



# FCC RADIO TEST REPORT

**FCC ID** : HLZA20001  
**Equipment** : Tablet PC  
**Brand Name** : acer  
**Model Name** : A20001  
**Marketing Name** : acer ENDURO Urban T1 EUT110-11A,  
EUT110A-11A  
**Applicant** : Acer Incorporated  
8F., No. 88, Sec. 1, Xintai 5th Rd., Xizhi Dist.,  
New Taipei City 22181, Taiwan (R.O.C)  
**Manufacturer** : Acer Incorporated  
8F., No. 88, Sec. 1, Xintai 5th Rd., Xizhi Dist.,  
New Taipei City 22181, Taiwan (R.O.C)  
**Standard** : FCC Part 15 Subpart E §15.407

The product was received on Dec. 07, 2020 and testing was started from Dec. 08, 2020 and completed on Feb. 26, 2021. We, Sporton International Inc. EMC & Wireless Communications Laboratory, 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. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

*Louis Wu*

Approved by: Louis Wu

**Sporton International Inc. EMC & Wireless Communications Laboratory**

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)



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## Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.403(i)	26dB Bandwidth	Pass	-
3.1	2.1049	99% Occupied Bandwidth	Reporting only	-
3.2	15.407(a)	Maximum Conducted Output Power	Pass	-
3.3	15.407(a)	Power Spectral Density	Pass	-
3.4	15.407(b)	Unwanted Emissions	Pass	Under limit 2.10 dB at 5459.200 MHz
3.5	15.207	AC Conducted Emission	Pass	Under limit 5.60 dB at 0.544 MHz
3.6	15.407(c)	Automatically Discontinue Transmission	Pass	-
3.7	15.203 15.407(a)	Antenna Requirement	Pass	-

**Declaration of Conformity:**

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

**Comments and Explanations:**

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

**Reviewed by: Wii Chang**

**Report Producer: Vivian Hsu**



# 1 General Description

## 1.1 Product Feature of Equipment Under Test

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

Product Specification subjective to this standard	
Antenna Type	WLAN: PIFA Antenna Bluetooth: PIFA Antenna GPS / Glonass: PIFA Antenna

Antenna information		
5150 MHz ~ 5250 MHz	Peak Gain (dBi)	0.59
5250 MHz ~ 5350 MHz	Peak Gain (dBi)	-0.13
5470 MHz ~ 5725 MHz	Peak Gain (dBi)	0.53

**Remark:** The above EUT's information was declared by manufacturer. Please refer to Comments and Explanations in report summary.

## 1.2 Modification of EUT

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



### 1.3 Testing Location

<b>Test Site</b>	Sporton International Inc. EMC & Wireless Communications Laboratory
<b>Test Site Location</b>	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978
<b>Test Site No.</b>	<b>Sporton Site No.</b> TH05-HY, CO05-HY, 03CH07-HY

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

FCC designation No.: TW1190

### 1.4 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 414788 D01 Radiated Test Site v01r01.
- ♦ 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. The TAF code is not including all the FCC KDB listed without accreditation.



## 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 <sup>#</sup>	5610	128	5640

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
Straddle Channel	138 <sup>#</sup>	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 "<sup>#</sup>" were 802.11ac VHT80.

## 2.2 Test Mode

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

Modulation	Data Rate
802.11a	6 Mbps
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) Link + H-Pattern + Earphone + SD Card + USB Cable (Charging from AC Adapter)





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

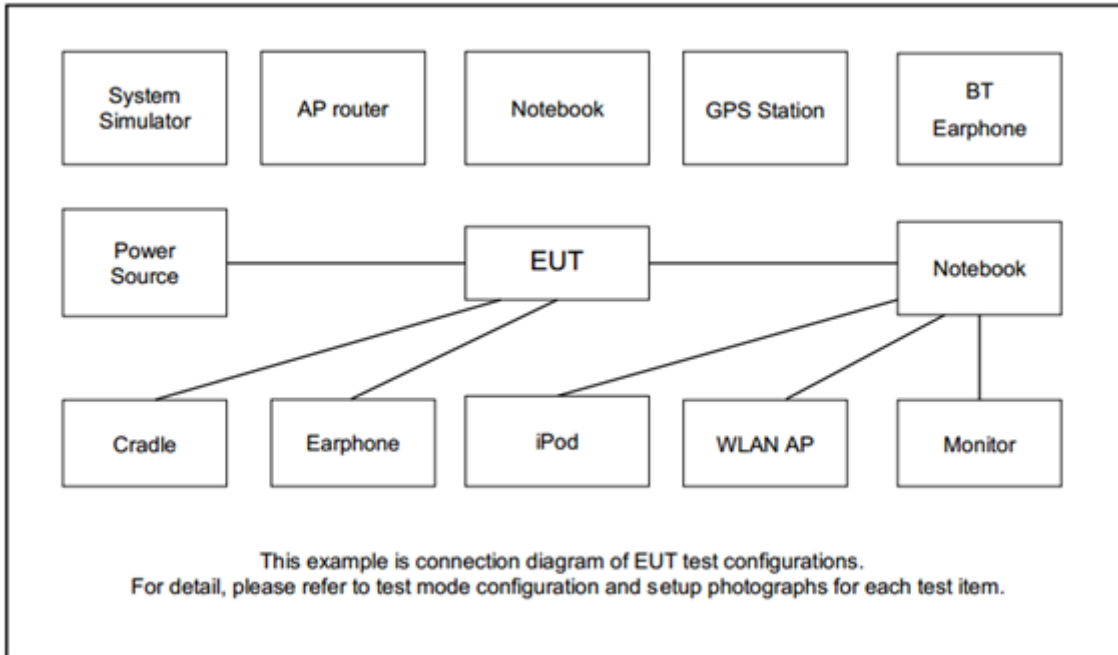
Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725MHz
		802.11n HT20	802.11n HT20	802.11n HT20
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140
Straddle		-	-	144

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	-	-	122
Straddle		-	-	138

Remark: For radiation spurious emission, the final modulation and the worst data rate was reference the max RF conducted power.

### 2.3 Connection Diagram of Test System



### 2.4 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Bluetooth Earphone	Sony Ericsson	MW600	PY7DDA-2029	N/A	N/A
2.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
3.	iPod Earphone	Apple	N/A	Verification	Unshielded, 1.0 m	N/A
4.	Notebook	Dell	Latitude 3400	FCC DOC	N/A	AC I/P : Unshielded, 1.2m DC O/P : Shielded, 1.8m
5.	SD Card	SanDisk	MicroSD HC	FCC DoC	N/A	N/A



## 2.5 EUT Operation Test Setup

The RF test items, 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.

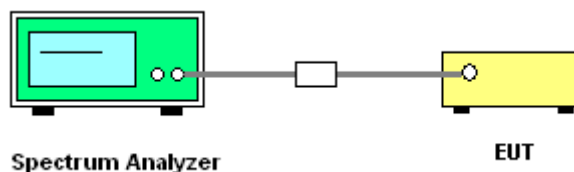
##### 3.1.2 Measuring Instruments

See list of measuring equipment of this test report.

##### 3.1.3 Test Procedures

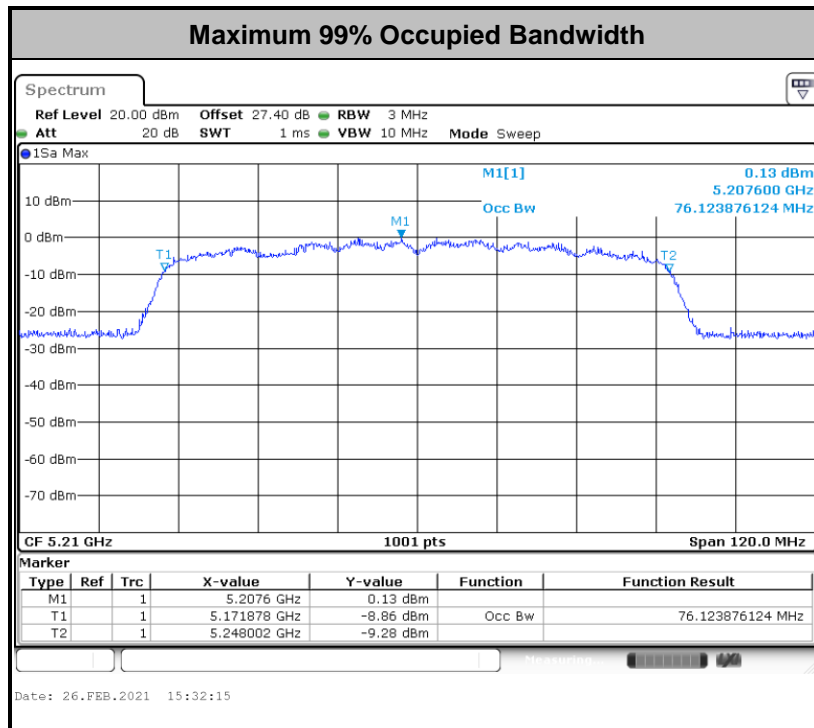
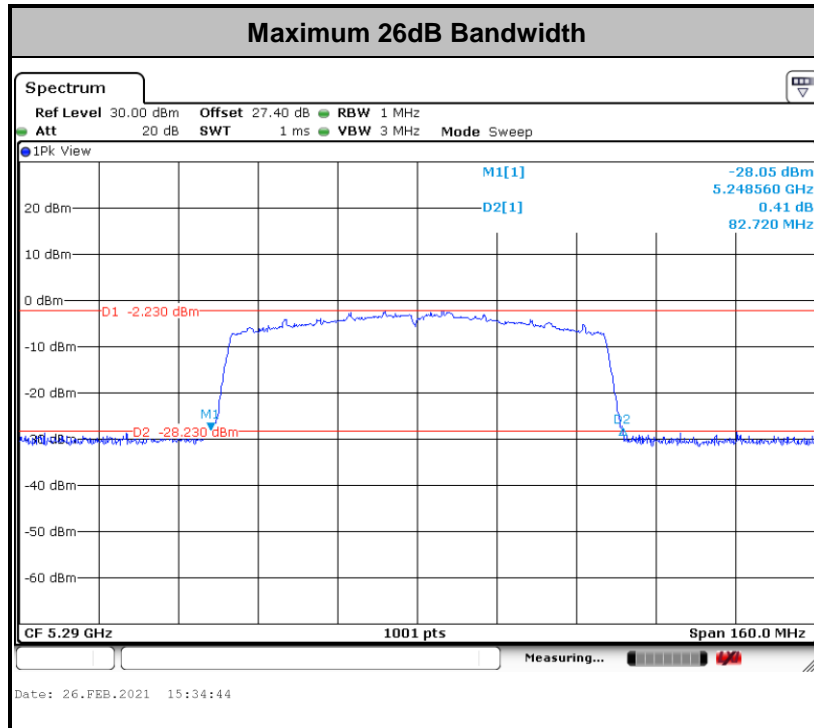
1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section C) Emission bandwidth
2. Set RBW = approximately 1% of the emission bandwidth.
3. Set the VBW > RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 26 dB 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 1-5% of the emission bandwidth 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 the 5.15–5.25 GHz bands:**

■ 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 an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W.

**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

See list of measuring equipment of this test report.

### 3.2.3 Test Procedures

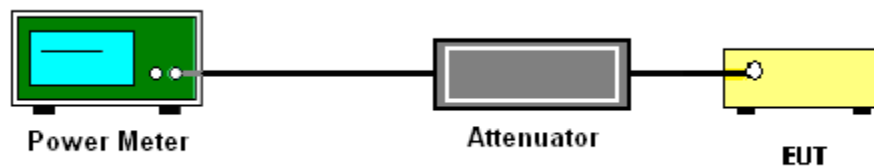
The testing follows Method PM-G of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

Method PM-G (Measurement using a gated RF average power meter):

1. Measurement is performed using a wideband RF power meter.
2. The EUT is configured to transmit at its maximum power control level.
3. Measure the average power of the transmitter.
4. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

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 the 5.15–5.25 GHz bands:**

For mobile and portable client devices in the 5.15–5.25 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1.0 MHz band. 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 1.0 MHz band.

**For the 5.25–5.725 GHz bands:**

The maximum power spectral density shall not exceed 11 dBm in any 1.0 MHz 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

See list of measuring equipment of this test report.



### 3.3.3 Test Procedures

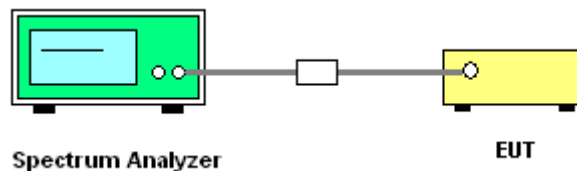
The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.  
Section F) Maximum power spectral density.

#### # Method SA-3 #

(power averaging (rms) detection with max hold):

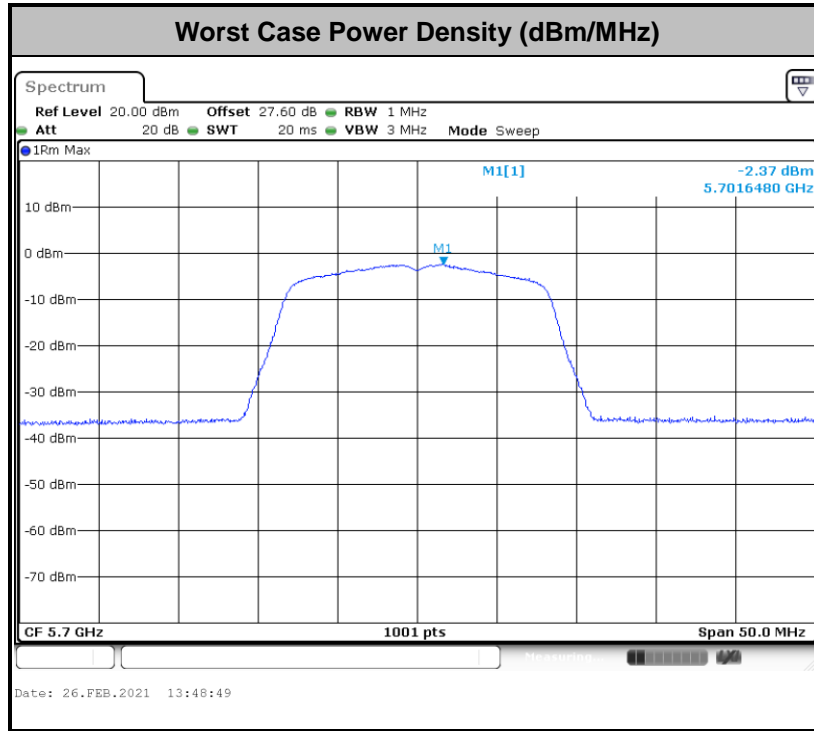
- Set span to encompass the entire emission bandwidth (EBW) of the signal.
  - Set RBW = 1 MHz.
  - Set VBW  $\geq$  3 MHz.
  - Number of points in sweep  $\geq$  2 Span / RBW.
  - Sweep time  $\leq$  (number of points in sweep)  $\times$  T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.  
Detector = power averaging (rms).
  - Trace mode = max hold.
  - Allow max hold to run for at least 60 seconds, or longer as needed to allow the trace to stabilize.
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.

