

TEST REPORT

Report No.: SHATBL2306004W02

Applicant : Furspark Technology Co., Ltd.

Product Name : Smart Pet Feeder

Brand Name : Furspark

Model Name : Furspark Big Eye

FCC ID : 2BCAD-BIGEYE

Test Standard : FCC Part15.247

Date of Test : 2023.06.19-2023.06.28

Report Prepared by :

Jack Suo

(Jack Suo)

Report Approved by :

Ghost Li.

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Authorized Signatory :

Terry Yang

(Terry Yang)



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TEST RESULT CERTIFICATION

Applicant's Name..... : Furspark Technology Co., Ltd.
Address..... : South Side, 8th Floor, East Building, No. 399 Chuangqiang Road, Xindai Town, Pinghu City, Jiaxing City, Zhejiang Province.
Manufacturer's Name..... : Furspark Technology Co., Ltd.
Address..... : South Side, 8th Floor, East Building, No. 399 Chuangqiang Road, Xindai Town, Pinghu City, Jiaxing City, Zhejiang Province.
Factory's Name..... : Furspark Technology Co., Ltd.
Address..... : South Side, 8th Floor, East Building, No. 399 Chuangqiang Road, Xindai Town, Pinghu City, Jiaxing City, Zhejiang Province.

Product Description

Product Name..... : Smart Pet Feeder
Brand Name..... : Furspark
Model Name..... : Furspark Big Eye
Series Model..... : N/A

Test Standards..... : FCC Part15.247

Test Procedure..... : ANSI C63.10-2013

The device has been tested by ATBL, and the test results show that the equipment under test (EUT) is in compliance with the FCC Part15.247 requirements. And it is applicable only to the tested sample identified in the report.

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Date of Test

Date of receipt of test item..... : 2023.06.02
Date (s) of performance of tests..... : 2023.06.19-2023.06.28
Date of Issue..... : 2023.06.27
Test Result..... : **Pass**

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Revision History

Rev.	Issue Date	Revisions	Revised by
00	2023.06.27	Initial Release	Ghost Li

1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

KDB 558074 D01 15.247 Meas Guidance v05r02.

FCC Part 15.247,Subpart C			
Standard Section	Test Item	Judgment	Remark
15.207	Conducted Emission	PASS	--
15.247 (a)(2)	6dB&99% Bandwidth	PASS	--
15.247 (b)(3)	Output Power	PASS	--
15.247(d) & 15.209 & 15.205	Radiated Spurious Emission	PASS	--
15.247(d) & 15.205	Conducted Spurious & Band Edge Emission	PASS	--
15.247 (e)	Power Spectral Density	PASS	--
15.205	Restricted bands of operation	PASS	--
15.203	Antenna Requirement	PASS	--

NOTE:

(1) 'N/A' denotes test is not applicable in this Test Report.

(2)All tests are according to ANSI C63.10-2013.

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF THE EUT

Product Name	Smart Pet Feeder	
Trade Name	Furspark	
Model Name	Furspark Big Eye	
Series Model	N/A	
Model Difference	N/A	
Product Description	The EUT is Smart Pet Feeder	
	Operation Frequency:	802.11b/g/n (20MHz): 2412~2462 MHz 802.11n(40MHz):2422~2452MHz
	Modulation Type:	802.11b(DSSS):CCK,DQPSK,DBPSK 802.11g(OFDM):BPSK,QPSK,16-QAM,64-QAM 802.11n(OFDM):BPSK,QPSK,16-QAM,64-QAM
	Bit Rate of Transmitter:	802.11b:11/5.5/2/1Mbps 802.11g:54/48/36/24/18/12/9/6Mbps 802.11n:MCS7/MCS6/MCS5/MCS4/MCS3/MCS2/MCS1/MCS0
	Number of Channel:	802.11b/g/n(20MHz): 11CH 802.11n(40MHz):9CH
	Antenna Designation:	FPC Antenna
	Antenna Gain (dBi):	3.01dBi
Channel List	Please refer to the Note 2.	
Power Input	DC5V 2A	
Battery	N/A	
Hardware version number	CPP MB V1.5	
Software version number	V7.2	
Connecting I/O Port(s)	Please refer to the User's Manual	

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User Manual.
2. The general information of EUT in this report is provided by the customer or manufacture, ATBL is only responsible for the test data but not for the information provided by the customer or manufacture.

2.

Operation Frequency of channel			
802.11b/g/n(20MHz)		Channel List for 802.11n(40MHz)	
Channel	Frequency	Channel	Frequency
01	2412	03	2422
02	2417	04	2427
03	2422	05	2432
04	2427	06	2437
05	2432	07	2442
06	2437	08	2447
07	2442	09	2452
08	2447		
09	2452		
10	2457		
11	2462		

Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

Carrier Frequency Channel

2.4GHz Test Frequency:

For 802.11b/g/n (HT20)	
Channel	Freq.(MHz)
01	2412
06	2437
11	2462

For 802.11n (HT40)	
Channel	Freq.(MHz)
03	2422
06	2437
09	2452

3.

Ant.	Model Name	Antenna Type	Connector	Gain (dBi)	Note
0	N/A	FPC Antenna	N/A	3.01dBi	WLAN ANT

2.2 DESCRIPTION OF THE TEST MODES

Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Worst Mode	Description	Data Rate
Mode 1	TX IEEE 802.11b CH1	1Mbps
Mode 2	TX IEEE 802.11b CH6	1Mbps
Mode 3	TX IEEE 802.11 b CH11	1Mbps
Mode 4	TX IEEE 802.11g CH1	6Mbps
Mode 5	TX IEEE 802.11g CH6	6Mbps
Mode 6	TX IEEE 802.11g CH11	6Mbps
Mode 7	TX IEEE 802.11n HT20 CH1	MCS0
Mode 8	TX IEEE 802.11n HT20 CH6	MCS0
Mode 9	TX IEEE 802.11n HT20 CH11	MCS0
Mode 10	TX IEEE 802.11n HT40 CH3	MCS0
Mode 11	TX IEEE 802.11n HT40 CH6	MCS0
Mode 12	TX IEEE 802.11n HT40 CH9	MCS0

Note:

- (1) The measurements are performed at all Bit Rate of Transmitter, the worst data was reported.
- (2) We have be tested for all available U.S. voltage and frequencies(For 120V,50/60Hz and 240V, 50/60Hz) for which the device is capable of operation, and the worst case of 120V /60Hz is shown in the report.

Conducted Emission

Test Case	
Conducted Emission	Model3 Keeping WIFI TX

2.3 TEST SOFTWARE AND POWER LEVEL

During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level.

RF Function	Type	Mode Or Modulation type	Ant Gain(dBi)	Power Class	Software For Testing
WIFI(2.4G)	2.4G WIFI	802.11b	3.01	23	Provided by the customer
		802.11g		23	
		802.11n(HT20)		23	
		802.11n(HT40)		23	

2.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Radiation Test Set



Conduction Test Set



2.5 DESCRIPTION OF NECESSARY ACCESSORIES AND SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Necessary accessories

Item	Equipment	Mfr/Brand	Model/Type No.	Length	Note
E-2	Adapter	Moveforest	MF-05001000SA1	N/A	N/A
C-1	USB	N/A	20cm	N/A	N/A

Support units

Item	Equipment	Mfr/Brand	Model/Type No.	Type No.	Note
E-3	Notebook	Lenovo	DESKTOP-USDEO09	00326-10000-00000-AA636	N/A
C-2	USB	N/A	100cm	N/A	N/A

Note:

(1) For detachable type I/O cable should be specified the length in cm in 『Length』 column.

2.6 LABORATORY INFORMATION

Company Name:	Shanghai ATBL Technology Co., Ltd.
Address:	Building 8, No. 160, Basheng Road, Waigaoqiao Free Trade Zone, Pudong New Area, Shanghai
Telephone:	+86(0)21-51298625

2.7 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95 %.

No.	Item	Uncertainty
1	RF output power, conducted	$\pm 0.958\text{dB}$
2	Conducted spurious emissions	$\pm 2.988\text{dB}$
3	All emissions, radiated 30MHz-1GHz	$\pm 2.50\text{dB}$
4	All emissions, radiated 1GHz-18GHz	$\pm 3.51\text{dB}$
5	Occupied bandwidth	$\pm 23.20\text{Hz}$
6	Power spectral density	$\pm 0.886\text{dB}$

2.8 EQUIPMENTS LIST

2.8.1 Radiation Test equipment

Kind of Equipment	Manufacturer	Type No.	Serial No.	Management number	Calibrated until
Test Receiver	R&S	ESCI	100469	SHATBL-E003	2024.05.09
Spectrum Analyzer	Agilent	N9020A	MY50200811	SHATBL-E017	2024.05.09
Bilog Antenna	SCHWARZBECK	VLUB 9168	01174	SHATBL-E008	2024.05.12
Horn Antenna	SCHWARZBECK	BBHA 9120D	02014	SHATBL-E009	2024.05.12
Active circular antenna(9kHz-30MHz)	R&S	ZN30900C	20077	SHATBL-E042	2024.05.09
Pre-Amplifier (0.1M-3GHz)	JPT	JPA-10M1G35	21010100035001	SHATBL-E005	2024.05.09
Pre-Amplifier (1G-18GHz)	JPT	JPA0118-55-303A	1910001800055000	SHATBL-E006	2024.05.09
Horn Antenna With Amplifier(18-40G)	Daze	ZN30900C	10100008	SHATBL-E043	2024.05.09
Temperature & Humidity	DeLi	DeLi	N/A	SHATBL-E016	2023.09.20
Antenna/Turntable Controller	Brilliant	N/A	N/A	SHATBL-E007	N/A
Test SW	FALA	EMC-RI(Ver.4A2)		SHATBL-E046	N/A

2.8.2 Conduction Test equipmentt

Kind of Equipment	Manufacturer	Type No.	Serial No.	Management number	Calibration date
Test Receiver	R&S	ESPI	101679	SHATBL-E012	2024.05.09
LISN	R&S	ENV216	101300	SHATBL-E013	2024.05.30
LISN	R&S	ENV216	100333	SHATBL-E041	2024.05.09
Temperature & Humidity	DeLi	DeLi	N/A	SHATBL-E015	2023.09.20
Test SW	FALA	EZ-EMC(Ver.EMC-CON3A1.1)		SHATBL-E044	N/A

2.8.3 RF Connected Test

Kind of Equipment	Manufacturer	Type No.	Serial No.	equipment number	Calibrated until
Power meter (with pulse power sensor)	Anritsu	ML2496A	1935001	SHATBL-W030	2023.09.27
Pulse power sensor (with power meter)	Anritsu	MA2411B	1911006	SHATBL-W031	2023.09.27
Signal Analyzer	Agilent	N9020A	MY57300196	SHATBL-W004	2023.09.27
Signal Generator	Agilent	N5182B	MY46240556	SHATBL-W005	2023.09.27
Wireless Communications Test Set	R&S	CMW500	101331	SHATBL-W007	2023.09.27
Temperature & Humidity	Deli	deli	N/A	SHATBL-W011	2023.09.27
Attenuator	Agilent	8494B	DC-18G	SHATBL-W009	2023.09.27
Attenuator	Agilent	8496B	DC-18G	SHATBL-W010	2023.09.27
power splitter	MNK	MPD-DC/6-2 S	62315 G51	SHATBL-W015	2023.09.27
			62315 G52	SHATBL-W016	2023.09.27
Filter	Chengdu kangmaiwei	ZBSF-C2400-2483.5-T3	N/A	SHATBL-W021	N/A
Constant temperature and humidity box	KSON	THS-B6C-150	6159K	SHATBL-W019	2024.01.16
Test SW	FALA	LZ-RF(Ver.LzRF-03A3.1)		SHATBL-W020	N/A

3. EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 POWER LINE CONDUCTED EMISSION LIMITS

The radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table.

FREQUENCY (MHz)	Conducted Emission limit (dBuV)	
	Quasi-peak	Average
0.15 -0.5	66 - 56 *	56 - 46 *
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00

Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of “ * ” marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

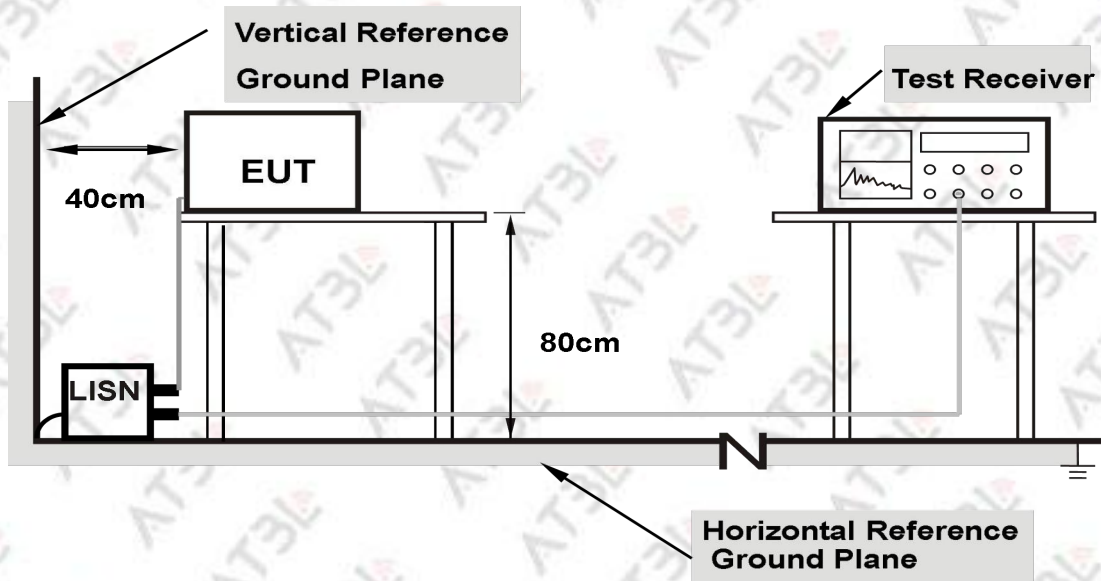
The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

3.1.2 TEST PROCEDURE

- The EUT is 0.8 m from the horizontal ground plane and 0.4 m from the vertical ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipment are powered from additional LISN(s). The LISN provides 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- LISN is at least 80 cm from the nearest part of EUT chassis.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

3.1.3 TEST SETUP



Note: 1. Support units were connected to second LISN.

2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes support units.

3.1.4 EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

3.1.5 TEST RESULT

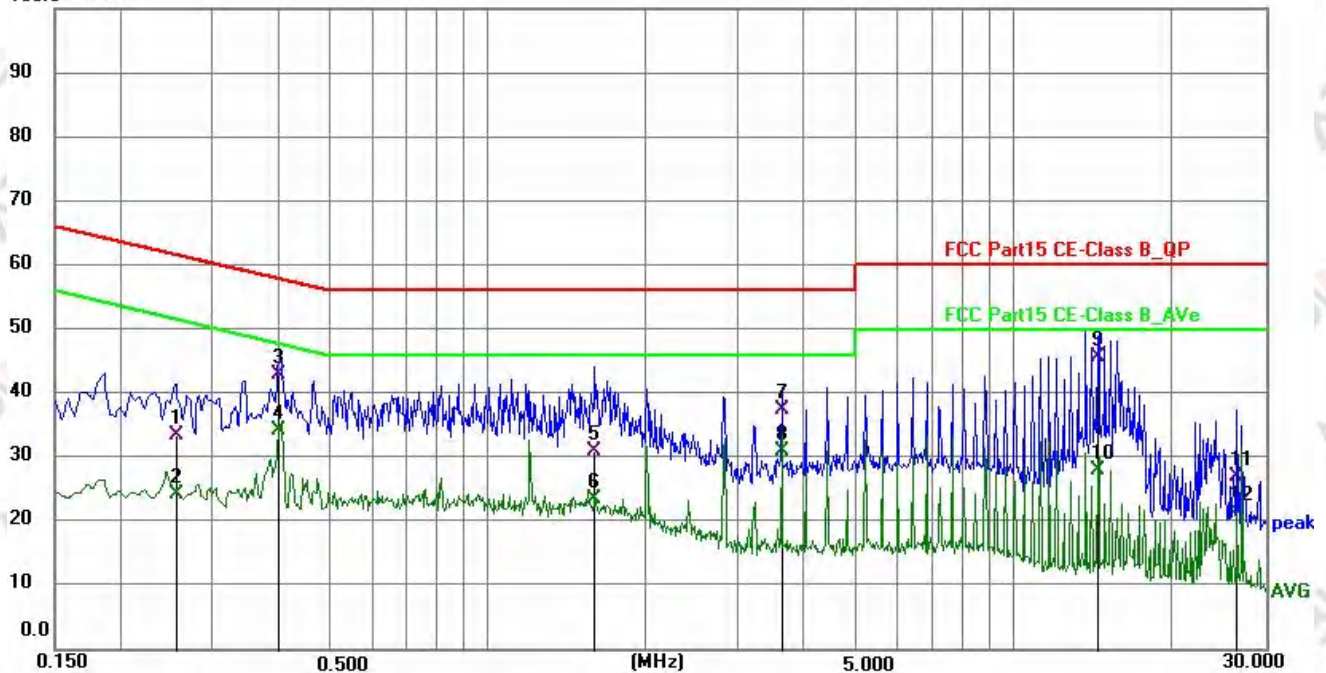
Temperature:	22.8°C	Relative Humidity:	51%RH
Test Voltage:	AC 120V/60Hz	Phase:	L
Test Mode:	Mode 13 Keeping WIFI TX		

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.2552	22.66	10.90	33.56	61.59	-28.03	QP
2	0.2552	13.45	10.90	24.35	51.59	-27.24	AVG
3	0.4009	31.92	10.94	42.86	57.83	-14.97	QP
4	0.4009	23.32	10.94	34.26	47.83	-13.57	AVG
5	1.6044	19.99	11.08	31.07	56.00	-24.93	QP
6	1.6044	12.41	11.08	23.49	46.00	-22.51	AVG
7	3.6143	26.37	11.09	37.46	56.00	-18.54	QP
8	3.6143	19.80	11.09	30.89	46.00	-15.11	AVG
9	14.4408	34.67	11.03	45.70	60.00	-14.30	QP
10	14.4408	17.07	11.03	28.10	50.00	-21.90	AVG
11	26.4651	15.25	11.84	27.09	60.00	-32.91	QP
12	26.4651	9.66	11.84	21.50	50.00	-28.50	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Margin = Result (Result = Reading + Factor) – Limit.
3. Factor = LISN factor + Cable loss + Limiter (10dB)

100.0 dBuV



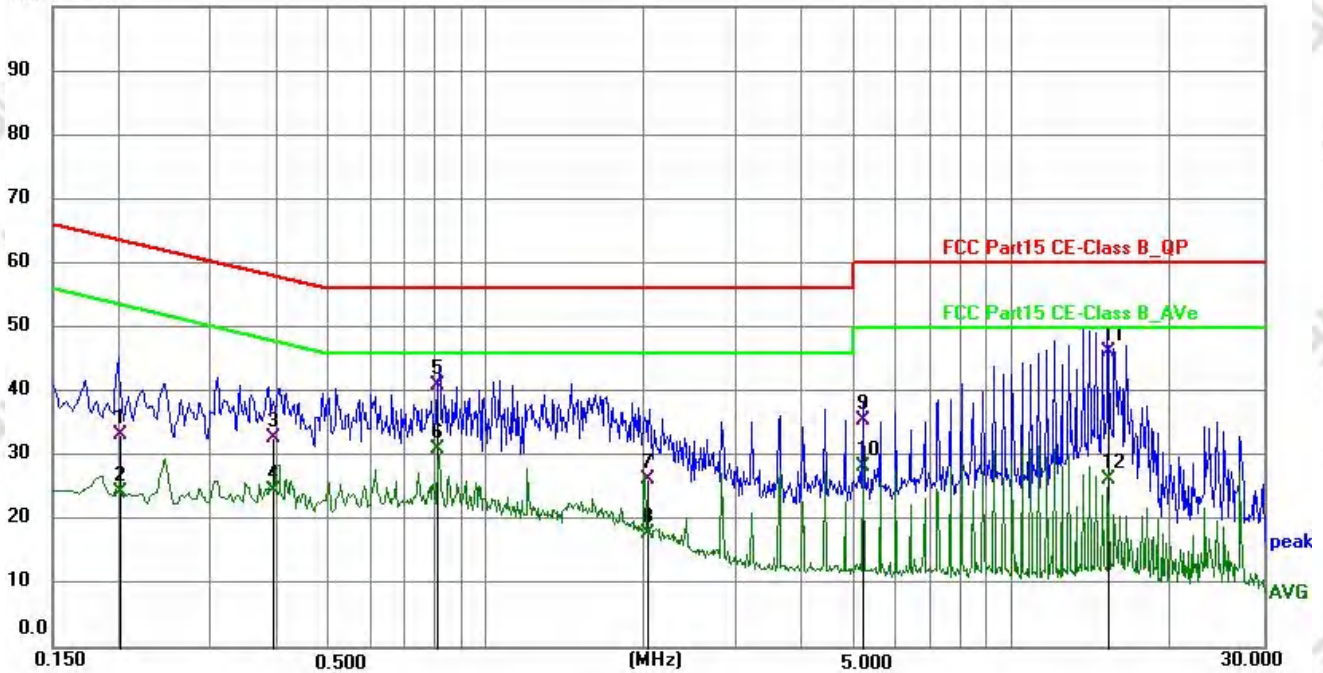
Temperature:	22.8°C	Relative Humidity:	51%RH
Test Voltage:	AC 120V/60Hz	Phase:	N
Test Mode:	Mode 13 Keeping WIFI TX		

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.2027	22.34	10.80	33.14	63.50	-30.36	QP
2	0.2027	13.41	10.80	24.21	53.50	-29.29	AVG
3	0.3946	21.88	10.87	32.75	57.97	-25.22	QP
4	0.3946	13.64	10.87	24.51	47.97	-23.46	AVG
5	0.8155	29.85	11.13	40.98	56.00	-15.02	QP
6	0.8155	19.88	11.13	31.01	46.00	-14.99	AVG
7	2.0481	15.42	10.81	26.23	56.00	-29.77	QP
8	2.0481	7.08	10.81	17.89	46.00	-28.11	AVG
9	5.2141	24.34	11.17	35.51	60.00	-24.49	QP
10	5.2141	17.14	11.17	28.31	50.00	-21.69	AVG
11	15.2358	34.42	11.65	46.07	60.00	-13.93	QP
12	15.2358	14.63	11.65	26.28	50.00	-23.72	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Margin = Result (Result = Reading + Factor) - Limit.
3. Factor = LISN factor + Cable loss + Limiter (10dB)

100.0 dBuV



3.2 RADIATED EMISSION MEASUREMENT

3.2.1 RADIATED EMISSION LIMITS

In any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the Restricted band specified on Part15.205(a)&209(a) limit in the table and according to ANSI C63.10-2013 below has to be followed.

LIMITS OF RADIATED EMISSION MEASUREMENT (Frequency Range 9kHz-1000MHz)

Frequencies (MHz)	Field Strength (micorvolts/meter)	Measurement Distance (meters)
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

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

FREQUENCY (MHz)	(dBuV/m) (at 3M)	
	PEAK	AVERAGE
Above 1000	74	54

Notes:

- (1) The limit for radiated test was performed according to FCC PART 15C.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).

LIMITS OF RESTRICTED FREQUENCY BANDS

IC:

FREQUENCY (MHz)	FREQUENCY (MHz)	FREQUENCY (MHz)	FREQUENCY (GHz)
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	Above 38.6
13.36-13.41			

For Radiated Emission

Spectrum Parameter	Setting
Attenuation	Auto
Detector	Peak/QP/AV
Start Frequency	9 kHz/150kHz(Peak/QP/AV)
Stop Frequency	150kHz/30MHz(Peak/QP/AV)
RB / VB (emission in restricted band)	200Hz (From 9kHz to 0.15MHz)/ 9kHz (From 0.15MHz to 30MHz); 200Hz (From 9kHz to 0.15MHz)/ 9kHz (From 0.15MHz to 30MHz)

Spectrum Parameter	Setting
Attenuation	Auto
Detector	Peak/QP
Start Frequency	30 MHz(Peak/QP)
Stop Frequency	1000 MHz (Peak/QP)
RB / VB (emission in restricted band)	120 kHz / 300 kHz

Spectrum Parameter	Setting
Attenuation	Auto
Detector	Peak/AV
Start Frequency	1000 MHz(Peak/AV)
Stop Frequency	10th carrier hamonic(Peak/AV)
RB / VB (emission in restricted band)	1MHz / 3MHz(Peak) 1 MHz/1/T MHz(AVG)

For Restricted band

Spectrum Parameter	Setting
Detector	Peak/AV
Start/Stop Frequency	2310MHz to 2500MHz
RB / VB	1 MHz / 3 MHz(Peak) 1 MHz/1/T MHz(AVG)

Receiver Parameter	Setting
Start ~ Stop Frequency	9kHz~90kHz / RB 200Hz for PK & AV
Start ~ Stop Frequency	90kHz~110kHz / RB 200Hz for QP
Start ~ Stop Frequency	110kHz~490kHz / RB 200Hz for PK & AV
Start ~ Stop Frequency	490kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

3.2.2 TEST PROCEDURE

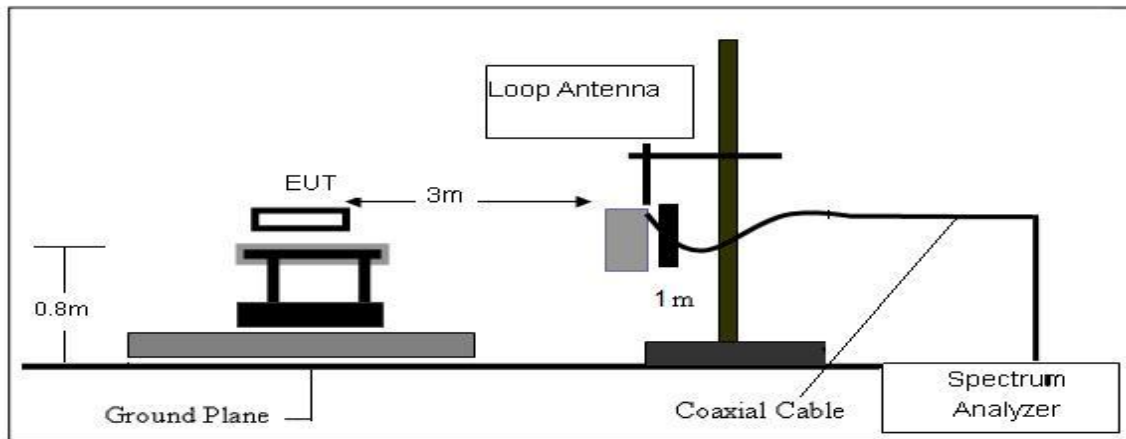
- The measuring distance at 3 m shall be used for measurements at frequency 0.009MHz up to 1GHz, and above 1GHz.
- The EUT was placed on the top of a rotating table 0.8 m (above 1GHz is 1.5 m) above the ground at a 3 m an echoic chamber test site. The table was rotated 360 degree to determine the position of the highest radiation.
- The height of the equipment shall be 0.8 m (above 1GHz is 1.5 m); the height of the test antenna shall vary between 1 m to 4 m. Horizontal and vertical polarization of the antenna are set to make the measurement.
- The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and Quasi Peak detector mode will be re-measured.
- If the Peak Mode measured value is compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and no additional QP Mode measurement was performed.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

Note:

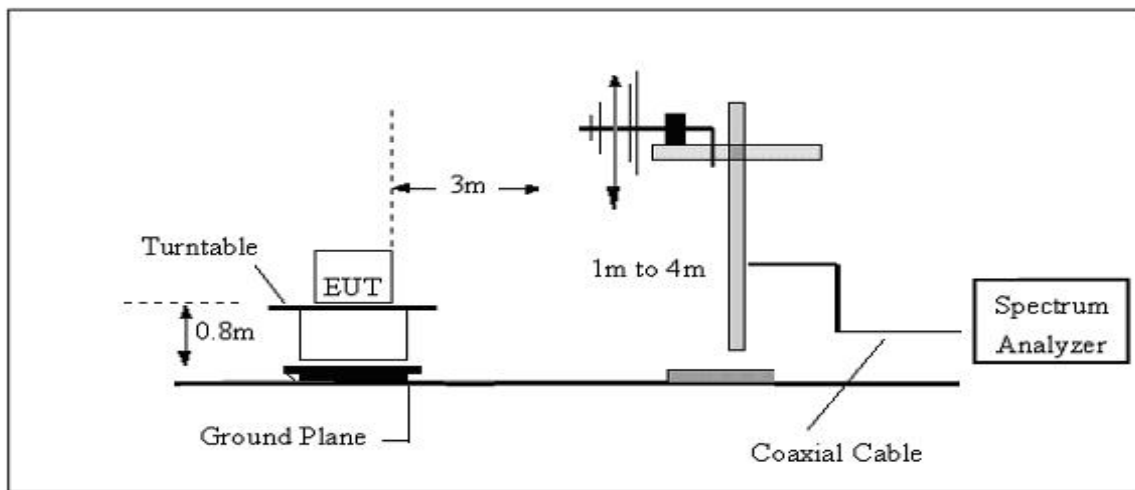
Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported.

3.2.3 TEST SETUP

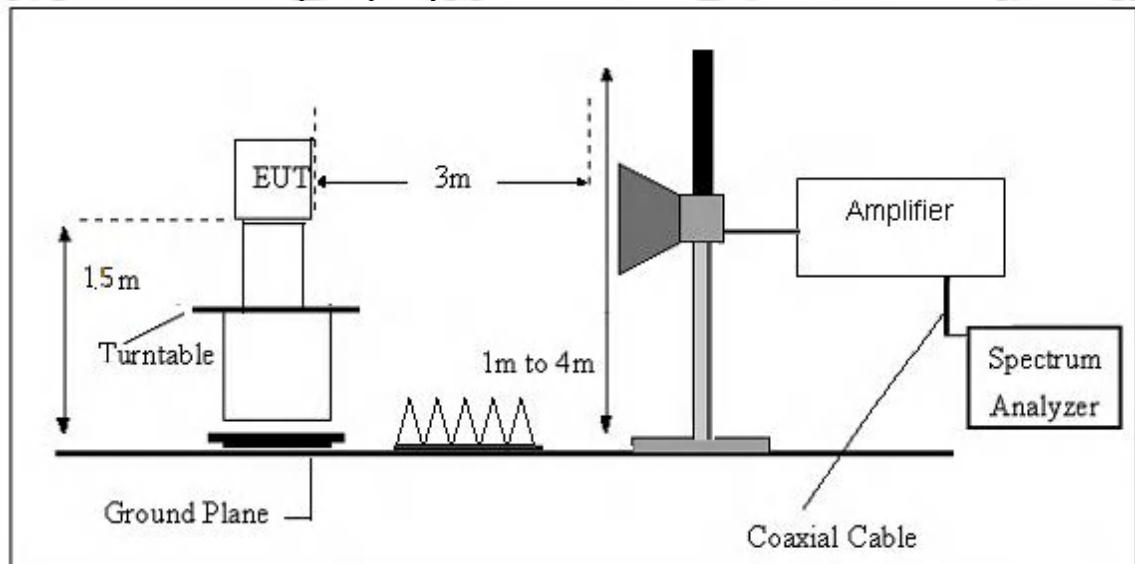
(A) Radiated Emission Test-Up Frequency Below 30MHz



(B) Radiated Emission Test-Up Frequency 30MHz~1GHz



(C) Radiated Emission Test-Up Frequency Above 1GHz



3.2.4 EUT OPERATING CONDITIONS

Please refer to section 3.1.4 of this report.

3.2.5 FIELD STRENGTH CALCULATION

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:

$$FS = RA + AF + CL - AG$$

Where

FS = Field Strength

CL = Cable Attenuation Factor (Cable Loss)

RA = Reading Amplitude

AG = Amplifier Gain

AF = Antenna Factor

For example

Frequency	FS	RA	AF	CL	AG	Factor
(MHz)	(dBμV/m)	(dBμV/m)	(dB)	(dB)	(dB)	(dB)
300	40	58.1	12.2	1.6	31.9	-18.1

$$\text{Factor} = \text{AF} + \text{CL} - \text{AG}$$

3.2.6 TEST RESULTS(RADIATEDSPURIOUS EMISSIONS)

9kHz - 30MHz

Temperature:	22.8°C	Relative Humidity:	51%RH
Test Voltage:	DC5V	Polarization:	--
Test Mode:	TX Mode		

Note:

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Distance extrapolation factor = $40 \log (\text{specific distance/test distance})(\text{dB})$;

Limit line = specific limits(dBμV) + distance extrapolation factor.

