Radio Test Report

FCC ID: 2BBLG-CHILINKIIOT

Original Grant

Report No.	:	TBR-C-202305-0244-5
Applicant	:	SHENZHEN CHILINK IOT TECHNOLOGY CO., LTD
Equipment Under Test (EUT)		
EUT Name	:	Industrial router
Model No.	:	ZR2720N
Series Model No.	:	ZR2721N, ZR3731N, ZR9721N, IR2730N, IR4731N, IR5731N, SS2031, PS2021, QX210-NW
Brand Name	:	ZLWL
Sample ID	:	202305-0244-4#1& 202305-0244-4#2
Receipt Date	:	2023-06-05
Test Date	:	2023-06-05 to 2023-06-30
Issue Date	:	2023-06-30
Standards	:	FCC Part 15 Subpart C 15.247
Test Method	:	ANSI C63.10: 2013 KDB 558074 D01 15.247 Meas Guidance v05r02
Conclusions	:	**PASS** In the configuration tested, the EUT complied with the standards specified above.
Witness Engineer	:	Camille Li
Engineer Supervisor	:	Ivan Su
Engineer Manager	:	Ray Lai

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in the report.

1/F.,Building 6, Rundongsheng Industrial Zone, Longzhu, Xixiang, Bao'an District, Shenzhen, Guangdong, China
Tel: +86 75526509301 Fax: +86 75526509195

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Revision History

Report No.	Version	Description	Issued Date
TBR-C-202305-0244-5	Rev.01	Initial issue of report	2023-06-30

1. General Information about EUT

1.1 Client Information

Applicant	:	SHENZHEN CHILINK IOT TECHNOLOGY CO., LTD
Address	:	Room518, 512, Block A, Ming You Industrial Products Displaying&amp, Purchasing Center, Baoyuan Road, Xixiang, Baoan, Shenzhen, Guangdong Province, China
Manufacturer	:	SHENZHEN CHILINK IOT TECHNOLOGY CO., LTD
Address	:	Room518, 512, Block A, Ming You Industrial Products Displaying&amp, Purchasing Center, Baoyuan Road, Xixiang, Baoan, Shenzhen, Guangdong Province, China

1.2 General Description of EUT (Equipment Under Test)

EUT Name	:	Industrial router	
Model(s) No.	:	ZR2720N, ZR2721N, ZR3731N, ZR9721N, IR2730N, IR4731N, IR5731N, SS2031, PS2021, QX210-NW	
Model Difference	:	All these models are identical in the same PCB, layout and electrical circuit, the only difference is names.	
Product Description	:	Operation Frequency:	802.11b/g/n(HT20): 2412MHz~2462MHz 802.11n(HT40): 2422MHz~2452MHz
		Number of Channel:	802.11b/g/n(HT20):11 channels 802.11n(HT40): 7 channels
		Antenna Gain:	5dBi Probe Antenna For WIFI and LTE band 2/4/5/12/13/17/25/26/41 3.5dBi Mushroom Antenna For WIFI and LTE band 2/4/5/12/13/17/25/26/41
		Modulation Type:	802.11b: DSSS(CCK, DQPSK, DBPSK) 802.11g/n:OFDM(BPSK,QPSK,16QAM,64 QAM)
		Bit Rate of Transmitter:	802.11b:11/5.5/2/1 Mbps 802.11g:54/48/36/24/18/12/9/6 Mbps 802.11n:up to 150Mbps
Power Rating	:	For Adapter: (Model:TS-A012-120010AY) Input: AC 100V-240V, 50/60Hz 0.4A Output: DC 12V⎓1A	
Software Version	:	V2.5 /V2.6 /V2.7	
Hardware Version	:	V1.1	
Remark: (1) The antenna gain and adapter provided by the applicant, the verified for the RF conduction test provided by TOBY test lab. (2) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.			

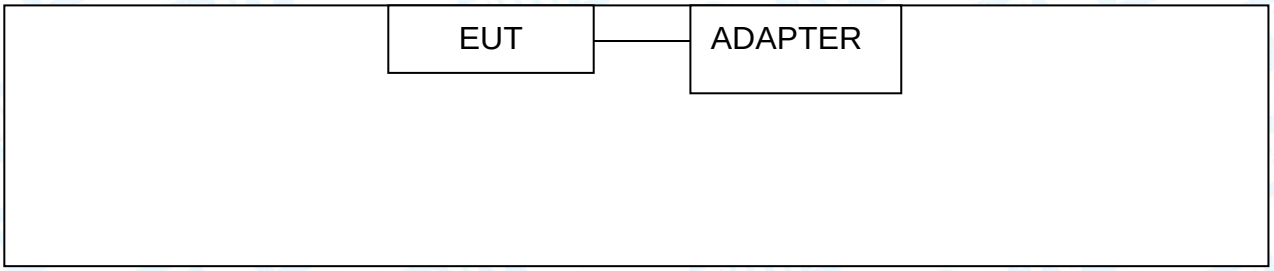
(3) Antenna information provided by the applicant.

(4) Channel List:

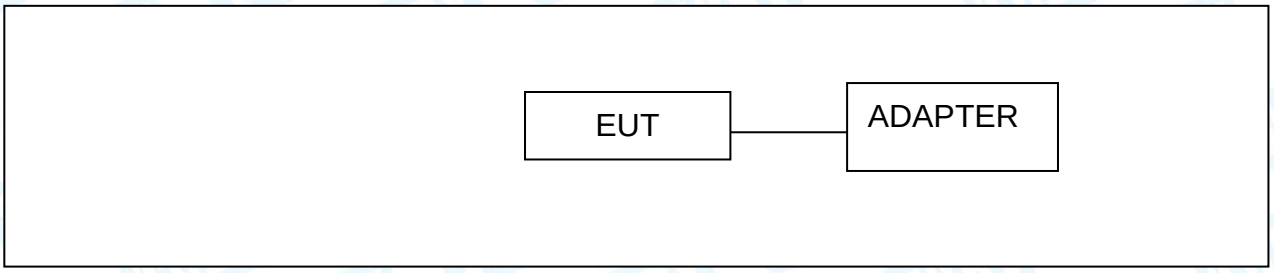
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	**2412**	05	2432	09	2452
02	2417	**06**	**2437**	10	2457
03	2422	07	2442	**11**	**2462**
04	2427	08	2447		
Note: CH 01~CH 11 for 802.11b/g/n(HT20) CH 03~CH 09 for 802.11n(HT40)					

1.3 Block Diagram Showing the Configuration of System Tested

Conducted Test



Radiated Test



1.4 Description of Support Units

Equipment Information				
Name	**Model**	**FCC ID/VOC**	**Manufacturer**	**Used "√"**
Adapter	TS-A012-120010AY	----	SHENZHEN TRANSIN	√
Cable Information				
Number	**Shielded Type**	**Ferrite Core**	**Length**	**Note**
-----	----	----	----	----
Remark: The adapter is provided by the Applicant.				

1.5 Description of Test Mode

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned follow was evaluated respectively.

For Conducted Emission Test	
Final Test Mode	**Description**
Mode 1	Charging with TX b Mode Channel 01
For Radiated and RF Conducted Test	
Final Test Mode	**Description**
Mode 2	TX Mode b Mode Channel 01/06/11
Mode 3	TX Mode g Mode Channel 01/06/11
Mode 4	TX Mode n(HT20) Mode Channel 01/06/11
Mode 5	TX Mode n(HT40) Mode Channel 03/06/09

Note:

(1) For all test, we have verified the construction and function in typical operation. And all the test modes were carried out with the EUT in transmitting operation in maximum power with all kinds of data rate.

According to ANSI C63.10 standards, the measurements are performed at the highest, middle, lowest available channels, and the worst case data rate as follows:

802.11b Mode: CCK
802.11g Mode: OFDM
802.11n (HT20) Mode: MCS 0
802.11n (HT40) Mode: MCS 0

(2) During the testing procedure, the continuously transmitting with the maximum power mode was programmed by the customer.

(3) The EUT is considered a Mobile unit; in normal use it was positioned on X-plane. The worst case was found positioned on X-plane. Therefore only the test data of this X-plane was used for radiated emission measurement test.

1.6 Description of Test Software Setting

During testing channel& Power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product power parameters of RF setting.

Test Software: Atheros Radio Test 2			
	Test Mode: Continuously transmitting		
Mode	**Data Rate**	**Channel**	**Parameters**
802.11b	CCK/ 1Mbps	01	19
	CCK/ 1Mbps	06	19
	CCK/ 1Mbps	11	19
802.11g	OFDM/ 6Mbps	01	19
	OFDM/ 6Mbps	06	19
	OFDM/ 6Mbps	11	19
802.11n(HT20)	MCS 0	01	19
	MCS 0	06	19
	MCS 0	11	19
802.11n(HT40)	MCS 0	03	16
	MCS 0	06	17
	MCS 0	09	17

1.7 Measurement Uncertainty

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

Test Item	**Parameters**	**Expanded Uncertainty (U_{Lab})**
Conducted Emission	Level Accuracy: 9kHz~150kHz 150kHz to 30MHz	±3.50 dB ±3.10 dB
Radiated Emission	Level Accuracy: 9kHz to 30 MHz	±4.60 dB
Radiated Emission	Level Accuracy: 30MHz to 1000 MHz	±4.50 dB
Radiated Emission	Level Accuracy: Above 1000MHz	±4.20 dB

1.8 Test Facility

The testing report were performed by the Shenzhen Toby Technology Co., Ltd., in their facilities located at 1/F., Building 6, Rundongsheng Industrial Zone, Longzhu, Xixiang, Bao'an District, Shenzhen, Guangdong, China. At the time of testing, the following bodies accredited the Laboratory:

CNAS (L5813)

The Laboratory has been accredited by CNAS to ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories for the competence in the field of testing. And the Registration No.: CNAS L5813.

A2LA Certificate No.: 4750.01

The laboratory has been accredited by American Association for Laboratory Accreditation(A2LA) to ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories for the technical competence in the field of Electrical Testing. And the A2LA Certificate No.: 4750.01.FCC Accredited Test Site Number: 854351. Designation Number: CN1223.

IC Registration No.: (11950A)

The Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing. The site registration: Site# 11950A. CAB identifier: CN0056.

2. Test Summary

Standard Section	Test Item	Test Sample(s)	Judgment	Remark
FCC				
FCC 15.207(a)	Conducted Emission	202305-0244-4#1	PASS	N/A
FCC 15.209 & 15.247(d)	Radiated Unwanted Emissions	202305-0244-4#1	PASS	N/A
FCC 15.203	Antenna Requirement	202305-0244-4#2	PASS	N/A
FCC 15.247(a)(2)	6dB Bandwidth	202305-0244-4#2	PASS	N/A
/	99% Occupied bandwidth	202305-0244-4#2	PASS	N/A
FCC 15.247(b)(3)	Peak Output Power and E.I.R.P	202305-0244-4#2	PASS	N/A
FCC 15.247(e)	Power Spectral Density	202305-0244-4#2	PASS	N/A
FCC 15.247(d)	Band Edge Measurements	202305-0244-4#2	PASS	N/A
FCC 15.247(d)	Conducted Unwanted Emissions	202305-0244-4#2	PASS	N/A
FCC 15.205&15.209	Emissions in Restricted Bands	202305-0244-4#2	PASS	N/A
/	On Time and Duty Cycle	202305-0244-4#2	/	N/A

Note: N/A is an abbreviation for Not Applicable.

3. Test Software

Test Item	Test Software	Manufacturer	Version No.
Conducted Emission	EZ-EMC	EZ	CDI-03A2
Radiation Emission	EZ-EMC	EZ	FA-03A2RE
RF Conducted Measurement	MTS-8310	MWRFtest	V2.0.0.0
RF Test System	JS1120	Tonscend	V2.6.88.0336

4. Test Equipment

Conducted Emission Test					
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Last Cal.**	**Cal. Due Date**
EMI Test Receiver	Rohde & Schwarz	ESCI	100321	Jun. 20, 2023	Jun. 19, 2024
RF Switching Unit	Compliance Direction Systems Inc	RSU-A4	34403	Jun. 20, 2023	Jun. 19, 2024
AMN	SCHWARZBECK	NNBL 8226-2	8226-2/164	Jun. 20, 2023	Jun. 19, 2024
LISN	Rohde & Schwarz	ENV216	101131	Jun. 20, 2023	Jun. 19, 2024
ISN	SCHWARZBECK	NTFM 8131	8131-193	Jun. 20, 2023	Jun. 19, 2024
ISN	SCHWARZBECK	CAT3 8158	cat3 5158-0094	Jun. 20, 2023	Jun. 19, 2024
ISN	SCHWARZBECK	NTFM5158	NTFM5158 0145	Jun. 20, 2023	Jun. 19, 2024
ISN	SCHWARZBECK	CAT 8158	cat5 8158-179	Jun. 20, 2023	Jun. 19, 2024
Radiation Emission Test (B Site)					
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Last Cal.**	**Cal. Due Date**
Spectrum Analyzer	Agilent	N9020A	MY49100060	Sep.01.2022	Aug. 31, 2023
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102197	Jun. 20, 2023	Jun. 19, 2024
EMI Test Receiver	Rohde & Schwarz	ESU-8	100472/008	Feb. 23, 2023	Feb. 22, 2024
Bilog Antenna	SCHWARZBECK	VULB 9168	1225	Dec. 05, 2021	Dec. 04, 2023
Horn Antenna	SCHWARZBECK	BBHA 9120 D	2463	Feb. 26, 2022	Feb.25, 2024
Horn Antenna	SCHWARZBECK	BBHA 9170	1118	Jun. 26, 2022	Jun.25, 2024
Loop Antenna	SCHWARZBECK	FMZB 1519 B	1519B-059	Jun. 26, 2022	Jun.25, 2024
HF Amplifier	Tonscend	TAP9E6343	AP21C806117	Sep.01.2022	Aug. 31, 2023
HF Amplifier	Tonscend	TAP051845	AP21C806141	Sep.01.2022	Aug. 31, 2023
HF Amplifier	Tonscend	TAP0184050	AP21C806129	Sep.01.2022	Aug. 31, 2023
Highpass Filter	CD	HPM-6.4/18G	---	N/A	N/A
Highpass Filter	CD	HPM-2.8/18G	---	N/A	N/A
Highpass Filter	XINBO	XBLBQ-HTA67(8-25G)	22052702-1	N/A	N/A
Antenna Conducted Emission					
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Last Cal.**	**Cal. Due Date**
Spectrum Analyzer	Agilent	E4407B	MY45106456	Jun. 20, 2023	Jun. 19, 2024
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102197	Jun. 20, 2023	Jun. 19, 2024
MXA Signal Analyzer	KEYSIGHT	N9020B	MY60110172	Sep.01.2022	Aug. 31, 2023
MXA Signal Analyzer	Agilent	N9020A	MY47380425	Sep.01.2022	Aug. 31, 2023
Vector Signal Generator	Agilent	N5182A	MY50141294	Sep.01.2022	Aug. 31, 2023
Analog Signal Generator	Agilent	N5181A	MY48180463	Sep.01.2022	Aug. 31, 2023
Vector Signal Generator	KEYSIGHT	N5182B	MY59101429	Sep.01.2022	Aug. 31, 2023
Analog Signal Generator	KEYSIGHT	N5173B	MY61252685	Sep.01.2022	Aug. 31, 2023

RF Power Sensor	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO26	Sep.01.2022	Aug. 31, 2023
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO29	Sep.01.2022	Aug. 31, 2023
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO31	Sep.01.2022	Aug. 31, 2023
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO33	Sep.01.2022	Aug. 31, 2023
RF Control Unit	Tonsced	JS0806-1	21C8060380	N/A	N/A
RF Control Unit	Tonsced	JS0806-2	21F8060439	Sep.01.2022	Aug. 31, 2023
Band Reject Filter Group	Tonsced	JS0806-F	21D8060414	Jun. 20, 2023	Jun. 19, 2024
Power Control Box	Tonsced	JS0806-4ADC	21C8060387	N/A	N/A
Wideband Radio Comunication Tester	Rohde & Schwarz	CMW500	144382	Sep.01.2022	Aug. 31, 2023
Universal Radio Communication Tester	Rohde&Schwarz	CMW500	168796	Feb. 23, 2023	Feb.22, 2024
Temperature and Humidity Chamber	ZhengHang	ZH-QTH-1500	ZH2107264	Jun. 20, 2023	Jun. 19, 2024

5. Conducted Emission Test

5.1 Test Standard and Limit

5.1.1 Test Standard

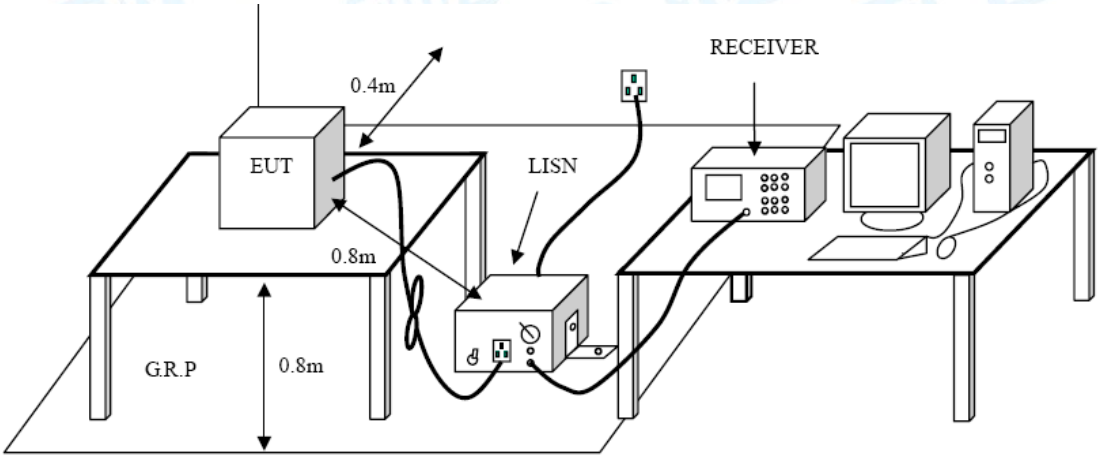
FCC Part 15.207

5.1.2 Test Limit

Frequency	Maximum RF Line Voltage (dBμV)	
	Quasi-peak Level	Average Level
150kHz~500kHz	66 ~ 56 *	56 ~ 46 *
500kHz~5MHz	56	46
5MHz~30MHz	60	50

Notes:
(1) *Decreasing linearly with logarithm of the frequency.
(2) The lower limit shall apply at the transition frequencies.
(3) The limit decrease in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

5.2 Test Setup



5.3 Test Procedure

●The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 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 at least 80 cm from nearest part of EUT chassis.
●The bandwidth of EMI test receiver is set at 9 kHz, and the test frequency band is from 0.15MHz to 30MHz.

5.4 Deviation From Test Standard

No deviation

5.5 EUT Operating Mode

Please refer to the description of test mode.

5.6 Test Data

Please refer to the Attachment A inside test report.

6. Radiated and Conducted Unwanted Emissions

6.1 Test Standard and Limit

6.1.1 Test Standard

FCC Part 15.209 & FCC Part 15.247(d)

6.1.2 Test Limit

General field strength limits at frequencies Below 30MHz		
Frequency (MHz)	**Field Strength (microvolt/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
Note: 1, The emission limits for the ranges 9-90 kHz and 110-490 kHz are based on measurements employing a linear average detector.		

