



FCC RF Test Report

APPLICANT : ZTE CORPORATION
EQUIPMENT : LTE Ufi
BRAND NAME : ZTE
MODEL NAME : R226-Z
FCC ID : SRQ-R226-Z
STANDARD : FCC Part 15 Subpart E §15.407
CLASSIFICATION : (NII) Unlicensed National Information Infrastructure

The product was received on Jul. 06, 2015 and testing was completed on Aug. 16, 2015. We, SPORTON INTERNATIONAL (KUNSHAN) 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 (KUNSHAN) 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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No. 3-2, PingXiang Road, Kunshan, Jiangsu Province, P. R. China



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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	≤24 dBm	Pass	-
3.3	15.407(a)	Power Spectral Density	≤11 dBm	Pass	-
3.4	15.407(b)	Unwanted Emissions	≤ -17, -27 dBm	Pass	Under limit 2.98 dB at 5148.850 MHz
3.5	15.207	AC Conducted Emission	15.207(a)	Pass	Under limit 5.27 dB at 0.560 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

ZTE CORPORATION

ZTE Plaza, Keji Road South, Hi-Tech Industrial Park, Nanshan District, Shenzhen, Guangdong, 518057, P. R. China

1.2 Manufacturer

ZTE CORPORATION

ZTE Plaza, Keji Road South, Hi-Tech Industrial Park, Nanshan District, Shenzhen, Guangdong, 518057, P. R. China

1.3 Feature of Equipment Under Test

Product Feature & Specification	
Equipment	LTE Ufi
Brand Name	ZTE
Model Name	R226-Z
FCC ID	SRQ-R226-Z
EUT supports Radios application	GPRS/EGPRS/WCDMA/HSPA/ HSPA+(Downlink Only)/DC-HSDPA/ WLAN 2.4GHz 802.11b/g/n HT20/HT40 WLAN 5GHz 802.11a/n HT20/HT40/ WLAN 5GHz 802.11ac VHT20/VHT40/VHT80
IMEI Code	Conducted: 353190070004090 Radiation: 353190070000270 Conduction: 353190070000163
HW Version	R226-Z.H01
SW Version	BD_R226-ZV1.0
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.



1.4 Product Specification of Equipment Under Test

Product Specification subjective to this standard			
Tx/Rx Frequency Range	5180 MHz ~ 5240 MHz		
Maximum Output Power to Antenna	802.11a : 8.75 dBm / 0.0075 W 802.11n HT20 : 7.98 dBm / 0.0063 W 802.11n HT40 : 8.12 dBm / 0.0065 W 802.11ac VHT20 : 7.01 dBm / 0.0050 W 802.11ac VHT40 : 7.22 dBm / 0.0053 W 802.11ac VHT80 : 7.02 dBm / 0.0050 W		
99% Occupied Bandwidth	802.11a : 17.00 MHz 802.11n HT20 : 18.05 MHz 802.11n HT40 : 36.20 MHz 802.11ac VHT20: 18.05 MHz 802.11ac VHT40 : 36.20 MHz 802.11ac VHT80 : 75.24 MHz		
Antenna Type / Gain	Chain Port 1 : IFA Antenna with gain 2.50 dBi Chain Port 2 : IFA Antenna with gain 2.50 dBi		
Type of Modulation	802.11a/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11ac : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM)		
Antenna Function Description		Chain Port 1	Chain Port 2
	802.11a	V	V
	802.11n/ac SISO	V	V
	802.11n/ac MIMO	V	V



1.5 Modification of EUT

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

1.6 Testing Location

Test Site	SPORTON INTERNATIONAL (KUNSHAN) INC.		
Test Site Location	No. 3-2, PingXiang Road, Kunshan, Jiangsu Province, P. R. China TEL: +86-0512-5790-0158 FAX: +86-0512-5790-0958		
Test Site No.	Sporton Site No.		FCC Registration No.
	TH01-KS	03CH02-KS	CO01-KS
			418269

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.
- ♦ ANSI C63.10-2013

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). For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases 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
	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.

WLAN 5GHz 802.11a Average Power (dBm)											
Power vs. Channel				Power vs. Data Rate							
Channel	Frequency (MHz)	Chain Port	Data Rate	Channel	9Mbps	12Mbps	18Mbps	24Mbps	36Mbps	48Mbps	54Mbps
			6Mbps								
CH 36	5180	1	8.73	CH 36	8.65	8.68	8.69	8.60	8.67	8.71	8.54
CH 44	5220	1	8.51								
CH 48	5240	1	8.47								
CH 36	5180	2	8.75	CH 36	8.72	8.74	8.53	8.40	8.36	8.44	8.42
CH 44	5220	2	8.19								
CH 48	5240	2	8.23								

WLAN 5GHz 802.11n-HT20 Average Power (dBm)											
Power vs. Channel				Power vs. Data Rate							
Channel	Frequency (MHz)	Chain Port	MCS Index	Channel	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
			MCS0								
CH 36	5180	1	7.88	CH 36	7.67	7.85	7.86	7.84	7.87	7.82	7.80
CH 44	5220	1	7.50								
CH 48	5240	1	7.39								
CH 36	5180	2	7.97	CH 36	7.90	7.92	7.95	7.86	7.94	7.93	7.96
CH 44	5220	2	7.58								
CH 48	5240	2	7.65								
CH 36	5180	1+2(1)	5.24	CH 36	5.09	4.81	4.71	4.65	4.62	4.66	4.50
CH 44	5220	1+2(1)	4.66								
CH 48	5240	1+2(1)	4.87								
CH 36	5180	1+2(2)	4.68	CH 36	4.63	4.61	4.57	4.56	4.43	4.46	4.39
CH 44	5220	1+2(2)	3.94								
CH 48	5240	1+2(2)	3.83								
CH 36	5180	1+2	7.98	CH 36	7.88	7.72	7.65	7.62	7.54	7.58	7.46
CH 44	5220	1+2	7.33								
CH 48	5240	1+2	7.39								



WLAN 5GHz 802.11n-HT40 Average Power (dBm)											
Power vs. Channel				Power vs. Data Rate							
Channel	Frequency (MHz)	Chain Port	MCS Index	Channel	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
			MCS0								
CH 38	5190	1	7.63	CH 38	7.47	7.50	7.38	7.49	7.52	7.44	7.41
CH 46	5230	1	7.41								
CH 38	5190	2	7.91	CH 38	7.84	7.80	7.73	7.76	7.89	7.81	7.73
CH 46	5230	2	7.24								
CH 38	5190	1+2(1)	4.88	CH 38	4.68	4.85	4.77	4.68	4.83	4.81	4.82
CH 46	5230	1+2(1)	4.66								
CH 38	5190	1+2(2)	5.33	CH 38	5.21	5.29	5.28	5.32	5.30	5.22	5.14
CH 46	5230	1+2(2)	5.00								
CH 38	5190	1+2	8.12	CH 38	7.97	8.09	8.04	8.02	8.08	8.03	7.99
CH 46	5230	1+2	7.84								

WLAN 5GHz 802.11ac VHT20 Average Power (dBm)												
Power vs. Channel				Power vs. Data Rate								
Channel	Frequency (MHz)	Chain Port	MCS Index	Channel	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8
			MCS0									
CH 36	5180	1	6.96	CH 36	6.73	6.85	6.89	6.87	6.92	6.91	6.84	6.90
CH 44	5220	1	6.68									
CH 48	5240	1	6.55									
CH 36	5180	2	6.78	CH 36	6.54	6.62	6.61	6.72	6.63	6.66	6.57	6.68
CH 44	5220	2	6.14									
CH 48	5240	2	6.03									
CH 36	5180	1+2(1)	3.90	CH 36	3.66	3.69	3.76	3.87	3.77	3.68	3.73	3.85
CH 44	5220	1+2(1)	3.24									
CH 48	5240	1+2(1)	3.38									
CH 36	5180	1+2(2)	4.09	CH 36	3.98	3.86	3.96	4.04	4.06	3.99	4.07	4.08
CH 44	5220	1+2(2)	3.70									
CH 48	5240	1+2(2)	3.53									
CH 36	5180	1+2	7.01	CH 36	6.83	6.79	6.87	6.97	6.93	6.85	6.92	6.98
CH 44	5220	1+2	6.49									
CH 48	5240	1+2	6.47									



WLAN 5GHz 802.11ac VHT40 Average Power (dBm)													
Power vs. Channel				Power vs. Data Rate									
Channel	Frequency (MHz)	Chain Port	MCS Index MCS0	Channel	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
CH 38	5190	1	7.09	CH 38	7.02	6.94	6.89	6.93	7.06	7.07	7.04	6.92	6.87
CH 46	5230	1	6.85	CH 38	7.20	7.15	7.12	7.11	7.08	7.14	7.02	7.17	7.18
CH 38	5190	2	7.21	CH 38	3.90	3.78	3.51	3.49	3.61	3.47	3.36	3.55	3.70
CH 46	5230	2	6.76	CH 38	4.21	4.20	4.18	4.30	4.26	4.22	4.25	4.28	4.22
CH 38	5190	1+2(1)	3.93	CH 38	7.07	7.01	6.87	6.92	6.96	6.87	6.84	6.94	6.98
CH 46	5230	1+2(1)	3.85	CH 46	6.78	6.85	6.89	6.70	6.79	6.86	6.85	6.96	6.93
CH 38	5190	1+2(2)	4.47	CH 42	6.73	6.85	6.83	6.88	6.93	6.92	6.89	6.90	6.86
CH 46	5230	1+2(2)	4.02	CH 42	3.06	3.09	3.03	3.02	3.24	3.21	3.32	3.22	3.34
CH 38	5190	1+2	7.22	CH 42	3.16	3.24	3.51	3.27	3.37	3.28	3.23	3.20	3.25
CH 46	5230	1+2	6.95	CH 42	6.12	6.17	6.29	6.15	6.32	6.25	6.28	6.22	6.31

WLAN 5GHz 802.11ac VHT80 Average Power (dBm)													
Power vs. Channel				Power vs. Data Rate									
Channel	Frequency (MHz)	Chain Port	MCS Index MCS0	Channel	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
CH 42	5210	1	6.98	CH 42	6.78	6.85	6.89	6.70	6.79	6.86	6.85	6.96	6.93
CH 42	5210	2	7.02	CH 42	3.06	3.09	3.03	3.02	3.24	3.21	3.32	3.22	3.34
CH 42	5210	1+2(1)	3.46	CH 42	3.16	3.24	3.51	3.27	3.37	3.28	3.23	3.20	3.25
CH 42	5210	1+2(2)	3.60	CH 42	6.12	6.17	6.29	6.15	6.32	6.25	6.28	6.22	6.31
CH 42	5210	1+2	6.54										

Note: Chain Port 1+2 is a calculated result from sum of the power Chain Port 1+2(1) and Chain Port 1+2(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.

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 : GPRS850 Idle + WLAN (5GHz) Link + USB Cable (Charging from Adapter)
Remark: For Radiated TCs, the tests were performed with adapter and USB cable.	