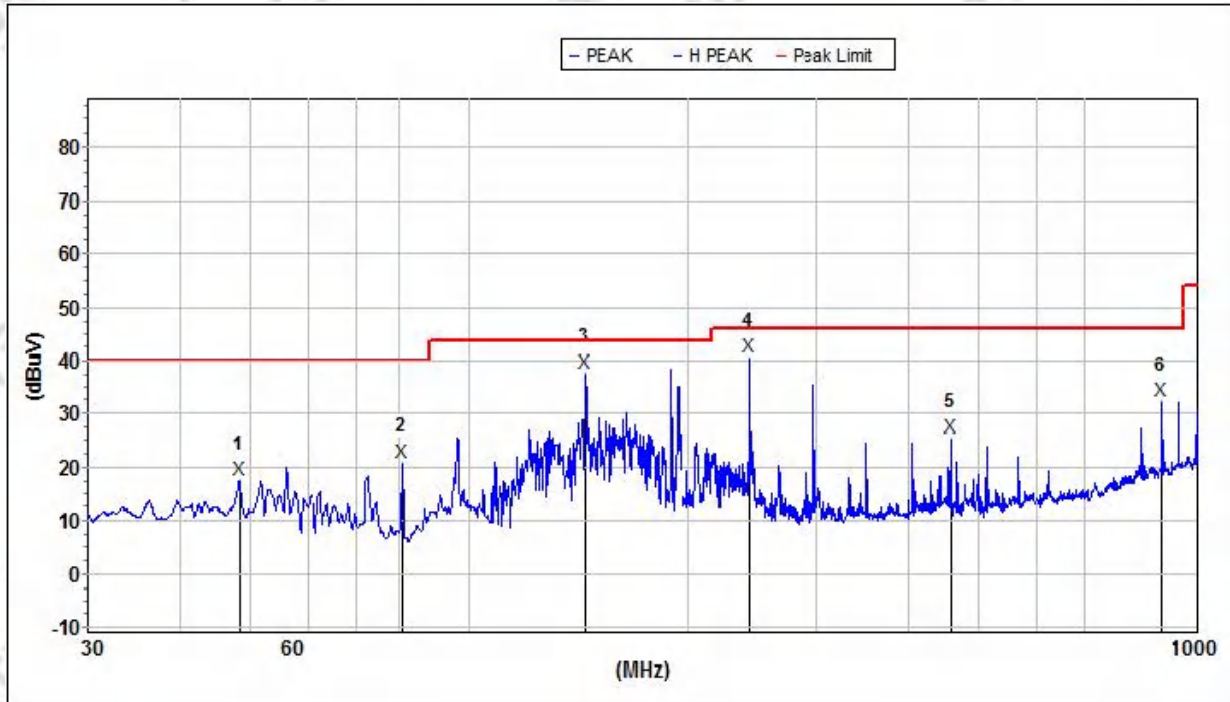
(30MHz -1000MHz)

Temperature:	23.2°C	Relative Humidity:	52%RH
Test Voltage:	DC 5V	Phase:	Horizontal
Test Mode:	TX Mode 1		

Remark:

1. Margin = Result (Result =Reading + Factor)-Limit
2. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain

Mode 1 Horizontal



Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:								
1	48.416591	17.6	40.0	22.4	13.6	32.6	0.8	H
2	80.785701	21.0	40.0	19.0	9.3	32.9	0.9	H
3	144.841766	37.6	43.5	5.9	13.8	32.9	1.3	H
4	242.525265	40.8	46.0	5.2	11.5	32.8	2.6	H
5	459.114404	25.4	46.0	20.6	14.4	32.4	2.8	H
6	890.727788	32.3	46.0	13.7	19.6	31.6	3.6	H

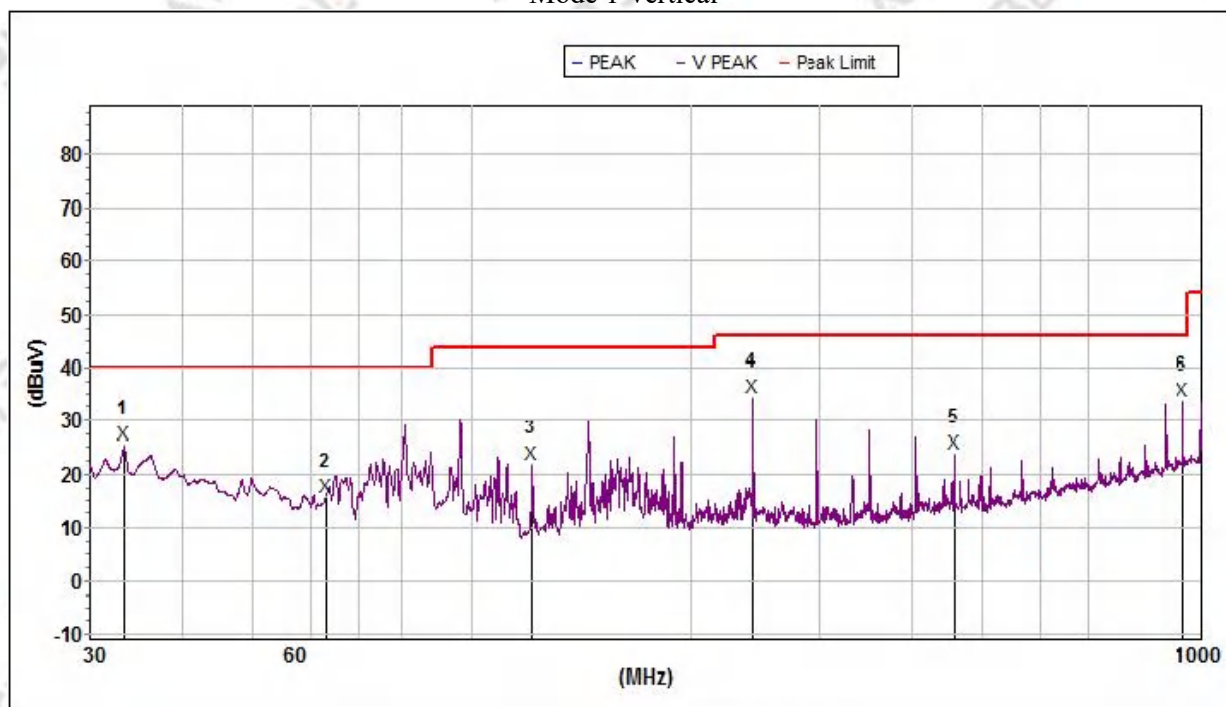
Temperature:	23.2°C	Relative Humidity:	52%RH
Test Voltage:	DC 5V	Phase:	Vertical
Test Mode:	TX Mode 1		

Remark:

1. Margin = Result (Result = Reading + Factor) – Limit

2. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain

Mode 1 Vertical



Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak								
1	33.386359	25.4	40.0	14.6	13.3	32.2	0.8	V
2	63.202315	15.7	40.0	24.3	12.1	32.8	0.8	V
3	120.487690	21.8	43.5	21.7	12.3	32.9	1.4	V
4	242.525265	34.4	46.0	11.6	11.5	32.8	2.5	V
5	459.114404	24.0	46.0	22.0	16.1	32.4	2.8	V
6	943.783761	33.7	46.0	12.3	22.1	31.3	3.7	V

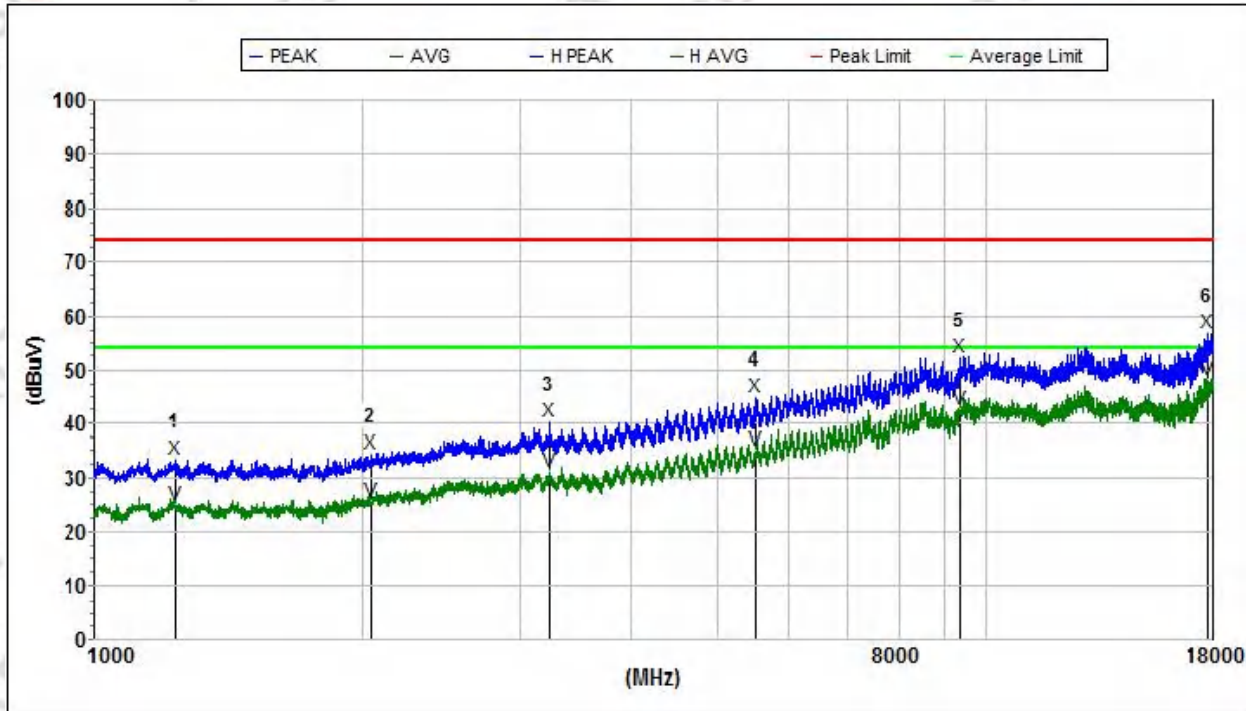
(1000MHz -18000MHz)

Temperature:	23.2°C	Relative Humidity:	52%RH
Test Voltage:	DC 5V	Phase:	Horizontal
Test Mode:	TX Mode 1		

Remark:

- Margin = Result (Result =Reading + Factor)-Limit
- Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain

Mode 1 Horizontal



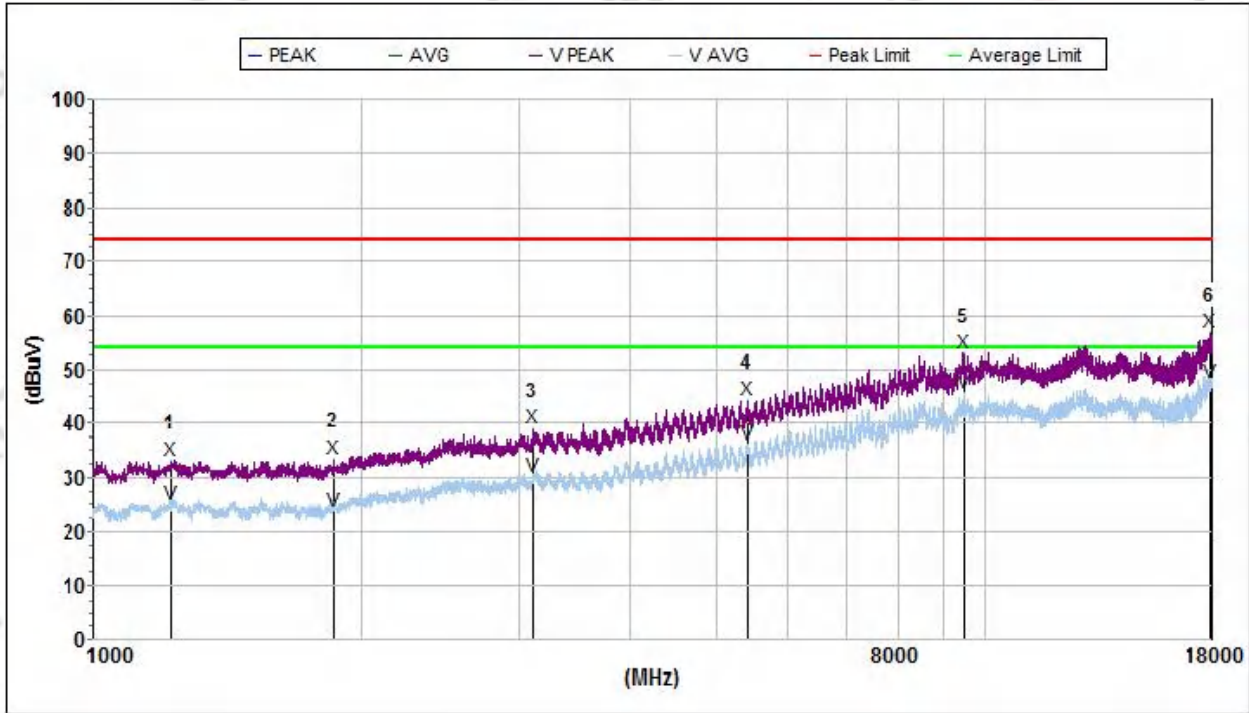
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L (dB)	Pol.
Peak								
1	1228.650000	33.6	74.0	40.4	25.8	60.9	2.3	H
2	2041.250000	34.6	74.0	39.4	26.8	60.9	2.7	H
3	3232.100000	40.3	74.0	33.7	29.7	58.4	3.0	H
4	5523.700000	45.1	74.0	28.9	32.8	58.1	4.0	H
5	9386.100000	52.4	74.0	21.6	38.6	59.2	5.4	H
6	17800.250000	56.8	74.0	17.2	41.1	57.8	7.0	H
Avg								
1	1228.650000	25.1	54.0	28.9	25.8	60.9	2.3	H
2	2041.250000	25.7	54.0	28.3	26.8	60.9	2.7	H
3	3232.100000	31.3	54.0	22.7	29.7	58.4	3.0	H
4	5523.700000	35.2	54.0	18.8	32.8	58.1	4.0	H
5	9386.100000	42.7	54.0	11.3	38.6	59.2	5.4	H
6	17800.250000	48.3	54.0	5.7	41.1	57.8	7.0	H

Temperature:	23.2°C	Relative Humidity:	52%RH
Test Voltage:	DC 5V	Phase:	Vertical
Test Mode:	TX Mode 1		

Remark:

1. Margin = Result (Result = Reading + Factor) - Limit
2. Factor = Antenna factor + Cable attenuation factor (cable loss) - Amplifier gain

Mode 1 Vertical



Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak								
1	1219.300000	33.2	74.0	40.8	25.7	60.9	2.3	V
2	1863.600000	33.6	74.0	40.4	25.4	61.1	2.6	V
3	3113.950000	39.2	74.0	34.8	29.7	58.7	3.0	V
4	5414.050000	44.4	74.0	29.6	32.7	58.0	3.9	V
5	9473.650000	53.0	74.0	21.0	38.6	59.7	5.4	V
6	17894.600000	56.8	74.0	17.2	41.7	57.7	7.0	V
Avg								
1	1219.300000	25.0	54.0	29.0	25.7	60.9	2.3	V
2	1863.600000	23.7	54.0	30.3	25.4	61.1	2.6	V
3	3113.950000	30.4	54.0	23.6	29.7	58.7	3.0	V
4	5414.050000	36.1	54.0	17.9	32.7	58.0	3.9	V
5	9473.650000	45.7	54.0	8.3	38.6	59.7	5.4	V
6	17894.600000	47.8	54.0	6.2	41.7	57.7	7.0	V

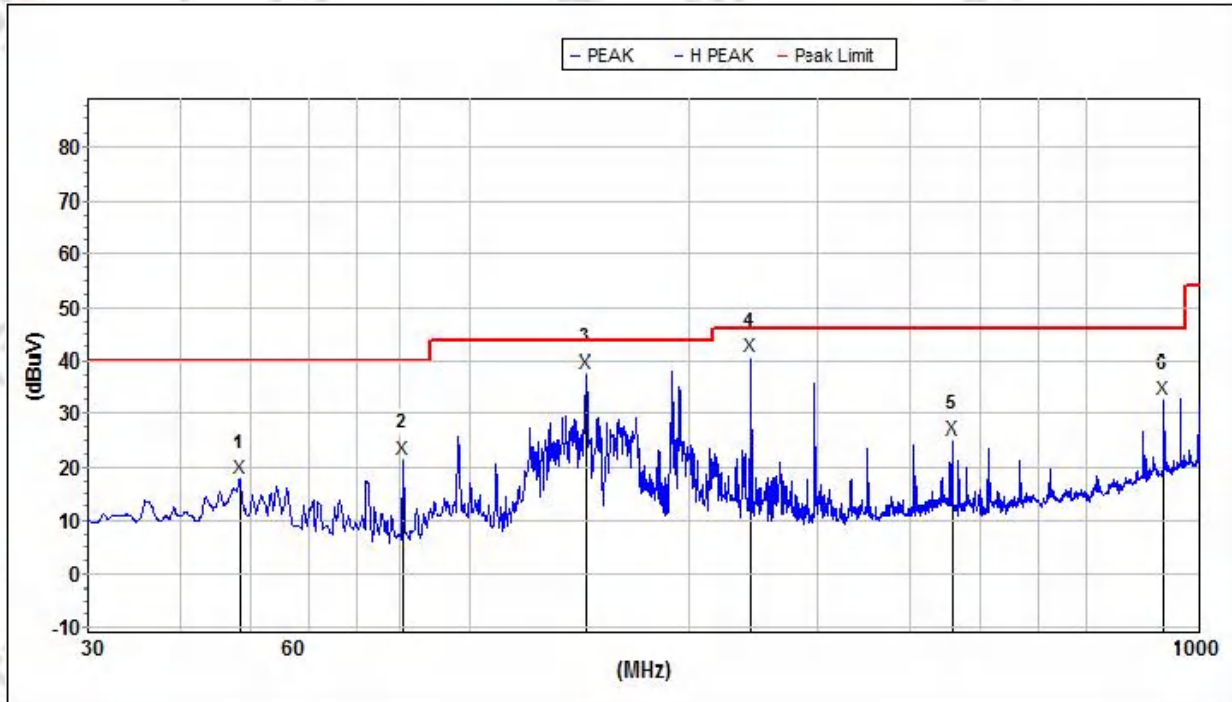
(30MHz -1000MHz)

Temperature:	23.2°C	Relative Humidity:	52%RH
Test Voltage:	DC 5V	Phase:	Horizontal
Test Mode:	TX Mode 3		

Remark:

1. Margin = Result (Result =Reading + Factor)-Limit
2. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain

Mode 3 Horizontal



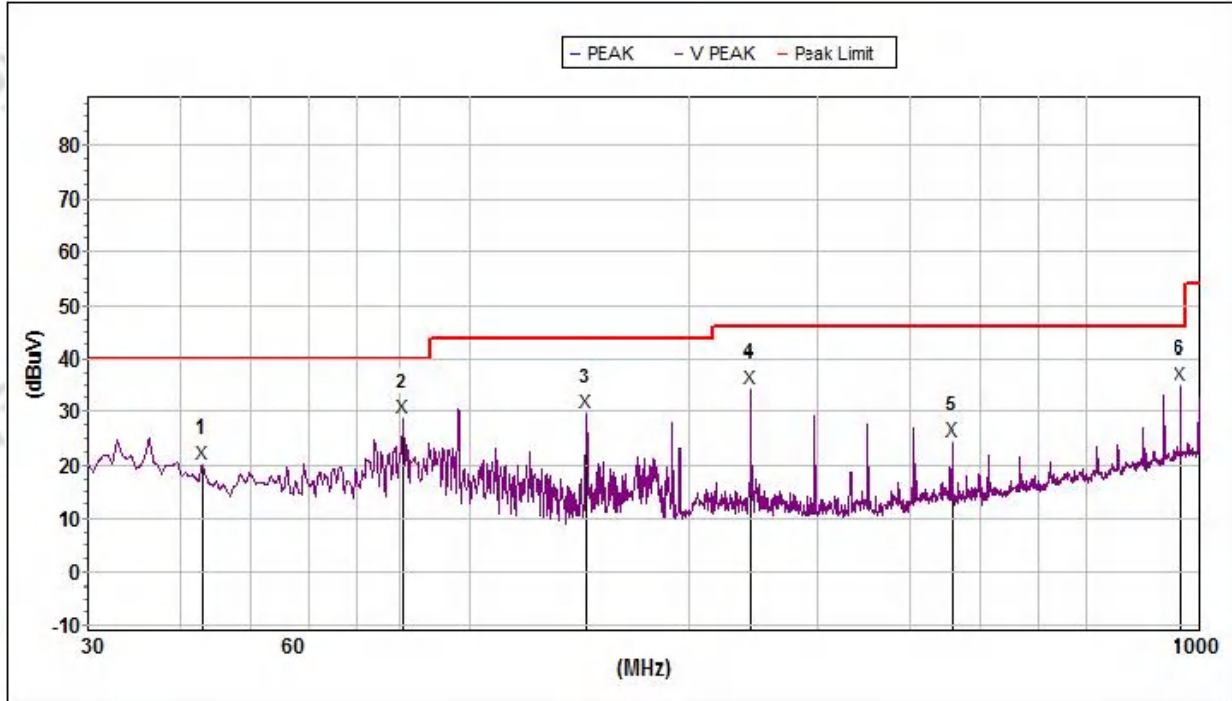
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak								
1	48.416591	18.1	40.0	21.9	13.6	32.6	0.8	H
2	80.785701	21.5	40.0	18.5	9.3	32.9	1.0	H
3	144.841766	37.7	43.5	5.8	13.8	32.9	1.3	H
4	242.525265	40.8	46.0	5.2	11.5	32.8	2.5	H
5	459.114404	25.2	46.0	20.8	14.4	32.4	2.8	H
6	890.727788	32.8	46.0	13.2	19.6	31.7	3.6	H

Temperature:	23.2°C	Relative Humidity:	52%RH
Test Voltage:	DC 5V	Phase:	Vertical
Test Mode:	TX Mode 3		

Remark:

1. Margin = Result (Result = Reading + Factor) - Limit
2. Factor = Antenna factor + Cable attenuation factor (cable loss) - Amplifier gain

Mode 3 Vertical



Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak								
1	43.050457	20.2	40.0	19.8	13.9	32.5	0.8	V
2	80.785701	28.7	40.0	11.3	9.3	32.9	1.0	V
3	144.841766	29.8	43.5	13.7	13.8	32.9	1.3	V
4	242.525265	34.3	46.0	11.7	11.5	32.8	2.5	V
5	459.114404	24.6	46.0	21.4	16.1	32.4	2.8	V
6	943.783761	35.2	46.0	10.8	22.1	31.3	3.7	V

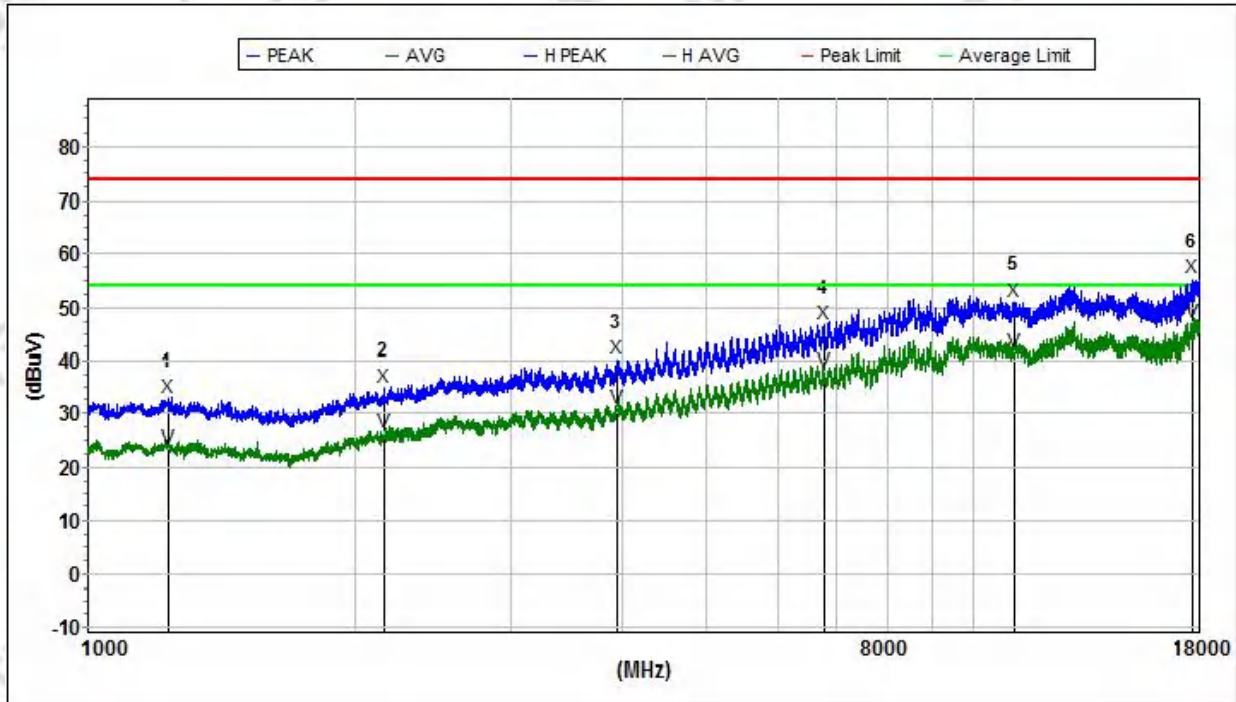
(1000MHz -18000MHz)

Temperature:	23.2°C	Relative Humidity:	52%RH
Test Voltage:	DC 5V	Phase:	Horizontal
Test Mode:	TX Mode 3		

Remark:

- Margin = Result (Result =Reading + Factor)-Limit
- Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain

Mode 3 Horizontal



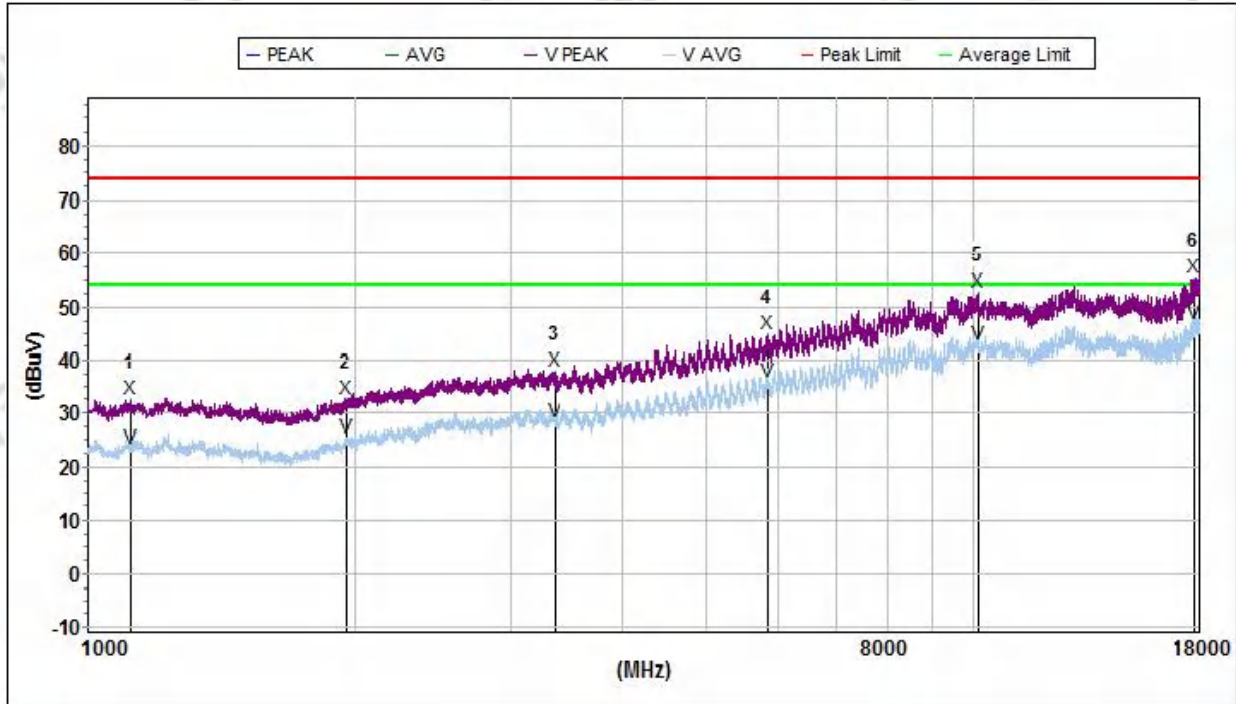
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak								
1	1228.650000	33.0	74.0	41.0	25.8	60.9	2.3	H
2	2154.300000	35.1	74.0	38.9	27.2	60.7	2.7	H
3	3948.650000	40.2	74.0	33.8	30.8	58.5	3.2	H
4	6784.250000	46.9	74.0	27.1	35.8	58.4	4.3	H
5	11119.250000	51.3	74.0	22.7	39.0	61.1	5.7	H
6	17681.250000	55.3	74.0	18.7	40.4	57.9	6.9	H
Avg								
1	1228.650000	23.5	54.0	30.5	25.8	60.9	2.3	H
2	2154.300000	26.6	54.0	27.4	27.2	60.7	2.7	H
3	3948.650000	31.0	54.0	23.0	30.8	58.5	3.2	H
4	6784.250000	38.1	54.0	15.9	35.8	58.4	4.3	H
5	11119.250000	41.5	54.0	12.5	39.0	61.1	5.7	H
6	17681.250000	47.1	54.0	6.9	40.4	57.9	6.9	H

Temperature:	23.2°C	Relative Humidity:	52%RH
Test Voltage:	DC 5V	Phase:	Vertical
Test Mode:	TX Mode 3		

Remark:

1. Margin = Result (Result = Reading + Factor) - Limit
2. Factor = Antenna factor + Cable attenuation factor (cable loss) - Amplifier gain

Mode 3 Vertical



Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak								
1	1113.900000	32.6	74.0	41.4	25.5	60.7	2.2	V
2	1959.650000	32.9	74.0	41.1	26.1	60.9	2.7	V
3	3361.300000	37.9	74.0	36.1	29.5	58.2	3.1	V
4	5833.950000	45.0	74.0	29.0	33.9	58.1	4.1	V
5	10103.500000	52.9	74.0	21.1	38.6	60.4	5.4	V
6	17797.700000	55.5	74.0	18.5	41.1	57.8	7.0	V
Avg								
1	1113.900000	23.7	54.0	30.3	25.5	60.7	2.2	V
2	1959.650000	25.5	54.0	28.5	26.1	60.9	2.7	V
3	3361.300000	28.5	54.0	25.5	29.5	58.2	3.1	V
4	5833.950000	36.2	54.0	17.8	33.9	58.1	4.1	V
5	10103.500000	43.1	54.0	10.9	38.6	60.4	5.4	V
6	17797.700000	46.8	54.0	7.2	41.1	57.8	7.0	V

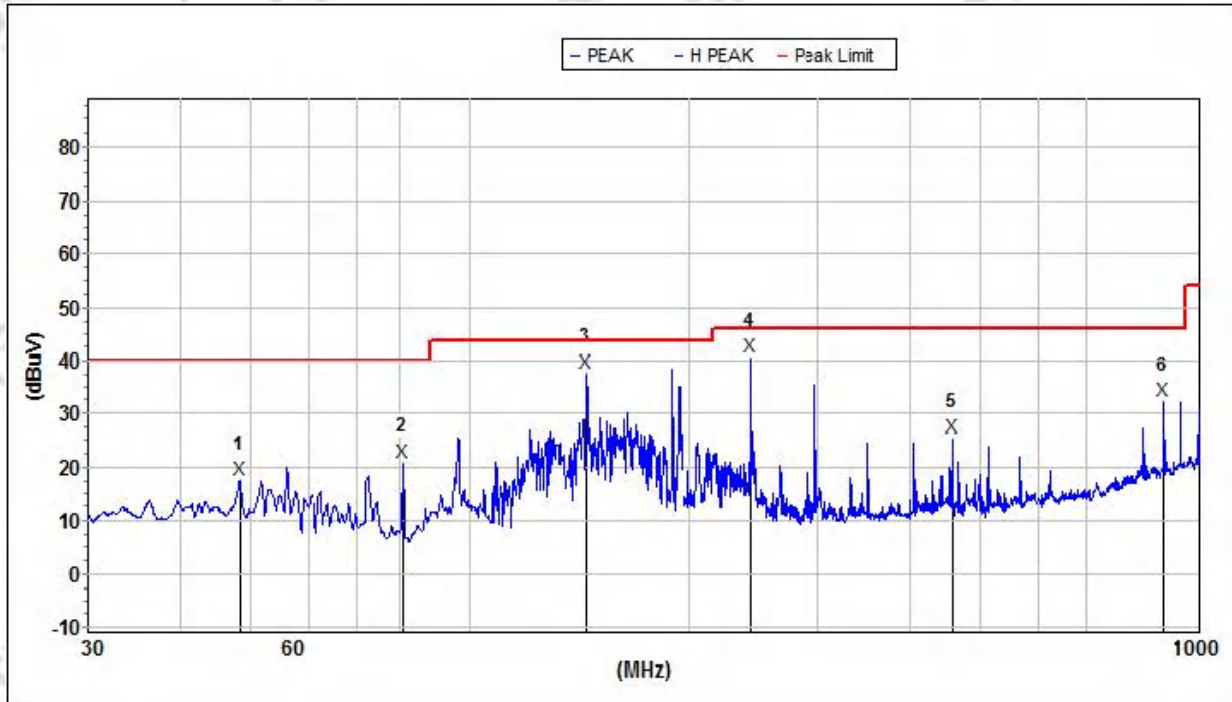
(30MHz -1000MHz)

Temperature:	23.2°C	Relative Humidity:	52%RH
Test Voltage:	DC 5V	Phase:	Horizontal
Test Mode:	TX Mode 4		

Remark:

1. Margin = Result (Result =Reading + Factor)-Limit
2. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain

Mode 4 Horizontal



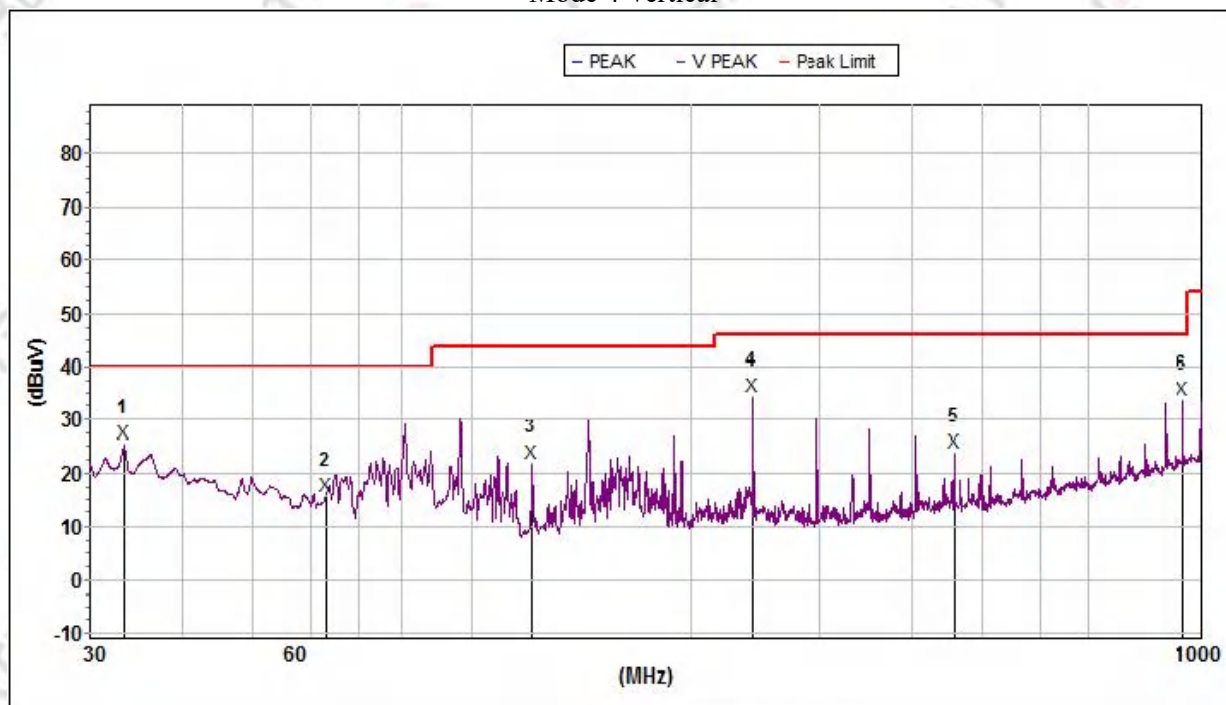
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:								
1	48.416591	17.6	40.0	22.4	13.6	32.6	0.8	H
2	80.785701	21.0	40.0	19.0	9.3	32.9	0.9	H
3	144.841766	37.6	43.5	5.9	13.8	32.9	1.3	H
4	242.525265	40.8	46.0	5.2	11.5	32.8	2.6	H
5	459.114404	25.4	46.0	20.6	14.4	32.4	2.8	H
6	890.727788	32.3	46.0	13.7	19.6	31.6	3.6	H

Temperature:	23.2°C	Relative Humidity:	52%RH
Test Voltage:	DC 5V	Phase:	Vertical
Test Mode:	TX Mode 4		

Remark:

1. Margin = Result (Result = Reading + Factor) - Limit
2. Factor = Antenna factor + Cable attenuation factor (cable loss) - Amplifier gain

Mode 4 Vertical



Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak								
1	33.386359	25.4	40.0	14.6	13.3	32.2	0.8	V
2	63.202315	15.7	40.0	24.3	12.1	32.8	0.8	V
3	120.487690	21.8	43.5	21.7	12.3	32.9	1.4	V
4	242.525265	34.4	46.0	11.6	11.5	32.8	2.5	V
5	459.114404	24.0	46.0	22.0	16.1	32.4	2.8	V
6	943.783761	33.7	46.0	12.3	22.1	31.3	3.7	V

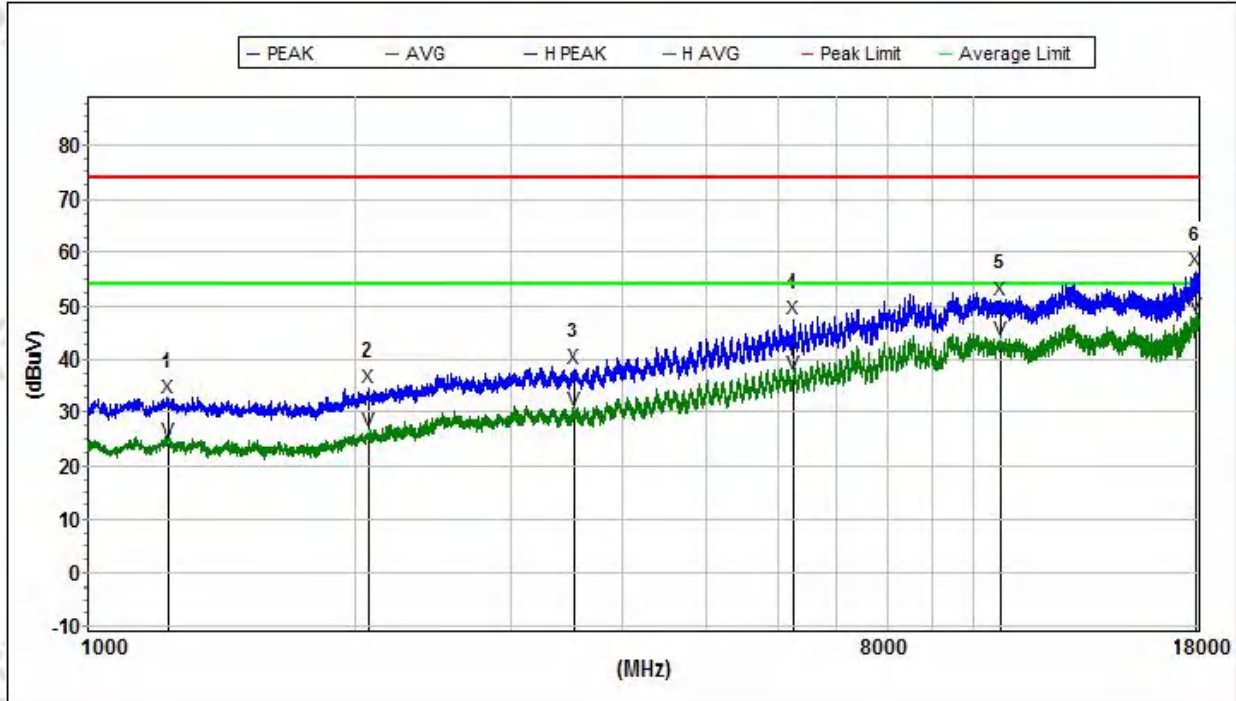
(1000MHz -18000MHz)

Temperature:	23.2°C	Relative Humidity:	52%RH
Test Voltage:	DC 5V	Phase:	Horizontal
Test Mode:	TX Mode 4		

Remark:

1. Margin = Result (Result =Reading + Factor)-Limit
2. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain

Mode 4 Horizontal



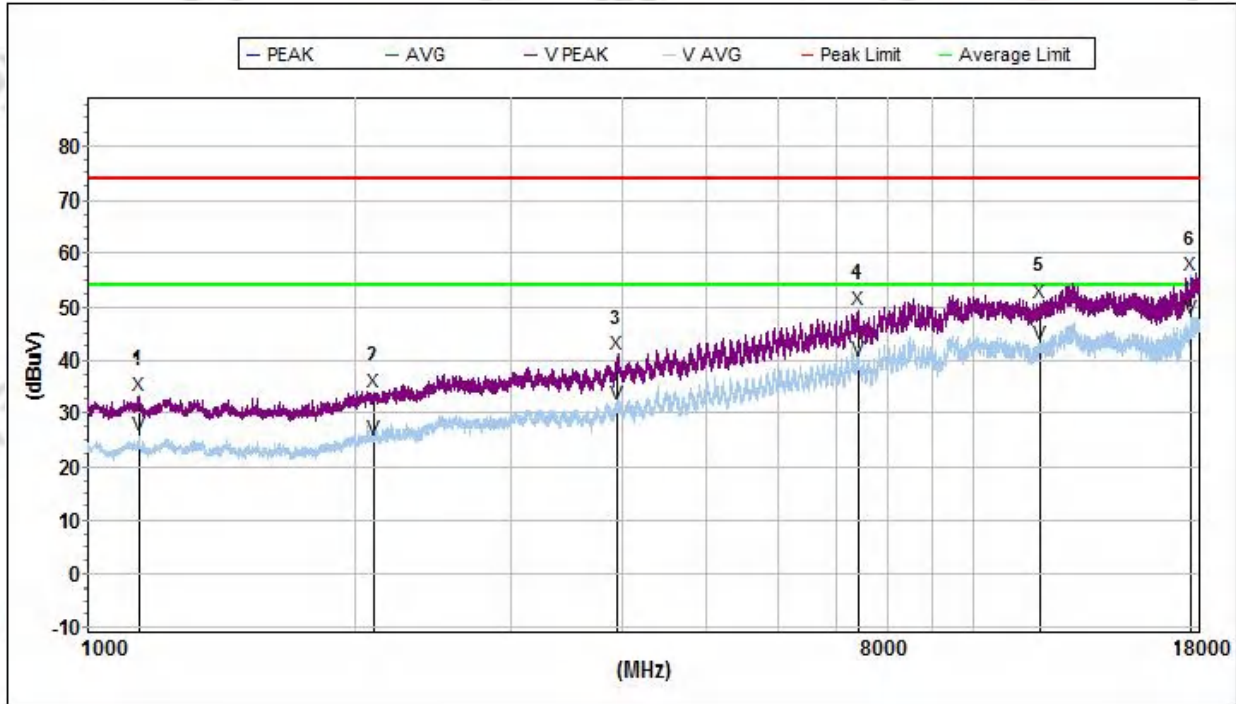
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L (dB)	Pol.
Peak								
1	1229.500000	32.9	74.0	41.1	25.8	60.9	2.3	H
2	2076.100000	34.6	74.0	39.4	27.0	60.9	2.7	H
3	3541.500000	38.3	74.0	35.7	29.5	59.0	3.1	H
4	6248.750000	47.5	74.0	26.5	34.2	58.0	4.2	H
5	10724.850000	51.3	74.0	22.7	38.9	61.1	5.6	H
6	17819.800000	56.4	74.0	17.6	41.2	57.8	7.0	H
Avg								
1	1229.500000	24.6	54.0	29.4	25.8	60.9	2.3	H
2	2076.100000	26.5	54.0	27.5	27.0	60.9	2.7	H
3	3541.500000	30.3	54.0	23.7	29.5	59.0	3.1	H
4	6248.750000	37.5	54.0	16.5	34.2	58.0	4.2	H
5	10724.850000	43.5	54.0	10.5	38.9	61.1	5.6	H
6	17819.800000	48.1	54.0	5.9	41.2	57.8	7.0	H

Temperature:	23.2°C	Relative Humidity:	52%RH
Test Voltage:	DC 5V	Phase:	Vertical
Test Mode:	TX Mode 4		

Remark:

1. Margin = Result (Result = Reading + Factor) - Limit
2. Factor = Antenna factor + Cable attenuation factor (cable loss) - Amplifier gain

Mode 4 Vertical



Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak								
1	1142.800000	33.3	74.0	40.7	25.6	60.7	2.2	V
2	2105.000000	34.1	74.0	39.9	27.2	60.8	2.7	V
3	3957.150000	41.1	74.0	32.9	30.8	58.5	3.2	V
4	7397.950000	49.5	74.0	24.5	36.5	57.5	4.6	V
5	11882.550000	50.8	74.0	23.2	39.0	59.9	5.9	V
6	17596.250000	55.7	74.0	18.3	39.8	58.0	6.9	V
Avg								
1	1142.800000	25.9	54.0	28.1	25.6	60.7	2.2	V
2	2105.000000	25.3	54.0	28.7	27.2	60.8	2.7	V
3	3957.150000	31.8	54.0	22.2	30.8	58.5	3.2	V
4	7397.950000	40.1	54.0	13.9	36.5	57.5	4.6	V
5	11882.550000	42.9	54.0	11.1	39.0	59.9	5.9	V
6	17596.250000	48.0	54.0	6.0	39.8	58.0	6.9	V

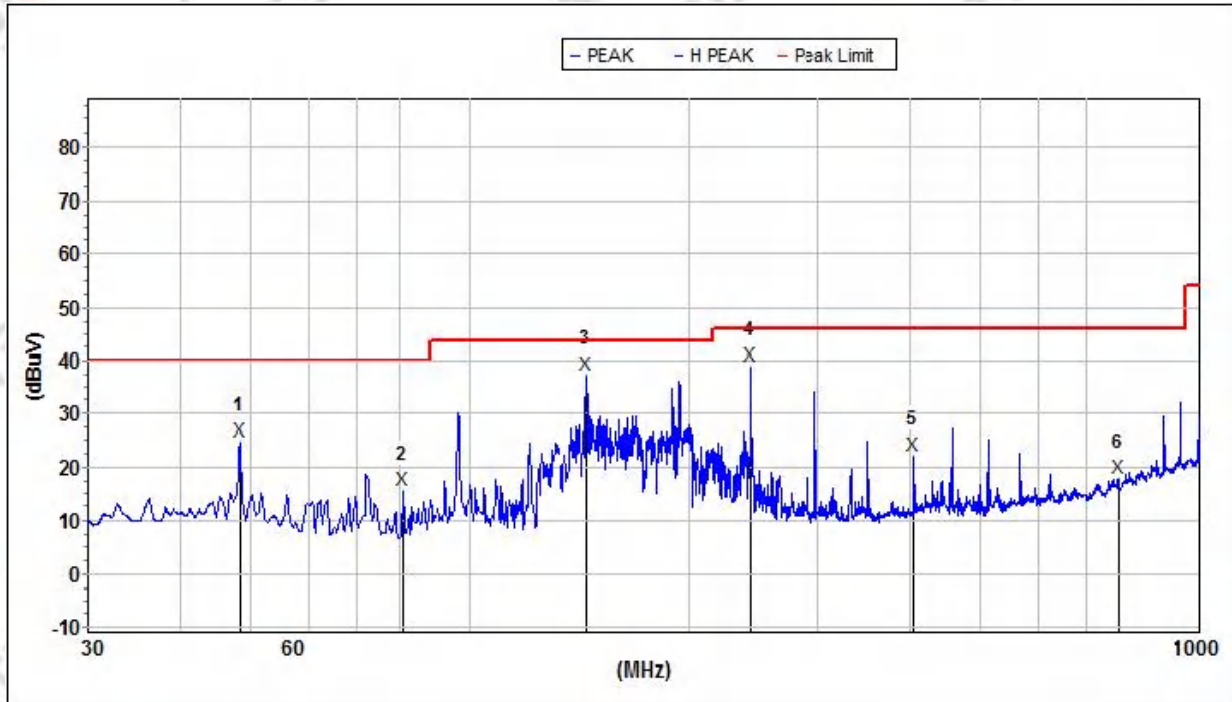
(30MHz -1000MHz)

Temperature:	23.2°C	Relative Humidity:	52%RH
Test Voltage:	DC 5V	Phase:	Horizontal
Test Mode:	TX Mode 6		

Remark:

1. Margin = Result (Result =Reading + Factor)-Limit
2. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain

Mode 6 Horizontal



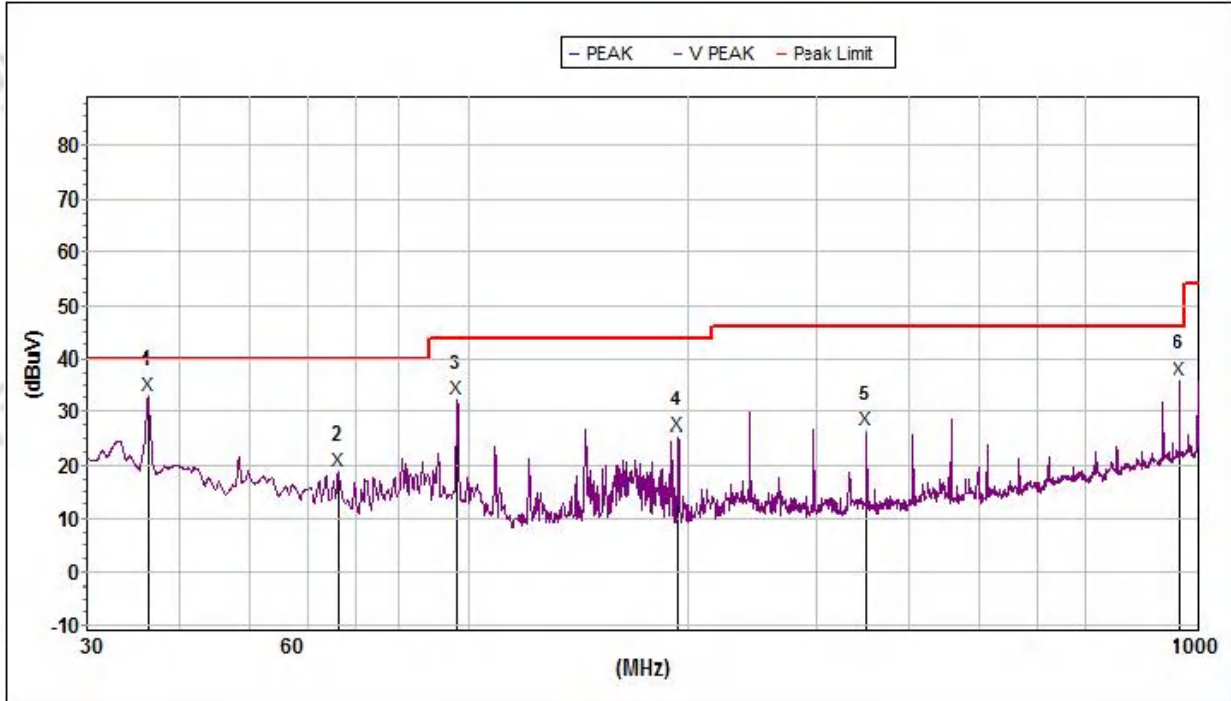
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak								
1	48.416591	24.7	40.0	15.3	13.6	32.6	0.8	H
2	80.785701	15.6	40.0	24.4	9.3	32.9	1.0	H
3	144.841766	37.2	43.5	6.3	13.8	32.9	1.3	H
4	242.525265	38.9	46.0	7.1	11.5	32.8	2.5	H
5	404.666528	22.2	46.0	23.8	13.9	32.3	2.7	H
6	772.802311	18.1	46.0	27.9	17.8	32.2	3.6	H

Temperature:	23.2°C	Relative Humidity:	52%RH
Test Voltage:	DC 5V	Phase:	Vertical
Test Mode:	TX Mode 6		

Remark:

1. Margin = Result (Result = Reading + Factor) - Limit
2. Factor = Antenna factor + Cable attenuation factor (cable loss) - Amplifier gain

Mode 6 Vertical



Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak								
1	36.254065	33.2	40.0	6.8	13.6	32.3	0.8	V
2	66.266167	19.0	40.0	21.0	11.5	32.8	0.8	V
3	96.436153	32.3	43.5	11.2	9.9	32.9	1.3	V
4	192.756232	25.5	43.5	18.0	10.3	32.8	2.2	V
5	350.476784	26.4	46.0	19.6	13.8	32.5	2.7	V
6	943.783761	35.9	46.0	10.1	22.1	31.3	3.7	V

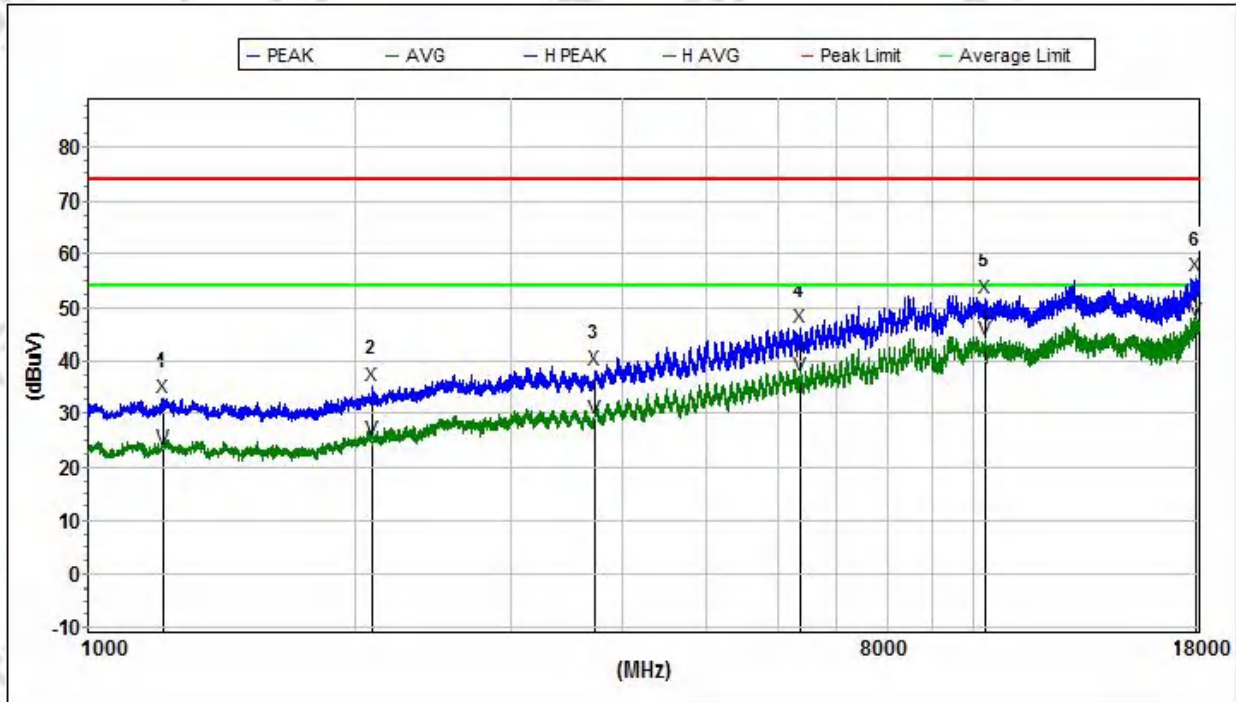
(1000MHz -18000MHz)

Temperature:	23.2°C	Relative Humidity:	52%RH
Test Voltage:	DC 5V	Phase:	Horizontal
Test Mode:	TX Mode 6		

Remark:

1. Margin = Result (Result =Reading + Factor)-Limit
2. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain

Mode 6 Horizontal



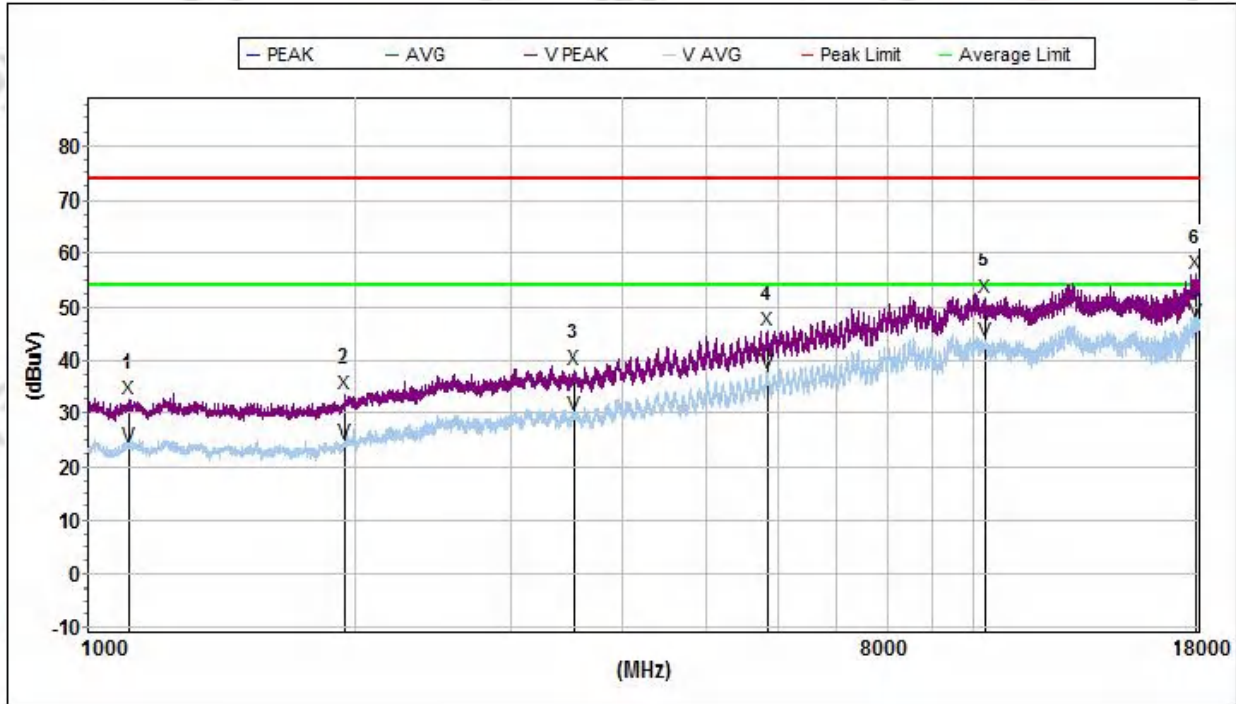
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak								
1	1210.800000	33.0	74.0	41.0	25.7	60.9	2.3	H
2	2088.000000	35.5	74.0	38.5	27.1	60.9	2.7	H
3	3742.950000	38.2	74.0	35.8	30.1	58.9	3.2	H
4	6360.100000	46.1	74.0	27.9	34.5	58.0	4.2	H
5	10294.750000	51.8	74.0	22.2	38.8	60.8	5.5	H
6	17807.050000	55.9	74.0	18.1	41.2	57.8	7.0	H
Avg								
1	1210.800000	23.5	54.0	30.5	25.7	60.9	2.3	H
2	2088.000000	25.3	54.0	28.7	27.1	60.9	2.7	H
3	3742.950000	29.2	54.0	24.8	30.1	58.9	3.2	H
4	6360.100000	37.4	54.0	16.6	34.5	58.0	4.2	H
5	10294.750000	43.8	54.0	10.2	38.8	60.8	5.5	H
6	17807.050000	47.7	54.0	6.3	41.2	57.8	7.0	H

Temperature:	23.2°C	Relative Humidity:	52%RH
Test Voltage:	DC 5V	Phase:	Vertical
Test Mode:	TX Mode 6		

Remark:

1. Margin = Result (Result = Reading + Factor) - Limit
2. Factor = Antenna factor + Cable attenuation factor (cable loss) - Amplifier gain

Mode 6 Vertical



Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak								
1	1113.050000	32.9	74.0	41.1	25.5	60.7	2.2	V
2	1950.300000	33.6	74.0	40.4	26.1	60.9	2.7	V
3	3540.650000	38.5	74.0	35.5	29.5	59.0	3.1	V
4	5842.450000	45.6	74.0	28.4	33.9	58.1	4.1	V
5	10295.600000	51.7	74.0	22.3	38.8	60.8	5.5	V
6	17822.350000	56.2	74.0	17.8	41.3	57.8	7.0	V
Avg								
1	1113.050000	23.8	54.0	30.2	25.5	60.7	2.2	V
2	1950.300000	24.5	54.0	29.5	26.1	60.9	2.7	V
3	3540.650000	29.7	54.0	24.3	29.5	59.0	3.1	V
4	5842.450000	37.8	54.0	16.2	33.9	58.1	4.1	V
5	10295.600000	43.5	54.0	10.5	38.8	60.8	5.5	V
6	17822.350000	47.1	54.0	6.9	41.3	57.8	7.0	V

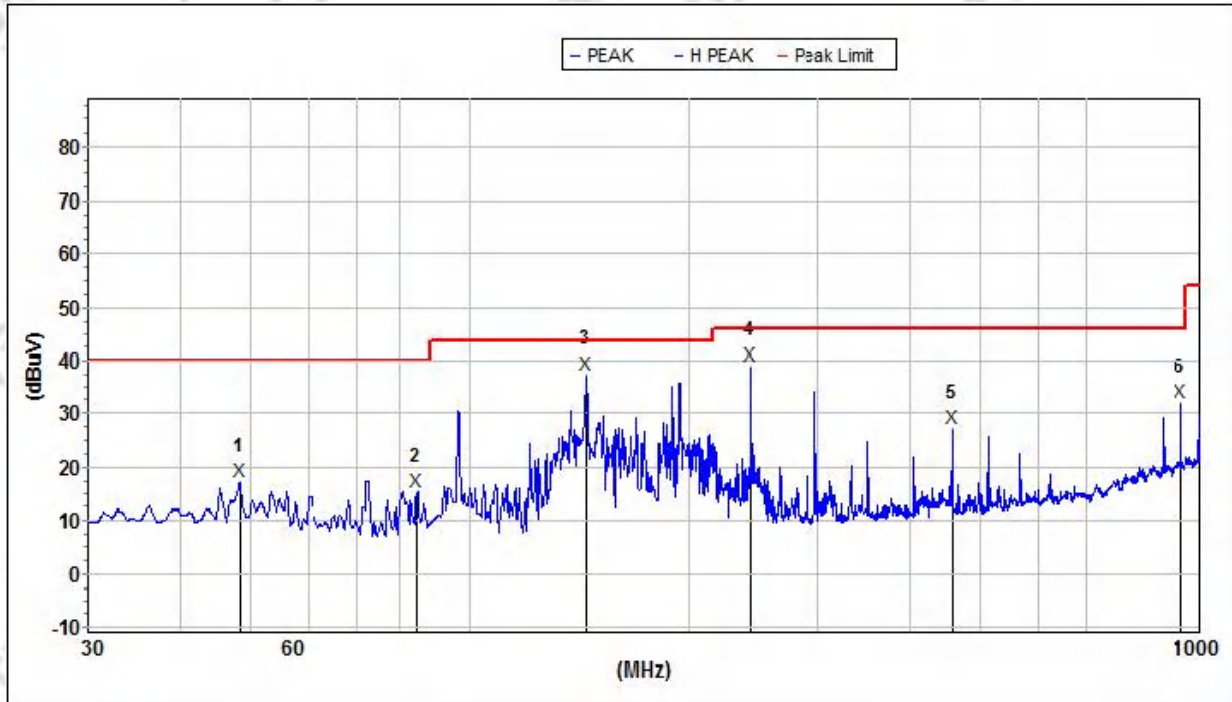
(30MHz -1000MHz)

Temperature:	23.2°C	Relative Humidity:	52%RH
Test Voltage:	DC 5V	Phase:	Horizontal
Test Mode:	TX Mode 7		

Remark:

1. Margin = Result (Result =Reading + Factor)-Limit
2. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain

Mode 7 Horizontal



Mk.	Freq. (MHz)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:								
1	48.416591	17.3	40.0	22.7	13.6	32.6	0.8	H
2	84.257592	15.3	40.0	24.7	9.4	32.9	1.0	H
3	144.841766	37.5	43.5	6.0	13.8	32.9	1.3	H
4	242.525265	38.9	46.0	7.1	11.5	32.8	2.5	H
5	459.114404	27.2	46.0	18.8	14.4	32.4	2.8	H
6	943.783761	32.0	46.0	14.0	20.2	31.3	3.7	H

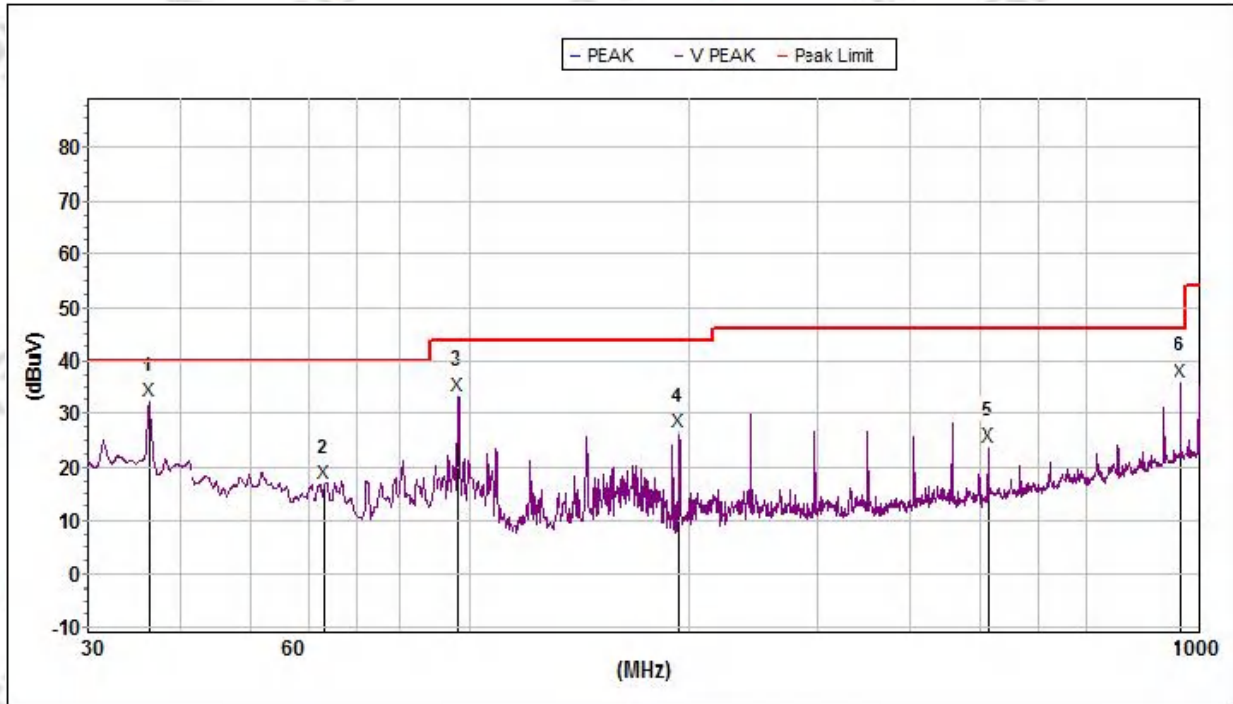
Temperature:	23.2°C	Relative Humidity:	52%RH
Test Voltage:	DC 5V	Phase:	Vertical
Test Mode:	TX Mode 7		

Remark:

1. Margin = Result (Result = Reading + Factor) - Limit

2. Factor = Antenna factor + Cable attenuation factor (cable loss) - Amplifier gain

Mode 7 Vertical



Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak								
1	36.254065	32.5	40.0	7.5	13.6	32.3	0.8	V
2	63.424327	17.0	40.0	23.0	12.1	32.8	0.8	V
3	96.436153	33.4	43.5	10.1	9.9	32.9	1.3	V
4	192.756232	26.4	43.5	17.1	10.3	32.8	2.2	V
5	512.733388	23.8	46.0	22.2	16.7	32.4	2.9	V
6	943.783761	36.0	46.0	10.0	22.1	31.3	3.7	V

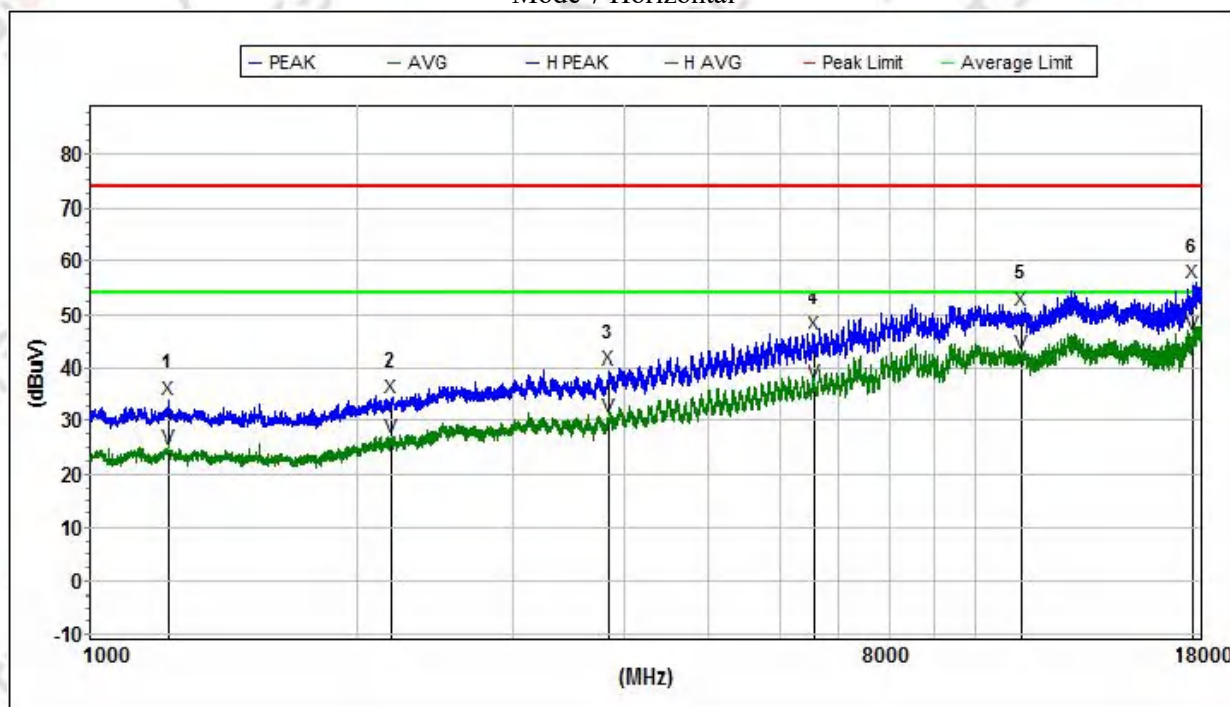
(1000MHz -18000MHz)

Temperature:	23.2°C	Relative Humidity:	52%RH
Test Voltage:	DC 5V	Phase:	Horizontal
Test Mode:	TX Mode 7		

Remark:

- Margin = Result (Result =Reading + Factor)-Limit
- Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain

