



TEST REPORT

APPLICANT : BLU Products, Inc.
PRODUCT NAME : Smart Phone
MODEL NAME : G43
BRAND NAME : BLU
FCC ID : YHLBLUG43W
STANDARD(S) : 47 CFR Part 15 Subpart C
RECEIPT DATE : 2023-09-11
TEST DATE : 2023-09-18 to 2023-10-08
ISSUE DATE : 2023-11-24



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Change History		
Version	Date	Reason for change
1.0	2023-11-24	First edition

1. Summary of Test Result

No.	Section	Description	Test Date	Test Engineer	Result	Method Determination /Remark
1	15.203	Antenna Requirement	N/A	N/A	PASS	No deviation
2	N/A	Duty Cycle of Test Signal	Sep. 22, 2023	Zhong Yanshan	PASS	No deviation
3	15.247(b)	Maximum Peak Conducted Output Power	Sep. 22, 2023	Zhong Yanshan	PASS	No deviation
4	15.247(b)	Maximum Average Conducted Output Power	Sep. 22, 2023	Zhong Yanshan	PASS	No deviation
5	15.247(a)	Bandwidth	Sep. 22, 2023	Zhong Yanshan	PASS	No deviation
6	15.247(d)	Conducted Spurious Emission and Band Edge	Sep. 22, 2023	Zhong Yanshan	PASS	No deviation
7	15.247(e)	Power Spectral Density	Sep. 22, 2023	Zhong Yanshan	PASS	No deviation
8	15.207	Conducted Emission	Sep. 19, 2023	Wang Deyong	PASS	No deviation
9	15.247(d)	Restricted Frequency Bands	Sep. 18, 2023	Lin Jiayong	PASS	No deviation
10	15.209, 15.247(d)	Radiated Emission	Sep. 27, 2023	Lin Jiayong	PASS	No deviation

Note 1: The tests were performed according to the method of measurements prescribed in ANSIC63.10-2013 and KDB558074 D01 v05r02.

Note 2: Additions to, deviation, or exclusions from the method shall be judged in the "method determination" column of add, deviate or exclude from the specific method shall be explained in the "Remark" of the above table.

Note 3: When the test result is a critical value, we will use the measurement uncertainty give the judgment result based on the 95% confidence intervals.



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 Equipments

Equipment Name	Serial No.	Type	Manufacturer	Cal. Date	Due Date
EXA Signal Analyzer	MY53470836	N9010A	Agilent	2023.02.27	2024.02.26
Power Sensor	MY54180008	U2021XA	Agilent	2023.09.19	2024.09.18
Attenuator	MTJ6004-20	VAT-10+	MTJ Cooperation	N/A	N/A
RF Cable (30MHz-26GHz)	CB01	RF01	Morlab	N/A	N/A
Coaxial Cable	CB02	RF02	Morlab	N/A	N/A
SMA Connector	CN01	RF03	HUBER-SUHNER	N/A	N/A

1.2.2 Conducted Emission Test Equipments

Equipment Name	Serial No.	Type	Manufacturer	Cal. Date	Due Date
Receiver	MY56400093	N9038A	KEYSIGHT	2023.02.09	2024.02.08
LISN	8127449	NSLK 8127	Schwarzbeck	2023.02.21	2024.02.20
Pulse Limiter (10dB)	VTSD 9561 F-B #206	VTSD 9561-F	Schwarzbeck	2023.06.27	2024.06.26
RF Coaxial Cable (DC-100MHz)	BNC	MRE04	Qualwave	N/A	N/A

1.2.3 List of Software Used

Description	Manufacturer	Software Version
Test System	MaiWei	2.0.0.0
Morlab EMCR	Morlab	V1.2
TS+ -[JS32-CE]	Tonscend	V2.5.0.0

**1.2.4 Radiated Test Equipments**

Equipment Name	Serial No.	Type	Manufacturer	Cal. Date	Due Date
Receiver	MY54130016	N9038A	Agilent	2023.06.21	2024.06.20
Test Antenna - Bi-Log	9163-519	VULB 9163	Schwarzbeck	2022.05.25	2025.05.24
Test Antenna - Loop	1519-022	FMZB1519	Schwarzbeck	2022.02.11	2025.02.10
Test Antenna – Horn	01774	BBHA 9120D	Schwarzbeck	2022.07.13	2025.07.12
Test Antenna – Horn	BBHA9170 #773	BBHA9170	Schwarzbeck	2022.07.14	2025.07.13
Preamplifier (10MHz-6GHz)	46732	S10M100L38 02	LUCIX CORP.	2023.06.27	2024.06.26
Preamplifier (2GHz-18GHz)	61171/61172	S020180L32 03	LUCIX CORP.	2023.06.27	2024.06.26
Preamplifier (18GHz-40GHz)	DS77209	DCLNA0118-40C-S	Decentest	2023.07.04	2024.07.03
RF Coaxial Cable (DC-18GHz)	MRE001	PE330	Pasternack	2023.06.27	2024.06.26
RF Coaxial Cable (DC-18GHz)	MRE002	CLU18	Pasternack	2023.06.27	2024.06.26
RF Coaxial Cable (DC-18GHz)	MRE003	CLU18	Pasternack	2023.06.27	2024.06.26
RF Coaxial Cable (DC-40GHz)	22290045	QA360-40-K K-0.5	Qualwave	2023.07.04	2024.07.03
RF Coaxial Cable (DC-40GHz)	22290046	QA360-40-K KF-2	Qualwave	2023.07.04	2024.07.03
RF Coaxial Cable (DC-18GHz)	22120181	QA500-18-N N-5	Qualwave	2023.07.04	2024.07.03
Notch Filter	N/A	WRCG-2400-2483.5-60SS	Wainwright	N/A	N/A
Anechoic Chamber	N/A	9m*6m*6m	CRT	2022.05.10	2025.05.09



1.3. Measurement Uncertainty

Test Items	Uncertainty	Remark
Peak Output Power	$\pm 2.22\text{dB}$	Confidence levels of 95%
Power Spectral Density	$\pm 2.22\text{dB}$	Confidence levels of 95%
Bandwidth	$\pm 5\%$	Confidence levels of 95%
Conducted Spurious Emission	$\pm 2.77\text{dB}$	Confidence levels of 95%
Restricted Frequency Bands	$\pm 5\%$	Confidence levels of 95%
Radiated Emission	$\pm 2.95\text{dB}$	Confidence levels of 95%
Conducted Emission	$\pm 2.44\text{dB}$	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	BLU Products, Inc.
Applicant Address	8600 NW 36th Street, Suite #200 Doral, FL 33166, USA
Manufacturer	BLU Products, Inc.
Manufacturer Address	8600 NW 36th Street, Suite #200 Doral, FL 33166, USA

2.2. Information of EUT

Product Name:	Smart Phone	
Sample No.:	1#	
Hardware Version:	A582-MB-V0.2	
Software Version:	BLU_G0950_V13.0.G.03.02_GENERIC_18-10-2023_1054	
Modulation Technology:	DSSS, OFDM	
Modulation Type:	Refer to section 1.3	
Operating Frequency Range:	802.11b/g/n (HT20): 2412MHz–2472MHz	
Antenna Type:	PIFA Antenna	
Antenna Gain:	-0.32dBi	
Accessory Information:	Battery	
	Brand Name:	BLU
	Model No.:	C894851400L
	Serial No.:	N/A
	Capacity:	4000mAh
	Rated Voltage:	3.85V
	Charge Limit:	4.4V
	Manufacturer:	Phenix New Energy(Huizhou) Co.,Ltd.



Accessory Information:	Adaptor	
	Brand Name:	BLU
	Model No.:	US-TY-2000
	Serial No.:	N/A
	Rated Output:	5V \pm 2000mA
	Rated Input:	100-240V \sim 50/60Hz, 0.3A
	Manufacturer:	Shenzhen Tianyin Electronics CO.,LTD

Note 1: We use the dedicated software to control the EUT continuous transmission.

Note 2: 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

Test Mode	Channel	Frequency (MHz)	Channel	Frequency (MHz)
802.11b/g/n (HT20)	1	2412	8	2447
	2	2417	9	2452
	3	2422	10	2457
	4	2427	11	2462
	5	2432	12	2467
	6	2437	13	2472
	7	2442		

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



2.4. Test Configuration of EUT

2.4.1. Modulation Type and Data Rate of EUT

Modulation technology	Modulation Type	Data Rate (Mbps) <small>Note1</small>
DSSS (802.11b)	DBPSK	1
	DQPSK	2
	CCK	5.5/ 11
OFDM (802.11g)	BPSK	6 / 9
	QPSK	12 / 18
	16QAM	24 / 36
	64QAM	48 / 54
OFDM (802.11n (HT20))	BPSK	6.5
	QPSK	13/19.5
	16QAM	26/39
	64QAM	52/58.5/65

Note1: The worst-case mode (bold face) in all data rates has been determined during the pre-scan, only the test data of the worst-case were recorded in this report.

Note2: The RF signal transmission of EUT is controlled by the build-in engineering mode which is provided by the manufacturer. The recorded power setting value is the maximum that the engineering mode has configuration during testing.

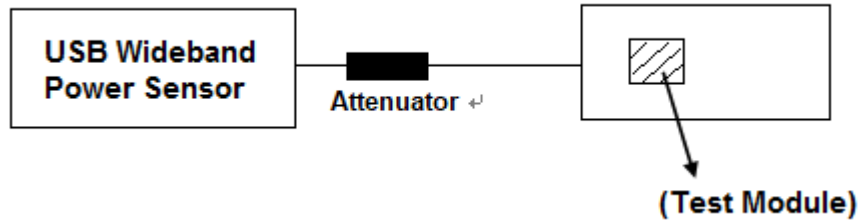
2.5. Test Conditions

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

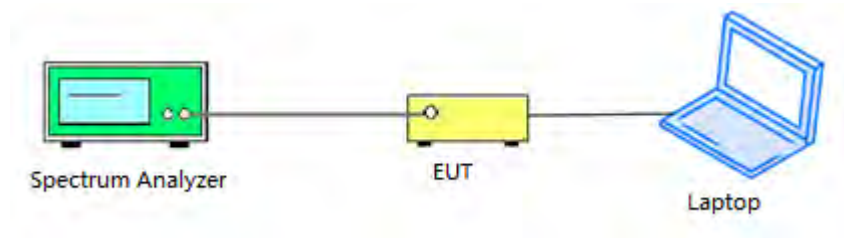
2.6. Test Setup Layout Diagram

2.6.1. Conducted Measurement

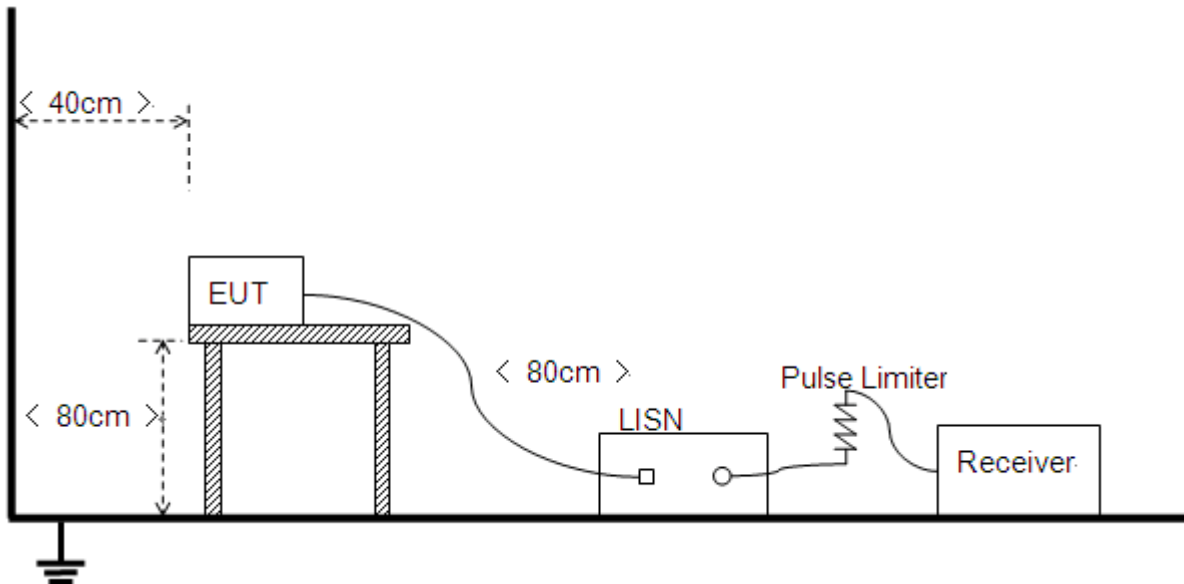
Power item



Other items

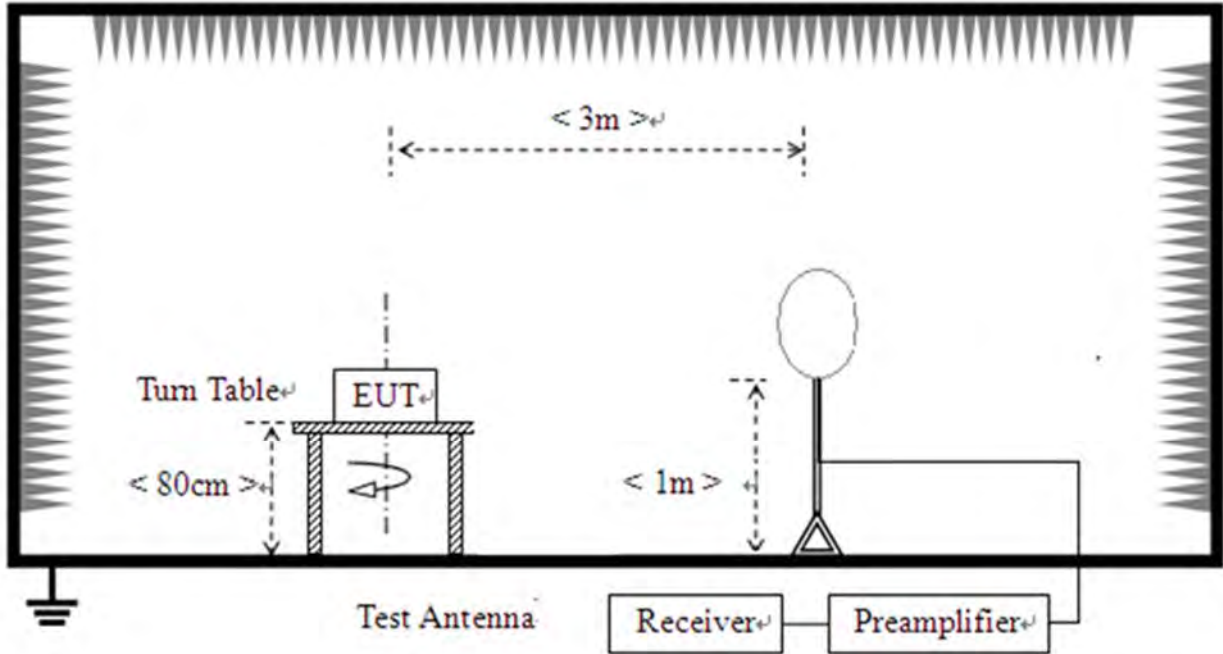


2.6.2. Conducted Emission Measurement

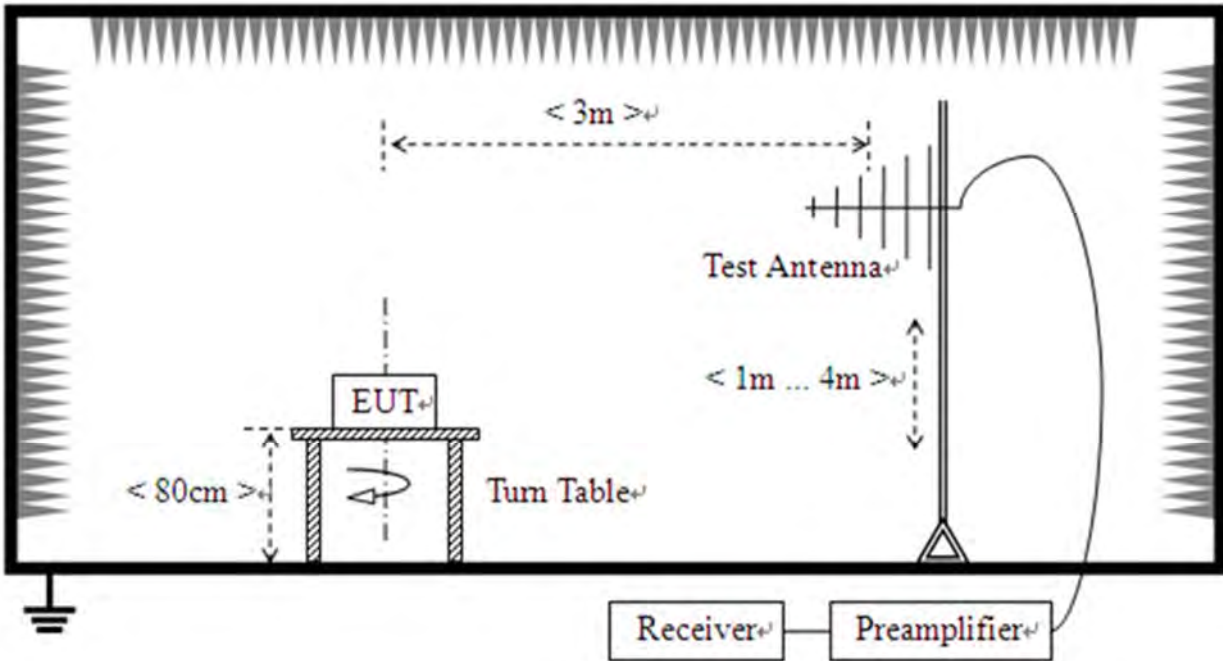


2.6.3.Radiation Measurement

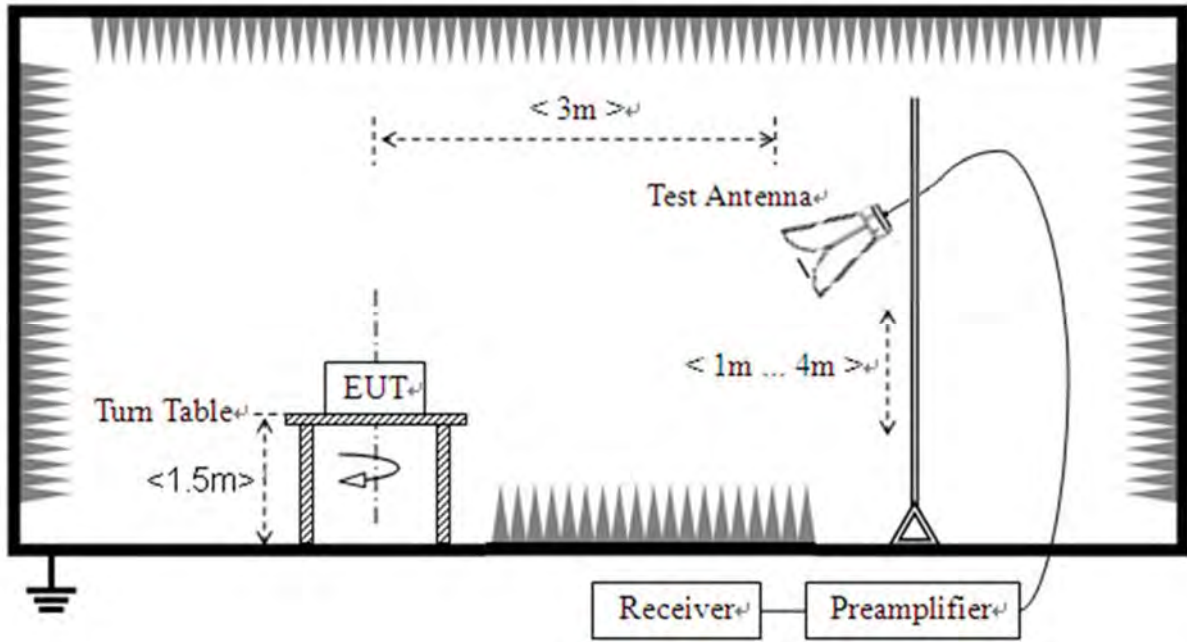
1) For radiated emissions from 9kHz to 30MHz



2) For radiated emissions from 30MHz to 1GHz



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

Inside of the EUT has a PIFA antenna coupled with the metal shrapnel. Please refer to the EUT internal photos.



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 $\pm 2\%$; 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 and Average 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 conducted output power of the intentional radiator shall not exceed 1 Watt.

3.3.2. Test Procedures

The EUT (Equipment under the test) which is coupled to the USB Wideband Power Sensor; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading.

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 and A.3 in this report.



3.4.6 dB Bandwidth

3.4.1.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.

3.4.1.Test Procedures

KDB 558074 Section 8.2 was used in order to prove compliance.

3.4.2.Test Setup Layout

Refer to chapter 2.6.1 in this report.

3.4.3.Test Result

Refer to Annex A.4 in this report.



3.5. Conducted Spurious Emissions and Band Edge

3.5.1. 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.

3.5.2. Test Procedures

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

3.5.3. Test Setup Layout

Refer to chapter 2.6.1 in this report.

3.5.4. Test Result

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



3.6. Power Spectral Density

3.6.1. 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.

3.6.2. 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 to 1.5 times DTS
- c) Set RBW to 30kHz
- d) Set VBW to 100kHz
- 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 and recorded as PD
- j) Use below formula to calculate the Conducted PSD value that at specified RBW:

Conducted PSD = PD - 10lg(30k/3k)

3.6.3. Test Setup Layout

Refer to chapter 2.6.1 in this report.

3.6.4. Test Result

Refer to Annex A.7 in this report.



3.7. Conducted Emission

3.7.1. 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.

3.7.2. 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: 2013.

3.7.3. Test Setup Layout

Refer to chapter 2.6.2 in this report.

3.7.4. Test Result

Refer to Annex A.8 in this report.



3.8. Restricted Frequency Bands

3.8.1. 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).

3.8.2. 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 $f \geq 1\text{GHz}$, 100 kHz for $f < 1\text{GHz}$

VBW = 3 MHz

Sweep = auto

Detector function = peak/average

Trace = max hold

Allow the trace to stabilize

3.8.3. Test Setup Layout

Refer to chapter 2.6.3 in this report.

3.8.4. Test Result

Refer to Annex A.9 in this report.



3.9. Radiated Emission

3.9.1. 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

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).



3.9.2. 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 3 meters. 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.

3.9.3. Test Setup Layout

Refer to chapter 2.6.3 in this report.

3.9.4. Test Result

Refer to Annex A.10 in this report.



Annex A Test Data and Result

A.1. Duty Cycle of Test Signal

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	b	2412	Ant1	99.71	0.01	0.08
NVNT	b	2442	Ant1	99.7	0.01	0.08
NVNT	b	2472	Ant1	99.71	0.01	0.08
NVNT	g	2412	Ant1	98.48	0.07	0.48
NVNT	g	2442	Ant1	98.48	0.07	0.48
NVNT	g	2472	Ant1	98.39	0.07	0.48
NVNT	n20	2412	Ant1	98.37	0.07	0.52
NVNT	n20	2442	Ant1	97.87	0.09	0.52
NVNT	n20	2472	Ant1	98.27	0.08	0.52

