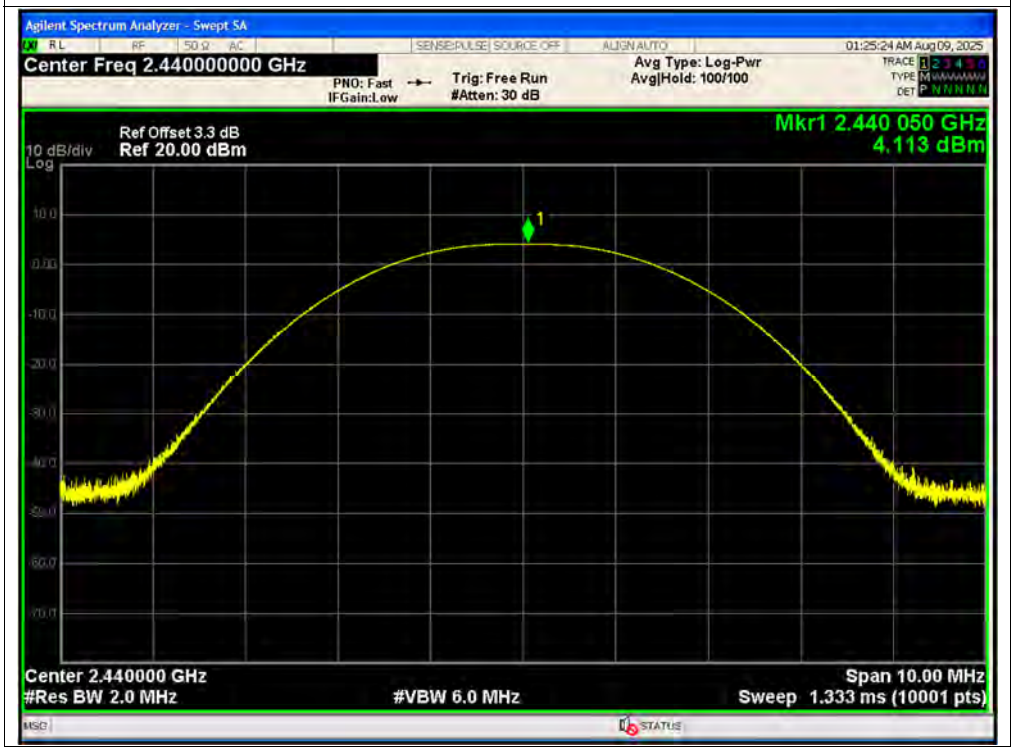


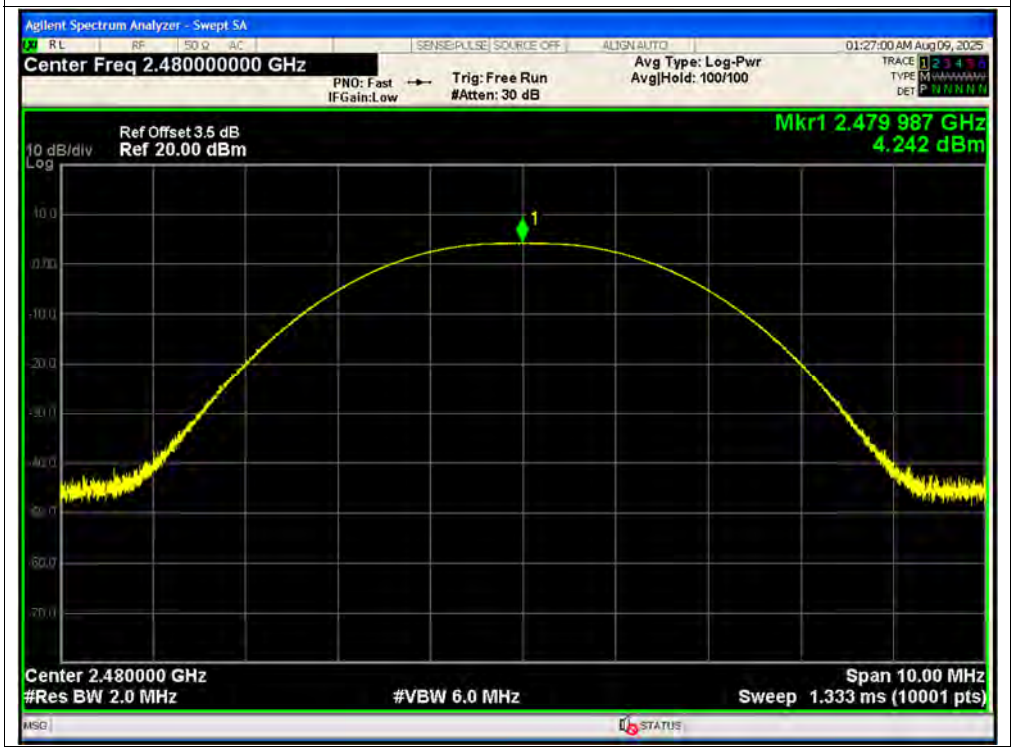
Peak Power NVNT BLE 1M 2480MHz Ant1


Right
Test Graphs
Peak Power NVNT BLE 1M 2402MHz Ant1



Peak Power NVNT BLE 1M 2440MHz Ant1



Peak Power NVNT BLE 1M 2480MHz Ant1


A.3. Maximum Average Conducted Output Power

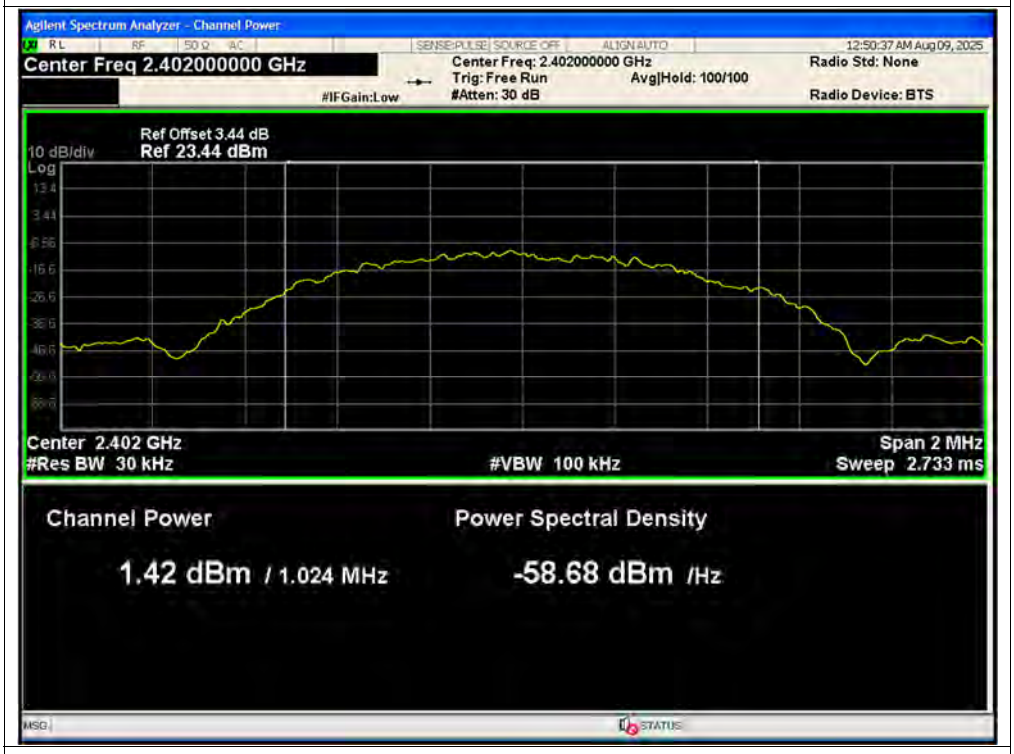
Left:

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Conducted Power (dBm)	Total Conducted Power (W)	Limit Conducted (dBm)	Verdict
NVNT	BLE 1M	2402	Ant1	1.42	2.06	3.48	0.00223	30	Pass
NVNT	BLE 1M	2440	Ant1	1.61	2.06	3.67	0.00233	30	Pass
NVNT	BLE 1M	2480	Ant1	1.48	2.06	3.54	0.00226	30	Pass

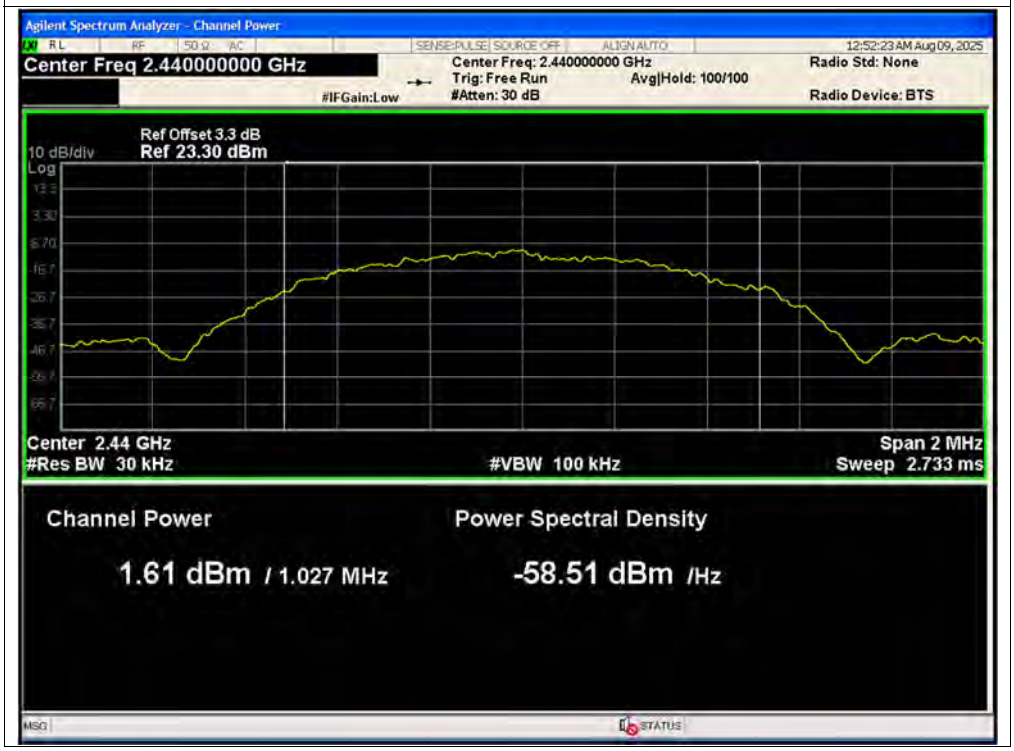
Right:

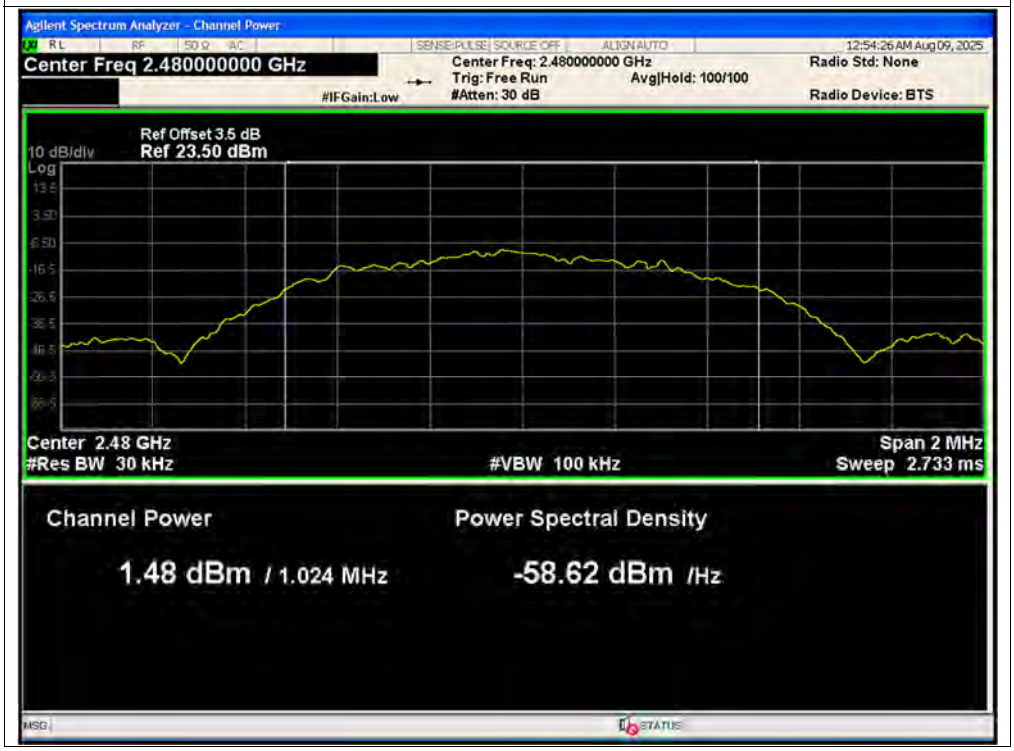
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Conducted Power (dBm)	Total Conducted Power (W)	Limit Conducted (dBm)	Verdict
NVNT	BLE 1M	2402	Ant1	1.73	2.06	3.79	0.00239	30	Pass
NVNT	BLE 1M	2440	Ant1	1.89	2.06	3.95	0.00248	30	Pass
NVNT	BLE 1M	2480	Ant1	1.71	2.06	3.77	0.00238	30	Pass