Ch. #		Band I : 5180-5240 MHz	
		802.11a	
L	Low	36	
M	Middle	44	
H	High	48	

Ch. #		Band I : 5180-5240 MHz	
		802.11n HT20	
L	Low	36	
M	Middle	44	
H	High	48	

Ch. #		Band I : 5180-5240 MHz	
		802.11n HT40	
L	Low	38	
M	Middle	-	
H	High	46	

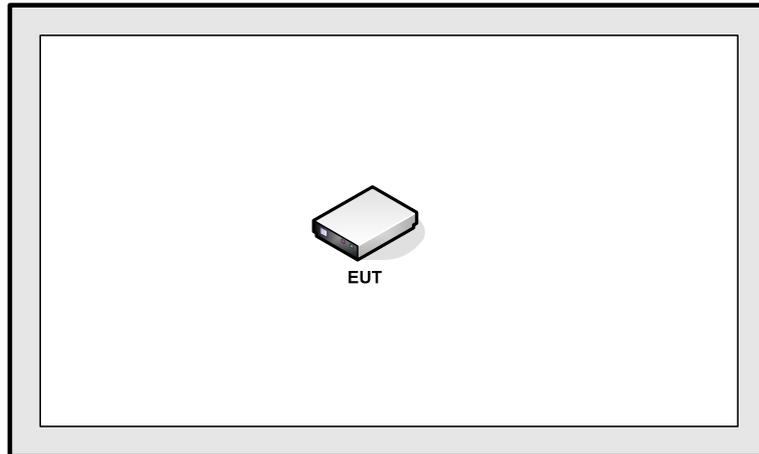
Ch. #		Band I : 5180-5240 MHz	
		802.11ac VHT20	
L	Low	36	
M	Middle	44	
H	High	48	

Ch. #		Band I : 5180-5240 MHz	
		802.11ac VHT40	
L	Low	38	
M	Middle	-	
H	High	46	

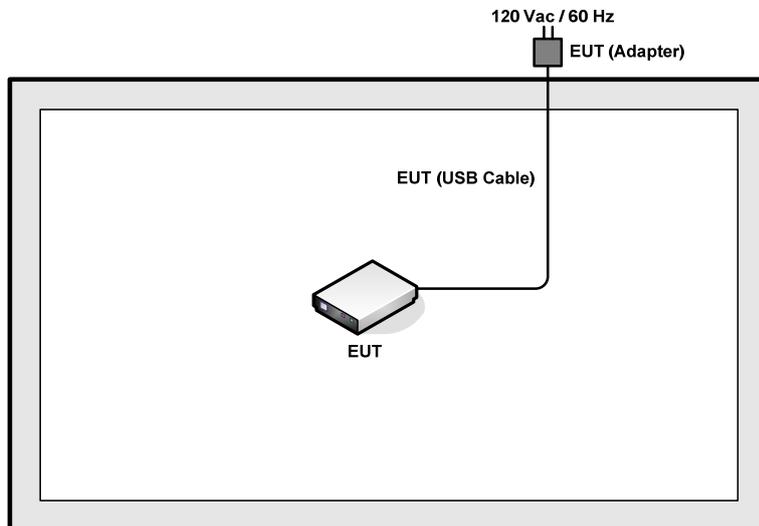
Ch. #		Band I : 5180-5240 MHz	
		802.11ac VHT80	
L	Low	-	
M	Middle	42	
H	High	-	

2.4 Connection Diagram of Test System

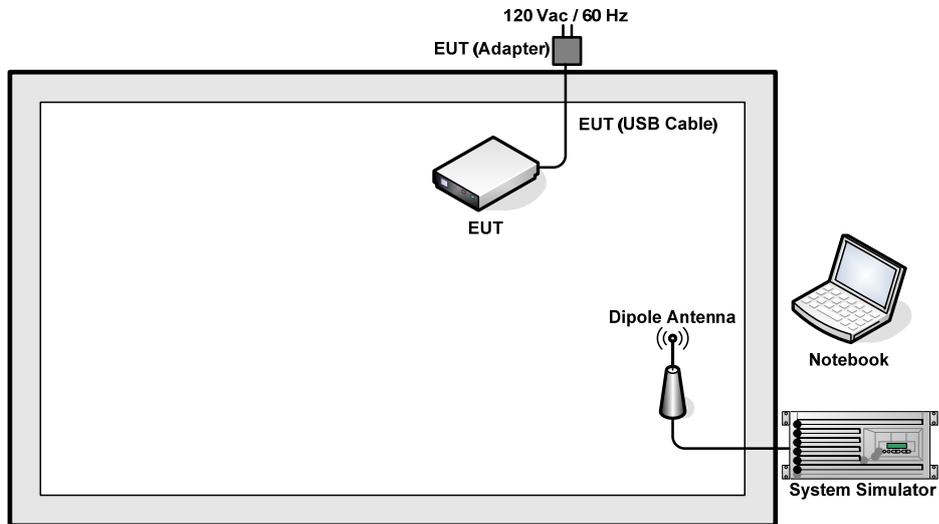
<WLAN5GHz 802.11a Chain Port 1/WLAN5GHz 802.11n HT40 Chain Port 1+2/WLAN5GHz 802.11ac VHT20 Chain Port 1+2 Tx Mode>



<WLAN5GHz 802.11a Chain Port 2/WLAN5GHz 802.11n HT20 Chain Port 1+2/WLAN5GHz 802.11ac VHT40/VHT80 Chain Port 1+2/WLAN5GHz 802.11ac VHT80 Chain Port 1/2 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.	System Simulator	R&S	CMU 200	N/A	N/A	Unshielded, 1.8 m
2.	Notebook	Lenovo	G480	PRC4	N/A	AC I/P: Unshielded, 1.8 m DC O/P: Shielded, 1.8 m
3.	DC Power Supply	GW INSTEK	GPD-2303S	N/A	N/A	Unshielded, 1.8 m

2.6 EUT Operation Test Setup

For WLAN RF test items, an engineering test program was provided and enabled to make EUT continuously transmit/receive.

For AC power line conducted emissions, the EUT was set to connect with the Notebook under large package sizes transmission.

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 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.

Offset = RF cable loss.

Following shows an offset computation example with cable loss 7.0 dB.

Offset (dB) = RF cable loss(dB).

= 7.0 (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.

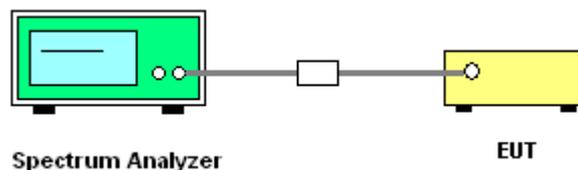
3.1.2 Measuring Instruments

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) $\geq 3 * RBW$.
8. Measure and record the results in the test report.

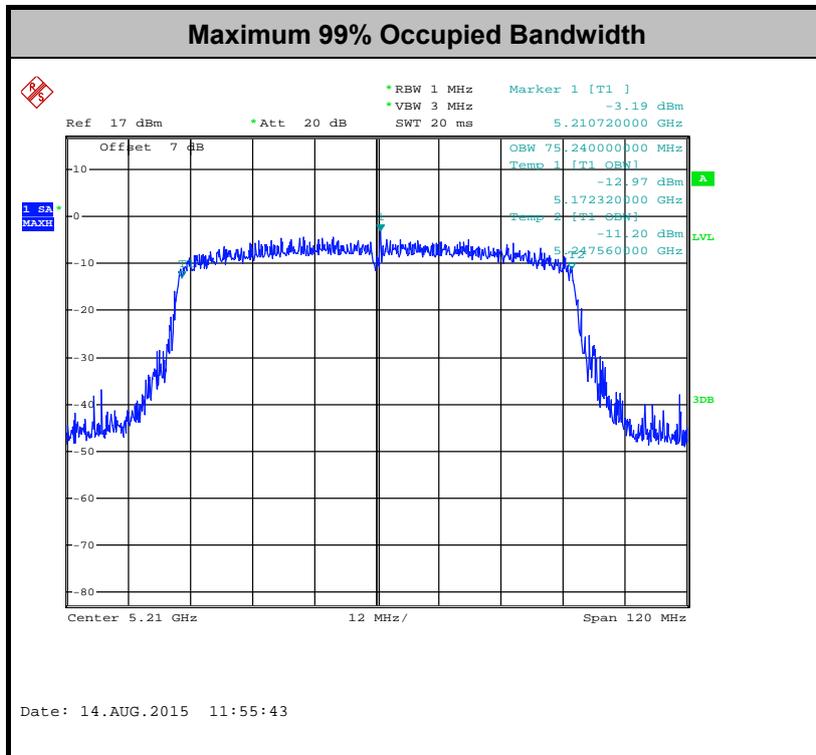
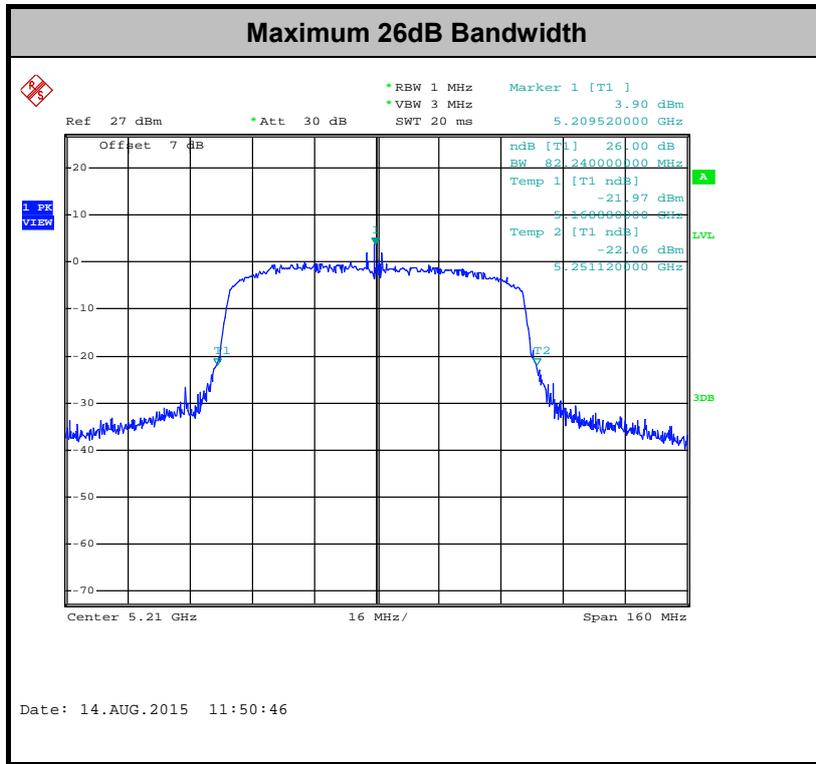
3.1.4 Test Setup





3.1.5 Test Result of 26dB & 99% Occupied Bandwidth Plots

Please refer to Appendix A.



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.

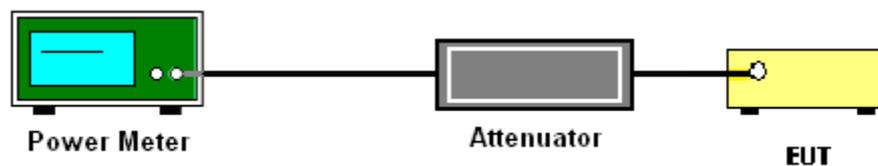
3.2.3 Test Procedures

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

<FCC 14-30 CFR 15.407>

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

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

3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

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

Method SA-2

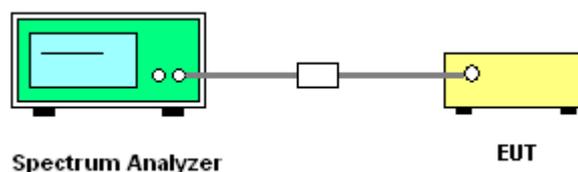
(trace averaging across on and off times of the EUT transmissions, followed by duty cycle correction).

