

FCC RF Test Report

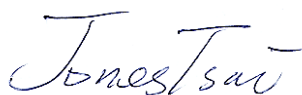
APPLICANT : Nyle Oswind Parry Limited Liability Company
EQUIPMENT : Tablet PC
MODEL NAME : GQY56XZ
FCC ID : 2ABO6-0725
STANDARD : FCC Part 15 Subpart E §15.407
CLASSIFICATION : (NII) Unlicensed National Information Infrastructure

The testing completed on Aug. 22, 2014. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.



Reviewed by: Joseph Lin / Supervisor



Approved by: Jones Tsai / Manager



SPORTON INTERNATIONAL INC.

No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.

TABLE OF CONTENTS

REVISION HISTORY.....	3
SUMMARY OF TEST RESULT	4
1 GENERAL DESCRIPTION	5
1.1 Applicant.....	5
1.2 Feature of Equipment Under Test	5
1.3 Product Specification of Equipment Under Test.....	6
1.4 Modification of EUT	6
1.5 Testing Location	7
1.6 Applicable Standards.....	7
2 TEST CONFIGURATION OF EQUIPMENT UNDER TEST	8
2.1 Carrier Frequency and Channel	9
2.2 Pre-Scanned RF Power	10
2.3 Test Mode	12
2.4 Connection Diagram of Test System.....	16
2.5 Support Unit used in test configuration and system	18
2.6 EUT Operation Test Setup	18
2.7 Measurement Results Explanation Example.....	18
3 TEST RESULT	19
3.1 26dB Bandwidth Measurement	19
3.2 Maximum Conducted Output Power Measurement	28
3.3 Power Spectral Density Measurement	35
3.4 Unwanted Emissions Measurement	43
3.5 AC Conducted Emission Measurement.....	139
3.6 Frequency Stability Measurement.....	144
3.7 Automatically Discontinue Transmission	146
3.8 Antenna Requirements.....	147
4 LIST OF MEASURING EQUIPMENT	149
5 UNCERTAINTY OF EVALUATION	150

REVISION HISTORY

[illegible]

SUMMARY OF TEST RESULT

Report Section	FCC Rule	IC Rule	Description	Limit	Result	Remark
3.1	2.1049 15.403(i)	RSS-210 A9.2	26dB Bandwidth	-	Pass	-
3.2	15.407(a)	RSS-210 A9.2	Maximum Conducted Output Power	$\leq 17, 24, 30$ dBm (depend on band)	Pass	-
3.3	15.407(a)	RSS-210 A9.2	Power Spectral Density	$\leq 4, 11, 17$ dBm (depend on band)	Pass	-
3.4	15.407(b)	RSS-210 A9.3	Unwanted Emissions	$\leq -17, -27$ dBm (depend on band)&15.209(a)	Pass	Under limit 0.56 dB at 5470.000 MHz
3.5	15.207	RSS-Gen 7.2.4	AC Conducted Emission	15.207(a)	Pass	Under limit 6.30 dB at 3.702 MHz
3.6	15.407(g)	-	Frequency Stability	Within Operation Band	Pass	-
3.7	15.407(c)	RSS-210 A9.4	Automatically Discontinue Transmission	Discontinue Transmission	Pass	-
3.8	15.203 & 15.407(a)	RSS-210 A9.2	Antenna Requirement	N/A	Pass	-

1 General Description

1.1 Applicant

Nyle Oswind Parry Limited Liability Company
7027 Old Madison Pike, Suite 108, Huntsville, Alabama 35806

1.2 Feature of Equipment Under Test

Product Feature	
Equipment	Tablet PC
Model Name	GQY56XZ
FCC ID	2ABO6-0725
EUT supports Radios application	GSM/EGPRS/WCDMA/HSPA/LTE <2.4GHz band> WLAN 11b/g/n HT20 WLAN 11ac VHT20 Bluetooth v4.0 EDR/LE <5GHz band> WLAN 11a/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

1.3 Product Specification of Equipment Under Test

Product Specification subjective to this standard												
Tx/Rx Channel Frequency Range		5180 MHz ~ 5240 MHz 5260 MHz ~ 5320 MHz 5500 MHz ~ 5720 MHz										
Maximum Output Power		<5180 MHz ~ 5240 MHz> 802.11a : 15.3 dBm / 0.0339 W 802.11n HT20 : 15.3 dBm / 0.0339 W 802.11n HT40 : 15.5 dBm / 0.0355 W 802.11ac VHT20: 15.4 dBm / 0.0347 W 802.11ac VHT40: 15.5 dBm / 0.0355 W 802.11ac VHT80: 15.4 dBm / 0.0347 W <5260 MHz ~ 5320 MHz> 802.11a : 15.1 dBm / 0.0324 W 802.11n HT20 : 15.3 dBm / 0.0339 W 802.11n HT40 : 15.3 dBm / 0.0339 W 802.11ac VHT20: 15.4 dBm / 0.0347 W 802.11ac VHT40: 15.3 dBm / 0.0339 W 802.11ac VHT80: 15.3 dBm / 0.0339 W <5500 MHz ~ 5720 MHz> 802.11a : 15.2 dBm / 0.0331 W 802.11n HT20 : 15.4 dBm / 0.0347 W 802.11n HT40 : 15.3 dBm / 0.0339 W 802.11ac VHT20: 15.2 dBm / 0.0331 W 802.11ac VHT40: 15.3 dBm / 0.0339 W 802.11ac VHT80: 15.3 dBm / 0.0339 W										
Type of Modulation		802.11a/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11ac : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM)										
Antenna Type		<5180 MHz ~ 5240 MHz> Ant. 1 : Fixed internal Antenna with gain 2.50 dBi Ant. 2 : Fixed internal Antenna with gain 2.60 dBi <5260 MHz ~ 5320 MHz> Ant. 1 : Fixed internal Antenna with gain 1.89 dBi Ant. 2 : Fixed internal Antenna with gain 3.20 dBi <5500 MHz ~ 5720 MHz> Ant. 1 : Fixed internal Antenna with gain 0.65 dBi Ant. 2 : Fixed internal Antenna with gain 2.40 dBi										
Antenna Function Description		<table><tr><td></td><td>Chain Ant. 1</td><td>Chain Ant. 2</td></tr><tr><td>802.11a MIMO</td><td>V</td><td>V</td></tr><tr><td>802.11n/ac MIMO</td><td>V</td><td>V</td></tr></table>			Chain Ant. 1	Chain Ant. 2	802.11a MIMO	V	V	802.11n/ac MIMO	V	V
	Chain Ant. 1	Chain Ant. 2										
802.11a MIMO	V	V										
802.11n/ac MIMO	V	V										

1.4 Modification of EUT

No modifications are made to the EUT during all test items.

1.5 Testing Location

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code : 1190) and the FCC designation No. TW1022 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC Test.

Test Site	SPORTON INTERNATIONAL INC.		
Test Site Location	No. 52, Hwa Ya 1 st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C. TEL: +886-3-327-3456 FAX: +886-3-328-4978		
Test Site No.	Sporton Site No.		
	TH02-HY	CO05-HY	03CH08-HY

1.6 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ FCC Part 15 Subpart E
- ♦ FCC KDB 789033 D02 General UNII Test Procedures New Rules v01
- ♦ FCC KDB 644545 D03 Guidance for IEEE 802.11ac v01
- ♦ FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
- ♦ ANSI C63.4-2003

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

2 Test Configuration of Equipment Under Test

The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conducted emission (150 kHz to 30 MHz) and radiated emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (Y plane) were recorded in this report.

The final configuration from all the combinations and the worst-case data rates were investigated by measuring the maximum power across all the data rates and modulation modes under section 2.2.

Based on the worst configuration found above, the RF power setting is set individually to meet FCC compliance limit for the final conducted and radiated tests shown in section 2.3.

2.1 Carrier Frequency and Channel

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5150-5250 MHz Band I (U-NII-1)	36	5180	44	5220
	38*	5190	46*	5230
	40	5200	48	5240
	42 [#]	5210		

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5250-5350 MHz Band II (U-NII-2A)	52	5260	60	5300
	54*	5270	62*	5310
	56	5280	64	5320
	58 [#]	5290		

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5470-57250 MHz Band III (U-NII-2C)	100	5500	120	5600
	102*	5510	122 [#]	5610
	104	5520	124	5620
	106 [#]	5530	126*	5630
	108	5540	128	5640
	110*	5550	132	5660
	112	5560	134*	5670
	116	5580	136	5680
	118*	5590	140	5700

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
Straddle Channel	144	5720	142*	5710
	138 [#]	5690		

Note:

1. The above Frequency and Channel in "*" were 802.11n HT40 and 802.11ac VHT40.
2. The above Frequency and Channel in "[#]" were 802.11ac VHT80.

2.2 Pre-Scanned RF Power

Preliminary tests were performed in different data rate and data rate associated with the highest power were chosen for full test in the following tables.

MIMO <Ant. 1+2>

5GHz 802.11a mode								
Data Rate	6M bps	9M bps	12M bps	18M bps	24M bps	36M bps	48M bps	54M bps
Average Power (dBm)	15.3	15.1	15.2	15.1	14.9	15.0	15.2	15.2

5GHz 802.11n HT20 mode								
Data Rate	MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7
Average Power (dBm)	15.4	15.2	15.0	15.3	15.2	15.3	15.3	15.3
Data Rate	MCS 8	MCS 9	MCS 10	MCS 11	MCS 12	MCS 13	MCS 14	MCS 15
Average Power (dBm)	15.3	15.2	15.1	15.2	15.2	15.2	15.2	15.2

5GHz 802.11n HT40 mode								
Data Rate	MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7
Average Power (dBm)	15.5	15.1	15.1	15.3	15.3	15.2	15.3	15.3
Data Rate	MCS 8	MCS 9	MCS 10	MCS 11	MCS 12	MCS 13	MCS 14	MCS 15
Average Power (dBm)	15.4	15.1	15.2	15.3	15.5	15.5	15.3	15.4

5GHz 802.11ac VHT20 mode									
Data Rate	Nss=1								
	MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7	MCS 8
Average Power (dBm)	15.4	15.1	14.8	15.2	15.2	15.2	15.3	15.2	15.2
Data Rate	Nss=2								
	MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7	MCS 8
Average Power (dBm)	15.4	15.4	15.3	15.4	15.4	15.4	15.4	15.4	15.4

5GHz 802.11ac VHT40 mode										
Data Rate	Nss=1									
	MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7	MCS 8	MCS 9
Average Power (dBm)	15.5	15.4	15.1	15.4	15.4	15.4	15.3	15.3	15.3	15.3
Data Rate	Nss=2									
	MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7	MCS 8	MCS 9
Average Power (dBm)	15.3	15.4	15.2	15.4	15.4	15.4	15.3	15.4	15.3	15.2

5GHz 802.11ac VHT80 mode										
Data Rate	Nss=1									
	MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7	MCS 8	MCS 9
Average Power (dBm)	15.4	15.2	15.3	15.2	15.2	15.2	15.2	15.3	15.0	14.9
Data Rate	Nss=2									
	MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7	MCS 8	MCS 9
Average Power (dBm)	15.2	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3

Note: MIMO Ant. 1+2 is a calculated result from sum of the power MIMO Ant. 1 and MIMO Ant. 2.

2.3 Test Mode

Final results of test modes, data rates and test channels are shown as following table.

Test Cases				
Conducted TCs	Test Items	Mode	Data rate	Test Channel
	26dB BW Power Spectral Density	802.11a	6 Mbps	L/M/H/Straddle
		802.11n HT20	MCS0	L/M/H/Straddle
		802.11n HT40	MCS0	L/M/H/Straddle
		802.11ac VHT20	MCS0	L/M/H/Straddle
		802.11ac VHT40	MCS0	L/M/H/Straddle
		802.11ac VHT80	MCS0	L/M/H/Straddle
	20dB Occupied Bandwidth	802.11a	6 Mbps	H
		802.11n HT20	MCS0	H
		802.11n HT40	MCS0	H
		802.11ac VHT20	MCS0	H
		802.11ac VHT40	MCS0	H
		802.11ac VHT80	MCS0	H
	Output Power	802.11a	6 Mbps	L/M/H/Straddle
		802.11n HT20	MCS0	L/M/H/Straddle
		802.11n HT40	MCS0	L/M/H/Straddle
		802.11ac VHT20	MCS0	L/M/H/Straddle
		802.11ac VHT40	MCS0	L/M/H/Straddle
		802.11ac VHT80	MCS0	L/M/H/Straddle
	Frequency Stability	802.11a	6 Mbps	L

Test Cases				
Radiated TCs	Test Items	Mode	Data rate	Test Channel
	Radiated Band Edge	802.11a	6 Mbps	L/H/Straddle
		802.11n HT20	MCS0	L/H/Straddle
		802.11n HT40	MCS0	L/H/Straddle
		802.11ac VHT20	MCS0	L/H/Straddle
		802.11ac VHT40	MCS0	L/M/H/Straddle
		802.11ac VHT80	MCS0	L/M/H/Straddle
	Radiated Spurious Emission	802.11a	6 Mbps	L/M/H/Straddle
		802.11n HT20	MCS0	L/M/H/Straddle
		802.11n HT40	MCS0	L/M/H/Straddle
		802.11ac VHT20	MCS0	L/M/H/Straddle
		802.11ac VHT40	MCS0	L/M/H/Straddle
		802.11ac VHT80	MCS0	L/M/H/Straddle
AC Conducted Emission	Mode 1 : GSM850 (GPRS class 8) Idle + WLAN (5GHz) Link + Bluetooth Link + Earphone + HDMI Cable with Monitor + HDMI to uUSB Dongle + USB Cable (Charging from Adapter) + Camera (Front) <Fig. 1>			
	Mode 2 : GSM850 (GPRS class 8) Idle + WLAN (5GHz) Link + Earphone + HDMI Cable with Monitor + HDMI to uUSB Dongle + USB Cable (Charging from Adapter) + Camera (Front) <Fig. 2>			
Remark: The worst case of conducted emission is mode 2; only the test data of it was reported.				

Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725 MHz
		802.11a	802.11a	802.11a
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140

Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725 MHz
		802.11n HT20	802.11n HT20	802.11n HT20
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140

Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725 MHz
		802.11n HT40	802.11n HT40	802.11n HT40
L	Low	38	54	102
M	Middle	-	-	110
H	High	46	62	134

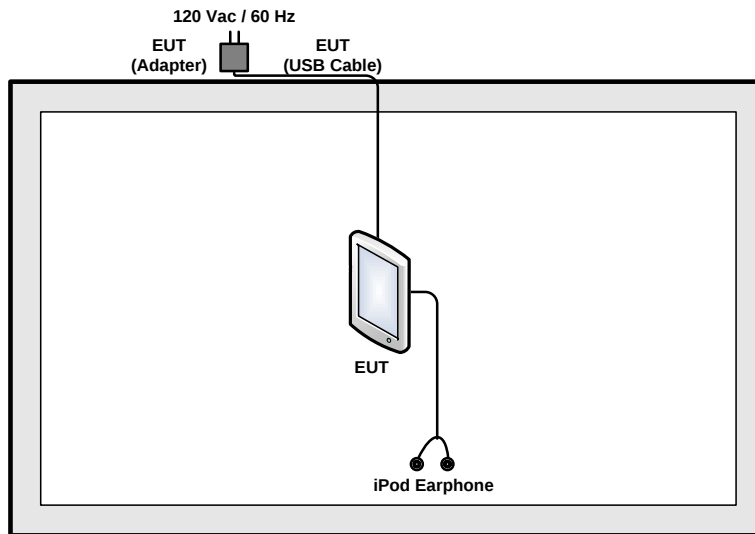
Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725 MHz
		802.11ac VHT20	802.11ac VHT20	802.11ac VHT20
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140

Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725 MHz
		802.11ac VHT40	802.11ac VHT40	802.11ac VHT40
L	Low	38	54	102
M	Middle	-	-	110
H	High	46	62	134

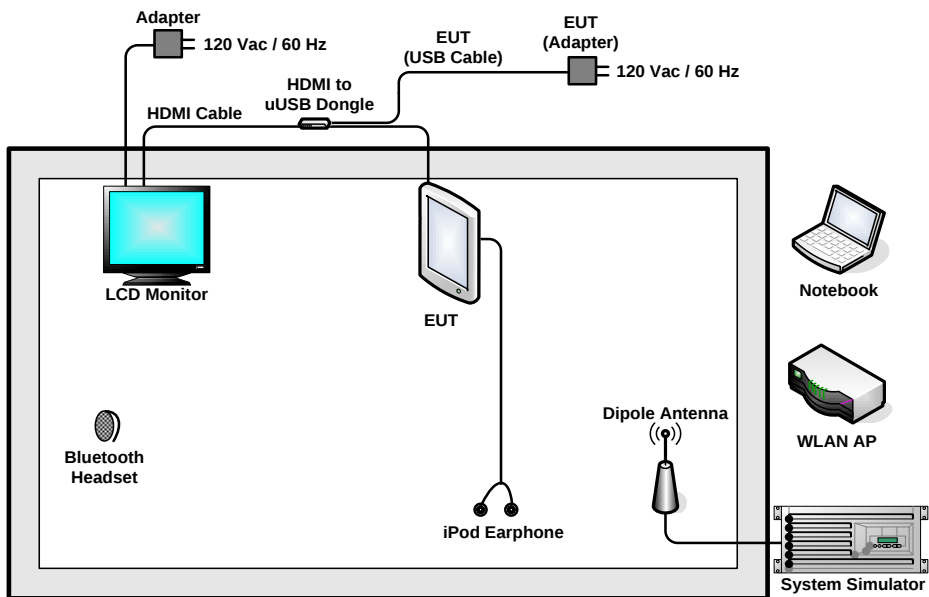
Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725 MHz
		802.11ac VHT80	802.11ac VHT80	802.11ac VHT80
L	Low	-	-	106
M	Middle	42	58	-
H	High	-	-	122

2.4 Connection Diagram of Test System

<WLAN Tx Mode>

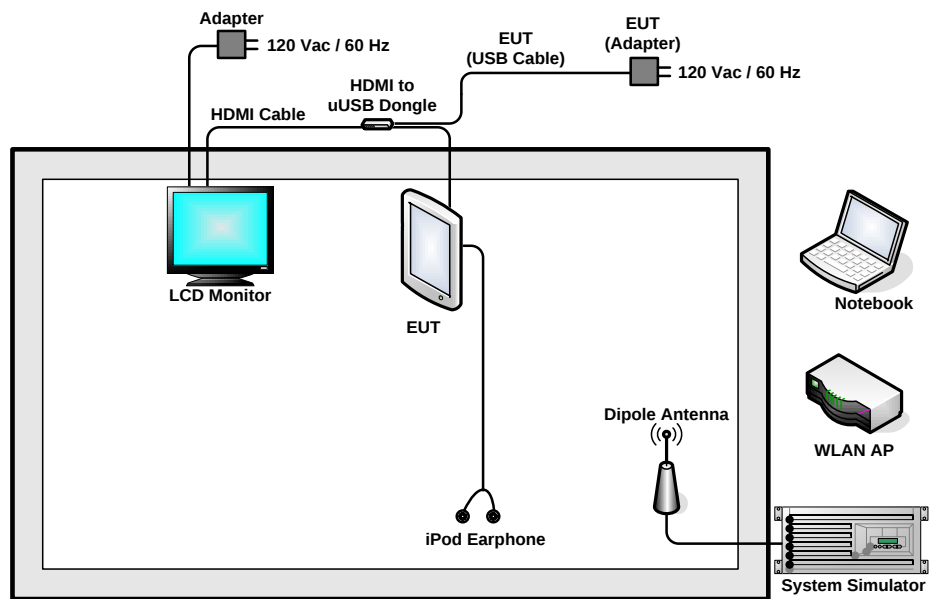


<EUT with Adapter and Bluetooth Earphone Mode for AC Conducted Emission>



<Fig. 1>

<EUT with Adapter Mode for AC Conducted Emission>



<Fig. 2>

2.5 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	System Simulator	R&S	CMU 200	N/A	N/A	Unshielded, 1.8 m
2.	Bluetooth Earphone	Sony Ericsson	MW600	PY7DDA-2029	N/A	N/A
3.	WLAN AP	D-Link	DIR-628	KA2DIR628A2	N/A	Unshielded, 1.8 m
4.	LCD Monitor	DELL	U2410	FCC DoC	Shielded, 1.6 m	Unshielded, 1.8 m
5.	HDMI to uUSB Dongle	N/A	PS56GR	N/A	Unshielded, 0.17 m	N/A
6.	iPod Earphone	Apple	N/A	Verification	Unshielded, 1.0 m	N/A
7.	Notebook	DELL	Latitude E6320	FCC DoC/ Contains FCC ID: QDS-BRCM1054	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m

2.6 EUT Operation Test Setup

For WLAN function, programmed RF utility, “ADB” installed in the notebook make the EUT provide functions like channel selection and power level for continuous transmitting and receiving signals.

2.7 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

Example :

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 4.2 dB and 10dB attenuator.

$$\begin{aligned}\text{Offset(dB)} &= \text{RF cable loss(dB)} + \text{attenuator factor(dB)} \\ &= 4.2 + 10 = 14.2 \text{ (dB)}\end{aligned}$$

3 Test Result

3.1 26dB Bandwidth Measurement

3.1.1 Description of 26dB Bandwidth

This section is for reporting purpose only.

There is no restriction limits for bandwidth.

For Straddle Channel, U-NII procedures were applied for operations in the frequency band in accordance with FCC KDB 644545 D03.