Left
Test Graphs
Average Power NVNT BLE 1M 2402MHz Ant1

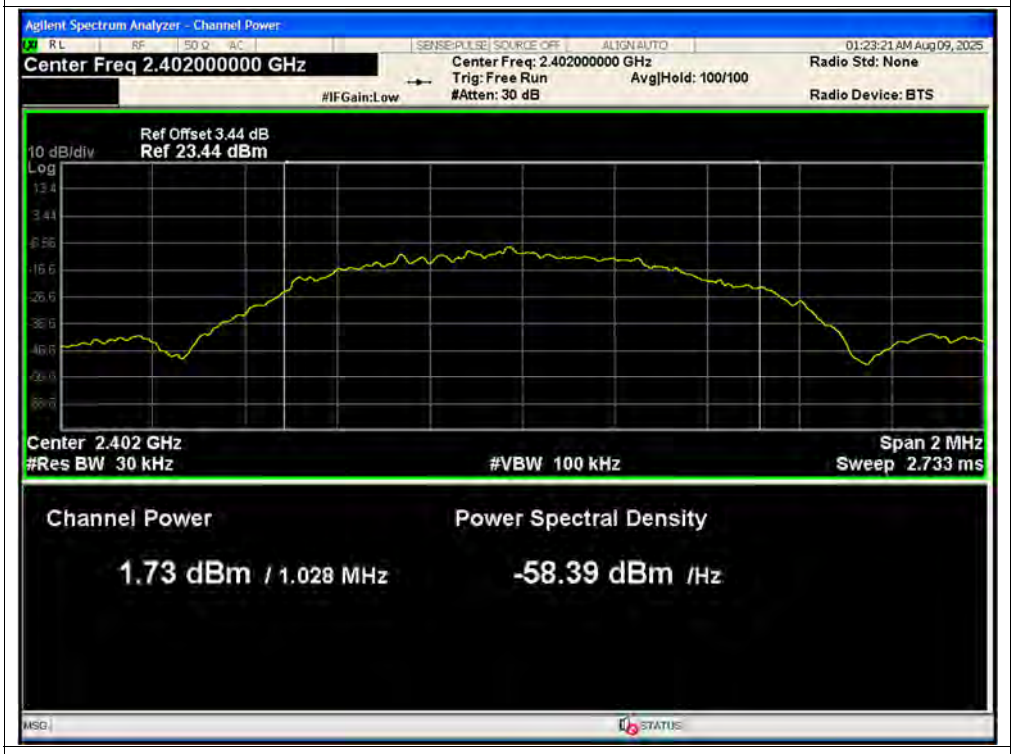


Average Power NVNT BLE 1M 2440MHz Ant1

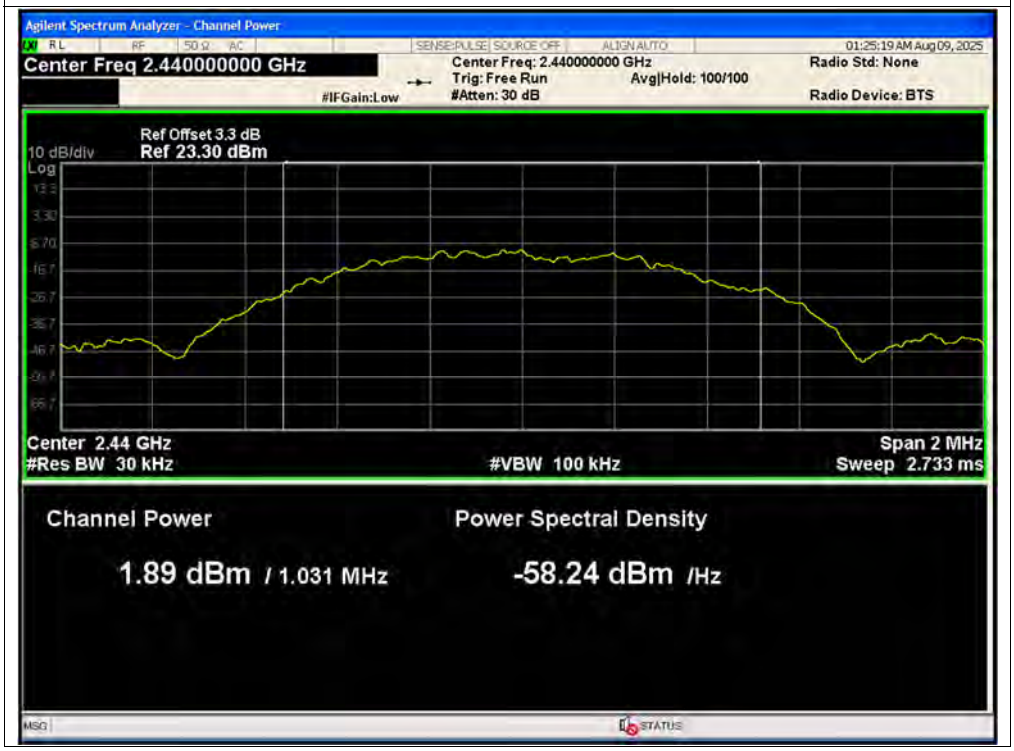


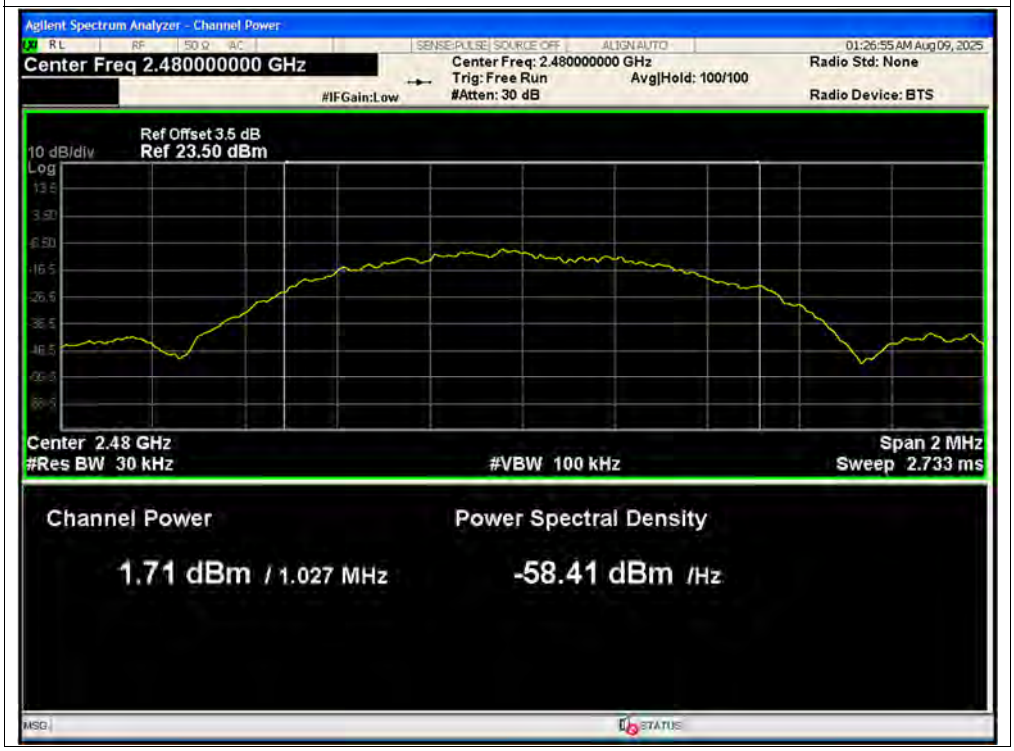
Average Power NVNT BLE 1M 2480MHz Ant1


Right
Test Graphs
Average Power NVNT BLE 1M 2402MHz Ant1



Average Power NVNT BLE 1M 2440MHz Ant1



Average Power NVNT BLE 1M 2480MHz Ant1


A.4. 6 dB Bandwidth

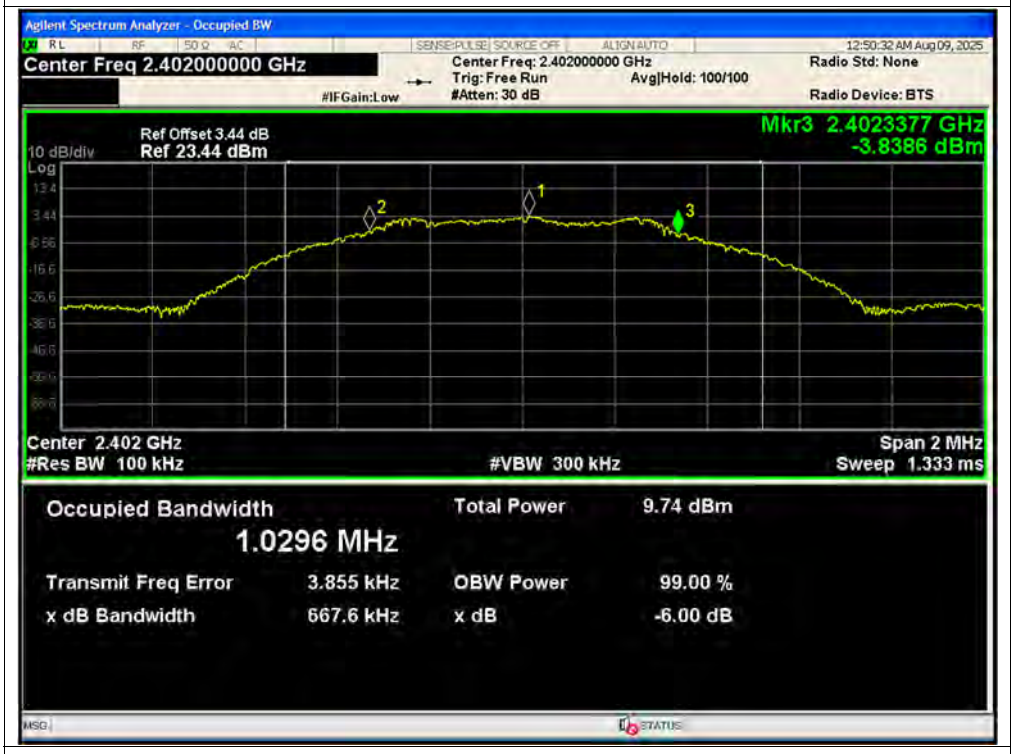
Left:

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	BLE 1M	2402	Ant1	0.6676	0.5	Pass
NVNT	BLE 1M	2440	Ant1	0.6759	0.5	Pass
NVNT	BLE 1M	2480	Ant1	0.6534	0.5	Pass

Right:

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	BLE 1M	2402	Ant1	0.6729	0.5	Pass
NVNT	BLE 1M	2440	Ant1	0.6866	0.5	Pass
NVNT	BLE 1M	2480	Ant1	0.6598	0.5	Pass

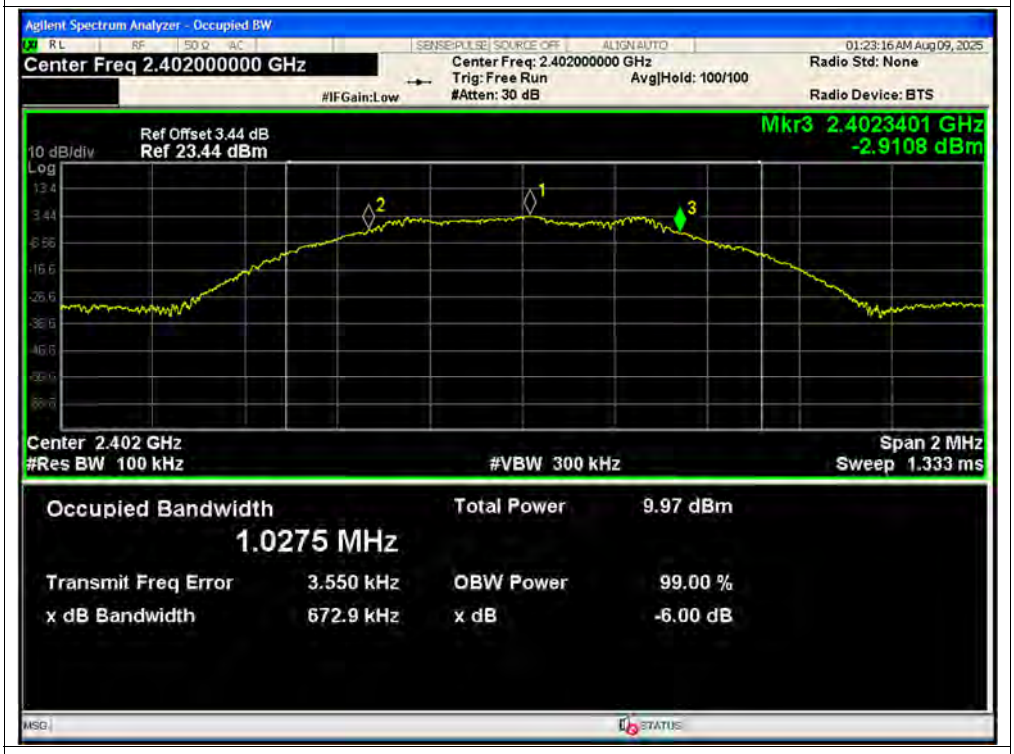
Left
Test Graphs
-6dB Bandwidth NVNT BLE 1M 2402MHz Ant1



-6dB Bandwidth NVNT BLE 1M 2440MHz Ant1

-6dB Bandwidth NVNT BLE 1M 2480MHz Ant1


Right
Test Graphs
-6dB Bandwidth NVNT BLE 1M 2402MHz Ant1



-6dB Bandwidth NVNT BLE 1M 2440MHz Ant1

-6dB Bandwidth NVNT BLE 1M 2480MHz Ant1


A.5. Conducted Spurious Emissions

Left:

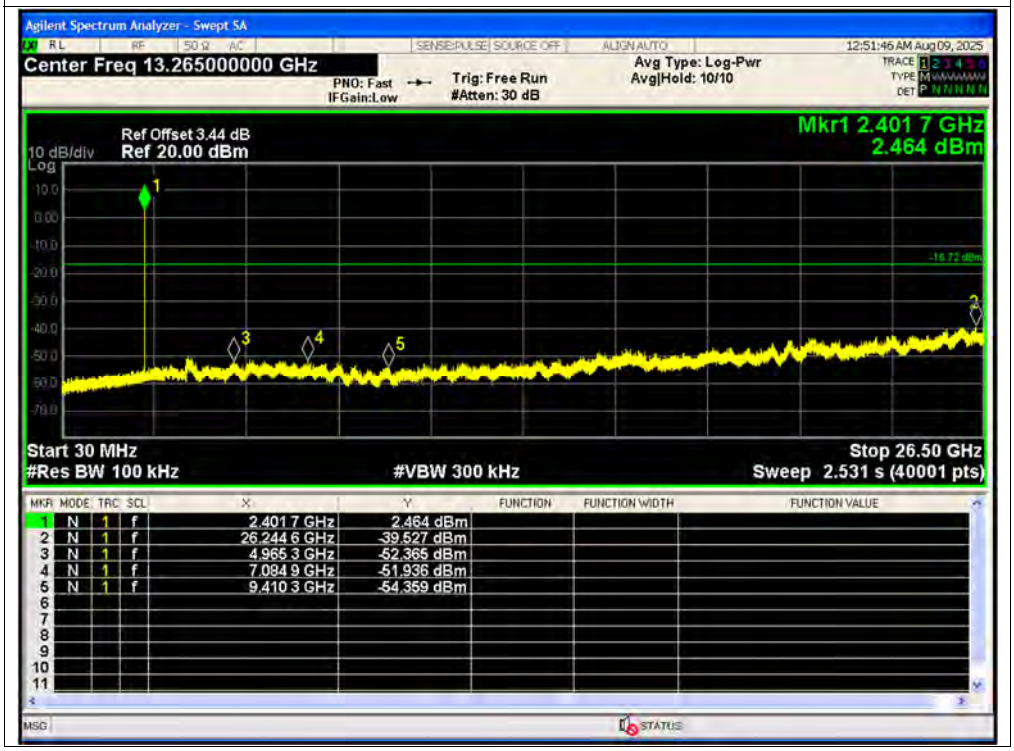
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	Ant1	-42.8	-20	Pass
NVNT	BLE 1M	2440	Ant1	-42.1	-20	Pass
NVNT	BLE 1M	2480	Ant1	-42.66	-20	Pass

Right:

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	Ant1	-41.92	-20	Pass
NVNT	BLE 1M	2440	Ant1	-42.3	-20	Pass
NVNT	BLE 1M	2480	Ant1	-42.19	-20	Pass

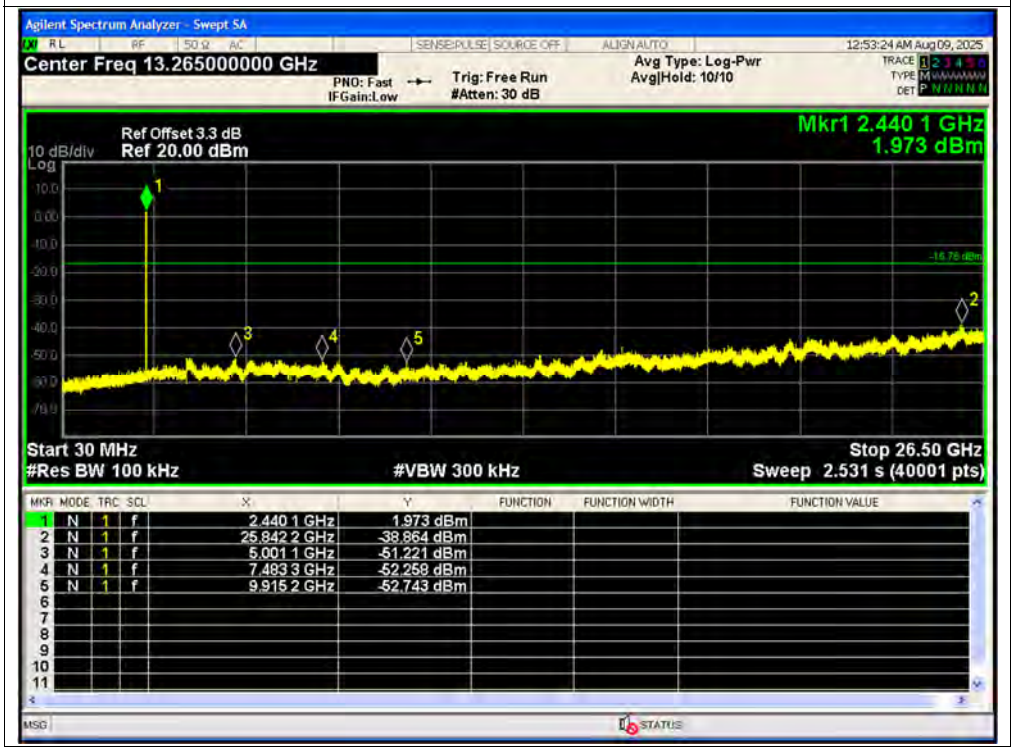
Left
Test Graphs
Tx. Spurious NVNT BLE 1M 2402MHz Ant1 Ref

Tx. Spurious NVNT BLE 1M 2402MHz Ant1 Emission



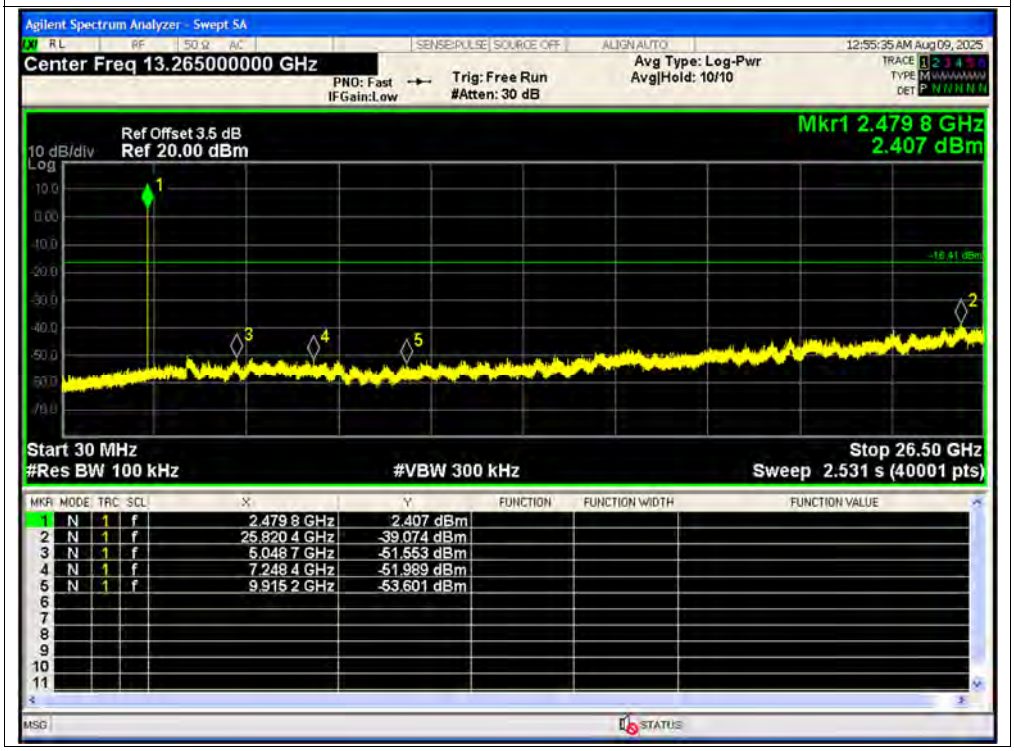
Tx. Spurious NVNT BLE 1M 2440MHz Ant1 Ref

Tx. Spurious NVNT BLE 1M 2440MHz Ant1 Emission



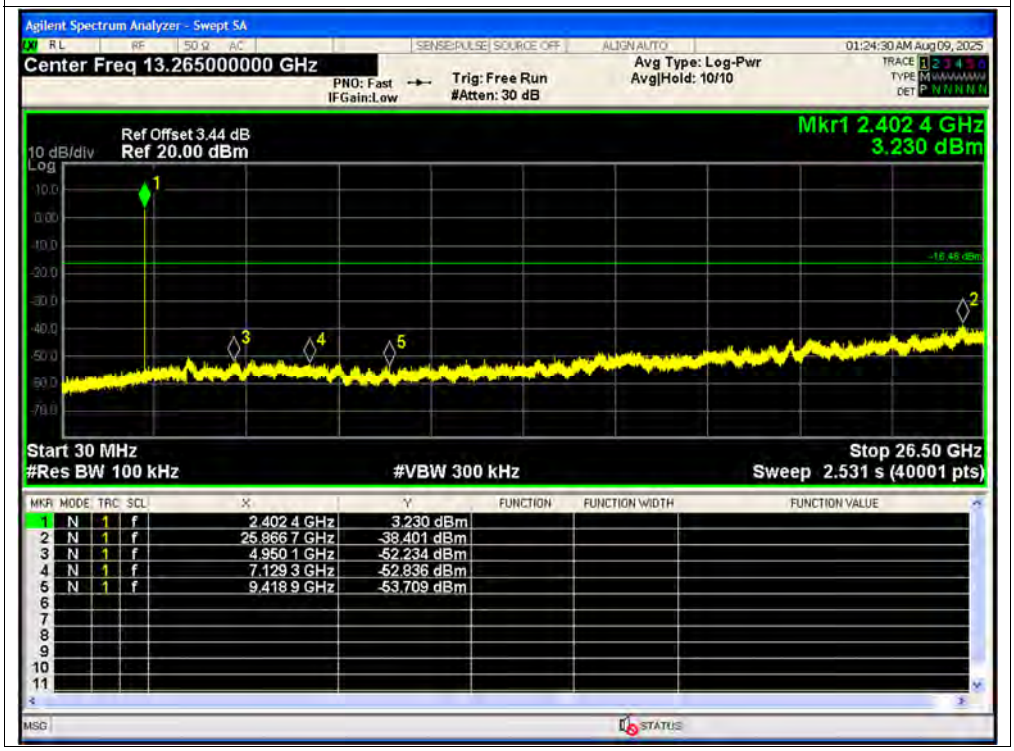
Tx. Spurious NVNT BLE 1M 2480MHz Ant1 Ref

