



FCC/IC RF Test Report

APPLICANT : VERTU Corporation Limited
EQUIPMENT : Cellular Telephone
BRAND NAME : VERTU
MODEL NAME : ASTER
TYPE(LTE) : VM-01
TYPE(WCDMA) : VM-01C
FCC ID : P7QVM-01
IC : 4299A-VM01
STANDARD : FCC Part 15 Subpart E §15.407
IC RSS-210 issue 8

CLASSIFICATION : (NII) Unlicensed National Information Infrastructure

The product was received on Jun. 23, 2014 and testing was completed on Jul. 24, 2014. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the procedures and shown to be compliant 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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IC: 4299A-VM01

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR462340E	Rev. 01	Initial issue of report	Jul. 31, 2014



SUMMARY OF TEST RESULT

Report Section	FCC Rule	IC Rule	Description	Limit	Result	Remark
-	15.403(i)	RSS-210 A9.2	26dB & 99% Bandwidth	-	Not Performed	Please refer to Sporton Report No. : FR430314D
-	15.407(a)	RSS-210 A9.2	Maximum Conducted Output Power	$\leq 17, 24, 30$ dBm (depend on band)	Pass	-
-	15.407(a)	RSS-210 A9.2	Power Spectral Density	$\leq 4, 11, 17$ dBm (depend on band)	Not Performed	Please refer to Sporton Report No. : FR430314D
-	15.407(a)(6)	RSS-210 A9.3	Peak Excursion Ratio	≤ 13 dB	Not Performed	Please refer to Sporton Report No. : FR430314D
3.1	15.407(b)	RSS-210 A9.3	Unwanted Emissions	$\leq -17, -27$ dBm (depend on band)&15.209(a)	Pass	Under limit 4.73 dB at 5469.04 MHz
3.2	15.207	RSS-Gen 7.2.4	AC Conducted Emission	15.207(a)	Pass	Under limit 9.70 dB at 0.198 MHz
-	15.407(g)	-	Frequency Stability	Within Operation Band	Not Performed	Please refer to Sporton Report No. : FR430314D
3.3	15.407(c)	RSS-210 A9.4	Automatically Discontinue Transmission	Discontinue Transmission	Pass	-
3.4	15.203 & 15.407(a)	RSS-210 A9.2	Antenna Requirement	N/A	Pass	-



1 General Description

1.1 Applicant

VERTU Corporation Limited

Beacon Hill Road, Church Crookham, Hampshire GU52 8DY, United Kingdom

1.2 Manufacturer

VERTU Corporation Limited

Beacon Hill Road, Church Crookham, Hampshire GU52 8DY, United Kingdom

1.3 Feature of Equipment Under Test

Product Feature & Specification	
Equipment	Cellular Telephone
Brand Name	VERTU
Model Name	ASTER
Type (LTE)	VM-01
Type (WCDMA)	VM-01C
Sample 1	LTE Sku
Sample 2	WCDMA Sku
FCC ID	P7QVM-01
IC	4299A-VM01
EUT supports Radios application	GSM/EGPRS/WCDMA/HSPA/LTE/NFC WLAN 2.4GHz 802.11b/g/n HT20 WLAN 5GHz 802.11a/n HT20/HT40 WLAN 5GHz 802.11ac VHT20/VHT40/VHT80 Bluetooth v3.0 + EDR/Bluetooth v4.0 LE
HW Version	F2
SW Version	000C_1_420
EUT Stage	Identical Prototype

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

List of Accessory:

Specification of Accessory		
AC Adapter	Brand Name	VERTU
	Model Name	AC-32V
Battery	Brand Name	VERTU
	Model Name	BP-9V
Car Charger	Brand Name	VERTU
	Model Name	DC-30V
Portable Power Charger	Brand Name	VERTU
	Model Name	DC-15V
Earphone 1	Brand Name	VERTU
	Model Name	WH-4V
Earphone 2	Brand Name	VERTU
	Model Name	WH-5V
Earphone 3	Brand Name	VERTU
	Model Name	HP-1V
USB Cable	Brand Name	VERTU
	Model Name	CA-225DV
Wireless Charger	Brand Name	VERTU
	Model Name	AC-35V
Wireless Speaker	Brand Name	VERTU
	Model Name	SP-1V

1.4 Product Specification of Equipment Under Test

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	<5180 MHz ~ 5240 MHz> 802.11a : 11.82 dBm / 0.0152 W 802.11n HT20 : 9.85 dBm / 0.0097 W 802.11n HT40 : 9.95 dBm / 0.0099 W 802.11ac VHT20: 8.00 dBm / 0.0063 W 802.11ac VHT40: 8.19 dBm / 0.0066 W 802.11ac VHT80: 7.68 dBm / 0.0059 W <5260 MHz ~ 5320 MHz> 802.11a : 12.00 dBm / 0.0158 W 802.11n HT20 : 10.15 dBm / 0.0104 W 802.11n HT40 : 10.04 dBm / 0.0101 W 802.11ac VHT20: 8.30 dBm / 0.0068 W 802.11ac VHT40: 8.14 dBm / 0.0065 W 802.11ac VHT80: 8.38 dBm / 0.0069 W <5500 MHz ~ 5580 MHz and 5660 MHz ~ 5700 MHz> 802.11a : 11.73 dBm / 0.0149 W 802.11n HT20 : 9.91 dBm / 0.0098 W 802.11n HT40 : 9.77 dBm / 0.0095 W 802.11ac VHT20: 8.06 dBm / 0.0064 W 802.11ac VHT40: 8.12 dBm / 0.0065 W 802.11ac VHT80: 8.27 dBm / 0.0067 W
Antenna Type	PIFA Antenna
Antenna Gain	5150 MHz ~ 5250 MHz : -0.78 dBi 5250 MHz ~ 5350 MHz : 0.78 dBi 5470 MHz ~ 5725 MHz : 0.63 dBi
Type of Modulation	802.11a/n: OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11ac: OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM)

Note: 5600 MHz ~ 5650 MHz is notched.

1.5 Modification of EUT

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

1.6 Testing Site

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: +886-3-3273456 / FAX: +886-3-3284978			
Test Site No.	Sporton Site No.			IC Registration No.
	TH02-HY	CO05-HY	03CH05-HY 03CH07-HY	4086B-1 4086B-2

1.7 Applied Standards

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

- ♦ FCC Part 15 Subpart E
- ♦ FCC KDB 789033 D01 General UNII Test Procedures v01r03
- ♦ ANSI C63.4-2003
- ♦ IC RSS-210 Issued 8
- ♦ IC RSS-Gen Issue 3
- ♦ NOTICE 2012-DRS0126

Remark:

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



2 Test Configuration of Equipment Under Test

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

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

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

2.1 Carrier Frequency 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

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

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



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. Final Output Power equals to Measured Output Power adds the duty factor.

5GHz 802.11a mode								
Data Rate (MHz)	6M bps	9M bps	12M bps	18M bps	24M bps	36M bps	48M bps	54M bps
Average Power (dBm)	12.00	11.99	11.97	11.96	11.95	11.91	11.93	11.98

5GHz 802.11n HT20 mode								
Data Rate (MHz)	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
Average Power (dBm)	10.15	10.08	10.11	10.09	10.12	10.01	9.97	9.95

5GHz 802.11n HT40 mode								
Data Rate (MHz)	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
Average Power (dBm)	10.04	9.99	9.95	9.97	9.88	9.81	9.89	9.91

5GHz 802.11ac VHT20 mode									
Data Rate (MHz)	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8
Average Power (dBm)	8.30	8.26	8.22	8.11	8.23	8.22	8.09	8.02	8.28

5GHz 802.11ac VHT40 mode										
Data Rate (MHz)	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
Average Power (dBm)	8.19	8.12	8.16	8.09	8.17	8.10	8.16	7.97	8.02	8.03

5GHz 802.11ac VHT80 mode										
Data Rate (MHz)	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
Average Power (dBm)	8.38	8.34	8.29	8.25	8.26	8.34	8.31	8.37	8.29	8.36

2.3 Test Mode

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

Test Cases				
	Test Items	Mode	Data rate	Test Channel
Conducted TCs	Output Power	802.11a	6 Mbps	L/M/H
		802.11n HT20	MCS 0	L/M/H
		802.11n HT40	MCS 0	L/M/H
		802.11ac VHT20	MCS 0	L/M/H
		802.11ac VHT40	MCS 0	L/M/H
		802.11ac VHT80	MCS 0	M
Radiated TCs	Radiated Band Edge	802.11a	6 Mbps	L/H
		802.11n HT20	MCS 0	L/H
		802.11n HT40	MCS 0	L/H
		802.11n HT40 WPC Mode	MCS 0	L
		802.11ac VHT80	MCS 0	M
	Radiated Spurious Emission	802.11a	6 Mbps	L/M/H
		802.11n HT20	MCS 0	L/M/H
		802.11n HT40	MCS 0	L/M/H
		802.11n HT40 WPC Mode	MCS 0	L
		802.11ac VHT80	MCS 0	M
AC Conducted Emission	Mode 1 : LTE Band 7 Idle + WLAN (5GHz) Link + Bluetooth Link + USB Cable (Data Link with Notebook) + NFC On + Earphone 1			
	Mode 2 : LTE Band 7 Idle + WLAN (5GHz) Idle + Bluetooth Idle + WPC Charging + GPS Rx + Earphone 2 + Wireless Charger (Charging from Adapter)			



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

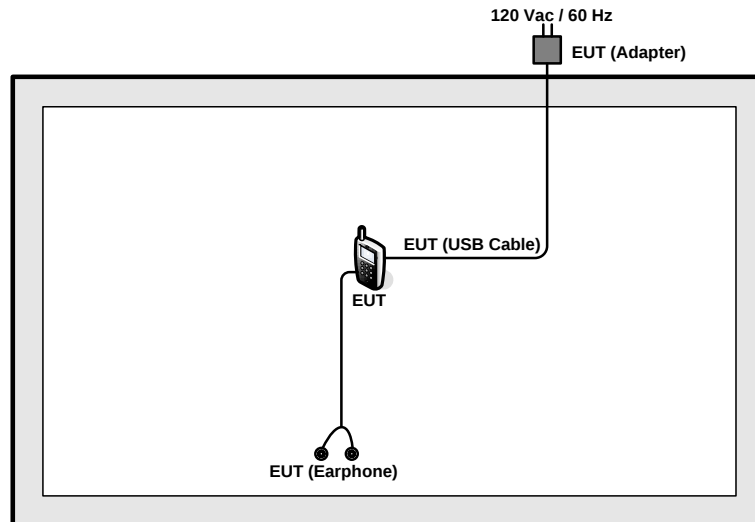
Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5600 MHz and 5650-5725MHz
		802.11n HT20/11ac VHT20	802.11n HT20/11ac VHT20	802.11n HT20/11ac VHT20
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140

Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5600 MHz and 5650-5725MHz
		802.11n HT40/11ac VHT40	802.11n HT40/11ac VHT40	802.11n HT40/11ac VHT40
L	Low	38	54	102
M	Middle	-	-	110
H	High	46	62	134

