



FCC RADIO TEST REPORT

FCC ID : A4RGXCA6
Equipment : Wireless Device
Model Name : GXCA6
Applicant : Google LLC
1600 Amphitheatre Parkway,
Mountain View, California, 94043 USA
Standard : FCC Part 15 Subpart E §15.407

The product was received on Feb. 26, 2020 and testing was started from Mar. 12, 2020 and completed on May 28, 2020. 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, Taiwan (R.O.C.)



Table of Contents

History of this test report	3
Summary of Test Result	4
1 General Description.....	5
1.1 Product Feature of Equipment Under Test	5
1.2 Product Specification of Equipment Under Test.....	6
1.3 Modification of EUT	8
1.4 Testing Location	8
1.5 Applicable Standards	8
2 Test Configuration of Equipment Under Test.....	9
2.1 Carrier Frequency and Channel.....	9
2.2 Test Mode	10
2.3 Connection Diagram of Test System	12
2.4 Support Unit used in test configuration and system	13
2.5 EUT Operation Test Setup	13
2.6 Measurement Results Explanation Example	13
3 Test Result.....	14
3.1 26dB & 99% Occupied Bandwidth Measurement.....	14
3.2 Maximum Conducted Output Power Measurement.....	16
3.3 Power Spectral Density Measurement.....	18
3.4 Unwanted Emissions Measurement	21
3.5 AC Conducted Emission Measurement	26
3.6 Automatically Discontinue Transmission	28
3.7 Antenna Requirements	30
4 List of Measuring Equipment	31
5 Uncertainty of Evaluation	33
Appendix A. Conducted Test Results	
Appendix B. AC Conducted Emission Test Result	
Appendix C. Radiated Spurious Emission	
Appendix D. Radiated Spurious Emission Plots	
Appendix E. Duty Cycle Plots	



History of this test report

Report No.	Version	Description	Issued Date
FR990608-02D	01	Initial issue of report	May 22, 2020
FR990608-02D	02	Add test data	Jun. 03, 2020
FR990608-02D	03	Revising the TAF description in cover page.	Jul. 01, 2020

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 1.51 dB at 5150.000 MHz
3.5	15.207	AC Conducted Emission	Pass	Under limit 12.66 dB at 0.634 MHz
3.6	15.407(c)	Automatically Discontinue Transmission	Pass	-
0	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: Fiona Wu

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
Equipment	Wireless Device
Model Name	GXCA6
FCC ID	A4RGXCA6
EUT supports Radios application	WLAN 11b/g/n HT20 WLAN 11a/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE

Remark: The above EUT's information was declared by manufacturer.

EUT Information List	
S/N	Performed Test Item
N/A	Conducted Measurement
01231HFDDL014DB	Radiated Spurious Emission
01171HFDDL013LG	Conducted Emission

1.2 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx/Rx Frequency Range	5180 MHz ~ 5240 MHz 5260 MHz ~ 5320 MHz 5500 MHz ~ 5720 MHz
Maximum Output Power	<5180 MHz ~ 5240 MHz> <Ant. 1> 802.11a : 15.70 dBm / 0.0372 W 802.11n HT20 : 15.70 dBm / 0.0372 W 802.11n HT40 : 14.60 dBm / 0.0288 W 802.11ac VHT20: 15.60 dBm / 0.0363 W 802.11ac VHT40: 14.50 dBm / 0.0282 W 802.11ac VHT80: 9.60 dBm / 0.0091 W <Ant. 2> 802.11a : 15.60 dBm / 0.0363 W 802.11n HT20 : 15.70 dBm / 0.0372 W 802.11n HT40 : 14.60 dBm / 0.0288 W 802.11ac VHT20: 15.60 dBm / 0.0363 W 802.11ac VHT40: 14.50 dBm / 0.0282 W 802.11ac VHT80: 9.90 dBm / 0.0098 W <5260 MHz ~ 5320 MHz> <Ant. 1> 802.11a : 15.60 dBm / 0.0363 W 802.11n HT20 : 15.70 dBm / 0.0372 W 802.11n HT40 : 14.70 dBm / 0.0295 W 802.11ac VHT20: 15.60 dBm / 0.0363 W 802.11ac VHT40: 14.60 dBm / 0.0288 W 802.11ac VHT80: 10.60 dBm / 0.0115 W <Ant. 2> 802.11a : 15.70 dBm / 0.0372 W 802.11n HT20 : 15.60 dBm / 0.0363 W 802.11n HT40 : 14.70 dBm / 0.0295 W 802.11ac VHT20: 15.50 dBm / 0.0355 W 802.11ac VHT40: 14.60 dBm / 0.0288 W 802.11ac VHT80: 9.40 dBm / 0.0087 W <5500 MHz ~ 5720 MHz > <Ant. 1> 802.11a : 15.70 dBm / 0.0372 W 802.11n HT20 : 15.60 dBm / 0.0363 W 802.11n HT40 : 14.70 dBm / 0.0295 W 802.11ac VHT20: 15.50 dBm / 0.0355 W 802.11ac VHT40: 14.60 dBm / 0.0288 W 802.11ac VHT80: 11.70 dBm / 0.0148 W <Ant. 2> 802.11a : 15.70 dBm / 0.0372 W 802.11n HT20 : 15.70 dBm / 0.0372 W 802.11n HT40 : 14.70 dBm / 0.0295 W 802.11ac VHT20: 15.60 dBm / 0.0363 W 802.11ac VHT40: 14.60 dBm / 0.0288 W 802.11ac VHT80: 11.60 dBm / 0.0145 W

Standards-related Product Specification	
99% Occupied Bandwidth	<Ant. 1> 802.11a : 17.20 MHz 802.11n HT20 : 17.85 MHz 802.11n HT40 : 36.70 MHz 802.11ac VHT80: 77.16 MHz <Ant. 2> 802.11a : 17.05 MHz 802.11n HT20 : 17.85 MHz 802.11n HT40 : 36.70 MHz 802.11ac VHT80: 77.40 MHz
Type of Modulation	802.11a/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11ac : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM)
Antenna Type / Gain	<5180 MHz ~ 5240 MHz> Ant. 1 : PCB PIFA Antenna type with gain 7.6 dBi Ant. 2 : PCB PIFA Antenna type with gain 7.7 dBi <5260 MHz ~ 5320 MHz> Ant. 1 : PCB PIFA Antenna type with gain 7.6 dBi Ant. 2 : PCB PIFA Antenna type with gain 7.7 dBi <5500 MHz ~ 5720 MHz > Ant. 1 : PCB PIFA Antenna type with gain 7.3 dBi Ant. 2 : PCB PIFA Antenna type with gain 6.6 dBi

1.3 Modification of EUT

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

1.4 Testing Location

Test Site	SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory			
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978			
Test Site No.	Sporton Site No.			
	TH05-HY	CO05-HY	03CH07-HY	DFS02-HY

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

FCC designation No.: TW1190

1.5 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).
- b. AC power line Conducted Emission was tested under maximum output power.

2.1 Carrier Frequency and Channel

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

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

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

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

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

Note:

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

2.2 Test Mode

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

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 : WLAN (5GHz) Link + Bluetooth Link + Max. Volum + Streaming music through WLAN and Bluetooth speaker + AC Adapter 2
Remark: For Radiated Test Cases, the tests were performed with Adapter 1	

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

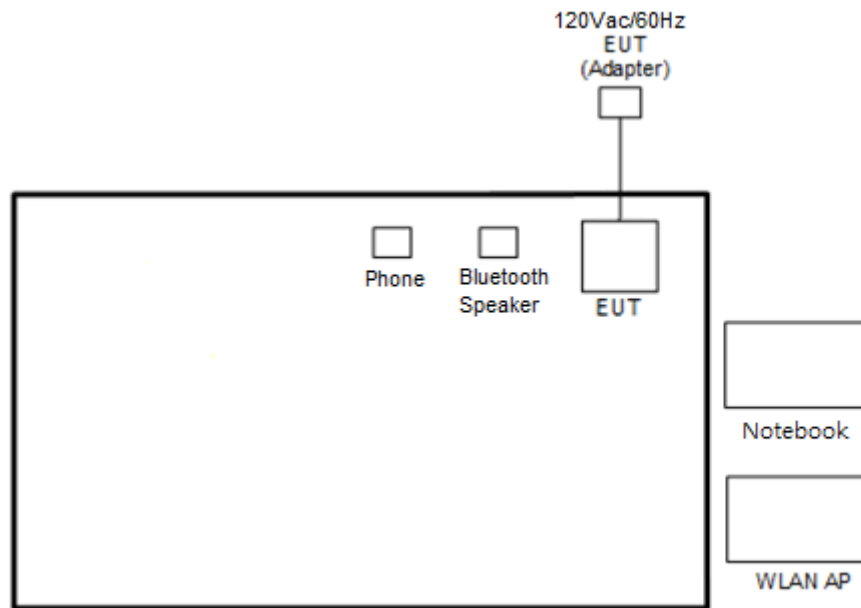
Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725MHz
		802.11n HT40	802.11n HT40	802.11n HT40
L	Low	38	54	102
M	Middle	-	-	110
H	High	46	62	134
Straddle		-	-	142

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	122
H	High	-	-	-
Straddle		-	-	138

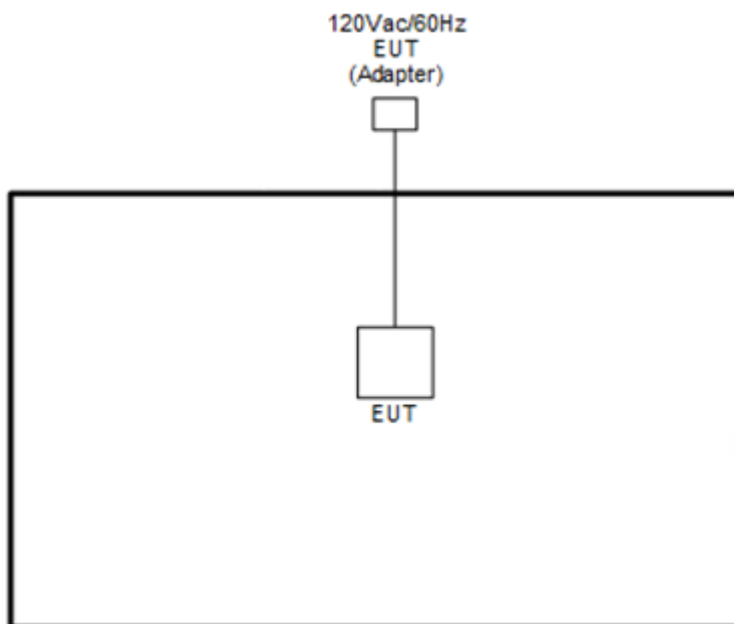
Remark: For radiation spurious emission, the final modulation and the worst data rate was reference the max RF conducted power.

2.3 Connection Diagram of Test System

<AC Conducted Emission Mode>



<WLAN TX Mode>



2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
2.	Notebook	Dell	Latitude 3400	FCC DoC	N/A	AC I/P : Unshielded, 1.2m DC O/P : Shielded, 1.8m
3.	Bluetooth Speaker	KINGONE	K5	N/A	N/A	Unshielded, 1.8 m
4.	Phone	Google	Pixel 4 XL	N/A	N/A	Unshielded, 1.8 m

2.5 EUT Operation Test Setup

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

2.6 Measurement Results Explanation Example

For all conducted test items:

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

Example :

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

Offset = RF cable loss + attenuator factor.

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

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

3 Test Result

3.1 26dB & 99% Occupied Bandwidth Measurement

3.1.1 Description of 26dB & 99% Occupied Bandwidth

This section is for reporting purpose only.

There is no restriction limits for bandwidth.

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

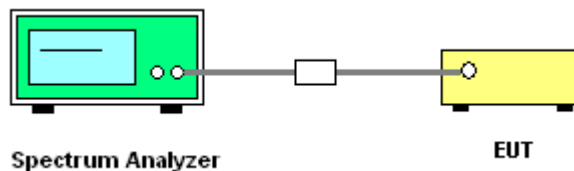
3.1.2 Measuring Instruments

See list of measuring equipment of this test report.

3.1.3 Test Procedures

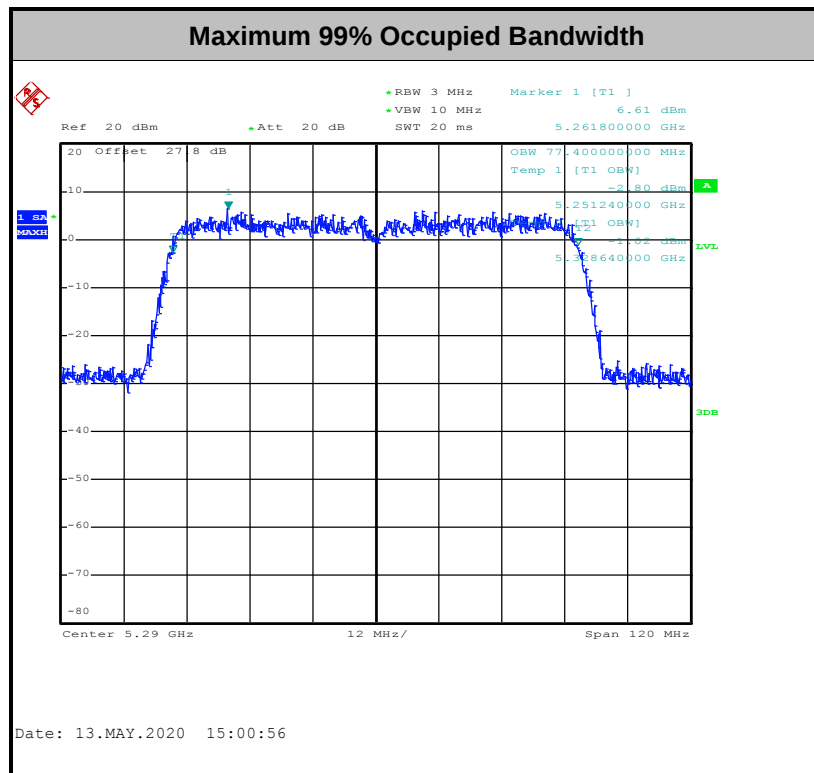
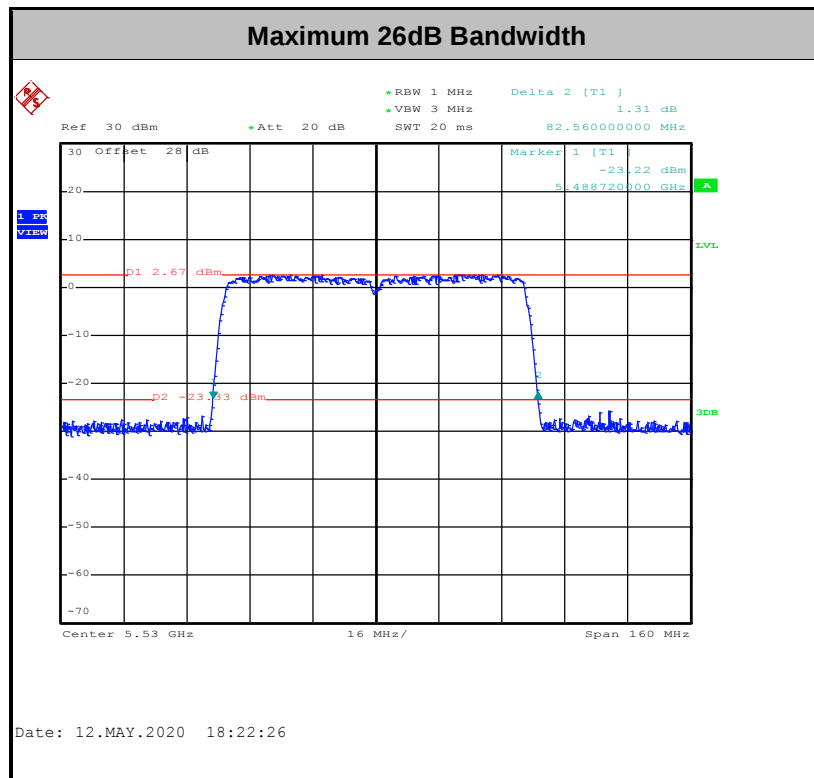
1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section C) Emission bandwidth
2. Set RBW = approximately 1% of the emission bandwidth.
3. Set the VBW > RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 26 dB 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 $11 \text{ dBm} + 10 \log B$, 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

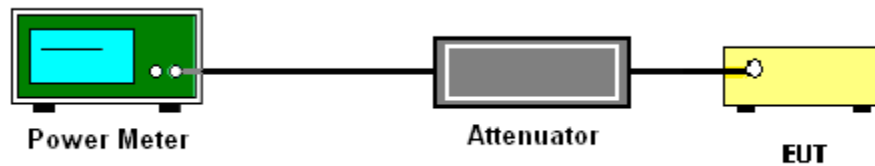
The testing follows Method PM-G of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

Method PM-G (Measurement using an 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.

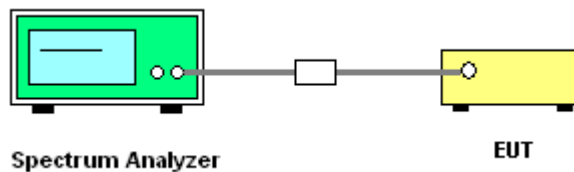
Section F) Maximum power spectral density.

Method SA-3

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

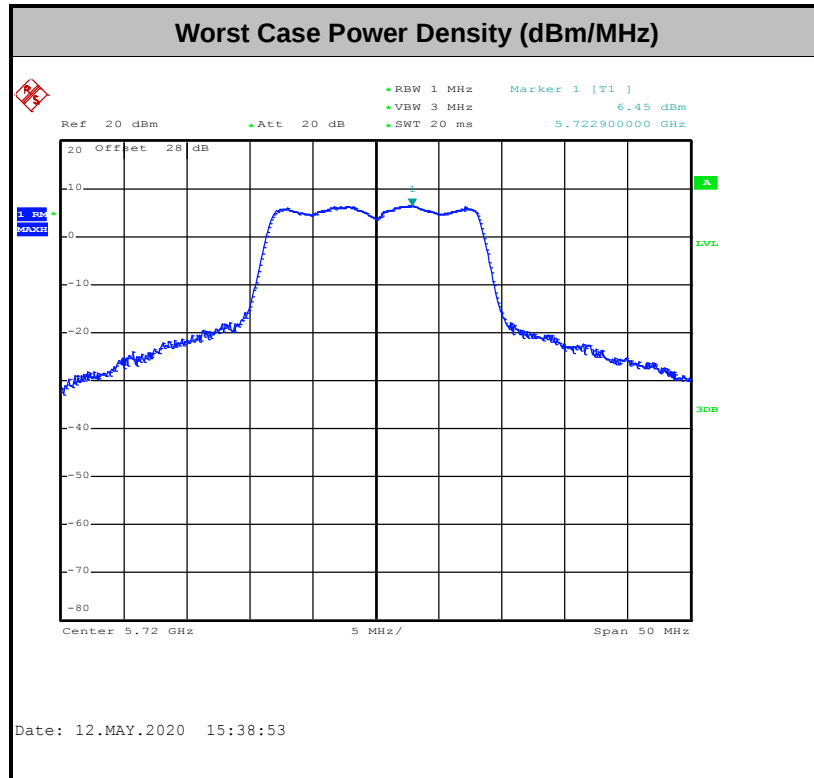
- Set span to encompass the entire emission bandwidth (EBW) of the signal.
 - Set RBW = 1 MHz.
 - Set VBW $\geq$ 3 MHz
 - Number of points in sweep $\geq$ 2 Span / RBW.
 - Sweep time $\leq$ (number of points in sweep) $\times$ T, when duty cycle is less than 98 percent where T is the minimum transmission 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.

3.4.1 Limit of Unwanted Emissions

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

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

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

- (2) Unwanted spurious emissions fallen in restricted bands shall comply with the general field strength limits as below table:

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

Note: The following formula is used to convert the EIRP to field strength.

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



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.

3.4.2 Measuring Instruments

See list of measuring equipment of this test report.