Mode 7 Horizontal



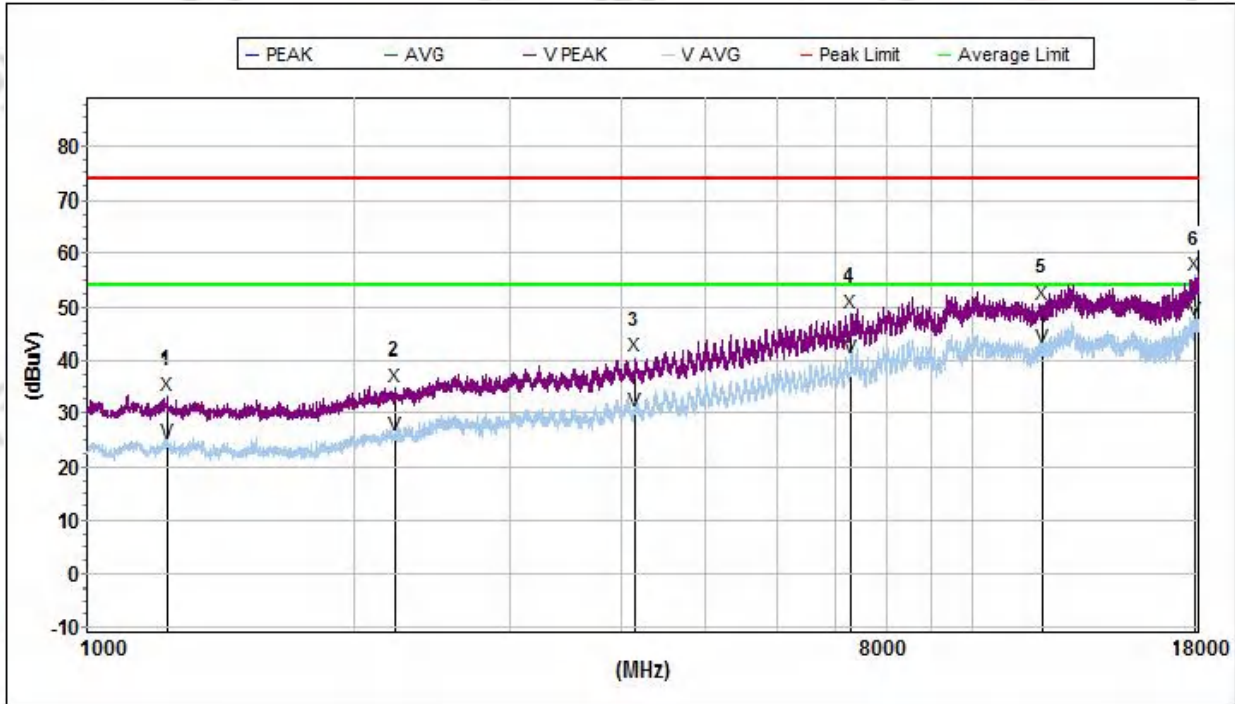
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L (dB)	Pol.
Peak								
1	1222.700000	34.1	74.0	39.9	25.7	60.9	2.3	H
2	2183.200000	34.4	74.0	39.6	27.2	60.6	2.7	H
3	3847.500000	39.5	74.0	34.5	30.6	58.8	3.2	H
4	6575.150000	46.4	74.0	27.6	35.4	58.1	4.2	H
5	11254.400000	50.7	74.0	23.3	39.0	61.1	5.7	H
6	17602.200000	55.9	74.0	18.1	39.9	58.0	6.9	H
Avg								
1	1222.700000	24.9	54.0	29.1	25.7	60.9	2.3	H
2	2183.200000	26.7	54.0	27.3	27.2	60.6	2.7	H
3	3847.500000	30.8	54.0	23.2	30.6	58.8	3.2	H
4	6575.150000	37.5	54.0	16.5	35.4	58.1	4.2	H
5	11254.400000	42.7	54.0	11.3	39.0	61.1	5.7	H
6	17602.200000	46.2	54.0	7.8	39.9	58.0	6.9	H

Temperature:	23.2°C	Relative Humidity:	52%RH
Test Voltage:	DC 5V	Phase:	Vertical
Test Mode:	TX Mode 7		

Remark:

1. Margin = Result (Result = Reading + Factor) - Limit
2. Factor = Antenna factor + Cable attenuation factor (cable loss) - Amplifier gain

Mode 7 Vertical



Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak								
1	1228.650000	33.5	74.0	40.5	25.8	60.9	2.3	V
2	2228.250000	34.9	74.0	39.1	27.2	60.4	2.8	V
3	4156.900000	40.5	74.0	33.5	30.9	58.2	3.4	V
4	7289.150000	48.8	74.0	25.2	36.8	57.6	4.5	V
5	11978.600000	50.6	74.0	23.4	39.0	59.7	5.9	V
6	17807.900000	55.8	74.0	18.2	41.2	57.8	7.0	V
Avg								
1	1228.650000	24.5	54.0	29.5	25.8	60.9	2.3	V
2	2228.250000	25.8	54.0	28.2	27.2	60.4	2.8	V
3	4156.900000	30.6	54.0	23.4	30.9	58.2	3.4	V
4	7289.150000	40.4	54.0	13.6	36.8	57.6	4.5	V
5	11978.600000	42.3	54.0	11.7	39.0	59.7	5.9	V
6	17807.900000	47.7	54.0	6.3	41.2	57.8	7.0	V

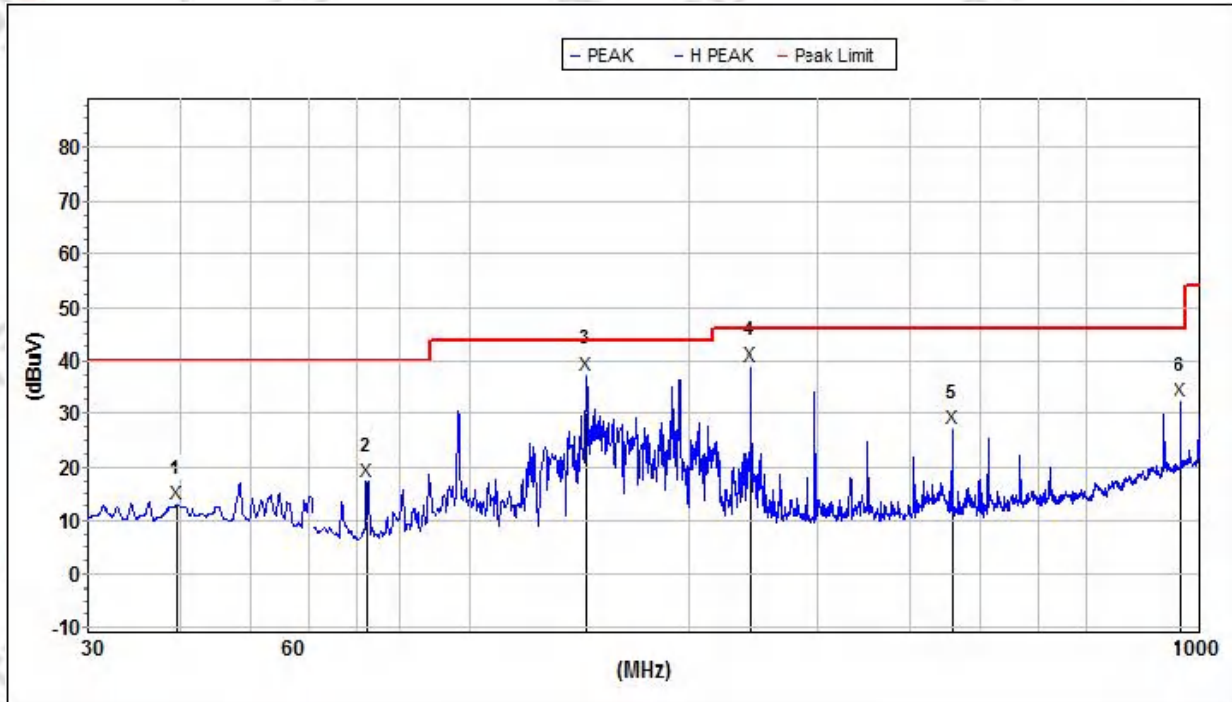
(30MHz -1000MHz)

Temperature:	23.2°C	Relative Humidity:	52%RH
Test Voltage:	DC 5V	Phase:	Horizontal
Test Mode:	TX Mode 9		

Remark:

1. Margin = Result (Result =Reading + Factor)-Limit
2. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain

Mode 9 Horizontal



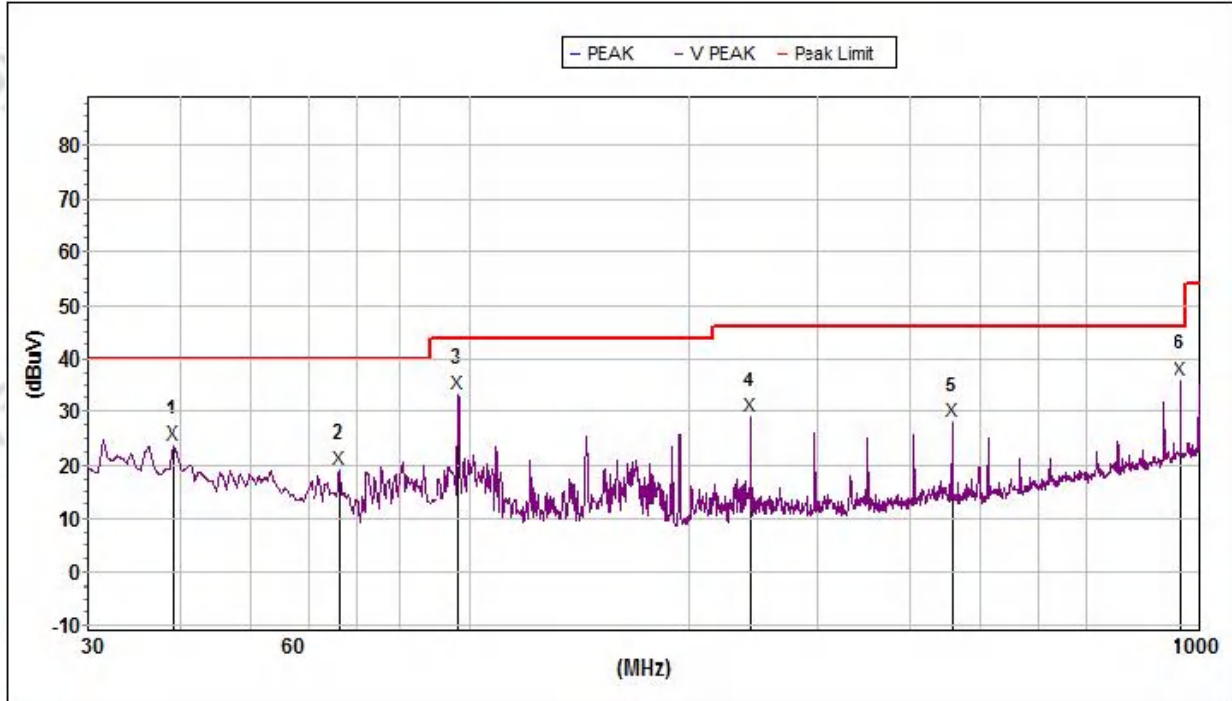
Mk.	Freq. (MHz)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak								
1	39.645155	12.9	40.0	27.1	14.0	32.4	0.8	H
2	72.464493	17.4	40.0	22.6	10.4	32.8	0.9	H
3	144.841766	37.2	43.5	6.3	13.8	32.9	1.3	H
4	242.525265	39.0	46.0	7.0	11.5	32.8	2.5	H
5	459.114404	27.3	46.0	18.7	14.4	32.4	2.8	H
6	943.783761	32.3	46.0	13.7	20.2	31.3	3.7	H

Temperature:	23.2°C	Relative Humidity:	52%RH
Test Voltage:	DC 5V	Phase:	Vertical
Test Mode:	TX Mode 9		

Remark:

1. Margin = Result (Result = Reading + Factor) - Limit
2. Factor = Antenna factor + Cable attenuation factor (cable loss) - Amplifier gain

Mode 9 Vertical



Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak								
1	39.161565	23.9	40.0	16.1	14.0	32.4	0.8	V
2	66.266167	19.1	40.0	20.9	11.5	32.8	0.8	V
3	96.436153	33.3	43.5	10.2	9.9	32.9	1.3	V
4	242.525265	29.1	46.0	16.9	11.5	32.8	2.5	V
5	459.114404	28.1	46.0	17.9	16.1	32.4	2.8	V
6	943.783761	36.2	46.0	9.8	22.1	31.3	3.7	V

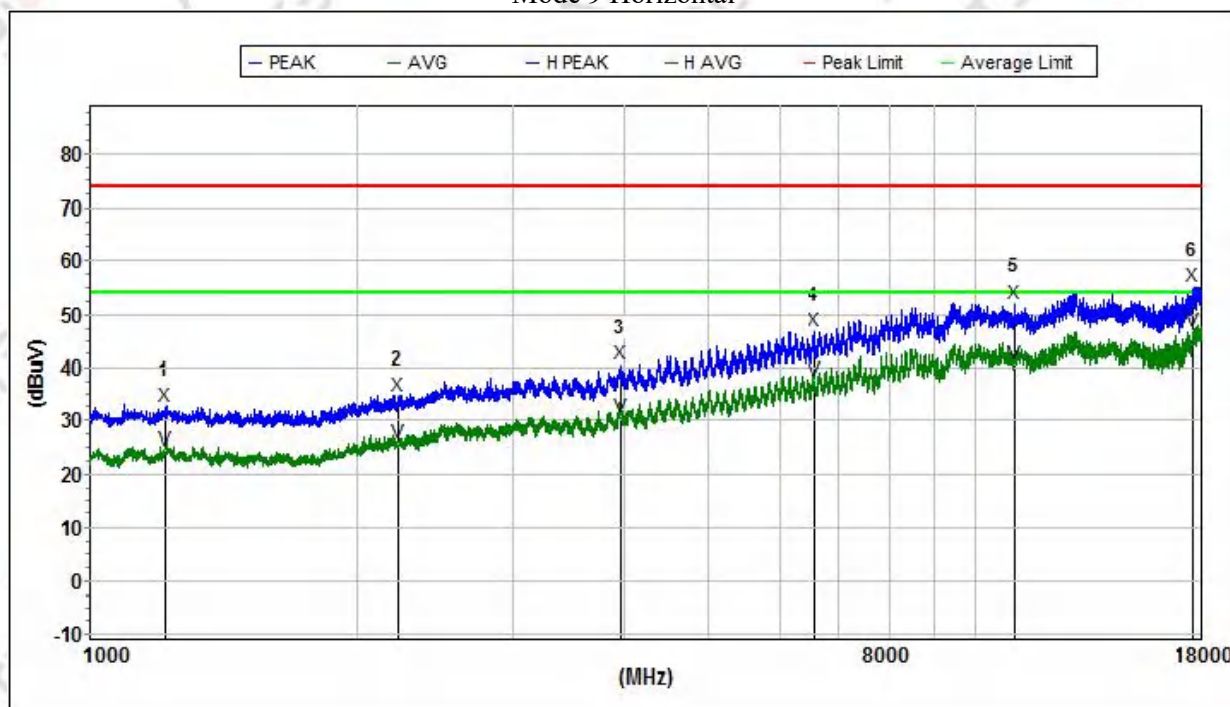
(1000MHz -18000MHz)

Temperature:	23.2°C	Relative Humidity:	52%RH
Test Voltage:	DC 5V	Phase:	Horizontal
Test Mode:	TX Mode 9		

Remark:

1. Margin = Result (Result =Reading + Factor)-Limit
2. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain

Mode 9 Horizontal

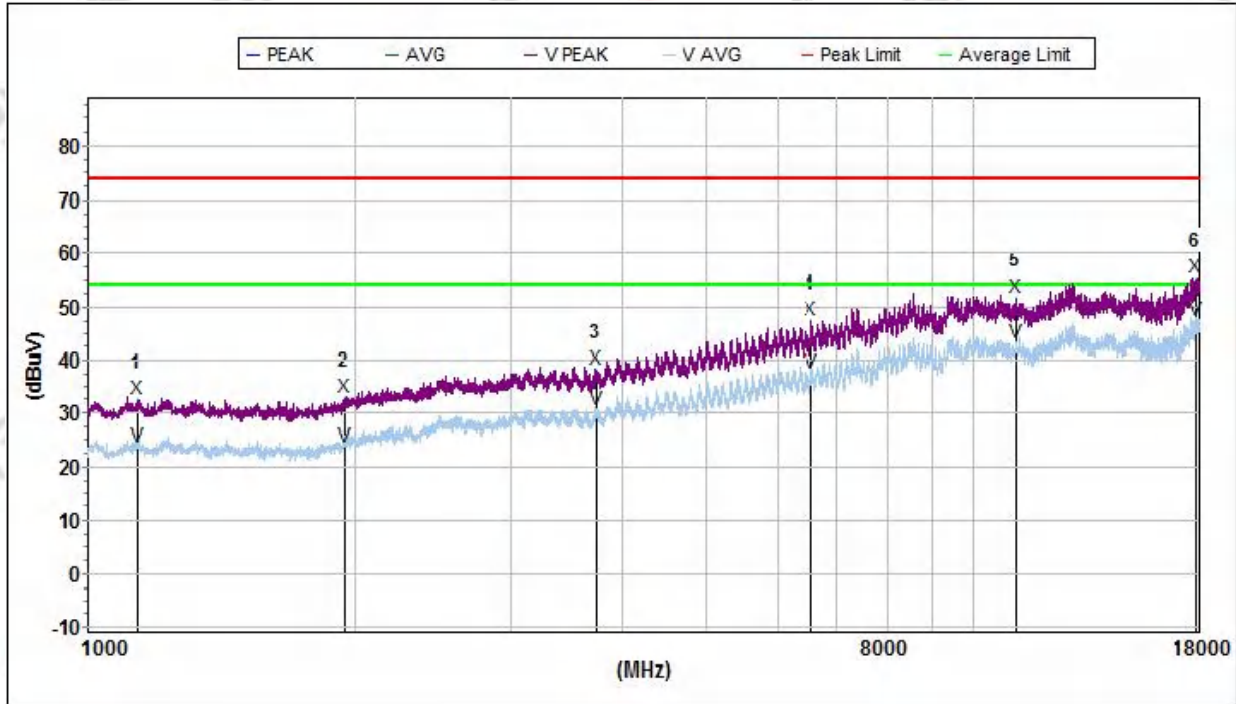


Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L (dB)	Pol.
Peak								
1	1215.050000	32.9	74.0	41.1	25.7	60.9	2.3	H
2	2226.550000	34.7	74.0	39.3	27.2	60.4	2.8	H
3	3965.650000	40.5	74.0	33.5	30.8	58.5	3.3	H
4	6576.000000	46.9	74.0	27.1	35.4	58.1	4.2	H
5	11032.550000	52.0	74.0	22.0	38.9	61.1	5.7	H
6	17599.650000	55.2	74.0	18.8	39.9	58.0	6.9	H
Avg								
1	1215.050000	24.5	54.0	29.5	25.7	60.9	2.3	H
2	2226.550000	25.7	54.0	28.3	27.2	60.4	2.8	H
3	3965.650000	30.9	54.0	23.1	30.8	58.5	3.3	H
4	6576.000000	37.8	54.0	16.2	35.4	58.1	4.2	H
5	11032.550000	40.8	54.0	13.2	38.9	61.1	5.7	H
6	17599.650000	47.0	54.0	7.0	39.9	58.0	6.9	H

Temperature:	23.2°C	Relative Humidity:	52%RH
Test Voltage:	DC 5V	Phase:	Vertical
Test Mode:	TX Mode 9		

Remark:

1. Margin = Result (Result = Reading + Factor) - Limit
 2. Factor = Antenna factor + Cable attenuation factor (cable loss) - Amplifier gain
- Mode 9 Vertical



Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak								
1	1135.150000	32.7	74.0	41.3	25.6	60.7	2.2	V
2	1947.750000	33.2	74.0	40.8	26.0	60.9	2.6	V
3	3750.600000	38.5	74.0	35.5	30.2	58.9	3.2	V
4	6565.800000	47.5	74.0	26.5	35.3	58.0	4.2	V
5	11151.550000	51.8	74.0	22.2	39.0	61.1	5.7	V
6	17815.550000	55.5	74.0	18.5	41.2	57.8	7.0	V
Avg								
1	1135.150000	23.9	54.0	30.1	25.6	60.7	2.2	V
2	1947.750000	24.0	54.0	30.0	26.0	60.9	2.6	V
3	3750.600000	30.8	54.0	23.2	30.2	58.9	3.2	V
4	6565.800000	37.6	54.0	16.4	35.3	58.0	4.2	V
5	11151.550000	43.4	54.0	10.6	39.0	61.1	5.7	V
6	17815.550000	47.4	54.0	6.6	41.2	57.8	7.0	V

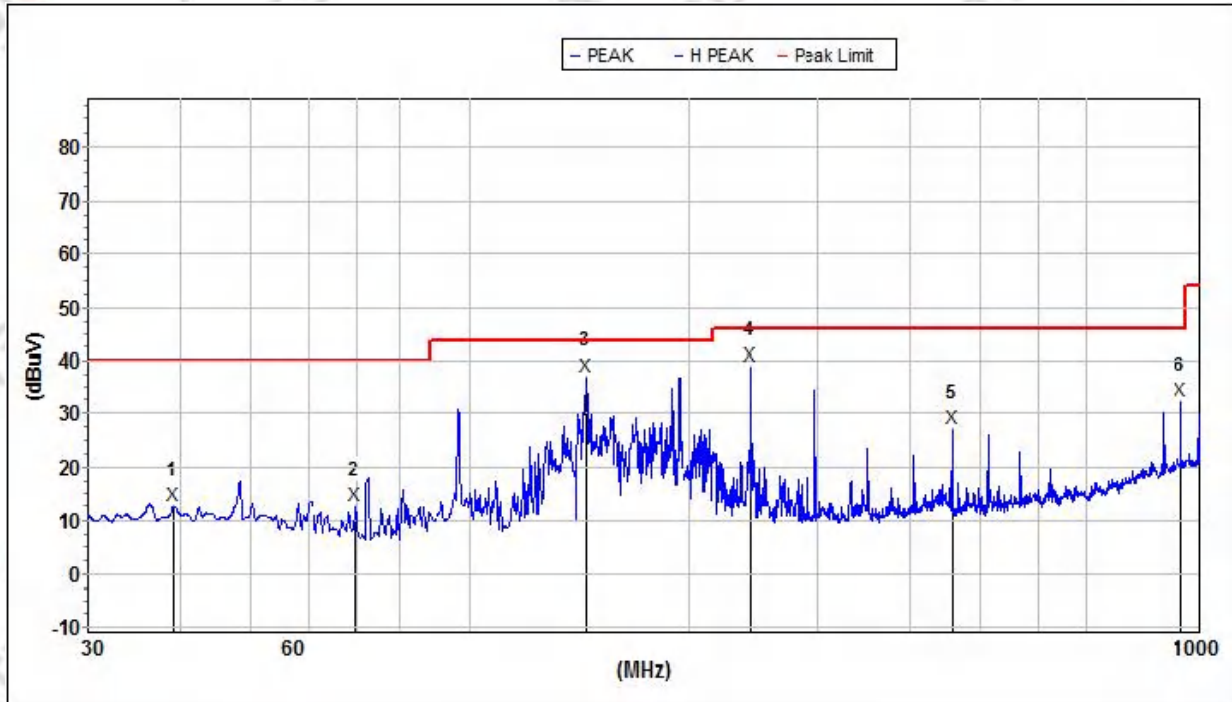
(30MHz -1000MHz)

Temperature:	23.2°C	Relative Humidity:	52%RH
Test Voltage:	DC 5V	Phase:	Horizontal
Test Mode:	TX Mode 10		

Remark:

1. Margin = Result (Result =Reading + Factor)-Limit
2. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain

Mode 10 Horizontal



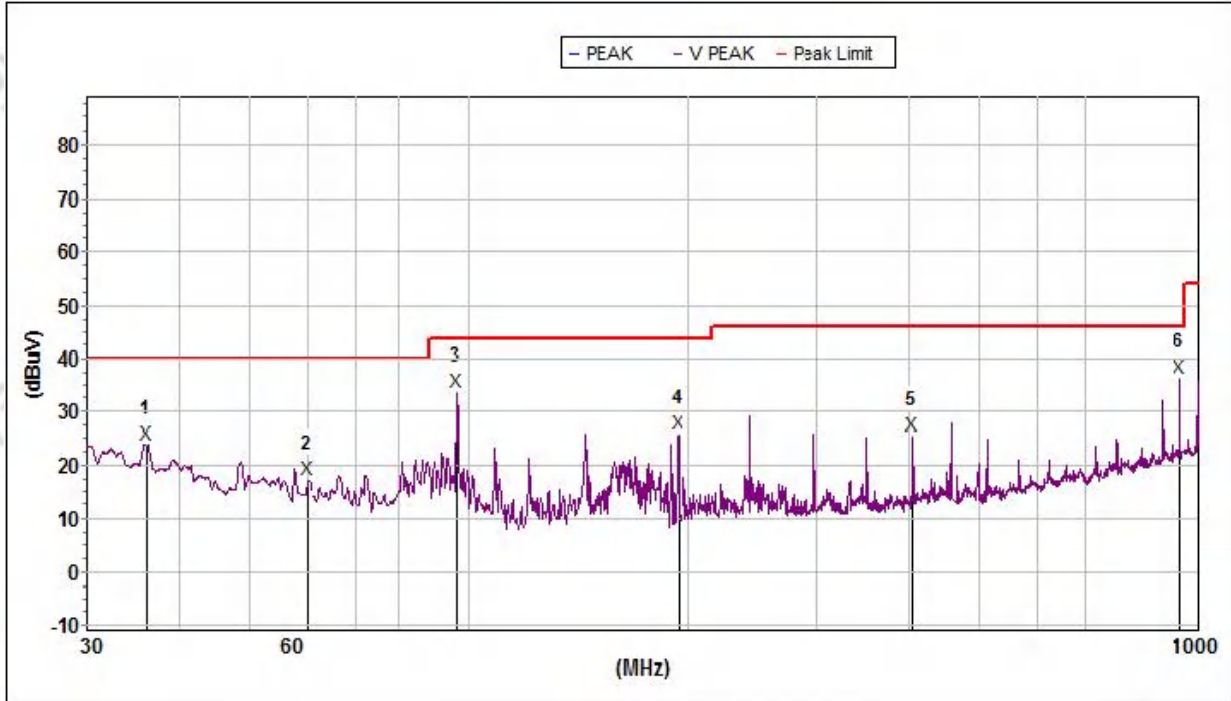
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak								
1	39.161565	12.7	40.0	27.3	14.0	32.4	0.8	H
2	69.722603	12.7	40.0	27.3	10.9	32.8	0.8	H
3	144.841766	37.1	43.5	6.4	13.8	32.9	1.3	H
4	242.525265	38.9	46.0	7.1	11.5	32.8	2.5	H
5	459.114404	27.2	46.0	18.8	14.4	32.4	2.8	H
6	943.783761	32.4	46.0	13.6	20.2	31.3	3.7	H

Temperature:	23.2°C	Relative Humidity:	52%RH
Test Voltage:	DC 5V	Phase:	Vertical
Test Mode:	TX Mode 10		

Remark:

1. Margin = Result (Result = Reading + Factor) - Limit
2. Factor = Antenna factor + Cable attenuation factor (cable loss) - Amplifier gain

Mode 10 Vertical



Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak								
1	36.127160	23.9	40.0	16.1	13.5	32.3	0.8	V
2	60.069117	17.2	40.0	22.8	12.7	32.7	0.8	V
3	96.436153	33.6	43.5	9.9	9.9	32.9	1.3	V
4	193.433330	25.9	43.5	17.6	10.3	32.8	2.2	V
5	404.666528	25.5	46.0	20.5	14.9	32.3	2.7	V
6	943.783761	36.4	46.0	9.6	22.1	31.3	3.7	V

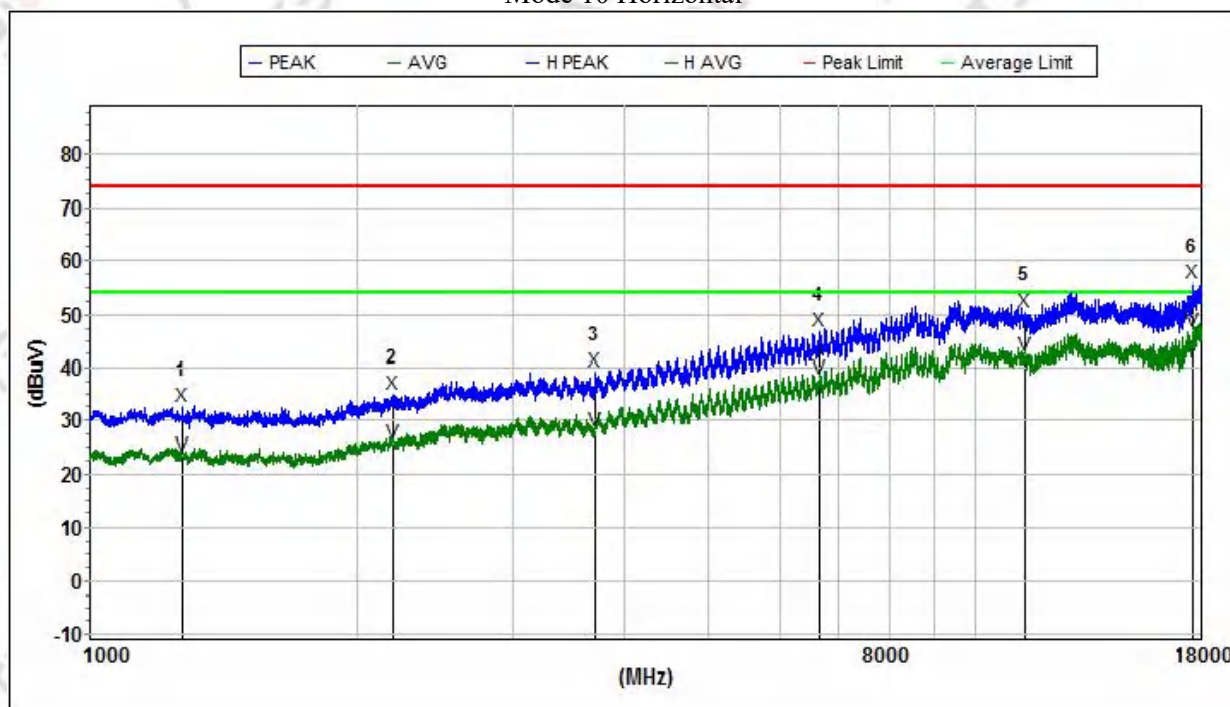
(1000MHz -18000MHz)

Temperature:	23.2°C	Relative Humidity:	52%RH
Test Voltage:	DC 5V	Phase:	Horizontal
Test Mode:	TX Mode 10		

Remark:

1. Margin = Result (Result =Reading + Factor)-Limit
2. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain

Mode 10 Horizontal



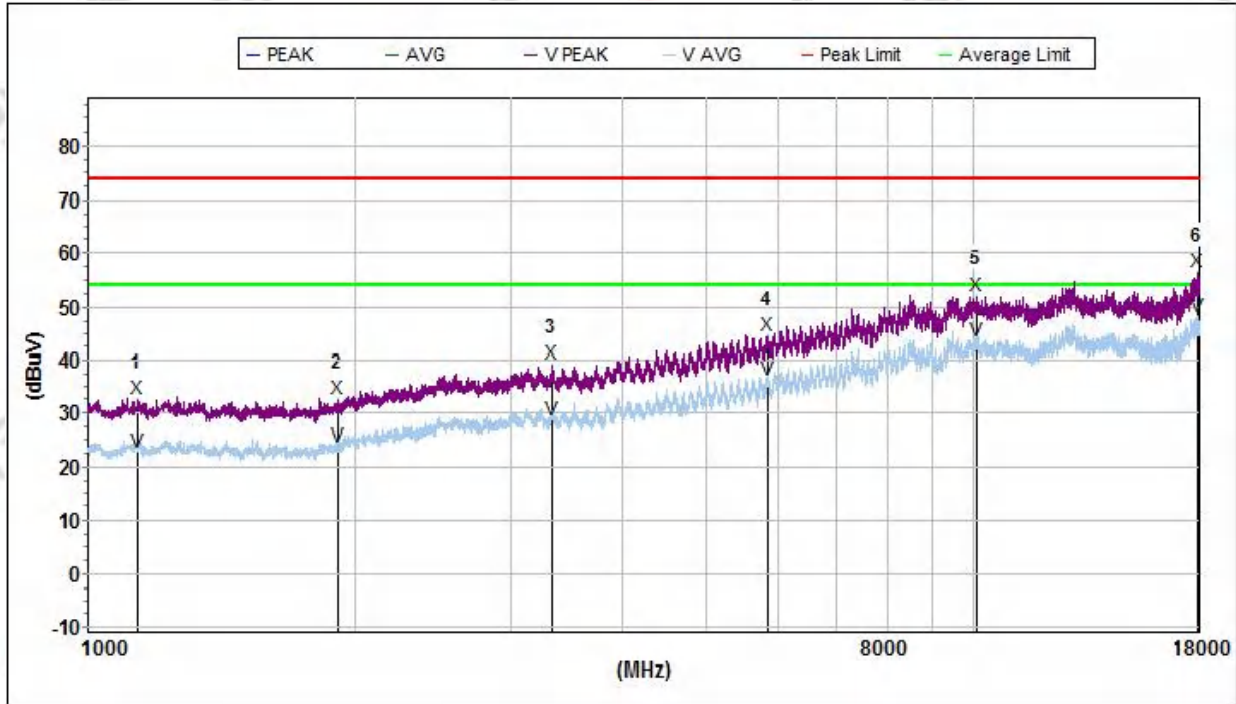
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L (dB)	Pol.
Peak								
1	1267.750000	32.6	74.0	41.4	25.8	61.0	2.3	H
2	2198.500000	35.0	74.0	39.0	27.2	60.5	2.7	H
3	3721.700000	39.2	74.0	34.8	30.0	58.9	3.2	H
4	6678.850000	46.8	74.0	27.2	35.8	58.1	4.3	H
5	11345.350000	50.4	74.0	23.6	39.1	61.1	5.8	H
6	17588.600000	55.7	74.0	18.3	39.8	58.0	6.9	H
Avg								
1	1267.750000	23.6	54.0	30.4	25.8	61.0	2.3	H
2	2198.500000	25.8	54.0	28.2	27.2	60.5	2.7	H
3	3721.700000	28.3	54.0	25.7	30.0	58.9	3.2	H
4	6678.850000	38.1	54.0	15.9	35.8	58.1	4.3	H
5	11345.350000	42.2	54.0	11.8	39.1	61.1	5.8	H
6	17588.600000	47.0	54.0	7.0	39.8	58.0	6.9	H

Temperature:	23.2°C	Relative Humidity:	52%RH
Test Voltage:	DC 5V	Phase:	Vertical
Test Mode:	TX Mode 10		

Remark:

1. Margin = Result (Result = Reading + Factor) - Limit
2. Factor = Antenna factor + Cable attenuation factor (cable loss) - Amplifier gain

