

# RADIO TEST REPORT

## FCC 47 CFR PART 15 SUBPART E

### CLASS II PERMISSIVE CHANGE

<b>Test Standard</b>	<b>FCC Part 15.407</b>
<b>FCC ID</b>	<b>TX2-RTL8821AU</b>
<b>Product name</b>	<b>802.11a/b/g/n/ac RTL8821AU Combo module</b>
<b>Brand Name</b>	<b>Realtek</b>
<b>Model</b>	<b>RTL8821AU</b>
<b>Test Result</b>	<b>Pass</b>

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:*

*Reviewed by:*

Handwritten signature of Sam Chuang in black ink.

Handwritten signature of Jerry Chuang in black ink.

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Sam Chuang  
Manager

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Jerry Chuang  
Engineer

## Revision History

Rev.	Issue Date	Revisions	Effect Page	Revised By
00	November 14, 2017	Initial Issue	ALL	Allison Chen
01	December 1, 2017	Rev.(01)	P.5, P.9, P.11, P.18, P.24, P.25	Allison Chen
02	December 4, 2017	Rev.(02)	P.11, 25, 75, 76, 143, 144	Angel Cheng

*Rev. (01):*

1. Remove IEEE 802.11ac VHT 20MHz and IEEE 802.11ac VHT 40MHz
2. Remove Applied standards KDB 662911 D01 v02r01.
3. Modify Applied standards KDB 789033 D02 v01r04, to KDB 789033 D02 v01r04.
4. Remove radiation bandedge and spurious emission Test Setup: 9kHz ~ 30MHz.
5. Other information, please refer to the T171012L01 and this test report.

*Rev. (02):*

1. Added radiation bandedge and spurious emission Test Setup: 9kHz ~ 30MHz.
2. Added notes in below 1 GHz test data.
3. Modify number of channels.
4. Modify test setup photo.

## Table of contents

<b>1. GENERAL INFORMATION .....</b>	<b>4</b>
<b>1.1 EUT INFORMATION .....</b>	<b>4</b>
<b>1.2 EUT CHANNEL INFORMATION .....</b>	<b>5</b>
<b>1.3 ANTENNA INFORMATION .....</b>	<b>6</b>
<b>1.4 MEASUREMENT UNCERTAINTY.....</b>	<b>7</b>
<b>1.5 FACILITIES AND TEST LOCATION .....</b>	<b>8</b>
<b>1.6 INSTRUMENT CALIBRATION .....</b>	<b>8</b>
<b>1.7 SUPPORT AND EUT ACCESSORIES EQUIPMENT .....</b>	<b>9</b>
<b>1.8 TEST METHODOLOGY AND APPLIED STANDARDS .....</b>	<b>9</b>
<b>2. TEST SUMMERY .....</b>	<b>10</b>
<b>3. DESCRIPTION OF TEST MODES .....</b>	<b>11</b>
<b>3.1 THE WORST MODE OF OPERATING CONDITION .....</b>	<b>11</b>
<b>3.2 THE WORST MODE OF MEASUREMENT .....</b>	<b>12</b>
<b>3.3 EUT DUTY CYCLE.....</b>	<b>13</b>
<b>4. TEST RESULT .....</b>	<b>14</b>
<b>4.1 AC POWER LINE CONDUCTED EMISSION .....</b>	<b>14</b>
<b>4.2 OUTPUT POWER MEASUREMENT .....</b>	<b>17</b>
<b>4.3 RADIATION BANDEDGE AND SPURIOUS EMISSION .....</b>	<b>23</b>
<b>APPENDIX 1 - PHOTOGRAPHS OF EUT</b>	

# 1. GENERAL INFORMATION

## 1.1 EUT INFORMATION

Applicant	Realtek Semiconductor Corp. No. 2, Innovation Road II, Hsinchu Science Park, Hsinchu, 300 Taiwan																																																									
Applicant Adress	Realtek Semiconductor Corp. No. 2, Innovation Road II, Hsinchu Science Park, Hsinchu, 300 Taiwan																																																									
Equipment	802.11a/b/g/n/ac RTL8821AU Combo module																																																									
Model No.	RTL8821AU																																																									
Model Discrepancy	N/A																																																									
Trade Name	Realtek																																																									
Received Date	October 12, 2017																																																									
Date of Test	November 10, 2017																																																									
Output Power	<table border="1"> <thead> <tr> <th>Band</th> <th>Mode</th> <th>Frequency Range (MHz)</th> <th>Output Power (dBm)</th> <th>Output Power (w)</th> </tr> </thead> <tbody> <tr> <td rowspan="3">U-NII-1</td> <td>IEEE 802.11a</td> <td>5180 ~ 5240</td> <td>11.99</td> <td>0.0158</td> </tr> <tr> <td>IEEE 802.11n HT 20 MHz</td> <td>5180 ~ 5240</td> <td>11.97</td> <td>0.0157</td> </tr> <tr> <td>IEEE 802.11n HT 40 MHz</td> <td>5190 ~ 5230</td> <td>11.67</td> <td>0.0147</td> </tr> <tr> <td rowspan="3">U-NII-2a</td> <td>IEEE 802.11a</td> <td>5260 ~ 5320</td> <td>11.98</td> <td>0.0158</td> </tr> <tr> <td>IEEE 802.11n HT 20 MHz</td> <td>5260 ~ 5320</td> <td>12.01</td> <td>0.0159</td> </tr> <tr> <td>IEEE 802.11n HT 40 MHz</td> <td>5270 ~ 5310</td> <td>12.30</td> <td>0.0170</td> </tr> <tr> <td rowspan="3">U-NII-2c</td> <td>IEEE 802.11a</td> <td>5500 ~ 5725</td> <td>12.03</td> <td>0.0160</td> </tr> <tr> <td>IEEE 802.11n HT 20 MHz</td> <td>5500 ~ 5725</td> <td>11.89</td> <td>0.0155</td> </tr> <tr> <td>IEEE 802.11n HT 40 MHz</td> <td>5510 ~ 5670</td> <td>12.50</td> <td>0.0178</td> </tr> <tr> <td rowspan="3">U-NII-3</td> <td>IEEE 802.11a</td> <td>5745 ~ 5825</td> <td>11.98</td> <td>0.0158</td> </tr> <tr> <td>IEEE 802.11n HT 20 MHz</td> <td>5745 ~ 5825</td> <td>11.76</td> <td>0.0150</td> </tr> <tr> <td>IEEE 802.11n HT 40 MHz</td> <td>5755 ~ 5795</td> <td>12.40</td> <td>0.0174</td> </tr> </tbody> </table>	Band	Mode	Frequency Range (MHz)	Output Power (dBm)	Output Power (w)	U-NII-1	IEEE 802.11a	5180 ~ 5240	11.99	0.0158	IEEE 802.11n HT 20 MHz	5180 ~ 5240	11.97	0.0157	IEEE 802.11n HT 40 MHz	5190 ~ 5230	11.67	0.0147	U-NII-2a	IEEE 802.11a	5260 ~ 5320	11.98	0.0158	IEEE 802.11n HT 20 MHz	5260 ~ 5320	12.01	0.0159	IEEE 802.11n HT 40 MHz	5270 ~ 5310	12.30	0.0170	U-NII-2c	IEEE 802.11a	5500 ~ 5725	12.03	0.0160	IEEE 802.11n HT 20 MHz	5500 ~ 5725	11.89	0.0155	IEEE 802.11n HT 40 MHz	5510 ~ 5670	12.50	0.0178	U-NII-3	IEEE 802.11a	5745 ~ 5825	11.98	0.0158	IEEE 802.11n HT 20 MHz	5745 ~ 5825	11.76	0.0150	IEEE 802.11n HT 40 MHz	5755 ~ 5795	12.40	0.0174
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Power Operation	<p>1. Power from host device. (DC 5V, 1.5A)                  2. Power from Li-ion Polymer Battery.                  Model: PR-464059G (1ICP5/40/59)                  Nominal Voltage: 3.8V                  Rated Capacity: 1630mAh / 6.2Wh                  Limited Charge voltage: 4.35V</p>																																																									
Class II Permissive Change	Applicants add a new appearance of EUT and change the circuit and layout, but the antenna type and module are identical with original.																																																									

## 1.2 EUT CHANNEL INFORMATION

Frequency Range	UNII-1	
	IEEE 802.11a	5180 ~ 5240 MHz
	IEEE 802.11n HT 20 MHz	5180 ~ 5240 MHz
	IEEE 802.11n HT 40 MHz	5190 ~ 5230 MHz
	UNII-2a	
	IEEE 802.11a	5260 ~ 5320 MHz
	IEEE 802.11n HT 20 MHz	5260 ~ 5320 MHz
	IEEE 802.11n HT 40 MHz	5270 ~ 5310 MHz
	UNII-2c	
	IEEE 802.11a	5500 ~ 5700 MHz
	IEEE 802.11n HT 20 MHz	5500 ~ 5700 MHz
	IEEE 802.11n HT 40 MHz	5510 ~ 5670 MHz
	UNII-3	
IEEE 802.11a	5745 ~ 5825 MHz	
IEEE 802.11n HT 20 MHz	5745 ~ 5825 MHz	
IEEE 802.11n HT 40 MHz	5755 ~ 5795 MHz	
Modulation Type	<ol style="list-style-type: none"> <li>1. IEEE 802.11a mode: OFDM</li> <li>2. IEEE 802.11n HT 20 MHz mode: OFDM</li> <li>3. IEEE 802.11n HT 40 MHz mode: OFDM</li> </ol>	

**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

<b>Antenna Type</b>	<input checked="" type="checkbox"/> PIFA <input type="checkbox"/> PCB for <input type="checkbox"/> Dipole <input type="checkbox"/> Printed <input type="checkbox"/> Coils
<b>Antenna Gain</b>	1.5dBi

## 1.4 MEASUREMENT UNCERTAINTY

PARAMETER	UNCERTAINTY
Semi Anechoic Chamber (966 Chamber_B) / Radiated Emission, 30 to 1000 MHz	+/- 3.97
Semi Anechoic Chamber (966 Chamber_B) / Radiated Emission, 1 to 18GHz	+/- 3.58
Semi Anechoic Chamber (966 Chamber_B) / Radiated Emission, 18 to 26 GHz	+/- 3.59
Semi Anechoic Chamber (966 Chamber_B) / Radiated Emission, 26 to 40 GHz	+/- 3.81
Conducted Emission (Mains Terminals), 9kHz to 30MHz	+/- 2.48

**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
AC Conduction Room	Jerry Chuang	
Radiation	Jerry Chuang	
RF Conducted	Eric Lee	

**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

AC Conduction Test Room					
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due
DC LISN	SCHWARZBECK	NNBM 8124	505	03/20/2017	03/19/2018
DC LISN	SCHWARZBECK	NNBM 8124	504	03/20/2017	03/19/2018
EMI Test Receiver	R&S	ESCI	W3010659	07/13/2017	07/12/2018

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	EMCO	3117	00055165	02/20/2017	02/19/2018
Pre-Amplifier	EMCI	EMC 012635	980151	08/01/2017	07/31/2018
Pre-Amplifier	EMEC	EM330	060609	06/07/2017	06/06/2018
Spectrum Analyzer	Agilent	E4446A	US42510252	12/05/2016	12/04/2017
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

Conducted Test Site					
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due
Power Meter	Anritsu	ML2495A	1012009	07/03/2017	07/02/2018
Power Sensor	Anritsu	MA2411B	917072	07/03/2017	07/02/2018
Spectrum Analyzer	R&S	FSV 40	101073	10/05/2017	10/04/2018
Thermostatic/Hrgrosatic Chamber	GWINSTEK	GTC-288MH-CC	TH160402	05/23/2017	05/22/2018
Wideband Radio communication Tester	R&S	CMW500	116875	04/25/2017	04/24/2018

**Remark:**

- Each piece of equipment is scheduled for calibration once a year and Precision Dipole is scheduled for calibration once three years.
- N.C.R. = No Calibration Request.



## 1.7 SUPPORT AND EUT ACCESSORIES EQUIPMENT

No	Equipment	Brand	Model	Series No.	FCC ID	Data Cable	Power Cord
1	NB(A)	Dell	PP19L	N/A	CXSMM01BR D02D110	N/A	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 v01r04, KDB 644545 D03 v01.

## 2. TEST SUMMERY

<b>FCC Standard Sec.</b>	<b>Chapter</b>	<b>Test Item</b>	<b>Result</b>
15.203	1.2	Antenna Requirement	Pass
15.207	4.1	AC Conducted Emission	Pass
15.407(a)	4.3	Output Power Measurement	Pass
15.407(b)	4.5	Radiation Band Edge	Pass
15.407(b)	4.5	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 HT 20 MHz mode: MCS0 3. IEEE 802.11n HT 40 MHz mode: MCS0																																												
Operating Frequency Range & Number of Channels	<table border="1"> <thead> <tr> <th></th> <th>Mode</th> <th>Frequency Range (MHz)</th> <th>Number of Channels</th> </tr> </thead> <tbody> <tr> <td rowspan="3">U-NII-1</td> <td>IEEE 802.11a</td> <td>5180 ~ 5240</td> <td>4 Channels</td> </tr> <tr> <td>IEEE 802.11n HT 20 MHz</td> <td>5180 ~ 5240</td> <td>4 Channels</td> </tr> <tr> <td>IEEE 802.11n HT 40 MHz</td> <td>5190 ~ 5230</td> <td>2 Channels</td> </tr> <tr> <td rowspan="3">U-NII-2a</td> <td>IEEE 802.11a</td> <td>5260 ~ 5320</td> <td>4 Channels</td> </tr> <tr> <td>IEEE 802.11n HT 20 MHz</td> <td>5260 ~ 5320</td> <td>4 Channels</td> </tr> <tr> <td>IEEE 802.11n HT 40 MHz</td> <td>5270 ~ 5310</td> <td>2 Channels</td> </tr> <tr> <td rowspan="3">U-NII-2c</td> <td>IEEE 802.11a</td> <td>5500 ~ 5700</td> <td>8 Channels</td> </tr> <tr> <td>IEEE 802.11n HT 20 MHz</td> <td>5500 ~ 5700</td> <td>8 Channels</td> </tr> <tr> <td>IEEE 802.11n HT 40 MHz</td> <td>5510 ~ 5670</td> <td>3 Channels</td> </tr> <tr> <td rowspan="3">U-NII-3</td> <td>IEEE 802.11a</td> <td>5745 ~ 5825</td> <td>5 Channels</td> </tr> <tr> <td>IEEE 802.11n HT 20 MHz</td> <td>5745 ~ 5825</td> <td>5 Channels</td> </tr> <tr> <td>IEEE 802.11n HT 40 MHz</td> <td>5755 ~ 5795</td> <td>2 Channels</td> </tr> </tbody> </table>		Mode	Frequency Range (MHz)	Number of Channels	U-NII-1	IEEE 802.11a	5180 ~ 5240	4 Channels	IEEE 802.11n HT 20 MHz	5180 ~ 5240	4 Channels	IEEE 802.11n HT 40 MHz	5190 ~ 5230	2 Channels	U-NII-2a	IEEE 802.11a	5260 ~ 5320	4 Channels	IEEE 802.11n HT 20 MHz	5260 ~ 5320	4 Channels	IEEE 802.11n HT 40 MHz	5270 ~ 5310	2 Channels	U-NII-2c	IEEE 802.11a	5500 ~ 5700	8 Channels	IEEE 802.11n HT 20 MHz	5500 ~ 5700	8 Channels	IEEE 802.11n HT 40 MHz	5510 ~ 5670	3 Channels	U-NII-3	IEEE 802.11a	5745 ~ 5825	5 Channels	IEEE 802.11n HT 20 MHz	5745 ~ 5825	5 Channels	IEEE 802.11n HT 40 MHz	5755 ~ 5795	2 Channels
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**Remark:**

1. EUT pre-scanned data rate of output power for each mode, the worst data rate were recorded in this report.
2. Covered modes are test reduction modes. The output powers on the covered modes are equal to or less than the mode referenced and use the same module
3. The mode IEEE 802.11ac VHT20 and VHT40 are only different in control messages with IEEE 802.11n HT20 and HT40, and have same power setting. Therefore, the highest power(IEEE 802.11n HT20 and HT40) were test conducted and radiated measurement and recorded in this report.

### 3.2 THE WORST MODE OF MEASUREMENT

AC Power Line Conducted Emission	
Test Condition	AC Power line conducted emission for line and neutral
Voltage/Hz	DC 5V
Test Mode	Mode 1:EUT power by host system.
Worst Mode	<input checked="" type="checkbox"/> Mode 1 <input type="checkbox"/> Mode 2 <input type="checkbox"/> Mode 3 <input type="checkbox"/> Mode 4

Radiated Emission Measurement Above 1G	
Test Condition	Band edge, Emission for Unwanted and Fundamental
Voltage/Hz	DC 5V
Test Mode	Mode 1:EUT power by host system.
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

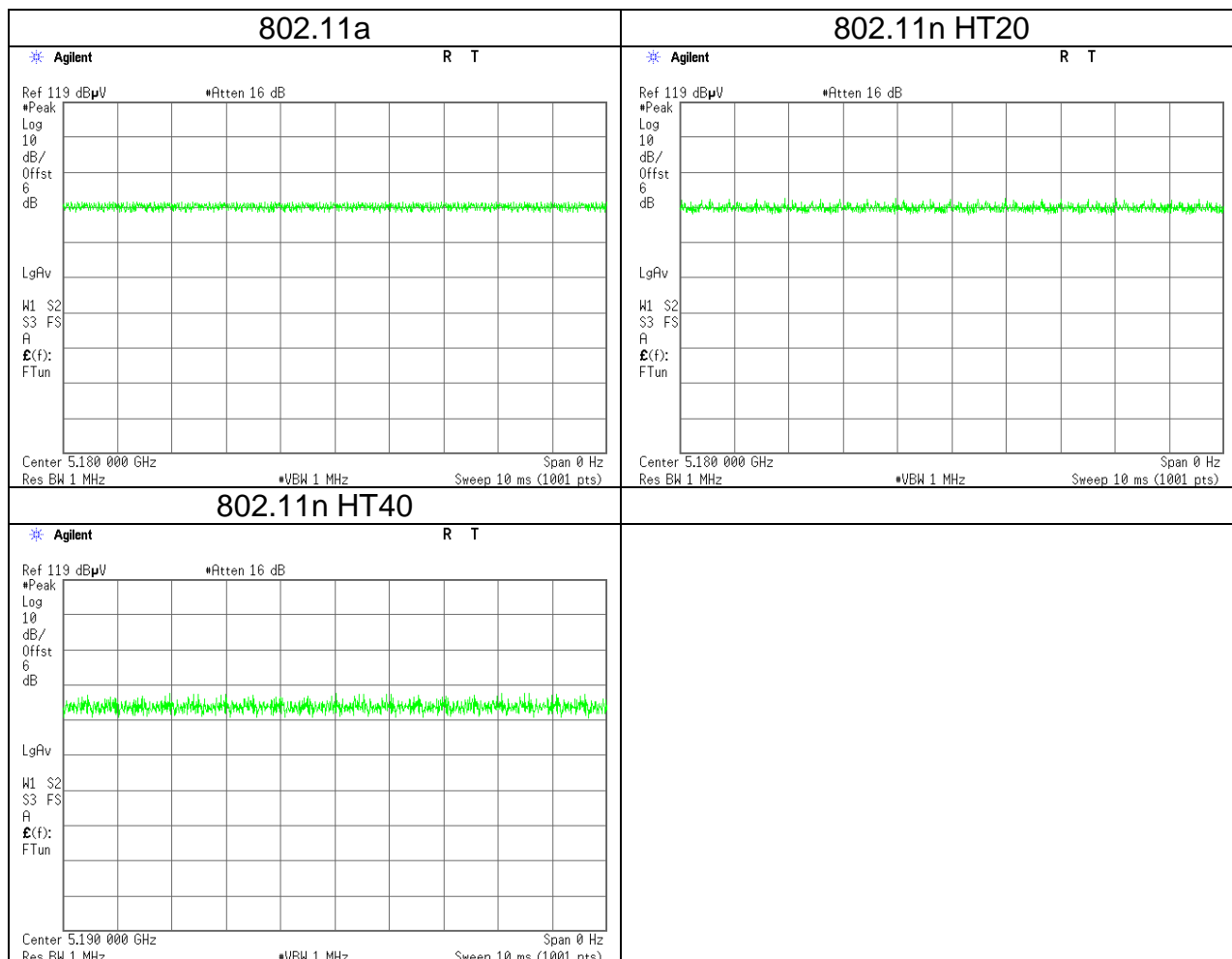
Radiated Emission Measurement Below 1G	
Test Condition	Radiated Emission Below 1G
Voltage/Hz	DC 5V
Test Mode	Mode 1:EUT power by host system.
Worst Mode	<input checked="" type="checkbox"/> Mode 1 <input type="checkbox"/> Mode 2 <input type="checkbox"/> Mode 3 <input type="checkbox"/> Mode 4

**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	1.000	1.000	100.00%	0.00
802.11n HT20	1.000	1.000	100.00%	0.00
802.11n HT40	1.000	1.000	100.00%	0.00



## 4. TEST RESULT

### 4.1 AC POWER LINE CONDUCTED EMISSION

#### 4.1.1 Test Limit

According to §15.207(a)

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

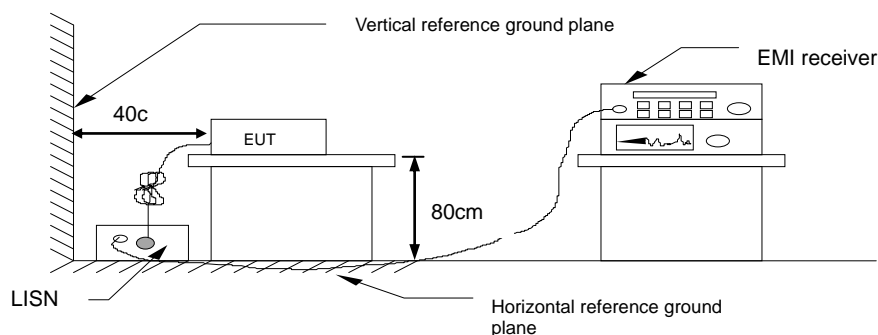
\* Decreases with the logarithm of the frequency.

#### 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

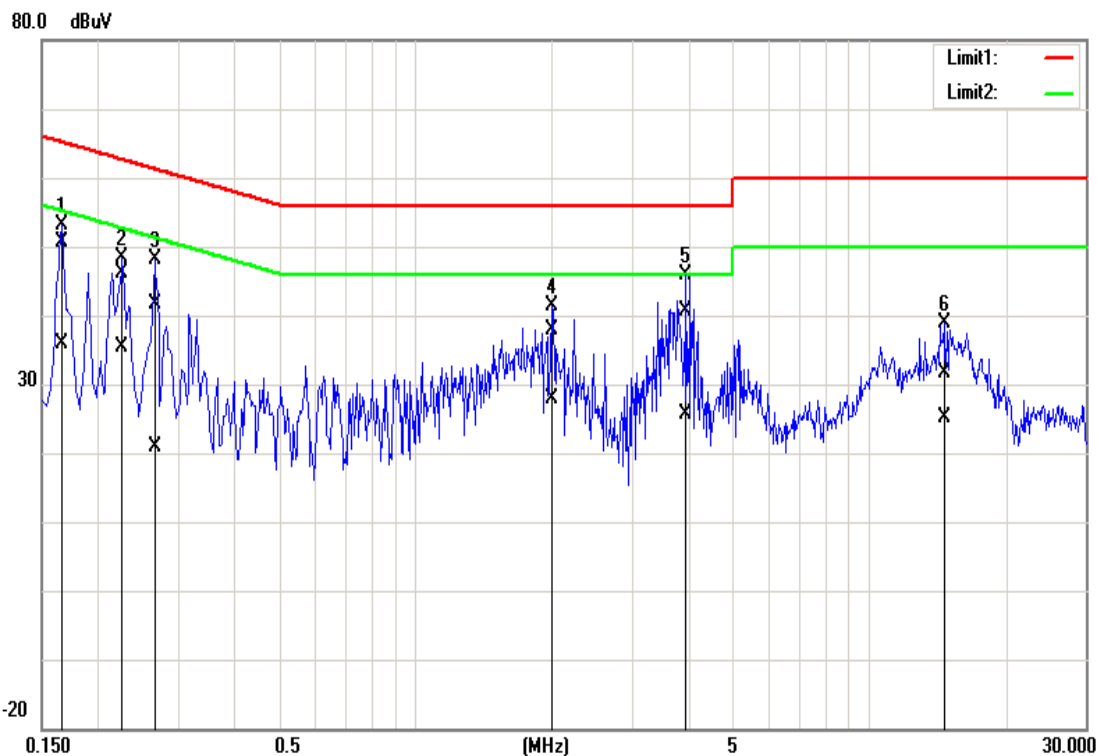


#### 4.1.4 Test Result

**Pass.**

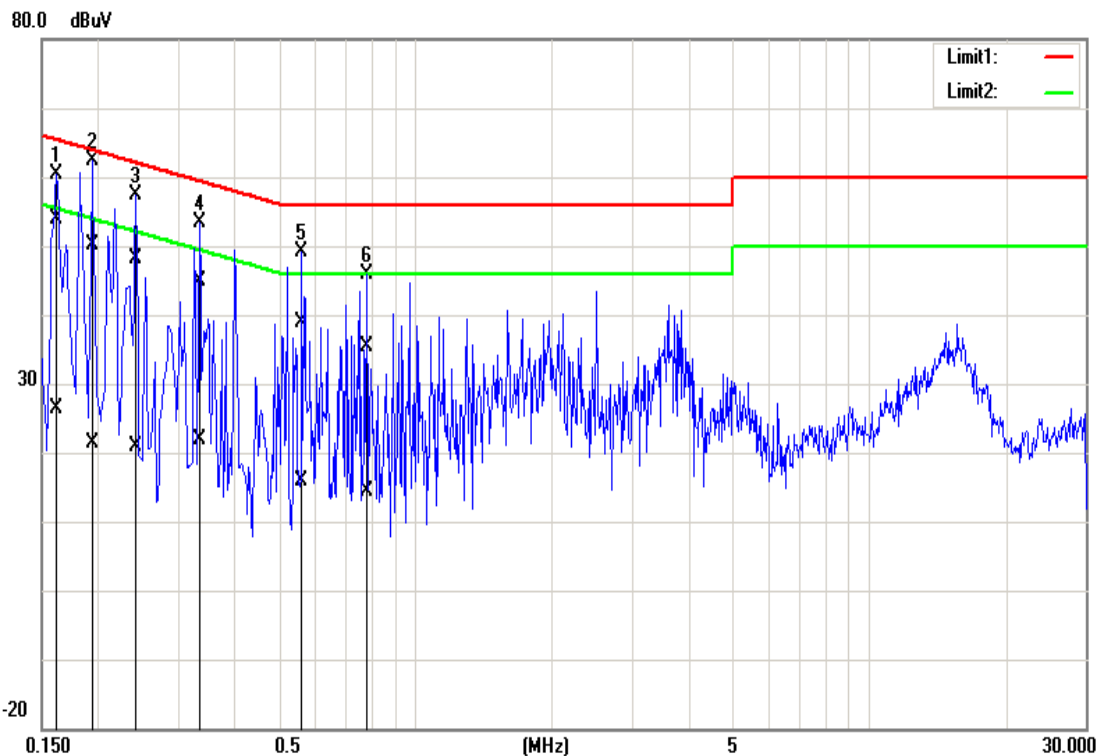
**Test Data**

Test Mode:	Mode 1	Temp/Hum	24(°C)/ 50%RH
Test Voltage:	120Vac / 60Hz	Test Date	November 10, 2017
Phase:	Line	Test Engineer	Jerry Chuang



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	50.46	35.88	0.05	50.51	35.93	65.16	55.16	-14.65	-19.23
2	0.2260	45.99	35.33	0.05	46.04	35.38	62.60	52.60	-16.56	-17.22
3	0.2660	41.61	20.90	0.05	41.66	20.95	61.24	51.24	-19.58	-30.29
4	2.0100	37.89	27.70	0.09	37.98	27.79	56.00	46.00	-18.02	-18.21
5	3.9580	40.56	25.47	0.13	40.69	25.60	56.00	46.00	-15.31	-20.40
6	14.6580	31.55	24.84	0.18	31.73	25.02	60.00	50.00	-28.27	-24.98

Test Mode:	Mode 1	Temp/Hum	24(°C)/ 50%RH
Test Voltage:	120Vac / 60Hz	Test Date	November 10, 2017
Phase:	Neutral	Test Engineer	Jerry Chuang



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	53.87	26.17	0.12	53.99	26.29	65.36	55.36	-11.37	-29.07
2	0.1940	50.04	21.15	0.12	50.16	21.27	63.86	53.86	-13.70	-32.59
3	0.2420	48.12	20.79	0.12	48.24	20.91	62.03	52.03	-13.79	-31.12
4	0.3340	44.83	21.69	0.13	44.96	21.82	59.35	49.35	-14.39	-27.53
5	0.5620	38.74	15.84	0.14	38.88	15.98	56.00	46.00	-17.12	-30.02
6	0.7820	35.17	14.23	0.14	35.31	14.37	56.00	46.00	-20.69	-31.63



## 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 an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 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 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. 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.

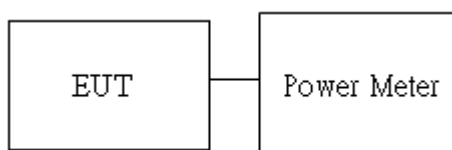
UNII-1 Limit	<input checked="" type="checkbox"/> Antenna not exceed 6 dBi : 24dBm <input type="checkbox"/> Antenna with DG greater than 6 dBi : [Limit = 30 – (DG – 6)]
UNII-2a/2c Limit	<input checked="" type="checkbox"/> Antenna not exceed 6 dBi : 24dBm <input type="checkbox"/> Antenna with DG greater 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 v01r04, 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)	DG (dBi)	Limit (dBm)
			chain0	chain1	chain0	chain1				
IEEE 802.11a	36	5180	53	-	11.70	-	11.70	0.0148	1.5	24
	44	5220	50	-	11.60	-	11.60	0.0145		
	48	5240	50	-	11.99	-	11.99	0.0158		
IEEE 802.11n HT20	36	5180	53	-	11.74	-	11.74	0.0149		
	44	5220	53	-	11.85	-	11.85	0.0153		
	48	5240	52	-	11.97	-	11.97	0.0157		
IEEE 802.11n HT40	38	5190	52	-	11.43	-	11.43	0.0139		
	46	5230	52	-	11.67	-	11.67	0.0147		

UNII-2a										
Config	CH	Freq. (MHz)	Power Set		AV Power(dBm)		AV Total Power (dBm)	AV Total Power (W)	DG (dBi)	Limit (dBm)
			chain0	chain1	chain0	chain1				
IEEE 802.11a	52	5260	48	-	11.76	-	11.76	0.0150	1.5	24
	56	5280	47	-	11.98	-	11.98	0.0158		
	64	5320	46	-	11.92	-	11.92	0.0156		
IEEE 802.11n HT20	52	5260	48	-	11.91	-	11.91	0.0155		
	56	5280	47	-	11.87	-	11.87	0.0154		
	64	5320	46	-	12.01	-	12.01	0.0159		
IEEE 802.11n HT40	54	5270	48	-	12.02	-	12.02	0.0159		
	62	5310	47	-	12.30	-	12.30	0.0170		

UNII-2c										
Config	CH	Freq. (MHz)	Power Set		AV Power(dBm)		AV Total Power (dBm)	AV Total Power (W)	DG (dBi)	Limit (dBm)
			chain0	chain1	chain0	chain1				
IEEE 802.11a	100	5500	51	-	11.24	-	11.24	0.0133	1.5	24
	116	5580	51	-	11.73	-	11.73	0.0149		
	140	5700	48	-	12.03	-	12.03	0.0160		
IEEE 802.11n HT20	100	5500	54	-	11.89	-	11.89	0.0155		
	116	5580	51	-	11.51	-	11.51	0.0142		
	140	5700	49	-	11.87	-	11.87	0.0154		
IEEE 802.11n HT40	102	5510	54	-	12.15	-	12.15	0.0164		
	110	5550	53	-	12.13	-	12.13	0.0163		
	134	5670	51	-	12.50	-	12.50	0.0178		

UNII-3										
Config	CH	Freq. (MHz)	Power Set		AV Power(dBm)		AV Total Power (dBm)	AV Total Power (W)	DG (dBi)	Limit (dBm)
			chain0	chain1	chain0	chain1				
IEEE 802.11a	149	5745	48	-	11.83	-	11.83	0.0152	1.5	30
	157	5785	48	-	11.98	-	11.98	0.0158		
	165	5825	48	-	11.96	-	11.96	0.0157		
IEEE 802.11n HT20	149	5475	49	-	11.63	-	11.63	0.0146		
	7	5785	49	-	11.76	-	11.76	0.0150		
	165	5825	48	-	11.72	-	11.72	0.0149		
IEEE 802.11n HT40	151	5755	51	-	12.40	-	12.40	0.0174		
	159	5795	50	-	12.11	-	12.11	0.0163		

### 4.3 RADIATION BANDEGE AND SPURIOUS EMISSION

#### 4.3.1 Test Limit

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)

### 4.3.2 Test Procedure

Test method Refer as KDB 789033 D02 v01r04, Section G.3, G.4, G.5, and G.6,.

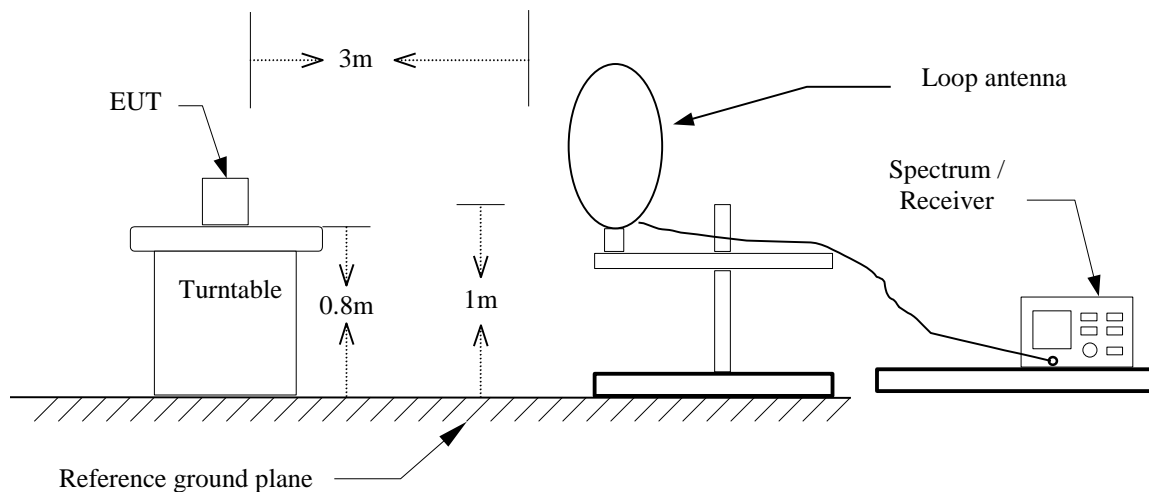
1. The EUT is placed on a turntable, Above 1 GHz is 1.5m and below 1 GHz is 0.8m above ground plane. The EUT Configured un accordance with ANSI C63.10, and the EUT set in a continuous mode.
2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level. And EUT 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 30MHz to 26.5GHz set to the low, Mid and High channels with the EUT transmit.
5. The SA setting following :
  - (1) Below 1G : RBW = 100kHz, VBW  $\geq$  3\*RBW, Sweep = Auto, Detector = Peak, Trace = Max hold.
  - (2) Above 1G :
    - (2.1) For Peak measurement : RBW = 1MHz, VBW  $\geq$  3 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 (%)	VBW
802.11a	100.00%	10Hz
802.11n HT20	100.00%	10Hz
802.11n HT40	100.00%	10Hz

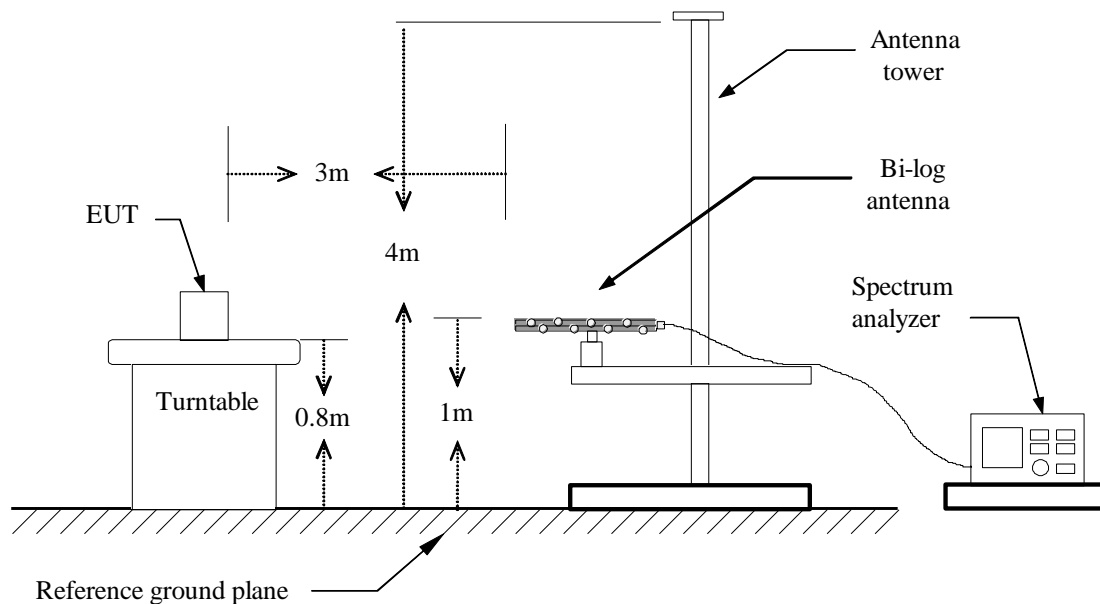


### 4.3.3 Test Setup

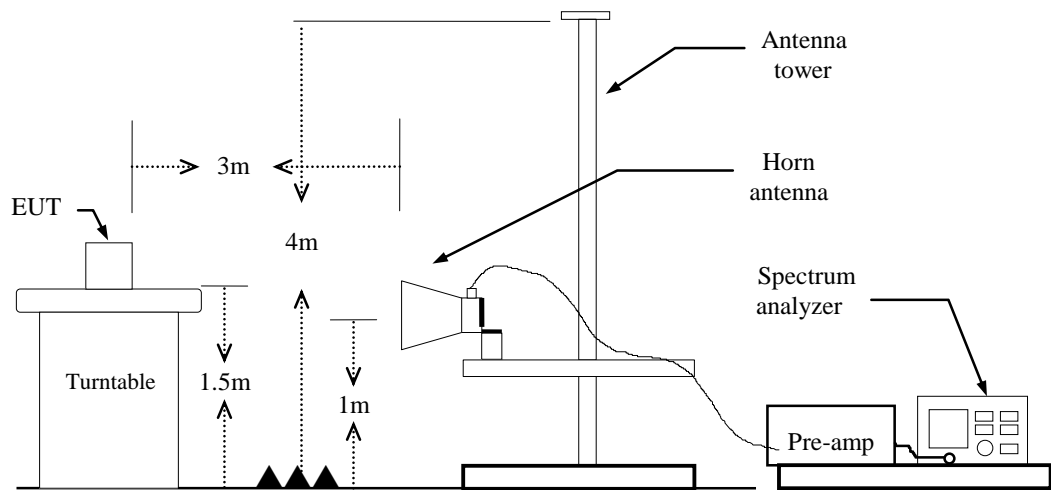
#### 9kHz ~ 30MHz



#### 30MHz ~ 1GHz



**Above 1 GHz**

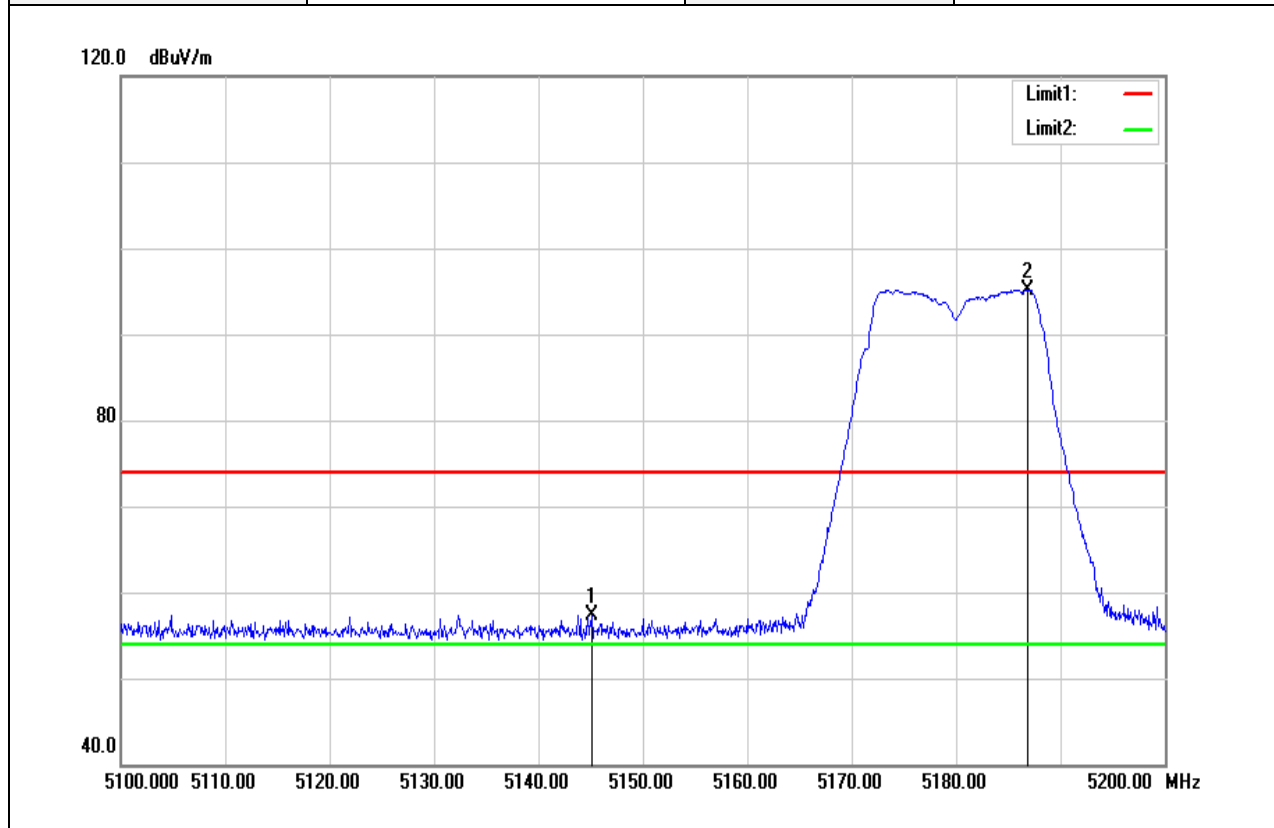


### 4.3.4 Test Result

#### Test Data

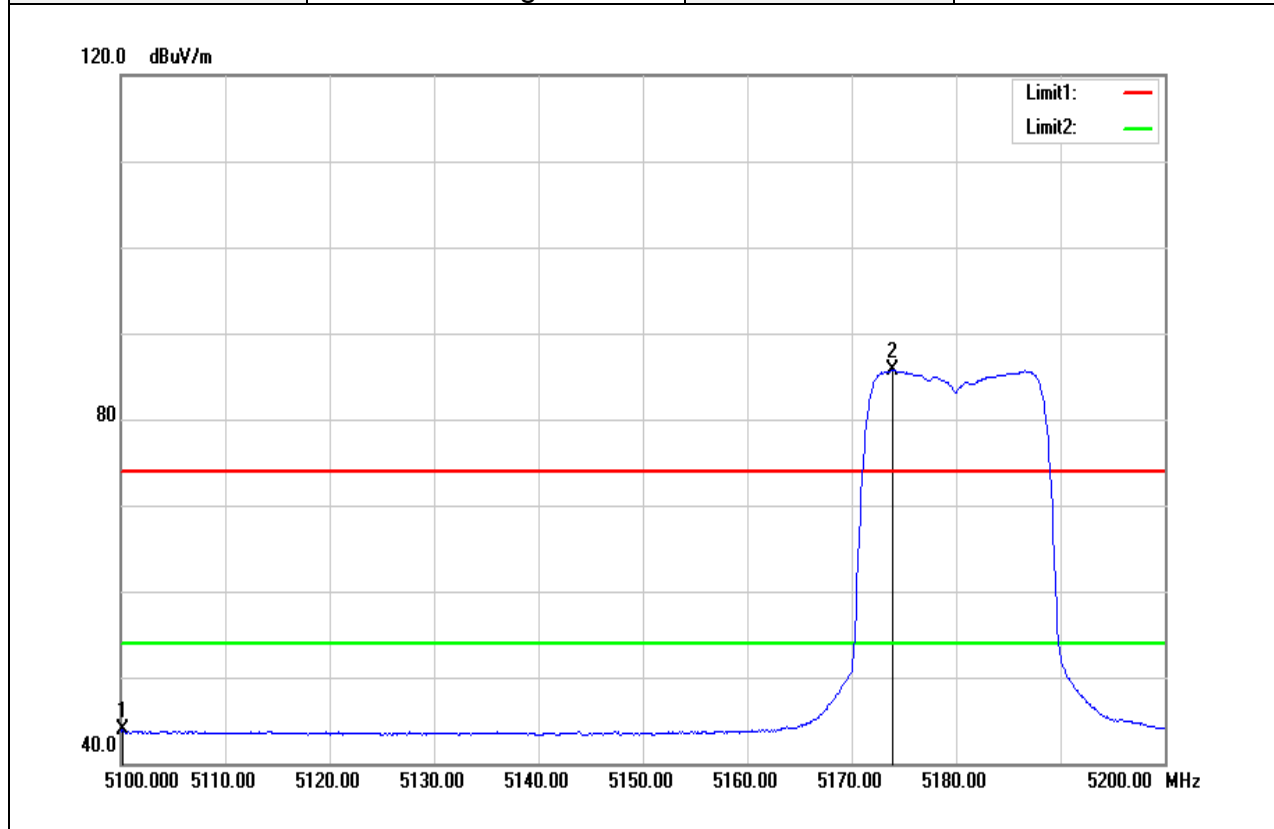
#### Band Edge Test Data for UNII-1

Test Mode	IEEE 802.11a Low CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak		



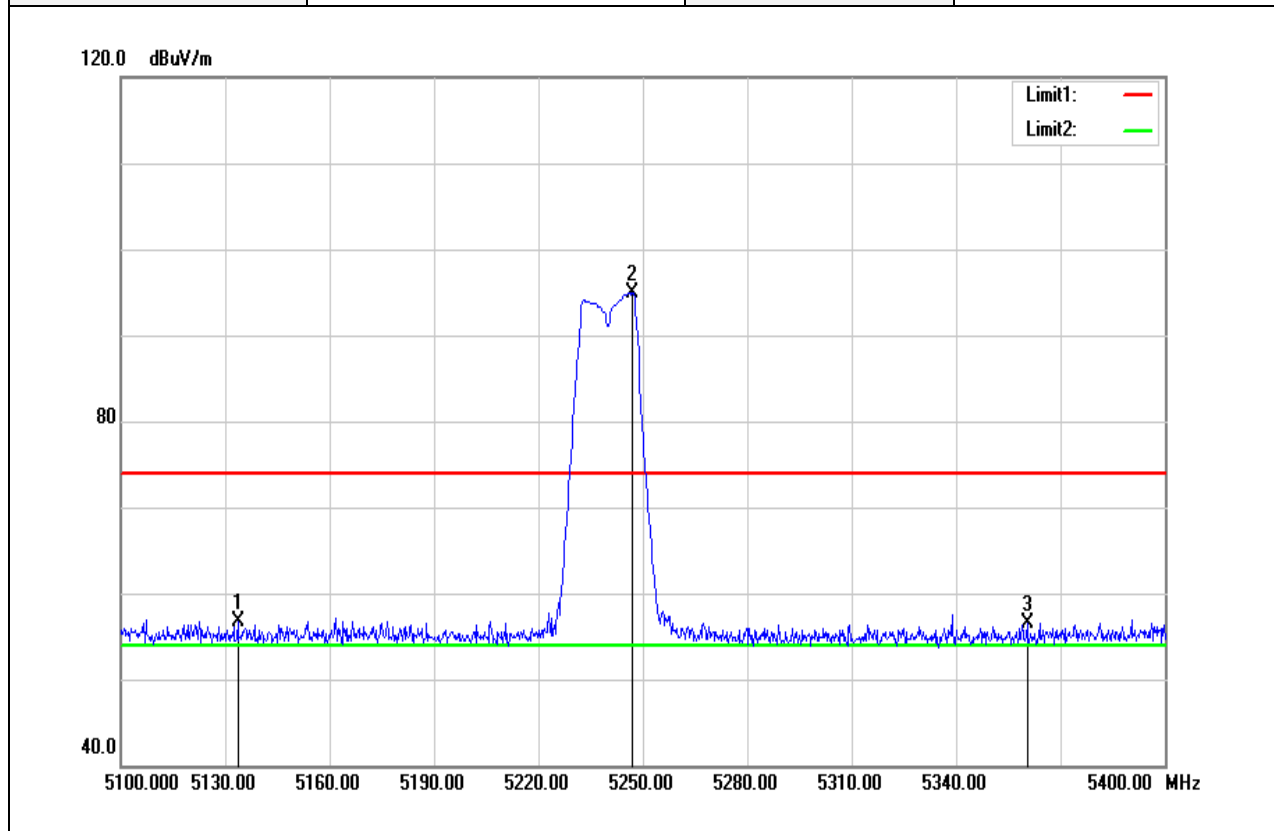
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5145.100	49.73	7.56	57.29	74.00	-16.71	peak
5186.800	87.51	7.63	95.14	-	-	peak

Test Mode	IEEE 802.11a Low CH	Temperature	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average		



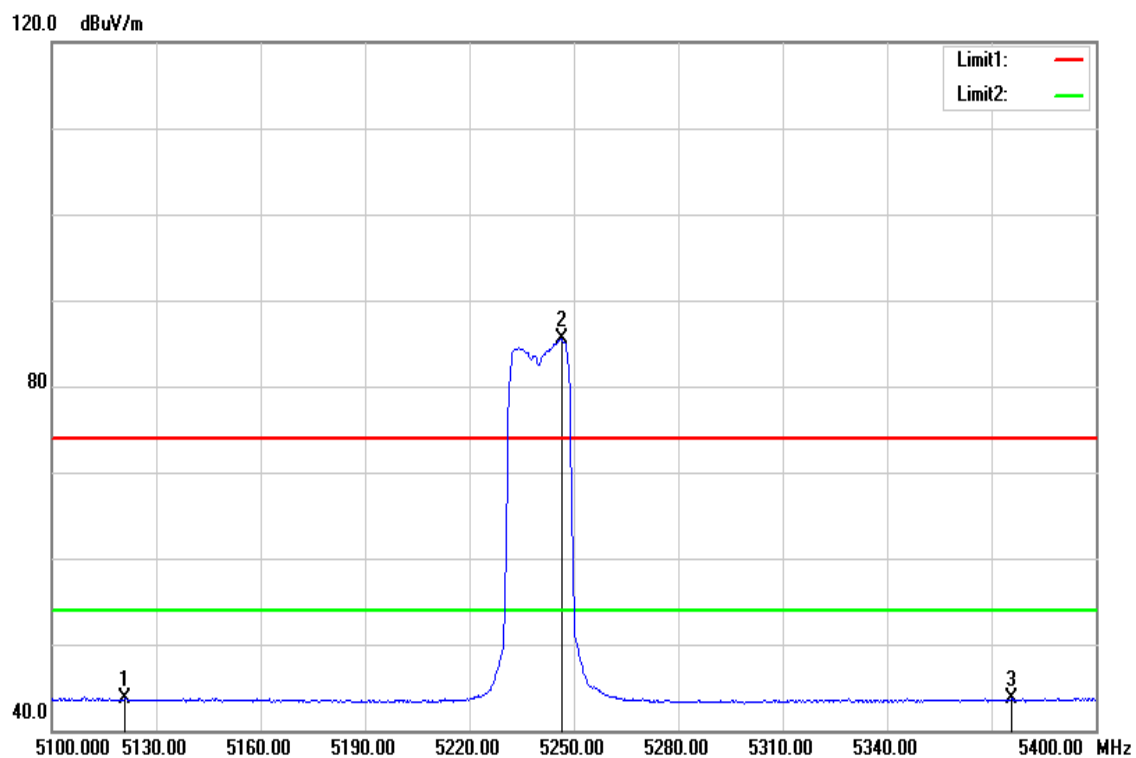
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5100.200	36.36	7.47	43.83	54.00	-10.17	AVG
5173.900	78.08	7.60	85.68	-	-	AVG

Test Mode	IEEE 802.11a High CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak		



