



FCC RF Test Report

APPLICANT : Broadcom Corporation
EQUIPMENT : Broadcom 802.11a/b/g/n/ac WLAN + Bluetooth 4.0
NGFF2230 Mini Card
BRAND NAME : Broadcom
MODEL NAME : BCM943162ZP
FCC ID : QDS-BRCM1075
STANDARD : FCC Part 15 Subpart E §15.407
CLASSIFICATION : (NII) Unlicensed National Information Infrastructure

The product was received on May 27, 2014 and testing was completed on Jul. 04, 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



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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR452709-01D	Rev. 01	Initial issue of report	Jul. 28, 2014



SUMMARY OF TEST RESULT

Report Section	FCC Rule	IC Rule	Description	Limit	Result	Remark
3.1	15.407(b)	RSS-210 A9.3	Unwanted Emissions	$\leq -17, -27$ dBm (depend on band)&15.209(a)	Pass	Under limit 0.22 dB at 5377.680 MHz
3.3	15.203 & 15.407(a)	RSS-210 A9.2	Antenna Requirement	N/A	Pass	-



1 General Description

1.1 Applicant

Broadcom Corporation

190 Mathilda Place Sunnyvale CA 94086 U.S.A.

1.2 Manufacturer

Broadcom Corporation

190 Mathilda Place Sunnyvale CA 94086 U.S.A.

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Broadcom 802.11a/b/g/n/ac WLAN + Bluetooth 4.0 NGFF2230 Mini Card
Brand Name	Broadcom
Model Name	BCM943162ZP
FCC ID	QDS-BRCM1075
Installed into Notebook	Brand Name: lenovo Model Name: TP00067A
EUT supports Radios application	WLAN 11b/g/n (HT20/HT40) WLAN 11ac VHT20/VHT40/VHT80 Bluetooth v4.0EDR/LE
EUT Stage	Production Unit

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



1.4 Product Specification subjective to this standard

Product Specification subjective to this standard	
Tx/Rx Frequency Range	5180 MHz ~ 5240 MHz 5260 MHz ~ 5320 MHz 5500 MHz ~ 5580 MHz 5660 MHz ~ 5700 MHz
Maximum Output Power to Antenna	<Ant. 1> <5180 MHz ~ 5240 MHz> 802.11a : 15.38 dBm / 0.0345 W 802.11n HT20 : 15.16 dBm / 0.0328 W 802.11n HT40 : 15.36 dBm / 0.0344 W 802.11ac VHT20 : 15.25 dBm / 0.0335 W 802.11ac VHT40 : 15.39 dBm / 0.0346 W 802.11ac VHT80 : 15.30 dBm / 0.0339 W <5260 MHz ~ 5320 MHz> 802.11a : 15.29 dBm / 0.0338 W 802.11n HT20 : 15.30 dBm / 0.0339 W 802.11n HT40 : 15.29 dBm / 0.0338 W 802.11ac VHT20 : 15.32 dBm / 0.0340 W 802.11ac VHT40 : 15.33 dBm / 0.0341 W 802.11ac VHT80 : 11.82 dBm / 0.0152 W <5500 MHz ~ 5580 MHz and 5660 MHz ~ 5700 MHz > 802.11a : 13.47 dBm / 0.0222 W 802.11n HT20 : 13.34 dBm / 0.0216 W 802.11n HT40 : 13.50 dBm / 0.0224 W 802.11ac VHT20 : 13.39 dBm / 0.0218 W 802.11ac VHT40 : 13.27 dBm / 0.0212 W 802.11ac VHT80 : 13.41 dBm / 0.0219 W <Ant. 2> <5180 MHz ~ 5240 MHz> 802.11a : 15.33 dBm / 0.0341 W 802.11n HT20 : 15.13 dBm / 0.0326 W 802.11n HT40 : 15.10 dBm / 0.0324 W 802.11ac VHT20 : 15.19 dBm / 0.0330 W 802.11ac VHT40 : 15.19 dBm / 0.0330 W 802.11ac VHT80 : 15.18 dBm / 0.0330 W <5260 MHz ~ 5320 MHz> 802.11a : 15.22 dBm / 0.0333 W 802.11n HT20 : 15.29 dBm / 0.0338 W 802.11n HT40 : 15.30 dBm / 0.0339 W 802.11ac VHT20 : 15.30 dBm / 0.0339 W 802.11ac VHT40 : 15.35 dBm / 0.0343 W 802.11ac VHT80 : 11.68 dBm / 0.0147 W <5500 MHz ~ 5580 MHz and 5660 MHz ~ 5700 MHz > 802.11a : 13.35 dBm / 0.0216 W 802.11n HT20 : 13.24 dBm / 0.0211 W 802.11n HT40 : 13.37 dBm / 0.0217 W 802.11ac VHT20 : 13.27 dBm / 0.0212 W 802.11ac VHT40 : 13.48 dBm / 0.0223 W 802.11ac VHT80 : 13.38 dBm / 0.0218 W

Product Specification subjective to this standard			
Type of Modulation		802.11a/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11ac : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM)	
Antenna Function for Transmitter			Chain Port 0 Ant. 1
		802.11 a/b/g	V
		802.11 n/ac SISO	V

Lonestar Antenna Information			
Antenna 1	Manufacturer	Speed	
	Antenna Type	Main: PIFA Antenna	Aux.: PIFA Antenna
	Antenna P/N	DC330018300	DC330018310
	Peak gain	Main Antenna : WLAN(2.4GHz):0.29dBi WLAN(5GHz):0.97dBi	Aux. Antenna : WLAN(2.4GHz):-0.11dBi Bluetooth :-0.11dBi WLAN(5GHz):0.34dBi
Antenna 2	Manufacturer	Yageo	
	Antenna Type	Main:PIFA Antenna	Aux.: PIFA Antenna
	Antenna P/N	DC330018100	DC330018110
	Peak gain	Main Antenna : WLAN(2.4GHz):1.92dBi WLAN(5GHz):1.26dBi	Aux. Antenna : WLAN (2.4GHz) :-2.84dBi Bluetooth : -2.84dBi WLAN(5GHz):-0.73dBi

1.5 Modification of EUT

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

1.6 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	03CH06-HY

Note: The test site complies with ANSI C63.4 2003 requirement.

1.7 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 644545 D01 Guidance for IEEE 802.11ac and Pre-ac Device Emissions Testing v01r02.
- FCC KDB 789033 D01 General UNII Test Procedures Old Rules v01r04
- ANSI C63.4-2003

Remark: All test items were verified and recorded according to the standards and without any deviation during the test.



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).

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 Channel

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5150-5250 MHz Band 1 (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 2 (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)
5470-5600 MHz and 5650-5725 MHz Band 3 (U-NII-2C)	100	5500	112	5560
	102	5510	116	5580
	104	5520	132	5660
	106	5530	134	5670
	108	5540	136	5680
	110	5550	140	5700

Note: The above Frequency and Channel in boldface were 802.11n HT40.

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.

<Ant. 1>

5GHz 802.11a mode								
Data Rate (MHz)	6M bps	9M bps	12M bps	18M bps	24M bps	36M bps	48M bps	54M bps
Avg. Power (dBm) <5180 MHz ~ 5240MHz>	15.38	15.20	15.14	15.23	15.26	15.24	15.28	15.31
Avg. Power(dBm) <5260 MHz ~ 5320MHz>	15.29	15.18	15.25	15.21	15.18	15.28	15.23	15.26
Avg. Power(dBm) <5500 MHz ~ 5580MHz>& <5660 MHz ~ 5700MHz>	13.47	13.35	13.38	13.42	13.31	13.34	13.44	13.39

5GHz 802.11n HT20 mode								
Data Rate (MHz)	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
Avg. Power (dBm) <5180 MHz ~ 5240MHz>	15.16	15.11	15.09	15.10	15.07	15.07	15.14	15.13
Avg. Power(dBm) <5260 MHz ~ 5320MHz>	15.30	15.28	15.21	15.16	15.29	15.25	15.26	15.22
Avg. Power(dBm) <5500 MHz ~ 5580MHz>& <5660 MHz ~ 5700MHz>	13.34	13.31	13.28	13.21	13.20	13.25	13.26	13.24

5GHz 802.11n HT40mode								
Data Rate (MHz)	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
Avg. Power (dBm) <5180 MHz ~ 5240MHz>	15.36	15.24	15.24	15.27	15.34	15.31	15.29	15.32
Avg. Power(dBm) <5260 MHz ~ 5320MHz>	15.29	15.12	15.18	15.11	15.14	15.21	15.22	15.22
Avg. Power(dBm) <5500 MHz ~ 5580MHz>& <5660 MHz ~ 5700MHz>	13.50	13.38	13.44	13.43	13.42	13.42	13.27	13.39



5GHz 802.11ac VHT20 mode									
Data Rate (MHz)	MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7	MCS 8
Avg. Power (dBm) <5180 MHz ~ 5240MHz>	15.25	15.24	15.20	15.19	15.20	15.19	15.21	15.23	15.17
Avg. Power(dBm) <5260 MHz ~ 5320MHz>	15.32	15.31	15.23	15.22	15.24	15.20	15.31	15.19	15.23
Avg. Power(dBm) <5500 MHz ~ 5580MHz>& <5660 MHz ~ 5700MHz>	13.39	13.36	13.34	13.37	13.30	13.20	13.32	13.30	13.29

5GHz 802.11ac VHT40 mode										
Data Rate (MHz)	MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7	MCS 8	MCS 9
Avg. Power (dBm) <5180 MHz ~ 5240MHz>	15.39	15.36	15.30	15.37	15.38	15.34	15.19	15.12	15.24	15.30
Avg. Power(dBm) <5260 MHz ~ 5320MHz>	15.33	15.32	15.29	15.27	15.27	15.32	15.26	15.22	15.21	15.29
Avg. Power(dBm) <5500 MHz ~ 5580MHz>& <5660 MHz ~ 5700MHz>	13.27	13.26	13.23	13.22	13.24	13.26	13.17	13.14	13.11	13.15

