RADIO TEST REPORT

FCC 47 CFR PART 15 SUBPART C
CLASS II PERMISSIVE CHANGE

Test Standard	**FCC Part 15.247**
FCC ID	**TX2-RTL8821AU**
Product name	**802.11a/b/g/n/ac RTL8821AU Combo module**
Brand Name	**Realtek**
Model	**RTL8821AU**
Test Result	**Pass**

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

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

Testing Laboratory
1309

Approved by:

Sam Chuang
Manager

Tested by:

Jerry Chuang
Engineer

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Revision History

Rev.	Issue Date	Revisions	Effect Page	Revised By
00	November 13, 2017	Initial Issue	ALL	Allison Chen
01	December 1, 2017	Rev(01)	P.8, P.16, P20, P.21	Allison Chen
02	December 4, 2017	Rev.(02)	P. 21, 39, 40, 65, 66	Angel Cheng

Rev. (01):
1. Modify Applied standards KDB 558074 D01 v03R05 to KDB 558074 D01 v04.
2. Remove radiation bandedge and spurious emission test setup: 9kHz ~ 30MHz.
3. 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 note in below 1GHz test data.
3. Modify test setup photo.

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1. GENERAL INFORMATION

1.1 EUT INFORMATION

Applicant	Realtek Semiconductor Corp. No. 2, Innovation Road II, Hsinchu Science Park, Hsinchu, 300 Taiwan
Manufacturer	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(W)	IEEE 802.11b mode: 0.0215 (EIRP : 0.0338) IEEE 802.11g mode: 0.1247(EIRP : 0.1963) IEEE 802.11n HT 20 MHz mode: 0.1054 (EIRP : 0.1660) IEEE 802.11n HT 40 MHz mode: 0.1030 (EIRP: 0.1622)
Power Operation	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
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.

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1.2 EUT CHANNEL INFORMATION

Frequency Range	2412MHz-2462MHz
Modulation Type	1. IEEE 802.11b mode: CCK 2. IEEE 802.11g mode: OFDM 3. IEEE 802.11n HT 20 MHz mode: OFDM 4. IEEE 802.11n HT40 MHz mode: OFDM
Bandwidth	1. IEEE 802.11b mode: 11 Channels 2. IEEE 802.11g mode: 11 Channels 3. IEEE 802.11n HT 20 MHz mode: 11 Channels 4. IEEE 802.11n HT 20 MHz mode: 9 Channels

Remark:
Refer as ANSI 63.10:2013 clause 5.6.1 Table 4 and RSS-GEN Table A1 for test channels

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

1.3 ANTENNA INFORMATION

Antenna Type	☒ PIFA ☐ PCB ☐ Dipole ☐ Coils
Antenna Gain	Gain: 1.97dBi

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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.

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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:

1. Each piece of equipment is scheduled for calibration once a year and Precision Dipole is scheduled for calibration once three years.

2. N.C.R. = No Calibration Request.

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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	CXSMM01BRD02D110	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 15.247, KDB 558074 D01 v04.

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2. TEST SUMMERY

FCC Standard Section	Report Section	Test Item	Result
15.203	1.2	Antenna Requirement	Pass
15.207(a)	4.1	AC Conducted Emission	Pass
15.247(b)	4.3	Output Power Measurement	Pass
15.247(d)	4.6	Radiation Band Edge	Pass
15.247(d)	4.6	Radiation Spurious Emission	Pass

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3. DESCRIPTION OF TEST MODES

3.1 THE WORST MODE OF OPERATING CONDITION

Operation mode	IEEE 802.11b mode :1Mbps IEEE 802.11g mode :6Mbps IEEE 802.11n HT20 mode :MCS0 IEEE 802.11n HT40 mode: MCS0
Test Channel Frequencies	**IEEE 802.11b mode :** 1. Lowest Channel : 2412MHz 2. Middle Channel : 2437MHz 3. Highest Channel : 2462MHz **IEEE 802.11g mode :** 1. Lowest Channel : 2412MHz 2. Middle Channel : 2437MHz 3. Highest Channel : 2462MHz **IEEE 802.11n HT20 mode :** 1. Lowest Channel : 2412MHz 2. Middle Channel : 2437MHz 3. Highest Channel : 2462MHz **IEEE 802.11n HT40 mode :** 1. Lowest Channel : 2422MHz 2. Middle Channel : 2437MHz 3. Highest Channel : 2452MHz
Operation Transmitter	IEEE 802.11b mode :1T1R IEEE 802.11g mode :1T1R IEEE 802.11n HT20 mode :1T1R IEEE 802.11n HT40 mode :1T1R

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

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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	☒ Mode 1 ☐ Mode 2 ☐ Mode 3 ☐ 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	☒ Mode 1 ☐ Mode 2 ☐ Mode 3 ☐ Mode 4
Worst Position	☐ Placed in fixed position. ☐ Placed in fixed position at X-Plane (E2-Plane) ☒ Placed in fixed position at Y-Plane (E1-Plane) ☐ Placed in fixed position at Z-Plane (H-Plane)
Worst Polarity	☒ Horizontal ☐ 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	☒ Mode 1 ☐ Mode 2 ☐ Mode 3 ☐ Mode 4

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

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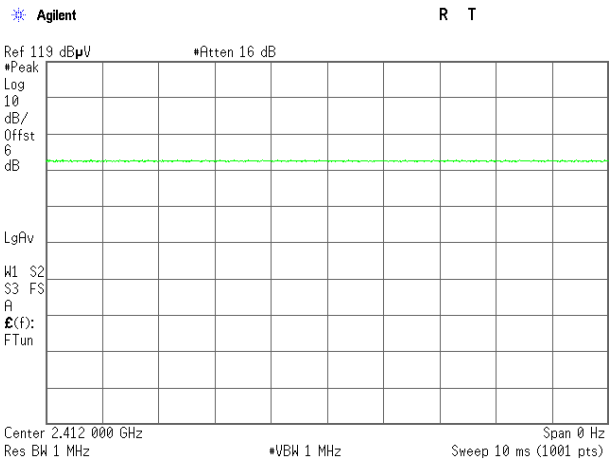
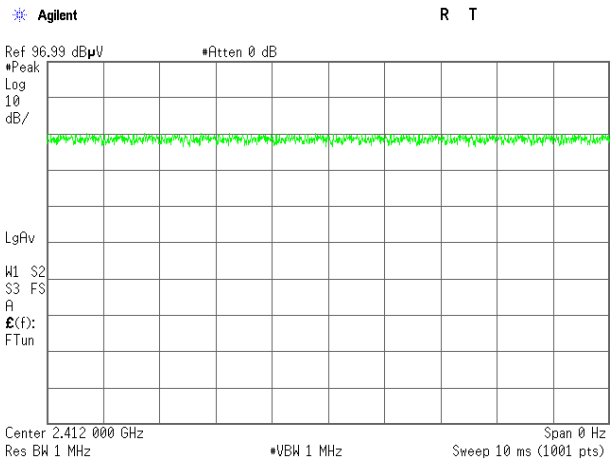
3.3 EUT DUTY CYCLE

Duty Cycle				
Configuration	TX ON (ms)	TX ALL (ms)	Duty Cycle (%)	Duty Factor(dB)
802.11b	1.0000	1.0000	100.00%	0.00
802.11g	1.0000	1.0000	100.00%	0.00
802.11n HT20	1.0000	1.0000	100.00%	0.00
802.11n HT40	1.0000	1.0000	100.00%	0.00

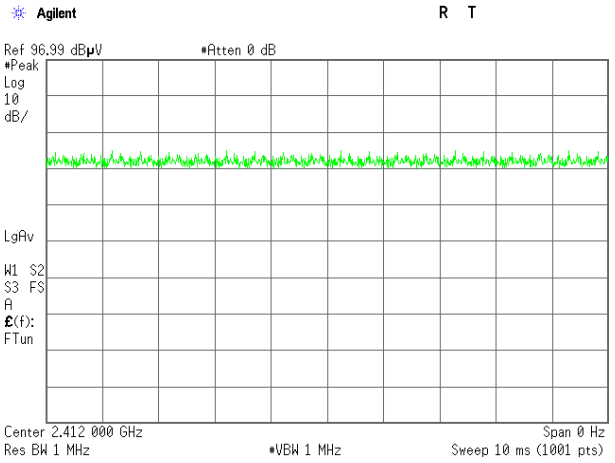
802.11b



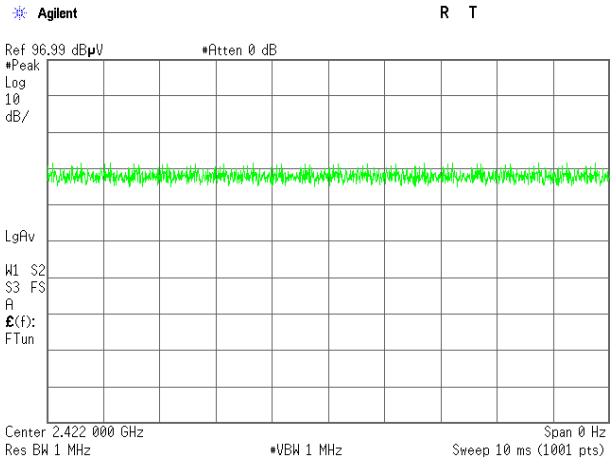
802.11g



802.11n HT20



802.11n HT40



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4. TEST RESULT

4.1 AC POWER LINE CONDUCTED EMISSION

4.1.1 Test Limit

According to §15.207(a)(2)

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

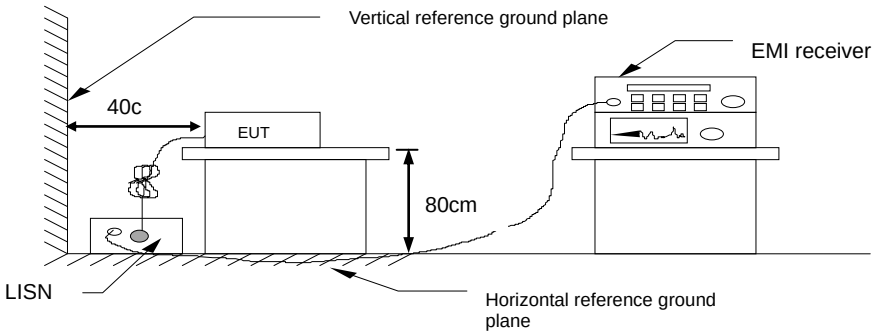
* Decreases with the logarithm of the frequency.

4.1.2 Test Procedure

Test method Refer as ANSI 63.10:2013 clause 6.2,

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

4.1.3 Test Setup



4.1.4 Test Result

Pass.

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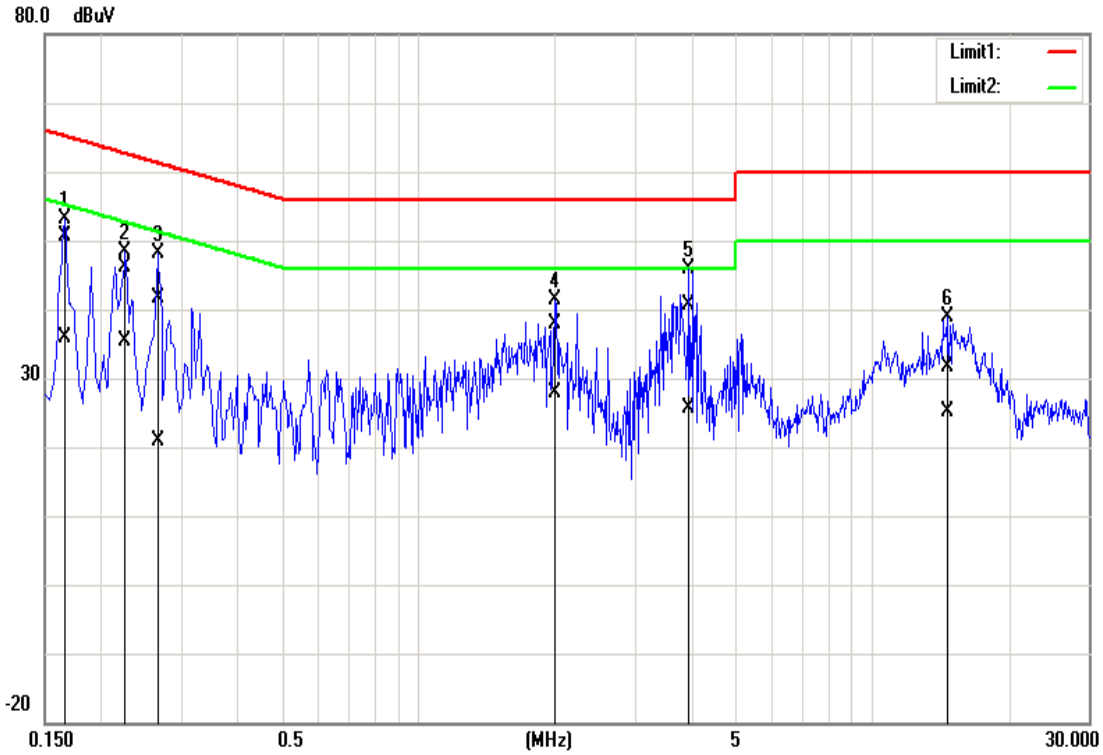
Test Data

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



No.	Frequency	QuasiPeak reading	Average reading	Correction factor	QuasiPeak result	Average result	QuasiPeak limit	Average limit	QuasiPeak margin	Average margin
	(MHz)	(dBuV)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dBuV)	(dBuV)	(dB)	(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

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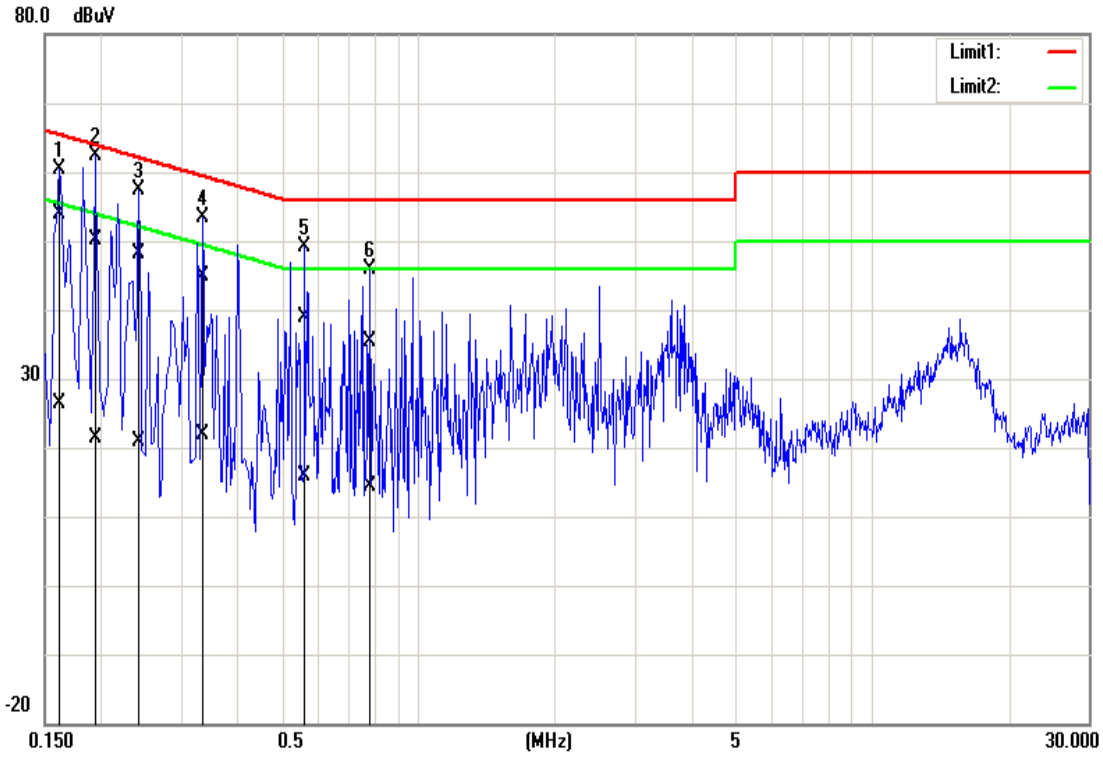
Test Mode:	Mode 1	Temp/Hum	24(℃)/ 50%RH
Test Voltage:	120Vac / 60Hz	Test Date	November 10, 2017
Phase:	Neutral	Test Engineer	Jerry Chuang



No.	Frequency	QuasiPeak reading	Average reading	Correction factor	QuasiPeak result	Average result	QuasiPeak limit	Average limit	QuasiPeak margin	Average margin
	(MHz)	(dBuV)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dBuV)	(dBuV)	(dB)	(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

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4.2 OUTPUT POWER MEASUREMENT

4.2.1 Test Limit

According to §15.247(b)

Peak output power：

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

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

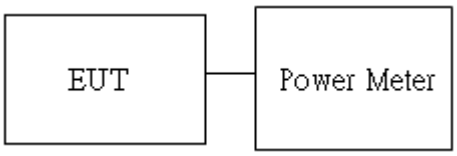
Average output power：For reporting purposes only.

4.2.2 Test Procedure

Test method Refer as KDB 558074 D01 v04, Section 9.1.2.