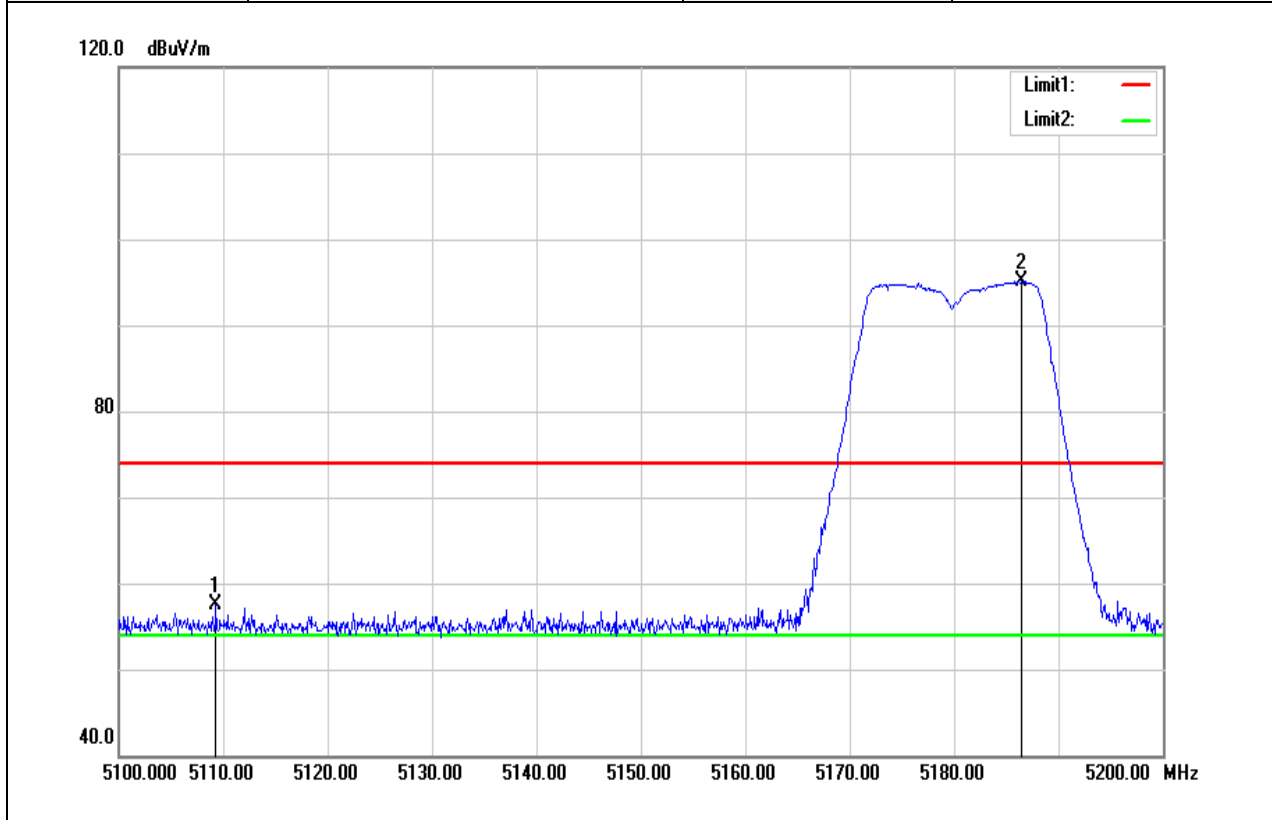
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5133.600	49.16	7.53	56.69	74.00	-17.31	peak
5247.000	87.17	7.75	94.92	-	-	peak
5360.400	48.61	7.96	56.57	74.00	-17.43	peak

Test Mode	IEEE 802.11a High CH	Temperature	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average		



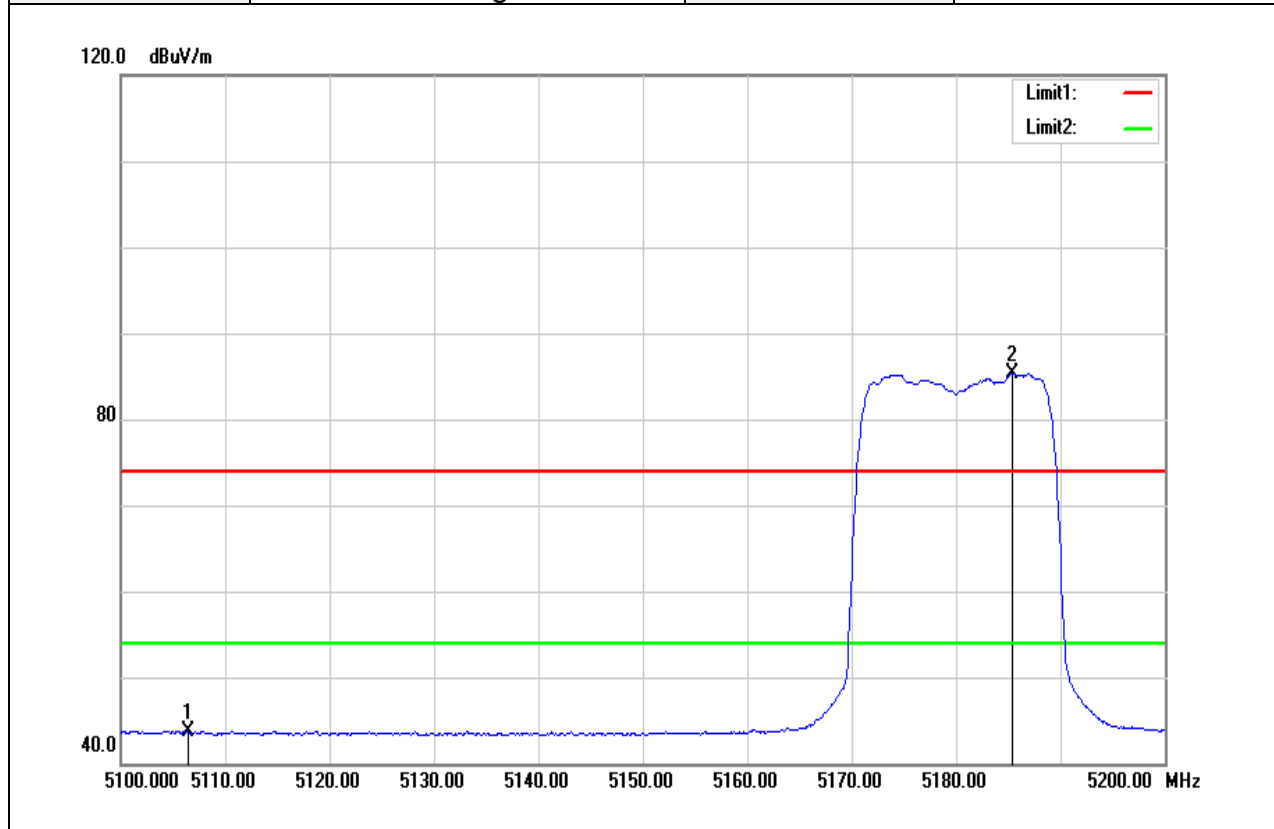
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5121.000	36.18	7.51	43.69	54.00	-10.31	AVG
5246.400	77.72	7.75	85.47	-	-	AVG
5375.700	35.71	7.99	43.70	54.00	-10.30	AVG

Test Mode	IEEE 802.11n HT20 Low CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak		



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5109.300	49.91	7.50	57.41	74.00	-16.59	peak
5186.500	87.48	7.63	95.11	-	-	peak

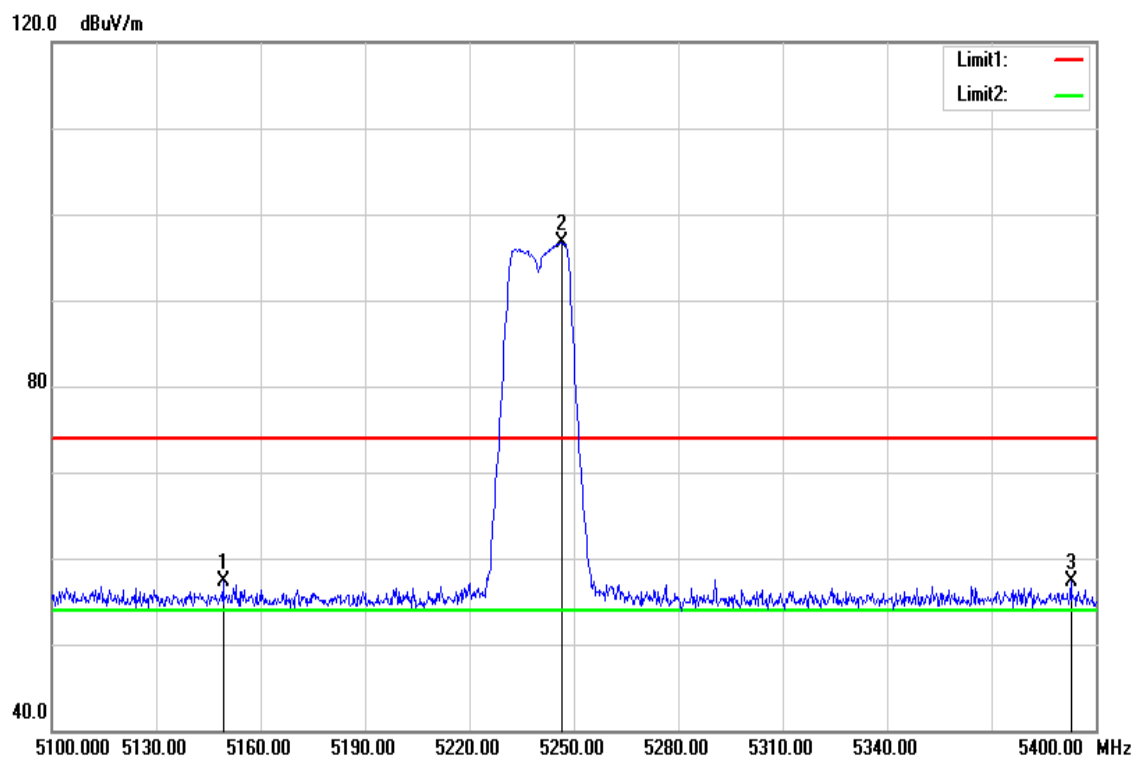
Test Mode	IEEE 802.11n HT20 Low CH	Temperature	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average		



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5106.500	36.28	7.49	43.77	54.00	-10.23	AVG
5185.400	77.62	7.63	85.25	-	-	AVG

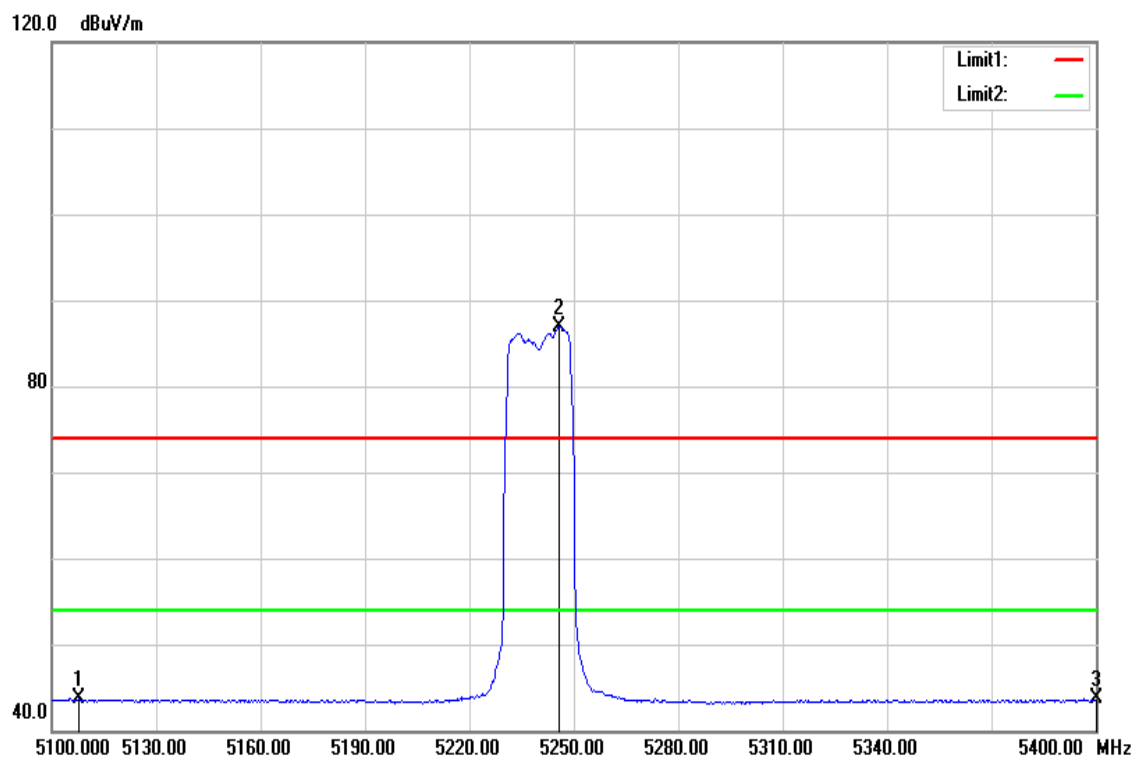


Test Mode	IEEE 802.11n HT20 High CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak		



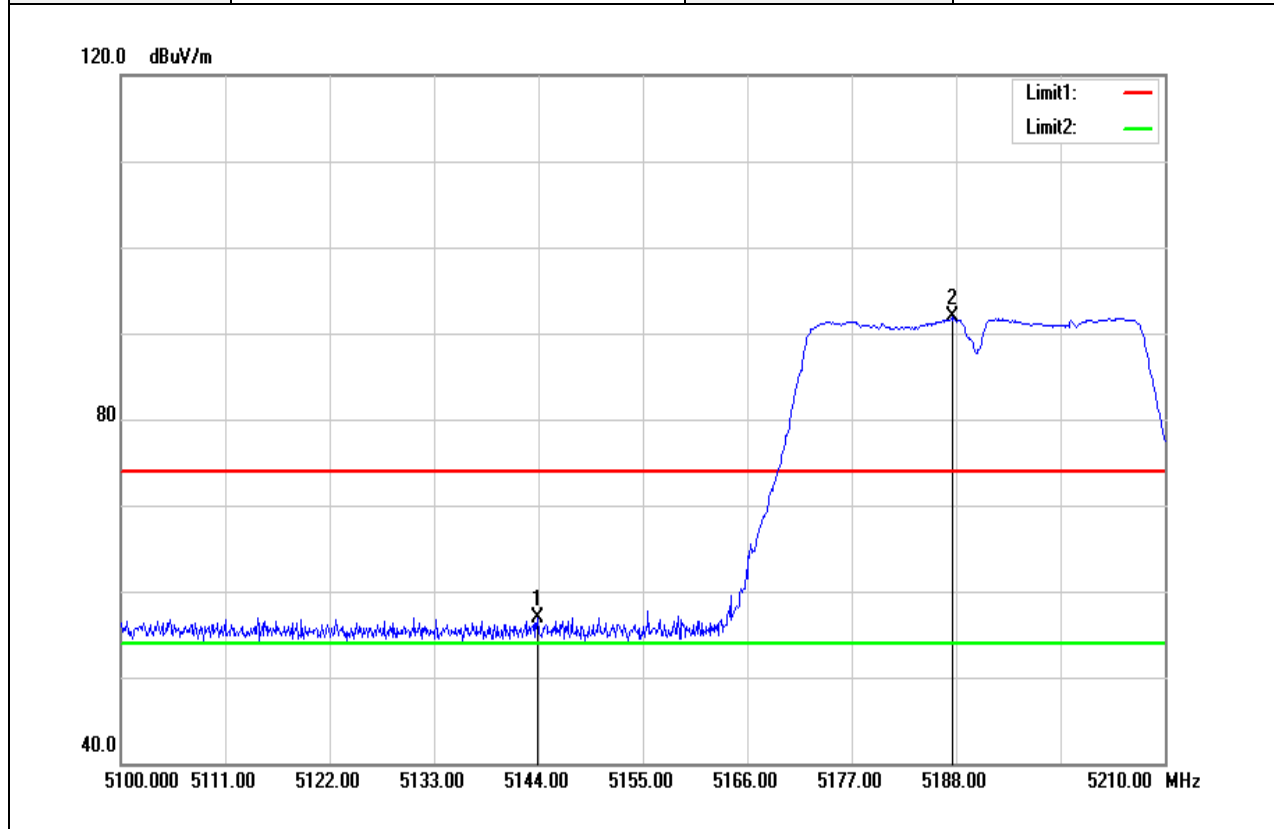
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5149.200	49.80	7.57	57.37	74.00	-16.63	peak
5246.400	88.95	7.75	96.70	-	-	peak
5392.800	49.38	8.01	57.39	74.00	-16.61	peak

Test Mode	IEEE 802.11n HT20 High CH	Temperature	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average		



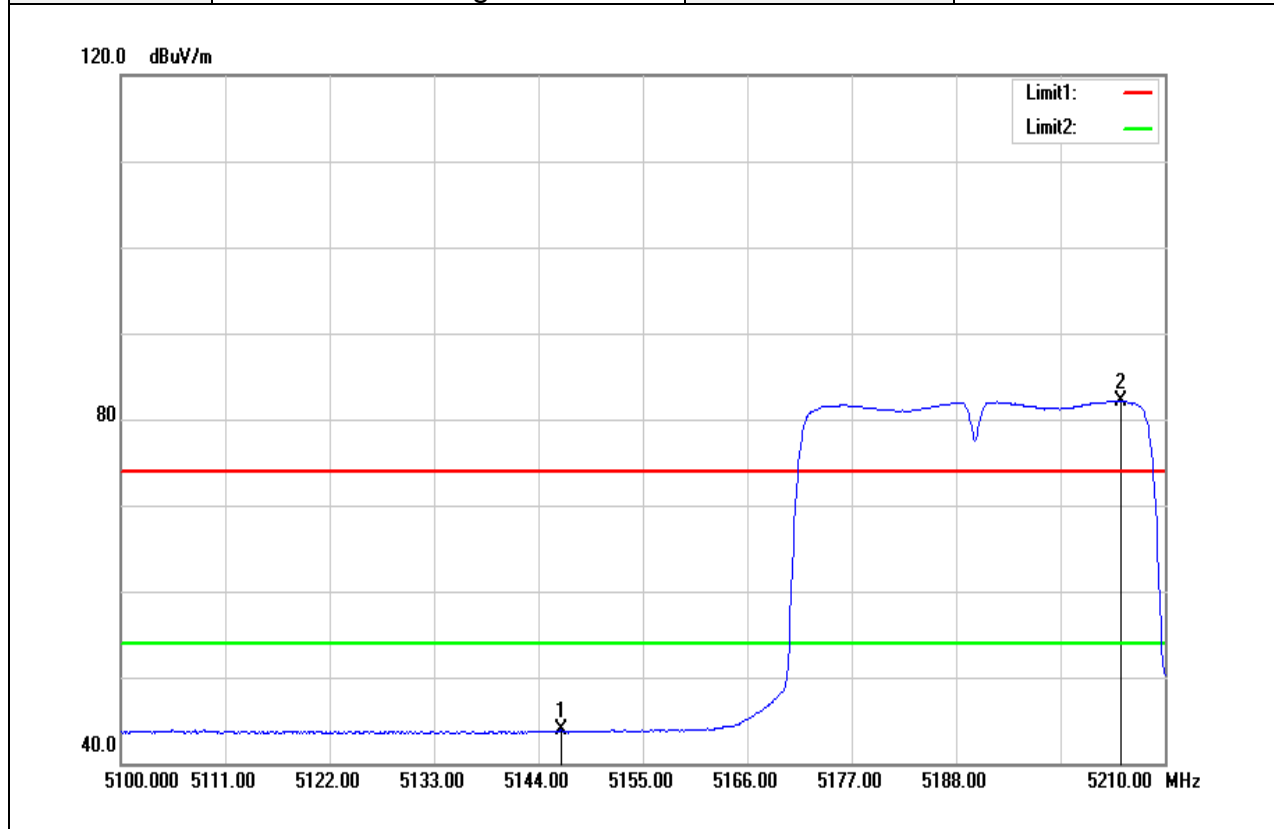
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5107.800	36.15	7.49	43.64	54.00	-10.36	AVG
5245.800	79.10	7.75	86.85	-	-	AVG
5400.000	35.61	8.03	43.64	54.00	-10.36	AVG

Test Mode	IEEE 802.11n HT40 Low CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak		



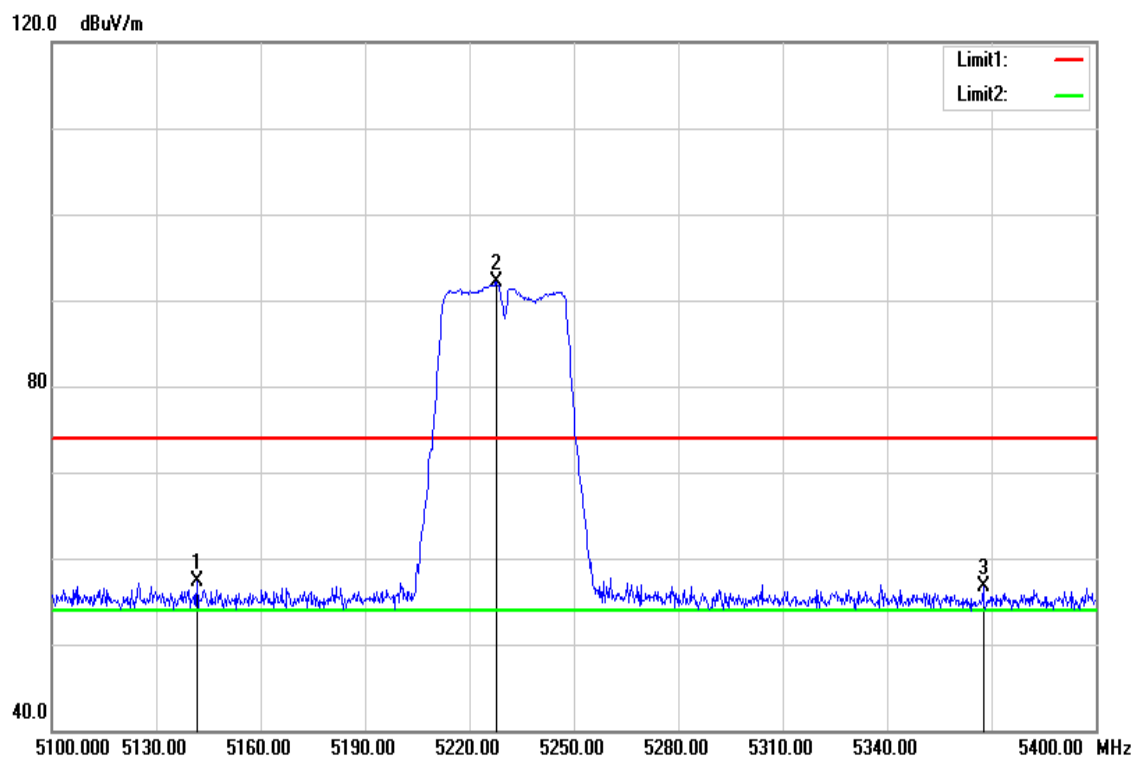
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5143.890	49.44	7.55	56.99	74.00	-17.01	peak
5187.560	84.19	7.64	91.83	-	-	peak

Test Mode	IEEE 802.11n HT40 Low CH	Temperature	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average		



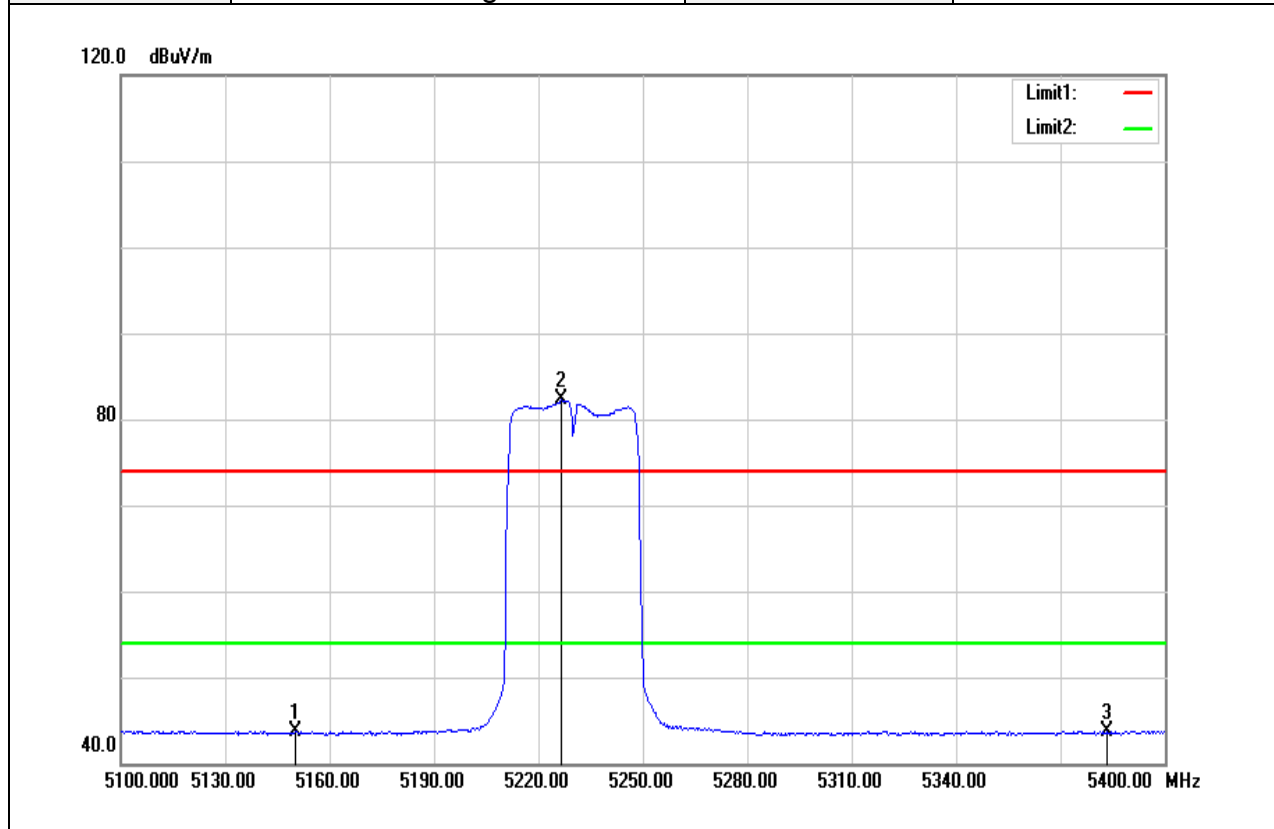
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5146.420	36.30	7.57	43.87	54.00	-10.13	AVG
5205.380	74.47	7.67	82.14	-	-	AVG

Test Mode	IEEE 802.11n HT40 High CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak		



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5141.700	49.69	7.55	57.24	74.00	-16.76	peak
5227.800	84.46	7.71	92.17	-	-	peak
5367.600	48.68	7.97	56.65	74.00	-17.35	peak

Test Mode	IEEE 802.11n HT40 High CH	Temperature	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average		

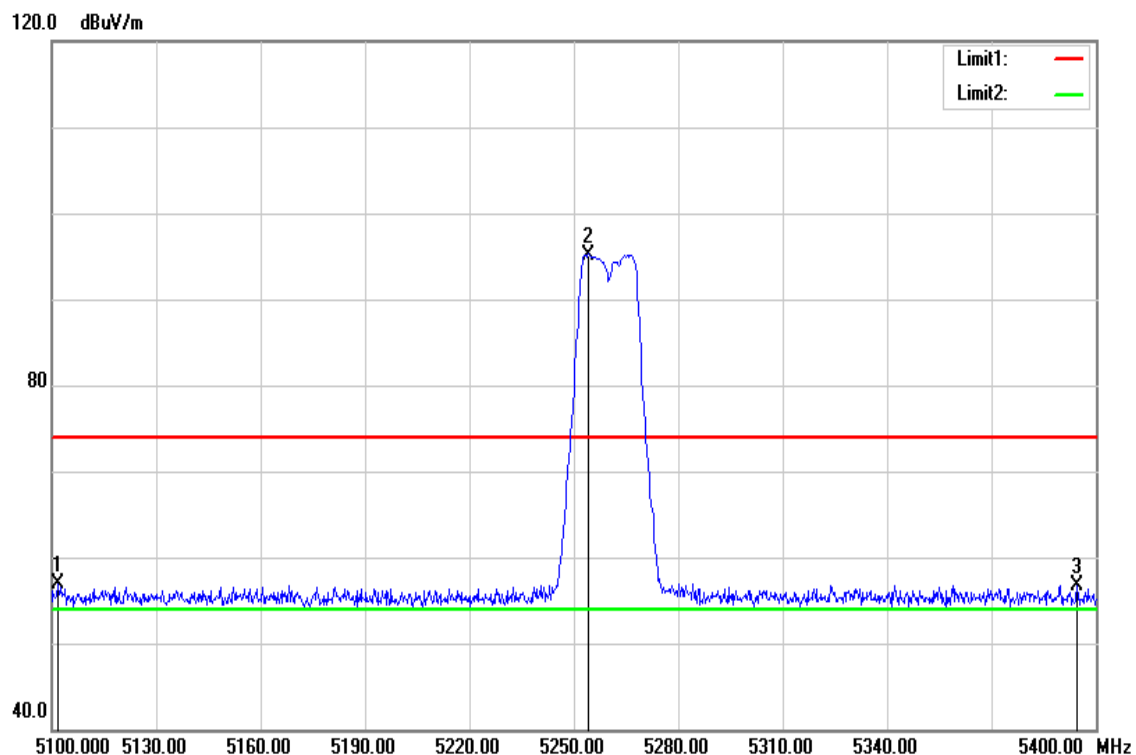


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5150.000	36.17	7.57	43.74	54.00	-10.26	AVG
5226.600	74.51	7.71	82.22	-	-	AVG
5383.200	35.70	7.99	43.69	54.00	-10.31	AVG

**Test Data**

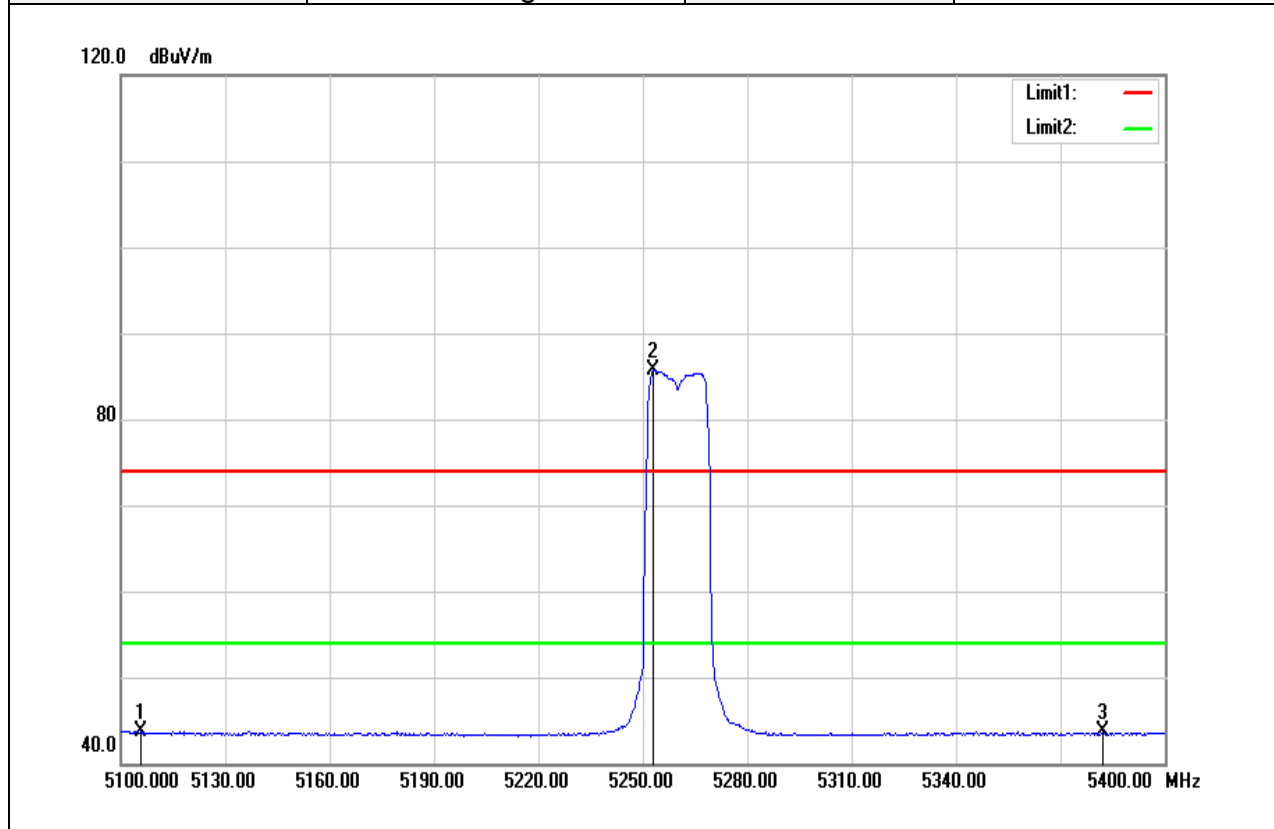
**Band Edge Test Data for UNII-2a**

Test Mode	IEEE 802.11a Low CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak		



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5101.800	49.46	7.47	56.93	74.00	-17.07	peak
5254.200	87.45	7.75	95.20	-	-	peak
5394.600	48.72	8.01	56.73	74.00	-17.27	peak

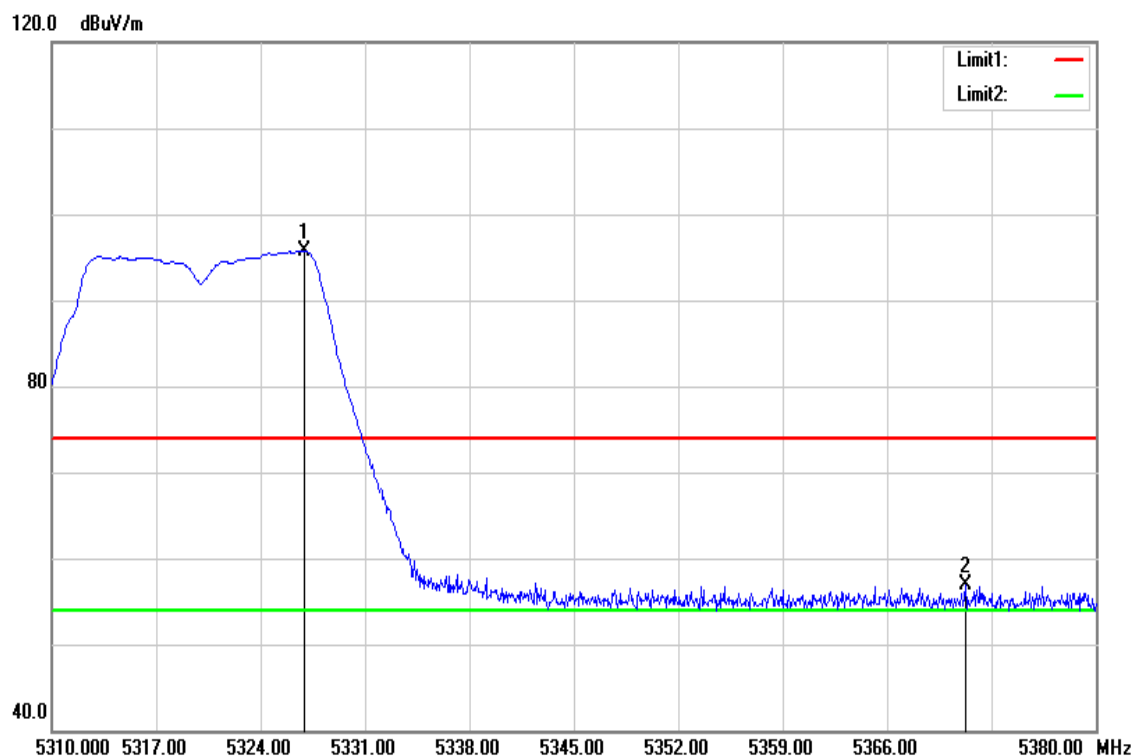
Test Mode	IEEE 802.11a Low CH	Temperature	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average		



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5105.700	36.28	7.49	43.77	54.00	-10.23	AVG
5253.000	77.89	7.75	85.64	-	-	AVG
5405.700	36.28	7.49	43.77	54.00	-10.23	AVG

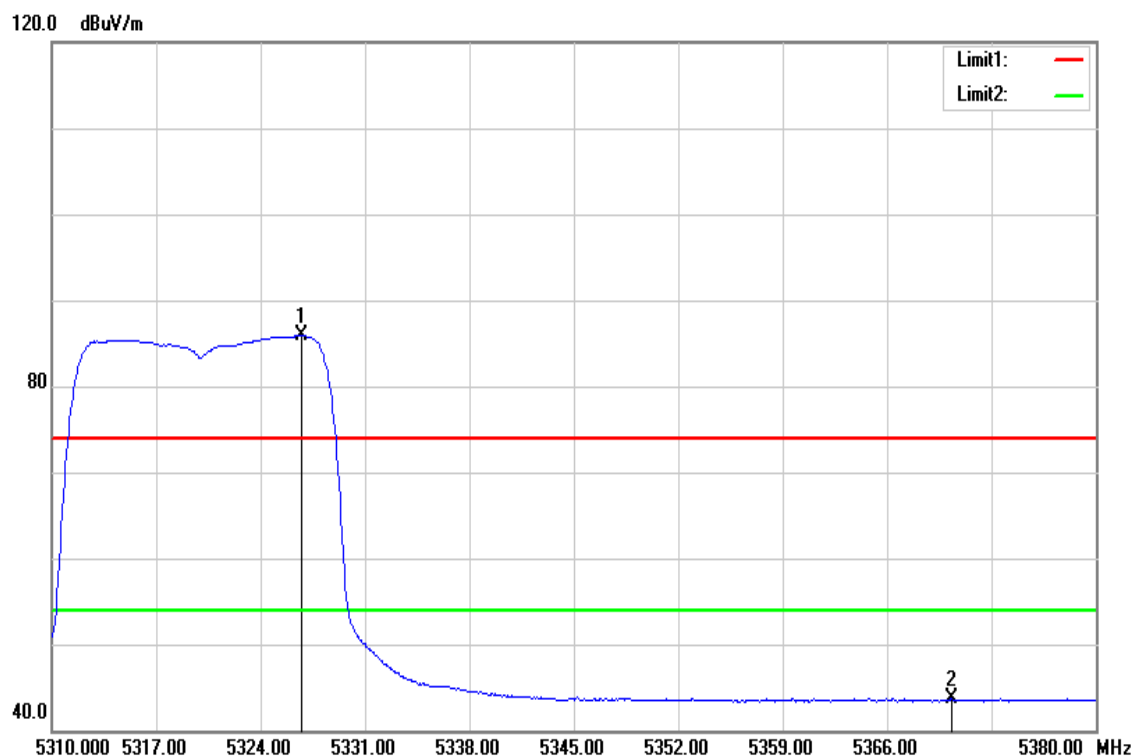


Test Mode	IEEE 802.11a High CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak		



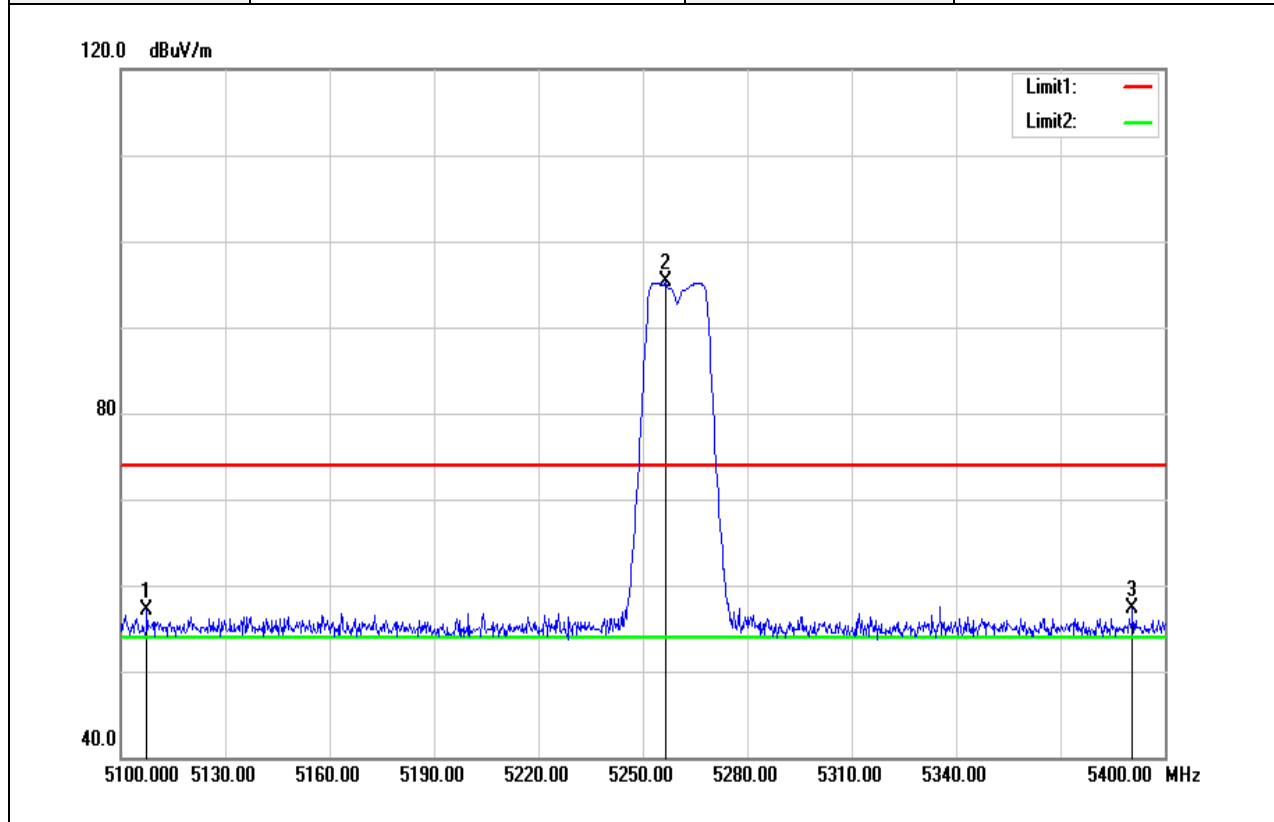
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5326.940	87.83	7.90	95.73	-	-	peak
5371.250	48.94	7.97	56.91	74.00	-17.09	peak
N/A						

Test Mode	IEEE 802.11a High CH	Temperature	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average		



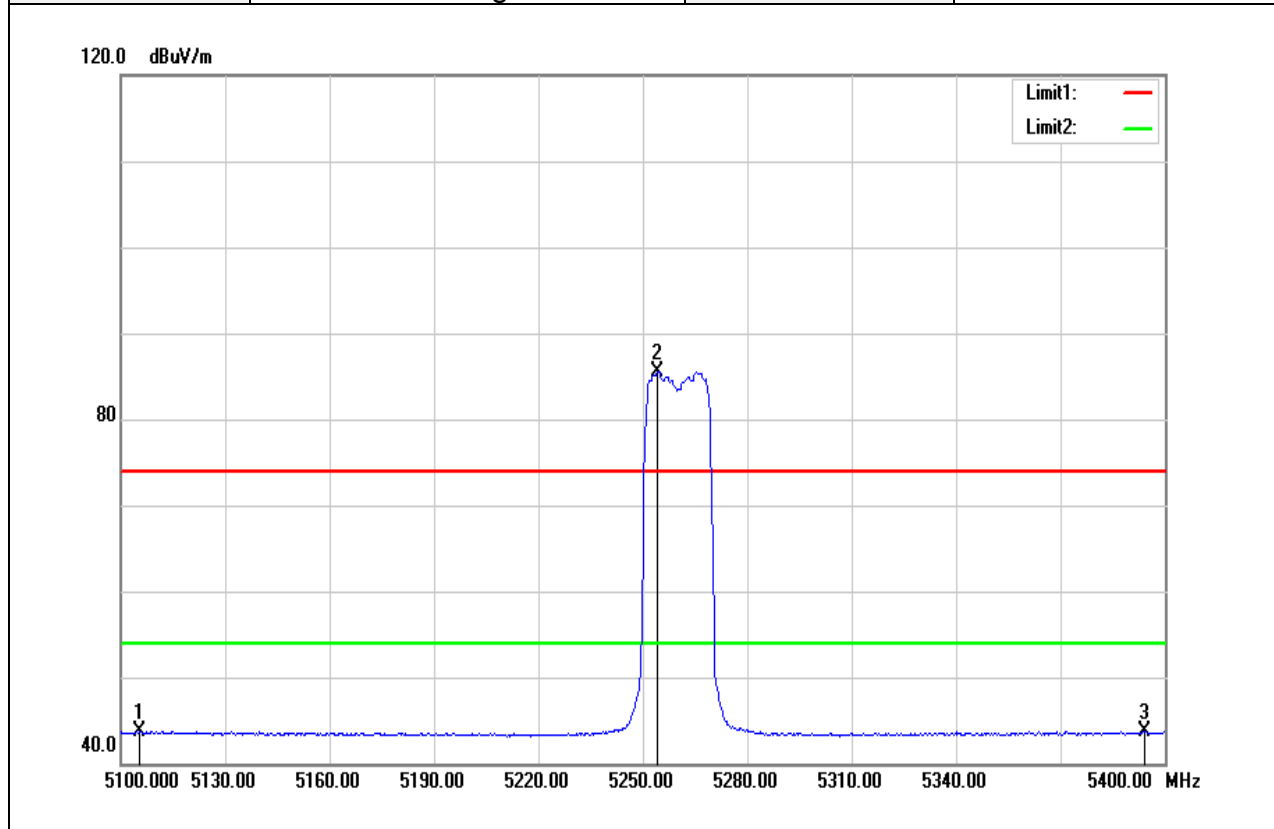
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5326.730	78.06	7.90	85.96	-	-	AVG
5370.340	35.73	7.97	43.70	54.00	-10.30	AVG
N/A						

Test Mode	IEEE 802.11n HT20 Low CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak		



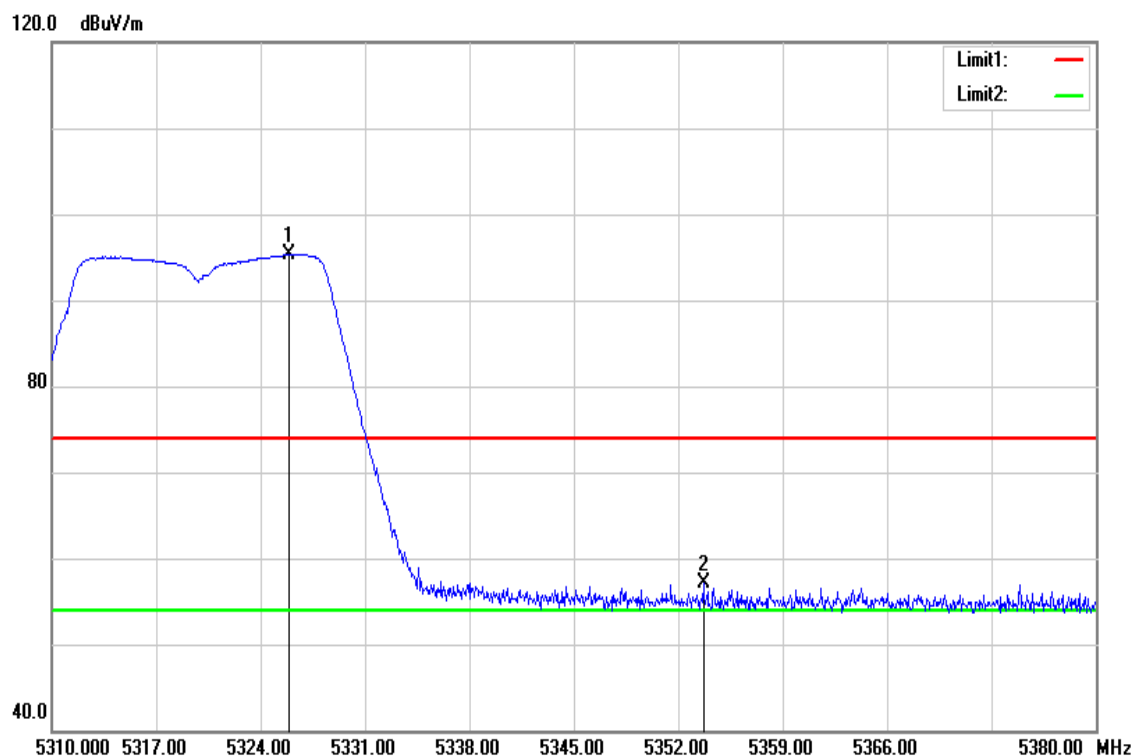
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5107.500	49.68	7.49	57.17	74.00	-16.83	peak
5256.600	87.47	7.76	95.23	-	-	peak
5390.700	49.39	8.00	57.39	74.00	-16.61	peak

Test Mode	IEEE 802.11n HT20 Low CH	Temperature	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average		



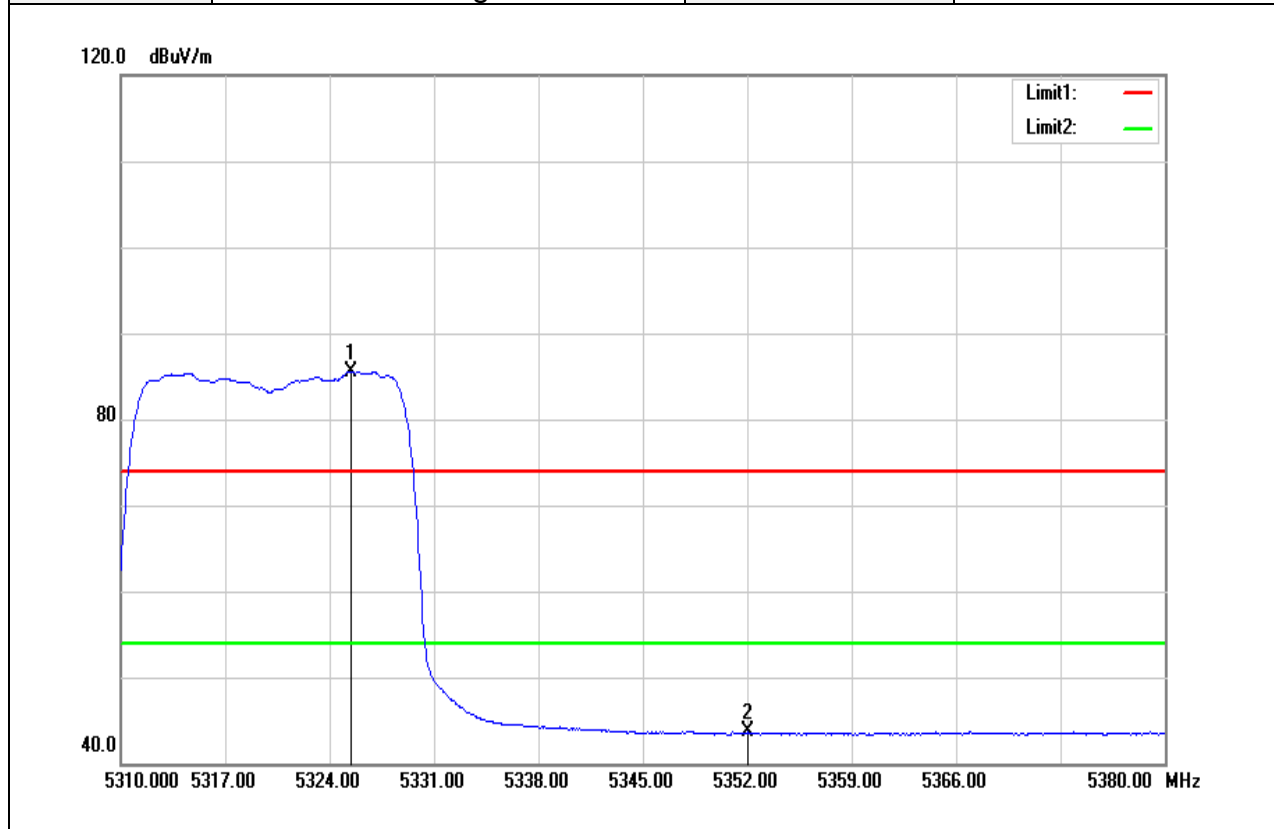
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5105.400	36.21	7.49	43.70	54.00	-10.30	AVG
5254.200	77.74	7.75	85.49	-	-	AVG
5394.300	35.77	8.01	43.78	54.00	-10.22	AVG

Test Mode	IEEE 802.11n HT20 High CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak		