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

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

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

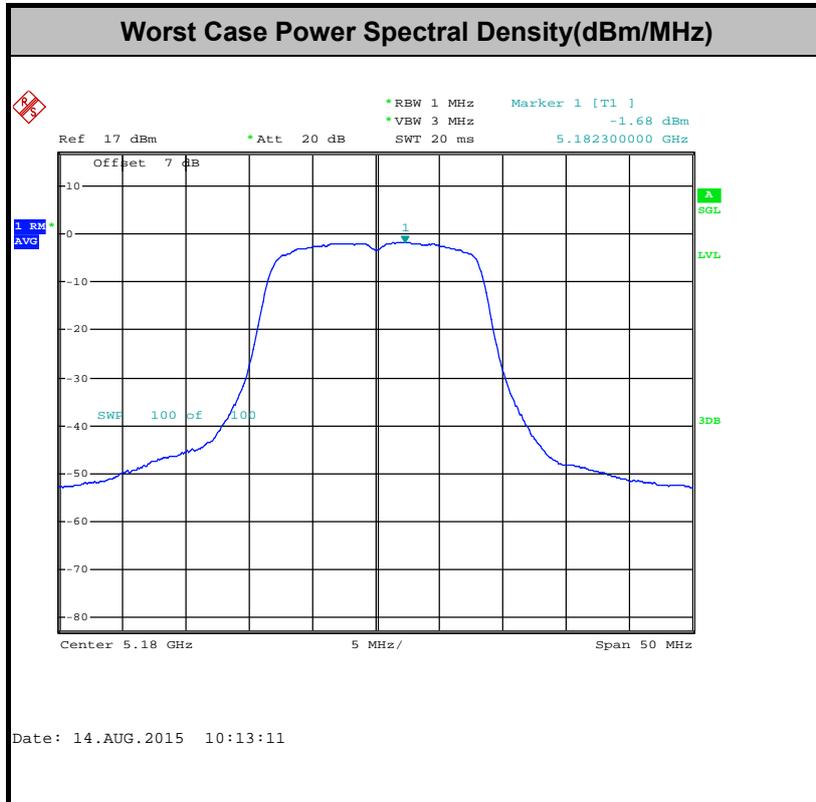
3.3.4 Test Setup





3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.



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

3.4 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.

3.4.1 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.

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

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

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

3.4.2 Measuring Instruments

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



3.4.3 Test Procedures

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

(1) Procedure for Unwanted Emissions Measurements Below 1000MHz

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

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

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

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

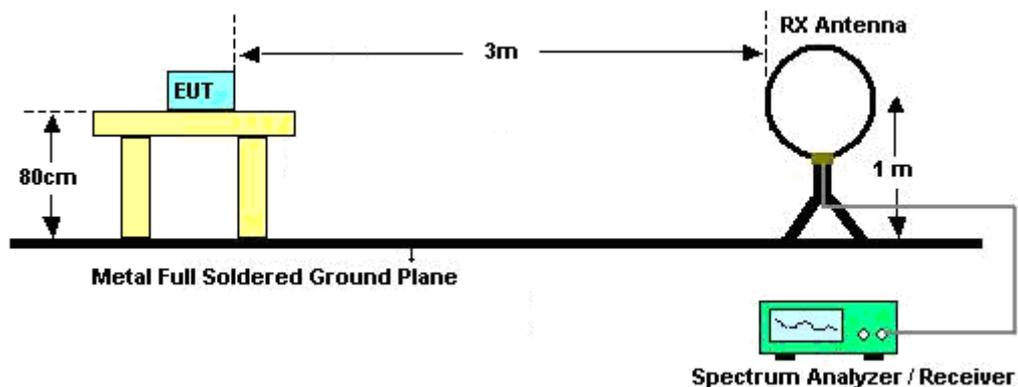
- RBW = 1 MHz
- VBW = 10 Hz, when duty cycle is no less than 98 percent.
- $VBW \geq 1/T$, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

Antenna	Band	Duty Cycle(%)	T(ms)	1/T(kHz)	VBW Setting
1	802.11a	95.833	2.070	0.483	1kHz
2	802.11a	95.480	2.070	0.483	1kHz
1+2	802.11n HT20	95.644	1.932	0.518	1kHz
1+2	802.11n HT40	91.412	0.958	1.044	3kHz
1+2	802.11n VHT20	95.379	1.940	0.515	1kHz
1+2	802.11n VHT40	91.445	0.962	1.040	3kHz
1	802.11n VHT80	82.655	0.467	2.141	3kHz
2	802.11n VHT80	82.888	0.465	2.151	3kHz
1+2	802.11n VHT80	83.784	0.465	2.151	3kHz

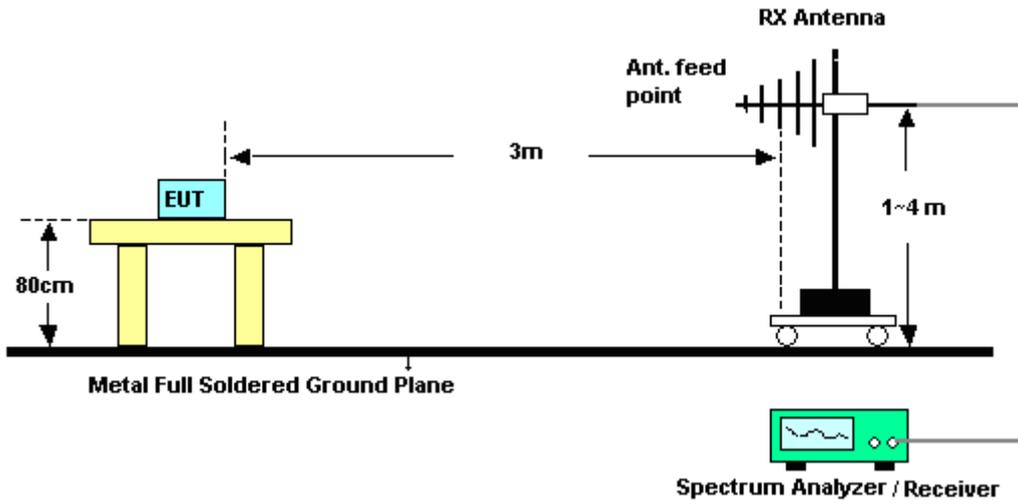
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband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

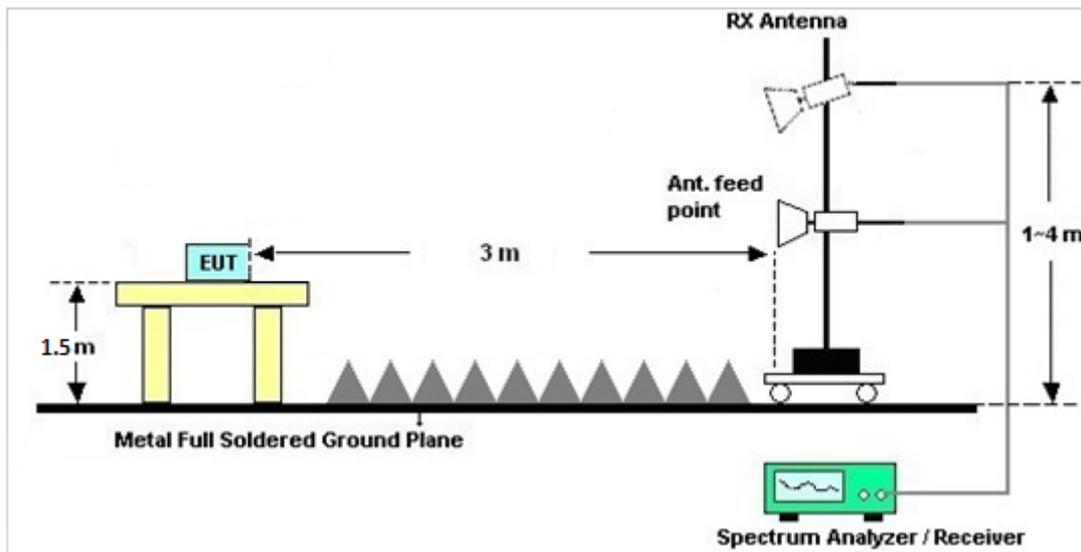
For radiated emissions below 30MHz



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 (dB μ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

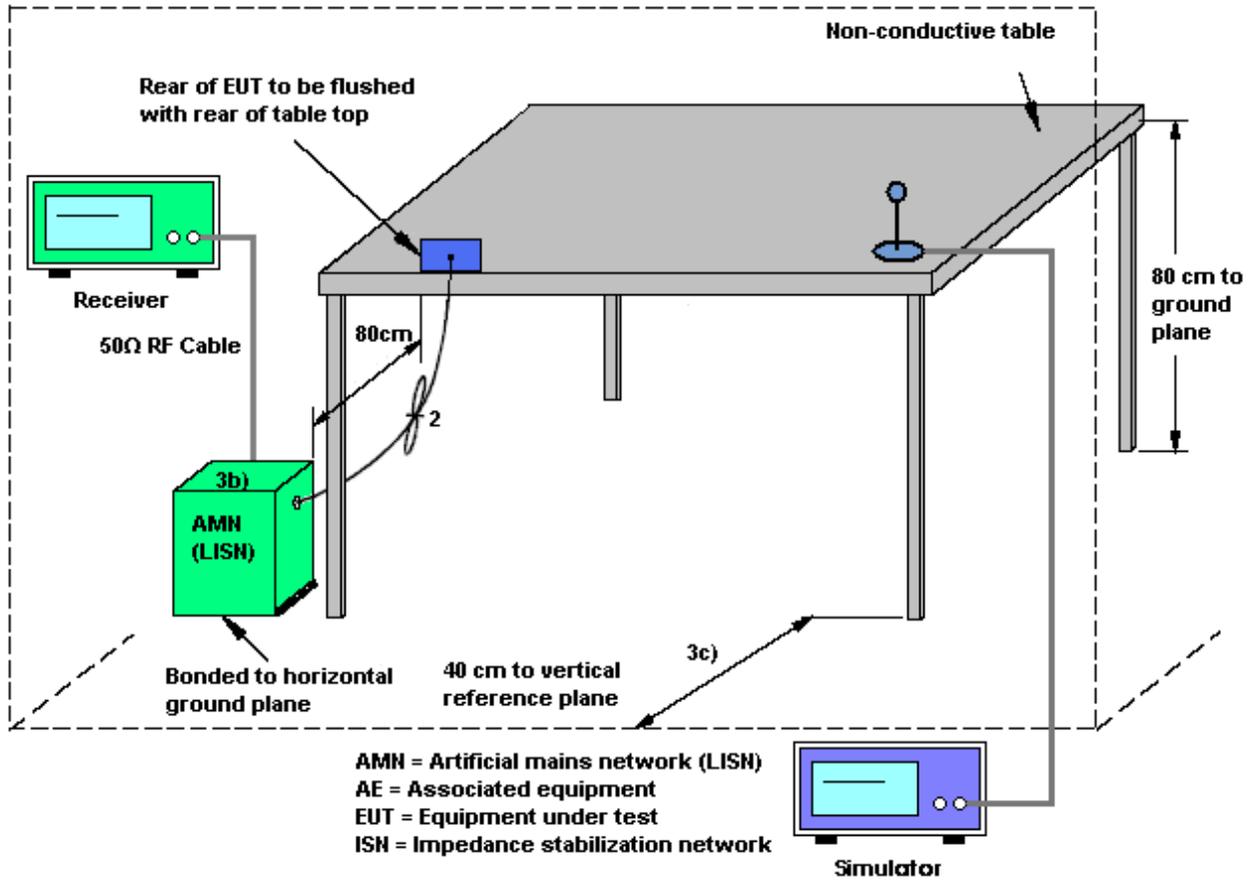
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

