RADIO TEST REPORT

FCC 47 CFR PART 15 SUBPART C
INDUSTRY CANADA RSS-247

Test Standard	**FCC Part 15.247** **RSS-247 issue 2 and RSS-GEN issue 5**
Product name	**Evolve Universal 10 inch Headrest Monitor**
Brand Name	**Ford**
Model No.	**661183**
Test Result	**Pass**
Statements of Conformity	**Determination of compliance is based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.**

The test Result was tested by Compliance Certification Services Inc. The test data, data evaluation, test procedures, and equipment configurations shown in this report were given in ANSI C63.10: 2013 and compliance standards.

The test results of this report relate only to the tested sample (EUT) identified in this report.
The test Report of full or partial shall not copy. Without written approval of Compliance Certification Services Inc. (Wugu Laboratory).

Approved by:

Kevin Tsai
Deputy Manager

Revision History

Rev.	Issue Date	Revisions	Effect Page	Revised By
00	July 28, 2021	Initial Issue	ALL	Doris Chu
01	August 3, 2021	See the following Note Rev. (01)	P.33, P.39-40, P.47	Doris Chu

Rev. (01)

1. Revised test result in section 5.4.4.
2. Revised test result in section 5.5.4.

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1. GENERAL INFORMATION

1.1 EUT INFORMATION

Applicant	JET OPTOELECTRONICS CO., LTD. 3F., No.300, Yangguang St., Neihu Dist., Taipei City 11491, Taiwan
Manufacturer	JET OPTOELECTRONICS CO., LTD. 3F., No.300, Yangguang St., Neihu Dist., Taipei City 11491, Taiwan
Equipment	Evolve Universal 10 inch Headrest Monitor
Model No.	661183
Model Discrepancy	N/A
Trade Name	Ford
Received Date	April 29, 2021
Date of Test	June 21 ~ August 3, 2021
Power Supply	Power from Power Supply: DC 12V
HW Version	20210126 D01
SW Version	95126
EUT Serial #	(1) Conducted: GA51RX0011030083 (2) Radiated: GA51RX 0011030014

Remark:
1. For more details, please refer to the User's manual of the EUT.
2. Disclaimer: Antenna information is provided by the applicant, test results of this report are applicable to the sample EUT received.
3. The EUT (model: 661183) had been tested under operating condition.

1.2 EUT CHANNEL INFORMATION

Frequency Range	802.11b/g/n HT 20: 2412MHz ~ 2462MHz
Modulation Type	1. IEEE 802.11b mode: CCK 2. IEEE 802.11g mode: OFDM 3. IEEE 802.11n HT 20 MHz mode : OFDM
Number of channel	1. IEEE 802.11b mode: 11 Channels 2. IEEE 802.11g mode: 11 Channels 3. IEEE 802.11n HT 20 MHz mode : 11 Channels

Remark:
Refer as ANSI C63.10: 2013 clause 5.6.1 Table 4 and RSS-GEN Table A1 for test channels

Number of frequencies to be tested		
Frequency range in which device operates	**Number of frequencies**	**Location in frequency range of operation**
☐ 1 MHz or less	1	Middle
☐ 1 MHz to 10 MHz	2	1 near top and 1 near bottom
☒ More than 10 MHz	3	1 near top, 1 near middle, and 1 near bottom

1.3 ANTENNA INFORMATION

Antenna Type	☒ Ceramic ☐ PCB ☐ Dipole ☐ Coils
Antenna Gain	chain0: Gain :1 dBi chain1: Gain :1 dBi Power Directional Gain: 4.01 dBi
Antenna Connector	N/A

Remark:
1.The antenna(s) of the EUT are permanently attached and there are no provisions for connection to an external antenna. So the EUT complies with the requirements of §15.203 and RSS-Gen 6.8.

1.4 MEASUREMENT UNCERTAINTY

PARAMETER	UNCERTAINTY
AC Powerline Conducted Emission	+/- 1.2575
Emission bandwidth, 20dB bandwidth	+/- 0.0014
RF output power, conducted	+/- 1.14
Power density, conducted	+/- 1.40
3M Semi Anechoic Chamber / 30M~200M	+/- 4.12
3M Semi Anechoic Chamber / 200M~1000M	+/- 4.68
3M Semi Anechoic Chamber / 1G~8G	+/- 5.18
3M Semi Anechoic Chamber / 8G~18G	+/- 5.47
3M Semi Anechoic Chamber / 18G~26G	+/- 3.81
3M Semi Anechoic Chamber / 26G~40G	+/- 3.87

Remark:
1.This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2
2. ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report.

1.5 FACILITIES AND TEST LOCATION

All measurement facilities used to collect the measurement data are located at

No.11, Wugong 6th Rd., Wugu Dist., New Taipei City, Taiwan. (R.O.C.)
CAB identifier: TW1309

Test site	Test Engineer	Remark
AC Conduction Room	-	Not applicable, because EUT doesn't connect to AC Main Source direct.
Radiation	Ray Li	-
RF Conducted	Lance Chen	-

Remark: The lab has been recognized as the FCC accredited lad under the KDB 974614 D01 and is listed in the FCC pubic Access Link (PAL) database, FCC Registration No. :444940, the FCC Designation No.:TW1309

1.6 INSTRUMENT CALIBRATION

RF Conducted Test Site					
Name of Equipment	**Manufacturer**	**Model**	**Serial Number**	**Calibration Date**	**Calibration Due**
Coaxial Cable	Woken	WC12	CC003	06/28/2021	06/27/2022
Coaxial Cable	Woken	WC12	CC001	06/28/2021	06/27/2022
EXA Signal Analyzer	KEYSIGHT	N9010B	MY55460167	09/07/2020	09/06/2021
Power Meter	Anritsu	ML2487A	6K00003260	05/24/2021	05/23/2022
Power Seneor	Anritsu	MA2490A	032910	05/24/2021	05/23/2022
Software	N/A				

3M 966 Chamber Test Site					
Equipment	**Manufacturer**	**Model**	**Serial Number**	**Cal Date**	**Cal Due**
Band Reject Filters	MICRO TRONICS	BRM 50702	120	02/08/2021	02/07/2022
Bilog Antenna	Sunol Sciences	JB3	A030105	07/24/2020	07/23/2021
Horn Antenna	ETS LINDGREN	3116	00026370	12/11/2020	12/10/2021
Coaxial Cable	HUBER SUHNER	SUCOFLEX 104PEA	20995	02/24/2021	02/23/2022
Coaxial Cable	EMCI	EMC105	190914+327109/4	09/19/2020	09/18/2021
K Type Cable	Huber+Suhner	SUCOFLEX 102	29406/2	12/09/2020	12/08/2021
K Type Cable	Huber+Suhner	SUCOFLEX 102	22470/2	12/09/2020	12/08/2021
Digital Thermo-Hygro Meter	WISEWIND	1206	D07	01/06/2021	01/05/2022
double Ridged Guide Horn Antenna	ETC	MCTD 1209	DRH13M02003	09/30/2020	09/29/2021
Loop Ant	COM-POWER	AL-130	121051	04/07/2021	04/06/2022
Pre-Amplifier	EMEC	EM330	060609	02/24/2021	02/23/2022
Pre-Amplifier	HP	8449B	3008A00965	12/25/2020	12/24/2021
Pre-Amplifier	MITEQ	AMF-6F-18004000-37-8P	985646	09/02/2020	09/01/2021
PSA Series Spectrum Analyzer	Agilent	E4446A	MY46180323	07/24/2020	07/23/2021
Antenna Tower	CCS	CC-A-1F	N/A	N.C.R	N.C.R
Controller	CCS	CC-C-1F	N/A	N.C.R	N.C.R
Turn Table	CCS	CC-T-1F	N/A	N.C.R	N.C.R
Software	e3 6.11-20180413				

Remark: Each piece of equipment is scheduled for calibration once a year.

1.7 SUPPORT AND EUT ACCESSORIES EQUIPMENT

EUT Accessories Equipment					
No.	**Equipment**	**Brand**	**Model**	**Series No.**	**FCC ID**
	N/A				

Support Equipment						
No.	**Equipment**	**Brand**	**Model**	**Series No.**	**FCC ID**	**IC**
1	DC Power Source	Agilent	E3640A	N/A	N/A	N/A
2	NB(E)	Lenovo	IBM 7663	N/A	N/A	N/A
3	NB(L)	Toshiba	PORTEGE R30-A	N/A	PD97260H	1000M-7260H

1.8 TEST METHODOLOGY AND APPLIED STANDARDS

The test methodology, setups and results comply with all requirements in accordance with ANSI C63.10:2013, FCC Part 2, FCC Part 15.247, RSS-247 Issue 2 and RSS-GEN Issue 5.

2. TEST SUMMARY

FCC Standard Section	IC Standard Section	Report Section	Test Item	Result
15.203	RSS-Gen 6.8	1.3	Antenna Requirement	Pass
15.207(a)	RSS-GEN 8.8	4.1	AC Conducted Emission	N/A
15.247(a)(2)	RSS-247(5.2)(a)	4.2	6 dB Bandwidth	Pass
-	RSS-GEN 6.7	4.2	Occupied Bandwidth (99%)	Pass
15.247(b)(3)	RSS-247(5.4)(d)	4.3	Output Power Measurement	Pass
15.247(e)	RSS-247(5.2)(b)	4.4	Power Spectral Density	Pass
15.247(d)	RSS-247(5.5)	4.5	Conducted Band Edge	Pass
15.247(d)	RSS-247(5.5)	4.5	Conducted Emission	Pass
15.247(d)	RSS-GEN 8.9, 8.10	4.6	Radiation Band Edge	Pass
15.247(d)	RSS-GEN 8.9, 8.10	4.6	Radiation Spurious Emission	Pass

3. DESCRIPTION OF TEST MODES

3.1 THE WORST MODE OF OPERATING CONDITION

Operation mode	IEEE 802.11b mode :1Mbps IEEE 802.11g mode :6Mbps IEEE 802.11n HT20 mode :MCS8
Test Channel Frequencies	**IEEE 802.11b mode :** 1. Lowest Channel : 2412MHz 2. Middle Channel : 2437MHz 3. Highest Channel : 2462MHz **IEEE 802.11g mode :** 1. Lowest Channel : 2412MHz 2. Middle Channel : 2437MHz 3. Highest Channel : 2462MHz **IEEE 802.11n HT20 mode :** 1. Lowest Channel : 2412MHz 2. Middle Channel : 2437MHz 3. Highest Channel : 2462MHz
Operation Transmitter	IEEE 802.11b mode : 2T2R IEEE 802.11g mode : 2T2R IEEE 802.11n HT20 mode : 2T2R

Remark:
1. EUT pre-scanned data rate of output power for each mode, the worst data rate were recorded in this report.
2. The worst-case data rates are determined to be as follows for each mode based upon investigations by measuring the peak power, average power and PSD across all date rates, bandwidths, and modulations. The device supports SISO and MIMO at 802.11 n mode, per pre-test, MIMO 2TX mode was the worst and reported.

3.2 THE WORST MODE OF MEASUREMENT

Radiated Emission Measurement Above 1G	
Test Condition	**Radiated Emission Above 1G**
Power supply Mode	**Mode 1: EUT power by Power supply**
Worst Mode	☒ Mode 1 ☐ Mode 2 ☐ Mode 3 ☐ Mode 4
Worst Position	☐ Placed in fixed position. ☐ Placed in fixed position at X-Plane (E2-Plane) ☐ Placed in fixed position at Y-Plane (E1-Plane) ☒ Placed in fixed position at Z-Plane (H-Plane)

Radiated Emission Measurement Below 1G	
Test Condition	**Radiated Emission Below 1G**
Power supply Mode	**Mode 1: EUT power by Power supply**
Worst Mode	☒ Mode 1 ☐ Mode 2 ☐ Mode 3 ☐ Mode 4

Remark:
1. The worst mode was record in this test report.
2. EUT pre-scanned in three axis ,X,Y, Z and two polarity, for radiated measurement. The worst case(Z-Plane) were recorded in this report

4. EUT DUTY CYCLE

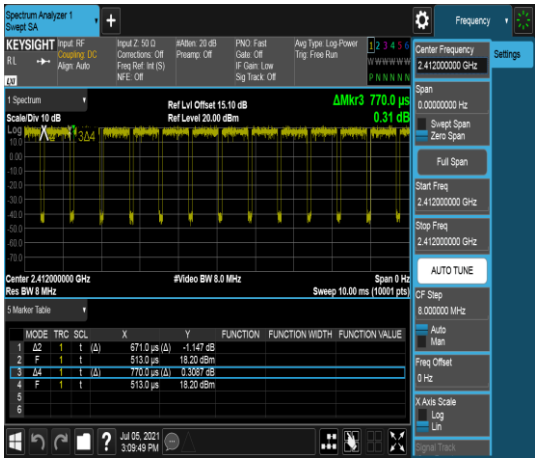
Temperature:	20.5 ~ 25.7℃	**Humidity:**	55% RH
Tested by:	Lance Chen	**Test date:**	July 5 ~ 6, 2021

Duty Cycle				
Configuration	Duty Cycle (%)	Duty Factor (dB) =10*log (1/Duty Cycle)	1/T (kHz)	VBW setting (kHz)
802.11b	98.91	0.05	0.12	0.01
802.11g	93.42	0.30	0.72	1.00
802.11n HT20	87.14	0.60	1.49	2.00

802.11b

802.11g

802.11n HT20



5. TEST RESULT

5.1 AC POWER LINE CONDUCTED EMISSION

5.1.1 Test Limit

According to §15.207(a)(2) and RSS-GEN section 8.8,

Frequency Range (MHz)	Limits(dBμV)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56*	56 to 46*
0.50 to 5	56	46
5 to 30	60	50

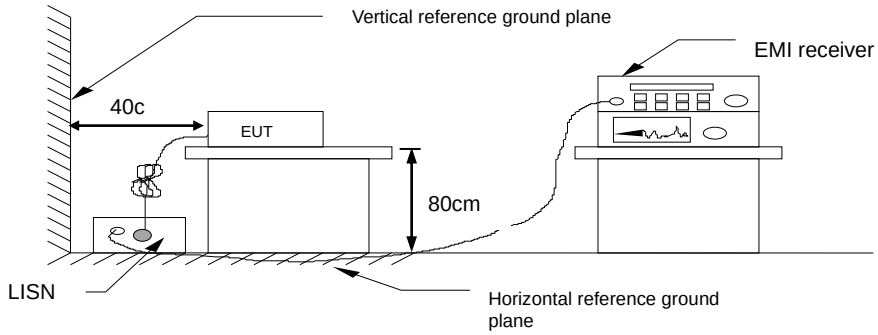
* Decreases with the logarithm of the frequency.

5.1.2 Test Procedure

Test method Refer as ANSI C63.10: 2013 clause 6.2,

1. The EUT was placed on a non-conducted table, which is 0.8m above horizontal ground plane and 0.4m above vertical ground plane.
2. EUT connected to the line impedance stabilization network (LISN)
3. Receiver set RBW of 9kHz and Detector Peak, and note as quasi-peak and average.
4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5. Recorded Line for Neutral and Line.

5.1.3 Test Setup



5.1.4 Test Result

Not applicable, because EUT doesn't connect to AC Main Source direct.

5.2 6dB BANDWIDTH AND OCCUPIED BANDWIDTH (99%)

5.2.1 Test Limit

According to §15.247(a)(2) and RSS-247 section 5.2(a),

6 dB Bandwidth ：

Limit	Shall be at least 500kHz

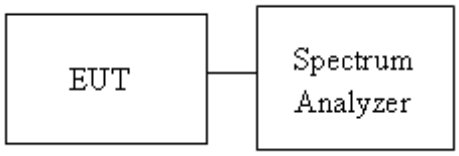
Occupied Bandwidth(99%) ： For reporting purposes only.

5.2.2 Test Procedure

Test method Refer as ANSI C63.10: 2013,

1. The EUT RF output connected to the spectrum analyzer by RF cable.
2. Setting maximum power transmit of EUT
3. SA set RBW = 100kHz, VBW = 300kHz and Detector = Peak, to measurement 6 dB Bandwidth.
4. SA set RBW = 1% ~ 5% OBW, VBW = three times the RBW and Detector = Peak, to measurement 99% Bandwidth
5. Measure and record the result of 6 dB Bandwidth and 99% Bandwidth. in the test report.

5.2.3 Test Setup



5.2.4 Test Result

Temperature: 20.5 ~ 25.7℃ **Humidity:** 55% RH

Tested by: Lance Chen **Test date:** July 5 ~ 6, 2021

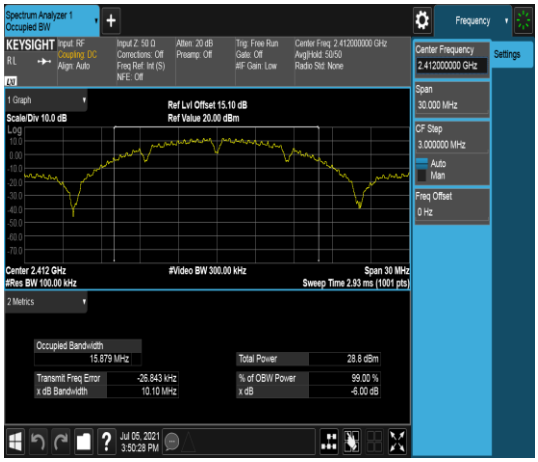
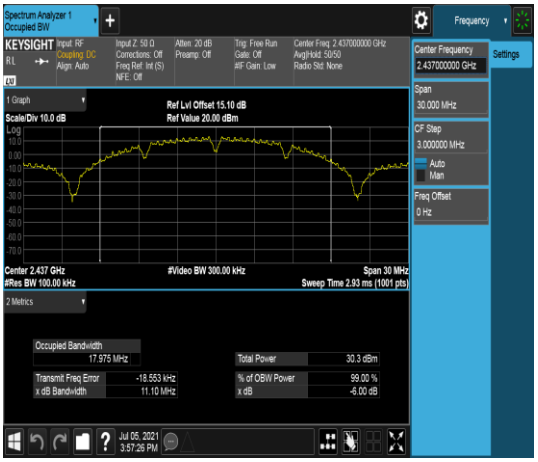
Test mode: IEEE 802.11b mode / 2412-2462 MHz				
Channel	**Frequency (MHz)**	**OBW (99%) (MHz)**	**6dB BW (MHz)**	**6dB limit (kHz)**
Low	2412	15.897	10.10	≥500
Mid	2437	17.973	11.10	
High	2462	15.089	10.06	