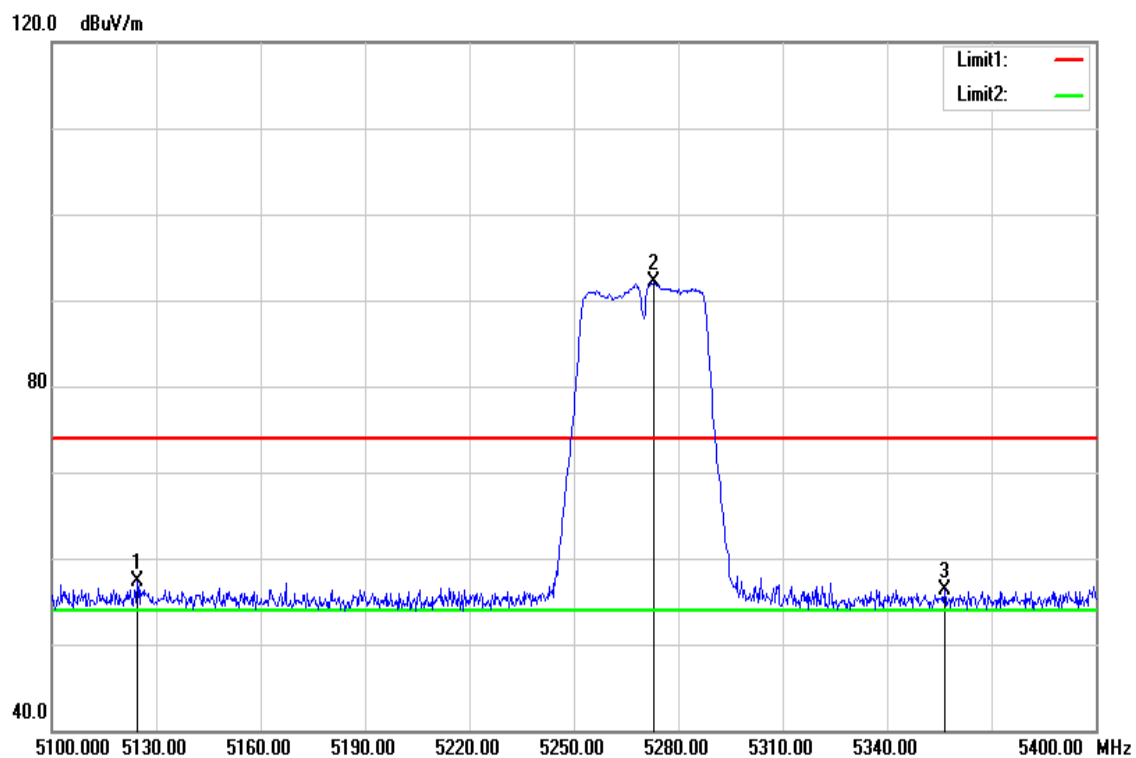
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5325.890	87.42	7.90	95.32	-	-	peak
5353.680	49.11	7.93	57.04	74.00	-16.96	peak
N/A						

Test Mode	IEEE 802.11n HT20 High CH	Temperature	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average		



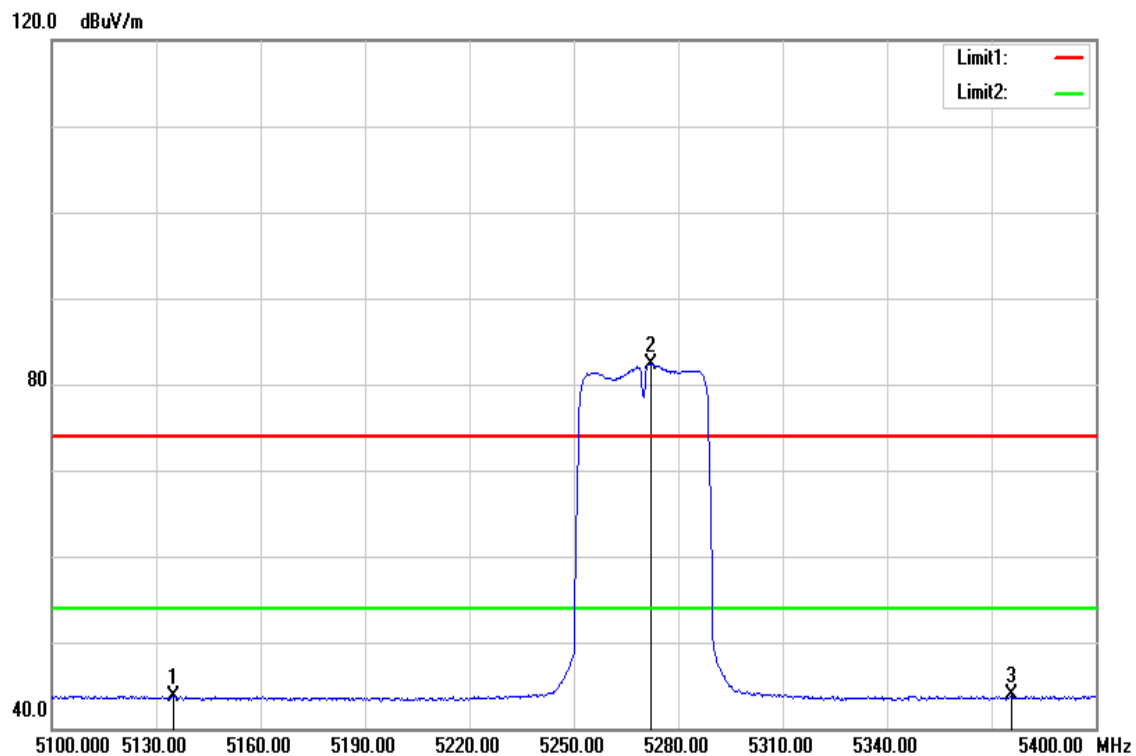
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5325.400	77.64	7.90	85.54	-	-	AVG
5352.000	35.72	7.93	43.65	54.00	-10.35	AVG
N/A						

Test Mode	IEEE 802.11n HT40 Low CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak		



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5124.600	49.74	7.51	57.25	74.00	-16.75	peak
5273.100	84.23	7.79	92.02	-	-	peak
5356.500	48.44	7.95	56.39	74.00	-17.61	peak

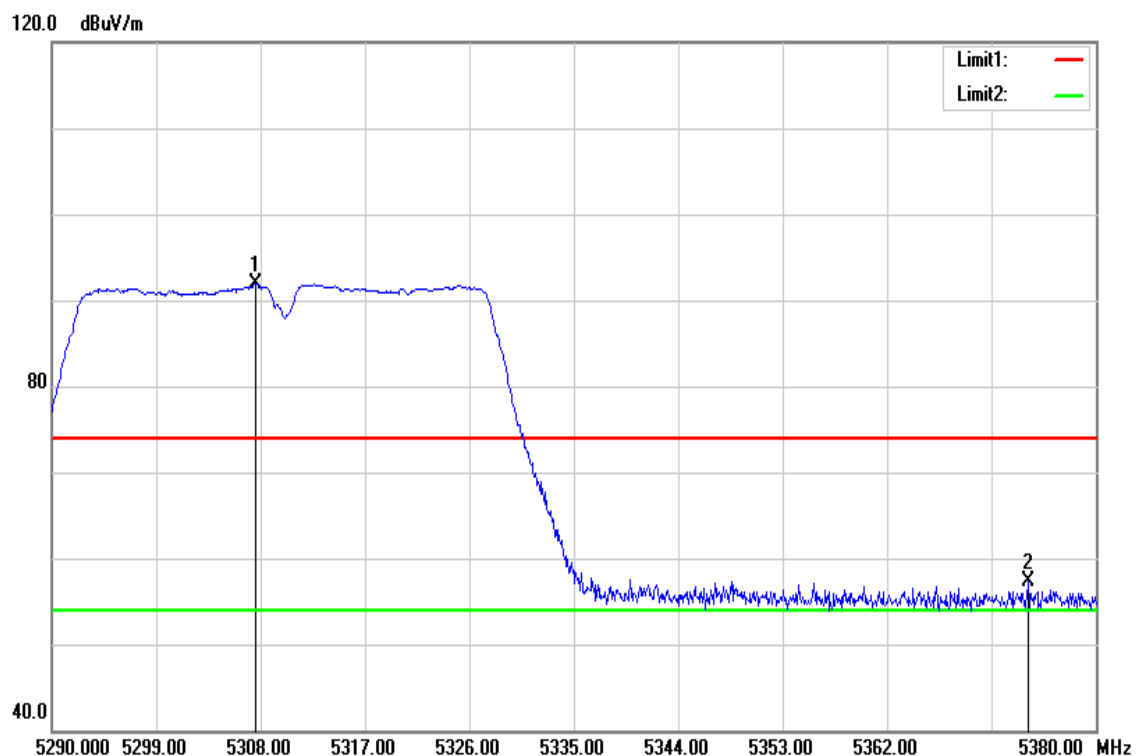
Test Mode	IEEE 802.11n HT40 Low CH	Temperature	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average		



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5135.100	36.20	7.54	43.74	54.00	-10.26	AVG
5272.200	74.59	7.79	82.38	-	-	AVG
5375.700	35.84	7.99	43.83	54.00	-10.17	AVG

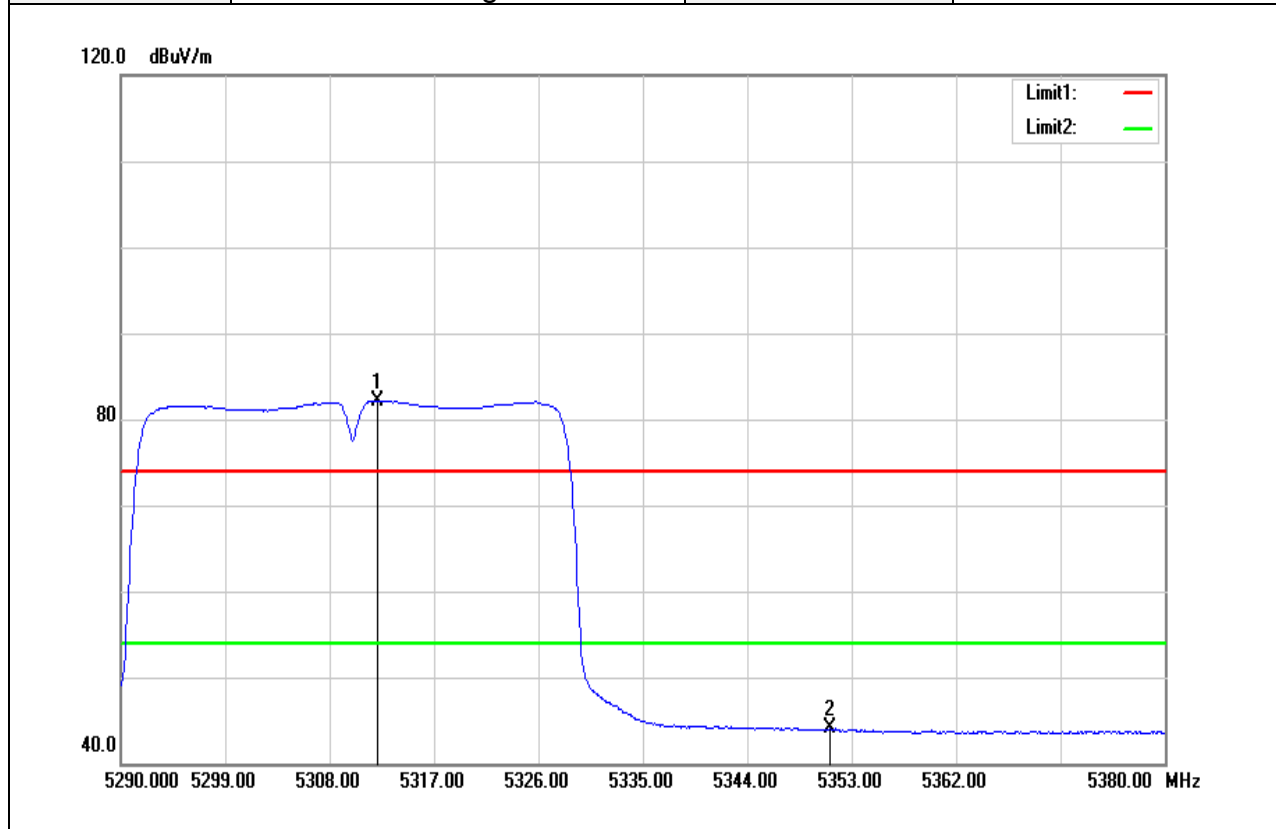


Test Mode	IEEE 802.11n HT40 High CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak		



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5307.550	84.04	7.85	91.89	-	-	peak
5374.150	49.32	7.97	57.29	74.00	-16.71	peak
N/A						

Test Mode	IEEE 802.11n HT40 High CH	Temperature	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average		

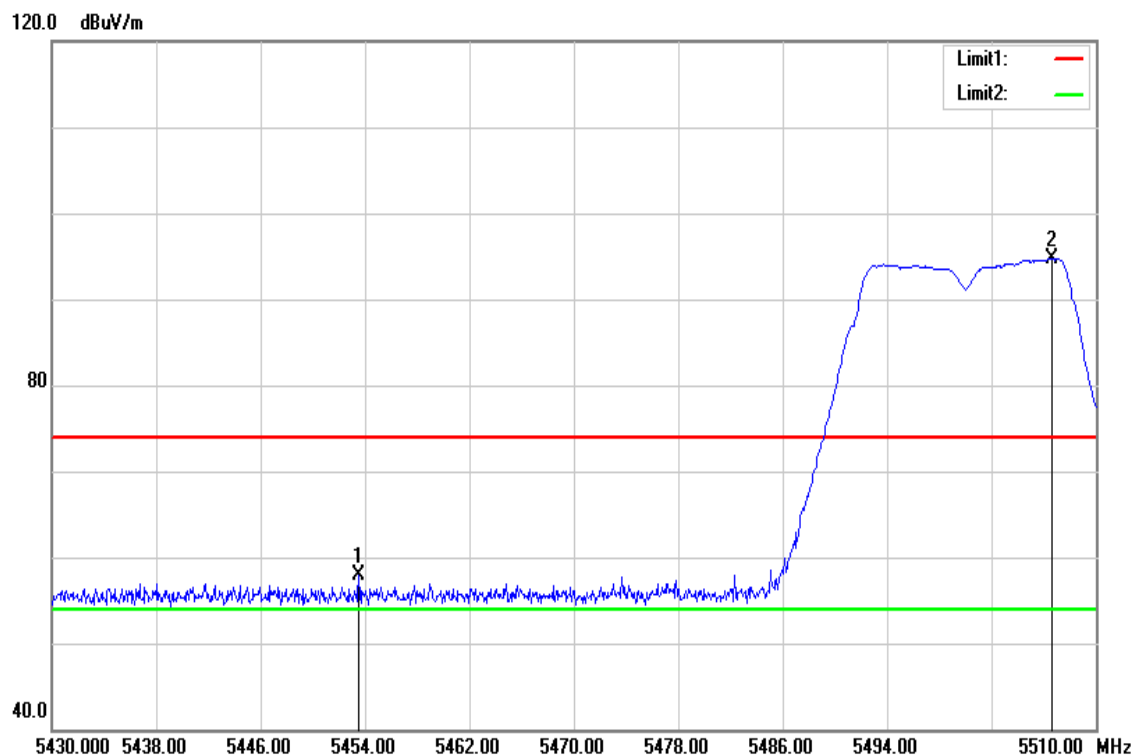


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5312.140	74.26	7.86	82.12	-	-	AVG
5351.110	36.12	7.93	44.05	54.00	-9.95	AVG
N/A						

**Test Data**

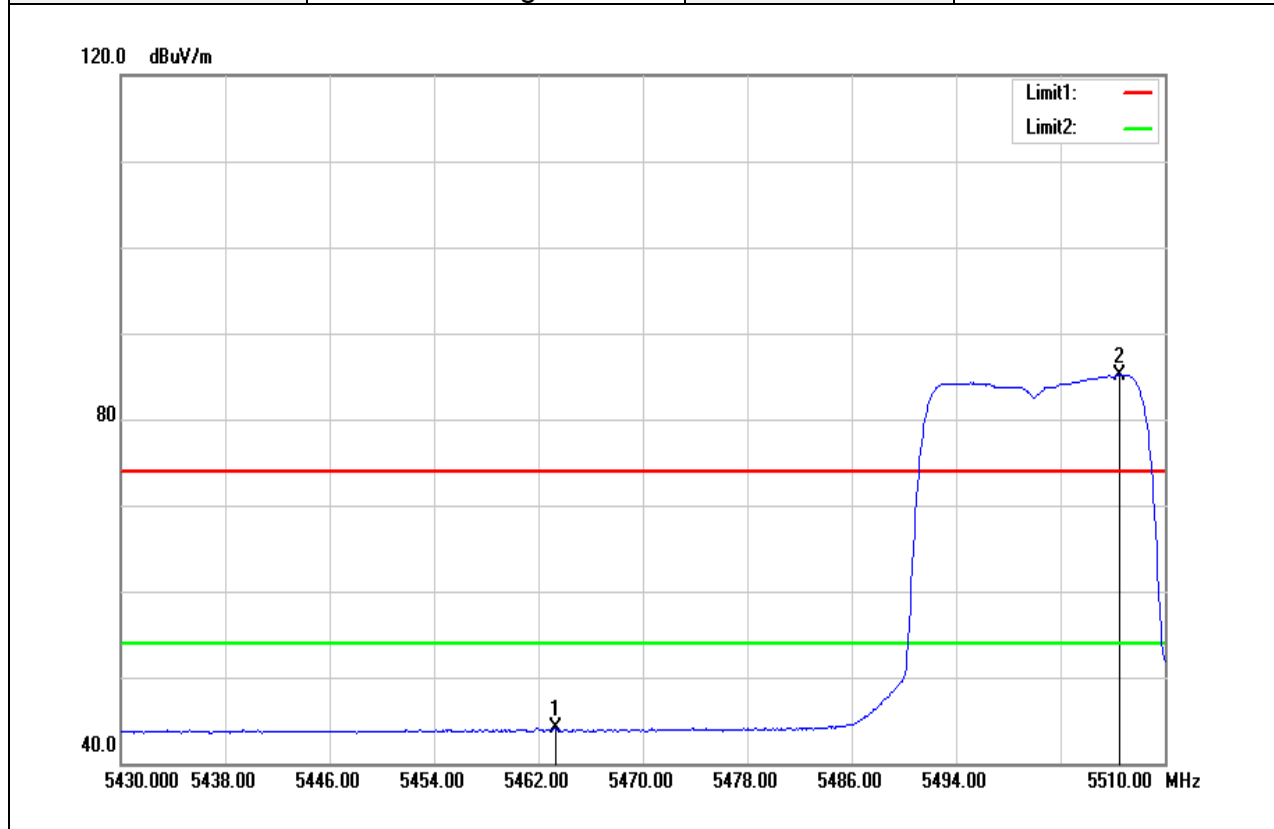
**Band Edge Test Data for UNII-2c**

Test Mode	IEEE 802.11a Low CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak		



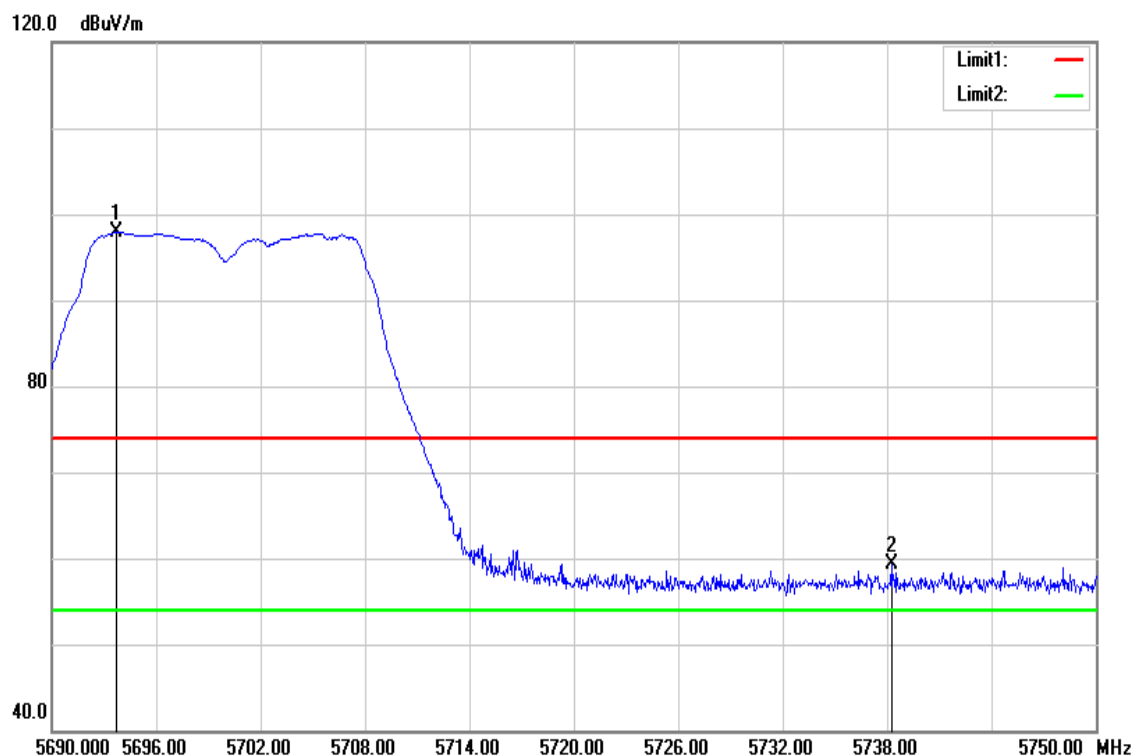
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5453.520	49.87	8.12	57.99	74.00	-16.01	peak
5506.640	86.54	8.23	94.77	-	-	peak

Test Mode	IEEE 802.11a Low CH	Temperature	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average		



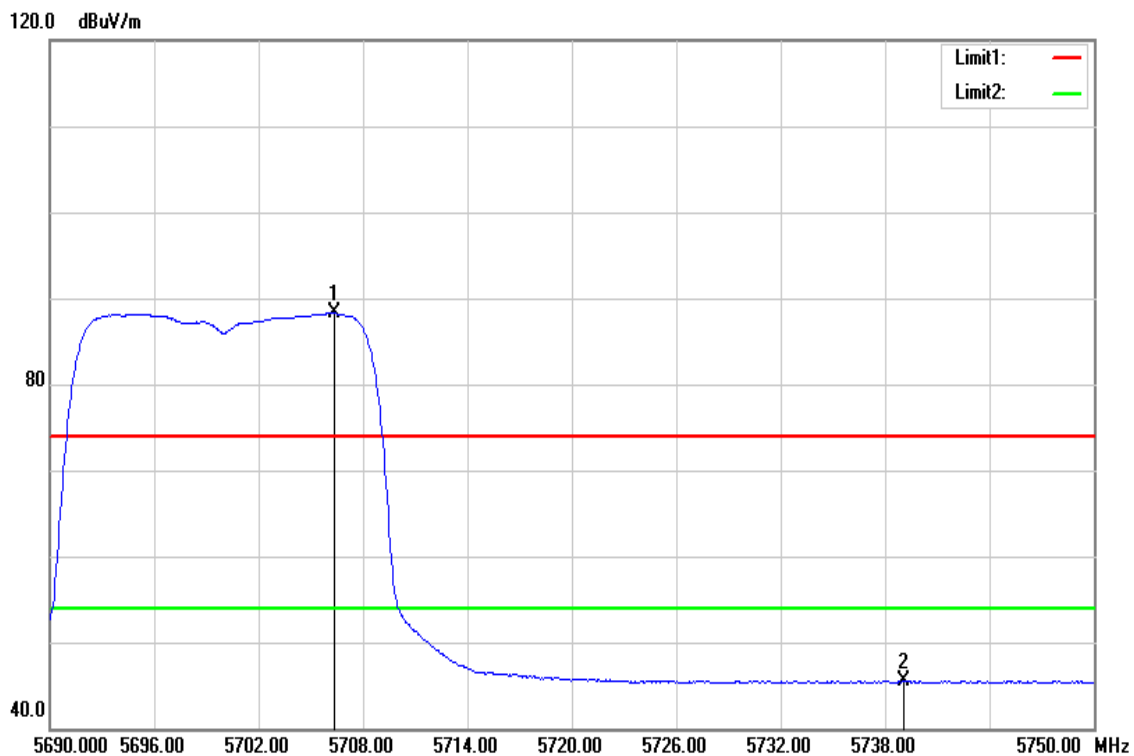
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5463.280	35.94	8.14	44.08	54.00	-9.92	AVG
5506.560	76.87	8.23	85.10	-	-	AVG

Test Mode	IEEE 802.11a High CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak		



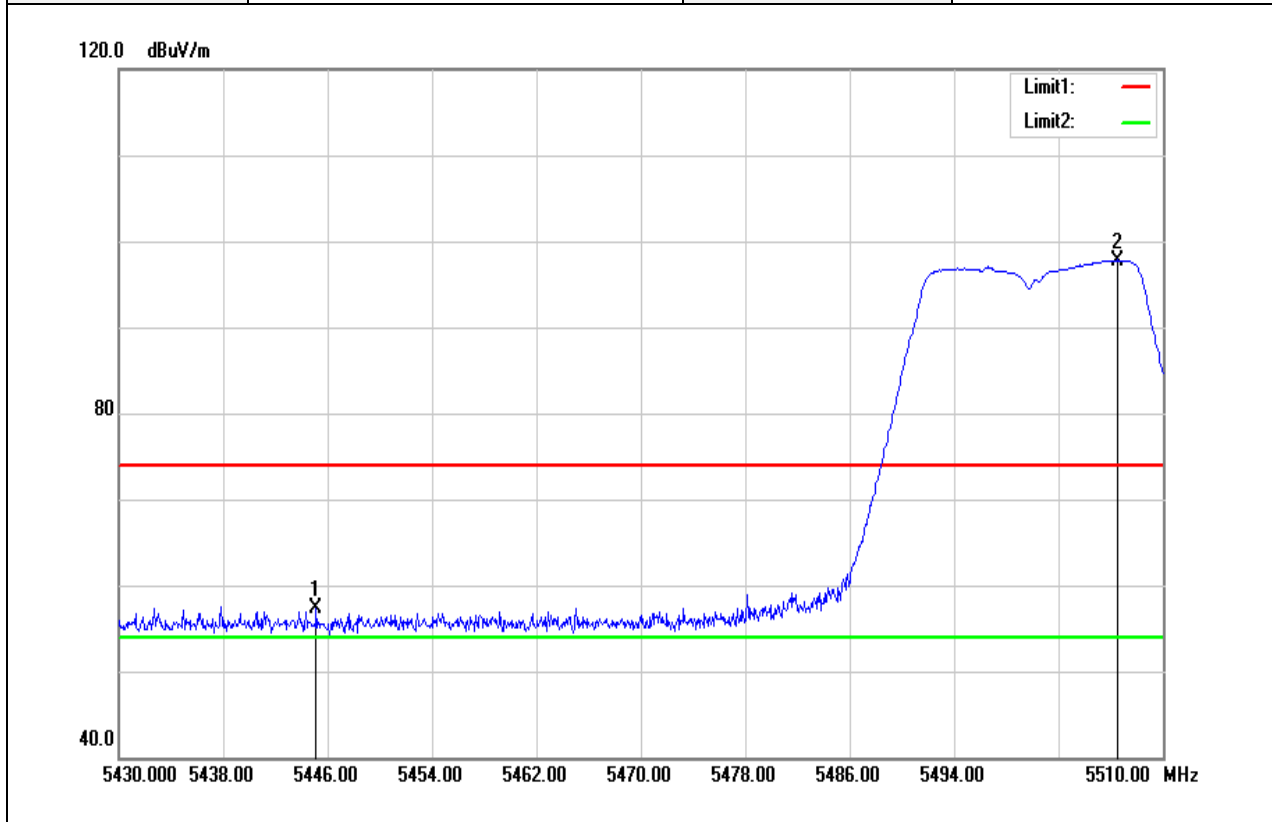
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5693.720	89.07	8.87	97.94	-	-	peak
5738.240	50.35	9.03	59.38	74.00	-14.62	peak
N/A						

Test Mode	IEEE 802.11a High CH	Temperature	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average		



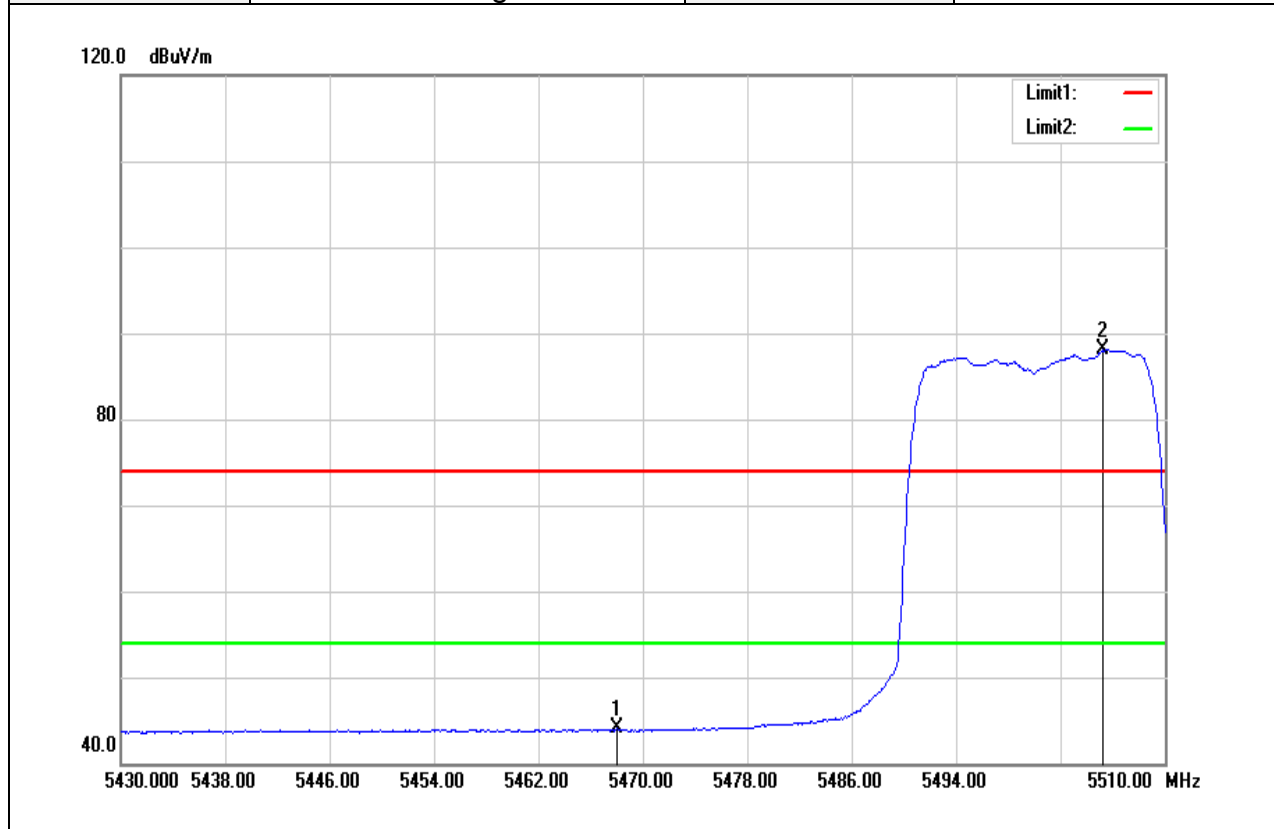
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5706.320	79.33	8.92	88.25	-	-	AVG
5739.080	36.55	9.03	45.58	54.00	-8.42	AVG
N/A						

Test Mode	IEEE 802.11n HT20 Low CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak		



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5445.120	49.21	8.12	57.33	74.00	-16.67	peak
5506.480	89.57	8.23	97.80	-	-	peak

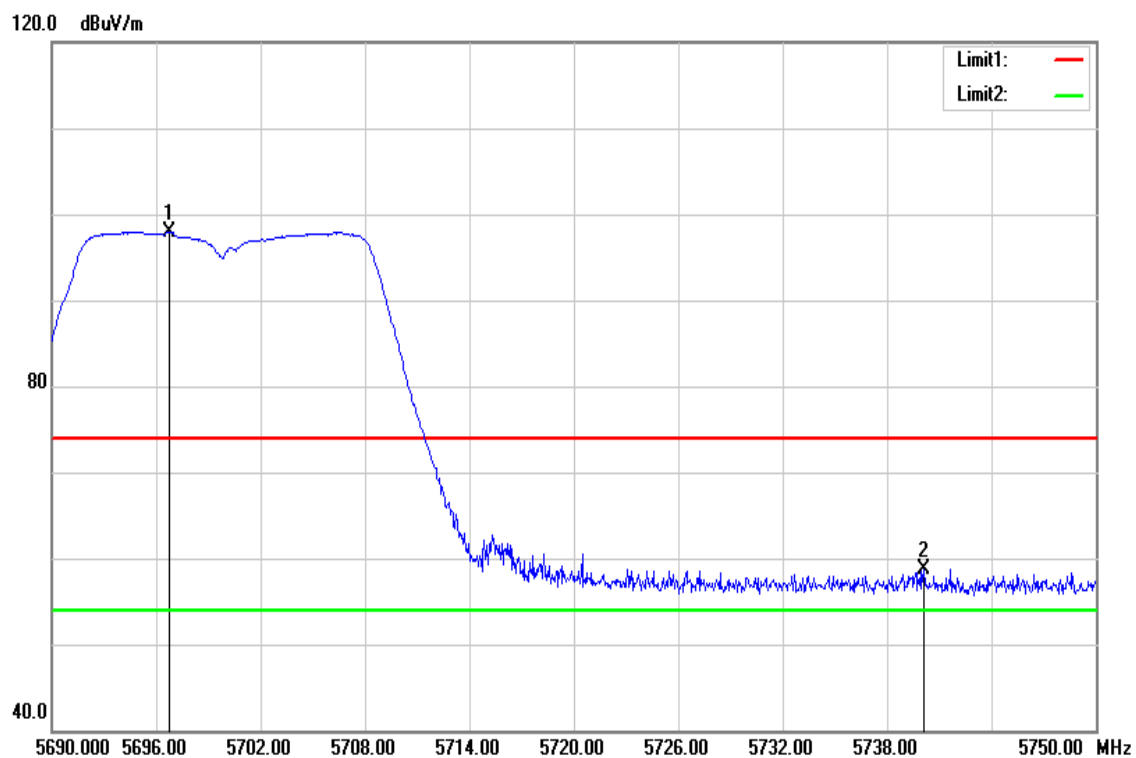
Test Mode	IEEE 802.11n HT20 Low CH	Temperature	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average		



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5468.000	35.86	8.15	44.01	54.00	-9.99	AVG
5505.280	79.80	8.23	88.03	-	-	AVG

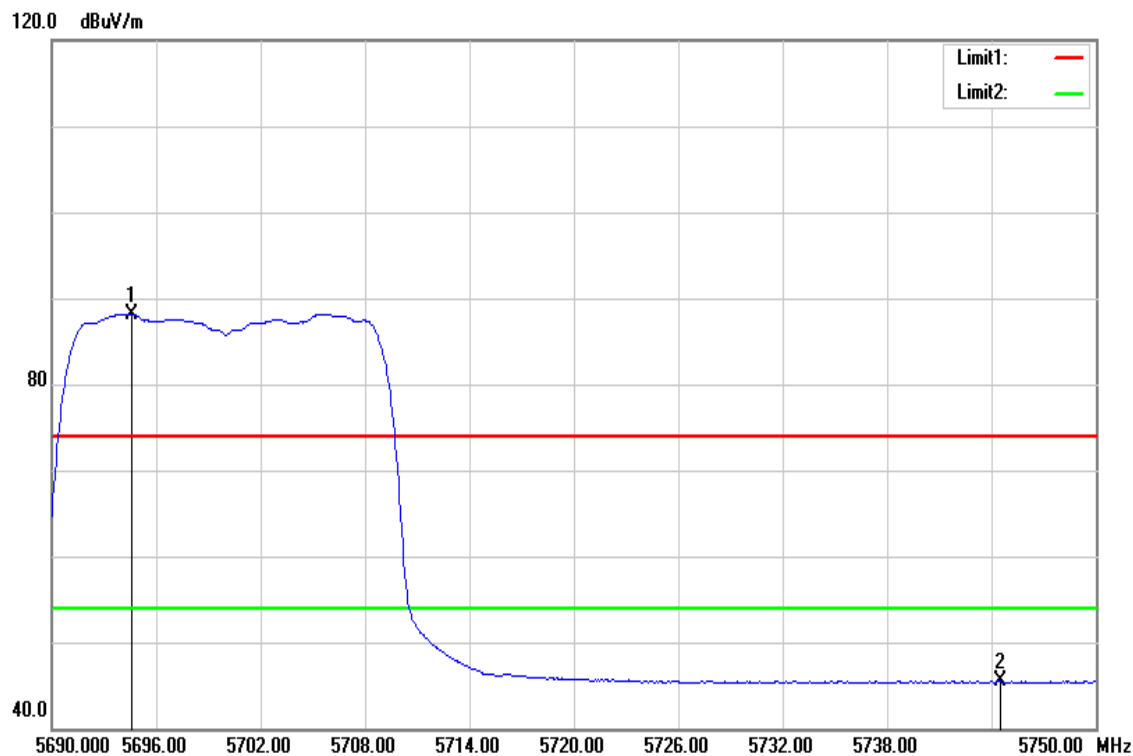


Test Mode	IEEE 802.11n HT20 High CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak		



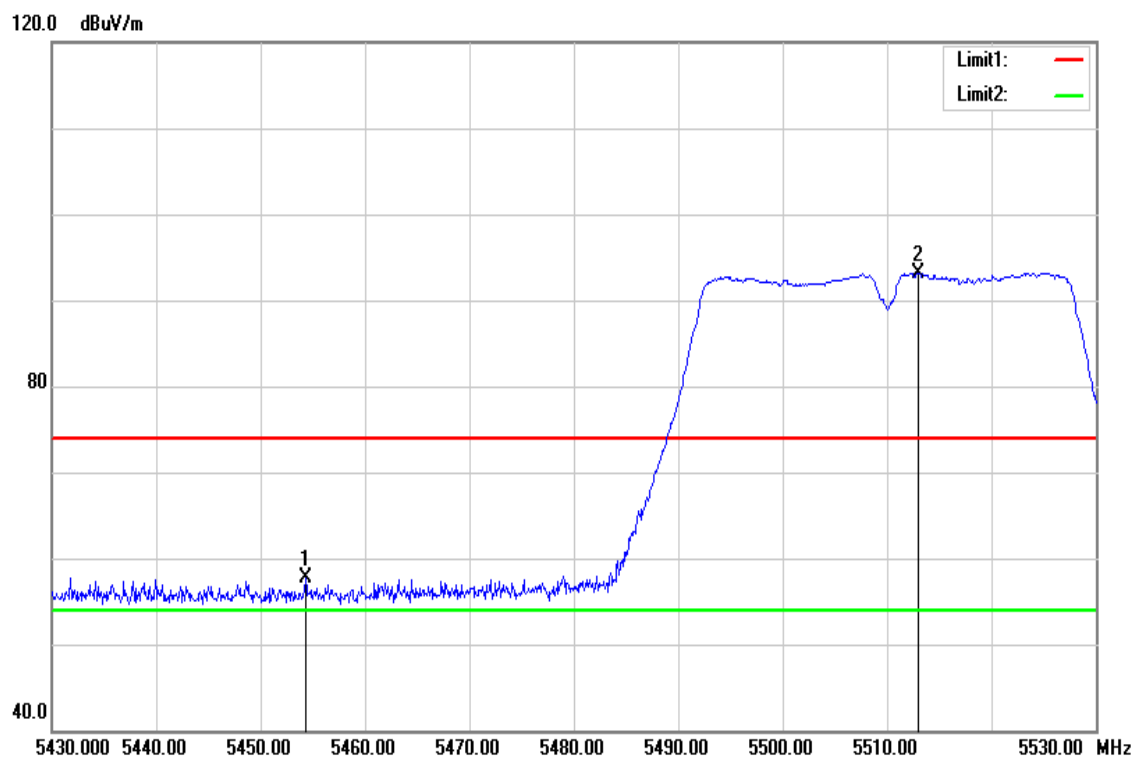
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5696.720	89.08	8.88	97.96	-	-	peak
5740.100	49.67	9.03	58.70	74.00	-15.30	peak
N/A						

Test Mode	IEEE 802.11n HT20 High CH	Temperature	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average		



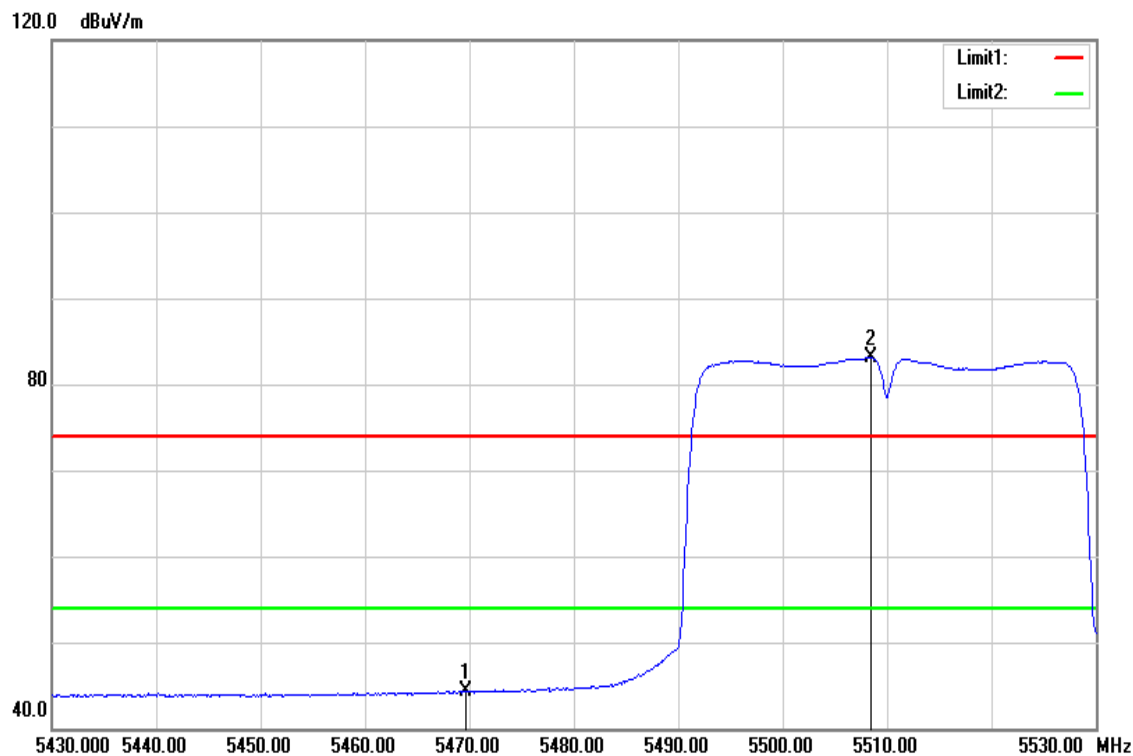
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5694.560	79.32	8.87	88.19	-	-	AVG
5744.540	36.48	9.04	45.52	54.00	-8.48	AVG
N/A						

Test Mode	IEEE 802.11n HT40 Low CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak		



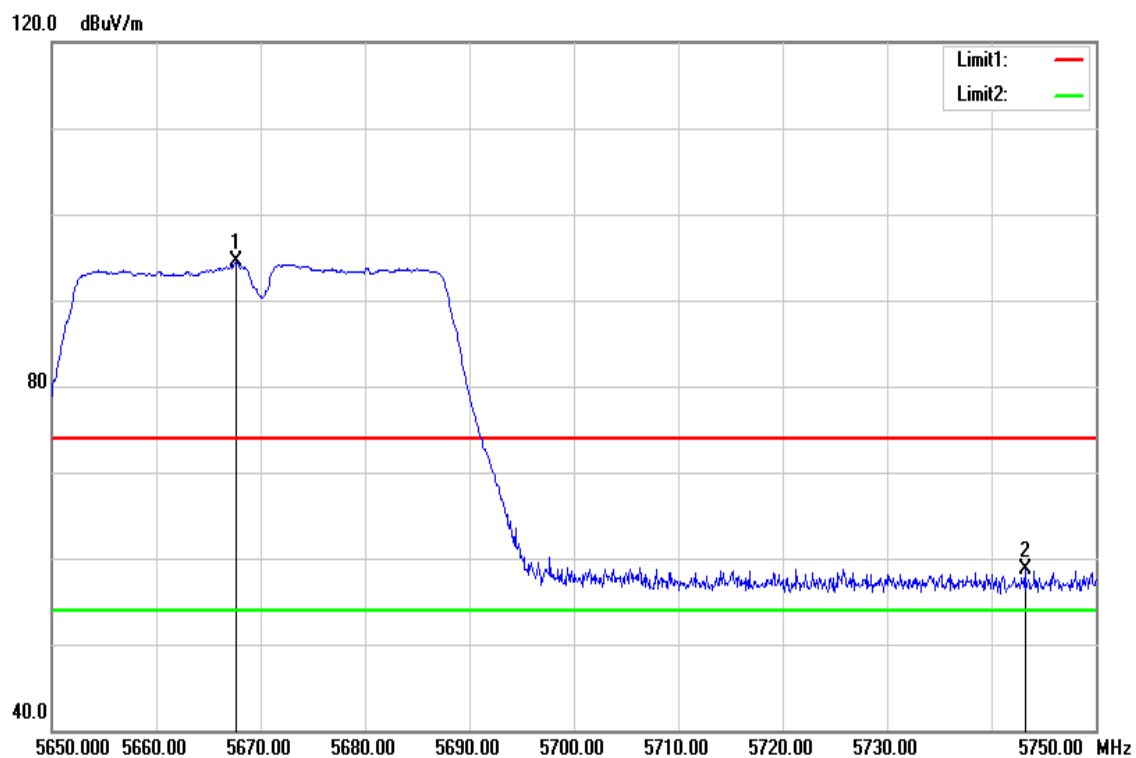
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5454.300	49.62	8.12	57.74	74.00	-16.26	peak
5513.000	84.92	8.26	93.18	-	-	peak

Test Mode	IEEE 802.11n HT40 Low CH	Temperature	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average		



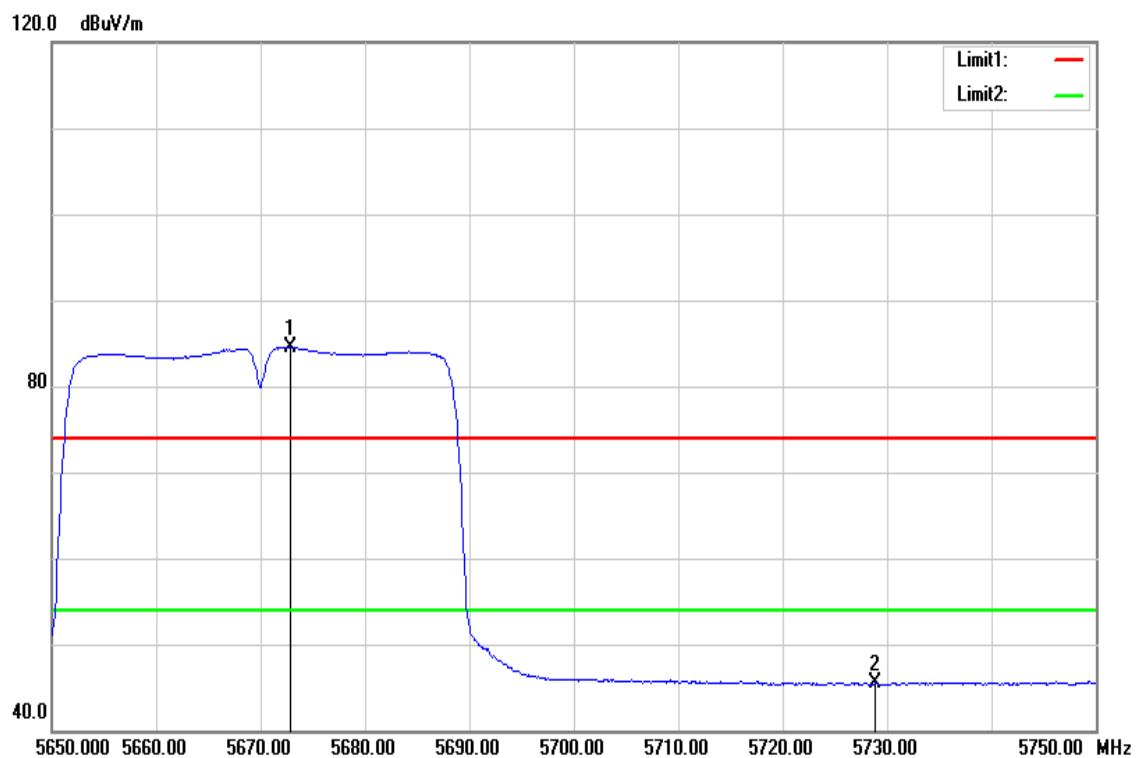
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5469.700	36.18	8.15	44.33	54.00	-9.67	AVG
5508.500	74.83	8.24	83.07	-	-	AVG

Test Mode	IEEE 802.11n HT40 High CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak		



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5667.600	85.65	8.79	94.44	-	-	peak
5743.200	49.70	9.04	58.74	74.00	-15.26	peak
N/A						

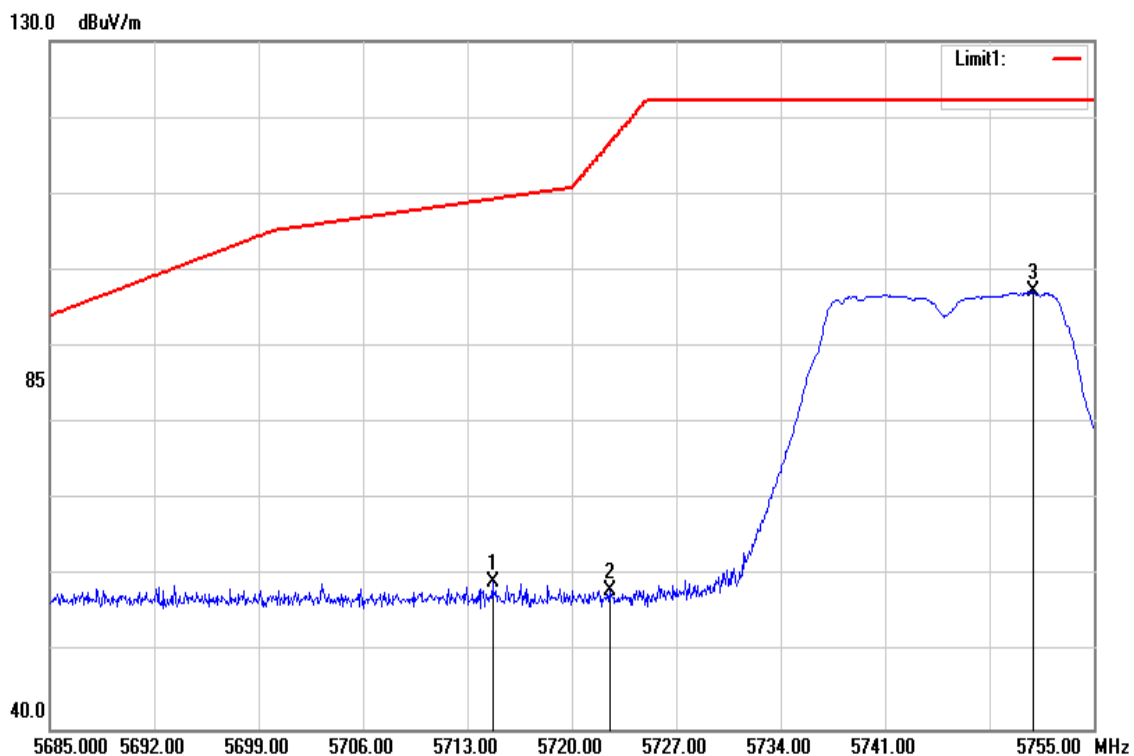
Test Mode	IEEE 802.11n HT40 High CH	Temperature	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average		



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5672.900	75.69	8.81	84.50	-	-	AVG
5728.800	36.59	8.99	45.58	54.00	-8.42	AVG
N/A						