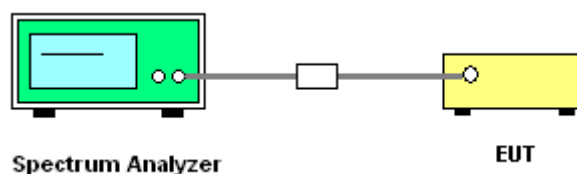
3.1.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.1.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01.
Section C) Emission bandwidth
2. Set RBW = approximately 1% of the emission bandwidth.
3. Set the VBW > RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 26 dB down from the peak of the emission.
Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.
7. For 99% Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) is set 1MHz and set the Video bandwidth (VBW) $\geq 3 * \text{RBW}$.
8. Measure and record the results in the test report.

3.1.4 Test Setup



3.1.5 Test Result of 26dB Bandwidth

Test Band :	5GHz band I, II, III	Temperature :	21~26℃
Test Engineer :	Bill Kuo and Stuart Lin	Relative Humidity :	45~54%

Mod.	Data Rate	N _{TX}	Channel	Freq. (MHz)	99% Bandwidth (MHz)		-		IC 99% Bandwidth EIRP Limit (dBm)		-	
					Ant 1	Ant 2	-	-	Ant 1	Ant 2	-	-
11a	6Mbps	2	36	5180	18.20	18.10	-	-	22.58		-	
11a	6Mbps	2	44	5220	18.20	17.95	-	-	22.54		-	
11a	6Mbps	2	48	5240	18.25	18.05	-	-	22.56		-	
HT20	MCS0	2	36	5180	19.00	18.85	-	-	22.75		-	
HT20	MCS0	2	44	5220	18.95	18.95	-	-	22.78		-	
HT20	MCS0	2	48	5240	18.85	18.95	-	-	22.75		-	
HT40	MCS0	2	38	5190	36.63	36.45	-	-	23.01		-	
HT40	MCS0	2	46	5230	36.72	36.72	-	-	23.01		-	
VHT20	MCS0	2	36	5180	18.95	18.95	-	-	22.78		-	
VHT20	MCS0	2	44	5220	19.00	18.95	-	-	22.78		-	
VHT20	MCS0	2	48	5240	18.90	19.00	-	-	22.76		-	
VHT40	MCS0	2	38	5190	36.63	36.81	-	-	23.01		-	
VHT40	MCS0	2	46	5230	36.72	36.63	-	-	23.01		-	
VHT80	MCS0	2	42	5210	76.02	76.02	-	-	23.01		-	

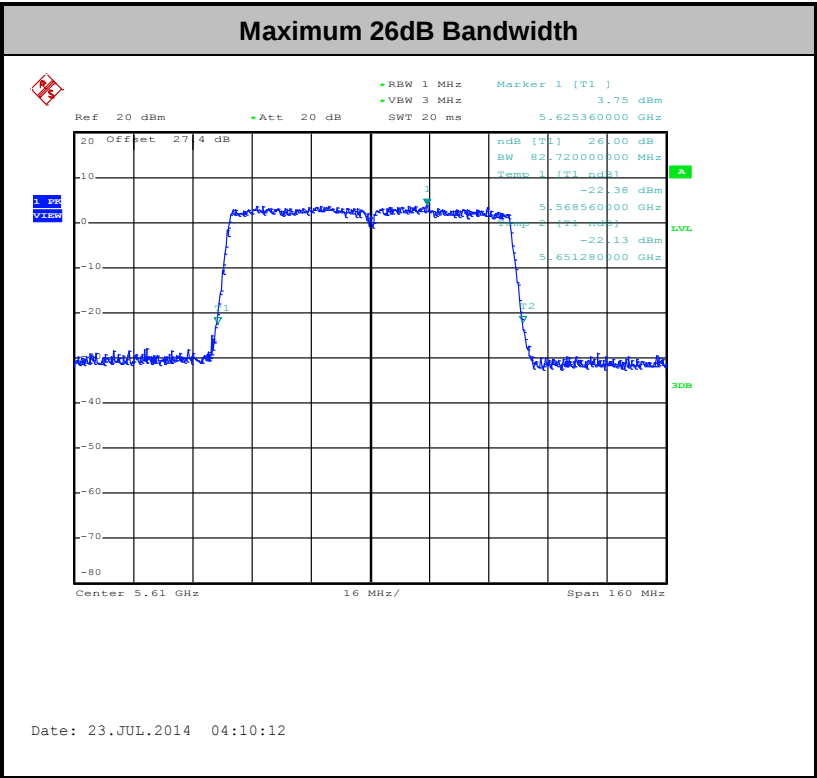
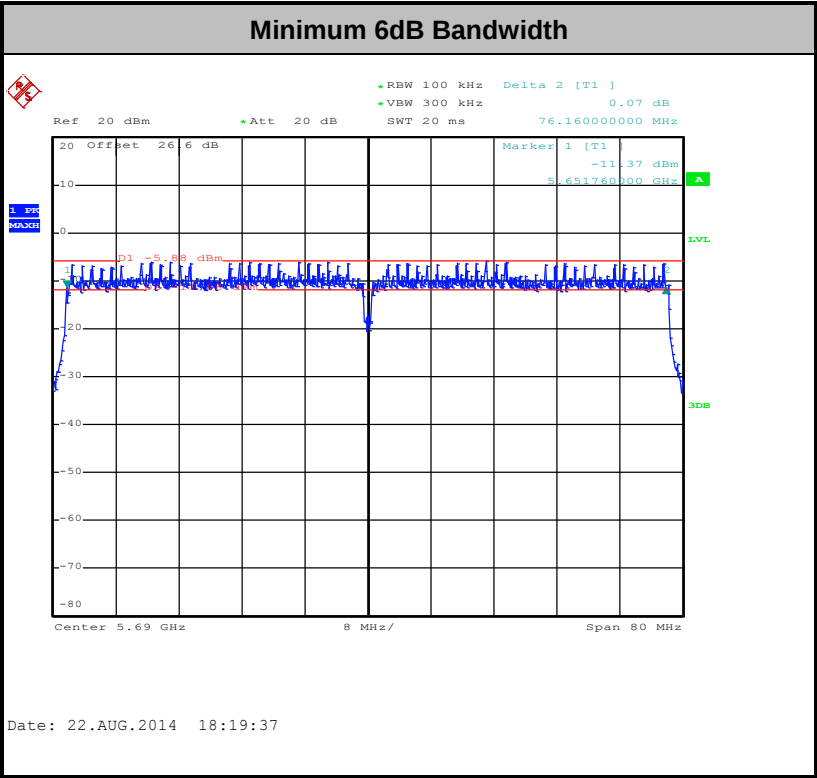
Mod.	Data Rate	N _{TX}	Channel	Freq. (MHz)	99% Bandwidth (MHz)		26dB Bandwidth (MHz)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)	
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2
11a	6Mbps	2	52	5260	18.00	18.00	23.10	22.90	29.55		23.98	
11a	6Mbps	2	60	5300	18.10	18.10	23.05	22.95	29.58		23.98	
11a	6Mbps	2	64	5320	18.00	18.05	23.10	22.95	29.55		23.98	
HT20	MCS0	2	52	5260	18.90	18.90	23.25	23.10	29.76		23.98	
HT20	MCS0	2	60	5300	18.90	18.95	23.50	23.15	29.76		23.98	
HT20	MCS0	2	64	5320	19.05	18.95	23.25	23.15	29.78		23.98	
HT40	MCS0	2	54	5270	36.60	36.70	41.40	41.22	30.00		23.98	
HT40	MCS0	2	62	5310	36.70	36.80	41.40	41.31	30.00		23.98	
VHT20	MCS0	2	52	5260	19.00	18.80	23.35	23.15	29.74		23.98	
VHT20	MCS0	2	60	5300	18.90	18.90	23.35	23.25	29.76		23.98	
VHT20	MCS0	2	64	5320	19.05	18.85	23.25	22.90	29.75		23.98	
VHT40	MCS0	2	54	5270	36.70	36.70	41.58	41.40	30.00		23.98	
VHT40	MCS0	2	62	5310	36.80	36.60	41.40	41.31	30.00		23.98	
VHT80	MCS0	2	58	5290	75.96	76.08	82.40	82.40	30.00		23.98	

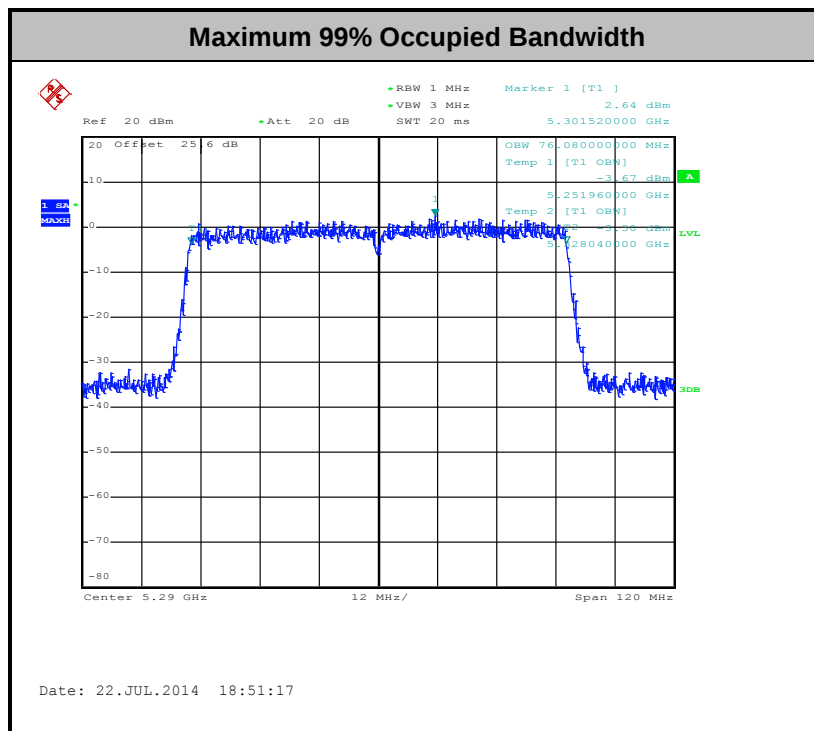
Mod.	Data Rate	N _{TX}	Channel	Freq. (MHz)	99% Bandwidth (MHz)		26dB Bandwidth (MHz)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)	
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2
11a	6Mbps	2	100	5500	18.25	18.00	23.05	22.80	29.55		23.98	
11a	6Mbps	2	116	5580	18.30	17.95	23.15	22.85	29.54		23.98	
11a	6Mbps	2	140	5700	18.25	17.90	23.00	23.00	29.53		23.98	
HT20	MCS0	2	100	5500	19.05	19.00	23.40	23.30	29.79		23.98	
HT20	MCS0	2	116	5580	18.95	18.80	23.35	23.20	29.74		23.98	
HT20	MCS0	2	140	5700	19.05	18.85	23.30	23.00	29.75		23.98	
HT40	MCS0	2	102	5510	36.60	36.80	41.40	41.31	30.00		23.98	
HT40	MCS0	2	110	5550	36.60	36.70	41.67	41.40	30.00		23.98	
HT40	MCS0	2	134	5670	36.70	36.80	41.58	41.31	30.00		23.98	
VHT20	MCS0	2	100	5500	18.80	18.10	23.05	22.75	29.58		23.98	
VHT20	MCS0	2	116	5580	19.05	18.85	23.35	23.15	29.75		23.98	
VHT20	MCS0	2	140	5700	19.05	18.85	23.25	23.10	29.75		23.98	
VHT40	MCS0	2	102	5510	36.70	36.70	41.67	41.31	30.00		23.98	
VHT40	MCS0	2	110	5550	36.60	36.80	41.40	41.40	30.00		23.98	
VHT40	MCS0	2	134	5670	36.70	36.70	41.40	41.31	30.00		23.98	
VHT80	MCS0	2	106	5530	75.96	75.84	82.24	82.24	30.00		23.98	
VHT80	MCS0	2	122	5610	75.96	75.84	82.72	82.24	30.00		23.98	

Test Band :	Straddle Channel	Temperature :	21~26℃
Test Engineer :	Bill Kuo and Stuart Lin	Relative Humidity :	45~54%

Mod.	Data Rate	N _{TX}	Channel	Freq. (MHz)	99% Bandwidth (MHz)		Emission Bandwidth (MHz)		IC 99% Bandwidth EIRP Limit (dBm)		FCC Emission Bandwidth Power Limit	
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2
11a	6Mbps	2	144	5720	18.15	18.15	19.67	19.54	-	-	-	-
				NII-2C	14.15	14.15	16.55	16.4	28.51	23.15	-	-
				NII-3	4	4	3.12	3.14	29.02	-	-	-
HT20	MCS0	2	144	5720	19.05	18.90	20.51	20.46	-	-	-	-
				NII-2C	14.65	14.55	16.75	16.7	28.63	23.23	-	-
				NII-3	4.4	4.35	3.76	3.76	29.38	-	-	-
HT40	MCS0	2	142	5710	36.70	36.80	38.95	38.86	-	-	-	-
				NII-2C	33.4	33.5	35.79	35.7	30.00	23.98	-	-
				NII-3	3.3	3.3	3.16	3.16	28.19	-	-	-
VHT20	MCS0	2	144	5710	19.00	18.95	20.46	20.41	-	-	-	-
				NII-2C	14.55	14.55	16.7	16.65	28.63	23.21	-	-
				NII-3	4.45	4.4	3.76	3.76	29.43	-	-	-
VHT40	MCS0	2	142	5710	36.70	36.70	38.95	38.86	-	-	-	-
				NII-2C	33.4	33.5	35.79	35.7	30.00	23.98	-	-
				NII-3	3.3	3.2	3.16	3.16	28.05	-	-	-
VHT80	MCS0	2	138	5710	75.96	75.84	79.36	78.88	-	-	-	-
				NII-2C	73.04	73.04	76.44	75.96	30.00	23.98	-	-
				NII-3	2.92	2.8	2.92	2.92	27.47	-	-	-

Note: For NII-3 Emission Bandwidth is 6dB Bandwidth.

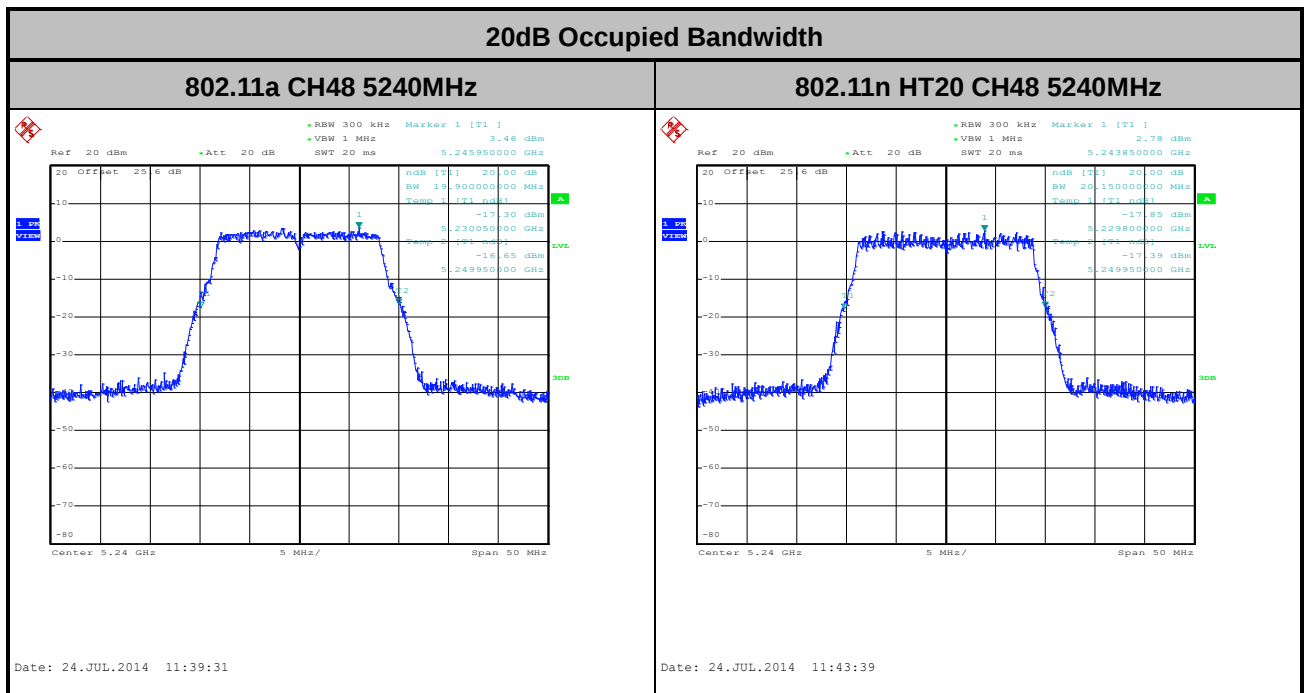




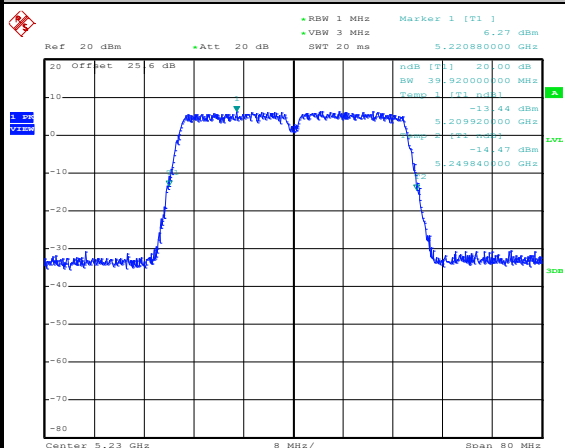
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

3.1.6 Test Result of 20dB Occupied Bandwidth

Mod.	Data Rate	NTX	Channel	Freq. (MHz)	20dB Bandwidth (MHz)		20dB Bandwidth Upper Frequency (FH) (MHz)		Upper Limit Line (MHz)	Pass/Fail
					Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	2	48	5240	19.90	-	5249.95	-	5250	Pass
HT20	MCS0	2	48	5240	20.15		5249.95			Pass
HT40	MCS0	2	46	5230	39.92		5249.84			Pass
VHT20	MCS0	2	48	5240	19.95		5249.95			Pass
VHT40	MCS0	2	46	5230	39.92		5249.92			Pass
VHT80	MCS0	2	42	5210	79.80		5249.90			Pass

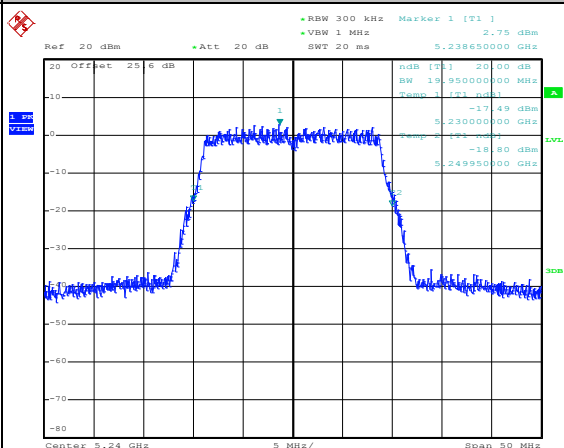


802.11n HT40 CH46 5230MHz



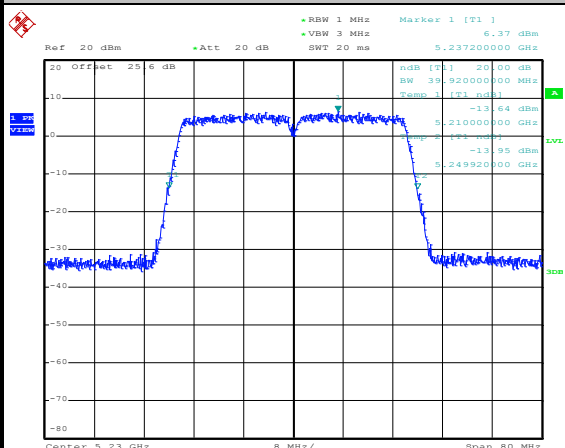
Date: 24.JUL.2014 11:56:55

802.11ac VHT20 CH48 5240MHz



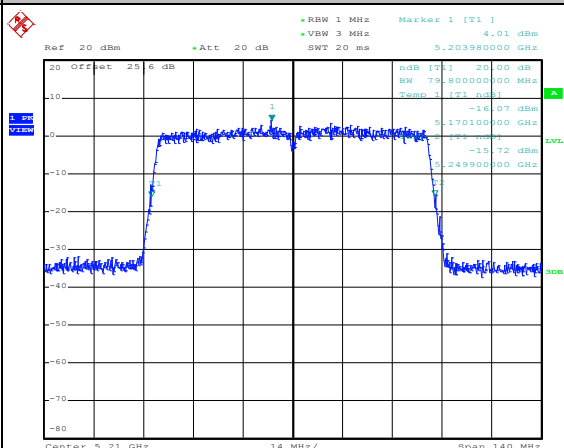
Date: 24.JUL.2014 11:49:55

802.11ac VHT40 CH46 5230MHz



Date: 24.JUL.2014 11:56:11

802.11ac VHT80 CH42 5210MHz



Date: 24.JUL.2014 11:54:47

Report No. : FR432436-09D

Report Version : Rev. 02

Page Number : 27 of 150

Report Template No.: BU5-FR15EWL Version 1.0

3.2 Maximum Conducted Output Power Measurement

3.2.1 Limit of Maximum Conducted Output Power

<FCC 14-30 CFR 15.407>

For mobile and portable client devices in the 5.15–5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW.

For the 5.25–5.35 GHz and 5.47–5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz.

For the band 5.725–5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W.

For Straddle Channel, U-NII procedures and limits were applied for operations in the frequency band in accordance with FCC KDB 644545 D03.

If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Note that U-NII-2 band, devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

3.2.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.2.3 Test Procedures

The testing follows Method PM of FCC KDB 789033 D02 General UNII Test Procedures New Rules v01.