Mode 10 Vertical



Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak								
1	1134.300000	32.8	74.0	41.2	25.6	60.7	2.2	V
2	1913.750000	32.8	74.0	41.2	25.8	61.0	2.6	V
3	3330.700000	39.2	74.0	34.8	29.6	58.2	3.1	V
4	5835.650000	44.7	74.0	29.3	33.9	58.1	4.1	V
5	10092.450000	52.0	74.0	22.0	38.6	60.4	5.4	V
6	17882.700000	56.4	74.0	17.6	41.6	57.7	7.0	V
Avg								
1	1134.300000	22.9	54.0	31.1	25.6	60.7	2.2	V
2	1913.750000	23.9	54.0	30.1	25.8	61.0	2.6	V
3	3330.700000	28.9	54.0	25.1	29.6	58.2	3.1	V
4	5835.650000	36.3	54.0	17.7	33.9	58.1	4.1	V
5	10092.450000	43.5	54.0	10.5	38.6	60.4	5.4	V
6	17882.700000	48.1	54.0	5.9	41.6	57.7	7.0	V

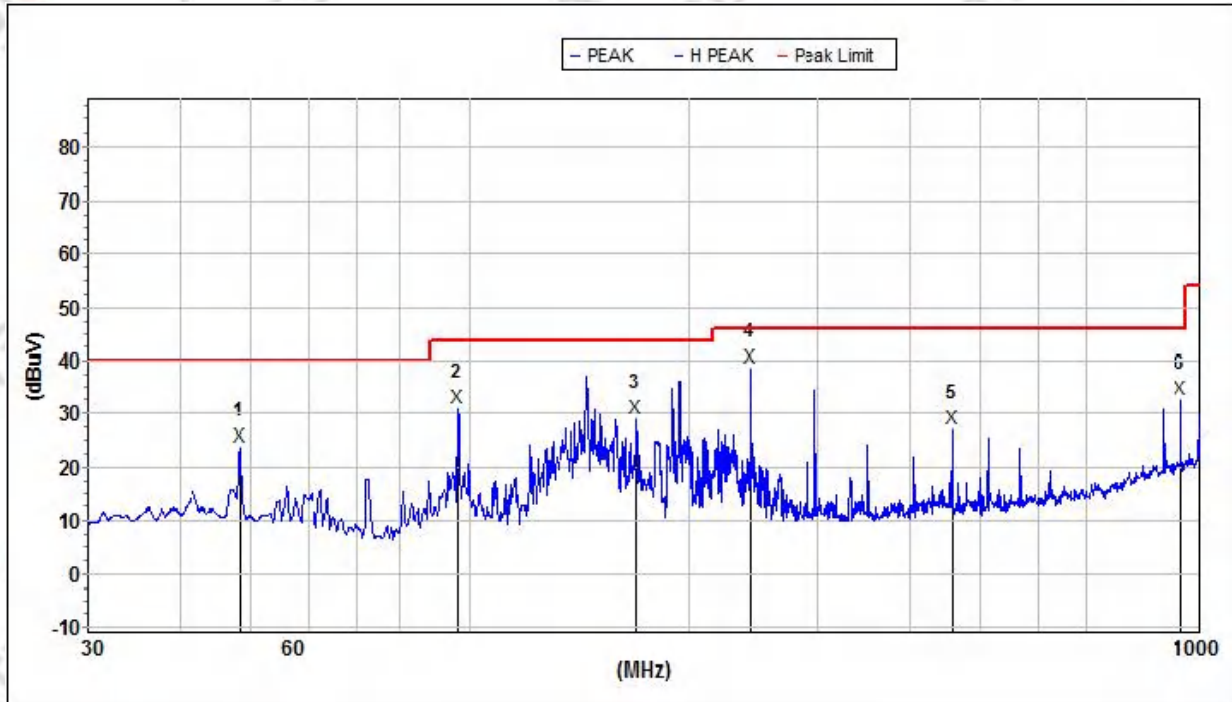
(30MHz -1000MHz)

Temperature:	23.2°C	Relative Humidity:	52%RH
Test Voltage:	DC 5V	Phase:	Horizontal
Test Mode:	TX Mode 12		

Remark:

1. Margin = Result (Result =Reading + Factor)-Limit
2. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain

Mode 12 Horizontal



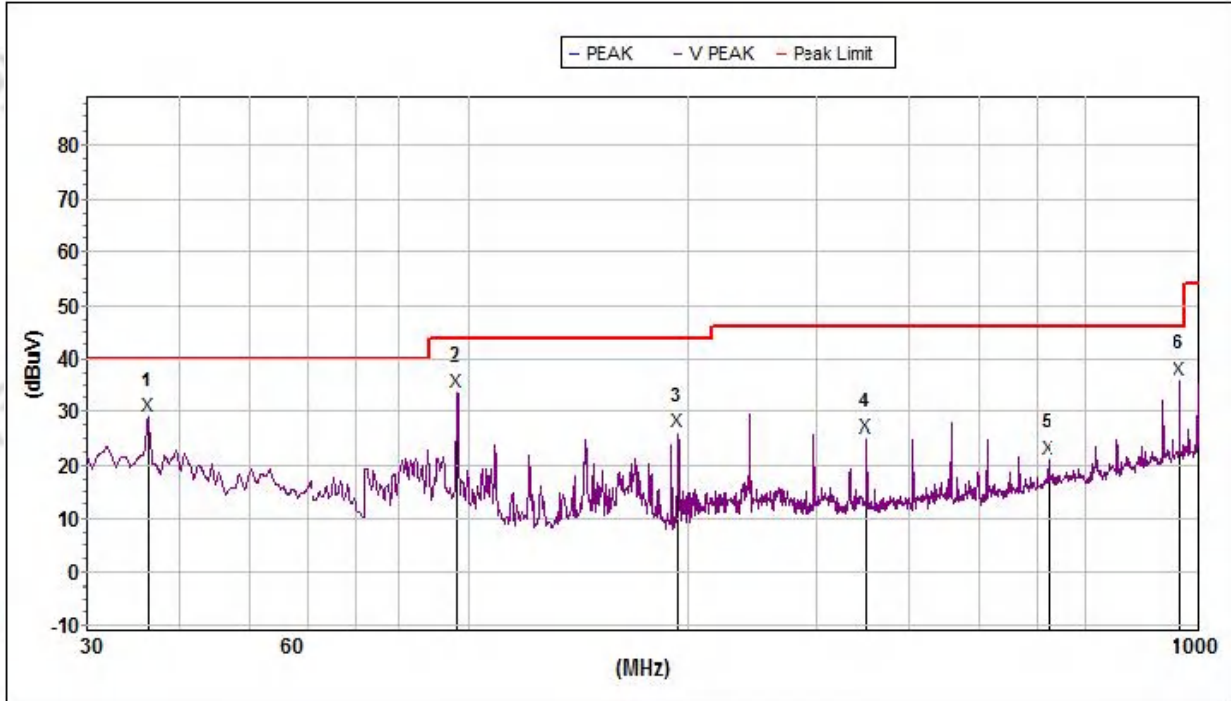
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak								
1	48.416591	24.0	40.0	16.0	13.6	32.6	0.8	H
2	96.436153	31.0	43.5	12.5	9.9	32.9	1.3	H
3	169.005359	29.2	43.5	14.3	13.3	32.9	1.7	H
4	242.525265	38.8	46.0	7.2	11.5	32.8	2.5	H
5	459.114404	27.3	46.0	18.7	14.4	32.4	2.8	H
6	943.783761	32.7	46.0	13.3	20.2	31.3	3.7	H

Temperature:	23.2°C	Relative Humidity:	52%RH
Test Voltage:	DC 5V	Phase:	Vertical
Test Mode:	TX Mode 12		

Remark:

1. Margin = Result (Result = Reading + Factor) - Limit
2. Factor = Antenna factor + Cable attenuation factor (cable loss) - Amplifier gain

Mode 12 Vertical



Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak								
1	36.254065	29.2	40.0	10.8	13.6	32.3	0.8	V
2	96.436153	33.9	43.5	9.6	9.9	32.9	1.3	V
3	192.756232	26.3	43.5	17.2	10.3	32.8	2.2	V
4	350.476784	25.1	46.0	20.9	13.8	32.5	2.7	V
5	620.709640	21.1	46.0	24.9	18.8	32.3	3.4	V
6	943.783761	36.0	46.0	10.0	22.1	31.3	3.7	V

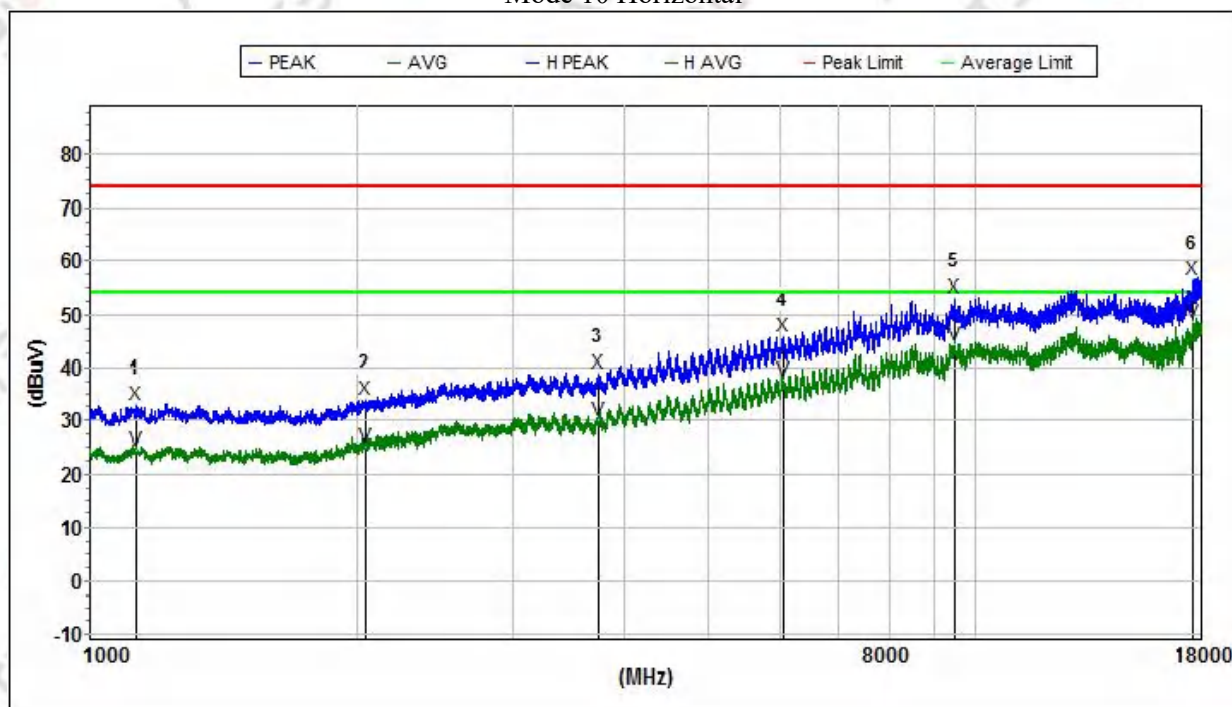
(1000MHz -18000MHz)

Temperature:	23.2°C	Relative Humidity:	52%RH
Test Voltage:	DC 5V	Phase:	Horizontal
Test Mode:	TX Mode 12		

Remark:

1. Margin = Result (Result =Reading + Factor)-Limit
2. Factor= Antenna factor+Cable attenuation factor(cable loss)-Amplifier gain

Mode 10 Horizontal



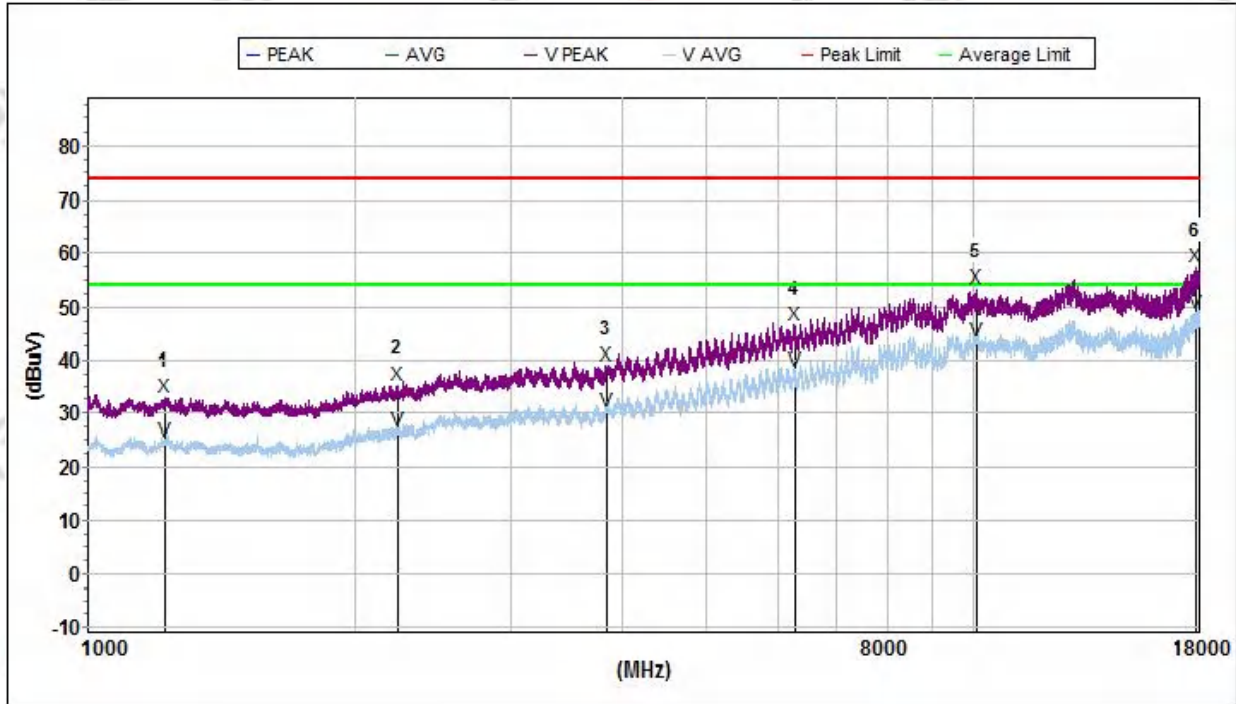
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak								
1	1126.650000	33.0	74.0	41.0	25.5	60.7	2.2	H
2	2047.200000	34.1	74.0	39.9	26.8	60.9	2.7	H
3	3745.500000	39.1	74.0	34.9	30.1	58.9	3.2	H
4	6044.750000	45.9	74.0	28.1	34.0	58.0	4.1	H
5	9477.050000	53.1	74.0	20.9	38.6	59.8	5.4	H
6	17597.100000	56.4	74.0	17.6	39.8	58.0	6.9	H
Avg								
1	1126.650000	24.6	54.0	29.4	25.5	60.7	2.2	H
2	2047.200000	25.1	54.0	28.9	26.8	60.9	2.7	H
3	3745.500000	30.1	54.0	23.9	30.1	58.9	3.2	H
4	6044.750000	37.7	54.0	16.3	34.0	58.0	4.1	H
5	9477.050000	44.3	54.0	9.7	38.6	59.8	5.4	H
6	17597.100000	48.7	54.0	5.3	39.8	58.0	6.9	H

Temperature:	23.2°C	Relative Humidity:	52%RH
Test Voltage:	DC 5V	Phase:	Vertical
Test Mode:	TX Mode 12		

Remark:

1. Margin = Result (Result = Reading + Factor) - Limit
2. Factor = Antenna factor + Cable attenuation factor (cable loss) - Amplifier gain

Mode 12 Vertical



Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak								
1	1220.150000	33.0	74.0	41.0	25.7	60.9	2.3	V
2	2234.200000	35.4	74.0	38.6	27.2	60.3	2.8	V
3	3845.800000	39.1	74.0	34.9	30.6	58.8	3.2	V
4	6260.650000	46.7	74.0	27.3	34.2	58.0	4.2	V
5	10094.150000	53.5	74.0	20.5	38.6	60.4	5.4	V
6	17815.550000	57.4	74.0	16.6	41.2	57.8	7.0	V
Avg								
1	1220.150000	24.7	54.0	29.3	25.7	60.9	2.3	V
2	2234.200000	26.7	54.0	27.3	27.2	60.3	2.8	V
3	3845.800000	30.6	54.0	23.4	30.6	58.8	3.2	V
4	6260.650000	38.0	54.0	16.0	34.2	58.0	4.2	V
5	10094.150000	43.7	54.0	10.3	38.6	60.4	5.4	V
6	17815.550000	49.0	54.0	5.0	41.2	57.8	7.0	V

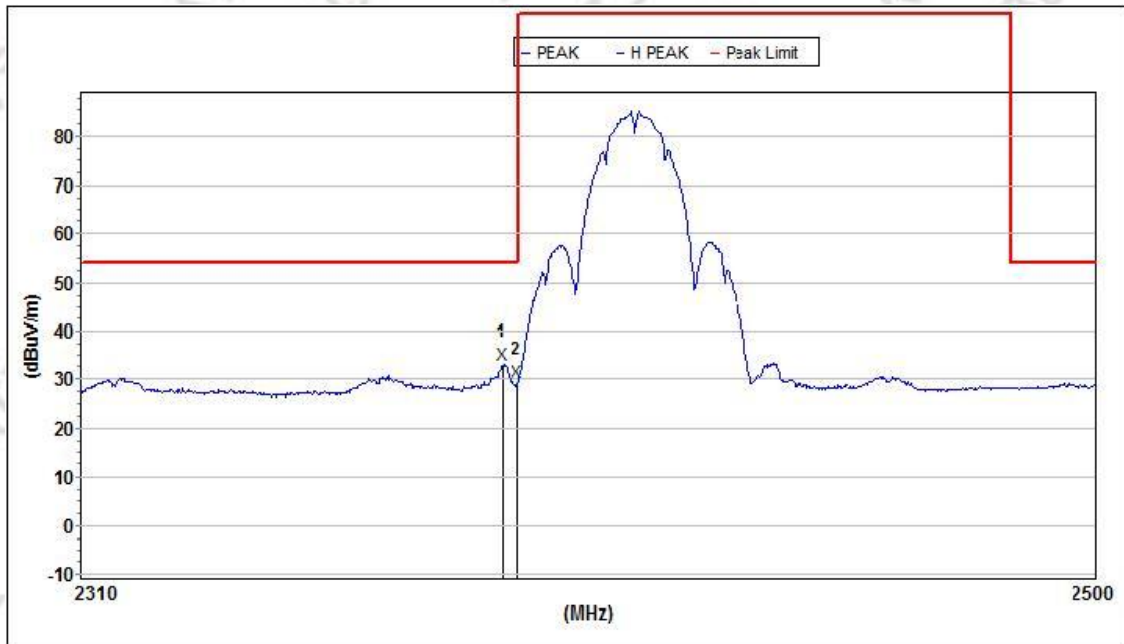
Note:

1. 802.11b, 802.11g, 802.11n (HT-20), 802.11n (HT-40) mode all have been tested, only show the worst case.
2. Other 18G-25G Emission detected are more than 20dB below the limit.

3.2.6 TEST RESULTS (BAND EDGE REQUIREMENTS)

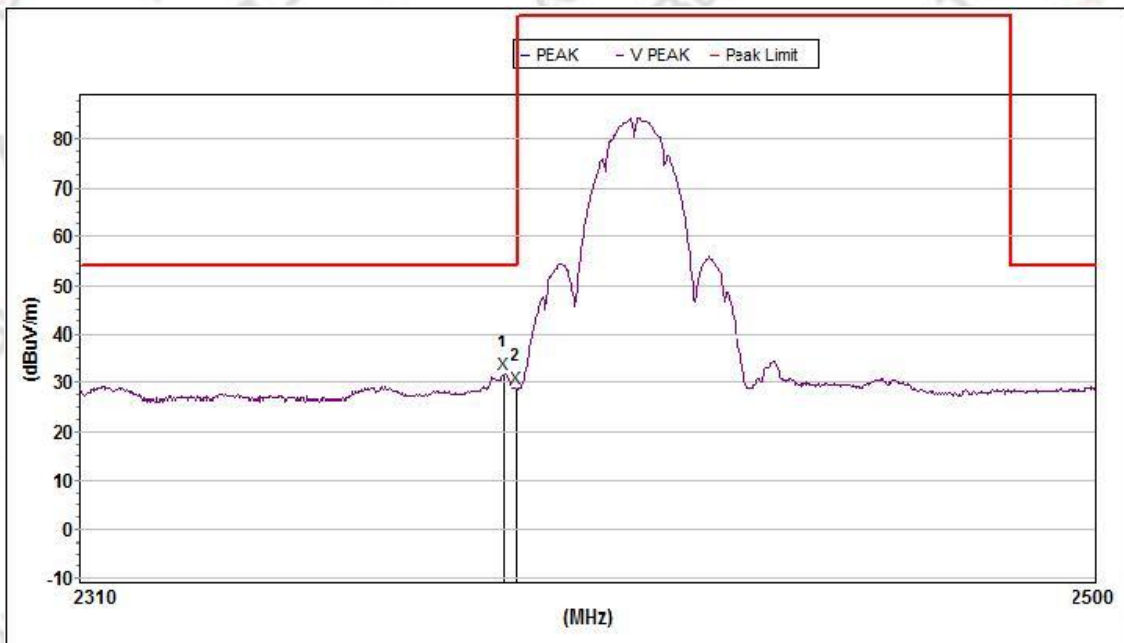
802.11b-Low

Horizontal



Mk.	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
AVG								
1	2387.031290	33.2	54.0	20.8	27.3	59.6	2.8	H
2	2390.000000	29.5	54.0	24.5	27.3	59.6	2.8	H

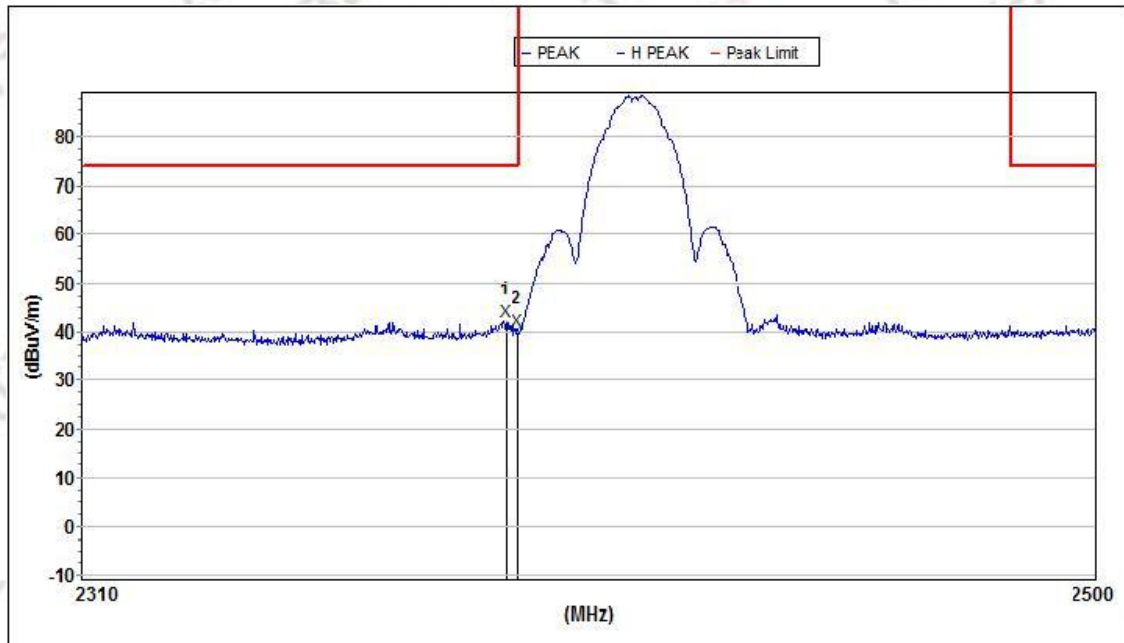
Vertical



Mk.	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
AVG								
1	2387.408677	31.7	54.0	22.3	27.3	59.6	2.8	V
2	2390.000000	28.9	54.0	25.1	27.3	59.6	2.8	V

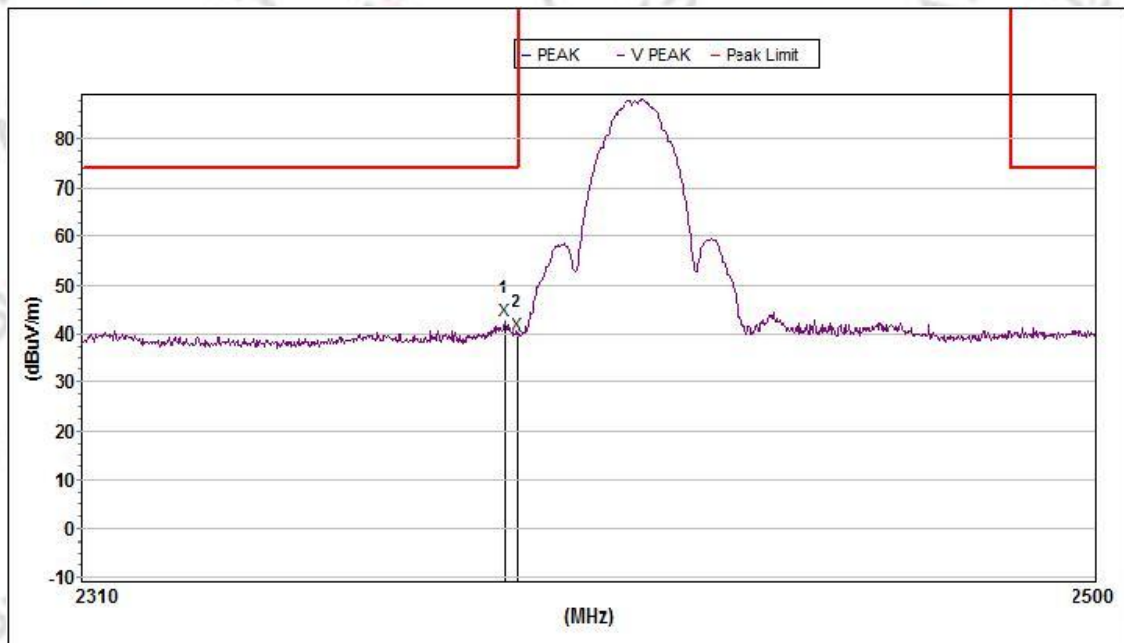
802.11b -Low

Horizontal



Mk.	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak								
1	2387.597392	41.9	74.0	32.1	27.3	59.6	2.8	H
2	2390.000000	40.1	74.0	33.9	27.3	59.6	2.8	H

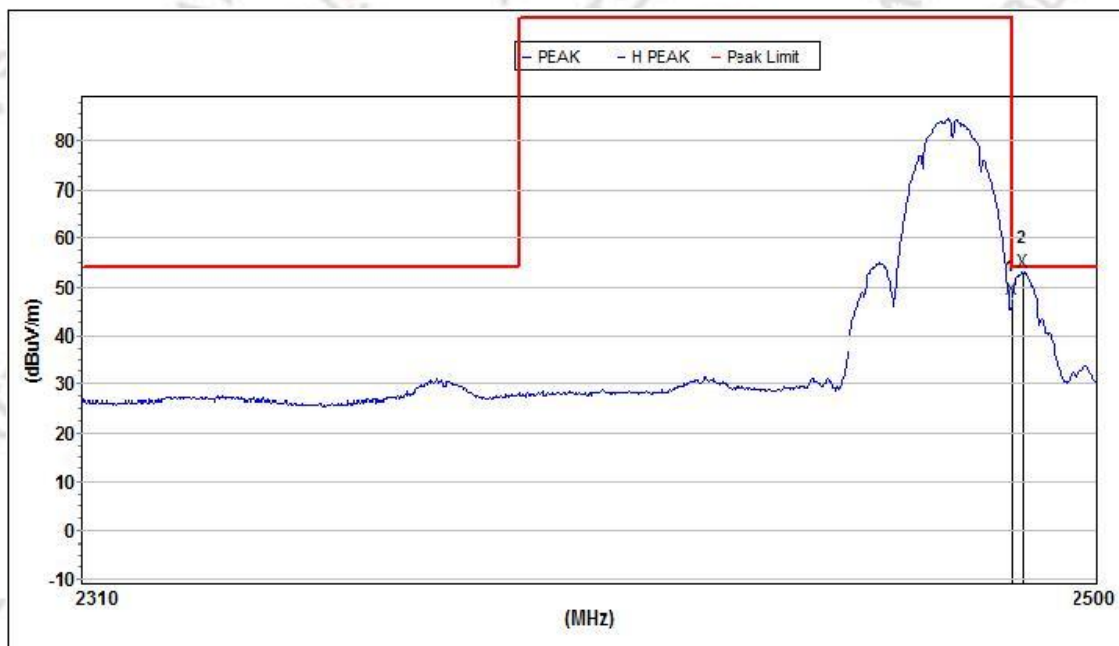
Vertical



Mk.	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak								
1	2387.219976	42.7	74.0	31.3	27.3	59.6	2.8	V
2	2390.000000	39.5	74.0	34.5	27.3	59.6	2.8	V

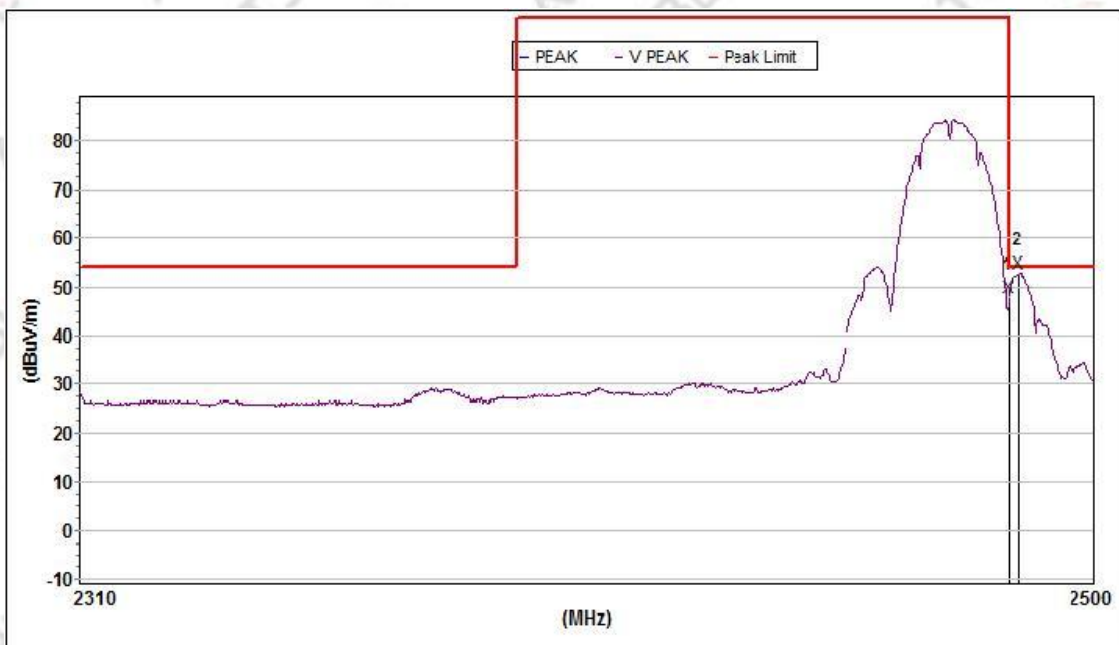
802.11b-High

Horizontal



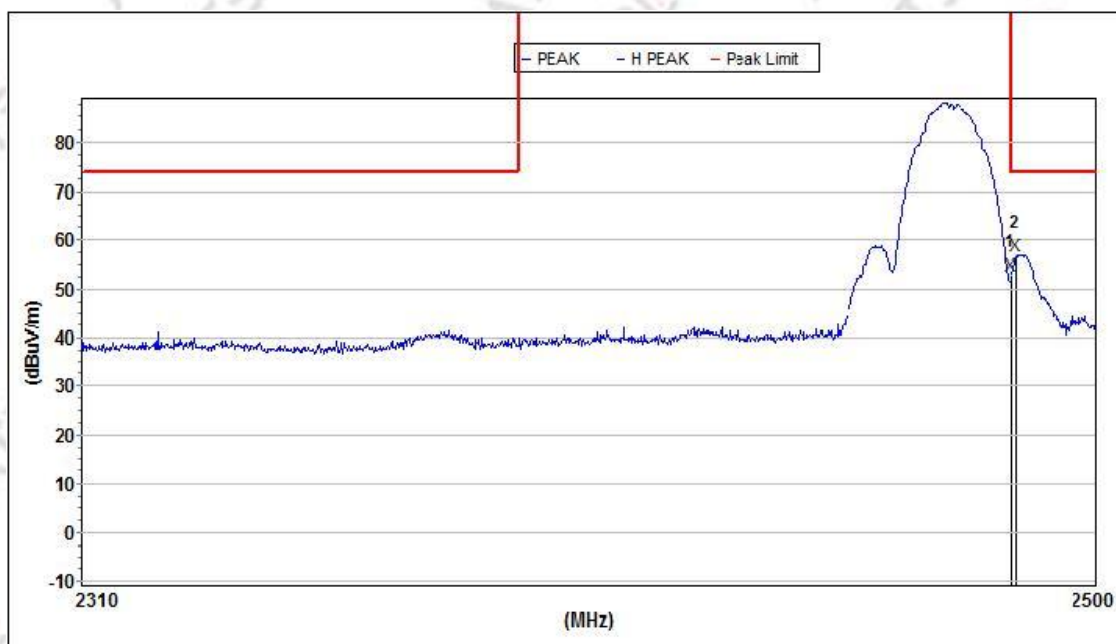
Mk.	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
AVG								
1	2483.501000	47.7	54.0	6.3	27.7	58.9	2.8	H
2	2485.616153	53.3	54.0	0.7	27.7	58.9	2.8	H