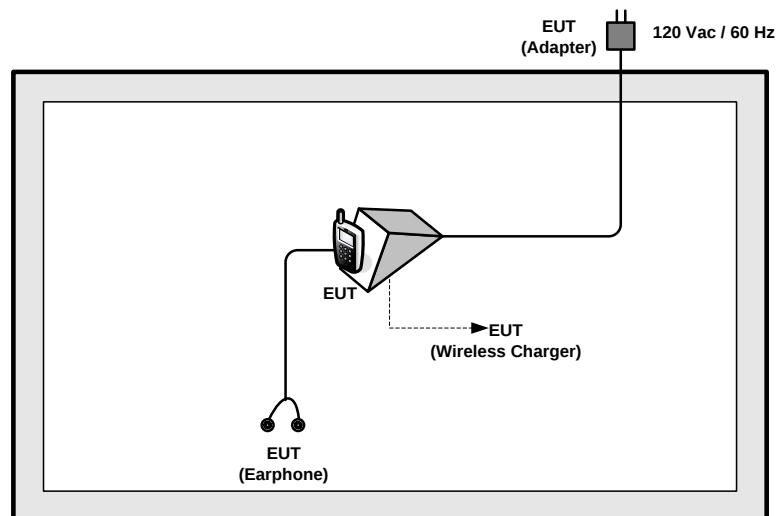
Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5600 MHz and 5650-5725MHz
		802.11ac VHT80	802.11ac VHT80	802.11ac VHT80
L	Low	-	-	-
M	Middle	42	58	106
H	High	-	-	-

2.4 Connection Diagram of Test System

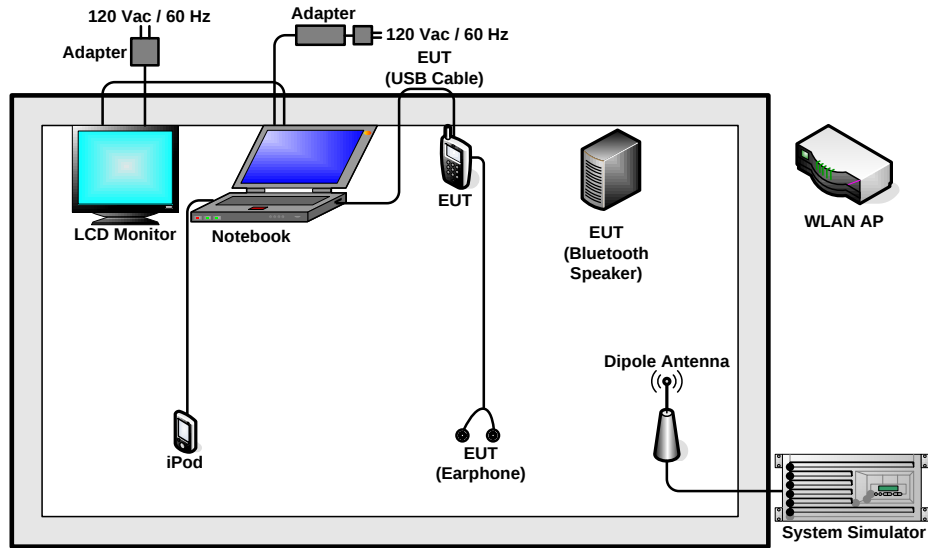
<WLAN Tx Mode>



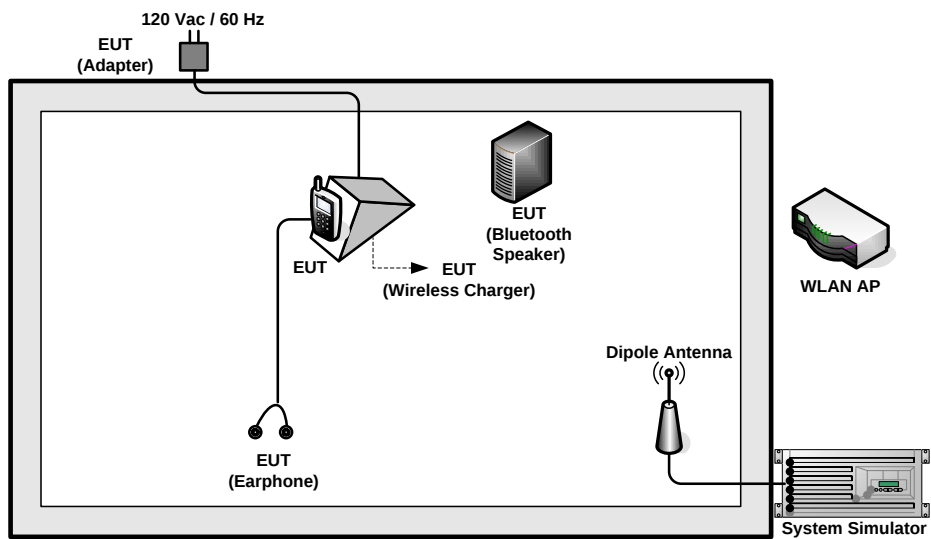
<WLAN Tx Mode with WPC Charging>



<AC Conducted Emission Mode>



<EUT with WPC Mode>



2.5 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	System Simulator	R&S	CMW 500	N/A	N/A	Unshielded, 1.8 m
2.	WLAN AP	D-Link	DIR-628	KA2DIR628A2	N/A	Unshielded, 1.8 m
3.	Notebook	DELL	Latitude E6320	FCC DoC/ Contains FCC ID: QDS-BRCM1054	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
4.	LCD Monitor	DELL	U2410	FCC DoC	Shielded, 1.6 m	Unshielded, 1.8 m
5.	iPod	Apple	A1285	FCC DoC	Shielded, 1.0 m	N/A
6.	Earphone	Ergotech	ET-E200	Verification	Unshielded, 1.8 m	N/A
7.	NFC Card	Metro Taipei	Easy Card	N/A	N/A	N/A
8.	SD Card	SanDisk	MicroSD HC	FCC DoC	N/A	N/A

2.6 EUT Operation Test Setup

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

2.7 Measurement Results Explanation Example

For all conducted test items:

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

Example :

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

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 7.9 dB and 20dB attenuator.

$$\begin{aligned}
 \text{Offset(dB)} &= \text{RF cable loss(dB)} + \text{attenuator factor(dB)} \\
 &= 7.9 + 20 = 27.9 \text{ (dB)}
 \end{aligned}$$

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.

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



EIRP (dBm)	Field Strength at 3m (dB μ V/m)
-17	78.3
- 27	68.3

- (3) KDB789033 v01r03 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 v01r03.

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.

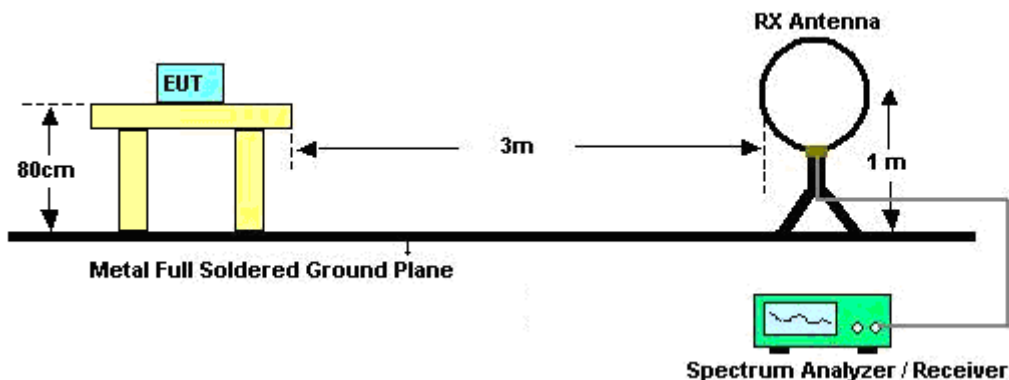
Band	Duty Cycle(%)	T(μ s)	1/T(kHz)	VBW Setting
802.11a	87.26	1370	0.73	1kHz
802.11n HT20	85.95	1272	0.79	1kHz
802.11n HT40	75.71	636	1.57	3kHz
802.11n VHT20	82.74	978	1.02	3kHz
802.11n VHT40	71.26	496	2.02	3kHz
802.11n VHT80	54.87	248	4.03	10kHz

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.

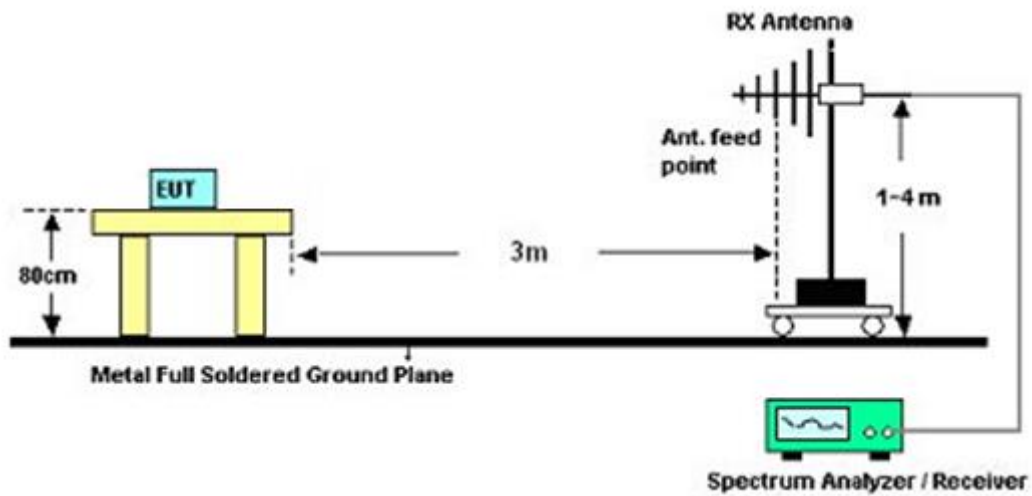
4. The antenna is a broadband antenna and its height is adjusted between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT was arranged to its worst 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

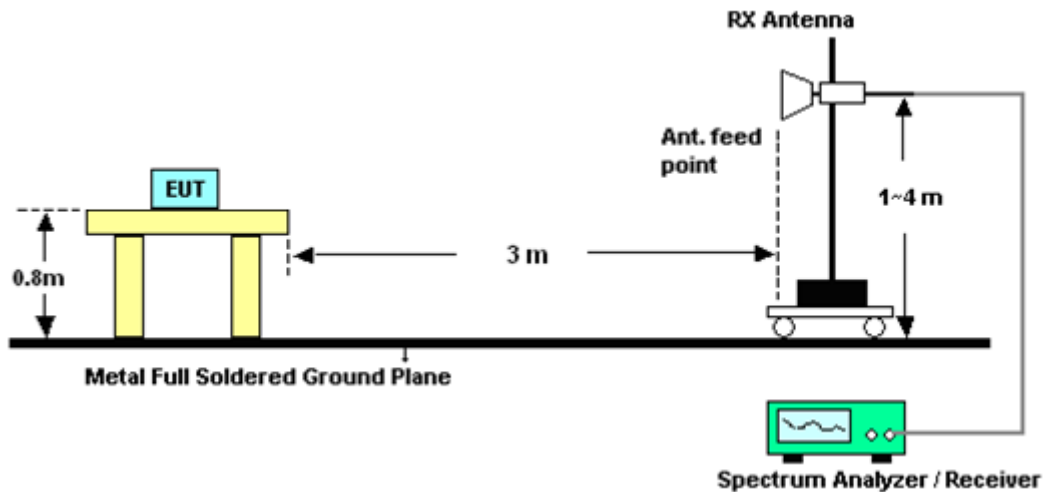
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



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

<Below 30MHz>

Test Mode :	802.11n HT40 with WPC Charging Mode	Temperature :	23~25°C
Test Channel :	102	Relative Humidity :	43~45%
Test Engineer :	Eric Shih	Polarization :	Horizontal