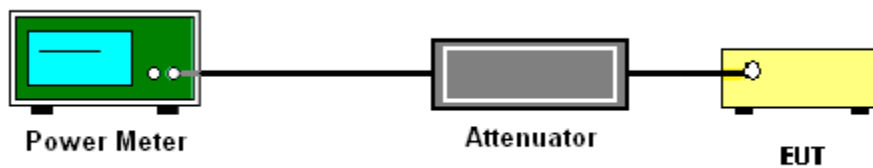
Method PM (Measurement using an RF average power meter):

1. Measurement is performed using a wideband RF power meter.
2. The EUT is configured to transmit continuously with a consistent duty cycle at its maximum power control level.
3. Measure the average power of the transmitter, and the average power is corrected with duty factor, $10 \log(1/x)$, where x is the duty cycle.

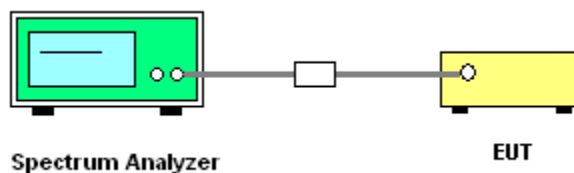
For straddle channel, the testing follows Method SA-3 (RMS detection with max hold) of FCC KDB 789033 D02 General UNII Test Procedures New Rules v01.

3.2.4 Test Setup

For normal channel:



For straddle channel:



3.2.5 Test Result of Maximum Conducted Output Power

Test Band :	5GHz band I	Temperature :	21~26℃
Test Engineer :	Bill Kuo and Stuart Lin	Relative Humidity :	45~54%

Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)			FCC Power Limit (dBm)		DG (dBi)		-	Pass /Fail
					Ant. 1	Ant. 2	Ant. 1	Ant. 2	Sum Power	Ant. 1	Ant. 2	Ant. 1	Ant. 2		
11a	6Mbps	2	36	5180	0.30	0.28	12.1	12.5	15.3	24.00		5.56			Pass
11a	6Mbps	2	44	5220	0.30	0.28	12.0	12.5	15.3	24.00		5.56			Pass
11a	6Mbps	2	48	5240	0.30	0.28	12.0	12.0	15.0	24.00		5.56			Pass
HT20	MCS0	2	36	5180	0.31	0.33	12.0	12.5	15.2	24.00		5.56			Pass
HT20	MCS0	2	44	5220	0.31	0.33	12.0	12.5	15.3	24.00		5.56			Pass
HT20	MCS0	2	48	5240	0.31	0.33	12.0	12.0	15.0	24.00		5.56			Pass
HT40	MCS0	2	38	5190	0.61	0.61	12.0	12.0	15.0	24.00		5.56			Pass
HT40	MCS0	2	46	5230	0.61	0.61	12.5	12.5	15.5	24.00		5.56			Pass
VHT20	MCS0	2	36	5180	0.31	0.32	12.2	12.5	15.4	24.00		5.56			Pass
VHT20	MCS0	2	44	5220	0.31	0.32	12.2	12.5	15.3	24.00		5.56			Pass
VHT20	MCS0	2	48	5240	0.31	0.32	12.0	12.0	15.0	24.00		5.56			Pass
VHT40	MCS0	2	38	5190	0.60	0.60	12.0	12.0	15.0	24.00		5.56			Pass
VHT40	MCS0	2	46	5230	0.60	0.60	12.5	12.5	15.5	24.00		5.56			Pass
VHT80	MCS0	2	42	5210	1.14	1.18	12.2	12.5	15.4	24.00		5.56			Pass

Note:

1. Final Output Power equals to Measured Output Power adds the duty factor.
2. Sum Power is a calculated result from sum of the Ant 1 and Ant 2.

Test Band :	5GHz band II	Temperature :	21~26℃
Test Engineer :	Bill Kuo and Stuart Lin	Relative Humidity :	45~54%

Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)			FCC Power Limit (dBm)		DG (dBi)		-	Pass /Fail
					Ant. 1	Ant. 2	Ant. 1	Ant. 2	Sum Power	Ant. 1	Ant. 2	Ant. 1	Ant. 2		
11a	6Mbps	2	52	5260	0.30	0.28	13.0	11.1	15.1	23.98		5.58			Pass
11a	6Mbps	2	60	5300	0.30	0.28	13.0	11.1	15.1	23.98		5.58			Pass
11a	6Mbps	2	64	5320	0.30	0.28	13.0	11.0	15.1	23.98		5.58			Pass
HT20	MCS0	2	52	5260	0.31	0.33	13.0	11.5	15.3	23.98		5.58			Pass
HT20	MCS0	2	60	5300	0.31	0.33	13.0	11.5	15.3	23.98		5.58			Pass
HT20	MCS0	2	64	5320	0.31	0.33	13.0	11.5	15.3	23.98		5.58			Pass
HT40	MCS0	2	54	5270	0.61	0.61	13.0	11.5	15.3	23.98		5.58			Pass
HT40	MCS0	2	62	5310	0.61	0.61	12.9	11.5	15.3	23.98		5.58			Pass
VHT20	MCS0	2	52	5260	0.31	0.32	13.0	11.4	15.3	23.98		5.58			Pass
VHT20	MCS0	2	60	5300	0.31	0.32	13.0	11.5	15.4	23.98		5.58			Pass
VHT20	MCS0	2	64	5320	0.31	0.32	13.0	11.3	15.3	23.98		5.58			Pass
VHT40	MCS0	2	54	5270	0.60	0.60	13.0	11.5	15.3	23.98		5.58			Pass
VHT40	MCS0	2	62	5310	0.60	0.60	12.5	10.8	14.8	23.98		5.58			Pass
VHT80	MCS0	2	58	5290	1.14	1.18	12.9	11.5	15.3	23.98		5.58			Pass

Note:

1. Final Output Power equals to Measured Output Power adds the duty factor.
2. Sum Power is a calculated result from sum of the power Ant 1 and Ant 2.

Test Band :	5GHz band III	Temperature :	21~26℃
Test Engineer :	Bill Kuo and Stuart Lin	Relative Humidity :	45~54%

Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)			FCC Power Limit (dBm)		DG (dBi)		-	Pass /Fail
					Ant. 1	Ant. 2	Ant. 1	Ant. 2	Sum Power	Ant. 1	Ant. 2	Ant. 1	Ant. 2		
11a	6Mbps	2	100	5500	0.30	0.28	13.0	11.0	15.1	23.98		4.58		-	Pass
11a	6Mbps	2	116	5580	0.30	0.28	13.0	11.1	15.2	23.98		4.58			Pass
11a	6Mbps	2	140	5700	0.30	0.28	12.9	11.1	15.1	23.98		4.58			Pass
HT20	MCS0	2	100	5500	0.31	0.33	13.0	11.5	15.3	23.98		4.58			Pass
HT20	MCS0	2	116	5580	0.31	0.33	13.0	11.5	15.3	23.98		4.58			Pass
HT20	MCS0	2	140	5700	0.31	0.33	13.0	11.5	15.4	23.98		4.58			Pass
HT40	MCS0	2	102	5510	0.61	0.61	12.5	10.8	14.7	23.98		4.58			Pass
HT40	MCS0	2	110	5550	0.61	0.61	13.0	11.5	15.3	23.98		4.58			Pass
HT40	MCS0	2	134	5670	0.61	0.61	12.9	11.5	15.2	23.98		4.58			Pass
VHT20	MCS0	2	100	5500	0.31	0.32	12.9	11.4	15.2	23.98		4.58			Pass
VHT20	MCS0	2	116	5580	0.31	0.32	12.8	11.5	15.2	23.98		4.58			Pass
VHT20	MCS0	2	140	5700	0.31	0.32	12.8	11.5	15.2	23.98		4.58			Pass
VHT40	MCS0	2	102	5510	0.60	0.60	12.0	10.5	14.3	23.98		4.58			Pass
VHT40	MCS0	2	110	5550	0.60	0.60	13.0	11.5	15.3	23.98		4.58			Pass
VHT40	MCS0	2	134	5670	0.60	0.60	12.9	11.4	15.3	23.98		4.58			Pass
VHT80	MCS0	2	106	5530	1.14	1.18	13.0	11.5	15.3	23.98		4.58			Pass
VHT80	MCS0	2	122	5610	1.14	1.18	13.0	11.3	15.2	23.98		4.58			Pass

Test Band :	Straddle Channel	Temperature :	21~26℃
Test Engineer :	Bill Kuo and Stuart Lin	Relative Humidity :	45~54%

Mod.	Data Rate	N _{TX}	Channel	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)			FCC Power Limit (dBm)		DG (dBi)		Pass /Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	2	144	5720	0.30	0.28	12.9	11.0	15.1	-		4.58		-
				NII-2C	0.30	0.28	12.0	10.1	14.1	23.15		4.58		Pass
				NII-3	0.30	0.28	5.9	4.1	8.1	30.00		4.58		Pass
HT20	MCS0	2	144	5720	0.31	0.33	12.8	11.5	15.3	-		4.58		-
				NII-2C	0.31	0.33	11.8	10.5	14.2	23.23		4.58		Pass
				NII-3	0.31	0.33	6.0	5.0	8.5	30.00		4.58		Pass
HT40	MCS0	2	142	5720	0.61	0.61	12.8	11.5	15.2	-		4.58		-
				NII-2C	0.61	0.61	12.4	11.1	14.8	23.98		4.58		Pass
				NII-3	0.61	0.61	2.1	0.4	4.3	30.00		4.58		Pass
VHT20	MCS0	2	144	5720	0.31	0.32	12.9	11.5	15.3	-		4.58		-
				NII-2C	0.31	0.32	11.9	10.4	14.2	23.21		4.58		Pass
				NII-3	0.31	0.32	6.0	5.0	8.6	30.00		4.58		Pass
VHT40	MCS0	2	142	5710	0.60	0.60	12.8	11.5	15.2	-		4.58		-
				NII-2C	0.60	0.60	12.5	11.1	14.9	23.98		4.58		Pass
				NII-3	0.60	0.60	2.1	0.4	4.3	30.00		4.58		Pass
VHT80	MCS0	2	138	5690	1.14	1.18	13.0	11.2	15.2	-		4.58		-
				NII-2C	1.14	1.18	12.8	11.1	15.0	23.98		4.58		Pass
				NII-3	1.14	1.18	-2.0	-3.8	0.2	30.00		4.58		Pass

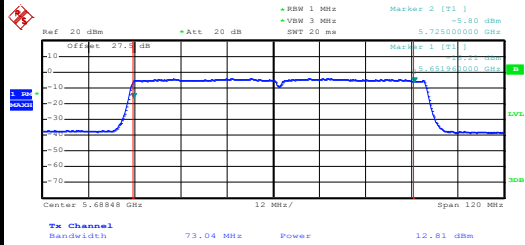
Note:

1. Final Output Power equals to Measured Output Power adds the duty factor.
2. Sum Power is a calculated result from sum of the power Ant 1 and Ant 2.

Maximum Straddle Channel Power

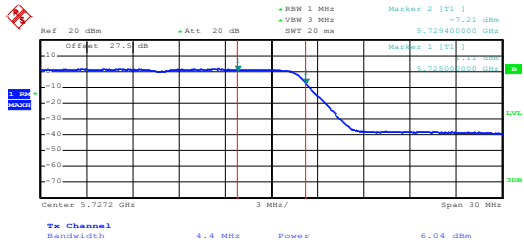
Ant. 1

NII-2C Band



Date: 23.JUL.2014 02:37:51

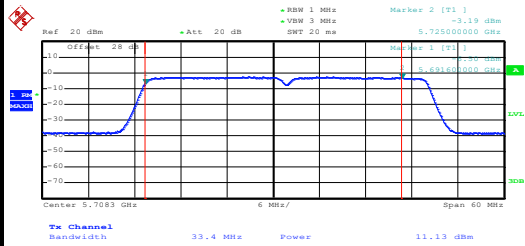
NII-3 Band



Date: 23.JUL.2014 02:05:49

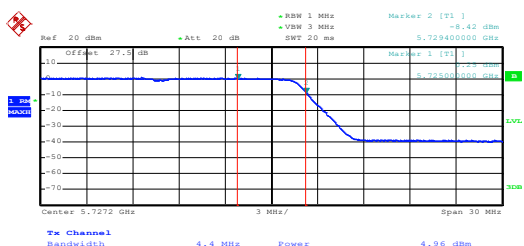
Ant. 2

NII-2C Band



Date: 9.JUL.2014 21:09:40

NII-3 Band



Date: 23.JUL.2014 02:08:27

3.3 Power Spectral Density Measurement

3.3.1 Limit of Power Spectral Density

<FCC 14-30 CFR 15.407>

For mobile and portable client devices in the 5.15–5.25 GHz band, the maximum power spectral density shall not exceed 11dBm in any 1 megahertz band.

For the 5.25–5.35 GHz and 5.47–5.725 GHz bands, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band.

For the band 5.725–5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band.

For Straddle Channel, U-NII procedures and limits were applied for operations in the frequency band in accordance with FCC KDB 644545 D03.

If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.3.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.3.3 Test Procedures

The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01.

Section F) Maximum power spectral density.

Method SA-2

(trace averaging across on and off times of the EUT transmissions, followed by duty cycle correction).

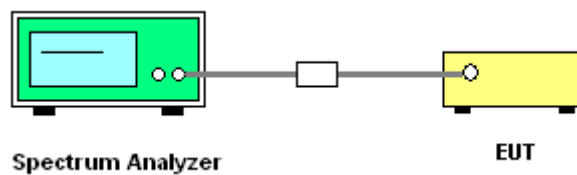
1. The testing follows Method SA-2 of FCC KDB 789033 D02 General UNII Test Procedures New Rules v01.
 - Measure the duty cycle.
 - Set span to encompass the entire emission bandwidth (EBW) of the signal.
 - Set RBW = 1 MHz.
 - Set VBW $\geq$ 3 MHz.
 - Number of points in sweep $\geq$ 2 Span / RBW.
 - Sweep time = auto.
 - Detector = RMS
 - Trace average at least 100 traces in power averaging mode.
 - Add $10 \log(1/x)$, where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times. For example, add $10 \log(1/0.25) = 6$ dB if the duty cycle is 25 percent.

2. The RF output of EUT was connected to the spectrum analyzer by a low loss cable.
3. Each plot has already offset with cable loss, and attenuator loss. Measure the PPSD and record it.
4. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

Method (1): Measure and sum the spectra across the outputs.

The total final Power Spectral Density is from a device with 2 transmitter outputs. The spectrum measurements of the individual outputs are all performed with the same span and number of points, the spectrum value in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 to obtain the value for the first frequency bin of the summed spectrum.

3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

Test Band :	5GHz band I	Temperature :	21~26℃
Test Engineer :	Bill Kuo and Stuart Lin	Relative Humidity :	45~54%

Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density (dBm/MHz)			Average PSD Limit (dBm)		DG (dBi)		Pass /Fail
					Ant 1	Ant 2	Ant 1	Ant 2	Sum Power	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	2	36	5180	0.30	0.28	-		3.33	11.00	5.56	-		Pass
11a	6Mbps	2	44	5220	0.30	0.28			3.32	11.00	5.56			Pass
11a	6Mbps	2	48	5240	0.30	0.28			2.98	11.00	5.56			Pass
HT20	MCS0	2	36	5180	0.31	0.33			2.91	11.00	5.56			Pass
HT20	MCS0	2	44	5220	0.31	0.33			2.94	11.00	5.56			Pass
HT20	MCS0	2	48	5240	0.31	0.33			2.51	11.00	5.56			Pass
HT40	MCS0	2	38	5190	0.61	0.61			-0.38	11.00	5.56			Pass
HT40	MCS0	2	46	5230	0.61	0.61			0.26	11.00	5.56			Pass
VHT20	MCS0	2	36	5180	0.31	0.32			3.00	11.00	5.56			Pass
VHT20	MCS0	2	44	5220	0.31	0.32			2.98	11.00	5.56			Pass
VHT20	MCS0	2	48	5240	0.31	0.32			2.56	11.00	5.56			Pass
VHT40	MCS0	2	38	5190	0.60	0.60			-0.56	11.00	5.56			Pass
VHT40	MCS0	2	46	5230	0.60	0.60			0.16	11.00	5.56			Pass
VHT80	MCS0	2	42	5210	1.14	1.18			-3.43	11.00	5.56			Pass

Note: Sum PSD is a bin-by-bin combined result of Ant 1 and Ant 2.

Test Band :	5GHz band II	Temperature :	21~26℃
Test Engineer :	Bill Kuo and Stuart Lin	Relative Humidity :	45~54%

Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density (dBm/MHz)			Average PSD Limit (dBm)		DG (dBi)		-	Pass /Fail
					Ant 1	Ant 2	Ant 1	Ant 2	Sum Power	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	2	52	5260	0.30	0.28	-		3.60	11.00	5.58				Pass
11a	6Mbps	2	60	5300	0.30	0.28			3.85	11.00	5.58				Pass
11a	6Mbps	2	64	5320	0.30	0.28			3.99	11.00	5.58				Pass
HT20	MCS0	2	52	5260	0.31	0.33			3.26	11.00	5.58				Pass
HT20	MCS0	2	60	5300	0.31	0.33			3.50	11.00	5.58				Pass
HT20	MCS0	2	64	5320	0.31	0.33			3.75	11.00	5.58				Pass
HT40	MCS0	2	54	5270	0.61	0.61			0.21	11.00	5.58				Pass
HT40	MCS0	2	62	5310	0.61	0.61			0.28	11.00	5.58				Pass
VHT20	MCS0	2	52	5260	0.31	0.32			3.37	11.00	5.58				Pass
VHT20	MCS0	2	60	5300	0.31	0.32			3.57	11.00	5.58				Pass
VHT20	MCS0	2	64	5320	0.31	0.32			3.71	11.00	5.58				Pass
VHT40	MCS0	2	54	5270	0.60	0.60			0.14	11.00	5.58				Pass
VHT40	MCS0	2	62	5310	0.60	0.60			0.14	11.00	5.58				Pass
VHT80	MCS0	2	58	5290	1.14	1.18			-3.10	11.00	5.58				Pass

Note: Sum PSD is a bin-by-bin combined result of Ant 1 and Ant 2.

Test Band :	5GHz band III	Temperature :	21~26℃
Test Engineer :	Bill Kuo and Stuart Lin	Relative Humidity :	45~54%

Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density (dBm/MHz)			Average PSD Limit (dBm)		DG (dBi)		-	Pass /Fail
					Ant 1	Ant 2	Ant 1	Ant 2	Sum Power	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	2	100	5500	0.30	0.28			4.69	11.00		4.58			Pass
11a	6Mbps	2	116	5580	0.30	0.28			4.31	11.00		4.58			Pass
11a	6Mbps	2	140	5700	0.30	0.28			4.38	11.00		4.58			Pass
HT20	MCS0	2	100	5500	0.31	0.33			4.48	11.00		4.58			Pass
HT20	MCS0	2	116	5580	0.31	0.33			4.30	11.00		4.58			Pass
HT20	MCS0	2	140	5700	0.31	0.33			4.27	11.00		4.58			Pass
HT40	MCS0	2	102	5510	0.61	0.61			-0.11	11.00		4.58			Pass
HT40	MCS0	2	110	5550	0.61	0.61			0.85	11.00		4.58			Pass
HT40	MCS0	2	134	5670	0.61	0.61			0.58	11.00		4.58		-	Pass
VHT20	MCS0	2	100	5500	0.31	0.32			4.09	11.00		4.58			Pass
VHT20	MCS0	2	116	5580	0.31	0.32			3.99	11.00		4.58			Pass
VHT20	MCS0	2	140	5700	0.31	0.32			4.10	11.00		4.58			Pass
VHT40	MCS0	2	102	5510	0.60	0.60			0.96	11.00		4.58			Pass
VHT40	MCS0	2	110	5550	0.60	0.60			1.01	11.00		4.58			Pass
VHT40	MCS0	2	134	5670	0.60	0.60			0.30	11.00		4.58			Pass
VHT80	MCS0	2	106	5530	1.14	1.18			-3.34	11.00		4.58			Pass
VHT80	MCS0	2	122	5610	1.14	1.18			-3.63	11.00		4.58			Pass

Note: Sum PSD is a bin-by-bin combined result of Ant 1 and Ant 2.

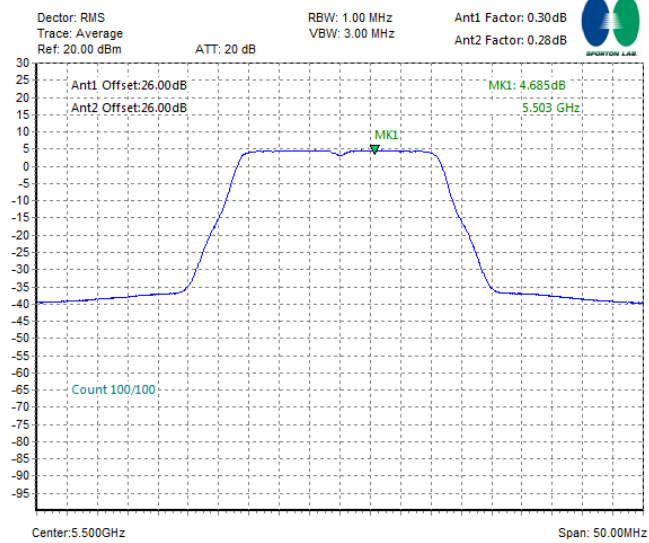
Test Band :	Straddle Channel	Temperature :	21~26℃
Test Engineer :	Bill Kuo and Stuart Lin	Relative Humidity :	45~54%

Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density (dBm/MHz)			Average PSD Limit (dBm)		DG (dBi)		-	Pass /Fail
					Ant 1	Ant 2	Ant 1	Ant 2	Sum Power	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	2	144	NII-2C	0.30	0.28	-		3.20	11.00		4.58		-	Pass
				NII-3	0.30	0.28			3.20	30.00		4.58			Pass
HT20	MCS0	2	144	NII-2C	0.31	0.33			2.91	11.00		4.58			Pass
				NII-3	0.31	0.33			2.91	30.00		4.58			Pass
HT40	MCS0	2	142	NII-2C	0.61	0.61			-1.88	11.00		4.58			Pass
				NII-3	0.61	0.61			-1.88	30.00		4.58			Pass
VHT20	MCS0	2	144	NII-2C	0.31	0.32			2.69	11.00		4.58			Pass
				NII-3	0.31	0.32			2.69	30.00		4.58			Pass
VHT40	MCS0	2	142	NII-2C	0.60	0.60			-1.75	11.00		4.58			Pass
				NII-3	0.60	0.60			-1.75	30.00		4.58			Pass
VHT80	MCS0	2	138	NII-2C	1.14	1.18			-3.42	11.00		4.58			Pass
				NII-3	1.14	1.18			-3.42	30.00		4.58			Pass

Note: For NII-3 PSD, limit is 30 dBm/500kHz.

