



FCC RF Test Report

APPLICANT : HTC Corporation
EQUIPMENT : VIVE Headset
MODEL NAME : 2Q27200
FCC ID : NM82Q27200
STANDARD : FCC Part 15 Subpart E §15.407
CLASSIFICATION : (NII) Unlicensed National Information Infrastructure

The product was received on Feb. 12, 2018 and testing was completed on Apr. 04, 2018. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

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

Reviewed by: Joseph Lin / Supervisor

Approved by: Jones Tsai / Manager



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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	15.407(b) & 15.209(a)	Pass	Under limit 1.07 dB at 5137.280 MHz
3.5	15.207	AC Conducted Emission	15.207(a)	Pass	Under limit 13.63 dB at 2.148 MHz
3.6	15.407(c)	Automatically Discontinue Transmission	Discontinue Transmission	Pass	-
3.7	15.203 & 15.407(a)	Antenna Requirement	N/A	Pass	-



1 General Description

1.1 Applicant

HTC Corporation

NO. 88, Section 3, Zhongxing Rd., Xindian Dist, New Taipei City, Taiwan 231

1.2 Manufacturer

HTC Corporation

NO. 88, Section 3, Zhongxing Rd., Xindian Dist, New Taipei City, Taiwan 231

1.3 Product Feature of Equipment Under Test

Bluetooth, Wi-Fi 2.4GHz 802.11b/g/n, and Wi-Fi 5GHz 802.11a/n/ac

Product Specification subjective to this standard	
Antenna Type	WLAN: Dipole Antenna Bluetooth: Dipole Antenna

1.4 Modification of EUT

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



1.5 Testing Location

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code : 1190) and the FCC designation No. TW1190 and TW0007 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC Test.

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

Note: The test site complies with ANSI C63.4 2014 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.	
	03CH13-HY	

Note: The test site complies with ANSI C63.4 2014 requirement.

1.6 Applicable Standards

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

- FCC Part 15 Subpart E
- FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
- 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. 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

- a. 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: conduction emission (150 kHz to 30 MHz), radiation 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 (X plane) were recorded in this report.
- b. AC power line Conducted Emission was tested under maximum output power.

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		

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

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



Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
TDWR Channel	118*	5590	124	5620
	120	5600	126*	5630
	122 [#]	5610	128	5640

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

Note:

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



2.2 Test Mode

Final test modes are considering the modulation and worse data rates as below table.

Single Mode

Modulation	Data Rate
802.11a	6 Mbps

MIMO Mode

Modulation	Data Rate
802.11n HT20	MCS0
802.11n HT40	MCS0
802.11ac VHT20 (Covered by HT20)	MCS0
802.11ac VHT40 (Covered by HT40)	MCS0
802.11ac VHT80	MCS0

Test Cases	
AC Conducted Emission	Mode 1 : Bluetooth Link + WLAN(5GHz) + USB Cable 1 (Charging from Adapter 2) + Earphone



<For Ant. 1 and Ant. 2>

Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725MHz
		802.11a	802.11a	802.11a
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140
Straddle		-	-	144

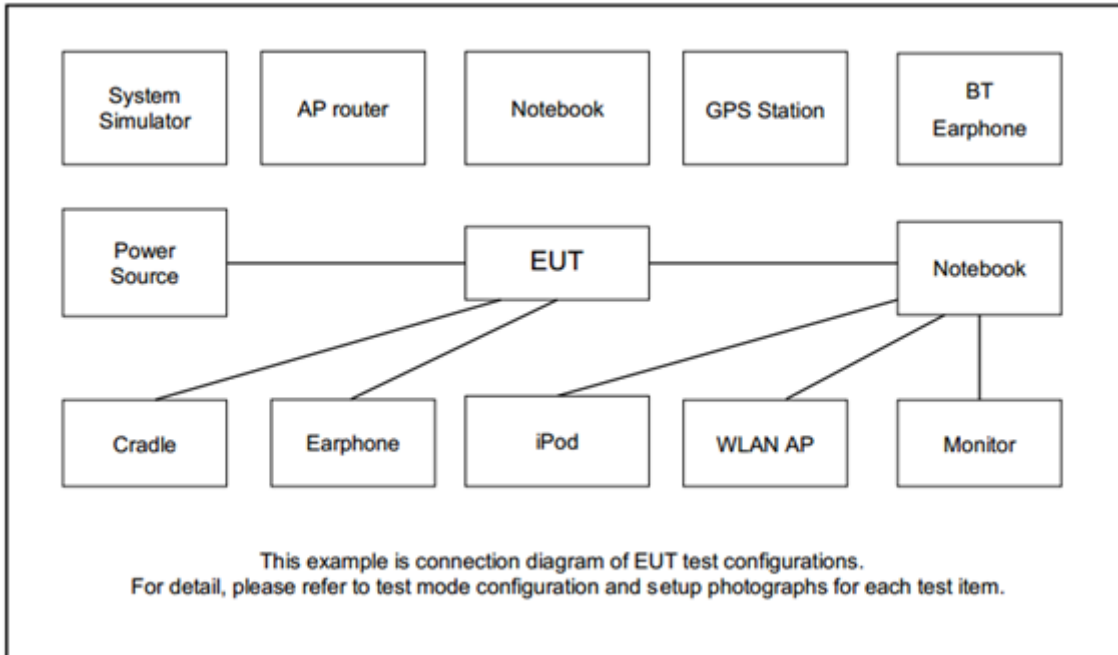
<For Ant. 1+2>

Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725MHz
		802.11n HT20	802.11n HT20	802.11n HT20
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140
Straddle		-	-	144

Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725MHz
		802.11n HT40	802.11n HT40	802.11n HT40
L	Low	38	54	102
M	Middle	-	-	110
H	High	46	62	134
Straddle		-	-	142

Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725MHz
		802.11ac VHT80	802.11ac VHT80	802.11ac VHT80
L	Low	-	-	106
M	Middle	42	58	-
H	High	-	-	-
Straddle		-	-	138

2.3 Connection Diagram of Test System



2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded,1.8m
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.	SD Card	SanDisk	MicroSD HC	FCC DoC	N/A	N/A
4.	iPod	Apple	A1285	FCC DoC	Shielded, 1.0 m	N/A
5.	iPod Earphone	Aibo	IP-E1	N/A	N/A	N/A



2.5 EUT Operation Test Setup

The RF test items, utility “QRCT” was installed in Notebook which was programmed in order to make the EUT get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.

2.6 Measurement Results Explanation Example

For all conducted test items:

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

Example :

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

Offset = RF cable loss + attenuator factor.

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

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

3 Test Result

3.1 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.

For Straddle Channel, According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, If the power and PSD of the devices are uniform and comply with the lower limits specified for the U-NII-2 bands, a single measurement over the entire emission bandwidth can be performed to show compliance.

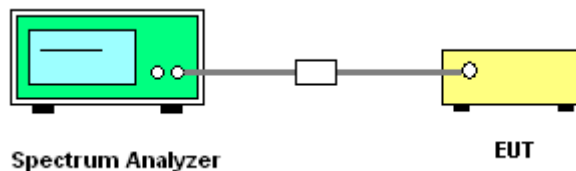
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

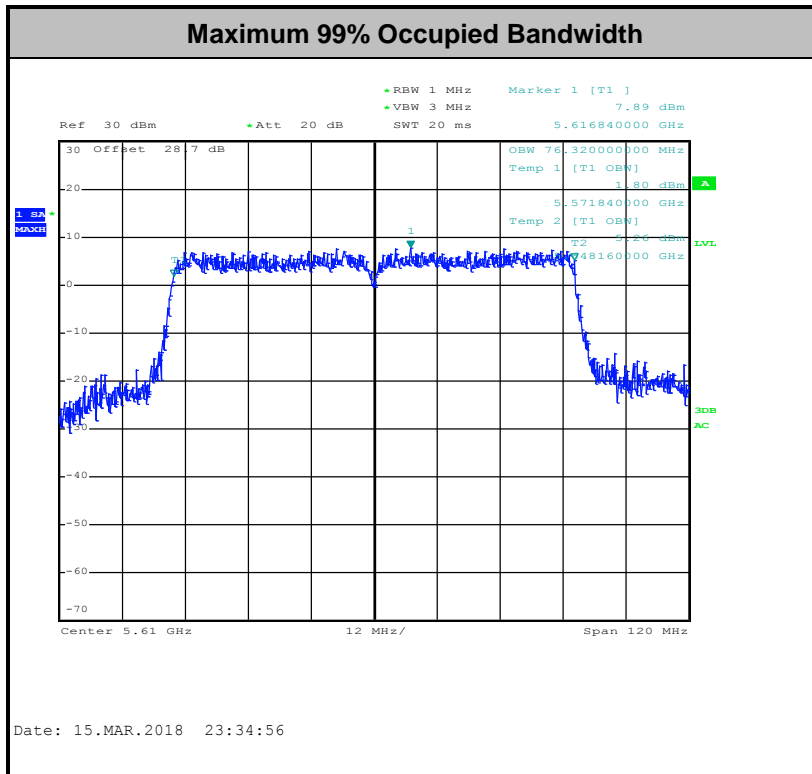
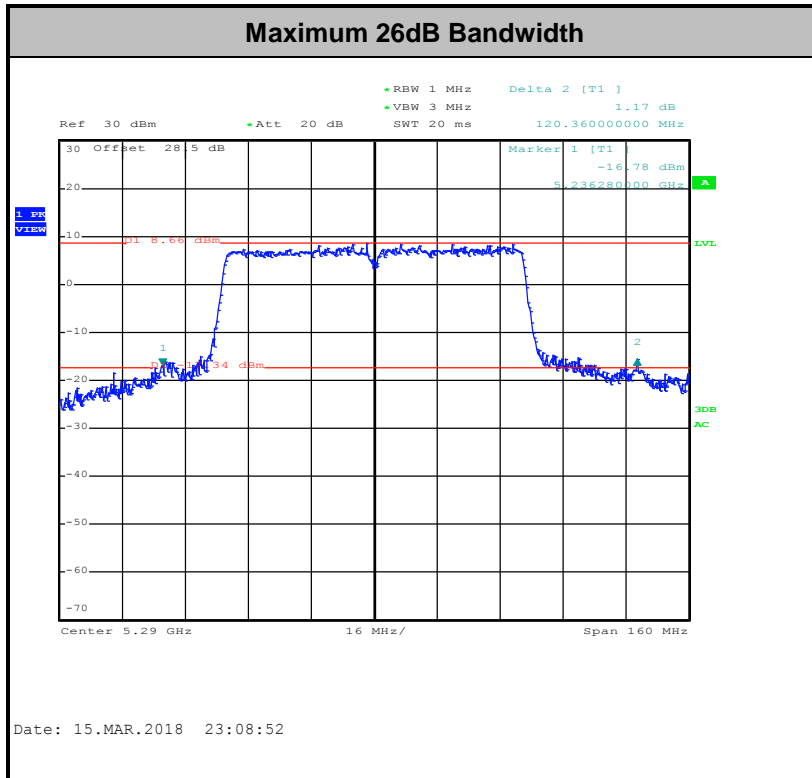
1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section C) Emission bandwidth
2. Set RBW = approximately 1% of the emission bandwidth.
3. Set the VBW > RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 26 dB 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

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.

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

For Straddle Channel, According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, If the power and PSD of the devices are uniform and comply with the lower limits specified for the U-NII-2 bands, a single measurement over the entire emission bandwidth can be performed to show compliance.

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

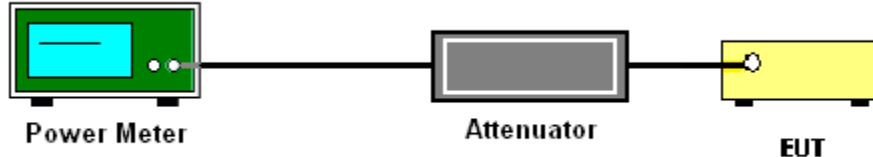
The testing follows Method PM of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

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

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

For Straddle Channel, According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, If the power and PSD of the devices are uniform and comply with the lower limits specified for the U-NII-2 bands, a single measurement over the entire emission bandwidth can be performed to show compliance.

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 an indoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band.

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

For Straddle Channel, According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, If the power and PSD of the devices are uniform and comply with the lower limits specified for the U-NII-2 bands, a single measurement over the entire emission bandwidth can be performed to show compliance.

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 v02r01.
Section F) Maximum power spectral density.

Method SA-2

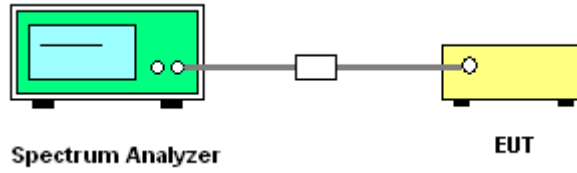
(trace averaging across on and off times of the EUT transmissions, followed by duty cycle correction).

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

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

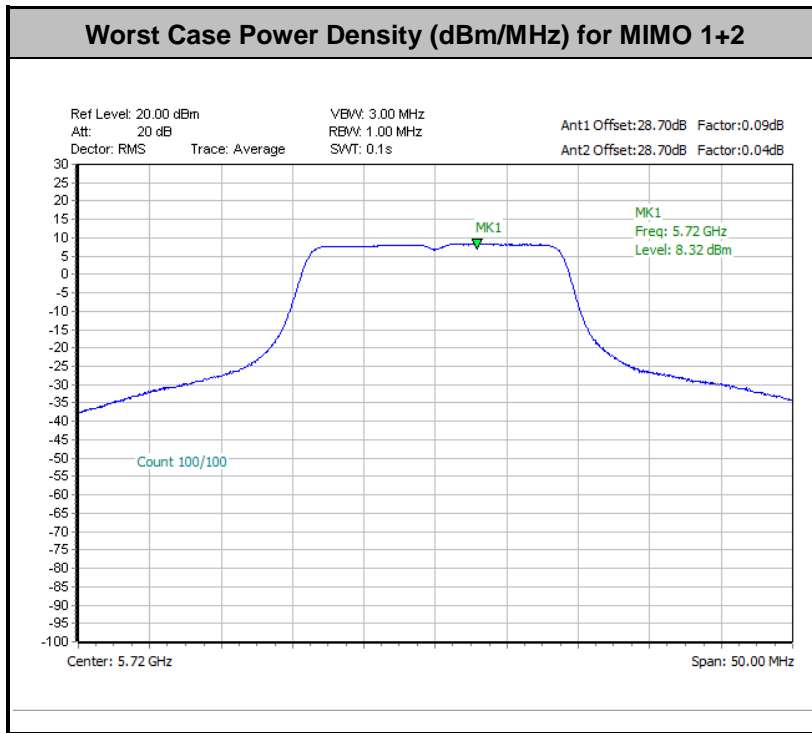
The total final Power Spectral Density is from a device with 2 transmitter outputs. The spectrum measurements of the individual outputs are all performed with the same span and number of points, the spectrum value in the first spectral bin of output 1 is summed with that in the first spectral bin of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

This section is to measure unwanted emissions through radiated measurement for band edge spurious emissions and out of band emissions measurement.

