

RADIO TEST REPORT

FCC 47 CFR PART 15 SUBPART E

(Class II Permissive Change)

Test Standard	FCC Part 15.407
FCC ID	FKGX11BKA
Product name	WLAN and BT, 2x2 PCIe M.2 2230 adapter card
Brand Name	DURABOOK
Model No.	9260NGW
Test Result	Pass

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:

A handwritten signature in black ink, appearing to read "Sam Chuang", written over a horizontal line.

Sam Chuang
Manager

Reviewed by:

A handwritten signature in black ink, appearing to read "Jerry Chuang", written over a horizontal line.

Jerry Chuang
Engineer

Revision History

Rev.	Issue Date	Revisions	Revised By
00	March 23, 2018	Initial Issue	Doris Chu
01	May 3, 2018	1. Add Cable Connector in section 1.3 in page 7. 2. Add loop antenna in page 8. 3. Revise section 2 in page 10.	Doris Chu
02	May 9, 2018	1. Revise section 1.3 Antenna connector in page 7.	Doris Chu

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1. GENERAL INFORMATION

1.1 EUT INFORMATION

Applicant	TWINHEAD INTERNATIONAL CORP. 11F, No. 550, Rueiguang Rd., Neihu, Taipei, Taiwan 114, R.O.C.		
Manufacturer	TWINHEAD INTERNATIONAL CORP. 11F, No. 550, Rueiguang Rd., Neihu, Taipei, Taiwan 114, R.O.C.		
Equipment	WLAN and BT, 2x2 PCIe M.2 2230 adapter card		
Model No.	9260NGW		
Model Discrepancy	All the model number was just for marketing purpose only.		
Received Date	DURABOOK		
Date of Test	March 12 ~ 30, 2018		
Power Operation	Power form Adapter FSP / FSP065-REBN2 I/P: 100-240VAC, 50-60Hz, 1.5A O/P: 19VDC, 3.42A		
Output Power(W)			
		Mode	Frequency Range (MHz)
			Output Power (W)
	U-NII-1	IEEE 802.11a	5180 ~ 5240
		IEEE 802.11n 20 MHz	5180 ~ 5240
		IEEE 802.11n 40 MHz	5190 ~ 5230
		IEEE 802.11ac VHT 80 MHz	5210
		IEEE 802.11ac VHT 160 MHz	5250
	U-NII-2a	IEEE 802.11a	5260 ~ 5320
		IEEE 802.11n 20 MHz	5260 ~ 5320
		IEEE 802.11n 40 MHz	5270 ~ 5310
		IEEE 802.11ac VHT 80 MHz	5290
	U-NII-2c	IEEE 802.11a	5500 ~ 5700
		IEEE 802.11n 20 MHz	5500 ~ 5700
		IEEE 802.11n 40 MHz	5510 ~ 5670
		IEEE 802.11ac VHT 80 MHz	5530 ~ 5610
		IEEE 802.11ac VHT 160 MHz	5570
	U-NII-3	IEEE 802.11a	5745 ~ 5825
		IEEE 802.11n 20 MHz	5745 ~ 5825
		IEEE 802.11n 40 MHz	5755 ~ 5795
		IEEE 802.11ac VHT 80 MHz	5775

Class II Permissive Change	<ol style="list-style-type: none">1. The subject approved module is being used in a specific host. [Product: Fully-Rugged Tablet PC, brand name/model: DURABOOK / X11XXXXXX(X=0~9,A~Z,a~z,Blank), U11XXXXXX(X=0~9,A~Z,a~z,Blank), R11(R5)].2. Power reduction per tune-up procedure is applied in order to comply with exposure requirements.3. The product only installs a WLAN module [X11XXXXXX(X=0~9,A~Z,a~z,Blank), U11XXXXXX(X=0~9,A~Z,a~z,Blank), R11(R5)]
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Remark:

1. Client consigns only one sample to test (model number: X11BK). Therefore, the testing Lab. just guarantees the unit, which has been tested.

1.2 EUT CHANNEL INFORMATION

Frequency Range	<table border="1"> <tr> <td colspan="2">UNII-1</td></tr> <tr> <td>IEEE 802.11a</td><td>5180 ~ 5240 MHz</td></tr> <tr> <td>IEEE 802.11n 20 MHz</td><td>5180 ~ 5240 MHz</td></tr> <tr> <td>IEEE 802.11n 40 MHz</td><td>5190 ~ 5230 MHz</td></tr> <tr> <td>IEEE 802.11ac VHT 80 MHz</td><td>5210 MHz</td></tr> <tr> <td>IEEE 802.11ac VHT 160 MHz</td><td>5250 MHz</td></tr> <tr> <td colspan="2">UNII-2a</td></tr> <tr> <td>IEEE 802.11a</td><td>5260 ~ 5320 MHz</td></tr> <tr> <td>IEEE 802.11n 20 MHz</td><td>5260 ~ 5320 MHz</td></tr> <tr> <td>IEEE 802.11n 40 MHz</td><td>5270 ~ 5310 MHz</td></tr> <tr> <td>IEEE 802.11ac VHT 80 MHz</td><td>5290 MHz</td></tr> <tr> <td colspan="2">UNII-2c</td></tr> <tr> <td>IEEE 802.11a</td><td>5500 ~ 5700 MHz</td></tr> <tr> <td>IEEE 802.11n 20 MHz</td><td>5500 ~ 5700 MHz</td></tr> <tr> <td>IEEE 802.11n 40 MHz</td><td>5510 ~ 5670 MHz</td></tr> <tr> <td>IEEE 802.11ac VHT 80 MHz</td><td>5530 ~ 5610 MHz</td></tr> <tr> <td>IEEE 802.11ac VHT 160 MHz</td><td>5570 MHz</td></tr> <tr> <td colspan="2">UNII-3</td></tr> <tr> <td>IEEE 802.11a</td><td>5745 ~ 5825 MHz</td></tr> <tr> <td>IEEE 802.11n 20 MHz</td><td>5745 ~ 5825 MHz</td></tr> <tr> <td>IEEE 802.11n 40 MHz</td><td>5755 ~ 5795 MHz</td></tr> <tr> <td>IEEE 802.11ac VHT 80 MHz</td><td>5775 MHz</td></tr> </table>	UNII-1		IEEE 802.11a	5180 ~ 5240 MHz	IEEE 802.11n 20 MHz	5180 ~ 5240 MHz	IEEE 802.11n 40 MHz	5190 ~ 5230 MHz	IEEE 802.11ac VHT 80 MHz	5210 MHz	IEEE 802.11ac VHT 160 MHz	5250 MHz	UNII-2a		IEEE 802.11a	5260 ~ 5320 MHz	IEEE 802.11n 20 MHz	5260 ~ 5320 MHz	IEEE 802.11n 40 MHz	5270 ~ 5310 MHz	IEEE 802.11ac VHT 80 MHz	5290 MHz	UNII-2c		IEEE 802.11a	5500 ~ 5700 MHz	IEEE 802.11n 20 MHz	5500 ~ 5700 MHz	IEEE 802.11n 40 MHz	5510 ~ 5670 MHz	IEEE 802.11ac VHT 80 MHz	5530 ~ 5610 MHz	IEEE 802.11ac VHT 160 MHz	5570 MHz	UNII-3		IEEE 802.11a	5745 ~ 5825 MHz	IEEE 802.11n 20 MHz	5745 ~ 5825 MHz	IEEE 802.11n 40 MHz	5755 ~ 5795 MHz	IEEE 802.11ac VHT 80 MHz	5775 MHz
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Modulation Type	<ol style="list-style-type: none"> 1. IEEE 802.11a mode: OFDM 2. IEEE 802.11n 20 MHz mode: OFDM 3. IEEE 802.11n 40 MHz mode: OFDM 4. IEEE 802.11ac VHT 80 MHz mode: OFDM 5. IEEE 802.11ac VHT 160 MHz mode: OFDM 																																												

Remark:

Refer as ANSI 63.10:2013 clause 5.6.1 Table 4 for test channels

Number of frequencies to be tested		
Frequency range in which device operates	Number of frequencies	Location in frequency range of operation
<input type="checkbox"/> 1 MHz or less	1	Middle
<input type="checkbox"/> 1 MHz to 10 MHz	2	1 near top and 1 near bottom
<input checked="" type="checkbox"/> More than 10 MHz	3	1 near top, 1 near middle, and 1 near bottom

1.3 ANTENNA INFORMATION

Antenna Type	<input checked="" type="checkbox"/> PIFA <input type="checkbox"/> PCB <input type="checkbox"/> Dipole <input type="checkbox"/> Coils
Antenna Gain	Well Green Technology Co., Ltd P/N: 22+600763+0 (Main) / 1.18dBi 22+600764+00 (Aux) / -0.44dBi
Antenna connector	Unique antenna connector with U.FL

1.4 MEASUREMENT UNCERTAINTY

PARAMETER	UNCERTAINTY
AC Powerline Conducted Emission	+/- 1.2575
Emission bandwidth, 20dB bandwidth	+/- 1.4003
RF output power, conducted	+/- 1.1372
Power density, conducted	+/- 1.4003
3M Semi Anechoic Chamber / 30M~200M	+/- 4.0138
3M Semi Anechoic Chamber / 200M~1000M	+/- 3.9483
3M Semi Anechoic Chamber / 1G~8G	+/- 2.5975
3M Semi Anechoic Chamber / 8G~18G	+/- 2.6112
3M Semi Anechoic Chamber / 18G~26G	+/- 2.7389
3M Semi Anechoic Chamber / 26G~40G	+/- 2.9683
3M Semi Anechoic Chamber / 40G~60G	+/- 1.8509
3M Semi Anechoic Chamber / 60G~75G	+/- 1.9869
3M Semi Anechoic Chamber / 75G~110G	+/- 2.9651
3M Semi Anechoic Chamber / 110G~170G	+/- 2.7807
3M Semi Anechoic Chamber / 170G~220G	+/- 3.6437
3M Semi Anechoic Chamber / 220G~325G	+/- 4.2982

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 24891, Taiwan. (R.O.C.)

Test site	Test Engineer	Remark
Radiation	Jerry Chuang	-

Remark: The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4 and CISPR Publication 22.

1.6 INSTRUMENT CALIBRATION

Wugu 966 Chamber A					
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due
Bilog Antenna	Sunol Sciences	JB3	A030105	06/20/2017	06/19/2018
Horn Antenna	ETC	MCTD 1209	DRH13M02003	08/25/2017	08/24/2018
Pre-Amplifier	EMEC	EM330	60609	06/07/2017	06/06/2018
Spectrum Analyzer	Agilent	E4446A	US42510252	11/27/2017	11/26/2018
Loop Ant	COM-POWER	AL-130	121051	03/21/2018	03/20/2019
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
Pre-Amplifier	HP	8449B	3008A00965	06/27/2017	06/26/2018
Filter	N/A	2400-2500	N/A	N/A	N/A
Filter	N/A	0-6000	N/A	N/A	N/A
Cable	HUBER SUHNER	SUCOFLEX 104PEA	25157	07/31/2017	07/30/2018
Cable	HUBER SUHNER	SUCOFLEX 104PEA	20995	07/31/2017	07/30/2018

AC Conducted Emissions Test Site					
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due
LISN	R&S	ENV216	101054	05/18/2017	05/17/2018
LISN	SCHWARZBEC K	NSLK 8127	8127-541	02/14/2018	02/13/2019
EMI Test Receiver	R&S	ESCI	100064	05/17/2017	05/16/2018

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
	N/A				

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 15.407, KDB 789033 D02 v02r01.

2. TEST SUMMERY

FCC Standard Sec.	Chapter	Test Item	Result
15.203	1.3	Antenna Requirement	Pass
15.207(a)	4.1	AC Conducted Emission	Pass
15.407(a)	4.2	Output Power Measurement	Pass
15.407(b)	4.3	Radiation Band Edge	Pass
15.407(b)	4.3	Radiation Spurious Emission	Pass

3. DESCRIPTION OF TEST MODES

3.1 THE WORST MODE OF OPERATING CONDITION

Operation mode	1. IEEE 802.11a mode: 6Mbps 2. IEEE 802.11n 20 MHz mode: MCS8 3. IEEE 802.11n 40 MHz mode: MCS8 4. IEEE 802.11ac VHT 80 MHz mode: MCS8 5. IEEE 802.11ac VHT 160 MHz mode: MCS8			
Operating Frequency Range & Number of Channels		Mode	Frequency Range (MHz)	Number of Channels
	U-NII-1	IEEE 802.11a	5180 ~ 5240	4 Channels
		IEEE 802.11n 20 MHz	5180 ~ 5240	4 Channels
		IEEE 802.11n 40 MHz	5190 ~ 5230	2 Channels
		IEEE 802.11ac VHT 80 MHz	5210	1 Channels
		IEEE 802.11ac VHT 160 MHz	5250	1 Channels
	U-NII-2a	IEEE 802.11a	5260 ~ 5320	4 Channels
		IEEE 802.11n 20 MHz	5260 ~ 5320	4 Channels
		IEEE 802.11n 40 MHz	5270 ~ 5310	2 Channels
		IEEE 802.11ac VHT 80 MHz	5290	1 Channels
	U-NII-2c	IEEE 802.11a	5500 ~ 5700	11 Channels
		IEEE 802.11n 20 MHz	5500 ~ 5700	11 Channels
		IEEE 802.11n 40 MHz	5510 ~ 5670	5 Channels
		IEEE 802.11ac VHT 80 MHz	5530 ~ 5610	2 Channels
		IEEE 802.11ac VHT 160 MHz	5570	1 Channels
	U-NII-3	IEEE 802.11a	5745 ~ 5825	5 Channels
		IEEE 802.11n 20 MHz	5745 ~ 5825	5 Channels
		IEEE 802.11n 40 MHz	5755 ~ 5795	2 Channels
		IEEE 802.11ac VHT 80 MHz	5775	1 Channels

Remark:

1. EUT pre-scanned data rate of output power for each mode, the worst data rate were recorded in this report.

3.2 THE WORST MODE OF MEASUREMENT

Radiated Emission Measurement Above 1G	
Test Condition	Band edge, Emission for Unwanted and Fundamental
Voltage/Hz	120V/60Hz
Test Mode	Mode 1:EUT power by AC adapter via power cable.
Worst Mode	<input checked="" type="checkbox"/> Mode 1 <input type="checkbox"/> Mode 2 <input type="checkbox"/> Mode 3 <input type="checkbox"/> Mode 4
Worst Position	<input type="checkbox"/> Placed in fixed position. <input checked="" type="checkbox"/> Placed in fixed position at X-Plane (E2-Plane) <input type="checkbox"/> Placed in fixed position at Y-Plane (E1-Plane) <input type="checkbox"/> Placed in fixed position at Z-Plane (H-Plane)
Worst Polarity	<input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical

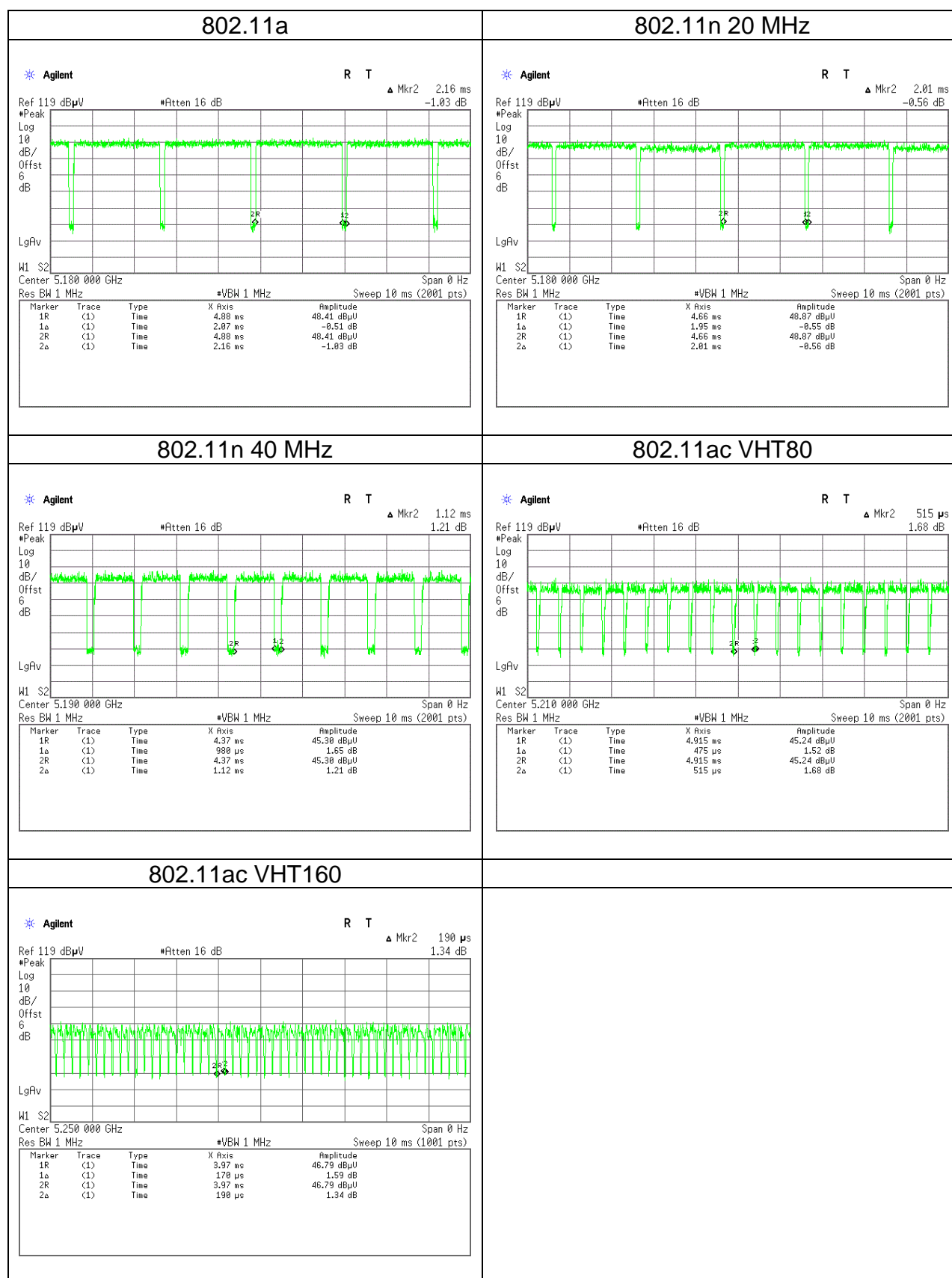
Radiated Emission Measurement Below 1G	
Test Condition	Radiated Emission Below 1G
Voltage/Hz	120V/60Hz
Test Mode	Mode 1:EUT power by AC adapter via power cable.
Worst Mode	<input checked="" type="checkbox"/> Mode 1 <input type="checkbox"/> Mode 2 <input type="checkbox"/> Mode 3 <input type="checkbox"/> 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, Horizontal and Vertical for radiated measurement. The worst case(X-Plane and Horizontal) were recorded in this report
3. For below 1G, AC power line conducted emission and radiation emission were performed the EUT transmit at the highest output power channel as worse case.

3.3 EUT DUTY CYCLE

Duty Cycle				
Configuration	TX ON (ms)	TX ALL (ms)	Duty Cycle (%)	Duty Factor(dB)
802.11a	2.0700	2.1600	95.83%	0.18
802.11n 20	1.9500	2.0100	97.01%	0.13
802.11n 40	0.9800	1.1200	87.50%	0.58
802.11ac VHT80	0.4750	0.5150	92.23%	0.35
802.11ac VHT160	0.1700	0.1900	89.47%	0.48



4. TEST RESULT

4.1 AC POWER LINE CONDUCTED EMISSION

4.1.1 Test Limit

According to §15.207(a)(2)

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

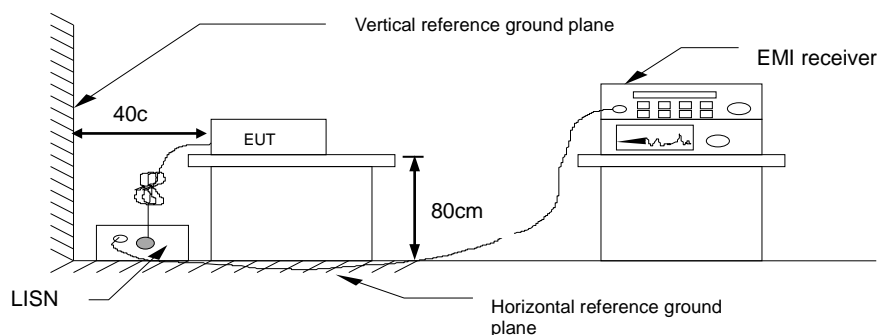
* Decreases with the logarithm of the frequency.

4.1.2 Test Procedure

Test method Refer as ANSI 63.10:2013 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.

4.1.3 Test Setup

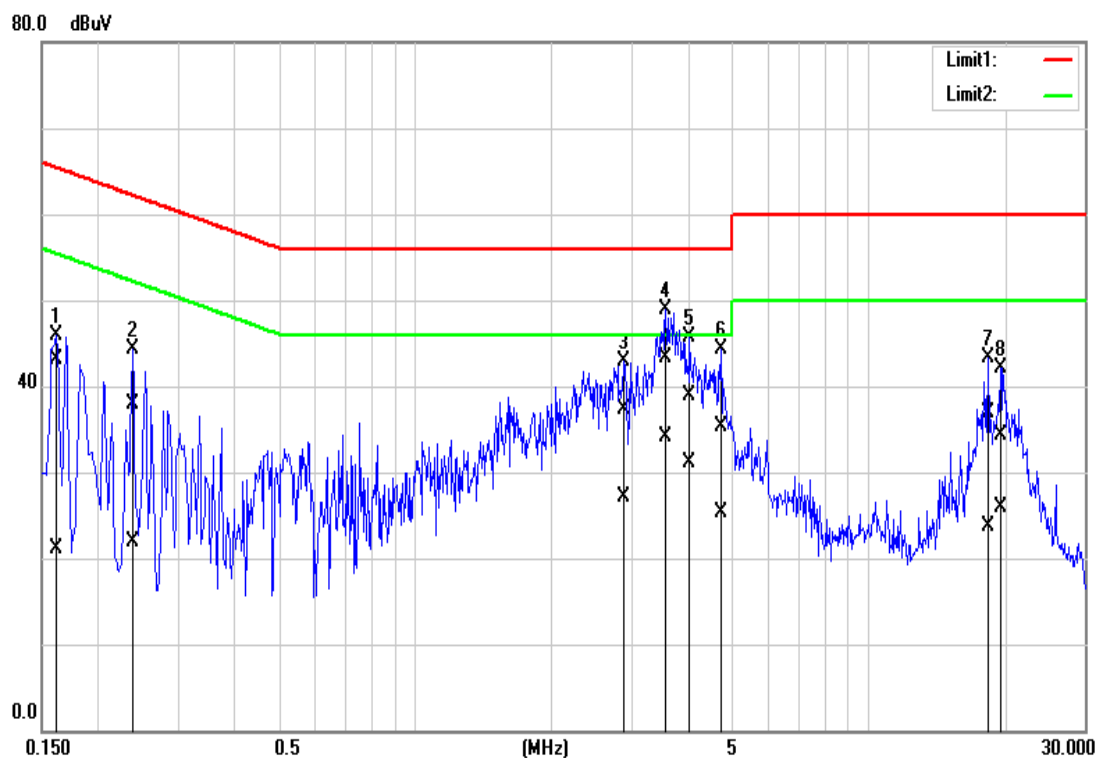


4.1.4 Test Result

Pass.

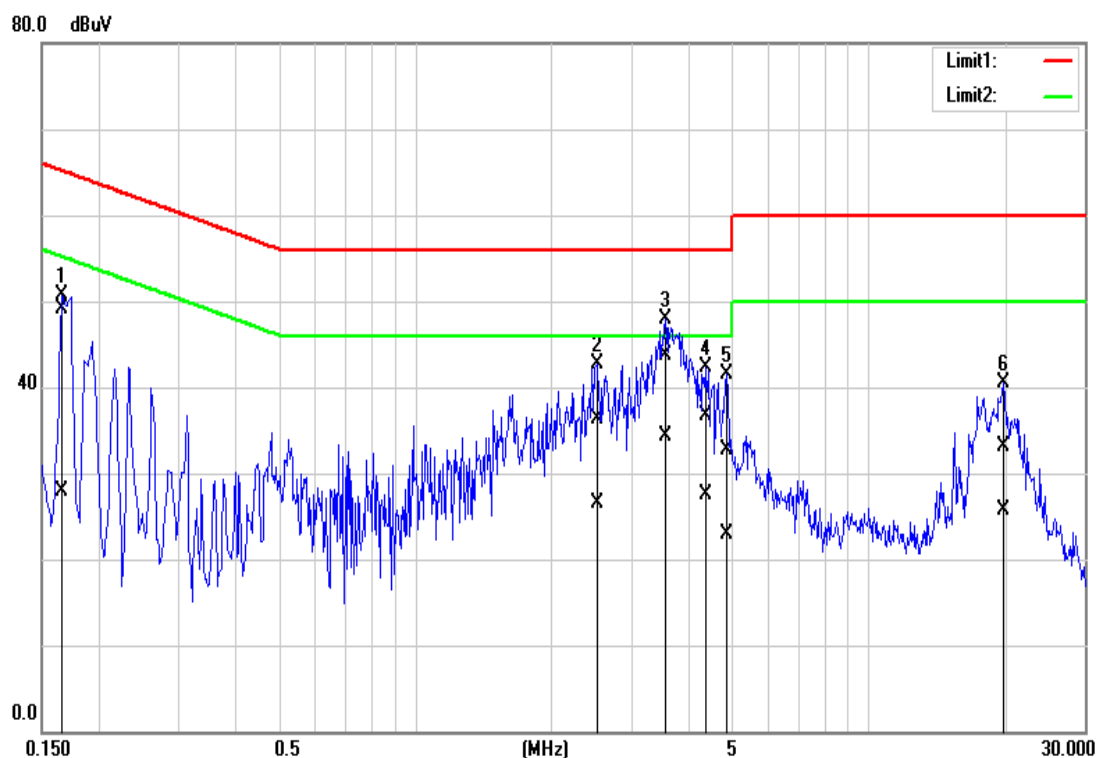
Test Data

Test Mode:	Mode 1	Temp/Hum	24(°C)/ 50%RH
Test Voltage:	120Vac / 60Hz	Test Date	March 30, 2018
Phase:	Line	Test Engineer	Dally Hong



No.	Frequency (MHz)	QuasiPeak reading (dBuV)	Average reading (dBuV)	Correction factor (dB)	QuasiPeak result (dBuV)	Average result (dBuV)	QuasiPeak limit (dBuV)	Average limit (dBuV)	QuasiPeak margin (dB)	Average margin (dB)
1	0.1620	33.53	11.54	9.66	43.19	21.20	65.36	55.36	-22.17	-34.16
2	0.2380	28.17	12.22	9.67	37.84	21.89	62.16	52.17	-24.32	-30.28
3	2.8940	27.56	17.32	9.73	37.29	27.05	56.00	46.00	-18.71	-18.95
4	3.5660	33.60	24.31	9.75	43.35	34.06	56.00	46.00	-12.65	-11.94
5	4.0300	29.17	21.41	9.75	38.92	31.16	56.00	46.00	-17.08	-14.84
6	4.7220	25.52	15.62	9.77	35.29	25.39	56.00	46.00	-20.71	-20.61
7	18.3540	26.93	13.80	9.99	36.92	23.79	60.00	50.00	-23.08	-26.21
8	19.5820	24.29	15.83	10.01	34.30	25.84	60.00	50.00	-25.70	-24.16

Test Mode:	Mode 1	Temp/Hum	24(°C)/ 50%RH
Test Voltage:	120Vac / 60Hz	Test Date	March 30, 2018
Phase:	Neutral	Test Engineer	Dally Hong



No.	Frequency (MHz)	QuasiPeak reading (dBuV)	Average reading (dBuV)	Correction factor (dB)	QuasiPeak result (dBuV)	Average result (dBuV)	QuasiPeak limit (dBuV)	Average limit (dBuV)	QuasiPeak margin (dB)	Average margin (dB)
1	0.1660	39.43	18.21	9.71	49.14	27.92	65.15	55.16	-16.01	-27.24
2	2.5220	26.52	16.73	9.77	36.29	26.50	56.00	46.00	-19.71	-19.50
3	3.5700	33.82	24.58	9.79	43.61	34.37	56.00	46.00	-12.39	-11.63
4	4.3620	26.88	17.67	9.79	36.67	27.46	56.00	46.00	-19.33	-18.54
5	4.8780	22.98	13.01	9.81	32.79	22.82	56.00	46.00	-23.21	-23.18
6	19.9340	23.00	15.72	10.06	33.06	25.78	60.00	50.00	-26.94	-24.22

4.2 OUTPUT POWER MEASUREMENT

4.2.1 Test Limit

According to §15.407 (a)(1), 15.407(a)(2) and 15.407(a)(3).

UNII-1 :

For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW(24 dBm) and The maximum e.i.r.p. shall not exceed 200 mW or $10 + 10 \log_{10} B$, dBm, whichever power is less. B is the 99% emission bandwidth in megahertz ,provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

UNII-2a and 2c:

the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. and The maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log_{10} B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

UNII-3:

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

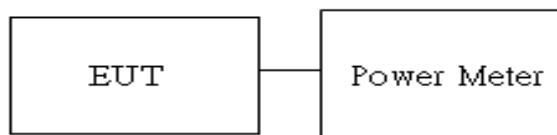
UNII-1 Limit	<input checked="" type="checkbox"/> Antenna not exceed 6 dBi : 24dBm (EIRP : 23dBm) <input type="checkbox"/> Antenna with DG greater than 6 dBi : [Limit = $30 - (DG - 6)$]
UNII-2a/2c Limit	<input checked="" type="checkbox"/> Antenna not exceed 6 dBi : 24dBm (EIRP : 30dBm) <input type="checkbox"/> Antenna with DG greater than 6 dBi : [Limit = $30 - (DG - 6)$]
UNII-3 Limit	<input checked="" type="checkbox"/> Antenna not exceed 6 dBi : 30dBm <input type="checkbox"/> Antenna with DG greater than 6 dBi : [Limit = $30 - (DG - 6)$]

4.2.2 Test Procedure

Test method Refer as KDB 789033 D02 v01r03, Section E.3.b.

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 Average output power. in the test report.

4.2.3 Test Setup



4.2.4 Test Result

Conducted output power :

UNII-1									
Config	CH	Freq. (MHz)	Power Set		AV Power(dBm)		AV Total Power (dBm)	AV Total Power (W)	Limit (dBm)
			chain0	chain1	chain0	chain1			
IEEE 802.11a Data rate: 6Mbps	36	5180	17.50	-	16.85	-	16.85	0.0484	24
	44	5220	17.50	-	18.27	-	18.27	0.0671	
	48	5240	17.50	-	18.28	-	18.28	0.0673	
IEEE 802.11n HT20 Data rate: MCS8	36	5180	15.60	15.60	15.35	15.85	18.62	0.0727	
	44	5220	18.40	18.40	17.80	17.85	20.84	0.1212	
	48	5240	18.40	18.40	17.81	17.83	20.83	0.1211	
IEEE 802.11n HT40 Data rate: MCS8	38	5190	15.50	15.50	15.85	15.88	18.88	0.0772	
	46	5230	15.50	15.50	17.35	16.85	20.12	0.1027	
IEEE 802.11ac VHT80 Data rate: MCS8	42	5210	15.00	15.00	15.35	15.37	18.37	0.0687	
IEEE 802.11ac VHT160 Data rate: MCS8	50	5250	10.25	10.25	10.87	10.85	13.87	0.0244	

UNII-2a									
Config	CH	Freq. (MHz)	Power Set		AV Power(dBm)		AV Total Power (dBm)	AV Total Power (dBm)	Limit (dBm)
			chain0	chain1	chain0	chain1			
IEEE 802.11a Data rate: 6Mbps	52	5260	20.00	-	19.68	-	19.68	0.0929	24
	56	5280	20.00	-	19.60	-	19.60	0.0912	
	64	5320	20.00	-	16.18	-	16.18	0.0415	
IEEE 802.11n HT20 Data rate: MCS8	52	5260	18.75	18.75	17.80	17.85	20.84	0.1212	
	56	5280	19.25	19.25	17.82	17.87	20.86	0.1218	
	64	5320	18.00	18.00	17.83	17.88	20.87	0.1220	
IEEE 802.11n HT40 Data rate: MCS8	54	5270	14.50	14.50	16.85	17.35	20.12	0.1027	
	62	5310	14.50	14.50	16.86	17.25	20.07	0.1016	
IEEE 802.11ac VHT80 Data rate: MCS8	58	5290	14.30	14.30	15.35	15.56	18.47	0.0703	

UNII-2c									
Config	CH	Freq. (MHz)	Power Set		AV Power(dBm)		AV Total Power (dBm)	AV Total Power (W)	Limit (dBm)
			chain0	chain1	chain0	chain1			
IEEE 802.11a Data rate: 6Mbps	100	5500	17.50	-	16.85	-	16.85	0.0484	24
	116	5580	17.50	-	16.88	-	16.88	0.0488	
	140	5700	17.50	-	17.56	-	17.56	0.0570	
IEEE 802.11n HT20 Data rate: MCS8	100	5500	15.25	15.25	14.85	15.85	18.39	0.0690	
	116	5580	17.25	17.25	15.85	15.88	18.88	0.0772	
	140	5700	15.25	15.25	15.52	15.64	18.26	0.0669	
IEEE 802.11n HT40 Data rate: MCS8	102	5510	16.00	16.00	14.04	0.35	14.22	0.0264	
	110	5550	16.00	16.00	14.05	0.26	14.23	0.0265	
	134	5670	16.00	16.00	14.95	0.31	15.10	0.0323	
IEEE 802.11ac VHT80 Data rate: MCS8	106	5530	11.62	11.62	11.21	11.23	14.23	0.0265	
IEEE 802.11ac VHT160 Data rate: MCS8	114	5570	13.50	13.50	17.60	18.85	15.74	0.0375	

UNII-3									
Config	CH	Freq. (MHz)	Power Set		AV Power(dBm)		AV Total Power (dBm)	AV Total Power (W)	Limit (dBm)
			chain0	chain1	chain0	chain1			
IEEE 802.11a Data rate: 6Mbps	149	5745	19.75	-	19.76	-	18.39	0.0690	30
	157	5785	20.00	-	19.81	-	18.88	0.0773	
	165	5825	19.75	-	19.75	-	18.95	0.0785	
IEEE 802.11n HT20 Data rate: MCS0	149	5745	18.60	18.60	17.55	17.65	20.61	0.1151	
	157	5785	18.60	18.60	17.35	17.38	20.38	0.1090	
	165	5825	18.60	18.60	17.85	17.35	20.62	0.1153	
IEEE 802.11n HT40 Data rate: MCS0	151	5755	7.50	7.50	17.36	17.37	20.38	0.1090	
	159	5795	7.50	7.50	17.20	18.05	20.66	0.1163	
IEEE 802.11ac VHT80 Data rate: MCS0	155	5775	13.50	13.50	14.60	14.65	17.64	0.0580	

4.3 RADIATION BANDEDGE AND SPURIOUS EMISSION

4.3.1 Test Limit

FCC according to §15.407, §15.209 and §15.205,

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 (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)

UNII-1 :

For transmitters operating in the band 5150-5250 MHz, all emissions outside the band 5150-5350 MHz shall not exceed -27 dBm/MHz e.i.r.p. However, any unwanted emissions that fall into the band 5250-5350 MHz must be 26 dBc, when measured using a resolution bandwidth between 1 and 5% of the occupied bandwidth, above 5.25 GHz. Otherwise, the transmission is considered as intentional and the devices shall implement dynamic frequency selection (DFS) and transmitter power control (TPC) as per the requirements for the band 5250-5350 MHz

UNII-2a and 2c :

For devices with operating frequencies in the band 5250-5350 MHz but having a channel bandwidth that overlaps the band 5150-5250 MHz, the devices' unwanted emission shall not exceed -27 dBm/MHz e.i.r.p. outside the band 5150-5350 MHz and its power shall comply with the spectral power density for operation within the band 5150-5250 MHz. The device shall be labelled "for indoor use only." Emissions outside the band 5470-5725 MHz shall not exceed -27 dBm/MHz e.i.r.p.

UNII-3:

All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

4.3.2 Test Procedure

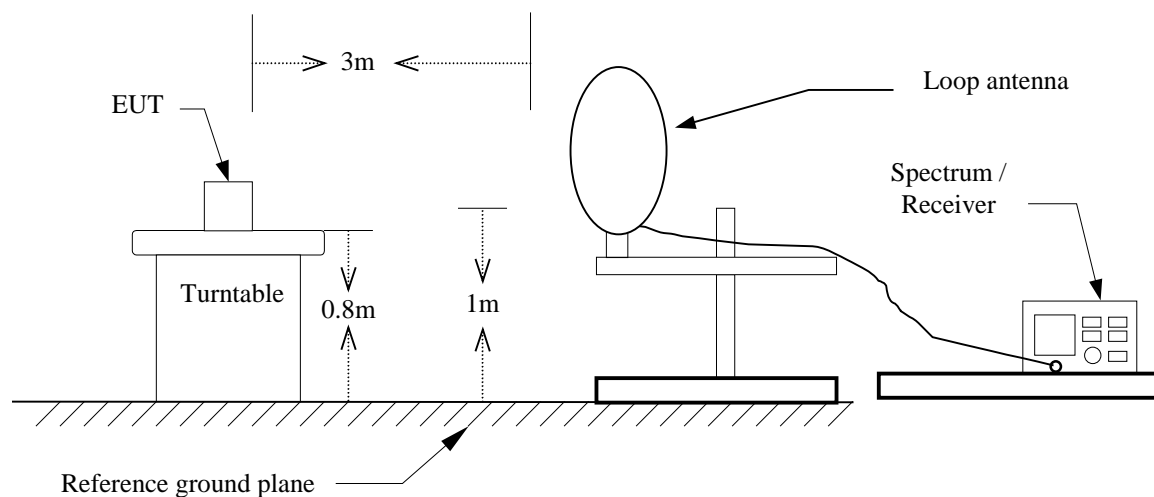
Test method Refer as KDB 789033 D02 v02r01, Section G.3, G.4, G.5, and G.6,.

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, 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.
4. No emission found between lowest internal used/generated frequency to 30MHz (9KHz~30MHz)
5. The SA setting following :
 - (1) Below 1G : RBW = 100kHz, VBW $\geq 3 \times$ RBW, Sweep = Auto, Detector = Peak, Trace = Max hold.
 - (2) Above 1G :
 - (2.1) For Peak measurement : RBW = 1MHz, VBW $\geq 3 \times$ RBW, Sweep = Auto, Detector = Peak, Trace = Max hold.
 - (2.2) For Average measurement : RBW = 1MHz, VBW
 - If Duty Cycle $\geq 98\%$, VBW=10Hz.
 - If Duty Cycle $< 98\%$, VBW=1/T.

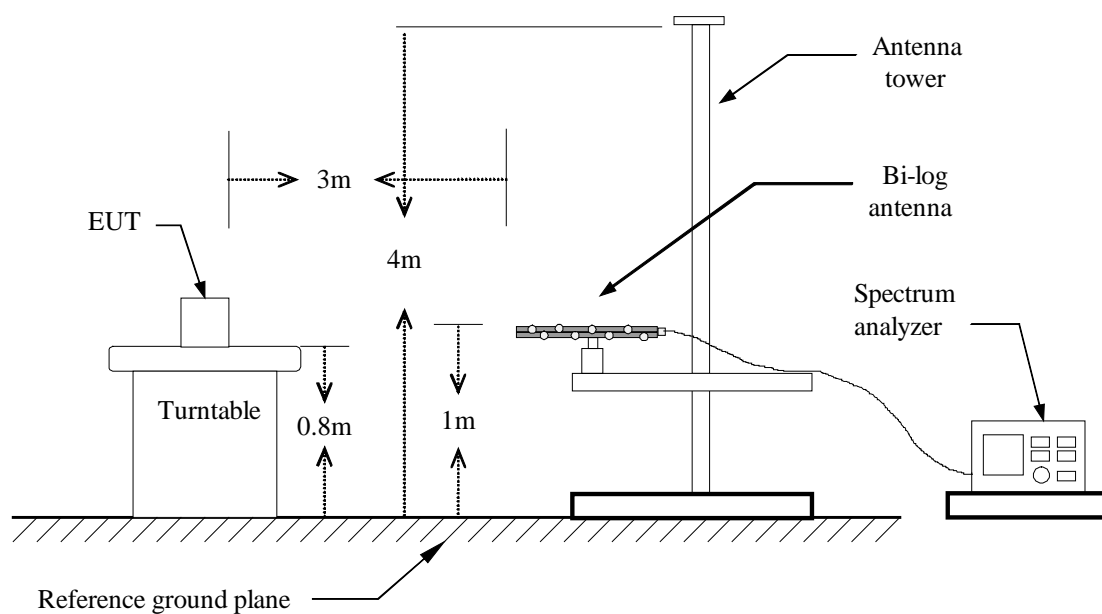
Configuration	Duty Cycle (%)	T(ms)	1/T (kHz)	VBW Setting
802.11a	96%	2.0700	483.092	510Hz
802.11n 20MHz	97%	1.9500	512.821	560Hz
802.11n 40MHz	88%	0.9800	1020.408	1.1KHz
802.11ac VHT80 MHz	92%	0.4750	2105.263	2.2KHz
802.11ac VHT160 MHz	89%	0.1700	5.882	6.2KHz

4.3.3 Test Setup

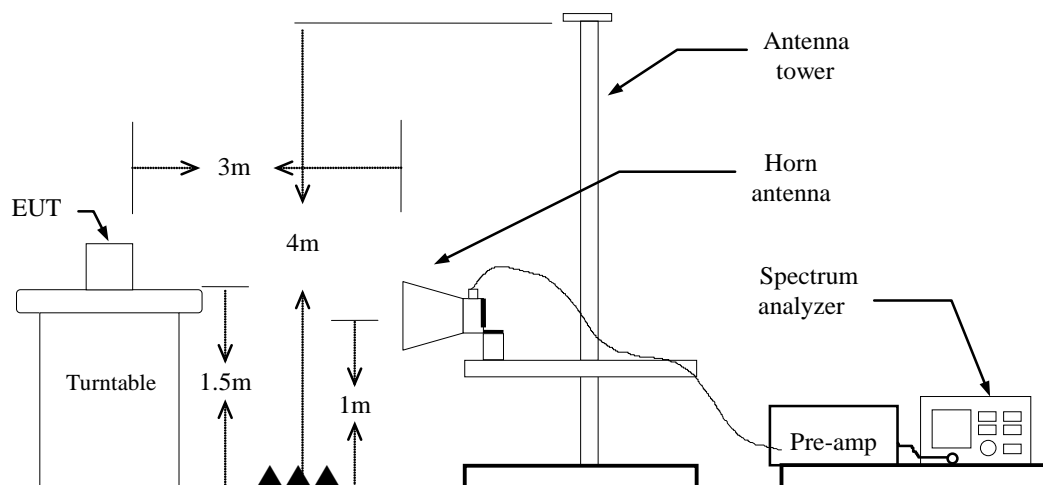
9kHz ~ 30MHz



30MHz ~ 1GHz



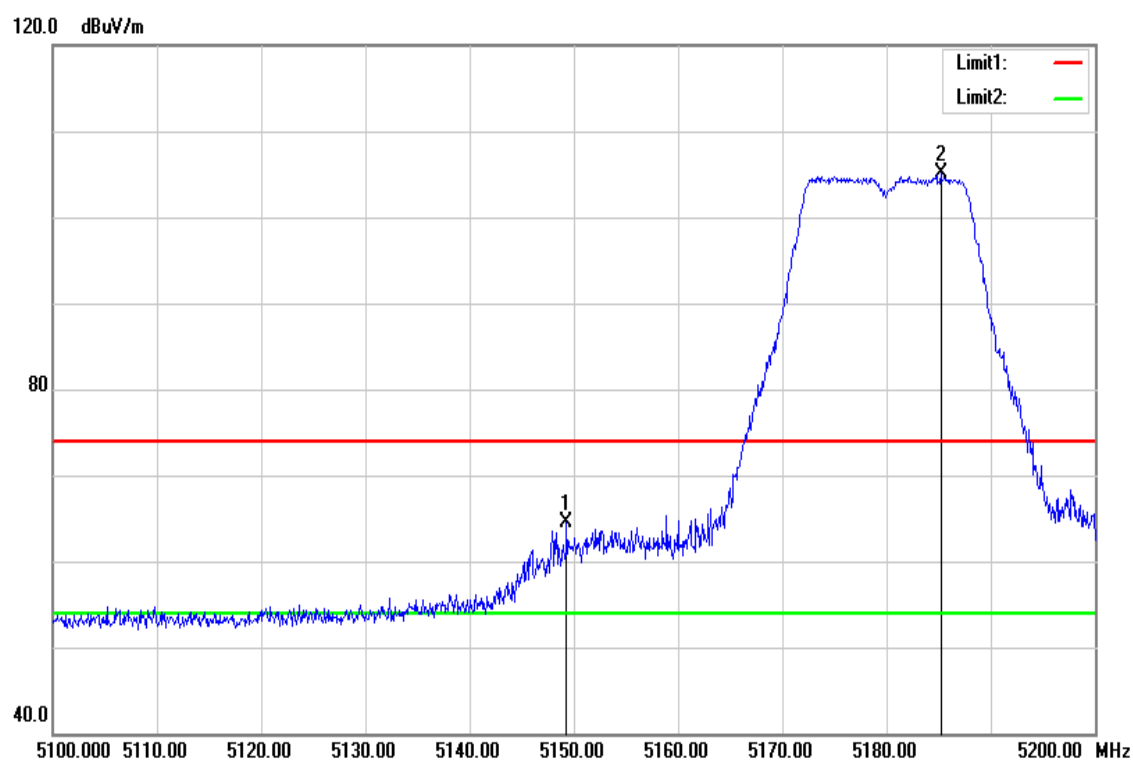
Above 1 GHz



4.3.4 Test Result

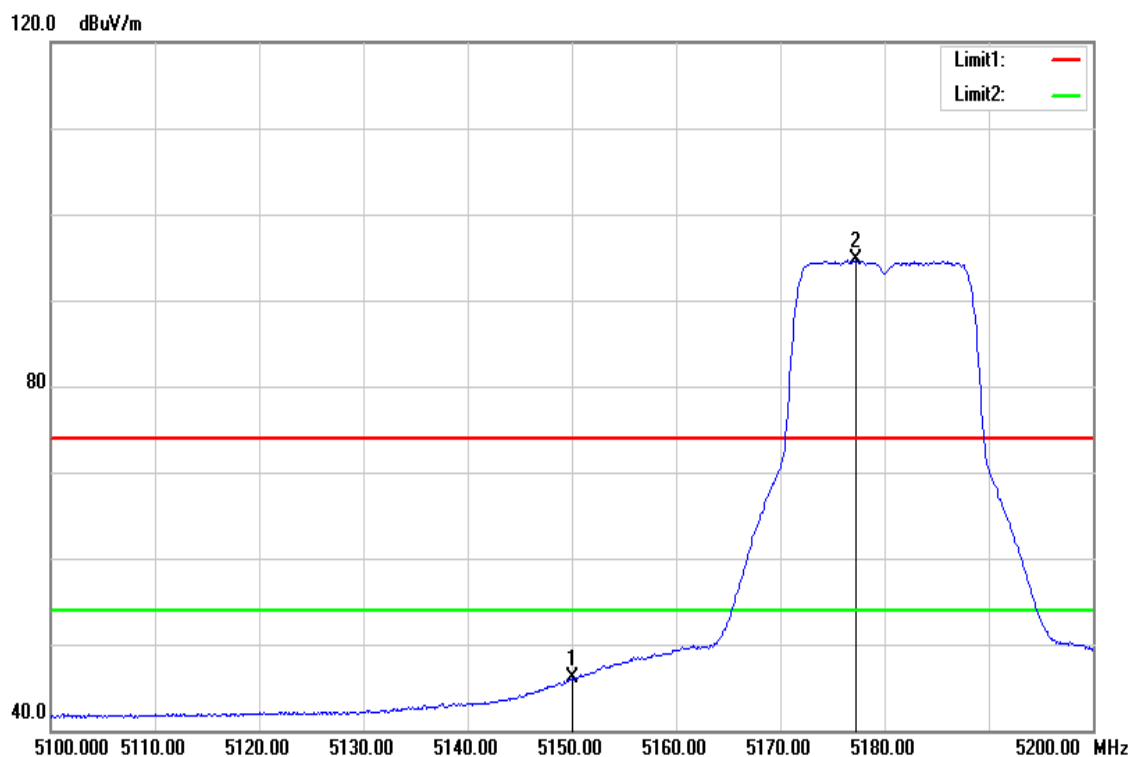
Test DataBand Edge Test Data for UNII-1

Test Mode	IEEE 802.11a / 5180MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak	Test Voltage	120Vac / 60Hz



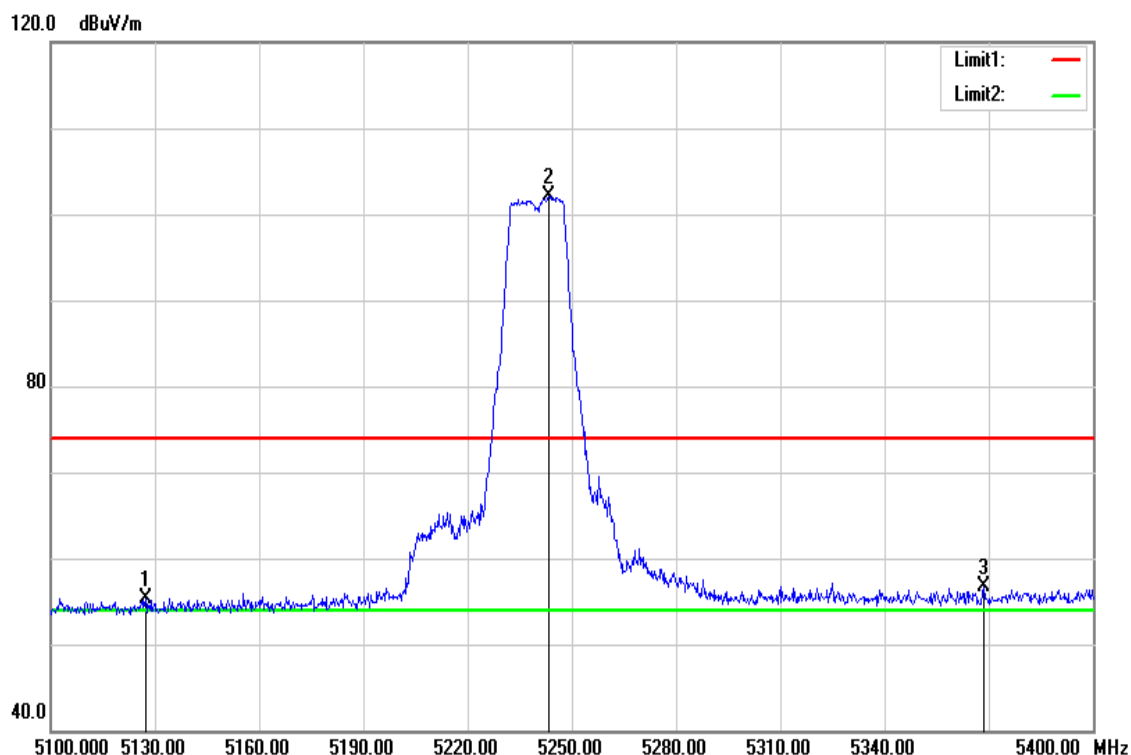
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5149.350	59.49	5.06	64.55	74.00	-9.45	peak
5185.250	100.03	5.15	105.18	-	-	peak

Test Mode	IEEE 802.11a / 5180MHz	Temperature	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average	Test Voltage	120Vac / 60Hz



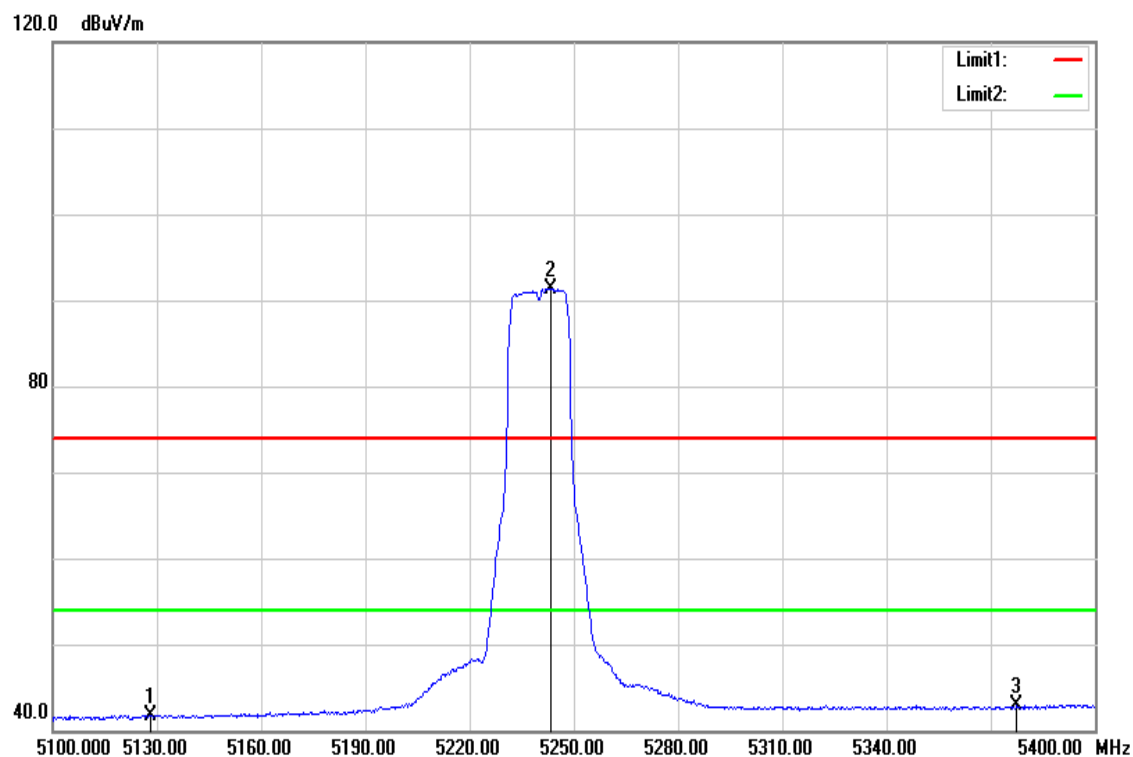
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5150.000	40.98	5.06	46.04	54.00	-7.96	AVG
5177.300	89.51	5.14	94.65	-	-	AVG

Test Mode	IEEE 802.11a / 5240MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak	Test Voltage	120Vac / 60Hz