If measured value meet 30 dBm/MHz, then it also compliance with 30dBm/500kHz.

Worst Case Power Density (dBm/MHz)



3.4 Unwanted Emissions Measurement

This section as specified in FCC Part 15.407(b) is to measure unwanted emissions through radiated measurement for band edge spurious emissions and out of band emissions measurement. The unwanted emissions shall comply with 15.407(b)(1) to (6), and restricted bands per FCC Part15.205.

3.4.1 Limit of Unwanted Emissions

- (1) For transmitters operating in the 5150-5250 MHz band: all emissions outside of the 5150-5350 MHz band shall not exceed an EIRP of -27dBm/MHz.

For transmitters operating in the 5250-5350 MHz band: all emissions outside of the 5150-5350 MHz band shall not exceed an EIRP of -27 dBm/MHz. Devices operating in the 5250-5350 MHz band that generate emissions in the 5150-5250 MHz band must meet all applicable technical requirements for operation in the 5150-5250 MHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of -27 dBm/MHz in the 5150-5250 MHz band.

For transmitters operating in the 5470-5600 MHz and 5650-5725MHz band: all emissions outside of the 5470-5600 MHz and 5650-5725MHz band shall not exceed an EIRP of -27 dBm/MHz.

- (2) Unwanted spurious emissions fallen in restricted bands per FCC Part15.205 shall comply with the general field strength limits set forth in § 15.209 as below table,

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

Note: The following formula is used to convert the EIRP to field strength.

$$E = \frac{1000000\sqrt{30P}}{3} \text{ } \mu\text{V/m, where P is the eirp (Watts)}$$

EIRP (dBm)	Field Strength at 3m (dBμV/m)
-17	78.3
- 27	68.3

(3) KDB789033 v01 G)2)c) As specified in 15.407(b), emissions above 1000 MHz that are outside of the restricted bands are subject to a peak emission limit of -27 dBm/MHz (or -17 dBm/MHz as specified in 15.407(b)(4)). However, an out-of-band emission that complies with both the average and peak limits of 15.209 is not required to satisfy the -27 dBm/MHz or -17 dBm/MHz peak emission limit.

3.4.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.4.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01. Section G) Unwanted emissions measurement.

(1) Procedure for Unwanted Emissions Measurements Below 1000MHz

- RBW = 120 kHz
- VBW = 300 kHz
- Detector = Peak
- Trace mode = max hold

(2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz

- RBW = 1 MHz
- VBW $\geq$ 3 MHz
- Detector = Peak
- Sweep time = auto
- Trace mode = max hold

(3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz

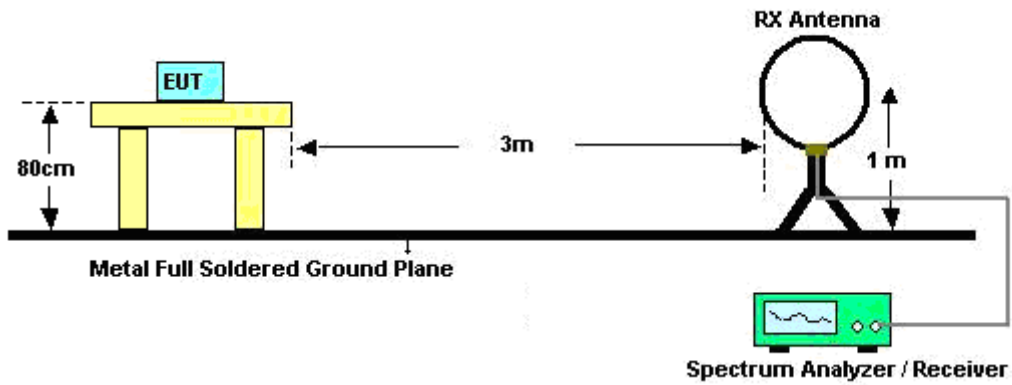
- RBW = 1 MHz
- VBW = 10 Hz, when duty cycle is no less than 98 percent.
- VBW $\geq$ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting
1+2	802.11a for Ant 1	93.23	1432	0.70	1kHz
1+2	802.11a for Ant 2	93.72	1432	0.70	
1+2	802.11n HT20 for Ant 1	93.06	1340	0.75	1kHz
1+2	802.11n HT20 for Ant 2	92.78	1336	0.75	
1+2	802.11n HT40 for Ant 1	86.98	668	1.50	3kHz
1+2	802.11n HT40 for Ant 2	86.98	668	1.50	
1+2	802.11ac VHT20 for Ant 1	93.06	1340	0.75	1kHz
1+2	802.11ac VHT20 for Ant 2	92.82	1344	0.74	
1+2	802.11ac VHT40 for Ant 1	87.05	672	1.49	3kHz
1+2	802.11ac VHT40 for Ant 2	87.11	676	1.48	
1+2	802.11ac VHT80 for Ant 1	76.85	332	3.01	10kHz
1+2	802.11ac VHT80 for Ant 2	76.15	332	3.01	

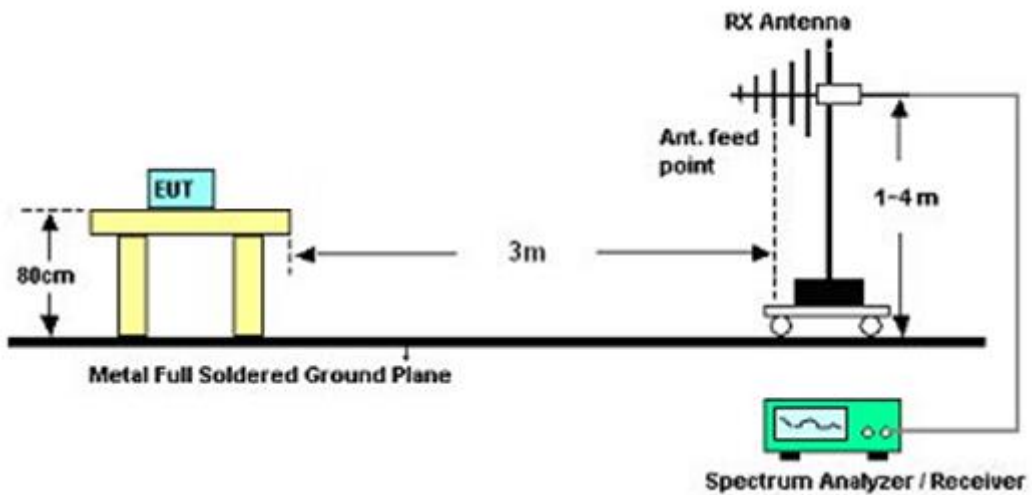
- The EUT was placed on a rotatable table top 0.8 meter above ground.
- The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
- The antenna is a broadband antenna and its height is adjusted between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
- For each suspected emission, the EUT was arranged to its worst case and then adjust the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
- For testing below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
- For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

3.4.4 Test Setup

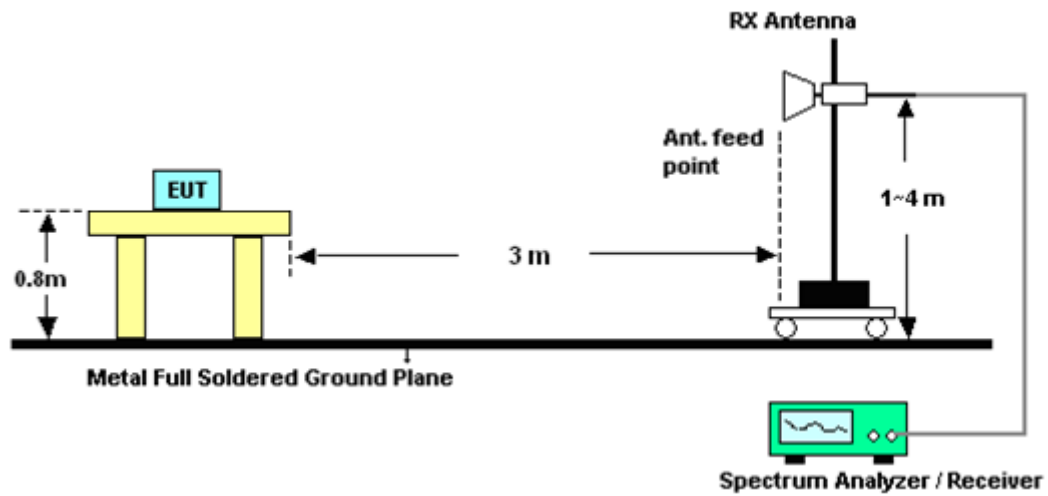
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



3.4.5 Test Results of Radiated Emissions (9 kHz ~ 30 MHz)

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.

3.4.6 Test Result of Radiated Band Edges

MIMO <Ant. 1 + 2>

Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	36	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5148.35	55.11	-18.89	74	45.4	35.12	8.94	34.35	100	151	Peak
5150	44.21	-9.79	54	34.5	35.12	8.94	34.35	100	151	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5150	57.63	-16.37	74	47.92	35.12	8.94	34.35	102	82	Peak
5149.85	46.13	-7.87	54	36.42	35.12	8.94	34.35	102	82	Average

Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	48	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5142.2	54.42	-19.58	74	44.72	35.12	8.94	34.36	100	152	Peak
5148.8	42.8	-11.2	54	33.09	35.12	8.94	34.35	100	152	Average
5367.71	55.24	-18.76	74	44.59	35.29	9.69	34.33	100	152	Peak
5451.97	43.76	-10.24	54	32.79	35.36	9.93	34.32	100	152	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5148.5	54.11	-19.89	74	44.4	35.12	8.94	34.35	101	91	Peak
5148.65	43.03	-10.97	54	33.32	35.12	8.94	34.35	101	91	Average
5352.31	55.64	-18.36	74	45.09	35.28	9.6	34.33	101	91	Peak
5354.18	44.37	-9.63	54	33.82	35.28	9.6	34.33	101	91	Average

Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	52	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5103.05	53.79	-20.21	74	44.19	35.08	8.88	34.36	100	166	Peak
5138.9	42.98	-11.02	54	33.32	35.11	8.91	34.36	100	166	Average
5435.69	55.27	-18.73	74	44.32	35.35	9.93	34.33	100	166	Peak
5361.44	44.15	-9.85	54	33.5	35.29	9.69	34.33	100	166	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5099.3	54.26	-19.74	74	44.66	35.08	8.88	34.36	101	128	Peak
5116.7	43.07	-10.93	54	33.43	35.09	8.91	34.36	101	128	Average
5361	55.54	-18.46	74	44.89	35.29	9.69	34.33	101	128	Peak
5359.9	44.46	-9.54	54	33.82	35.28	9.69	34.33	101	128	Average

Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	64	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5351.76	55.93	-18.07	74	45.38	35.28	9.6	34.33	100	177	Peak
5351.1	44.8	-9.2	54	34.25	35.28	9.6	34.33	100	177	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5364.41	57.68	-16.32	74	47.03	35.29	9.69	34.33	101	139	Peak
5350	45.95	-8.05	54	35.4	35.28	9.6	34.33	101	139	Average

Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	100	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5452.08	55.74	-18.26	74	44.71	35.36	9.99	34.32	108	359	Peak
5469.04	45.09	-8.91	54	34.05	35.37	9.99	34.32	108	359	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5469.04	58.65	-15.35	74	47.61	35.37	9.99	34.32	100	156	Peak
5470	46.77	-7.23	54	35.73	35.37	9.99	34.32	100	156	Average

Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	140	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725.64	58.88	-15.12	74	46.79	35.71	10.77	34.39	100	144	Peak
5726.44	46.76	-7.24	54	34.67	35.71	10.77	34.39	100	144	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5732.2	57.81	-16.19	74	45.73	35.71	10.77	34.4	113	356	Peak
5727.24	46.31	-7.69	54	34.22	35.71	10.77	34.39	113	356	Average

Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	144	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5384.44	55.08	-18.92	74	44.31	35.31	9.79	34.33	100	140	Peak
5465.68	43.79	-10.21	54	32.75	35.37	9.99	34.32	100	140	Average
5878.8	56.78	-17.22	74	44.12	35.93	11.17	34.44	100	140	Peak
5870.8	45.64	-8.36	54	32.98	35.93	11.17	34.44	100	140	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5393.08	54.89	-19.11	74	44.12	35.31	9.79	34.33	123	356	Peak
5469.76	43.91	-10.09	54	32.87	35.37	9.99	34.32	123	356	Average
5882.56	57.08	-16.92	74	44.42	35.93	11.17	34.44	123	356	Peak
5890	45.59	-8.41	54	32.85	35.96	11.23	34.45	123	356	Average

Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	36	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5149.7	57.14	-16.86	74	47.43	35.12	8.94	34.35	100	44	Peak
5150	44.73	-9.27	54	35.02	35.12	8.94	34.35	100	44	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5148.65	58.83	-15.17	74	49.12	35.12	8.94	34.35	101	90	Peak
5149.7	45.97	-8.03	54	36.26	35.12	8.94	34.35	101	90	Average

Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	48	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5010.5	54.37	-19.63	74	44.99	35.01	8.74	34.37	111	149	Peak
5148.8	42.78	-11.22	54	33.07	35.12	8.94	34.35	111	149	Average
5451.86	54.94	-19.06	74	43.97	35.36	9.93	34.32	111	149	Peak
5453.07	43.86	-10.14	54	32.83	35.36	9.99	34.32	111	149	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5121.8	54.05	-19.95	74	44.41	35.09	8.91	34.36	100	89	Peak
5144.15	43.06	-10.94	54	33.35	35.12	8.94	34.35	100	89	Average
5366.17	55.51	-18.49	74	44.86	35.29	9.69	34.33	100	89	Peak
5450.1	44.53	-9.47	54	33.56	35.36	9.93	34.32	100	89	Average

Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	52	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5146.7	54.4	-19.6	74	44.69	35.12	8.94	34.35	100	176	Peak
5147.75	42.89	-11.11	54	33.18	35.12	8.94	34.35	100	176	Average
5355.94	54.89	-19.11	74	44.34	35.28	9.6	34.33	100	176	Peak
5362.32	43.92	-10.08	54	33.27	35.29	9.69	34.33	100	176	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5078.6	53.89	-20.11	74	44.34	35.07	8.84	34.36	102	143	Peak
5148.95	42.92	-11.08	54	33.21	35.12	8.94	34.35	102	143	Average
5376.73	56.37	-17.63	74	45.72	35.29	9.69	34.33	102	143	Peak
5360.56	44.53	-9.47	54	33.88	35.29	9.69	34.33	102	143	Average

Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	64	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5354.84	56.85	-17.15	74	46.3	35.28	9.6	34.33	100	178	Peak
5350	45.06	-8.94	54	34.51	35.28	9.6	34.33	100	178	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5352.75	57.92	-16.08	74	47.37	35.28	9.6	34.33	100	140	Peak
5350.11	46.32	-7.68	54	35.77	35.28	9.6	34.33	100	140	Average

Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	100	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5458.32	55.49	-18.51	74	44.46	35.36	9.99	34.32	107	348	Peak
5468.88	44.85	-9.15	54	33.81	35.37	9.99	34.32	107	348	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5464.88	59.9	-14.1	74	48.86	35.37	9.99	34.32	100	156	Peak
5470	47.86	-6.14	54	36.82	35.37	9.99	34.32	100	156	Average

Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	140	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725.32	57.7	-16.3	74	45.61	35.71	10.77	34.39	100	145	Peak
5725.24	46.65	-7.35	54	34.56	35.71	10.77	34.39	100	145	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5737.72	57.36	-16.64	74	45.25	35.74	10.77	34.4	115	356	Peak
5725.96	46.23	-7.77	54	34.14	35.71	10.77	34.39	115	356	Average

Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	144	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5399.56	54.45	-19.55	74	43.67	35.32	9.79	34.33	100	143	Peak
5466.16	43.78	-10.22	54	32.74	35.37	9.99	34.32	100	143	Average
5871.28	57.08	-16.92	74	44.42	35.93	11.17	34.44	100	143	Peak
5872.4	45.59	-8.41	54	32.93	35.93	11.17	34.44	100	143	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5413.72	54.97	-19.03	74	44.11	35.33	9.86	34.33	103	124	Peak
5465.32	43.78	-10.22	54	32.74	35.37	9.99	34.32	103	124	Average
5852.48	56.89	-17.11	74	44.33	35.88	11.11	34.43	103	124	Peak
5874.08	45.65	-8.35	54	32.99	35.93	11.17	34.44	103	124	Average

Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	38	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5145.5	60.51	-13.49	74	50.8	35.12	8.94	34.35	100	151	Peak
5150	49.15	-4.85	54	39.44	35.12	8.94	34.35	100	151	Average
5453.62	54.75	-19.25	74	43.72	35.36	9.99	34.32	100	151	Peak
5459.89	44.16	-9.84	54	33.13	35.36	9.99	34.32	100	151	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5149.55	64.01	-9.99	74	54.3	35.12	8.94	34.35	113	91	Peak
5149.7	51.74	-2.26	54	42.03	35.12	8.94	34.35	113	91	Average
5458.57	55.43	-18.57	74	44.4	35.36	9.99	34.32	113	91	Peak
5354.07	44.6	-9.4	54	34.05	35.28	9.6	34.33	113	91	Peak

Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	46	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5149.7	54.34	-19.66	74	44.63	35.12	8.94	34.35	100	150	Peak
5147.9	44.14	-9.86	54	34.43	35.12	8.94	34.35	100	150	Average
5378.71	54.95	-19.05	74	44.28	35.31	9.69	34.33	100	150	Peak
5449	44.19	-9.81	54	33.23	35.36	9.93	34.33	100	150	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5148.95	57.02	-16.98	74	47.31	35.12	8.94	34.35	101	86	Peak
5149.55	45.07	-8.93	54	35.36	35.12	8.94	34.35	101	86	Average
5389.93	56.46	-17.54	74	45.69	35.31	9.79	34.33	101	86	Peak
5350	44.98	-9.02	54	34.43	35.28	9.6	34.33	101	86	Average

Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	54	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5098.4	53.67	-20.33	74	44.07	35.08	8.88	34.36	100	178	Peak
5150	43.32	-10.68	54	33.61	35.12	8.94	34.35	100	178	Average
5355.28	55.67	-18.33	74	45.12	35.28	9.6	34.33	100	178	Peak
5350.11	44.94	-9.06	54	34.39	35.28	9.6	34.33	100	178	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5126.45	54.71	-19.29	74	45.05	35.11	8.91	34.36	101	140	Peak
5137.25	43.21	-10.79	54	33.55	35.11	8.91	34.36	101	140	Average
5351.76	57.09	-16.91	74	46.54	35.28	9.6	34.33	101	140	Peak
5353.08	46.06	-7.94	54	35.51	35.28	9.6	34.33	101	140	Average

Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	62	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5087	53.42	-20.58	74	43.87	35.07	8.84	34.36	100	178	Peak
5140.85	43.13	-10.87	54	33.43	35.12	8.94	34.36	100	178	Average
5351.87	63.06	-10.94	74	52.51	35.28	9.6	34.33	100	178	Peak
5352.42	50.69	-3.31	54	40.14	35.28	9.6	34.33	100	178	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5062.1	53.46	-20.54	74	43.96	35.05	8.81	34.36	102	142	Peak
5148.5	43.17	-10.83	54	33.46	35.12	8.94	34.35	102	142	Average
5352.09	66.96	-7.04	74	56.41	35.28	9.6	34.33	102	142	Peak
5351.65	52.47	-1.53	54	41.92	35.28	9.6	34.33	102	142	Average

Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	102	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5467.6	61.22	-12.78	74	50.18	35.37	9.99	34.32	136	342	Peak
5470	48.83	-5.17	54	37.79	35.37	9.99	34.32	136	342	Average
5743.32	56.06	-17.94	74	43.87	35.74	10.85	34.4	136	342	Peak
5753.88	45.32	-8.68	54	33.11	35.76	10.85	34.4	136	342	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5469.36	65.69	-8.31	74	54.65	35.37	9.99	34.32	100	150	Peak
5469.84	53.37	-0.63	54	42.33	35.37	9.99	34.32	100	150	Average
5755.08	55.86	-18.14	74	43.65	35.76	10.85	34.4	100	150	Peak
5761.72	45.29	-8.71	54	33.09	35.76	10.85	34.41	100	150	Average

Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	110	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5448.4	54.99	-19.01	74	44.03	35.36	9.93	34.33	103	142	Peak
5468.56	44.79	-9.21	54	33.75	35.37	9.99	34.32	103	142	Average
5741	55.89	-18.11	74	43.7	35.74	10.85	34.4	103	142	Peak
5761.56	45.36	-8.64	54	33.16	35.76	10.85	34.41	103	142	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5464.4	57.54	-16.46	74	46.5	35.37	9.99	34.32	100	163	Peak
5467.76	46.31	-7.69	54	35.27	35.37	9.99	34.32	100	163	Average
5755.96	56.46	-17.54	74	44.26	35.76	10.85	34.41	100	163	Peak
5753.16	45.41	-8.59	54	33.2	35.76	10.85	34.4	100	163	Average

Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	134	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5382	55.22	-18.78	74	44.45	35.31	9.79	34.33	101	140	Peak
5451.28	44.24	-9.76	54	33.27	35.36	9.93	34.32	101	140	Average
5726.52	58.4	-15.6	74	46.31	35.71	10.77	34.39	101	140	Peak
5728.52	47.22	-6.78	54	35.13	35.71	10.77	34.39	101	140	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5358.32	55.08	-18.92	74	44.44	35.28	9.69	34.33	135	163	Peak
5434	44.38	-9.62	54	33.43	35.35	9.93	34.33	135	163	Average
5726.2	57.73	-16.27	74	45.64	35.71	10.77	34.39	135	163	Peak
5725	46.4	-7.6	54	34.31	35.71	10.77	34.39	135	163	Average

Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	142	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5431.6	54.8	-19.2	74	43.85	35.35	9.93	34.33	100	139	Peak
5467.36	44.15	-9.85	54	33.11	35.37	9.99	34.32	100	139	Average
5853.36	56.56	-17.44	74	44	35.88	11.11	34.43	100	139	Peak
5872.16	45.83	-8.17	54	33.17	35.93	11.17	34.44	100	139	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5415.88	55.11	-18.89	74	44.25	35.33	9.86	34.33	104	140	Peak
5453.2	44.19	-9.81	54	33.16	35.36	9.99	34.32	104	140	Average
5874.16	56.69	-17.31	74	44.03	35.93	11.17	34.44	104	140	Peak
5888.64	45.91	-8.09	54	33.17	35.96	11.23	34.45	104	140	Average

Test Mode :	802.11ac VHT20	Temperature :	22~24°C
Test Channel :	36	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5148.5	56.44	-17.56	74	46.73	35.12	8.94	34.35	100	150	Peak
5148.8	44.72	-9.28	54	35.01	35.12	8.94	34.35	100	150	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5146.7	58.96	-15.04	74	49.25	35.12	8.94	34.35	102	102	Peak
5150	46.32	-7.68	54	36.61	35.12	8.94	34.35	102	102	Average

Test Mode :	802.11ac VHT20	Temperature :	22~24°C
Test Channel :	48	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5075.45	54.25	-19.75	74	44.7	35.07	8.84	34.36	100	151	Peak
5137.7	42.85	-11.15	54	33.19	35.11	8.91	34.36	100	151	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5352.97	55.23	-18.77	74	44.68	35.28	9.6	34.33	100	151	Peak
5451.2	43.8	-10.2	54	32.83	35.36	9.93	34.32	100	151	Average

Test Mode :	802.11ac VHT20	Temperature :	22~24°C
Test Channel :	52	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5136.2	53.75	-20.25	74	44.09	35.11	8.91	34.36	100	178	Peak
5147.3	42.87	-11.13	54	33.16	35.12	8.94	34.35	100	178	Average
5364.08	55.6	-18.4	74	44.95	35.29	9.69	34.33	100	178	Peak
5352.31	43.9	-10.1	54	33.35	35.28	9.6	34.33	100	178	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5021.3	53.84	-20.16	74	44.41	35.03	8.77	34.37	100	122	Peak
5148.8	42.93	-11.07	54	33.22	35.12	8.94	34.35	100	122	Average
5373.54	55.19	-18.81	74	44.54	35.29	9.69	34.33	100	122	Peak
5364.3	44.45	-9.55	54	33.8	35.29	9.69	34.33	100	122	Average

Test Mode :	802.11ac VHT20	Temperature :	22~24°C
Test Channel :	64	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5352.97	56.54	-17.46	74	45.99	35.28	9.6	34.33	100	180	Peak
5350	45.27	-8.73	54	34.72	35.28	9.6	34.33	100	180	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5358.25	58.34	-15.66	74	47.7	35.28	9.69	34.33	101	140	Peak
5350.11	46.62	-7.38	54	36.07	35.28	9.6	34.33	101	140	Average

Test Mode :	802.11ac VHT20	Temperature :	22~24°C
Test Channel :	100	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5469.68	56.02	-17.98	74	44.98	35.37	9.99	34.32	109	328	Peak
5470	45	-9	54	33.96	35.37	9.99	34.32	109	328	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5469.52	59.2	-14.8	74	48.16	35.37	9.99	34.32	100	149	Peak
5469.84	47.54	-6.46	54	36.5	35.37	9.99	34.32	100	149	Average

Test Mode :	802.11ac VHT20	Temperature :	22~24°C
Test Channel :	140	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5726.2	58.31	-15.69	74	46.22	35.71	10.77	34.39	100	141	Peak
5725.24	46.88	-7.12	54	34.79	35.71	10.77	34.39	100	141	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5727.88	58.61	-15.39	74	46.52	35.71	10.77	34.39	114	122	Peak
5730.52	46.98	-7.02	54	34.9	35.71	10.77	34.4	114	122	Average

Test Mode :	802.11ac VHT20	Temperature :	22~24°C
Test Channel :	144	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5407.72	55.34	-18.66	74	44.49	35.32	9.86	34.33	100	139	Peak
5451.88	43.83	-10.17	54	32.86	35.36	9.93	34.32	100	139	Average
5868.96	56.54	-17.46	74	43.9	35.91	11.17	34.44	100	139	Peak
5878.24	45.55	-8.45	54	32.89	35.93	11.17	34.44	100	139	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5418.4	55.39	-18.61	74	44.53	35.33	9.86	34.33	103	120	Peak
5464.96	43.77	-10.23	54	32.73	35.37	9.99	34.32	103	120	Average
5888.08	57.15	-16.85	74	44.41	35.96	11.23	34.45	103	120	Peak
5875.84	45.63	-8.37	54	32.97	35.93	11.17	34.44	103	120	Average

Test Mode :	802.11ac VHT40	Temperature :	22~24°C
Test Channel :	38	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5146.85	65.21	-8.79	74	55.5	35.12	8.94	34.35	102	91	Peak
5150	53.14	-0.86	54	43.43	35.12	8.94	34.35	102	91	Average
5392.57	55.25	-18.75	74	44.48	35.31	9.79	34.33	102	91	Peak
5353.63	44.6	-9.4	54	34.05	35.28	9.6	34.33	102	91	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5145.35	63.19	-10.81	74	53.48	35.12	8.94	34.35	110	54	Peak
5150	50.34	-3.66	54	40.63	35.12	8.94	34.35	110	54	Average
5428.65	54.7	-19.3	74	43.75	35.35	9.93	34.33	110	54	Peak
5441.96	44.23	-9.77	54	33.28	35.35	9.93	34.33	110	54	Average

Test Mode :	802.11ac VHT40	Temperature :	22~24°C
Test Channel :	46	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5144	55.22	-18.78	74	45.51	35.12	8.94	34.35	100	148	Peak
5150	44.07	-9.93	54	34.36	35.12	8.94	34.35	100	148	Average
5438.22	54.95	-19.05	74	44	35.35	9.93	34.33	100	148	Peak
5450.43	44.2	-9.8	54	33.23	35.36	9.93	34.32	100	148	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5150	55.45	-18.55	74	45.74	35.12	8.94	34.35	100	92	Peak
5149.85	44.72	-9.28	54	35.01	35.12	8.94	34.35	100	92	Average
5366.17	55.64	-18.36	74	44.99	35.29	9.69	34.33	100	92	Peak
5372.44	44.96	-9.04	54	34.31	35.29	9.69	34.33	100	92	Average

Test Mode :	802.11ac VHT40	Temperature :	22~24°C
Test Channel :	54	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5137.55	53.84	-20.16	74	44.18	35.11	8.91	34.36	100	179	Peak
5148.65	43.12	-10.88	54	33.41	35.12	8.94	34.35	100	179	Average
5350.44	55.92	-18.08	74	45.37	35.28	9.6	34.33	100	179	Peak
5350.77	44.74	-9.26	54	34.19	35.28	9.6	34.33	100	179	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5143.85	54.11	-19.89	74	44.4	35.12	8.94	34.35	101	127	Peak
5148.95	43.22	-10.78	54	33.51	35.12	8.94	34.35	101	127	Average
5357.81	55.82	-18.18	74	45.18	35.28	9.69	34.33	101	127	Peak
5350.99	45.28	-8.72	54	34.73	35.28	9.6	34.33	101	127	Average

Test Mode :	802.11ac VHT40	Temperature :	22~24°C
Test Channel :	62	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5149.55	53.94	-20.06	74	44.23	35.12	8.94	34.35	100	180	Peak
5147.9	43.12	-10.88	54	33.41	35.12	8.94	34.35	100	180	Average
5354.51	63.66	-10.34	74	53.11	35.28	9.6	34.33	100	180	Peak
5350	51.69	-2.31	54	41.14	35.28	9.6	34.33	100	180	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5085.95	54.53	-19.47	74	44.98	35.07	8.84	34.36	101	135	Peak
5149.7	43.12	-10.88	54	33.41	35.12	8.94	34.35	101	135	Average
5356.93	66.75	-7.25	74	56.11	35.28	9.69	34.33	101	135	Peak
5352.09	53.42	-0.58	54	42.87	35.28	9.6	34.33	101	135	Average

Test Mode :	802.11ac VHT40	Temperature :	22~24°C
Test Channel :	102	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5469.04	60.71	-13.29	74	49.67	35.37	9.99	34.32	107	360	Peak
5468.72	49.5	-4.5	54	38.46	35.37	9.99	34.32	107	360	Average
5752.92	55.77	-18.23	74	43.56	35.76	10.85	34.4	107	360	Peak
5743.64	45.35	-8.65	54	33.16	35.74	10.85	34.4	107	360	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5465.2	67.53	-6.47	74	56.49	35.37	9.99	34.32	100	154	Peak
5469.68	53.23	-0.77	54	42.19	35.37	9.99	34.32	100	154	Average
5764.84	55.73	-18.27	74	43.45	35.76	10.93	34.41	100	154	Peak
5763.32	45.32	-8.68	54	33.12	35.76	10.85	34.41	100	154	Average

Test Mode :	802.11n VHT40	Temperature :	22~24°C
Test Channel :	110	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5467.44	55.21	-18.79	74	44.17	35.37	9.99	34.32	104	142	Peak
5466.32	44.77	-9.23	54	33.73	35.37	9.99	34.32	104	142	Average
5735.56	55.78	-18.22	74	43.67	35.74	10.77	34.4	104	142	Peak
5748.2	45.33	-8.67	54	33.14	35.74	10.85	34.4	104	142	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5467.28	57.94	-16.06	74	46.9	35.37	9.99	34.32	108	157	Peak
5469.84	46.67	-7.33	54	35.63	35.37	9.99	34.32	108	157	Average
5749.32	56.2	-17.8	74	44.01	35.74	10.85	34.4	108	157	Peak
5761.64	45.38	-8.62	54	33.18	35.76	10.85	34.41	108	157	Average

Test Mode :	802.11ac VHT40	Temperature :	22~24°C
Test Channel :	134	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5366.64	54.72	-19.28	74	44.07	35.29	9.69	34.33	102	144	Peak
5447.76	44.06	-9.94	54	33.1	35.36	9.93	34.33	102	144	Average
5733.32	58.29	-15.71	74	46.21	35.71	10.77	34.4	102	144	Peak
5728.2	46.7	-7.3	54	34.61	35.71	10.77	34.39	102	144	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5398.64	54.53	-19.47	74	43.75	35.32	9.79	34.33	108	172	Peak
5460.88	44.07	-9.93	54	33.04	35.36	9.99	34.32	108	172	Average
5726.2	59.28	-14.72	74	47.19	35.71	10.77	34.39	108	172	Peak
5726.2	47.12	-6.88	54	35.03	35.71	10.77	34.39	108	172	Average

Test Mode :	802.11ac VHT40	Temperature :	22~24°C
Test Channel :	142	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5441.32	54.56	-19.44	74	43.61	35.35	9.93	34.33	100	147	Peak
5469.04	44	-10	54	32.96	35.37	9.99	34.32	100	147	Average
5855.28	57.52	-16.48	74	44.93	35.91	11.11	34.43	100	147	Peak
5889.6	45.86	-8.14	54	33.12	35.96	11.23	34.45	100	147	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5377.36	54.89	-19.11	74	44.24	35.29	9.69	34.33	106	140	Peak
5450.2	44.16	-9.84	54	33.19	35.36	9.93	34.32	106	140	Average
5854.32	56.54	-17.46	74	43.95	35.91	11.11	34.43	106	140	Peak
5880.8	45.8	-8.2	54	33.14	35.93	11.17	34.44	106	140	Average

Test Mode :	802.11ac VHT80	Temperature :	22~24°C
Test Channel :	42	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5147.9	61.74	-12.26	74	52.03	35.12	8.94	34.35	100	150	Peak
5148.2	50.94	-3.06	54	41.23	35.12	8.94	34.35	100	150	Average
5392.35	55.02	-18.98	74	44.25	35.31	9.79	34.33	100	150	Peak
5408.96	44.76	-9.24	54	33.91	35.32	9.86	34.33	100	150	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5139.65	64.6	-9.4	74	54.93	35.12	8.91	34.36	100	93	Peak
5144.9	53.37	-0.63	54	43.66	35.12	8.94	34.35	100	93	Average
5368.81	56.9	-17.1	74	46.25	35.29	9.69	34.33	100	93	Peak
5350.55	46.08	-7.92	54	35.53	35.28	9.6	34.33	100	93	Average

Test Mode :	802.11ac VHT80	Temperature :	22~24°C
Test Channel :	58	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5143.7	53.76	-20.24	74	44.06	35.12	8.94	34.36	100	177	Peak
5147.45	44.08	-9.92	54	34.37	35.12	8.94	34.35	100	177	Average
5360.23	61.28	-12.72	74	50.64	35.28	9.69	34.33	100	177	Peak
5350.11	50.57	-3.43	54	40.02	35.28	9.6	34.33	100	177	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5146.1	54.46	-19.54	74	44.75	35.12	8.94	34.35	101	134	Peak
5149.25	43.92	-10.08	54	34.21	35.12	8.94	34.35	101	134	Average
5383.99	63.61	-10.39	74	52.84	35.31	9.79	34.33	101	134	Peak
5352.31	52.59	-1.41	54	42.04	35.28	9.6	34.33	101	134	Average

Test Mode :	802.11ac VHT80	Temperature :	22~24°C
Test Channel :	106	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5464.4	61.99	-12.01	74	50.95	35.37	9.99	34.32	110	347	Peak
5464.56	50.63	-3.37	54	39.59	35.37	9.99	34.32	110	347	Average
5733.64	56.36	-17.64	74	44.28	35.71	10.77	34.4	110	347	Peak
5762.52	45.58	-8.42	54	33.38	35.76	10.85	34.41	110	347	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5433.84	65.21	-8.79	74	54.26	35.35	9.93	34.33	100	155	Peak
5470	53.44	-0.56	54	42.4	35.37	9.99	34.32	100	155	Average
5758.44	56.45	-17.55	74	44.25	35.76	10.85	34.41	100	155	Peak
5757.08	45.77	-8.23	54	33.57	35.76	10.85	34.41	100	155	Average

Test Mode :	802.11ac VHT80	Temperature :	22~24°C
Test Channel :	122	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5464.56	55.47	-18.53	74	44.43	35.37	9.99	34.32	102	141	Peak
5468.08	45.45	-8.55	54	34.41	35.37	9.99	34.32	102	141	Average
5727.96	57.3	-16.7	74	45.21	35.71	10.77	34.39	102	141	Peak
5725.64	46.75	-7.25	54	34.66	35.71	10.77	34.39	102	141	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5460.72	57.33	-16.67	74	46.3	35.36	9.99	34.32	107	166	Peak
5468.08	46.54	-7.46	54	35.5	35.37	9.99	34.32	107	166	Average
5733	58.3	-15.7	74	46.22	35.71	10.77	34.4	107	166	Peak
5725.72	47.46	-6.54	54	35.37	35.71	10.77	34.39	107	166	Average

Test Mode :	802.11ac VHT80	Temperature :	22~24°C
Test Channel :	138	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5442.48	54.5	-19.5	74	43.55	35.35	9.93	34.33	100	145	Peak
5374.64	44.42	-9.58	54	33.77	35.29	9.69	34.33	100	145	Average
5853.44	56.3	-17.7	74	43.74	35.88	11.11	34.43	100	145	Peak
5861.04	46.18	-7.82	54	33.54	35.91	11.17	34.44	100	145	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5359.12	54.55	-19.45	74	43.91	35.28	9.69	34.33	137	358	Peak
5402.32	44.43	-9.57	54	33.65	35.32	9.79	34.33	137	358	Average
5882.48	56.12	-17.88	74	43.46	35.93	11.17	34.44	137	358	Peak
5858.8	46.34	-7.66	54	33.76	35.91	11.11	34.44	137	358	Average

3.4.7 Test Result of Unwanted Radiated Emission (30MHz ~ 10th Harmonic)

MIMO <Ant. 1 + 2>

Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	36	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5182 MHz is fundamental signal which can be ignored.. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10359 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5182	95.92	-	-	86.14	35.15	8.98	34.35	100	151	Average
5182	106.04	-	-	96.26	35.15	8.98	34.35	100	151	Peak
10359	46.68	-7.32	54	51.29	37.95	14.89	57.45	100	0	Peak
15540	46.32	-7.68	54	45.5	40.31	19.08	58.57	100	0	Peak

Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	36	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5178 MHz is fundamental signal which can be ignored.. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10359 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5178	99.72	-	-	89.94	35.15	8.98	34.35	102	82	Average
5178	110.22	-	-	100.44	35.15	8.98	34.35	102	82	Peak
10359	46.39	-7.61	54	51	37.95	14.89	57.45	100	0	Peak
15540	48.14	-5.86	54	47.32	40.31	19.08	58.57	100	0	Peak

Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	44	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5222 MHz is fundamental signal which can be ignored.. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10442 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5222	96.67	-	-	86.74	35.17	9.11	34.35	100	151	Average
5222	106.85	-	-	96.92	35.17	9.11	34.35	100	151	Peak
10442	46.46	-7.54	54	51.01	37.97	14.91	57.43	100	0	Peak
15662	49.82	-4.18	54	48.91	40.36	19.03	58.48	100	0	Peak

Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	44	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5222 MHz is fundamental signal which can be ignored.. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10442 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5222	99.45	-	-	89.52	35.17	9.11	34.35	101	89	Average
5222	109.96	-	-	100.03	35.17	9.11	34.35	101	89	Peak
10442	47.66	-6.34	54	52.21	37.97	14.91	57.43	100	0	Peak
15658	49.58	-4.42	54	48.67	40.36	19.03	58.48	100	0	Peak

Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	48	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5240 MHz is fundamental signal which can be ignored.. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10482 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5240	96.69	-	-	86.65	35.19	9.2	34.35	100	152	Average
5240	107.02	-	-	96.98	35.19	9.2	34.35	100	152	Peak
10482	47.13	-6.87	54	51.63	37.99	14.92	57.41	100	0	Peak
15722	49.4	-4.6	54	48.43	40.39	19	58.42	100	0	Peak

Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	48	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5238 MHz is fundamental signal which can be ignored.. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10478 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5238	99.59	-	-	89.55	35.19	9.2	34.35	101	91	Average
5238	110.52	-	-	100.48	35.19	9.2	34.35	101	91	Peak
10478	45.69	-8.31	54	50.19	37.99	14.92	57.41	100	0	Peak
15722	49.36	-4.64	54	48.39	40.39	19	58.42	100	0	Peak

Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	52	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5258 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10521 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5258	97.13	-	-	87.07	35.2	9.2	34.34	100	166	Average
5258	107.34	-	-	97.28	35.2	9.2	34.34	100	166	Peak
10521	44.16	-9.84	54	47.44	38.01	14.94	56.23	100	0	Peak
15780	45.73	-8.27	54	42.13	40.41	18.97	55.78	100	0	Peak

Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	52	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5262 MHz is fundamental signal which can be ignored.. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10521 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5262	98.27	-	-	88.1	35.21	9.3	34.34	101	128	Average
5262	109.95	-	-	99.78	35.21	9.3	34.34	101	128	Peak
10521	44	-10	54	47.28	38.01	14.94	56.23	100	0	Peak
15780	47.22	-6.78	54	43.62	40.41	18.97	55.78	100	0	Peak

Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	60	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5298 MHz is fundamental signal which can be ignored.. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10599 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5298	97.65	-	-	87.35	35.24	9.4	34.34	100	168	Average
5298	107.84	-	-	97.54	35.24	9.4	34.34	100	168	Peak
10599	47.65	-6.35	54	50.77	38.08	14.96	56.16	100	0	Peak
15900	47.87	-6.13	54	43.87	40.46	18.92	55.38	100	0	Peak

Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	60	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5302 MHz is fundamental signal which can be ignored.. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10598 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5302	100.03	-	-	89.73	35.24	9.4	34.34	102	142	Average
5302	110.09	-	-	99.79	35.24	9.4	34.34	102	142	Peak
10598	49.84	-4.16	54	52.96	38.08	14.96	56.16	100	0	Peak
15900	47.98	-6.02	54	43.98	40.46	18.92	55.38	100	0	Peak

Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	64	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5318 MHz is fundamental signal which can be ignored.. 2. Average measurement was not performed if peak level went lower than the average limit. 3. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5318	96.89	-	-	86.48	35.25	9.5	34.34	100	177	Average
5318	106.51	-	-	96.1	35.25	9.5	34.34	100	177	Peak
10641	46.9	-7.1	54	49.94	38.11	14.98	56.13	100	0	Peak
15960	45.44	-8.56	54	41.2	40.49	18.9	55.15	100	0	Peak

Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	64	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5318 MHz is fundamental signal which can be ignored.. 2. Average measurement was not performed if peak level went lower than the average limit. 3. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5318	99.78	-	-	89.37	35.25	9.5	34.34	101	139	Average
5318	110.05	-	-	99.64	35.25	9.5	34.34	101	139	Peak
10641	46.95	-7.05	54	49.99	38.11	14.98	56.13	100	0	Peak
15960	47.64	-6.36	54	43.4	40.49	18.9	55.15	100	0	Peak

Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	100	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5502 MHz is fundamental signal which can be ignored.. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 16500 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
41.07	21.06	-18.94	40	39.14	12.8	0.94	31.82	100	58	Peak
160.95	22.85	-20.65	43.5	42.71	10.06	1.86	31.78	-	-	Peak
243.57	18.06	-27.94	46	35.89	11.66	2.28	31.77	-	-	Peak
412	20.82	-25.18	46	33.4	16.28	2.95	31.81	-	-	Peak
649.3	23.31	-22.69	46	32.56	19.01	3.78	32.04	-	-	Peak
976.2	25.72	-28.28	54	30.79	21.06	4.7	30.83	-	-	Peak
5502	96.12	-	-	84.92	35.4	10.13	34.33	108	359	Average
5502	106.08	-	-	94.88	35.4	10.13	34.33	108	359	Peak
11001	47	-7	54	49.36	38.4	15.09	55.85	100	0	Peak
16500	45.26	-8.74	54	40.54	41.8	19.02	56.1	100	0	Peak

Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	100	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5498 MHz is fundamental signal which can be ignored.. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 16500 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
40.8	33.74	-6.26	40	51.82	12.8	0.94	31.82	100	116	Peak
122.61	19.52	-23.98	43.5	37.56	12.12	1.62	31.78	-	-	Peak
169.32	24.63	-18.87	43.5	44.81	9.7	1.9	31.78	-	-	Peak
348.3	21.81	-24.19	46	36.57	14.3	2.72	31.78	-	-	Peak
549.2	24.38	-21.62	46	34.14	18.74	3.46	31.96	-	-	Peak
599.6	25.86	-20.14	46	35.66	18.6	3.64	32.04	-	-	Peak
5498	98.97	-	-	87.83	35.4	10.06	34.32	100	156	Average
5498	109.82	-	-	98.68	35.4	10.06	34.32	100	156	Peak
11001	46.6	-7.4	54	48.96	38.4	15.09	55.85	100	0	Peak
16500	44.65	-9.35	54	39.93	41.8	19.02	56.1	100	0	Peak

Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	116	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5578 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 16740 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5578	97.62	-	-	86.14	35.5	10.33	34.35	104	44	Average
5578	107.33	-	-	95.85	35.5	10.33	34.35	104	44	Peak
11160	45.65	-8.35	54	47.84	38.5	15.14	55.83	100	0	Peak
16740	46.81	-7.19	54	41.4	41.99	19.09	55.67	100	0	Peak

Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	116	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5582 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 16740 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5582	99.65	-	-	88.15	35.52	10.33	34.35	108	166	Average
5582	109.98	-	-	98.48	35.52	10.33	34.35	108	166	Peak
11160	45.99	-8.01	54	48.18	38.5	15.14	55.83	100	0	Peak
16740	47.16	-6.84	54	41.75	41.99	19.09	55.67	100	0	Peak

Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	140	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5698 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 17100 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5698	95.79	-	-	83.8	35.67	10.7	34.38	100	144	Average
5698	104.93	-	-	92.94	35.67	10.7	34.38	100	144	Peak
11400	46.12	-7.88	54	48.07	38.64	15.22	55.81	100	0	Peak
17100	47.71	-6.29	54	41.86	42.06	19.18	55.39	100	0	Peak

Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	140	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5702 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 17100 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5702	96.02	-	-	84.01	35.69	10.7	34.38	113	356	Average
5702	106.14	-	-	94.13	35.69	10.7	34.38	113	356	Peak
11400	46.31	-7.69	54	48.26	38.64	15.22	55.81	100	0	Peak
17100	47.65	-6.35	54	41.8	42.06	19.18	55.39	100	0	Peak

Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	144	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5718 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 17160 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5718	95.65	-	-	83.56	35.71	10.77	34.39	100	140	Average
5718	105.92	-	-	93.83	35.71	10.77	34.39	100	140	Peak
11439	44.3	-9.7	54	46.22	38.66	15.23	55.81	100	0	Peak
17160	45.97	-8.03	54	40.31	41.97	19.2	55.51	100	0	Peak

Test Mode :	802.11a	Temperature :	22~24°C
Test Channel :	144	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5722 MHz is fundamental signal which can be ignored.. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 17160 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5722	94.66	-	-	82.57	35.71	10.77	34.39	123	356	Average
5722	105.2	-	-	93.11	35.71	10.77	34.39	123	356	Peak
11439	44.8	-9.2	54	46.72	38.66	15.23	55.81	100	0	Peak
17160	46.58	-7.42	54	40.92	41.97	19.2	55.51	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	36	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5182 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10359 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5182	95.25	-	-	85.47	35.15	8.98	34.35	100	44	Average
5182	104.95	-	-	95.17	35.15	8.98	34.35	100	44	Peak
10359	47.44	-6.56	54	52.05	37.95	14.89	57.45	100	0	Peak
15540	36.39	-17.61	54	35.57	40.31	19.08	58.57	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	36	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5178 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10359 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5178	98.63	-	-	88.85	35.15	8.98	34.35	101	90	Average
5178	109.05	-	-	99.27	35.15	8.98	34.35	101	90	Peak
10359	48.28	-5.72	54	52.89	37.95	14.89	57.45	100	0	Peak
15540	37.24	-16.76	54	36.42	40.31	19.08	58.57	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	44	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5222 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10440 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5222	94.9	-	-	84.97	35.17	9.11	34.35	100	146	Average
5222	105.14	-	-	95.21	35.17	9.11	34.35	100	146	Peak
10440	45.68	-8.32	54	50.23	37.97	14.91	57.43	100	0	Peak
15660	47.12	-6.88	54	46.21	40.36	19.03	58.48	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	44	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5222 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10440 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5222	99.13	-	-	89.2	35.17	9.11	34.35	114	95	Average
5222	109.72	-	-	99.79	35.17	9.11	34.35	114	95	Peak
10440	46.48	-7.52	54	51.03	37.97	14.91	57.43	100	0	Peak
15660	50.93	-3.07	54	50.02	40.36	19.03	58.48	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	48	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5242 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10478 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5242	95.14	-	-	85.09	35.2	9.2	34.35	111	149	Average
5242	104.97	-	-	94.92	35.2	9.2	34.35	111	149	Peak
10478	48.05	-5.95	54	52.55	37.99	14.92	57.41	100	0	Peak
15722	49.05	-4.95	54	48.08	40.39	19	58.42	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	48	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5238 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10479 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5238	99.6	-	-	89.56	35.19	9.2	34.35	100	89	Average
5238	110.23	-	-	100.19	35.19	9.2	34.35	100	89	Peak
10479	47.97	-6.03	54	52.47	37.99	14.92	57.41	100	0	Peak
15720	49.41	-4.59	54	48.44	40.39	19	58.42	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	52	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5258 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10521 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5258	96.96	-	-	86.9	35.2	9.2	34.34	100	176	Average
5258	107.49	-	-	97.43	35.2	9.2	34.34	100	176	Peak
10521	47.66	-6.34	54	50.94	38.01	14.94	56.23	100	0	Peak
15780	47.44	-6.56	54	43.84	40.41	18.97	55.78	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	52	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5262 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10521 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5262	99.58	-	-	89.41	35.21	9.3	34.34	102	143	Average
5262	109.31	-	-	99.14	35.21	9.3	34.34	102	143	Peak
10521	49.1	-4.9	54	52.38	38.01	14.94	56.23	100	0	Peak
15780	46.87	-7.13	54	43.27	40.41	18.97	55.78	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	60	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5302 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10599 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5302	96.7	-	-	86.4	35.24	9.4	34.34	100	180	Average
5302	106.51	-	-	96.21	35.24	9.4	34.34	100	180	Peak
10599	49.12	-4.88	54	52.24	38.08	14.96	56.16	100	0	Peak
15900	47.84	-6.16	54	43.84	40.46	18.92	55.38	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	60	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5302 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10599 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5302	99.37	-	-	89.07	35.24	9.4	34.34	101	142	Average
5302	109.3	-	-	99	35.24	9.4	34.34	101	142	Peak
10599	47.95	-6.05	54	51.07	38.08	14.96	56.16	100	0	Peak
15900	47.44	-6.56	54	43.44	40.46	18.92	55.38	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	64	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5318 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5318	95.77	-	-	85.36	35.25	9.5	34.34	100	178	Average
5318	105.79	-	-	95.38	35.25	9.5	34.34	100	178	Peak
10641	47.4	-6.6	54	50.44	38.11	14.98	56.13	100	0	Peak
15960	46.42	-7.58	54	42.18	40.49	18.9	55.15	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	64	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5318 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5318	98.29	-	-	87.88	35.25	9.5	34.34	100	140	Average
5318	108.67	-	-	98.26	35.25	9.5	34.34	100	140	Peak
10641	48.59	-5.41	54	51.63	38.11	14.98	56.13	100	0	Peak
15960	47.33	-6.67	54	43.09	40.49	18.9	55.15	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	100	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5498 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 16500 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
40.8	21.5	-18.5	40	39.58	12.8	0.94	31.82	100	17	Peak
169.05	22.84	-20.66	43.5	42.98	9.74	1.9	31.78	-	-	Peak
243.57	19.07	-26.93	46	36.9	11.66	2.28	31.77	-	-	Peak
326.6	19.59	-26.41	46	35.05	13.67	2.64	31.77	-	-	Peak
599.6	21.54	-24.46	46	31.34	18.6	3.64	32.04	-	-	Peak
849.5	21.19	-24.81	46	28.31	20.2	4.36	31.68	-	-	Peak
5498	94.18	-	-	83.04	35.4	10.06	34.32	107	348	Average
5498	103.88	-	-	92.74	35.4	10.06	34.32	107	348	Peak
11001	47.72	-6.28	54	50.08	38.4	15.09	55.85	100	0	Peak
16500	45.54	-8.46	54	40.82	41.8	19.02	56.1	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	100	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5498 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 16500 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
40.8	33.03	-6.97	40	51.11	12.8	0.94	31.82	100	59	Peak
169.59	24.61	-18.89	43.5	44.79	9.7	1.9	31.78	-	-	Peak
224.13	21	-25	46	41.04	9.56	2.18	31.78	-	-	Peak
346.2	21.34	-24.66	46	36.2	14.2	2.72	31.78	-	-	Peak
599.6	26.2	-19.8	46	36	18.6	3.64	32.04	-	-	Peak
924.4	23.56	-22.44	46	29.71	20.54	4.55	31.24	-	-	Peak
5498	98.35	-	-	87.21	35.4	10.06	34.32	100	156	Average
5498	108.09	-	-	96.95	35.4	10.06	34.32	100	156	Peak
11001	46.56	-7.44	54	48.92	38.4	15.09	55.85	100	0	Peak
16500	46.27	-7.73	54	41.55	41.8	19.02	56.1	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	116	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5578 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 16740 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5578	96.26	-	-	84.78	35.5	10.33	34.35	104	141	Average
5578	106.36	-	-	94.88	35.5	10.33	34.35	104	141	Peak
11160	49.26	-4.74	54	51.45	38.5	15.14	55.83	100	0	Peak
16740	47.74	-6.26	54	42.33	41.99	19.09	55.67	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	116	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5578 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 16740 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5578	99.53	-	-	88.05	35.5	10.33	34.35	108	160	Average
5578	109.19	-	-	97.71	35.5	10.33	34.35	108	160	Peak
11160	49.32	-4.68	54	51.51	38.5	15.14	55.83	100	0	Peak
16740	44.76	-9.24	54	39.35	41.99	19.09	55.67	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	140	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5698 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 17100 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5698	95.47	-	-	83.48	35.67	10.7	34.38	100	145	Average
5698	104.53	-	-	92.54	35.67	10.7	34.38	100	145	Peak
11400	44.92	-9.08	54	46.87	38.64	15.22	55.81	100	0	Peak
17100	47.73	-6.27	54	41.88	42.06	19.18	55.39	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	140	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5698 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 17100 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5698	95.11	-	-	83.12	35.67	10.7	34.38	115	356	Average
5698	105.03	-	-	93.04	35.67	10.7	34.38	115	356	Peak
11400	45.94	-8.06	54	47.89	38.64	15.22	55.81	100	0	Peak
17100	46.41	-7.59	54	40.56	42.06	19.18	55.39	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	144	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5718 MHz is fundamental signal which can be ignored.. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 17160 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5718	94.37	-	-	82.28	35.71	10.77	34.39	100	143	Average
5718	103.75	-	-	91.66	35.71	10.77	34.39	100	143	Peak
11439	45.09	-8.91	54	47.01	38.66	15.23	55.81	100	0	Peak
17160	46.83	-7.17	54	41.17	41.97	19.2	55.51	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	22~24°C
Test Channel :	144	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5722 MHz is fundamental signal which can be ignored.. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 17160 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5722	95.77	-	-	83.68	35.71	10.77	34.39	103	124	Average
5722	105.54	-	-	93.45	35.71	10.77	34.39	103	124	Peak
11439	45.62	-8.38	54	47.54	38.66	15.23	55.81	100	0	Peak
17160	48.43	-5.57	54	42.77	41.97	19.2	55.51	100	0	Peak

Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	38	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5188 MHz is fundamental signal which can be ignored.. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10380 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5188	92.31	-	-	82.53	35.15	8.98	34.35	100	151	Average
5188	101.6	-	-	91.82	35.15	8.98	34.35	100	151	Peak
10380	44.66	-9.34	54	49.27	37.95	14.89	57.45	100	0	Peak
15570	46.64	-7.36	54	45.78	40.33	19.07	58.54	100	0	Peak

Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	38	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5192 MHz is fundamental signal which can be ignored.. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10380 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5192	96.18	-	-	86.36	35.16	9.01	34.35	113	91	Average
5192	106.59	-	-	96.77	35.16	9.01	34.35	113	91	Peak
10380	44.55	-9.45	54	49.16	37.95	14.89	57.45	100	0	Peak
15570	46.14	-7.86	54	45.28	40.33	19.07	58.54	100	0	Peak

Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	46	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5228 MHz is fundamental signal which can be ignored.. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10461 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5228	93.7	-	-	83.75	35.19	9.11	34.35	100	150	Average
5228	103.29	-	-	93.34	35.19	9.11	34.35	100	150	Peak
10461	44.59	-9.41	54	49.09	37.99	14.92	57.41	100	0	Peak
15690	46.93	-7.07	54	45.99	40.38	19.01	58.45	100	0	Peak

Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	46	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5232 MHz is fundamental signal which can be ignored.. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10461 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5232	97.85	-	-	87.9	35.19	9.11	34.35	101	86	Average
5232	107.97	-	-	98.02	35.19	9.11	34.35	101	86	Peak
10461	46.11	-7.89	54	50.61	37.99	14.92	57.41	100	0	Peak
15690	48.38	-5.62	54	47.44	40.38	19.01	58.45	100	0	Peak

Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	54	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5268 MHz is fundamental signal which can be ignored.. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10539 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5268	95.93	-	-	85.76	35.21	9.3	34.34	100	178	Average
5268	104.74	-	-	94.57	35.21	9.3	34.34	100	178	Peak
10539	47.03	-6.97	54	50.27	38.03	14.94	56.21	100	0	Peak
15810	47.23	-6.77	54	43.52	40.42	18.96	55.67	100	0	Peak

Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	54	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5268 MHz is fundamental signal which can be ignored.. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10539 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5268	97.62	-	-	87.45	35.21	9.3	34.34	101	140	Average
5268	107.3	-	-	97.13	35.21	9.3	34.34	101	140	Peak
10539	49.76	-4.24	54	53	38.03	14.94	56.21	100	0	Peak
15810	47.1	-6.9	54	43.39	40.42	18.96	55.67	100	0	Peak

Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	62	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5312 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5312	94.5	-	-	84.09	35.25	9.5	34.34	100	178	Average
5312	103.67	-	-	93.26	35.25	9.5	34.34	100	178	Peak
10620	44.89	-9.11	54	47.97	38.1	14.97	56.15	100	0	Peak
15930	47.85	-6.15	54	43.74	40.47	18.91	55.27	100	0	Peak

Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	62	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5312 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5312	96.97	-	-	86.56	35.25	9.5	34.34	102	142	Average
5312	106	-	-	95.59	35.25	9.5	34.34	102	142	Peak
10620	45.34	-8.66	54	48.42	38.1	14.97	56.15	100	0	Peak
15930	46.93	-7.07	54	42.82	40.47	18.91	55.27	100	0	Peak

Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	102	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5508 MHz is fundamental signal which can be ignored.. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 16530 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
41.61	21.57	-18.43	40	40.33	12.1	0.95	31.81	100	74	Peak
169.05	23.02	-20.48	43.5	43.16	9.74	1.9	31.78	-	-	Peak
243.57	18.45	-27.55	46	36.28	11.66	2.28	31.77	-	-	Peak
458.2	19.74	-26.26	46	31.49	16.96	3.14	31.85	-	-	Peak
699.7	22.22	-23.78	46	31.46	18.89	3.91	32.04	-	-	Peak
927.2	21.91	-24.09	46	28	20.57	4.56	31.22	-	-	Peak
5508	95.31	-	-	84.11	35.4	10.13	34.33	100	150	Average
5508	104.72	-	-	93.52	35.4	10.13	34.33	100	150	Peak
11019	45.81	-8.19	54	48.16	38.41	15.09	55.85	100	0	Peak
16530	46.21	-7.79	54	41.39	41.83	19.03	56.04	100	0	Peak

Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	102	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5508 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 16530 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
39.99	32.5	-7.5	40	49.89	13.5	0.93	31.82	100	155	Peak
122.61	20.83	-22.67	43.5	38.87	12.12	1.62	31.78	-	-	Peak
169.32	24.8	-18.7	43.5	44.98	9.7	1.9	31.78	-	-	Peak
351.1	21.6	-24.4	46	36.23	14.42	2.73	31.78	-	-	Peak
599.6	25.66	-20.34	46	35.46	18.6	3.64	32.04	-	-	Peak
874.7	22.69	-23.31	46	29.44	20.4	4.4	31.55	-	-	Peak
5508	89.81	-	-	78.61	35.4	10.13	34.33	136	342	Average
5508	99.03	-	-	87.83	35.4	10.13	34.33	136	342	Peak
11019	45.22	-8.78	54	47.57	38.41	15.09	55.85	100	0	Peak
16530	45.51	-8.49	54	40.69	41.83	19.03	56.04	100	0	Peak

Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	110	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5552 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 16650 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5552	95.28	-	-	83.89	35.47	10.26	34.34	103	142	Average
5552	104.91	-	-	93.52	35.47	10.26	34.34	103	142	Peak
11100	47.28	-6.72	54	49.54	38.46	15.12	55.84	100	0	Peak
16650	46.21	-7.79	54	41.05	41.92	19.06	55.82	100	0	Peak

Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	110	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5552 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 16650 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5552	96.77	-	-	85.38	35.47	10.26	34.34	100	163	Average
5552	105.93	-	-	94.54	35.47	10.26	34.34	100	163	Peak
11100	47.7	-6.3	54	49.96	38.46	15.12	55.84	100	0	Peak
16650	46.97	-7.03	54	41.81	41.92	19.06	55.82	100	0	Peak

Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	134	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5668 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 17010 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5668	93.69	-	-	81.88	35.64	10.55	34.38	101	140	Average
5668	103.75	-	-	91.94	35.64	10.55	34.38	101	140	Peak
11340	46.46	-7.54	54	48.48	38.6	15.2	55.82	100	0	Peak
17010	49.17	-4.83	54	43.06	42.18	19.16	55.23	100	0	Peak

Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	134	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5672 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 17010 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5672	95.21	-	-	83.33	35.64	10.62	34.38	135	163	Average
5672	104.21	-	-	92.33	35.64	10.62	34.38	135	163	Peak
11340	45.75	-8.25	54	47.77	38.6	15.2	55.82	100	0	Peak
17010	48.56	-5.44	54	42.45	42.18	19.16	55.23	100	0	Peak

Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	142	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5708 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 17130 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5708	92.55	-	-	80.55	35.69	10.7	34.39	100	139	Average
5708	102.04	-	-	90.04	35.69	10.7	34.39	100	139	Peak
11421	44.68	-9.32	54	46.62	38.65	15.22	55.81	100	0	Peak
17130	48.19	-5.81	54	42.44	42.01	19.19	55.45	100	0	Peak

Test Mode :	802.11n HT40	Temperature :	22~24°C
Test Channel :	142	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5711 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 17130 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5711	94.88	-	-	82.88	35.69	10.7	34.39	104	140	Average
5711	104.97	-	-	92.97	35.69	10.7	34.39	104	140	Peak
11421	45.44	-8.56	54	47.38	38.65	15.22	55.81	100	0	Peak
17130	48.13	-5.87	54	42.38	42.01	19.19	55.45	100	0	Peak

Test Mode :	802.11ac VHT20	Temperature :	22~24°C
Test Channel :	36	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5182 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10360 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5182	95.43	-	-	85.65	35.15	8.98	34.35	100	150	Average
5182	106.29	-	-	96.51	35.15	8.98	34.35	100	150	Peak
10360	47.24	-6.76	54	51.85	37.95	14.89	57.45	100	0	Peak
15540	47.18	-6.82	54	46.36	40.31	19.08	58.57	100	0	Peak