Vertical



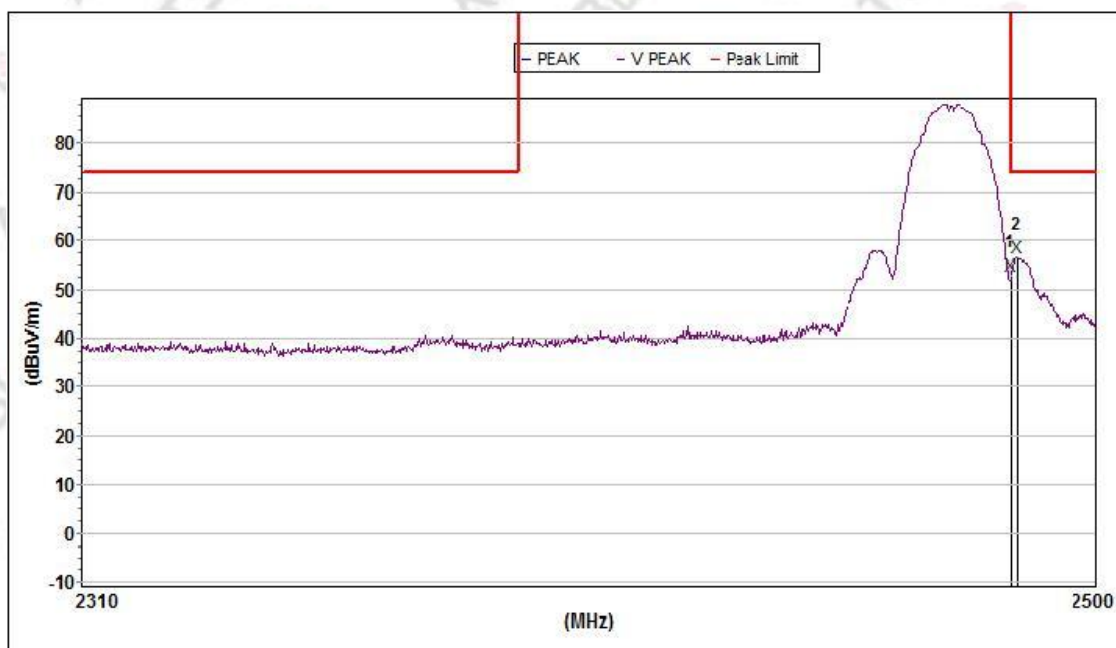
Mk.	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
AVG								
1	2483.501000	48.0	54.0	6.0	27.7	58.9	2.8	V
2	2485.419690	52.8	54.0	1.2	27.7	58.9	2.8	V

802.11b -High Horizontal



Mk.	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak								
1	2483.501000	52.7	74.0	21.3	27.7	58.9	2.8	H
2	2484.437606	56.9	74.0	17.1	27.7	58.9	2.8	H

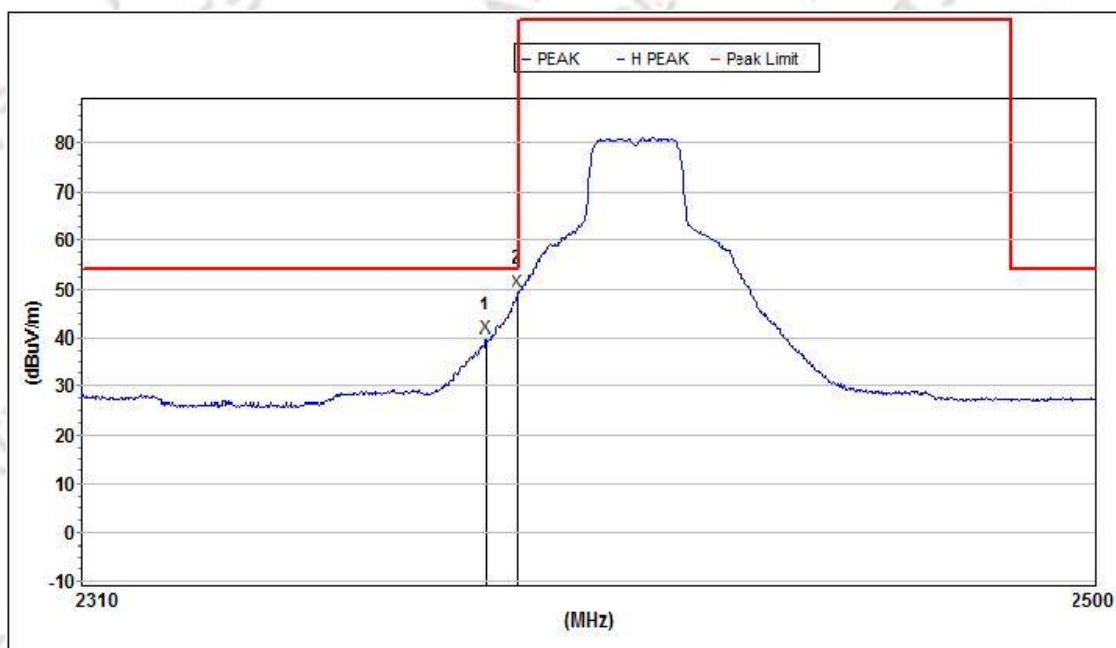
Vertical



Mk.	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak								
1	2483.501000	52.8	74.0	21.2	27.7	58.9	2.8	V
2	2484.830393	56.5	74.0	17.5	27.7	58.9	2.8	V

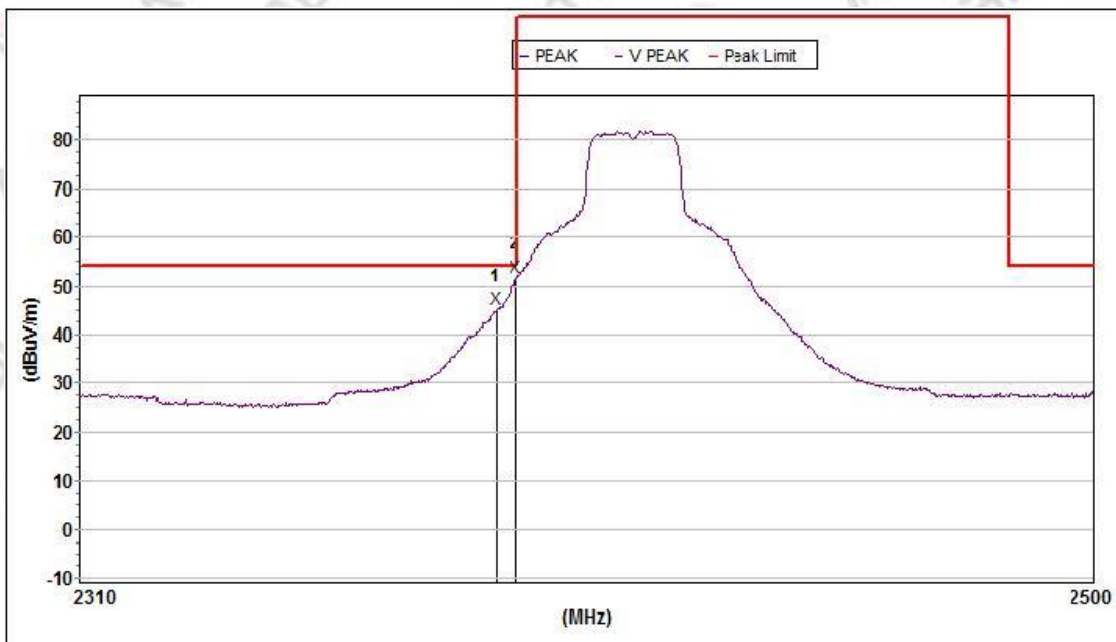
802.11g-Low

Horizontal



Mk.	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
AVG								
1	2383.825907	39.9	54.0	14.1	27.3	59.6	2.8	H
2	2390.000000	49.5	54.0	4.5	27.3	59.6	2.8	H

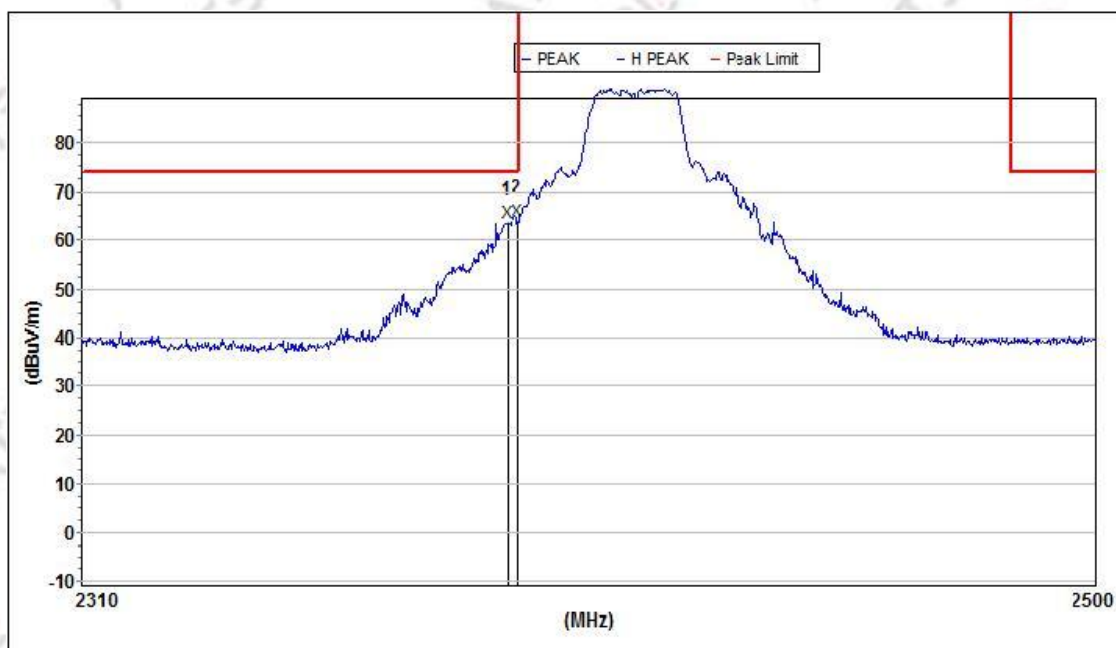
Vertical



Mk.	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
AVG								
1	2386.276694	45.2	54.0	8.8	27.3	59.6	2.8	V
2	2390.000000	51.7	54.0	2.3	27.3	59.6	2.8	V

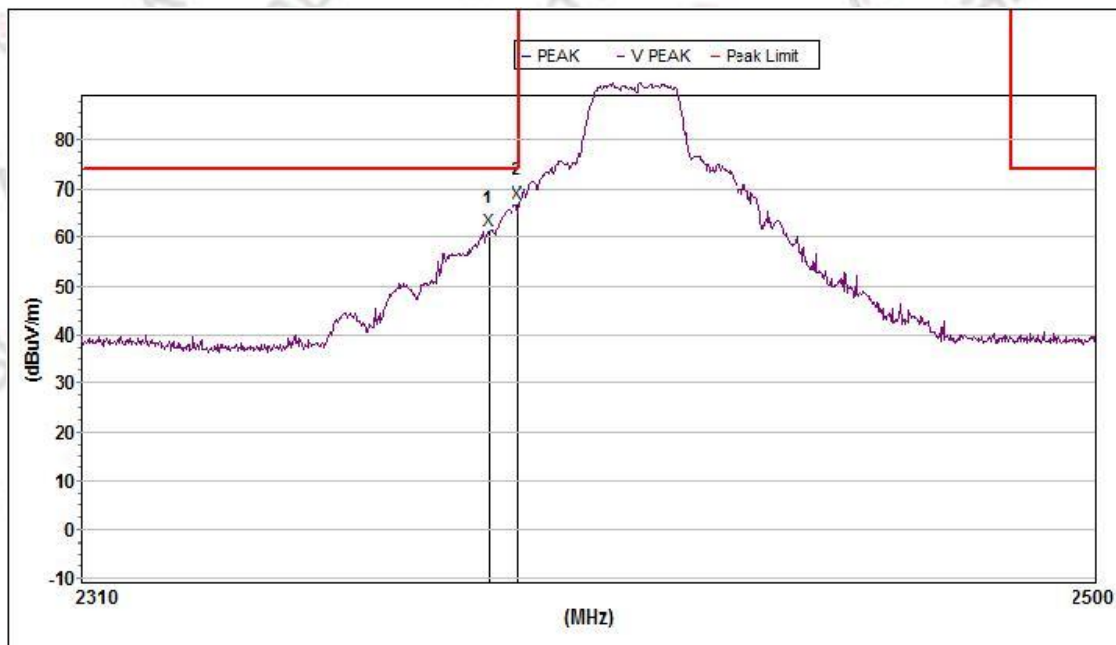
802.11g -Low

Horizontal



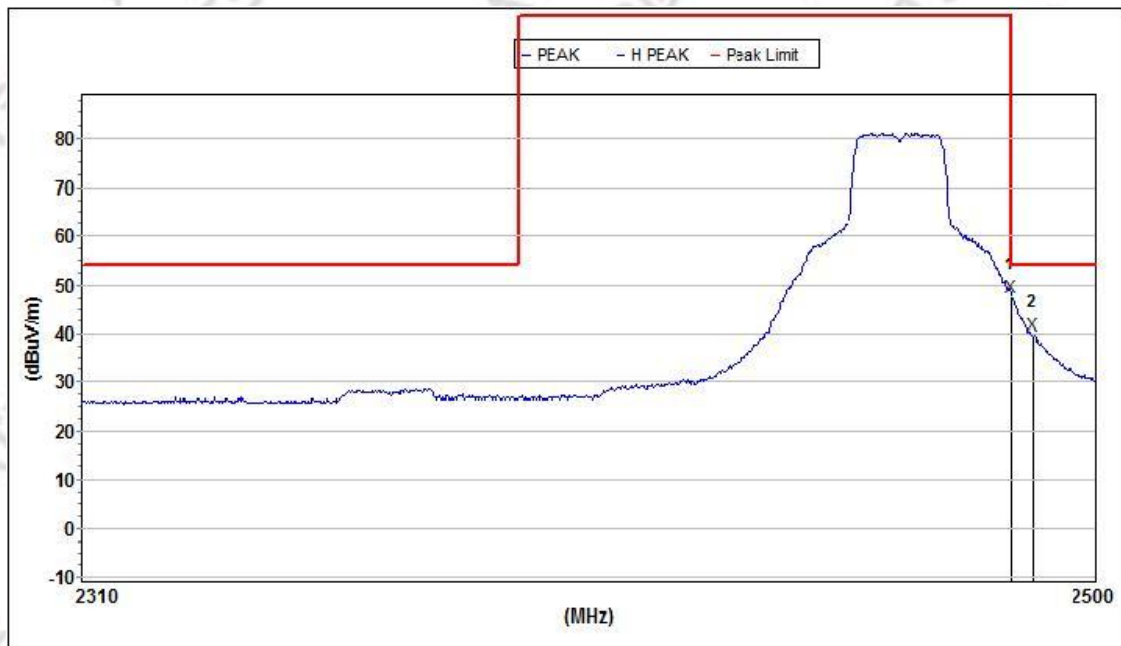
Mk.	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak								
1	2387.786123	63.7	74.0	10.3	27.3	59.6	2.8	H
2	2390.000000	64.1	74.0	9.9	27.3	59.6	2.8	H

Vertical



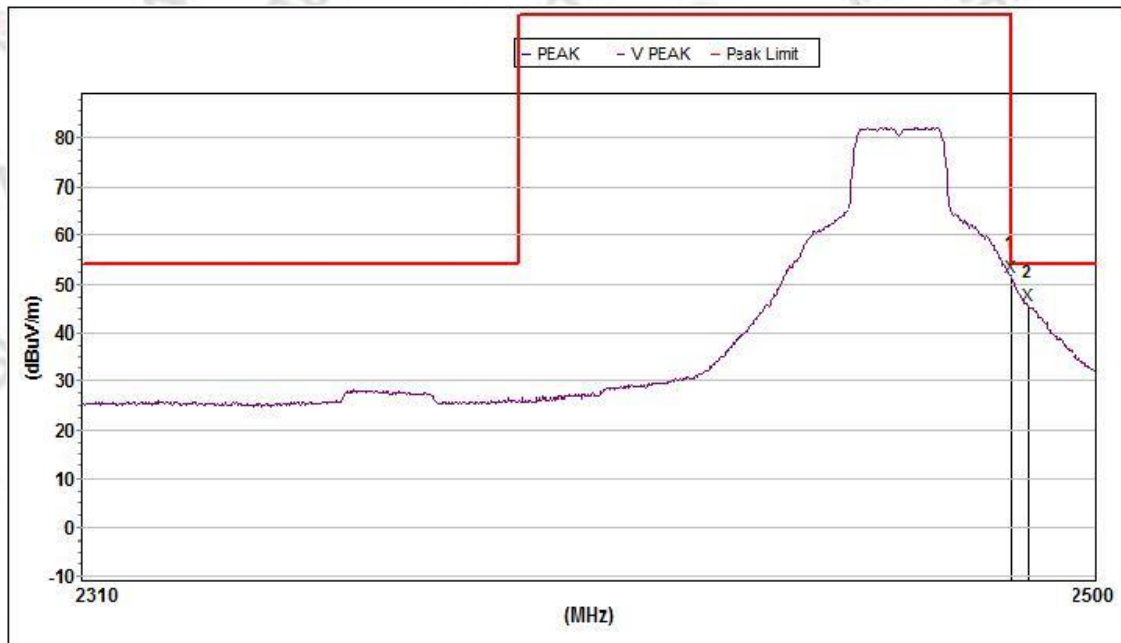
Mk.	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak								
1	2384.391250	61.4	74.0	12.6	27.3	59.6	2.8	V
2	2390.000000	66.9	74.0	7.1	27.3	59.6	2.8	V

802.11g -High Horizontal



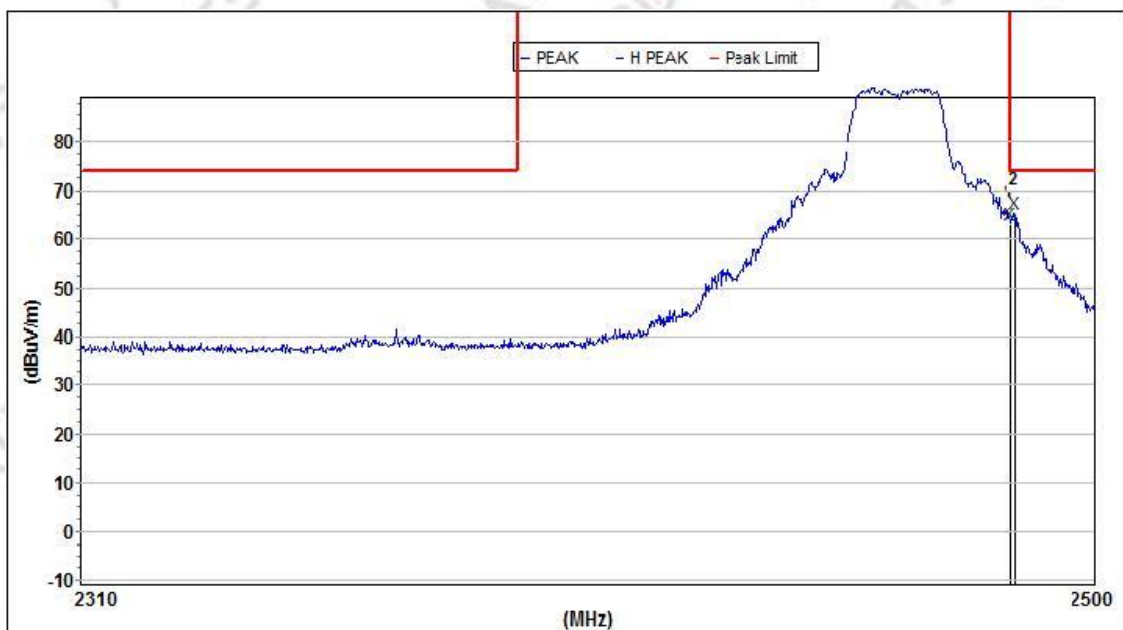
Mk.	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
AVG								
1	2483.501000	47.4	54.0	6.6	27.7	58.9	2.8	H
2	2487.581641	39.7	54.0	14.3	27.7	58.9	2.8	H

Vertical



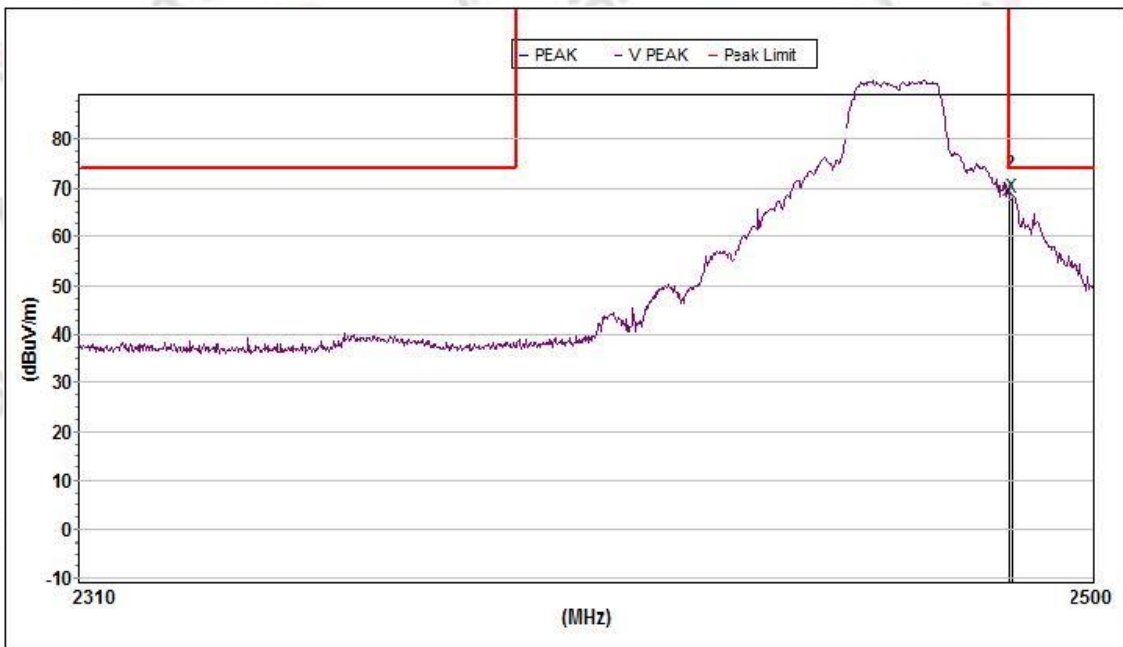
Mk.	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
AVG								
1	2483.501000	51.4	54.0	2.6	27.7	58.9	2.8	V
2	2486.795259	45.7	54.0	8.3	27.7	58.9	2.8	V

802.11g -High Horizontal



Mk.	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak								
1	2483.501000	62.9	74.0	11.1	27.7	58.9	2.8	H
2	2484.437606	65.4	74.0	8.6	27.7	58.9	2.8	H

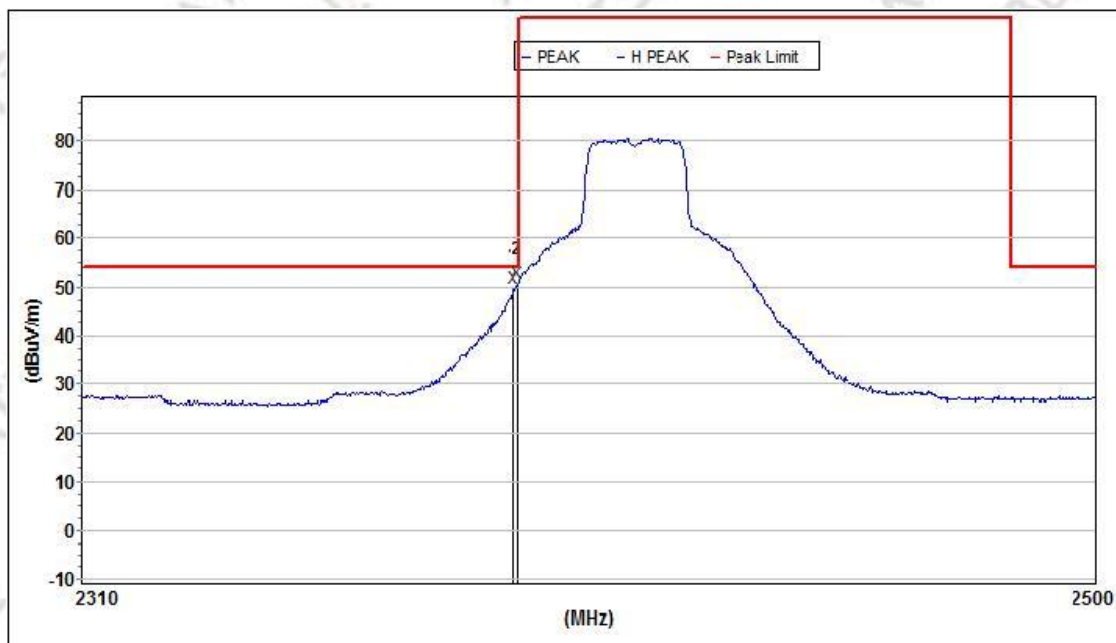
Vertical



Mk.	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak								
1	2483.501000	67.6	74.0	6.4	27.7	58.9	2.8	V
2	2484.241236	68.4	74.0	5.6	27.7	58.9	2.8	V

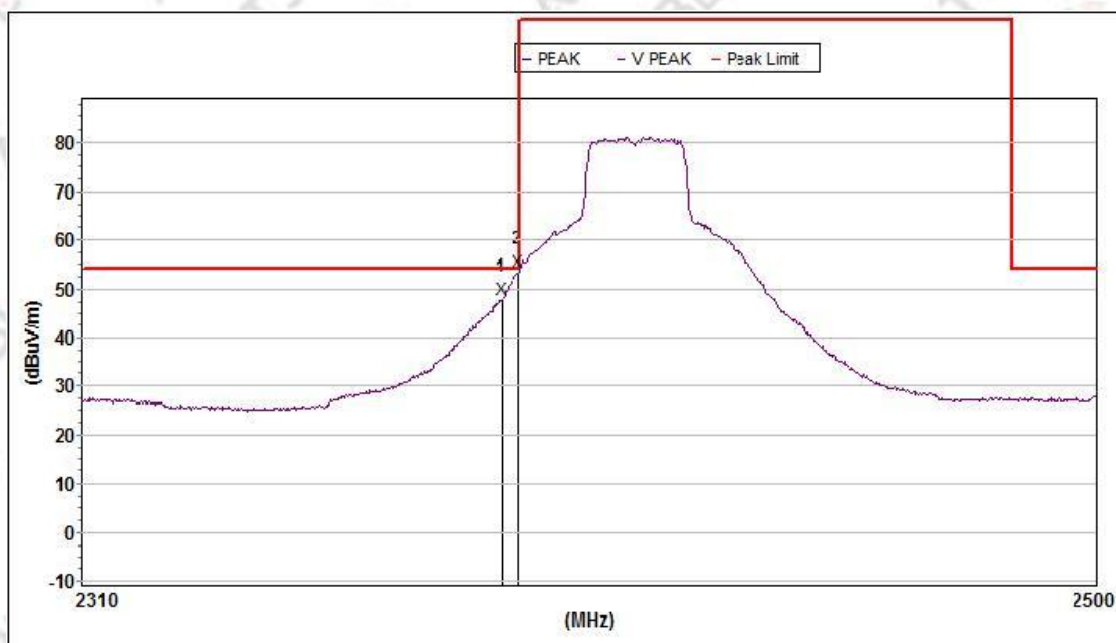
802.11N20-Low

Horizontal



Mk.	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
AVG								
1	2389.107657	50.0	54.0	4.0	27.3	59.6	2.8	H
2	2390.000000	50.7	54.0	3.3	27.3	59.6	2.8	H

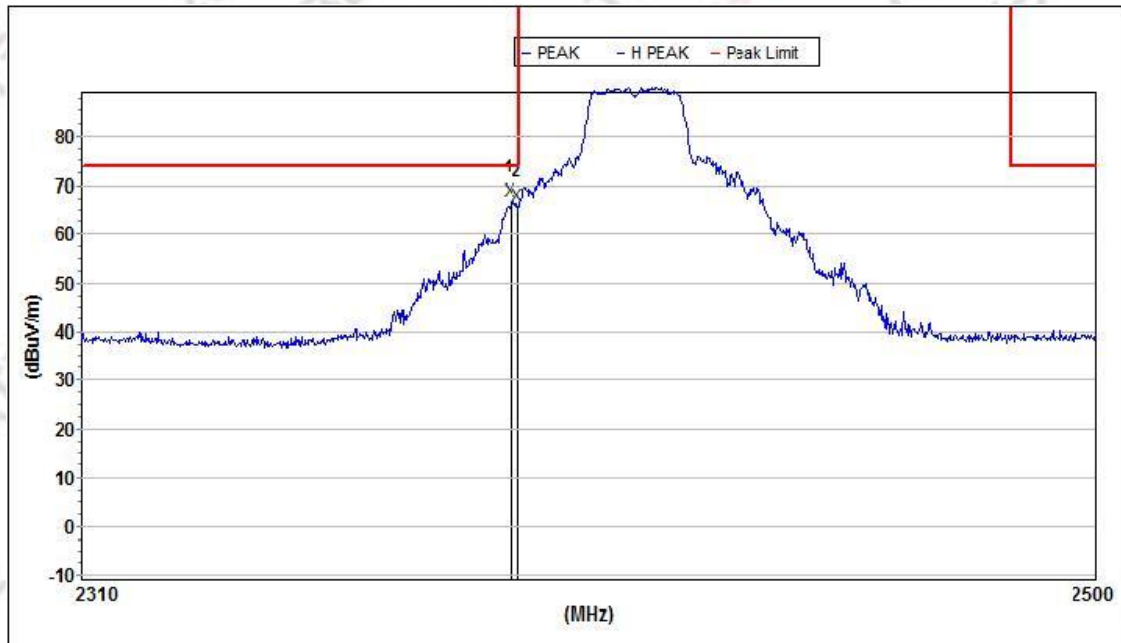
Vertical



Mk.	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
AVG								
1	2386.842618	48.0	54.0	6.0	27.3	59.6	2.8	V
2	2390.000000	53.5	54.0	0.5	27.3	59.6	2.8	V

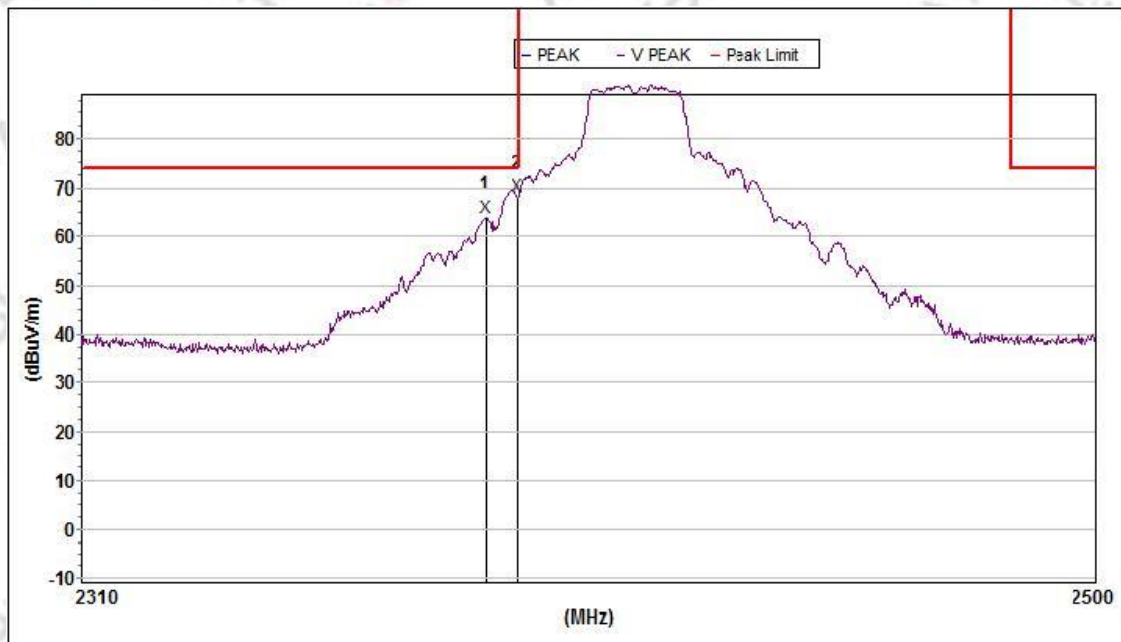
802.11N20 -Low

Horizontal



Mk.	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak								
1	2388.541196	66.9	74.0	7.1	27.3	59.6	2.8	H
2	2390.000000	65.9	74.0	8.1	27.3	59.6	2.8	H

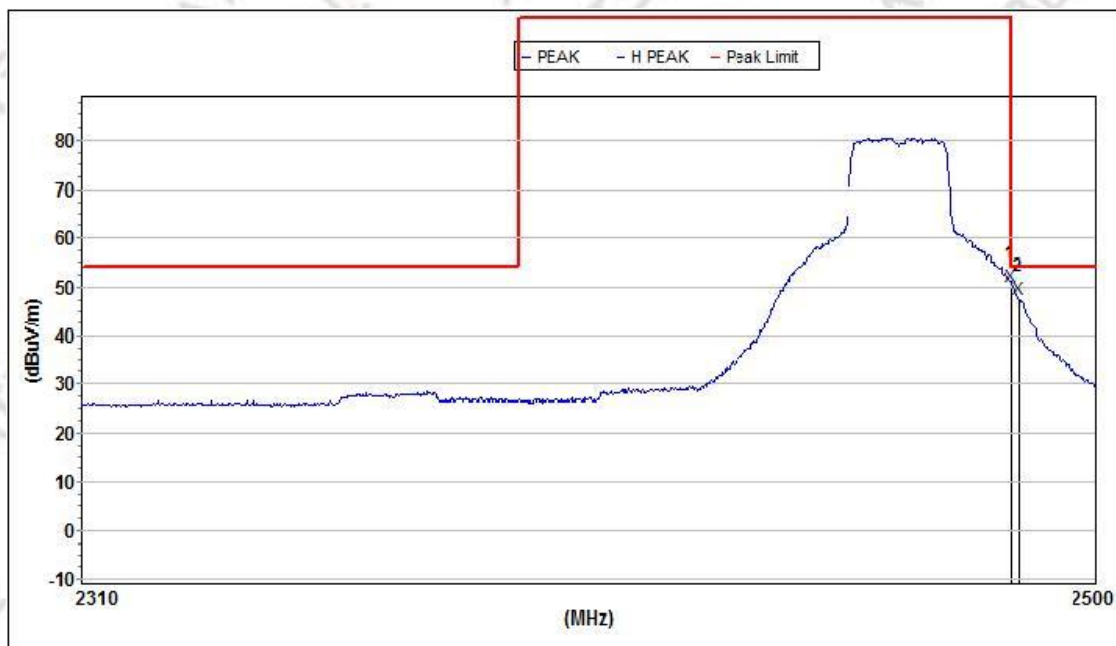
Vertical



Mk.	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak								
1	2383.825907	63.9	74.0	10.1	27.3	59.6	2.8	V
2	2390.000000	68.3	74.0	5.7	27.3	59.6	2.8	V