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
0.01237	36.03	-89.73	125.76	15.46	20.28	0.29	-	-	Average
0.06666	29.17	-81.96	111.13	8.81	20.07	0.29	-	-	Average
0.10478	22.18	-85.02	107.2	1.84	20.05	0.29	-	-	QP
0.12084	25.3	-80.66	105.96	4.99	20.02	0.29	-	-	Average
0.14816	51.57	-52.62	104.19	31.28	20	0.29	-	-	Average
0.22922	40.8	-59.6	100.4	20.55	19.96	0.29	-	-	Average
1.173	38.92	-27.3	66.22	18.68	19.93	0.31	100	32	QP
13.304	36.21	-33.79	70	16.18	19.63	0.4	-	-	QP
20.437	37.5	-32.5	70	17.02	20.05	0.43	-	-	QP
28.715	36.08	-33.92	70	15.25	20.32	0.51	-	-	QP



Test Mode :	802.11n HT40 with WPC Charging Mode	Temperature :	23~25°C
Test Channel :	102	Relative Humidity :	43~45%
Test Engineer :	Eric Shih	Polarization :	Vertical

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
0.01237	33.68	-92.08	125.76	13.11	20.28	0.29	-	-	Average
0.07875	24.96	-84.72	109.68	4.6	20.07	0.29	-	-	Average
0.10296	22.47	-84.88	107.35	2.13	20.05	0.29	-	-	QP
0.1418	24.46	-80.11	104.57	4.15	20.02	0.29	-	-	Average
0.1482	47.42	-56.77	104.19	27.13	20	0.29	-	-	Average
0.45396	43.71	-50.75	94.46	23.52	19.9	0.29	-	-	Average
1.241	39.04	-26.69	65.73	18.8	19.93	0.31	100	289	QP
11.008	36.01	-33.99	70	15.89	19.73	0.39	-	-	QP
18.862	38.49	-31.51	70	18.12	19.94	0.43	-	-	QP
26.825	36.09	-33.91	70	15.27	20.34	0.48	-	-	QP



3.1.6 Test Result

3.1.6.1 Test Result of Radiated Band Edges

Test Mode :	802.11a	Temperature :	25~26°C
Test Channel :	36	Relative Humidity :	50~51%
Test Engineer :	Jet Lu		

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	55.39	-18.61	74	49.34	31.62	6.72	32.29	104	43	Peak
5150	39.8	-14.2	54	33.75	31.62	6.72	32.29	104	43	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
5149.7	53.76	-20.24	74	47.71	31.62	6.72	32.29	111	68	Peak
5150	39.32	-14.68	54	33.27	31.62	6.72	32.29	111	68	Average

Test Mode :	802.11a	Temperature :	25~26°C
Test Channel :	48	Relative Humidity :	50~51%
Test Engineer :	Jet Lu		

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
5028.05	47.68	-26.32	74	41.82	31.53	6.65	32.32	106	42	Peak
5008.55	35.52	-18.48	54	29.7	31.51	6.64	32.33	106	42	Average
5383.11	48.32	-25.68	74	41.85	31.81	6.88	32.22	106	42	Peak
5352.09	36.09	-17.91	54	29.71	31.78	6.83	32.23	106	42	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
5038.4	48.1	-25.9	74	42.23	31.54	6.65	32.32	104	343	Peak
5031.2	35.45	-18.55	54	29.59	31.53	6.65	32.32	104	343	Average
5400.05	48.47	-25.53	74	41.99	31.82	6.88	32.22	104	343	Peak
5363.31	36.07	-17.93	54	29.66	31.79	6.85	32.23	104	343	Average



Test Mode :	802.11a	Temperature :	25~26°C
Test Channel :	52	Relative Humidity :	50~51%
Test Engineer :	Jet Lu		

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
5058.5	47.73	-26.27	74	41.82	31.55	6.67	32.31	108	42	Peak
5003.15	35.41	-18.59	54	29.6	31.5	6.64	32.33	108	42	Average
5363.2	48.49	-25.51	74	42.08	31.79	6.85	32.23	108	42	Peak
5358.8	36.22	-17.78	54	29.82	31.78	6.85	32.23	108	42	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
5007.2	47.95	-26.05	74	42.13	31.51	6.64	32.33	108	349	Peak
5005.7	35.59	-18.41	54	29.77	31.51	6.64	32.33	108	349	Average
5364.85	48.1	-25.9	74	41.69	31.79	6.85	32.23	108	349	Peak
5364.19	36.05	-17.95	54	29.64	31.79	6.85	32.23	108	349	Average

Test Mode :	802.11a	Temperature :	25~26°C
Test Channel :	64	Relative Humidity :	50~51%
Test Engineer :	Jet Lu		

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
5350.11	57.73	-16.27	74	51.35	31.78	6.83	32.23	106	41	Peak
5350.11	41.61	-12.39	54	35.23	31.78	6.83	32.23	106	41	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
5350.44	58.03	-15.97	74	51.65	31.78	6.83	32.23	101	342	Peak
5350	40.58	-13.42	54	34.2	31.78	6.83	32.23	101	342	Average



Test Mode :	802.11a	Temperature :	25~26°C
Test Channel :	100	Relative Humidity :	50~51%
Test Engineer :	Jet Lu		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5469.52	58.01	-15.99	74	51.4	31.87	6.94	32.2	100	23	Peak
5469.52	42.28	-11.72	54	35.67	31.87	6.94	32.2	100	23	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
5466.16	60.13	-13.87	74	53.52	31.87	6.94	32.2	100	347	Peak
5470	43.52	-10.48	54	36.91	31.87	6.94	32.2	100	347	Average

Test Mode :	802.11a	Temperature :	25~26°C
Test Channel :	140	Relative Humidity :	50~51%
Test Engineer :	Jet Lu		

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
5725.08	67.91	-6.09	74	60.66	32.21	7.16	32.12	100	17	Peak
5725	47.8	-6.2	54	40.55	32.21	7.16	32.12	100	17	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
5725.32	62.74	-11.26	74	55.49	32.21	7.16	32.12	120	84	Peak
5725	44.32	-9.68	54	37.07	32.21	7.16	32.12	120	84	Average



Test Mode :	802.11n HT20	Temperature :	25~26°C
Test Channel :	36	Relative Humidity :	50~51%
Test Engineer :	Jet Lu		

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
5145.05	54.61	-19.39	74	48.56	31.62	6.72	32.29	109	43	Peak
5128.25	40	-14	54	33.97	31.61	6.71	32.29	109	43	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
5148.8	49.66	-24.34	74	43.61	31.62	6.72	32.29	100	104	Peak
5128.4	37.52	-16.48	54	31.49	31.61	6.71	32.29	100	104	Average

Test Mode :	802.11n HT20	Temperature :	25~26°C
Test Channel :	48	Relative Humidity :	50~51%
Test Engineer :	Jet Lu		

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
5004.2	47.94	-26.06	74	42.12	31.51	6.64	32.33	109	43	Peak
5145.05	35.56	-18.44	54	29.51	31.62	6.72	32.29	109	43	Average
5432.17	48.85	-25.15	74	42.29	31.85	6.92	32.21	109	43	Peak
5363.97	36.16	-17.84	54	29.75	31.79	6.85	32.23	109	43	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
5041.4	47.95	-26.05	74	42.08	31.54	6.65	32.32	104	343	Peak
5003.6	35.49	-18.51	54	29.67	31.51	6.64	32.33	104	343	Average
5402.14	48.94	-25.06	74	42.46	31.82	6.88	32.22	104	343	Peak
5355.61	36.09	-17.91	54	29.71	31.78	6.83	32.23	104	343	Average



Test Mode :	802.11n HT20	Temperature :	25~26°C
Test Channel :	52	Relative Humidity :	50~51%
Test Engineer :	Jet Lu		

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
5029.85	48.07	-25.93	74	42.21	31.53	6.65	32.32	107	42	Peak
5023.85	35.56	-18.44	54	29.7	31.53	6.65	32.32	107	42	Average
5371.23	50.26	-23.74	74	43.85	31.79	6.85	32.23	107	42	Peak
5364.08	36.32	-17.68	54	29.91	31.79	6.85	32.23	107	42	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
5046.95	47.88	-26.12	74	41.99	31.54	6.67	32.32	104	340	Peak
5010.8	35.48	-18.52	54	29.66	31.51	6.64	32.33	104	340	Average
5399.61	48.92	-25.08	74	42.44	31.82	6.88	32.22	104	340	Peak
5351.76	36.15	-17.85	54	29.77	31.78	6.83	32.23	104	340	Average

Test Mode :	802.11n HT20	Temperature :	25~26°C
Test Channel :	64	Relative Humidity :	50~51%
Test Engineer :	Jet Lu		

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
5353.41	54.51	-19.49	74	48.13	31.78	6.83	32.23	107	27	Peak
5350.44	39.24	-14.76	54	32.86	31.78	6.83	32.23	107	27	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
5351.43	54.63	-19.37	74	48.25	31.78	6.83	32.23	103	348	Peak
5351.1	38.95	-15.05	54	32.57	31.78	6.83	32.23	103	348	Average



Test Mode :	802.11n HT20	Temperature :	25~26°C
Test Channel :	100	Relative Humidity :	50~51%
Test Engineer :	Jet Lu		

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
5468.72	55.06	-18.94	74	48.45	31.87	6.94	32.2	102	33	Peak
5469.36	40.9	-13.1	54	34.29	31.87	6.94	32.2	102	33	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5467.76	57.76	-16.24	74	51.15	31.87	6.94	32.2	100	347	Peak
5469.2	42.12	-11.88	54	35.51	31.87	6.94	32.2	100	347	Average

Test Mode :	802.11n HT20	Temperature :	25~26°C
Test Channel :	140	Relative Humidity :	50~51%
Test Engineer :	Jet Lu		

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
5725.08	63.33	-10.67	74	56.08	32.21	7.16	32.12	100	35	Peak
5725	46.97	-7.03	54	39.72	32.21	7.16	32.12	100	35	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
5725.48	62.91	-11.09	74	55.66	32.21	7.16	32.12	100	118	Peak
5725.08	45.96	-8.04	54	38.71	32.21	7.16	32.12	100	118	Average



Test Mode :	802.11n HT40	Temperature :	25~26°C
Test Channel :	38	Relative Humidity :	50~51%
Test Engineer :	Jet Lu		

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
5147.45	67.46	-6.54	74	61.41	31.62	6.72	32.29	108	34	Peak
5149.85	49.19	-4.81	54	43.14	31.62	6.72	32.29	108	34	Average
5359.24	48.39	-25.61	74	41.99	31.78	6.85	32.23	108	34	Peak
5361.22	36.75	-17.25	54	30.34	31.79	6.85	32.23	108	34	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	60.64	-13.36	74	54.59	31.62	6.72	32.29	100	74	Peak
5150	45.36	-8.64	54	39.31	31.62	6.72	32.29	100	74	Average
5354.18	48.26	-25.74	74	41.88	31.78	6.83	32.23	100	74	Peak
5363.2	36.69	-17.31	54	30.28	31.79	6.85	32.23	100	74	Average