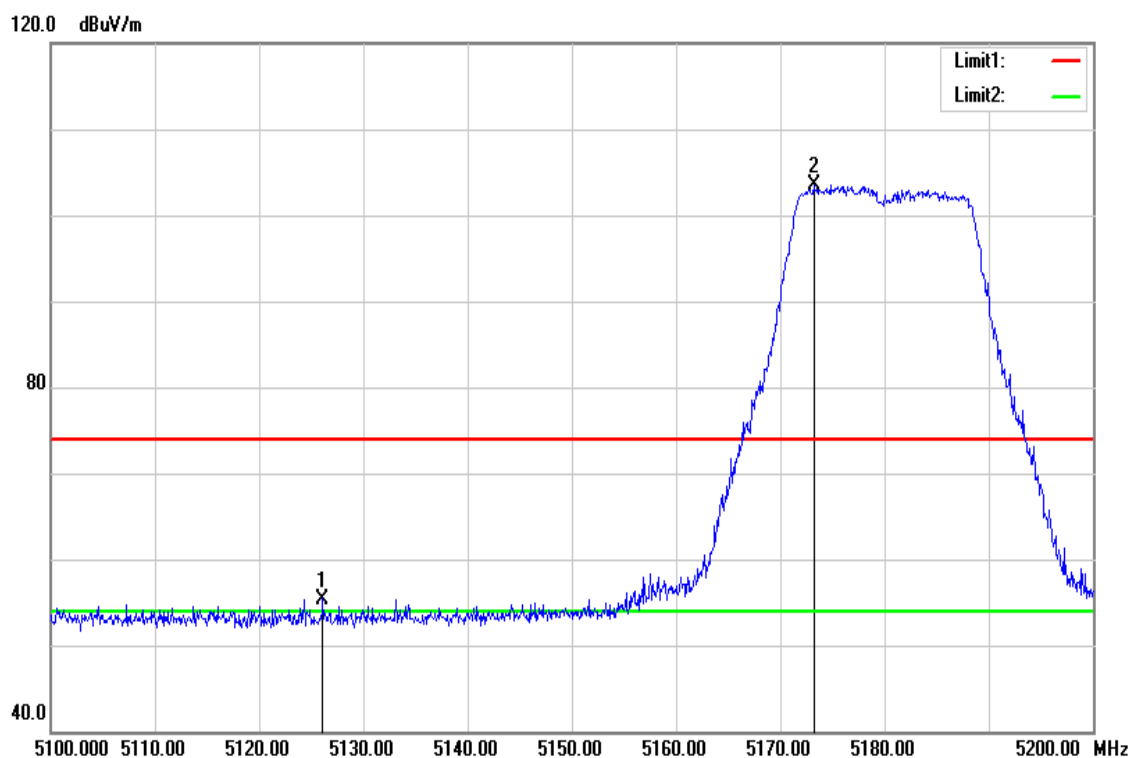
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5127.450	50.37	5.01	55.38	74.00	-18.62	peak
5243.400	96.88	5.29	102.17	-	-	peak
5368.500	51.05	5.60	56.65	74.00	-17.35	peak

Test Mode	IEEE 802.11a / 5240MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average	Test Voltage	120Vac / 60Hz



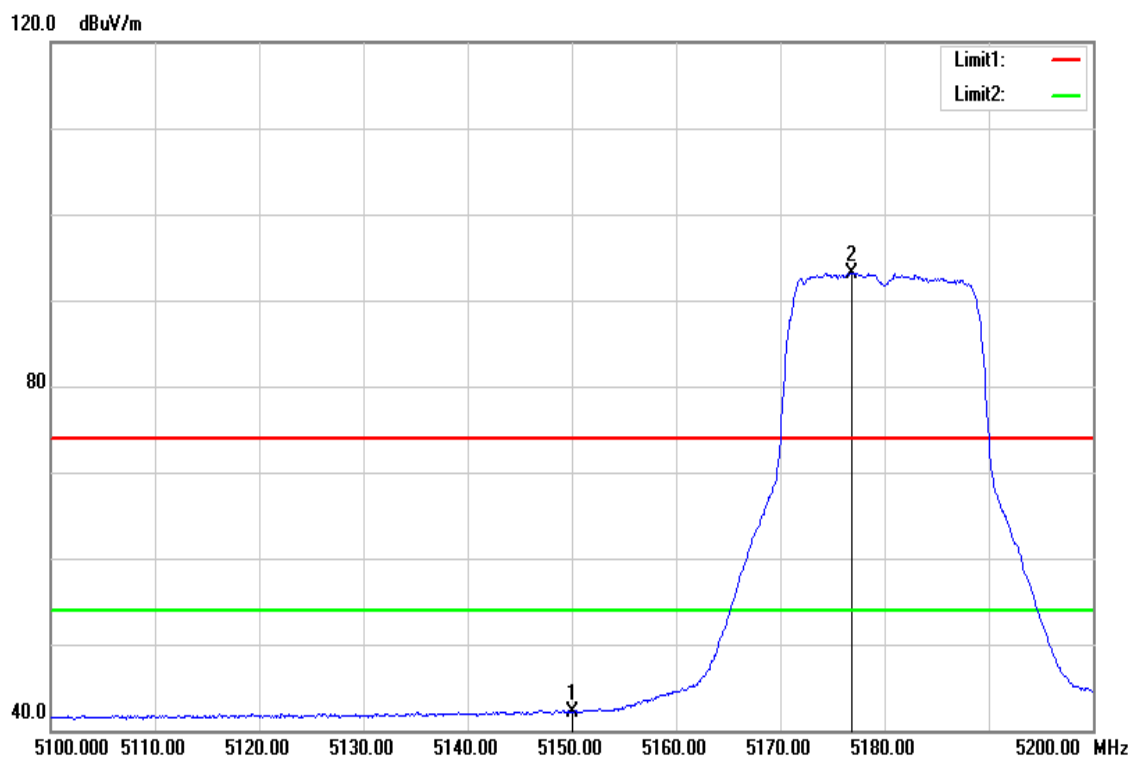
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5128.350	36.78	5.01	41.79	54.00	-12.21	AVG
5243.400	86.07	5.29	91.36	-	-	AVG
5377.500	37.28	5.63	42.91	54.00	-11.09	AVG

Test Mode	IEEE 802.11n 20 MHz / 5180MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak	Test Voltage	120Vac / 60Hz



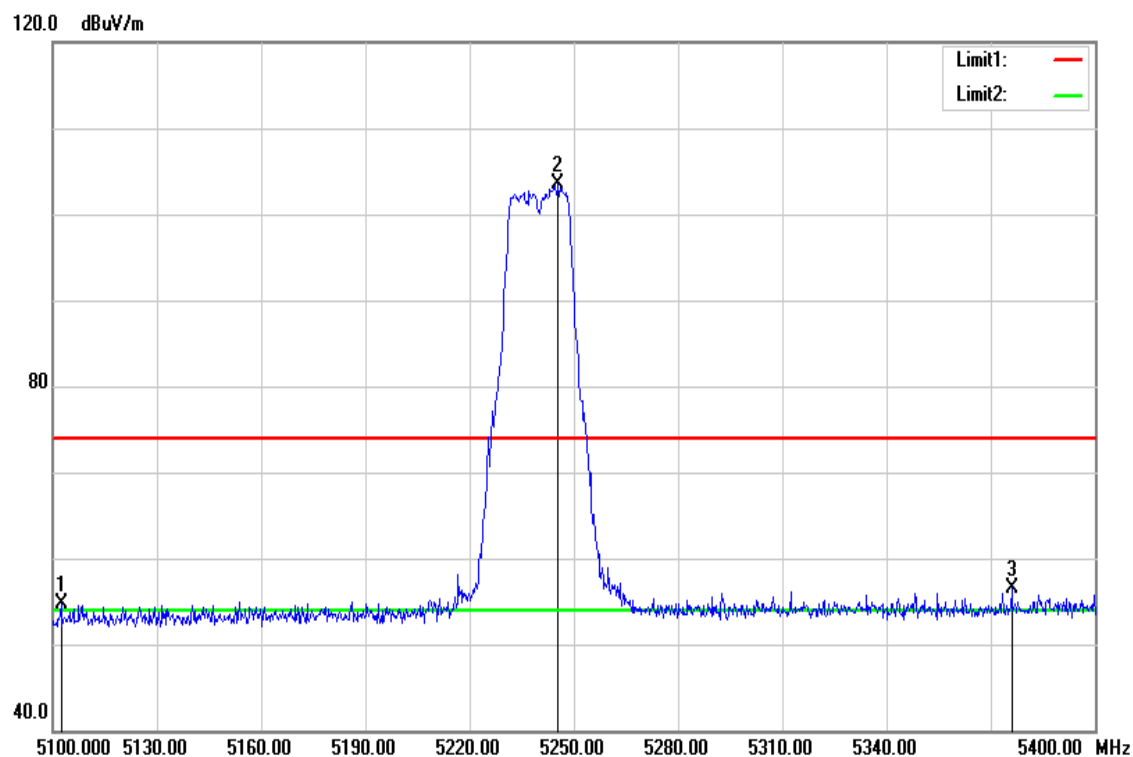
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5126.100	50.39	5.01	55.40	74.00	-18.60	peak
5173.250	98.42	5.11	103.53	-	-	peak

Test Mode	IEEE 802.11n 20 MHz / 5180MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average	Test Voltage	120Vac / 60Hz



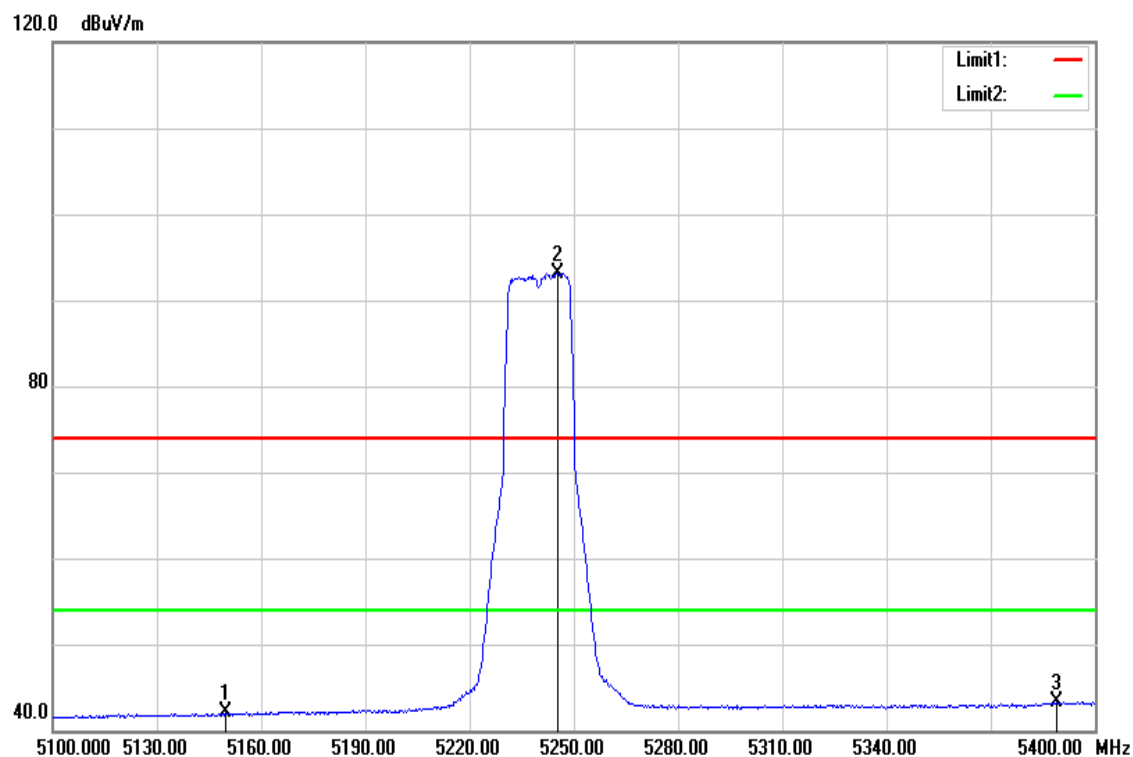
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5150.000	37.00	5.06	42.06	54.00	-11.94	AVG
5176.850	88.01	5.14	93.15	-	-	AVG

Test Mode	IEEE 802.11n 20 MHz / 5240MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak	Test Voltage	120Vac / 60Hz



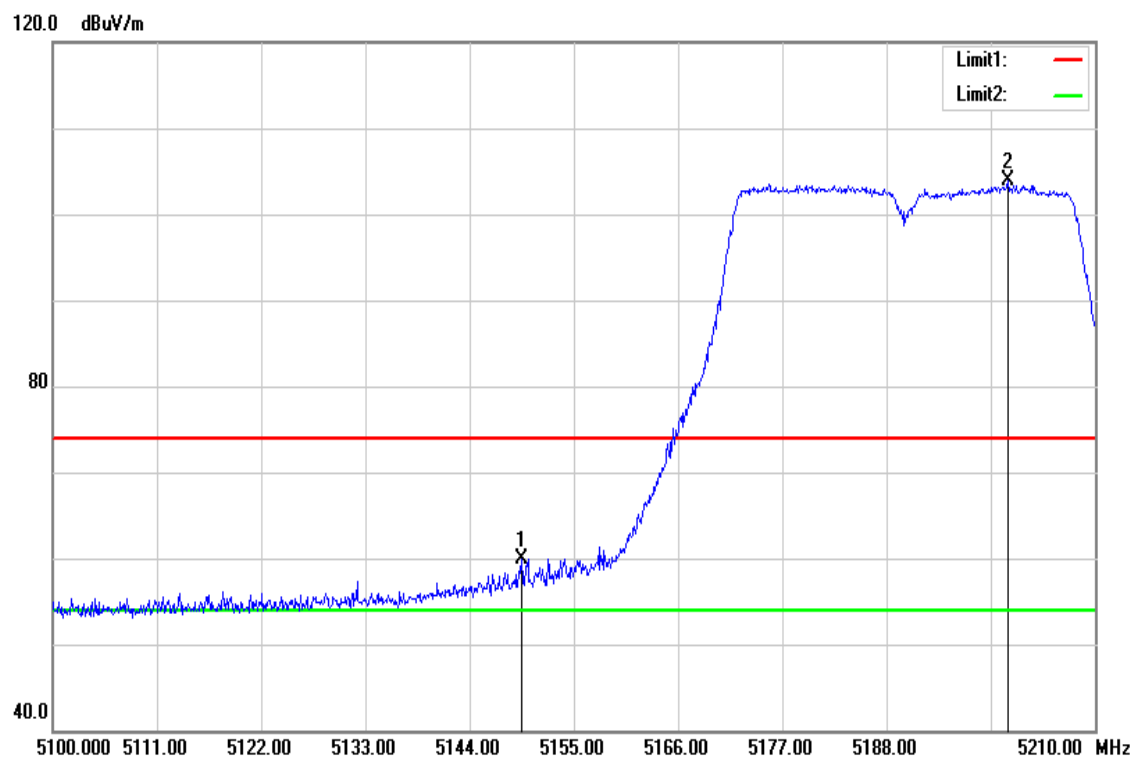
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5102.400	49.77	4.94	54.71	74.00	-19.29	peak
5245.500	98.10	5.31	103.41	-	-	peak
5376.150	50.81	5.63	56.44	74.00	-17.56	peak

Test Mode	IEEE 802.11n 20 MHz / 5240MHz	Temperature	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average	Test Voltage	120Vac / 60Hz



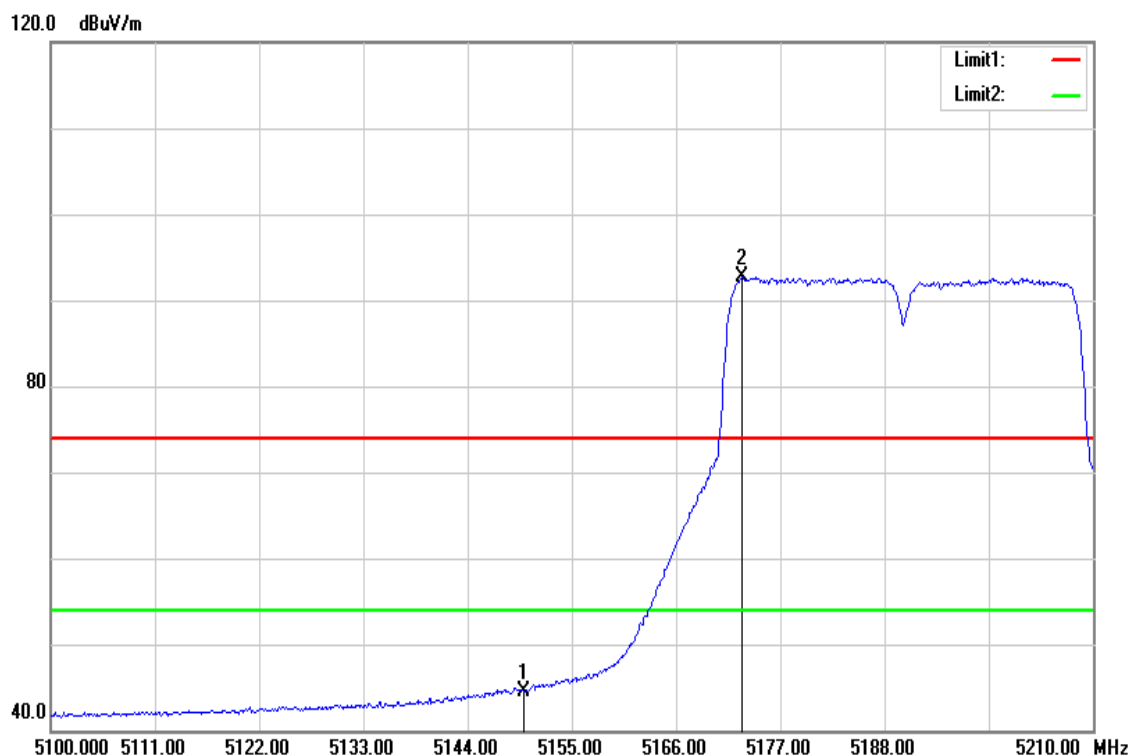
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5149.950	37.03	5.06	42.09	54.00	-11.91	AVG
5245.500	87.83	5.31	93.14	-	-	AVG
5389.050	37.67	5.65	43.32	54.00	-10.68	AVG

Test Mode	IEEE 802.11n 40 MHz / 5190MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak	Test Voltage	120Vac / 60Hz



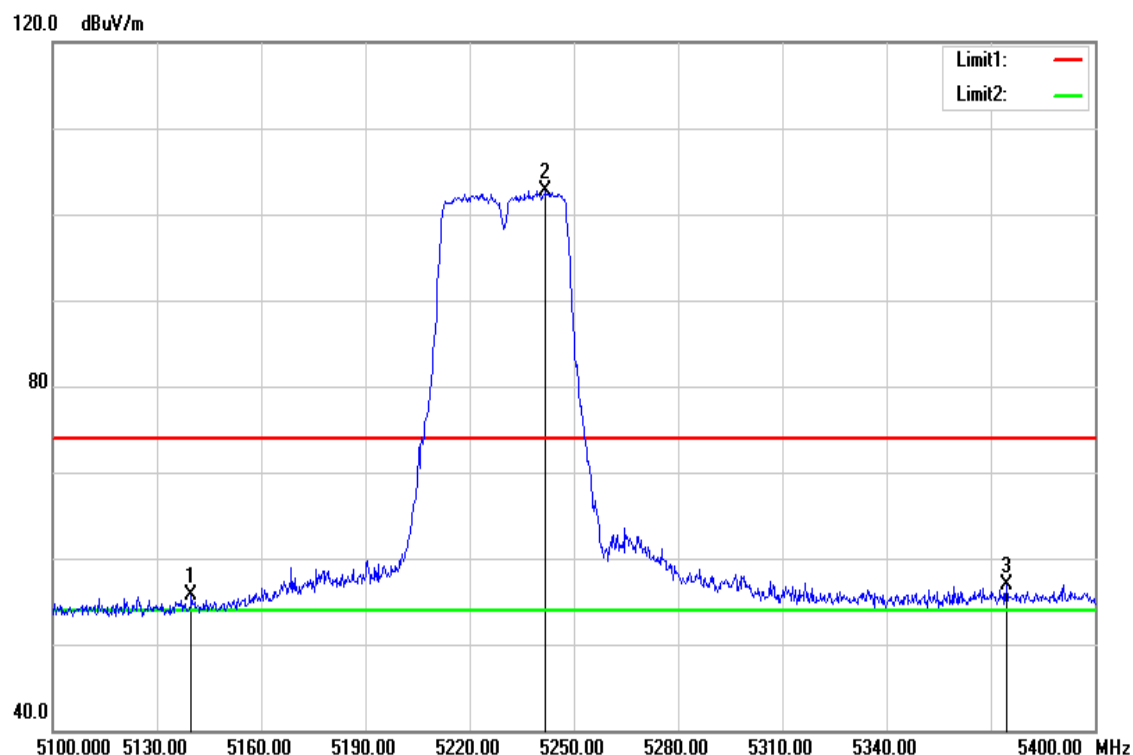
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5149.500	54.82	5.06	59.88	74.00	-14.12	peak
5200.760	98.76	5.19	103.95	-	-	peak

Test Mode	IEEE 802.11n 40 MHz / 5190MHz	Temperature	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average	Test Voltage	120Vac / 60Hz



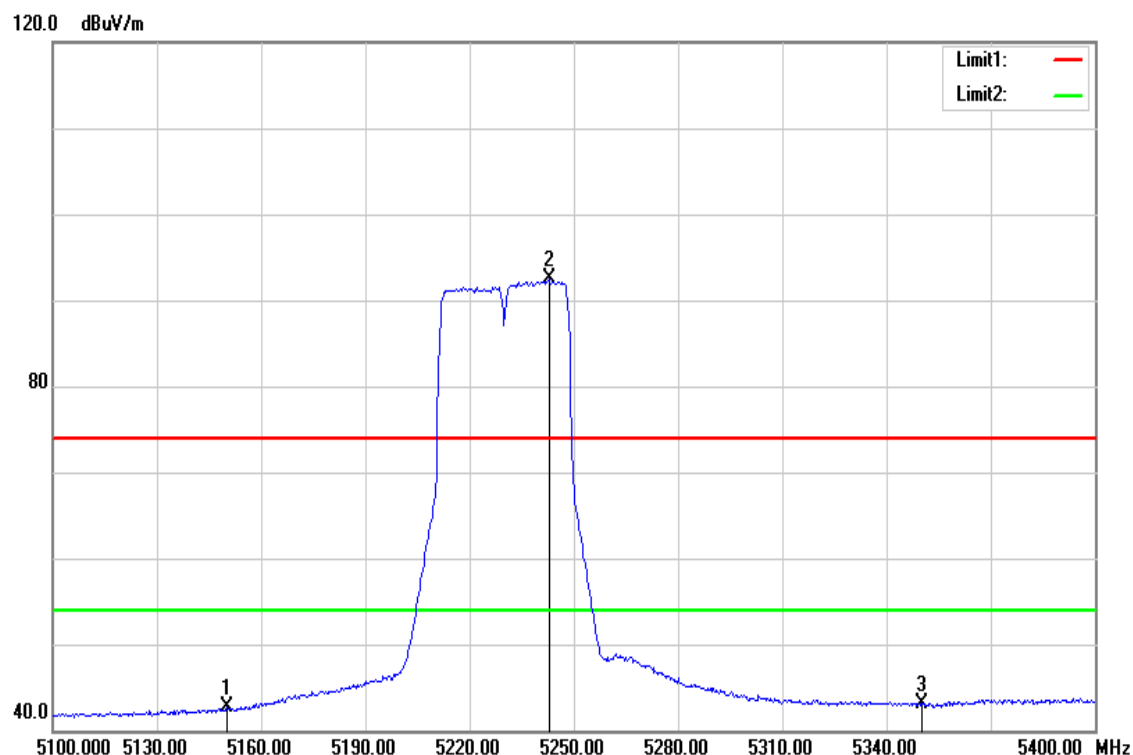
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5150.000	39.48	5.06	44.54	54.00	-9.46	AVG
5172.985	87.61	5.11	92.72	-	-	AVG

Test Mode	IEEE 802.11n 40 MHz / 5230MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak	Test Voltage	120Vac / 60Hz



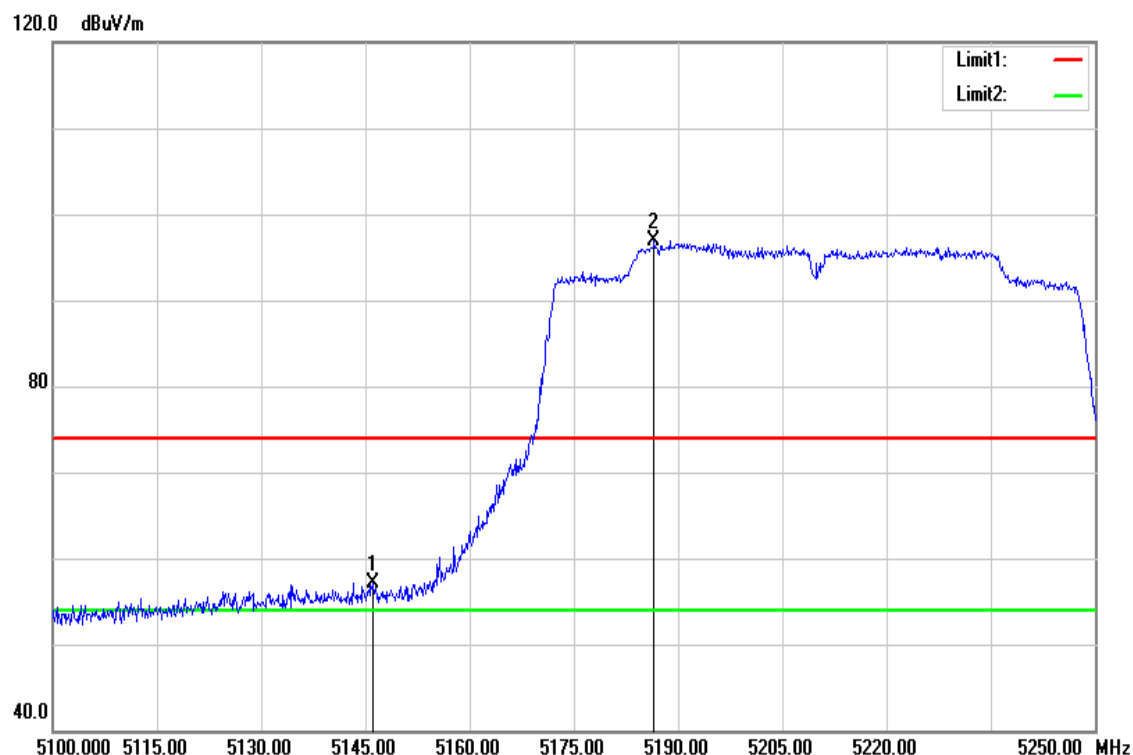
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5140.050	50.74	5.03	55.77	74.00	-18.23	peak
5242.050	97.49	5.29	102.78	-	-	peak
5374.650	51.29	5.61	56.90	74.00	-17.10	peak

Test Mode	IEEE 802.11n 40 MHz / 5230MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average	Test Voltage	120Vac / 60Hz



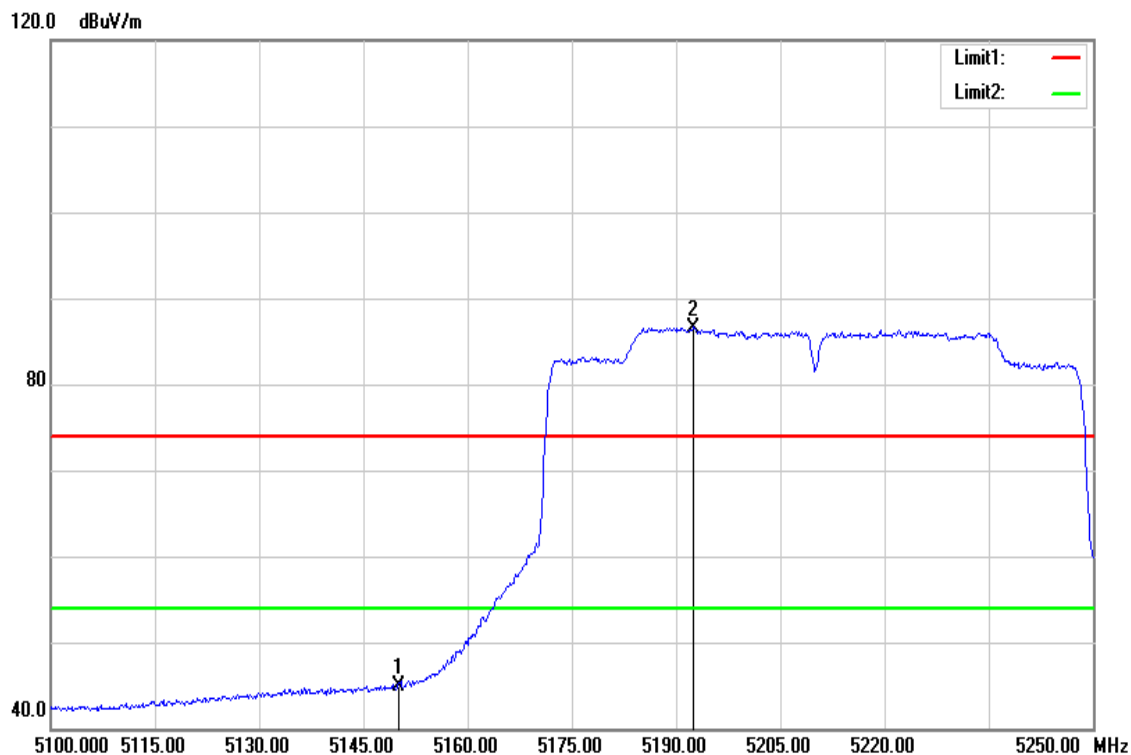
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5150.000	37.65	5.06	42.71	54.00	-11.29	AVG
5242.800	87.18	5.29	92.47	-	-	AVG
5350.000	37.45	5.56	43.01	54.00	-10.99	AVG

Test Mode	IEEE 802.11ac VHT80 MHz / 5210MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak	Test Voltage	120Vac / 60Hz



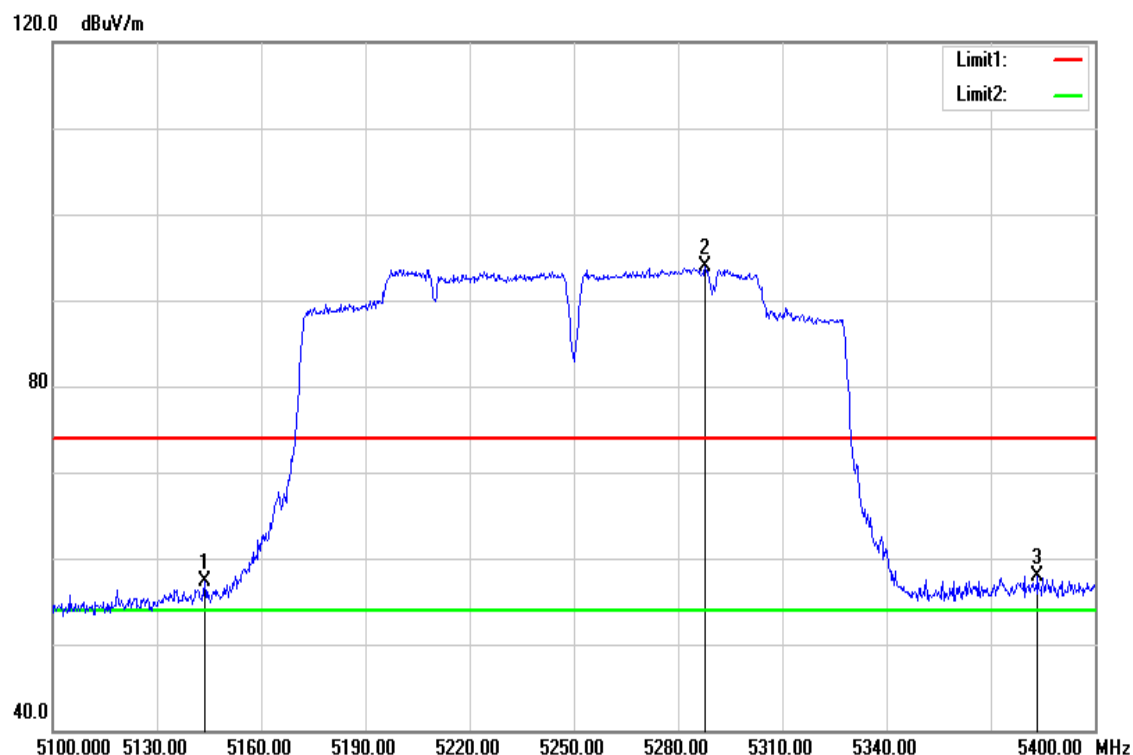
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5146.125	52.08	5.06	57.14	74.00	-16.86	peak
5186.625	91.76	5.15	96.91	-	-	peak

Test Mode	IEEE 802.11ac VHT80 MHz / 5210MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average	Test Voltage	120Vac / 60Hz



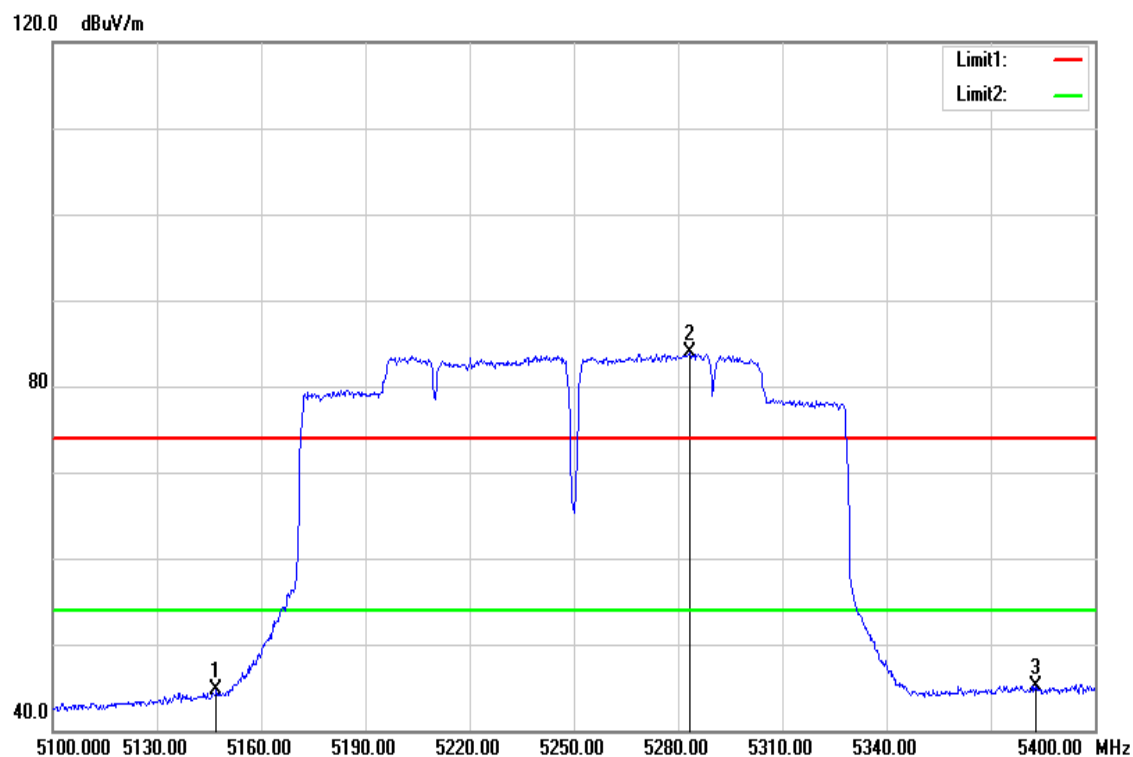
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5150.000	39.80	5.06	44.86	54.00	-9.14	AVG
5192.625	81.43	5.17	86.60	-	-	AVG

Test Mode	IEEE 802.11ac VHT160 MHz / 5250MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak	Test Voltage	120Vac / 60Hz



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5143.950	52.29	5.05	57.34	74.00	-16.66	peak
5287.950	88.48	5.40	93.88	-	-	peak
5383.650	52.26	5.64	57.90	74.00	-16.10	peak

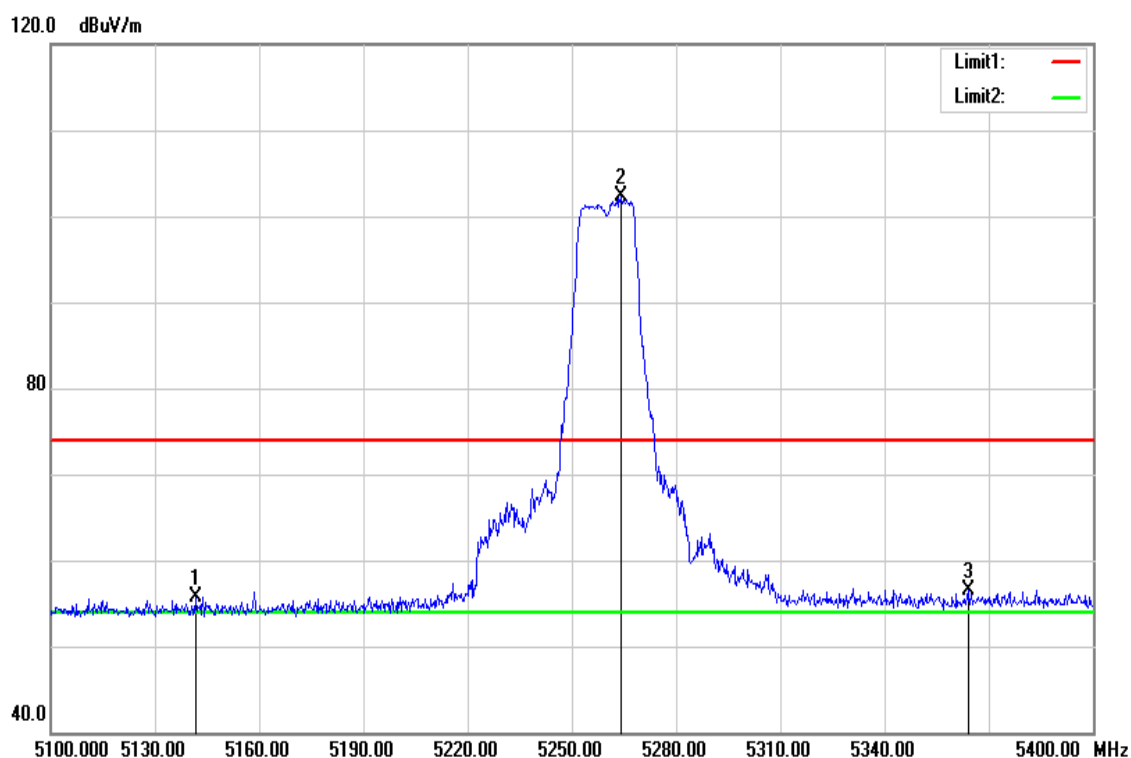
Test Mode	IEEE 802.11ac VHT160 MHz / 5250MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average	Test Voltage	120Vac / 60Hz



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5147.100	39.57	5.06	44.63	54.00	-9.37	AVG
5283.450	78.47	5.39	83.86	-	-	AVG
5382.900	39.55	5.64	45.19	54.00	-8.81	AVG

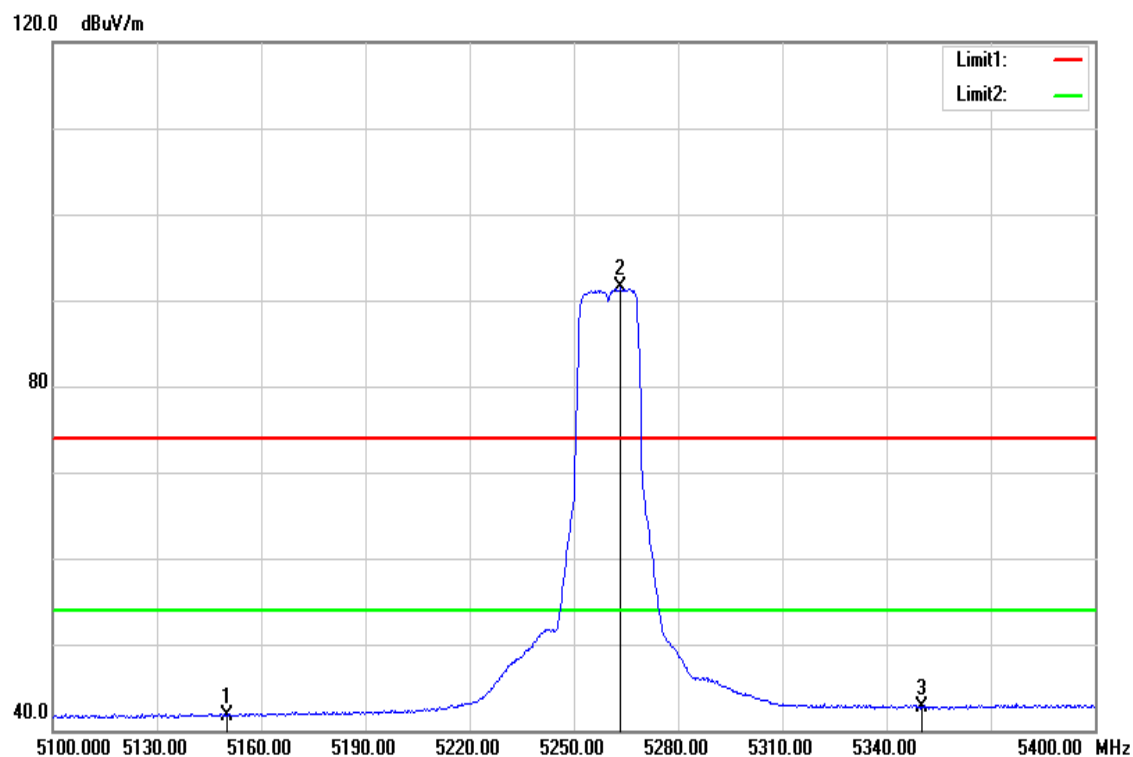
Band Edge Test Data for UNII-2a

Test Mode	IEEE 802.11a / 5260 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak	Test Voltage	120Vac / 60Hz



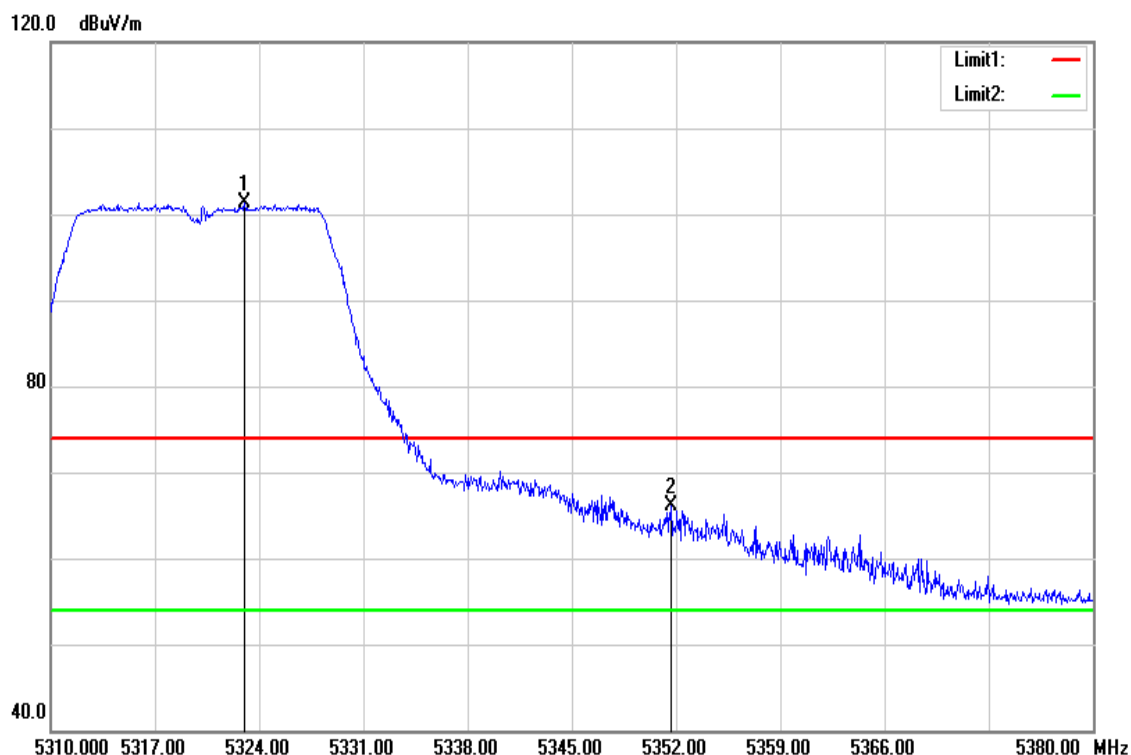
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5141.700	50.69	5.04	55.73	74.00	-18.27	peak
5264.100	96.90	5.34	102.24	-	-	peak
5364.000	50.96	5.59	56.55	74.00	-17.45	peak

Test Mode	IEEE 802.11a / 5260MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average	Test Voltage	120Vac / 60Hz



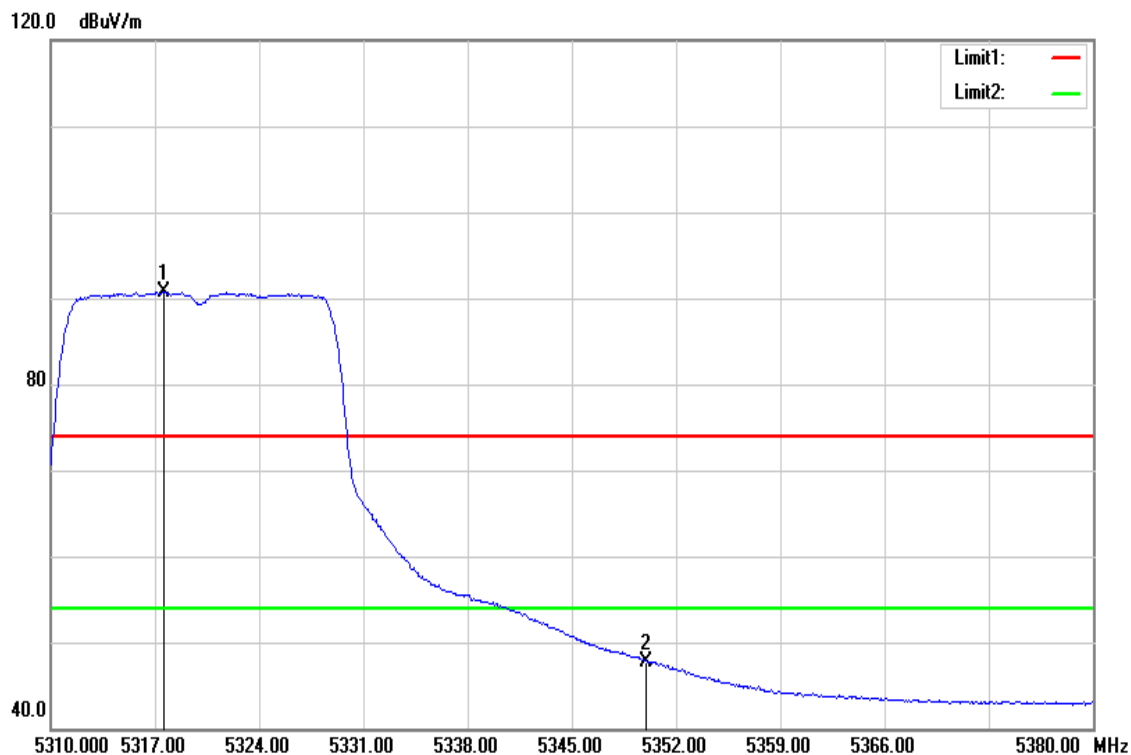
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5150.000	36.69	5.06	41.75	54.00	-12.25	AVG
5263.500	86.10	5.34	91.44	-	-	AVG
5350.000	37.06	5.56	42.62	54.00	-11.38	AVG

Test Mode	IEEE 802.11a / 5320MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak	Test Voltage	120Vac / 60Hz



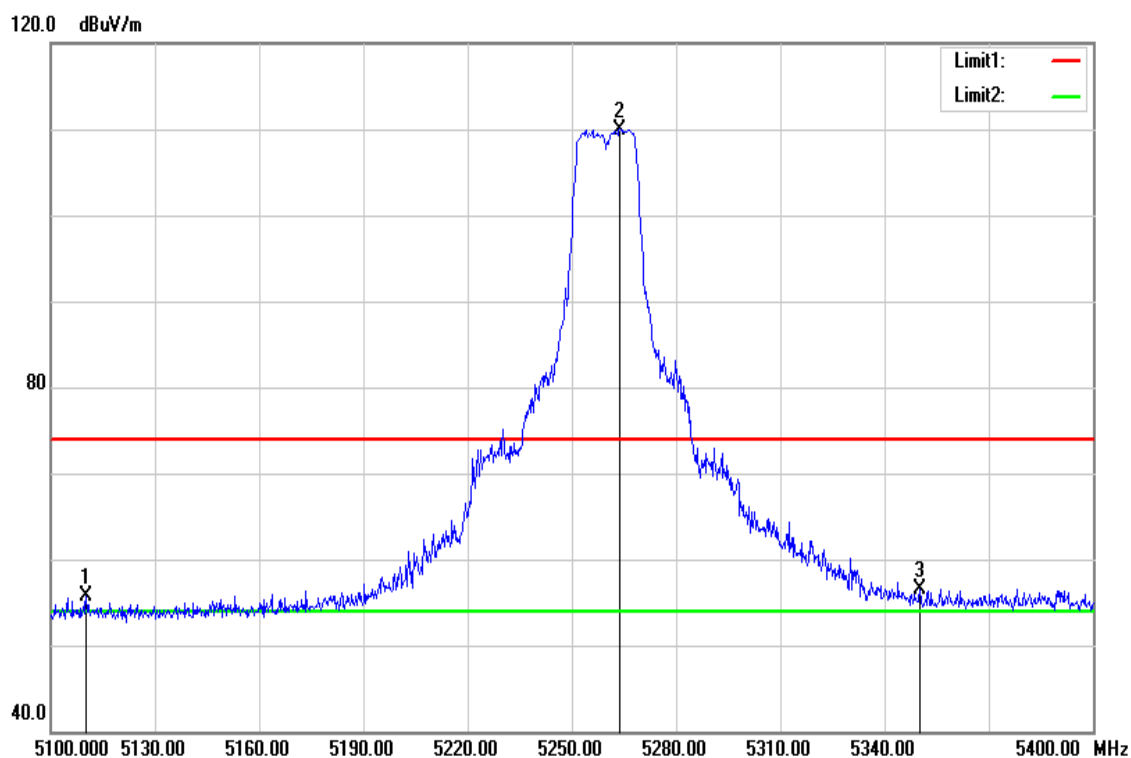
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5323.055	95.73	5.48	101.21	-	-	peak
5351.685	60.63	5.56	66.19	74.00	-7.81	peak

Test Mode	IEEE 802.11a / 5320MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average	Test Voltage	120Vac / 60Hz



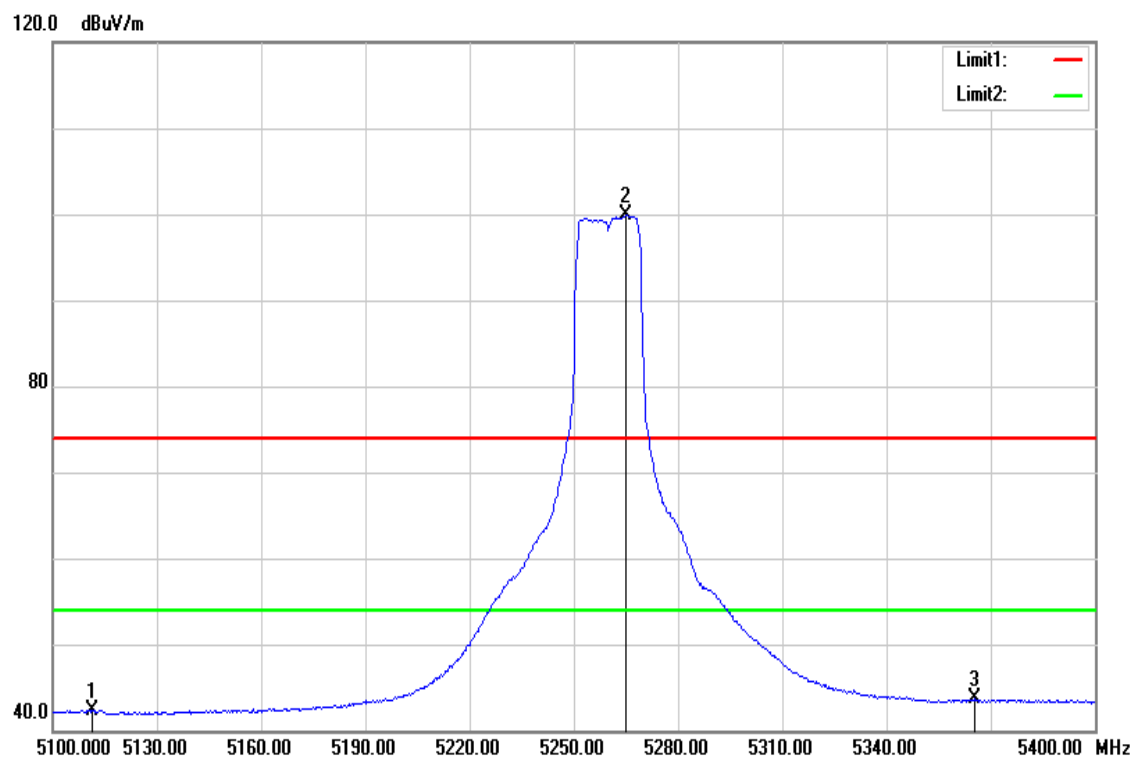
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5317.630	85.20	5.48	90.68	-	-	AVG
5350.000	42.14	5.56	47.70	54.00	-6.30	AVG

Test Mode	IEEE 802.11n 20 MHz / 5260MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak	Test Voltage	120Vac / 60Hz



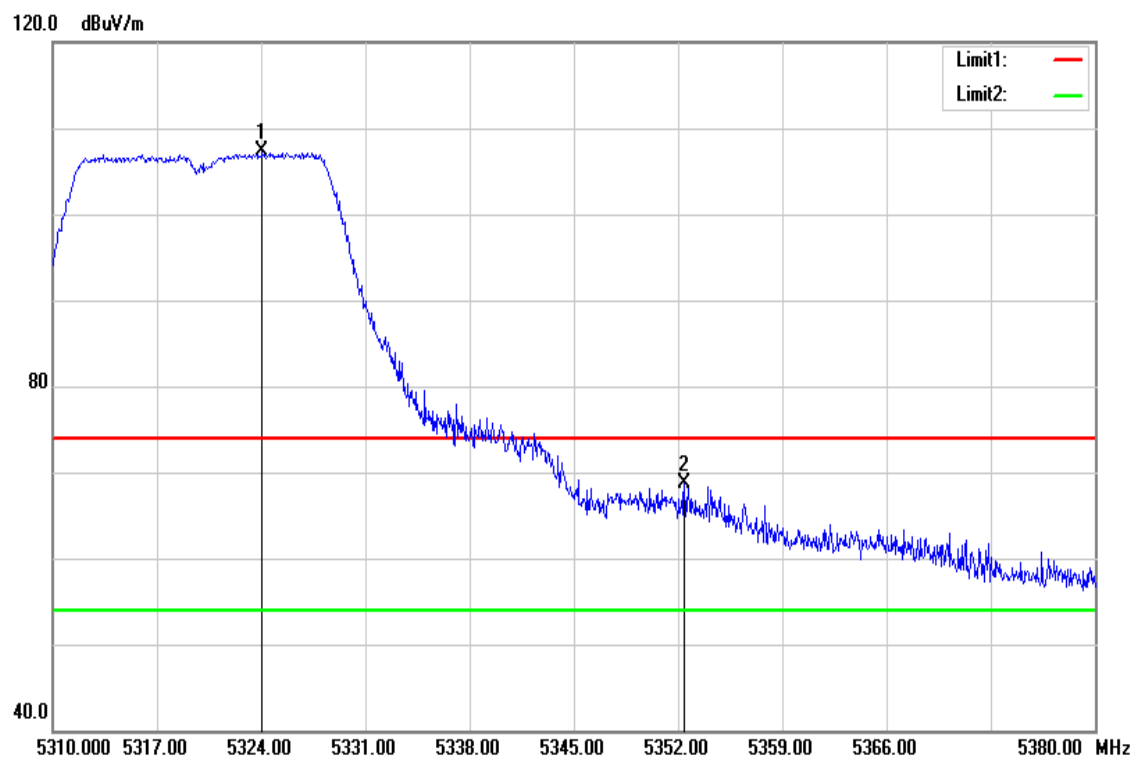
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5110.350	50.72	4.97	55.69	74.00	-18.31	peak
5263.800	104.66	5.34	110.00	-	-	peak
5350.200	50.91	5.56	56.47	74.00	-17.53	peak

Test Mode	IEEE 802.11n 20 MHz / 5260MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average	Test Voltage	120Vac / 60Hz