3.4.3 Test Procedures

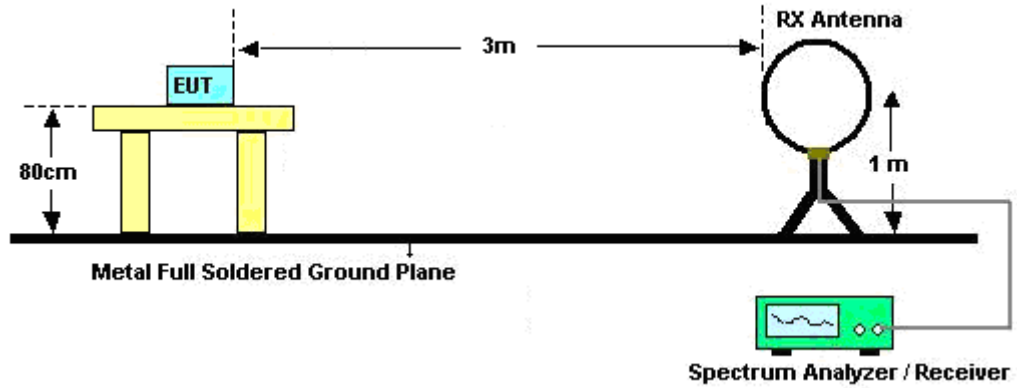
1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section G) Unwanted emissions measurement.
 - (1) Procedure for Unwanted Emissions Measurements Below 1000MHz
 - RBW = 120 kHz
 - VBW = 300 kHz
 - Detector = Peak
 - Trace mode = max hold
 - (2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz
 - RBW = 1 MHz
 - VBW ≥ 3 MHz
 - Detector = Peak
 - Sweep time = auto
 - Trace mode = max hold

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

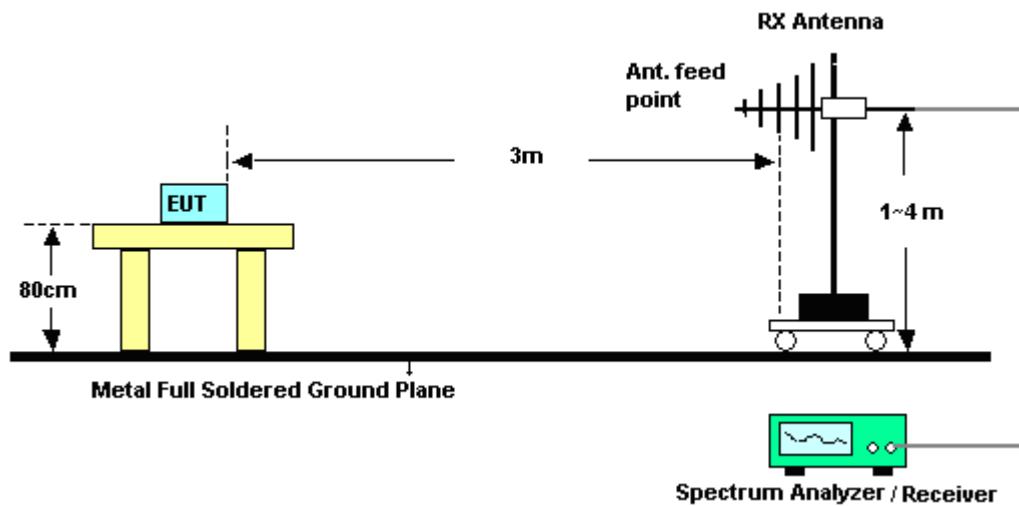
- RBW = 1 MHz
 - VBW = 10 Hz, when duty cycle is no less than 98 percent.
 - $VBW \geq 1/T$, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
 3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
 4. The antenna is a broadband antenna and its height is adjusted between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
 5. For each suspected emission, the EUT was arranged to its worst case and then adjust the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
 6. For testing below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
 7. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

3.4.4 Test Setup

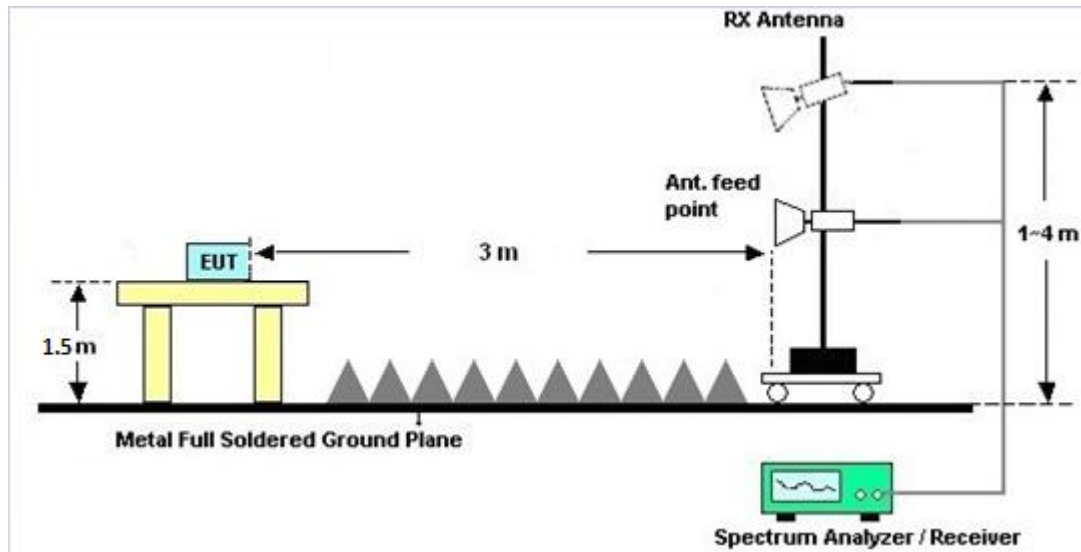
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



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

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

There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site v01r01, and the result came out very similar.

3.4.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix C and D.

3.4.7 Duty Cycle

Please refer to Appendix E.

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

Please refer to Appendix C and D.

3.5 AC Conducted Emission Measurement

3.5.1 Limit of AC Conducted Emission

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

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

*Decreases with the logarithm of the frequency.

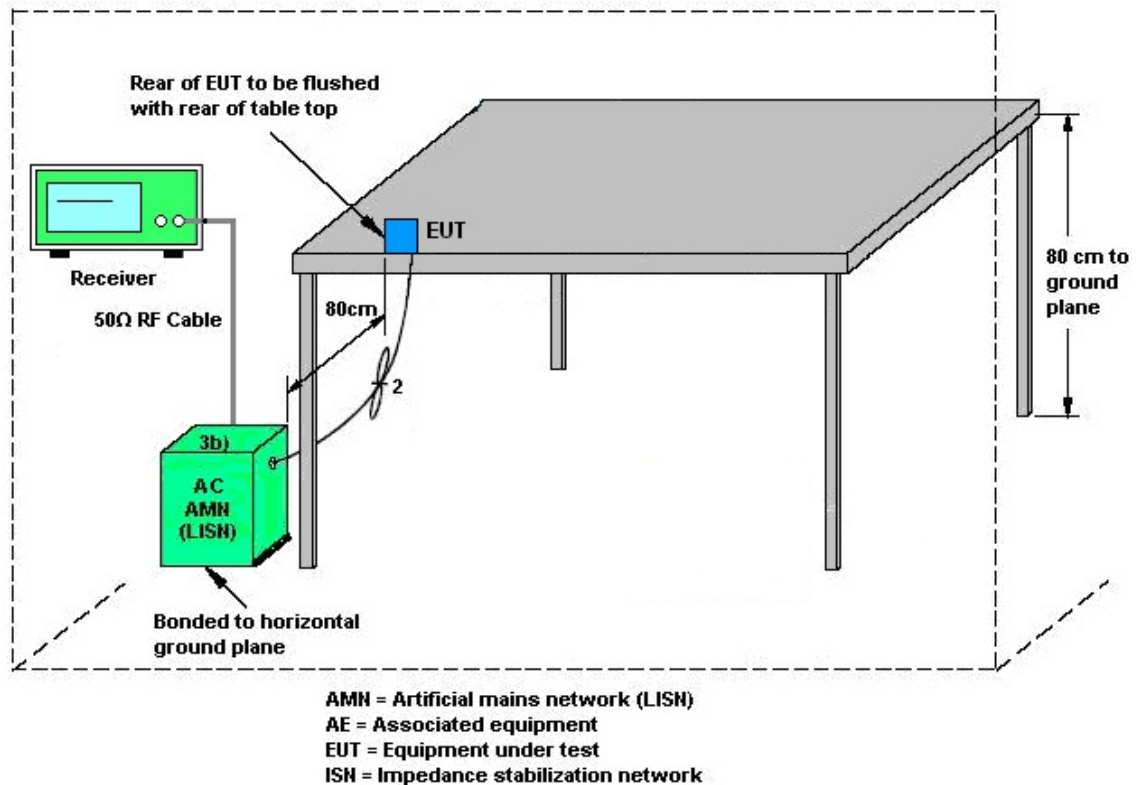
3.5.2 Measuring Instruments

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

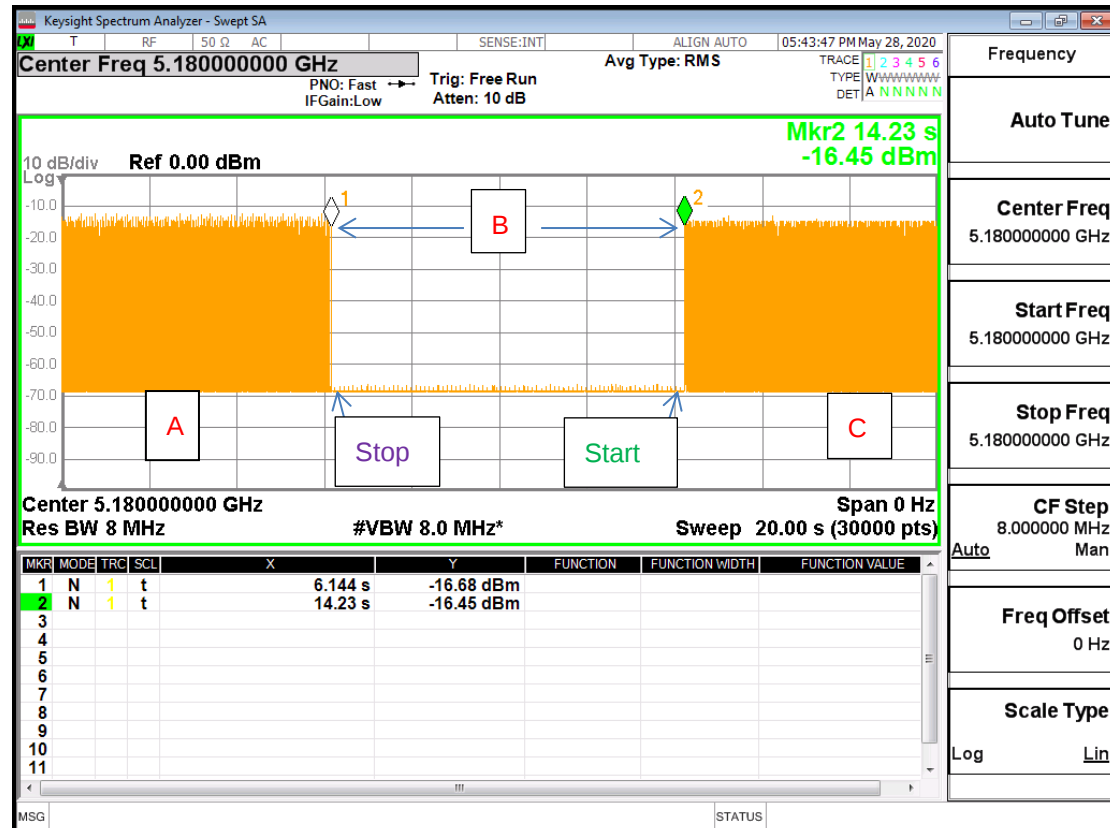
EUT is verified this characteristic during the function check of normal sample associated with an access point:

- A. Information start: make EUT supply information to the access point.
- B. Information stop: stop supplying information to the access point.

While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving.

- C. Information start: make EUT supply information to the access point again.

The EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.

5180MHz


Note: The control / signalling information during the period B is precluded.



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	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N-06	35419 & 03	30MHz~1GHz	Apr. 30, 2019	Apr. 21, 2020~ Apr. 28, 2020	Apr. 29, 2020	Radiation (03CH07-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N-06	35419 & 03	30MHz~1GHz	Apr. 29, 2020	Apr. 30, 2020~ May 12, 2020	Apr. 28, 2021	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ESCO	3117	00075962	1GHz ~ 18GHz	Dec. 06, 2019	Apr. 21, 2020~ May 12, 2020	Dec. 05, 2020	Radiation (03CH07-HY)
EMI Test Receiver	Agilent	N9038A(MXE)	MY53290053	20Hz~26.5GHz	Jan. 18, 2020	Apr. 21, 2020~ May 12, 2020	Jan. 17, 2021	Radiation (03CH07-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9 kHz~30 MHz	Dec. 26, 2019	Apr. 21, 2020~ May 12, 2020	Dec. 25, 2020	Radiation (03CH07-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1590075	1GHz~18GHz	Apr. 24, 2019	Apr. 21, 2020~ Apr. 22, 2020	Apr. 23, 2020	Radiation (03CH07-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1590075	1GHz~18GHz	Apr. 23, 2020	Apr. 24, 2020~ May 12, 2020	Apr. 22, 2021	Radiation (03CH07-HY)
Preamplifier	COM-POWER	PA-103A	161241	10MHz~1GHz	May 20, 2019	Apr. 21, 2020~ May 12, 2020	May 19, 2020	Radiation (03CH07-HY)
Preamplifier	Agilent	8449B	3008A02362	1GHz~26.5GHz	Nov. 01, 2019	Apr. 21, 2020~ May 12, 2020	Oct. 31, 2020	Radiation (03CH07-HY)
Notch Filter	Wainwright	WRCJV12-569 5-5725-5850-5 880-40SS	SN1	5G Band 4	Mar. 15, 2020	Apr. 21, 2020~ May 12, 2020	Mar. 14, 2021	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2858/2,801 606/2	18GHz~40GHz	Feb. 25, 2020	Apr. 21, 2020~ May 12, 2020	Feb. 24, 2021	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY24971/4, MY28655/4	9kHz~30MHz	Feb. 25, 2020	Apr. 21, 2020~ May 12, 2020	Feb. 24, 2021	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY28655/4, MY24971/4, MY15682/4	30MHz~1GHz	Feb. 25, 2020	Apr. 21, 2020~ May 12, 2020	Feb. 24, 2021	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY28655/4, MY24971/4, MY15682/4	1GHz~18GHz	Feb. 25, 2020	Apr. 21, 2020~ May 12, 2020	Feb. 24, 2021	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	801606/2	9KHz ~ 40GHz	N/A	Apr. 21, 2020~ May 12, 2020	N/A	Radiation (03CH07-HY)



Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Controller	ChainTek	Chaintek 3000	N/A	Control Turn table	N/A	Apr. 21, 2020~ May 12, 2020	N/A	Radiation (03CH07-HY)
Controller	Max-Full	MF7802	MF780208368	Control Ant Mast	N/A	Apr. 21, 2020~ May 12, 2020	N/A	Radiation (03CH07-HY)
Antenna Mast	Max-Full	MFA520BS	N/A	1m~4m	N/A	Apr. 21, 2020~ May 12, 2020	N/A	Radiation (03CH07-HY)
Turn Table	ChainTek	Chaintek 3000	N/A	0~360 Degree	N/A	Apr. 21, 2020~ May 12, 2020	N/A	Radiation (03CH07-HY)
USB Data Logger	TECPEL	TR-32	HE17XB2495	N/A	N/A	Apr. 21, 2020~ May 12, 2020	N/A	Radiation (03CH07-HY)
Spectrum Analyzer	Keysight	N9010A	MY54200486	10Hz~44GHz	Oct. 28, 2019	Apr. 21, 2020~ May 12, 2020	Oct. 27, 2020	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170251	18GHz~40GHz	Nov. 26, 2019	Apr. 21, 2020~ May 12, 2020	Nov. 25, 2020	Radiation (03CH07-HY)
Software	Audix	E3 6.2009-8-24	N/A	N/A	N/A	Apr. 21, 2020~ May 12, 2020	N/A	Radiation (03CH07-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz~40GHz	Dec. 13, 2019	Apr. 21, 2020~ May 12, 2020	Dec. 12, 2020	Radiation (03CH07-HY)
Hygrometer	Testo	608-H2	41410069	N/A	Jun. 17, 2019	May 01, 2020~ May 13, 2020	Jun. 16, 2020	Conducted (TH05-HY)
Power Sensor	DARE	RPR3006W	16I00054SNO10	10MHz~6GHz	Dec. 23, 2019	May 01, 2020~ May 13, 2020	Dec. 22, 2020	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100055	9kHz-40GHz	Aug. 14, 2019	May 01, 2020~ May 13, 2020	Aug. 13, 2020	Conducted (TH05-HY)
Switch Control Manframe	Burgeon	ETF-058	EC1300484	N/A	Aug. 22, 2019	May 01, 2020~ May 13, 2020	Aug. 21, 2020	Conducted (TH05-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Mar. 12, 2020	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9kHz~3.6GHz	Nov. 15, 2019	Mar. 12, 2020	Nov. 14, 2020	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34913912	N/A	Mar. 19, 2019	Mar. 12, 2020	Mar. 18, 2020	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Nov. 20, 2019	Mar. 12, 2020	Nov. 19, 2020	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Mar. 12, 2020	N/A	Conduction (CO05-HY)
LF Cable	HUBER + SUHNER	RG-214/U	LF01	N/A	Jan. 02, 2020	Mar. 12, 2020	Jan. 01, 2021	Conduction (CO05-HY)
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100851	N/A	Jan. 02, 2020	Mar. 12, 2020	Jan. 01, 2021	Conduction (CO05-HY)
Spectrum Analyzer	Keysight	N9010A	MY56070412	10Hz~7GHz	Aug. 27, 2019	May 28, 2020	Aug. 26, 2020	DFS (DFS02-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
---	-----

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.6
---	-----

Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.2
---	-----

Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.3
---	-----

Appendix A. Test Result of Conducted Test Items

Test Engineer:	Shiming Liu	Temperature:	21~25	°C
Test Date:	2020/05/01~2020/05/13	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	16.85	16.80	27.55	27.85	-		22.27	22.25	
11a	6Mbps	1	44	5220	16.90	16.95	35.25	35.25	-		22.28	22.29	
11a	6Mbps	1	48	5240	16.95	16.90	35.30	35.20	-		22.29	22.28	
HT20	MCS0	1	36	5180	17.75	17.75	21.70	21.70	-		22.49	22.49	
HT20	MCS0	1	44	5220	17.75	17.80	23.75	23.70	-		22.49	22.50	
HT20	MCS0	1	48	5240	17.85	17.80	23.25	23.20	-		22.52	22.50	
HT40	MCS0	1	38	5190	36.50	36.50	41.76	41.76	-		23.01	23.01	
HT40	MCS0	1	46	5230	36.60	36.60	41.72	41.57	-		23.01	23.01	
VHT80	MCS0	1	42	5210	77.16	77.16	82.24	82.24	-		23.01	23.01	

TEST RESULTS DATA
Average Power Table

FCC Band I single antenna													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC 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	14.10	14.50		22.40	22.30	7.60	7.70		Pass
11a	6Mbps	1	44	5220	15.70	15.60		22.40	22.30	7.60	7.70		Pass
11a	6Mbps	1	48	5240	15.60	15.60		22.40	22.30	7.60	7.70		Pass
HT20	MCS0	1	36	5180	14.20	14.60		22.40	22.30	7.60	7.70		Pass
HT20	MCS0	1	44	5220	15.70	15.70		22.40	22.30	7.60	7.70		Pass
HT20	MCS0	1	48	5240	15.60	15.70		22.40	22.30	7.60	7.70		Pass
HT40	MCS0	1	38	5190	11.10	11.60		22.40	22.30	7.60	7.70		Pass
HT40	MCS0	1	46	5230	14.60	14.60		22.40	22.30	7.60	7.70		Pass
VHT20	MCS0	1	36	5180	14.10	14.50		22.40	22.30	7.60	7.70		Pass
VHT20	MCS0	1	44	5220	15.60	15.60		22.40	22.30	7.60	7.70		Pass
VHT20	MCS0	1	48	5240	15.50	15.60		22.40	22.30	7.60	7.70		Pass
VHT40	MCS0	1	38	5190	11.00	11.50		22.40	22.30	7.60	7.70		Pass
VHT40	MCS0	1	46	5230	14.50	14.50		22.40	22.30	7.60	7.70		Pass
VHT80	MCS0	1	42	5210	9.60	9.90		22.40	22.30	7.60	7.70		Pass

TEST RESULTS DATA
Power Spectral Density

FCC 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	4.93	4.97		9.40	9.30	7.60	7.70		Pass
11a	6Mbps	1	44	5220	6.17	6.16		9.40	9.30	7.60	7.70		Pass
11a	6Mbps	1	48	5240	5.90	5.98		9.40	9.30	7.60	7.70		Pass
HT20	MCS0	1	36	5180	4.79	4.01		9.40	9.30	7.60	7.70		Pass
HT20	MCS0	1	44	5220	5.82	5.03		9.40	9.30	7.60	7.70		Pass
HT20	MCS0	1	48	5240	5.80	4.94		9.40	9.30	7.60	7.70		Pass
HT40	MCS0	1	38	5190	-1.11	-1.92		9.40	9.30	7.60	7.70		Pass
HT40	MCS0	1	46	5230	1.80	1.22		9.40	9.30	7.60	7.70		Pass
VHT80	MCS0	1	42	5210	-6.35	-7.05		9.40	9.30	7.60	7.70		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	16.95	16.90	35.40	35.45	23.29	23.28	29.29	29.28	23.98	23.98	
11a	6Mbps	1	60	5300	17.20	16.95	35.35	35.35	23.36	23.29	29.36	29.29	23.98	23.98	
11a	6Mbps	1	64	5320	16.85	16.85	28.80	28.00	23.27	23.27	29.27	29.27	23.98	23.98	
HT20	MCS0	1	52	5260	17.75	17.75	23.00	23.25	23.49	23.49	29.49	29.49	23.98	23.98	
HT20	MCS0	1	60	5300	17.80	17.85	25.60	23.00	23.50	23.52	29.50	29.52	23.98	23.98	
HT20	MCS0	1	64	5320	17.75	17.75	21.70	21.65	23.49	23.49	29.49	29.49	23.98	23.98	
HT40	MCS0	1	54	5270	36.60	36.60	41.94	41.76	23.98	23.98	30.00	30.00	23.98	23.98	
HT40	MCS0	1	62	5310	36.60	36.60	41.94	41.92	23.98	23.98	30.00	30.00	23.98	23.98	
VHT80	MCS0	1	58	5290	77.16	77.40	82.24	82.16	23.98	23.98	30.00	30.00	23.98	23.98	