Test Mode :	802.11n HT40	Temperature :	25~26°C
Test Channel :	46	Relative Humidity :	50~51%
Test Engineer :	Jet Lu		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5145.5	49.7	-24.3	74	43.65	31.62	6.72	32.29	109	34	Peak
5126	37.26	-16.74	54	31.23	31.61	6.71	32.29	109	34	Average
5353.3	48.17	-25.83	74	41.79	31.78	6.83	32.23	109	34	Peak
5367.38	37.1	-16.9	54	30.69	31.79	6.85	32.23	109	34	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
5010.2	47.7	-26.3	74	41.88	31.51	6.64	32.33	100	109	Peak
5127.5	36.41	-17.59	54	30.38	31.61	6.71	32.29	100	109	Average
5365.73	48.32	-25.68	74	41.91	31.79	6.85	32.23	100	109	Peak
5366.72	36.53	-17.47	54	30.12	31.79	6.85	32.23	100	109	Average



Test Mode :	802.11n HT40	Temperature :	25~26°C
Test Channel :	54	Relative Humidity :	50~51%
Test Engineer :	Jet Lu		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5136.95	47.8	-26.2	74	41.77	31.61	6.71	32.29	109	34	Peak
5008.85	36.31	-17.69	54	30.49	31.51	6.64	32.33	109	34	Average
5372.77	48.78	-25.22	74	42.37	31.79	6.85	32.23	109	34	Peak
5372.66	37.38	-16.62	54	30.97	31.79	6.85	32.23	109	34	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
5037.2	48.38	-25.62	74	42.52	31.53	6.65	32.32	109	107	Peak
5000.3	36.02	-17.98	54	30.21	31.5	6.64	32.33	109	107	Average
5356.05	48.5	-25.5	74	42.1	31.78	6.85	32.23	109	107	Peak
5372.44	36.99	-17.01	54	30.58	31.79	6.85	32.23	109	107	Average



Test Mode :	802.11n HT40	Temperature :	25~26°C
Test Channel :	62	Relative Humidity :	50~51%
Test Engineer :	Jet Lu		

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
5034.2	47.79	-26.21	74	41.93	31.53	6.65	32.32	107	35	Peak
5006.6	36.08	-17.92	54	30.26	31.51	6.64	32.33	107	35	Average
5350.66	63.9	-10.1	74	57.52	31.78	6.83	32.23	107	35	Peak
5350.77	48.01	-5.99	54	41.63	31.78	6.83	32.23	107	35	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
5014.85	48.38	-25.62	74	42.56	31.51	6.64	32.33	102	347	Peak
5009.75	35.97	-18.03	54	30.15	31.51	6.64	32.33	102	347	Average
5350.11	64.98	-9.02	74	58.6	31.78	6.83	32.23	102	347	Peak
5350	47.83	-6.17	54	41.45	31.78	6.83	32.23	102	347	Average



Test Mode :	802.11n HT40	Temperature :	25~26°C
Test Channel :	102	Relative Humidity :	50~51%
Test Engineer :	Jet Lu		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5469.68	64.75	-9.25	74	58.14	31.87	6.94	32.2	102	32	Peak
5469.52	48.54	-5.46	54	41.93	31.87	6.94	32.2	102	32	Average
5733.8	49.14	-24.86	74	41.89	32.21	7.16	32.12	102	32	Peak
5746.36	37.22	-16.78	54	29.91	32.24	7.18	32.11	102	32	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5469.52	66.89	-7.11	74	60.28	31.87	6.94	32.2	100	339	Peak
5469.04	49.27	-4.73	54	42.66	31.87	6.94	32.2	100	339	Average
5756.44	49.04	-24.96	74	41.71	32.26	7.18	32.11	100	339	Peak
5737.88	37.19	-16.81	54	29.9	32.24	7.16	32.11	100	339	Average



Test Mode :	802.11n HT40	Temperature :	25~26°C
Test Channel :	134	Relative Humidity :	50~51%
Test Engineer :	Jet Lu		

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
5376.72	48.19	-25.81	74	41.78	31.79	6.85	32.23	100	35	Peak
5381.36	36.69	-17.31	54	30.22	31.81	6.88	32.22	100	35	Average
5727.96	55.19	-18.81	74	47.94	32.21	7.16	32.12	100	35	Peak
5725.64	41.2	-12.8	54	33.95	32.21	7.16	32.12	100	35	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
5370.64	48.81	-25.19	74	42.4	31.79	6.85	32.23	118	339	Peak
5362	36.84	-17.16	54	30.43	31.79	6.85	32.23	118	339	Average
5727.24	55.91	-18.09	74	48.66	32.21	7.16	32.12	118	339	Peak
5727.16	41.2	-12.8	54	33.95	32.21	7.16	32.12	118	339	Average



Test Mode :	802.11ac VHT80	Temperature :	25~26°C
Test Channel :	42	Relative Humidity :	50~51%
Test Engineer :	Jet Lu		

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
5138.75	57.45	-16.55	74	51.42	31.61	6.71	32.29	100	35	Peak
5149.1	45.7	-8.3	54	39.65	31.62	6.72	32.29	100	35	Average
5353.41	48.64	-25.36	74	42.26	31.78	6.83	32.23	100	35	Peak
5365.07	37.63	-16.37	54	31.22	31.79	6.85	32.23	100	35	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5139.95	55	-19	74	48.96	31.62	6.71	32.29	100	104	Peak
5142.65	42.54	-11.46	54	36.49	31.62	6.72	32.29	100	104	Average
5390.37	48.67	-25.33	74	42.2	31.81	6.88	32.22	100	104	Peak
5386.41	37.72	-16.28	54	31.25	31.81	6.88	32.22	100	104	Average



Test Mode :	802.11ac VHT80	Temperature :	25~26°C
Test Channel :	58	Relative Humidity :	50~51%
Test Engineer :	Jet Lu		

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
5002.4	48.07	-25.93	74	42.26	31.5	6.64	32.33	107	35	Peak
5018	37.04	-16.96	54	31.22	31.51	6.64	32.33	107	35	Average
5354.73	59.02	-14.98	74	52.64	31.78	6.83	32.23	107	35	Peak
5350.99	46.77	-7.23	54	40.39	31.78	6.83	32.23	107	35	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
5009.6	48.2	-25.8	74	42.38	31.51	6.64	32.33	102	349	Peak
5058.65	37.13	-16.87	54	31.22	31.55	6.67	32.31	102	349	Average
5354.95	58.71	-15.29	74	52.33	31.78	6.83	32.23	102	349	Peak
5356.38	46.38	-7.62	54	39.98	31.78	6.85	32.23	102	349	Average



Test Mode :	802.11ac VHT80	Temperature :	25~26°C
Test Channel :	106	Relative Humidity :	50~51%
Test Engineer :	Jet Lu		

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
5470	54.94	-19.06	74	48.33	31.87	6.94	32.2	103	32	Peak
5468.24	39.36	-14.64	54	32.75	31.87	6.94	32.2	103	32	Average
5726.92	48.84	-25.16	74	41.59	32.21	7.16	32.12	103	32	Peak
5744.44	37.85	-16.15	54	30.54	32.24	7.18	32.11	103	32	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
5470	57.66	-16.34	74	51.05	31.87	6.94	32.2	100	344	Peak
5469.84	40.84	-13.16	54	34.23	31.87	6.94	32.2	100	344	Average
5728.6	48.93	-25.07	74	41.68	32.21	7.16	32.12	100	344	Peak
5747.56	38.33	-15.67	54	31.02	32.24	7.18	32.11	100	344	Average

**<WLAN Tx with WPC Charging Mode>**

Test Mode :	802.11n HT40 with WPC Charging Mode	Temperature :	25~26°C
Test Channel :	102	Relative Humidity :	50~51%
Test Engineer :	Jet Lu		

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
5468.72	58.05	-15.95	74	51.44	31.87	6.94	32.2	100	22	Peak
5470	43.56	-10.44	54	36.95	31.87	6.94	32.2	100	22	Average
5728.6	46.38	-27.62	74	39.13	32.21	7.16	32.12	100	22	Peak
5743.88	34.77	-19.23	54	27.46	32.24	7.18	32.11	100	22	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	58.9	-15.1	74	52.29	31.87	6.94	32.2	115	343	Peak
5468.72	45.67	-8.33	54	39.06	31.87	6.94	32.2	115	343	Average
5735.24	47.08	-26.92	74	39.79	32.24	7.16	32.11	115	343	Peak
5758.2	34.85	-19.15	54	27.52	32.26	7.18	32.11	115	343	Average

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

Test Mode :	802.11a	Temperature :	25~26°C
Test Channel :	36	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	Polarization :	Horizontal
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	93.54	-	-	87.44	31.65	6.73	32.28	108	43	Average
5178	103.77	-	-	97.67	31.65	6.73	32.28	108	43	Peak
10359	47.71	-26.29	74	55.77	39.59	9.8	57.45	100	0	Peak
15540	36.53	-37.47	74	44.49	38.8	11.81	58.57	100	0	Peak

Test Mode :	802.11a	Temperature :	25~26°C
Test Channel :	36	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	Polarization :	Vertical
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	90.32	-	-	84.22	31.65	6.73	32.28	111	67	Average
5182	100.68	-	-	94.58	31.65	6.73	32.28	111	67	Peak
10359	49.56	-24.44	74	57.62	39.59	9.8	57.45	100	0	Peak
15540	36.84	-37.16	74	44.8	38.8	11.81	58.57	100	0	Peak



Test Mode :	802.11a	Temperature :	25~26°C
Test Channel :	44	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	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	93.32	-	-	87.16	31.67	6.76	32.27	109	42	Average
5222	102.77	-	-	96.61	31.67	6.76	32.27	109	42	Peak
10440	44.83	-29.17	74	52.75	39.69	9.82	57.43	100	0	Peak
15660	36.49	-37.51	74	44.7	38.47	11.8	58.48	100	0	Peak

Test Mode :	802.11a	Temperature :	25~26°C
Test Channel :	44	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	Polarization :	Vertical
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	88.85	-	-	82.69	31.67	6.76	32.27	122	114	Average
5222	98.59	-	-	92.43	31.67	6.76	32.27	122	114	Peak
10440	44.63	-29.37	74	52.55	39.69	9.82	57.43	100	0	Peak
15660	37.47	-36.53	74	45.68	38.47	11.8	58.48	100	0	Peak



Test Mode :	802.11a	Temperature :	25~26°C
Test Channel :	48	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	Polarization :	Horizontal
Remark :	5238 MHz is fundamental signal which can be ignored. 10479 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
5238	93.98	-	-	87.78	31.69	6.77	32.26	106	42	Average
5238	103.7	-	-	97.5	31.69	6.77	32.26	106	42	Peak
10479	44.81	-29.19	74	52.61	39.77	9.84	57.41	100	0	Peak
15720	37.03	-36.97	74	45.38	38.27	11.8	58.42	100	0	Peak

Test Mode :	802.11a	Temperature :	25~26°C
Test Channel :	48	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	Polarization :	Vertical
Remark :	5238 MHz is fundamental signal which can be ignored. 10479 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
5238	91.32	-	-	85.12	31.69	6.77	32.26	104	343	Average
5238	101.41	-	-	95.21	31.69	6.77	32.26	104	343	Peak
10479	45.16	-28.84	74	52.96	39.77	9.84	57.41	100	0	Peak
15720	38.34	-35.66	74	46.69	38.27	11.8	58.42	100	0	Peak



Test Mode :	802.11a	Temperature :	25~26°C
Test Channel :	52	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	Polarization :	Horizontal
Remark :	5258 MHz is fundamental signal which can be ignored. 10521 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
5258	93.34	-	-	87.13	31.7	6.77	32.26	108	42	Average
5258	103.2	-	-	96.99	31.7	6.77	32.26	108	42	Peak
10521	45.11	-28.89	74	52.82	39.83	9.86	57.4	100	0	Peak
15780	36.84	-37.16	74	45.29	38.13	11.8	58.38	100	0	Peak