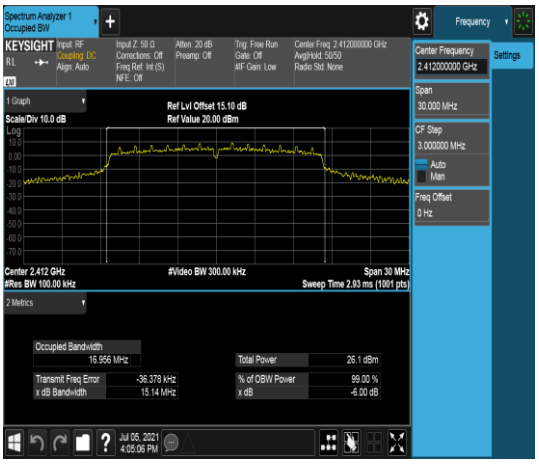
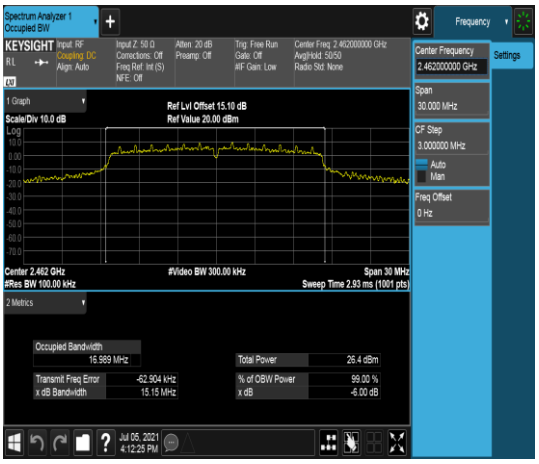
Test mode: IEEE 802.11g mode / 2412-2462 MHz				
Channel	**Frequency (MHz)**	**OBW (99%) (MHz)**	**6dB BW (MHz)**	**6dB limit (kHz)**
Low	2412	17.791	15.14	≥500
Mid	2437	19.150	15.15	
High	2462	17.799	15.15	

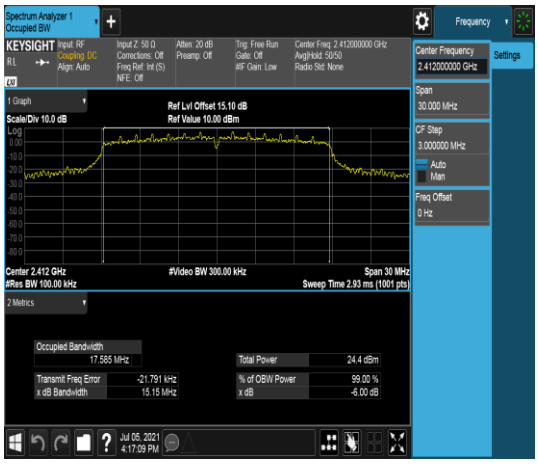
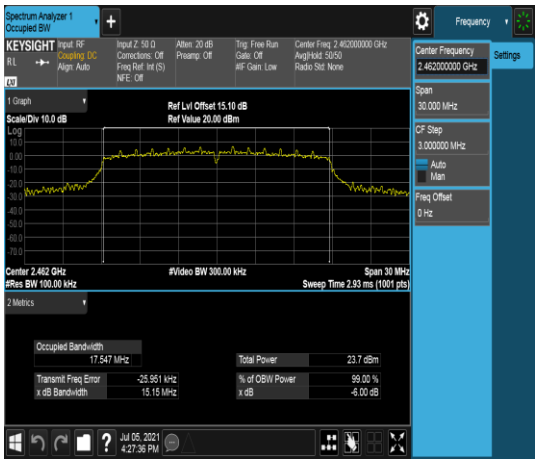
Test mode: IEEE 802.11n HT 20 MHz mode / 2412-2462 MHz						
Channel	**Frequency (MHz)**	**Chain 0 OBW(99%) (MHz)**	**Chain 1 OBW(99%) (MHz)**	**Chain 0 6dB BW (MHz)**	**Chain 1 6dB BW (MHz)**	**6dB limit (kHz)**
Low	2412	17.775	17.674	15.15	15.14	≥500
Mid	2437	18.660	19.781	15.15	15.15	
High	2462	17.714	17.633	15.15	15.15	

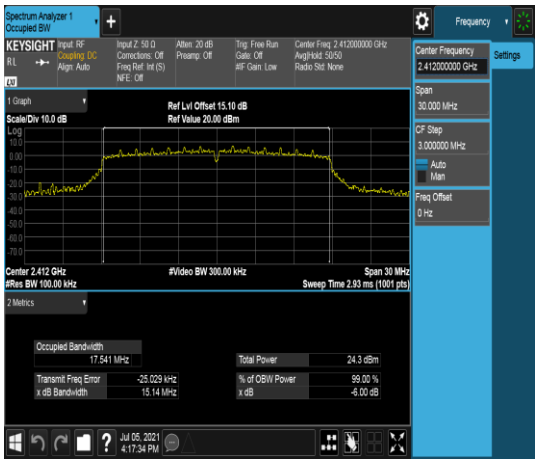
Test Data

6dB BANDWIDTH

IEEE 802.11b mode	
Low CH	**Mid CH**
	
High CH	
	

IEEE 802.11g mode	
Low CH	**Mid CH**
	
High CH	
	

IEEE 802.11n HT20 mode-chain0	
Low CH	**Mid CH**
	
High CH	
	

IEEE 802.11n HT20 mode-chain1	
Low CH	**Mid CH**
	
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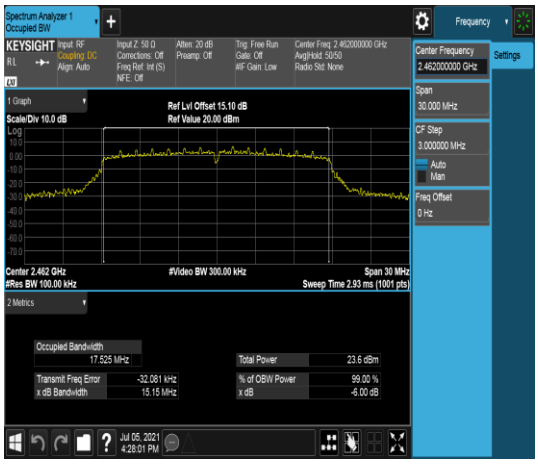
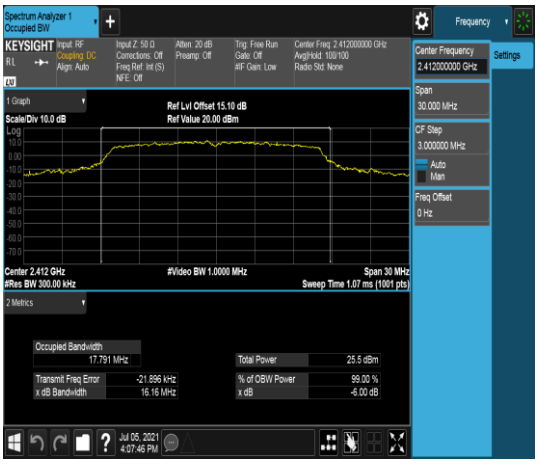
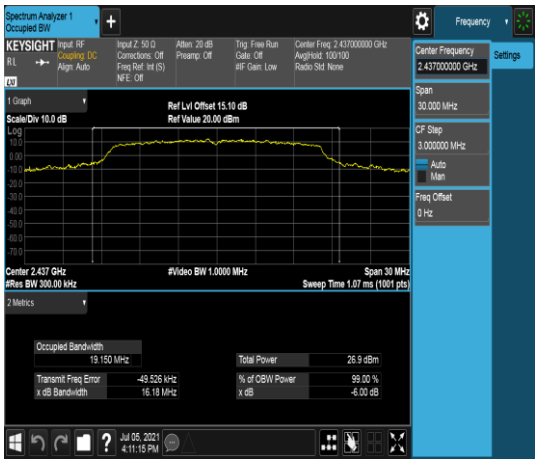
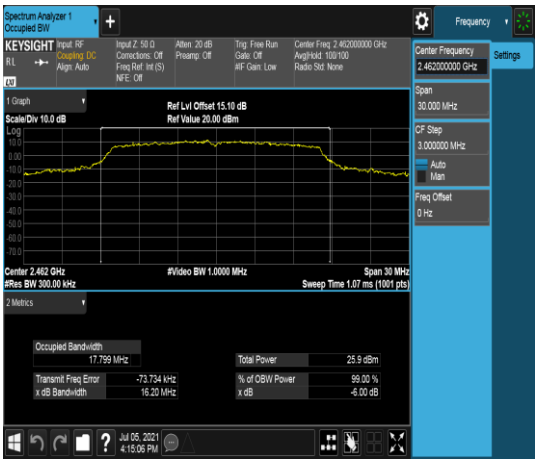
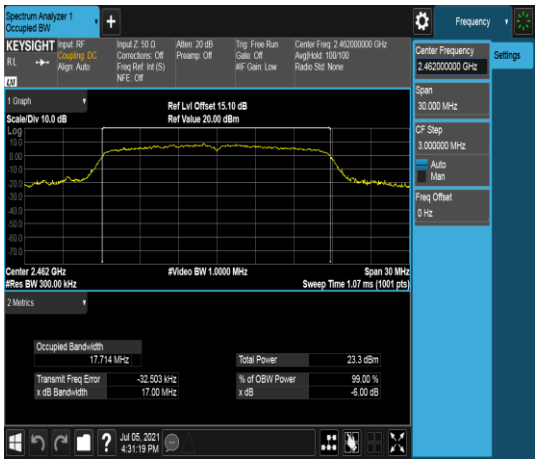
	

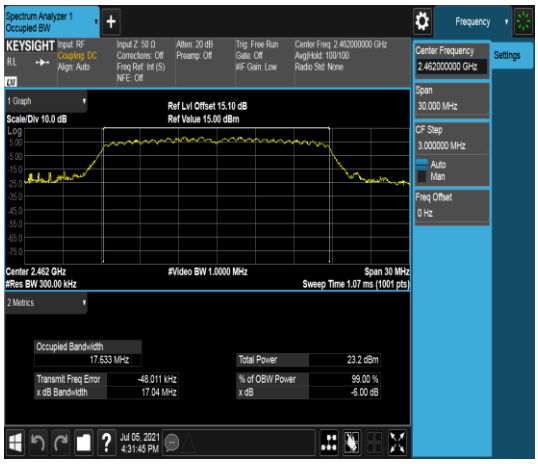
Test Data

BANDWIDTH 99%

IEEE 802.11b mode	
Low CH	**Mid CH**
	
High CH	
	

IEEE 802.11g mode	
Low CH	**Mid CH**
	
High CH	
	

IEEE 802.11n HT20 mode-chain0	
Low CH	**Mid CH**
	
High CH	
	

IEEE 802.11n HT20 mode-chain1	
Low CH	**Mid CH**
	
High CH	
	

5.3 OUTPUT POWER MEASUREMENT

5.3.1 Test Limit

According to §15.247(b) and RSS-247 section 5.4(d),

Peak output power：

FCC:

For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement,

IC:

For systems using digital modulation in the 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt(30 dBm) and the e.i.r.p. shall not exceed 4Watt(36 dBm), base on the use of antennas with directional gain not exceed 6 dBi If transmitting antennas of directional gain greater than 6dBi are used the peak output power the conducted output power from the intentional radiator shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. In case of point-to-point operation, the limit has to be reduced by 1dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi.

For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement,

Limit	☒ Antenna not exceed 6 dBi：30dBm ☐ Antenna with DG greater than 6 dBi： [Limit = 30 – (DG – 6)] ☐ Point-to-point operation：

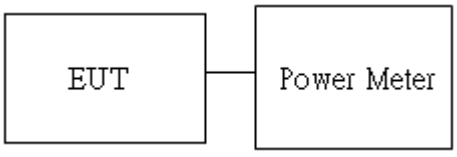
Average output power：For reporting purposes only.

5.3.2 Test Procedure

Test method Refer as ANSI C63.10:2013.

1. The EUT RF output connected to the power meter by RF cable.
2. Setting maximum power transmit of EUT.
3. The path loss was compensated to the results for each measurement.
4. Measure and record the result of Peak output power and Average output power. in the test report.

5.3.3 Test Setup



5.3.4 Test Result

Temperature:	20.5 ~ 25.7℃	**Humidity:**	55% RH
Tested by:	Lance Chen	**Test date:**	July 5 ~ 6, 2021

Peak output power：

802.11b Ch0						
CH	**Freq. (MHz)**	**Data Rate**	**Power set**	**Peak Output Power (dBm)**	**Limit (dBm)**	**RESULT**
1	2412	1	20	23.92	30.00	PASS
6	2437	1	23	**25.09**	30.00	PASS
11	2462	1	19	23.71	30.00	PASS

802.11b Ch1						
CH	**Freq. (MHz)**	**Data Rate**	**Power set**	**Peak Output Power (dBm)**	**Limit (dBm)**	**RESULT**
1	2412	1	19	23.55	30.00	PASS
6	2437	1	21	24.89	30.00	PASS
11	2462	1	19	23.68	30.00	PASS

802.11g Ch0						
CH	**Freq. (MHz)**	**Data Rate**	**Power set**	**Peak Output Power (dBm)**	**Limit (dBm)**	**RESULT**
1	2412	6	19	24.72	30.00	PASS
6	2437	6	23	**24.96**	30.00	PASS
11	2462	6	18	24.67	30.00	PASS

802.11g Ch1						
CH	**Freq. (MHz)**	**Data Rate**	**Power set**	**Peak Output Power (dBm)**	**Limit (dBm)**	**RESULT**
1	2412	6	18	24.34	30.00	PASS
6	2437	6	19	24.69	30.00	PASS
11	2462	6	18	24.35	30.00	PASS

802.11n_HT20M MIMO								
CH	Freq. (MHz)	Data Rate	Power set	Peak Output Power (dBm)		Total Peak Output Power (dBm)	Limit (dBm)	RESULT
				CH 0	CH 1			
1	2412	MCS8	18	24.11	23.50	26.83	30.00	PASS
6	2437	MCS8	23	25.20	24.51	27.88	30.00	PASS
11	2462	MCS8	17	23.74	23.38	26.57	30.00	PASS

Average output power：

802.11b Ch0						
CH	**Freq. (MHz)**	**Data Rate**	**Power set**	**Max. Avg. Output include tune up tolerance Power (dBm)**	**Limit (dBm)**	**RESULT**
1	2412	1	20	22.48	30.00	PASS
6	2437	1	23	**23.98**	30.00	PASS
11	2462	1	19	22.06	30.00	PASS

802.11b Ch1						
CH	**Freq. (MHz)**	**Data Rate**	**Power set**	**Max. Avg. Output include tune up tolerance Power (dBm)**	**Limit (dBm)**	**RESULT**
1	2412	1	19	21.83	30.00	PASS
6	2437	1	21	23.79	30.00	PASS
11	2462	1	19	21.94	30.00	PASS

802.11g Ch0						
CH	**Freq. (MHz)**	**Data Rate**	**Power set**	**Max. Avg. Output include tune up tolerance Power (dBm)**	**Limit (dBm)**	**RESULT**
1	2412	6	19	19.49	30.00	PASS
6	2437	6	23	**20.73**	30.00	PASS
11	2462	6	18	18.82	30.00	PASS

802.11g Ch1						
CH	**Freq. (MHz)**	**Data Rate**	**Power set**	**Max. Avg. Output include tune up tolerance Power (dBm)**	**Limit (dBm)**	**RESULT**
1	2412	6	18	18.92	30.00	PASS
6	2437	6	19	19.75	30.00	PASS
11	2462	6	18	18.75	30.00	PASS

802.11n_HT20M MIMO								
CH	Freq. (MHz)	Data Rate	Power set	Avg. Output Power (dBm)		Max. Avg. Output include tune up tolerance Power (dBm)	Limit (dBm)	RESULT
				CH 0	CH 1			
1	2412	MCS8	18	17.12	16.98	20.66	30.00	PASS
6	2437	MCS8	23	21.13	19.94	24.18	30.00	PASS
11	2462	MCS8	17	16.28	16.25	19.87	30.00	PASS

EIRP power：

802.11b Ch0							
CH	**Freq. (MHz)**	**Data Rate**	**Avg. Output Power (dBm)**	**Antenna Gain (dBi)**	**EIRP (dBm)**	**Limit (dBm)**	**RESULT**
1	2412	1	22.48	1.00	23.48	36	PASS
6	2437	1	23.98	1.00	**24.98**	36	PASS
11	2462	1	22.06	1.00	23.06	36	PASS

802.11b Ch1							
CH	**Freq. (MHz)**	**Data Rate**	**Avg. Output Power (dBm)**	**Antenna Gain (dBi)**	**EIRP (dBm)**	**Limit (dBm)**	**RESULT**
1	2412	1	21.83	1.00	22.83	36	PASS
6	2437	1	23.79	1.00	24.79	36	PASS
11	2462	1	21.94	1.00	22.94	36	PASS

802.11g Ch0							
CH	**Freq. (MHz)**	**Data Rate**	**Avg. Output Power (dBm)**	**Antenna Gain (dBi)**	**EIRP (dBm)**	**Limit (dBm)**	**RESULT**
1	2412	6	19.49	1.00	20.49	36	PASS
6	2437	6	20.73	1.00	**21.73**	36	PASS
11	2462	6	18.82	1.00	19.82	36	PASS

802.11g Ch1							
CH	**Freq. (MHz)**	**Data Rate**	**Avg. Output Power (dBm)**	**Antenna Gain (dBi)**	**EIRP (dBm)**	**Limit (dBm)**	**RESULT**
1	2412	6	18.92	1.00	19.92	36	PASS
6	2437	6	19.75	1.00	20.75	36	PASS
11	2462	6	18.75	1.00	19.75	36	PASS

802.11n_HT20M MIMO									
CH	Freq. (MHz)	Data Rate	Avg. Output Power (dBm)		Total Avg. Output Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	RESULT
			CH 0	CH 1					
1	2412	MCS8	24.11	23.50	20.66	4.01	24.67	36	PASS
6	2437	MCS8	25.20	24.51	24.18	4.01	28.19	36	PASS
11	2462	MCS8	23.74	23.38	19.87	4.01	23.88	36	PASS

5.4 POWER SPECTRAL DENSITY

5.4.1 Test Limit

According to §15.247(e) and RSS-247 section 5.2(b),

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

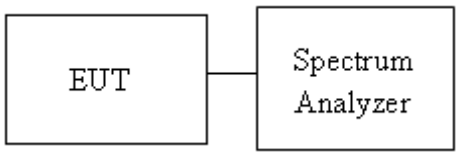
Limit	☒ Antenna not exceed 6 dBi：8dBm ☐ Antenna with DG greater than 6 dBi： [Limit = 8 – (DG – 6)] ☐ Point-to-point operation：

5.4.2 Test Procedure

Test method Refer as ANSI C63.10:2013

1. The EUT RF output connected to the spectrum analyzer by RF cable.
2. Setting maximum power transmit of EUT
3. SA set RBW = 3kHz, VBW = 10kHz, Span = 1.5 times DTS Bandwidth (6 dB BW), Detector = Peak, Sweep Time = Auto and Trace = Max hold.
4. The path loss and Duty Factor were compensated to the results for each measurement by SA.
5. Mark the maximum level.
6. Measure and record the result of power spectral density. in the test report.