TEST RESULTS DATA
Average Power Table

FCC Band II single antenna													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC 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	15.60	15.60		22.38	22.28	7.60	7.70	26.99	Pass
11a	6Mbps	1	60	5300	15.60	15.70		22.38	22.28	7.60	7.70	26.99	Pass
11a	6Mbps	1	64	5320	14.20	14.20		22.38	22.28	7.60	7.70	26.99	Pass
HT20	MCS0	1	52	5260	15.60	15.60		22.38	22.28	7.60	7.70	26.99	Pass
HT20	MCS0	1	60	5300	15.70	15.60		22.38	22.28	7.60	7.70	26.99	Pass
HT20	MCS0	1	64	5320	14.30	14.40		22.38	22.28	7.60	7.70	26.99	Pass
HT40	MCS0	1	54	5270	14.70	14.70		22.38	22.28	7.60	7.70	26.99	Pass
HT40	MCS0	1	62	5310	13.70	12.10		22.38	22.28	7.60	7.70	26.99	Pass
VHT20	MCS0	1	52	5260	15.50	15.50		22.38	22.28	7.60	7.70	26.99	Pass
VHT20	MCS0	1	60	5300	15.60	15.50		22.38	22.28	7.60	7.70	26.99	Pass
VHT20	MCS0	1	64	5320	14.20	14.30		22.38	22.28	7.60	7.70	26.99	Pass
VHT40	MCS0	1	54	5270	14.60	14.60		22.38	22.28	7.60	7.70	26.99	Pass
VHT40	MCS0	1	62	5310	13.60	12.00		22.38	22.28	7.60	7.70	26.99	Pass
VHT80	MCS0	1	58	5290	10.60	9.40		22.38	22.28	7.60	7.70	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	5.92	5.28		9.40	9.30	7.60	7.70		Pass
11a	6Mbps	1	60	5300	5.83	5.12		9.40	9.30	7.60	7.70		Pass
11a	6Mbps	1	64	5320	4.70	4.08		9.40	9.30	7.60	7.70		Pass
HT20	MCS0	1	52	5260	5.71	5.06		9.40	9.30	7.60	7.70		Pass
HT20	MCS0	1	60	5300	5.75	4.87		9.40	9.30	7.60	7.70		Pass
HT20	MCS0	1	64	5320	4.62	3.92		9.40	9.30	7.60	7.70		Pass
HT40	MCS0	1	54	5270	2.00	1.11		9.40	9.30	7.60	7.70		Pass
HT40	MCS0	1	62	5310	0.88	-0.95		9.40	9.30	7.60	7.70		Pass
VHT80	MCS0	1	58	5290	-5.37	-7.02		9.40	9.30	7.60	7.70		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	16.95	17.05	35.45	35.30	23.29	23.32	29.29	29.32	23.98	23.98	----	----
11a	6Mbps	1	116	5580	16.95	16.95	35.50	35.70	23.29	23.29	29.29	29.29	23.98	23.98	----	----
11a	6Mbps	1	140	5700	16.85	16.80	21.85	21.50	23.27	23.25	29.27	29.25	23.98	23.98	----	----
HT20	MCS0	1	100	5500	17.75	17.85	21.70	26.95	23.49	23.52	29.49	29.52	23.98	23.98	----	----
HT20	MCS0	1	116	5580	17.85	17.75	26.40	26.35	23.52	23.49	29.52	29.49	23.98	23.98	----	----
HT20	MCS0	1	140	5700	17.75	17.75	21.80	21.75	23.49	23.49	29.49	29.49	23.98	23.98	----	----
HT40	MCS0	1	102	5510	36.60	36.50	41.89	41.94	23.98	23.98	30.00	30.00	23.98	23.98	----	----
HT40	MCS0	1	110	5550	36.70	36.60	41.76	42.03	23.98	23.98	30.00	30.00	23.98	23.98	----	----
HT40	MCS0	1	134	5670	36.60	36.70	41.76	57.96	23.98	23.98	30.00	30.00	23.98	23.98	----	----
VHT80	MCS0	1	106	5530	77.16	77.40	82.56	82.24	23.98	23.98	30.00	30.00	23.98	23.98	----	----
VHT80	MCS0	1	122	5610	77.16	77.16	82.36	82.41	23.98	23.98	30.00	30.00	23.98	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	13.65	13.60	22.80	24.30	22.35	22.34	28.35	28.34	23.98	23.98	3.25	3.25
HT20	MCS0	1	144	5720	13.90	14.00	20.30	22.65	22.43	22.46	28.43	28.46	23.98	23.98	3.85	3.85
HT40	MCS0	1	142	5710	33.40	33.40	35.97	49.02	23.98	23.98	30.00	30.00	23.98	23.98	3.09	3.18
VHT80	MCS0	1	138	5690	73.76	73.64	76.20	76.13	23.98	23.98	30.00	30.00	23.98	23.98	3.24	3.23

TEST RESULTS DATA
Average Power Table

FCC Band III single antenna													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC 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	15.70	15.70		22.68	23.38	7.30	6.60	26.99	Pass
11a	6Mbps	1	116	5580	15.60	15.60		22.68	23.38	7.30	6.60	26.99	Pass
11a	6Mbps	1	140	5700	12.10	12.10		22.68	23.38	7.30	6.60	26.99	Pass
HT20	MCS0	1	100	5500	14.50	15.70		22.68	23.38	7.30	6.60	26.99	Pass
HT20	MCS0	1	116	5580	15.60	15.70		22.68	23.38	7.30	6.60	26.99	Pass
HT20	MCS0	1	140	5700	13.10	13.10		22.68	23.38	7.30	6.60	26.99	Pass
HT40	MCS0	1	102	5510	14.60	14.70		22.68	23.38	7.30	6.60	26.99	Pass
HT40	MCS0	1	110	5550	14.70	14.60		22.68	23.38	7.30	6.60	26.99	Pass
HT40	MCS0	1	134	5670	14.60	14.60		22.68	23.38	7.30	6.60	26.99	Pass
VHT20	MCS0	1	100	5500	14.40	15.60		22.68	23.38	7.30	6.60	26.99	Pass
VHT20	MCS0	1	116	5580	15.50	15.60		22.68	23.38	7.30	6.60	26.99	Pass
VHT20	MCS0	1	140	5700	13.00	13.00		22.68	23.38	7.30	6.60	26.99	Pass
VHT40	MCS0	1	102	5510	14.50	14.60		22.68	23.38	7.30	6.60	26.99	Pass
VHT40	MCS0	1	110	5550	14.60	14.50		22.68	23.38	7.30	6.60	26.99	Pass
VHT40	MCS0	1	134	5670	14.50	14.50		22.68	23.38	7.30	6.60	26.99	Pass
VHT80	MCS0	1	106	5530	10.80	9.50		22.68	23.38	7.30	6.60	26.99	Pass
VHT80	MCS0	1	122	5610	11.70	11.60		22.68	23.38	7.30	6.60	26.99	Pass

FCC Band III straddle channel single antenna													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC 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	15.60	15.60		22.68	23.38	7.30	6.60	26.99	Pass
HT20	MCS0	1	144	5720	15.60	15.60		22.68	23.38	7.30	6.60	26.99	Pass
HT40	MCS0	1	142	5710	14.60	14.60		22.68	23.38	7.30	6.60	26.99	Pass
VHT20	MCS0	1	144	5720	15.50	15.50		22.68	23.38	7.30	6.60	26.99	Pass
VHT40	MCS0	1	142	5710	14.50	14.50		22.68	23.38	7.30	6.60	26.99	Pass
VHT80	MCS0	1	138	5690	11.60	11.60		22.68	23.38	7.30	6.60	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	6.23	5.80		9.70	10.40	7.30	6.60		Pass
11a	6Mbps	1	116	5580	6.26	5.76		9.70	10.40	7.30	6.60		Pass
11a	6Mbps	1	140	5700	3.54	2.01		9.70	10.40	7.30	6.60		Pass
HT20	MCS0	1	100	5500	4.99	5.63		9.70	10.40	7.30	6.60		Pass
HT20	MCS0	1	116	5580	5.99	5.54		9.70	10.40	7.30	6.60		Pass
HT20	MCS0	1	140	5700	3.49	2.76		9.70	10.40	7.30	6.60		Pass
HT40	MCS0	1	102	5510	2.12	1.76		9.70	10.40	7.30	6.60		Pass
HT40	MCS0	1	110	5550	2.18	1.77		9.70	10.40	7.30	6.60		Pass
HT40	MCS0	1	134	5670	1.92	1.87		9.70	10.40	7.30	6.60		Pass
VHT80	MCS0	1	106	5530	-4.87	-6.46		9.70	10.40	7.30	6.60		Pass
VHT80	MCS0	1	122	5610	-4.13	-4.95		9.70	10.40	7.30	6.60		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	6.45	5.44		9.70	10.40	7.30	6.60		Pass
HT20	MCS0	1	144	5720	5.30	5.41		9.70	10.40	7.30	6.60		Pass
HT40	MCS0	1	142	5710	1.55	1.78		9.70	10.40	7.30	6.60		Pass
VHT80	MCS0	1	138	5690	-4.47	-5.25		9.70	10.40	7.30	6.60		Pass



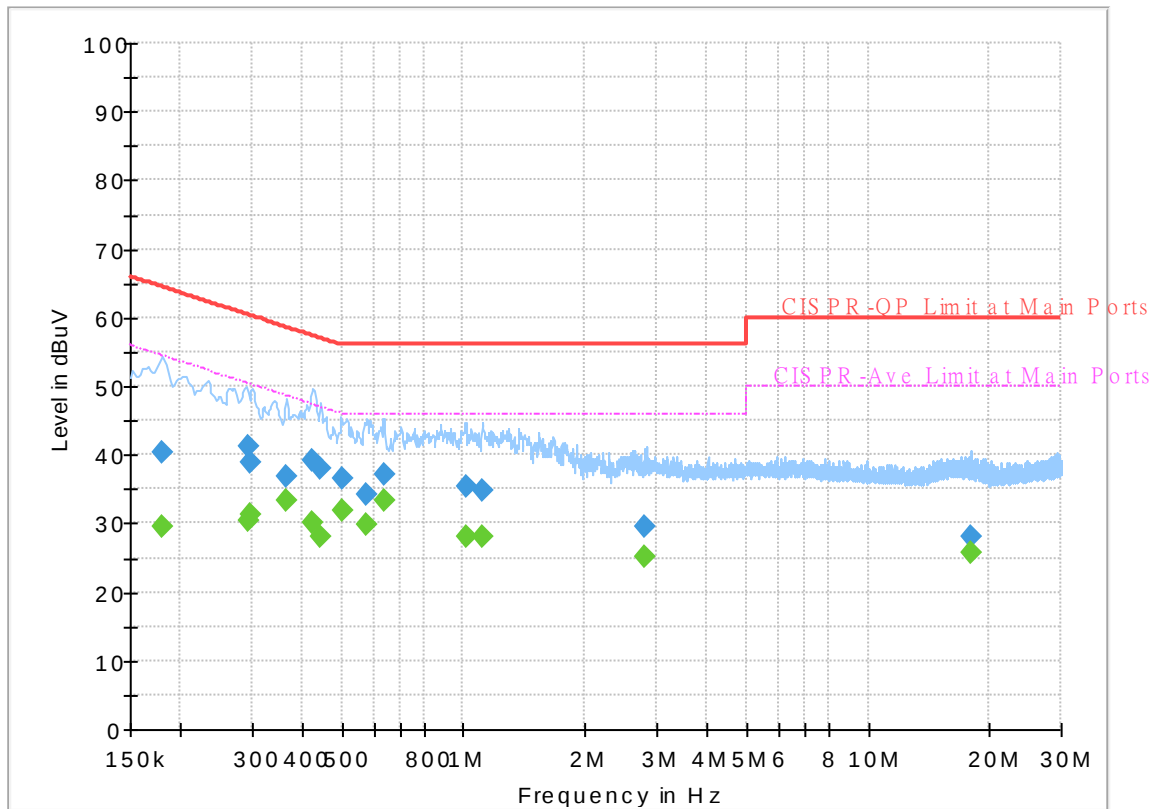
Appendix B. AC Conducted Emission Test Results

Test Engineer :	Tom Lee	Temperature :	21~25℃
		Relative Humidity :	42~50%

EUT Information

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)
0.179610	---	29.48	54.50	25.02	L1	OFF	19.5
0.179610	40.43	---	64.50	24.07	L1	OFF	19.5
0.294000	---	30.53	50.41	19.88	L1	OFF	19.5
0.294000	41.19	---	60.41	19.22	L1	OFF	19.5
0.296610	---	31.36	50.34	18.98	L1	OFF	19.5
0.296610	38.82	---	60.34	21.52	L1	OFF	19.5
0.364470	---	33.39	48.63	15.24	L1	OFF	19.5
0.364470	36.81	---	58.63	21.82	L1	OFF	19.5
0.423690	---	30.08	47.38	17.30	L1	OFF	19.5
0.423690	39.21	---	57.38	18.17	L1	OFF	19.5
0.444750	---	27.95	46.97	19.02	L1	OFF	19.5
0.444750	37.88	---	56.97	19.09	L1	OFF	19.5
0.501900	---	31.93	46.00	14.07	L1	OFF	19.5
0.501900	36.55	---	56.00	19.45	L1	OFF	19.5
0.573000	---	29.95	46.00	16.05	L1	OFF	19.5
0.573000	34.14	---	56.00	21.86	L1	OFF	19.5
0.634470	---	33.34	46.00	12.66	L1	OFF	19.5
0.634470	37.25	---	56.00	18.75	L1	OFF	19.5
1.012020	---	28.09	46.00	17.91	L1	OFF	19.6
1.012020	35.25	---	56.00	20.75	L1	OFF	19.6
1.110660	---	27.94	46.00	18.06	L1	OFF	19.6

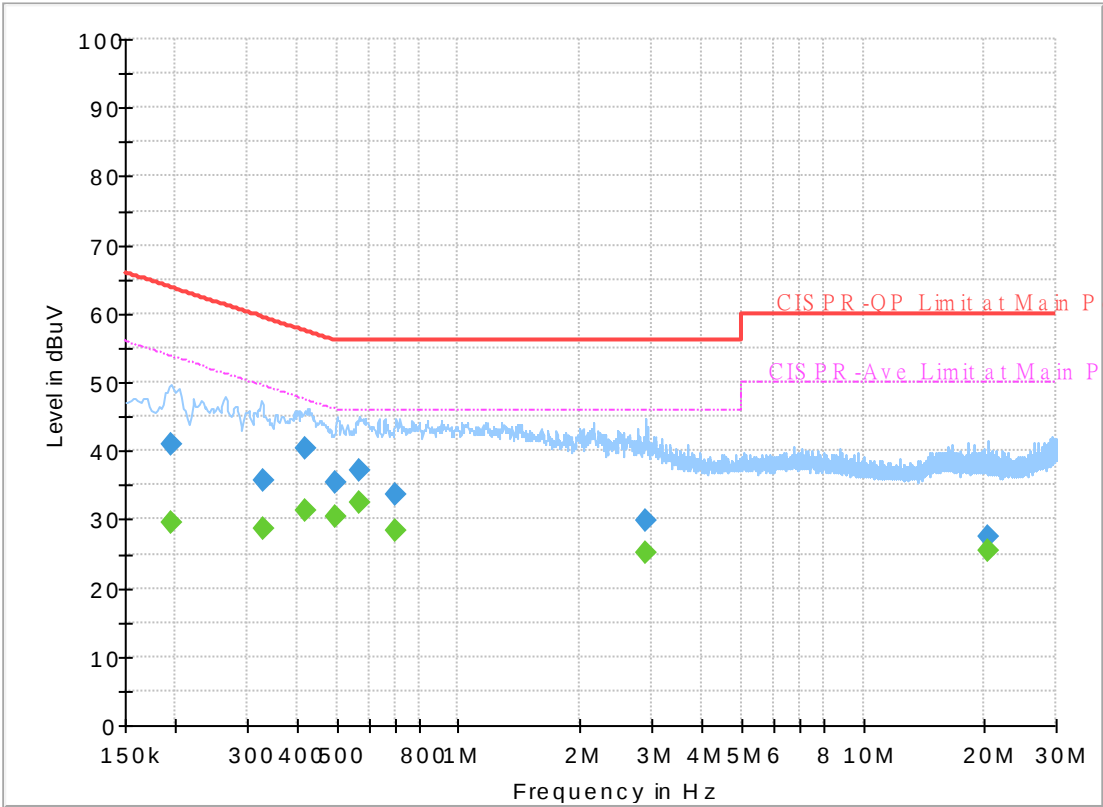
1.110660	34.81	---	56.00	21.19	L1	OFF	19.6
2.811210	---	25.13	46.00	20.87	L1	OFF	19.7
2.811210	29.59	---	56.00	26.41	L1	OFF	19.7
18.017250	---	25.61	50.00	24.39	L1	OFF	20.2
18.017250	28.21	---	60.00	31.79	L1	OFF	20.2

EUT Information

Test Mode :
Test Voltage :
Phase :

Mode 1
120Vac/60Hz
Neutral

Full Spectrum



Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.194370	---	29.41	53.85	24.44	N	OFF	19.6
0.194370	40.82	---	63.85	23.03	N	OFF	19.6
0.329280	---	28.52	49.47	20.95	N	OFF	19.6
0.329280	35.57	---	59.47	23.90	N	OFF	19.6
0.420000	---	31.16	47.45	16.29	N	OFF	19.6
0.420000	40.47	---	57.45	16.98	N	OFF	19.6
0.496950	---	30.27	46.05	15.78	N	OFF	19.6
0.496950	35.39	---	56.05	20.66	N	OFF	19.6
0.570300	---	32.39	46.00	13.61	N	OFF	19.6
0.570300	37.00	---	56.00	19.00	N	OFF	19.6
0.696750	---	28.46	46.00	17.54	N	OFF	19.6
0.696750	33.54	---	56.00	22.46	N	OFF	19.6
2.904270	---	25.15	46.00	20.85	N	OFF	19.6
2.904270	29.95	---	56.00	26.05	N	OFF	19.6
20.476500	---	25.42	50.00	24.58	N	OFF	20.4
20.476500	27.55	---	60.00	32.45	N	OFF	20.4



Appendix C. Radiated Spurious Emission

Test Engineer :	Jesse Wang, Stan Hsieh, Ken Wu, and Nick Yu	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. 1		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11a CH 36 5180MHz		5148.72	60.48	-13.52	74	49.94	34.4	11.56	35.42	182	350	P	H
		5150	47.55	-6.45	54	37.01	34.4	11.56	35.42	182	350	A	H
	*	5180	107.14	-	-	96.5	34.47	11.58	35.41	182	350	P	H
	*	5180	99.83	-	-	89.19	34.47	11.58	35.41	182	350	A	H
													H
		5149.24	62.93	-11.07	74	52.39	34.4	11.56	35.42	160	342	P	V
		5150	51.13	-2.87	54	40.59	34.4	11.56	35.42	160	342	A	V
	*	5180	110.86	-	-	100.22	34.47	11.58	35.41	160	342	P	V
	*	5180	102.99	-	-	92.35	34.47	11.58	35.41	160	342	A	V
													V
802.11a CH 44 5220MHz		5062.66	49.23	-24.77	74	39.03	34.17	11.48	35.45	279	351	P	H
		5150	41.6	-12.4	54	31.06	34.4	11.56	35.42	279	351	A	H
	*	5220	107.71	-	-	96.99	34.5	11.62	35.4	279	351	P	H
	*	5220	100.15	-	-	89.43	34.5	11.62	35.4	279	351	A	H
		5438.72	49.57	-24.43	74	38.34	34.7	11.85	35.32	279	351	P	H
		5365.92	40.39	-13.61	54	29.4	34.57	11.77	35.35	279	351	A	H
		5132.08	52.47	-21.53	74	41.99	34.37	11.54	35.43	138	341	P	V
		5150	44.23	-9.77	54	33.69	34.4	11.56	35.42	138	341	A	V
	*	5220	111.37	-	-	100.65	34.5	11.62	35.4	138	341	P	V
	*	5220	104	-	-	93.28	34.5	11.62	35.4	138	341	A	V
		5444.32	49.61	-24.39	74	38.37	34.7	11.86	35.32	138	341	P	V
		5365.92	42	-12	54	31.01	34.57	11.77	35.35	138	341	A	V