Tx. Spurious NVNT BLE 1M 2480MHz Ant1 Emission



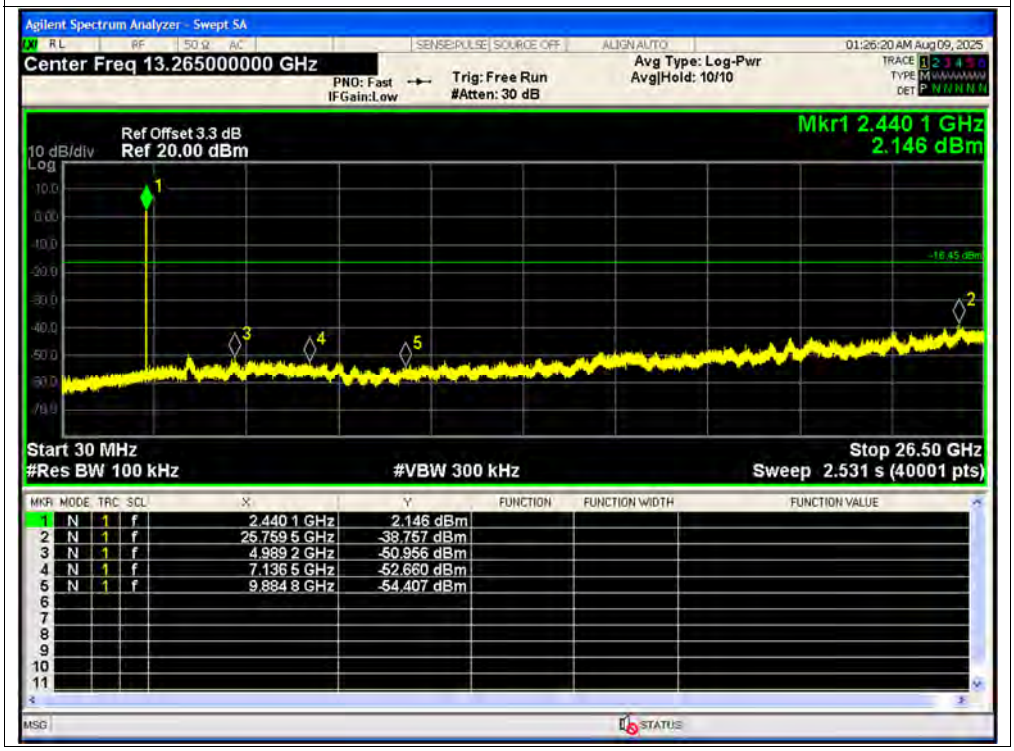
Right
Test Graphs
Tx. Spurious NVNT BLE 1M 2402MHz Ant1 Ref

Tx. Spurious NVNT BLE 1M 2402MHz Ant1 Emission



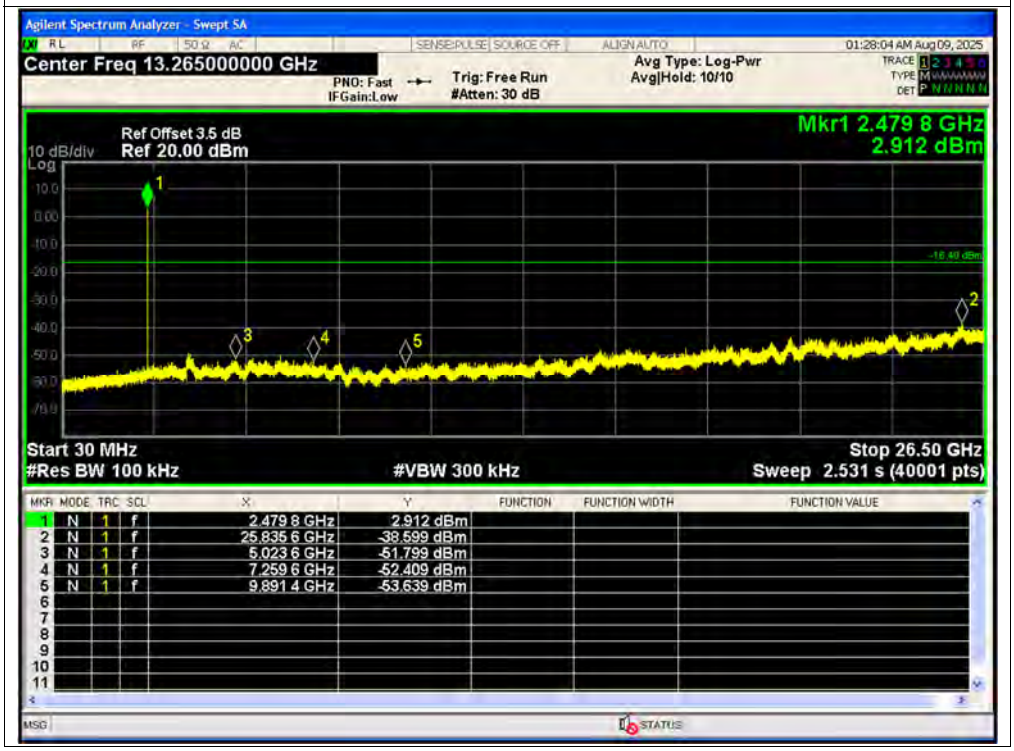
Tx. Spurious NVNT BLE 1M 2440MHz Ant1 Ref

Tx. Spurious NVNT BLE 1M 2440MHz Ant1 Emission



Tx. Spurious NVNT BLE 1M 2480MHz Ant1 Ref

Tx. Spurious NVNT BLE 1M 2480MHz Ant1 Emission



A.6. Band Edge

Left:

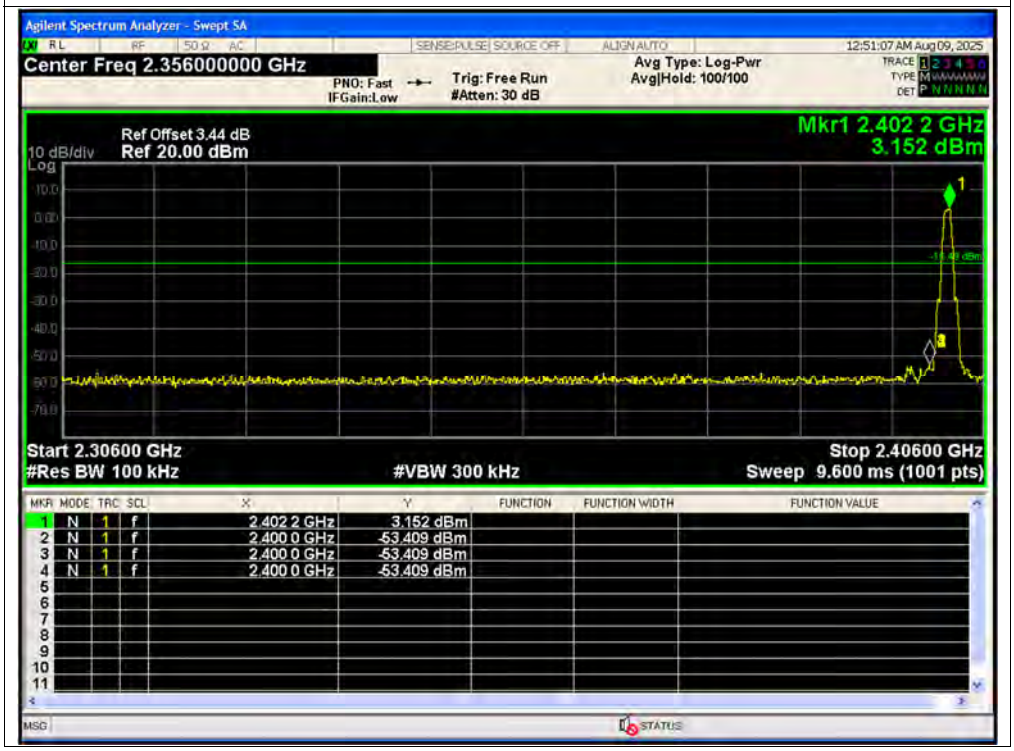
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	Ant1	-56.91	-20	Pass
NVNT	BLE 1M	2480	Ant1	-58.26	-20	Pass

Right:

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	Ant1	-55.71	-20	Pass
NVNT	BLE 1M	2480	Ant1	-58.03	-20	Pass

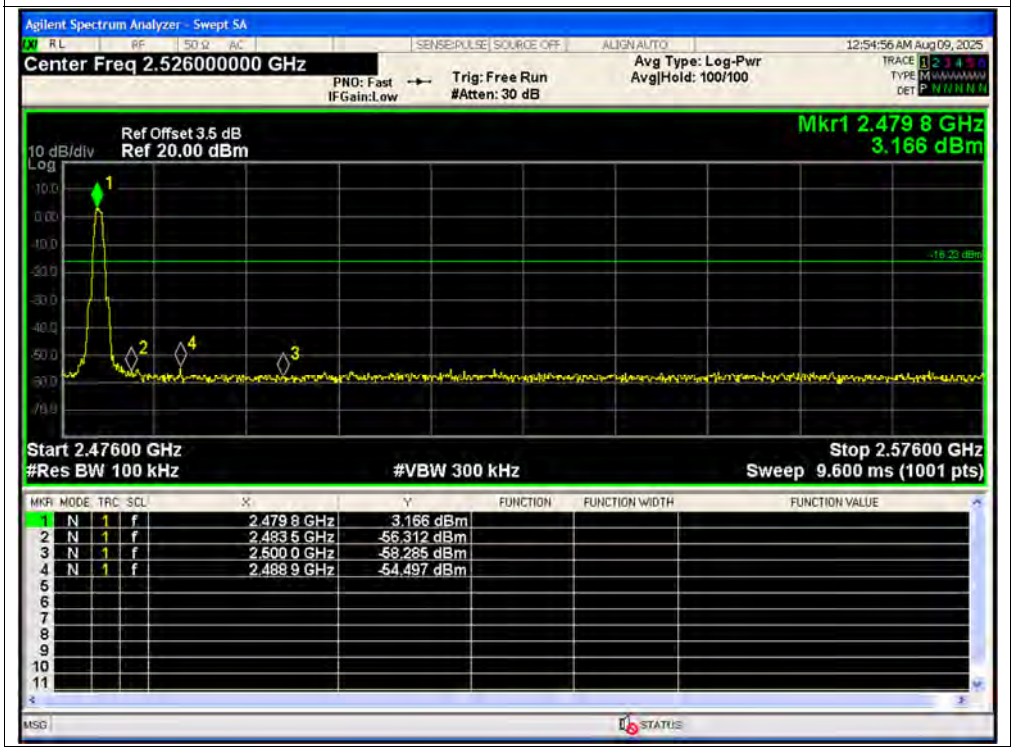
Left
Test Graphs
Band Edge NVNT BLE 1M 2402MHz Ant1 Ref

Band Edge NVNT BLE 1M 2402MHz Ant1 Emission



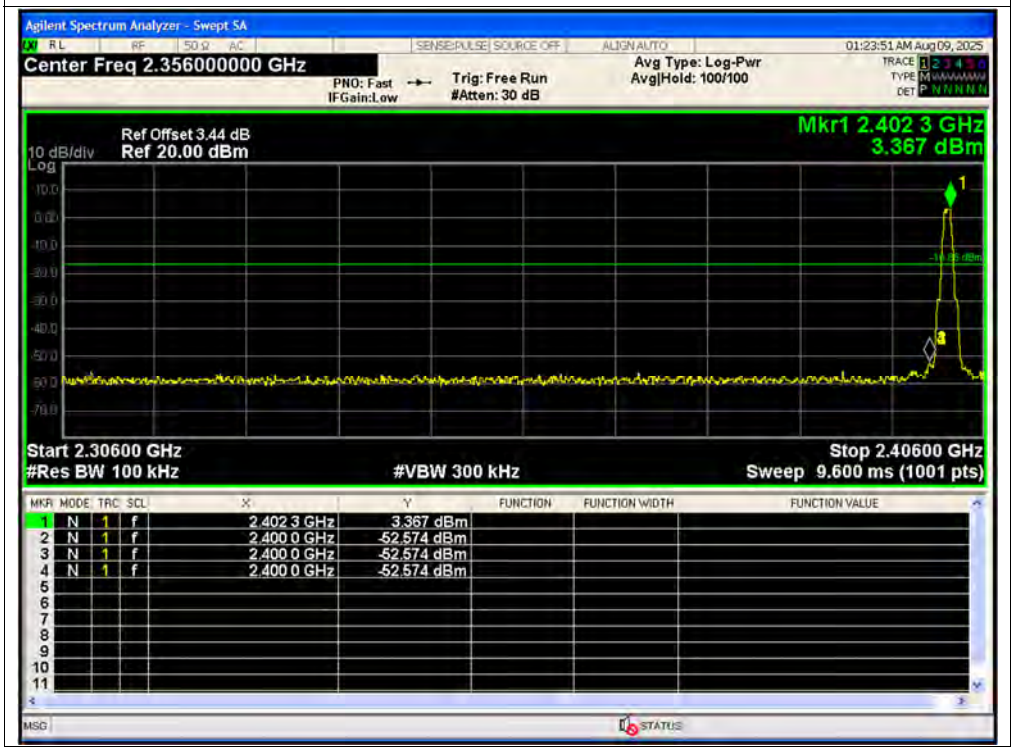
Band Edge NVNT BLE 1M 2480MHz Ant1 Ref

Band Edge NVNT BLE 1M 2480MHz Ant1 Emission



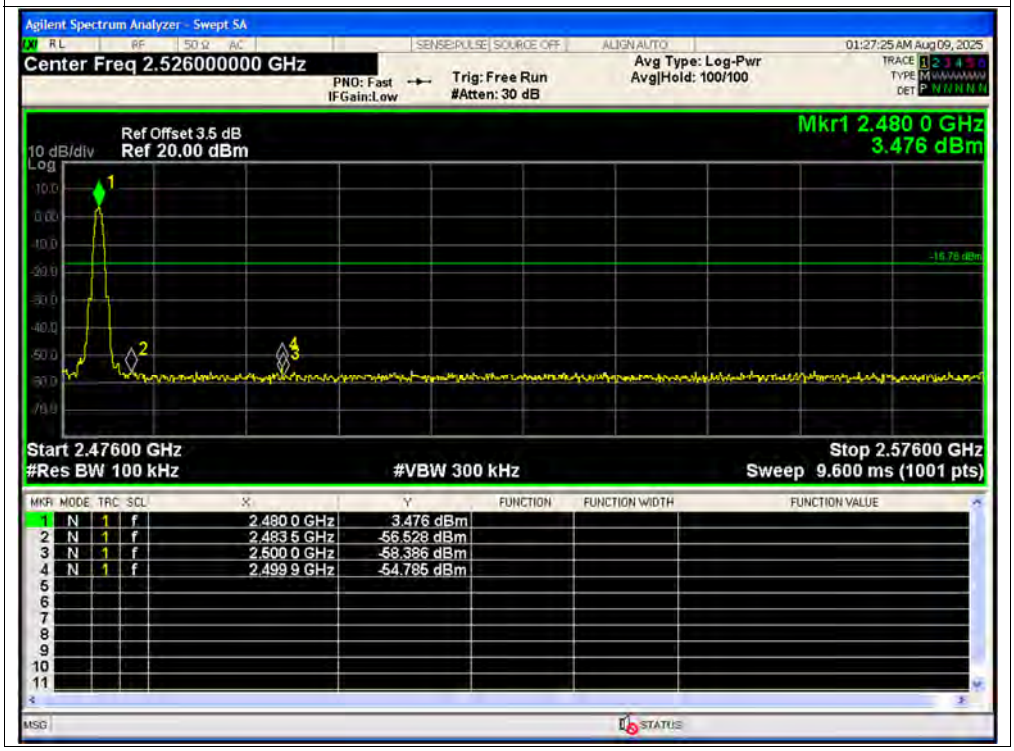
Right
Test Graphs
Band Edge NVNT BLE 1M 2402MHz Ant1 Ref

Band Edge NVNT BLE 1M 2402MHz Ant1 Emission



Band Edge NVNT BLE 1M 2480MHz Ant1 Ref

Band Edge NVNT BLE 1M 2480MHz Ant1 Emission



A.7. Power Spectral Density

Left:

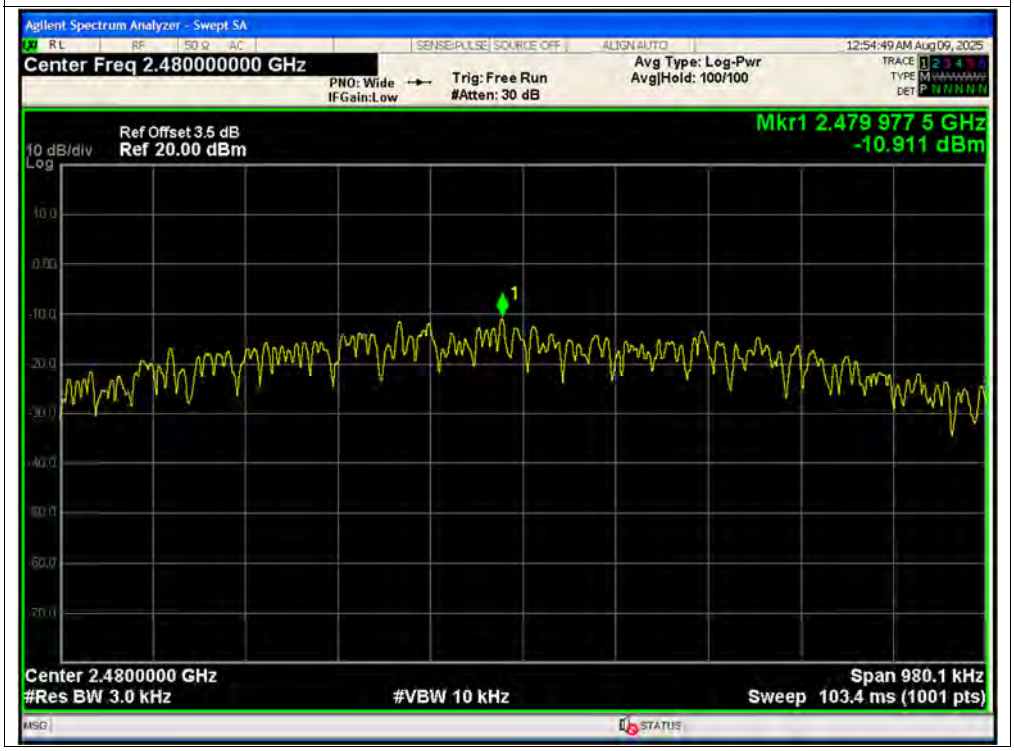
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3kHz)	Duty Factor (dB)	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	BLE 1M	2402	Ant1	-11.15	0	-11.15	8	Pass
NVNT	BLE 1M	2440	Ant1	-11.2	0	-11.2	8	Pass
NVNT	BLE 1M	2480	Ant1	-10.91	0	-10.91	8	Pass

Right:

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3kHz)	Duty Factor (dB)	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	BLE 1M	2402	Ant1	-10.85	0	-10.85	8	Pass
NVNT	BLE 1M	2440	Ant1	-10.96	0	-10.96	8	Pass
NVNT	BLE 1M	2480	Ant1	-10.77	0	-10.77	8	Pass

Left
Test Graphs
PSD NVNT BLE 1M 2402MHz Ant1

PSD NVNT BLE 1M 2440MHz Ant1

PSD NVNT BLE 1M 2480MHz Ant1


Right
Test Graphs
PSD NVNT BLE 1M 2402MHz Ant1

PSD NVNT BLE 1M 2440MHz Ant1

PSD NVNT BLE 1M 2480MHz Ant1

A.8. Conducted Emission

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. Set RBW=9kHz, VBW=30kHz. 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:

Test Mode: EUT + PC + PC Adapter + Fixture + BT TX

Test voltage: AC 120V/60Hz

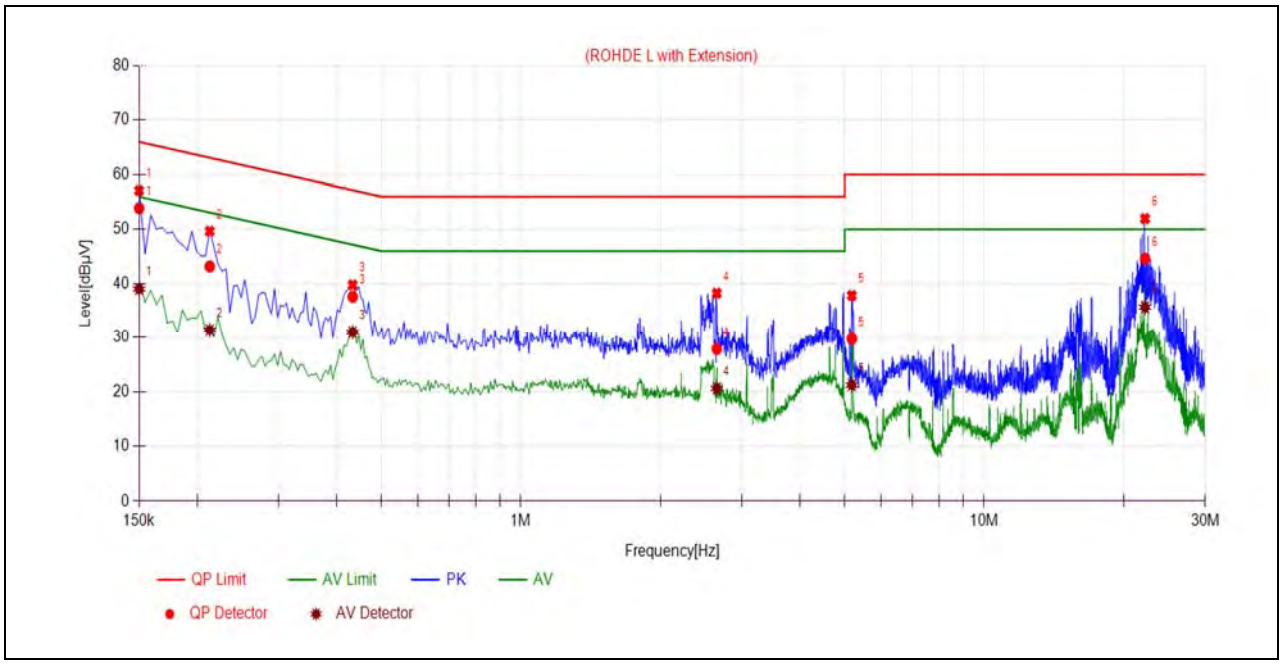
The measurement results are obtained as below:

$E\ [dB\mu V] = U_R + L_{Cable\ loss}\ [dB] + A_{Factor}$

U_R: Receiver Reading

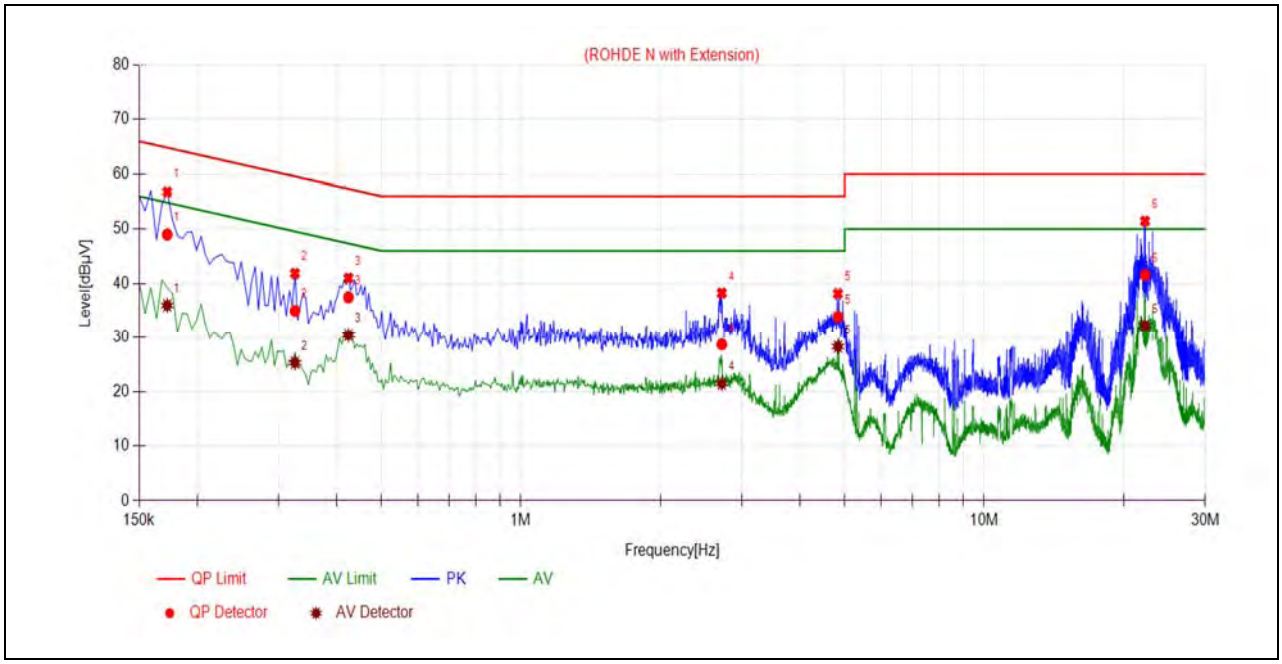
A_{Factor}: Voltage division factor of LISN

B. Test Plot:



(L Phase)

No.	Fre. (MHz)	Emission Level (dBµV)		Limit (dBµV)		Power-line	Verdict
		Quai-peak	Average	Quai-peak	Average		
1	0.1500	53.88	39.04	66.00	56.00	Line	PASS
2	0.2130	43.18	31.39	63.09	53.09		PASS
3	0.4335	37.59	31.01	57.18	47.18		PASS
4	2.6476	27.82	20.60	56.00	46.00		PASS
5	5.1810	29.73	21.20	60.00	50.00		PASS
6	22.2456	44.62	35.67	60.00	50.00		PASS



(N Phase)

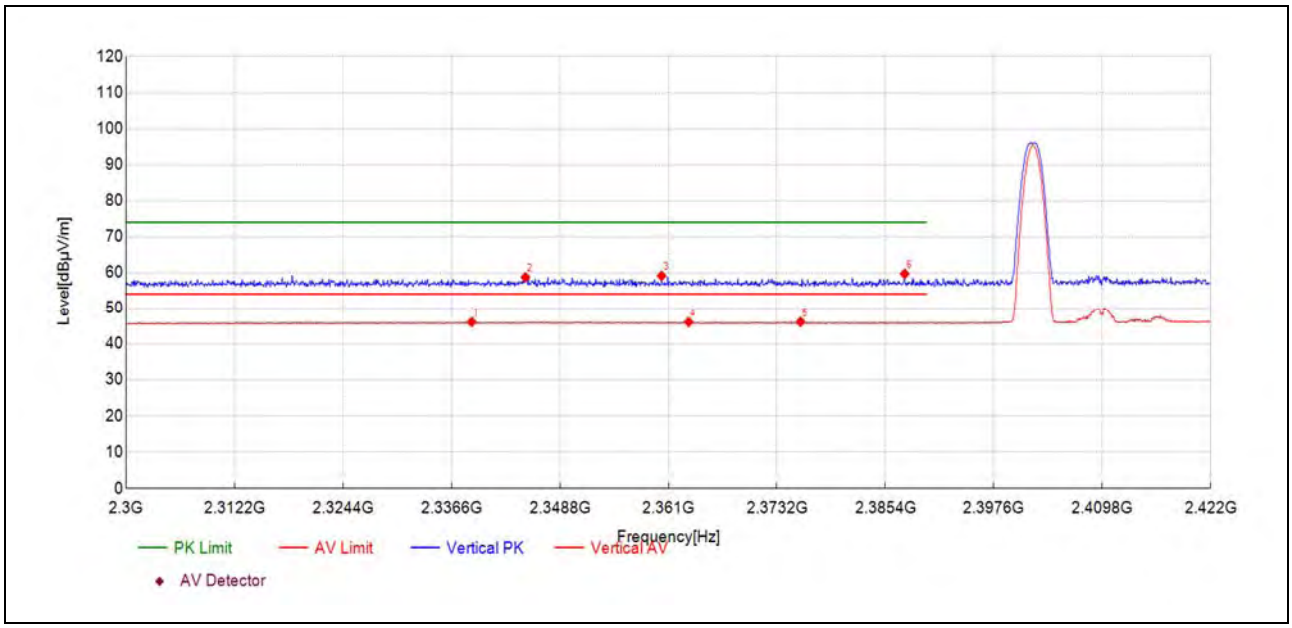
No.	Fre. (MHz)	Emission Level (dBµV)		Limit (dBµV)		Power-line	Verdict
		Quai-peak	Average	Quai-peak	Average		
1	0.1725	48.99	35.98	64.84	54.84	Neutral	PASS
2	0.3255	34.98	25.30	59.57	49.57		PASS
3	0.4245	37.48	30.46	57.36	47.36		PASS
4	2.7149	28.70	21.46	56.00	46.00		PASS
5	4.8348	33.88	28.29	56.00	46.00		PASS
6	22.2486	41.56	32.27	60.00	50.00		PASS

A.9. Restricted Frequency Bands

Note: Restricted Frequency Bands were performed when antenna was at vertical and horizontal polarity, and only the worse test condition (Vertical) was recorded in this test report.

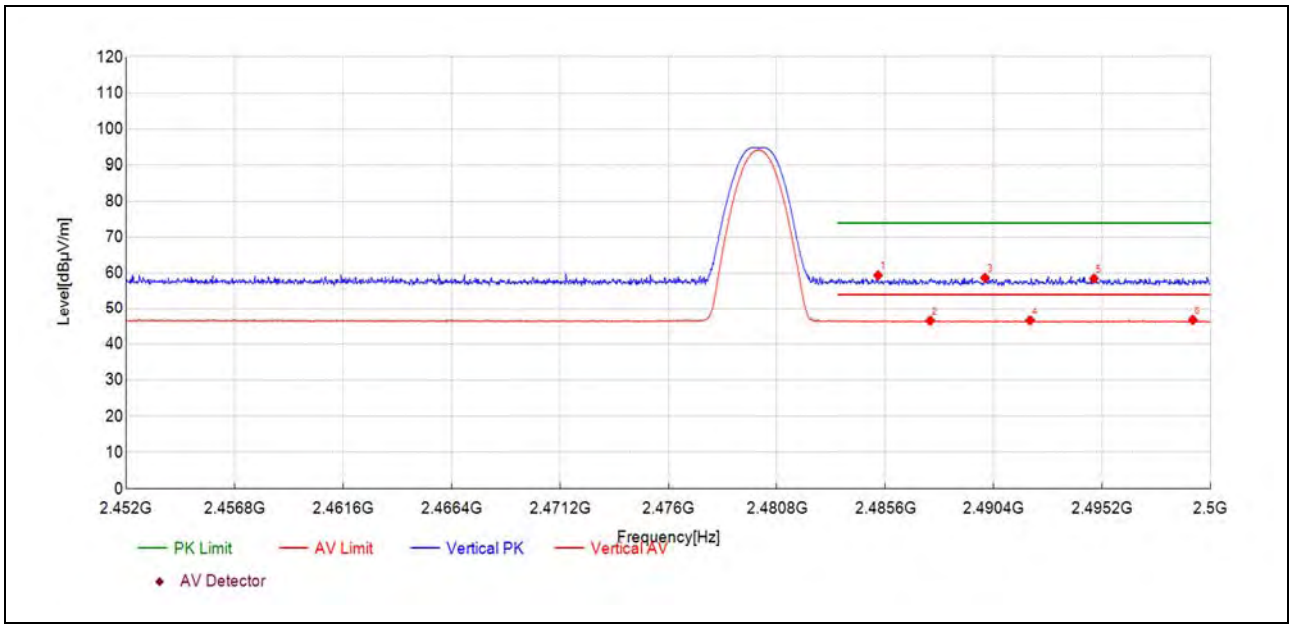
Left:

Plot for Channel 0



Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
2338.88	8.8	46.10	37.350	54.00	7.90	150	46	AV	PASS
2344.92	21.3	58.75	37.410	74.00	15.25	150	201	PK	PASS
2360.24	21.7	59.12	37.460	74.00	14.88	150	65	PK	PASS
2363.29	8.6	46.07	37.470	54.00	7.93	150	51	AV	PASS
2375.86	8.7	46.13	37.480	54.00	7.87	150	84	AV	PASS
2387.58	22.2	59.67	37.490	74.00	14.33	150	93	PK	PASS

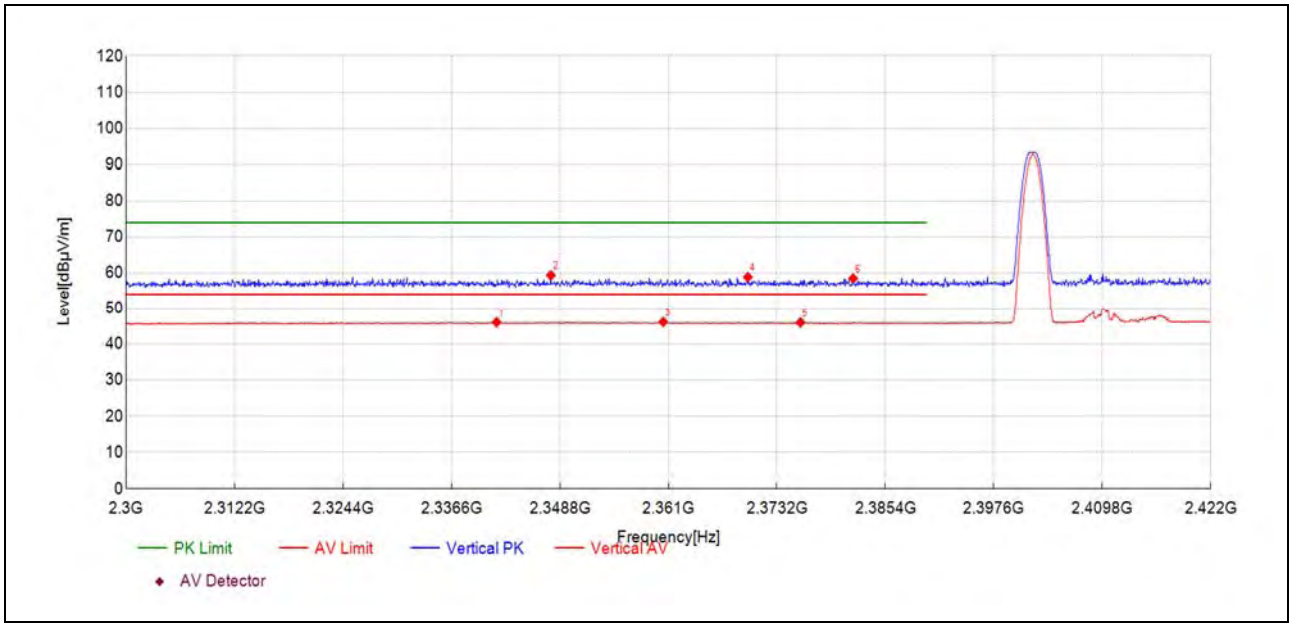
Plot for Channel 39



Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
2485.28	21.1	59.40	38.270	74.00	14.60	150	274	PK	PASS
2487.59	8.2	46.51	38.270	54.00	7.49	150	170	AV	PASS
2490.01	20.5	58.72	38.270	74.00	15.28	150	330	PK	PASS
2492.00	8.4	46.61	38.260	54.00	7.39	150	142	AV	PASS
2494.84	20.2	58.50	38.260	74.00	15.50	150	5	PK	PASS
2499.21	8.5	46.75	38.250	54.00	7.25	150	241	AV	PASS

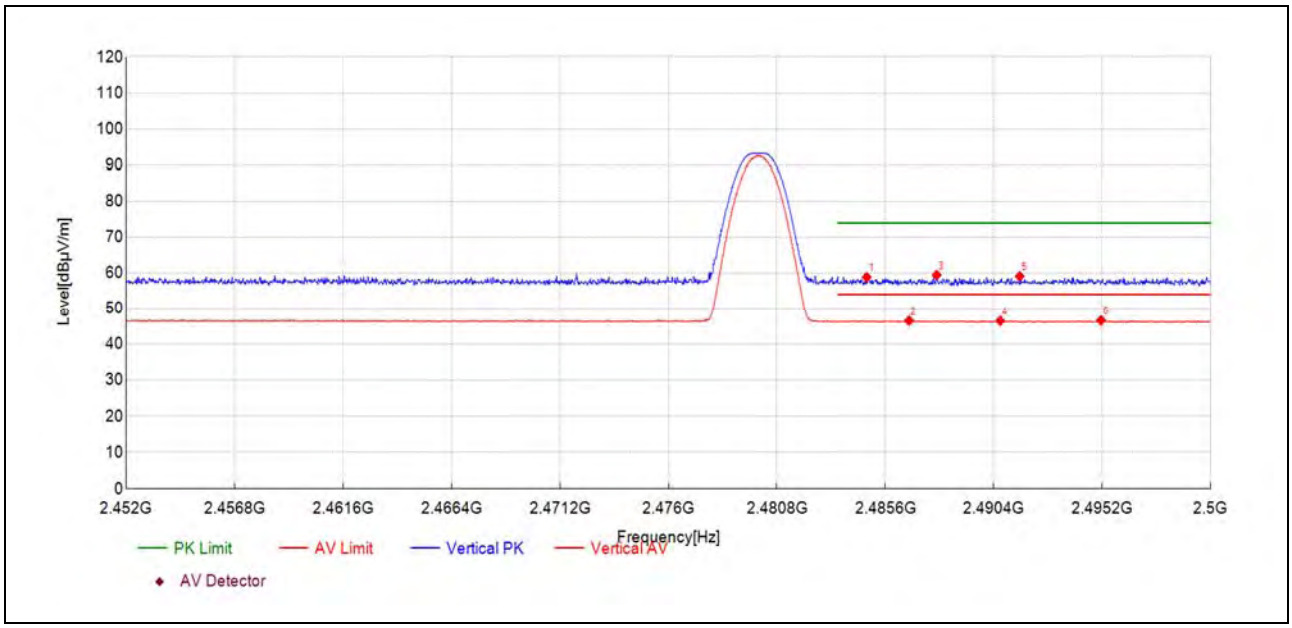
Right:

Plot for Channel 0



Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
2341.68	8.7	46.09	37.380	54.00	7.91	150	93	AV	PASS
2347.79	21.9	59.35	37.430	74.00	14.65	150	32	PK	PASS
2360.42	8.7	46.17	37.460	54.00	7.83	150	108	AV	PASS
2369.94	21.4	58.87	37.470	74.00	15.13	150	145	PK	PASS
2375.86	8.5	46.02	37.480	54.00	7.98	150	296	AV	PASS
2381.78	21.0	58.47	37.480	74.00	15.53	150	254	PK	PASS

Plot for Channel 39



Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
2484.78	20.6	58.87	38.270	74.00	15.13	150	61	PK	PASS
2486.65	8.3	46.59	38.270	54.00	7.41	150	179	AV	PASS
2487.87	21.2	59.49	38.270	74.00	14.51	150	42	PK	PASS
2490.68	8.3	46.53	38.270	54.00	7.47	150	33	AV	PASS
2491.55	20.9	59.15	38.260	74.00	14.85	150	301	PK	PASS
2495.15	8.4	46.63	38.260	54.00	7.37	150	339	AV	PASS

A.10. Radiated Emission

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 (or average) limit, it is unnecessary to perform an quasi-peak measurement (or average).