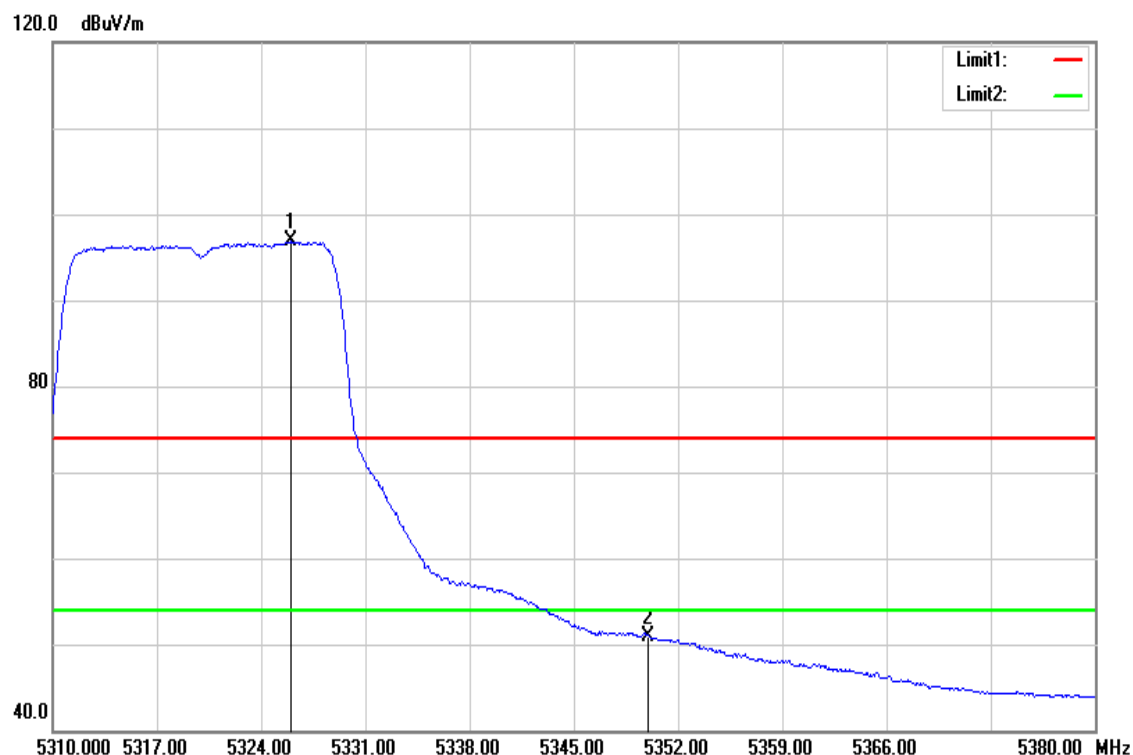
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5111.400	37.38	4.97	42.35	54.00	-11.65	AVG
5265.150	94.53	5.35	99.88	-	-	AVG
5365.200	38.10	5.60	43.70	54.00	-10.30	AVG

Test Mode	IEEE 802.11n 20 MHz / 5320MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak	Test Voltage	120Vac / 60Hz



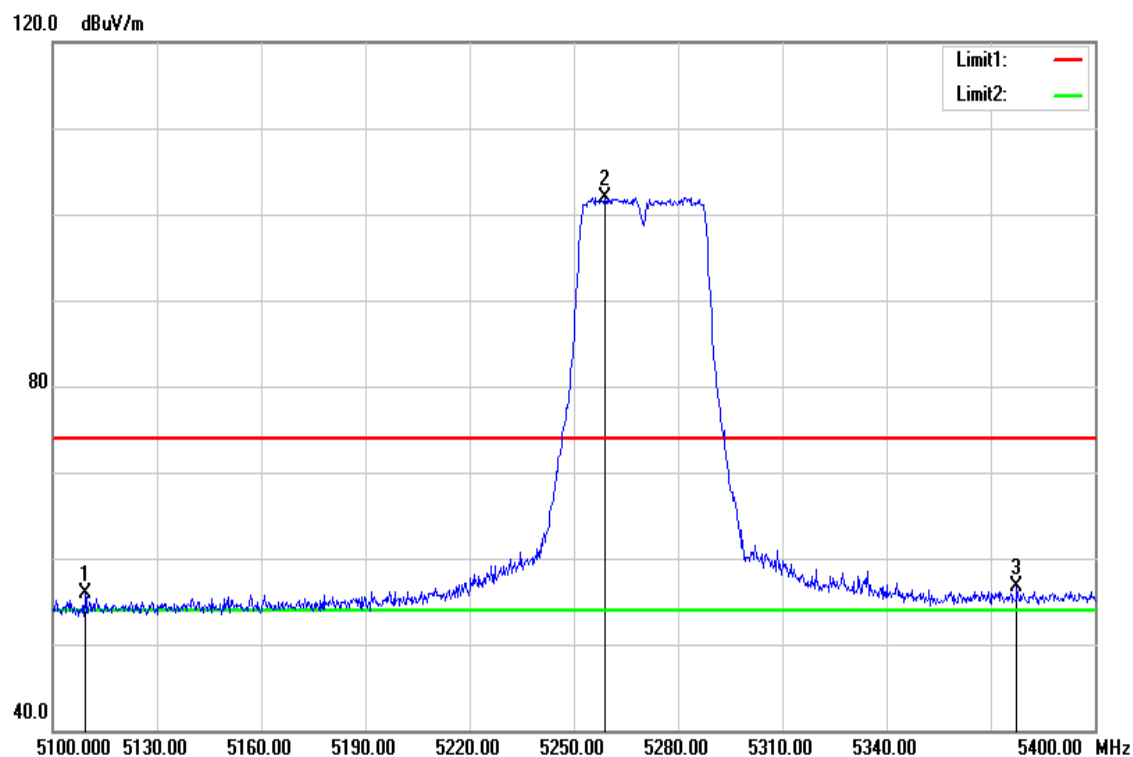
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5324.070	101.80	5.49	107.29	-	-	peak
5352.455	63.17	5.56	68.73	74.00	-5.27	peak

Test Mode	IEEE 802.11n 20 MHz / 5320MHz	Temperature	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average	Test Voltage	120Vac / 60Hz



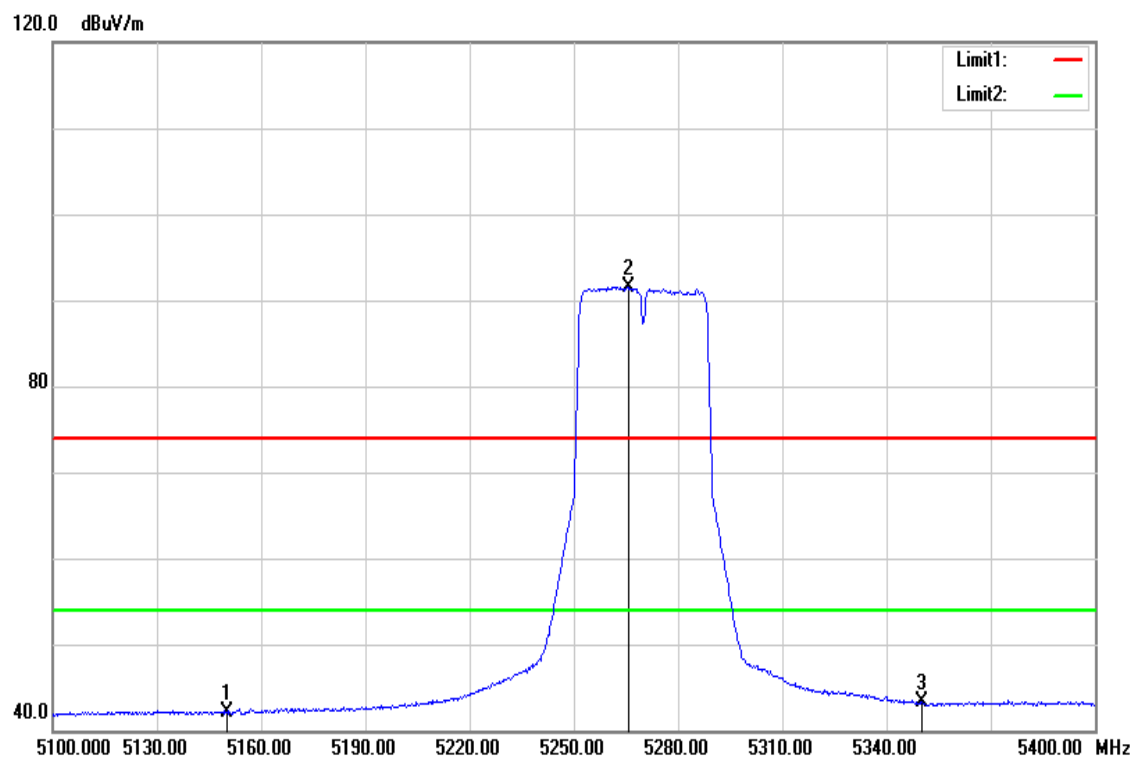
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5325.960	91.34	5.51	96.85	-	-	AVG
5350.000	45.30	5.56	50.86	54.00	-3.14	AVG

Test Mode	IEEE 802.11n 40 MHz / 5270MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak	Test Voltage	120Vac / 60Hz



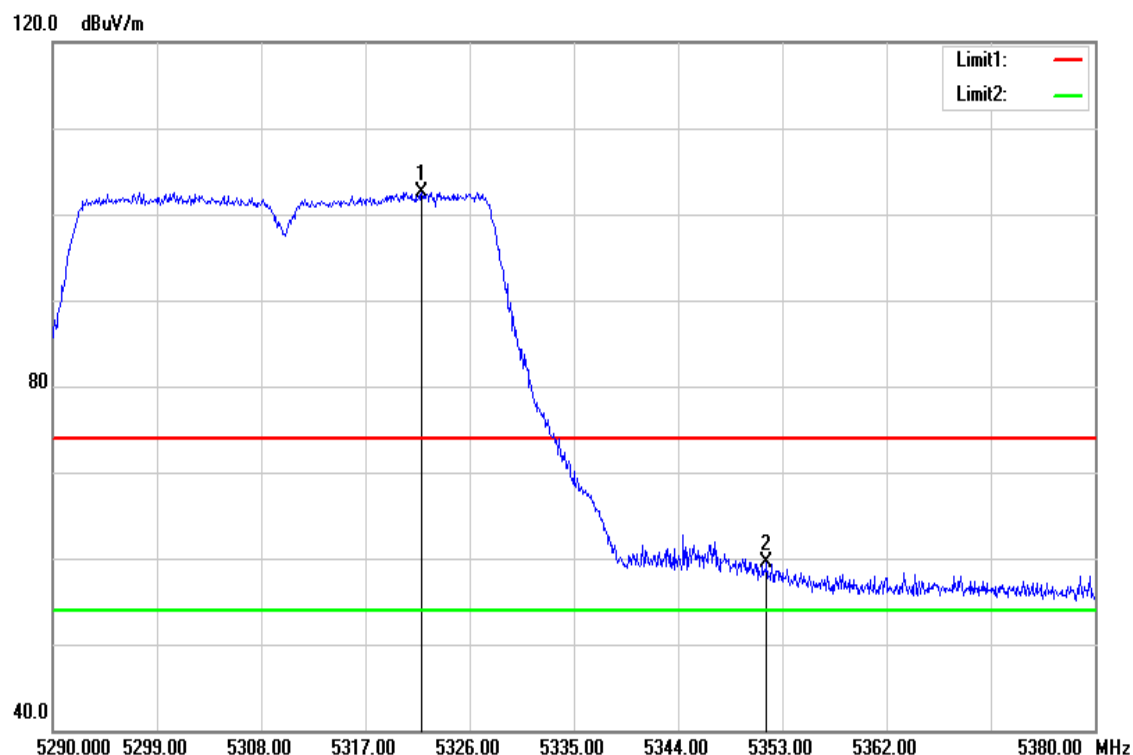
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5109.450	50.90	4.97	55.87	74.00	-18.13	peak
5259.000	96.63	5.34	101.97	-	-	peak
5377.500	51.03	5.63	56.66	74.00	-17.34	peak

Test Mode	IEEE 802.11n 40 MHz / 5270MHz	Temperature	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average	Test Voltage	120Vac / 60Hz



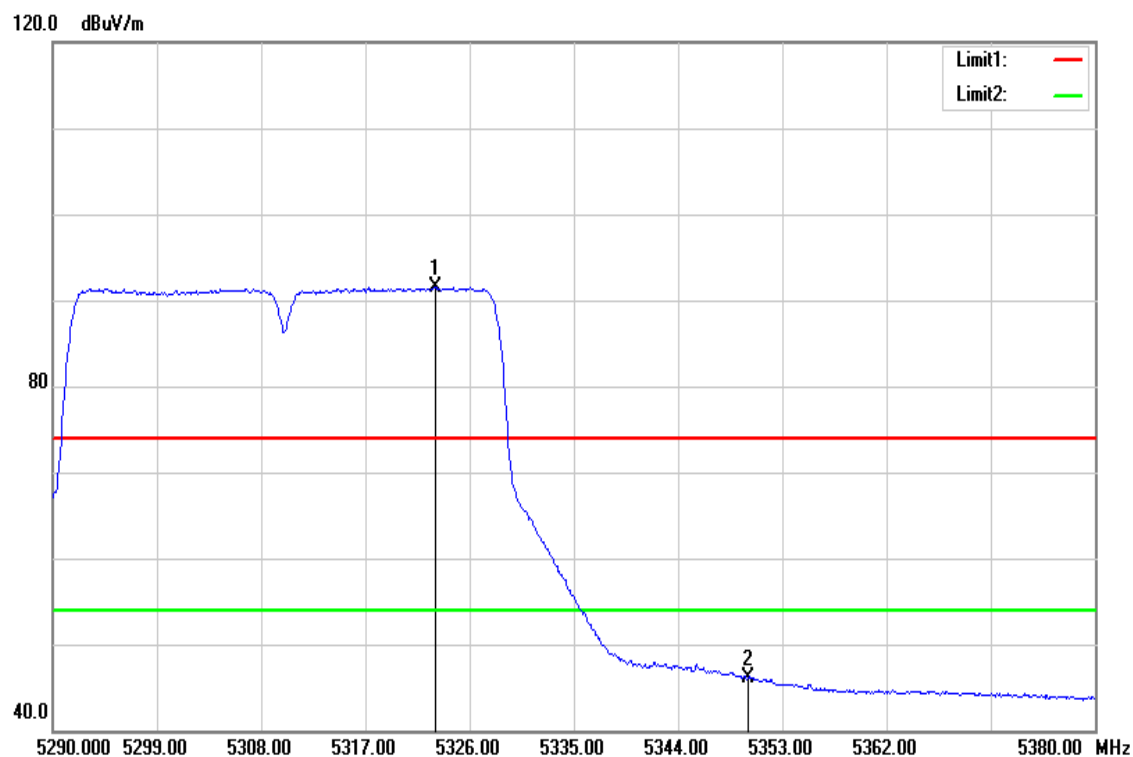
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5150.000	37.00	5.06	42.06	54.00	-11.94	AVG
5266.050	86.16	5.35	91.51	-	-	AVG
5350.000	37.78	5.56	43.34	54.00	-10.66	AVG

Test Mode	IEEE 802.11n 40 MHz / 5310MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak	Test Voltage	120Vac / 60Hz



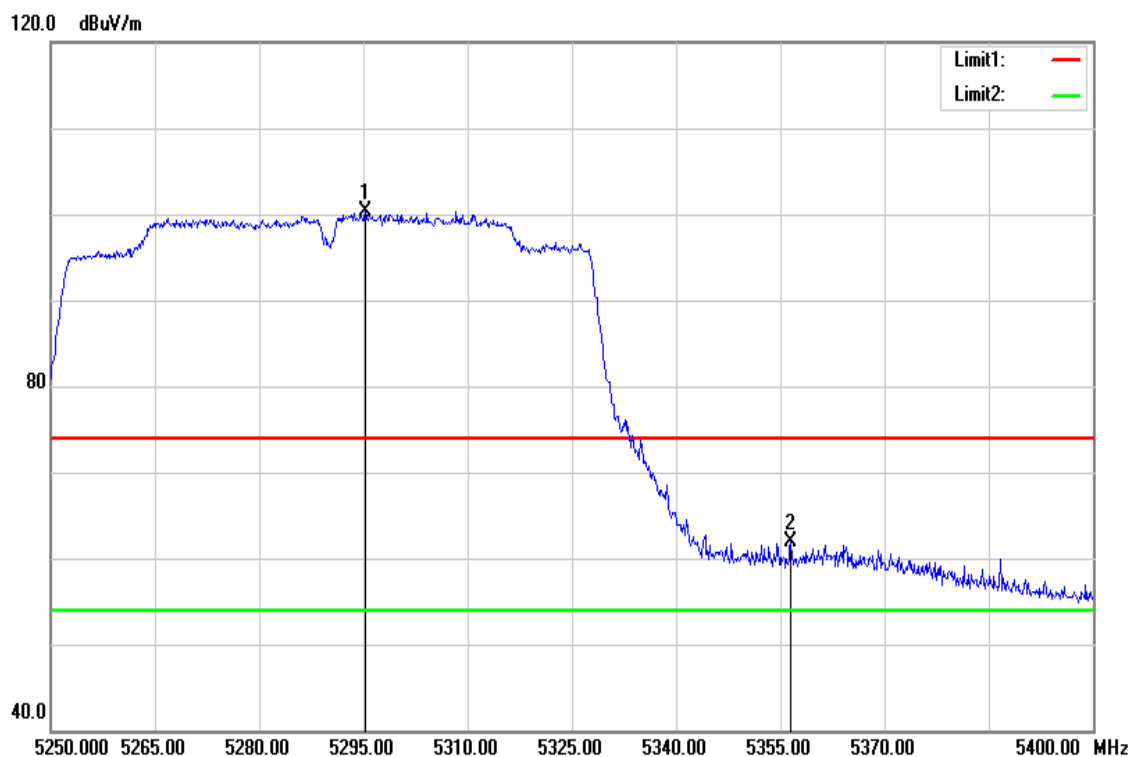
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5321.860	97.04	5.48	102.52	-	-	peak
5351.650	54.03	5.56	59.59	74.00	-14.41	peak

Test Mode	IEEE 802.11n 40 MHz / 5310MHz	Temperature	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average	Test Voltage	120Vac / 60Hz



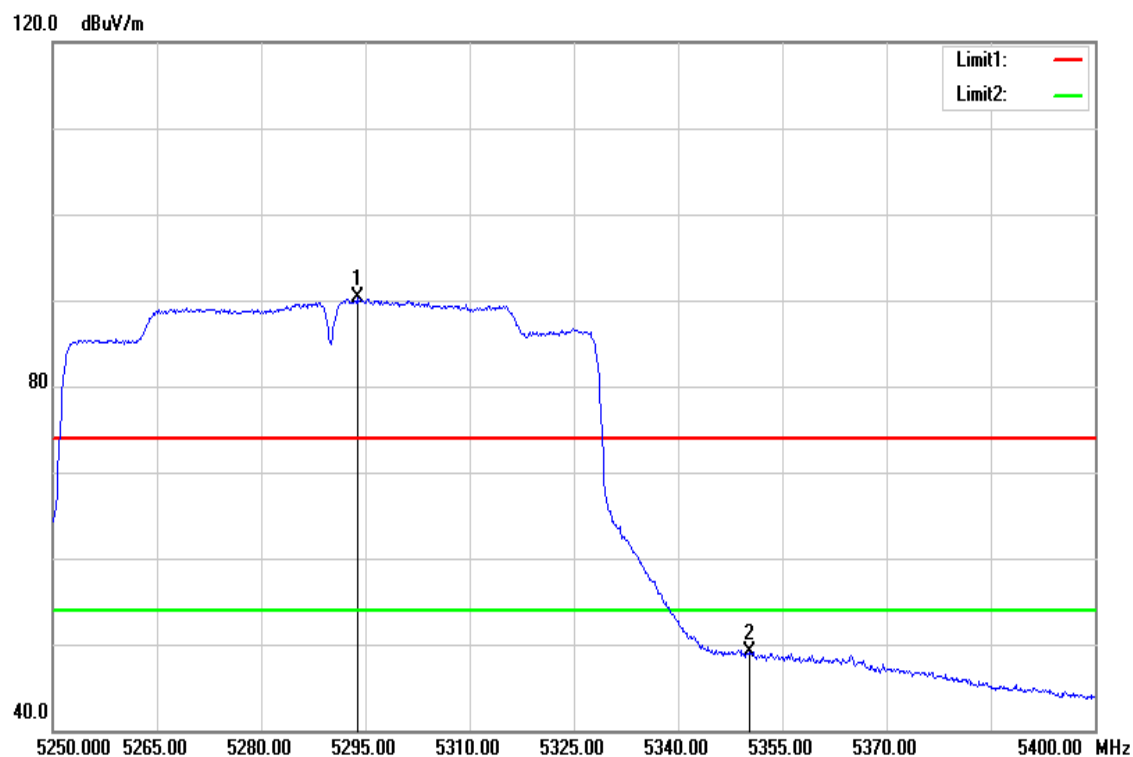
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5323.030	86.10	5.48	91.58	-	-	AVG
5350.000	40.59	5.56	46.15	54.00	-7.85	AVG

Test Mode	IEEE 802.11ac VHT80 MHz / 5290MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak	Test Voltage	120Vac / 60Hz



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5295.300	94.85	5.43	100.28	-	-	peak
5356.500	56.29	5.57	61.86	74.00	-12.14	peak

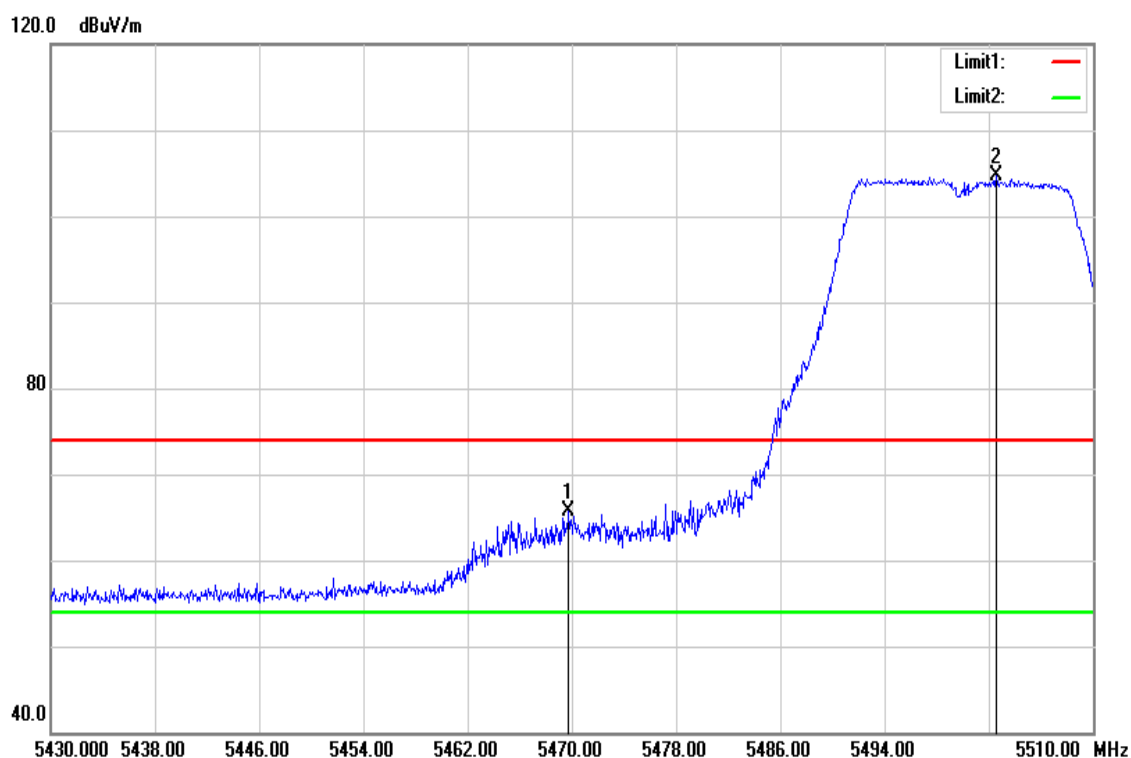
Test Mode	IEEE 802.11ac VHT80 MHz / 5290MHz	Temperature	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average	Test Voltage	120Vac / 60Hz



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5293.875	84.83	5.42	90.25	-	-	AVG
5350.350	43.58	5.56	49.14	54.00	-4.86	AVG

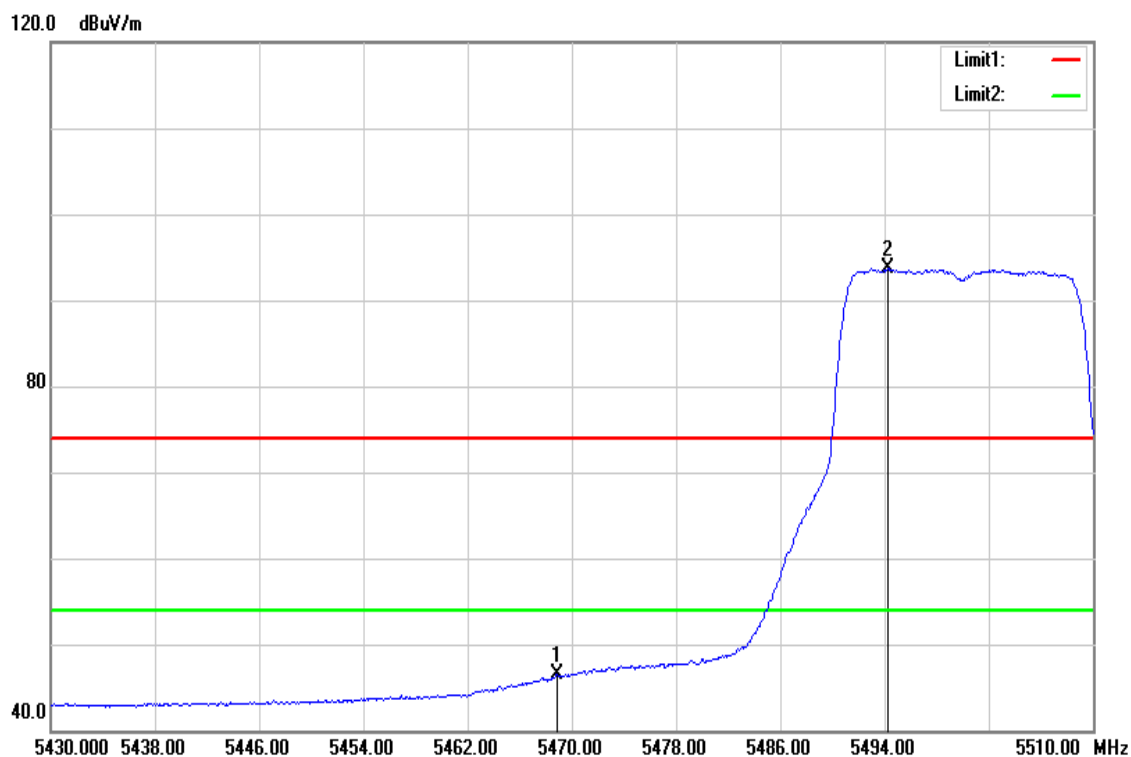
Band Edge Test Data for UNII-2c

Test Mode	IEEE 802.11a / 5500MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak	Test Voltage	120Vac / 60Hz



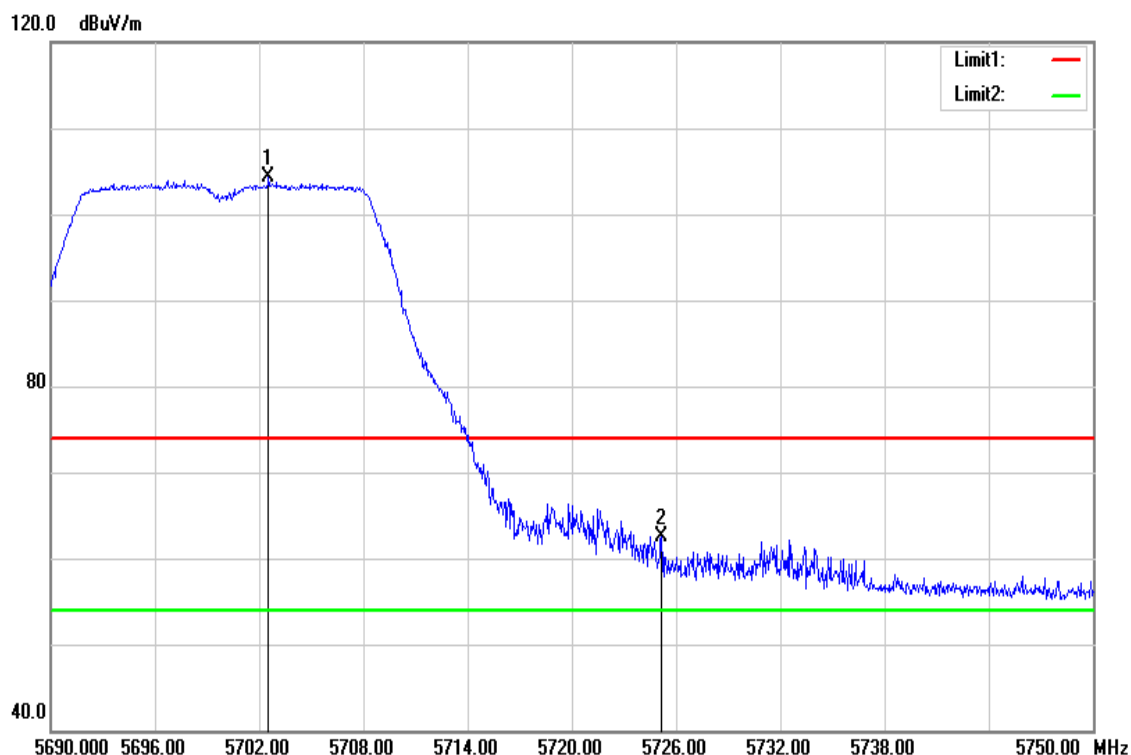
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5469.800	59.81	5.85	65.66	74.00	-8.34	peak
5502.560	98.82	5.94	104.76	-	-	peak

Test Mode	IEEE 802.11a / 5500MHz	Temperature	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average	Test Voltage	120Vac / 60Hz



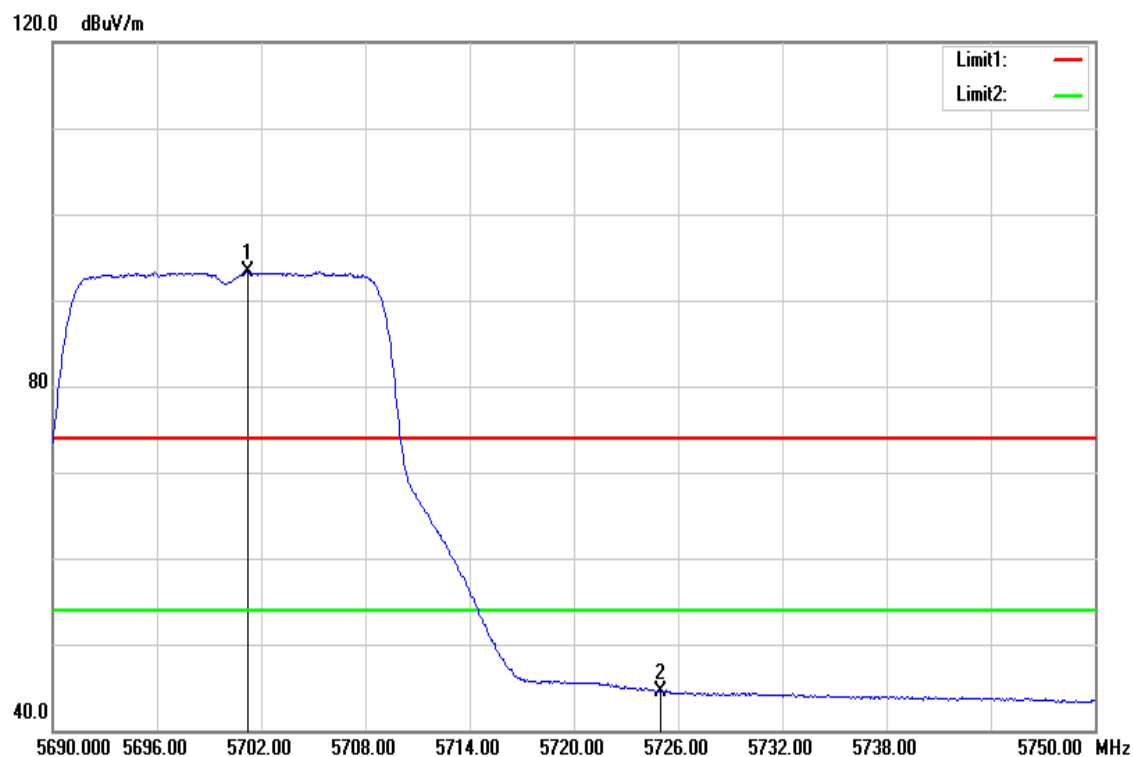
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5468.880	40.60	5.85	46.45	54.00	-7.55	AVG
5494.280	87.81	5.91	93.72	-	-	AVG

Test Mode	IEEE 802.11a / 5700 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak	Test Voltage	120Vac / 60Hz



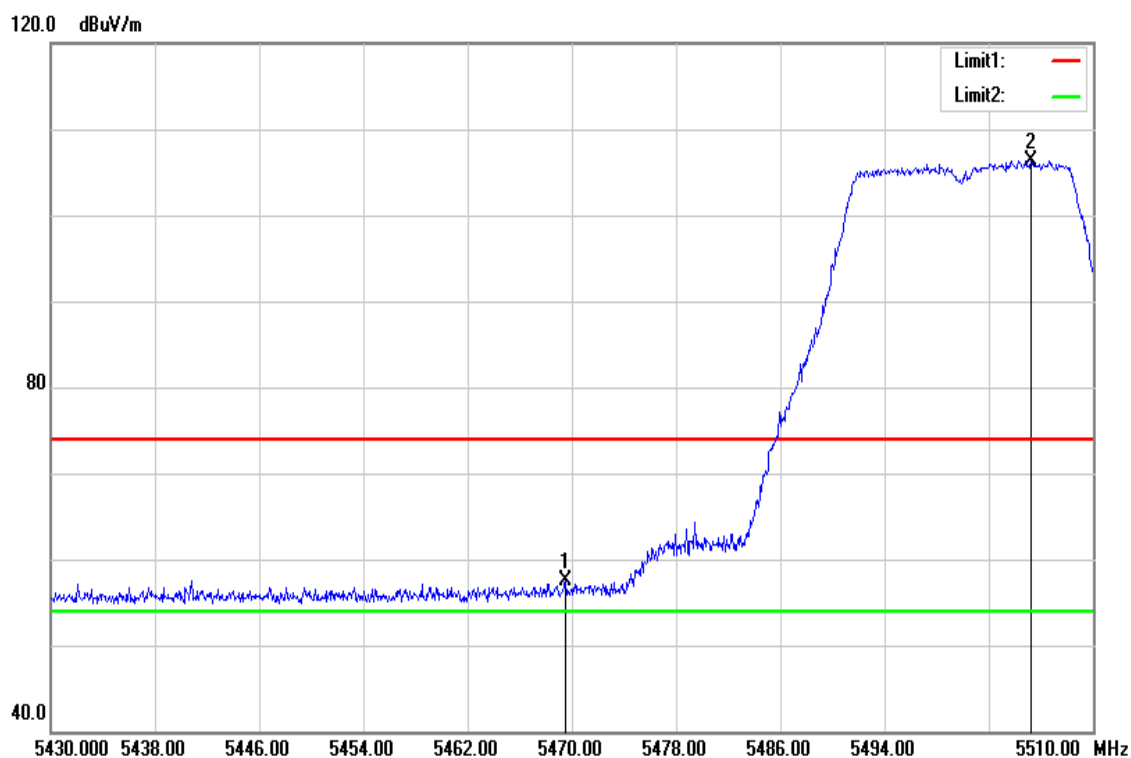
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5702.540	97.82	6.46	104.28	-	-	peak
5725.160	56.03	6.52	62.55	74.00	-11.45	peak

Test Mode	IEEE 802.11a / 5700 MHz	Temperature	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average	Test Voltage	120Vac / 60Hz



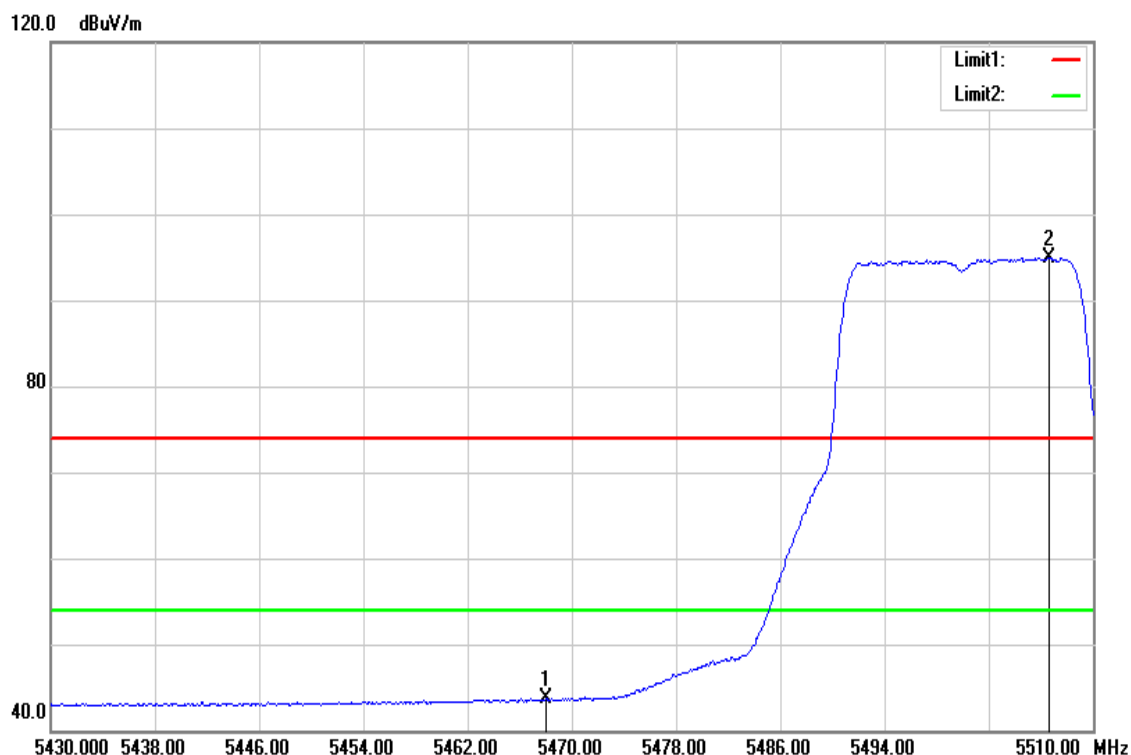
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5701.220	86.91	6.45	93.36	-	-	AVG
5725.000	37.95	6.52	44.47	54.00	-9.53	AVG

Test Mode	IEEE 802.11n 20 MHz / 5500MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak	Test Voltage	120Vac / 60Hz



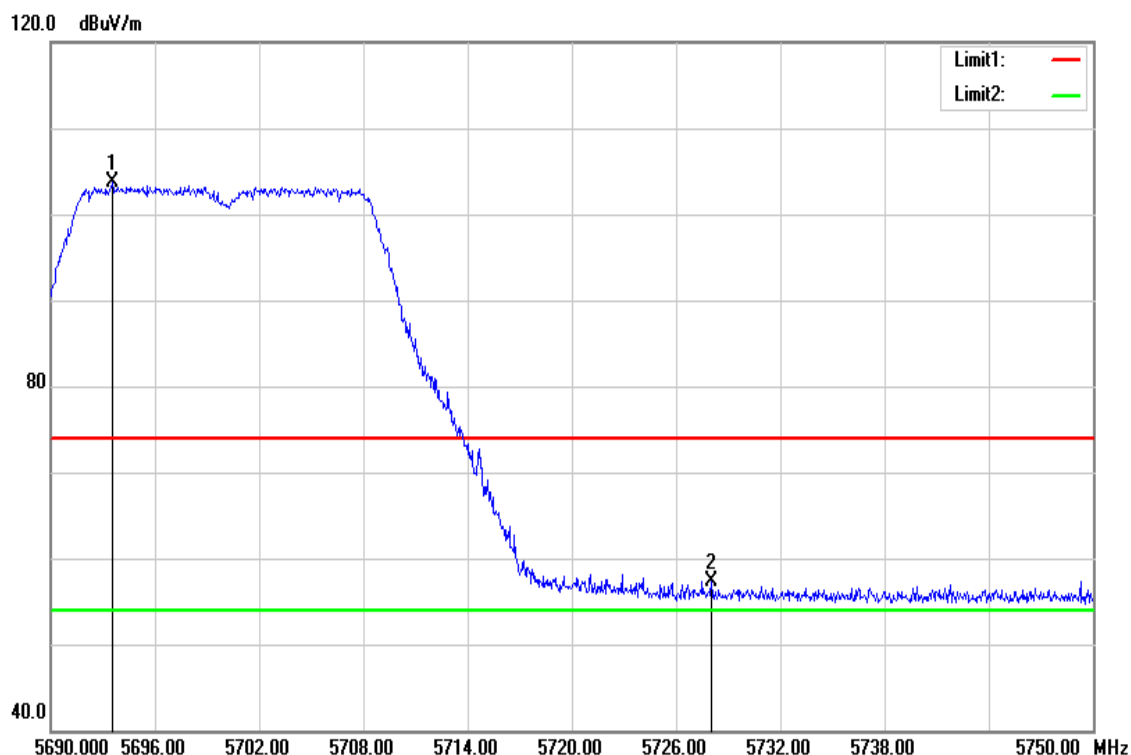
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5469.560	51.60	5.85	57.45	74.00	-16.55	peak
5505.280	100.40	5.95	106.35	-	-	peak

Test Mode	IEEE 802.11n 20 MHz / 5500MHz	Temperature	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average	Test Voltage	120Vac / 60Hz



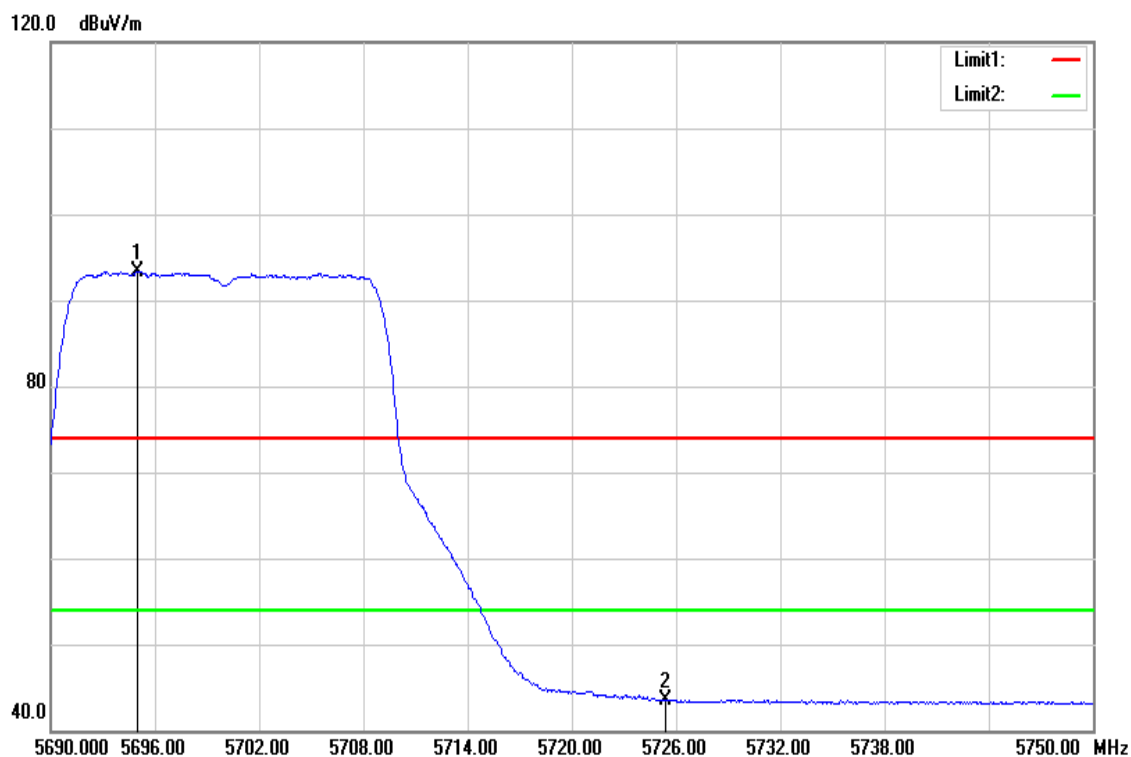
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5468.040	37.84	5.85	43.69	54.00	-10.31	AVG
5506.640	88.99	5.95	94.94	-	-	AVG

Test Mode	IEEE 802.11n 20 MHz / 5700 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak	Test Voltage	120Vac / 60Hz



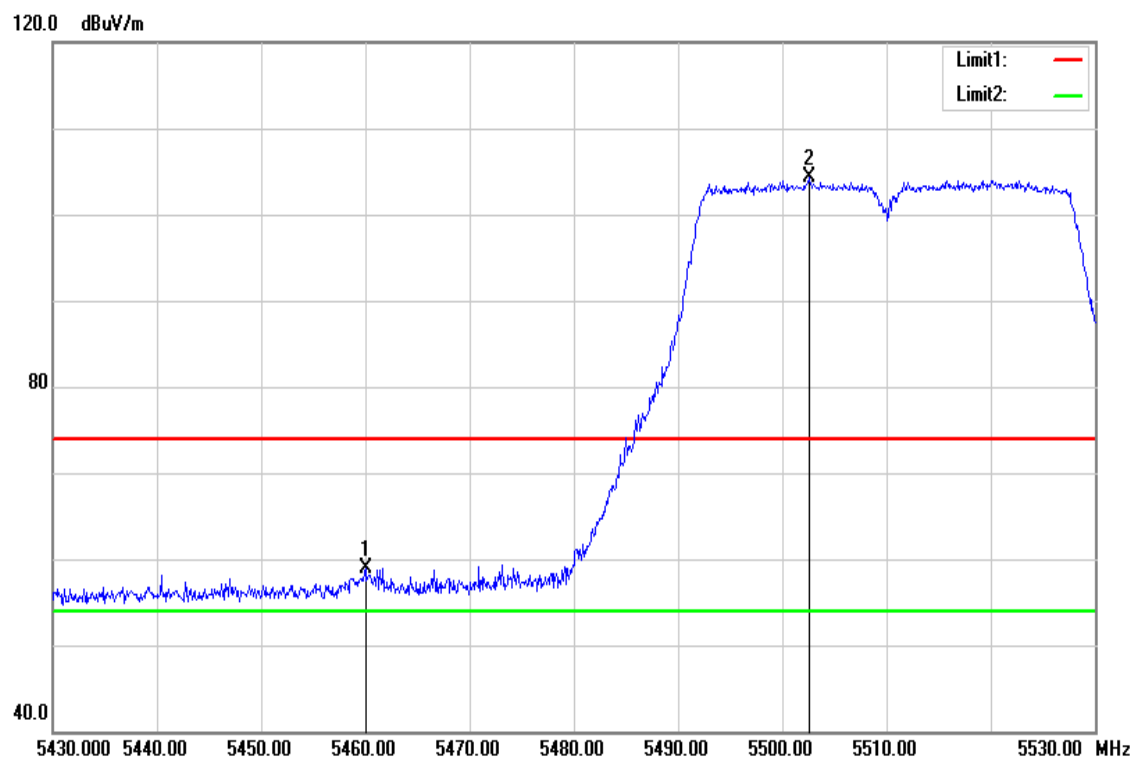
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5693.570	97.22	6.44	103.66	-	-	peak
5728.040	50.80	6.53	57.33	74.00	-16.67	peak

Test Mode	IEEE 802.11n 20 MHz / 5700 MHz	Temperature	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average	Test Voltage	120Vac / 60Hz



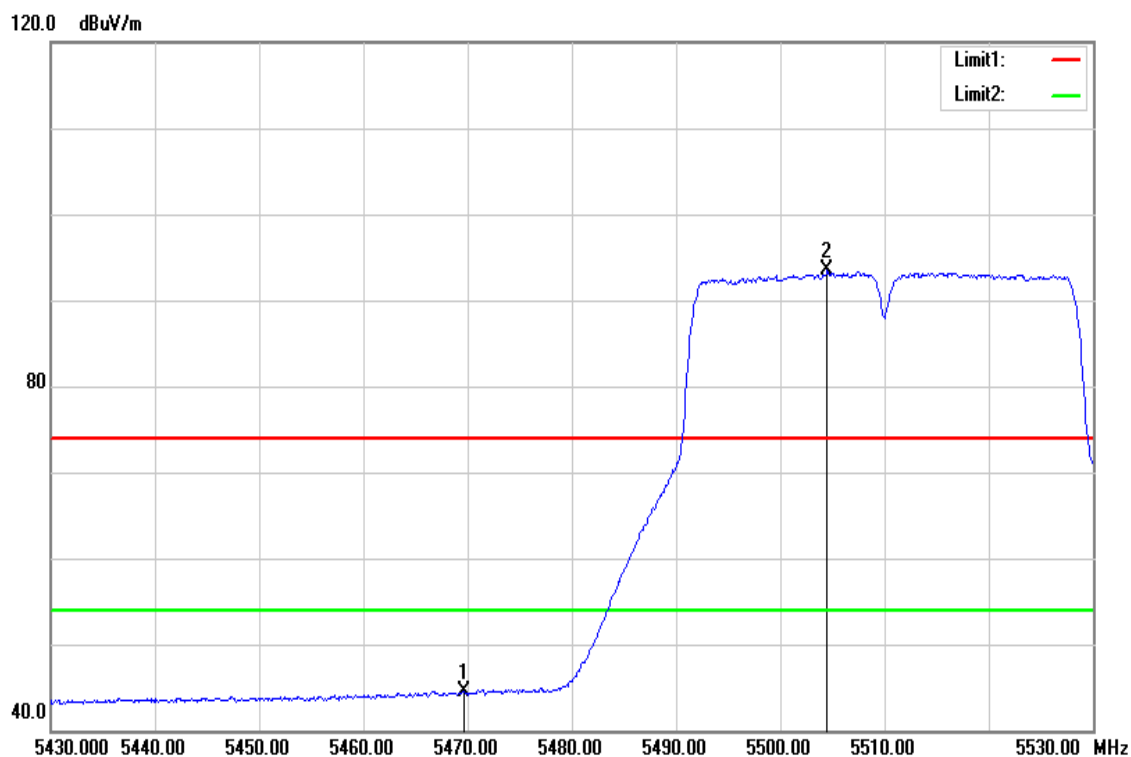
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5694.980	86.92	6.44	93.36	-	-	AVG
5725.430	37.04	6.52	43.56	54.00	-10.44	AVG

Test Mode	IEEE 802.11n 40 MHz / 5510 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak	Test Voltage	120Vac / 60Hz



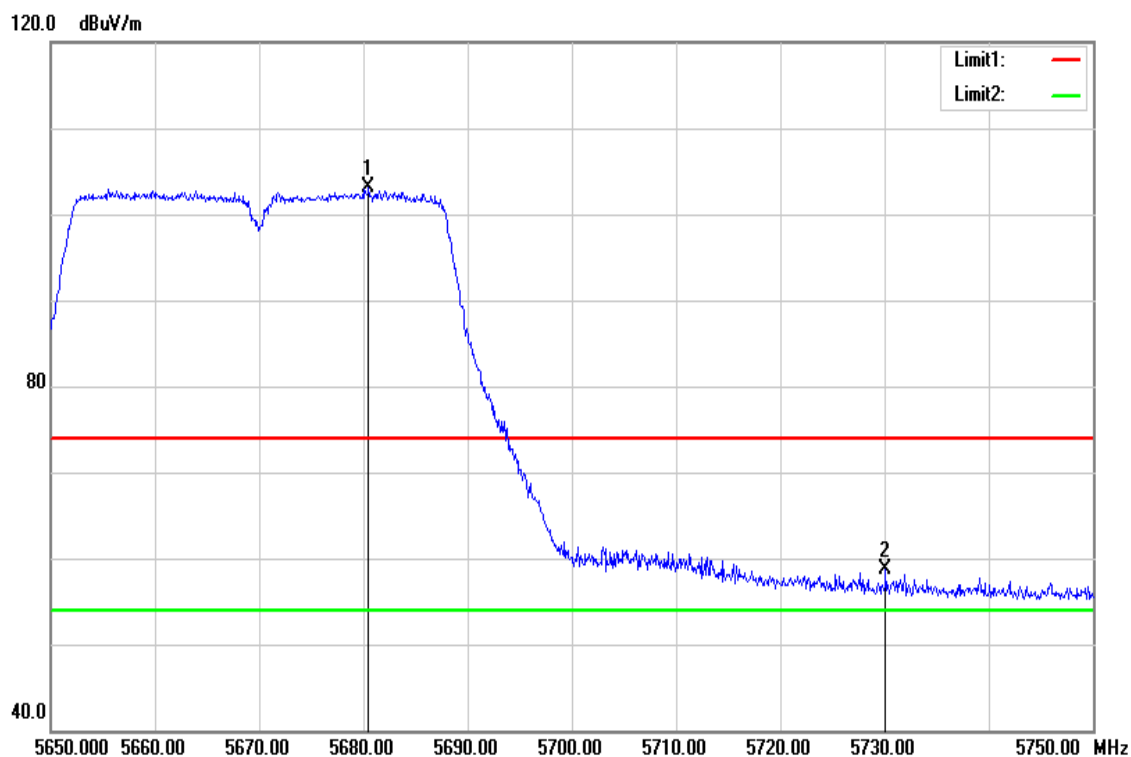
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5460.050	53.14	5.83	58.97	74.00	-15.03	peak
5502.650	98.36	5.94	104.30	-	-	peak

Test Mode	IEEE 802.11n 40 MHz / 5510 MHz	Temperature	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average	Test Voltage	120Vac / 60Hz



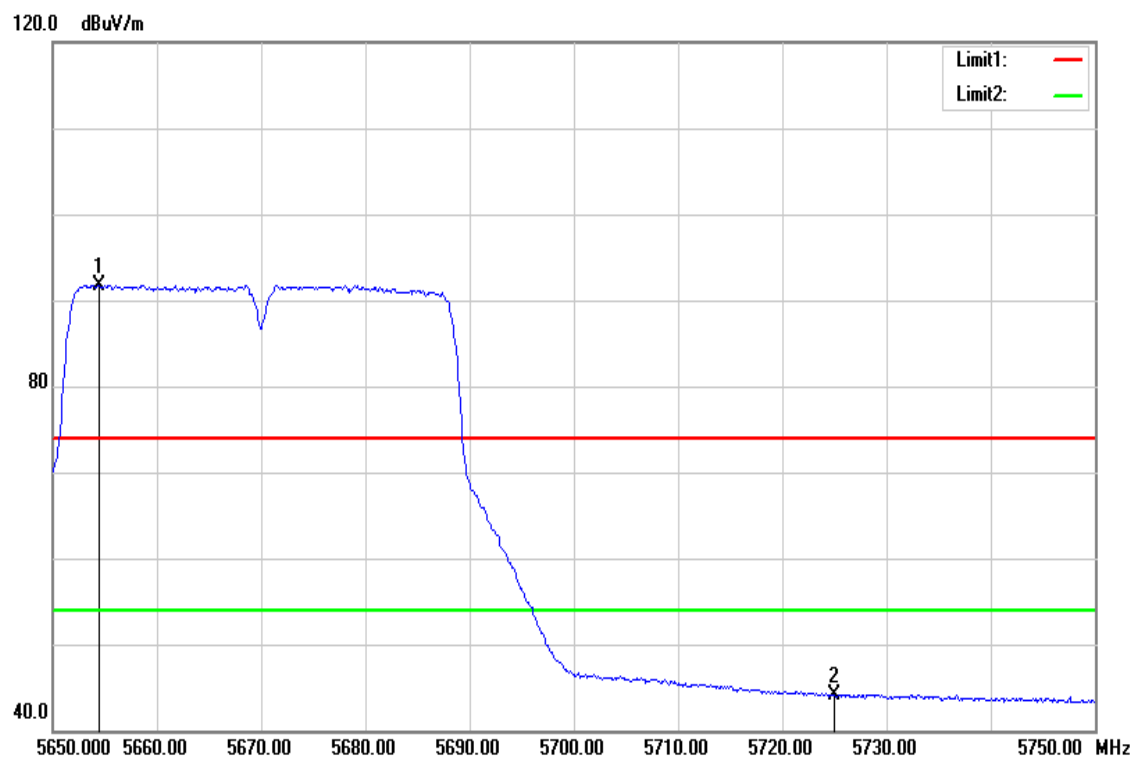
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5469.600	38.61	5.85	44.46	54.00	-9.54	AVG
5504.550	87.49	5.95	93.44	-	-	AVG