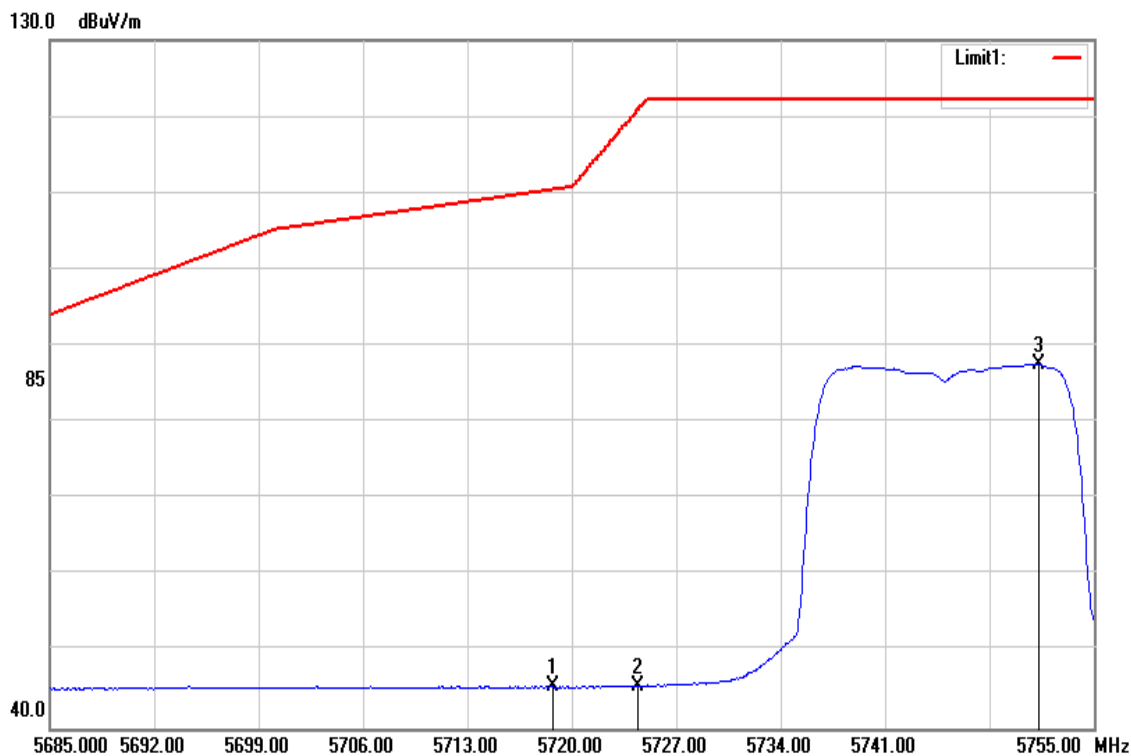
**Band Edge Test Data for UNII-3**

Test Mode	IEEE 802.11a Low CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak		



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5714.680	50.37	8.95	59.32	109.31	-49.99	peak
5722.520	49.19	8.98	58.17	116.55	-58.38	peak
5750.940	88.09	9.07	97.16	-	-	peak

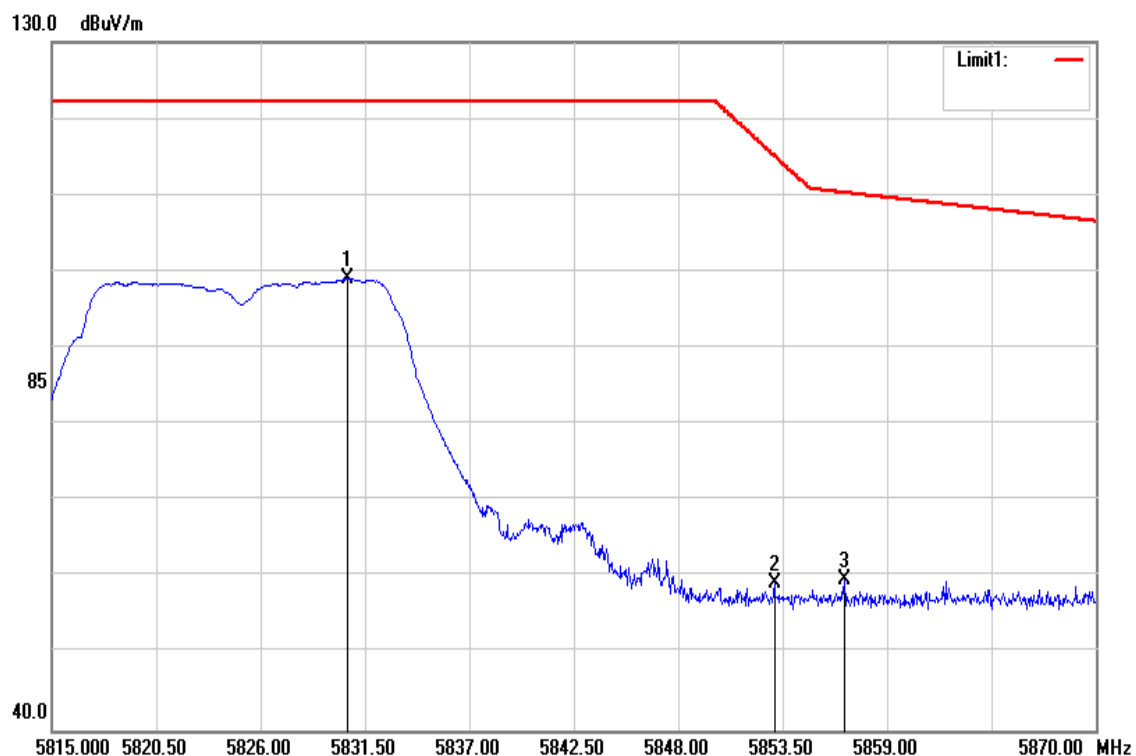
Test Mode	IEEE 802.11a Low CH	Temperature	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average		



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5718.740	36.53	8.96	45.49	110.45	-64.96	AVG
5724.410	36.63	8.98	45.61	120.85	-75.24	AVG
5751.360	78.55	9.07	87.62	-	-	AVG

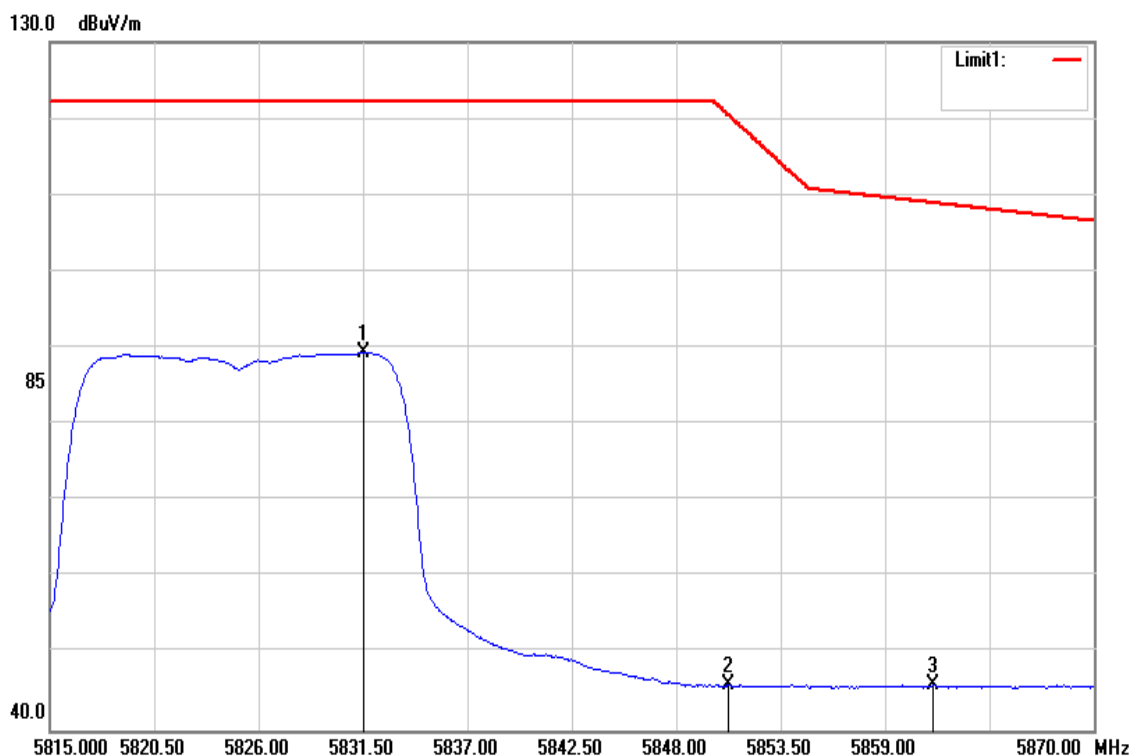


Test Mode	IEEE 802.11a High CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak		



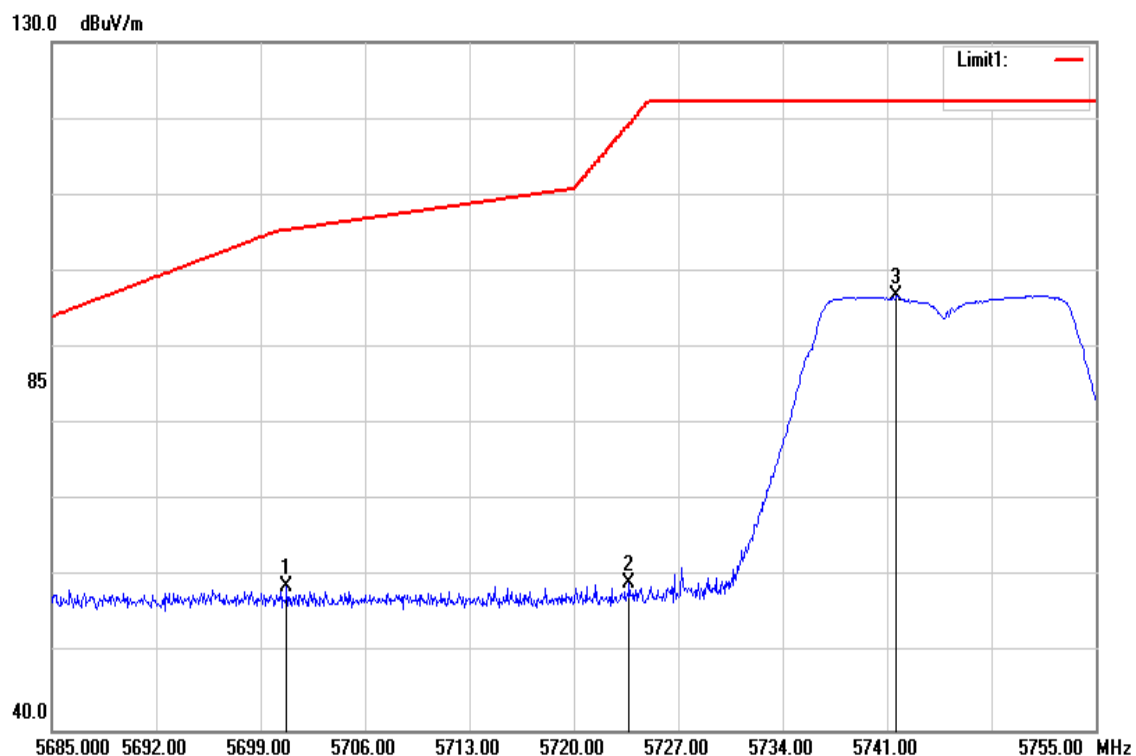
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5830.565	89.66	9.34	99.00	-	-	peak
5853.060	49.83	9.42	59.25	115.22	-55.97	peak
5856.745	50.24	9.43	59.67	110.31	-50.64	peak

Test Mode	IEEE 802.11a High CH	Temperature	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average		



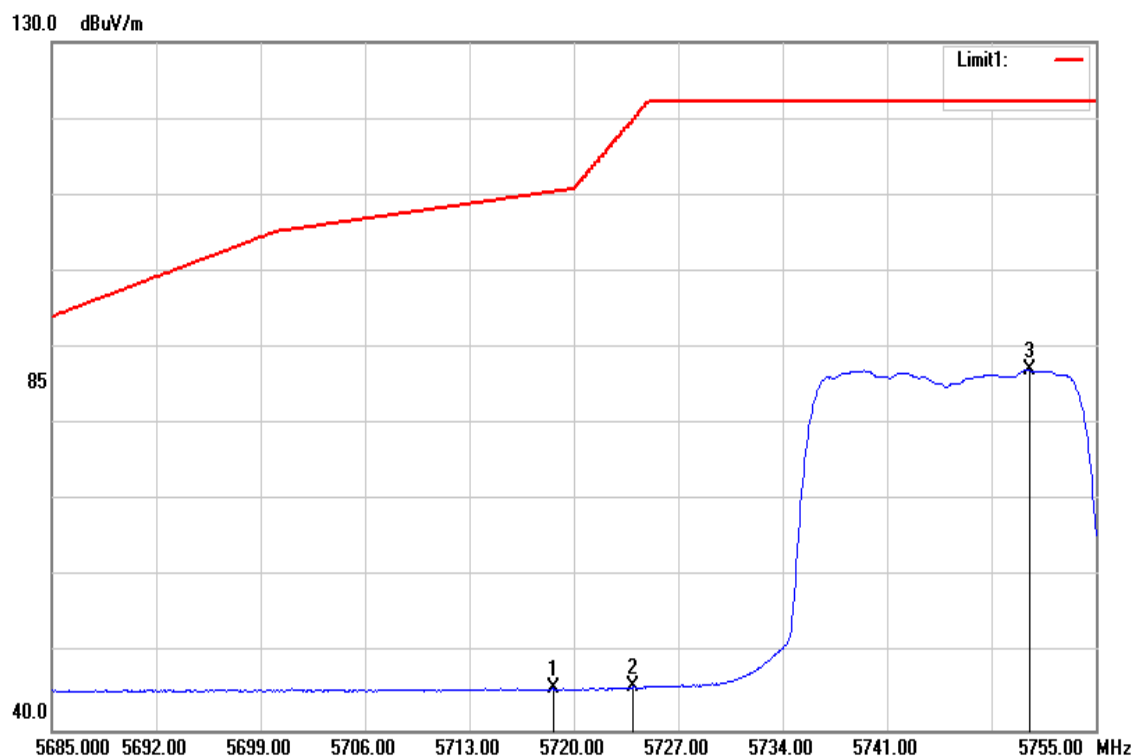
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5831.555	80.07	9.34	89.41	-	-	AVG
5850.750	36.55	9.41	45.96	120.49	-74.53	AVG
5861.530	36.49	9.44	45.93	108.97	-63.04	AVG

Test Mode	IEEE 802.11n HT20 Low CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak		



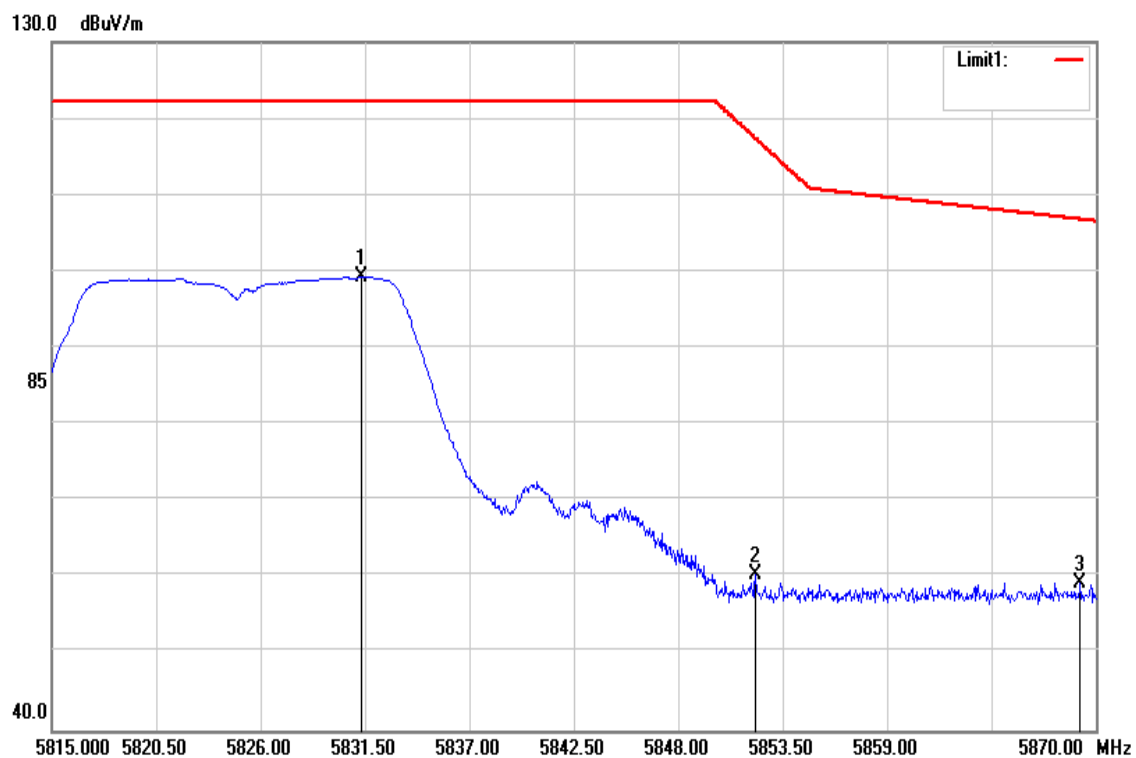
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5700.750	49.88	8.89	58.77	105.41	-46.64	peak
5723.710	50.35	8.98	59.33	119.26	-59.93	peak
5741.630	87.81	9.03	96.84	-	-	peak

Test Mode	IEEE 802.11n HT20 Low CH	Temperature	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average		



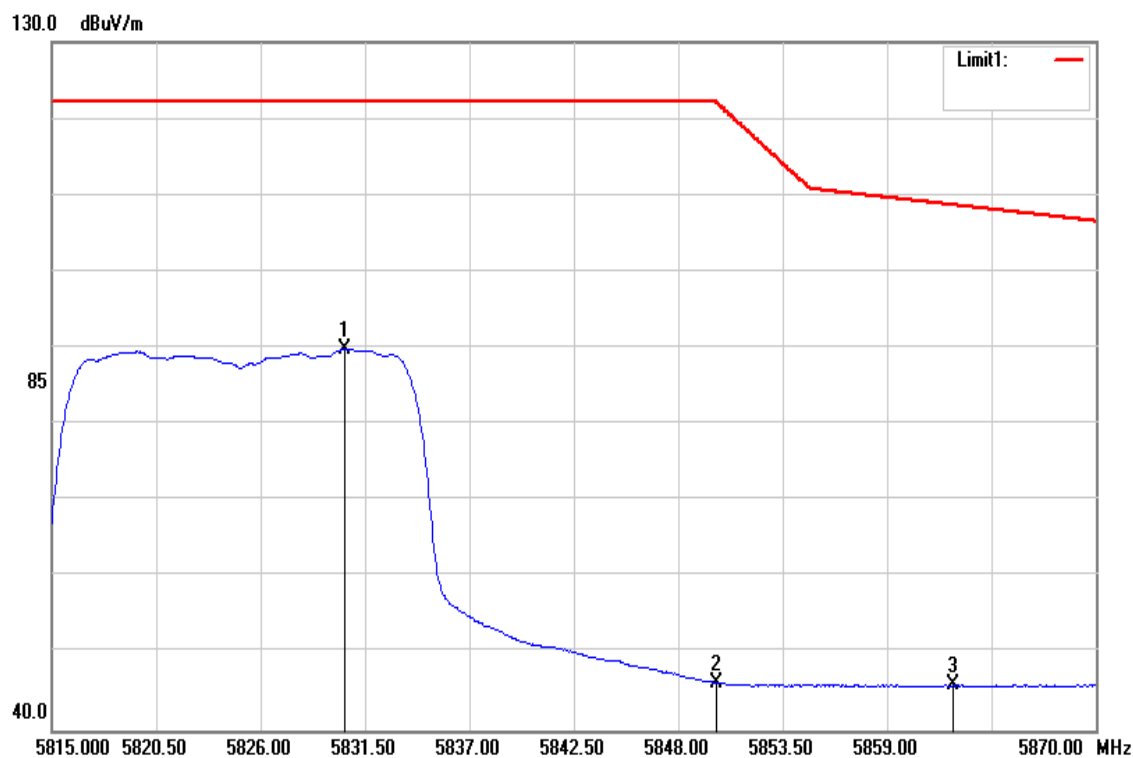
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5718.600	36.54	8.96	45.50	110.41	-64.91	AVG
5723.990	36.72	8.98	45.70	119.90	-74.20	AVG
5750.520	78.04	9.07	87.11	-	-	AVG

Test Mode	IEEE 802.11n HT20 High CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak		



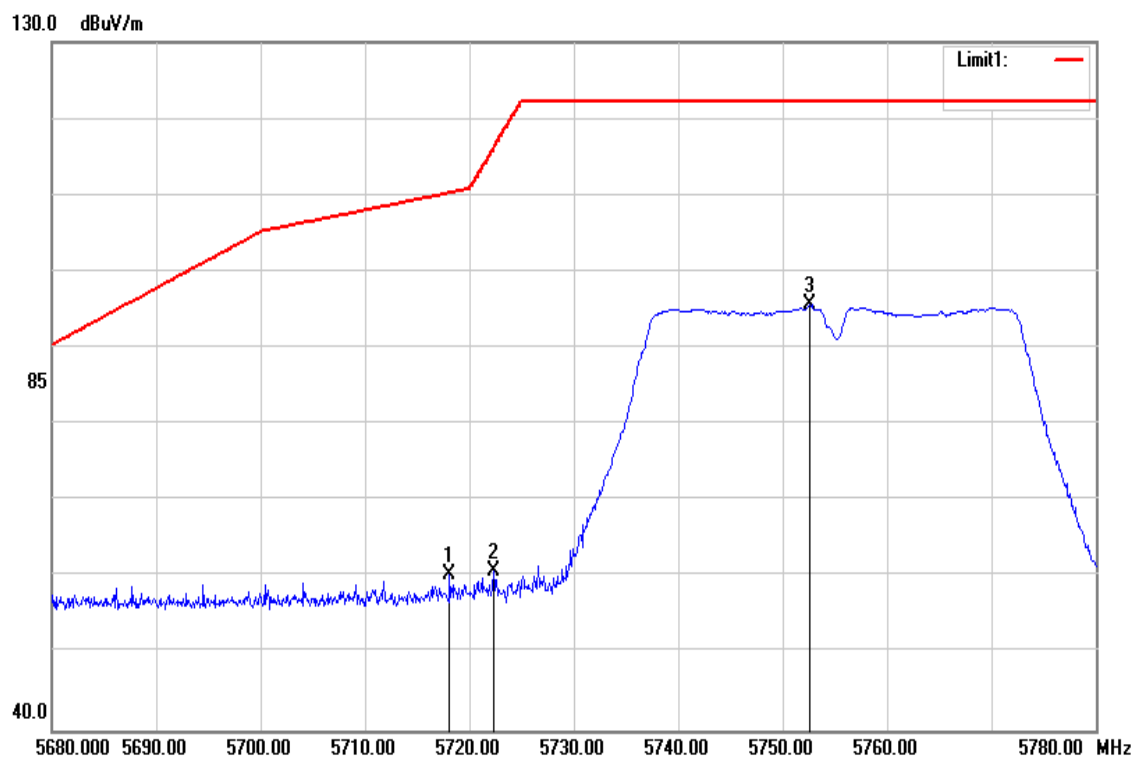
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5831.335	89.93	9.34	99.27	-	-	peak
5852.070	51.02	9.41	60.43	117.48	-57.05	peak
5869.175	49.74	9.47	59.21	106.83	-47.62	peak

Test Mode	IEEE 802.11n HT20 High CH	Temperature	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average		



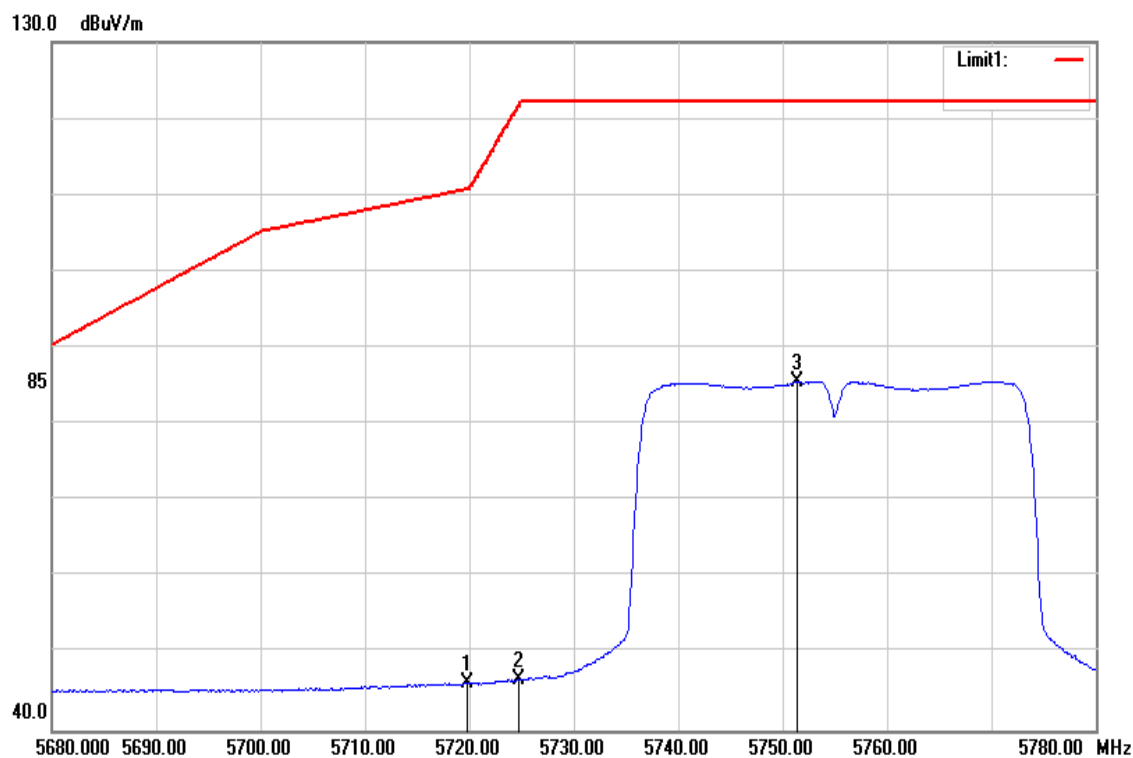
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5830.400	80.44	9.34	89.78	-	-	AVG
5850.035	36.84	9.41	46.25	122.12	-75.87	AVG
5862.465	36.53	9.44	45.97	108.71	-62.74	AVG

Test Mode	IEEE 802.11n HT40 Low CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak		



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5718.100	51.34	8.96	60.30	110.27	-49.97	peak
5722.300	51.94	8.97	60.91	116.04	-55.13	peak
5752.600	86.55	9.08	95.63	-	-	peak

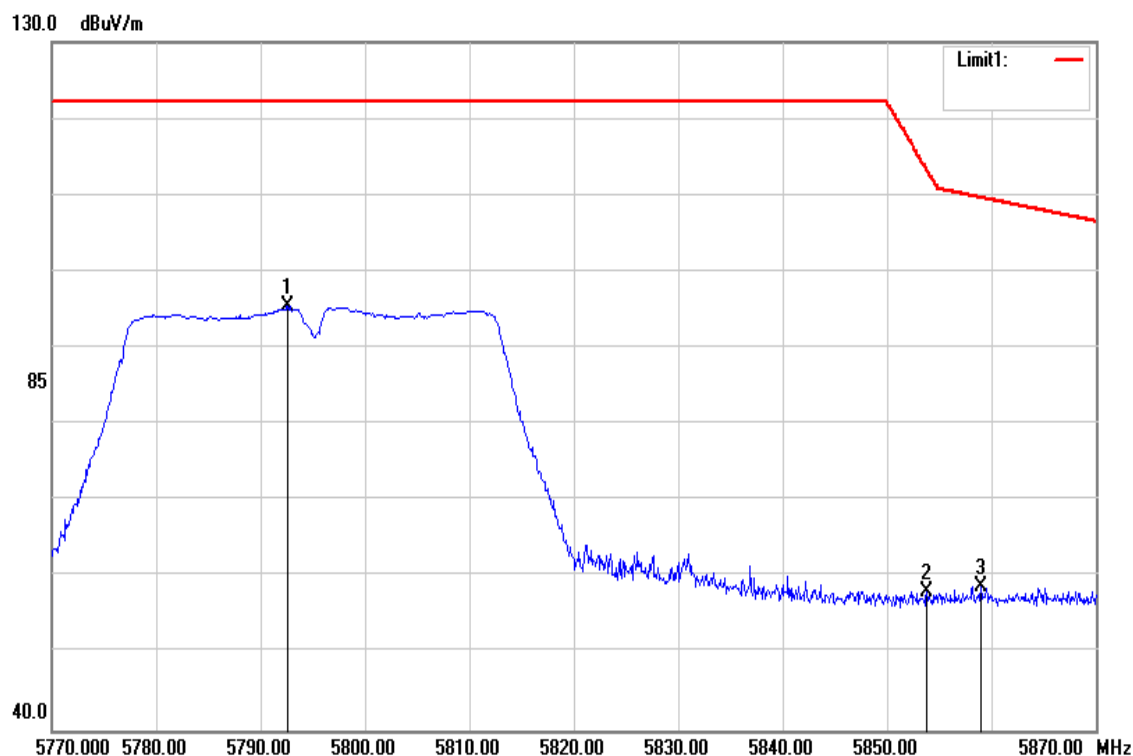
Test Mode	IEEE 802.11n HT40 Low CH	Temperature	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average		



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5719.800	37.30	8.96	46.26	110.74	-64.48	AVG
5724.700	37.70	8.98	46.68	121.52	-74.84	AVG
5751.400	76.58	9.07	85.65	-	-	AVG

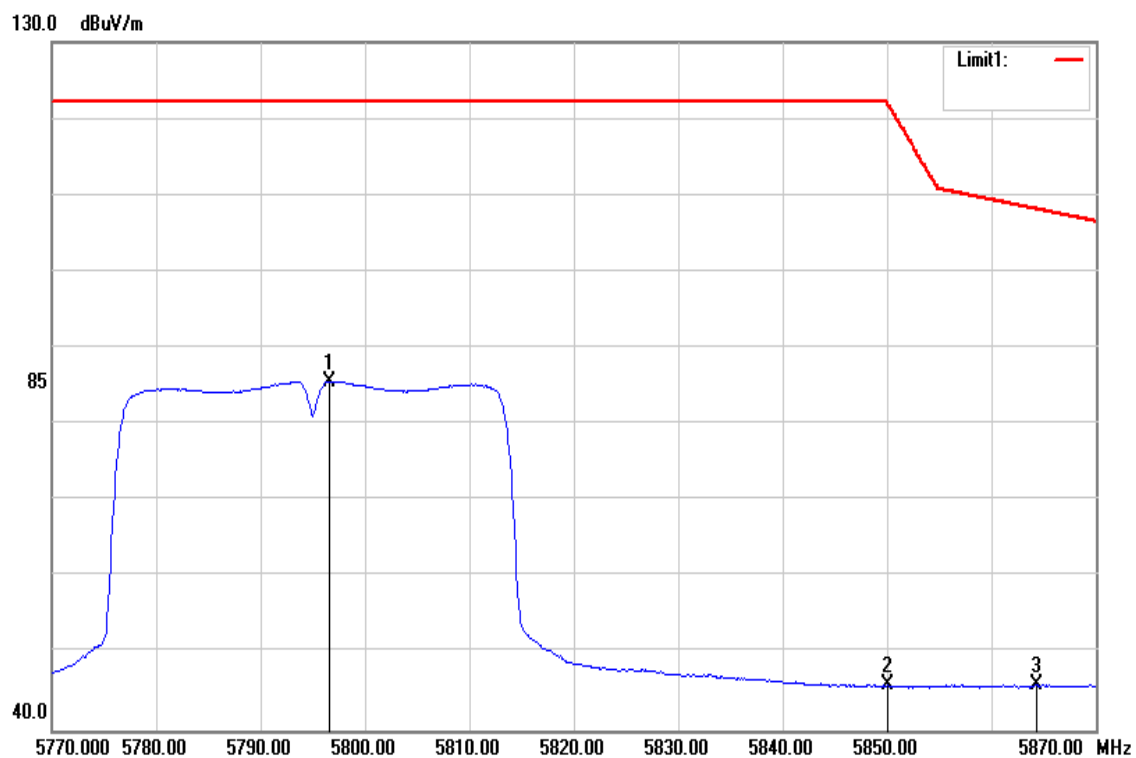


Test Mode	IEEE 802.11n HT40 High CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak		



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5792.600	86.23	9.21	95.44	-	-	peak
5853.800	48.72	9.42	58.14	113.54	-55.40	peak
5859.000	49.39	9.44	58.83	109.68	-50.85	peak

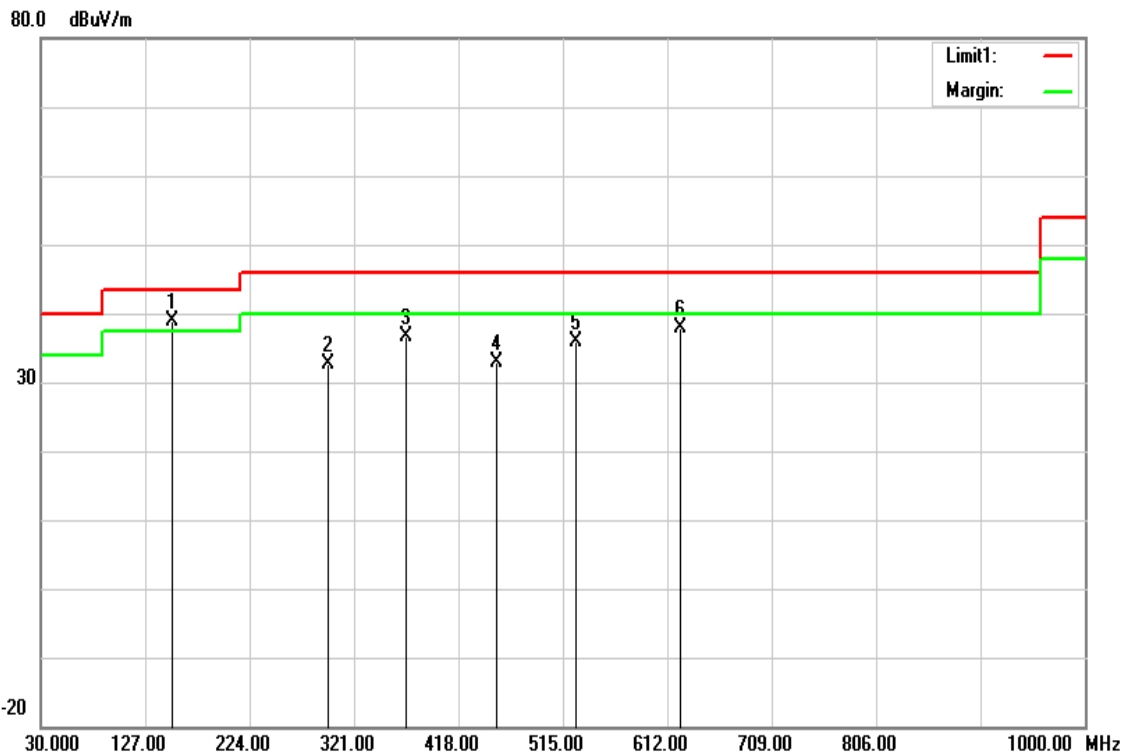
Test Mode	IEEE 802.11n HT40 High CH	Temperature	24(°C)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average		



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
5796.600	76.39	9.23	85.62	-	-	AVG
5850.100	36.45	9.41	45.86	121.97	-76.11	AVG
5864.300	36.49	9.46	45.95	108.20	-62.25	AVG

**Below 1G Test Data**

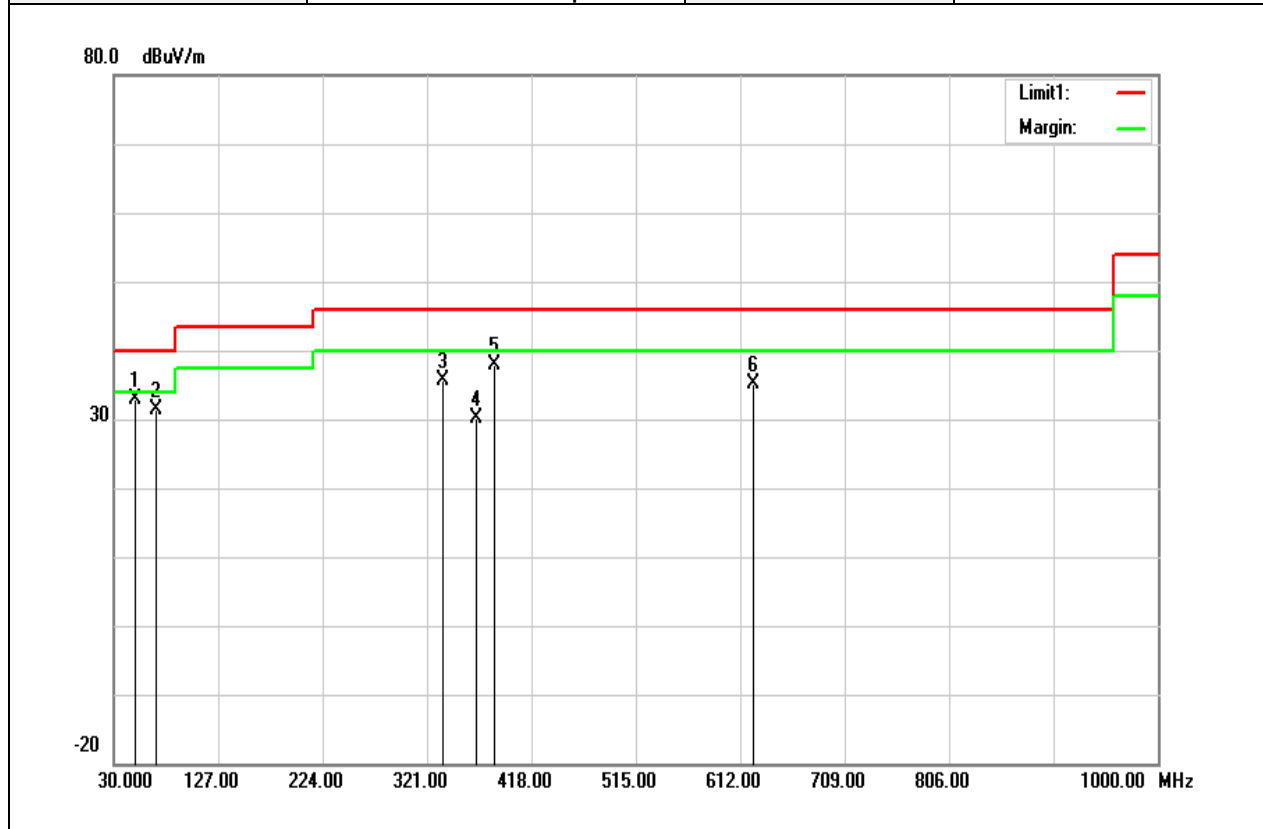
Test Mode	Mode 1	Temp/Hum	24(°C)/ 33%RH
Test Item	30MHz-1GHz	Test Date	November 10, 2017
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Qusi-peak		



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
152.2200	54.79	-15.80	38.99	43.50	-4.51	QP
296.7500	46.85	-14.10	32.75	46.00	-13.25	peak
369.5000	48.93	-12.36	36.57	46.00	-9.43	peak
452.9200	42.47	-9.53	32.94	46.00	-13.06	peak
527.6100	43.76	-7.97	35.79	46.00	-10.21	peak
623.6400	44.19	-6.27	37.92	46.00	-8.08	peak

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

Test Mode	Mode 1	Temp/Hum	24(°C)/ 33%RH
Test Item	30MHz-1GHz	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Qusi-peak		

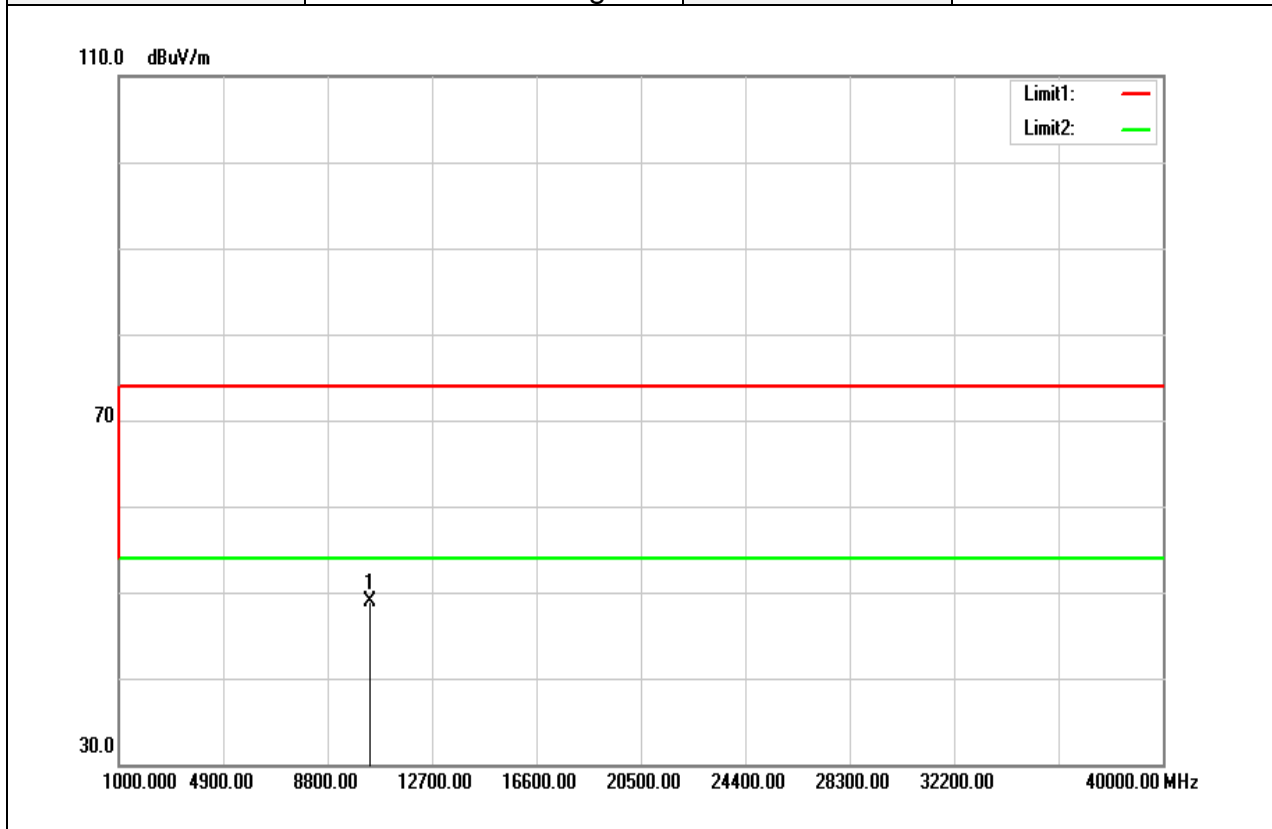


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
49.4000	53.80	-20.86	32.94	40.00	-7.06	peak
68.8000	52.75	-21.30	31.45	40.00	-8.55	peak
335.5500	49.03	-13.30	35.73	46.00	-10.27	peak
366.5900	42.51	-12.45	30.06	46.00	-15.94	peak
384.0500	49.83	-11.90	37.93	46.00	-8.07	peak
623.6400	41.33	-6.27	35.06	46.00	-10.94	peak

Notes: 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 Low CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average		

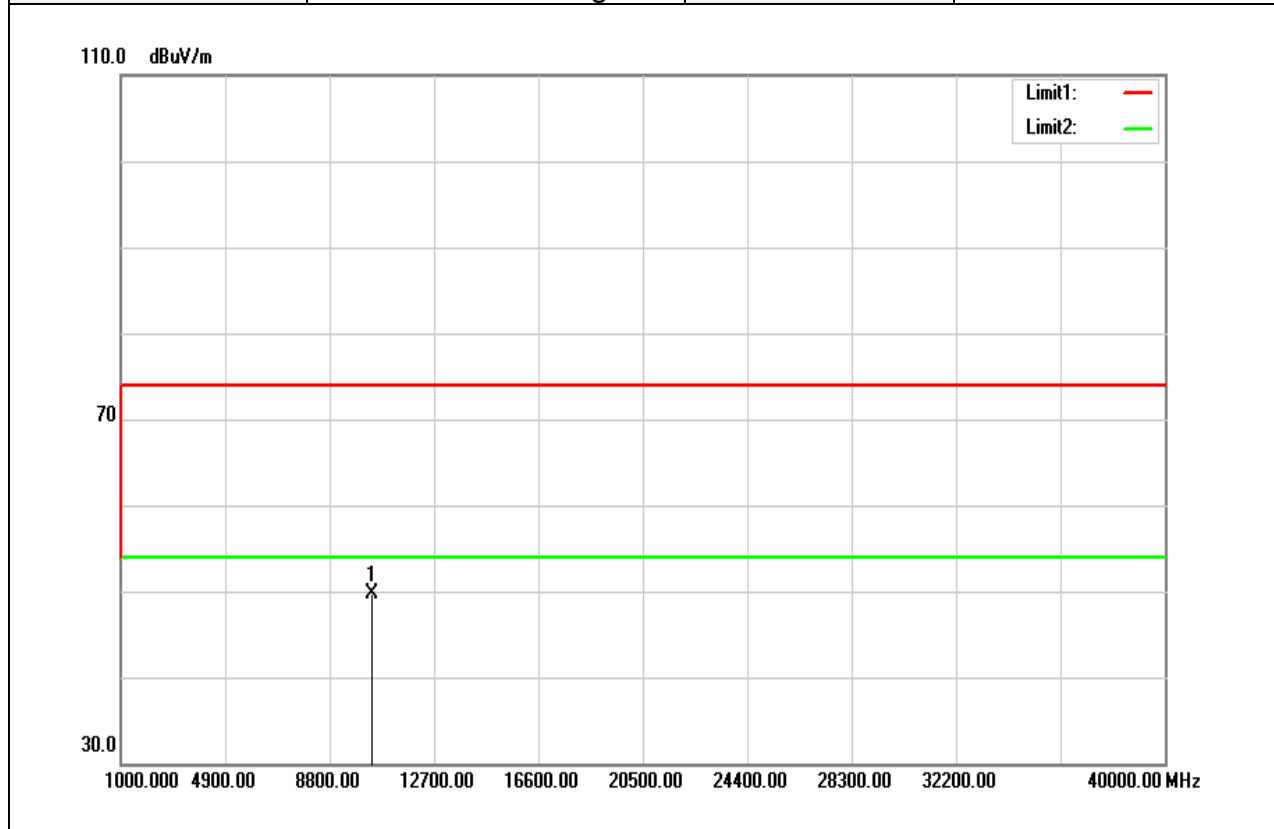


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10360.000	30.33	18.61	48.94	74.00	-25.06	peak
N/A						

**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 802.11a Low CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average		

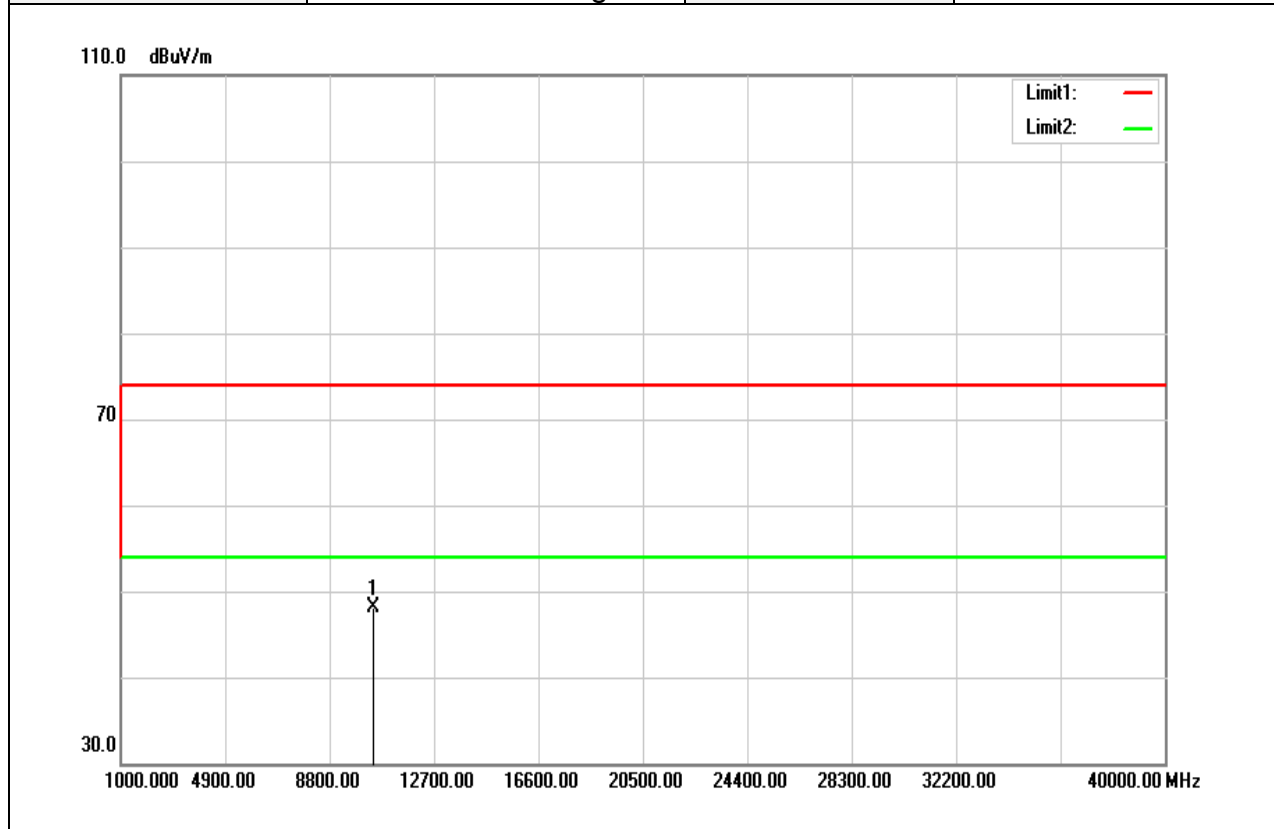


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10360.000	31.04	18.61	49.65	74.00	-24.35	peak
N/A						

**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 Mid CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average		

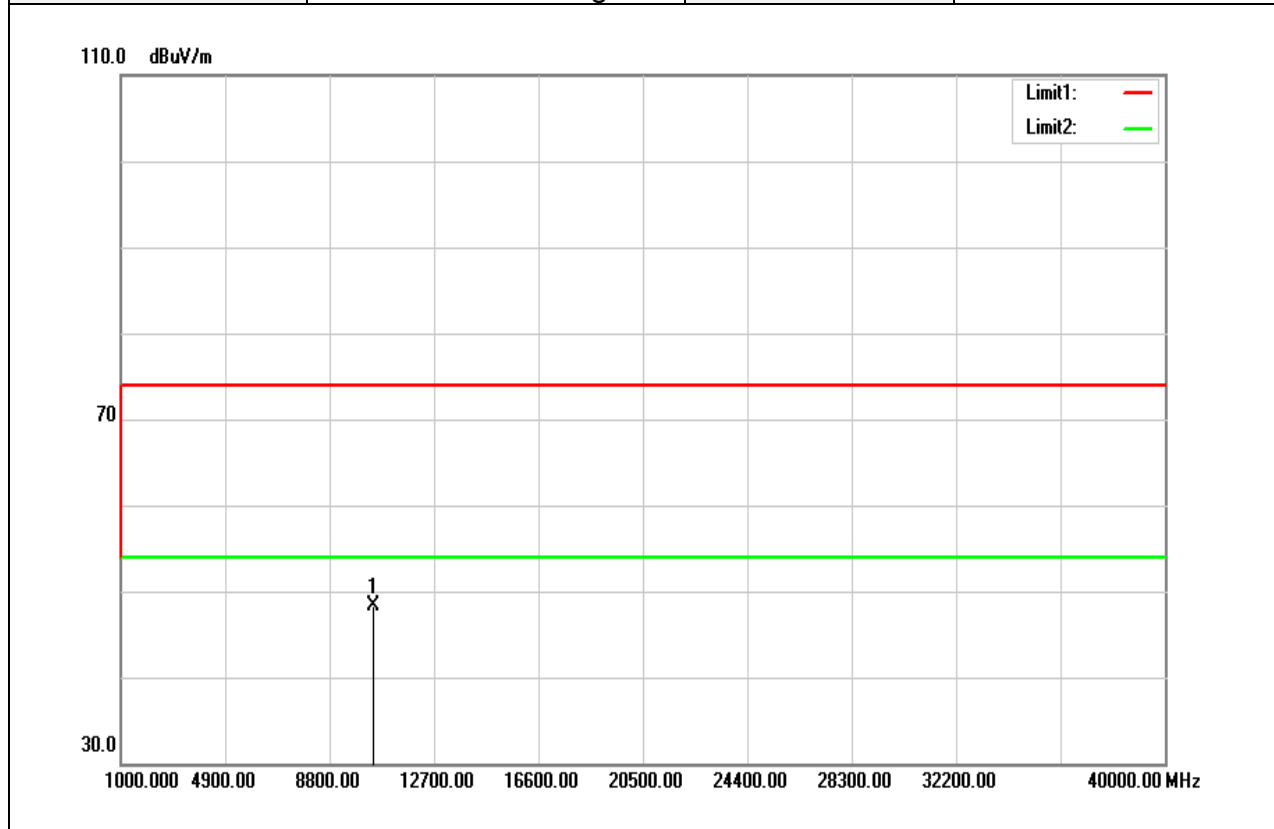


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10440.000	29.39	18.80	48.19	74.00	-25.81	peak
N/A						