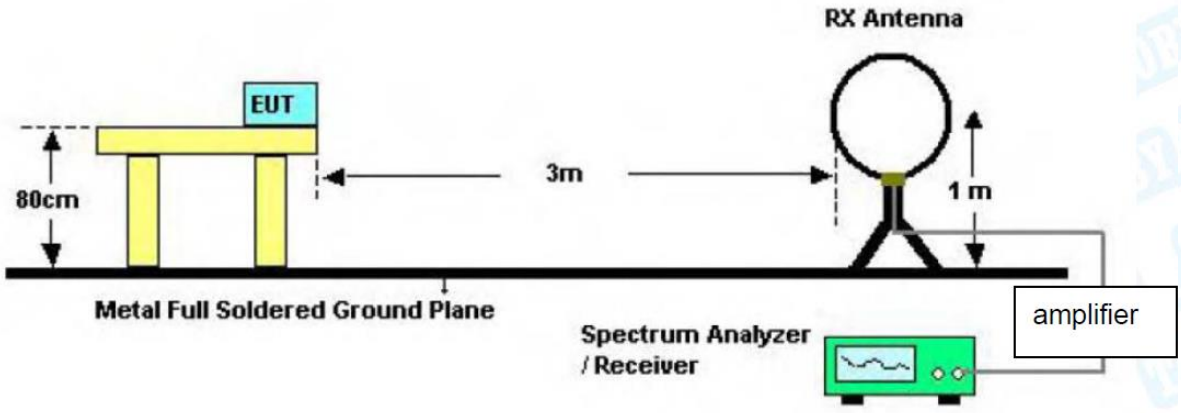
General field strength limits at frequencies above 30 MHz		
Frequency (MHz)	**Field strength (μV/m at 3 m)**	**Measurement Distance (meters)**
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

General field strength limits at frequencies Above 1000MHz		
Frequency (MHz)	**Distance of 3m (dBuV/m)**	
	Peak	**Average**
Above 1000	74	54
Note: (1) The tighter limit applies at the band edges. (2) Emission Level(dBuV/m)=20log Emission Level(uV/m)		

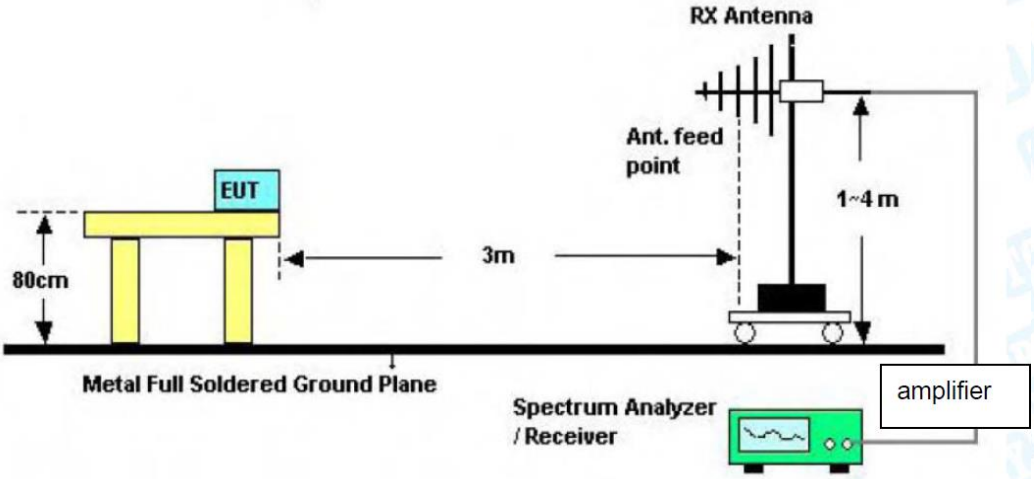
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under section 5.4(d), the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits specified in RSS-Gen is not required.

6.2 Test Setup

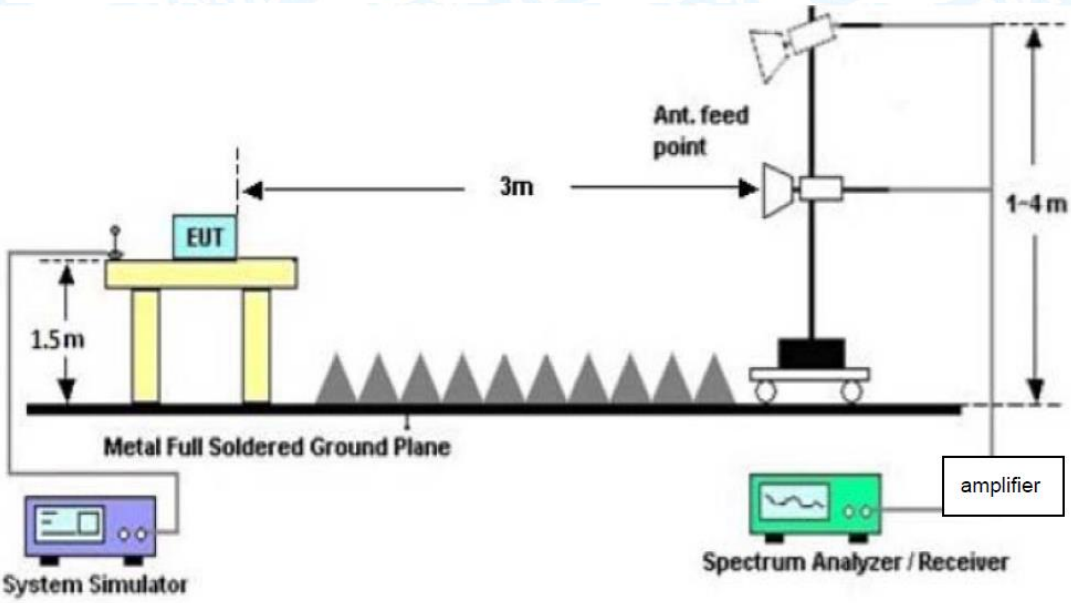
Radiated measurement



Below 30MHz Test Setup

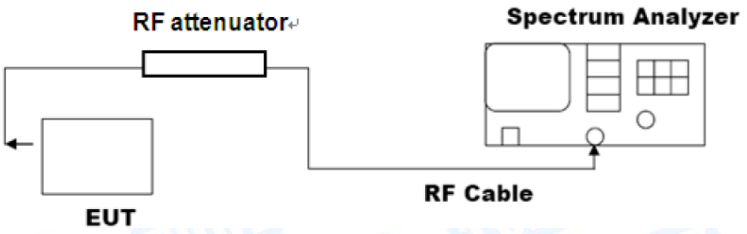


Below 1000MHz Test Setup



Above 1GHz Test Setup

Conducted measurement



6.3 Test Procedure

---Radiated measurement

●The measuring distance of 3m shall be used for measurements at frequency up to 1GHz and above 1 GHz. The EUT was placed on a rotating 0.8m high above ground, the table was rotated 360 degrees to determine the position of the highest radiation.

● Measurements at frequency above 1GHz. The EUT was placed on a rotating 1.5m high above the ground. RF absorbers covered the ground plane with a minimum area of 3.0m by 3.0m between the EUT and measurement receiver antenna. The RF absorber shall not exceed 30cm in high above the conducting floor. The table was rotated 360 degrees to determine the position of the highest radiation.

● The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set to make measurement.

●The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.

●If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit Below 1 GHz, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed. But the Peak Value and average value both need to comply with applicable limit above 1 GHz.

●Testing frequency range 30MHz-1GHz the measuring instrument use VBW=120 kHz with Quasi-peak detection. Testing frequency range 9KHz-150Hz the measuring instrument use VBW=200Hz with Quasi-peak detection. Testing frequency range 9KHz-30MHz the measuring instrument use VBW=9kHz with Quasi-peak detection.

●Testing frequency range above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.

●For the actual test configuration, please see the test setup photo.

--- Conducted measurement

●Reference level measurement

Establish a reference level by using the following procedure:

a) Set instrument center frequency to DTS channel center frequency.
b) Set the span to≥1.5 times the DTS bandwidth.
c) Set the RBW = 100 kHz.
d) Set the VBW≥[3*RBW].
e) Detector = peak.
f) Sweep time = auto couple.
g) Trace mode = max hold.
h) Allow trace to fully stabilize.
i) Use the peak marker function to determine the maximum PSD level.

Note that the channel found to contain the maximum PSD level can be used to establish the reference level.

●Emission level measurement

Establish an emission level by using the following procedure:

a) Set the center frequency and span to encompass frequency range to be measured.
b) Set the RBW = 100 kHz.
c) Set the VBW≥[3*RBW].
d) Detector = peak.
e) Sweep time = auto couple.
f) Trace mode = max hold.
g) Allow trace to fully stabilize.
h) Use the peak marker function to determine the maximum amplitude level.

Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) is attenuated by at least the minimum requirements specified in 11.11. Report the three highest emissions relative to the limit.

6.4 Deviation From Test Standard

No deviation

6.5 EUT Operating Mode

Please refer to the description of test mode.

6.6 Test Data

Radiated measurement please refer to the Attachment B inside test report.
Conducted measurement please refer to the Appendix A.

7. Restricted Bands Requirement

7.1 Test Standard and Limit

7.1.1 Test Standard

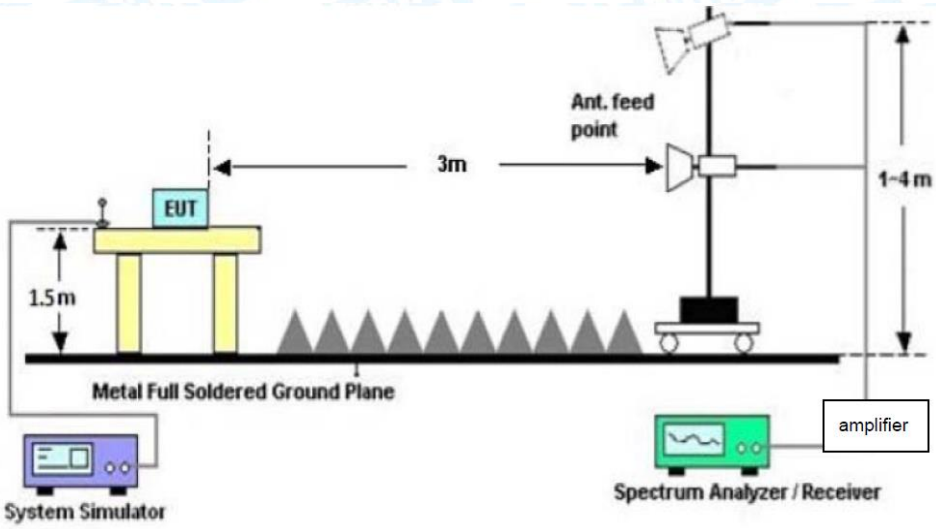
FCC Part 15.205 & FCC Part 15.249

7.1.2 Test Limit

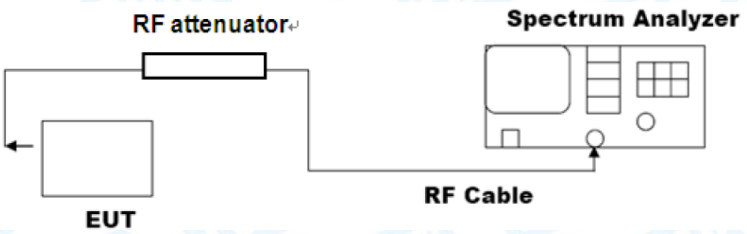
Restricted Frequency Band (MHz)	Distance Meters(at 3m)	
	Peak (dBuV/m)	Average (dBuV/m)
2310 ~2390	74	54
2483.5 ~2500	74	54
	Peak (dBm)see 7.3 e)	Average (dBm) see 7.3 e)
2310 ~2390	-41.20	-21.20
2483.5 ~2500	-41.20	-21.20
Note: According the ANSI C63.10 11.12.2 antenna-port conducted measurements may also be used as an alternative to radiated measurements for determining compliance in the restricted frequency bands requirements. If conducted measurements are performed, then proper impedance matching must be ensured and an additional radiated test forcabinet/case emissions is required.		

7.2 Test Setup

Radiated measurement



Conducted measurement



7.3 Test Procedure

---Radiated measurement

● Measurements at frequency above 1GHz. The EUT was placed on a rotating 1.5m high above the ground. RF absorbers covered the ground plane with a minimum area of 3.0m by 3.0m between the EUT and measurement receiver antenna. The RF absorber shall not exceed 30cm in high above the conducting floor. The table was rotated 360 degrees to determine the position of the highest radiation.

● The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set to make measurement.

●The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.

●The Peak Value and average value both need to comply with applicable limit above 1 GHz.

●Testing frequency range above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.

●For the actual test configuration, please see the test setup photo.

--- Conducted measurement

a) Measure the conducted output power (in dBm) using the detector specified by the appropriate regulatory agency (see 11.12.2.3 through 11.12.2.5 for guidance regarding measurement procedures for determining quasi-peak, peak, and average conducted output power, respectively).

b) Add the maximum transmit antenna gain (in dBi) to the measured output power level to determine the EIRP (see 11.12.2.6 for guidance on determining the applicable antenna gain).

c) Add the appropriate maximum ground reflection factor to the EIRP (6 dB for frequencies ≤30 MHz; 4.7 dB for frequencies between 30 MHz and 1000 MHz, inclusive; and 0 dB for frequencies > 1000 MHz).

d) For MIMO devices, measure the power of each chain and sum the EIRP of all chains in linear terms (i.e., watts and mW).

e) Convert the resultant EIRP to an equivalent electric field strength using the following relationship:

$$E = \text{EIRP} - 20 \log d + 104.8$$

where

E is the electric field strength in dBuV/m

EIRP is the equivalent isotropically radiated power in dBm

d is the specified measurement distance in m

f) Compare the resultant electric field strength level with the applicable regulatory limit.

g) Perform the radiated spurious emission test.

7.4 Deviation From Test Standard

No deviation

7.5 EUT Operating Mode

Please refer to the description of test mode.

7.6 Test Data

Remark: The test uses antenna-port conducted measurements as an alternative to radiated measurements for determining compliance in the restricted frequency bands requirements.

Restrict Band measurements Please refer to the Attachment C inside test report.
Conducted measurement please refer to the Appendix A.

8. Bandwidth Test

8.1 Test Standard and Limit

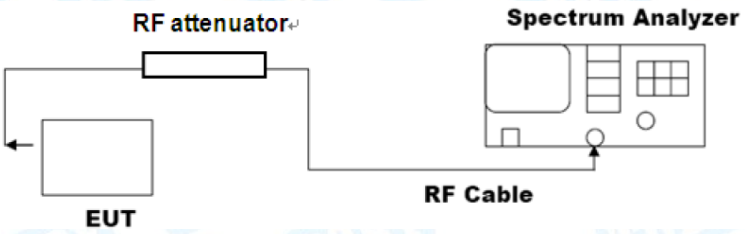
8.1.1 Test Standard

FCC Part 15.205 & FCC Part 15.247(d)

8.1.2 Test Limit

Test Item	Limit	Frequency Range(MHz)
-6dB bandwidth (DTS bandwidth)	>=500 KHz	2400~2483.5
99% occupied bandwidth	/	2400~2483.5

8.2 Test Setup



8.3 Test Procedure

---DTS bandwidth

●The steps for the first option are as follows:

a) Set RBW = 100 kHz.

b) Set the VBW≥[3*RBW].

c) Detector = peak.

d) Trace mode = max hold.

e) Sweep = auto couple.

f) Allow the trace to stabilize.

g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

---occupied bandwidth

●The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power of the given emission. The following procedure shall be used for measuring 99% power bandwidth:

a) The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.

b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be approximately three times the RBW, unless otherwise specified by the applicable requirement.

c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than [10 log (OBW/RBW)] below the reference level. Specific guidance is given in 4.1.5.2.
d) Step a) through step c) might require iteration to adjust within the specified range.
e) Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
f) Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.
g) If the instrument does not have a 99% power bandwidth function, then the trace data points are recovered and directly summed in linear power terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the total is reached; that frequency is recorded as the upper frequency. The 99% power bandwidth is the difference between these two frequencies.
h) The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

8.4 Deviation From Test Standard

No deviation

8.5 EUT Operating Mode

Please refer to the description of test mode.

8.6 Test Data

Please refer to the Appendix A.

9. Peak Output Power

9.1 Test Standard and Limit

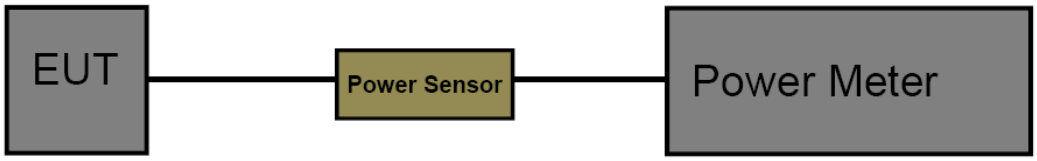
9.1.1 Test Standard

FCC Part 15.247(b)(3)

9.1.2 Test Limit

Test Item	Limit	Frequency Range(MHz)
Peak Output Power	not exceed 1 W or 30dBm	2400~2483.5

9.2 Test Setup



9.3 Test Procedure

●The EUT was connected to RF power meter via a broadband power sensor as show the block above. The power sensor video bandwidth is greater than or equal to the DTS bandwidth of the equipment.

9.4 Deviation From Test Standard

No deviation

9.5 EUT Operating Mode

Please refer to the description of test mode.

9.6 Test Data

Please refer to the Appendix A.

10. Power Spectral Density

10.1 Test Standard and Limit

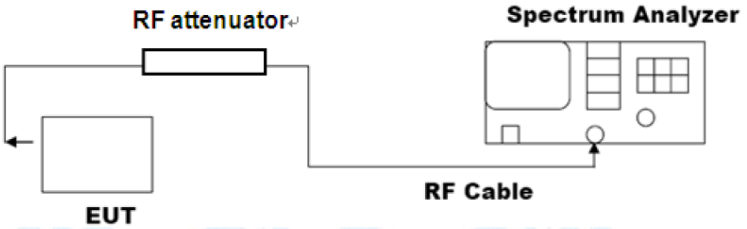
10.1.1 Test Standard

FCC Part 15.247I

10.1.2 Test Limit

Test Item	Limit	Frequency Range(MHz)
Power Spectral Density	8dBm(in any 3 kHz)	2400~2483.5

10.2 Test Setup



10.3 Test Procedure

●The following procedure shall be used if maximum peak conducted output power was used to determine compliance, and it is optional if the maximum conducted (average) output power was used to determine compliance:

a) Set analyzer center frequency to DTS channel center frequency.
b) Set the span to 1.5 times the DTS bandwidth.
c) Set the RBW to 3 kHz≤RBW≤100 kHz.
d) Set the VBW ≥[3*RBW].
e) Detector = peak.
f) Sweep time = auto couple.
g) Trace mode = max hold.
h) Allow trace to fully stabilize.
i) Use the peak marker function to determine the maximum amplitude level within the RBW.
j) If measured value exceeds requirement, then reduce RBW (but no less than 3 kHz) and repeat.

10.4 Deviation From Test Standard

No deviation

10.5 Antenna Connected Construction

Please refer to the description of test mode.

10.6 Test Data

Please refer to the Appendix A.

11. Antenna Requirement

11.1 Test Standard and Limit

11.1.1 Test Standard

FCC Part 15.203

11.1.2 Requirement

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

11.2 Deviation From Test Standard

No deviation

11.3 Antenna Connected Construction

The gains of the antenna used for transmitting is 5dBi or 3.5dBi and the antenna de-signed with permanent attachment and no consideration of replacement. Please see the EUT photo for details.

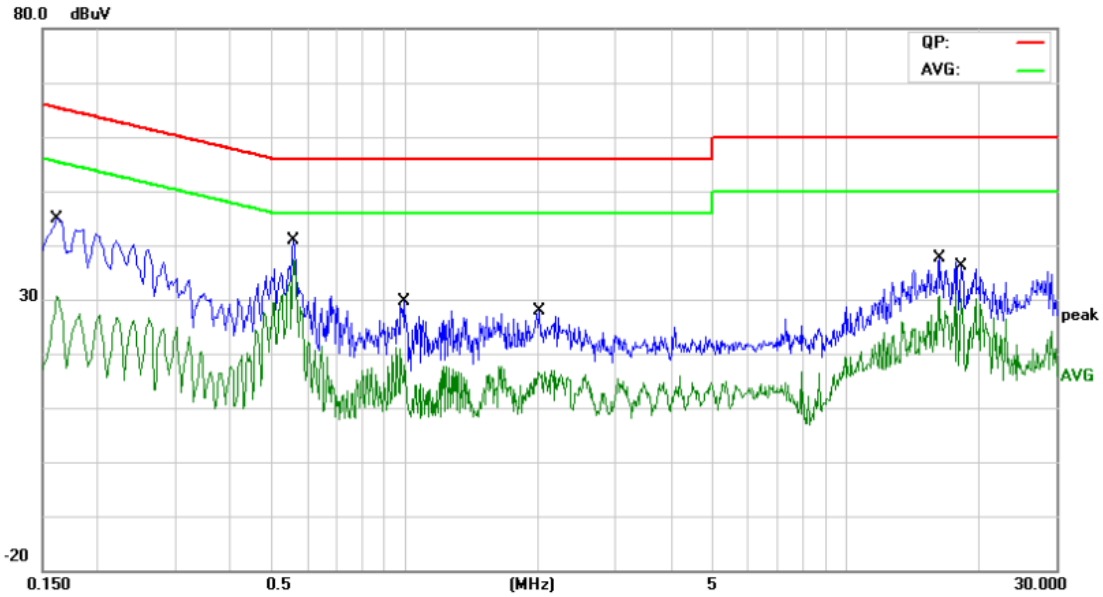
11.4 Test Data

The EUT antenna is a Probe or Mushroom Antenna. It complies with the standard requirement.