Test Mode :	802.11a	Temperature :	25~26°C
Test Channel :	52	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	Polarization :	Vertical
Remark :	5262 MHz is fundamental signal which can be ignored. 10521 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
5262	90.69	-	-	84.45	31.71	6.79	32.26	108	349	Average
5262	98.21	-	-	91.97	31.71	6.79	32.26	108	349	Peak
10521	44.84	-29.16	74	52.55	39.83	9.86	57.4	100	0	Peak
15780	37.11	-36.89	74	45.56	38.13	11.8	58.38	100	0	Peak



Test Mode :	802.11a	Temperature :	25~26°C
Test Channel :	60	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	Polarization :	Horizontal
Remark :	5298 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
5298	94.58	-	-	88.29	31.74	6.8	32.25	107	41	Average
5298	104.3	-	-	98.01	31.74	6.8	32.25	107	41	Peak
10599	43.92	-30.08	74	51.49	39.97	9.88	57.42	100	0	Peak
15900	38.53	-35.47	74	47.25	37.79	11.77	58.28	100	0	Peak

Test Mode :	802.11a	Temperature :	25~26°C
Test Channel :	60	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	Polarization :	Vertical
Remark :	5298 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
5298	92.93	-	-	86.64	31.74	6.8	32.25	101	343	Average
5298	103.22	-	-	96.93	31.74	6.8	32.25	101	343	Peak
10599	44.74	-29.26	74	52.31	39.97	9.88	57.42	100	0	Peak
15900	39.22	-34.78	74	47.94	37.79	11.77	58.28	100	0	Peak



Test Mode :	802.11a	Temperature :	25~26°C
Test Channel :	64	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	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	93.67	-	-	87.35	31.75	6.81	32.24	106	41	Average
5322	103.64	-	-	97.32	31.75	6.81	32.24	106	41	Peak
10641	44.31	-29.69	74	51.82	40.02	9.9	57.43	100	0	Peak
15960	37.6	-36.4	74	46.47	37.6	11.76	58.23	100	0	Peak

Test Mode :	802.11a	Temperature :	25~26°C
Test Channel :	64	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	Polarization :	Vertical
Remark :	1. 5318 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5318	92.79	-	-	86.47	31.75	6.81	32.24	101	342	Average
5318	102.5	-	-	96.18	31.75	6.81	32.24	101	342	Peak
10641	44.68	-29.32	74	52.19	40.02	9.9	57.43	100	0	Peak
15960	38.49	-35.51	74	47.36	37.6	11.76	58.23	100	0	Peak



Test Mode :	802.11a	Temperature :	25~26°C
Test Channel :	100	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	Polarization :	Horizontal
Remark :	5502 MHz is fundamental signal which can be ignored. 16500 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
5502	93.35	-	-	86.66	31.9	6.98	32.19	100	24	Average
5502	103.31	-	-	96.62	31.9	6.98	32.19	100	24	Peak
11001	44.68	-29.32	74	51.5	40.6	10.08	57.5	100	0	Peak
16500	43.26	-30.74	74	49.48	38.9	12.18	57.3	100	0	Peak

Test Mode :	802.11a	Temperature :	25~26°C
Test Channel :	100	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	Polarization :	Vertical
Remark :	5502 MHz is fundamental signal which can be ignored. 16500 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
5502	94.51	-	-	87.82	31.9	6.98	32.19	100	347	Average
5502	105	-	-	98.31	31.9	6.98	32.19	100	347	Peak
11001	44.58	-29.42	74	51.4	40.6	10.08	57.5	100	0	Peak
16500	42.83	-31.17	74	49.05	38.9	12.18	57.3	100	0	Peak



Test Mode :	802.11a	Temperature :	25~26°C
Test Channel :	116	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	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	94.33	-	-	87.43	32.02	7.04	32.16	100	46	Average
5582	104.01	-	-	97.11	32.02	7.04	32.16	100	46	Peak
11160	45.39	-28.61	74	52.2	40.47	10.15	57.43	100	0	Peak
16740	44.03	-29.97	74	49.24	39.77	12.32	57.3	100	0	Peak

Test Mode :	802.11a	Temperature :	25~26°C
Test Channel :	116	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	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	92.4	-	-	85.5	32.02	7.04	32.16	100	55	Average
5582	101.93	-	-	95.03	32.02	7.04	32.16	100	55	Peak
11160	45.33	-28.67	74	52.14	40.47	10.15	57.43	100	0	Peak
16740	43.63	-30.37	74	48.84	39.77	12.32	57.3	100	0	Peak



Test Mode :	802.11a	Temperature :	25~26°C
Test Channel :	140	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	Polarization :	Horizontal
Remark :	5698 MHz is fundamental signal which can be ignored. 17100 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
31.35	22.9	-17.1	40	53.83	0	0.71	31.64	144	152	Peak
207.93	18.27	-25.23	43.5	47.96	0	1.49	31.18	-	-	Peak
234.12	22.24	-23.76	46	51.58	0	1.59	30.93	-	-	Peak
311.9	24.56	-21.44	46	53.67	0	1.81	30.92	-	-	Peak
389.6	33.56	-12.44	46	62.67	0	1.99	31.1	-	-	Peak
857.9	26.28	-19.72	46	53.08	0	2.94	29.74	-	-	Peak
5698	94.23	-	-	87.04	32.17	7.15	32.13	100	17	Average
5698	103.57	-	-	96.38	32.17	7.15	32.13	100	17	Peak
11400	45.68	-28.32	74	52.46	40.28	10.28	57.34	100	0	Peak
17100	45.81	-28.19	74	49.77	41.12	12.48	57.56	100	0	Peak



Test Mode :	802.11a	Temperature :	25~26°C
Test Channel :	140	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	Polarization :	Vertical
Remark :	1. 5702 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
32.97	28.65	-11.35	40	59.56	0	0.72	31.63	100	297	Peak
42.42	24.27	-15.73	40	55.07	0	0.76	31.56	-	-	Peak
234.12	22.68	-23.32	46	52.02	0	1.59	30.93	-	-	Peak
389.6	27.85	-18.15	46	56.96	0	1.99	31.1	-	-	Peak
494.6	26.25	-19.75	46	54.64	0	2.22	30.61	-	-	Peak
533.1	30.52	-15.48	46	59.12	0	2.3	30.9	-	-	Peak
5702	90.75	-	-	83.53	32.19	7.15	32.12	120	84	Average
5702	100.36	-	-	93.14	32.19	7.15	32.12	120	84	Peak
11400	45.35	-28.65	74	52.13	40.28	10.28	57.34	100	0	Peak
17100	45.39	-28.61	74	49.35	41.12	12.48	57.56	100	0	Peak



Test Mode :	802.11n HT20	Temperature :	25~26°C
Test Channel :	36	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	Polarization :	Horizontal
Remark :	5182 MHz is fundamental signal which can be ignored. - Average measurement was not performed if peak level went lower than the average limit. 10359 MHz is not within a restricted band and satisfies both the average and peak limits of 15.209.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (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	91.49	-	-	111.41	31.65	6.73	58.3	109	43	Average
5182	101.44	-	-	121.36	31.65	6.73	58.3	109	43	Peak
10359	46.8	-27.2	74	54.86	39.59	9.8	57.45	100	0	Peak
15540	41.97	-32.03	74	49.93	38.8	11.81	58.57	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	25~26°C
Test Channel :	36	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	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	87.64	-	-	81.54	31.65	6.73	32.28	100	104	Average
5182	97.69	-	-	91.59	31.65	6.73	32.28	100	104	Peak
10359	44.91	-29.09	74	52.97	39.59	9.8	57.45	100	0	Peak
15540	41.97	-32.03	74	49.93	38.8	11.81	58.57	100	0	Peak



Test Mode :	802.11n HT20	Temperature :	25~26°C
Test Channel :	44	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	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	91.83	-	-	111.62	31.67	6.76	58.22	108	41	Average
5218	102.09	-	-	121.88	31.67	6.76	58.22	108	41	Peak
10440	44.85	-29.15	74	52.77	39.69	9.82	57.43	100	0	Peak
15660	41.03	-32.97	74	49.24	38.47	11.8	58.48	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	25~26°C
Test Channel :	44	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	Polarization :	Vertical
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	89.15	-	-	82.99	31.67	6.76	32.27	134	89	Average
5218	99.25	-	-	93.09	31.67	6.76	32.27	134	89	Peak
10440	44.72	-29.28	74	52.64	39.69	9.82	57.43	100	0	Peak
15660	41.03	-32.97	74	49.24	38.47	11.8	58.48	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	25~26°C
Test Channel :	48	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	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	92.45	-	-	112.18	31.69	6.77	58.19	109	43	Average
5238	102.92	-	-	122.65	31.69	6.77	58.19	109	43	Peak
10479	46.14	-27.86	74	53.94	39.77	9.84	57.41	100	0	Peak
15720	41.86	-32.14	74	50.21	38.27	11.8	58.42	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	25~26°C
Test Channel :	48	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	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	90.5	-	-	84.3	31.69	6.77	32.26	104	343	Average
5238	100.54	-	-	94.34	31.69	6.77	32.26	104	343	Peak
10479	46.67	-27.33	74	54.47	39.77	9.84	57.41	100	0	Peak
15720	41.86	-32.14	74	50.21	38.27	11.8	58.42	100	0	Peak



Test Mode :	802.11n HT20	Temperature :	25~26°C
Test Channel :	52	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	Polarization :	Horizontal
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	92.53	-	-	112.14	31.71	6.79	58.11	107	42	Average
5262	102.16	-	-	121.77	31.71	6.79	58.11	107	42	Peak
10521	46.78	-27.22	74	54.49	39.83	9.86	57.4	100	0	Peak
15780	33.35	-40.65	74	41.8	38.13	11.8	58.38	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	25~26°C
Test Channel :	52	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	Polarization :	Vertical
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	90.92	-	-	84.71	31.7	6.77	32.26	104	340	Average
5258	100.68	-	-	94.47	31.7	6.77	32.26	104	340	Peak
10521	46.81	-27.19	74	54.52	39.83	9.86	57.4	100	0	Peak
15780	33.35	-40.65	74	41.8	38.13	11.8	58.38	100	0	Peak



Test Mode :	802.11n HT20	Temperature :	25~26°C
Test Channel :	60	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	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	91.59	-	-	111.09	31.74	6.8	58.04	107	30	Average
5298	101.25	-	-	120.75	31.74	6.8	58.04	107	30	Peak
10599	45.34	-28.66	74	52.91	39.97	9.88	57.42	100	0	Peak
15900	33.31	-40.69	74	42.03	37.79	11.77	58.28	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	25~26°C
Test Channel :	60	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	Polarization :	Vertical
Remark :	1. 5302 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
5302	90.3	-	-	84.01	31.74	6.8	32.25	103	350	Average
5302	100.49	-	-	94.2	31.74	6.8	32.25	103	350	Peak
10599	46.01	-27.99	74	53.58	39.97	9.88	57.42	100	0	Peak
15900	33.31	-40.69	74	42.03	37.79	11.77	58.28	100	0	Peak