Test Mode	IEEE 802.11n 40 MHz / 5670 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak	Test Voltage	120Vac / 60Hz



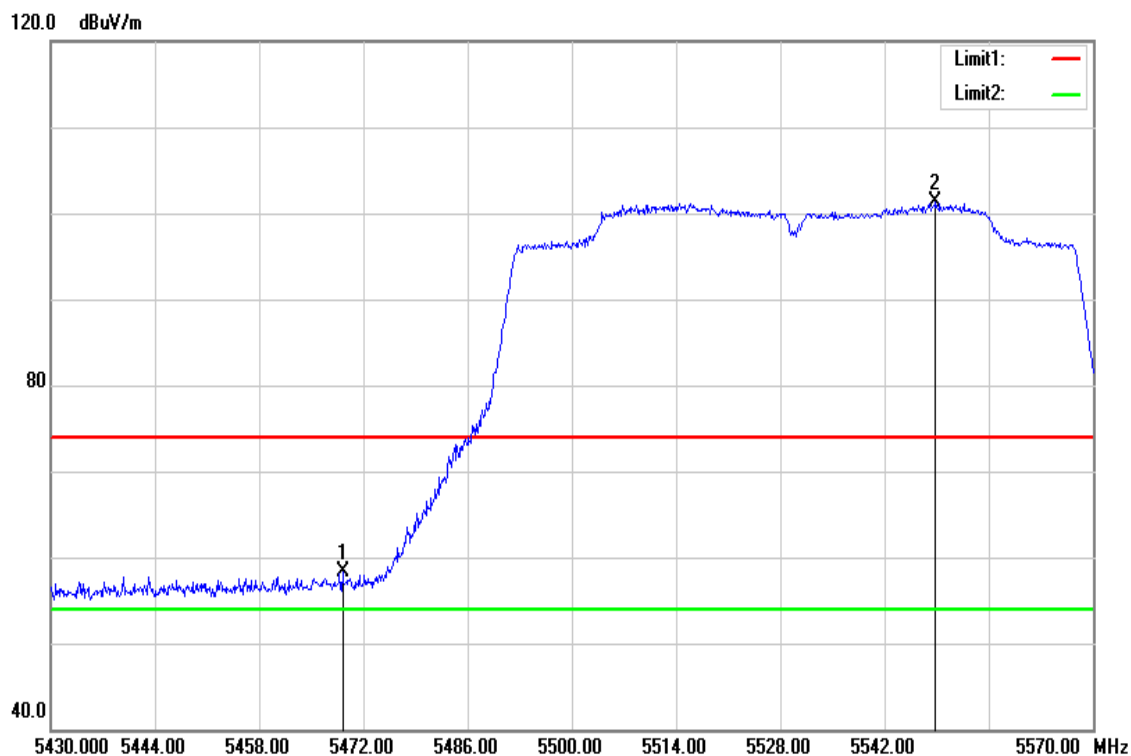
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5680.500	96.60	6.41	103.01	-	-	peak
5730.150	52.10	6.54	58.64	74.00	-15.36	peak

Test Mode	IEEE 802.11n 40 MHz / 5670 MHz	Temperature	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average	Test Voltage	120Vac / 60Hz



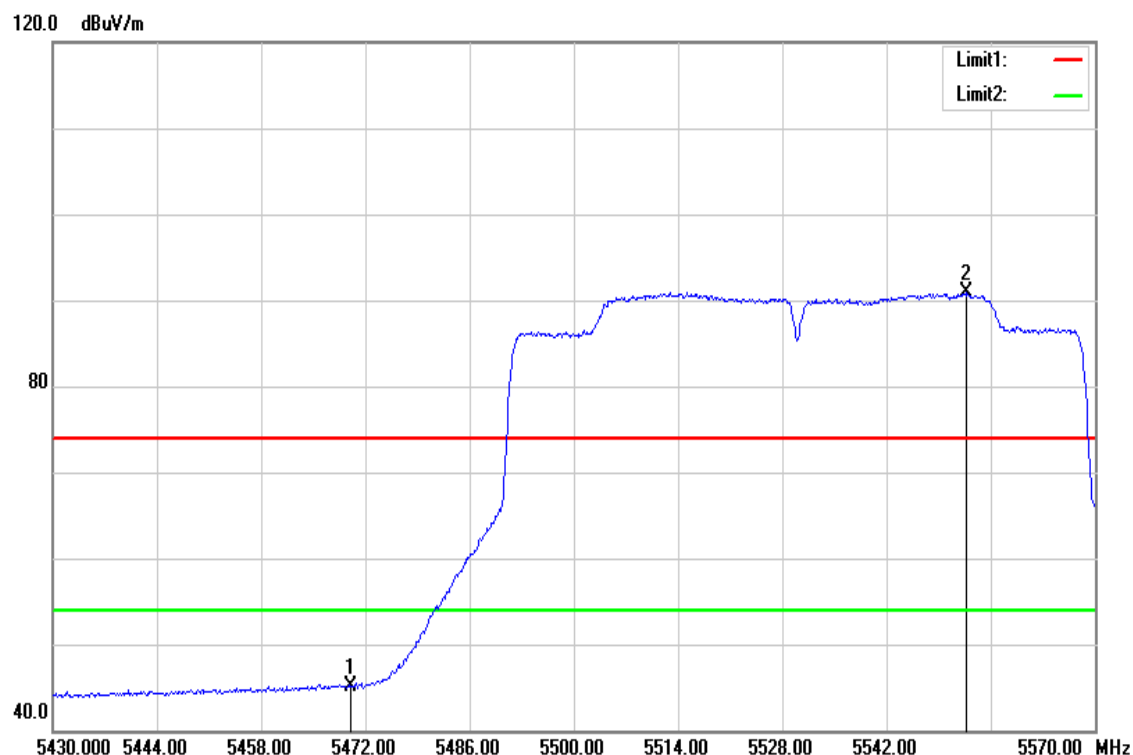
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5654.400	85.46	6.34	91.80	-	-	AVG
5725.000	37.51	6.52	44.03	54.00	-9.97	AVG

Test Mode	IEEE 802.11ac VHT80 MHz / 5530 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak	Test Voltage	120Vac / 60Hz



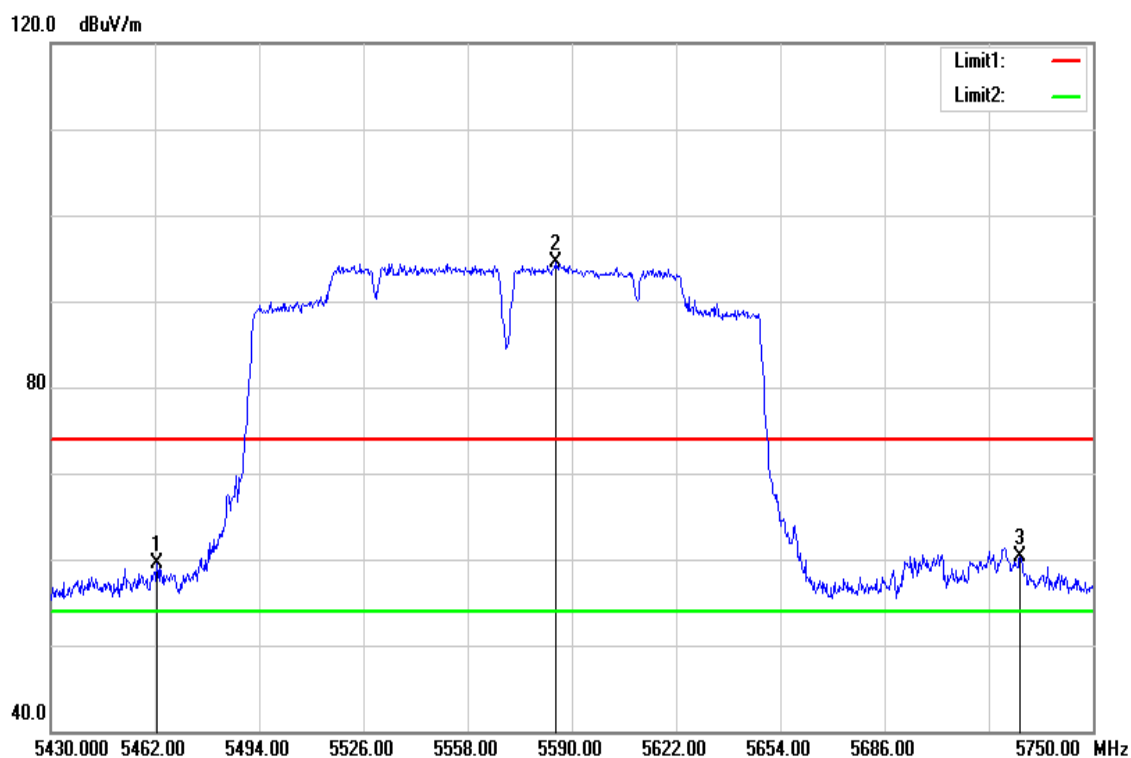
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5469.200	52.53	5.85	58.38	74.00	-15.62	peak
5548.860	95.18	6.06	101.24	-	-	peak

Test Mode	IEEE 802.11ac VHT80 MHz / 5530 MHz	Temperature	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average	Test Voltage	120Vac / 60Hz



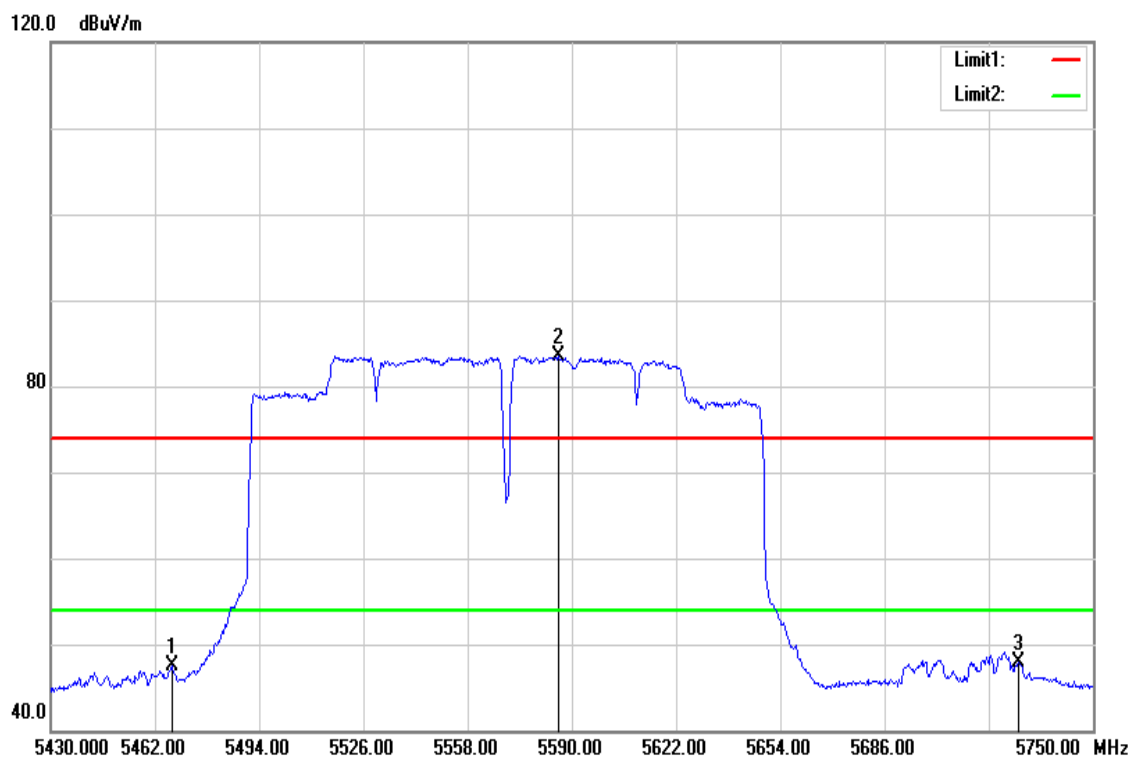
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5470.000	39.32	5.85	45.17	54.00	-8.83	AVG
5552.850	84.83	6.07	90.90	-	-	AVG

Test Mode	IEEE 802.11ac VHT160 MHz / 5570 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak	Test Voltage	120Vac / 60Hz



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5462.800	53.66	5.84	59.50	74.00	-14.50	peak
5585.040	88.44	6.15	94.59	-	-	peak
5727.760	53.76	6.53	60.29	74.00	-13.71	peak

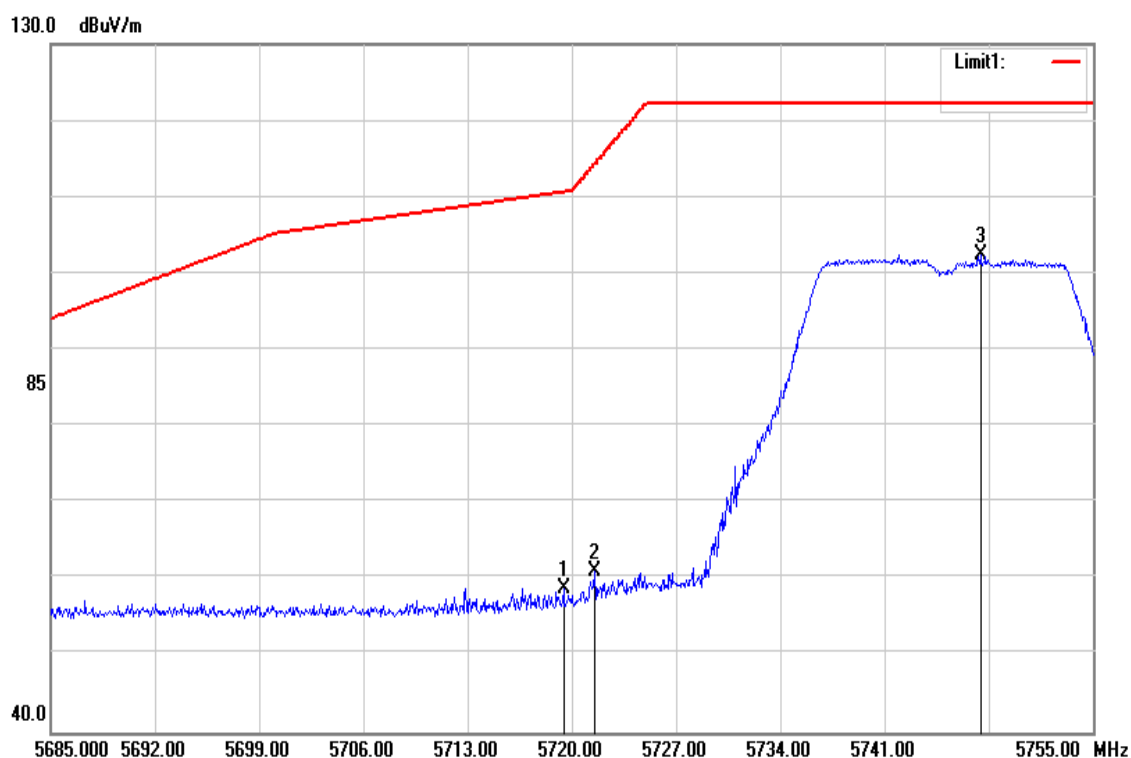
Test Mode	IEEE 802.11ac VHT160 MHz / 5570 MHz	Temperature	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average	Test Voltage	120Vac / 60Hz



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5467.280	41.68	5.85	47.53	54.00	-6.47	AVG
5586.000	77.43	6.15	83.58			AVG
5727.120	41.45	6.52	47.97	54.00	-6.03	AVG

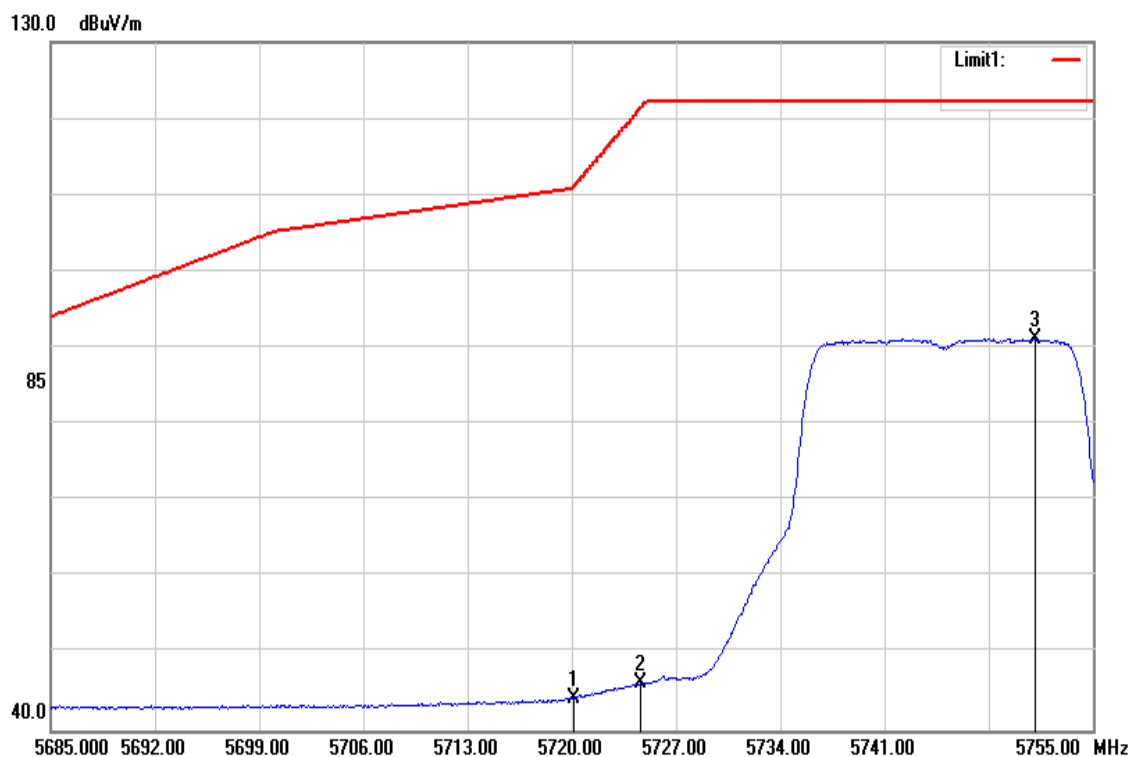
Band Edge Test Data for UNII-3

Test Mode	IEEE 802.11a / 5745 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak	Test Voltage	120Vac / 60Hz



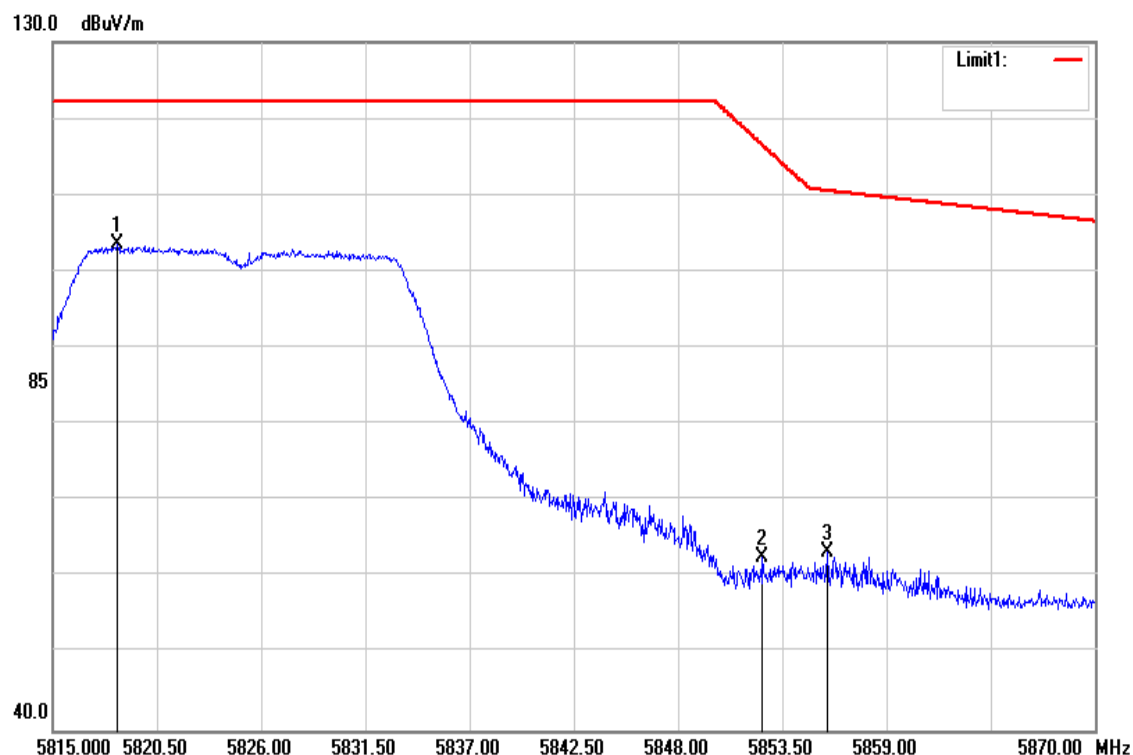
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5719.440	52.32	6.50	58.82	110.64	-51.82	peak
5721.540	54.49	6.51	61.00	114.31	-53.31	peak
5747.440	95.96	6.58	102.54	-	-	peak

Test Mode	IEEE 802.11a / 5745 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average	Test Voltage	120Vac / 60Hz



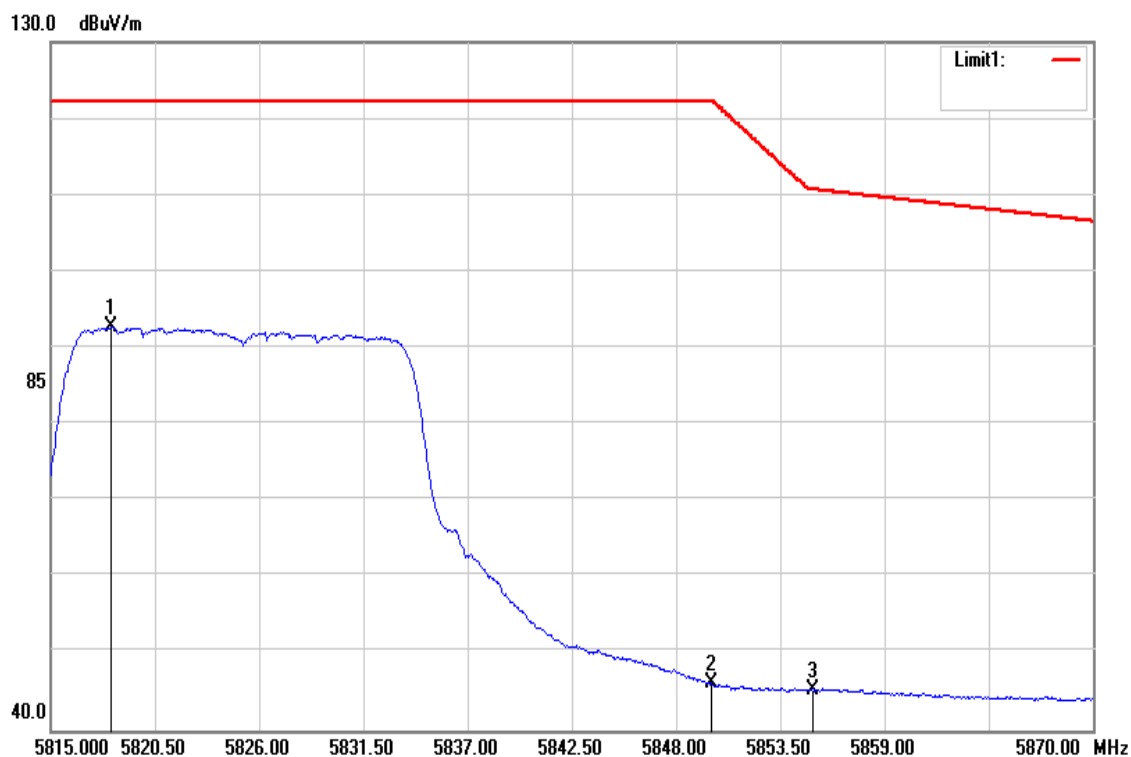
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5720.140	37.76	6.50	44.26	111.12	-66.86	AVG
5724.655	39.59	6.52	46.11	121.41	-75.30	AVG
5751.080	84.63	6.58	91.21	-	-	AVG

Test Mode	IEEE 802.11a / 5825 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak	Test Voltage	120Vac / 60Hz



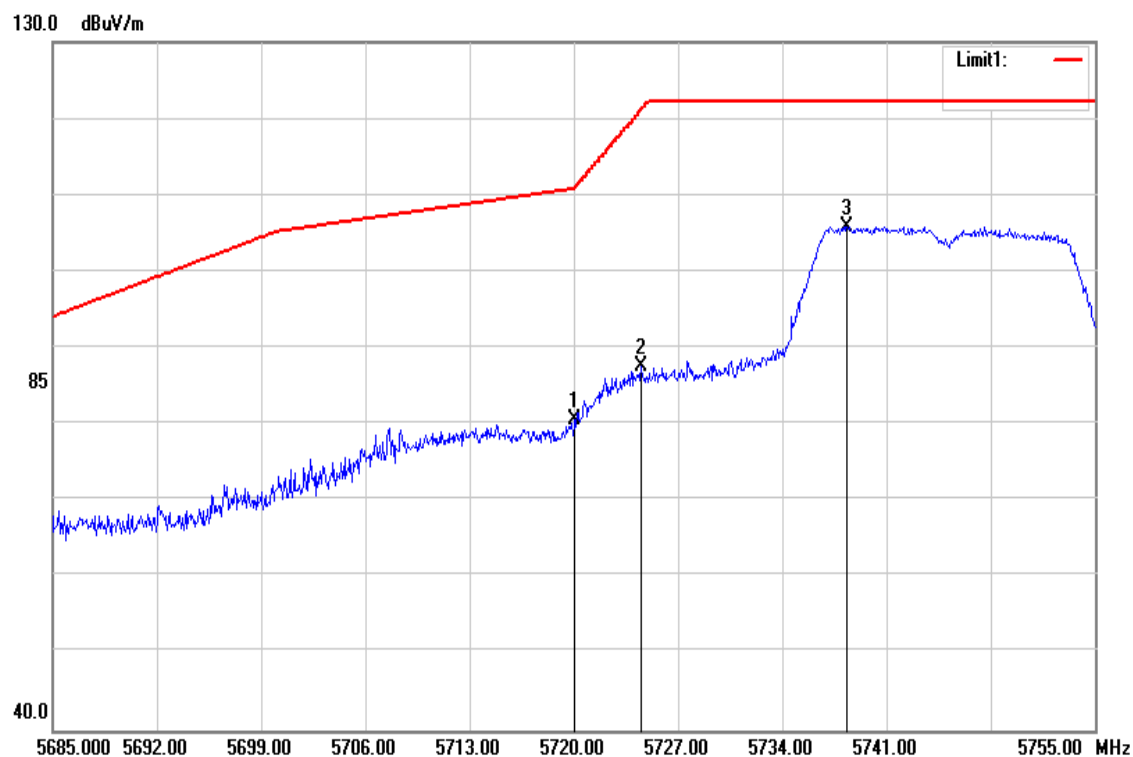
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5818.410	96.74	6.77	103.51	-	-	peak
5852.455	55.73	6.85	62.58	116.60	-54.02	peak
5855.865	56.53	6.86	63.39	110.56	-47.17	peak

Test Mode	IEEE 802.11a / 5825 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average	Test Voltage	120Vac / 60Hz



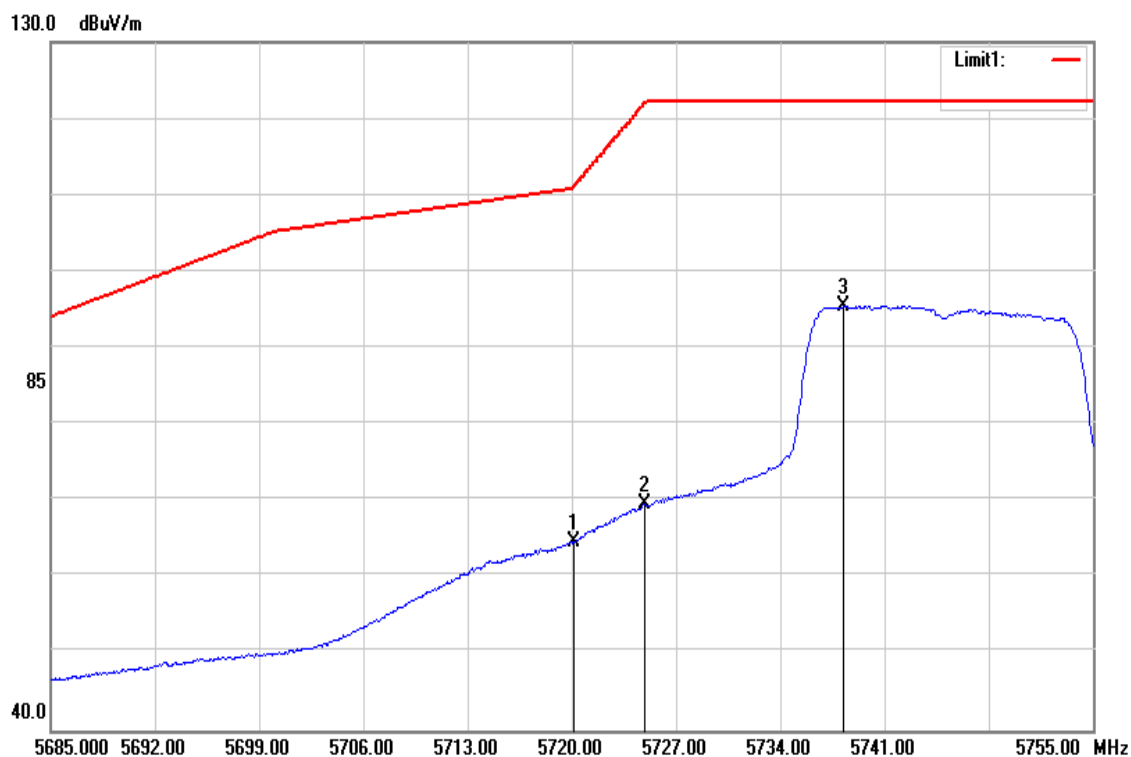
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5818.217	85.96	6.77	92.73	-	-	AVG
5849.870	39.23	6.85	46.08	122.20	-76.12	AVG
5855.233	38.54	6.86	45.40	110.73	-65.33	AVG

Test Mode	IEEE 802.11n 20 MHz / 5745 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak	Test Voltage	120Vac / 60Hz



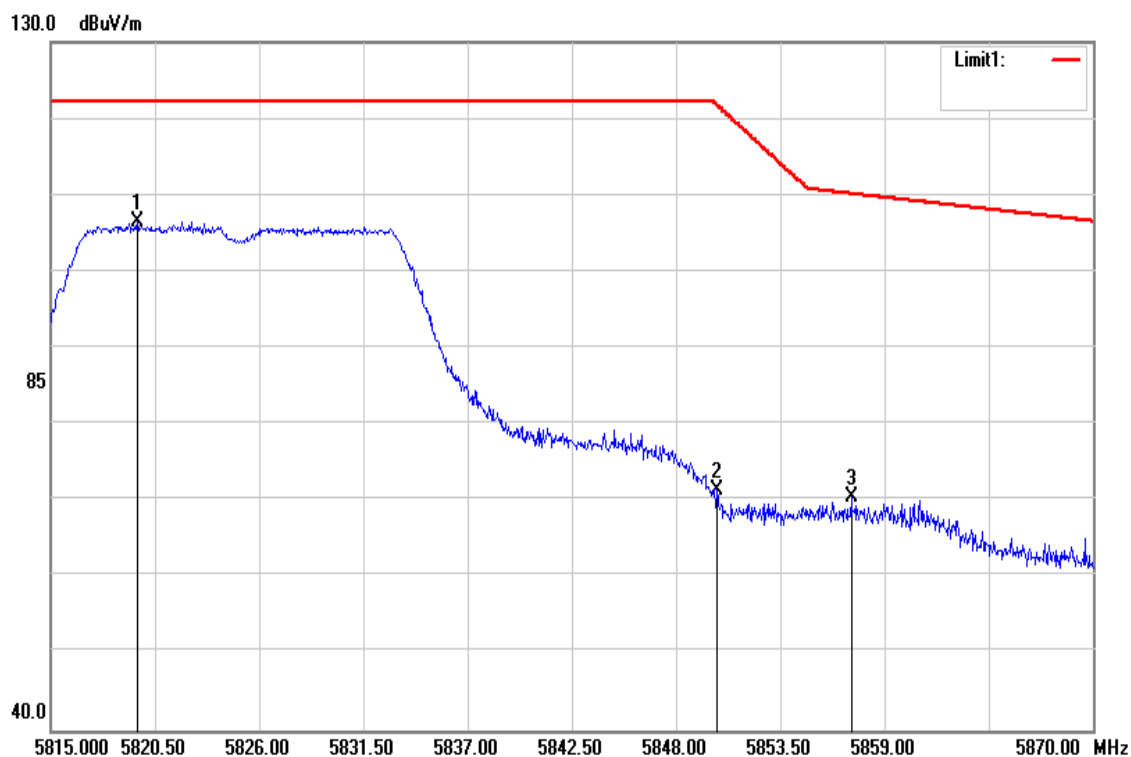
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5720.105	74.08	6.50	80.58	111.04	-30.46	peak
5724.480	81.08	6.52	87.60	121.01	-33.41	peak
5738.375	99.35	6.56	105.91	-	-	peak

Test Mode	IEEE 802.11n 20 MHz / 5745 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average	Test Voltage	120Vac / 60Hz



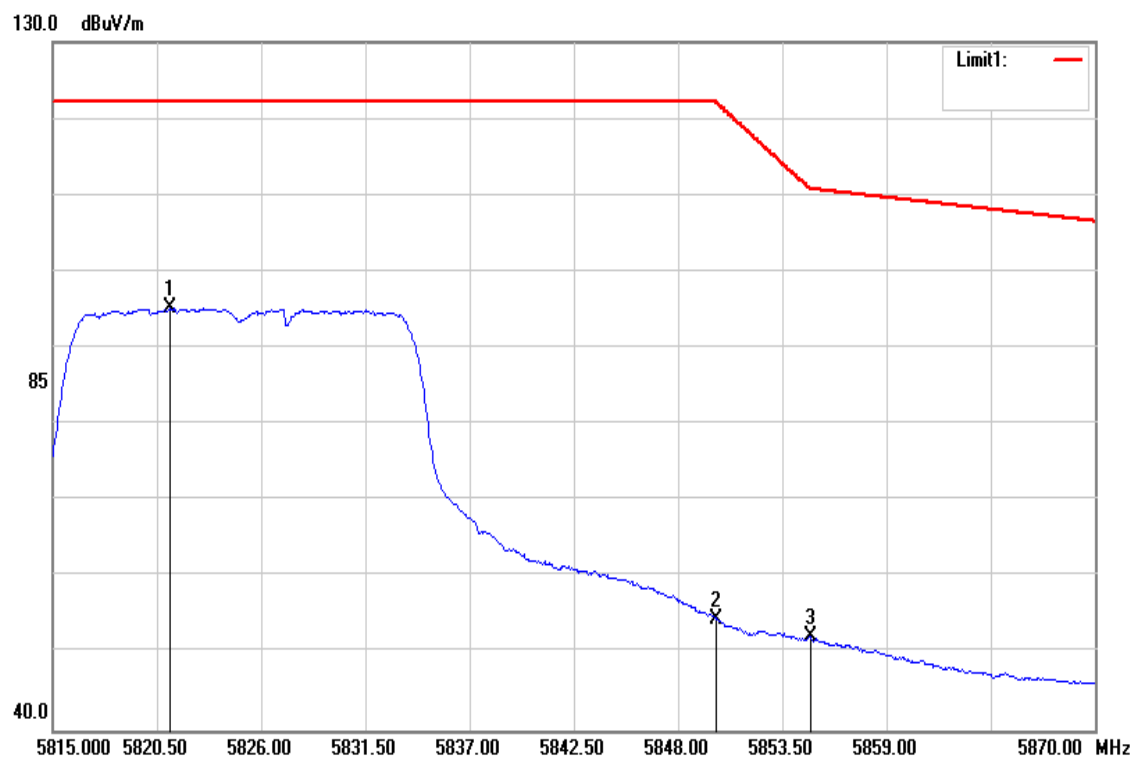
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5720.140	58.23	6.50	64.73	111.12	-46.39	AVG
5724.935	63.15	6.52	69.67	122.05	-52.38	AVG
5738.305	88.96	6.56	95.52	-	-	AVG

Test Mode	IEEE 802.11n 20 MHz / 5825 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak	Test Voltage	120Vac / 60Hz



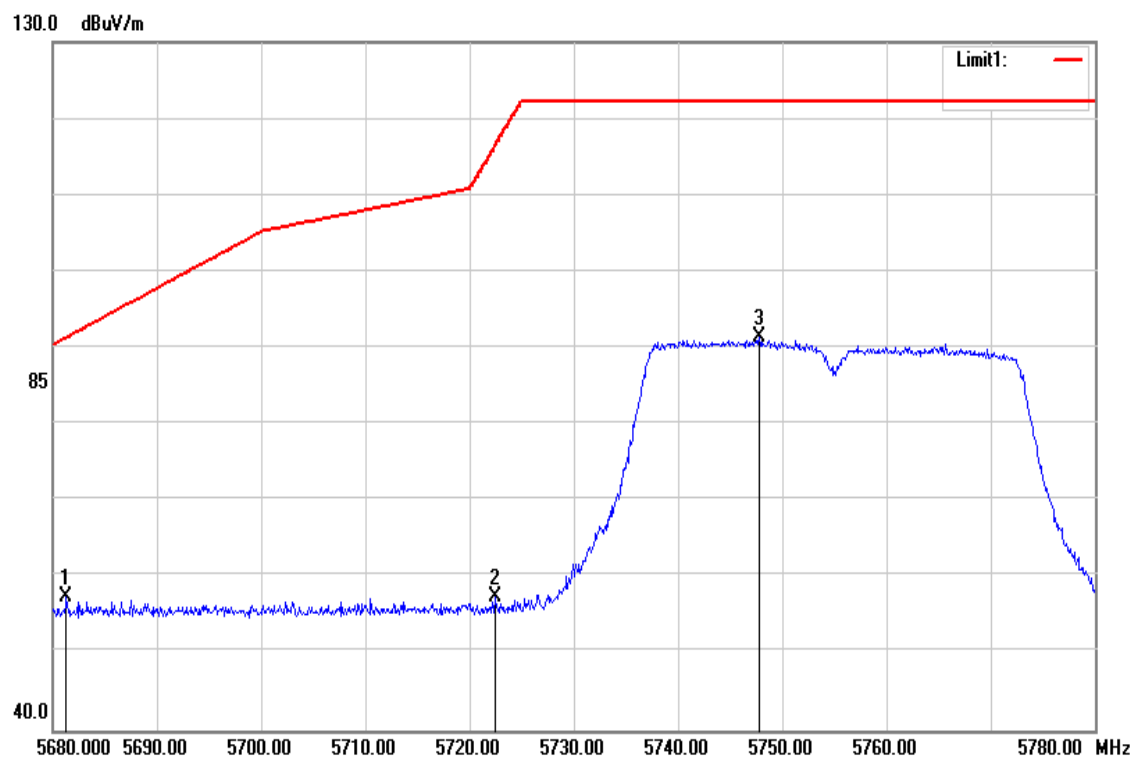
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5819.565	99.67	6.76	106.43	-	-	peak
5850.172	64.45	6.85	71.30	121.81	-50.51	peak
5857.267	63.58	6.86	70.44	110.17	-39.73	peak

Test Mode	IEEE 802.11n 20 MHz / 5825 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average	Test Voltage	120Vac / 60Hz



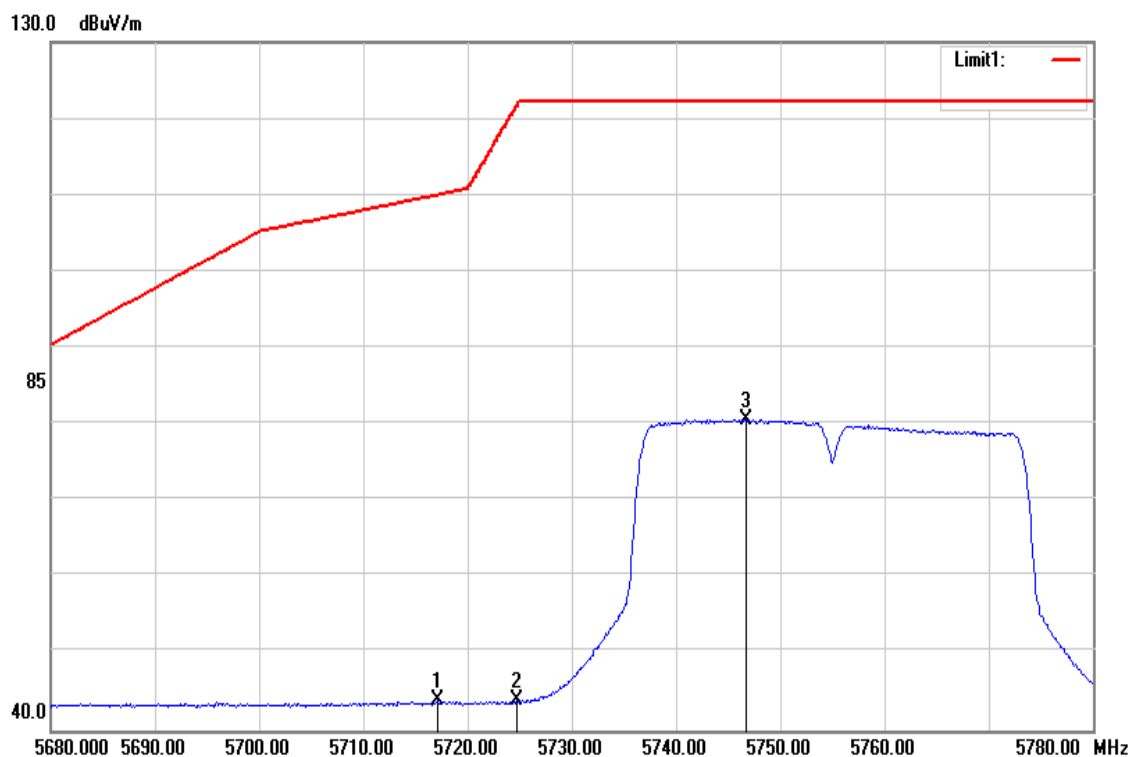
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5821.215	88.38	6.77	95.15	-	-	AVG
5850.035	47.76	6.85	54.61	122.12	-67.51	AVG
5854.985	45.44	6.86	52.30	110.83	-58.53	AVG

Test Mode	IEEE 802.11n 40 MHz/ 5755 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak	Test Voltage	120Vac / 60Hz



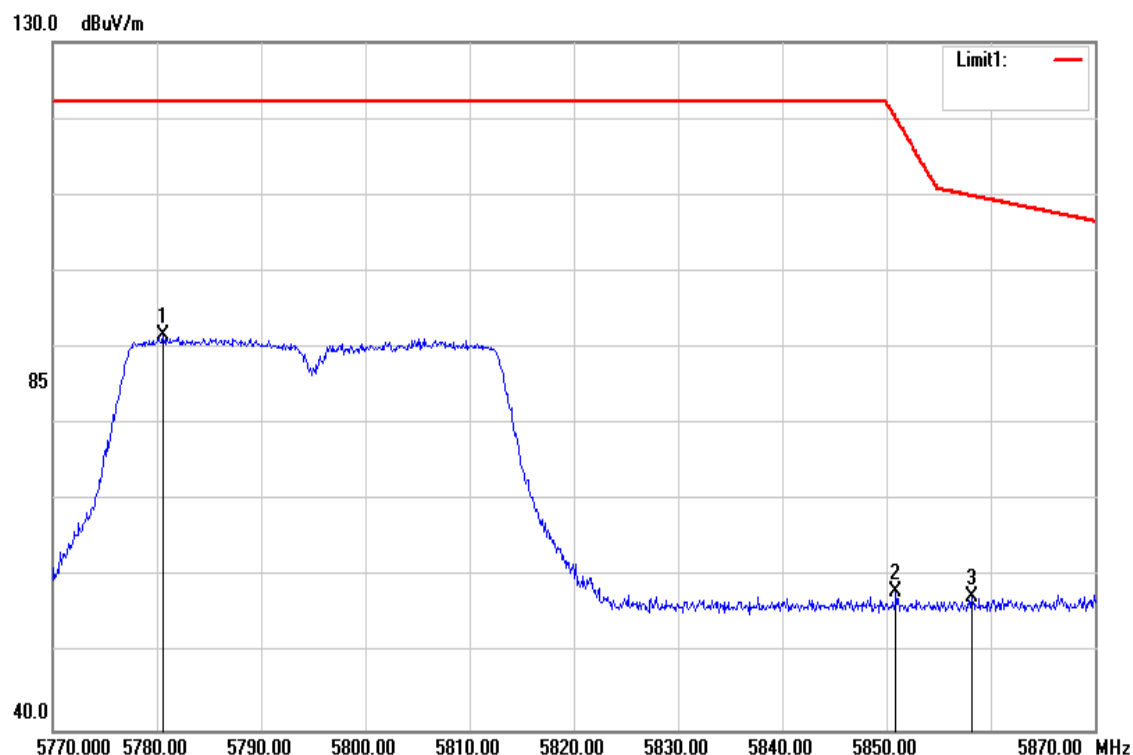
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5681.350	51.15	6.40	57.55	91.40	-33.85	peak
5722.450	50.90	6.51	57.41	116.39	-58.98	peak
5747.850	84.73	6.59	91.32	-	-	peak

Test Mode	IEEE 802.11n 40 MHz/ 5755 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average	Test Voltage	120Vac / 60Hz



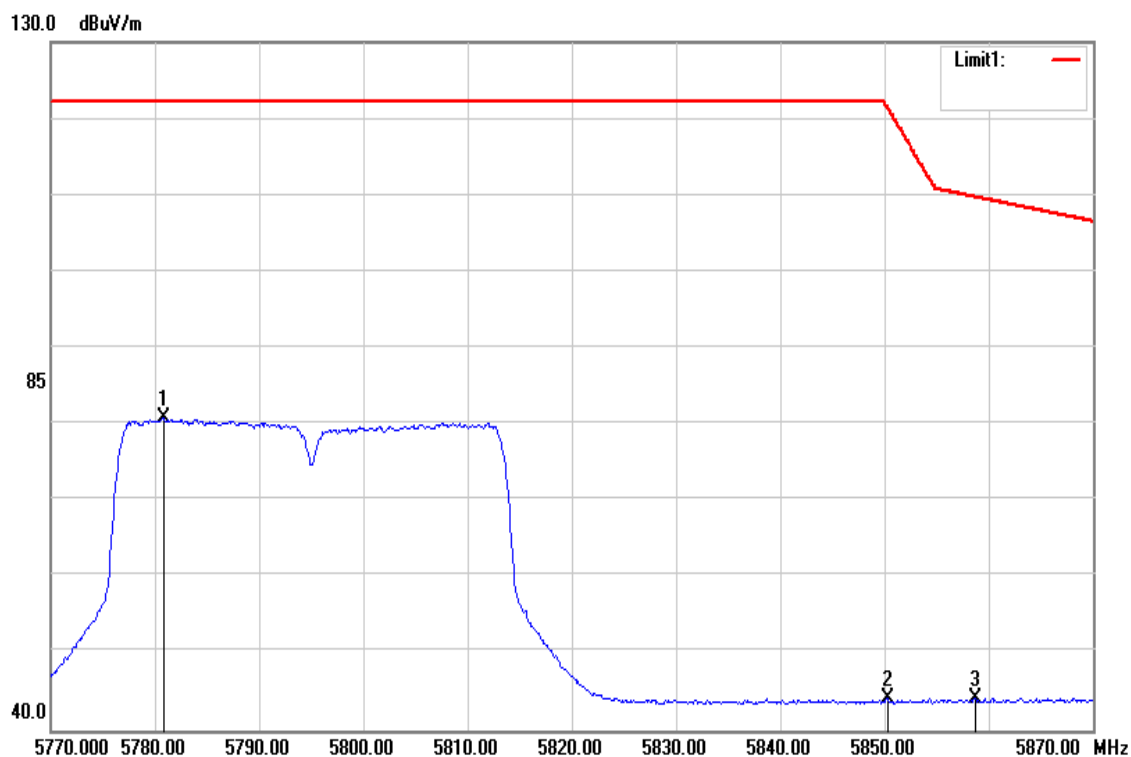
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5717.100	37.37	6.49	43.86	109.99	-66.13	AVG
5724.750	37.39	6.52	43.91	121.63	-77.72	AVG
5746.700	74.08	6.58	80.66	-	-	AVG

Test Mode	IEEE 802.11n 40 MHz/ 5795 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak	Test Voltage	120Vac / 60Hz



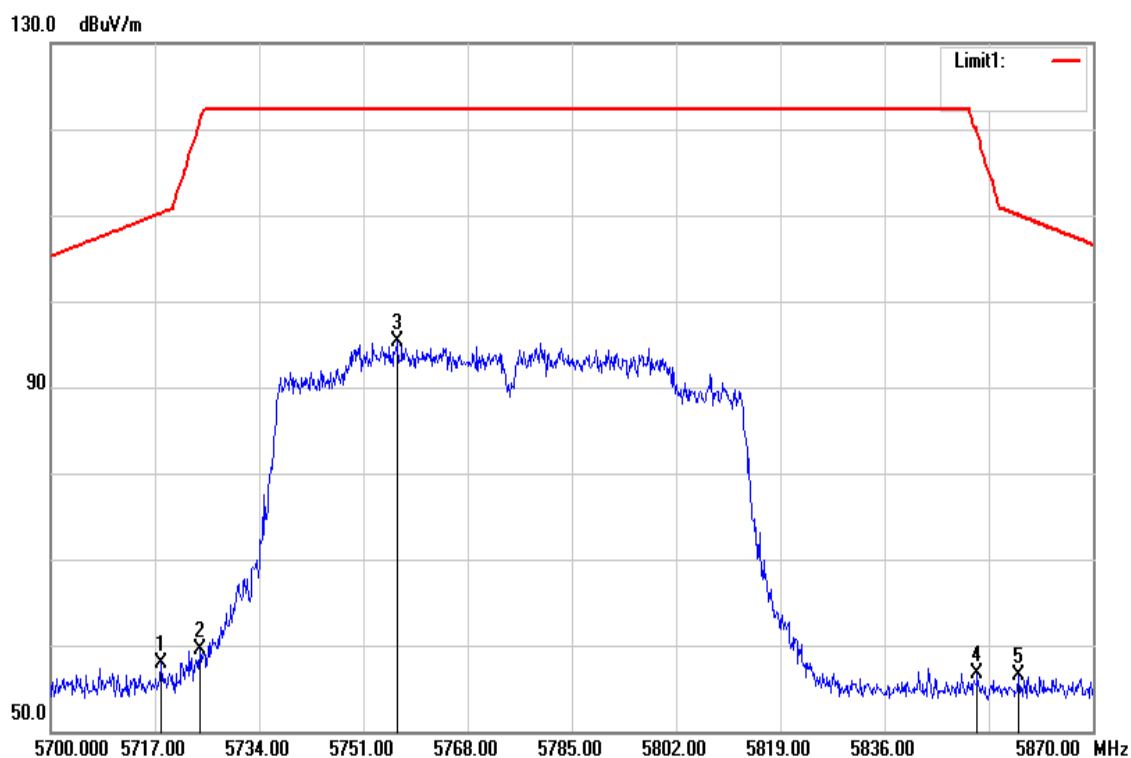
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5780.600	84.93	6.67	91.60	-	-	peak
5850.900	51.31	6.85	58.16	120.15	-61.99	peak
5858.250	50.51	6.87	57.38	109.89	-52.51	peak

Test Mode	IEEE 802.11n 40 MHz/ 5795 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average	Test Voltage	120Vac / 60Hz



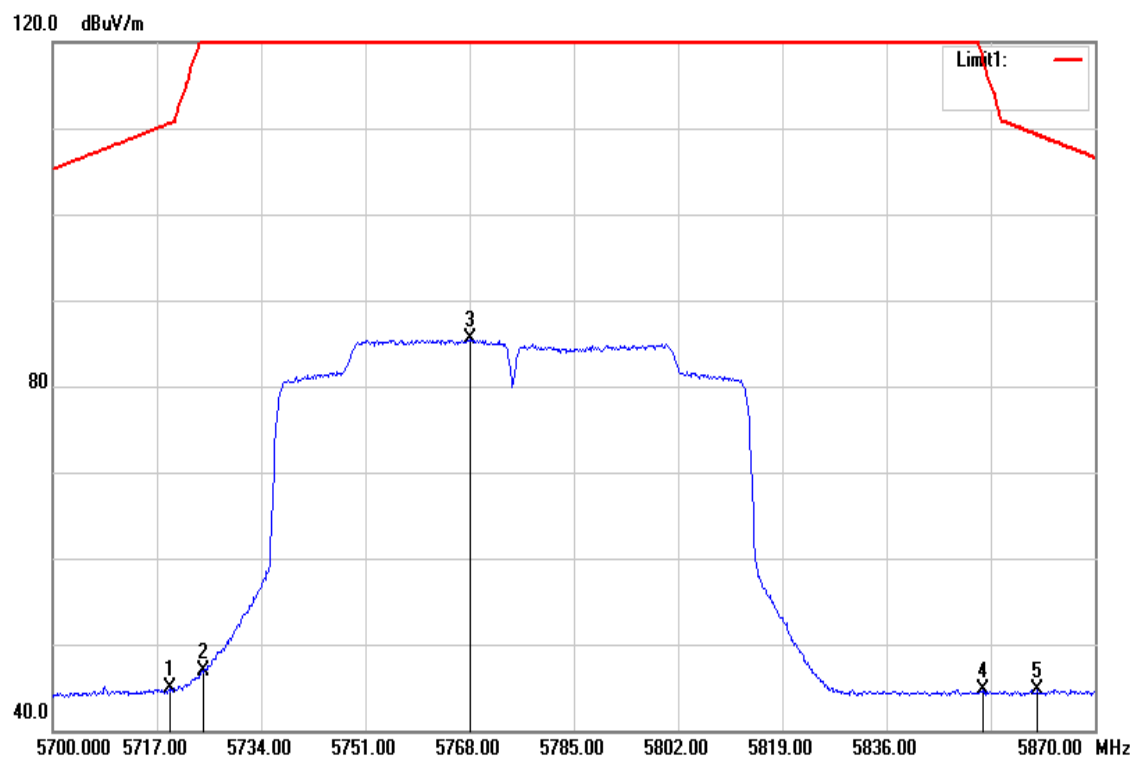
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5780.800	74.07	6.67	80.74	-	-	AVG
5850.300	37.35	6.85	44.20	121.52	-77.32	AVG
5858.700	37.27	6.87	44.14	109.76	-65.62	AVG

Test Mode	IEEE 802.11ac VHT80 MHz / 5775 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak	Test Voltage	120Vac / 60Hz



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5718.105	51.42	6.50	57.92	110.27	-52.35	peak
5724.395	52.96	6.52	59.48	120.82	-61.34	peak
5756.525	88.78	6.60	95.38	-	-	peak
5851.215	49.78	6.85	56.63	119.43	-62.80	peak
5857.930	49.54	6.87	56.41	109.98	-53.57	peak