5GHz 802.11ac VHT80 mode										
Data Rate (MHz)	MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7	MCS 8	MCS 9
Avg. Power (dBm) <5180 MHz ~ 5240MHz>	15.30	15.25	15.23	15.26	15.23	15.14	15.27	15.13	15.12	15.24



<Ant. 2>

5GHz 802.11a mode								
Data Rate (MHz)	6M bps	9M bps	12M bps	18M bps	24M bps	36M bps	48M bps	54M bps
Avg. Power (dBm) <5180 MHz ~ 5240MHz>	15.33	15.02	15.17	15.04	15.28	15.32	15.31	15.26
Avg. Power(dBm) <5260 MHz ~ 5320MHz>	15.22	15.06	15.17	15.15	15.19	15.21	15.17	15.21
Avg. Power(dBm) <5500 MHz ~ 5580MHz>& <5660 MHz ~ 5700MHz>	13.35	13.25	13.29	13.24	13.20	13.31	13.31	13.32

5GHz 802.11n HT20 mode								
Data Rate (MHz)	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
Avg. Power (dBm) <5180 MHz ~ 5240MHz>	15.13	15.08	15.06	15.02	15.12	15.06	15.05	15.05
Avg. Power(dBm) <5260 MHz ~ 5320MHz>	15.29	15.21	15.24	15.19	15.22	15.28	15.27	15.22
Avg. Power(dBm) <5500 MHz ~ 5580MHz>& <5660 MHz ~ 5700MHz>	13.24	13.22	13.16	13.11	13.14	13.19	13.19	13.12

5GHz 802.11n HT40mode								
Data Rate (MHz)	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
Avg. Power (dBm) <5180 MHz ~ 5240MHz>	15.10	15.02	15.03	15.03	15.07	15.03	15.05	15.06
Avg. Power(dBm) <5260 MHz ~ 5320MHz>	15.30	15.21	15.06	15.10	15.29	15.25	15.18	15.13
Avg. Power(dBm) <5500 MHz ~ 5580MHz>& <5660 MHz ~ 5700MHz>	13.37	13.34	13.19	13.24	13.35	13.35	13.32	13.27



5GHz 802.11ac VHT20 mode									
Data Rate (MHz)	MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7	MCS 8
Avg. Power (dBm) <5180 MHz ~ 5240MHz>	15.19	15.14	15.16	15.07	15.10	15.09	15.15	15.10	15.17
Avg. Power(dBm) <5260 MHz ~ 5320MHz>	15.30	15.28	15.21	15.21	15.23	15.21	15.23	15.16	15.25
Avg. Power(dBm) <5500 MHz ~ 5580MHz>& <5660 MHz ~ 5700MHz>	13.27	13.22	13.22	13.17	13.23	13.18	13.11	13.16	13.20

5GHz 802.11ac VHT40 mode										
Data Rate (MHz)	MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7	MCS 8	MCS 9
Avg. Power (dBm) <5180 MHz ~ 5240MHz>	15.19	15.11	15.14	15.09	15.10	15.12	15.15	15.09	15.13	15.05
Avg. Power(dBm) <5260 MHz ~ 5320MHz>	15.35	15.28	15.22	15.12	15.32	15.27	15.23	15.28	15.25	15.20
Avg. Power(dBm) <5500 MHz ~ 5580MHz>& <5660 MHz ~ 5700MHz>	13.48	13.37	13.33	13.46	13.45	13.37	13.35	13.28	13.21	13.28

5GHz 802.11ac VHT80 mode										
Data Rate (MHz)	MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7	MCS 8	MCS 9
Avg. Power (dBm) <5180 MHz ~ 5240MHz>	15.18	15.12	15.15	15.11	15.05	15.13	15.06	15.15	15.09	15.05

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
	Output Power	802.11a	6 Mbps	L/M/H
		802.11n HT20	MCS0	L/M/H
		802.11n HT40	MCS0	L/M/H
		802.11ac VHT20	MCS0	L/M/H
		802.11ac VHT40	MCS0	L/M/H
		802.11ac VHT80	MCS0	M
Radiated TCs	Radiated Band Edge	802.11a	6 Mbps	L/H
		802.11n HT20	MCS0	L/H
		802.11n HT40	MCS0	L/H
		802.11ac VHT80	MCS0	M
	Radiated Spurious Emission	802.11a	6 Mbps	L/M/H
		802.11n HT20	MCS0	L/M/H
		802.11n HT40	MCS0	L/M/H
		802.11ac VHT80	MCS0	M



Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5600 MHz and 5650-5725MHz
		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 : 5470-5600 MHz and 5650-5725MHz
		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 : 5470-5600 MHz and 5650-5725MHz
		802.11n HT40	802.11n HT40	802.11n HT40
L	Low	38	54	102
M	Middle	-	-	110
H	High	46	62	134

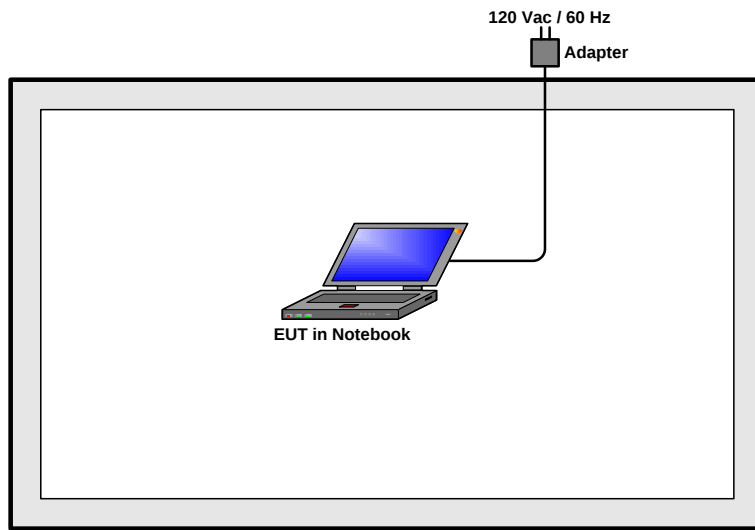
Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5600 MHz and 5650-5725MHz
		802.11ac VHT20	802.11ac VHT20	802.11ac VHT20
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140



Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5600 MHz and 5650-5725MHz
		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 : 5470-5600 MHz and 5650-5725MHz
		802.11ac VHT80	802.11ac VHT80	802.11ac VHT80
L	Low	-	-	-
M	Middle	42	58	106
H	High	-	-	-

2.4 Connection Diagram of Test System



2.5 EUT Operation Test Setup

The programmed RF utility "Mtool" is installed in EUT to provide channel selection, power level, data rate and the application type. RF Utility can send transmitting signal for all testing. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product.

2.6 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 Unwanted Radiated Emission 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.

3.1.1 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 Old Rules v01r04 H)2)c(i) 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.

3.1.2 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 D01 General UNII Test Procedures Old Rules v01r04.

Section H) 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

- The setting follows the H) 5) of FCC KDB 789033.
- 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

- The setting follows H) 6) of FCC KDB 789033.
- 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.

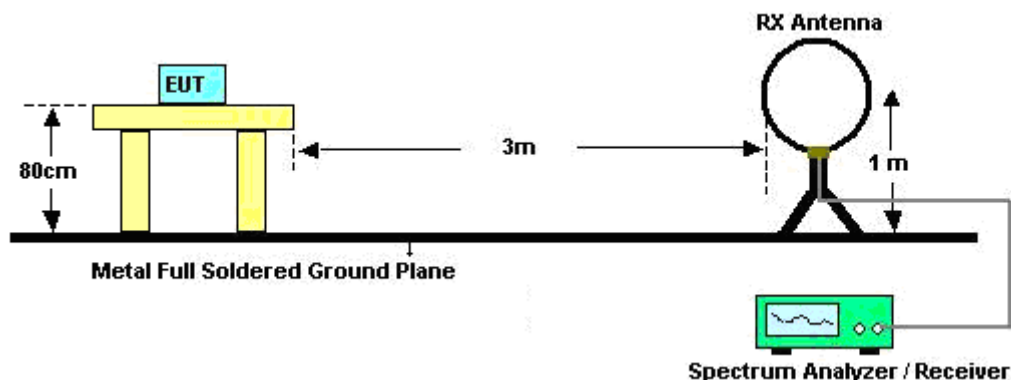


Antenna	Band	Duty Cycle(%)	T(μs)	1/T(kHz)	VBW Setting
1	802.11a	95.03	2064	0.484496124	1kHz
2	802.11a	94.95	2070	0.483091787	1kHz
1	5GHz 802.11n HT20 for Ant 1	95.07	1930	0.518134715	1kHz
2	5GHz 802.11n HT20 for Ant 2	95.07	1930	0.518134715	1kHz
1	5GHz 802.11n HT40 for Ant 1	90.29	948	1.054852321	3kHz
2	5GHz 802.11n HT40 for Ant 2	90.29	948	1.054852321	3kHz
1	5GHz 802.11ac VHT20 for Ant 1	98.48	1940	0.515463918	10Hz
2	5GHz 802.11ac VHT20 for Ant 2	98.47	1930	0.518134715	10Hz
1	5GHz 802.11ac VHT40 for Ant 1	96.36	954	1.048218029	3kHz
2	5GHz 802.11ac VHT40 for Ant 2	96.97	960	1.041666667	3kHz
1	5GHz 802.11ac VHT40 for Ant 1	93.55	464	2.155172414	3kHz
2	5GHz 802.11ac VHT40 for Ant 2	93.55	464	2.155172414	3kHz

