

TEST REPORT

Report No.: SHATBL2402015W02

Applicant : QUNDA Control Technology(Jiangsu)Co.,Ltd.

Product Name : Thermostat

Brand Name : 

Model Name : QD-HVAC15 WIFI (QUNDA)

FCC ID : 2BFIE-QD-HVAC15WIFI

Test Standard : FCC Part15.247

Date of Test : 2024.03.10-2024.03.18

Report Prepared by :



(Jack Suo)

Report Approved by :



(Ghost Li)

Authorized Signatory :



(Terry Yang)



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REVISION HISTORY

Rev.	Issue Date	Revisions	Revised by
00	2024.03.19	Initial Release	Ghost Li

DECLARATION OF REPORT

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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SUMMARY OF TEST RESULT

Report Section	Standard Section	Test Item	Judgment	Remark
3.1	15.247 (b)(3)	Maximum Conducted Output Power	PASS	--
3.2	15.247 (a)(2)	6dB&99% Bandwidth	PASS	--
3.3	15.247 (e)	Power Spectral Density	PASS	--
3.4	15.247(d) & 15.205	Conducted Spurious & Band Edge Emission	PASS	--
3.5	15.247(d) & 15.209 & 15.205	Radiated Spurious Emission and Restricted Band	PASS	--
3.6	15.207(a)	AC Power-Line Conducted Emission	PASS	--
3.7	15.203	Antenna Requirement	PASS	--

1. GENERAL DESCRIPTION

1.1. Applicant

Name : QUNDA Control Technology(Jiangsu)Co.,Ltd.
Address : NO.888 LongQiao Road,WuJiang Economy Development Area SuZhou,Jiangsu,China

1.2. Manufacturer

Name : QUNDA Control Technology(Jiangsu)Co.,Ltd.
Address : NO.888 LongQiao Road,WuJiang Economy Development Area SuZhou,Jiangsu,China

1.3. Factory

Name : QUNDA Control Technology(Jiangsu)Co.,Ltd.
Address : NO.888 LongQiao Road,WuJiang Economy Development Area SuZhou,Jiangsu,China

1.4. General Information of EUT

General Information	
Equipment Name	Thermostat
Brand Name	 Controller Expert
Model Name	QD-HVAC15 WIFI (QUNDA)
Series Model	QD-HVAC15 WIFI(E) QD-HVAC15 WIFI(2S) QD-HVAC15 WIFI(2S) (QUNDA) MGTH-15TWI GP-HVAC15(WIFI)
Model Difference	The same structure, different LOGO, different function (main test model is full function, series model is deletion function)
SN or IMEI Code	202401290023010
Power Rating	18-30V~Max.1.5A 50-60Hz
Hardware version	QD-HVAC15
Software version	QD-HVAC15-XSB
Connecting I/O Port(s)	Refer to the remark below.

Remark:

1. The above information of EUT was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.
2. Device voltage 18 to 36V AC 50Hz or 60Hz were verified, 24V AC 60Hz test mode is the worst mode, so AC 24V 60Hz was used for all test.

1.5. Equipment Specification

Equipment Specification	
Frequency Range	2400~2483.5 MHz
Supported Modes	802.11b/g/n
Supported Bandwidth	20 MHz
Maximum Output Power To Antenna	26.60dBm (0.4571W)
Type of Modulation	802.11b: DSSS (DBPSK/DQPSK/CCK) 802.11g/n(HT): OFDM (BPSK/QPSK/16QAM/64QAM)
Antenna Type	PCB Antenna
Antenna Gain	2.54dBi

1.6. Modification of EUT

No modifications are made to the EUT during all test items.

1.7. 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

1.8. Applicable 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 §15.247

FCC KDB 558074 D01 15.247 Meas Guidance v05r02

ANSI C63.10-2013

Remark:

All test items were verified and recorded according to the standards and without any deviation during the test.

2. TEST CONFIGURATION OF EUT

2.1. Carrier Frequency Channel

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

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

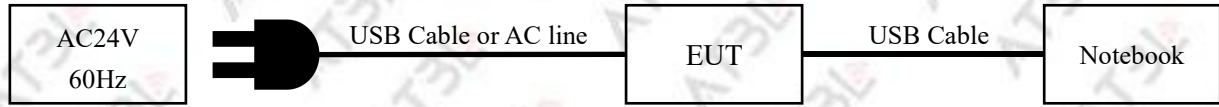
2.2. Test Modes

The table below is showing all test modes to demonstrate in compliance with the standard.

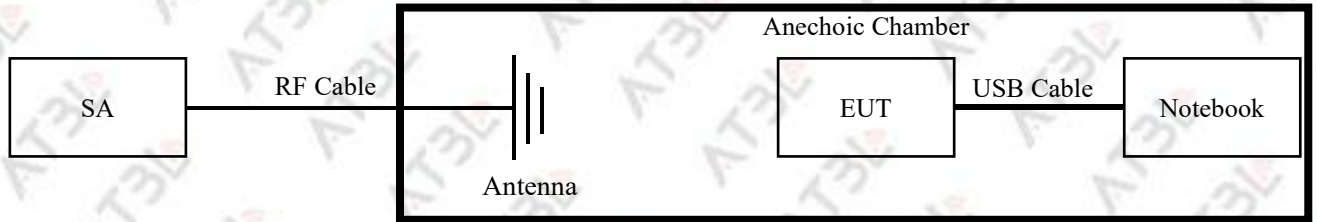
	Test Mode	Description	Data Rate
For Conducted and Radiated Test	Mode 1	TX IEEE 802.11b CH1	1Mbps
	Mode 2	TX IEEE 802.11b CH6	1Mbps
	Mode 3	TX IEEE 802.11 b CH11	1Mbps
	Mode 4	TX IEEE 802.11g CH1	6Mbps
	Mode 5	TX IEEE 802.11g CH6	6Mbps
	Mode 6	TX IEEE 802.11g CH11	6Mbps
	Mode 7	TX IEEE 802.11n HT20 CH1	MCS0
	Mode 8	TX IEEE 802.11n HT20 CH6	MCS0
	Mode 9	TX IEEE 802.11n HT20 CH11	MCS0
For AC Power-line Conducted Emission	Mode 10	Keep WIFI link under the maximum output power	

2.3. Block Diagram of Test System

2.3.1. For AC Power-Line Conducted Emission



2.3.2. For Radiated Spurious Emission



2.3.3. For Conducted Test



2.4. Description of Support Units

NO.	Unit	Brand	Model	Description
1	Notebook	Lenovo	DESKTOP-USDEO09	N/A
2	USB Cable	N/A	100cm	N/A

2.5. Test Software and Power Level

During the test, the channel and power control software provided by the customer is used to control the operation channel and output power level.

2.6. EUT Operating Conditions

For AC power-line conducted emission, the EUT was connected under the large package sizes transmission.

For radiated spurious emission and conducted test, the engineering test program was provided and make the EUT to continuous transmit/receive.

2.7. Equipment List

2.7.1. For AC Power-Line Conducted Emission

Equipment Name	Manufacturer	Model	Serial No.	Equipment No.	Calibration Until
Test Receiver	R&S	ESPI	101679	SHATBL-E012	2024.05.09
LISN	R&S	ENV216	100300	SHATBL-E013	2024.05.30
LISN	R&S	ENV216	100333	SHATBL-E041	2024.05.09
Thermometer	DeLi	N/A	N/A	SHATBL-E016	2024.09.20
Test Software	FALA	EZ-EMC	N/A	SHATBL-E046	N/A

2.7.2. For Radiated Spurious Emission

Equipment Name	Manufacturer	Model	Serial No.	Equipment No.	Calibration Until
Signal analyzer	Agilent	N9020A	MY50200811	SHATBL-E017	2024.05.09
Amplifier	JPT	JPA0118-55-303A	1910001800055000	SHATBL-E006	2024.05.09
Amplifier	JPT	JPA-10M1G32	21010100035001	SHATBL-E005	2024.05.09
Antenna/Turn table Controller	Brilliant	N/A	N/A	SHATBL-E007	N/A
Loop Antenna	Daze	ZN30900C	20077	SHATBL-E042	2024.05.09
Bilog Antenna	SCHWARZBECK	VULB 9168	01174	SHATBL-E008	2024.05.12
Broad-band Horn Antenna	SCHWARZBECK	BBHA 9120D	02334	SHATBL-E009	2024.05.12
Horn Antenna	COM-POWER	AH-1840	10100008	SHATBL-E043	2024.05.09
Thermometer	DeLi	N/A	N/A	SHATBL-E015	2024.09.20
Test Software	FALA	EMC-RI	N/A	SHATBL-E046	N/A

2.7.3. For Conducted Test

Equipment Name	Manufacturer	Model	Serial No.	Equipment No.	Calibration Until
Power meter	Anritsu	ML2496A	1935001	SHATBL-W030	2024.07.09
Power sensor	Anritsu	MA2411B	1911006	SHATBL-W031	2024.07.09
Power sensor	DARE	RPR3006W	16I00054SN016	SHATBL-W008	2024.07.09
Power sensor	DARE	RPR3006W	RPR6W-2001005	SHATBL-W032	2024.07.09
Power sensor	Rediteq	RPR3006W	RPR6W-2201002	SHATBL-W033	2024.07.09
Power sensor	Rediteq	RPR3006W	RPR6W-2201003	SHATBL-W034	2024.07.09
Power sensor	Keysight	U2021XA	MY59120004	SHATBL-W035	2024.07.09
Adjustable Attenuator	Agilent	8494B	MY42144015	SHATBL-W009	2024.07.09
Adjustable Attenuator	Agilent	8496B	MY42143776	SHATBL-W010	2024.07.09
Environmental Test Chamber	KSON	THS-B6C-150	9159K	SHATBL-W019	2025.01.15
Signal analyzer	Keysight	N9020A	MY50510136	SHATBL-W003	2024.07.09
Vector signal generator	Keysight	N5182B	MY57300196	SHATBL-W005	2024.07.09
Vector signal generator	Agilent	N5182A	MY50143555	SHATBL-W037	2024.07.09
Analog signal generator	Keysight	N5173B	MY60403026	SHATBL-W038	2024.07.09
Wideband radio communication tester	R&S	CMW500	101331	SHATBL-W007	2024.07.09
Spectrum analyzer	R&S	FSV40-N	101761	SHATBL-W036	2024.07.09
Switch Box	N/A	RFSW3003328	RFSW201019	SHATBL-W029	N/A
Thermometer	DeLi	N/A	N/A	SHATBL-W012	2024.07.09
Test Software	FALA	LZ-RF	N/A	SHATBL-W020	N/A

2.8. 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	$\pm 0.886\text{dB}$

3. TEST RESULT

3.1. Maximum Peak Conducted Output Power

3.1.1. Limit

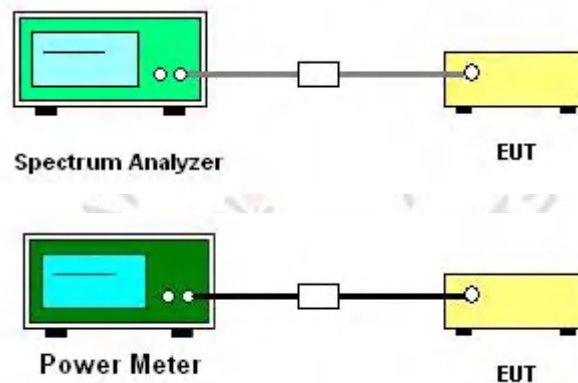
FCC Part15.247				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(b)(3)	Output Power	1 watt or 30dBm	2400-2483.5	PASS

3.1.2. 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.

3.1.3. Test Setup



3.1.4. Test Result of

Please refer to Appendix A for the test data.

3.2. 6dB Bandwidth and 99% Bandwidth

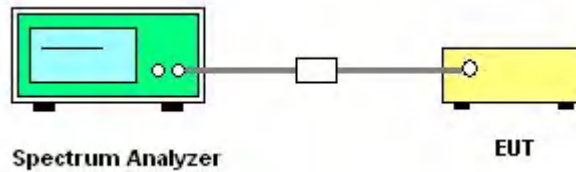
3.2.1. Limit

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

3.2.2. 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.

3.2.3. Test Setup



3.2.4. Test Result of Number of

Please refer to Appendix A for the test data.

3.3. Power Spectral Density

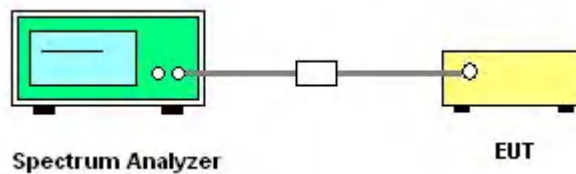
3.3.1. Limit

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

3.3.2. 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.

3.3.3. Test Setup



3.3.4. Test Result of

Please refer to Appendix A for the test data.

3.4. Conducted Spurious & Band Edge Emission

3.4.1. 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.

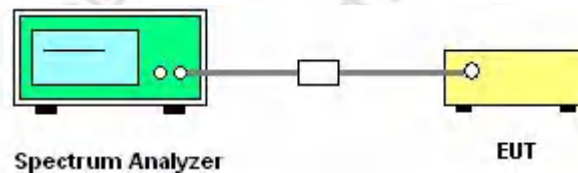
3.4.2. Test Procedure

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

3.4.3. 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.

3.4.4. Test Result of

Please refer to Appendix A for the test data.

3.5. Radiated Spurious Emission and Restricted Band

3.5.1. Limit

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

Note:

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).

47 CFR 15.205(a): Only spurious emissions are permitted in any of the frequency bands listed below:

Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (MHz)
0.090-0.110	12.29-12.293	149.9-150.05	1660-1710	8.025-8.5
0.495-0.505	12.51975-12.52025	156.52475-156.52525	1718.8-1722.2	9.0-9.2
2.1735-2.1905	12.57675-12.57725	156.7-156.9	2200-2300	9.3-9.5
4.125-4.128	13.36-13.41	162.0125-167.17	2310-2390	10.6-12.7
4.17725-4.17775	16.42-16.423	167.72-173.2	2483.5-2500	13.25-13.4
4.20725-4.20775	16.69475-16.69525	240-285	2690-2900	14.47-14.5
6.215-6.218	16.80425-16.80475	322-335.4	3260-3267	15.35-16.2
6.26775-6.26825	25.5-25.67	399.9-410	3332-3339	17.7-21.4
6.31175-6.31225	37.5-38.25	608-614	3345.8-3358	22.01-23.12
8.291-8.294	73-74.6	960-1240	3600-4400	23.6-24.0
8.362-8.366	74.8-75.2	1300-1427	4500-5150	31.2-31.8
8.37625-8.38675	108-121.94	1435-1626.5	5350-5460	36.43-36.5
8.41425-8.41475	123-138	1645.5-1646.5	7250-7750	Above 38.6

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

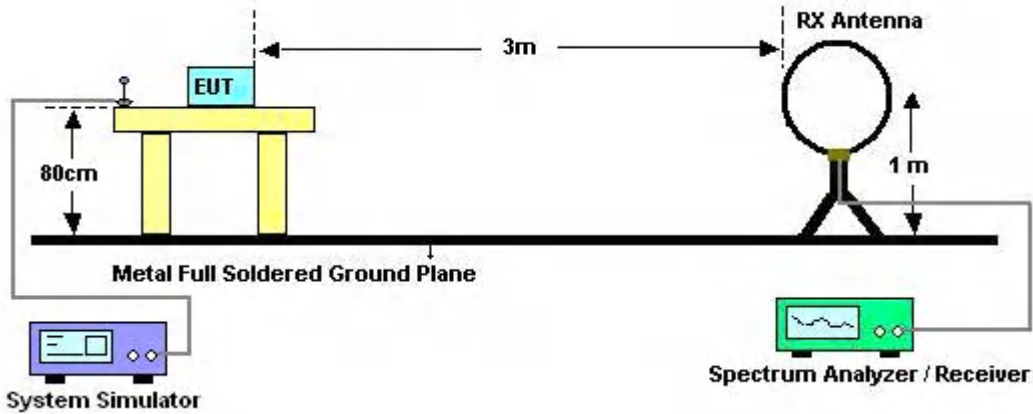
3.5.2. Test Procedure

1. The measuring distance at 3 m shall be used for measurements at frequency 0.009MHz up to 1GHz,and above 1GHz.
2. 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.
3. 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.
4. 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.
5. 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.
6. For the actual test configuration, please refer to the related Item –EUT Test Photos.

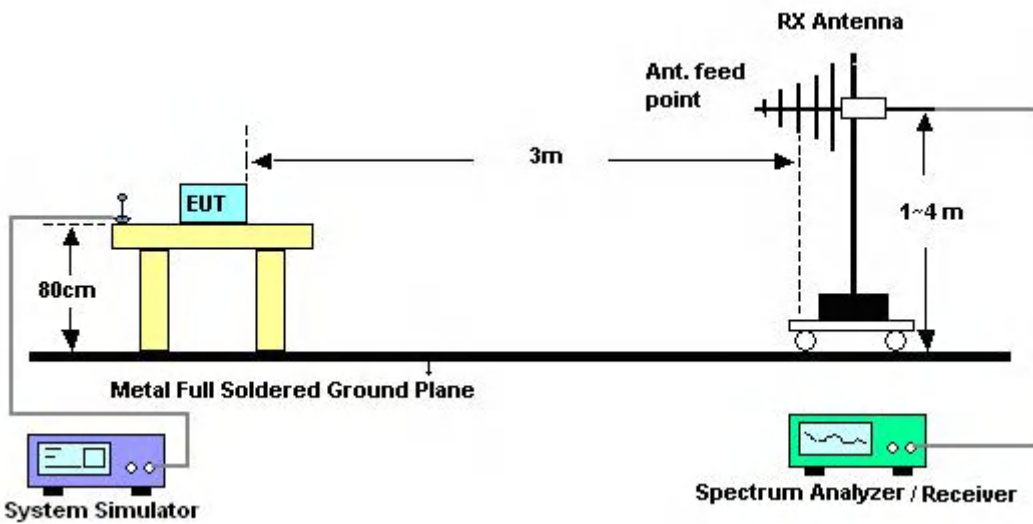
Note: Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported.

3.5.3. Test Setup

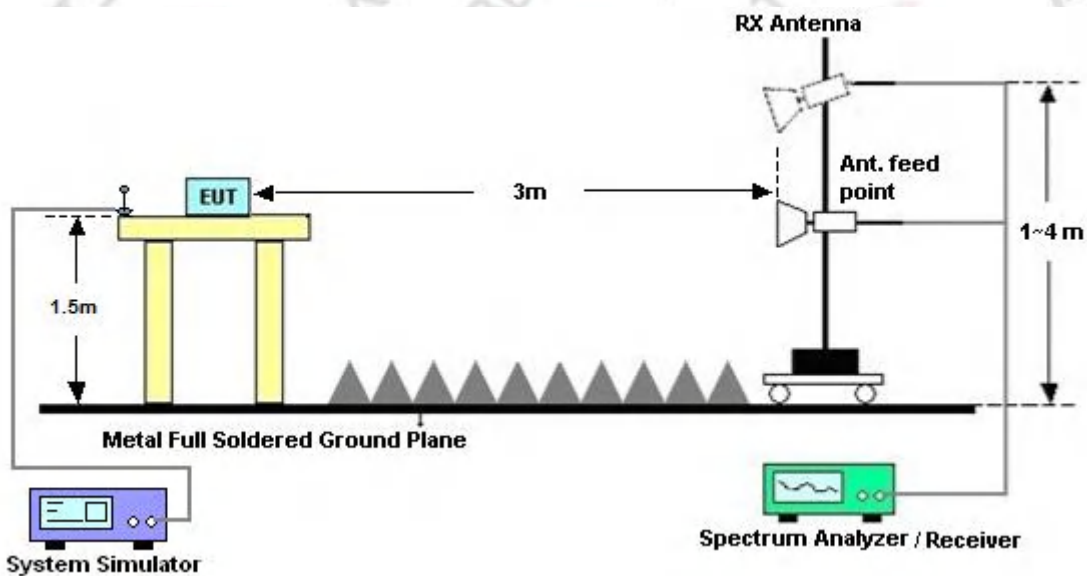
3.5.3.1. For radiated emissions below 30MHz



3.5.3.2. For radiated emissions from 30MHz to 1GHz



3.5.3.3. For radiated emissions above 1GHz



3.5.4. Test Result of

3.5.4.1. For 9 kHz ~ 30 MHz

Please refer to the Appendix B.

3.5.4.2. For 30 MHz ~ 1 GHz

Please refer to the Appendix B.

3.5.4.3. For 1 GHz ~ 18GHz

Please refer to the Appendix B.

3.5.4.4. For above 18GHz

Please refer to the Appendix B.

3.5.4.5. For above Restricted Band

Please refer to the Appendix B.

3.6. AC Power-Line Conducted Emission

3.6.1. Limit

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

3.6.2. 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.

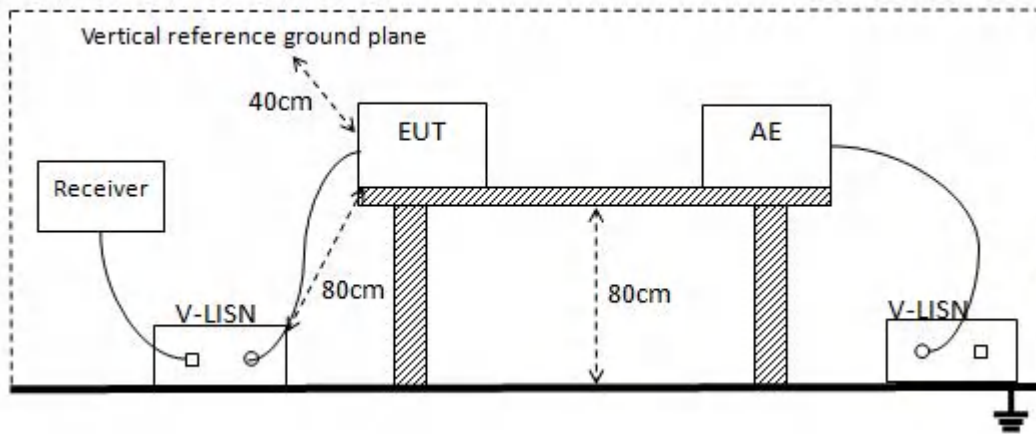
Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.

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.

3.6.3. Test Setup



3.6.4. Test Result of

Please refer to Appendix C for the test data.

3.7. Antenna Requirement

3.7.1. Standard Requirement

According to 47 CFR 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.

3.7.2. EUT Antenna

The antenna used for the EUT is PCB antenna, which meets the antenna requirements.

4. Test Setup Photographs

Please refer to Appendix D.