802.11a CH 48 5240MHz		5141.44	50.27	-23.73	74	39.74	34.4	11.55	35.42	181	351	P	H
		5079.3	41.08	-12.92	54	30.79	34.23	11.5	35.44	181	351	A	H
	*	5240	107.7	-	-	96.95	34.5	11.64	35.39	181	351	P	H
	*	5240	100.32	-	-	89.57	34.5	11.64	35.39	181	351	A	H
		5400.36	49.42	-24.58	74	38.24	34.7	11.81	35.33	181	351	P	H
		5350.24	40.72	-13.28	54	29.81	34.5	11.76	35.35	181	351	A	H
		5135.72	52.07	-21.93	74	41.57	34.37	11.55	35.42	137	342	P	V
		5079.3	43.01	-10.99	54	32.72	34.23	11.5	35.44	137	342	A	V
	*	5240	111.55	-	-	100.8	34.5	11.64	35.39	137	342	P	V
	*	5240	103.96	-	-	93.21	34.5	11.64	35.39	137	342	A	V
		5350.52	50.34	-23.66	74	39.43	34.5	11.76	35.35	137	342	P	V
		5350	42.27	-11.73	54	31.36	34.5	11.76	35.35	137	342	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 1		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11a CH 36 5180MHz		10360	46.41	-21.79	68.2	50.39	37.47	17.58	59.03	100	0	P	H
		15540	47.69	-26.31	74	42.71	40.1	21.65	56.77	100	0	P	H
													H
													H
		10360	44.32	-23.88	68.2	48.3	37.47	17.58	59.03	100	0	P	V
		15540	47.9	-26.1	74	42.92	40.1	21.65	56.77	100	0	P	V
													V
													V
802.11a CH 44 5220MHz		3915	50.67	-23.33	74	42.62	33.3	10.11	35.36	208	53	P	H
		3915	38.6	-15.4	54	30.55	33.3	10.11	35.36	208	53	A	H
		10440	46.73	-21.47	68.2	51.09	37.53	17.65	59.54	100	0	P	H
		15660	47.8	-26.2	74	42.32	40.45	21.73	56.7	100	0	P	H
		3915	48.94	-25.06	74	40.89	33.3	10.11	35.36	100	0	P	V
		10440	45.8	-22.4	68.2	50.16	37.53	17.65	59.54	100	0	P	V
		15660	49.02	-24.98	74	43.54	40.45	21.73	56.7	100	0	P	V
													V
802.11a CH 48 5240MHz		10480	47.87	-20.33	68.2	51.55	37.58	17.68	58.94	100	0	P	H
		15720	52.24	-21.76	74	46.64	40.58	21.76	56.74	100	321	P	H
		15720	42.4	-11.6	54	36.8	40.58	21.76	56.74	100	321	A	H
													H
		10480	47.95	-20.25	68.2	51.63	37.58	17.68	58.94	100	0	P	V
		15720	51.67	-22.33	74	46.07	40.58	21.76	56.74	100	352	P	V
		15720	41.03	-12.97	54	35.43	40.58	21.76	56.74	100	352	A	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 36 5180MHz		5145.86	58.21	-15.79	74	47.68	34.4	11.55	35.42	183	351	P	H
		5150	46.57	-7.43	54	36.03	34.4	11.56	35.42	183	351	A	H
	*	5180	107.15	-	-	96.51	34.47	11.58	35.41	183	351	P	H
	*	5180	99.5	-	-	88.86	34.47	11.58	35.41	183	351	A	H
													H
													H
		5144.3	61.75	-12.25	74	51.22	34.4	11.55	35.42	157	343	P	V
		5150	49.9	-4.1	54	39.36	34.4	11.56	35.42	157	343	A	V
	*	5180	110.53	-	-	99.89	34.47	11.58	35.41	157	343	P	V
	*	5180	103.14	-	-	92.5	34.47	11.58	35.41	157	343	A	V
													V
													V
802.11n HT20 CH 44 5220MHz		5142.48	50.87	-23.13	74	40.34	34.4	11.55	35.42	208	354	P	H
		5146.9	41.87	-12.13	54	31.34	34.4	11.55	35.42	208	354	A	H
	*	5220	107.66	-	-	96.94	34.5	11.62	35.4	208	354	P	H
	*	5220	100.29	-	-	89.57	34.5	11.62	35.4	208	354	A	H
		5365.08	49.68	-24.32	74	38.69	34.57	11.77	35.35	208	354	P	H
		5375.44	40.76	-13.24	54	29.75	34.57	11.78	35.34	208	354	A	H
		5140.92	52.23	-21.77	74	41.7	34.4	11.55	35.42	137	340	P	V
		5149.76	44.03	-9.97	54	33.49	34.4	11.56	35.42	137	340	A	V
	*	5220	111.31	-	-	100.59	34.5	11.62	35.4	137	340	P	V
	*	5220	103.76	-	-	93.04	34.5	11.62	35.4	137	340	A	V
		5359.76	49.66	-24.34	74	38.74	34.5	11.77	35.35	137	340	P	V
		5365.92	42.36	-11.64	54	31.37	34.57	11.77	35.35	137	340	A	V



FCC RADIO TEST REPORT

Report No. : FR990608-02D

802.11n HT20 CH 48 5240MHz		5136.76	50.03	-23.97	74	39.53	34.37	11.55	35.42	181	351	P	H
		5078.52	41.23	-12.77	54	30.94	34.23	11.5	35.44	181	351	A	H
	*	5240	107.52	-	-	96.77	34.5	11.64	35.39	181	351	P	H
	*	5240	100.33	-	-	89.58	34.5	11.64	35.39	181	351	A	H
		5351.08	49.36	-24.64	74	38.45	34.5	11.76	35.35	181	351	P	H
		5350	40.64	-13.36	54	29.73	34.5	11.76	35.35	181	351	A	H
		5148.2	51.84	-22.16	74	41.3	34.4	11.56	35.42	137	342	P	V
		5078.78	43.38	-10.62	54	33.09	34.23	11.5	35.44	137	342	A	V
	*	5240	111.38	-	-	100.63	34.5	11.64	35.39	137	342	P	V
	*	5240	104.02	-	-	93.27	34.5	11.64	35.39	137	342	A	V
		5358.08	50.83	-23.17	74	39.91	34.5	11.77	35.35	137	342	P	V
		5364.24	42.35	-11.65	54	31.36	34.57	11.77	35.35	137	342	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 1		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11n HT20 CH 36 5180MHz		10360	45.1	-23.1	68.2	49.08	37.47	17.58	59.03	100	0	P	H
		15540	47.66	-26.34	74	42.68	40.1	21.65	56.77	100	0	P	H
													H
													H
		10360	44.82	-23.38	68.2	48.8	37.47	17.58	59.03	100	0	P	V
		15540	48.64	-25.36	74	43.66	40.1	21.65	56.77	100	0	P	V
													V
													V
802.11n HT20 CH 44 5220MHz		10440	46.19	-22.01	68.2	49.98	37.53	17.65	58.97	100	0	P	H
		15660	48.47	-25.53	74	43.04	40.45	21.73	56.75	100	0	P	H
													H
													H
		10440	46.66	-21.54	68.2	50.45	37.53	17.65	58.97	100	0	P	V
		15660	49.49	-24.51	74	44.06	40.45	21.73	56.75	100	0	P	V
													V
													V
802.11n HT20 CH 48 5240MHz		10480	48.01	-20.19	68.2	51.69	37.58	17.68	58.94	100	0	P	H
		15720	52.32	-21.68	74	46.72	40.58	21.76	56.74	100	318	P	H
		15720	42.13	-11.87	54	36.53	40.58	21.76	56.74	100	318	A	H
													H
		10480	45.71	-22.49	68.2	49.39	37.58	17.68	58.94	100	0	P	V
		15720	51.64	-22.36	74	46.04	40.58	21.76	56.74	100	353	P	V
		15720	40.78	-13.22	54	35.18	40.58	21.76	56.74	100	353	A	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz
WIFI 802.11n HT40 (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)
802.11n HT40 CH 38 5190MHz		5145.86	53.68	-20.32	74	43.15	34.4	11.55	35.42	184	350	P	H
		5150	47.26	-6.74	54	36.72	34.4	11.56	35.42	184	350	A	H
	*	5190	100.7	-	-	90.05	34.47	11.59	35.41	184	350	P	H
	*	5190	93.58	-	-	82.93	34.47	11.59	35.41	184	350	A	H
		5449.08	48.6	-25.4	74	37.35	34.7	11.87	35.32	184	350	P	H
		5459.72	39.68	-14.32	54	28.41	34.7	11.88	35.31	184	350	A	H
		5149.76	59.42	-14.58	74	48.88	34.4	11.56	35.42	145	342	P	V
		5150	51.34	-2.66	54	40.8	34.4	11.56	35.42	145	342	A	V
	*	5190	104.02	-	-	93.37	34.47	11.59	35.41	145	342	P	V
	*	5190	97.17	-	-	86.52	34.47	11.59	35.41	145	342	A	V
		5353.6	50.03	-23.97	74	39.12	34.5	11.76	35.35	145	342	P	V
		5359.76	40.73	-13.27	54	29.81	34.5	11.77	35.35	145	342	A	V
802.11n HT40 CH 46 5230MHz		5145.34	51.67	-22.33	74	41.14	34.4	11.55	35.42	172	350	P	H
		5150	42.62	-11.38	54	32.08	34.4	11.56	35.42	172	350	A	H
	*	5230	103.09	-	-	92.35	34.5	11.63	35.39	172	350	P	H
	*	5230	96.1	-	-	85.36	34.5	11.63	35.39	172	350	A	H
		5416.6	49.37	-24.63	74	38.17	34.7	11.83	35.33	172	350	P	H
		5359.2	40.69	-13.31	54	29.77	34.5	11.77	35.35	172	350	A	H
		5138.58	54	-20	74	43.5	34.37	11.55	35.42	174	343	P	V
		5150	45.26	-8.74	54	34.72	34.4	11.56	35.42	174	343	A	V
	*	5230	107.27	-	-	96.53	34.5	11.63	35.39	174	343	P	V
	*	5230	100.01	-	-	89.27	34.5	11.63	35.39	174	343	A	V
		5350	50.65	-23.35	74	39.74	34.5	11.76	35.35	174	343	P	V
		5351.64	42.42	-11.58	54	31.51	34.5	11.76	35.35	174	343	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	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	Avg. (P/A)	(H/V)
802.11n HT40 CH 38 5190MHz		10380	45.28	-22.92	68.2	49.22	37.48	17.6	59.02	100	0	P	H
		15570	47.43	-26.57	74	42.32	40.2	21.68	56.77	100	0	P	H
													H
													H
		10380	45.65	-22.55	68.2	49.59	37.48	17.6	59.02	100	0	P	V
		15570	48.04	-25.96	74	42.93	40.2	21.68	56.77	100	0	P	V
													V
													V
802.11n HT40 CH 46 5230MHz		10460	45.83	-22.37	68.2	49.58	37.55	17.66	58.96	100	0	P	H
		15690	47.94	-26.06	74	42.39	40.55	21.75	56.75	100	0	P	H
													H
													H
		10460	45.68	-22.52	68.2	49.43	37.55	17.66	58.96	100	0	P	V
		15690	48.11	-25.89	74	42.56	40.55	21.75	56.75	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI	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)
802.11ac VHT80 CH 42 5210MHz		5142.22	57.44	-16.56	74	46.91	34.4	11.55	35.42	189	356	P	H
		5145.34	48.28	-5.72	54	37.75	34.4	11.55	35.42	189	356	A	H
	*	5210	96.02	-	-	85.31	34.5	11.61	35.4	189	356	P	H
	*	5210	88.17	-	-	77.46	34.5	11.61	35.4	189	356	A	H
		5441.8	49.28	-24.72	74	38.04	34.7	11.86	35.32	189	356	P	H
		5350.52	40.83	-13.17	54	29.92	34.5	11.76	35.35	189	356	A	H
		5144.56	60.47	-13.53	74	49.94	34.4	11.55	35.42	222	341	P	V
		5150	52.22	-1.78	54	41.68	34.4	11.56	35.42	222	341	A	V
	*	5210	99.74	-	-	89.03	34.5	11.61	35.4	222	341	P	V
	*	5210	92.54	-	-	81.83	34.5	11.61	35.4	222	341	A	V
		5366.48	50.13	-23.87	74	39.14	34.57	11.77	35.35	222	341	P	V
		5350.52	42.5	-11.5	54	31.59	34.5	11.76	35.35	222	341	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 1		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11ac VHT80 CH 42 5210MHz		10420	46.28	-21.92	68.2	50.12	37.52	17.63	58.99	100	0	P	H
		15630	46.75	-27.25	74	41.4	40.4	21.71	56.76	100	0	P	H
													H
													H
		10420	45.28	-22.92	68.2	49.12	37.52	17.63	58.99	100	0	P	V
		15630	46.73	-27.27	74	41.38	40.4	21.71	56.76	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 - 5250~5350MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 1		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11a CH 52 5260MHz		5147.35	50.58	-23.42	74	40.04	34.4	11.56	35.42	190	350	P	H
		5098.7	41.27	-12.73	54	30.9	34.3	11.51	35.44	190	350	A	H
	*	5260	107.16	-	-	96.31	34.57	11.66	35.38	190	350	P	H
	*	5260	99.8	-	-	88.95	34.57	11.66	35.38	190	350	A	H
		5427.12	49.63	-24.37	74	38.41	34.7	11.84	35.32	190	350	P	H
		5350.56	40.87	-13.13	54	29.96	34.5	11.76	35.35	190	350	A	H
		5022.05	50.52	-23.48	74	40.43	34.1	11.45	35.46	140	337	P	V
		5099.05	42.8	-11.2	54	32.43	34.3	11.51	35.44	140	337	A	V
	*	5260	111.26	-	-	100.41	34.57	11.66	35.38	140	337	P	V
	*	5260	103.52	-	-	92.67	34.57	11.66	35.38	140	337	A	V
		5365.92	52.36	-21.64	74	41.37	34.57	11.77	35.35	140	337	P	V
		5350.32	42.81	-11.19	54	31.9	34.5	11.76	35.35	140	337	A	V
802.11a CH 60 5300MHz		5099.05	50.39	-23.61	74	40.02	34.3	11.51	35.44	182	351	P	H
		5139.3	41.26	-12.74	54	30.76	34.37	11.55	35.42	182	351	A	H
	*	5300	108.18	-	-	97.15	34.7	11.7	35.37	182	351	P	H
	*	5300	100.21	-	-	89.18	34.7	11.7	35.37	182	351	A	H
		5351.52	56.02	-17.98	74	45.11	34.5	11.76	35.35	182	351	P	H
		5350.08	44.88	-9.12	54	33.97	34.5	11.76	35.35	182	351	A	H
		5149.1	52.32	-21.68	74	41.78	34.4	11.56	35.42	136	344	P	V
		5138.6	42.97	-11.03	54	32.47	34.37	11.55	35.42	136	344	A	V
	*	5300	111.9	-	-	100.87	34.7	11.7	35.37	136	344	P	V
	*	5300	103.76	-	-	92.73	34.7	11.7	35.37	136	344	A	V
		5352.96	59.84	-14.16	74	48.93	34.5	11.76	35.35	136	344	P	V
		5350.08	47.03	-6.97	54	36.12	34.5	11.76	35.35	136	344	A	V



802.11a CH 64 5320MHz	*	5320	106.13	-	-	95.13	34.63	11.73	35.36	152	351	P	H
	*	5320	98.71	-	-	87.71	34.63	11.73	35.36	152	351	A	H
		5351.2	59.61	-14.39	74	48.7	34.5	11.76	35.35	152	351	P	H
		5350.08	47.02	-6.98	54	36.11	34.5	11.76	35.35	152	351	A	H
													H
													H
	*	5320	109.9	-	-	98.9	34.63	11.73	35.36	157	346	P	V
	*	5320	102.36	-	-	91.36	34.63	11.73	35.36	157	346	A	V
		5360.8	60.46	-13.54	74	49.47	34.57	11.77	35.35	157	346	P	V
		5350.08	50.22	-3.78	54	39.31	34.5	11.76	35.35	157	346	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 1		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11a CH 52 5260MHz		10520	46.51	-21.69	68.2	50.13	37.6	17.7	58.92	100	0	P	H
		15780	49.61	-24.39	74	44.02	40.53	21.8	56.74	100	0	P	H
													H
													H
		10520	46.14	-22.06	68.2	49.76	37.6	17.7	58.92	100	0	P	V
		15780	49.72	-24.28	74	44.13	40.53	21.8	56.74	100	0	P	V
													V
													V
802.11a CH 60 5300MHz		3975	50.8	-23.2	74	42.79	33.2	10.18	35.37	221	51	P	H
		3975	40.21	-13.79	54	32.2	33.2	10.18	35.37	221	51	A	H
		10600	47.65	-26.35	74	51.54	37.6	17.76	59.25	100	0	P	H
		15900	52.29	-21.71	74	46.66	40.8	21.89	57.06	122	315	P	H
		15900	42.76	-11.24	54	37.13	40.8	21.89	57.06	122	315	A	H
		3975	50.61	-23.39	74	42.6	33.2	10.18	35.37	200	329	P	V
		3975	40.05	-13.95	54	32.04	33.2	10.18	35.37	200	329	A	V
		10600	47.12	-26.88	74	51.01	37.6	17.76	59.25	100	0	P	V
		15900	51.42	-22.58	74	45.79	40.8	21.89	57.06	400	324	P	V
		15900	42.44	-11.56	54	36.81	40.8	21.89	57.06	400	324	A	V
802.11a CH 64 5320MHz		10640	49.84	-24.16	74	53.28	37.63	17.79	58.86	100	0	P	H
		15960	49.19	-24.81	74	43.17	40.8	21.93	56.71	100	0	P	H
													H
													H
		10640	46.57	-27.43	74	50.01	37.63	17.79	58.86	100	0	P	V
		15960	49.75	-24.25	74	43.73	40.8	21.93	56.71	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

WIFI 802.11n HT20 (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)
802.11n HT20 CH 52 5260MHz		5079.1	50.92	-23.08	74	40.63	34.23	11.5	35.44	160	352	P	H
		5098.7	40.85	-13.15	54	30.48	34.3	11.51	35.44	160	352	A	H
	*	5260	107.08	-	-	96.23	34.57	11.66	35.38	160	352	P	H
	*	5260	99.67	-	-	88.82	34.57	11.66	35.38	160	352	A	H
		5362.32	49.65	-24.35	74	38.66	34.57	11.77	35.35	160	352	P	H
		5360.4	40.9	-13.1	54	29.98	34.5	11.77	35.35	160	352	A	H
		5045.5	51.49	-22.51	74	41.37	34.1	11.47	35.45	167	344	P	V
		5099.05	42.94	-11.06	54	32.57	34.3	11.51	35.44	167	344	A	V
	*	5260	111.06	-	-	100.21	34.57	11.66	35.38	167	344	P	V
	*	5260	103.71	-	-	92.86	34.57	11.66	35.38	167	344	A	V
		5372.4	51.26	-22.74	74	40.25	34.57	11.78	35.34	167	344	P	V
		5353.68	42.66	-11.34	54	31.75	34.5	11.76	35.35	167	344	A	V
802.11n HT20 CH 60 5300MHz		5122.85	50.2	-23.8	74	39.73	34.37	11.53	35.43	154	351	P	H
		5138.6	40.91	-13.09	54	30.41	34.37	11.55	35.42	154	351	A	H
	*	5300	107.43	-	-	96.4	34.7	11.7	35.37	154	351	P	H
	*	5300	99.74	-	-	88.71	34.7	11.7	35.37	154	351	A	H
		5354.88	57.36	-16.64	74	46.45	34.5	11.76	35.35	154	351	P	H
		5350.08	43.43	-10.57	54	32.52	34.5	11.76	35.35	154	351	A	H
		5107.45	51.72	-22.28	74	41.3	34.33	11.52	35.43	165	344	P	V
		5138.25	42.92	-11.08	54	32.42	34.37	11.55	35.42	165	344	A	V
	*	5300	111.25	-	-	100.22	34.7	11.7	35.37	165	344	P	V
	*	5300	103.67	-	-	92.64	34.7	11.7	35.37	165	344	A	V
		5358.48	58.85	-15.15	74	47.93	34.5	11.77	35.35	165	344	P	V
		5350.08	45.83	-8.17	54	34.92	34.5	11.76	35.35	165	344	A	V