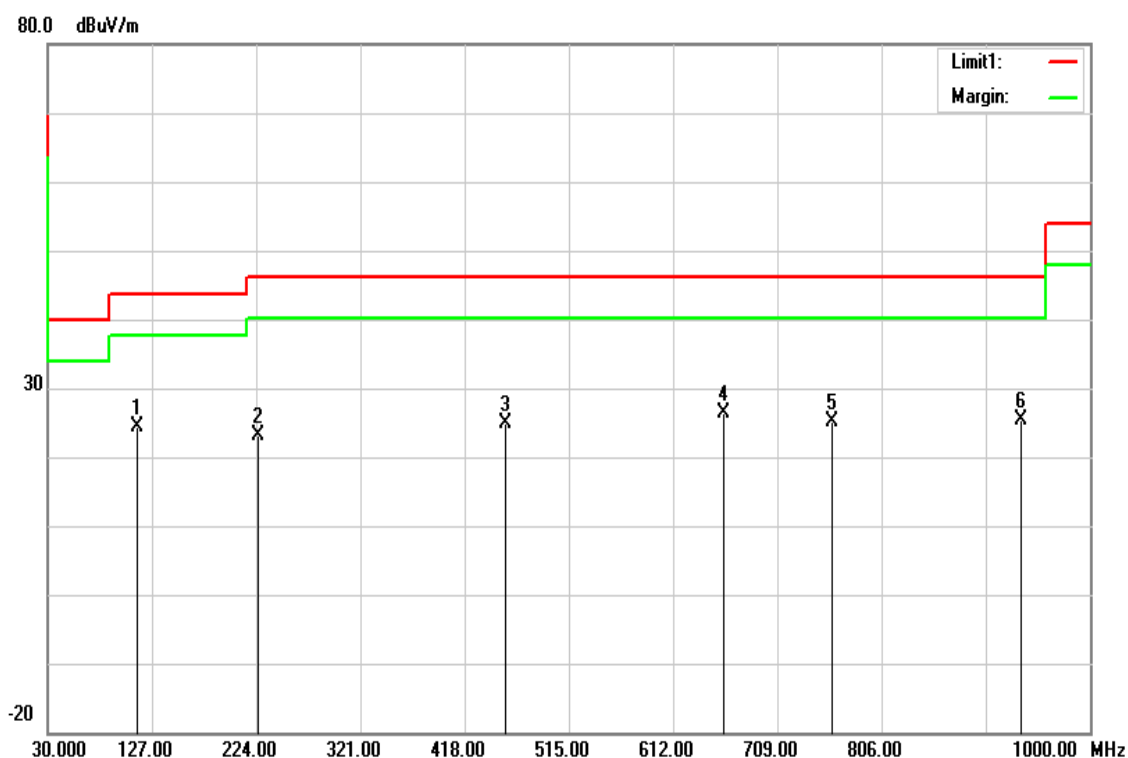
Test Mode	IEEE 802.11ac VHT80 MHz / 5775 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	March 12, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average	Test Voltage	120Vac / 60Hz



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5719.125	38.50	6.50	45.00	110.55	-65.55	AVG
5724.735	40.44	6.52	46.96	121.60	-74.64	AVG
5768.085	78.78	6.63	85.41	-	-	AVG
5851.810	37.82	6.85	44.67	118.07	-73.40	AVG
5860.735	37.85	6.87	44.72	109.19	-64.47	AVG

Below 1G Test Data

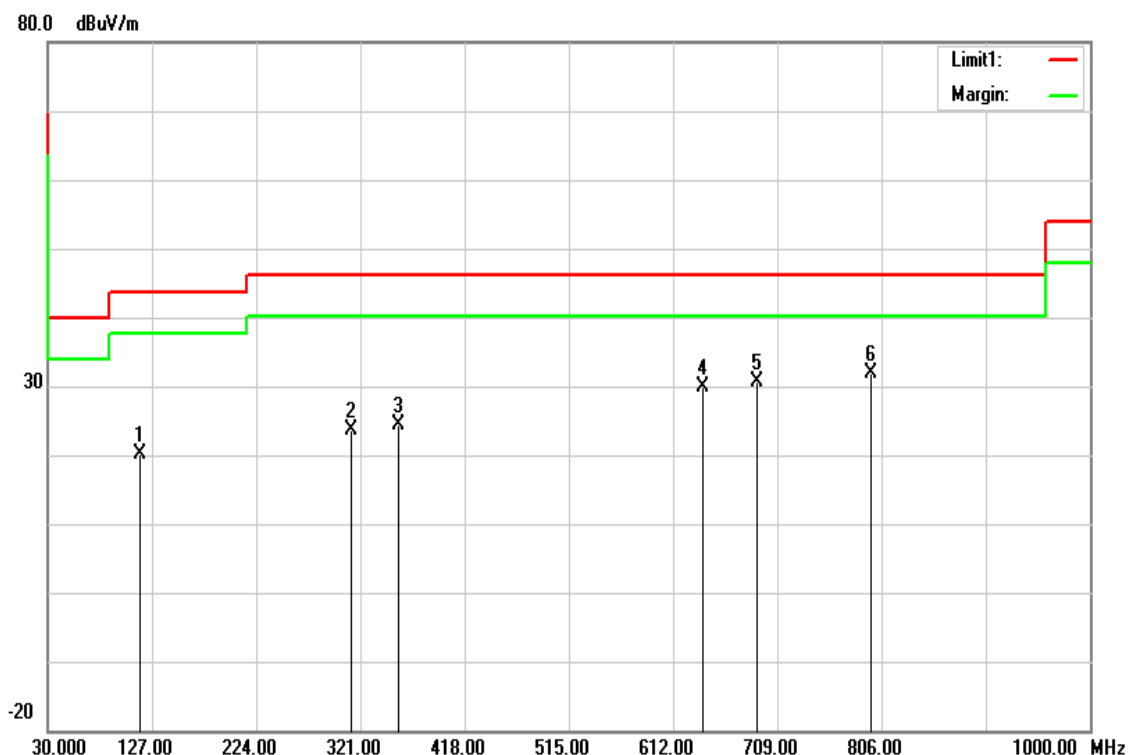
Test Mode	IEEE 802.11ac VHT160 MHz / 5570 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	30MHz-1GHz	Test Date	March 13, 2018
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Quasi-peak	Test Voltage	120Vac / 60Hz



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
113.4200	40.46	-16.18	24.28	43.52	-19.24	peak
225.9400	39.99	-16.98	23.01	46.02	-23.01	peak
455.8300	34.42	-9.48	24.94	46.02	-21.08	peak
659.5300	31.78	-5.42	26.36	46.02	-19.66	peak
760.4100	29.34	-4.11	25.23	46.02	-20.79	peak
935.9800	26.92	-1.42	25.50	46.02	-20.52	peak

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

Test Mode	IEEE 802.11ac VHT160 MHz / 5570 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	30MHz-1GHz	Test Date	March 13, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Quasi-peak	Test Voltage	120Vac / 60Hz

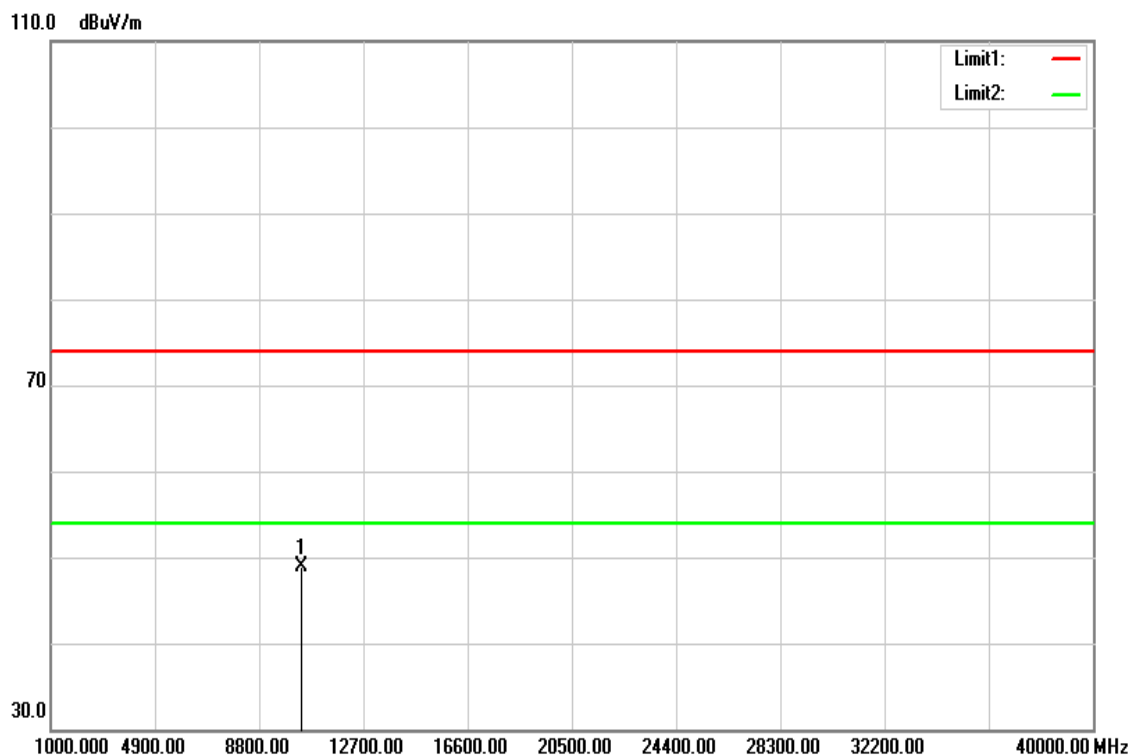


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
115.3600	35.94	-15.82	20.12	43.52	-23.40	peak
312.2700	37.42	-13.80	23.62	46.02	-22.40	peak
356.8900	37.10	-12.76	24.34	46.02	-21.68	peak
640.1300	35.68	-5.83	29.85	46.02	-16.17	peak
690.5700	35.56	-5.02	30.54	46.02	-15.48	peak
796.3000	35.28	-3.44	31.84	46.02	-14.18	peak

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

Above 1G Test Data for UNII-1

Test Mode	IEEE 802.11a / 5180MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

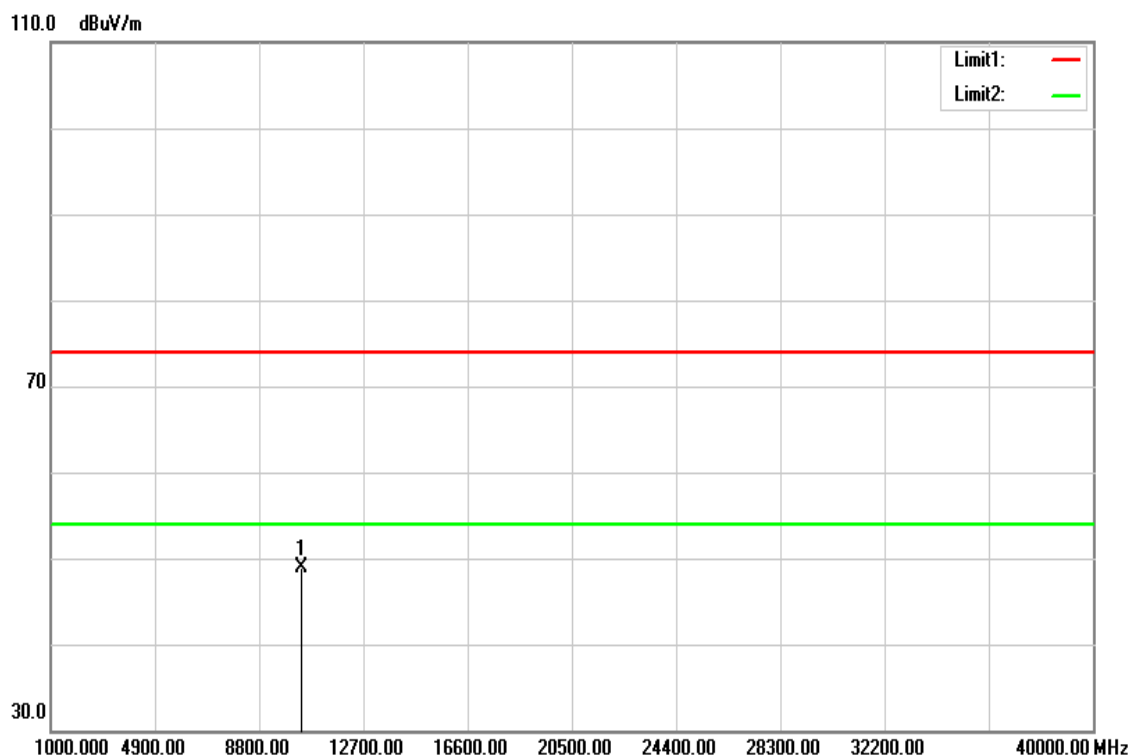


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10360.000	34.44	14.45	48.89	74.00	-25.11	peak
N/A						

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 802.11a / 5180MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

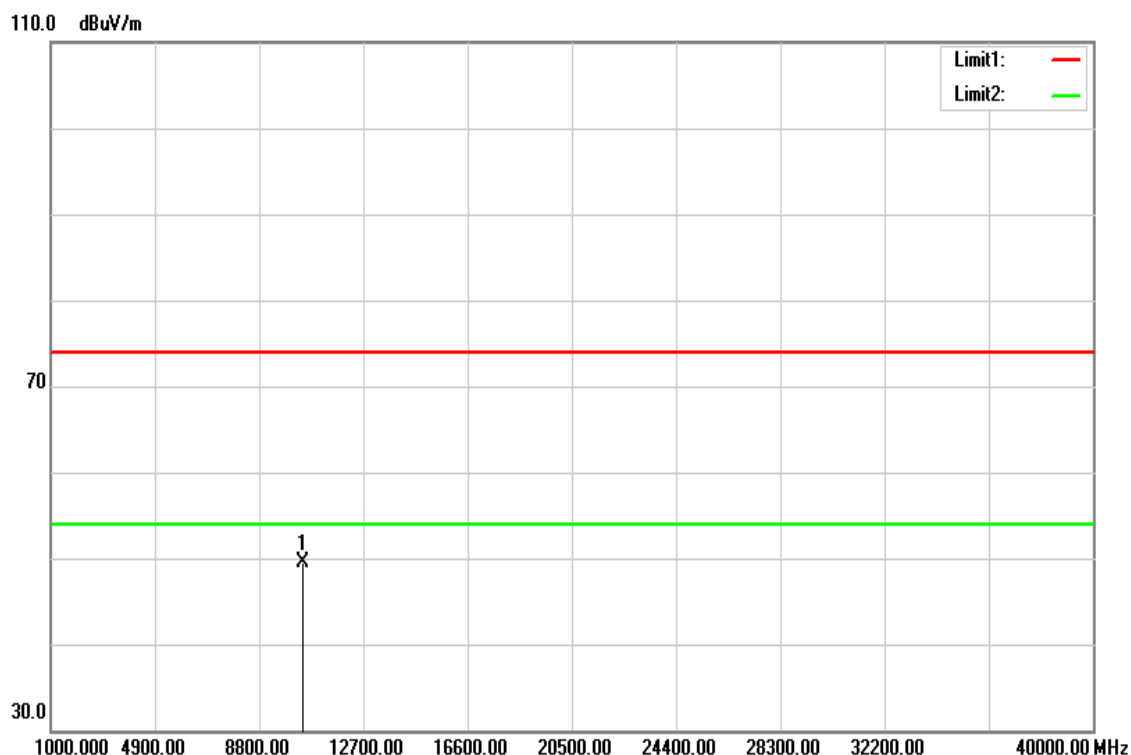


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10360.000	34.53	14.45	48.98	74.00	-25.02	peak
N/A						

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 802.11a / 5220 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Horizontal	Test Date	March 13, 2018
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

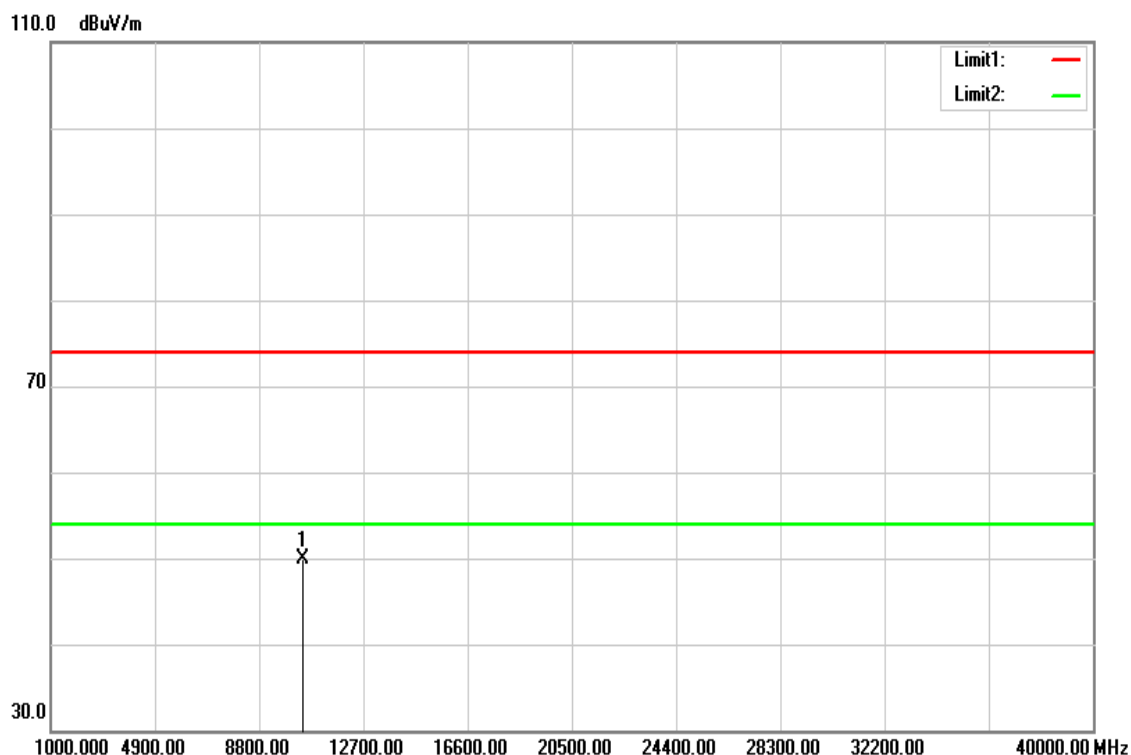


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10440.000	34.72	14.71	49.43	74.00	-24.57	peak
N/A						

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 802.11a / 5220 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

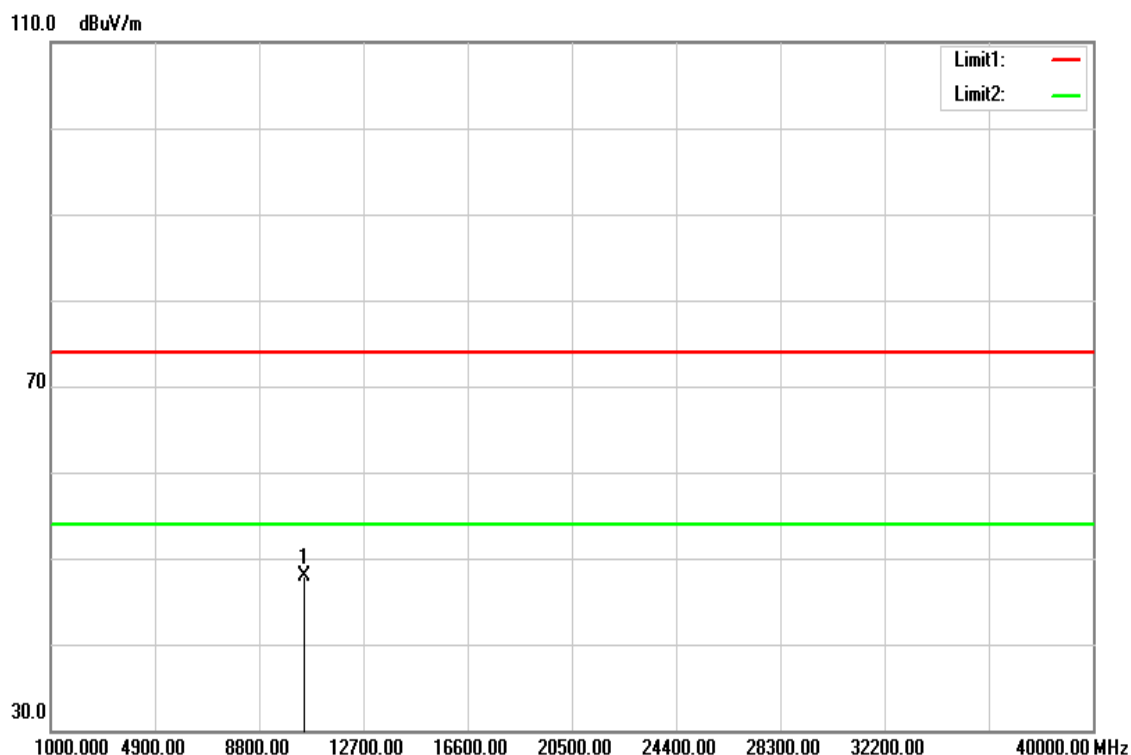


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10440.000	35.11	14.71	49.82	74.00	-24.18	peak
N/A						

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 802.11a / 5240MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

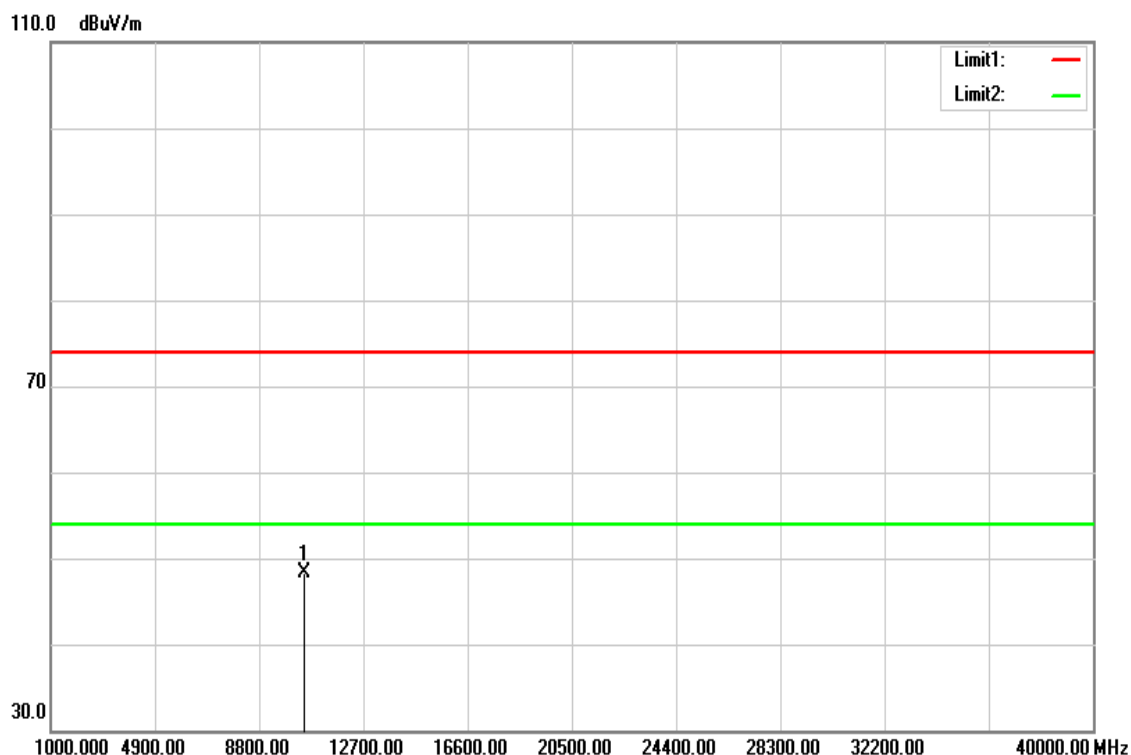


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10480.000	32.99	14.84	47.83	74.00	-26.17	peak
N/A						

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 802.11a / 5240MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

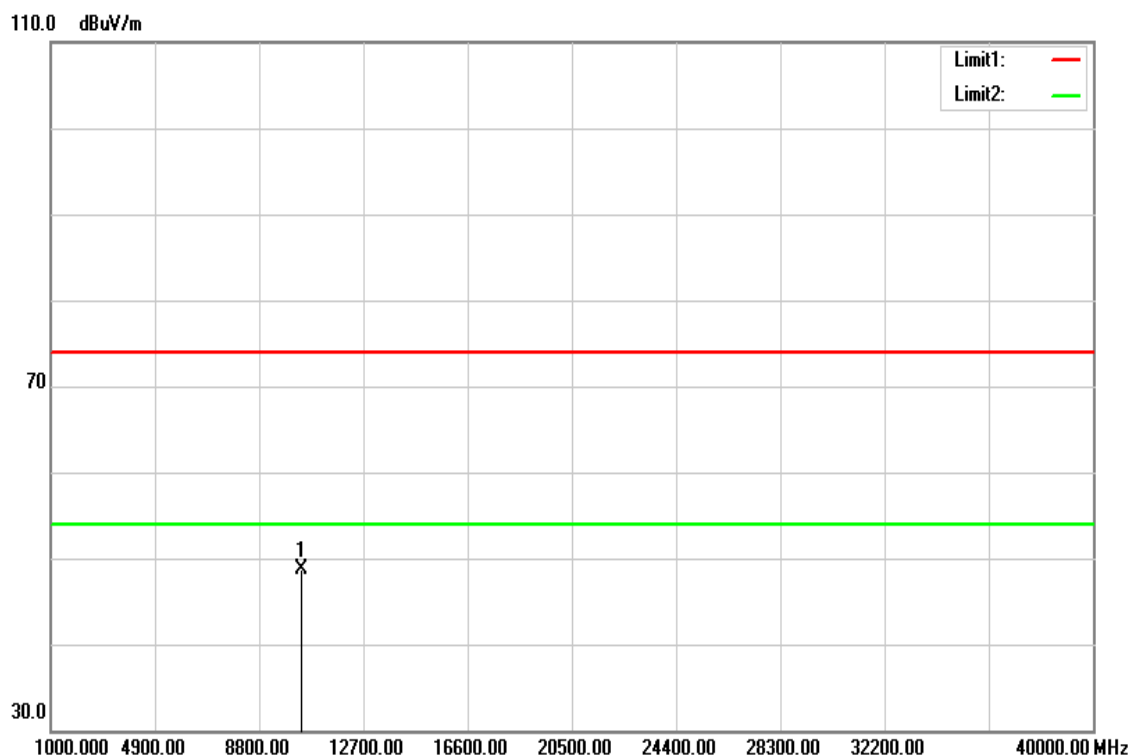


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10480.000	33.44	14.84	48.28	74.00	-25.72	peak
N/A						

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 20 MHz / 5180MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

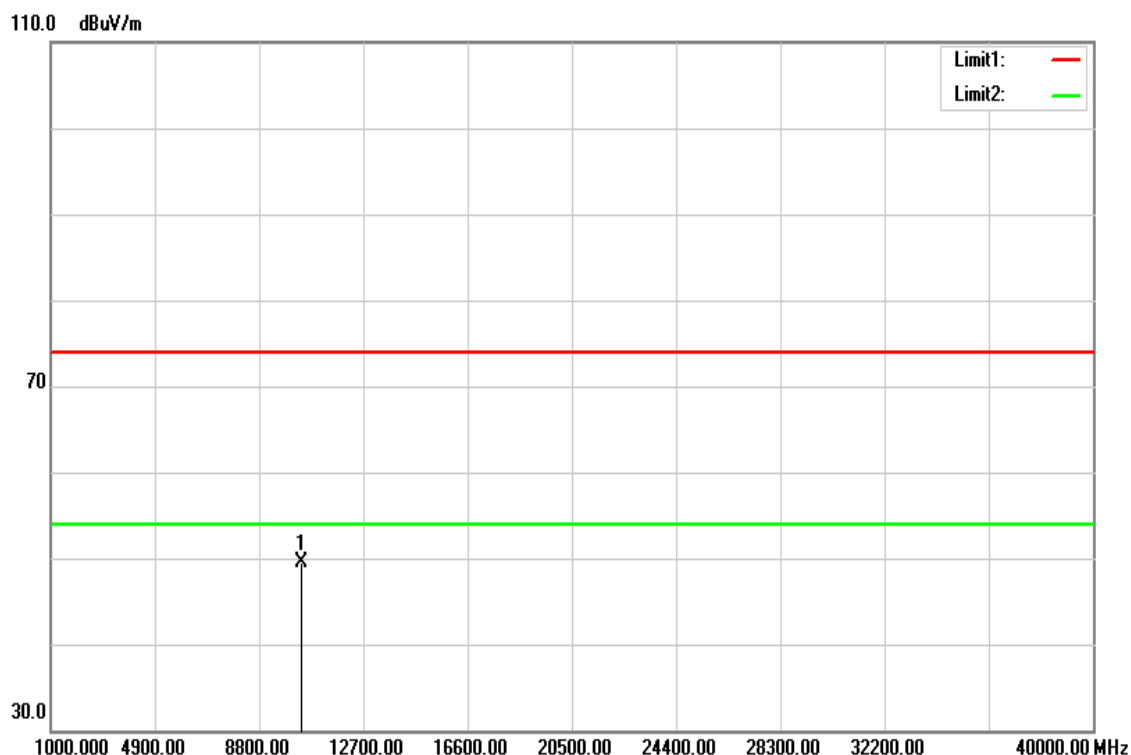


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10360.000	34.22	14.45	48.67	74.00	-25.33	peak
N/A						

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 20 MHz/ 5180MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

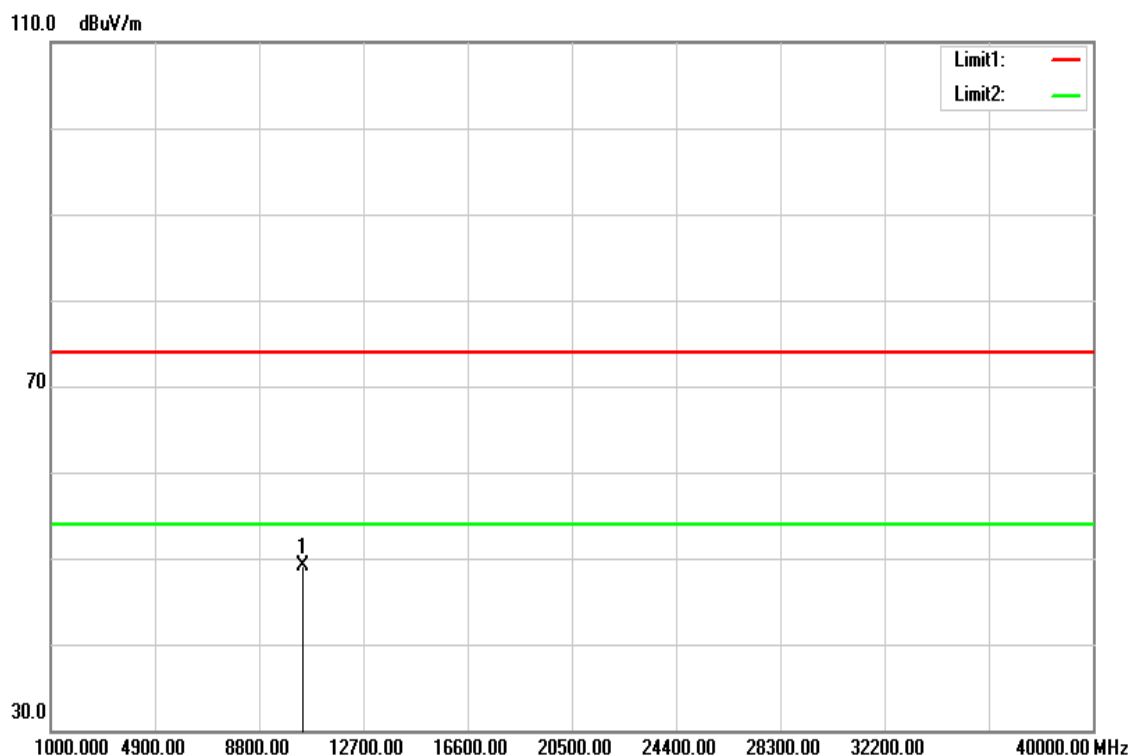


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10360.000	35.11	14.45	49.56	74.00	-24.44	peak
N/A						

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 20 MHz / 5220MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

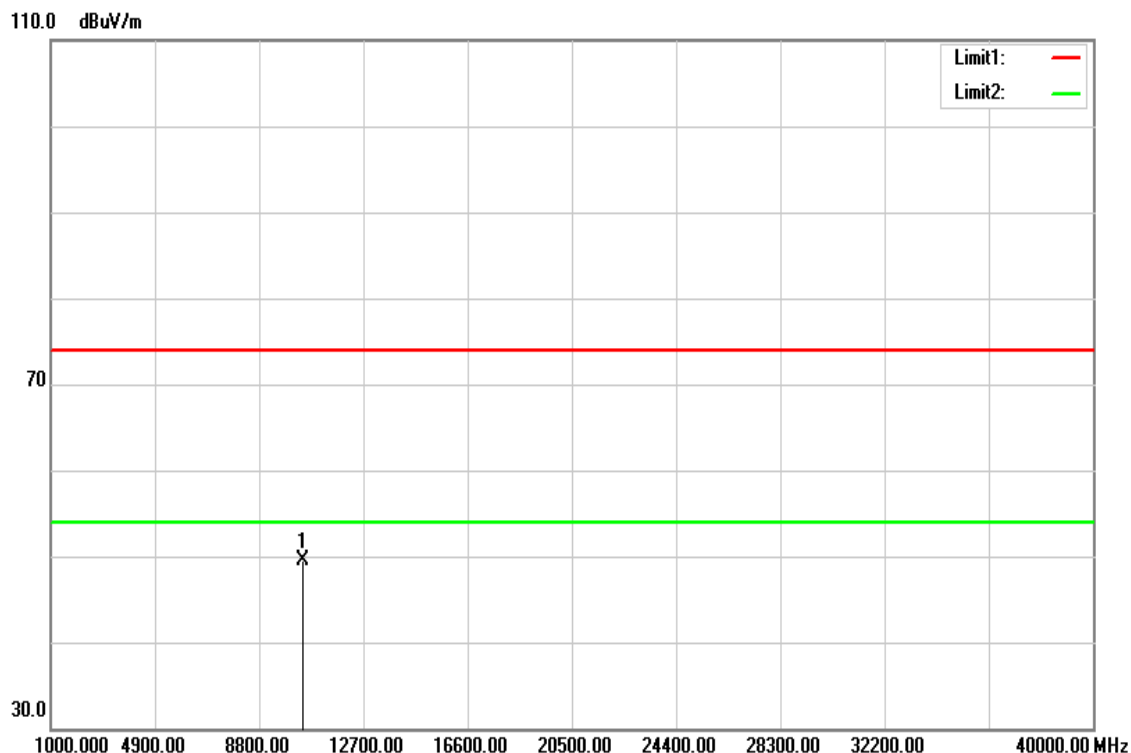


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10440.000	34.30	14.71	49.01	74.00	-24.99	peak
N/A						

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 20 MHz / 5220MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

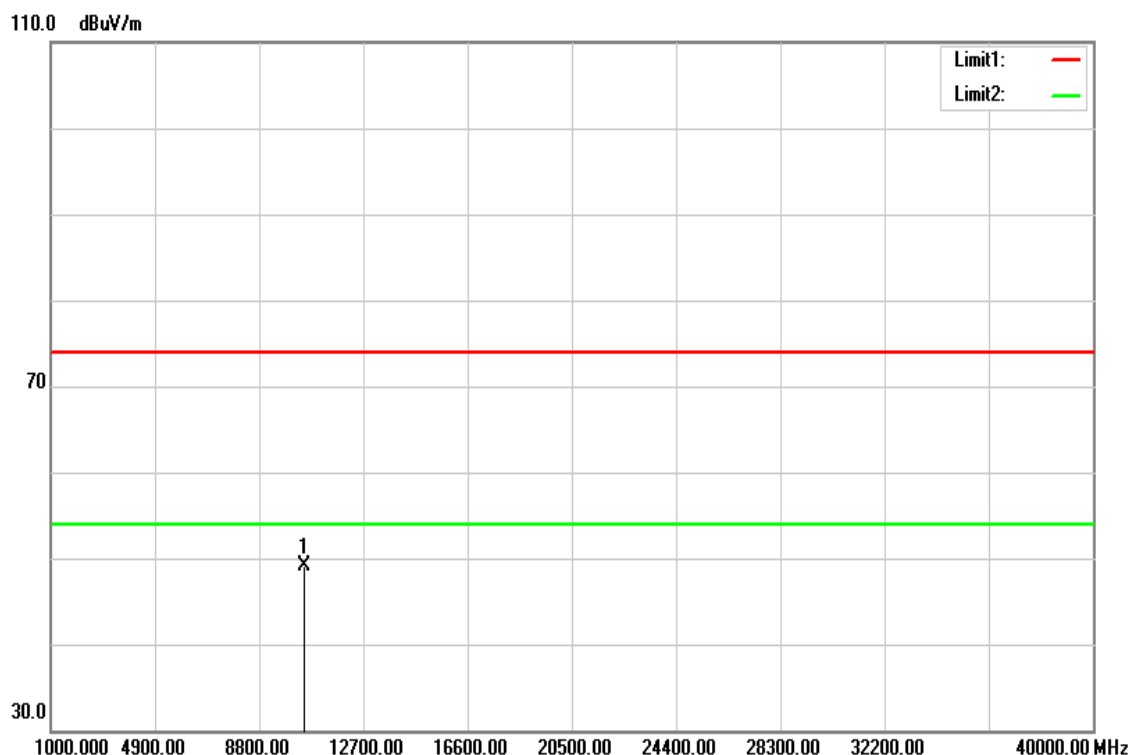


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10440.000	34.75	14.71	49.46	74.00	-24.54	peak
N/A						

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 20 MHz / 5240MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

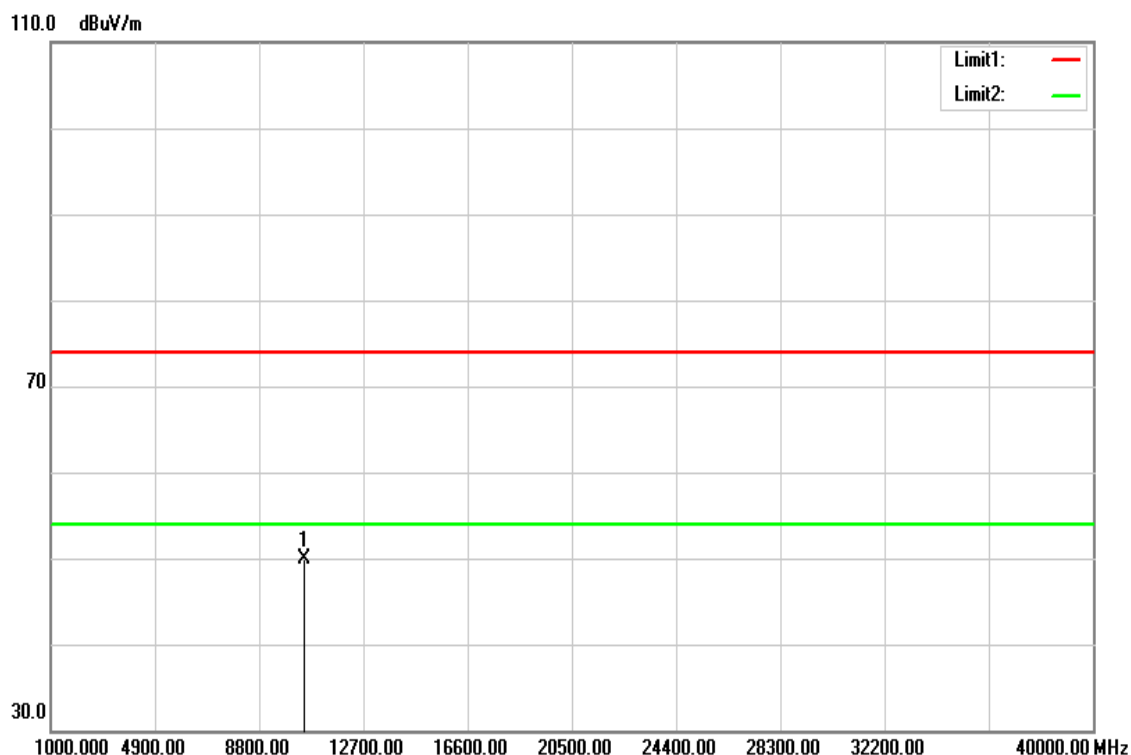


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10480.000	34.17	14.84	49.01	74.00	-24.99	peak
N/A						

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 20 MHz / 5240MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

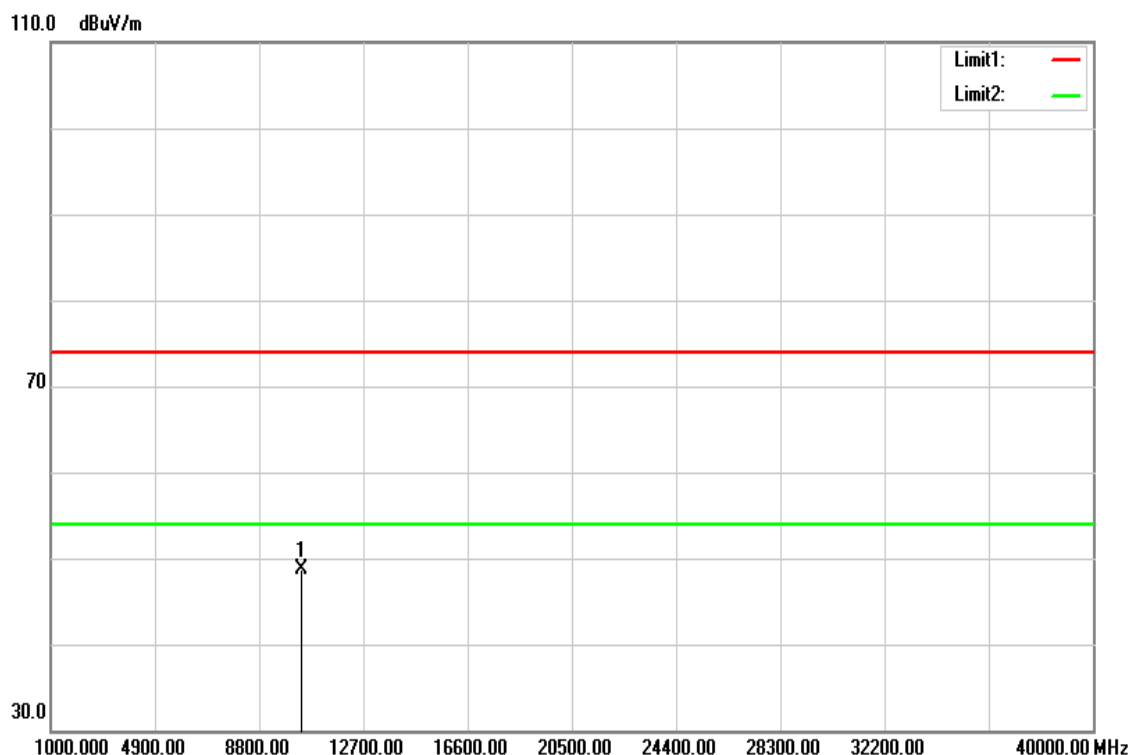


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10480.000	34.98	14.84	49.82	74.00	-24.18	peak
N/A						

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 40 MHz / 5190MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

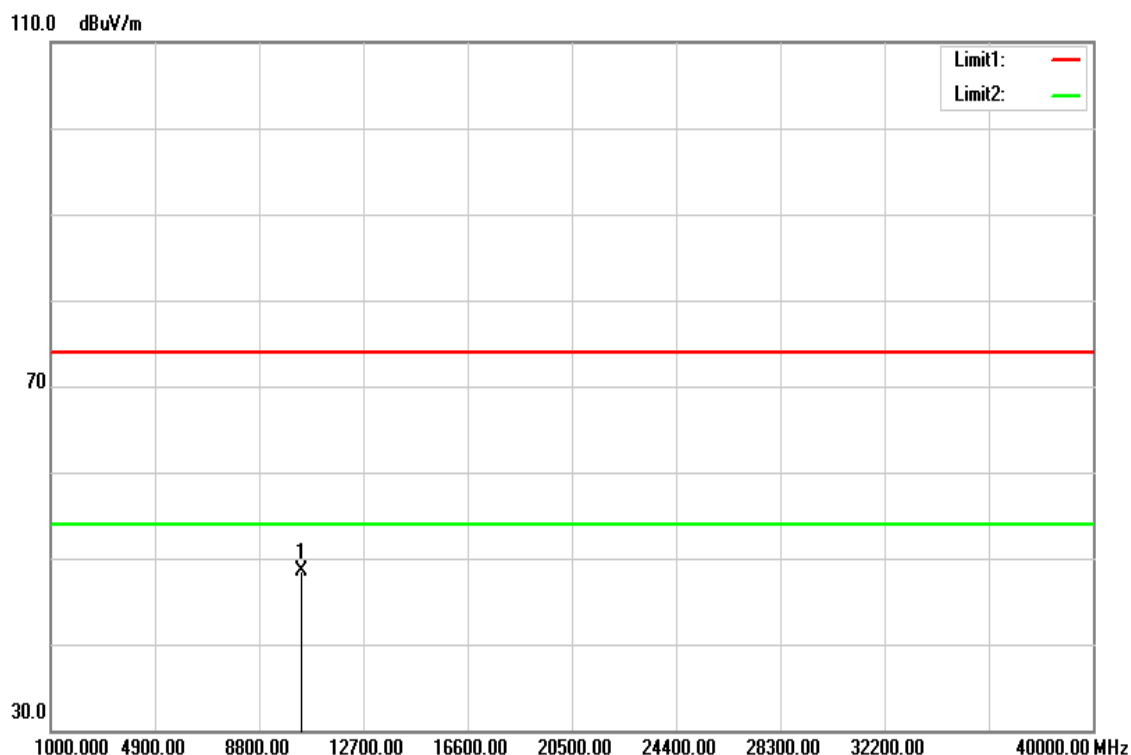


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10380.000	34.20	14.50	48.70	74.00	-25.30	peak
N/A						

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 40 MHz / 5190MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

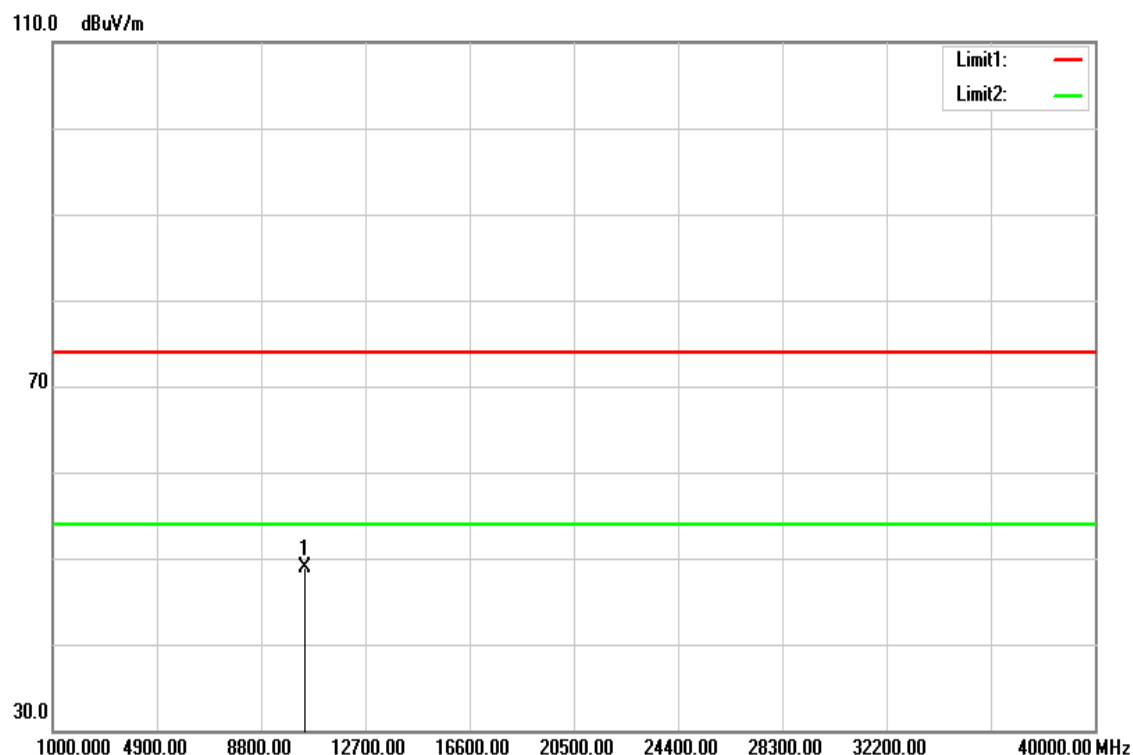


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10380.000	33.96	14.50	48.46	74.00	-25.54	peak
N/A						

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 40 MHz / 5230MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

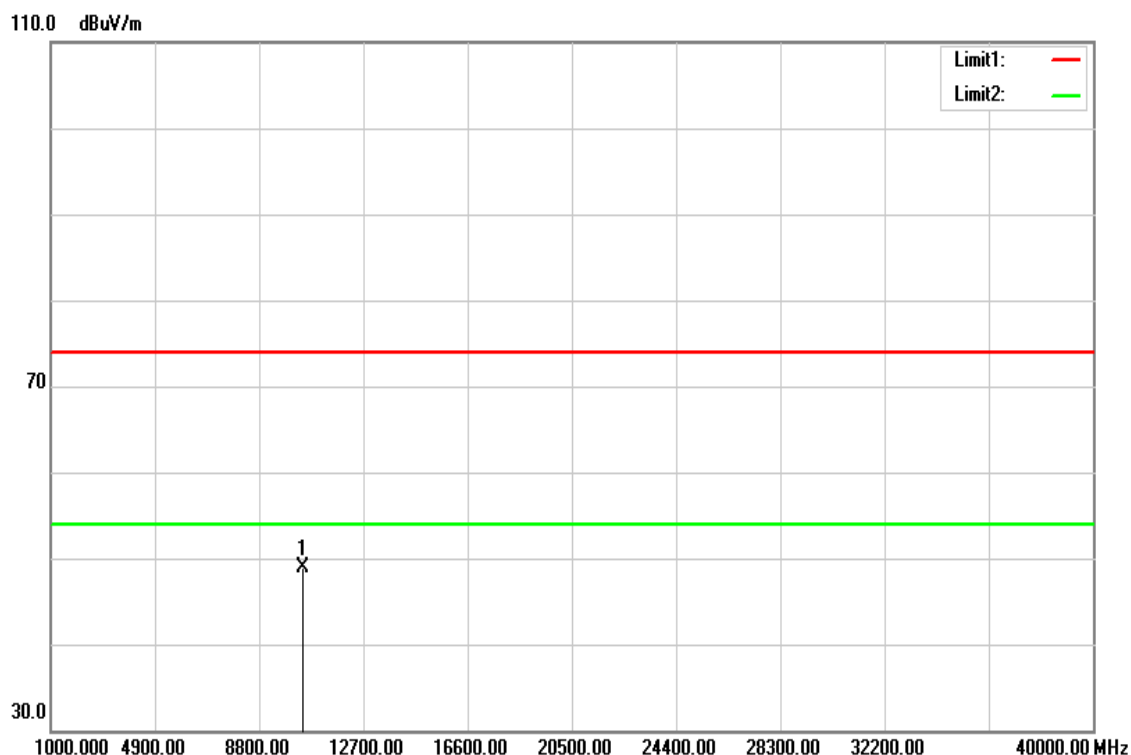


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10460.000	34.15	14.79	48.94	74.00	-25.06	peak
N/A						

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 40 MHz / 5230MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

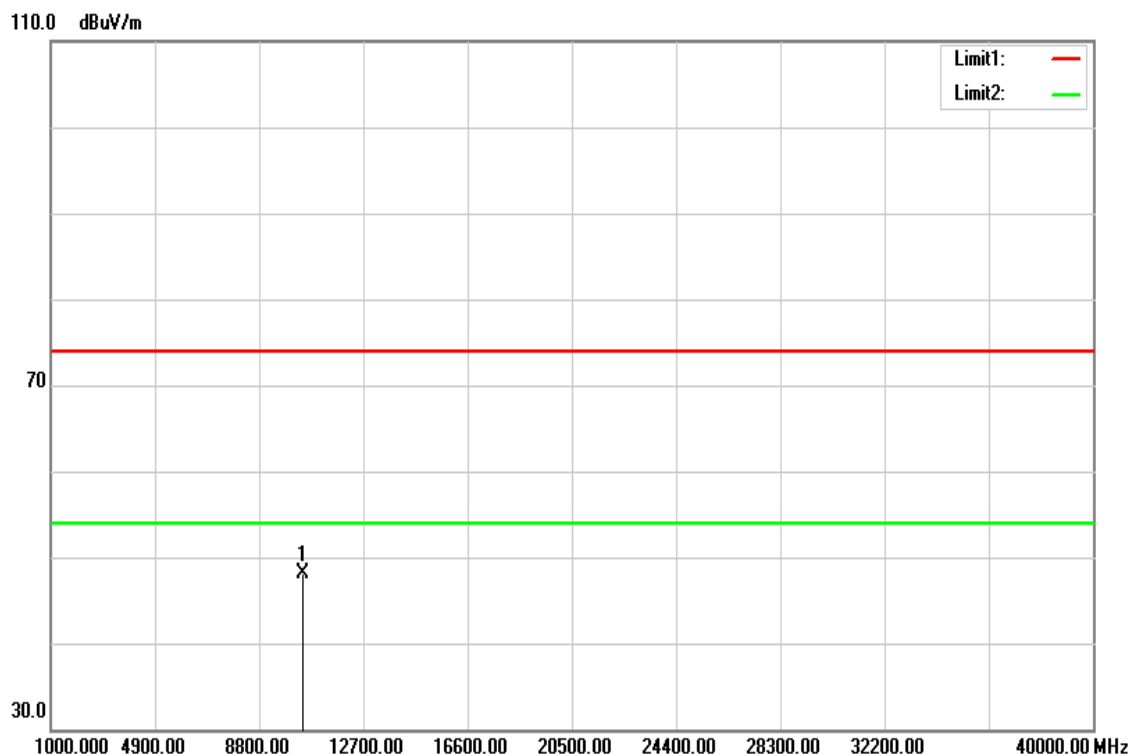


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10460.000	34.02	14.79	48.81	74.00	-25.19	peak
N/A						

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 802.11ac VHT80 MHz / 5210MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

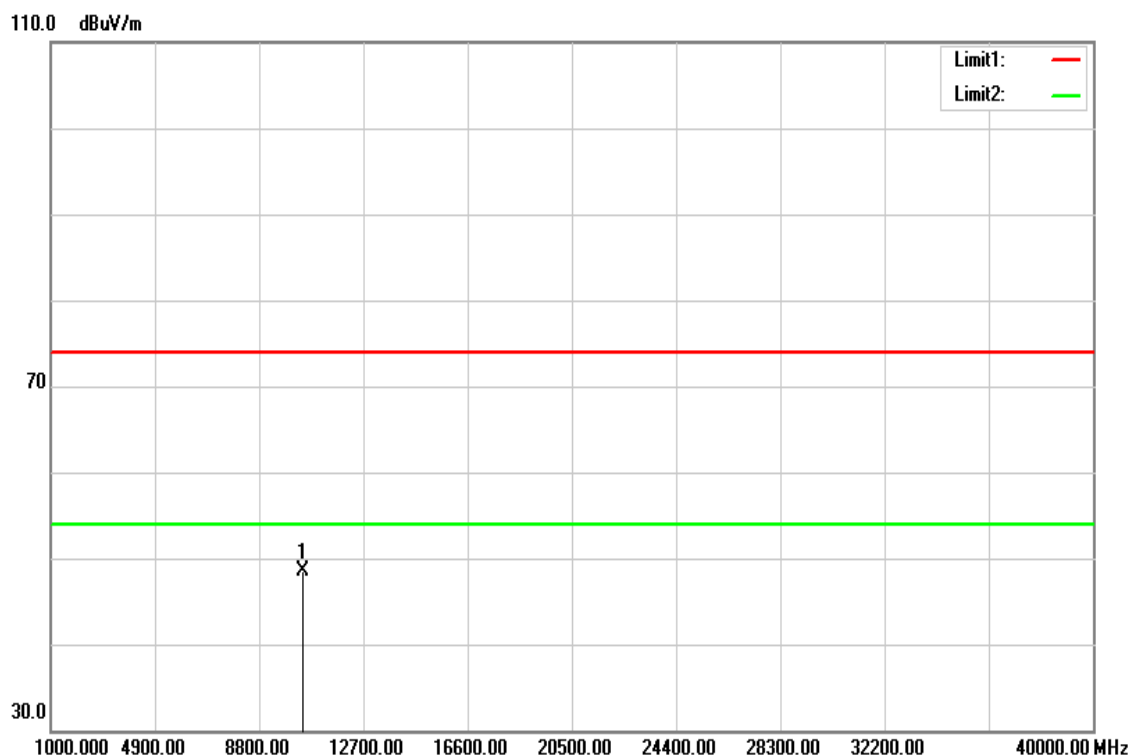


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10420.000	33.45	14.66	48.11	74.00	-25.89	peak
N/A						