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

4.2.3 Test Setup



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4.2.4 Test Result

Peak output power：

Wifi 2.4G													
Config	CH	Freq. (MHz)	power set		PK Power(dBm)		PK Total Power (dBm)	PK Total Power (W)	EIRP PK Total Power (dBm)	EIRP PK Total Power (W)	DG (dBi)	Limit (dBm)	EIRP Limit (dBm)
			chain0	chain1	chain0	chain1							
IEEE 802.11b Data rate: 1Mbps	Low	2412	22	-	11.02	-	11.02	0.0126	12.99	0.0199	1.97	30	36
	Mid	2437	29	-	13.32	-	13.32	0.0215	15.29	0.0338			
	High	2462	29	-	13.28	-	13.28	0.0213	15.25	0.0335			
IEEE 802.11g Data rate: 6Mbps	Low	2412	46	-	20.30	-	20.30	0.1072	22.27	0.1687			
	Mid	2437	47	-	20.96	-	20.96	0.1247	22.93	0.1963			
	High	2462	47	-	20.45	-	20.45	0.1109	22.42	0.1746			
IEEE 802.11n HT20 Data rate: MCS0	Low	2412	47	-	20.12	-	20.12	0.1028	22.09	0.1618			
	Mid	2437	47	-	20.23	-	20.23	0.1054	22.20	0.1660			
	High	2462	47	-	20.18	-	20.18	0.1042	22.15	0.1641			
IEEE 802.11n HT40 Data rate: MCS0	Low	2422	48	-	19.84	-	19.84	0.0964	21.81	0.1517			
	Mid	2437	48	-	20.13	-	20.13	0.1030	22.10	0.1622			
	High	2452	48	-	20.13	-	20.13	0.1030	22.10	0.1622			

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Average output power：

Wifi 2.4G					
Config	CH	Freq. (MHz)	AV Power(dBm)		AV Total Power (dBm)
			chain0	chain1	
IEEE 802.11b Data rate: 1Mbps	Low	2412	9.68	-	9.68
	Mid	2437	10.24	-	10.24
	High	2462	10.21	-	10.21
IEEE 802.11g Data rate: 6Mbps	Low	2412	11.97	-	11.97
	Mid	2437	12.75	-	12.75
	High	2462	12.43	-	12.43
IEEE 802.11n HT20 Data rate: MCS0	Low	2412	12.35	-	12.35
	Mid	2437	12.47	-	12.47
	High	2462	12.23	-	12.23
IEEE 802.11n HT40 Data rate: MCS0	Low	2422	12.03	-	12.03
	Mid	2437	12.11	-	12.11
	High	2452	12.06	-	12.06

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4.3 RADIATION BANDEDGE AND SPURIOUS EMISSION

4.3.1 Test Limit

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

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

Below 30 MHz

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

Above 30 MHz

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

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4.3.2 Test Procedure

Test method Refer as KDB 558074 D01 v04, Section 12.1.

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.

Remark:

Although these tests were performed other than open area test site, adequate comparison measurements were confirmed against 30 m open are test site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field based on KDB 937606.

4. The SA setting following：

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

(2) Above 1G：

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

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

˙If Duty Cycle ≥ 98%, VBW=10Hz.

˙If Duty Cycle < 98%, VBW=1/T.

Configuration	Duty Cycle (%)	T(ms)	1/T (kHz)	VBW Setting
802.11b	100%	1.0000	-	300Hz
802.11g	100%	1.0000	-	300Hz
802.11n HT20	100%	1.0000	-	300Hz
802.11n HT40	100%	1.0000	-	300Hz

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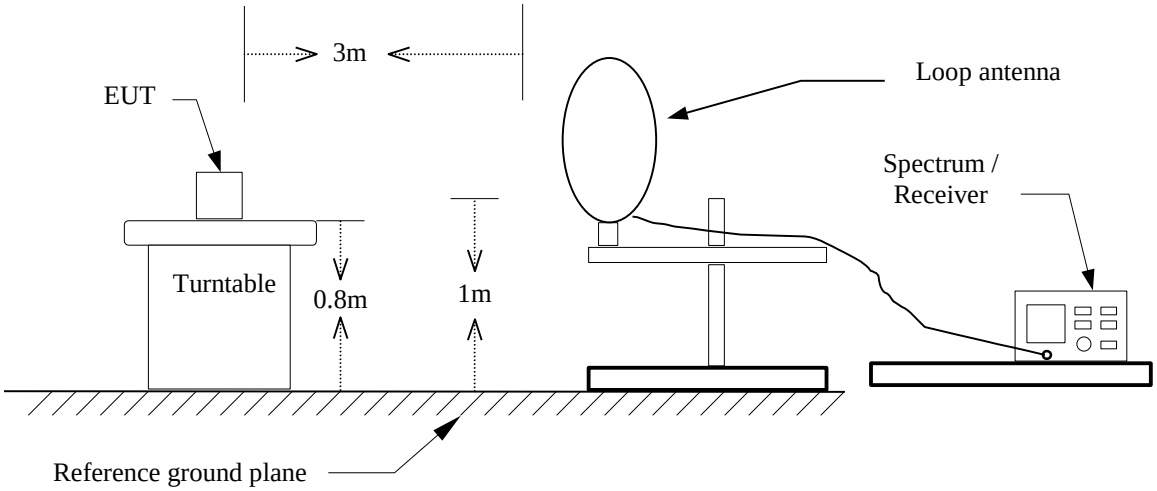
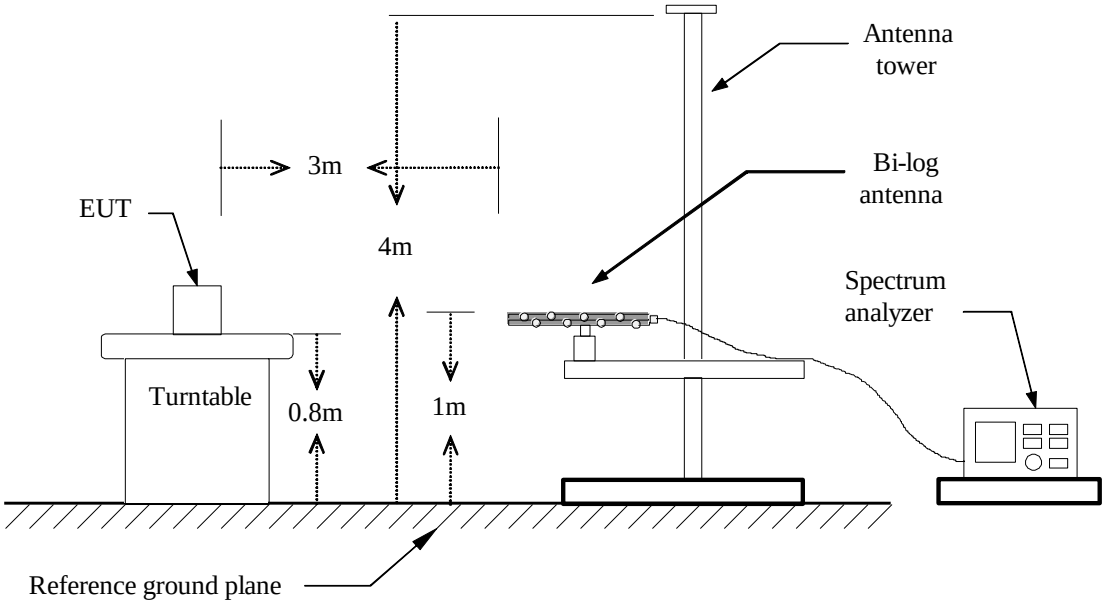
4.3.3 Test Setup

9kHz ~ 30MHz



30MHz ~ 1GHz



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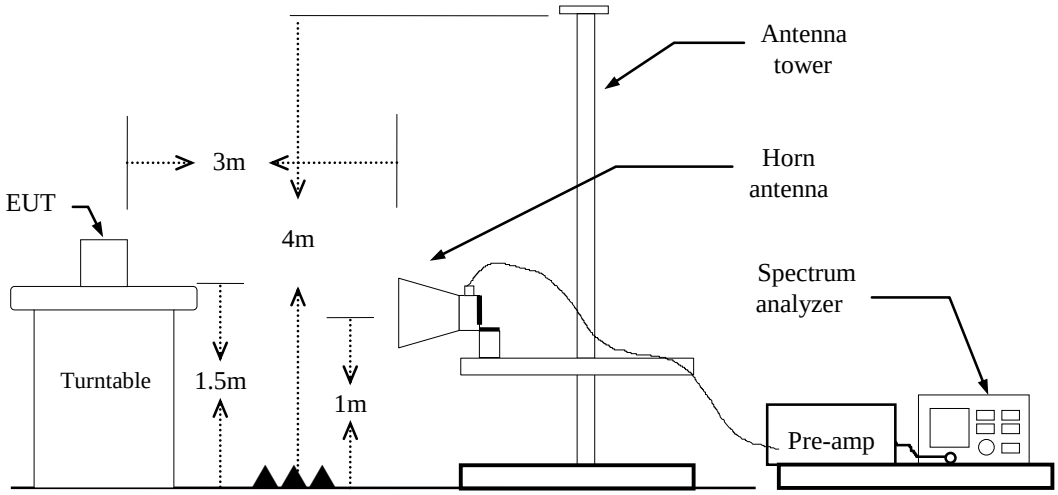
Above 1 GHz



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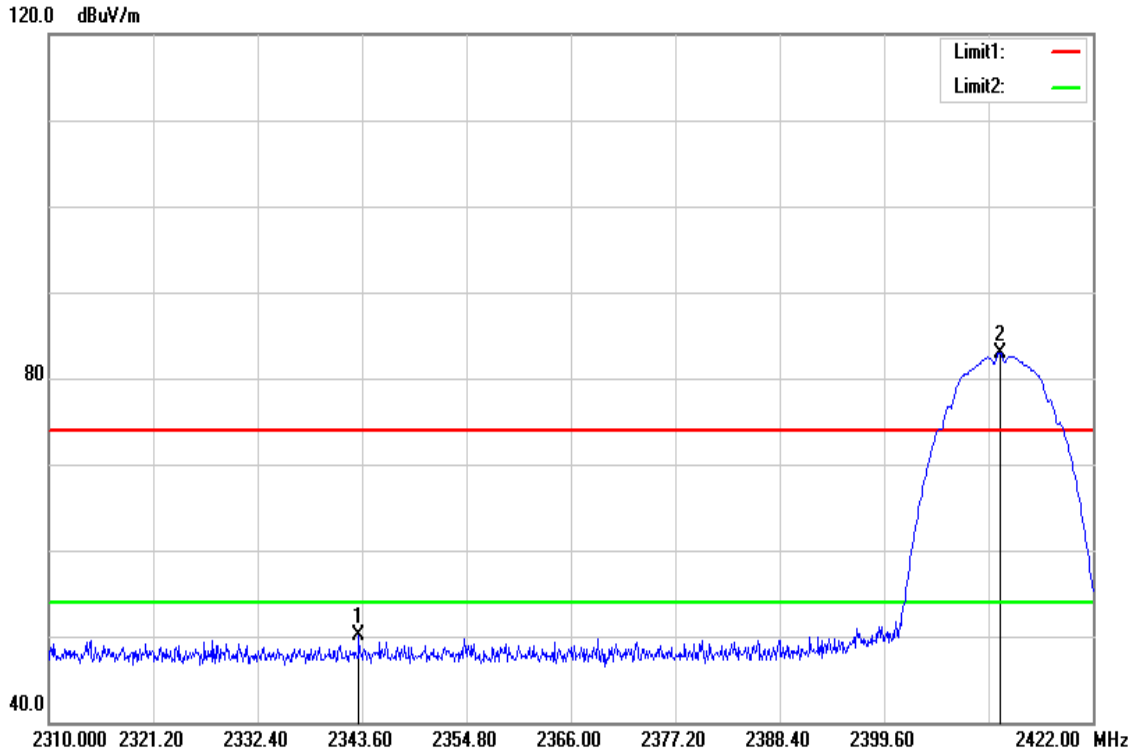
4.3.4 Test Result

Band Edge Test Data

Test Mode	IEEE 802.11b Low CH	Temp/Hum	24(℃)/ 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
2343.264	50.86	-0.75	50.11	74.00	-23.89	peak
2412.032	83.44	-0.54	82.90	-	-	peak

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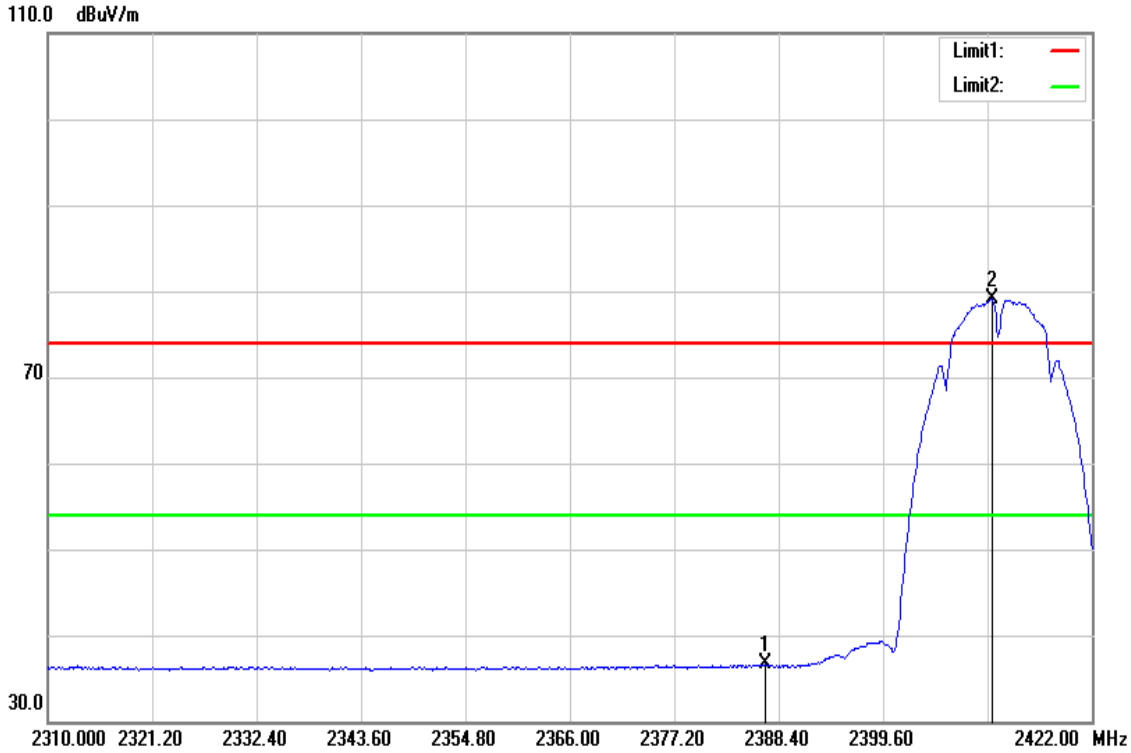
Test Mode	IEEE 802.11b Low CH	Temperature:	24(℃)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average		



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
2386.944	37.26	-0.61	36.65	54.00	-17.35	AVG
2411.248	79.66	-0.54	79.12	-	-	AVG

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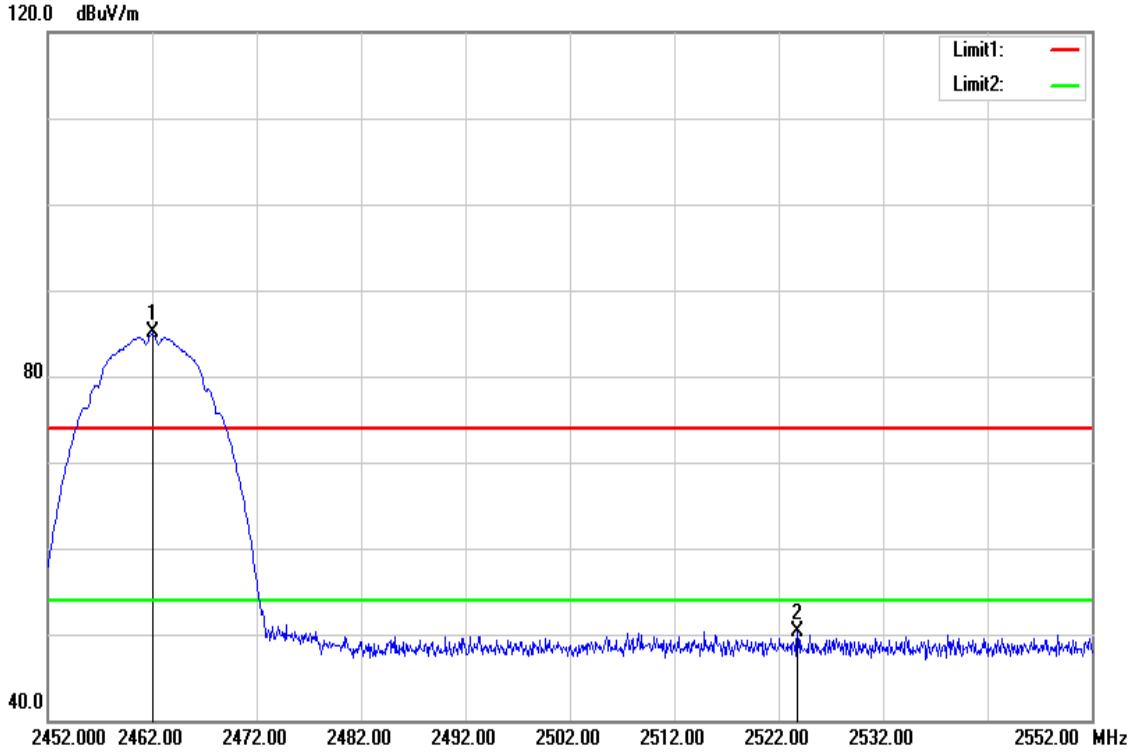
Test Mode	IEEE 802.11b High CH	Temp/Hum	24(℃)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak	-	