FCC RADIO TEST REPORT

Report No. : FR990608-02D

802.11n HT20 CH 64 5320MHz	*	5320	106.39	-	-	95.39	34.63	11.73	35.36	152	351	P	H
	*	5320	98.78	-	-	87.78	34.63	11.73	35.36	152	351	A	H
		5358.72	58.85	-15.15	74	47.93	34.5	11.77	35.35	152	351	P	H
		5350.72	45.69	-8.31	54	34.78	34.5	11.76	35.35	152	351	A	H
													H
													H
	*	5320	109.9	-	-	98.9	34.63	11.73	35.36	156	346	P	V
	*	5320	102.53	-	-	91.53	34.63	11.73	35.36	156	346	A	V
		5350.72	65.93	-8.07	74	55.02	34.5	11.76	35.35	156	346	P	V
		5350.56	48.88	-5.12	54	37.97	34.5	11.76	35.35	156	346	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	Avg. (P/A)	(H/V)
802.11n HT20 CH 52 5260MHz		10520	45.14	-23.06	68.2	48.76	37.6	17.7	58.92	100	0	P	H
		15780	46.73	-27.27	74	41.14	40.53	21.8	56.74	100	0	P	H
													H
													H
		10520	44.32	-23.88	68.2	47.94	37.6	17.7	58.92	100	0	P	V
		15780	47.44	-26.56	74	41.85	40.53	21.8	56.74	100	0	P	V
													V
													V
802.11n HT20 CH 60 5300MHz		10600	45.27	-28.73	74	48.79	37.6	17.76	58.88	100	0	P	H
		15900	49.06	-24.94	74	43.09	40.8	21.89	56.72	100	0	P	H
													H
													H
		10600	44.12	-29.88	74	47.64	37.6	17.76	58.88	100	0	P	V
		15900	49.02	-24.98	74	43.05	40.8	21.89	56.72	100	0	P	V
													V
													V
802.11n HT20 CH 64 5320MHz		10640	43.67	-30.33	74	47.11	37.63	17.79	58.86	100	0	P	H
		15960	47.74	-26.26	74	41.72	40.8	21.93	56.71	100	0	P	H
													H
													H
		10640	44.57	-29.43	74	48.01	37.63	17.79	58.86	100	0	P	V
		15960	48.59	-25.41	74	42.57	40.8	21.93	56.71	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz
WIFI 802.11n HT40 (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)
802.11n HT40 CH 54 5270MHz		5128.45	50.54	-23.46	74	40.06	34.37	11.54	35.43	160	351	P	H
		5120.05	41	-13	54	30.57	34.33	11.53	35.43	160	351	A	H
	*	5270	103.01	-	-	92.15	34.57	11.67	35.38	160	351	P	H
	*	5270	96.02	-	-	85.16	34.57	11.67	35.38	160	351	A	H
		5353.2	51.6	-22.4	74	40.69	34.5	11.76	35.35	160	351	P	H
		5350.08	42.62	-11.38	54	31.71	34.5	11.76	35.35	160	351	A	H
		5120.4	54.34	-19.66	74	43.91	34.33	11.53	35.43	152	344	P	V
		5103.95	42.93	-11.07	54	32.54	34.3	11.52	35.43	152	344	A	V
	*	5270	107.26	-	-	96.4	34.57	11.67	35.38	152	344	P	V
	*	5270	99.94	-	-	89.08	34.57	11.67	35.38	152	344	A	V
		5360.64	54.91	-19.09	74	43.92	34.57	11.77	35.35	152	344	P	V
		5350.08	44.98	-9.02	54	34.07	34.5	11.76	35.35	152	344	A	V
802.11n HT40 CH 62 5310MHz		5126	50.04	-23.96	74	39.56	34.37	11.54	35.43	152	351	P	H
		5126	40.65	-13.35	54	30.17	34.37	11.54	35.43	152	351	A	H
	*	5310	101.87	-	-	90.88	34.63	11.72	35.36	152	351	P	H
	*	5310	95.01	-	-	84.02	34.63	11.72	35.36	152	351	A	H
		5356.08	57.32	-16.68	74	46.41	34.5	11.76	35.35	152	351	P	H
		5350.08	48.5	-5.5	54	37.59	34.5	11.76	35.35	152	351	A	H
		5143.15	50.63	-23.37	74	40.1	34.4	11.55	35.42	145	344	P	V
		5141.4	42.45	-11.55	54	31.92	34.4	11.55	35.42	145	344	A	V
	*	5310	105.32	-	-	94.33	34.63	11.72	35.36	145	344	P	V
	*	5310	98.64	-	-	87.65	34.63	11.72	35.36	145	344	A	V
		5350.08	62.19	-11.81	74	51.28	34.5	11.76	35.35	145	344	P	V
		5350.08	51.77	-2.23	54	40.86	34.5	11.76	35.35	145	344	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	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	Avg. (P/A)	(H/V)
802.11n HT40 CH 54 5270MHz		10540	43.55	-24.65	68.2	47.15	37.6	17.71	58.91	100	0	P	H
		15810	46.08	-27.92	74	40.49	40.5	21.82	56.73	100	0	P	H
													H
													H
		10540	43.35	-24.85	68.2	46.95	37.6	17.71	58.91	100	0	P	V
		15810	46.12	-27.88	74	40.53	40.5	21.82	56.73	100	0	P	V
													V
													V
802.11n HT40 CH 62 5310MHz		10620	43.65	-30.35	74	47.12	37.62	17.78	58.87	100	0	P	H
		15930	46.79	-27.21	74	40.79	40.8	21.91	56.71	100	0	P	H
													H
													H
		10620	43.04	-30.96	74	46.51	37.62	17.78	58.87	100	0	P	V
		15930	47.13	-26.87	74	41.13	40.8	21.91	56.71	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz
WIFI 802.11ac VHT80 (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)
802.11ac VHT80 CH 58 5290MHz		5110.95	52.73	-21.27	74	42.31	34.33	11.52	35.43	205	357	P	H
		5149.8	43.48	-10.52	54	32.94	34.4	11.56	35.42	205	357	A	H
	*	5290	96.09	-	-	85.14	34.63	11.69	35.37	205	357	P	H
	*	5290	89.18	-	-	78.23	34.63	11.69	35.37	205	357	A	H
		5359.2	58.34	-15.66	74	47.42	34.5	11.77	35.35	205	357	P	H
		5350.08	48.22	-5.78	54	37.31	34.5	11.76	35.35	205	357	A	H
		5129.85	55.71	-18.29	74	45.23	34.37	11.54	35.43	194	338	P	V
		5149.45	46.49	-7.51	54	35.95	34.4	11.56	35.42	194	338	A	V
	*	5290	100.49	-	-	89.54	34.63	11.69	35.37	194	338	P	V
	*	5290	92.94	-	-	81.99	34.63	11.69	35.37	194	338	A	V
		5356.56	60.8	-13.2	74	49.89	34.5	11.76	35.35	194	338	P	V
		5350.08	51.75	-2.25	54	40.84	34.5	11.76	35.35	194	338	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 1		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11ac VHT80 CH 58 5290MHz		10580	43.13	-25.07	68.2	46.67	37.6	17.75	58.89	100	0	P	H
		15870	46.56	-27.44	74	40.67	40.74	21.87	56.72	100	0	P	H
													H
													H
		10580	42.49	-25.71	68.2	46.03	37.6	17.75	58.89	100	0	P	V
		15870	46.15	-27.85	74	40.26	40.74	21.87	56.72	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 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 1		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11a CH 100 5500MHz		5457.04	59.42	-14.58	74	48.15	34.7	11.88	35.31	171	353	P	H
		5466.8	63.54	-4.66	68.2	52.16	34.8	11.89	35.31	171	353	P	H
		5460	45.68	-8.32	54	34.41	34.7	11.88	35.31	171	353	A	H
	*	5500	108.03	-	-	96.4	35	11.93	35.3	171	353	P	H
	*	5500	100.27	-	-	88.64	35	11.93	35.3	171	353	A	H
													H
		5458.32	62.5	-11.5	74	51.23	34.7	11.88	35.31	144	345	P	V
		5468.88	65.39	-2.81	68.2	54.01	34.8	11.89	35.31	144	345	P	V
		5460	48	-6	54	36.73	34.7	11.88	35.31	144	345	A	V
	*	5500	110.36	-	-	98.73	35	11.93	35.3	144	345	P	V
	*	5500	102.9	-	-	91.27	35	11.93	35.3	144	345	A	V
													V
802.11a CH 116 5580MHz		5431.6	49.92	-24.08	74	38.69	34.7	11.85	35.32	163	354	P	H
		5463.04	48.62	-19.58	68.2	37.25	34.8	11.88	35.31	163	354	P	H
		5422.96	40.48	-13.52	54	29.27	34.7	11.84	35.33	163	354	A	H
	*	5580	108.57	-	-	96.99	34.87	12.02	35.31	163	354	P	H
	*	5580	100.79	-	-	89.21	34.87	12.02	35.31	163	354	A	H
		5757.755	50.61	-17.59	68.2	38.64	35	12.3	35.33	163	354	P	H
		5408.08	50.96	-23.04	74	39.77	34.7	11.82	35.33	156	346	P	V
		5460.01	48.78	-19.42	68.2	37.51	34.7	11.88	35.31	156	346	P	V
		5423.2	42.14	-11.86	54	30.93	34.7	11.84	35.33	156	346	A	V
	*	5580	110.56	-	-	98.98	34.87	12.02	35.31	156	346	P	V
	*	5580	102.87	-	-	91.29	34.87	12.02	35.31	156	346	A	V
		5728.775	50.89	-17.31	68.2	38.96	35	12.25	35.32	156	346	P	V



FCC RADIO TEST REPORT

Report No. : FR990608-02D

802.11a CH 140 5700MHz	*	5700	105.73	-	-	93.85	35	12.2	35.32	162	353	P	H
	*	5700	98.29	-	-	86.41	35	12.2	35.32	162	353	A	H
		5726.92	61.07	-7.13	68.2	49.14	35	12.25	35.32	162	353	P	H
													H
													H
													H
	*	5700	106.69	-	-	94.81	35	12.2	35.32	159	333	P	V
	*	5700	99.35	-	-	87.47	35	12.2	35.32	159	333	A	V
		5725.8	64.92	-3.28	68.2	52.99	35	12.25	35.32	159	333	P	V
													V
													V
													V
Remark	1. No other spurious found.												
	2. All results are PASS against Peak and Average limit line.												



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

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 1		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11a CH 100 5500MHz		11000	45.16	-28.84	74	47.9	37.9	18.05	58.69	100	0	P	H
		16500	51.8	-16.4	68.2	44.24	41.6	22.38	56.42	100	0	P	H
													H
													H
		11000	46.32	-27.68	74	49.06	37.9	18.05	58.69	100	0	P	V
		16500	53.55	-14.65	68.2	45.99	41.6	22.38	56.42	100	0	P	V
													V
													V
802.11a CH 116 5580MHz		4185	54.59	-19.41	74	46.01	33.37	10.58	35.37	176	358	P	H
		4185	47.08	-6.92	54	38.5	33.37	10.58	35.37	176	358	A	H
		11160	49.29	-24.71	74	51.22	37.9	18.19	58.02	100	0	P	H
		16740	53.33	-14.87	68.2	44.89	42.36	22.58	56.5	100	0	P	H
		4185	56.02	-17.98	74	47.44	33.37	10.58	35.37	200	335	P	V
		4185	48.23	-5.77	54	39.65	33.37	10.58	35.37	200	335	A	V
		11160	48.65	-25.35	74	50.58	37.9	18.19	58.02	100	0	P	V
		16740	52.68	-15.52	68.2	44.24	42.36	22.58	56.5	100	0	P	V
802.11a CH 140 5700MHz		4276	52.53	-21.47	74	43.6	33.63	10.66	35.36	159	353	P	H
		4276	42.75	-11.25	54	33.82	33.63	10.66	35.36	159	353	A	H
		11400	44.42	-29.58	74	45.65	38.1	18.41	57.74	100	0	P	H
		17100	51.79	-16.41	68.2	43.19	42	22.87	56.27	100	0	P	H
		4276	52.43	-21.57	74	43.5	33.63	10.66	35.36	159	333	P	V
		4276	43.31	-10.69	54	34.38	33.63	10.66	35.36	159	333	A	V
		11400	43.76	-30.24	74	44.99	38.1	18.41	57.74	100	0	P	V
		17100	51.19	-17.01	68.2	42.59	42	22.87	56.27	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 100 5500MHz		5457.68	54.15	-19.85	74	42.88	34.7	11.88	35.31	201	354	P	H
		5464.72	60.38	-7.82	68.2	49.01	34.8	11.88	35.31	201	354	P	H
		5460	43.55	-10.45	54	32.28	34.7	11.88	35.31	201	354	A	H
	*	5500	106.72	-	-	95.09	35	11.93	35.3	201	354	P	H
	*	5500	98.83	-	-	87.2	35	11.93	35.3	201	354	A	H
													H
		5457.2	58.29	-15.71	74	47.02	34.7	11.88	35.31	204	352	P	V
		5469.2	62.13	-6.07	68.2	50.75	34.8	11.89	35.31	204	352	P	V
		5460	45.5	-8.5	54	34.23	34.7	11.88	35.31	204	352	A	V
	*	5500	109.53	-	-	97.9	35	11.93	35.3	204	352	P	V
	*	5500	101.83	-	-	90.2	35	11.93	35.3	204	352	A	V
													V
802.11n HT20 CH 116 5580MHz		5426.56	49.49	-24.51	74	38.27	34.7	11.84	35.32	194	354	P	H
		5461.84	48.69	-19.51	68.2	37.42	34.7	11.88	35.31	194	354	P	H
		5434	40.56	-13.44	54	29.33	34.7	11.85	35.32	194	354	A	H
	*	5580	107.68	-	-	96.1	34.87	12.02	35.31	194	354	P	H
	*	5580	100.48	-	-	88.9	34.87	12.02	35.31	194	354	A	H
		5755.865	50.47	-17.73	68.2	38.5	35	12.3	35.33	194	354	P	H
		5365.36	51.77	-22.23	74	40.78	34.57	11.77	35.35	202	346	P	V
		5468.56	51.21	-16.99	68.2	39.83	34.8	11.89	35.31	202	346	P	V
		5419.36	42.2	-11.8	54	31	34.7	11.83	35.33	202	346	A	V
	*	5580	109.78	-	-	98.2	34.87	12.02	35.31	202	346	P	V
	*	5580	101.98	-	-	90.4	34.87	12.02	35.31	202	346	A	V
		5759.96	53.07	-15.13	68.2	41.1	35	12.3	35.33	202	346	P	V



FCC RADIO TEST REPORT

Report No. : FR990608-02D

802.11n HT20 CH 140 5700MHz	*	5700	105.81	-	-	93.93	35	12.2	35.32	214	355	P	H
	*	5700	98.58	-	-	86.7	35	12.2	35.32	214	355	A	H
		5728.04	61.91	-6.29	68.2	49.98	35	12.25	35.32	214	355	P	H
													H
													H
													H
	*	5700	107.59	-	-	95.71	35	12.2	35.32	202	356	P	V
	*	5700	100.08	-	-	88.2	35	12.2	35.32	202	356	A	V
		5731.96	62.45	-5.75	68.2	50.51	35	12.26	35.32	202	356	P	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11n HT20 CH 100 5500MHz		4125	50.94	-23.06	74	42.55	33.3	10.46	35.37	201	48	P	H
		4125	41.46	-12.54	54	33.07	33.3	10.46	35.37	201	48	A	H
		11000	46.25	-27.75	74	48.99	37.9	18.05	58.69	100	0	P	H
		16500	52.09	-16.11	68.2	44.53	41.6	22.38	56.42	100	0	P	H
		4125	51.18	-22.82	74	42.79	33.3	10.46	35.37	229	335	P	V
		4125	42.09	-11.91	54	33.7	33.3	10.46	35.37	229	335	A	V
		11000	45.41	-28.59	74	48.15	37.9	18.05	58.69	100	0	P	V
		16500	52.81	-15.39	68.2	45.25	41.6	22.38	56.42	100	0	P	V
802.11n HT20 CH 116 5580MHz		4185	51.08	-22.92	74	42.5	33.37	10.58	35.37	195	47	P	H
		4185	42.98	-11.02	54	34.4	33.37	10.58	35.37	195	47	A	H
		11160	44.6	-29.4	74	46.82	37.9	18.19	58.31	100	0	P	H
		16740	52.72	-15.48	68.2	44.11	42.36	22.58	56.33	100	0	P	H
		4185	51.53	-22.47	74	42.95	33.37	10.58	35.37	221	332	P	V
		4185	43.28	-10.72	54	34.7	33.37	10.58	35.37	221	332	A	V
		11160	46.54	-27.46	74	48.76	37.9	18.19	58.31	100	0	P	V
		16740	50.35	-17.85	68.2	41.74	42.36	22.58	56.33	100	0	P	V
802.11n HT20 CH 140 5700MHz		4275	50.33	-23.67	74	41.41	33.63	10.65	35.36	214	336	P	H
		4275	42.22	-11.78	54	33.3	33.63	10.65	35.36	214	38	A	H
		11400	44.87	-29.13	74	46.1	38.1	18.41	57.74	100	0	P	H
		17100	50.34	-17.86	68.2	41.74	42	22.87	56.27	100	0	P	H
		4275	51.25	-22.75	74	42.33	33.63	10.65	35.36	214	336	P	V
		4275	43.62	-10.38	54	34.7	33.63	10.65	35.36	214	336	A	V
		11400	45.04	-28.96	74	46.27	38.1	18.41	57.74	100	0	P	V
		17100	50.85	-17.35	68.2	42.25	42	22.87	56.27	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz
WIFI 802.11n HT40 (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)
802.11n HT40 CH 102 5510MHz		5458	59	-15	74	47.73	34.7	11.88	35.31	208	353	P	H
		5469.52	59.8	-8.4	68.2	48.42	34.8	11.89	35.31	208	353	P	H
		5459.92	48.56	-5.44	54	37.29	34.7	11.88	35.31	208	353	A	H
	*	5510	103.74	-	-	92.1	35	11.94	35.3	208	353	P	H
	*	5510	96.04	-	-	84.4	35	11.94	35.3	208	353	A	H
		5759.645	49.36	-18.84	68.2	37.39	35	12.3	35.33	208	353	P	H
		5459.44	59.5	-14.5	74	48.23	34.7	11.88	35.31	203	345	P	V
		5462.08	62.92	-5.28	68.2	51.65	34.7	11.88	35.31	203	345	P	V
		5459.92	51.04	-2.96	54	39.77	34.7	11.88	35.31	203	345	A	V
	*	5510	105.65	-	-	94.01	35	11.94	35.3	203	345	P	V
	*	5510	98.74	-	-	87.1	35	11.94	35.3	203	345	A	V
		5751.14	51.19	-17.01	68.2	39.23	35	12.29	35.33	203	345	P	V
802.11n HT40 CH 110 5550MHz		5420.32	50.16	-23.84	74	38.96	34.7	11.83	35.33	214	355	P	H
		5466.64	50.35	-17.85	68.2	38.97	34.8	11.89	35.31	214	355	P	H
		5459.68	41.68	-12.32	54	30.41	34.7	11.88	35.31	214	355	A	H
	*	5550	104.38	-	-	92.91	34.8	11.98	35.31	214	355	P	H
	*	5550	96.68	-	-	85.21	34.8	11.98	35.31	214	355	A	H
		5756.81	49.48	-18.72	68.2	37.51	35	12.3	35.33	214	355	P	H
		5383.84	52.08	-21.92	74	41	34.63	11.79	35.34	203	345	P	V
		5468.8	51.98	-16.22	68.2	40.6	34.8	11.89	35.31	203	345	P	V
		5456.32	43.2	-10.8	54	31.94	34.7	11.87	35.31	203	345	A	V
	*	5550	105.88	-	-	94.41	34.8	11.98	35.31	203	345	P	V
	*	5550	98.18	-	-	86.71	34.8	11.98	35.31	203	345	A	V
		5759.645	51.69	-16.51	68.2	39.72	35	12.3	35.33	203	345	P	V