The measurement results are obtained as below:

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

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.

Note 1: 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.

Note 2: For the frequency, which started from 9kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit was not recorded.

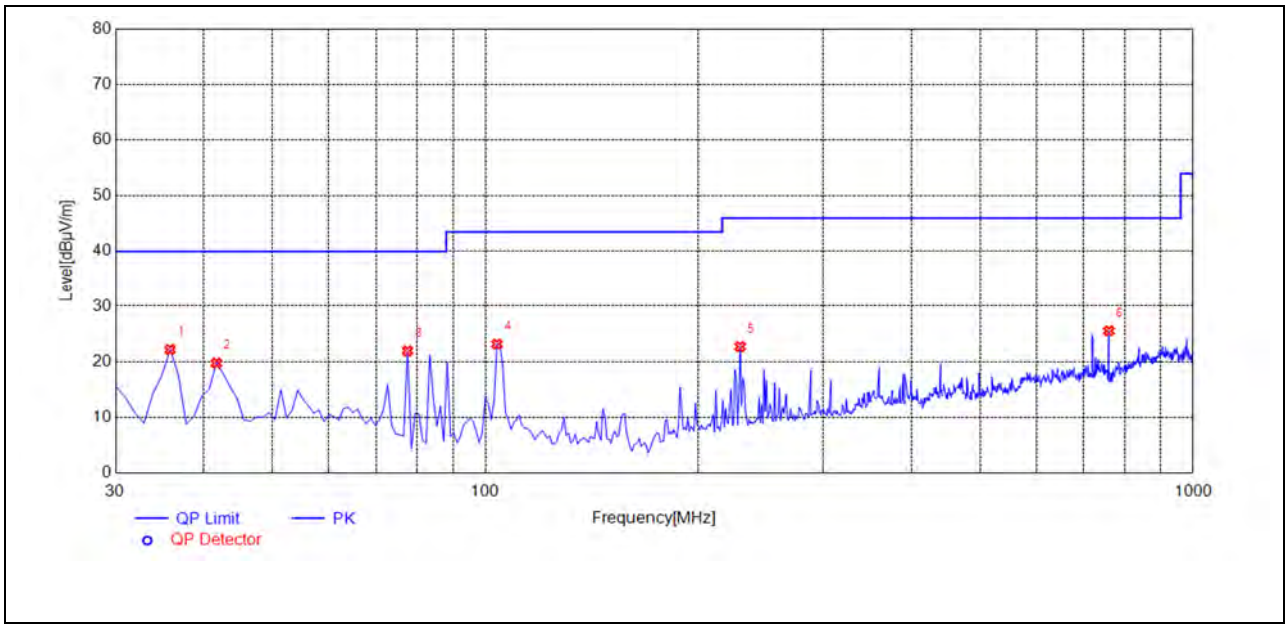
Note 3: For the frequency, which started from 18GHz to 10th harmonic of the highest frequency, was pre-scanned and the result which was 20dB lower than the limit was not recorded.

Note 4: All test modes were considered and evaluated respectively by performing full test, only the worst data were recorded.

Left

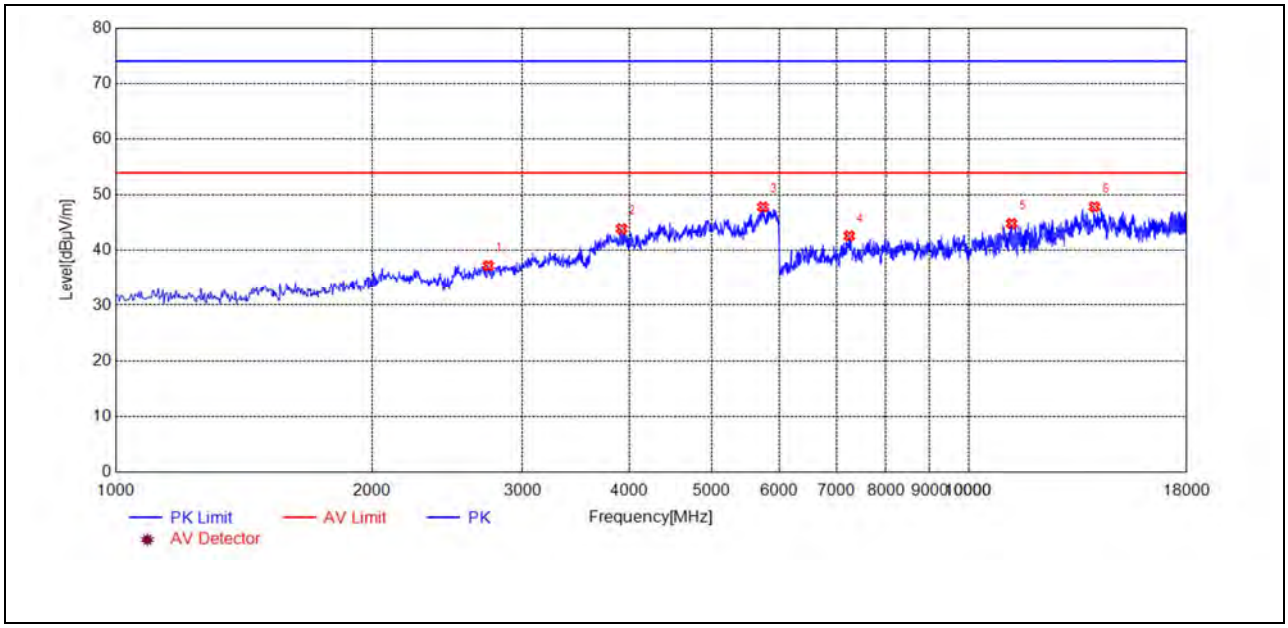
1Mbps

Plot for Channel 0



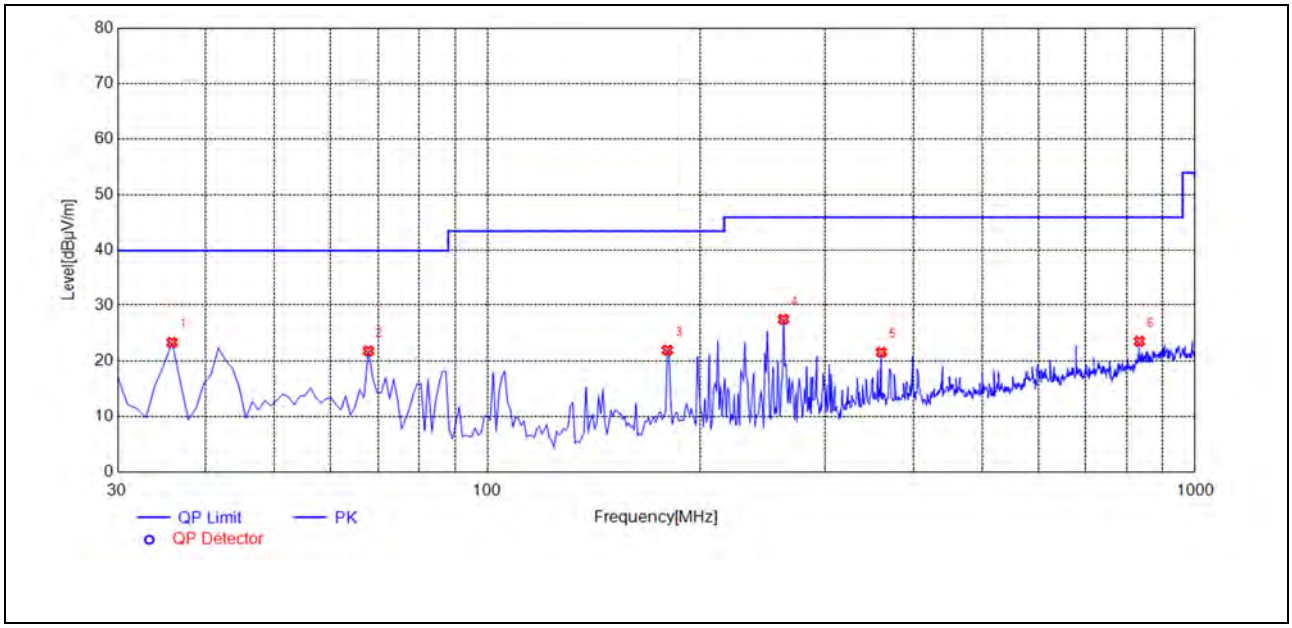
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
35.8258	22.17	-36.91	40.00	17.83	150	199	Horizontal	PASS
41.6517	19.75	-29.90	40.00	20.25	150	142	Horizontal	PASS
77.5776	21.92	-33.84	40.00	18.08	150	278	Horizontal	PASS
103.7938	23.15	-30.69	43.50	20.35	150	351	Horizontal	PASS
229.0490	22.68	-30.93	46.00	23.32	150	127	Horizontal	PASS
760.1702	25.51	-22.02	46.00	20.49	150	221	Horizontal	PASS



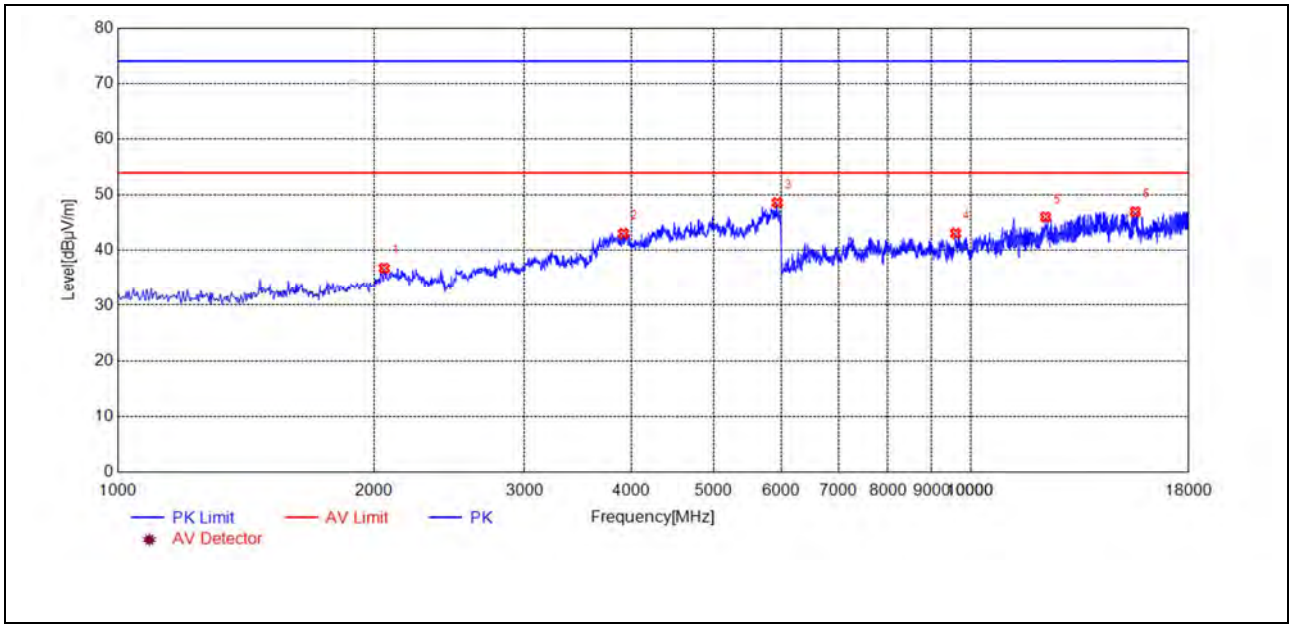
(Antenna Horizontal, 1GHz to 18GHz)

Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
2734.3469	37.26	-19.52	74.00	36.74	150	52	Horizontal	PASS
3917.7836	43.92	-14.53	74.00	30.08	150	127	Horizontal	PASS
5737.1474	47.85	-6.94	74.00	26.15	150	152	Horizontal	PASS
7243.6487	42.65	-2.63	74.00	31.35	150	136	Horizontal	PASS
11225.8452	44.87	3.90	74.00	29.13	150	262	Horizontal	PASS
14034.8070	47.89	6.90	74.00	26.11	150	152	Horizontal	PASS



(Antenna Vertical, 30MHz to 1GHz)

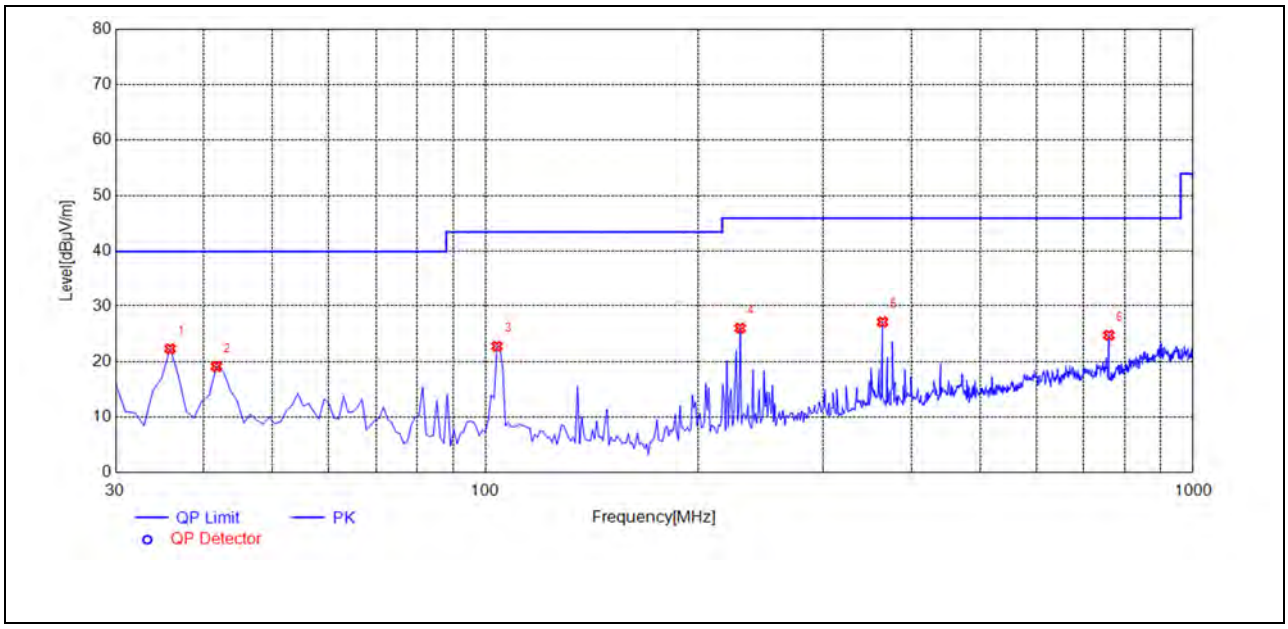
Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
35.8258	23.29	-36.91	40.00	16.71	150	103	Vertical	PASS
67.8679	21.76	-32.31	40.00	18.24	150	59	Vertical	PASS
179.5295	21.91	-33.34	43.50	21.59	150	248	Vertical	PASS
262.0621	27.45	-30.21	46.00	18.55	150	285	Vertical	PASS
360.1301	21.52	-26.34	46.00	24.48	150	343	Vertical	PASS
833.9640	23.49	-19.15	46.00	22.51	150	219	Vertical	PASS



(Antenna Vertical, 1GHz to 18GHz)

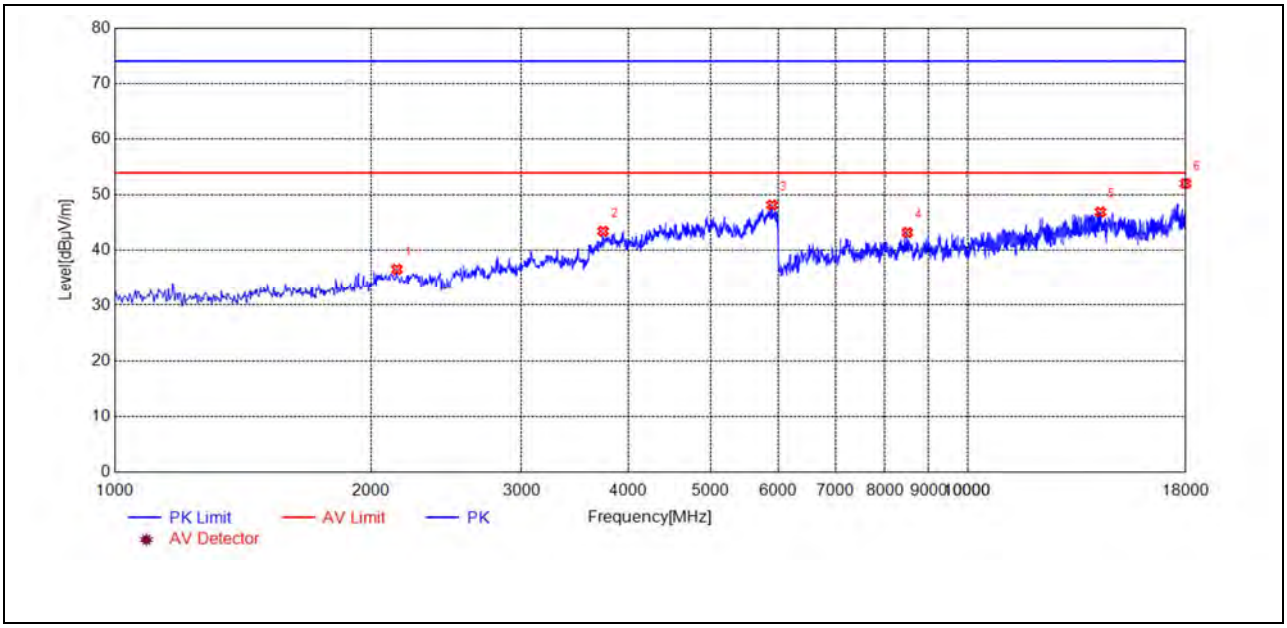
Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
2054.2108	36.79	-20.65	74.00	37.21	150	15	Vertical	PASS
3917.7836	43.06	-14.53	74.00	30.94	150	341	Vertical	PASS
5930.9862	48.63	-6.57	74.00	25.37	150	360	Vertical	PASS
9600.3201	43.11	1.20	74.00	30.89	150	132	Vertical	PASS
12239.2479	46.04	5.08	74.00	27.96	150	341	Vertical	PASS
15585.5171	47.00	6.34	74.00	27.00	150	48	Vertical	PASS