Antenna Type
☒Permanent attached antenna
☐Unique connector antenna
☐Professional installation antenna

Attachment A—Conducted Emission Test Data

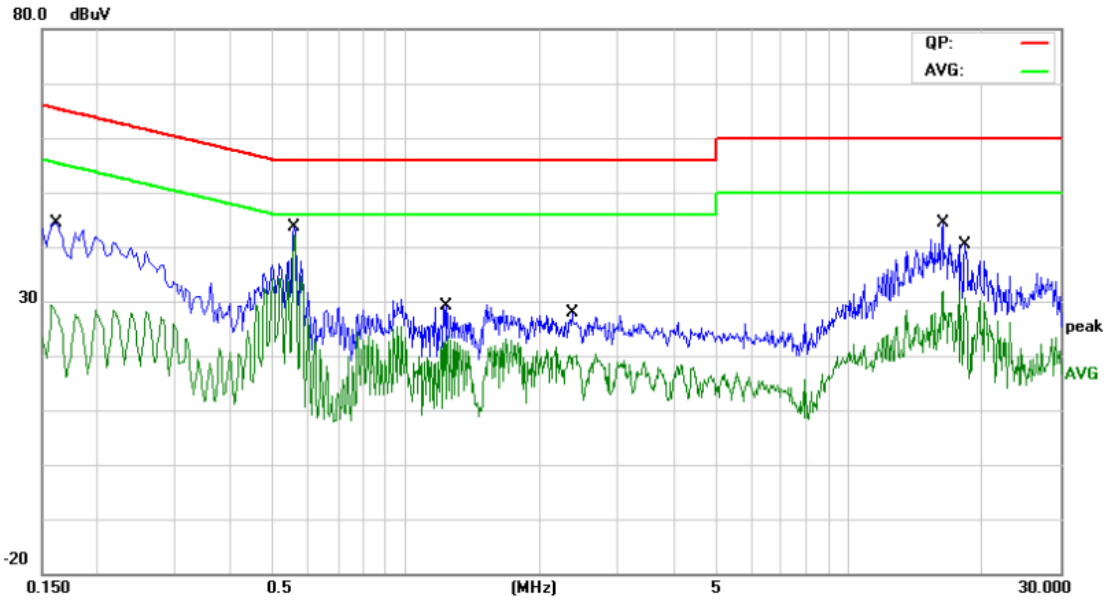
Temperature:	25.4℃	**Relative Humidity:**	49%
Test Voltage:	AC 120V/60Hz		
Terminal:	Line		
Test Mode:	Mode 1 (Probe Antenna)		
Remark:	Only worse case is reported.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.1620	31.61	11.08	42.69	65.36	-22.67	QP
2		0.1620	16.93	11.08	28.01	55.36	-27.35	AVG
3		0.5580	27.73	10.92	38.65	56.00	-17.35	QP
4	*	0.5580	22.82	10.92	33.74	46.00	-12.26	AVG
5		0.9900	9.21	10.69	19.90	56.00	-36.10	QP
6		0.9900	1.61	10.69	12.30	46.00	-33.70	AVG
7		2.0220	6.91	10.48	17.39	56.00	-38.61	QP
8		2.0220	-1.01	10.48	9.47	46.00	-36.53	AVG
9		16.2260	25.43	10.41	35.84	60.00	-24.16	QP
10		16.2260	20.58	10.41	30.99	50.00	-19.01	AVG
11		18.2420	24.09	10.58	34.67	60.00	-25.33	QP
12		18.2420	19.65	10.58	30.23	50.00	-19.77	AVG

Remark:
1. Corr. Factor (dB) = LISN Factor (dB) + Cable Loss (dB)
2. Margin (dB) =QuasiPeak/Average (dBuV)-Limit (dBuV)

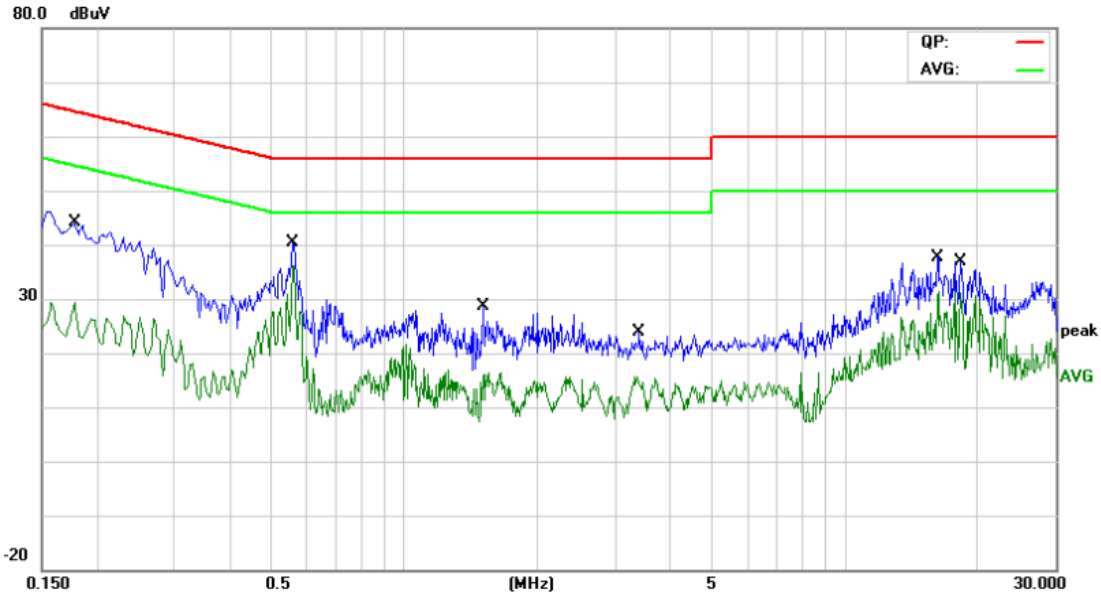
Temperature:	25.4℃	**Relative Humidity:**	49%
Test Voltage:	AC 120V/60Hz		
Terminal:	Neutral		
Test Mode:	Mode 1 (Probe Antenna)		
Remark:	Only worse case is reported.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.1620	31.16	11.01	42.17	65.36	-23.19	QP
2		0.1620	16.62	11.01	27.63	55.36	-27.73	AVG
3		0.5580	28.36	10.91	39.27	56.00	-16.73	QP
4	*	0.5580	24.19	10.91	35.10	46.00	-10.90	AVG
5		1.2340	14.92	10.66	25.58	56.00	-30.42	QP
6		1.2340	9.91	10.66	20.57	46.00	-25.43	AVG
7		2.3660	11.23	10.41	21.64	56.00	-34.36	QP
8		2.3660	5.30	10.41	15.71	46.00	-30.29	AVG
9		16.2260	30.67	10.40	41.07	60.00	-18.93	QP
10		16.2260	21.63	10.40	32.03	50.00	-17.97	AVG
11		18.2420	28.49	10.47	38.96	60.00	-21.04	QP
12		18.2420	20.30	10.47	30.77	50.00	-19.23	AVG

Remark:
1. Corr. Factor (dB) = LISN Factor (dB) + Cable Loss (dB)
2. Margin (dB) =QuasiPeak/Average (dBuV)-Limit (dBuV)

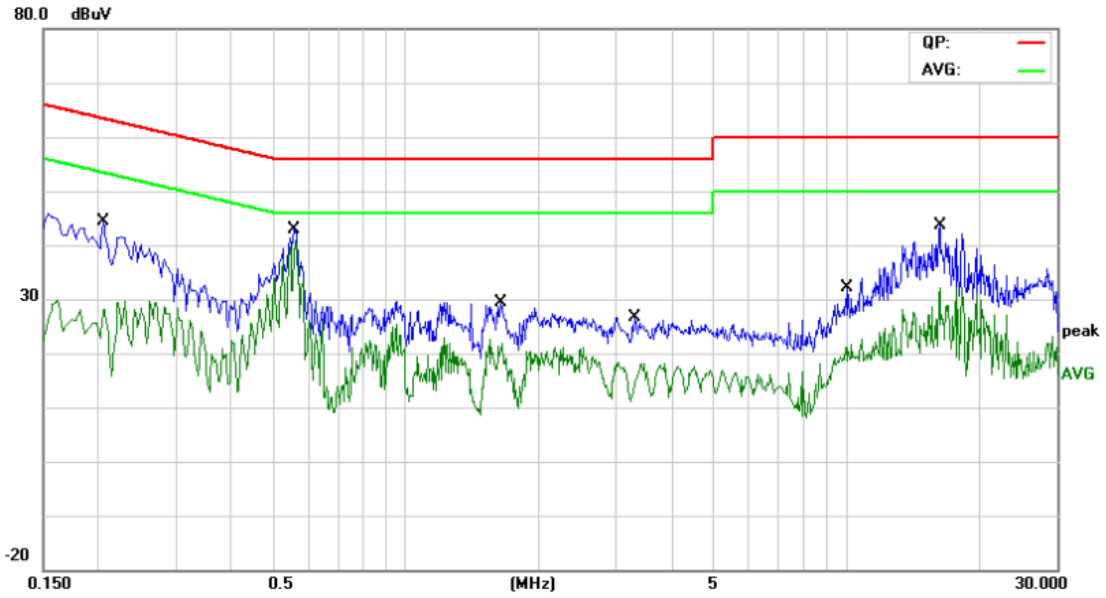
Temperature:	25.4℃	**Relative Humidity:**	49%
Test Voltage:	AC 120V/60Hz		
Terminal:	Line		
Test Mode:	Mode 1 (Mushroom Antenna)		
Remark:	Only worse case is reported.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.1780	29.12	11.04	40.16	64.57	-24.41	QP
2		0.1780	14.52	11.04	25.56	54.57	-29.01	AVG
3		0.5580	27.01	10.92	37.93	56.00	-18.07	QP
4	*	0.5580	24.69	10.92	35.61	46.00	-10.39	AVG
5		1.5060	7.19	10.58	17.77	56.00	-38.23	QP
6		1.5060	0.36	10.58	10.94	46.00	-35.06	AVG
7		3.4140	7.24	10.15	17.39	56.00	-38.61	QP
8		3.4140	2.61	10.15	12.76	46.00	-33.24	AVG
9		16.1660	25.19	10.41	35.60	60.00	-24.40	QP
10		16.1660	20.08	10.41	30.49	50.00	-19.51	AVG
11		18.2420	25.17	10.58	35.75	60.00	-24.25	QP
12		18.2420	20.70	10.58	31.28	50.00	-18.72	AVG

Remark:
1. Corr. Factor (dB) = LISN Factor (dB) + Cable Loss (dB)
2. Margin (dB) =QuasiPeak/Average (dBuV)-Limit (dBuV)

Temperature:	25.4℃	**Relative Humidity:**	49%
Test Voltage:	AC 120V/60Hz		
Terminal:	Neutral		
Test Mode:	Mode 1 (Mushroom Antenna)		
Remark:	Only worse case is reported.		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.2060	25.20	11.11	36.31	63.36	-27.05	QP
2		0.2060	10.60	11.11	21.71	53.36	-31.65	AVG
3		0.5580	31.28	10.91	42.19	56.00	-13.81	QP
4	*	0.5580	29.10	10.91	40.01	46.00	-5.99	AVG
5		1.6420	13.86	10.60	24.46	56.00	-31.54	QP
6		1.6420	7.08	10.60	17.68	46.00	-28.32	AVG
7		3.2980	9.44	10.17	19.61	56.00	-36.39	QP
8		3.2980	2.85	10.17	13.02	46.00	-32.98	AVG
9		10.0620	17.04	10.17	27.21	60.00	-32.79	QP
10		10.0620	10.46	10.17	20.63	50.00	-29.37	AVG
11		16.2300	30.24	10.40	40.64	60.00	-19.36	QP
12		16.2300	21.03	10.40	31.43	50.00	-18.57	AVG

Remark:
1. Corr. Factor (dB) = LISN Factor (dB) + Cable Loss (dB)
2. Margin (dB) =QuasiPeak/Average (dBuV)-Limit (dBuV)

Attachment B--Unwanted Emissions Data

---Radiated Unwanted Emissions

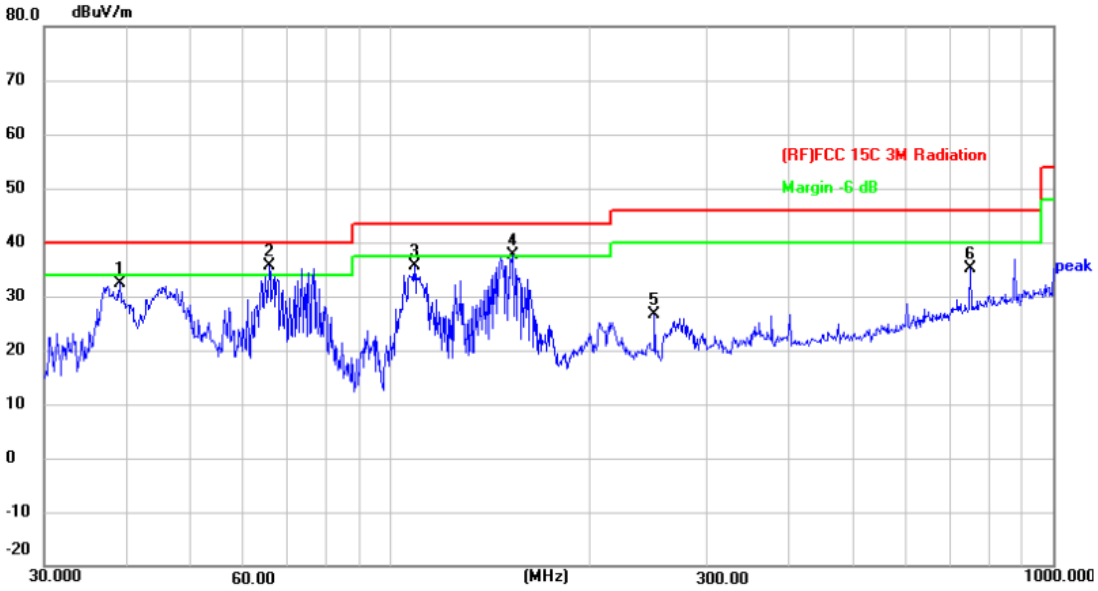
9 KHz~30 MHz

From 9 KHz to 30 MHz: Conclusion: PASS

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

30MHz~1GHz

Temperature:	24.3℃	**Relative Humidity:**	45%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	Mode 2 (Probe Antenna)		
Remark:	Only worse case is reported.		

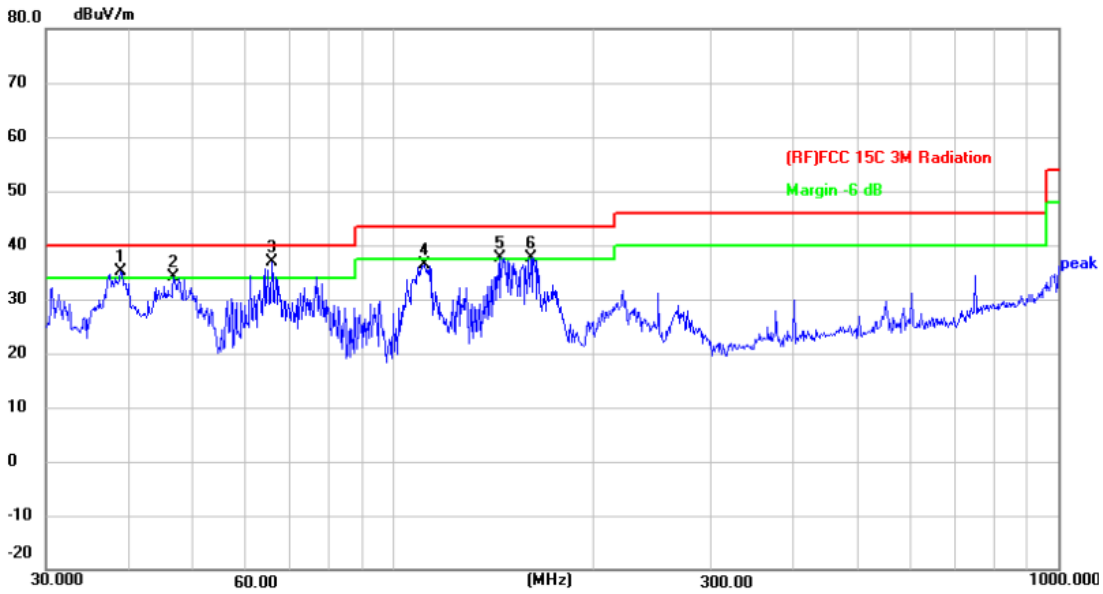


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	39.0242	55.19	-22.92	32.27	40.00	-7.73	peak
2 *	65.5725	59.74	-24.08	35.66	40.00	-4.34	peak
3	108.6470	60.50	-24.86	35.64	43.50	-7.86	peak
4 !	153.2000	59.87	-22.34	37.53	43.50	-5.97	peak
5	250.3009	49.42	-22.68	26.74	46.00	-19.26	peak
6	750.1082	45.27	-10.09	35.18	46.00	-10.82	peak

*:Maximum data x:Over limit !:over margin

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. QuasiPeak (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = QuasiPeak (dBμV/m)-Limit QPK(dBμV/m)

Temperature:	24.3℃	**Relative Humidity:**	45%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	Mode 2 (Probe Antenna)		
Remark:	Only worse case is reported.		

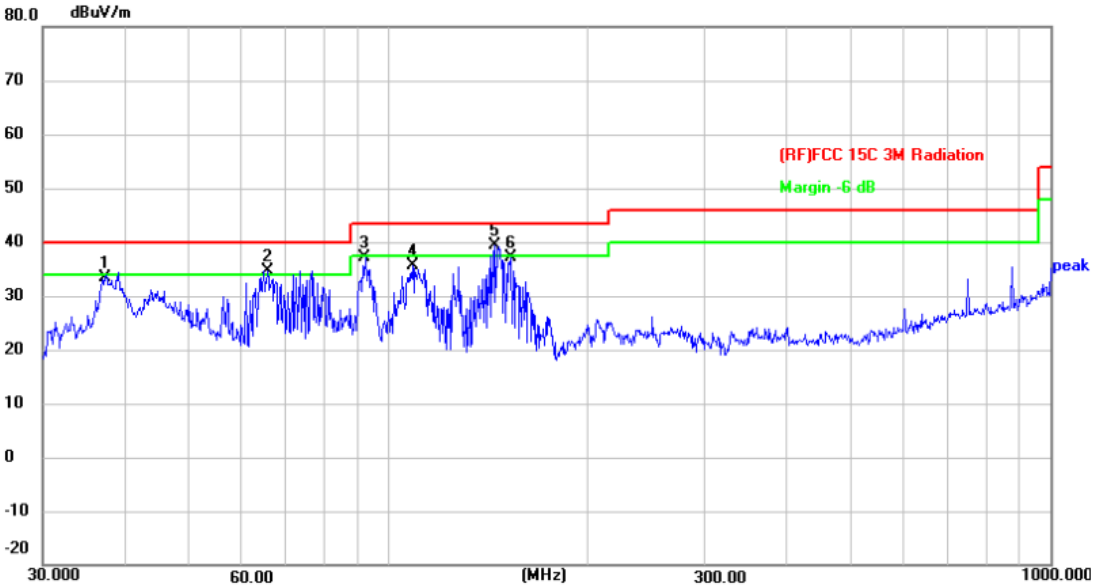


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 !	38.8877	58.07	-22.92	35.15	40.00	-4.85	peak
2 !	46.6662	56.74	-22.64	34.10	40.00	-5.90	peak
3 *	65.5725	61.01	-24.08	36.93	40.00	-3.07	peak
4	111.3468	60.91	-24.61	36.30	43.50	-7.20	peak
5 !	144.8417	60.18	-22.56	37.62	43.50	-5.88	peak
6 !	160.9088	59.78	-22.22	37.56	43.50	-5.94	peak

*:Maximum data x:Over limit !:over margin

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. QuasiPeak (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = QuasiPeak (dBμV/m)-Limit QPK(dBμV/m)

Temperature:	24.3℃	**Relative Humidity:**	45%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	Mode 2 (Mushroom Antenna)		
Remark:	Only worse case is reported.		