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

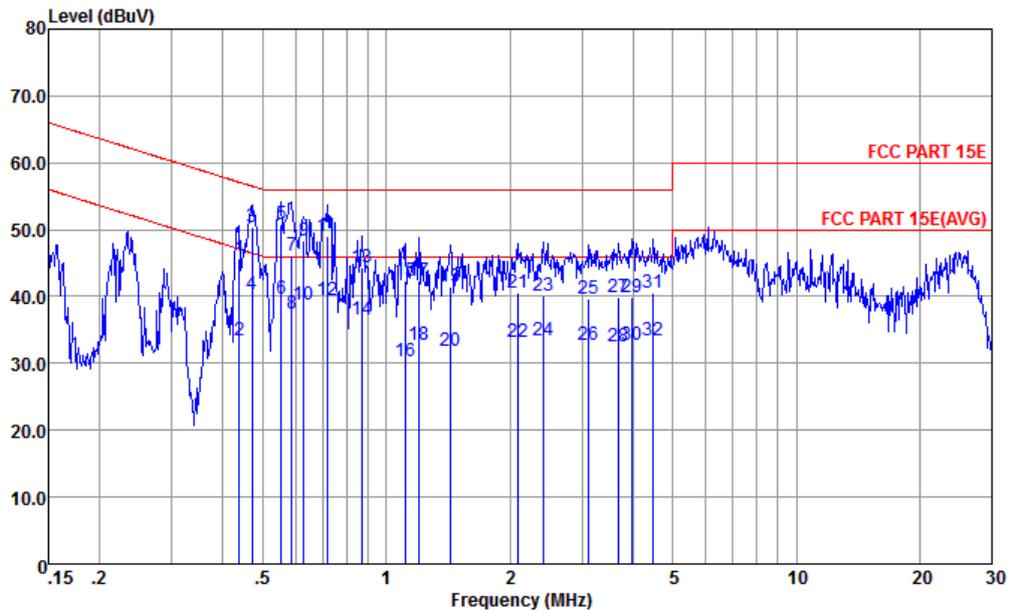
3.5.4 Test Setup





3.5.5 Test Result of AC Conducted Emission

Test Mode :	Mode 1	Temperature :	22~24°C
Test Engineer :	Eko Guan	Relative Humidity :	44~46%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	GPRS850 Idle + WLAN (5GHz) Link + USB Cable (Charging from Adapter)		



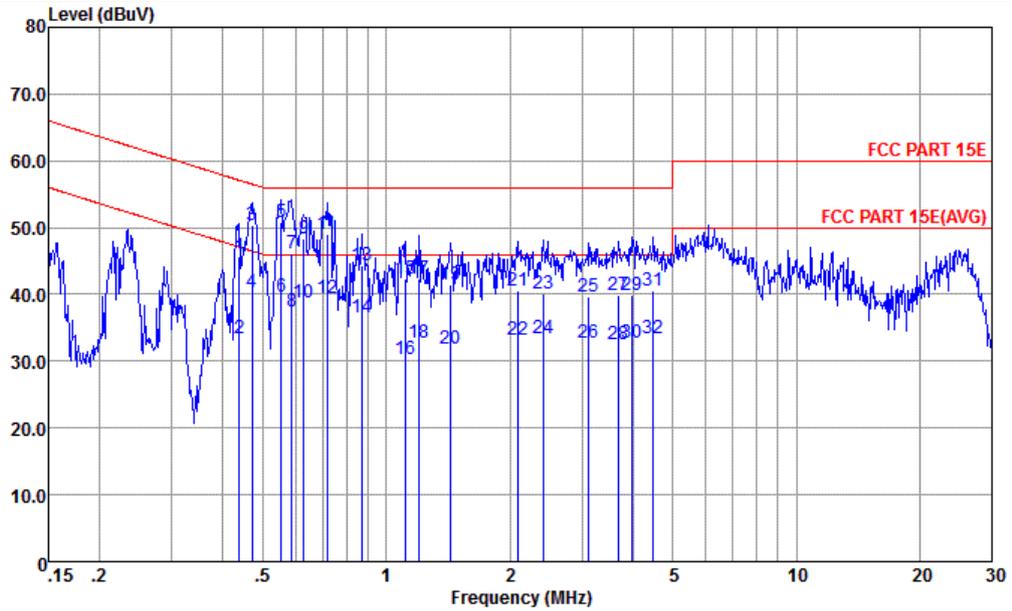
Site : CO01-KS
 Condition : FCC PART 15E LISN-L20140306 LINE

mode : Mode 1

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.44	45.69	-11.42	57.11	34.81	0.26	10.62	QP
2	0.44	33.49	-13.62	47.11	22.61	0.26	10.62	Average
3	0.47	50.45	-6.04	56.49	39.60	0.23	10.62	QP
4	0.47	40.35	-6.14	46.49	29.50	0.23	10.62	Average
5 *	0.56	50.73	-5.27	56.00	39.90	0.20	10.63	QP
6	0.56	39.63	-6.37	46.00	28.80	0.20	10.63	Average
7	0.59	46.03	-9.97	56.00	35.20	0.20	10.63	QP
8	0.59	37.33	-8.67	46.00	26.50	0.20	10.63	Average
9	0.63	48.33	-7.67	56.00	37.50	0.20	10.63	QP
10	0.63	38.68	-7.32	46.00	27.85	0.20	10.63	Average
11	0.72	48.94	-7.06	56.00	38.10	0.20	10.64	QP
12	0.72	39.34	-6.66	46.00	28.50	0.20	10.64	Average
13	0.87	44.38	-11.62	56.00	33.60	0.13	10.65	QP
14	0.87	36.58	-9.42	46.00	25.80	0.13	10.65	Average
15	1.11	42.35	-13.65	56.00	31.60	0.10	10.65	QP
16	1.11	30.25	-15.75	46.00	19.50	0.10	10.65	Average
17	1.20	42.26	-13.74	56.00	31.50	0.10	10.66	QP
18	1.20	32.66	-13.34	46.00	21.90	0.10	10.66	Average
19	1.43	41.38	-14.62	56.00	30.60	0.10	10.68	QP
20	1.43	31.98	-14.02	46.00	21.20	0.10	10.68	Average
21	2.09	40.61	-15.39	56.00	29.81	0.10	10.70	QP
22	2.09	33.31	-12.69	46.00	22.51	0.10	10.70	Average
23	2.41	40.14	-15.86	56.00	29.31	0.11	10.72	QP
24	2.41	33.34	-12.66	46.00	22.51	0.11	10.72	Average
25	3.12	39.74	-16.26	56.00	28.80	0.15	10.79	QP



Test Mode :	Mode 1	Temperature :	22~24°C
Test Engineer :	Eko Guan	Relative Humidity :	44~46%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	GPRS850 Idle + WLAN (5GHz) Link + USB Cable (Charging from Adapter)		



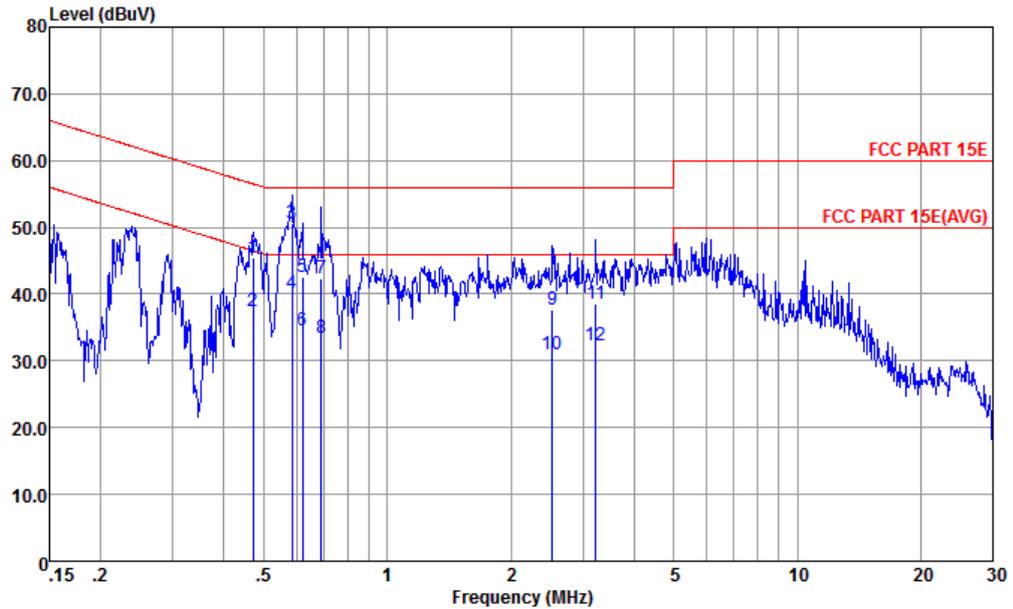
Site : CO01-KS
 Condition : FCC PART 15E LISN-L20140306 LINE

mode : Mode 1

	Freq	Level	Over	Limit	Read	LISN	Cable	Remark
	MHz	dBuV	Limit	Line	Level	Factor	Loss	
			dB	dBuV	dBuV	dB	dB	
26	3.12	32.84	-13.16	46.00	21.90	0.15	10.79	Average
27	3.68	39.90	-16.10	56.00	28.90	0.18	10.82	QP
28	3.68	32.50	-13.50	46.00	21.50	0.18	10.82	Average
29	3.99	39.91	-16.09	56.00	28.90	0.18	10.83	QP
30	3.99	32.81	-13.19	46.00	21.80	0.18	10.83	Average
31	4.48	40.53	-15.47	56.00	29.50	0.19	10.84	QP
32	4.48	33.53	-12.47	46.00	22.50	0.19	10.84	Average



Test Mode :	Mode 1	Temperature :	22~24°C
Test Engineer :	Eko Guan	Relative Humidity :	44~46%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	GPRS850 Idle + WLAN (5GHz) Link + USB Cable (Charging from Adapter)		



Site : CO01-KS
 Condition : FCC PART 15E LISN-N20140306 NEUTRAL

mode : Mode 1

	Freq	Level	Over	Limit	Read	LISN	Cable	Remark
	MHz	dBuV	Limit	Line	Level	Factor	Loss	
			dB	dBuV	dBuV	dB	dB	
1	0.47	45.55	-10.94	56.49	34.61	0.32	10.62	QP
2	0.47	37.55	-8.94	46.49	26.61	0.32	10.62	Average
3 *	0.59	50.48	-5.52	56.00	39.60	0.25	10.63	QP
4	0.59	40.08	-5.92	46.00	29.20	0.25	10.63	Average
5	0.62	42.46	-13.54	56.00	31.60	0.23	10.63	QP
6	0.62	34.46	-11.54	46.00	23.60	0.23	10.63	Average
7	0.69	42.34	-13.66	56.00	31.50	0.20	10.64	QP
8	0.69	33.44	-12.56	46.00	22.60	0.20	10.64	Average
9	2.53	37.65	-18.35	56.00	26.80	0.12	10.73	QP
10	2.53	31.05	-14.95	46.00	20.20	0.12	10.73	Average
11	3.22	38.46	-17.54	56.00	27.51	0.15	10.80	QP
12	3.22	32.26	-13.74	46.00	21.31	0.15	10.80	Average

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.