**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 Mid CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average		



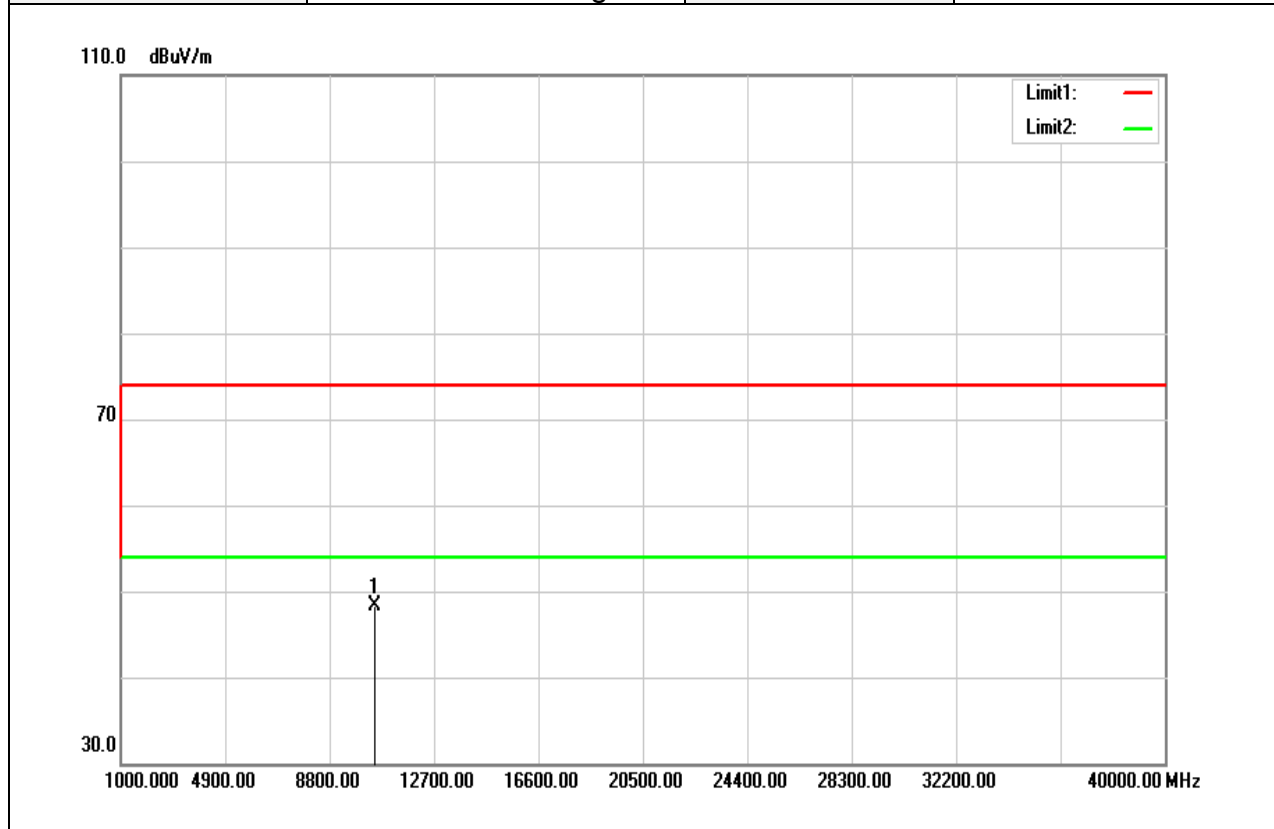
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10440.000	29.51	18.80	48.31	74.00	-25.69	peak
N/A						

**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 High CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average		

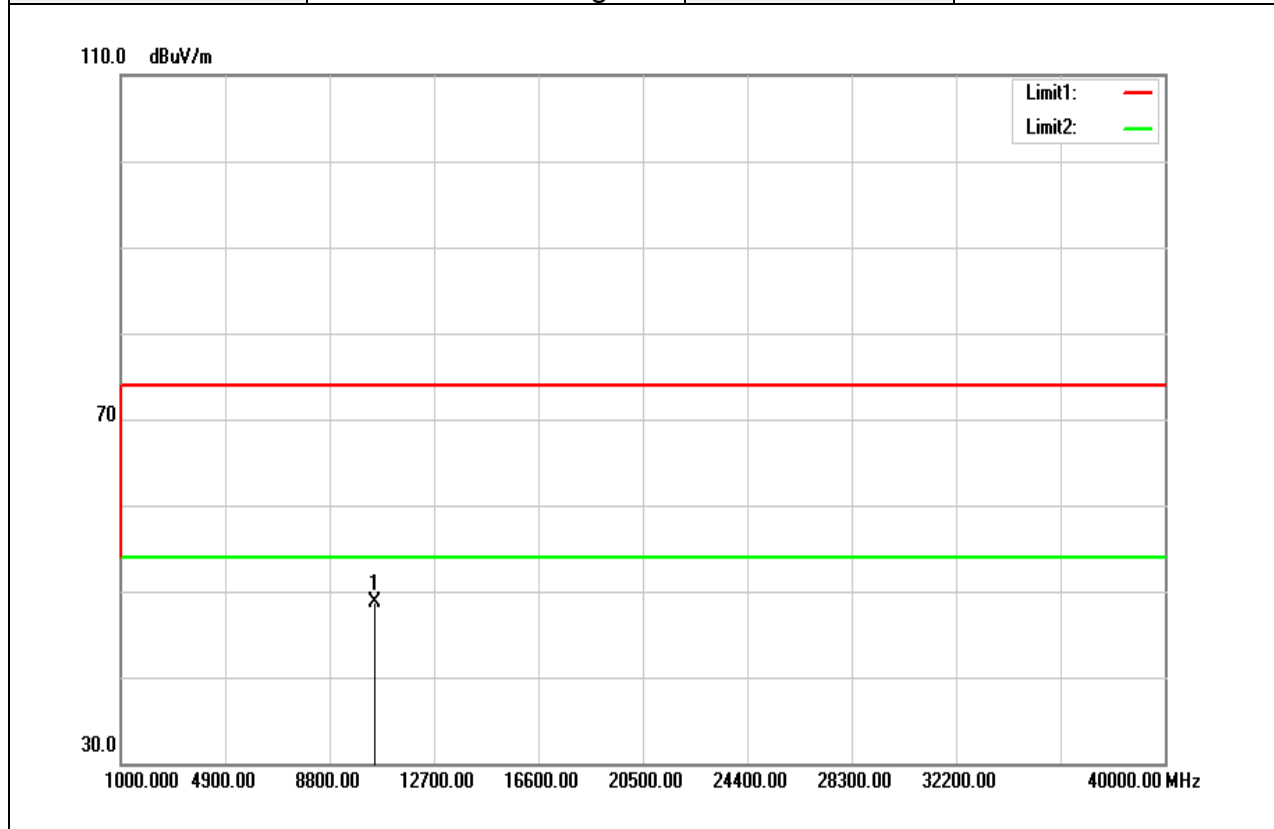


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10480.000	29.33	18.90	48.23	74.00	-25.77	peak
N/A						

**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 High CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average		

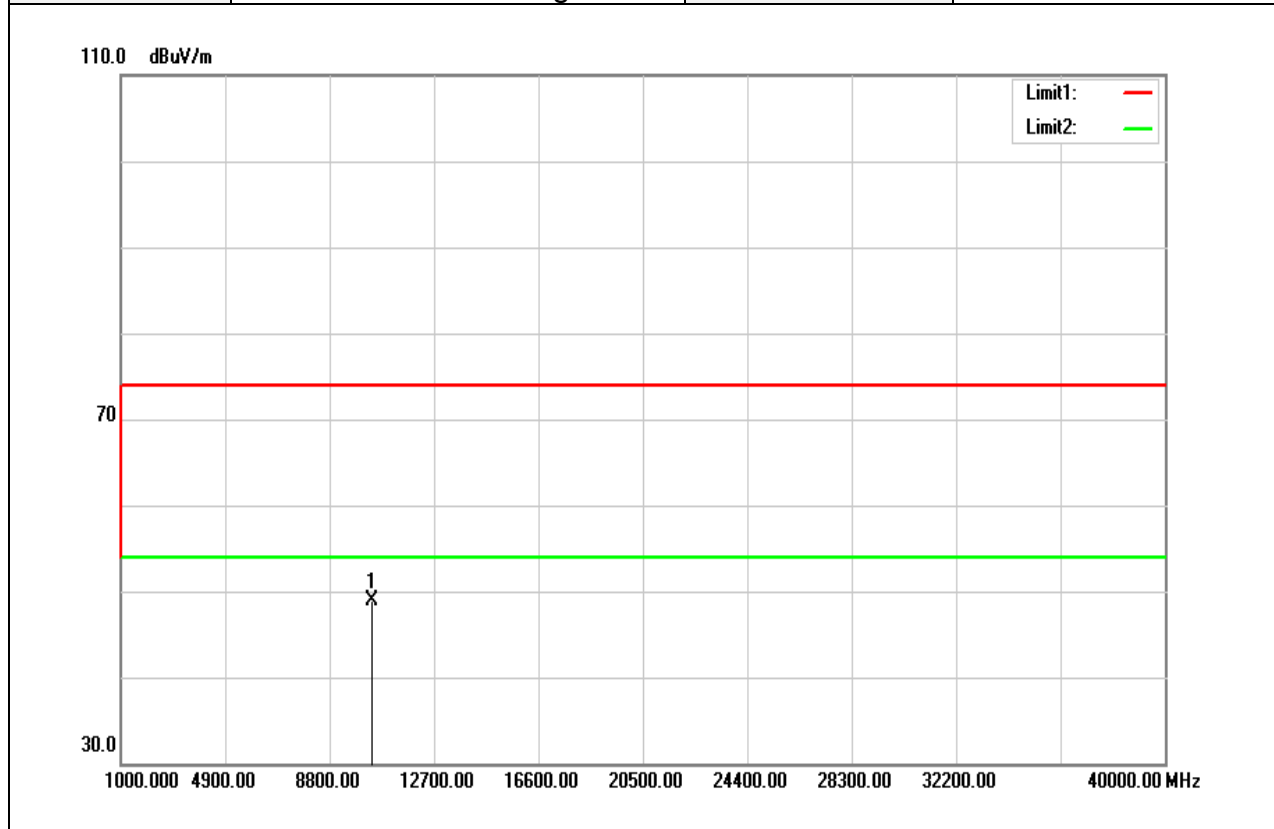


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10480.000	29.80	18.90	48.70	74.00	-25.30	peak
N/A						

**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 HT20 Low CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average		

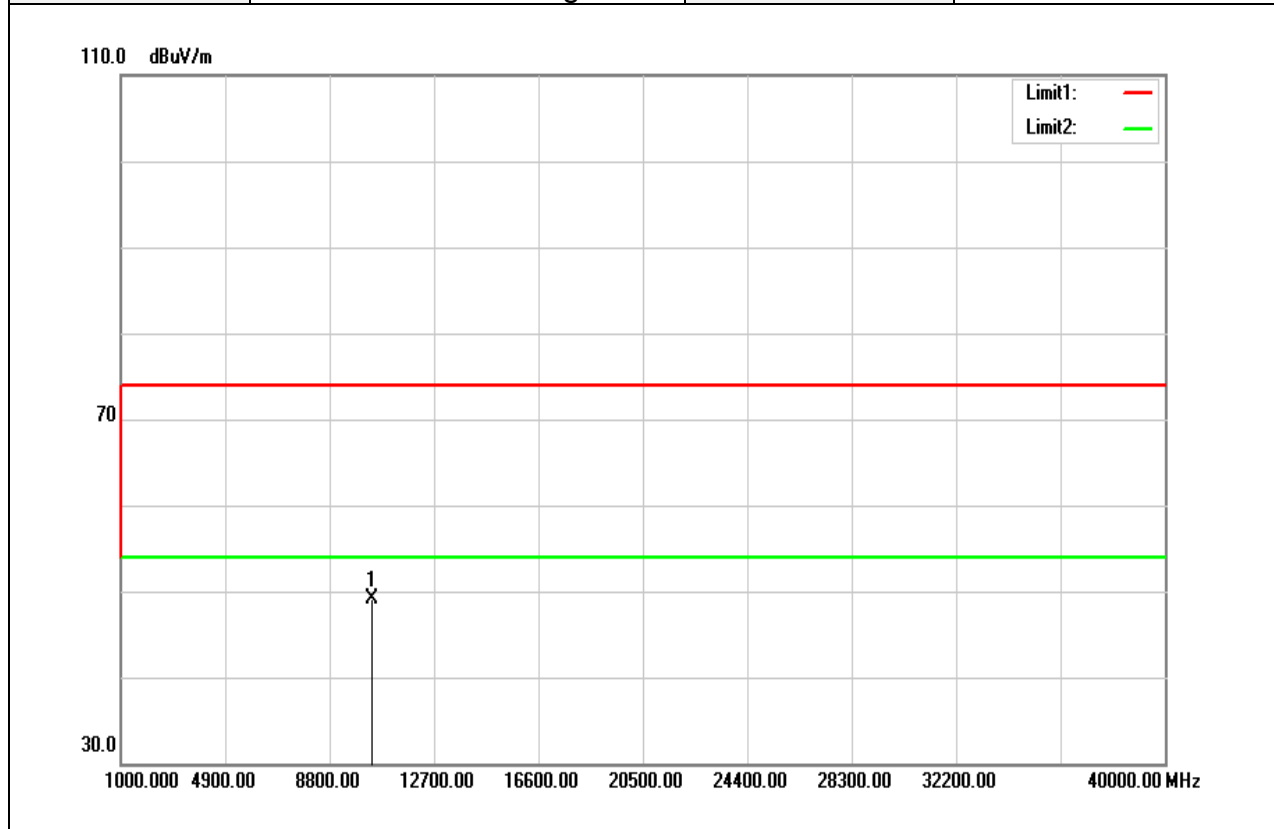


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10360.000	30.36	18.61	48.97	74.00	-25.03	peak
N/A						

**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 HT20 Low CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average		

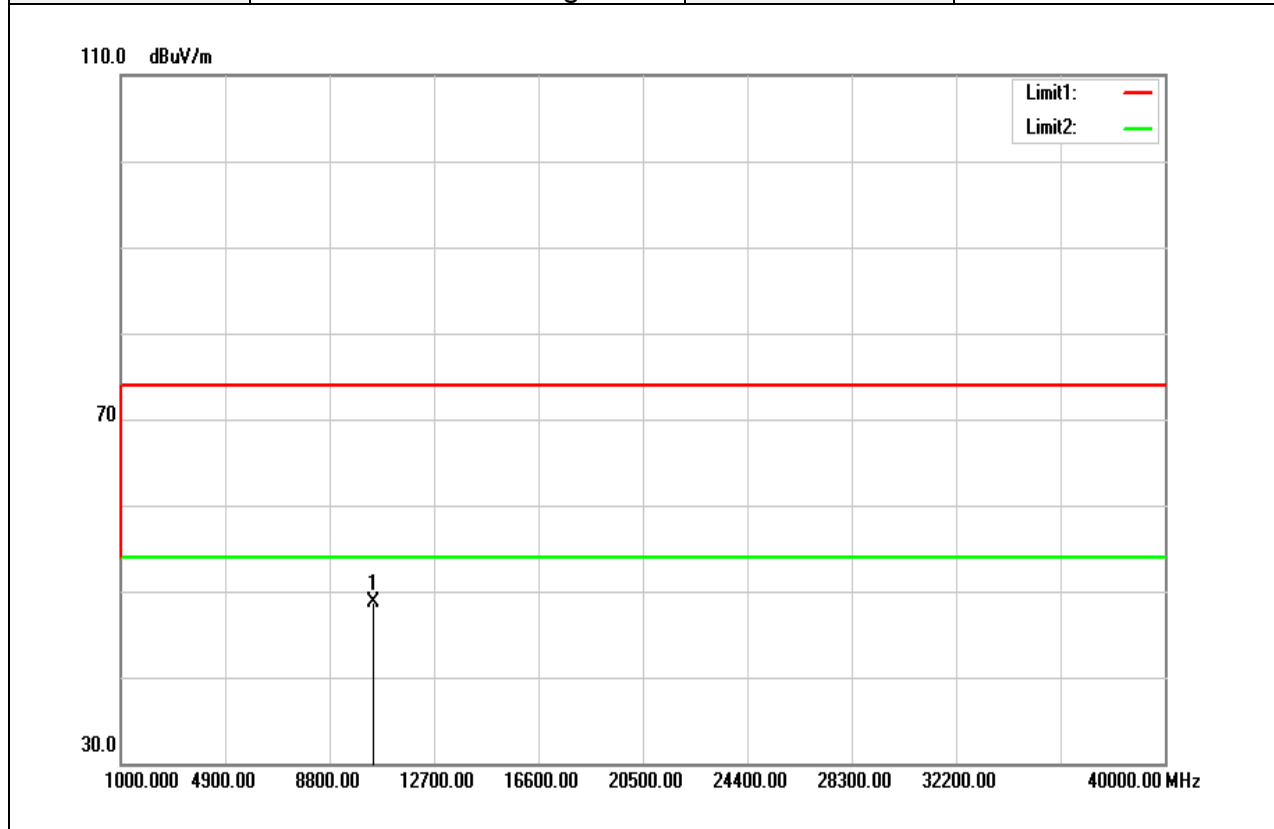


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10360.000	30.48	18.61	49.09	74.00	-24.91	peak
N/A						

**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 HT20 Mid CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average		

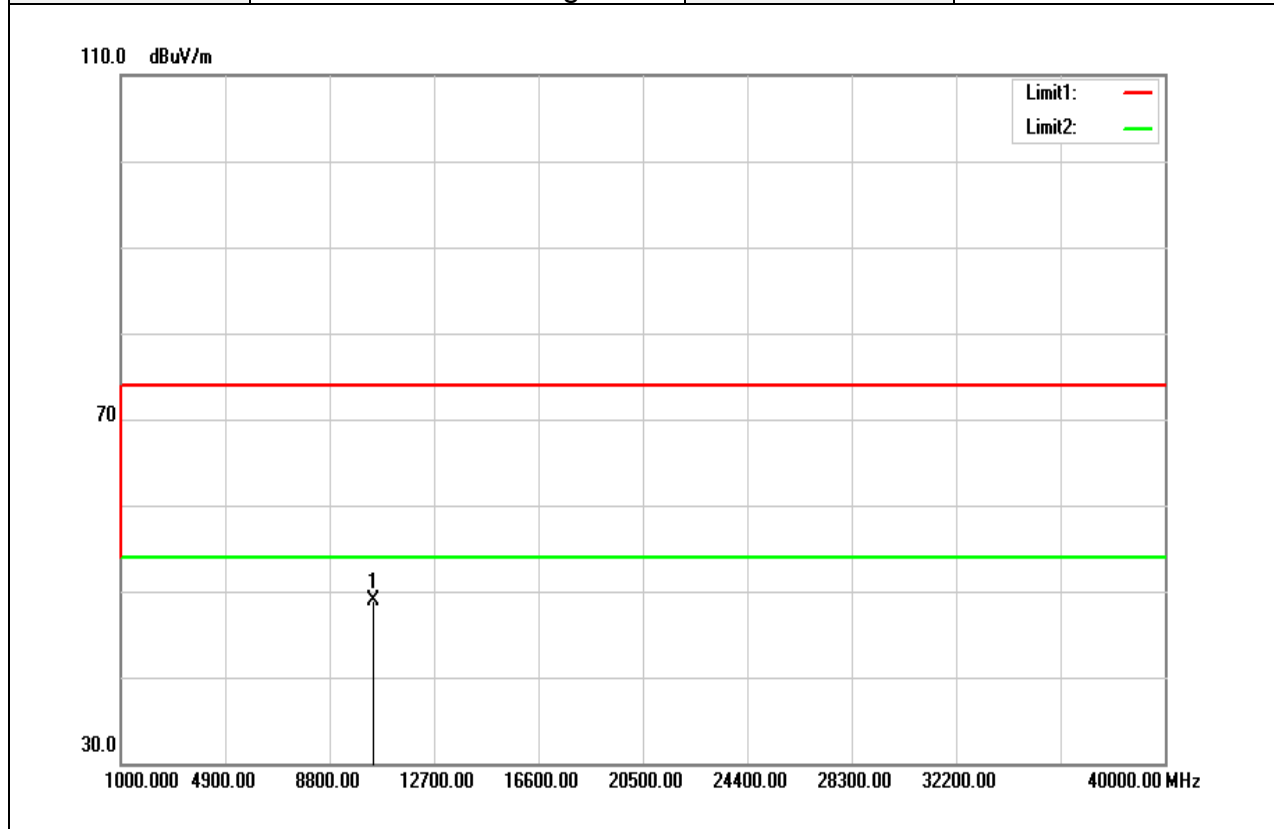


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10440.000	29.97	18.80	48.77	74.00	-25.23	peak
N/A						

**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 HT20 Mid CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average		

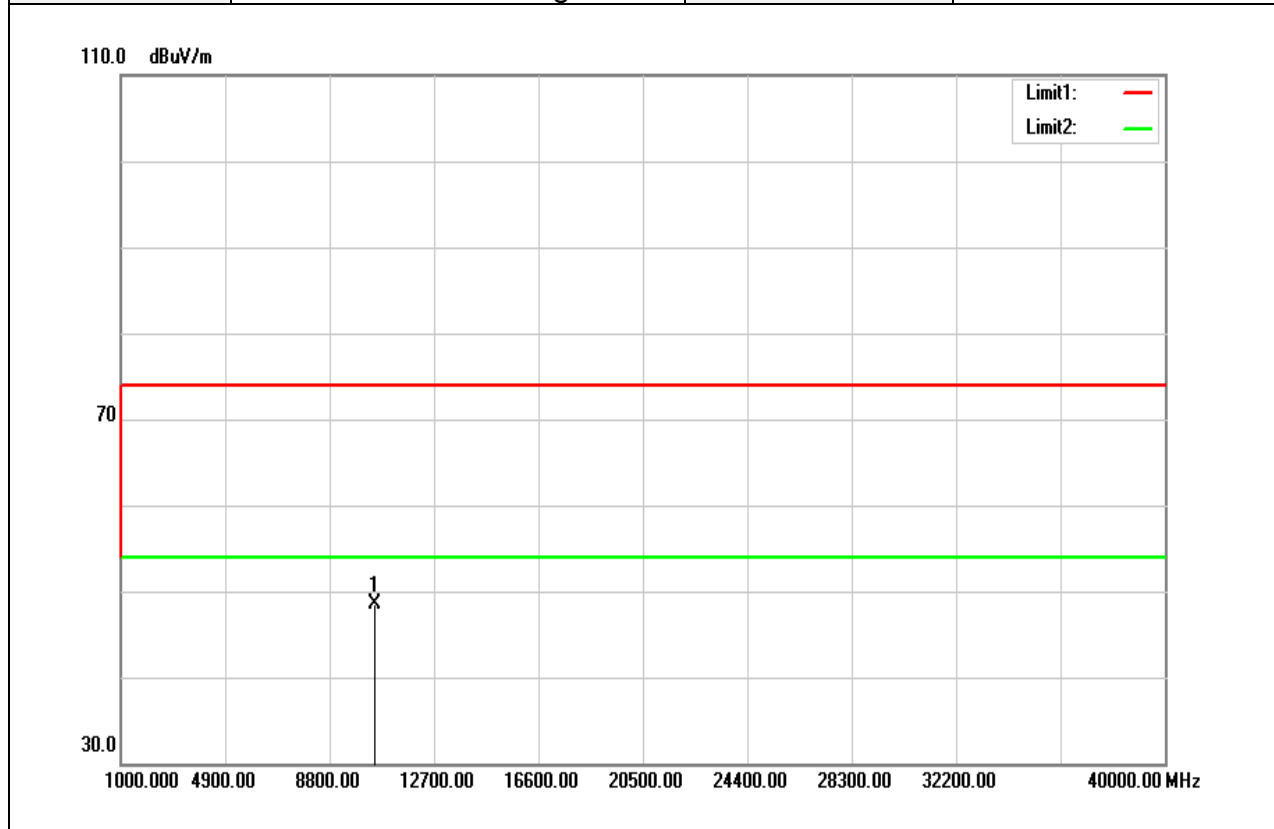


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10440.000	30.18	18.80	48.98	74.00	-25.02	peak
N/A						

**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 802.11n HT20 High CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average		

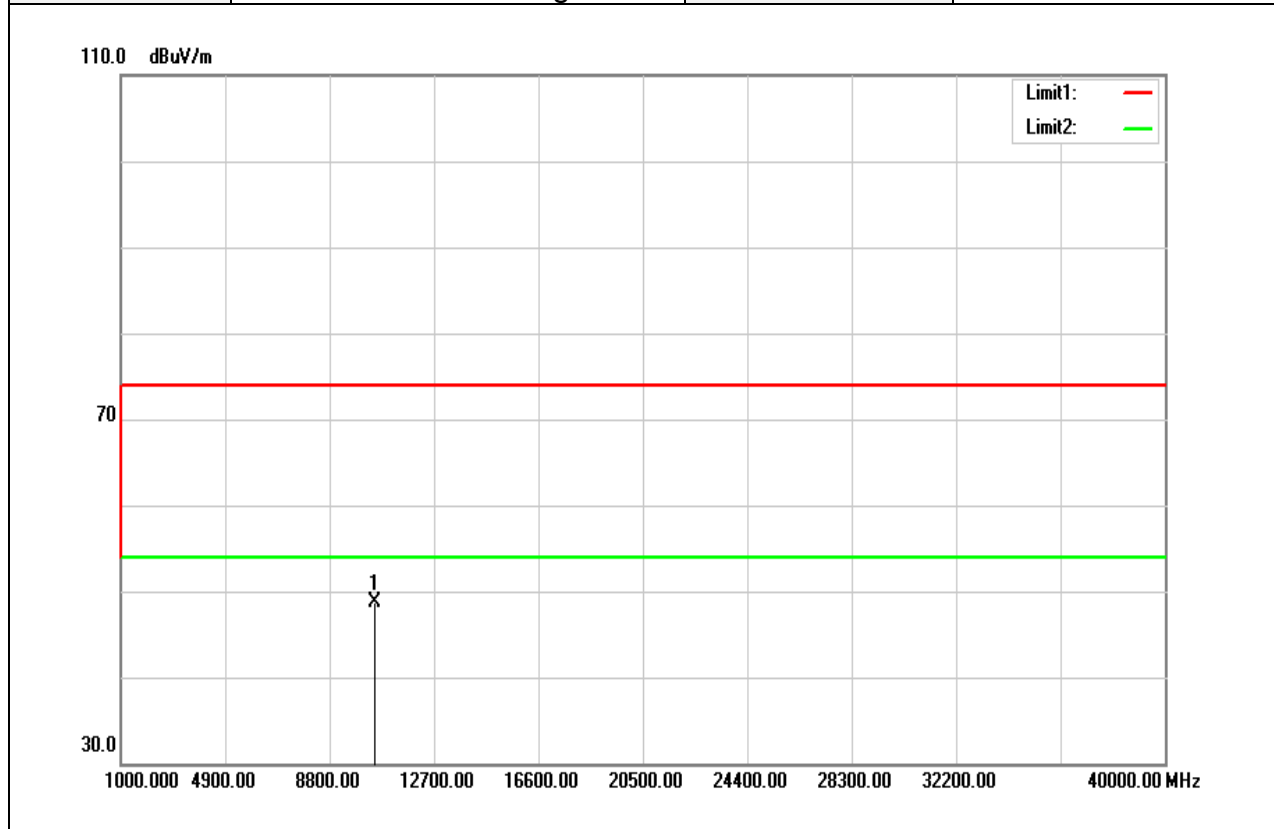


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10480.000	29.62	18.90	48.52	74.00	-25.48	peak
N/A						

**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 802.11n HT20 High CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average		



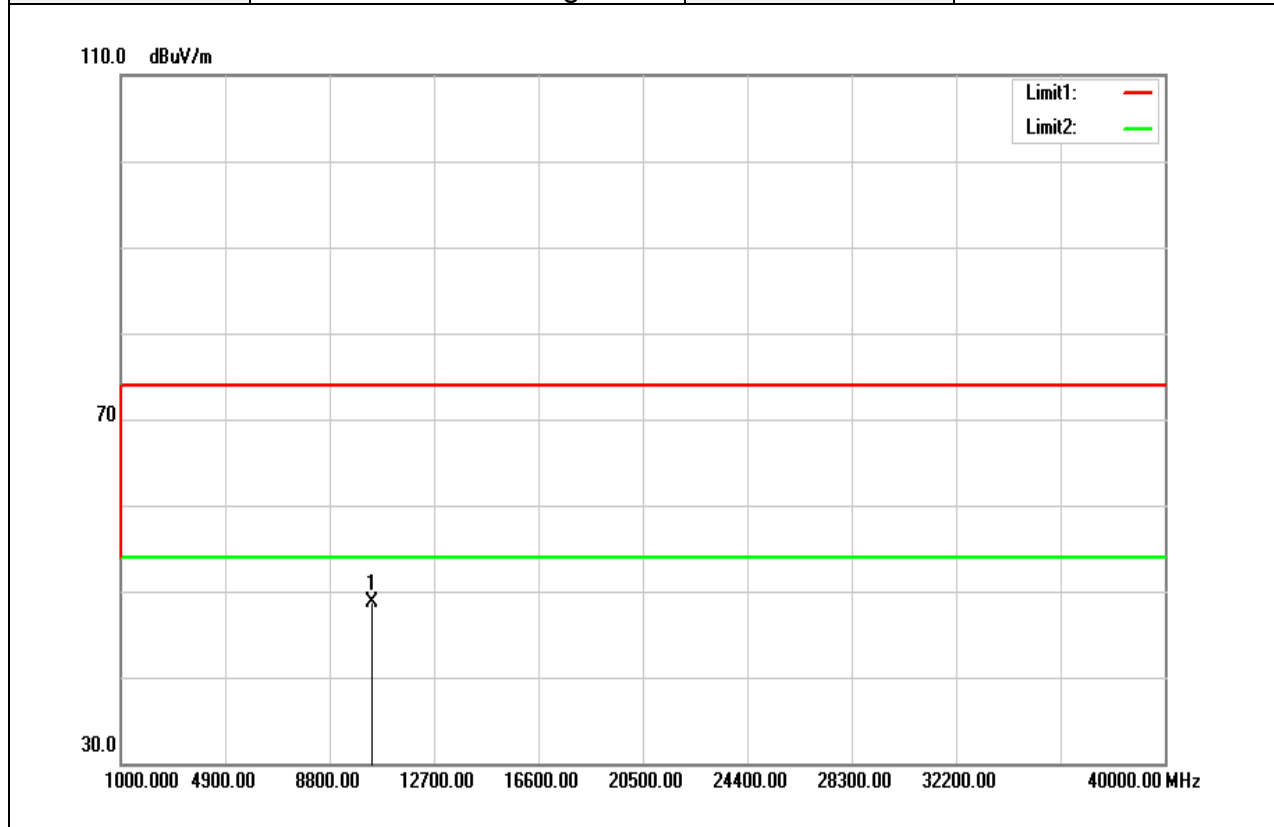
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10480.000	29.73	18.90	48.63	74.00	-25.37	peak
N/A						

**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 HT40 Low CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average		

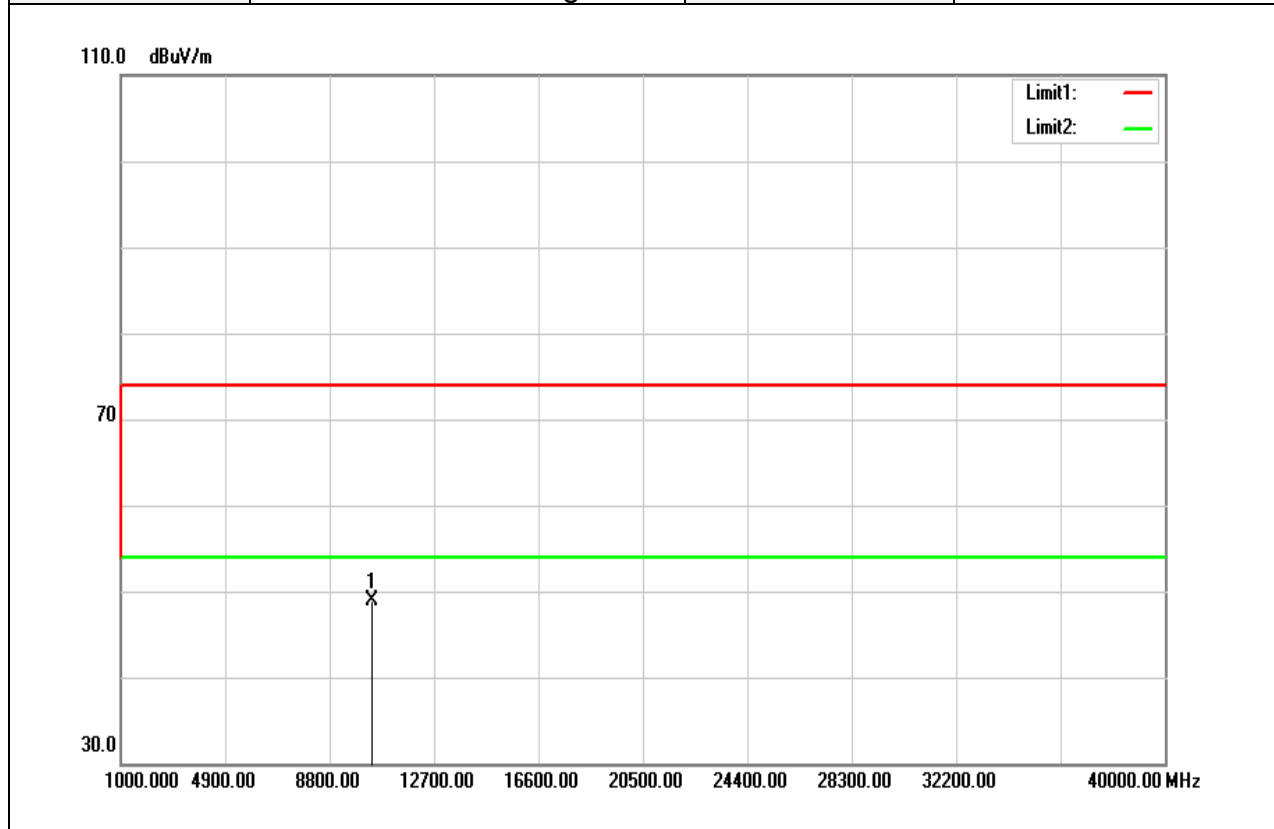


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10380.000	30.08	18.65	48.73	74.00	-25.27	peak
N/A						

**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 802.11n HT40 Low CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average		

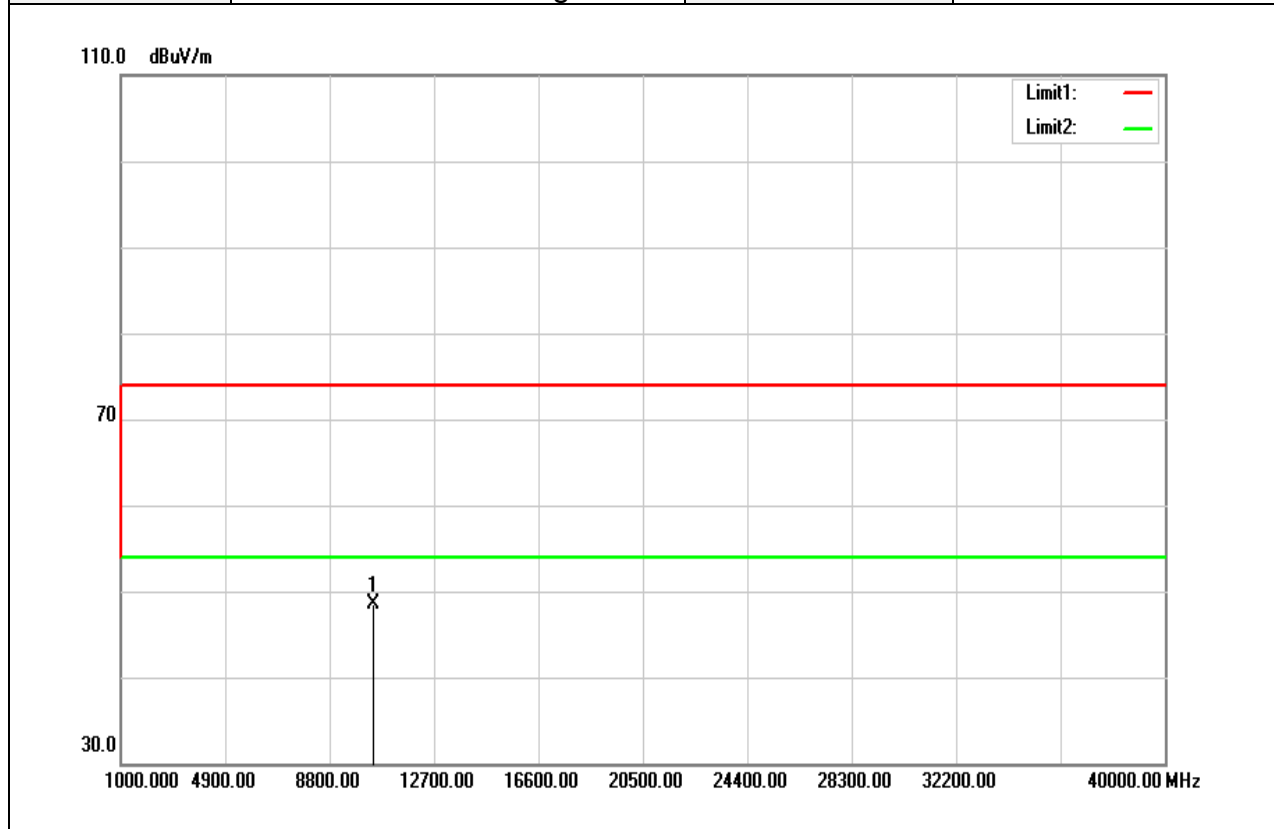


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10380.000	30.33	18.65	48.98	74.00	-25.02	peak
N/A						

**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 802.11n HT40 High CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average		

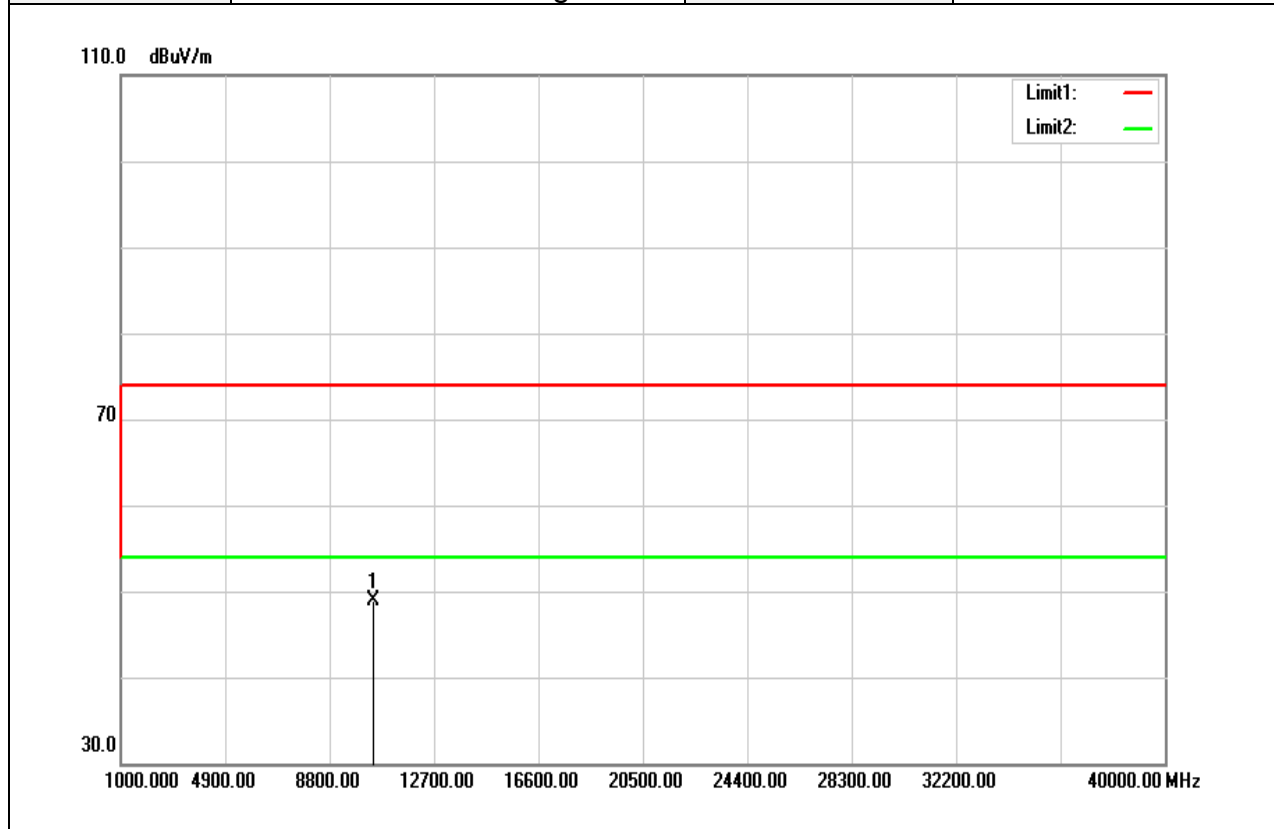


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10460.000	29.63	18.86	48.49	74.00	-25.51	peak
N/A						

**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 HT40 High CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average		



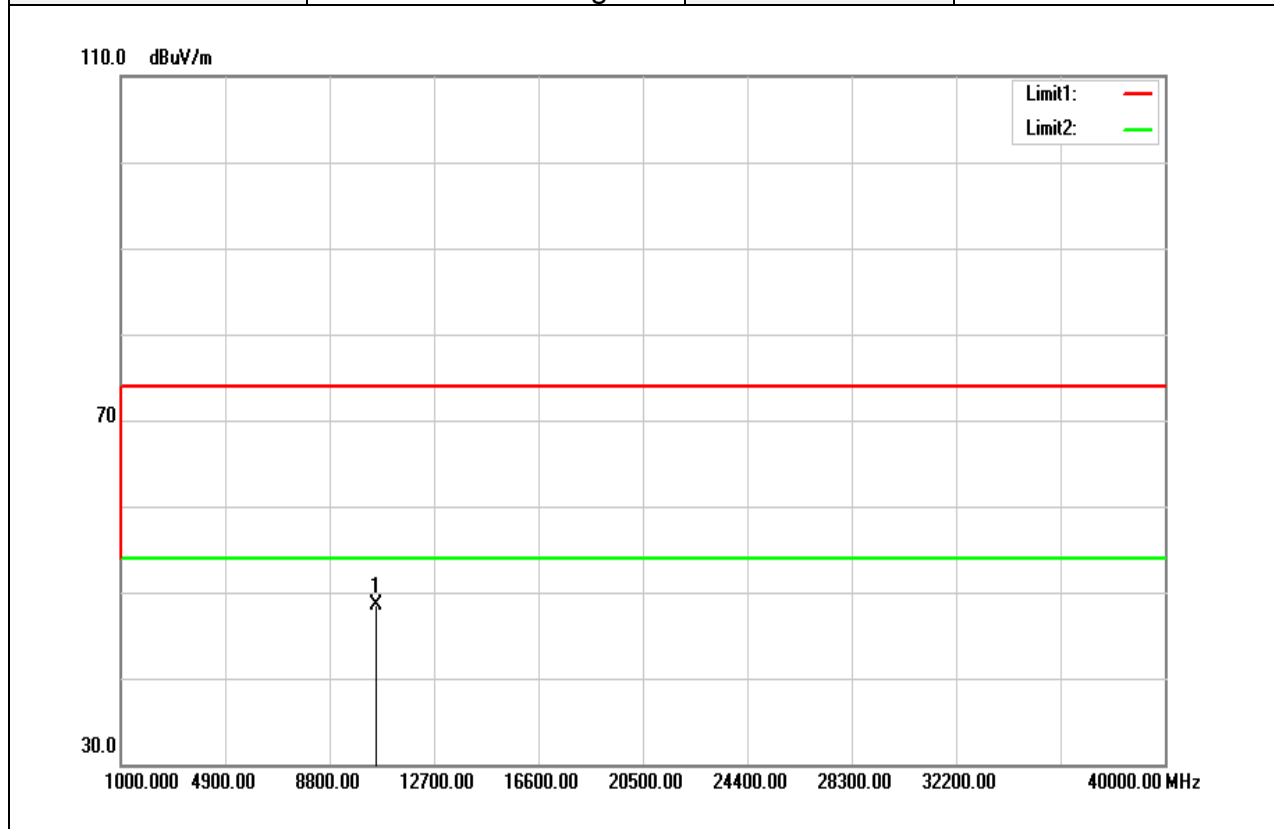
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10460.000	30.08	18.86	48.94	74.00	-25.06	peak
N/A						

**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

**Above 1G Test Data for UNII-2a**

Test Mode	IEEE 802.11a Low CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average		

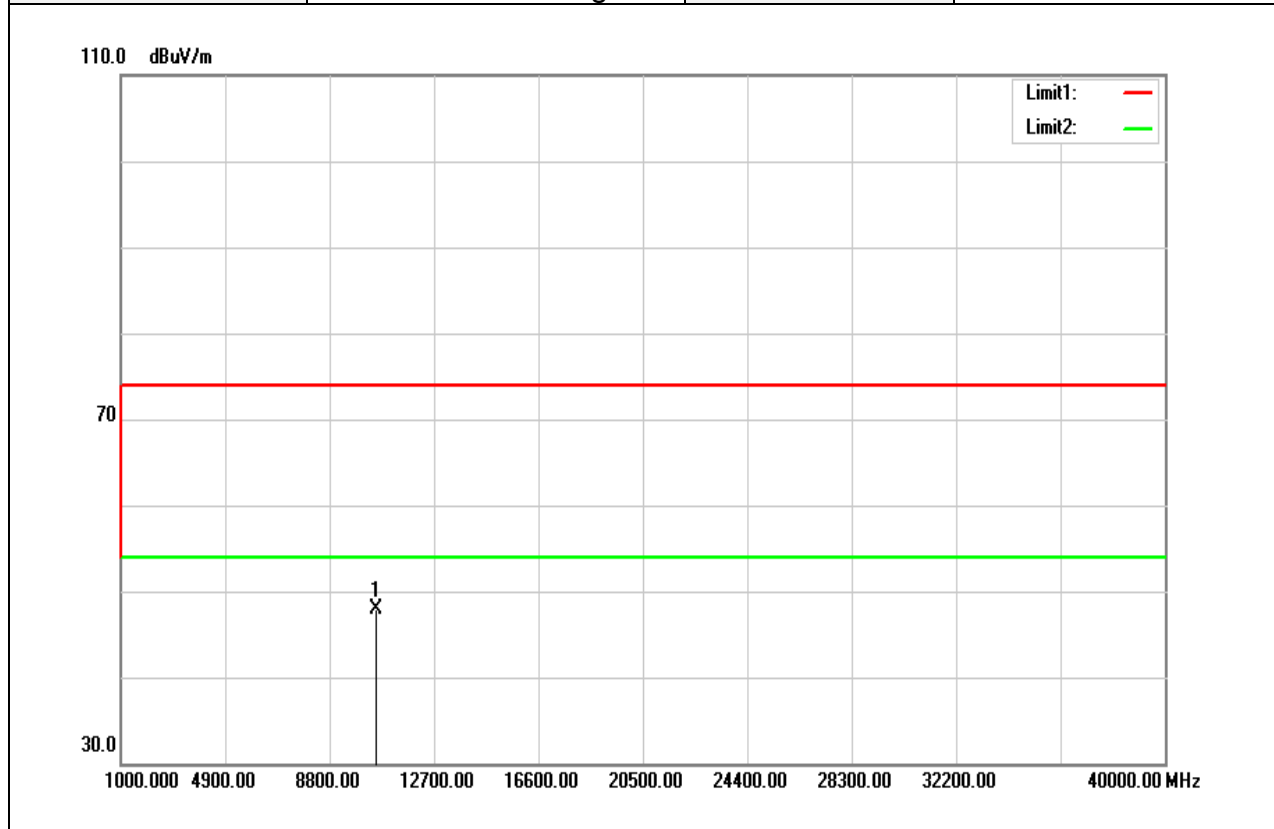


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10520.000	29.43	18.99	48.42	74.00	-25.58	peak
N/A						

**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 Low CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average		

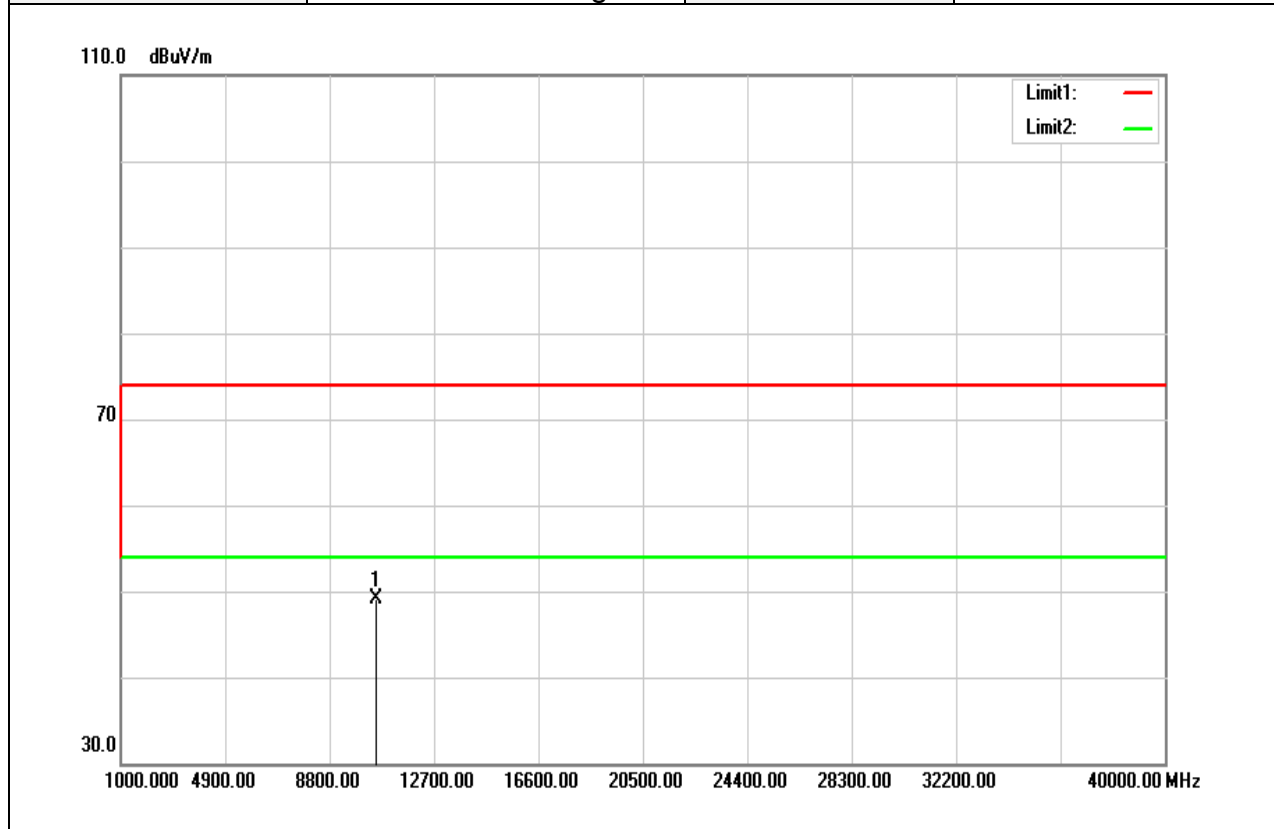


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10520.000	28.93	18.99	47.92	74.00	-26.08	peak
N/A						

**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 802.11a Mid CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average		