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
2462.000	85.38	-0.37	85.01	-	-	peak
2523.800	50.53	-0.20	50.33	74.00	-23.67	peak

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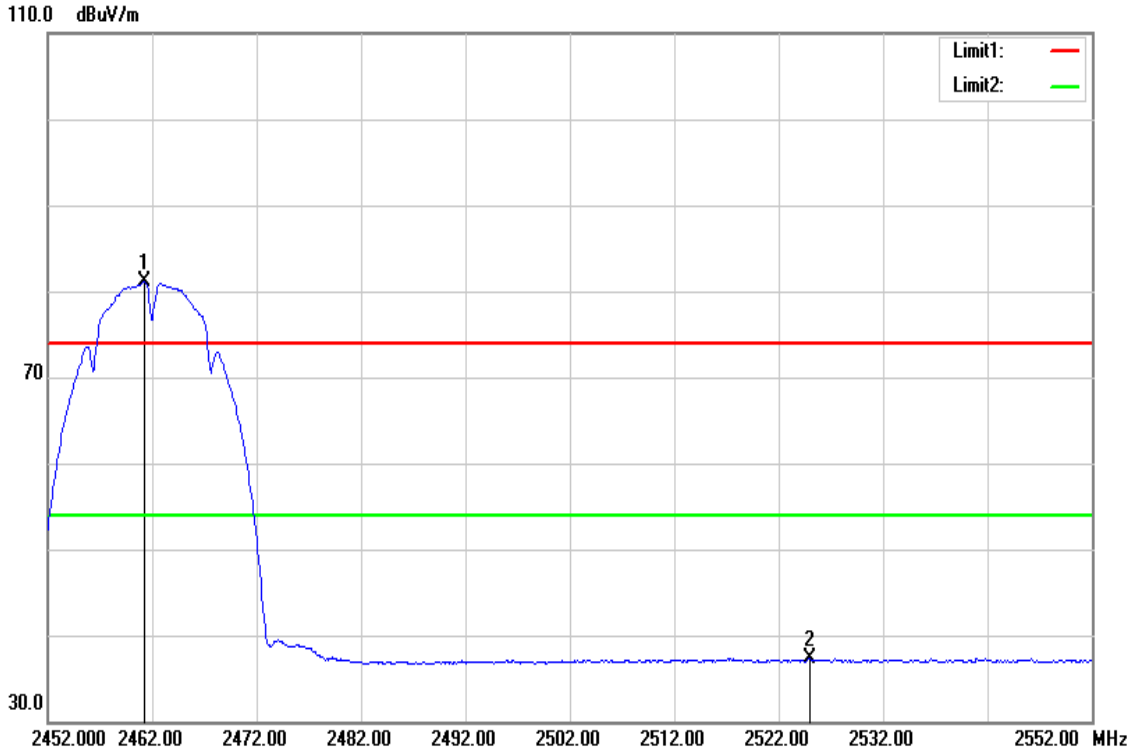
Test Mode	IEEE 802.11b High CH	Temperature:	24(℃)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average		



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
2461.200	81.55	-0.37	81.18	-	-	AVG
2525.000	37.46	-0.20	37.26	54.00	-16.74	AVG

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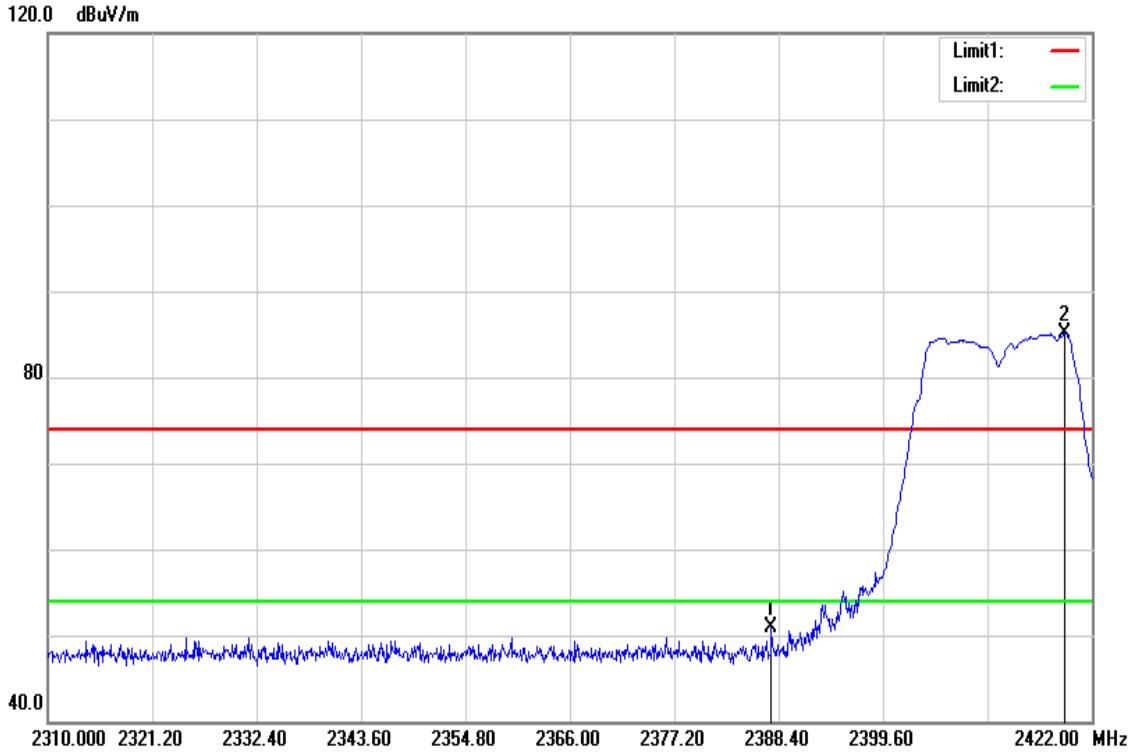
Test Mode	IEEE 802.11g Low CH	Temp/Hum	24(℃)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak		



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
2387.616	51.42	-0.60	50.82	74.00	-23.18	peak
2419.088	85.62	-0.51	85.11	-	-	peak

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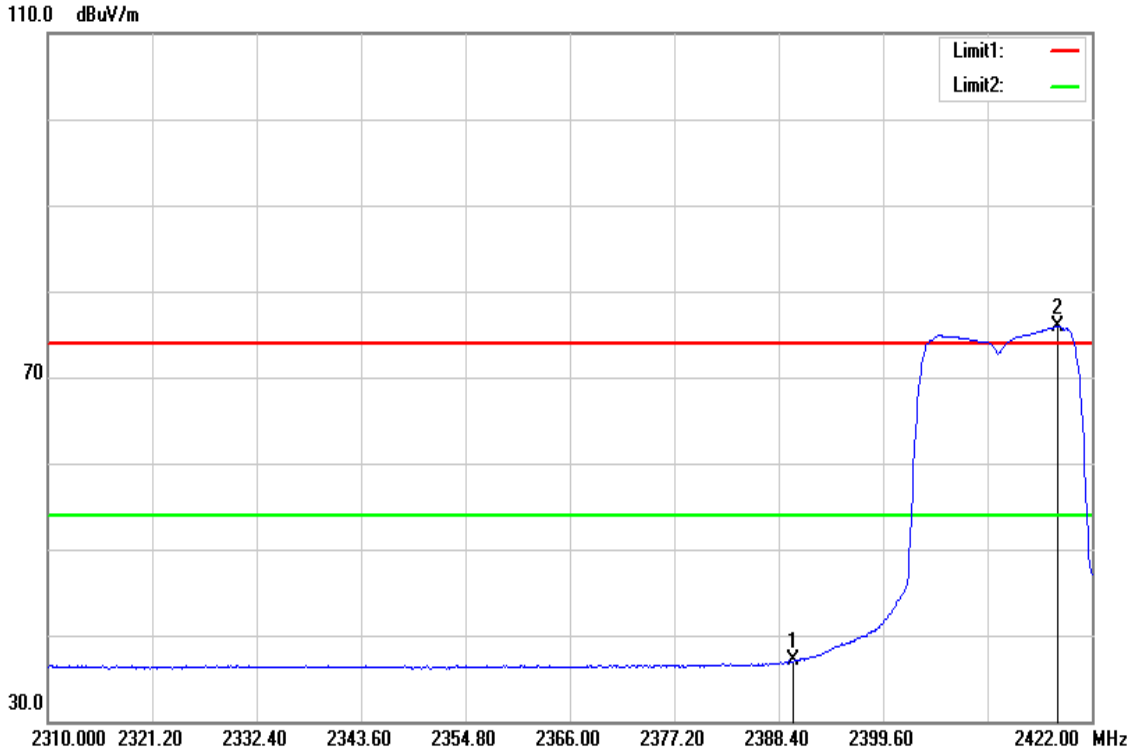
Test Mode	IEEE 802.11g Low CH	Temperature:	24(℃)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average		



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
2390.000	37.66	-0.60	37.06	54.00	-16.94	AVG
2418.304	76.49	-0.51	75.98	-	-	AVG

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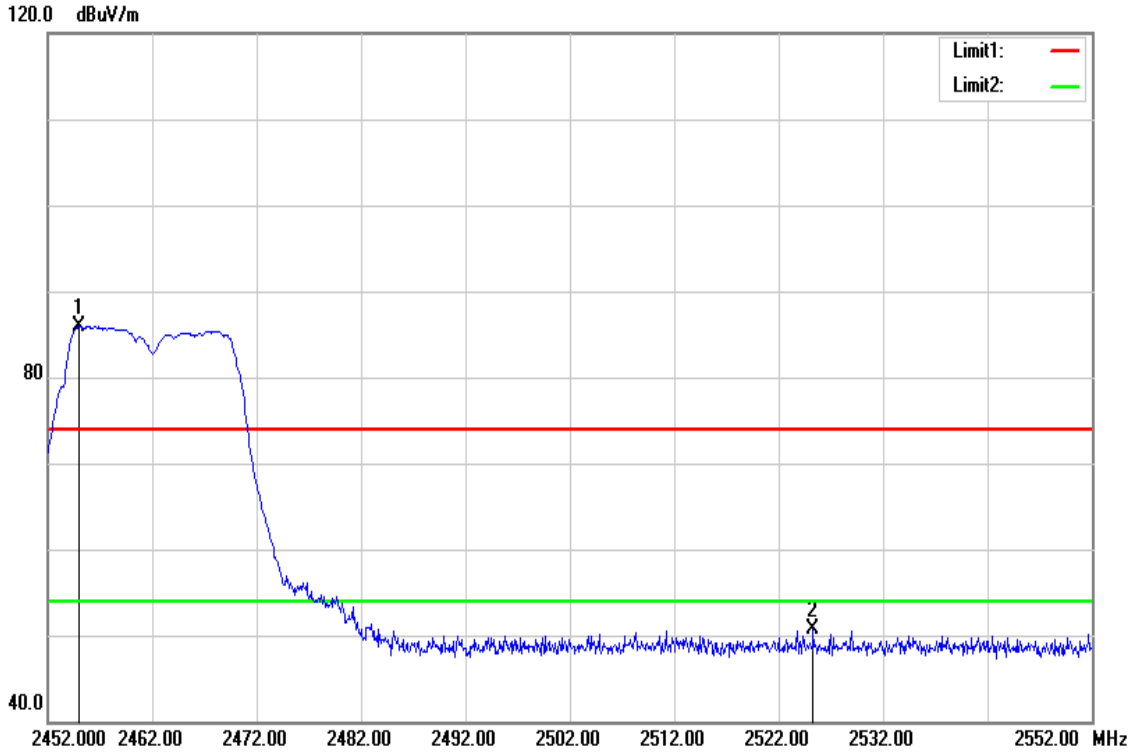
Test Mode	IEEE 802.11g High CH	Temp/Hum	24(℃)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak		



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
2455.000	86.28	-0.39	85.89	-	-	peak
2525.300	50.87	-0.20	50.67	74.00	-23.33	peak

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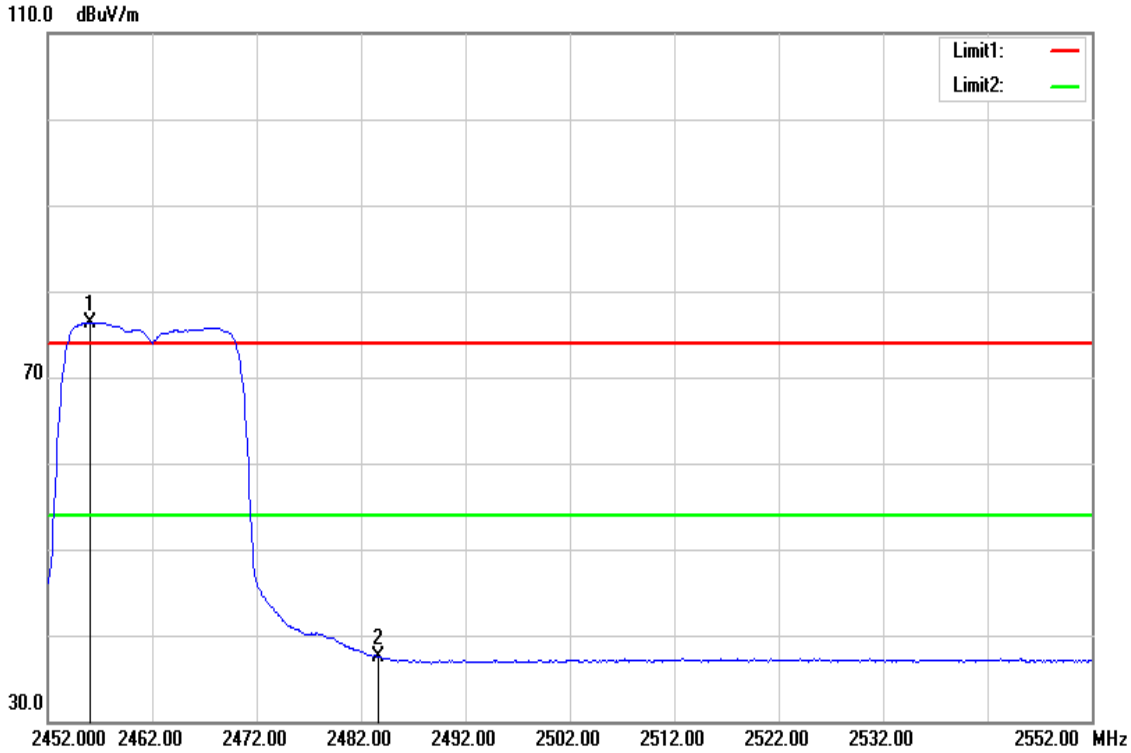
Test Mode	IEEE 802.11g High CH	Temperature:	24(℃)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average		



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
2456.100	76.74	-0.39	76.35	-	-	AVG
2483.700	37.86	-0.30	37.56	54.00	-16.44	AVG

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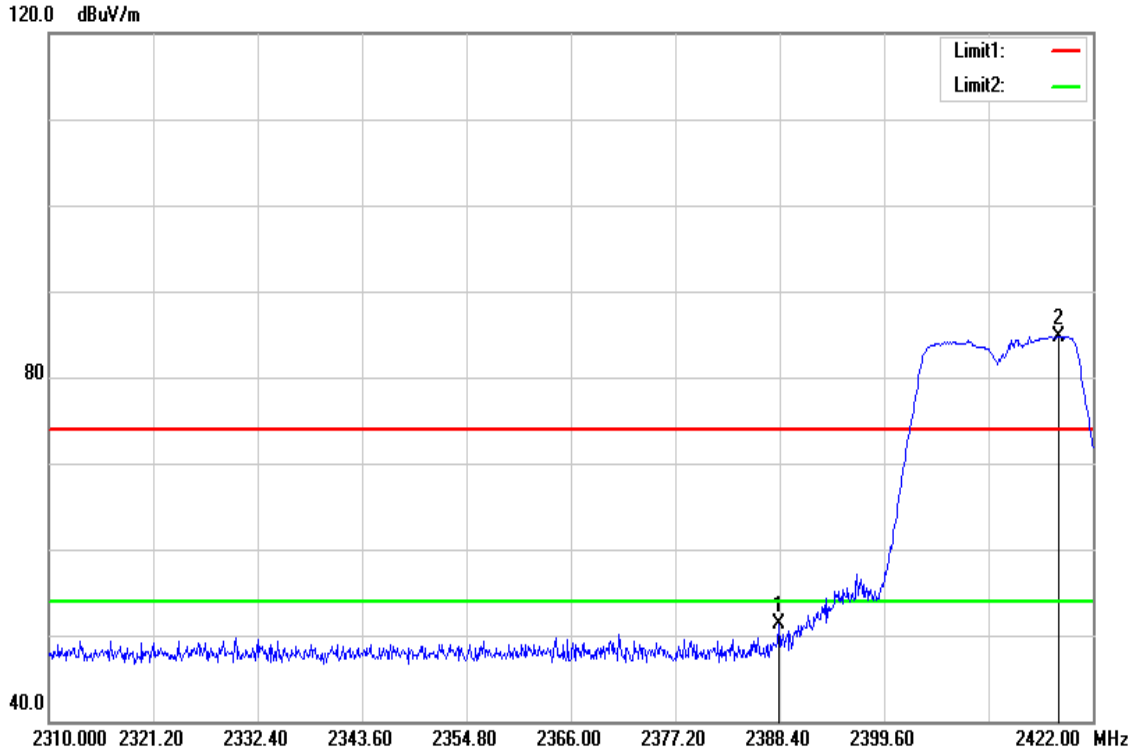
Test Mode	IEEE 802.11n HT20 Low CH	Temp/Hum	24(℃)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak		