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

Appendix A _ Conducted Test Data

3.1.4. Test Result of Maximum Peak Conducted Output Power

Temperature:	25 °C	Relative Humidity:	60%RH
Test Voltage:	AC 24V	Test Mode:	TX Mode1/2/3/4/5/6/7/8/9

Test mode	Test Channel	Frequency	Average Conducted Output Power	Peak Conducted Output Power	LIMIT
		(MHz)	(dBm)	(dBm)	dBm
Mode1	CH01	2412	17.04	19.73	30
Mode2	CH06	2437	17.91	20.56	30
Mode3	CH11	2462	17.62	20.12	30
Mode4	CH01	2412	17.54	24.02	30
Mode5	CH06	2437	18.21	24.11	30
Mode6	CH11	2462	17.31	24.05	30
Mode7	CH01	2412	17.10	24.02	30
Mode8	CH06	2437	17.72	24.06	30
Mode9	CH11	2462	16.61	23.92	30

EIRP Power

Test Mode	Frequency	Peak Conducted Output Power	Antenna Gain	EIRP Power	LIMIT
	(MHz)	(dBm)	(dBi)	(dBm)	dBm
Mode1	2412	19.73	2.54	22.27	36
Mode2	2437	20.56	2.54	23.10	36
Mode3	2462	20.12	2.54	22.66	36
Mode4	2412	24.02	2.54	26.56	36
Mode5	2437	24.11	2.54	26.65	36
Mode6	2462	24.05	2.54	26.59	36
Mode7	2412	24.02	2.54	26.56	36
Mode8	2437	24.06	2.54	26.60	36
Mode9	2462	23.92	2.54	26.46	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.

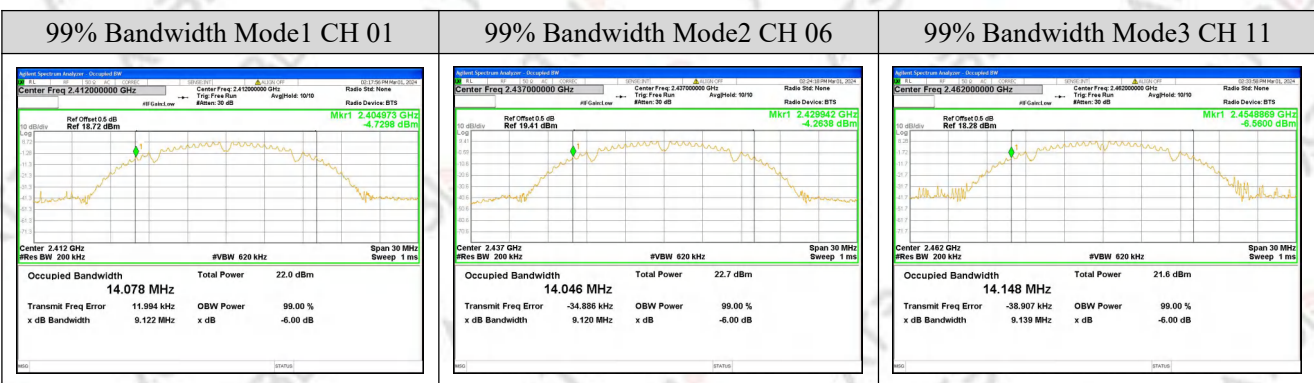
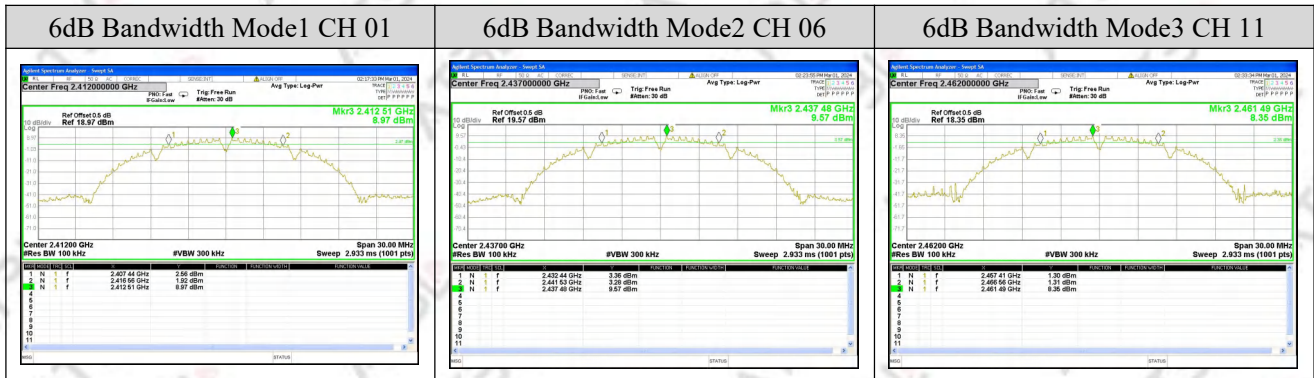
3.2.4. Test Result of Number of 6dB Bandwidth and 99% Bandwidth

Temperature:	25 °C	Relative Humidity:	60%RH
Test Voltage:	AC 24V	Test Mode:	TX Mode1/2/3/4/5/6/7/8/9

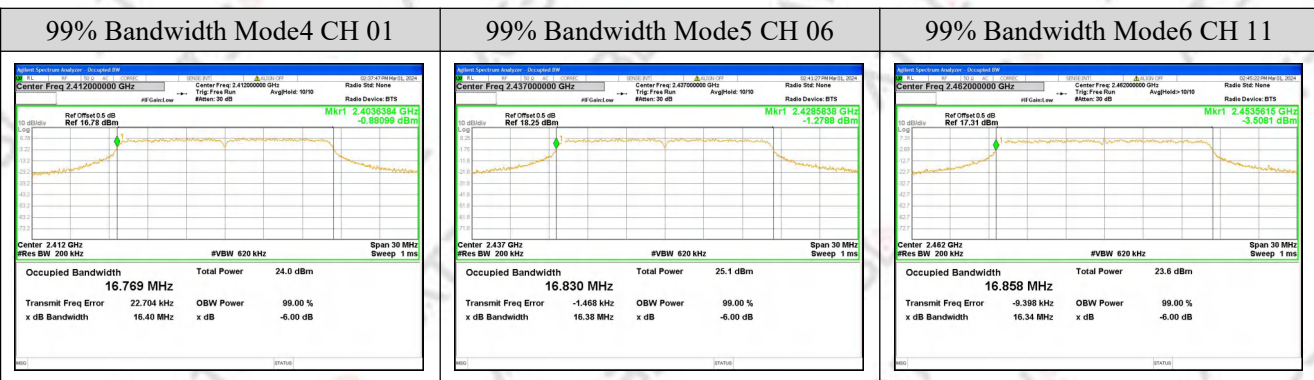
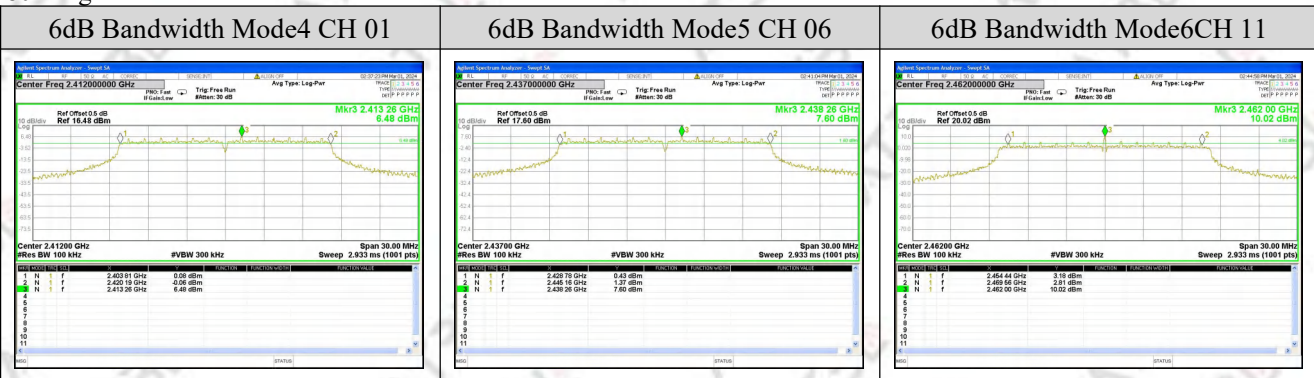
Test mode	Frequency	6dB Bandwidth (kHz)	99% Bandwidth (MHz)	6dB Bandwidth Limit(kHz)	Result
Mode1	2412 MHz	912	14.078	≥500	PASS
Mode2	2437 MHz	909	14.046	≥500	PASS
Mode3	2462 MHz	915	14.148	≥500	PASS
Mode4	2412 MHz	1638	16.769	≥500	PASS
Mode5	2437 MHz	1638	16.830	≥500	PASS
Mode6	2462 MHz	1512	16.858	≥500	PASS
Mode7	2412 MHz	1761	17.863	≥500	PASS
Mode8	2437 MHz	1761	17.862	≥500	PASS
Mode9	2462 MHz	1758	17.895	≥500	PASS

6dB Bandwidth & 99% Bandwidth

802.11b

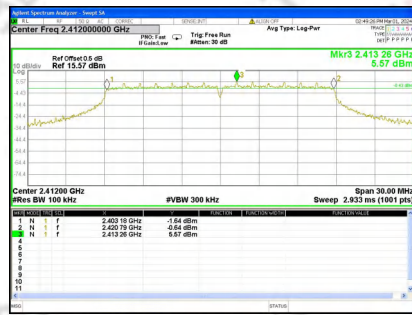


802.11g

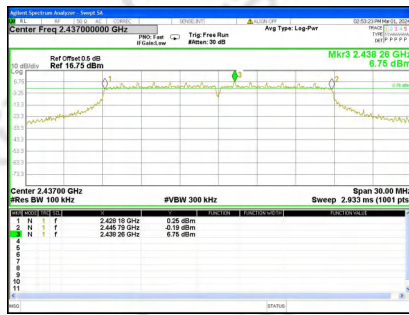


802.11n20

6dB Bandwidth Mode7 CH 01



6dB Bandwidth Mode8 CH 06



6dB Bandwidth Mode9 CH 11



99% Bandwidth Mode7 CH 01



99% Bandwidth Mode8CH 06



99% Bandwidth Mode9 CH 11

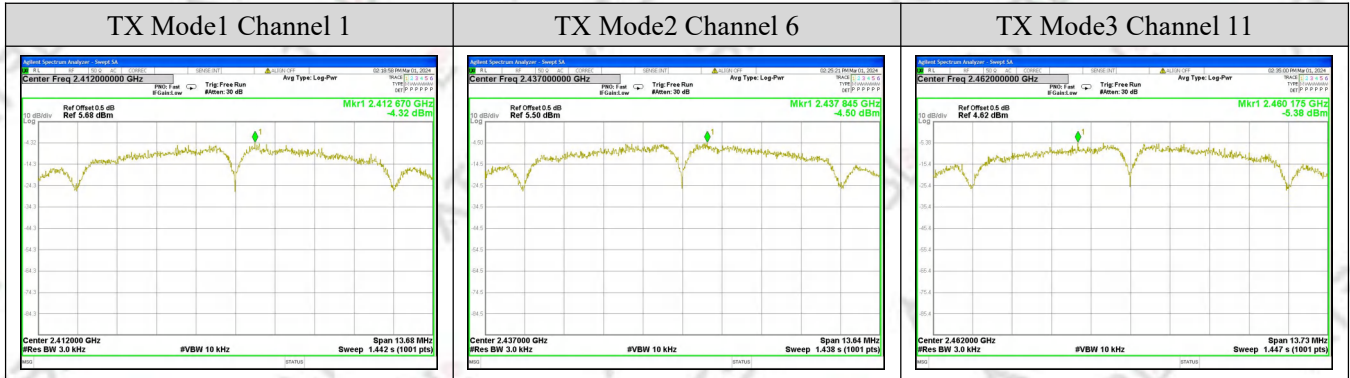


3.3.4. Test Result of Power Spectral Density

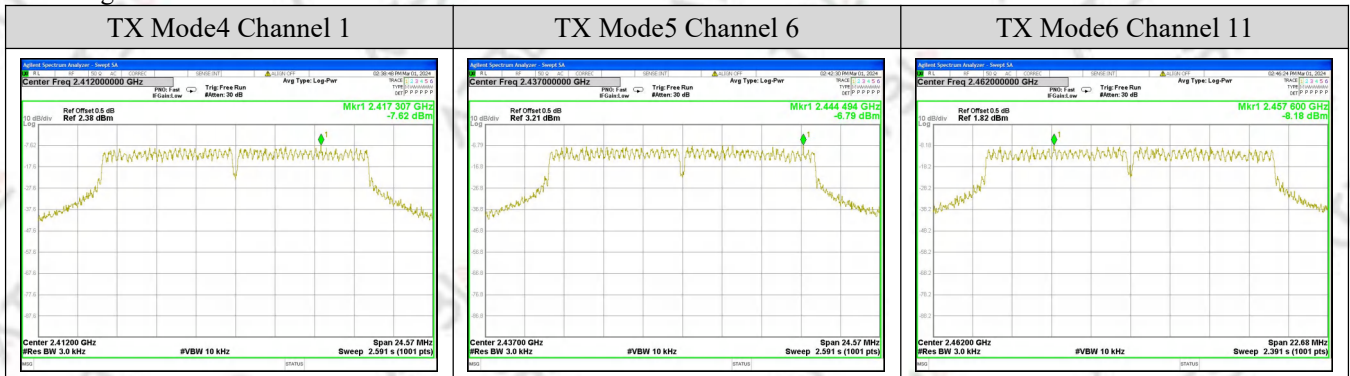
Temperature:	25 °C	Relative Humidity:	60%RH
Test Voltage:	AC 24V	Test Mode:	TX Mode1/2/3/4/5/6/7/8/9

Test mode	Frequency	Power Density	Limit (dBm/3kHz)	Result
		(dBm/3kHz)		
Mode1	2412 MHz	-4.32	≤8	PASS
Mode2	2437 MHz	-4.50	≤8	PASS
Mode3	2462 MHz	-5.38	≤8	PASS
Mode4	2412 MHz	-7.62	≤8	PASS
Mode5	2437 MHz	-6.79	≤8	PASS
Mode6	2462 MHz	-8.18	≤8	PASS
Mode7	2412 MHz	-8.84	≤8	PASS
Mode8	2437 MHz	-7.17	≤8	PASS
Mode9	2462 MHz	-8.53	≤8	PASS

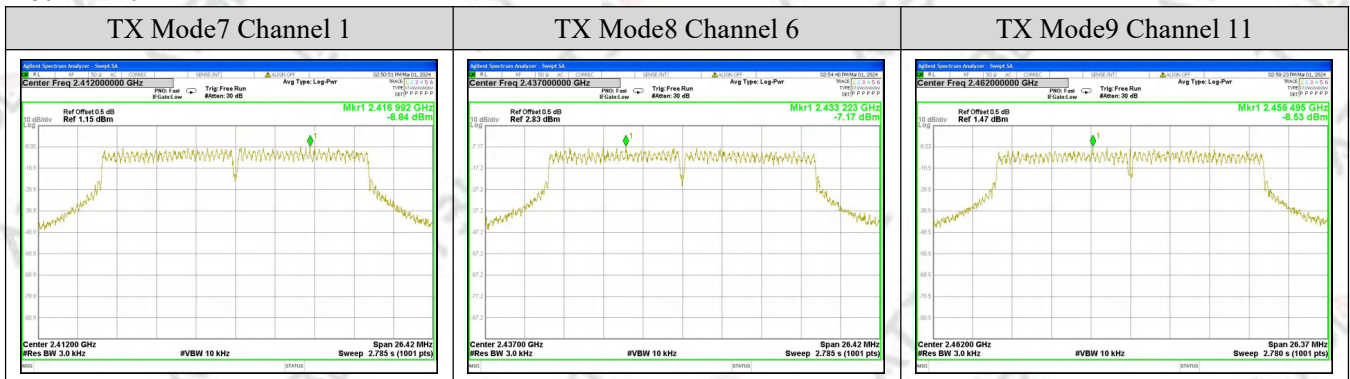
802.11b



802.11g



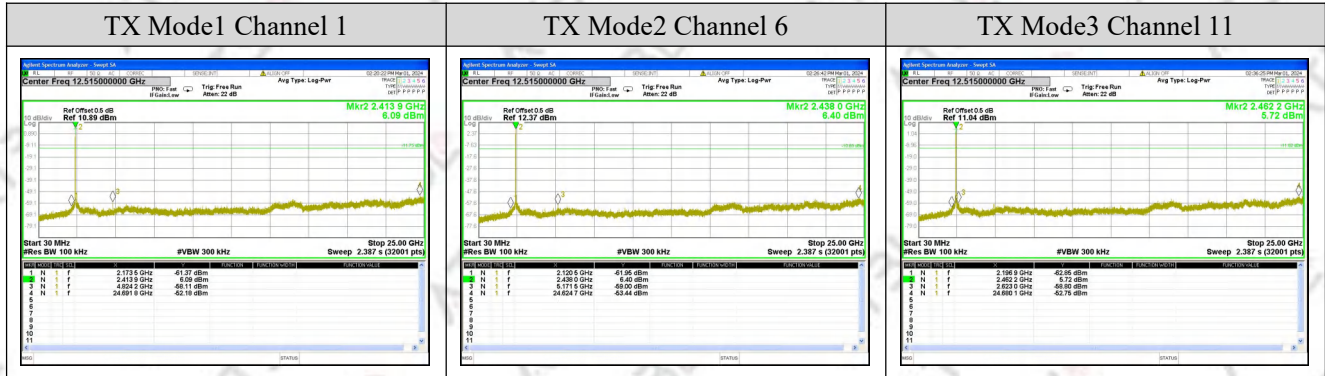
802.11n20



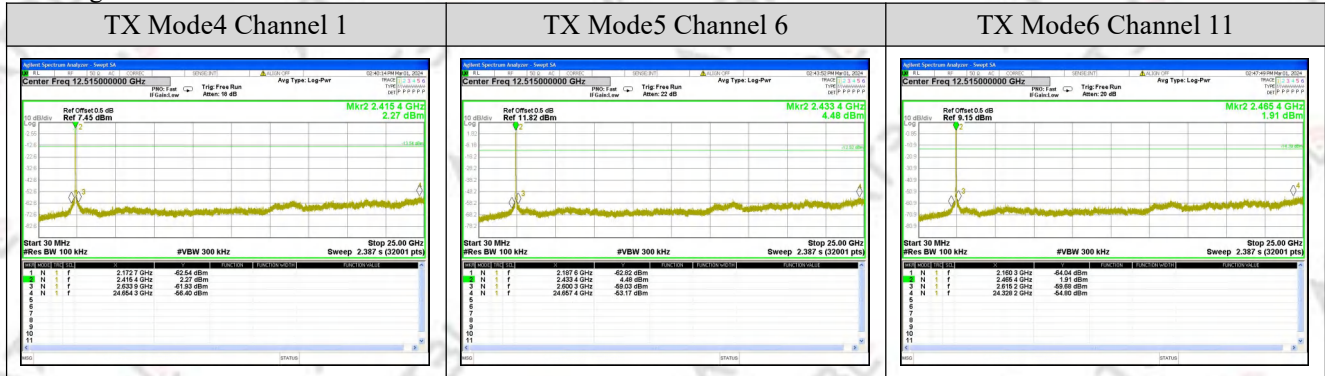
3.4.4. Test Result of Conducted Spurious & Band Edge Emission

Temperature:	25 °C	Relative Humidity:	60%RH
Test Voltage:	AC 24V	Test Mode:	TX Mode1/2/3/4/5/6/7/8/9

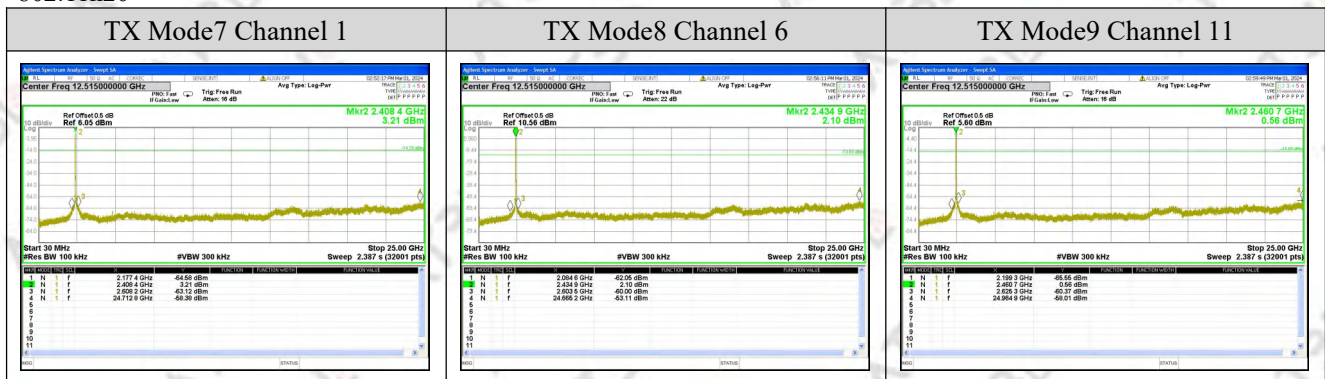
802.11b



802.11g

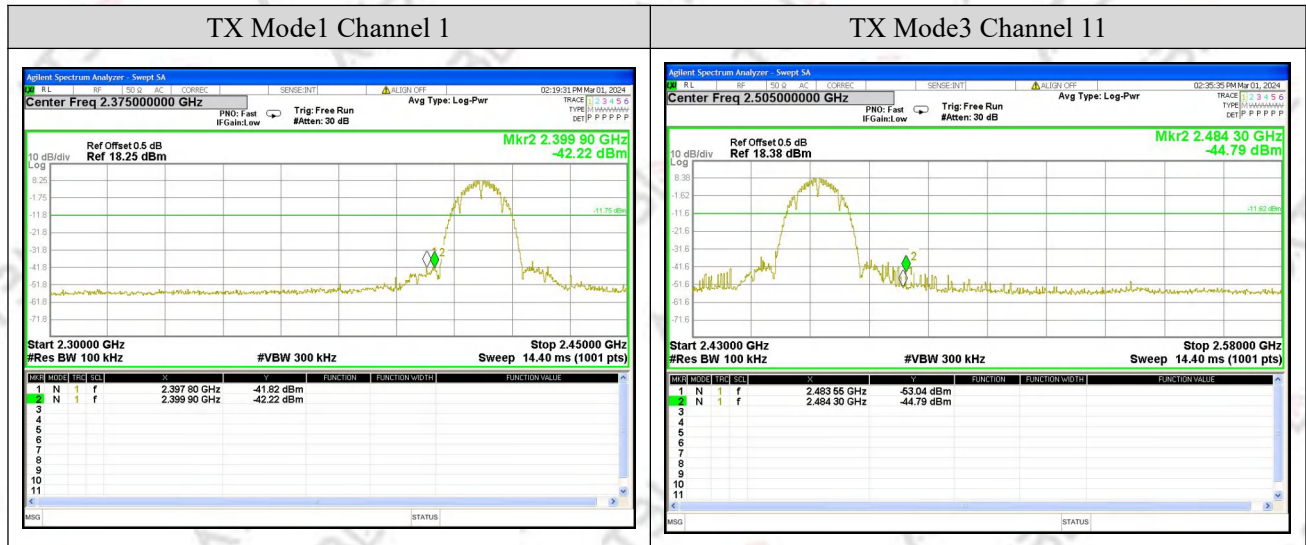


802.11n20

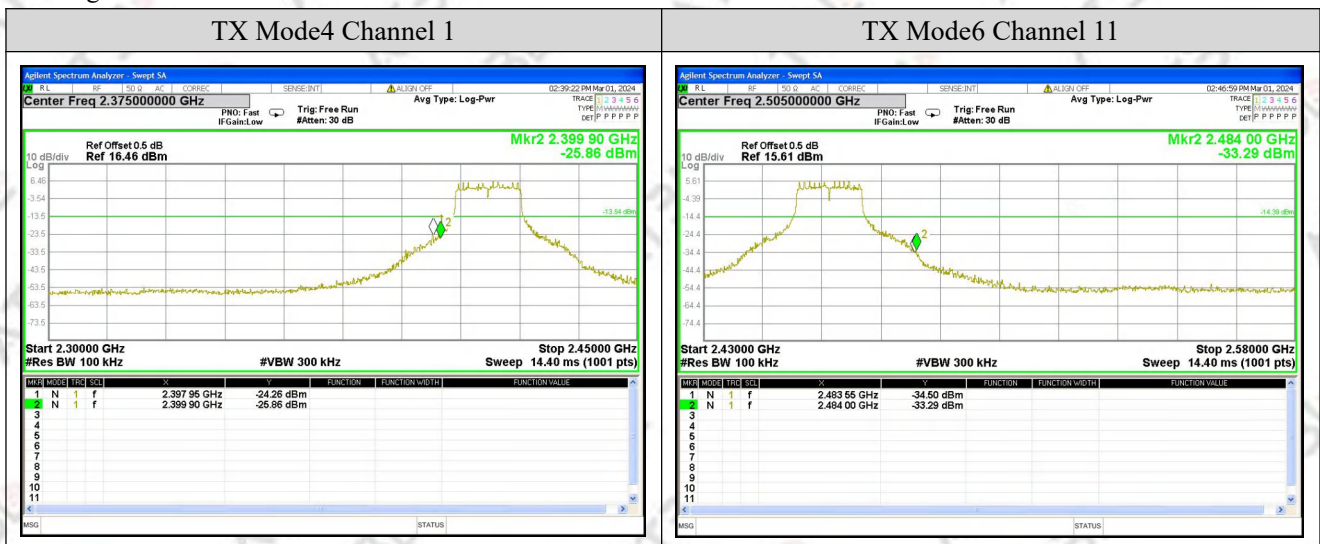


For Band edge(it's also the reference level for conducted spurious emission)