Test Mode :	802.11n HT20	Temperature :	25~26°C
Test Channel :	64	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	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	90.74	-	-	110.18	31.75	6.81	58	107	27	Average
5322	100.98	-	-	120.42	31.75	6.81	58	107	27	Peak
10641	44.65	-29.35	74	52.16	40.02	9.9	57.43	100	0	Peak
15960	33.1	-40.9	74	41.97	37.6	11.76	58.23	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	25~26°C
Test Channel :	64	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	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	90.36	-	-	84.04	31.75	6.81	32.24	103	348	Average
5322	100.03	-	-	93.71	31.75	6.81	32.24	103	348	Peak
10641	45.38	-28.62	74	52.89	40.02	9.9	57.43	100	0	Peak
15960	33.1	-40.9	74	41.97	37.6	11.76	58.23	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	25~26°C
Test Channel :	100	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	Polarization :	Horizontal
Remark :	1. 5502 MHz is fundamental signal which can be ignored. 2. 16500 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
5502	91.19	-	-	109.91	31.9	6.98	57.6	102	33	Average
5502	101.33	-	-	120.05	31.9	6.98	57.6	102	33	Peak
11001	44.66	-29.34	74	51.48	40.6	10.08	57.5	100	0	Peak
16500	40.59	-33.41	74	46.81	38.9	12.18	57.3	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	25~26°C
Test Channel :	100	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	Polarization :	Vertical
Remark :	1. 5498 MHz is fundamental signal which can be ignored. 2. 16500 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
5498	92.06	-	-	85.39	31.9	6.96	32.19	100	347	Average
5498	102.35	-	-	95.68	31.9	6.96	32.19	100	347	Peak
11001	44.78	-29.22	74	51.6	40.6	10.08	57.5	100	0	Peak
16500	40.59	-33.41	74	46.81	38.9	12.18	57.3	100	0	Peak



Test Mode :	802.11n HT20	Temperature :	25~26°C
Test Channel :	116	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	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	90.92	-	-	109.29	32.02	7.04	57.43	100	37	Average
5582	100.64	-	-	119.01	32.02	7.04	57.43	100	37	Peak
11160	44.57	-29.43	74	51.38	40.47	10.15	57.43	100	0	Peak
16740	41.89	-32.11	74	47.1	39.77	12.32	57.3	100	0	Peak

Test Mode :	802.11n HT20	Temperature :	25~26°C
Test Channel :	116	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	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	92.31	-	-	85.41	32.02	7.04	32.16	108	343	Average
5582	102.26	-	-	95.36	32.02	7.04	32.16	108	343	Peak
11160	45.5	-28.5	74	52.31	40.47	10.15	57.43	100	0	Peak
16740	41.89	-32.11	74	47.1	39.77	12.32	57.3	100	0	Peak



Test Mode :	802.11n HT20	Temperature :	25~26°C
Test Channel :	140	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	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
31.35	22.99	-17.01	40	53.92	0	0.71	31.64	182	147	Peak
207.93	18.65	-24.85	43.5	48.34	0	1.49	31.18	-	-	Peak
234.12	22.44	-23.56	46	51.78	0	1.59	30.93	-	-	Peak
311.9	24.31	-21.69	46	53.42	0	1.81	30.92	-	-	Peak
389.6	33.45	-12.55	46	62.56	0	1.99	31.1	-	-	Peak
857.9	26.52	-19.48	46	53.32	0	2.94	29.74	-	-	Peak
5698	91.61	-	-	84.42	32.17	7.15	32.13	100	35	Average
5698	101.83	-	-	94.64	32.17	7.15	32.13	100	35	Peak
11400	45.91	-28.09	74	52.69	40.28	10.28	57.34	100	0	Peak
17100	44.49	-29.51	74	48.45	41.12	12.48	57.56	100	0	Peak



Test Mode :	802.11n HT20	Temperature :	25~26°C
Test Channel :	140	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	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
32.97	28.88	-11.12	40	59.79	0	0.72	31.63	158	204	Peak
42.42	24.39	-15.61	40	55.19	0	0.76	31.56	-	-	Peak
234.12	22.87	-23.13	46	52.21	0	1.59	30.93	-	-	Peak
389.6	28.01	-17.99	46	57.12	0	1.99	31.1	-	-	Peak
494.6	26.42	-19.58	46	54.81	0	2.22	30.61	-	-	Peak
533.1	30.97	-15.03	46	59.57	0	2.3	30.9	-	-	Peak
5698	90.16	-	-	82.97	32.17	7.15	32.13	100	118	Average
5698	99.94	-	-	92.75	32.17	7.15	32.13	100	118	Peak
11400	46.28	-27.72	74	53.06	40.28	10.28	57.34	100	0	Peak
17100	44.23	-29.77	74	48.19	41.12	12.48	57.56	100	0	Peak



Test Mode :	802.11n HT40	Temperature :	25~26°C
Test Channel :	38	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	Polarization :	Horizontal
Remark :	1. 5192 MHz is fundamental signal which can be ignored. 2. 10380 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
5192	89.89	-	-	109.74	31.66	6.75	58.26	108	34	Average
5192	99.59	-	-	119.44	31.66	6.75	58.26	108	34	Peak
10380	47.24	-26.76	74	55.27	39.61	9.81	57.45	100	0	Peak
15570	38.05	-35.95	74	46.07	38.71	11.81	58.54	100	0	Peak

Test Mode :	802.11n HT40	Temperature :	25~26°C
Test Channel :	38	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	Polarization :	Vertical
Remark :	1. 5192 MHz is fundamental signal which can be ignored. 2. 10380 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
5192	85.91	-	-	79.77	31.66	6.75	32.27	100	74	Average
5192	95.98	-	-	89.84	31.66	6.75	32.27	100	74	Peak
10380	46.7	-27.3	74	54.73	39.61	9.81	57.45	100	0	Peak
15570	38.05	-35.95	74	46.07	38.71	11.81	58.54	100	0	Peak



Test Mode :	802.11n HT40	Temperature :	25~26°C
Test Channel :	46	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	Polarization :	Horizontal
Remark :	1. 5232 MHz is fundamental signal which can be ignored. 2. 10461 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
5232	89.96	-	-	109.7	31.69	6.76	58.19	109	34	Average
5232	99.84	-	-	119.58	31.69	6.76	58.19	109	34	Peak
10461	46.39	-27.61	74	54.22	39.75	9.83	57.41	100	0	Peak
15690	35.97	-38.03	74	44.25	38.37	11.8	58.45	100	0	Peak

Test Mode :	802.11n HT40	Temperature :	25~26°C
Test Channel :	46	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	Polarization :	Vertical
Remark :	1. 5228 MHz is fundamental signal which can be ignored. 2. 10461 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
5228	85.99	-	-	79.8	31.69	6.76	32.26	100	109	Average
5228	95.43	-	-	89.24	31.69	6.76	32.26	100	109	Peak
10461	48.4	-25.6	74	56.23	39.75	9.83	57.41	100	0	Peak
15690	35.97	-38.03	74	44.25	38.37	11.8	58.45	100	0	Peak



Test Mode :	802.11n HT40	Temperature :	25~26°C
Test Channel :	54	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	Polarization :	Horizontal
Remark :	1. 5272 MHz is fundamental signal which can be ignored. 2. 10539 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
5272	89.57	-	-	109.18	31.71	6.79	58.11	109	34	Average
5272	99.69	-	-	119.3	31.71	6.79	58.11	109	34	Peak
10539	45.23	-28.77	74	52.92	39.86	9.86	57.41	100	0	Peak
15810	33.36	-40.64	74	41.88	38.03	11.8	58.35	100	0	Peak

Test Mode :	802.11n HT40	Temperature :	25~26°C
Test Channel :	54	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	Polarization :	Vertical
Remark :	1. 5268 MHz is fundamental signal which can be ignored. 2. 10539 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
5268	86.25	-	-	80.01	31.71	6.79	32.26	109	107	Average
5268	95.8	-	-	89.56	31.71	6.79	32.26	109	107	Peak
10539	45.91	-28.09	74	53.6	39.86	9.86	57.41	100	0	Peak
15810	33.36	-40.64	74	41.88	38.03	11.8	58.35	100	0	Peak

Test Mode :	802.11n HT40	Temperature :	25~26°C
Test Channel :	62	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	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	89.21	-	-	82.89	31.75	6.81	32.24	107	35	Average
5312	98.74	-	-	92.42	31.75	6.81	32.24	107	35	Peak
10620	45.81	-28.19	74	53.35	39.99	9.89	57.42	100	0	Peak
15930	33.02	-40.98	74	41.83	37.69	11.76	58.26	100	0	Peak

Test Mode :	802.11n HT40	Temperature :	25~26°C
Test Channel :	62	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	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	88.1	-	-	81.8	31.74	6.81	32.25	102	347	Average
5308	97.66	-	-	91.36	31.74	6.81	32.25	102	347	Peak
10620	44.9	-29.1	74	52.44	39.99	9.89	57.42	100	0	Peak
15930	33.02	-40.98	74	41.83	37.69	11.76	58.26	100	0	Peak



Test Mode :	802.11n HT40	Temperature :	25~26°C
Test Channel :	102	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	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
31.35	23.32	-16.68	40	54.25	0	0.71	31.64	196	135	Peak
207.93	19.23	-24.27	43.5	48.92	0	1.49	31.18	-	-	Peak
234.12	22.65	-23.35	46	51.99	0	1.59	30.93	-	-	Peak
311.9	24.98	-21.02	46	54.09	0	1.81	30.92	-	-	Peak
389.6	33.69	-12.31	46	62.8	0	1.99	31.1	-	-	Peak
857.9	26.89	-19.11	46	53.69	0	2.94	29.74	-	-	Peak
5508	86.79	-	-	80.1	31.9	6.98	32.19	102	32	Average
5508	97.59	-	-	90.9	31.9	6.98	32.19	102	32	Peak
11019	42.49	-31.51	74	49.31	40.59	10.08	57.49	100	0	Peak
16530	41.72	-32.28	74	47.8	39.02	12.2	57.3	100	0	Peak



Test Mode :	802.11n HT40	Temperature :	25~26°C
Test Channel :	102	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	Polarization :	Vertical
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
32.97	28.93	-11.07	40	59.84	0	0.72	31.63	109	248	Peak
42.42	25.16	-14.84	40	55.96	0	0.76	31.56	-	-	Peak
234.12	23.36	-22.64	46	52.7	0	1.59	30.93	-	-	Peak
389.6	28.35	-17.65	46	57.46	0	1.99	31.1	-	-	Peak
494.6	27.26	-18.74	46	55.65	0	2.22	30.61	-	-	Peak
533.1	31.26	-14.74	46	59.86	0	2.3	30.9	-	-	Peak
5508	88.29	-	-	81.6	31.9	6.98	32.19	100	339	Average
5508	98.21	-	-	91.52	31.9	6.98	32.19	100	339	Peak
11019	43.04	-30.96	74	49.86	40.59	10.08	57.49	100	0	Peak
16530	41.12	-32.88	74	47.2	39.02	12.2	57.3	100	0	Peak



Test Mode :	802.11n HT40	Temperature :	25~26°C
Test Channel :	110	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	Polarization :	Horizontal
Remark :	1. 5552 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
5552	88.6	-	-	107.11	31.97	7.02	57.5	111	21	Average
5552	98.72	-	-	117.23	31.97	7.02	57.5	111	21	Peak
11100	41.79	-32.21	74	48.6	40.52	10.13	57.46	100	0	Peak
16650	41.22	-32.78	74	46.78	39.46	12.28	57.3	100	0	Peak