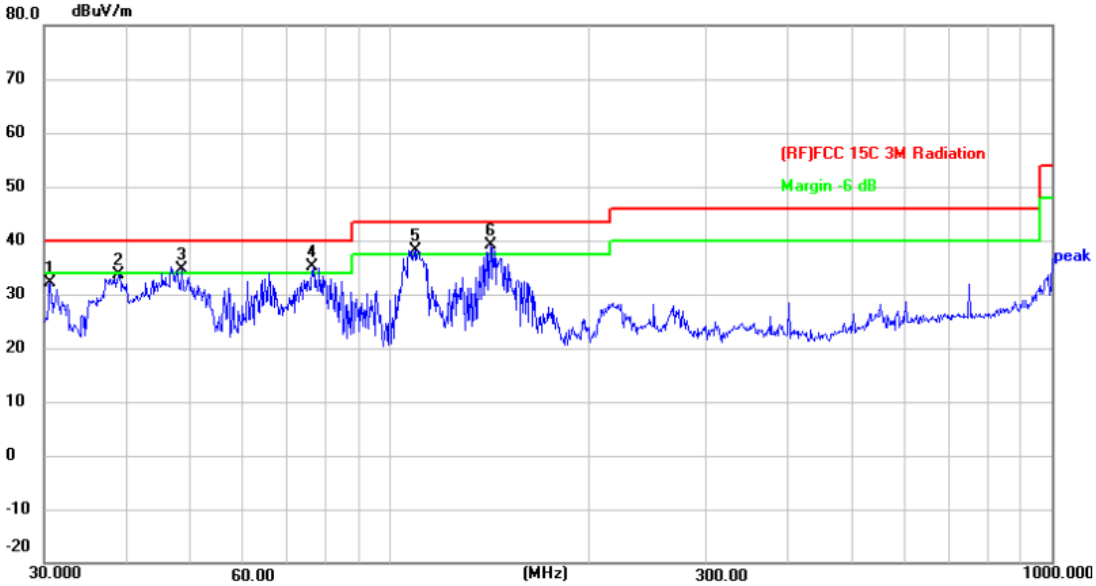


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	37.2854	56.35	-22.92	33.43	40.00	-6.57	peak
2 !	65.5725	58.74	-24.08	34.66	40.00	-5.34	peak
3	92.1386	63.64	-26.47	37.17	43.50	-6.33	peak
4	108.6470	60.50	-24.86	35.64	43.50	-7.86	peak
5 *	144.8417	61.86	-22.56	39.30	43.50	-4.20	peak
6	153.2001	59.37	-22.34	37.03	43.50	-6.47	peak

*:Maximum data x:Over limit !:over margin

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. QuasiPeak (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = QuasiPeak (dBμV/m)-Limit QPK(dBμV/m)

Temperature:	24.3℃	**Relative Humidity:**	45%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	Mode 2 (Mushroom Antenna)		
Remark:	Only worse case is reported.		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	30.6376	55.13	-23.07	32.06	40.00	-7.94	peak
2	38.8877	56.57	-22.92	33.65	40.00	-6.35	peak
3 !	48.3316	57.18	-22.58	34.60	40.00	-5.40	peak
4 !	76.5119	61.24	-26.06	35.18	40.00	-4.82	peak
5 !	109.4116	62.96	-24.78	38.18	43.50	-5.32	peak
6 *	141.8262	61.73	-22.63	39.10	43.50	-4.40	peak

*:Maximum data x:Over limit !:over margin

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. QuasiPeak (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = QuasiPeak (dBμV/m)-Limit QPK(dBμV/m)

Above 1GHz

Test Results of the Probe Antenna

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Horizontal		
Test Mode:	TX B Mode 2412MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4824.224	68.70	-9.99	58.71	74.00	-15.29	peak
2 *	4824.314	60.11	-9.99	50.12	54.00	-3.88	AVG

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Vertical		
Test Mode:	TX B Mode 2412MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4824.178	68.16	-9.99	58.17	74.00	-15.83	peak
2 *	4824.224	60.16	-9.99	50.17	54.00	-3.83	AVG

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Horizontal		
Test Mode:	TX B Mode 2437MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4874.327	68.87	-9.90	58.97	74.00	-15.03	peak
2 *	4874.374	60.03	-9.90	50.13	54.00	-3.87	AVG

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Vertical		
Test Mode:	TX B Mode 2437MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4874.234	59.53	-9.90	49.63	54.00	-4.37	AVG
2	4874.512	67.02	-9.90	57.12	74.00	-16.88	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Horizontal		
Test Mode:	TX B Mode 2462MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4924.378	59.89	-9.78	50.11	54.00	-3.89	AVG
2	4924.521	67.90	-9.78	58.12	74.00	-15.88	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Vertical		
Test Mode:	TX B Mode 2462MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4924.378	59.82	-9.78	50.04	54.00	-3.96	AVG
2	4924.715	68.46	-9.78	58.68	74.00	-15.32	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Horizontal		
Test Mode:	TX G Mode 2412MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4824.367	68.96	-9.99	58.97	74.00	-15.03	peak
2 *	4824.637	60.21	-9.99	50.22	54.00	-3.78	AVG

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Vertical		
Test Mode:	TX G Mode 2412MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4824.359	60.24	-9.99	50.25	54.00	-3.75	AVG
2	4824.552	67.51	-9.99	57.52	74.00	-16.48	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Horizontal		
Test Mode:	TX G Mode 2437MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4874.321	68.86	-9.90	58.96	74.00	-15.04	peak
2 *	4874.551	60.22	-9.90	50.32	54.00	-3.68	AVG

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Vertical		
Test Mode:	TX G Mode 2437MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4874.327	60.59	-9.90	50.69	54.00	-3.31	AVG
2	4874.358	68.79	-9.90	58.89	74.00	-15.11	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Horizontal		
Test Mode:	TX G Mode 2462MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4924.297	68.43	-9.78	58.65	74.00	-15.35	peak
2 *	4924.378	60.05	-9.78	50.27	54.00	-3.73	AVG

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Vertical		
Test Mode:	TX G Mode 2462MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4924.275	59.89	-9.78	50.11	54.00	-3.89	AVG
2	4924.327	68.74	-9.78	58.96	74.00	-15.04	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Horizontal		
Test Mode:	TX n(HT20) Mode 2412MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4824.245	69.11	-9.99	59.12	74.00	-14.88	peak
2 *	4824.368	60.16	-9.99	50.17	54.00	-3.83	AVG

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Vertical		
Test Mode:	TX n(HT20) Mode 2412MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4824.451	68.73	-9.99	58.74	74.00	-15.26	peak
2 *	4824.634	60.34	-9.99	50.35	54.00	-3.65	AVG

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Horizontal		
Test Mode:	TX n(HT20) Mode 2437MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4874.241	68.11	-9.90	58.21	74.00	-15.79	peak
2 *	4874.553	60.02	-9.90	50.12	54.00	-3.88	AVG

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Vertical		
Test Mode:	TX n(HT20) Mode 2437MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4874.531	68.02	-9.90	58.12	74.00	-15.88	peak
2 *	4874.678	59.94	-9.90	50.04	54.00	-3.96	AVG

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Horizontal		
Test Mode:	TX n(HT20) Mode 2462MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4924.314	60.00	-9.78	50.22	54.00	-3.78	AVG
2	4924.532	68.91	-9.78	59.13	74.00	-14.87	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Vertical		
Test Mode:	TX n(HT20) Mode 2462MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4924.127	69.54	-9.78	59.76	74.00	-14.24	peak
2 *	4924.412	60.02	-9.78	50.24	54.00	-3.76	AVG

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Horizontal		
Test Mode:	TX n(HT40) Mode 2422MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4844.314	68.67	-9.94	58.73	74.00	-15.27	peak
2 *	4844.612	60.14	-9.94	50.20	54.00	-3.80	AVG

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Vertical		
Test Mode:	TX n(HT40) Mode 2422MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4844.522	60.30	-9.94	50.36	54.00	-3.64	AVG
2	4844.525	68.06	-9.94	58.12	74.00	-15.88	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Horizontal		
Test Mode:	TX n(HT40) Mode 2437MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4874.358	60.04	-9.90	50.14	54.00	-3.86	AVG
2	4874.512	69.26	-9.90	59.36	74.00	-14.64	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Vertical		
Test Mode:	TX n(HT40) Mode 2437MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4874.275	60.25	-9.90	50.35	54.00	-3.65	AVG
2	4874.348	68.37	-9.90	58.47	74.00	-15.53	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Horizontal		
Test Mode:	TX n(HT40) Mode 2452MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4904.441	68.57	-9.84	58.73	74.00	-15.27	peak
2 *	4904.635	60.05	-9.84	50.21	54.00	-3.79	AVG

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Vertical		
Test Mode:	TX n(HT40) Mode 2452MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4904.174	60.17	-9.84	50.33	54.00	-3.67	AVG
2	4904.258	68.09	-9.84	58.25	74.00	-15.75	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Test Results of the Mushroom Antenna

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Horizontal		
Test Mode:	TX B Mode 2412MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4824.336	60.16	-9.99	50.17	54.00	-3.83	AVG
2	4824.553	69.65	-9.99	59.66	74.00	-14.34	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Vertical		
Test Mode:	TX B Mode 2412MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4824.478	69.67	-9.99	59.68	74.00	-14.32	peak
2 *	4824.524	60.28	-9.99	50.29	54.00	-3.71	AVG

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Horizontal		
Test Mode:	TX B Mode 2437MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4874.647	69.66	-9.90	59.76	74.00	-14.24	peak
2 *	4874.697	60.53	-9.90	50.63	54.00	-3.37	AVG

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Vertical		
Test Mode:	TX B Mode 2437MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4874.336	60.59	-9.90	50.69	54.00	-3.31	AVG
2	4874.524	68.55	-9.90	58.65	74.00	-15.35	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Horizontal		
Test Mode:	TX B Mode 2462MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4924.331	60.44	-9.78	50.66	54.00	-3.34	AVG
2	4924.551	68.74	-9.78	58.96	74.00	-15.04	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Vertical		
Test Mode:	TX B Mode 2462MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4924.268	60.59	-9.78	50.81	54.00	-3.19	AVG
2	4924.325	68.69	-9.78	58.91	74.00	-15.09	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Horizontal		
Test Mode:	TX G Mode 2412MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4824.337	69.80	-9.99	59.81	74.00	-14.19	peak
2 *	4824.714	60.46	-9.99	50.47	54.00	-3.53	AVG

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Vertical		
Test Mode:	TX G Mode 2412MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4824.512	69.64	-9.99	59.65	74.00	-14.35	peak
2 *	4824.647	60.68	-9.99	50.69	54.00	-3.31	AVG

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Horizontal		
Test Mode:	TX G Mode 2437MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4874.378	60.53	-9.90	50.63	54.00	-3.37	AVG
2	4874.542	68.59	-9.90	58.69	74.00	-15.31	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Vertical		
Test Mode:	TX G Mode 2437MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4874.237	68.67	-9.90	58.77	74.00	-15.23	peak
2 *	4874.537	60.34	-9.90	50.44	54.00	-3.56	AVG

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Horizontal		
Test Mode:	TX G Mode 2462MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4924.322	68.55	-9.78	58.77	74.00	-15.23	peak
2 *	4924.376	60.46	-9.78	50.68	54.00	-3.32	AVG

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Vertical		
Test Mode:	TX G Mode 2462MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4924.337	59.92	-9.78	50.14	54.00	-3.86	AVG
2	4924.563	68.91	-9.78	59.13	74.00	-14.87	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Horizontal		
Test Mode:	TX n(HT20) Mode 2412MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4824.331	60.24	-9.99	50.25	54.00	-3.75	AVG
2	4824.532	69.67	-9.99	59.68	74.00	-14.32	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Vertical		
Test Mode:	TX n(HT20) Mode 2412MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4824.359	68.72	-9.99	58.73	74.00	-15.27	peak
2 *	4824.663	60.34	-9.99	50.35	54.00	-3.65	AVG

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Horizontal		
Test Mode:	TX n(HT20) Mode 2437MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4874.532	60.59	-9.90	50.69	54.00	-3.31	AVG
2	4874.578	68.53	-9.90	58.63	74.00	-15.37	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Vertical		
Test Mode:	TX n(HT20) Mode 2437MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4874.358	60.06	-9.90	50.16	54.00	-3.84	AVG
2	4874.535	69.53	-9.90	59.63	74.00	-14.37	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Horizontal		
Test Mode:	TX n(HT20) Mode 2462MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4924.356	59.92	-9.78	50.14	54.00	-3.86	AVG
2	4924.587	69.41	-9.78	59.63	74.00	-14.37	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Vertical		
Test Mode:	TX n(HT20) Mode 2462MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4924.346	68.41	-9.78	58.63	74.00	-15.37	peak
2 *	4924.538	60.30	-9.78	50.52	54.00	-3.48	AVG

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Horizontal		
Test Mode:	TX n(HT40) Mode 2422MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4844.386	68.17	-9.94	58.23	74.00	-15.77	peak
2 *	4844.635	60.49	-9.94	50.55	54.00	-3.45	AVG

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Vertical		
Test Mode:	TX n(HT40) Mode 2422MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4844.447	60.60	-9.94	50.66	54.00	-3.34	AVG
2	4844.532	69.57	-9.94	59.63	74.00	-14.37	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Horizontal		
Test Mode:	TX n(HT40) Mode 2437MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4874.341	60.03	-9.90	50.13	54.00	-3.87	AVG
2	4874.531	68.01	-9.90	58.11	74.00	-15.89	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Vertical		
Test Mode:	TX n(HT40) Mode 2437MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	4874.341	69.76	-9.90	59.86	74.00	-14.14	peak
2 *	4874.356	60.42	-9.90	50.52	54.00	-3.48	AVG

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Horizontal		
Test Mode:	TX n(HT40) Mode 2452MHz		

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4904.278	60.52	-9.84	50.68	54.00	-3.32	AVG
2	4904.341	68.77	-9.84	58.93	74.00	-15.07	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	26℃	**Relative Humidity:**	54%
Test Voltage:	DC 12V		
Ant. Pol.	Vertical		
Test Mode:	TX n(HT40) Mode 2452MHz		

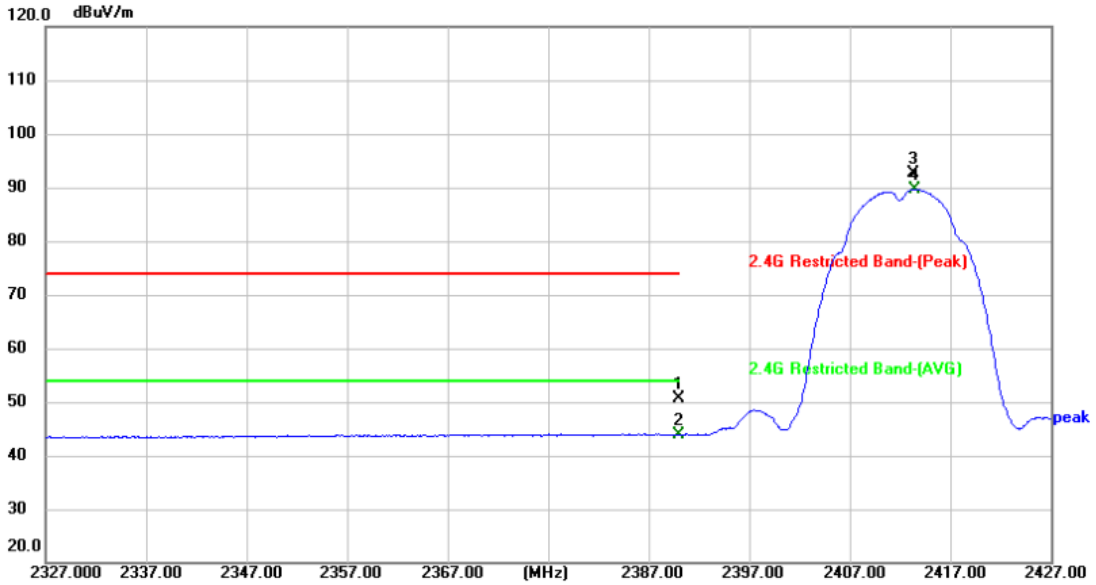
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	4904.347	59.95	-9.84	50.11	54.00	-3.89	AVG
2	4904.525	68.39	-9.84	58.55	74.00	-15.45	peak

Remark:
1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
5. No report for the emission which more than 20dB below the prescribed limit.

Attachment C-- Restricted Bands Requirement Test Data

Test Results of the Probe Antenna

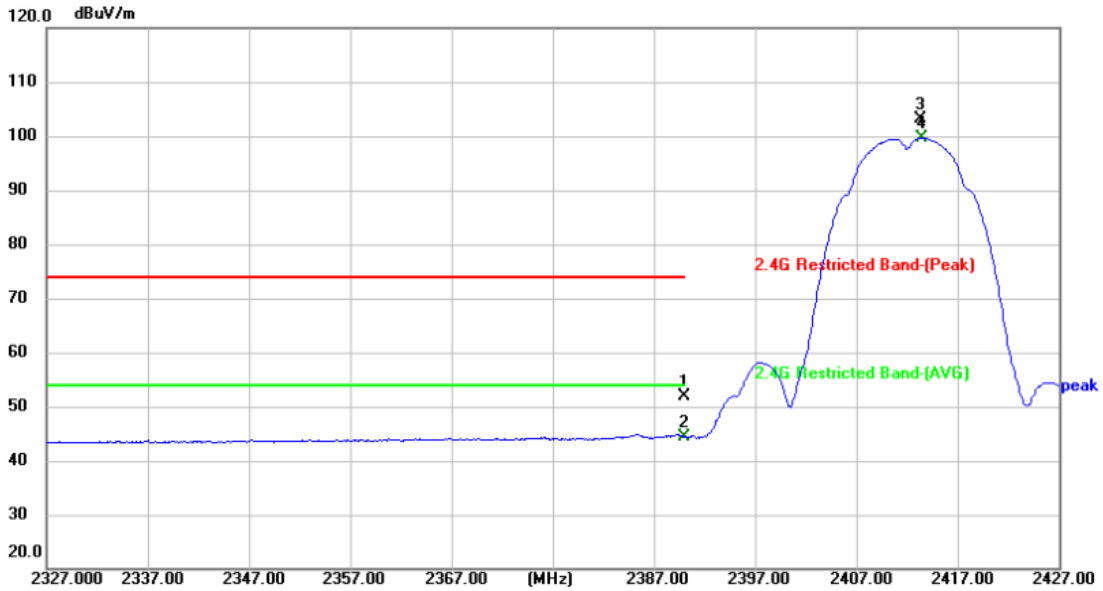
Temperature:	23.5℃	**Relative Humidity:**	47%
Test Voltage:	DC 12V		
Ant. Pol.	Horizontal		
Test Mode:	TX B Mode 2412MHz		
Remark:	Only show the worse case		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2390.000	43.71	6.80	50.51	74.00	-23.49	peak
2 *	2390.000	36.98	6.80	43.78	54.00	-10.22	AVG
3	2413.300	85.76	6.87	92.63	Fundamental Frequency		peak
4	2413.400	82.81	6.87	89.68	Fundamental Frequency		AVG