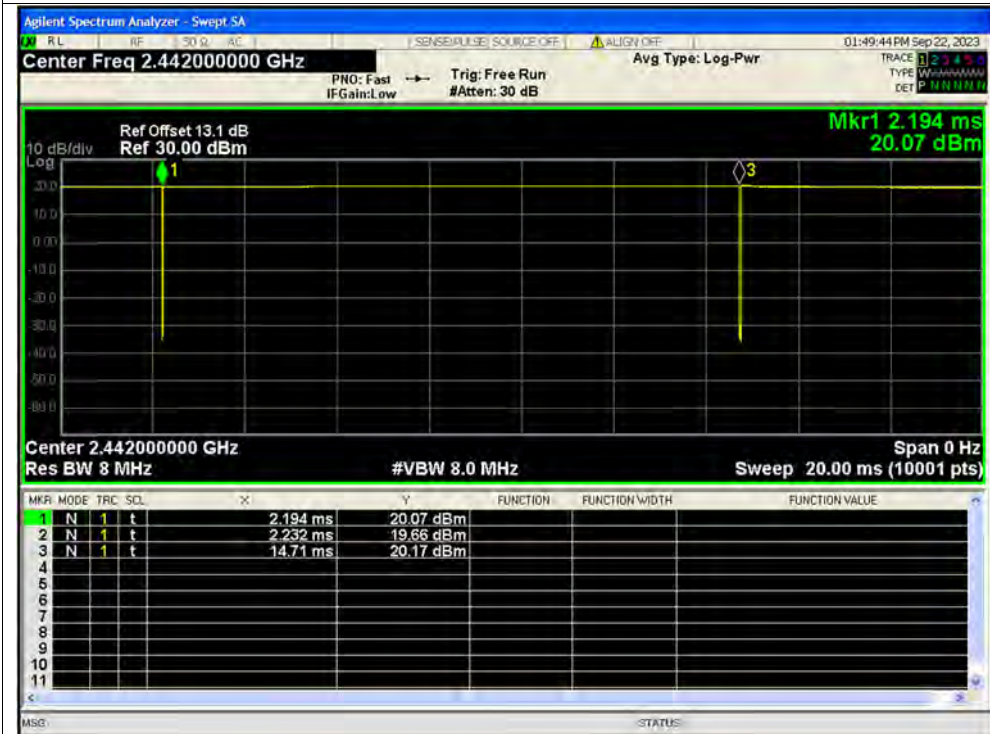


Test Graphs

Duty Cycle NVNT b 2412MHz Ant1

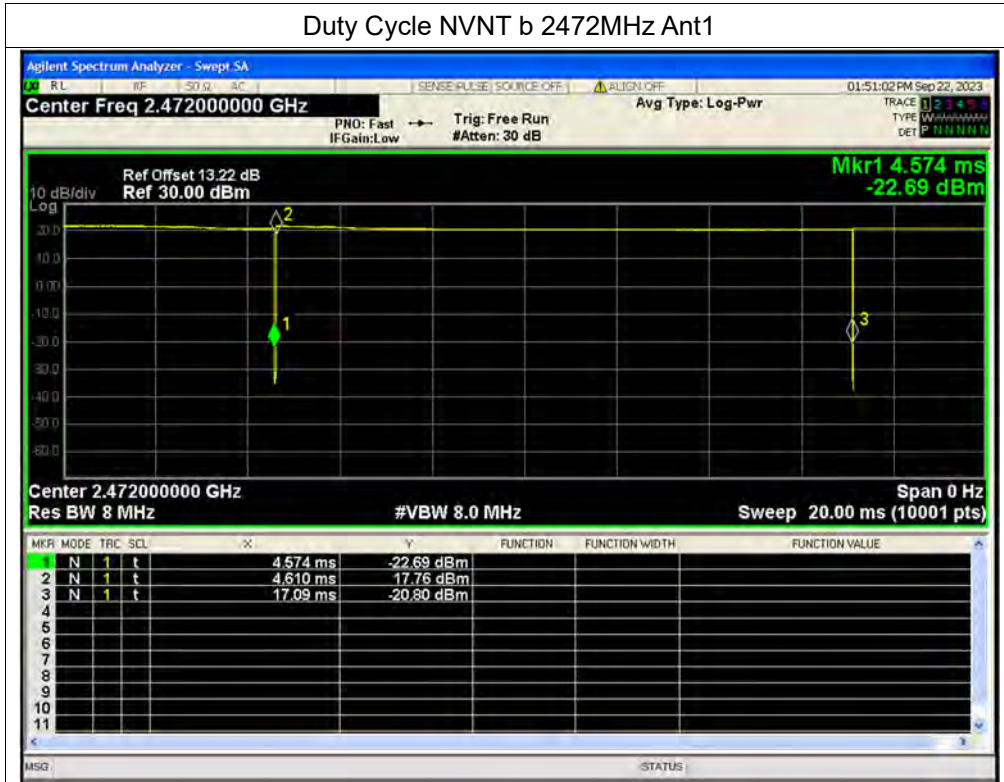


Duty Cycle NVNT b 2442MHz Ant1

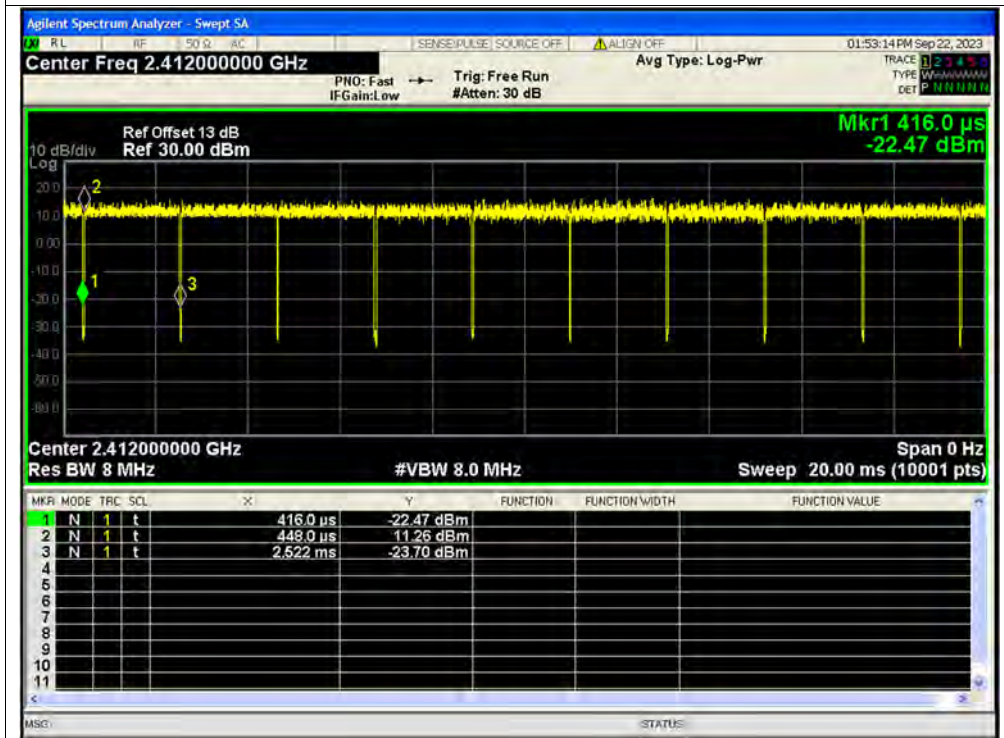




Duty Cycle NVNT b 2472MHz Ant1

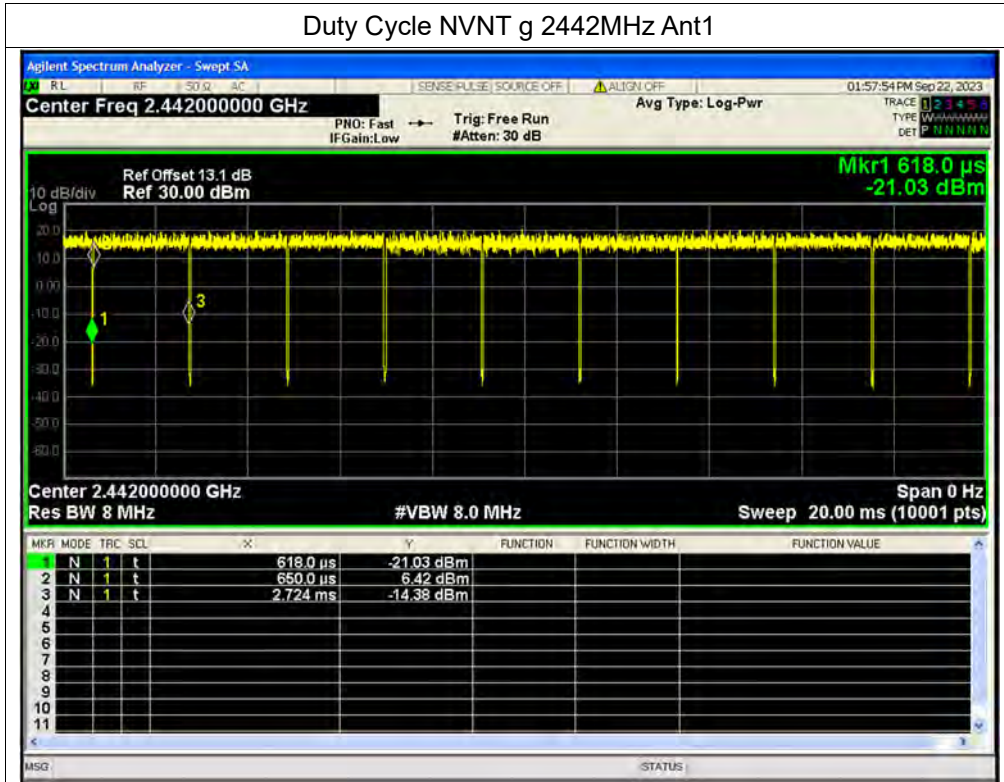


Duty Cycle NVNT g 2412MHz Ant1

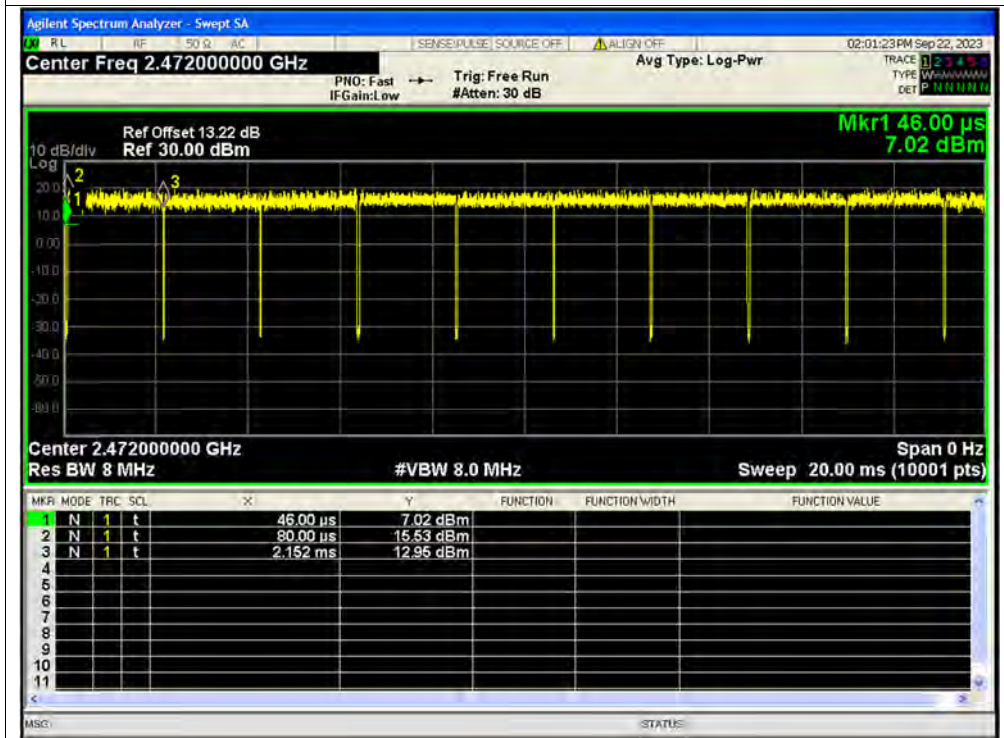




Duty Cycle NVNT g 2442MHz Ant1

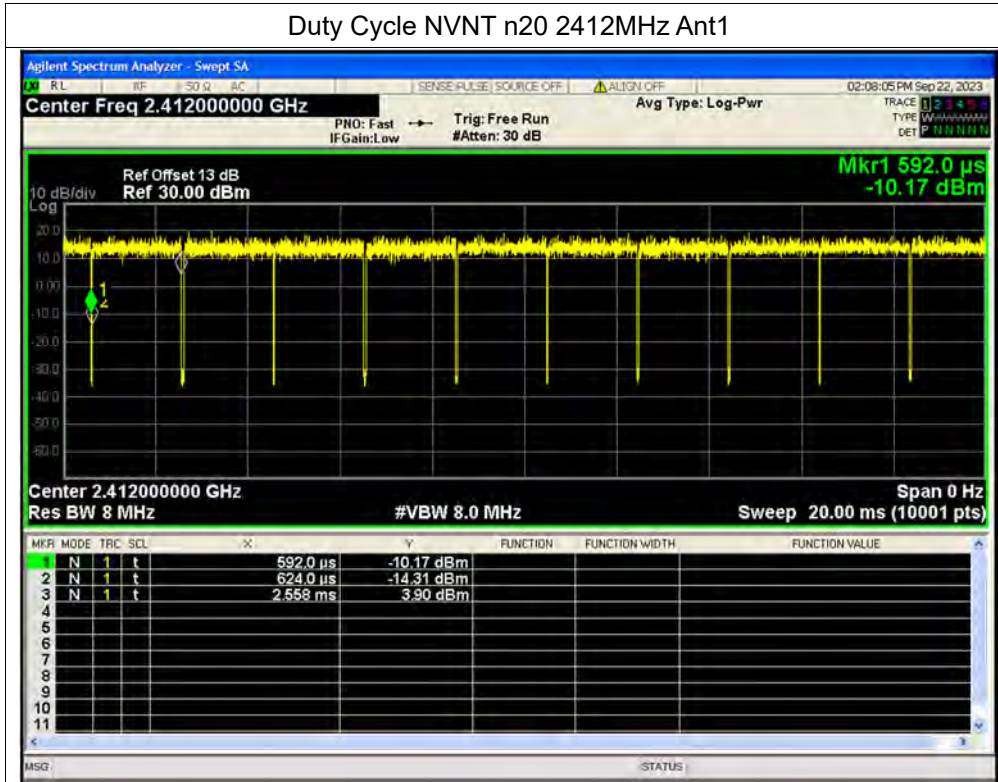


Duty Cycle NVNT g 2472MHz Ant1

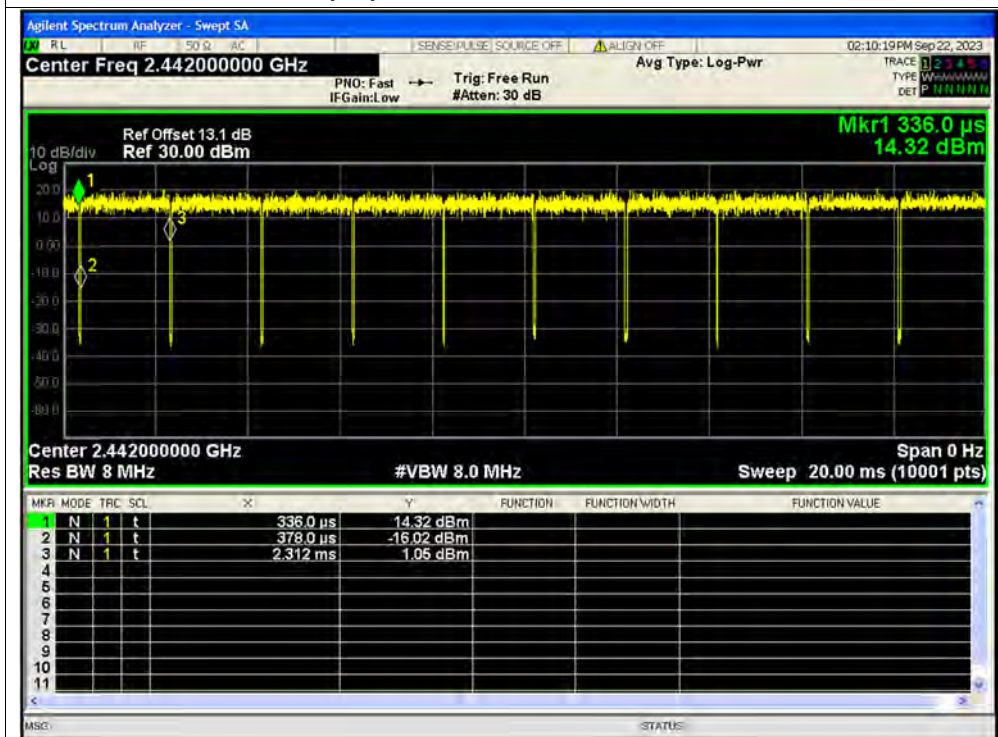




Duty Cycle NVNT n20 2412MHz Ant1

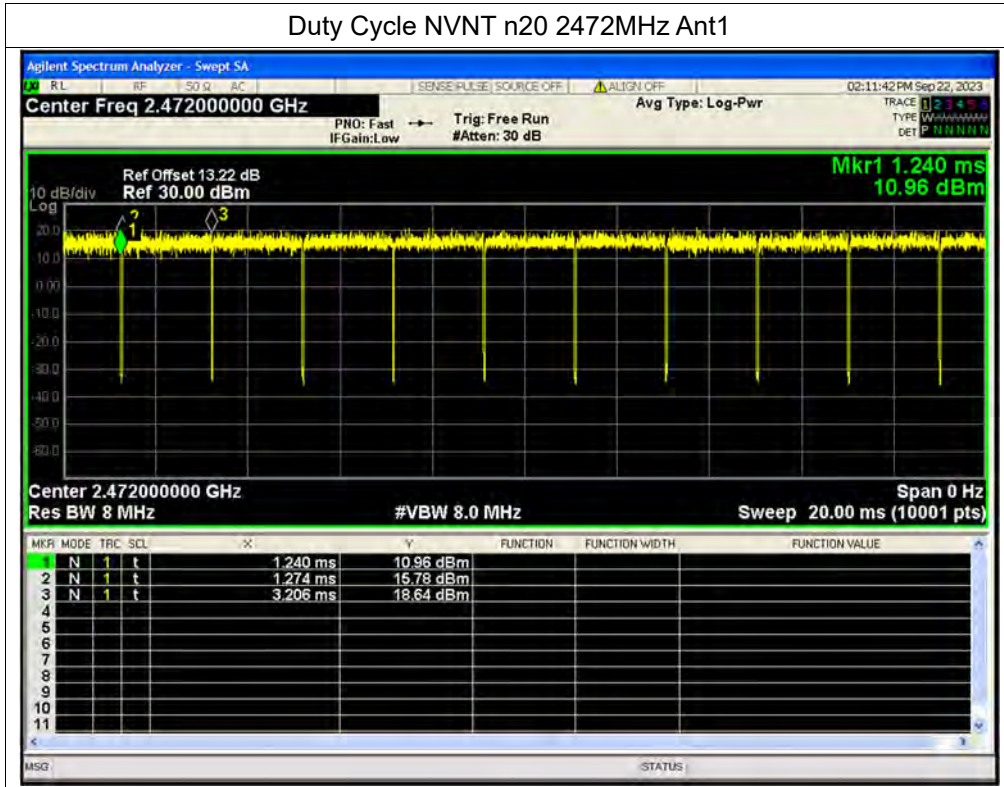


Duty Cycle NVNT n20 2442MHz Ant1





Duty Cycle NVNT n20 2472MHz Ant1



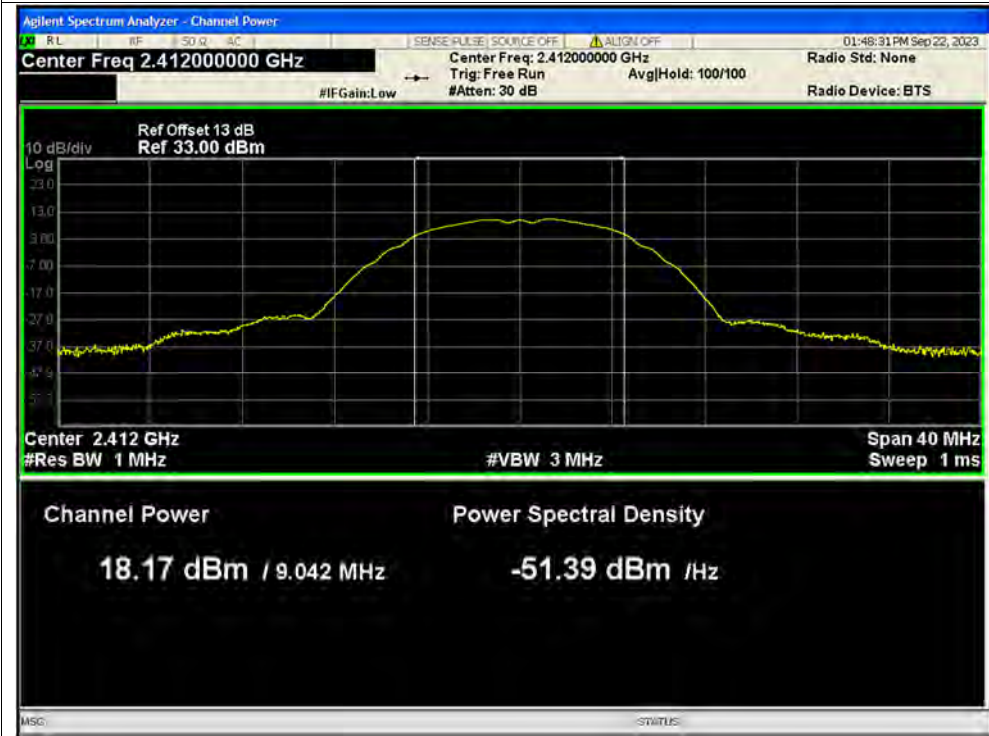
**A.2. Maximum Peak Conducted Output Power**

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Conducted Power (dBm)	Total Conducted Power (W)	Limit Conducted (dBm)	Verdict
NVNT	b	2412	Ant1	18.17	0	18.17	0.06561	30	Pass
NVNT	b	2442	Ant1	18.44	0	18.44	0.06982	30	Pass
NVNT	b	2472	Ant1	16.11	0	16.11	0.04083	30	Pass
NVNT	g	2412	Ant1	20.24	0	20.24	0.10568	30	Pass
NVNT	g	2442	Ant1	20.72	0	20.72	0.11803	30	Pass
NVNT	g	2472	Ant1	16.53	0	16.53	0.04498	30	Pass
NVNT	n20	2412	Ant1	19.78	0	19.78	0.09506	30	Pass
NVNT	n20	2442	Ant1	19.88	0	19.88	0.09727	30	Pass
NVNT	n20	2472	Ant1	16.2	0	16.2	0.04169	30	Pass

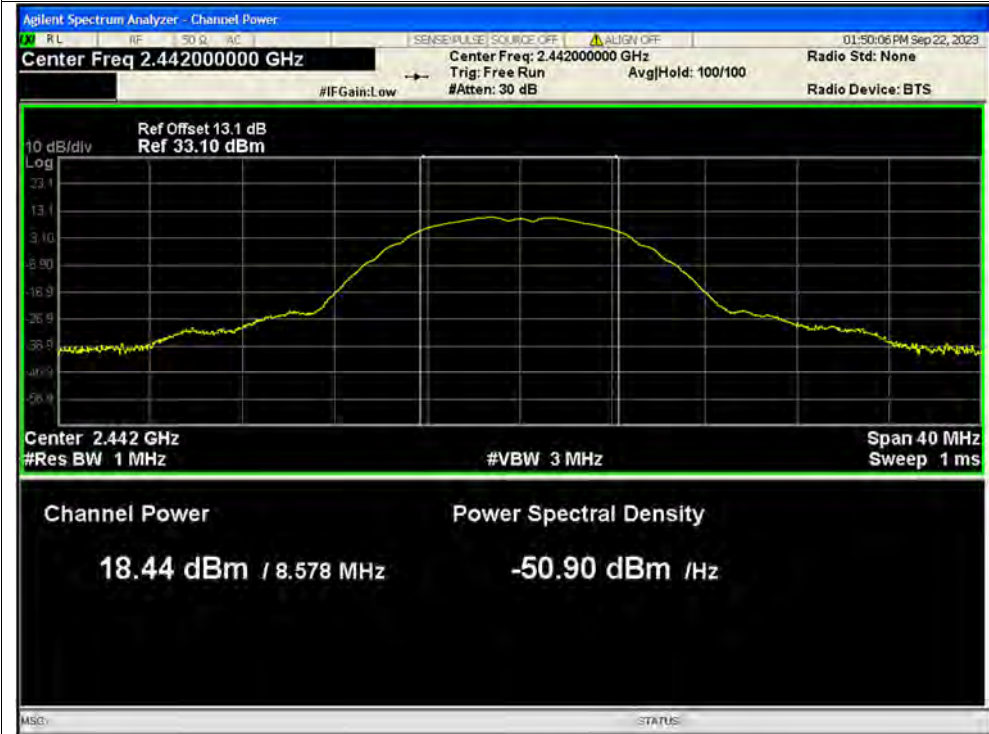


Test Graphs

Peak Power NVNT b 2412MHz Ant1

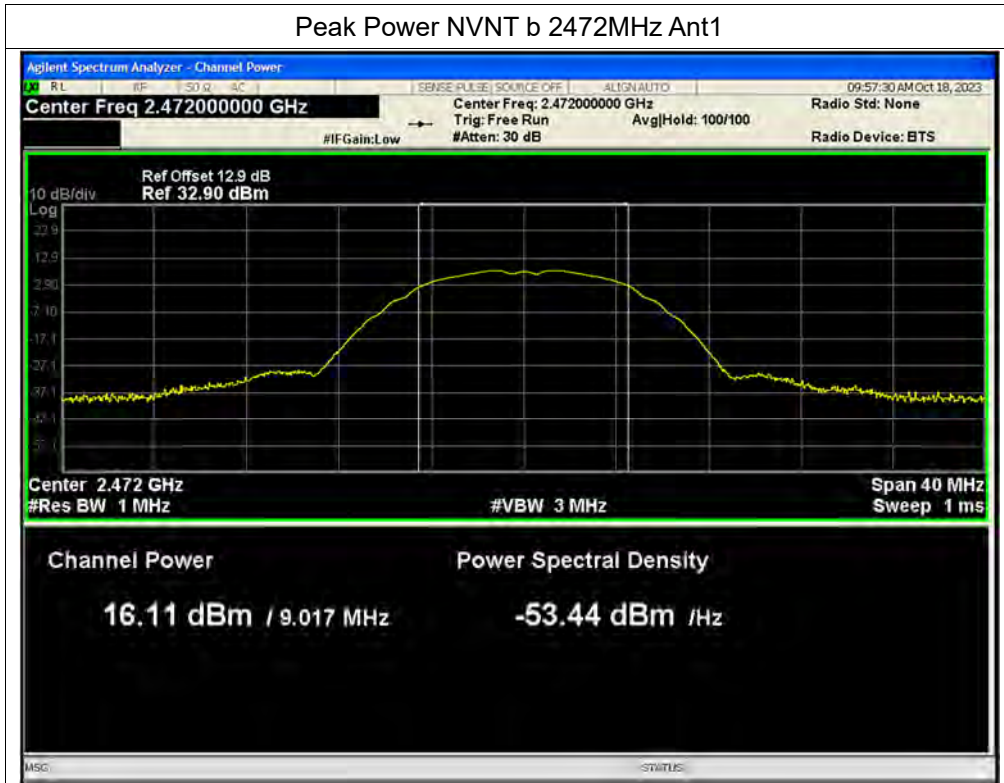


Peak Power NVNT b 2442MHz Ant1

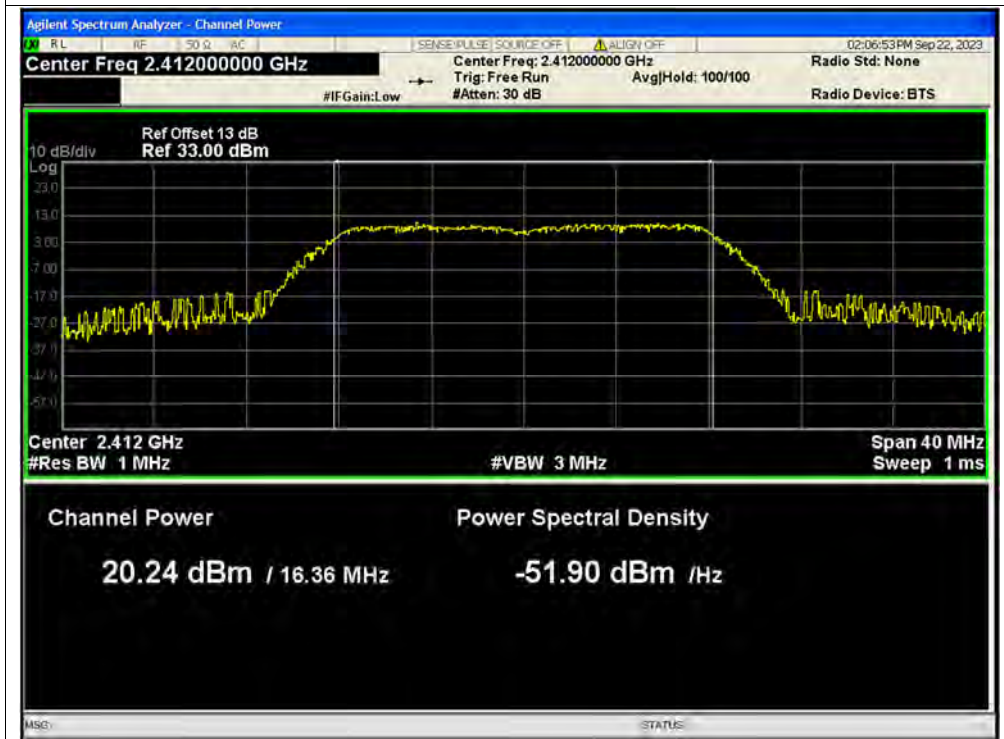




Peak Power NVNT b 2472MHz Ant1

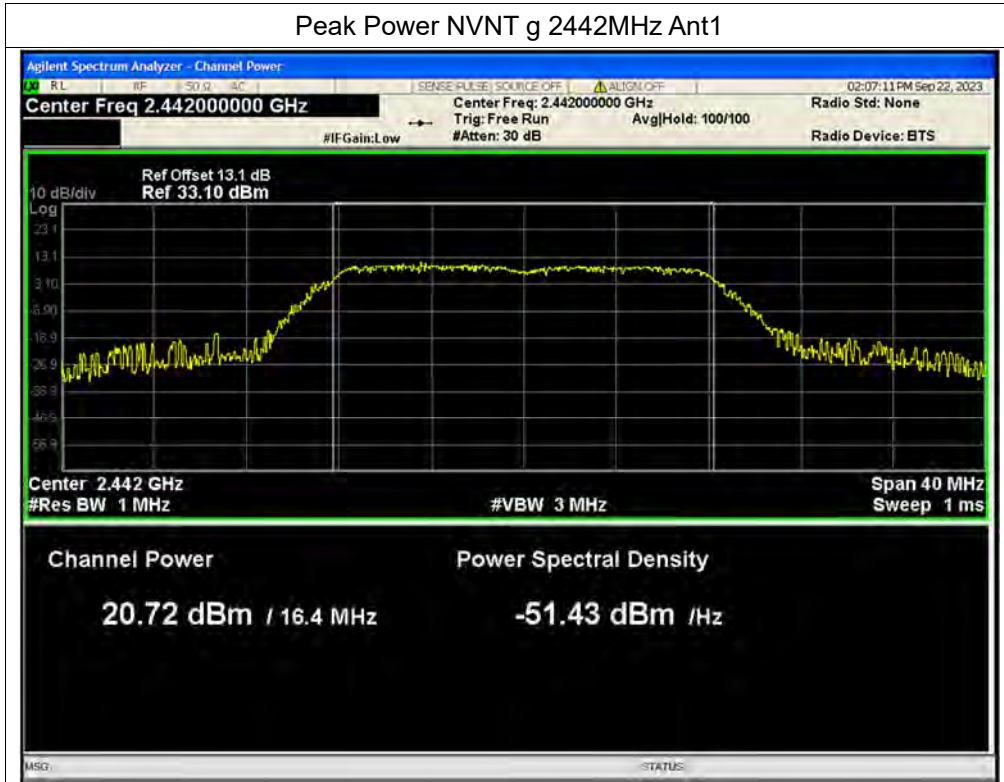


Peak Power NVNT g 2412MHz Ant1

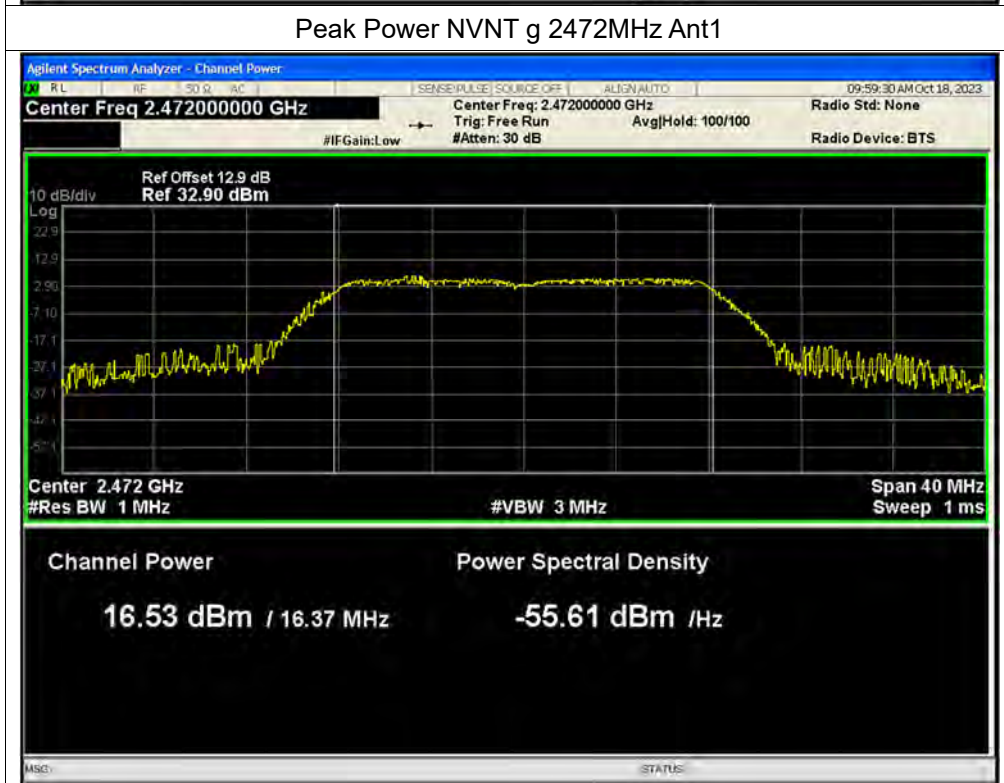




Peak Power NVNT g 2442MHz Ant1

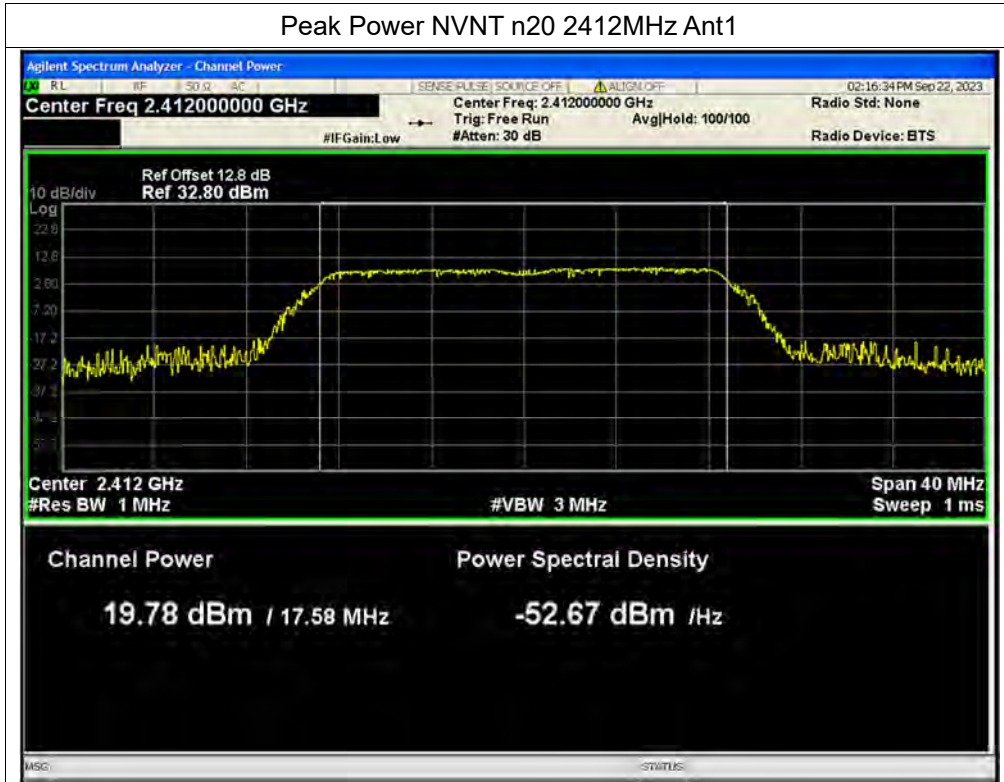


Peak Power NVNT g 2472MHz Ant1

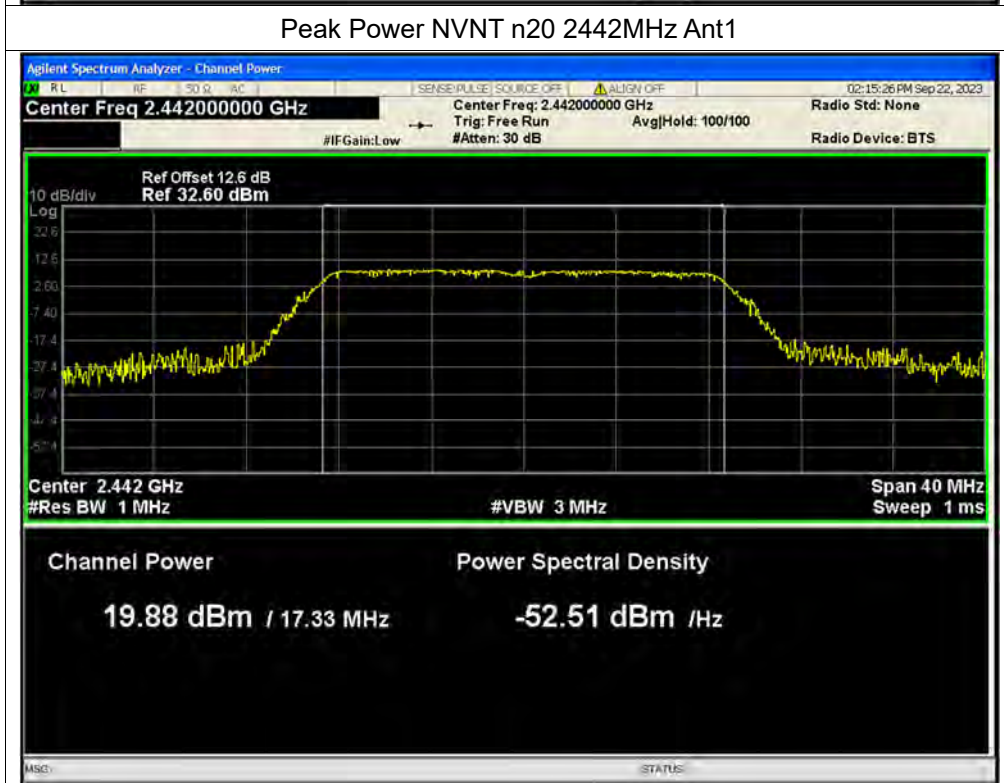


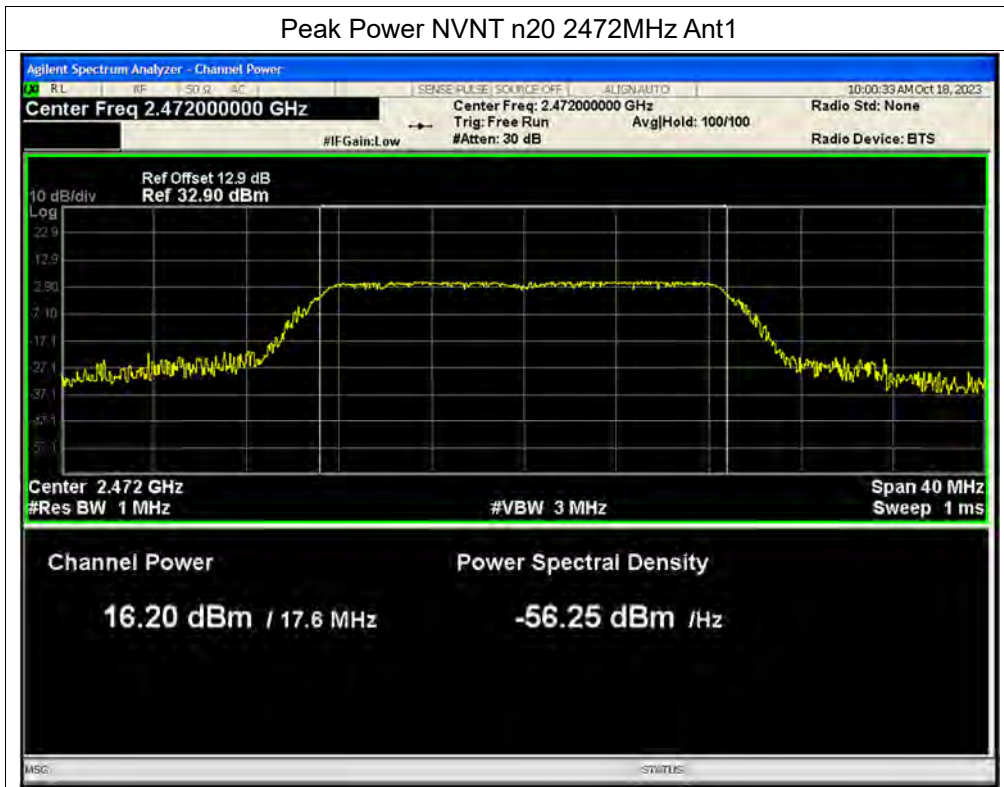


Peak Power NVNT n20 2412MHz Ant1



Peak Power NVNT n20 2442MHz Ant1





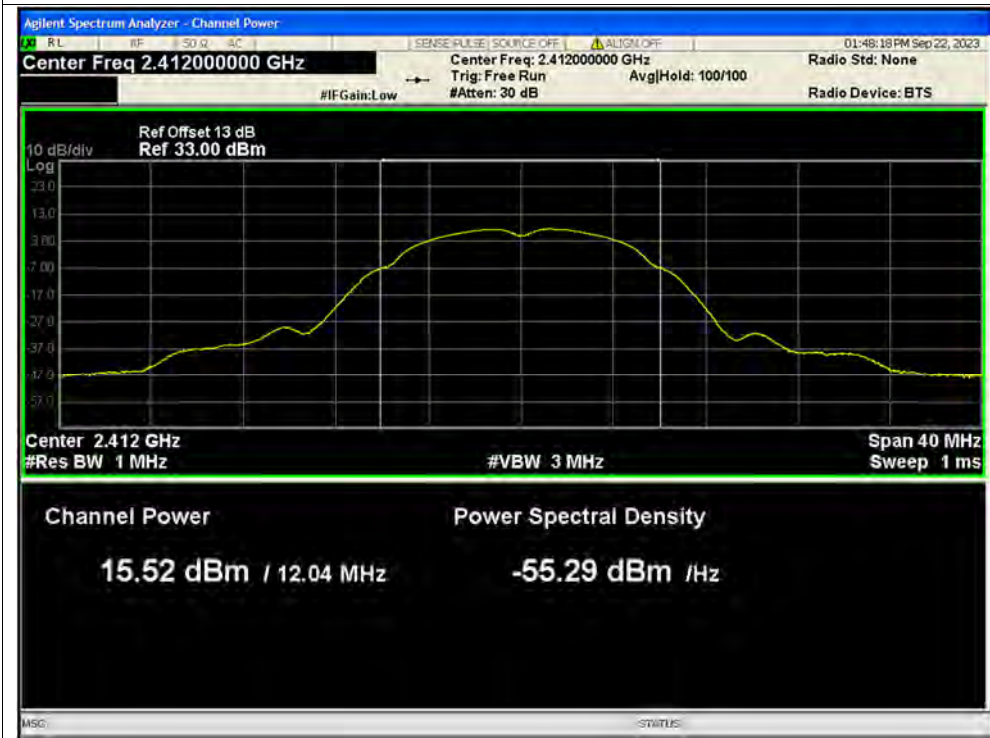
**A.3. Maximum Average Conducted Output Power**

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Conducted Power (dBm)	Total Conducted Power (W)	Limit Conducted (dBm)	Verdict
NVNT	b	2412	Ant1	15.52	0.01	15.53	0.03573	30	Pass
NVNT	b	2442	Ant1	15.84	0.01	15.85	0.03846	30	Pass
NVNT	b	2472	Ant1	13.46	0.01	13.47	0.02223	30	Pass
NVNT	g	2412	Ant1	13	0.07	13.07	0.02028	30	Pass
NVNT	g	2442	Ant1	13.54	0.07	13.61	0.02296	30	Pass
NVNT	g	2472	Ant1	9.26	0.07	9.33	0.00857	30	Pass
NVNT	n20	2412	Ant1	12.19	0.07	12.26	0.01683	30	Pass
NVNT	n20	2442	Ant1	12.46	0.09	12.55	0.01799	30	Pass
NVNT	n20	2472	Ant1	8.7	0.08	8.78	0.00755	30	Pass