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
2388.288	51.92	-0.60	51.32	74.00	-22.68	peak
2418.304	85.27	-0.51	84.76	-	-	peak

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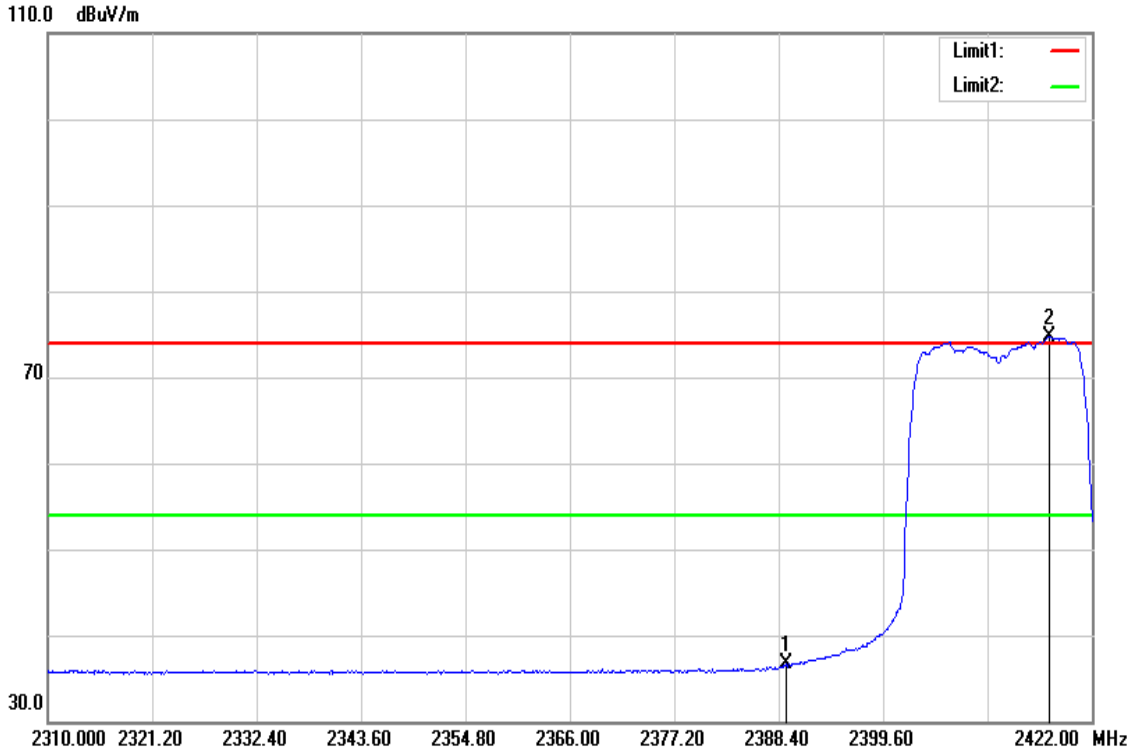
Test Mode	IEEE 802.11n HT20 Low CH	Temperature:	24(℃)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average		



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
2390.000	39.99	-0.60	39.39	54.00	-14.61	AVG
2405.424	77.95	-0.55	77.40	--	--	AVG

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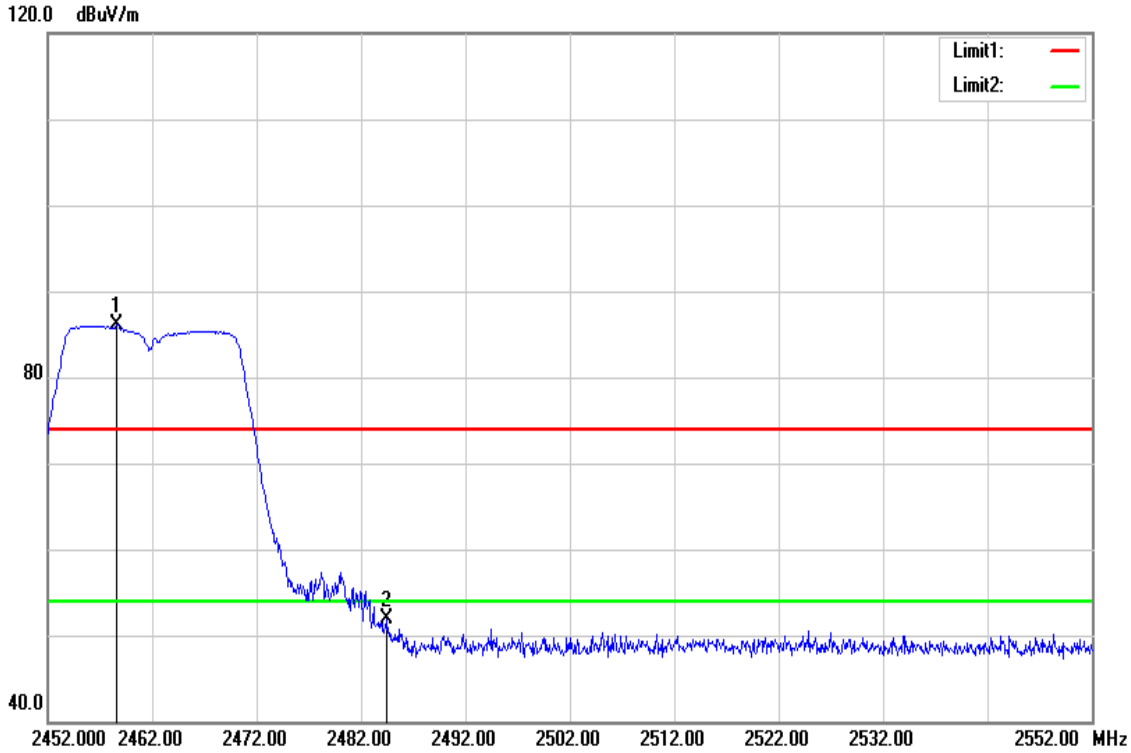
Test Mode	IEEE 802.11n HT20 High CH	Temp/Hum	24(℃)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak		



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
2458.600	86.43	-0.37	86.06	-	-	peak
2484.500	52.27	-0.30	51.97	74.00	-22.03	peak

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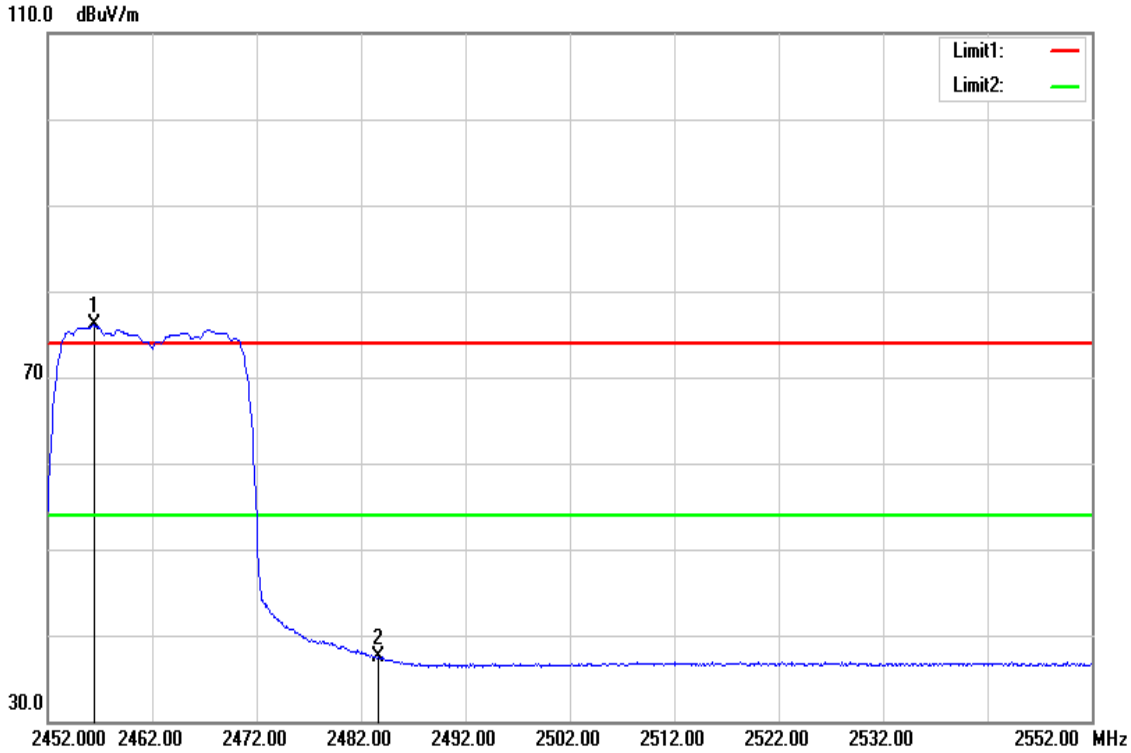
Test Mode	IEEE 802.11n HT20 High CH	Temperature:	24(℃)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average		



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
2456.400	76.43	-0.39	76.04	-	-	AVG
2483.600	37.78	-0.30	37.48	54.00	-16.52	AVG

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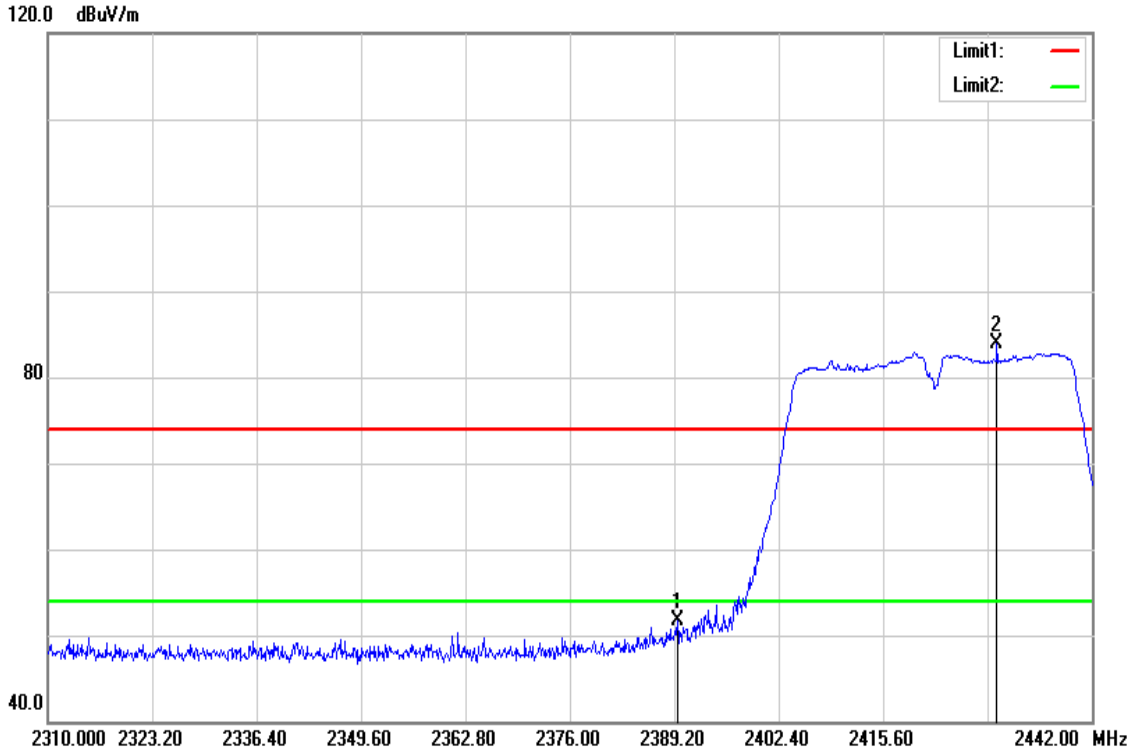
Test Mode	IEEE 802.11n HT40 Low CH	Temp/Hum	24(℃)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak		



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
2389.596	52.23	-0.60	51.63	74.00	-22.37	peak
2429.988	84.35	-0.48	83.87	-	-	peak

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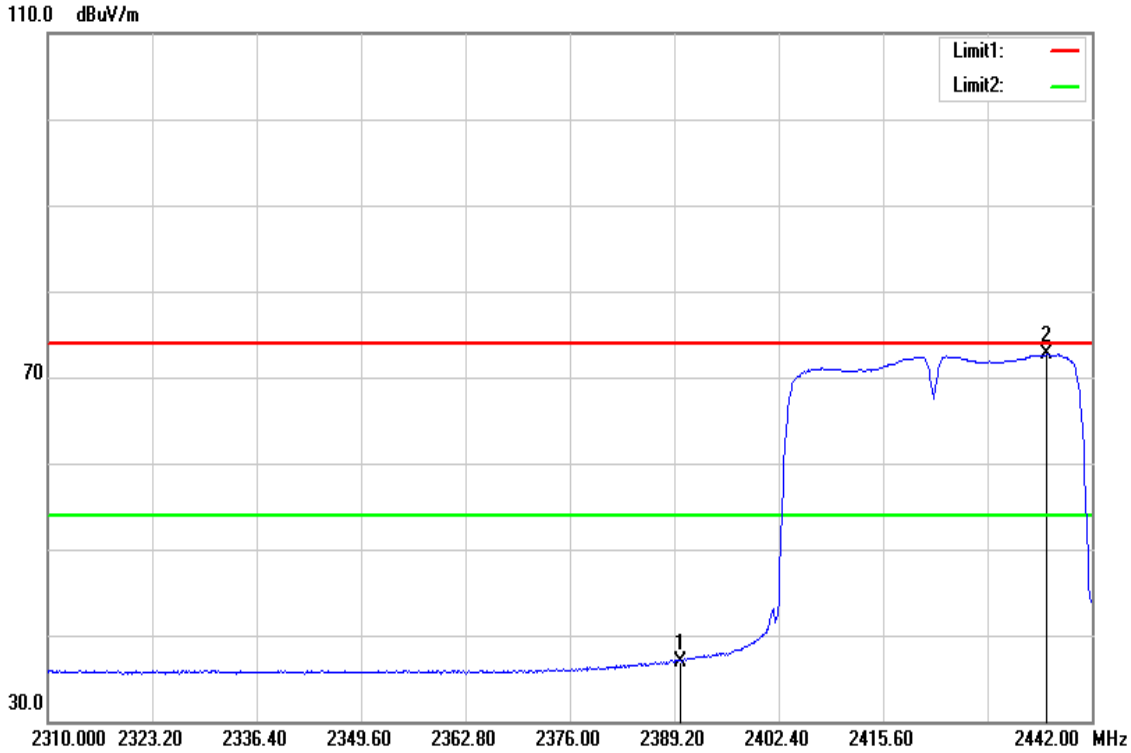
Test Mode	IEEE 802.11n HT20 Low CH	Temperature:	24(℃)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average		



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
2390.000	37.56	-0.60	36.96	54.00	-17.04	AVG
2436.324	73.11	-0.46	72.65	-	-	AVG

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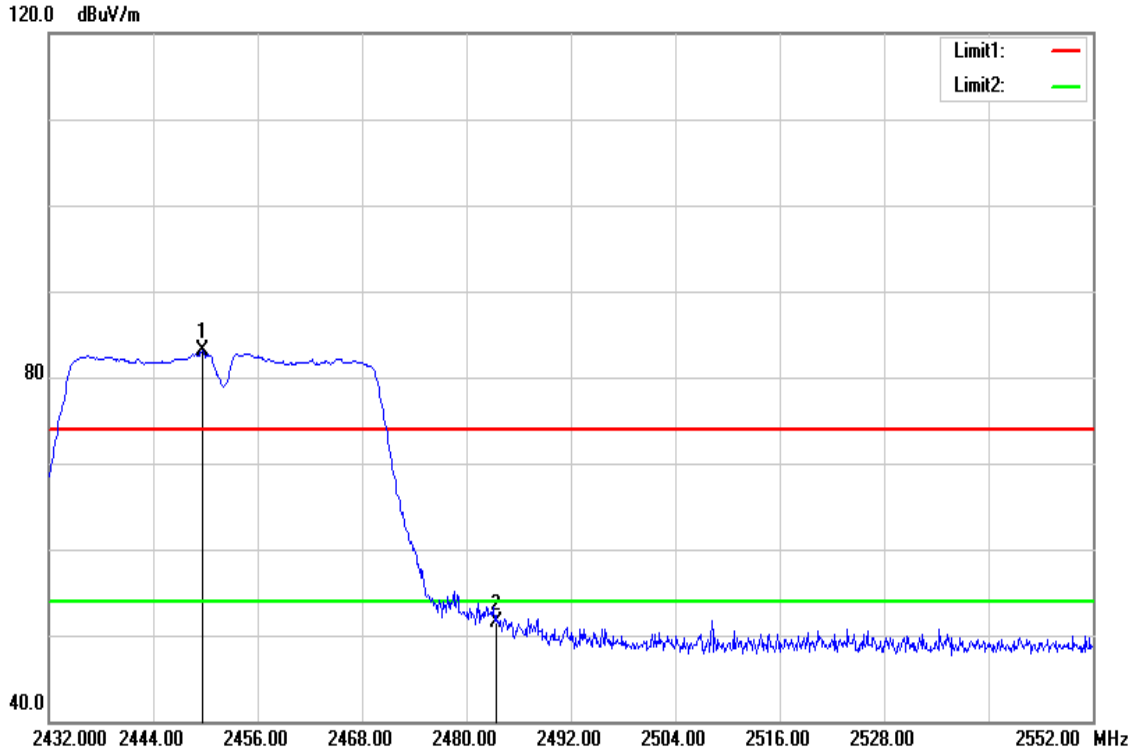
Test Mode	IEEE 802.11n HT40 High CH	Temp/Hum	24(℃)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak		