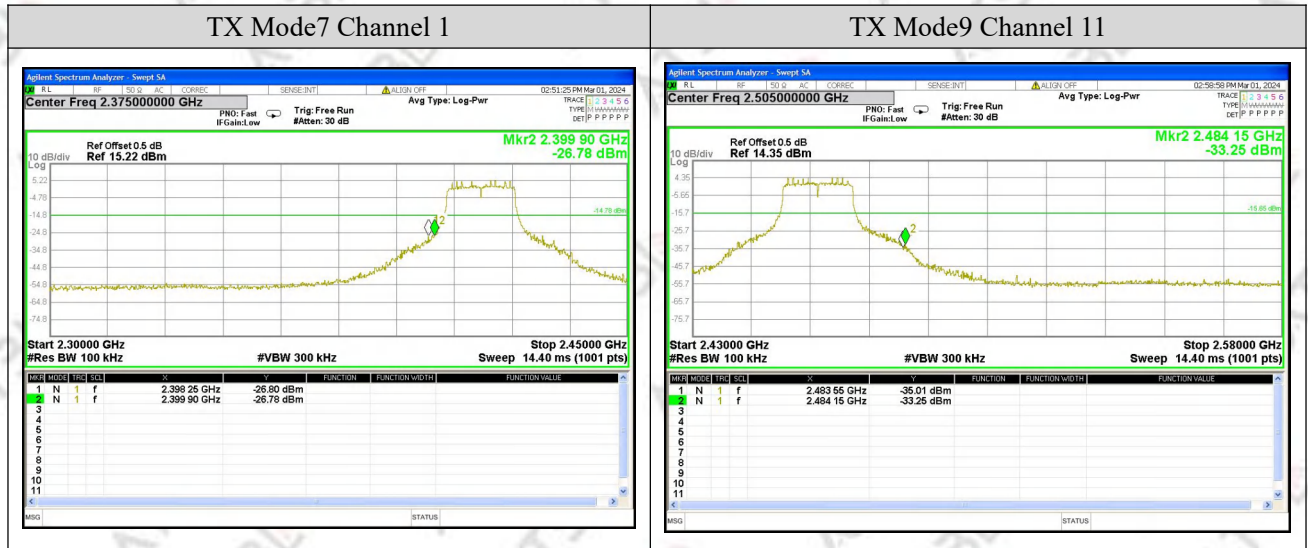
802.11b



802.11g



802.11n20



*****END OF APPENDIX A*****

Appendix B _ Radiated Test Data

3.5.4. Test Result of Radiated Spurious Emission and Restricted Band

3.5.4.1. For 9 kHz ~ 30 MHz

Temperature:	23.4°C	Relative Humidity:	60%RH
Test Voltage:	AC 24V	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 = $40 \log (\text{specific distance/test distance})$ (dB);

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

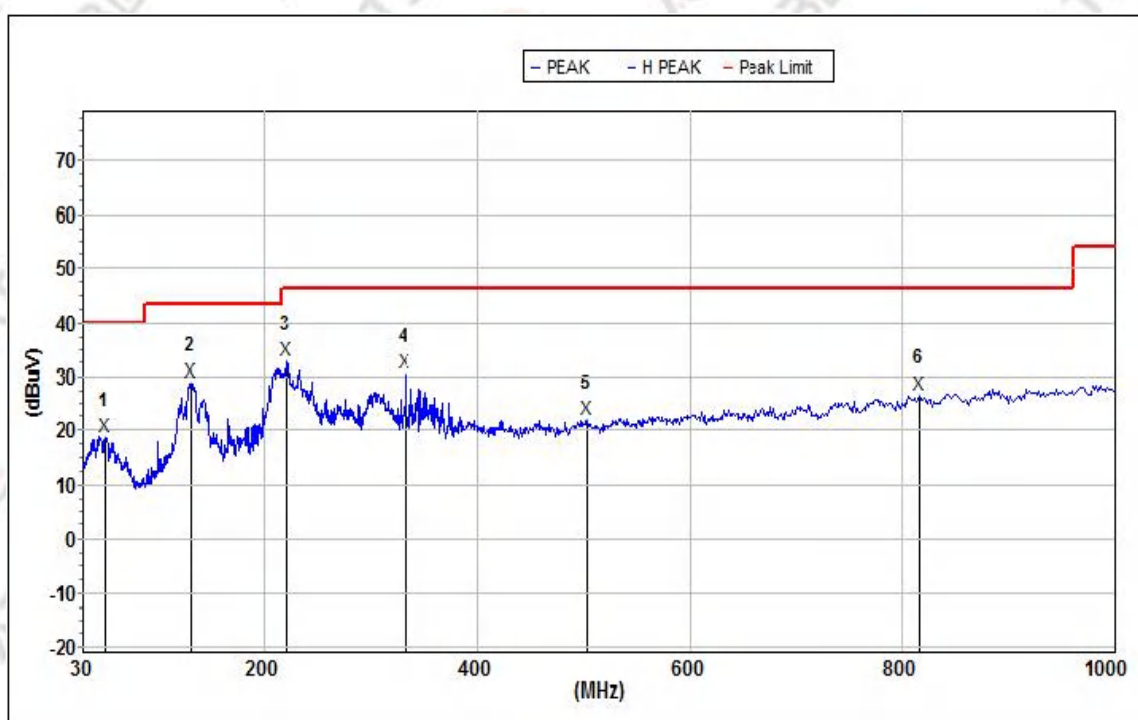
3.5.4.2. For 30 MHz ~ 1 GHz

Temperature:	23.4°C	Relative Humidity:	60%RH
Test Voltage:	AC 24V	Polarization:	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



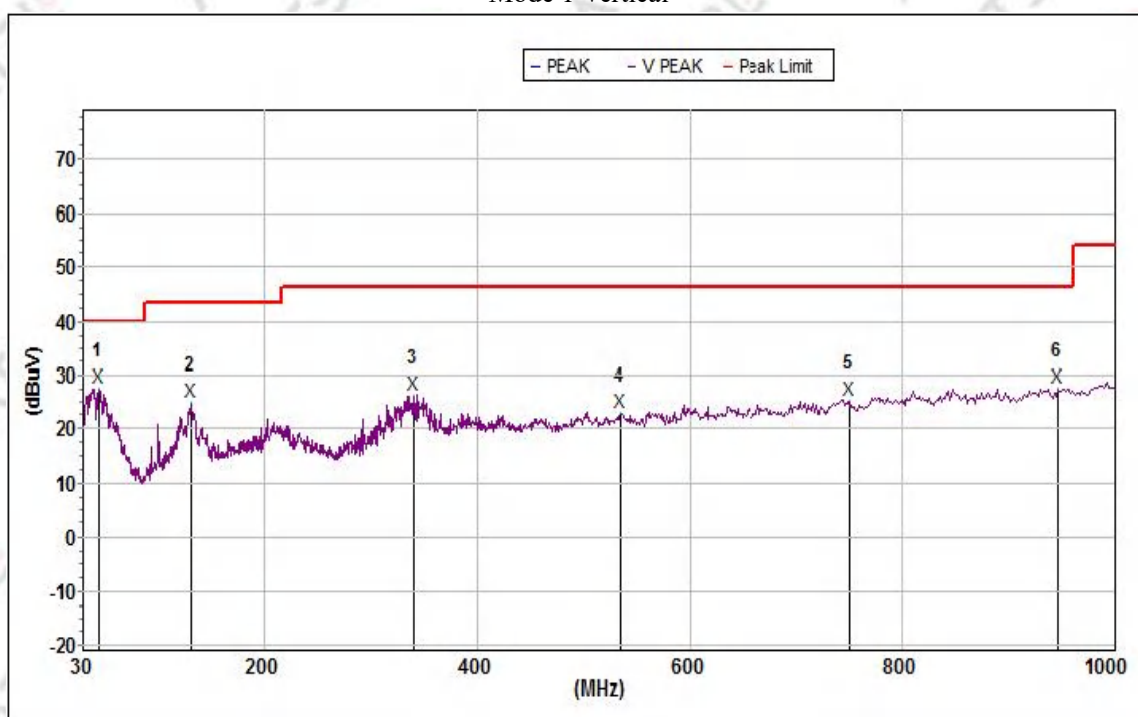
Mk.	Freq. (MHz)	Level (dBUV)	Limit (dBUV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	50.321	18.8	40.0	21.2	194	100	18.1	31.9	1.0	H
2	131.758	29.1	43.5	14.4	227	100	16.6	31.9	1.6	H
3	220.231	32.8	46.0	13.2	356	100	17.2	31.9	2.0	H
4	332.519	30.7	46.0	15.3	293	100	19.3	32.2	2.6	H
5	503.822	22.1	46.0	23.9	227	100	22.4	31.2	3.1	H
6	815.968	26.6	46.0	19.4	360	100	25.6	31.4	4.0	H

Temperature:	23.4°C	Relative Humidity:	60%RH
Test Voltage:	AC 24V	Polarization:	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



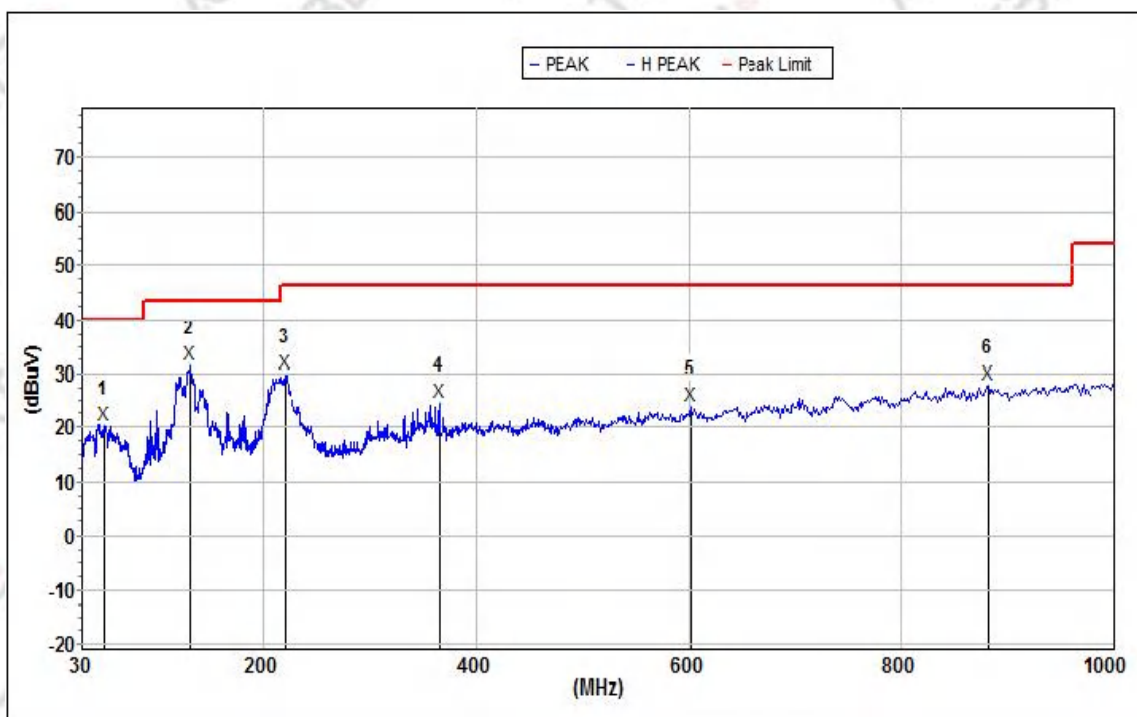
Mk.	Freq. (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	44.979	27.8	40.0	12.2	81	300	18.5	32.0	0.9	V
2	132.221	24.9	43.5	18.6	130	300	17.1	31.9	1.6	V
3	340.782	26.4	46.0	19.6	359	300	19.9	32.2	2.6	V
4	533.832	23.1	46.0	22.9	3	300	23.2	31.2	3.2	V
5	750.108	25.5	46.0	20.5	226	300	25.0	31.3	3.9	V
6	945.440	27.8	46.0	18.2	99	300	26.8	31.9	4.3	V

Temperature:	23.4°C	Relative Humidity:	60%RH
Test Voltage:	AC 24V	Polarization:	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



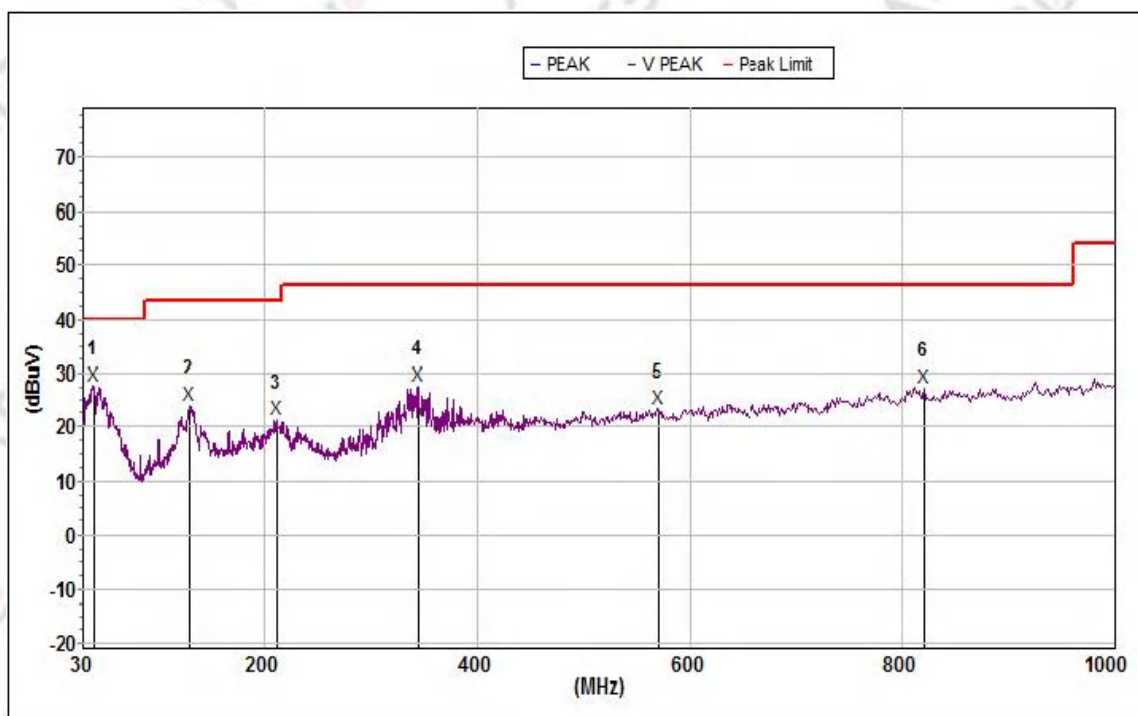
Mk.	Freq. (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	51.211	20.4	40.0	19.6	185	300	18.0	31.9	1.0	H
2	131.758	31.5	43.5	12.0	200	300	16.6	31.9	1.6	H
3	220.231	29.9	46.0	16.1	0	300	17.2	31.9	2.0	H
4	365.539	24.8	46.0	21.2	314	300	20.2	32.3	2.7	H
5	601.427	24.2	46.0	21.8	357	300	23.3	31.1	3.5	H
6	881.407	28.0	46.0	18.0	0	300	26.5	31.8	4.2	H

Temperature:	23.4°C	Relative Humidity:	60%RH
Test Voltage:	AC 24V	Polarization:	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



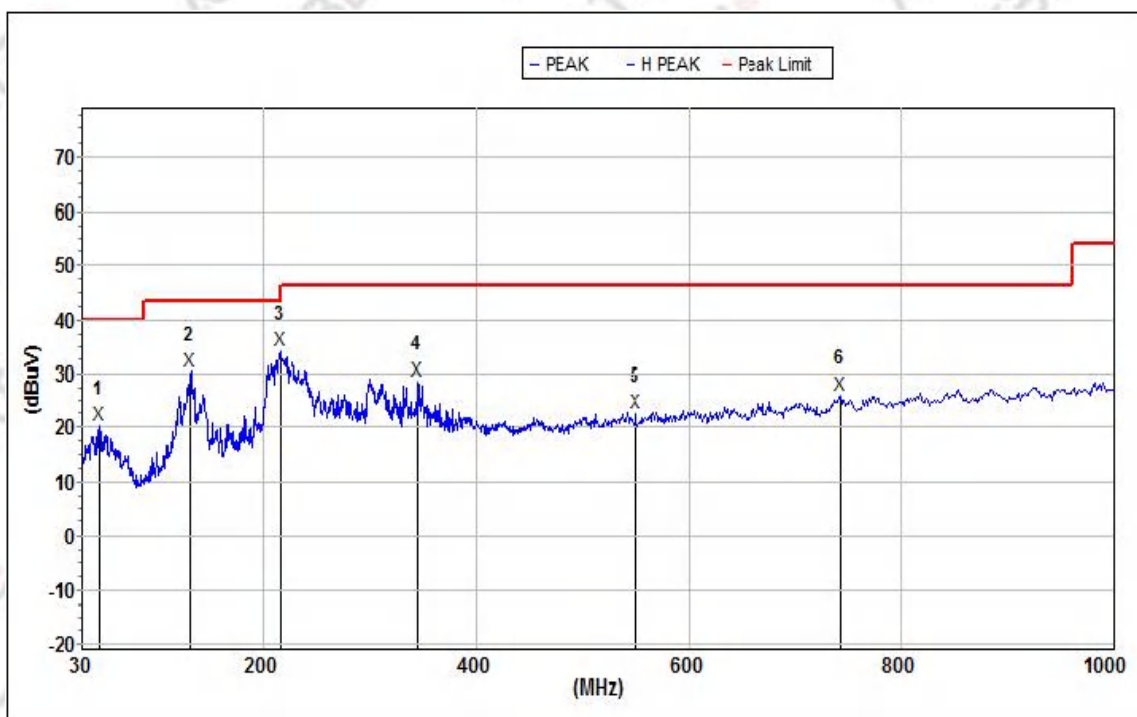
Mk.	Freq. (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	39.645	27.7	40.0	12.3	149	300	18.2	32.0	0.9	V
2	130.379	24.2	43.5	19.3	133	300	17.0	31.9	1.6	V
3	210.786	21.3	43.5	22.2	37	300	18.3	31.9	2.0	V
4	344.990	27.7	46.0	18.3	325	300	20.1	32.2	2.7	V
5	571.611	23.5	46.0	22.5	67	300	23.5	31.1	3.4	V
6	820.271	27.3	46.0	18.7	149	300	25.8	31.4	4.0	V

Temperature:	23.4°C	Relative Humidity:	60%RH
Test Voltage:	AC 24V	Polarization:	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