5.4.3 Test Setup



5.4.4 Test Result

Temperature:	20.5 ~ 25.7℃	**Humidity:**	55% RH
Tested by:	Lance Chen	**Test date:**	July 5 ~ 6, 2021

POWER DENSITY 802.11b				
Freq. (MHz)	Ch0 PSD	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
2412	-3.71	-3.71	8.00	PASS
2437	-3.46	-3.46	8.00	PASS
2462	-0.46	-0.46	8.00	PASS

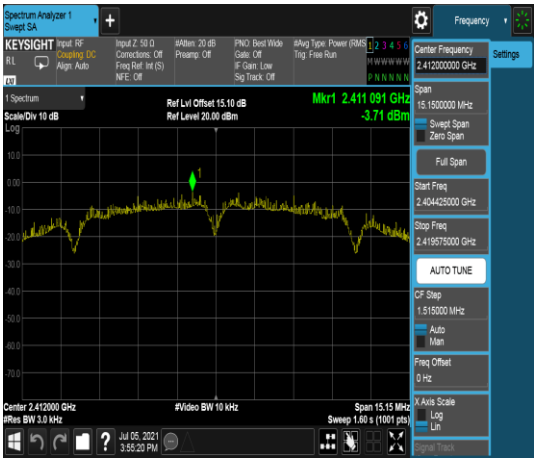
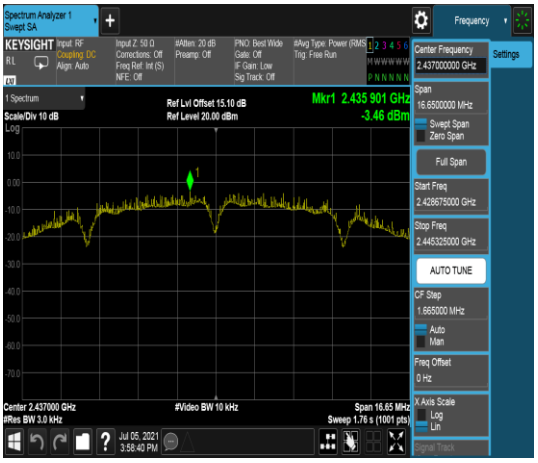
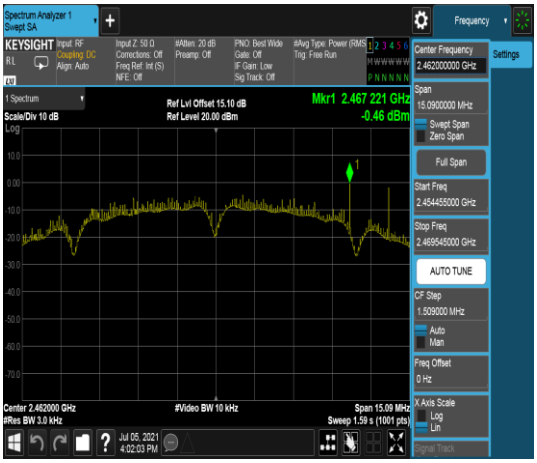
Remark: Due to the same characteristics, select a port for record.

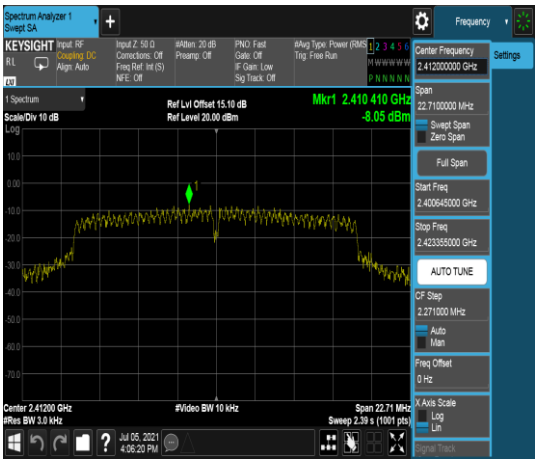
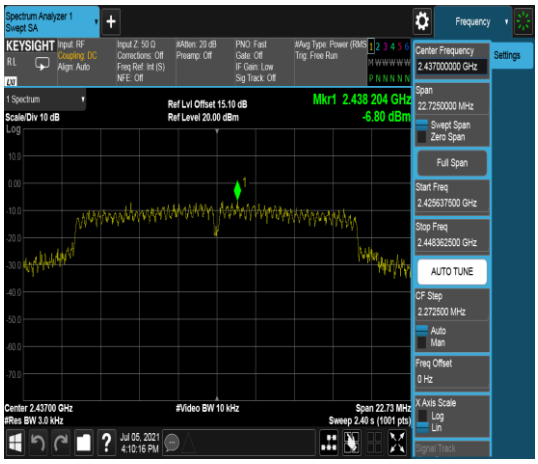
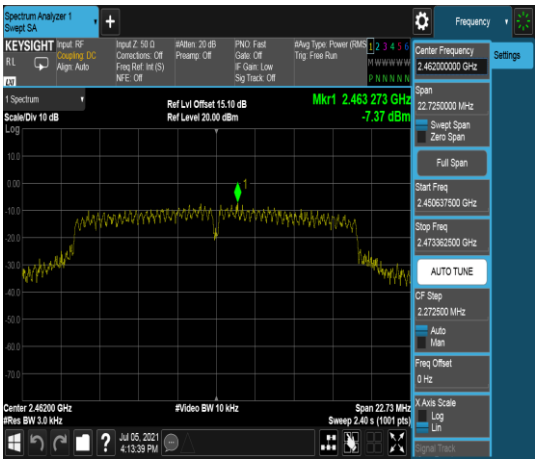
POWER DENSITY 802.11g				
Freq. (MHz)	Ch0 PSD	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
2412	-8.05	-8.05	8.00	PASS
2437	-6.8	-6.80	8.00	PASS
2462	-7.37	-7.37	8.00	PASS

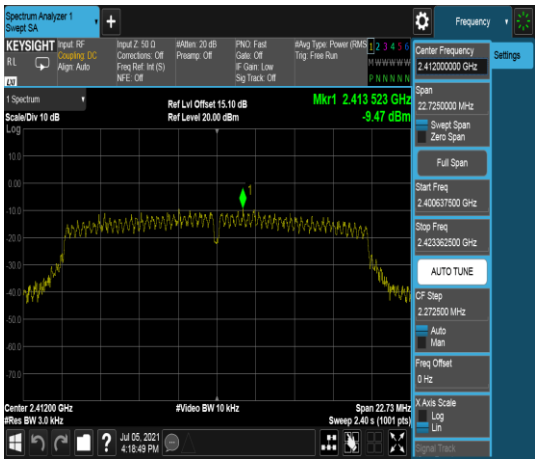
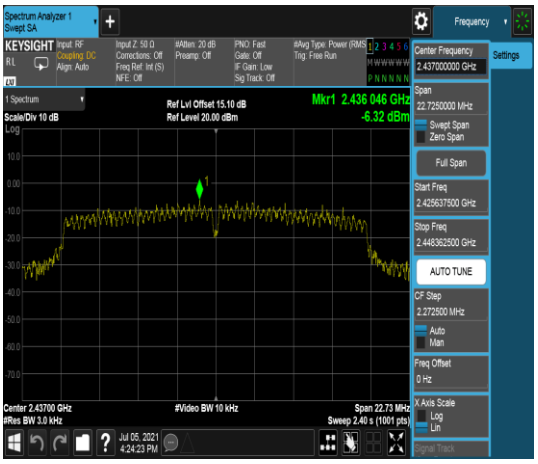
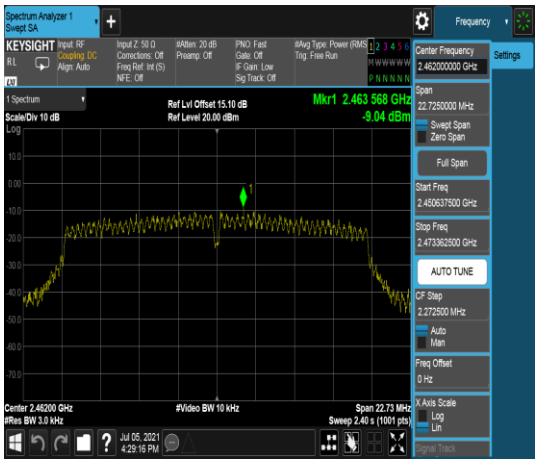
Remark: Due to the same characteristics, select a port for record.

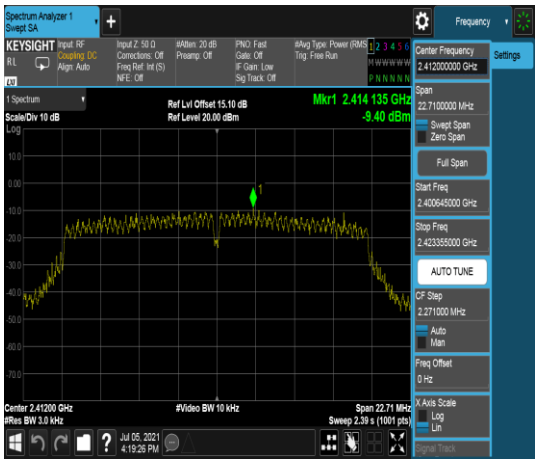
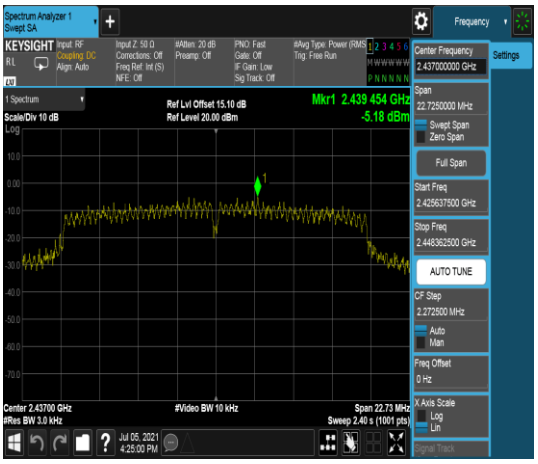
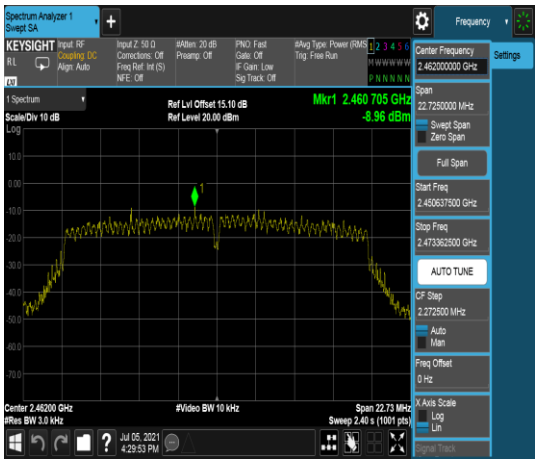
POWER DENSITY 802.11n HT20					
Freq. (MHz)	Ch0 PSD	Ch1 PSD	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
2412	-9.47	-9.4	-6.42	8.00	PASS
2437	-6.32	-5.18	-2.70	8.00	PASS
2462	-9.04	-8.96	-5.99	8.00	PASS

Test Data

IEEE 802.11b mode- chain 0	
Low CH	**Mid CH**
	
High CH	
	

IEEE 802.11g mode- chain 0	
Low CH	**Mid CH**
	
High CH	
	

IEEE 802.11n HT20 mode- chain 0	
Low CH	**Mid CH**
	
High CH	
	

IEEE 802.11n HT20 mode- chain 1	
Low CH	**Mid CH**
	
High CH	
	

5.5 CONDUCTED BANDEDGE AND SPURIOUS EMISSION

5.5.1 Test Limit

According to §15.247(d) and RSS-247 section 5.5,

FCC:

In any 100 kHz bandwidth outside the authorized frequency band,

Non-restricted bands shall be attenuated at least 20 dB/30 dB relative to the maximum PSD level in 100 kHz by RF conducted or a radiated measurement which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a).

IC:

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, aspermitted 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.

5.5.2 Test Procedure

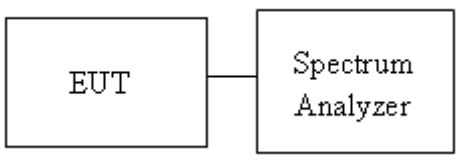
Test method Refer as ANSI C63.10:2013.

1. EUT RF output port connected to the SA by RF cable, and the path loss was compensated to result.

2. SA setting, RBW=100kHz, VBW=300kHz, Detector=Peak, Trace mode = max hold, SWT = Auto.

3. In any 100 kHz bandwidth outside the authorized frequency band, shall be attenuated at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz when conducted power procedure is used. f the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

5.5.3 Test Setup

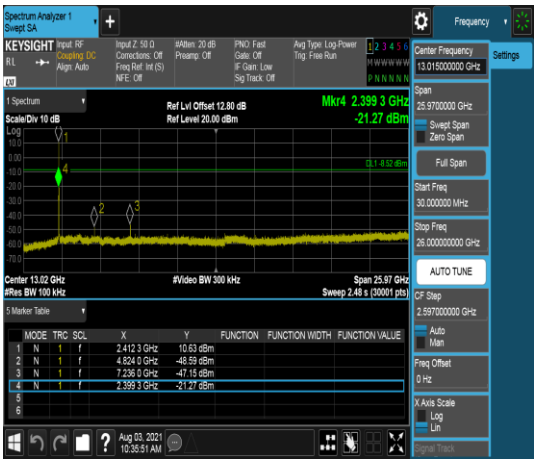


5.5.4 Test Result

Test Data

Temperature:	20.5 ~ 25.7℃	**Humidity:**	55% RH
Tested by:	Lance Chen	**Test date:**	July 5 ~ 6, 2021
Temperature:	26.3℃	**Humidity:**	57% RH
Tested by:	Lance Chen	**Test date:**	August 3, 2021

Chain 0:

<table>
<tr><th colspan="2">IEEE 802.11b mode Low CH chain 0</th></tr>
<tr><th>Reference Level of PSD in 100kHz</th><th>Band Edge</th></tr>
<tr><td> 
</td><td> 
</td></tr>
<tr><th colspan="2">Spurious Emission 30MHz-25GHz</th></tr>
<tr><td colspan="2"> 
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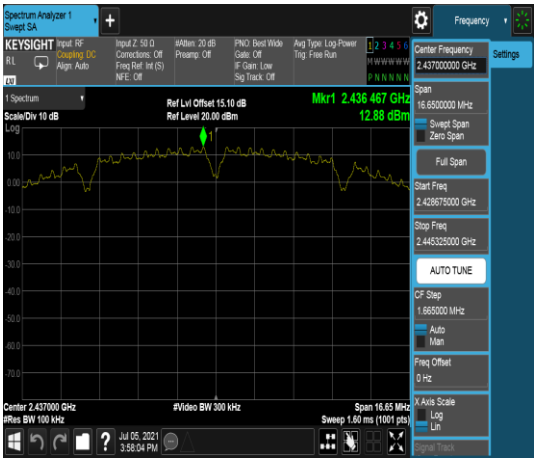
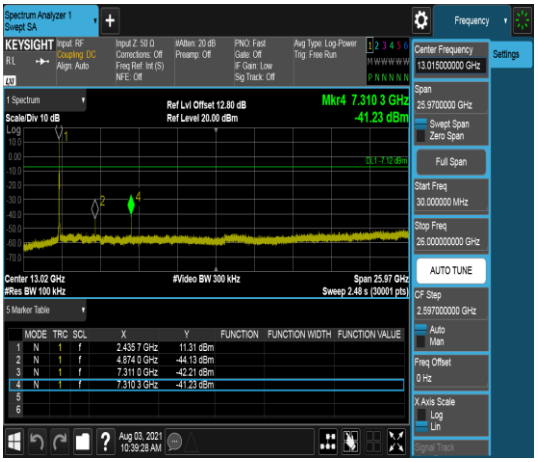
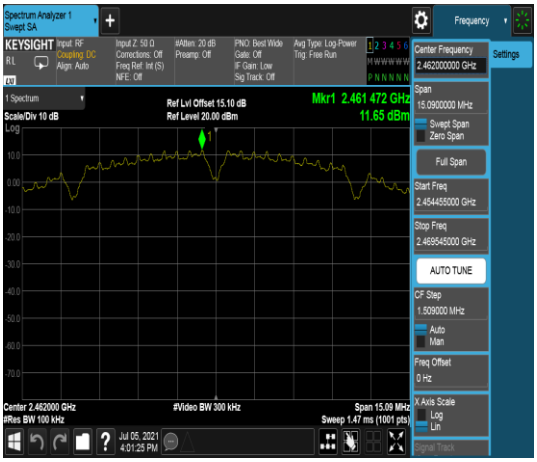
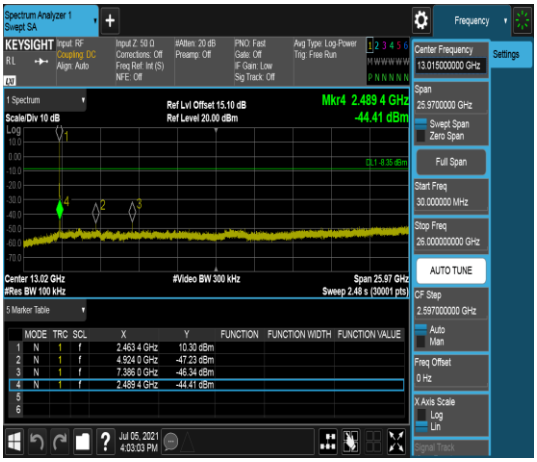
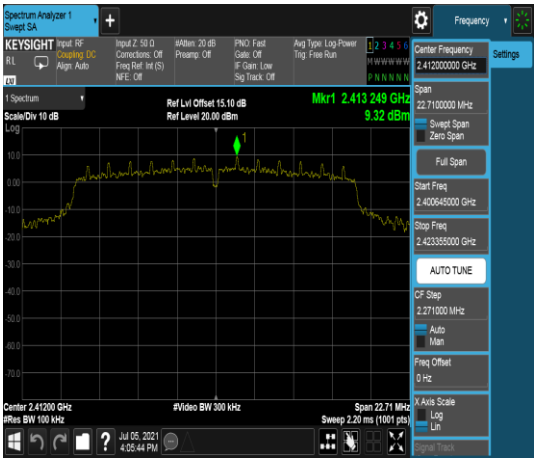
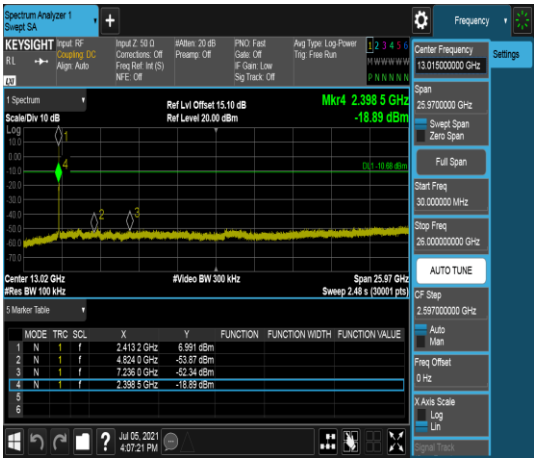
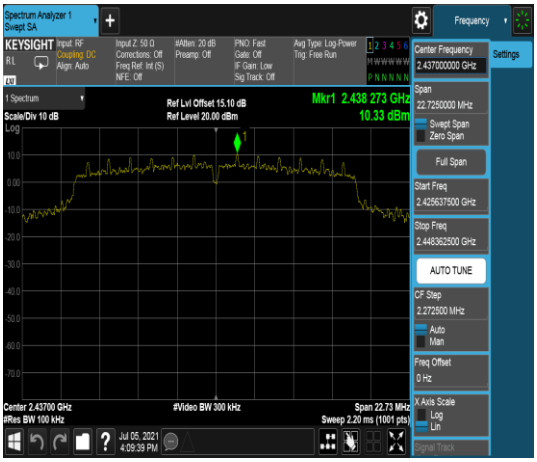
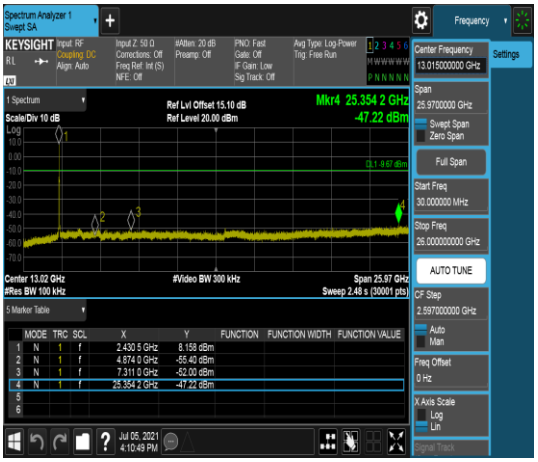
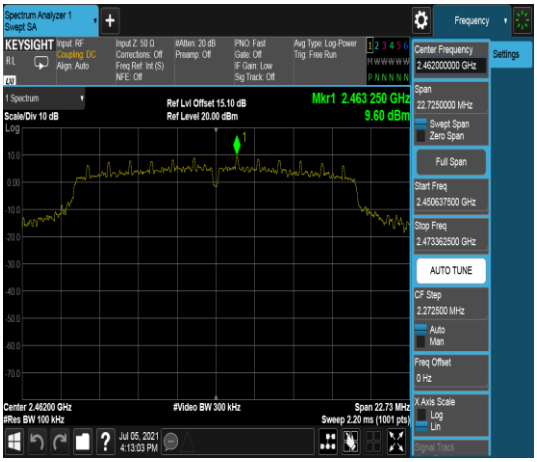
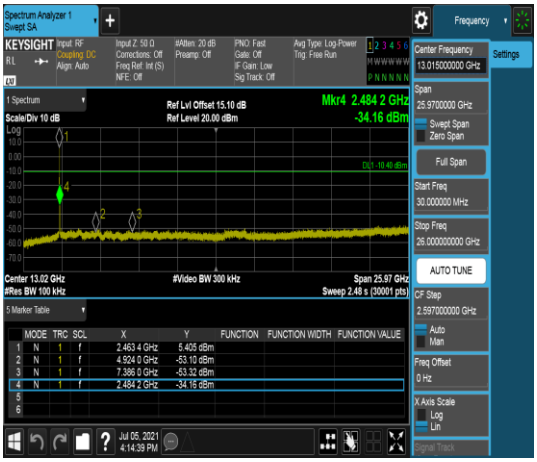
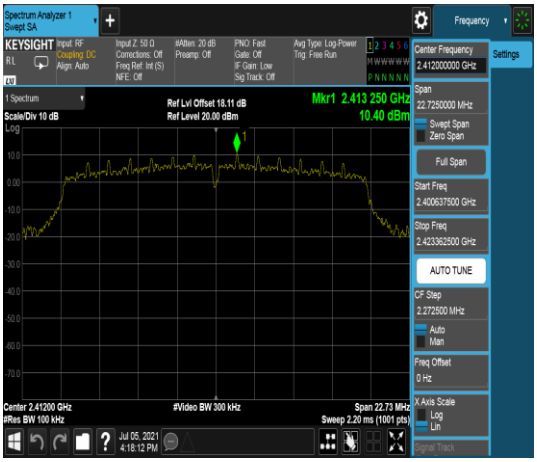
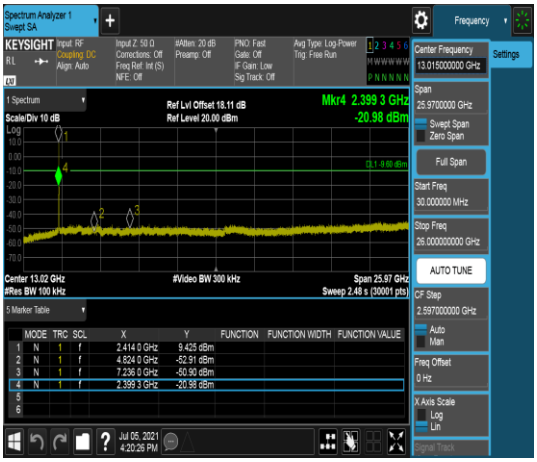
IEEE 802.11b mode Mid CH chain 0	
Reference Level of PSD in 100kHz	**Spurious Emission 30MHz-25GHz**
	