Test Mode :	802.11n HT40	Temperature :	25~26°C
Test Channel :	110	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	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	90.13	-	-	83.31	31.97	7.02	32.17	108	339	Average
5548	99.73	-	-	92.91	31.97	7.02	32.17	108	339	Peak
11100	43.18	-30.82	74	49.99	40.52	10.13	57.46	100	0	Peak
16650	41.22	-32.78	74	46.78	39.46	12.28	57.3	100	0	Peak



Test Mode :	802.11n HT40	Temperature :	25~26°C
Test Channel :	134	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	Polarization :	Horizontal
Remark :	1. 5668 MHz is fundamental signal which can be ignored. 2. 17010 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
5668	88.4	-	-	106.42	32.14	7.1	57.26	100	35	Average
5668	98	-	-	116.02	32.14	7.1	57.26	100	35	Peak
11340	46.08	-27.92	74	52.87	40.33	10.25	57.37	100	0	Peak
17010	45.09	-28.91	74	49.22	40.77	12.44	57.34	100	0	Peak

Test Mode :	802.11n HT40	Temperature :	25~26°C
Test Channel :	134	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	Polarization :	Vertical
Remark :	1. 5672 MHz is fundamental signal which can be ignored. 2. 17010 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
5672	88.4	-	-	81.26	32.14	7.13	32.13	118	339	Average
5672	98.3	-	-	91.16	32.14	7.13	32.13	118	339	Peak
11340	45.52	-28.48	74	52.31	40.33	10.25	57.37	100	0	Peak
17010	45.09	-28.91	74	49.22	40.77	12.44	57.34	100	0	Peak



Test Mode :	802.11ac VHT80	Temperature :	25~26°C
Test Channel :	42	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	Polarization :	Horizontal
Remark :	1. 5208 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
5208	85.27	-	-	105.07	31.67	6.75	58.22	100	35	Average
5208	93.56	-	-	113.36	31.67	6.75	58.22	100	35	Peak
10419	46.06	-27.94	74	54	39.67	9.82	57.43	100	0	Peak
15630	35.43	-38.57	74	43.61	38.51	11.8	58.49	100	0	Peak

Test Mode :	802.11ac VHT80	Temperature :	25~26°C
Test Channel :	42	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	Polarization :	Vertical
Remark :	1. 5208 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
5208	81.04	-	-	74.89	31.67	6.75	32.27	100	104	Average
5208	90.48	-	-	84.33	31.67	6.75	32.27	100	104	Peak
10419	46.64	-27.36	74	54.58	39.67	9.82	57.43	100	0	Peak
15630	35.43	-38.57	74	43.61	38.51	11.8	58.49	100	0	Peak



Test Mode :	802.11ac VHT80	Temperature :	25~26°C
Test Channel :	58	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	Polarization :	Horizontal
Remark :	1. 5288 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
31.35	23.61	-16.39	40	54.54	0	0.71	31.64	158	269	Peak
207.93	25.32	-18.18	43.5	55.01	0	1.49	31.18	-	-	Peak
234.12	23.65	-22.35	46	52.99	0	1.59	30.93	-	-	Peak
311.9	24.93	-21.07	46	54.04	0	1.81	30.92	-	-	Peak
389.6	33.7	-12.3	46	62.81	0	1.99	31.1	-	-	Peak
857.9	26.35	-19.65	46	53.15	0	2.94	29.74	-	-	Peak
5288	85.73	-	-	79.45	31.73	6.8	32.25	107	35	Average
5288	94.25	-	-	87.97	31.73	6.8	32.25	107	35	Peak
10581	44.48	-29.52	74	52.09	39.94	9.87	57.42	100	0	Peak
15870	34.49	-39.51	74	43.17	37.84	11.78	58.3	100	0	Peak



Test Mode :	802.11ac VHT80	Temperature :	25~26°C
Test Channel :	58	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	Polarization :	Vertical
Remark :	1. 5292 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
32.97	29.02	-10.98	40	59.93	0	0.72	31.63	104	236	Peak
42.42	25.31	-14.69	40	56.11	0	0.76	31.56	-	-	Peak
234.12	23.02	-22.98	46	52.36	0	1.59	30.93	-	-	Peak
389.6	28.01	-17.99	46	57.12	0	1.99	31.1	-	-	Peak
494.6	26.42	-19.58	46	54.81	0	2.22	30.61	-	-	Peak
533.1	30.97	-15.03	46	59.57	0	2.3	30.9	-	-	Peak
5292	83.89	-	-	77.61	31.73	6.8	32.25	102	349	Average
5292	93.22	-	-	86.94	31.73	6.8	32.25	102	349	Peak
10581	46.32	-27.68	74	53.93	39.94	9.87	57.42	100	0	Peak
15870	33.58	-40.42	74	42.26	37.84	11.78	58.3	100	0	Peak



Test Mode :	802.11ac VHT80	Temperature :	25~26°C
Test Channel :	106	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	Polarization :	Horizontal
Remark :	1. 5532 MHz is fundamental signal which can be ignored. 2. 16590 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
5532	84.53	-	-	77.76	31.95	7	32.18	103	32	Average
5532	93.58	-	-	86.81	31.95	7	32.18	103	32	Peak
11061	43.49	-30.51	74	50.31	40.55	10.1	57.47	100	0	Peak
16590	41.16	-32.84	74	46.99	39.21	12.26	57.3	100	0	Peak

Test Mode :	802.11ac VHT80	Temperature :	25~26°C
Test Channel :	106	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	Polarization :	Vertical
Remark :	1. 5528 MHz is fundamental signal which can be ignored. 2. 16590 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
5528	84.94	-	-	78.2	31.92	7	32.18	100	344	Average
5528	94.43	-	-	87.69	31.92	7	32.18	100	344	Peak
11061	41.2	-32.8	74	48.02	40.55	10.1	57.47	100	0	Peak
16590	41.41	-32.59	74	47.24	39.21	12.26	57.3	100	0	Peak



Test Mode :	802.11n HT40 with WPC Charging Mode	Temperature :	25~26°C
Test Channel :	102	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	Polarization :	Horizontal
Remark :	1. 5497 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
40.26	25.67	-14.33	40	43.6	13.12	0.76	31.81	170	300	Peak
91.83	26.96	-16.54	43.5	48.72	8.96	1.06	31.78	-	-	Peak
163.38	26.42	-17.08	43.5	46.92	9.94	1.34	31.78	-	-	Peak
386.1	18.75	-27.25	46	33.22	15.34	1.98	31.79	-	-	Peak
498.8	18.89	-27.11	46	30.57	17.98	2.23	31.89	-	-	Peak
983.9	24.38	-29.62	54	27.1	24.86	3.19	30.77	-	-	Peak
5497	80.97	-	-	74.3	31.9	6.96	32.19	100	22	Average
5497	89.54	-	-	82.87	31.9	6.96	32.19	100	22	Peak
11019	42.35	-31.65	74	49.17	40.59	10.08	57.49	100	0	Peak
16530	39.07	-34.93	74	45.15	39.02	12.2	57.3	100	0	Peak

Test Mode :	802.11n HT40 with WPC Charging Mode	Temperature :	25~26°C
Test Channel :	102	Relative Humidity :	50~51%
Test Engineer :	Jet Lu	Polarization :	Vertical
Remark :	1. 5516 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
30.81	27.85	-12.15	40	40.58	18.38	0.71	31.82	108	190	Peak
165.81	24.13	-19.37	43.5	44.78	9.78	1.35	31.78	-	-	Peak
262.74	29.91	-16.09	46	46.4	13.6	1.68	31.77	-	-	Peak
305.6	25.72	-20.28	46	42.39	13.3	1.79	31.76	-	-	Peak
369.3	21.23	-24.77	46	36.21	14.87	1.94	31.79	-	-	Peak
913.9	23.06	-22.94	46	27.7	23.65	3.02	31.31	-	-	Peak
5516	84.57	-	-	77.85	31.92	6.98	32.18	115	343	Average
5516	93.07	-	-	86.35	31.92	6.98	32.18	115	343	Peak
11019	43.12	-30.88	74	49.94	40.59	10.08	57.49	100	0	Peak
16530	39.35	-34.65	74	45.43	39.02	12.2	57.3	100	0	Peak

3.2 AC Conducted Emission Measurement

3.2.1 Limit of AC Conducted Emission

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

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

*Decreases with the logarithm of the frequency.

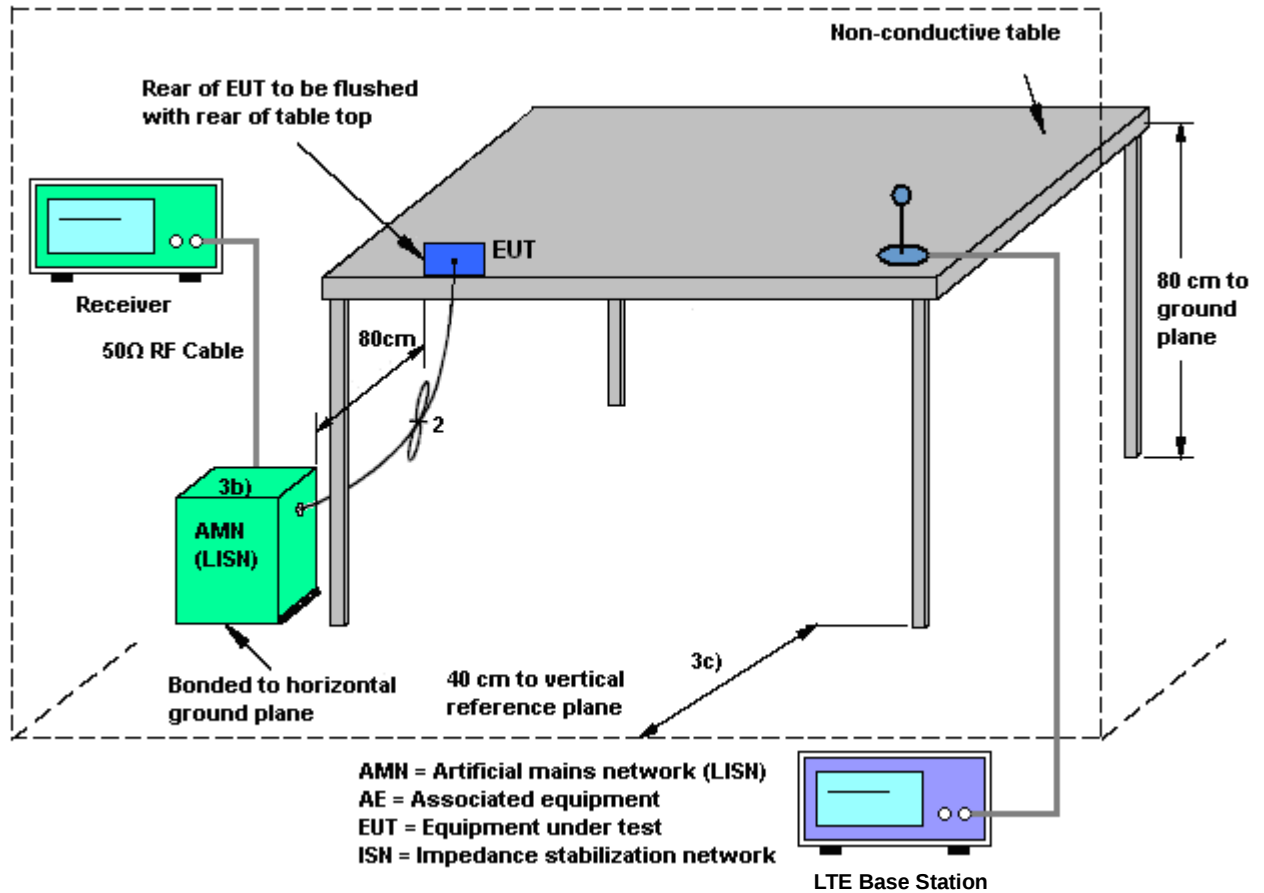
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