### 3.3.4 Test Setup



### 3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.





### 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.

#### <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.

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



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

(3) KDB789033 D02 v02r01 G)2)c)

(i) Sections 15.407(b)(1-3) specifies the unwanted emissions limit 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.

(ii) Section 15.407(b)(4) specifies the unwanted emissions limit for the U-NII-3 band. A band emissions mask is specified in Section 15.407(b)(4)(i). The emission limits are based on the use of a peak detector.

### 3.4.1 Measuring Instruments

See list of measuring equipment of this test report.

### 3.4.2 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 ≥ 3 MHz
- Detector = Peak
- Sweep time = auto
- Trace mode = max hold

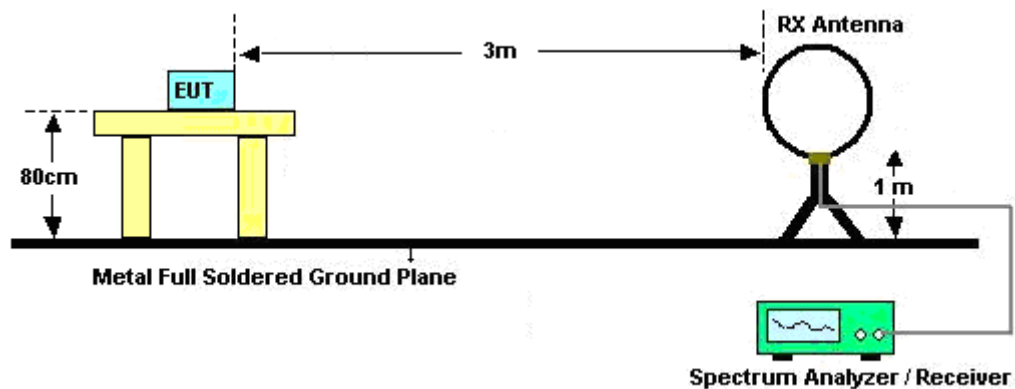
(3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz

- 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.

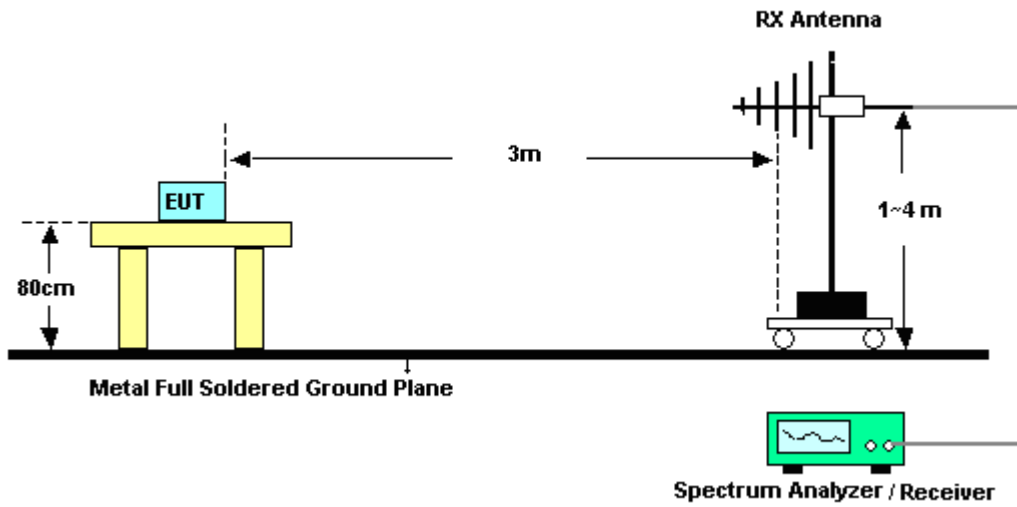
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband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

### 3.4.3 Test Setup

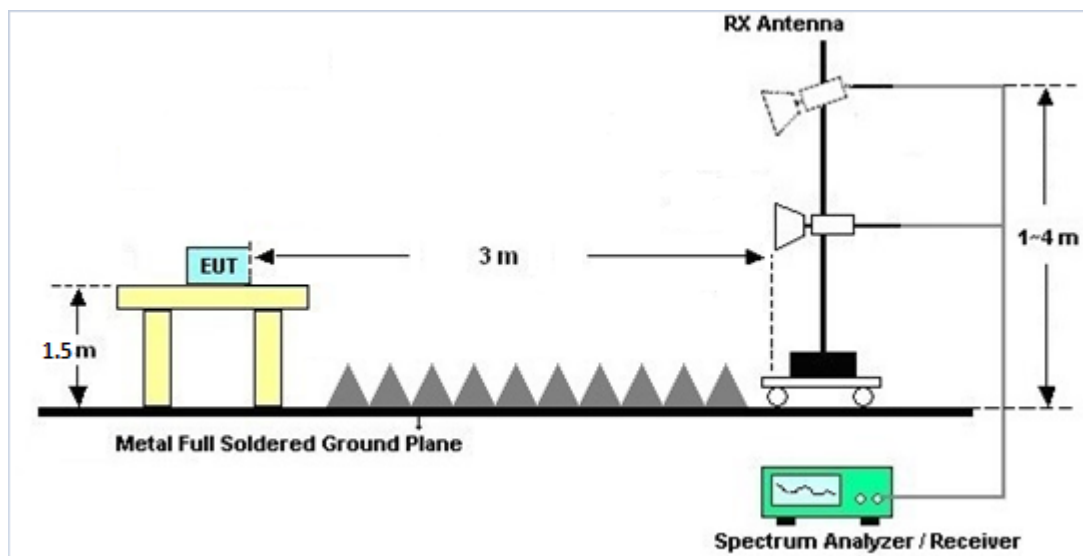
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated test above 1GHz





### **3.4.4 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 alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site v01r01, and the result came out very similar.

### **3.4.5 Test Result of Radiated Spurious at Band Edges**

Please refer to Appendix C and D.

### **3.4.6 Duty Cycle**

Please refer to Appendix E.

### **3.4.7 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 $\mu$ 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

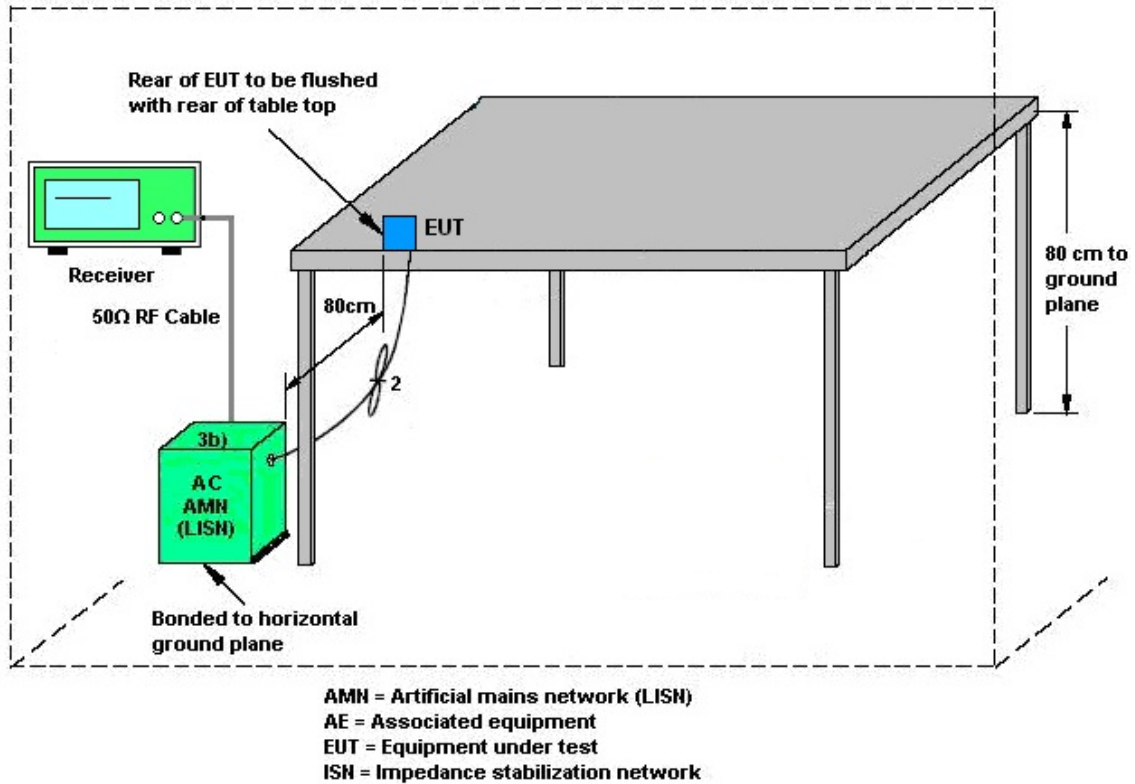
See list of measuring equipment of this test report.

#### 3.5.3 Test Procedures

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



### 3.5.4 Test Setup



### 3.5.5 Test Result of AC Conducted Emission

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**

See list of measuring equipment 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**

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



## 4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Jul. 14, 2020	Dec. 25, 2020~ Dec. 28, 2020	Jul. 13, 2021	Radiation (03CH07-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D0 1N-06	35419 & 03	30MHz~1GHz	Apr. 29, 2020	Dec. 13, 2020~ Dec. 28, 2020	Apr. 28, 2021	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ESCO	3117	00075962	1GHz ~ 18GHz	Dec. 01, 2020	Dec. 13, 2020~ Dec. 28, 2020	Nov. 30, 2021	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA 9170	BBHA917025 1	18GHz~40GHz	Dec. 02, 2020	Dec. 13, 2020~ Dec. 28, 2020	Dec. 01, 2021	Radiation (03CH07-HY)
EMI Test Receiver	Agilent	N9038A(MX E)	MY53290053	20Hz~26.5GHz	May 21, 2020	Dec. 13, 2020~ Dec. 28, 2020	May 20, 2021	Radiation (03CH07-HY)
Spectrum Analyzer	Agilent	N9030A	MY52350276	3Hz~44GHz	Jun. 09, 2020	Dec. 13, 2020~ Dec. 28, 2020	Jun. 08, 2021	Radiation (03CH07-HY)
Preamplifier	COM-POWE R	PA-103A	161241	10MHz~1GHz	May 19, 2020	Dec. 13, 2020~ Dec. 28, 2020	May 18, 2021	Radiation (03CH07-HY)
Preamplifier	MITEQ	AMF-7D-001 01800-30-10 P	1590075	1GHz~18GHz	Apr. 23, 2020	Dec. 13, 2020~ Dec. 28, 2020	Apr. 22, 2021	Radiation (03CH07-HY)
Preamplifier	Agilent	8449B	3008A02362	1GHz~26.5GHz	Oct. 31, 2020	Dec. 13, 2020~ Dec. 28, 2020	Oct. 30, 2021	Radiation (03CH07-HY)
Preamplifier	EMEC	EM18G40G	060801	18GHz~40GHz	Jun. 15, 2020	Dec. 13, 2020~ Dec. 28, 2020	Jun. 14, 2021	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2858/2,80 1606/2	18GHz~40GHz	Feb. 25, 2020	Dec. 13, 2020~ Dec. 28, 2020	Feb. 24, 2021	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY24971/4, MY28655/4	9kHz~30MHz	Feb. 25, 2020	Dec. 13, 2020~ Dec. 28, 2020	Feb. 24, 2021	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY28655/4, MY24971/4, MY15682/4	30MHz~1GHz	Feb. 25, 2020	Dec. 13, 2020~ Dec. 28, 2020	Feb. 24, 2021	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY28655/4, MY24971/4, MY15682/4	1GHz~18GHz	Feb. 25, 2020	Dec. 13, 2020~ Dec. 28, 2020	Feb. 24, 2021	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	801606/2	9KHz ~ 40GHz	N/A	Dec. 13, 2020~ Dec. 28, 2020	N/A	Radiation (03CH07-HY)
Antenna Mast	Max-Full	MFA520BS	N/A	1m~4m	N/A	Dec. 13, 2020~ Dec. 28, 2020	N/A	Radiation (03CH07-HY)
Turn Table	ChainTek	Chaintek 3000	N/A	0~360 Degree	N/A	Dec. 13, 2020~ Dec. 28, 2020	N/A	Radiation (03CH07-HY)
USB Data Logger	TECPEL	TR-32	HE17XB2495	N/A	N/A	Dec. 13, 2020~ Dec. 28, 2020	N/A	Radiation (03CH07-HY)
Software	Audix	E3 6.2009-8-24	N/A	N/A	N/A	Dec. 13, 2020~ Dec. 28, 2020	N/A	Radiation (03CH07-HY)



Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Dec. 14, 2020	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102317	9kHz~3.6GHz	Sep. 11, 2020	Dec. 14, 2020	Sep. 10, 2021	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34913912	N/A	Nov. 18, 2020	Dec. 14, 2020	Nov. 17, 2021	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Nov. 16, 2020	Dec. 14, 2020	Nov. 15, 2021	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Dec. 14, 2020	N/A	Conduction (CO05-HY)
LF Cable	HUBER + SUHNER	RG-214/U	LF01	N/A	Jan. 02, 2020	Dec. 14, 2020	Jan. 01, 2021	Conduction (CO05-HY)
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100851	N/A	Jan. 02, 2020	Dec. 14, 2020	Jan. 01, 2021	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34893241	N/A	Mar. 02, 2020	Dec. 08, 2020~ Feb. 26, 2021	Mar. 01, 2021	Conducted (TH05-HY)
Power Sensor	DARE	RPR3006W	15100041SN O09	10MHz~6GHz	Jan. 22, 2020	Dec. 08, 2020~ Jan. 05, 2021	Jan. 21, 2021	Conducted (TH05-HY)
Power Sensor	DARE	RPR3006W	15100041SN O09	10MHz~6GHz	Jan. 06, 2021	Jan. 06, 2021~ Feb. 26, 2021	Jan. 05, 2022	Conducted (TH05-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101566	10Hz ~ 40GHz	Jul. 22, 2020	Dec. 08, 2020~ Feb. 26, 2021	Jul. 21, 2021	Conducted (TH05-HY)
Switch Box & RF Cable	EM Electronics	EMSW18SE	SW200302	N/A	Mar. 17, 2020	Dec. 08, 2020~ Feb. 26, 2021	Mar. 16, 2021	Conducted (TH05-HY)



## 5 Uncertainty of Evaluation

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

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

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	4.7
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### Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	5.3
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### Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	5.0
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**Appendix A. Test Result of Conducted Test Items**

Test Engineer:	Hank Hsu / Eason Huang / Rebecca Li	Temperature:	21~25	°C
Test Date:	2020/12/08~2021/2/26	Relative Humidity:	51~54	%

**TEST RESULTS DATA**  
**26dB and 99% OBW**

Band I single antenna													
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	17.28	-	21.45	-	-	-	22.38	-	
11a	6Mbps	1	44	5220	17.33	-	21.55	-	-	-	22.39	-	
11a	6Mbps	1	48	5240	17.33	-	21.50	-	-	-	22.39	-	
HT20	MCS0	1	36	5180	17.98	-	21.80	-	-	-	22.55	-	
HT20	MCS0	1	44	5220	18.03	-	21.65	-	-	-	22.56	-	
HT20	MCS0	1	48	5240	18.08	-	21.55	-	-	-	22.57	-	
HT40	MCS0	1	38	5190	37.56	-	42.12	-	-	-	23.01	-	
HT40	MCS0	1	46	5230	37.66	-	42.21	-	-	-	23.01	-	
VHT80	MCS0	1	42	5210	76.12	-	82.08	-	-	-	23.01	-	



**TEST RESULTS DATA**  
**Average Power Table**

Band I single antenna												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	1	36	5180	2.60	-		24.00	-	0.59	-	Pass
11a	6Mbps	1	44	5220	1.80	-		24.00	-	0.59	-	Pass
11a	6Mbps	1	48	5240	1.80	-		24.00	-	0.59	-	Pass
HT20	MCS0	1	36	5180	2.30	-		24.00	-	0.59	-	Pass
HT20	MCS0	1	44	5220	1.80	-		24.00	-	0.59	-	Pass
HT20	MCS0	1	48	5240	1.60	-		24.00	-	0.59	-	Pass
HT40	MCS0	1	38	5190	1.80	-		24.00	-	0.59	-	Pass
HT40	MCS0	1	46	5230	1.30	-		24.00	-	0.59	-	Pass
VHT20	MCS0	1	36	5180	2.20	-		24.00	-	0.59	-	Pass
VHT20	MCS0	1	44	5220	1.70	-		24.00	-	0.59	-	Pass
VHT20	MCS0	1	48	5240	1.50	-		24.00	-	0.59	-	Pass
VHT40	MCS0	1	38	5190	1.70	-		24.00	-	0.59	-	Pass
VHT40	MCS0	1	46	5230	1.20	-		24.00	-	0.59	-	Pass
VHT80	MCS0	1	42	5210	1.30	-		24.00	-	0.59	-	Pass

**TEST RESULTS DATA**  
**Power Spectral Density**

Band I single antenna												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	1	36	5180	-8.26	-		11.00	-	0.59	-	Pass
11a	6Mbps	1	44	5220	-8.39	-		11.00	-	0.59	-	Pass
11a	6Mbps	1	48	5240	-8.74	-		11.00	-	0.59	-	Pass
HT20	MCS0	1	36	5180	-8.52	-		11.00	-	0.59	-	Pass
HT20	MCS0	1	44	5220	-9.05	-		11.00	-	0.59	-	Pass
HT20	MCS0	1	48	5240	-9.13	-		11.00	-	0.59	-	Pass
HT40	MCS0	1	38	5190	-11.67	-		11.00	-	0.59	-	Pass
HT40	MCS0	1	46	5230	-11.85	-		11.00	-	0.59	-	Pass
VHT80	MCS0	1	42	5210	-14.53	-		11.00	-	0.59	-	Pass

**TEST RESULTS DATA**  
**26dB and 99% OBW**

Band II single antenna															
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	17.08	-	21.40	-	23.33	-	29.33	-	23.98	-	
11a	6Mbps	1	60	5300	17.08	-	21.30	-	23.33	-	29.33	-	23.98	-	
11a	6Mbps	1	64	5320	17.03	-	21.40	-	23.31	-	29.31	-	23.98	-	
HT20	MCS0	1	52	5260	17.78	-	21.40	-	23.50	-	29.50	-	23.98	-	
HT20	MCS0	1	60	5300	17.78	-	21.50	-	23.50	-	29.50	-	23.98	-	
HT20	MCS0	1	64	5320	17.73	-	21.40	-	23.49	-	29.49	-	23.98	-	
HT40	MCS0	1	54	5270	36.86	-	42.30	-	23.98	-	30.00	-	23.98	-	
HT40	MCS0	1	62	5310	36.76	-	42.39	-	23.98	-	30.00	-	23.98	-	
VHT80	MCS0	1	58	5290	75.88	-	82.72	-	23.98	-	30.00	-	23.98	-	

**TEST RESULTS DATA**  
**Average Power Table**

Band II single antenna													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	52	5260	3.70	-		23.98	-	-0.13	-	26.99	Pass
11a	6Mbps	1	60	5300	3.90	-		23.98	-	-0.13	-	26.99	Pass
11a	6Mbps	1	64	5320	3.80	-		23.98	-	-0.13	-	26.99	Pass
HT20	MCS0	1	52	5260	3.50	-		23.98	-	-0.13	-	26.99	Pass
HT20	MCS0	1	60	5300	3.90	-		23.98	-	-0.13	-	26.99	Pass
HT20	MCS0	1	64	5320	3.60	-		23.98	-	-0.13	-	26.99	Pass
HT40	MCS0	1	54	5270	3.80	-		23.98	-	-0.13	-	26.99	Pass
HT40	MCS0	1	62	5310	3.90	-		23.98	-	-0.13	-	26.99	Pass
VHT20	MCS0	1	52	5260	3.40	-		23.98	-	-0.13	-	26.99	Pass
VHT20	MCS0	1	60	5300	3.80	-		23.98	-	-0.13	-	26.99	Pass
VHT20	MCS0	1	64	5320	3.50	-		23.98	-	-0.13	-	26.99	Pass
VHT40	MCS0	1	54	5270	3.70	-		23.98	-	-0.13	-	26.99	Pass
VHT40	MCS0	1	62	5310	3.80	-		23.98	-	-0.13	-	26.99	Pass
VHT80	MCS0	1	58	5290	3.70	-		23.98	-	-0.13	-	26.99	Pass

**TEST RESULTS DATA**  
**Power Spectral Density**

Band II single antenna													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)			Pass /Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	52	5260	-6.70	-		11.00	-	-0.13	-		Pass
11a	6Mbps	1	60	5300	-6.91	-		11.00	-	-0.13	-		Pass
11a	6Mbps	1	64	5320	-6.40	-		11.00	-	-0.13	-		Pass
HT20	MCS0	1	52	5260	-6.45	-		11.00	-	-0.13	-		Pass
HT20	MCS0	1	60	5300	-6.97	-		11.00	-	-0.13	-		Pass
HT20	MCS0	1	64	5320	-6.77	-		11.00	-	-0.13	-		Pass
HT40	MCS0	1	54	5270	-9.25	-		11.00	-	-0.13	-		Pass
HT40	MCS0	1	62	5310	-9.26	-		11.00	-	-0.13	-		Pass
VHT80	MCS0	1	58	5290	-12.52	-		11.00	-	-0.13	-		Pass

**TEST RESULTS DATA**  
**26dB and 99% OBW**

Band III single antenna																
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	17.03	-	21.30	-	23.31	-	29.31	-	23.98	-	----	----
11a	6Mbps	1	116	5580	16.93	-	21.35	-	23.29	-	29.29	-	23.98	-	----	----
11a	6Mbps	1	140	5700	16.88	-	21.30	-	23.27	-	29.27	-	23.98	-	----	----
HT20	MCS0	1	100	5500	17.73	-	21.45	-	23.49	-	29.49	-	23.98	-	----	----
HT20	MCS0	1	116	5580	17.73	-	21.55	-	23.49	-	29.49	-	23.98	-	----	----
HT20	MCS0	1	140	5700	17.73	-	21.50	-	23.49	-	29.49	-	23.98	-	----	----
HT40	MCS0	1	102	5510	36.66	-	41.76	-	23.98	-	30.00	-	23.98	-	----	----
HT40	MCS0	1	110	5550	36.56	-	41.94	-	23.98	-	30.00	-	23.98	-	----	----
HT40	MCS0	1	134	5670	36.86	-	42.30	-	23.98	-	30.00	-	23.98	-	----	----
VHT80	MCS0	1	106	5530	75.64	-	81.60	-	23.98	-	30.00	-	23.98	-	----	----
VHT80	MCS0	1	122	5610	75.52	-	81.92	-	23.98	-	30.00	-	23.98	-	----	----

Band III straddle channel single antenna																
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	144	5720	13.54	-	15.65	-	22.32	-	28.32	-	22.95	-	2.6	-
HT20	MCS0	1	144	5720	13.89	-	15.75	-	22.43	-	28.43	-	22.97	-	2.55	-
HT40	MCS0	1	142	5710	33.28	-	35.88	-	23.98	-	30.00	-	23.98	-	2.55	-
VHT80	MCS0	1	138	5690	72.64	-	75.80	-	23.98	-	30.00	-	23.98	-	2.603	-

**TEST RESULTS DATA**  
**Average Power Table**

Band III single antenna													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	100	5500	4.90	-		23.98	-	0.53	-	26.99	Pass
11a	6Mbps	1	116	5580	5.80	-		23.98	-	0.53	-	26.99	Pass
11a	6Mbps	1	140	5700	7.90	-		23.98	-	0.53	-	26.99	Pass
HT20	MCS0	1	100	5500	4.90	-		23.98	-	0.53	-	26.99	Pass
HT20	MCS0	1	116	5580	5.60	-		23.98	-	0.53	-	26.99	Pass
HT20	MCS0	1	140	5700	5.70	-		23.98	-	0.53	-	26.99	Pass
HT40	MCS0	1	102	5510	5.00	-		23.98	-	0.53	-	26.99	Pass
HT40	MCS0	1	110	5550	5.70	-		23.98	-	0.53	-	26.99	Pass
HT40	MCS0	1	134	5670	6.20	-		23.98	-	0.53	-	26.99	Pass
VHT20	MCS0	1	100	5500	4.80	-		23.98	-	0.53	-	26.99	Pass
VHT20	MCS0	1	116	5580	5.50	-		23.98	-	0.53	-	26.99	Pass
VHT20	MCS0	1	140	5700	5.60	-		23.98	-	0.53	-	26.99	Pass
VHT40	MCS0	1	102	5510	4.90	-		23.98	-	0.53	-	26.99	Pass
VHT40	MCS0	1	110	5550	5.60	-		23.98	-	0.53	-	26.99	Pass
VHT40	MCS0	1	134	5670	6.10	-		23.98	-	0.53	-	26.99	Pass
VHT80	MCS0	1	106	5530	4.70	-		23.98	-	0.53	-	26.99	Pass
VHT80	MCS0	1	122	5610	5.40	-		23.98	-	0.53	-	26.99	Pass

Band III straddle channel single antenna													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	144	5720	8.20	-		22.95	-	0.53	-	26.99	Pass
HT20	MCS0	1	144	5720	5.90	-		22.97	-	0.53	-	26.99	Pass
HT40	MCS0	1	142	5710	6.00	-		23.98	-	0.53	-	26.99	Pass
VHT20	MCS0	1	144	5720	5.80	-		23.98	-	0.53	-	26.99	Pass
VHT40	MCS0	1	142	5710	5.90	-		23.98	-	0.53	-	26.99	Pass
VHT80	MCS0	1	138	5690	7.60	-		23.98	-	0.53	-	26.99	Pass

**TEST RESULTS DATA**  
**Power Spectral Density**

Band III single antenna													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)			Pass /Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	100	5500	-4.73	-		11.00	-	0.53	-		Pass
11a	6Mbps	1	116	5580	-4.54	-		11.00	-	0.53	-		Pass
11a	6Mbps	1	140	5700	-2.37	-		11.00	-	0.53	-		Pass
HT20	MCS0	1	100	5500	-5.42	-		11.00	-	0.53	-		Pass
HT20	MCS0	1	116	5580	-5.12	-		11.00	-	0.53	-		Pass
HT20	MCS0	1	140	5700	-4.24	-		11.00	-	0.53	-		Pass
HT40	MCS0	1	102	5510	-7.86	-		11.00	-	0.53	-		Pass
HT40	MCS0	1	110	5550	-7.62	-		11.00	-	0.53	-		Pass
HT40	MCS0	1	134	5670	-7.21	-		11.00	-	0.53	-		Pass
VHT80	MCS0	1	106	5530	-11.22	-		11.00	-	0.53	-		Pass
VHT80	MCS0	1	122	5610	-10.60	-		11.00	-	0.53	-		Pass

Band III straddle channel single antenna													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)			Pass /Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	144	5720	-2.71	-		11.00	-	0.53	-		Pass
HT20	MCS0	1	144	5720	-4.16	-		11.00	-	0.53	-		Pass
HT40	MCS0	1	142	5710	-7.13	-		11.00	-	0.53	-		Pass
VHT80	MCS0	1	138	5690	-8.62	-		11.00	-	0.53	-		Pass