FCC RADIO TEST REPORT

Report No. : FR990608-02D

802.11n HT40 CH 134 5670MHz		5371	49.8	-24.2	74	38.79	34.57	11.78	35.34	220	356	P	H
		5470	48.39	-19.81	68.2	37.01	34.8	11.89	35.31	220	356	P	H
		5459.9	40.86	-13.14	54	29.59	34.7	11.88	35.31	220	356	A	H
	*	5670	104.29	-	-	92.6	34.85	12.16	35.32	220	356	P	H
	*	5670	96.49	-	-	84.8	34.85	12.16	35.32	220	356	A	H
		5727.55	61.9	-6.3	68.2	49.97	35	12.25	35.32	220	356	P	H
		5456.4	50.35	-23.65	74	39.09	34.7	11.87	35.31	231	341	P	V
		5464.1	50.41	-17.79	68.2	39.04	34.8	11.88	35.31	231	341	P	V
		5437.5	42.09	-11.91	54	30.86	34.7	11.85	35.32	231	341	A	V
	*	5670	105.99	-	-	94.3	34.85	12.16	35.32	231	341	P	V
	*	5670	98.19	-	-	86.5	34.85	12.16	35.32	231	341	A	V
		5727.375	65.82	-2.38	68.2	53.89	35	12.25	35.32	231	341	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz
WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11n HT40 CH 102 5510MHz		11020	44.3	-29.7	74	46.98	37.9	18.06	58.64	100	0	P	H
		16530	49.54	-18.66	68.2	41.88	41.67	22.4	56.41	100	0	P	H
													H
													H
		11020	43.88	-30.12	74	46.56	37.9	18.06	58.64	100	0	P	V
		16530	50.29	-17.91	68.2	42.63	41.67	22.4	56.41	100	0	P	V
													V
													V
802.11n HT40 CH 110 5550MHz		11100	43.64	-30.36	74	46.06	37.9	18.13	58.45	100	0	P	H
		16650	51.17	-17.03	68.2	42.94	42.1	22.5	56.37	100	0	P	H
													H
													H
		11100	44.74	-29.26	74	47.16	37.9	18.13	58.45	100	0	P	V
		16650	48.54	-19.66	68.2	40.31	42.1	22.5	56.37	100	0	P	V
													V
													V
802.11n HT40 CH 134 5670MHz		11340	43.95	-30.05	74	45.45	38.03	18.35	57.88	100	0	P	H
		17010	49.27	-18.93	68.2	40.53	42.17	22.81	56.24	100	0	P	H
													H
													H
		11340	43.39	-30.61	74	44.89	38.03	18.35	57.88	100	0	P	V
		17010	50.18	-18.02	68.2	41.44	42.17	22.81	56.24	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 802.11ac VHT80 (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)
802.11ac VHT80 CH 106 5530MHz		5455.84	55.89	-18.11	74	44.64	34.7	11.87	35.32	200	360	P	H
		5468.32	57.38	-10.82	68.2	46	34.8	11.89	35.31	200	360	P	H
		5459.92	48.9	-5.1	54	37.63	34.7	11.88	35.31	200	360	A	H
	*	5530	96.89	-	-	85.3	34.93	11.96	35.3	200	360	P	H
	*	5530	88.99	-	-	77.4	34.93	11.96	35.3	200	360	A	H
		5745.47	50.73	-17.47	68.2	38.77	35	12.28	35.32	200	360	P	H
		5451.28	60.44	-13.56	74	49.19	34.7	11.87	35.32	206	344	P	V
		5463.04	61.39	-6.81	68.2	50.02	34.8	11.88	35.31	206	344	P	V
		5459.92	52.33	-1.67	54	41.06	34.7	11.88	35.31	206	344	A	V
	*	5530	100.79	-	-	89.2	34.93	11.96	35.3	206	344	P	V
	*	5530	92.09	-	-	80.5	34.93	11.96	35.3	206	344	A	V
		5727.515	50.86	-17.34	68.2	38.93	35	12.25	35.32	206	344	P	V
802.11ac VHT80 CH 122 5610MHz		5391.65	53.17	-20.83	74	42.08	34.63	11.8	35.34	194	353	P	H
		5460.95	52.51	-15.69	68.2	41.24	34.7	11.88	35.31	194	353	P	H
		5459.9	43.8	-10.2	54	32.53	34.7	11.88	35.31	194	353	A	H
	*	5610	97.28	-	-	85.53	35	12.06	35.31	194	353	P	H
	*	5610	90.92	-	-	79.17	35	12.06	35.31	194	353	A	H
		5743.3	52.18	-16.02	68.2	40.22	35	12.28	35.32	194	353	P	H
		5442.75	55.54	-18.46	74	44.3	34.7	11.86	35.32	200	347	P	V
		5461.65	54.34	-13.86	68.2	43.07	34.7	11.88	35.31	200	347	P	V
		5456.05	45.91	-8.09	54	34.65	34.7	11.87	35.31	200	347	A	V
	*	5610	99.54	-	-	87.79	35	12.06	35.31	200	347	P	V
	*	5610	92.9	-	-	81.15	35	12.06	35.31	200	347	A	V
		5759.925	54.39	-13.81	68.2	42.42	35	12.3	35.33	200	347	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	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11ac VHT80 CH 106 5530MHz		11060	43.62	-30.38	74	46.17	37.9	18.1	58.55	100	0	P	H
		16590	46.77	-21.43	68.2	38.94	41.77	22.45	56.39	100	0	P	H
													H
													H
		11060	44.31	-29.69	74	46.86	37.9	18.1	58.55	100	0	P	V
		16590	49.26	-18.94	68.2	41.43	41.77	22.45	56.39	100	0	P	V
													V
													V
802.11ac VHT80 CH 122 5610MHz		11220	44.35	-29.65	74	46.35	37.92	18.25	58.17	100	0	P	H
		16830	48.12	-20.08	68.2	39.46	42.3	22.66	56.3	100	0	P	H
													H
													H
		11220	43.94	-30.06	74	45.94	37.92	18.25	58.17	100	0	P	V
		16830	48.6	-19.6	68.2	39.94	42.3	22.66	56.3	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 1		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11a CH 144 5720MHz		5451.4	49.85	-24.15	74	38.6	34.7	11.87	35.32	189	354	P	H
		5464.66	51.05	-17.15	68.2	39.68	34.8	11.88	35.31	189	354	P	H
		5458.81	40.38	-13.62	54	29.11	34.7	11.88	35.31	189	354	A	H
	*	5720	108.62	-	-	96.7	35	12.24	35.32	189	354	P	H
	*	5720	100.52	-	-	88.6	35	12.24	35.32	189	354	A	H
		5912.5	51.32	-16.88	68.2	39.03	35.2	12.43	35.34	189	354	P	H
		5445.16	50.14	-23.86	74	38.9	34.7	11.86	35.32	197	356	P	V
		5470	49.2	-19	68.2	37.82	34.8	11.89	35.31	197	356	P	V
		5459.59	41.46	-12.54	54	30.19	34.7	11.88	35.31	197	356	A	V
	*	5720	110.14	-	-	98.22	35	12.24	35.32	197	356	P	V
	*	5720	102.11	-	-	90.19	35	12.24	35.32	197	356	A	V
		5945.5	52.68	-15.52	68.2	40.38	35.2	12.44	35.34	197	356	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 1		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11a CH 144 5720MHz		4290	52.85	-21.15	74	43.95	33.6	10.66	35.36	202	47	P	H
		4290	44.4	-9.6	54	35.5	33.6	10.66	35.36	202	47	A	H
		11440	45.21	-28.79	74	46.28	38.13	18.44	57.64	100	0	P	H
		17160	54.03	-14.17	68.2	45.68	41.73	22.91	56.29	100	0	P	H
		4290	54.4	-19.6	74	45.5	33.6	10.66	35.36	200	336	P	V
		4290	45.8	-8.2	54	36.9	33.6	10.66	35.36	200	336	A	V
		11440	47.77	-26.23	74	48.84	38.13	18.44	57.64	100	0	P	V
		17160	52.94	-15.26	68.2	44.59	41.73	22.91	56.29	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 144 5720MHz		5351.56	49.62	-24.38	74	38.71	34.5	11.76	35.35	189	354	P	H
		5461.15	48.53	-19.67	68.2	37.26	34.7	11.88	35.31	189	354	P	H
		5459.59	40.35	-13.65	54	29.08	34.7	11.88	35.31	189	354	A	H
	*	5720	108.02	-	-	96.1	35	12.24	35.32	189	354	P	H
	*	5720	100.12	-	-	88.2	35	12.24	35.32	189	354	A	H
		5895.25	51.56	-16.64	68.2	39.28	35.2	12.42	35.34	189	354	P	H
		5355.07	50.06	-23.94	74	39.15	34.5	11.76	35.35	197	356	P	V
		5465.05	49.47	-18.73	68.2	38.1	34.8	11.88	35.31	197	356	P	V
		5459.98	41.49	-12.51	54	30.22	34.7	11.88	35.31	197	356	A	V
	*	5720	109.69	-	-	97.77	35	12.24	35.32	197	356	P	V
	*	5720	101.95	-	-	90.03	35	12.24	35.32	197	356	A	V
		5889.5	52.74	-15.46	68.2	40.47	35.2	12.41	35.34	197	356	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 1		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11n HT20 CH 144 5720MHz		4290	52.76	-21.24	74	43.86	33.6	10.66	35.36	201	47	P	H
		4290	44.17	-9.83	54	35.27	33.6	10.66	35.36	201	47	A	H
		11440	44.71	-29.29	74	45.78	38.13	18.44	57.64	100	0	P	H
		17160	53.15	-15.05	68.2	44.8	41.73	22.91	56.29	100	0	P	H
		4290	53.61	-20.39	74	44.71	33.6	10.66	35.36	200	336	P	V
		4290	45.35	-8.65	54	36.45	33.6	10.66	35.36	200	336	A	V
		11440	46.15	-27.85	74	47.22	38.13	18.44	57.64	100	0	P	V
		17160	52.36	-15.84	68.2	44.01	41.73	22.91	56.29	100	0	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 (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)
802.11n HT40 CH 142 5710MHz		5454.52	50.74	-23.26	74	39.49	34.7	11.87	35.32	214	356	P	H
		5465.83	49.37	-18.83	68.2	37.99	34.8	11.89	35.31	214	356	P	H
		5459.98	40.82	-13.18	54	29.55	34.7	11.88	35.31	214	356	A	H
	*	5710	104.91	-	-	93.01	35	12.22	35.32	214	356	P	H
	*	5710	97.05	-	-	85.15	35	12.22	35.32	214	356	A	H
		5917.25	52.08	-16.12	68.2	39.79	35.2	12.43	35.34	214	356	P	H
		5450.62	50.52	-23.48	74	39.27	34.7	11.87	35.32	207	337	P	V
		5467.78	49.14	-19.06	68.2	37.76	34.8	11.89	35.31	207	337	P	V
		5459.98	41.61	-12.39	54	30.34	34.7	11.88	35.31	207	337	A	V
	*	5710	105.6	-	-	93.7	35	12.22	35.32	207	337	P	V
	*	5710	98	-	-	86.1	35	12.22	35.32	207	337	A	V
		5909.5	52.19	-16.01	68.2	39.91	35.2	12.42	35.34	207	337	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	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11n HT40 CH 142 5710MHz		11420	43.83	-30.17	74	44.98	38.12	18.42	57.69	100	0	P	H
		17130	50.92	-17.28	68.2	42.44	41.87	22.89	56.28	100	0	P	H
													H
													H
		11420	44.25	-29.75	74	45.4	38.12	18.42	57.69	100	0	P	V
		17130	50.57	-17.63	68.2	42.09	41.87	22.89	56.28	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI	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)
802.11ac VHT80 CH 138 5690MHz		5456.86	51.1	-22.9	74	39.83	34.7	11.88	35.31	212	355	P	H
		5468.17	51.06	-17.14	68.2	39.68	34.8	11.89	35.31	212	355	P	H
		5459.98	42.11	-11.89	54	30.84	34.7	11.88	35.31	212	355	A	H
	*	5690	98.77	-	-	86.9	35	12.19	35.32	212	355	P	H
	*	5690	91.07	-	-	79.2	35	12.19	35.32	212	355	A	H
		5889.7	51.52	-16.68	68.2	39.25	35.2	12.41	35.34	212	355	P	H
		5448.67	51.85	-22.15	74	40.6	34.7	11.87	35.32	201	336	P	V
		5469.73	51.57	-16.63	68.2	40.19	34.8	11.89	35.31	201	336	P	V
		5459.98	42.86	-11.14	54	31.59	34.7	11.88	35.31	201	336	A	V
	*	5690	100.47	-	-	88.6	35	12.19	35.32	201	336	P	V
	*	5690	92.17	-	-	80.3	35	12.19	35.32	201	336	A	V
		5927.5	52.64	-15.56	68.2	40.35	35.2	12.43	35.34	201	336	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 1		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11ac VHT80 CH 138 5690MHz		11380	43.55	-30.45	74	44.88	38.08	18.38	57.79	100	0	P	H
		17070	49.02	-19.18	68.2	40.37	42.07	22.84	56.26	100	0	P	H
													H
													H
		11380	43.51	-30.49	74	44.84	38.08	18.38	57.79	100	0	P	V
		17070	47.73	-20.47	68.2	39.08	42.07	22.84	56.26	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



5GHz WIFI 802.11ac VHT80 (SHF)

[illegible]



Emission below 1GHz
5GHz WIFI 802.11ac VHT80 (LF)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 1		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
5GHz 802.11ac VHT80 LF		83.73	25.87	-14.13	40	40.69	13.64	1.53	29.99	-	-	P	H
		128.28	31.6	-11.9	43.5	42.1	17.55	1.9	29.95	100	0	P	H
		265.44	26.89	-19.11	46	34.39	19.55	2.74	29.79	-	-	P	H
		360.9	25.89	-20.11	46	31.81	20.65	3.21	29.78	-	-	P	H
		520.5	30.5	-15.5	46	32.47	23.95	3.86	29.78	-	-	P	H
		954.5	33.39	-12.61	46	26.17	30.48	5.27	28.53	-	-	P	H
													H
													H
													H
													H
													H
													H
		32.16	33.01	-6.99	40	38.46	23.57	0.96	29.98	100	0	P	V
		82.92	27.27	-12.73	40	42.1	13.64	1.52	29.99	-	-	P	V
		152.04	30.55	-12.95	43.5	41.44	16.96	2.07	29.92	-	-	P	V
		358.1	27	-19	46	33.02	20.56	3.2	29.78	-	-	P	V
		520.5	36.64	-9.36	46	38.61	23.95	3.86	29.78	-	-	P	V
		927.2	33.5	-12.5	46	27.84	29.19	5.2	28.73	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												



Band 1 - 5150~5250MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 2		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11a CH 36 5180MHz		5149.24	60.6	-13.4	74	50.06	34.4	11.56	35.42	212	338	P	H
		5150	48.52	-5.48	54	37.98	34.4	11.56	35.42	212	338	A	H
	*	5180	107.47	-	-	96.83	34.47	11.58	35.41	212	338	P	H
	*	5180	99.83	-	-	89.19	34.47	11.58	35.41	212	338	A	H
													H
													H
		5149.76	68.18	-5.82	74	57.64	34.4	11.56	35.42	177	34	P	V
		5150	52.49	-1.51	54	41.95	34.4	11.56	35.42	177	34	P	V
	*	5180	110.63	-	-	99.99	34.47	11.58	35.41	177	34	P	V
	*	5180	103.01	-	-	92.37	34.47	11.58	35.41	177	34	A	V
													V
													V
802.11a CH 44 5220MHz		5135.2	50.96	-23.04	74	40.47	34.37	11.54	35.42	219	332	P	H
		5149.76	42.27	-11.73	54	31.73	34.4	11.56	35.42	219	332	A	H
	*	5220	108.67	-	-	97.95	34.5	11.62	35.4	219	332	P	H
	*	5220	100.85	-	-	90.13	34.5	11.62	35.4	219	332	A	H
		5360.04	50.47	-23.53	74	39.55	34.5	11.77	35.35	219	332	P	H
		5365.92	40.88	-13.12	54	29.89	34.57	11.77	35.35	219	332	A	H
		5148.46	54.19	-19.81	74	43.65	34.4	11.56	35.42	180	32	P	V
		5150	44.73	-9.27	54	34.19	34.4	11.56	35.42	180	32	A	V
	*	5220	111.58	-	-	100.86	34.5	11.62	35.4	180	32	P	V
	*	5220	103.72	-	-	93	34.5	11.62	35.4	180	32	A	V
		5426.96	50.25	-23.75	74	39.03	34.7	11.84	35.32	180	32	P	V
		5365.92	42.16	-11.84	54	31.17	34.57	11.77	35.35	180	32	A	V



FCC RADIO TEST REPORT

Report No. : FR990608-02D

802.11a CH 48 5240MHz		5086.58	50.43	-23.57	74	40.14	34.23	11.5	35.44	212	332	P	H
		5079.3	41.23	-12.77	54	30.94	34.23	11.5	35.44	212	332	A	H
	*	5240	108.31	-	-	97.56	34.5	11.64	35.39	212	332	P	H
	*	5240	100.67	-	-	89.92	34.5	11.64	35.39	212	332	A	H
		5380.48	51.44	-22.56	74	40.36	34.63	11.79	35.34	212	332	P	H
		5362.56	41.19	-12.81	54	30.2	34.57	11.77	35.35	212	332	A	H
		5148.72	53.59	-20.41	74	43.05	34.4	11.56	35.42	173	32	P	V
		5079.04	43.21	-10.79	54	32.92	34.23	11.5	35.44	173	32	A	V
	*	5240	111.56	-	-	100.81	34.5	11.64	35.39	173	32	P	V
	*	5240	103.65	-	-	92.9	34.5	11.64	35.39	173	32	A	V
		5408.2	50.87	-23.13	74	39.68	34.7	11.82	35.33	173	32	P	V
		5350	42.51	-11.49	54	31.6	34.5	11.76	35.35	173	32	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 2		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11a CH 36 5180MHz		10360	43.37	-24.83	68.2	47.35	37.47	17.58	59.03	100	0	P	H
		15540	46.03	-27.97	74	41.05	40.1	21.65	56.77	100	0	P	H
													H
													H
		10360	43.31	-24.89	68.2	47.29	37.47	17.58	59.03	100	0	P	V
		15540	45.82	-28.18	74	40.84	40.1	21.65	56.77	100	0	P	V
													V
													V
802.11a CH 44 5220MHz		3915	50.15	-23.85	74	42.1	33.3	10.11	35.36	231	350	P	H
		3915	38.54	-15.46	54	30.49	33.3	10.11	35.36	231	350	A	H
		10440	46.89	-21.31	68.2	51.25	37.53	17.65	59.54	100	0	P	H
		15660	48.81	-25.19	74	43.33	40.45	21.73	56.7	100	0	P	H
		3915	49.36	-24.64	74	41.31	33.3	10.11	35.36	100	0	P	V
		10440	46.1	-22.1	68.2	50.46	37.53	17.65	59.54	100	0	P	V
		15660	49.42	-24.58	74	43.94	40.45	21.73	56.7	100	0	P	V
													V
802.11a CH 48 5240MHz		10480	44.87	-23.33	68.2	48.55	37.58	17.68	58.94	100	0	P	H
		15720	48.86	-25.14	74	43.26	40.58	21.76	56.74	100	0	P	H
													H
													H
		10480	45.88	-22.32	68.2	49.56	37.58	17.68	58.94	100	0	P	V
		15720	48.8	-25.2	74	43.2	40.58	21.76	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	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 36 5180MHz		5145.08	61.98	-12.02	74	51.45	34.4	11.55	35.42	206	338	P	H
		5150	47.66	-6.34	54	37.12	34.4	11.56	35.42	206	338	A	H
	*	5180	107.47	-	-	96.83	34.47	11.58	35.41	206	338	P	H
	*	5180	99.76	-	-	89.12	34.47	11.58	35.41	206	338	A	H
													H
													H
		5150	63.97	-10.03	74	53.43	34.4	11.56	35.42	176	33	P	V
		5150	51.1	-2.9	54	40.56	34.4	11.56	35.42	176	33	A	V
	*	5180	110.82	-	-	100.18	34.47	11.58	35.41	176	33	P	V
	*	5180	103.12	-	-	92.48	34.47	11.58	35.41	176	33	A	V
													V
													V
802.11n HT20 CH 44 5220MHz		5090.22	50.92	-23.08	74	40.55	34.3	11.51	35.44	221	332	P	H
		5150	42.41	-11.59	54	31.87	34.4	11.56	35.42	221	332	A	H
	*	5220	108.65	-	-	97.93	34.5	11.62	35.4	221	332	P	H
	*	5220	100.85	-	-	90.13	34.5	11.62	35.4	221	332	A	H
		5397.28	49.29	-24.71	74	38.11	34.7	11.81	35.33	221	332	P	H
		5366.48	41.06	-12.94	54	30.07	34.57	11.77	35.35	221	332	A	H
		5042.38	52.67	-21.33	74	42.56	34.1	11.47	35.46	177	34	P	V
		5150	44.47	-9.53	54	33.93	34.4	11.56	35.42	177	34	A	V
	*	5220	111.25	-	-	100.53	34.5	11.62	35.4	177	34	P	V
	*	5220	103.71	-	-	92.99	34.5	11.62	35.4	177	34	A	V
		5380.76	49.97	-24.03	74	38.89	34.63	11.79	35.34	177	34	P	V
		5376.56	41.99	-12.01	54	30.97	34.57	11.79	35.34	177	34	A	V