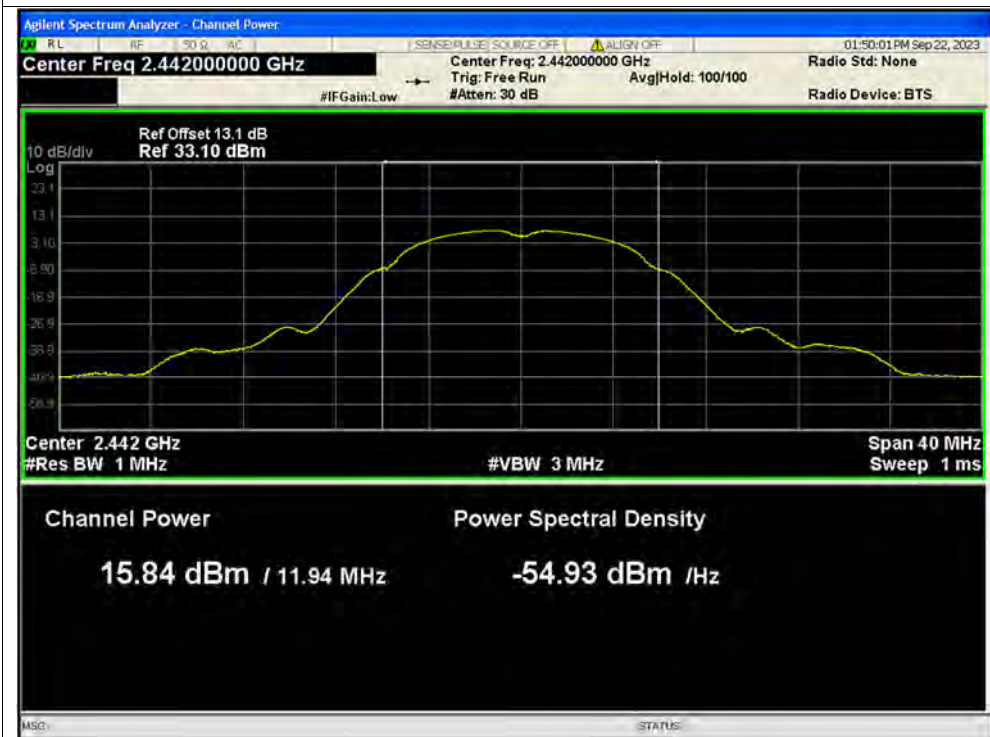


Test Graphs

Average Power NVNT b 2412MHz Ant1

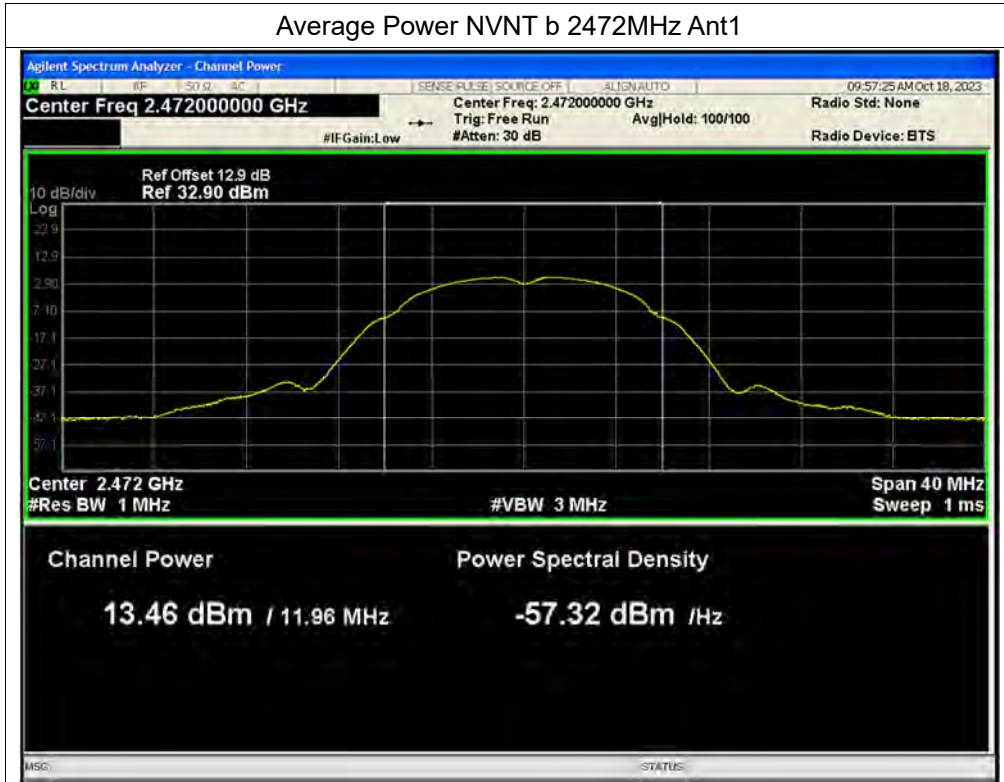


Average Power NVNT b 2442MHz Ant1

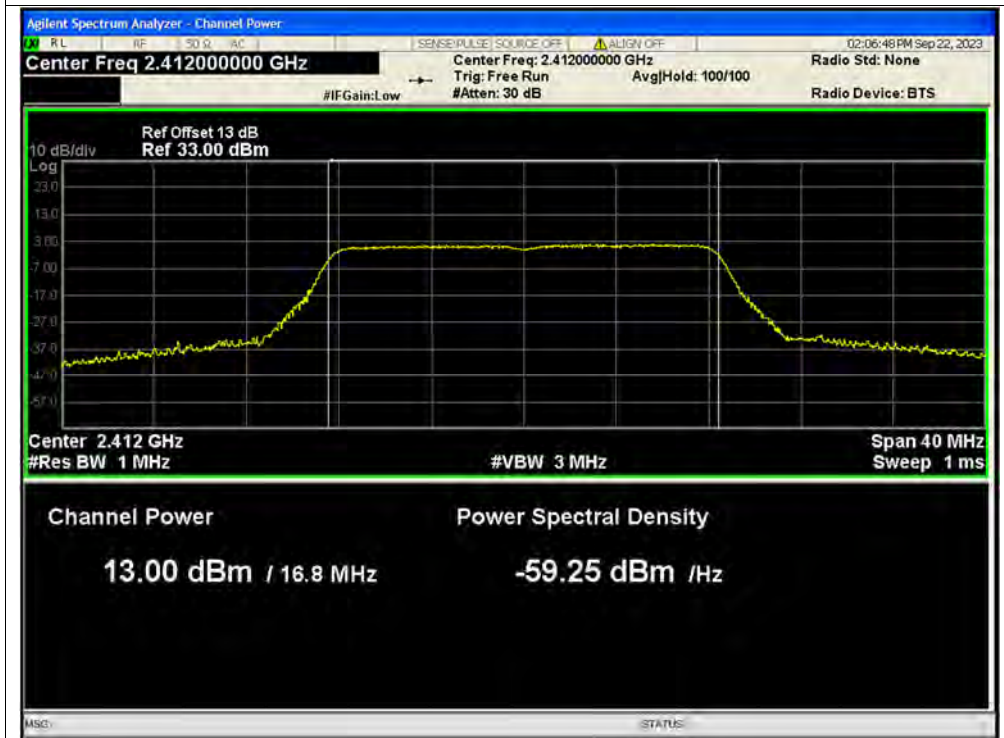




Average Power NVNT b 2472MHz Ant1

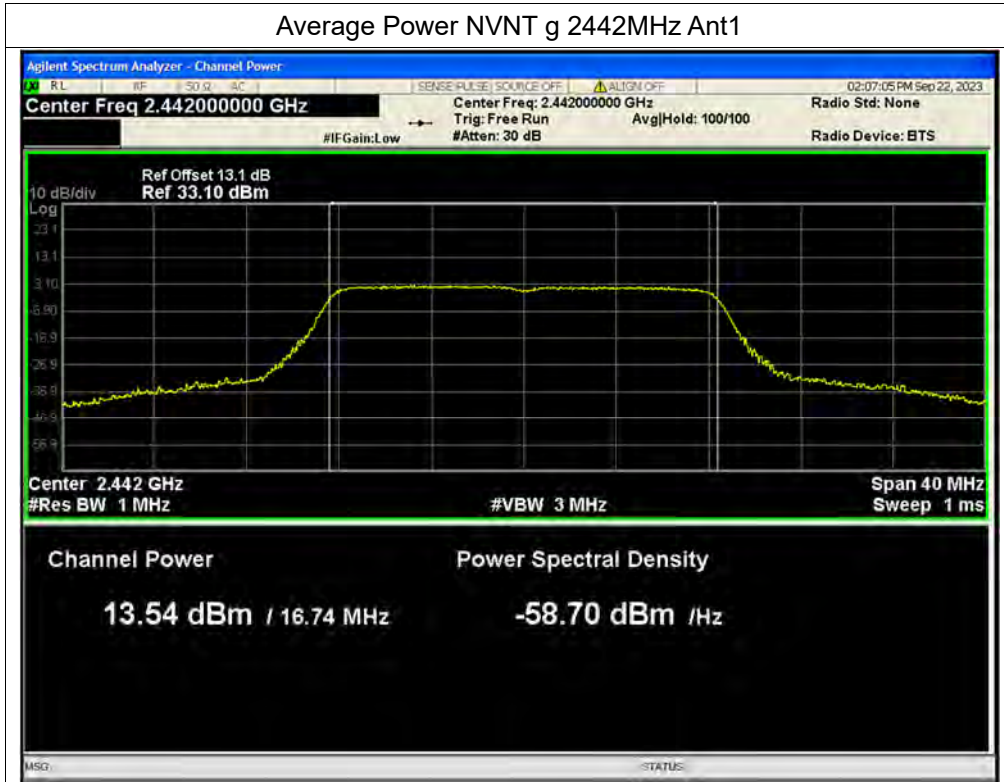


Average Power NVNT g 2412MHz Ant1

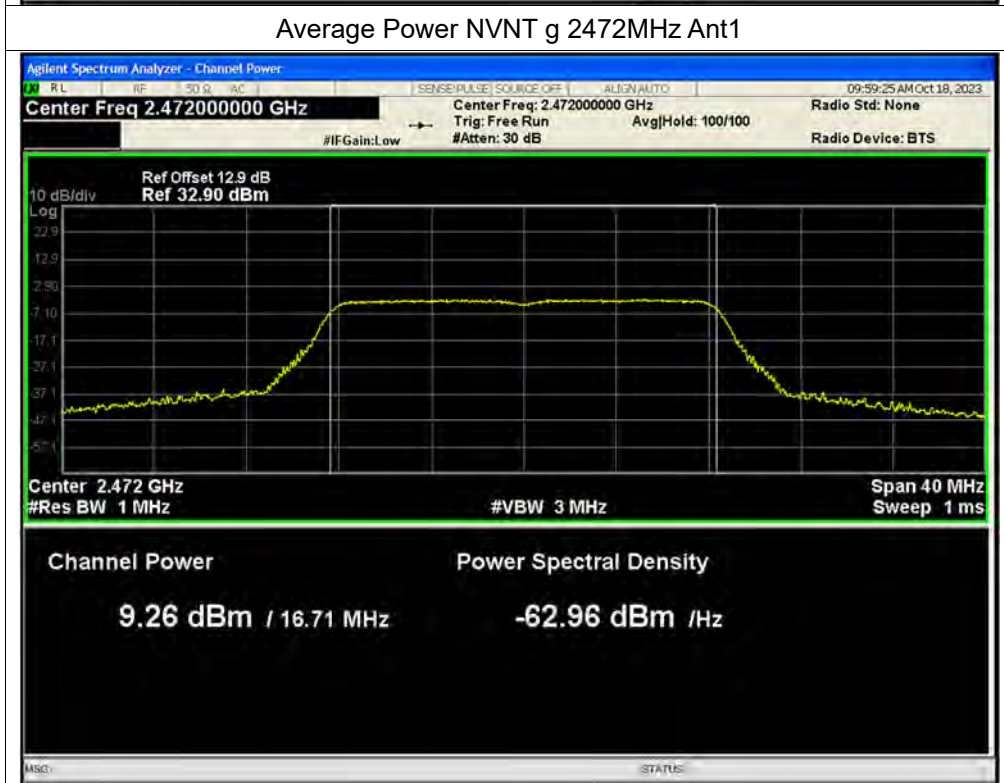




Average Power NVNT g 2442MHz Ant1

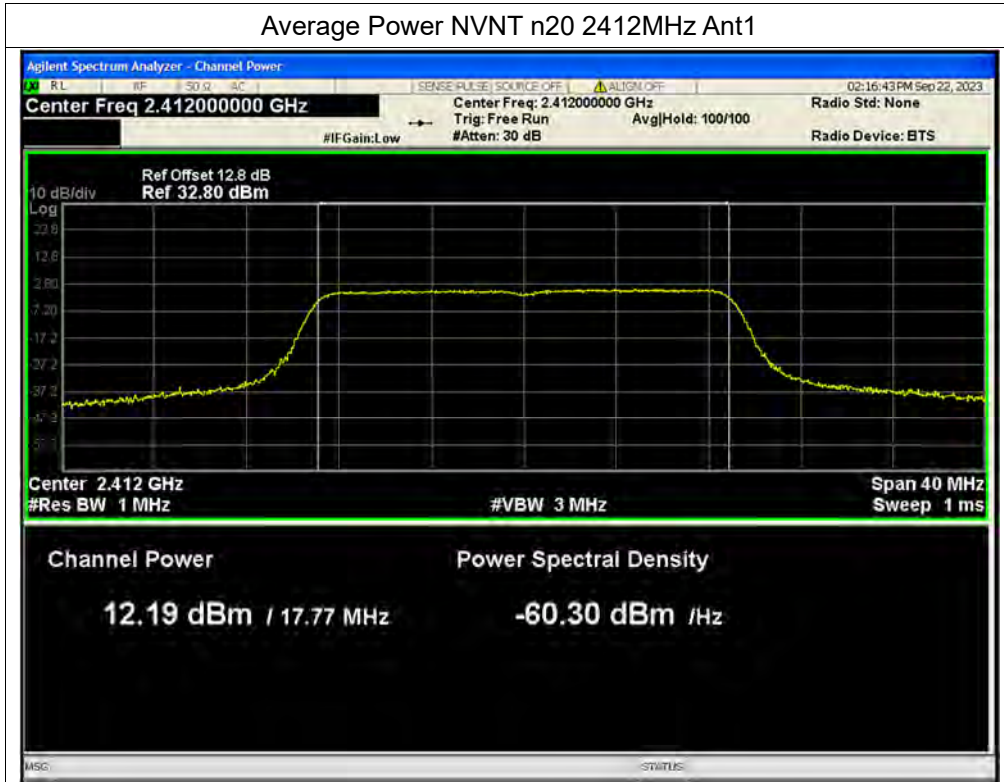


Average Power NVNT g 2472MHz Ant1

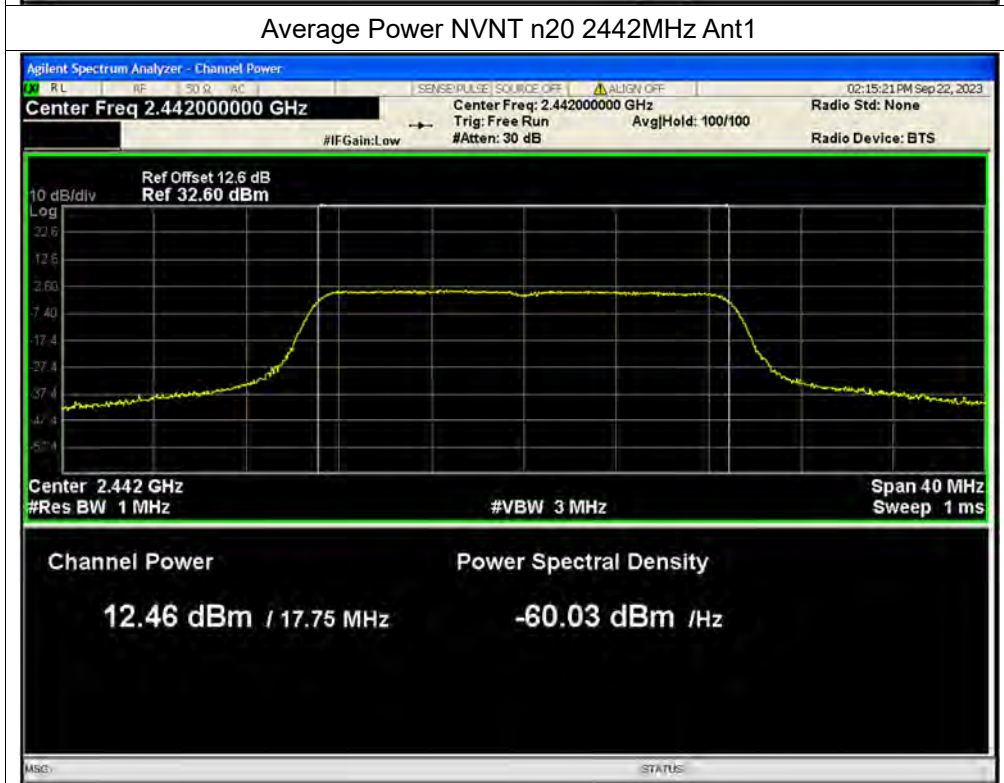


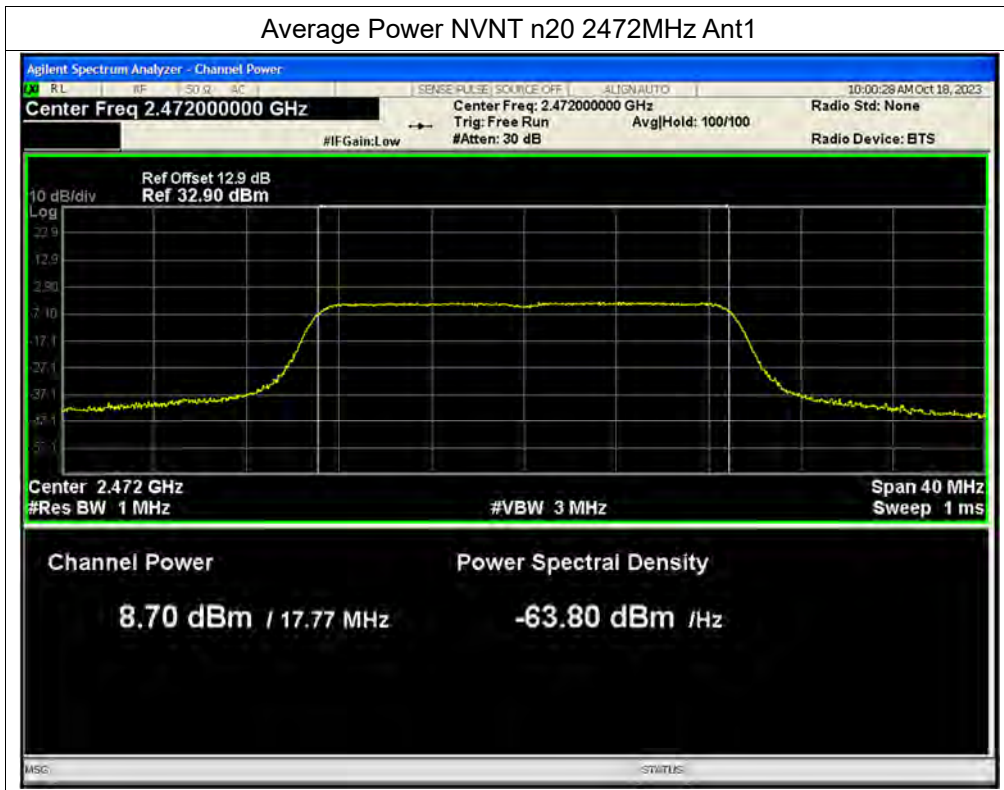


Average Power NVNT n20 2412MHz Ant1



Average Power NVNT n20 2442MHz Ant1





**A.4. 6 dB Bandwidth**

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	9.042	0.5	Pass
NVNT	b	2442	Ant1	8.578	0.5	Pass
NVNT	b	2472	Ant1	9.017	0.5	Pass
NVNT	g	2412	Ant1	16.362	0.5	Pass
NVNT	g	2442	Ant1	16.4	0.5	Pass
NVNT	g	2472	Ant1	16.373	0.5	Pass
NVNT	n20	2412	Ant1	17.583	0.5	Pass
NVNT	n20	2442	Ant1	17.33	0.5	Pass
NVNT	n20	2472	Ant1	17.595	0.5	Pass



Test Graphs

-6dB Bandwidth NVNT b 2412MHz Ant1

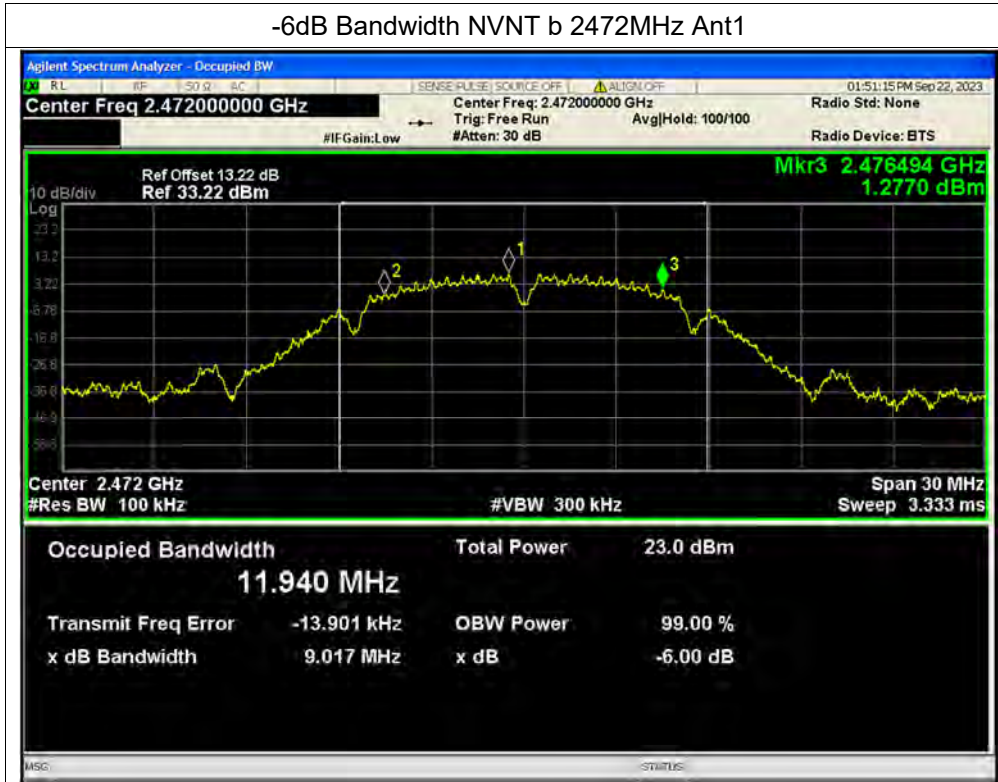


-6dB Bandwidth NVNT b 2442MHz Ant1

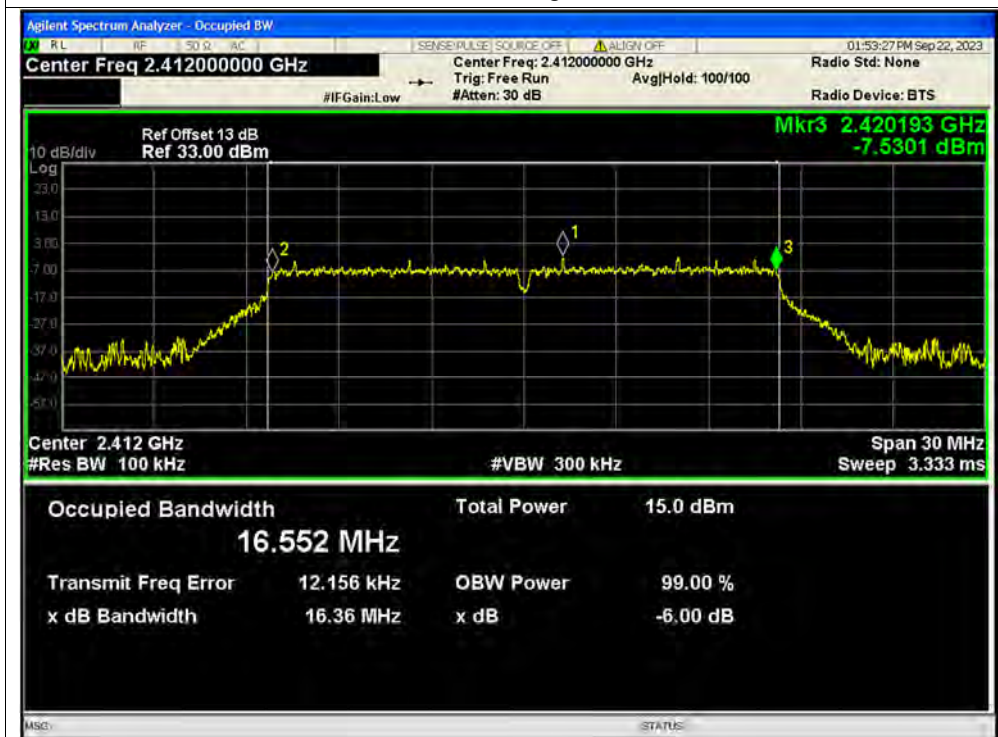




-6dB Bandwidth NVNT b 2472MHz Ant1

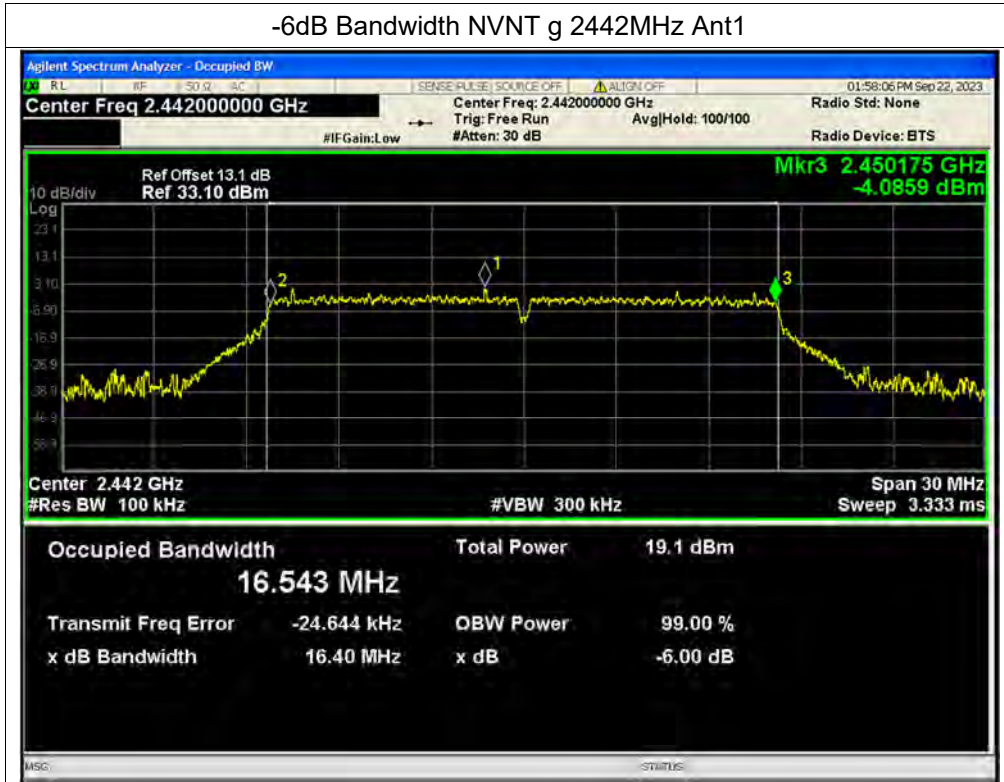


-6dB Bandwidth NVNT g 2412MHz Ant1

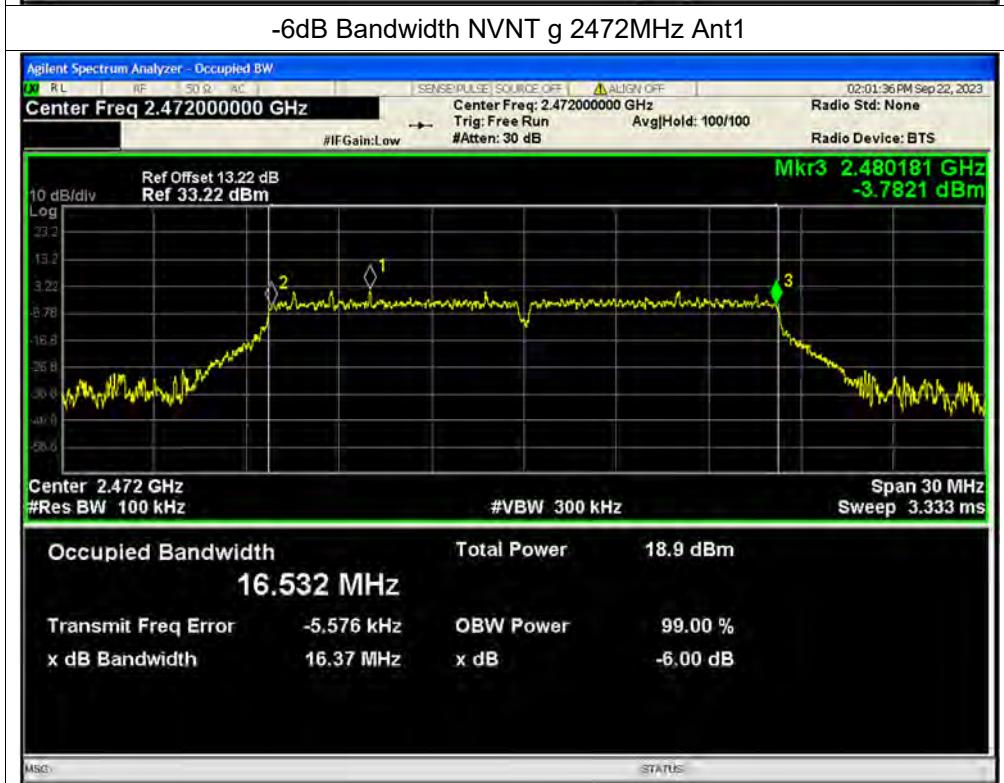




-6dB Bandwidth NVNT g 2442MHz Ant1

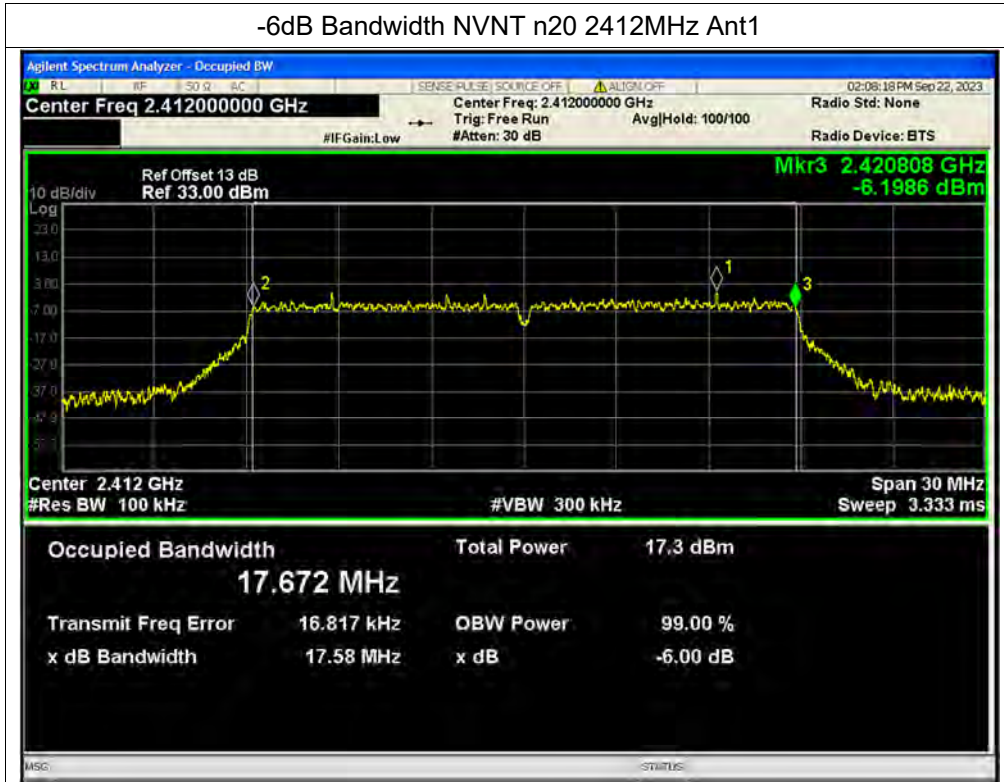


-6dB Bandwidth NVNT g 2472MHz Ant1

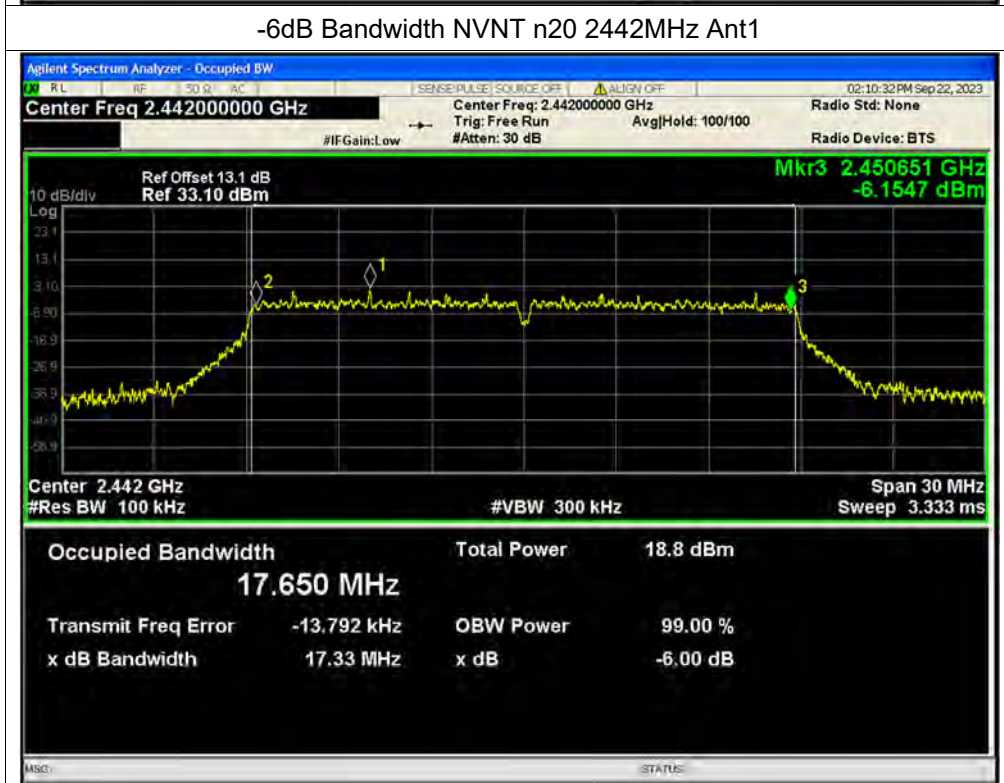


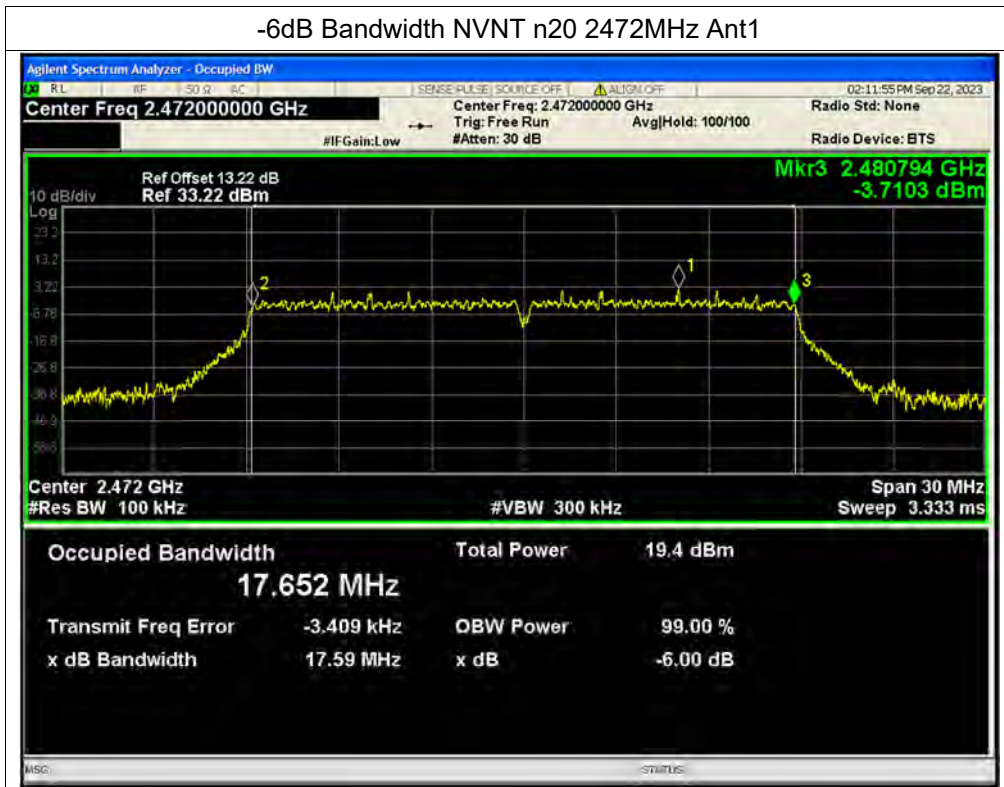


-6dB Bandwidth NVNT n20 2412MHz Ant1



-6dB Bandwidth NVNT n20 2442MHz Ant1







A.5. Conducted Spurious Emissions

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-33.77	-20	Pass
NVNT	b	2442	Ant1	-35.21	-20	Pass
NVNT	b	2472	Ant1	-35.92	-20	Pass
NVNT	g	2412	Ant1	-30.66	-20	Pass
NVNT	g	2442	Ant1	-31.1	-20	Pass
NVNT	g	2472	Ant1	-30.77	-20	Pass
NVNT	n20	2412	Ant1	-29.99	-20	Pass
NVNT	n20	2442	Ant1	-30.45	-20	Pass
NVNT	n20	2472	Ant1	-30.97	-20	Pass