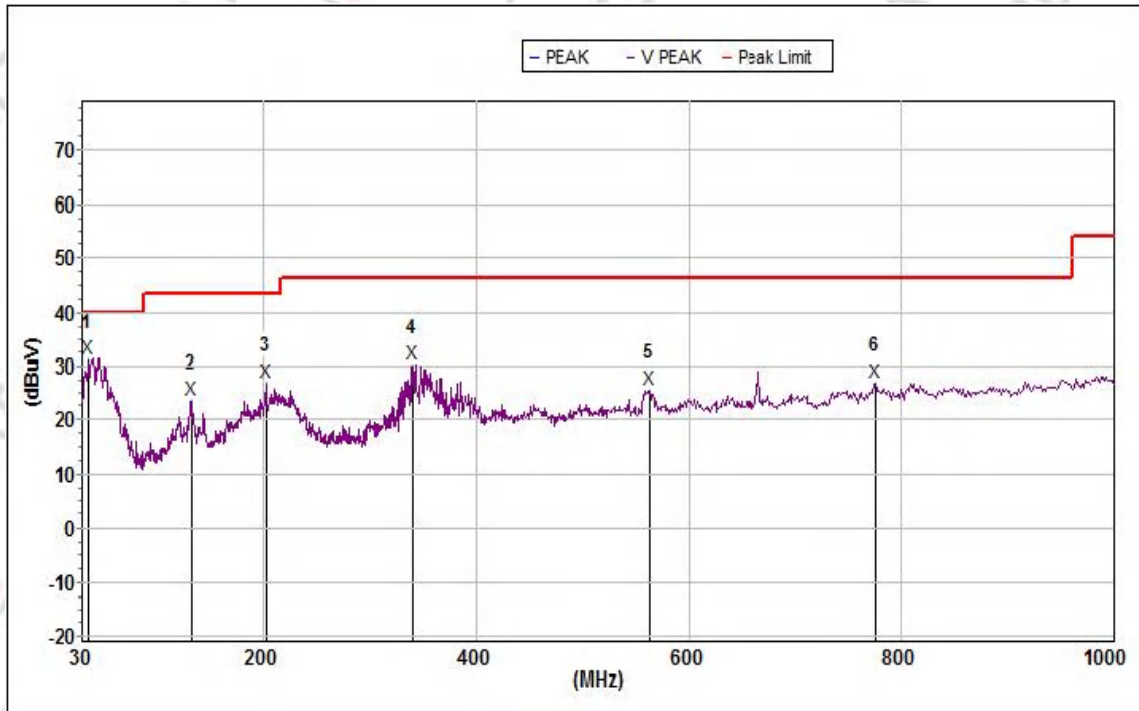
Mk.	Freq. (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	46.422	20.4	40.0	19.6	180	100	18.1	31.9	0.8	H
2	132.453	30.4	43.5	13.1	180	100	16.7	31.9	1.4	H
3	216.024	34.2	46.0	11.8	360	100	17.2	31.9	2.5	H
4	346.202	28.6	46.0	17.4	275	100	19.7	32.2	2.7	H
5	549.983	22.8	46.0	23.2	99	100	22.8	31.2	3.1	H
6	742.259	26.2	46.0	19.8	114	100	24.8	31.2	3.6	H

Temperature:	23.4°C	Relative Humidity:	60%RH
Test Voltage:	AC 24V	Polarization:	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



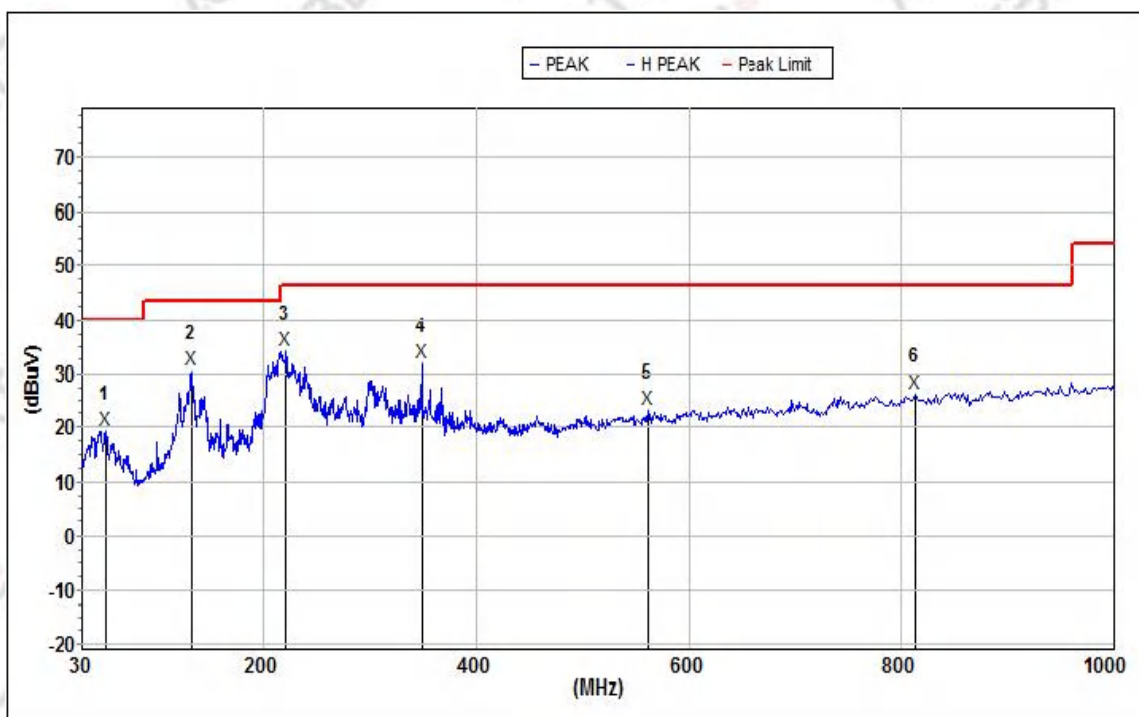
Mk.	Freq. (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	35.812	31.3	40.0	8.7	196	100	18.1	32.0	0.8	V
2	132.685	23.9	43.5	19.6	148	100	17.2	31.9	1.4	V
3	202.100	26.9	43.5	16.6	0	100	18.5	31.9	2.4	V
4	341.380	30.4	46.0	15.6	0	100	19.9	32.2	2.7	V
5	563.650	25.8	46.0	20.2	148	100	23.4	31.1	3.2	V
6	775.517	27.0	46.0	19.0	228	100	25.4	31.3	3.6	V

Temperature:	23.4°C	Relative Humidity:	60%RH
Test Voltage:	AC 24V	Polarization:	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



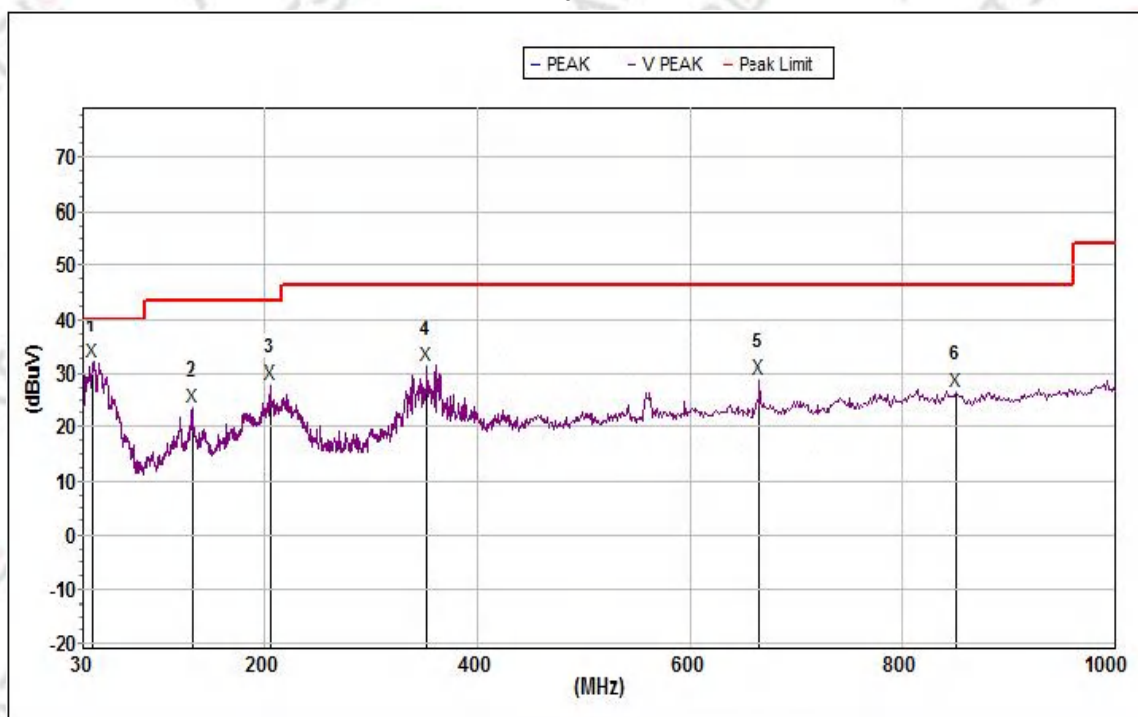
Mk.	Freq. (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	51.752	19.3	40.0	20.7	150	100	17.9	31.9	0.8	H
2	132.685	30.8	43.5	12.7	198	100	16.7	31.9	1.4	H
3	220.231	34.4	46.0	11.6	341	100	17.2	31.9	2.5	H
4	349.250	31.8	46.0	14.2	296	100	19.8	32.2	2.7	H
5	561.677	23.3	46.0	22.7	216	100	23.0	31.1	3.2	H
6	813.112	26.4	46.0	19.6	216	100	25.6	31.4	3.6	H

Temperature:	23.4°C	Relative Humidity:	60%RH
Test Voltage:	AC 24V	Polarization:	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



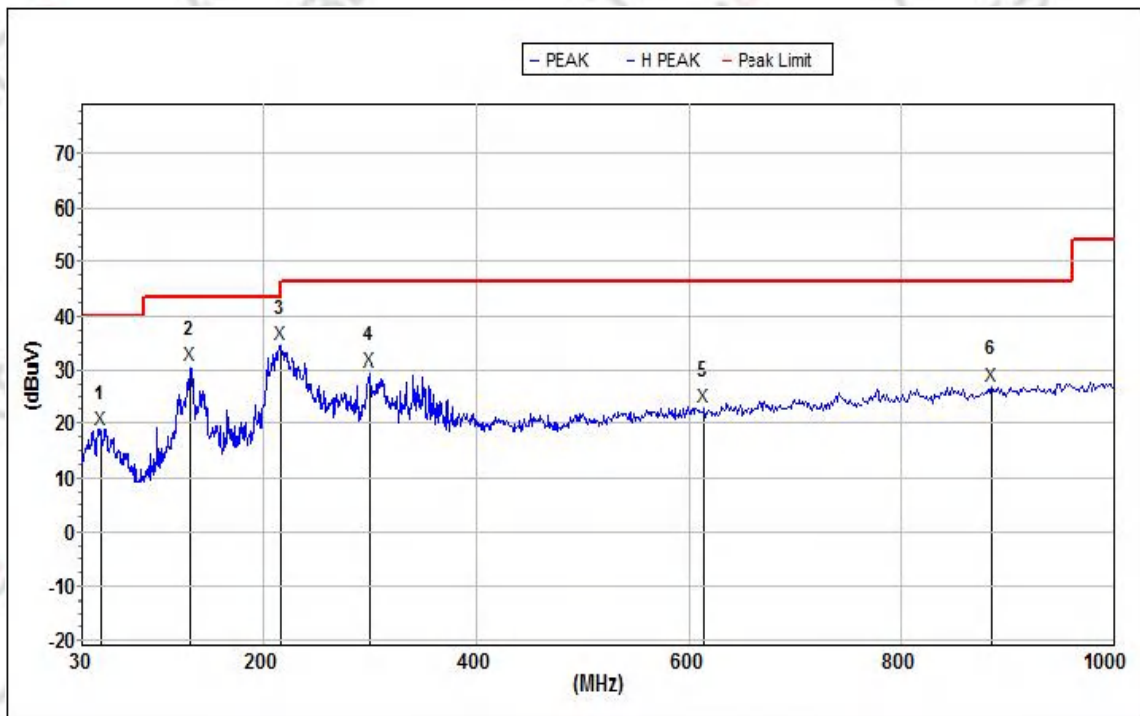
Mk.	Freq. (MHz)	Level (dBUV)	Limit (dBUV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	39.162	32.1	40.0	7.9	161	100	18.2	32.0	0.8	V
2	132.685	23.7	43.5	19.8	176	100	17.2	31.9	1.4	V
3	204.955	28.1	43.5	15.4	0	100	18.4	31.9	2.4	V
4	353.563	31.3	46.0	14.7	322	100	20.4	32.2	2.7	V
5	665.803	28.9	46.0	17.1	48	100	24.1	31.2	3.4	V
6	849.545	26.6	46.0	19.4	290	100	25.9	31.6	3.6	V

Temperature:	23.4°C	Relative Humidity:	60%RH
Test Voltage:	AC 24V	Polarization:	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



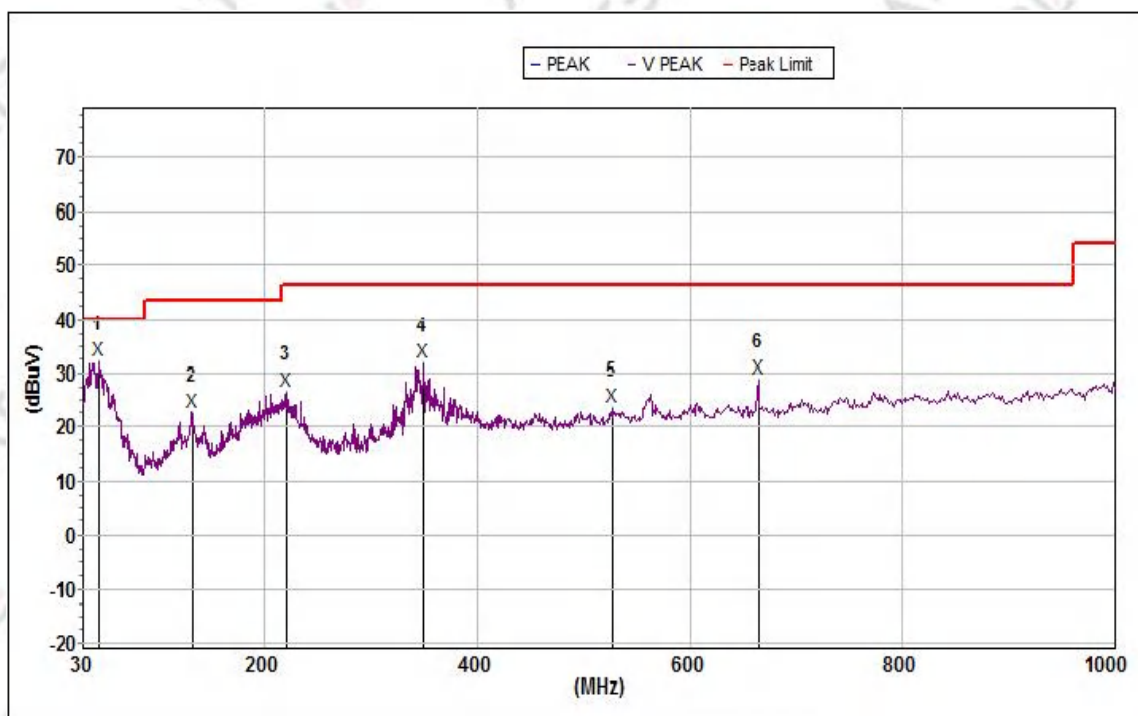
Mk.	Freq. (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	47.910	18.9	40.0	21.1	208	100	18.1	31.9	0.8	H
2	131.758	30.8	43.5	12.7	208	100	16.6	31.9	1.4	H
3	216.024	34.6	46.0	11.4	360	100	17.2	31.9	2.5	H
4	299.316	29.6	46.0	16.4	306	100	18.5	32.1	2.7	H
5	614.214	23.0	46.0	23.0	1	100	23.4	31.1	3.4	H
6	884.503	27.1	46.0	18.9	193	100	26.6	31.8	3.6	H

Temperature:	23.4°C	Relative Humidity:	60%RH
Test Voltage:	AC 24V	Polarization:	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



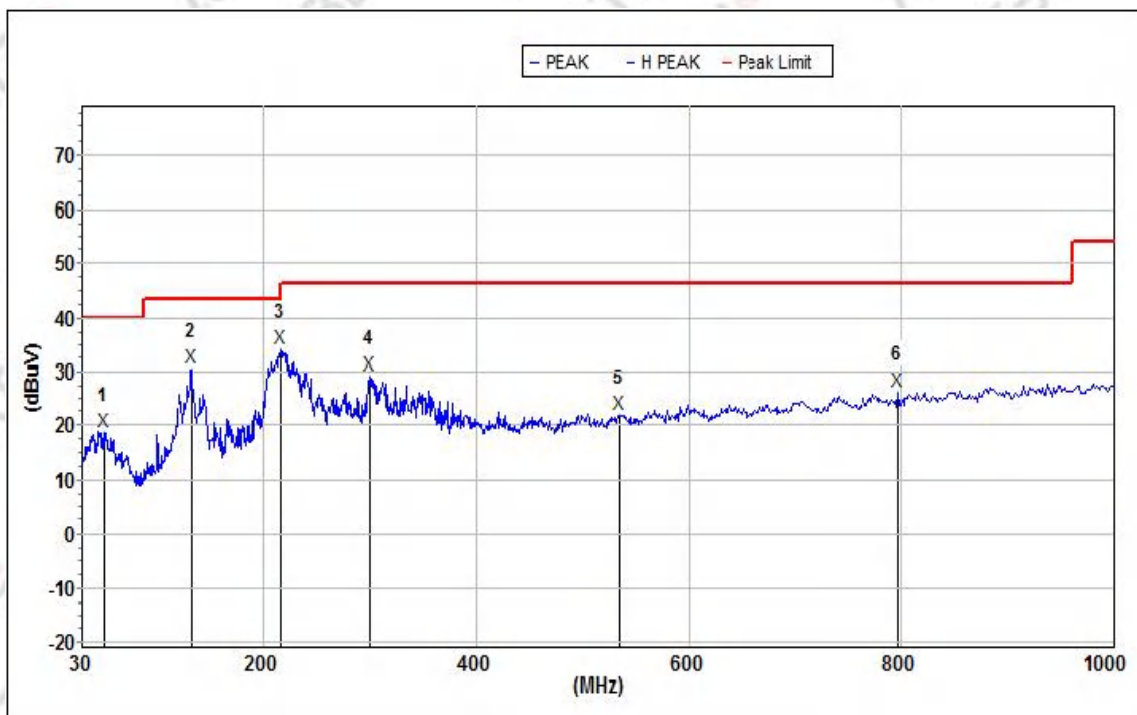
Mk.	Freq. (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	44.979	32.2	40.0	7.8	295	100	18.5	32.0	0.8	V
2	132.685	22.9	43.5	20.6	151	100	17.2	31.9	1.4	V
3	220.231	26.7	46.0	19.3	119	100	18.1	31.9	2.5	V
4	349.863	31.9	46.0	14.1	351	100	20.3	32.2	2.7	V
5	526.397	23.7	46.0	22.3	247	100	23.2	31.2	3.0	V
6	664.637	28.9	46.0	17.1	357	100	24.1	31.2	3.4	V

Temperature:	23.4°C	Relative Humidity:	60%RH
Test Voltage:	AC 24V	Polarization:	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



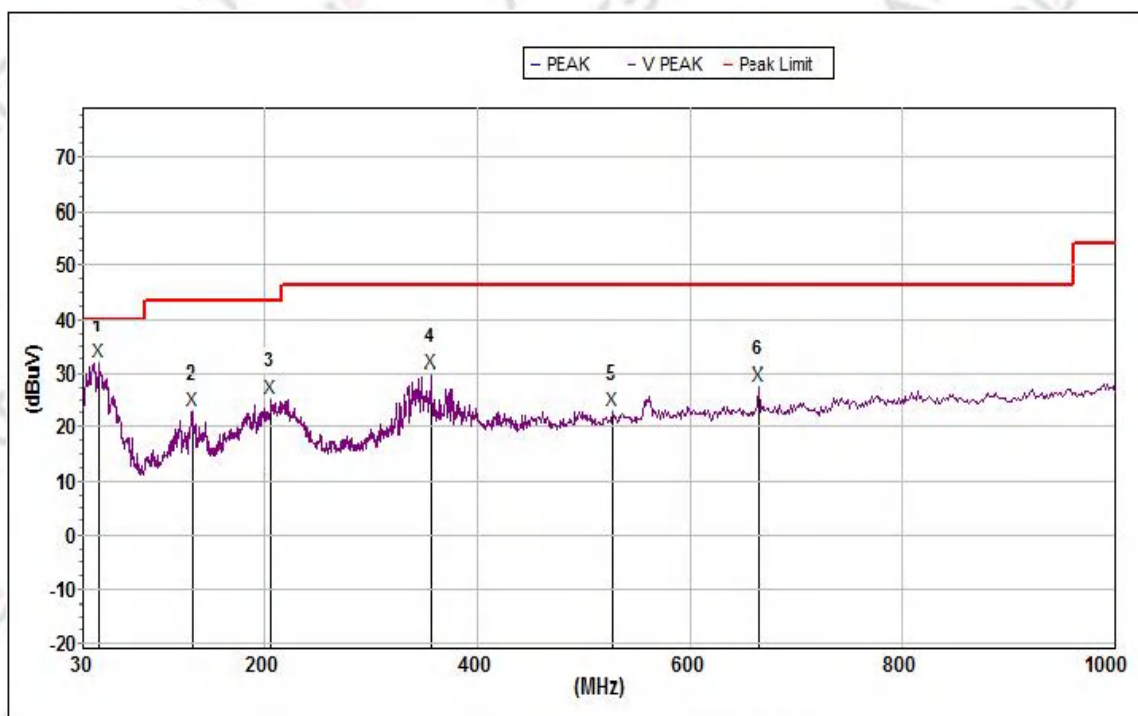
Mk.	Freq. (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	50.853	18.8	40.0	21.2	200	100	18.1	31.9	0.8	H
2	132.685	30.5	43.5	13.0	200	100	16.7	31.9	1.4	H
3	215.646	34.2	43.5	9.3	360	100	17.2	31.9	2.5	H
4	299.316	29.2	46.0	16.8	313	100	18.5	32.1	2.7	H
5	533.832	22.1	46.0	23.9	342	100	22.7	31.2	3.0	H
6	796.183	26.5	46.0	19.5	342	100	25.4	31.3	3.6	H

Temperature:	23.4°C	Relative Humidity:	60%RH
Test Voltage:	AC 24V	Polarization:	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)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	44.979	31.9	40.0	8.1	276	100	18.5	32.0	0.8	V
2	132.685	23.1	43.5	20.4	163	100	17.2	31.9	1.4	V
3	205.315	25.5	43.5	18.0	9	100	18.4	31.9	2.4	V
4	357.302	30.1	46.0	15.9	349	100	20.5	32.2	2.7	V
5	527.320	23.1	46.0	22.9	64	100	23.2	31.2	3.0	V
6	665.803	27.8	46.0	18.2	0	100	24.1	31.2	3.4	V