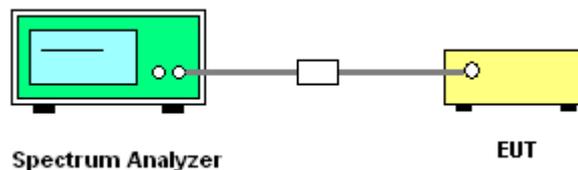
3.6.2 Measuring Instruments

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

An embedded-in antenna design is used.

3.8.3 Antenna Gain

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

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.

	Chain	Chain	DG	DG	Power	PSD
	Port 1	Port 2	for	for	Limit	Limit
	(dBi)	(dBi)	Power	PSD	Reduction	Reduction
	(dBi)	(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 Equipments

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSP40	100319	9kHz~40GHz	Oct. 28, 2014	Aug. 14, 2015	Oct. 27, 2015	Conducted (TH01-KS)
Pulse Power Sensor	Anritsu	MA2411B	0917070	30MHz~40GHz	Jan. 23, 2015	Aug. 14, 2015	Jan. 22, 2016	Conducted (TH01-KS)
Power Meter	Anritsu	ML2495A	1005002	50MHz Bandwidth	Jan. 23, 2015	Aug. 14, 2015	Jan. 22, 2016	Conducted (TH01-KS)
Thermal Chamber	Ten Billion	TTC-B3S	TBN-960502	-40~+150°C	Oct. 25, 2014	Aug. 14, 2015	Oct. 24, 2015	Conducted (TH01-KS)
EMI Test Receiver	R&S	ESR7	101403	9kHz~7GHz; Max 30dBm	Sep. 29, 2014	Aug. 16, 2015	Sep. 28, 2015	Radiation (03CH02-KS)
Spectrum Analyzer	R&S	FSV40	101040	10kHz~40GHz; Max 30dBm	Sep. 25, 2014	Aug. 16, 2015	Sep. 24, 2015	Radiation (03CH02-KS)
Loop Antenna	R&S	HFH2-Z2	100321	9kHz~30MHz	Nov. 13, 2014	Aug. 16, 2015	Nov. 12, 2015	Radiation (03CH02-KS)
Bilog Antenna	TeseQ	CBL6112D	37879	30MHz~2GHz	Sep. 13, 2014	Aug. 16, 2015	Sep. 12, 2015	Radiation (03CH02-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	75957	1GHz~18GHz	Nov. 08, 2014	Aug. 16, 2015	Nov. 07, 2015	Radiation (03CH02-KS)
Active Horn Antenna	com-power	AHA-118	701030	1GHz~18GHz	Nov. 08, 2014	Aug. 16, 2015	Nov. 07, 2015	Radiation (03CH02-KS)
SHF-EHF Horn	com-power	AH-840	101070	18GHz~40GHz	Sep. 04, 2014	Aug. 16, 2015	Sep. 03, 2015	Radiation (03CH02-KS)
Amplifier	com-power	PA-103A	161069	1kHz~1000MHz / 32 dB	May 04, 2015	Aug. 16, 2015	May 03, 2016	Radiation (03CH02-KS)
Amplifier	Agilent	8449B	3008A02384	1GHz~26.5GHz Gain 30dB	Oct. 28, 2014	Aug. 16, 2015	Oct. 27, 2015	Radiation (03CH02-KS)
AC Power Source	Chroma	61601	616010002473	N/A	NCR	Aug. 16, 2015	NCR	Radiation (03CH02-KS)
Turn Table	MF	MF7802	N/A	0~360 degree	NCR	Aug. 16, 2015	NCR	Radiation (03CH02-KS)
Antenna Mast	MF	MF7802	N/A	1 m~4 m	NCR	Aug. 16, 2015	NCR	Radiation (03CH02-KS)
EMI Receiver	R&S	ESCI7	100768	9kHz~7GHz;	May 04, 2015	Aug. 05, 2015	May 03, 2016	Conduction (CO01-KS)
AC LISN	MessTec	AN3016	060103	9kHz~30MHz	Oct. 25, 2014	Aug. 05, 2015	Oct. 24, 2015	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060105	9kHz~30MHz	Oct. 25, 2014	Aug. 05, 2015	Oct. 24, 2015	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP000000811	AC 0V~300V, 45Hz~1000Hz	Oct. 25, 2014	Aug. 05, 2015	Oct. 24, 2015	Conduction (CO01-KS)



5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.3 dB
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.1 dB
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Appendix A. Conducted Test Results

Test Engineer:	Silent Hai	Temperature:	21~25	°C
Test Date:	2015/8/14	Relative Humidity:	51~54	%

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	1	36	5180		16.95		22.20	-			22.29	
11a	6Mbps	1	44	5220		17.00		22.15	-			22.30	
11a	6Mbps	1	48	5240		17.00		22.25	-			22.30	
HT20	MCS0	1	36	5180		17.95		22.85	-			22.54	
HT20	MCS0	1	44	5220		18.05		22.85	-			22.56	
HT20	MCS0	1	48	5240		17.90		22.90	-			22.53	
HT40	MCS0	1	38	5190		36.10		43.11	-			23.01	
HT40	MCS0	1	46	5230		36.20		43.38	-			23.01	
VHT20	MCS0	1	36	5180	18.05		22.90		-		22.56		
VHT20	MCS0	1	44	5220	17.95		22.90		-		22.54		
VHT20	MCS0	1	48	5240	17.95		23.05		-		22.54		
VHT40	MCS0	1	38	5190		36.10		43.20	-			23.01	
VHT40	MCS0	1	46	5230		36.20		43.47	-			23.01	
VHT80	MCS0	1	42	5210		75.12		82.24	-			23.01	
HT20	MCS0	2	36	5180	18.05	17.95	22.70	22.90	-		22.54		
HT20	MCS0	2	44	5220	18.00	18.00	22.80	22.85	-		22.55		
HT20	MCS0	2	48	5240	18.00	17.95	22.75	22.65	-		22.54		
HT40	MCS0	2	38	5190	36.20	36.10	43.11	42.75	-		23.01		
HT40	MCS0	2	46	5230	36.10	36.20	43.02	43.29	-		23.01		
VHT20	MCS0	2	36	5180	18.00	17.95	22.90	22.75	-		22.54		
VHT20	MCS0	2	44	5220	18.00	17.95	22.70	22.90	-		22.54		
VHT20	MCS0	2	48	5240	18.00	18.05	22.75	22.60	-		22.55		
VHT40	MCS0	2	38	5190	36.20	36.10	43.20	42.57	-		23.01		
VHT40	MCS0	2	46	5230	36.10	36.10	42.93	42.66	-		23.01		
VHT80	MCS0	2	42	5210	75.24	75.00	82.08	81.12	-		23.01		

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	1	36	5180	0.18	0.20	8.73	8.75		24.00	24.00	2.50	2.50	Pass
11a	6Mbps	1	44	5220	0.18	0.20	8.51	8.19		24.00	24.00	2.50	2.50	Pass
11a	6Mbps	1	48	5240	0.18	0.20	8.47	8.23		24.00	24.00	2.50	2.50	Pass
HT20	MCS0	1	36	5180	0.22	0.21	7.88	7.97		24.00	24.00	2.50	2.50	Pass
HT20	MCS0	1	44	5220	0.22	0.21	7.50	7.58		24.00	24.00	2.50	2.50	Pass
HT20	MCS0	1	48	5240	0.22	0.21	7.39	7.65		24.00	24.00	2.50	2.50	Pass
HT40	MCS0	1	38	5190	0.46	0.39	7.63	7.91		24.00	24.00	2.50	2.50	Pass
HT40	MCS0	1	46	5230	0.46	0.39	7.41	7.24		24.00	24.00	2.50	2.50	Pass
VHT20	MCS0	1	36	5180	0.19	0.21	6.96	6.78		24.00	24.00	2.50	2.50	Pass
VHT20	MCS0	1	44	5220	0.19	0.21	6.68	6.14		24.00	24.00	2.50	2.50	Pass
VHT20	MCS0	1	48	5240	0.19	0.21	6.55	6.03		24.00	24.00	2.50	2.50	Pass
VHT40	MCS0	1	38	5190	0.43	0.43	7.09	7.21		24.00	24.00	2.50	2.50	Pass
VHT40	MCS0	1	46	5230	0.43	0.43	6.85	6.76		24.00	24.00	2.50	2.50	Pass
VHT80	MCS0	1	42	5210	82.65	82.89	6.98	7.02		24.00	24.00	2.50	2.50	Pass
HT20	MCS0	2	36	5180	0.19	0.23	5.24	4.68	7.98	24.00		2.50		Pass
HT20	MCS0	2	44	5220	0.19	0.23	4.66	3.94	7.33	24.00		2.50		Pass
HT20	MCS0	2	48	5240	0.19	0.23	4.87	3.83	7.39	24.00		2.50		Pass
HT40	MCS0	2	38	5190	0.47	0.39	4.88	5.33	8.12	24.00		2.50		Pass
HT40	MCS0	2	46	5230	0.47	0.39	4.66	5.00	7.84	24.00		2.50		Pass
VHT20	MCS0	2	36	5180	0.21	0.21	3.90	4.09	7.01	24.00		2.50		Pass
VHT20	MCS0	2	44	5220	0.21	0.21	3.24	3.70	6.49	24.00		2.50		Pass
VHT20	MCS0	2	48	5240	0.21	0.21	3.38	3.53	6.47	24.00		2.50		Pass
VHT40	MCS0	2	38	5190	0.39	0.40	3.93	4.47	7.22	24.00		2.50		Pass
VHT40	MCS0	2	46	5230	0.39	0.40	3.85	4.02	6.95	24.00		2.50		Pass
VHT80	MCS0	2	42	5210	0.77	0.77	3.46	3.60	6.54	24.00		2.50		Pass

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	0.18	0.20		-1.48		11.00	11.00	2.50	2.50	Pass
11a	6Mbps	1	44	5220	0.18	0.20		-1.66		11.00	11.00	2.50	2.50	Pass
11a	6Mbps	1	48	5240	0.18	0.20		-1.71		11.00	11.00	2.50	2.50	Pass
HT20	MCS0	1	36	5180	0.22	0.21		-1.81		11.00	11.00	2.50	2.50	Pass
HT20	MCS0	1	44	5220	0.22	0.21		-2.02		11.00	11.00	2.50	2.50	Pass
HT20	MCS0	1	48	5240	0.22	0.21		-2.06		11.00	11.00	2.50	2.50	Pass
HT40	MCS0	1	38	5190	0.46	0.39		-5.44		11.00	11.00	2.50	2.50	Pass
HT40	MCS0	1	46	5230	0.46	0.39		-5.62		11.00	11.00	2.50	2.50	Pass
VHT20	MCS0	1	36	5180	0.19	0.21	-4.08			11.00	11.00	2.50	2.50	Pass
VHT20	MCS0	1	44	5220	0.19	0.21	-3.97			11.00	11.00	2.50	2.50	Pass
VHT20	MCS0	1	48	5240	0.19	0.21	-3.96			11.00	11.00	2.50	2.50	Pass
VHT40	MCS0	1	38	5190	0.43	0.43		-6.25		11.00	11.00	2.50	2.50	Pass
VHT40	MCS0	1	46	5230	0.43	0.43		-6.53		11.00	11.00	2.50	2.50	Pass
VHT80	MCS0	1	42	5210	0.83	0.81		-8.63		11.00	11.00	2.50	2.50	Pass
HT20	MCS0	2	36	5180	0.19	0.23			-2.38	11.00		5.51		Pass
HT20	MCS0	2	44	5220	0.19	0.23			-2.91	11.00		5.51		Pass
HT20	MCS0	2	48	5240	0.19	0.23			-2.70	11.00		5.51		Pass
HT40	MCS0	2	38	5190	0.47	0.39			-5.87	11.00		5.51		Pass
HT40	MCS0	2	46	5230	0.47	0.39			-6.15	11.00		5.51		Pass
VHT20	MCS0	2	36	5180	0.21	0.21			-3.61	11.00		5.51		Pass
VHT20	MCS0	2	44	5220	0.21	0.21			-4.10	11.00		5.51		Pass
VHT20	MCS0	2	48	5240	0.21	0.21			-3.88	11.00		5.51		Pass
VHT40	MCS0	2	38	5190	0.39	0.40			-6.86	11.00		5.51		Pass
VHT40	MCS0	2	46	5230	0.39	0.40			-7.11	11.00		5.51		Pass
VHT80	MCS0	2	42	5210	0.77	0.77			-10.18	11.00		5.51		Pass

