

TEST REPORT

Report No.: SHATBL2402014W02

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

Product Name : Thermostat

Brand Name :  **qunda** Controller Expert

Model Name : QD-HVAC10(W)(QUNDA)

FCC ID : 2BFIE-QD-HVAC10W

Test Standard : FCC Part15.247

Date of Test : 2024.03.10-2024.03.18

Report Prepared by :



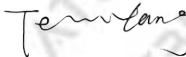
(Jack Suo)

Report Approved by :



(Ghost Li)

Authorized Signatory :



(Terry Yang)



TABLE OF CONTENTS

REVISION HISTORY	3
DECLARATION OF REPORT	4
SUMMARY OF TEST RESULT	5
1. GENERAL DESCRIPTION	6
1.1. Applicant	6
1.2. Manufacturer	6
1.3. Factory	6
1.4. General Information of EUT	7
1.5. Equipment Specification	8
1.6. Modification of EUT	8
1.7. Laboratory Information	8
1.8. Applicable Standards	8
2. TEST CONFIGURATION OF EUT	9
2.1. Carrier Frequency Channel	9
2.2. Test Modes	9
2.3. Block Diagram of Test System	10
2.4. Description of Support Units	10
2.5. Test Software and Power Level	10
2.6. EUT Operating Conditions	10
2.7. Equipment List	11
2.8. Measurement Uncertainty	12
3. TEST RESULT	13
3.1. Maximum Peak Conducted Output Power	13
3.2. 6dB Bandwidth and 99% Bandwidth	14
3.3. Power Spectral Density	15
3.4. Conducted Spurious & Band Edge Emission	16
3.5. Radiated Spurious Emission and Restricted Band	17
3.6. AC Power-Line Conducted Emission	22
3.7. Antenna Requirement	24
4. Test Setup Photographs	25
Appendix A _ Conducted Test Data	26
Appendix B _ Radiated Test Data	36
Appendix C _ AC Power-Line Conducted Emission Test Data	74
Appendix D _ Test Setup	76

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-HVAC10(W)(QUNDA)
Series Model	QD-HVAC10(W) QD-HVAC10(W2S)(QUNDA) [QD-HVAC10(W)(MECHDOC)]
Model Difference	The same structure, different LOGO, different function (main test model is full function, series model is deletion function)
SN or IMEI Code	202401290023005
Power Rating	18-30V~Max.1.5A 50-60Hz
Hardware version	QD-HVAC10
Software version	QD-HVAC10-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	26.63dBm (0.460W)
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

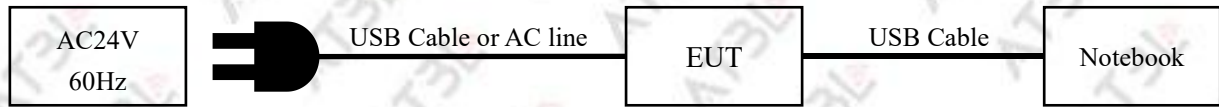
2.2. Test Modes

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

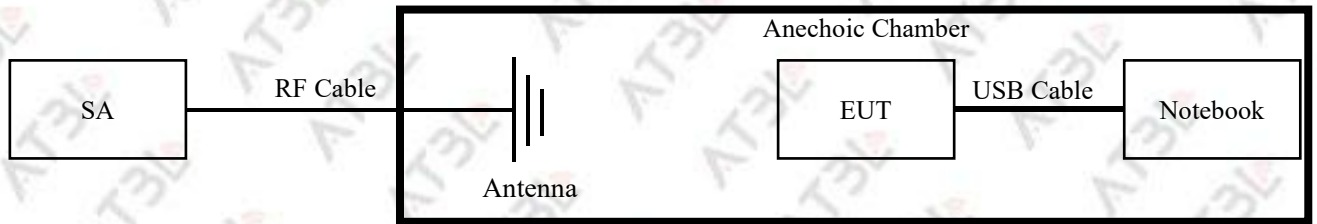
	Test Mode	Description	Data Rate
For Conducted and Radiated Test	Mode 1	TX IEEE 802.11b CH1	1Mbps
	Mode 2	TX IEEE 802.11b CH6	1Mbps
	Mode 3	TX IEEE 802.11 b CH11	1Mbps
	Mode 4	TX IEEE 802.11g CH1	6Mbps
	Mode 5	TX IEEE 802.11g CH6	6Mbps
	Mode 6	TX IEEE 802.11g CH11	6Mbps
	Mode 7	TX IEEE 802.11n HT20 CH1	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

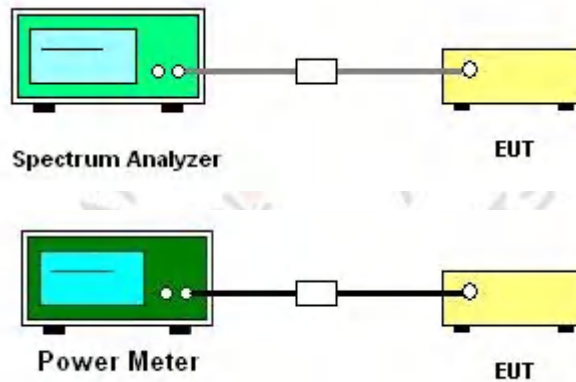
FCC Part15.247				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(b)(3)	Output Power	1 watt or 30dBm	2400-2483.5	PASS

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

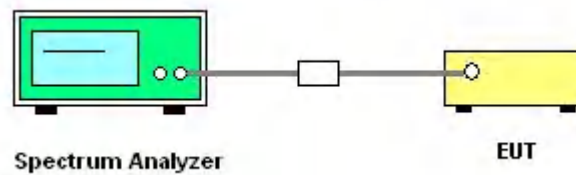
3.2.1. Limit

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

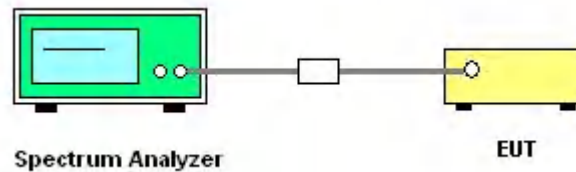
3.3.1. Limit

FCC Part15.247,Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(e)	Power Spectral Density	8 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.

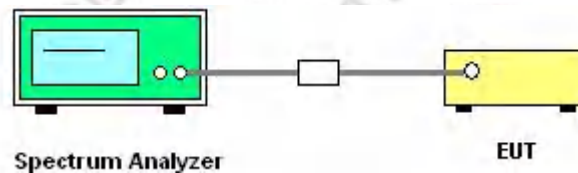
3.4.2. Test Procedure

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

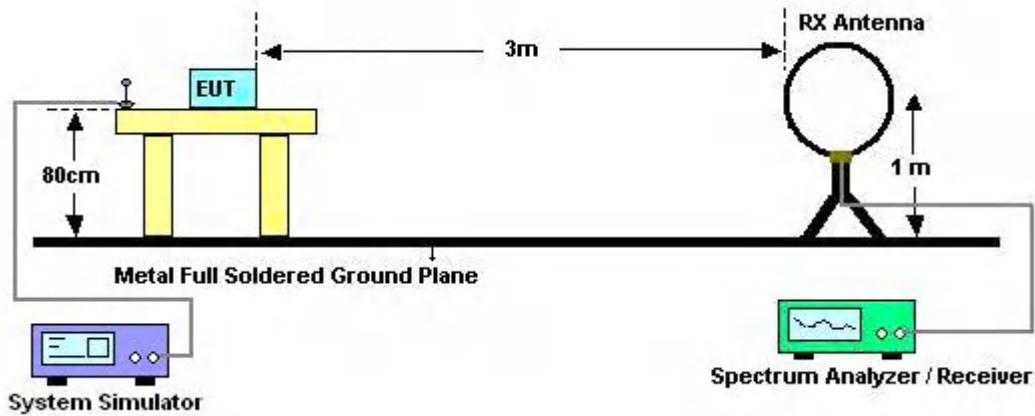
3.5.2. Test Procedure

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.

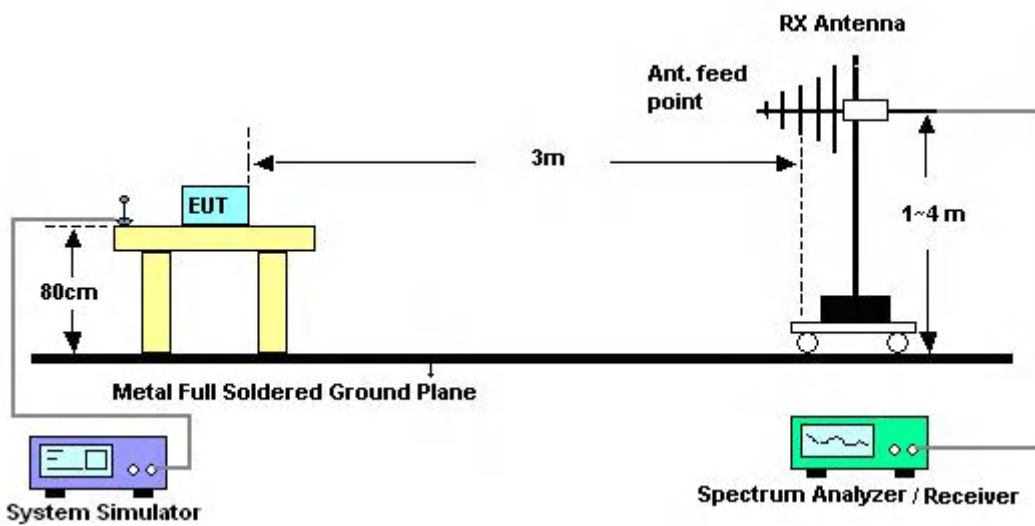
Note: Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported.

3.5.3. Test Setup

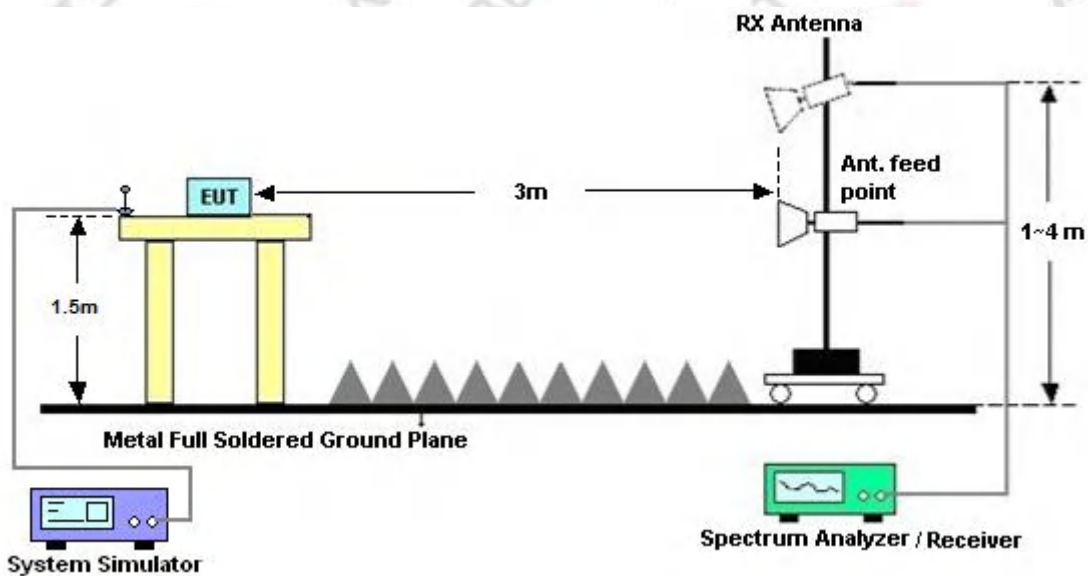
3.5.3.1. For radiated emissions below 30MHz



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.

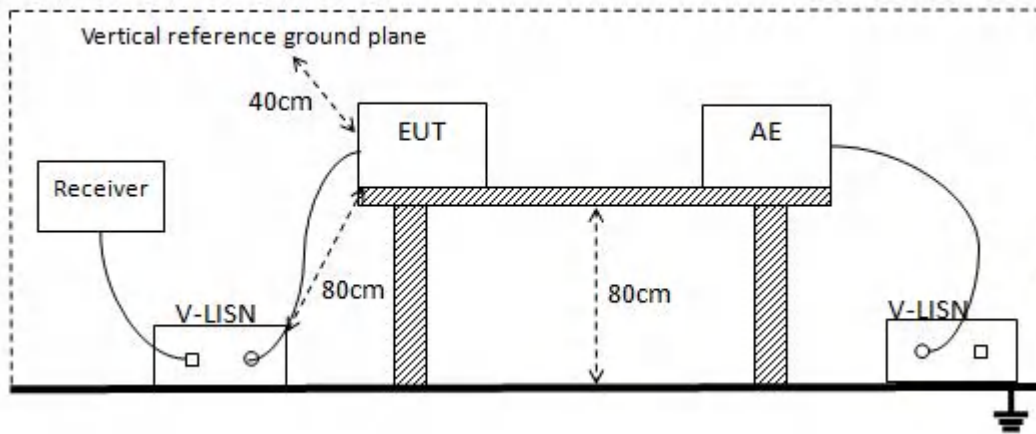
Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.

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	17.17	19.82	30
Mode2	CH06	2437	17.92	20.59	30
Mode3	CH11	2462	17.39	20.06	30
Mode4	CH01	2412	18.06	24.06	30
Mode5	CH06	2437	18.33	24.09	30
Mode6	CH11	2462	17.23	23.99	30
Mode7	CH01	2412	17.02	24.03	30
Mode8	CH06	2437	17.76	24.05	30
Mode9	CH11	2462	16.65	23.97	30

EIRP Power

Test Mode	Frequency	Peak Conducted Output Power	Antenna Gain	EIRP Power	LIMIT
	(MHz)	(dBm)	(dBi)	(dBm)	dBm
Mode1	2412	19.82	2.54	22.36	36
Mode2	2437	20.59	2.54	23.13	36
Mode3	2462	20.06	2.54	22.60	36
Mode4	2412	24.06	2.54	26.60	36
Mode5	2437	24.09	2.54	26.63	36
Mode6	2462	23.99	2.54	26.53	36
Mode7	2412	24.03	2.54	26.57	36
Mode8	2437	24.05	2.54	26.59	36
Mode9	2462	23.97	2.54	26.51	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.

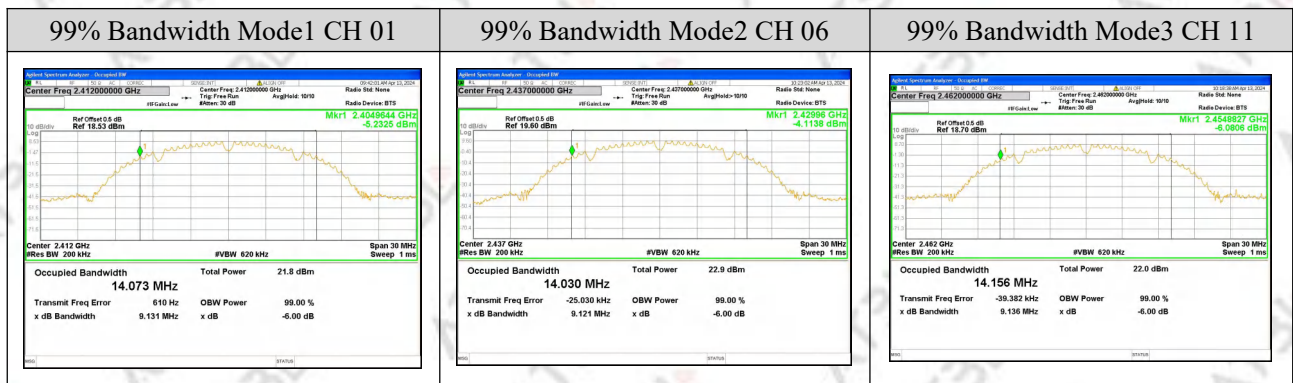
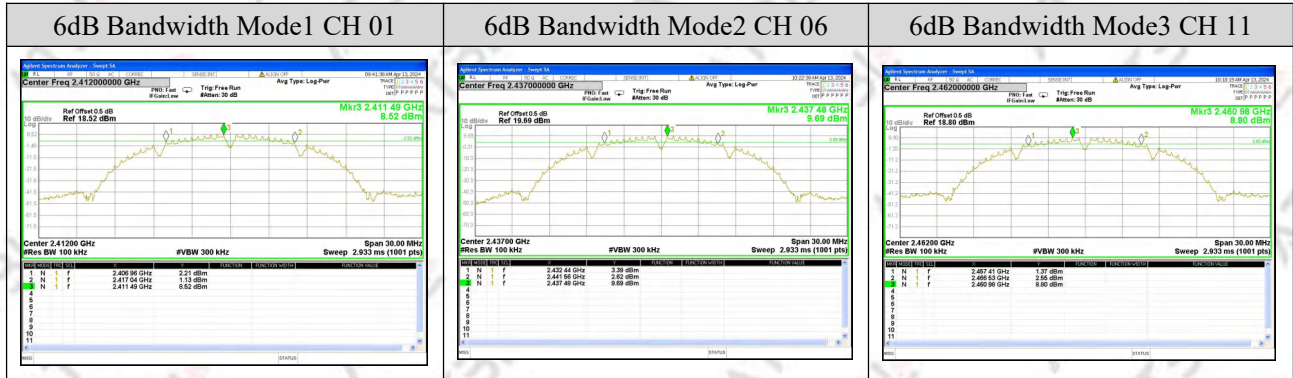
3.2.4. Test Result of Number of 6dB Bandwidth and 99% Bandwidth

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

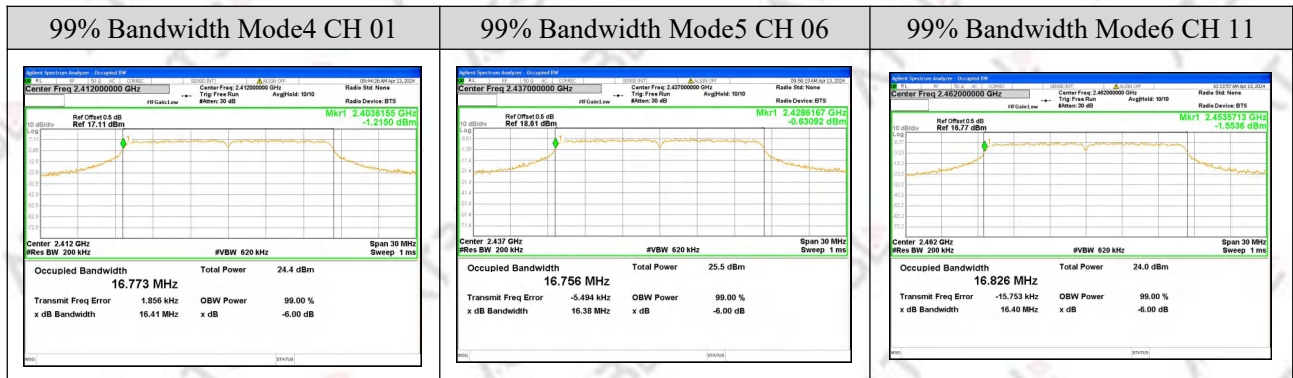
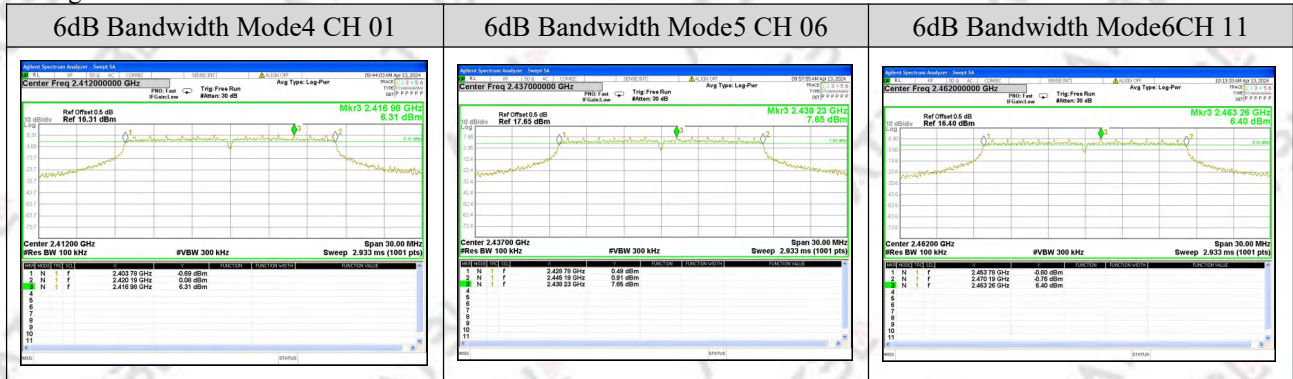
Test mode	Frequency	6dB Bandwidth (kHz)	99% Bandwidth (MHz)	6dB Bandwidth Limit(kHz)	Result
Mode1	2412 MHz	10080	14.073	≥500	PASS
Mode2	2437 MHz	9120	14.030	≥500	PASS
Mode3	2462 MHz	9120	14.156	≥500	PASS
Mode4	2412 MHz	16410	16.773	≥500	PASS
Mode5	2437 MHz	16410	16.756	≥500	PASS
Mode6	2462 MHz	16410	16.826	≥500	PASS
Mode7	2412 MHz	17610	17.856	≥500	PASS
Mode8	2437 MHz	17610	17.838	≥500	PASS
Mode9	2462 MHz	17610	17.891	≥500	PASS