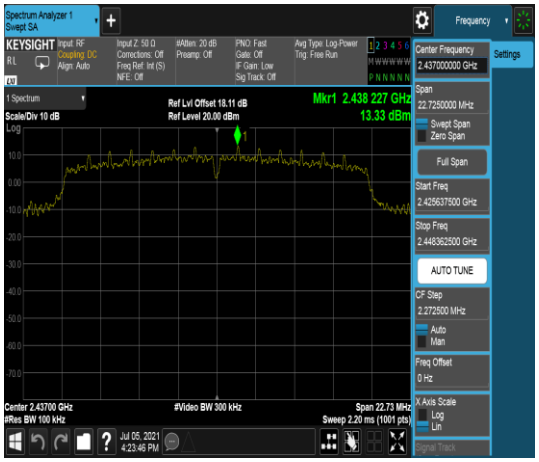
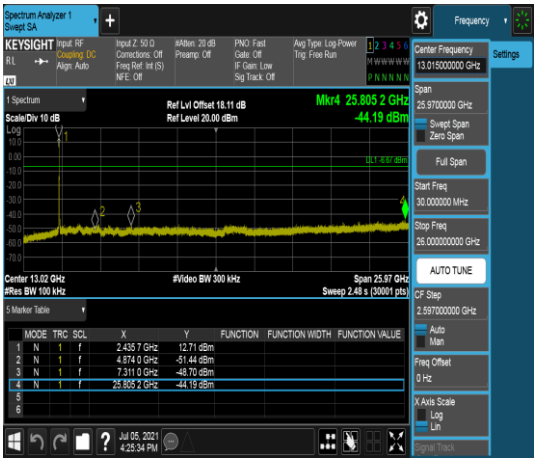
IEEE 802.11b mode High CH chain 0	
Reference Level of PSD in 100kHz	**Band Edge**
	
Spurious Emission 30MHz-25GHz	
	

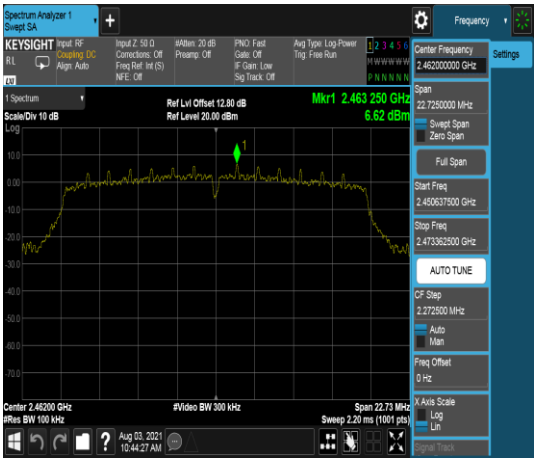
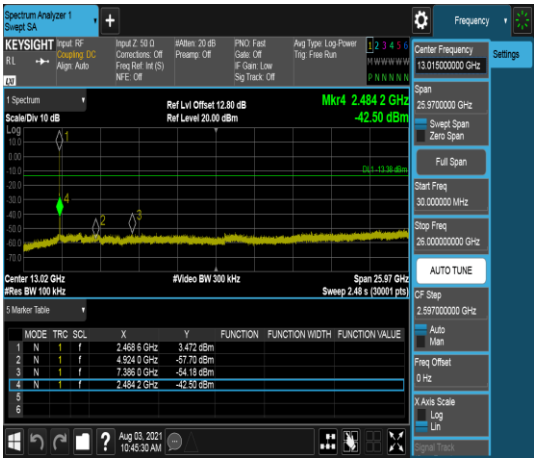
IEEE 802.11g mode Low CH chain 0	
Reference Level of PSD in 100kHz	**Band Edge**
	
Spurious Emission 30MHz-25GHz	
	

IEEE 802.11g mode Mid CH chain 0	
Reference Level of PSD in 100kHz	**Spurious Emission 30MHz-25GHz**
	

IEEE 802.11g mode High CH chain 0	
Reference Level of PSD in 100kHz	**Band Edge**
	
Spurious Emission 30MHz-25GHz	
	

IEEE 802.11 n HT20 mode Low CH chain 0	
Reference Level of PSD in 100kHz	**Band Edge**
	
Spurious Emission 30MHz-25GHz	
	

IEEE 802.11 n HT20 mode Mid CH chain 0	
Reference Level of PSD in 100kHz	**Spurious Emission 30MHz-25GHz**
	

IEEE 802.11n HT20 mode High CH chain 0	
Reference Level of PSD in 100kHz	**Band Edge**
	
Spurious Emission 30MHz-25GHz	
	

5.6 RADIATION BANDEDGE AND SPURIOUS EMISSION

5.6.1 Test Limit

FCC according to §15.247(d), §15.209 and §15.205,

IC according to RSS-247 section 5.5, RSS-Gen, Section 8.9 and 8.10

In any 100 kHz bandwidth outside the authorized frequency band, all harmonic and spurious must be least 20 dB below the highest emission level with the authorized frequency band. Radiation emission which fall in the restricted bands must also follow the FCC section 15.209 as below limit in table.

Below 30 MHz

Frequency	Field Strength (microvolts/m)	Magnetic H-Field (microamperes/m)	Measurement Distance (metres)
9-490 kHz	2,400/F (F in kHz)	2,400/F (F in kHz)	300
490-1,705 kHz	24,000/F (F in kHz)	24,000/F (F in kHz)	30
1.705-30 MHz	30	N/A	30

Above 30 MHz

Frequency	Field Strength (microvolts/m)	Measurement Distance (metres)
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Remark:
Although these tests were performed other than open area test site, adequate comparison measurements were confirmed against 30 m open are test site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field based on KDB 414788.

IC according to RSS-247 section 5.5, RSS-Gen, Section 8.9 and 8.10

RSS-Gen Table 3 and Table 5 – General Field Strength Limits for Transmitters and Receivers at Frequencies Above 30 MHz (Note)

Frequency (MHz)	Field Strength microvolts/m at 3 metres (watts, e.i.r.p.)	
	Transmitters	Receivers
30-88	100 (3 nW)	100 (3 nW)
88-216	150 (6.8 nW)	150 (6.8 nW)
216-960	200 (12 nW)	200 (12 nW)
Above 960	500 (75 nW)	500 (75 nW)

Note: Measurements for compliance with the limits in table 3 may be performed at distances other than 3 metres, in accordance with Section 6.6.

RSS-Gen Table 6: General Field Strength Limits for Transmitters at Frequencies Below 30 MHz (Transmit)

Frequency	Magnetic field strength (H-Field) (μA/m)	Measurement Distance (m)
9-490 kHz Note	6.37/F (F in kHz)	300
490-1,705 kHz	63.7/F (F in kHz)	30
1.705-30 MHz	0.08	30

Note: The emission limits for the ranges 9-90 kHz and 110-490 kHz are based on measurements employing a linear average detector.

5.6.2 Test Procedure

Test method Refer as ANSI C63.10:2013.

1. The EUT is placed on a turntable, Above 1 GHz is 1.5m and below 1 GHz is 0.8m above ground plane. The EUT Configured un accordance with ANSI C63.10: 2013, and the EUT set in a continuous mode.

2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level. And EUT is set 3m away from the receiving antenna, which is scanned from 1m to 4m above the ground plane to find out the highest emissions. Measurement are made polarized in both the vertical and the horizontal positions with antenna.

3. Span shall wide enough to full capture the emission measured. The SA from 9kHz to 26.5GHz set to the low, Mid and High channels with the EUT transmit.

Note: No emission found between lowest internal used/generated frequency to 30MHz (9KHz~30MHz)

Remark:

Although these tests were performed other than open area test site, adequate comparison measurements were confirmed against 30 m open are test site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field based on KDB 414788.

4. The SA setting following：

(1) Below 1G：RBW = 100kHz, VBW ≥ 3 RBW, Sweep = Auto, Detector = Peak, Trace = Max hold.

(2) Above 1G：

(2.1) For Peak measurement：RBW = 1MHz, VBW ≥ 3 RBW, Sweep = Auto, Detector = Peak, Trace = Max hold.

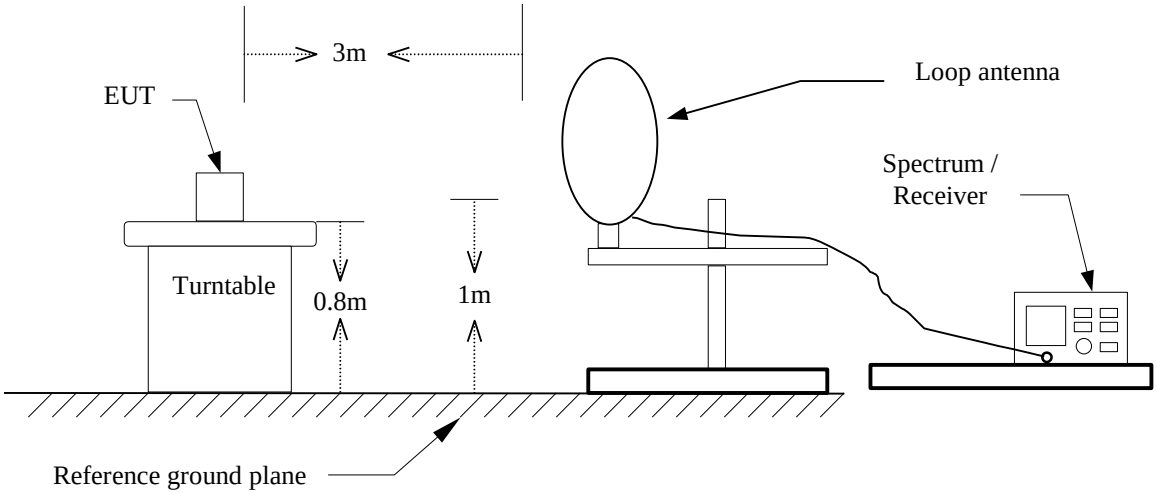
(2.2) For Average measurement：RBW = 1MHz, VBW

˙If Duty Cycle ≥ 98%, VBW=10Hz.

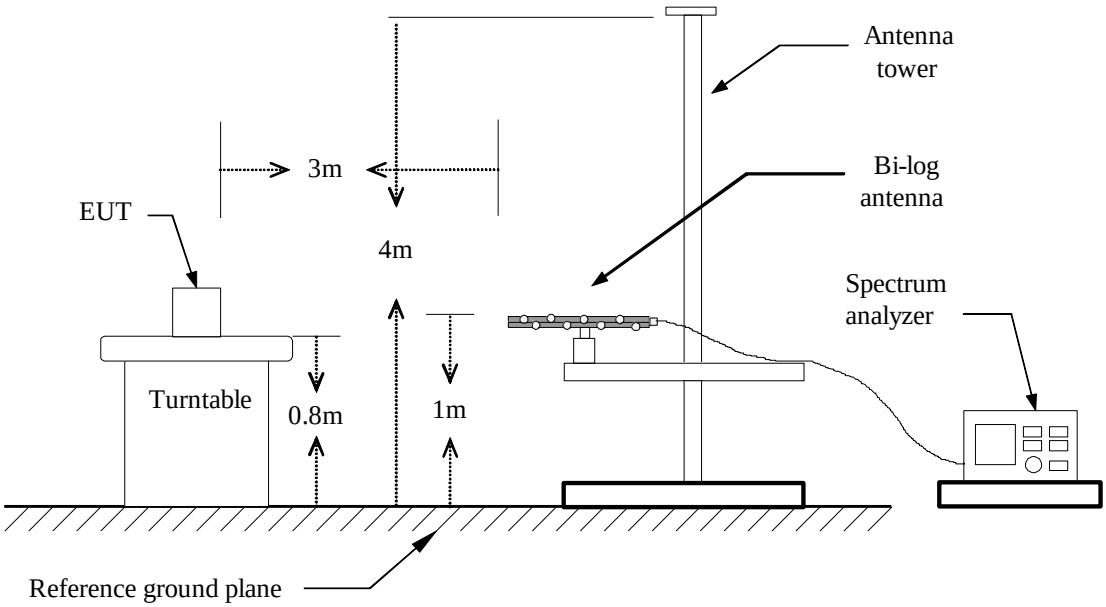
˙If Duty Cycle < 98%, VBW=1/T.

5.6.3 Test Setup

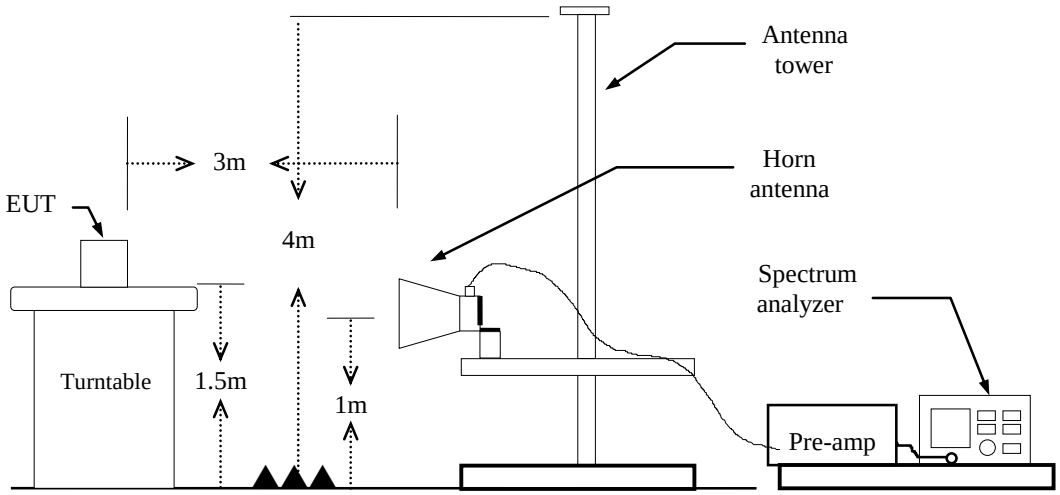
9kHz ~ 30MHz



30MHz ~ 1GHz



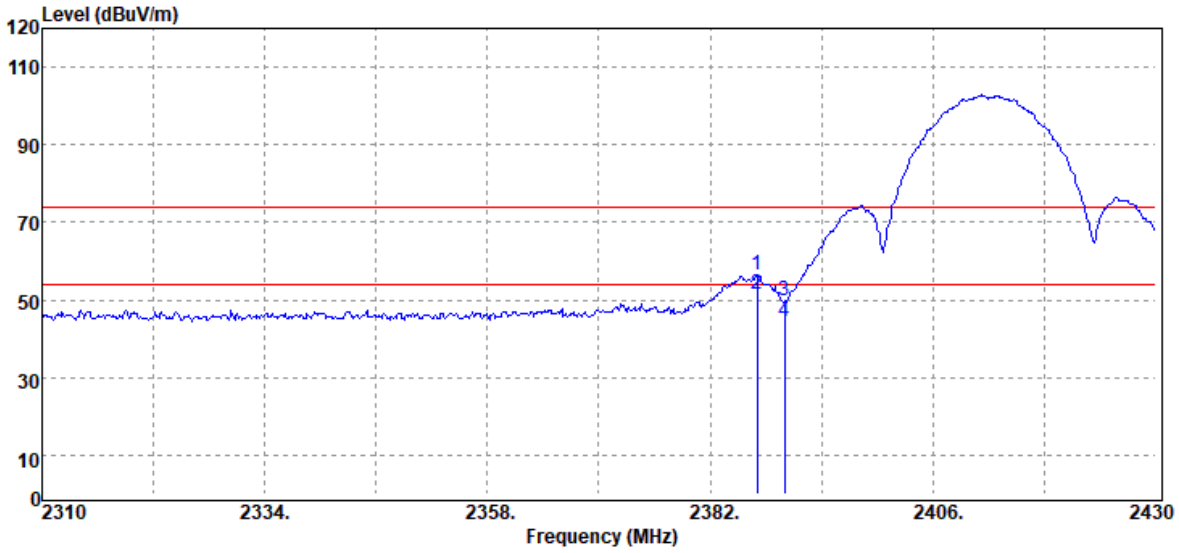
Above 1 GHz



5.6.4 Test Result

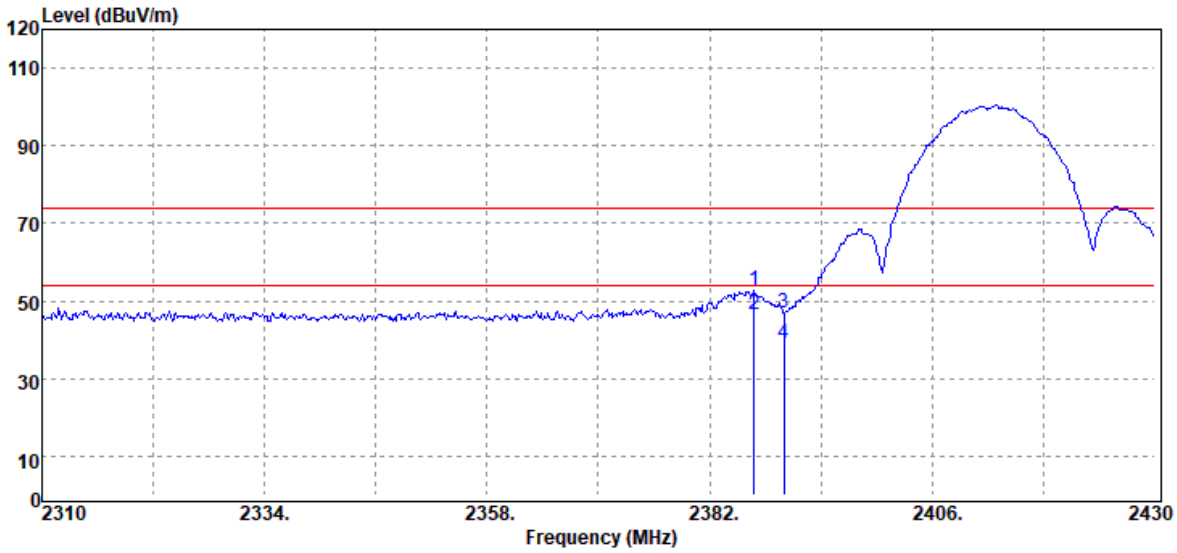
Band Edge Test Data

Test Mode	IEEE 802.11b Low CH 2412MHz	Temp/Hum	23(℃)/ 63%RH
Test Item	Band Edge	Test Date	June 22, 2021
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak / Average		



