FCC RF Test Report

APPLICANT	:	TP-LINK TECHNOLOGIES CO., LTD.
EQUIPMENT	:	AC1200 Wi-Fi Range Extender
BRAND NAME	:	TP-LINK
MODEL NAME	:	RE380D
FCC ID	:	TE7RE380D
STANDARD	:	FCC Part 15 Subpart E §15.407
CLASSIFICATION	:	(NII) Unlicensed National Information Infrastructure

The product was received on Oct. 18, 2015 and testing was completed on Nov. 03, 2015. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

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

Reviewed by: Joseph Lin / Supervisor

Approved by: Jones Tsai / Manager

SPORTON INTERNATIONAL INC.
No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C.

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR5O1801B	Rev. 01	Initial issue of report	Nov. 13, 2015
FR5O1801B	Rev. 02	Updating FCC ID.	Nov. 20, 2015
FR5O1801B	Rev. 03	Updating KDB 789033 and KDB 644545 standard version.	Nov. 23, 2015

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.1	2.1049 15.403(i)	26dB & 99% Bandwidth	-	Pass	-
3.2	15.407(a)	Maximum Conducted Output Power	FCC ≤ 30 dBm (depend on band)	Pass	-
3.3	15.407(a)	Power Spectral Density	FCC ≤ 17 dBm (depend on band)	Pass	-
3.4	15.407(b)	Unwanted Emissions	≤ -17, -27 dBm (depend on band) & 15.209(a)	Pass	Under limit 0.51 dB at 5379.480 MHz
3.5	15.207	AC Conducted Emission	15.207(a)	Pass	Under limit 8.80 dB at 0.150 MHz
3.6	15.407(g)	Frequency Stability	Within Operation Band	Pass	-
3.7	15.407(c)	Automatically Discontinue Transmission	Discontinue Transmission	Pass	-
3.8	15.203 & 15.407(a)	Antenna Requirement	N/A	Pass	-

1 General Description

1.1 Applicant

TP-LINK TECHNOLOGIES CO., LTD.
Building 24 (floors 1,3,4,5) and 28 (floors1-4) Central Science and Technology Park, Shennan Rd, Nanshan, Shenzhen, China

1.2 Manufacturer

TP-LINK TECHNOLOGIES CO., LTD.
Building 24 (floors 1,3,4,5) and 28 (floors1-4) Central Science and Technology Park, Shennan Rd, Nanshan, Shenzhen, China

1.3 Feature of Equipment Under Test

Product Feature	
Equipment	AC1200 Wi-Fi Range Extender
Brand Name	TP-LINK
Model Name	RE380D
FCC ID	TE7RE380D
EUT supports Radios application	WLAN 11a/b/g/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80
EUT Stage	Pre-Production Unit

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

1.4 Product Specification of Equipment Under Test

<table>
<tr><th colspan="2">Product Specification subjective to this standard</th></tr>
<tr><td>Tx/Rx Channel Frequency Range</td><td>5180 MHz ~ 5240 MHz</td></tr>
<tr><td>Maximum Output Power</td><td>SISO <Ant. 1>
802.11a : 24.08 dBm / 0.2559 W
802.11n HT20 : 24.80 dBm / 0.3020 W
802.11n HT40 : 23.50 dBm / 0.2239 W
802.11ac VHT20: 24.77 dBm / 0.2999 W
802.11ac VHT40: 22.56 dBm / 0.1803 W
802.11ac VHT80: 15.32 dBm / 0.0340 W
SISO <Ant. 2>
802.11a : 24.64 dBm / 0.2911 W
802.11n HT20 : 26.37 dBm / 0.4335 W
802.11n HT40 : 23.82 dBm / 0.2410 W
802.11ac VHT20: 22.11 dBm / 0.1626 W
802.11ac VHT40: 23.70 dBm / 0.2344 W
802.11ac VHT80: 15.85 dBm / 0.0385 W
MIMO <Ant. 1 + 2>
802.11a : 27.75 dBm / 0.5957 W
802.11n HT20 : 28.14 dBm / 0.6516 W
802.11n HT40 : 26.92 dBm / 0.4920 W
802.11ac VHT20: 25.21 dBm / 0.6427 W
802.11ac VHT40: 26.42 dBm / 0.4385 W
802.11ac VHT80: 18.74 dBm / 0.0748 W</td></tr>
<tr><td>99% Occupied Bandwidth</td><td>802.11a : 19.00 MHz
802.11n HT20 : 20.05 MHz
802.11n HT40 : 37.10 MHz
802.11ac VHT20 : 20.75 MHz
802.11ac VHT40 : 37.20 MHz
802.11ac VHT80 : 75.84 MHz</td></tr>
<tr><td>Type of Modulation</td><td>802.11a/n : OFDM (BPSK / QPSK / 16QAM / 64QAM)
802.11ac : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM)</td></tr>
<tr><td>Antenna Type</td><td>Main Antenna : Dipole Antenna
Aux. Antenna : Dipole Antenna</td></tr>
<tr><td>Antenna Gain</td><td>Main Antenna : 2.50 dBi
Aux. Antenna : 2.50 dBi</td></tr>
<tr><td>Antenna Function Description</td><td>
<table>
<tr><th></th><th>Ant. 1</th><th>Ant. 2</th></tr>
<tr><td>802.11 a/n/ac SISO</td><td>V</td><td>V</td></tr>
<tr><td>802.11 a/n/ac MIMO</td><td>V</td><td>V</td></tr>
</table>
</td></tr>
</table>

1.5 Modification of EUT

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

1.6 Testing Location

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

Test Site	SPORTON INTERNATIONAL INC.	
Test Site Location	No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C. TEL: +886-3-327-3456 FAX: +886-3-328-4978	
Test Site No.	**Sporton Site No.**	
	TH05-HY	CO05-HY

Note: The test site complies with ANSI C63.4 2009 requirement.

Test Site	SPORTON INTERNATIONAL INC.
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd Rd. Guishan Dist, Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
Test Site No.	**Sporton Site No.**
	03CH12-HY

Note: The test site complies with ANSI C63.4 2009 requirement.

1.7 Applicable Standards

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

- FCC Part 15 Subpart E
- FCC KDB 789033 D02 General UNII Test Procedures New Rules v01
- FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
- FCC KDB 644545 D03 Guidance for IEEE 802 11ac New Rules v01
- ANSI C63.10-2009

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. FCC permits the use of the 1.5 meter table as an alternative in C63.10-2013 through inquiry tracking number 961829.
3. 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).

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

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

2.1 Carrier Frequency and Channel

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

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

2.2 Pre-Scanned RF Power

Preliminary tests were performed in different data rate and data rate associated with the highest power were chosen for full test in the following tables. Final Output Power equals to Measured Output Power adds the duty factor.

SISO <Ant. 1>

5GHz 802.11a mode								
Data Rate (MHz)	6M bps	9M bps	12M bps	18M bps	24M bps	36M bps	48M bps	54M bps
Average Power (dBm)	24.08	24.01	23.96	23.98	24.00	23.95	23.97	23.94

5GHz 802.11n HT20 mode								
Data Rate (MHz)	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
Average Power (dBm)	24.80	24.62	24.41	24.29	24.34	24.24	24.10	23.96

5GHz 802.11n HT40 mode								
Data Rate (MHz)	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
Average Power (dBm)	23.50	23.17	23.22	23.20	23.21	23.19	23.16	23.13

5GHz 802.11ac VHT20 mode									
Data Rate (MHz)	MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7	MCS 8
Average Power (dBm)	24.77	24.64	24.54	24.46	24.39	24.25	24.23	24.10	24.13

5GHz 802.11ac VHT40 mode										
Data Rate (MHz)	MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7	MCS 8	MCS 9
Average Power (dBm)	22.56	22.26	22.30	22.22	22.22	22.26	22.09	22.19	22.23	22.15

5GHz 802.11ac VHT80 mode										
Data Rate (MHz)	MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7	MCS 8	MCS 9
Average Power (dBm)	15.32	15.18	15.25	15.11	15.08	14.96	14.92	14.94	14.85	14.69

SISO <Ant. 2>

5GHz 802.11a mode								
Data Rate (MHz)	6M bps	9M bps	12M bps	18M bps	24M bps	36M bps	48M bps	54M bps
Average Power (dBm)	24.64	24.40	24.38	24.31	24.26	24.29	24.21	24.12

5GHz 802.11n HT20 mode								
Data Rate (MHz)	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
Average Power (dBm)	26.37	26.35	26.30	26.10	26.04	26.07	25.93	25.81

5GHz 802.11n HT40 mode								
Data Rate (MHz)	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
Average Power (dBm)	23.82	23.61	23.61	23.48	23.56	23.56	23.50	23.55

5GHz 802.11ac VHT20 mode									
Data Rate (MHz)	MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7	MCS 8
Average Power (dBm)	22.11	22.06	22.06	21.96	21.89	21.90	21.76	21.79	21.68

5GHz 802.11ac VHT40 mode										
Data Rate (MHz)	MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7	MCS 8	MCS 9
Average Power (dBm)	23.70	23.57	23.57	23.44	23.59	23.58	23.56	23.56	23.42	23.57

5GHz 802.11ac VHT80 mode										
Data Rate (MHz)	MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7	MCS 8	MCS 9
Average Power (dBm)	15.85	15.78	15.74	15.66	15.70	15.72	15.56	15.37	15.58	15.43

MIMO <Ant. 1+2>

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)	27.75	27.13	27.09	27.03	26.99	26.94	26.96	26.92

5GHz 802.11n HT20 mode								
Data Rate (MHz)	MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7
Average Power (dBm)	28.14	26.93	27.02	26.97	27.04	26.97	26.87	26.73

5GHz 802.11n HT40 mode								
Data Rate (MHz)	MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7
Average Power (dBm)	26.92	26.80	26.82	26.81	26.74	26.78	26.78	26.71

5GHz 802.11ac VHT20 mode									
Data Rate (MHz)	MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7	MCS 8
Average Power (dBm)	28.08	28.00	27.97	27.95	27.95	27.94	27.92	27.82	27.86

5GHz 802.11ac VHT40 mode										
Data Rate (MHz)	MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7	MCS 8	MCS 9
Average Power (dBm)	26.42	26.33	26.29	26.18	26.17	26.28	26.22	26.16	26.17	26.05

5GHz 802.11ac VHT80 mode										
Data Rate (MHz)	MCS 0	MCS 1	MCS 2	MCS 3	MCS 4	MCS 5	MCS 6	MCS 7	MCS 8	MCS 9
Average Power (dBm)	18.74	18.66	18.67	18.62	18.65	18.65	18.65	18.42	18.40	18.28

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

2.3 Test Mode

Final test mode of conducted test items and radiated spurious emissions are considering the modulation and worse data rates from the power table described in section 2.2.