6dB Bandwidth & 99% Bandwidth

802.11b

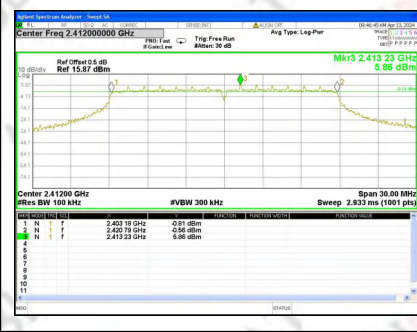


802.11g



802.11n20

6dB Bandwidth Mode7 CH 01



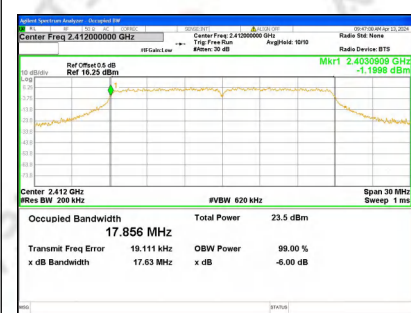
6dB Bandwidth Mode8 CH 06



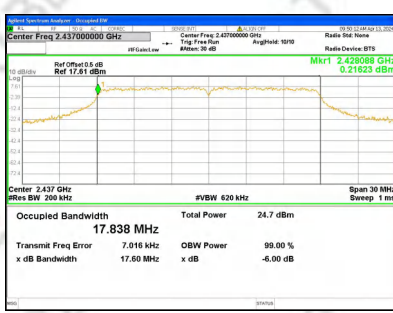
6dB Bandwidth Mode9 CH 11



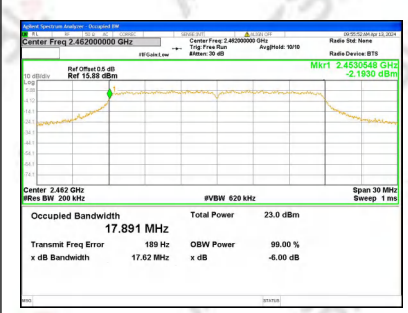
99% Bandwidth Mode7 CH 01



99% Bandwidth Mode8CH 06



99% Bandwidth Mode9 CH 11

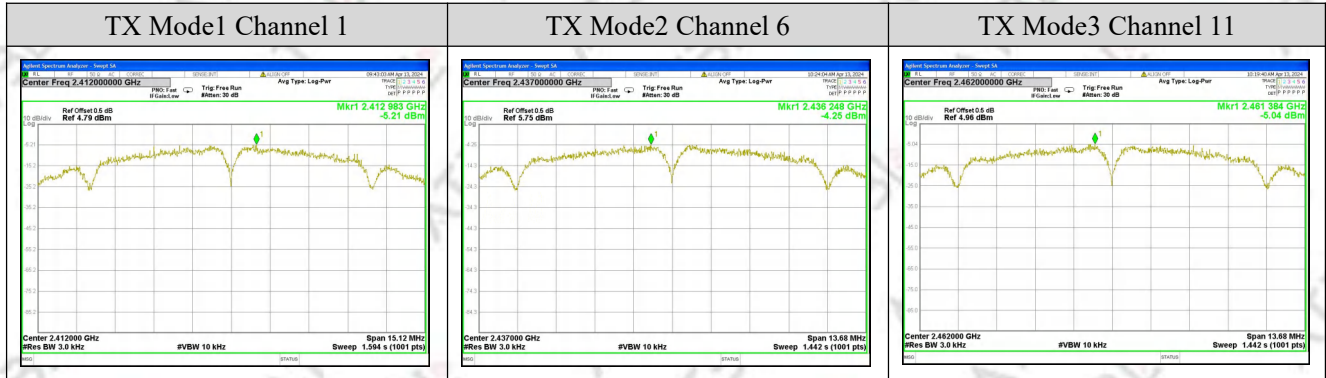


3.3.4. Test Result of Power Spectral Density

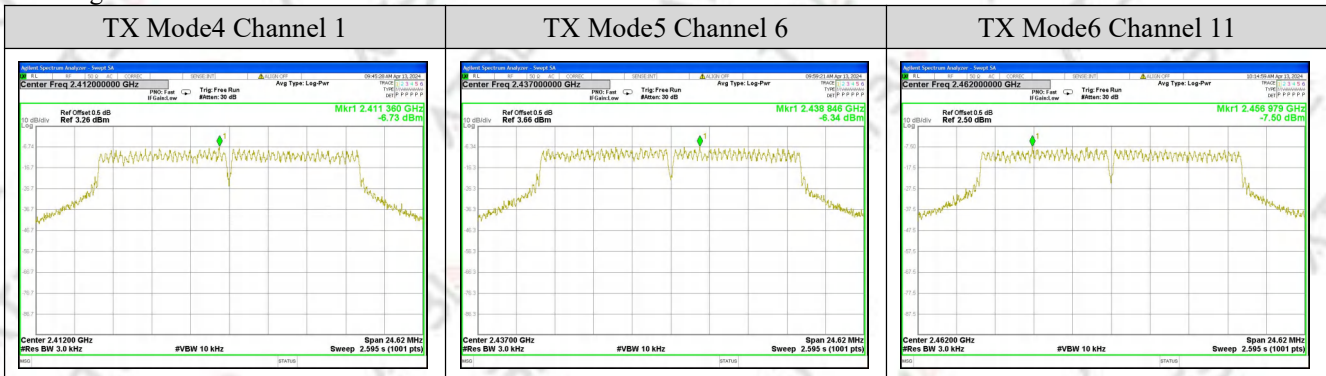
Temperature:	25 °C	Relative Humidity:	60%RH
Test Voltage:	AC 24V	Test Mode:	TX Mode1/2/3/4/5/6/7/8/9

Test mode	Frequency	Power Density	Limit (dBm/3kHz)	Result
		(dBm/3kHz)		
Mode1	2412 MHz	-5.21	≤8	PASS
Mode2	2437 MHz	-4.25	≤8	PASS
Mode3	2462 MHz	-5.04	≤8	PASS
Mode4	2412 MHz	-6.73	≤8	PASS
Mode5	2437 MHz	-6.34	≤8	PASS
Mode6	2462 MHz	-7.50	≤8	PASS
Mode7	2412 MHz	-7.16	≤8	PASS
Mode8	2437 MHz	-6.85	≤8	PASS
Mode9	2462 MHz	-8.66	≤8	PASS

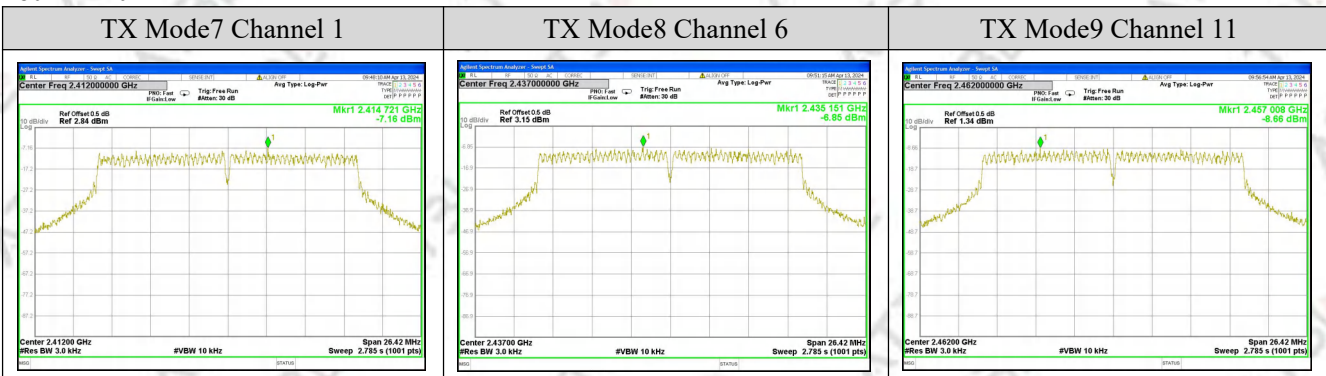
802.11b



802.11g



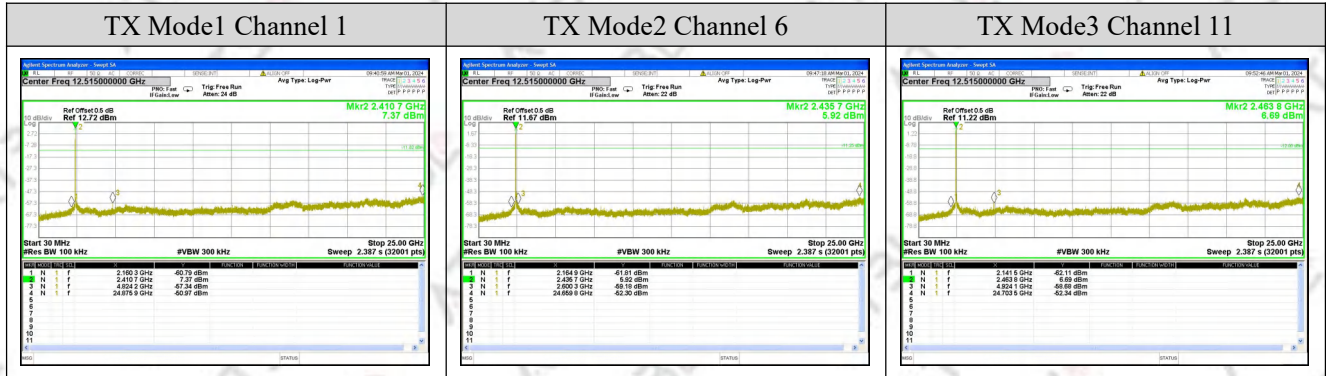
802.11n20



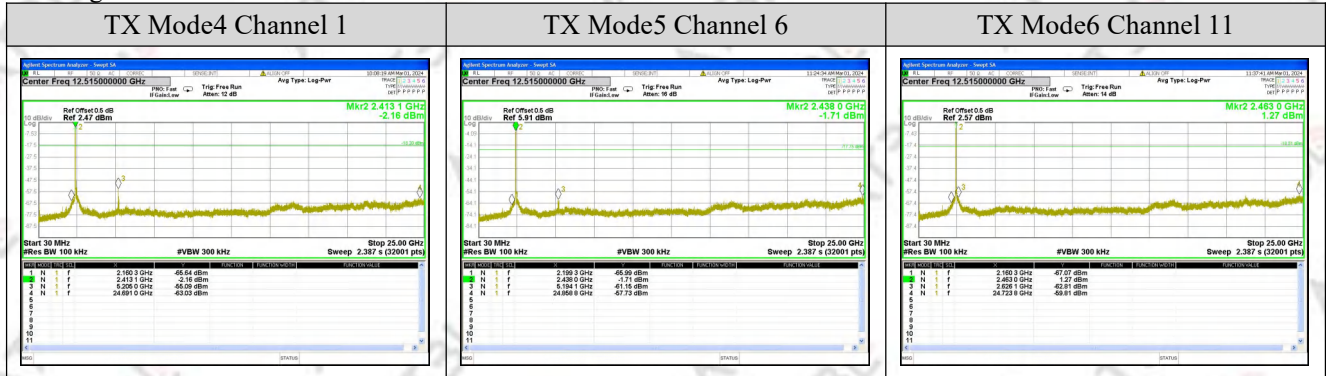
3.4.4. Test Result of Conducted Spurious & Band Edge Emission

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

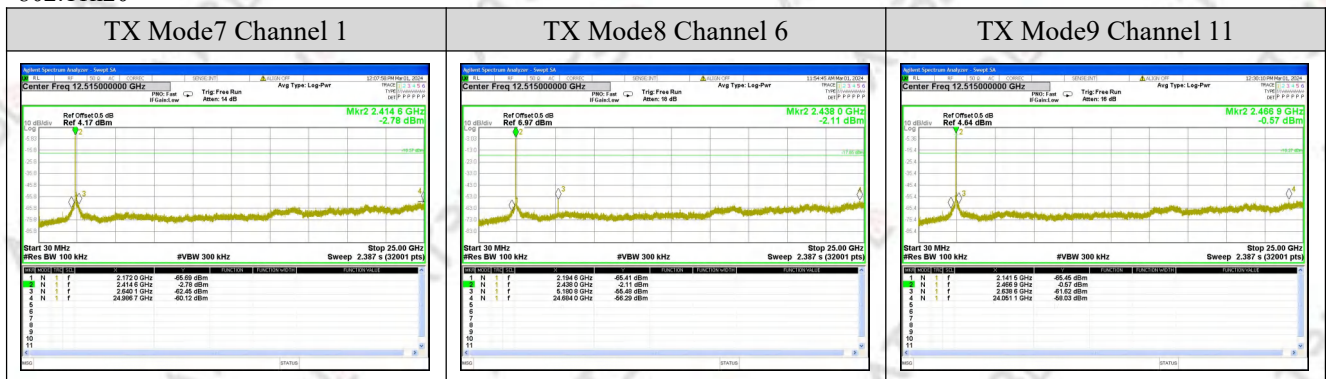
802.11b



802.11g

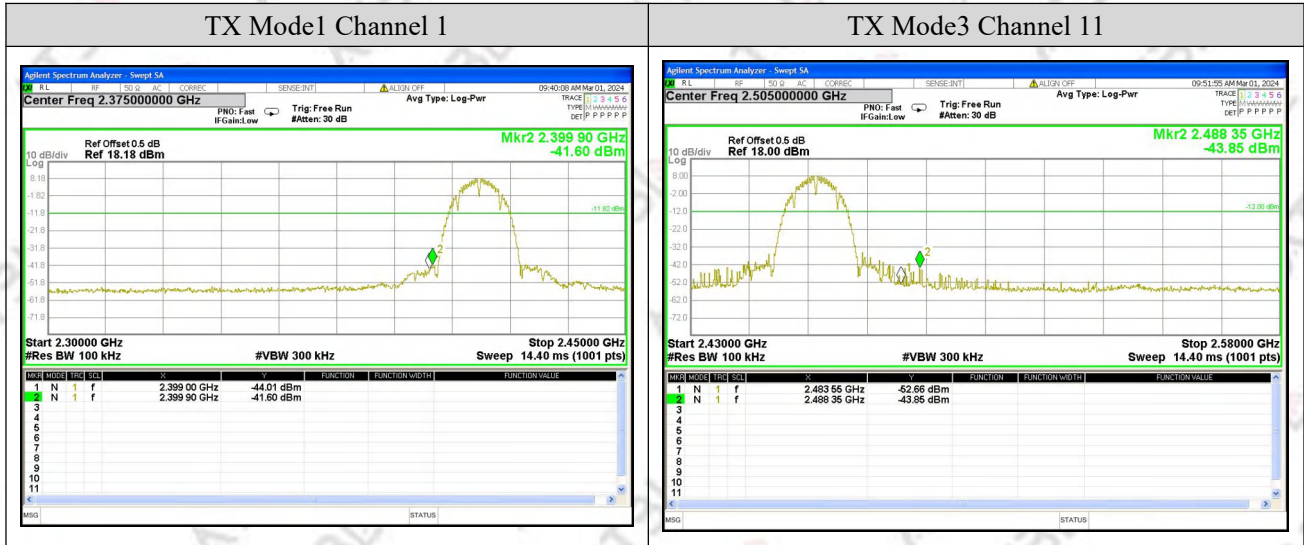


802.11n20

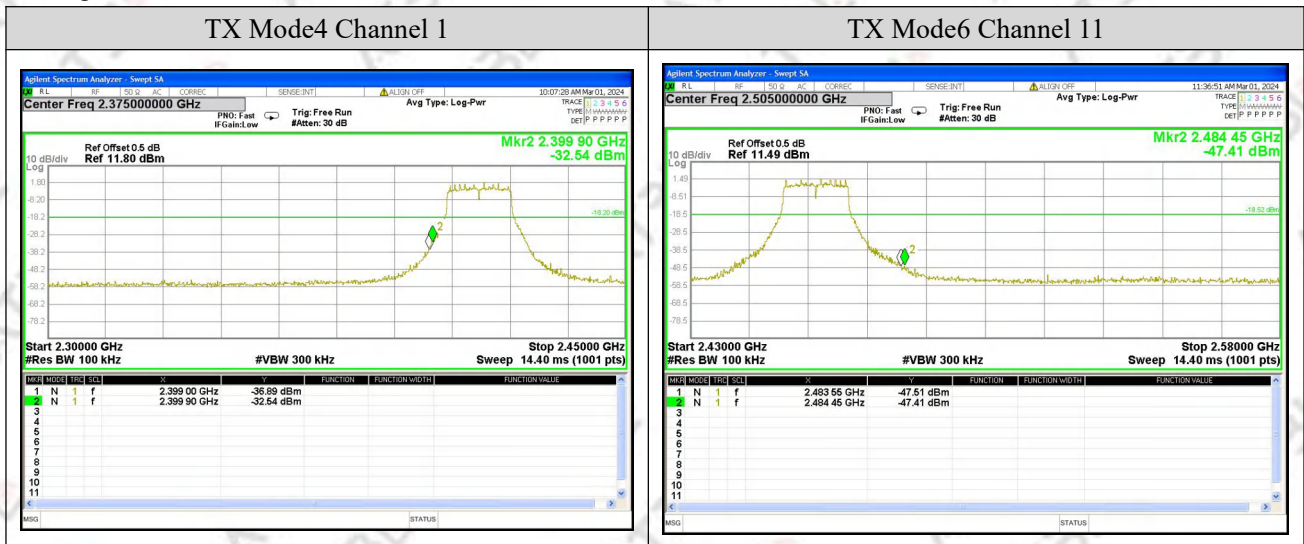


For Band edge(it's also the reference level for conducted spurious emission)

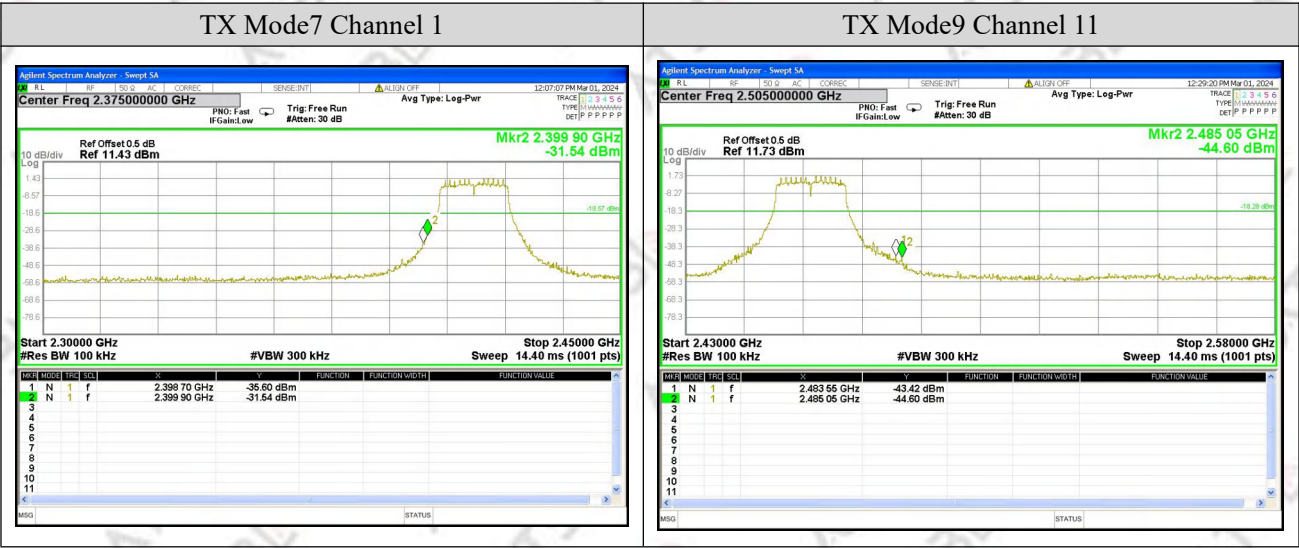
802.11b



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.