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 802.11ac VHT80 MHz / 5210MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

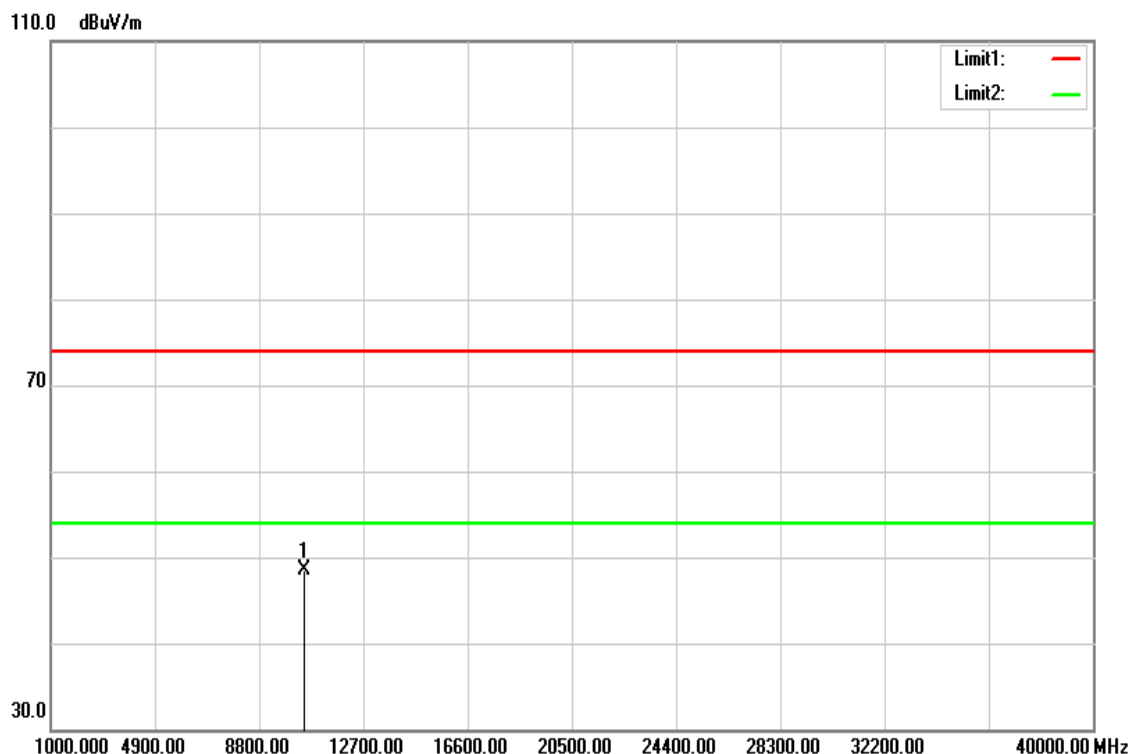


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10420.000	33.86	14.66	48.52	74.00	-25.48	peak
N/A						

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 802.11ac VHT160 MHz / 5250MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

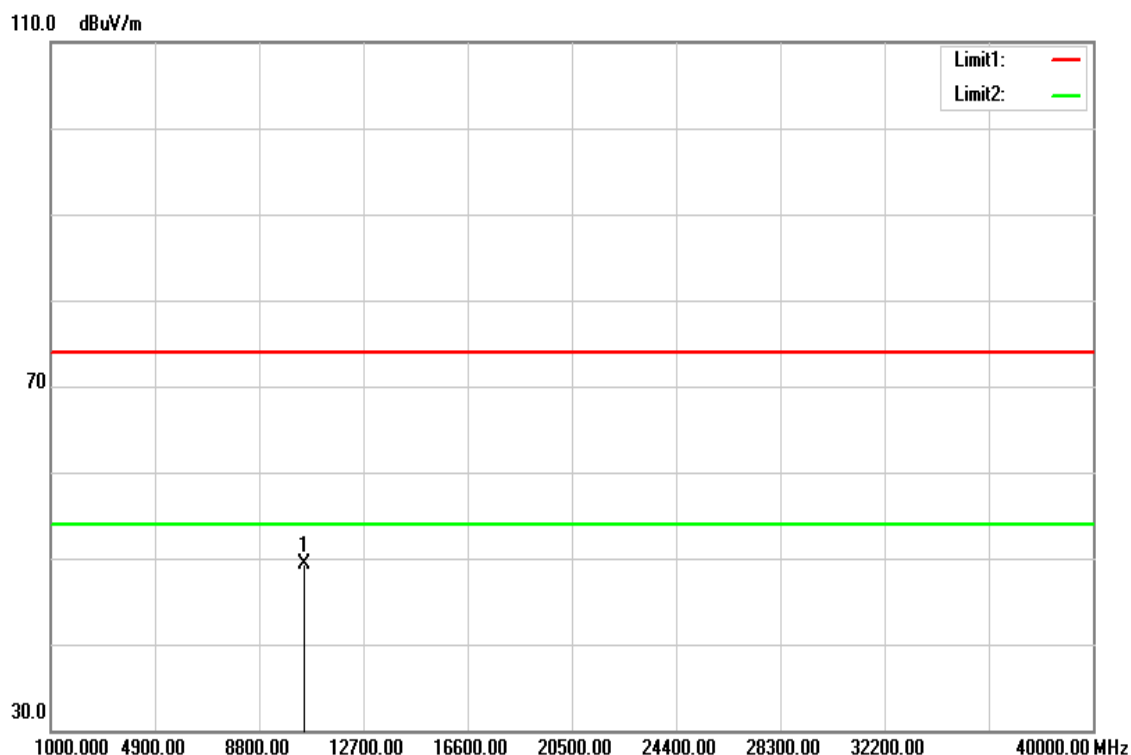


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10500.000	33.60	14.92	48.52	74.00	-25.48	peak
N/A						

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 802.11ac VHT160 MHz / 5250MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz



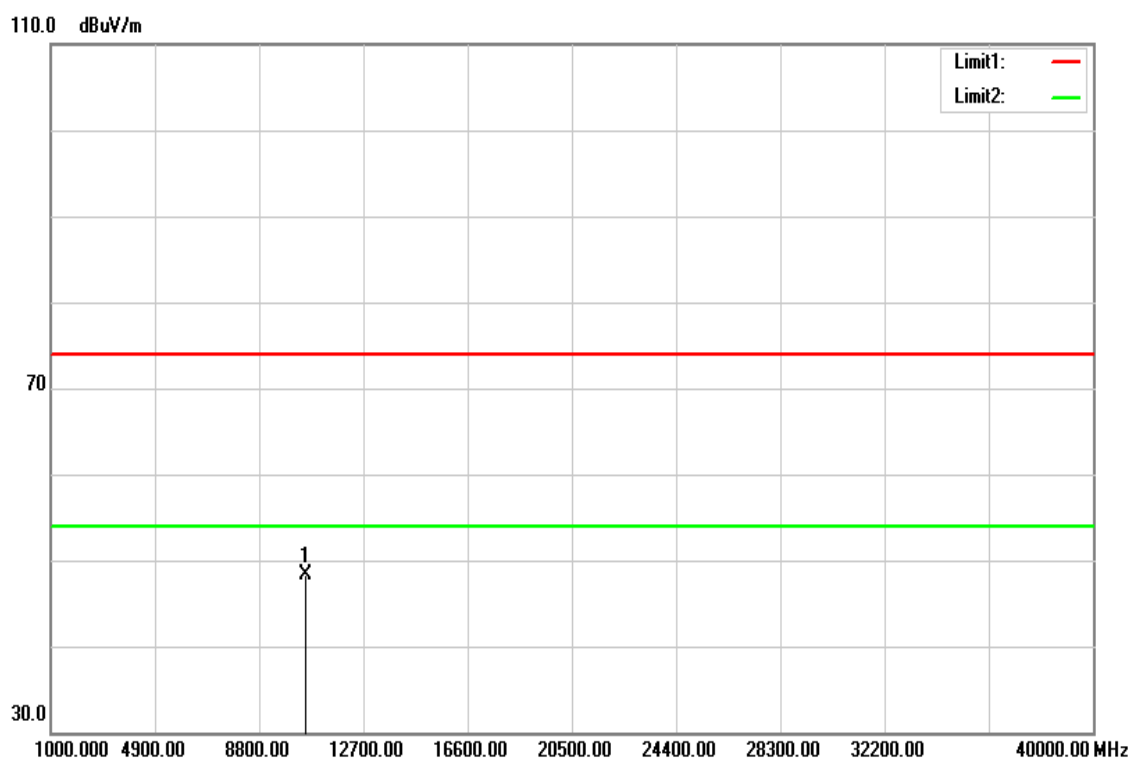
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10500.000	34.42	14.92	49.34	74.00	-24.66	peak
N/A						

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

Above 1G Test Data for UNII-2a

Test Mode	IEEE 802.11a / 5260 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

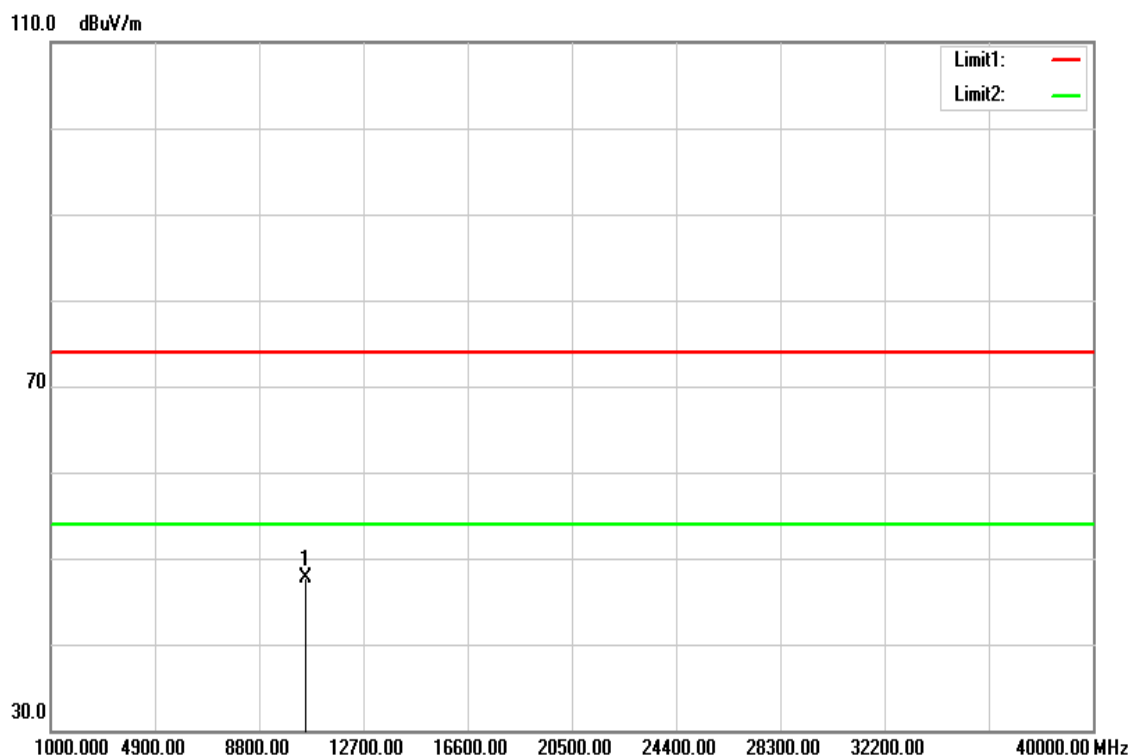


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10520.000	33.30	14.97	48.27	74.00	-25.73	peak
N/A						

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 802.11a / 5260 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

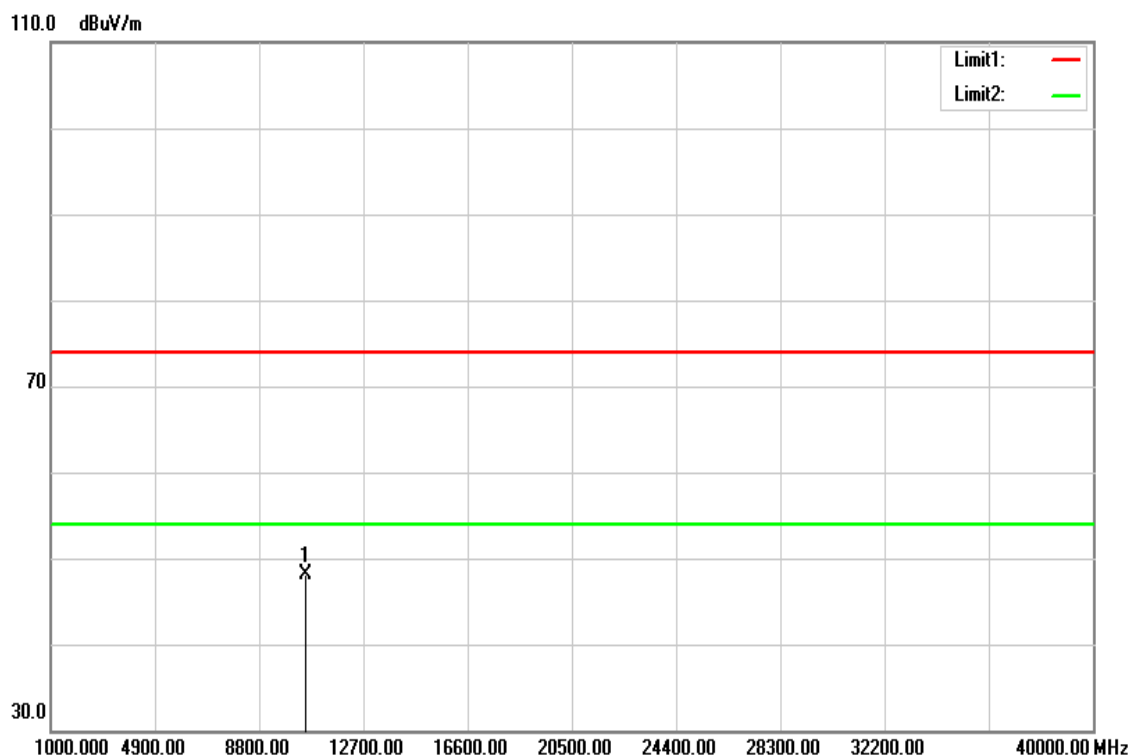


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10520.000	32.67	14.97	47.64	74.00	-26.36	peak
N/A						

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 802.11a / 5280 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

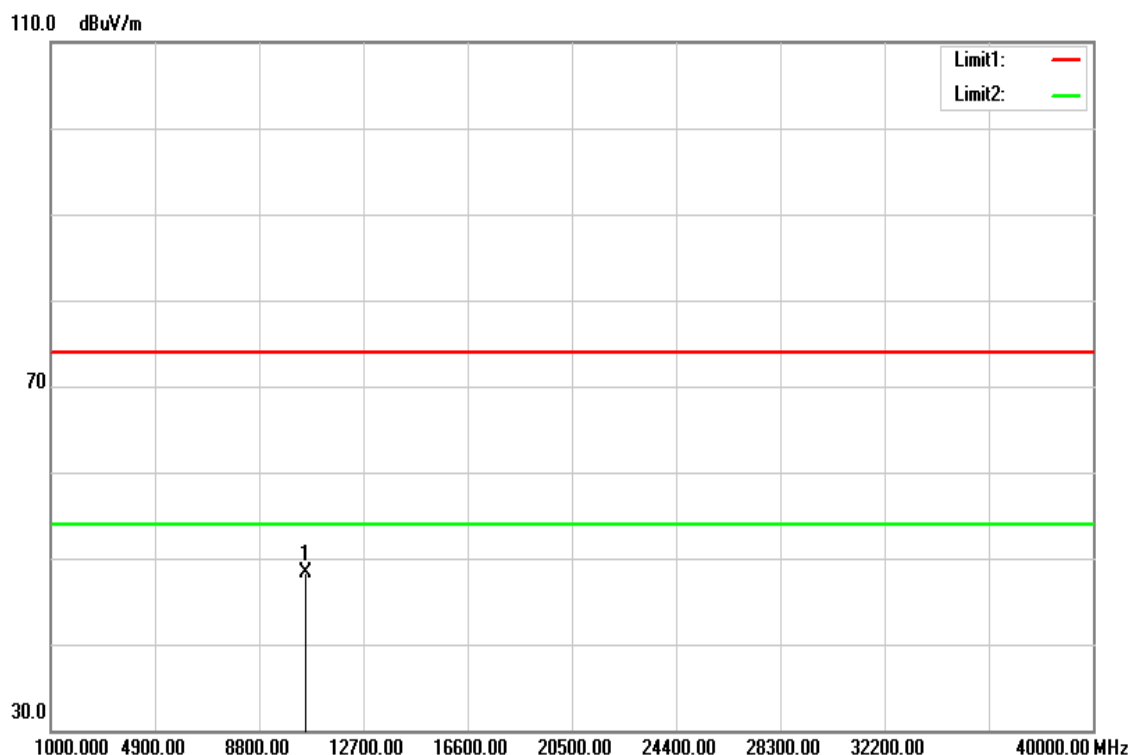


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10560.000	33.02	15.06	48.08	74.00	-25.92	peak
N/A						

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 802.11a / 5280 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

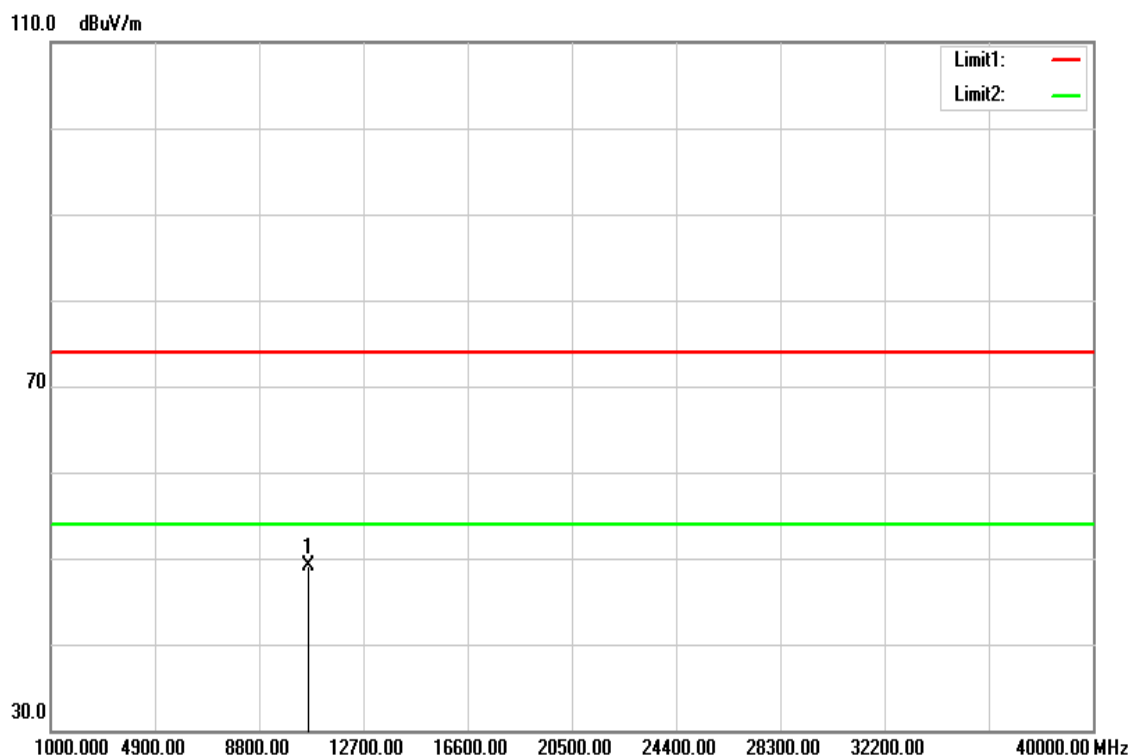


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10560.000	33.27	15.06	48.33	74.00	-25.67	peak
N/A						

Remark:

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

Test Mode	IEEE 802.11a / 5320 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

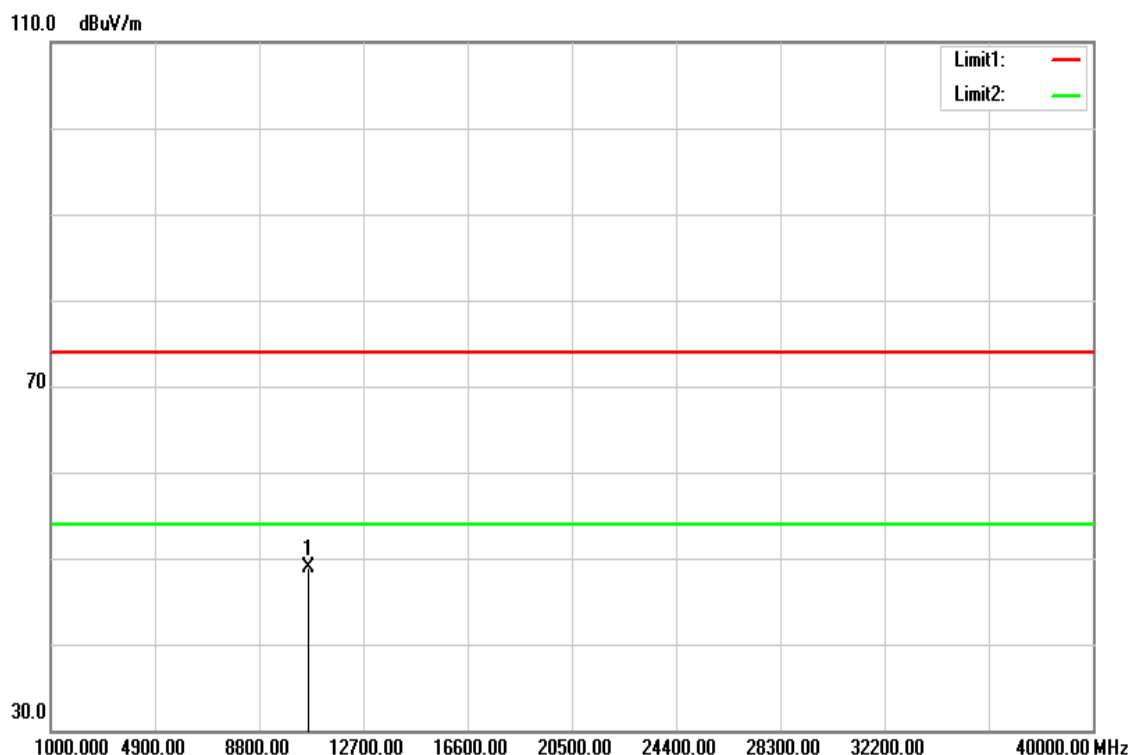


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10640.000	33.87	15.23	49.10	74.00	-24.90	peak
N/A						

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 802.11a / 5320 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

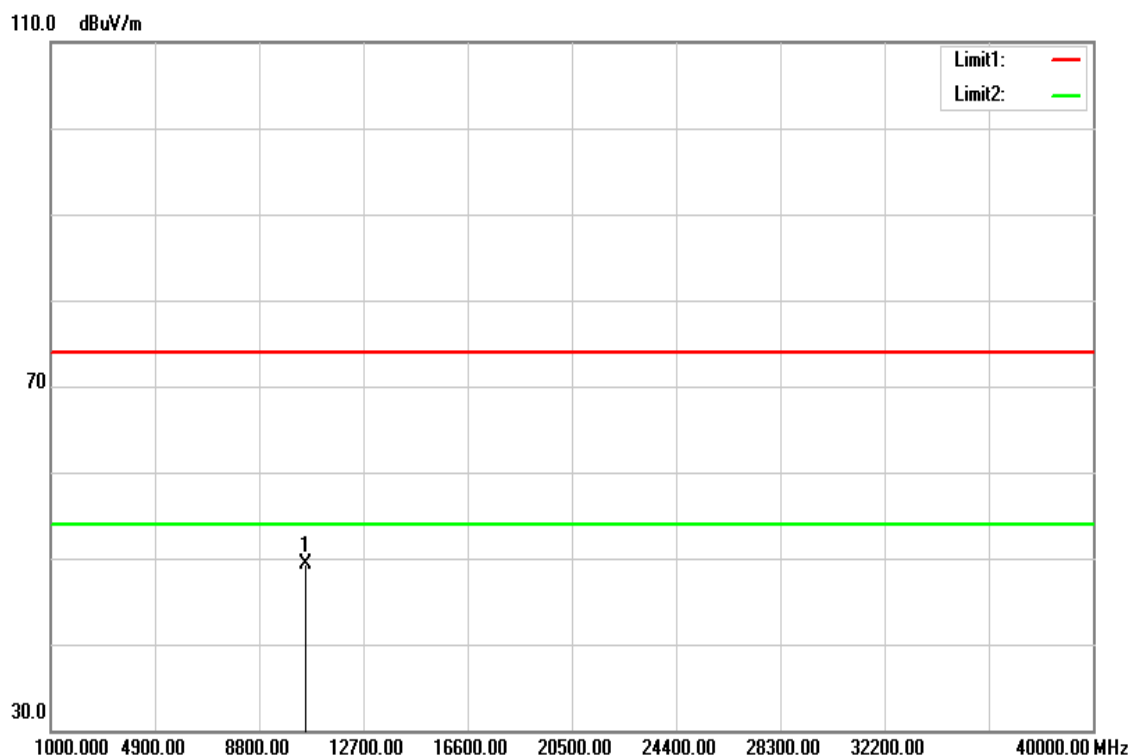


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10640.000	33.61	15.23	48.84	74.00	-25.16	peak
N/A						

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 20 MHz / 5260 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

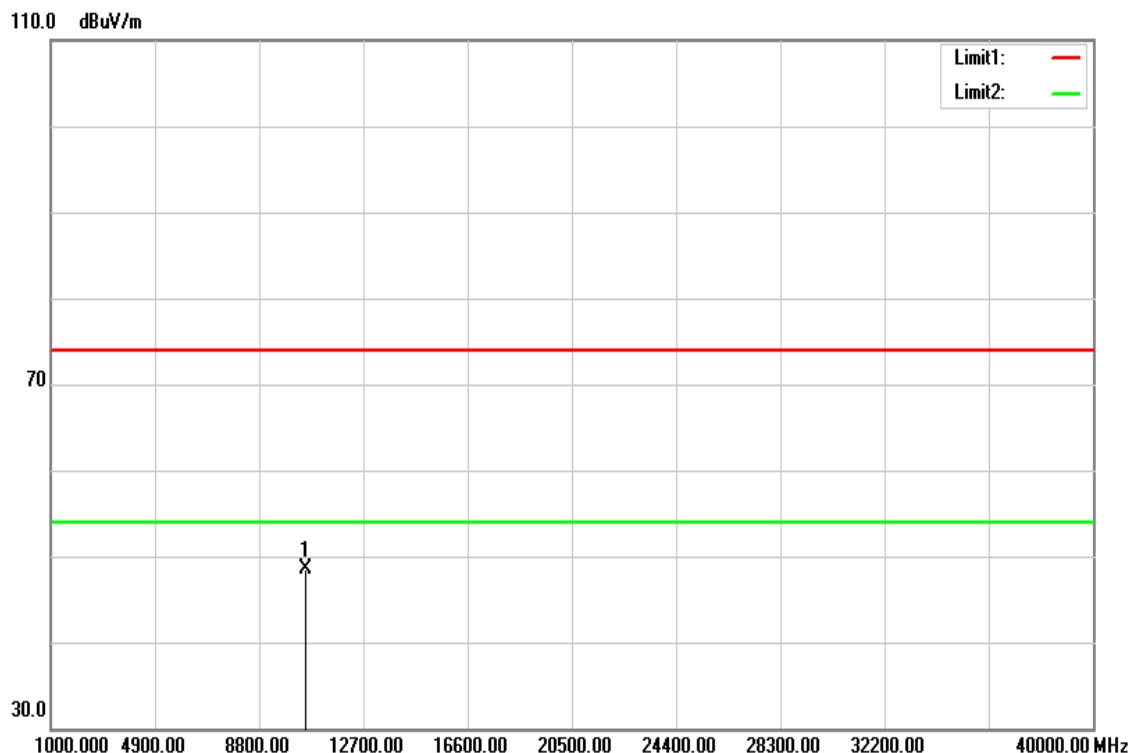


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10520.000	34.37	14.97	49.34	74.00	-24.66	peak
N/A						

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 20 MHz / 5260 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

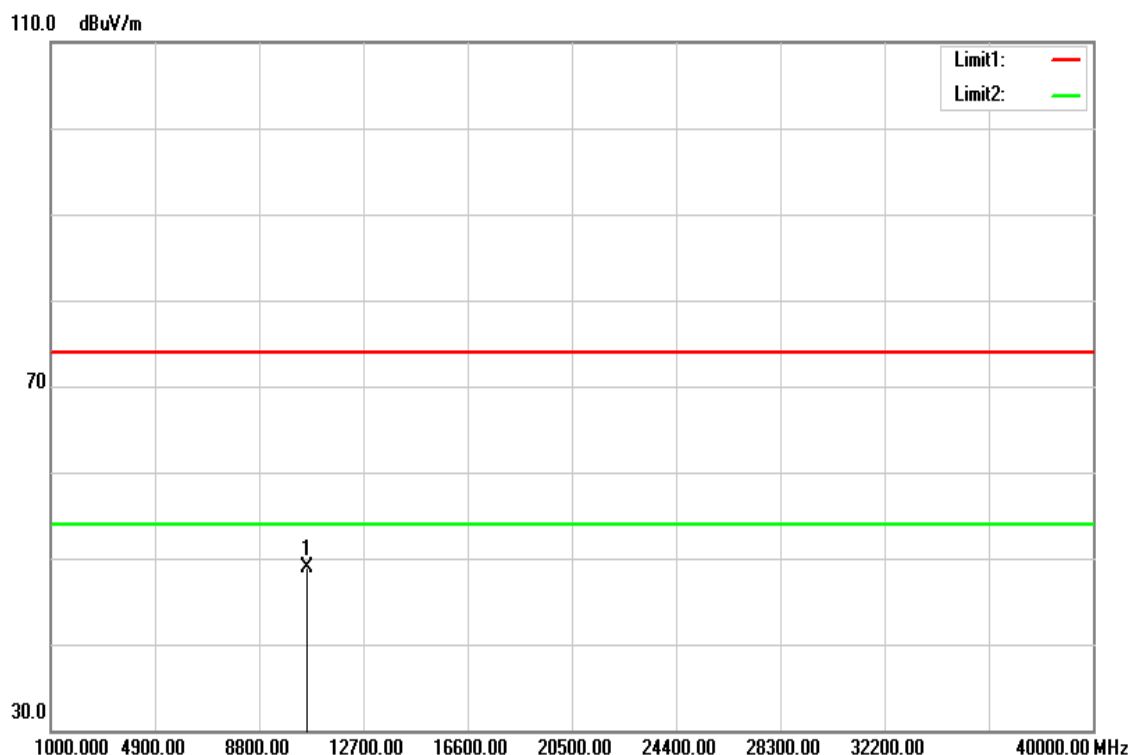


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10520.000	33.50	14.97	48.47	74.00	-25.53	peak
N/A						

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 20 MHz / 5280 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

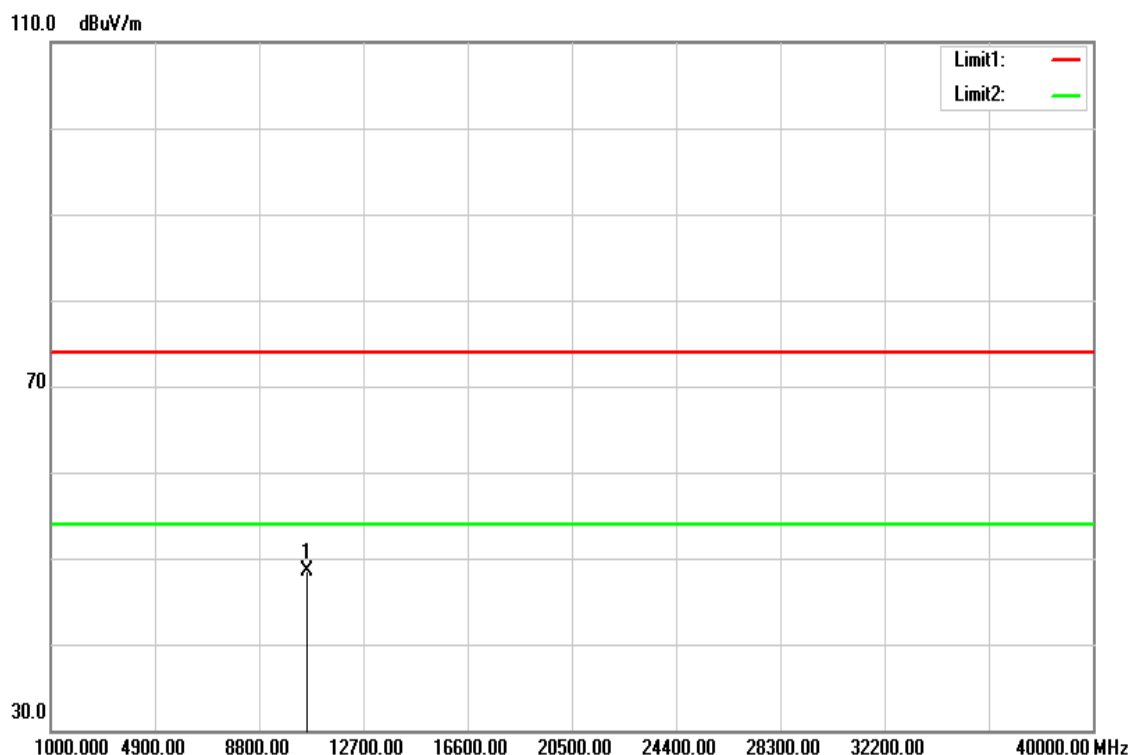


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10580.000	33.90	15.10	49.00	74.00	-25.00	peak
N/A						

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 20 MHz / 5280 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

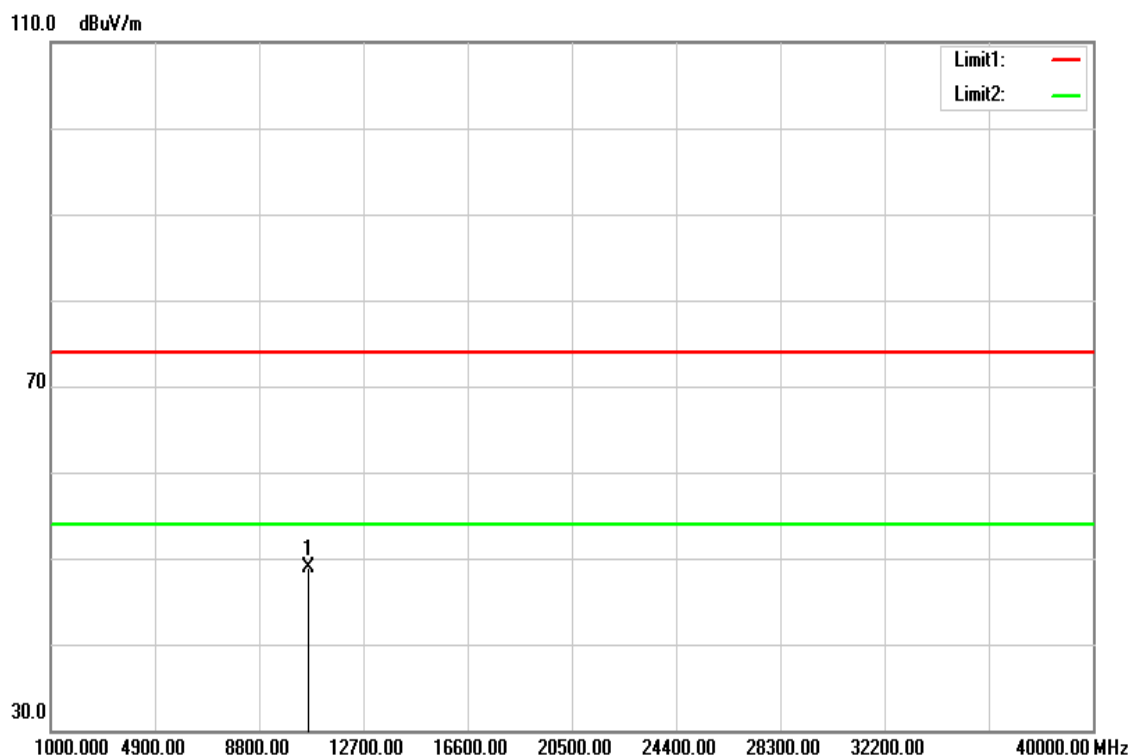


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10580.000	33.45	15.10	48.55	74.00	-25.45	peak
N/A						

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 20 MHz / 5320 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

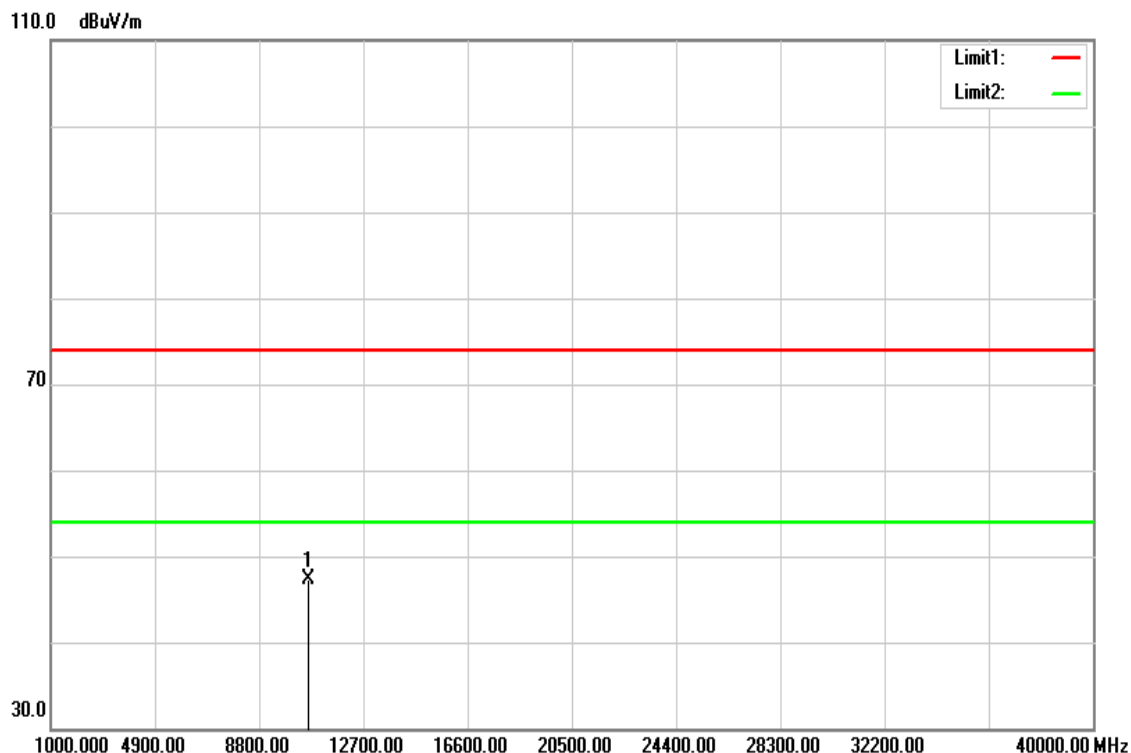


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10640.000	33.77	15.23	49.00	74.00	-25.00	peak
N/A						

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 20 MHz / 5320 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

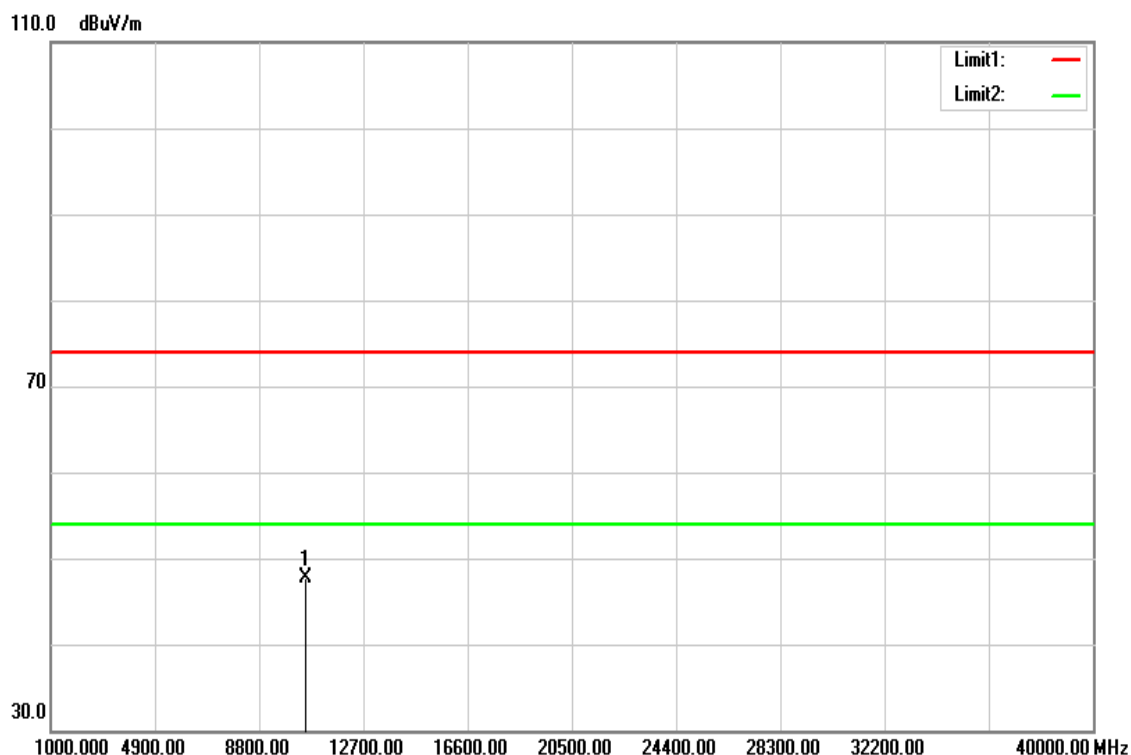


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10640.000	31.99	15.23	47.22	74.00	-26.78	peak
N/A						

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 40 MHz / 5270 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

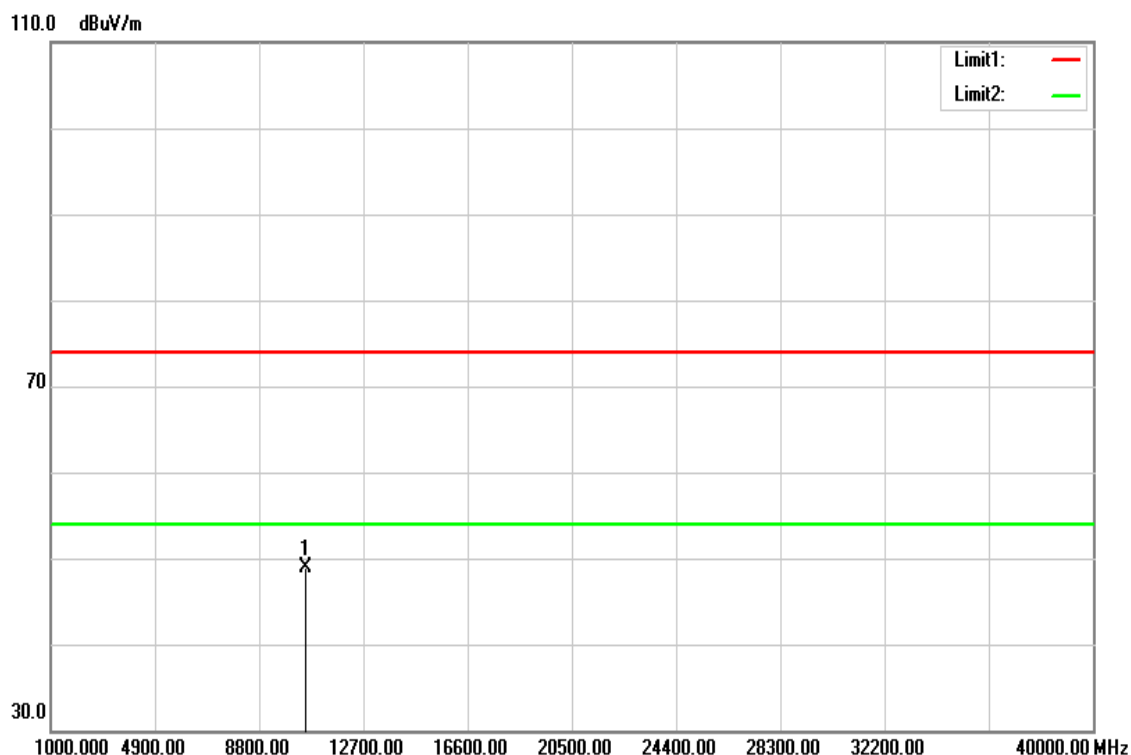


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10540.000	32.74	15.01	47.75	74.00	-26.25	peak
N/A						

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 40 MHz / 5270 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

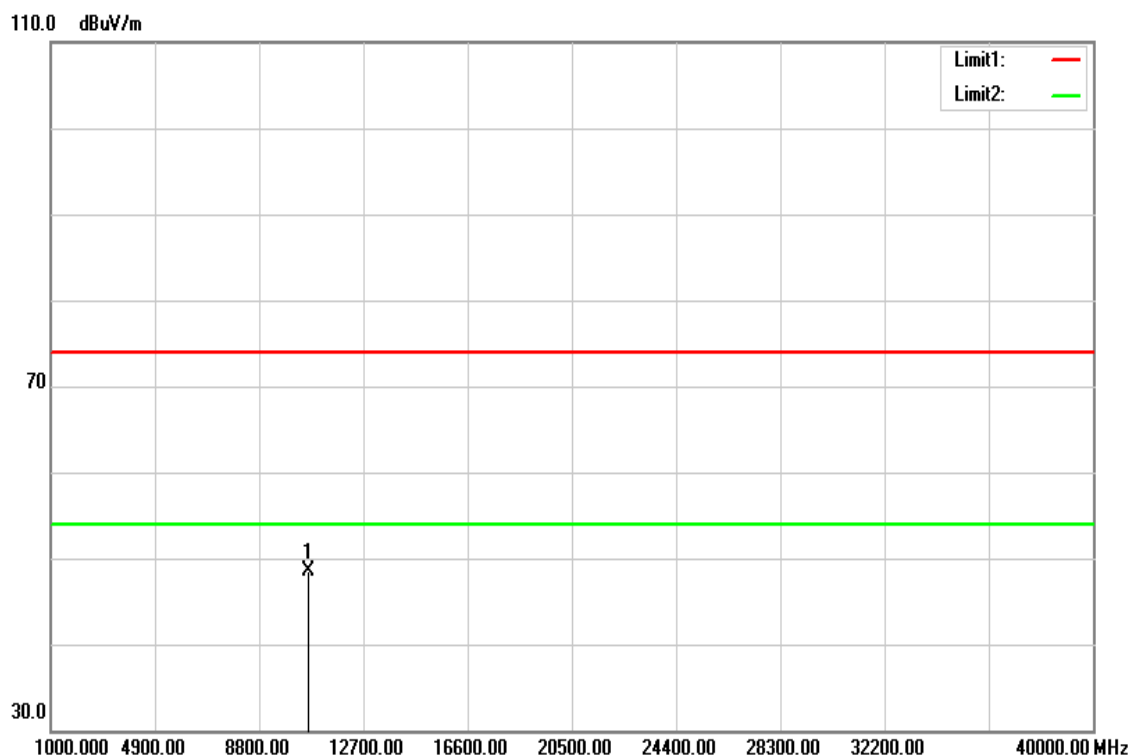


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10540.000	33.98	15.01	48.99	74.00	-25.01	peak
N/A						

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 40 MHz / 5310 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

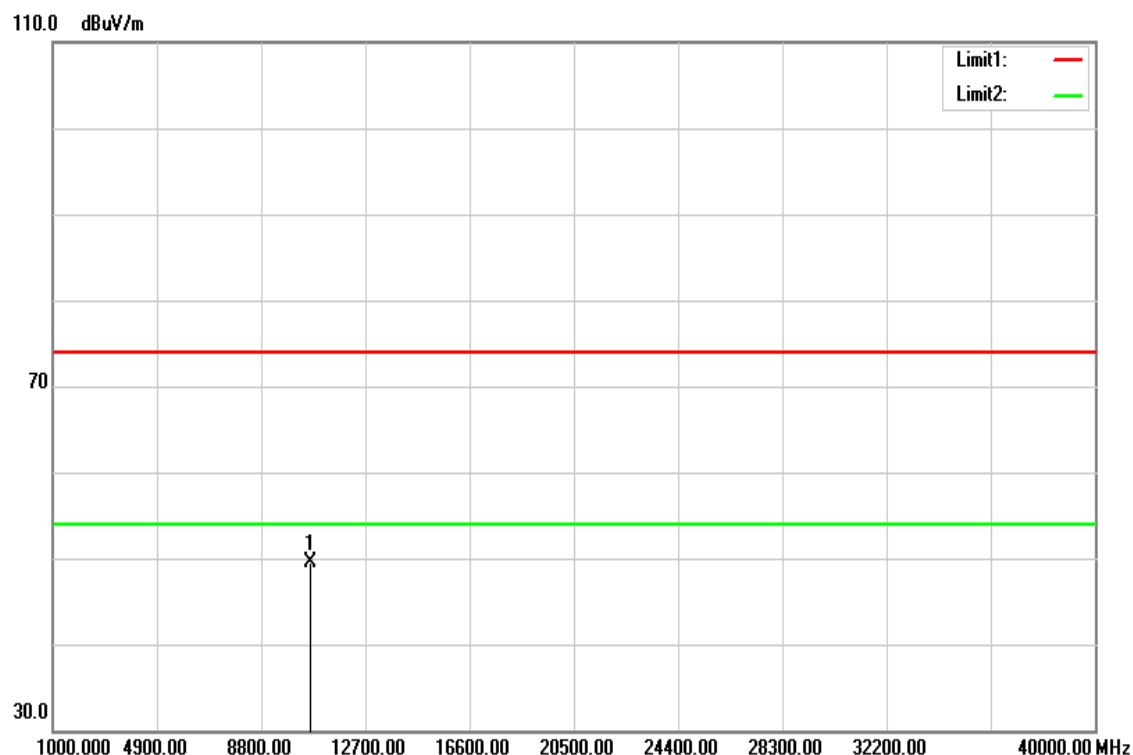


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10620.000	33.40	15.20	48.60	74.00	-25.40	peak
N/A						

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 40 MHz / 5310 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

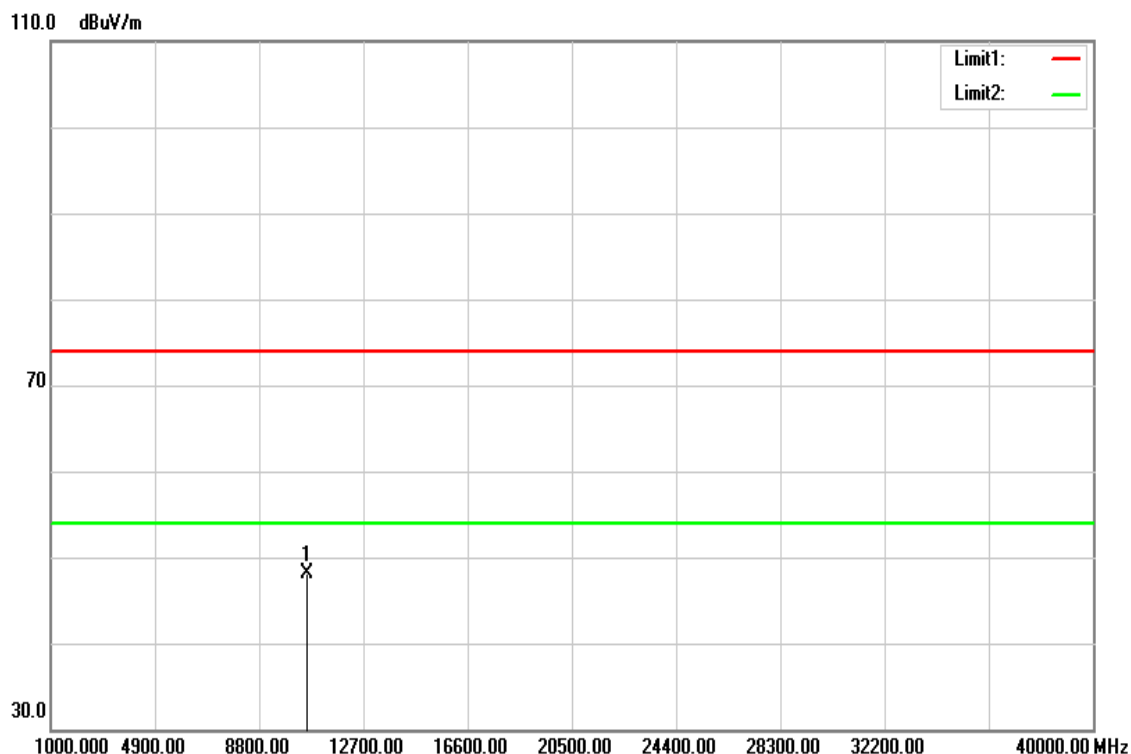


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10620.000	34.24	15.20	49.44	74.00	-24.56	peak
N/A						

Remark:

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

Test Mode	IEEE 802.11ac VHT80 MHz / 5290 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

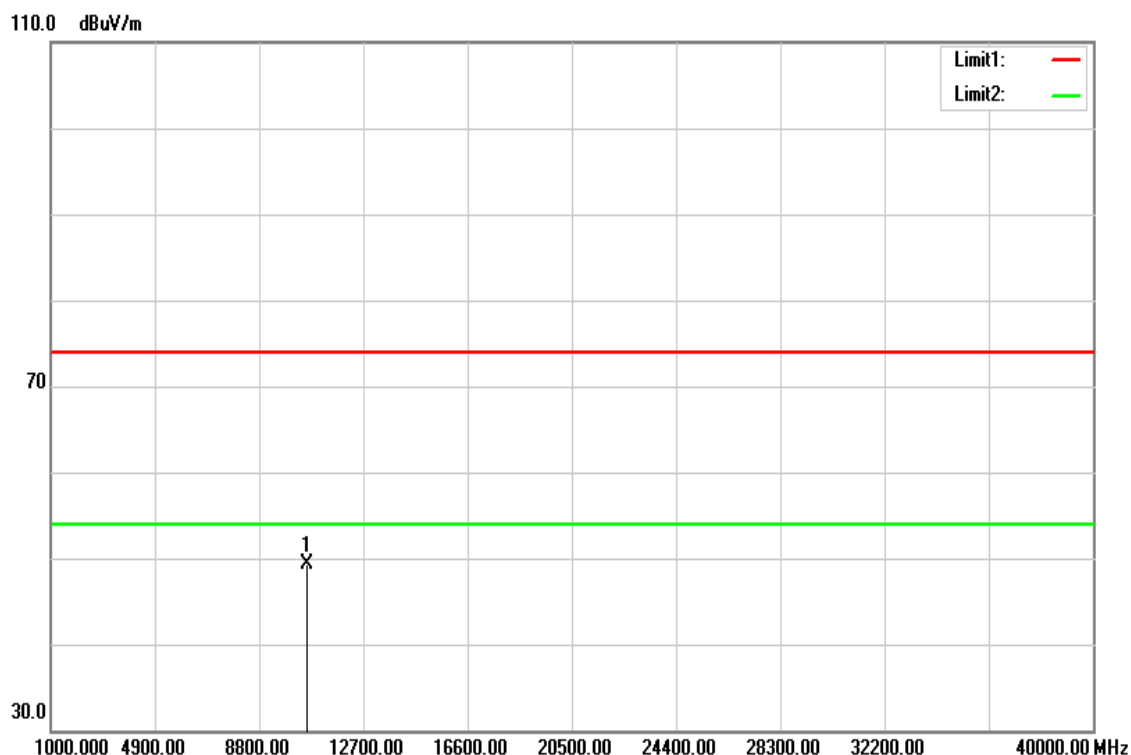


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10580.000	32.93	15.10	48.03	74.00	-25.97	peak
N/A						