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
2449.640	83.43	-0.41	83.02	74.00	9.02	peak
2483.500	51.82	-0.30	51.52	-	-	peak

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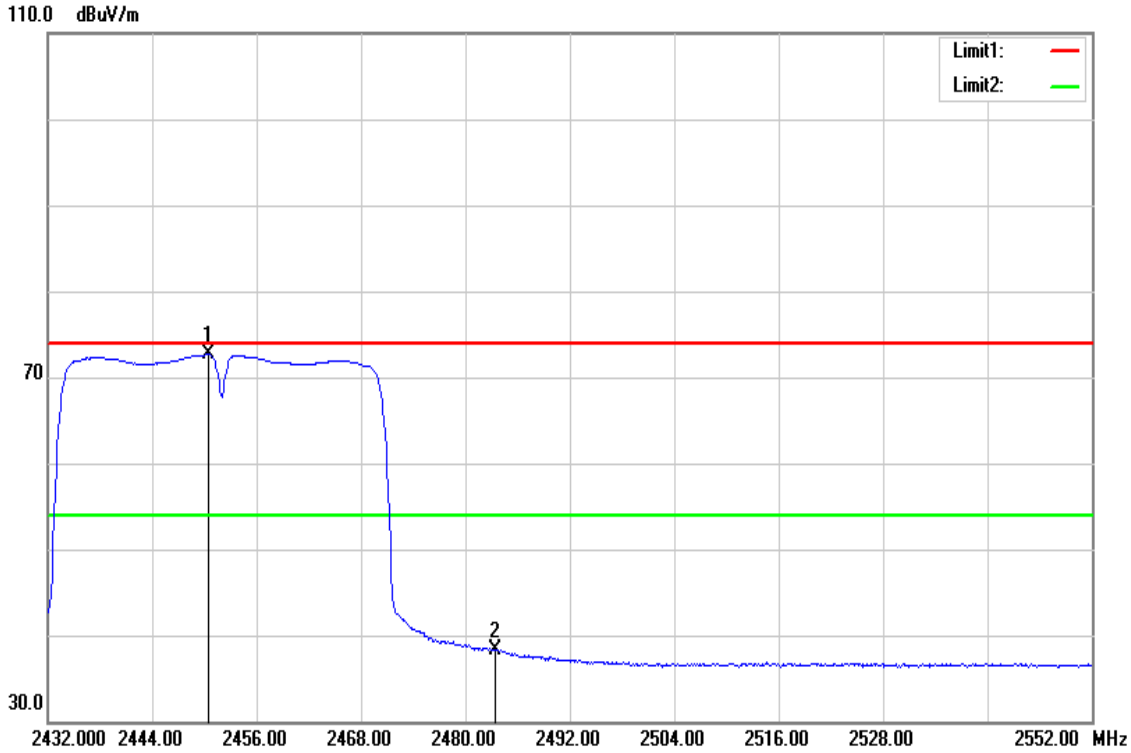
Test Mode	IEEE 802.11n HT40 High CH	Temperature:	24(℃)/ 33%RH
Test Item	Band Edge	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Average		



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
2450.480	73.02	-0.40	72.62	-	-	AVG
2483.500	38.58	-0.30	38.28	54.00	-15.72	AVG

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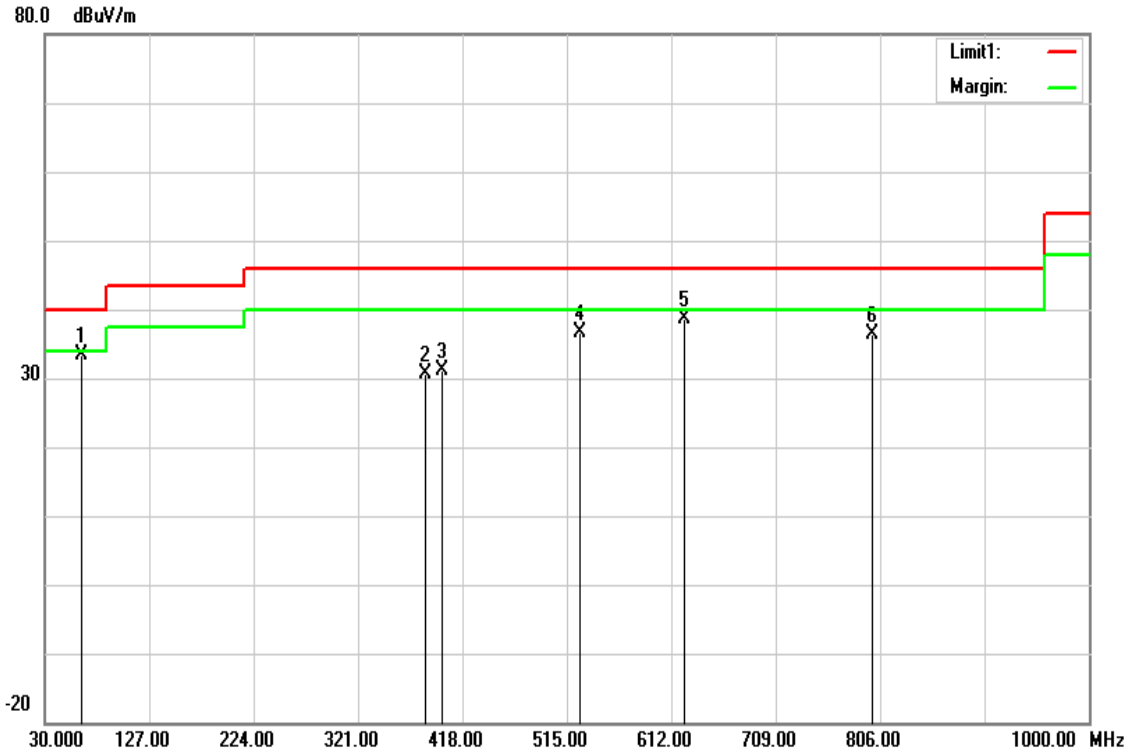
Below 1G Test Data

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



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
63.9500	55.05	-21.60	33.45	40.00	-6.55	peak
384.0500	42.49	-11.90	30.59	46.00	-15.41	peak
399.5700	42.55	-11.40	31.15	46.00	-14.85	peak
527.6100	44.64	-7.97	36.67	46.00	-9.33	peak
623.6400	44.79	-6.27	38.52	46.00	-7.48	peak
799.2100	39.74	-3.39	36.35	46.00	-9.65	peak

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

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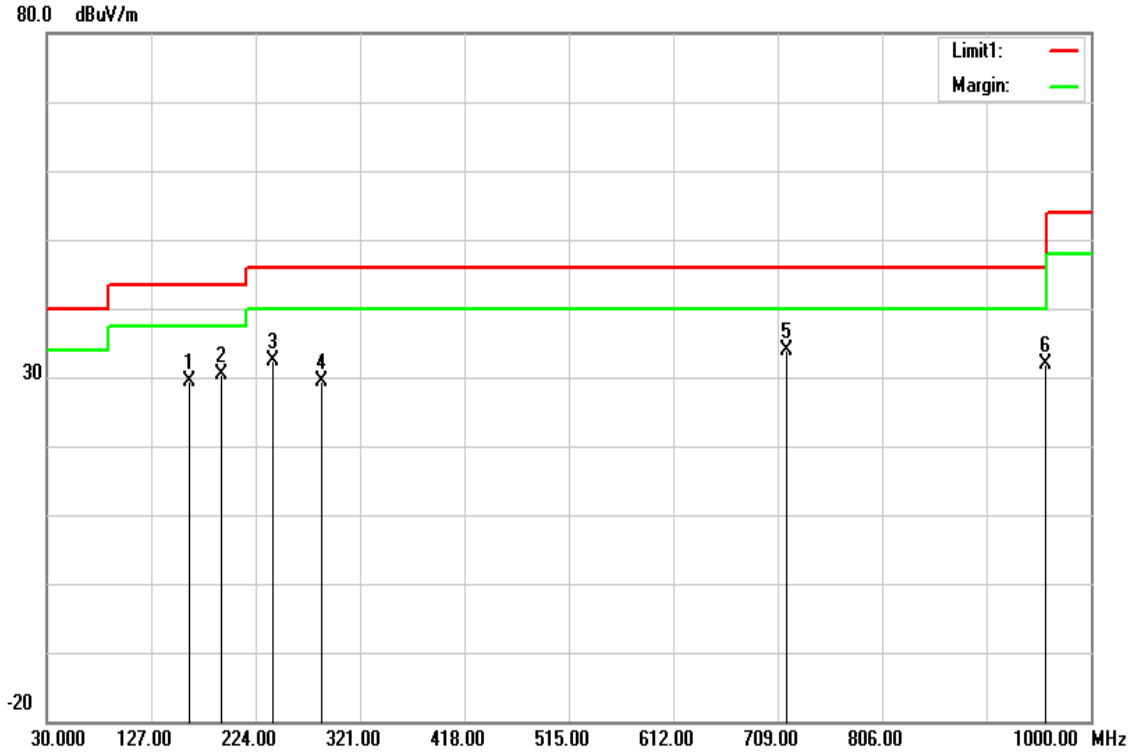
Test Mode	Mode 1	Temp/Hum	24(℃)/ 33%RH
Test Item	30MHz-1GHz	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak		



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB	Remark
162.8900	45.45	-16.13	29.32	43.50	-14.18	peak
191.9900	46.53	-16.04	30.49	43.50	-13.01	peak
239.5200	48.58	-16.16	32.42	46.00	-13.58	peak
285.1100	43.60	-14.22	29.38	46.00	-16.62	peak
716.7600	38.56	-4.69	33.87	46.00	-12.13	peak
958.2900	32.87	-1.10	31.77	46.00	-14.23	peak

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

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Above 1G Test Data

Test Mode	IEEE 802.11b Low CH	Temp/Hum	24(℃)/ 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
4827.000	47.27	6.84	54.11	74.00	-19.89	peak
4827.000	46.23	6.84	53.07	54.00	-0.93	AVG

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*

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Test Mode	IEEE 802.11b Low CH	Temp/Hum	24(℃)/ 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 (BuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
4827.000	44.71	6.84	51.55	74.00	-22.45	peak

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*

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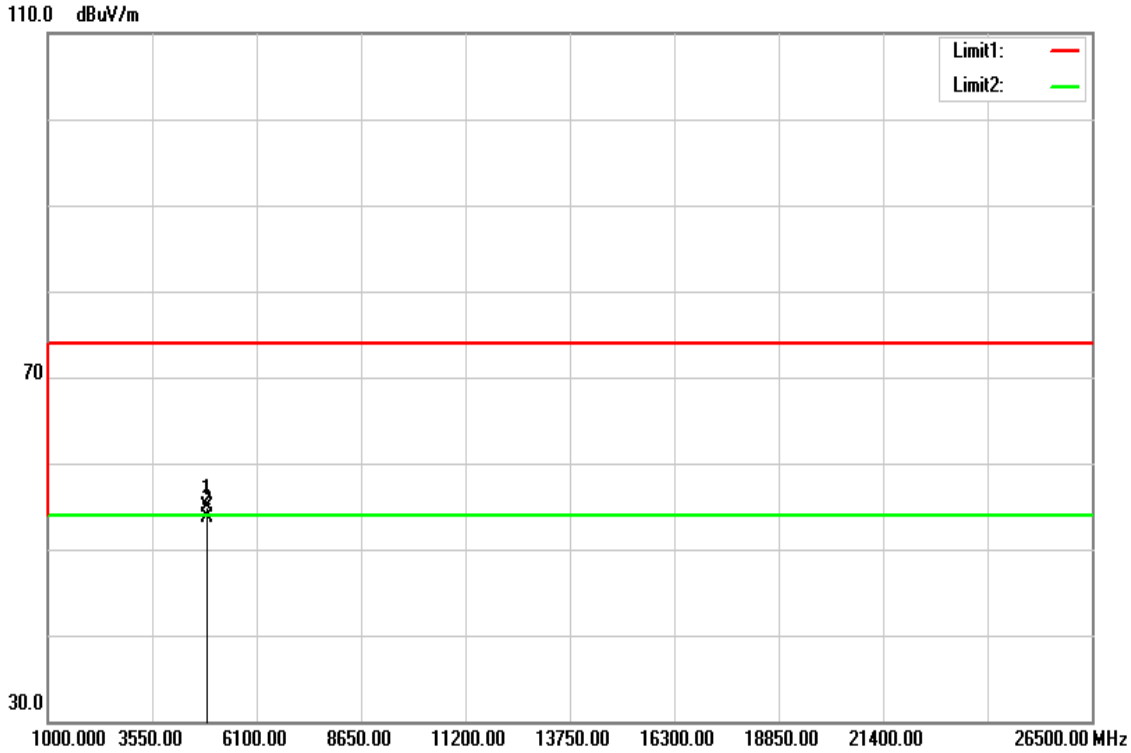
Test Mode	IEEE 802.11b Mid CH	Temp/Hum	24(℃)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average		



Frequency (MHz)	Reading (dBu)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
4876.000	47.96	6.97	54.93	74.00	-19.07	peak
4876.000	46.82	6.97	53.79	54.00	-0.21	AVG

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*

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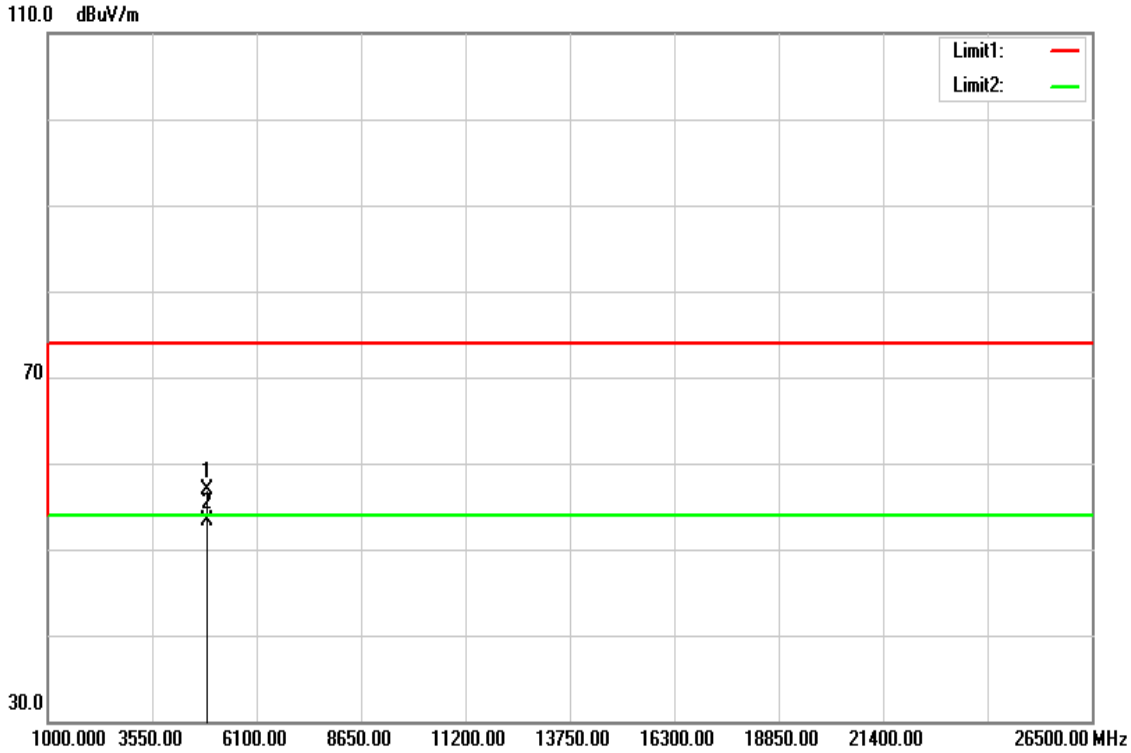
Test Mode	IEEE 802.11b Mid CH	Temp/Hum	24(℃)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average		



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
4876.000	49.94	6.97	56.91	74.00	-17.09	peak
4876.000	46.33	6.97	53.30	54.00	-0.70	AVG

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*

This report shall not be reproduced except in full, without the written approval of Compliance Certification Services.