TEST RESULTS DATA
Frequency Stability

Band I										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stability (ppm)	Temperature (°C)	Voltage (V)	Note
11a	6Mbps	1	36	5180	5180.050	0.050	9.65	20	3.6	
11a	6Mbps	1	36	5180	5180.050	0.050	9.65	20	4.35	
11a	6Mbps	1	36	5180	5180.050	0.050	9.65	20	3.8	
11a	6Mbps	1	36	5180	5180.000	0.000	0.00	-30	3.8	
11a	6Mbps	1	36	5180	5180.000	0.000	0.00	50	3.8	



Appendix B. Radiated Test Results

Band 1 - 5150~5250MHz WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 36 5180MHz	*	5182	102.35	-	-	99.98	31.85	7.03	36.51	150	174	P	H
		5180	92.32	-	-	89.95	31.85	7.03	36.51	150	174	A	H
		6908	53.83	-20.17	74	49.21	32.88	8.32	36.58	150	212	P	H
		6908	47.78	-6.22	54	43.16	32.88	8.32	36.58	150	212	A	H
		5148.7	51.66	-22.34	74	49.33	31.84	7.02	36.53	150	174	P	H
		5148.15	36.09	-17.91	54	33.76	31.84	7.02	36.53	150	174	A	H
	*	5176	96.29	-	-	93.92	31.85	7.03	36.51	150	29	P	V
	*	5176	86.28	-	-	83.91	31.85	7.03	36.51	150	29	A	V
		5146.6	51.87	-22.13	74	49.54	31.84	7.02	36.53	150	29	P	V
	5146	36.37	-17.63	54	34.04	31.84	7.02	36.53	150	29	A	V	
802.11a CH 44 5220MHz	*	5216	101.76	-	-	99.35	31.86	7.05	36.5	273	91	P	H
		5218	91.7	-	-	89.29	31.86	7.05	36.5	273	91	A	H
		6962	50.02	-23.98	74	45.24	33.01	8.33	36.56	273	91	P	H
		6962	42.74	-11.26	54	37.96	33.01	8.33	36.56	273	91	A	H
	*	5216	96.7	-	-	94.29	31.86	7.05	36.5	150	294	P	V
	*	5218	86.91	-	-	84.5	31.86	7.05	36.5	150	294	A	V



802.11a CH 48 5240MHz	*	5236	101.23	-	-	98.79	31.87	7.07	36.5	300	178	P	H
		5236	91.16	-	-	88.72	31.87	7.07	36.5	300	178	A	H
		6988	51.56	-22.44	74	46.72	33.06	8.34	36.56	300	178	P	H
		6988	42.13	-11.87	54	37.29	33.06	8.34	36.56	300	178	A	H
		5357.35	47.78	-26.22	74	45.17	31.91	7.2	36.5	300	178	P	H
		5356.15	34.57	-19.43	54	31.96	31.91	7.2	36.5	300	178	A	H
	*	5240	97.81	-	-	95.37	31.87	7.07	36.5	150	23	P	V
	*	5238	87.83	-	-	85.39	31.87	7.07	36.5	150	23	A	V
		5370.75	47.29	-26.71	74	44.67	31.91	7.21	36.5	150	23	P	V
		5359.1	34.34	-19.66	54	31.73	31.91	7.2	36.5	150	23	A	V
Remark	<ol style="list-style-type: none"> No other spurious found. All results are PASS against Peak and Average limit line. 												



Band 1 5150~5250MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1	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		10359	48.5	-25.5	74	37.51	38.02	10.3	37.33	150	216	P	H
		10359	48.29	-25.71	74	37.3	38.02	10.3	37.33	150	119	P	V
802.11a CH 44 5220MHz		10440	47.6	-26.4	74	36.52	38.06	10.33	37.31	150	263	P	H
		10440	47.99	-26.01	74	36.91	38.06	10.33	37.31	150	174	P	V
802.11a CH 48 5240MHz		10479	48.31	-25.69	74	37.17	38.09	10.35	37.3	150	78	P	H
		10479	47.56	-26.44	74	36.42	38.09	10.35	37.3	150	119	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1	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)
802.11ac VHT80 CH 42 5210MHz	*	5210	96.83	-	-	94.42	31.86	7.05	36.5	159	347	P	H
	*	5202	85.8	-	-	83.41	31.86	7.03	36.5	159	347	A	H
		5147.6	64.84	-9.16	74	62.51	31.84	7.02	36.53	159	347	P	H
		5148.95	44.24	-9.76	54	41.91	31.84	7.02	36.53	159	347	A	H
		5352.65	53.83	-20.17	74	51.22	31.91	7.2	36.5	159	347	P	H
		5350.3	36.79	-17.21	54	34.18	31.91	7.2	36.5	159	347	A	H
	*	5202	90.22	-	-	87.83	31.86	7.03	36.5	150	204	P	V
	*	5192	80.02	-	-	77.63	31.86	7.03	36.5	150	204	A	V
		5147.85	59.25	-14.75	74	56.92	31.84	7.02	36.53	150	204	P	V
		5149.3	40.46	-13.54	54	38.13	31.84	7.02	36.53	150	204	A	V
	5390.4	50.94	-23.06	74	48.29	31.92	7.23	36.5	150	204	P	V	
	5350.4	36.01	-17.99	54	33.4	31.91	7.2	36.5	150	204	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	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)
802.11ac VHT80		10419	47.37	-26.63	74	36.32	38.05	10.32	37.32	155	315	P	H
CH 42 5210MHz		10419	46.91	-27.09	74	35.86	38.05	10.32	37.32	150	194	P	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	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a LF		101.78	27.62	-15.88	43.5	49.59	12.07	1.3	35.34	100	120	P	H
		214.3	15.26	-28.24	43.5	38.4	9.98	1.91	35.03			P	H
		390.84	18.15	-27.85	46	34.82	15.92	2.61	35.2			P	H
		587.75	21.67	-24.33	46	34.87	18.42	3.23	34.85			P	H
		596.48	22.08	-23.92	46	35.28	18.48	3.25	34.93			P	H
		838.98	23.47	-22.53	46	33.03	20.93	3.89	34.38			P	H
		43.58	33.69	-6.31	40	56.18	11.4	0.87	34.76	116	32	P	V
		102.75	25.87	-17.63	43.5	47.85	12.05	1.31	35.34			P	V
		204.6	21.25	-22.25	43.5	44.86	9.59	1.87	35.07			P	V
		449.04	18.97	-27.03	46	34.09	16.98	2.8	34.9			P	V
		666.32	23.84	-22.16	46	36.11	19.1	3.46	34.83			P	V
		840.92	23.42	-22.58	46	32.94	20.96	3.89	34.37			P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												



Emission below 1GHz
WIFI 802.11ac VHT80 (LF @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT80 LF		101.78	30.62	-12.88	43.5	52.59	12.07	1.3	35.34	132	206	P	H
		214.3	14.26	-29.24	43.5	37.4	9.98	1.91	35.03			P	H
		439.34	16.95	-29.05	46	32.32	16.83	2.77	34.97			P	H
		596.48	20.08	-25.92	46	33.28	18.48	3.25	34.93			P	H
		773.02	20.52	-25.48	46	31.22	20.03	3.74	34.47			P	H
		893.3	23.8	-22.2	46	32.97	21.36	4.01	34.54			P	H
	!	43.58	35.69	-4.31	40	58.18	11.4	0.87	34.76	145	202	P	V
		102.75	23.87	-19.63	43.5	45.85	12.05	1.31	35.34			P	V
		204.6	19.25	-24.25	43.5	42.86	9.59	1.87	35.07			P	V
		449.04	17.97	-28.03	46	33.09	16.98	2.8	34.9			P	V
		586.78	20.51	-25.49	46	33.71	18.42	3.22	34.84			P	V
	895.24	23.83	-22.17	46	32.99	21.37	4.01	34.54			P	V	
Remark	1. No other spurious found. 2. All results are PASS against limit line.												