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 802.11ac VHT80 MHz / 5290 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz



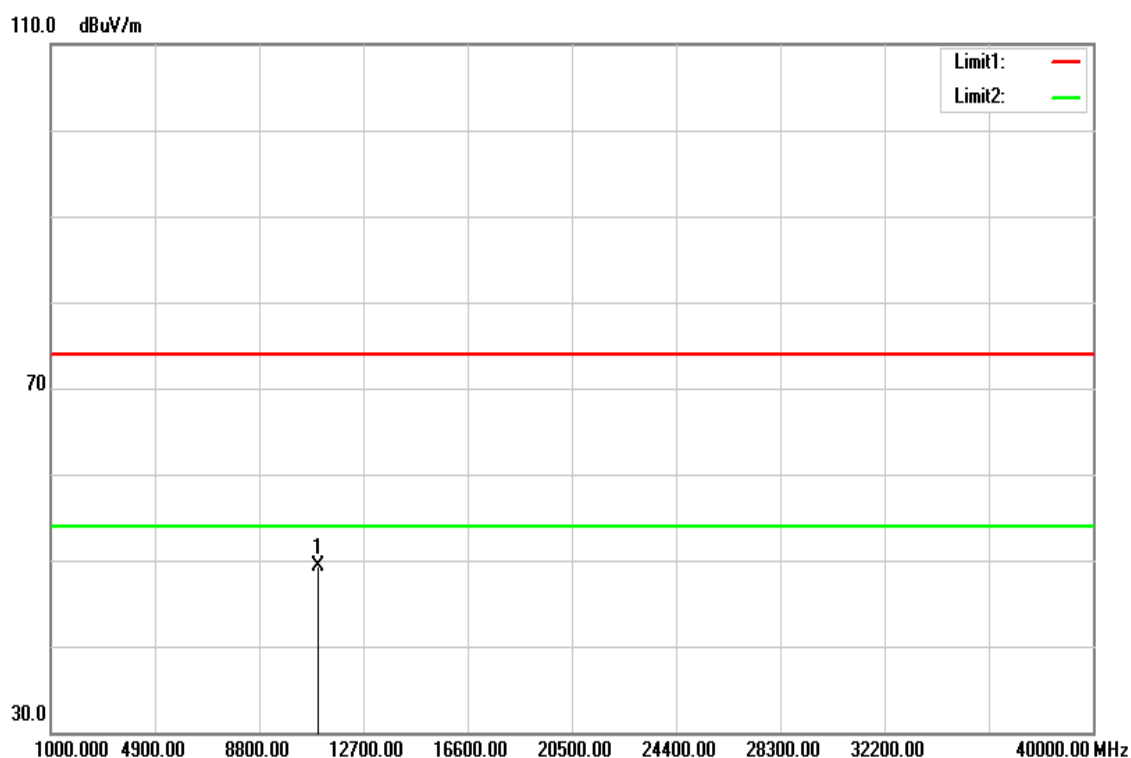
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10580.000	34.28	15.10	49.38	74.00	-24.62	peak
N/A						

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

Above 1G Test Data for UNII-2c

Test Mode	IEEE 802.11a / 5500 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

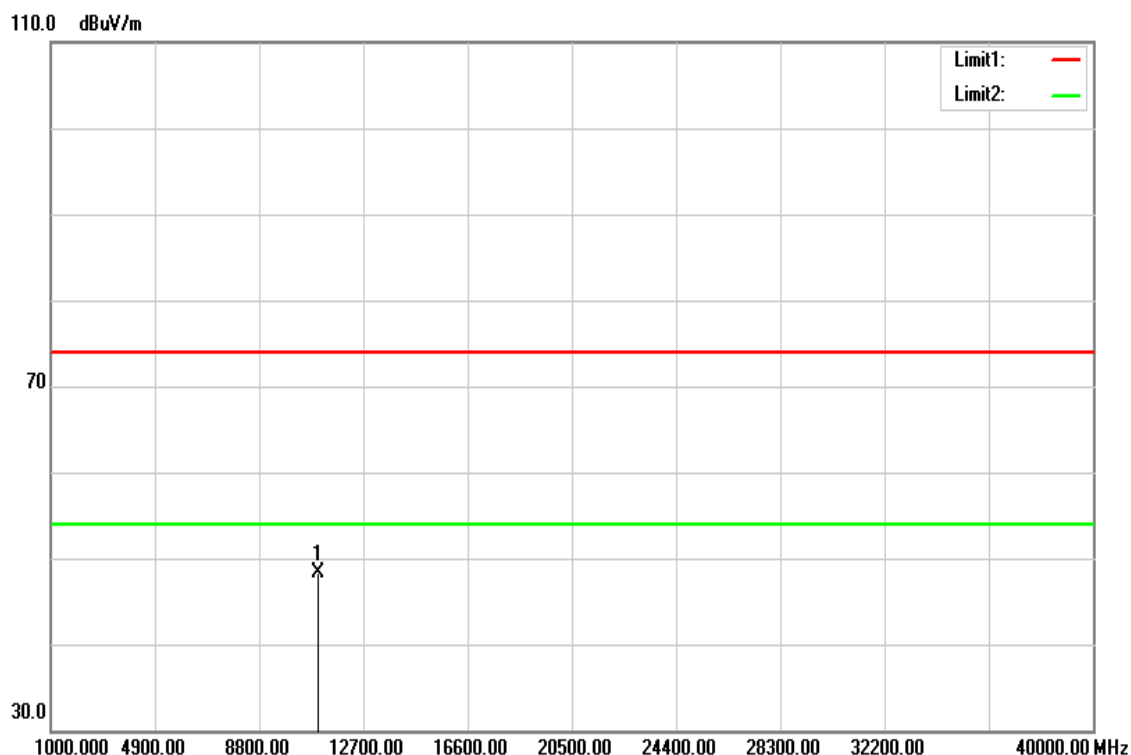


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11000.000	33.24	16.06	49.30	74.00	-24.70	peak
N/A						

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 802.11a / 5500 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

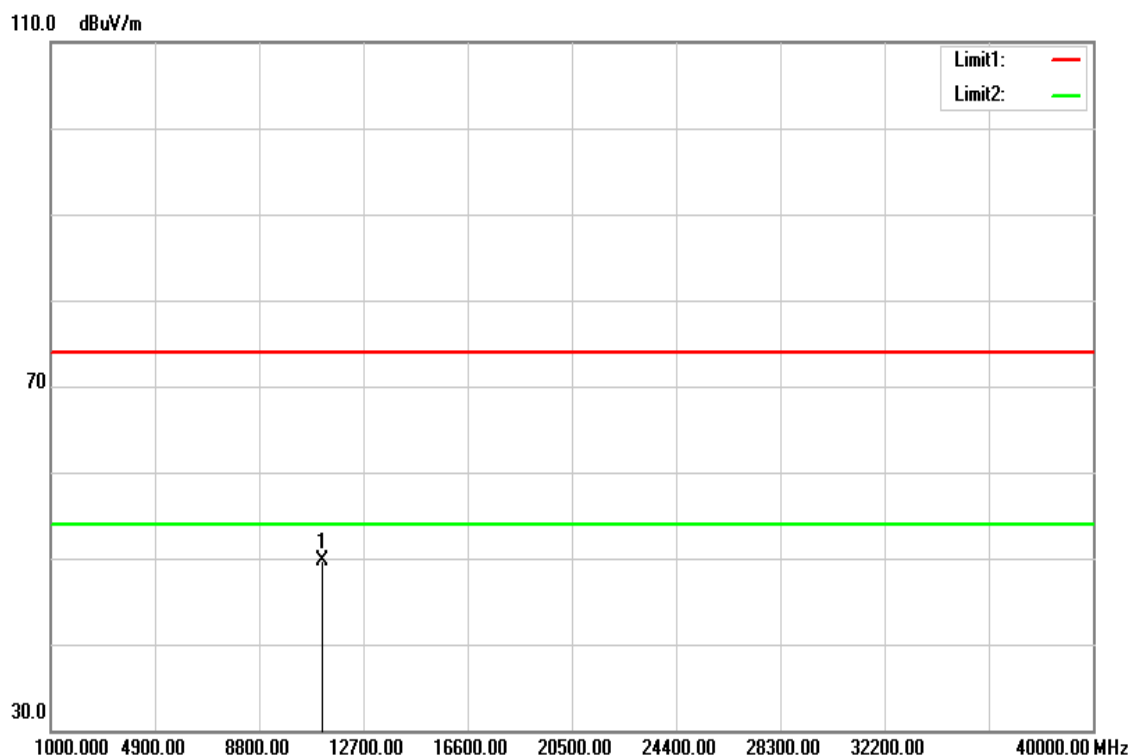


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11000.000	32.22	16.06	48.28	74.00	-25.72	peak
N/A						

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 802.11a / 5580 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

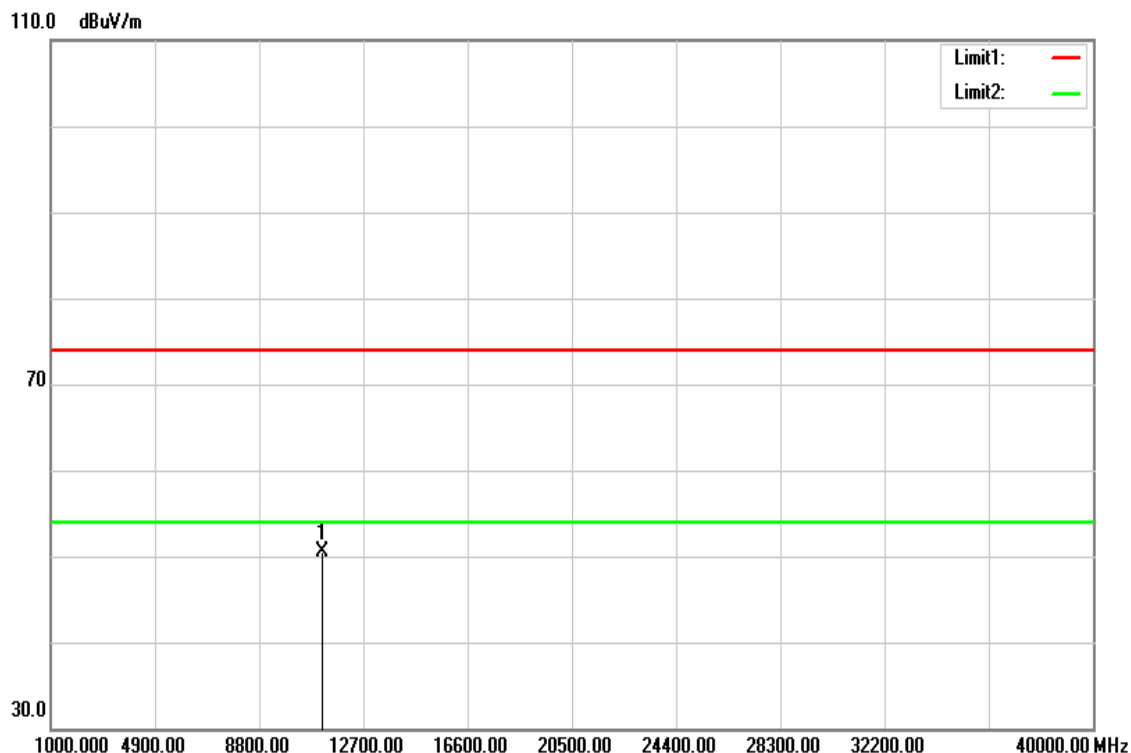


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11160.000	33.55	16.07	49.62	74.00	-24.38	peak
N/A						

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 802.11a / 5580 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

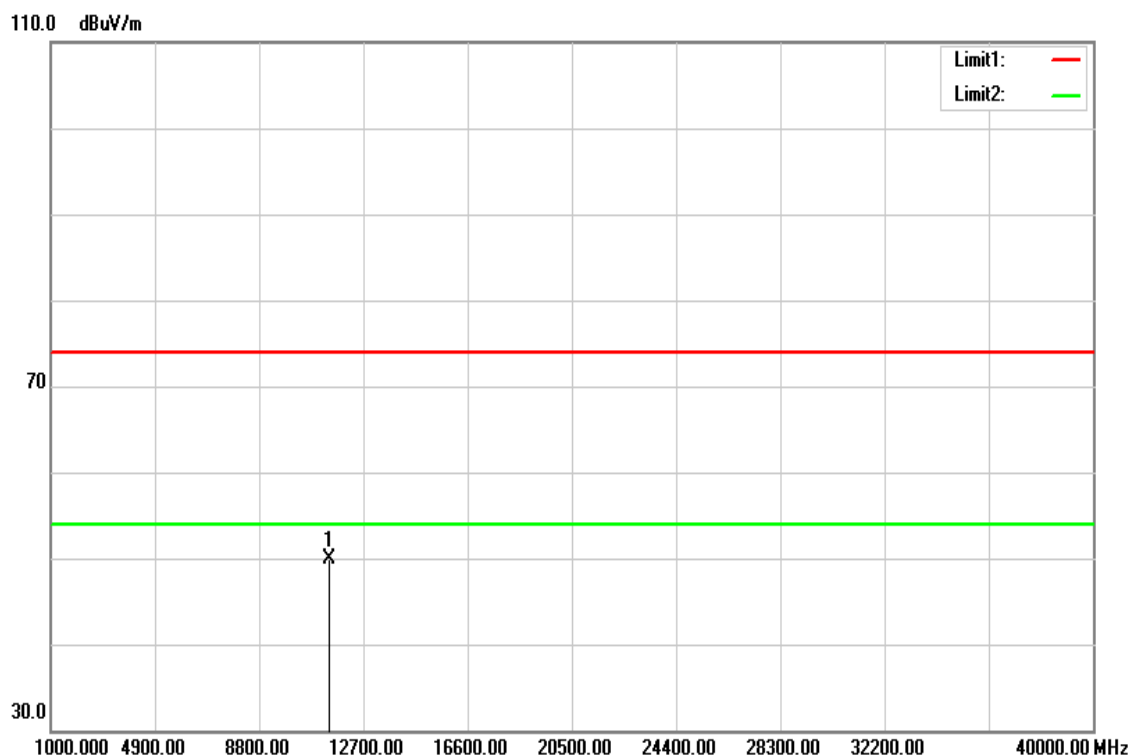


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11160.000	34.37	16.07	50.44	74.00	-23.56	peak
N/A						

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 802.11a / 5700 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

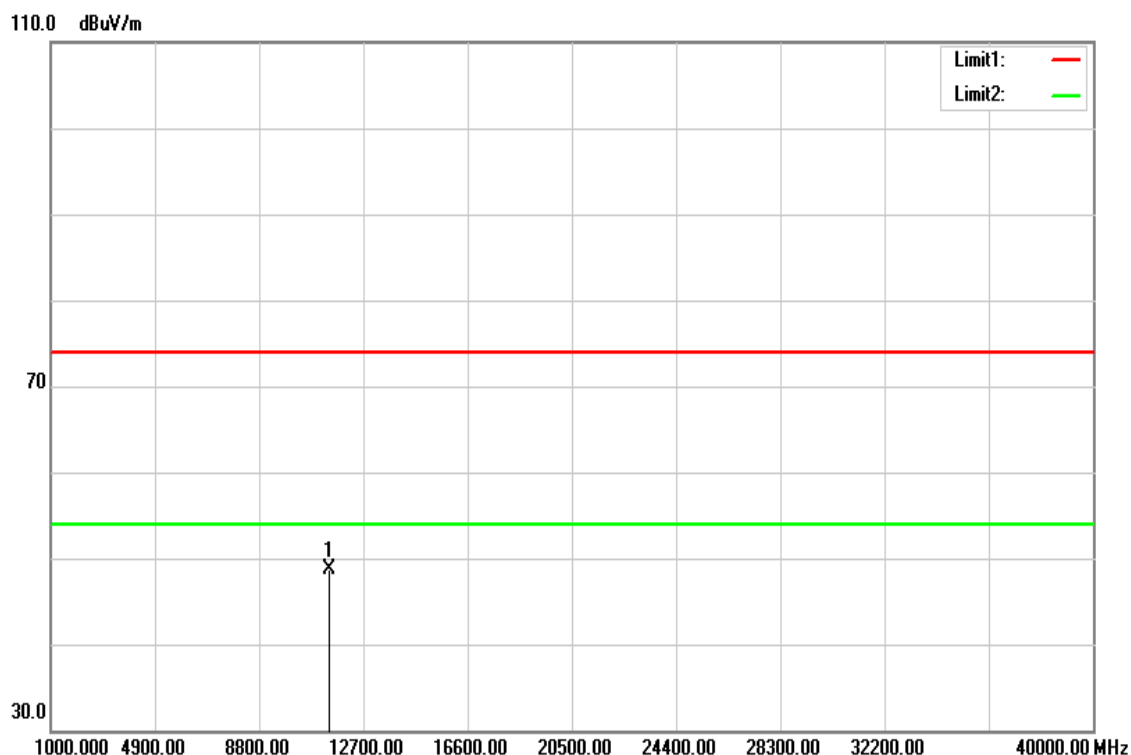


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11400.000	33.73	16.08	49.81	74.00	-24.19	peak
N/A						

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 802.11a / 5700 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

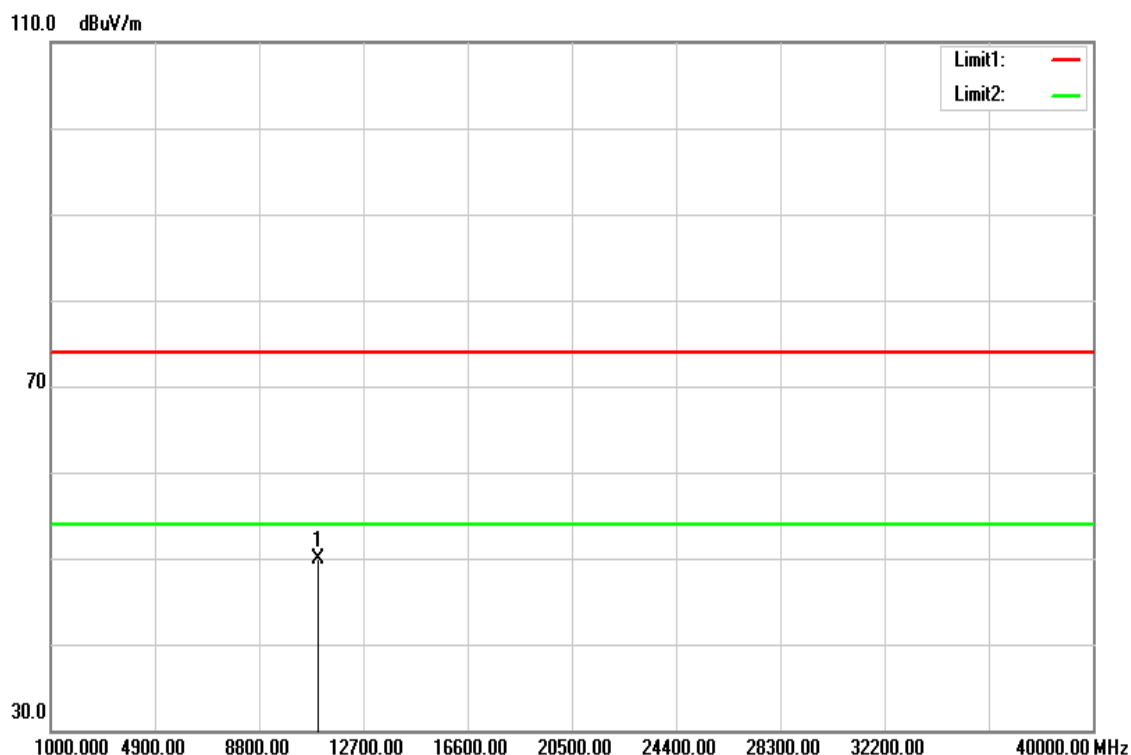


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11400.000	32.62	16.08	48.70	74.00	-25.30	peak
N/A						

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 20 MHz / 5500 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

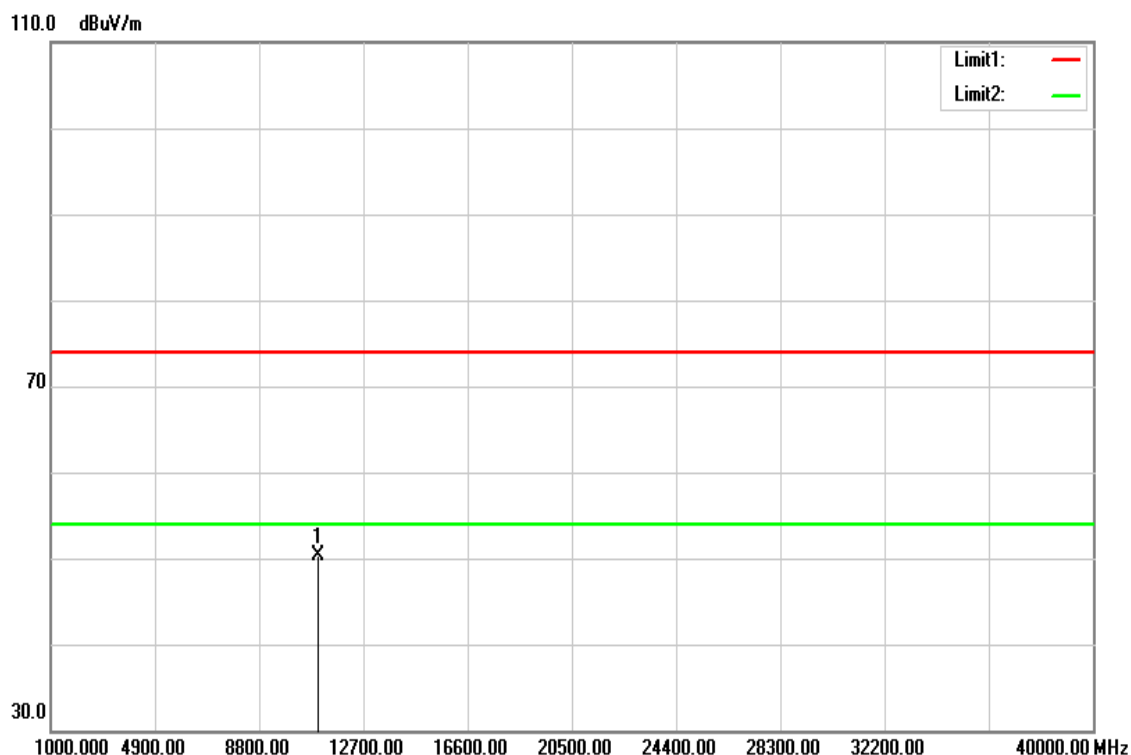


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11000.000	33.75	16.06	49.81	74.00	-24.19	peak
N/A						

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 20 MHz / 5500 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

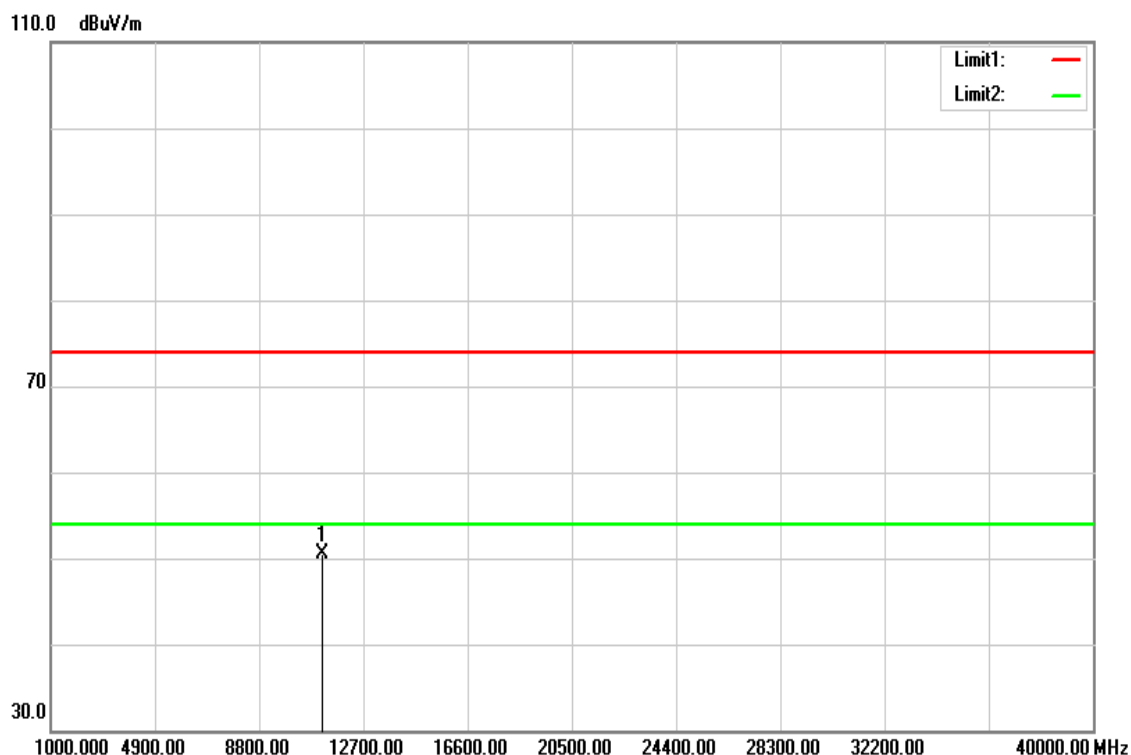


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11000.000	34.29	16.06	50.35	74.00	-23.65	peak
N/A						

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 20 MHz / 5580 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

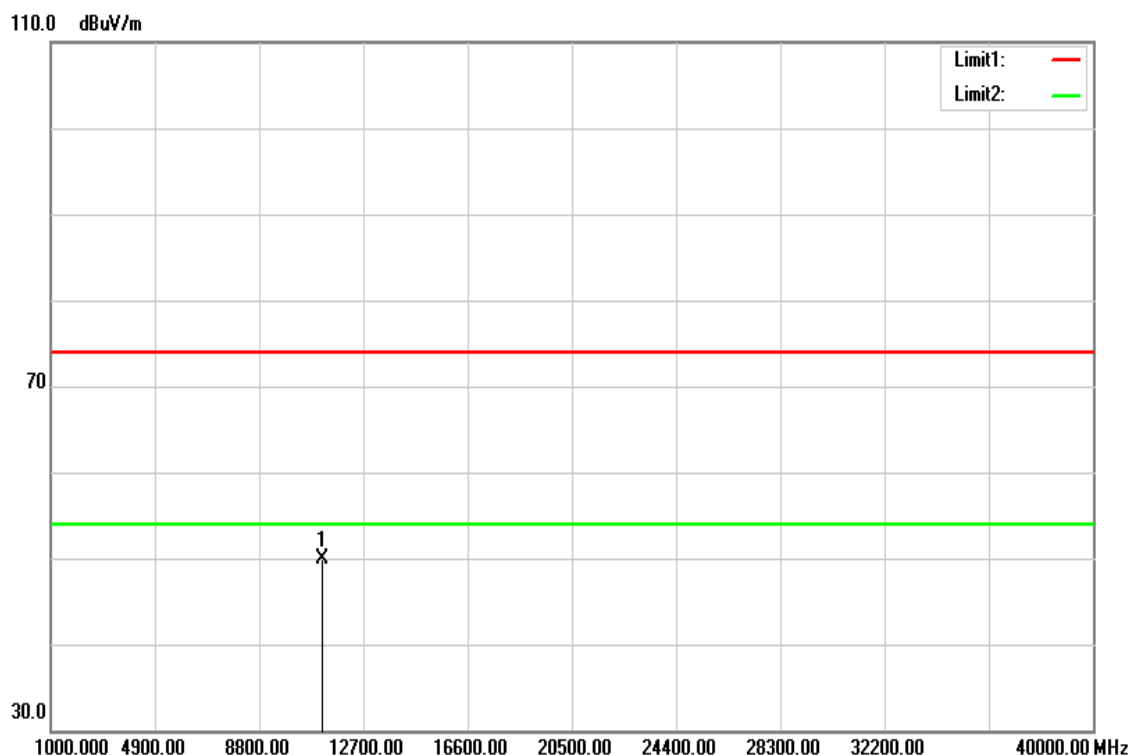


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11160.000	34.49	16.07	50.56	74.00	-23.44	peak
N/A						

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 20 MHz / 5580 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

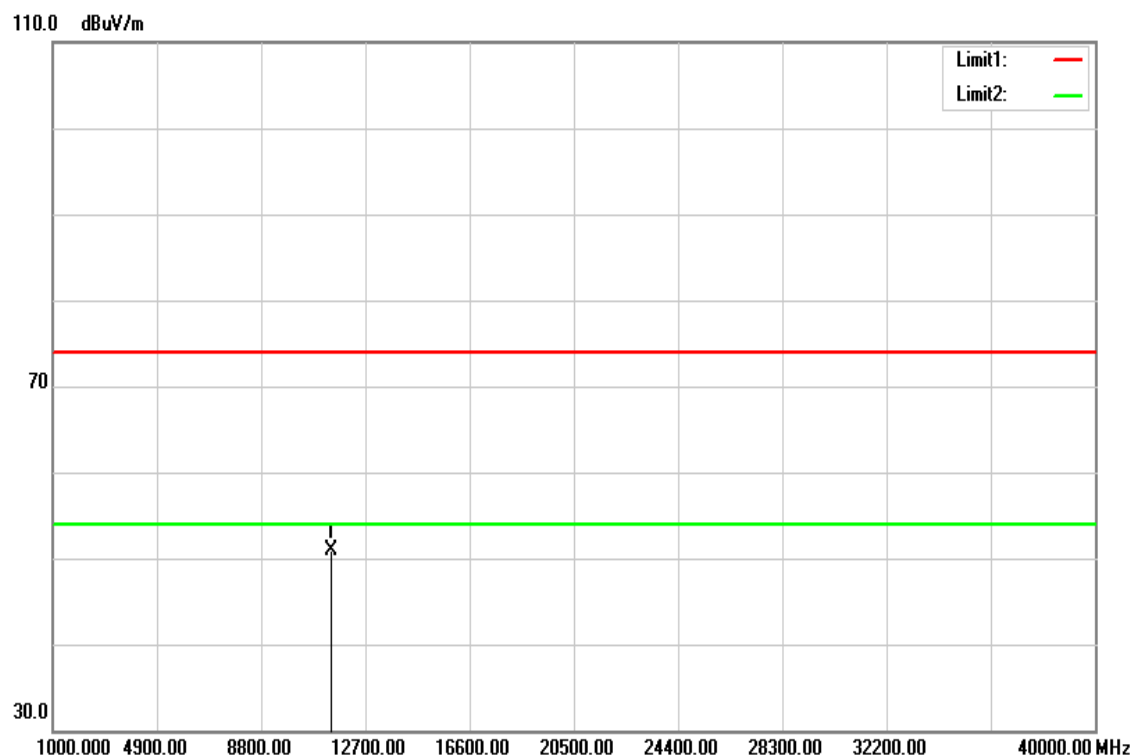


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11160.000	33.85	16.07	49.92	74.00	-24.08	peak
N/A						

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 20 MHz / 5700 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

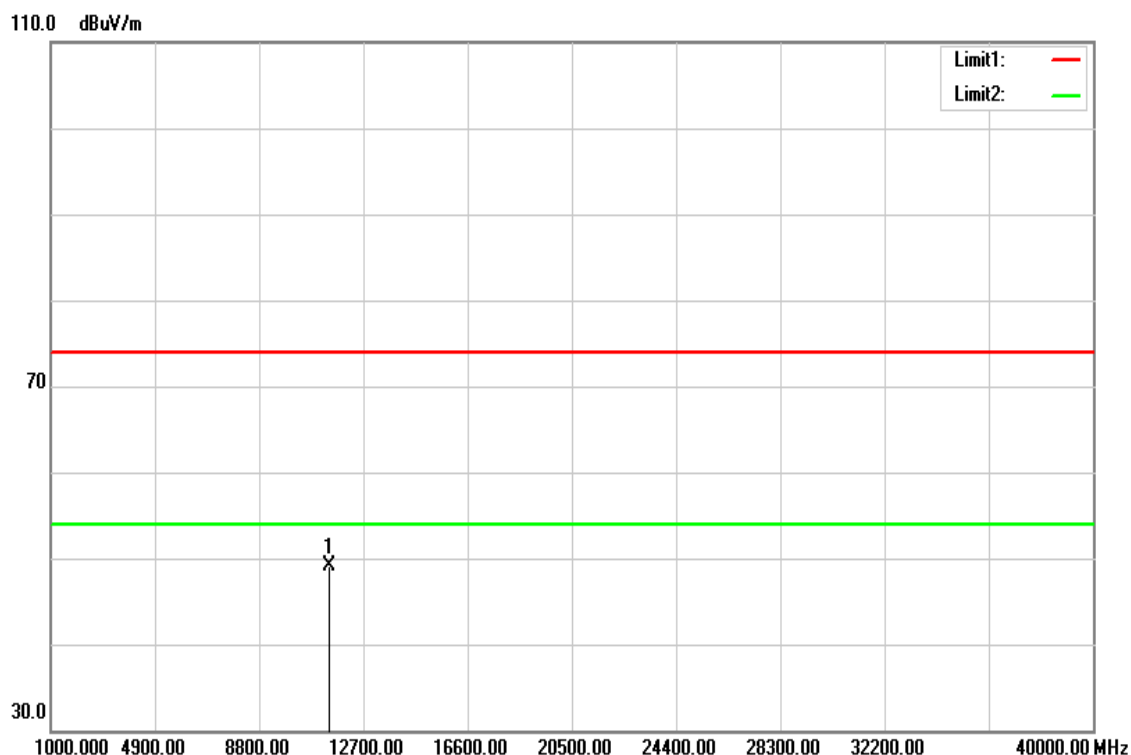


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11400.000	34.79	16.08	50.87	74.00	-23.13	peak
N/A						

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 20 MHz / 5700 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

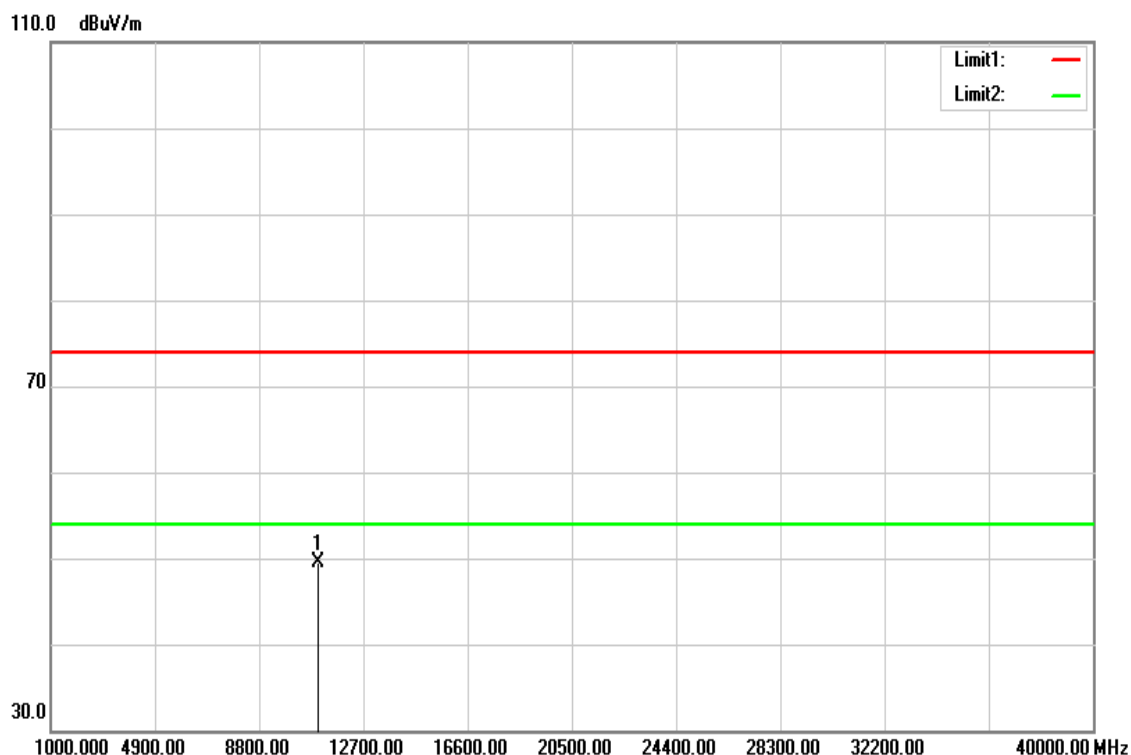


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11400.000	33.11	16.08	49.19	74.00	-24.81	peak
N/A						

Remark:

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 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 40 MHz / 5510 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

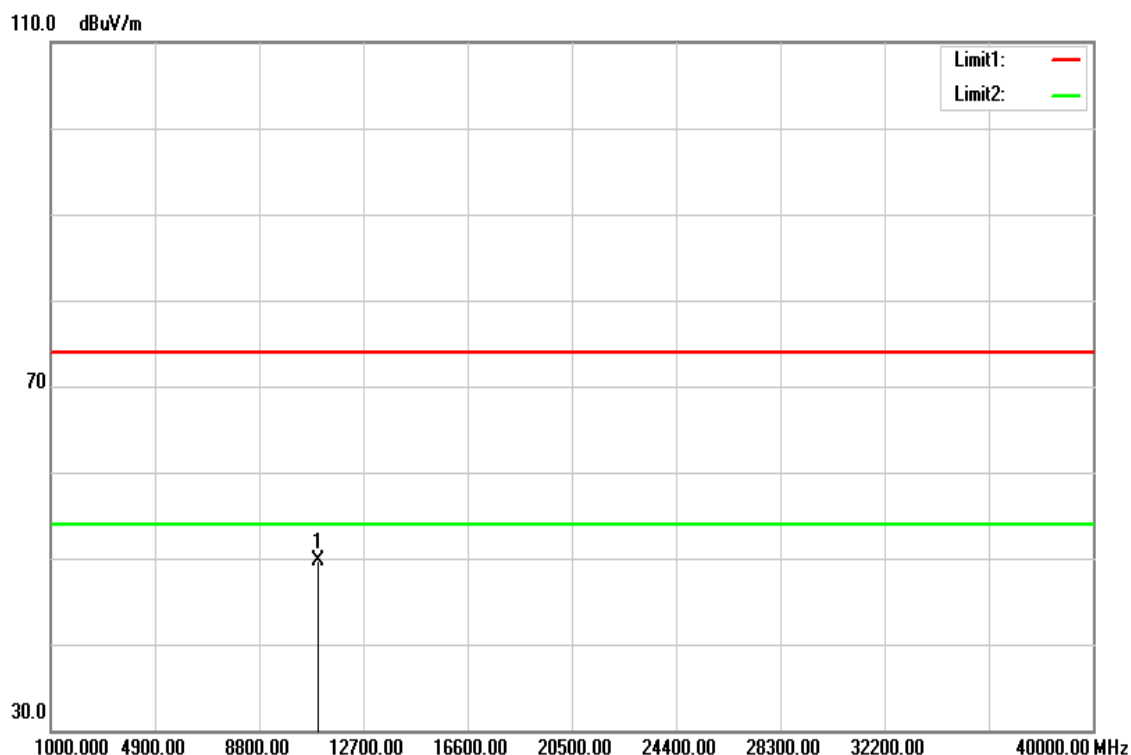


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11020.000	33.50	16.05	49.55	74.00	-24.45	peak
N/A						

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 40 MHz / 5510 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

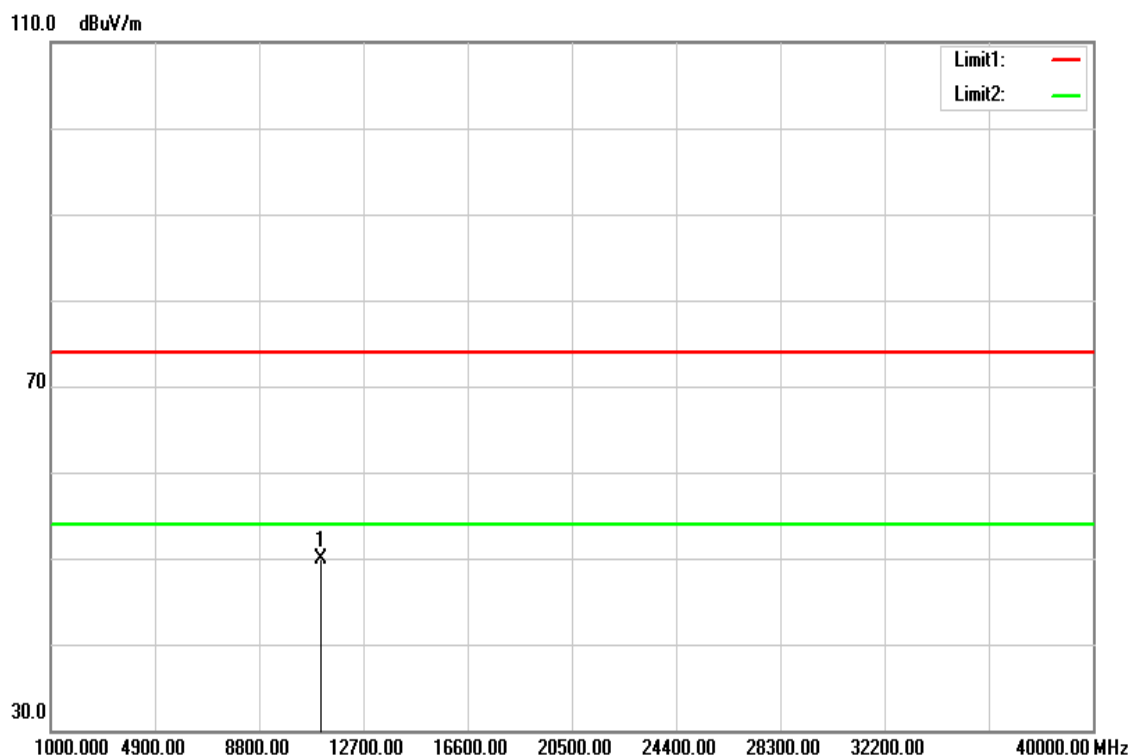


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11020.000	33.57	16.05	49.62	74.00	-24.38	peak
N/A						

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 40 MHz / 5550 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

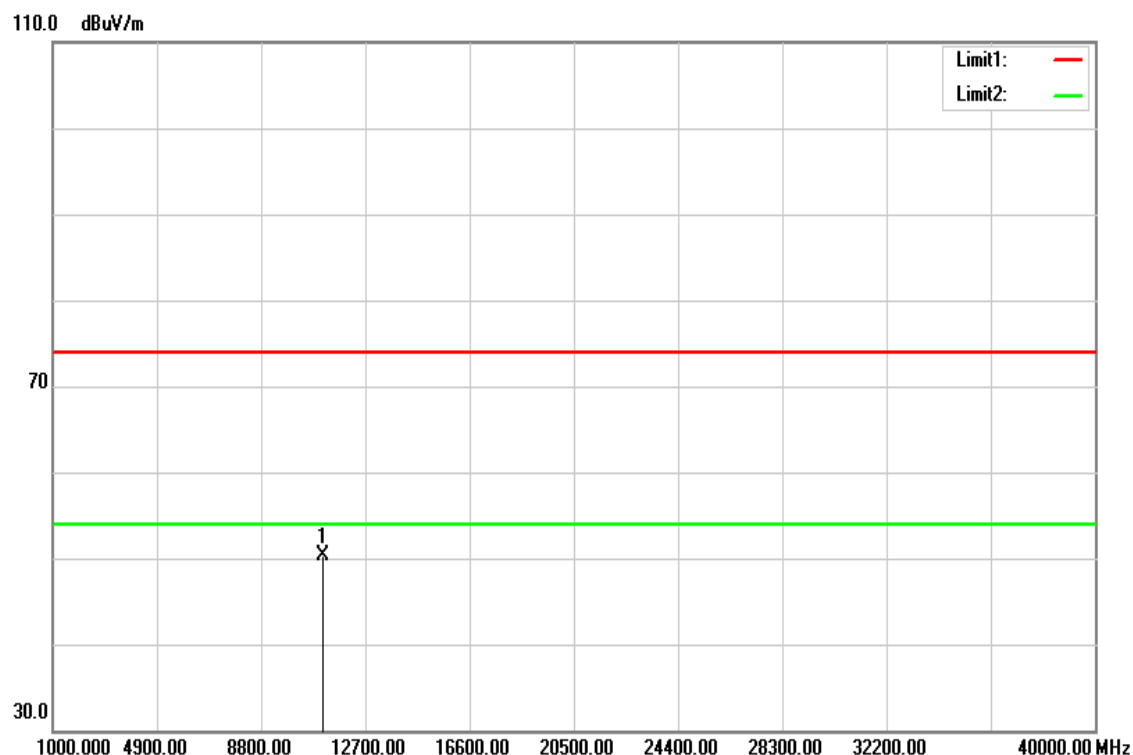


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11100.000	33.84	16.07	49.91	74.00	-24.09	peak
N/A						

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 40 MHz / 5550 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

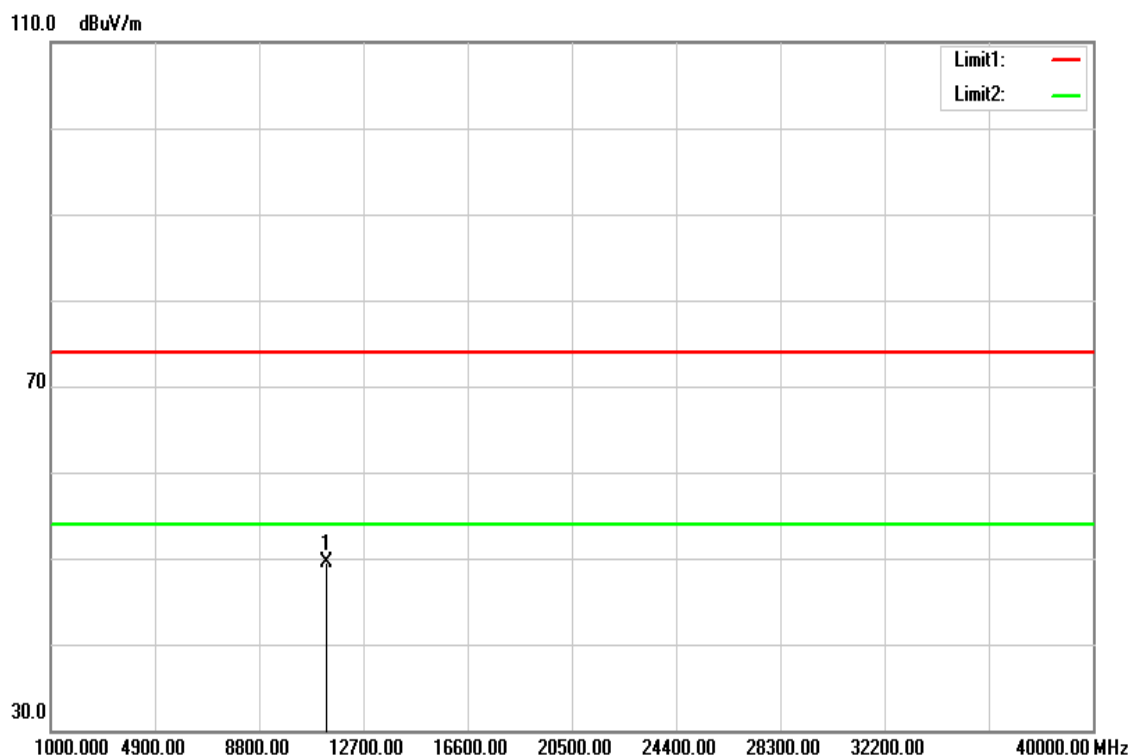


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11100.000	34.31	16.07	50.38	74.00	-23.62	peak
N/A						

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 40 MHz / 5670 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

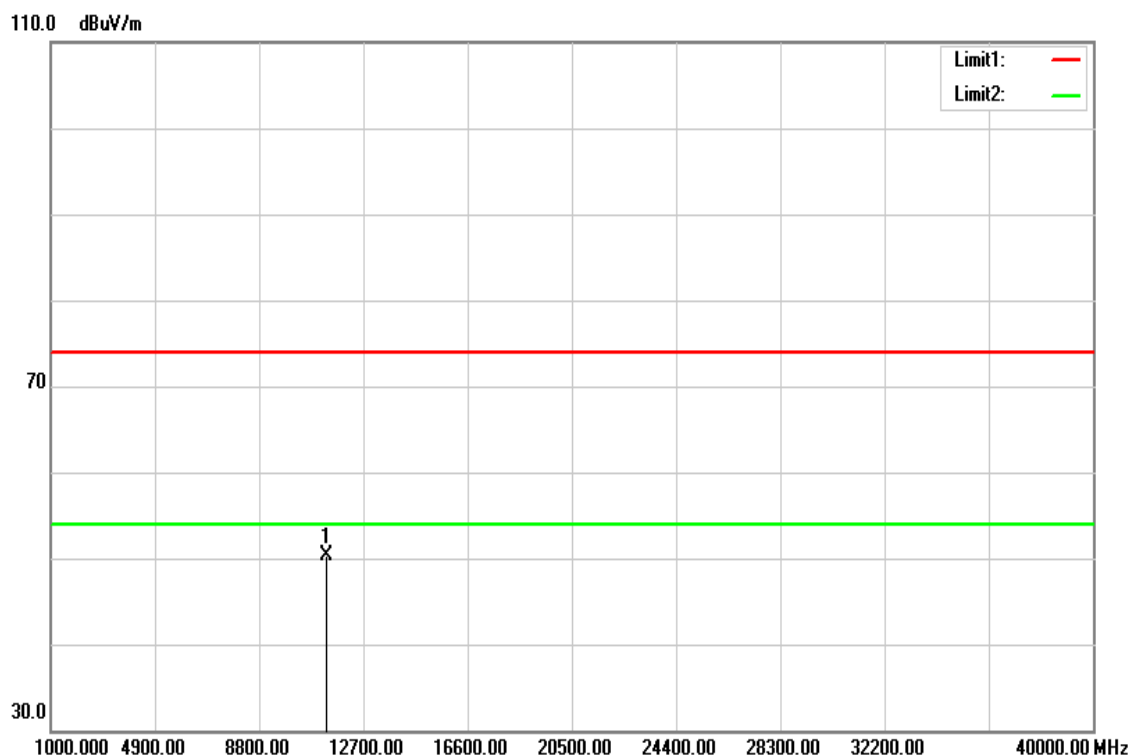


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11340.000	33.51	16.08	49.59	74.00	-24.41	peak
N/A						

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 40 MHz / 5670 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

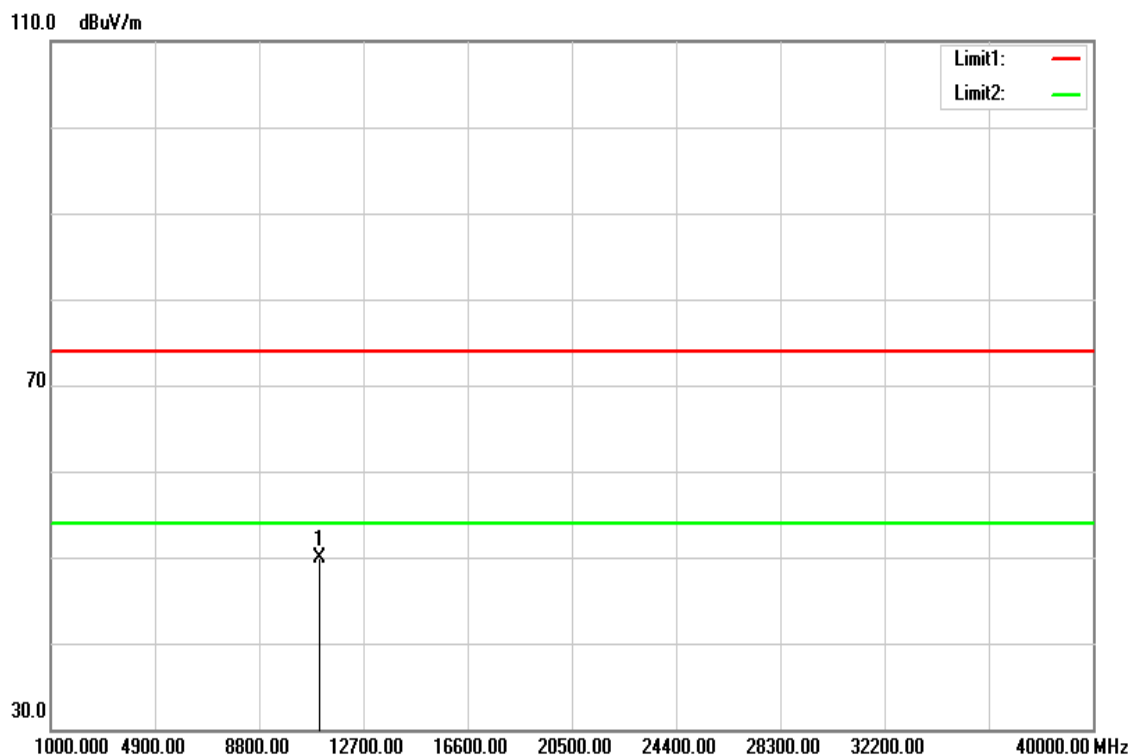


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11340.000	34.32	16.08	50.40	74.00	-23.60	peak
N/A						

Remark:

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

Test Mode	IEEE 802.11ac VHT80 MHz / 5530 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

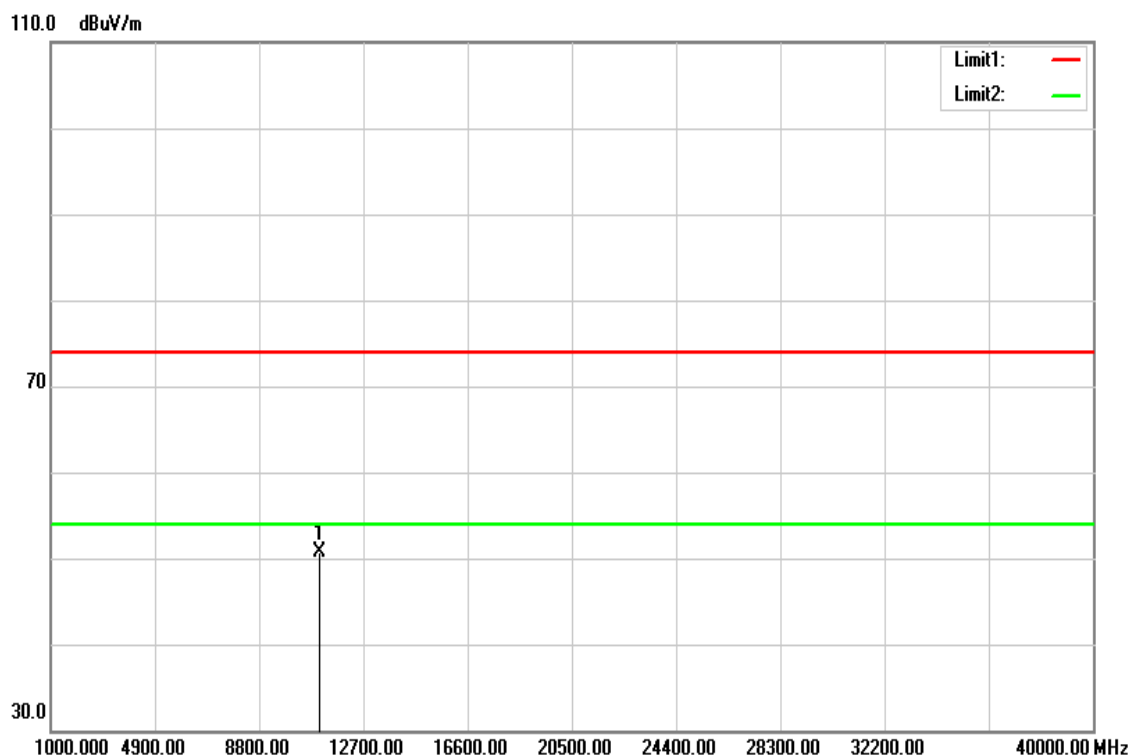


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11060.000	33.78	16.06	49.84	74.00	-24.16	peak
N/A						