Emission Level= Read Level+ Correct Factor

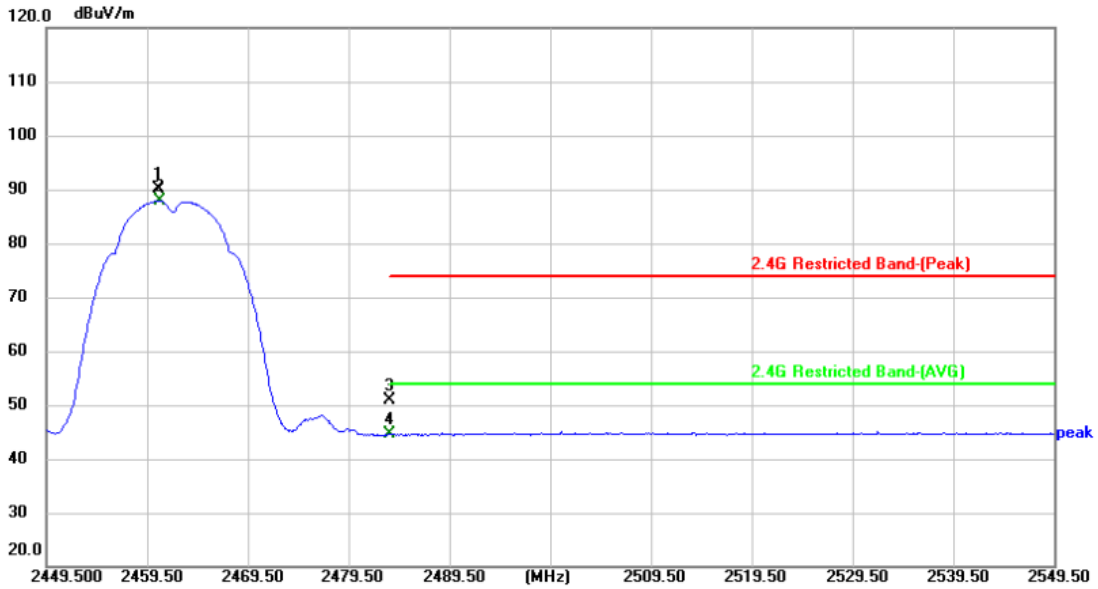
Temperature:	23.5℃	**Relative Humidity:**	47%
Test Voltage:	DC 12V		
Ant. Pol.	Vertical		
Test Mode:	TX B Mode 2412MHz		
Remark:	Only show the worse case		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2390.000	45.09	6.80	51.89	74.00	-22.11	peak
2 *	2390.000	37.63	6.80	44.43	54.00	-9.57	AVG
3	2413.300	96.34	6.87	103.21	Fundamental Frequency		peak
4	2413.500	92.80	6.87	99.67	Fundamental Frequency		AVG

Emission Level= Read Level+ Correct Factor

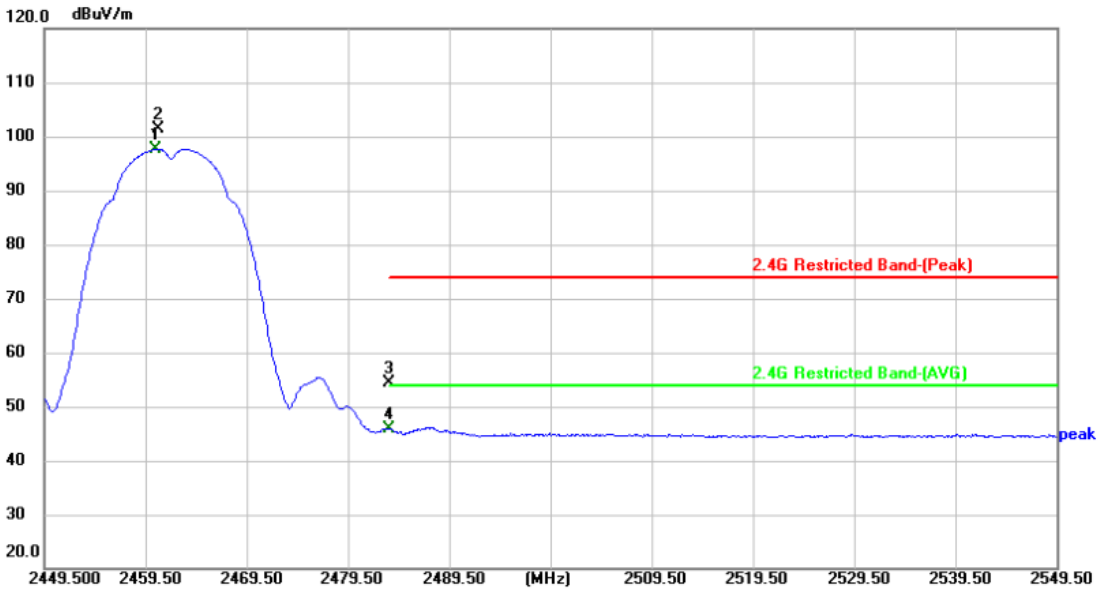
Temperature:	23.5℃	**Relative Humidity:**	47%
Test Voltage:	DC 12V		
Ant. Pol.	Horizontal		
Test Mode:	TX B Mode 2462MHz		
Remark:	Only show the worse case		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2460.600	83.09	7.06	90.15	Fundamental Frequency		peak
2	2460.800	80.82	7.06	87.88	Fundamental Frequency		AVG
3	2483.500	43.83	7.15	50.98	74.00	-23.02	peak
4 *	2483.500	37.47	7.15	44.62	54.00	-9.38	AVG

Emission Level= Read Level+ Correct Factor

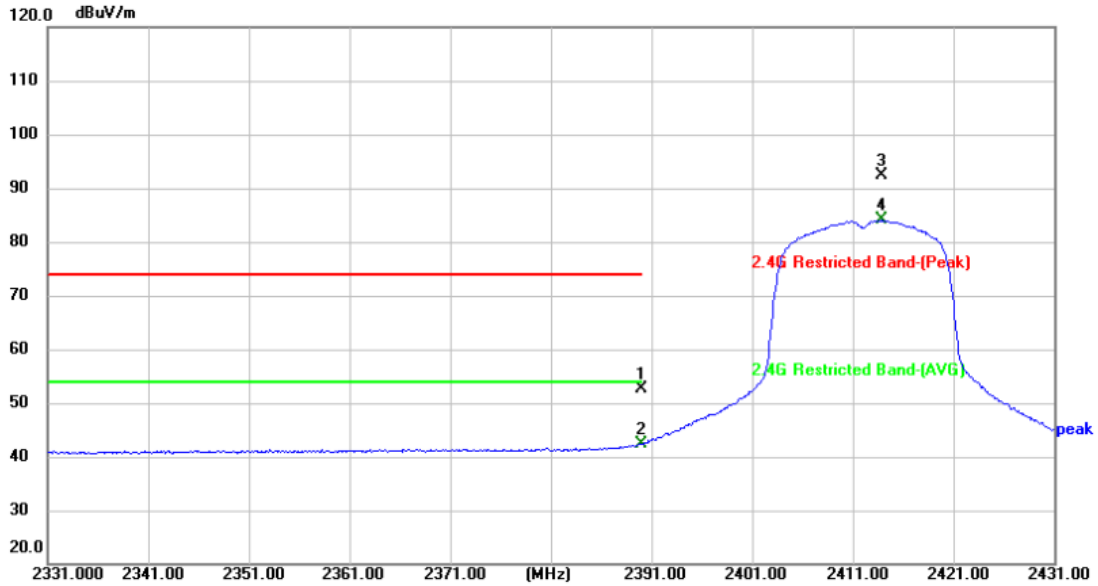
Temperature:	23.5℃	**Relative Humidity:**	47%
Test Voltage:	DC 12V		
Ant. Pol.	Vertical		
Test Mode:	TX B Mode 2462MHz		
Remark:	Only show the worse case		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2460.500	90.57	7.05	97.62	Fundamental Frequency		AVG
2	2460.700	94.21	7.06	101.27	Fundamental Frequency		peak
3	2483.500	47.35	7.15	54.50	74.00	-19.50	peak
4 *	2483.500	38.79	7.15	45.94	54.00	-8.06	AVG

Emission Level= Read Level+ Correct Factor

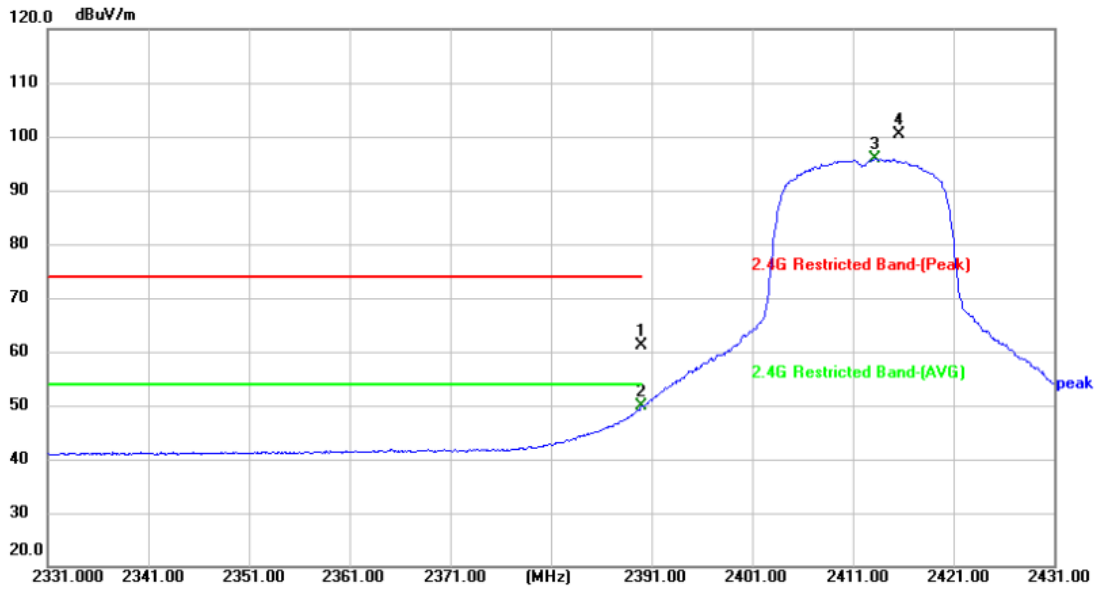
Temperature:	23.5℃	**Relative Humidity:**	47%
Test Voltage:	DC 12V		
Ant. Pol.	Horizontal		
Test Mode:	TX G Mode 2412MHz		
Remark:	Only show the worse case		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2390.000	45.71	6.80	52.51	74.00	-21.49	peak
2 *	2390.000	35.51	6.80	42.31	54.00	-11.69	AVG
3	2413.900	85.50	6.87	92.37	Fundamental Frequency		peak
4	2413.900	77.20	6.87	84.07	Fundamental Frequency		AVG

Emission Level= Read Level+ Correct Factor

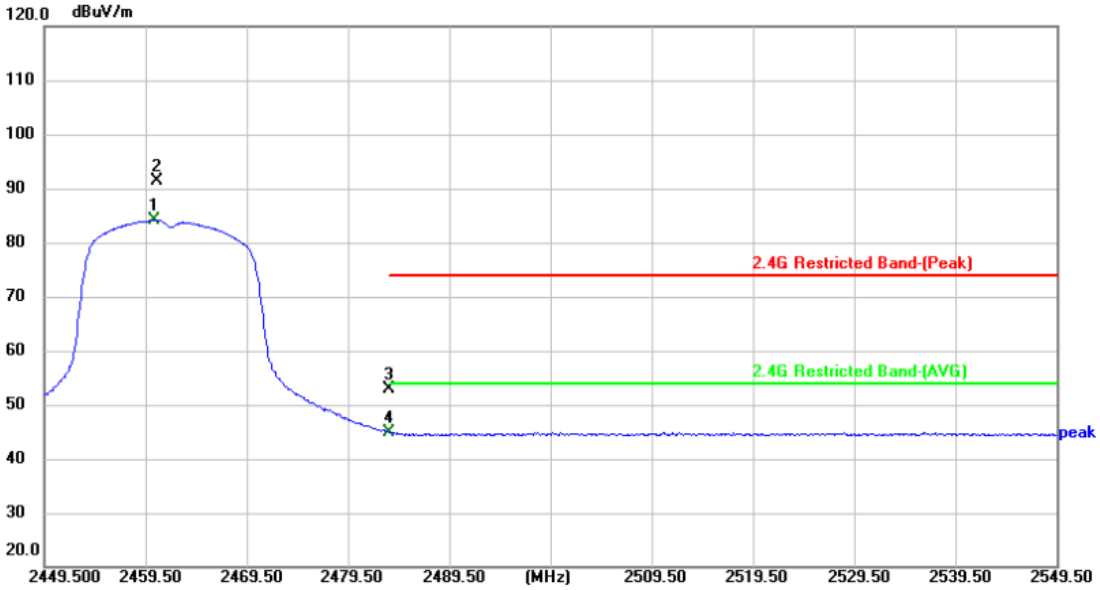
Temperature:	23.5℃	**Relative Humidity:**	47%
Test Voltage:	DC 12V		
Ant. Pol.	Vertical		
Test Mode:	TX G Mode 2412MHz		
Remark:	Only show the worse case		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2390.000	54.36	6.80	61.16	74.00	-12.84	peak
2 *	2390.000	43.02	6.80	49.82	54.00	-4.18	AVG
3	2413.200	88.96	6.87	95.83	Fundamental Frequency		AVG
4	2415.600	93.62	6.88	100.50	Fundamental Frequency		peak

Emission Level= Read Level+ Correct Factor

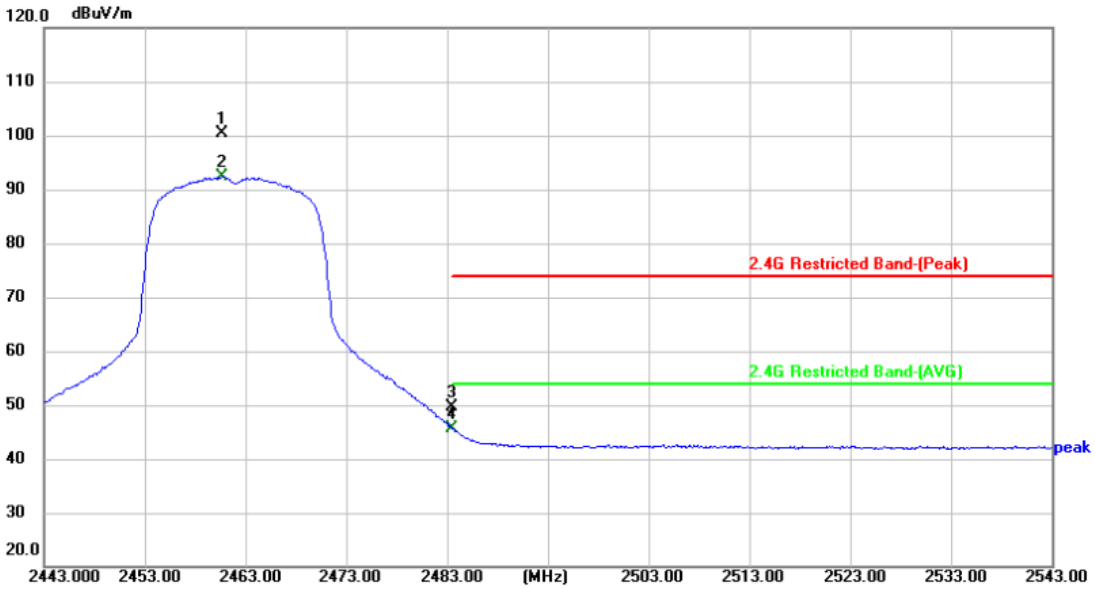
Temperature:	23.5℃	**Relative Humidity:**	47%
Test Voltage:	DC 12V		
Ant. Pol.	Horizontal		
Test Mode:	TX G Mode 2462MHz		
Remark:	Only show the worse case		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2460.400	77.16	7.05	84.21	Fundamental Frequency		AVG
2	2460.600	84.26	7.06	91.32	Fundamental Frequency		peak
3	2483.500	45.82	7.15	52.97	74.00	-21.03	peak
4 *	2483.500	37.82	7.15	44.97	54.00	-9.03	AVG

Emission Level= Read Level+ Correct Factor

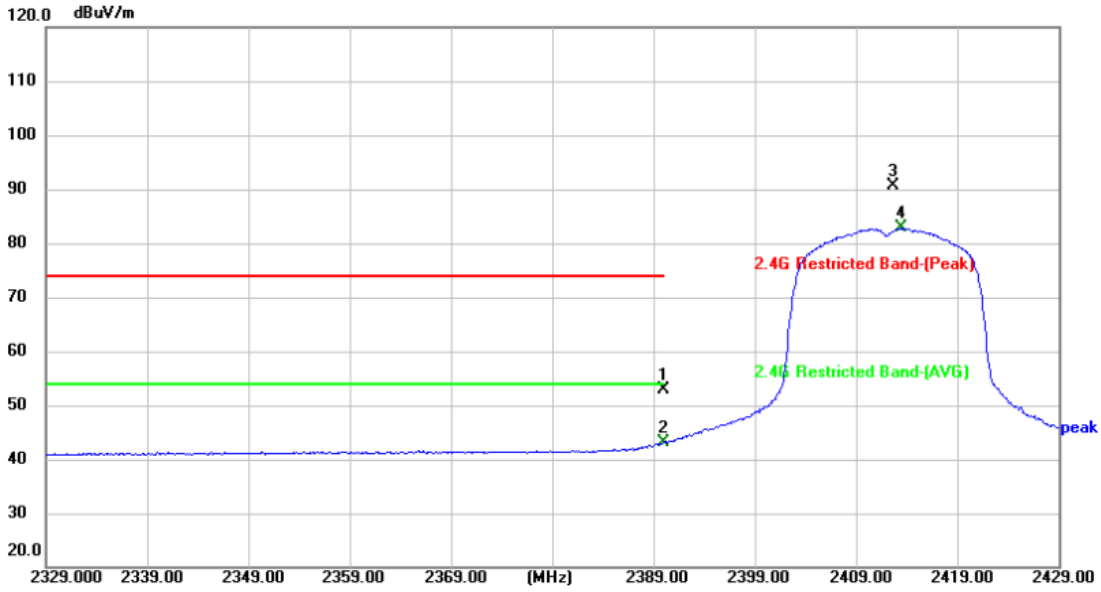
Temperature:	23.5℃	**Relative Humidity:**	47%
Test Voltage:	DC 12V		
Ant. Pol.	Vertical		
Test Mode:	TX G Mode 2462MHz		
Remark:	Only show the worse case		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2460.600	93.43	7.06	100.49	Fundamental Frequency		peak
2	2460.600	85.25	7.06	92.31	Fundamental Frequency		AVG
3	2483.500	42.57	7.15	49.72	74.00	-24.28	peak
4 *	2483.500	38.57	7.15	45.72	54.00	-8.28	AVG

Emission Level= Read Level+ Correct Factor

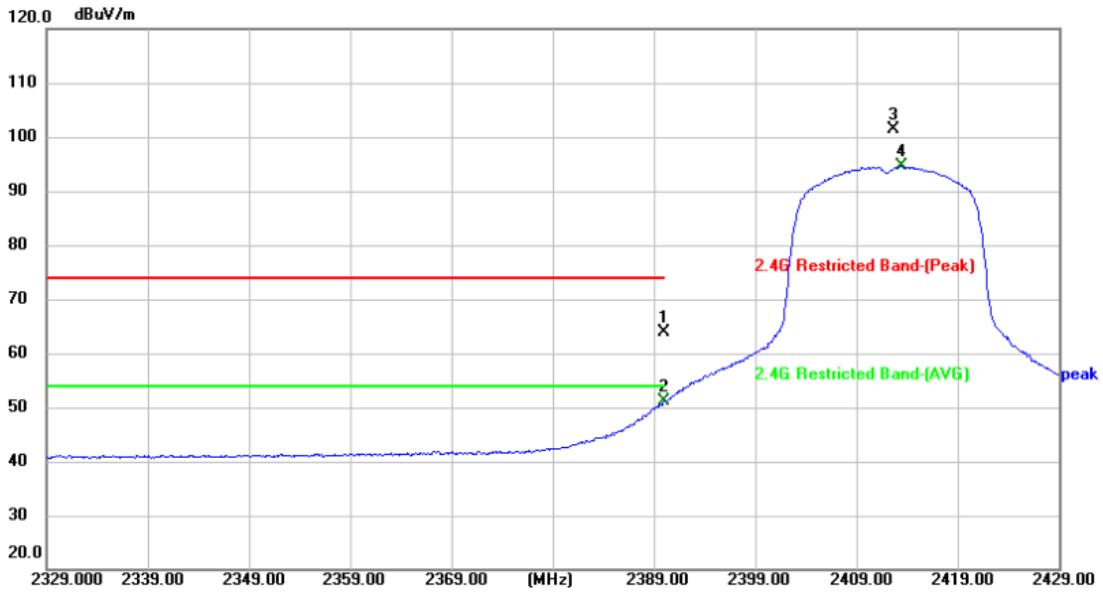
Temperature:	23.5℃	**Relative Humidity:**	47%
Test Voltage:	DC 12V		
Ant. Pol.	Horizontal		
Test Mode:	TX N(HT20) Mode 2412MHz		
Remark:	N/A		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2390.000	45.99	6.80	52.79	74.00	-21.21	peak
2 *	2390.000	36.26	6.80	43.06	54.00	-10.94	AVG
3	2412.600	83.82	6.87	90.69	Fundamental Frequency		peak
4	2413.400	75.96	6.87	82.83	Fundamental Frequency		AVG