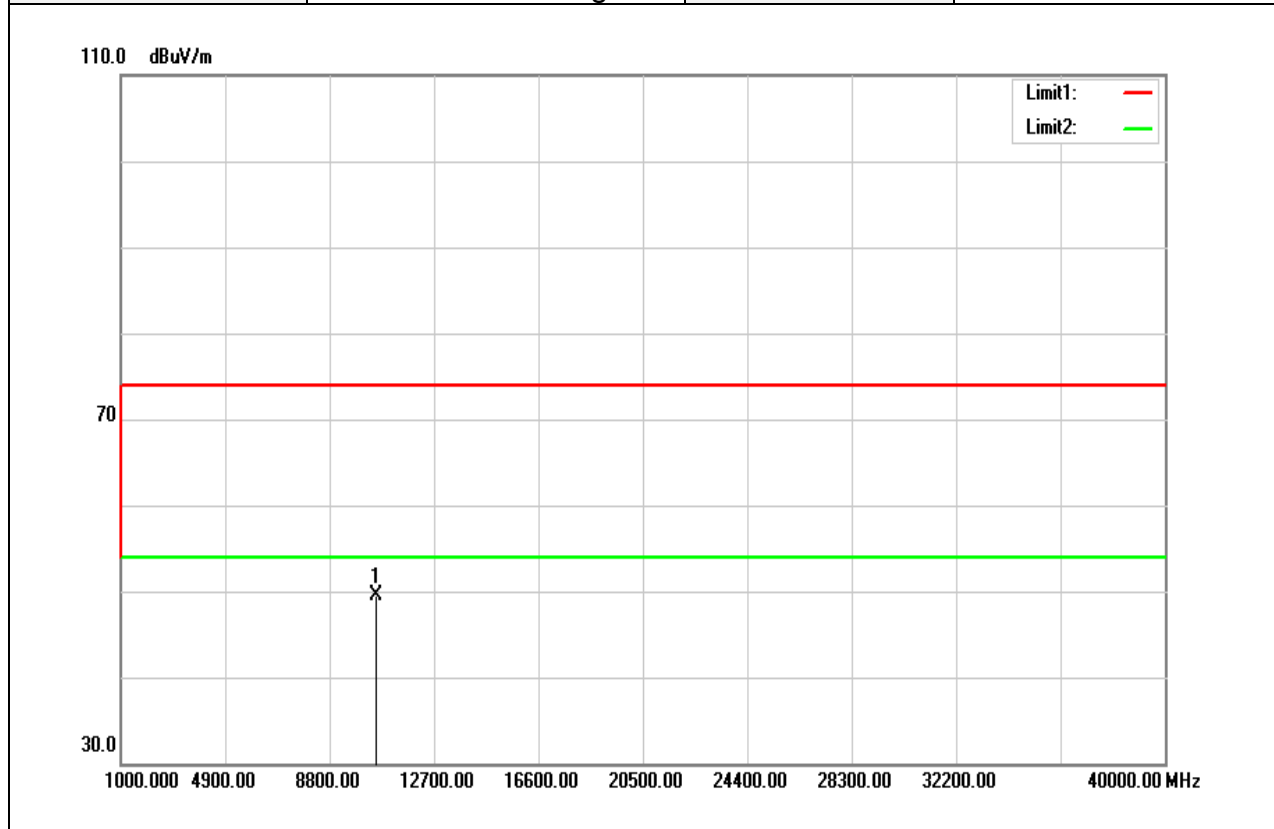


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10560.000	30.03	19.02	49.05	74.00	-24.95	peak
N/A						

**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 Mid CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average		



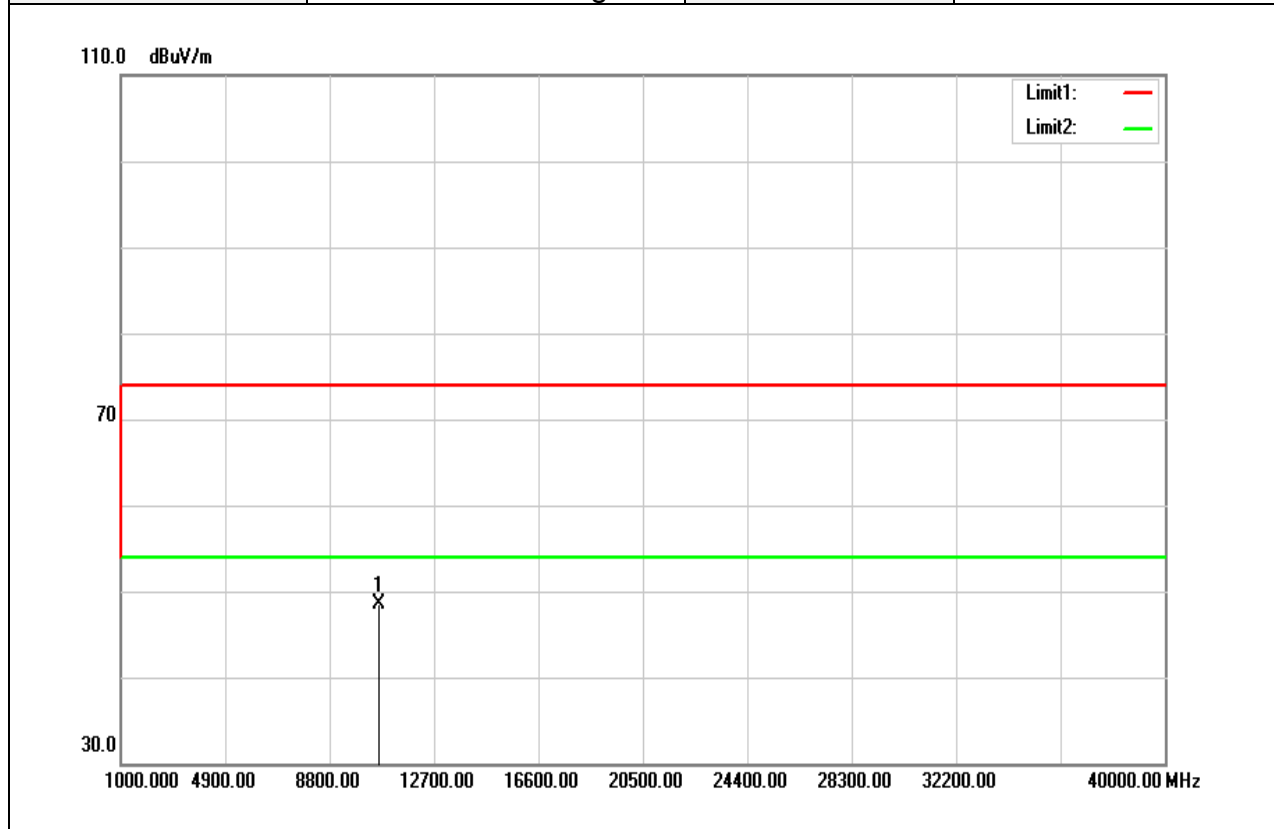
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10560.000	30.46	19.02	49.48	74.00	-24.52	peak
N/A						

**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 High CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average		

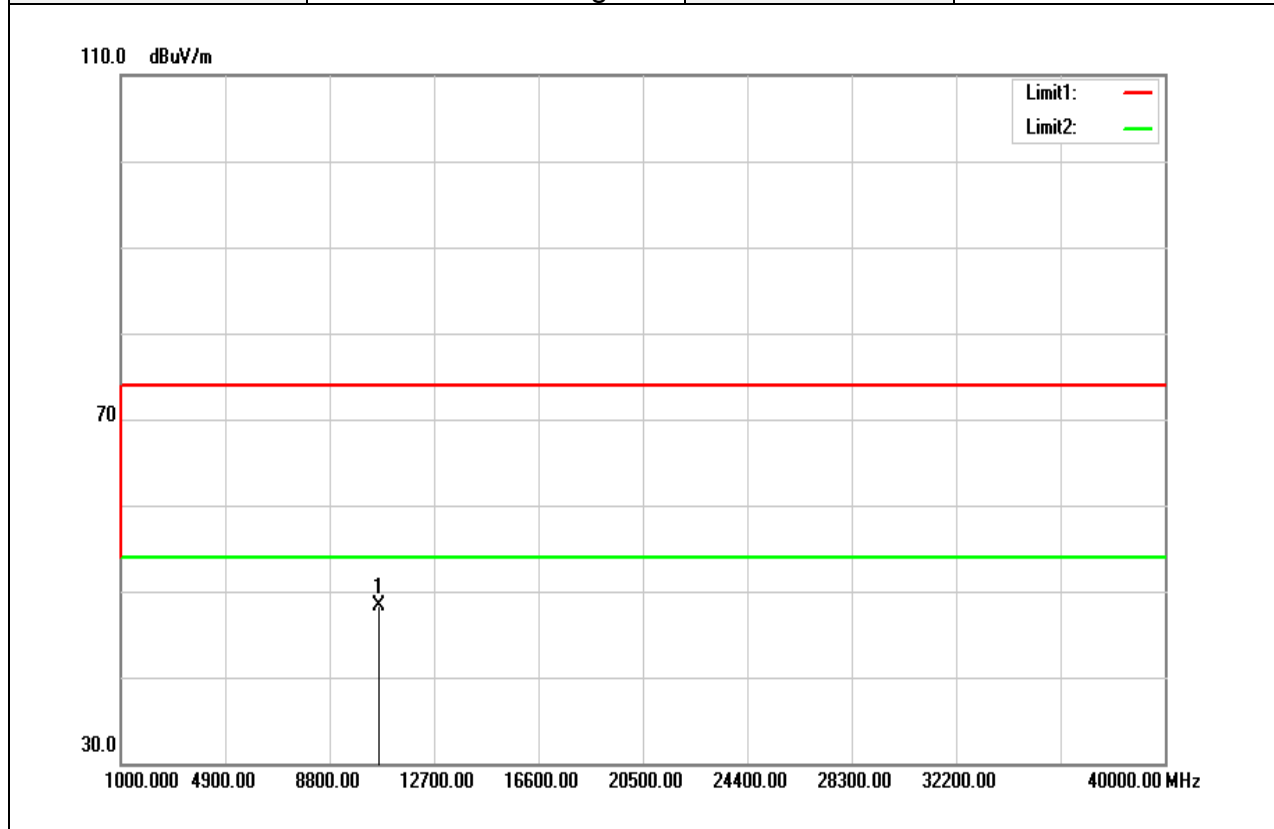


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10640.000	29.43	19.11	48.54	74.00	-25.46	peak
N/A						

**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 High CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average		

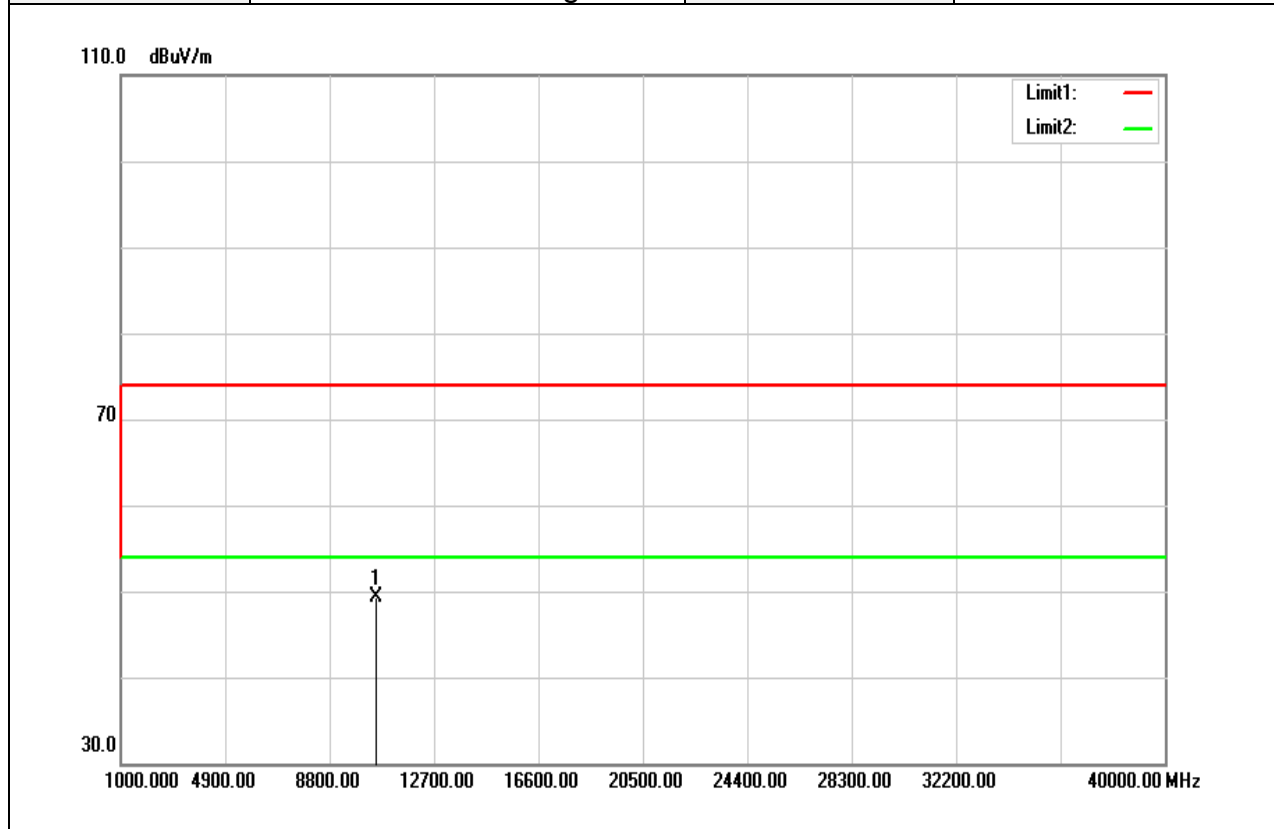


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10640.000	29.14	19.11	48.25	74.00	-25.75	peak
N/A						

**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 HT20 Low CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average		

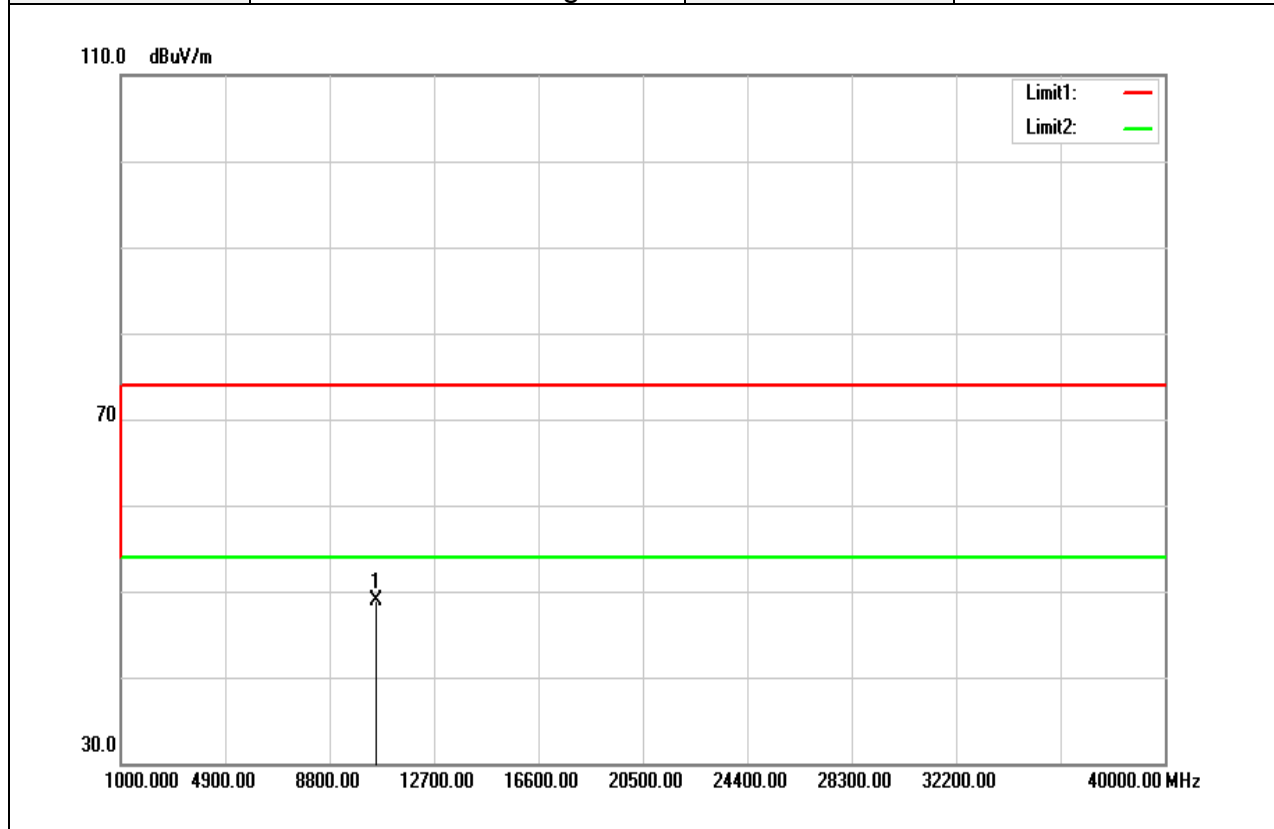


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10520.000	30.26	18.99	49.25	74.00	-24.75	peak
N/A						

**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 HT20 Low CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average		

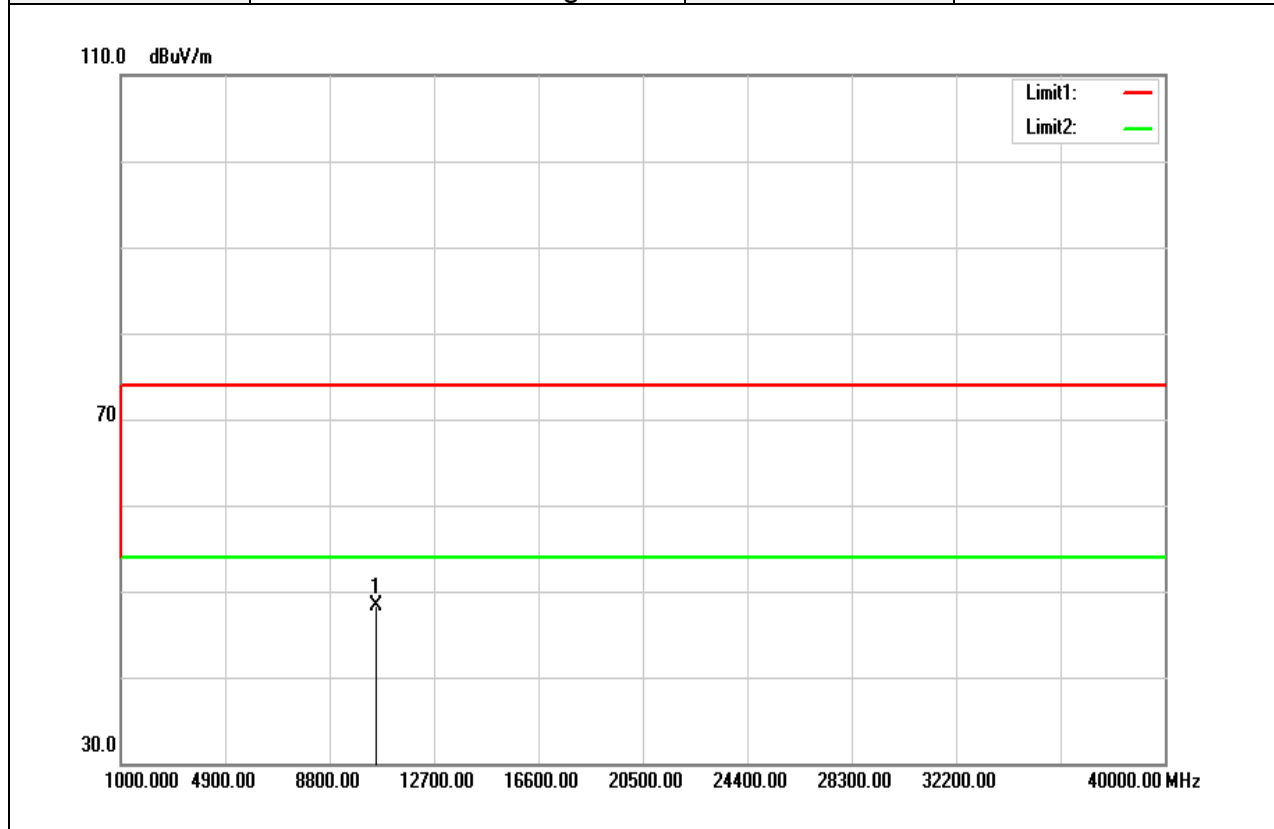


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10520.000	29.84	18.99	48.83	74.00	-25.17	peak
N/A						

**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 802.11n HT20 Mid CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average		

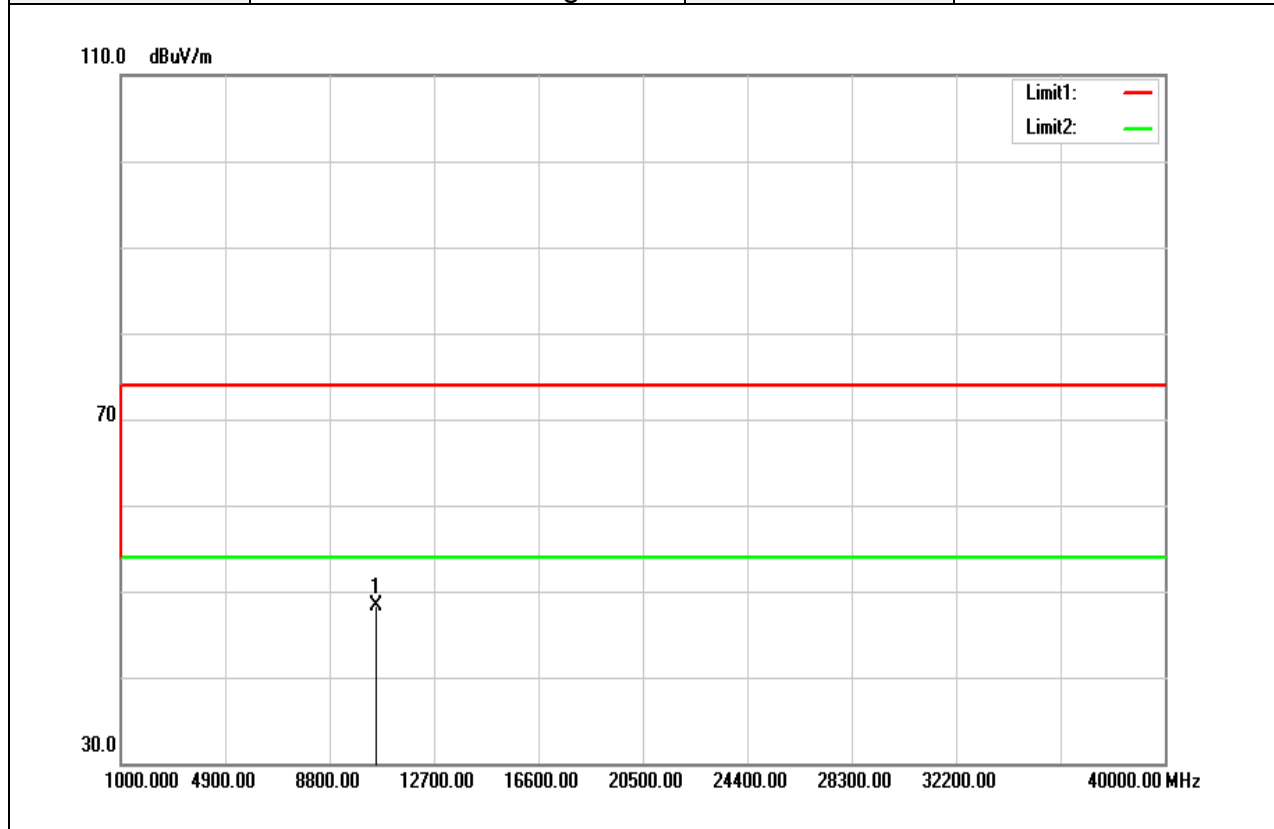


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10560.000	29.21	19.02	48.23	74.00	-25.77	peak
N/A						

**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 HT20 Mid CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average		

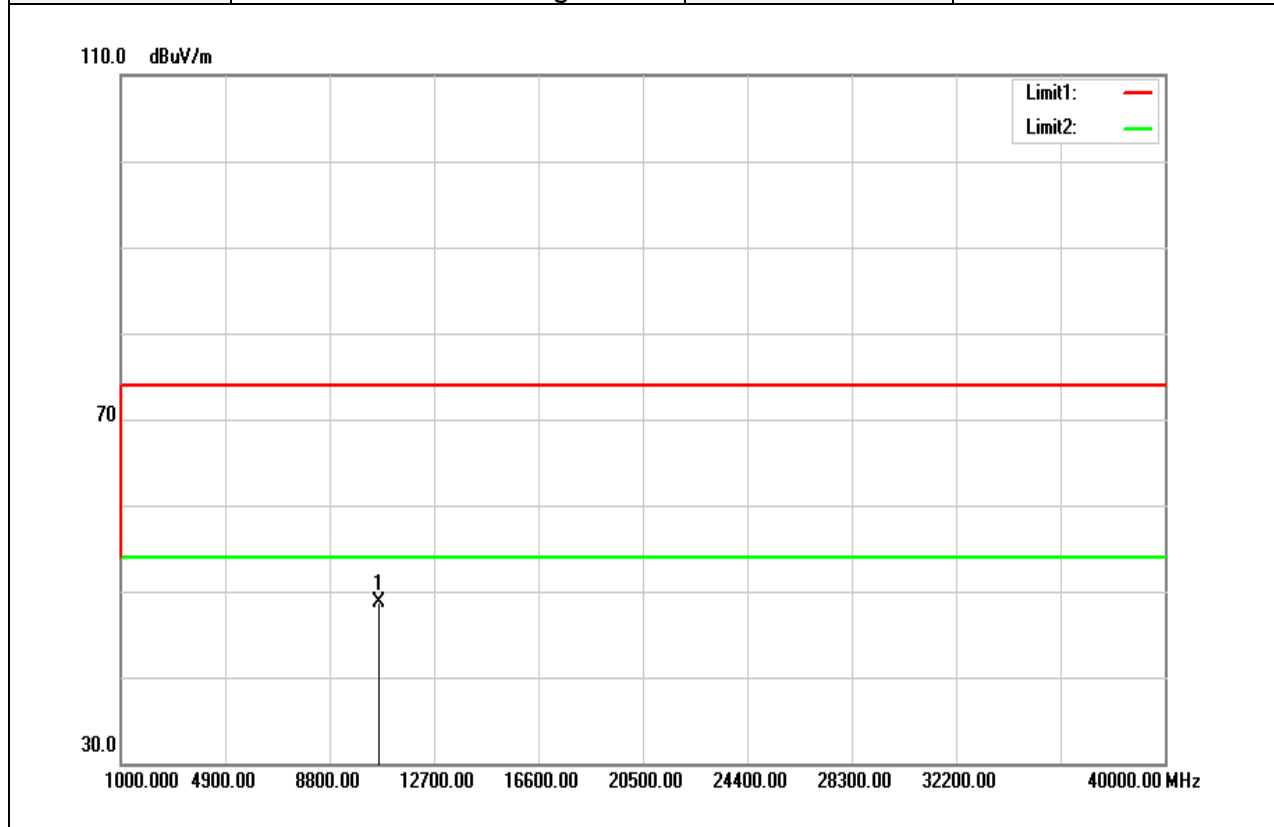


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10560.000	29.26	19.02	48.28	74.00	-25.72	peak
N/A						

**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 HT20 High CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average		

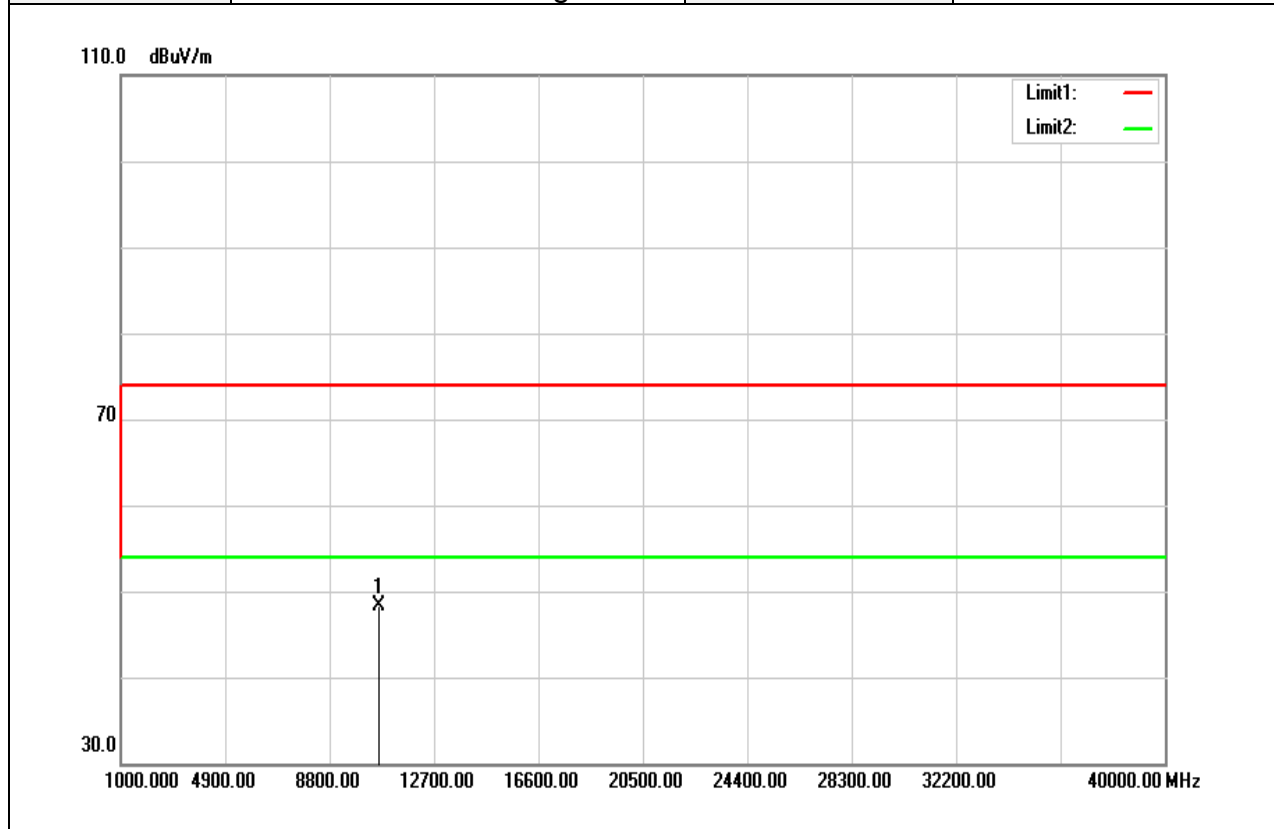


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10640.000	29.65	19.11	48.76	74.00	-25.24	peak
N/A						

**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 HT20 High CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average		



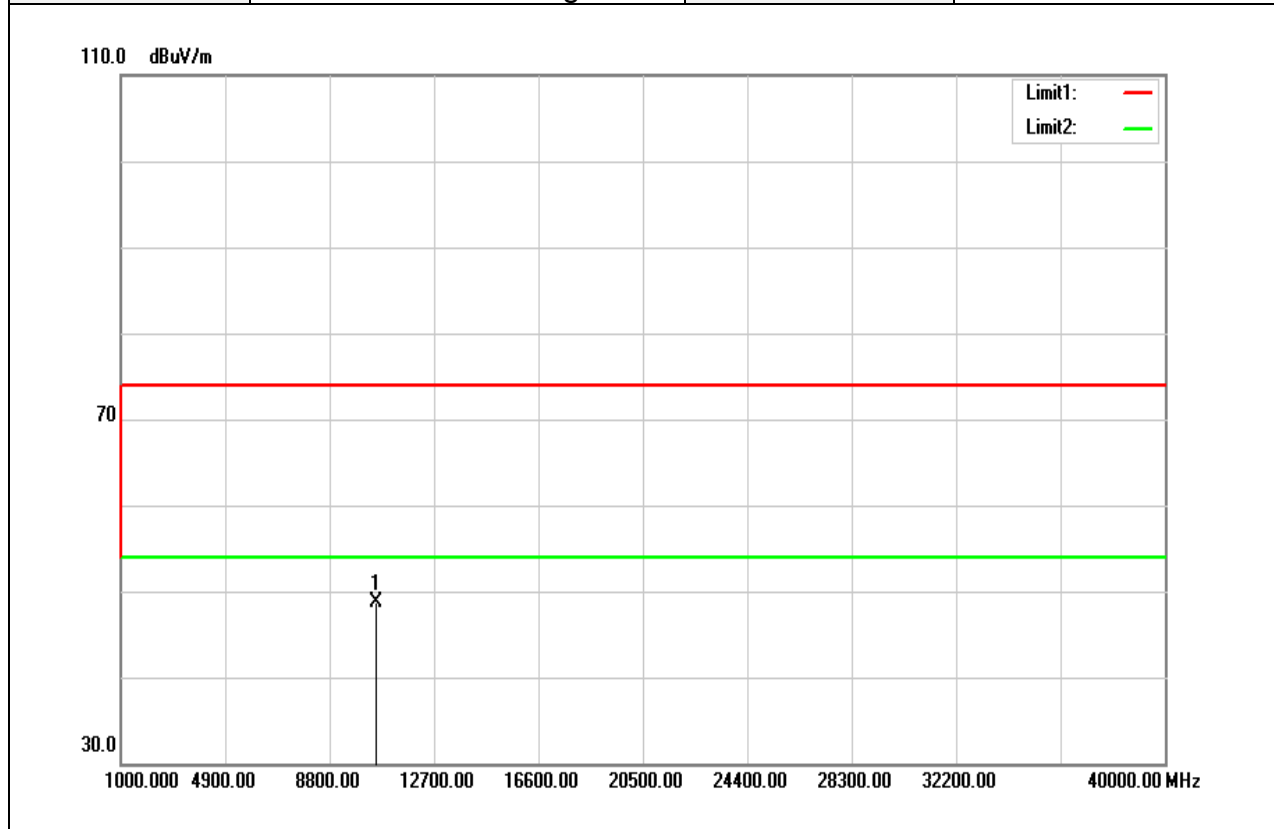
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10640.000	29.12	19.11	48.23	74.00	-25.77	peak
N/A						

**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 HT40 Low CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average		

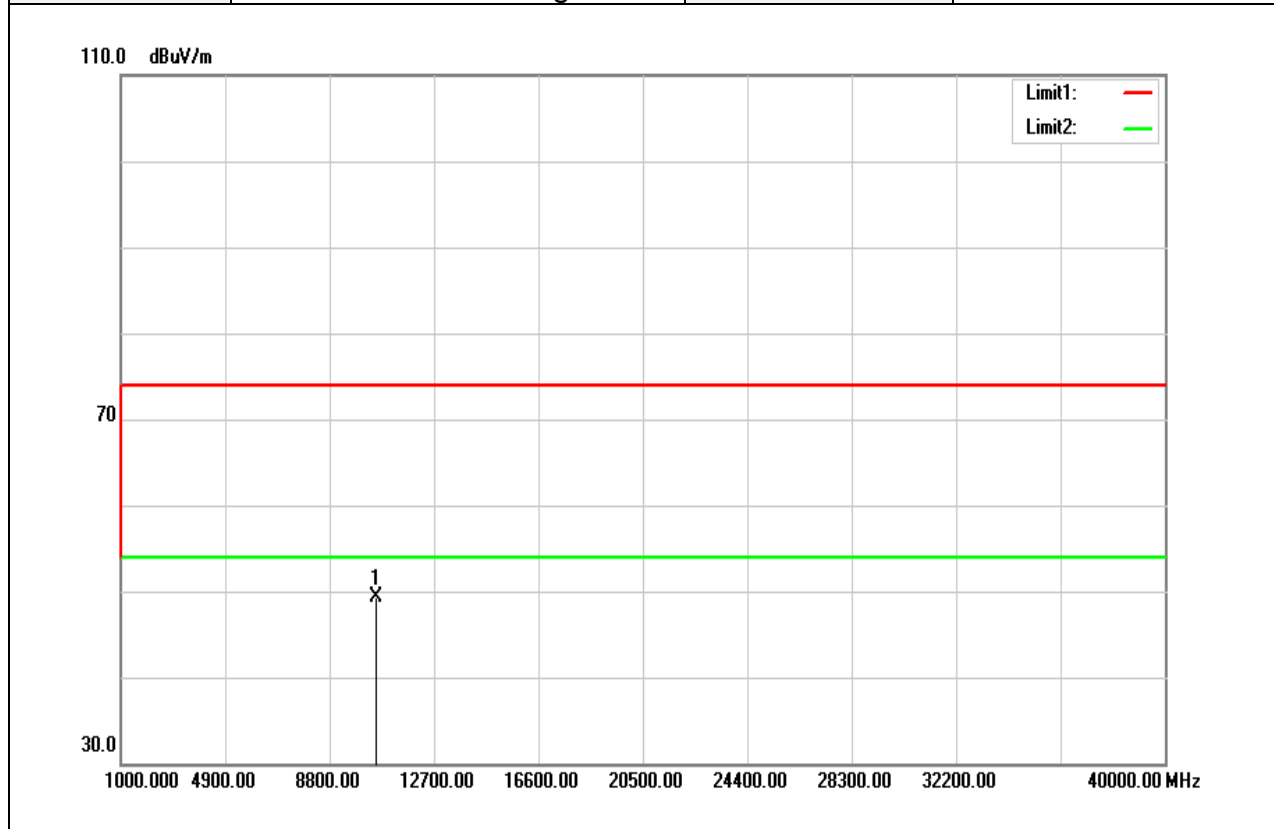


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10540.000	29.61	19.01	48.62	74.00	-25.38	peak
N/A						

**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 HT40 Low CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average		

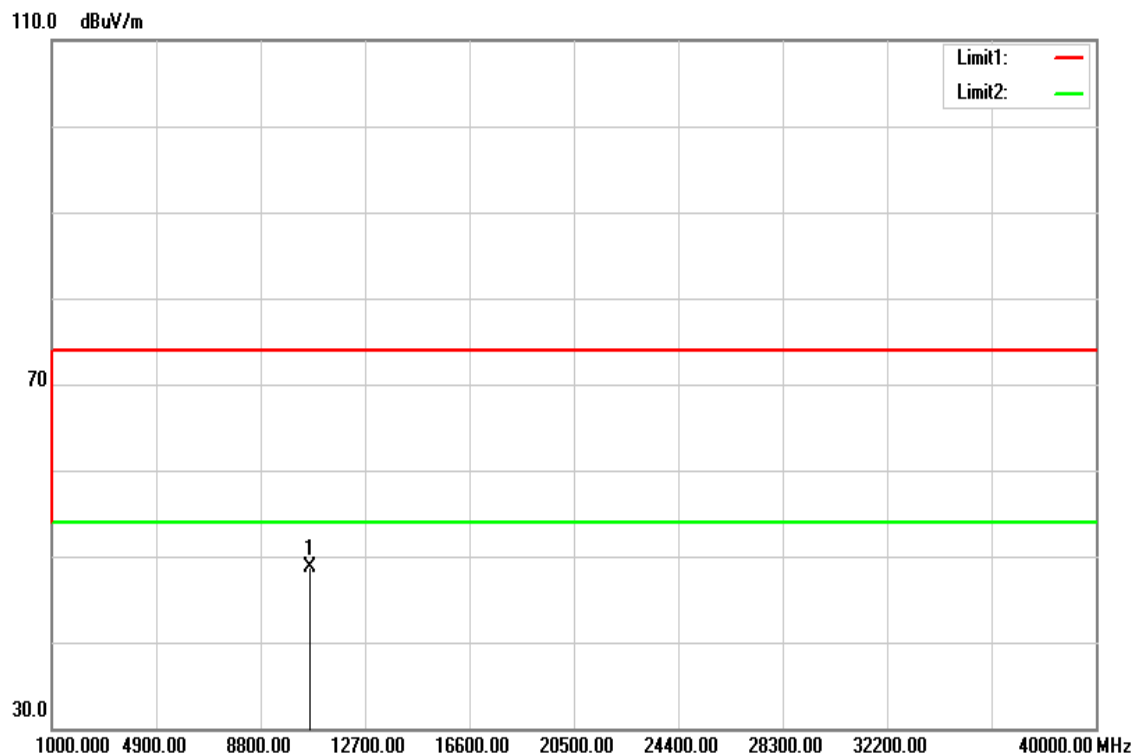


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10540.000	30.26	19.01	49.27	74.00	-24.73	peak
N/A						

**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 802.11n HT40 High CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average		

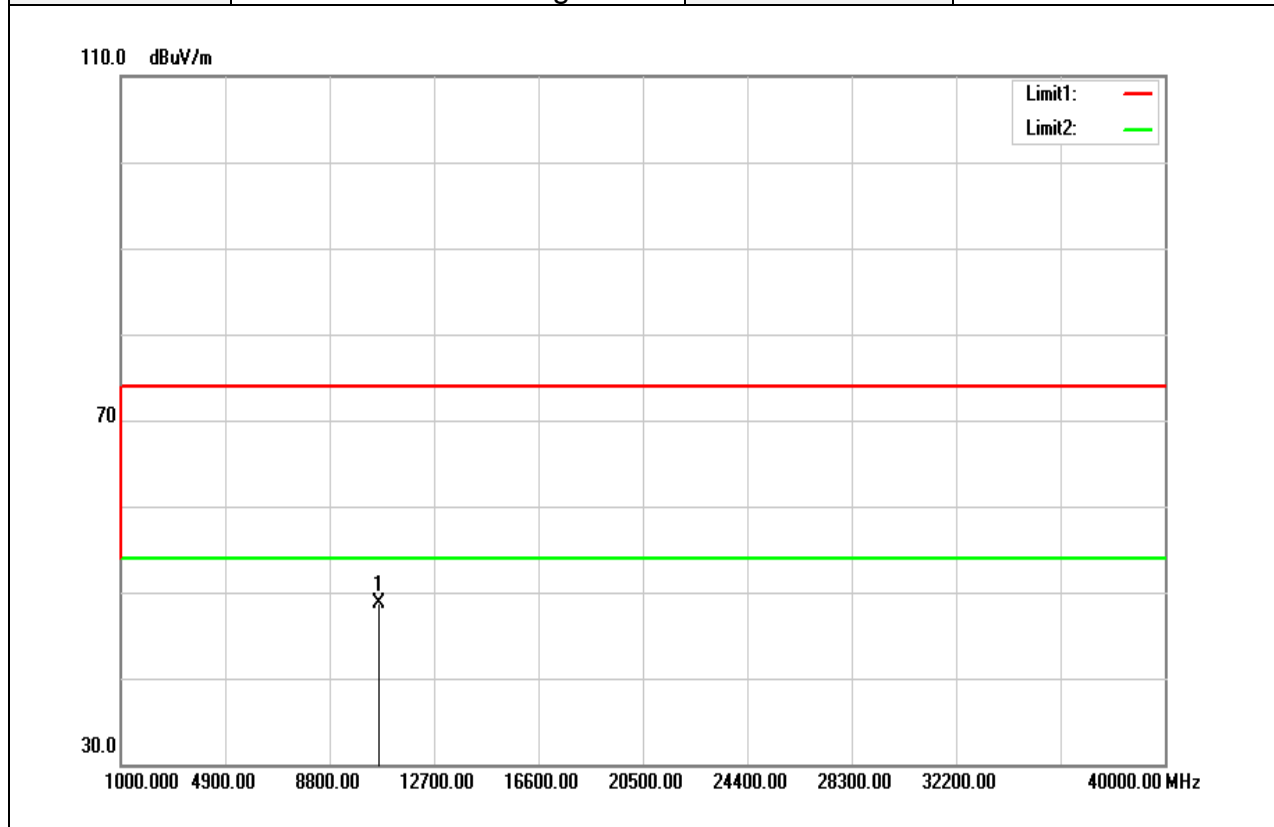


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10620.000	29.60	19.10	48.70	74.00	-25.30	peak
N/A						

**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 HT40 High CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average		



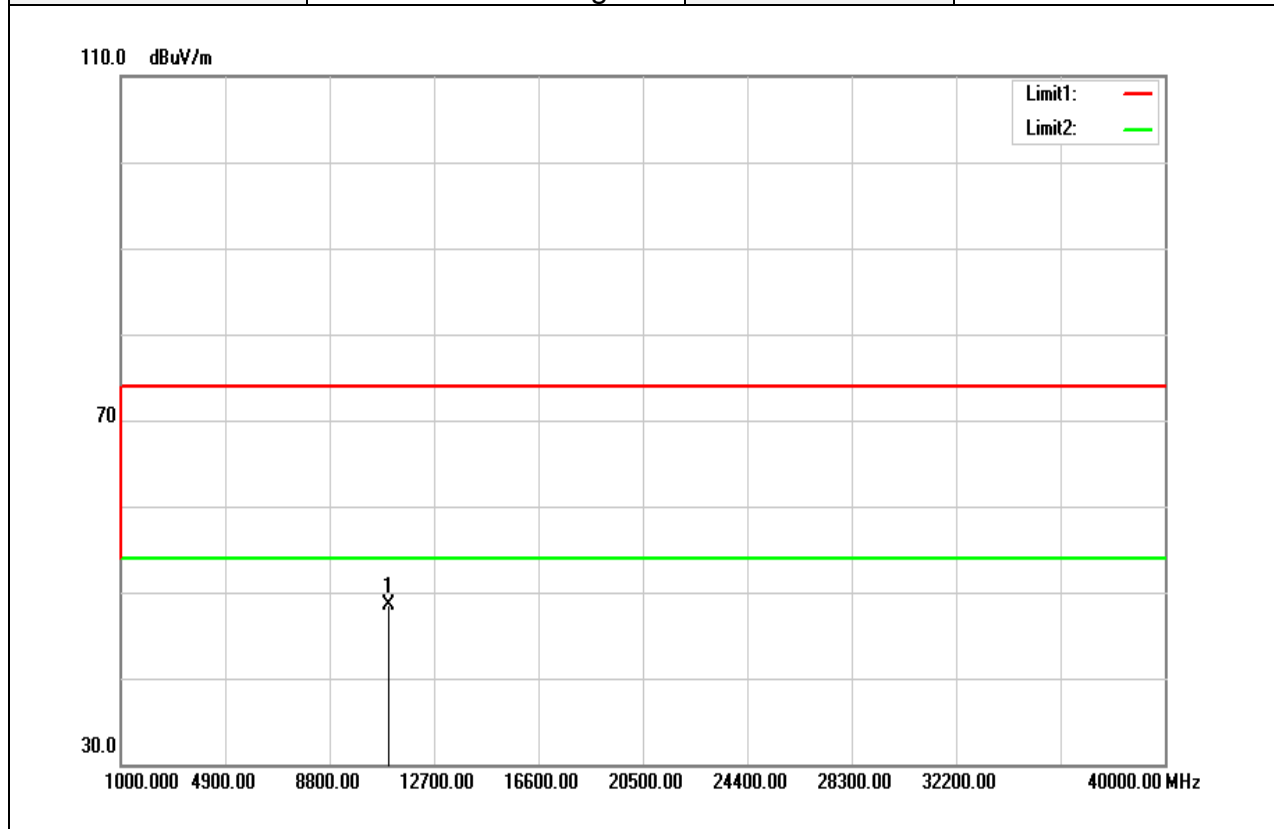
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
10620.000	29.61	19.10	48.71	74.00	-25.29	peak
N/A						

**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 Low CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average		

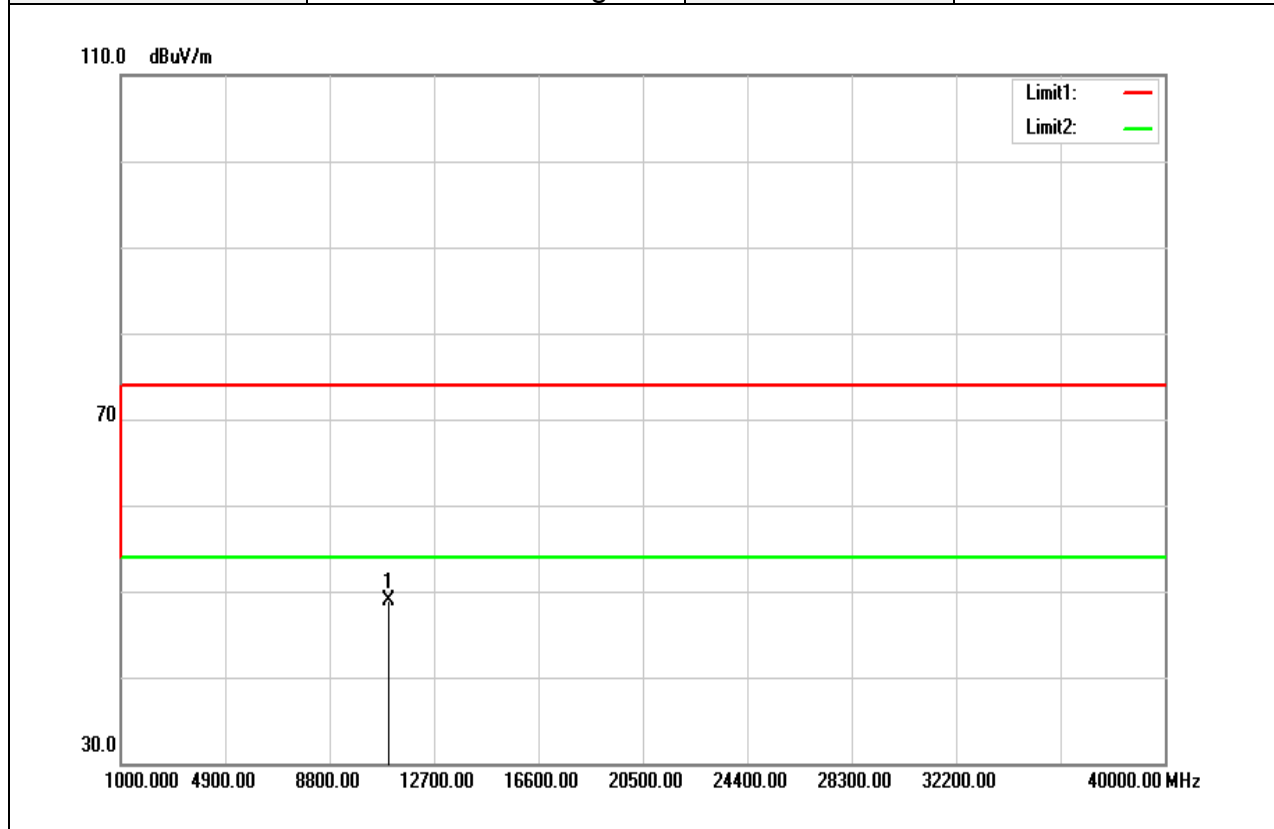


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11000.000	29.04	19.50	48.54	74.00	-25.46	peak
N/A						

**Remark:**

3. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
4. 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 Low CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average		

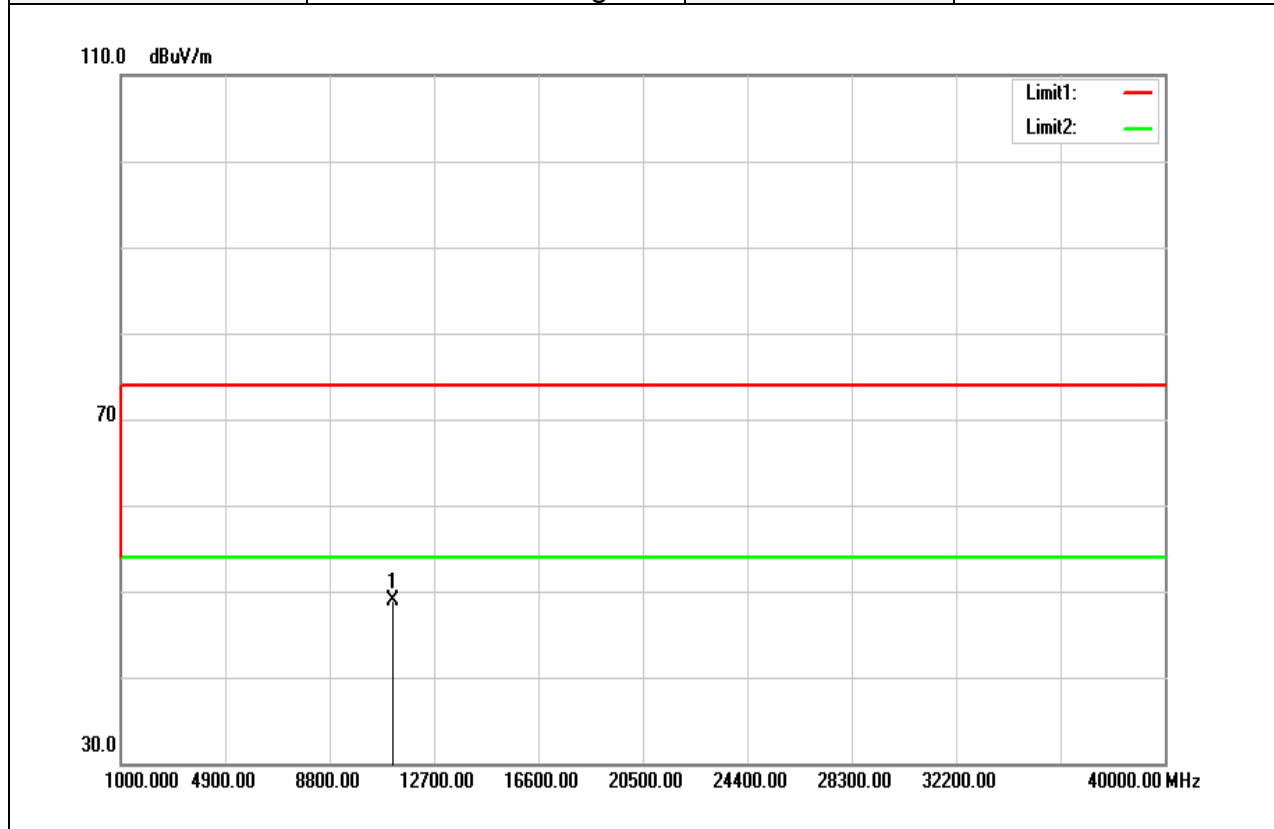


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11000.000	29.39	19.50	48.89	74.00	-25.11	peak
N/A						