Single Antenna

Modulation	Data Rate
802.11a	6 Mbps
802.11n HT20	MCS0
802.11n HT40	MCS0
802.11ac VHT20	MCS0
802.11ac VHT40	MCS0
802.11ac VHT80	MCS0

MIMO Antenna

Modulation	Data Rate
802.11a	6 Mbps
802.11n HT20	MCS0
802.11n HT40	MCS0
802.11ac VHT20	MCS0
802.11ac VHT40	MCS0
802.11ac VHT80	MCS0

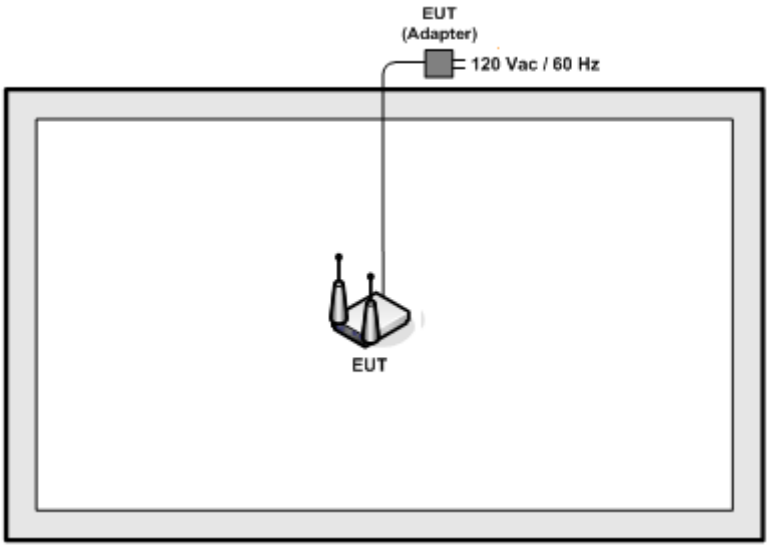
Test Cases	
AC Conducted Emission	Mode 1 : WLAN (5GHz) Link + RJ-45 + Adapter 1
Remark: For radiated spurious emissions, the test was performed with adapter 1.	

Ch. #		Band I：5150-5250 MHz	Band I：5150-5250 MHz	Band I：5150-5250 MHz
		802.11a	802.11n HT20	802.11n HT40
L	Low	36	36	38
M	Middle	44	44	-
H	High	48	48	46

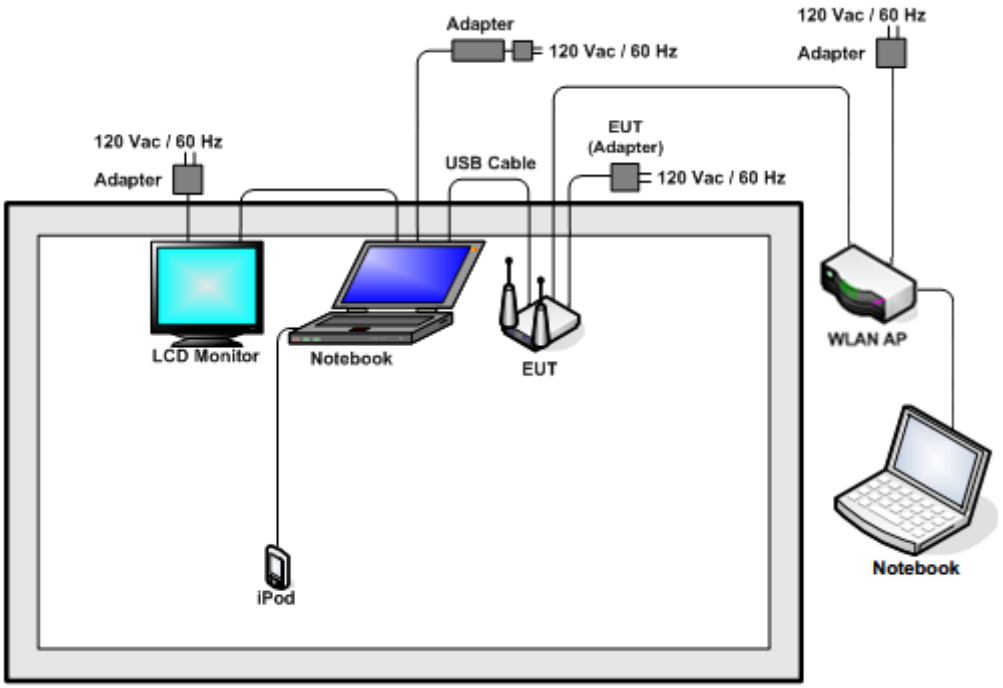
Ch. #		Band I：5150-5250 MHz	Band I：5150-5250 MHz	Band I：5150-5250 MHz
		802.11ac VHT20	802.11ac VHT40	802.11ac VHT80
L	Low	36	38	-
M	Middle	44	-	42
H	High	48	46	-

2.4 Connection Diagram of Test System

<WLAN Tx Mode>



<AC Conducted Emission Mode>



2.5 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	WLAN AP	D-Link	DIR-628	KA2DIR628A2	N/A	Unshielded, 1.8 m
2.	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
3.	Notebook	DELL	P20G	FCC DoC/ Contains FCC ID:QDS-BRCM1051	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
4.	iPod	Apple	A1285	FCC DoC	Shielded, 1.0 m	N/A
5.	LCD Monitor	DELL	U2410	FCC DoC	Shielded, 1.6 m	Unshielded, 1.8 m

2.6 EUT Operation Test Setup

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

2.7 Measurement Results Explanation Example

For all conducted test items:

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

Example :

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

Offset = RF cable loss + attenuator factor.

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

Offset(dB) = RF cable loss(dB) + attenuator factor(dB).

= 4.2 + 10 = 14.2 (dB)

3 Test Result

3.1 26dB & 99% Occupied Bandwidth Measurement

3.1.1 Description of 26dB & 99% Occupied Bandwidth

This section is for reporting purpose only.

There is no restriction limits for bandwidth.

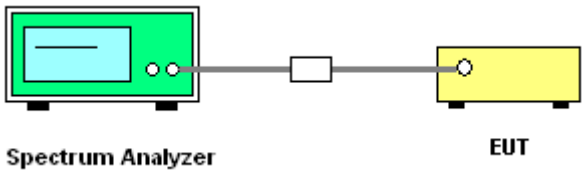
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

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

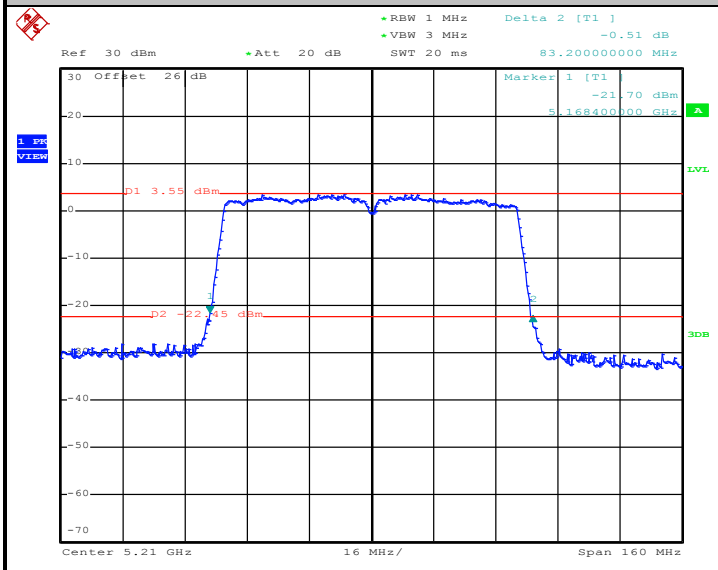
3.1.4 Test Setup



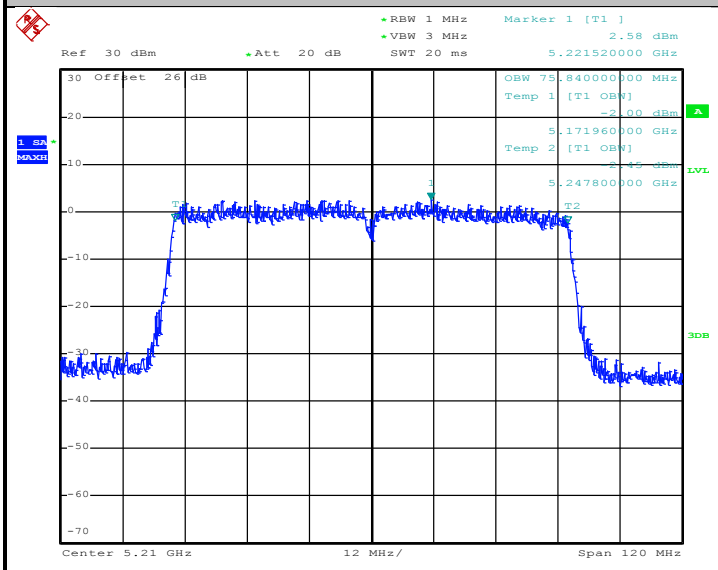
3.1.5 Test Result of 26dB & 99% Occupied Bandwidth

Please refer to Appendix A.