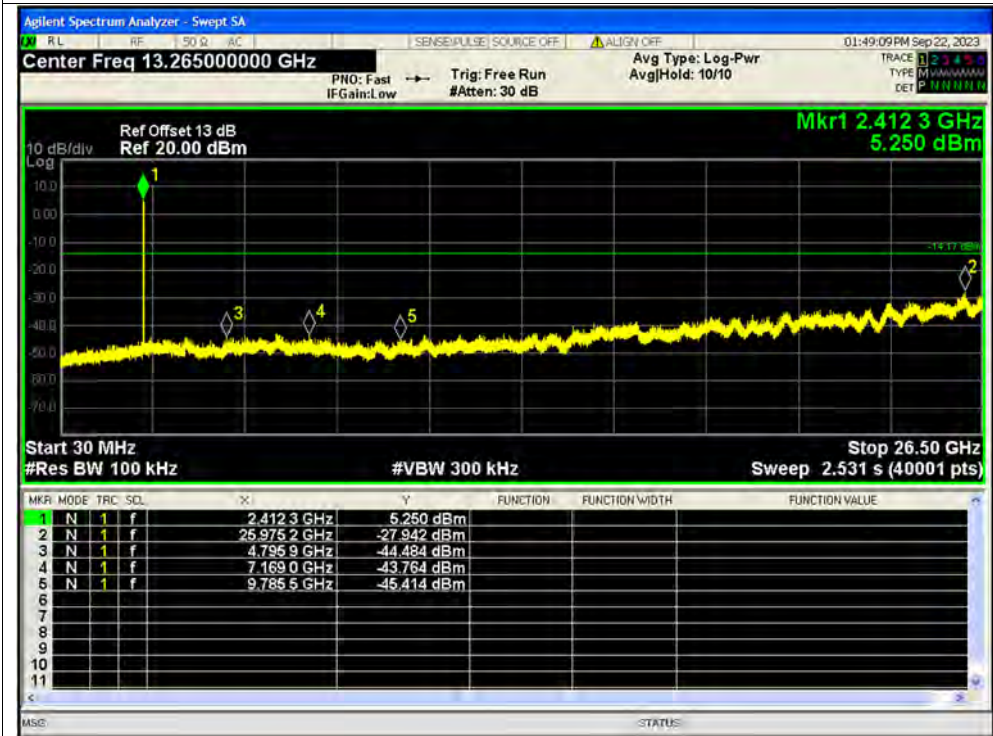


Test Graphs

Tx. Spurious NVNT b 2412MHz Ant1 Ref



Tx. Spurious NVNT b 2412MHz Ant1 Emission

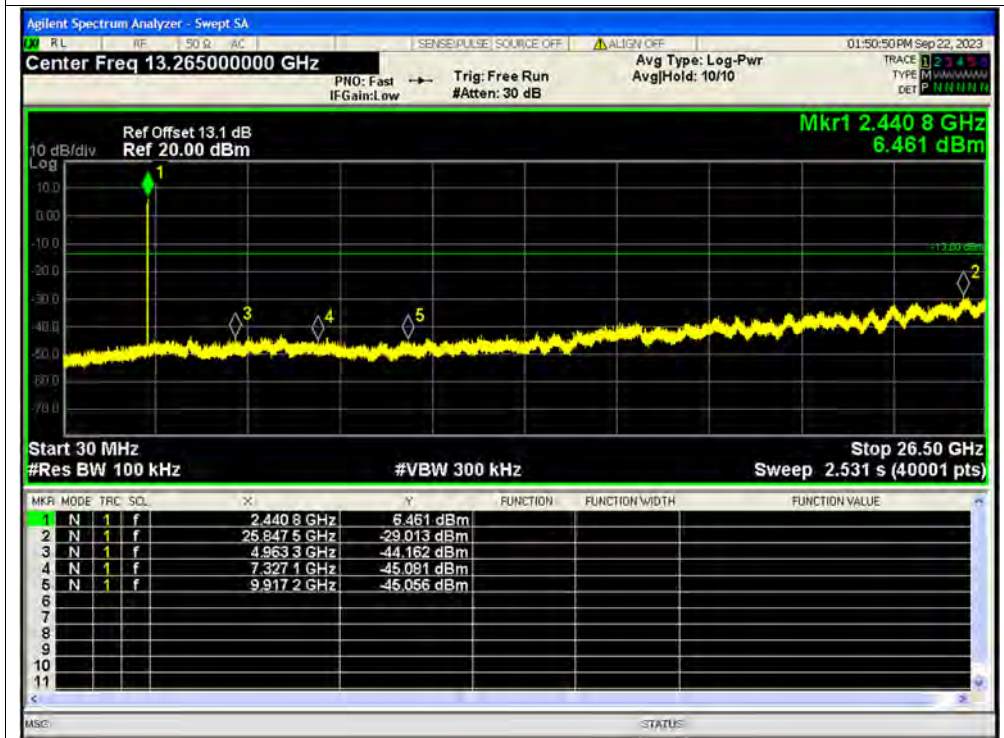




Tx. Spurious NVNT b 2442MHz Ant1 Ref

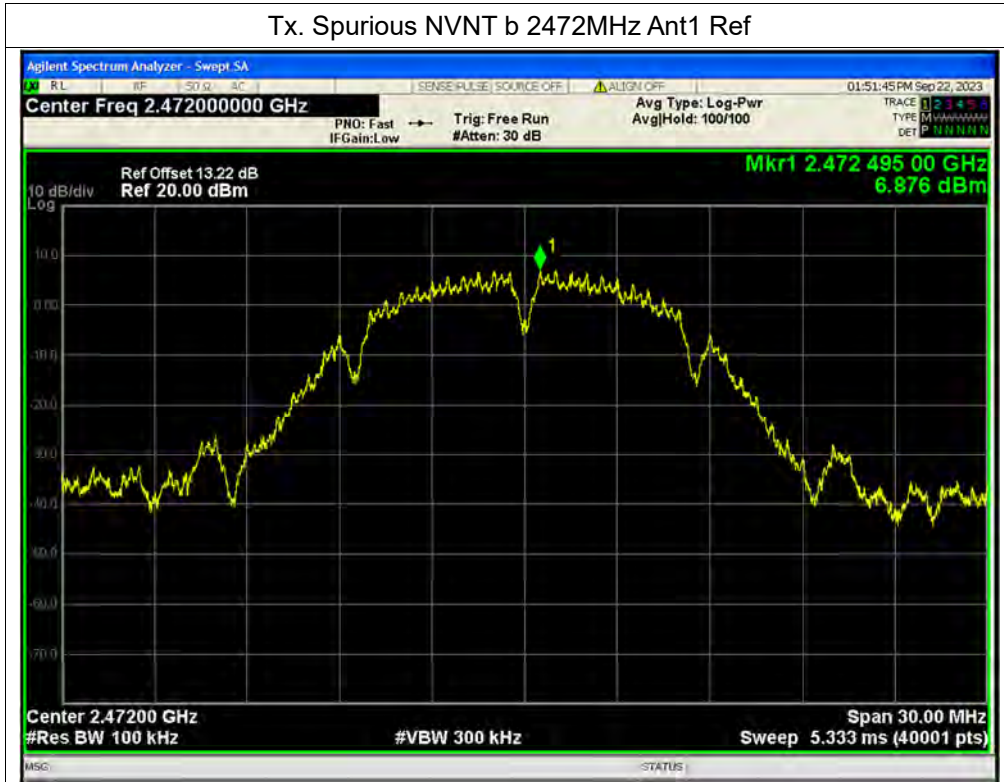


Tx. Spurious NVNT b 2442MHz Ant1 Emission

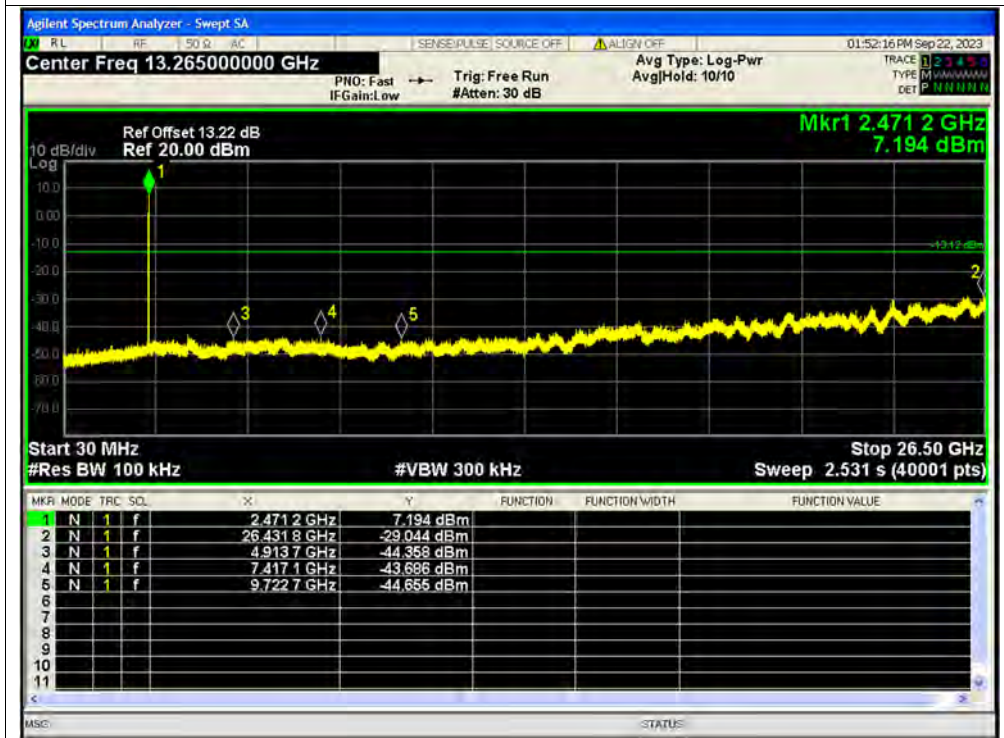




Tx. Spurious NVNT b 2472MHz Ant1 Ref

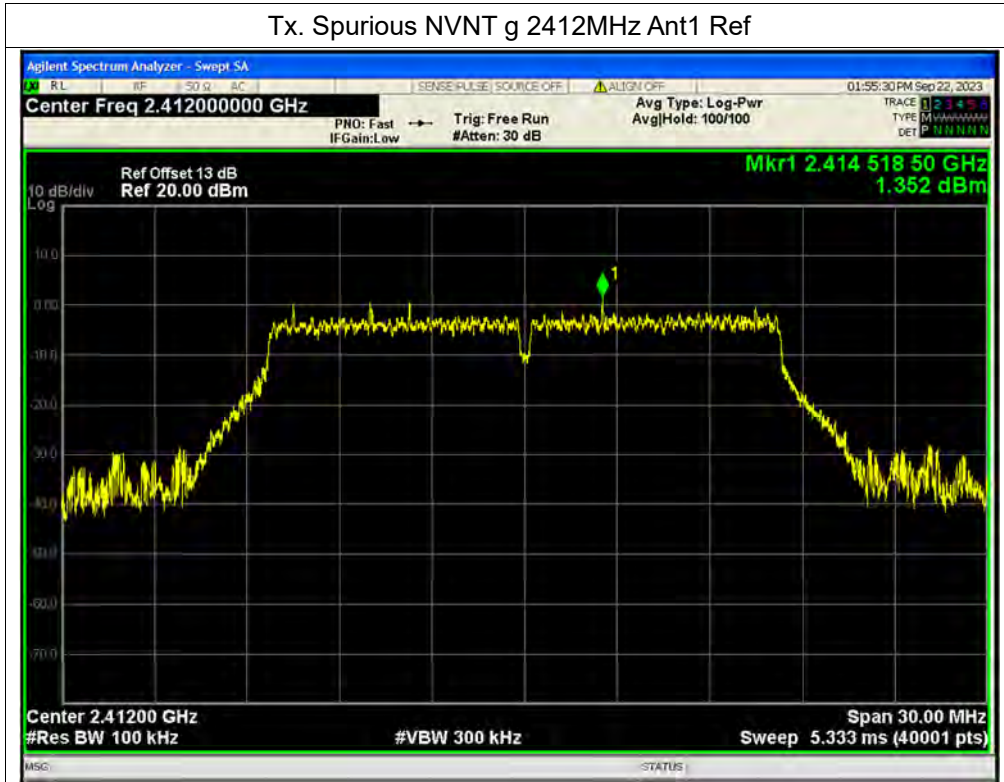


Tx. Spurious NVNT b 2472MHz Ant1 Emission

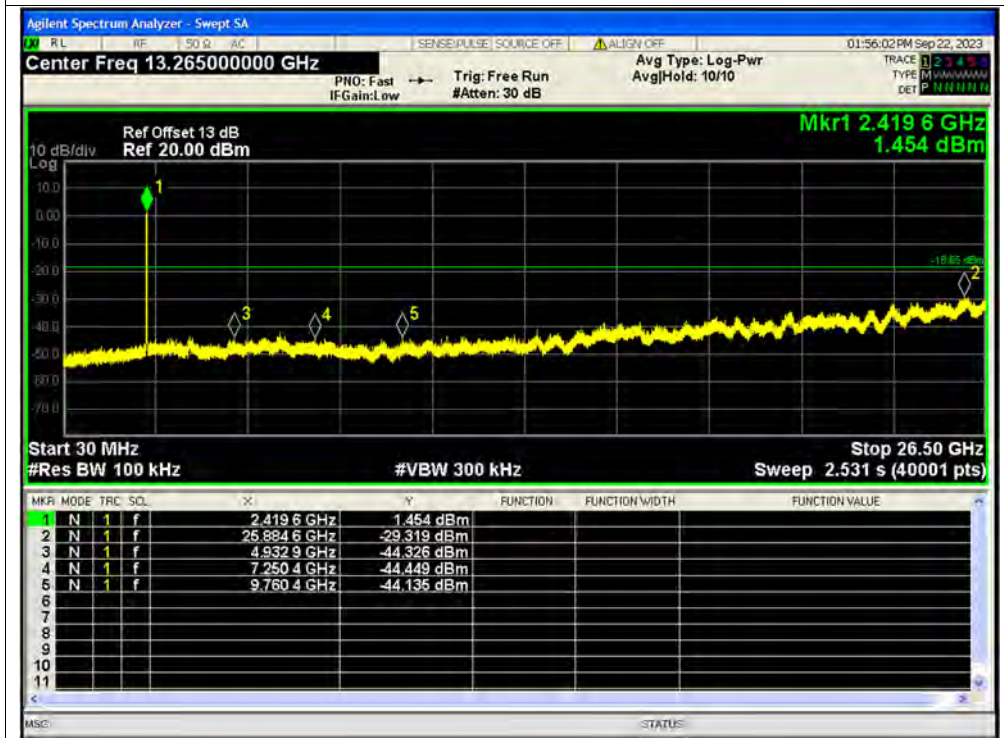




Tx. Spurious NVNT g 2412MHz Ant1 Ref

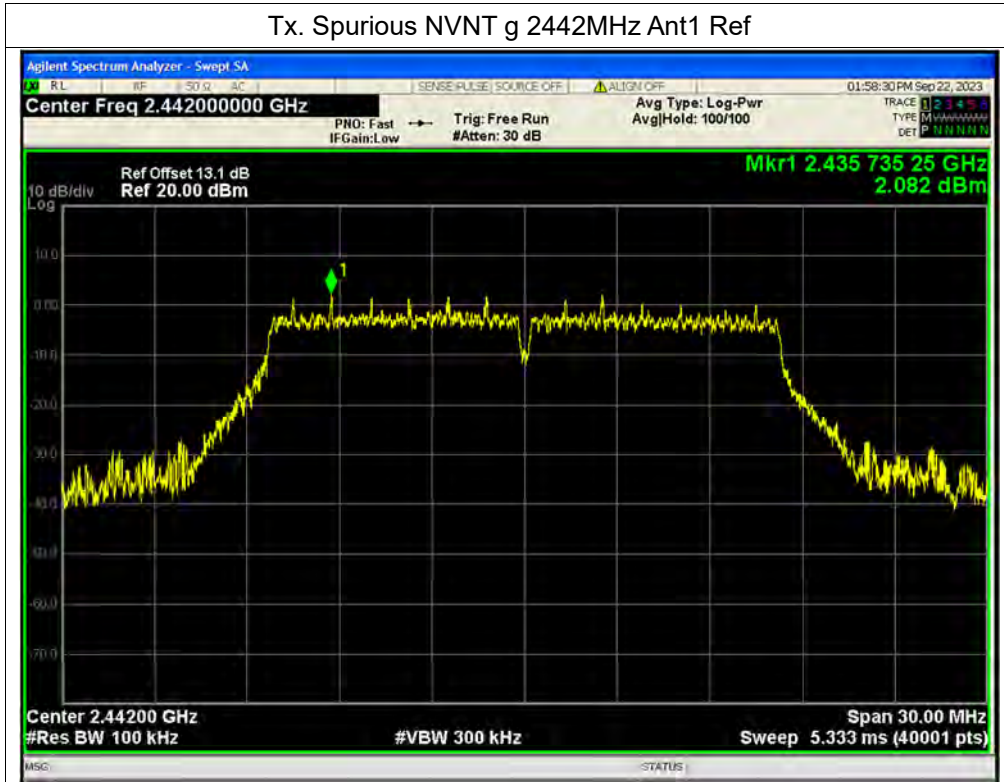


Tx. Spurious NVNT g 2412MHz Ant1 Emission

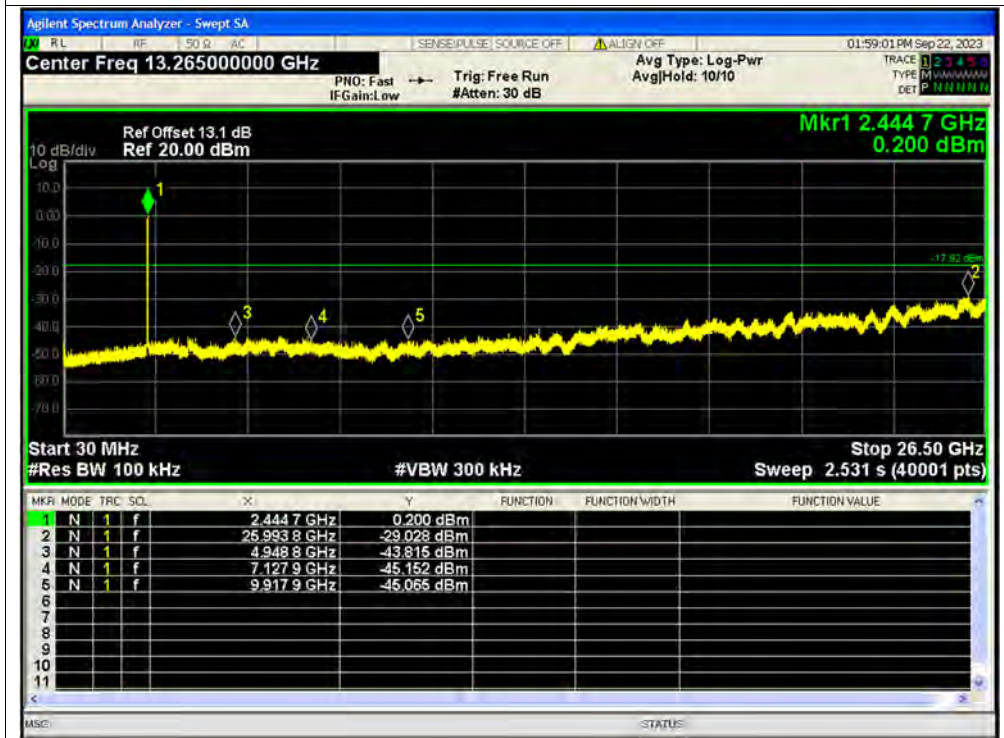




Tx. Spurious NVNT g 2442MHz Ant1 Ref

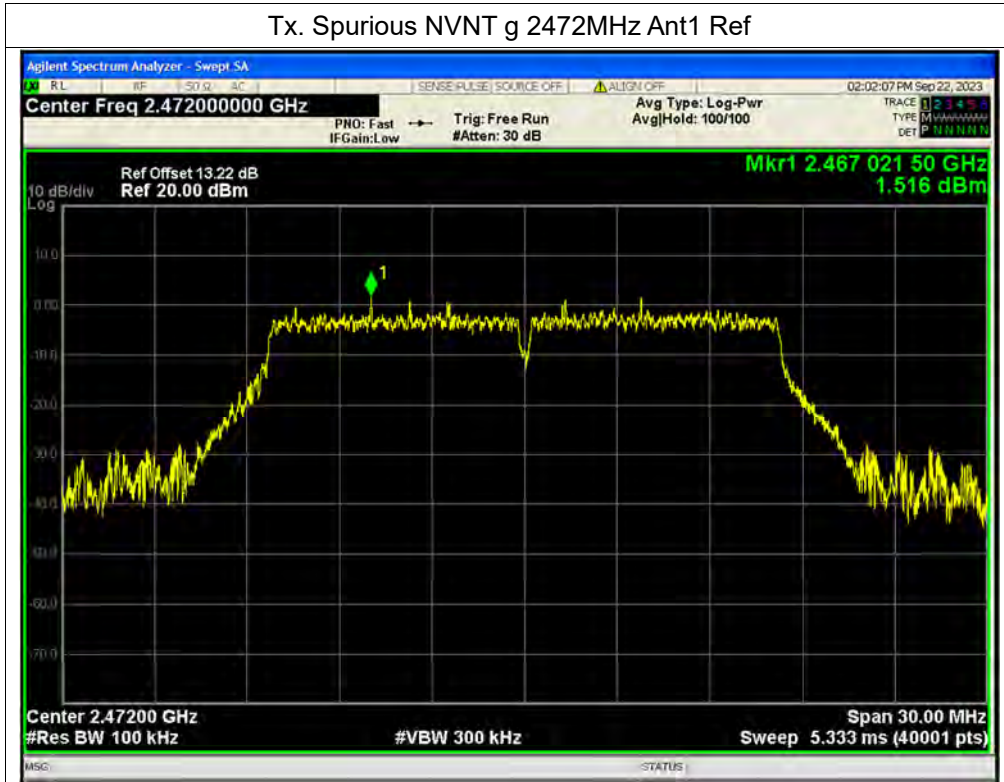


Tx. Spurious NVNT g 2442MHz Ant1 Emission

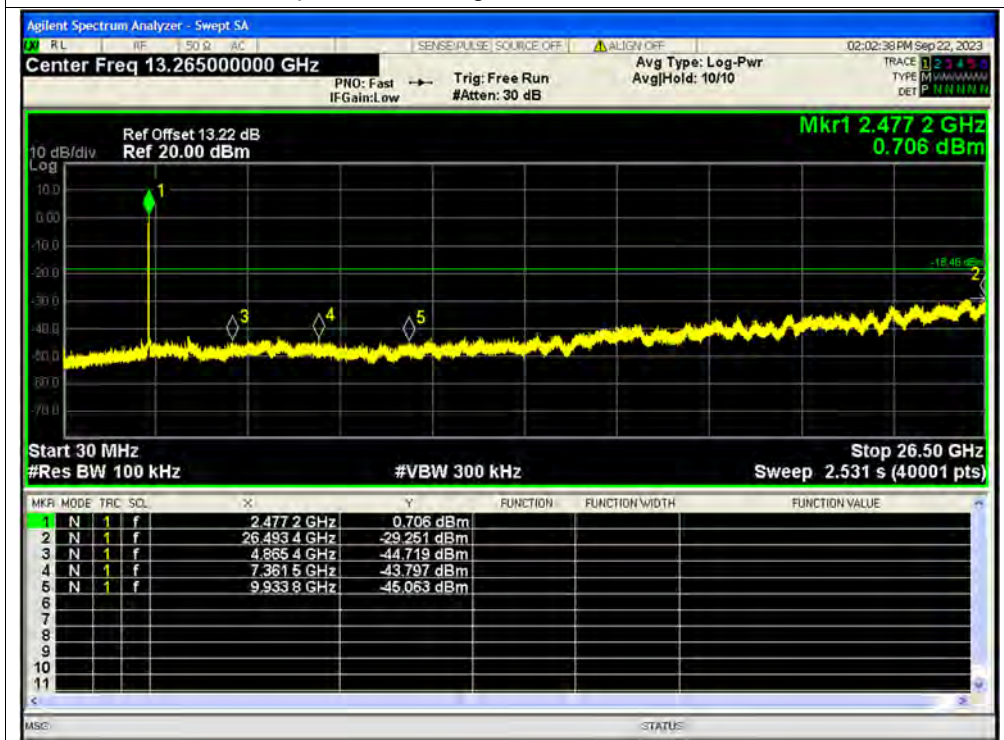




Tx. Spurious NVNT g 2472MHz Ant1 Ref

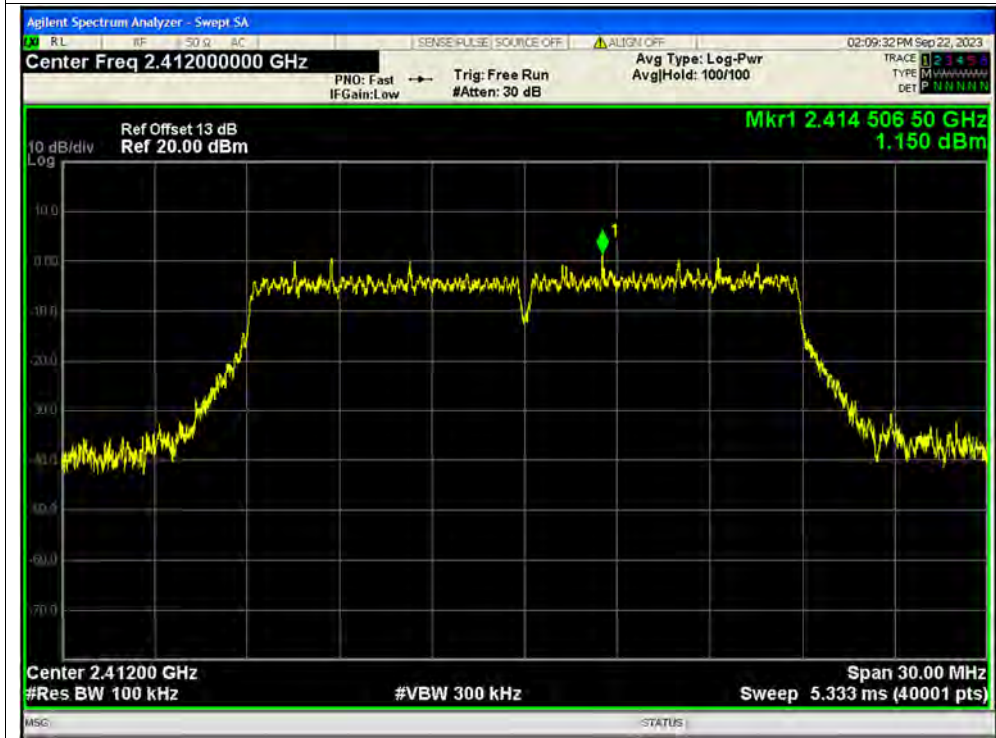


Tx. Spurious NVNT g 2472MHz Ant1 Emission

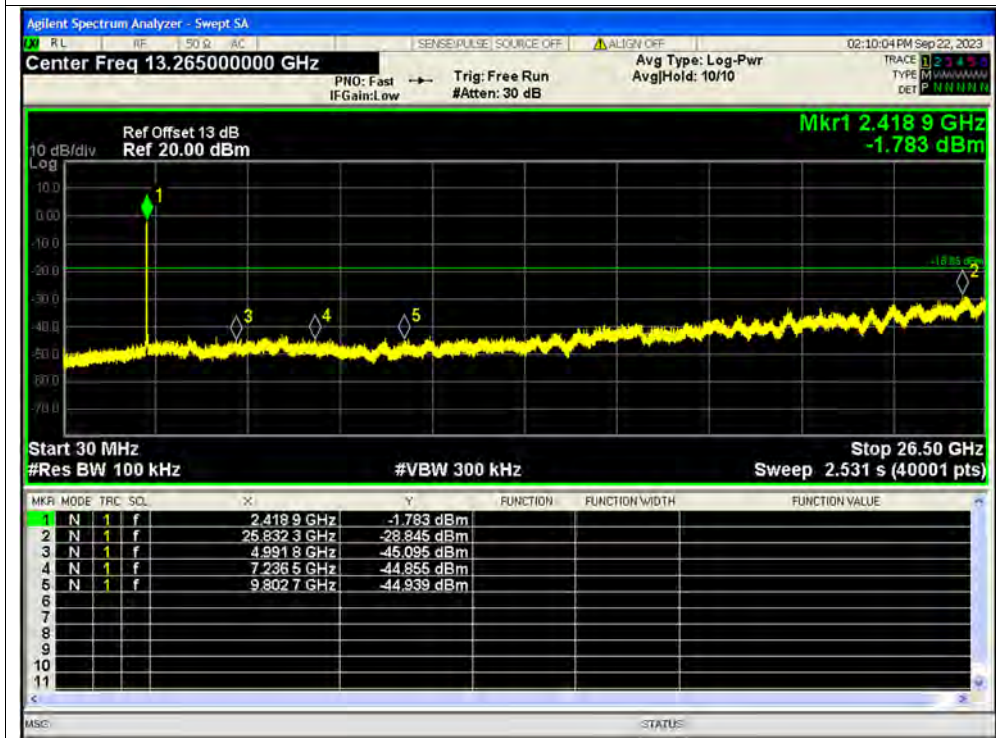




Tx. Spurious NVNT n20 2412MHz Ant1 Ref



Tx. Spurious NVNT n20 2412MHz Ant1 Emission

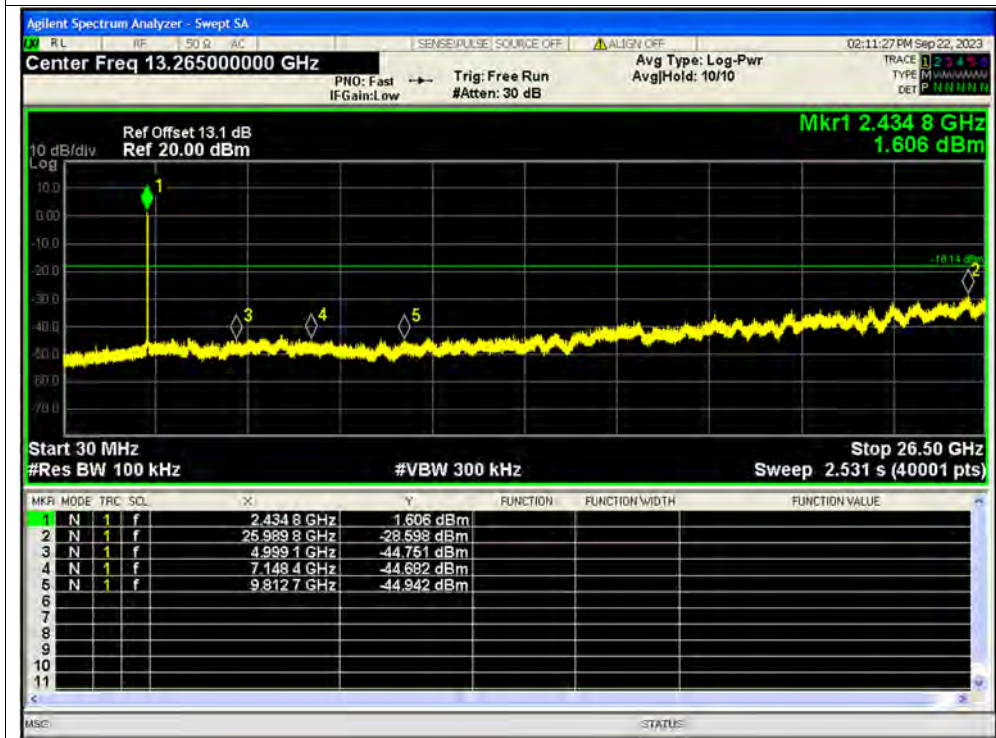




Tx. Spurious NVNT n20 2442MHz Ant1 Ref

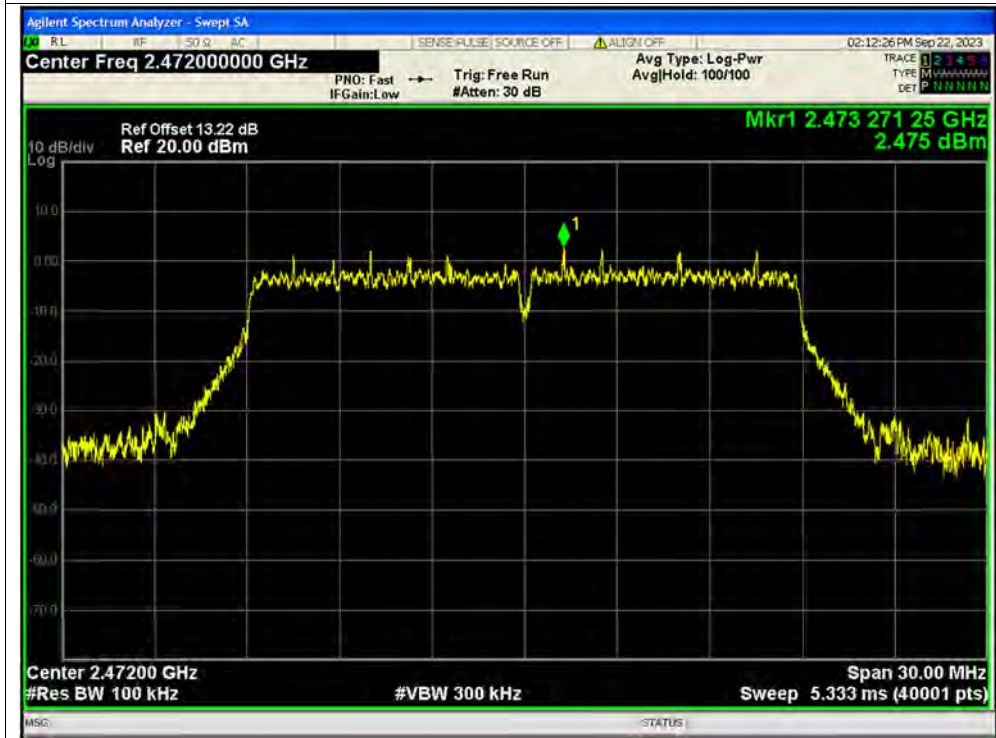


Tx. Spurious NVNT n20 2442MHz Ant1 Emission

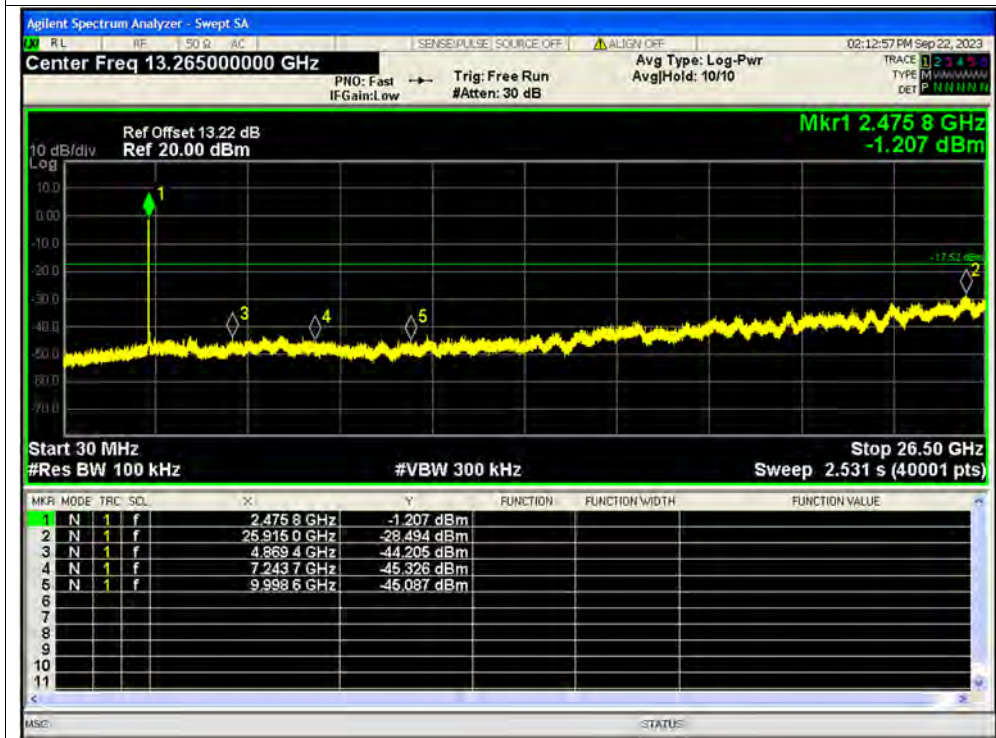




Tx. Spurious NVNT n20 2472MHz Ant1 Ref



Tx. Spurious NVNT n20 2472MHz Ant1 Emission





A.6. Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-38.01	-20	Pass
NVNT	b	2472	Ant1	-41.86	-20	Pass
NVNT	g	2412	Ant1	-30.97	-20	Pass
NVNT	g	2472	Ant1	-31.74	-20	Pass
NVNT	n20	2412	Ant1	-36.06	-20	Pass
NVNT	n20	2472	Ant1	-33.27	-20	Pass