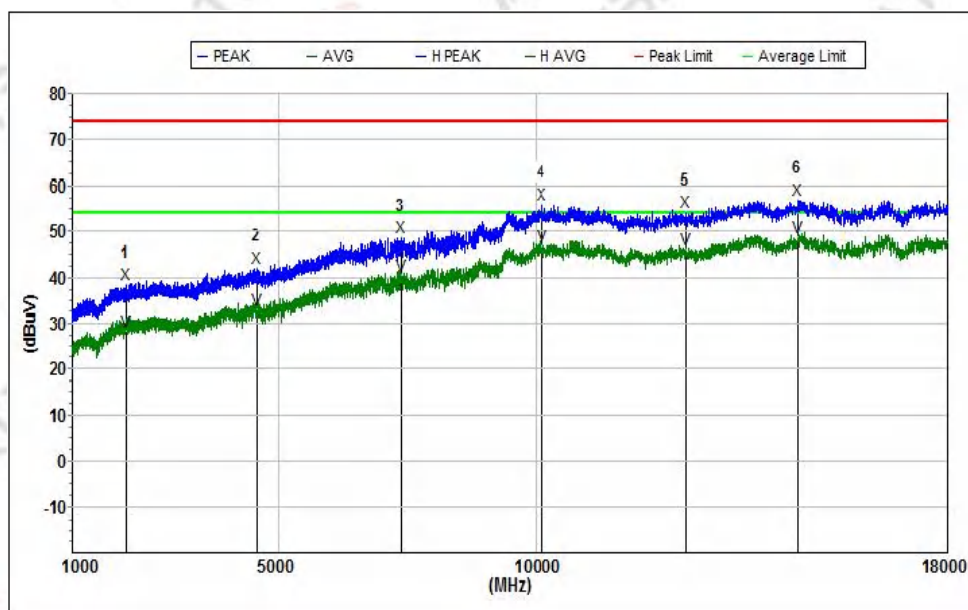
3.5.4.3. For 1GHz ~ 18 GHz

Temperature:	23.4°C	Relative Humidity:	60%RH
Test Voltage:	AC 24V	Polarization:	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



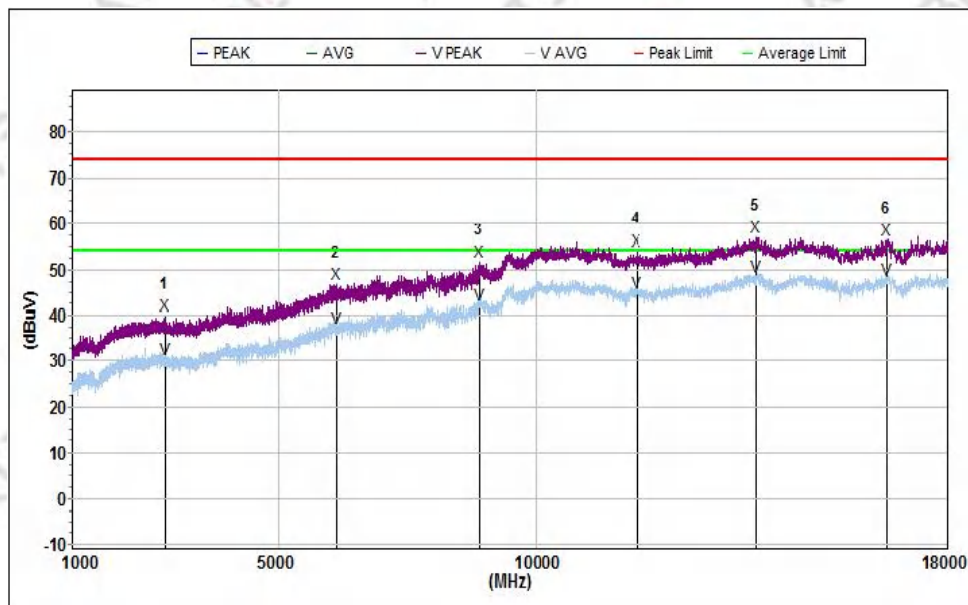
Mk.	Freq. (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	2027.650	38.7	74.0	35.3	0	100	25.4	56.3	2.7	H
2	4586.150	42.1	74.0	31.9	0	100	31.5	57.3	3.5	H
3	7375.850	48.7	74.0	25.3	0	100	36.3	57.0	4.6	H
4	10121.350	55.9	74.0	18.1	0	100	38.3	56.5	5.4	H
5	12911.900	54.5	74.0	19.5	0	100	39.8	56.6	6.2	H
6	15076.000	56.9	74.0	17.1	0	100	39.0	55.9	6.3	H
Avg										
1	2027.650	28.2	54.0	25.8	0	100	25.4	56.3	2.7	H
2	4586.150	33.1	54.0	20.9	0	100	31.5	57.3	3.5	H
3	7375.850	40.5	54.0	13.5	0	100	36.3	57.0	4.6	H
4	10121.350	46.8	54.0	7.2	0	100	38.3	56.5	5.4	H
5	12911.900	46.2	54.0	7.8	0	100	39.8	56.6	6.2	H
6	15076.000	48.8	54.0	5.2	0	100	39.0	55.9	6.3	H

Temperature:	23.4°C	Relative Humidity:	60%RH
Test Voltage:	AC 24V	Polarization:	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



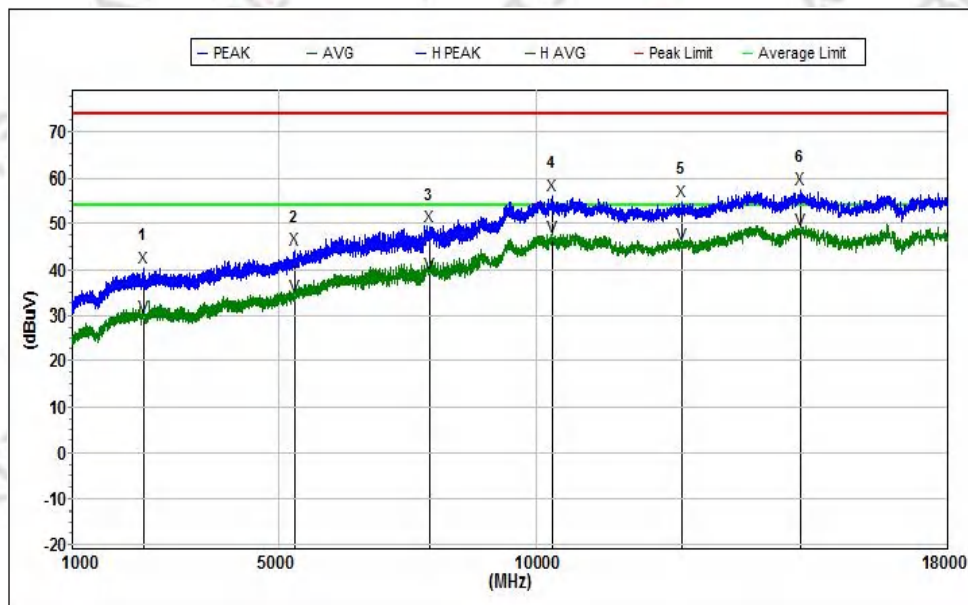
Mk.	Freq. (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	2802.850	40.0	74.0	34.0	0	100	28.2	57.5	2.9	V
2	6118.700	46.8	74.0	27.2	36	100	34.0	57.0	4.1	V
3	8907.550	51.9	74.0	22.1	182	100	37.5	57.3	5.3	V
4	11959.050	54.0	74.0	20.0	36	100	38.7	56.3	5.9	V
5	14283.800	57.1	74.0	16.9	109	100	39.5	55.9	6.2	V
6	16819.350	56.3	74.0	17.7	0	100	38.0	56.2	6.8	V
Avg										
1	2802.850	30.3	54.0	23.7	0	100	28.2	57.5	2.9	V
2	6118.700	37.3	54.0	16.7	36	100	34.0	57.0	4.1	V
3	8907.550	42.2	54.0	11.8	182	100	37.5	57.3	5.3	V
4	11959.050	44.9	54.0	9.1	36	100	38.7	56.3	5.9	V
5	14283.800	48.4	54.0	5.6	109	100	39.5	55.9	6.2	V
6	16819.350	48.0	54.0	6.0	0	100	38.0	56.2	6.8	V

Temperature:	23.4°C	Relative Humidity:	60%RH
Test Voltage:	AC 24V	Polarization:	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



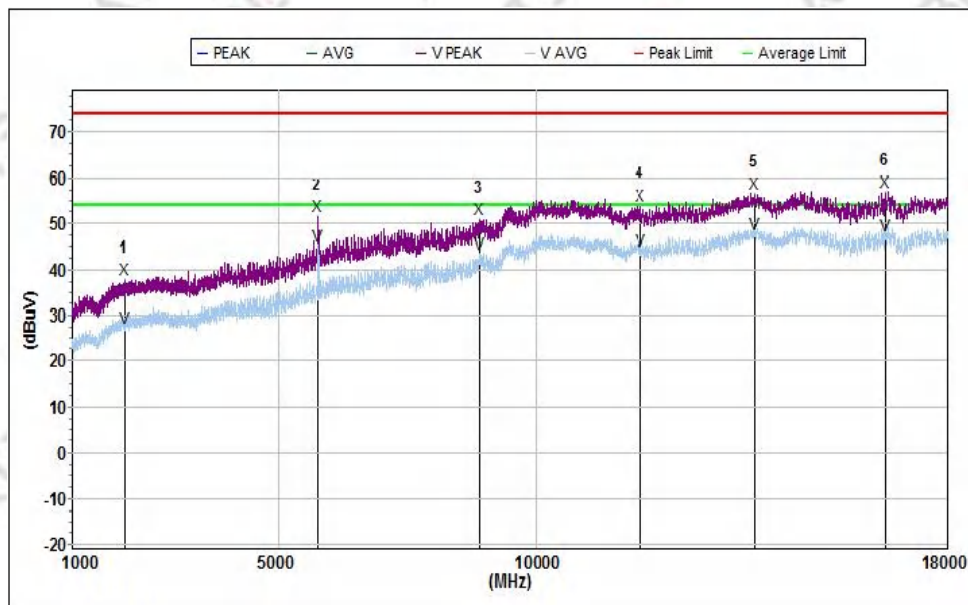
Mk.	Freq. (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	2380.400	40.6	74.0	33.4	108	100	27.0	56.9	2.8	H
2	5316.300	44.5	74.0	29.5	108	100	32.5	57.4	3.9	H
3	7924.100	49.4	74.0	24.6	108	100	36.9	57.1	4.9	H
4	10322.800	56.4	74.0	17.6	108	100	38.4	56.6	5.5	H
5	12832.850	54.9	74.0	19.1	108	100	39.7	56.5	6.1	H
6	15124.450	57.6	74.0	16.4	108	100	38.9	55.9	6.3	H
Avg										
1	2380.400	29.8	54.0	24.2	108	100	27.0	56.9	2.8	H
2	5316.300	34.3	54.0	19.7	108	100	32.5	57.4	3.9	H
3	7924.100	39.2	54.0	14.8	108	100	36.9	57.1	4.9	H
4	10322.800	47.0	54.0	7.0	108	100	38.4	56.6	5.5	H
5	12832.850	45.5	54.0	8.5	108	100	39.7	56.5	6.1	H
6	15124.450	48.9	54.0	5.1	108	100	38.9	55.9	6.3	H

Temperature:	23.4°C	Relative Humidity:	60%RH
Test Voltage:	AC 24V	Polarization:	Vertical
Test Mode:	TX Mode 2		

Remark:

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

Mode 2 Vertical



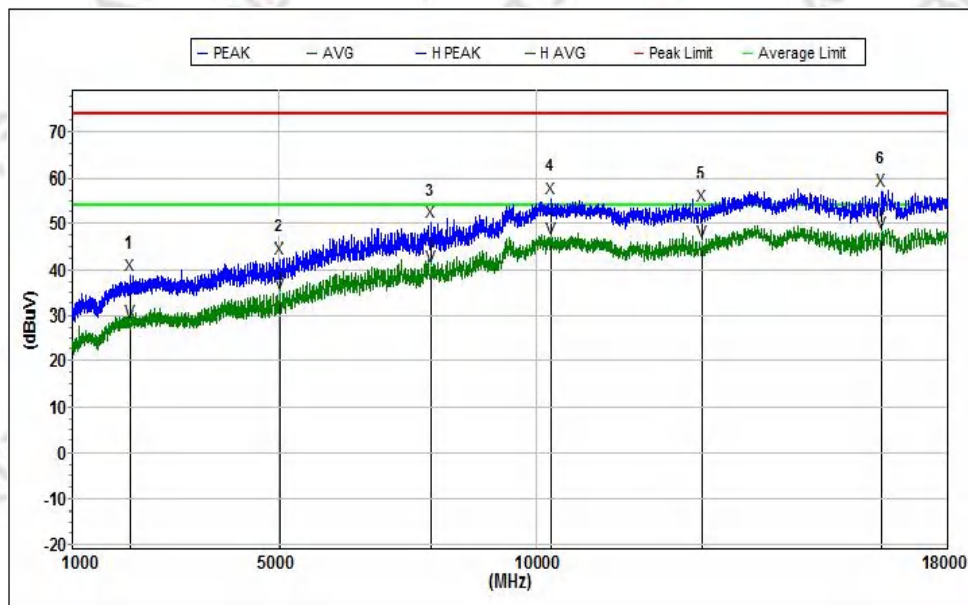
Mk.	Freq. (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	2003.850	37.8	74.0	36.2	29	100	25.2	56.3	2.7	V
2	5764.250	51.8	74.0	22.2	29	100	33.0	57.1	4.1	V
3	8908.400	51.0	74.0	23.0	29	100	37.5	57.3	5.3	V
4	12029.600	53.9	74.0	20.1	29	100	38.7	56.3	5.9	V
5	14251.500	56.5	74.0	17.5	29	100	39.6	55.9	6.2	V
6	16785.350	57.0	74.0	17.0	29	100	37.9	56.2	6.8	V
Avg										
1	2003.850	27.2	54.0	26.8	29	100	25.2	56.3	2.7	V
2	5764.250	45.2	54.0	8.8	29	100	33.0	57.1	4.1	V
3	8908.400	43.4	54.0	10.6	29	100	37.5	57.3	5.3	V
4	12029.600	44.1	54.0	9.9	29	100	38.7	56.3	5.9	V
5	14251.500	47.8	54.0	6.2	29	100	39.6	55.9	6.2	V
6	16785.350	47.4	54.0	6.6	29	100	37.9	56.2	6.8	V

Temperature:	23.4°C	Relative Humidity:	60%RH
Test Voltage:	AC 24V	Polarization:	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



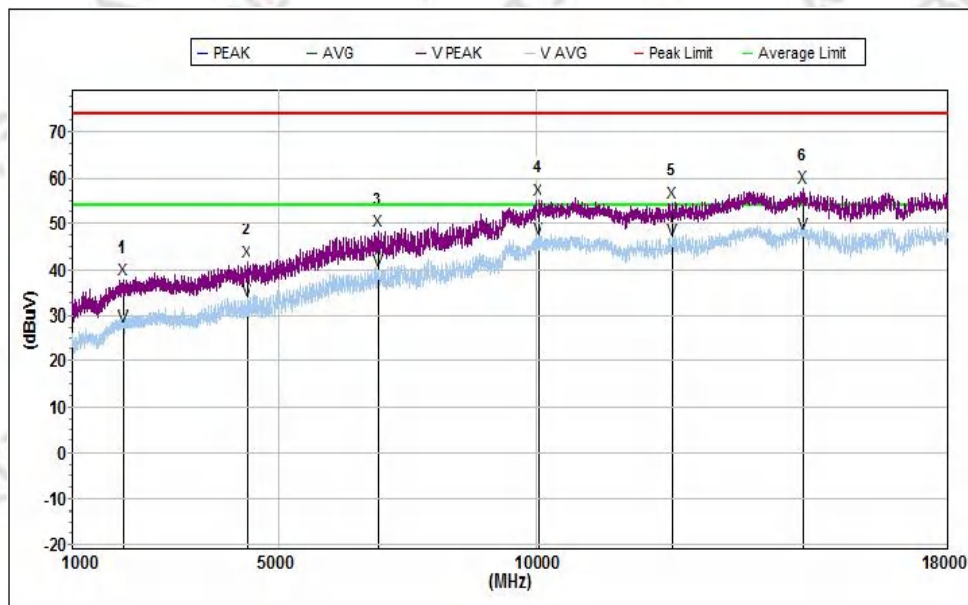
Mk.	Freq. (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	2099.900	38.8	74.0	35.2	177	100	25.8	56.5	2.7	H
2	5027.300	42.6	74.0	31.4	177	100	32.8	57.5	3.6	H
3	7948.750	50.3	74.0	23.7	177	100	36.9	57.1	4.9	H
4	10301.550	55.6	74.0	18.4	177	100	38.4	56.6	5.5	H
5	13221.300	54.0	74.0	20.0	177	100	39.9	56.4	6.2	H
6	16719.050	57.4	74.0	16.6	177	100	38.0	56.2	6.8	H
Avg										
1	2099.900	28.8	54.0	25.2	177	100	25.8	56.5	2.7	H
2	5027.300	34.8	54.0	19.2	177	100	32.8	57.5	3.6	H
3	7948.750	40.9	54.0	13.1	177	100	36.9	57.1	4.9	H
4	10301.550	46.8	54.0	7.2	177	100	38.4	56.6	5.5	H
5	13221.300	46.1	54.0	7.9	177	100	39.9	56.4	6.2	H
6	16719.050	48.1	54.0	5.9	177	100	38.0	56.2	6.8	H

Temperature:	23.4°C	Relative Humidity:	60%RH
Test Voltage:	AC 24V	Polarization:	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



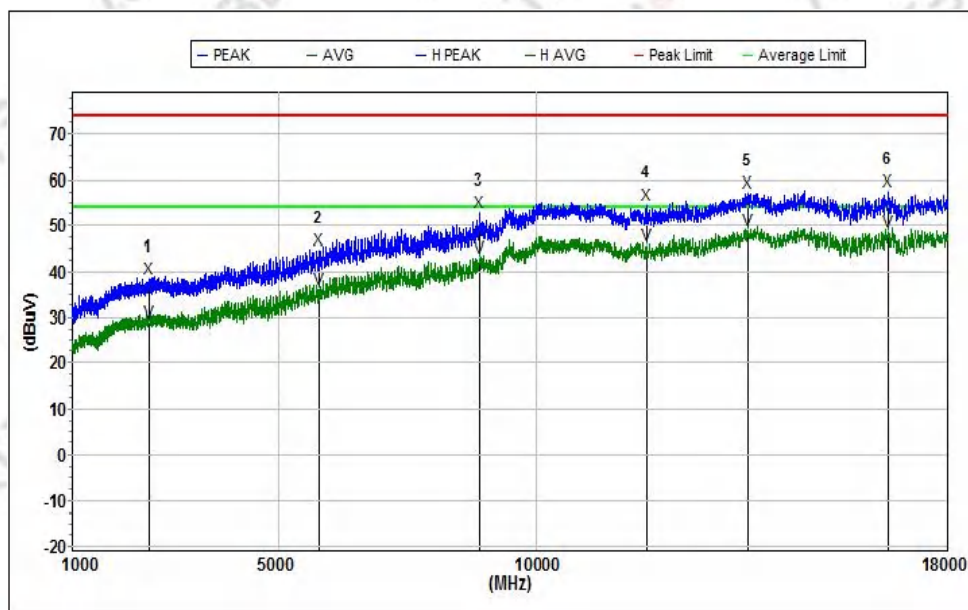
Mk.	Freq. (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	1976.650	38.0	74.0	36.0	321	100	25.2	56.4	2.7	V
2	4388.950	41.8	74.0	32.2	321	100	30.8	57.3	3.5	V
3	6933.000	48.5	74.0	25.5	321	100	35.6	56.9	4.3	V
4	10053.350	55.2	74.0	18.8	321	100	38.1	56.5	5.4	V
5	12654.350	54.7	74.0	19.3	321	100	39.4	56.5	6.1	V
6	15190.750	58.1	74.0	15.9	321	100	38.6	55.9	6.3	V
Avg										
1	1976.650	27.8	54.0	26.2	321	100	25.2	56.4	2.7	V
2	4388.950	33.3	54.0	20.7	321	100	30.8	57.3	3.5	V
3	6933.000	39.9	54.0	14.1	321	100	35.6	56.9	4.3	V
4	10053.350	46.9	54.0	7.1	321	100	38.1	56.5	5.4	V
5	12654.350	46.3	54.0	7.7	321	100	39.4	56.5	6.1	V
6	15190.750	47.8	54.0	6.2	321	100	38.6	55.9	6.3	V

Temperature:	23.4°C	Relative Humidity:	60%RH
Test Voltage:	AC 24V	Polarization:	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



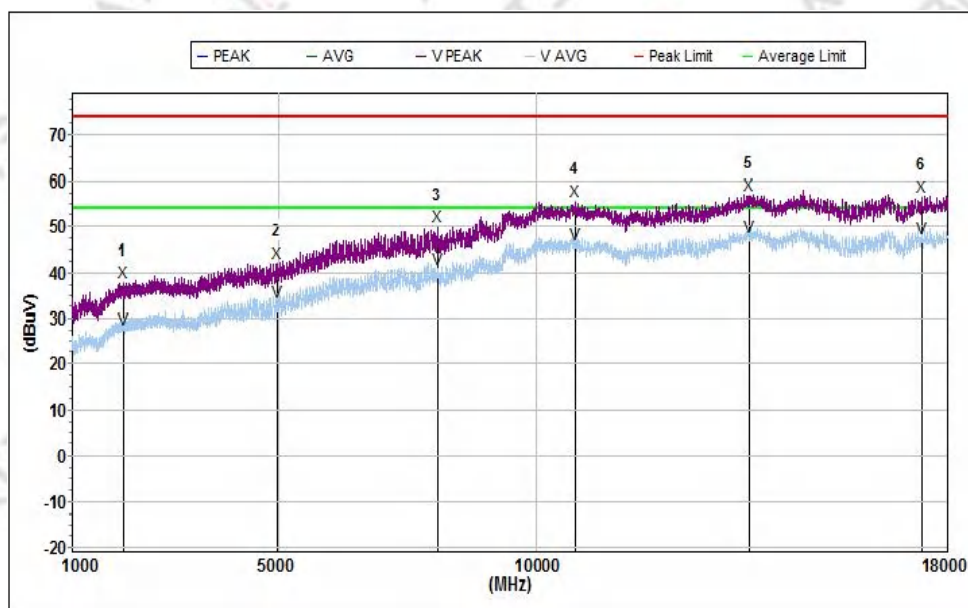
Mk.	Freq. (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	2472.200	38.4	74.0	35.6	256	100	27.5	57.1	2.8	H
2	5791.450	44.9	74.0	29.1	256	100	33.3	57.1	4.1	H
3	8914.350	53.0	74.0	21.0	256	100	37.8	57.3	5.3	H
4	12152.000	54.6	74.0	19.4	256	100	39.0	56.3	5.9	H
5	14122.300	57.2	74.0	16.8	256	100	39.8	55.9	6.2	H
6	16839.750	57.6	74.0	16.4	256	100	38.1	56.2	6.8	H
Avg										
1	2472.200	29.0	54.0	25.0	256	100	27.5	57.1	2.8	H
2	5791.450	36.3	54.0	17.7	256	100	33.3	57.1	4.1	H
3	8914.350	43.3	54.0	10.7	256	100	37.8	57.3	5.3	H
4	12152.000	45.7	54.0	8.3	256	100	39.0	56.3	5.9	H
5	14122.300	49.1	54.0	4.9	256	100	39.8	55.9	6.2	H
6	16839.750	48.6	54.0	5.4	256	100	38.1	56.2	6.8	H