Maximum 26dB Bandwidth



Maximum 99% Occupied Bandwidth



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

3.2 Maximum Conducted Output Power Measurement

3.2.1 Limit of Maximum Conducted Output Power

<FCC 14-30 CFR 15.407>

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

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

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

3.2.2 Measuring Instruments

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

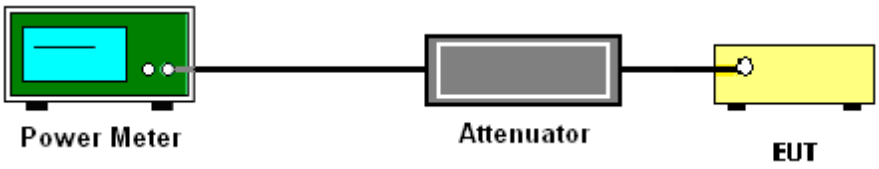
3.2.3 Test Procedures

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

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

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

3.2.4 Test Setup



3.2.5 Test Result of Maximum Conducted Output Power

Please refer to Appendix A.

3.3 Power Spectral Density Measurement

3.3.1 Limit of Power Spectral Density

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

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

3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01.
Section F) Maximum power spectral density.

 # Method SA-2 #

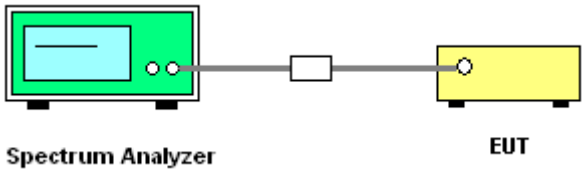
(trace averaging across on and off times of the EUT transmissions, followed by duty cycle correction).

1. The testing follows Method SA-2 of FCC KDB 789033 D02 General UNII Test Procedures New Rules v01.
   - Measure the duty cycle.
   - Set span to encompass the entire emission bandwidth (EBW) of the signal.
   - Set RBW = 1 MHz.
   - Set VBW ≥ 3 MHz.
   - Number of points in sweep ≥ 2 Span / RBW.
   - Sweep time = auto.
   - Detector = RMS
   - Trace average at least 100 traces in power averaging mode.
   - Add 10 log(1/x), where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times. For example, add 10 log(1/0.25) = 6 dB if the duty cycle is 25 percent.
2. The RF output of EUT was connected to the spectrum analyzer by a low loss cable.
3. Each plot has already offset with cable loss, and attenuator loss. Measure the PPSD and record it.
4. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

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

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

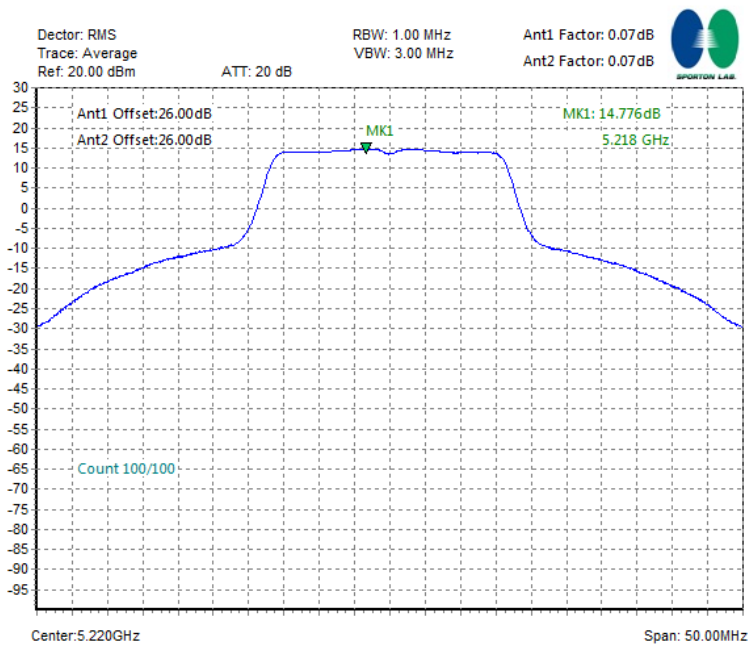
3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.

Worst Case Power Density (dBm/MHz)



Note: Average Power Density (dB) = Measured value+ Duty Factor

3.4 Unwanted Emissions Measurement

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

3.4.1 Limit of Unwanted Emissions

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

(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.

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

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

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

3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

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

   (1) Procedure for Unwanted Emissions Measurements Below 1000MHz

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

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

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

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

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

Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting
1+2	5GHz 802.11a for Ant 1	98.47	-	-	10Hz
1+2	5GHz 802.11a for Ant 2	98.47	-	-	
1+2	5GHz 802.11n HT20 for Ant 1	98.56	-	-	
1+2	5GHz 802.11n HT20 for Ant 2	98.56	-	-	
1+2	5GHz 802.11n HT40 for Ant 1	96.91	940.00	1.06	3kHz
1+2	5GHz 802.11n HT40 for Ant 2	96.91	940.00	1.06	
1+2	5GHz 802.11ac VHT80 for Ant 1	93.90	462.00	2.16	
1+2	5GHz 802.11ac VHT80 for Ant 2	93.90	462.00	2.16	

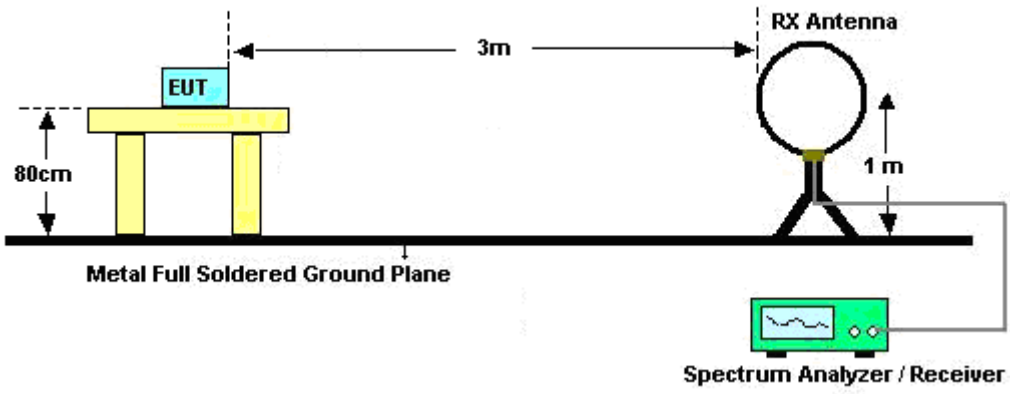
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband 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.

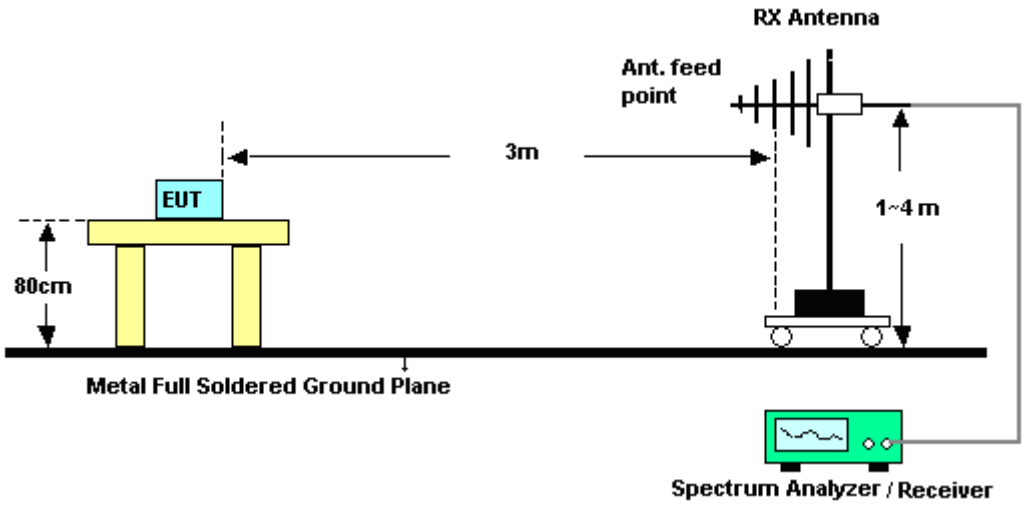
6. For testing below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
7. For testing above 1GHz, the emission level 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.