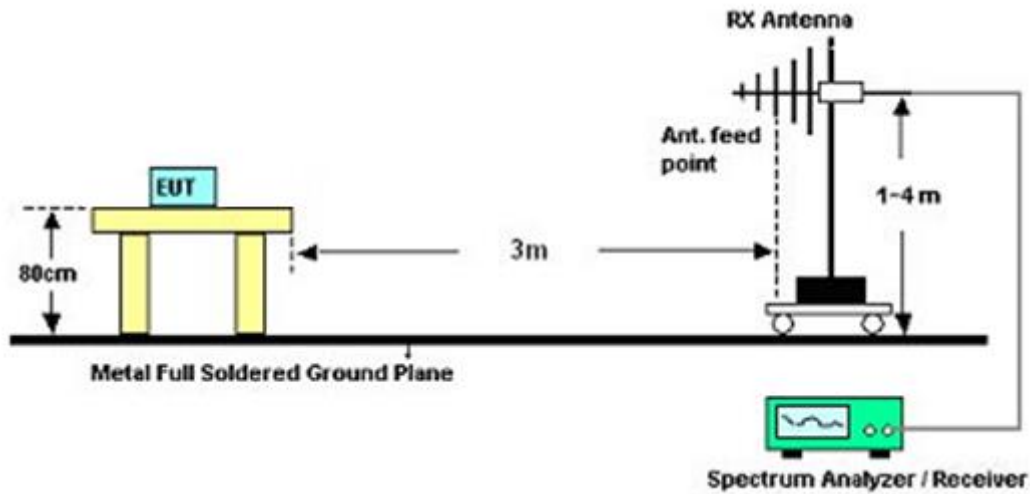
2. The EUT was placed on a rotatable table top 0.8 meter above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband antenna and its height is adjusted between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. 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.
6. 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.
7. 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.

3.1.4 Test Setup

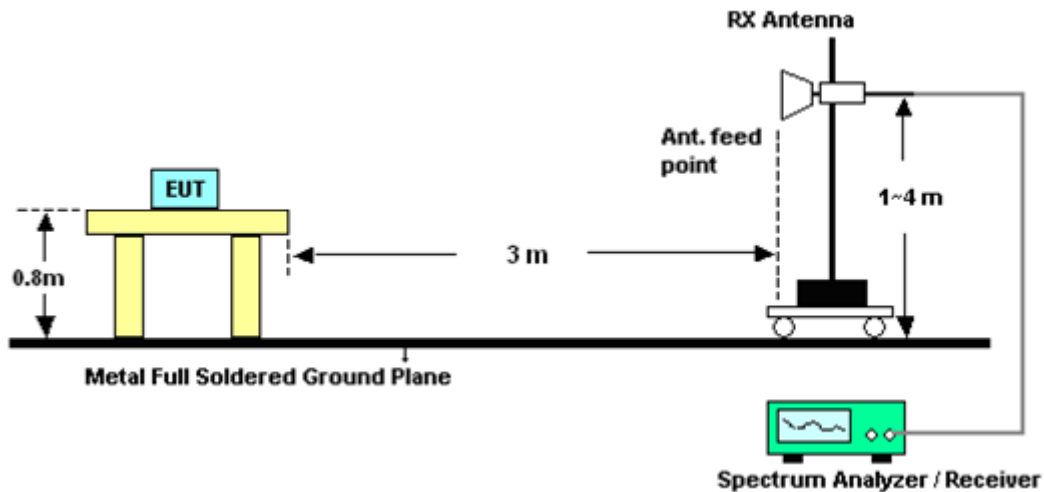
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



3.1.5 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.



3.1.6 Test Result

3.1.6.1 Test Result of Radiated Band Edges

<Ant. 1>

Test Mode :	802.11a	Temperature :	22~25°C
Test Channel :	36	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu		

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
5145.95	64.48	-9.52	74	53.58	34.45	10.44	33.99	111	324	Peak
5148.95	49.41	-4.59	54	38.51	34.45	10.44	33.99	111	324	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
5148.35	64.84	-9.16	74	53.94	34.45	10.44	33.99	100	243	Peak
5148.5	49.57	-4.43	54	38.67	34.45	10.44	33.99	100	243	Average



Test Mode :	802.11a	Temperature :	22~25°C
Test Channel :	48	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu		

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
5145.95	55.63	-18.37	74	44.73	34.45	10.44	33.99	123	323	Peak
5150	44.11	-9.89	54	33.21	34.45	10.44	33.99	123	323	Average
5417.87	54.85	-19.15	74	43.29	34.72	10.82	33.98	123	323	Peak
5452.63	44.35	-9.65	54	32.69	34.75	10.89	33.98	123	323	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
5147.15	54.91	-19.09	74	44.01	34.45	10.44	33.99	100	296	Peak
5150	43.96	-10.04	54	33.06	34.45	10.44	33.99	100	296	Average
5451.42	55.44	-18.56	74	43.81	34.75	10.86	33.98	100	296	Peak
5455.6	44.26	-9.74	54	32.6	34.75	10.89	33.98	100	296	Average



Test Mode :	802.11a	Temperature :	22~25°C
Test Channel :	52	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu		

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	55.37	-18.63	74	44.47	34.45	10.44	33.99	121	323	Peak
5148.2	44.02	-9.98	54	33.12	34.45	10.44	33.99	121	323	Average
5369.47	55.66	-18.34	74	44.22	34.67	10.75	33.98	121	323	Peak
5376.18	44.71	-9.29	54	33.27	34.67	10.75	33.98	121	323	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
5115.8	54.74	-19.26	74	43.94	34.42	10.37	33.99	100	285	Peak
5149.85	44.02	-9.98	54	33.12	34.45	10.44	33.99	100	285	Average
5366.06	55.4	-18.6	74	43.96	34.67	10.75	33.98	100	285	Peak
5447.79	44.2	-9.8	54	32.57	34.75	10.86	33.98	100	285	Average

Test Mode :	802.11a	Temperature :	22~25°C
Test Channel :	64	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu		

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
5350.55	64.74	-9.26	74	53.35	34.65	10.72	33.98	118	285	Peak
5350.11	50.4	-3.6	54	39.01	34.65	10.72	33.98	118	285	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
5350.33	62.83	-11.17	74	51.44	34.65	10.72	33.98	109	242	Peak
5350.22	48.19	-5.81	54	36.8	34.65	10.72	33.98	109	242	Average



Test Mode :	802.11a	Temperature :	22~25°C
Test Channel :	100	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu		

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	61.12	-12.88	74	49.44	34.77	10.89	33.98	100	276	Peak
5469.68	48.53	-5.47	54	36.85	34.77	10.89	33.98	100	276	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
5468.08	61.13	-12.87	74	49.45	34.77	10.89	33.98	104	246	Peak
5466.64	48.31	-5.69	54	36.63	34.77	10.89	33.98	104	246	Average

Test Mode :	802.11a	Temperature :	22~25°C
Test Channel :	140	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu		

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
5725.48	63.04	-10.96	74	50.67	35.02	11.34	33.99	108	276	Peak
5725.16	49.06	-4.94	54	36.69	35.02	11.34	33.99	108	276	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
5726.04	61.9	-12.1	74	49.53	35.02	11.34	33.99	100	243	Peak
5730.92	48.08	-5.92	54	35.71	35.02	11.34	33.99	100	243	Average



Test Mode :	802.11n HT20	Temperature :	22~25°C
Test Channel :	36	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu		

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	65.19	-8.81	74	54.29	34.45	10.44	33.99	121	308	Peak
5149.85	49.7	-4.3	54	38.8	34.45	10.44	33.99	121	308	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
5143.25	63.7	-10.3	74	52.8	34.45	10.44	33.99	110	246	Peak
5150	48.9	-5.1	54	38	34.45	10.44	33.99	110	246	Average

Test Mode :	802.11n HT20	Temperature :	22~25°C
Test Channel :	48	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu		

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
5071.85	54.99	-19.01	74	44.27	34.38	10.33	33.99	119	288	Peak
5145.65	44.23	-9.77	54	33.33	34.45	10.44	33.99	119	288	Average
5456.59	55.74	-18.26	74	44.08	34.75	10.89	33.98	119	288	Peak
5459.89	44.83	-9.17	54	33.17	34.75	10.89	33.98	119	288	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	55.16	-18.84	74	44.26	34.45	10.44	33.99	110	242	Peak
5149.85	43.95	-10.05	54	33.05	34.45	10.44	33.99	110	242	Average
5414.24	56.02	-17.98	74	44.46	34.72	10.82	33.98	110	242	Peak
5456.26	44.5	-9.5	54	32.84	34.75	10.89	33.98	110	242	Average



Test Mode :	802.11n HT20	Temperature :	22~25°C
Test Channel :	52	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu		

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
5129	54.87	-19.13	74	44.03	34.43	10.4	33.99	118	289	Peak
5147.45	44.37	-9.63	54	33.47	34.45	10.44	33.99	118	289	Average
5365.4	56.36	-17.64	74	44.92	34.67	10.75	33.98	118	289	Peak
5367.49	45	-9	54	33.56	34.67	10.75	33.98	118	289	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
5131.4	55.17	-18.83	74	44.33	34.43	10.4	33.99	111	241	Peak
5145.95	43.93	-10.07	54	33.03	34.45	10.44	33.99	111	241	Average
5440.75	55.42	-18.58	74	43.81	34.73	10.86	33.98	111	241	Peak
5444.6	44.34	-9.66	54	32.73	34.73	10.86	33.98	111	241	Average

Test Mode :	802.11n HT20	Temperature :	22~25°C
Test Channel :	64	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu		