Test Mode :	802.11ac VHT20	Temperature :	22~24°C
Test Channel :	36	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5178 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10359 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5178	98.79	-	-	89.01	35.15	8.98	34.35	102	102	Average
5178	109.84	-	-	100.06	35.15	8.98	34.35	102	102	Peak
10359	45.46	-8.54	54	50.07	37.95	14.89	57.45	100	0	Peak
15538	49.36	-4.64	54	48.54	40.31	19.08	58.57	100	0	Peak

Test Mode :	802.11ac VHT20	Temperature :	22~24°C
Test Channel :	44	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5222 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10441 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5222	95.52	-	-	85.59	35.17	9.11	34.35	100	149	Average
5222	105.36	-	-	95.43	35.17	9.11	34.35	100	149	Peak
10441	47.1	-6.9	54	51.65	37.97	14.91	57.43	100	0	Peak
15660	48.7	-5.3	54	47.79	40.36	19.03	58.48	100	0	Peak

Test Mode :	802.11ac VHT20	Temperature :	22~24°C
Test Channel :	44	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5222 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10440 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5222	99.37	-	-	89.44	35.17	9.11	34.35	101	86	Average
5222	109.71	-	-	99.78	35.17	9.11	34.35	101	86	Peak
10440	46	-8	54	50.55	37.97	14.91	57.43	100	0	Peak
15660	49.74	-4.26	54	48.83	40.36	19.03	58.48	100	0	Peak

Test Mode :	802.11ac VHT20	Temperature :	22~24°C
Test Channel :	48	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5238 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10478 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5238	95.45	-	-	85.41	35.19	9.2	34.35	100	151	Average
5238	105.04	-	-	95	35.19	9.2	34.35	100	151	Peak
10478	47.37	-6.63	54	51.87	37.99	14.92	57.41	100	0	Peak
15720	44.19	-9.81	54	43.22	40.39	19	58.42	100	0	Peak

Test Mode :	802.11ac VHT20	Temperature :	22~24°C
Test Channel :	48	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5238 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10479 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5238	97.68	-	-	87.64	35.19	9.2	34.35	100	89	Average
5238	107.36	-	-	97.32	35.19	9.2	34.35	100	89	Peak
10479	45.65	-8.35	54	50.15	37.99	14.92	57.41	100	0	Peak
15722	48.92	-5.08	54	47.95	40.39	19	58.42	100	0	Peak

Test Mode :	802.11ac VHT20	Temperature :	22~24°C
Test Channel :	52	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5258 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10522 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5258	96.91	-	-	86.85	35.2	9.2	34.34	100	178	Average
5258	108.18	-	-	98.12	35.2	9.2	34.34	100	178	Peak
10522	48.56	-5.44	54	51.84	38.01	14.94	56.23	100	0	Peak
15780	47.17	-6.83	54	43.57	40.41	18.97	55.78	100	0	Peak

Test Mode :	802.11ac VHT20	Temperature :	22~24°C
Test Channel :	52	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5262 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10522 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5262	98.86	-	-	88.69	35.21	9.3	34.34	100	122	Average
5262	108.87	-	-	98.7	35.21	9.3	34.34	100	122	Peak
10522	50.27	-3.73	54	53.55	38.01	14.94	56.23	100	0	Peak
15780	46.91	-7.09	54	43.31	40.41	18.97	55.78	100	0	Peak

Test Mode :	802.11ac VHT20	Temperature :	22~24°C
Test Channel :	60	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5299 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10598 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5299	97.3	-	-	87	35.24	9.4	34.34	100	178	Average
5299	106.78	-	-	96.48	35.24	9.4	34.34	100	178	Peak
10598	49.71	-4.29	54	52.83	38.08	14.96	56.16	100	0	Peak
15900	48.14	-5.86	54	44.14	40.46	18.92	55.38	100	0	Peak

Test Mode :	802.11ac VHT20	Temperature :	22~24°C
Test Channel :	60	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5302 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10599 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5302	99.51	-	-	89.21	35.24	9.4	34.34	102	140	Average
5302	109.3	-	-	99	35.24	9.4	34.34	102	140	Peak
10599	49.59	-4.41	54	52.71	38.08	14.96	56.16	100	0	Peak
15900	48.55	-5.45	54	44.55	40.46	18.92	55.38	100	0	Peak

Test Mode :	802.11ac VHT20	Temperature :	22~24°C
Test Channel :	64	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5318 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5318	96.78	-	-	86.37	35.25	9.5	34.34	100	180	Average
5318	107.85	-	-	97.44	35.25	9.5	34.34	100	180	Peak
10641	47.07	-6.93	54	50.11	38.11	14.98	56.13	100	0	Peak
15960	48.85	-5.15	54	44.61	40.49	18.9	55.15	100	0	Peak

Test Mode :	802.11ac VHT20	Temperature :	22~24°C
Test Channel :	64	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5322 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5322	99.07	-	-	88.66	35.25	9.5	34.34	101	140	Average
5322	109.13	-	-	98.72	35.25	9.5	34.34	101	140	Peak
10641	46.19	-7.81	54	49.23	38.11	14.98	56.13	100	0	Peak
15960	46.11	-7.89	54	41.87	40.49	18.9	55.15	100	0	Peak

Test Mode :	802.11ac VHT20	Temperature :	22~24°C
Test Channel :	100	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5498 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 16500 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
41.34	21.16	-18.84	40	39.93	12.1	0.95	31.82	100	36	Peak
123.15	18.57	-24.93	43.5	36.64	12.08	1.63	31.78	-	-	Peak
161.49	22.95	-20.55	43.5	42.84	10.02	1.87	31.78	-	-	Peak
339.2	19.66	-26.34	46	34.87	13.88	2.69	31.78	-	-	Peak
599.6	20.99	-25.01	46	30.79	18.6	3.64	32.04	-	-	Peak
876.8	22.17	-23.83	46	28.9	20.4	4.41	31.54	-	-	Peak
5498	95.26	-	-	84.12	35.4	10.06	34.32	109	328	Average
5498	106.05	-	-	94.91	35.4	10.06	34.32	109	328	Peak
11001	47.2	-6.8	54	49.56	38.4	15.09	55.85	100	0	Peak
16500	44.85	-9.15	54	40.13	41.8	19.02	56.1	100	0	Peak

Test Mode :	802.11ac VHT20	Temperature :	22~24°C
Test Channel :	100	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5502 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 16500 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
41.34	32.88	-7.12	40	51.65	12.1	0.95	31.82	100	198	Peak
169.32	24.77	-18.73	43.5	44.95	9.7	1.9	31.78	-	-	Peak
224.13	22.85	-23.15	46	42.89	9.56	2.18	31.78	-	-	Peak
344.8	21.98	-24.02	46	36.9	14.15	2.71	31.78	-	-	Peak
549.2	24.47	-21.53	46	34.23	18.74	3.46	31.96	-	-	Peak
649.3	25.25	-20.75	46	34.5	19.01	3.78	32.04	-	-	Peak
5502	98.73	-	-	87.53	35.4	10.13	34.33	100	149	Average
5502	110.19	-	-	98.99	35.4	10.13	34.33	100	149	Peak
11001	46.84	-7.16	54	49.2	38.4	15.09	55.85	100	0	Peak
16500	45.2	-8.8	54	40.48	41.8	19.02	56.1	100	0	Peak

Test Mode :	802.11ac VHT20	Temperature :	22~24°C
Test Channel :	116	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5582 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 16740 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5582	96.57	-	-	85.07	35.52	10.33	34.35	103	140	Average
5582	105.94	-	-	94.44	35.52	10.33	34.35	103	140	Peak
11162	48.49	-5.51	54	50.68	38.5	15.14	55.83	100	0	Peak
16740	48.17	-5.83	54	42.76	41.99	19.09	55.67	100	0	Peak

Test Mode :	802.11ac VHT20	Temperature :	22~24°C
Test Channel :	116	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5578 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 16740 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5578	99.04	-	-	87.56	35.5	10.33	34.35	108	162	Average
5578	109.17	-	-	97.69	35.5	10.33	34.35	108	162	Peak
11161	48.88	-5.12	54	51.07	38.5	15.14	55.83	100	0	Peak
16740	46.92	-7.08	54	41.51	41.99	19.09	55.67	100	0	Peak

Test Mode :	802.11ac VHT20	Temperature :	22~24°C
Test Channel :	140	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5698 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 17100 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5698	95.56	-	-	83.57	35.67	10.7	34.38	100	141	Average
5698	105.18	-	-	93.19	35.67	10.7	34.38	100	141	Peak
11400	44.71	-9.29	54	46.66	38.64	15.22	55.81	100	0	Peak
17100	45.58	-8.42	54	39.73	42.06	19.18	55.39	100	0	Peak

Test Mode :	802.11ac VHT20	Temperature :	22~24°C
Test Channel :	140	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5698 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 17100 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5698	96.82	-	-	84.83	35.67	10.7	34.38	114	122	Average
5698	107.08	-	-	95.09	35.67	10.7	34.38	114	122	Peak
11400	45.07	-8.93	54	47.02	38.64	15.22	55.81	100	0	Peak
17100	48.65	-5.35	54	42.8	42.06	19.18	55.39	100	0	Peak

Test Mode :	802.11ac VHT20	Temperature :	22~24°C
Test Channel :	144	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5722 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 17160 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5722	94.5	-	-	82.41	35.71	10.77	34.39	100	139	Average
5722	104.5	-	-	92.41	35.71	10.77	34.39	100	139	Peak
11439	44.68	-9.32	54	46.6	38.66	15.23	55.81	100	0	Peak
17160	46.77	-7.23	54	41.11	41.97	19.2	55.51	100	0	Peak

Test Mode :	802.11ac VHT20	Temperature :	22~24°C
Test Channel :	144	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5722 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 17160 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5722	96.84	-	-	84.75	35.71	10.77	34.39	103	120	Average
5722	106.76	-	-	94.67	35.71	10.77	34.39	103	120	Peak
11439	45.06	-8.94	54	46.98	38.66	15.23	55.81	100	0	Peak
17160	47.93	-6.07	54	42.27	41.97	19.2	55.51	100	0	Peak

Test Mode :	802.11ac VHT40	Temperature :	22~24°C
Test Channel :	38	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5192 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10380 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5192	93	-	-	83.18	35.16	9.01	34.35	110	54	Average
5192	102.4	-	-	92.58	35.16	9.01	34.35	110	54	Peak
10380	44.83	-9.17	54	49.44	37.95	14.89	57.45	100	0	Peak
15570	47.49	-6.51	54	46.63	40.33	19.07	58.54	100	0	Peak

Test Mode :	802.11ac VHT40	Temperature :	22~24°C
Test Channel :	38	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5192 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10380 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5192	96.56	-	-	86.74	35.16	9.01	34.35	102	91	Average
5192	106.95	-	-	97.13	35.16	9.01	34.35	102	91	Peak
10380	44.89	-9.11	54	49.5	37.95	14.89	57.45	100	0	Peak
15570	47.88	-6.12	54	47.02	40.33	19.07	58.54	100	0	Peak

Test Mode :	802.11ac VHT40	Temperature :	22~24°C
Test Channel :	46	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5232 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10461 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5232	94.15	-	-	84.2	35.19	9.11	34.35	100	148	Average
5232	103.81	-	-	93.86	35.19	9.11	34.35	100	148	Peak
10461	45.64	-8.36	54	50.14	37.99	14.92	57.41	100	0	Peak
15690	47.8	-6.2	54	46.86	40.38	19.01	58.45	100	0	Peak

Test Mode :	802.11ac VHT40	Temperature :	22~24°C
Test Channel :	46	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5232 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10460 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5232	97.62	-	-	87.67	35.19	9.11	34.35	100	92	Average
5232	107.57	-	-	97.62	35.19	9.11	34.35	100	92	Peak
10460	47.42	-6.58	54	51.94	37.98	14.92	57.42	100	0	Peak
15690	48.9	-5.1	54	47.96	40.38	19.01	58.45	100	0	Peak

Test Mode :	802.11ac VHT40	Temperature :	22~24°C
Test Channel :	54	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5272 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10542 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5272	95.06	-	-	84.89	35.21	9.3	34.34	100	179	Average
5272	105.37	-	-	95.2	35.21	9.3	34.34	100	179	Peak
10542	48.09	-5.91	54	51.32	38.03	14.95	56.21	100	0	Peak
15810	46.94	-7.06	54	43.23	40.42	18.96	55.67	100	0	Peak

Test Mode :	802.11ac VHT40	Temperature :	22~24°C
Test Channel :	54	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5268 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10541 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5268	97.15	-	-	86.98	35.21	9.3	34.34	101	127	Average
5268	106.66	-	-	96.49	35.21	9.3	34.34	101	127	Peak
10541	47.66	-6.34	54	50.89	38.03	14.95	56.21	100	0	Peak
15810	46.98	-7.02	54	43.27	40.42	18.96	55.67	100	0	Peak

Test Mode :	802.11ac VHT40	Temperature :	22~24°C
Test Channel :	62	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5308 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
40.8	21.26	-18.74	40	39.34	12.8	0.94	31.82	100	85	Peak
169.32	23.09	-20.41	43.5	43.27	9.7	1.9	31.78	-	-	Peak
243.57	18.29	-27.71	46	36.12	11.66	2.28	31.77	-	-	Peak
335.7	19.77	-26.23	46	35.05	13.81	2.68	31.77	-	-	Peak
649.3	22.04	-23.96	46	31.29	19.01	3.78	32.04	-	-	Peak
778.1	21.47	-24.53	46	29.4	19.88	4.14	31.95	-	-	Peak
5308	94.65	-	-	84.25	35.24	9.5	34.34	100	180	Average
5308	104.31	-	-	93.91	35.24	9.5	34.34	100	180	Peak
10620	44.64	-9.36	54	47.72	38.1	14.97	56.15	100	0	Peak
15930	45.86	-8.14	54	41.75	40.47	18.91	55.27	100	0	Peak

Test Mode :	802.11ac VHT40	Temperature :	22~24°C
Test Channel :	62	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5312 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
41.07	33.03	-6.97	40	51.11	12.8	0.94	31.82	100	188	Peak
123.42	20.43	-23.07	43.5	38.5	12.08	1.63	31.78	-	-	Peak
168.51	24.82	-18.68	43.5	44.96	9.74	1.9	31.78	-	-	Peak
344.8	21.65	-24.35	46	36.57	14.15	2.71	31.78	-	-	Peak
598.9	25.82	-20.18	46	35.63	18.6	3.63	32.04	-	-	Peak
923.7	23.91	-22.09	46	30.08	20.53	4.54	31.24	-	-	Peak
5312	97.07	-	-	86.66	35.25	9.5	34.34	101	135	Average
5312	106.66	-	-	96.25	35.25	9.5	34.34	101	135	Peak
10620	45.33	-8.67	54	48.41	38.1	14.97	56.15	100	0	Peak
15930	45.9	-8.1	54	41.79	40.47	18.91	55.27	100	0	Peak

Test Mode :	802.11ac VHT40	Temperature :	22~24°C
Test Channel :	102	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5512 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 16530 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5512	92.26	-	-	81.06	35.4	10.13	34.33	107	360	Average
5512	102.18	-	-	90.98	35.4	10.13	34.33	107	360	Peak
11019	45.23	-8.77	54	47.58	38.41	15.09	55.85	100	0	Peak
16530	46.42	-7.58	54	41.6	41.83	19.03	56.04	100	0	Peak

Test Mode :	802.11ac VHT40	Temperature :	22~24°C
Test Channel :	102	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5508 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 16530 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5508	95.83	-	-	84.63	35.4	10.13	34.33	100	154	Average
5508	105.73	-	-	94.53	35.4	10.13	34.33	100	154	Peak
11019	45.62	-8.38	54	47.97	38.41	15.09	55.85	100	0	Peak
16530	45.89	-8.11	54	41.07	41.83	19.03	56.04	100	0	Peak

Test Mode :	802.11ac VHT40	Temperature :	22~24°C
Test Channel :	110	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5552 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 16650 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5552	94.81	-	-	83.42	35.47	10.26	34.34	104	142	Average
5552	104.39	-	-	93	35.47	10.26	34.34	104	142	Peak
11098	49.24	-4.76	54	51.5	38.46	15.12	55.84	100	0	Peak
16650	46.65	-7.35	54	41.49	41.92	19.06	55.82	100	0	Peak

Test Mode :	802.11ac VHT40	Temperature :	22~24°C
Test Channel :	110	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5548 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 16649 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5548	97.54	-	-	86.15	35.47	10.26	34.34	108	157	Average
5548	107.49	-	-	96.1	35.47	10.26	34.34	108	157	Peak
11102	48.9	-5.1	54	51.16	38.46	15.12	55.84	100	0	Peak
16649	49.59	-4.41	54	44.43	41.92	19.06	55.82	100	0	Peak

Test Mode :	802.11ac VHT40	Temperature :	22~24°C
Test Channel :	134	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5668 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 17010 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5668	93.63	-	-	81.82	35.64	10.55	34.38	102	144	Average
5668	102.91	-	-	91.1	35.64	10.55	34.38	102	144	Peak
11340	46.58	-7.42	54	48.6	38.6	15.2	55.82	100	0	Peak
17010	48.99	-5.01	54	42.88	42.18	19.16	55.23	100	0	Peak

Test Mode :	802.11ac VHT40	Temperature :	22~24°C
Test Channel :	134	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5668 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 17010 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5668	95.4	-	-	83.59	35.64	10.55	34.38	108	172	Average
5668	105.46	-	-	93.65	35.64	10.55	34.38	108	172	Peak
11340	47.06	-6.94	54	49.08	38.6	15.2	55.82	100	0	Peak
17010	48.34	-5.66	54	42.23	42.18	19.16	55.23	100	0	Peak

Test Mode :	802.11ac VHT40	Temperature :	22~24°C
Test Channel :	142	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5708 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 17130 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5708	92.24	-	-	80.24	35.69	10.7	34.39	100	147	Average
5708	101.09	-	-	89.09	35.69	10.7	34.39	100	147	Peak
11421	46.3	-7.7	54	48.24	38.65	15.22	55.81	100	0	Peak
17130	46.42	-7.58	54	40.67	42.01	19.19	55.45	100	0	Peak

Test Mode :	802.11ac VHT40	Temperature :	22~24°C
Test Channel :	142	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5712 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 17130 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5712	93.62	-	-	81.62	35.69	10.7	34.39	106	140	Average
5712	104.18	-	-	92.18	35.69	10.7	34.39	106	140	Peak
11421	44.89	-9.11	54	46.83	38.65	15.22	55.81	100	0	Peak
17130	46.51	-7.49	54	40.76	42.01	19.19	55.45	100	0	Peak

Test Mode :	802.11ac VHT80	Temperature :	22~24°C
Test Channel :	42	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5214 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10419 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5214	91.22	-	-	81.29	35.17	9.11	34.35	100	150	Average
5214	100.45	-	-	90.52	35.17	9.11	34.35	100	150	Peak
10419	45.67	-8.33	54	50.23	37.97	14.9	57.43	100	0	Peak
15630	46.05	-7.95	54	45.14	40.36	19.04	58.49	100	0	Peak

Test Mode :	802.11ac VHT80	Temperature :	22~24°C
Test Channel :	42	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5214 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10419 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5214	94.82	-	-	84.89	35.17	9.11	34.35	100	93	Average
5214	104	-	-	94.07	35.17	9.11	34.35	100	93	Peak
10419	45.06	-8.94	54	49.62	37.97	14.9	57.43	100	0	Peak
15630	46.06	-7.94	54	45.15	40.36	19.04	58.49	100	0	Peak

Test Mode :	802.11ac VHT80	Temperature :	22~24°C
Test Channel :	58	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5292 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10581 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5292	92.85	-	-	82.56	35.23	9.4	34.34	100	177	Average
5292	102.09	-	-	91.8	35.23	9.4	34.34	100	177	Peak
10581	43.96	-10.04	54	47.1	38.07	14.96	56.17	100	0	Peak
15870	46.84	-7.16	54	42.9	40.45	18.93	55.44	100	0	Peak

Test Mode :	802.11ac VHT80	Temperature :	22~24°C
Test Channel :	58	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5288 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 10581 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5288	94.98	-	-	84.69	35.23	9.4	34.34	101	134	Average
5288	104.93	-	-	94.64	35.23	9.4	34.34	101	134	Peak
10581	44.81	-9.19	54	47.95	38.07	14.96	56.17	100	0	Peak
15870	47.14	-6.86	54	43.2	40.45	18.93	55.44	100	0	Peak

Test Mode :	802.11ac VHT80	Temperature :	22~24°C
Test Channel :	106	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5528 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 16590 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
40.8	21.1	-18.9	40	39.18	12.8	0.94	31.82	100	48	Peak
89.94	16.43	-27.07	43.5	38.1	8.7	1.41	31.78	-	-	Peak
161.76	23.06	-20.44	43.5	42.95	10.02	1.87	31.78	-	-	Peak
328	20.48	-25.52	46	35.92	13.68	2.65	31.77	-	-	Peak
649.3	23.03	-22.97	46	32.28	19.01	3.78	32.04	-	-	Peak
699	21.96	-24.04	46	31.2	18.89	3.91	32.04	-	-	Peak
5528	90.73	-	-	79.45	35.42	10.2	34.34	110	347	Average
5528	100.08	-	-	88.8	35.42	10.2	34.34	110	347	Peak
11061	44.88	-9.12	54	47.17	38.44	15.11	55.84	100	0	Peak
16590	47.19	-6.81	54	42.21	41.87	19.05	55.94	100	0	Peak