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

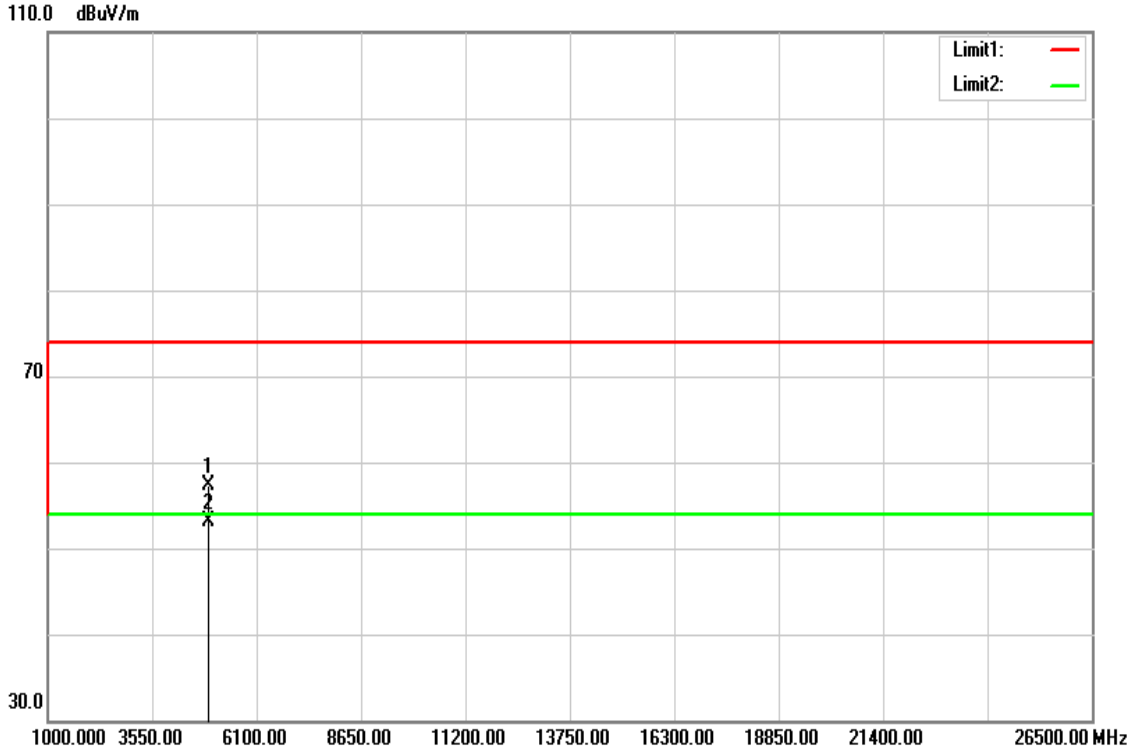
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
4925.000	43.12	7.09	50.21	74.00	-23.79	peak

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*

This report shall not be reproduced except in full, without the written approval of Compliance Certification Services.

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



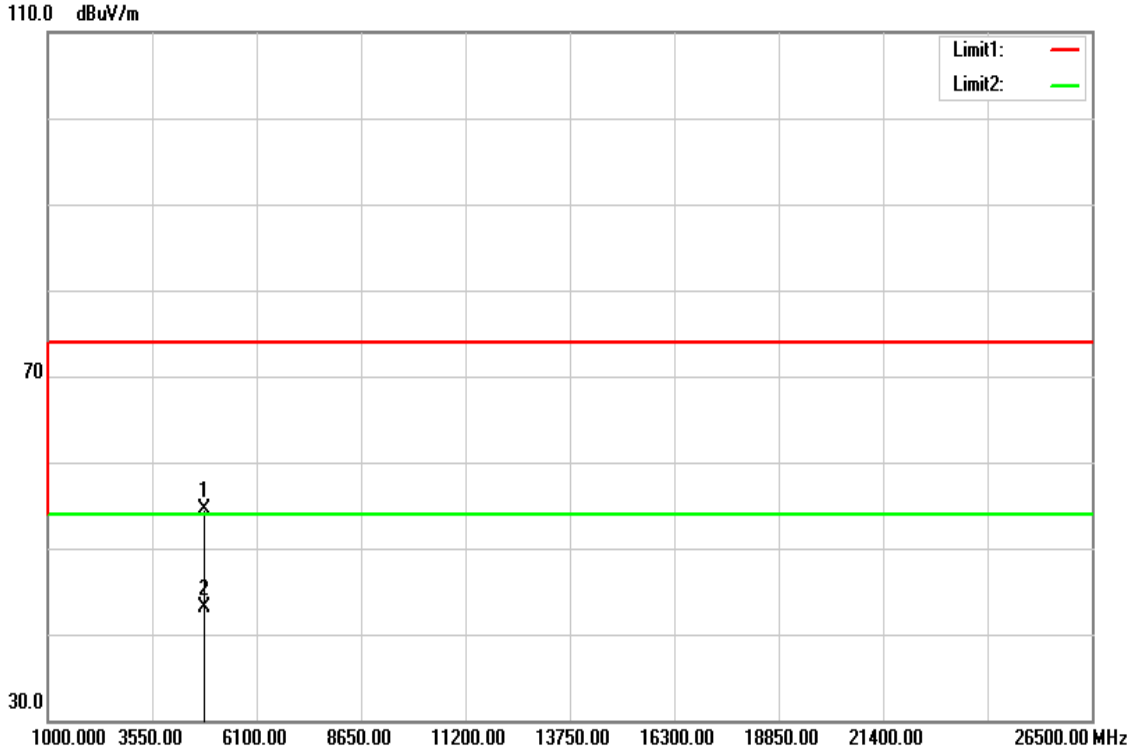
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB	Remark
4925.000	50.28	7.09	57.37	74.00	-16.63	peak
4925.000	46.04	7.09	53.13	54.00	-0.87	AVG

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*

This report shall not be reproduced except in full, without the written approval of Compliance Certification Services.

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



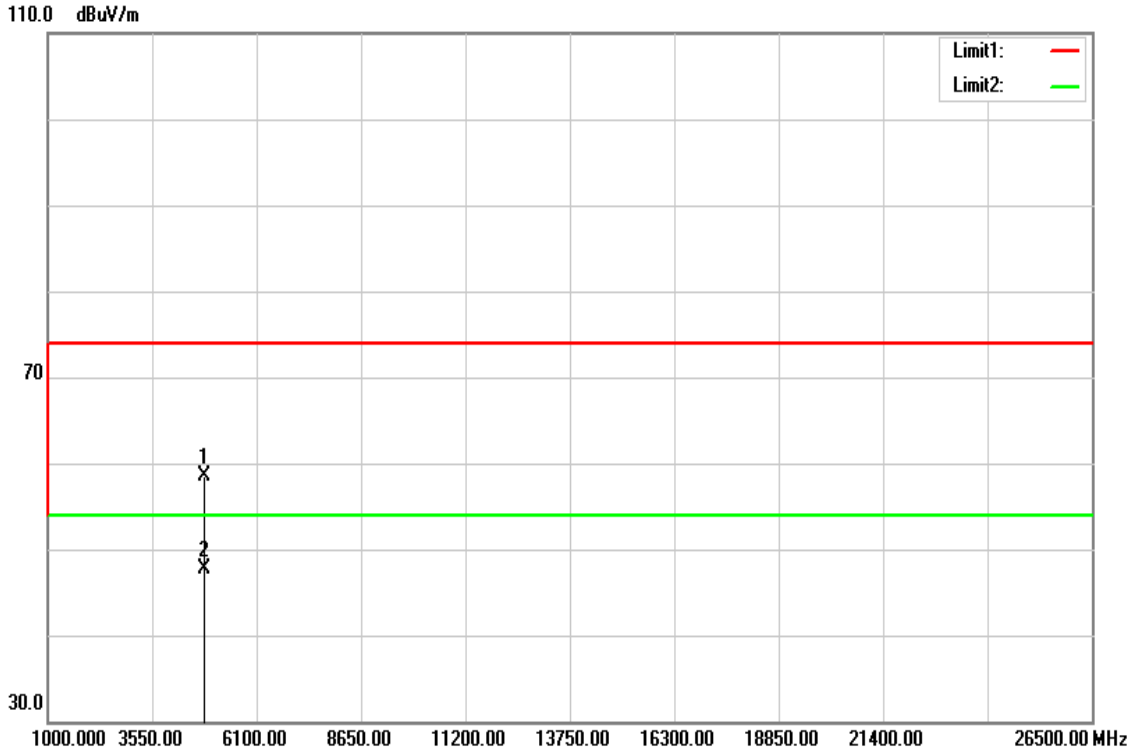
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
4827.000	47.57	6.84	54.41	74.00	-19.59	peak
4827.000	36.22	6.84	43.06	54.00	-10.94	AVG

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*

This report shall not be reproduced except in full, without the written approval of Compliance Certification Services.

Test Mode	IEEE 802.11g Low CH	Temp/Hum	24(℃)/ 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 (BuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
4820.000	51.66	6.82	58.48	74.00	-15.52	peak
4820.000	40.80	6.82	47.62	54.00	-6.38	AVG

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*

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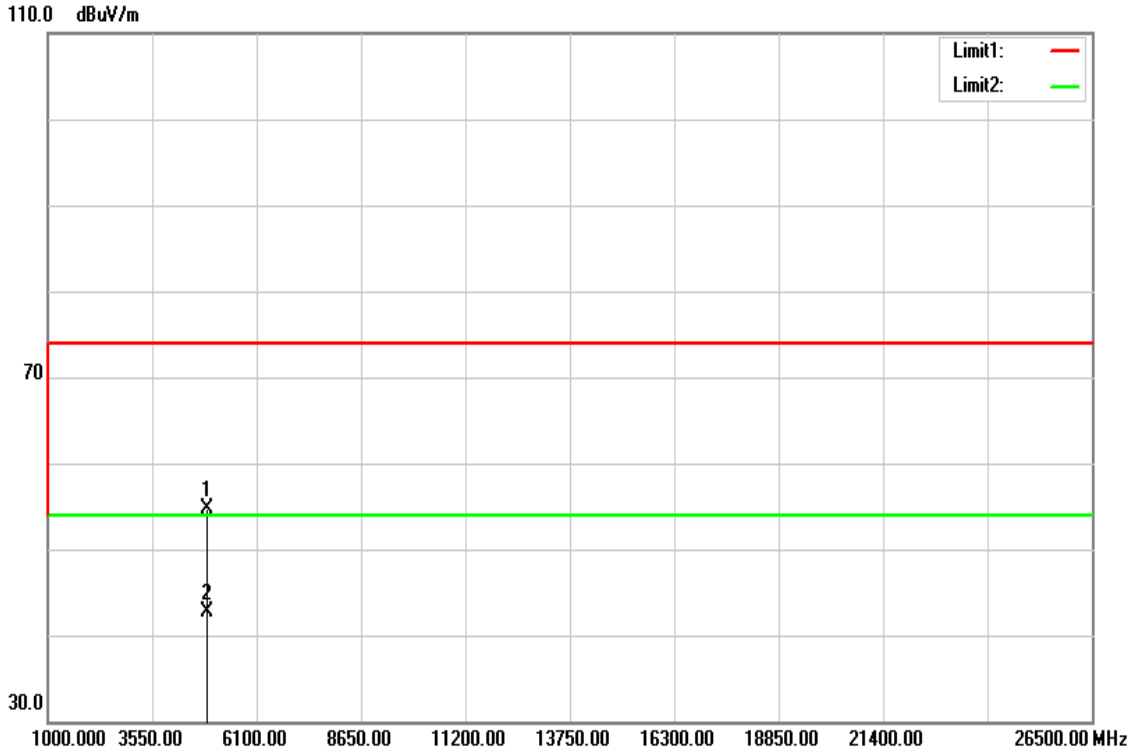
Test Mode	IEEE 802.11g Mid CH	Temp/Hum	24(℃)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average		



Frequency (MHz)	Reading (dBu)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
4876.000	47.76	6.97	54.73	74.00	-19.27	peak
4876.000	35.79	6.97	42.76	54.00	-11.24	AVG

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*

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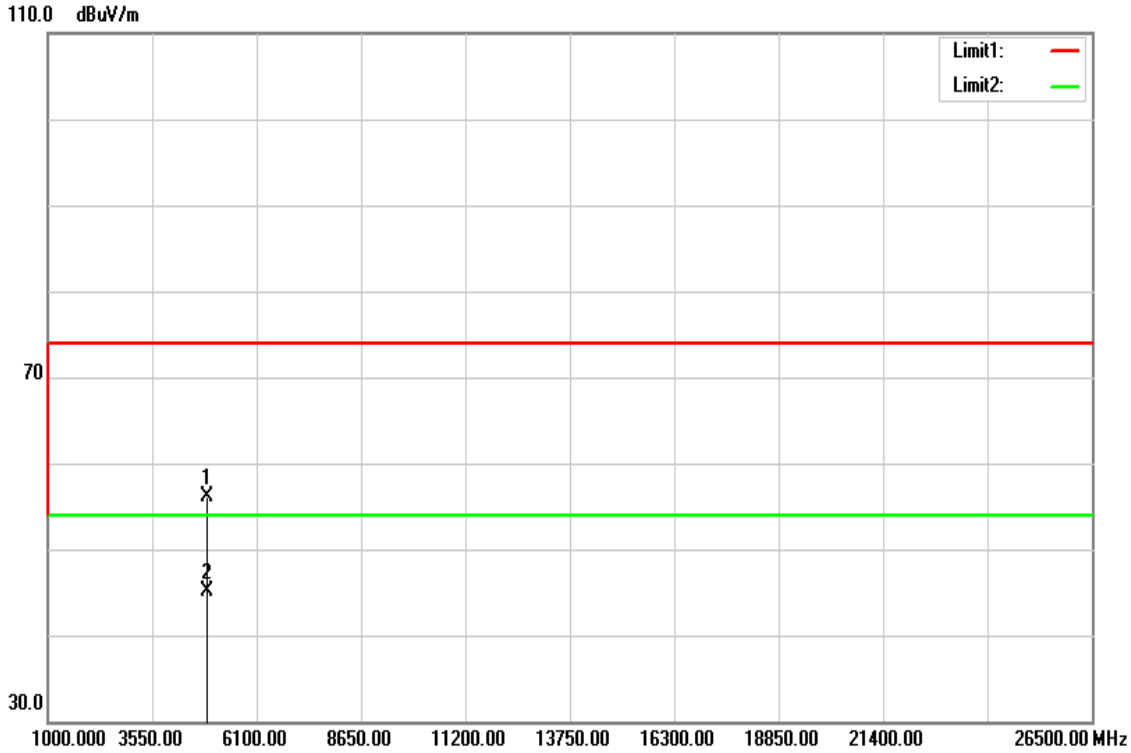
Test Mode	IEEE 802.11g Mid CH	Temp/Hum	24(℃)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average		



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
4876.000	49.20	6.97	56.17	74.00	-17.83	peak
4876.000	38.06	6.97	45.03	54.00	-8.97	AVG

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*

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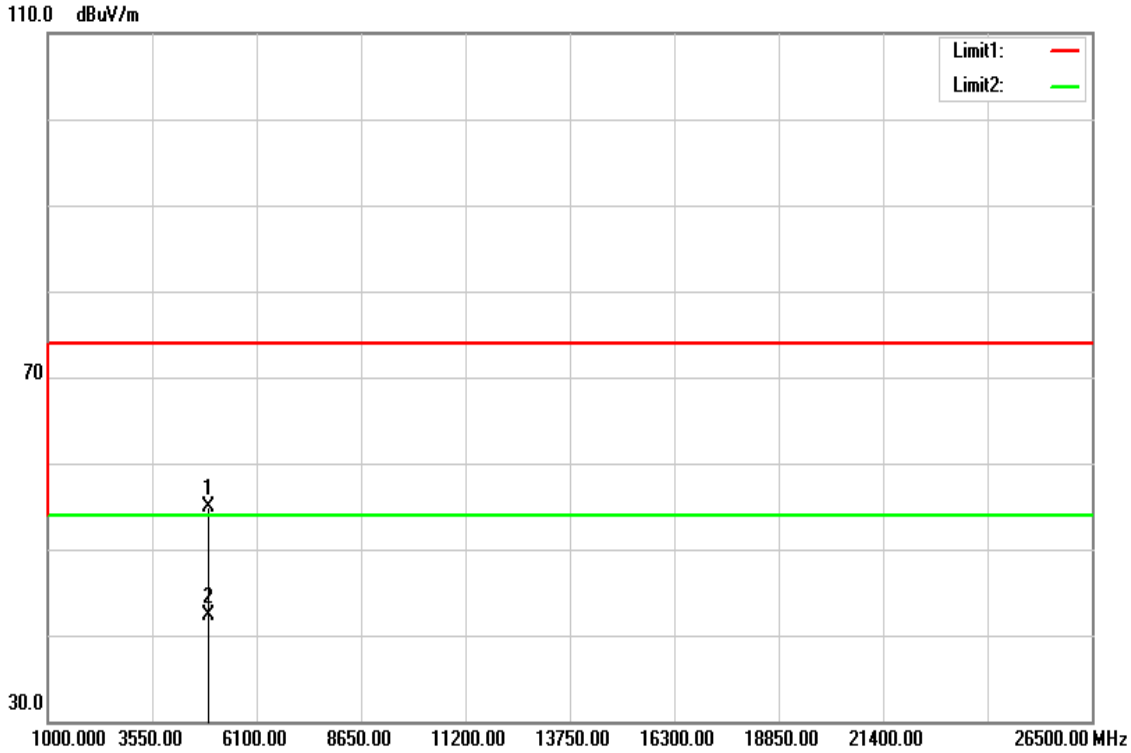
Test Mode	IEEE 802.11g High CH	Temp/Hum	24(℃)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average		



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
4925.000	47.86	7.09	54.95	74.00	-19.05	peak
4925.000	35.11	7.09	42.20	54.00	-11.80	AVG