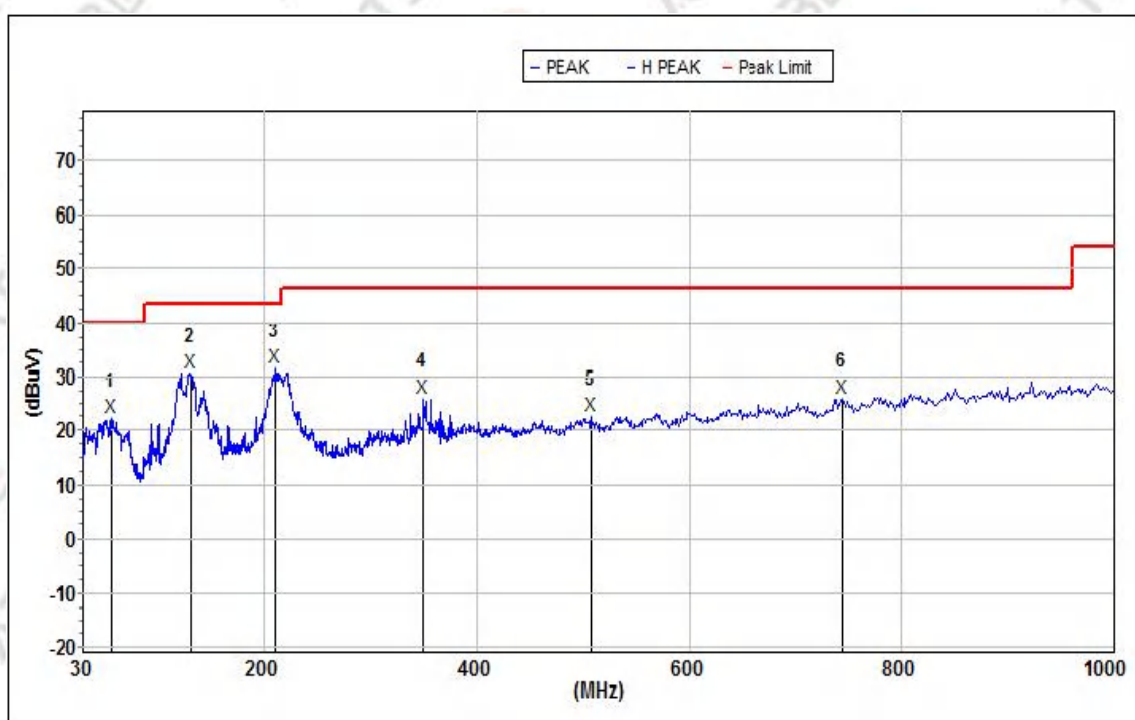
3.5.4.2. For 30 MHz ~ 1 GHz

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



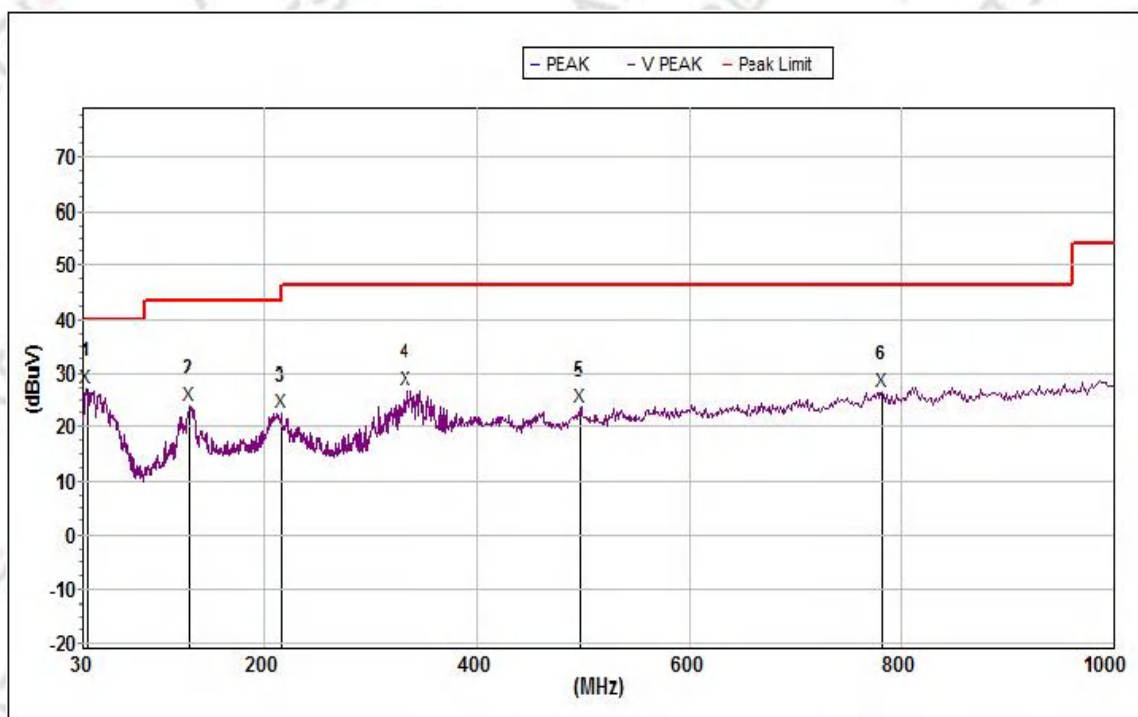
Mk.	Freq. (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	56.099	22.4	40.0	17.6	192	300	17.2	31.9	1.0	H
2	131.297	30.7	43.5	12.8	143	300	16.6	31.9	1.6	H
3	210.417	31.6	43.5	11.9	0	300	17.2	31.9	2.0	H
4	350.477	26.1	46.0	19.9	288	300	19.8	32.2	2.7	H
5	507.368	22.9	46.0	23.1	360	300	22.5	31.2	3.1	H
6	743.561	26.1	46.0	19.9	288	300	24.8	31.2	3.8	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



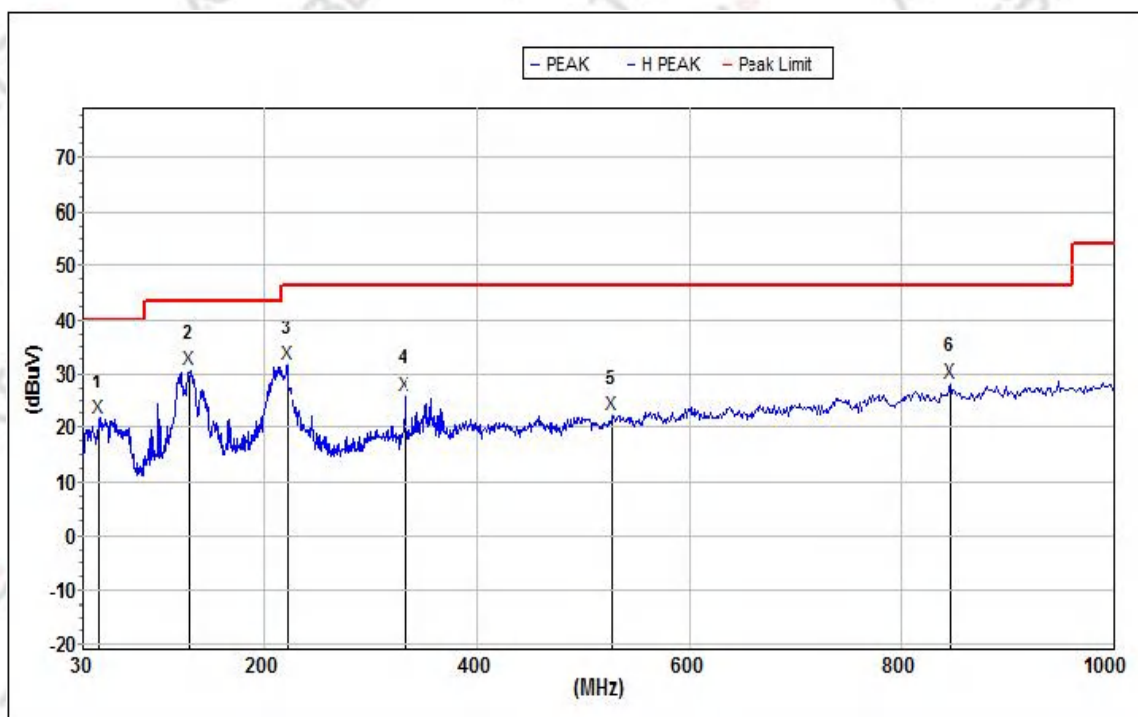
Mk.	Freq. (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	32.406	27.3	40.0	12.7	197	300	17.9	32.1	0.8	V
2	130.837	24.0	43.5	19.5	295	300	17.0	31.9	1.6	V
3	216.024	22.6	46.0	23.4	295	300	18.2	31.9	2.0	V
4	333.102	27.0	46.0	19.0	359	300	19.5	32.2	2.6	V
5	496.805	23.7	46.0	22.3	39	300	23.0	31.2	3.1	V
6	782.345	26.8	46.0	19.2	295	300	25.5	31.3	3.9	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



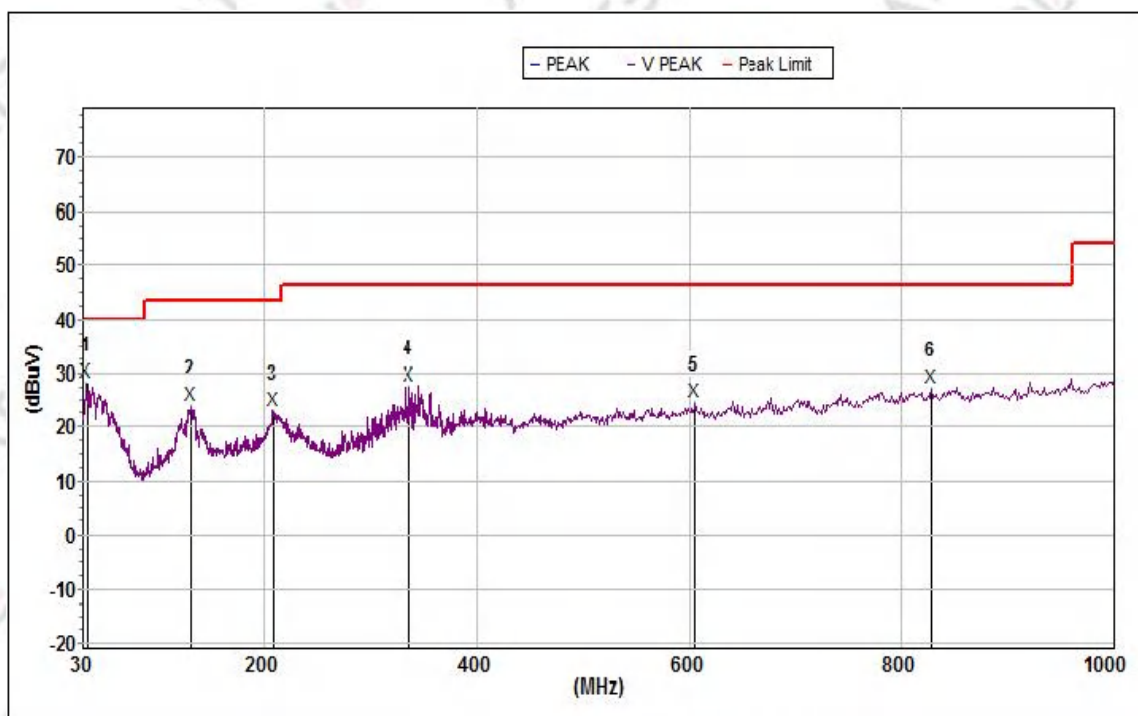
Mk.	Freq. (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	45.455	21.7	40.0	18.3	214	300	18.0	31.9	1.0	H
2	130.379	30.7	43.5	12.8	148	300	16.5	31.9	1.6	H
3	221.004	31.7	46.0	14.3	0	300	17.2	31.9	2.0	H
4	332.519	25.9	46.0	20.1	133	300	19.3	32.2	2.6	H
5	527.320	22.5	46.0	23.5	214	300	22.6	31.2	3.2	H
6	845.088	28.3	46.0	17.7	357	300	26.0	31.6	4.1	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



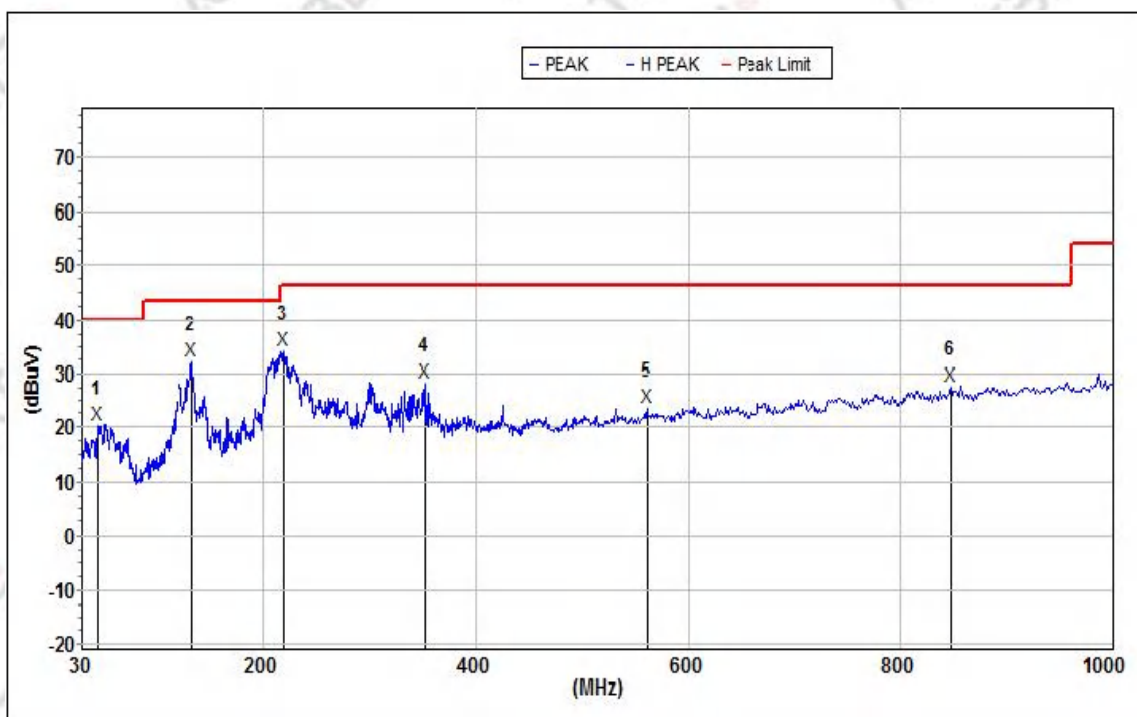
Mk.	Freq. (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	33.328	28.3	40.0	11.7	229	300	17.9	32.1	0.8	V
2	131.758	24.0	43.5	19.5	84	300	17.1	31.9	1.6	V
3	208.215	23.2	43.5	20.3	295	300	18.3	31.9	1.9	V
4	337.216	27.7	46.0	18.3	360	300	19.7	32.2	2.6	V
5	605.659	24.6	46.0	21.4	350	300	23.7	31.1	3.5	V
6	827.493	27.4	46.0	18.6	327	300	25.8	31.5	4.1	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



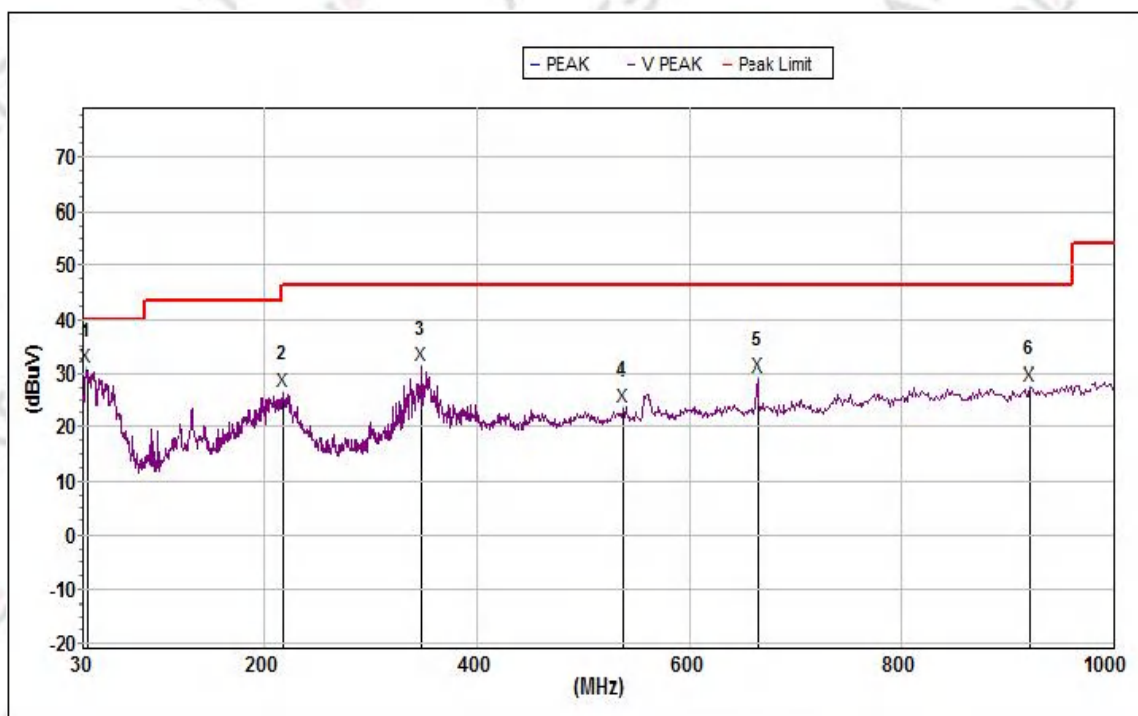
Mk.	Freq. (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	45.455	20.3	40.0	19.7	52	100	18.0	31.9	1.0	H
2	133.151	32.3	43.5	11.2	319	100	16.7	31.9	1.6	H
3	218.308	34.1	46.0	11.9	31	100	17.2	31.9	2.0	H
4	353.563	28.5	46.0	17.5	0	100	19.9	32.2	2.7	H
5	561.677	23.8	46.0	22.2	274	100	23.0	31.1	3.3	H
6	846.571	27.7	46.0	18.3	28	100	26.1	31.6	4.1	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



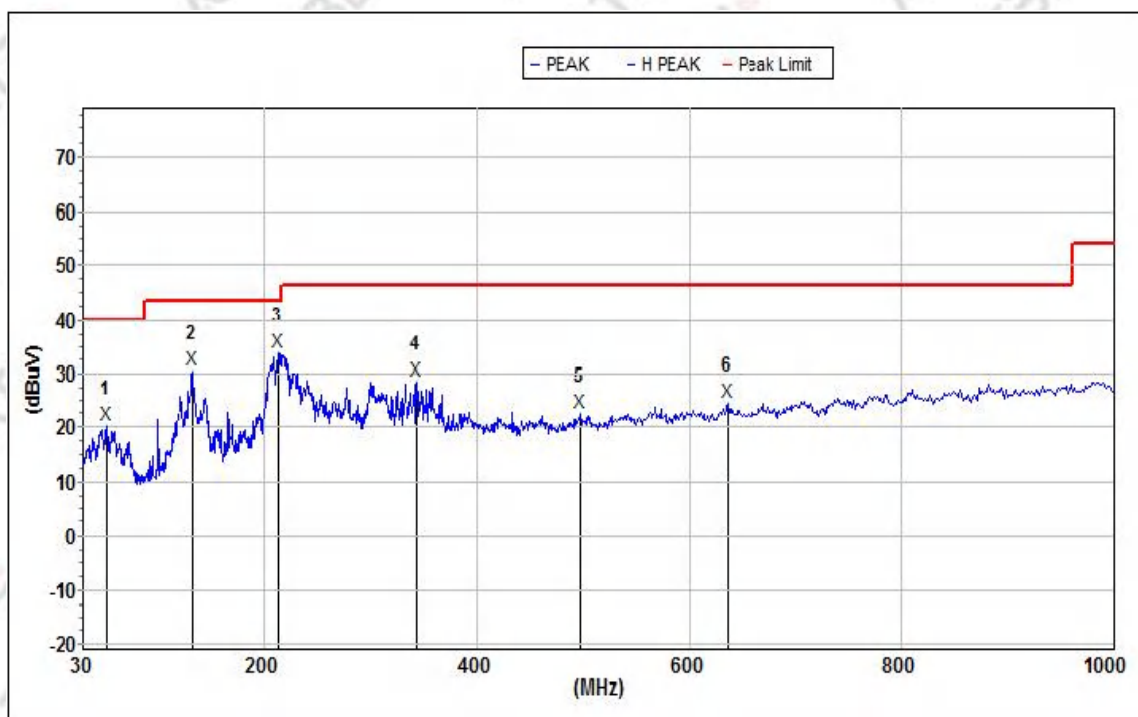
Mk.	Freq. (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	32.921	30.9	40.0	9.1	200	100	17.9	32.1	0.8	V
2	217.163	26.6	46.0	19.4	0	100	18.2	31.9	2.0	V
3	348.638	31.3	46.0	14.7	352	100	20.2	32.2	2.7	V
4	537.589	23.8	46.0	22.2	39	100	23.3	31.2	3.3	V
5	664.637	29.2	46.0	16.8	12	100	24.1	31.2	3.6	V
6	920.900	27.6	46.0	18.4	281	100	26.5	31.9	4.2	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