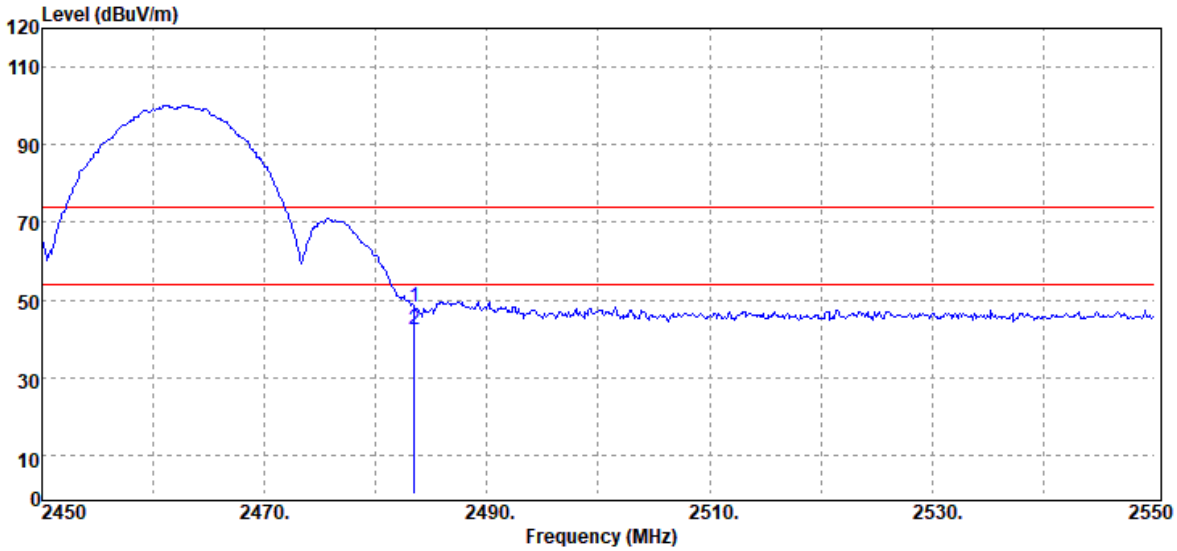
Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
2387.04	Peak	57.39	-1.00	56.39	74.00	-17.61
2387.04	Average	52.65	-1.00	51.65	54.00	-2.35
2390.00	Peak	50.71	-1.00	49.71	74.00	-24.29
2390.00	Average	45.52	-1.00	44.52	54.00	-9.48

Test Mode	IEEE 802.11b Low CH 2412MHz	Temp/Hum	23(℃)/ 63%RH
Test Item	Band Edge	Test Date	June 22, 2021
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak / Average		



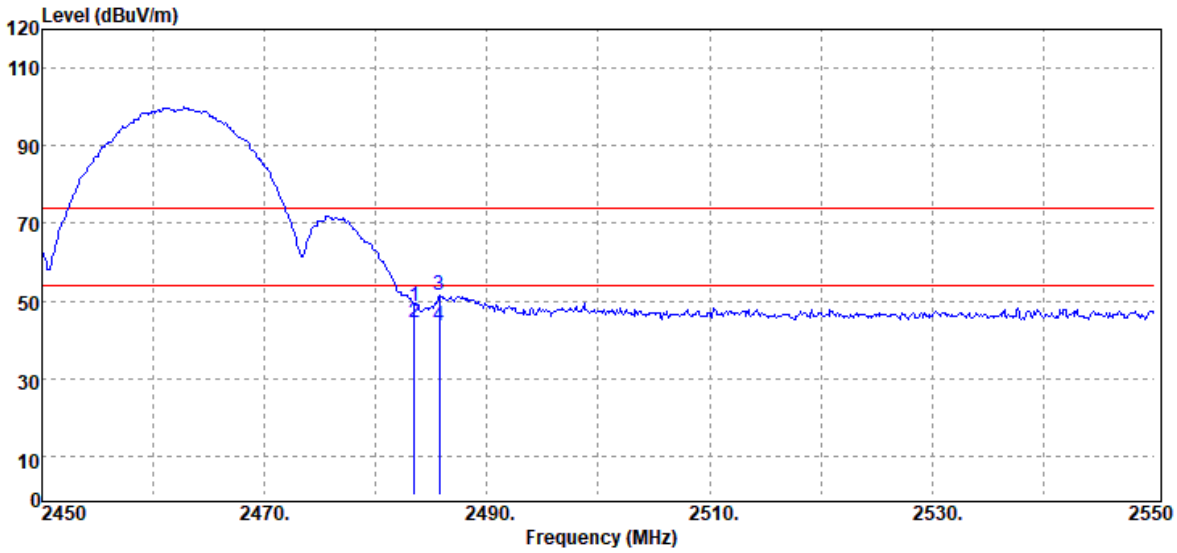
Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
2386.80	Peak	53.60	-1.00	52.60	74.00	-21.40
2386.80	Average	47.65	-1.00	46.65	54.00	-7.35
2390.00	Peak	47.83	-1.00	46.83	74.00	-27.17
2390.00	Average	40.15	-1.00	39.15	54.00	-14.85

Test Mode	IEEE 802.11b High CH 2462MHz	Temp/Hum	23(℃)/ 63%RH
Test Item	Band Edge	Test Date	June 22, 2021
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak / Average		



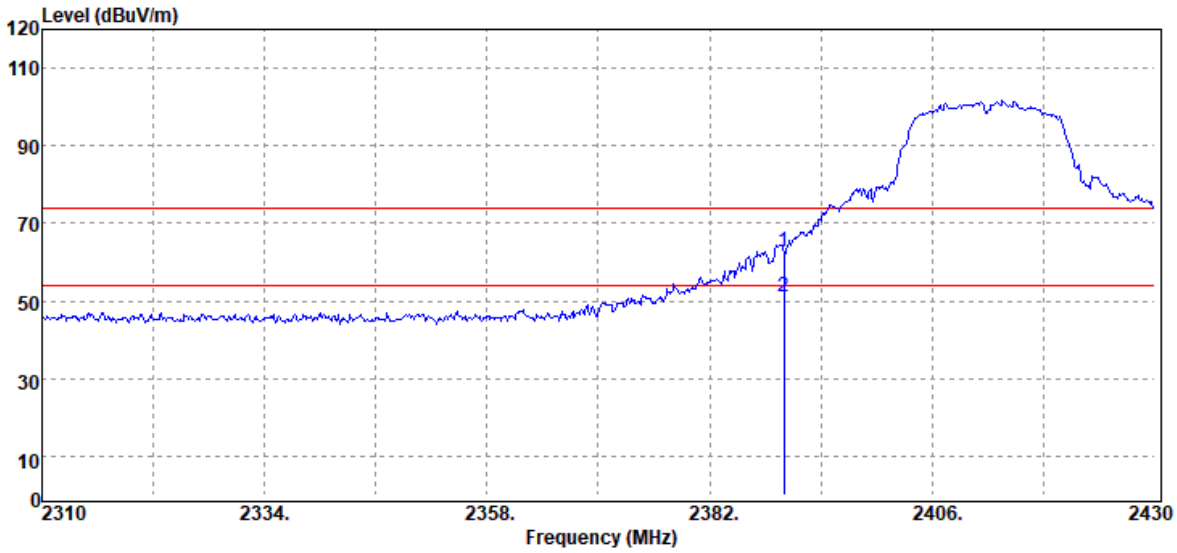
Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
2483.50	Peak	48.78	-0.66	48.12	74.00	-25.88
2483.50	Average	42.89	-0.66	42.23	54.00	-11.77

Test Mode	IEEE 802.11b High CH 2462MHz	Temp/Hum	23(℃)/ 63%RH
Test Item	Band Edge	Test Date	June 22, 2021
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak / Average		



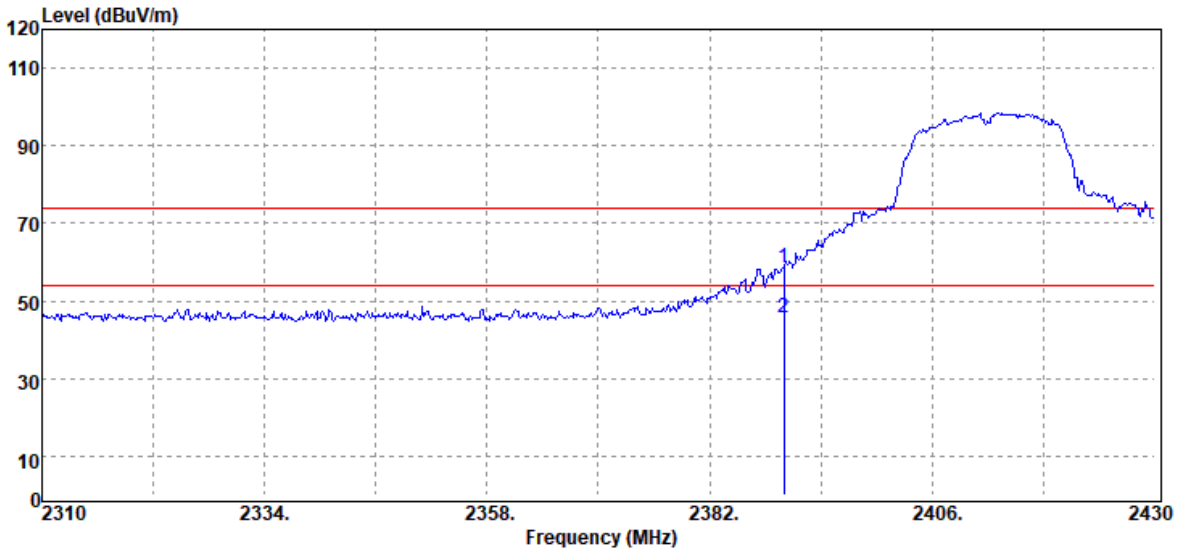
Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
2483.50	Peak	49.33	-0.66	48.67	74.00	-25.33
2483.50	Average	44.91	-0.66	44.25	54.00	-9.75
2485.70	Peak	52.04	-0.65	51.39	74.00	-22.61
2485.70	Average	44.40	-0.65	43.75	54.00	-10.25

Test Mode	IEEE 802.11g Low CH 2412MHz	Temp/Hum	23(℃)/ 63%RH
Test Item	Band Edge	Test Date	June 22, 2021
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak / Average		



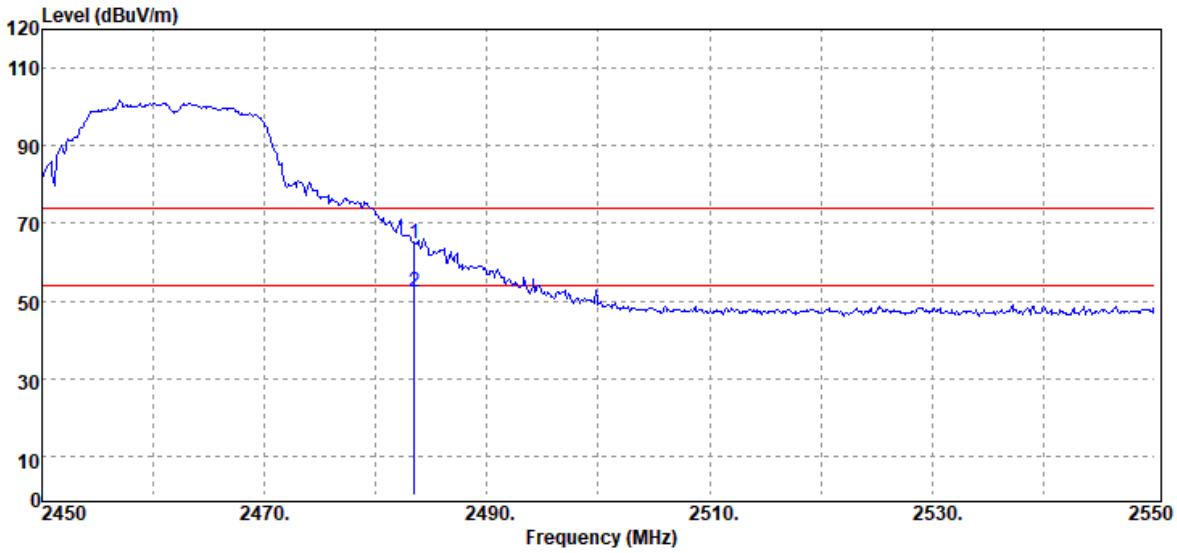
Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
2390.00	Peak	63.89	-1.00	62.89	74.00	-11.11
2390.00	Average	52.13	-1.00	51.13	54.00	-2.87

Test Mode	IEEE 802.11g Low CH 2412MHz	Temp/Hum	23(℃)/ 63%RH
Test Item	Band Edge	Test Date	June 22, 2021
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak / Average		



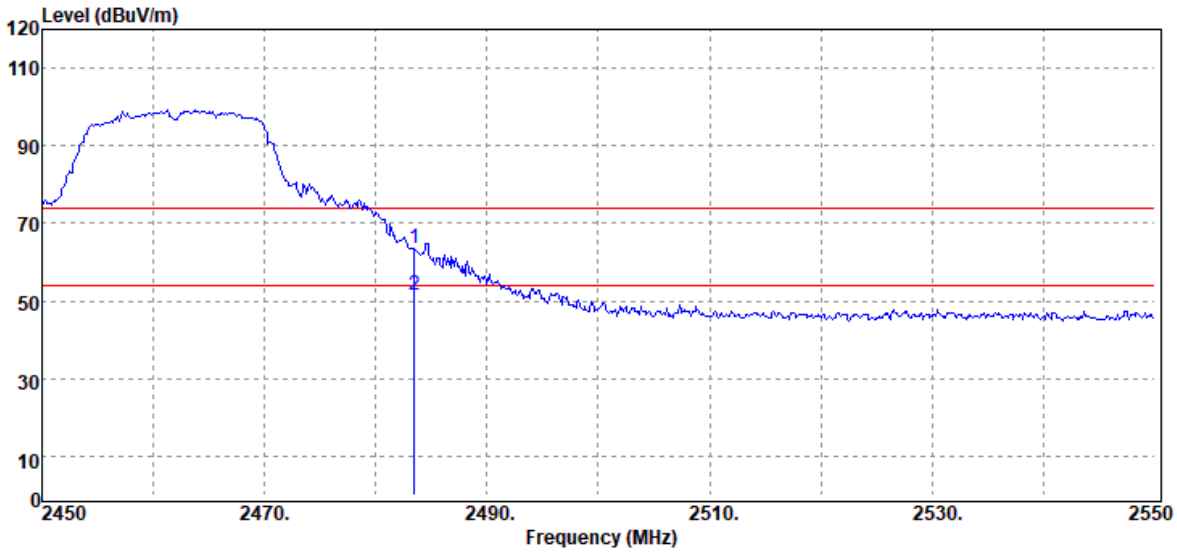
Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
2390.00	Peak	59.42	-1.00	58.42	74.00	-15.58
2390.00	Average	46.49	-1.00	45.49	54.00	-8.51

Test Mode	IEEE 802.11g High CH 2462MHz	Temp/Hum	23(℃)/ 63%RH
Test Item	Band Edge	Test Date	June 22, 2021
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak / Average		



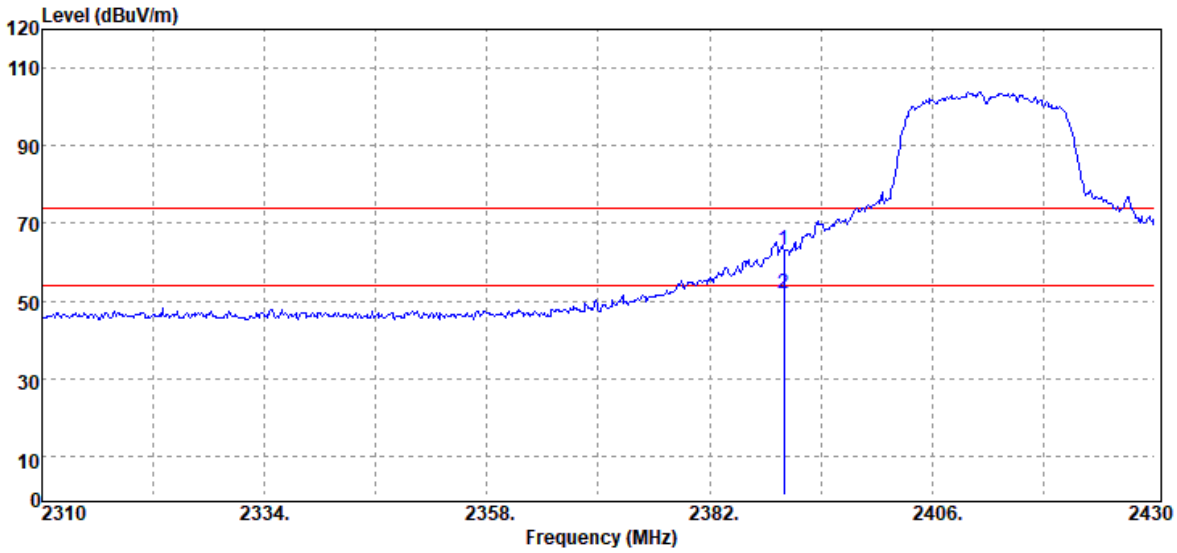
Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
2483.50	Peak	65.61	-0.66	64.95	74.00	-9.05
2483.50	Average	53.05	-0.66	52.39	54.00	-1.61