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*

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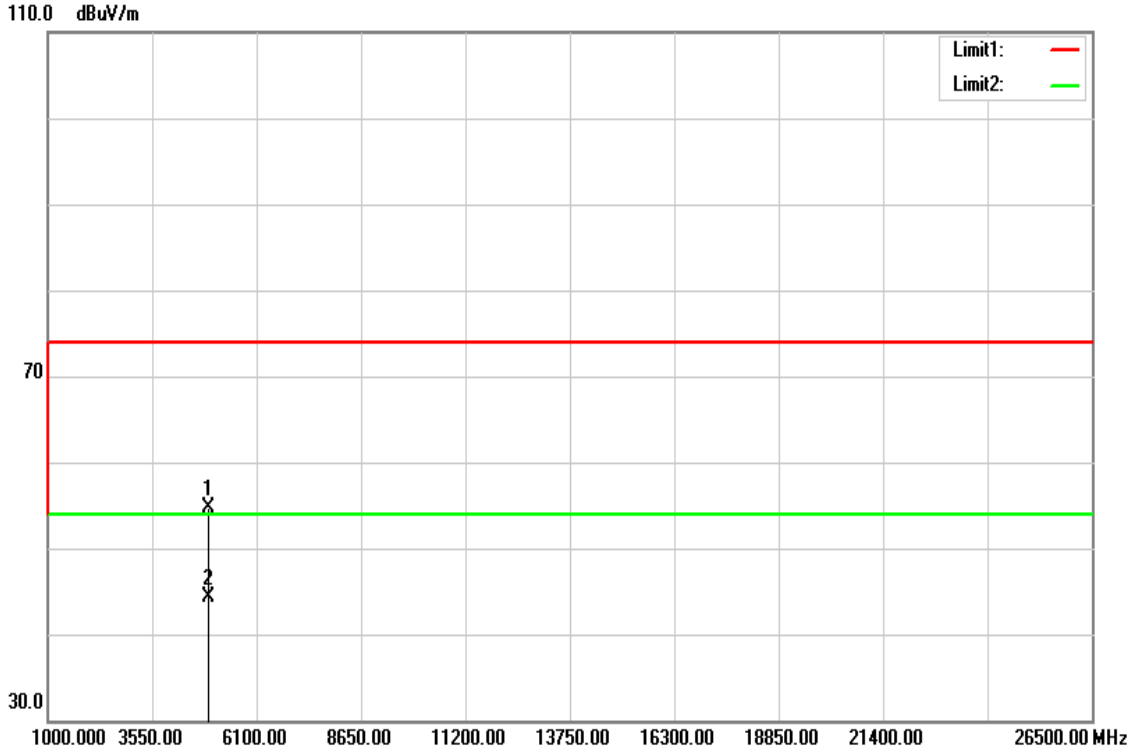
Test Mode	IEEE 802.11g High CH	Temp/Hum	24(℃)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average		



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB	Remark
4918.000	47.62	7.08	54.70	74.00	-19.30	peak
4918.000	37.18	7.08	44.26	54.00	-9.74	AVG

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*

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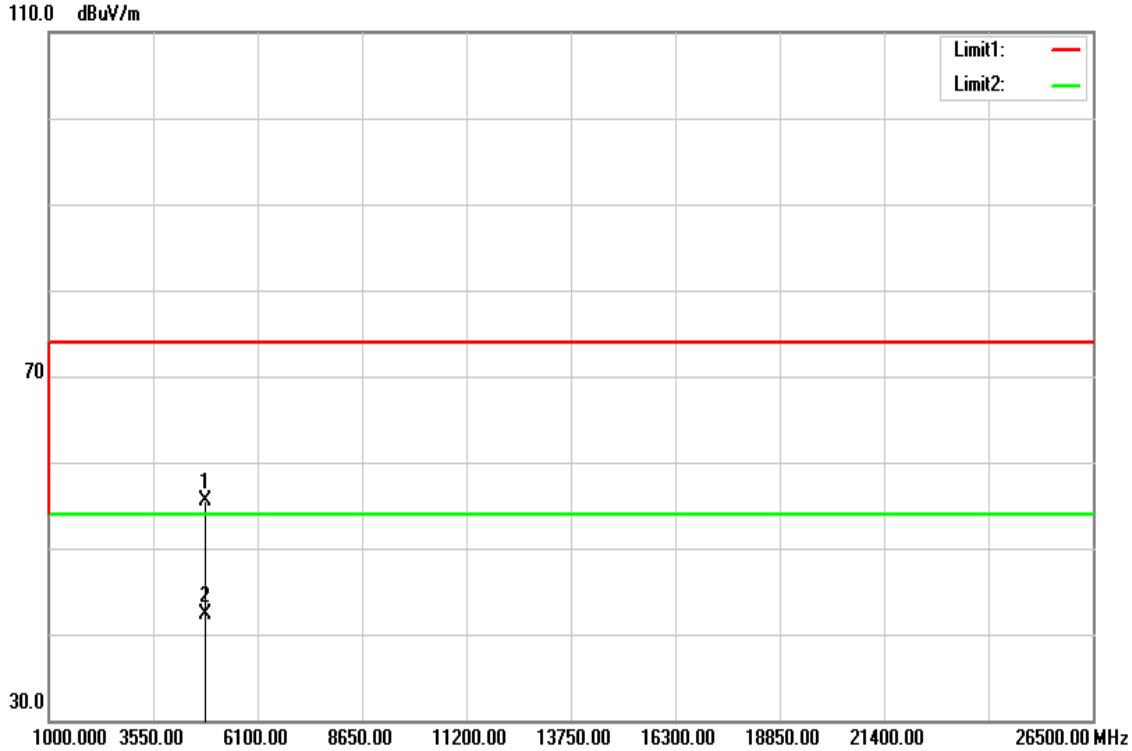
Test Mode	IEEE 802.11n HT20 Low CH	Temp/Hum	24(℃)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average		



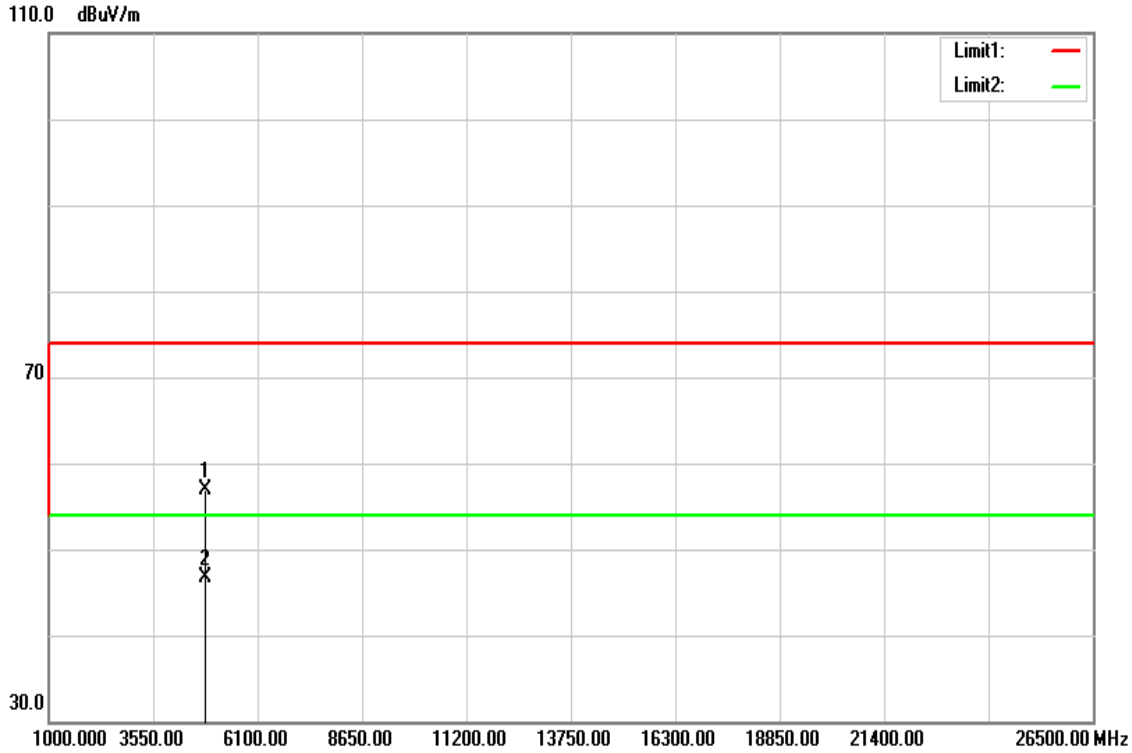
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
4820.000	48.76	6.82	55.58	74.00	-18.42	peak
4820.000	35.50	6.82	42.32	54.00	-11.68	AVG

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*

This report shall not be reproduced except in full, without the written approval of Compliance Certification Services.

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



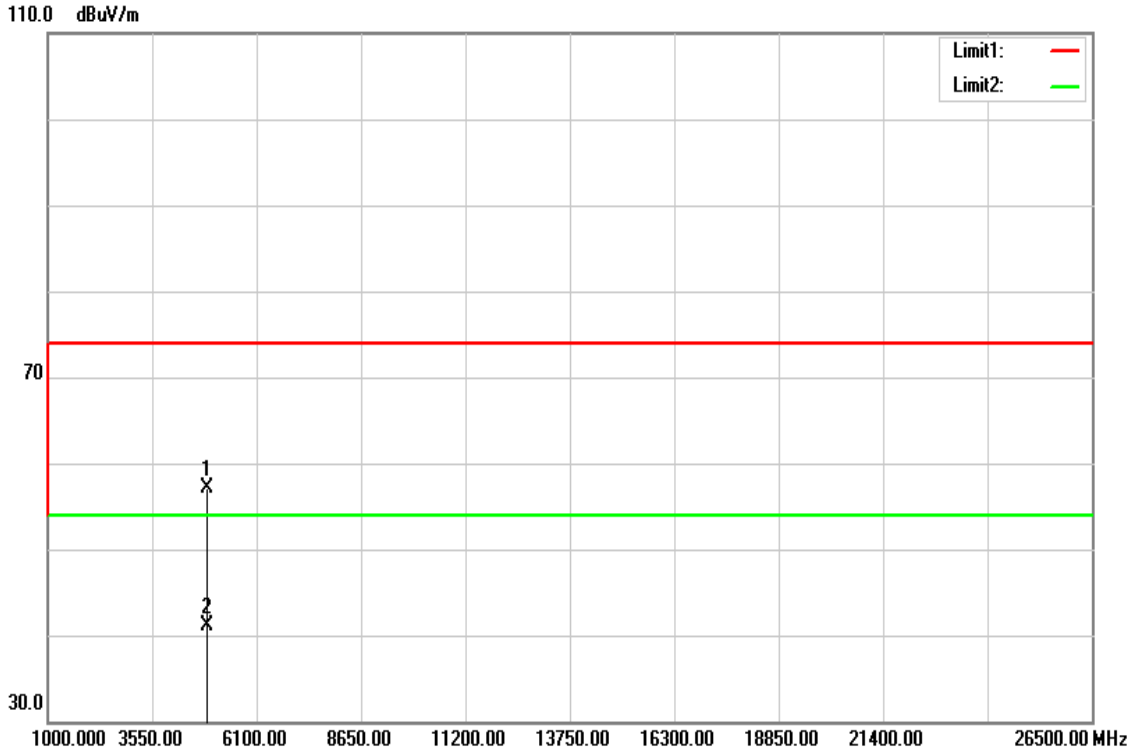
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
4820.000	50.03	6.82	56.85	74.00	-17.15	peak
4820.000	39.79	6.82	46.61	54.00	-7.39	AVG

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*

This report shall not be reproduced except in full, without the written approval of Compliance Certification Services.

Test Mode	IEEE 802.11n HT20 Mid CH	Temp/Hum	24(℃)/ 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
4876.000	50.23	6.97	57.20	74.00	-16.80	peak
4876.000	34.19	6.97	41.16	54.00	-12.84	AVG

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*

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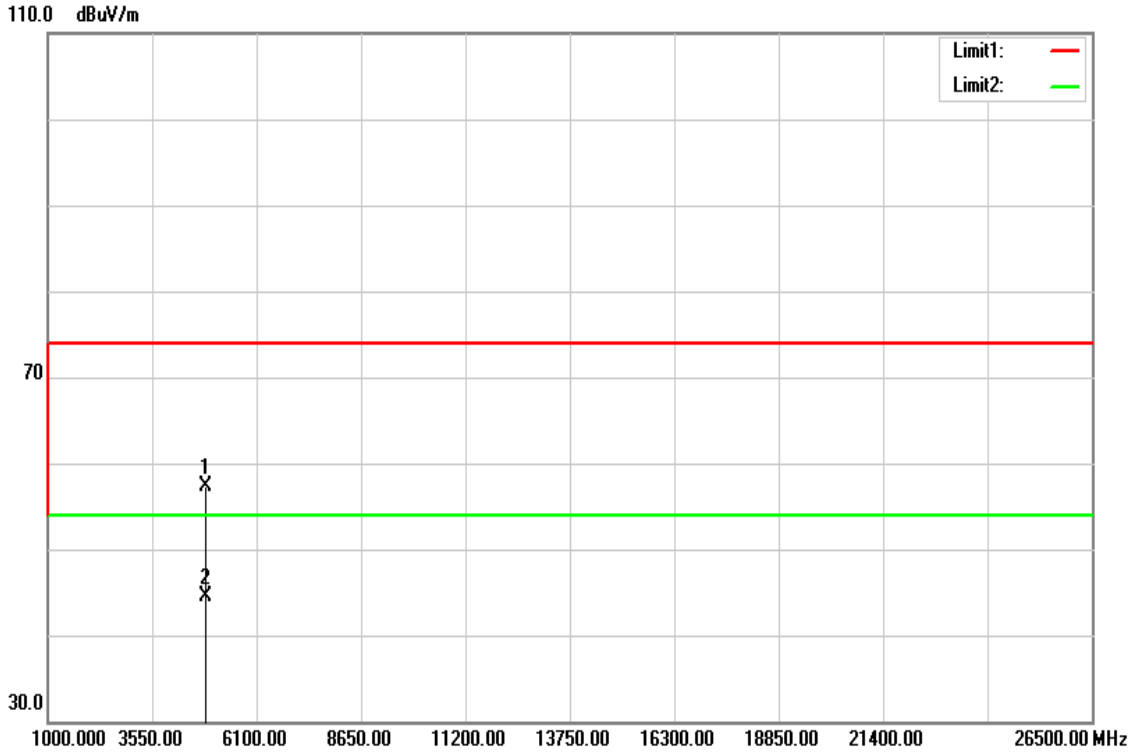
Test Mode	IEEE 802.11n HT20 Mid CH	Temp/Hum	24(℃)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average		



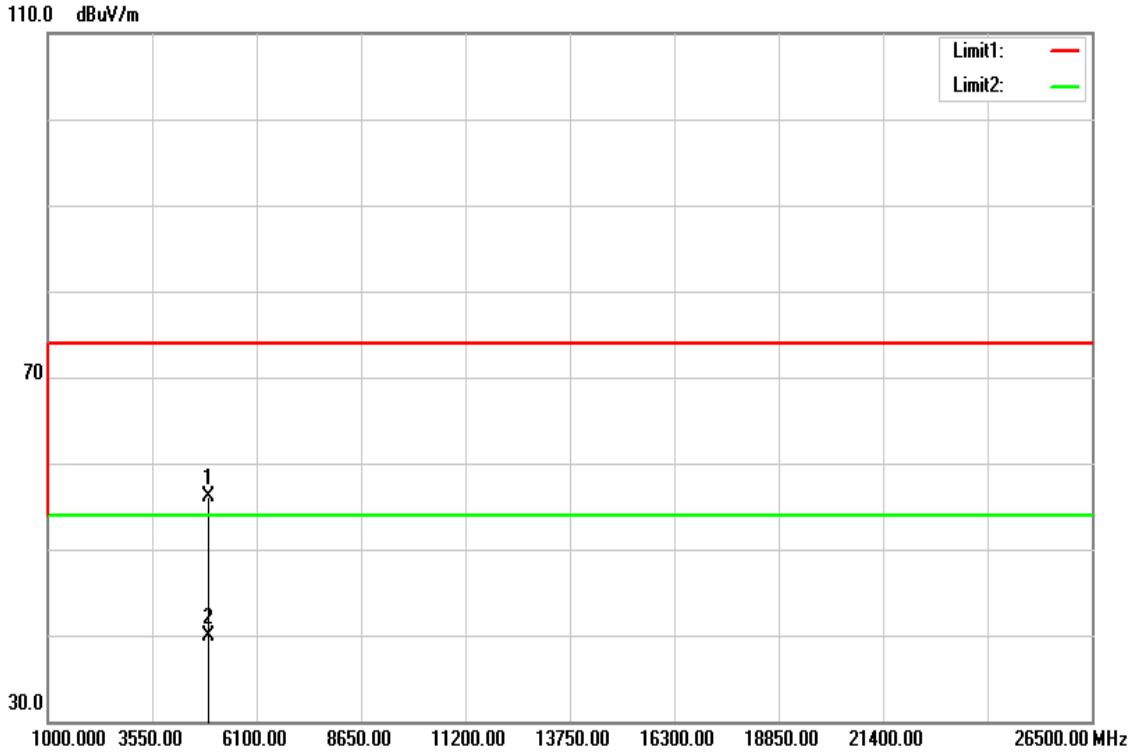
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB	Remark
4869.000	50.30	6.95	57.25	74.00	-16.75	peak
4869.000	37.55	6.95	44.50	54.00	-9.50	AVG

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*

This report shall not be reproduced except in full, without the written approval of Compliance Certification Services.