3.4.1 Limit of Unwanted Emissions

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

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

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

- (2) Unwanted spurious emissions fallen in restricted bands shall comply with the general field strength limits 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 D02 v02r01 G)2)c)

- (i) Section 15.407(b)(1) to (b)(3) specify the unwanted emission limits for the U-NII-1 and U-NII-2 bands. As specified, emissions above 1000 MHz that are outside of the restricted bands are subject to a peak emission limit of -27 dBm/MHz.³
- (ii) Section 15.407(b)(4) specifies the unwanted emission limit for the U-NII-3 band. A band emissions mask is specified in Section 15.407(b)(4)(i). The emission limits are in terms of a Peak detector. An alternative to the band emissions mask is specified in Section 15.407(b)(4)(ii). The alternative limits are based on the highest antenna gain specified in the filing. There are also marketing and importation restrictions for the devices using the alternative limit.⁴

Note 3: An out-of-band emission that complies with both the average and peak limits of Section 15.209 is not required to satisfy the -27 dBm/MHz peak emission limit.

Note 4: Only devices with antenna gains of 10 dBi or less may be approved using the emission limits specified in Section 15.247(d) till March 2, 2018; all other devices operating in this band must use the mask specified in Section 15.407(b)(4)(i).



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 v02r01. Section G) Unwanted emissions measurement.

(1) Procedure for Unwanted Emissions Measurements Below 1000MHz

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

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

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

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

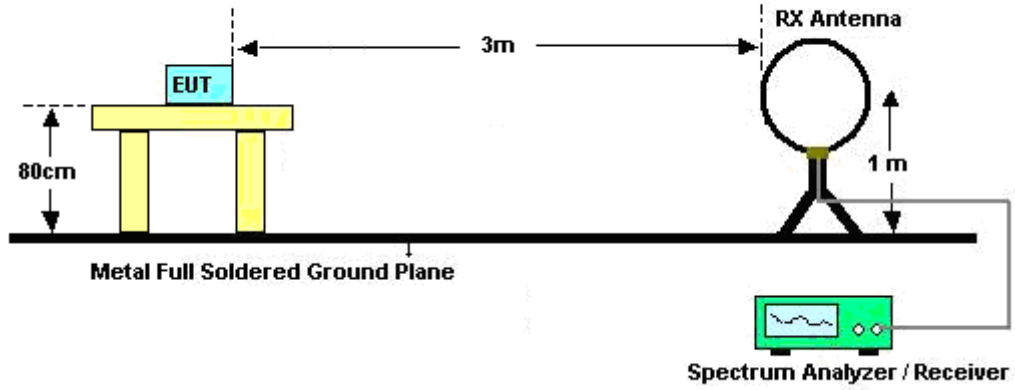
- RBW = 1 MHz
- VBW = 10 Hz, when duty cycle is no less than 98 percent.
- VBW \geq 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.



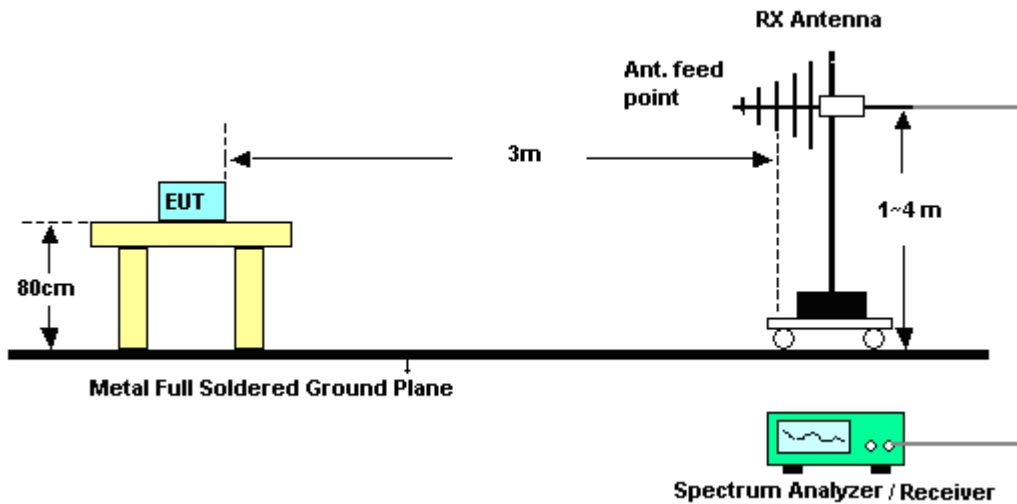
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband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

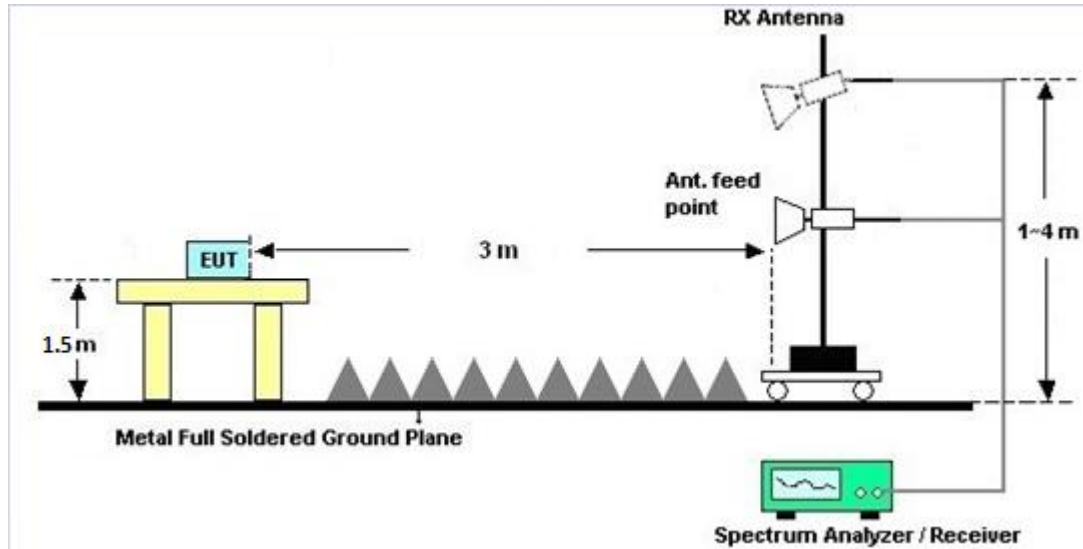
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



3.4.5 Test Results of Radiated Spurious 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 was not reported.

There is a comparison data of both open-field test site and semi-Anechoic chamber, and the result came out very similar.

3.4.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix C and D.

3.4.7 Duty Cycle

Please refer to Appendix E.

3.4.8 Test Result of Radiated Spurious Emissions (30MHz ~ 10th Harmonic)

Please refer to Appendix C and D.



3.5 AC Conducted Emission Measurement

3.5.1 Limit of AC Conducted Emission

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

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

*Decreases with the logarithm of the frequency.

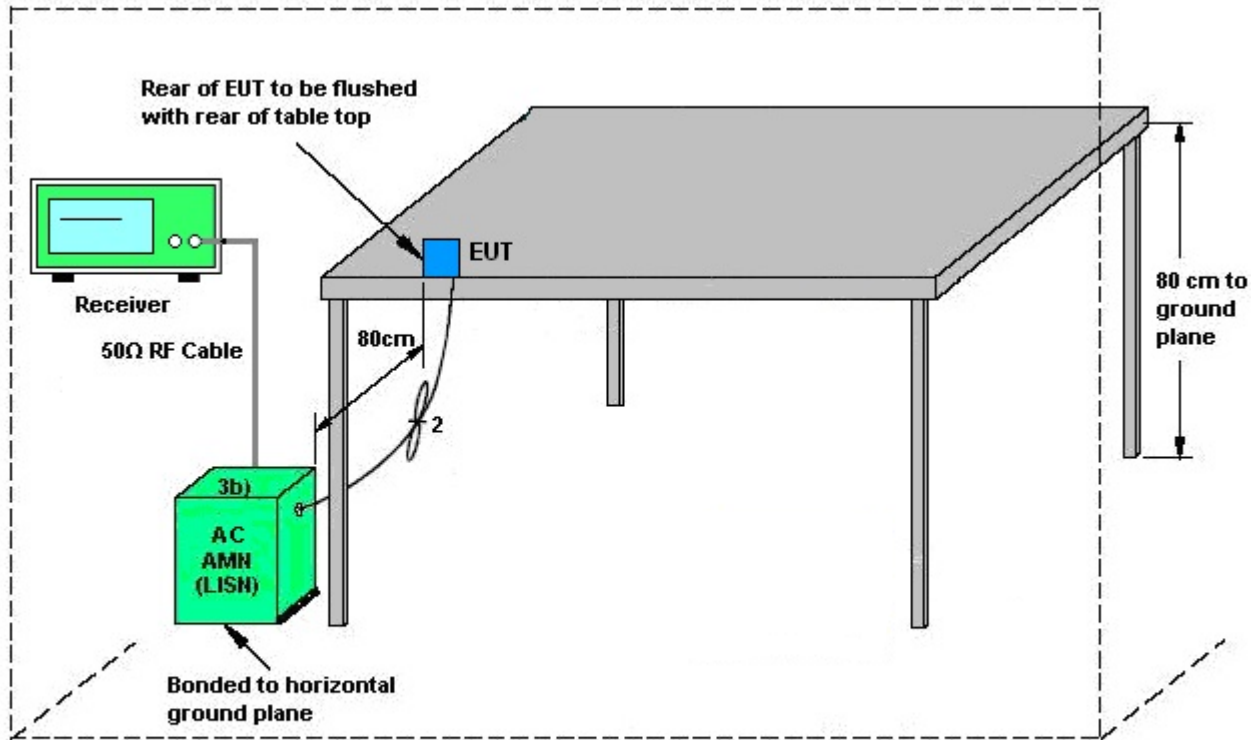
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

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

3.5.4 Test Setup



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

3.5.5 Test Result of AC Conducted Emission

Please refer to Appendix B.



3.6 Automatically Discontinue Transmission

3.6.1 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.

3.6.2 Measuring Instruments

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

3.6.3 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.



3.7 Antenna Requirements

3.7.1 Standard Applicable

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.

3.7.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.7.3 Antenna Gain

<CDD Modes >

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

Directional gain = GANT + Array Gain, where Array Gain is as follows.

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

Array Gain = 10 log(NANT/NSS=1) dB.

For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for NANT ≤ 4.

Directional gain may be calculated by using the formulas applicable to equal gain antennas with GANT set equal to the gain of the antenna having the highest gain;

The EUT supports CDD mode.

For power, the directional gain GANT is set equal to the antenna having the highest gain, i.e., F)2)f)i).

For PSD, the directional gain calculation is following F)2)f)ii) of KDB 662911 D01 v02r01.

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.

	Ant. 1 (dBi)	Ant. 2 (dBi)	DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
Band I	-3.00	-3.00	-3.00	0.01	0.00	0.00
Band II	-3.00	-3.00	-3.00	0.01	0.00	0.00
Band III	-3.00	-3.00	-3.00	0.01	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	N/A	Oct. 06, 2017	Feb. 26, 2018~ Apr. 04, 2018	Oct. 05, 2018	Conducted (TH05-HY)
Power Sensor	Anritsu	MA2411B	1207363	300MHz~40GHz z	Oct. 06, 2017	Feb. 26, 2018~ Apr. 04, 2018	Oct. 05, 2018	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100057	9kHz-40GHz	Nov. 21, 2017	Feb. 26, 2018~ Apr. 04, 2018	Nov. 20, 2018	Conducted (TH05-HY)
Programmable Power Supply	GW Instek	PSS-2005	EL890094	1V~20V 0.5A~5A	Oct. 16, 2017	Feb. 26, 2018~ Apr. 04, 2018	Oct. 15, 2018	Conducted (TH05-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Feb. 23, 2018	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	3.6GHz	Dec. 08, 2017	Feb. 23, 2018	Dec. 07, 2018	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Nov. 30, 2017	Feb. 23, 2018	Nov. 29, 2018	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32 V8.4	N/A	N/A	N/A	Feb. 23, 2018	N/A	Conduction (CO05-HY)
LF Cable	HUBER + SUHNER	RG-214/U	LF01	N/A	Jan. 03, 2018	Feb. 23, 2018	Jan. 02, 2019	Conduction (CO05-HY)
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100851	N/A	Jan. 03, 2018	Feb. 23, 2018	Jan. 02, 2019	Conduction (CO05-HY)



Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Amplifier	MITEQ	TTA1840-35-H G	1871923	18GHz~40GHz, VSWR : 2.5:1 max	Jul. 18, 2017	Mar. 21, 2018~ Apr. 03, 2018	Jul. 17, 2018	Radiation (03CH13-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Nov. 23, 2017	Mar. 21, 2018~ Apr. 03, 2018	Nov. 22, 2018	Radiation (03CH13-HY)
Amplifier	Sonoma-Instr ument	310 N	187282	9KHz~1GHz	Jan. 19, 2018	Mar. 21, 2018~ Apr. 03, 2018	Jan. 18, 2020	Radiation (03CH13-HY)
Bilog Antenna	TESEQ	CBL 6111D&00800 N1D01N-06	40103&07	30MHz to 1GHz	Jan. 10, 2018	Mar. 21, 2018~ Apr. 03, 2018	Jan. 09, 2019	Radiation (03CH13-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-124 1	1GHz ~ 18GHz	Jun. 15, 2017	Mar. 21, 2018~ Apr. 03, 2018	Jun. 14, 2018	Radiation (03CH13-HY)
Preamplifier	MITEQ	AMF-7D-00101 800-30-10P	1590074	1GHz~18GHz	May 22, 2017	Mar. 21, 2018~ Apr. 03, 2018	May 21, 2018	Radiation (03CH13-HY)
Preamplifier	Keysight	83017A	MY532701 47	1GHz~26.5GHz	Feb. 02, 2018	Mar. 21, 2018~ Apr. 03, 2018	Feb. 01, 2019	Radiation (03CH13-HY)
Spectrum Analyzer	Keysight	N9010A	MY553705 26	10Hz~44GHz	Mar. 15, 2018	Mar. 21, 2018~ Apr. 03, 2018	Mar. 14, 2019	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126E	0030/126E	30M-18G	Jan. 22, 2018	Mar. 21, 2018~ Apr. 03, 2018	Jan. 21, 2019	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	335041/4	30M-18G	Jan. 22, 2018	Mar. 21, 2018~ Apr. 03, 2018	Jan. 21, 2019	Radiation (03CH13-HY)
RF Cable	Humber+Suh ner	SUCOFLEX 104	MY24961/ 4	30M~18GHz	Jan. 22, 2018	Mar. 21, 2018~ Apr. 03, 2018	Jan. 21, 2019	Radiation (03CH13-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	Mar. 21, 2018~ Apr. 03, 2018	N/A	Radiation (03CH13-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	Mar. 21, 2018~ Apr. 03, 2018	N/A	Radiation (03CH13-HY)
Software	AUDIX	E3 6.2009-8-24c	RK-001124	N/A	N/A	Mar. 21, 2018~ Apr. 03, 2018	N/A	Radiation (03CH13-HY)
Filter	Woken	WHKX8-5872. 5-6750-18000- 40ST	SN3	6.75GHz High Pass	Sep. 18, 2017	Mar. 21, 2018~ Apr. 03, 2018	Sep. 17, 2018	Radiation (03CH13-HY)
Filter	Wainwright	WLK4-1000-15 30-8000-40SS	SN12	1GHz Low Pass Filter	Sep. 18, 2017	Mar. 21, 2018~ Apr. 03, 2018	Sep. 17, 2018	Radiation (03CH13-HY)
EMI Test Receiver	Agilent	N9038A(MXE)	MY532900 53	20Hz to 26.5GHz	Jan. 16, 2018	Mar. 21, 2018~ Apr. 03, 2018	Jan. 15, 2019	Radiation (03CH13-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA 9170	BBHA9170 584	18GHz- 40GHz	Nov. 27, 2017	Mar. 21, 2018~ Apr. 03, 2018	Nov. 26, 2018	Radiation (03CH13-HY)



5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.70
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.90
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Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.40
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Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.30
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Appendix A. Test Result of Conducted Test Items

Test Engineer:	Kai Liao / Shiming Liu/ Luffy Lin	Temperature:	21~25	°C
Test Date:	2018/02/26 ~ 2018/04/04	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	18.05	17.80	27.35	25.15	-	-	22.56	22.50	
11a	6Mbps	1	44	5220	17.90	18.00	28.65	28.10	-	-	22.53	22.55	
11a	6Mbps	1	48	5240	17.90	17.90	25.65	31.70	-	-	22.53	22.53	
HT20	MCS0	2	36	5180	19.20	18.95	43.30	41.00	-	-	22.78		
HT20	MCS0	2	44	5220	19.10	19.05	42.90	41.30	-	-	22.80		
HT20	MCS0	2	48	5240	19.00	19.05	41.65	43.70	-	-	22.79		
HT40	MCS0	2	38	5190	37.00	37.10	69.30	68.96	-	-	23.01		
HT40	MCS0	2	46	5230	37.20	37.00	78.30	69.70	-	-	23.01		
VHT80	MCS0	2	42	5210	76.20	76.08	118.14	97.36	-	-	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	0.12	0.08	16.64	16.62		24.00	24.00	-3.00	-3.00	Pass
11a	6Mbps	1	44	5220	0.12	0.08	16.62	16.58		24.00	24.00	-3.00	-3.00	Pass
11a	6Mbps	1	48	5240	0.12	0.08	16.52	16.55		24.00	24.00	-3.00	-3.00	Pass
HT20	MCS0	1	36	5180	0.09	0.09	16.99	16.79		24.00	24.00	-3.00	-3.00	Pass
HT20	MCS0	1	44	5220	0.09	0.09	16.70	16.78		24.00	24.00	-3.00	-3.00	Pass
HT20	MCS0	1	48	5240	0.09	0.09	16.96	16.76		24.00	24.00	-3.00	-3.00	Pass
HT40	MCS0	1	38	5190	0.18	0.18	16.75	16.65		24.00	24.00	-3.00	-3.00	Pass
HT40	MCS0	1	46	5230	0.18	0.18	16.70	16.58		24.00	24.00	-3.00	-3.00	Pass
VHT20	MCS0	1	36	5180	0.13	0.13	16.65	16.63		24.00	24.00	-3.00	-3.00	Pass
VHT20	MCS0	1	44	5220	0.13	0.13	16.63	16.59		24.00	24.00	-3.00	-3.00	Pass
VHT20	MCS0	1	48	5240	0.13	0.13	16.53	16.56		24.00	24.00	-3.00	-3.00	Pass
VHT40	MCS0	1	38	5190	0.18	0.18	16.69	16.54		24.00	24.00	-3.00	-3.00	Pass
VHT40	MCS0	1	46	5230	0.18	0.18	16.68	16.48		24.00	24.00	-3.00	-3.00	Pass
VHT80	MCS0	1	42	5210	0.38	0.38	15.21	15.09		24.00	24.00	-3.00	-3.00	Pass
HT20	MCS0	2	36	5180	0.09	0.04	17.01	16.95	19.99	24.00		-3.00		Pass
HT20	MCS0	2	44	5220	0.09	0.04	17.04	16.90	19.98	24.00		-3.00		Pass
HT20	MCS0	2	48	5240	0.09	0.04	16.97	16.87	19.93	24.00		-3.00		Pass
HT40	MCS0	2	38	5190	0.20	0.23	16.83	16.67	19.76	24.00		-3.00		Pass
HT40	MCS0	2	46	5230	0.20	0.23	16.77	16.60	19.69	24.00		-3.00		Pass
VHT20	MCS0	2	36	5180	0.09	0.09	16.73	16.72	19.73	24.00		-3.00		Pass
VHT20	MCS0	2	44	5220	0.09	0.09	16.68	16.63	19.66	24.00		-3.00		Pass
VHT20	MCS0	2	48	5240	0.09	0.09	16.58	16.60	19.60	24.00		-3.00		Pass
VHT40	MCS0	2	38	5190	0.18	0.22	16.69	16.60	19.66	24.00		-3.00		Pass
VHT40	MCS0	2	46	5230	0.18	0.22	16.71	16.50	19.62	24.00		-3.00		Pass
VHT80	MCS0	2	42	5210	0.38	0.38	15.32	15.14	18.24	24.00		-3.00		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	0.12	0.08	4.37	4.13		11.00	11.00	-3.00	-3.00	Pass
11a	6Mbps	1	44	5220	0.12	0.08	4.41	4.65		11.00	11.00	-3.00	-3.00	Pass
11a	6Mbps	1	48	5240	0.12	0.08	4.16	4.52		11.00	11.00	-3.00	-3.00	Pass
HT20	MCS0	2	36	5180	0.09	0.04			7.41	11.00		0.01		Pass
HT20	MCS0	2	44	5220	0.09	0.04			7.49	11.00		0.01		Pass
HT20	MCS0	2	48	5240	0.09	0.04			7.29	11.00		0.01		Pass
HT40	MCS0	2	38	5190	0.20	0.23			5.24	11.00		0.01		Pass
HT40	MCS0	2	46	5230	0.20	0.23			5.08	11.00		0.01		Pass
VHT80	MCS0	2	42	5210	0.38	0.38			1.63	11.00		0.01		Pass

TEST RESULTS DATA
26dB and 99% OBW

Band II															
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)		FCC 26dB Bandwidth Power Limit (dBm)		Note
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	1	52	5260	18.05	18.00	28.05	28.40	23.56	23.55	29.56	29.55	23.98	23.98	
11a	6Mbps	1	60	5300	17.85	18.00	30.00	32.80	23.52	23.55	29.52	29.55	23.98	23.98	
11a	6Mbps	1	64	5320	17.80	17.95	27.85	29.55	23.50	23.54	29.50	29.54	23.98	23.98	
HT20	MCS0	2	52	5260	19.00	18.85	40.95	43.30	23.75		29.75		23.98		
HT20	MCS0	2	60	5300	19.10	19.15	45.05	43.60	23.81		29.81		23.98		
HT20	MCS0	2	64	5320	19.20	19.00	43.50	42.10	23.79		29.79		23.98		
HT40	MCS0	2	54	5270	37.00	37.20	66.78	65.96	23.98		30.00		23.98		
HT40	MCS0	2	62	5310	37.30	37.20	78.54	75.96	23.98		30.00		23.98		
VHT80	MCS0	2	58	5290	76.20	76.08	120.36	117.44	23.98		30.00		23.98		

TEST RESULTS DATA
Average Power Table

FCC Band II															
Mod.	Data Rate	Ntx	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	52	5260	0.12	0.08	16.75	16.61		23.98	23.98	-3.00	-3.00	26.99	Pass
11a	6Mbps	1	60	5300	0.12	0.08	16.72	16.54		23.98	23.98	-3.00	-3.00	26.99	Pass
11a	6Mbps	1	64	5320	0.12	0.08	16.68	16.38		23.98	23.98	-3.00	-3.00	26.99	Pass
HT20	MCS0	1	52	5260	0.09	0.09	16.90	16.65		23.98	23.98	-3.00	-3.00	26.99	Pass
HT20	MCS0	1	60	5300	0.09	0.09	16.74	16.58		23.98	23.98	-3.00	-3.00	26.99	Pass
HT20	MCS0	1	64	5320	0.09	0.09	16.99	16.51		23.98	23.98	-3.00	-3.00	26.99	Pass
HT40	MCS0	1	54	5270	0.18	0.18	16.68	16.68		23.98	23.98	-3.00	-3.00	26.99	Pass
HT40	MCS0	1	62	5310	0.18	0.18	15.96	15.39		23.98	23.98	-3.00	-3.00	26.99	Pass
VHT20	MCS0	1	52	5260	0.13	0.13	16.78	16.63		23.98	23.98	-3.00	-3.00	26.99	Pass
VHT20	MCS0	1	60	5300	0.13	0.13	16.73	16.56		23.98	23.98	-3.00	-3.00	26.99	Pass
VHT20	MCS0	1	64	5320	0.13	0.13	16.73	16.39		23.98	23.98	-3.00	-3.00	26.99	Pass
VHT40	MCS0	1	54	5270	0.18	0.18	16.64	16.67		23.98	23.98	-3.00	-3.00	26.99	Pass
VHT40	MCS0	1	62	5310	0.18	0.18	15.93	15.36		23.98	23.98	-3.00	-3.00	26.99	Pass
VHT80	MCS0	1	58	5290	0.38	0.38	13.53	13.50		23.98	23.98	-3.00	-3.00	26.99	Pass
HT20	MCS0	2	52	5260	0.09	0.04	16.91	16.78	19.86	23.98		-3.00		26.99	Pass
HT20	MCS0	2	60	5300	0.09	0.04	17.09	16.68	19.90	23.98		-3.00		26.99	Pass
HT20	MCS0	2	64	5320	0.09	0.04	17.04	16.58	19.83	23.98		-3.00		26.99	Pass
HT40	MCS0	2	54	5270	0.20	0.23	17.12	16.73	19.94	23.98		-3.00		26.99	Pass
HT40	MCS0	2	62	5310	0.20	0.23	15.98	15.45	18.73	23.98		-3.00		26.99	Pass
VHT20	MCS0	2	52	5260	0.09	0.09	16.81	16.87	19.85	23.98		-3.00		26.99	Pass
VHT20	MCS0	2	60	5300	0.09	0.09	17.01	16.72	19.88	23.98		-3.00		26.99	Pass
VHT20	MCS0	2	64	5320	0.09	0.09	16.96	16.59	19.79	23.98		-3.00		26.99	Pass
VHT40	MCS0	2	54	5270	0.18	0.22	17.01	16.82	19.93	23.98		-3.00		26.99	Pass
VHT40	MCS0	2	62	5310	0.18	0.22	15.95	15.43	18.71	23.98		-3.00		26.99	Pass
VHT80	MCS0	2	58	5290	0.38	0.38	13.63	13.52	16.58	23.98		-3.00		26.99	Pass

TEST RESULTS DATA
Power Spectral Density

Band II														
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	52	5260	0.12	0.08	4.55	4.27		11.00	11.00	-3.00	-3.00	Pass
11a	6Mbps	1	60	5300	0.12	0.08	3.98	3.94		11.00	11.00	-3.00	-3.00	Pass
11a	6Mbps	1	64	5320	0.12	0.08	3.95	3.80		11.00	11.00	-3.00	-3.00	Pass
HT20	MCS0	2	52	5260	0.09	0.04			6.93	11.00		0.01		Pass
HT20	MCS0	2	60	5300	0.09	0.04			6.88	11.00		0.01		Pass
HT20	MCS0	2	64	5320	0.09	0.04			6.81	11.00		0.01		Pass
HT40	MCS0	2	54	5270	0.20	0.23			5.93	11.00		0.01		Pass
HT40	MCS0	2	62	5310	0.20	0.23			4.68	11.00		0.01		Pass
VHT80	MCS0	2	58	5290	0.38	0.38			-0.32	11.00		0.01		Pass