Band 1 - 5150~5250MHz
WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 36 5180MHz	*	5182	103.34	-	-	100.97	31.85	7.03	36.51	150	220	P	H
	*	5182	93.3	-	-	90.93	31.85	7.03	36.51	150	220	A	H
		5149.75	57.42	-16.58	74	55.09	31.84	7.02	36.53	150	220	P	H
		5149.35	43.41	-10.59	54	41.08	31.84	7.02	36.53	150	220	A	H
	*	5182	98.75	-	-	96.38	31.85	7.03	36.51	300	82	P	V
	*	5182	88.89	-	-	86.52	31.85	7.03	36.51	300	82	A	V
		5149.8	52.66	-21.34	74	50.33	31.84	7.02	36.53	300	82	P	V
		5150	38.77	-15.23	54	36.44	31.84	7.02	36.53	300	82	A	V
802.11a CH 44 5220MHz	*	5222	103.3	-	-	100.89	31.86	7.05	36.5	150	244	P	H
	*	5222	93.14	-	-	90.73	31.86	7.05	36.5	150	244	A	H
	*	5222	98.4	-	-	95.99	31.86	7.05	36.5	296	118	P	V
	*	5218	88.25	-	-	85.84	31.86	7.05	36.5	296	118	A	V
802.11a CH 48 5240MHz	*	5240	104.08	-	-	101.64	31.87	7.07	36.5	160	63	P	H
	*	5240	93.94	-	-	91.5	31.87	7.07	36.5	160	63	A	H
		5399.75	48.72	-25.28	74	46.05	31.92	7.25	36.5	160	63	P	H
		5350.2	35.56	-18.44	54	32.95	31.91	7.2	36.5	160	63	A	H
	*	5242	100.28	-	-	97.81	31.88	7.09	36.5	292	279	P	V
	*	5238	90.64	-	-	88.2	31.87	7.07	36.5	292	279	A	V
		5376.5	47.66	-26.34	74	45.04	31.91	7.21	36.5	292	279	P	V
		5359.7	34.86	-19.14	54	32.25	31.91	7.2	36.5	292	279	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 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		10360	48.82	-25.18	74	37.83	38.02	10.3	37.33	150	216	P	H
5180MHz		10360	48.04	-25.96	74	37.05	38.02	10.3	37.33	150	25	P	V
802.11a CH 44		10440	48.19	-25.81	74	37.11	38.06	10.33	37.31	150	285	P	H
5220MHz		10440	48.43	-25.57	74	37.35	38.06	10.33	37.31	150	96	P	V
802.11a CH 48		10480	48.13	-25.87	74	36.99	38.09	10.35	37.3	150	269	P	H
5240MHz		10479	48.15	-25.85	74	37.01	38.09	10.35	37.3	199	200	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 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)
802.11ac VHT80 CH 42 5210MHz	*	5208	97.71	-	-	95.3	31.86	7.05	36.5	150	41	P	H
	*	5204	86.76	-	-	84.37	31.86	7.03	36.5	150	41	A	H
		5145.5	66.85	-7.15	74	64.52	31.84	7.02	36.53	150	41	P	H
	!	5148.85	51.02	-2.98	54	48.69	31.84	7.02	36.53	150	41	A	H
		5355.65	57.39	-16.61	74	54.78	31.91	7.2	36.5	150	41	P	H
		5354.1	38.71	-15.29	54	36.1	31.91	7.2	36.5	150	41	A	H
	*	5208	94.67	-	-	92.26	31.86	7.05	36.5	293	284	P	V
	*	5204	82.88	-	-	80.49	31.86	7.03	36.5	293	284	A	V
		5149.15	61.1	-12.9	74	58.77	31.84	7.02	36.53	293	284	P	V
		5146.4	45.86	-8.14	54	43.53	31.84	7.02	36.53	293	284	A	V
	5365.4	55.71	-18.29	74	53.09	31.91	7.21	36.5	293	284	P	V	
	5353.7	37.29	-16.71	54	34.68	31.91	7.2	36.5	293	284	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. 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)
802.11ac VHT80		10419	47.07	-26.93	74	36.02	38.05	10.32	37.32	150	50	P	H
CH 42 5210MHz		10419	47.02	-26.98	74	35.97	38.05	10.32	37.32	288	294	P	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	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a LF		58.13	21.32	-18.68	40	48.98	6.9	1	35.56	-	-	P	H
		101.78	30.62	-12.88	43.5	52.59	12.07	1.3	35.34	112	145	P	H
		214.3	16.26	-27.24	43.5	39.4	9.98	1.91	35.03	-	-	P	H
		504.33	19.6	-26.4	46	33.81	17.37	2.97	34.55	-	-	P	H
		596.48	21.08	-24.92	46	34.28	18.48	3.25	34.93	-	-	P	H
		893.3	25.8	-20.2	46	34.97	21.36	4.01	34.54	-	-	P	H
		43.58	31.69	-8.31	40	54.18	11.4	0.87	34.76	145	285	P	V
		102.75	24.87	-18.63	43.5	46.85	12.05	1.31	35.34	-	-	P	V
		204.6	22.25	-21.25	43.5	45.86	9.59	1.87	35.07	-	-	P	V
		522.76	20.25	-25.75	46	34.02	17.71	3.04	34.52	-	-	P	V
		666.32	24.84	-21.16	46	37.11	19.1	3.46	34.83	-	-	P	V
		912.7	26.08	-19.92	46	35.1	21.48	4.06	34.56	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												



Emission below 1GHz
WIFI 802.11ac VHT80 (LF @ 3m)

Table with 14 columns: WIFI, Note, Frequency, Level, Over, Limit, Read, Antenna, Cable, Preamp, Ant, Table, Peak, Pol. It contains 12 rows of test data for 802.11ac VHT80 LF and a Remark section at the bottom.



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)
802.11n HT20 CH 36 5180MHz	*	5178	103.87	-	-	101.5	31.85	7.03	36.51	150	176	P	H
		5176	94.26	-	-	91.89	31.85	7.03	36.51	150	176	A	H
		6908	51.88	-22.12	74	47.26	32.88	8.32	36.58	150	176	P	H
		6908	45.68	-8.32	54	41.06	32.88	8.32	36.58	150	176	A	H
		5149.8	53.48	-20.52	74	51.15	31.84	7.02	36.53	150	176	P	H
		5149.65	40.67	-13.33	54	38.34	31.84	7.02	36.53	150	176	A	H
	*	5176	97.22	-	-	94.85	31.85	7.03	36.51	300	141	P	V
	*	5176	87.38	-	-	85.01	31.85	7.03	36.51	300	141	A	V
802.11n HT20 CH 44 5220MHz		5145.25	49.87	-24.13	74	47.54	31.84	7.02	36.53	300	141	P	V
		5150	36.8	-17.2	54	34.47	31.84	7.02	36.53	300	141	A	V
	*	5216	104.07	-	-	101.66	31.86	7.05	36.5	182	87	P	H
		5216	94.24	-	-	91.83	31.86	7.05	36.5	182	87	A	H
		6962	50.59	-23.41	74	45.81	33.01	8.33	36.56	182	87	P	H
		6962	44.18	-9.82	54	39.4	33.01	8.33	36.56	182	87	A	H
802.11n HT20 CH 48 5240MHz	*	5222	98.48	-	-	96.07	31.86	7.05	36.5	295	34	P	V
	*	5222	88.51	-	-	86.1	31.86	7.05	36.5	295	34	A	V
	*	5240	103.49	-	-	101.05	31.87	7.07	36.5	150	185	P	H
		5238	93.63	-	-	91.19	31.87	7.07	36.5	150	185	A	H
		6988	50.87	-23.13	74	46.03	33.06	8.34	36.56	150	185	P	H
		6988	43.45	-10.55	54	38.61	33.06	8.34	36.56	150	185	A	H
		5356.9	47.93	-26.07	74	45.32	31.91	7.2	36.5	150	185	P	H
		5354.15	34.78	-19.22	54	32.17	31.91	7.2	36.5	150	185	A	H
	*	5238	97.86	-	-	95.42	31.87	7.07	36.5	300	142	P	V
	*	5240	88.29	-	-	85.85	31.87	7.07	36.5	300	142	A	V
	5352.8	46.98	-27.02	74	44.37	31.91	7.2	36.5	300	142	P	V	
	5351.65	34.38	-19.62	54	31.77	31.91	7.2	36.5	300	142	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)
802.11n HT20 CH 36 5180MHz		10359	48.67	-25.33	74	37.68	38.02	10.3	37.33	300	253	P	H
		10360	48.49	-25.51	74	37.5	38.02	10.3	37.33	150	147	P	V
802.11n HT20 CH 44 5220MHz		10440	47.78	-26.22	74	36.7	38.06	10.33	37.31	150	213	P	H
		10440	47.53	-26.47	74	36.45	38.06	10.33	37.31	152	114	P	V
802.11n HT20 CH 48 5240MHz		10480	46.69	-27.31	74	35.55	38.09	10.35	37.3	162	33	P	H
		10479	48.25	-25.75	74	37.11	38.09	10.35	37.3	174	152	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 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)
802.11n HT40 CH 38 5190MHz	*	5196	100.4	-	-	98.01	31.86	7.03	36.5	150	95	P	H
		5186	91.27	-	-	88.9	31.85	7.03	36.51	150	95	A	H
		6920	49.93	-24.07	74	45.31	32.88	8.32	36.58	150	95	P	H
		6922	44.46	-9.54	54	39.84	32.88	8.32	36.58	150	95	A	H
		5149.35	59.19	-14.81	74	56.86	31.84	7.02	36.53	150	95	P	H
		5148.65	42.05	-11.95	54	39.72	31.84	7.02	36.53	150	95	A	H
	*	5182	94.31	-	-	91.94	31.85	7.03	36.51	300	0	P	V
	*	5182	85.13	-	-	82.76	31.85	7.03	36.51	300	0	A	V
		5149.55	55.76	-18.24	74	53.43	31.84	7.02	36.53	300	0	P	V
		5150	38.82	-15.18	54	36.49	31.84	7.02	36.53	300	0	A	V
802.11n HT40 CH 46 5230MHz	*	5226	100.71	-	-	98.27	31.87	7.07	36.5	167	173	P	H
		5236	91.12	-	-	88.68	31.87	7.07	36.5	167	173	A	H
		6974	52.16	-21.84	74	47.38	33.01	8.33	36.56	167	173	P	H
		6974	44.4	-9.6	54	39.62	33.01	8.33	36.56	167	173	A	H
		5391.4	48.8	-25.2	74	46.15	31.92	7.23	36.5	167	173	P	H
		5386.75	35.26	-18.74	54	32.61	31.92	7.23	36.5	167	173	A	H
	*	5232	96.24	-	-	93.8	31.87	7.07	36.5	273	126	P	V
	*	5234	86.82	-	-	84.38	31.87	7.07	36.5	273	126	A	V
		5395.15	47.11	-26.89	74	44.44	31.92	7.25	36.5	273	126	P	V
		5363.65	34.8	-19.2	54	32.18	31.91	7.21	36.5	273	126	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)
802.11n HT40 CH 38 5190MHz		10380	47.12	-26.88	74	36.12	38.03	10.3	37.33	150	174	P	H
		10380	48.77	-25.23	74	37.77	38.03	10.3	37.33	150	78	P	V
802.11n HT40 CH 46 5230MHz		10460	47.79	-26.21	74	36.7	38.07	10.33	37.31	162	116	P	H
		10461	48.25	-25.75	74	37.13	38.08	10.34	37.3	174	20	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz
WIFI 802.11ac VHT20 (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)
802.11ac VHT20 CH 36 5180MHz	*	5176	103.52	-	-	101.15	31.85	7.03	36.51	150	353	P	H
		5176	93.67	-	-	91.3	31.85	7.03	36.51	150	353	A	H
		6908	52.42	-21.58	74	47.8	32.88	8.32	36.58	150	353	P	H
	!	6908	48.04	-5.96	54	43.42	32.88	8.32	36.58	150	353	A	H
		5149.7	54.93	-19.07	74	52.6	31.84	7.02	36.53	150	353	P	H
		5149.65	41.8	-12.2	54	39.47	31.84	7.02	36.53	150	353	A	H
	*	5182	96.66	-	-	94.29	31.85	7.03	36.51	150	197	P	V
	*	5182	86.17	-	-	83.8	31.85	7.03	36.51	150	197	A	V
802.11ac VHT20 CH 44 5220MHz		5148.15	49.89	-24.11	74	47.56	31.84	7.02	36.53	150	197	P	V
		5149.65	37.23	-16.77	54	34.9	31.84	7.02	36.53	150	197	A	V
	*	5216	103.57	-	-	101.16	31.86	7.05	36.5	150	353	P	H
		5216	93.49	-	-	91.08	31.86	7.05	36.5	150	353	A	H
		6962	52.31	-21.69	74	47.53	33.01	8.33	36.56	150	353	P	H
		6962	45.61	-8.39	54	40.83	33.01	8.33	36.56	150	353	A	H
802.11ac VHT20 CH 48 5240MHz	*	5216	95.02	-	-	92.61	31.86	7.05	36.5	150	205	P	V
	*	5218	85.27	-	-	82.86	31.86	7.05	36.5	150	205	A	V
	*	5236	103.46	-	-	101.02	31.87	7.07	36.5	150	352	P	H
		5236	93.72	-	-	91.28	31.87	7.07	36.5	150	352	A	H
		6988	51.51	-22.49	74	46.67	33.06	8.34	36.56	150	352	P	H
		6988	44.97	-9.03	54	40.13	33.06	8.34	36.56	150	352	A	H
		5398.75	48.86	-25.14	74	46.19	31.92	7.25	36.5	150	352	P	H
		5350.7	35.46	-18.54	54	32.85	31.91	7.2	36.5	150	352	A	H
	*	5242	96.46	-	-	93.99	31.88	7.09	36.5	150	193	P	V
	*	5242	86.85	-	-	84.38	31.88	7.09	36.5	150	193	A	V
	5397.15	48.29	-25.71	74	45.62	31.92	7.25	36.5	150	193	P	V	
	5388.7	34.82	-19.18	54	32.17	31.92	7.23	36.5	150	193	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 VHT20 (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)
802.11ac VHT20 CH 36 5180MHz		10359	46.77	-27.23	74	35.78	38.02	10.3	37.33	150	348	P	H
		10359	47.8	-26.2	74	36.81	38.02	10.3	37.33	150	284	P	V
802.11ac VHT20 CH 44 5220MHz		10440	47.34	-26.66	74	36.26	38.06	10.33	37.31	150	348	P	H
		10440	47.83	-26.17	74	36.75	38.06	10.33	37.31	150	284	P	V
802.11ac VHT20 CH 48 5240MHz		10479	47.69	-26.31	74	36.55	38.09	10.35	37.3	150	351	P	H
		10479	47.22	-26.78	74	36.08	38.09	10.35	37.3	150	286	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz
WIFI 802.11ac VHT40 (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)
802.11ac VHT40 CH 38 5190MHz	*	5186	101.94	-	-	99.57	31.85	7.03	36.51	150	355	P	H
		5184	92.49	-	-	90.12	31.85	7.03	36.51	150	355	A	H
		6922	51.63	-22.37	74	47.01	32.88	8.32	36.58	150	355	P	H
		6922	46.64	-7.36	54	42.02	32.88	8.32	36.58	150	355	A	H
		5149.8	63.37	-10.63	74	61.04	31.84	7.02	36.53	150	355	P	H
		5150	44.68	-9.32	54	42.35	31.84	7.02	36.53	150	355	A	H
	*	5194	94.33	-	-	91.94	31.86	7.03	36.5	150	196	P	V
	*	5184	84.8	-	-	82.43	31.85	7.03	36.51	150	196	A	V
		5144.05	56.4	-17.6	74	54.07	31.84	7.02	36.53	150	196	P	V
	5148.25	38.75	-15.25	54	36.42	31.84	7.02	36.53	150	196	A	V	
802.11ac VHT40 CH 46 5230MHz	*	5236	101.13	-	-	98.69	31.87	7.07	36.5	163	355	P	H
		5234	91.71	-	-	89.27	31.87	7.07	36.5	163	355	A	H
		6974	51.22	-22.78	74	46.44	33.01	8.33	36.56	163	355	P	H
		6974	45.98	-8.02	54	41.2	33.01	8.33	36.56	163	355	A	H
		5396.3	49.86	-24.14	74	47.19	31.92	7.25	36.5	163	355	P	H
		5350	36.13	-17.87	54	33.52	31.91	7.2	36.5	163	355	A	H
	*	5232	93.7	-	-	91.26	31.87	7.07	36.5	150	191	P	V
	*	5234	83.94	-	-	81.5	31.87	7.07	36.5	150	191	A	V
		5350.15	48.41	-25.59	74	45.8	31.91	7.2	36.5	150	191	P	V
	5353.15	35.48	-18.52	54	32.87	31.91	7.2	36.5	150	191	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 VHT40 (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)
802.11ac VHT40		10380	47.01	-26.99	74	36.01	38.03	10.3	37.33	150	356	P	H
CH 38 5190MHz		10380	46.79	-27.21	74	35.79	38.03	10.3	37.33	150	198	P	V
802.11ac VHT40		10461	47.03	-26.97	74	35.91	38.08	10.34	37.3	150	351	P	H
CH 46 5230MHz		10461	46.22	-27.78	74	35.1	38.08	10.34	37.3	150	210	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz
WIFI 802.11ac 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)
802.11ac VHT80 CH 42 5210MHz	*	5226	97.6	-	-	95.16	31.87	7.07	36.5	150	353	P	H
	*	5206	88.24	-	-	85.85	31.86	7.03	36.5	150	353	A	H
		5149.65	67.06	-6.94	74	64.73	31.84	7.02	36.53	150	353	P	H
	!	5147.15	50.75	-3.25	54	48.42	31.84	7.02	36.53	150	353	A	H
		5354.25	56.96	-17.04	74	54.35	31.91	7.2	36.5	150	353	P	H
		5353.7	36.06	-17.94	54	33.45	31.91	7.2	36.5	150	353	A	H
	*	5210	91.44	-	-	89.03	31.86	7.05	36.5	150	196	P	V
	*	5206	80.96	-	-	78.57	31.86	7.03	36.5	150	196	A	V
		5147.6	61.61	-12.39	74	59.28	31.84	7.02	36.53	150	196	P	V
		5146.3	44.86	-9.14	54	42.53	31.84	7.02	36.53	150	196	A	V
	5357.35	50.97	-23.03	74	48.36	31.91	7.2	36.5	150	196	P	V	
	5358.4	35.33	-18.67	54	32.72	31.91	7.2	36.5	150	196	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)
802.11ac VHT80		10419	45.91	-28.09	74	34.86	38.05	10.32	37.32	150	358	P	H
CH 42 5210MHz		10419	47.28	-26.72	74	36.23	38.05	10.32	37.32	150	210	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Emission below 1GHz
WIFI 802.11n HT20 (LF @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 LF		101.78	31.62	-11.88	43.5	53.59	12.07	1.3	35.34	200	145	P	H
		153.19	17.39	-26.11	43.5	39.63	11.09	1.6	34.93	-	-	P	H
		390.84	17.15	-28.85	46	33.82	15.92	2.61	35.2	-	-	P	H
		542.16	19.03	-26.97	46	32.36	18.06	3.11	34.5	-	-	P	H
		596.48	20.08	-25.92	46	33.28	18.48	3.25	34.93	-	-	P	H
		786.6	20.44	-25.56	46	31	20.17	3.77	34.5	-	-	P	H
		43.58	31.69	-8.31	40	54.18	11.4	0.87	34.76	100	147	P	V
		54.25	31.33	-8.67	40	58.34	7.53	0.97	35.51	-	-	P	V
		102.75	27.87	-15.63	43.5	49.85	12.05	1.31	35.34	-	-	P	V
		199.75	21.53	-21.97	43.5	45.38	9.4	1.84	35.09	-	-	P	V
		606.18	21.07	-24.93	46	34.19	18.56	3.27	34.95	-	-	P	V
		754.59	21.43	-24.57	46	32.31	19.85	3.69	34.42	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												