3.4.4 Test Setup

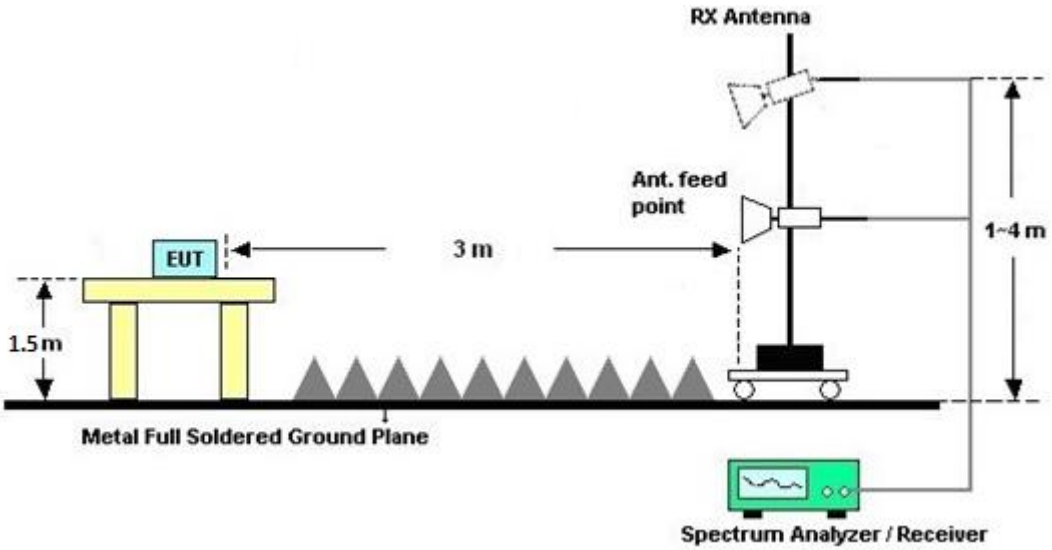
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



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

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

3.4.6 Test Result of Radiated Band Edges

Please refer to Appendix B.

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

Please refer to Appendix B.

3.5 AC Conducted Emission Measurement

3.5.1 Limit of AC Conducted Emission

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

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

*Decreases with the logarithm of the frequency.

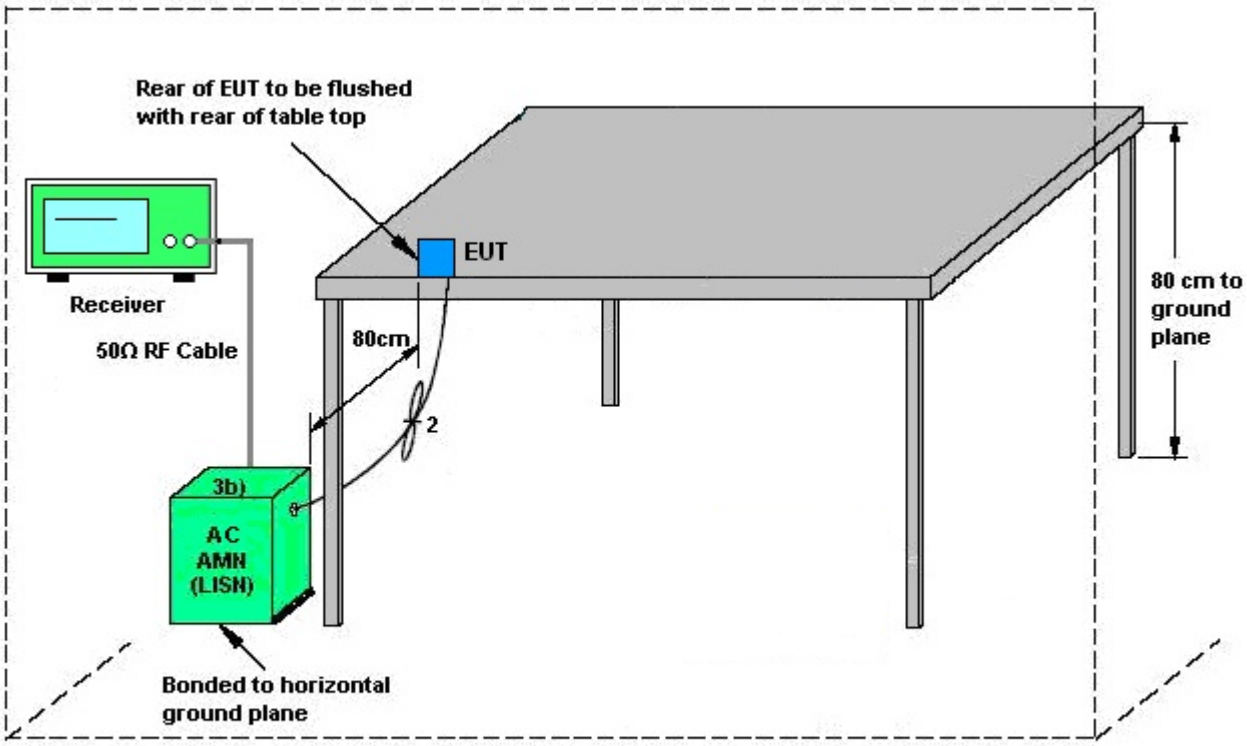
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

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

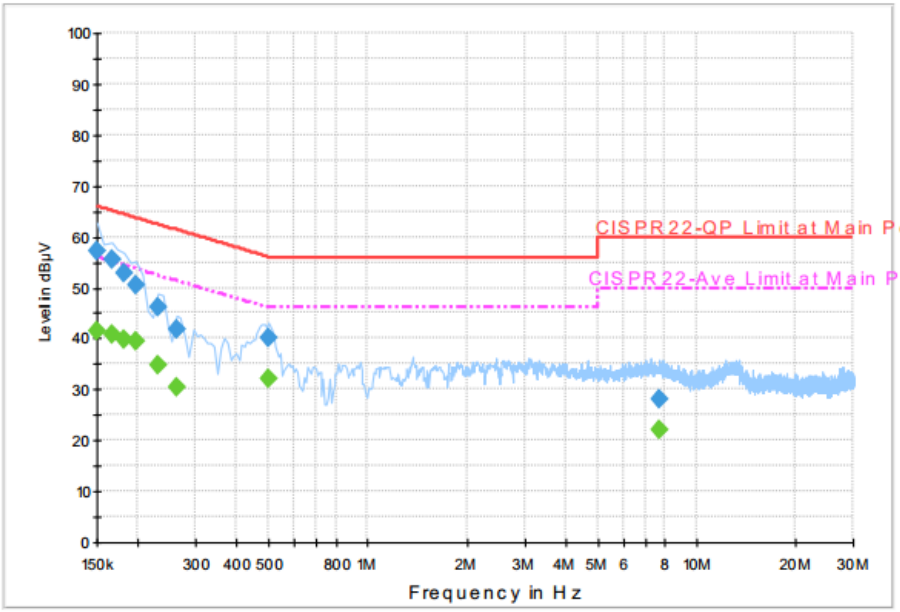
3.5.4 Test Setup



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

3.5.5 Test Result of AC Conducted Emission

Test Mode :	Mode 1	Temperature :	21~22℃
Test Engineer :	Derreck Chen	Relative Humidity :	52~55%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	WLAN (5GHz) Link + RJ-45 + Adapter 1		



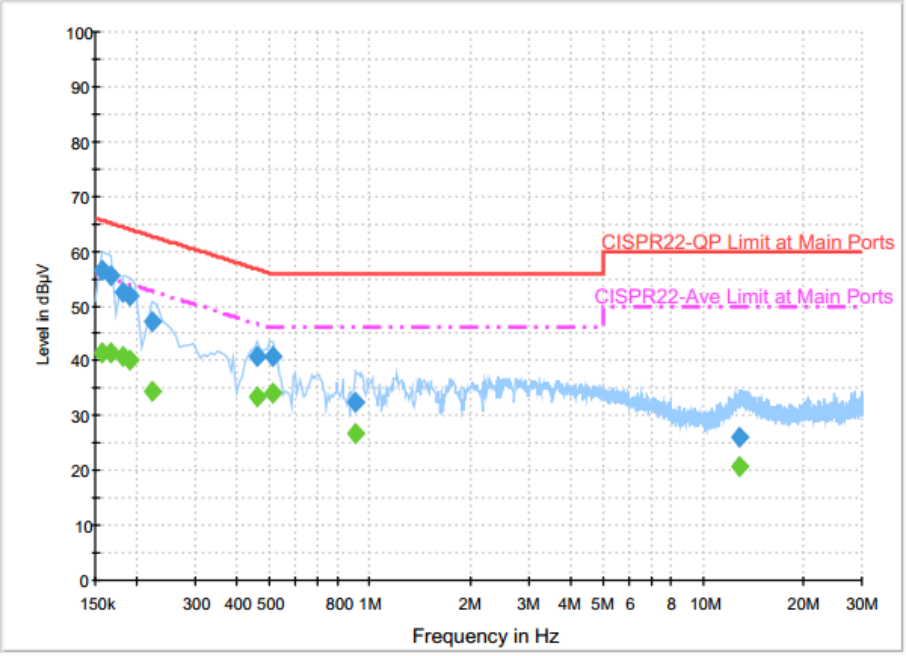
Final Result : QuasiPeak

Frequency (MHz)	QuasiPeak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	57.2	Off	L1	19.5	8.8	66.0
0.166000	55.7	Off	L1	19.5	9.5	65.2
0.182000	52.7	Off	L1	19.5	11.7	64.4
0.198000	50.7	Off	L1	19.4	13.0	63.7
0.230000	46.2	Off	L1	19.5	16.2	62.4
0.262000	41.8	Off	L1	19.5	19.6	61.4
0.502000	40.0	Off	L1	19.5	16.0	56.0
7.726000	28.0	Off	L1	19.7	32.0	60.0