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



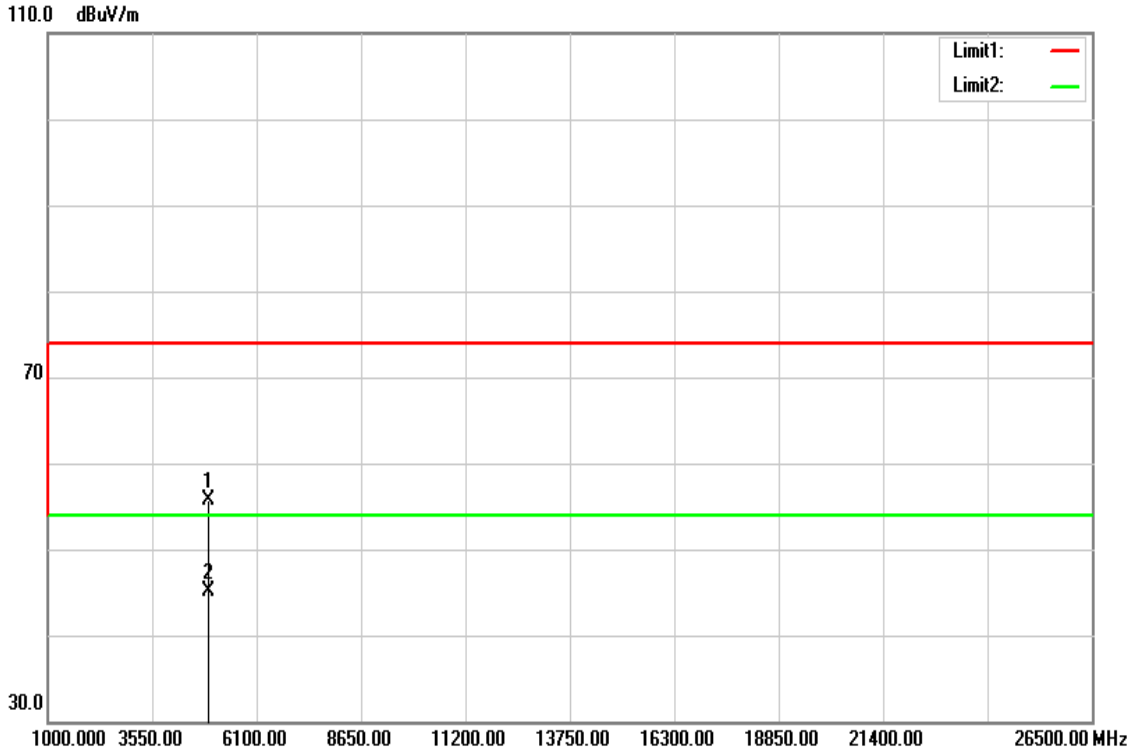
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
4925.000	49.03	7.09	56.12	74.00	-17.88	peak
4925.000	32.88	7.09	39.97	54.00	-14.03	AVG

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*

This report shall not be reproduced except in full, without the written approval of Compliance Certification Services.

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



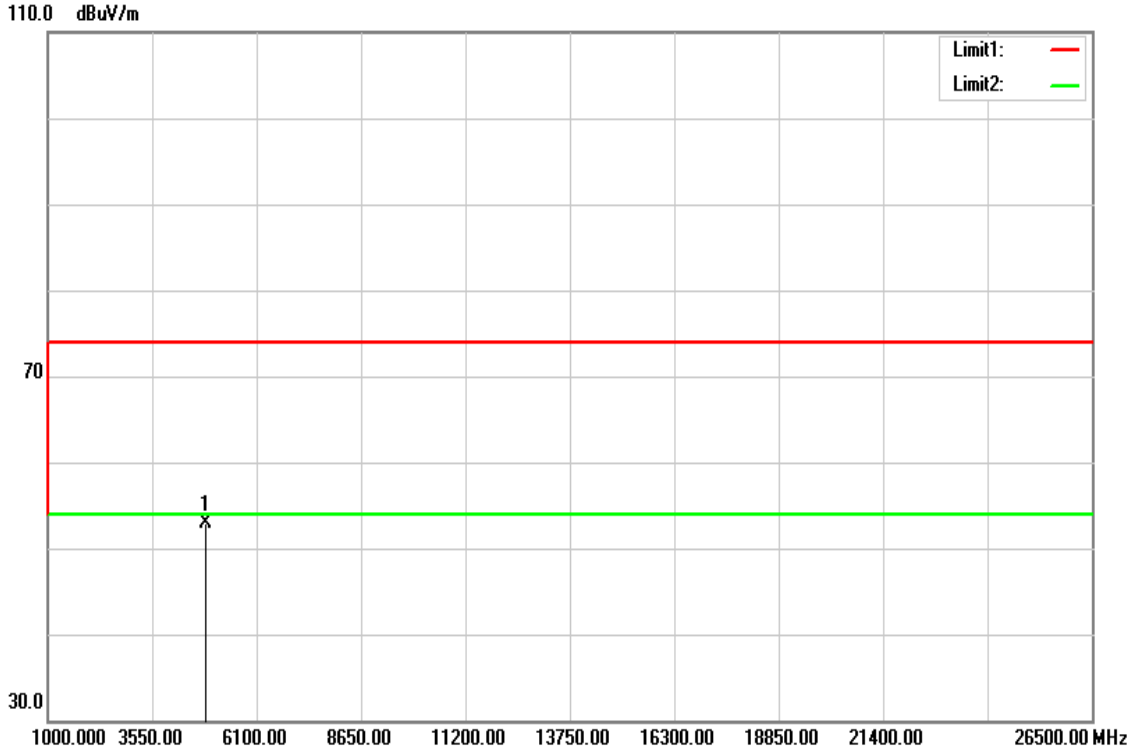
Frequency (MHz	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
4932.000	48.69	7.11	55.80	74.00	-18.20	peak
4932.000	38.05	7.11	45.16	54.00	-8.84	AVG

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*

This report shall not be reproduced except in full, without the written approval of Compliance Certification Services.

Test Mode	IEEE 802.11n HT40 Low CH	Temp/Hum	24(℃)/ 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
4848.000	45.92	6.90	52.82	74.00	-21.18	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*

This report shall not be reproduced except in full, without the written approval of Compliance Certification Services.

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

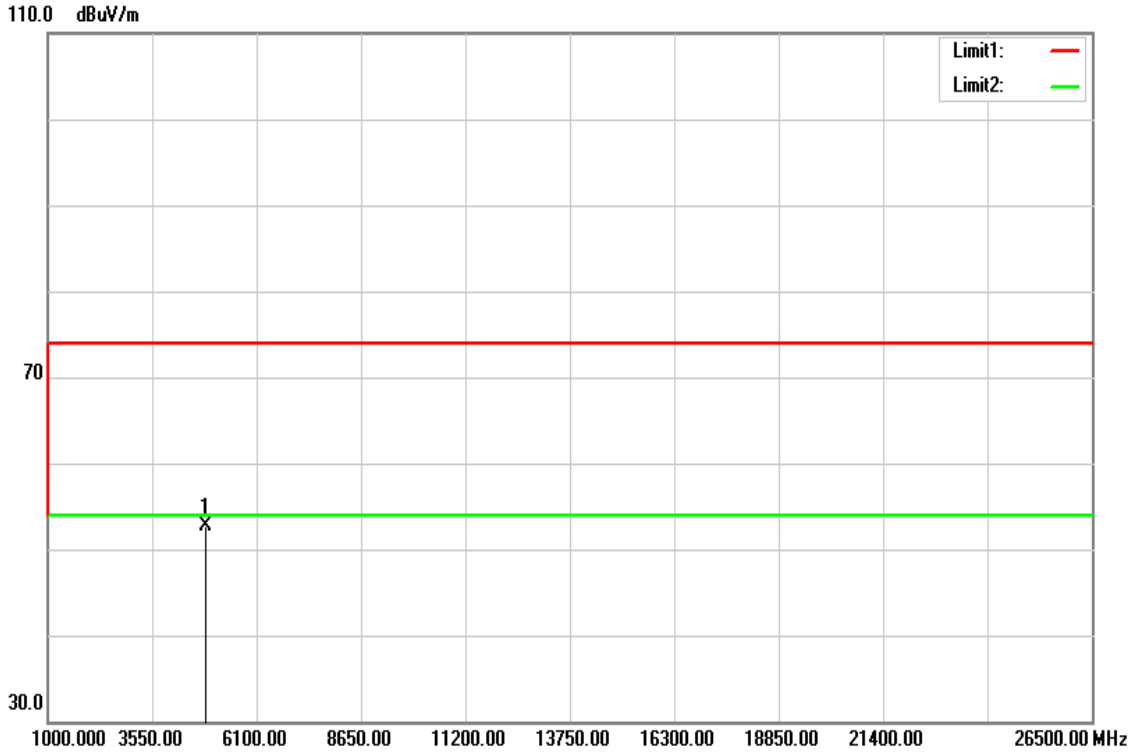
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
4844.000	43.21	6.88	50.09	74.00	-23.91	peak

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*

This report shall not be reproduced except in full, without the written approval of Compliance Certification Services.

Test Mode	IEEE 802.11n HT40 Mid CH	Temp/Hum	24(℃)/ 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)	R mark
4874.000	45.75	6.97	52.72	74.00	-21.28	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*

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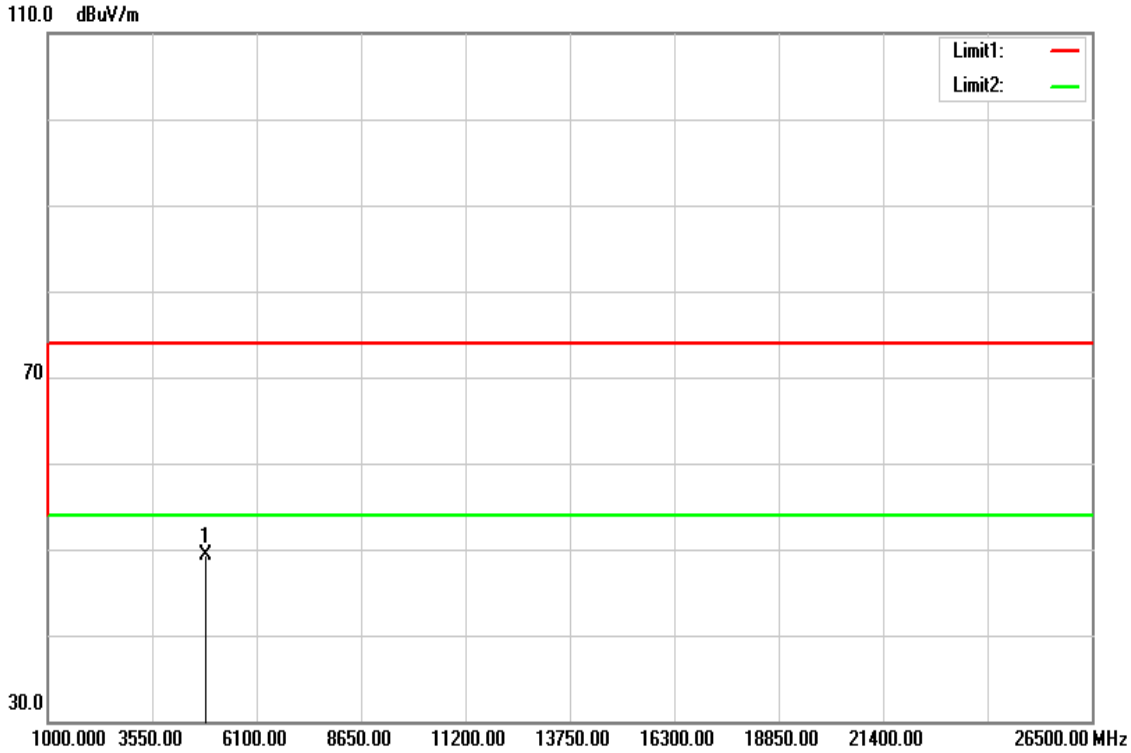
Test Mode	IEEE 802.11n HT40 Mid CH	Temp/Hum	24(℃)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Horizontal	Test Engineer	Jerry Chuang
Detector	Peak and Average		



Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB	Remark
4874.000	42.36	6.97	49.33	74.00	-24.67	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*

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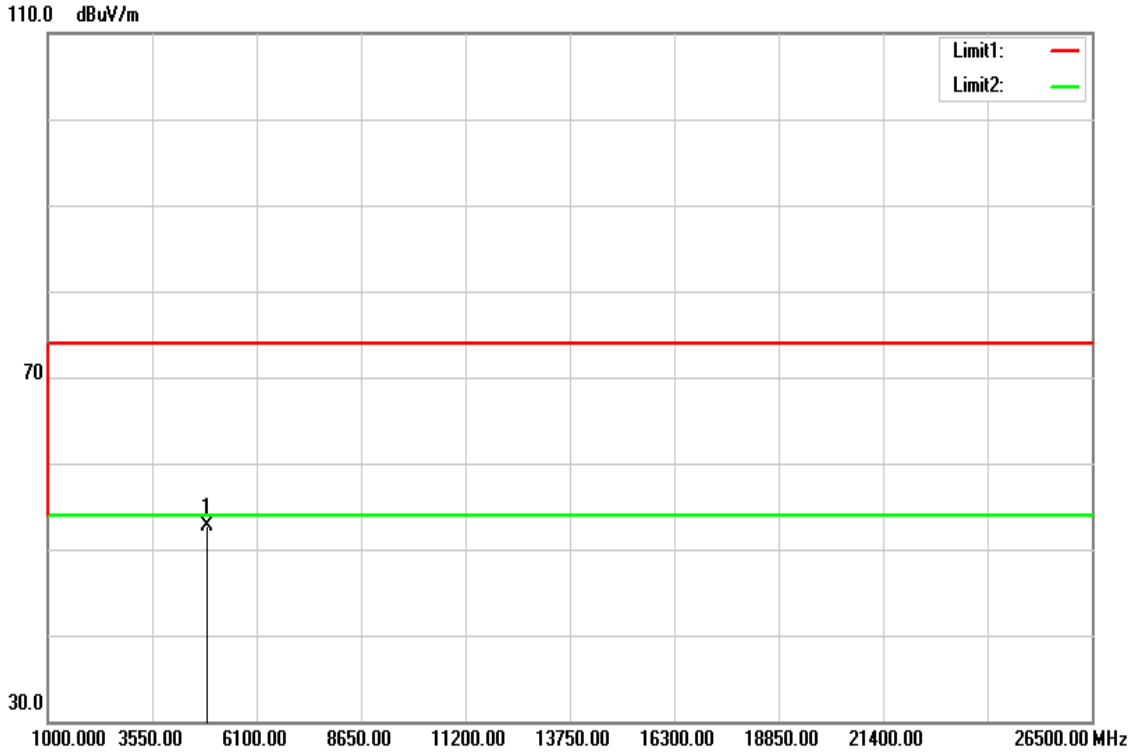
Test Mode	IEEE 802.11n HT40 High CH	Temp/Hum	24(℃)/ 33%RH
Test Item	Harmonic	Test Date	November 10, 2017
Polarize	Vertical	Test Engineer	Jerry Chuang
Detector	Peak and Average		



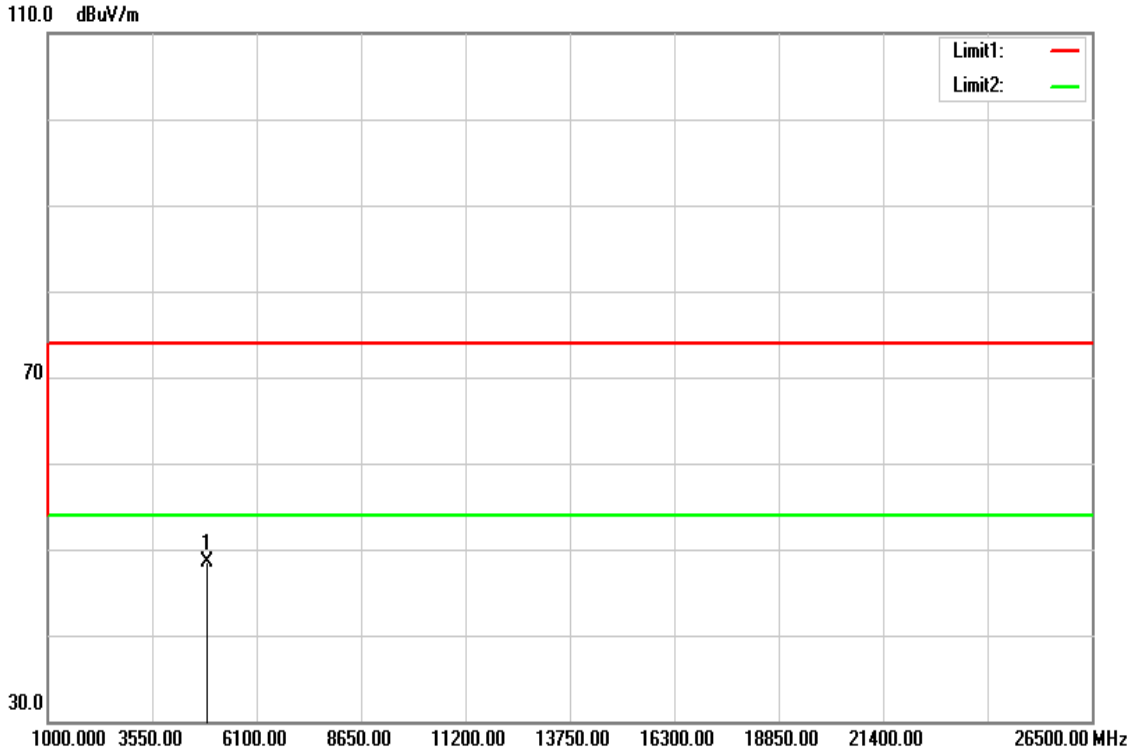
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
4904.000	45.74	7.04	52.78	74.00	-21.22	peak
N/A						

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*

This report shall not be reproduced except in full, without the written approval of Compliance Certification Services.

Test Mode	IEEE 802.11n HT40 High CH	Temp/Hum	24(℃)/ 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
4904.000	41.42	7.04	48.46	74.00	-25.54	peak

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*

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