Temperature:	23.4°C	Relative Humidity:	60%RH
Test Voltage:	AC 24V	Polarization:	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



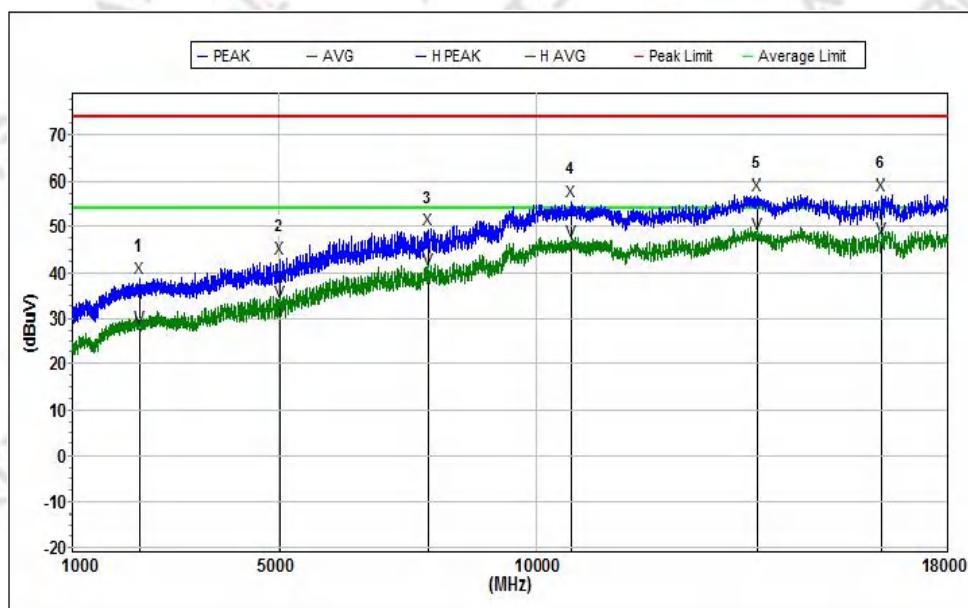
Mk.	Freq. (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	1976.650	38.0	74.0	36.0	321	100	25.2	56.4	2.7	V
2	4969.500	42.0	74.0	32.0	321	100	32.6	57.5	3.6	V
3	8082.200	50.0	74.0	24.0	321	100	36.8	57.1	4.9	V
4	10755.874	55.7	74.0	18.3	321	100	38.6	56.7	5.6	V
5	14156.613	56.9	74.0	17.1	321	100	39.7	55.9	6.2	V
6	17485.750	56.6	74.0	17.4	321	100	39.9	56.2	6.9	V
Avg										
1	1976.650	27.8	54.0	26.2	321	100	25.2	56.4	2.7	V
2	4969.500	33.5	54.0	20.5	321	100	32.6	57.5	3.6	V
3	8082.200	40.9	54.0	13.1	321	100	36.8	57.1	4.9	V
4	10755.874	46.2	54.0	7.8	321	100	38.6	56.7	5.6	V
5	14156.613	47.7	54.0	6.3	321	100	39.7	55.9	6.2	V
6	17485.750	47.4	54.0	6.6	321	100	39.9	56.2	6.9	V

Temperature:	23.4°C	Relative Humidity:	60%RH
Test Voltage:	AC 24V	Polarization:	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



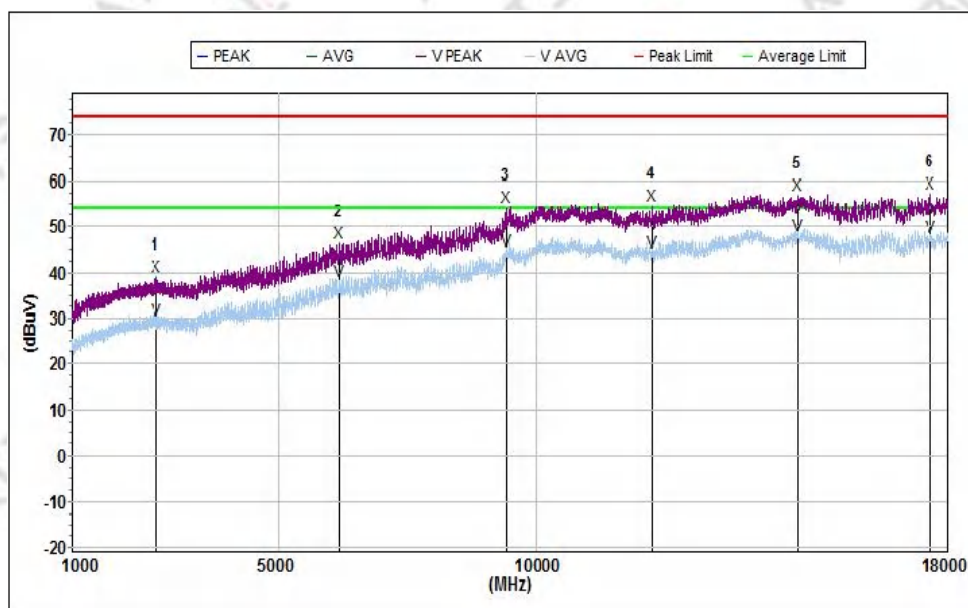
Mk.	Freq. (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	2283.500	38.8	74.0	35.2	0	100	26.6	56.8	2.8	H
2	5031.550	43.2	74.0	30.8	0	100	32.8	57.5	3.6	H
3	7891.800	49.5	74.0	24.5	0	100	36.9	57.1	4.9	H
4	10688.300	55.8	74.0	18.2	0	100	38.7	56.7	5.6	H
5	14300.800	57.0	74.0	17.0	0	100	39.7	55.9	6.2	H
6	16709.700	57.1	74.0	16.9	0	100	38.0	56.2	6.8	H
Avg										
1	2283.500	28.0	54.0	26.0	0	100	26.6	56.8	2.8	H
2	5031.550	33.7	54.0	20.3	0	100	32.8	57.5	3.6	H
3	7891.800	41.0	54.0	13.0	0	100	36.9	57.1	4.9	H
4	10688.300	46.8	54.0	7.2	0	100	38.7	56.7	5.6	H
5	14300.800	48.5	54.0	5.5	0	100	39.7	55.9	6.2	H
6	16709.700	47.5	54.0	6.5	0	100	38.0	56.2	6.8	H

Temperature:	23.4°C	Relative Humidity:	60%RH
Test Voltage:	AC 24V	Polarization:	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



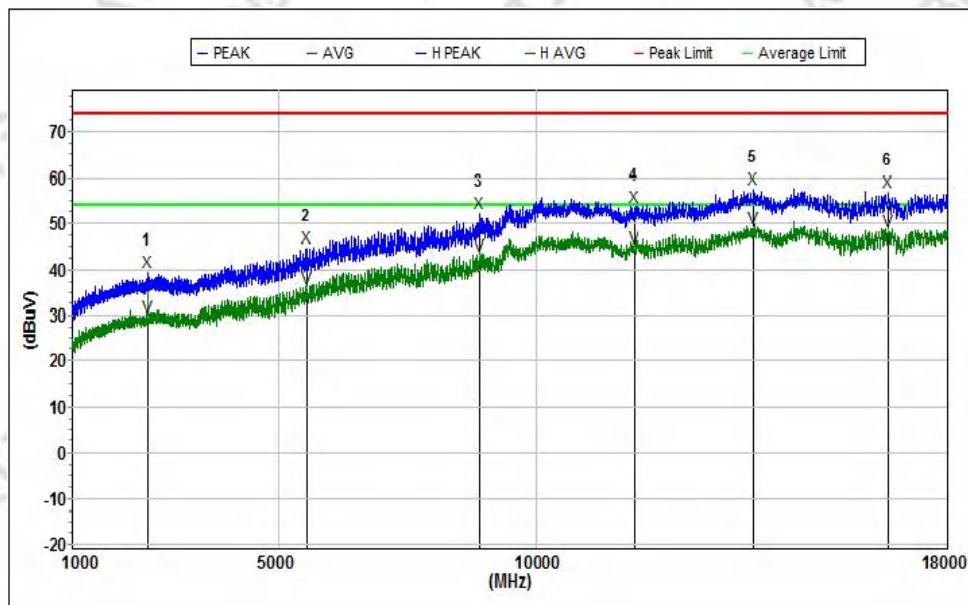
Mk.	Freq. (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	2618.400	39.1	74.0	34.9	0	100	27.7	57.3	2.8	V
2	6172.250	46.3	74.0	27.7	0	100	34.1	57.0	4.1	V
3	9417.550	54.4	74.0	19.6	0	100	37.8	57.0	5.4	V
4	12266.750	54.6	74.0	19.4	0	100	39.0	56.4	6.0	V
5	15072.600	57.0	74.0	17.0	0	100	38.8	55.9	6.3	V
6	17660.000	57.3	74.0	16.7	0	100	40.6	56.1	7.0	V
Avg										
1	2618.400	29.6	54.0	24.4	0	100	27.7	57.3	2.8	V
2	6172.250	38.2	54.0	15.8	0	100	34.1	57.0	4.1	V
3	9417.550	44.8	54.0	9.2	0	100	37.8	57.0	5.4	V
4	12266.750	44.3	54.0	9.7	0	100	39.0	56.4	6.0	V
5	15072.600	48.0	54.0	6.0	0	100	38.8	55.9	6.3	V
6	17660.000	47.9	54.0	6.1	0	100	40.6	56.1	7.0	V

Temperature:	23.4°C	Relative Humidity:	60%RH
Test Voltage:	AC 24V	Polarization:	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



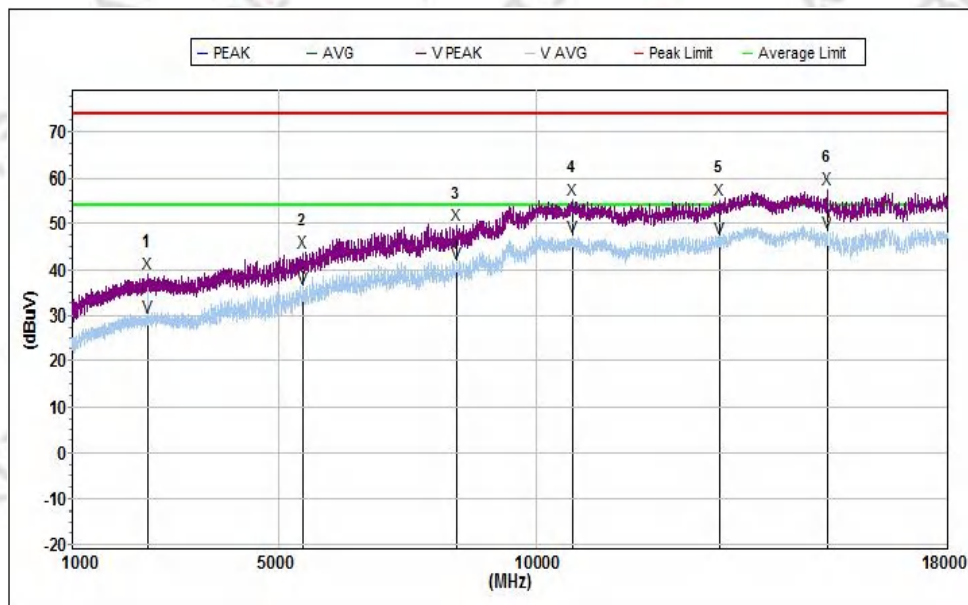
Mk.	Freq. (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	2440.750	39.5	74.0	34.5	0	100	27.3	57.0	2.8	H
2	5535.600	44.7	74.0	29.3	0	100	32.5	57.3	4.0	H
3	8916.050	52.4	74.0	21.6	0	100	37.8	57.3	5.3	H
4	11897.000	53.8	74.0	20.2	0	100	38.8	56.4	5.9	H
5	14239.600	57.7	74.0	16.3	0	100	39.7	55.9	6.2	H
6	16841.450	57.0	74.0	17.0	0	100	38.1	56.2	6.8	H
Avg										
1	2440.750	29.8	54.0	24.2	0	100	27.3	57.0	2.8	H
2	5535.600	36.0	54.0	18.0	0	100	32.5	57.3	4.0	H
3	8916.050	43.1	54.0	10.9	0	100	37.8	57.3	5.3	H
4	11897.000	44.8	54.0	9.2	0	100	38.8	56.4	5.9	H
5	14239.600	49.2	54.0	4.8	0	100	39.7	55.9	6.2	H
6	16841.450	48.3	54.0	5.7	0	100	38.1	56.2	6.8	H

Temperature:	23.4°C	Relative Humidity:	60%RH
Test Voltage:	AC 24V	Polarization:	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)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	2440.750	39.1	74.0	34.9	360	100	27.1	57.0	2.8	V
2	5475.250	43.9	74.0	30.1	360	100	32.2	57.3	4.0	V
3	8468.950	49.8	74.0	24.2	360	100	37.1	57.2	5.1	V
4	10702.750	55.4	74.0	18.6	360	100	38.6	56.7	5.6	V
5	13547.700	55.3	74.0	18.7	360	100	39.8	56.2	6.2	V
6	15642.100	57.6	74.0	16.4	360	100	37.9	56.0	6.4	V
Avg										
1	2440.750	29.5	54.0	24.5	360	100	27.1	57.0	2.8	V
2	5475.250	35.8	54.0	18.2	360	100	32.2	57.3	4.0	V
3	8468.950	41.4	54.0	12.6	360	100	37.1	57.2	5.1	V
4	10702.750	47.0	54.0	7.0	360	100	38.6	56.7	5.6	V
5	13547.700	46.7	54.0	7.3	360	100	39.8	56.2	6.2	V
6	15642.100	48.1	54.0	5.9	360	100	37.9	56.0	6.4	V

3.5.4.4. For above 18GHz

Temperature:	23.4°C	Relative Humidity:	60%RH
Test Voltage:	AC 24V	Polarization:	--
Test Mode:	TX Mode		

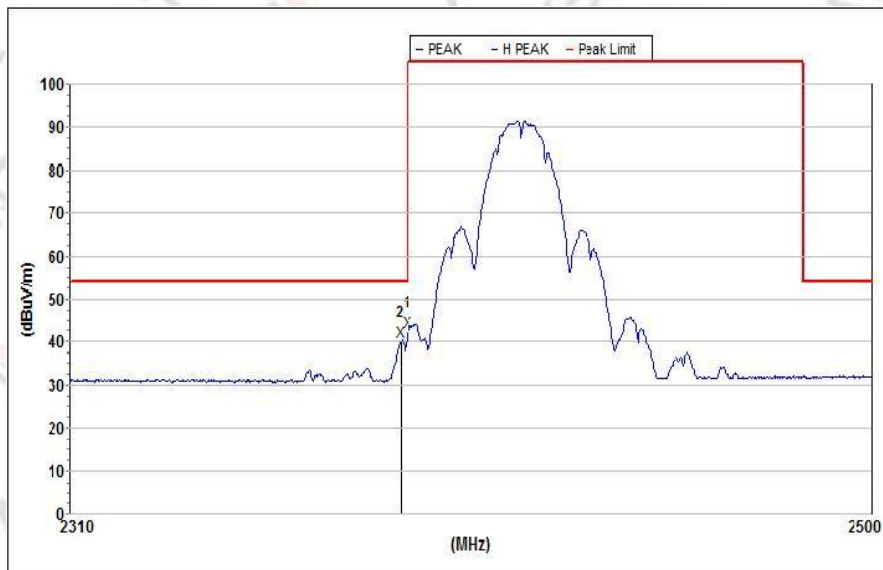
Note:

Other 18G-25G Emission detected are more than 20dB below the limit.

3.5.4.5. For above Restricted Band

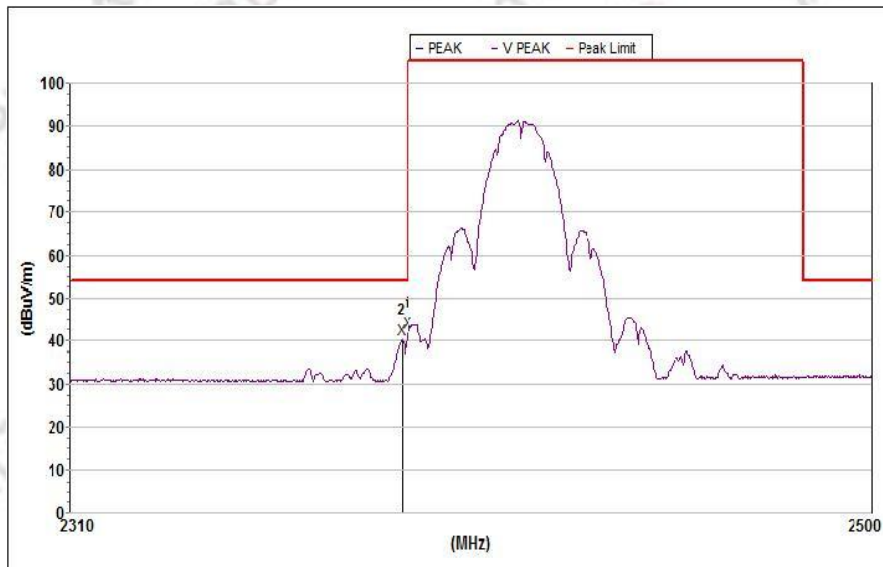
802.11b-Low

Mode 1 Horizontal



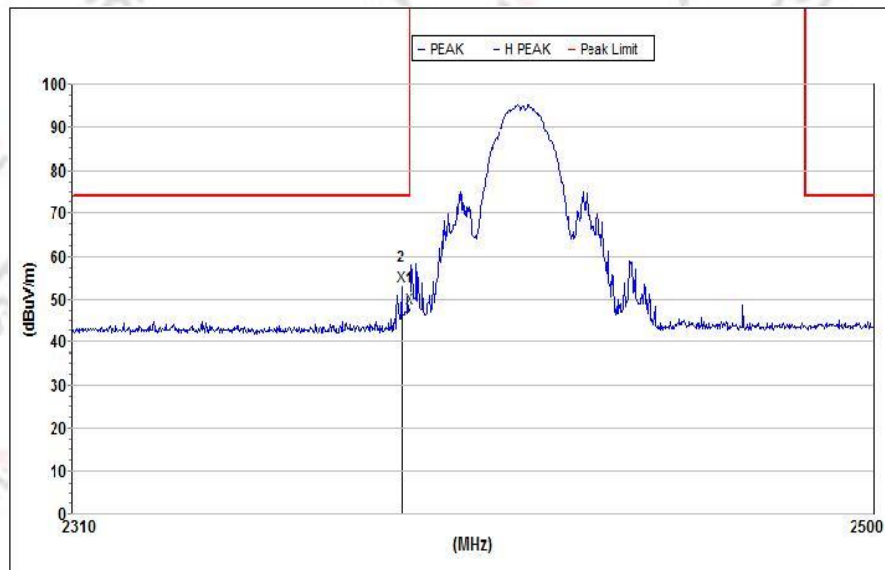
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Avg										
1	2390.000	42.3	54.0	11.7	108	150	27.1	56.9	6.4	H
2	2388.352	40.1	54.0	13.9	108	150	27.1	56.9	6.4	H

Mode 1 Vertical



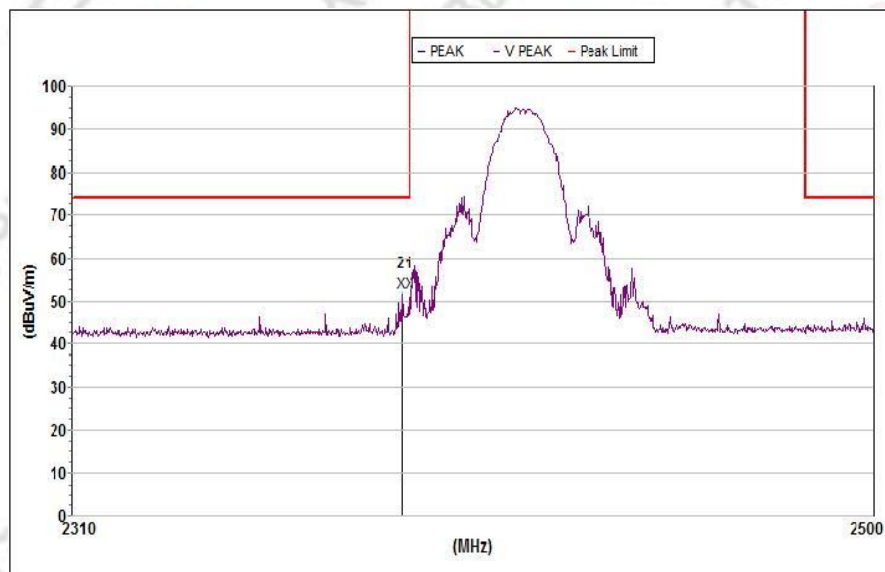
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Avg										
1	2390.000	42.2	54.0	11.8	113	150	26.9	56.9	6.4	V
2	2388.730	40.5	54.0	13.5	113	150	26.9	56.9	6.4	V

802.11b-Low Mode 1 Horizontal



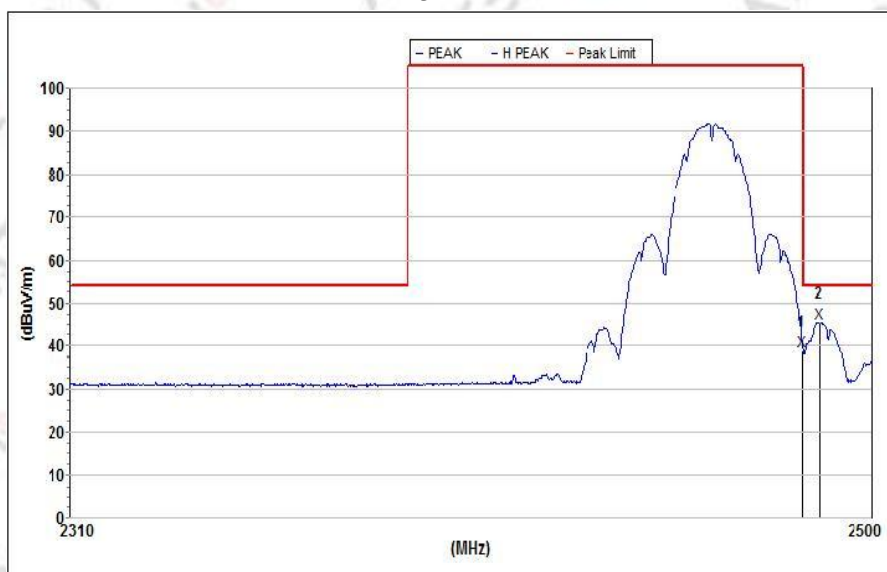
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak										
1	2390.000	48.0	74.0	26.0	116	150	27.1	56.9	6.4	H
2	2387.975	52.9	74.0	21.1	80	150	27.1	56.9	6.4	H