Emission Level= Read Level+ Correct Factor

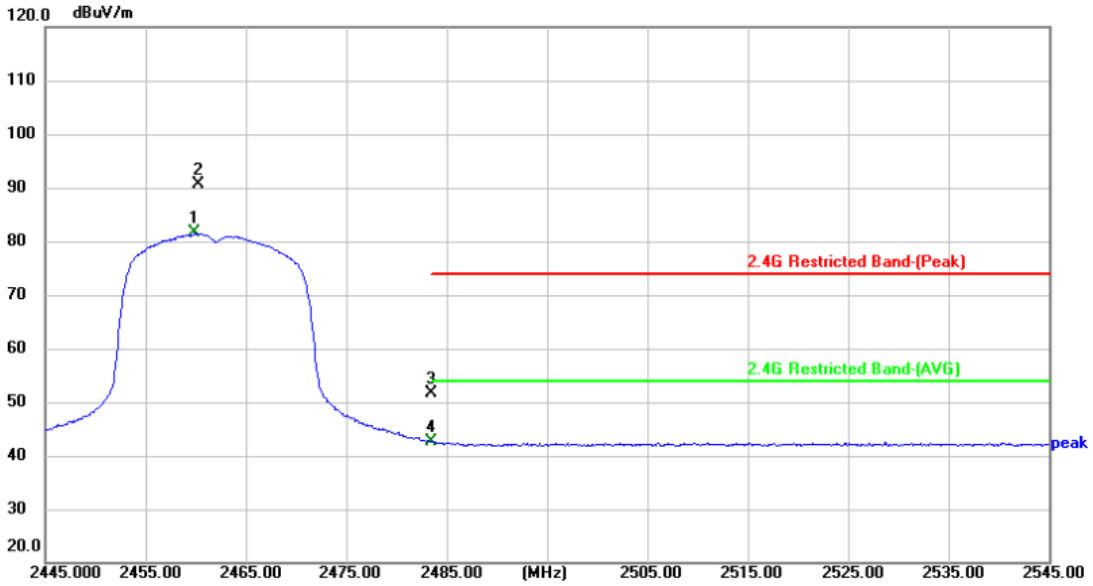
Temperature:	23.5℃	**Relative Humidity:**	47%
Test Voltage:	DC 12V		
Ant. Pol.	Vertical		
Test Mode:	TX N(HT20) Mode 2412MHz		
Remark:	N/A		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2390.000	56.99	6.80	63.79	74.00	-10.21	peak
2 *	2390.000	44.42	6.80	51.22	54.00	-2.78	AVG
3	2412.600	94.56	6.87	101.43	Fundamental Frequency		peak
4	2413.500	87.85	6.87	94.72	Fundamental Frequency		AVG

Emission Level= Read Level+ Correct Factor

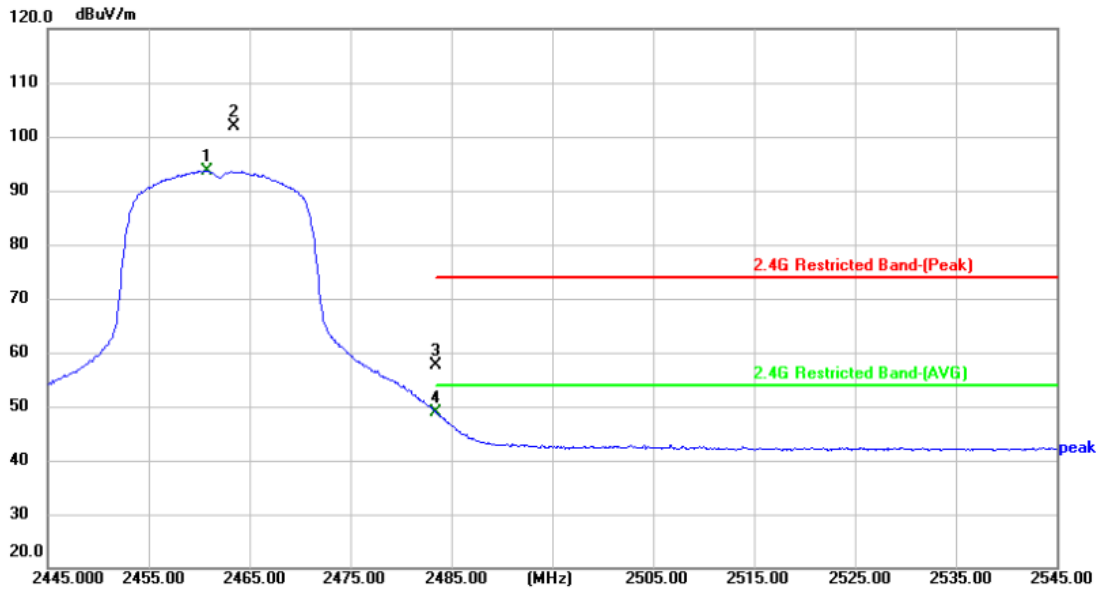
Temperature:	23.5℃	**Relative Humidity:**	47%
Test Voltage:	DC 12V		
Ant. Pol.	Horizontal		
Test Mode:	TX N(HT20) Mode 2462MHz		
Remark:	N/A		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2459.900	74.49	7.05	81.54	Fundamental Frequency		AVG
2	2460.200	83.58	7.05	90.63	Fundamental Frequency		peak
3	2483.500	44.41	7.15	51.56	74.00	-22.44	peak
4 *	2483.500	35.55	7.15	42.70	54.00	-11.30	AVG

Emission Level= Read Level+ Correct Factor

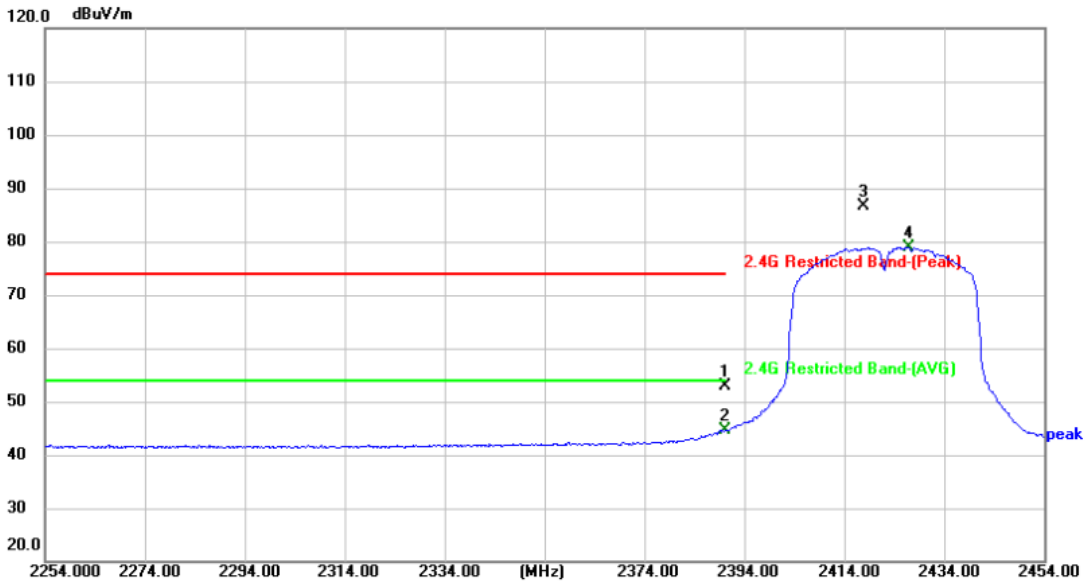
Temperature:	23.5℃	**Relative Humidity:**	47%
Test Voltage:	DC 12V		
Ant. Pol.	Vertical		
Test Mode:	TX N(HT20) Mode 2462MHz		
Remark:	N/A		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2460.800	86.62	7.06	93.68	Fundamental Frequency		AVG
2	2463.400	94.84	7.06	101.90	Fundamental Frequency		peak
3	2483.500	50.52	7.15	57.67	74.00	-16.33	peak
4 *	2483.500	41.62	7.15	48.77	54.00	-5.23	AVG

Emission Level= Read Level+ Correct Factor

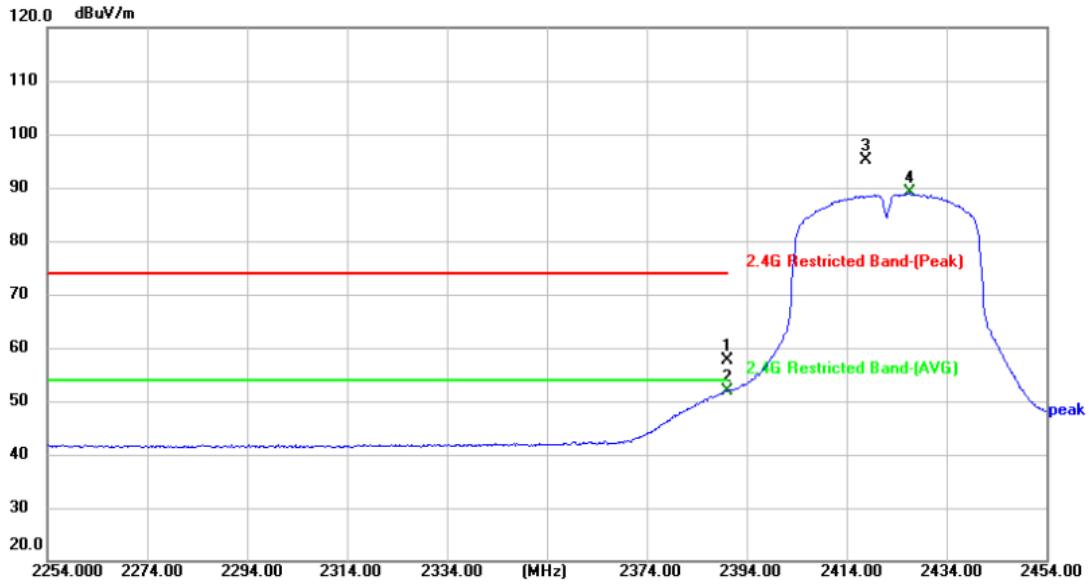
Temperature:	23.5℃	**Relative Humidity:**	47%
Test Voltage:	DC 12V		
Ant. Pol.	Horizontal		
Test Mode:	TX N(HT40) Mode 2422MHz		
Remark:	N/A		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2390.000	46.16	6.80	52.96	74.00	-21.04	peak
2 *	2390.000	37.74	6.80	44.54	54.00	-9.46	AVG
3	2417.800	79.82	6.88	86.70	Fundamental Frequency		peak
4	2426.800	71.98	6.92	78.90	Fundamental Frequency		AVG

Emission Level= Read Level+ Correct Factor

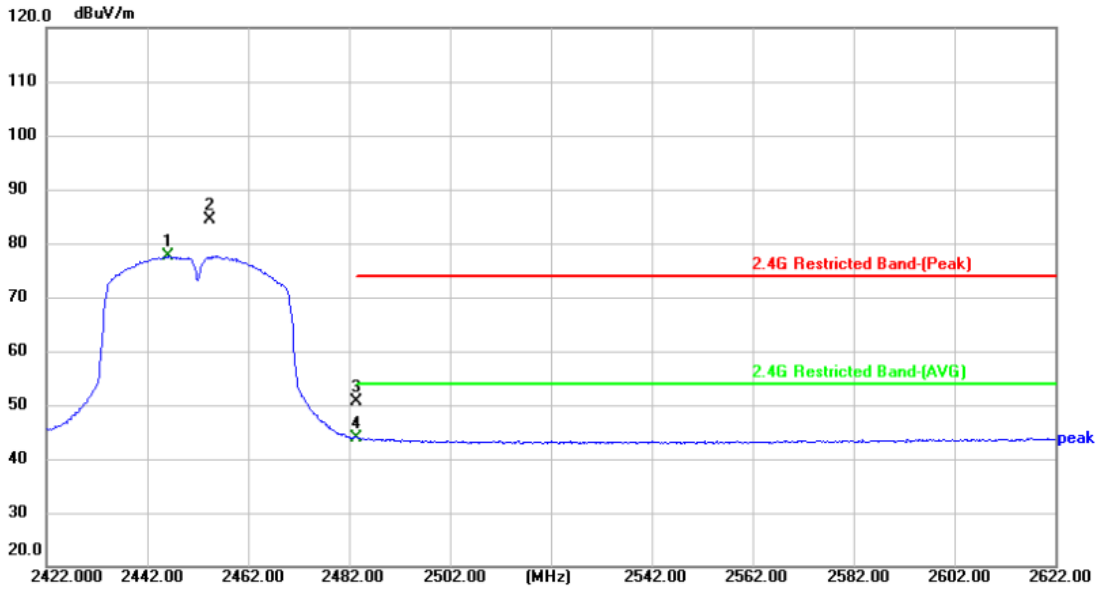
Temperature:	23.5℃	**Relative Humidity:**	47%
Test Voltage:	DC 12V		
Ant. Pol.	Vertical		
Test Mode:	TX N(HT40) Mode 2422MHz		
Remark:	N/A		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2390.000	50.92	6.80	57.72	74.00	-16.28	peak
2 *	2390.000	44.97	6.80	51.77	54.00	-2.23	AVG
3	2417.800	88.16	6.88	95.04	Fundamental Frequency		peak
4	2426.600	82.10	6.92	89.02	Fundamental Frequency		AVG

Emission Level= Read Level+ Correct Factor

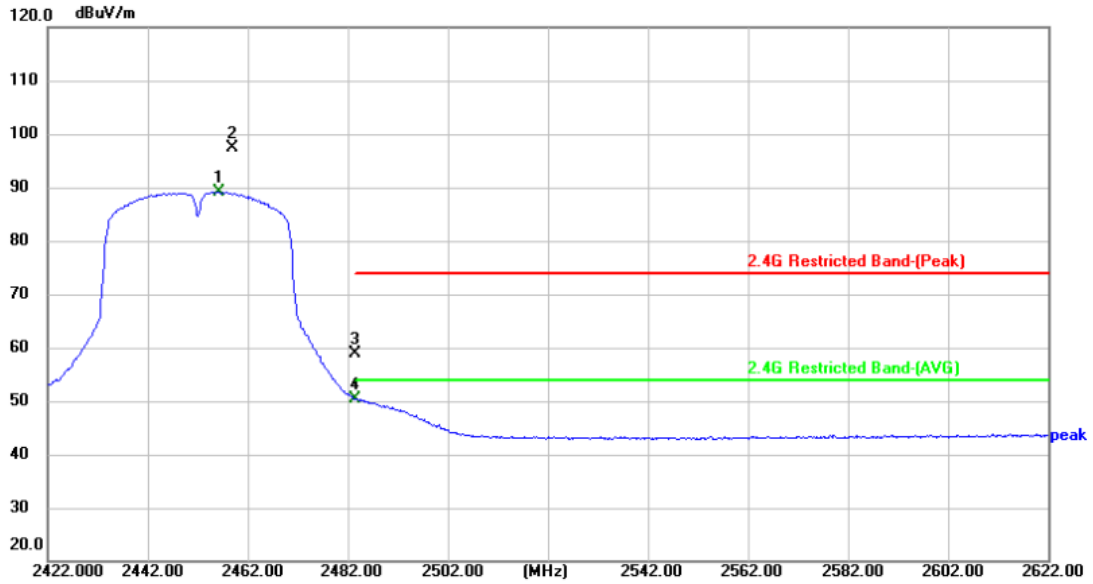
Temperature:	23.5℃	**Relative Humidity:**	47%
Test Voltage:	DC 12V		
Ant. Pol.	Horizontal		
Test Mode:	TX N(HT40) Mode 2452MHz		
Remark:	N/A		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2446.200	70.59	7.00	77.59	Fundamental Frequency		AVG
2	2454.400	77.35	7.03	84.38	Fundamental Frequency		peak
3	2483.500	43.44	7.15	50.59	74.00	-23.41	peak
4 *	2483.500	36.70	7.15	43.85	54.00	-10.15	AVG

Emission Level= Read Level+ Correct Factor

Temperature:	23.5℃	**Relative Humidity:**	47%
Test Voltage:	DC 12V		
Ant. Pol.	Vertical		
Test Mode:	TX N(HT40) Mode 2452MHz		
Remark:	N/A		

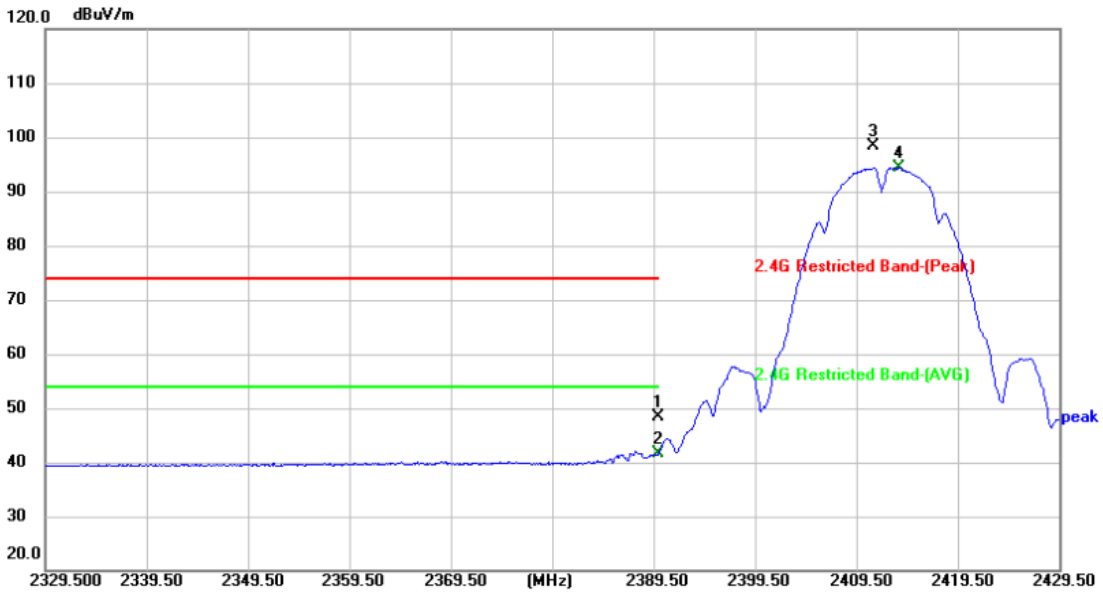


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2456.200	82.17	7.03	89.20	Fundamental Frequency		AVG
2	2458.800	90.40	7.05	97.45	Fundamental Frequency		peak
3	2483.500	51.70	7.15	58.85	74.00	-15.15	peak
4 *	2483.500	43.28	7.15	50.43	54.00	-3.57	AVG