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
5350	68.28	-5.72	74	56.89	34.65	10.72	33.98	116	285	Peak
5350.11	51.6	-2.4	54	40.21	34.65	10.72	33.98	116	285	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
5350.33	65.26	-8.74	74	53.87	34.65	10.72	33.98	107	242	Peak
5350	49.88	-4.12	54	38.49	34.65	10.72	33.98	107	242	Average



Test Mode :	802.11n HT20	Temperature :	22~25°C
Test Channel :	100	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu		

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
5462.48	60.94	-13.06	74	49.28	34.75	10.89	33.98	114	282	Peak
5469.36	48.32	-5.68	54	36.64	34.77	10.89	33.98	114	282	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
5468.72	60.1	-13.9	74	48.42	34.77	10.89	33.98	106	252	Peak
5469.68	48.08	-5.92	54	36.4	34.77	10.89	33.98	106	252	Average

Test Mode :	802.11n HT20	Temperature :	22~25°C
Test Channel :	140	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu		

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
5729.16	64.18	-9.82	74	51.81	35.02	11.34	33.99	120	268	Peak
5730.36	49.79	-4.21	54	37.42	35.02	11.34	33.99	120	268	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
5725.08	62.79	-11.21	74	50.42	35.02	11.34	33.99	101	257	Peak
5725.08	49.4	-4.6	54	37.03	35.02	11.34	33.99	101	257	Average



Test Mode :	802.11n HT40	Temperature :	22~25°C
Test Channel :	38	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu		

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	67.07	-6.93	74	56.17	34.45	10.44	33.99	123	294	Peak
5150	52.19	-1.81	54	41.29	34.45	10.44	33.99	123	294	Average
5401.92	54.93	-19.07	74	43.42	34.7	10.79	33.98	123	294	Peak
5458.35	44.51	-9.49	54	32.85	34.75	10.89	33.98	123	294	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	64.06	-9.94	74	53.16	34.45	10.44	33.99	100	242	Peak
5149.1	50.07	-3.93	54	39.17	34.45	10.44	33.99	100	242	Average
5358.03	55.24	-18.76	74	43.82	34.65	10.75	33.98	100	242	Peak
5418.31	44.36	-9.64	54	32.8	34.72	10.82	33.98	100	242	Average



Test Mode :	802.11n HT40	Temperature :	22~25°C
Test Channel :	46	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu		

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	61.9	-12.1	74	51	34.45	10.44	33.99	107	287	Peak
5149.25	48.49	-5.51	54	37.59	34.45	10.44	33.99	107	287	Average
5373.87	56.34	-17.66	74	44.9	34.67	10.75	33.98	107	287	Peak
5373.87	45.08	-8.92	54	33.64	34.67	10.75	33.98	107	287	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
5149.85	60.61	-13.39	74	49.71	34.45	10.44	33.99	100	241	Peak
5150	47.38	-6.62	54	36.48	34.45	10.44	33.99	100	241	Average
5418.09	55.58	-18.42	74	44.02	34.72	10.82	33.98	100	241	Peak
5355.83	44.78	-9.22	54	33.39	34.65	10.72	33.98	100	241	Average



Test Mode :	802.11n HT40	Temperature :	22~25°C
Test Channel :	54	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu		

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
5141.9	56.32	-17.68	74	45.42	34.45	10.44	33.99	107	286	Peak
5148.95	45.65	-8.35	54	34.75	34.45	10.44	33.99	107	286	Average
5353.74	61.24	-12.76	74	49.85	34.65	10.72	33.98	107	286	Peak
5350.55	47.79	-6.21	54	36.4	34.65	10.72	33.98	107	286	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
5148.35	55.87	-18.13	74	44.97	34.45	10.44	33.99	100	240	Peak
5147.45	44.75	-9.25	54	33.85	34.45	10.44	33.99	100	240	Average
5352.2	60.22	-13.78	74	48.83	34.65	10.72	33.98	100	240	Peak
5350.22	46.5	-7.5	54	35.11	34.65	10.72	33.98	100	240	Average



Test Mode :	802.11n HT40	Temperature :	22~25°C
Test Channel :	62	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu		

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
5140.25	55	-19	74	44.1	34.45	10.44	33.99	108	304	Peak
5146.7	44.23	-9.77	54	33.33	34.45	10.44	33.99	108	304	Average
5357.81	68.06	-5.94	74	56.64	34.65	10.75	33.98	108	304	Peak
5353.08	53.58	-0.42	54	42.19	34.65	10.72	33.98	108	304	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
5081.6	55.16	-18.84	74	44.44	34.38	10.33	33.99	100	239	Peak
5147.45	44.19	-9.81	54	33.29	34.45	10.44	33.99	100	239	Average
5355.28	65.62	-8.38	74	54.23	34.65	10.72	33.98	100	239	Peak
5354.29	50.44	-3.56	54	39.05	34.65	10.72	33.98	100	239	Average



Test Mode :	802.11n HT40	Temperature :	22~25°C
Test Channel :	102	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu		

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
5460.72	67.96	-6.04	74	56.3	34.75	10.89	33.98	102	282	Peak
5468.4	53.73	-0.27	54	42.05	34.77	10.89	33.98	102	282	Average
5760.68	56.2	-17.8	74	43.75	35.06	11.39	34	102	282	Peak
5760.28	45.32	-8.68	54	32.87	35.06	11.39	34	102	282	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
5459.92	62.27	-11.73	74	50.61	34.75	10.89	33.98	139	114	Peak
5468.24	47.79	-6.21	54	36.11	34.77	10.89	33.98	139	114	Average
5764.92	56.11	-17.89	74	43.62	35.06	11.43	34	139	114	Peak
5754.84	45.26	-8.74	54	32.8	35.06	11.39	33.99	139	114	Average



Test Mode :	802.11n HT40	Temperature :	22~25°C
Test Channel :	110	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu		

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
5466.16	55.62	-18.38	74	43.94	34.77	10.89	33.98	100	276	Peak
5469.2	45.05	-8.95	54	33.37	34.77	10.89	33.98	100	276	Average
5744.6	55.8	-18.2	74	43.36	35.04	11.39	33.99	100	276	Peak
5725.72	45.28	-8.72	54	32.91	35.02	11.34	33.99	100	276	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
5465.68	55.88	-18.12	74	44.2	34.77	10.89	33.98	100	314	Peak
5462.64	44.7	-9.3	54	33.02	34.77	10.89	33.98	100	314	Average
5732.36	56.04	-17.96	74	43.67	35.02	11.34	33.99	100	314	Peak
5753.64	45.13	-8.87	54	32.67	35.06	11.39	33.99	100	314	Average



Test Mode :	802.11n HT40	Temperature :	22~25°C
Test Channel :	134	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu		

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
5409.68	54.71	-19.29	74	43.17	34.7	10.82	33.98	100	261	Peak
5433.52	44.64	-9.36	54	33.03	34.73	10.86	33.98	100	261	Average
5730.44	61.19	-12.81	74	48.82	35.02	11.34	33.99	100	261	Peak
5725.08	48.53	-5.47	54	36.16	35.02	11.34	33.99	100	261	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
5435.76	55.14	-18.86	74	43.53	34.73	10.86	33.98	167	258	Peak
5454.32	44.66	-9.34	54	33	34.75	10.89	33.98	167	258	Average
5726.84	61	-13	74	48.63	35.02	11.34	33.99	167	258	Peak
5726.2	48.49	-5.51	54	36.12	35.02	11.34	33.99	167	258	Average



Test Mode :	802.11n VHT80	Temperature :	22~25°C
Test Channel :	42	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu		

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
5466.64	55.21	-18.79	74	43.53	34.77	10.89	33.98	100	293	Peak
5447.28	44.58	-9.42	54	32.95	34.75	10.86	33.98	100	293	Average
5746.2	55.79	-18.21	74	43.35	35.04	11.39	33.99	100	293	Peak
5762.76	45.25	-8.75	54	32.8	35.06	11.39	34	100	293	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
5354.32	56.39	-17.61	74	45	34.65	10.72	33.98	100	244	Peak
5350	45.6	-8.4	54	34.21	34.65	10.72	33.98	100	244	Average
5729.4	55.61	-18.39	74	43.24	35.02	11.34	33.99	100	244	Peak
5732.12	45.22	-8.78	54	32.85	35.02	11.34	33.99	100	244	Average



Test Mode :	802.11n VHT80	Temperature :	22~25°C
Test Channel :	58	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu		

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
5384.4	68.59	-5.41	74	57.1	34.68	10.79	33.98	100	338	Peak
5377.68	53.78	-0.22	54	42.33	34.68	10.75	33.98	100	338	Average
5729.32	55.39	-18.61	74	43.02	35.02	11.34	33.99	100	338	Peak
5750.2	45.12	-8.88	54	32.68	35.04	11.39	33.99	100	338	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
5355.12	67.64	-6.36	74	56.25	34.65	10.72	33.98	100	241	Peak
5381.2	52.4	-1.6	54	40.91	34.68	10.79	33.98	100	241	Average
5748.6	56.61	-17.39	74	44.17	35.04	11.39	33.99	100	241	Peak
5737.08	45.28	-8.72	54	32.89	35.04	11.34	33.99	100	241	Average



Test Mode :	802.11n VHT80	Temperature :	22~25°C
Test Channel :	106	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu		

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
5440.72	64.13	-9.87	74	52.52	34.73	10.86	33.98	100	275	Peak
5449.84	50.97	-3.03	54	39.34	34.75	10.86	33.98	100	275	Average
5738.04	56.06	-17.94	74	43.67	35.04	11.34	33.99	100	275	Peak
5727.8	45.47	-8.53	54	33.1	35.02	11.34	33.99	100	275	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
5442.64	62.53	-11.47	74	50.92	34.73	10.86	33.98	100	314	Peak
5445.2	49.49	-4.51	54	37.88	34.73	10.86	33.98	100	314	Average
5732.36	55.42	-18.58	74	43.05	35.02	11.34	33.99	100	314	Peak
5756.52	45.17	-8.83	54	32.72	35.06	11.39	34	100	314	Average

