



FCC RADIO TEST REPORT

FCC ID : ACJFZS1A
Equipment : Tablet Computer
Brand Name : Panasonic
Model Name : FZ-S1
Marketing Name : FZ-S1
Applicant : Panasonic Corporation of North America
Two Riverfront Plaza, 9th Floor, Newark, NJ
07102-5490
Manufacturer : Panasonic Mobile Communications Co., Ltd.
600 Saedo-cho, Tsuzuki-ku, Yokohama-city,
Kanagawa 224-8539, Japan
Standard : FCC Part 15 Subpart E §15.407

The product was received on Sep. 18, 2020 and testing was started from Oct. 07, 2020 and completed on Dec. 15, 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.)



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History of this test report

Report No.	Version	Description	Issued Date
FR091742E	01	Initial issue of report	Dec. 21, 2020
FR091742E	02	Revise product feature of equipment under test	Dec. 30, 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 1.77 dB at 5459.200 MHz
3.5	15.207	AC Conducted Emission	Pass	Under limit 14.24 dB at 0.503 MHz
3.6	15.407(c)	Automatically Discontinue Transmission	Pass	-
3.7	15.203 15.407(a)	Antenna Requirement	Pass	-

Declaration of Conformity:

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

Comments and Explanations:

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

Reviewed by: Wii Chang**Report Producer: Yimin Ho**



1 General Description

1.1 Product Feature of Equipment Under Test

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

Product Specification subjective to this standard	
Sample 1	FZ-S1
Sample 2	FZ-S1 with 2nd USB
Sample 3	FZ-S1 with BCR Landscape and 2nd USB
Sample 4	FZ-S1 with BCR Portrait
Sample 5	FZ-S1 with BCR Landscape
Antenna Type	WLAN: Loop Antenna Bluetooth: Loop Antenna NFC: Loop Antenna
Antenna Gain	WLAN 5GHz (Band 1): 2.00 dBi WLAN 5GHz (Band 2): 2.78 dBi WLAN 5GHz (Band 3): 3.63 dBi

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

Accessories Information		
AC Adapter	Brand Name	Panasonic
	Model Name	FZ-AAE184EM
Standard Battery	Brand Name	Panasonic
	Model Name	FZ-VZSUT10U
Large Battery	Brand Name	Panasonic
	Model Name	FZ-VZSUT11U

1.2 Modification of EUT

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



1.3 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

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

Test Site	SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory	
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855	
Test Site No.	Sporton Site No.	
	03CH16-HY	

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

FCC designation No.: TW1190 and TW0007

1.4 Applicable Standards

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

- ♦ FCC Part 15 Subpart E
- ♦ FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
- ♦ FCC KDB 414788 D01 Radiated Test Site v01r01.
- ♦ ANSI C63.10-2013

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. The TAF code is not including all the FCC KDB listed without accreditation.
3. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.



2 Test Configuration of Equipment Under Test

- a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conduction emission (150 kHz to 30 MHz), radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (Y plane) were recorded in this report.
- b. AC power line Conducted Emission was tested under maximum output power.

2.1 Carrier Frequency and Channel

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

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

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

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
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 + MPEG4 + Earphone + USB Cable (Charging from AC Adapter) for Sample 1 Mode 2 : WLAN (5GHz) Idle + Bluetooth Idle + MPEG4 + Earphone + USB Cable (Charging from AC Adapter) for Sample 1
Remark: <ol style="list-style-type: none">1. The worst case of conducted emission is mode 1; only the test data of it was reported.2. For Radiated Test Cases, the tests were performed with Standard Battery and Sample 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