Mode 1 Vertical



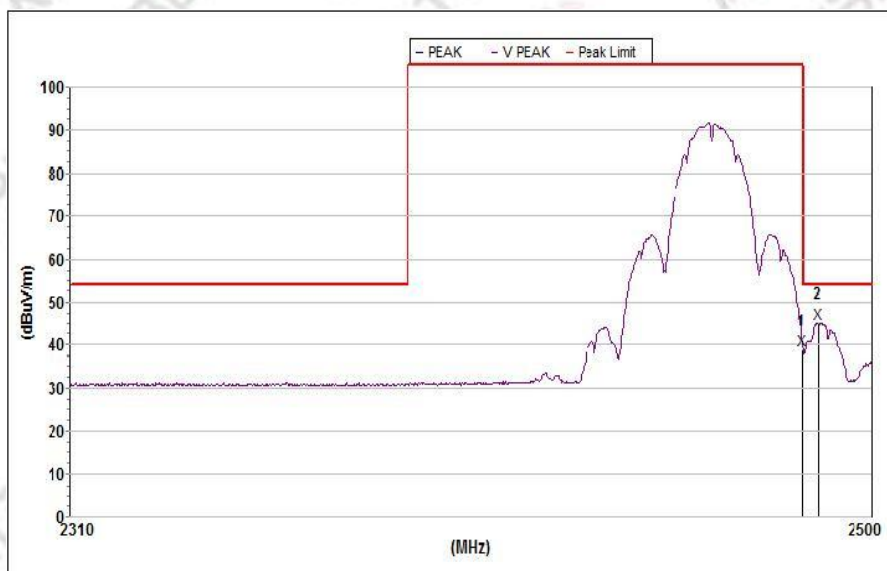
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak										
1	2390.000	52.1	74.0	21.9	76	150	26.9	56.9	6.4	V
2	2388.164	51.9	74.0	22.1	101	150	26.9	56.9	6.4	V

802.11b-High Mode 3 Horizontal



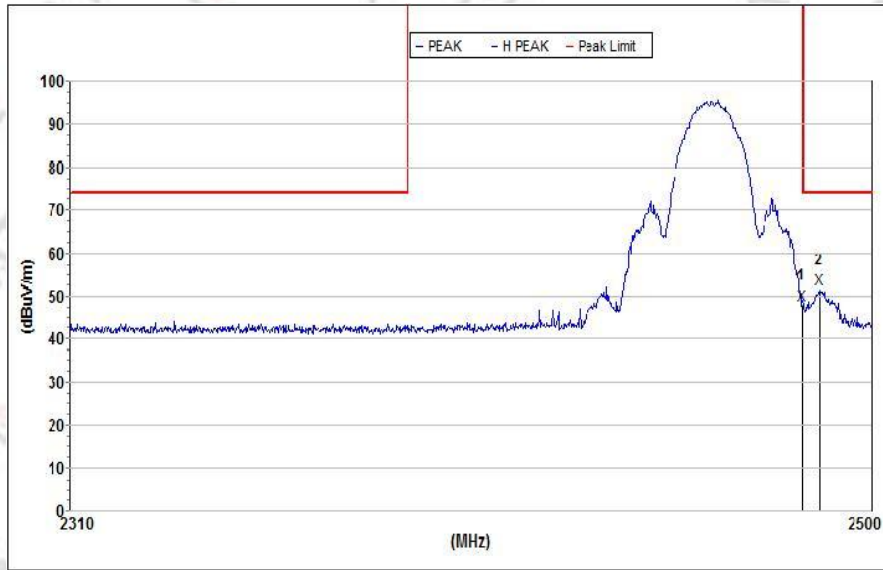
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Avg										
1	2483.501	38.7	54.0	15.3	113	150	27.5	57.1	6.5	H
2	2487.582	45.4	54.0	8.6	113	150	27.5	57.1	6.5	H

Mode 3 Vertical



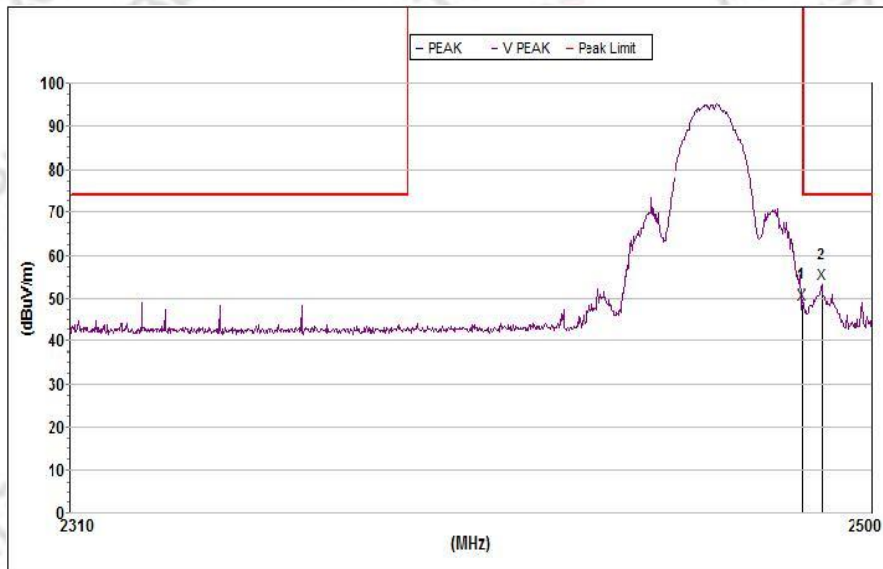
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Avg										
1	2483.501	38.8	54.0	15.2	75	150	27.3	57.1	6.5	V
2	2487.188	45.1	54.0	8.9	112	150	27.3	57.1	6.5	V

802.11b-High Mode 3 Horizontal



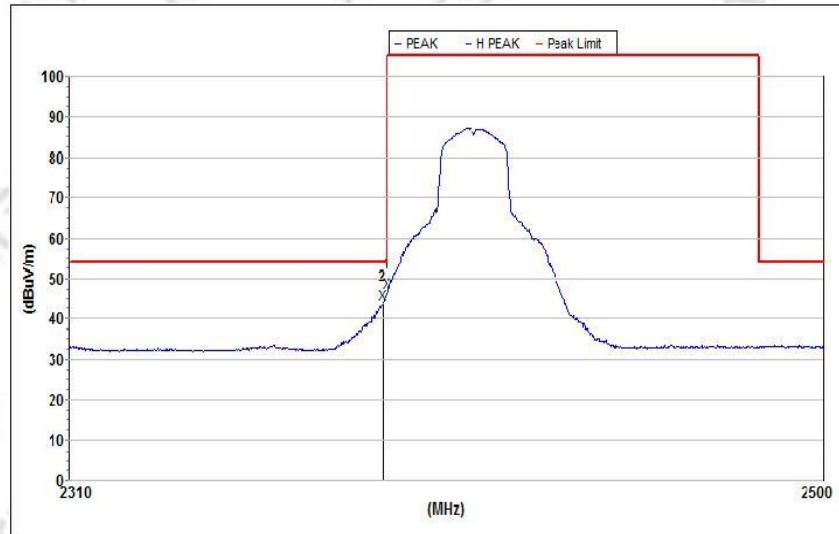
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak										
1	2483.501	47.9	74.0	26.1	90	150	27.5	57.1	6.5	H
2	2487.385	51.6	74.0	22.4	78	150	27.5	57.1	6.5	H

Mode 3 Vertical



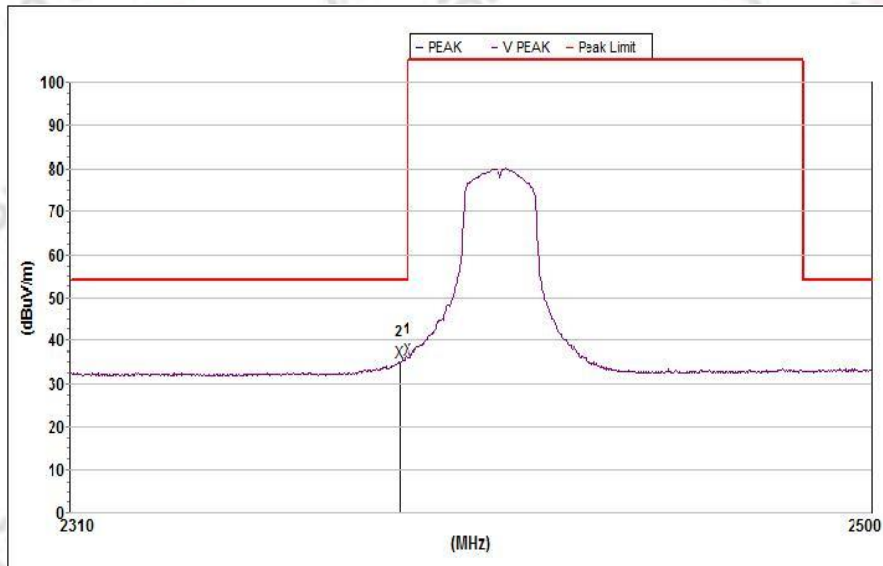
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak										
1	2483.501	48.8	74.0	25.2	322	150	27.3	57.1	6.5	V
2	2487.975	53.2	74.0	20.8	100	150	27.3	57.1	6.5	V

802.11g-Low Mode 4 Horizontal



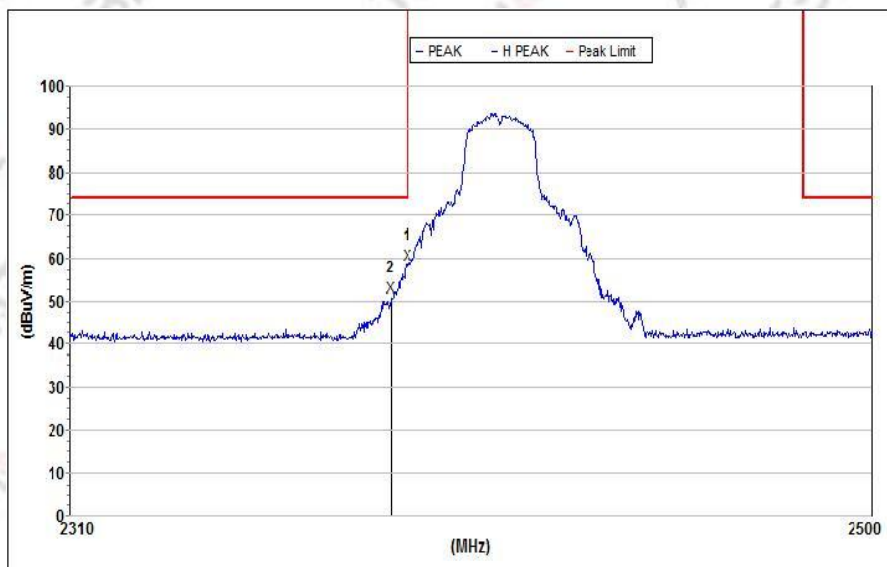
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Avg										
1	2390.000	46.7	54.0	7.3	93	150	27.1	56.9	6.4	H
2	2388.919	43.9	54.0	10.1	106	150	27.1	56.9	6.3	H

Mode 4 Vertical



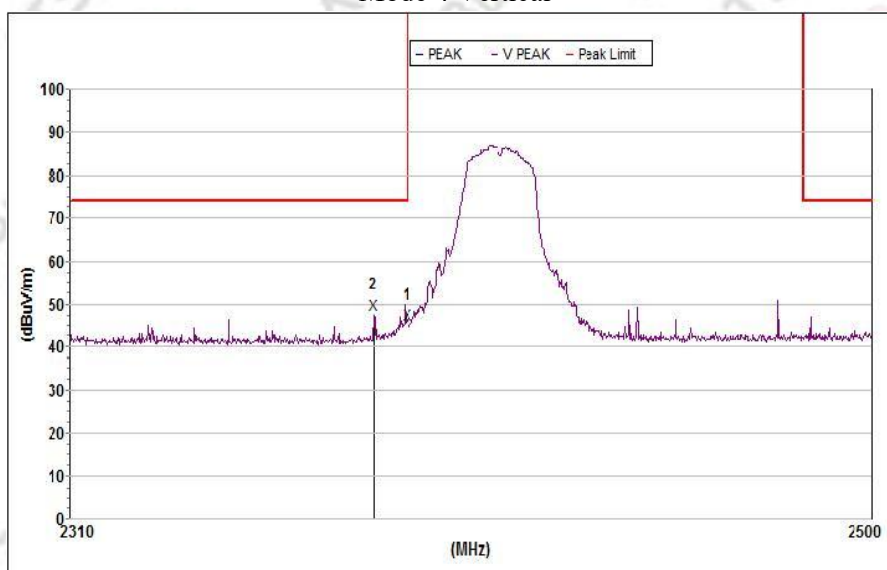
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Avg										
1	2390.000	35.8	54.0	18.2	55	150	26.9	56.9	6.4	V
2	2388.164	35.3	54.0	18.7	311	150	26.9	56.9	6.3	V

802.11g-Low Mode 4 Horizontal



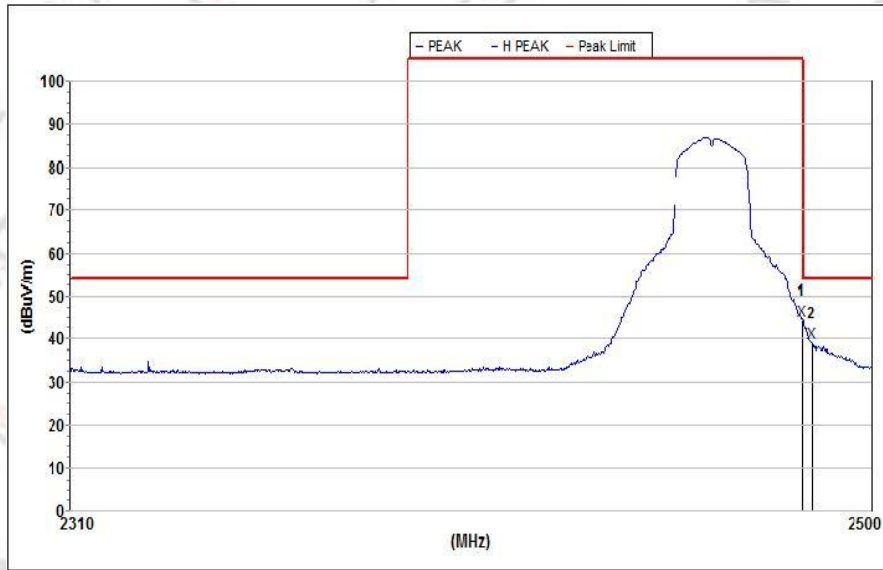
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak										
1	2390.000	58.5	74.0	15.5	297	150	27.1	56.9	6.4	H
2	2386.088	51.1	74.0	22.9	98	150	27.1	56.9	6.3	H

Mode 4 Vertical



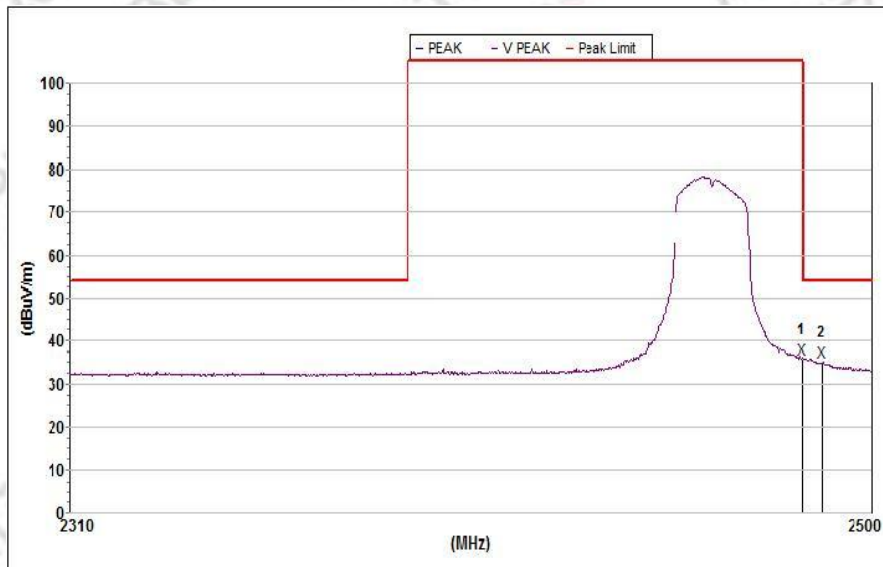
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak										
1	2390.000	45.4	74.0	28.6	170	150	26.9	56.9	6.4	V
2	2381.942	47.7	74.0	26.3	183	150	26.9	56.9	6.3	V

802.11g-High Mode 6 Horizontal



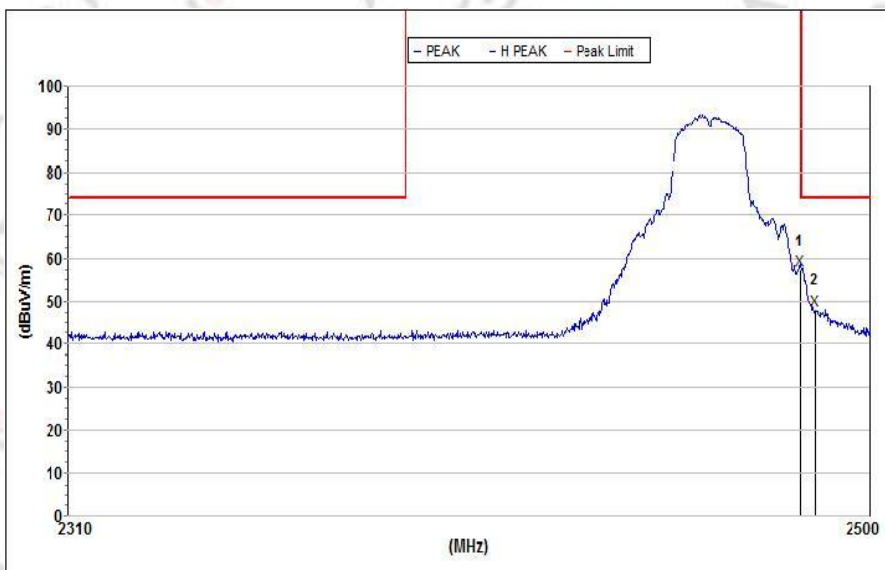
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Avg										
1	2483.501	44.4	54.0	9.6	122	150	27.5	57.1	6.5	H
2	2485.813	39.2	54.0	14.8	103	150	27.5	57.1	6.5	H

Mode 6 Vertical



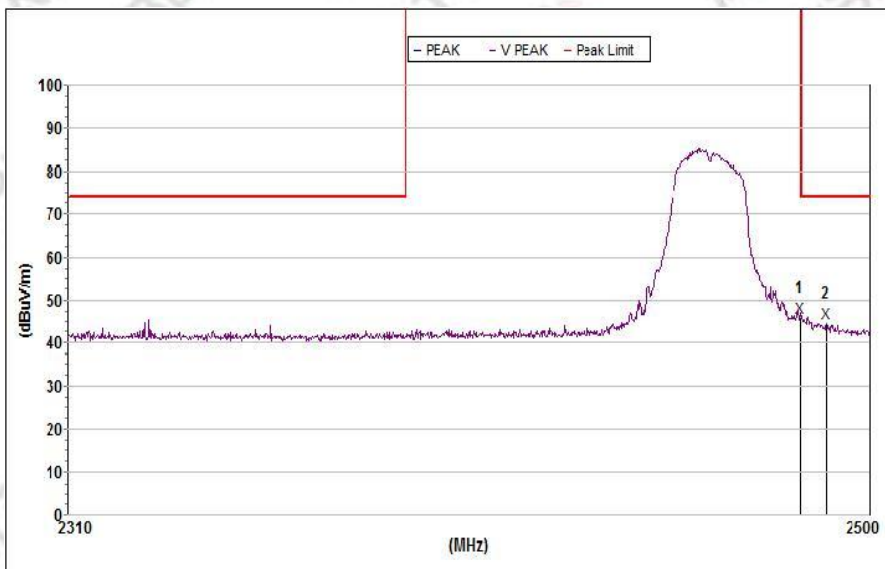
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Avg										
1	2483.501	35.9	54.0	18.1	173	150	27.3	57.1	6.5	V
2	2488.172	35.2	54.0	18.8	154	150	27.3	57.1	6.5	V

802.11g-High Mode 6 Horizontal



Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak										
1	2483.501	57.2	74.0	16.8	96	150	27.5	57.1	6.5	H
2	2486.992	48.1	74.0	25.9	96	150	27.5	57.1	6.5	H

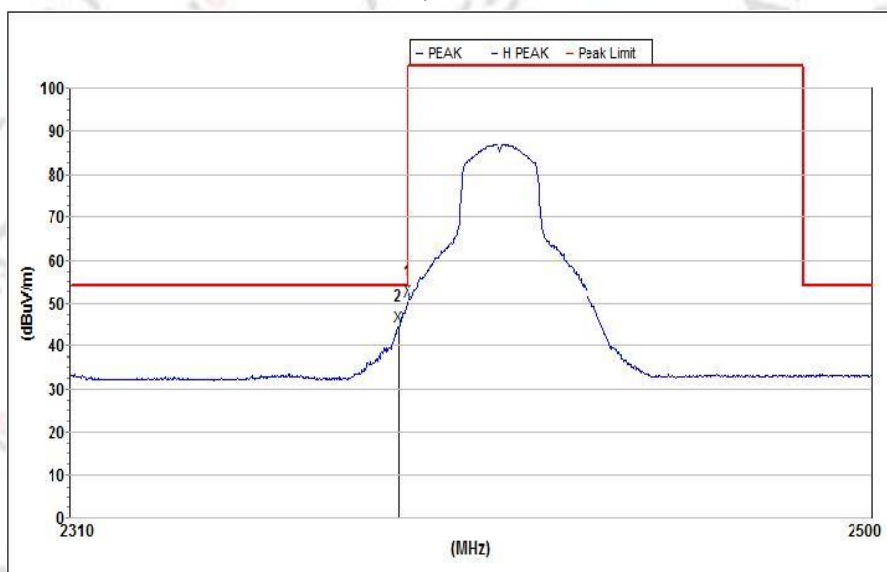
Mode 6 Vertical



Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak										
1	2483.501	45.9	74.0	28.1	347	150	27.3	57.1	6.5	V
2	2489.549	44.6	74.0	29.4	7	150	27.4	57.1	6.5	V