Plot for Channel 19



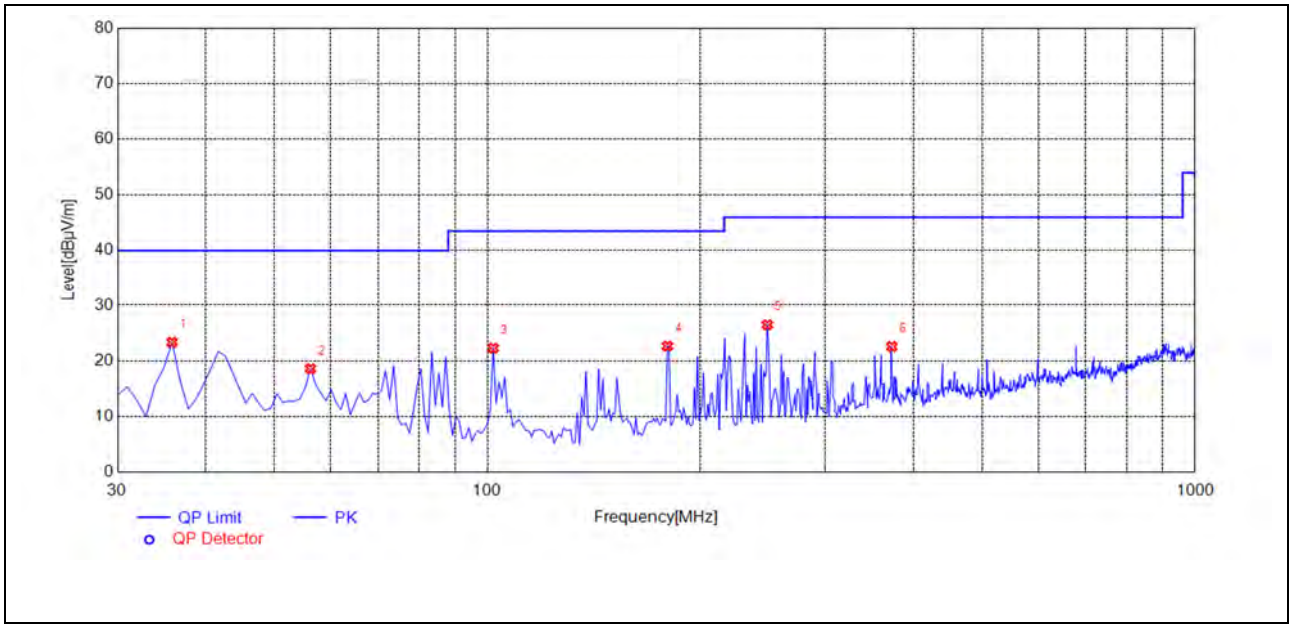
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
35.8258	22.30	-36.91	40.00	17.70	150	284	Horizontal	PASS
41.6517	19.11	-29.90	40.00	20.89	150	269	Horizontal	PASS
103.7938	22.75	-30.69	43.50	20.75	150	269	Horizontal	PASS
229.0490	26.00	-30.93	46.00	20.00	150	124	Horizontal	PASS
364.0140	27.12	-26.39	46.00	18.88	150	321	Horizontal	PASS
760.1702	24.73	-22.02	46.00	21.27	150	9	Horizontal	PASS



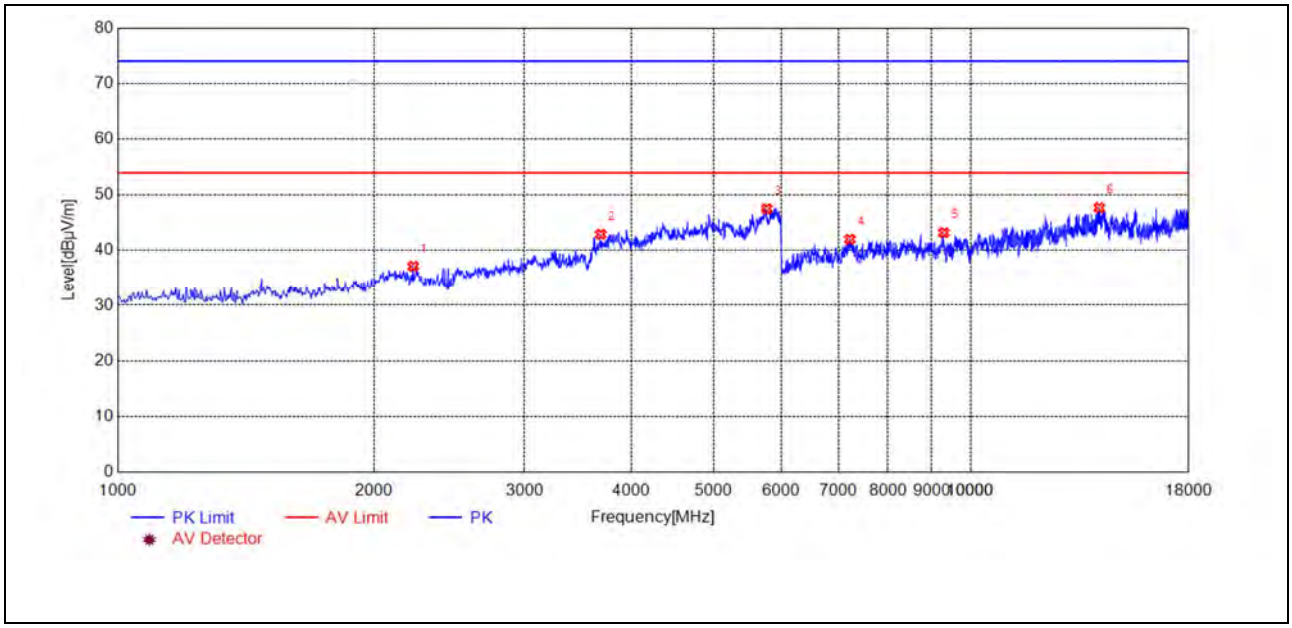
(Antenna Horizontal, 1GHz to 18GHz)

Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
2142.6285	36.60	-20.35	74.00	37.40	150	189	Horizontal	PASS
3737.5475	43.48	-15.51	74.00	30.52	150	72	Horizontal	PASS
5896.9794	48.21	-7.01	74.00	25.79	150	180	Horizontal	PASS
8495.0990	43.23	-1.60	74.00	30.77	150	315	Horizontal	PASS
14306.8614	46.95	7.75	74.00	27.05	150	5	Horizontal	PASS
18000.0000	52.08	13.41	74.00	21.92	150	332	Horizontal	PASS



(Antenna Vertical, 30MHz to 1GHz)

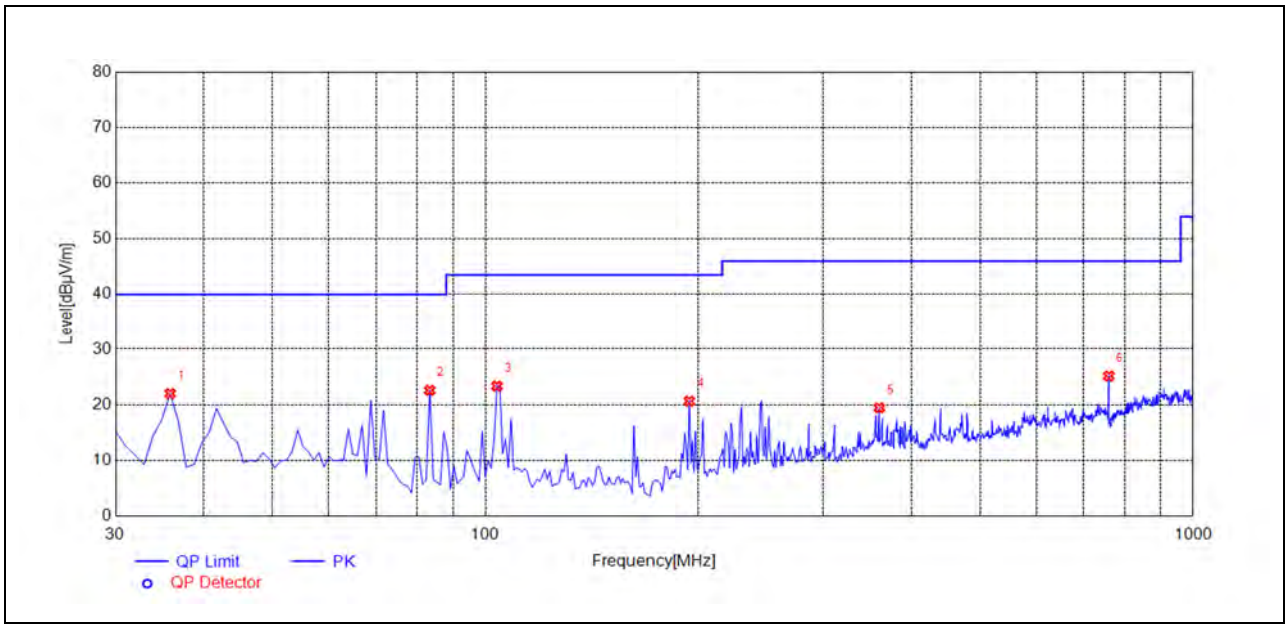
Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
35.8258	23.33	-36.91	40.00	16.67	150	265	Vertical	PASS
56.2162	18.59	-29.38	40.00	21.41	150	228	Vertical	PASS
101.8519	22.27	-30.89	43.50	21.23	150	32	Vertical	PASS
179.5295	22.63	-33.34	43.50	20.87	150	155	Vertical	PASS
248.4685	26.47	-30.36	46.00	19.53	150	273	Vertical	PASS
372.7528	22.57	-26.28	46.00	23.43	150	192	Vertical	PASS



(Antenna Vertical, 1GHz to 18GHz)

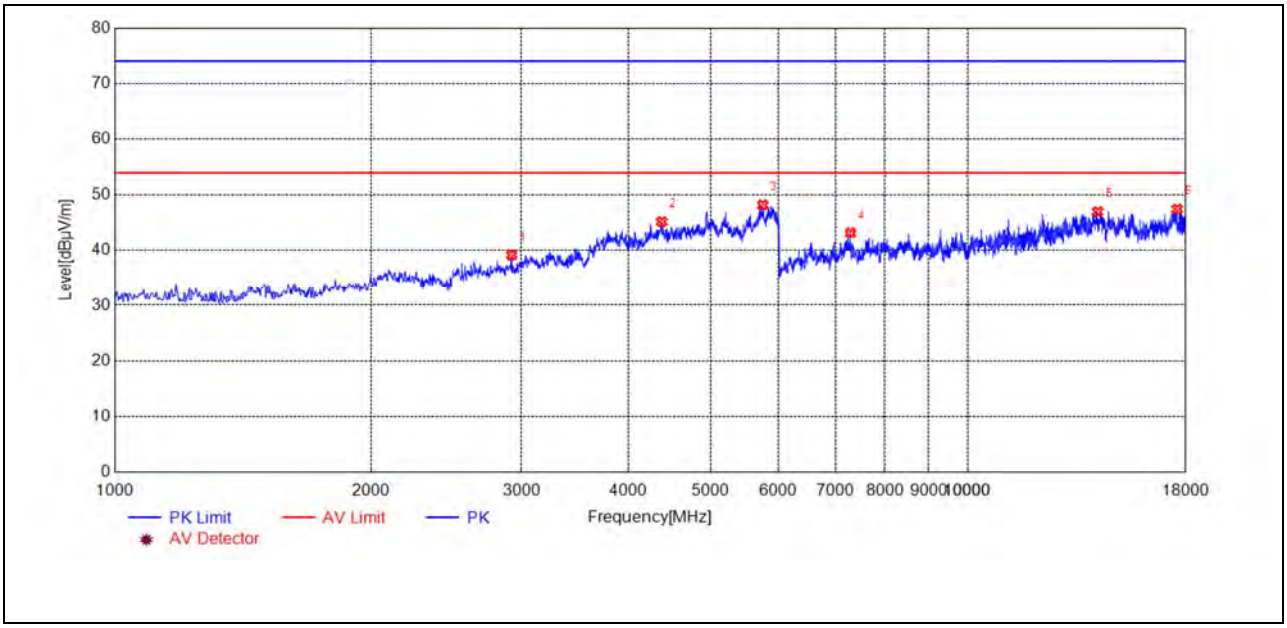
Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
2220.8442	37.14	-20.74	74.00	36.86	150	332	Vertical	PASS
3683.1366	42.92	-16.05	74.00	31.08	150	98	Vertical	PASS
5767.7536	47.53	-7.30	74.00	26.47	150	182	Vertical	PASS
7216.4433	42.03	-2.86	74.00	31.97	150	149	Vertical	PASS
9301.0602	43.21	1.40	74.00	30.79	150	299	Vertical	PASS
14147.0294	47.73	6.44	74.00	26.27	150	241	Vertical	PASS

Plot for Channel 39



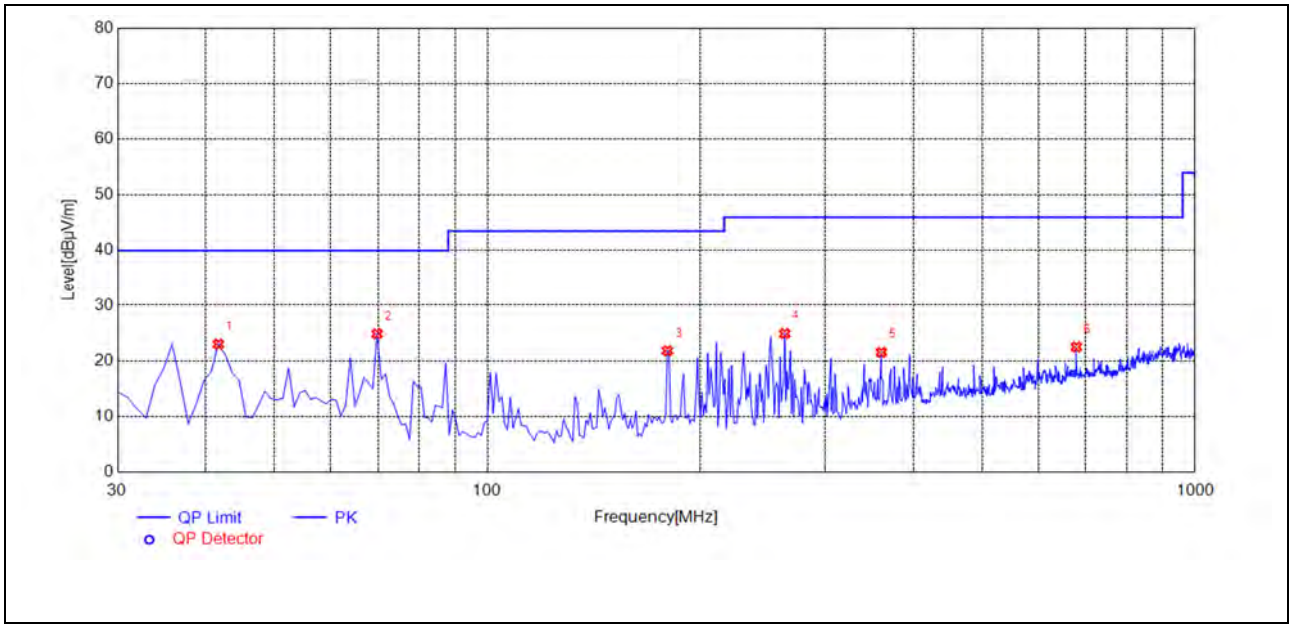
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
35.8258	21.99	-36.91	40.00	18.01	150	229	Horizontal	PASS
83.4034	22.59	-33.46	40.00	17.41	150	287	Horizontal	PASS
103.7938	23.33	-30.69	43.50	20.17	150	112	Horizontal	PASS
194.0941	20.64	-33.18	43.50	22.86	150	287	Horizontal	PASS
360.1301	19.43	-26.34	46.00	26.57	150	280	Horizontal	PASS
760.1702	25.14	-22.02	46.00	20.86	150	353	Horizontal	PASS



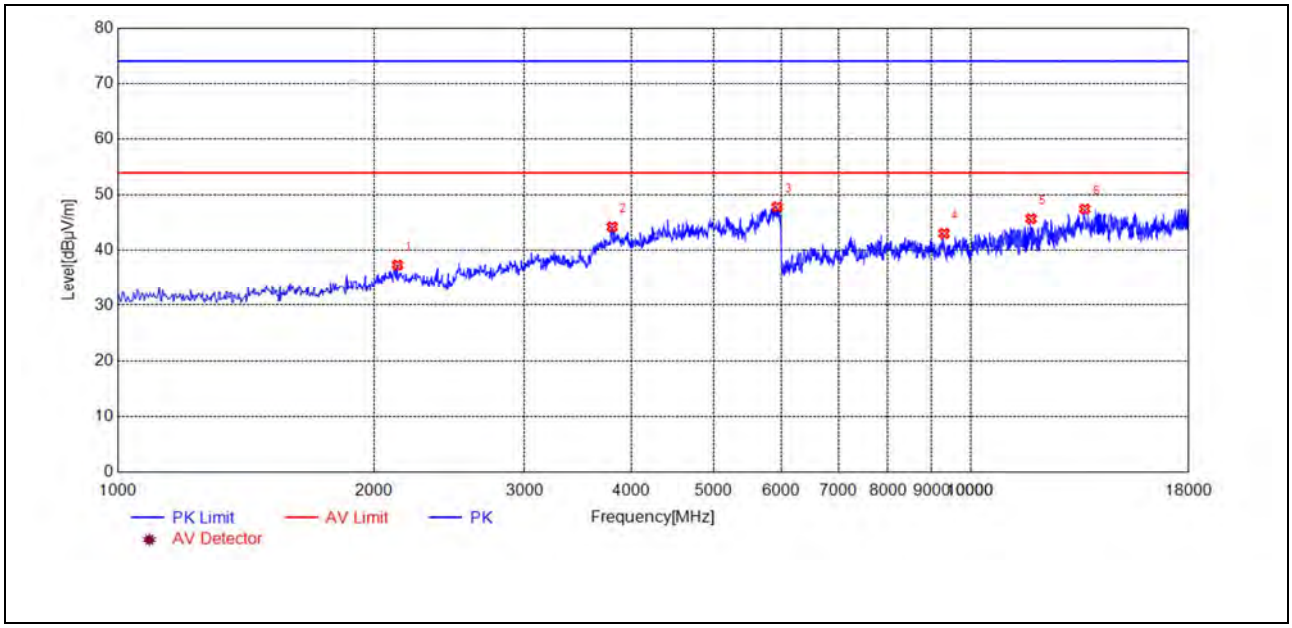
(Antenna Horizontal, 1GHz to 18GHz)

Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
2921.3843	39.18	-18.58	74.00	34.82	150	274	Horizontal	PASS
4376.8754	45.19	-12.00	74.00	28.81	150	207	Horizontal	PASS
5750.7502	48.22	-6.75	74.00	25.78	150	257	Horizontal	PASS
7287.8576	43.19	-3.22	74.00	30.81	150	173	Horizontal	PASS
14198.0396	46.99	6.29	74.00	27.01	150	140	Horizontal	PASS
17595.3191	47.47	8.85	74.00	26.53	150	224	Horizontal	PASS



(Antenna Vertical, 30MHz to 1GHz)

Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
41.6517	22.99	-29.90	40.00	17.01	150	197	Vertical	PASS
69.8098	24.86	-32.28	40.00	15.14	150	241	Vertical	PASS
179.5295	21.79	-33.34	43.50	21.71	150	15	Vertical	PASS
263.0330	24.89	-30.35	46.00	21.11	150	189	Vertical	PASS
360.1301	21.50	-26.34	46.00	24.50	150	189	Vertical	PASS
679.5796	22.48	-21.83	46.00	23.52	150	0	Vertical	PASS