Final Result : Average

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	41.5	Off	L1	19.5	14.5	56.0
0.166000	40.7	Off	L1	19.5	14.5	55.2
0.182000	39.9	Off	L1	19.5	14.5	54.4
0.198000	39.5	Off	L1	19.4	14.2	53.7
0.230000	34.7	Off	L1	19.5	17.7	52.4
0.262000	30.5	Off	L1	19.5	20.9	51.4
0.502000	32.2	Off	L1	19.5	13.8	46.0
7.726000	22.2	Off	L1	19.7	27.8	50.0

Test Mode :	Mode 1	Temperature :	21~22℃
Test Engineer :	Derreck Chen	Relative Humidity :	52~55%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	WLAN (5GHz) Link + RJ-45 + Adapter 1		



Final Result : QuasiPeak

Frequency (MHz)	QuasiPeak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.158000	56.6	Off	N	19.5	9.0	65.6
0.166000	55.6	Off	N	19.5	9.6	65.2
0.182000	52.5	Off	N	19.5	11.9	64.4
0.190000	51.8	Off	N	19.5	12.2	64.0
0.222000	47.2	Off	N	19.4	15.5	62.7
0.462000	40.7	Off	N	19.5	16.0	56.7
0.510000	40.8	Off	N	19.5	15.2	56.0
0.910000	32.4	Off	N	19.6	23.6	56.0
12.934000	26.2	Off	N	19.9	33.8	60.0

Final Result : Average

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.158000	41.5	Off	N	19.5	14.1	55.6
0.166000	41.3	Off	N	19.5	13.9	55.2
0.182000	40.8	Off	N	19.5	13.6	54.4
0.190000	40.0	Off	N	19.5	14.0	54.0
0.222000	34.4	Off	N	19.4	18.3	52.7
0.462000	33.5	Off	N	19.5	13.2	46.7
0.510000	34.0	Off	N	19.5	12.0	46.0
0.910000	26.8	Off	N	19.6	19.2	46.0
12.934000	20.7	Off	N	19.9	29.3	50.0

3.6 Frequency Stability Measurement

3.6.1 Limit of Frequency Stability

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

3.6.2 Measuring Instruments

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

3.6.3 Test Procedures

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

3.6.4 Test Setup

3.6.5 Test Result of Frequency Stability

Please refer to Appendix A.

3.7 Automatically Discontinue Transmission

3.7.1 Limit of Automatically Discontinue Transmission

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

3.7.2 Measuring Instruments

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

3.7.3 Test Result of Automatically Discontinue Transmission

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

3.8 Antenna Requirements

3.8.1 Standard Applicable

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

3.8.2 Antenna Anti-Replacement Construction

Non-standard antenna connector is used.

3.8.3 Antenna Gain

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

Directional gain = G_{ANT} + Array Gain, where Array Gain is as follows.

For power spectral density (PSD) measurements on all devices,

Array Gain = 10 log(N_{ANT}/N_{SS}=1) dB.

For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$.

The EUT supports CDD mode.

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

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

			DG for Power	DG for PSD	Power Limit Reduction	PSD Limit Reduction
	Ant 1 (dBi)	Ant 2 (dBi)	(dBi)	(dBi)	(dB)	(dB)
Band I	2.50	2.50	2.50	5.51	0.00	0.00

Power limit reduction = Composite gain – 6dBi, (min = 0)

PSD limit reduction = Composite gain + PSD Array gain – 6dBi, (min = 0)

4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Power Meter	Anritsu	ML2495A	1218006	300MHz~40GHz	Oct. 07, 2015	Oct. 31, 2015 ~ Nov. 02, 2015	Oct. 06, 2016	Conducted (TH05-HY)
Power Sensor	Anritsu	MA2411B	1207363	300MHz~40GHz	Oct. 07, 2015	Oct. 31, 2015 ~ Nov. 02, 2015	Oct. 06, 2016	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100055	9kHz-40GHz	Jun. 18, 2015	Oct. 31, 2015 ~ Nov. 02, 2015	Jun. 17, 2016	Conducted (TH05-HY)
Programmable Power Supply	GW Instek	PSS-2005	EL890089	1V~20V 0.5A~5A	Jan. 14, 2015	Oct. 31, 2015 ~ Nov. 02, 2015	Jan. 13, 2016	Conducted (TH05-HY)
Temperature Chamber	ESPEC	SH-641	92013720	-40℃~90℃	Sep. 08, 2015	Oct. 31, 2015 ~ Nov. 02, 2015	Sep. 07, 2016	Conducted (TH05-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1815698	1GHz~18GHz	Dec. 12, 2014	Oct. 31, 2015 ~ Nov. 01, 2015	Dec. 11, 2015	Radiation (03CH12-HY)
Bilog Antenna	TESEQ	CBL 6111D	35419	30MHz to 1GHz	Mar. 30, 2015	Oct. 31, 2015 ~ Nov. 01, 2015	Mar. 29, 2016	Radiation (03CH12-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	Oct. 31, 2015 ~ Nov. 01, 2015	N/A	Radiation (03CH12-HY)
Turn Table	EMEC	TT2000	N/A	0-360 degree	N/A	Oct. 31, 2015 ~ Nov. 01, 2015	N/A	Radiation (03CH12-HY)
Spectrum Analyzer	Keysight	N9010A	MY54200485	10Hz ~ 44GHZ	Sep. 24, 2015	Oct. 31, 2015 ~ Nov. 01, 2015	Dec. 14, 2015	Radiation (03CH12-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1241	1GHz ~ 18GHz	Apr. 22, 2015	Oct. 31, 2015 ~ Nov. 01, 2015	Apr. 21, 2016	Radiation (03CH12-HY)
Preamplifier	COM-POWER	PA-103A	161075	10MHz~1GHz	Apr. 09, 2015	Oct. 31, 2015 ~ Nov. 01, 2015	Apr. 08, 2016	Radiation (03CH12-HY)
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170584	18GHz- 40GHz	Nov. 03, 2014	Oct. 31, 2015 ~ Nov. 01, 2015	Nov. 02, 2015	Radiation (03CH12-HY)
Loop Antenna	TESEQ	HLA 6120	31244	9kHZ~30MHz	Feb. 02, 2015	Oct. 31, 2015 ~ Nov. 01, 2015	Feb. 01, 2016	Radiation (03CH12-HY)
Preamplifier	MITEQ	JS44-18004000-33-8P	1840917	18GHz ~40GHz	Jun. 02, 2015	Oct. 31, 2015 ~ Nov. 01, 2015	Jun. 01, 2016	Radiation (03CH12-HY)
Preamplifier	Agilent	8449B	3008A02375	1GHz~ 26.5GHz	Jan. 15, 2015	Oct. 31, 2015 ~ Nov. 01, 2015	Jan. 14, 2016	Radiation (03CH12-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Dec. 02, 2014	Oct. 29, 2015	Dec. 01, 2015	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Dec. 08, 2014	Oct. 29, 2015	Dec. 07, 2015	Conduction (CO05-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Oct. 29, 2015	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**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**5.1**

Appendix A. Conducted Test Results

Report Number : FR5O1801B

Test Engineer:	Osolemio Chang	Temperature:	21~22	°C
Test Date:	2015/10/31 ~ 2015/11/02	Relative Humidity:	53~54	%

Report Number : FR5O1801B

TEST RESULTS DATA
26dB and 99% OBW

Band I														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)			Note
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	2	36	5180	18.00	17.85	30.00	30.10	-		22.52			
11a	6Mbps	2	44	5220	18.45	19.00	37.50	39.30	-		22.66			
11a	6Mbps	2	48	5240	18.00	17.95	30.00	33.10	-		22.54			
HT20	MCS0	2	36	5180	18.90	18.80	42.80	40.60	-		22.74			
HT20	MCS0	2	44	5220	18.85	18.95	40.80	43.90	-		22.75			
HT20	MCS0	2	48	5240	19.35	20.05	44.50	45.50	-		22.87			
HT40	MCS0	2	38	5190	36.70	36.70	47.88	41.22	-		23.01			
HT40	MCS0	2	46	5230	37.00	37.10	78.48	78.48	-		23.01			
VHT20	MCS0	2	36	5180	19.05	18.85	40.50	41.30	-		22.75			
VHT20	MCS0	2	44	5220	18.85	18.95	39.90	43.50	-		22.75			
VHT20	MCS0	2	48	5240	19.50	20.75	44.20	46.90	-		22.90			
VHT40	MCS0	2	38	5190	36.70	36.60	44.62	41.04	-		23.01			
VHT40	MCS0	2	46	5230	37.00	37.20	74.16	75.60	-		23.01			
VHT80	MCS0	2	42	5210	75.84	75.72	83.20	82.24	-		23.01			