**<Ant. 2>**

Test Mode :	802.11n VHT80	Temperature :	22~25°C
Test Channel :	58	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu		

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
5440.72	64.13	-9.87	74	52.52	34.73	10.86	33.98	100	275	Peak
5449.84	50.97	-3.03	54	39.34	34.75	10.86	33.98	100	275	Average
5738.04	56.06	-17.94	74	43.67	35.04	11.34	33.99	100	275	Peak
5727.8	45.47	-8.53	54	33.1	35.02	11.34	33.99	100	275	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
5442.64	62.53	-11.47	74	50.92	34.73	10.86	33.98	100	314	Peak
5445.2	49.49	-4.51	54	37.88	34.73	10.86	33.98	100	314	Average
5732.36	55.42	-18.58	74	43.05	35.02	11.34	33.99	100	314	Peak
5756.52	45.17	-8.83	54	32.72	35.06	11.39	34	100	314	Average

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

<Ant. 1>

Test Mode :	802.11a	Temperature :	22~25°C
Test Channel :	36	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Horizontal
Remark :	1. 5182 MHz is fundamental signal which can be ignored. 2. 10359 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

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	99.89	-	-	88.93	34.48	10.47	33.99	111	324	Average
5182	110.06	-	-	99.1	34.48	10.47	33.99	111	324	Peak
10359	43.19	-30.81	74	56.07	37.17	10.64	60.69	100	0	Peak
15540	46.54	-27.46	74	54.49	39.73	11.79	59.47	100	0	Peak

Test Mode :	802.11a	Temperature :	22~25°C
Test Channel :	36	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Vertical
Remark :	1. 5178 MHz is fundamental signal which can be ignored. 2. 10359 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

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	99.04	-	-	88.08	34.48	10.47	33.99	100	243	Average
5178	109.27	-	-	98.31	34.48	10.47	33.99	100	243	Peak
10359	46.2	-27.8	74	59.08	37.17	10.64	60.69	100	0	Peak
15540	47.4	-26.6	74	55.35	39.73	11.79	59.47	100	0	Peak



Test Mode :	802.11a	Temperature :	22~25°C
Test Channel :	44	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Horizontal
Remark :	5218 MHz is fundamental signal which can be ignored. 10440 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. - Average measurement was not performed if peak level went lower than the average limit.		

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
5218	100.65	-	-	89.58	34.52	10.54	33.99	109	307	Average
5218	111.07	-	-	100	34.52	10.54	33.99	109	307	Peak
10440	44.31	-29.69	74	57.02	37.23	10.65	60.59	100	0	Peak
15660	46.48	-27.52	74	54.21	39.86	11.75	59.34	100	0	Peak

Test Mode :	802.11a	Temperature :	22~25°C
Test Channel :	44	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Vertical
Remark :	5222 MHz is fundamental signal which can be ignored. 10440 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. - Average measurement was not performed if peak level went lower than the average limit.		

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	98.78	-	-	87.71	34.52	10.54	33.99	100	230	Average
5222	108.23	-	-	97.16	34.52	10.54	33.99	100	230	Peak
10440	43.94	-30.06	74	56.65	37.23	10.65	60.59	100	0	Peak
15660	46.14	-27.86	74	53.87	39.86	11.75	59.34	100	0	Peak



Test Mode :	802.11a	Temperature :	22~25°C
Test Channel :	48	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Horizontal
Remark :	1. 5238 MHz is fundamental signal which can be ignored. 2. 10479 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

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	99.62	-	-	88.5	34.53	10.58	33.99	123	323	Average
5238	109.57	-	-	98.45	34.53	10.58	33.99	123	323	Peak
10479	43.73	-30.27	74	56.31	37.28	10.66	60.52	100	0	Peak
15720	45.84	-28.16	74	53.46	39.92	11.74	59.28	100	0	Peak

Test Mode :	802.11a	Temperature :	22~25°C
Test Channel :	48	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Vertical
Remark :	1. 5238 MHz is fundamental signal which can be ignored. 2. 10479 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

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	97.77	-	-	86.69	34.53	10.54	33.99	100	296	Average
5238	108.27	-	-	97.19	34.53	10.54	33.99	100	296	Peak
10479	47.24	-26.76	74	59.82	37.28	10.66	60.52	100	0	Peak
15720	46.42	-27.58	74	54.04	39.92	11.74	59.28	100	0	Peak



Test Mode :	802.11a	Temperature :	22~25°C
Test Channel :	52	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Horizontal
Remark :	1. 5258 MHz is fundamental signal which can be ignored. 2. 10521 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

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	99.79	-	-	88.64	34.55	10.58	33.98	121	323	Average
5258	110.03	-	-	98.88	34.55	10.58	33.98	121	323	Peak
10521	43.28	-30.72	74	55.75	37.31	10.67	60.45	100	0	Peak
15780	46.89	-27.11	74	54.41	39.98	11.72	59.22	100	0	Peak

Test Mode :	802.11a	Temperature :	22~25°C
Test Channel :	52	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Vertical
Remark :	1. 5262 MHz is fundamental signal which can be ignored. 2. 10521 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

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	96.98	-	-	85.83	34.55	10.58	33.98	100	285	Average
5262	107.02	-	-	95.87	34.55	10.58	33.98	100	285	Peak
10521	43.6	-30.4	74	56.07	37.31	10.67	60.45	100	0	Peak
15780	46.26	-27.74	74	53.78	39.98	11.72	59.22	100	0	Peak



Test Mode :	802.11a	Temperature :	22~25°C
Test Channel :	60	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Horizontal
Remark :	1. 5298 MHz is fundamental signal which can be ignored. 2. 10599 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

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	97.83	-	-	86.56	34.6	10.65	33.98	100	303	Average
5298	107.66	-	-	96.39	34.6	10.65	33.98	100	303	Peak
10599	44.12	-29.88	74	56.29	37.36	10.68	60.21	100	0	Peak
15900	46.91	-27.09	74	54.23	40.1	11.68	59.1	100	0	Peak

Test Mode :	802.11a	Temperature :	22~25°C
Test Channel :	60	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	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.		

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	100.16	-	-	88.91	34.58	10.65	33.98	117	282	Average
5302	110.32	-	-	99.07	34.58	10.65	33.98	117	282	Peak
10602	50.37	-23.63	74	62.54	37.36	10.68	60.21	100	0	Peak
15900	46.19	-27.81	74	53.51	40.1	11.68	59.1	100	0	Peak



Test Mode :	802.11a	Temperature :	22~25°C
Test Channel :	64	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	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.		

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
216.3	26.26	-19.74	46	47.24	9.16	1.61	31.75	-	-	Peak
234.66	29.26	-16.74	46	48.53	10.8	1.67	31.74	-	-	Peak
299.73	36.55	-9.45	46	53.16	13.2	1.91	31.72	112	258	Peak
300	35.71	-10.29	46	52.32	13.2	1.91	31.72	-	-	Peak
373.5	33.14	-12.86	46	47.85	14.96	2.12	31.79	-	-	Peak
625.5	28.96	-17.04	46	38.51	19.71	2.79	32.05	-	-	Peak
5318	101.83	-	-	90.51	34.62	10.68	33.98	118	285	Average
5318	111.95	-	-	100.63	34.62	10.68	33.98	118	285	Peak
10641	43.23	-30.77	74	55.27	37.38	10.69	60.11	100	0	Peak
15960	46.71	-27.29	74	53.91	40.17	11.66	59.03	100	0	Peak



Test Mode :	802.11a	Temperature :	22~25°C
Test Channel :	64	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	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.		

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
87.24	29.3	-10.7	40	51.9	8.12	1.04	31.76	100	123	Peak
196.05	27.48	-16.02	43.5	48.59	9.12	1.52	31.75	-	-	Peak
206.85	28.15	-15.35	43.5	49.2	9.14	1.56	31.75	-	-	Peak
399.4	29.29	-16.71	46	43.12	15.8	2.19	31.82	-	-	Peak
874	30.43	-15.57	46	37.87	20.9	3.3	31.64	-	-	Peak
937	31.84	-14.16	46	38.4	21.27	3.36	31.19	-	-	Peak
5322	99.32	-	-	88	34.62	10.68	33.98	109	242	Average
5322	109.55	-	-	98.23	34.62	10.68	33.98	109	242	Peak
10641	42.9	-31.1	74	54.94	37.38	10.69	60.11	100	0	Peak
15960	46.03	-27.97	74	53.23	40.17	11.66	59.03	100	0	Peak



Test Mode :	802.11a	Temperature :	22~25°C
Test Channel :	100	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	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.		

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
5502	99.4	-	-	87.62	34.8	10.96	33.98	100	276	Average
5502	109.68	-	-	97.9	34.8	10.96	33.98	100	276	Peak
11100	47.7	-26.3	74	58.22	37.64	10.82	58.98	100	0	Peak
16500	46.62	-27.38	74	52.7	41	11.82	58.9	100	0	Peak

Test Mode :	802.11a	Temperature :	22~25°C
Test Channel :	100	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	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.		