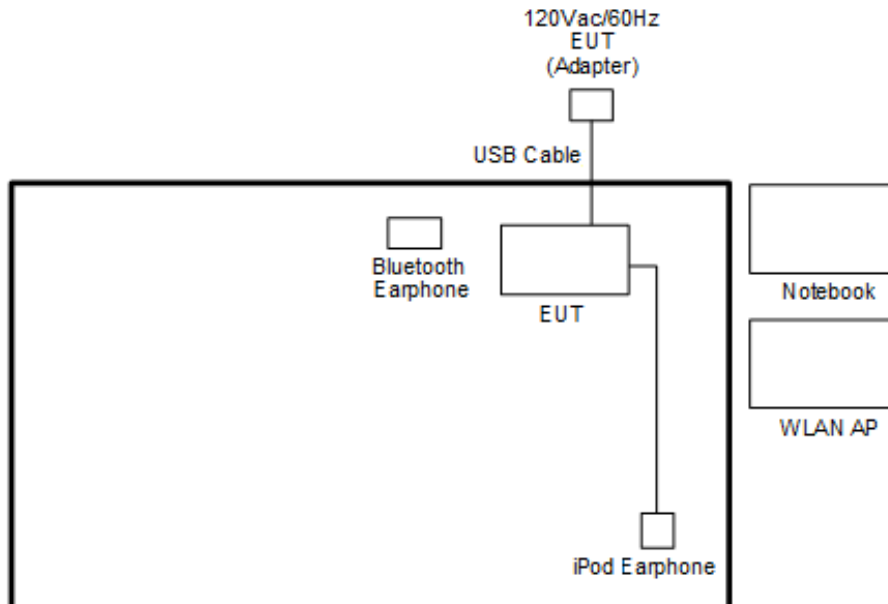
Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725MHz
		802.11n HT40	802.11n HT40	802.11n HT40
L	Low	38	54	102
M	Middle	-	-	110
H	High	46	62	134
Straddle		-	-	142

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	-
H	High	-	-	-
Straddle		-	-	138

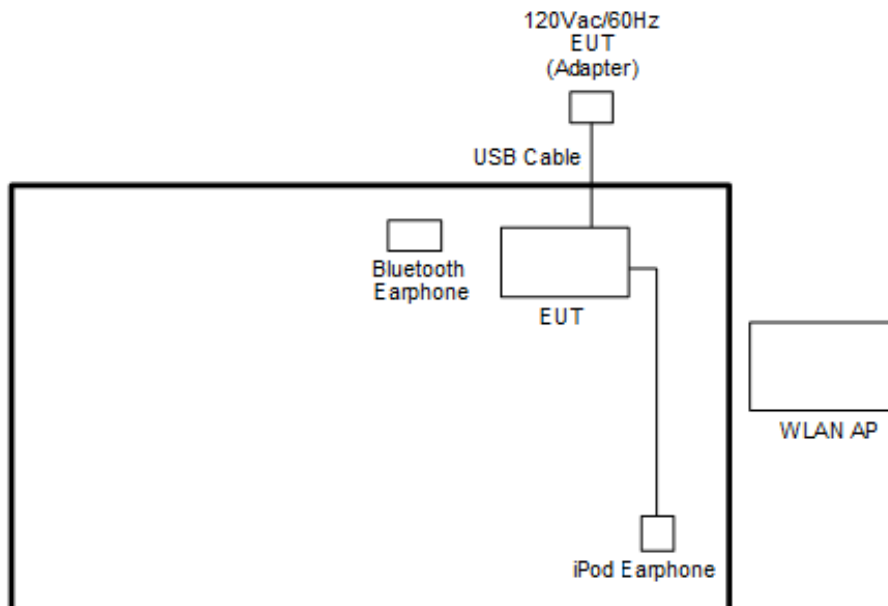
Remark: For radiation spurious emission, the final modulation and the worst data rate was reference the max RF conducted power.

2.3 Connection Diagram of Test System

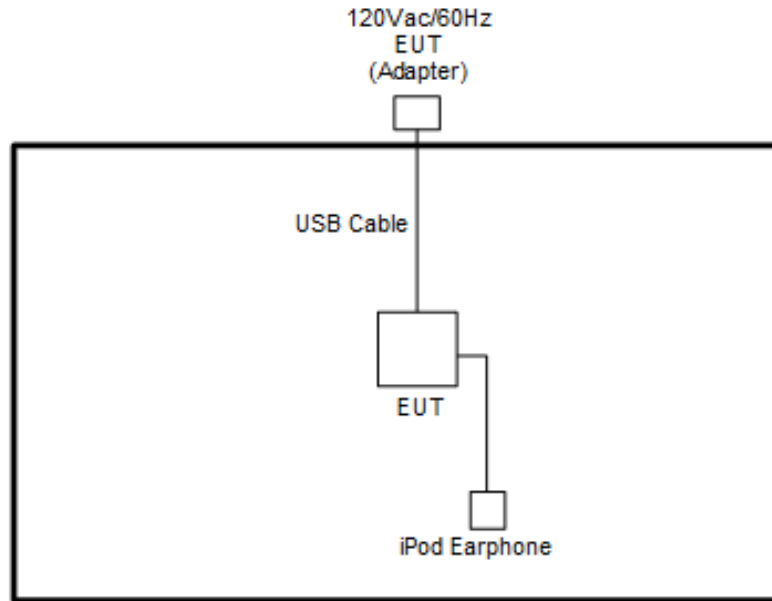
<AC Conducted Emission with Link Mode>



<AC Conducted Emission with Idle Mode>



<WLAN Tx Mode>



2.4 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Bluetooth Earphone	Sony Ericsson	MW600	PY7DDA-2029	N/A	N/A
2.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
3.	iPod Earphone	Apple	N/A	Verification	Unshielded, 1.0m	N/A
4.	Notebook	DELL	Latitude E3340	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
5.	Type-C USB Cable	LUXSHARE PRECISION LIMITED	L2UU3001-C S-R	N/A	Unshielded, 1.0m	N/A