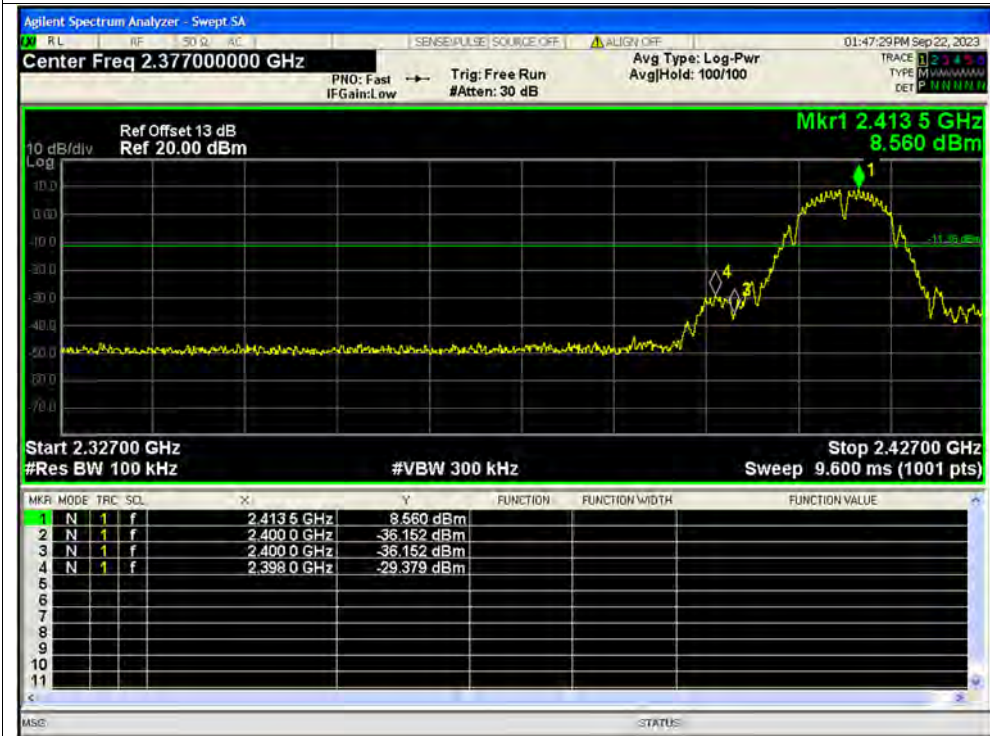


Test Graphs

Band Edge NVNT b 2412MHz Ant1 Ref



Band Edge NVNT b 2412MHz Ant1 Emission

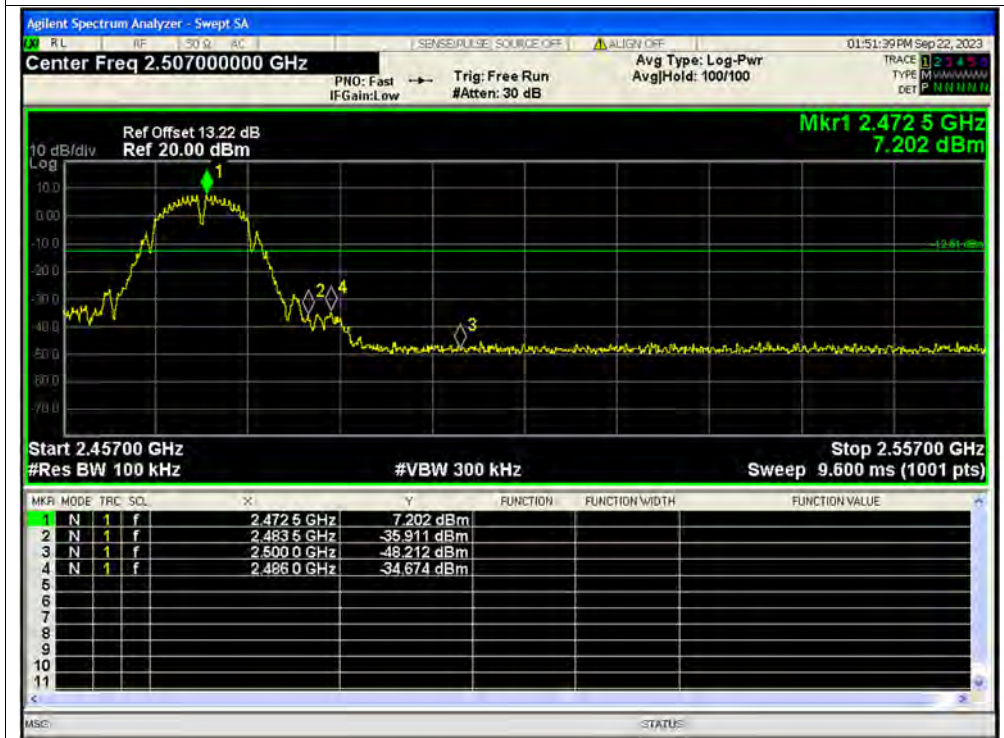




Band Edge NVNT b 2472MHz Ant1 Ref

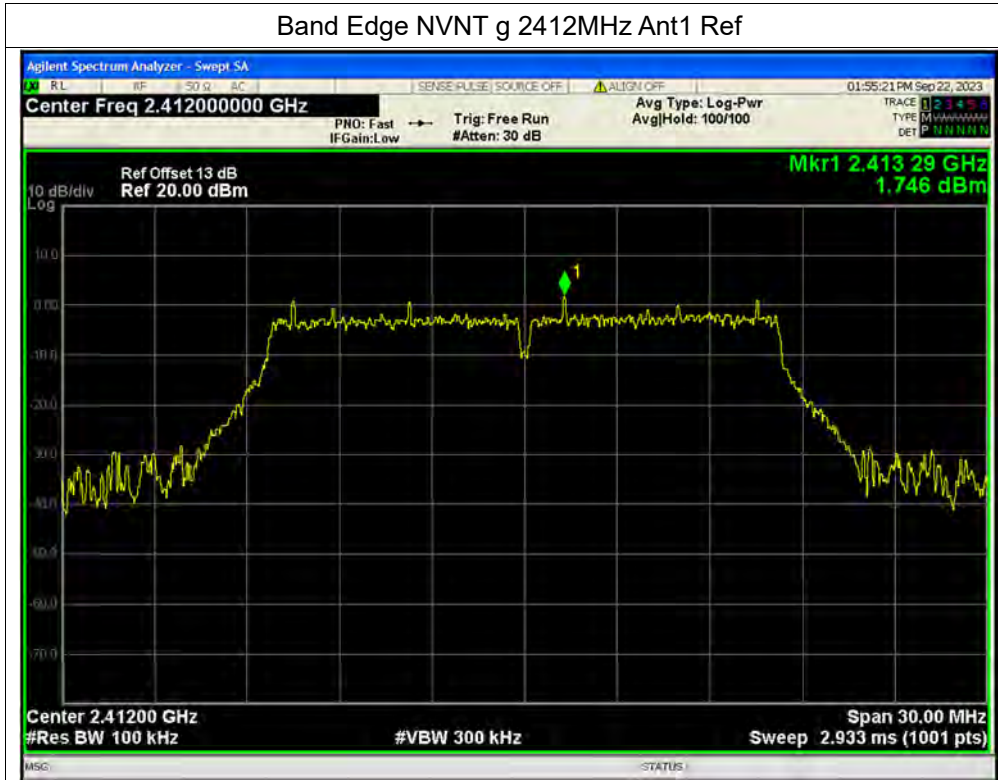


Band Edge NVNT b 2472MHz Ant1 Emission

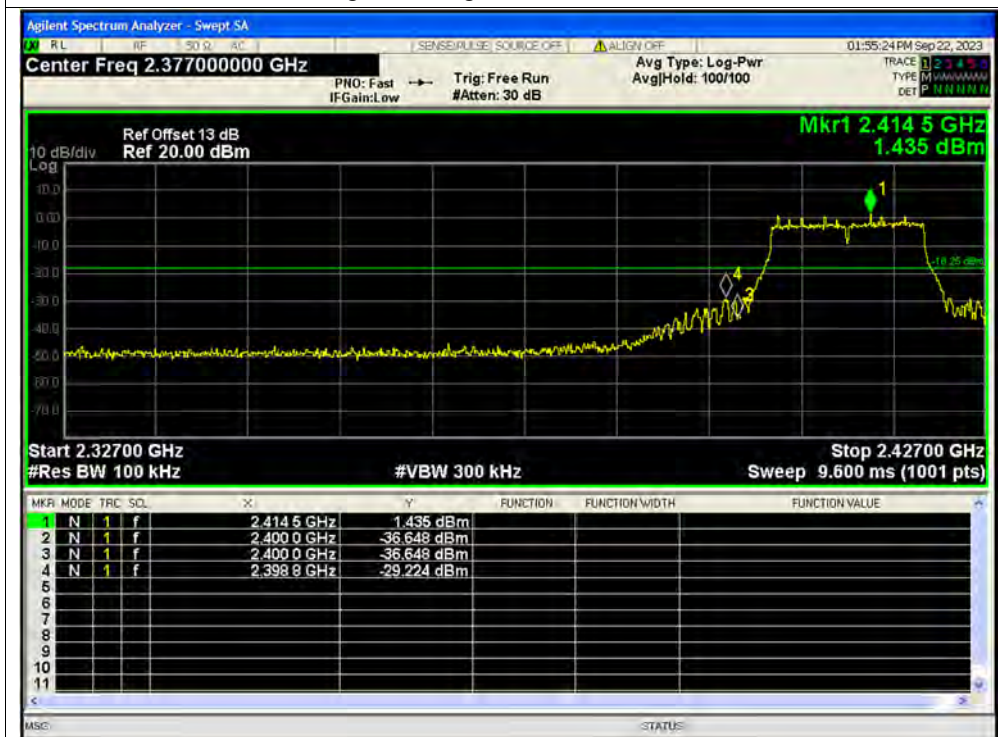




Band Edge NVNT g 2412MHz Ant1 Ref

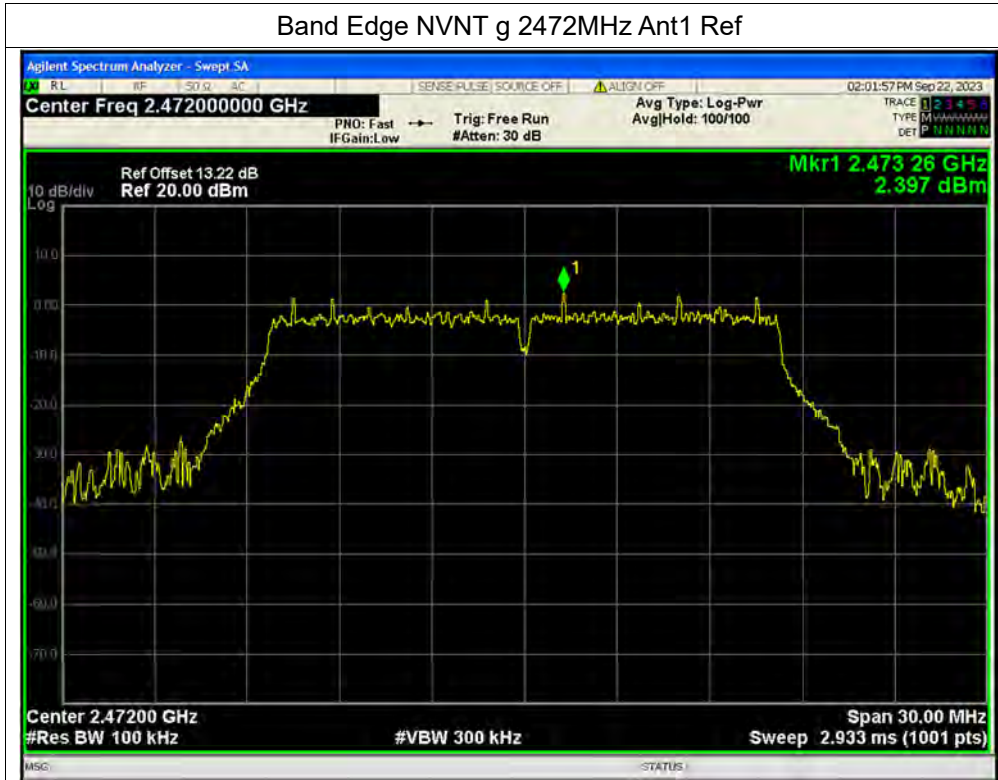


Band Edge NVNT g 2412MHz Ant1 Emission

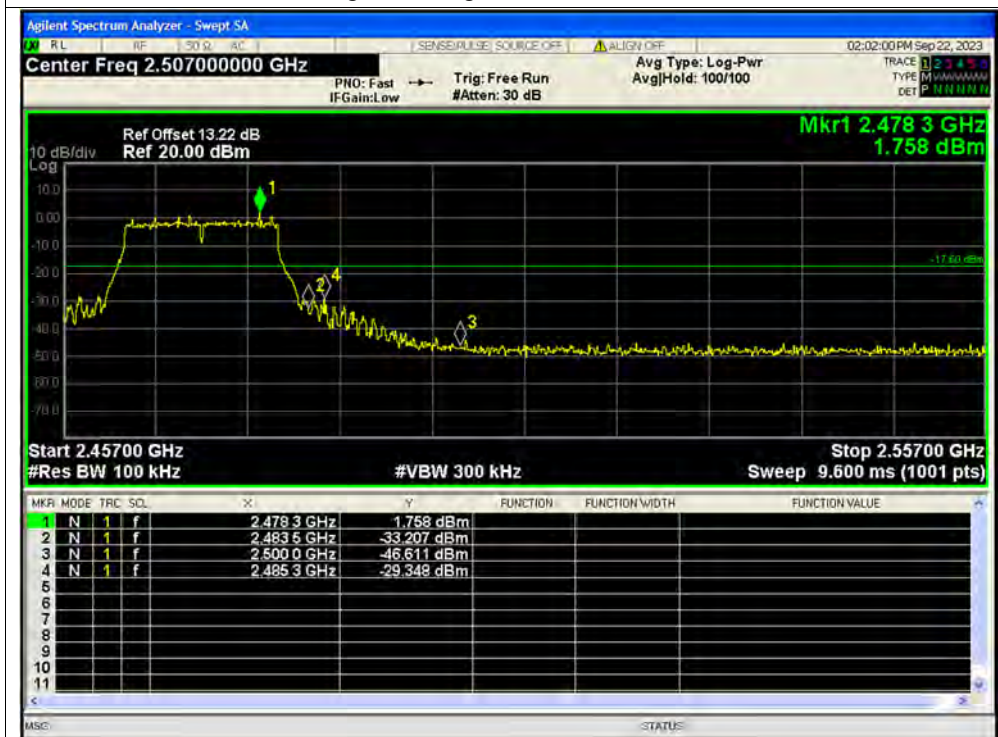




Band Edge NVNT g 2472MHz Ant1 Ref



Band Edge NVNT g 2472MHz Ant1 Emission

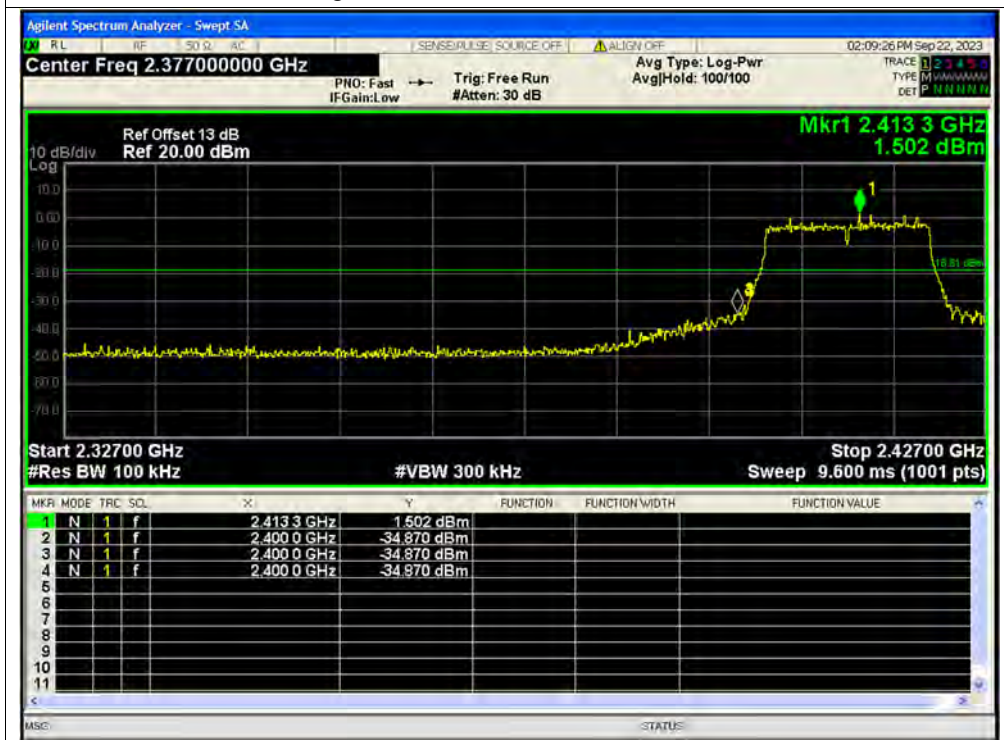




Band Edge NVNT n20 2412MHz Ant1 Ref



Band Edge NVNT n20 2412MHz Ant1 Emission

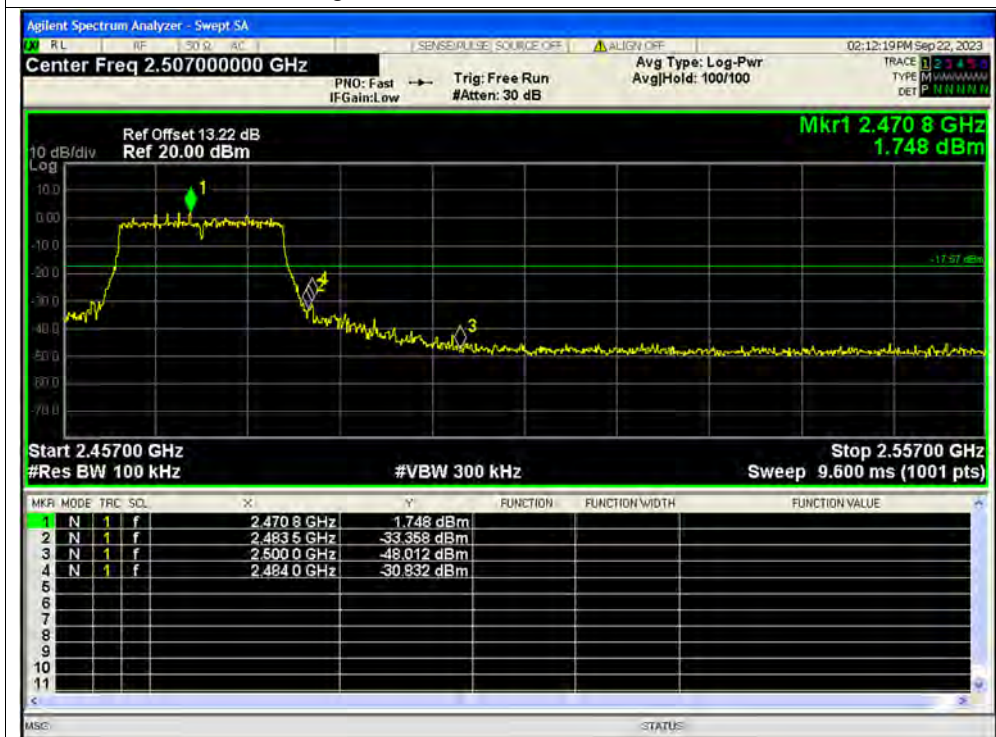




Band Edge NVNT n20 2472MHz Ant1 Ref



Band Edge NVNT n20 2472MHz Ant1 Emission



**A.7. Power Spectral Density**

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3kHz)	Duty Factor (dB)	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	b	2412	Ant1	-2.43	0	-2.43	8	Pass
NVNT	b	2442	Ant1	-4.52	0	-4.52	8	Pass
NVNT	b	2472	Ant1	-6.44	0	-6.44	8	Pass
NVNT	g	2412	Ant1	-13.62	0	-13.62	8	Pass
NVNT	g	2442	Ant1	-12.74	0	-12.74	8	Pass
NVNT	g	2472	Ant1	-13.13	0	-13.13	8	Pass
NVNT	n20	2412	Ant1	-13.94	0	-13.94	8	Pass
NVNT	n20	2442	Ant1	-12.78	0	-12.78	8	Pass
NVNT	n20	2472	Ant1	-12.3	0	-12.3	8	Pass



Test Graphs

PSD NVNT b 2412MHz Ant1

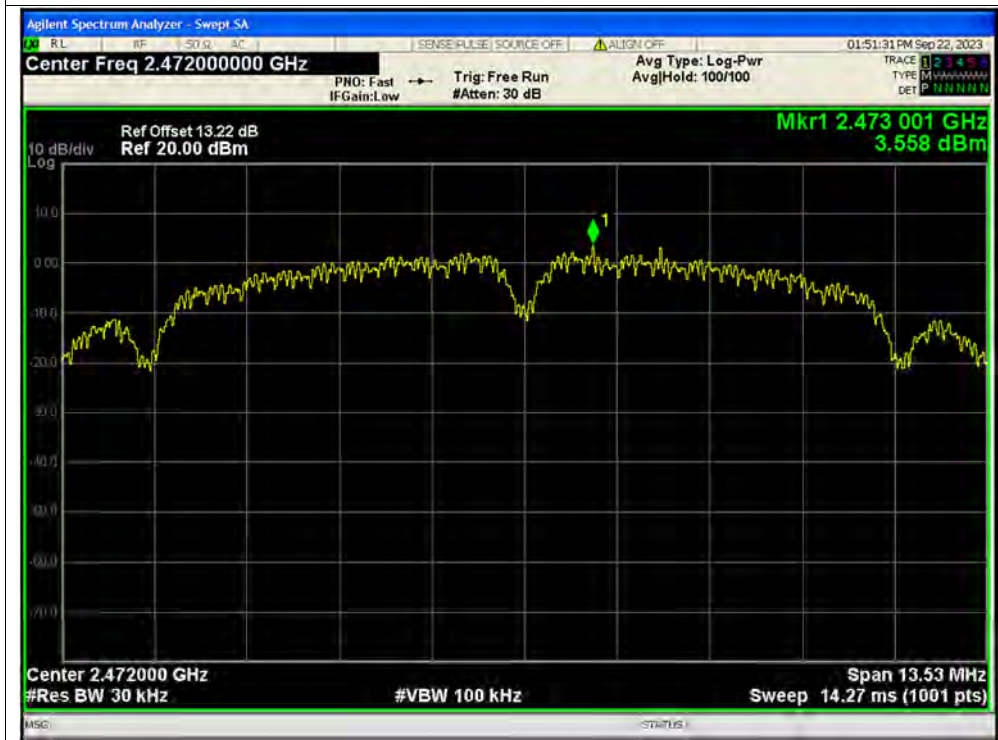


PSD NVNT b 2442MHz Ant1





PSD NVNT b 2472MHz Ant1

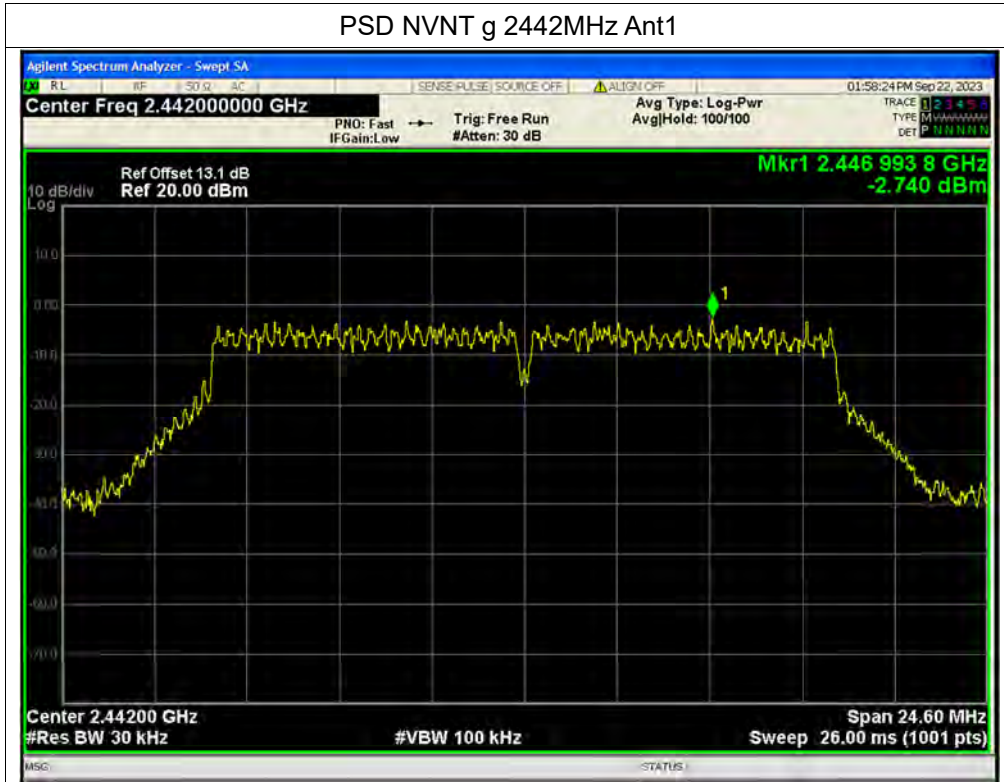


PSD NVNT g 2412MHz Ant1

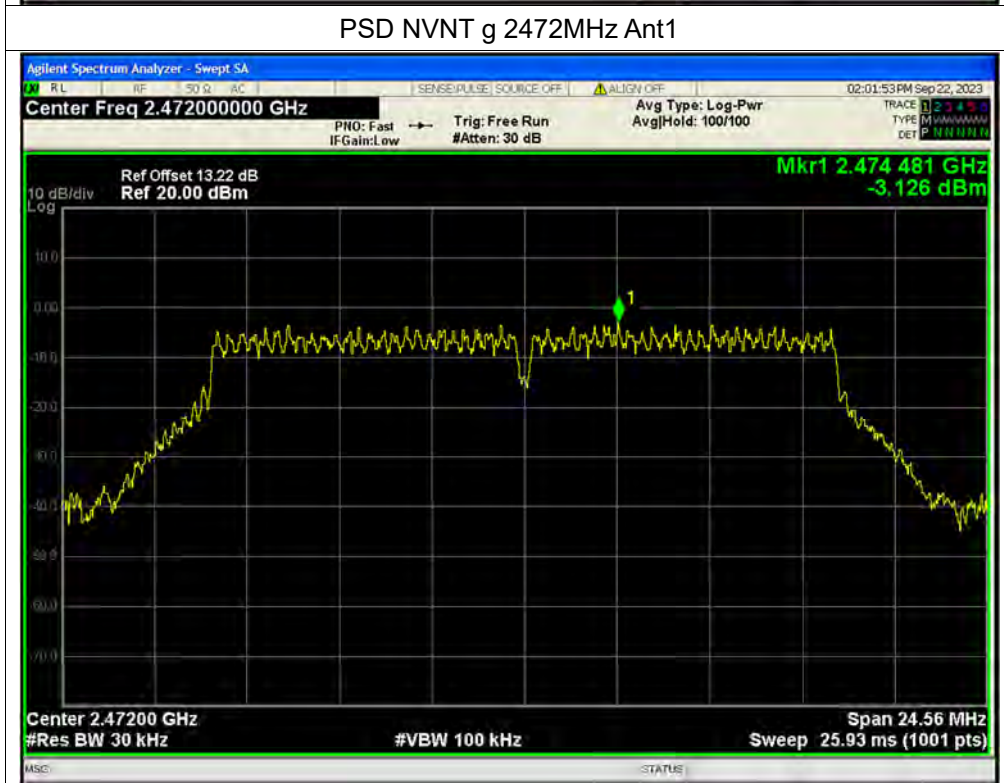




PSD NVNT g 2442MHz Ant1

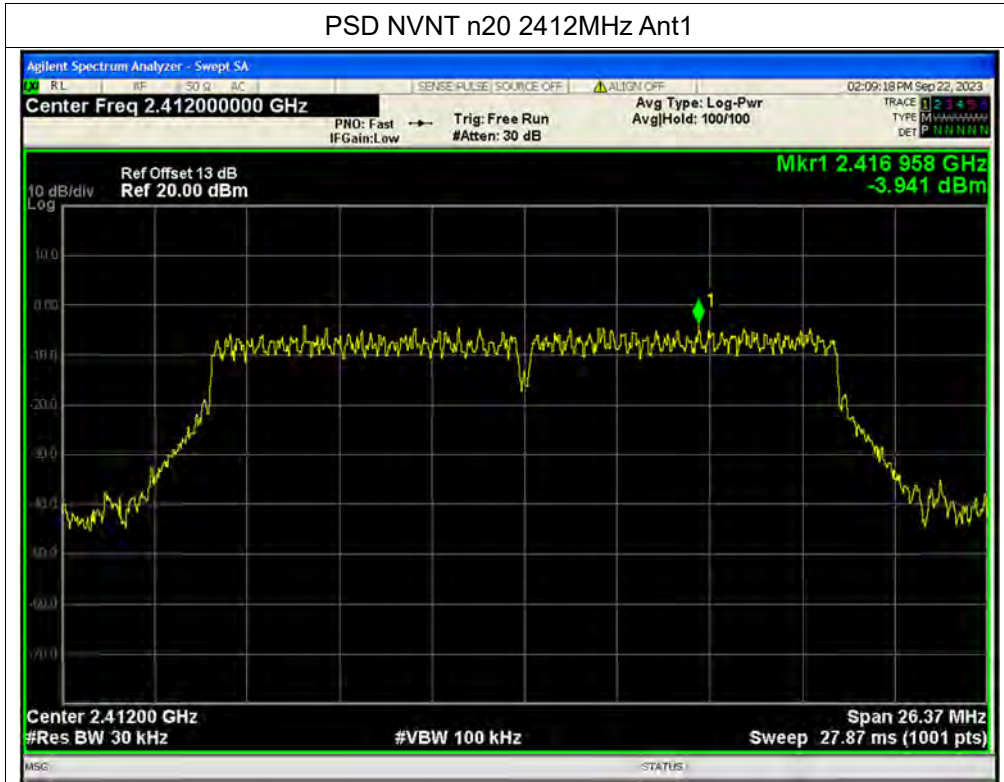


PSD NVNT g 2472MHz Ant1

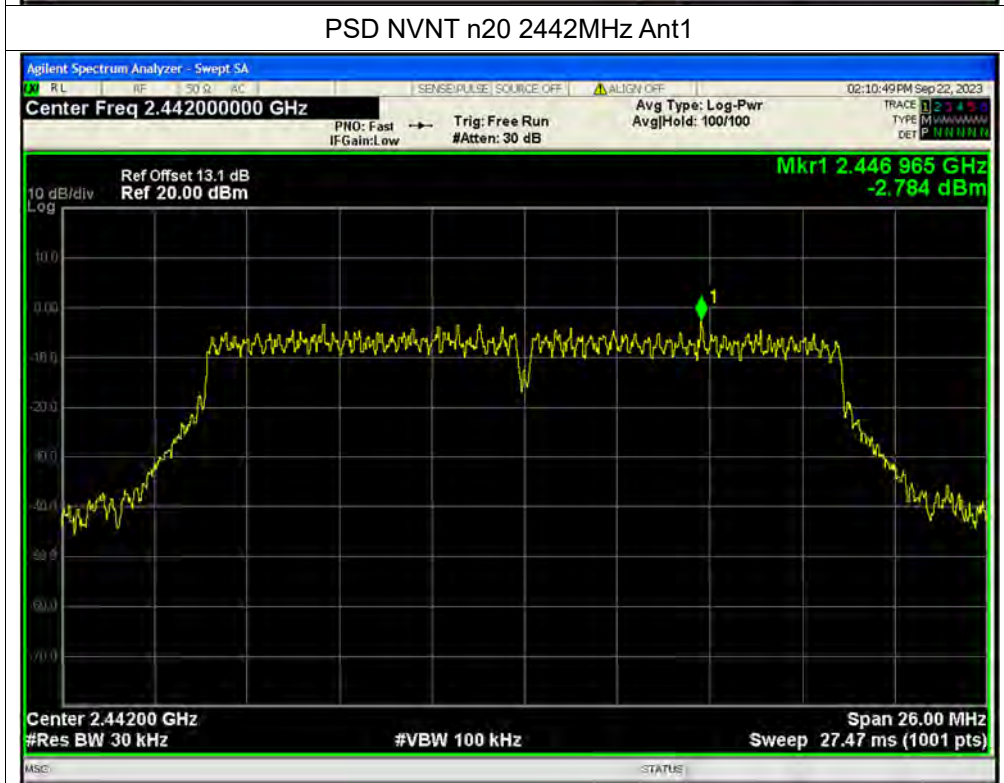


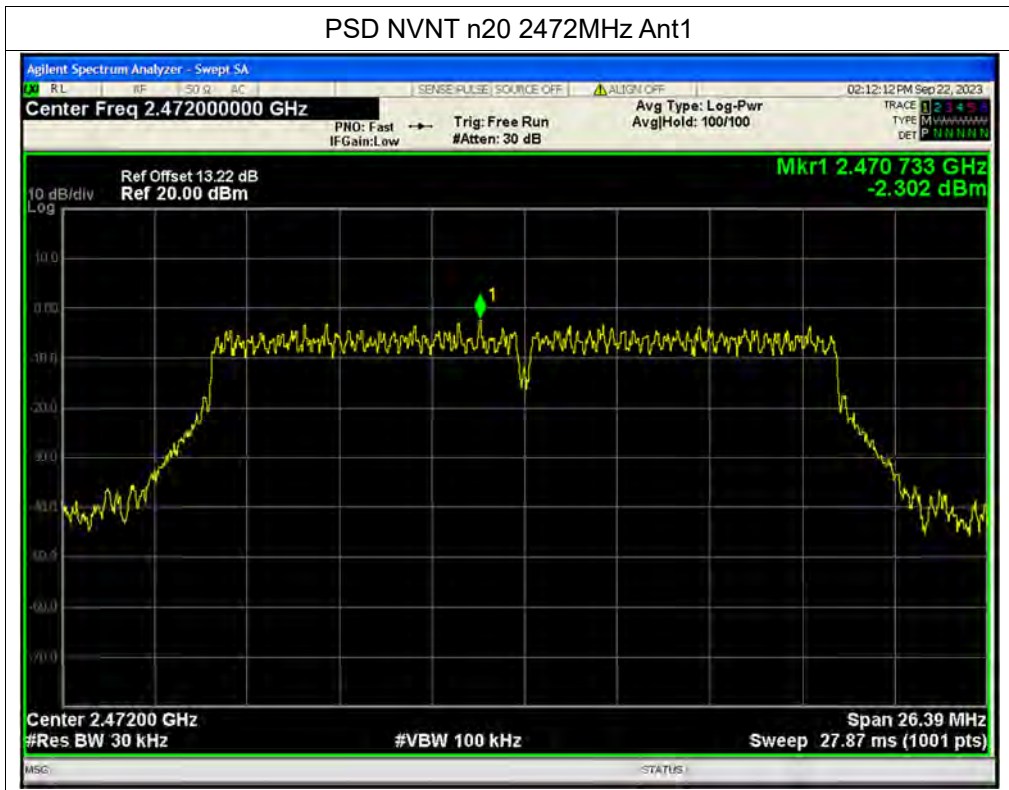


PSD NVNT n20 2412MHz Ant1



PSD NVNT n20 2442MHz 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 + Adapter + USB Cable +WIFI TX

Test voltage: AC 120V/60Hz

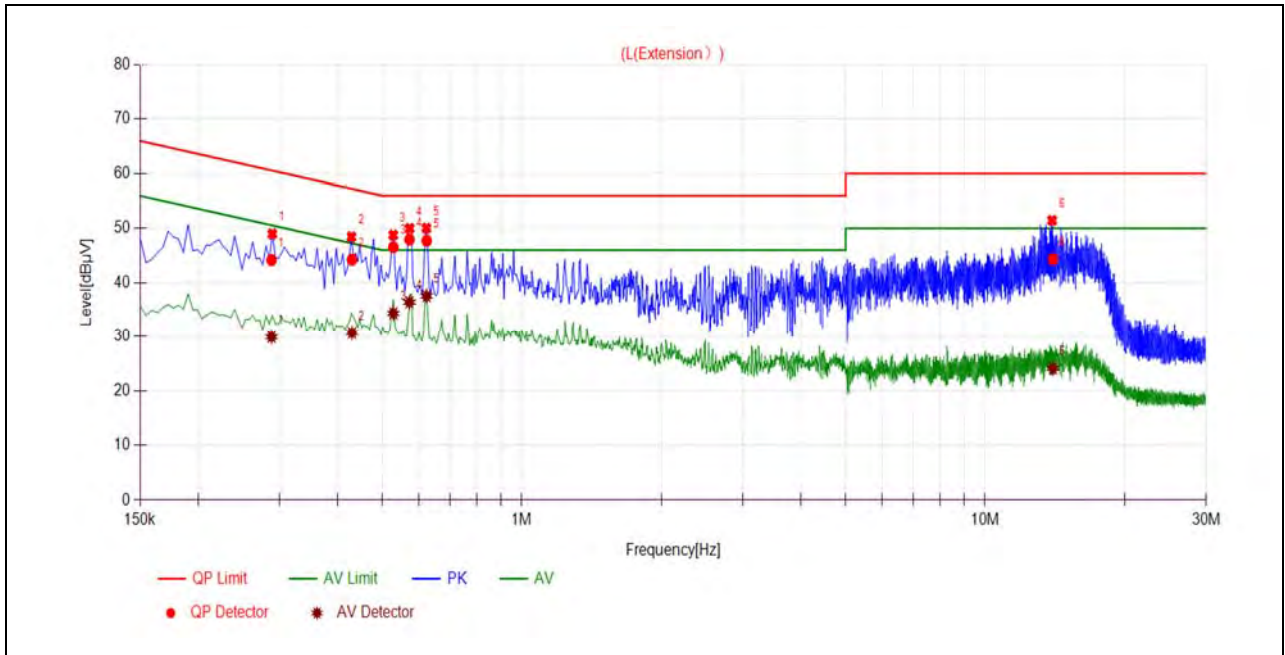
The measurement results are obtained as below:

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

U_R : Receiver Reading

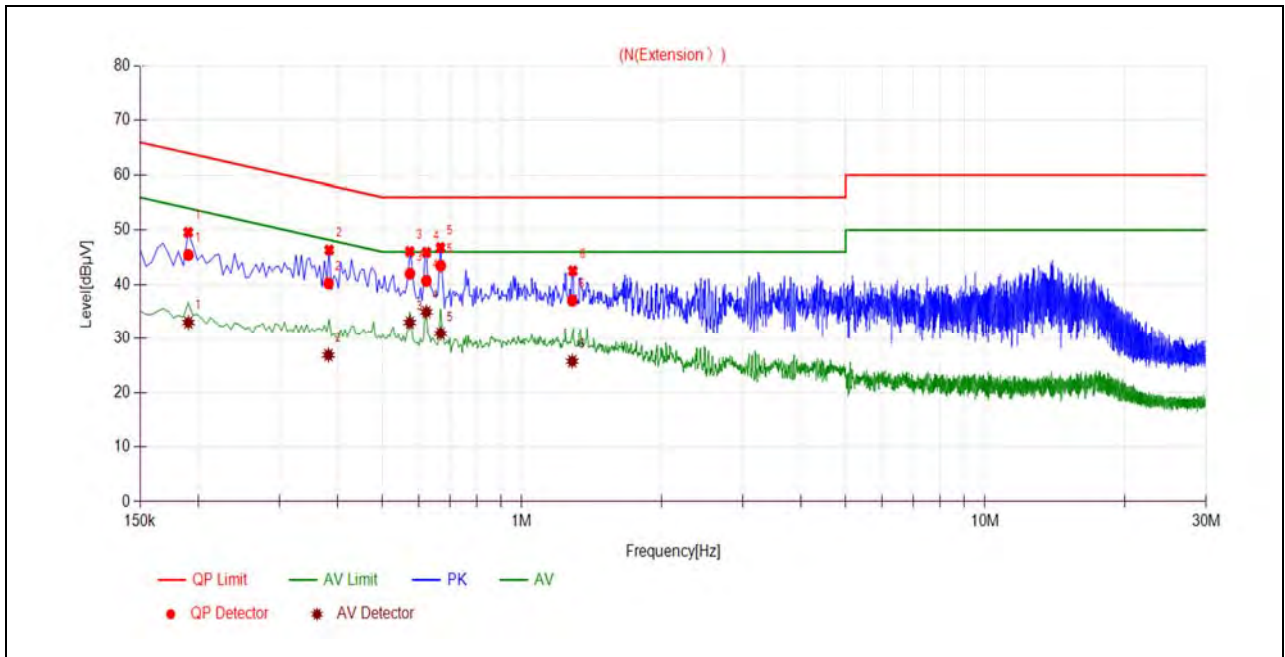
A_{Factor} : Voltage division factor of LISN

B. Test Plot:



(L Phase)

No.	Fre. (MHz)	Emission Level (dBµV)		Limit (dBµV)		Power-line	Verdict
		Quai-peak	Average	Quai-peak	Average		
1	0.2883	44.17	29.91	60.57	50.57	Line	PASS
2	0.4300	44.25	30.70	57.25	47.25		PASS
3	0.5282	46.55	34.35	56.00	46.00		PASS
4	0.5722	47.97	36.43	56.00	46.00		PASS
5	0.6230	47.74	37.54	56.00	46.00		PASS
6	14.0035	44.31	24.07	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	0.1907	45.44	33.03	64.01	54.01	Neutral	PASS
2	0.3825	40.24	26.90	58.22	48.22		PASS
3	0.5733	42.00	33.02	56.00	46.00		PASS
4	0.6223	40.69	34.98	56.00	46.00		PASS
5	0.6681	43.47	30.93	56.00	46.00		PASS
6	1.2850	37.05	25.75	56.00	46.00		PASS

**A.9. Restricted Frequency Bands**

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

The measurement results are obtained as below:

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

A_T : Total correction Factor except Antenna

U_R : Receiver Reading

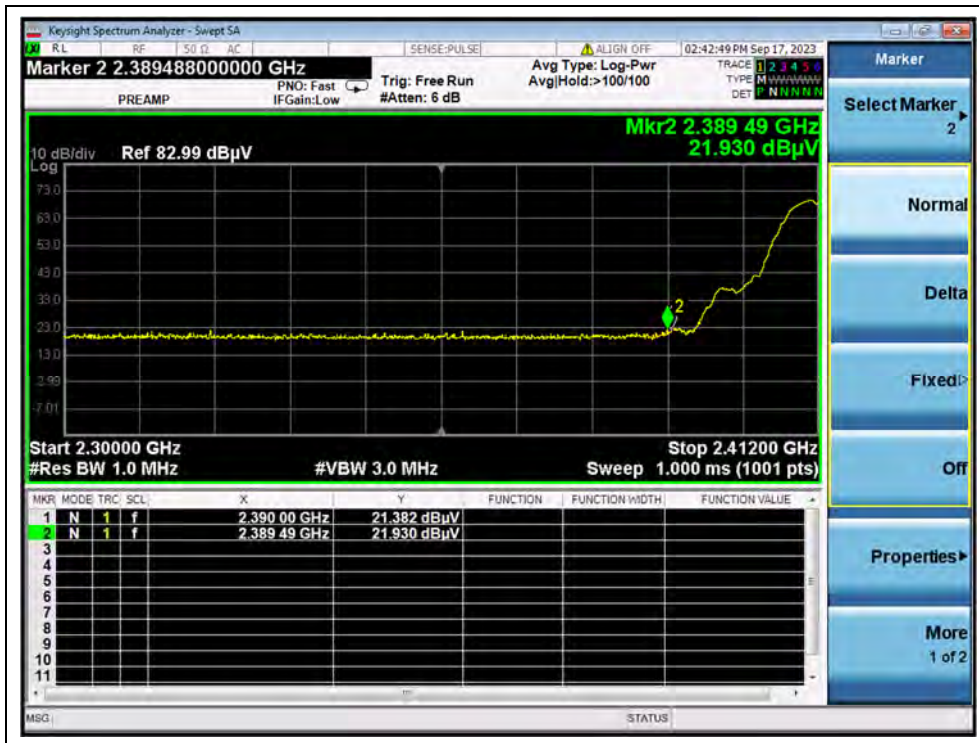
G_{preamp} : Preamplifier Gain

A_{Factor} : Antenna Factor at 3m

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.