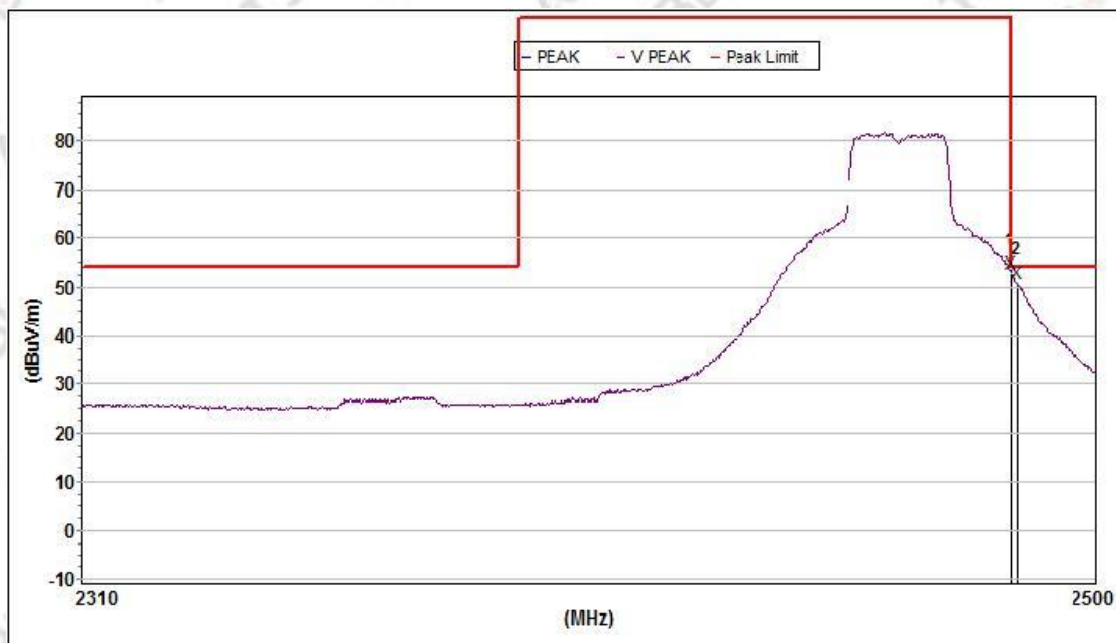
802.11N20-High

Horizontal



Mk.	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
AVG								
1	2483.501000	50.3	54.0	3.7	27.7	58.9	2.8	H
2	2485.026810	47.7	54.0	6.3	27.7	58.9	2.8	H

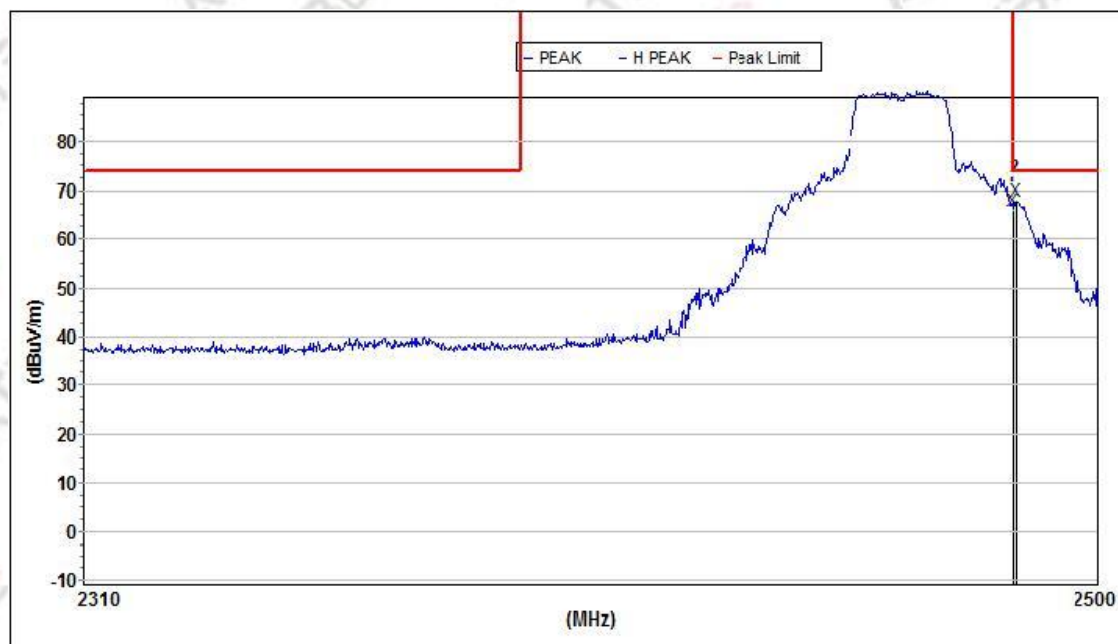
Vertical



Mk.	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
AVG								
1	2483.501000	52.8	54.0	1.2	27.7	58.9	2.8	V
2	2484.633992	50.8	54.0	3.2	27.7	58.9	2.8	V

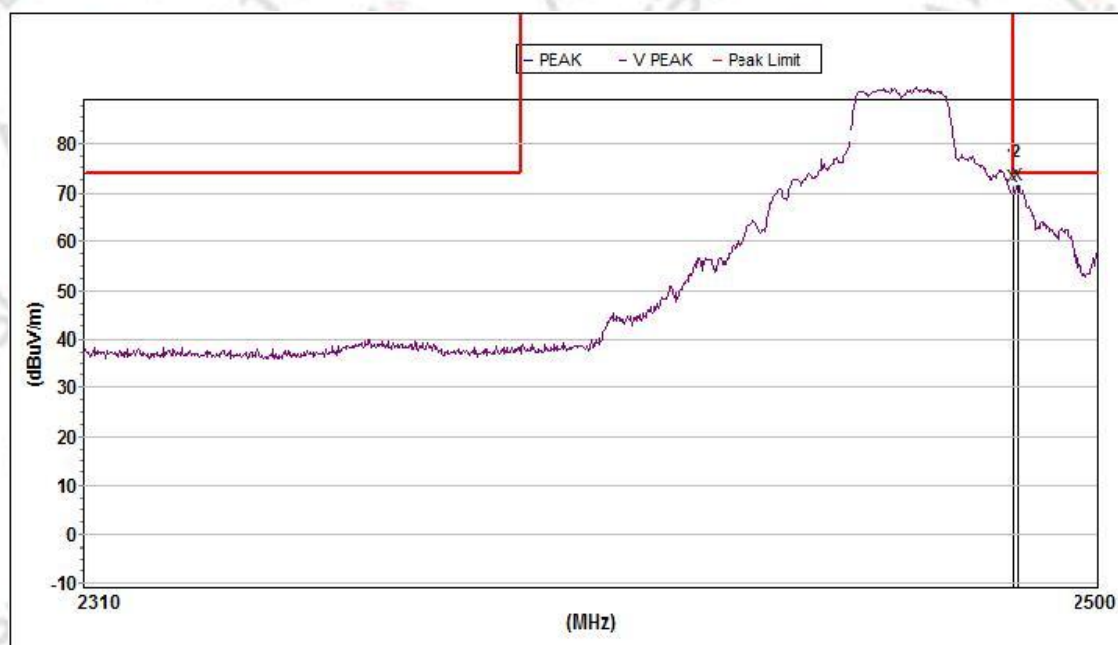
802.11N20 -High

Horizontal



Mk.	Frequency (MHz)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak								
1	2483.501000	65.9	74.0	8.1	27.7	58.9	2.8	H
2	2484.241236	68.1	74.0	5.9	27.7	58.9	2.8	H

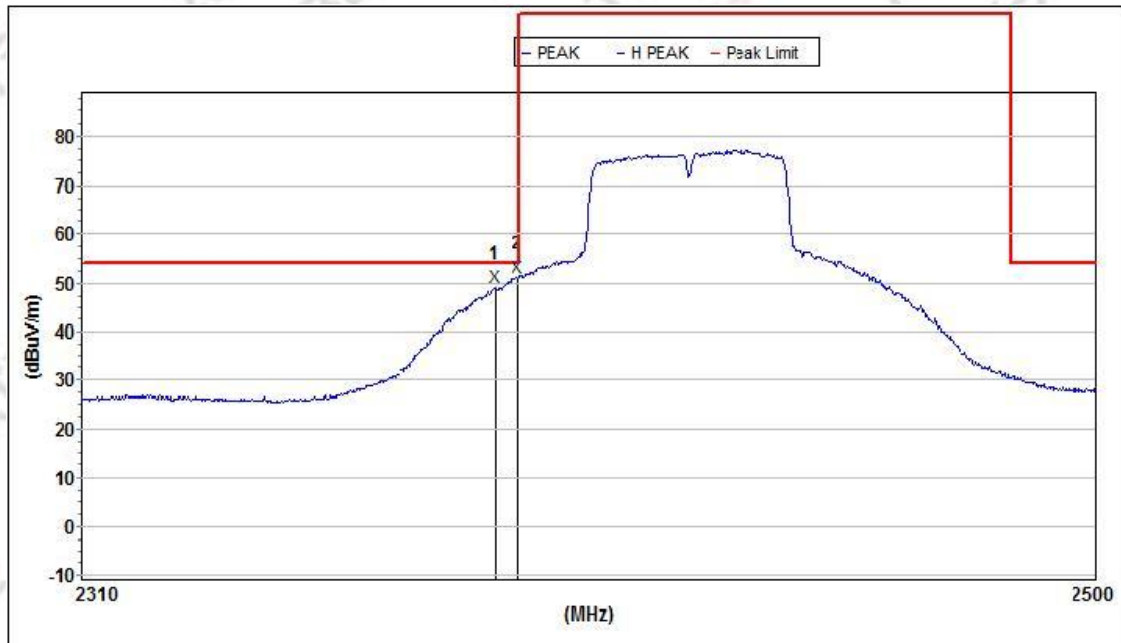
Vertical



Mk.	Frequency (MHz)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak								
1	2483.501000	71.1	74.0	2.9	27.7	58.9	2.8	V
2	2484.437606	71.7	74.0	2.3	27.7	58.9	2.8	V

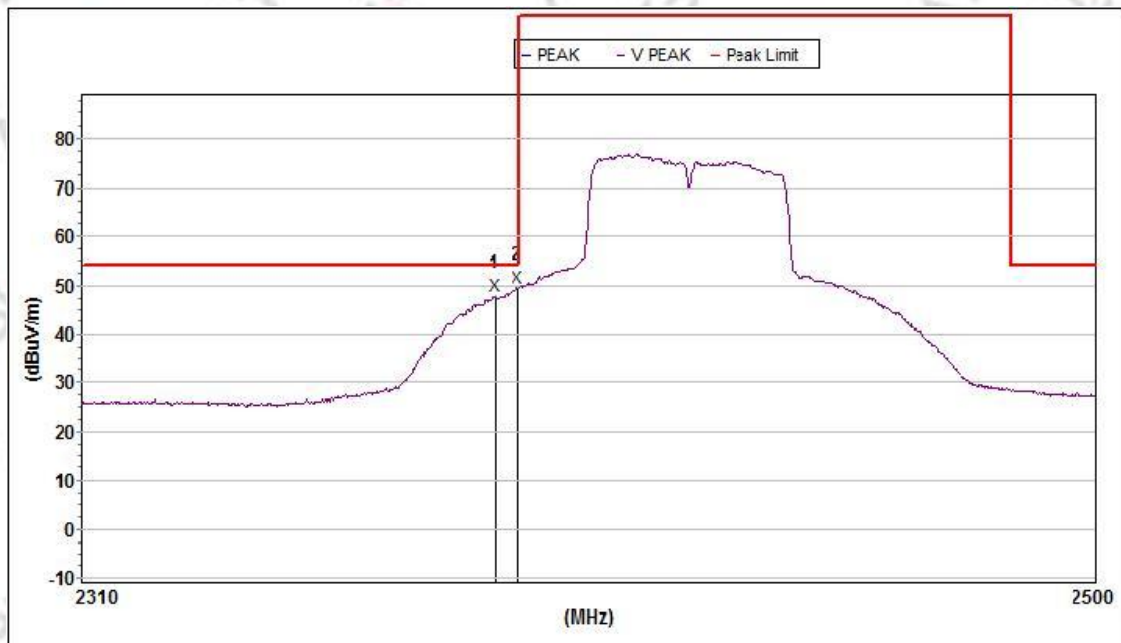
802.11N40 -Low

Horizontal



Mk.	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
AVG								
1	2385.522338	49.1	54.0	4.9	27.3	59.6	2.8	H
2	2390.000000	51.1	54.0	2.9	27.3	59.6	2.8	H

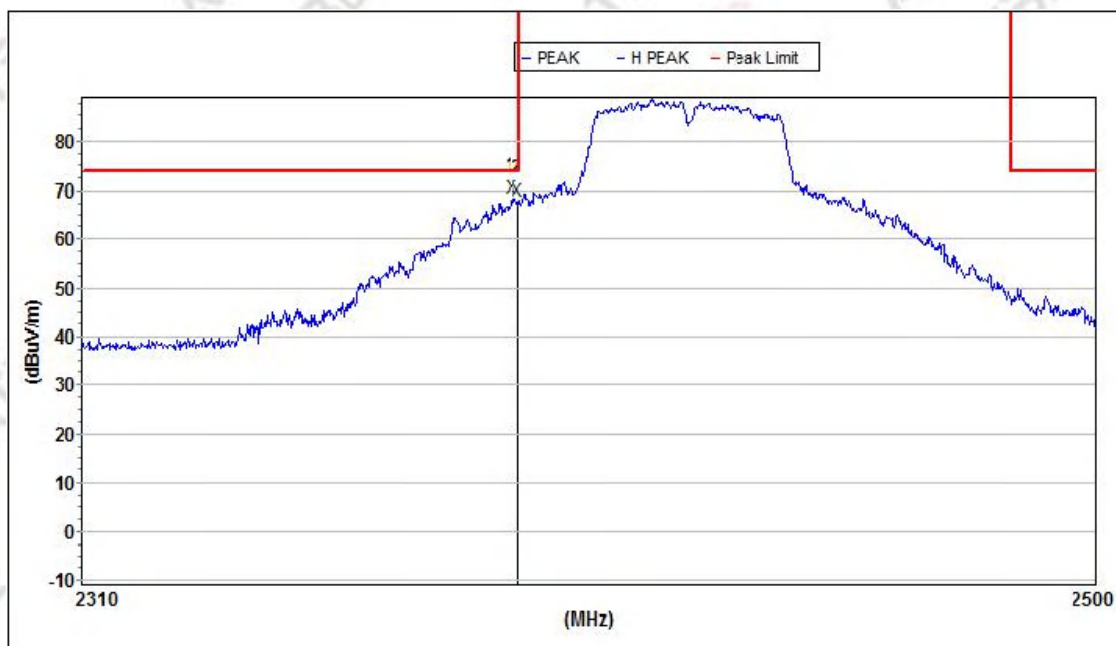
Vertical



Mk.	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
AVG								
1	2385.522338	47.9	54.0	6.1	27.3	59.6	2.8	V
2	2390.000000	49.6	54.0	4.4	27.3	59.6	2.8	V

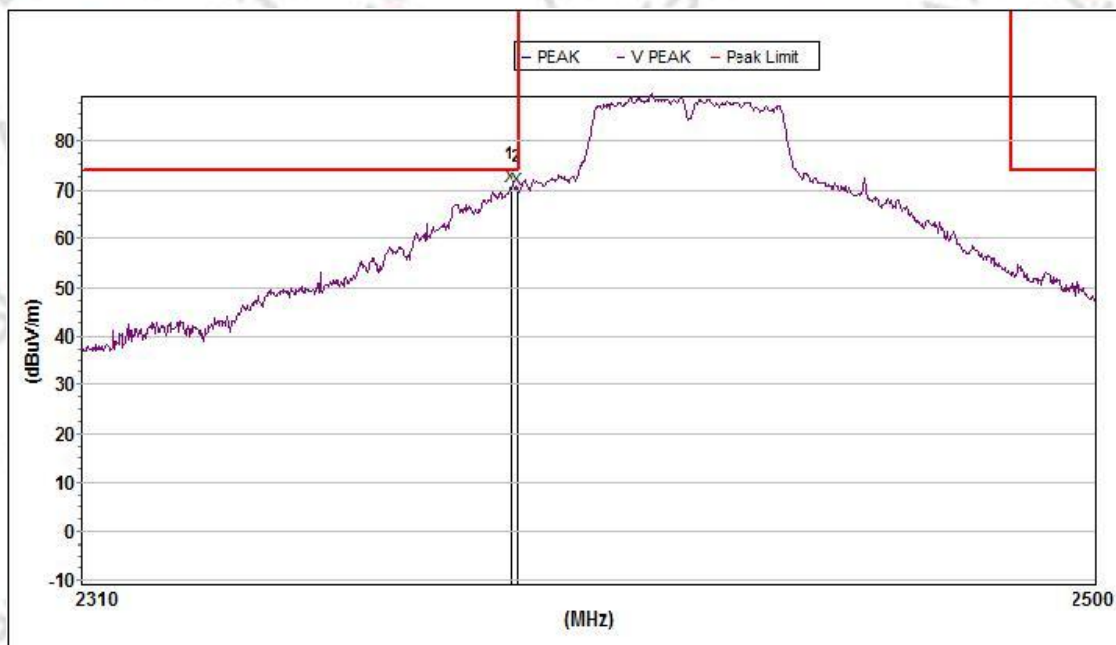
802.11N40 -Low

Horizontal



Mk.	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak								
1	2388.730001	68.6	74.0	5.4	27.3	59.6	2.8	H
2	2390.000000	68.0	74.0	6.0	27.3	59.6	2.8	H

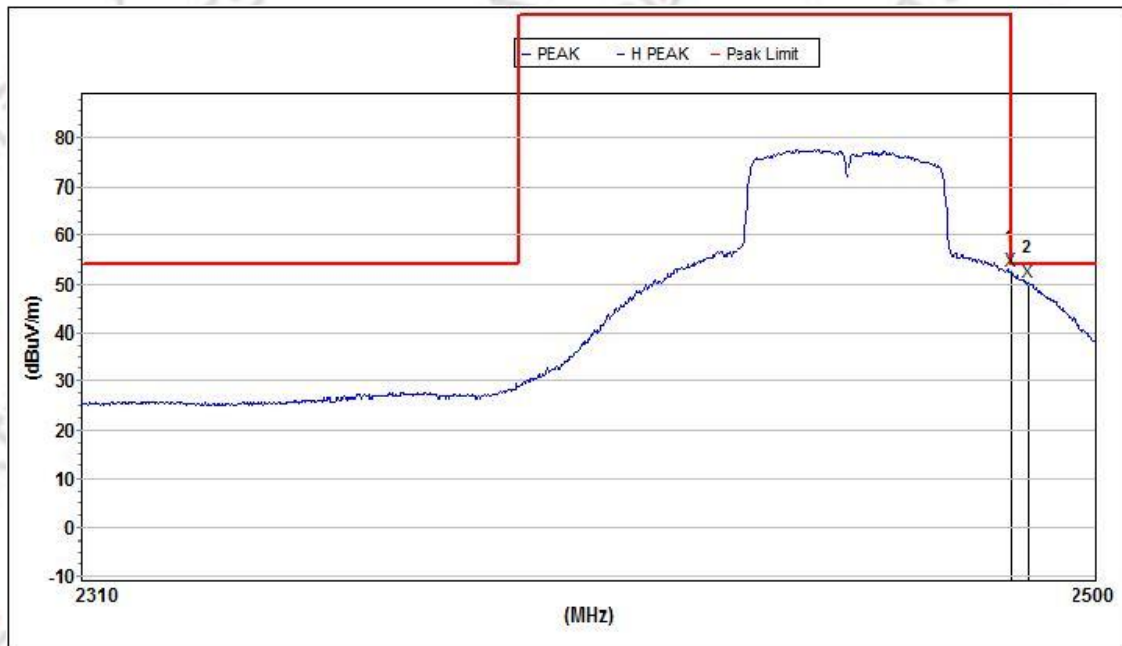
Vertical



Mk.	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak								
1	2388.541196	70.7	74.0	3.3	27.3	59.6	2.8	V
2	2390.000000	70.0	74.0	4.0	27.3	59.6	2.8	V

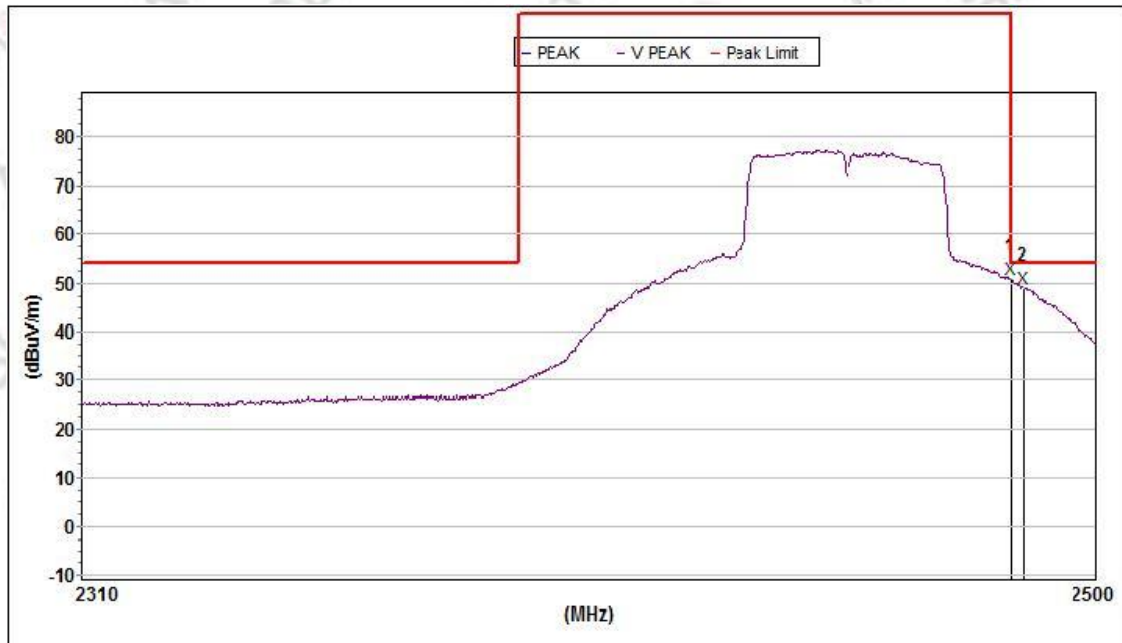
802.11N40 -High

Horizontal



Mk.	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
AVG								
1	2483.501000	52.7	54.0	1.3	27.7	58.9	2.8	H
2	2486.795259	50.6	54.0	3.4	27.7	58.9	2.8	H

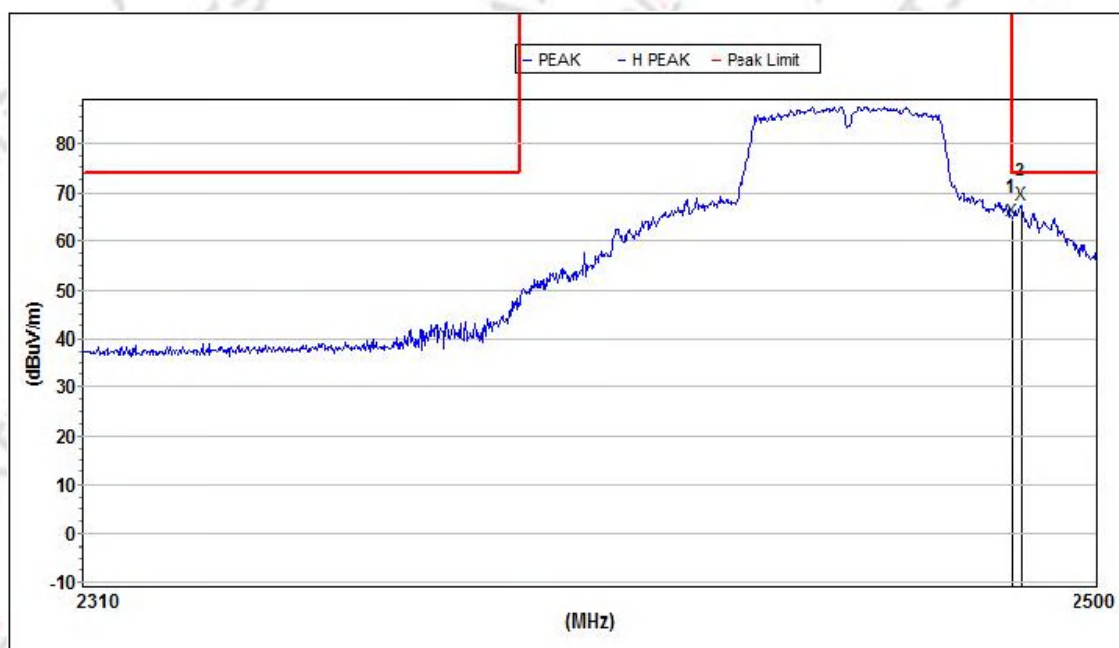
Vertical



Mk.	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
AVG								
1	2483.501000	50.8	54.0	3.2	27.7	58.9	2.8	V
2	2485.812632	48.9	54.0	5.1	27.7	58.9	2.8	V

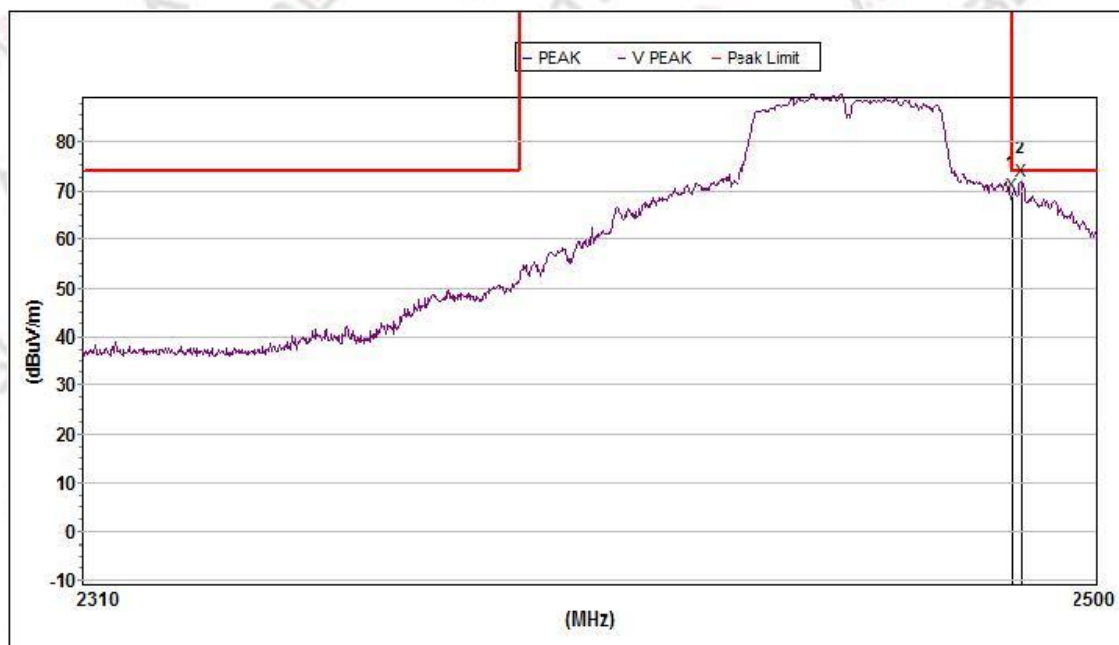
802.11N40 -High

Horizontal



Mk.	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak								
1	2483.501000	64.3	74.0	9.7	27.7	58.9	2.8	H
2	2485.419690	67.7	74.0	6.3	27.7	58.9	2.8	H

Vertical



Mk.	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak								
1	2483.501000	69.0	74.0	5.0	27.7	58.9	2.8	V
2	2485.223242	72.0	74.0	2.0	27.7	58.9	2.8	V

4.CONDUCTED SPURIOUS & BAND EDGE EMISSION

4.1 LIMIT

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.

4.2 TEST PROCEDURE

Spectrum Parameter	Setting
Detector	Peak
Start/Stop Frequency	30 MHz to 10th carrier harmonic
RB / VB (emission in restricted band)	100 kHz/300 kHz
Trace-Mode:	Max hold

For Band edge

Spectrum Parameter	Setting
Detector	Peak
Start/Stop Frequency	Lower Band Edge: 2300 to 2450 MHz Upper Band Edge: 2430 to 2580 MHz
RB / VB (emission in restricted band)	100 kHz/300 kHz
Trace-Mode:	Max hold

4.3 DEVIATION FROM STANDARD

No deviation.

4.4 TEST SETUP



The EUT which is powered by the Battery, is connected to the Spectrum Analyzer; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 100 kHz. In order to make an accurate measurement, set the span greater than RBW.

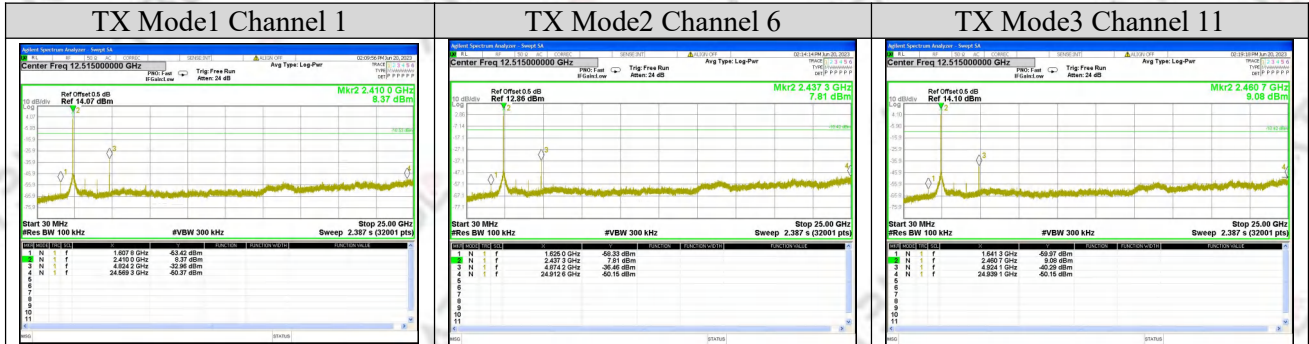
4.5 EUT OPERATION CONDITIONS

Please refer to section 3.1.4 of this report.

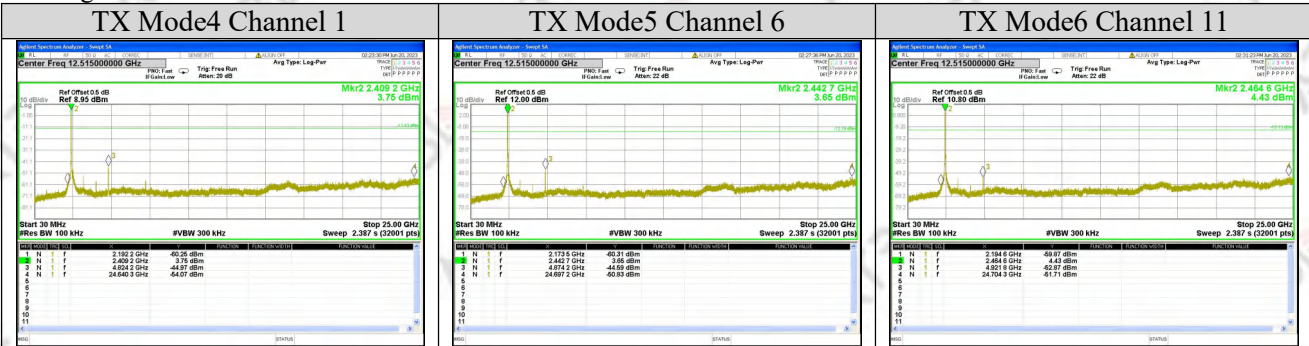
4.6 TEST RESULTS

Temperature:	22.8°C	Relative Humidity:	51%RH
Test Voltage:	DC 5V	Test Mode:	TX Mode1/2/3/4/5/6/7/8/9

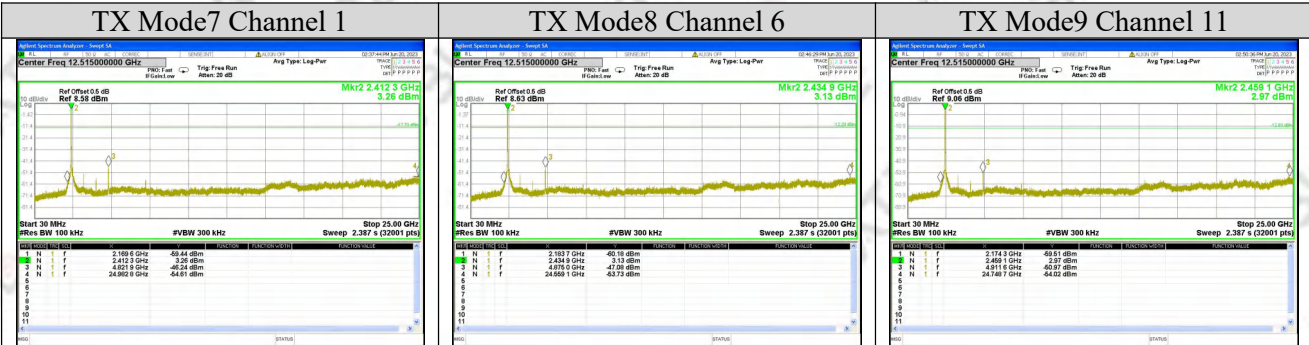
802.11b



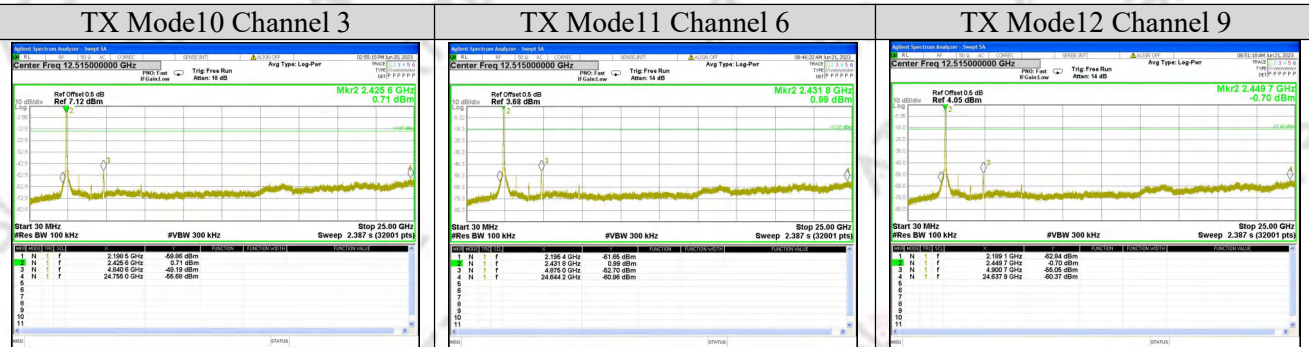
802.11g



802.11n20

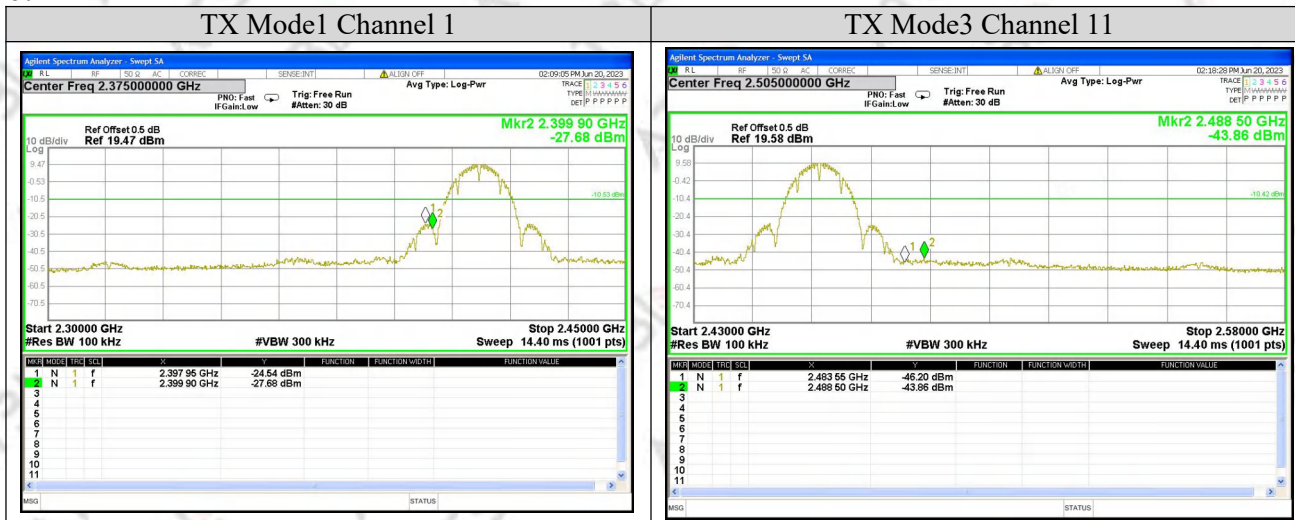


802.11n40

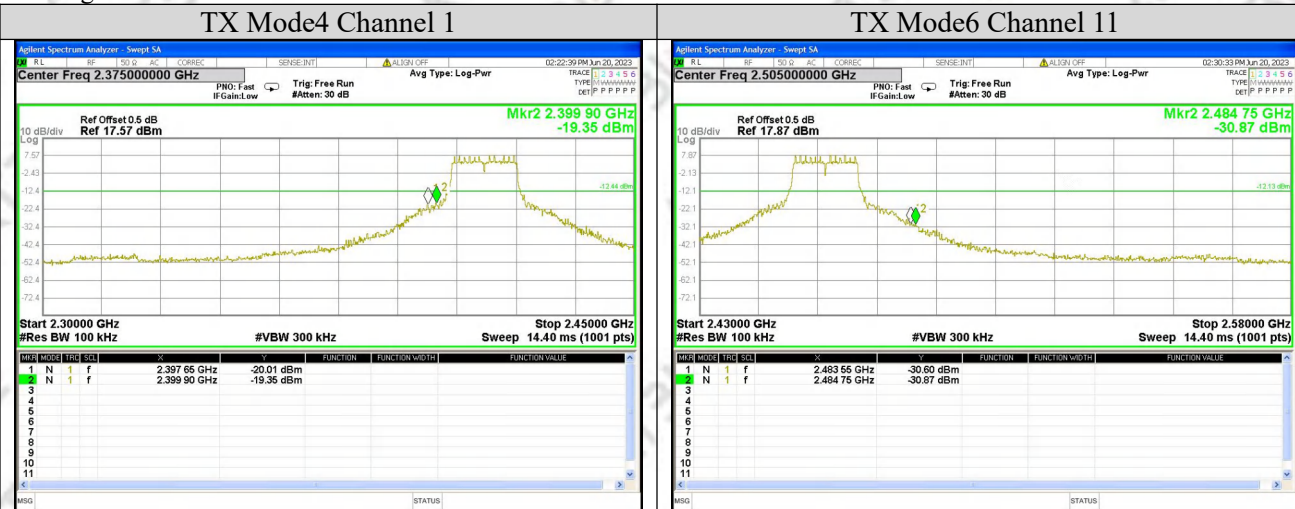


For Band edge(it's also the reference level for conducted spurious emission)