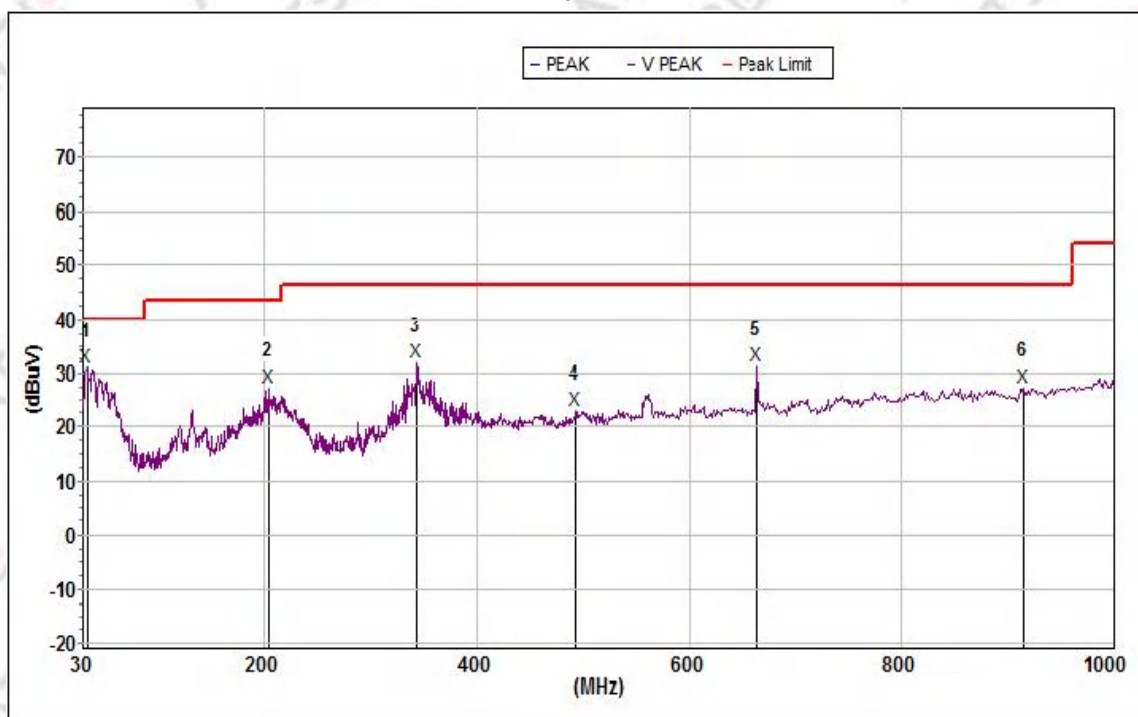
Mk.	Freq. (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	51.752	20.3	40.0	19.7	213	100	17.9	31.9	1.0	H
2	132.685	30.5	43.5	13.0	180	100	16.7	31.9	1.6	H
3	213.015	33.8	43.5	9.7	195	100	17.2	31.9	2.0	H
4	344.386	28.6	46.0	17.4	309	100	19.7	32.2	2.7	H
5	497.676	22.9	46.0	23.1	11	100	22.4	31.2	3.1	H
6	636.134	24.8	46.0	21.2	116	100	23.7	31.1	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



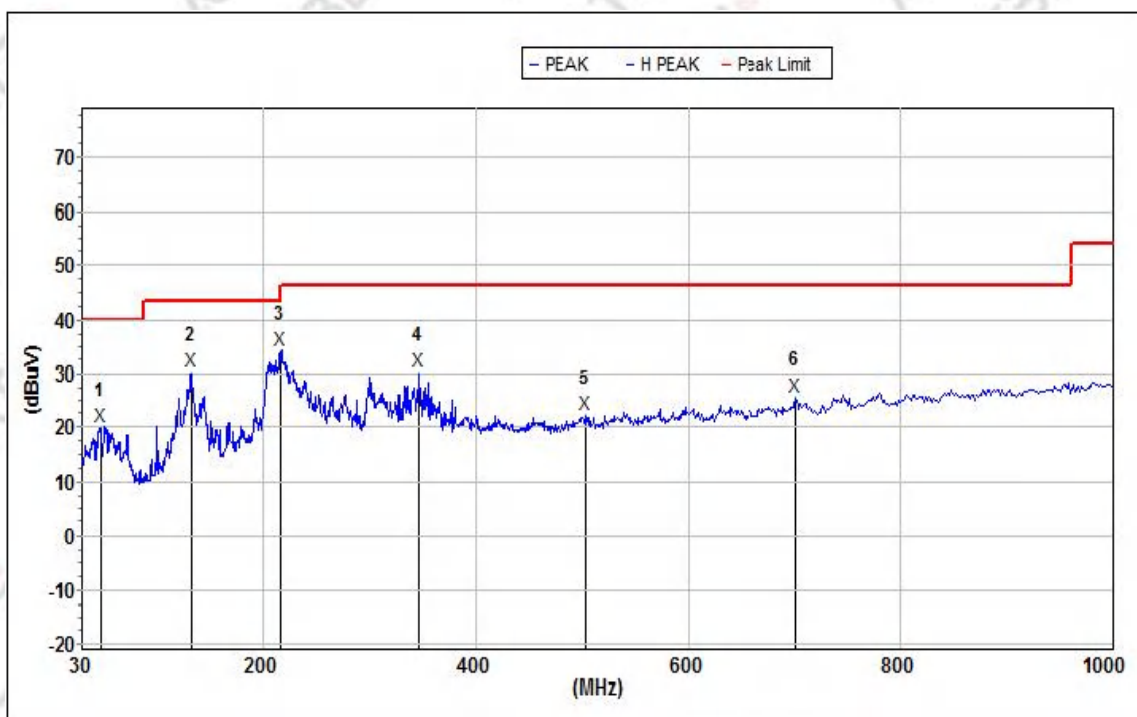
Mk.	Freq. (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	32.691	31.1	40.0	8.9	161	100	17.9	32.1	0.8	V
2	203.880	27.4	43.5	16.1	348	100	18.4	31.9	1.9	V
3	343.782	31.8	46.0	14.2	355	100	20.0	32.2	2.7	V
4	493.333	23.0	46.0	23.0	0	100	22.9	31.3	3.1	V
5	663.473	31.2	46.0	14.8	355	100	24.1	31.2	3.6	V
6	914.464	27.4	46.0	18.6	9	100	26.4	31.9	4.2	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



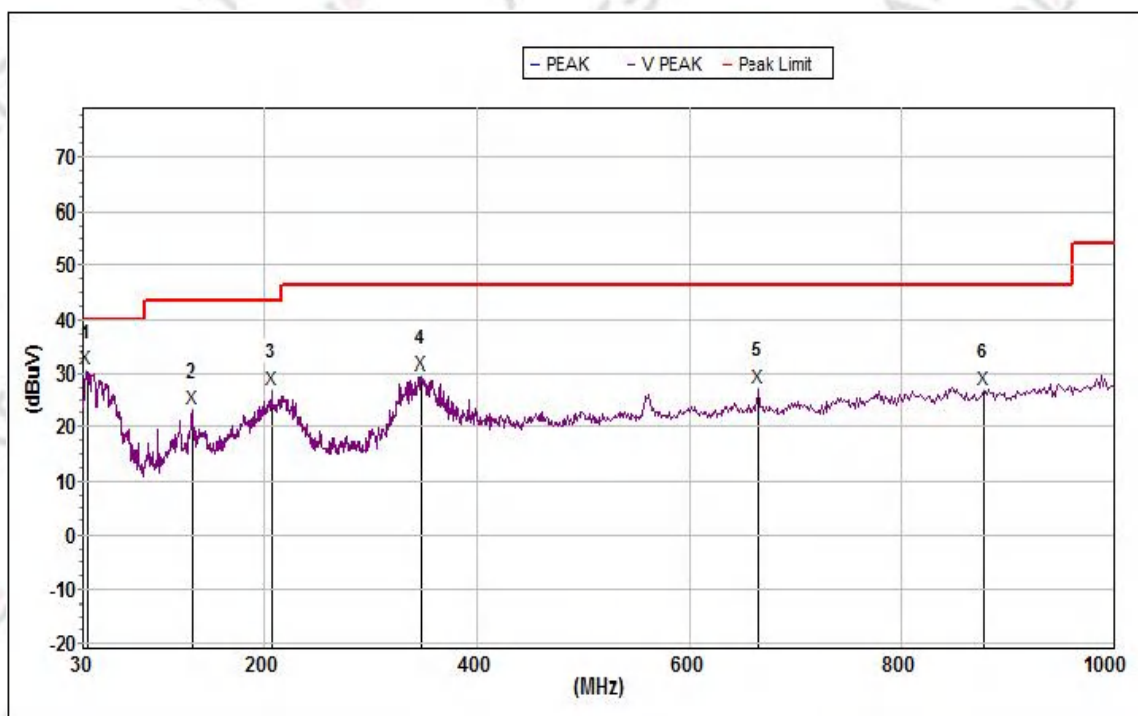
Mk.	Freq. (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	47.910	20.2	40.0	19.8	176	100	18.1	31.9	1.0	H
2	133.151	30.4	43.5	13.1	176	100	16.7	31.9	1.6	H
3	216.024	34.2	46.0	11.8	209	100	17.2	31.9	2.0	H
4	347.418	30.3	46.0	15.7	290	100	19.7	32.2	2.7	H
5	503.822	22.4	46.0	23.6	225	100	22.4	31.2	3.1	H
6	700.532	25.7	46.0	20.3	8	100	24.3	31.2	3.7	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



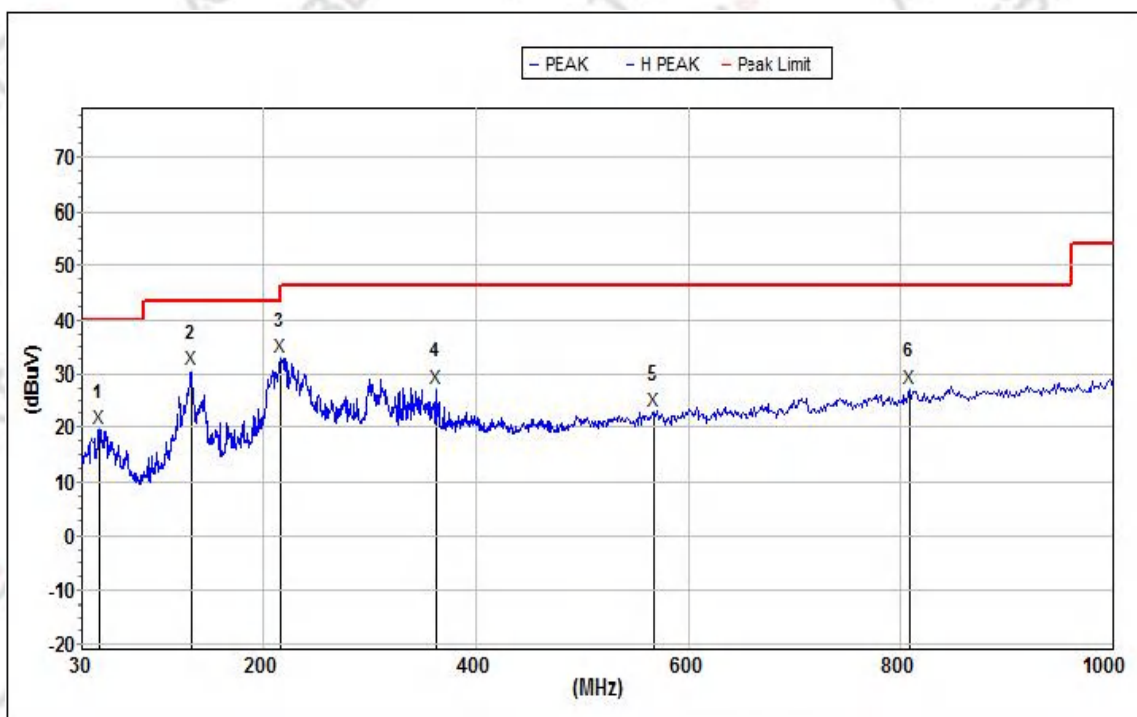
Mk.	Freq. (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	33.386	30.8	40.0	9.2	152	100	18.0	32.1	0.8	V
2	133.151	23.4	43.5	20.1	249	100	17.2	31.9	1.6	V
3	206.760	27.0	43.5	16.5	360	100	18.4	31.9	1.9	V
4	348.027	29.5	46.0	16.5	330	100	20.2	32.2	2.7	V
5	665.803	27.4	46.0	18.6	38	100	24.1	31.2	3.6	V
6	878.321	27.1	46.0	18.9	5	100	26.1	31.8	4.2	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



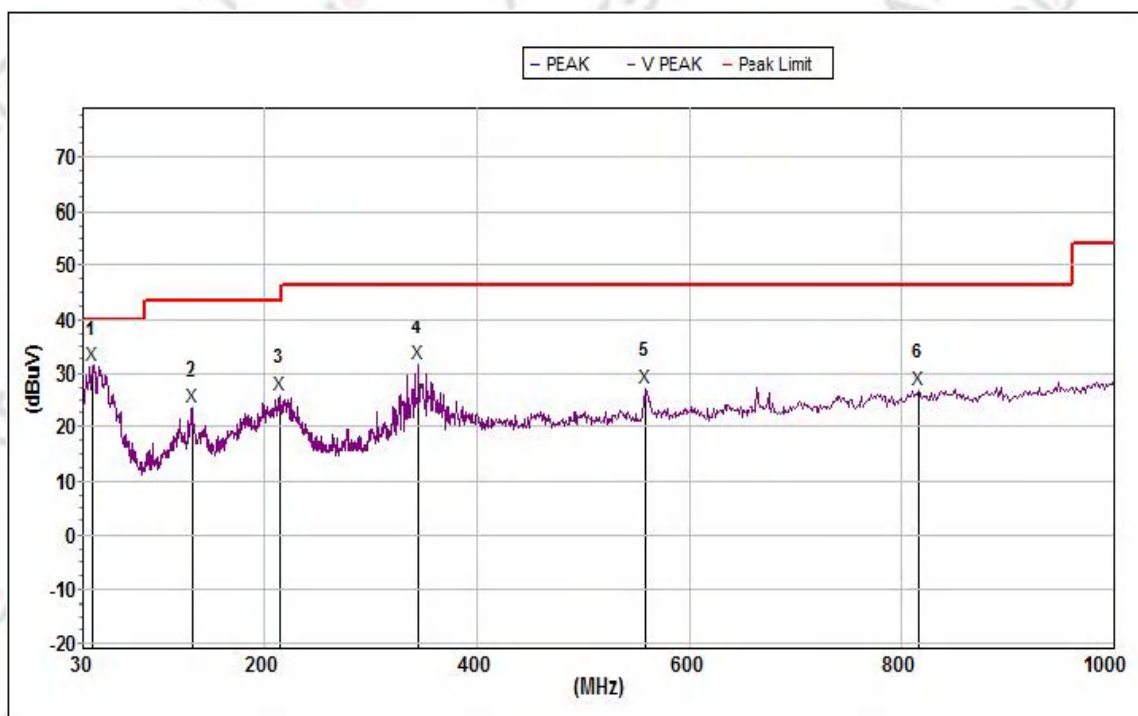
Mk.	Freq. (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	46.912	19.7	40.0	20.3	166	100	18.1	31.9	1.0	H
2	132.685	30.8	43.5	12.7	199	100	16.7	31.9	1.6	H
3	216.024	33.1	46.0	12.9	357	100	17.2	31.9	2.0	H
4	363.621	27.2	46.0	18.8	312	100	20.2	32.3	2.7	H
5	568.613	23.2	46.0	22.8	13	100	23.0	31.1	3.4	H
6	808.846	27.3	46.0	18.7	215	100	25.5	31.4	4.0	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	39.576	31.4	40.0	8.6	175	100	18.2	32.0	0.9	V
2	132.685	23.7	43.5	19.8	157	100	17.2	31.9	1.6	V
3	213.763	25.9	43.5	17.6	142	100	18.2	31.9	2.0	V
4	346.202	31.5	46.0	14.5	2	100	20.1	32.2	2.7	V
5	558.730	27.3	46.0	18.7	175	100	23.4	31.1	3.3	V
6	815.968	26.9	46.0	19.1	0	100	25.8	31.4	4.0	V

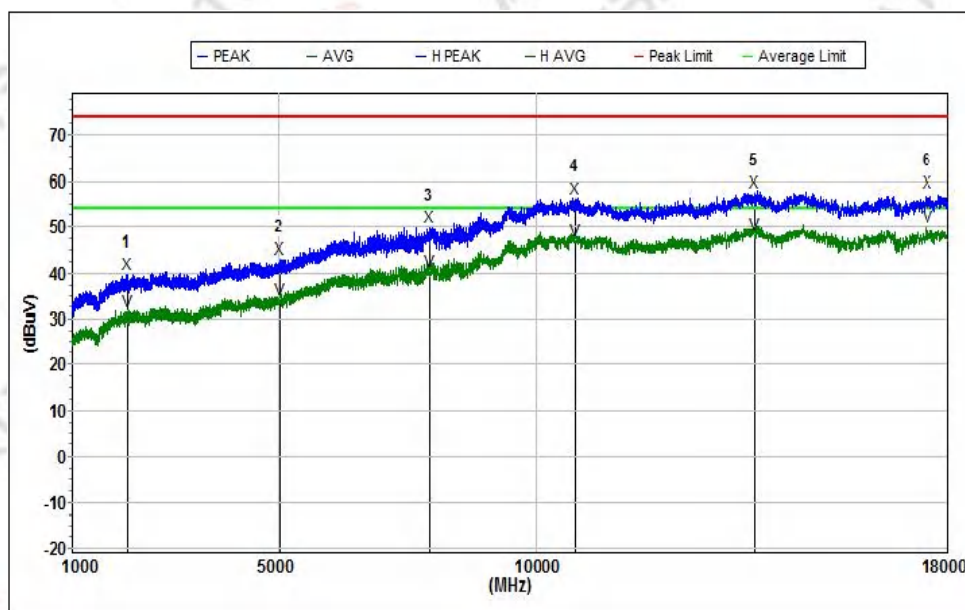
3.5.4.3. For 1GHz ~ 18 GHz

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



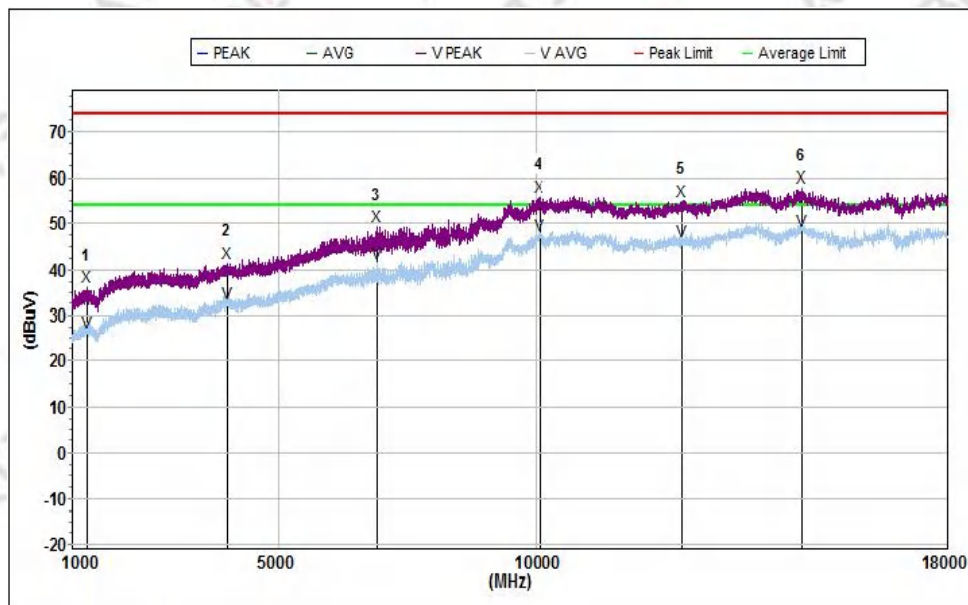
Mk.	Freq. (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	2053.150	39.8	74.0	34.2	106	300	25.5	56.4	2.7	H
2	5020.500	43.0	74.0	31.0	106	300	32.8	57.5	3.6	H
3	7931.750	49.9	74.0	24.1	106	300	36.9	57.1	4.9	H
4	10775.850	56.3	74.0	17.7	106	300	38.7	56.7	5.6	H
5	14245.550	57.7	74.0	16.3	106	300	39.7	55.9	6.2	H
6	17608.150	57.6	74.0	16.4	106	300	40.5	56.1	7.0	H
Avg										
1	2053.150	31.7	54.0	22.3	106	300	25.5	56.4	2.7	H
2	5020.500	34.2	54.0	19.8	106	300	32.8	57.5	3.6	H
3	7931.750	40.6	54.0	13.4	106	300	36.9	57.1	4.9	H
4	10775.850	47.1	54.0	6.9	106	300	38.7	56.7	5.6	H
5	14245.550	48.5	54.0	5.5	106	300	39.7	55.9	6.2	H
6	17608.150	49.9	54.0	4.1	106	300	40.5	56.1	7.0	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