Emission Level= Read Level+ Correct Factor

Test Results of the Mushroom Antenna

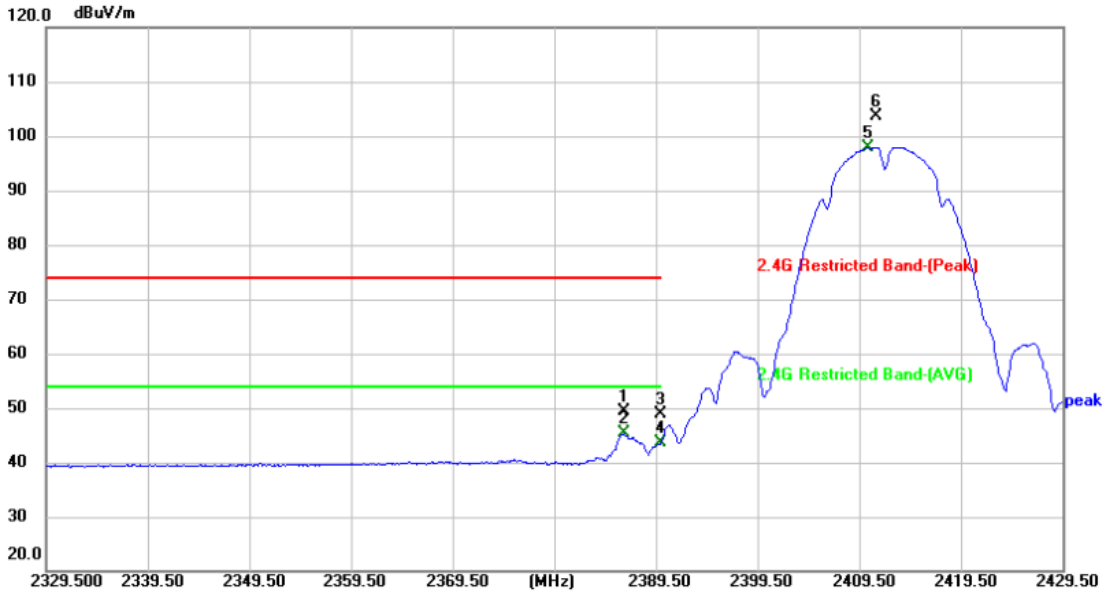
Temperature:	23.5℃	**Relative Humidity:**	47%
Test Voltage:	DC 12V		
Ant. Pol.	Horizontal		
Test Mode:	TX B Mode 2412MHz		
Remark:	Only show the worse case		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2390.000	43.67	4.80	48.47	74.00	-25.53	peak
2 *	2390.000	36.88	4.80	41.68	54.00	-12.32	AVG
3	2411.100	93.41	4.86	98.27	Fundamental Frequency		peak
4	2413.700	89.61	4.87	94.48	Fundamental Frequency		AVG

Emission Level= Read Level+ Correct Factor

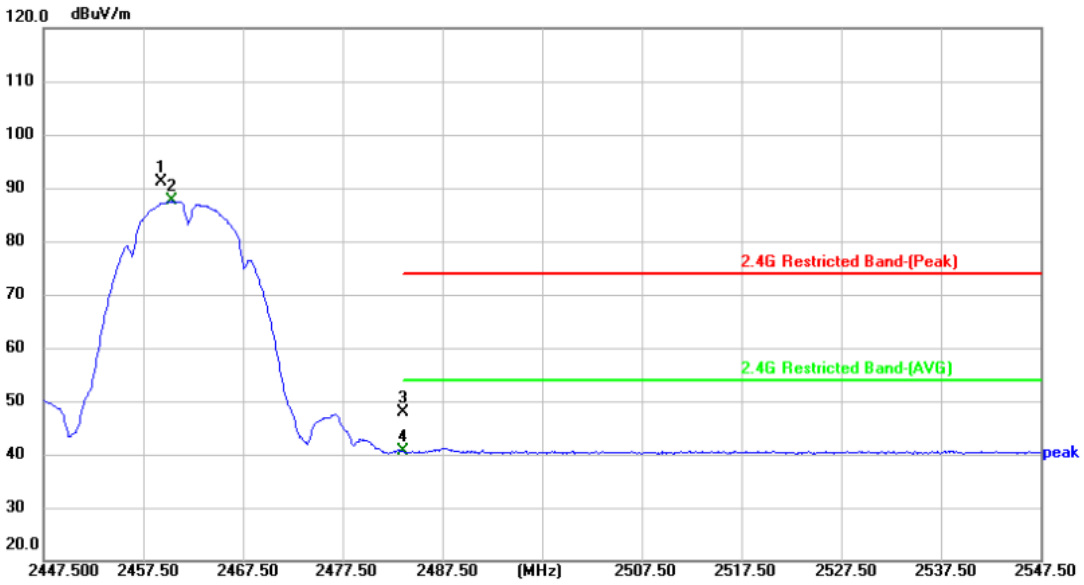
Temperature:	23.5℃	**Relative Humidity:**	47%
Test Voltage:	DC 12V		
Ant. Pol.	Vertical		
Test Mode:	TX B Mode 2412MHz		
Remark:	Only show the worse case		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2386.300	44.51	4.78	49.29	74.00	-24.71	peak
2 *	2386.300	40.48	4.78	45.26	54.00	-8.74	AVG
3	2390.000	44.01	4.80	48.81	74.00	-25.19	peak
4	2390.000	38.76	4.80	43.56	54.00	-10.44	AVG
5	2410.300	93.09	4.85	97.94	Fundamental Frequency		AVG
6	2411.100	98.87	4.86	103.73	Fundamental Frequency		peak

Emission Level= Read Level+ Correct Factor

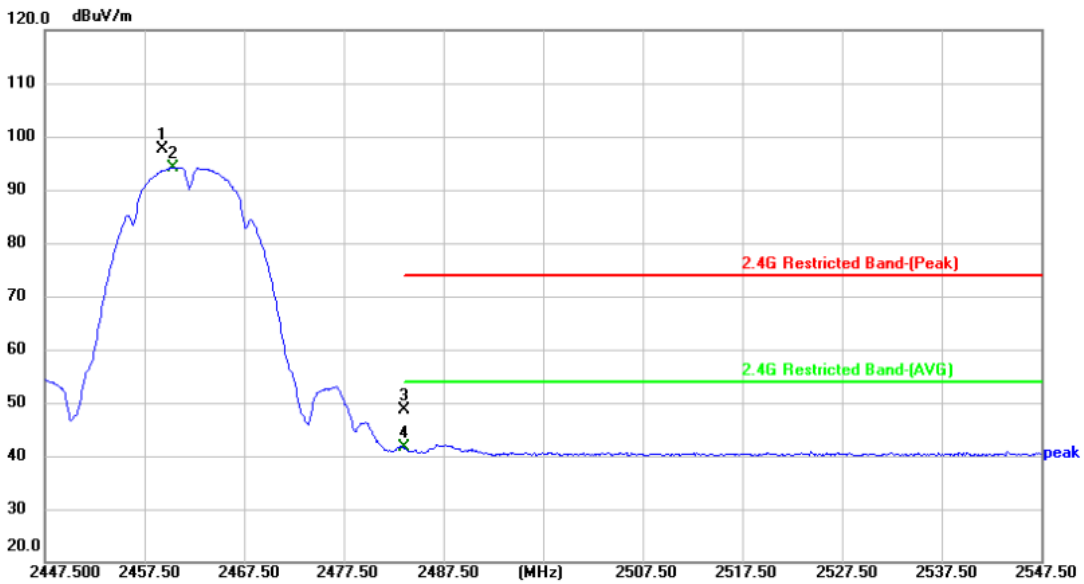
Temperature:	23.5℃	**Relative Humidity:**	47%
Test Voltage:	DC 12V		
Ant. Pol.	Horizontal		
Test Mode:	TX B Mode 2462MHz		
Remark:	Only show the worse case		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2459.300	86.00	5.05	91.05	Fundamental Frequency		peak
2	2460.300	82.53	5.05	87.58	Fundamental Frequency		AVG
3	2483.500	42.70	5.15	47.85	74.00	-26.15	peak
4 *	2483.500	35.45	5.15	40.60	54.00	-13.40	AVG

Emission Level= Read Level+ Correct Factor

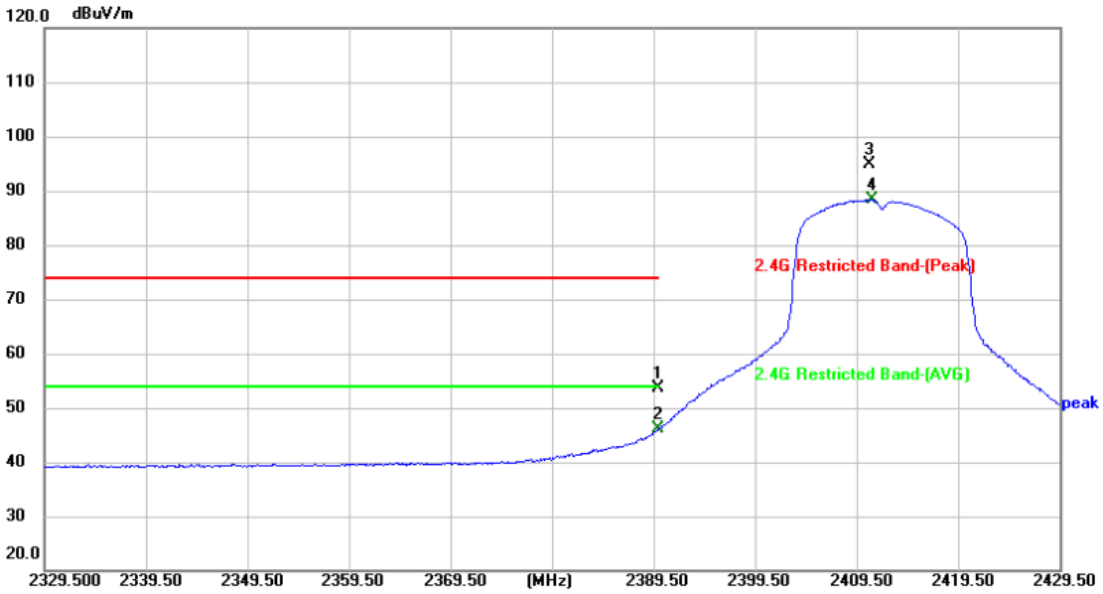
Temperature:	23.5℃	**Relative Humidity:**	47%
Test Voltage:	DC 12V		
Ant. Pol.	Vertical		
Test Mode:	TX B Mode 2462MHz		
Remark:	Only show the worse case		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2459.300	92.65	5.05	97.70	Fundamental Frequency		peak
2	2460.300	89.16	5.05	94.21	Fundamental Frequency		AVG
3	2483.500	43.43	5.15	48.58	74.00	-25.42	peak
4 *	2483.500	36.38	5.15	41.53	54.00	-12.47	AVG

Emission Level= Read Level+ Correct Factor

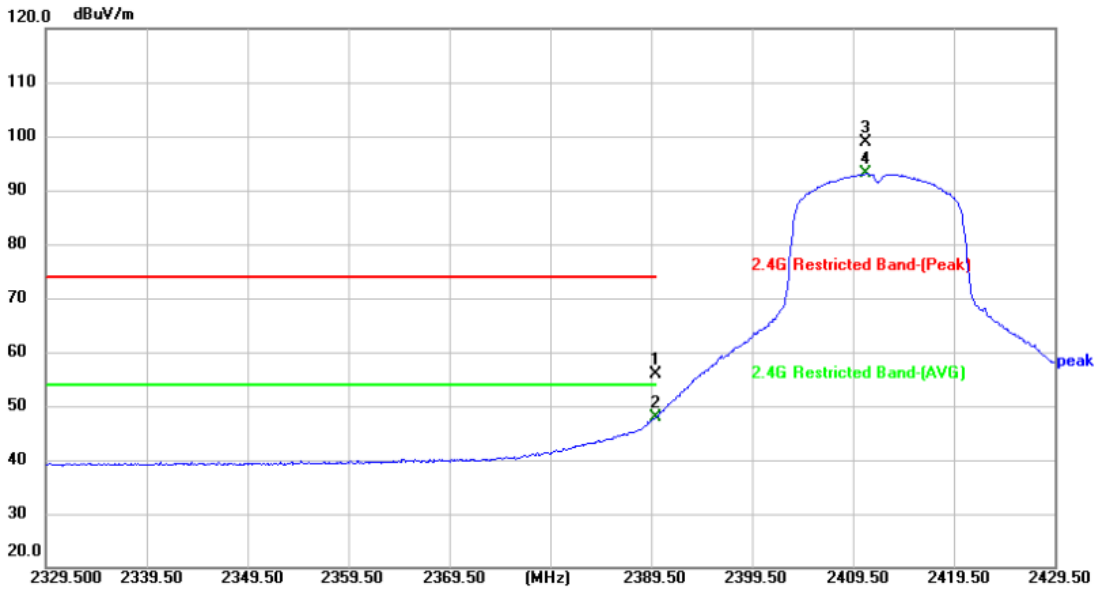
Temperature:	23.5℃	**Relative Humidity:**	47%
Test Voltage:	DC 12V		
Ant. Pol.	Horizontal		
Test Mode:	TX G Mode 2412MHz		
Remark:	Only show the worse case		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2390.000	48.93	4.80	53.73	74.00	-20.27	peak
2 *	2390.000	41.36	4.80	46.16	54.00	-7.84	AVG
3	2410.700	90.04	4.86	94.90	Fundamental Frequency		peak
4	2411.000	83.44	4.86	88.30	Fundamental Frequency		AVG

Emission Level= Read Level+ Correct Factor

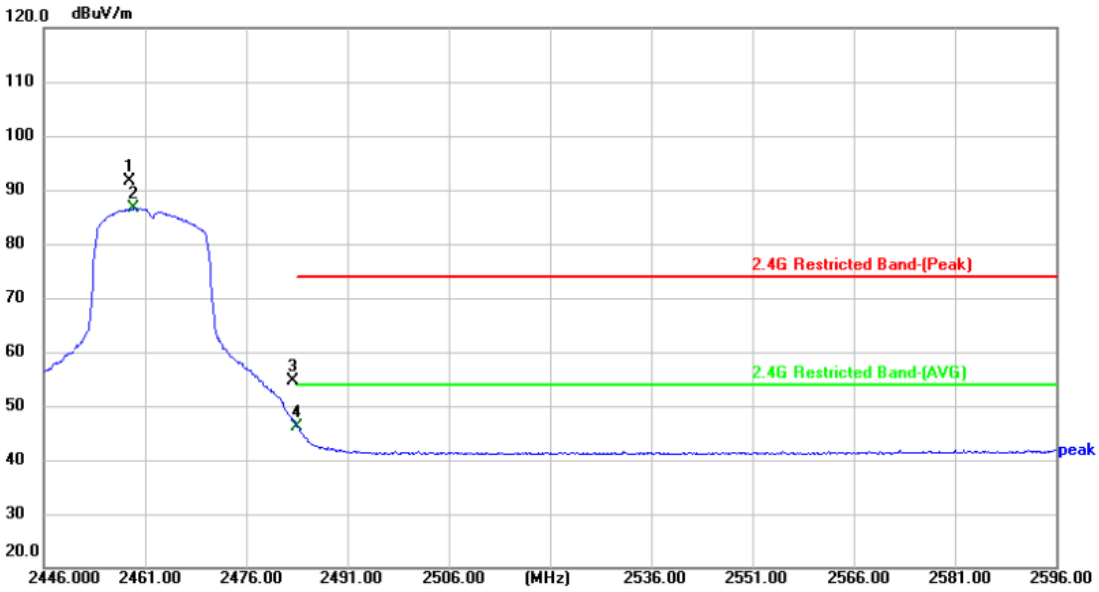
Temperature:	23.5℃	**Relative Humidity:**	47%
Test Voltage:	DC 12V		
Ant. Pol.	Vertical		
Test Mode:	TX G Mode 2412MHz		
Remark:	Only show the worse case		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2390.000	51.17	4.80	55.97	74.00	-18.03	peak
2 *	2390.000	43.11	4.80	47.91	54.00	-6.09	AVG
3	2410.700	93.95	4.86	98.81	Fundamental Frequency		peak
4	2410.800	88.27	4.86	93.13	Fundamental Frequency		AVG

Emission Level= Read Level+ Correct Factor

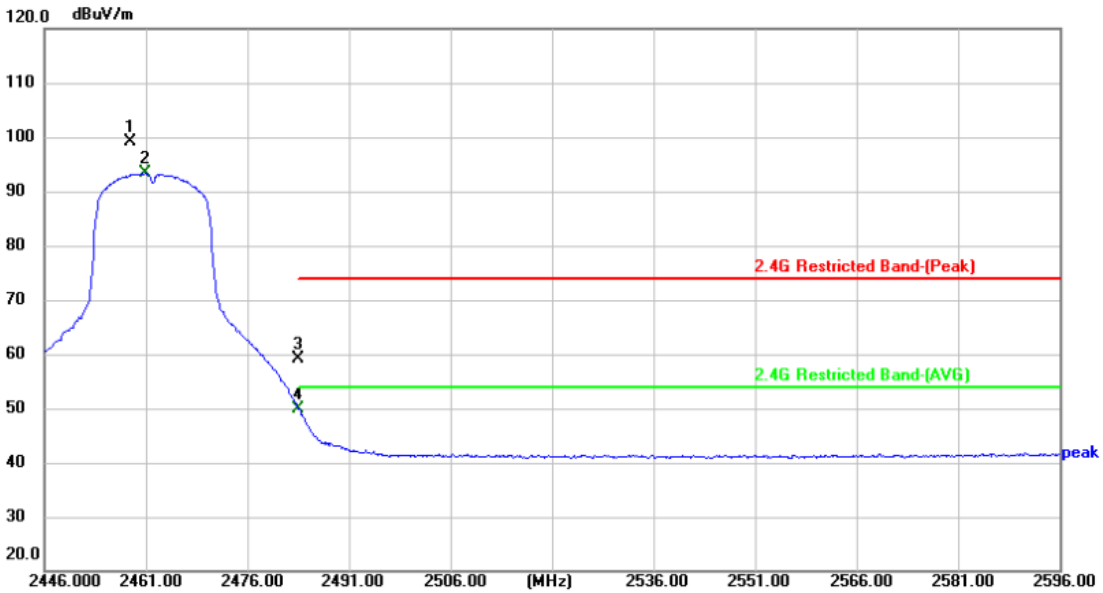
Temperature:	23.5℃	**Relative Humidity:**	47%
Test Voltage:	DC 12V		
Ant. Pol.	Horizontal		
Test Mode:	TX G Mode 2462MHz		
Remark:	Only show the worse case		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2458.600	86.70	5.05	91.75	Fundamental Frequency		peak
2	2459.350	81.57	5.05	86.62	Fundamental Frequency		AVG
3	2483.000	49.39	5.15	54.54	Fundamental Frequency		peak
4 *	2483.500	41.02	5.15	46.17	54.00	-7.83	AVG

Emission Level= Read Level+ Correct Factor

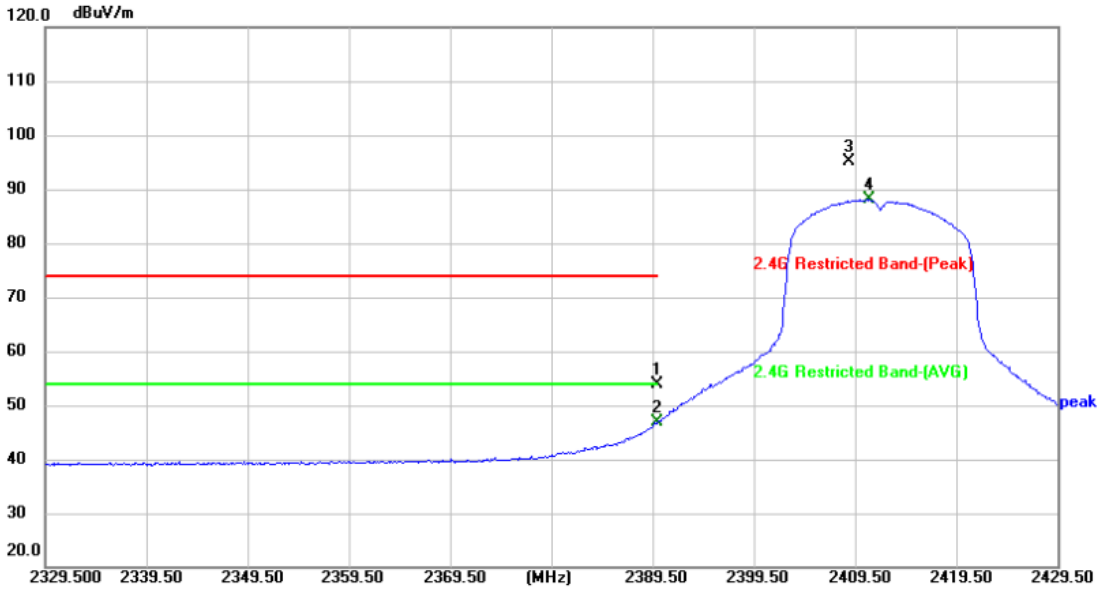
Temperature:	23.5℃	**Relative Humidity:**	47%
Test Voltage:	DC 12V		
Ant. Pol.	Vertical		
Test Mode:	TX G Mode 2462MHz		
Remark:	Only show the worse case		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2458.600	93.96	5.05	99.01	Fundamental Frequency		peak
2	2460.850	88.36	5.06	93.42	Fundamental Frequency		AVG
3	2483.500	54.09	5.15	59.24	74.00	-14.76	peak
4 *	2483.500	44.78	5.15	49.93	54.00	-4.07	AVG