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 802.11ac VHT80 MHz / 5530 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

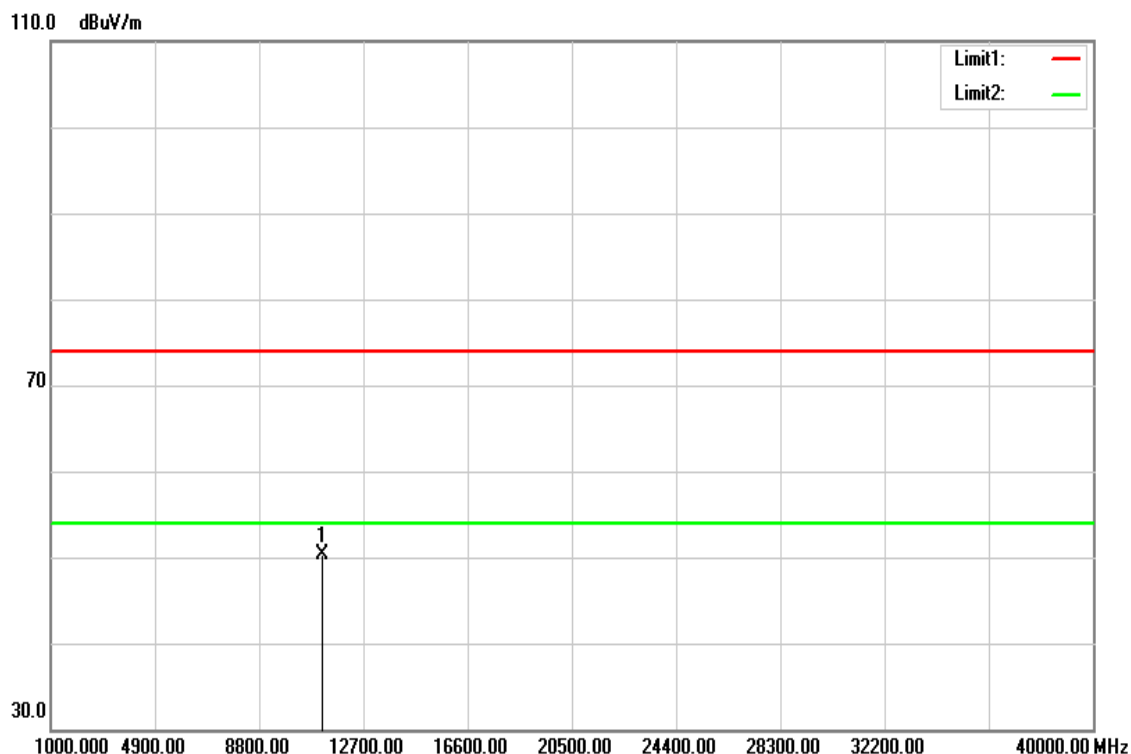


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11060.000	34.55	16.06	50.61	74.00	-23.39	peak
N/A						

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 802.11ac VHT160 MHz / 5570 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

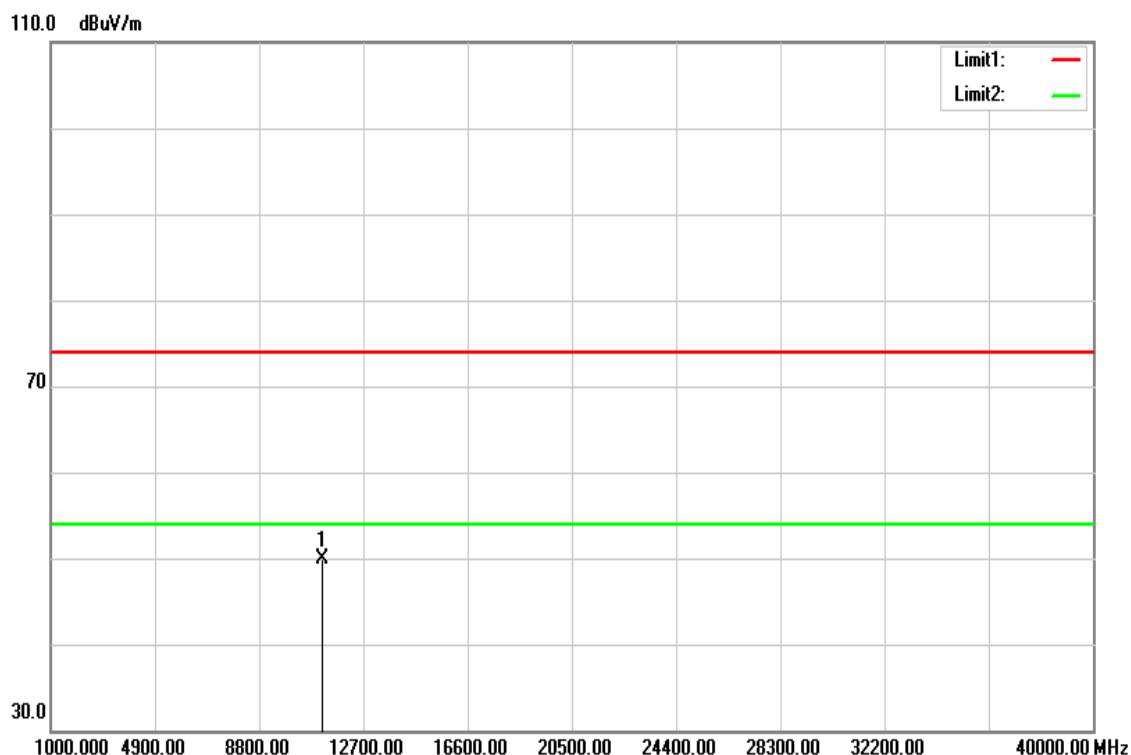


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11140.000	34.14	16.07	50.21	74.00	-23.79	peak
N/A						

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 802.11ac VHT160 MHz / 5570 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz



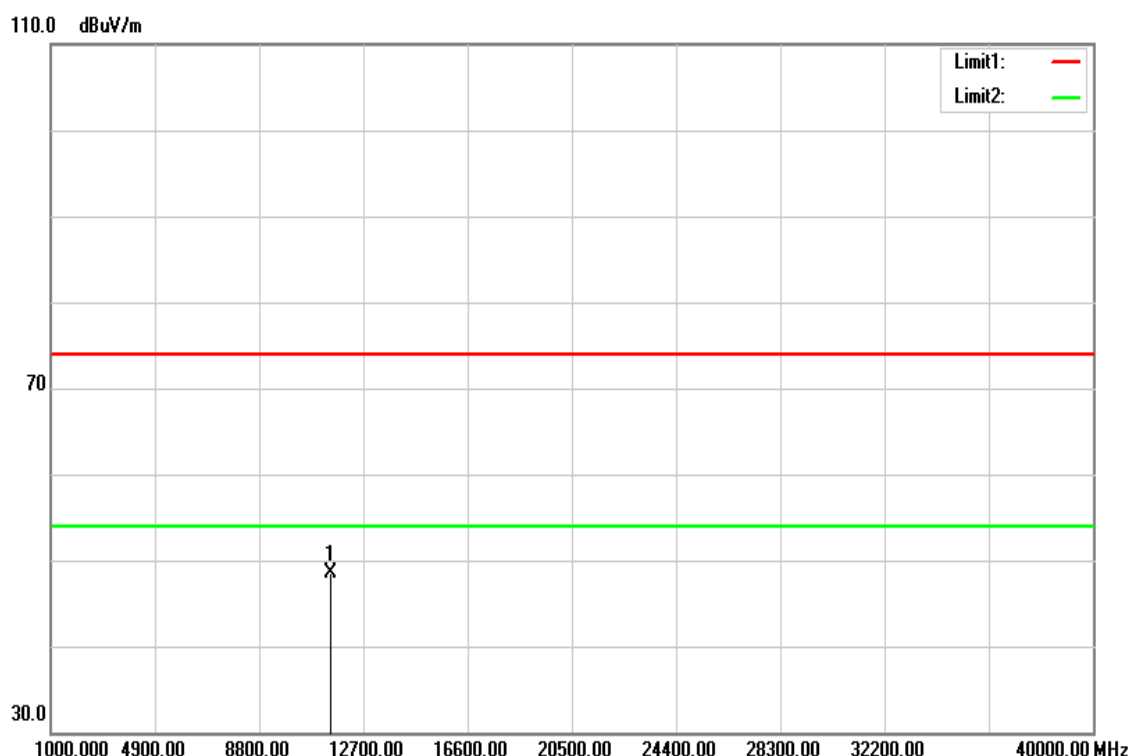
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11140.000	33.86	16.07	49.93	74.00	-24.07	peak
N/A						

Remark:

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

Above 1G Test Data for UNII-3

Test Mode	IEEE 802.11a / 5745 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

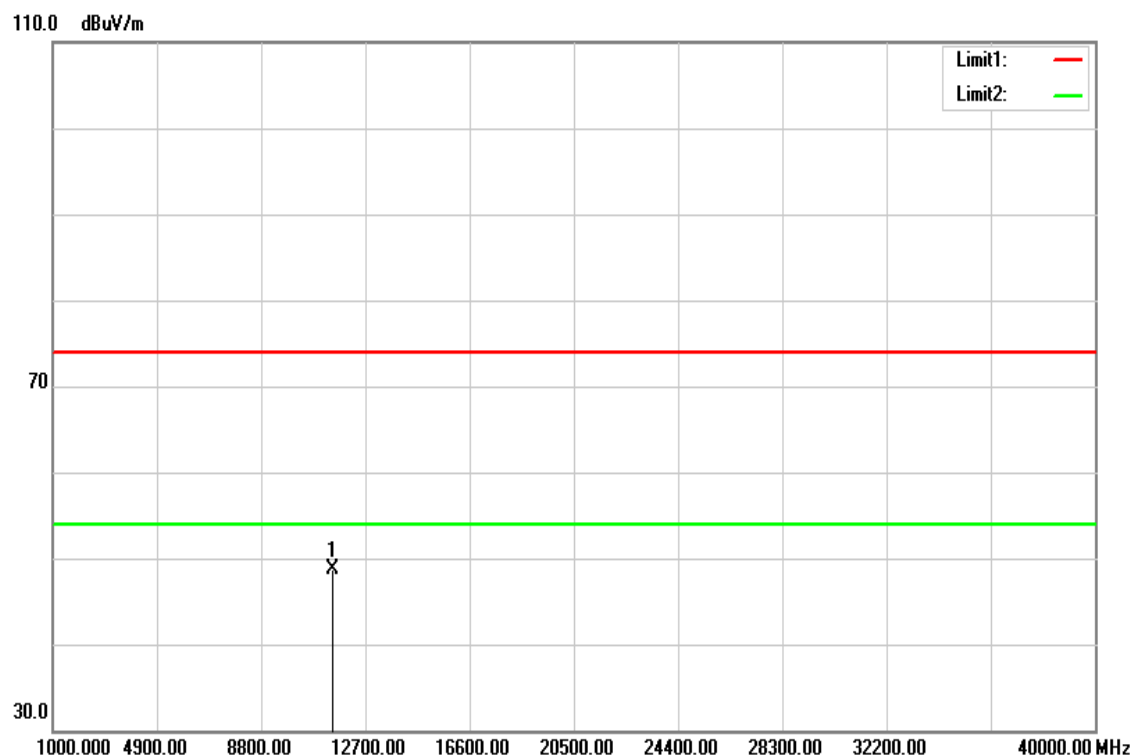


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11490.000	32.43	16.09	48.52	74.00	-25.48	peak
N/A						

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 802.11a / 5745 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

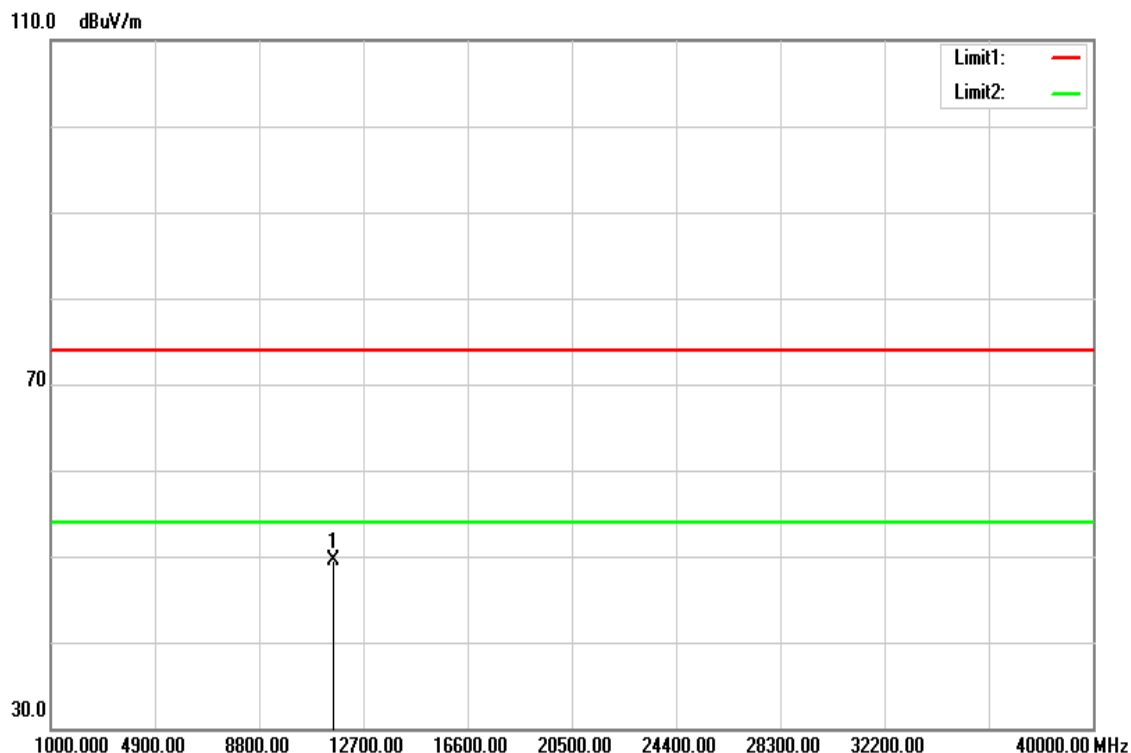


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11490.000	32.64	16.09	48.73	74.00	-25.27	peak
N/A						

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 802.11a / 5745 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

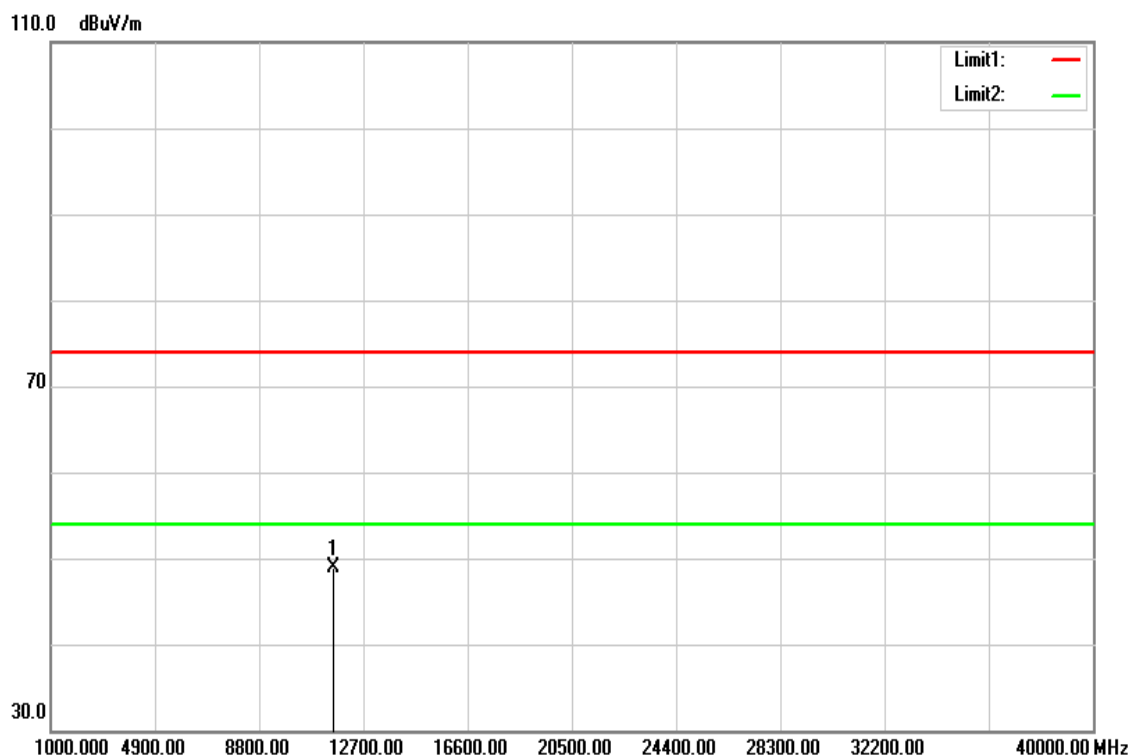


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11570.000	33.50	16.01	49.51	74.00	-24.49	peak
N/A						

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 802.11a / 5745 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

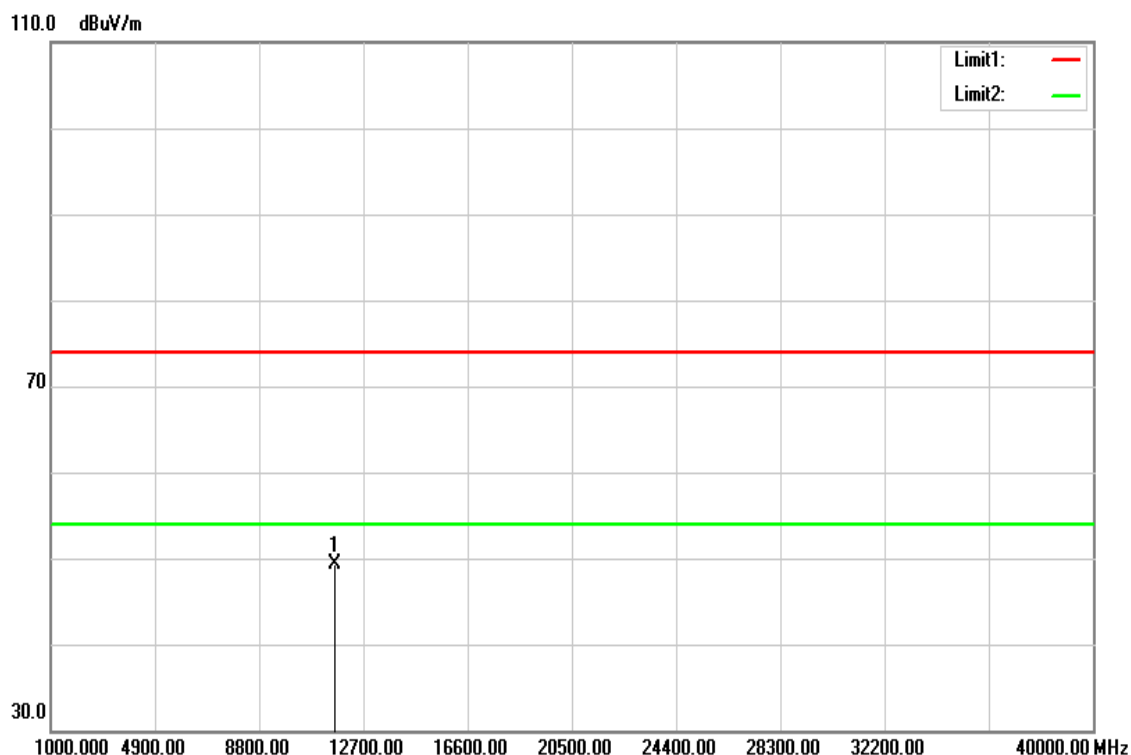


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11570.000	32.98	16.01	48.99	74.00	-25.01	peak
N/A						

Remark:

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

Test Mode	IEEE 802.11a / 5825 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

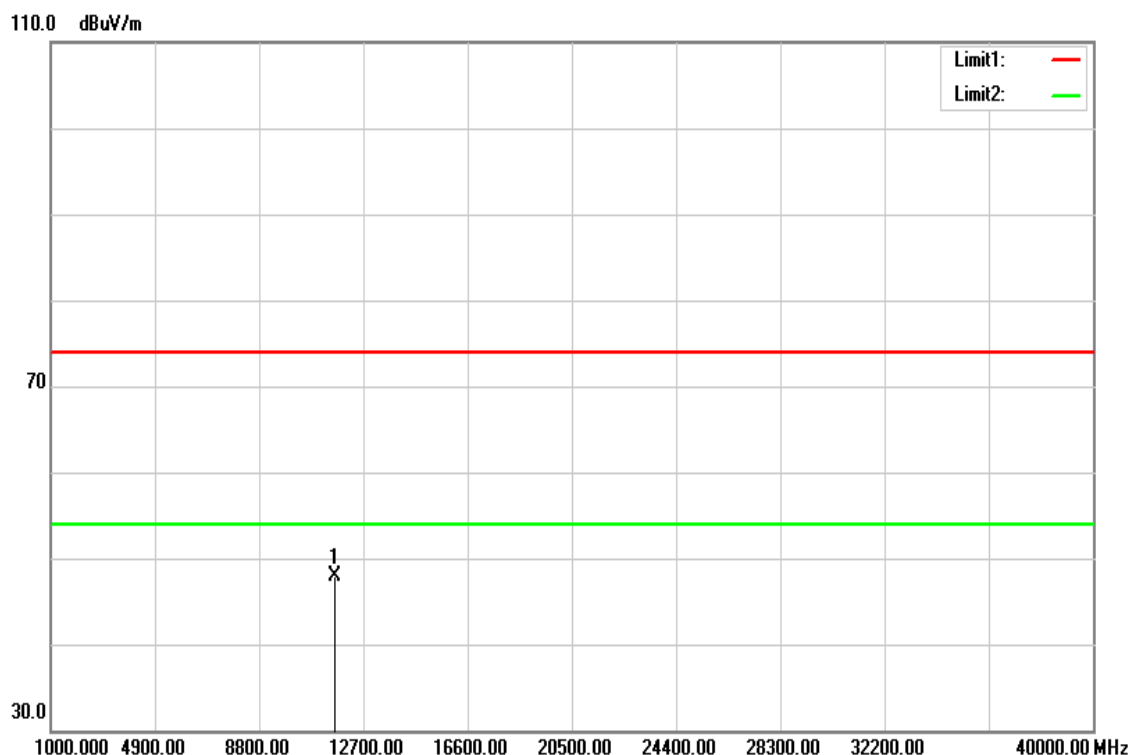


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11650.000	33.38	15.93	49.31	74.00	-24.69	peak
N/A						

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 802.11a / 5825 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

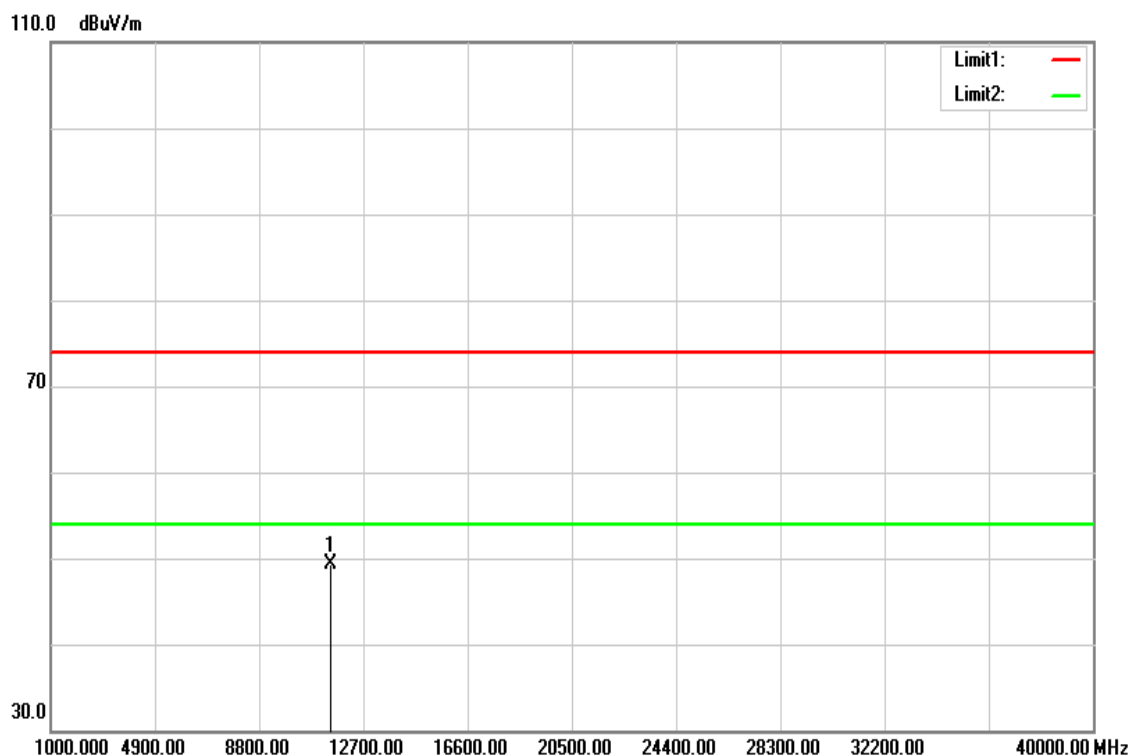


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11650.000	31.98	15.93	47.91	74.00	-26.09	peak
N/A						

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 20 MHz / 5745 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

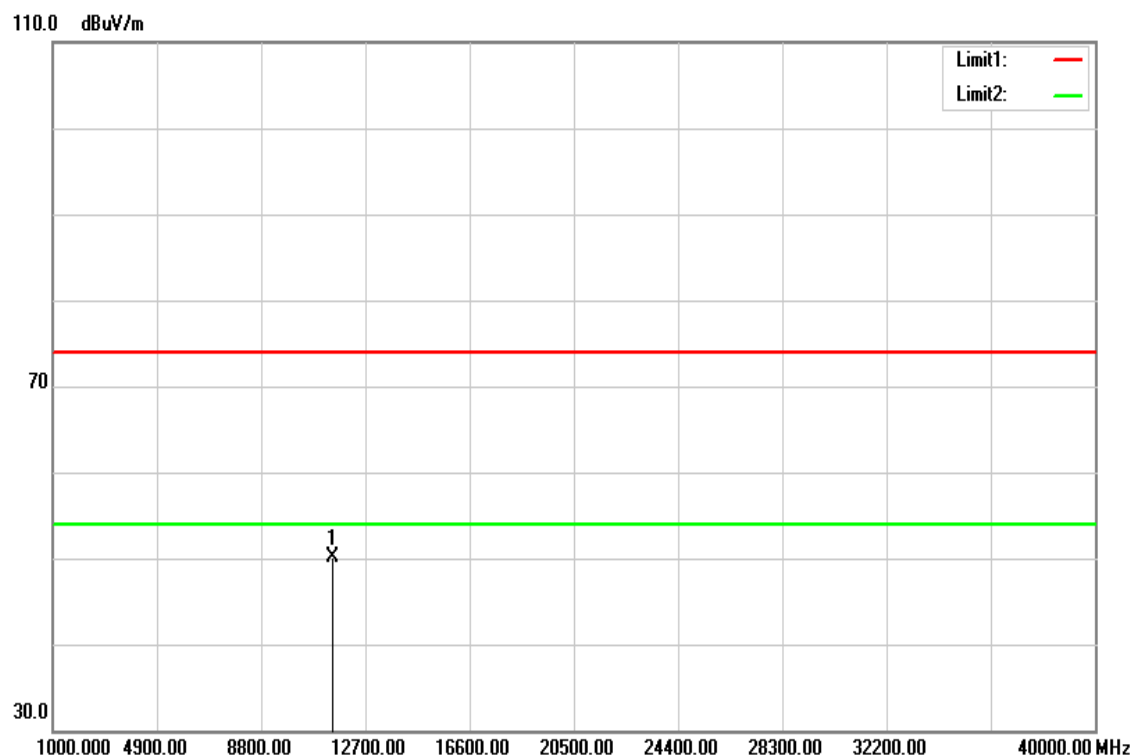


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11490.000	33.11	16.09	49.20	74.00	-24.80	peak
N/A						

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 20 MHz / 5745 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

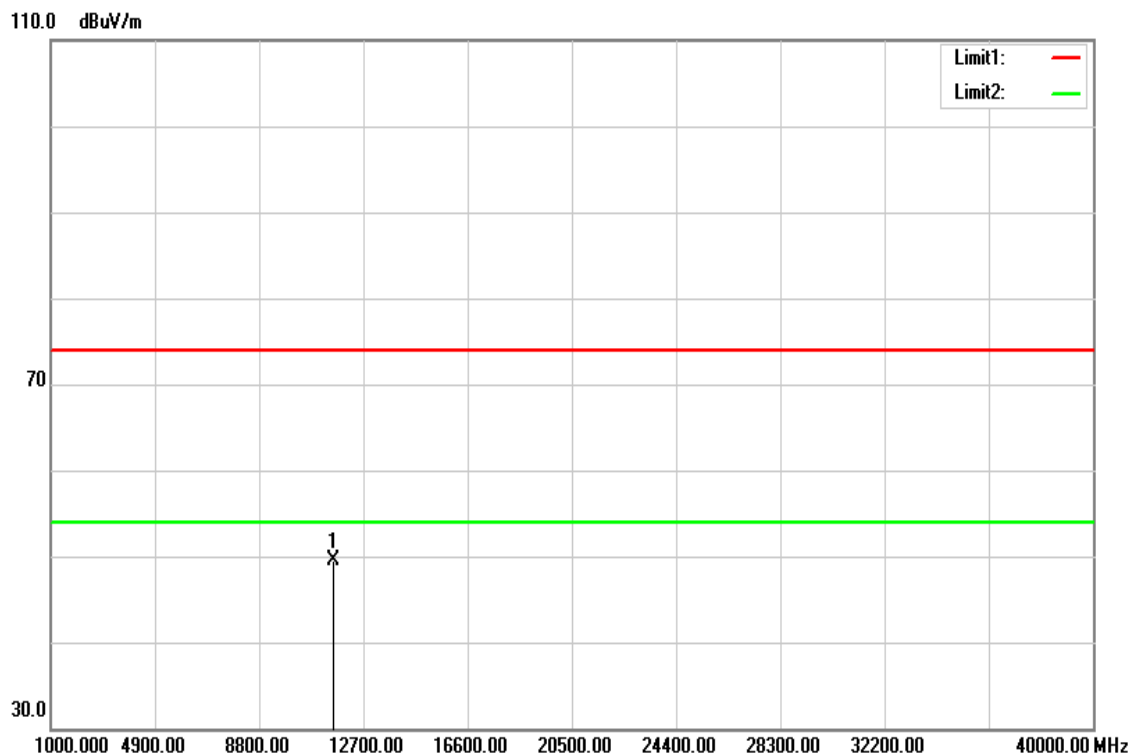


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11490.000	34.07	16.09	50.16	74.00	-23.84	peak
N/A						

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 20 MHz/ 5785 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

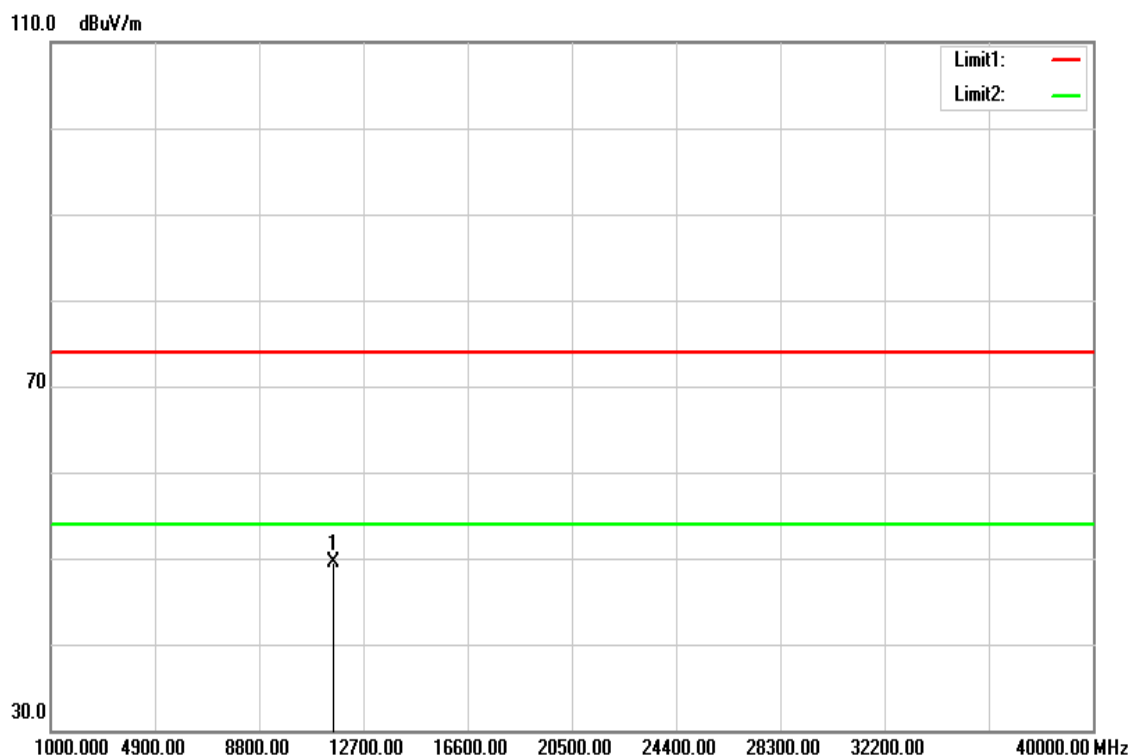


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11570.000	33.54	16.01	49.55	74.00	-24.45	peak
N/A						

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 20 MHz/ 5785 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

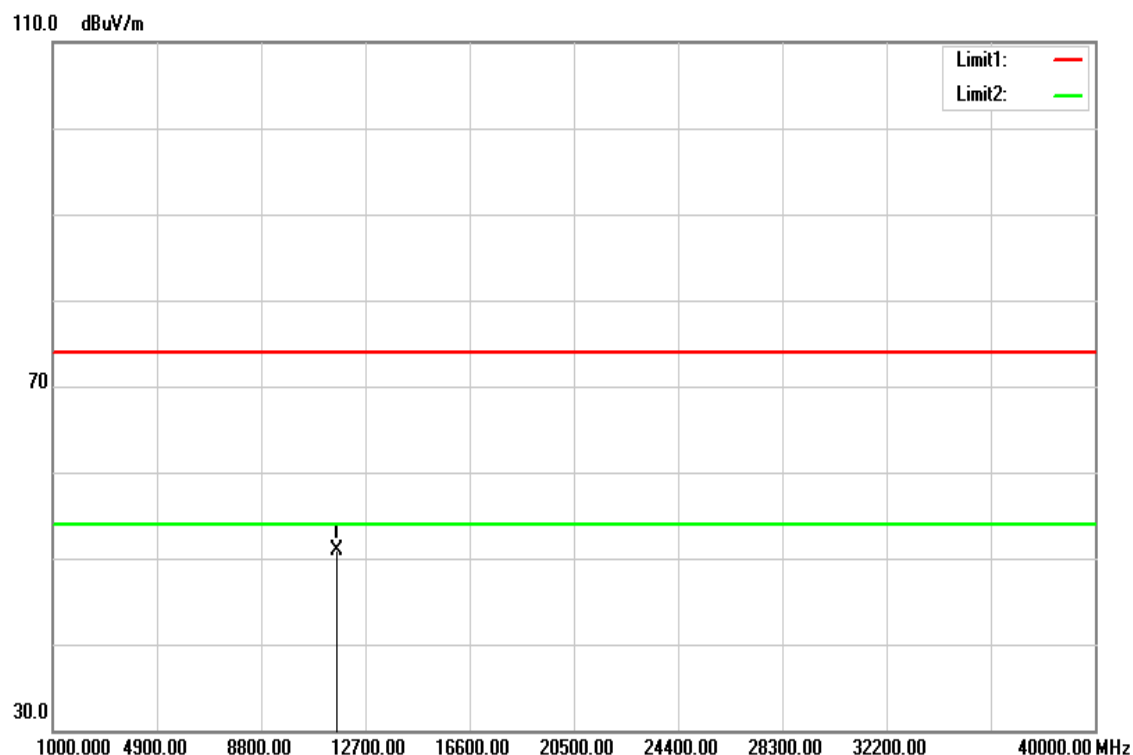


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11570.000	33.42	16.01	49.43	74.00	-24.57	peak
N/A						

Remark:

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 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 20 MHz/ 5825 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

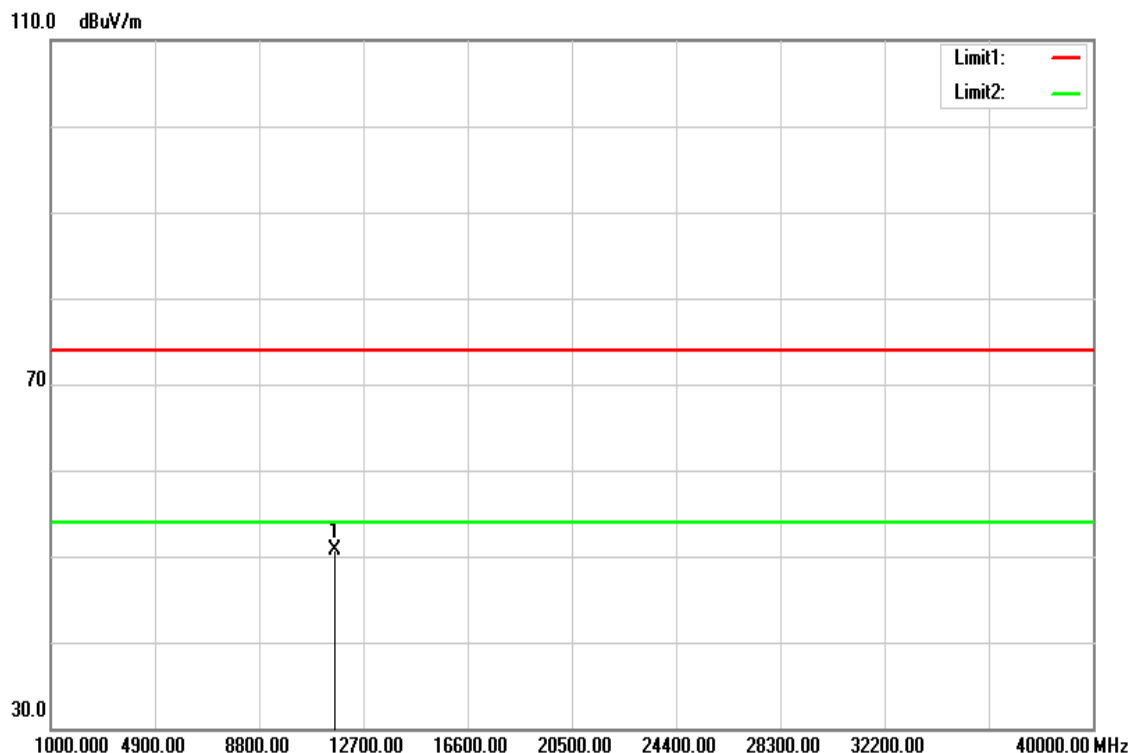


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11650.000	35.00	15.93	50.93	74.00	-23.07	peak
N/A						

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 20 MHz/ 5825 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

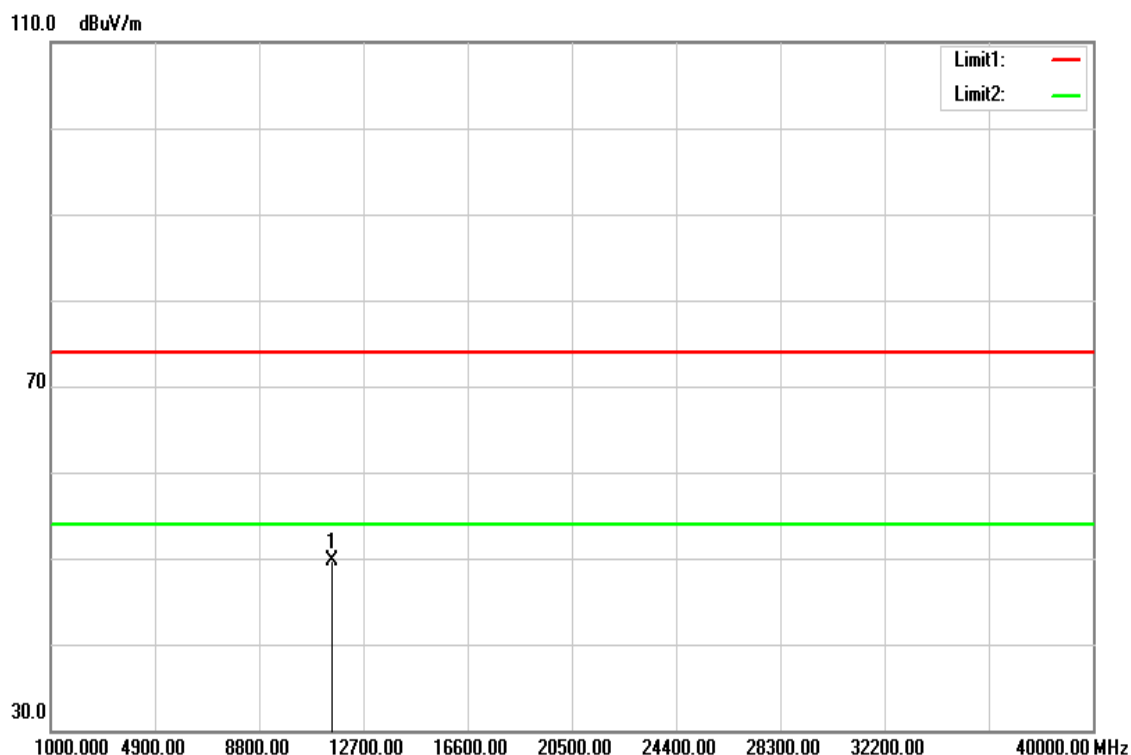


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11650.000	34.71	15.93	50.64	74.00	-23.36	peak
N/A						

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 40 MHz/ 5755 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

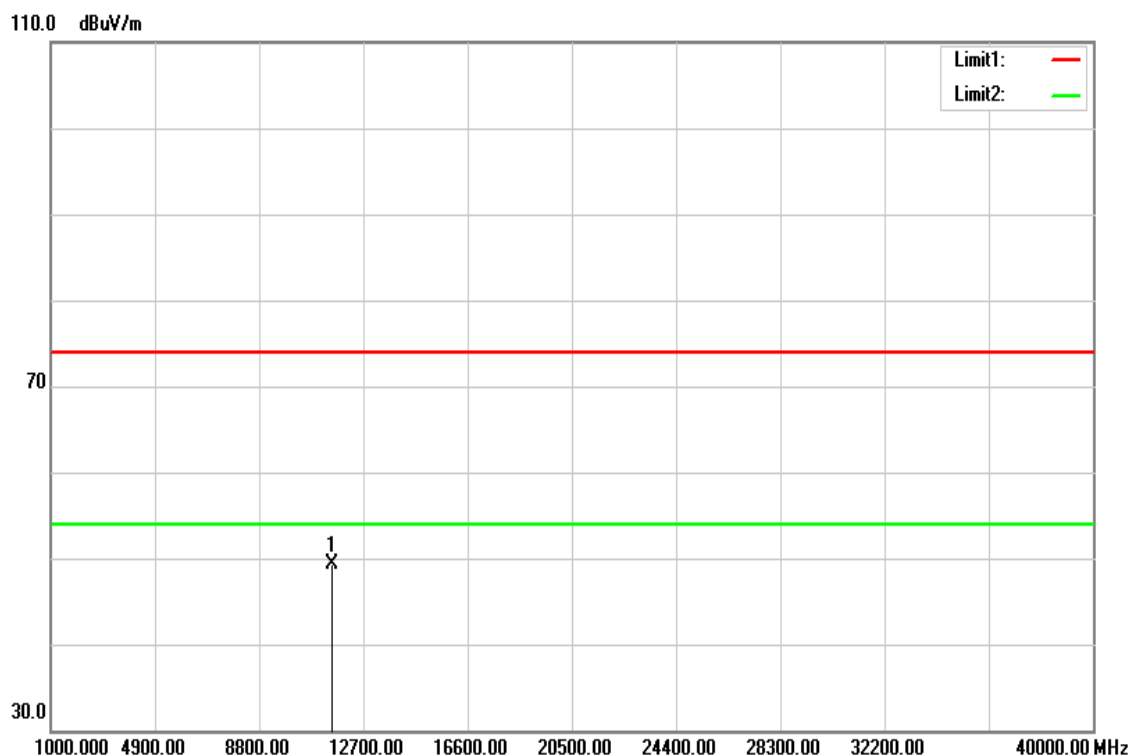


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11510.000	33.56	16.08	49.64	74.00	-24.36	peak
N/A						

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 40 MHz/ 5755 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

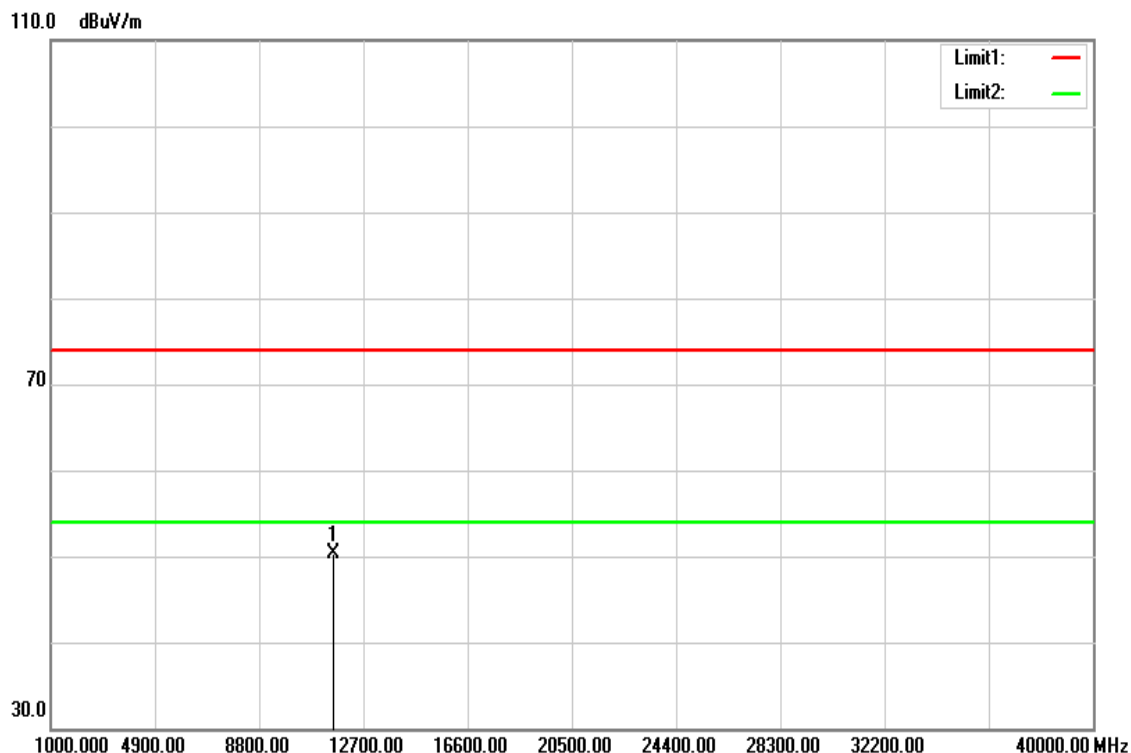


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11510.000	33.29	16.08	49.37	74.00	-24.63	peak
N/A						

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 40 MHz/ 5795 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

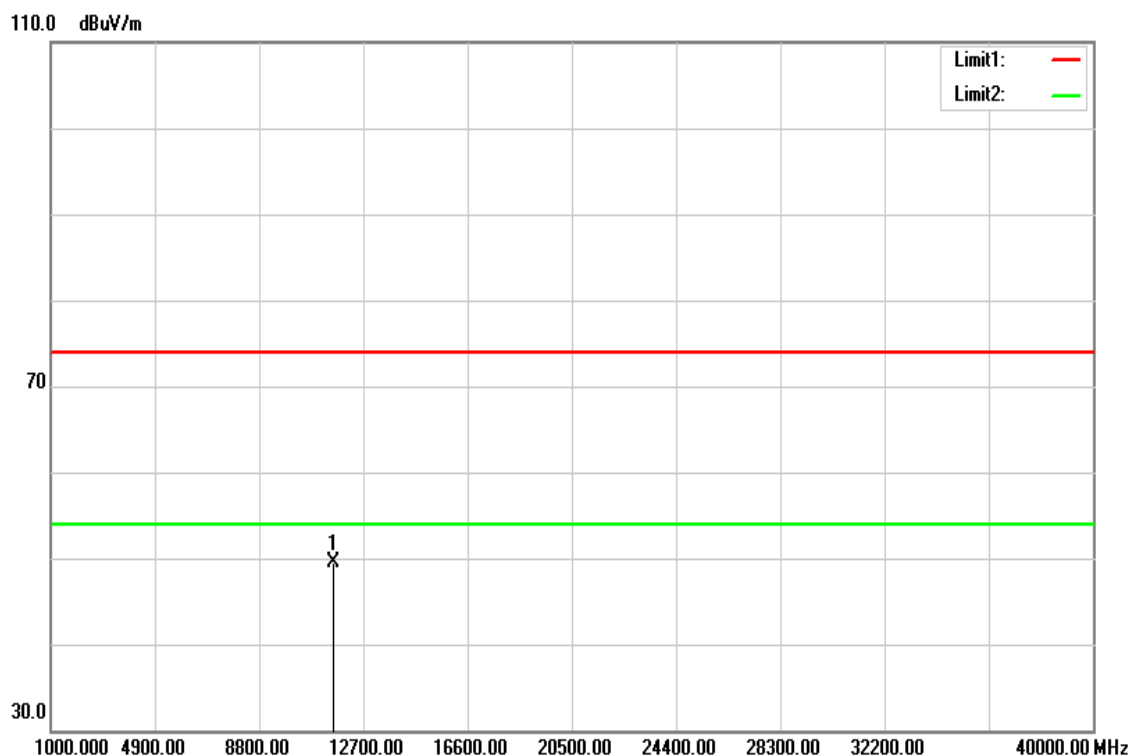


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11590.000	34.39	16.00	50.39	74.00	-23.61	peak
N/A						

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 40 MHz/ 5795 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

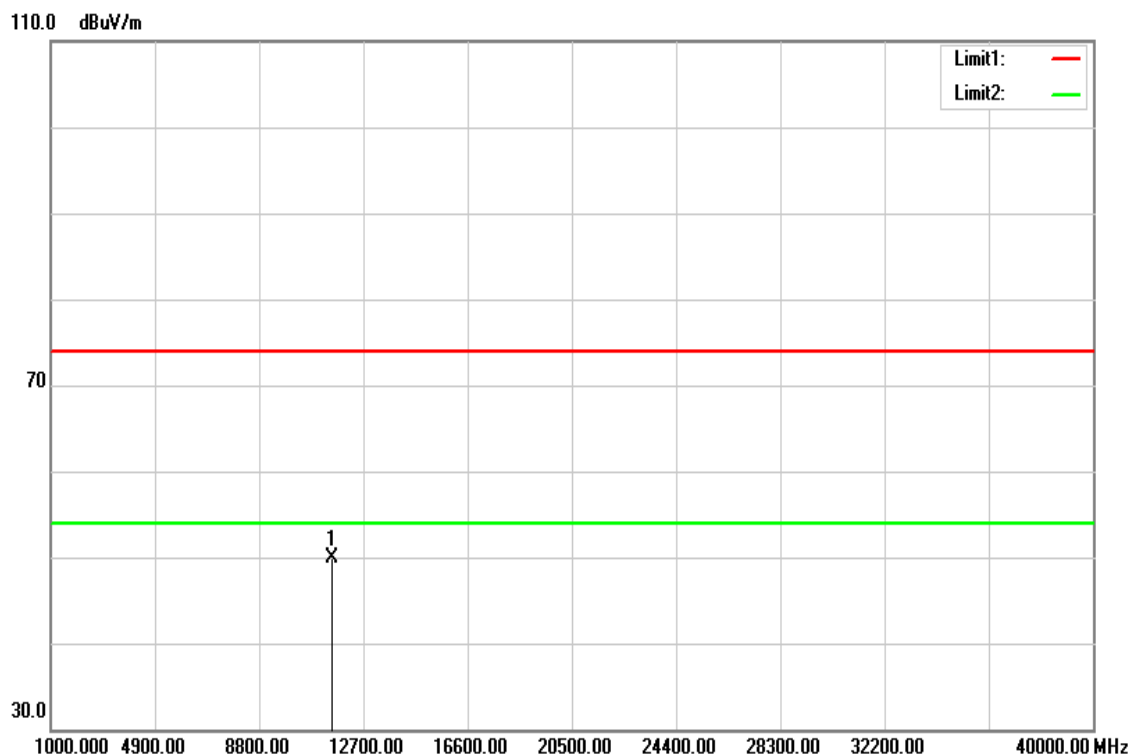


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11590.000	33.47	16.00	49.47	74.00	-24.53	peak
N/A						

Remark:

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

Test Mode	IEEE 802.11ac VHT80 MHz / 5775 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz

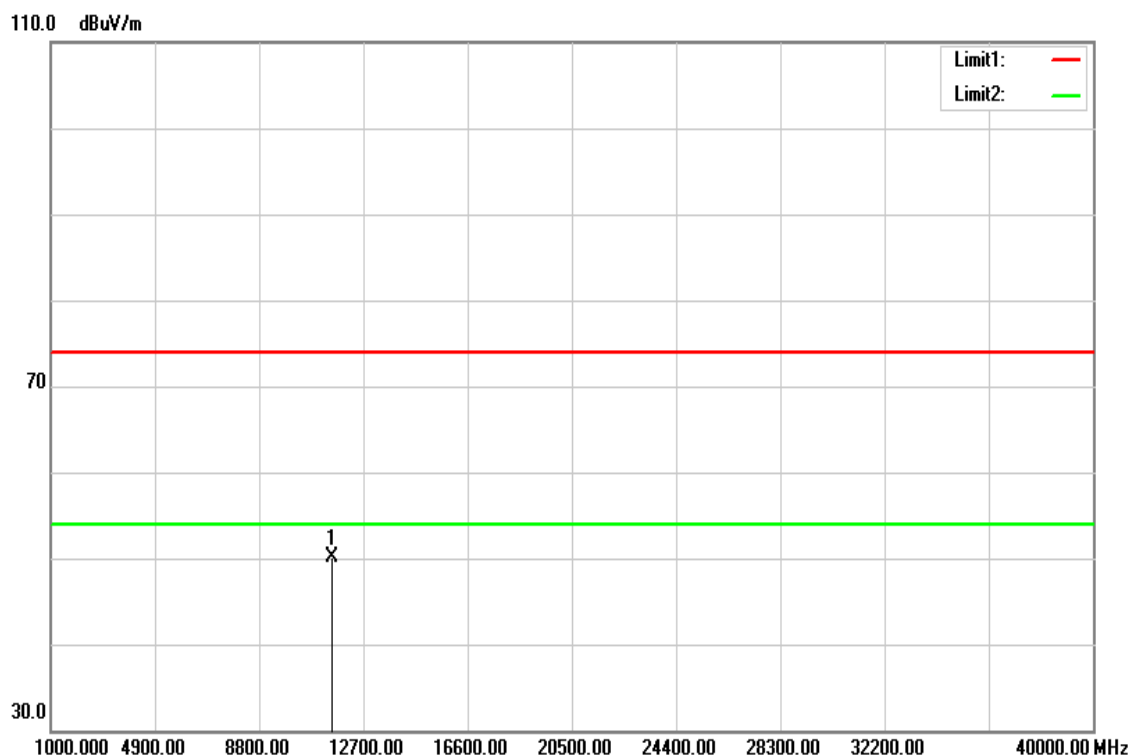


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11550.000	33.83	16.04	49.87	74.00	-24.13	peak
N/A						

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 802.11ac VHT80 MHz / 5775 MHz	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	March 13, 2018
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average	Test Voltage	120Vac / 60Hz



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11550.000	34.04	16.04	50.08	74.00	-23.92	peak
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