FCC RADIO TEST REPORT

Report No. : FR990608-02D

802.11n HT20 CH 48 5240MHz		5082.68	51.12	-22.88	74	40.83	34.23	11.5	35.44	204	332	P	H
		5079.3	41.33	-12.67	54	31.04	34.23	11.5	35.44	204	332	A	H
	*	5240	108.34	-	-	97.59	34.5	11.64	35.39	204	332	P	H
	*	5240	100.87	-	-	90.12	34.5	11.64	35.39	204	332	A	H
		5413.8	50.28	-23.72	74	39.08	34.7	11.83	35.33	204	332	P	H
		5352.76	41.39	-12.61	54	30.48	34.5	11.76	35.35	204	332	A	H
		5063.96	52.44	-21.56	74	42.24	34.17	11.48	35.45	175	32	P	V
		5078.78	43.79	-10.21	54	33.5	34.23	11.5	35.44	175	32	A	V
	*	5240	111.23	-	-	100.48	34.5	11.64	35.39	175	32	P	V
	*	5240	103.72	-	-	92.97	34.5	11.64	35.39	175	32	A	V
		5352.48	51.16	-22.84	74	40.25	34.5	11.76	35.35	175	32	P	V
		5351.36	42.43	-11.57	54	31.52	34.5	11.76	35.35	175	32	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 2		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11n HT20 CH 36 5180MHz		10360	42.88	-25.32	68.2	46.86	37.47	17.58	59.03	100	0	P	H
		15540	46.05	-27.95	74	41.07	40.1	21.65	56.77	100	0	P	H
													H
													H
		10360	43.26	-24.94	68.2	47.24	37.47	17.58	59.03	100	0	P	V
		15540	45.73	-28.27	74	40.75	40.1	21.65	56.77	100	0	P	V
													V
													V
802.11n HT20 CH 44 5220MHz		10440	44.6	-23.6	68.2	48.39	37.53	17.65	58.97	100	0	P	H
		15660	47.39	-26.61	74	41.96	40.45	21.73	56.75	100	0	P	H
													H
													H
		10440	44.98	-23.22	68.2	48.77	37.53	17.65	58.97	100	0	P	V
		15660	47.86	-26.14	74	42.43	40.45	21.73	56.75	100	0	P	V
													V
													V
802.11n HT20 CH 48 5240MHz		10480	44.79	-23.41	68.2	48.47	37.58	17.68	58.94	100	0	P	H
		15720	49.15	-24.85	74	43.55	40.58	21.76	56.74	100	0	P	H
													H
													H
		10480	44.98	-23.22	68.2	48.66	37.58	17.68	58.94	100	0	P	V
		15720	49.9	-24.1	74	44.3	40.58	21.76	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 HT40 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 CH 38 5190MHz		5149.5	57.52	-16.48	74	46.98	34.4	11.56	35.42	246	345	P	H
		5150.02	48.5	-101.5	150	37.96	34.4	11.56	35.42	246	345	A	H
	*	5190	101.04	-	-	90.39	34.47	11.59	35.41	246	345	P	H
	*	5190	93.87	-	-	83.22	34.47	11.59	35.41	246	345	A	H
		5439.56	49.27	-24.73	74	38.03	34.7	11.86	35.32	246	345	P	H
		5459.16	39.88	-14.12	54	28.61	34.7	11.88	35.31	246	345	A	H
		5149.5	59.86	-14.14	74	49.32	34.4	11.56	35.42	191	28	P	V
		5150	51.72	-2.28	54	41.18	34.4	11.56	35.42	191	28	A	V
	*	5190	103.77	-	-	93.12	34.47	11.59	35.41	191	28	P	V
	*	5190	96.86	-	-	86.21	34.47	11.59	35.41	191	28	A	V
		5433.96	49.63	-24.37	74	38.4	34.7	11.85	35.32	191	28	P	V
		5360.88	40.65	-13.35	54	29.66	34.57	11.77	35.35	191	28	A	V
802.11n HT40 CH 46 5230MHz		5147.16	53	-21	74	42.46	34.4	11.56	35.42	234	345	P	H
		5150	44.07	-9.93	54	33.53	34.4	11.56	35.42	234	345	A	H
	*	5230	104.85	-	-	94.11	34.5	11.63	35.39	234	345	P	H
	*	5230	97.61	-	-	86.87	34.5	11.63	35.39	234	345	A	H
		5351.08	50.89	-23.11	74	39.98	34.5	11.76	35.35	234	345	P	H
		5350	41.49	-12.51	54	30.58	34.5	11.76	35.35	234	345	A	H
		5143.78	54.13	-19.87	74	43.6	34.4	11.55	35.42	190	30	P	V
		5150	46.63	-7.37	54	36.09	34.4	11.56	35.42	190	30	A	V
	*	5230	108.08	-	-	97.34	34.5	11.63	35.39	190	30	P	V
	*	5230	100.67	-	-	89.93	34.5	11.63	35.39	190	30	A	V
		5362	51.84	-22.16	74	40.85	34.57	11.77	35.35	190	30	P	V
		5350	43.11	-10.89	54	32.2	34.5	11.76	35.35	190	30	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	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 2		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11n HT40 CH 38 5190MHz		10380	44.06	-24.14	68.2	48	37.48	17.6	59.02	100	0	P	H
		15570	46.43	-27.57	74	41.32	40.2	21.68	56.77	100	0	P	H
													H
													H
		10380	44.39	-23.81	68.2	48.33	37.48	17.6	59.02	100	0	P	V
		15570	46.38	-27.62	74	41.27	40.2	21.68	56.77	100	0	P	V
													V
													V
802.11n HT40 CH 46 5230MHz		10460	44.64	-23.56	68.2	48.39	37.55	17.66	58.96	100	0	P	H
		15690	47.16	-26.84	74	41.61	40.55	21.75	56.75	100	0	P	H
													H
													H
		10460	45.78	-22.42	68.2	49.53	37.55	17.66	58.96	100	0	P	V
		15690	48.19	-25.81	74	42.64	40.55	21.75	56.75	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT80 CH 42 5210MHz		5147.94	55.89	-18.11	74	45.35	34.4	11.56	35.42	203	338	P	H
		5150	47.74	-6.26	54	37.2	34.4	11.56	35.42	203	338	A	H
	*	5210	96.76	-	-	86.05	34.5	11.61	35.4	203	338	P	H
	*	5210	88.51	-	-	77.8	34.5	11.61	35.4	203	338	A	H
		5365.08	50.08	-23.92	74	39.09	34.57	11.77	35.35	203	338	P	H
		5350.8	40.72	-13.28	54	29.81	34.5	11.76	35.35	203	338	A	H
		5147.16	60.16	-13.84	74	49.62	34.4	11.56	35.42	184	29	P	V
		5145.34	51.49	-2.51	54	40.96	34.4	11.55	35.42	184	29	A	V
	*	5210	99.51	-	-	88.8	34.5	11.61	35.4	184	29	P	V
	*	5210	92.11	-	-	81.4	34.5	11.61	35.4	184	29	A	V
		5405.4	50.44	-23.56	74	39.25	34.7	11.82	35.33	184	29	P	V
		5350.52	41.97	-12.03	54	31.06	34.5	11.76	35.35	184	29	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 2		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11ac VHT80 CH 42 5210MHz		10420	44.55	-23.65	68.2	48.39	37.52	17.63	58.99	100	0	P	H
		15630	46.54	-27.46	74	41.19	40.4	21.71	56.76	100	0	P	H
													H
													H
		10420	43.8	-24.4	68.2	47.64	37.52	17.63	58.99	100	0	P	V
		15630	45.7	-28.3	74	40.35	40.4	21.71	56.76	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 - 5250~5350MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 2		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11a CH 52 5260MHz		5063	50.46	-23.54	74	40.26	34.17	11.48	35.45	194	335	P	H
		5098.7	40.97	-13.03	54	30.6	34.3	11.51	35.44	194	335	A	H
	*	5260	107.45	-	-	96.6	34.57	11.66	35.38	194	335	P	H
	*	5260	99.25	-	-	88.4	34.57	11.66	35.38	194	335	A	H
		5381.04	49.51	-24.49	74	38.43	34.63	11.79	35.34	194	335	P	H
		5351.04	40.91	-13.09	54	30	34.5	11.76	35.35	194	335	A	H
		5103.6	51.48	-22.52	74	41.09	34.3	11.52	35.43	184	24	P	V
		5098.7	42.88	-11.12	54	32.51	34.3	11.51	35.44	184	24	A	V
	*	5260	110.25	-	-	99.4	34.57	11.66	35.38	184	24	P	V
	*	5260	101.95	-	-	91.1	34.57	11.66	35.38	184	24	A	V
		5353.2	52.24	-21.76	74	41.33	34.5	11.76	35.35	184	24	P	V
		5351.04	42.34	-11.66	54	31.43	34.5	11.76	35.35	184	24	A	V
802.11a CH 60 5300MHz		5114.8	50.14	-23.86	74	39.71	34.33	11.53	35.43	188	335	P	H
		5139.3	40.76	-13.24	54	30.26	34.37	11.55	35.42	188	335	A	H
	*	5300	105.94	-	-	94.91	34.7	11.7	35.37	188	335	P	H
	*	5300	97.73	-	-	86.7	34.7	11.7	35.37	188	335	A	H
		5361.6	55.71	-18.29	74	44.72	34.57	11.77	35.35	188	335	P	H
		5350.08	44.1	-9.9	54	33.19	34.5	11.76	35.35	188	335	A	H
		5120.05	51.94	-22.06	74	41.51	34.33	11.53	35.43	179	24	P	V
		5138.95	42.3	-11.7	54	31.8	34.37	11.55	35.42	179	24	A	V
	*	5300	110.14	-	-	99.11	34.7	11.7	35.37	179	24	P	V
	*	5300	101.94	-	-	90.91	34.7	11.7	35.37	179	24	A	V
		5352	59.55	-14.45	74	48.64	34.5	11.76	35.35	179	24	P	V
		5350.08	46.55	-7.45	54	35.64	34.5	11.76	35.35	179	24	A	V



802.11a CH 64 5320MHz	*	5320	105.8	-	-	94.8	34.63	11.73	35.36	197	336	P	H
	*	5320	97.7	-	-	86.7	34.63	11.73	35.36	197	336	A	H
		5367.52	58.8	-15.2	74	47.8	34.57	11.78	35.35	197	336	P	H
		5350.08	46.96	-7.04	54	36.05	34.5	11.76	35.35	197	336	A	H
													H
													H
	*	5320	108.5	-	-	97.5	34.63	11.73	35.36	181	20	P	V
	*	5320	100.3	-	-	89.3	34.63	11.73	35.36	181	20	A	V
		5354.24	63.09	-10.91	74	52.18	34.5	11.76	35.35	181	20	P	V
		5350.08	49.5	-4.5	54	38.59	34.5	11.76	35.35	181	20	A	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 2		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11a CH 52 5260MHz		10520	44.63	-23.57	68.2	48.25	37.6	17.7	58.92	100	0	P	H
		15780	49.13	-24.87	74	43.54	40.53	21.8	56.74	100	0	P	H
													H
													H
		10520	45.21	-22.99	68.2	48.83	37.6	17.7	58.92	100	0	P	V
		15780	48.83	-25.17	74	43.24	40.53	21.8	56.74	100	0	P	V
													V
													V
802.11a CH 60 5300MHz		3975	50.19	-23.81	74	42.18	33.2	10.18	35.37	268	360	P	H
		3975	37.99	-16.01	54	29.98	33.2	10.18	35.37	268	360	A	H
		10600	46.59	-27.41	74	50.48	37.6	17.76	59.25	100	0	P	H
		15900	51.65	-22.35	74	46.02	40.8	21.89	57.06	109	315	P	H
		15900	42.35	-11.65	54	36.72	40.8	21.89	57.06	109	315	A	H
		3975	50.58	-23.42	74	42.57	33.2	10.18	35.37	209	41	P	V
		3975	38.27	-15.73	54	30.26	33.2	10.18	35.37	209	41	A	V
		10600	46.89	-27.11	74	50.78	37.6	17.76	59.25	100	0	P	V
		15900	52.05	-21.95	74	46.42	40.8	21.89	57.06	294	338	P	V
		15900	42.61	-11.39	54	36.98	40.8	21.89	57.06	294	338	A	V
802.11a CH 64 5320MHz		10640	44.19	-29.81	74	47.63	37.63	17.79	58.86	100	0	P	H
		15960	49.36	-24.64	74	43.34	40.8	21.93	56.71	100	0	P	H
													H
													H
		10640	44.82	-29.18	74	48.26	37.63	17.79	58.86	100	0	P	V
		15960	49.69	-24.31	74	43.67	40.8	21.93	56.71	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 52 5260MHz		5114.1	50.67	-23.33	74	40.24	34.33	11.53	35.43	194	335	P	H
		5098.7	40.99	-13.01	54	30.62	34.3	11.51	35.44	194	335	A	H
	*	5260	107.05	-	-	96.2	34.57	11.66	35.38	194	335	P	H
	*	5260	99.15	-	-	88.3	34.57	11.66	35.38	194	335	A	H
		5375.28	49.54	-24.46	74	38.53	34.57	11.78	35.34	194	335	P	H
		5352	40.87	-13.13	54	29.96	34.5	11.76	35.35	194	335	A	H
		5077.35	52.68	-21.32	74	42.39	34.23	11.5	35.44	184	24	P	V
		5098.7	42.63	-11.37	54	32.26	34.3	11.51	35.44	184	24	A	V
	*	5260	109.9	-	-	99.05	34.57	11.66	35.38	184	24	P	V
	*	5260	101.87	-	-	91.02	34.57	11.66	35.38	184	24	A	V
		5356.08	51.39	-22.61	74	40.48	34.5	11.76	35.35	184	24	P	V
		5365.44	42.22	-11.78	54	31.23	34.57	11.77	35.35	184	24	A	V
802.11n HT20 CH 60 5300MHz		5145.25	50.37	-23.63	74	39.84	34.4	11.55	35.42	188	335	P	H
		5077.7	40.81	-13.19	54	30.52	34.23	11.5	35.44	188	335	A	H
	*	5300	106.64	-	-	95.61	34.7	11.7	35.37	188	335	P	H
	*	5300	98.74	-	-	87.71	34.7	11.7	35.37	188	335	A	H
		5351.04	55.22	-18.78	74	44.31	34.5	11.76	35.35	188	335	P	H
		5350.08	43.52	-10.48	54	32.61	34.5	11.76	35.35	188	335	A	H
		5013.3	51.25	-22.75	74	41.18	34.1	11.44	35.47	179	24	P	V
		5137.9	42.35	-11.65	54	31.85	34.37	11.55	35.42	179	24	A	V
	*	5300	109.84	-	-	98.81	34.7	11.7	35.37	179	24	P	V
	*	5300	101.84	-	-	90.81	34.7	11.7	35.37	179	24	A	V
		5354.88	58.99	-15.01	74	48.08	34.5	11.76	35.35	179	24	P	V
		5350.08	45.6	-8.4	54	34.69	34.5	11.76	35.35	179	24	A	V



802.11n HT20 CH 64 5320MHz	*	5320	105.2	-	-	94.2	34.63	11.73	35.36	197	336	P	H
	*	5320	97.4	-	-	86.4	34.63	11.73	35.36	197	336	A	H
		5355.6	61.25	-12.75	74	50.34	34.5	11.76	35.35	197	336	P	H
		5350.08	45.79	-8.21	54	34.88	34.5	11.76	35.35	197	336	A	H
													H
													H
	*	5320	108.56	-	-	97.56	34.63	11.73	35.36	181	20	P	V
	*	5320	100.22	-	-	89.22	34.63	11.73	35.36	181	20	A	V
		5352.48	62.79	-11.21	74	51.88	34.5	11.76	35.35	181	20	P	V
		5350.56	48.09	-5.91	54	37.18	34.5	11.76	35.35	181	20	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 2		(MHz)	(dBμV/m)	(dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11n HT20 CH 52 5260MHz		10520	44.82	-23.38	68.2	48.44	37.6	17.7	58.92	100	0	P	H
		15780	49.68	-24.32	74	44.09	40.53	21.8	56.74	100	0	P	H
													H
													H
		10520	44.77	-23.43	68.2	48.39	37.6	17.7	58.92	100	0	P	V
		15780	48.42	-25.58	74	42.83	40.53	21.8	56.74	100	0	P	V
													V
													V
802.11n HT20 CH 60 5300MHz		10600	44.42	-29.58	74	47.94	37.6	17.76	58.88	100	0	P	H
		15900	49.77	-24.23	74	43.8	40.8	21.89	56.72	100	0	P	H
													H
													H
		10600	45.72	-28.28	74	49.24	37.6	17.76	58.88	100	0	P	V
		15900	49.74	-24.26	74	43.77	40.8	21.89	56.72	100	0	P	V
													V
													V
802.11n HT20 CH 64 5320MHz		10640	44.19	-29.81	74	47.63	37.63	17.79	58.86	100	0	P	H
		15960	46.83	-27.17	74	40.81	40.8	21.93	56.71	100	0	P	H
													H
													H
		10640	45.37	-28.63	74	48.81	37.63	17.79	58.86	100	0	P	V
		15960	48.01	-25.99	74	41.99	40.8	21.93	56.71	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 CH 54 5270MHz		5099.75	49.55	-24.45	74	39.18	34.3	11.51	35.44	199	336	P	H
		5101.5	40.99	-13.01	54	30.61	34.3	11.52	35.44	199	336	A	H
	*	5270	102.95	-	-	92.09	34.57	11.67	35.38	199	336	P	H
	*	5270	95.06	-	-	84.2	34.57	11.67	35.38	199	336	A	H
		5364.72	52.28	-21.72	74	41.29	34.57	11.77	35.35	199	336	P	H
		5350.08	42.48	-11.52	54	31.57	34.5	11.76	35.35	199	336	A	H
		5021.35	52.27	-21.73	74	42.18	34.1	11.45	35.46	191	22	P	V
		5088.2	42.61	-11.39	54	32.32	34.23	11.5	35.44	191	22	A	V
	*	5270	105.76	-	-	94.9	34.57	11.67	35.38	191	22	P	V
	*	5270	98.03	-	-	87.17	34.57	11.67	35.38	191	22	A	V
		5353.44	54.11	-19.89	74	43.2	34.5	11.76	35.35	191	22	P	V
		5350.08	44.34	-9.66	54	33.43	34.5	11.76	35.35	191	22	A	V
802.11n HT40 CH 62 5310MHz		5117.6	49.58	-24.42	74	39.15	34.33	11.53	35.43	188	334	P	H
		5142.1	40.45	-13.55	54	29.92	34.4	11.55	35.42	188	334	A	H
	*	5310	101.04	-	-	90.05	34.63	11.72	35.36	188	334	P	H
	*	5310	93.28	-	-	82.29	34.63	11.72	35.36	188	334	A	H
		5353.68	55.98	-18.02	74	45.07	34.5	11.76	35.35	188	334	P	H
		5350.08	48.15	-5.85	54	37.24	34.5	11.76	35.35	188	334	A	H
		5094.85	51.76	-22.24	74	41.39	34.3	11.51	35.44	184	23	P	V
		5148.05	41.67	-12.33	54	31.13	34.4	11.56	35.42	184	23	A	V
	*	5310	103.78	-	-	92.79	34.63	11.72	35.36	184	23	P	V
	*	5310	95.88	-	-	84.89	34.63	11.72	35.36	184	23	A	V
		5350.08	59.25	-14.75	74	48.34	34.5	11.76	35.35	184	23	P	V
		5350.08	50.52	-3.48	54	39.61	34.5	11.76	35.35	184	23	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	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 2		(MHz)	(dBμV/m)	(dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11n HT40 CH 54 5270MHz		10540	44.22	-23.98	68.2	47.82	37.6	17.71	58.91	100	0	P	H
		15810	46.4	-27.6	74	40.81	40.5	21.82	56.73	100	0	P	H
													H
													H
		10540	44.05	-24.15	68.2	47.65	37.6	17.71	58.91	100	0	P	V
		15810	47.45	-26.55	74	41.86	40.5	21.82	56.73	100	0	P	V
													V
													V
802.11n HT40 CH 62 5310MHz		10620	44.18	-29.82	74	47.65	37.62	17.78	58.87	100	0	P	H
		15930	47.69	-26.31	74	41.69	40.8	21.91	56.71	100	0	P	H
													H
													H
		10620	44.36	-29.64	74	47.83	37.62	17.78	58.87	100	0	P	V
		15930	48.05	-25.95	74	42.05	40.8	21.91	56.71	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT80 CH 58 5290MHz		5140.35	52.21	-21.79	74	41.68	34.4	11.55	35.42	198	336	P	H
		5149.8	42.91	-11.09	54	32.37	34.4	11.56	35.42	198	336	A	H
	*	5290	96.27	-	-	85.32	34.63	11.69	35.37	198	336	P	H
	*	5290	88.56	-	-	77.61	34.63	11.69	35.37	198	336	A	H
		5369.52	56.14	-17.86	74	45.13	34.57	11.78	35.34	198	336	P	H
		5350.08	48.24	-5.76	54	37.33	34.5	11.76	35.35	198	336	A	H
		5131.25	54.09	-19.91	74	43.61	34.37	11.54	35.43	186	27	P	V
		5149.45	45.37	-8.63	54	34.83	34.4	11.56	35.42	186	27	A	V
	*	5290	99.12	-	-	88.17	34.63	11.69	35.37	186	27	P	V
	*	5290	91.16	-	-	80.21	34.63	11.69	35.37	186	27	A	V
		5359.2	60.04	-13.96	74	49.12	34.5	11.77	35.35	186	27	P	V
		5350.08	50.53	-3.47	54	39.62	34.5	11.76	35.35	186	27	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 2		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11ac VHT80 CH 58 5290MHz		10580	43.74	-24.46	68.2	47.28	37.6	17.75	58.89	100	0	P	H
		15870	47.94	-26.06	74	42.05	40.74	21.87	56.72	100	0	P	H
													H
													H
		10580	44.69	-23.51	68.2	48.23	37.6	17.75	58.89	100	0	P	V
		15870	47.83	-26.17	74	41.94	40.74	21.87	56.72	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 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 2		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11a CH 100 5500MHz		5460.08	58.48	-9.72	68.2	47.21	34.7	11.88	35.31	247	337	P	H
		5468.88	62.52	-5.68	68.2	51.14	34.8	11.89	35.31	247	337	P	H
		5460	44.46	-9.54	54	33.19	34.7	11.88	35.31	247	337	A	H
	*	5500	107.68	-	-	96.05	35	11.93	35.3	247	337	P	H
	*	5500	99.53	-	-	87.9	35	11.93	35.3	247	337	A	H
													H
		5456.88	59.41	-14.59	74	48.14	34.7	11.88	35.31	215	13	P	V
		5468.88	62.48	-5.72	68.2	51.1	34.8	11.89	35.31	215	13	P	V
		5460	46.04	-7.96	54	34.77	34.7	11.88	35.31	215	13	A	V
	*	5500	109.83	-	-	98.2	35	11.93	35.3	215	13	P	V
	*	5500	101.76	-	-	90.13	35	11.93	35.3	215	13	A	V
													V
802.11a CH 116 5580MHz		5393.2	49.27	-24.73	74	38.18	34.63	11.8	35.34	138	324	P	H
		5464.48	49.56	-18.64	68.2	38.19	34.8	11.88	35.31	138	324	P	H
		5428	40.43	-13.57	54	29.21	34.7	11.84	35.32	138	324	A	H
	*	5580	107.98	-	-	96.4	34.87	12.02	35.31	138	324	P	H
	*	5580	99.88	-	-	88.3	34.87	12.02	35.31	138	324	A	H
		5762.48	50.85	-17.35	68.2	38.87	35	12.31	35.33	138	324	P	H
		5374	49.71	-24.29	74	38.7	34.57	11.78	35.34	227	13	P	V
		5466.16	50.55	-17.65	68.2	39.17	34.8	11.89	35.31	227	13	P	V
		5433.76	41.05	-12.95	54	29.82	34.7	11.85	35.32	227	13	A	V
	*	5580	109.78	-	-	98.2	34.87	12.02	35.31	227	13	P	V
	*	5580	101.78	-	-	90.2	34.87	12.02	35.31	227	13	A	V
		5737.595	51.5	-16.7	68.2	39.55	35	12.27	35.32	227	13	P	V