Report Number : FR5O1801B

TEST RESULTS DATA
Average Power Table

FCC Band I															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)			Pass/Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	2	36	5180	0.07	0.07	22.61	22.91	25.77	30.00		2.50			Pass
11a	6Mbps	2	44	5220	0.07	0.07	24.55	22.91	27.75	30.00		2.50			Pass
11a	6Mbps	2	48	5240	0.07	0.07	23.12	22.91	26.31	30.00		2.50			Pass
HT20	MCS0	2	36	5180	0.06	0.06	22.94	23.48	26.23	30.00		2.50			Pass
HT20	MCS0	2	44	5220	0.06	0.06	23.29	23.48	26.53	30.00		2.50			Pass
HT20	MCS0	2	48	5240	0.06	0.06	24.95	23.48	28.14	30.00		2.50			Pass
HT40	MCS0	2	38	5190	0.14	0.14	20.07	20.17	23.13	30.00		2.50			Pass
HT40	MCS0	2	46	5230	0.14	0.14	20.07	20.17	26.92	30.00		2.50			Pass
VHT20	MCS0	2	36	5180	0.06	0.06	22.93	23.43	26.20	30.00		2.50			Pass
VHT20	MCS0	2	44	5220	0.06	0.06	23.33	23.66	26.51	30.00		2.50			Pass
VHT20	MCS0	2	48	5240	0.06	0.06	24.92	25.21	28.08	30.00		2.50			Pass
VHT40	MCS0	2	38	5190	0.13	0.13	20.01	20.00	23.02	30.00		2.50			Pass
VHT40	MCS0	2	46	5230	0.13	0.13	22.74	23.98	26.42	30.00		2.50			Pass
VHT80	MCS0	2	42	5210	0.27	0.27	15.39	16.03	18.74	30.00		2.50			Pass

Report Number : FR5O1801B

TEST RESULTS DATA
Power Spectral Density

FCC Band I															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)			Pass /Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	36	5180	0.06	0.06				17.00	17.00	2.50	2.50		Pass
11a	6Mbps	1	44	5220	0.06	0.06				17.00	17.00	2.50	2.50		Pass
11a	6Mbps	1	48	5240	0.06	0.06				17.00	17.00	2.50	2.50		Pass
HT20	MCS0	1	36	5180	0.06	0.06				17.00	17.00	2.50	2.50		Pass
HT20	MCS0	1	44	5220	0.06	0.06				17.00	17.00	2.50	2.50		Pass
HT20	MCS0	1	48	5240	0.06	0.06				17.00	17.00	2.50	2.50		Pass
HT40	MCS0	1	38	5190	0.13	0.13				17.00	17.00	2.50	2.50		Pass
HT40	MCS0	1	46	5230	0.13	0.13				17.00	17.00	2.50	2.50		Pass
VHT20	MCS0	1	36	5180	0.06	0.06				17.00	17.00	2.50	2.50		Pass
VHT20	MCS0	1	44	5220	0.06	0.06				17.00	17.00	2.50	2.50		Pass
VHT20	MCS0	1	48	5240	0.06	0.06				17.00	17.00	2.50	2.50		Pass
VHT40	MCS0	1	38	5190	0.13	0.13				17.00	17.00	2.50	2.50		Pass
VHT40	MCS0	1	46	5230	0.13	0.13				17.00	17.00	2.50	2.50		Pass
VHT80	MCS0	1	42	5210	0.27	0.27				17.00	17.00	2.50	2.50		Pass
11a	6Mbps	2	36	5180	0.07	0.07			13.36	17.00		5.51			Pass
11a	6Mbps	2	44	5220	0.07	0.07			14.78	17.00		5.51			Pass
11a	6Mbps	2	48	5240	0.07	0.07			13.08	17.00		5.51			Pass
HT20	MCS0	2	36	5180	0.06	0.06			13.52	17.00		5.51			Pass
HT20	MCS0	2	44	5220	0.06	0.06			13.20	17.00		5.51			Pass
HT20	MCS0	2	48	5240	0.06	0.06			14.44	17.00		5.51			Pass
HT40	MCS0	2	38	5190	0.14	0.14			7.21	17.00		5.51			Pass
HT40	MCS0	2	46	5230	0.14	0.14			10.48	17.00		5.51			Pass
VHT20	MCS0	2	36	5180	0.06	0.06			13.15	17.00		5.51			Pass
VHT20	MCS0	2	44	5220	0.06	0.06			13.11	17.00		5.51			Pass
VHT20	MCS0	2	48	5240	0.06	0.06			14.64	17.00		5.51			Pass
VHT40	MCS0	2	38	5190	0.13	0.13			7.14	17.00		5.51			Pass
VHT40	MCS0	2	46	5230	0.13	0.13			10.41	17.00		5.51			Pass
VHT80	MCS0	2	42	5210	0.27	0.27			-0.77	17.00		5.51			Pass

TEST RESULTS DATA
Frequency Stability

Band I										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stablility (ppm)	Temperature (°C)	Voltage (V)	Note
11a	6Mbps	1	36	5180	5179.900	-0.100	-19.31	25	90	
11a	6Mbps	1	36	5180	5179.900	-0.100	-19.31	25	264	
11a	6Mbps	1	36	5180	5179.900	-0.100	-19.31	25	110	
11a	6Mbps	1	36	5180	5179.900	-0.100	-19.31	-30	110	
11a	6Mbps	1	36	5180	5179.900	-0.100	-19.31	50	110	

Appendix B. Radiated Spurious Emission

Test Engineer :	Potter Liu and Nick Yu	Temperature :	21~23°C
		Relative Humidity :	58~60%

Band 1 - 5150~5250MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 36 5180MHz		5150	62.6	-11.4	74	54.23	31.63	11.01	34.27	102	185	P	H
		5149.55	46.91	-7.09	54	38.54	31.63	11.01	34.27	102	185	A	H
	*	5180	112.2	-	-	103.74	31.64	11.08	34.26	102	185	P	H
	*	5180	100.38	-	-	91.92	31.64	11.08	34.26	102	185	A	H
		5417.1	54.49	-19.51	74	45.49	31.68	11.49	34.17	102	185	P	H
		5379.7	42.48	-11.52	54	33.5	31.68	11.48	34.18	102	185	A	H
		5149.85	71.07	-2.93	74	62.7	31.63	11.01	34.27	263	344	P	V
		5149.7	53.14	-0.86	54	44.77	31.63	11.01	34.27	263	344	A	V
	*	5180	120.49	-	-	112.03	31.64	11.08	34.26	263	344	P	V
	*	5180	108.41	-	-	99.95	31.64	11.08	34.26	263	344	A	V
		5376.84	58.64	-15.36	74	49.68	31.67	11.48	34.19	263	344	P	V
		5374.42	46.02	-7.98	54	37.06	31.67	11.48	34.19	263	344	A	V
802.11a CH 44 5220MHz		5143.25	58.04	-15.96	74	49.67	31.63	11.01	34.27	100	186	P	H
		5138.9	46.8	-7.2	54	38.44	31.63	11.01	34.28	100	186	A	H
	*	5220	114.32	-	-	105.77	31.64	11.16	34.25	100	186	P	H
	*	5220	102.2	-	-	93.65	31.64	11.16	34.25	100	186	A	H
		5374.75	55.64	-18.36	74	46.68	31.67	11.48	34.19	100	186	P	H
		5379.26	44.67	-9.33	54	35.69	31.68	11.48	34.18	100	186	A	H
		5144.6	64.91	-9.09	74	56.54	31.63	11.01	34.27	260	344	P	V
		5139.2	53.22	-0.78	54	44.86	31.63	11.01	34.28	260	344	A	V
	*	5220	122.71	-	-	114.16	31.64	11.16	34.25	260	344	P	V
	*	5220	110.82	-	-	102.27	31.64	11.16	34.25	260	344	A	V
		5375.08	64.49	-9.51	74	55.53	31.67	11.48	34.19	260	344	P	V
		5379.48	53.49	-0.51	54	44.51	31.68	11.48	34.18	260	344	A	V

		5079.05	54.67	-19.33	74	46.47	31.62	10.88	34.3	108	174	P	H
		5079.2	43.53	-10.47	54	35.33	31.62	10.88	34.3	108	174	A	H
	*	5240	112.67	-	-	104.1	31.65	11.16	34.24	108	174	P	H
	*	5240	100.76	-	-	92.19	31.65	11.16	34.24	108	174	A	H
		5395.32	56.89	-17.11	74	47.91	31.68	11.48	34.18	108	174	P	H
802.11a		5399.17	45.76	-8.24	54	36.78	31.68	11.48	34.18	108	174	A	H
CH 48		5080.4	58.18	-15.82	74	49.98	31.62	10.88	34.3	302	330	P	V
5240MHz		5077.1	47.2	-6.8	54	39	31.62	10.88	34.3	302	330	A	V
	*	5246	116.77	-	-	108.2	31.65	11.16	34.24	302	330	P	V
	*	5246	104.97	-	-	96.4	31.65	11.16	34.24	302	5246	A	V
		5401.15	64.3	-9.7	74	55.32	31.68	11.48	34.18	302	330	P	V
		5401.26	53.36	-0.64	54	44.38	31.68	11.48	34.18	302	330	A	V
													V

Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.