TEST RESULTS DATA
26dB and 99% OBW

Band III																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth In U-NII 2C (MHz)		26 dB Bandwidth In U-NII 2C (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		6 dB Bandwidth for Straddle Channel (MHz)	
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2
11a	6Mbps	1	100	5500	18.00	17.95	31.45	33.10	23.55	23.54	29.55	29.54	23.98	23.98	----	----
11a	6Mbps	1	116	5580	17.85	18.00	26.15	27.45	23.52	23.55	29.52	29.55	23.98	23.98	----	----
11a	6Mbps	1	140	5700	18.15	17.95	27.25	28.15	23.59	23.54	29.59	29.54	23.98	23.98	----	----
11a	6Mbps	1	144	5720	14.00	14.00	7.35	8.60	22.46	22.46	28.46	28.46	19.66	20.34	3.15	3.15
HT20	MCS0	2	100	5500	19.40	19.45	43.10	41.07	23.88		29.88		23.98		----	----
HT20	MCS0	2	116	5580	19.15	19.05	41.95	43.37	23.80		29.80		23.98		----	----
HT20	MCS0	2	140	5700	19.15	19.25	40.64	43.50	23.82		29.82		23.98		----	----
HT20	MCS0	2	144	5720	14.45	14.45	10.75	16.88	22.60		28.60		21.31		3.8	3.8
HT40	MCS0	2	102	5510	37.10	37.30	71.59	74.10	23.98		30.00		23.98		----	----
HT40	MCS0	2	110	5550	37.20	37.40	69.57	75.96	23.98		30.00		23.98		----	----
HT40	MCS0	2	134	5670	37.10	37.30	67.56	75.34	23.98		30.00		23.98		----	----
HT40	MCS0	2	142	5710	33.60	33.60	16.50	25.41	23.98		30.00		23.17		3.2	2.9
VHT80	MCS0	2	106	5530	76.08	75.96	104.00	114.85	23.98		30.00		23.98		----	----
VHT80	MCS0	2	122	5610	76.32	76.32	105.40	109.76	23.98		30.00		23.98		----	----
VHT80	MCS0	2	138	5690	73.04	73.04	13.32	30.28	23.98		30.00		22.25		3.24	3.24

TEST RESULTS DATA
Average Power Table

FCC Band III															
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	100	5500	0.12	0.08	16.64	16.49		23.98	23.98	-3.00	-3.00	26.99	Pass
11a	6Mbps	1	116	5580	0.12	0.08	16.58	16.61		23.98	23.98	-3.00	-3.00	26.99	Pass
11a	6Mbps	1	140	5700	0.12	0.08	16.52	16.81		23.98	23.98	-3.00	-3.00	26.99	Pass
11a	6Mbps	1	144	5720	0.12	0.08	16.51	16.82		19.66	20.34	-3.00	-3.00	26.99	Pass
HT20	MCS0	1	100	5500	0.09	0.09	16.95	16.52		23.98	23.98	-3.00	-3.00	26.99	Pass
HT20	MCS0	1	116	5580	0.09	0.09	16.91	16.77		23.98	23.98	-3.00	-3.00	26.99	Pass
HT20	MCS0	1	140	5700	0.09	0.09	16.56	16.99		23.98	23.98	-3.00	-3.00	26.99	Pass
HT20	MCS0	1	144	5720	0.09	0.09	16.63	16.96		23.98	23.98	-3.00	-3.00	26.99	Pass
HT40	MCS0	1	102	5510	0.18	0.18	14.80	14.74		23.98	23.98	-3.00	-3.00	26.99	Pass
HT40	MCS0	1	110	5550	0.18	0.18	16.91	16.99		23.98	23.98	-3.00	-3.00	26.99	Pass
HT40	MCS0	1	134	5670	0.18	0.18	16.46	16.81		23.98	23.98	-3.00	-3.00	26.99	Pass
HT40	MCS0	1	142	5710	0.18	0.18	16.58	16.85		23.98	23.98	-3.00	-3.00	26.99	Pass
VHT20	MCS0	1	100	5500	0.13	0.13	16.90	16.50		23.98	23.98	-3.00	-3.00	26.99	Pass
VHT20	MCS0	1	116	5580	0.13	0.13	16.80	16.74		23.98	23.98	-3.00	-3.00	26.99	Pass
VHT20	MCS0	1	140	5700	0.13	0.13	16.53	16.83		23.98	23.98	-3.00	-3.00	26.99	Pass
VHT20	MCS0	1	144	5720	0.13	0.13	16.53	16.87		23.98	23.98	-3.00	-3.00	26.99	Pass
VHT40	MCS0	1	102	5510	0.18	0.18	14.76	14.72		23.98	23.98	-3.00	-3.00	26.99	Pass
VHT40	MCS0	1	110	5550	0.18	0.18	16.78	16.70		23.98	23.98	-3.00	-3.00	26.99	Pass
VHT40	MCS0	1	134	5670	0.18	0.18	16.44	16.80		23.98	23.98	-3.00	-3.00	26.99	Pass
VHT40	MCS0	1	142	5710	0.18	0.18	16.43	16.82		23.98	23.98	-3.00	-3.00	26.99	Pass
VHT80	MCS0	1	106	5530	0.38	0.38	8.25	8.40		23.98	23.98	-3.00	-3.00	26.99	Pass
VHT80	MCS0	1	122	5610	0.38	0.38	16.66	16.78		23.98	23.98	-3.00	-3.00	26.99	Pass
VHT80	MCS0	1	138	5690	0.38	0.38	16.70	16.90		23.98	23.98	-3.00	-3.00	26.99	Pass
HT20	MCS0	2	100	5500	0.09	0.04	16.98	16.80	19.90	23.98		-3.00		26.99	Pass
HT20	MCS0	2	116	5580	0.09	0.04	16.92	16.88	19.91	23.98		-3.00		26.99	Pass
HT20	MCS0	2	140	5700	0.09	0.04	16.62	17.22	19.94	23.98		-3.00		26.99	Pass
HT20	MCS0	2	144	5720	0.09	0.04	16.70	17.20	19.97	21.31		-3.00		26.99	Pass
HT40	MCS0	2	102	5510	0.20	0.23	15.00	14.90	17.96	23.98		-3.00		26.99	Pass
HT40	MCS0	2	110	5550	0.20	0.23	16.92	17.03	19.98	23.98		-3.00		26.99	Pass
HT40	MCS0	2	134	5670	0.20	0.23	16.62	17.31	19.99	23.98		-3.00		26.99	Pass
HT40	MCS0	2	142	5710	0.20	0.23	16.59	17.35	19.99	23.17		-3.00		26.99	Pass
VHT20	MCS0	2	100	5500	0.09	0.09	16.99	16.77	19.89	23.98		-3.00		26.99	Pass
VHT20	MCS0	2	116	5580	0.09	0.09	16.87	16.91	19.90	23.98		-3.00		26.99	Pass
VHT20	MCS0	2	140	5700	0.09	0.09	16.59	17.20	19.92	23.98		-3.00		26.99	Pass
VHT20	MCS0	2	144	5720	0.09	0.09	16.69	17.20	19.96	23.98		-3.00		26.99	Pass
VHT40	MCS0	2	102	5510	0.18	0.22	14.96	14.88	17.93	23.98		-3.00		26.99	Pass
VHT40	MCS0	2	110	5550	0.18	0.22	16.89	17.02	19.97	23.98		-3.00		26.99	Pass
VHT40	MCS0	2	134	5670	0.18	0.22	16.57	17.34	19.98	23.98		-3.00		26.99	Pass
VHT40	MCS0	2	142	5710	0.18	0.22	16.46	17.34	19.93	23.98		-3.00		26.99	Pass
VHT80	MCS0	2	106	5530	0.38	0.38	8.52	8.60	11.57	23.98		-3.00		26.99	Pass
VHT80	MCS0	2	122	5610	0.38	0.38	16.68	17.27	19.99	23.98		-3.00		26.99	Pass
VHT80	MCS0	2	138	5690	0.38	0.38	16.74	17.21	19.99	22.25		-3.00		26.99	Pass

TEST RESULTS DATA
Power Spectral Density

Band III														
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	100	5500	0.12	0.08	5.50	5.30		11.00	11.00	-3.00	-3.00	Pass
11a	6Mbps	1	116	5580	0.12	0.08	5.46	5.67		11.00	11.00	-3.00	-3.00	Pass
11a	6Mbps	1	140	5700	0.12	0.08	4.55	4.57		11.00	11.00	-3.00	-3.00	Pass
11a	6Mbps	1	144	5720	0.12	0.08	4.67	4.79		11.00	11.00	-3.00	-3.00	Pass
HT20	MCS0	2	100	5500	0.09	0.04			7.96	11.00		0.01		Pass
HT20	MCS0	2	116	5580	0.09	0.04			7.85	11.00		0.01		Pass
HT20	MCS0	2	140	5700	0.09	0.04			8.21	11.00		0.01		Pass
HT20	MCS0	2	144	5720	0.09	0.04			8.32	11.00		0.01		Pass
HT40	MCS0	2	102	5510	0.20	0.23			4.72	11.00		0.01		Pass
HT40	MCS0	2	110	5550	0.20	0.23			5.23	11.00		0.01		Pass
HT40	MCS0	2	134	5670	0.20	0.23			5.58	11.00		0.01		Pass
HT40	MCS0	2	142	5710	0.20	0.23			5.51	11.00		0.01		Pass
VHT80	MCS0	2	106	5530	0.38	0.38			-4.72	11.00		0.01		Pass
VHT80	MCS0	2	122	5610	0.38	0.38			2.25	11.00		0.01		Pass
VHT80	MCS0	2	138	5690	0.38	0.38			2.32	11.00		0.01		Pass



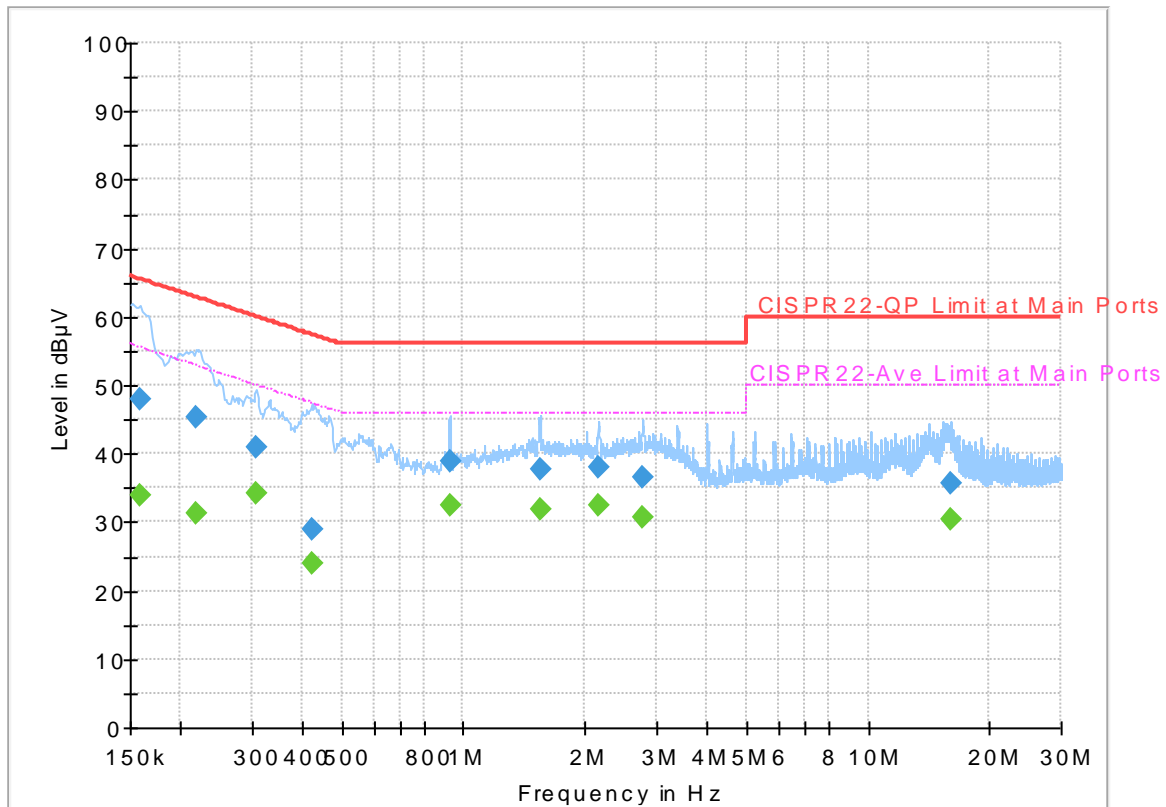
Appendix B. AC Conducted Emission Test Results