Test Mode	IEEE 802.11g High CH 2462MHz	Temp/Hum	23(℃)/ 63%RH
Test Item	Band Edge	Test Date	June 22, 2021
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak / Average		



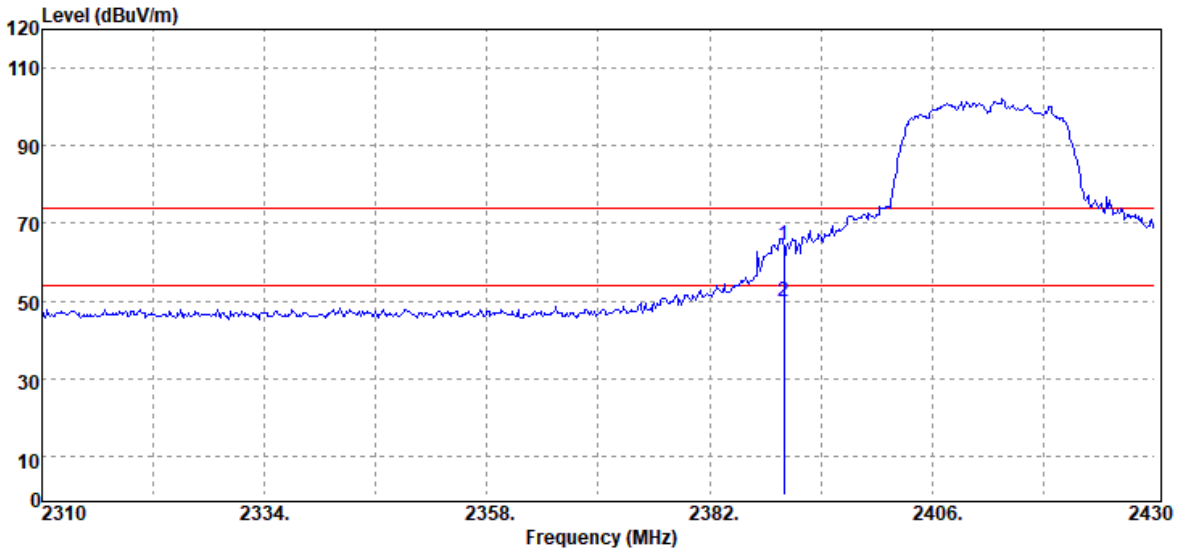
Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
2483.50	Peak	64.10	-0.66	63.44	74.00	-10.56
2483.50	Average	51.98	-0.66	51.32	54.00	-2.68

Test Mode	IEEE 802.11n HT20 Low CH 2412MHz	Temp/Hum	23(℃)/ 63%RH
Test Item	Band Edge	Test Date	June 22, 2021
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak / Average		



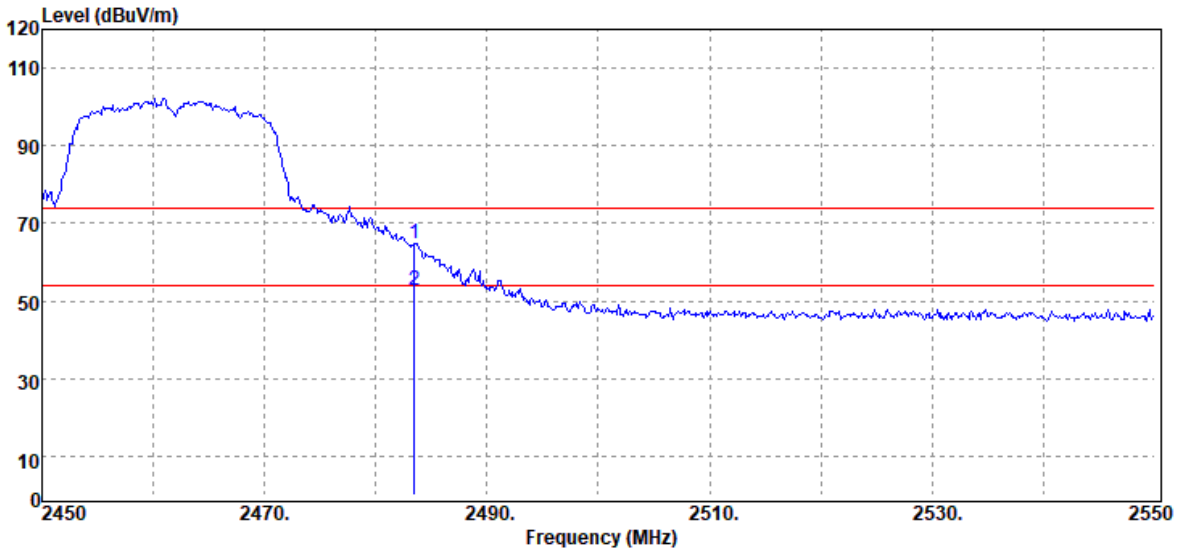
Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
2390.00	Peak	64.03	-1.00	63.03	74.00	-10.97
2390.00	Average	53.03	-1.00	52.03	54.00	-1.97

Test Mode	IEEE 802.11 n20 Low CH 2412MHz	Temp/Hum	23(℃)/ 63%RH
Test Item	Band Edge	Test Date	June 22, 2021
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak / Average		



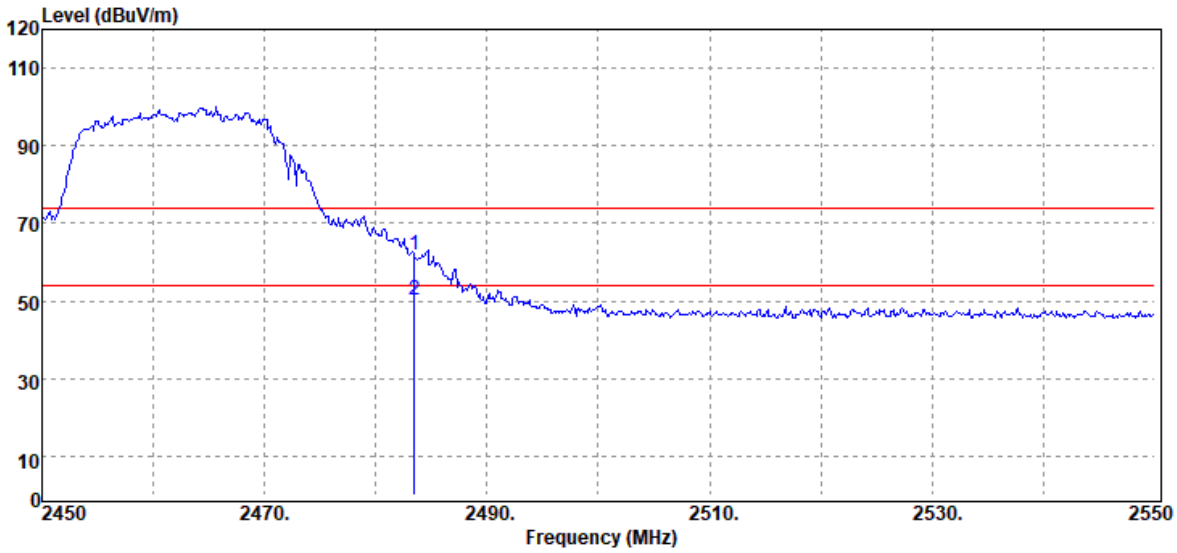
Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
2390.00	Peak	65.24	-1.00	64.24	74.00	-9.76
2390.00	Average	50.66	-1.00	49.66	54.00	-4.34

Test Mode	IEEE 802.11n HT20 High CH 2462MHz	Temp/Hum	23(℃)/ 63%RH
Test Item	Band Edge	Test Date	June 22, 2021
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak / Average		



Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
2483.50	Peak	65.63	-0.66	64.97	74.00	-9.03
2483.50	Average	53.40	-0.66	52.74	54.00	-1.26

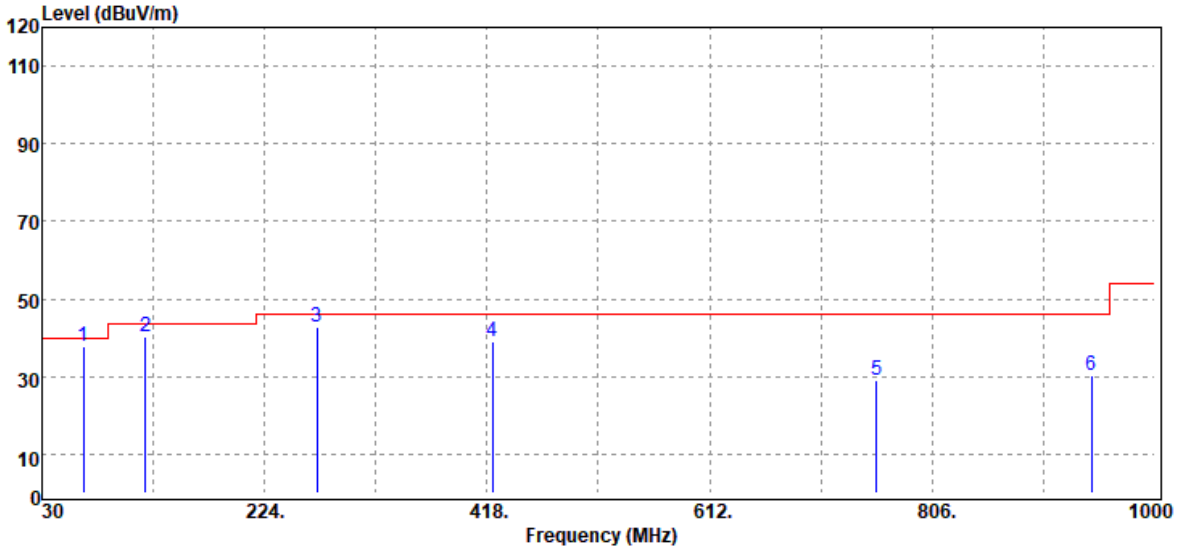
Test Mode	IEEE 802.11n20 High CH 2462MHz	Temp/Hum	23(℃)/ 63%RH
Test Item	Band Edge	Test Date	June 22, 2021
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak / Average		



Frequency (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
2483.50	Peak	62.54	-0.66	61.88	74.00	-12.12
2483.50	Average	50.73	-0.66	50.07	54.00	-3.93

Below 1G Test Data

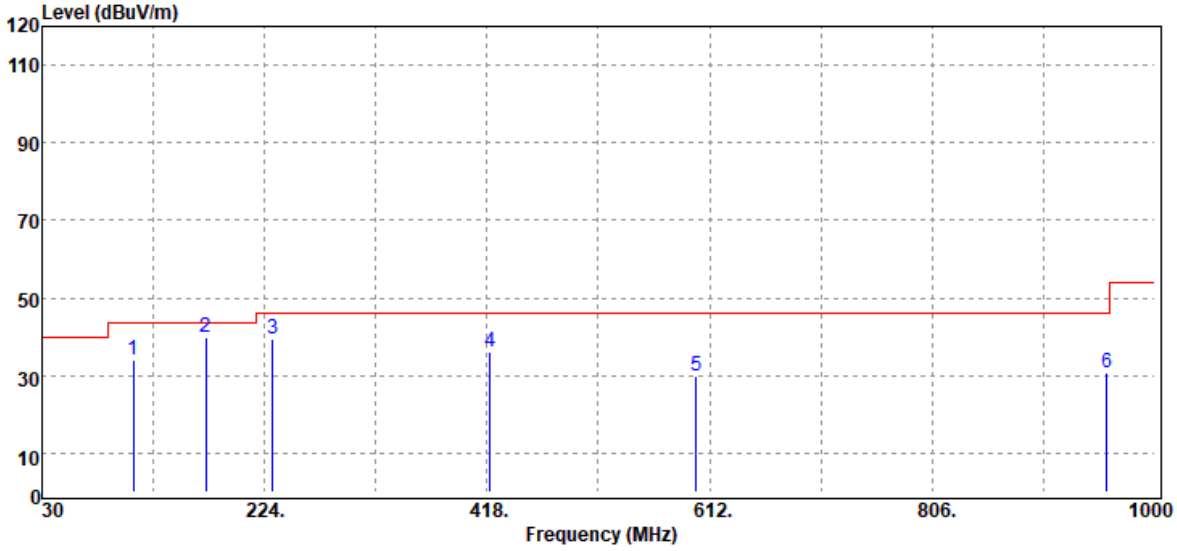
Test Mode	Mode 1	Temp/Hum	23(℃)/ 63%RH
Test Item	30MHz-1GHz	Test Date	June 22, 2021
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak	Test Voltage	



Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
65.89	Peak	53.15	-15.54	37.61	40.00	-2.39
120.21	Peak	49.57	-9.11	40.46	43.50	-3.04
269.59	Peak	51.75	-8.99	42.76	46.00	-3.24
422.85	Peak	44.16	-4.94	39.22	46.00	-6.78
757.50	Peak	28.13	0.95	29.08	46.00	-16.92
944.71	Peak	26.51	3.94	30.45	46.00	-15.55

Note: No emission found between lowest internal used/generated frequency to 30MHz(9KHz~30MHz)

Test Mode	Mode 1	Temp/Hum	23(℃)/ 63%RH
Test Item	30MHz-1GHz	Test Date	June 22, 2021
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak	Test Voltage	

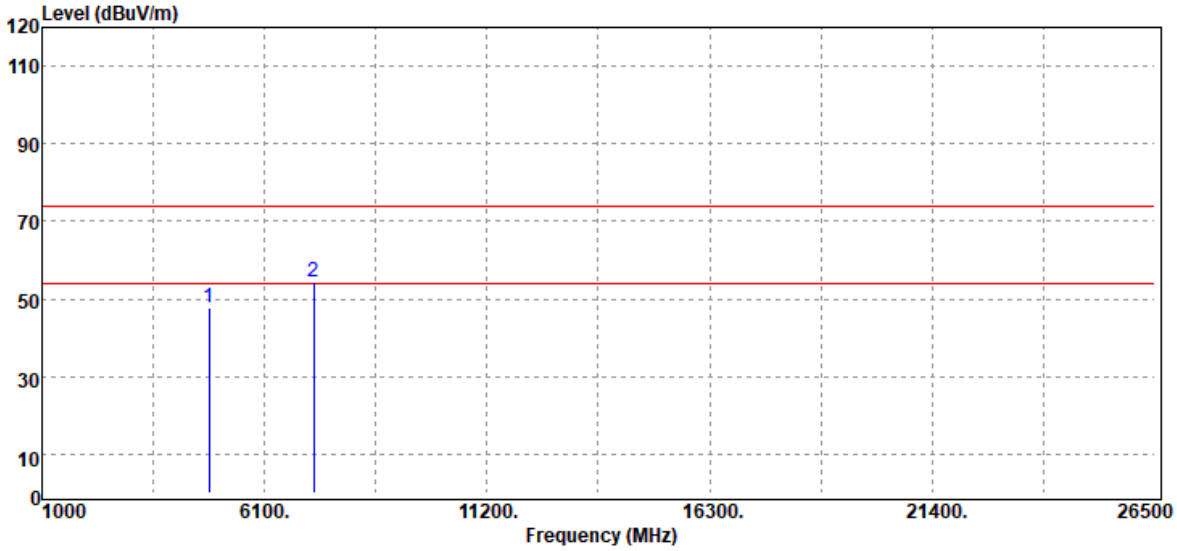


Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
109.54	Peak	44.58	-10.52	34.06	43.50	-9.44
172.59	Peak	50.69	-11.00	39.69	43.50	-3.81
230.79	Peak	50.66	-11.20	39.46	46.00	-6.54
420.91	Peak	41.19	-5.02	36.17	46.00	-9.83
600.36	Peak	31.87	-1.85	30.02	46.00	-15.98
958.29	Peak	26.88	3.79	30.67	46.00	-15.33

Note: No emission found between lowest internal used/generated frequency to 30MHz(9KHz~30MHz)

Above 1G Test Data

Test Mode	IEEE 802.11b Low CH	Temp/Hum	22.8(℃)/ 52%RH
Test Item	Harmonic	Test Date	June 21, 2021
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak		

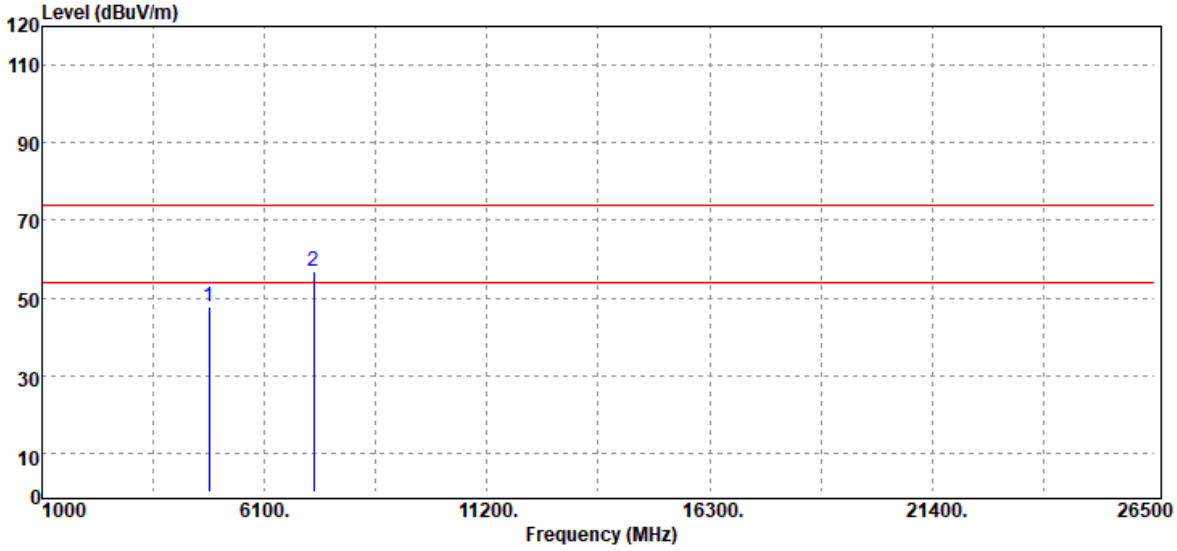


Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
4824.00	Peak	42.08	5.68	47.76	74.00	-26.24
7236.00	Peak	41.28	13.17	54.45	74.00	-19.55
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz,the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11b Low CH	Temp/Hum	22.8(℃)/ 52%RH
Test Item	Harmonic	Test Date	June 21, 2021
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak		