802.11b Mode

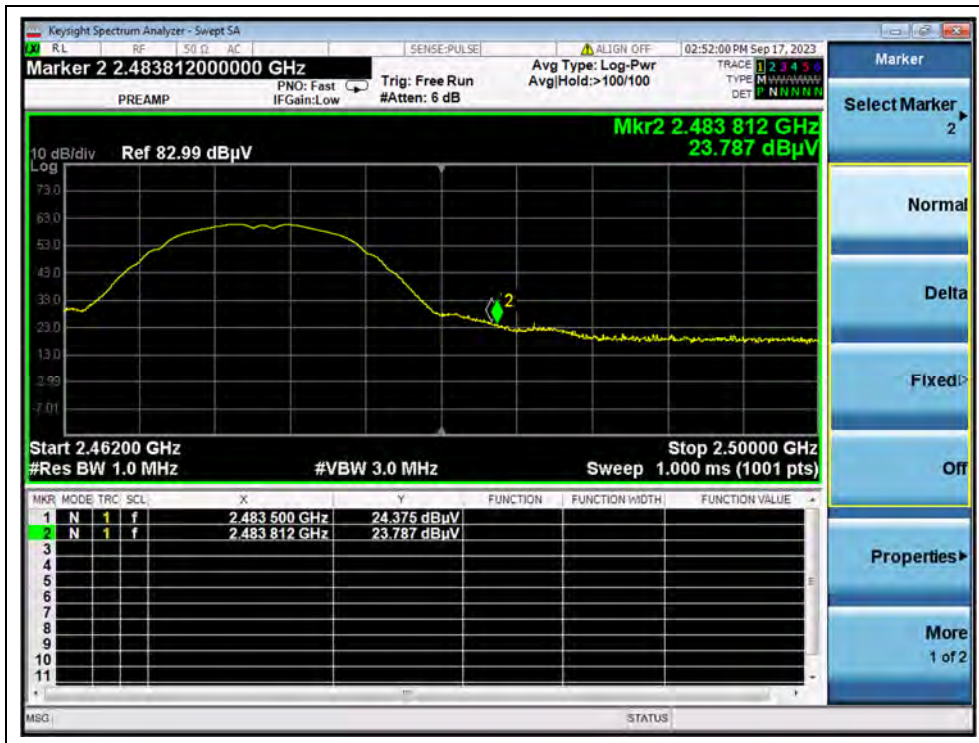
Channel	Frequency (MHz)	Detector	Receiver Reading	A_T (dB)	A_{Factor} (dB@3m)	Max. Emission E (dB μ V/m)	Limit (dB μ V/m)	Verdict
		PK/ AV	U_R (dB μ V)					
1	2389.49	PK	21.93	6.74	27.20	55.87	74	PASS
1	2390.00	AV	10.46	6.74	27.20	44.40	54	PASS
13	2483.50	PK	24.38	6.74	27.20	58.32	74	PASS
13	2483.50	AV	14.14	6.74	27.20	48.08	54	PASS



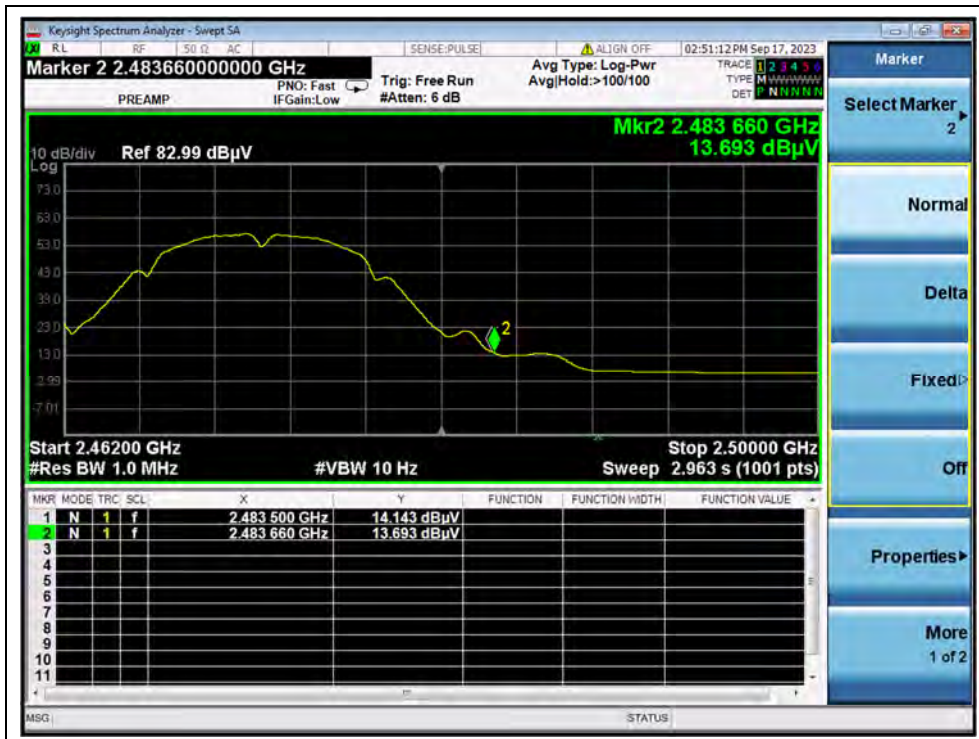
(PEAK, Channel 1, 802.11b)



(AVERAGE, Channel 1, 802.11b)



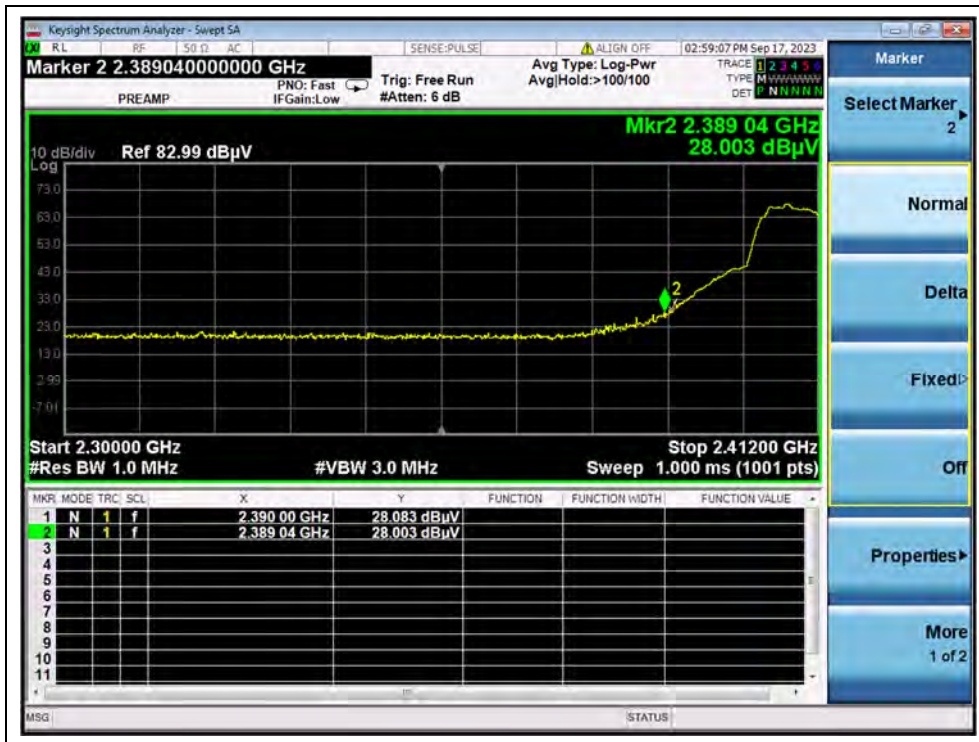
(PEAK, Channel 13, 802.11b)



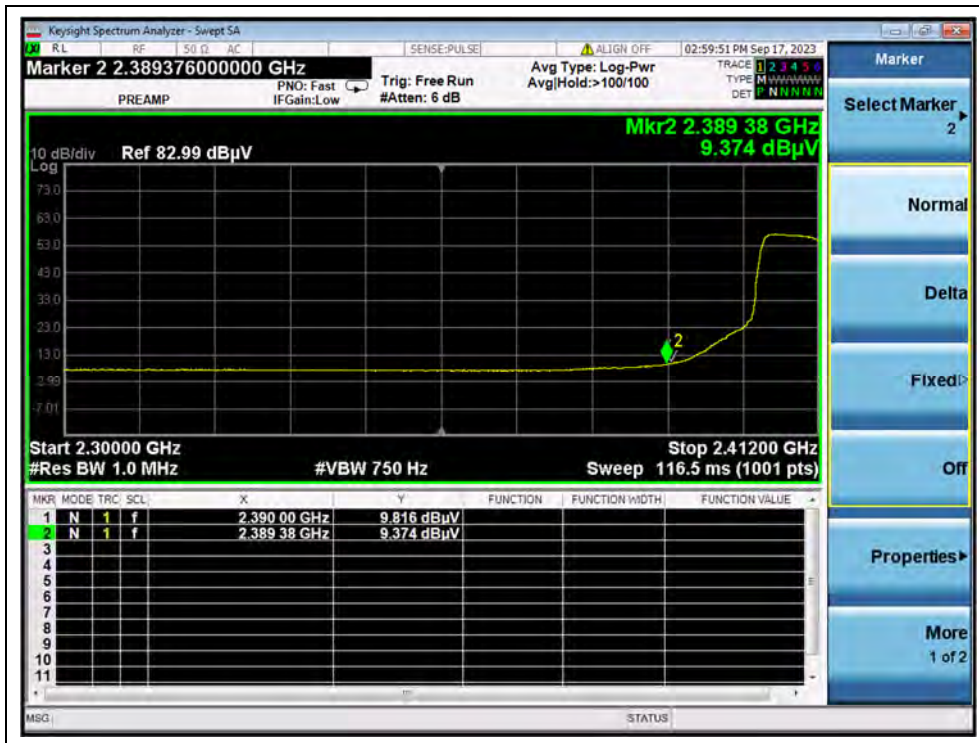
(AVERAGE, Channel 13, 802.11b)

802.11g Mode

Channel	Frequency (MHz)	Detector	Receiver Reading	A _T (dB)	A _{Factor} (dB@3m)	Max. Emission E (dBμV/m)	Limit (dBμV/m)	Verdict
		PK/ AV	U _R (dBμV)					
1	2390.00	PK	28.08	6.74	27.20	62.02	74	PASS
1	2390.00	AV	9.82	6.74	27.20	43.76	54	PASS
13	2485.14	PK	36.45	6.74	27.20	70.39	74	PASS
13	2483.74	AV	16.78	6.74	27.20	50.72	54	PASS



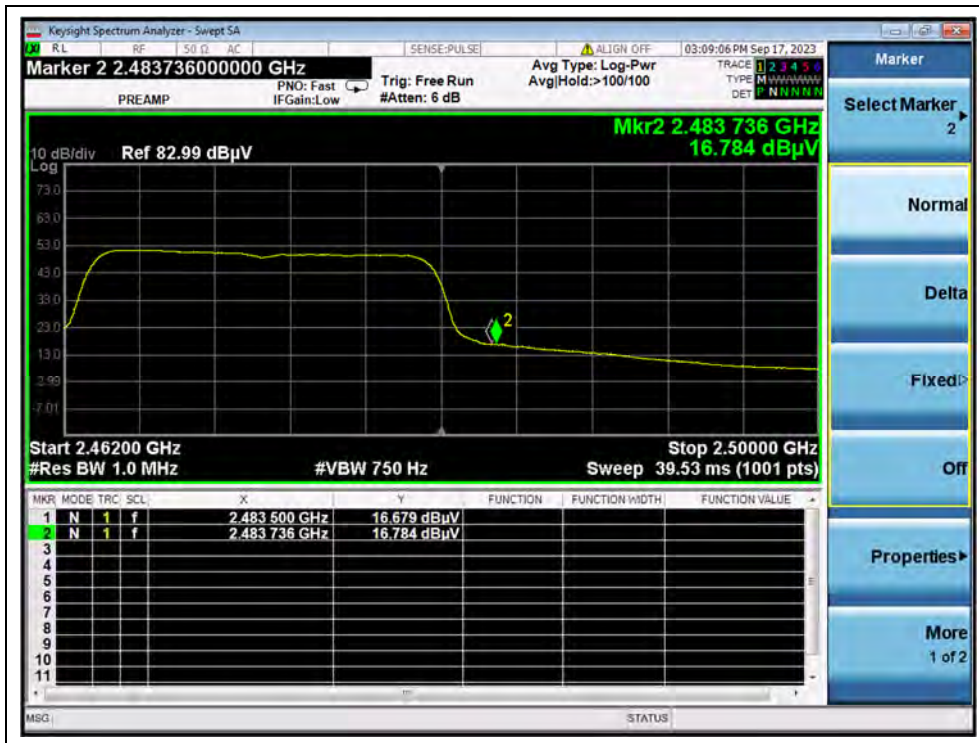
(PEAK, Channel 1, 802.11g)



(AVERAGE, Channel 1, 802.11g)



(PEAK, Channel 13, 802.11g)

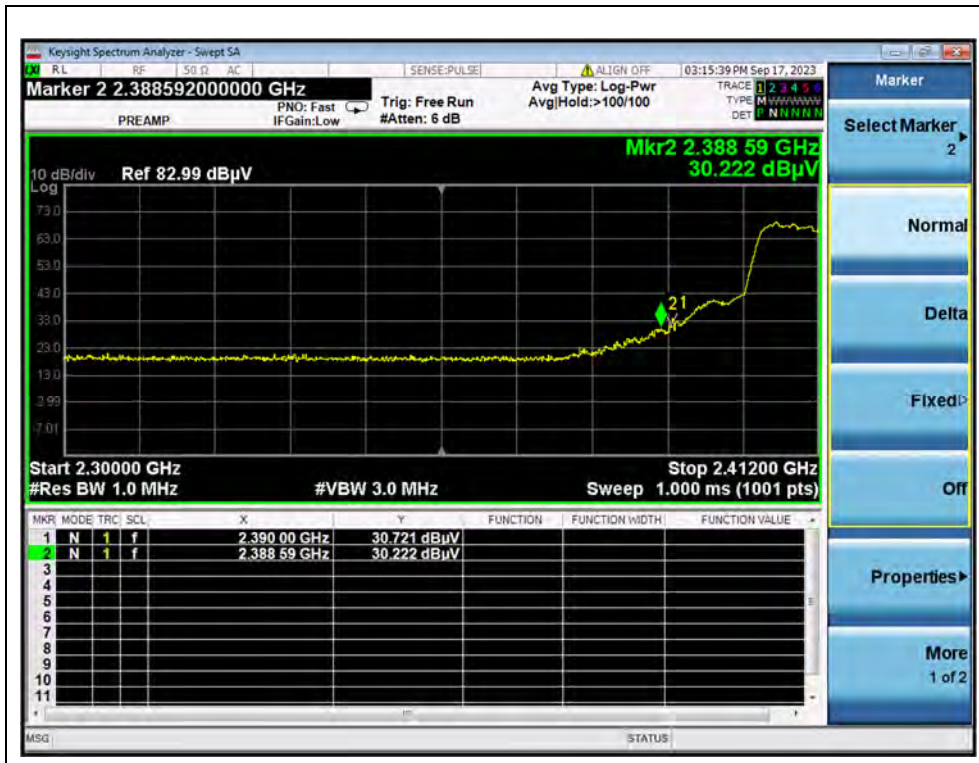


(AVERAGE, Channel 13, 802.11g)

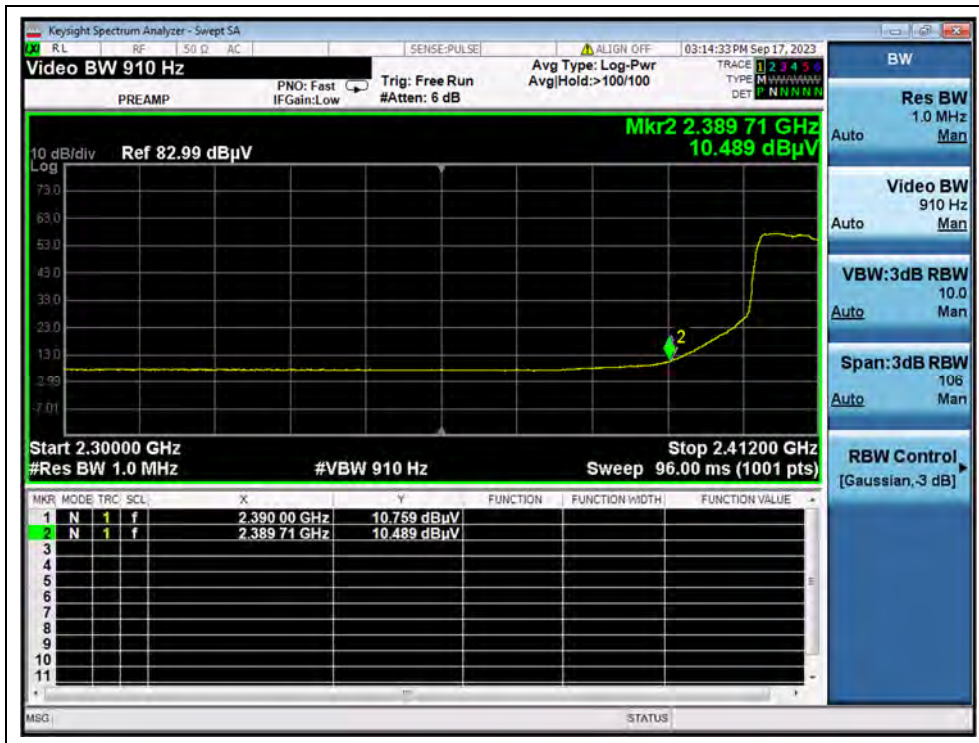


802.11n (HT20) Mode

Channel	Frequency (MHz)	Detector	Receiver Reading U_R (dB μ V)	A_T (dB)	A_{Factor} (dB@3m)	Max. Emission E (dB μ V/m)	Limit (dB μ V/m)	Verdict
		PK/ AV						
1	2390.00	PK	30.72	6.74	27.20	64.66	74	PASS
1	2390.00	AV	10.76	6.74	27.20	44.70	54	PASS
13	2484.00	PK	33.12	6.74	27.20	67.06	74	PASS
13	2483.50	AV	16.34	6.74	27.20	50.28	54	PASS



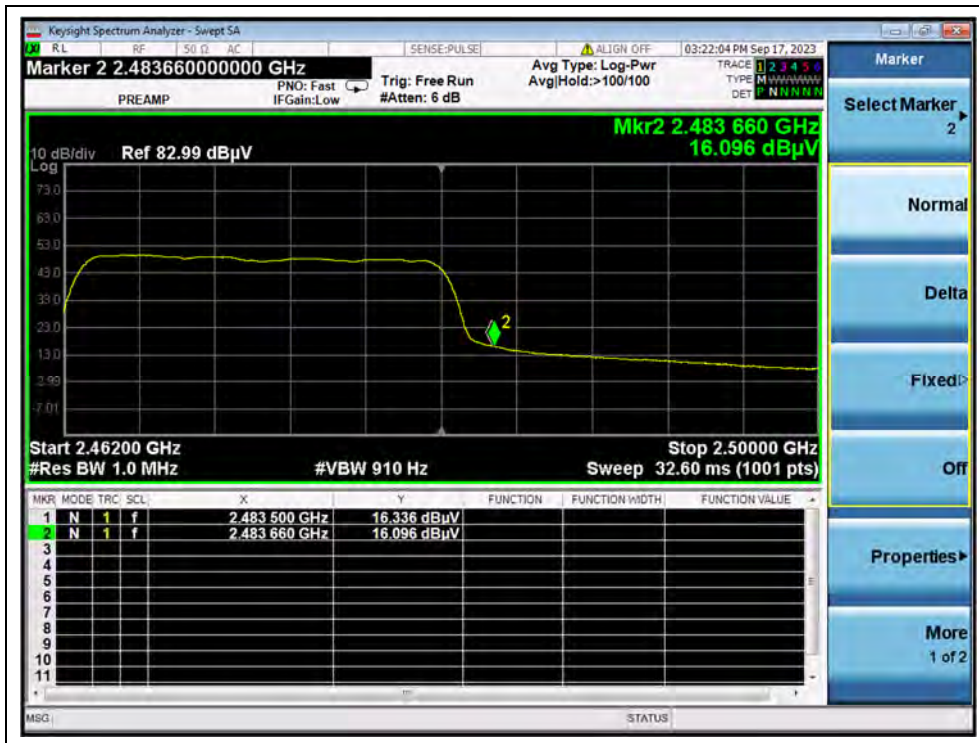
(PEAK, Channel 1, 802.11n (HT20))



(AVERAGE, Channel 1, 802.11n (HT20))



(PEAK, Channel 13, 802.11n (HT20))



(AVERAGE, Channel 13, 802.11n (HT20))



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:

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

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.

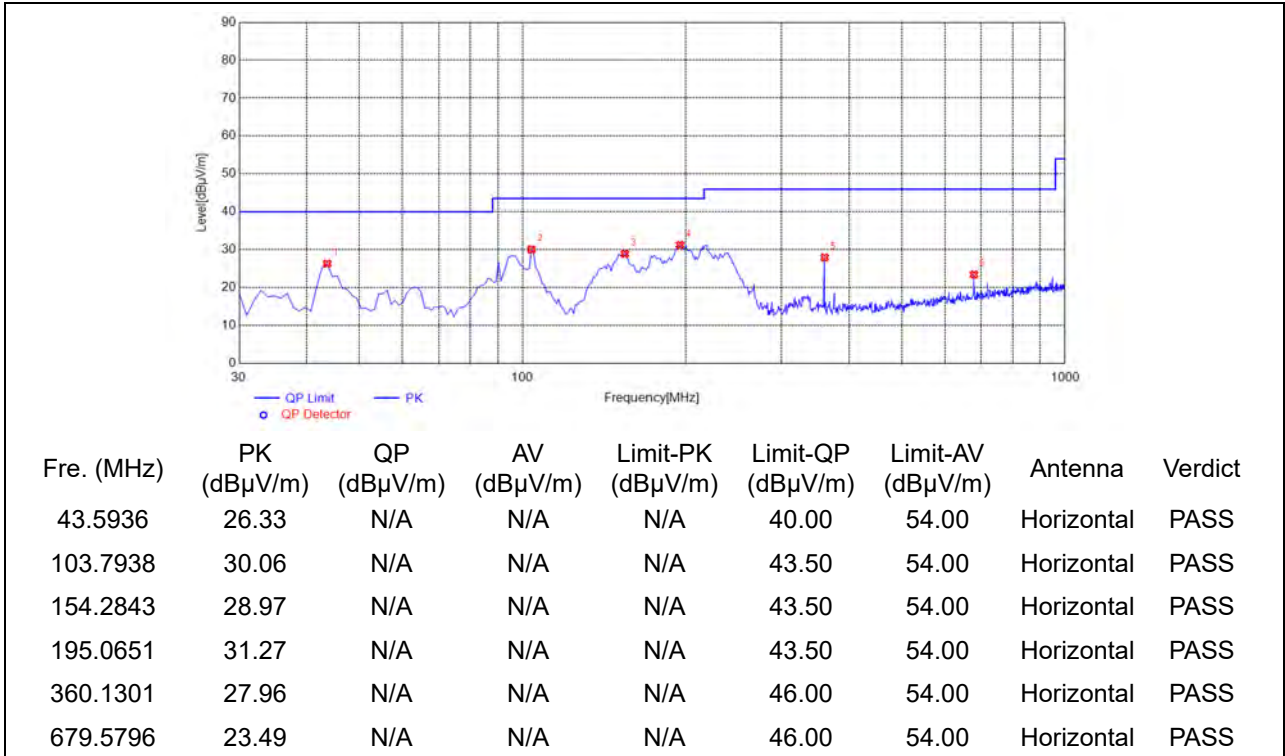
Note2: For the frequency, which started from 9kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit was not recorded.

Note3: For the frequency, which started from 18GHz to 10th harmonic of the highest frequency, was pre-scanned and the result which was 20dB lower than the limit was not recorded.

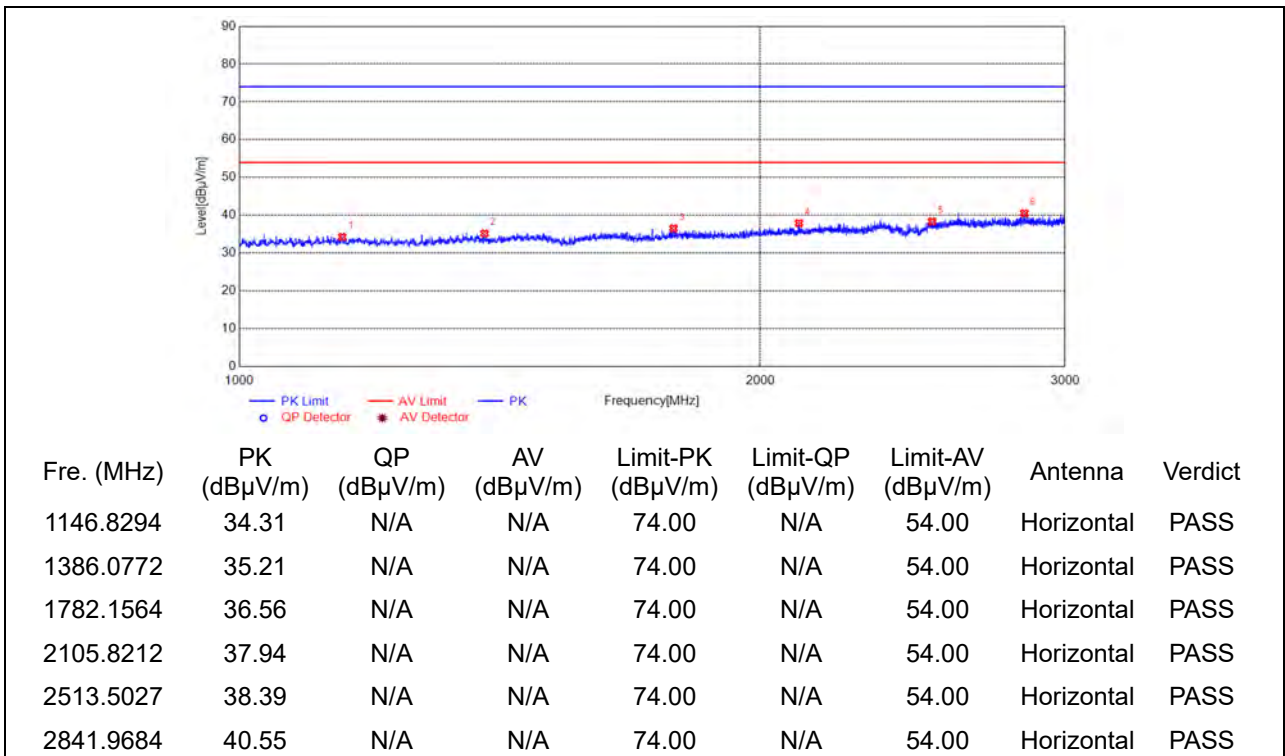


802.11b Mode

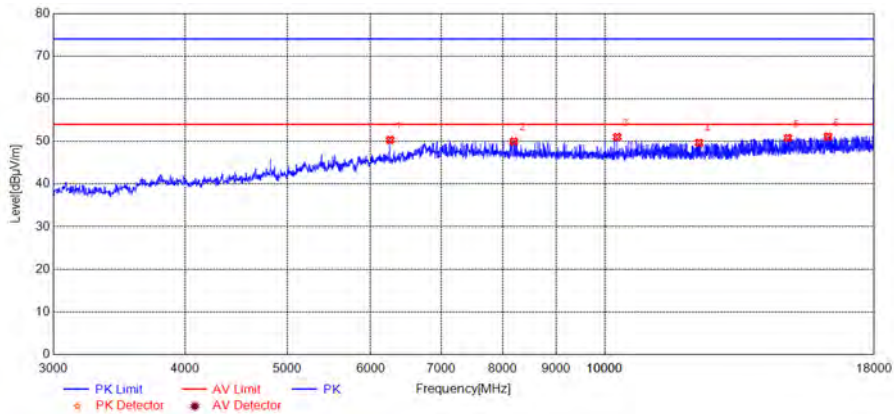
Plot for Channel 1



(Antenna Horizontal, 30MHz to 1GHz)

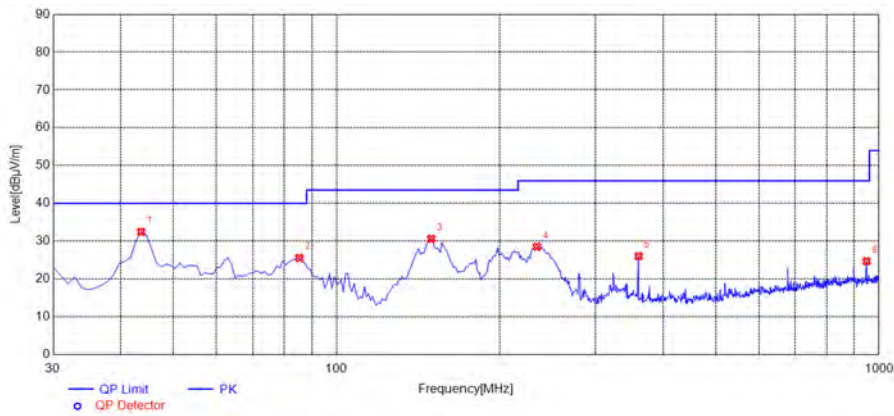


(Antenna Horizontal, 1GHz to 3GHz)



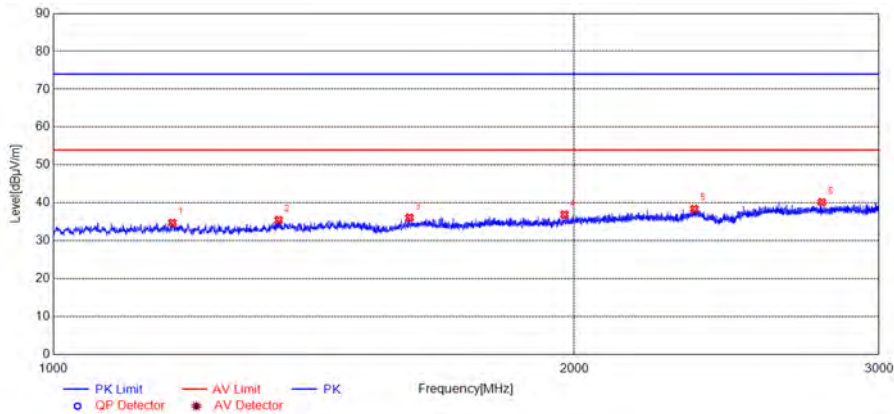
Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
6261.6523	50.34	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8200.0400	50.00	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
10276.4553	51.04	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12286.8574	49.65	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
14918.3837	50.81	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
16280.6561	51.14	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 3GHz to 18GHz)



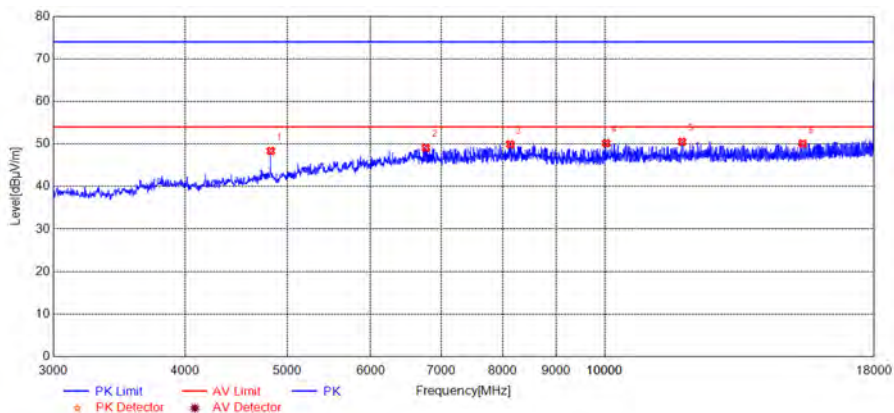
Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
43.5936	32.47	N/A	N/A	N/A	40.00	54.00	Vertical	PASS
85.3453	25.59	N/A	N/A	N/A	40.00	54.00	Vertical	PASS
149.4294	30.64	N/A	N/A	N/A	43.50	54.00	Vertical	PASS
233.9039	28.57	N/A	N/A	N/A	46.00	54.00	Vertical	PASS
360.1301	26.03	N/A	N/A	N/A	46.00	54.00	Vertical	PASS
948.5385	24.70	N/A	N/A	N/A	46.00	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 1GHz)



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
1172.0344	34.77	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
1349.6699	35.50	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
1606.5213	36.13	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
1974.1948	36.97	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2346.6693	38.43	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2780.3561	40.20	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 1GHz to 3GHz)

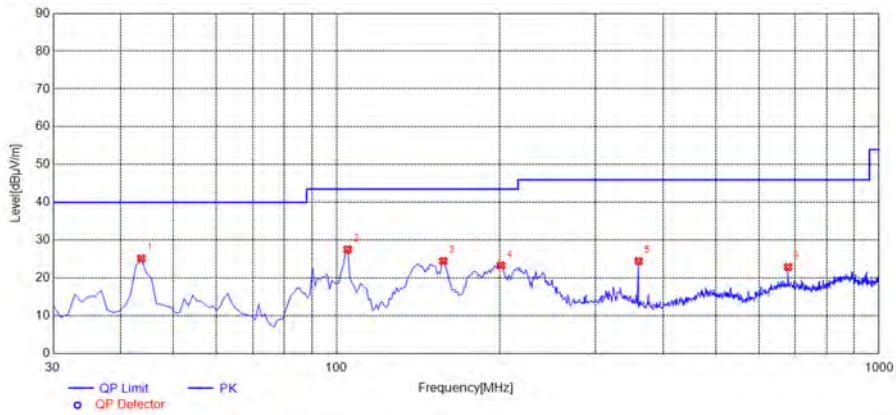


Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
4824.3649	48.35	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
6768.7538	49.10	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8137.0274	49.93	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
10030.4061	50.18	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
11839.7680	50.52	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
15404.4809	50.10	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 3GHz to 18GHz)