Test Mode :	802.11ac VHT80	Temperature :	22~24°C
Test Channel :	106	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5532 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 16590 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
40.26	32.92	-7.08	40	51	12.8	0.94	31.82	100	196	Peak
122.61	20.68	-22.82	43.5	38.72	12.12	1.62	31.78	-	-	Peak
169.32	24.61	-18.89	43.5	44.79	9.7	1.9	31.78	-	-	Peak
346.2	21.82	-24.18	46	36.68	14.2	2.72	31.78	-	-	Peak
599.6	26.52	-19.48	46	36.32	18.6	3.64	32.04	-	-	Peak
749.4	21.86	-24.14	46	29.99	19.8	4.05	31.98	-	-	Peak
5532	94.19	-	-	82.88	35.45	10.2	34.34	100	155	Average
5532	103.3	-	-	91.99	35.45	10.2	34.34	100	155	Peak
11061	45.15	-8.85	54	47.44	38.44	15.11	55.84	100	0	Peak
16590	47.97	-6.03	54	42.99	41.87	19.05	55.94	100	0	Peak

Test Mode :	802.11ac VHT80	Temperature :	22~24°C
Test Channel :	122	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5608 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 16830 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5608	93.3	-	-	81.72	35.54	10.4	34.36	102	141	Average
5608	101.83	-	-	90.25	35.54	10.4	34.36	102	141	Peak
11220	44.77	-9.23	54	46.91	38.53	15.16	55.83	100	0	Peak
16830	47.14	-6.86	54	41.48	42.06	19.11	55.51	100	0	Peak

Test Mode :	802.11ac VHT80	Temperature :	22~24°C
Test Channel :	122	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5612 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 16830 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5612	95	-	-	83.42	35.54	10.4	34.36	107	166	Average
5612	104.3	-	-	92.72	35.54	10.4	34.36	107	166	Peak
11220	45.42	-8.58	54	47.56	38.53	15.16	55.83	100	0	Peak
16830	47.97	-6.03	54	42.31	42.06	19.11	55.51	100	0	Peak

Test Mode :	802.11ac VHT80	Temperature :	22~24°C
Test Channel :	138	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5692 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 17070 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5692	89.1	-	-	77.11	35.67	10.7	34.38	100	145	Average
5692	97.84	-	-	85.85	35.67	10.7	34.38	100	145	Peak
11379	45.36	-8.64	54	47.33	38.63	15.21	55.81	100	0	Peak
17070	48.33	-5.67	54	42.36	42.11	19.18	55.32	100	0	Peak

Test Mode :	802.11ac VHT80	Temperature :	22~24°C
Test Channel :	138	Relative Humidity :	46~48%
Test Engineer :	Ivan Chiang and Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5688 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit. 3. 17070 MHz is not within a restricted band, and satisfies both the average and peak limits of 15.209. 4. No spurious emissions are detected other than listed points as below.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5688	90.57	-	-	78.66	35.67	10.62	34.38	137	358	Average
5688	99.87	-	-	87.96	35.67	10.62	34.38	137	358	Peak
11379	46.26	-7.74	54	48.23	38.63	15.21	55.81	100	0	Peak
17070	47.8	-6.2	54	41.83	42.11	19.18	55.32	100	0	Peak

3.5 AC Conducted Emission Measurement

3.5.1 Limit of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency of emission (MHz)	Conducted limit (dB μ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

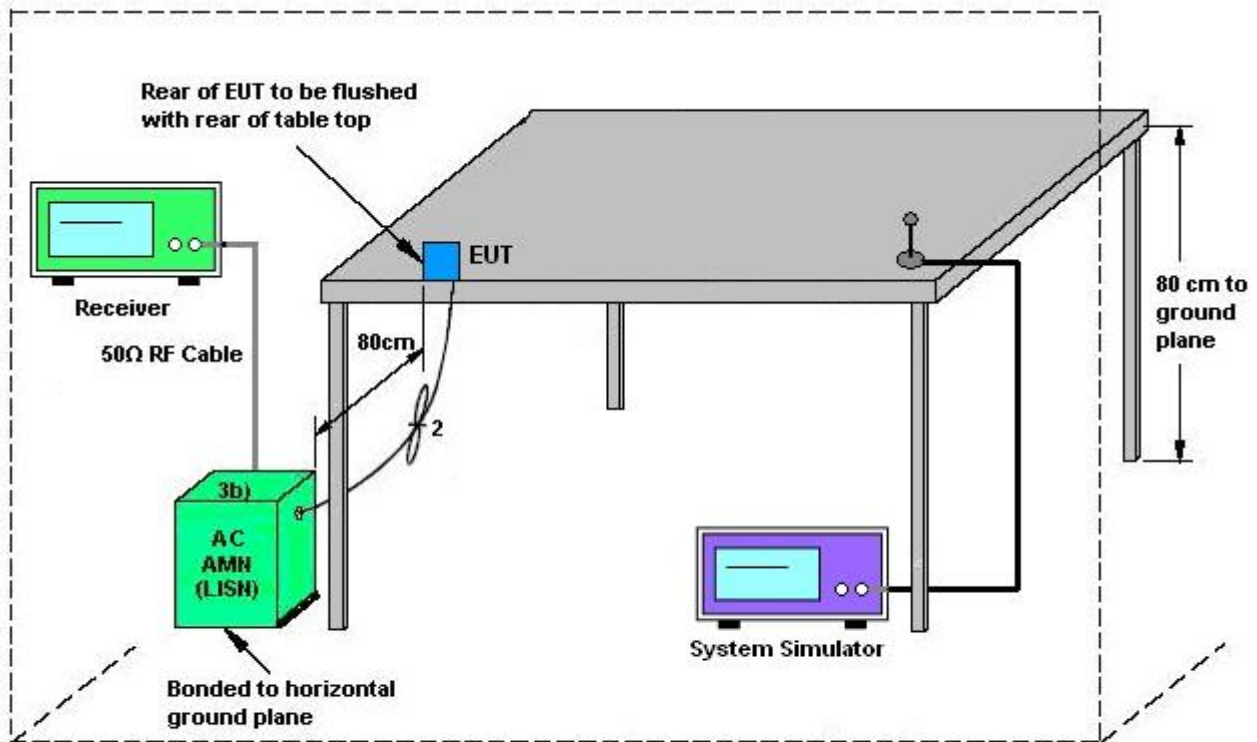
3.5.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.5.3 Test Procedures

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.

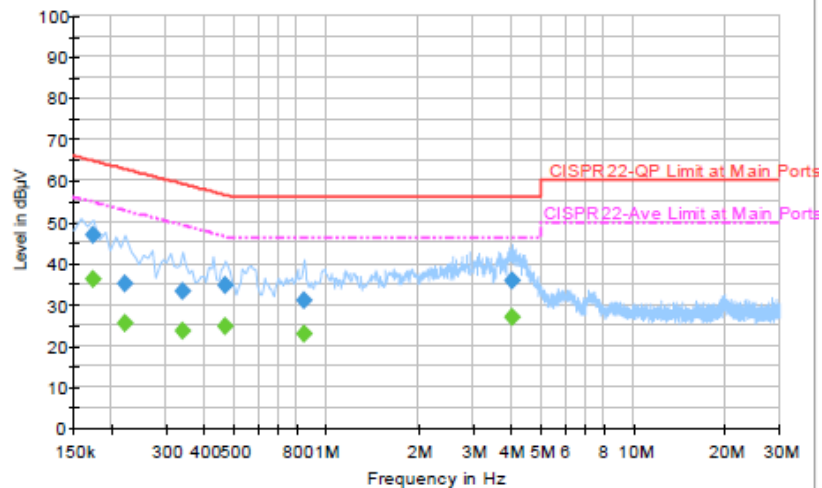
3.5.4 Test Setup



AMN = Artificial mains network (LISH)
AE = Associated equipment
EUT = Equipment under test
ISN = Impedance stabilization network

3.5.5 Test Result of AC Conducted Emission

Test Mode :	Mode 2	Temperature :	20~22°C
Test Engineer :	Kai-Chun Chu	Relative Humidity :	46~48%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	GSM850 (GPRS class 8) Idle + WLAN (5GHz) Link + Earphone + HDMI Cable with Monitor + HDMI to uUSB Dongle + USB Cable (Charging from Adapter) + Camera (Front)		



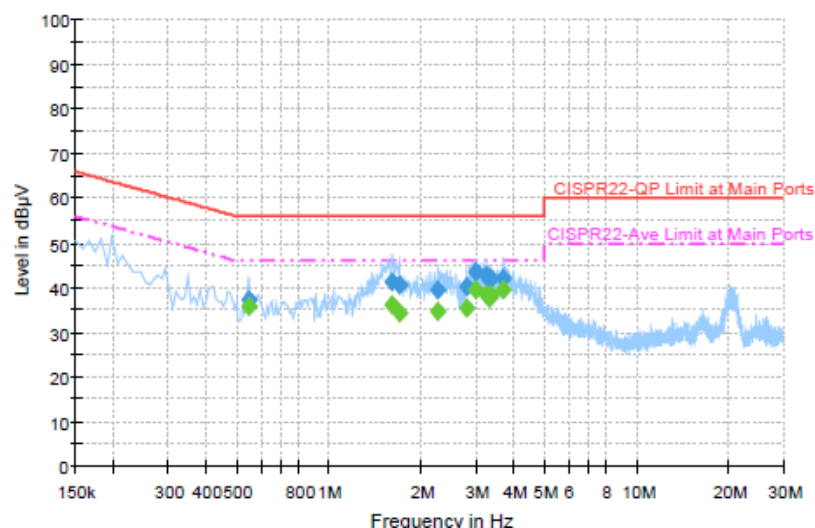
Final Result : QuasiPeak

Frequency (MHz)	QuasiPeak (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.174000	46.7	Off	L1	19.3	18.1	64.8
0.222000	34.9	Off	L1	19.3	27.8	62.7
0.342000	33.3	Off	L1	19.4	25.9	59.2
0.470000	34.7	Off	L1	19.4	21.8	56.5
0.846000	30.9	Off	L1	19.6	25.1	56.0
4.038000	35.7	Off	L1	19.6	20.3	56.0

Final Result : Average

Frequency (MHz)	Average (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.174000	36.1	Off	L1	19.3	18.7	54.8
0.222000	25.5	Off	L1	19.3	27.2	52.7
0.342000	23.8	Off	L1	19.4	25.4	49.2
0.470000	24.7	Off	L1	19.4	21.8	46.5
0.846000	22.9	Off	L1	19.6	23.1	46.0
4.038000	26.8	Off	L1	19.6	19.2	46.0

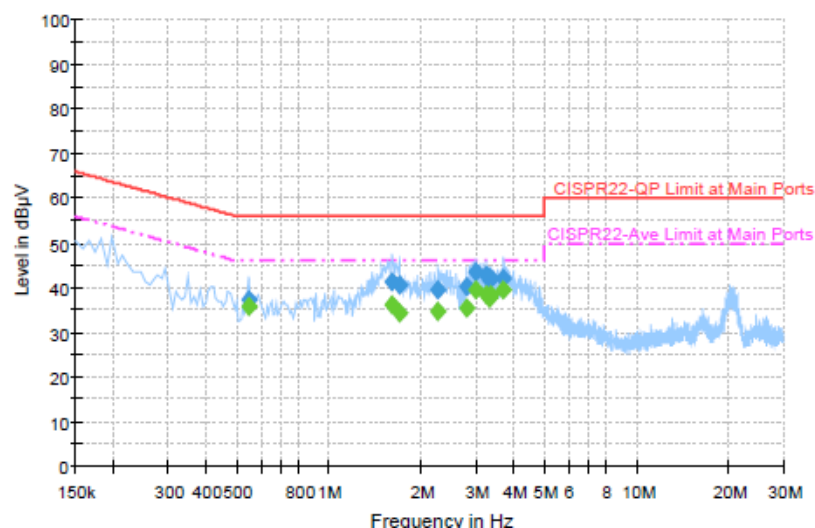
Test Mode :	Mode 2	Temperature :	20~22℃
Test Engineer :	Kai-Chun Chu	Relative Humidity :	46~48%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	GSM850 (GPRS class 8) Idle + WLAN (5GHz) Link + Earphone + HDMI Cable with Monitor + HDMI to uUSB Dongle + USB Cable (Charging from Adapter) + Camera (Front)		



Final Result : QuasiPeak

Frequency (MHz)	QuasiPeak (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.550000	37.3	Off	N	19.4	18.7	56.0
1.606000	41.3	Off	N	19.5	14.7	56.0
1.694000	40.8	Off	N	19.6	15.2	56.0
2.270000	39.7	Off	N	19.5	16.3	56.0
2.798000	40.2	Off	N	19.6	15.8	56.0
2.990000	43.5	Off	N	19.6	12.5	56.0
3.246000	42.9	Off	N	19.6	13.1	56.0
3.310000	41.6	Off	N	19.6	14.4	56.0
3.382000	42.2	Off	N	19.6	13.8	56.0
3.702000	42.1	Off	N	19.6	13.9	56.0

Test Mode :	Mode 2	Temperature :	20~22℃
Test Engineer :	Kai-Chun Chu	Relative Humidity :	46~48%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	GSM850 (GPRS class 8) Idle + WLAN (5GHz) Link + Earphone + HDMI Cable with Monitor + HDMI to uUSB Dongle + USB Cable (Charging from Adapter) + Camera (Front)		



Final Result : Average

Frequency (MHz)	Average (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.550000	35.7	Off	N	19.4	10.3	46.0
1.606000	36.0	Off	N	19.5	10.0	46.0
1.694000	34.5	Off	N	19.6	11.5	46.0
2.270000	34.6	Off	N	19.5	11.4	46.0
2.798000	35.3	Off	N	19.6	10.7	46.0
2.990000	39.5	Off	N	19.6	6.5	46.0
3.246000	38.5	Off	N	19.6	7.5	46.0
3.310000	37.5	Off	N	19.6	8.5	46.0
3.382000	38.5	Off	N	19.6	7.5	46.0
3.702000	39.7	Off	N	19.6	6.3	46.0

3.6 Frequency Stability Measurement

3.6.1 Limit of Frequency Stability

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

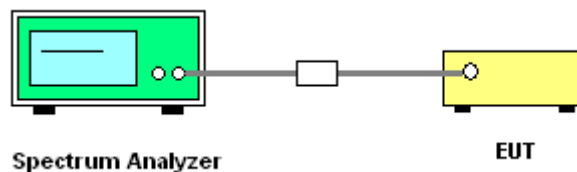
3.6.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.6.3 Test Procedures

1. To ensure emission at the band edge is maintained within the authorized band, those values shall be measured by radiation emissions at upper and lower frequency points, and finally compensated by frequency deviation as procedures below.
2. The EUT was operated at the maximum output power, and connected to the spectrum analyzer, which is set to maximum hold function and peak detector. The peak value of the power envelope was measured and noted. The upper and lower frequency points were respectively measured relatively 10dB lower than the measured peak value.
3. The frequency deviation was calculated by adding the upper frequency point and the lower frequency point divided by two. Those detailed values of frequency deviation are provided in table below.

3.6.4 Test Setup



3.6.5 Test Result of Frequency Stability

Test Band :	5GHz band 1,2,3	Test Engineer :	Bill Kuo and Stuart Lin
--------------------	-----------------	------------------------	-------------------------

Mod.	Data Rate	N _{TX}	Channel	Freq. (MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stability (ppm)	Temperature (°C)	Voltage (V)
11a	6Mbps	1	36	5180	5180.000	0.000	0.00	20	3.4
11a	6Mbps	1	36	5180	5180.000	0.000	0.00	20	4.2
11a	6Mbps	1	36	5180	5180.000	0.000	0.00	20	3.7
11a	6Mbps	1	36	5180	5180.000	0.000	0.00	0	3.7
11a	6Mbps	1	36	5180	5180.000	0.000	0.00	50	3.7

Mod.	Data Rate	N _{TX}	Channel	Freq. (MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stability (ppm)	Temperature (°C)	Voltage (V)
11a	6Mbps	1	64	5320	5320.000	0.000	0.00	20	3.4
11a	6Mbps	1	64	5320	5320.000	0.000	0.00	20	4.2
11a	6Mbps	1	64	5320	5319.950	-0.050	-9.40	20	3.7
11a	6Mbps	1	64	5320	5320.000	0.000	0.00	0	3.7
11a	6Mbps	1	64	5320	5320.000	0.000	0.00	50	3.7

Mod.	Data Rate	N _{TX}	Channel	Freq. (MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stability (ppm)	Temperature (°C)	Voltage (V)
11a	6Mbps	1	100	5500	5500.000	0.000	0.00	20	3.4
11a	6Mbps	1	100	5500	5500.000	0.000	0.00	20	4.2
11a	6Mbps	1	100	5500	5500.000	0.000	0.00	20	3.7
11a	6Mbps	1	100	5500	5499.975	-0.025	-4.55	0	3.7
11a	6Mbps	1	100	5500	5500.000	0.000	0.00	50	3.7

Note:

- Center Frequency = (Low Frequency + High Frequency) / 2.
- EUT will turn off WLAN signal when operating temperature is lower than -10°C.

3.7 Automatically Discontinue Transmission

3.7.1 Limit of Automatically Discontinue Transmission

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signaling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization to describe how this requirement is met.

3.7.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.7.3 Test Result of Automatically Discontinue Transmission

While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.

3.8 Antenna Requirements

3.8.1 Standard Applicable

According to FCC 47 CFR Section 15.407(a)(1)(2) ,if transmitting antenna directional gain is greater than 6 dBi, both the peak transmit power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.8.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.8.3 Antenna Gain

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

$$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$$

where

Each antenna is driven by no more than one spatial stream;

N_{SS} = the number of independent spatial streams of data;

N_{ANT} = the total number of antennas

$g_{j,k} = 10^{G_k / 20}$ if the k th antenna is being fed by spatial stream j , or zero if it is not;

G_k is the gain in dBi of the k th antenna.

The EUT supports CDD mode.

The power and PSD limit should be modified if the directional gain of EUT is over 6 dBi,

The directional gain “DG” is calculated as following table.

			DG	DG	Power	PSD
			for	for	Limit	Limit
	Ant 1	Ant 2	Power	PSD	Reduction	Reduction
	(dBi)	(dBi)	(dBi)	(dBi)	(dB)	(dB)
Band I	2.50	2.60	5.56	5.56	0.00	0.00
Band II	1.89	3.20	5.58	5.58	0.00	0.00
Band III	0.65	2.40	4.58	4.58	0.00	0.00

Power Limit Reduction = DG(Power) – 6dBi, (min = 0)

PSD Limit Reduction = DG(PSD) – 6dBi, (min = 0)

4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	Rohde & Schwarz	FSP40	100055	9kHz~40GHz	Jun. 07, 2013	Apr. 14, 2014~ Jun. 05, 2014	Jun. 06, 2014	Conducted (TH02-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100055	9kHz~40GHz	Jun. 09, 2014	Jun. 10, 2014~ Aug. 22, 2014	Jun. 08, 2015	Conducted (TH02-HY)
Power Meter	Anritsu	ML2495A	1036004	300MHz~40GHz	Aug. 17, 2013	Apr. 14, 2014~ Jul. 24, 2014	Aug. 16, 2014	Conducted (TH02-HY)
Power Sensor	Anritsu	MA2411B	1027253	300MHz~40GHz	Aug. 17, 2013	Apr. 14, 2014~ Jul. 24, 2014	Aug. 16, 2014	Conducted (TH02-HY)
EMI Test Receiver	Rohde & Schwarz	ESU26	100472	20Hz ~ 26.5GHz	Jan. 15, 2014	May 03, 2014~ Jul. 17, 2014	Jan. 14, 2015	Radiation (03CH08-HY)
Bilog Antenna	Teseq GmbH	CBL6112D	35379	30MHz~2GHz	Oct. 10, 2013	May 03, 2014~ Jul. 17, 2014	Oct. 09, 2014	Radiation (03CH08-HY)
Horn Antenna	ESCO	3117	000143261	1GHz~18GHz	Jan. 16, 2014	May 03, 2014~ Jul. 17, 2014	Jan. 15, 2015	Radiation (03CH08-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170251	15GHz~40GHz	Oct. 03, 2013	May 03, 2014~ Jul. 17, 2014	Oct. 02, 2014	Radiation (03CH08-HY)
Amplifier	SONOMA	310N	186713	9kHz~1GHz	Apr. 16, 2014	May 03, 2014~ Jul. 17, 2014	Apr. 15, 2015	Radiation (03CH08-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1590074	1GHz~18GHz	Jul. 09, 2013	May 03, 2014~ Jul. 17, 2014	Jul. 08, 2014	Radiation (03CH08-HY)
Pre Amplifier	Agilent	8449B	3008A02665	1GHz~26.5GHz	Sep. 04, 2013	May 03, 2014~ Jul. 17, 2014	Sep. 03, 2014	Radiation (03CH08-HY)
Turn Table	Chaintek	Chaintek 3000	N/A	0~360 Degree	N/A	May 03, 2014~ Jul. 17, 2014	N/A	Radiation (03CH08-HY)
Antenna Mast	MF	MFA520BS	N/A	1m~4m	N/A	May 03, 2014~ Jul. 17, 2014	N/A	Radiation (03CH08-HY)
EMI Test Receiver	Rohde & Schwarz	ESCS 30	100356	9kHz ~ 2.75GHz	Nov. 15, 2013	Jul. 14, 2014	Nov. 14, 2014	Conduction (CO05-HY)
LISN (for auxiliary equipment)	Rohde & Schwarz	ENV216	100081	9kHz ~ 30MHz	Dec. 12, 2013	Jul. 14, 2014	Dec. 11, 2014	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz ~ 30MHz	Dec. 04, 2013	Jul. 14, 2014	Dec. 03, 2014	Conduction (CO05-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Jul. 14, 2014	N/A	Conduction (CO05-HY)

5 Uncertainty of Evaluation

Uncertainty of Conducted Emission Measurement (150kHz ~ 30MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	2.26
--	------

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	4.30
--	------