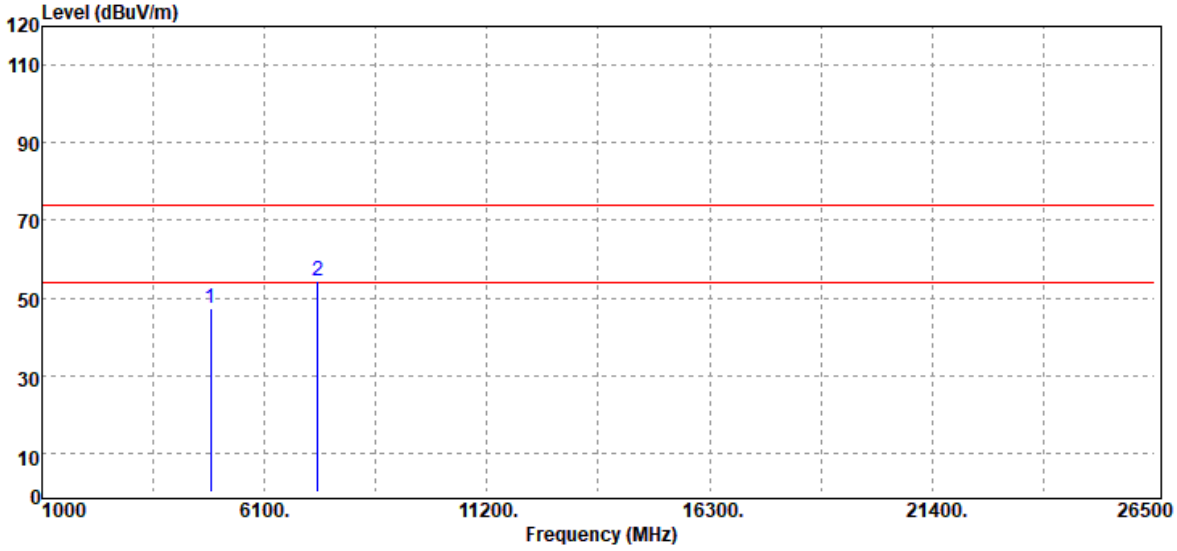


Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
4824.00	Peak	41.89	5.68	47.57	74.00	-26.43
7236.00	Peak	43.86	13.17	57.03	74.00	-16.97
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz,the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11b Mid CH	Temp/Hum	22.8(℃)/ 52%RH
Test Item	Harmonic	Test Date	June 21, 2021
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak		

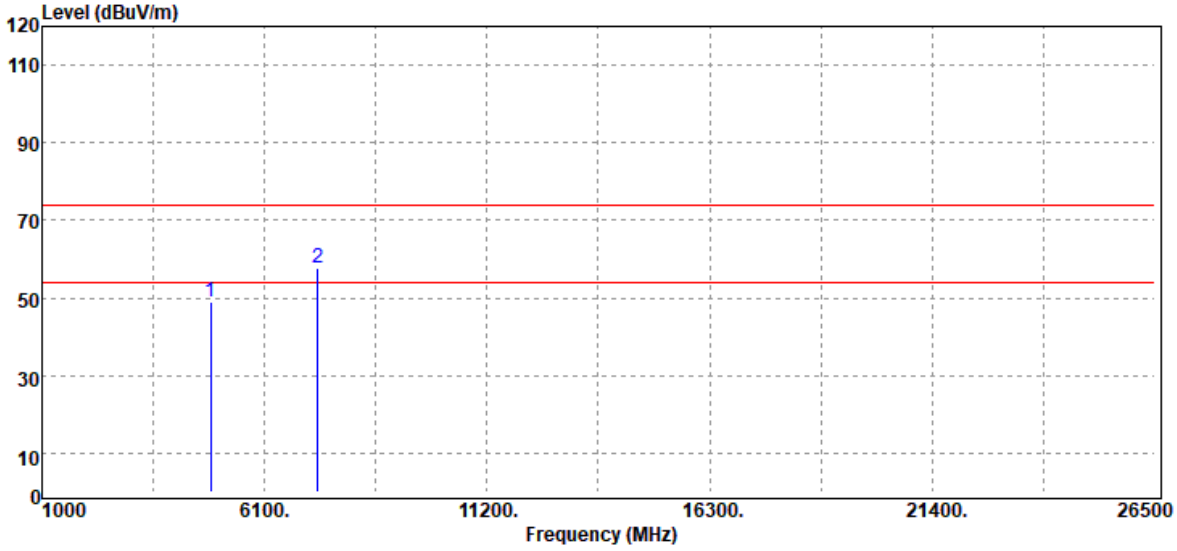


Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
4874.00	Peak	41.51	5.92	47.43	74.00	-26.57
7311.00	Peak	41.34	13.26	54.60	74.00	-19.40
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz,the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11b Mid CH	Temp/Hum	22.8(℃)/ 52%RH
Test Item	Harmonic	Test Date	June 21, 2021
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak		

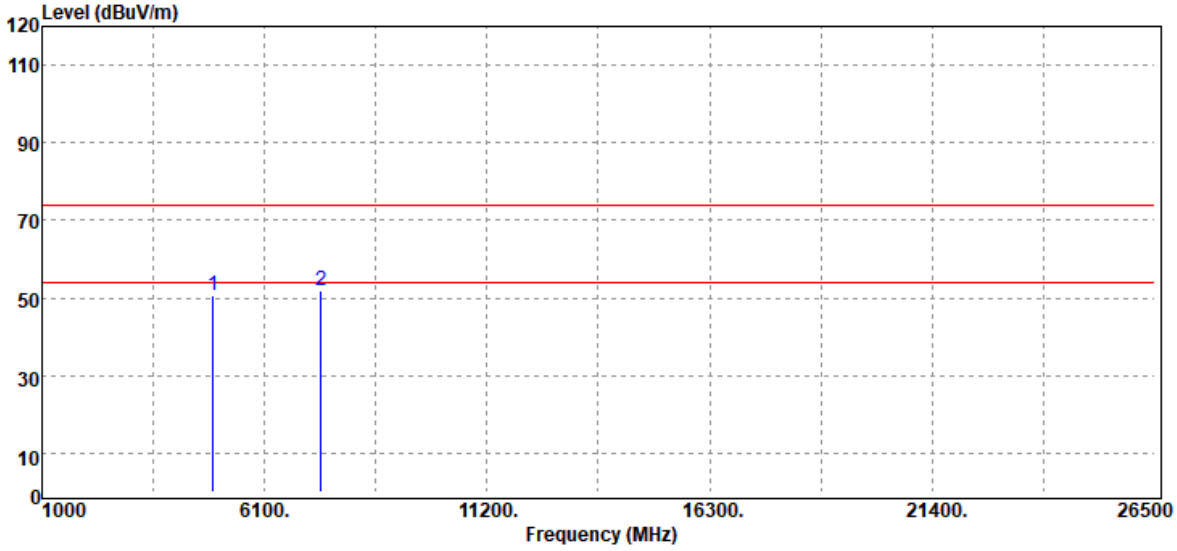


Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
4874.00	Peak	43.20	5.92	49.12	74.00	-24.88
7311.00	Peak	44.40	13.26	57.66	74.00	-16.34
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz,the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11b High CH	Temp/Hum	22.8(℃)/ 52%RH
Test Item	Harmonic	Test Date	June 21, 2021
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak		

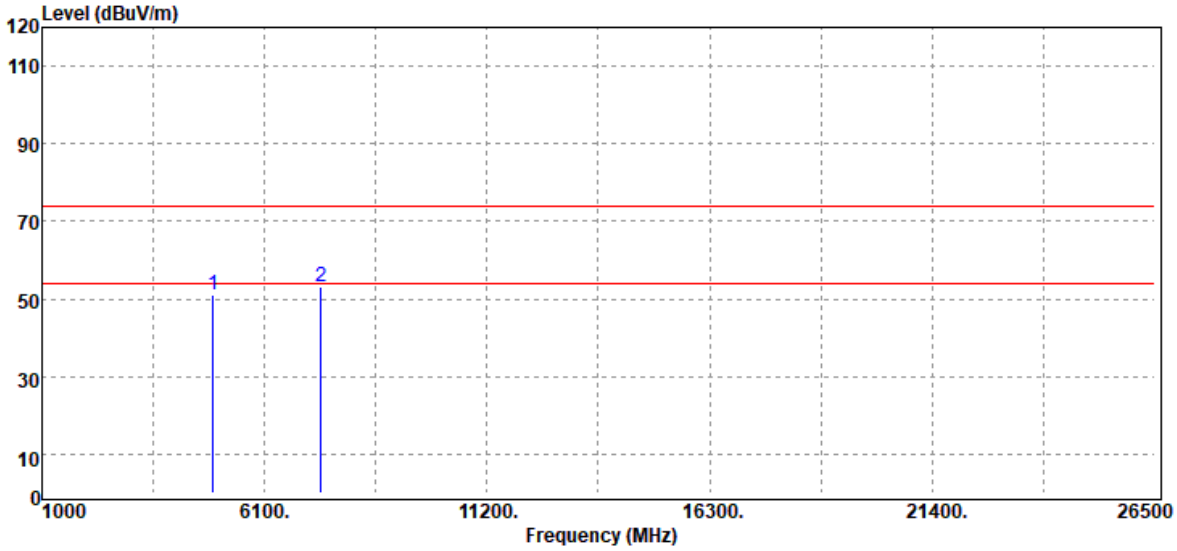


Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
4924.00	Peak	44.47	6.37	50.84	74.00	-23.16
7386.00	Peak	38.63	13.07	51.70	74.00	-22.30
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz,the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11b High CH	Temp/Hum	22.8(℃)/ 52%RH
Test Item	Harmonic	Test Date	June 21, 2021
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak		

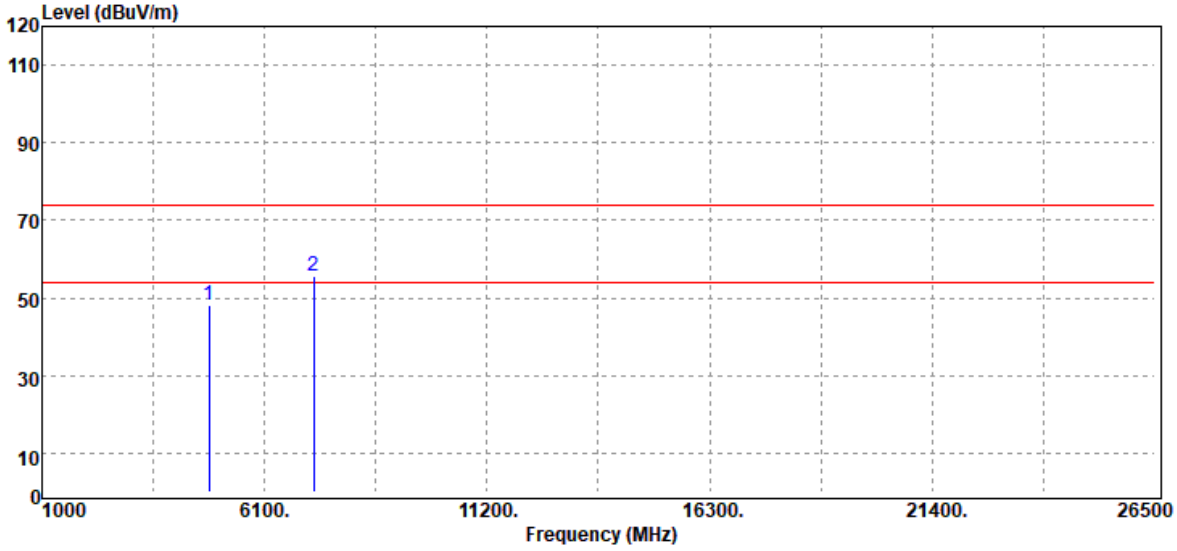


Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
4924.00	Peak	44.57	6.37	50.94	74.00	-23.06
7386.00	Peak	39.93	13.07	53.00	74.00	-21.00
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz,the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11g Low CH	Temp/Hum	22.8(℃)/ 52%RH
Test Item	Harmonic	Test Date	June 21, 2021
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak		

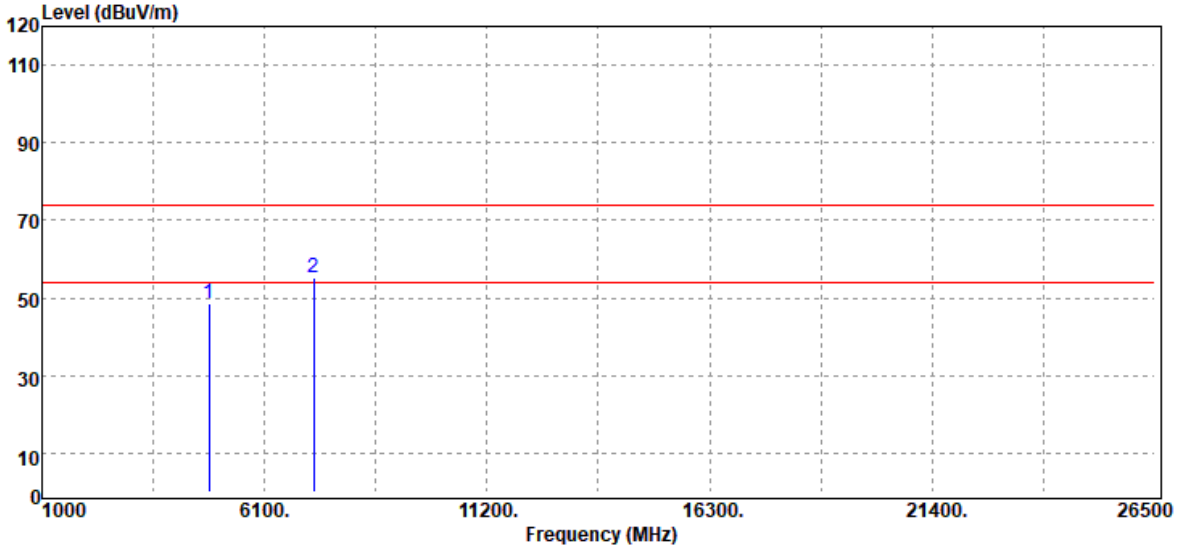


Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
4824.00	Peak	42.44	5.68	48.12	74.00	-25.88
7236.00	Peak	42.43	13.17	55.60	74.00	-18.40
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz,the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11g Low CH	Temp/Hum	22.8(℃)/ 52%RH
Test Item	Harmonic	Test Date	June 21, 2021
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak		

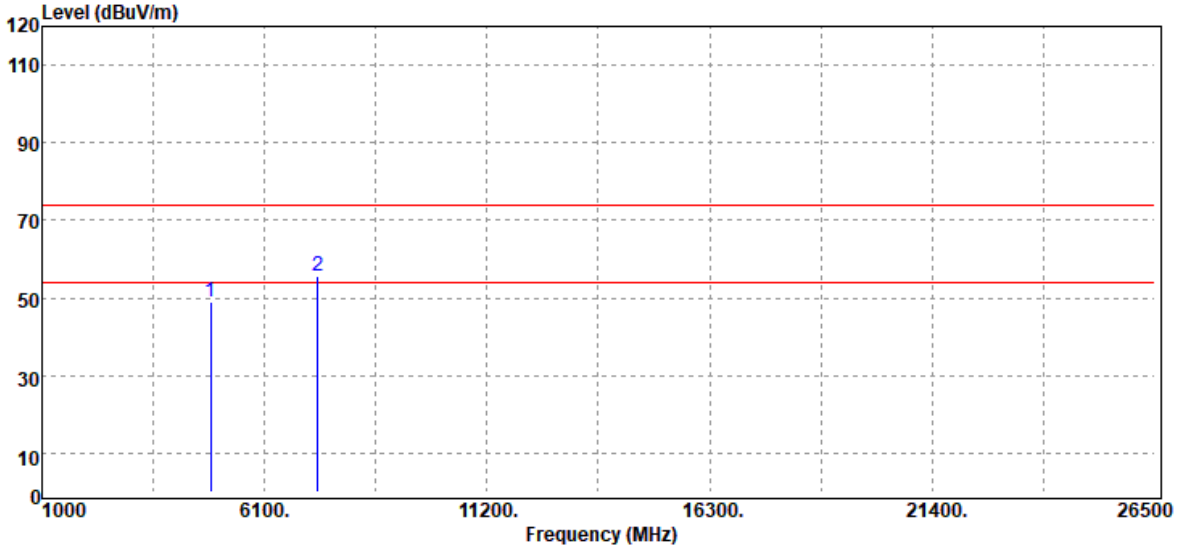


Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
4824.00	Peak	42.92	5.68	48.60	74.00	-25.40
7236.00	Peak	42.20	13.17	55.37	74.00	-18.63
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz,the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11g Mid CH	Temp/Hum	22.8(℃)/ 52%RH
Test Item	Harmonic	Test Date	June 22, 2021
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak		

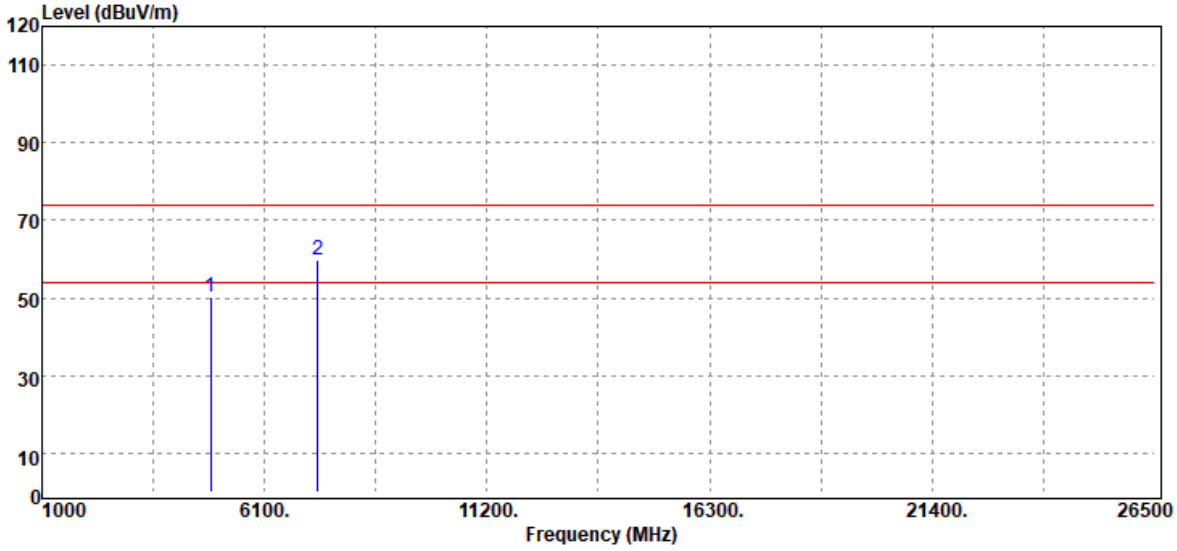


Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
4874.00	Peak	43.19	5.92	49.11	74.00	-24.89
7311.00	Peak	42.47	13.26	55.73	74.00	-18.27
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz,the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11g Mid CH	Temp/Hum	22.8(℃)/ 52%RH
Test Item	Harmonic	Test Date	June 22, 2021
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak		