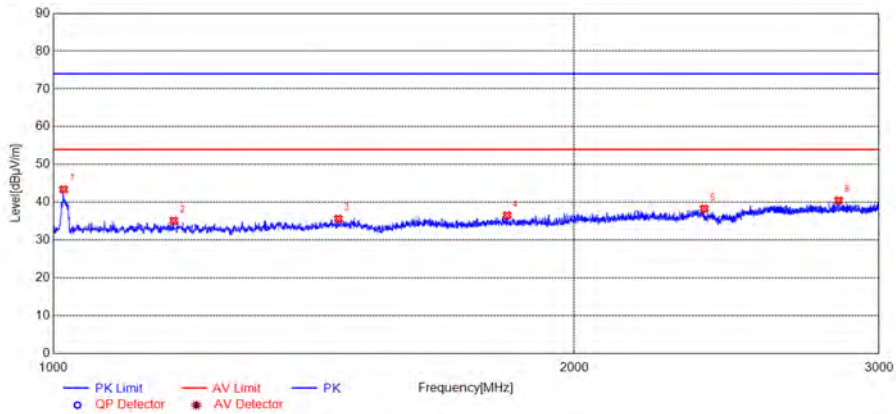


Plot for Channel 7



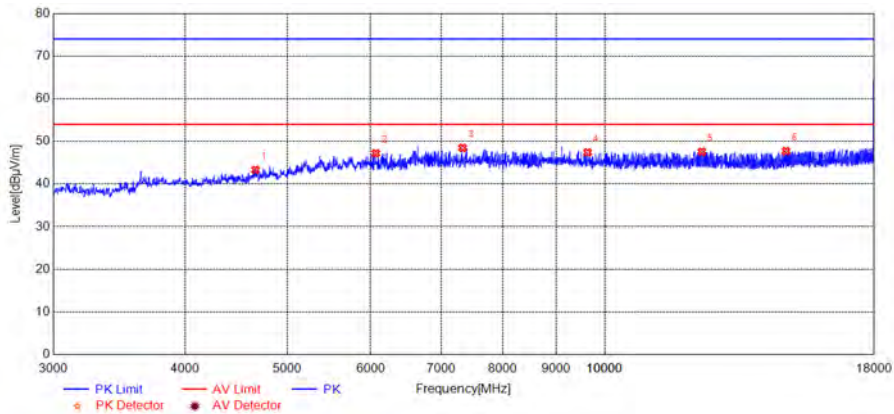
Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
43.5936	25.18	N/A	N/A	N/A	40.00	54.00	Horizontal	PASS
104.7648	27.58	N/A	N/A	N/A	43.50	54.00	Horizontal	PASS
157.1972	24.47	N/A	N/A	N/A	43.50	54.00	Horizontal	PASS
200.8909	23.33	N/A	N/A	N/A	43.50	54.00	Horizontal	PASS
360.1301	24.46	N/A	N/A	N/A	46.00	54.00	Horizontal	PASS
679.5796	22.93	N/A	N/A	N/A	46.00	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 1GHz)



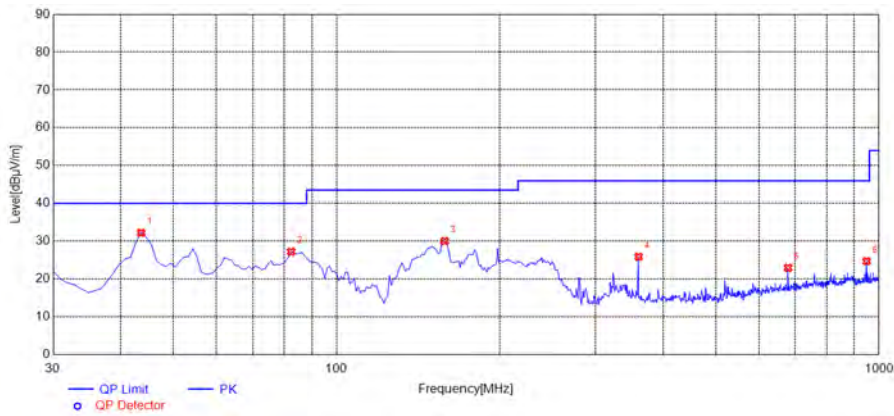
Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
1014.0028	43.44	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
1174.0348	35.14	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
1461.2923	35.65	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
1829.3659	36.58	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
2377.4755	38.33	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
2842.7686	40.50	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 1GHz to 3GHz)



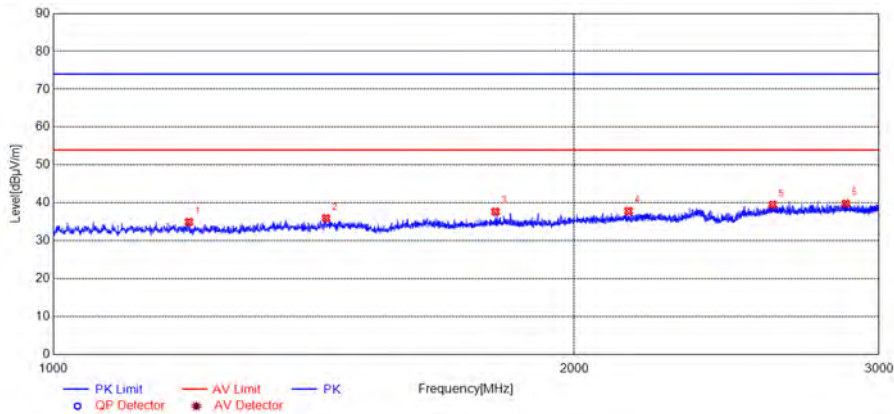
Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
4665.3331	43.33	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
6066.6133	47.21	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
7332.8666	48.48	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
9634.3269	47.43	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12361.8724	47.57	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
14852.3705	47.73	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 3GHz to 18GHz)



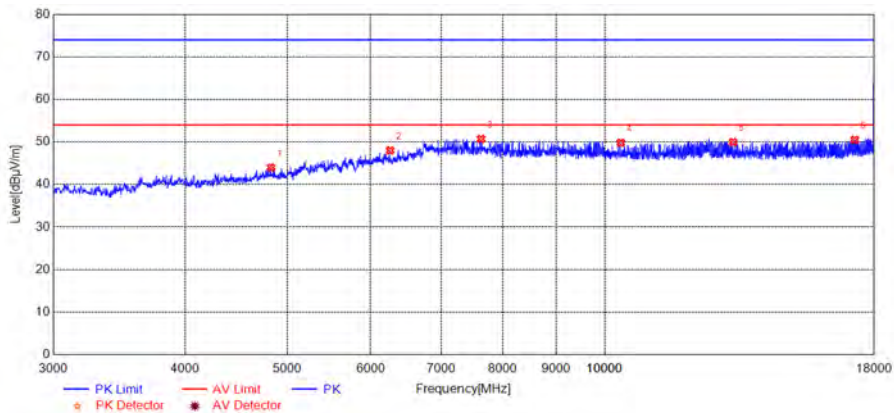
Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
43.5936	32.23	N/A	N/A	N/A	40.00	54.00	Vertical	PASS
82.4324	27.21	N/A	N/A	N/A	40.00	54.00	Vertical	PASS
158.1682	30.03	N/A	N/A	N/A	43.50	54.00	Vertical	PASS
360.1301	25.89	N/A	N/A	N/A	46.00	54.00	Vertical	PASS
679.5796	22.95	N/A	N/A	N/A	46.00	54.00	Vertical	PASS
948.5385	24.73	N/A	N/A	N/A	46.00	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 1GHz)



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
1198.0396	34.97	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
1437.6875	35.97	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
1801.3603	37.72	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2150.2300	37.88	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2604.3209	39.55	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2870.3741	39.87	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 1GHz to 3GHz)

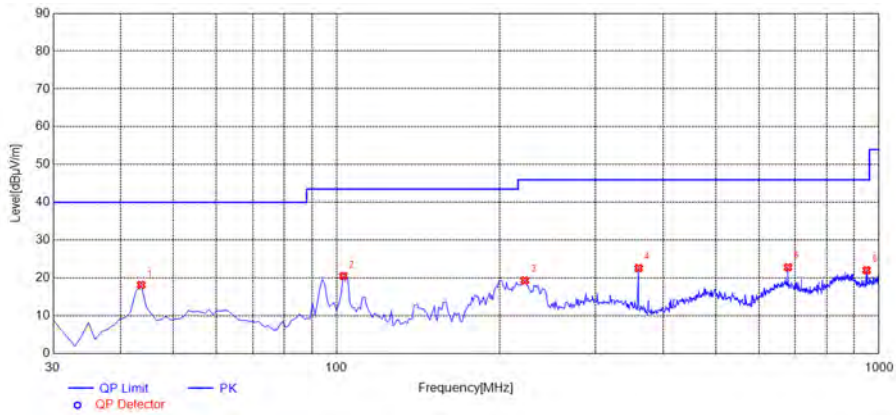


Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
4827.3655	44.01	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
6261.6523	48.03	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
7632.9266	50.72	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
10354.4709	49.84	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
13232.0464	50.00	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
17258.8518	50.51	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 3GHz to 18GHz)

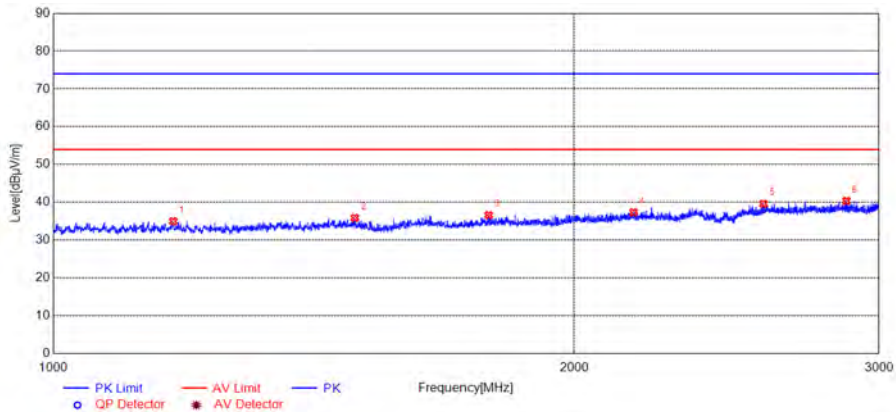


Plot for Channel 13



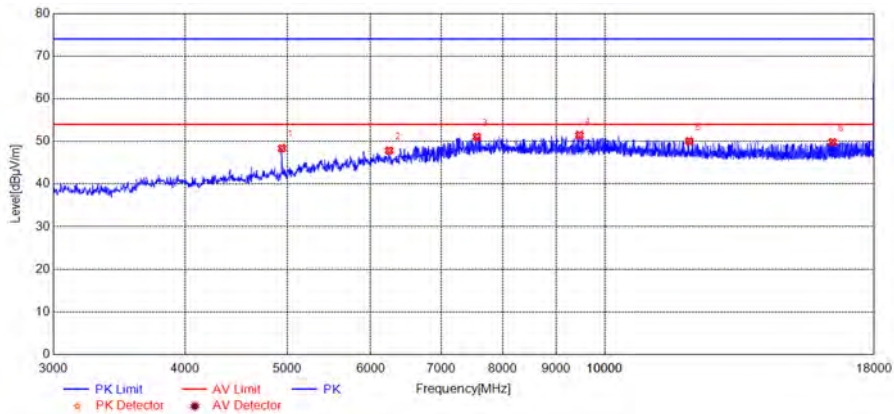
Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
43.5936	18.18	N/A	N/A	N/A	40.00	54.00	Horizontal	PASS
102.8228	20.54	N/A	N/A	N/A	43.50	54.00	Horizontal	PASS
222.2523	19.40	N/A	N/A	N/A	46.00	54.00	Horizontal	PASS
360.1301	22.62	N/A	N/A	N/A	46.00	54.00	Horizontal	PASS
679.5796	22.86	N/A	N/A	N/A	46.00	54.00	Horizontal	PASS
948.5385	22.06	N/A	N/A	N/A	46.00	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 1GHz)



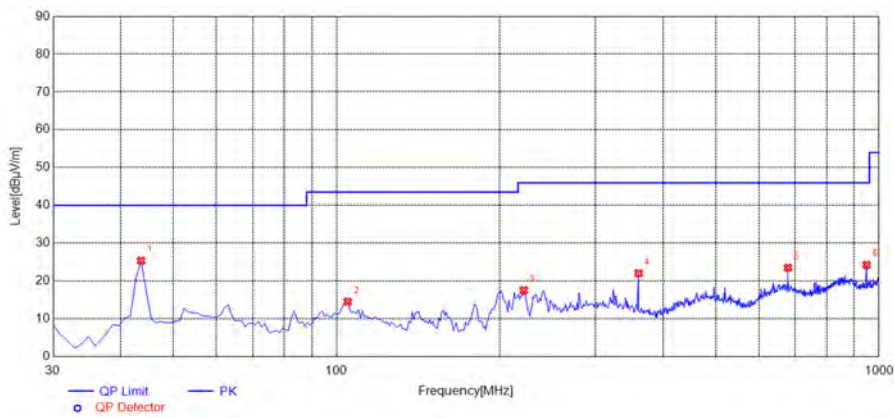
Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
1173.2346	35.00	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
1493.6987	35.91	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
1784.9570	36.63	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
2164.2328	37.38	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
2572.3145	39.61	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
2872.3745	40.38	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 1GHz to 3GHz)



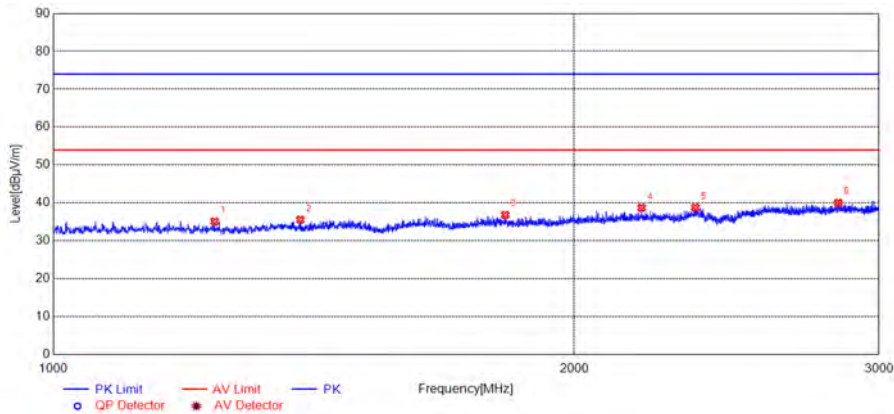
Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
4944.3889	48.37	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
6246.6493	47.83	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
7563.9128	51.05	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
9463.2927	51.47	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12025.8052	50.03	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
16448.6897	49.82	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 3GHz to 18GHz)



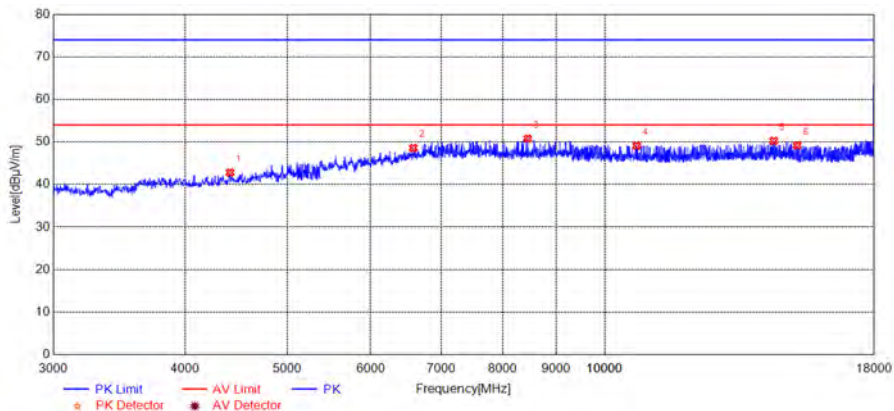
Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
43.5936	25.36	N/A	N/A	N/A	40.00	54.00	Vertical	PASS
104.7648	14.53	N/A	N/A	N/A	43.50	54.00	Vertical	PASS
221.2813	17.53	N/A	N/A	N/A	46.00	54.00	Vertical	PASS
360.1301	22.05	N/A	N/A	N/A	46.00	54.00	Vertical	PASS
679.5796	23.53	N/A	N/A	N/A	46.00	54.00	Vertical	PASS
948.5385	24.28	N/A	N/A	N/A	46.00	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 1GHz)



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
1239.6479	35.10	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
1389.2779	35.58	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
1824.5649	36.85	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2187.8376	38.73	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2349.8700	38.78	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2841.9684	40.05	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 1GHz to 3GHz)



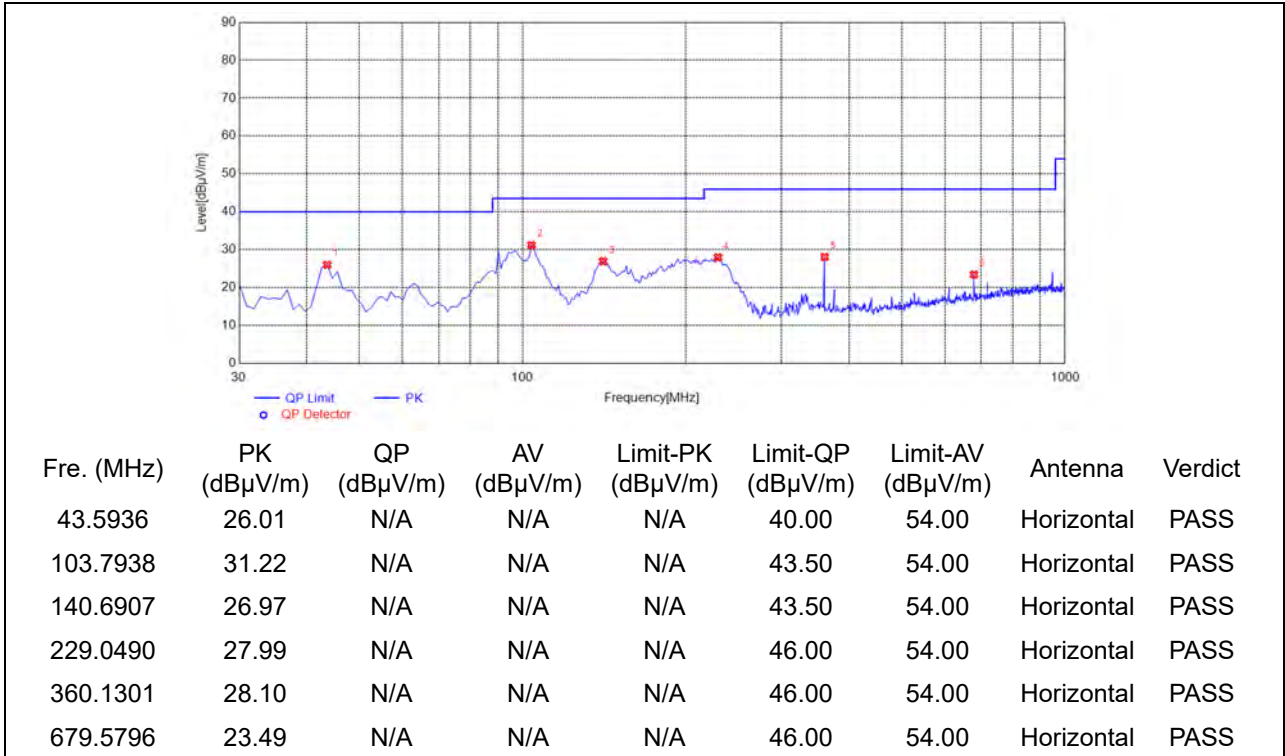
Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
4413.2827	42.82	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
6585.7171	48.59	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8452.0904	50.79	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
10723.5447	49.15	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
14462.2925	50.26	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
15218.4437	49.24	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 3GHz to 18GHz)

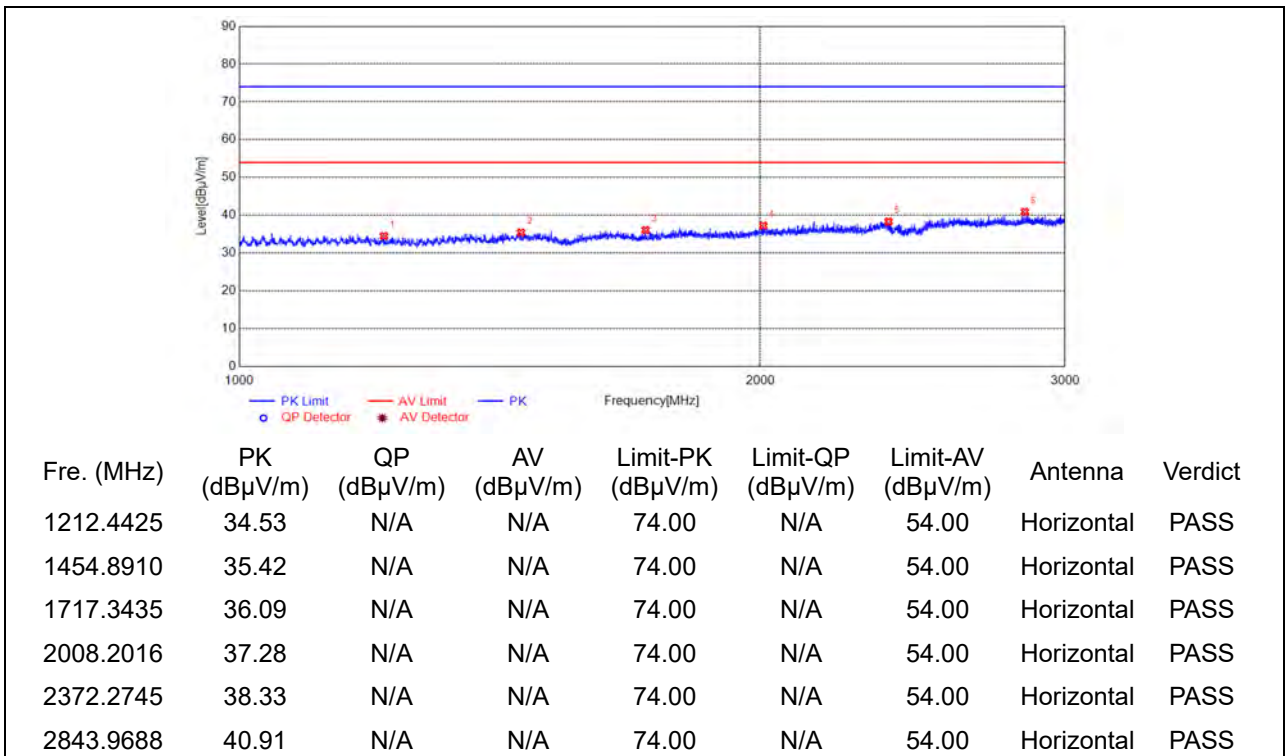


802.11g Mode

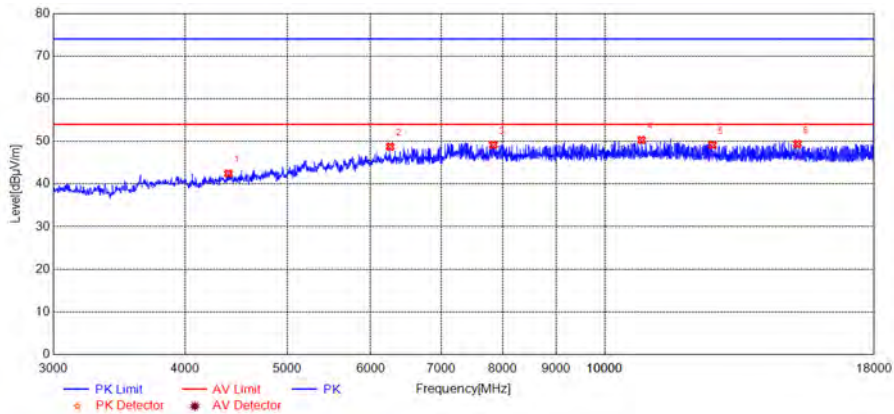
Plot for Channel 1



(Antenna Horizontal, 30MHz to 1GHz)

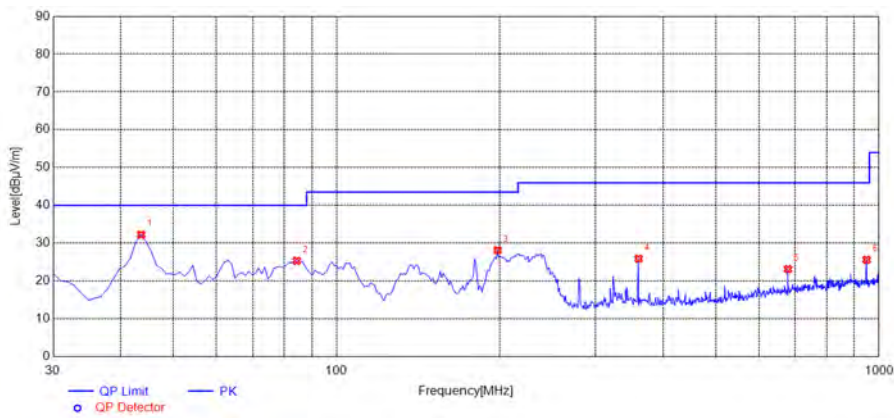


(Antenna Horizontal, 1GHz to 3GHz)



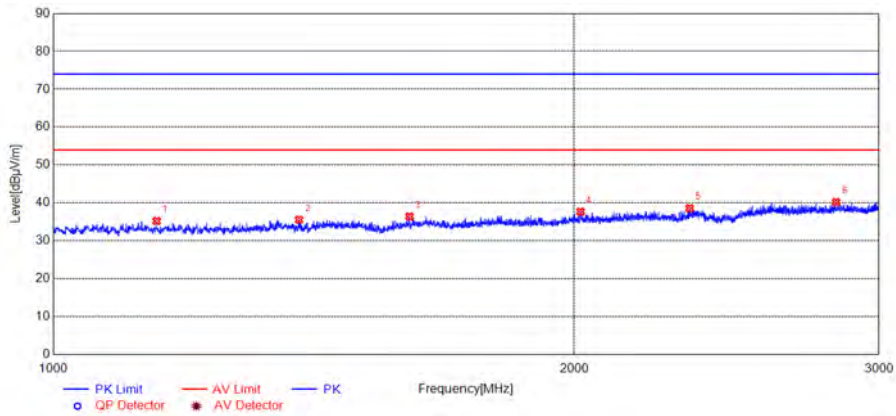
Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
4398.2797	42.44	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
6261.6523	48.75	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
7842.9686	49.21	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
10840.5681	50.33	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12646.9294	49.17	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
15227.4455	49.41	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 3GHz to 18GHz)



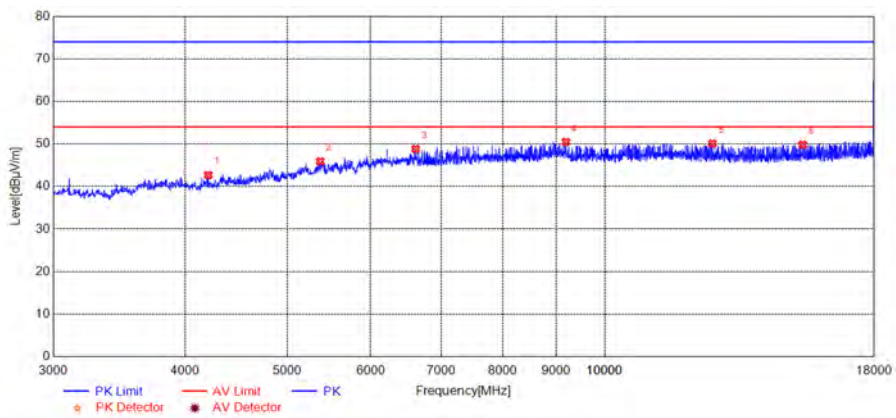
Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
43.5936	32.25	N/A	N/A	N/A	40.00	54.00	Vertical	PASS
84.3744	25.35	N/A	N/A	N/A	40.00	54.00	Vertical	PASS
197.9780	28.16	N/A	N/A	N/A	43.50	54.00	Vertical	PASS
360.1301	25.91	N/A	N/A	N/A	46.00	54.00	Vertical	PASS
679.5796	23.16	N/A	N/A	N/A	46.00	54.00	Vertical	PASS
948.5385	25.63	N/A	N/A	N/A	46.00	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 1GHz)



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
1147.6295	35.24	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
1386.8774	35.59	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
1606.5213	36.43	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2017.0034	37.70	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2331.8664	38.62	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2833.5667	40.21	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 1GHz to 3GHz)

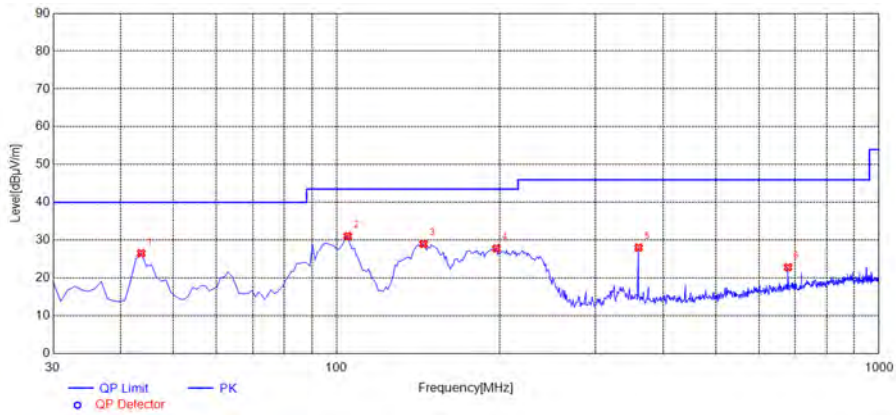


Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
4209.2418	42.69	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5373.4747	45.91	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
6618.7237	48.82	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
9187.2374	50.49	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12649.9300	50.10	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
15404.4809	49.88	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 3GHz to 18GHz)

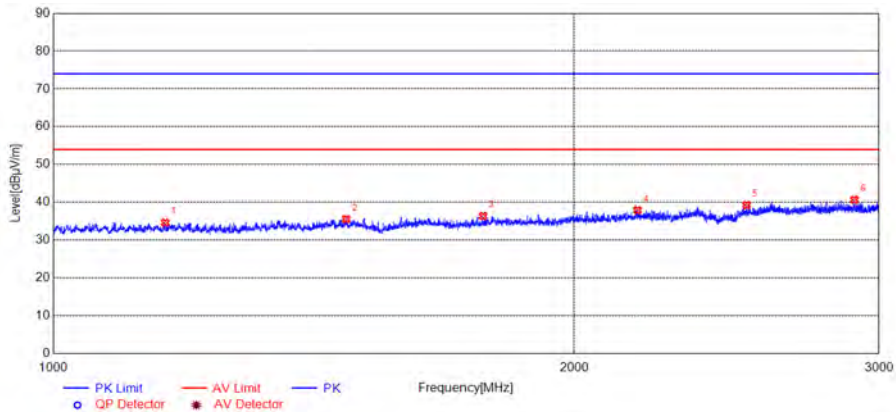


Plot for Channel 7



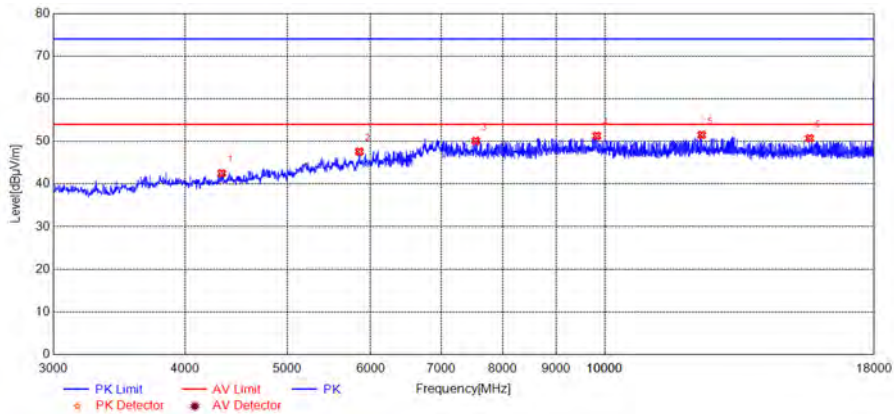
Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
43.5936	26.56	N/A	N/A	N/A	40.00	54.00	Horizontal	PASS
104.7648	31.10	N/A	N/A	N/A	43.50	54.00	Horizontal	PASS
144.5746	29.01	N/A	N/A	N/A	43.50	54.00	Horizontal	PASS
197.0070	27.83	N/A	N/A	N/A	43.50	54.00	Horizontal	PASS
360.1301	28.03	N/A	N/A	N/A	46.00	54.00	Horizontal	PASS
679.5796	22.87	N/A	N/A	N/A	46.00	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 1GHz)



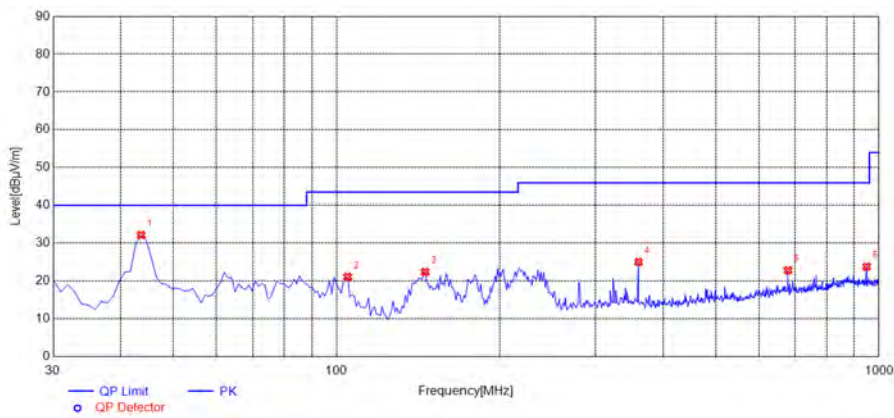
Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
1160.8322	34.63	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
1476.4953	35.54	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
1771.7544	36.41	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
2175.4351	37.93	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
2515.5031	39.29	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
2903.5807	40.69	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 1GHz to 3GHz)



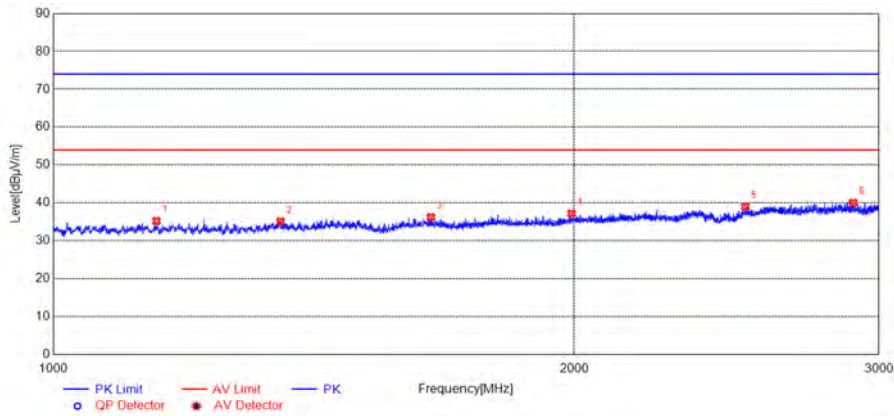
Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
4335.2671	42.51	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5853.5707	47.61	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
7545.9092	50.11	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
9829.3659	51.31	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12358.8718	51.53	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
15638.5277	50.73	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 3GHz to 18GHz)



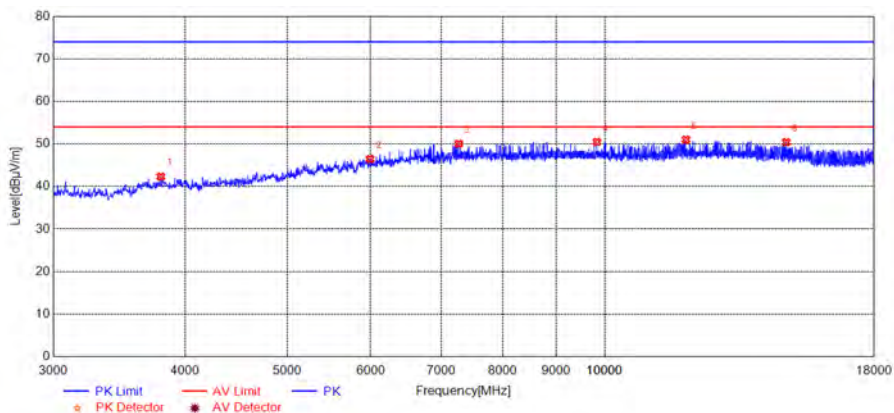
Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
43.5936	32.17	N/A	N/A	N/A	40.00	54.00	Vertical	PASS
104.7648	21.11	N/A	N/A	N/A	43.50	54.00	Vertical	PASS
145.5455	22.39	N/A	N/A	N/A	43.50	54.00	Vertical	PASS
360.1301	25.04	N/A	N/A	N/A	46.00	54.00	Vertical	PASS
679.5796	22.84	N/A	N/A	N/A	46.00	54.00	Vertical	PASS
948.5385	23.79	N/A	N/A	N/A	46.00	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 1GHz)



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
1147.2294	35.22	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
1353.2707	35.13	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
1652.9306	36.24	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
1992.9986	37.21	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2511.5023	39.03	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2898.7798	40.07	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 1GHz to 3GHz)

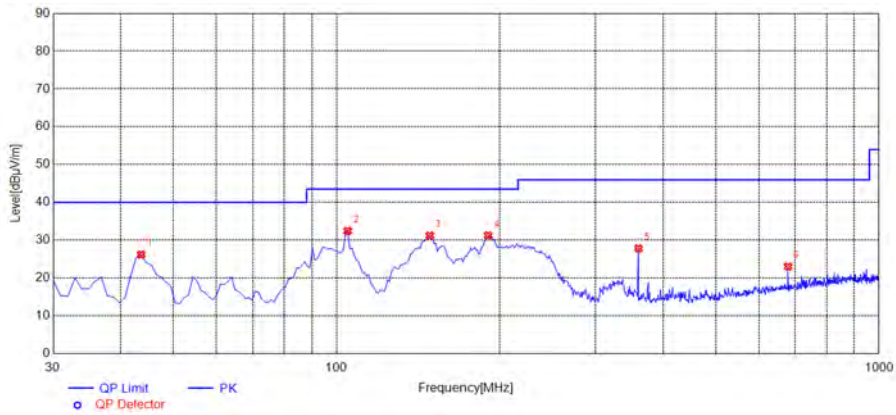


Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
3795.1590	42.32	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5991.5983	46.48	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
7269.8540	50.04	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
9832.3665	50.48	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
11938.7878	51.02	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
14861.3723	50.41	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 3GHz to 18GHz)