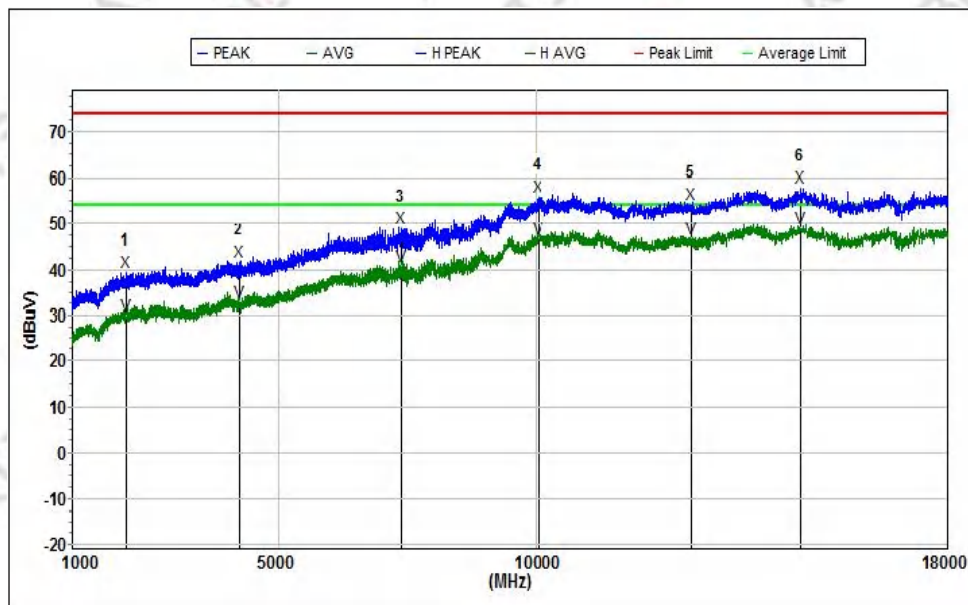
Mk.	Freq. (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	1283.050	36.3	74.0	37.7	113	300	25.3	58.8	2.3	V
2	3985.200	41.5	74.0	32.5	113	300	30.5	57.2	3.3	V
3	6928.750	49.5	74.0	24.5	113	300	35.6	56.9	4.3	V
4	10059.300	55.9	74.0	18.1	113	300	38.1	56.5	5.4	V
5	12845.600	55.1	74.0	18.9	113	300	39.6	56.6	6.2	V
6	15165.250	57.9	74.0	16.1	113	300	38.7	55.9	6.3	V
Avg										
1	1283.050	26.5	54.0	27.5	113	300	25.3	58.8	2.3	V
2	3985.200	32.5	54.0	21.5	113	300	30.5	57.2	3.3	V
3	6928.750	41.5	54.0	12.5	113	300	35.6	56.9	4.3	V
4	10059.300	47.5	54.0	6.5	113	300	38.1	56.5	5.4	V
5	12845.600	46.0	54.0	8.0	113	300	39.6	56.6	6.2	V
6	15165.250	48.3	54.0	5.7	113	300	38.7	55.9	6.3	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



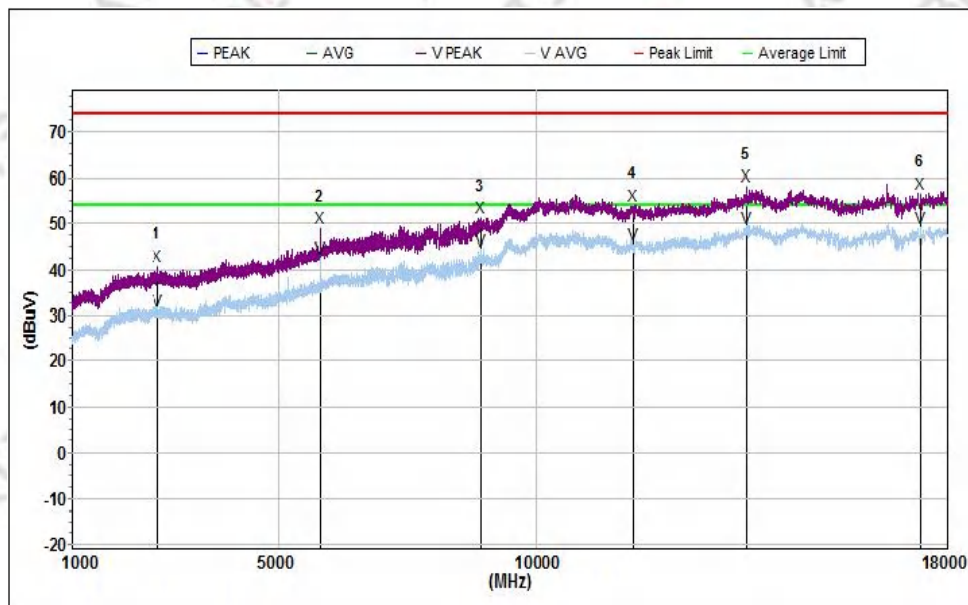
Mk.	Freq. (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	2029.350	39.6	74.0	34.4	181	300	25.4	56.3	2.7	H
2	4224.900	41.9	74.0	32.1	181	300	30.9	57.2	3.4	H
3	7374.150	49.2	74.0	24.8	181	300	36.3	57.0	4.6	H
4	10030.400	56.1	74.0	17.9	181	300	38.2	56.5	5.4	H
5	13013.900	54.4	74.0	19.6	181	300	39.9	56.6	6.2	H
6	15135.500	57.9	74.0	16.1	181	300	38.9	55.9	6.3	H
Avg										
1	2029.350	29.9	54.0	24.1	181	300	25.4	56.3	2.7	H
2	4224.900	32.8	54.0	21.2	181	300	30.9	57.2	3.4	H
3	7374.150	41.0	54.0	13.0	181	300	36.3	57.0	4.6	H
4	10030.400	46.9	54.0	7.1	181	300	38.2	56.5	5.4	H
5	13013.900	46.6	54.0	7.4	181	300	39.9	56.6	6.2	H
6	15135.500	49.2	54.0	4.8	181	300	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



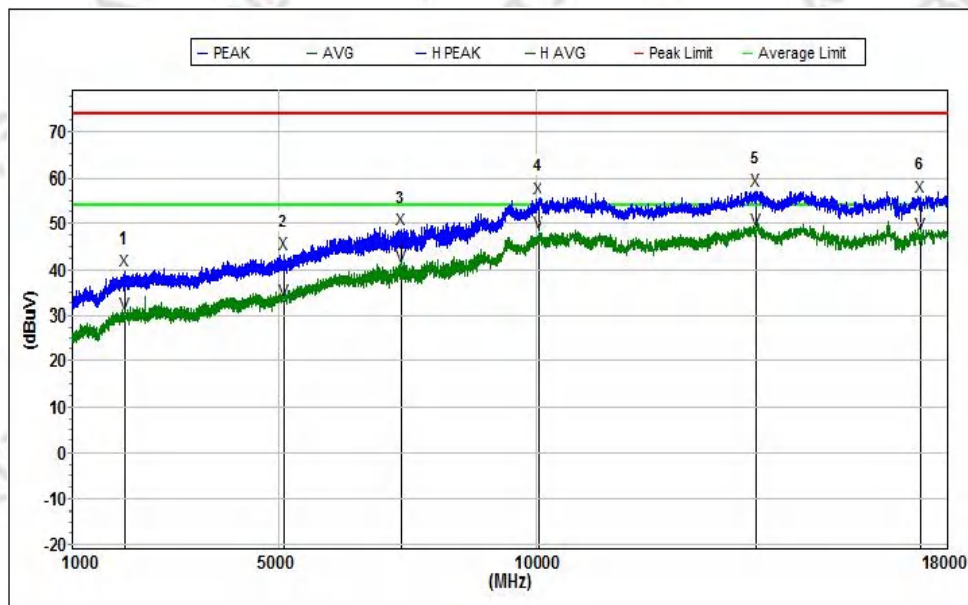
Mk.	Freq. (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	2651.550	40.7	74.0	33.3	319	300	27.8	57.3	2.9	V
2	5798.250	49.0	74.0	25.0	319	300	33.2	57.1	4.1	V
3	8927.950	51.4	74.0	22.6	319	300	37.5	57.3	5.4	V
4	11868.100	54.0	74.0	20.0	319	300	38.7	56.4	5.9	V
5	14104.450	58.4	74.0	15.6	319	300	39.7	55.9	6.2	V
6	17459.400	56.6	74.0	17.4	319	300	39.8	56.2	6.9	V
Avg										
1	2651.550	30.9	54.0	23.1	319	300	27.8	57.3	2.9	V
2	5798.250	42.4	54.0	11.6	319	300	33.2	57.1	4.1	V
3	8927.950	44.0	54.0	10.0	319	300	37.5	57.3	5.4	V
4	11868.100	45.5	54.0	8.5	319	300	38.7	56.4	5.9	V
5	14104.450	49.2	54.0	4.8	319	300	39.7	55.9	6.2	V
6	17459.400	49.0	54.0	5.0	319	300	39.8	56.2	6.9	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



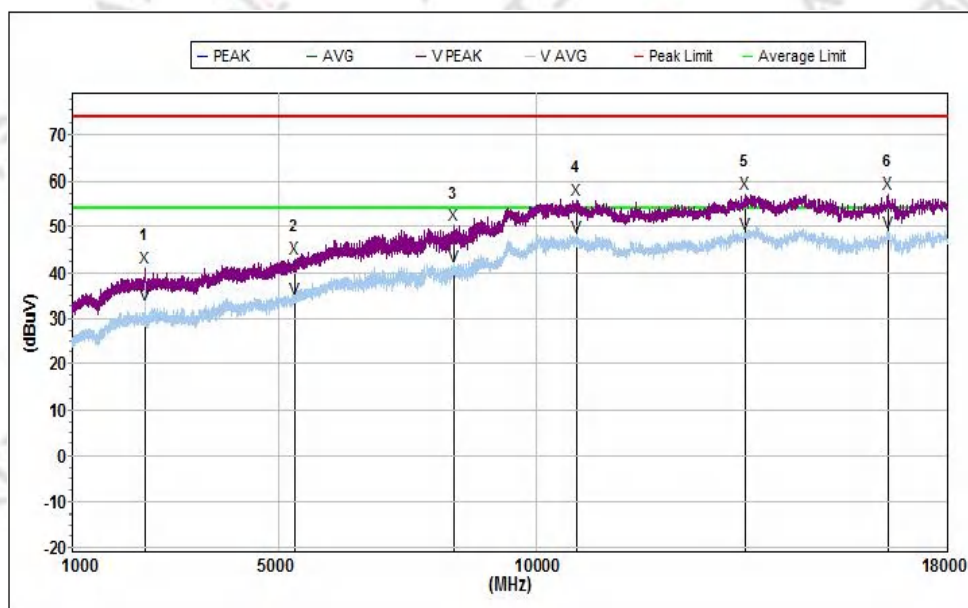
Mk.	Freq. (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	2017.450	40.0	74.0	34.0	359	100	25.4	56.3	2.7	H
2	5105.500	43.4	74.0	30.6	359	100	32.7	57.5	3.7	H
3	7373.300	48.8	74.0	25.2	359	100	36.3	57.0	4.6	H
4	10049.100	55.5	74.0	18.5	359	100	38.2	56.5	5.4	H
5	14277.850	57.2	74.0	16.8	359	100	39.7	55.9	6.2	H
6	17458.550	56.0	74.0	18.0	359	100	39.9	56.2	6.9	H
Avg										
1	2017.450	30.4	54.0	23.6	359	100	25.4	56.3	2.7	H
2	5105.500	33.2	54.0	20.8	359	100	32.7	57.5	3.7	H
3	7373.300	40.7	54.0	13.3	359	100	36.3	57.0	4.6	H
4	10049.100	48.2	54.0	5.8	359	100	38.2	56.5	5.4	H
5	14277.850	48.6	54.0	5.4	359	100	39.7	55.9	6.2	H
6	17458.550	47.9	54.0	6.1	359	100	39.9	56.2	6.9	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



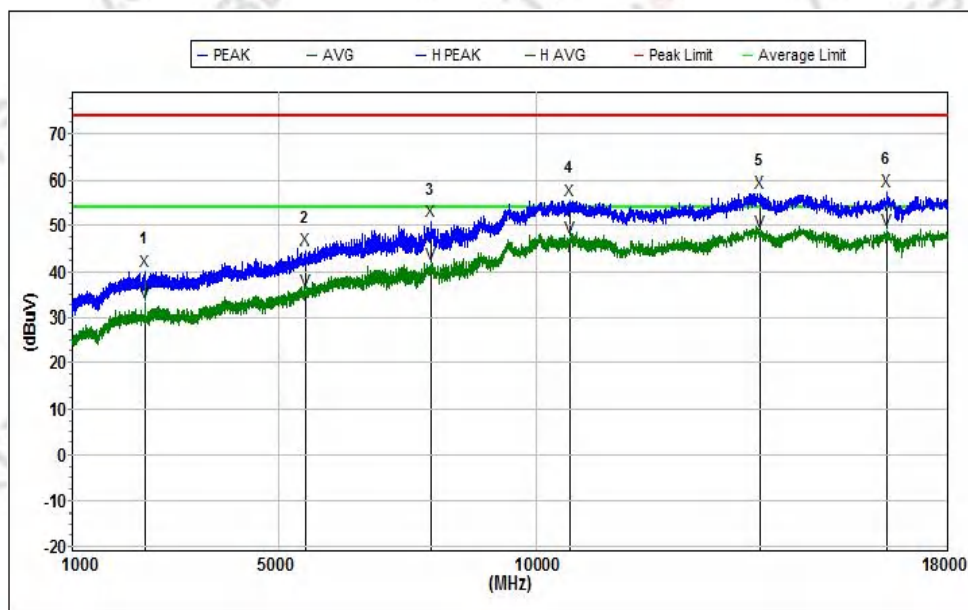
Mk.	Freq. (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	2405.050	41.3	74.0	32.7	360	100	27.0	56.9	2.8	V
2	5317.150	43.2	74.0	30.8	360	100	32.4	57.4	3.9	V
3	8406.900	50.3	74.0	23.7	360	100	37.1	57.2	5.1	V
4	10786.050	56.0	74.0	18.0	360	100	38.7	56.7	5.6	V
5	14073.850	57.4	74.0	16.6	360	100	39.7	55.9	6.2	V
6	16828.700	57.4	74.0	16.6	360	100	38.0	56.2	6.8	V
Avg										
1	2405.050	33.1	54.0	20.9	360	100	27.0	56.9	2.8	V
2	5317.150	34.4	54.0	19.6	360	100	32.4	57.4	3.9	V
3	8406.900	41.6	54.0	12.4	360	100	37.1	57.2	5.1	V
4	10786.050	47.6	54.0	6.4	360	100	38.7	56.7	5.6	V
5	14073.850	48.4	54.0	5.6	360	100	39.7	55.9	6.2	V
6	16828.700	48.9	54.0	5.1	360	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 6		

Remark:

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

Mode 6 Horizontal



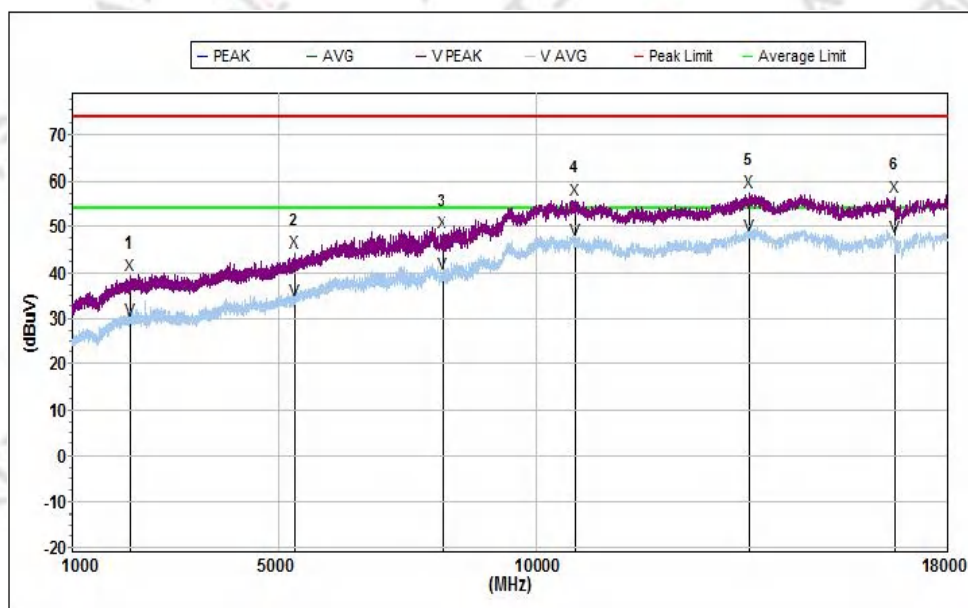
Mk.	Freq. (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	2405.050	40.1	74.0	33.9	257	100	27.2	56.9	2.8	H
2	5509.250	44.9	74.0	29.1	257	100	32.4	57.3	4.0	H
3	7940.250	51.2	74.0	22.8	257	100	36.9	57.1	4.9	H
4	10668.750	55.6	74.0	18.4	257	100	38.7	56.7	5.6	H
5	14354.350	57.3	74.0	16.7	257	100	39.6	55.9	6.2	H
6	16824.450	57.7	74.0	16.3	257	100	38.1	56.2	6.8	H
Avg										
1	2405.050	33.2	54.0	20.8	257	100	27.2	56.9	2.8	H
2	5509.250	35.9	54.0	18.1	257	100	32.4	57.3	4.0	H
3	7940.250	41.9	54.0	12.1	257	100	36.9	57.1	4.9	H
4	10668.750	47.4	54.0	6.6	257	100	38.7	56.7	5.6	H
5	14354.350	48.8	54.0	5.2	257	100	39.6	55.9	6.2	H
6	16824.450	49.2	54.0	4.8	257	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



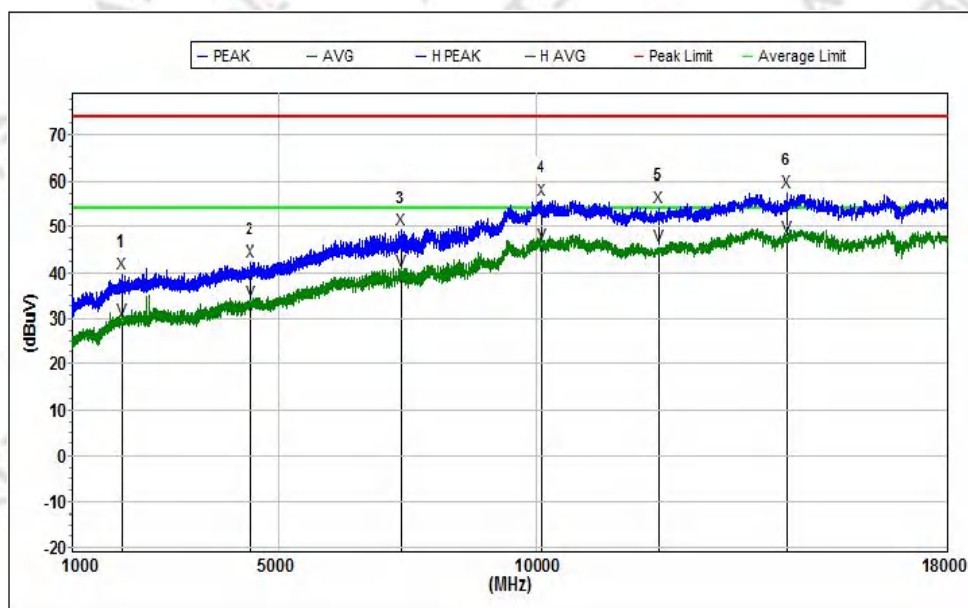
Mk.	Freq. (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	2122.850	39.5	74.0	34.5	175	100	25.7	56.5	2.7	V
2	5327.350	44.4	74.0	29.6	175	100	32.4	57.4	3.9	V
3	8171.450	48.8	74.0	25.2	175	100	36.9	57.1	5.0	V
4	10774.150	55.9	74.0	18.1	175	100	38.6	56.7	5.6	V
5	14146.950	57.7	74.0	16.3	175	100	39.7	55.9	6.2	V
6	16953.650	56.6	74.0	17.4	175	100	38.1	56.2	6.9	V
Avg										
1	2122.850	29.7	54.0	24.3	175	100	25.7	56.5	2.7	V
2	5327.350	34.0	54.0	20.0	175	100	32.4	57.4	3.9	V
3	8171.450	40.0	54.0	14.0	175	100	36.9	57.1	5.0	V
4	10774.150	47.2	54.0	6.8	175	100	38.6	56.7	5.6	V
5	14146.950	48.0	54.0	6.0	175	100	39.7	55.9	6.2	V
6	16953.650	47.6	54.0	6.4	175	100	38.1	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