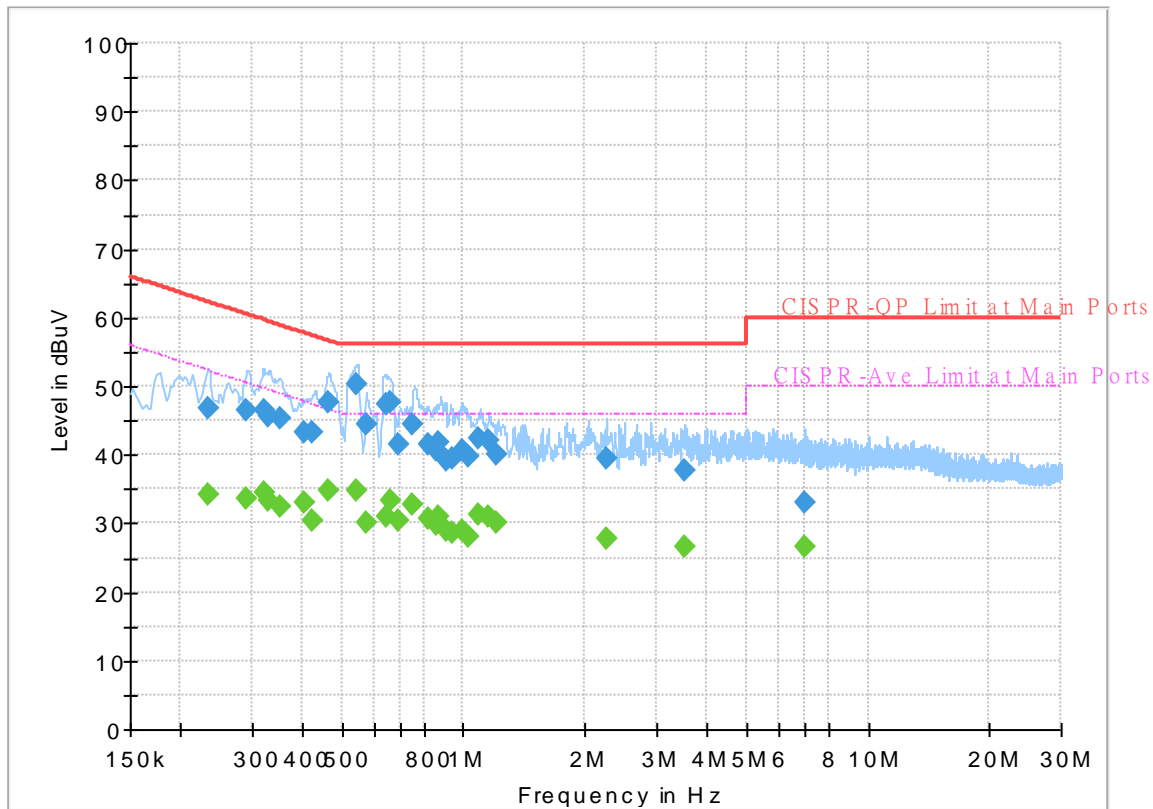
## Appendix B. AC Conducted Emission Test Results

Test Engineer :	Howard Huang	Temperature :	24~26°C
		Relative Humidity :	40~50%

# EUT Information

Report NO : 0N2651  
 Test Mode : Mode 1  
 Test Voltage : 120Vac/60Hz  
 Phase : Line

Full Spectrum



## Final\_Result

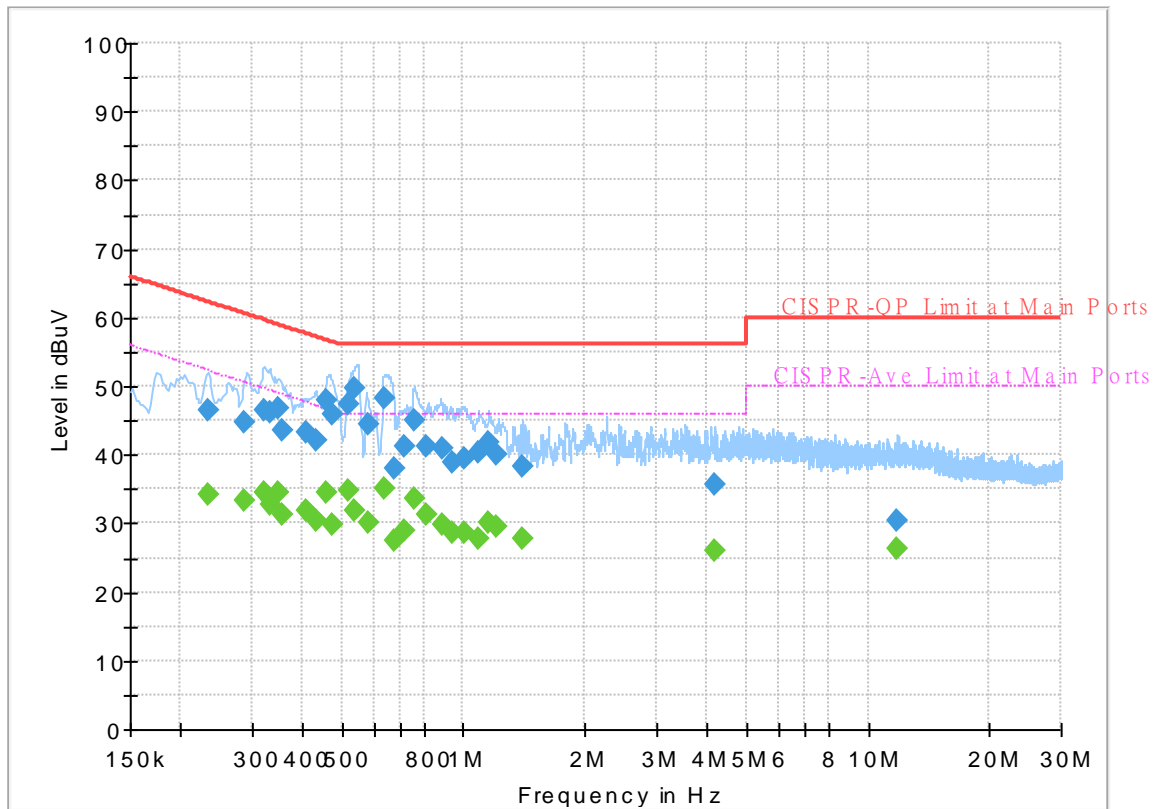
Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.233250	---	34.31	52.33	18.02	L1	OFF	19.5
0.233250	46.65	---	62.33	15.68	L1	OFF	19.5
0.289770	---	33.59	50.53	16.94	L1	OFF	19.5
0.289770	46.38	---	60.53	14.15	L1	OFF	19.5
0.321270	---	34.58	49.67	15.09	L1	OFF	19.5
0.321270	46.42	---	59.67	13.25	L1	OFF	19.5
0.327750	---	33.39	49.51	16.12	L1	OFF	19.5
0.327750	45.52	---	59.51	13.99	L1	OFF	19.5
0.351960	---	32.57	48.92	16.35	L1	OFF	19.5
0.351960	45.20	---	58.92	13.72	L1	OFF	19.5
0.404250	---	32.90	47.77	14.87	L1	OFF	19.5
0.404250	43.34	---	57.77	14.43	L1	OFF	19.5
0.424500	---	30.52	47.36	16.84	L1	OFF	19.5
0.424500	43.42	---	57.36	13.94	L1	OFF	19.5
0.462660	---	34.66	46.65	11.99	L1	OFF	19.5
0.462660	47.64	---	56.65	9.01	L1	OFF	19.5
0.543750	---	34.90	46.00	11.10	L1	OFF	19.6
0.543750	50.40	---	56.00	5.60	L1	OFF	19.6
0.578220	---	30.09	46.00	15.91	L1	OFF	19.6
0.578220	44.53	---	56.00	11.47	L1	OFF	19.6
0.644370	---	31.00	46.00	15.00	L1	OFF	19.6

0.644370	47.32	---	56.00	8.68	L1	OFF	19.6
0.663000	---	33.21	46.00	12.79	L1	OFF	19.6
0.663000	47.80	---	56.00	8.20	L1	OFF	19.6
0.694140	---	30.30	46.00	15.70	L1	OFF	19.6
0.694140	41.42	---	56.00	14.58	L1	OFF	19.6
0.750750	---	32.79	46.00	13.21	L1	OFF	19.6
0.750750	44.42	---	56.00	11.58	L1	OFF	19.6
0.818250	---	30.62	46.00	15.38	L1	OFF	19.6
0.818250	41.45	---	56.00	14.55	L1	OFF	19.6
0.856770	---	29.68	46.00	16.32	L1	OFF	19.6
0.856770	40.51	---	56.00	15.49	L1	OFF	19.6
0.870810	---	31.07	46.00	14.93	L1	OFF	19.6
0.870810	41.86	---	56.00	14.14	L1	OFF	19.6
0.905730	---	28.89	46.00	17.11	L1	OFF	19.6
0.905730	39.31	---	56.00	16.69	L1	OFF	19.6
0.935250	---	28.71	46.00	17.29	L1	OFF	19.6
0.935250	39.37	---	56.00	16.63	L1	OFF	19.6
0.989430	---	28.99	46.00	17.01	L1	OFF	19.6
0.989430	40.64	---	56.00	15.36	L1	OFF	19.6
1.026780	---	27.96	46.00	18.04	L1	OFF	19.6
1.026780	39.71	---	56.00	16.29	L1	OFF	19.6
1.094730	---	31.36	46.00	14.64	L1	OFF	19.6
1.094730	42.36	---	56.00	13.64	L1	OFF	19.6
1.153230	---	31.06	46.00	14.94	L1	OFF	19.6
1.153230	42.11	---	56.00	13.89	L1	OFF	19.6
1.212900	---	30.15	46.00	15.85	L1	OFF	19.6
1.212900	40.19	---	56.00	15.81	L1	OFF	19.6
2.256000	---	27.85	46.00	18.15	L1	OFF	19.7
2.256000	39.40	---	56.00	16.60	L1	OFF	19.7
3.534000	---	26.55	46.00	19.45	L1	OFF	19.7
3.534000	37.60	---	56.00	18.40	L1	OFF	19.7
6.951750	---	26.68	50.00	23.32	L1	OFF	19.9
6.951750	33.17	---	60.00	26.83	L1	OFF	19.9

# EUT Information

Report NO : 0N2651  
 Test Mode : Mode 1  
 Test Voltage : 120Vac/60Hz  
 Phase : Neutral

Full Spectrum



## Final\_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.234060	---	34.21	52.30	18.09	N	OFF	19.6
0.234060	46.38	---	62.30	15.92	N	OFF	19.6
0.287250	---	33.40	50.60	17.20	N	OFF	19.6
0.287250	44.78	---	60.60	15.82	N	OFF	19.6
0.321720	---	34.46	49.66	15.20	N	OFF	19.6
0.321720	46.47	---	59.66	13.19	N	OFF	19.6
0.331800	---	32.84	49.41	16.57	N	OFF	19.6
0.331800	46.15	---	59.41	13.26	N	OFF	19.6
0.347190	---	34.60	49.03	14.43	N	OFF	19.6
0.347190	46.76	---	59.03	12.27	N	OFF	19.6
0.357000	---	31.22	48.80	17.58	N	OFF	19.6
0.357000	43.55	---	58.80	15.25	N	OFF	19.6
0.408840	---	31.76	47.67	15.91	N	OFF	19.6
0.408840	43.13	---	57.67	14.54	N	OFF	19.6
0.435120	---	30.52	47.15	16.63	N	OFF	19.6
0.435120	42.03	---	57.15	15.12	N	OFF	19.6
0.460770	---	34.56	46.68	12.12	N	OFF	19.6
0.460770	47.90	---	56.68	8.78	N	OFF	19.6
0.476250	---	29.77	46.40	16.63	N	OFF	19.6
0.476250	45.83	---	56.40	10.57	N	OFF	19.6
0.519000	---	34.85	46.00	11.15	N	OFF	19.6

0.519000	47.40	---	56.00	8.60	N	OFF	19.6
0.539250	---	31.77	46.00	14.23	N	OFF	19.6
0.539250	49.59	---	56.00	6.41	N	OFF	19.6
0.579480	---	30.24	46.00	15.76	N	OFF	19.6
0.579480	44.36	---	56.00	11.64	N	OFF	19.6
0.638430	---	35.04	46.00	10.96	N	OFF	19.6
0.638430	48.14	---	56.00	7.86	N	OFF	19.6
0.673440	---	27.36	46.00	18.64	N	OFF	19.6
0.673440	37.89	---	56.00	18.11	N	OFF	19.6
0.717630	---	28.89	46.00	17.11	N	OFF	19.6
0.717630	41.28	---	56.00	14.72	N	OFF	19.6
0.756420	---	33.67	46.00	12.33	N	OFF	19.6
0.756420	45.03	---	56.00	10.97	N	OFF	19.6
0.811500	---	31.22	46.00	14.78	N	OFF	19.6
0.811500	41.11	---	56.00	14.89	N	OFF	19.6
0.883500	---	29.86	46.00	16.14	N	OFF	19.6
0.883500	40.94	---	56.00	15.06	N	OFF	19.6
0.935520	---	28.64	46.00	17.36	N	OFF	19.6
0.935520	39.01	---	56.00	16.99	N	OFF	19.6
1.000950	---	28.60	46.00	17.40	N	OFF	19.6
1.000950	39.58	---	56.00	16.42	N	OFF	19.6
1.088250	---	27.67	46.00	18.33	N	OFF	19.6
1.088250	40.45	---	56.00	15.55	N	OFF	19.6
1.152150	---	30.17	46.00	15.83	N	OFF	19.6
1.152150	41.88	---	56.00	14.12	N	OFF	19.6
1.212000	---	29.42	46.00	16.58	N	OFF	19.6
1.212000	40.02	---	56.00	15.98	N	OFF	19.6
1.392270	---	27.66	46.00	18.34	N	OFF	19.6
1.392270	38.32	---	56.00	17.68	N	OFF	19.6
4.175250	---	26.01	46.00	19.99	N	OFF	19.7
4.175250	35.75	---	56.00	20.25	N	OFF	19.7
11.852520	---	26.26	50.00	23.74	N	OFF	20.1
11.852520	30.50	---	60.00	29.50	N	OFF	20.1