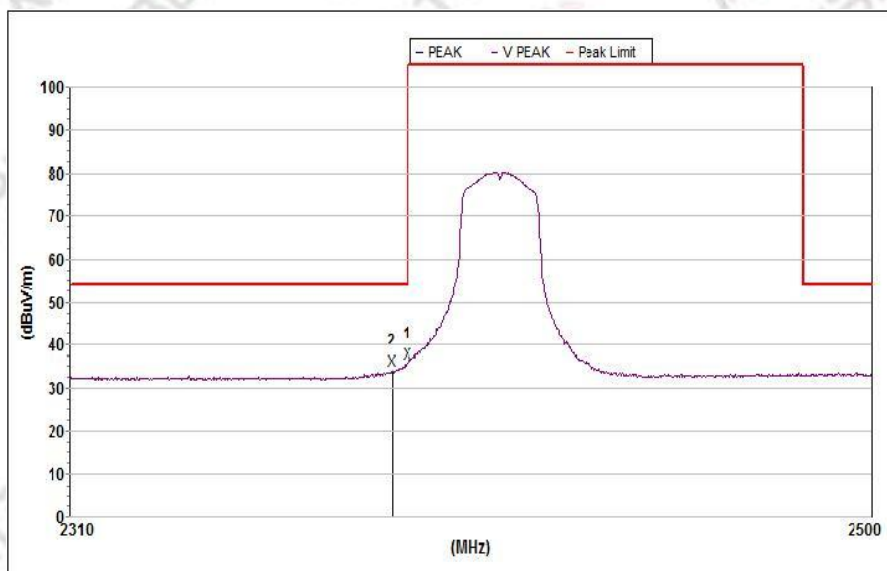
802.11n20-Low

Mode 7 Horizontal



Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Avg										
1	2390.000	50.6	54.0	3.4	321	150	27.1	56.9	6.4	H
2	2387.597	44.8	54.0	9.2	295	150	27.1	56.9	6.4	H

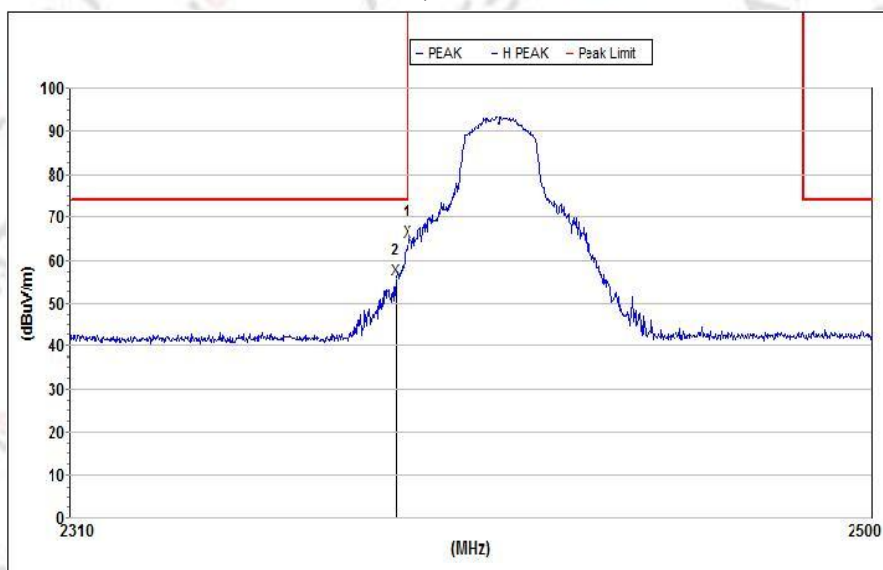
Mode 7 Vertical



Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Avg										
1	2390.000	35.7	54.0	18.3	9	150	26.9	56.9	6.4	V
2	2386.277	34.1	54.0	19.9	39	150	26.9	56.9	6.4	V

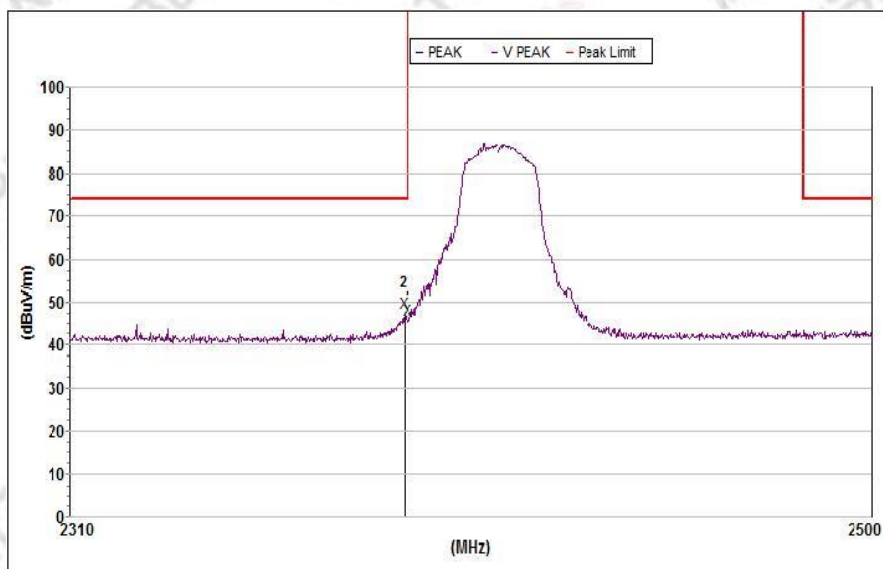
802.11n20-Low

Mode 7 Horizontal



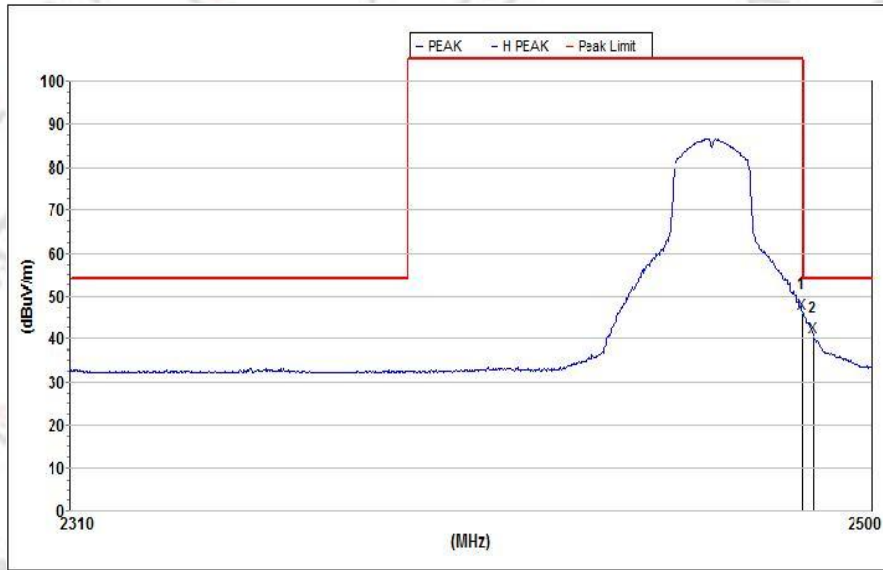
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak										
1	2390.000	64.5	74.0	9.5	77	150	27.1	56.9	6.4	H
2	2387.220	55.6	74.0	18.4	295	150	27.1	56.9	6.4	H

Mode 7 Vertical



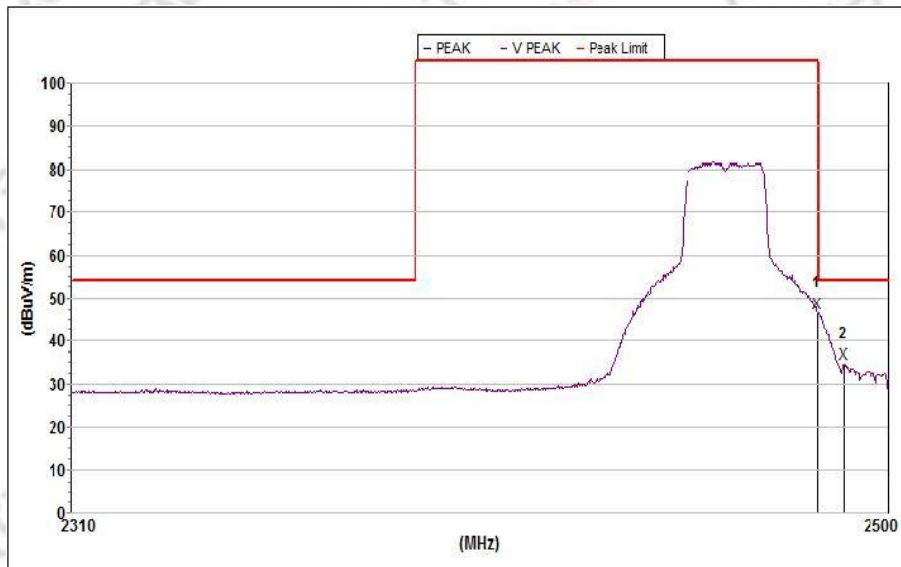
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak										
1	2390.000	46.1	74.0	27.9	12	150	26.9	56.9	6.4	V
2	2389.108	47.7	74.0	26.3	351	150	26.9	56.9	6.4	V

802.11n20-High Mode 9 Horizontal



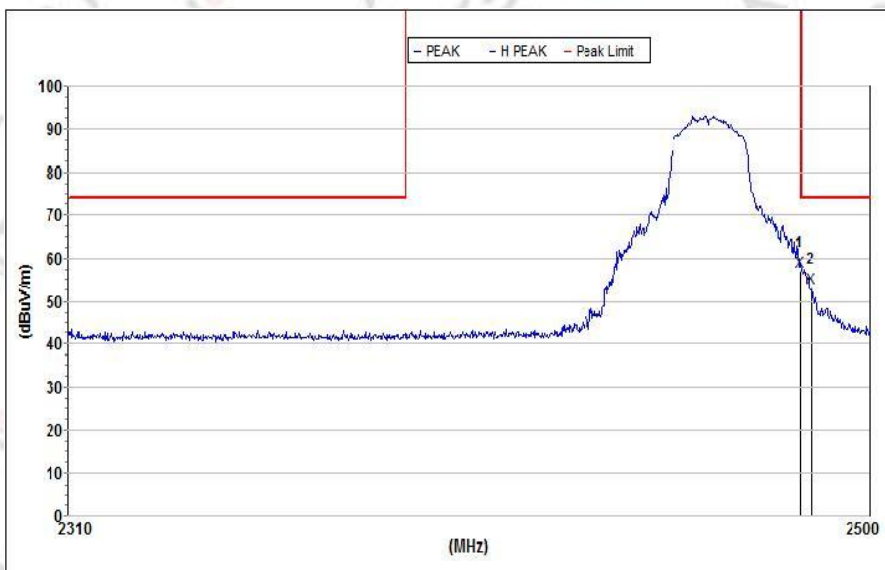
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Avg										
1	2483.501	46.2	54.0	7.8	106	150	27.5	57.1	6.5	H
2	2486.206	40.5	54.0	13.5	290	150	27.5	57.1	6.5	H

Mode 9 Vertical



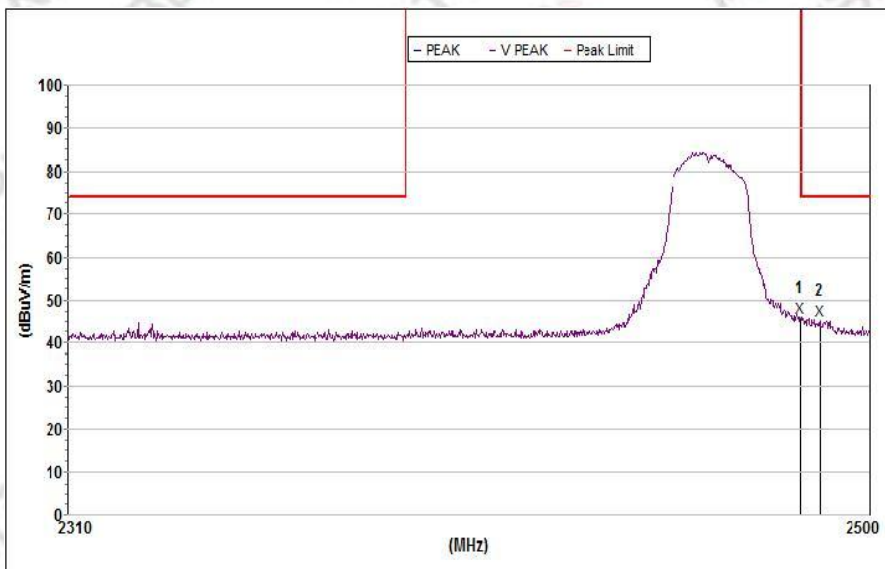
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Avg										
1	2483.501	46.8	54.0	7.2	170	150	27.3	57.1	7.1	V
2	2489.549	34.9	54.0	19.1	231	150	27.4	57.1	7.1	V

802.11n20-High Mode 9 Horizontal



Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak										
1	2483.501	56.9	74.0	17.1	100	150	27.5	57.1	6.5	H
2	2486.206	52.9	74.0	21.1	198	150	27.5	57.1	6.5	H

Mode 9 Vertical



Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak										
1	2483.501	46.0	74.0	28.0	1	150	27.3	57.1	6.5	V
2	2487.975	45.3	74.0	28.7	360	150	27.3	57.1	6.5	V

*****END OF APPENDIX B*****

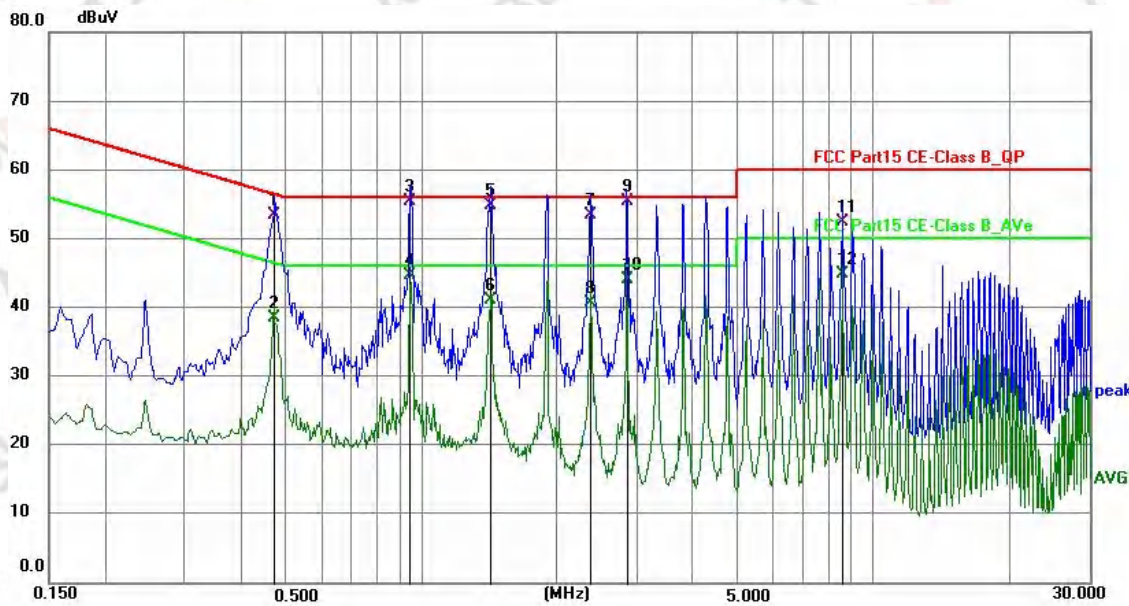
Appendix C _ AC Power-Line Conducted Emission Test Data

3.6.4. Test Result of AC Power-Line Conducted Emission

Temperature:	26.2°C	Relative Humidity:	53%RH
Test Voltage:	AC 24V/60Hz	Phase:	L
Test Mode:	Mode 10		

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)

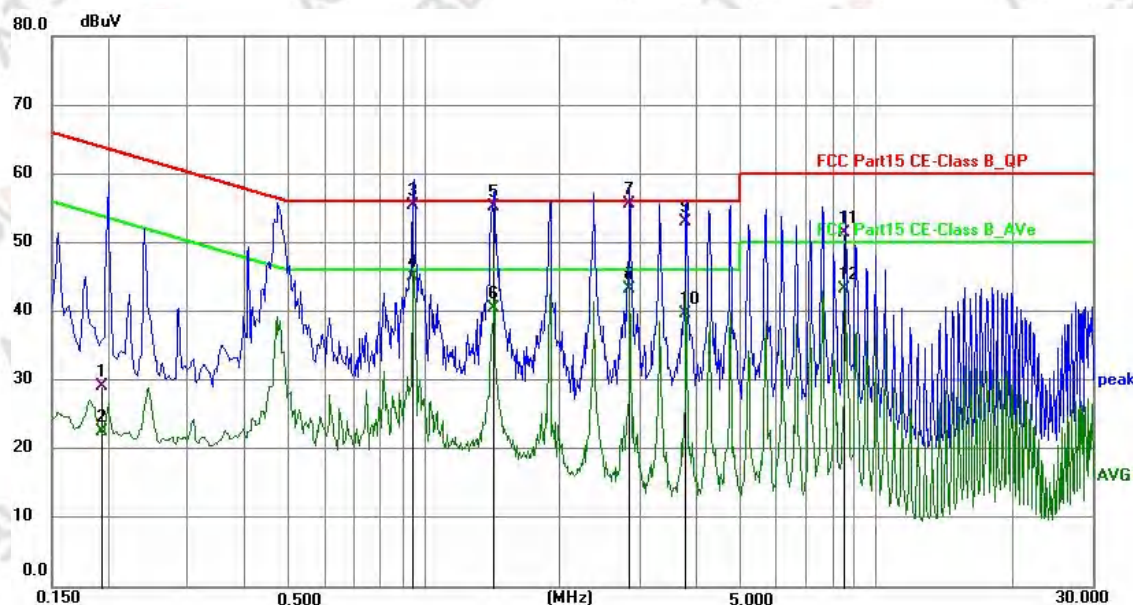


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.4736	43.50	9.86	53.36	56.45	-3.09	QP
2	0.4736	28.61	9.86	38.47	46.45	-7.98	AVG
3	0.9467	45.53	9.92	55.45	56.00	-0.55	QP
4	0.9467	34.77	9.92	44.69	46.00	-1.31	AVG
5	1.4237	44.92	9.95	54.87	56.00	-1.13	QP
6	1.4237	31.08	9.95	41.03	46.00	-4.97	AVG
7	2.3733	43.36	9.99	53.35	56.00	-2.65	QP
8	2.3733	30.62	9.99	40.61	46.00	-5.39	AVG
9	2.8548	45.42	10.00	55.42	56.00	-0.58	QP
10	2.8548	34.13	10.00	44.13	46.00	-1.87	AVG
11	8.5437	42.23	10.12	52.35	60.00	-7.65	QP
12	8.5437	34.80	10.12	44.92	50.00	-5.08	AVG

Temperature:	26.2°C	Relative Humidity:	53%RH
Test Voltage:	AC 24V/60Hz	Phase:	N
Test Mode:	Mode 10		

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)

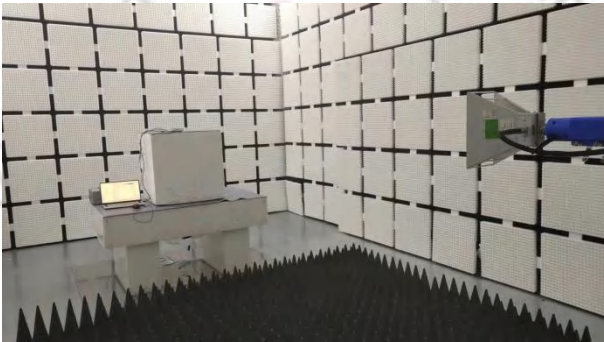
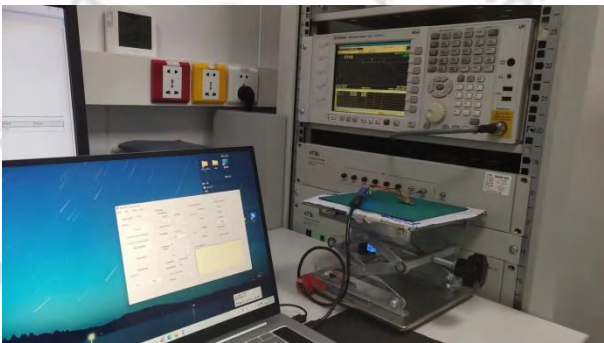
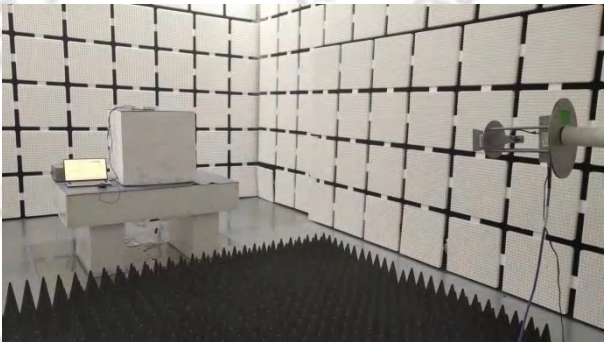
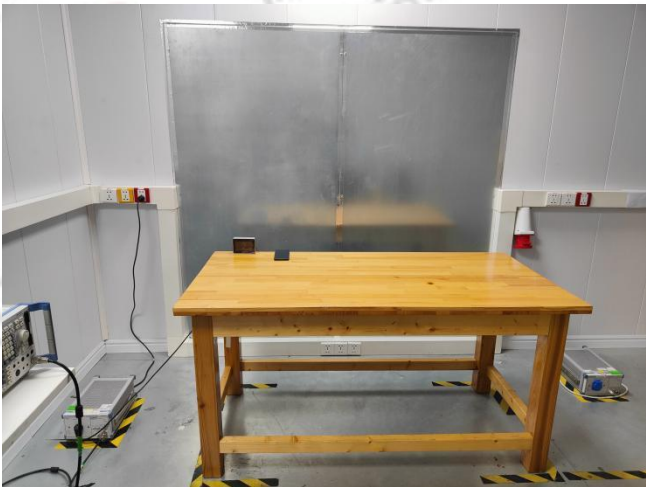


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1935	19.31	9.82	29.13	63.88	-34.75	QP
2	0.1935	12.83	9.82	22.65	53.88	-31.23	AVG
3	0.9503	45.70	9.79	55.49	56.00	-0.51	QP
4	0.9503	35.34	9.79	45.13	46.00	-0.87	AVG
5	1.4232	45.36	9.84	55.20	56.00	-0.80	QP
6	1.4232	30.67	9.84	40.51	46.00	-5.49	AVG
7	2.8456	45.63	9.97	55.60	56.00	-0.40	QP
8	2.8456	33.28	9.97	43.25	46.00	-2.75	AVG
9	3.7921	43.02	9.99	53.01	56.00	-2.99	QP
10	3.7921	29.78	9.99	39.77	46.00	-6.23	AVG
11	8.5405	41.54	10.00	51.54	60.00	-8.46	QP
12	8.5405	33.33	10.00	43.33	50.00	-6.67	AVG

*****END OF APPENDIX C*****

Appendix D _ Test Setup

4. TEST SETUP PHOTOGRAPHS

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 APPENDIX D*****