Test Engineer :	Blue Lan	Temperature :	24~25°C
		Relative Humidity :	51~53%

EUT Information

Report NO : 821216
 Test Mode : Mode 1
 Test Voltage : 120Vac/60Hz
 Phase : Line

Full Spectrum



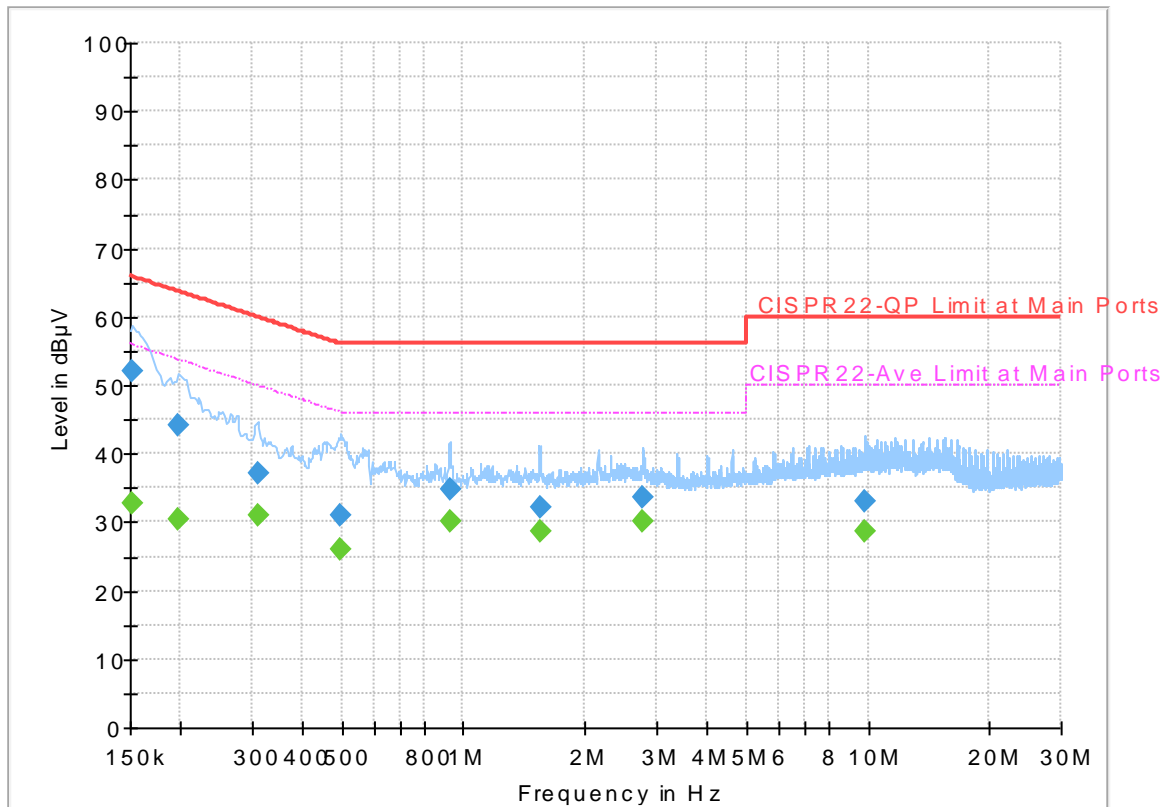
Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.159000	---	33.77	55.52	21.75	L1	OFF	19.5
0.159000	47.90	---	65.52	17.62	L1	OFF	19.5
0.217500	---	31.33	52.91	21.58	L1	OFF	19.5
0.217500	45.43	---	62.91	17.48	L1	OFF	19.5
0.307500	---	34.10	50.04	15.94	L1	OFF	19.5
0.307500	40.99	---	60.04	19.05	L1	OFF	19.5
0.422250	---	23.85	47.40	23.55	L1	OFF	19.5
0.422250	28.81	---	57.40	28.59	L1	OFF	19.5
0.924000	---	32.32	46.00	13.68	L1	OFF	19.5
0.924000	38.88	---	56.00	17.12	L1	OFF	19.5
1.545000	---	32.01	46.00	13.99	L1	OFF	19.6
1.545000	37.63	---	56.00	18.37	L1	OFF	19.6
2.148000	---	32.37	46.00	13.63	L1	OFF	19.4
2.148000	37.93	---	56.00	18.07	L1	OFF	19.4
2.782500	---	30.73	46.00	15.27	L1	OFF	19.6
2.782500	36.51	---	56.00	19.49	L1	OFF	19.6
15.960750	---	30.34	50.00	19.66	L1	OFF	19.8
15.960750	35.68	---	60.00	24.32	L1	OFF	19.8

EUT Information

Report NO : 821216
 Test Mode : Mode 1
 Test Voltage : 120Vac/60Hz
 Phase : Neutral

Full Spectrum



Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.152250	---	32.88	55.88	23.00	N	OFF	19.5
0.152250	52.12	---	65.88	13.76	N	OFF	19.5
0.197250	---	30.29	53.73	23.44	N	OFF	19.5
0.197250	44.14	---	63.73	19.59	N	OFF	19.5
0.309750	---	30.93	49.98	19.05	N	OFF	19.5
0.309750	37.02	---	59.98	22.96	N	OFF	19.5
0.498750	---	26.08	46.02	19.94	N	OFF	19.5
0.498750	30.86	---	56.02	25.16	N	OFF	19.5
0.924000	---	30.20	46.00	15.80	N	OFF	19.5
0.924000	34.80	---	56.00	21.20	N	OFF	19.5
1.542750	---	28.76	46.00	17.24	N	OFF	19.6
1.542750	32.28	---	56.00	23.72	N	OFF	19.6
2.780250	---	30.14	46.00	15.86	N	OFF	19.5
2.780250	33.67	---	56.00	22.33	N	OFF	19.5
9.825000	---	28.76	50.00	21.24	N	OFF	19.7
9.825000	33.01	---	60.00	26.99	N	OFF	19.7



Appendix C. Radiated Spurious Emission

Test Engineer :	Alex Jeng, Bill Chang, Fu Chen, and Wilson Wu	Temperature :	24.6~25.2°C
		Relative Humidity :	48~52%



<Antenna 1>

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

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)	
802.11a CH 36 5180MHz		5111.8	53.17	-20.83	74	42.64	31.94	8.13	29.54	187	95	P	H	
		5099.58	42.66	-11.34	54	32.18	31.92	8.1	29.54	187	95	A	H	
	*	5180	103.99	-	-	93.3	32.02	8.22	29.55	187	95	P	H	
	*	5180	96.44	-	-	85.75	32.02	8.22	29.55	187	95	A	H	
													H	
													H	
			5134.42	53.84	-20.16	74	43.28	31.96	8.15	29.55	151	134	P	V
			5145.34	42.88	-11.12	54	32.28	31.98	8.17	29.55	151	134	A	V
	*		5180	106.38	-	-	95.69	32.02	8.22	29.55	151	134	P	V
	*		5180	98.78	-	-	88.09	32.02	8.22	29.55	151	134	A	V
													V	
													V	
802.11a CH 44 5220MHz		5023.92	51.77	-22.23	74	41.45	31.84	8.01	29.53	186	94	P	H	
		5073.32	42.48	-11.52	54	32.04	31.9	8.08	29.54	186	94	A	H	
	*	5220	105.33	-	-	94.58	32.06	8.25	29.56	186	94	P	H	
	*	5220	97.75	-	-	87	32.06	8.25	29.56	186	94	A	H	
			5450.76	51.3	-22.7	74	40.09	32.34	8.46	29.59	186	94	P	H
			5452.72	42.8	-11.2	54	31.59	32.34	8.46	29.59	186	94	A	H
			5000.26	52.42	-21.58	74	42.16	31.8	7.99	29.53	199	132	P	V
			5093.6	42.81	-11.19	54	32.33	31.92	8.1	29.54	199	132	A	V
	*		5220	107.79	-	-	97.04	32.06	8.25	29.56	199	132	P	V
	*		5220	100.33	-	-	89.58	32.06	8.25	29.56	199	132	A	V
			5419.68	51.17	-22.83	74	40.09	32.3	8.36	29.58	199	132	P	V
			5453	42.84	-11.16	54	31.63	32.34	8.46	29.59	199	132	A	V



802.11a CH 48 5240MHz		5065.52	51.82	-22.18	74	41.42	31.88	8.06	29.54	182	94	P	H
		5035.1	42.54	-11.46	54	32.19	31.84	8.04	29.53	182	94	A	H
	*	5240	105.64	-	-	94.87	32.08	8.25	29.56	182	94	P	H
	*	5240	98.14	-	-	87.37	32.08	8.25	29.56	182	94	A	H
		5406.52	51.71	-22.29	74	40.7	32.28	8.31	29.58	182	94	P	H
		5452.72	42.98	-11.02	54	31.77	32.34	8.46	29.59	182	94	A	H
		5041.86	51.89	-22.11	74	41.53	31.86	8.04	29.54	117	186	P	V
		5036.92	42.54	-11.46	54	32.19	31.84	8.04	29.53	117	186	A	V
	*	5240	106.09	-	-	95.32	32.08	8.25	29.56	117	186	P	V
	*	5240	98.73	-	-	87.96	32.08	8.25	29.56	117	186	A	V
		5458.04	50.98	-23.02	74	39.77	32.34	8.46	29.59	117	186	P	V
		5452.72	43.16	-10.84	54	31.95	32.34	8.46	29.59	117	186	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 - 5250~5350MHz
WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	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 52 5260MHz		5013.94	52.02	-21.98	74	41.74	31.82	7.99	29.53	201	93	P	H
		5068.68	42.56	-11.44	54	32.16	31.88	8.06	29.54	201	93	A	H
	*	5260	105.94	-	-	95.12	32.12	8.26	29.56	201	93	P	H
	*	5260	98.49	-	-	87.67	32.12	8.26	29.56	201	93	A	H
		5426.64	50.61	-23.39	74	39.53	32.3	8.36	29.58	201	93	P	H
		5452.8	42.9	-11.1	54	31.69	32.34	8.46	29.59	201	93	A	H
		5147.22	52.27	-21.73	74	41.67	31.98	8.17	29.55	119	183	P	V
		5065.62	42.75	-11.25	54	32.35	31.88	8.06	29.54	119	183	A	V
	*	5260	106.8	-	-	95.98	32.12	8.26	29.56	119	183	P	V
	*	5260	99.31	-	-	88.49	32.12	8.26	29.56	119	183	A	V
		5429.76	49.89	-24.11	74	38.79	32.32	8.36	29.58	119	183	P	V
		5452.8	42.86	-11.14	54	31.65	32.34	8.46	29.59	119	183	A	V
802.11a CH 60 5300MHz		5091.46	52.82	-21.18	74	42.34	31.92	8.1	29.54	201	95	P	H
		5029.58	42.63	-11.37	54	32.31	31.84	8.01	29.53	201	95	A	H
	*	5300	106.93	-	-	96.07	32.16	8.27	29.57	201	95	P	H
	*	5300	99.59	-	-	88.73	32.16	8.27	29.57	201	95	A	H
		5360.64	51.76	-22.24	74	40.79	32.24	8.3	29.57	201	95	P	H
		5376	42.92	-11.08	54	31.96	32.24	8.3	29.58	201	95	A	H
		5079.22	52.29	-21.71	74	41.85	31.9	8.08	29.54	116	181	P	V
		5037.74	42.58	-11.42	54	32.21	31.86	8.04	29.53	116	181	A	V
	*	5300	108.65	-	-	97.79	32.16	8.27	29.57	116	181	P	V
	*	5300	101.04	-	-	90.18	32.16	8.27	29.57	116	181	A	V
		5376.24	51.25	-22.75	74	40.29	32.24	8.3	29.58	116	181	P	V
		5352.96	43.41	-10.59	54	32.47	32.22	8.29	29.57	116	181	A	V



802.11a CH 64 5320MHz	*	5320	108.15	-	-	97.26	32.18	8.28	29.57	189	93	P	H
	*	5320	100.6	-	-	89.71	32.18	8.28	29.57	189	93	A	H
		5364.8	52.27	-21.73	74	41.3	32.24	8.3	29.57	189	93	P	H
		5376	43.62	-10.38	54	32.66	32.24	8.3	29.58	189	93	A	H
													H
													H
	*	5320	109.5	-	-	98.61	32.18	8.28	29.57	120	180	P	V
	*	5320	102.05	-	-	91.16	32.18	8.28	29.57	120	180	A	V
		5369.28	52.52	-21.48	74	41.55	32.24	8.3	29.57	120	180	P	V
		5375.84	44.25	-9.75	54	33.29	32.24	8.3	29.58	120	180	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz
WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	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 100 5500MHz		5454.8	52.92	-21.08	74	41.71	32.34	8.46	29.59	206	95	P	H	
		5463.44	53.66	-14.54	68.2	42.43	32.36	8.46	29.59	206	95	P	H	
		5455.76	44.27	-9.73	54	33.06	32.34	8.46	29.59	206	95	A	H	
	*	5500	109.21	-	-	97.84	32.4	8.56	29.59	206	95	P	H	
	*	5500	101.86	-	-	90.49	32.4	8.56	29.59	206	95	A	H	
														H
			5450.48	52.26	-21.74	74	41.05	32.34	8.46	29.59	100	175	P	V
			5462	53.2	-15	68.2	41.99	32.34	8.46	29.59	100	175	P	V
			5452.88	44.7	-9.3	54	33.49	32.34	8.46	29.59	100	175	A	V
	*		5500	110	-	-	98.63	32.4	8.56	29.59	100	175	P	V
	*		5500	102.62	-	-	91.25	32.4	8.56	29.59	100	175	A	V
														V
802.11a CH 116 5580MHz		5457.28	51.53	-22.47	74	40.32	32.34	8.46	29.59	189	94	P	H	
		5465.2	50.1	-18.1	68.2	38.87	32.36	8.46	29.59	189	94	P	H	
		5452.72	42.94	-11.06	54	31.73	32.34	8.46	29.59	189	94	A	H	
	*	5580	108.76	-	-	97.12	32.47	8.8	29.63	189	94	P	H	
	*	5580	101.48	-	-	89.84	32.47	8.8	29.63	189	94	A	H	
			5729.405	52.93	-15.27	68.2	41.17	32.62	8.82	29.68	189	94	P	H
			5418.16	51.72	-22.28	74	40.64	32.3	8.36	29.58	100	176	P	V
			5465.68	51.18	-17.02	68.2	39.95	32.36	8.46	29.59	100	176	P	V
			5452.96	43.1	-10.9	54	31.89	32.34	8.46	29.59	100	176	A	V
	*		5580	110.06	-	-	98.42	32.47	8.8	29.63	100	176	P	V
	*		5580	102.5	-	-	90.86	32.47	8.8	29.63	100	176	A	V
			5760.905	51.88	-16.32	68.2	40.12	32.66	8.81	29.71	100	176	P	V



802.11a CH 140 5700MHz	*	5700	109.52	-	-	97.78	32.59	8.82	29.67	184	93	P	H
	*	5700	102.3	-	-	90.56	32.59	8.82	29.67	184	93	A	H
		5740.84	53.94	-14.26	68.2	42.18	32.64	8.81	29.69	184	93	P	H
													H
													H
													H
	*	5700	108.43	-	-	96.69	32.59	8.82	29.67	100	173	P	V
	*	5700	101.15	-	-	89.41	32.59	8.82	29.67	100	173	A	V
		5730.92	54.84	-13.36	68.2	43.09	32.62	8.82	29.69	100	173	P	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	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 144 5720MHz	*	5720	109.24	-	-	97.48	32.62	8.82	29.68	196	90	P	H	
	*	5720	101.61	-	-	89.85	32.62	8.82	29.68	196	90	A	H	
													H	
													H	
													H	
													H	
	*	5720	110.38	-	-	98.62	32.62	8.82	29.68	100	177	P	V	
	*	5720	102.52	-	-	90.76	32.62	8.82	29.68	100	177	A	V	
														V
														V
														V
	Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11a CH 144 5720MHz		11440	49.1	-24.9	74	52.88	39.93	12.72	56.43	100	0	P	H	
		17160	49.62	-18.58	68.2	50.32	40.4	15.07	56.17	100	0	P	H	
													H	
													H	
			11440	48.65	-25.35	74	52.43	39.93	12.72	56.43	100	0	P	V
			17160	49.65	-18.55	68.2	50.35	40.4	15.07	56.17	100	0	P	V
														V
														V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