Emission Level= Read Level+ Correct Factor

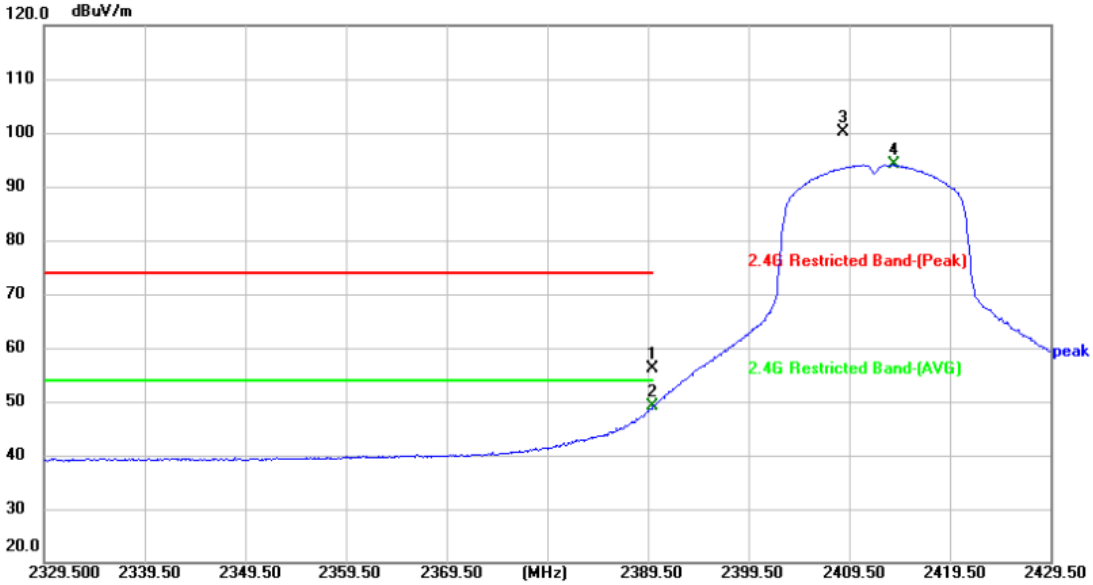
Temperature:	23.5℃	**Relative Humidity:**	47%
Test Voltage:	DC 12V		
Ant. Pol.	Horizontal		
Test Mode:	TX N(HT20) Mode 2412MHz		
Remark:	N/A		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2390.000	49.03	4.80	53.83	74.00	-20.17	peak
2 *	2390.000	42.06	4.80	46.86	54.00	-7.14	AVG
3	2408.900	90.21	4.85	95.06	Fundamental Frequency		peak
4	2410.900	83.19	4.86	88.05	Fundamental Frequency		AVG

Emission Level= Read Level+ Correct Factor

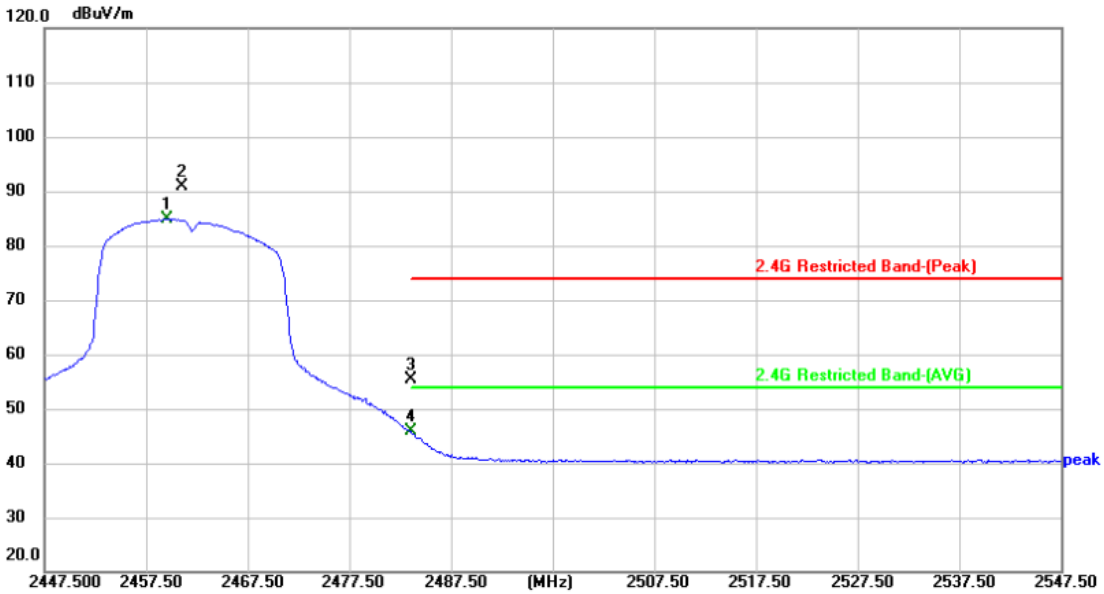
Temperature:	23.5℃	**Relative Humidity:**	47%
Test Voltage:	DC 12V		
Ant. Pol.	Vertical		
Test Mode:	TX N(HT20) Mode 2412MHz		
Remark:	N/A		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2390.000	51.39	4.80	56.19	74.00	-17.81	peak
2 *	2390.000	44.39	4.80	49.19	54.00	-4.81	AVG
3	2408.900	95.35	4.85	100.20	Fundamental Frequency		peak
4	2413.900	89.16	4.87	94.03	Fundamental Frequency		AVG

Emission Level= Read Level+ Correct Factor

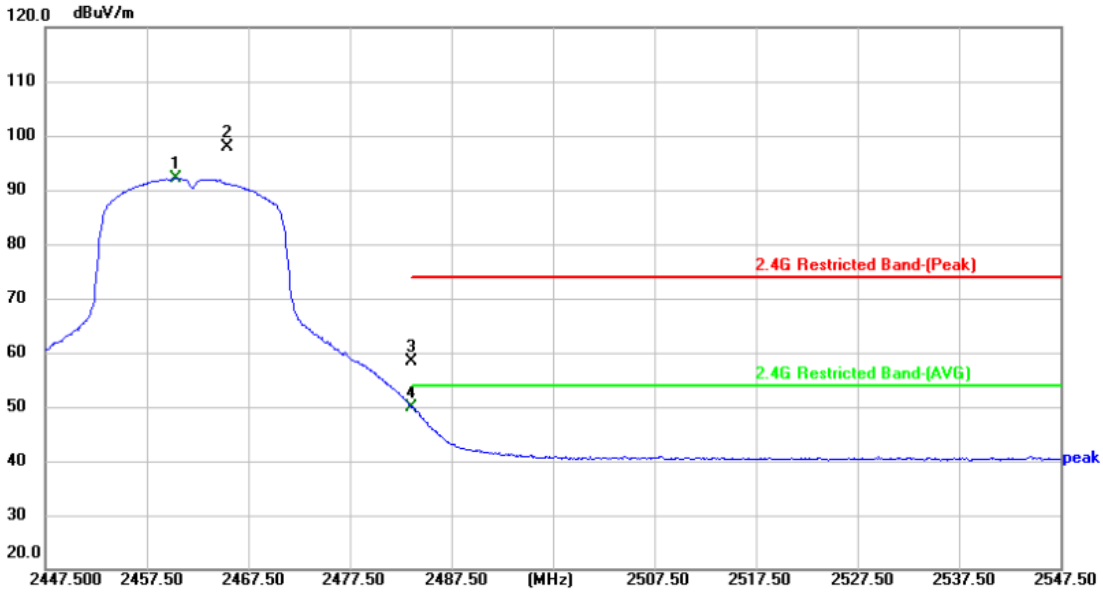
Temperature:	23.5℃	**Relative Humidity:**	47%
Test Voltage:	DC 12V		
Ant. Pol.	Horizontal		
Test Mode:	TX N(HT20) Mode 2462MHz		
Remark:	N/A		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2459.500	79.89	5.05	84.94	Fundamental Frequency		AVG
2	2461.000	85.77	5.06	90.83	Fundamental Frequency		peak
3	2483.500	50.26	5.15	55.41	74.00	-18.59	peak
4 *	2483.500	40.73	5.15	45.88	54.00	-8.12	AVG

Emission Level= Read Level+ Correct Factor

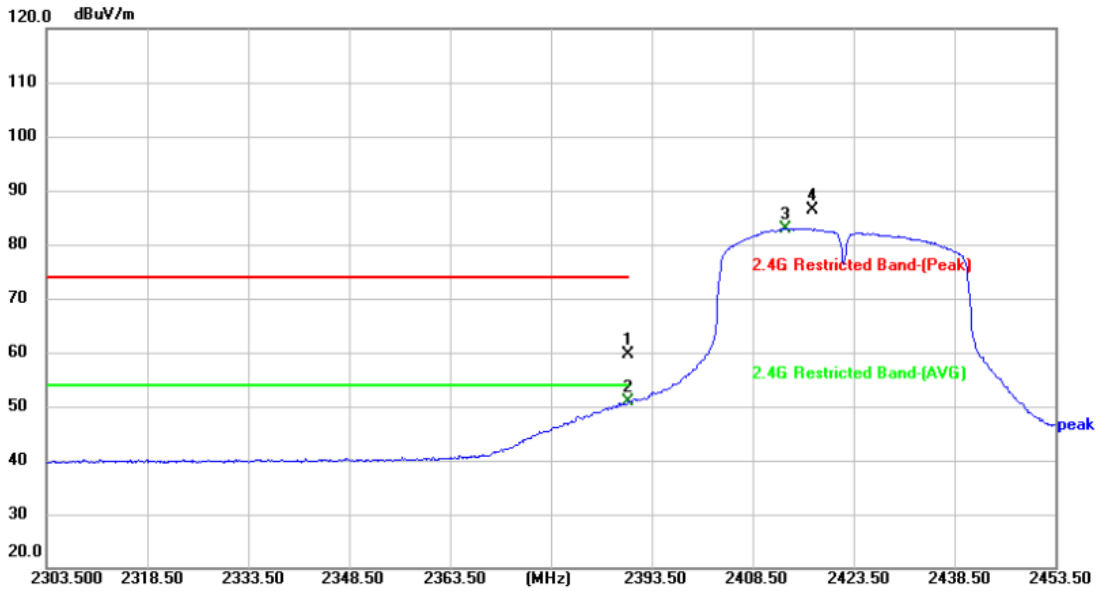
Temperature:	23.5℃	**Relative Humidity:**	47%
Test Voltage:	DC 12V		
Ant. Pol.	Vertical		
Test Mode:	TX N(HT20) Mode 2462MHz		
Remark:	N/A		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2460.300	87.10	5.05	92.15	Fundamental Frequency		AVG
2	2465.400	92.88	5.07	97.95	Fundamental Frequency		peak
3	2483.500	53.13	5.15	58.28	74.00	-15.72	peak
4 *	2483.500	44.82	5.15	49.97	54.00	-4.03	AVG

Emission Level= Read Level+ Correct Factor

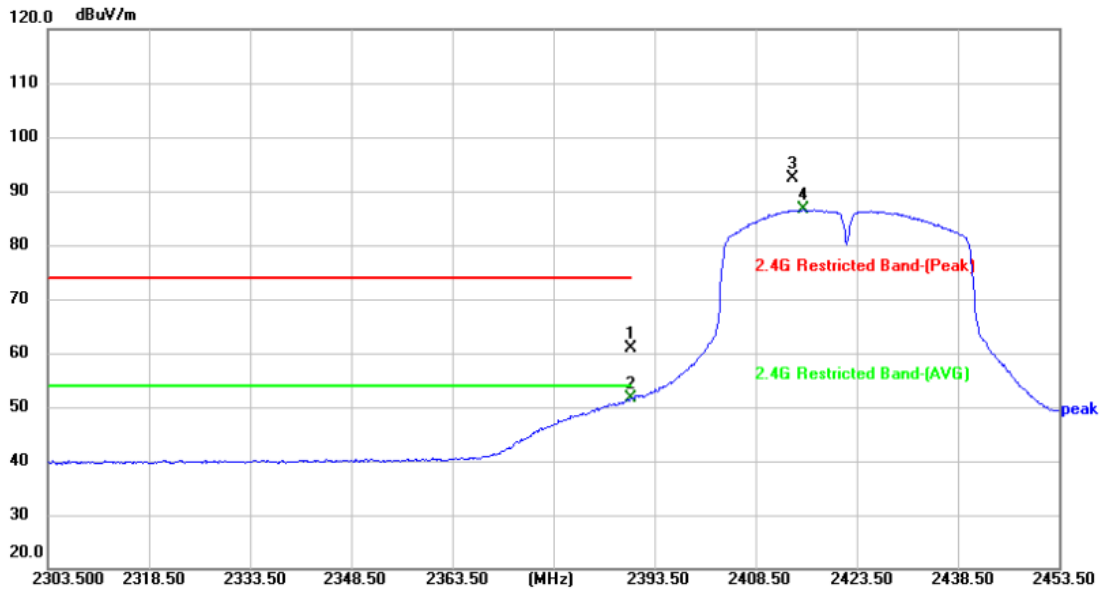
Temperature:	23.5℃	**Relative Humidity:**	47%
Test Voltage:	DC 12V		
Ant. Pol.	Horizontal		
Test Mode:	TX N(HT40) Mode 2422MHz		
Remark:	N/A		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2390.000	54.81	4.80	59.61	74.00	-14.39	peak
2 *	2390.000	45.99	4.80	50.79	54.00	-3.21	AVG
3	2413.450	78.11	4.87	82.98	Fundamental Frequency		AVG
4	2417.350	81.48	4.88	86.36	Fundamental Frequency		peak

Emission Level= Read Level+ Correct Factor

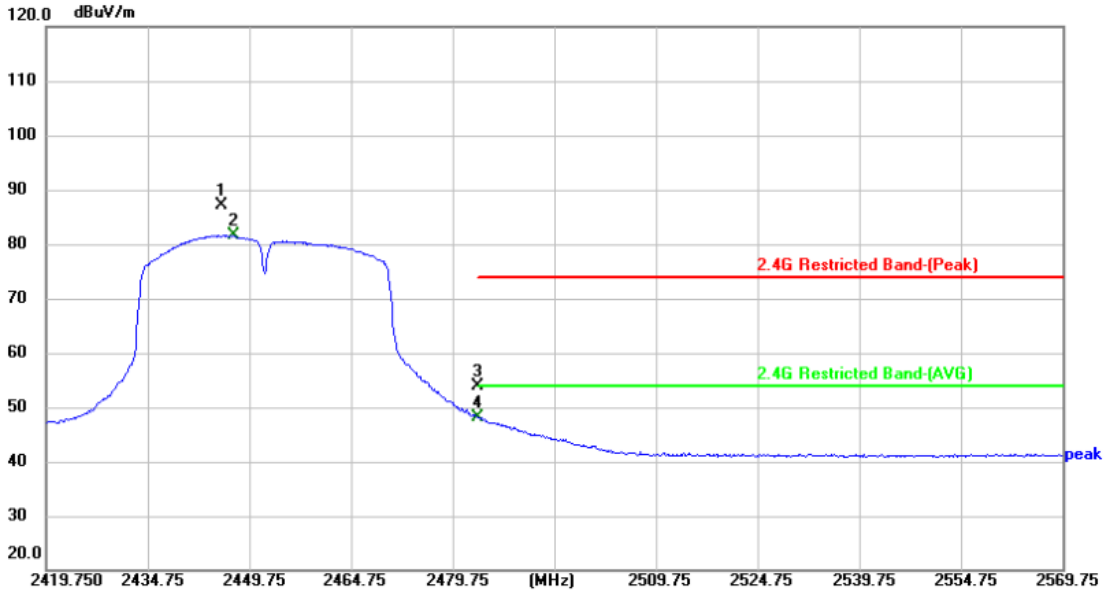
Temperature:	23.5℃	**Relative Humidity:**	47%
Test Voltage:	DC 12V		
Ant. Pol.	Vertical		
Test Mode:	TX N(HT40) Mode 2422MHz		
Remark:	N/A		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2390.000	55.98	4.80	60.78	74.00	-13.22	peak
2 *	2390.000	46.93	4.80	51.73	54.00	-2.27	AVG
3	2414.050	87.39	4.87	92.26	Fundamental Frequency		peak
4	2415.550	81.70	4.88	86.58	Fundamental Frequency		AVG

Emission Level= Read Level+ Correct Factor

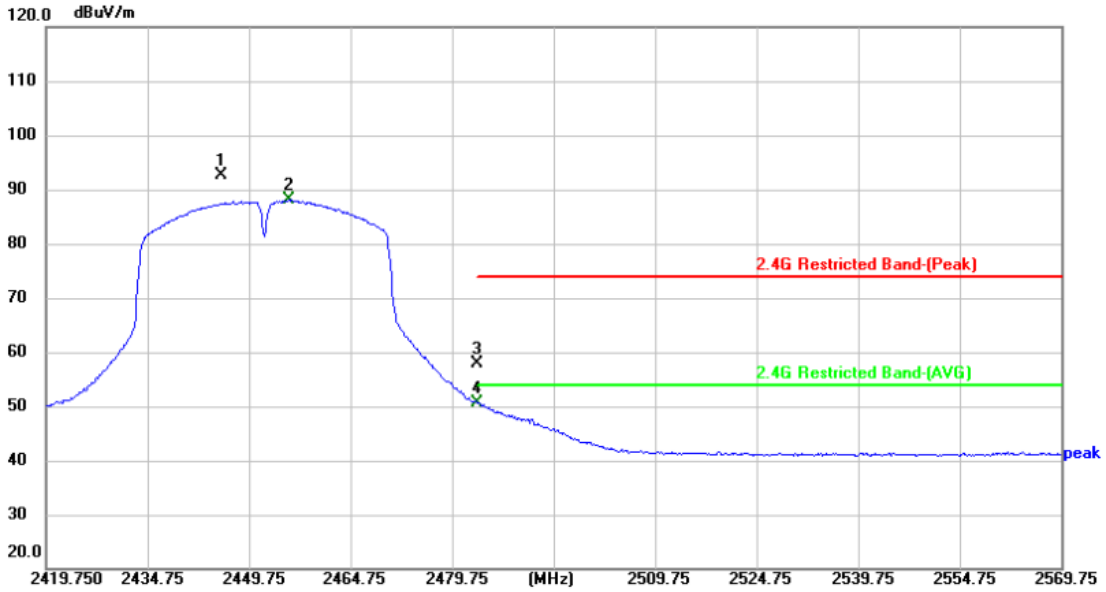
Temperature:	23.5℃	**Relative Humidity:**	47%
Test Voltage:	DC 12V		
Ant. Pol.	Horizontal		
Test Mode:	TX N(HT40) Mode 2452MHz		
Remark:	N/A		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2445.550	82.07	5.00	87.07	Fundamental Frequency		peak
2	2447.500	76.63	5.00	81.63	Fundamental Frequency		AVG
3	2483.500	48.74	5.15	53.89	74.00	-20.11	peak
4 *	2483.500	42.91	5.15	48.06	54.00	-5.94	AVG

Emission Level= Read Level+ Correct Factor

Temperature:	23.5℃	**Relative Humidity:**	47%
Test Voltage:	DC 12V		
Ant. Pol.	Vertical		
Test Mode:	TX N(HT40) Mode 2452MHz		
Remark:	N/A		



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2445.550	87.60	5.00	92.60	Fundamental Frequency		peak
2	2455.600	83.08	5.03	88.11	Fundamental Frequency		AVG
3	2483.500	52.84	5.15	57.99	74.00	-16.01	peak
4 *	2483.500	45.56	5.15	50.71	54.00	-3.29	AVG

Emission Level= Read Level+ Correct Factor

-----END OF REPORT------