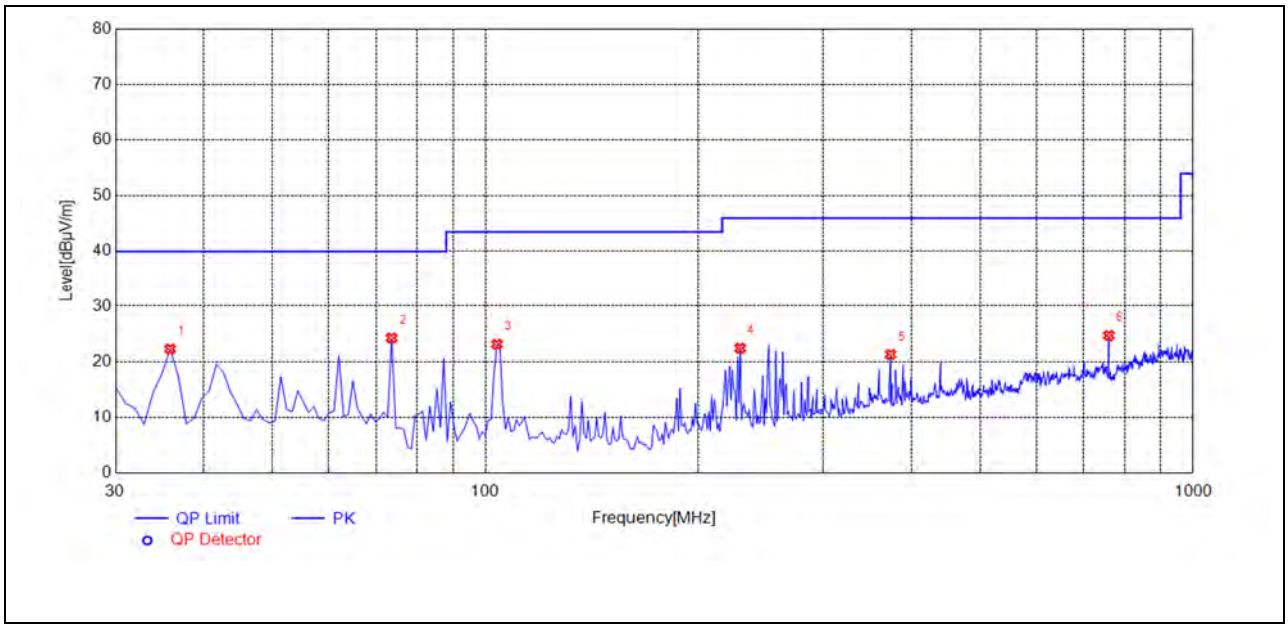
(Antenna Vertical, 1GHz to 18GHz)

Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
2129.0258	37.38	-20.29	74.00	36.62	150	270	Vertical	PASS
3798.7598	44.27	-14.43	74.00	29.73	150	136	Vertical	PASS
5930.9862	47.87	-6.57	74.00	26.13	150	337	Vertical	PASS
9304.4609	43.08	1.26	74.00	30.92	150	303	Vertical	PASS
11766.5533	45.72	3.11	74.00	28.28	150	119	Vertical	PASS
13606.3213	47.49	7.31	74.00	26.51	150	35	Vertical	PASS

Right

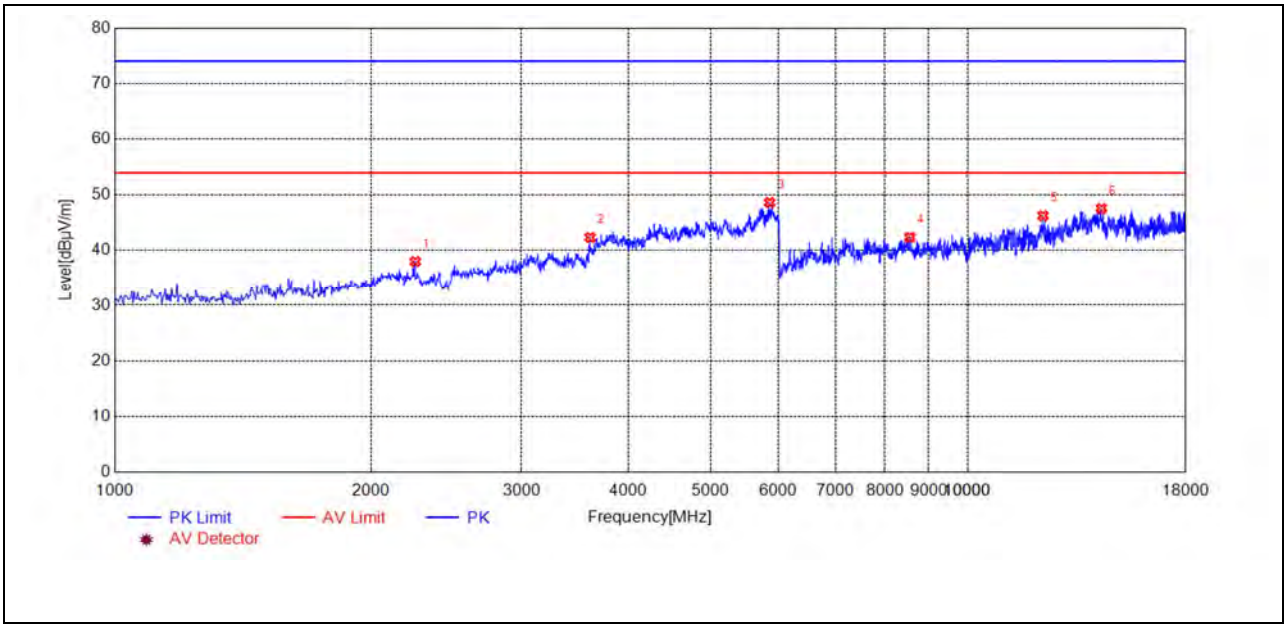
1Mbps

Plot for Channel 0



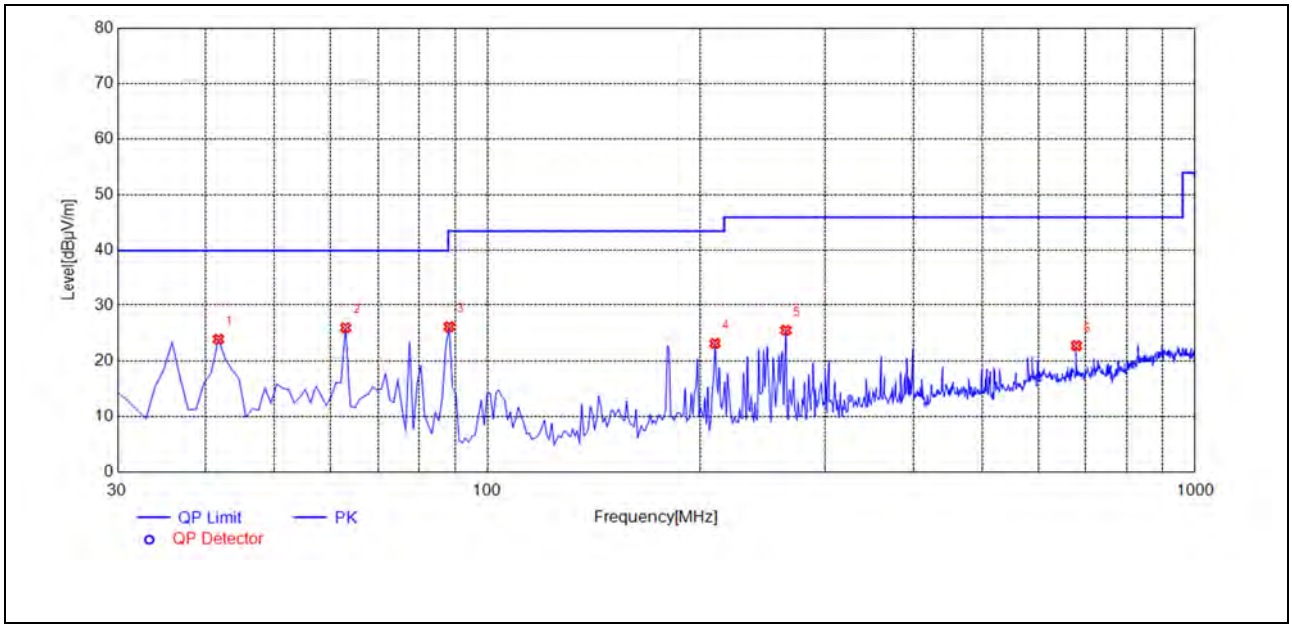
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
35.8258	22.27	-36.91	40.00	17.73	150	175	Horizontal	PASS
73.6937	24.24	-32.97	40.00	15.76	150	81	Horizontal	PASS
103.7938	23.11	-30.69	43.50	20.39	150	240	Horizontal	PASS
229.0490	22.41	-30.93	46.00	23.59	150	328	Horizontal	PASS
373.7237	21.28	-26.36	46.00	24.72	150	320	Horizontal	PASS
760.1702	24.69	-22.02	46.00	21.31	150	343	Horizontal	PASS



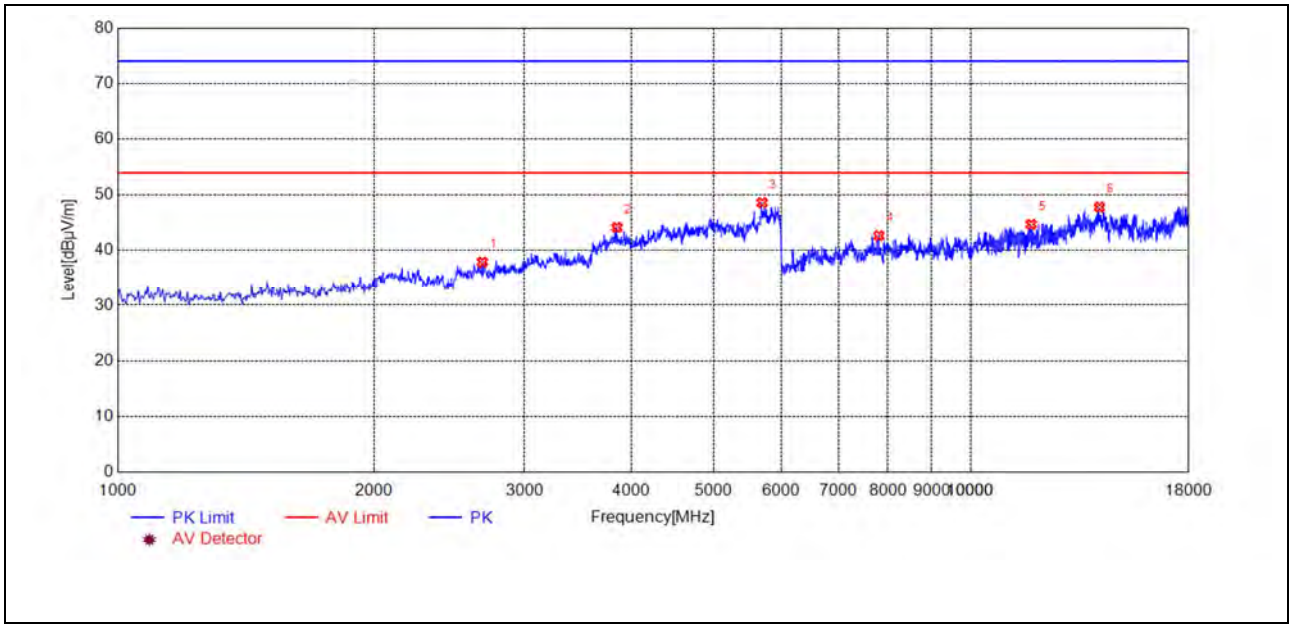
(Antenna Horizontal, 1GHz to 18GHz)

Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
2251.4503	38.01	-20.03	74.00	35.99	150	157	Horizontal	PASS
3608.3217	42.35	-15.81	74.00	31.65	150	81	Horizontal	PASS
5859.5719	48.67	-6.94	74.00	25.33	150	274	Horizontal	PASS
8552.9106	42.39	-1.32	74.00	31.61	150	149	Horizontal	PASS
12252.8506	46.26	5.27	74.00	27.74	150	141	Horizontal	PASS
14340.8682	47.58	7.55	74.00	26.42	150	65	Horizontal	PASS



(Antenna Vertical, 30MHz to 1GHz)

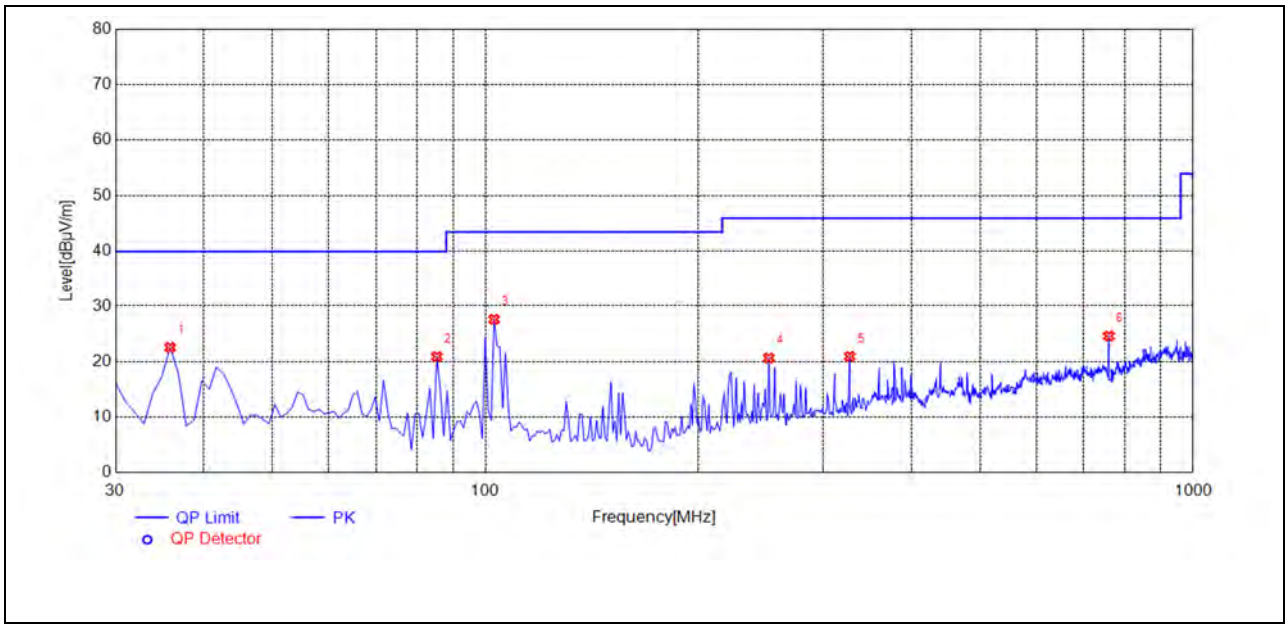
Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
41.6517	23.86	-29.90	40.00	16.14	150	308	Vertical	PASS
63.0130	25.93	-30.53	40.00	14.07	150	272	Vertical	PASS
88.2583	26.11	-33.93	43.50	17.39	150	76	Vertical	PASS
209.6296	23.11	-32.30	43.50	20.39	150	329	Vertical	PASS
264.0040	25.48	-30.48	46.00	20.52	150	61	Vertical	PASS
679.5796	22.69	-21.83	46.00	23.31	150	112	Vertical	PASS



(Antenna Vertical, 1GHz to 18GHz)

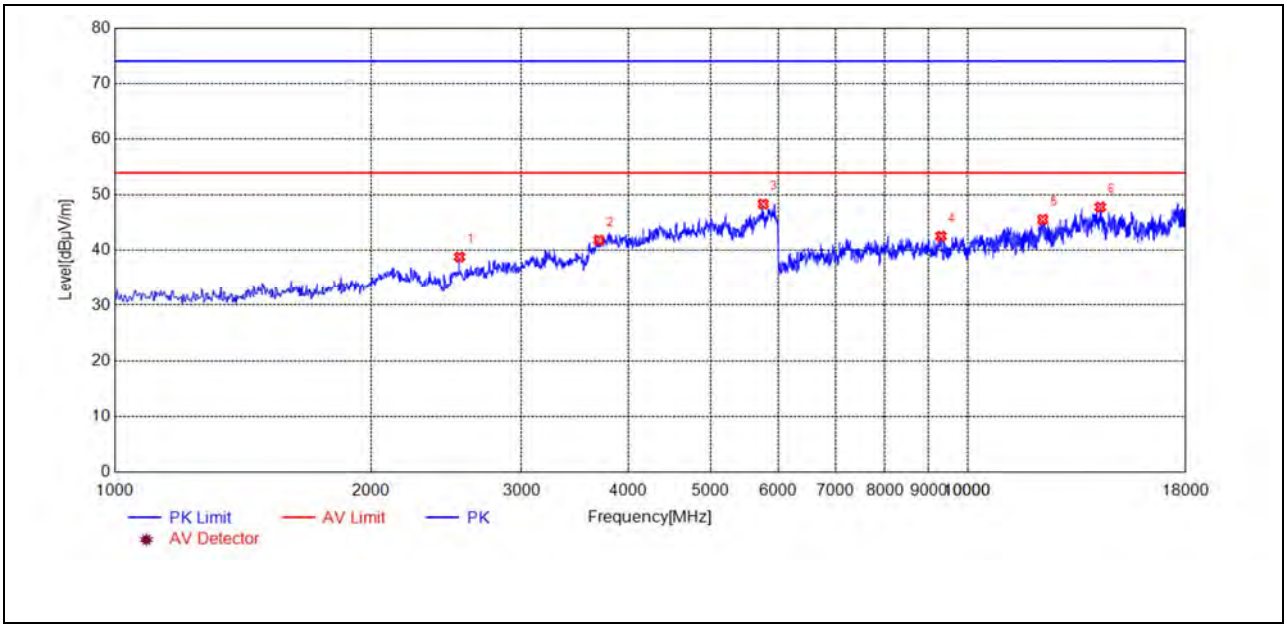
Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
2676.5353	37.90	-19.34	74.00	36.10	150	10	Vertical	PASS
3849.7700	44.16	-14.42	74.00	29.84	150	18	Vertical	PASS
5692.9386	48.64	-7.69	74.00	25.36	150	160	Vertical	PASS
7804.7610	42.68	-2.45	74.00	31.32	150	0	Vertical	PASS
11769.9540	44.72	3.03	74.00	29.28	150	294	Vertical	PASS
14150.4301	47.83	6.44	74.00	26.17	150	286	Vertical	PASS