<Antenna 2>

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

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.	
2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)	
802.11a CH 36 5180MHz		5062.92	51.2	-22.8	74	40.8	31.88	8.06	29.54	100	15	P	H	
		5148.46	42.09	-11.91	54	31.49	31.98	8.17	29.55	100	15	A	H	
	*	5180	106.39	-	-	95.7	32.02	8.22	29.55	100	15	P	H	
	*	5180	98.85	-	-	88.16	32.02	8.22	29.55	100	15	A	H	
													H	
													H	
			5148.2	51.45	-22.55	74	40.85	31.98	8.17	29.55	100	260	P	V
			5150	42.68	-11.32	54	32.08	31.98	8.17	29.55	100	260	A	V
	*		5180	108.12	-	-	97.43	32.02	8.22	29.55	100	260	P	V
	*		5180	100.56	-	-	89.87	32.02	8.22	29.55	100	260	A	V
													V	
													V	
802.11a CH 44 5220MHz		5092.56	51.93	-22.07	74	41.45	31.92	8.1	29.54	100	16	P	H	
		5046.54	41.8	-12.2	54	31.44	31.86	8.04	29.54	100	16	A	H	
	*	5220	107.63	-	-	96.88	32.06	8.25	29.56	100	16	P	H	
	*	5220	100.04	-	-	89.29	32.06	8.25	29.56	100	16	A	H	
			5370.68	51.13	-22.87	74	40.16	32.24	8.3	29.57	100	16	P	H
			5460	41.64	-12.36	54	30.43	32.34	8.46	29.59	100	16	A	H
			5054.86	51.58	-22.42	74	41.18	31.88	8.06	29.54	100	254	P	V
			5085.54	41.85	-12.15	54	31.41	31.9	8.08	29.54	100	254	A	V
	*		5220	109.68	-	-	98.93	32.06	8.25	29.56	100	254	P	V
	*		5220	101.98	-	-	91.23	32.06	8.25	29.56	100	254	A	V
			5358.08	51.35	-22.65	74	40.41	32.22	8.29	29.57	100	254	P	V
			5458.88	41.81	-12.19	54	30.6	32.34	8.46	29.59	100	254	A	V



802.11a CH 48 5240MHz		5018.98	51.86	-22.14	74	41.56	31.82	8.01	29.53	100	18	P	H
		5057.46	41.81	-12.19	54	31.41	31.88	8.06	29.54	100	18	A	H
	*	5240	108.88	-	-	98.11	32.08	8.25	29.56	100	18	P	H
	*	5240	101.23	-	-	90.46	32.08	8.25	29.56	100	18	A	H
		5390.28	50.84	-23.16	74	39.86	32.26	8.3	29.58	100	18	P	H
		5458.32	41.57	-12.43	54	30.36	32.34	8.46	29.59	100	18	A	H
		5109.72	52.13	-21.87	74	41.6	31.94	8.13	29.54	100	255	P	V
		5087.88	41.82	-12.18	54	31.38	31.9	8.08	29.54	100	255	A	V
	*	5240	109.74	-	-	98.97	32.08	8.25	29.56	100	255	P	V
	*	5240	102.04	-	-	91.27	32.08	8.25	29.56	100	255	A	V
		5435.08	51.33	-22.67	74	40.18	32.32	8.41	29.58	100	255	P	V
		5458.88	41.77	-12.23	54	30.56	32.34	8.46	29.59	100	255	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 - 5250~5350MHz
WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	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 52 5260MHz		5028.56	52.78	-21.22	74	42.46	31.84	8.01	29.53	100	15	P	H
		5046.58	41.8	-12.2	54	31.44	31.86	8.04	29.54	100	15	A	H
	*	5260	107.57	-	-	96.75	32.12	8.26	29.56	100	15	P	H
	*	5260	99.93	-	-	89.11	32.12	8.26	29.56	100	15	A	H
		5433.12	50.63	-23.37	74	39.48	32.32	8.41	29.58	100	15	P	H
		5460	41.62	-12.38	54	30.41	32.34	8.46	29.59	100	15	A	H
		5042.84	52.07	-21.93	74	41.71	31.86	8.04	29.54	100	254	P	V
		5072.08	41.83	-12.17	54	31.39	31.9	8.08	29.54	100	254	A	V
	*	5260	109.86	-	-	99.04	32.12	8.26	29.56	100	254	P	V
	*	5260	102.33	-	-	91.51	32.12	8.26	29.56	100	254	A	V
		5397.6	50.8	-23.2	74	39.79	32.28	8.31	29.58	100	254	P	V
		5458.32	41.77	-12.23	54	30.56	32.34	8.46	29.59	100	254	A	V
802.11a CH 60 5300MHz		5010.54	52.69	-21.31	74	42.41	31.82	7.99	29.53	100	15	P	H
		5048.96	41.81	-12.19	54	31.45	31.86	8.04	29.54	100	15	A	H
	*	5300	107.71	-	-	96.85	32.16	8.27	29.57	100	15	P	H
	*	5300	100.01	-	-	89.15	32.16	8.27	29.57	100	15	A	H
		5363.28	52.27	-21.73	74	41.3	32.24	8.3	29.57	100	15	P	H
		5456.16	41.49	-12.51	54	30.28	32.34	8.46	29.59	100	15	A	H
		5106.76	52.94	-21.06	74	42.41	31.94	8.13	29.54	100	250	P	V
		5049.64	41.87	-12.13	54	31.51	31.86	8.04	29.54	100	250	A	V
	*	5300	109.15	-	-	98.29	32.16	8.27	29.57	100	250	P	V
	*	5300	101.56	-	-	90.7	32.16	8.27	29.57	100	250	A	V
		5356.56	50.9	-23.1	74	39.96	32.22	8.29	29.57	100	250	P	V
		5350.08	42.06	-11.94	54	31.12	32.22	8.29	29.57	100	250	A	V



802.11a CH 64 5320MHz	*	5320	106.86	-	-	95.97	32.18	8.28	29.57	100	13	P	H
	*	5320	99.19	-	-	88.3	32.18	8.28	29.57	100	13	A	H
		5387.04	50.88	-23.12	74	39.9	32.26	8.3	29.58	100	13	P	H
		5352.8	41.61	-12.39	54	30.67	32.22	8.29	29.57	100	13	A	H
													H
													H
	*	5320	109.4	-	-	98.51	32.18	8.28	29.57	100	253	P	V
	*	5320	101.74	-	-	90.85	32.18	8.28	29.57	100	253	A	V
		5362.72	52.36	-21.64	74	41.39	32.24	8.3	29.57	100	253	P	V
		5353.28	42.21	-11.79	54	31.27	32.22	8.29	29.57	100	253	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz
WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	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 100 5500MHz		5455.28	52.1	-21.9	74	40.89	32.34	8.46	29.59	104	11	P	H	
		5461.04	54	-14.2	68.2	42.79	32.34	8.46	29.59	104	11	P	H	
		5459.76	41.93	-12.07	54	30.72	32.34	8.46	29.59	104	11	A	H	
	*	5500	105.91	-	-	94.54	32.4	8.56	29.59	104	11	P	H	
	*	5500	98.34	-	-	86.97	32.4	8.56	29.59	104	11	A	H	
														H
			5450	52.07	-21.93	74	40.86	32.34	8.46	29.59	127	258	P	V
			5464.56	54.03	-14.17	68.2	42.8	32.36	8.46	29.59	127	258	P	V
			5460	42.6	-11.4	54	31.39	32.34	8.46	29.59	127	258	A	V
	*		5500	109.5	-	-	98.13	32.4	8.56	29.59	127	258	P	V
	*		5500	101.93	-	-	90.56	32.4	8.56	29.59	127	258	A	V
														V
802.11a CH 116 5580MHz		5449.12	51.7	-22.3	74	40.48	32.34	8.46	29.58	100	12	P	H	
		5467.6	52	-16.2	68.2	40.72	32.36	8.51	29.59	100	12	P	H	
		5459.68	41.5	-12.5	54	30.29	32.34	8.46	29.59	100	12	A	H	
	*	5580	107.82	-	-	96.18	32.47	8.8	29.63	100	12	P	H	
	*	5580	100.17	-	-	88.53	32.47	8.8	29.63	100	12	A	H	
			5762.795	50.68	-17.52	68.2	38.92	32.66	8.81	29.71	100	12	P	H
			5458.96	50.8	-23.2	74	39.59	32.34	8.46	29.59	100	260	P	V
			5462.8	50.18	-18.02	68.2	38.95	32.36	8.46	29.59	100	260	P	V
			5459.2	41.62	-12.38	54	30.41	32.34	8.46	29.59	100	260	A	V
	*		5580	110.89	-	-	99.25	32.47	8.8	29.63	100	260	P	V
	*		5580	103.27	-	-	91.63	32.47	8.8	29.63	100	260	A	V
			5761.535	51.58	-16.62	68.2	39.82	32.66	8.81	29.71	100	260	P	V



802.11a CH 140 5700MHz	*	5700	107.11	-	-	95.37	32.59	8.82	29.67	100	10	P	H
	*	5700	99.5	-	-	87.76	32.59	8.82	29.67	100	10	A	H
		5727.08	54.36	-13.84	68.2	42.6	32.62	8.82	29.68	100	10	P	H
													H
													H
													H
	*	5700	111.95	-	-	100.21	32.59	8.82	29.67	121	262	P	V
	*	5700	104.32	-	-	92.58	32.59	8.82	29.67	121	262	A	V
		5731.8	55.37	-12.83	68.2	43.62	32.62	8.82	29.69	121	262	P	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	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 144 5720MHz	*	5720	107.46	-	-	95.7	32.62	8.82	29.68	109	10	P	H	
	*	5720	100.07	-	-	88.31	32.62	8.82	29.68	109	10	A	H	
													H	
													H	
													H	
	*	5722	112.16	-	-	100.4	32.62	8.82	29.68	115	260	P	V	
	*	5722	104.52	-	-	92.76	32.62	8.82	29.68	115	260	A	V	
														V
														V
														V
														V
	Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11a CH 144 5720MHz		11440	47.75	-26.25	74	51.53	39.93	12.72	56.43	100	0	P	H	
		17160	49.6	-18.6	68.2	50.3	40.4	15.07	56.17	100	0	P	H	
													H	
													H	
			11440	48.61	-25.39	74	52.39	39.93	12.72	56.43	100	0	P	V
			17160	49.73	-18.47	68.2	50.43	40.4	15.07	56.17	100	0	P	V
														V
														V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



<Antenna 1+2>

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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11n HT20 CH 36 5180MHz		5104.26	53.17	-20.83	74	42.69	31.92	8.1	29.54	199	88	P	H	
		5145.86	43.08	-10.92	54	32.48	31.98	8.17	29.55	199	88	A	H	
	*	5180	108.24	-	-	97.55	32.02	8.22	29.55	199	88	P	H	
	*	5180	100.83	-	-	90.14	32.02	8.22	29.55	199	88	A	H	
													H	
														H
			5140.14	52.25	-21.75	74	41.67	31.98	8.15	29.55	227	174	P	V
			5147.68	43.55	-10.45	54	32.95	31.98	8.17	29.55	227	174	A	V
		*	5180	112.05	-	-	101.36	32.02	8.22	29.55	227	174	P	V
		*	5180	104.42	-	-	93.73	32.02	8.22	29.55	227	174	A	V
													V	
													V	
802.11n HT20 CH 44 5220MHz		5017.42	52.39	-21.61	74	42.09	31.82	8.01	29.53	201	93	P	H	
		5028.34	42.87	-11.13	54	32.55	31.84	8.01	29.53	201	93	A	H	
		*	5220	109.76	-	-	99.01	32.06	8.25	29.56	201	93	P	H
		*	5220	102.33	-	-	91.58	32.06	8.25	29.56	201	93	A	H
			5432	51.57	-22.43	74	40.42	32.32	8.41	29.58	201	93	P	H
			5452.72	42.41	-11.59	54	31.2	32.34	8.46	29.59	201	93	A	H
			5056.68	52.04	-21.96	74	41.64	31.88	8.06	29.54	220	162	P	V
			5053.04	42.71	-11.29	54	32.33	31.86	8.06	29.54	220	162	A	V
		*	5220	112	-	-	101.25	32.06	8.25	29.56	220	162	P	V
		*	5220	104.53	-	-	93.78	32.06	8.25	29.56	220	162	A	V
		5400.92	50.38	-23.62	74	39.37	32.28	8.31	29.58	220	162	P	V	
		5457.48	42.52	-11.48	54	31.31	32.34	8.46	29.59	220	162	A	V	



802.11n HT20 CH 48 5240MHz		5083.46	53.59	-20.41	74	43.15	31.9	8.08	29.54	206	86	P	H
		5072.02	42.65	-11.35	54	32.21	31.9	8.08	29.54	206	86	A	H
	*	5240	109.66	-	-	98.89	32.08	8.25	29.56	206	86	P	H
	*	5240	101.9	-	-	91.13	32.08	8.25	29.56	206	86	A	H
		5414.08	52	-22	74	40.92	32.3	8.36	29.58	206	86	P	H
		5451.88	42.08	-11.92	54	30.87	32.34	8.46	29.59	206	86	A	H
		5110.5	51.06	-22.94	74	40.53	31.94	8.13	29.54	193	170	P	V
		5116.48	42.62	-11.38	54	32.09	31.94	8.13	29.54	193	170	A	V
	*	5240	112.76	-	-	101.99	32.08	8.25	29.56	193	170	P	V
	*	5240	105.47	-	-	94.7	32.08	8.25	29.56	193	170	A	V
		5362.84	51.69	-22.31	74	40.72	32.24	8.3	29.57	193	170	P	V
		5452.72	42.81	-11.19	54	31.6	32.34	8.46	29.59	193	170	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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11n HT20 CH 36 5180MHz		10360	46.88	-21.32	68.2	52.28	39.29	12.34	57.03	100	0	P	H	
		15540	48.21	-25.79	74	51.77	38.31	14.61	56.48	100	0	P	H	
													H	
													H	
			10360	46.68	-21.52	68.2	52.08	39.29	12.34	57.03	100	0	P	V
			15540	46.79	-27.21	74	50.35	38.31	14.61	56.48	100	0	P	V
														V
802.11n HT20 CH 44 5220MHz		10440	47.64	-20.56	68.2	52.9	39.39	12.36	57.01	100	0	P	H	
		15660	46.2	-27.8	74	49.94	38	14.67	56.41	100	0	P	H	
													H	
													H	
			10440	47.83	-20.37	68.2	53.09	39.39	12.36	57.01	100	0	P	V
			15660	45.85	-28.15	74	49.59	38	14.67	56.41	100	0	P	V
														V
802.11n HT20 CH 48 5240MHz		10480	47.46	-20.74	68.2	52.61	39.47	12.38	57	100	0	P	H	
		15720	46.86	-27.14	74	50.73	37.82	14.68	56.37	100	0	P	H	
													H	
													H	
			10480	47.27	-20.93	68.2	52.42	39.47	12.38	57	100	0	P	V
			15720	46.92	-27.08	74	50.79	37.82	14.68	56.37	100	0	P	V
														V
Remark	1. No other spurious found.													
	2. All results are PASS against Peak and Average limit line.													