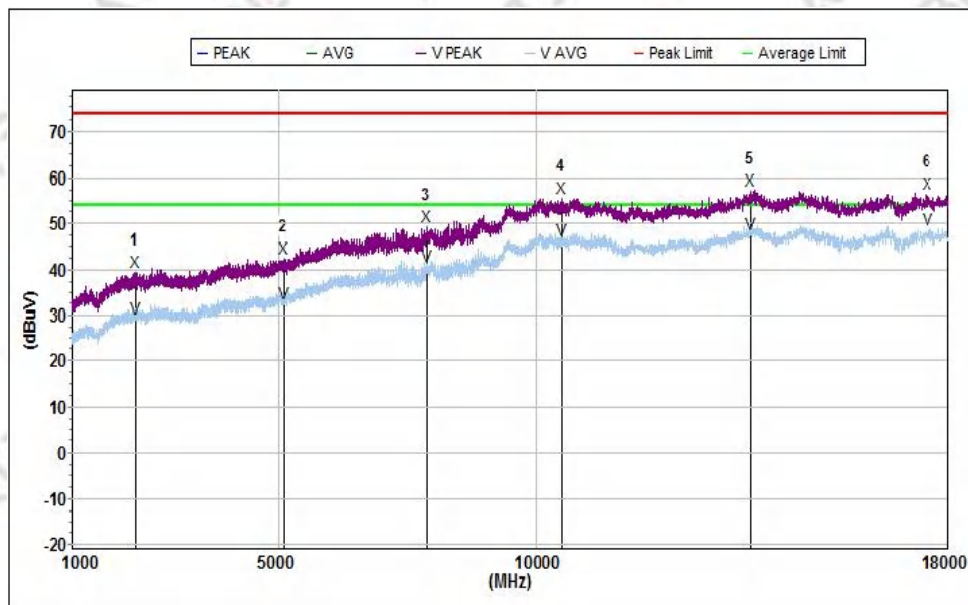
Mk.	Freq. (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	1959.650	39.7	74.0	34.3	29	100	25.3	56.4	2.7	H
2	4470.550	42.4	74.0	31.6	29	100	31.2	57.3	3.5	H
3	7372.450	49.3	74.0	24.7	29	100	36.3	57.0	4.6	H
4	10111.150	55.9	74.0	18.1	29	100	38.3	56.5	5.4	H
5	12394.250	54.3	74.0	19.7	29	100	39.2	56.4	6.0	H
6	14866.050	57.5	74.0	16.5	29	100	39.2	55.9	6.3	H
Avg										
1	1959.650	29.7	54.0	24.3	29	100	25.3	56.4	2.7	H
2	4470.550	33.6	54.0	20.4	29	100	31.2	57.3	3.5	H
3	7372.450	40.6	54.0	13.4	29	100	36.3	57.0	4.6	H
4	10111.150	46.1	54.0	7.9	29	100	38.3	56.5	5.4	H
5	12394.250	45.9	54.0	8.1	29	100	39.2	56.4	6.0	H
6	14866.050	47.7	54.0	6.3	29	100	39.2	55.9	6.3	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



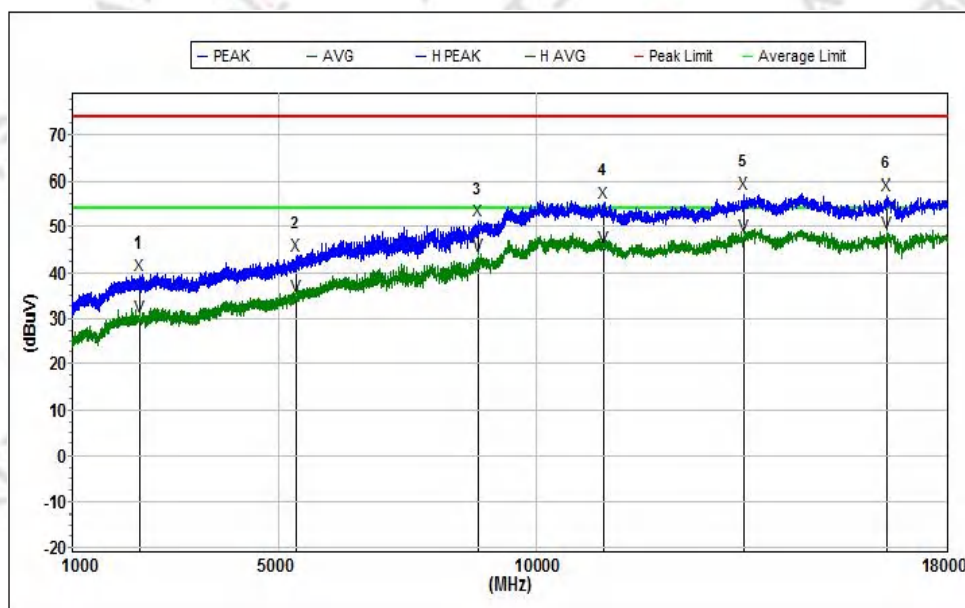
Mk.	Freq. (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	2217.200	39.5	74.0	34.5	326	100	26.2	56.6	2.7	V
2	5097.850	42.5	74.0	31.5	326	100	32.6	57.5	3.7	V
3	7864.600	49.4	74.0	24.6	326	100	36.6	57.1	4.8	V
4	10516.600	55.8	74.0	18.2	326	100	38.5	56.7	5.6	V
5	14186.050	57.2	74.0	16.8	326	100	39.6	55.9	6.2	V
6	17610.700	56.6	74.0	17.4	326	100	40.4	56.1	7.0	V
Avg										
1	2217.200	29.3	54.0	24.7	326	100	26.2	56.6	2.7	V
2	5097.850	32.7	54.0	21.3	326	100	32.6	57.5	3.7	V
3	7864.600	40.8	54.0	13.2	326	100	36.6	57.1	4.8	V
4	10516.600	46.3	54.0	7.7	326	100	38.5	56.7	5.6	V
5	14186.050	47.8	54.0	6.2	326	100	39.6	55.9	6.2	V
6	17610.700	48.6	54.0	5.4	326	100	40.4	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



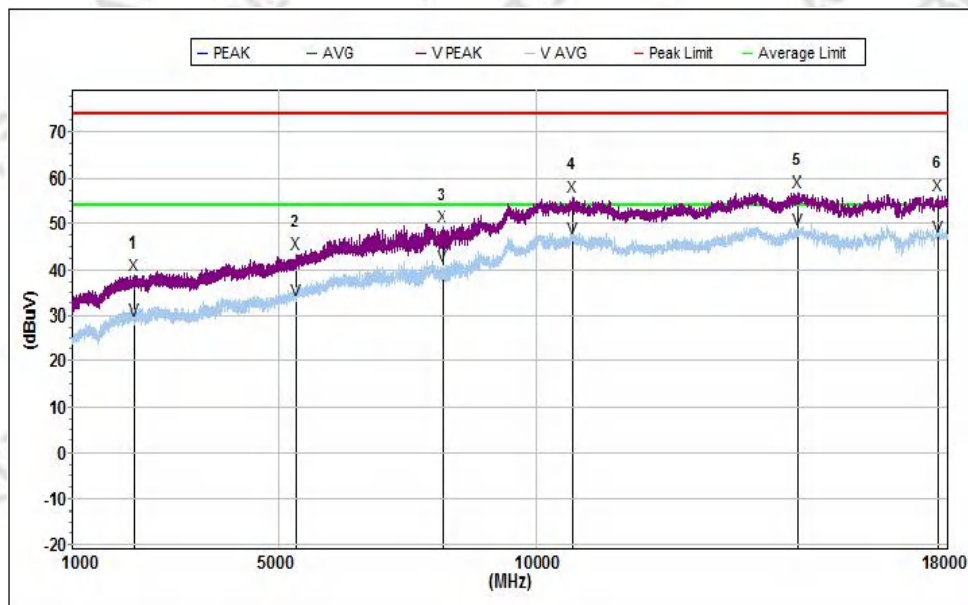
Mk.	Freq. (MHz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:										
1	2293.700	39.4	74.0	34.6	110	100	26.7	56.8	2.8	H
2	5345.200	43.9	74.0	30.1	110	100	32.5	57.4	3.9	H
3	8888.000	51.3	74.0	22.7	110	100	37.8	57.3	5.3	H
4	11305.400	55.3	74.0	18.7	110	100	38.9	56.6	5.8	H
5	14047.500	57.2	74.0	16.8	110	100	39.9	55.9	6.2	H
6	16816.800	56.8	74.0	17.2	110	100	38.1	56.2	6.8	H
Avg										
1	2293.700	30.4	54.0	23.6	110	100	26.7	56.8	2.8	H
2	5345.200	35.0	54.0	19.0	110	100	32.5	57.4	3.9	H
3	8888.000	43.8	54.0	10.2	110	100	37.8	57.3	5.3	H
4	11305.400	45.6	54.0	8.4	110	100	38.9	56.6	5.8	H
5	14047.500	48.1	54.0	5.9	110	100	39.9	55.9	6.2	H
6	16816.800	48.9	54.0	5.1	110	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	2183.200	38.9	74.0	35.1	175	100	26.0	56.6	2.7	V
2	5329.900	43.6	74.0	30.4	175	100	32.4	57.4	3.9	V
3	8169.750	49.5	74.0	24.5	175	100	36.9	57.1	5.0	V
4	10717.200	56.0	74.0	18.0	175	100	38.6	56.7	5.6	V
5	15077.700	56.8	74.0	17.2	175	100	38.8	55.9	6.3	V
6	17827.450	56.3	74.0	17.7	175	100	41.2	56.1	7.0	V
Avg										
1	2183.200	28.9	54.0	25.1	175	100	26.0	56.6	2.7	V
2	5329.900	33.3	54.0	20.7	175	100	32.4	57.4	3.9	V
3	8169.750	40.8	54.0	13.2	175	100	36.9	57.1	5.0	V
4	10717.200	46.9	54.0	7.1	175	100	38.6	56.7	5.6	V
5	15077.700	48.6	54.0	5.4	175	100	38.8	55.9	6.3	V
6	17827.450	47.0	54.0	7.0	175	100	41.2	56.1	7.0	V

3.5.4.4. For above 18GHz

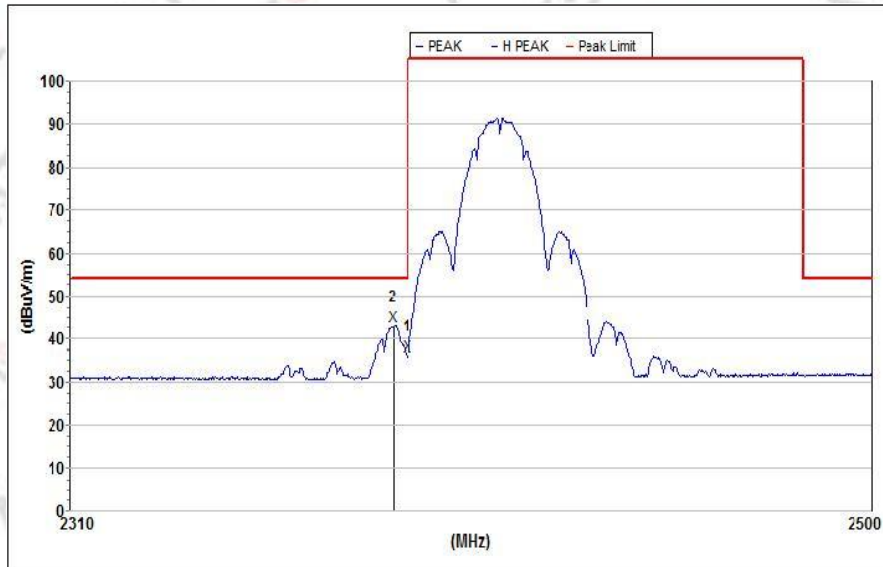
Temperature:	23.4°C	Relative Humidity:	60%RH
Test Voltage:	AC 24V	Polarization:	--
Test Mode:	TX Mode		

Note:

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

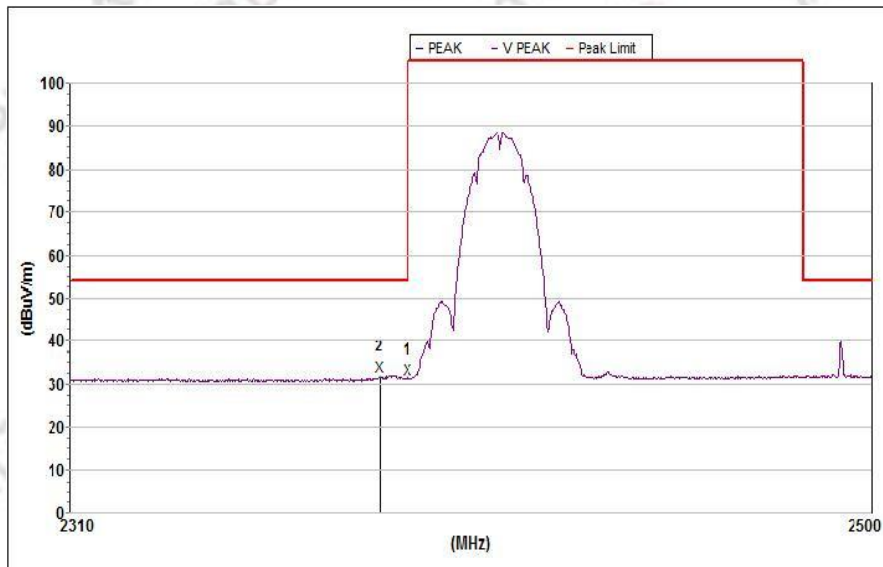
3.5.4.5. For above Restricted Band

802.11b-Low Mode 1 Horizontal



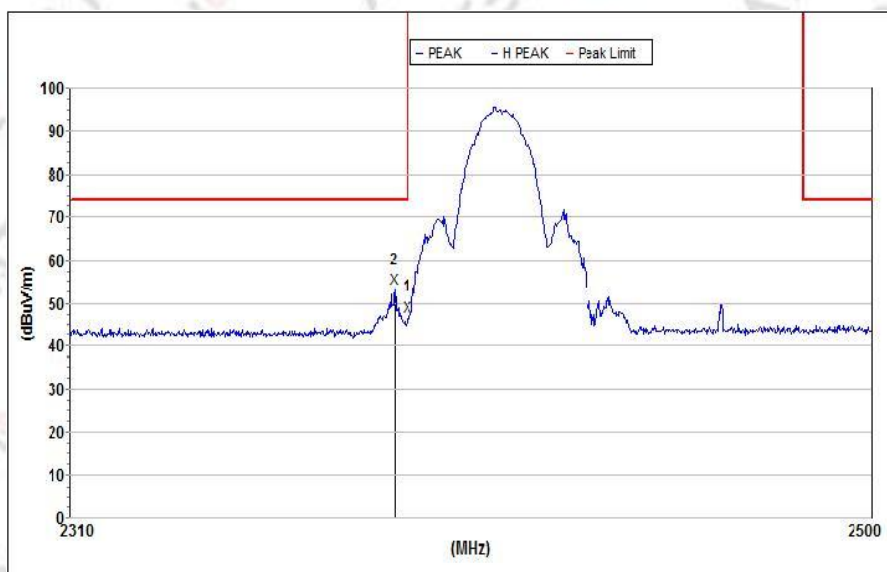
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Avg										
1	2390.000	36.2	54.0	17.8	145	150	27.1	56.9	6.4	H
2	2386.654	43.1	54.0	10.9	208	150	27.1	56.9	6.3	H

Mode 1 Vertical



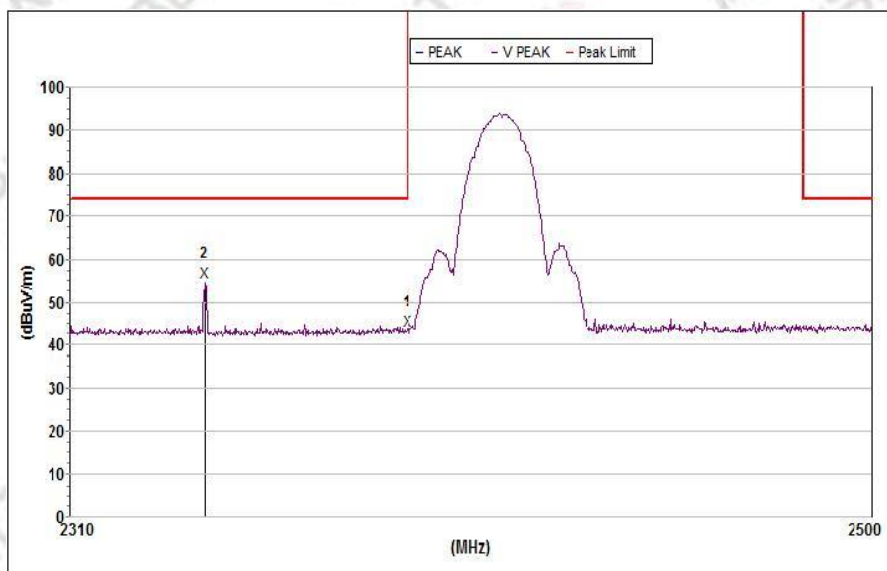
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Avg										
1	2390.000	31.2	54.0	22.8	260	150	26.9	56.9	6.4	V
2	2383.261	31.8	54.0	22.2	260	150	26.9	56.9	6.4	V

802.11b-Low Mode 1 Horizontal



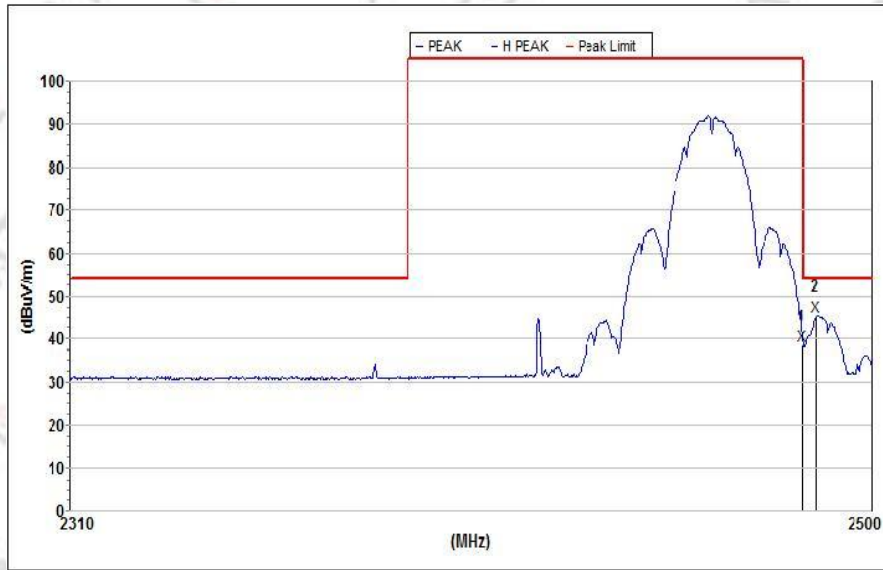
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak										
1	2390.000	47.1	74.0	26.9	137	150	27.1	56.9	6.4	H
2	2386.843	53.3	74.0	20.7	62	150	27.1	56.9	6.4	H

Mode 1 Vertical



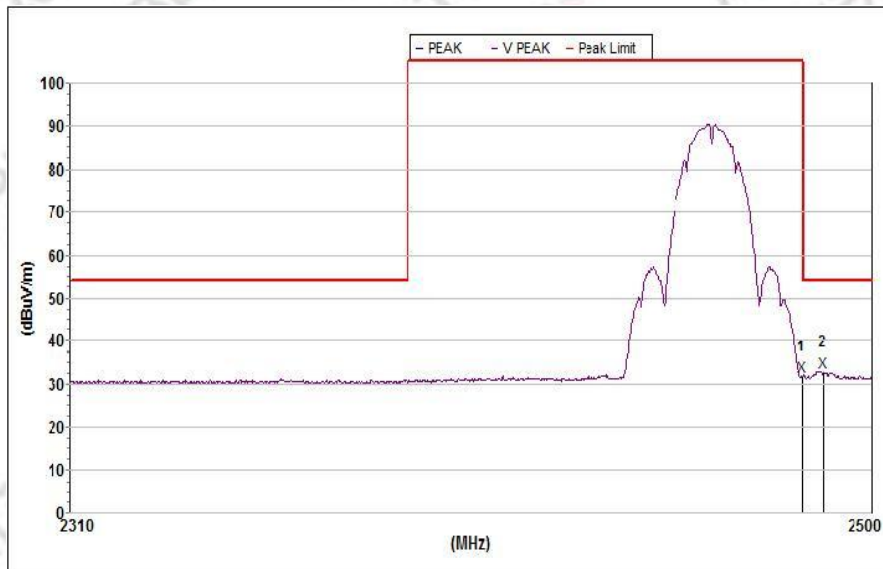
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak										
1	2390.000	43.4	74.0	30.6	103	150	26.9	56.9	6.4	V
2	2341.805	54.6	74.0	19.4	192	150	26.7	56.8	6.3	V