Band 1 5150~5250MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 36 5180MHz		10360	48.79	-25.21	74	50.88	39.59	16.36	58.04	100	0	P	H
		15540	47.41	-26.59	74	46.67	38.72	20.78	58.76	100	0	P	H
													H
													H
		5614	59.46	-14.54	74	50.17	31.89	11.55	34.15	244	344	P	V
		5614	49.56	-4.44	54	40.27	31.89	11.55	34.15	244	295	A	V
		10360	48.01	-25.99	74	50.1	39.59	16.36	58.04	100	0	P	V
		15540	47.96	-26.04	74	47.22	38.72	20.78	58.76	100	0	P	V
802.11a CH 44 5220MHz		10440	49.84	-24.16	74	51.62	39.69	16.45	57.92	100	0	P	H
		15660	50.87	-23.13	74	50.14	38.46	20.88	58.61	100	0	P	H
													H
													H
		5656	62.5	-11.5	74	53.1	31.98	11.58	34.16	247	330	P	V
		5656	50.81	-3.19	54	41.41	31.98	11.58	34.16	247	330	A	V
		10440	50.25	-23.75	74	52.03	39.69	16.45	57.92	100	0	P	V
		15660	54.9	-19.1	74	54.17	38.46	20.88	58.61	209	162	P	V
		15660	43.68	-10.32	54	42.95	38.46	20.88	58.61	209	162	A	V
802.11a CH 48 5240MHz		10480	50.21	-23.79	74	51.77	39.77	16.5	57.83	100	0	P	H
		15720	47	-27	74	46.28	38.31	20.94	58.53	100	0	P	H
													H
													H
		5680	61.12	-12.88	74	51.69	32.01	11.58	34.16	201	356	P	V
		5680	50.07	-3.93	54	40.64	32.01	11.58	34.16	201	356	A	V
		10480	50.46	-23.54	74	52.02	39.77	16.5	57.83	100	0	P	V
		15720	50.49	-23.51	74	49.77	38.31	20.94	58.53	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11n HT20(Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5149.7	65.3	-8.7	74	56.93	31.63	11.01	34.27	103	187	P	H
		5149.25	47.48	-6.52	54	39.11	31.63	11.01	34.27	103	187	A	H
	*	5180	112.28	-	-	103.82	31.64	11.08	34.26	103	187	P	H
	*	5180	99.31	-	-	90.85	31.64	11.08	34.26	103	187	A	H
802.11n		5375.74	54.74	-19.26	74	45.78	31.67	11.48	34.19	103	187	P	H
HT20		5379.7	42.55	-11.45	54	33.57	31.68	11.48	34.18	103	187	A	H
CH 36		5148.8	71.18	-2.82	74	62.81	31.63	11.01	34.27	281	341	P	V
5180MHz		5149.55	53.21	-0.79	54	44.84	31.63	11.01	34.27	281	341	A	V
	*	5181	120.46	-	-	112	31.64	11.08	34.26	281	341	P	V
	*	5181	107.2	-	-	98.74	31.64	11.08	34.26	281	341	A	V
		5374.64	58.45	-15.55	74	49.49	31.67	11.48	34.19	281	341	P	V
		5374.31	46.1	-7.9	54	37.14	31.67	11.48	34.19	281	341	A	V
		5144	56.61	-17.39	74	48.24	31.63	11.01	34.27	131	186	P	H
		5141.9	45.12	-8.88	54	36.75	31.63	11.01	34.27	131	186	A	H
	*	5221	110.79	-	-	102.24	31.64	11.16	34.25	131	186	P	H
	*	5221	100.21	-	-	91.66	31.64	11.16	34.25	131	186	A	H
802.11n		5377.06	55.87	-18.13	74	46.91	31.67	11.48	34.19	131	186	P	H
HT20		5382.34	43.9	-10.1	54	34.92	31.68	11.48	34.18	131	186	A	H
CH 44		5144.45	63.75	-10.25	74	55.38	31.63	11.01	34.27	262	339	P	V
5220MHz		5141.75	51.73	-2.27	54	43.36	31.63	11.01	34.27	262	339	A	V
	*	5221	120.76	-	-	112.21	31.64	11.16	34.25	262	339	P	V
	*	5221	108.92	-	-	100.37	31.64	11.16	34.25	262	339	A	V
		5376.51	65.04	-8.96	74	56.08	31.67	11.48	34.19	262	339	P	V
		5379.15	53.17	-0.83	54	44.19	31.68	11.48	34.18	262	339	A	V

		5076.8	55.1	-18.9	74	46.9	31.62	10.88	34.3	110	187	P	H
		5077.1	43.64	-10.36	54	35.44	31.62	10.88	34.3	110	187	A	H
	*	5239	112.01	-	-	103.44	31.65	11.16	34.24	110	187	P	H
	*	5239	101.56	-	-	92.99	31.65	11.16	34.24	110	187	A	H
802.11n		5394.99	56.51	-17.49	74	47.53	31.68	11.48	34.18	110	187	P	H
HT20		5402.36	44.31	-9.69	54	35.33	31.68	11.48	34.18	110	187	A	H
CH 48		5083.1	60.34	-13.66	74	52.14	31.62	10.88	34.3	247	305	P	V
5240MHz		5080.85	48.48	-5.52	54	40.28	31.62	10.88	34.3	247	305	A	V
	*	5239	120.3	-	-	111.73	31.65	11.16	34.24	247	305	P	V
	*	5239	109.42	-	-	100.85	31.65	11.16	34.24	247	305	A	V
		5397.3	64.81	-9.19	74	55.83	31.68	11.48	34.18	247	305	P	V
		5397.41	53.38	-0.62	54	44.4	31.68	11.48	34.18	247	305	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		10360	47.86	-26.14	74	49.95	39.59	16.36	58.04	100	0	P	H
		15540	47.44	-26.56	74	46.7	38.72	20.78	58.76	100	0	P	H
802.11n													H
HT20													H
CH 36		5614	60.46	-13.54	74	51.17	31.89	11.55	34.15	242	356	P	V
5180MHz		5614	49.63	-4.37	54	40.34	31.89	11.55	34.15	242	356	A	V
		10360	49.1	-24.9	74	51.19	39.59	16.36	58.04	100	0	P	V
		15540	50.37	-23.63	74	49.63	38.72	20.78	58.76	100	0	P	V
		10440	47.93	-26.07	74	49.71	39.69	16.45	57.92	100	0	P	H
		15660	46.83	-27.17	74	46.1	38.46	20.88	58.61	100	0	P	H
													H
802.11n													H
HT20		5656	57.52	-16.48	74	48.12	31.98	11.58	34.16	262	339	P	V
CH 44		5656	46.62	-7.38	54	37.22	31.98	11.58	34.16	262	339	A	V
5220MHz		10440	49.13	-24.87	74	50.91	39.69	16.45	57.92	100	0	P	V
		15660	52.59	-21.41	74	51.86	38.46	20.88	58.61	151	332	P	V
		15660	39.99	-14.01	54	39.26	38.46	20.88	58.61	151	332	P	V
		10480	51.85	-22.15	74	53.41	39.77	16.5	57.83	102	78	P	H
		10480	40.83	-13.17	54	42.39	39.77	16.5	57.83	102	78	A	H
		15720	49.34	-24.66	74	48.62	38.31	20.94	58.53	100	0	P	H
802.11n													H
HT20		5674	59.27	-14.73	74	49.84	32.01	11.58	34.16	247	305	P	V
CH 48		5674	50.55	-3.45	54	41.12	32.01	11.58	34.16	247	305	A	V
5240MHz		10480	54.45	-19.55	74	56.01	39.77	16.5	57.83	100	350	P	V
		10480	42.07	-11.93	54	43.63	39.77	16.5	57.83	100	350	A	V
		15720	54.12	-19.88	74	53.4	38.31	20.94	58.53	283	176	P	V
		15720	38.56	-15.44	54	37.84	38.31	20.94	58.53	283	176	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5149.55	65.63	-8.37	74	57.26	31.63	11.01	34.27	100	199	P	H
		5150	47.66	-6.34	54	39.29	31.63	11.01	34.27	100	199	A	H
	*	5189	105.13	-	-	96.67	31.64	11.08	34.26	100	199	P	H
	*	5189	96	-	-	87.54	31.64	11.08	34.26	100	199	A	H
802.11n		5398.51	54.18	-19.82	74	45.2	31.68	11.48	34.18	100	199	P	H
HT40		5352.42	43.23	-10.77	54	34.36	31.67	11.4	34.2	100	199	A	H
CH 38		5147.6	73.13	-0.87	74	64.76	31.63	11.01	34.27	235	301	P	V
5190MHz		5149.55	52.92	-1.08	54	44.55	31.63	11.01	34.27	235	301	A	V
	*	5188	113.05	-	-	104.59	31.64	11.08	34.26	235	301	P	V
	*	5188	103.81	-	-	95.35	31.64	11.08	34.26	235	301	A	V
		5354.84	59.59	-14.41	74	50.72	31.67	11.4	34.2	235	301	P	V
		5362.21	49.17	-4.83	54	40.29	31.67	11.4	34.19	235	301	A	V
		5149.55	62.92	-11.08	74	54.55	31.63	11.01	34.27	128	186	P	H
		5147.15	47.05	-6.95	54	38.68	31.63	11.01	34.27	128	186	A	H
	*	5231	108.97	-	-	100.4	31.65	11.16	34.24	128	186	P	H
	*	5231	99.77	-	-	91.2	31.65	11.16	34.24	128	186	A	H
802.11n		5357.15	54.99	-19.01	74	46.12	31.67	11.4	34.2	128	186	P	H
HT40		5375.08	43.9	-10.1	54	34.94	31.67	11.48	34.19	128	186	A	H
CH 46		5147.15	69.52	-4.48	74	61.15	31.63	11.01	34.27	286	341	P	V
5230MHz		5146.85	53.32	-0.68	54	44.95	31.63	11.01	34.27	286	341	A	V
	*	5232	117.68	-	-	109.11	31.65	11.16	34.24	286	341	P	V
	*	5232	108.61	-	-	100.04	31.65	11.16	34.24	286	341	A	V
		5396.64	61.72	-12.28	74	52.74	31.68	11.48	34.18	286	341	P	V
		5384.32	50.94	-3.06	54	41.96	31.68	11.48	34.18	286	341	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		10380	47.27	-26.73	74	49.27	39.61	16.4	58.01	100	0	P	H
		15570	46.85	-27.15	74	46.1	38.65	20.82	58.72	100	0	P	H
802.11n													H
HT40													H
CH 38		10380	46.91	-27.09	74	48.91	39.61	16.4	58.01	100	0	P	V
5190MHz		15570	47.05	-26.95	74	46.3	38.65	20.82	58.72	100	0	P	V
													V
													V
		10460	46.83	-27.17	74	48.5	39.72	16.5	57.89	100	0	P	H
		15690	48.41	-25.59	74	47.69	38.38	20.91	58.57	100	0	P	H
802.11n													H
HT40													H
CH 46		10460	47.74	-26.26	74	49.41	39.72	16.5	57.89	100	0	P	V
5230MHz		15690	48.1	-25.9	74	47.38	38.38	20.91	58.57	100	0	P	V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.