Band 1 5150~5250MHz
WIFI 802.11n 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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 38 5190MHz		5146.38	56.05	-17.95	74	45.45	31.98	8.17	29.55	201	92	P	H
		5149.5	47.43	-6.57	54	36.83	31.98	8.17	29.55	201	92	A	H
	*	5190	107.17	-	-	96.48	32.02	8.22	29.55	201	92	P	H
	*	5190	99.51	-	-	88.82	32.02	8.22	29.55	201	92	A	H
		5457.48	51.46	-22.54	74	40.25	32.34	8.46	29.59	201	92	P	H
		5460	42.86	-11.14	54	31.65	32.34	8.46	29.59	201	92	A	H
		5147.68	60.71	-13.29	74	50.11	31.98	8.17	29.55	162	130	P	V
		5150	52.23	-1.77	54	41.63	31.98	8.17	29.55	162	130	A	V
	*	5190	107.36	-	-	96.67	32.02	8.22	29.55	162	130	P	V
	*	5190	99.98	-	-	89.29	32.02	8.22	29.55	162	130	A	V
		5451.04	50.9	-23.1	74	39.69	32.34	8.46	29.59	162	130	P	V
		5459.16	42.85	-11.15	54	31.64	32.34	8.46	29.59	162	130	A	V
802.11n HT40 CH 46 5230MHz		5073.32	52.01	-21.99	74	41.57	31.9	8.08	29.54	224	81	P	H
		5075.4	43.55	-10.45	54	33.11	31.9	8.08	29.54	224	81	A	H
	*	5230	106.22	-	-	95.45	32.08	8.25	29.56	224	81	P	H
	*	5230	98.3	-	-	87.53	32.08	8.25	29.56	224	81	A	H
		5407.36	51.36	-22.64	74	40.35	32.28	8.31	29.58	224	81	P	H
		5455.24	42.61	-11.39	54	31.4	32.34	8.46	29.59	224	81	A	H
		5090.48	52.12	-21.88	74	41.64	31.92	8.1	29.54	160	172	P	V
		5148.72	43.64	-10.36	54	33.04	31.98	8.17	29.55	160	172	A	V
	*	5230	109.48	-	-	98.71	32.08	8.25	29.56	160	172	P	V
	*	5230	101.68	-	-	90.91	32.08	8.25	29.56	160	172	A	V
	5453	51.01	-22.99	74	39.8	32.34	8.46	29.59	160	172	P	V	
	5441.52	43.04	-10.96	54	31.89	32.32	8.41	29.58	160	172	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 (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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 42 5210MHz		5139.88	58.45	-15.55	74	47.87	31.98	8.15	29.55	228	87	P	H
		5139.88	49.99	-4.01	54	39.41	31.98	8.15	29.55	228	87	A	H
	*	5210	104.04	-	-	93.3	32.06	8.24	29.56	228	87	P	H
	*	5210	96.45	-	-	85.71	32.06	8.24	29.56	228	87	A	H
		5439.28	52.33	-21.67	74	41.18	32.32	8.41	29.58	228	87	P	H
		5444.04	42.81	-11.19	54	31.66	32.32	8.41	29.58	228	87	A	H
		5137.54	61.12	-12.88	74	50.56	31.96	8.15	29.55	172	177	P	V
		5137.28	52.93	-1.07	54	42.37	31.96	8.15	29.55	172	177	A	V
	*	5210	105.67	-	-	94.93	32.06	8.24	29.56	172	177	P	V
	*	5210	97.81	-	-	87.07	32.06	8.24	29.56	172	177	A	V
		5432.56	52.24	-21.76	74	41.09	32.32	8.41	29.58	172	177	P	V
	5376	43.18	-10.82	54	32.22	32.24	8.3	29.58	172	177	A	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 - 5250~5350MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	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 CH 52 5260MHz		5114.58	51.48	-22.52	74	40.95	31.94	8.13	29.54	206	90	P	H
		5084.32	42.67	-11.33	54	32.23	31.9	8.08	29.54	206	90	A	H
	*	5260	109.69	-	-	98.87	32.12	8.26	29.56	206	90	P	H
	*	5260	102.08	-	-	91.26	32.12	8.26	29.56	206	90	A	H
		5416.08	50.9	-23.1	74	39.82	32.3	8.36	29.58	206	90	P	H
		5455.92	42.15	-11.85	54	30.94	32.34	8.46	29.59	206	90	A	H
		5109.48	52.6	-21.4	74	42.07	31.94	8.13	29.54	157	177	P	V
		5107.44	42.71	-11.29	54	32.18	31.94	8.13	29.54	157	177	A	V
	*	5260	112.18	-	-	101.36	32.12	8.26	29.56	157	177	P	V
	*	5260	104.58	-	-	93.76	32.12	8.26	29.56	157	177	A	V
		5436.48	51.5	-22.5	74	40.35	32.32	8.41	29.58	157	177	P	V
		5376	42.74	-11.26	54	31.78	32.24	8.3	29.58	157	177	A	V
802.11n HT20 CH 60 5300MHz		5054.06	50.96	-23.04	74	40.58	31.86	8.06	29.54	100	273	P	H
		5082.62	42.47	-11.53	54	32.03	31.9	8.08	29.54	100	273	A	H
	*	5300	106.87	-	-	96.01	32.16	8.27	29.57	100	273	P	H
	*	5300	99.05	-	-	88.19	32.16	8.27	29.57	100	273	A	H
		5446.56	50.86	-23.14	74	39.69	32.34	8.41	29.58	100	273	P	H
		5453.04	41.99	-12.01	54	30.78	32.34	8.46	29.59	100	273	A	H
		5131.24	51.54	-22.46	74	40.98	31.96	8.15	29.55	147	180	P	V
		5074.12	42.51	-11.49	54	32.07	31.9	8.08	29.54	147	180	A	V
	*	5300	112.77	-	-	101.91	32.16	8.27	29.57	147	180	P	V
	*	5300	104.79	-	-	93.93	32.16	8.27	29.57	147	180	A	V
		5355.6	51.6	-22.4	74	40.66	32.22	8.29	29.57	147	180	P	V
		5352.48	42.77	-11.23	54	31.83	32.22	8.29	29.57	147	180	A	V



802.11n HT20 CH 64 5320MHz	*	5320	108.57	-	-	97.68	32.18	8.28	29.57	100	269	P	H
	*	5320	101.13	-	-	90.24	32.18	8.28	29.57	100	269	A	H
		5371.04	51.98	-22.02	74	41.01	32.24	8.3	29.57	100	269	P	H
		5351.68	42.52	-11.48	54	31.58	32.22	8.29	29.57	100	269	A	H
													H
													H
	*	5320	111.05	-	-	100.16	32.18	8.28	29.57	100	199	P	V
	*	5320	103.7	-	-	92.81	32.18	8.28	29.57	100	199	A	V
		5350.72	53.56	-20.44	74	42.62	32.22	8.29	29.57	100	199	P	V
		5350.24	43.55	-10.45	54	32.61	32.22	8.29	29.57	100	199	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz
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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11n HT20 CH 52 5260MHz		10520	48.2	-20	68.2	53.28	39.52	12.39	56.99	100	0	P	H	
		15780	46.92	-27.08	74	50.86	37.68	14.71	56.33	100	0	P	H	
													H	
													H	
			10520	47.64	-20.56	68.2	52.72	39.52	12.39	56.99	100	0	P	V
			15780	45.16	-28.84	74	49.1	37.68	14.71	56.33	100	0	P	V
														V
802.11n HT20 CH 60 5300MHz		10600	47.31	-26.69	74	52.2	39.62	12.41	56.92	100	0	P	H	
		15900	45.62	-28.38	74	49.74	37.37	14.77	56.26	100	0	P	H	
													H	
													H	
			10600	46.49	-27.51	74	51.38	39.62	12.41	56.92	100	0	P	V
			15900	47.22	-26.78	74	51.34	37.37	14.77	56.26	100	0	P	V
														V
802.11n HT20 CH 64 5320MHz		10640	48.72	-25.28	74	53.53	39.67	12.41	56.89	100	0	P	H	
		15960	45.83	-28.17	74	50.08	37.19	14.78	56.22	100	0	P	H	
													H	
													H	
			10640	48.13	-25.87	74	52.94	39.67	12.41	56.89	100	0	P	V
			15960	46.32	-27.68	74	50.57	37.19	14.78	56.22	100	0	P	V
														V
Remark	1. No other spurious found.													
	2. All results are PASS against Peak and Average limit line.													



Band 2 5250~5350MHz
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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 54 5270MHz		5065.28	50.59	-23.41	74	40.19	31.88	8.06	29.54	219	91	P	H
		5077.18	43.56	-10.44	54	33.12	31.9	8.08	29.54	219	91	A	H
	*	5270	109.77	-	-	98.94	32.12	8.27	29.56	219	91	P	H
	*	5270	102.72	-	-	91.89	32.12	8.27	29.56	219	91	A	H
		5366.16	51.73	-22.27	74	40.76	32.24	8.3	29.57	219	91	P	H
		5351.76	43.24	-10.76	54	32.3	32.22	8.29	29.57	219	91	A	H
		5073.1	51.24	-22.76	74	40.8	31.9	8.08	29.54	150	177	P	V
		5068.68	43.51	-10.49	54	33.11	31.88	8.06	29.54	150	177	A	V
	*	5270	111.66	-	-	100.83	32.12	8.27	29.56	150	177	P	V
	*	5270	104.54	-	-	93.71	32.12	8.27	29.56	150	177	A	V
		5448.96	51.14	-22.86	74	39.92	32.34	8.46	29.58	150	177	P	V
		5350.08	44.07	-9.93	54	33.13	32.22	8.29	29.57	150	177	A	V
	802.11n HT40 CH 62 5310MHz		5113.56	51.5	-22.5	74	40.97	31.94	8.13	29.54	208	89	P
		5078.88	43.38	-10.62	54	32.94	31.9	8.08	29.54	208	89	A	H
*		5310	108.35	-	-	97.46	32.18	8.28	29.57	208	89	P	H
*		5310	101.41	-	-	90.52	32.18	8.28	29.57	208	89	A	H
		5350.08	55.8	-18.2	74	44.86	32.22	8.29	29.57	208	89	P	H
		5350.32	49.54	-4.46	54	38.6	32.22	8.29	29.57	208	89	A	H
		5093.84	51.41	-22.59	74	40.93	31.92	8.1	29.54	150	179	P	V
		5122.4	43.39	-10.61	54	32.87	31.94	8.13	29.55	150	179	A	V
*		5310	110.24	-	-	99.35	32.18	8.28	29.57	150	179	P	V
*		5310	103.06	-	-	92.17	32.18	8.28	29.57	150	179	A	V
	5351.52	60.1	-13.9	74	49.16	32.22	8.29	29.57	150	179	P	V	
	5350.32	52.18	-1.82	54	41.24	32.22	8.29	29.57	150	179	A	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz
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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 58 5290MHz		5030.94	51.35	-22.65	74	41.03	31.84	8.01	29.53	221	85	P	H
		5048.62	43.46	-10.54	54	33.1	31.86	8.04	29.54	221	85	A	H
	*	5290	102.47	-	-	91.62	32.14	8.27	29.56	221	85	P	H
	*	5290	94.95	-	-	84.1	32.14	8.27	29.56	221	85	A	H
		5368.8	55.91	-18.09	74	44.94	32.24	8.3	29.57	221	85	P	H
		5350.32	49.47	-4.53	54	38.53	32.22	8.29	29.57	221	85	A	H
		5004.08	53.09	-20.91	74	42.81	31.82	7.99	29.53	185	167	P	V
		5081.6	43.3	-10.7	54	32.86	31.9	8.08	29.54	185	167	A	V
	*	5290	104.97	-	-	94.12	32.14	8.27	29.56	185	167	P	V
	*	5290	97.29	-	-	86.44	32.14	8.27	29.56	185	167	A	V
		5359.44	60.54	-13.46	74	49.59	32.22	8.3	29.57	185	167	P	V
	5358.96	52.04	-1.96	54	41.09	32.22	8.3	29.57	185	167	A	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	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 CH 100 5500MHz		5457.84	52.67	-21.33	74	41.46	32.34	8.46	29.59	221	68	P	H	
		5462.48	51.74	-16.46	68.2	40.53	32.34	8.46	29.59	221	68	P	H	
		5457.68	43.2	-10.8	54	31.99	32.34	8.46	29.59	221	68	A	H	
	*	5500	111.01	-	-	99.64	32.4	8.56	29.59	221	68	P	H	
	*	5500	103.44	-	-	92.07	32.4	8.56	29.59	221	68	A	H	
														H
			5455.28	52.07	-21.93	74	40.86	32.34	8.46	29.59	176	173	P	V
			5469.36	53.52	-14.68	68.2	42.24	32.36	8.51	29.59	176	173	P	V
			5458.96	43.94	-10.06	54	32.73	32.34	8.46	29.59	176	173	A	V
	*		5500	112.9	-	-	101.53	32.4	8.56	29.59	176	173	P	V
	*		5500	105.63	-	-	94.26	32.4	8.56	29.59	176	173	A	V
														V
802.11n HT20 CH 116 5580MHz		5379.04	50.85	-23.15	74	39.87	32.26	8.3	29.58	217	226	P	H	
		5467.36	50.22	-17.98	68.2	38.94	32.36	8.51	29.59	217	226	P	H	
		5458.48	41.97	-12.03	54	30.76	32.34	8.46	29.59	217	226	A	H	
	*	5580	110.87	-	-	99.23	32.47	8.8	29.63	217	226	P	H	
	*	5580	103.11	-	-	91.47	32.47	8.8	29.63	217	226	A	H	
			5739.8	51.39	-16.81	68.2	39.63	32.64	8.81	29.69	217	226	P	H
			5448.88	52.26	-21.74	74	41.04	32.34	8.46	29.58	213	256	P	V
			5464	51.71	-16.49	68.2	40.48	32.36	8.46	29.59	213	256	P	V
			5451.28	42.15	-11.85	54	30.94	32.34	8.46	29.59	213	256	A	V
	*		5580	112.71	-	-	101.07	32.47	8.8	29.63	213	256	P	V
	*		5580	105.28	-	-	93.64	32.47	8.8	29.63	213	256	A	V
			5764.37	52.2	-16	68.2	40.44	32.66	8.81	29.71	213	256	P	V