### Appendix C. Radiated Spurious Emission

Test Engineer :	Jesse Wang, Stan Hsieh, Ken Wu	Temperature :	21 ~ 23°C
		Relative Humidity :	49 ~ 53%

**Band 1 - 5150~5250MHz**  
**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 36 5180MHz		5148.98	56.85	-17.15	74	46.37	34.2	11.56	35.28	100	68	P	H	
		5149.76	49.7	-4.3	54	39.22	34.2	11.56	35.28	100	68	A	H	
	*	5180	110.08	-	-	99.5	34.27	11.58	35.27	100	68	P	H	
	*	5180	102.88	-	-	92.3	34.27	11.58	35.27	100	68	A	H	
													H	
													H	
			5076.44	49.13	-24.87	74	38.82	34.13	11.49	35.31	400	187	P	V
			5150	41.03	-12.97	54	30.55	34.2	11.56	35.28	400	187	A	V
	*		5180	100.39	-	-	89.81	34.27	11.58	35.27	400	187	P	V
	*		5180	93.12	-	-	82.54	34.27	11.58	35.27	400	187	A	V
													V	
													V	
802.11a CH 44 5220MHz		5140.14	50.32	-23.68	74	39.86	34.2	11.55	35.29	100	69	P	H	
		5130.52	42.81	-11.19	54	32.36	34.2	11.54	35.29	100	69	A	H	
	*	5220	109.46	-	-	98.79	34.3	11.62	35.25	100	69	P	H	
	*	5220	102.27	-	-	91.6	34.3	11.62	35.25	100	69	A	H	
			5363.68	48.11	-25.89	74	37.05	34.47	11.77	35.18	100	69	P	H
			5357.52	39.94	-14.06	54	28.95	34.4	11.77	35.18	100	69	A	H
			5147.68	48.45	-25.55	74	37.97	34.2	11.56	35.28	395	187	P	V
			5088.4	40.02	-13.98	54	29.69	34.13	11.51	35.31	395	187	A	V
	*		5220	101.85	-	-	91.18	34.3	11.62	35.25	395	187	P	V
	*		5220	94.54	-	-	83.87	34.3	11.62	35.25	395	187	A	V
			5350.52	48.24	-25.76	74	37.26	34.4	11.76	35.18	395	187	P	V
			5453.28	39.43	-14.57	54	28.09	34.6	11.87	35.13	395	187	A	V



<b>802.11a CH 48 5240MHz</b>		5140.14	50.17	-23.83	74	39.71	34.2	11.55	35.29	111	68	P	H
		5118.3	42.36	-11.64	54	31.92	34.2	11.53	35.29	111	68	A	H
	*	5240	109.41	-	-	98.71	34.3	11.64	35.24	111	68	P	H
	*	5240	102.21	-	-	91.51	34.3	11.64	35.24	111	68	A	H
		5383.84	48.35	-25.65	74	37.2	34.53	11.79	35.17	111	68	P	H
		5374.32	40.07	-13.93	54	28.99	34.47	11.78	35.17	111	68	A	H
		5108.42	48.78	-25.22	74	38.36	34.2	11.52	35.3	395	188	P	V
		5088.92	40.11	-13.89	54	29.71	34.2	11.51	35.31	395	188	A	V
	*	5240	101.26	-	-	90.56	34.3	11.64	35.24	395	188	P	V
	*	5240	94.27	-	-	83.57	34.3	11.64	35.24	395	188	A	V
		5387.2	47.53	-26.47	74	36.37	34.53	11.8	35.17	395	188	P	V
		5428.64	39.42	-14.58	54	28.12	34.6	11.84	35.14	395	188	A	V
<b>Remark</b>	<ol style="list-style-type: none"> <li>1. No other spurious found.</li> <li>2. All results are PASS against Peak and Average limit line.</li> </ol>												



**Band 1 5150~5250MHz**  
**WIFI 802.11a (Harmonic @ 3m)**

WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
802.11a CH 36 5180MHz		10360	55.38	-12.82	68.2	59.21	37.57	17.63	59.03	100	0	P	H
		15540	43.73	-30.27	74	38.59	40.27	21.64	56.77	100	0	P	H
													H
													H
		10360	54.85	-13.35	68.2	58.68	37.57	17.63	59.03	100	0	P	V
		15540	44.31	-29.69	74	39.17	40.27	21.64	56.77	100	0	P	V
													V
													V
802.11a CH 44 5220MHz		10440	60.37	-7.83	68.2	64.04	37.6	17.7	58.97	100	0	P	H
		15660	44.03	-29.97	74	38.67	40.4	21.71	56.75	100	0	P	H
													H
													H
		10440	56.18	-12.02	68.2	59.85	37.6	17.7	58.97	100	0	P	V
		15660	45.02	-28.98	74	39.66	40.4	21.71	56.75	100	0	P	V
													V
													V
802.11a CH 48 5240MHz		10480	60.81	-7.39	68.2	64.42	37.6	17.73	58.94	100	0	P	H
		15720	45.63	-28.37	74	40.02	40.62	21.73	56.74	100	0	P	H
													H
													H
		10480	56.79	-11.41	68.2	60.4	37.6	17.73	58.94	100	0	P	V
		15720	45.85	-28.15	74	40.24	40.62	21.73	56.74	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												





**Band 1 5150~5250MHz**  
**WIFI 802.11n HT20 (Band Edge @ 3m)**

WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	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		5147.68	57.14	-16.86	74	46.66	34.2	11.56	35.28	100	68	P	H	
		5150	51.05	-2.95	54	40.57	34.2	11.56	35.28	100	68	A	H	
	*	5180	110.04	-	-	99.46	34.27	11.58	35.27	100	68	P	H	
	*	5180	102.67	-	-	92.09	34.27	11.58	35.27	100	68	A	H	
													H	
													H	
			5146.38	50.35	-23.65	74	39.88	34.2	11.55	35.28	379	188	P	V
			5150	42.02	-11.98	54	31.54	34.2	11.56	35.28	379	188	A	V
		*	5180	100.56	-	-	89.98	34.27	11.58	35.27	379	188	P	V
		*	5180	93.25	-	-	82.67	34.27	11.58	35.27	379	188	A	V
													V	
													V	
802.11n HT20 CH 44 5220MHz		5127.4	51.5	-22.5	74	41.05	34.2	11.54	35.29	100	68	P	H	
		5121.16	42.6	-11.4	54	32.16	34.2	11.53	35.29	100	68	A	H	
	*	5220	109.7	-	-	99.03	34.3	11.62	35.25	100	68	P	H	
	*	5220	102.4	-	-	91.73	34.3	11.62	35.25	100	68	A	H	
			5455.8	48.96	-25.04	74	37.62	34.6	11.87	35.13	100	68	P	H
			5363.12	40	-14	54	28.94	34.47	11.77	35.18	100	68	A	H
			5025.48	48.33	-25.67	74	38.15	34.07	11.45	35.34	373	117	P	V
			5101.4	40.42	-13.58	54	30	34.2	11.52	35.3	373	117	A	V
		*	5220	103.05	-	-	92.38	34.3	11.62	35.25	373	117	P	V
		*	5220	95.73	-	-	85.06	34.3	11.62	35.25	373	117	A	V
		5449.36	49.64	-24.36	74	38.31	34.6	11.87	35.14	373	117	P	V	
		5456.36	39.54	-14.46	54	28.2	34.6	11.87	35.13	373	117	A	V	



<b>802.11n</b>  <b>HT20</b>  <b>CH 48</b>  <b>5240MHz</b>		5111.54	50.06	-23.94	74	39.64	34.2	11.52	35.3	100	69	P	H
		5112.06	42.21	-11.79	54	31.78	34.2	11.53	35.3	100	69	A	H
	*	5240	108.89	-	-	98.19	34.3	11.64	35.24	100	69	P	H
	*	5240	101.6	-	-	90.9	34.3	11.64	35.24	100	69	A	H
		5435.36	48.27	-25.73	74	36.96	34.6	11.85	35.14	100	69	P	H
		5376	40.15	-13.85	54	29.07	34.47	11.78	35.17	100	69	A	H
		5071.5	48.18	-25.82	74	37.87	34.13	11.49	35.31	375	126	P	V
		5107.12	40.16	-13.84	54	29.74	34.2	11.52	35.3	375	126	A	V
	*	5240	101.79	-	-	91.09	34.3	11.64	35.24	375	126	P	V
	*	5240	94.41	-	-	83.71	34.3	11.64	35.24	375	126	A	V
		5456.08	48.12	-25.88	74	36.78	34.6	11.87	35.13	375	126	P	V
		5440.96	39.47	-14.53	54	28.15	34.6	11.86	35.14	375	126	A	V
<b>Remark</b>	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	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	56.23	-11.97	68.2	60.06	37.57	17.63	59.03	100	0	P	H	
		15540	43.56	-30.44	74	38.42	40.27	21.64	56.77	100	0	P	H	
													H	
													H	
			10360	53.02	-15.18	68.2	56.85	37.57	17.63	59.03	100	0	P	V
			15540	44.25	-29.75	74	39.11	40.27	21.64	56.77	100	0	P	V
														V
802.11n HT20 CH 44 5220MHz		10440	58.91	-9.29	68.2	62.58	37.6	17.7	58.97	100	0	P	H	
		15660	43.85	-30.15	74	38.49	40.4	21.71	56.75	100	0	P	H	
													H	
													H	
			10440	55.62	-12.58	68.2	59.29	37.6	17.7	58.97	100	0	P	V
			15660	44.74	-29.26	74	39.38	40.4	21.71	56.75	100	0	P	V
														V
802.11n HT20 CH 48 5240MHz		10480	62.91	-5.29	68.2	66.52	37.6	17.73	58.94	100	0	P	H	
		15720	45.14	-28.86	74	39.53	40.62	21.73	56.74	100	0	P	H	
													H	
													H	
			10480	56.38	-11.82	68.2	59.99	37.6	17.73	58.94	100	0	P	V
			15720	46.23	-27.77	74	40.62	40.62	21.73	56.74	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	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		5150	57.81	-16.19	74	47.33	34.2	11.56	35.28	100	68	P	H
		5150	50.74	-3.26	54	40.26	34.2	11.56	35.28	100	68	A	H
	*	5190	102.88	-	-	92.29	34.27	11.59	35.27	100	68	P	H
	*	5190	95.86	-	-	85.27	34.27	11.59	35.27	100	68	A	H
		5357.8	47.5	-26.5	74	36.51	34.4	11.77	35.18	100	68	P	H
		5361.16	40.51	-13.49	54	29.45	34.47	11.77	35.18	100	68	A	H
		5147.68	51.49	-22.51	74	41.01	34.2	11.56	35.28	100	101	P	V
		5150	45.63	-8.37	54	35.15	34.2	11.56	35.28	100	101	A	V
	*	5190	97.28	-	-	86.69	34.27	11.59	35.27	100	101	P	V
	*	5190	90.37	-	-	79.78	34.27	11.59	35.27	100	101	A	V
		5388.04	48.4	-25.6	74	37.24	34.53	11.8	35.17	100	101	P	V
		5453.84	40.74	-13.26	54	29.4	34.6	11.87	35.13	100	101	A	V
802.11n HT40 CH 46 5230MHz		5145.34	50.4	-23.6	74	39.93	34.2	11.55	35.28	100	56	P	H
		5149.5	43.13	-10.87	54	32.65	34.2	11.56	35.28	100	56	A	H
	*	5230	105.54	-	-	94.85	34.3	11.63	35.24	100	56	P	H
	*	5230	98.79	-	-	88.1	34.3	11.63	35.24	100	56	A	H
		5356.4	48.56	-25.44	74	37.58	34.4	11.76	35.18	100	56	P	H
		5385.52	41.35	-12.65	54	30.2	34.53	11.79	35.17	100	56	A	H
		5118.04	50.03	-23.97	74	39.6	34.2	11.53	35.3	100	101	P	V
		5149.76	41.9	-12.1	54	31.42	34.2	11.56	35.28	100	101	A	V
	*	5230	101.4	-	-	90.71	34.3	11.63	35.24	100	101	P	V
	*	5230	94.66	-	-	83.97	34.3	11.63	35.24	100	101	A	V
	5404.56	47.49	-26.51	74	36.23	34.6	11.82	35.16	100	101	P	V	
	5444.32	40.42	-13.58	54	29.1	34.6	11.86	35.14	100	101	A	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



**Band 1 5150~5250MHz**  
**WIFI 802.11n HT40 (Harmonic @ 3m)**

WIFI Ant. 1	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		10380	47.59	-20.61	68.2	51.38	37.58	17.65	59.02	100	0	P	H	
		15570	44.11	-29.89	74	38.98	40.23	21.67	56.77	100	0	P	H	
													H	
													H	
			10380	45.69	-22.51	68.2	49.48	37.58	17.65	59.02	100	0	P	V
			15570	44	-30	74	38.87	40.23	21.67	56.77	100	0	P	V
														V
802.11n HT40 CH 46 5230MHz		10460	55.59	-12.61	68.2	59.24	37.6	17.71	58.96	100	0	P	H	
		15690	44.14	-29.86	74	38.64	40.53	21.72	56.75	100	0	P	H	
													H	
													H	
			10460	52.64	-15.56	68.2	56.29	37.6	17.71	58.96	100	0	P	V
			15690	45.47	-28.53	74	39.97	40.53	21.72	56.75	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 802.11ac VHT80 (Band Edge @ 3m)**

WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	Path Loss ( dB )	Preamp Factor ( dB )	Ant Pos ( cm )	Table Pos ( deg )	Peak Avg. ( P/A )	Pol. ( H/V )
<b>802.11ac VHT80 CH 42 5210MHz</b>		5148.98	56.63	-17.37	74	46.15	34.2	11.56	35.28	100	68	P	H
		5148.72	51.24	-2.76	54	40.76	34.2	11.56	35.28	100	68	A	H
	*	5210	96.57	-	-	85.91	34.3	11.61	35.25	100	68	P	H
	*	5210	90	-	-	79.34	34.3	11.61	35.25	100	68	A	H
		5382.72	48.43	-25.57	74	37.28	34.53	11.79	35.17	100	68	P	H
		5432.28	42.3	-11.7	54	30.99	34.6	11.85	35.14	100	68	A	H
		5148.98	51.21	-22.79	74	40.73	34.2	11.56	35.28	115	102	P	V
		5146.9	46.93	-7.07	54	36.46	34.2	11.55	35.28	115	102	A	V
	*	5212	91.37	-	-	80.71	34.3	11.61	35.25	115	102	P	V
	*	5212	85	-	-	74.34	34.3	11.61	35.25	115	102	A	V
		5424.72	48.29	-25.71	74	36.99	34.6	11.84	35.14	115	102	P	V
	5415.76	41.62	-12.38	54	30.35	34.6	11.83	35.16	115	102	A	V	
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB/m )	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		10420	43.57	-24.63	68.2	47.28	37.6	17.68	58.99	100	0	P	V	
		15630	43.79	-30.21	74	38.53	40.33	21.69	56.76	100	0	P	V	
													H	
													H	
			10420	45.28	-22.92	68.2	48.99	37.6	17.68	58.99	100	0	P	H
			15630	44.11	-29.89	74	38.85	40.33	21.69	56.76	100	0	P	H
														V
													V	
<b>Remark</b>	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 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 52 5260MHz		5147	50.64	-23.36	74	40.17	34.2	11.55	35.28	111	69	P	H
		5133.35	41.84	-12.16	54	31.39	34.2	11.54	35.29	111	69	A	H
	*	5260	109.11	-	-	98.31	34.37	11.66	35.23	111	69	P	H
	*	5260	101.82	-	-	91.02	34.37	11.66	35.23	111	69	A	H
		5365.44	49.43	-24.57	74	38.37	34.47	11.77	35.18	111	69	P	H
		5350.56	40.59	-13.41	54	29.61	34.4	11.76	35.18	111	69	A	H
		5146.65	49.72	-24.28	74	39.25	34.2	11.55	35.28	100	101	P	V
		5116.9	40.18	-13.82	54	29.75	34.2	11.53	35.3	100	101	A	V
	*	5260	104.18	-	-	93.38	34.37	11.66	35.23	100	101	P	V
	*	5260	96.94	-	-	86.14	34.37	11.66	35.23	100	101	A	V
		5451.36	48.08	-25.92	74	36.74	34.6	11.87	35.13	100	101	P	V
		5459.76	39.69	-14.31	54	28.34	34.6	11.88	35.13	100	101	A	V
802.11a CH 60 5300MHz		5143.15	47.69	-26.31	74	37.23	34.2	11.55	35.29	101	63	P	H
		5148.75	40.25	-13.75	54	29.77	34.2	11.56	35.28	101	63	A	H
	*	5300	106.73	-	-	95.73	34.5	11.7	35.2	101	63	P	H
	*	5300	99.8	-	-	88.8	34.5	11.7	35.2	101	63	A	H
		5386.56	49.01	-24.99	74	37.85	34.53	11.8	35.17	101	63	P	H
		5352.96	40.44	-13.56	54	29.46	34.4	11.76	35.18	101	63	A	H
		5115.15	48.4	-25.6	74	37.97	34.2	11.53	35.3	355	81	P	V
		5128.8	39.15	-14.85	54	28.7	34.2	11.54	35.29	355	81	A	V
	*	5300	101.46	-	-	90.46	34.5	11.7	35.2	355	81	P	V
	*	5300	94.45	-	-	83.45	34.5	11.7	35.2	355	81	A	V
		5368.56	47.75	-26.25	74	36.68	34.47	11.78	35.18	355	81	P	V
		5406.96	38.82	-15.18	54	27.56	34.6	11.82	35.16	355	81	A	V





<b>802.11a CH 64 5320MHz</b>	*	5320	104.88	-	-	93.88	34.47	11.73	35.2	100	63	P	H
	*	5320	96.97	-	-	85.97	34.47	11.73	35.2	100	63	A	H
		5352.32	47.9	-26.1	74	36.92	34.4	11.76	35.18	100	63	P	H
		5350.08	40.22	-13.78	54	29.24	34.4	11.76	35.18	100	63	A	H
													H
													H
	*	5320	99.58	-	-	88.58	34.47	11.73	35.2	399	85	P	V
	*	5320	91.59	-	-	80.59	34.47	11.73	35.2	399	85	A	V
		5435.68	47.64	-26.36	74	36.33	34.6	11.85	35.14	399	85	P	V
		5449.12	38.93	-15.07	54	27.6	34.6	11.87	35.14	399	85	A	V
													V
													V
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



**Band 2 5250~5350MHz**  
**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 52 5260MHz		10520	59.41	-8.79	68.2	62.98	37.6	17.75	58.92	100	0	P	H	
		15780	44.9	-29.1	74	39.21	40.67	21.76	56.74	100	0	P	H	
													H	
													H	
			10520	56.07	-12.13	68.2	59.64	37.6	17.75	58.92	100	0	P	V
			15780	45.82	-28.18	74	40.13	40.67	21.76	56.74	100	0	P	V
														V
														V
802.11a CH 60 5300MHz		10600	61.09	-12.91	74	64.56	37.6	17.81	58.88	100	274	P	H	
		10600	51.43	-2.57	54	54.9	37.6	17.81	58.88	100	274	A	H	
		15900	45.52	-28.48	74	39.61	40.8	21.83	56.72	100	0	P	H	
													H	
			10600	56.95	-17.05	74	60.42	37.6	17.81	58.88	236	344	P	V
			10600	47.43	-6.57	54	50.9	37.6	17.81	58.88	236	344	A	V
			15900	47.19	-26.81	74	41.28	40.8	21.83	56.72	100	0	P	V
														V
802.11a CH 64 5320MHz		10640	60.57	-13.43	74	63.96	37.63	17.84	58.86	100	278	P	H	
		10640	51.03	-2.97	54	54.42	37.63	17.84	58.86	100	278	A	H	
		15960	46.36	-27.64	74	40.28	40.93	21.86	56.71	100	0	P	H	
													H	
			10650	49.65	-24.35	74	53.01	37.65	17.85	58.86	100	0	P	V
			15960	44.91	-29.09	74	38.83	40.93	21.86	56.71	100	0	P	V
			10650	49.65	-24.35	74	53.01	37.65	17.85	58.86	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 HT20 (Band Edge @ 3m)**

WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	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		5137.9	50.19	-23.81	74	39.73	34.2	11.55	35.29	107	69	P	H
		5130.2	41.92	-12.08	54	31.47	34.2	11.54	35.29	107	69	A	H
	*	5260	109.18	-	-	98.38	34.37	11.66	35.23	107	69	P	H
	*	5260	102.07	-	-	91.27	34.37	11.66	35.23	107	69	A	H
		5350.08	48.03	-25.97	74	37.05	34.4	11.76	35.18	107	69	P	H
		5377.92	40.63	-13.37	54	29.48	34.53	11.79	35.17	107	69	A	H
		5113.05	48.47	-25.53	74	38.04	34.2	11.53	35.3	100	101	P	V
		5124.6	40.37	-13.63	54	29.92	34.2	11.54	35.29	100	101	A	V
	*	5260	104.42	-	-	93.62	34.37	11.66	35.23	100	101	P	V
	*	5260	97.01	-	-	86.21	34.37	11.66	35.23	100	101	A	V
		5391.12	48.6	-25.4	74	37.44	34.53	11.8	35.17	100	101	P	V
		5456.88	39.82	-14.18	54	28.47	34.6	11.88	35.13	100	101	A	V
802.11n HT20 CH 60 5300MHz		5140.7	48.14	-25.86	74	37.68	34.2	11.55	35.29	101	63	P	H
		5138.6	40.06	-13.94	54	29.6	34.2	11.55	35.29	101	63	A	H
	*	5300	106.6	-	-	95.6	34.5	11.7	35.2	101	63	P	H
	*	5300	98.2	-	-	87.2	34.5	11.7	35.2	101	63	A	H
		5350.56	48.84	-25.16	74	37.86	34.4	11.76	35.18	101	63	P	H
		5362.08	40.45	-13.55	54	29.39	34.47	11.77	35.18	101	63	A	H
		5043.05	48.36	-25.64	74	38.22	34	11.47	35.33	355	81	P	V
		5123.2	39.14	-14.86	54	28.7	34.2	11.53	35.29	355	81	A	V
	*	5300	100.7	-	-	89.7	34.5	11.7	35.2	355	81	P	V
	*	5300	92.98	-	-	81.98	34.5	11.7	35.2	355	81	A	V
	5407.44	47.15	-26.85	74	35.89	34.6	11.82	35.16	355	81	P	V	
	5419.2	38.89	-15.11	54	27.62	34.6	11.83	35.16	355	81	A	V	



<b>802.11n</b> <b>HT20</b> <b>CH 64</b> <b>5320MHz</b>	*	5320	105.21	-	-	94.21	34.47	11.73	35.2	109	63	P	H
	*	5320	97.32	-	-	86.32	34.47	11.73	35.2	109	63	A	H
		5351.84	53.61	-20.39	74	42.63	34.4	11.76	35.18	109	63	P	H
		5350.08	41.8	-12.2	54	30.82	34.4	11.76	35.18	109	63	A	H
													H
													H
	*	5320	99.67	-	-	88.67	34.47	11.73	35.2	399	85	P	V
	*	5320	91.8	-	-	80.8	34.47	11.73	35.2	399	85	A	V
		5401.76	46.99	-27.01	74	35.74	34.6	11.81	35.16	399	85	P	V
		5459.36	38.94	-15.06	54	27.59	34.6	11.88	35.13	399	85	A	V
													V
													V
<b>Remark</b>	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	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	63.27	-4.93	68.2	66.84	37.6	17.75	58.92	100	0	P	H	
		15780	48.06	-25.94	74	42.37	40.67	21.76	56.74	100	0	P	H	
													H	
													H	
			10520	57.65	-10.55	68.2	61.22	37.6	17.75	58.92	100	0	P	V
			15780	47.48	-26.52	74	41.79	40.67	21.76	56.74	100	0	P	V
														V
802.11n HT20 CH 60 5300MHz		10600	59.48	-14.52	74	62.95	37.6	17.81	58.88	100	278	P	H	
		10600	51.4	-2.6	54	54.87	37.6	17.81	58.88	100	278	A	H	
		15900	46.43	-27.57	74	40.52	40.8	21.83	56.72	100	0	P	H	
													H	
			10600	50.22	-23.78	74	53.69	37.6	17.81	58.88	100	0	P	V
			15900	45.84	-28.16	74	39.93	40.8	21.83	56.72	100	0	P	V
			10600	50.22	-23.78	74	53.69	37.6	17.81	58.88	100	0	P	V
802.11n HT20 CH 64 5320MHz		10640	60.47	-13.53	74	63.86	37.63	17.84	58.86	100	278	P	H	
		10640	51.12	-2.88	54	54.51	37.63	17.84	58.86	100	278	A	H	
		15960	45.23	-28.77	74	39.15	40.93	21.86	56.71	100	0	P	H	
													H	
			10640	49.87	-24.13	74	53.26	37.63	17.84	58.86	100	0	P	V
			15960	44.46	-29.54	74	38.38	40.93	21.86	56.71	100	0	P	V
			10640	49.87	-24.13	74	53.26	37.63	17.84	58.86	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	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		5133.7	49.17	-24.83	74	38.72	34.2	11.54	35.29	113	70	P	H	
		5124.6	42.46	-11.54	54	32.01	34.2	11.54	35.29	113	70	A	H	
	*	5270	106.53	-	-	95.72	34.37	11.67	35.23	113	70	P	H	
	*	5270	99.51	-	-	88.7	34.37	11.67	35.23	113	70	A	H	
		5411.52	48.6	-25.4	74	37.34	34.6	11.82	35.16	113	70	P	H	
		5351.76	42.16	-11.84	54	31.18	34.4	11.76	35.18	113	70	A	H	
		5097.65	48.43	-25.57	74	38.02	34.2	11.51	35.3	120	102	P	V	
		5130.55	40.91	-13.09	54	30.46	34.2	11.54	35.29	120	102	A	V	
	*	5270	101.27	-	-	90.46	34.37	11.67	35.23	120	102	P	V	
	*	5270	94.26	-	-	83.45	34.37	11.67	35.23	120	102	A	V	
		5447.52	47.57	-26.43	74	36.25	34.6	11.86	35.14	120	102	P	V	
		5443.2	40.51	-13.49	54	29.19	34.6	11.86	35.14	120	102	A	V	
	802.11n HT40 CH 62 5310MHz		5085.75	49.32	-24.68	74	39	34.13	11.5	35.31	100	58	P	H
			5121.1	41.61	-12.39	54	31.17	34.2	11.53	35.29	100	58	A	H
*		5310	103.13	-	-	92.14	34.47	11.72	35.2	100	58	P	H	
*		5310	96.48	-	-	85.49	34.47	11.72	35.2	100	58	A	H	
		5350.08	56.13	-17.87	74	45.15	34.4	11.76	35.18	100	58	P	H	
		5350.32	51.34	-2.66	54	40.36	34.4	11.76	35.18	100	58	A	H	
		5124.25	48.67	-25.33	74	38.22	34.2	11.54	35.29	122	101	P	V	
		5111.65	40.97	-13.03	54	30.55	34.2	11.52	35.3	122	101	A	V	
*		5310	98.42	-	-	87.43	34.47	11.72	35.2	122	101	P	V	
*		5310	92.05	-	-	81.06	34.47	11.72	35.2	122	101	A	V	
	5353.92	53.52	-20.48	74	42.54	34.4	11.76	35.18	122	101	P	V		
	5352	45.99	-8.01	54	35.01	34.4	11.76	35.18	122	101	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 HT40 (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)	
802.11n HT40 CH 54 5270MHz		10540	56.47	-11.73	68.2	60.02	37.6	17.76	58.91	100	0	P	H	
		15810	45.85	-28.15	74	40.1	40.7	21.78	56.73	100	0	P	H	
													H	
													H	
			10540	52.3	-15.9	68.2	55.85	37.6	17.76	58.91	100	0	P	V
			15810	45.69	-28.31	74	39.94	40.7	21.78	56.73	100	0	P	V
														V
														V
802.11n HT40 CH 62 5310MHz		10620	55.92	-18.08	74	59.34	37.62	17.83	58.87	100	278	P	H	
		10620	49.15	-4.85	54	52.57	37.62	17.83	58.87	100	278	A	H	
		15930	45.59	-28.41	74	39.58	40.87	21.85	56.71	100	0	P	H	
													H	
			10620	49.97	-24.03	74	53.39	37.62	17.83	58.87	100	0	P	V
			15930	45.99	-28.01	74	39.98	40.87	21.85	56.71	100	0	P	V
														V
														V
<b>Remark</b>	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	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)
<b>802.11ac VHT80 CH 58 5290MHz</b>		5112.35	50.05	-23.95	74	39.62	34.2	11.53	35.3	106	70	P	H
		5138.95	43.28	-10.72	54	32.82	34.2	11.55	35.29	106	70	A	H
	*	5290	99.33	-	-	88.43	34.43	11.69	35.22	106	70	P	H
	*	5290	92.45	-	-	81.55	34.43	11.69	35.22	106	70	A	H
		5350.08	57.3	-16.7	74	46.32	34.4	11.76	35.18	106	70	P	H
		5350.08	50.65	-3.35	54	39.67	34.4	11.76	35.18	106	70	A	H
		5079.1	48.85	-25.15	74	38.53	34.13	11.5	35.31	117	102	P	V
		5078.4	41.97	-12.03	54	31.65	34.13	11.5	35.31	117	102	A	V
	*	5290	94.12	-	-	83.22	34.43	11.69	35.22	117	102	P	V
	*	5290	87.39	-	-	76.49	34.43	11.69	35.22	117	102	A	V
		5350.08	52.85	-21.15	74	41.87	34.4	11.76	35.18	117	102	P	V
	5354.16	46.55	-7.45	54	35.57	34.4	11.76	35.18	117	102	A	V	
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												