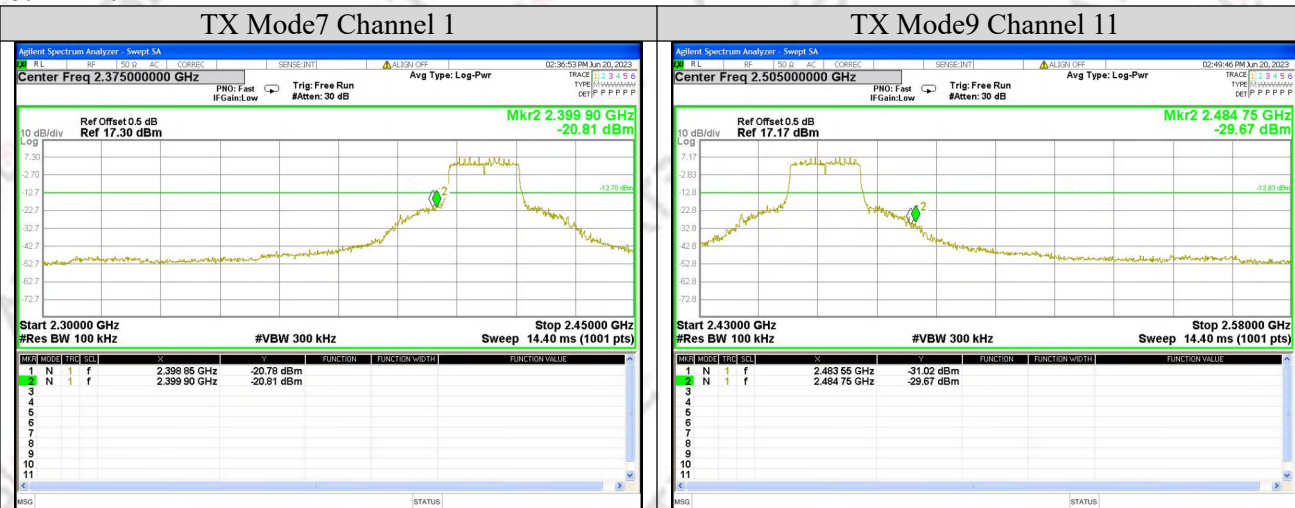
802.11b



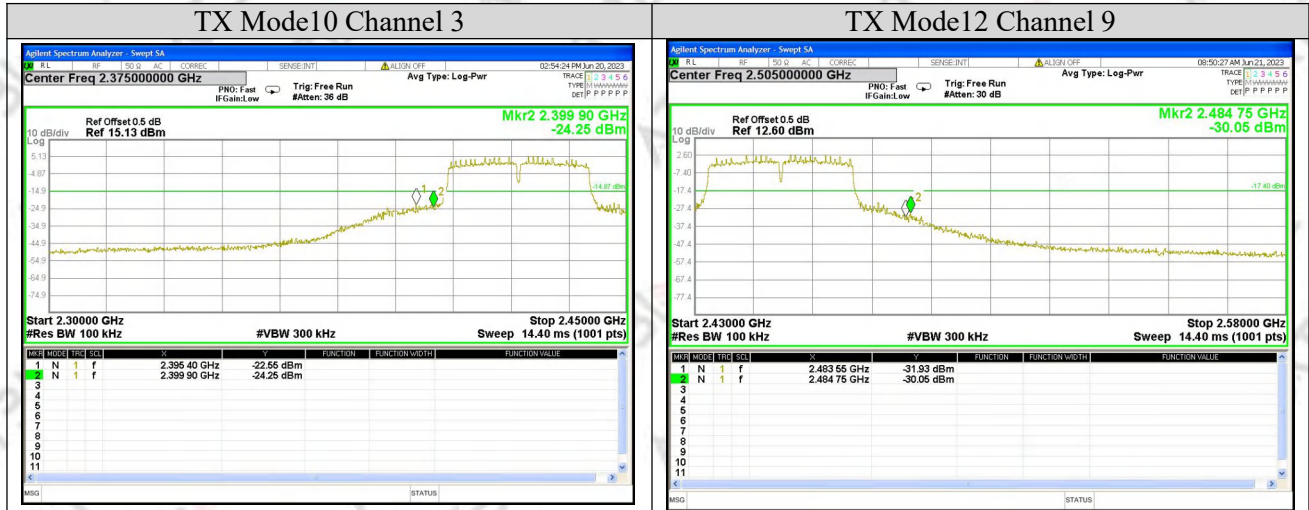
802.11g



802.11n20



802.11n40



5. POWER SPECTRAL DENSITY TEST

5.1 LIMIT

FCC Part15.247,Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(e)	Power Spectral Density	$\leq 8 \text{ dBm}$ (RBW $\geq 3 \text{ kHz}$)	2400-2483.5	PASS

5.2 TEST PROCEDURE

1. Set analyzer center frequency to DTS channel center frequency.
2. Set the span to 1.5 times the DTS channel bandwidth.
3. Set the $100 \text{ kHz} \geq \text{RBW} \geq 3 \text{ kHz}$.
4. Set the $\text{VBW} \geq 3 \times \text{RBW}$.
5. Detector = peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the peak marker function to determine the maximum amplitude level.
10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

5.3 DEVIATION FROM STANDARD

No deviation.

5.4 TEST SETUP



5.5 EUT OPERATION CONDITIONS

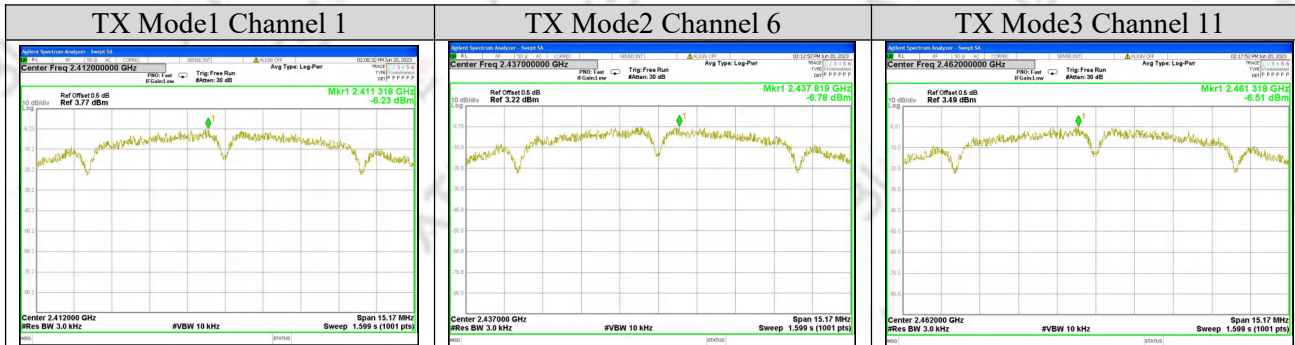
Please refer to section 3.1.4 of this report.

5.6 TEST RESULTS

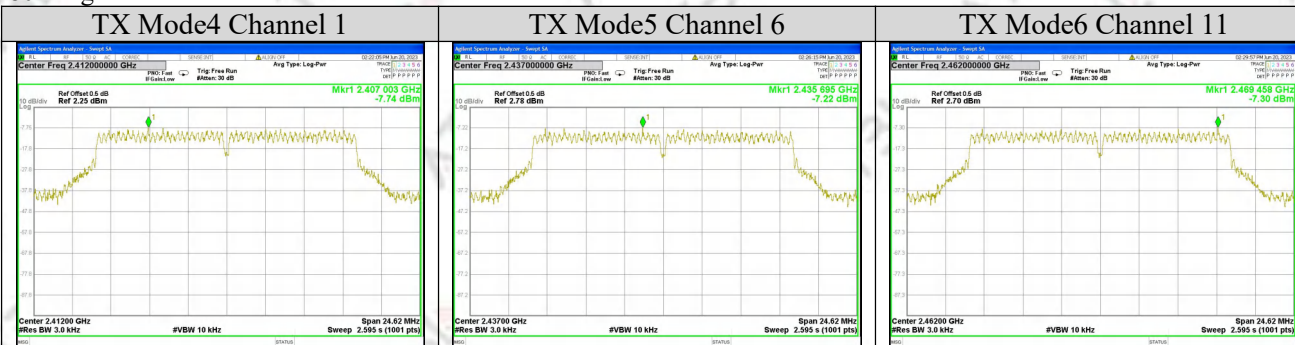
Temperature:	22.8°C	Relative Humidity:	51%RH
Test Voltage:	DC 5V	Test Mode:	TX Mode1/2/3/4/5/6/7/8/9/10/11/12

Test mode	Frequency	Power Density	Limit (3kHz/dBm)	Result
		(dBm/3kHz)		
Mode1	2412 MHz	-6.23	≤8	PASS
Mode2	2437 MHz	-6.78	≤8	PASS
Mode3	2462 MHz	-6.51	≤8	PASS
Mode4	2412 MHz	-7.74	≤8	PASS
Mode5	2437 MHz	-7.22	≤8	PASS
Mode6	2462 MHz	-7.30	≤8	PASS
Mode7	2412 MHz	-8.11	≤8	PASS
Mode8	2437 MHz	-7.13	≤8	PASS
Mode9	2462 MHz	-7.25	≤8	PASS
Mode10	2422 MHz	-10.45	≤8	PASS
Mode11	2437 MHz	-12.23	≤8	PASS
Mode12	2452 MHz	-12.44	≤8	PASS

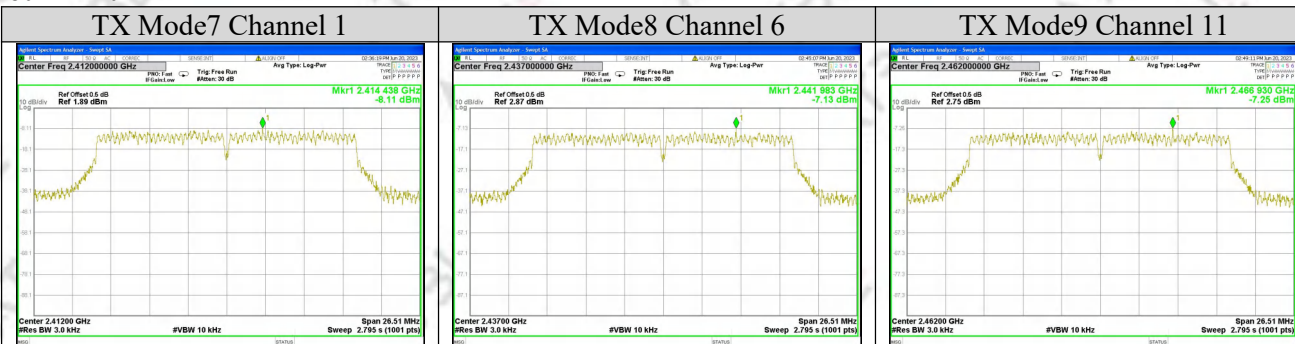
802.11b



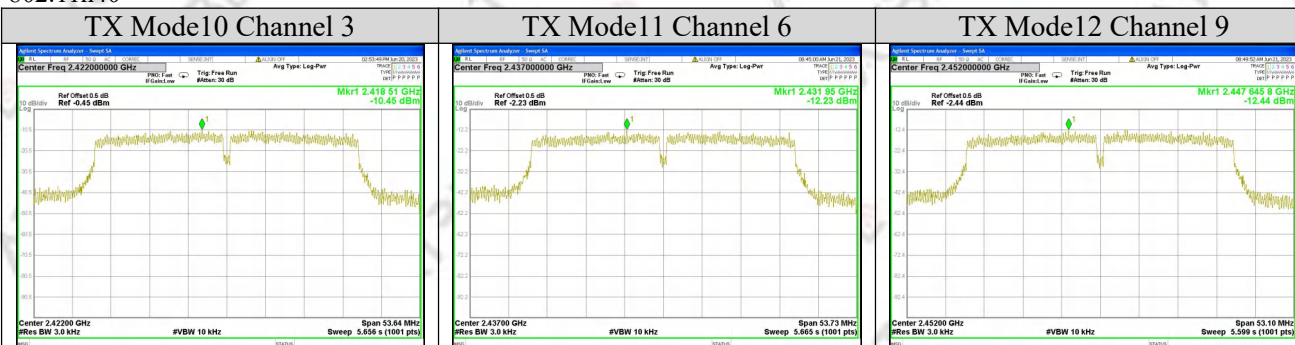
802.11g



802.11n20



802.11n40



6. BANDWIDTH TEST

6.1 LIMIT

FCC Part15.247,Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(a)(2)	Bandwidth	$\geq 500\text{kHz}$ (6dB bandwidth)	2400-2483.5	PASS
15.247	99% Bandwidth	For reporting purposes only.	2400-2483.5	PASS

6.2 TEST PROCEDURE

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 above (i.e., RBW = 100 kHz, VBW $\geq$ 3RBW, 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 $\geq$ 6 dB.

6.3 DEVIATION FROM STANDARD

No deviation.

6.4 TEST SETUP



6.5 EUT OPERATION CONDITIONS

Please refer to section 3.1.4 of this report.

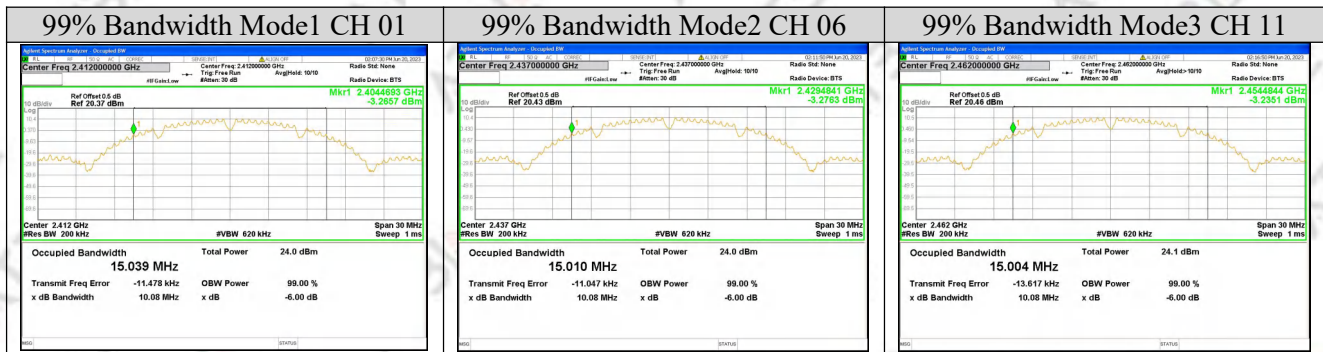
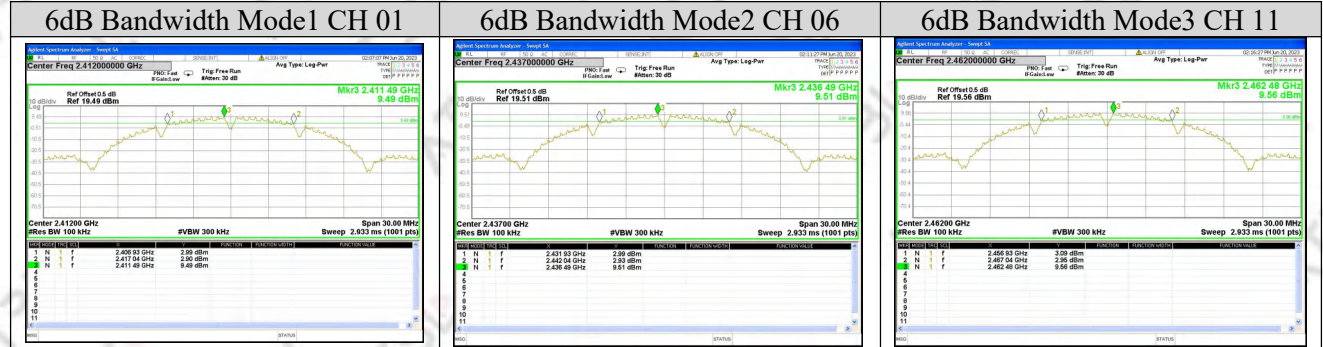
6.6 TEST RESULTS

Temperature:	22.8°C	Relative Humidity:	51%RH
Test Voltage:	DC 5V	Test Mode:	TX Mode1/2/3/4/5/6/7/8/9/10/11/12

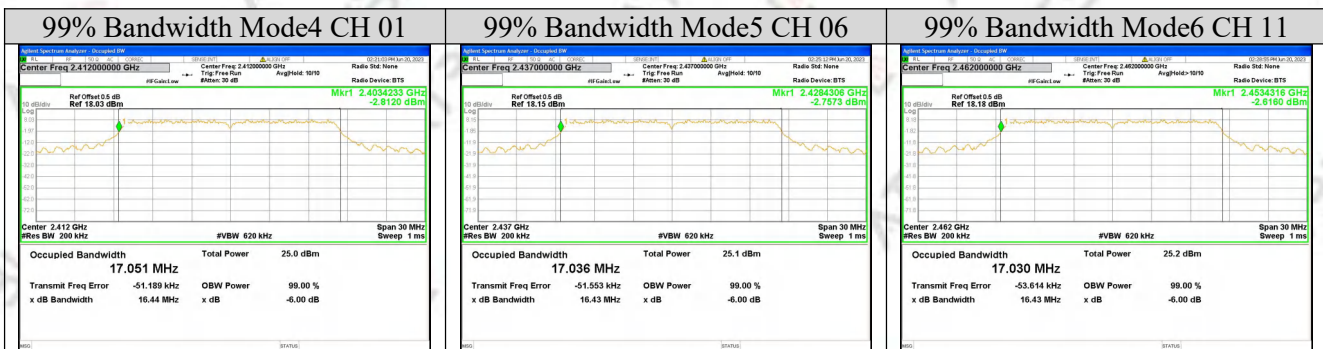
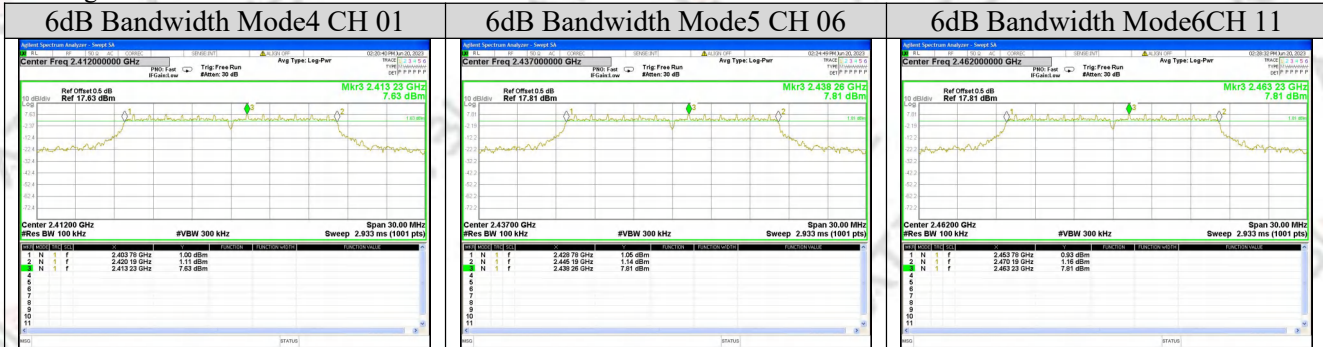
Test mode	Frequency	6dB Bandwidth (MHz)	99% Bandwidth (MHz)	6dB Bandwidth Limit(kHz)	Result
Mode1	2412 MHz	10.11	15.039	≥500kHz	PASS
Mode2	2437 MHz	10.11	15.010	≥500kHz	PASS
Mode3	2462 MHz	10.11	15.004	≥500kHz	PASS
Mode4	2412 MHz	16.41	17.051	≥500kHz	PASS
Mode5	2437 MHz	16.41	17.036	≥500kHz	PASS
Mode6	2462 MHz	16.41	17.030	≥500kHz	PASS
Mode7	2412 MHz	17.67	17.901	≥500kHz	PASS
Mode8	2437 MHz	17.67	17.891	≥500kHz	PASS
Mode9	2462 MHz	17.77	17.881	≥500kHz	PASS
Mode10	2422 MHz	35.76	36.344	≥500kHz	PASS
Mode11	2437 MHz	35.82	36.402	≥500kHz	PASS
Mode12	2452 MHz	35.40	36.308	≥500kHz	PASS

6dB Bandwidth & 99% Bandwidth

802.11b



802.11g



802.11n20

6dB Bandwidth Mode7 CH 01



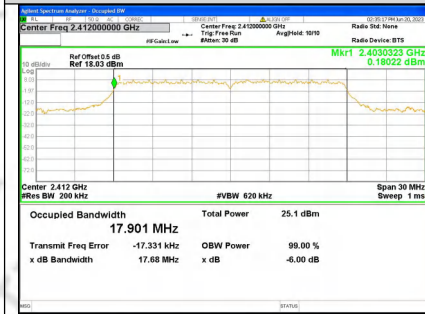
6dB Bandwidth Mode8 CH 06



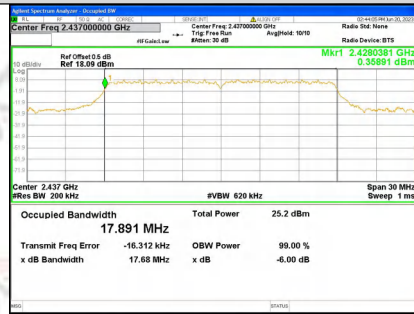
6dB Bandwidth Mode9 CH 11



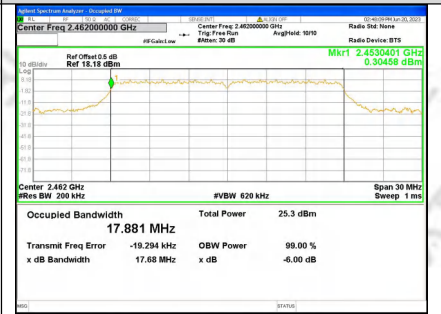
99% Bandwidth Mode7 CH 01



99% Bandwidth Mode8 CH 06

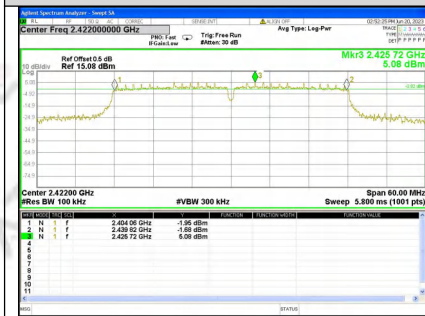


99% Bandwidth Mode9 CH 11

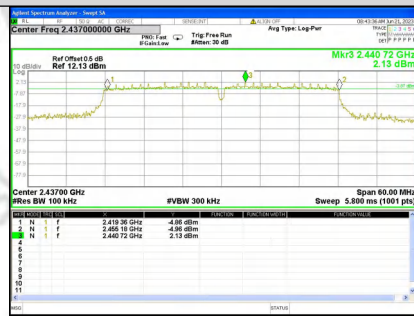


802.11n40

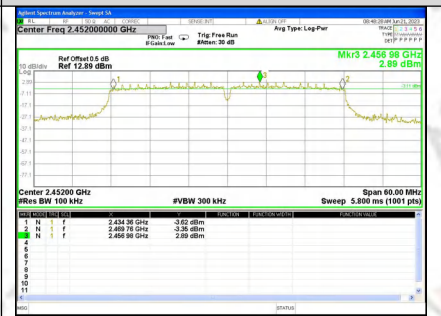
6dB Bandwidth Mode10 CH 03



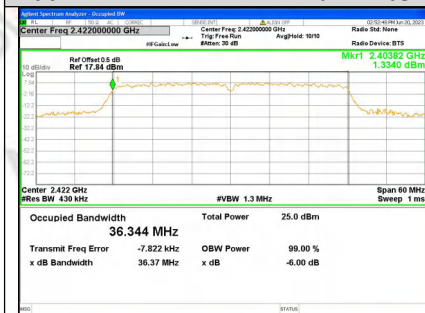
6dB Bandwidth Mode11 CH 06



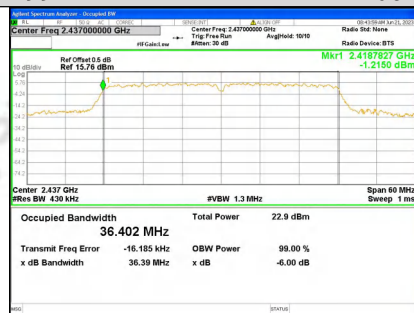
6dB Bandwidth Mode12 CH 09



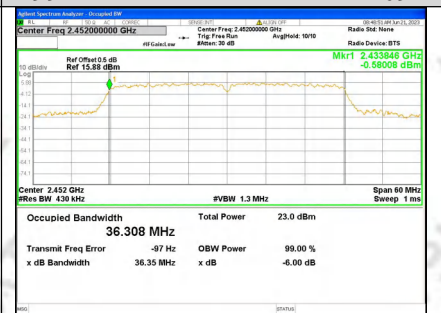
99% Bandwidth Mode10 CH 03



99% Bandwidth Mode11 CH 06



99% Bandwidth Mode12 CH 09



7. PEAK OUTPUT POWER TEST

7.1 LIMIT

FCC Part15.247				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(b)(3)	Output Power	1 watt or 30dBm	2400-2483.5	PASS

7.2 TEST PROCEDURE

PKPM1 Peak power meter method:

The maximum peak conducted output power may be measured using a broadband peak RF power meter. The power meter shall have a video bandwidth that is greater than or equal to the DTS bandwidth and shall use a fast-responding diode detector.

7.3 DEVIATION FROM STANDARD

No deviation.

7.4 TEST SETUP



7.5 EUT OPERATION CONDITIONS

Please refer to section 3.1.4 of this report.

7.6 TEST RESULTS

Temperature:	22.8°C	Relative Humidity:	51%RH
Test Voltage:	DC 5V	Test Mode:	TX Mode1/2/3/4/5/6/7/8/9/10/11/12

Test mode	Test Channel	Frequency	Average Conducted Output Power	Peak Conducted Output Power	LIMIT
		(MHz)	(dBm)	(dBm)	dBm
Mode1	CH01	2412	17.08	18.92	30
Mode2	CH06	2437	17.15	18.98	30
Mode3	CH11	2462	17.14	19.01	30
Mode4	CH01	2412	17.12	23.15	30
Mode5	CH06	2437	16.73	23.19	30
Mode6	CH11	2462	17.19	23.26	30
Mode7	CH01	2412	15.97	23.07	30
Mode8	CH06	2437	16.02	23.13	30
Mode9	CH11	2462	16.01	23.19	30
Mode10	CH 03	2422	16.13	22.82	30
Mode11	CH 06	2437	16.12	22.88	30
Mode12	CH 09	2452	16.62	22.93	30

Test Mode	Frequency	Peak Conducted Output Power	Antenna Gain	EIRP Power	LIMIT
	(MHz)	(dBm)	(dBi)	(dBm)	dBm
Mode1	2412	18.92	3.01	21.93	36
Mode2	2437	18.98	3.01	21.99	36
Mode3	2462	19.01	3.01	22.02	36
Mode4	2412	23.15	3.01	26.16	36
Mode5	2437	23.19	3.01	26.20	36
Mode6	2462	23.26	3.01	26.27	36
Mode7	2412	23.07	3.01	26.08	36
Mode8	2437	23.13	3.01	26.14	36
Mode9	2462	23.19	3.01	26.20	36
Mode10	2422	22.82	3.01	25.83	36
Mode11	2437	22.88	3.01	25.89	36
Mode12	2452	22.93	3.01	25.94	36

Note: Our power sensor test AVG power has no duty cycle display. The power sensor measures AVG power is Burst power. The software has considered the factor of the duty cycle factor, so it is unnecessary to add it again.

8. ANTENNA REQUIREMENT

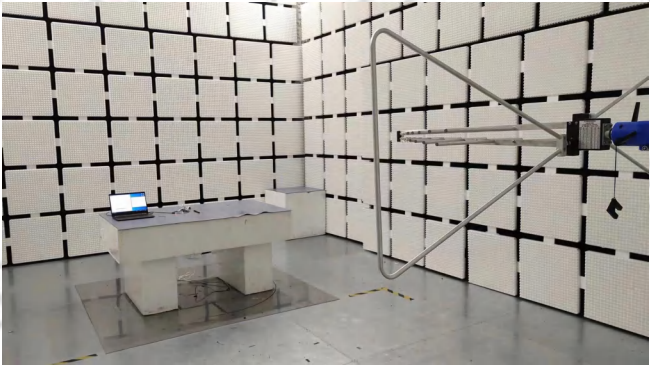
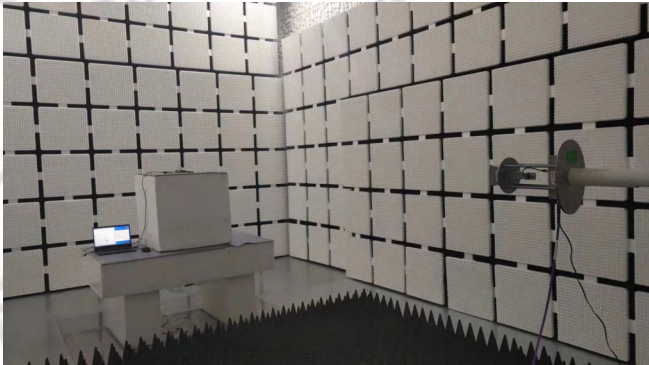
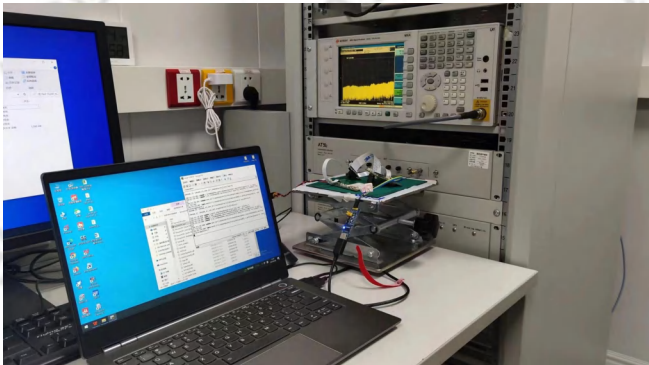
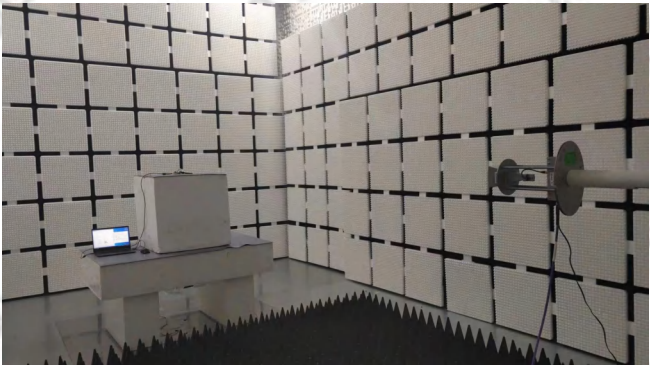
8.1 STANDARD REQUIREMENT

15.203 requirement: For intentional device, according to 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.

8.2 EUT ANTENNA

The EUT antenna is FPC Antenna. It comply with the standard requirement.

9.APPENDIX-PHOTOS OF TEST SETUP

Radiated Emissions for 30MHz-1GHz	Radiated Emissions for 1GHz-18GHz
	
Radiated Emissions for 9kHz-30MHz	Conducted for RF
	
Radiated Emissions for above 18GHz	AC Power Line Conducted Emissions
	

*****END OF THE REPORT*****