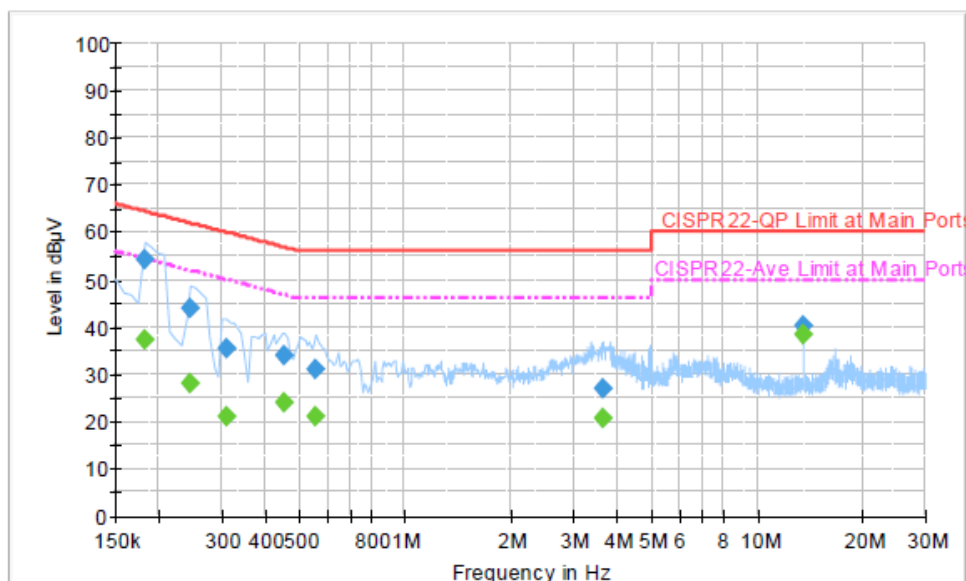
1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.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

3.2.4 Test Setup



3.2.5 Test Result of AC Conducted Emission

Test Mode :	Mode 1	Temperature :	20~22℃
Test Engineer :	Kai-Chun Chu	Relative Humidity :	46~48%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	LTE Band 7 Idle + WLAN (5GHz) Link + Bluetooth Link + USB Cable (Data Link with Notebook) + NFC On + Earphone 1		



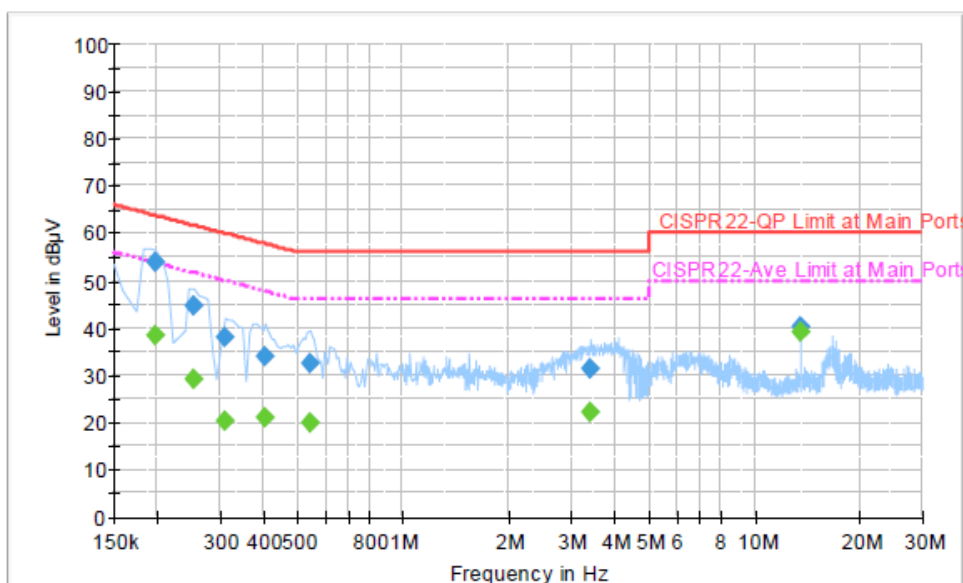
Final Result : QuasiPeak

Frequency (MHz)	QuasiPeak (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.182000	54.1	Off	L1	19.4	10.3	64.4
0.246000	43.8	Off	L1	19.4	18.1	61.9
0.310000	35.4	Off	L1	19.4	24.6	60.0
0.454000	34.1	Off	L1	19.4	22.7	56.8
0.558000	31.1	Off	L1	19.4	24.9	56.0
3.630000	27.1	Off	L1	19.5	28.9	56.0
13.558000	40.2	Off	L1	19.8	19.8	60.0

Final Result : Average

Frequency (MHz)	Average (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.182000	37.1	Off	L1	19.4	17.3	54.4
0.246000	28.2	Off	L1	19.4	23.7	51.9
0.310000	21.2	Off	L1	19.4	28.8	50.0
0.454000	23.9	Off	L1	19.4	22.9	46.8
0.558000	21.1	Off	L1	19.4	24.9	46.0
3.630000	20.5	Off	L1	19.5	25.5	46.0
13.558000	38.5	Off	L1	19.8	11.5	50.0

Test Mode :	Mode 1	Temperature :	20~22°C
Test Engineer :	Kai-Chun Chu	Relative Humidity :	46~48%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	LTE Band 7 Idle + WLAN (5GHz) Link + Bluetooth Link + USB Cable (Data Link with Notebook) + NFC On + Earphone 1		


Final Result : QuasiPeak

Frequency (MHz)	QuasiPeak (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.198000	54.0	Off	N	19.3	9.7	63.7
0.254000	44.6	Off	N	19.4	17.0	61.6
0.310000	38.2	Off	N	19.4	21.8	60.0
0.406000	33.9	Off	N	19.4	23.8	57.7
0.542000	32.4	Off	N	19.4	23.6	56.0
3.422000	31.4	Off	N	19.6	24.6	56.0
13.558000	40.3	Off	N	19.8	19.7	60.0

Final Result : Average

Frequency (MHz)	Average (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.198000	38.2	Off	N	19.3	15.5	53.7
0.254000	29.3	Off	N	19.4	22.3	51.6
0.310000	20.2	Off	N	19.4	29.8	50.0
0.406000	21.1	Off	N	19.4	26.6	47.7
0.542000	19.9	Off	N	19.4	26.1	46.0
3.422000	22.2	Off	N	19.6	23.8	46.0
13.558000	39.0	Off	N	19.8	11.0	50.0



3.3 Automatically Discontinue Transmission

3.3.1 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.

3.3.2 Measuring Instruments

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

3.3.3 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.



3.4 Antenna Requirements

3.4.1 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.

3.4.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.4.3 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 Equipments

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Power Meter	Anritsu	ML2495A	1036004	300MHz~40GHz	Aug. 17, 2013	Jul. 16, 2014	Aug. 16, 2014	Conducted (TH02-HY)
Power Sensor	Anritsu	MA2411B	1027253	300MHz~40GHz	Aug. 17, 2013	Jul. 16, 2014	Aug. 16, 2014	Conducted (TH02-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100055	9kHz~40GHz	Jun. 09, 2014	Jul. 14, 2014 ~ Jul. 24, 2014	Jun. 08, 2015	Radiation (03CH05-HY)
Bilog Antenna	Schaffner	CBL6111C	2725	30MHz~1GHz	Oct. 10, 2013	Jul. 14, 2014 ~ Jul. 24, 2014	Oct. 09, 2014	Radiation (03CH05-HY)
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1241	1GHz~18GHz	Apr. 16, 2014	Jul. 14, 2014 ~ Jul. 24, 2014	Apr. 15, 2015	Radiation (03CH05-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170251	18GHz~40GHz	Oct. 03, 2013	Jul. 14, 2014 ~ Jul. 24, 2014	Oct. 02, 2014	Radiation (03CH05-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1590074	100kHz~18GHz	Jul. 07, 2014	Jul. 14, 2014 ~ Jul. 24, 2014	Jul. 06, 2015	Radiation (03CH05-HY)
Preamplifier	EMCI	EMC011830	980148	DC~18GHz	Jun. 23, 2014	Jul. 14, 2014 ~ Jul. 24, 2014	Jun. 22, 2015	Radiation (03CH05-HY)
Preamplifier	COM-POWER	PA-103	161075	9kHz~30MHz	Apr. 15, 2014	Jul. 14, 2014 ~ Jul. 24, 2014	Apr. 14, 2015	Radiation (03CH05-HY)
Preamplifier	Miteq	TTA0204	1872107	18GHz~40GHz	May 23, 2014	Jul. 14, 2014 ~ Jul. 24, 2014	May 22, 2015	Radiation (03CH05-HY)
Turn Table	HD	HD100	420/611	0 - 360 degree	N/A	Jul. 14, 2014 ~ Jul. 24, 2014	N/A	Radiation (03CH05-HY)
Antenna Mast	HD	HD100	240/666	1 m - 4 m	N/A	Jul. 14, 2014 ~ Jul. 24, 2014	N/A	Radiation (03CH05-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100330	9K~30M	Nov. 15, 2012	Jul. 22, 2014	Nov. 14, 2014	Radiation (03CH07-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP30	101067	9KHz ~ 30GHz	Feb. 10, 2014	Jul. 22, 2014	Feb. 09, 2015	Radiation (03CH07-HY)
Bilog Antenna	Schaffner	CBL6111C	2726	30MHz ~ 1GHz	Oct. 10, 2013	Jul. 22, 2014	Oct. 09, 2014	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ESCO	3117	75962	1GHz~18GHz	Aug. 22, 2013	Jul. 22, 2014	Aug. 21, 2014	Radiation (03CH07-HY)
Preamplifier	COM-POWER	PA-103A	161241	30MHz~1GHz	Mar. 17, 2014	Jul. 22, 2014	Mar. 16, 2015	Radiation (03CH07-HY)
Preamplifier	Agilent	8449B	3008A02362	1 GHz~26.5 GHz	Nov. 29, 2013	Jul. 22, 2014	Nov. 28, 2014	Radiation (03CH07-HY)
Turn Table	ChainTek	ChainTek 3000	N/A	0 ~ 360 degree	N/A	Jul. 22, 2014	N/A	Radiation (03CH07-HY)
Antenna Mast	ChainTek	M-400-0	114/8000604/L	N/A	N/A	Jul. 22, 2014	N/A	Radiation (03CH07-HY)



Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EMI Test Receiver	Rohde & Schwarz	ESCS 30	100356	9kHz ~ 2.75GHz	Nov. 15, 2013	Jul. 11, 2014	Nov. 14, 2014	Conduction (CO05-HY)
LISN (for auxiliary equipment)	Rohde & Schwarz	ENV216	100081	9kHz ~ 30MHz	Dec. 12, 2013	Jul. 11, 2014	Dec. 11, 2014	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz ~ 30MHz	Dec. 04, 2013	Jul. 11, 2014	Dec. 03, 2014	Conduction (CO05-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Jul. 11, 2014	N/A	Conduction (CO05-HY)



5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.26
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.10
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