**Remark:**

- 3. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 4. 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 Mid CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average		

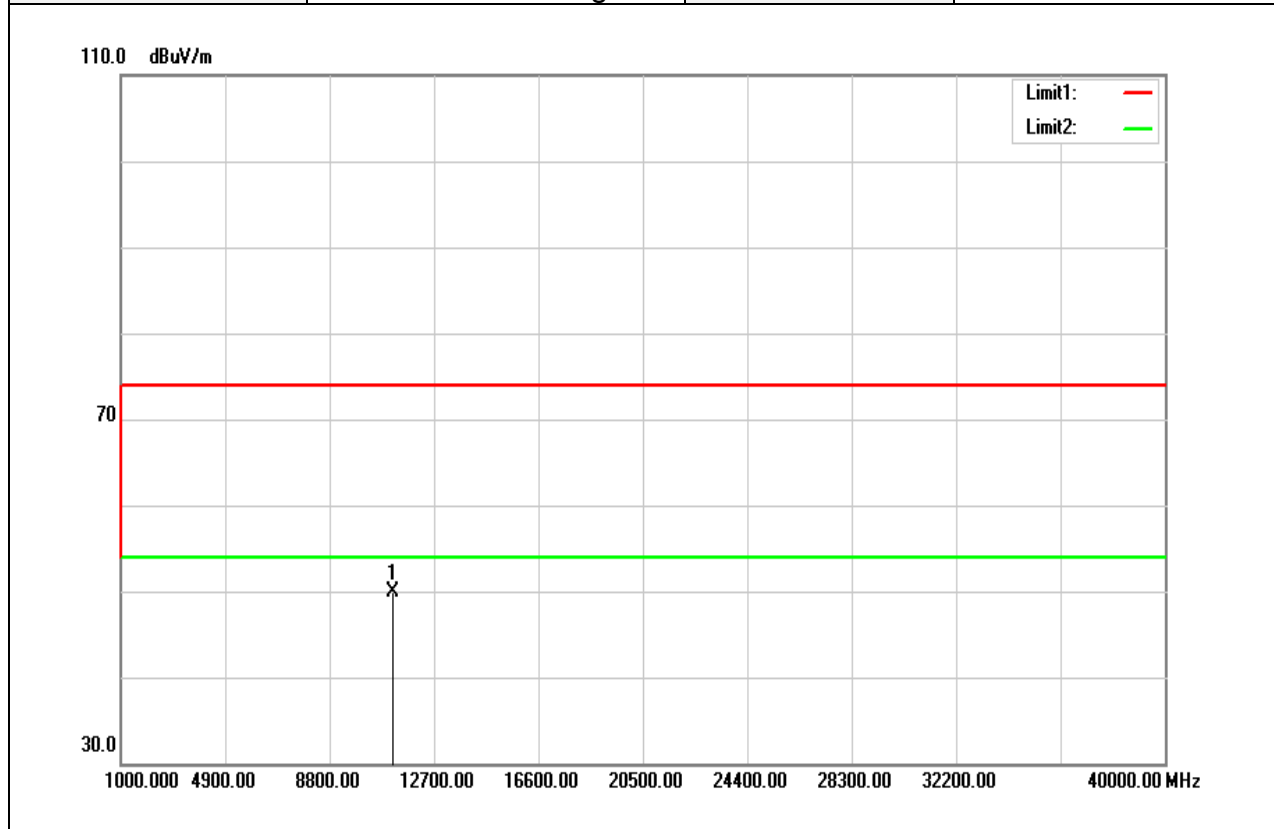


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11160.000	29.40	19.54	48.94	74.00	-25.06	peak
N/A						

**Remark:**

- 3. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 4. 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 Mid CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average		



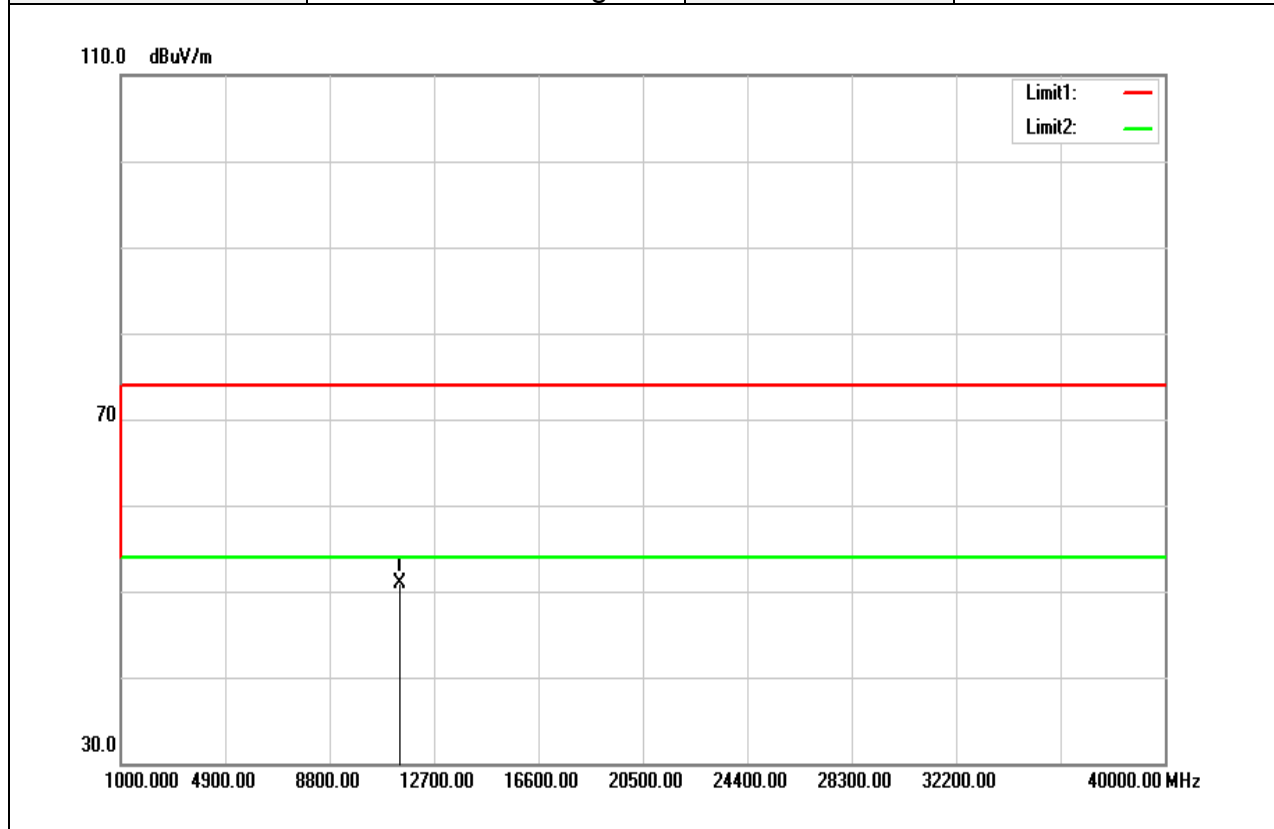
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11160.000	30.40	19.54	49.94	74.00	-24.06	peak
N/A						

**Remark:**

3. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
4. 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 High CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average		

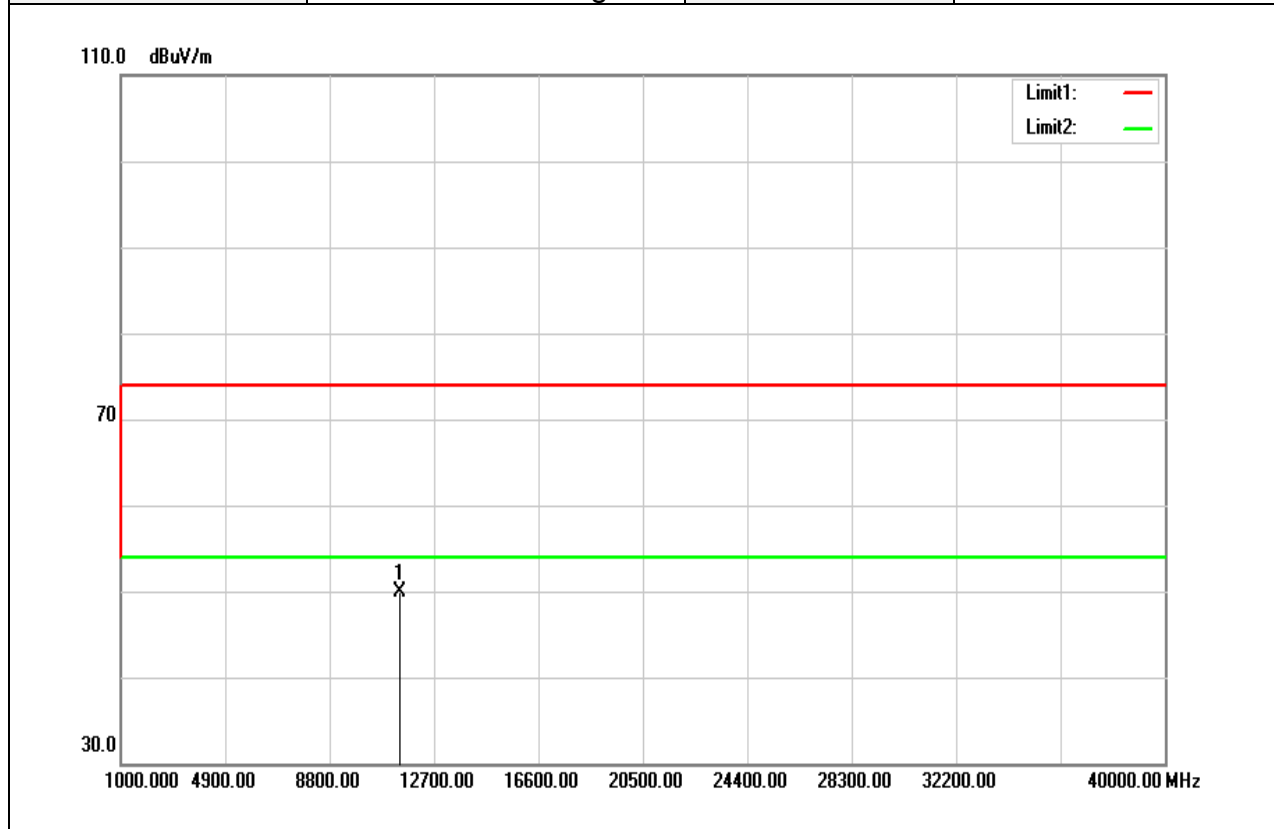


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11400.000	31.28	19.60	50.88	74.00	-23.12	peak
N/A						

**Remark:**

- 3. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 4. 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 High CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average		

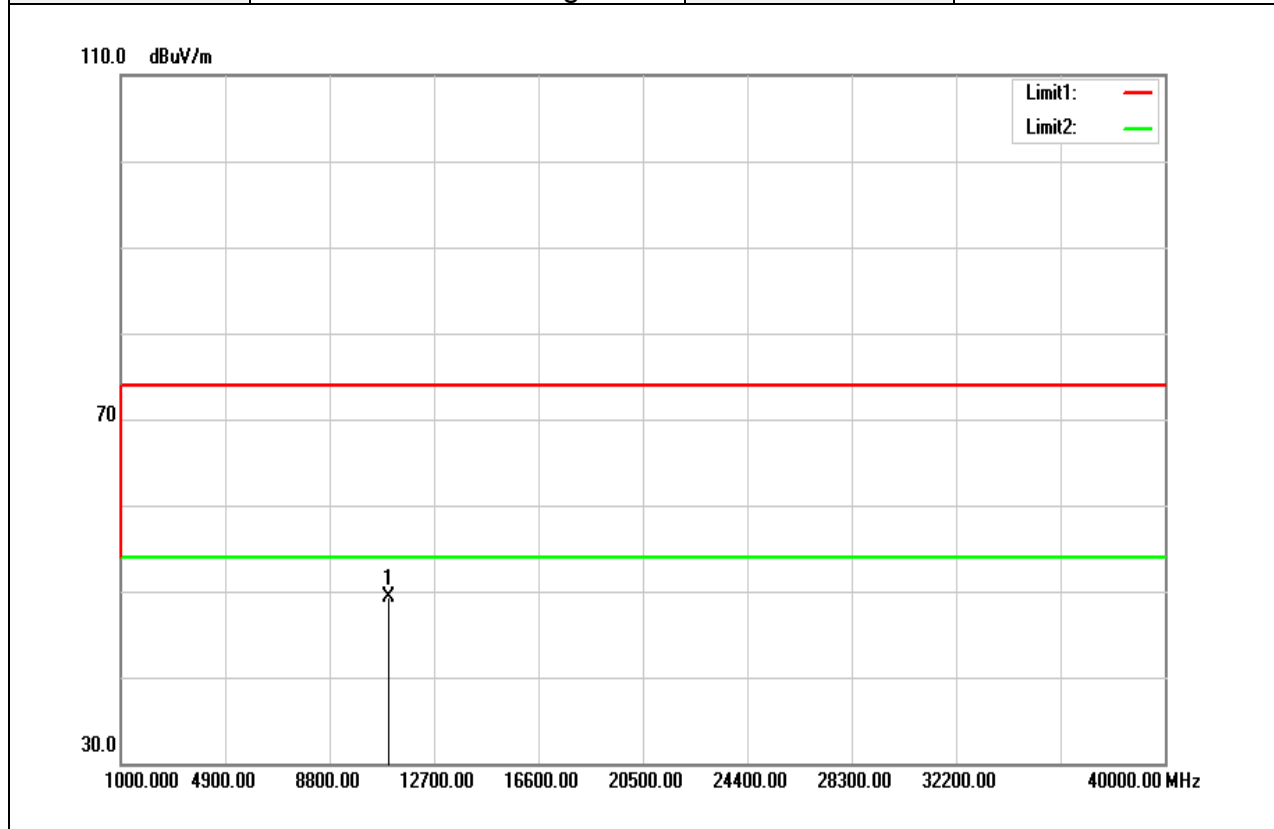


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11400.000	30.36	19.60	49.96	74.00	-24.04	peak
N/A						

**Remark:**

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

Test Mode	IEEE 802.11n HT20 Low CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average		

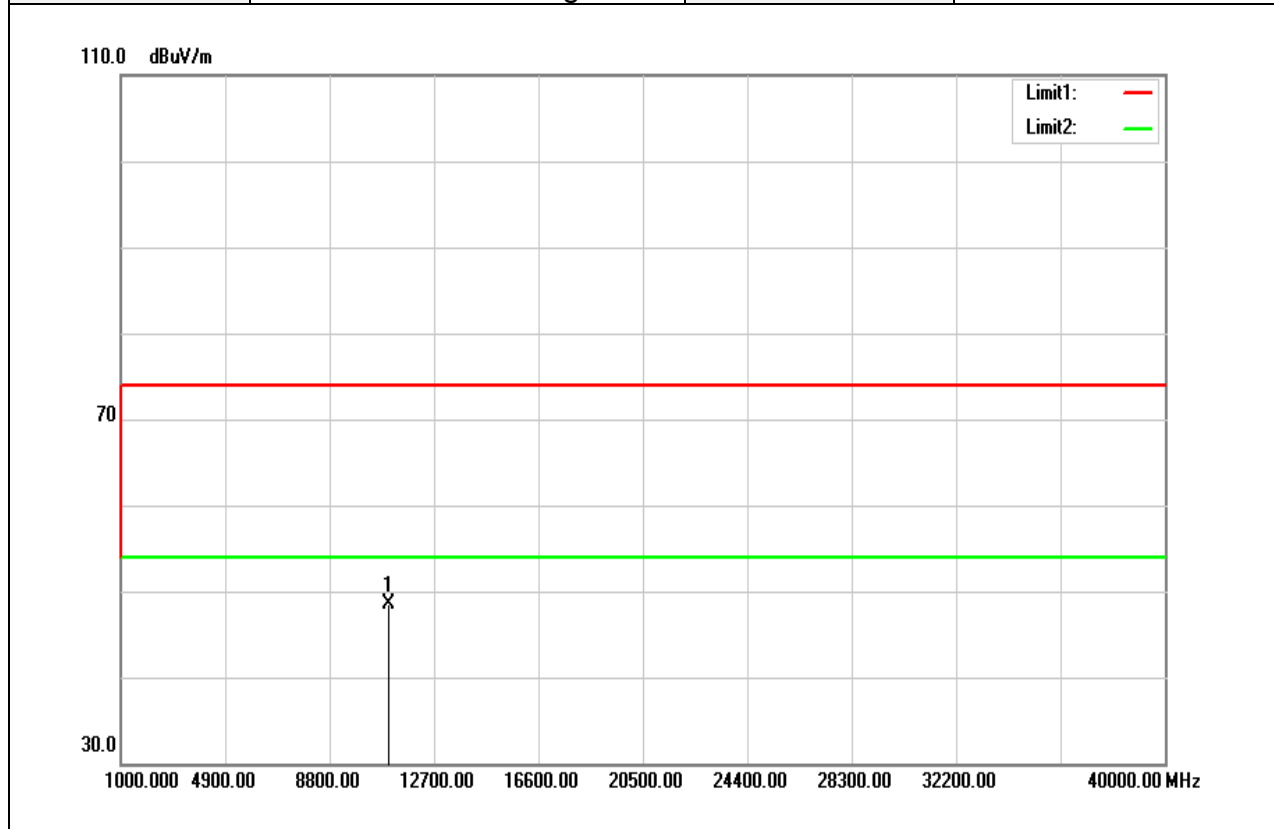


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11000.000	29.76	19.50	49.26	74.00	-24.74	peak
N/A						

**Remark:**

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

Test Mode	IEEE 802.11n HT20 Low CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average		

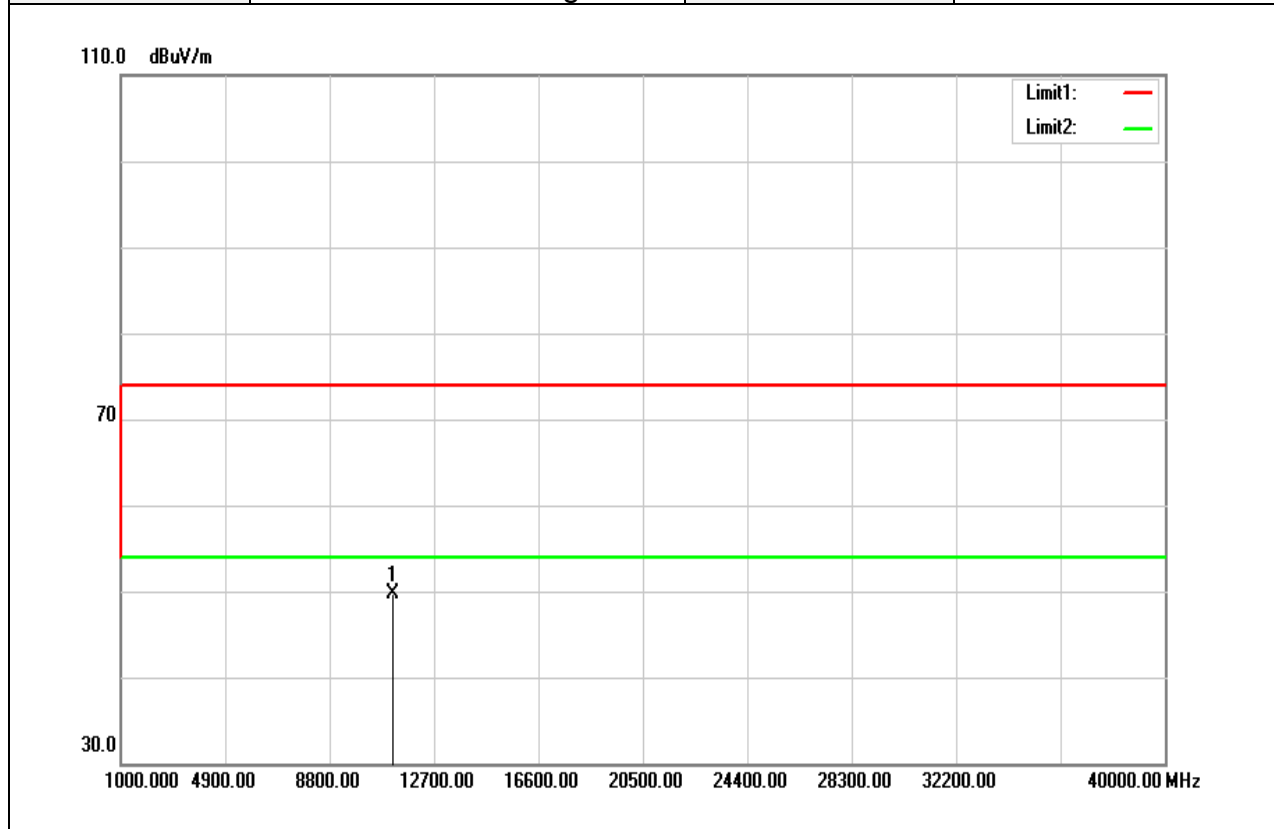


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11000.000	29.02	19.50	48.52	74.00	-25.48	peak
N/A						

**Remark:**

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

Test Mode	IEEE 802.11n HT20 Mid CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average		

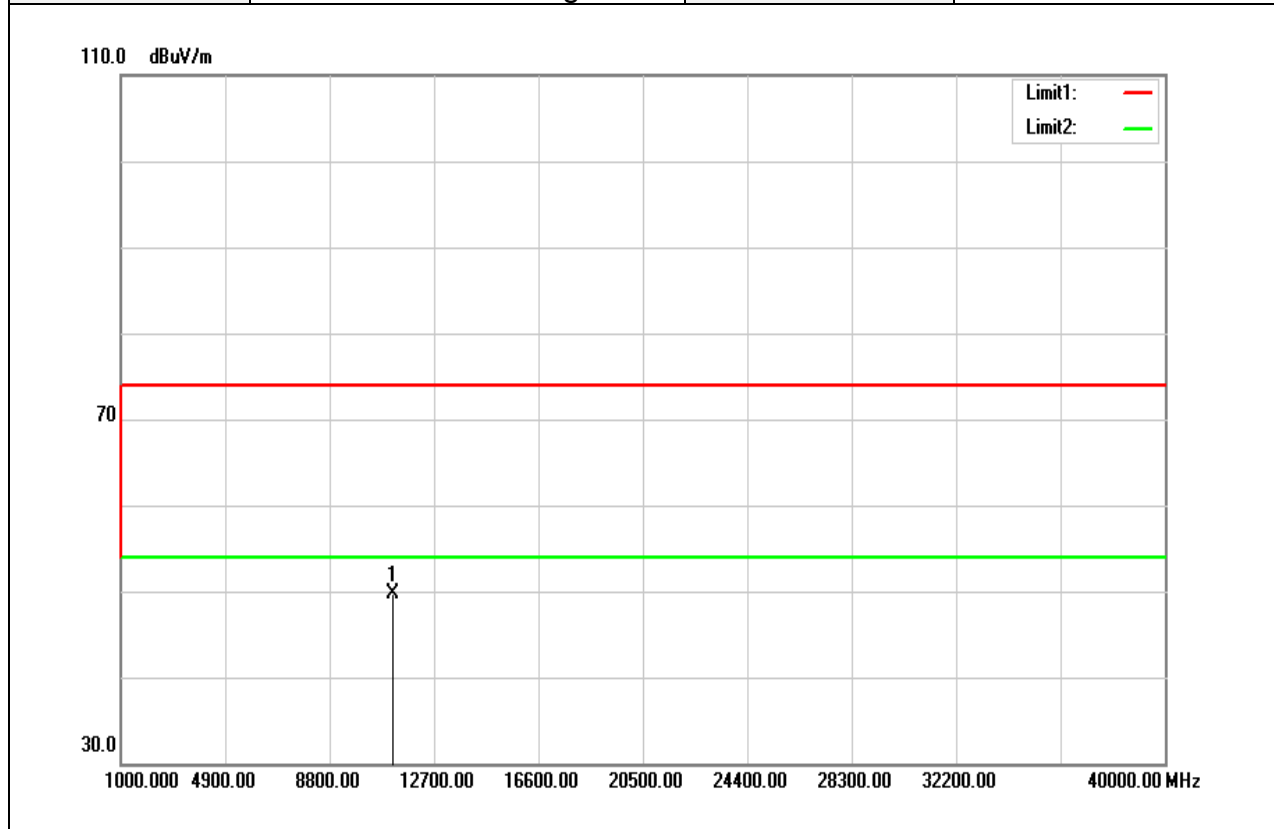


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11160.000	30.14	19.54	49.68	74.00	-24.32	peak
N/A						

**Remark:**

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

Test Mode	IEEE 802.11n HT20 Mid CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average		

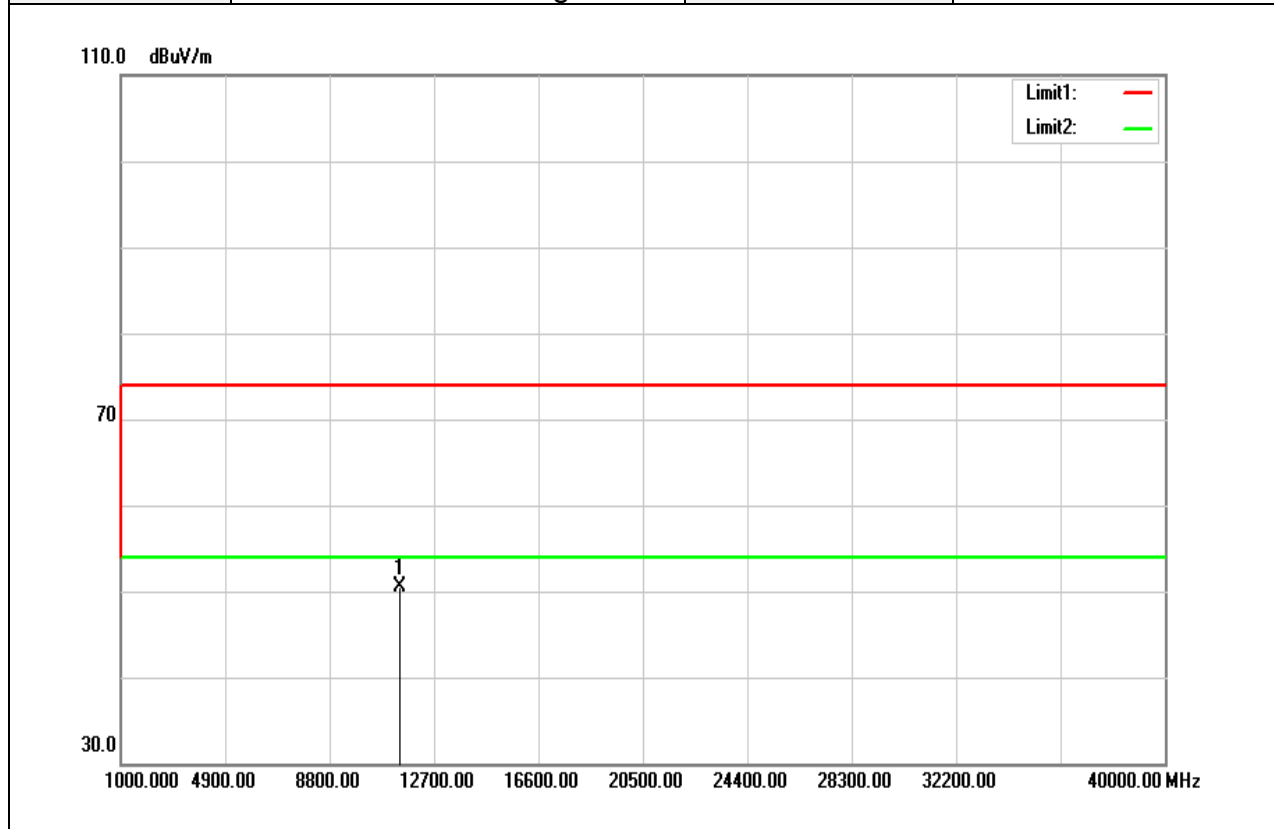


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11160.000	30.20	19.54	49.74	74.00	-24.26	peak
N/A						

**Remark:**

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

Test Mode	IEEE 802.11n HT20 High CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average		

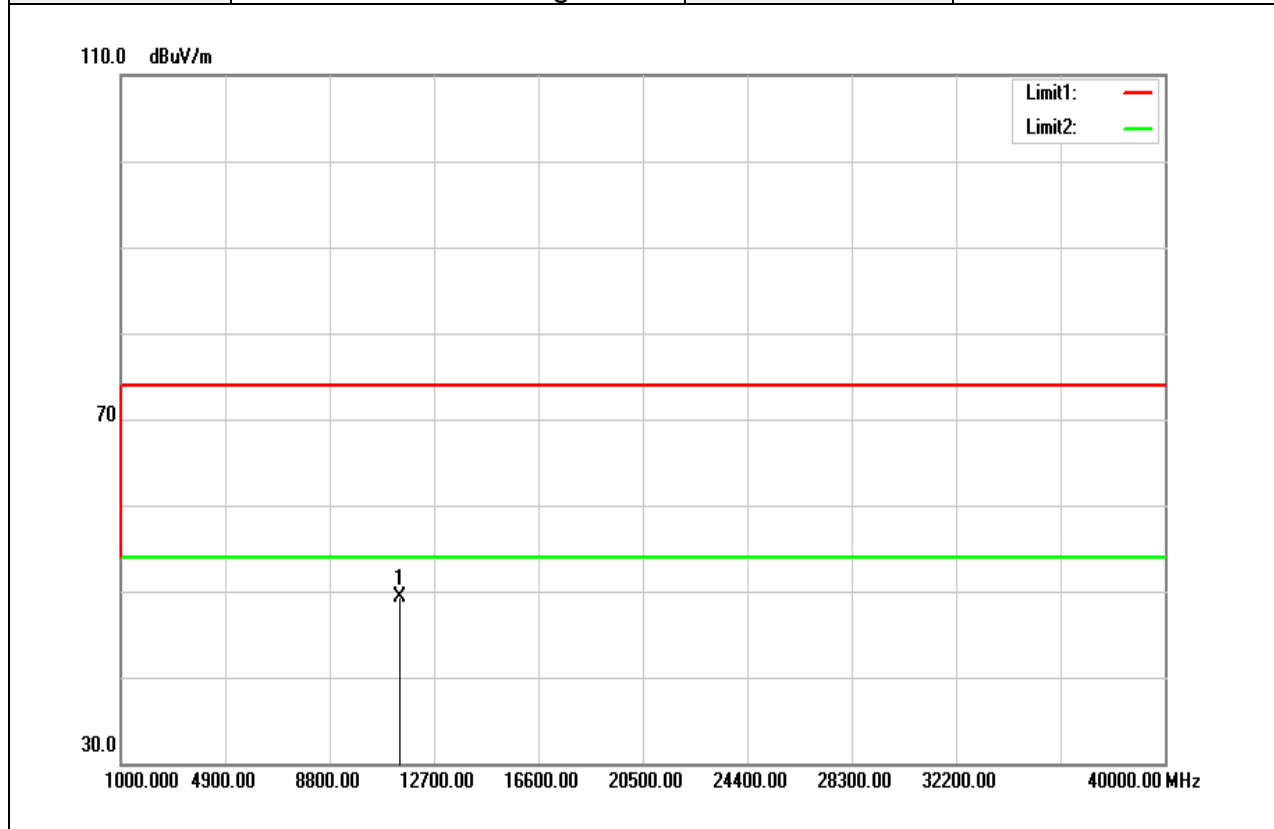


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11400.000	30.81	19.60	50.41	74.00	-23.59	peak
N/A						

**Remark:**

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

Test Mode	IEEE 802.11n HT20 High CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average		



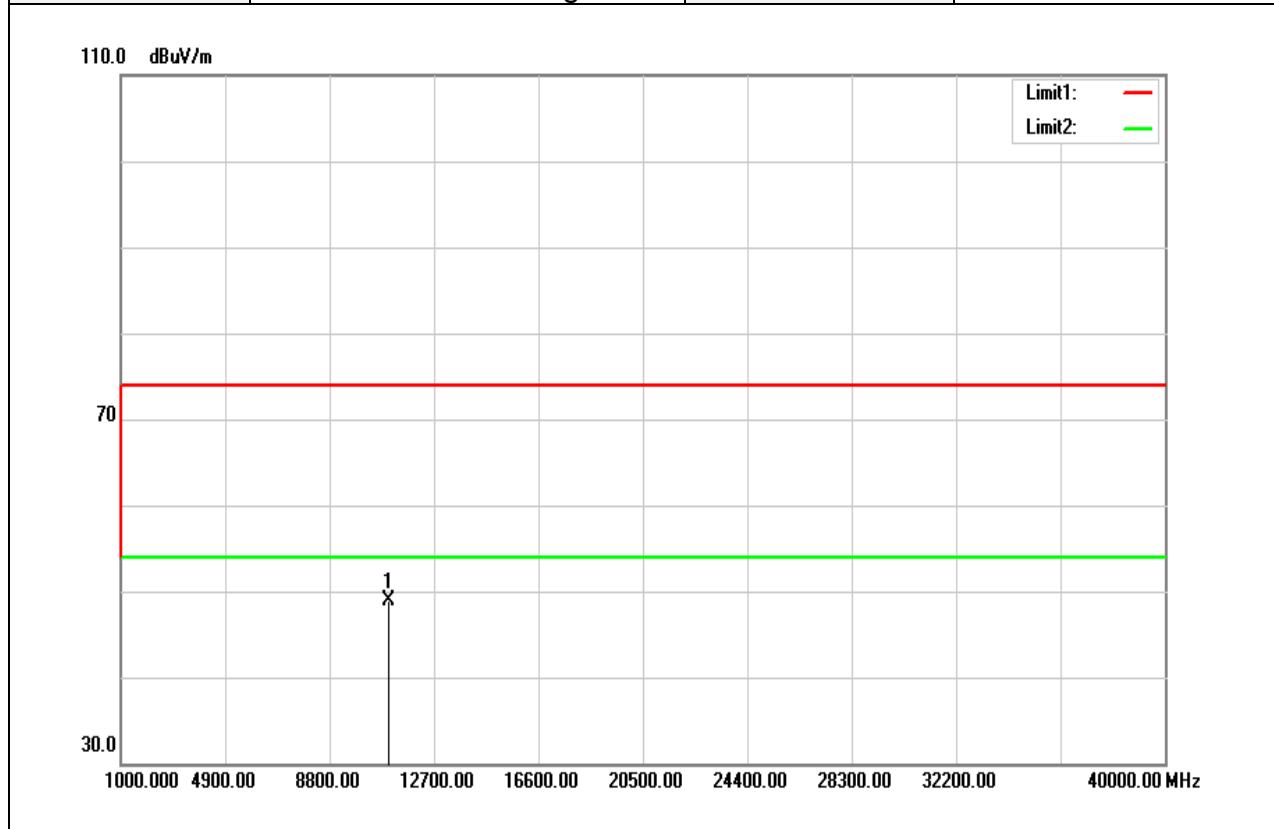
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11400.000	29.70	19.60	49.30	74.00	-24.70	peak
N/A						

**Remark:**

3. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
4. 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 HT40 Low CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average		

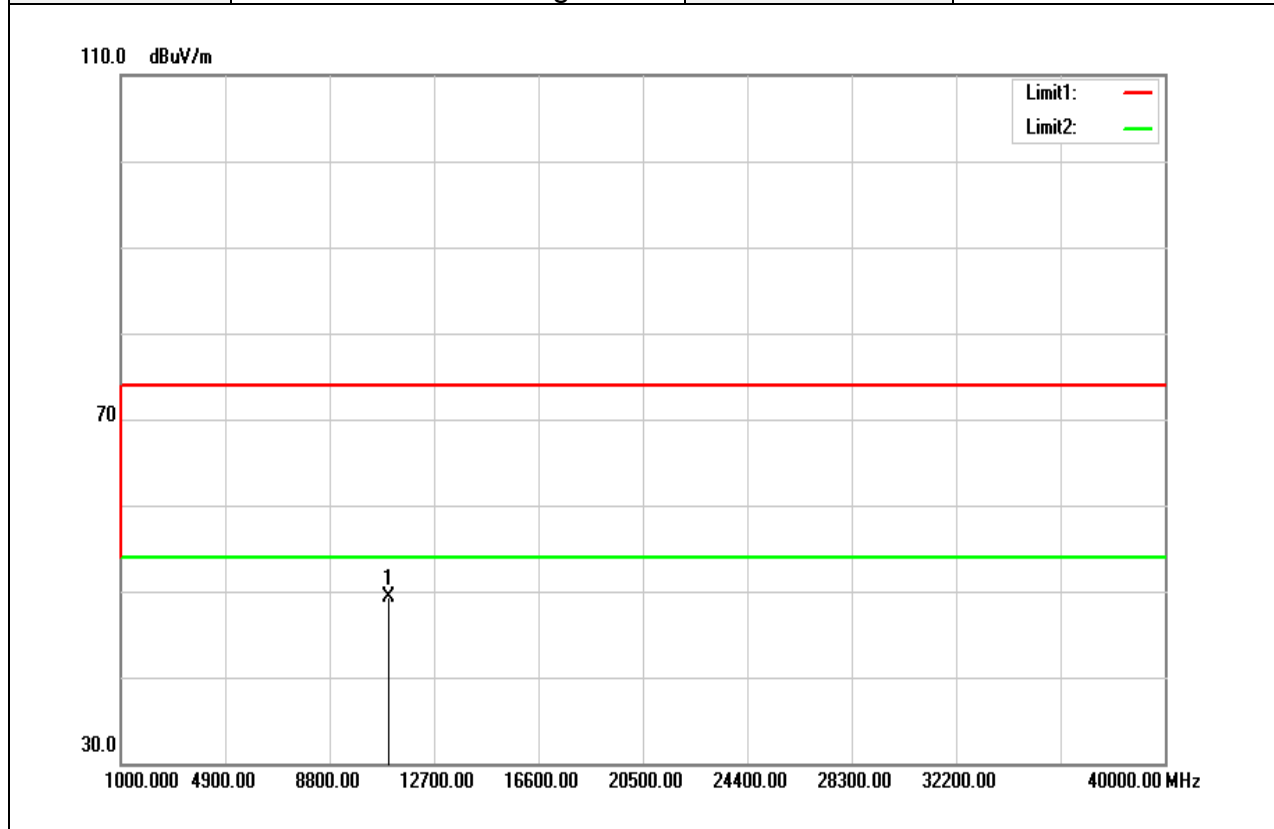


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11020.000	29.46	19.50	48.96	74.00	-25.04	peak
N/A						

**Remark:**

- 3. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 4. 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 HT40 Low CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average		

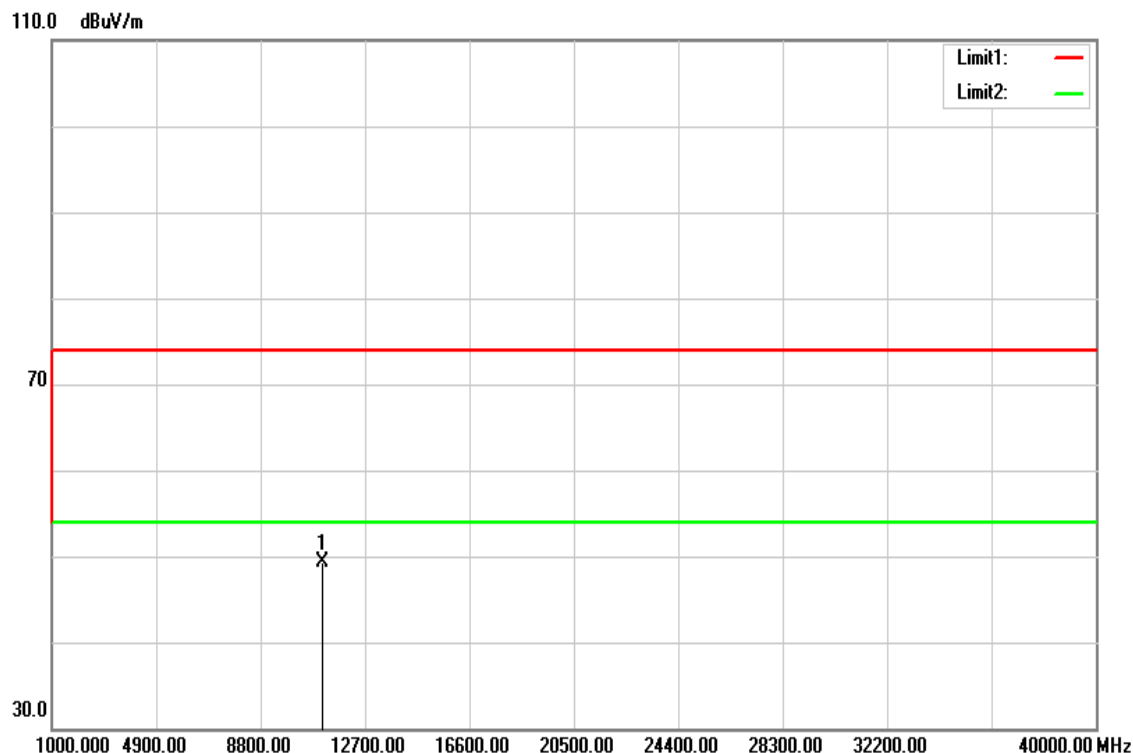


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11020.000	29.72	19.50	49.22	74.00	-24.78	peak
N/A						

**Remark:**

- 3. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 4. 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 HT40 Mid CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average		

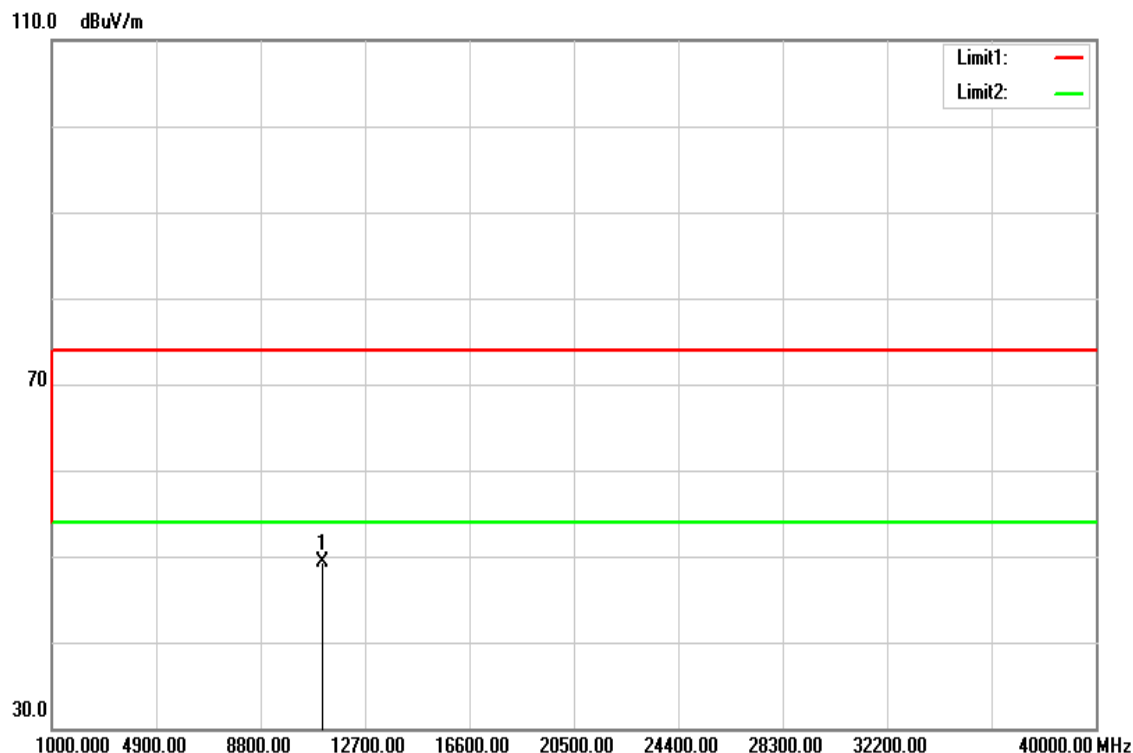


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11100.000	29.86	19.53	49.39	74.00	-24.61	peak
N/A						

**Remark:**

3. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
4. 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 HT40 Mid CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average		

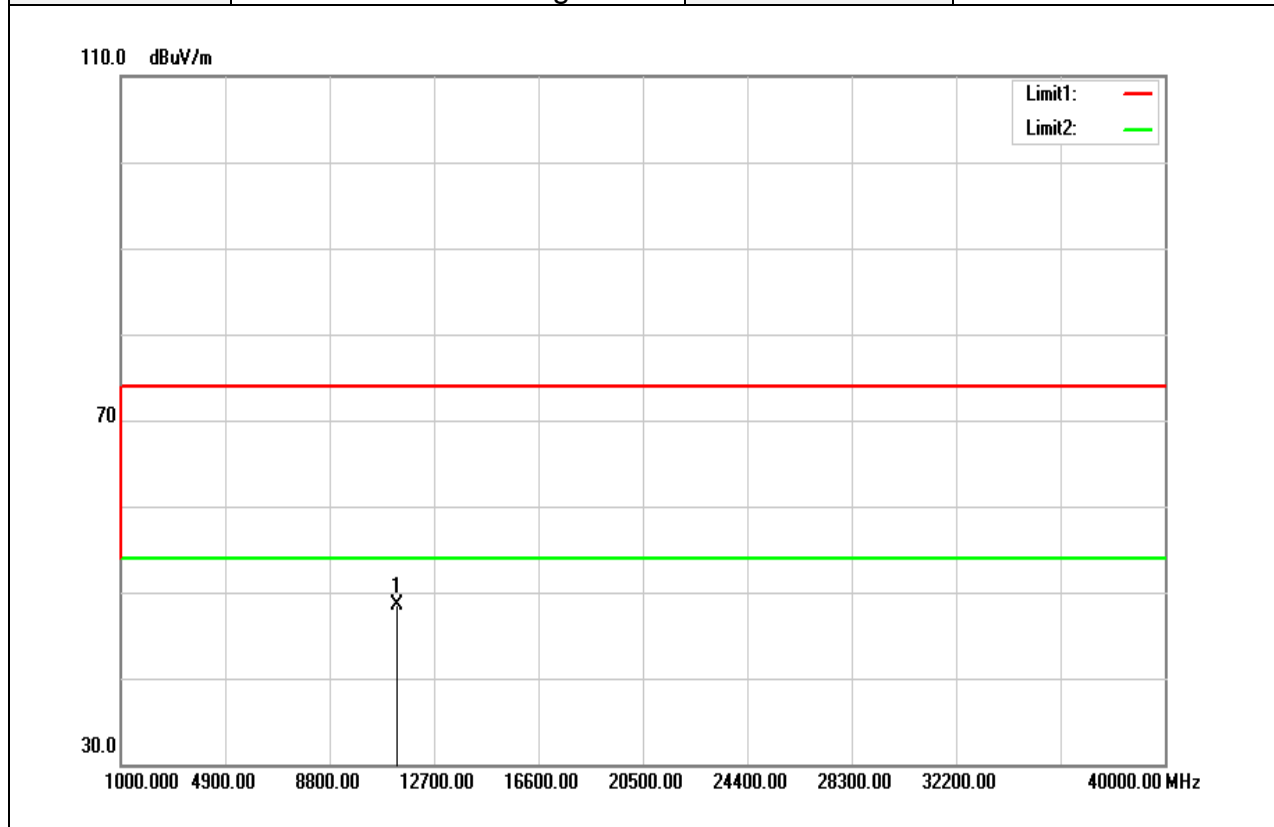


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11100.000	29.67	19.53	49.20	74.00	-24.80	peak
N/A						

**Remark:**

3. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
4. 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 HT40 High CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average		

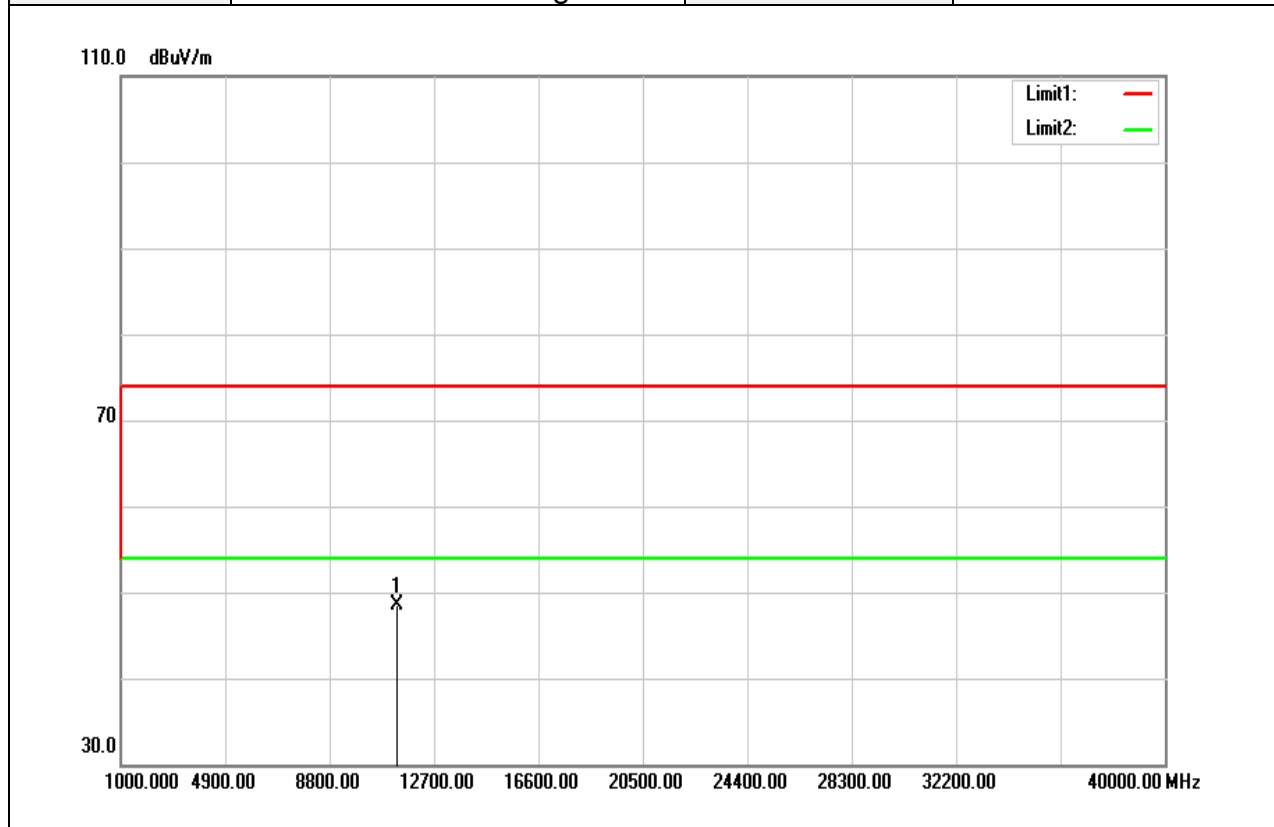


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11340.000	28.97	19.59	48.56	74.00	-25.44	peak
N/A						

**Remark:**

- 5. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 6. 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 HT40 High CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average		