2.5 EUT Operation Test Setup

The RF test items, utility “QRCT v4.0 00156.0” 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.

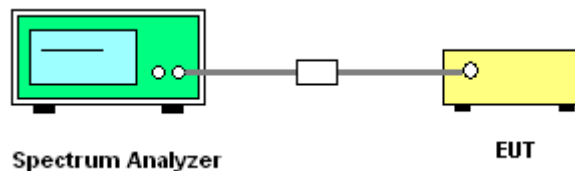
3.1.2 Measuring Instruments

See list of measuring equipment of this test report.

3.1.3 Test Procedures

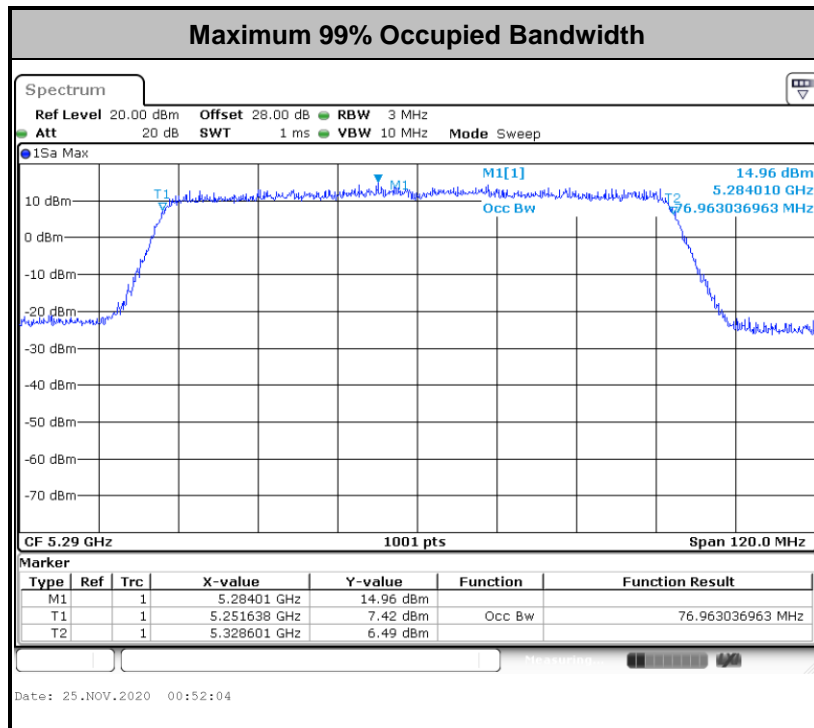
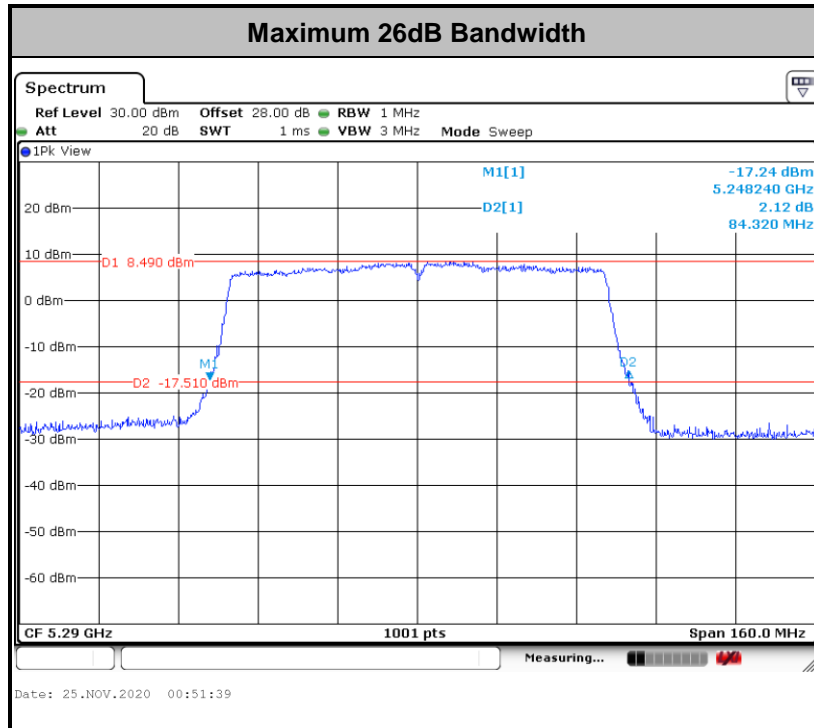
1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section C) Emission bandwidth
2. Set RBW = approximately 1% of the emission bandwidth.
3. Set the VBW > RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 26 dB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