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
5498	98.59	-	-	86.84	34.8	10.93	33.98	104	246	Average
5498	108.29	-	-	96.54	34.8	10.93	33.98	104	246	Peak
11100	53.24	-20.76	74	63.76	37.64	10.82	58.98	100	0	Peak
16500	46.21	-27.79	74	52.29	41	11.82	58.9	100	0	Peak



Test Mode :	802.11a	Temperature :	22~25°C
Test Channel :	116	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Horizontal
Remark :	1. 5582 MHz is fundamental signal which can be ignored. 2. 16740 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

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	100.52	-	-	88.54	34.87	11.09	33.98	110	284	Average
5582	110.87	-	-	98.89	34.87	11.09	33.98	110	284	Peak
11163	47.12	-26.88	74	57.51	37.67	10.84	58.9	100	0	Peak
16740	46.91	-27.09	74	52.52	41.24	11.91	58.76	100	0	Peak

Test Mode :	802.11a	Temperature :	22~25°C
Test Channel :	116	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Vertical
Remark :	1. 5582 MHz is fundamental signal which can be ignored. 2. 16740 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

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	99.81	-	-	87.82	34.89	11.09	33.99	101	246	Average
5582	110.27	-	-	98.28	34.89	11.09	33.99	101	246	Peak
11163	53.89	-20.11	74	64.28	37.67	10.84	58.9	100	0	Peak
16740	46.08	-27.92	74	51.69	41.24	11.91	58.76	100	0	Peak



Test Mode :	802.11a	Temperature :	22~25°C
Test Channel :	140	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Horizontal
Remark :	1. 5698 MHz is fundamental signal which can be ignored. 2. 17100 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

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	101	-	-	88.7	34.99	11.3	33.99	108	276	Average
5698	112.13	-	-	99.83	34.99	11.3	33.99	108	276	Peak
11400	46.75	-27.25	74	56.62	37.76	10.99	58.62	100	0	Peak
17100	46.71	-27.29	74	51.85	41.34	12.12	58.6	100	0	Peak

Test Mode :	802.11a	Temperature :	22~25°C
Test Channel :	140	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Vertical
Remark :	1. 5698 MHz is fundamental signal which can be ignored. 2. 17100 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

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	99.44	-	-	87.14	34.99	11.3	33.99	100	243	Average
5698	109.7	-	-	97.4	34.99	11.3	33.99	100	243	Peak
11400	53.23	-20.77	74	63.1	37.76	10.99	58.62	100	0	Peak
17100	46.62	-27.38	74	51.76	41.34	12.12	58.6	100	0	Peak



Test Mode :	802.11n HT20	Temperature :	22~25°C
Test Channel :	36	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Horizontal
Remark :	5180 MHz is fundamental signal which can be ignored. 10359 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. - Average measurement was not performed if peak level went lower than the average limit.		

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
5180	100.54	-	-	89.58	34.48	10.47	33.99	121	308	Average
5180	110.57	-	-	99.61	34.48	10.47	33.99	121	308	Peak
10359	42.68	-31.32	74	55.56	37.17	10.64	60.69	100	0	Peak
15540	48.31	-25.69	74	56.26	39.73	11.79	59.47	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	22~25°C
Test Channel :	36	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Vertical
Remark :	5182 MHz is fundamental signal which can be ignored. 10359 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. - Average measurement was not performed if peak level went lower than the average limit.		

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	99.34	-	-	88.38	34.48	10.47	33.99	110	246	Average
5182	109.96	-	-	99	34.48	10.47	33.99	110	246	Peak
10359	43.08	-30.92	74	55.96	37.17	10.64	60.69	100	0	Peak
15540	46.17	-27.83	74	54.12	39.73	11.79	59.47	100	0	Peak



Test Mode :	802.11n HT20	Temperature :	22~25°C
Test Channel :	44	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Horizontal
Remark :	1. 5222 MHz is fundamental signal which can be ignored. 2. 10440 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

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	100.81	-	-	89.73	34.53	10.54	33.99	121	307	Average
5222	110.62	-	-	99.54	34.53	10.54	33.99	121	307	Peak
10440	43.09	-30.91	74	55.8	37.23	10.65	60.59	100	0	Peak
15660	46.34	-27.66	74	54.07	39.86	11.75	59.34	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	22~25°C
Test Channel :	44	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Vertical
Remark :	1. 5218 MHz is fundamental signal which can be ignored. 2. 10440 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

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
5218	98.7	-	-	87.63	34.52	10.54	33.99	111	260	Average
5218	108.13	-	-	97.06	34.52	10.54	33.99	111	260	Peak
10440	45.58	-28.42	74	58.29	37.23	10.65	60.59	100	0	Peak
15660	46.56	-27.44	74	54.29	39.86	11.75	59.34	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	22~25°C
Test Channel :	48	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Horizontal
Remark :	1. 5242 MHz is fundamental signal which can be ignored. 2. 10479 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

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	100.52	-	-	89.37	34.55	10.58	33.98	119	288	Average
5242	110.78	-	-	99.63	34.55	10.58	33.98	119	288	Peak
10479	42.75	-31.25	74	55.33	37.28	10.66	60.52	100	0	Peak
15720	45.95	-28.05	74	53.57	39.92	11.74	59.28	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	22~25°C
Test Channel :	48	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Vertical
Remark :	1. 5242 MHz is fundamental signal which can be ignored. 2. 10479 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

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	-	-	88.52	34.53	10.54	33.99	110	242	Average
5238	109.82	-	-	98.74	34.53	10.54	33.99	110	242	Peak
10479	46.17	-27.83	74	58.75	37.28	10.66	60.52	100	0	Peak
15720	47.4	-26.6	74	55.02	39.92	11.74	59.28	100	0	Peak



Test Mode :	802.11n HT20	Temperature :	22~25°C
Test Channel :	52	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Horizontal
Remark :	1. 5258 MHz is fundamental signal which can be ignored. 2. 10521 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

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	102.31	-	-	91.16	34.55	10.58	33.98	118	289	Average
5258	112.07	-	-	100.92	34.55	10.58	33.98	118	289	Peak
10521	43.06	-30.94	74	55.53	37.31	10.67	60.45	100	0	Peak
15780	46.83	-27.17	74	54.35	39.98	11.72	59.22	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	22~25°C
Test Channel :	52	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Vertical
Remark :	1. 5262 MHz is fundamental signal which can be ignored. 2. 10521 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

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	-	-	87.12	34.55	10.58	33.98	111	241	Average
5262	108.25	-	-	97.1	34.55	10.58	33.98	111	241	Peak
10521	49.36	-24.64	74	61.83	37.31	10.67	60.45	100	0	Peak
15780	47.11	-26.89	74	54.63	39.98	11.72	59.22	100	0	Peak



Test Mode :	802.11n HT20	Temperature :	22~25°C
Test Channel :	60	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Horizontal
Remark :	5302 MHz is fundamental signal which can be ignored. 10599 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. - Average measurement was not performed if peak level went lower than the average limit.		

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	101.8	-	-	90.53	34.6	10.65	33.98	116	284	Average
5302	111.96	-	-	100.69	34.6	10.65	33.98	116	284	Peak
10599	44.06	-29.94	74	56.23	37.36	10.68	60.21	100	0	Peak
15900	46.34	-27.66	74	53.66	40.1	11.68	59.1	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	22~25°C
Test Channel :	60	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Vertical
Remark :	5302 MHz is fundamental signal which can be ignored. 10599 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. - Average measurement was not performed if peak level went lower than the average limit.		

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	100.74	-	-	89.47	34.6	10.65	33.98	108	241	Average
5302	110.39	-	-	99.12	34.6	10.65	33.98	108	241	Peak
10599	48.72	-25.28	74	60.89	37.36	10.68	60.21	100	0	Peak
15900	47.2	-26.8	74	54.52	40.1	11.68	59.1	100	0	Peak



Test Mode :	802.11n HT20	Temperature :	22~25°C
Test Channel :	64	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Horizontal
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.		

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	102.06	-	-	90.74	34.62	10.68	33.98	116	285	Average
5322	112.41	-	-	101.09	34.62	10.68	33.98	116	285	Peak
10641	43.46	-30.54	74	55.5	37.38	10.69	60.11	100	0	Peak
15960	45.57	-28.43	74	52.77	40.17	11.66	59.03	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	22~25°C
Test Channel :	64	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	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.		

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	99.81	-	-	88.49	34.62	10.68	33.98	107	242	Average
5322	110.19	-	-	98.87	34.62	10.68	33.98	107	242	Peak
10641	48.69	-25.31	74	60.73	37.38	10.69	60.11	100	0	Peak
15960	47.16	-26.84	74	54.36	40.17	11.66	59.03	100	0	Peak



Test Mode :	802.11n HT20	Temperature :	22~25°C
Test Channel :	100	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	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.		

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
5502	100.39	-	-	88.61	34.8	10.96	33.98	114	282	Average
5502	110.8	-	-	99.02	34.8	10.96	33.98	114	282	Peak
11001	44.31	-29.69	74	55.05	37.6	10.76	59.1	100	0	Peak
16500	45.99	-28.01	74	52.07	41	11.82	58.9	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	22~25°C
Test Channel :	100	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	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.		

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
5498	99.11	-	-	87.38	34.78	10.93	33.98	106	252	Average
5498	109.96	-	-	98.23	34.78	10.93	33.98	106	252	Peak
11001	53.51	-20.49	74	64.25	37.6	10.76	59.1	100	0	Peak
16500	45.71	-28.29	74	51.79	41	11.82	58.9	100	0	Peak



Test Mode :	802.11n HT20	Temperature :	22~25°C
Test Channel :	116	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	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.		

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	101.03	-	-	89.06	34.87	11.09	33.99	100	283	Average
5578	111.33	-	-	99.36	34.87	11.09	33.99	100	283	Peak
11160	45.47	-28.53	74	55.86	37.67	10.84	58.9	100	0	Peak
16740	45.84	-28.16	74	51.45	41.24	11.91	58.76	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	22~25°C
Test Channel :	116	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	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.		