**Band 2 5250~5350MHz  
WIFI 802.11ac VHT80 (Harmonic @ 3m)**

WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level (dBμV)	Antenna Factor ( dB/m )	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		10580	51.95	-16.25	68.2	55.44	37.6	17.8	58.89	100	0	P	H	
		15870	46.1	-27.9	74	40.23	40.78	21.81	56.72	100	0	P	H	
													H	
													H	
			10580	48.14	-20.06	68.2	51.63	37.6	17.8	58.89	100	0	P	V
			15870	46.97	-27.03	74	41.1	40.78	21.81	56.72	100	0	P	V
														V
													V	
<b>Remark</b>	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 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 100 5500MHz		5455.6	52.09	-21.91	74	40.75	34.6	11.87	35.13	100	58	P	H	
		5469.84	60.42	-7.78	68.2	48.99	34.67	11.89	35.13	100	58	P	H	
		5459.92	42.75	-11.25	54	31.4	34.6	11.88	35.13	100	58	A	H	
	*	5500	108.54	-	-	96.93	34.8	11.93	35.12	100	58	P	H	
	*	5500	101.51	-	-	89.9	34.8	11.93	35.12	100	58	A	H	
														H
			5459.6	48.73	-25.27	74	37.38	34.6	11.88	35.13	113	101	P	V
			5469.36	50.72	-17.48	68.2	39.29	34.67	11.89	35.13	113	101	P	V
			5459.28	40.37	-13.63	54	29.02	34.6	11.88	35.13	113	101	A	V
	*		5500	101.81	-	-	90.2	34.8	11.93	35.12	113	101	P	V
	*		5500	94.97	-	-	83.36	34.8	11.93	35.12	113	101	A	V
														V
802.11a CH 116 5580MHz		5392	49.7	-24.3	74	38.54	34.53	11.8	35.17	100	59	P	H	
		5468.32	50.15	-18.05	68.2	38.72	34.67	11.89	35.13	100	59	P	H	
		5455.36	40.93	-13.07	54	29.59	34.6	11.87	35.13	100	59	A	H	
	*	5580	107.85	-	-	96.24	34.73	12.02	35.14	100	59	P	H	
	*	5580	100.49	-	-	88.88	34.73	12.02	35.14	100	59	A	H	
			5742.32	48.79	-19.41	68.2	36.99	34.7	12.27	35.17	100	59	P	H
			5437.36	47.54	-26.46	74	36.23	34.6	11.85	35.14	122	102	P	V
			5467.6	47.38	-20.82	68.2	35.95	34.67	11.89	35.13	122	102	P	V
			5457.28	40.02	-13.98	54	28.67	34.6	11.88	35.13	122	102	A	V
	*		5580	102.53	-	-	90.92	34.73	12.02	35.14	122	102	P	V
	*		5580	94.92	-	-	83.31	34.73	12.02	35.14	122	102	A	V
			5747.045	48.5	-19.7	68.2	36.69	34.7	12.28	35.17	122	102	P	V



<b>802.11a</b> <b>CH 140</b> <b>5700MHz</b>	*	5700	105.75	-	-	94.01	34.7	12.2	35.16	100	62	P	H
	*	5700	98.34	-	-	86.6	34.7	12.2	35.16	100	62	A	H
		5725	64.15	-4.05	68.2	52.36	34.7	12.25	35.16	100	62	P	H
													H
													H
													H
	*	5700	102.49	-	-	90.75	34.7	12.2	35.16	124	101	P	V
	*	5700	95.08	-	-	83.34	34.7	12.2	35.16	124	101	A	V
		5725.32	58.1	-10.1	68.2	46.31	34.7	12.25	35.16	124	101	P	V
													V
													V
													V
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



**Band 3 - 5470~5725MHz**  
**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 100 5500MHz		11000	57.85	-16.15	74	60.54	37.9	18.1	58.69	100	278	P	H	
		11000	48.29	-5.71	54	50.98	37.9	18.1	58.69	100	278	A	H	
		16500	51.67	-16.53	68.2	43.62	42.1	22.37	56.42	100	0	P	H	
													H	
		11000	48.5	-25.5	74	51.19	37.9	18.1	58.69	100	0	P	V	
		16500	51.16	-17.04	68.2	43.11	42.1	22.37	56.42	100	0	P	V	
		11000	48.5	-25.5	74	51.19	37.9	18.1	58.69	100	0	P	V	
														V
802.11a CH 116 5580MHz		11160	49.7	-24.3	74	51.88	37.9	18.23	58.31	100	0	P	H	
		16740	49.96	-18.24	68.2	41.55	42.14	22.6	56.33	100	0	P	H	
													H	
													H	
		11160	44.78	-29.22	74	46.96	37.9	18.23	58.31	100	0	P	V	
		16740	49.86	-18.34	68.2	41.45	42.14	22.6	56.33	100	0	P	V	
														V
														V
802.11a CH 140 5700MHz		11400	44.6	-29.4	74	45.79	38.1	18.45	57.74	100	0	P	H	
		17100	49.13	-19.07	68.2	40.79	41.7	22.91	56.27	100	0	P	H	
													H	
													H	
		11400	44.38	-29.62	74	45.57	38.1	18.45	57.74	100	0	P	V	
		17100	48.6	-19.6	68.2	40.26	41.7	22.91	56.27	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 - 5470~5725MHz**  
**WIFI 802.11n HT20 (Band Edge @ 3m)**

WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	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		5459.6	59.7	-14.3	74	48.35	34.6	11.88	35.13	100	58	P	H	
		5468.88	62.69	-5.51	68.2	51.26	34.67	11.89	35.13	100	58	P	H	
		5459.92	43.95	-10.05	54	32.6	34.6	11.88	35.13	100	58	A	H	
	*	5500	108.11	-	-	96.5	34.8	11.93	35.12	100	58	P	H	
	*	5500	100.9	-	-	89.29	34.8	11.93	35.12	100	58	A	H	
														H
			5459.28	52.06	-21.94	74	40.71	34.6	11.88	35.13	113	102	P	V
			5469.04	56.46	-11.74	68.2	45.03	34.67	11.89	35.13	113	102	P	V
			5459.6	40.46	-13.54	54	29.11	34.6	11.88	35.13	113	102	A	V
	*		5500	102.11	-	-	90.5	34.8	11.93	35.12	113	102	P	V
	*		5500	94.5	-	-	82.89	34.8	11.93	35.12	113	102	A	V
													V	
802.11n HT20 CH 116 5580MHz		5459.68	49.58	-24.42	74	38.23	34.6	11.88	35.13	108	59	P	H	
		5464.96	50.45	-17.75	68.2	39.03	34.67	11.88	35.13	108	59	P	H	
		5452.96	41	-13	54	29.66	34.6	11.87	35.13	108	59	A	H	
	*	5580	107.44	-	-	95.83	34.73	12.02	35.14	108	59	P	H	
	*	5580	99.81	-	-	88.2	34.73	12.02	35.14	108	59	A	H	
			5743.265	50.68	-17.52	68.2	38.87	34.7	12.28	35.17	108	59	P	H
			5380.96	48.71	-25.29	74	37.56	34.53	11.79	35.17	124	102	P	V
			5462.56	49.02	-19.18	68.2	37.6	34.67	11.88	35.13	124	102	P	V
			5452.24	40.01	-13.99	54	28.67	34.6	11.87	35.13	124	102	A	V
	*		5580	100.94	-	-	89.33	34.73	12.02	35.14	124	102	P	V
	*		5580	93.81	-	-	82.2	34.73	12.02	35.14	124	102	A	V
		5742.635	49.43	-18.77	68.2	37.62	34.7	12.28	35.17	124	102	P	V	



<b>802.11n</b> <b>HT20</b> <b>CH 140</b> <b>5700MHz</b>	*	5700	105.85	-	-	94.11	34.7	12.2	35.16	146	41	P	H
	*	5700	98.05	-	-	86.31	34.7	12.2	35.16	146	41	A	H
		5726.52	64.89	-3.31	68.2	53.1	34.7	12.25	35.16	146	41	P	H
													H
													H
													H
	*	5700	101.3	-	-	89.56	34.7	12.2	35.16	112	102	P	V
	*	5700	93.85	-	-	82.11	34.7	12.2	35.16	112	102	A	V
		5728.36	60.16	-8.04	68.2	48.37	34.7	12.25	35.16	112	102	P	V
													V
													V
													V
<b>Remark</b>	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	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	59.37	-14.63	74	62.06	37.9	18.1	58.69	100	275	P	H	
		11000	48.3	-5.7	54	50.99	37.9	18.1	58.69	100	275	A	H	
		16500	49.34	-18.86	68.2	41.29	42.1	22.37	56.42	100	0	P	H	
													H	
			11000	49.82	-24.18	74	52.51	37.9	18.1	58.69	100	0	P	V
			16500	49.97	-18.23	68.2	41.92	42.1	22.37	56.42	100	0	P	V
			11000	49.82	-24.18	74	52.51	37.9	18.1	58.69	100	0	P	V
802.11n HT20 CH 116 5580MHz		11160	49.33	-24.67	74	51.51	37.9	18.23	58.31	100	0	P	H	
		16740	49.77	-18.43	68.2	41.36	42.14	22.6	56.33	100	0	P	H	
													H	
													H	
			11160	45.91	-28.09	74	48.09	37.9	18.23	58.31	100	0	P	V
			16740	49.56	-18.64	68.2	41.15	42.14	22.6	56.33	100	0	P	V
													V	
802.11n HT20 CH 140 5700MHz		11400	44.15	-29.85	74	45.34	38.1	18.45	57.74	100	0	P	H	
		17100	51.03	-17.17	68.2	42.69	41.7	22.91	56.27	100	0	P	H	
													H	
													H	
			11400	45.19	-28.81	74	46.38	38.1	18.45	57.74	100	0	P	V
			17100	49.47	-18.73	68.2	41.13	41.7	22.91	56.27	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	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		5458.96	59	-15	74	47.65	34.6	11.88	35.13	100	58	P	H
		5467.12	63.12	-5.08	68.2	51.69	34.67	11.89	35.13	100	58	P	H
		5459.2	51.9	-2.1	54	40.55	34.6	11.88	35.13	100	58	P	H
	*	5510	103.97	-	-	92.35	34.8	11.94	35.12	100	58	P	H
	*	5510	97.11	-	-	85.49	34.8	11.94	35.12	100	58	A	H
		5748.935	48.6	-19.6	68.2	36.78	34.7	12.29	35.17	100	58	P	H
		5457.04	53.17	-20.83	74	41.82	34.6	11.88	35.13	111	102	P	V
		5465.2	55.86	-12.34	68.2	44.44	34.67	11.88	35.13	111	102	P	V
		5458.72	46.27	-7.73	54	34.92	34.6	11.88	35.13	111	102	A	V
	*	5510	97.62	-	-	86	34.8	11.94	35.12	111	102	P	V
	*	5510	90.71	-	-	79.09	34.8	11.94	35.12	111	102	A	V
		5751.455	48.7	-19.5	68.2	36.88	34.7	12.29	35.17	111	102	P	V
802.11n HT40 CH 110 5550MHz		5442.4	51.18	-22.82	74	39.86	34.6	11.86	35.14	100	58	P	H
		5465.92	51.22	-16.98	68.2	39.79	34.67	11.89	35.13	100	58	P	H
		5458.72	42.41	-11.59	54	31.06	34.6	11.88	35.13	100	58	A	H
	*	5550	104.75	-	-	93.2	34.7	11.98	35.13	100	58	P	H
	*	5550	96.95	-	-	85.4	34.7	11.98	35.13	100	58	A	H
		5742.32	48.12	-20.08	68.2	36.32	34.7	12.27	35.17	100	58	P	H
		5410.72	48.4	-25.6	74	37.14	34.6	11.82	35.16	107	102	P	V
		5460.16	47.4	-20.8	68.2	36.05	34.6	11.88	35.13	107	102	P	V
		5453.2	40.69	-13.31	54	29.35	34.6	11.87	35.13	107	102	A	V
	*	5550	97.66	-	-	86.11	34.7	11.98	35.13	107	102	P	V
	*	5550	90.85	-	-	79.3	34.7	11.98	35.13	107	102	A	V
		5740.43	48.3	-19.9	68.2	36.5	34.7	12.27	35.17	107	102	P	V