802.11b-High Mode 3 Horizontal



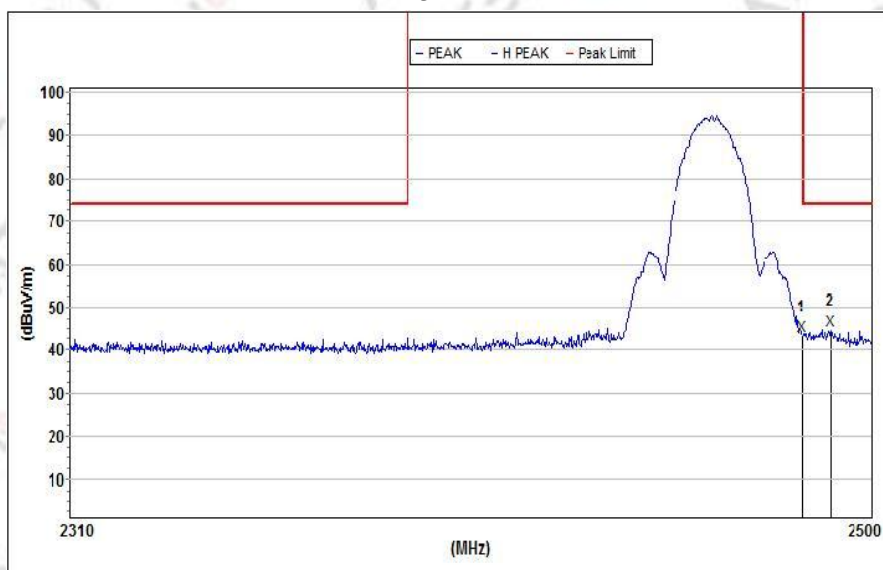
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Avg										
1	2483.501	38.5	54.0	15.5	98	150	27.5	57.1	6.5	H
2	2486.795	45.3	54.0	8.7	109	150	27.5	57.1	6.5	H

Mode 3 Vertical



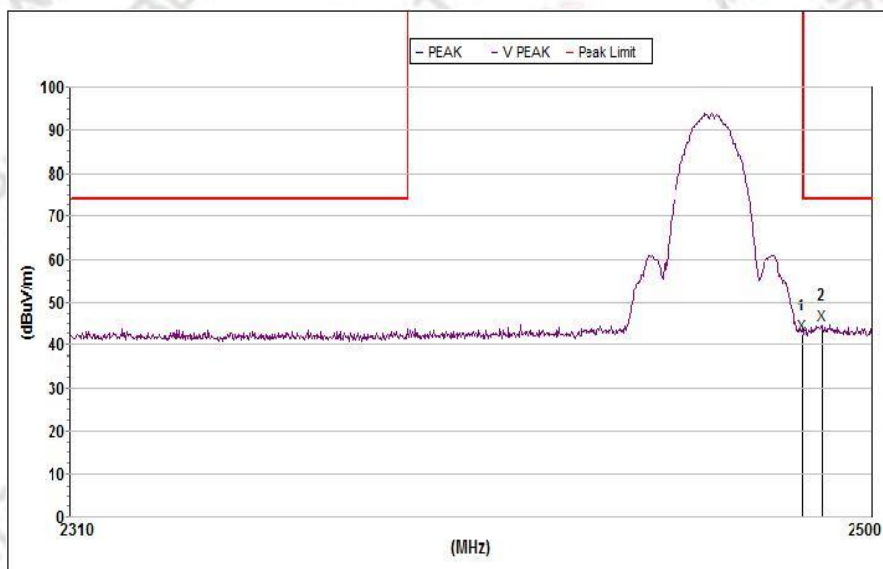
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Avg										
1	2483.501	31.8	54.0	22.2	158	150	27.3	57.1	6.5	V
2	2488.368	33.0	54.0	21.0	173	150	27.3	57.1	6.5	V

802.11b-High Mode 3 Horizontal



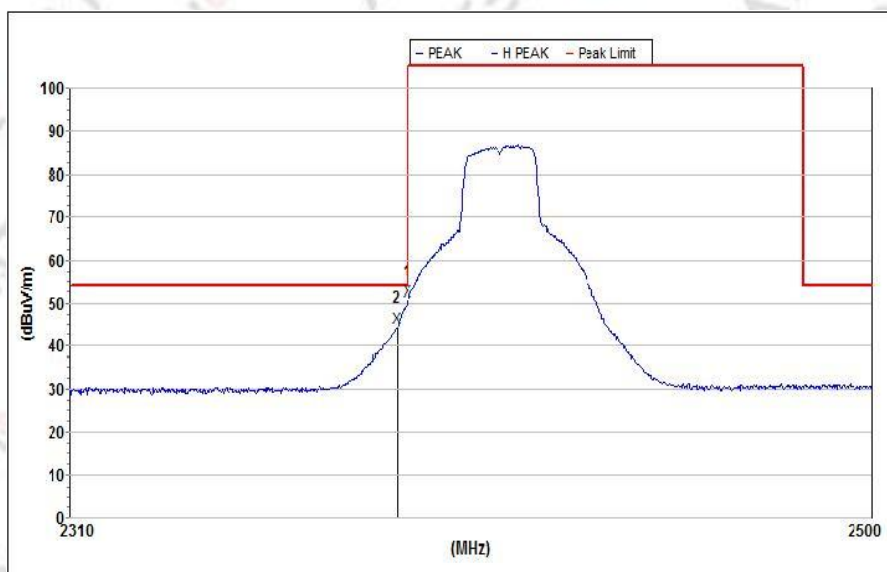
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak										
1	2483.501	43.5	74.0	30.5	338	150	27.5	57.1	6.5	H
2	2490.139	44.9	74.0	29.1	197	150	27.6	57.1	6.5	H

Mode 3 Vertical



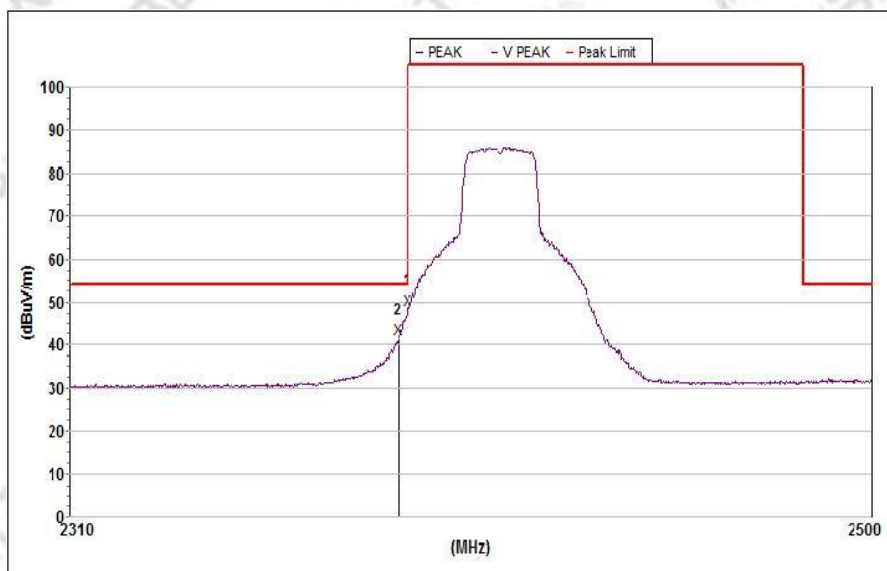
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak										
1	2483.501	42.3	74.0	31.7	197	150	27.3	57.1	6.5	V
2	2487.975	44.9	74.0	29.1	185	150	27.3	57.1	6.5	V

802.11g-Low Mode 4 Horizontal



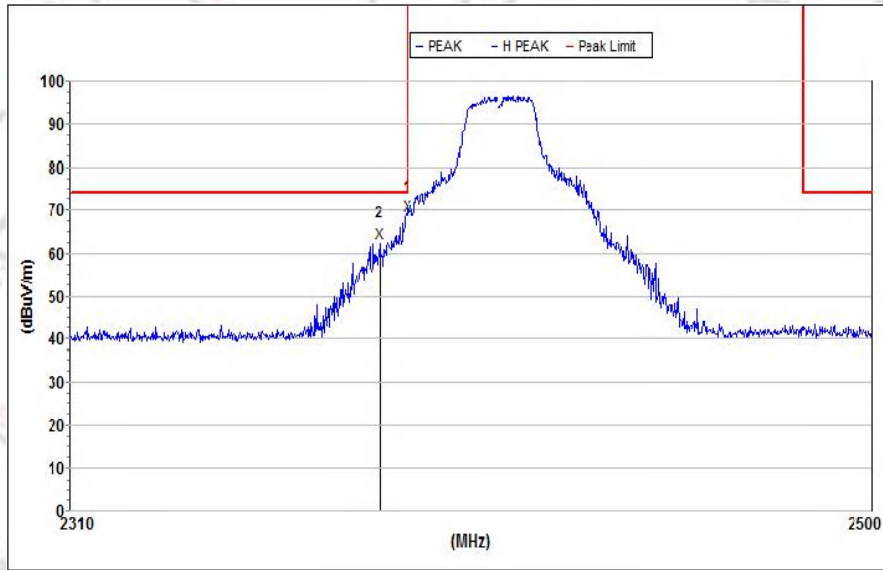
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Avg										
1	2390.000	50.7	54.0	3.3	318	150	27.1	56.9	6.4	H
2	2387.409	44.3	54.0	9.7	318	150	27.1	56.9	6.4	H

Mode 4 Vertical



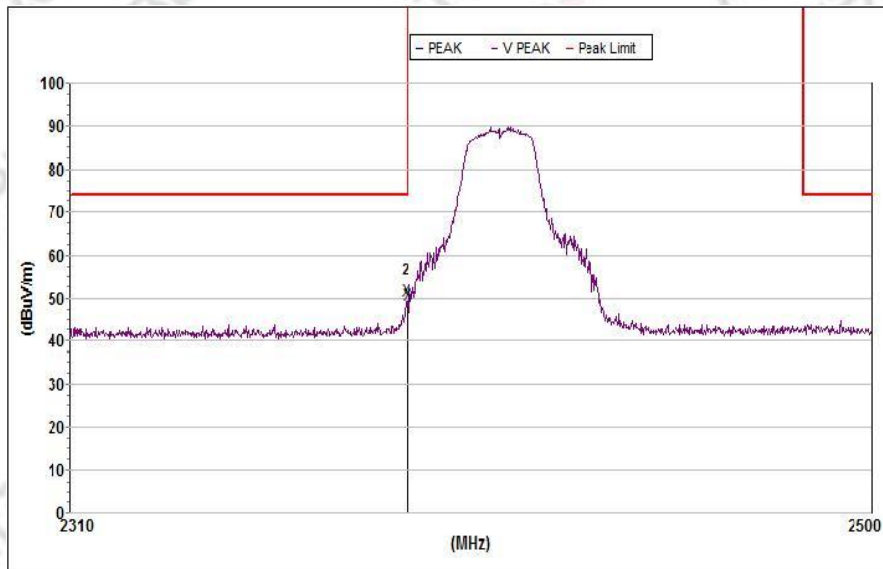
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Avg										
1	2390.000	48.2	54.0	5.8	1	150	26.9	56.9	6.4	V
2	2387.597	41.5	54.0	12.5	316	150	26.9	56.9	6.4	V

802.11g-Low Mode 4 Horizontal



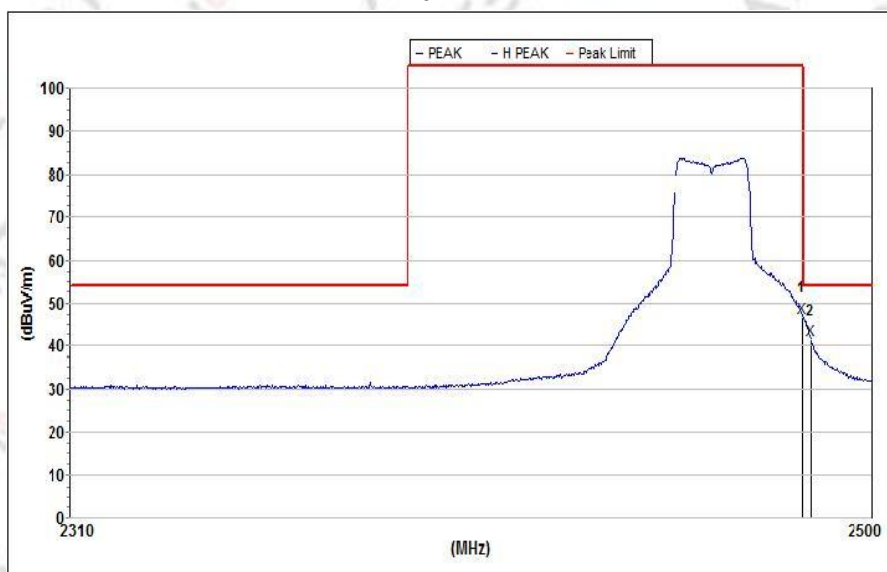
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak										
1	2390.000	68.7	74.0	5.3	225	150	27.1	56.9	6.4	H
2	2383.261	62.5	74.0	11.5	295	150	27.1	56.9	6.4	H

Mode 4 Vertical



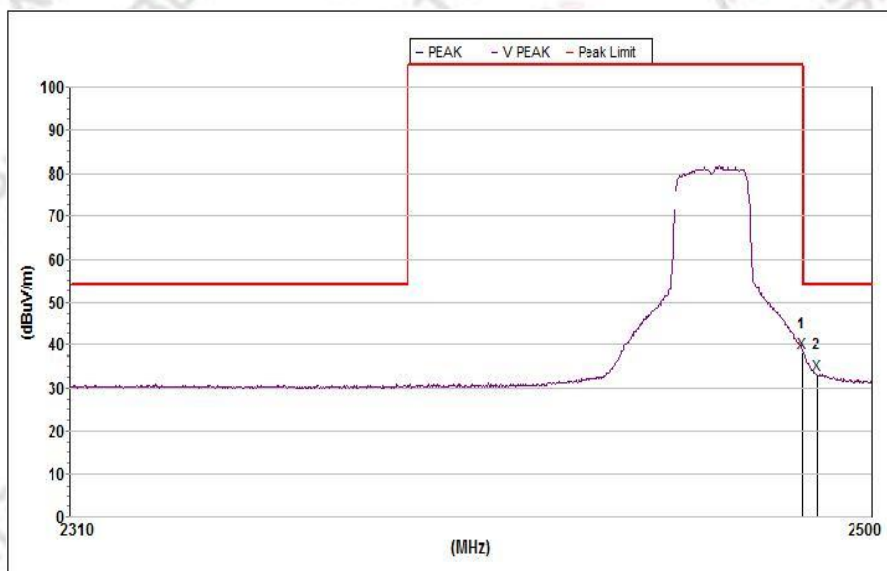
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak										
1	2390.000	48.8	74.0	25.2	306	150	26.9	56.9	6.4	V
2	2389.674	49.8	74.0	24.2	159	150	26.9	56.9	6.3	V

802.11g-High Mode 6 Horizontal



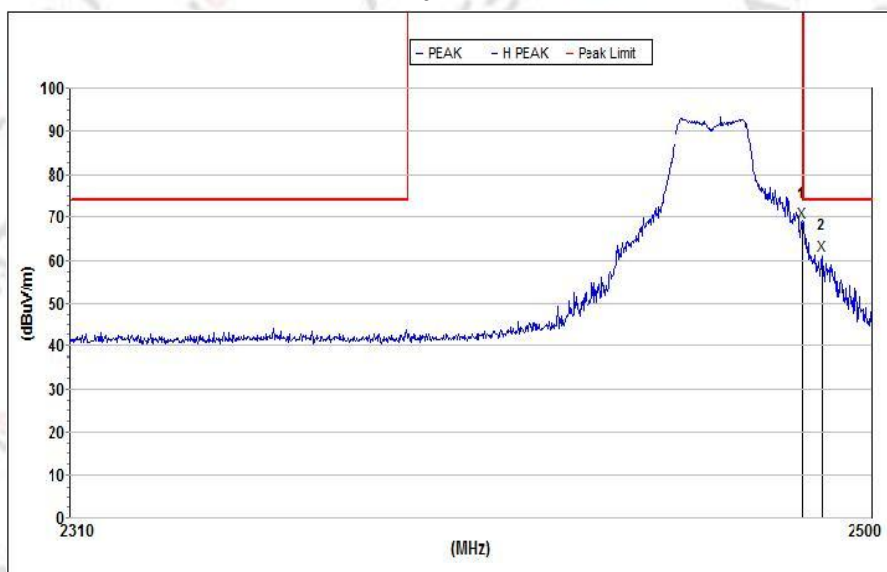
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Avg										
1	2483.501	46.8	54.0	7.2	296	150	27.5	57.1	6.5	H
2	2485.420	41.6	54.0	12.4	296	150	27.5	57.1	6.5	H

Mode 6 Vertical



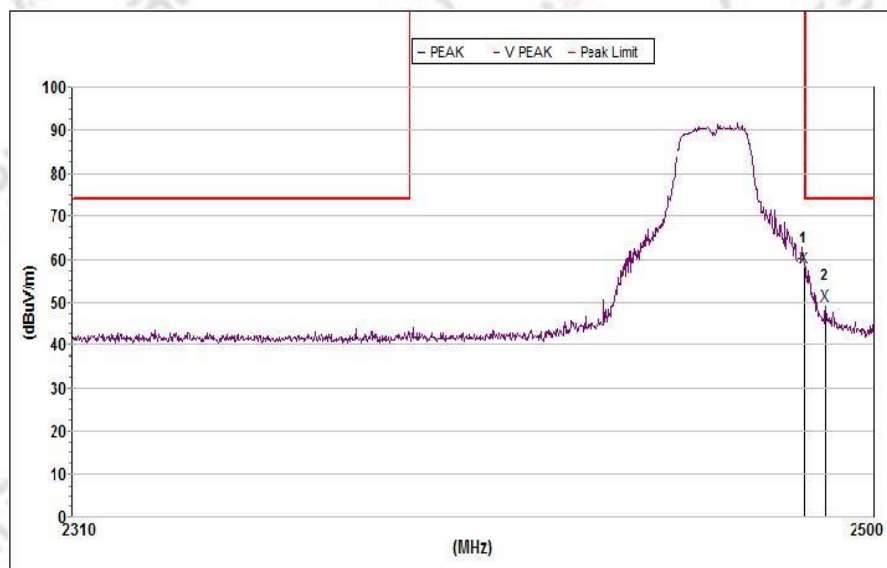
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Avg										
1	2483.501	38.3	54.0	15.7	158	150	27.3	57.1	6.5	V
2	2486.992	33.1	54.0	20.9	171	150	27.3	57.1	6.5	V

802.11g-High Mode 6 Horizontal



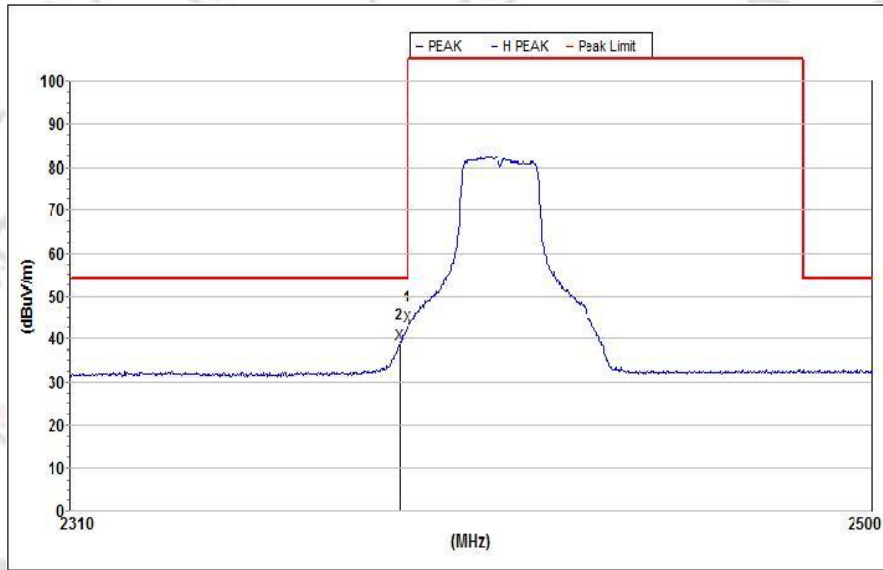
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak										
1	2483.501	68.9	74.0	5.1	298	150	27.5	57.1	6.5	H
2	2487.975	61.3	74.0	12.7	298	150	27.5	57.1	6.5	H