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	99.3	-	-	87.32	34.87	11.09	33.98	104	245	Average
5582	109.42	-	-	97.44	34.87	11.09	33.98	104	245	Peak
11160	52.51	-21.49	74	62.9	37.67	10.84	58.9	100	0	Peak
16740	46.07	-27.93	74	51.68	41.24	11.91	58.76	100	0	Peak



Test Mode :	802.11n HT20	Temperature :	22~25°C
Test Channel :	140	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	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.		

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	101.37	-	-	89.07	34.99	11.3	33.99	120	268	Average
5698	111.98	-	-	99.68	34.99	11.3	33.99	120	268	Peak
11400	44.05	-29.95	74	53.92	37.76	10.99	58.62	100	0	Peak
17100	46.95	-27.05	74	52.09	41.34	12.12	58.6	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	22~25°C
Test Channel :	140	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	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.		

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	100.26	-	-	87.94	35.01	11.3	33.99	101	257	Average
5702	110.48	-	-	98.16	35.01	11.3	33.99	101	257	Peak
11400	53.42	-20.58	74	63.29	37.76	10.99	58.62	100	0	Peak
17100	47.75	-26.25	74	52.89	41.34	12.12	58.6	100	0	Peak



Test Mode :	802.11n HT40	Temperature :	22~25°C
Test Channel :	38	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Horizontal
Remark :	5192 MHz is fundamental signal which can be ignored. 10380 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. - Average measurement was not performed if peak level went lower than the average limit.		

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	97.9	-	-	86.88	34.5	10.51	33.99	123	294	Average
5192	107.81	-	-	96.79	34.5	10.51	33.99	123	294	Peak
10380	43.54	-30.46	74	56.38	37.18	10.64	60.66	100	0	Peak
15570	47.35	-26.65	74	55.23	39.77	11.78	59.43	100	0	Peak

Test Mode :	802.11n HT40	Temperature :	22~25°C
Test Channel :	38	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Vertical
Remark :	5188 MHz is fundamental signal which can be ignored. 10380 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. - Average measurement was not performed if peak level went lower than the average limit.		

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	96.65	-	-	85.63	34.5	10.51	33.99	100	242	Average
5188	106.56	-	-	95.54	34.5	10.51	33.99	100	242	Peak
10380	43.81	-30.19	74	56.65	37.18	10.64	60.66	100	0	Peak
15570	46.77	-27.23	74	54.65	39.77	11.78	59.43	100	0	Peak



Test Mode :	802.11n HT40	Temperature :	22~25°C
Test Channel :	46	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Horizontal
Remark :	5228 MHz is fundamental signal which can be ignored. 10461 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. - Average measurement was not performed if peak level went lower than the average limit.		

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	99.96	-	-	88.88	34.53	10.54	33.99	107	287	Average
5228	109.88	-	-	98.8	34.53	10.54	33.99	107	287	Peak
10461	43.58	-30.42	74	56.2	37.27	10.66	60.55	100	0	Peak
15690	46.29	-27.71	74	53.96	39.89	11.75	59.31	100	0	Peak

Test Mode :	802.11n HT40	Temperature :	22~25°C
Test Channel :	46	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Vertical
Remark :	5232 MHz is fundamental signal which can be ignored. 10461 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. - Average measurement was not performed if peak level went lower than the average limit.		

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	99.27	-	-	88.19	34.53	10.54	33.99	100	241	Average
5232	109.02	-	-	97.94	34.53	10.54	33.99	100	241	Peak
10461	45.02	-28.98	74	57.64	37.27	10.66	60.55	100	0	Peak
15690	46.18	-27.82	74	53.85	39.89	11.75	59.31	100	0	Peak



Test Mode :	802.11n HT40	Temperature :	22~25°C
Test Channel :	54	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Horizontal
Remark :	5268 MHz is fundamental signal which can be ignored. 10539 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. - Average measurement was not performed if peak level went lower than the average limit.		

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	101.43	-	-	90.28	34.55	10.58	33.98	107	286	Average
5268	111.53	-	-	100.38	34.55	10.58	33.98	107	286	Peak
10539	44.03	-29.97	74	56.44	37.32	10.67	60.4	100	0	Peak
15810	46.9	-27.1	74	54.37	40.01	11.71	59.19	100	0	Peak

Test Mode :	802.11n HT40	Temperature :	22~25°C
Test Channel :	54	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Vertical
Remark :	5272 MHz is fundamental signal which can be ignored. 10539 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. - Average measurement was not performed if peak level went lower than the average limit.		

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	98.58	-	-	87.38	34.57	10.61	33.98	100	240	Average
5272	108.48	-	-	97.28	34.57	10.61	33.98	100	240	Peak
10539	43.37	-30.63	74	55.78	37.32	10.67	60.4	100	0	Peak
15810	46.42	-27.58	74	53.89	40.01	11.71	59.19	100	0	Peak



Test Mode :	802.11n HT40	Temperature :	22~25°C
Test Channel :	62	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	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.		

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	98.75	-	-	87.48	34.6	10.65	33.98	108	304	Average
5312	108.3	-	-	97.03	34.6	10.65	33.98	108	304	Peak
10620	44.09	-29.91	74	56.19	37.37	10.69	60.16	100	0	Peak
15930	46.73	-27.27	74	54	40.13	11.67	59.07	100	0	Peak

Test Mode :	802.11n HT40	Temperature :	22~25°C
Test Channel :	62	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Vertical
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.		

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
5308	95.59	-	-	84.32	34.6	10.65	33.98	100	239	Average
5308	105.09	-	-	93.82	34.6	10.65	33.98	100	239	Peak
10620	44.36	-29.64	74	56.46	37.37	10.69	60.16	100	0	Peak
15930	46.51	-27.49	74	53.78	40.13	11.67	59.07	100	0	Peak



Test Mode :	802.11n HT40	Temperature :	22~25°C
Test Channel :	102	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Horizontal
Remark :	1. 5508 MHz is fundamental signal which can be ignored. 2. 16530 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

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	97.6	-	-	85.82	34.8	10.96	33.98	102	282	Average
5508	107.05	-	-	95.27	34.8	10.96	33.98	102	282	Peak
11019	44.75	-29.25	74	55.46	37.61	10.76	59.08	100	0	Peak
16530	46.59	-27.41	74	52.61	41.03	11.83	58.88	100	0	Peak

Test Mode :	802.11n HT40	Temperature :	22~25°C
Test Channel :	102	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Vertical
Remark :	1. 5512 MHz is fundamental signal which can be ignored. 2. 16530 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

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	91.03	-	-	79.25	34.8	10.96	33.98	139	114	Average
5512	101.24	-	-	89.46	34.8	10.96	33.98	139	114	Peak
11019	50.87	-23.13	74	61.58	37.61	10.76	59.08	100	0	Peak
16530	46.59	-27.41	74	52.61	41.03	11.83	58.88	100	0	Peak



Test Mode :	802.11n HT40	Temperature :	22~25°C
Test Channel :	110	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Horizontal
Remark :	1. 5560 MHz is fundamental signal which can be ignored. 2. 16650 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

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
5560	96.36	-	-	84.44	34.85	11.05	33.98	100	276	Average
5560	105.46	-	-	93.54	34.85	11.05	33.98	100	276	Peak
11100	45.91	-28.09	74	56.43	37.64	10.82	58.98	100	0	Peak
16650	46.76	-27.24	74	52.53	41.16	11.88	58.81	100	0	Peak

Test Mode :	802.11n HT40	Temperature :	22~25°C
Test Channel :	110	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Vertical
Remark :	1. 5548 MHz is fundamental signal which can be ignored. 2. 16650 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

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	91.47	-	-	79.55	34.85	11.05	33.98	100	314	Average
5548	100.7	-	-	88.78	34.85	11.05	33.98	100	314	Peak
11100	51	-23	74	61.52	37.64	10.82	58.98	100	0	Peak
16650	46.39	-27.61	74	52.16	41.16	11.88	58.81	100	0	Peak



Test Mode :	802.11n HT40	Temperature :	22~25°C
Test Channel :	134	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Horizontal
Remark :	5674 MHz is fundamental signal which can be ignored. 17010 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. - Average measurement was not performed if peak level went lower than the average limit.		

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
5674	98.25	-	-	86.01	34.97	11.26	33.99	100	261	Average
5674	107.23	-	-	94.99	34.97	11.26	33.99	100	261	Peak
11340	45.25	-28.75	74	55.26	37.73	10.96	58.7	100	0	Peak
17010	46.83	-27.17	74	51.96	41.47	12	58.6	100	0	Peak

Test Mode :	802.11n HT40	Temperature :	22~25°C
Test Channel :	134	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Vertical
Remark :	5664 MHz is fundamental signal which can be ignored. 17010 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. - Average measurement was not performed if peak level went lower than the average limit.		

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
5664	96.71	-	-	84.52	34.96	11.22	33.99	167	258	Average
5664	105.4	-	-	93.21	34.96	11.22	33.99	167	258	Peak
11340	51.01	-22.99	74	61.02	37.73	10.96	58.7	100	0	Peak
17010	46.93	-27.07	74	52.06	41.47	12	58.6	100	0	Peak



Test Mode :	802.11n VHT80	Temperature :	22~25°C
Test Channel :	42	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Horizontal
Remark :	1. 5210 MHz is fundamental signal which can be ignored. 2. 10419 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

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
5210	94.27	-	-	83.31	34.48	10.47	33.99	100	293	Average
5210	103.71	-	-	92.75	34.48	10.47	33.99	100	293	Peak
10419	44.38	-29.62	74	57.13	37.22	10.65	60.62	100	0	Peak
15630	46.95	-27.05	74	54.71	39.84	11.76	59.36	100	0	Peak

Test Mode :	802.11n VHT80	Temperature :	22~25°C
Test Channel :	42	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Vertical
Remark :	1. 5210 MHz is fundamental signal which can be ignored. 2. 10419 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

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
5210	92.58	-	-	81.51	34.52	10.54	33.99	100	244	Average
5210	101.67	-	-	90.6	34.52	10.54	33.99	100	244	Peak
10419	44.35	-29.65	74	57.1	37.22	10.65	60.62	100	0	Peak
15630	46.3	-27.7	74	54.06	39.84	11.76	59.36	100	0	Peak



Test Mode :	802.11n VHT80	Temperature :	22~25°C
Test Channel :	58	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Horizontal
Remark :	5290 MHz is fundamental signal which can be ignored. 10419 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. - Average measurement was not performed if peak level went lower than the average limit.		