Band 1 5150~5250MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5147.75	62.76	-11.24	74	54.39	31.63	11.01	34.27	100	186	P	H
		5129.75	47.28	-6.72	54	38.92	31.63	11.01	34.28	100	186	A	H
	*	5211	98	-	-	89.45	31.64	11.16	34.25	100	186	P	H
		5211	89	-	-	80.45	31.64	11.16	34.25	100	186	A	H
802.11ac		5418.31	54.26	-19.74	74	45.26	31.68	11.49	34.17	100	186	P	H
VHT80		5359.13	43.02	-10.98	54	34.15	31.67	11.4	34.2	100	186	A	H
CH 42		5113.85	68.09	-5.91	74	59.81	31.62	10.95	34.29	251	301	P	V
5210MHz		5150	53.37	-0.63	54	45	31.63	11.01	34.27	251	301	A	V
	*	5212	107.54	-	-	98.99	31.64	11.16	34.25	251	301	P	V
		5212	97.39	-	-	88.84	31.64	11.16	34.25	251	301	A	V
		5359.57	57.8	-16.2	74	48.93	31.67	11.4	34.2	251	301	P	V
		5359.79	46.04	-7.96	54	37.17	31.67	11.4	34.2	251	301	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 1 5150~5250MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		10420	46.66	-21.64	68.3	48.49	39.67	16.45	57.95	100	0	P	H
		15630	46.23	-27.77	74	45.51	38.5	20.85	58.63	100	0	P	H
802.11ac													H
VHT80													H
CH 42		5794	58.19	-10.11	68.3	48.46	32.23	11.67	34.17	251	301	P	V
5210MHz		10420	47.11	-21.19	68.3	48.94	39.67	16.45	57.95	100	0	P	V
		15630	45.67	-28.33	74	44.95	38.5	20.85	58.63	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Emission below 1GHz

WIFI 802.11a (LF @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		70.23	37.93	-2.07	40	60.39	6.6	1.39	30.45	131	309	QP	H
	*	70.23	41.3	1.3	40	63.76	6.6	1.39	30.45	131	309	P	H
		75.36	36.15	-3.85	40	57.89	7.31	1.39	30.44	-	-	P	H
		206.58	39.51	-3.99	43.5	57.48	10.23	2.09	30.29	100	215	QP	H
		206.58	41.18	-2.32	43.5	59.15	10.23	2.09	30.29	100	215	P	H
		382.6	28.52	-17.48	46	39.63	16	2.94	30.05	-	-	P	H
		500.2	29.58	-16.42	46	37.98	18.1	3.31	29.81	-	-	P	H
		970.6	29.29	-24.71	54	29.14	24.5	4.67	29.02	-	-	P	H
													H
													H
													H
802.11a													H
LF		51.06	38.84	-1.16	40	59.4	8.52	1.39	30.47	105	294	QP	V
	*	51.06	40.62	0.62	40	61.18	8.52	1.39	30.47	105	294	P	V
		83.19	37.03	-2.97	40	57.81	8.26	1.39	30.43	-	-	P	V
		206.04	36.77	-6.73	43.5	54.76	10.21	2.09	30.29	-	-	P	V
		320.3	31.86	-14.14	46	45.12	14.31	2.56	30.13	-	-	P	V
		500.2	29.2	-16.8	46	37.6	18.1	3.31	29.81	-	-	P	V
		960.8	29.38	-24.62	54	29.36	24.5	4.58	29.06	-	-	P	V
													V
													V
													V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against limit line.

Note symbol

*	**Fundamental Frequency** which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency.
!	Test result is **over limit** line.
P/A	**P**eak or **A**verage
H/V	**H**orizontal or **V**ertical

A calculation example for radiated spurious emission is shown as below:

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 01 2412MHz		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

1. Level(dBμV/m) =

Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

2. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)

= 55.45 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)

= 43.54 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

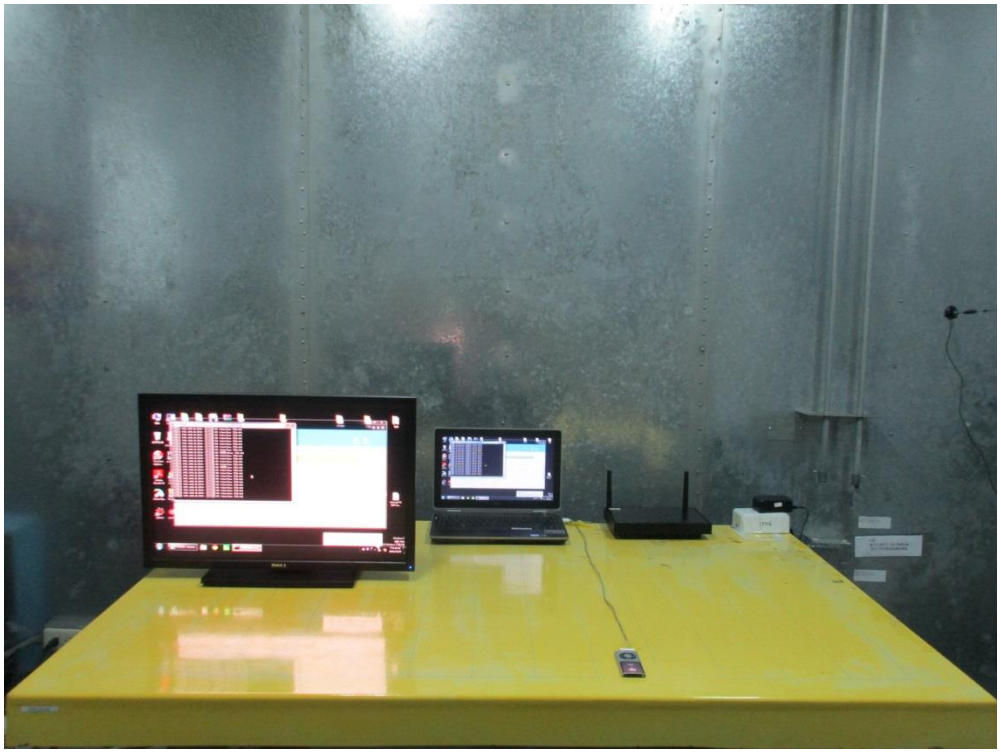
= 43.54(dBμV/m) – 54(dBμV/m)

= -10.46(dB)

Both peak and average measured complies with the limit line, so test result is "PASS".

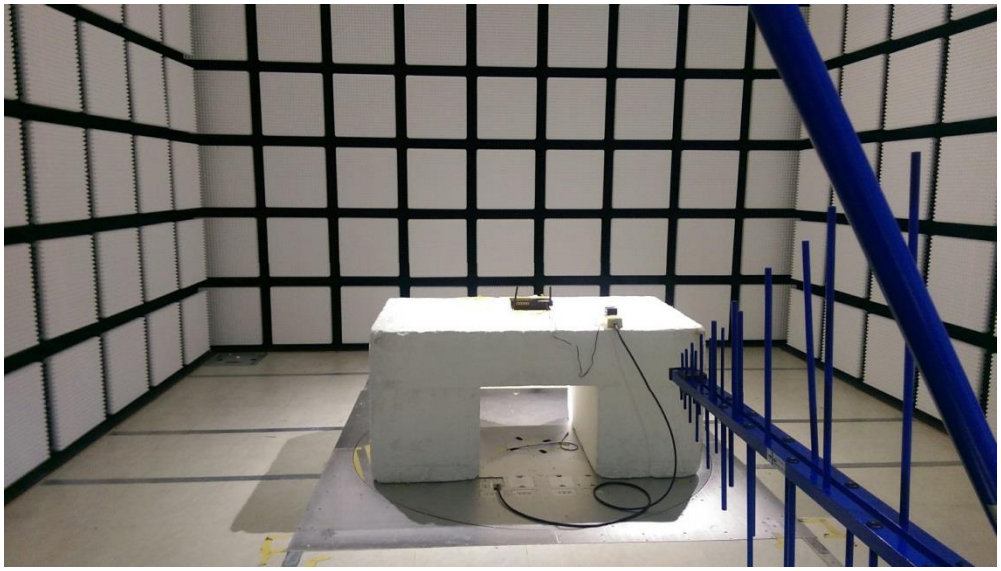
Appendix C. Setup Photographs

<Conducted Emission>



<Radiated Emission>

LF



HF