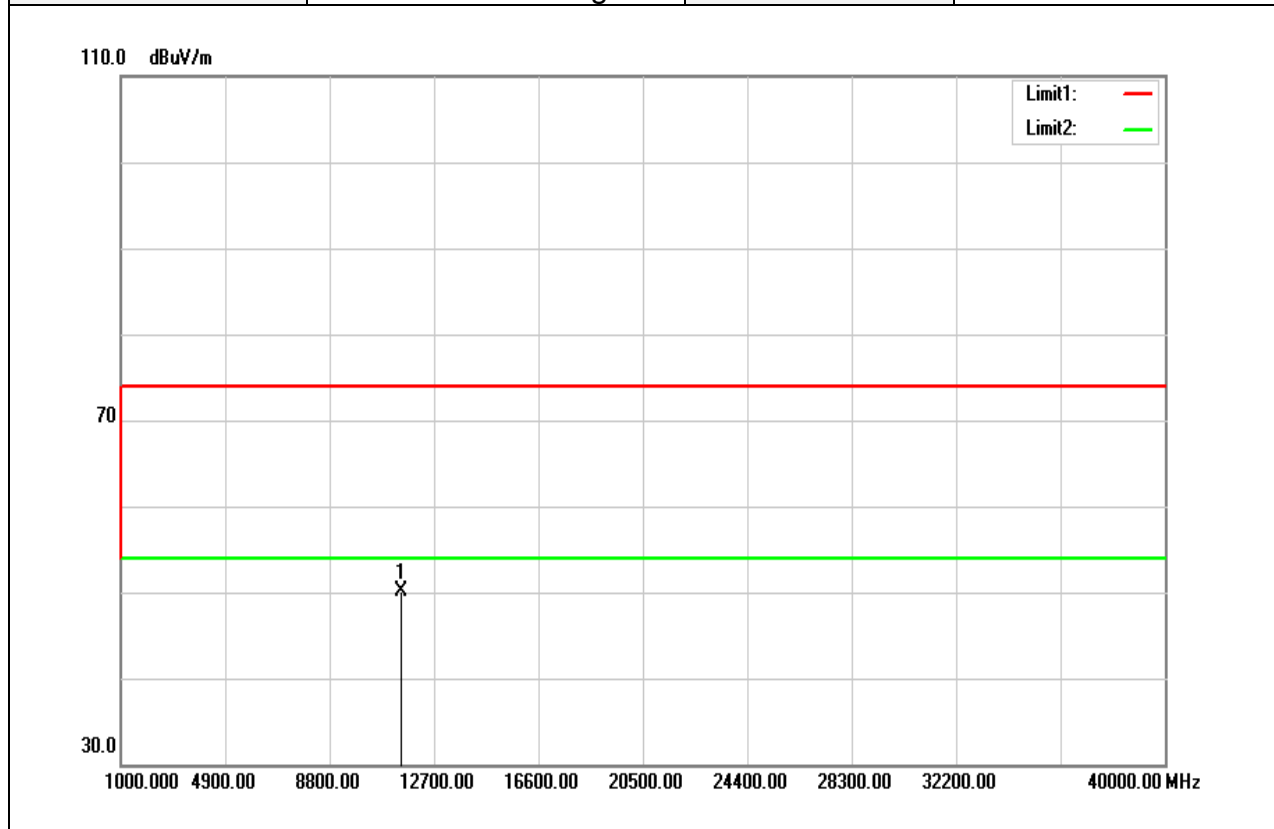
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11340.000	29.00	19.59	48.59	74.00	-25.41	peak
N/A						

**Remark:**

- 5. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 6. 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 Low CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average		

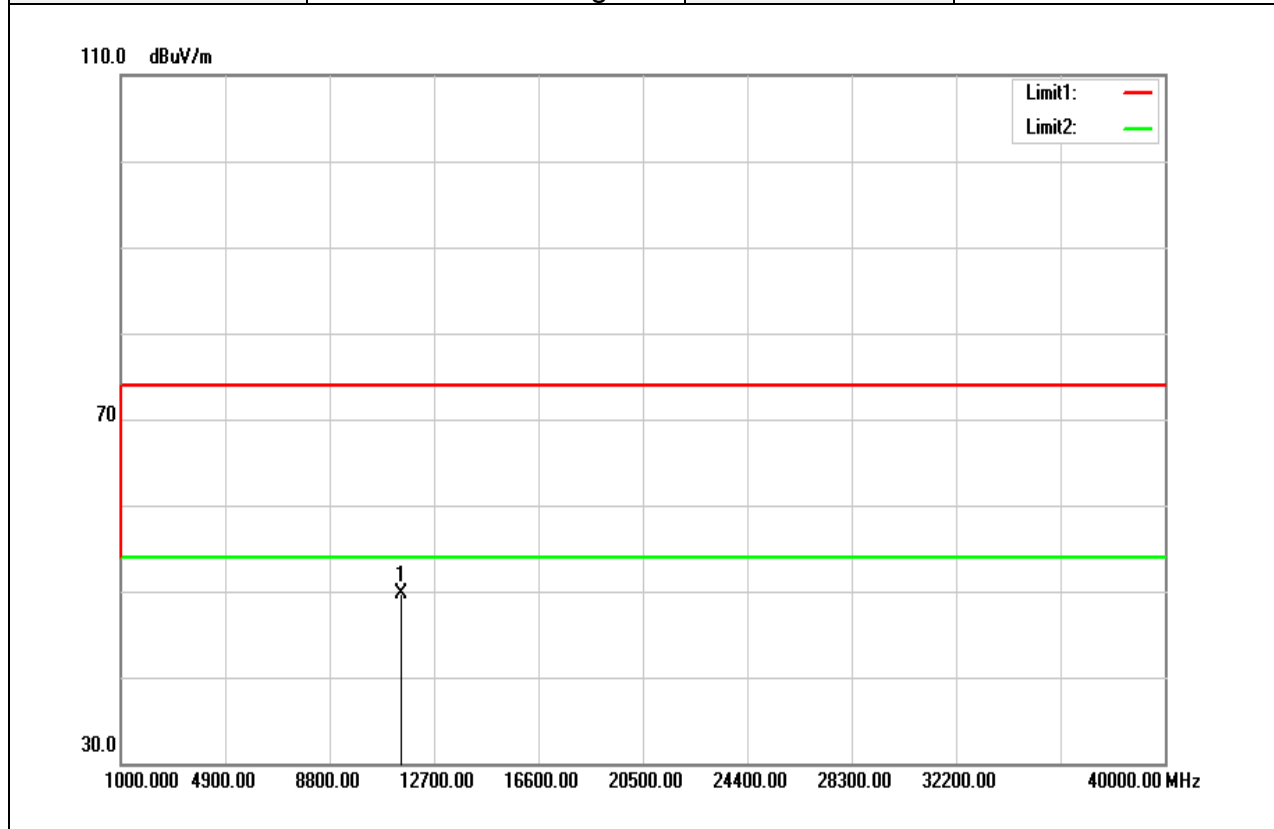


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11490.000	30.38	19.63	50.01	74.00	-23.99	peak
N/A						

**Remark:**

5. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
6. 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 Low CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average		



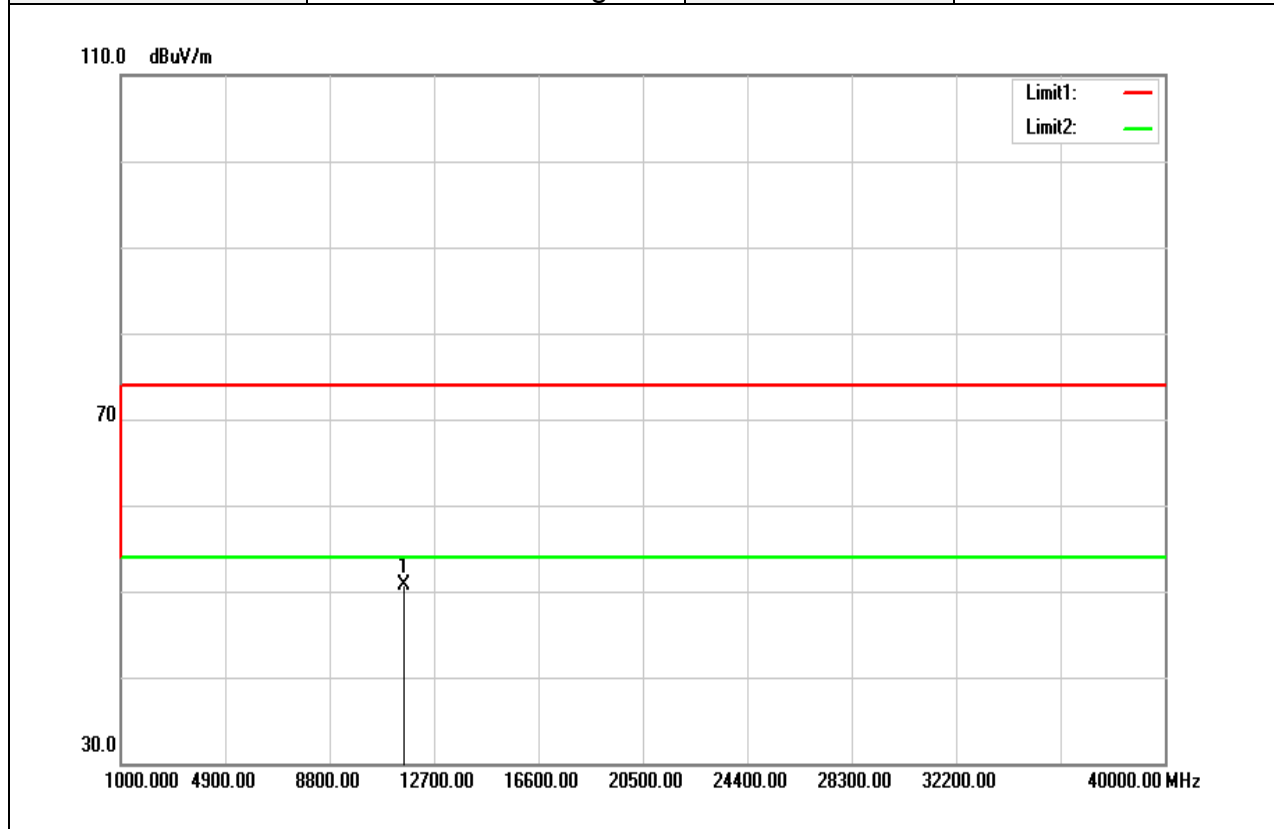
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11490.000	30.16	19.63	49.79	74.00	-24.21	peak
N/A						

**Remark:**

- 5. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 6. 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 Mid CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average		

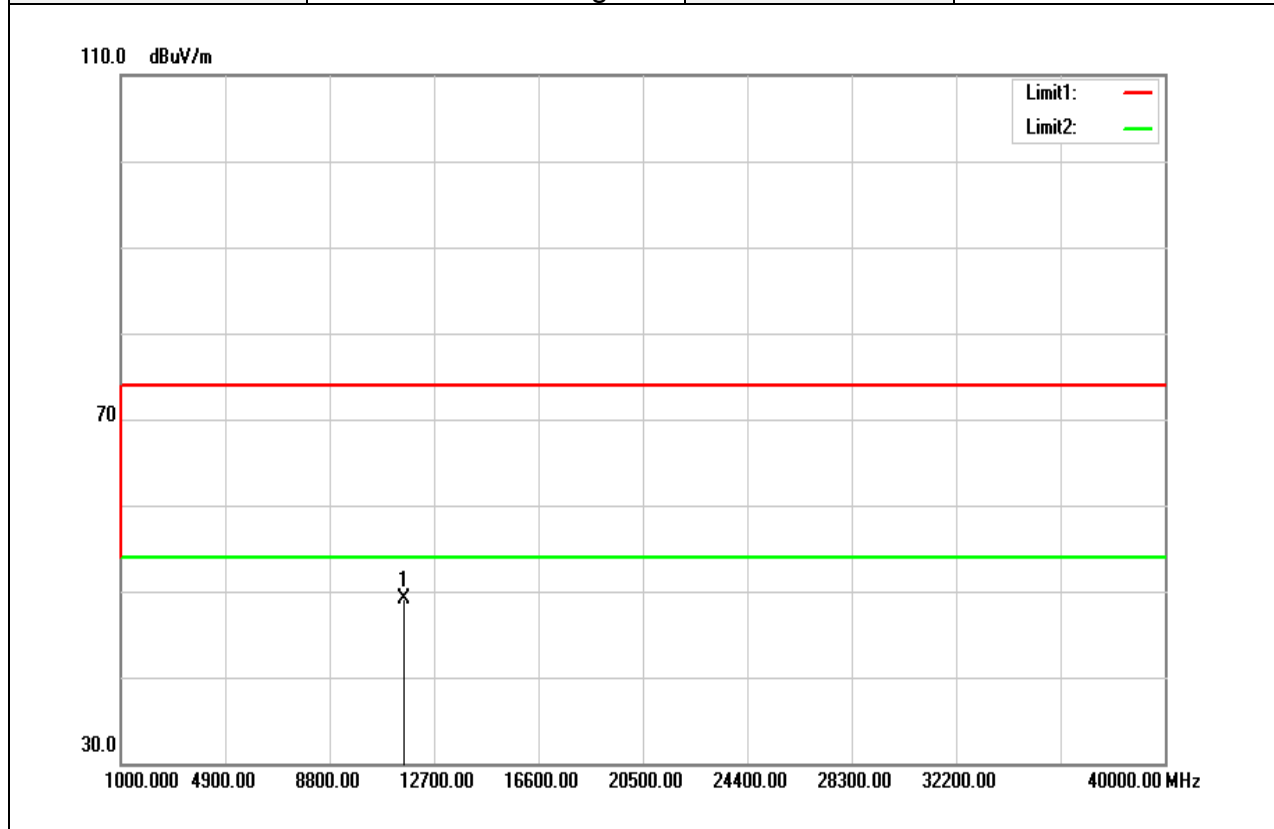


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11570.000	31.06	19.60	50.66	74.00	-23.34	peak
N/A						

**Remark:**

- 5. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 6. 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 Mid CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average		

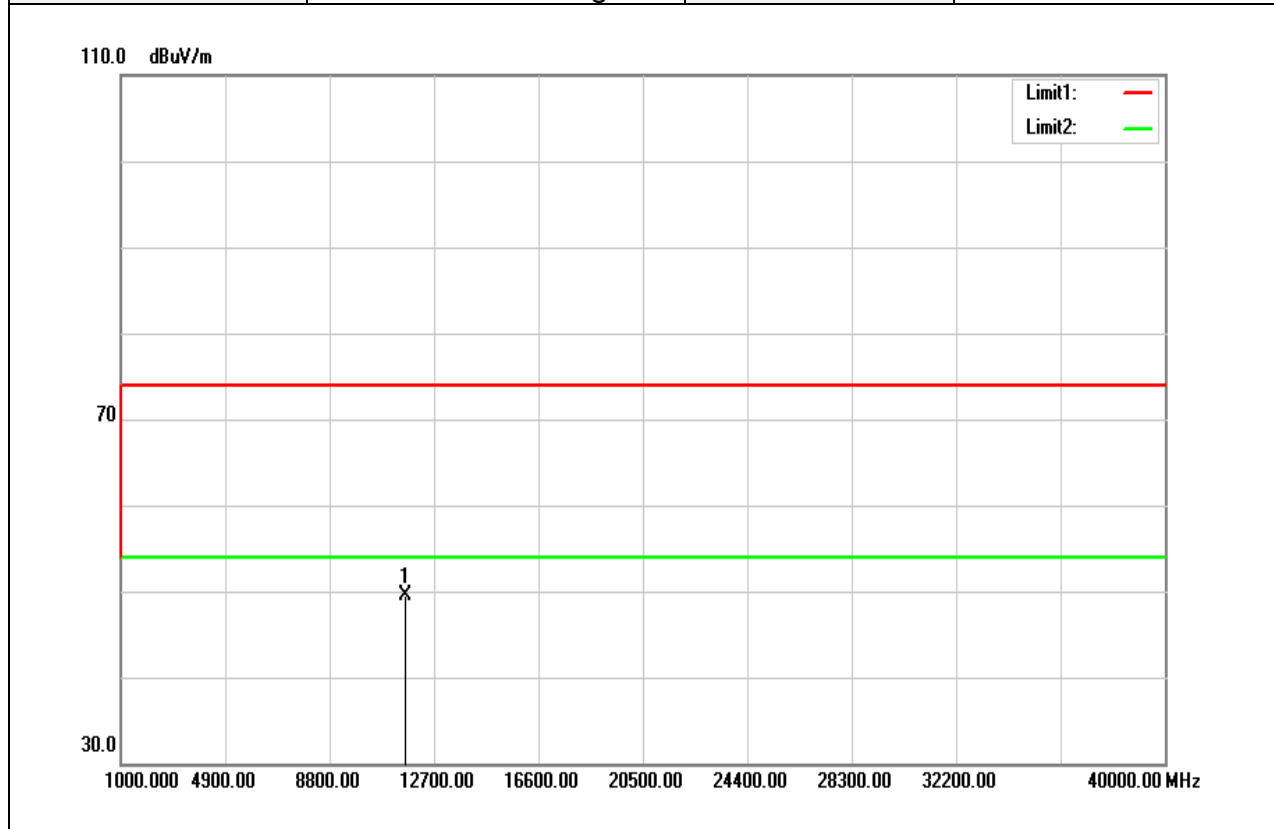


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11570.000	29.43	19.60	49.03	74.00	-24.97	peak
N/A						

**Remark:**

- 5. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 6. 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 High CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average		

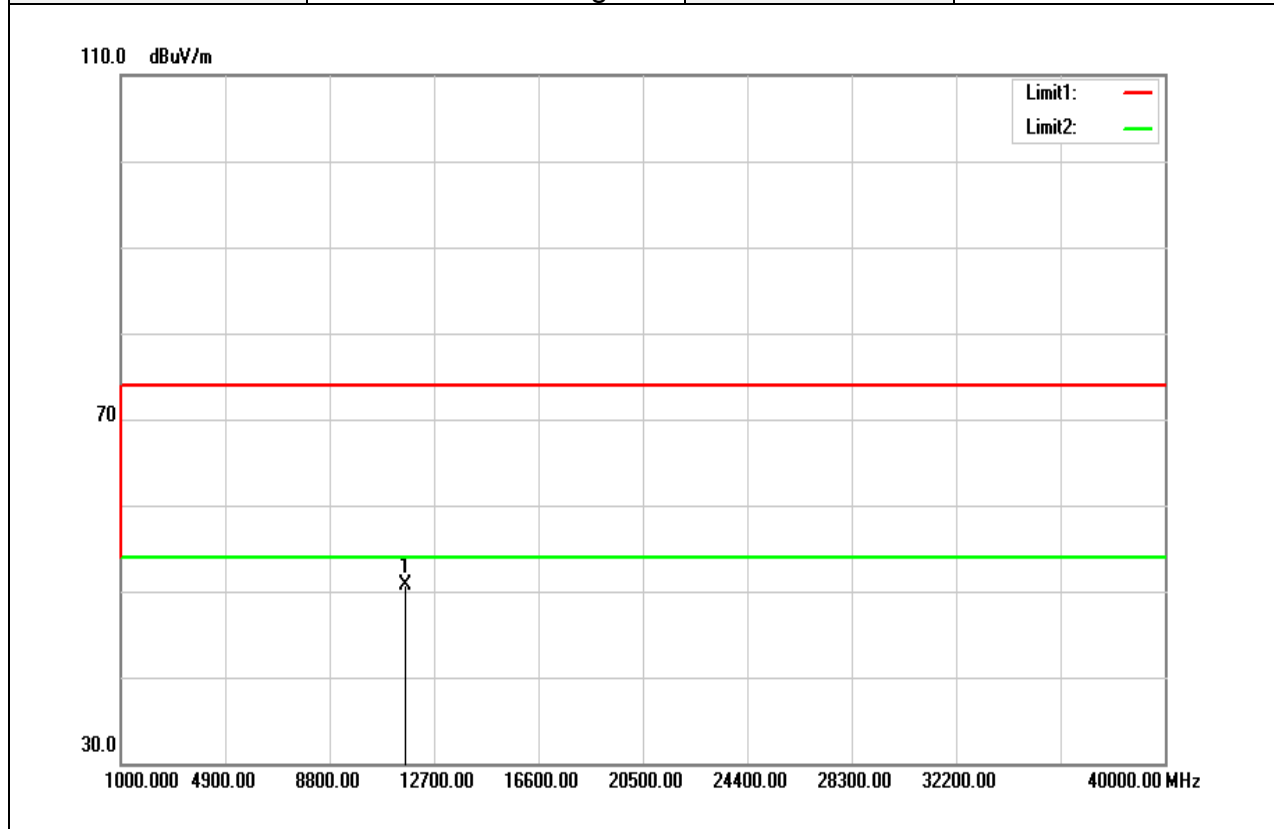


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11650.000	29.99	19.57	49.56	74.00	-24.44	peak
N/A						

**Remark:**

- 5. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 6. 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 High CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average		

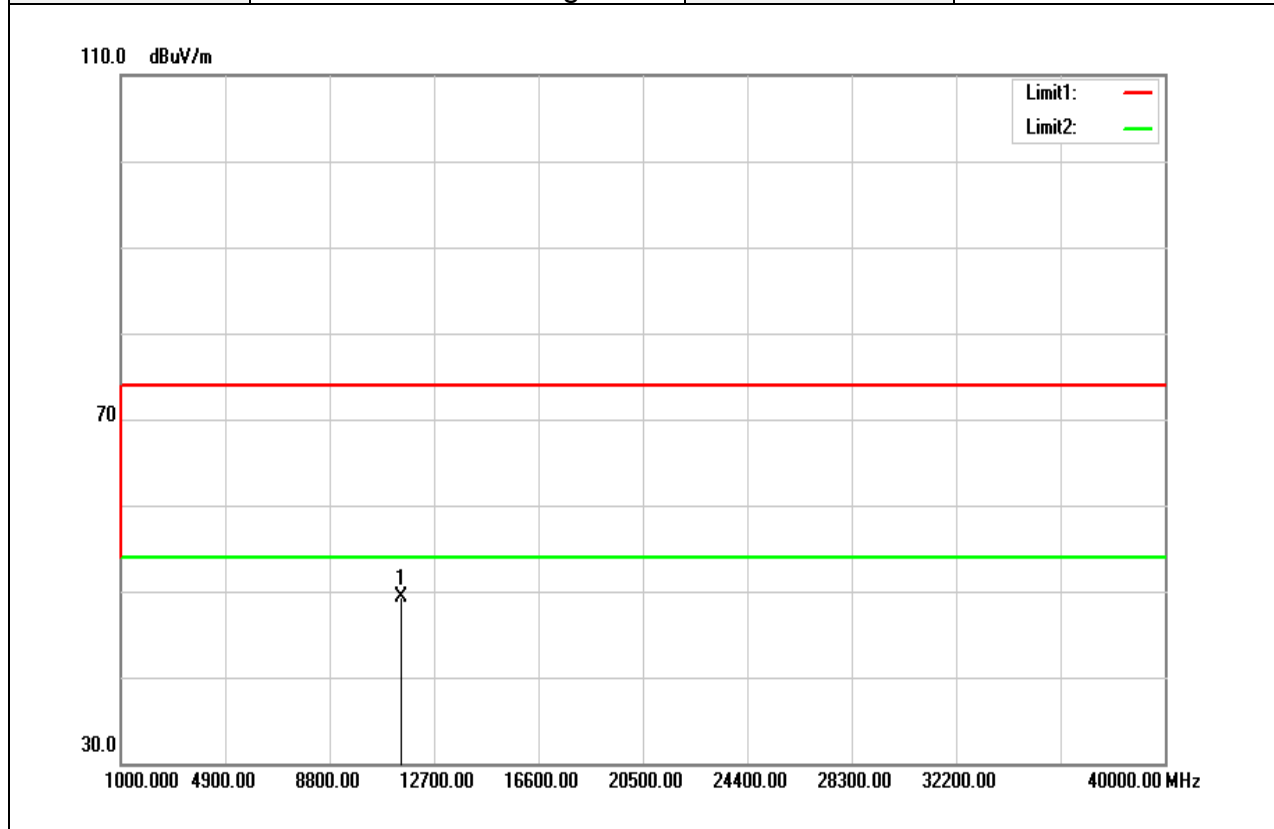


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11650.000	31.08	19.57	50.65	74.00	-23.35	peak
N/A						

**Remark:**

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

Test Mode	IEEE 802.11n HT20 Low CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average		

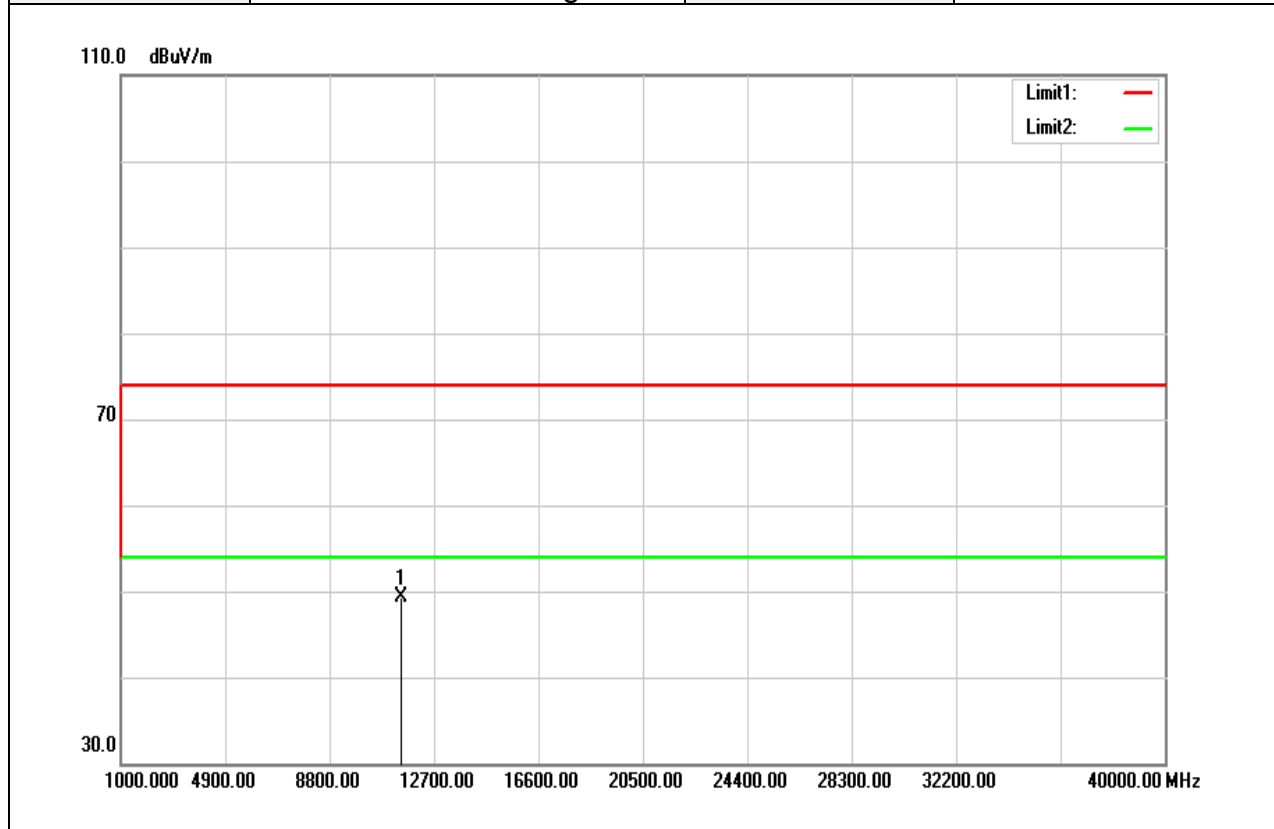


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11490.000	29.74	19.63	49.37	74.00	-24.63	peak
N/A						

**Remark:**

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

Test Mode	IEEE 802.11n HT20 Low CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average		

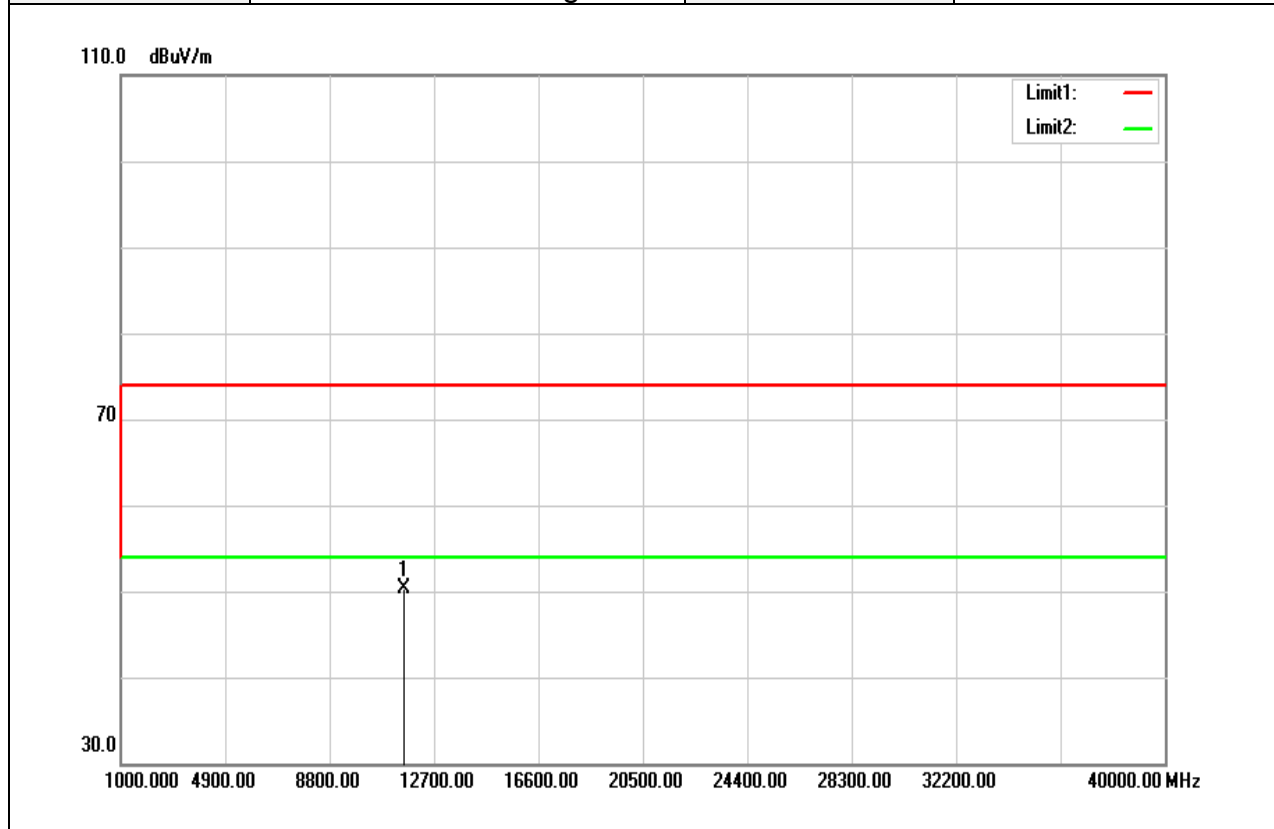


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11490.000	29.72	19.63	49.35	74.00	-24.65	peak
N/A						

**Remark:**

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

Test Mode	IEEE 802.11n HT20 Mid CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average		

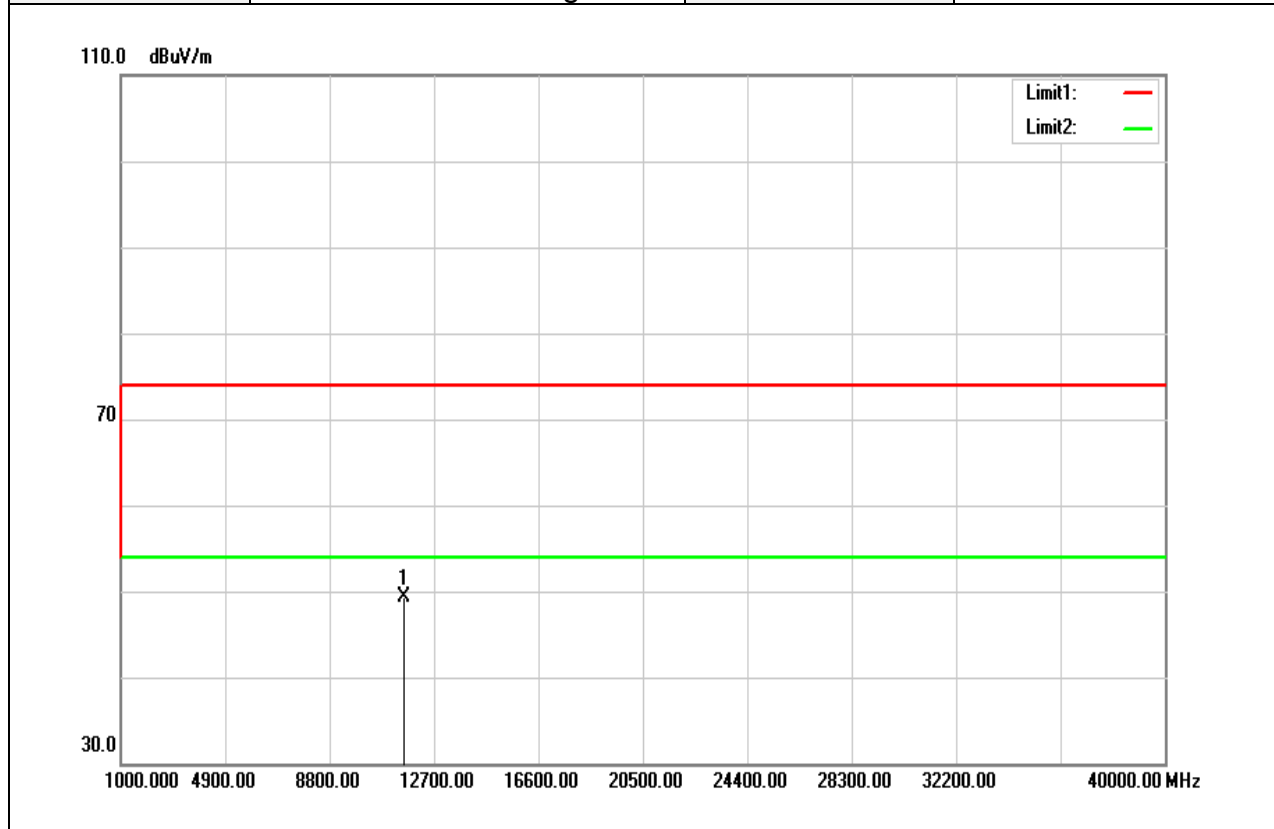


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11570.000	30.78	19.60	50.38	74.00	-23.62	peak
N/A						

**Remark:**

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

Test Mode	IEEE 802.11n HT20 Mid CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average		



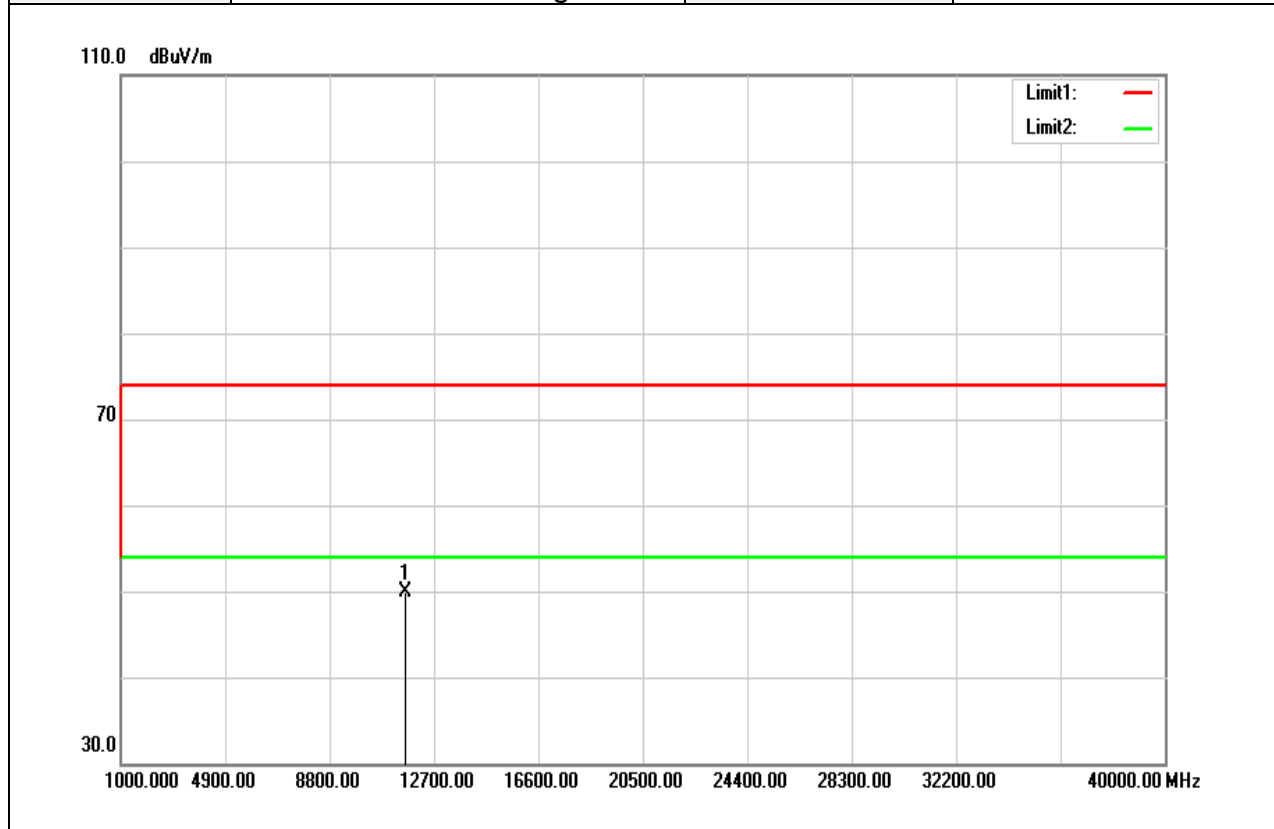
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11570.000	29.69	19.60	49.29	74.00	-24.71	peak
N/A						

**Remark:**

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



Test Mode	IEEE 802.11n HT20 High CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average		

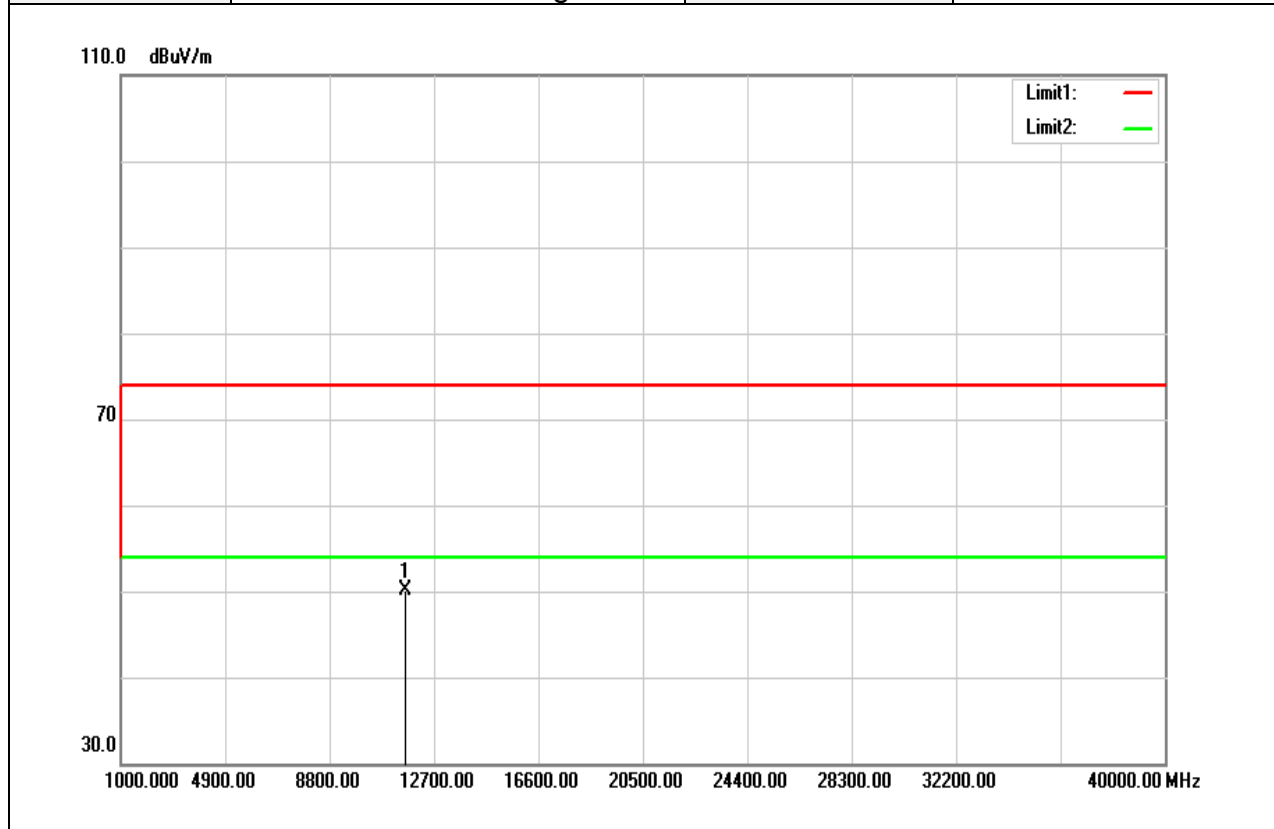


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11650.000	30.36	19.57	49.93	74.00	-24.07	peak
N/A						

**Remark:**

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

Test Mode	IEEE 802.11n HT20 High CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average		

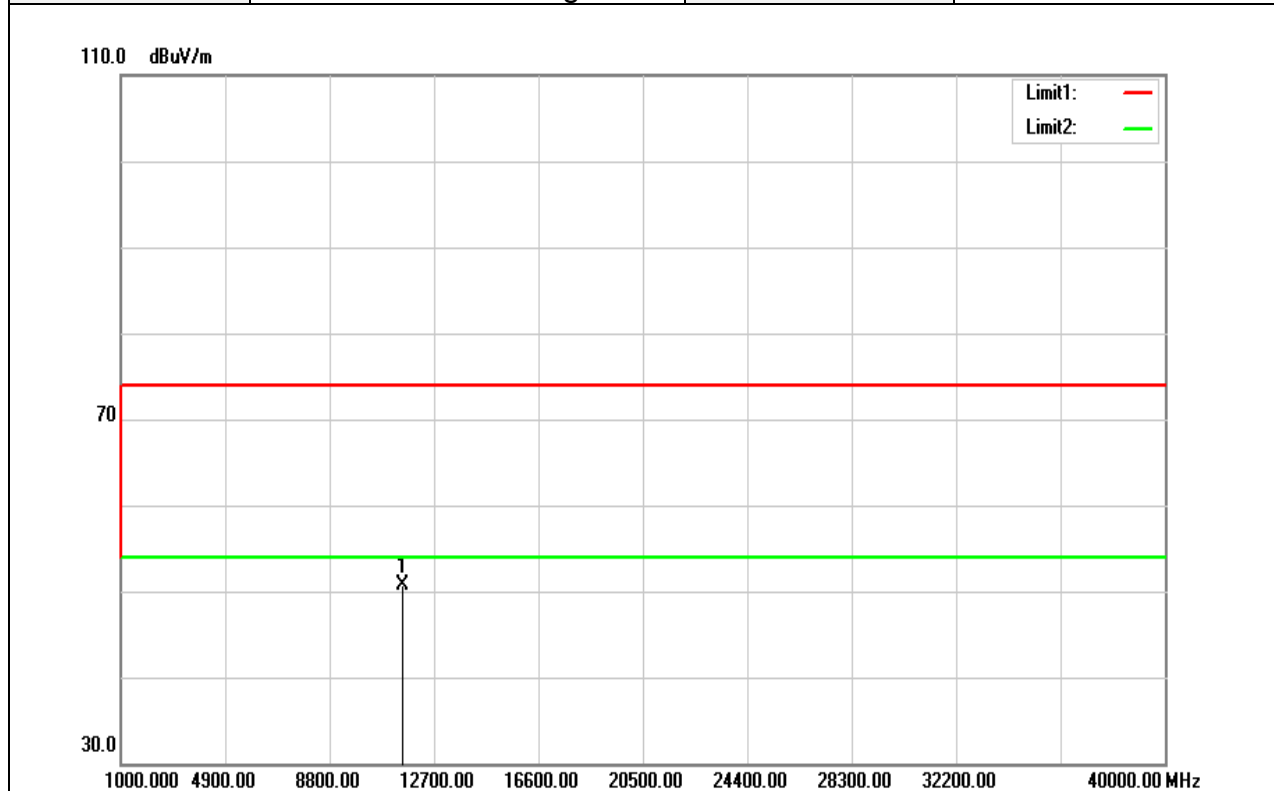


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11650.000	30.46	19.57	50.03	74.00	-23.97	peak
N/A						

**Remark:**

- 5. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 6. 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 HT40 Low CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average		

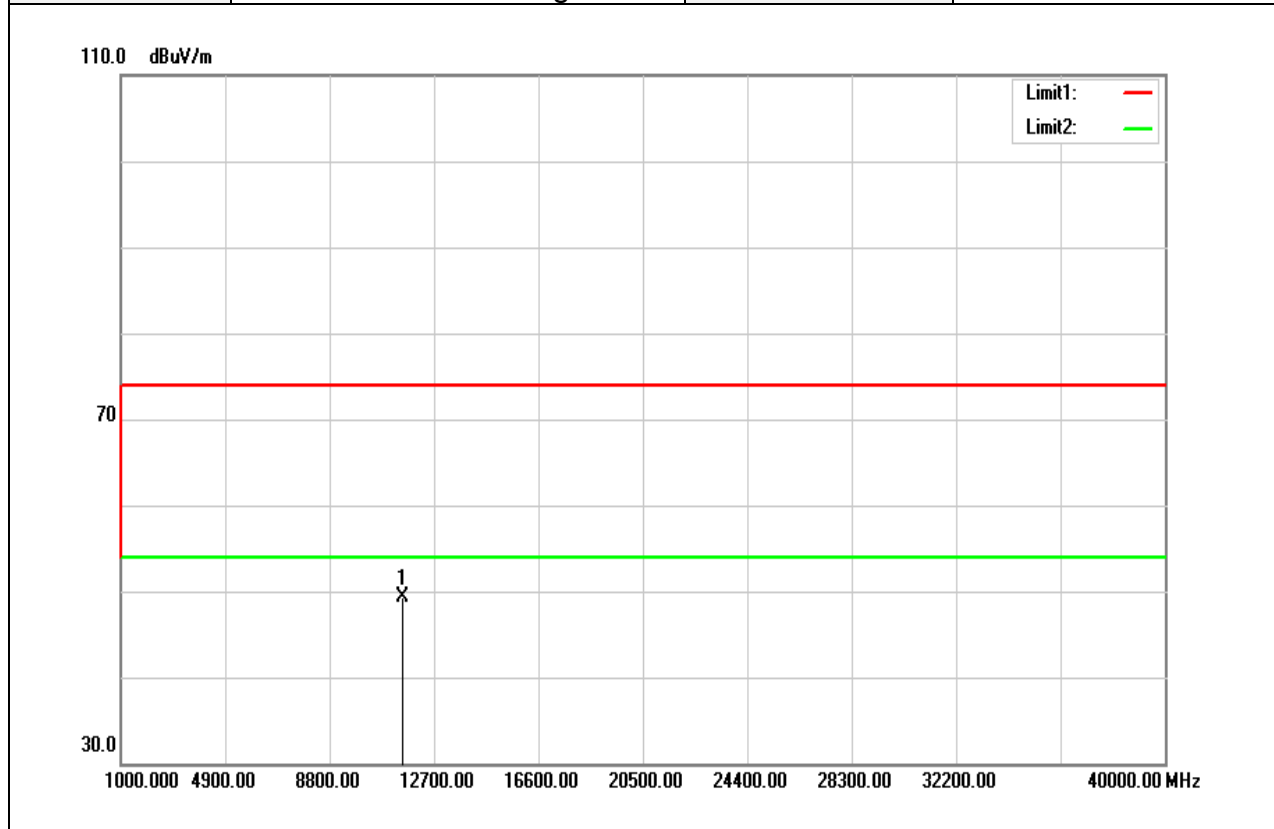


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11510.000	31.11	19.63	50.74	74.00	-23.26	peak
N/A						

**Remark:**

5. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
6. 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 HT40 Low CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average		

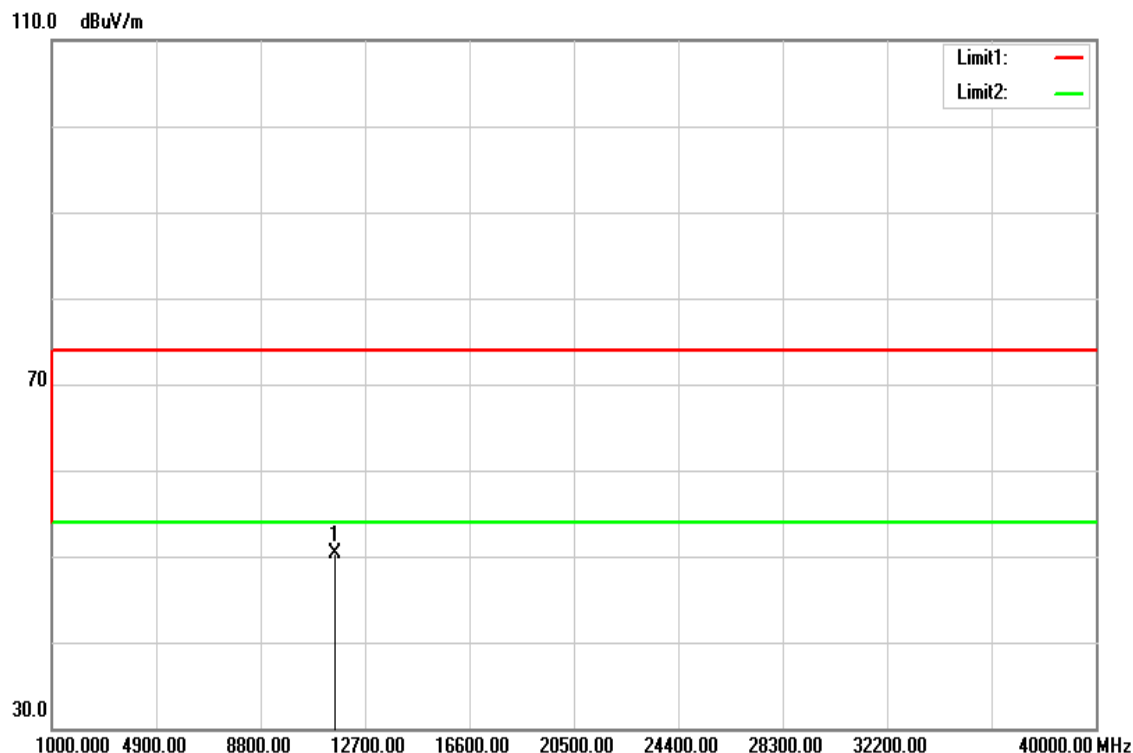


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11510.000	29.69	19.63	49.32	74.00	-24.68	peak
N/A						

**Remark:**

- 5. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 6. 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 HT40 High CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average		

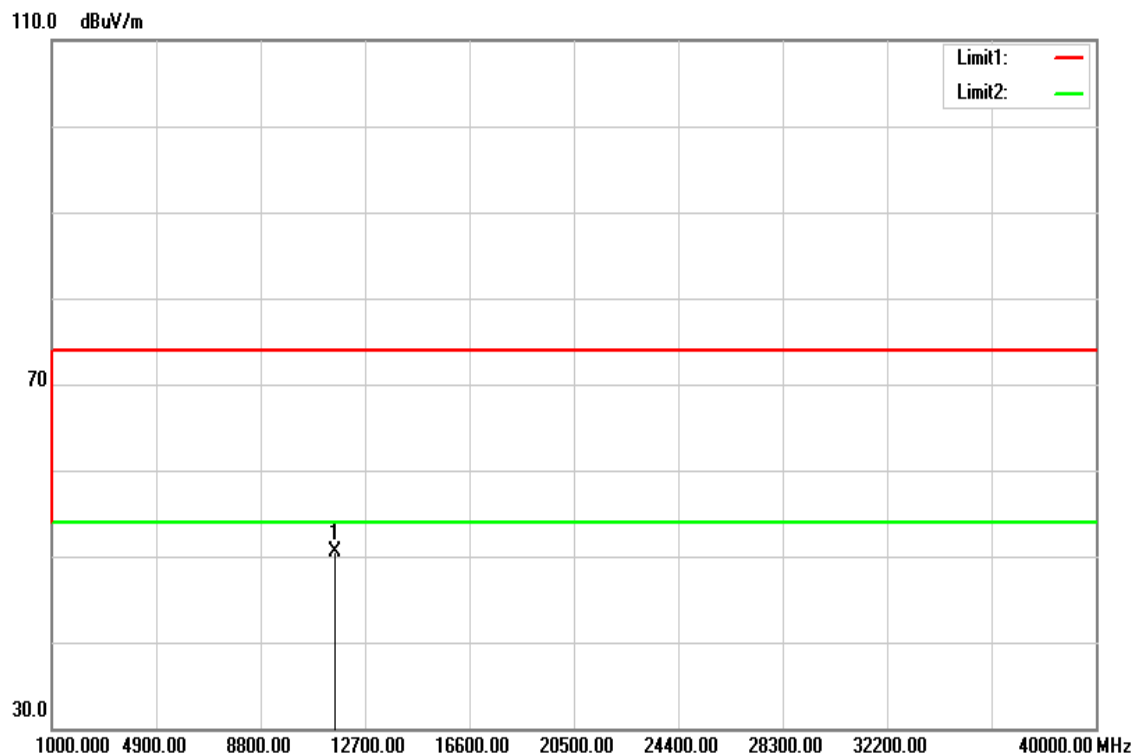


Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11590.000	30.66	19.60	50.26	74.00	-23.74	peak
N/A						

**Remark:**

- 7. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 8. 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 HT40 High CH	Temp/Hum	24(°C)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average		



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
11590.000	31.00	19.60	50.60	74.00	-23.40	peak
N/A						

**Remark:**

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