Plot for Channel 19



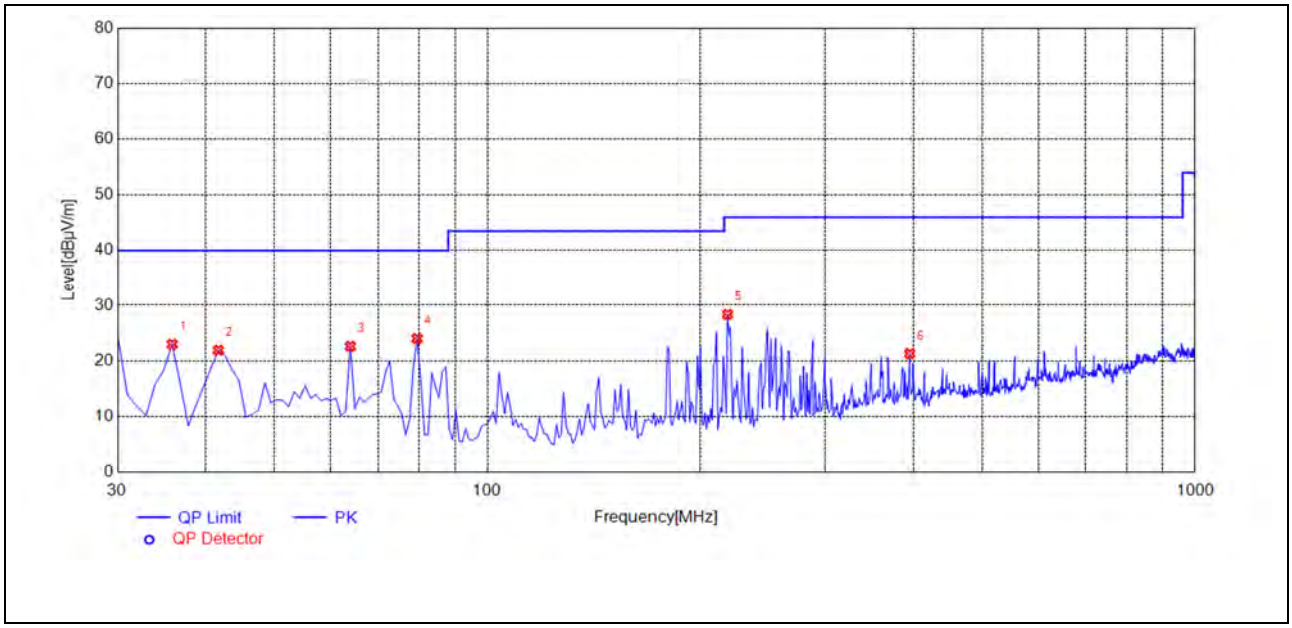
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
35.8258	22.54	-36.91	40.00	17.46	150	61	Horizontal	PASS
85.3453	20.89	-33.92	40.00	19.11	150	280	Horizontal	PASS
102.8228	27.59	-30.97	43.50	15.91	150	280	Horizontal	PASS
251.3814	20.62	-30.32	46.00	25.38	150	229	Horizontal	PASS
327.1171	20.91	-28.30	46.00	25.09	150	229	Horizontal	PASS
760.1702	24.58	-22.02	46.00	21.42	150	243	Horizontal	PASS



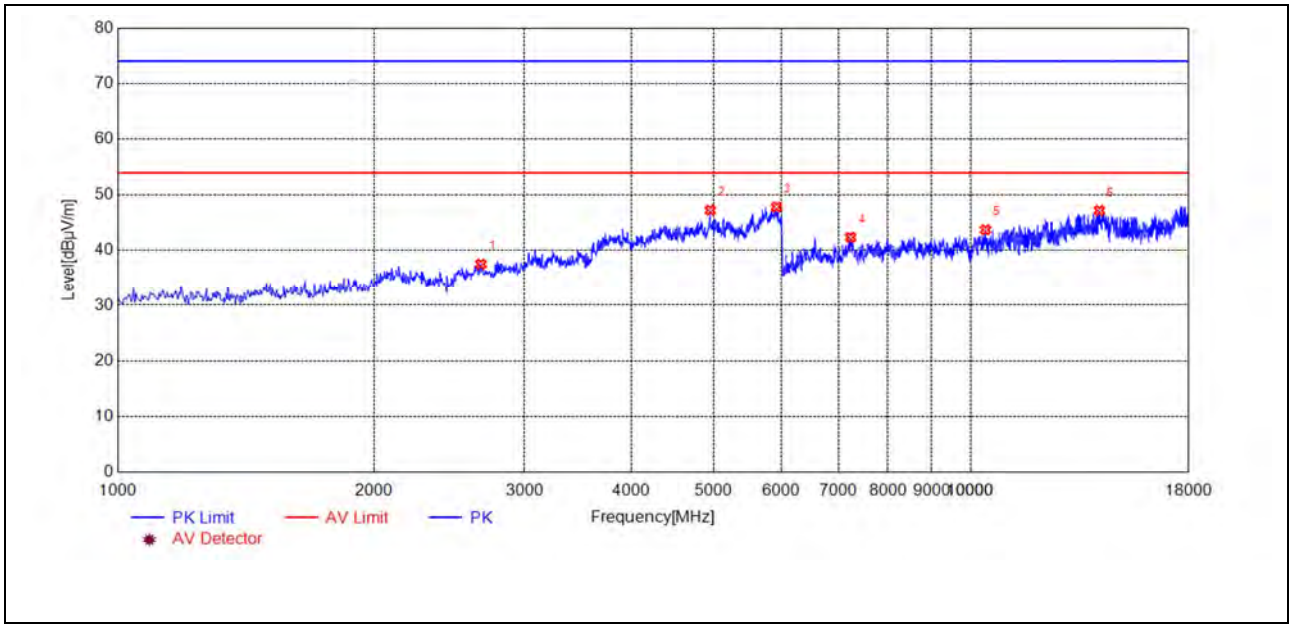
(Antenna Horizontal, 1GHz to 18GHz)

Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
2537.1074	38.84	-19.86	74.00	35.16	150	207	Horizontal	PASS
3696.7393	41.87	-15.87	74.00	32.13	150	190	Horizontal	PASS
5757.5515	48.38	-6.97	74.00	25.62	150	156	Horizontal	PASS
9301.0602	42.56	1.40	74.00	31.44	150	324	Horizontal	PASS
12246.0492	45.58	5.23	74.00	28.42	150	316	Horizontal	PASS
14300.0600	47.83	7.79	74.00	26.17	150	173	Horizontal	PASS



(Antenna Vertical, 30MHz to 1GHz)

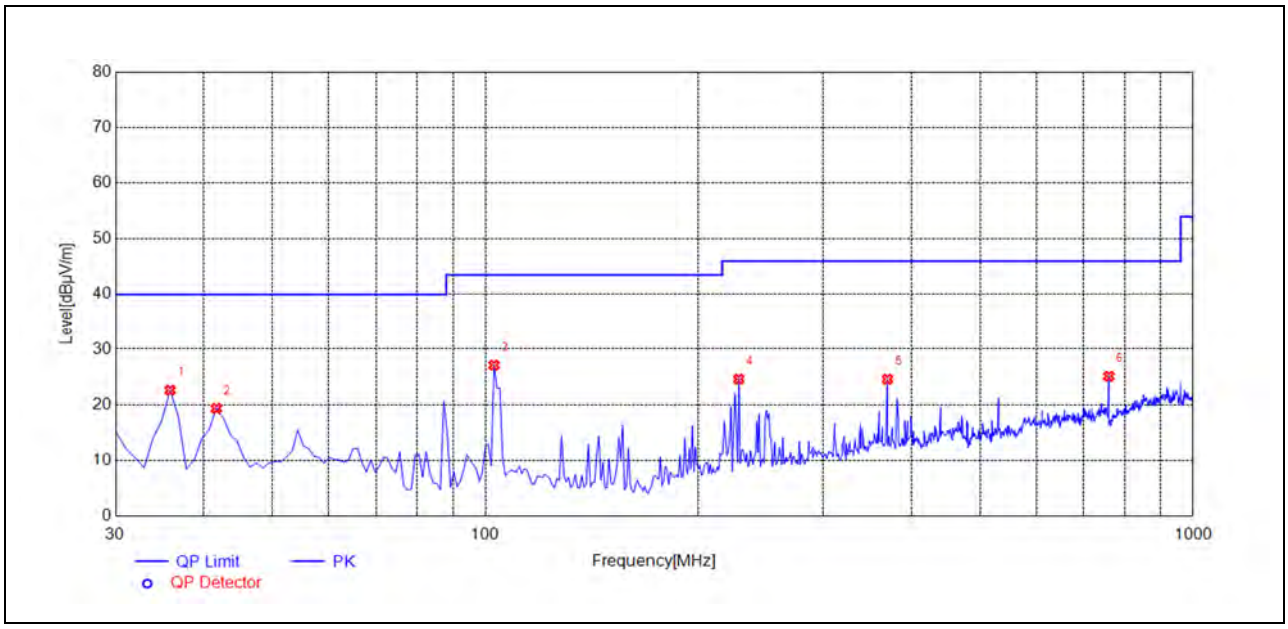
Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
35.8258	22.96	-36.91	40.00	17.04	150	248	Vertical	PASS
41.6517	21.90	-29.90	40.00	18.10	150	197	Vertical	PASS
63.9840	22.62	-30.20	40.00	17.38	150	233	Vertical	PASS
79.5195	24.01	-34.06	40.00	15.99	150	233	Vertical	PASS
218.3684	28.34	-31.55	46.00	17.66	150	131	Vertical	PASS
395.0851	21.27	-25.21	46.00	24.73	150	182	Vertical	PASS



(Antenna Vertical, 1GHz to 18GHz)

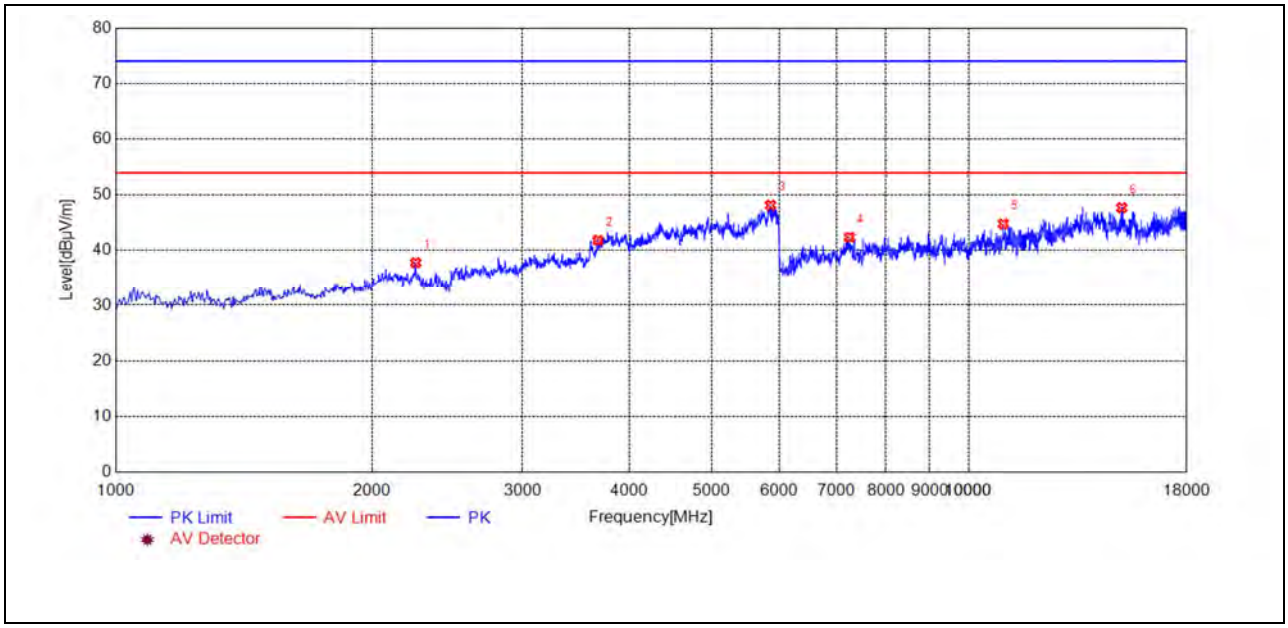
Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
2666.3333	37.53	-19.36	74.00	36.47	150	220	Vertical	PASS
4951.5903	47.29	-9.51	74.00	26.71	150	120	Vertical	PASS
5920.7842	47.85	-6.72	74.00	26.15	150	86	Vertical	PASS
7230.0460	42.39	-2.75	74.00	31.61	150	345	Vertical	PASS
10406.2813	43.74	2.45	74.00	30.26	150	144	Vertical	PASS
14150.4301	47.21	6.44	74.00	26.79	150	203	Vertical	PASS

Plot for Channel 39



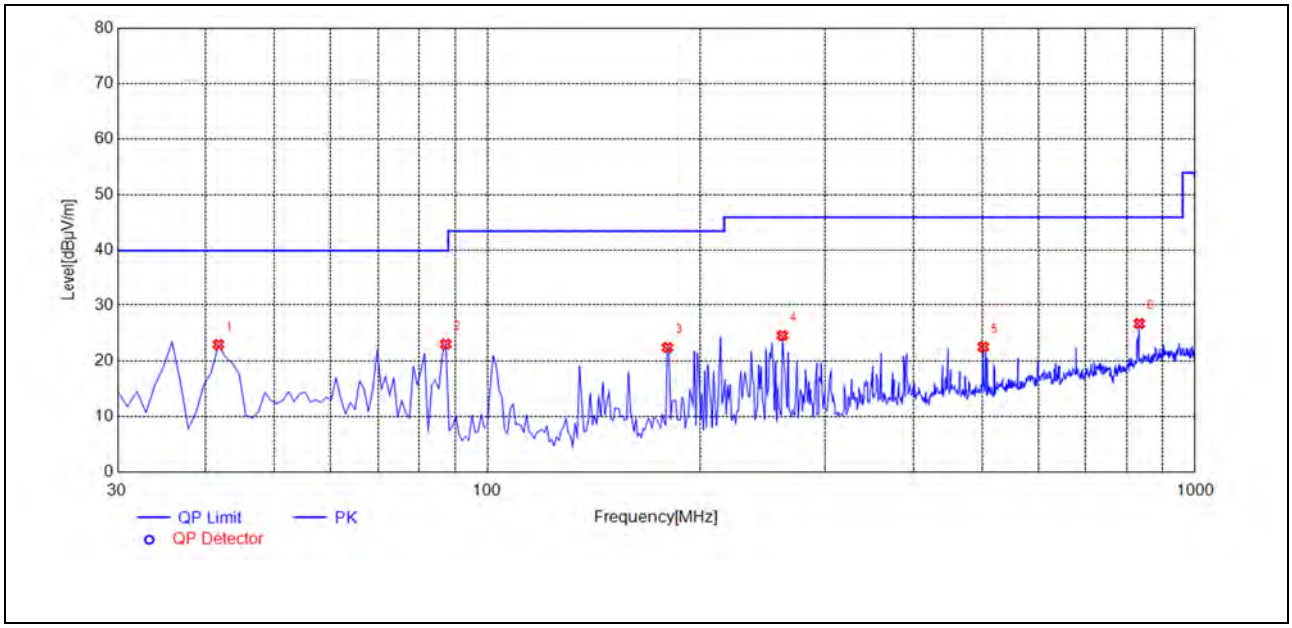
(Antenna Horizontal, 30MHz to 1GHz)

Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
35.8258	22.60	-36.91	40.00	17.40	150	190	Horizontal	PASS
41.6517	19.34	-29.90	40.00	20.66	150	96	Horizontal	PASS
102.8228	27.09	-30.97	43.50	16.41	150	96	Horizontal	PASS
228.0781	24.60	-31.16	46.00	21.40	150	73	Horizontal	PASS
369.8398	24.57	-26.06	46.00	21.43	150	321	Horizontal	PASS
760.1702	25.11	-22.02	46.00	20.89	150	147	Horizontal	PASS



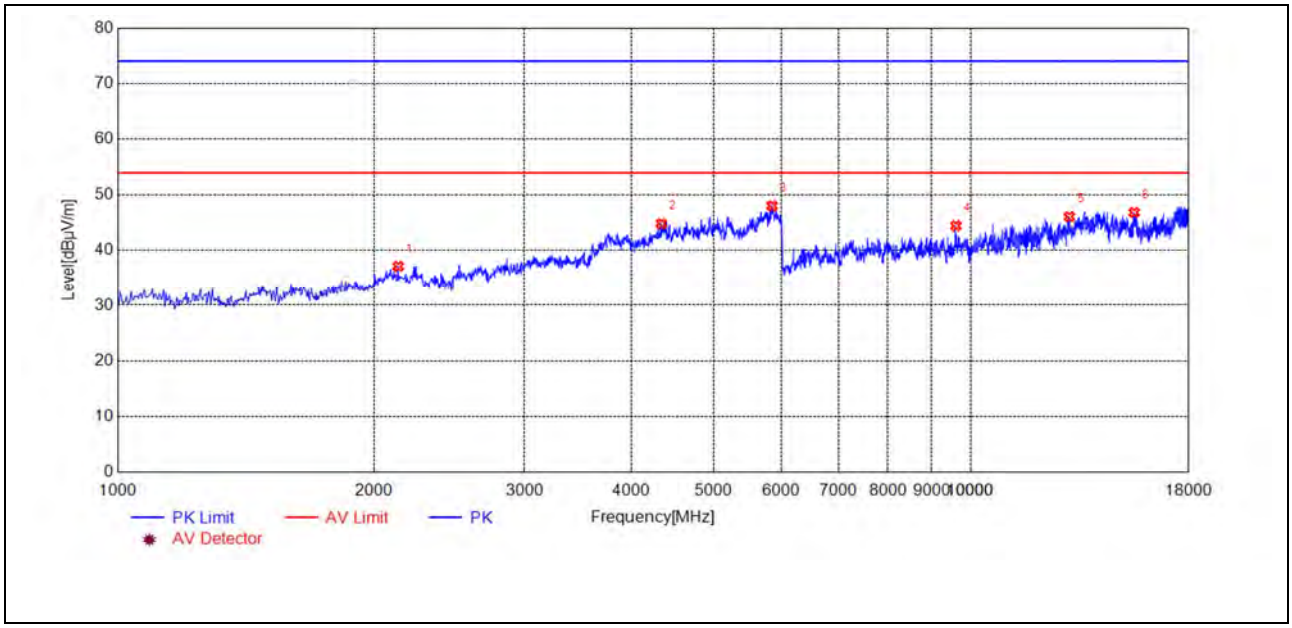
(Antenna Horizontal, 1GHz to 18GHz)

Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
2248.0496	37.80	-20.04	74.00	36.20	150	253	Horizontal	PASS
3676.3353	41.84	-16.14	74.00	32.16	150	18	Horizontal	PASS
5856.1712	48.18	-6.93	74.00	25.82	150	345	Horizontal	PASS
7247.0494	42.39	-2.60	74.00	31.61	150	244	Horizontal	PASS
10977.5955	44.80	3.15	74.00	29.20	150	136	Horizontal	PASS
15112.8226	47.72	6.74	74.00	26.28	150	295	Horizontal	PASS



(Antenna Vertical, 30MHz to 1GHz)

Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
41.6517	22.90	-29.90	40.00	17.10	150	293	Vertical	PASS
87.2873	22.98	-33.84	40.00	17.02	150	227	Vertical	PASS
179.5295	22.38	-33.34	43.50	21.12	150	358	Vertical	PASS
261.0911	24.53	-30.08	46.00	21.47	150	322	Vertical	PASS
501.8919	22.49	-24.88	46.00	23.51	150	112	Vertical	PASS
833.9640	26.69	-19.15	46.00	19.31	150	39	Vertical	PASS



(Antenna Vertical, 1GHz to 18GHz)

Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
2132.4265	37.14	-20.30	74.00	36.86	150	233	Vertical	PASS
4339.4679	44.82	-12.16	74.00	29.18	150	81	Vertical	PASS
5849.3699	48.05	-6.94	74.00	25.95	150	174	Vertical	PASS
9607.1214	44.46	0.98	74.00	29.54	150	275	Vertical	PASS
13048.6097	46.11	6.51	74.00	27.89	150	350	Vertical	PASS
15544.7089	46.87	5.64	74.00	27.13	150	107	Vertical	PASS

END OF REPORT