Mode 6 Vertical



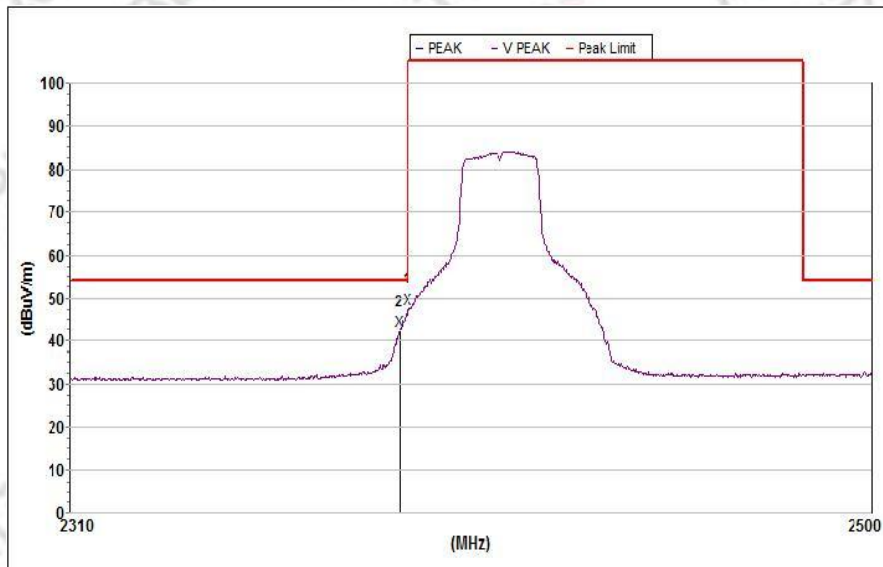
Mk.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak										
1	2483.501	58.2	74.0	15.8	171	150	27.3	57.1	6.5	V
2	2488.368	49.2	74.0	24.8	111	150	27.3	57.1	6.5	V

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	43.2	54.0	10.8	303	150	27.1	56.9	6.4	H
2	2387.975	38.8	54.0	15.2	303	150	27.1	56.9	6.4	H

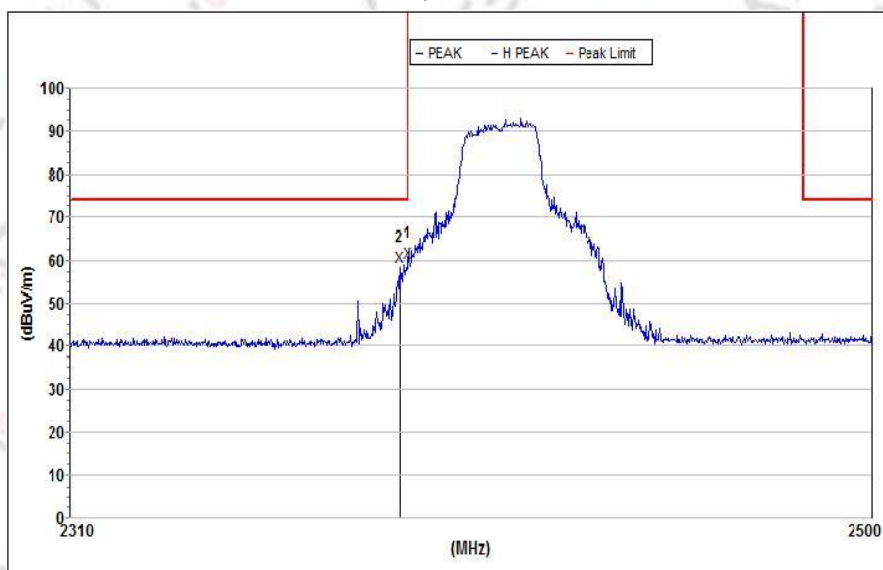
Mode 7 Vertical



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	47.6	54.0	6.4	308	100	26.9	56.9	6.4	V
2	2387.975	42.4	54.0	11.6	308	100	26.9	56.9	6.4	V

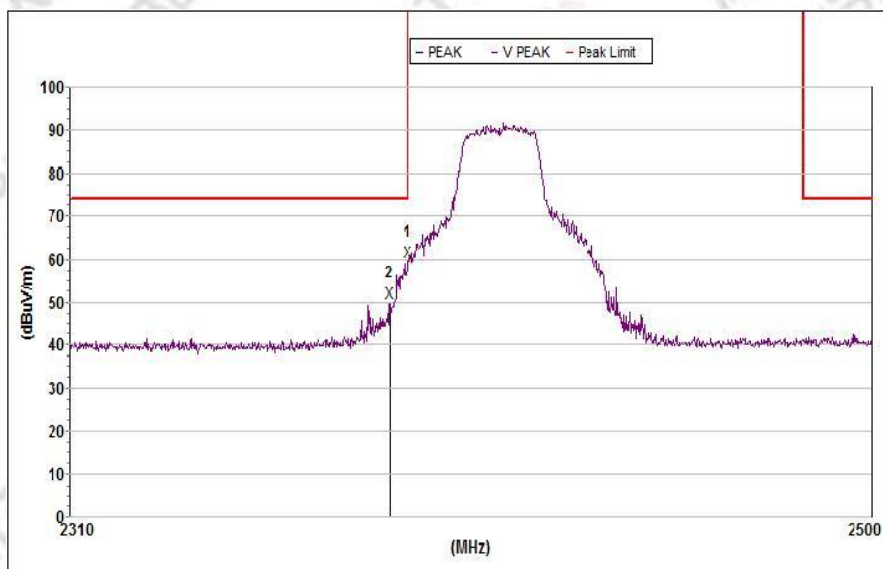
802.11n20-Low

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	59.7	74.0	14.3	294	101	27.1	56.9	6.4	H
2	2388.164	58.6	74.0	15.4	294	101	27.1	56.9	6.4	H

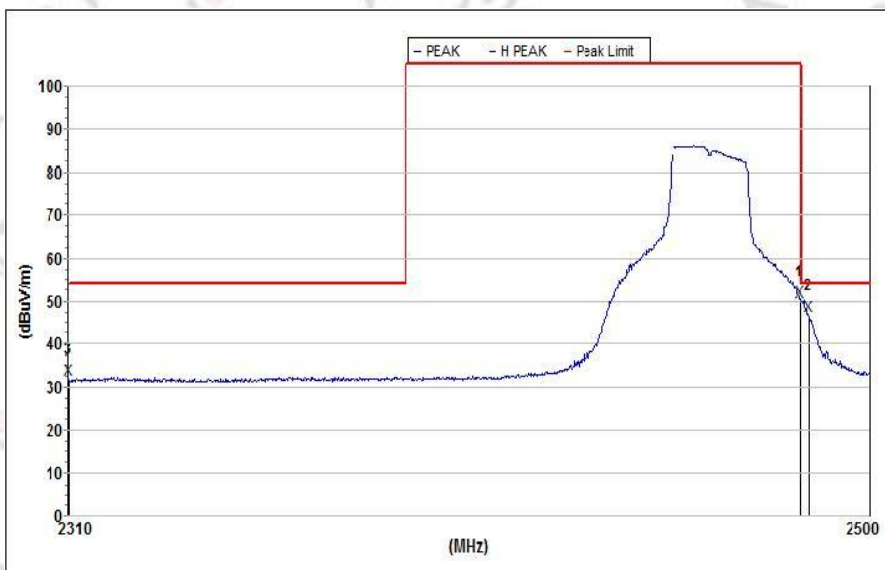
Mode 7 Vertical



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	59.4	74.0	14.6	310	100	26.9	56.9	6.4	V
2	2385.711	50.0	74.0	24.0	310	100	26.9	56.9	6.4	V

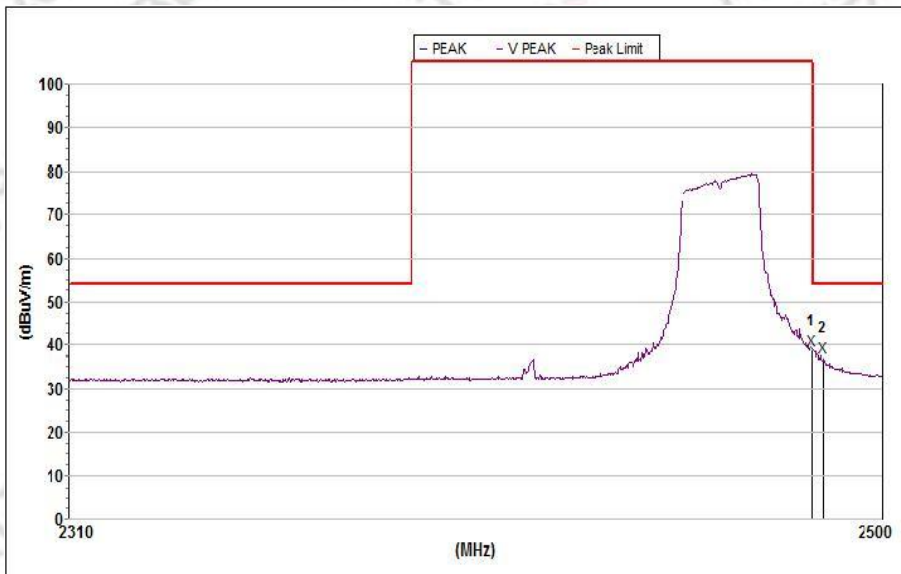
802.11n20-High

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	50.0	54.0	4.0	208	150	27.5	57.1	6.5	H
2	2485.616	46.7	54.0	7.3	208	150	27.5	57.1	6.5	H

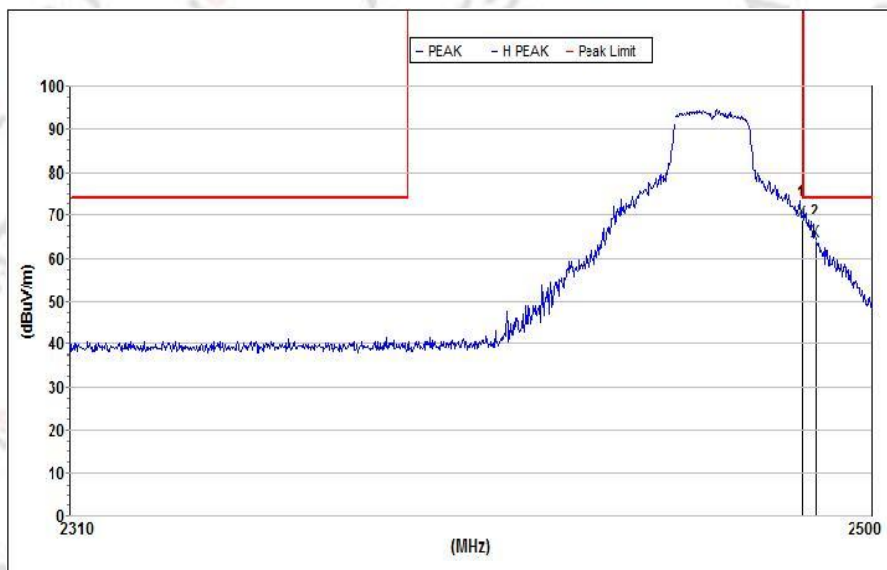
Mode 9 Vertical



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	38.8	54.0	15.2	215	150	27.3	57.1	6.5	V
2	2486.206	37.3	54.0	16.7	336	150	27.3	57.1	6.5	V

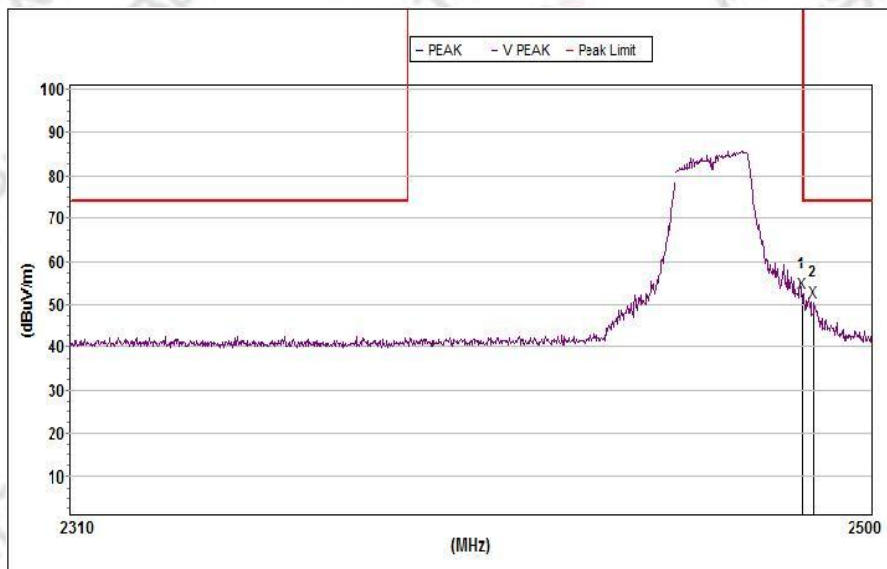
802.11n20-High

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	68.8	74.0	5.2	210	150	27.5	57.1	6.5	H
2	2486.795	64.0	74.0	10.0	210	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	52.5	74.0	21.5	239	150	27.3	57.1	6.5	V
2	2486.206	50.8	74.0	23.2	239	150	27.3	57.1	6.5	V

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

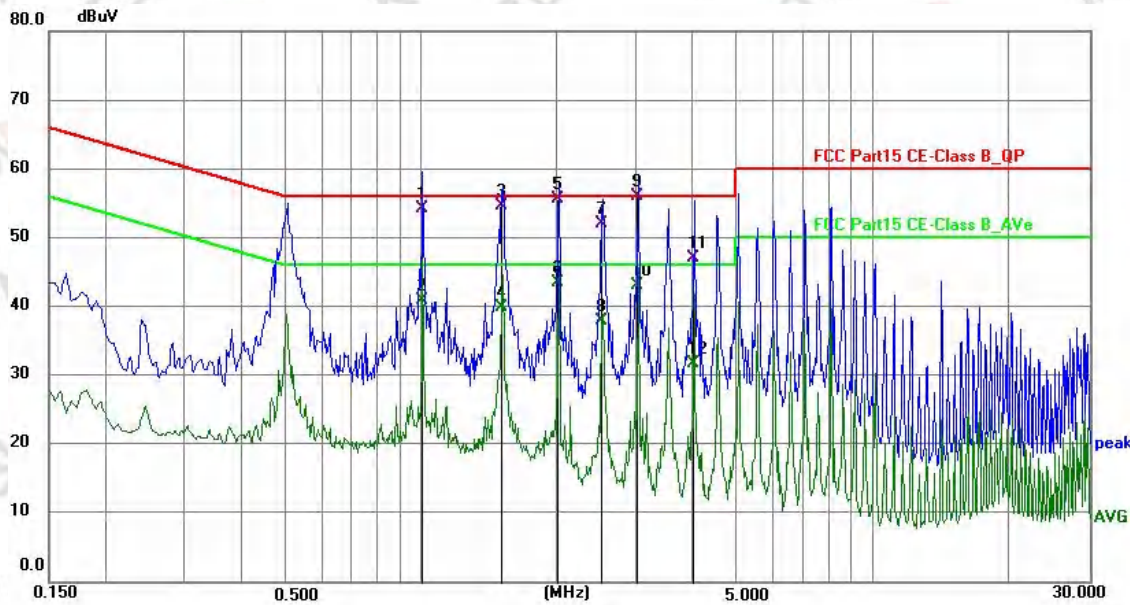
Appendix C _ AC Power-Line Conducted Emission Test Data

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)

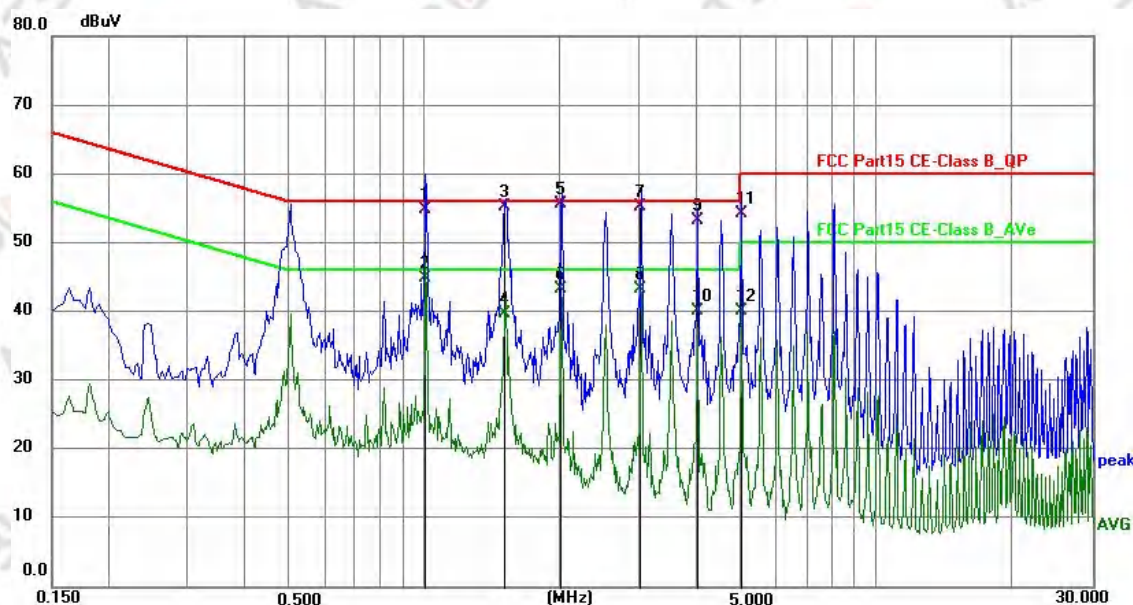


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	1.0017	44.20	9.93	54.13	56.00	-1.87	QP
2	1.0017	30.93	9.93	40.86	46.00	-5.14	AVG
3	1.5131	44.70	9.95	54.65	56.00	-1.35	QP
4	1.5131	29.98	9.95	39.93	46.00	-6.07	AVG
5	2.0114	45.62	9.97	55.59	56.00	-0.41	QP
6	2.0114	33.54	9.97	43.51	46.00	-2.49	AVG
7	2.5135	42.09	9.99	52.08	56.00	-3.92	QP
8	2.5135	27.83	9.99	37.82	46.00	-8.18	AVG
9	3.0176	45.94	10.01	55.95	56.00	-0.05	QP
10	3.0176	33.12	10.01	43.13	46.00	-2.87	AVG
11	4.0183	36.90	10.07	46.97	56.00	-9.03	QP
12	4.0183	21.74	10.07	31.81	46.00	-14.19	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)

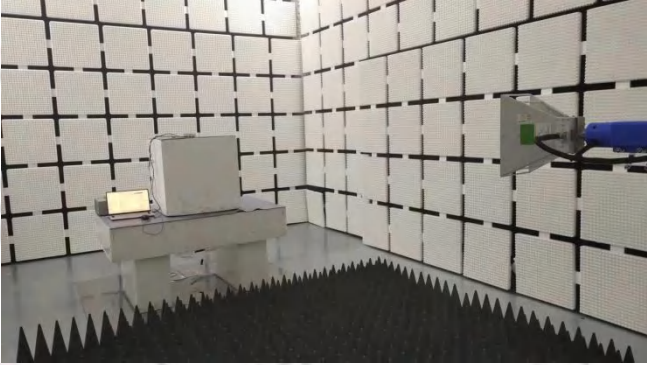
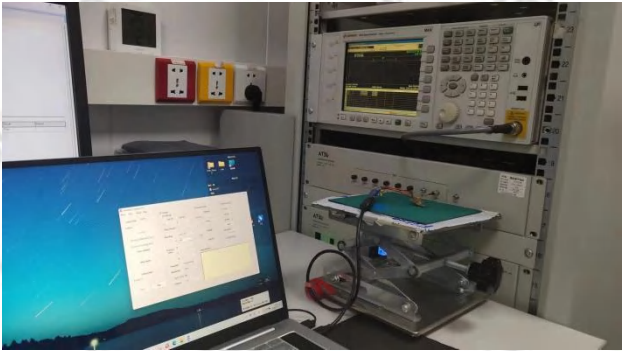
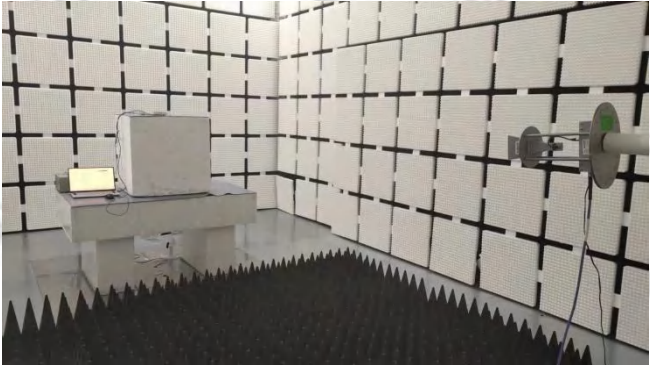


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	1.0046	45.13	9.79	54.92	56.00	-1.08	QP
2	1.0046	35.15	9.79	44.94	46.00	-1.06	AVG
3	1.5138	45.31	9.85	55.16	56.00	-0.84	QP
4	1.5138	29.94	9.85	39.79	46.00	-6.21	AVG
5	2.0124	45.69	9.90	55.59	56.00	-0.41	QP
6	2.0124	33.44	9.90	43.34	46.00	-2.66	AVG
7	3.0178	45.22	9.99	55.21	56.00	-0.79	QP
8	3.0178	33.28	9.99	43.27	46.00	-2.73	AVG
9	4.0246	43.33	9.99	53.32	56.00	-2.68	QP
10	4.0246	30.06	9.99	40.05	46.00	-5.95	AVG
11	5.0389	44.22	9.99	54.21	60.00	-5.79	QP
12	5.0389	30.05	9.99	40.04	50.00	-9.96	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*****