FCC RADIO TEST REPORT

Report No. : FR990608-02D

802.11a CH 140 5700MHz	*	5700	104.58	-	-	92.7	35	12.2	35.32	172	2	P	H
	*	5700	96.58	-	-	84.7	35	12.2	35.32	172	2	A	H
		5729	60.26	-7.94	68.2	48.33	35	12.25	35.32	172	2	P	H
													H
													H
													H
	*	5700	106.68	-	-	94.8	35	12.2	35.32	206	360	P	V
	*	5700	99.31	-	-	87.43	35	12.2	35.32	206	360	A	V
		5725.72	64.16	-4.04	68.2	52.23	35	12.25	35.32	206	360	P	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 2		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11a CH 100 5500MHz		11000	45.45	-28.55	74	48.19	37.9	18.05	58.69	100	0	P	H
		16500	45.82	-22.38	68.2	38.26	41.6	22.38	56.42	100	0	P	H
													H
													H
		11000	47.02	-26.98	74	49.76	37.9	18.05	58.69	100	0	P	V
		16500	45.78	-22.42	68.2	38.22	41.6	22.38	56.42	100	0	P	V
													V
													V
802.11a CH 116 5580MHz		4185	50.43	-23.57	74	41.85	33.37	10.58	35.37	267	346	P	H
		4185	40.82	-13.18	54	32.24	33.37	10.58	35.37	267	346	A	H
		11160	48.07	-25.93	74	50	37.9	18.19	58.02	100	0	P	H
		16740	53.05	-15.15	68.2	44.61	42.36	22.58	56.5	100	0	P	H
		4185	51.64	-22.36	74	43.06	33.37	10.58	35.37	210	32	P	V
		4185	42.18	-11.82	54	33.6	33.37	10.58	35.37	210	32	A	V
		11160	48.79	-25.21	74	50.72	37.9	18.19	58.02	100	0	P	V
		16740	52.49	-15.71	68.2	44.05	42.36	22.58	56.5	100	0	P	V
802.11a CH 140 5700MHz		11400	42.78	-31.22	74	44.01	38.1	18.41	57.74	100	0	P	H
		17100	46.9	-21.3	68.2	38.3	42	22.87	56.27	100	0	P	H
													H
													H
		11400	43.52	-30.48	74	44.75	38.1	18.41	57.74	100	0	P	V
		17100	46.87	-21.33	68.2	38.27	42	22.87	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	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 100 5500MHz		5458.96	57.51	-16.49	74	46.24	34.7	11.88	35.31	247	337	P	H
		5469.04	59.9	-8.3	68.2	48.52	34.8	11.89	35.31	247	337	P	H
		5460	44.35	-9.65	54	33.08	34.7	11.88	35.31	247	337	A	H
	*	5500	107.12	-	-	95.49	35	11.93	35.3	247	337	P	H
	*	5500	99.12	-	-	87.49	35	11.93	35.3	247	337	A	H
													H
		5458.64	59.05	-14.95	74	47.78	34.7	11.88	35.31	215	13	P	V
		5469.36	62.86	-5.34	68.2	51.48	34.8	11.89	35.31	215	13	P	V
		5460	45.97	-8.03	54	34.7	34.7	11.88	35.31	215	13	A	V
	*	5500	109.43	-	-	97.8	35	11.93	35.3	215	13	P	V
	*	5500	101.72	-	-	90.09	35	11.93	35.3	215	13	A	V
													V
802.11n HT20 CH 116 5580MHz		5357.68	49.66	-24.34	74	38.74	34.5	11.77	35.35	137	324	P	H
		5469.04	48.76	-19.44	68.2	37.38	34.8	11.89	35.31	137	324	P	H
		5408.08	40.56	-13.44	54	29.37	34.7	11.82	35.33	137	324	A	H
	*	5580	107.28	-	-	95.7	34.87	12.02	35.31	137	324	P	H
	*	5580	99.48	-	-	87.9	34.87	12.02	35.31	137	324	A	H
		5760.275	50.82	-17.38	68.2	38.85	35	12.3	35.33	137	324	P	H
		5403.04	50.17	-23.83	74	38.99	34.7	11.81	35.33	227	13	P	V
		5462.8	48.66	-19.54	68.2	37.29	34.8	11.88	35.31	227	13	P	V
		5458.24	41.11	-12.89	54	29.84	34.7	11.88	35.31	227	13	A	V
	*	5580	109.38	-	-	97.8	34.87	12.02	35.31	227	13	P	V
	*	5580	101.66	-	-	90.08	34.87	12.02	35.31	227	13	A	V
		5726.885	50.56	-17.64	68.2	38.63	35	12.25	35.32	227	13	P	V



FCC RADIO TEST REPORT

Report No. : FR990608-02D

802.11n HT20 CH 140 5700MHz	*	5700	105.56	-	-	93.68	35	12.2	35.32	100	5	P	H
	*	5700	98	-	-	86.12	35	12.2	35.32	100	5	A	H
		5730.6	60	-8.2	68.2	48.06	35	12.26	35.32	100	5	P	H
													H
													H
													H
	*	5700	107.04	-	-	95.16	35	12.2	35.32	249	8	P	V
	*	5700	99.64	-	-	87.76	35	12.2	35.32	249	8	A	V
		5725.16	62.54	-5.66	68.2	50.61	35	12.25	35.32	249	8	P	V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11n HT20 CH 100 5500MHz		11000	45.65	-28.35	74	48.39	37.9	18.05	58.69	100	0	P	H
		16500	45.7	-22.5	68.2	38.14	41.6	22.38	56.42	100	0	P	H
													H
													H
		11000	44.61	-29.39	74	47.35	37.9	18.05	58.69	100	0	P	V
		16500	45.84	-22.36	68.2	38.28	41.6	22.38	56.42	100	0	P	V
													V
													V
802.11n HT20 CH 116 5580MHz		11160	45.73	-28.27	74	47.95	37.9	18.19	58.31	100	0	P	H
		16740	44.29	-23.91	68.2	35.68	42.36	22.58	56.33	100	0	P	H
													H
													H
		11160	44.83	-29.17	74	47.05	37.9	18.19	58.31	100	0	P	V
		16740	44.52	-23.68	68.2	35.91	42.36	22.58	56.33	100	0	P	V
													V
													V
802.11n HT20 CH 140 5700MHz		11400	42.44	-31.56	74	43.67	38.1	18.41	57.74	100	0	P	H
		17100	48.48	-19.72	68.2	39.88	42	22.87	56.27	100	0	P	H
													H
													H
		11400	43.48	-30.52	74	44.71	38.1	18.41	57.74	100	0	P	V
		17100	46.71	-21.49	68.2	38.11	42	22.87	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 HT40 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 CH 102 5510MHz		5458.72	55.52	-18.48	74	44.25	34.7	11.88	35.31	195	328	P	H
		5467.6	62.44	-5.76	68.2	51.06	34.8	11.89	35.31	195	328	P	H
		5459.92	46.98	-7.02	54	35.71	34.7	11.88	35.31	195	328	A	H
	*	5510	101.93	-	-	90.29	35	11.94	35.3	195	328	P	H
	*	5510	95.83	-	-	84.19	35	11.94	35.3	195	328	A	H
		5736.02	48.24	-19.96	68.2	36.3	35	12.26	35.32	195	328	P	H
		5459.92	55.76	-18.24	74	44.49	34.7	11.88	35.31	243	25	P	V
		5462.32	63.6	-4.6	68.2	52.33	34.7	11.88	35.31	243	25	P	V
		5459.92	48.8	-5.2	54	37.53	34.7	11.88	35.31	243	25	A	V
	*	5510	103.8	-	-	92.16	35	11.94	35.3	243	25	P	V
	*	5510	97.48	-	-	85.84	35	11.94	35.3	243	25	A	V
		5759.96	53.38	-14.82	68.2	41.41	35	12.3	35.33	243	25	P	V
802.11n HT40 CH 110 5550MHz		5392.72	47.95	-26.05	74	36.86	34.63	11.8	35.34	252	327	P	H
		5466.4	48.61	-19.59	68.2	37.23	34.8	11.89	35.31	252	327	P	H
		5459.68	40.36	-13.64	54	29.09	34.7	11.88	35.31	252	327	A	H
	*	5550	102.04	-	-	90.57	34.8	11.98	35.31	252	327	P	H
	*	5550	95.74	-	-	84.27	34.8	11.98	35.31	252	327	A	H
		5760.275	49.31	-18.89	68.2	37.34	35	12.3	35.33	252	327	P	H
		5457.04	48.61	-25.39	74	37.34	34.7	11.88	35.31	251	7	P	V
		5464.72	50.04	-18.16	68.2	38.67	34.8	11.88	35.31	251	7	P	V
		5458.96	41.29	-12.71	54	30.02	34.7	11.88	35.31	251	7	A	V
	*	5550	103.77	-	-	92.3	34.8	11.98	35.31	251	7	P	V
	*	5550	97.51	-	-	86.04	34.8	11.98	35.31	251	7	A	V
		5759.96	51.35	-16.85	68.2	39.38	35	12.3	35.33	251	7	P	V



FCC RADIO TEST REPORT

Report No. : FR990608-02D

802.11n HT40 CH 134 5670MHz		5369.25	49.95	-24.05	74	38.94	34.57	11.78	35.34	267	332	P	H
		5460.25	48.03	-20.17	68.2	36.76	34.7	11.88	35.31	267	332	P	H
		5459.9	39.85	-14.15	54	28.58	34.7	11.88	35.31	267	332	A	H
	*	5670	102.35	-	-	90.66	34.85	12.16	35.32	267	332	P	H
	*	5670	95.85	-	-	84.16	34.85	12.16	35.32	267	332	A	H
		5730.875	60.85	-7.35	68.2	48.91	35	12.26	35.32	267	332	P	H
		5458.5	49.06	-24.94	74	37.79	34.7	11.88	35.31	258	6	P	V
		5461.65	47.65	-20.55	68.2	36.38	34.7	11.88	35.31	258	6	P	V
		5459.9	40.38	-13.62	54	29.11	34.7	11.88	35.31	258	6	A	V
	*	5670	104.01	-	-	92.32	34.85	12.16	35.32	258	6	P	V
	*	5670	97.39	-	-	85.7	34.85	12.16	35.32	258	6	A	V
		5725.625	63.34	-4.86	68.2	51.41	35	12.25	35.32	258	6	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz
WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11n HT40 CH 102 5510MHz		11020	43.15	-30.85	74	45.83	37.9	18.06	58.64	100	0	P	H
		16530	43.47	-24.73	68.2	35.81	41.67	22.4	56.41	100	0	P	H
													H
													H
		11020	44.79	-29.21	74	47.47	37.9	18.06	58.64	100	0	P	V
		16530	44.24	-23.96	68.2	36.58	41.67	22.4	56.41	100	0	P	V
													V
													V
802.11n HT40 CH 110 5550MHz		11100	44.56	-29.44	74	46.98	37.9	18.13	58.45	100	0	P	H
		16650	43.11	-25.09	68.2	34.88	42.1	22.5	56.37	100	0	P	H
													H
													H
		11100	43.35	-30.65	74	45.77	37.9	18.13	58.45	100	0	P	V
		16650	44.37	-23.83	68.2	36.14	42.1	22.5	56.37	100	0	P	V
													V
													V
802.11n HT40 CH 134 5670MHz		11340	42.8	-31.2	74	44.3	38.03	18.35	57.88	100	0	P	H
		17010	44.04	-24.16	68.2	35.3	42.17	22.81	56.24	100	0	P	H
													H
													H
		11340	43.04	-30.96	74	44.54	38.03	18.35	57.88	100	0	P	V
		17010	44.1	-24.1	68.2	35.36	42.17	22.81	56.24	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 802.11ac VHT80 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT80 CH 106 5530MHz		5450.8	55.65	-18.35	74	44.4	34.7	11.87	35.32	261	332	P	H
		5469.76	57.74	-10.46	68.2	46.36	34.8	11.89	35.31	261	332	P	H
		5459.92	48.16	-5.84	54	36.89	34.7	11.88	35.31	261	332	A	H
	*	5530	96.39	-	-	84.8	34.93	11.96	35.3	261	332	P	H
	*	5530	89.79	-	-	78.2	34.93	11.96	35.3	261	332	A	H
		5749.25	50.74	-17.46	68.2	38.77	35	12.29	35.32	261	332	P	H
		5459.44	58.33	-15.67	74	47.06	34.7	11.88	35.31	222	15	P	V
		5466.4	58.93	-9.27	68.2	47.55	34.8	11.89	35.31	222	15	P	V
		5459.92	50.58	-3.42	54	39.31	34.7	11.88	35.31	222	15	A	V
	*	5530	98.16	-	-	86.57	34.93	11.96	35.3	222	15	P	V
	*	5530	91.49	-	-	79.9	34.93	11.96	35.3	222	15	A	V
		5759.96	53.48	-14.72	68.2	41.51	35	12.3	35.33	222	15	P	V
802.11ac VHT80 CH 122 5610MHz		5441	51.19	-22.81	74	39.95	34.7	11.86	35.32	264	332	P	H
		5466.55	50.9	-17.3	68.2	39.52	34.8	11.89	35.31	264	332	P	H
		5457.8	42.6	-11.4	54	31.33	34.7	11.88	35.31	264	332	A	H
	*	5610	95.86	-	-	84.11	35	12.06	35.31	264	332	P	H
	*	5610	89.75	-	-	78	35	12.06	35.31	264	332	A	H
		5726.325	51.02	-17.18	68.2	39.09	35	12.25	35.32	264	332	P	H
		5457.1	52.28	-21.72	74	41.01	34.7	11.88	35.31	192	7	P	V
		5460.95	53.66	-14.54	68.2	42.39	34.7	11.88	35.31	192	7	P	V
		5459.9	43.99	-10.01	54	32.72	34.7	11.88	35.31	192	7	A	V
	*	5610	97.98	-	-	86.23	35	12.06	35.31	192	7	P	V
	*	5610	91.33	-	-	79.58	35	12.06	35.31	192	7	A	V
		5759.75	53.67	-14.53	68.2	41.7	35	12.3	35.33	192	7	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	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	Avg. (P/A)	(H/V)
802.11ac VHT80 CH 106 5530MHz		11060	43.62	-30.38	74	46.17	37.9	18.1	58.55	100	0	P	H
		16590	41.52	-26.68	68.2	33.69	41.77	22.45	56.39	100	0	P	H
													H
													H
		11060	42.96	-31.04	74	45.51	37.9	18.1	58.55	100	0	P	V
		16590	42.17	-26.03	68.2	34.34	41.77	22.45	56.39	100	0	P	V
													V
													V
802.11ac VHT80 CH 122 5610MHz		11220	42.88	-31.12	74	44.88	37.92	18.25	58.17	100	0	P	H
		16830	43.14	-25.06	68.2	34.48	42.3	22.66	56.3	100	0	P	H
													H
													H
		11220	43.42	-30.58	74	45.42	37.92	18.25	58.17	100	0	P	V
		16830	44.21	-23.99	68.2	35.55	42.3	22.66	56.3	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 2		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11a CH 144 5720MHz		5388.22	49.14	-24.86	74	38.05	34.63	11.8	35.34	262	332	P	H
		5467.39	47.4	-20.8	68.2	36.02	34.8	11.89	35.31	262	332	P	H
		5455.69	39.6	-14.4	54	28.35	34.7	11.87	35.32	262	332	A	H
	*	5720	107.19	-	-	95.27	35	12.24	35.32	262	332	P	H
	*	5720	99.65	-	-	87.73	35	12.24	35.32	262	332	A	H
		5881.25	51.14	-17.06	68.2	38.94	35.13	12.41	35.34	262	332	P	H
		5458.81	49.67	-24.33	74	38.4	34.7	11.88	35.31	200	6	P	V
		5465.44	48.27	-19.93	68.2	36.89	34.8	11.89	35.31	200	6	P	V
		5459.59	40.14	-13.86	54	28.87	34.7	11.88	35.31	200	6	A	V
	*	5720	108.87	-	-	96.95	35	12.24	35.32	200	6	P	V
	*	5720	101.48	-	-	89.56	35	12.24	35.32	200	6	A	V
		5858.75	50.4	-17.8	68.2	38.27	35.07	12.4	35.34	200	6	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 2		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11a CH 144 5720MHz		11440	43.99	-30.01	74	45.06	38.13	18.44	57.64	100	0	P	H
		17160	49.4	-18.8	68.2	41.05	41.73	22.91	56.29	100	0	P	H
													H
													H
		11440	44.45	-29.55	74	45.52	38.13	18.44	57.64	100	0	P	V
		17160	51.01	-17.19	68.2	42.66	41.73	22.91	56.29	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 144 5720MHz		5449.84	49.18	-24.82	74	37.93	34.7	11.87	35.32	253	324	P	H
		5464.27	48.22	-19.98	68.2	36.85	34.8	11.88	35.31	253	324	P	H
		5459.59	39.44	-14.56	54	28.17	34.7	11.88	35.31	253	324	A	H
	*	5720	107.15	-	-	95.23	35	12.24	35.32	253	324	P	H
	*	5720	99.79	-	-	87.87	35	12.24	35.32	253	324	A	H
		5893.5	50.67	-17.53	68.2	38.39	35.2	12.42	35.34	253	324	P	H
		5429.17	49.69	-24.31	74	38.47	34.7	11.84	35.32	200	6	P	V
		5470	48.59	-19.61	68.2	37.21	34.8	11.89	35.31	200	6	P	V
		5459.59	40.28	-13.72	54	29.01	34.7	11.88	35.31	200	6	A	V
	*	5720	108.84	-	-	96.92	35	12.24	35.32	200	6	P	V
	*	5720	101.55	-	-	89.63	35	12.24	35.32	200	6	A	V
		5880	51.56	-16.64	68.2	39.36	35.13	12.41	35.34	200	6	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 2		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11n HT20 CH 144 5720MHz		11440	43.55	-30.45	74	44.62	38.13	18.44	57.64	100	0	P	H
		17160	50.79	-17.41	68.2	42.44	41.73	22.91	56.29	100	0	P	H
													H
													H
		11440	45.2	-28.8	74	46.27	38.13	18.44	57.64	100	0	P	V
		17160	48.88	-19.32	68.2	40.53	41.73	22.91	56.29	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 CH 142 5710MHz		5447.89	48.91	-25.09	74	37.66	34.7	11.87	35.32	250	327	P	H
		5460.37	48.7	-19.5	68.2	37.43	34.7	11.88	35.31	250	327	P	H
		5458.42	39.56	-14.44	54	28.29	34.7	11.88	35.31	250	327	A	H
	*	5710	103.02	-	-	91.12	35	12.22	35.32	250	327	P	H
	*	5710	96.18	-	-	84.28	35	12.22	35.32	250	327	A	H
		5858.25	50.52	-17.68	68.2	38.39	35.07	12.4	35.34	250	327	P	H
		5426.05	49.59	-24.41	74	38.38	34.7	11.84	35.33	199	7	P	V
		5463.88	48.5	-19.7	68.2	37.13	34.8	11.88	35.31	199	7	P	V
		5459.98	40.28	-13.72	54	29.01	34.7	11.88	35.31	199	7	A	V
	*	5710	104.36	-	-	92.46	35	12.22	35.32	199	7	P	V
	*	5710	97.6	-	-	85.7	35	12.22	35.32	199	7	A	V
		5884.75	51.25	-16.95	68.2	39.05	35.13	12.41	35.34	199	7	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	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 2		(MHz)	(dBμV/m)	(dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11n HT40 CH 142 5710MHz		11420	43.67	-30.33	74	44.82	38.12	18.42	57.69	100	0	P	H
		17130	43.64	-24.56	68.2	35.16	41.87	22.89	56.28	100	0	P	H
													H
													H
		11420	43.26	-30.74	74	44.41	38.12	18.42	57.69	100	0	P	V
		17130	43.32	-24.88	68.2	34.84	41.87	22.89	56.28	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT80 CH 138 5690MHz		5452.57	49.29	-24.71	74	38.04	34.7	11.87	35.32	253	326	P	H
		5466.61	50.06	-18.14	68.2	38.68	34.8	11.89	35.31	253	326	P	H
		5459.98	40.07	-13.93	54	28.8	34.7	11.88	35.31	253	326	A	H
	*	5690	96.97	-	-	85.1	35	12.19	35.32	253	326	P	H
	*	5690	89.76	-	-	77.89	35	12.19	35.32	253	326	A	H
		5853.4	50.38	-17.82	68.2	38.32	35	12.4	35.34	253	326	P	H
		5455.3	50.6	-23.4	74	39.35	34.7	11.87	35.32	227	34	P	V
		5469.34	50.28	-17.92	68.2	38.9	34.8	11.89	35.31	227	34	P	V
		5458.81	41.3	-12.7	54	30.03	34.7	11.88	35.31	227	34	A	V
	*	5690	98.64	-	-	86.77	35	12.19	35.32	227	34	P	V
	*	5690	91.41	-	-	79.54	35	12.19	35.32	227	34	A	V
		5936.2	50.67	-17.53	68.2	38.37	35.2	12.44	35.34	227	34	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 2		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11ac VHT80 CH 138 5690MHz		11380	42.42	-31.58	74	43.75	38.08	18.38	57.79	100	0	P	H
		17070	42.39	-25.81	68.2	33.74	42.07	22.84	56.26	100	0	P	H
													H
													H
		11380	42.96	-31.04	74	44.29	38.08	18.38	57.79	100	0	P	V
		17070	43	-25.2	68.2	34.35	42.07	22.84	56.26	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Emission above 18GHz

WIFI 802.11a (SHF @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 2		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11a SHF		39912	44.43	-29.57	74	42.69	44.1	12.08	54.44	100	0	P	H
													H
													H
													H
		39670	43.93	-30.07	74	42.67	44.1	12.08	54.44	100	0	P	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												



Emission below 1GHz

WIFI 802.11a (LF @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant. 2		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
802.11a LF		85.62	26.02	-13.98	40	40.45	14.01	1.55	29.99	-	-	P	H
		129.09	32.39	-11.11	43.5	43.01	17.43	1.9	29.95	100	0	P	H
		260.04	24.99	-21.01	46	32.55	19.53	2.71	29.8	-	-	P	H
		358.1	26.89	-19.11	46	32.91	20.56	3.2	29.78	-	-	P	H
		520.5	30.2	-15.8	46	32.17	23.95	3.86	29.78	-	-	P	H
		955.9	33.46	-12.54	46	26.21	30.5	5.28	28.53	-	-	P	H
													H
													H
													H
													H
													H
		32.16	33.91	-6.09	40	39.36	23.57	0.96	29.98	100	0	P	V
		82.11	28.48	-11.52	40	43.42	13.53	1.52	29.99	-	-	P	V
		150.96	30.81	-12.69	43.5	41.5	17.17	2.06	29.92	-	-	P	V
		360.9	27.41	-18.59	46	33.33	20.65	3.21	29.78	-	-	P	V
		520.5	36.2	-9.8	46	38.17	23.95	3.86	29.78	-	-	P	V
		946.8	33.46	-12.54	46	26.83	29.97	5.25	28.59	-	-	P	V
													V
													V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

Note symbol

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

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

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

1. 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”.