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
180.66	23.12	-20.38	43.5	44.12	9.3	1.45	31.75	-	-	Peak
200.1	29.01	-14.49	43.5	50.02	9.2	1.54	31.75	-	-	Peak
216.3	26.26	-19.74	46	47.24	9.16	1.61	31.75	-	-	Peak
300	35.71	-10.29	46	52.32	13.2	1.91	31.72	-	-	Peak
497.4	34.24	-11.76	46	45.94	17.77	2.46	31.93	115	325	Peak
872.6	30.37	-15.63	46	37.82	20.9	3.29	31.64	-	-	Peak
5290	92.46	-	-	81.21	34.58	10.65	33.98	100	338	Average
5290	113.94	-	-	102.69	34.58	10.65	33.98	100	338	Peak
10419	45.57	-28.43	74	58.32	37.22	10.65	60.62	100	0	Peak
15630	46.1	-27.9	74	53.86	39.84	11.76	59.36	100	0	Peak



Test Mode :	802.11n VHT80	Temperature :	22~25°C
Test Channel :	58	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Vertical
Remark :	5290 MHz is fundamental signal which can be ignored. 10419 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. - Average measurement was not performed if peak level went lower than the average limit.		

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
196.05	27.48	-16.02	43.5	48.59	9.12	1.52	31.75	-	-	Peak
206.85	28.15	-15.35	43.5	49.2	9.14	1.56	31.75	-	-	Peak
251.4	27.93	-18.07	46	45.37	12.55	1.74	31.73	-	-	Peak
373.5	27.1	-18.9	46	41.81	14.96	2.12	31.79	-	-	Peak
399.4	29.29	-16.71	46	43.12	15.8	2.19	31.82	-	-	Peak
937	31.84	-14.16	46	38.4	21.27	3.36	31.19	100	148	Peak
5290	92.45	-	-	81.2	34.58	10.65	33.98	100	241	Average
5290	102.65	-	-	91.4	34.58	10.65	33.98	100	241	Peak
10419	43.33	-30.67	74	56.08	37.22	10.65	60.62	100	0	Peak
15630	46	-28	74	53.76	39.84	11.76	59.36	100	0	Peak



Test Mode :	802.11n VHT80	Temperature :	22~25°C
Test Channel :	106	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Horizontal
Remark :	5530 MHz is fundamental signal which can be ignored. 16590 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. - Average measurement was not performed if peak level went lower than the average limit.		

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
5530	92.72	-	-	80.87	34.83	11	33.98	100	275	Average
5530	102.68	-	-	90.83	34.83	11	33.98	100	275	Peak
11061	44.19	-29.81	74	54.79	37.63	10.79	59.02	100	0	Peak
16590	45.74	-28.26	74	51.64	41.09	11.86	58.85	100	0	Peak

Test Mode :	802.11n VHT80	Temperature :	22~25°C
Test Channel :	106	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Vertical
Remark :	5530 MHz is fundamental signal which can be ignored. 16590 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. - Average measurement was not performed if peak level went lower than the average limit.		

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
5530	87.89	-	-	76.04	34.83	11	33.98	100	314	Average
5530	97.7	-	-	85.85	34.83	11	33.98	100	314	Peak
11061	44.74	-29.26	74	55.34	37.63	10.79	59.02	100	0	Peak
16590	46.15	-27.85	74	52.05	41.09	11.86	58.85	100	0	Peak

**<Ant. 2>**

Test Mode :	802.11n VHT80	Temperature :	22~25°C
Test Channel :	58	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Horizontal
Remark :	1. 5290 MHz is fundamental signal which can be ignored. 2. 10581 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. 3. Average measurement was not performed if peak level went lower than the average limit.		

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
100.2	21.35	-22.15	43.5	41.2	10.8	1.1	31.75	-	-	Peak
199.56	28.23	-15.27	43.5	49.24	9.2	1.54	31.75	-	-	Peak
237.9	29.04	-16.96	46	47.94	11.16	1.68	31.74	-	-	Peak
375.6	32.63	-13.37	46	47.31	15	2.12	31.8	-	-	Peak
499.5	34.95	-11.05	46	46.61	17.79	2.48	31.93	105	215	Peak
900.6	28.82	-17.18	46	35.88	21.09	3.37	31.52	-	-	Peak
5290	91.67	-	-	80.42	34.58	10.65	33.98	100	50	Average
5290	101.25	-	-	90.05	34.57	10.61	33.98	100	50	Peak
10581	43.65	-30.35	74	55.88	37.35	10.68	60.26	100	0	Peak
15870	46.9	-27.1	74	54.25	40.08	11.69	59.12	100	0	Peak



Test Mode :	802.11n VHT80	Temperature :	22~25°C
Test Channel :	58	Relative Humidity :	40~45%
Test Engineer :	Hyden Wu	Polarization :	Vertical
Remark :	5290 MHz is fundamental signal which can be ignored. 10581 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209. - Average measurement was not performed if peak level went lower than the average limit.		

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
100.2	20.87	-22.63	43.5	40.72	10.8	1.1	31.75	-	-	Peak
206.85	25.89	-17.61	43.5	46.94	9.14	1.56	31.75	-	-	Peak
237.9	26.15	-19.85	46	45.05	11.16	1.68	31.74	-	-	Peak
499.5	30.91	-15.09	46	42.57	17.79	2.48	31.93	-	-	Peak
623.4	30.93	-15.07	46	40.53	19.67	2.78	32.05	117	270	Peak
937	29.34	-16.66	46	35.9	21.27	3.36	31.19	-	-	Peak
5290	88.31	-	-	77.06	34.58	10.65	33.98	100	56	Average
5290	97.98	-	-	86.71	34.6	10.65	33.98	100	56	Peak
10581	44.72	-29.28	74	56.95	37.35	10.68	60.26	100	0	Peak
15870	46.58	-27.42	74	53.93	40.08	11.69	59.12	100	0	Peak



3.2 Automatically Discontinue Transmission

3.2.1 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.

3.2.2 Measuring Instruments

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

3.2.3 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.



3.3 Antenna Requirements

3.3.1 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.

3.3.2 Antenna Anti-Replacement Construction

Non-standard antenna connector is used.

3.3.3 Antenna Gain

The antenna gain is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.



4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Power Meter	Anritsu	ML2495A	1036004	300MHz~40GHz	Aug. 17, 2013	Jun. 05, 2014	Aug. 16, 2014	Conducted (TH02-HY)
Power Sensor	Anritsu	MA2411B	1027253	300MHz~40GHz	Aug. 17, 2013	Jun. 05, 2014	Aug. 16, 2014	Conducted (TH02-HY)
Spectrum Analyzer	Agilent	E4408B	MY44211030	9kHz ~ 26.5GHz	Dec. 02, 2013	Jun. 27, 2014 ~ Jul. 04, 2014	Dec. 01, 2014	Radiation (03CH06-HY)
EMI Test Receiver	R&S	ESVS10	834468/0003	20MHz ~ 1000MHz	May 06, 2014	Jun. 27, 2014 ~ Jul. 04, 2014	May 05, 2015	Radiation (03CH06-HY)
Bilog Antenna	Schaffner	CBL6112B	2885	30MHz ~ 2GHz	Oct. 10, 2013	Jun. 27, 2014 ~ Jul. 04, 2014	Oct. 09, 2014	Radiation (03CH06-HY)
Double Ridge Horn Antenna	EMCO	3117	00066583	1GHz ~ 18GHz	Aug. 02, 2013	Jun. 27, 2014 ~ Jul. 04, 2014	Aug. 01, 2014	Radiation (03CH06-HY)
Amplifier	SONOMA	310N	186713	9kHz ~ 1GHz	Apr. 16, 2014	Jun. 27, 2014 ~ Jul. 04, 2014	Apr. 15, 2015	Radiation (03CH06-HY)
Pre Amplifier	EMCI	EMC051845	SN980048	1GHz ~ 18GHz	Jul. 18, 2013	Jun. 27, 2014 ~ Jul. 04, 2014	Jul. 17, 2014	Radiation (03CH06-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170251	15GHz ~ 40GHz	Oct. 03, 2013	Jun. 27, 2014 ~ Jul. 04, 2014	Oct. 02, 2014	Radiation (03CH06-HY)
Preamplifier	Agilent	8449B	3008A01917	1GHz ~ 26.5GHz	Apr. 10, 2014	Jun. 27, 2014 ~ Jul. 04, 2014	Apr. 09, 2015	Radiation (03CH06-HY)
Turn Table	INN-CO	DS2000	420/650/00	0 ~ 360 degree	N/A	Jun. 27, 2014 ~ Jul. 04, 2014	N/A	Radiation (03CH06-HY)
Antenna Mast	MF	MF-7802	MF780208212	1 m ~ 4 m	N/A	Jun. 27, 2014 ~ Jul. 04, 2014	N/A	Radiation (03CH06-HY)
Loop Antenna	TESEQ	HLA 6120	31244	9 kHz~30 MHz	Dec. 02, 2012	Jun. 27, 2014 ~ Jul. 04, 2014	Dec. 03, 2014	Radiation (03CH06-HY)



5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.50
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