Emission below 1GHz
WIFI 802.11n HT40 (LF @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 LF		99.84	32.93	-10.57	43.5	54.89	12.1	1.29	35.35	132	62	P	H
		390.84	16.15	-29.85	46	32.82	15.92	2.61	35.2	-	-	P	H
		439.34	16.95	-29.05	46	32.32	16.83	2.77	34.97	-	-	P	H
		596.48	20.08	-25.92	46	33.28	18.48	3.25	34.93	-	-	P	H
		773.02	20.52	-25.48	46	31.22	20.03	3.74	34.47	-	-	P	H
		893.3	23.8	-22.2	46	32.97	21.36	4.01	34.54	-	-	P	H
		43.58	30.69	-9.31	40	53.18	11.4	0.87	34.76	122	102	P	V
		102.75	30.87	-12.63	43.5	52.85	12.05	1.31	35.34	-	-	P	V
		204.6	21.25	-22.25	43.5	44.86	9.59	1.87	35.07	-	-	P	V
		449.04	17.97	-28.03	46	33.09	16.98	2.8	34.9	-	-	P	V
		586.78	20.51	-25.49	46	33.71	18.42	3.22	34.84	-	-	P	V
	675.05	20.29	-25.71	46	32.48	19.15	3.49	34.83	-	-	P	V	
Remark	1. No other spurious found. 2. All results are PASS against limit line.												



Emission below 1GHz
WIFI 802.11ac VHT20 (LF @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT20 LF		101.78	29.62	-13.88	43.5	51.59	12.07	1.3	35.34	112	23	P	H
		207.51	15.4	-28.1	43.5	38.87	9.71	1.88	35.06	-	-	P	H
		439.34	17.95	-28.05	46	33.32	16.83	2.77	34.97	-	-	P	H
		596.48	21.08	-24.92	46	34.28	18.48	3.25	34.93	-	-	P	H
		761.38	19.32	-26.68	46	30.13	19.92	3.71	34.44	-	-	P	H
		893.3	23.8	-22.2	46	32.97	21.36	4.01	34.54	-	-	P	H
		45.52	32.3	-7.7	40	55.62	10.47	0.89	34.68	100	165	P	V
		55.22	30.3	-9.7	40	57.74	7.2	0.97	35.61	-	-	P	V
		102.75	25.87	-17.63	43.5	47.85	12.05	1.31	35.34	-	-	P	V
		380.17	17.49	-28.51	46	34.52	15.57	2.57	35.17	-	-	P	V
		586.78	21.51	-24.49	46	34.71	18.42	3.22	34.84	-	-	P	V
		808.91	22.71	-23.29	46	32.95	20.44	3.82	34.5	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												



Emission below 1GHz
WIFI 802.11ac VHT40 (LF @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT40 LF		101.78	25.62	-17.88	43.5	47.59	12.07	1.3	35.34	148	85	P	H
		214.3	15.26	-28.24	43.5	38.4	9.98	1.91	35.03	-	-	P	H
		329.73	15.75	-30.25	46	34.17	14.16	2.38	34.96	-	-	P	H
		390.84	18.15	-27.85	46	34.82	15.92	2.61	35.2	-	-	P	H
		596.48	20.08	-25.92	46	33.28	18.48	3.25	34.93	-	-	P	H
		773.02	20.52	-25.48	46	31.22	20.03	3.74	34.47	-	-	P	H
		45.52	31.3	-8.7	40	54.62	10.47	0.89	34.68	200	154	P	V
		102.75	24.87	-18.63	43.5	46.85	12.05	1.31	35.34	-	-	P	V
		586.78	20.51	-25.49	46	33.71	18.42	3.22	34.84	-	-	P	V
		675.05	21.29	-24.71	46	33.48	19.15	3.49	34.83	-	-	P	V
		808.91	21.71	-24.29	46	31.95	20.44	3.82	34.5	-	-	P	V
	912.7	24.08	-21.92	46	33.1	21.48	4.06	34.56	-	-	P	V	
Remark	1. No other spurious found. 2. All results are PASS against limit line.												



Emission below 1GHz
WIFI 802.11ac VHT80 (LF @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT80 LF		103.72	32.82	-10.68	43.5	54.81	12.03	1.32	35.34	132	65	P	H
		214.3	11.26	-32.24	43.5	34.4	9.98	1.91	35.03	-	-	P	H
		372.41	11.85	-34.15	46	29.14	15.32	2.54	35.15	-	-	P	H
		439.34	13.95	-32.05	46	29.32	16.83	2.77	34.97	-	-	P	H
		706.09	16.97	-29.03	46	28.82	19.36	3.58	34.79	-	-	P	H
		838.98	18.47	-27.53	46	28.03	20.93	3.89	34.38	-	-	P	H
		43.58	33.69	-6.31	40	56.18	11.4	0.87	34.76	178	85	P	V
		102.75	22.87	-20.63	43.5	44.85	12.05	1.31	35.34	-	-	P	V
		204.6	18.25	-25.25	43.5	41.86	9.59	1.87	35.07	-	-	P	V
		425.76	15.29	-30.71	46	31.01	16.62	2.72	35.06	-	-	P	V
		675.05	18.29	-27.71	46	30.48	19.15	3.49	34.83	-	-	P	V
		912.7	22.08	-23.92	46	31.1	21.48	4.06	34.56	-	-	P	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	Peak or Average
H/V	Horizontal or Vertical



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

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