<b>802.11n</b>  <b>HT40</b>  <b>CH 134</b>  <b>5670MHz</b>		5386.75	48.36	-25.64	74	37.2	34.53	11.8	35.17	111	59	P	H
		5468.65	47.87	-20.33	68.2	36.44	34.67	11.89	35.13	111	59	P	H
		5458.5	40.53	-13.47	54	29.18	34.6	11.88	35.13	111	59	A	H
	*	5670	102.63	-	-	91.02	34.6	12.16	35.15	111	59	P	H
	*	5670	95.45	-	-	83.84	34.6	12.16	35.15	111	59	A	H
		5736.125	57.5	-10.7	68.2	45.71	34.7	12.26	35.17	111	59	P	H
		5430.15	47.11	-26.89	74	35.81	34.6	11.84	35.14	118	103	P	V
		5463.75	45.93	-22.27	68.2	34.51	34.67	11.88	35.13	118	103	P	V
		5421.05	40.47	-13.53	54	29.2	34.6	11.83	35.16	118	103	A	V
	*	5670	98.7	-	-	87.09	34.6	12.16	35.15	118	103	P	V
	*	5670	91.4	-	-	79.79	34.6	12.16	35.15	118	103	A	V
		5729.3	56.53	-11.67	68.2	44.74	34.7	12.25	35.16	118	103	P	V
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



**Band 3 - 5470~5725MHz**  
**WIFI 802.11n HT40 (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 )	
802.11n HT40 CH 102 5510MHz		11020	49.62	-24.38	74	52.25	37.9	18.11	58.64	100	0	P	H	
		16530	48.86	-19.34	68.2	40.88	42	22.39	56.41	100	0	P	H	
													H	
													H	
			11020	45.59	-28.41	74	48.22	37.9	18.11	58.64	100	0	P	V
			16530	49.82	-18.38	68.2	41.84	42	22.39	56.41	100	0	P	V
														V
802.11n HT40 CH 110 5550MHz		11100	48.91	-25.09	74	51.28	37.9	18.18	58.45	100	0	P	H	
		16650	47.83	-20.37	68.2	39.75	41.95	22.5	56.37	100	0	P	H	
													H	
													H	
			11100	45.64	-28.36	74	48.01	37.9	18.18	58.45	100	0	P	V
			16650	47.92	-20.28	68.2	39.84	41.95	22.5	56.37	100	0	P	V
														V
802.11n HT40 CH 134 5670MHz		11340	44.13	-29.87	74	45.52	38.1	18.39	57.88	100	0	P	H	
		17010	48.43	-19.77	68.2	40.04	41.78	22.85	56.24	100	0	P	H	
													H	
													H	
			11340	44.25	-29.75	74	45.64	38.1	18.39	57.88	100	0	P	V
			17010	48.24	-19.96	68.2	39.85	41.78	22.85	56.24	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 802.11ac VHT80 (Band Edge @ 3m)**

WIFI Ant. 1	Note	Frequency ( MHz )	Level ( dBμV/m )	Over Limit ( dB )	Limit Line ( dBμV/m )	Read Level ( dBμV )	Antenna Factor ( dB/m )	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		5459.68	55.54	-18.46	74	44.19	34.6	11.88	35.13	100	58	P	H
		5468.8	56.48	-11.72	68.2	45.05	34.67	11.89	35.13	100	58	P	H
		5456.56	51.62	-2.38	54	40.27	34.6	11.88	35.13	100	58	A	H
	*	5530	97.32	-	-	85.72	34.77	11.96	35.13	100	58	P	H
	*	5530	91.83	-	-	80.23	34.77	11.96	35.13	100	58	A	H
		5756.18	48.3	-19.9	68.2	36.44	34.73	12.3	35.17	100	58	P	H
		5457.76	50.39	-23.61	74	39.04	34.6	11.88	35.13	119	100	P	V
		5468.56	51.9	-16.3	68.2	40.47	34.67	11.89	35.13	119	100	P	V
		5456.56	45.99	-8.01	54	34.64	34.6	11.88	35.13	119	100	A	V
	*	5530	90.8	-	-	79.2	34.77	11.96	35.13	119	100	P	V
	*	5530	85.2	-	-	73.6	34.77	11.96	35.13	119	100	A	V
		5740.43	48.53	-19.67	68.2	36.73	34.7	12.27	35.17	119	100	P	V
802.11ac VHT80 CH 122 5610MHz		5444.15	49.62	-24.38	74	38.3	34.6	11.86	35.14	100	58	P	H
		5466.2	51.4	-16.8	68.2	39.97	34.67	11.89	35.13	100	58	P	H
		5458.15	44.04	-9.96	54	32.69	34.6	11.88	35.13	100	58	A	H
	*	5610	100.68	-	-	88.96	34.8	12.06	35.14	100	58	P	H
	*	5610	94.81	-	-	83.09	34.8	12.06	35.14	100	58	A	H
		5728.775	54.62	-13.58	68.2	42.83	34.7	12.25	35.16	100	58	P	H
		5449.4	47.65	-26.35	74	36.32	34.6	11.87	35.14	100	103	P	V
		5466.55	46.57	-21.63	68.2	35.14	34.67	11.89	35.13	100	103	P	V
		5454.65	41.85	-12.15	54	30.51	34.6	11.87	35.13	100	103	A	V
	*	5610	94.49	-	-	82.77	34.8	12.06	35.14	100	103	P	V
	*	5610	88.11	-	-	76.39	34.8	12.06	35.14	100	103	A	V
		5731.05	52.72	-15.48	68.2	40.93	34.7	12.26	35.17	100	103	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 (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)	
802.11ac VHT80 CH 106 5530MHz		11060	46.37	-27.63	74	48.87	37.9	18.15	58.55	100	0	P	H	
		16590	46.97	-21.23	68.2	39.06	41.85	22.45	56.39	100	0	P	H	
													H	
													H	
			11060	43.55	-30.45	74	46.05	37.9	18.15	58.55	100	0	P	V
			16590	47.2	-21	68.2	39.29	41.85	22.45	56.39	100	0	P	V
														V
802.11ac VHT80 CH 122 5610MHz		11220	45.31	-28.69	74	47.26	37.93	18.29	58.17	100	0	P	H	
		16830	49	-19.2	68.2	40.45	42.17	22.68	56.3	100	0	P	H	
													H	
													H	
			11220	43.93	-30.07	74	45.88	37.93	18.29	58.17	100	0	P	V
			16830	49.08	-19.12	68.2	40.53	42.17	22.68	56.3	100	0	P	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)

Table with 14 columns: 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). Rows include frequencies from 5390.56 to 5853.5 MHz and a Remark section.



**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	44.13	-29.87	74	45.16	38.13	18.48	57.64	100	0	P	H	
		17160	49.77	-18.43	68.2	41.62	41.5	22.94	56.29	100	0	P	H	
													H	
													H	
			11440	44.63	-29.37	74	45.66	38.13	18.48	57.64	100	0	P	V
			17160	49.91	-18.29	68.2	41.76	41.5	22.94	56.29	100	0	P	V
														V
														V
<b>Remark</b>	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 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 )
<b>802.11n HT20 CH 144 5720MHz</b>		5428.39	48.8	-25.2	74	37.5	34.6	11.84	35.14	138	41	P	H
		5470.12	47.73	-20.47	68.2	36.3	34.67	11.89	35.13	138	41	P	H
		5457.25	39.48	-14.52	54	28.13	34.6	11.88	35.13	138	41	A	H
	*	5720	106.38	-	-	94.6	34.7	12.24	35.16	138	41	P	H
	*	5720	99.08	-	-	87.3	34.7	12.24	35.16	138	41	A	H
		5867.5	49.8	-18.4	68.2	37.69	34.9	12.4	35.19	138	41	P	H
		5405.77	47.65	-26.35	74	36.39	34.6	11.82	35.16	134	103	P	V
		5464.66	47.96	-20.24	68.2	36.54	34.67	11.88	35.13	134	103	P	V
		5458.81	39.54	-14.46	54	28.19	34.6	11.88	35.13	134	103	A	V
	*	5720	101.88	-	-	90.1	34.7	12.24	35.16	134	103	P	V
	*	5720	94.36	-	-	82.58	34.7	12.24	35.16	134	103	A	V
		5944.5	51.35	-16.85	68.2	39.11	35	12.44	35.2	134	103	P	V
<b>Remark</b>	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	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	44.18	-29.82	74	45.21	38.13	18.48	57.64	100	0	P	H	
		17160	52.09	-16.11	68.2	43.94	41.5	22.94	56.29	100	0	P	H	
													H	
													H	
			11440	44.18	-29.82	74	45.21	38.13	18.48	57.64	100	0	P	V
			17160	49.07	-19.13	68.2	40.92	41.5	22.94	56.29	100	0	P	V
														V
													V	
<b>Remark</b>	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	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		5434.63	48.19	-25.81	74	36.88	34.6	11.85	35.14	101	42	P	H
		5463.1	47.4	-20.8	68.2	35.98	34.67	11.88	35.13	101	42	P	H
		5459.59	40.22	-13.78	54	28.87	34.6	11.88	35.13	101	42	A	H
	*	5710	102.86	-	-	91.1	34.7	12.22	35.16	101	42	P	H
	*	5710	96.09	-	-	84.33	34.7	12.22	35.16	101	42	A	H
		5908.75	50.7	-17.5	68.2	38.54	34.93	12.42	35.19	101	42	P	H
		5367.94	47.43	-26.57	74	36.36	34.47	11.78	35.18	116	104	P	V
		5467	47.93	-20.27	68.2	36.5	34.67	11.89	35.13	116	104	P	V
		5458.81	40.09	-13.91	54	28.74	34.6	11.88	35.13	116	104	A	V
	*	5710	98.75	-	-	86.99	34.7	12.22	35.16	116	104	P	V
	*	5710	91.46	-	-	79.7	34.7	12.22	35.16	116	104	A	V
		5862.75	50.01	-18.19	68.2	37.9	34.9	12.4	35.19	116	104	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 HT40 (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 )	
802.11n HT40 CH 142 5710MHz		11420	44.05	-29.95	74	45.16	38.12	18.46	57.69	100	0	P	H	
		17130	48.65	-19.55	68.2	40.41	41.6	22.92	56.28	100	0	P	H	
													H	
													H	
			11420	44.57	-29.43	74	45.68	38.12	18.46	57.69	100	0	P	V
			17130	48.56	-19.64	68.2	40.32	41.6	22.92	56.28	100	0	P	V
														V
														V
<b>Remark</b>	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	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 )
<b>802.11ac VHT80 CH 138 5690MHz</b>		5443.99	48.98	-25.02	74	37.66	34.6	11.86	35.14	137	41	P	H
		5463.88	46.82	-21.38	68.2	35.4	34.67	11.88	35.13	137	41	P	H
		5435.41	41.75	-12.25	54	30.44	34.6	11.85	35.14	137	41	A	H
	*	5690	99.55	-	-	87.82	34.7	12.19	35.16	137	41	P	H
	*	5690	93.88	-	-	82.15	34.7	12.19	35.16	137	41	A	H
		5861.2	51.34	-16.86	68.2	39.23	34.9	12.4	35.19	137	41	P	H
		5458.42	48.1	-25.9	74	36.75	34.6	11.88	35.13	130	104	P	V
		5463.1	46.82	-21.38	68.2	35.4	34.67	11.88	35.13	130	104	P	V
		5456.08	41.81	-12.19	54	30.47	34.6	11.87	35.13	130	104	A	V
	*	5690	96.43	-	-	84.7	34.7	12.19	35.16	130	104	P	V
	*	5690	88.83	-	-	77.1	34.7	12.19	35.16	130	104	A	V
		5886.4	51.99	-16.21	68.2	39.87	34.9	12.41	35.19	130	104	P	V
<b>Remark</b>	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	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	44.02	-29.98	74	45.29	38.1	18.42	57.79	100	0	P	H	
		17070	48.18	-20.02	68.2	39.83	41.73	22.88	56.26	100	0	P	H	
													H	
													H	
			11380	44.6	-29.4	74	45.87	38.1	18.42	57.79	100	0	P	V
			17070	48.25	-19.95	68.2	39.9	41.73	22.88	56.26	100	0	P	V
														V
													V	
<b>Remark</b>	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



Emission below 1GHz  
WIFI 802.11n HT40 (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		( MHz )	( dBμV/m )	( dB )	( dBμV/m )	( dBμV )	( dB/m )	( dB )	( dB )	( cm )	( deg )	( P/A )	( H/V )	
802.11n HT40 LF		30	31.01	-8.99	40	35.77	24.32	0.93	30.01	-	-	P	H	
		93.45	36.95	-6.55	43.5	50.22	15.08	1.62	29.97	100	0	P	H	
		199.83	32.68	-10.82	43.5	45.26	14.97	2.38	29.93	-	-	P	H	
		311.9	31.73	-14.27	46	39.33	19.32	2.98	29.9	-	-	P	H	
		427.4	30.65	-15.35	46	34.3	22.74	3.49	29.88	-	-	P	H	
		938.4	33.56	-12.44	46	27.51	29.59	5.23	28.77	-	-	P	H	
														H
														H
														H
														H
														H
														H
			30	32.43	-7.57	40	37.19	24.32	0.93	30.01	-	-	P	V
			45.93	33.66	-6.34	40	46.22	16.29	1.14	29.99	100	0	P	V
			94.8	31.88	-11.62	43.5	44.93	15.29	1.63	29.97	-	-	P	V
			752.2	29.57	-16.43	46	26.73	27.74	4.65	29.55	-	-	P	V
			862.8	31.26	-14.74	46	26.54	28.88	5	29.16	-	-	P	V
			957.3	33.93	-12.07	46	26.84	30.47	5.28	28.66	-	-	P	V
														V
														V
													V	
													V	
													V	
													V	
Remark	1. No other spurious found. 2. All results are PASS against limit line.													



**Note symbol**

*	<b>Fundamental Frequency</b> which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency.
!	Test result is <b>over limit</b> line.
P/A	<b>Peak</b> or <b>Average</b>
H/V	<b>Horizontal</b> or <b>Vertical</b>



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”.**