802.11n HT20 CH 140 5700MHz	*	5700	110.38	-	-	98.64	32.59	8.82	29.67	180	228	P	H
	*	5700	102.8	-	-	91.06	32.59	8.82	29.67	180	228	A	H
		5725.08	54.58	-13.62	68.2	42.82	32.62	8.82	29.68	180	228	P	H
													H
													H
													H
	*	5700	114.12	-	-	102.38	32.59	8.82	29.67	100	205	P	V
	*	5700	106.89	-	-	95.15	32.59	8.82	29.67	100	205	A	V
		5728.2	55.26	-12.94	68.2	43.5	32.62	8.82	29.68	100	205	P	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz
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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11n HT20 CH 100 5500MHz		11000	48.23	-25.77	74	52.22	40.1	12.51	56.6	100	0	P	H	
		16500	46.76	-21.44	68.2	49.24	38.3	14.92	55.7	100	0	P	H	
													H	
													H	
			11000	47.67	-26.33	74	51.66	40.1	12.51	56.6	100	0	P	V
			16500	46.77	-21.43	68.2	49.25	38.3	14.92	55.7	100	0	P	V
														V
802.11n HT20 CH 116 5580MHz		11160	47.8	-26.2	74	51.71	40.03	12.59	56.53	100	0	P	H	
		16740	46.43	-21.77	68.2	48.15	39.12	14.96	55.8	100	0	P	H	
													H	
													H	
			11160	48.15	-25.85	74	52.06	40.03	12.59	56.53	100	0	P	V
			16740	46.57	-21.63	68.2	48.29	39.12	14.96	55.8	100	0	P	V
														V
802.11n HT20 CH 140 5700MHz		11400	48.59	-25.41	74	52.37	39.94	12.72	56.44	100	0	P	H	
		17100	49.87	-18.33	68.2	50.63	40.24	15.06	56.06	100	0	P	H	
													H	
													H	
			11400	48.4	-25.6	74	52.18	39.94	12.72	56.44	100	0	P	V
			17100	48.88	-19.32	68.2	49.64	40.24	15.06	56.06	100	0	P	V
														V
Remark	1. No other spurious found.													
	2. All results are PASS against Peak and Average limit line.													



Band 3 - 5470~5725MHz
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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 102 5510MHz		5459.92	57.29	-16.71	74	46.08	32.34	8.46	29.59	208	91	P	H
		5469.04	63.39	-4.81	68.2	52.11	32.36	8.51	29.59	208	91	P	H
		5459.92	47.56	-6.44	54	36.35	32.34	8.46	29.59	208	91	A	H
	*	5510	105.96	-	-	94.56	32.4	8.6	29.6	208	91	P	H
	*	5510	97.84	-	-	86.44	32.4	8.6	29.6	208	91	A	H
		5753.66	52.25	-15.95	68.2	40.47	32.66	8.81	29.69	208	91	P	H
		5459.68	57.77	-16.23	74	46.56	32.34	8.46	29.59	100	188	P	V
		5468.08	66.25	-1.95	68.2	54.97	32.36	8.51	29.59	100	188	P	V
		5459.92	49.83	-4.17	54	38.62	32.34	8.46	29.59	100	188	A	V
	*	5510	109.46	-	-	98.06	32.4	8.6	29.6	100	188	P	V
	*	5510	101.48	-	-	90.08	32.4	8.6	29.6	100	188	A	V
		5746.415	52.03	-16.17	68.2	40.27	32.64	8.81	29.69	100	188	P	V
802.11n HT40 CH 110 5550MHz		5425.84	51.2	-22.8	74	40.12	32.3	8.36	29.58	218	88	P	H
		5469.28	51.54	-16.66	68.2	40.26	32.36	8.51	29.59	218	88	P	H
		5458.96	43.12	-10.88	54	31.91	32.34	8.46	29.59	218	88	A	H
	*	5550	110.32	-	-	98.78	32.45	8.7	29.61	218	88	P	H
	*	5550	104.99	-	-	93.45	32.45	8.7	29.61	218	88	A	H
		5757.44	51.26	-16.94	68.2	39.5	32.66	8.81	29.71	218	88	P	H
		5449.36	51.21	-22.79	74	39.99	32.34	8.46	29.58	102	192	P	V
		5469.52	51.04	-17.16	68.2	39.76	32.36	8.51	29.59	102	192	P	V
		5457.28	44.01	-9.99	54	32.8	32.34	8.46	29.59	102	192	A	V
	*	5550	113.95	-	-	102.41	32.45	8.7	29.61	102	192	P	V
	*	5550	105.53	-	-	93.99	32.45	8.7	29.61	102	192	A	V
		5739.17	51.43	-16.77	68.2	39.67	32.64	8.81	29.69	102	192	P	V



802.11n HT40 CH 134 5670MHz		5459.2	50.97	-23.03	74	39.76	32.34	8.46	29.59	220	66	P	H
		5467.95	50.83	-17.37	68.2	39.55	32.36	8.51	29.59	220	66	P	H
		5454.3	42.65	-11.35	54	31.44	32.34	8.46	29.59	220	66	A	H
	*	5670	109.86	-	-	98.12	32.57	8.83	29.66	220	66	P	H
	*	5670	102.28	-	-	90.54	32.57	8.83	29.66	220	66	A	H
		5725.625	57.52	-10.68	68.2	45.76	32.62	8.82	29.68	220	66	P	H
		5458.15	50.55	-23.45	74	39.34	32.34	8.46	29.59	230	253	P	V
		5460.6	49.8	-18.4	68.2	38.59	32.34	8.46	29.59	230	253	P	V
		5449.05	42.69	-11.31	54	31.47	32.34	8.46	29.58	230	253	A	V
	*	5670	111.78	-	-	100.04	32.57	8.83	29.66	230	253	P	V
	*	5670	104.63	-	-	92.89	32.57	8.83	29.66	230	253	A	V
		5734.13	59.21	-8.99	68.2	47.46	32.62	8.82	29.69	230	253	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz
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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 106 5530MHz		5451.52	60.33	-13.67	74	49.12	32.34	8.46	29.59	214	66	P	H
		5470	65.8	-2.4	68.2	54.52	32.36	8.51	29.59	214	66	P	H
		5450.56	52.28	-1.72	54	41.07	32.34	8.46	29.59	214	66	A	H
	*	5530	99.3	-	-	87.84	32.42	8.65	29.61	214	66	P	H
	*	5530	91.14	-	-	79.68	32.42	8.65	29.61	214	66	A	H
		5745.47	51.54	-16.66	68.2	39.78	32.64	8.81	29.69	214	66	P	H
		5450.08	58.99	-15.01	74	47.78	32.34	8.46	29.59	156	172	P	V
		5467.84	61.53	-6.67	68.2	50.25	32.36	8.51	29.59	156	172	P	V
		5449.6	51.37	-2.63	54	40.15	32.34	8.46	29.58	156	172	A	V
	*	5530	101.65	-	-	90.19	32.42	8.65	29.61	156	172	P	V
	*	5530	93.33	-	-	81.87	32.42	8.65	29.61	156	172	A	V
	5752.4	51.57	-16.63	68.2	39.79	32.66	8.81	29.69	156	172	P	V	
802.11ac VHT80 CH 122 5610MHz		5407.84	51.8	-22.2	74	40.79	32.28	8.31	29.58	207	67	P	H
		5467.36	53.14	-15.06	68.2	41.86	32.36	8.51	29.59	207	67	P	H
		5458.72	43.88	-10.12	54	32.67	32.34	8.46	29.59	207	67	A	H
	*	5610	108.09	-	-	96.38	32.5	8.85	29.64	207	67	P	H
	*	5610	99.76	-	-	88.05	32.5	8.85	29.64	207	67	A	H
		5748.935	53.54	-14.66	68.2	41.78	32.64	8.81	29.69	207	67	P	H
		5447.2	52.89	-21.11	74	41.72	32.34	8.41	29.58	100	176	P	V
		5467.36	55.54	-12.66	68.2	44.26	32.36	8.51	29.59	100	176	P	V
		5459.92	45.13	-8.87	54	33.92	32.34	8.46	29.59	100	176	A	V
	*	5610	109.73	-	-	98.02	32.5	8.85	29.64	100	176	P	V
	*	5610	101.2	-	-	89.49	32.5	8.85	29.64	100	176	A	V
	5726.57	54.93	-13.27	68.2	43.17	32.62	8.82	29.68	100	176	P	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	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 CH 144 5720MHz	*	5720	111.1	-	-	99.34	32.62	8.82	29.68	210	67	P	H
	*	5720	103.63	-	-	91.87	32.62	8.82	29.68	210	67	A	H
													H
													H
													H
													H
	*	5720	114.62	-	-	102.86	32.62	8.82	29.68	177	189	P	V
	*	5720	107.28	-	-	95.52	32.62	8.82	29.68	177	189	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11n HT20 CH 144 5720MHz		11440	46.85	-27.15	74	51.56	39.93	11.79	56.43	100	0	P	H	
		17160	49.33	-18.87	68.2	51.06	40.4	14.04	56.17	100	0	P	H	
													H	
													H	
			11440	47.37	-26.63	74	52.08	39.93	11.79	56.43	100	0	P	V
			17160	48.78	-19.42	68.2	50.51	40.4	14.04	56.17	100	0	P	V
														V
													V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



Band 3 - Straddle Channel
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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 142 5710MHz	*	5710	111.89	-	-	100.14	32.61	8.82	29.68	215	65	P	H
	*	5710	104.11	-	-	92.36	32.61	8.82	29.68	215	65	A	H
													H
													H
													H
													H
	*	5710	114.43	-	-	102.68	32.61	8.82	29.68	165	184	P	V
	*	5710	106.42	-	-	94.67	32.61	8.82	29.68	165	184	A	V
													V
													V
												V	
												V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11n HT40 CH 142 5710MHz		11420	47.76	-26.24	74	52.47	39.93	11.79	56.43	100	0	P	H	
		17130	48.68	-19.52	68.2	50.43	40.32	14.04	56.11	100	0	P	H	
													H	
													H	
			11420	46.48	-27.52	74	51.19	39.93	11.79	56.43	100	0	P	V
			17130	47.9	-20.3	68.2	49.65	40.32	14.04	56.11	100	0	P	V
														V
														V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



Band 3 - Straddle Channel
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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 138 5690MHz	*	5690	107.81	-	-	96.06	32.59	8.83	29.67	211	68	P	H
	*	5690	99.77	-	-	88.02	32.59	8.83	29.67	211	68	A	H
													H
													H
													H
													H
	*	5690	110.46	-	-	98.71	32.59	8.83	29.67	170	186	P	V
	*	5690	102.57	-	-	90.82	32.59	8.83	29.67	170	186	A	V
													V
													V
												V	
												V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11ac VHT80 CH 138 5690MHz		11380	46.52	-27.48	74	51.23	39.95	11.79	56.45	100	0	P	H	
		17070	49.05	-19.15	68.2	50.91	40.16	13.99	56.01	100	0	P	H	
													H	
													H	
			11380	47.76	-26.24	74	52.47	39.95	11.79	56.45	100	0	P	V
			17070	48.35	-19.85	68.2	50.21	40.16	13.99	56.01	100	0	P	V
														V
													V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



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

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	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		92.64	28.39	-15.11	43.5	44.01	15.36	1.19	32.29	-	-	P	H	
		180.93	34.1	-9.4	43.5	49.56	15.13	1.6	32.27	-	-	P	H	
		271.26	44.19	-1.81	46	55.03	19.33	1.93	32.17	101	78	QP	H	
		320.3	39.91	-6.09	46	50.39	19.49	2.09	32.13	-	-	P	H	
		328	33.99	-12.01	46	44.16	19.75	2.15	32.14	-	-	P	H	
		773.9	33.86	-12.14	46	34.38	28.23	3.18	32.04	-	-	P	H	
														H
														H
														H
														H
														H
														H
			51.06	30.37	-9.63	40	47.57	14.13	0.97	32.32	100	0	P	V
			164.46	27.99	-15.51	43.5	42.53	16.18	1.5	32.28	-	-	P	V
			255.99	35.26	-10.74	46	45.94	19.5	1.93	32.19	-	-	P	V
			776	32.32	-13.68	46	32.75	28.25	3.24	32.03	-	-	P	V
			920.2	32.68	-13.32	46	31.02	29.34	3.53	31.33	-	-	P	V
			966.4	34.14	-19.86	54	30.32	31.02	3.57	30.91	-	-	P	V
														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	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	Path	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)
802.11b		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. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB)
2. Level(dBμV/m) = Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
3. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)
= Antenna Factor(dB/m) + Path 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) + Path 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”.