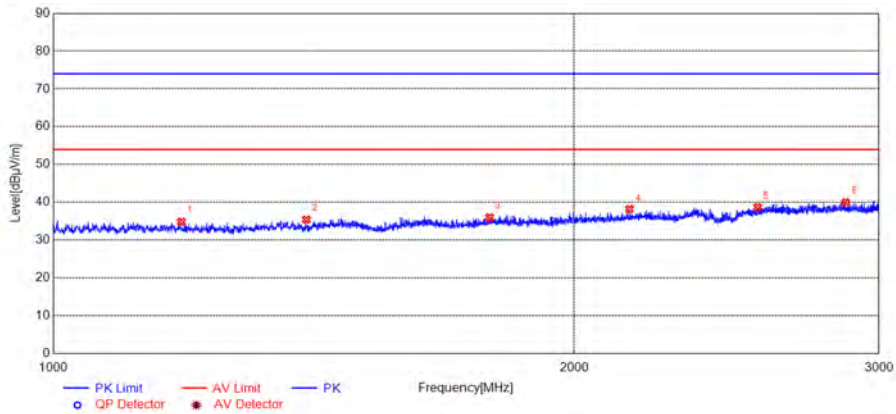


Plot for Channel 13



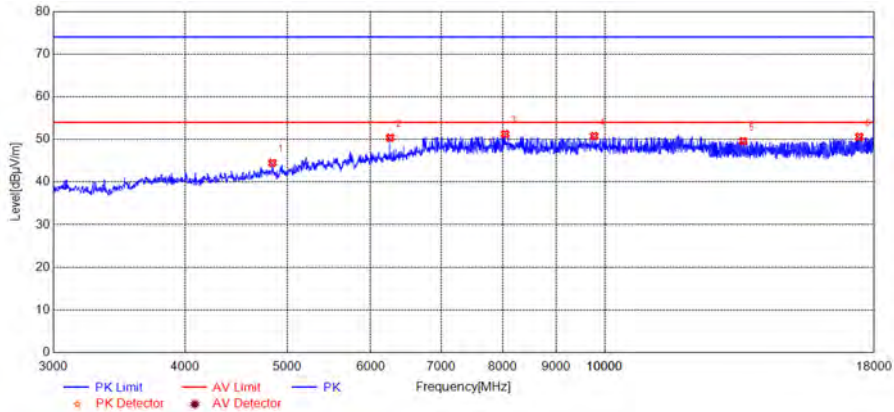
Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
43.5936	26.22	N/A	N/A	N/A	40.00	54.00	Horizontal	PASS
104.7648	32.47	N/A	N/A	N/A	43.50	54.00	Horizontal	PASS
148.4585	31.23	N/A	N/A	N/A	43.50	54.00	Horizontal	PASS
190.2102	31.27	N/A	N/A	N/A	43.50	54.00	Horizontal	PASS
360.1301	27.83	N/A	N/A	N/A	46.00	54.00	Horizontal	PASS
679.5796	23.06	N/A	N/A	N/A	46.00	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 1GHz)



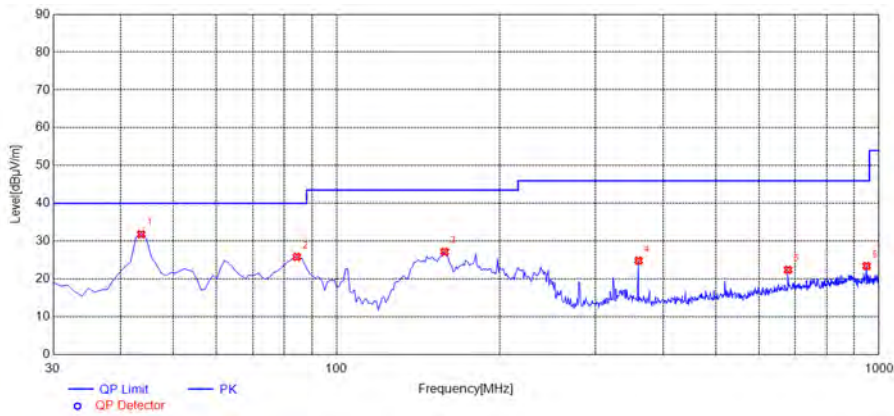
Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
1186.0372	34.86	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
1400.4801	35.42	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
1786.9574	36.02	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
2152.6305	38.18	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
2552.3105	38.72	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
2869.9740	40.02	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 1GHz to 3GHz)



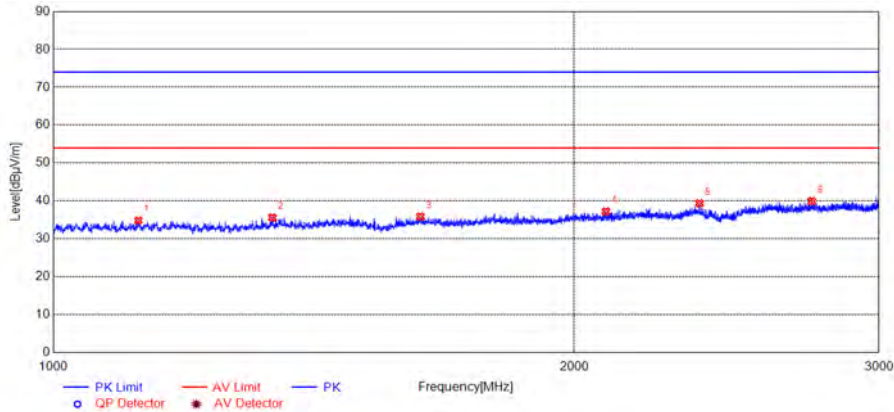
Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
4842.3685	44.48	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
6261.6523	50.37	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8047.0094	51.27	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
9772.3545	50.79	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
13526.1052	49.60	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
17429.8860	50.59	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 3GHz to 18GHz)



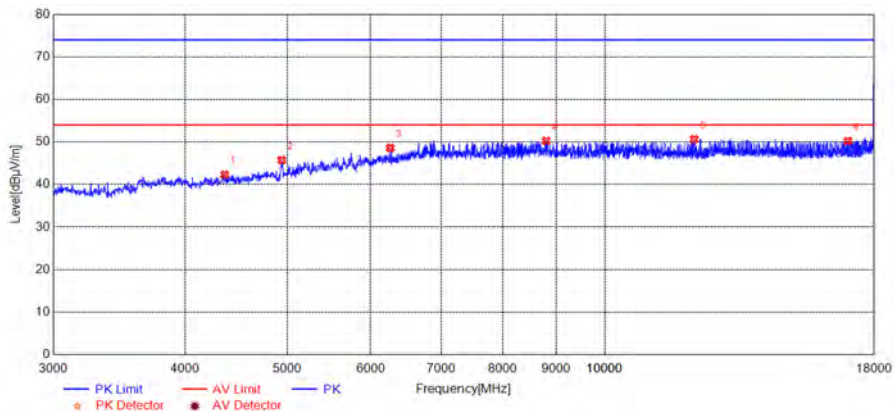
Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
43.5936	31.84	N/A	N/A	N/A	40.00	54.00	Vertical	PASS
84.3744	25.84	N/A	N/A	N/A	40.00	54.00	Vertical	PASS
158.1682	27.22	N/A	N/A	N/A	43.50	54.00	Vertical	PASS
360.1301	24.88	N/A	N/A	N/A	46.00	54.00	Vertical	PASS
679.5796	22.44	N/A	N/A	N/A	46.00	54.00	Vertical	PASS
948.5385	23.45	N/A	N/A	N/A	46.00	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 1GHz)



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
1120.0240	34.81	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
1338.8678	35.61	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
1629.7259	35.89	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2086.2172	37.21	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2362.6725	39.38	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2743.5487	39.96	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 1GHz to 3GHz)



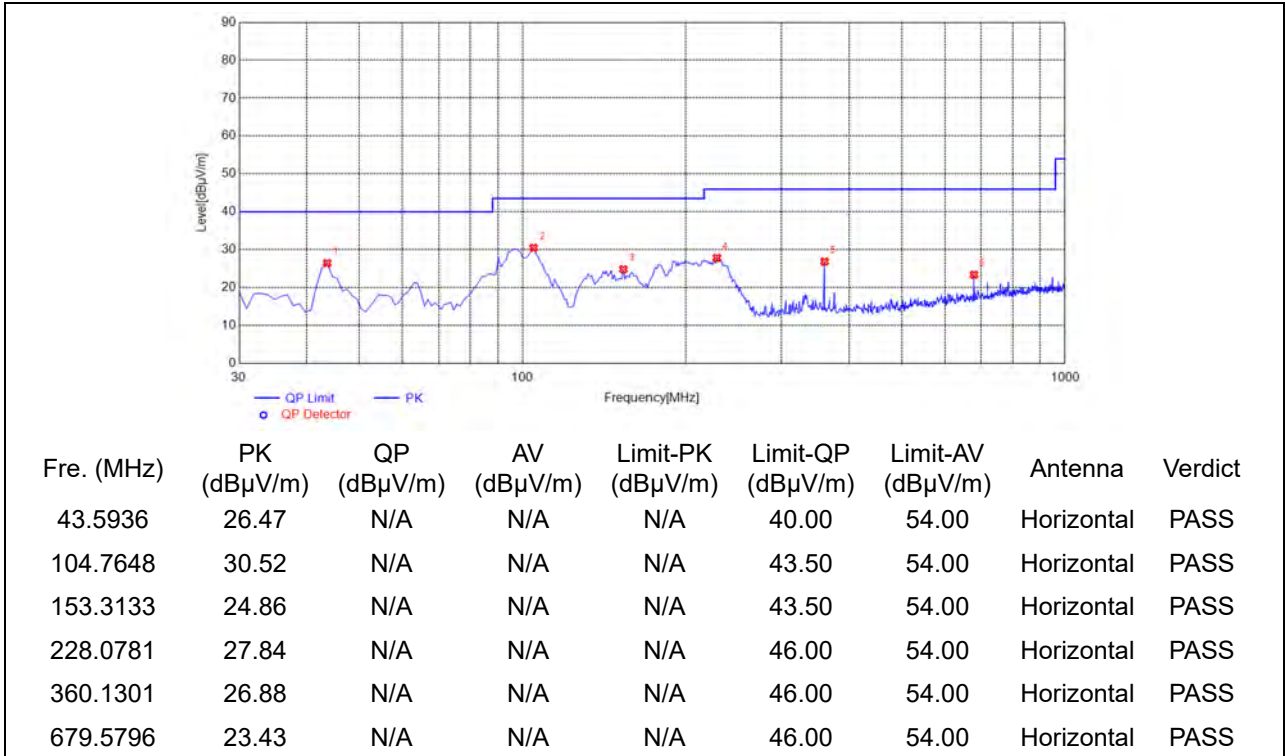
Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
4362.2725	42.31	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4941.3883	45.73	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
6261.6523	48.64	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8800.1600	50.24	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12154.8310	50.64	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
17003.8008	50.22	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 3GHz to 18GHz)

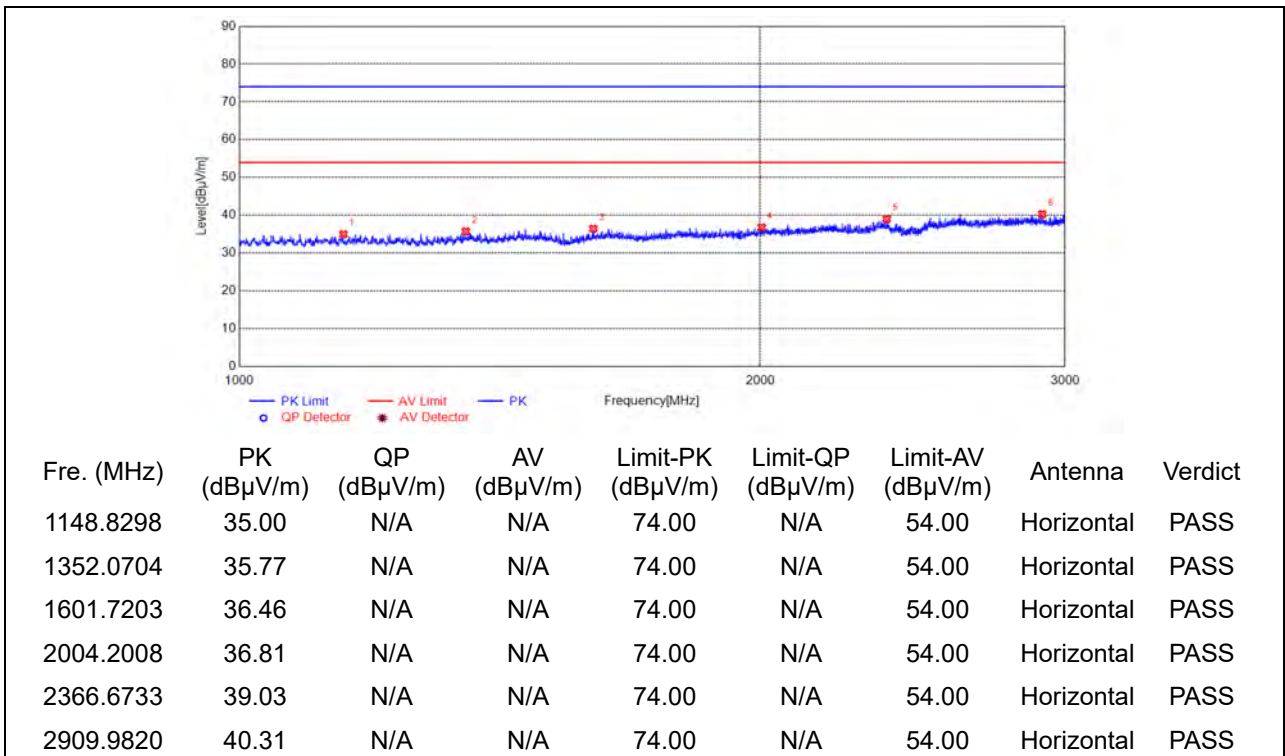


802.11n (HT20) Mode

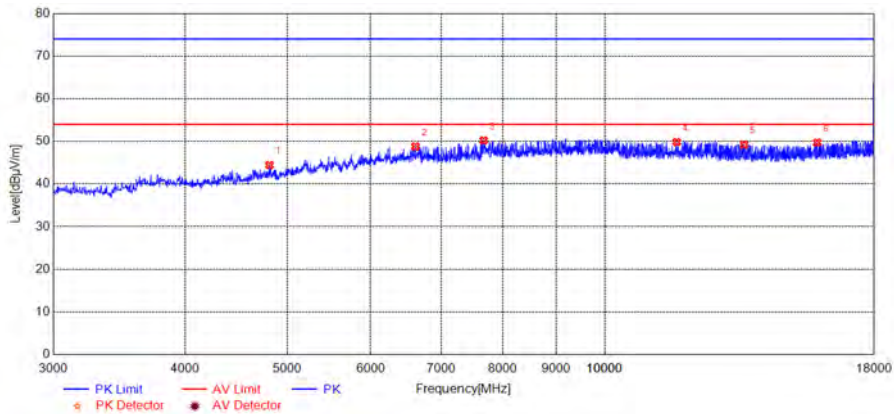
Plot for Channel 1



(Antenna Horizontal, 30MHz to 1GHz)

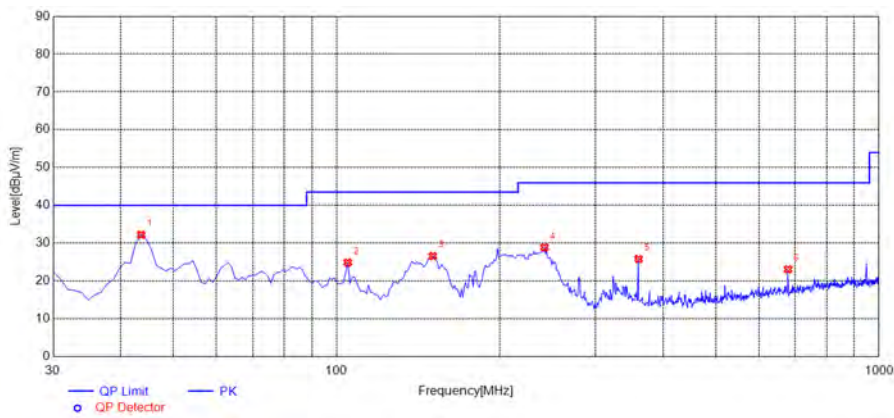


(Antenna Horizontal, 1GHz to 3GHz)



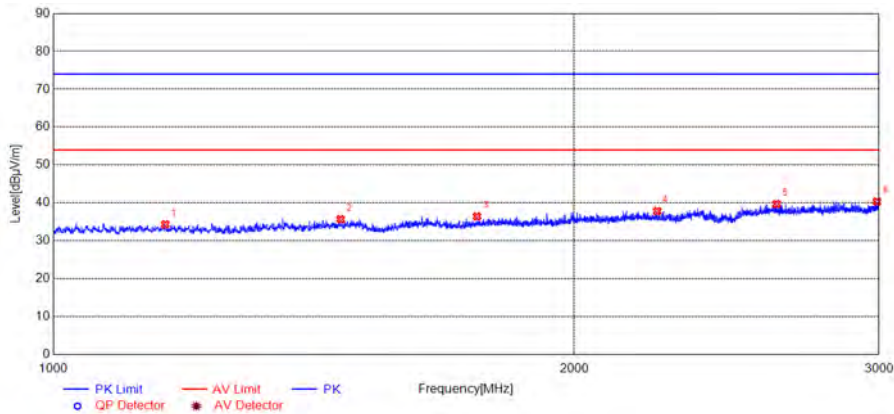
Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
4812.3625	44.46	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
6615.7231	48.80	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
7677.9356	50.23	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
11698.7397	49.86	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
13559.1118	49.26	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
15899.5799	49.72	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 3GHz to 18GHz)



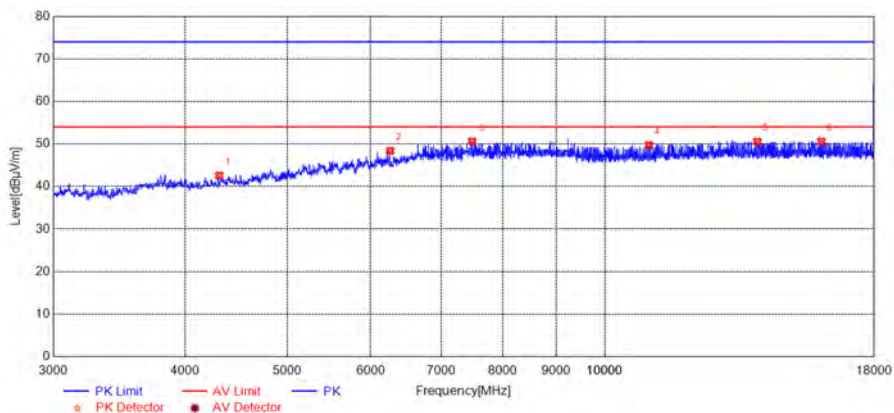
Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
43.5936	32.23	N/A	N/A	N/A	40.00	54.00	Vertical	PASS
104.7648	24.91	N/A	N/A	N/A	43.50	54.00	Vertical	PASS
150.4004	26.60	N/A	N/A	N/A	43.50	54.00	Vertical	PASS
241.6717	28.90	N/A	N/A	N/A	46.00	54.00	Vertical	PASS
360.1301	25.82	N/A	N/A	N/A	46.00	54.00	Vertical	PASS
679.5796	23.10	N/A	N/A	N/A	46.00	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 1GHz)



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
1160.8322	34.38	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
1465.6931	35.74	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
1757.3515	36.47	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2233.4467	37.86	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2617.5235	39.73	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2991.5983	40.35	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 1GHz to 3GHz)

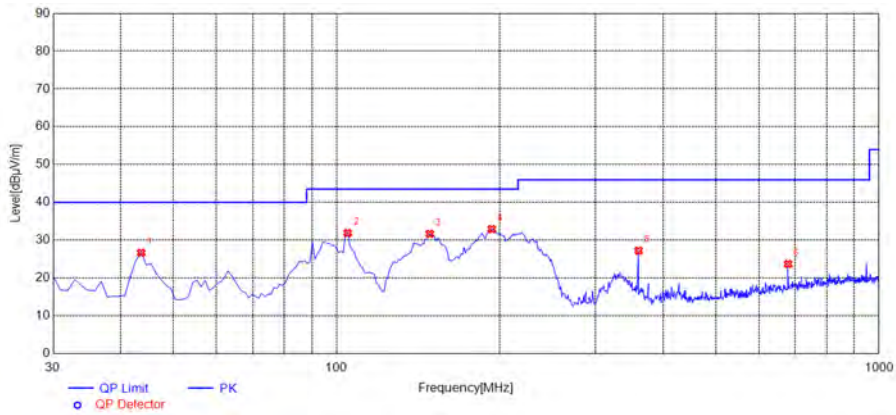


Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
4311.2623	42.58	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
6261.6523	48.38	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
7488.8978	50.60	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
11014.6029	49.69	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
13955.1910	50.54	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
16046.6093	50.57	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 3GHz to 18GHz)

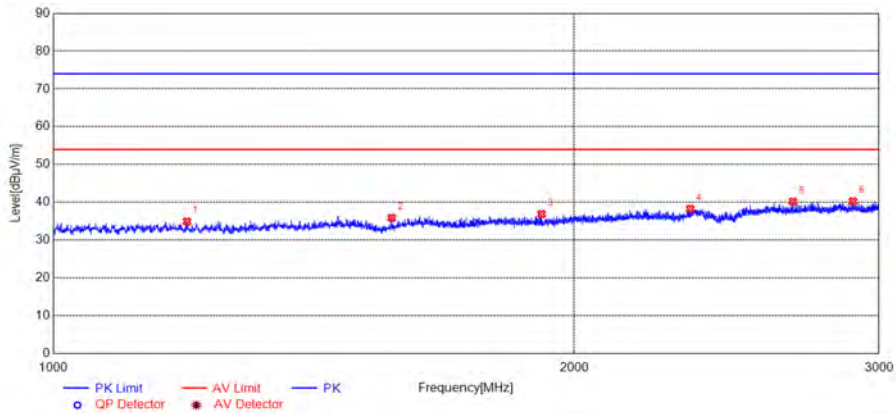


Plot for Channel 7



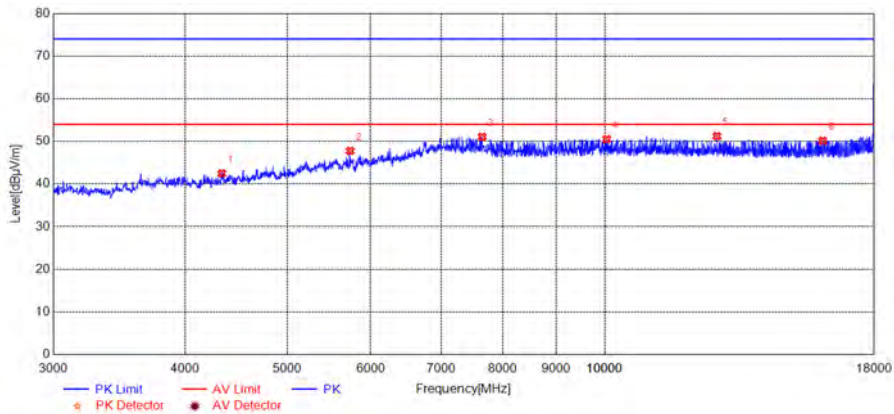
Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
43.5936	26.67	N/A	N/A	N/A	40.00	54.00	Horizontal	PASS
104.7648	31.92	N/A	N/A	N/A	43.50	54.00	Horizontal	PASS
148.4585	31.70	N/A	N/A	N/A	43.50	54.00	Horizontal	PASS
193.1231	32.96	N/A	N/A	N/A	43.50	54.00	Horizontal	PASS
360.1301	27.24	N/A	N/A	N/A	46.00	54.00	Horizontal	PASS
679.5796	23.72	N/A	N/A	N/A	46.00	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 1GHz)



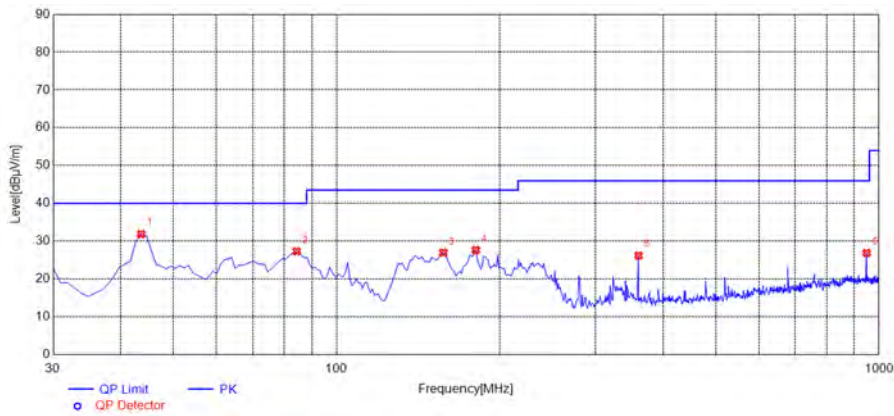
Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
1194.8390	34.93	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
1568.9138	35.92	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
1914.9830	36.92	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
2333.8668	38.29	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
2675.9352	40.20	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
2897.9796	40.27	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 1GHz to 3GHz)



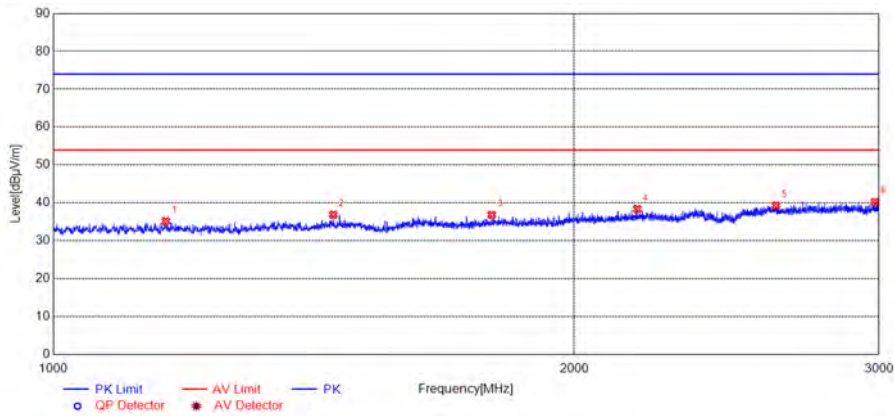
Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
4335.2671	42.46	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5736.5473	47.75	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
7653.9308	51.06	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
10042.4085	50.50	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12775.9552	51.22	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
16091.6183	50.14	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 3GHz to 18GHz)



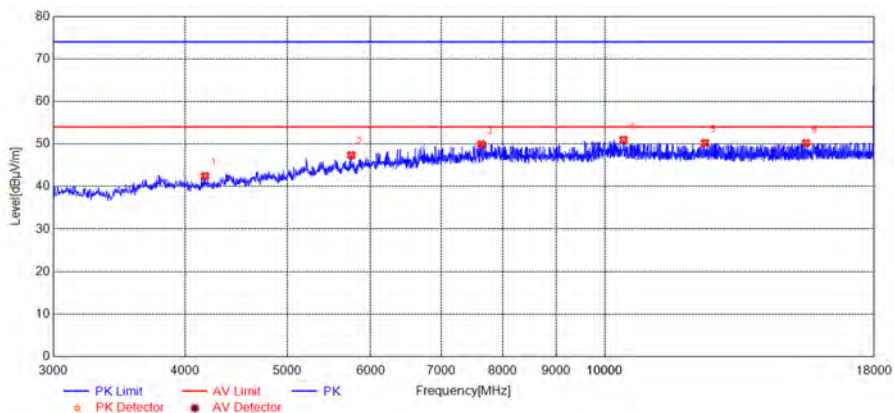
Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
43.5936	31.87	N/A	N/A	N/A	40.00	54.00	Vertical	PASS
84.3744	27.35	N/A	N/A	N/A	40.00	54.00	Vertical	PASS
157.1972	26.98	N/A	N/A	N/A	43.50	54.00	Vertical	PASS
180.5005	27.66	N/A	N/A	N/A	43.50	54.00	Vertical	PASS
360.1301	26.21	N/A	N/A	N/A	46.00	54.00	Vertical	PASS
948.5385	26.90	N/A	N/A	N/A	46.00	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 1GHz)



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
1161.6323	35.18	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
1451.2903	36.88	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
1792.1584	36.85	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2175.0350	38.40	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2615.5231	39.35	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2984.3969	40.23	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 1GHz to 3GHz)

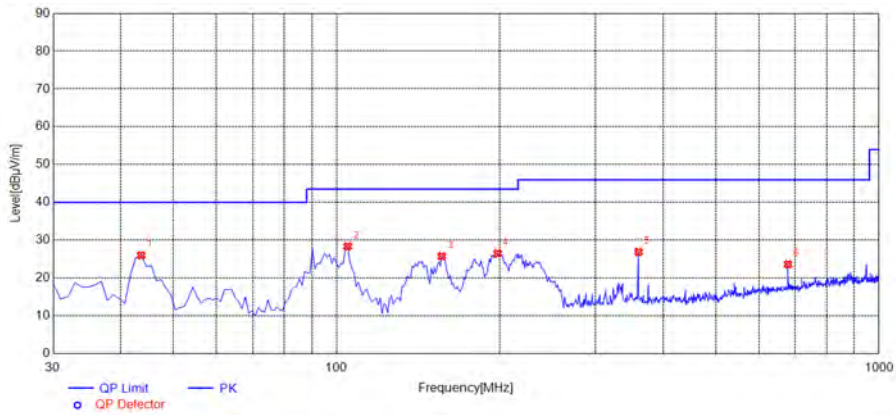


Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
4179.2358	42.42	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5751.5503	47.37	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
7641.9284	49.92	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
10420.4841	51.00	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12442.8886	50.22	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
15521.5043	50.19	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 3GHz to 18GHz)

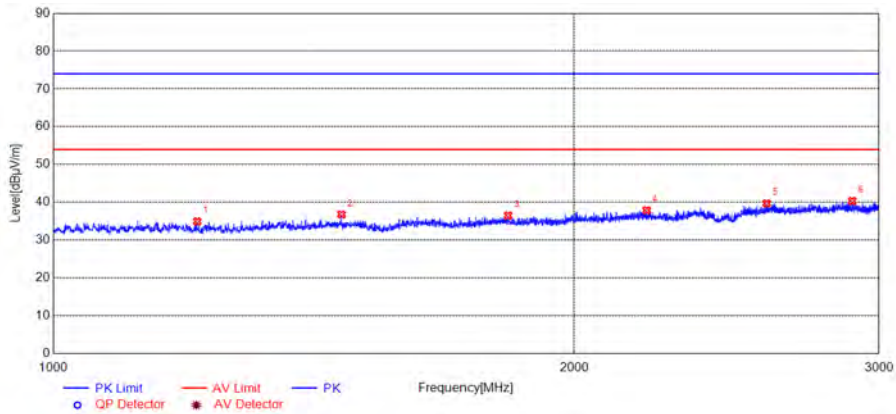


Plot for Channel 13



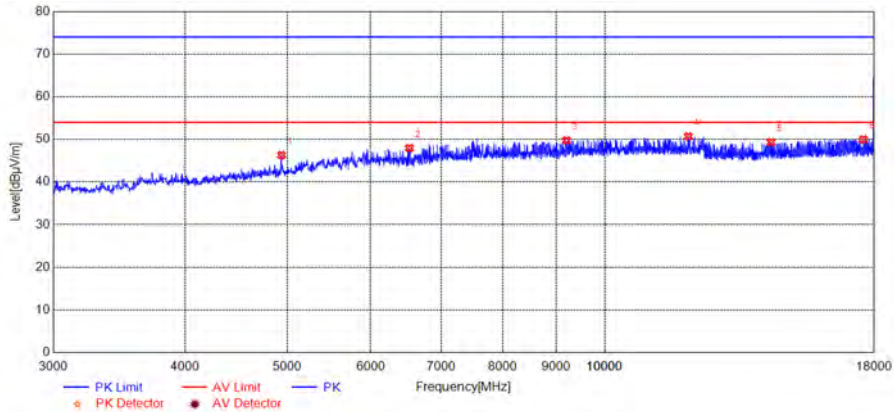
Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
43.5936	26.00	N/A	N/A	N/A	40.00	54.00	Horizontal	PASS
104.7648	28.39	N/A	N/A	N/A	43.50	54.00	Horizontal	PASS
156.2262	25.77	N/A	N/A	N/A	43.50	54.00	Horizontal	PASS
197.9780	26.52	N/A	N/A	N/A	43.50	54.00	Horizontal	PASS
360.1301	26.94	N/A	N/A	N/A	46.00	54.00	Horizontal	PASS
679.5796	23.63	N/A	N/A	N/A	46.00	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 1GHz)



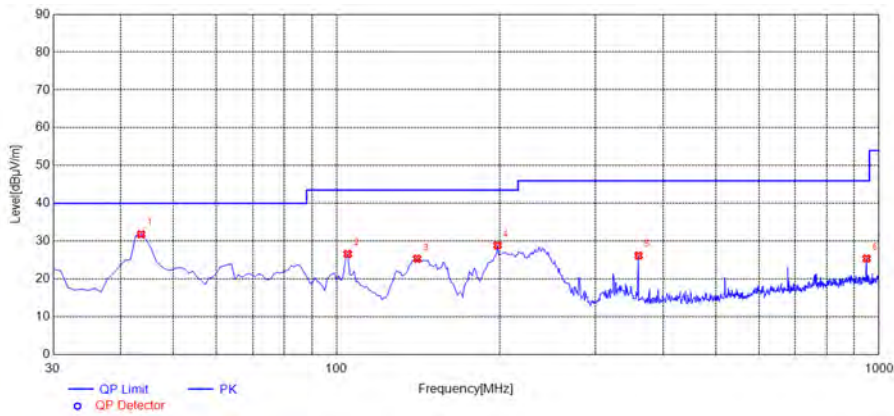
Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
1211.2422	34.95	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
1467.6935	36.80	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
1831.7664	36.51	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
2202.6405	37.90	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
2583.5167	39.72	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
2894.7790	40.37	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 1GHz to 3GHz)



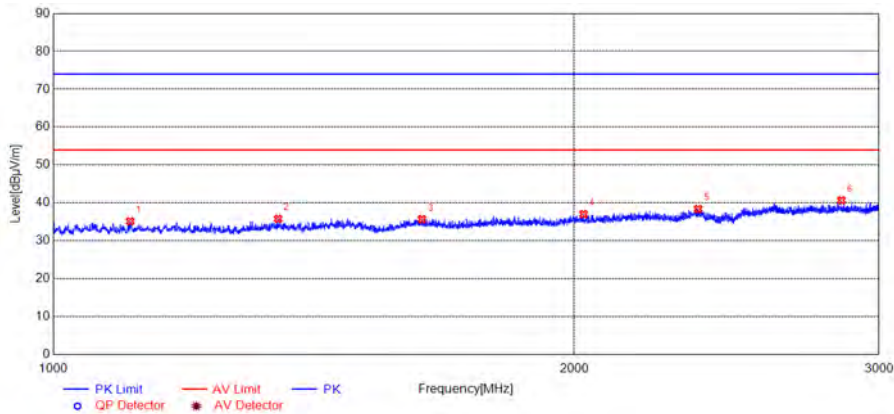
Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
4938.3877	46.30	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
6528.7057	47.94	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
9199.2398	49.76	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12001.8004	50.71	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
14378.2757	49.34	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
17591.9184	49.97	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 3GHz to 18GHz)



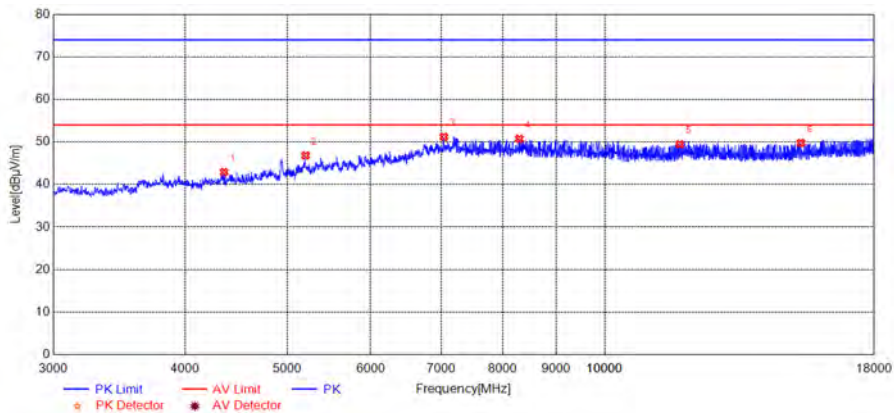
Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
43.5936	31.82	N/A	N/A	N/A	40.00	54.00	Vertical	PASS
104.7648	26.63	N/A	N/A	N/A	43.50	54.00	Vertical	PASS
140.6907	25.37	N/A	N/A	N/A	43.50	54.00	Vertical	PASS
197.9780	28.90	N/A	N/A	N/A	43.50	54.00	Vertical	PASS
360.1301	26.22	N/A	N/A	N/A	46.00	54.00	Vertical	PASS
948.5385	25.43	N/A	N/A	N/A	46.00	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 1GHz)



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
1108.0216	35.16	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
1348.8698	35.83	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
1633.3267	35.74	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2025.0050	37.07	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2358.2717	38.45	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2853.9708	40.71	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 1GHz to 3GHz)



Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
4356.2713	42.92	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5205.4411	46.85	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
7038.8078	51.21	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8299.0598	50.73	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
11782.7566	49.46	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
15347.4695	49.77	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 3GHz to 18GHz)

END OF REPORT