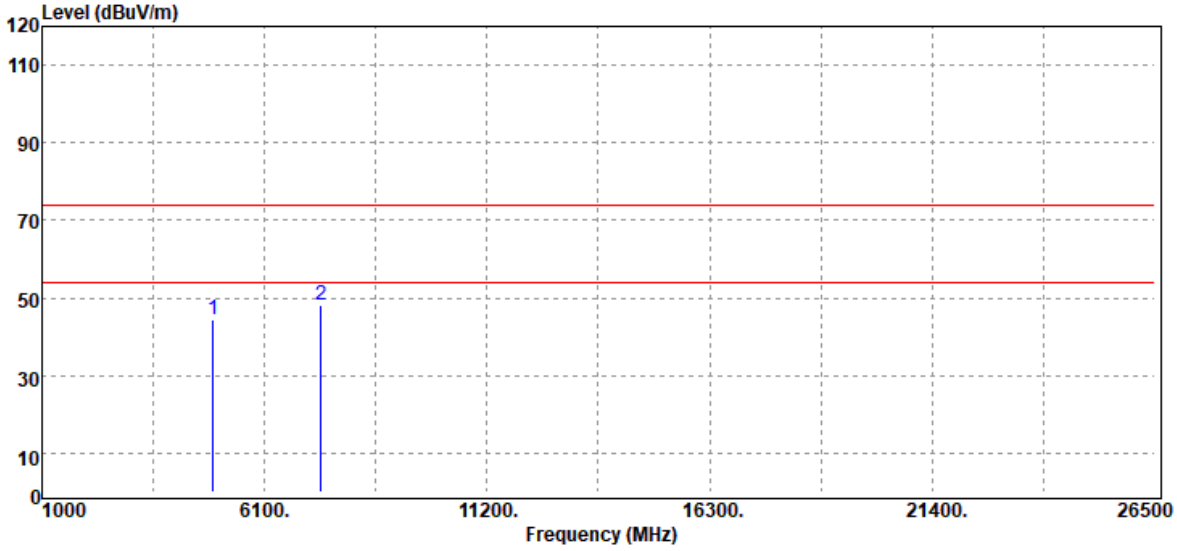


Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
4874.00	Peak	44.29	5.92	50.21	74.00	-23.79
7311.00	Peak	46.62	13.26	59.88	74.00	-14.12
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz,the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11g High CH	Temp/Hum	22.8(℃)/ 52%RH
Test Item	Harmonic	Test Date	June 22, 2021
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak		

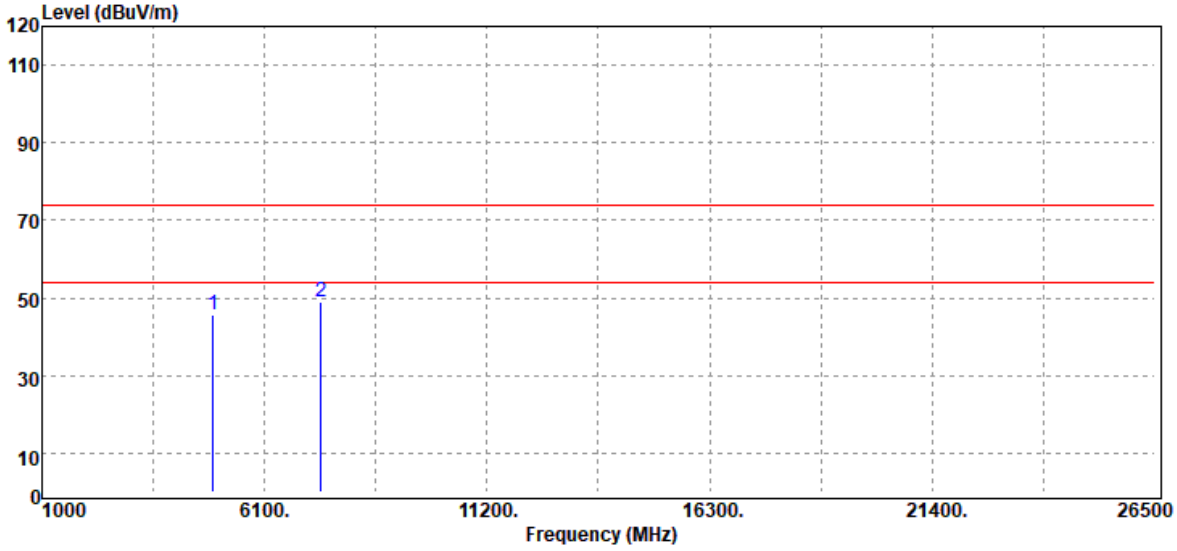


Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
4924.00	Peak	38.02	6.37	44.39	74.00	-29.61
7386.00	Peak	34.92	13.07	47.99	74.00	-26.01
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz,the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11g High CH	Temp/Hum	22.8(℃)/ 52%RH
Test Item	Harmonic	Test Date	June 22, 2021
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak		

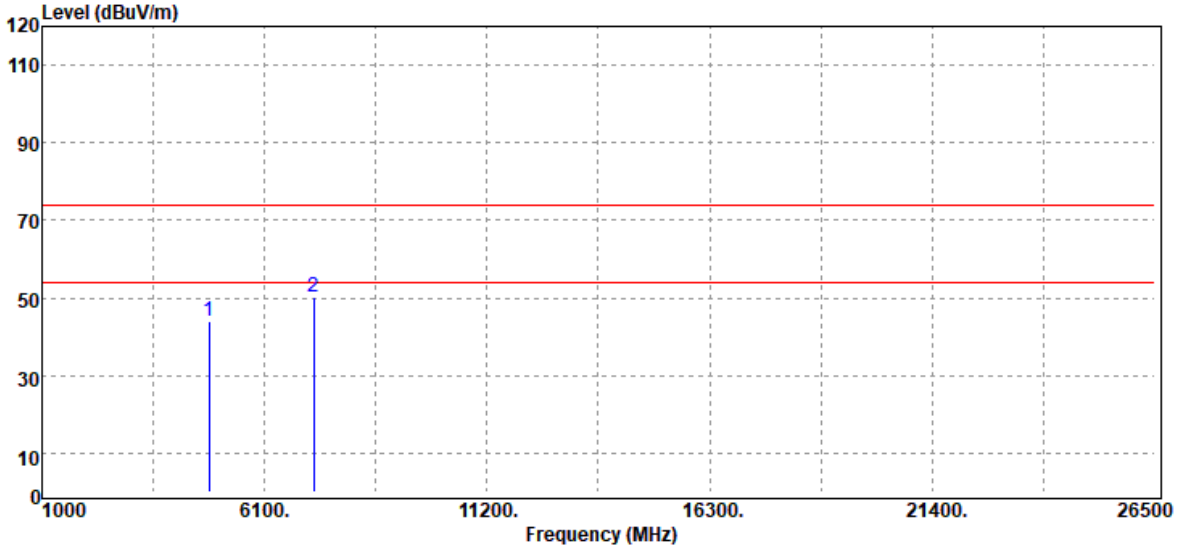


Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
4924.00	Peak	39.36	6.37	45.73	74.00	-28.27
7386.00	Peak	35.87	13.07	48.94	74.00	-25.06
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz,the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT20 Low CH	Temp/Hum	22.8(℃)/ 52%RH
Test Item	Harmonic	Test Date	June 22, 2021
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak		

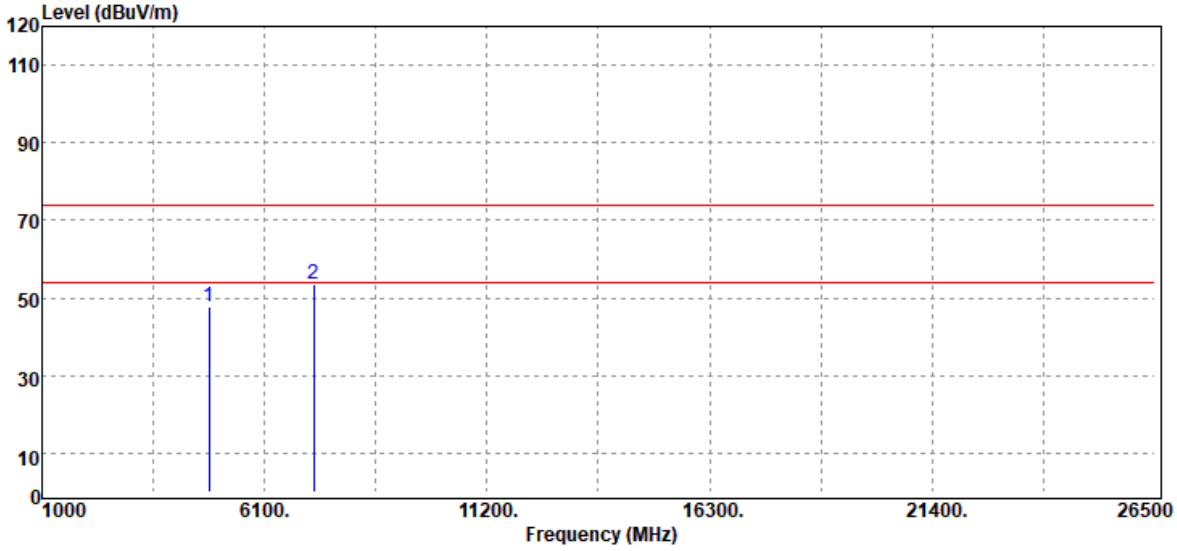


Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
4824.00	Peak	38.17	5.68	43.85	74.00	-30.15
7236.00	Peak	37.04	13.17	50.21	74.00	-23.79
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz,the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT20 Low CH	Temp/Hum	22.8(℃)/ 52%RH
Test Item	Harmonic	Test Date	June 22, 2021
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak		

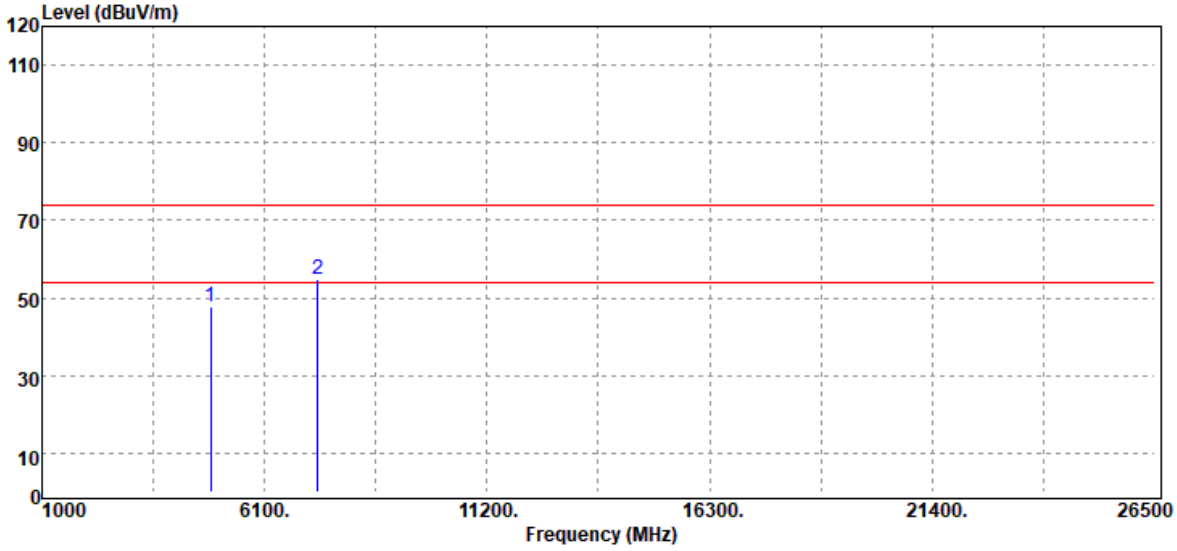


Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
4824.00	Peak	41.87	5.68	47.55	74.00	-26.45
7236.00	Peak	40.23	13.17	53.40	74.00	-20.60
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz,the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT20 Mid CH	Temp/Hum	22.8(℃)/ 52%RH
Test Item	Harmonic	Test Date	June 22, 2021
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak		

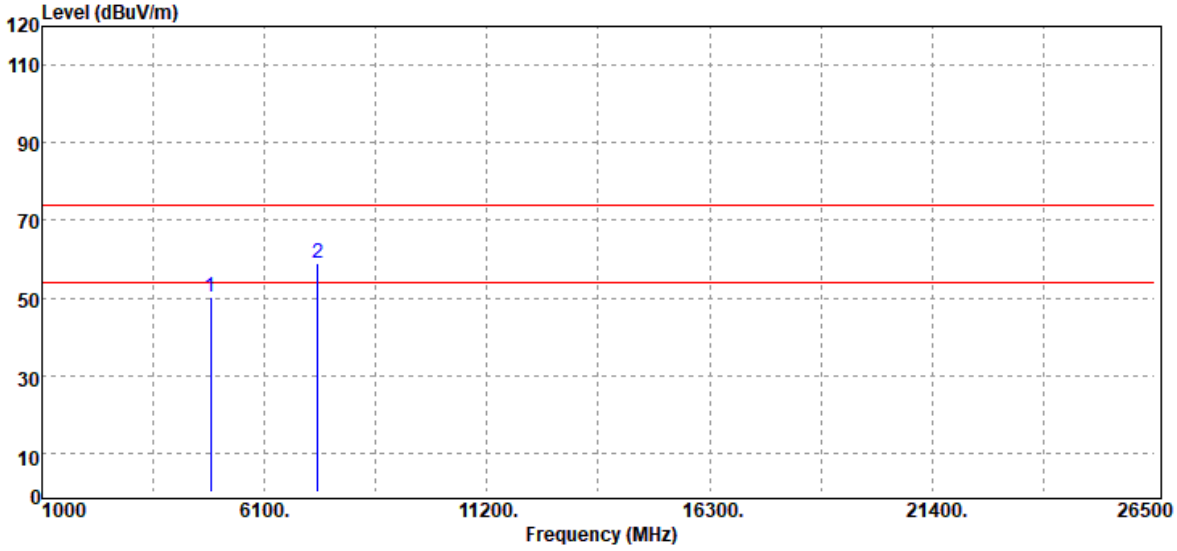


Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
4874.00	Peak	41.78	5.92	47.70	74.00	-26.30
7311.00	Peak	41.40	13.26	54.66	74.00	-19.34
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz,the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT20 Mid CH	Temp/Hum	22.8(℃)/ 52%RH
Test Item	Harmonic	Test Date	June 22, 2021
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak		

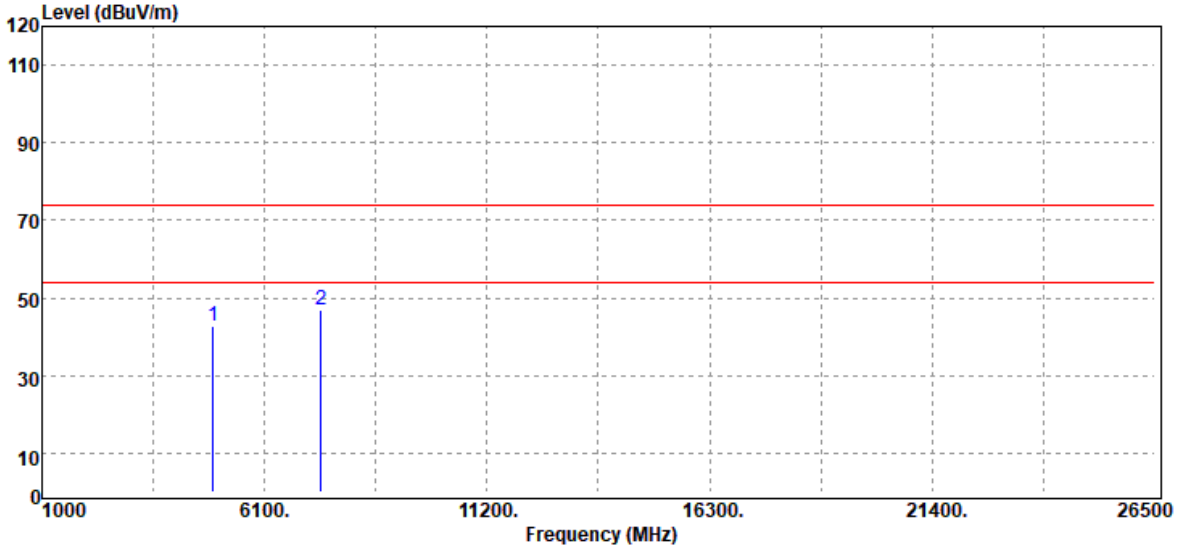


Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
4874.00	Peak	44.49	5.92	50.41	74.00	-23.59
7311.00	Peak	45.70	13.26	58.96	74.00	-15.04
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz,the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT20 High CH	Temp/Hum	22.8(℃)/ 52%RH
Test Item	Harmonic	Test Date	June 22, 2021
Polarize	Vertical	Test Engineer	Ray Li
Detector	Peak		

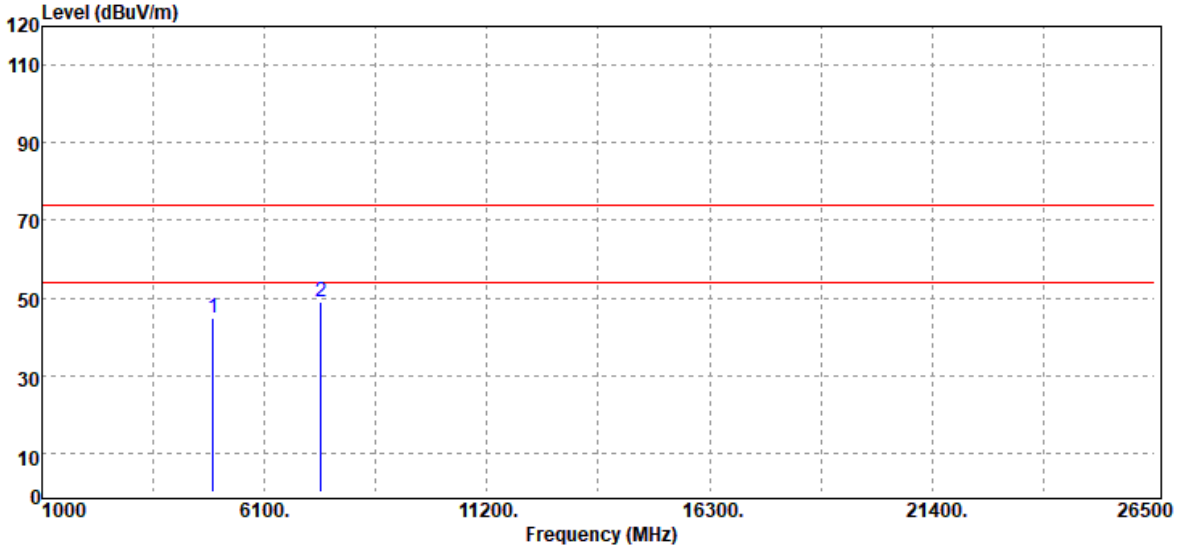


Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
4924.00	Peak	36.27	6.37	42.64	74.00	-31.36
7386.00	Peak	33.90	13.07	46.97	74.00	-27.03
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz,the EUT peak value was under average limit, therefore the Average value compliance with the average limit

Test Mode	IEEE 802.11n HT20 High CH	Temp/Hum	22.8(℃)/ 52%RH
Test Item	Harmonic	Test Date	June 22, 2021
Polarize	Horizontal	Test Engineer	Ray Li
Detector	Peak		



Freq. (MHz)	Detector Mode (PK/QP/AV)	Spectrum Reading Level (dBµV)	Factor (dB)	Actual FS (dBµV/m)	Limit @3m (dBµV/m)	Margin (dB)
4924.00	Peak	38.68	6.37	45.05	74.00	-28.95
7386.00	Peak	36.04	13.07	49.11	74.00	-24.89
N/A						

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. For above 1GHz,the EUT peak value was under average limit, therefore the Average value compliance with the average limit

- End of Test Report -