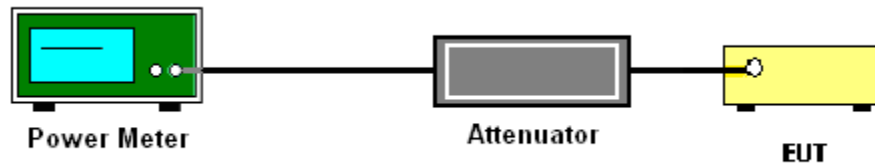
The testing follows Method PM-G of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

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

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

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

3.2.4 Test Setup



3.2.5 Test Result of Maximum Conducted Output Power

Please refer to Appendix A.



3.3 Power Spectral Density Measurement

3.3.1 Limit of Power Spectral Density

<FCC 14-30 CFR 15.407>

For the 5.15–5.25 GHz bands:

For mobile and portable client devices in the 5.15–5.25 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1.0 MHz band. For an indoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1.0 MHz band.

For the 5.25–5.725 GHz bands:

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

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

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

3.3.2 Measuring Instruments

See list of measuring equipment of this test report.

3.3.3 Test Procedures

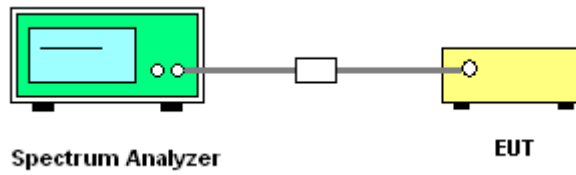
The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section F) Maximum power spectral density.

Method SA-3

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

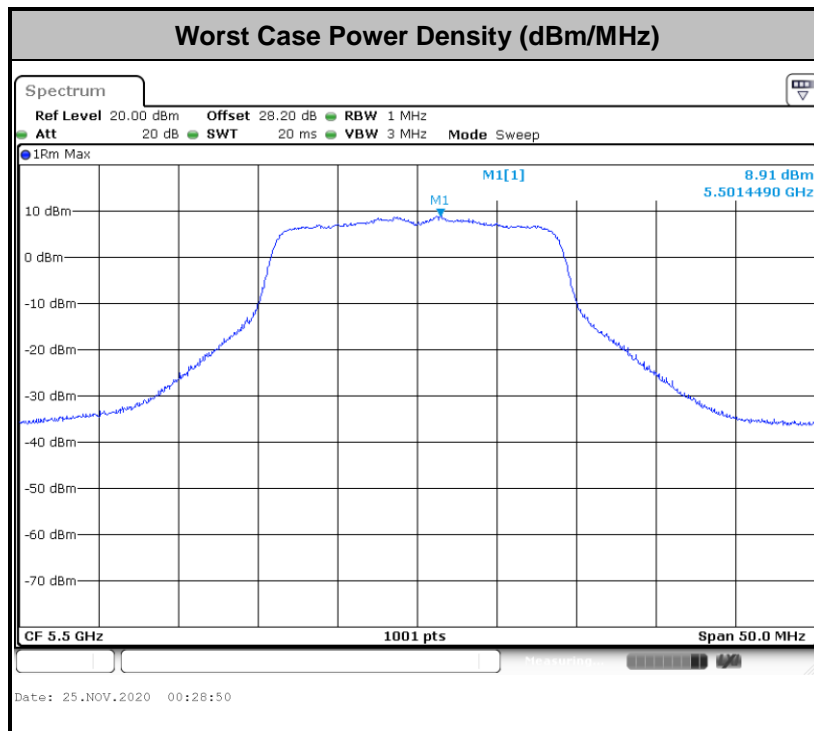
- Set span to encompass the entire emission bandwidth (EBW) of the signal.
 - Set RBW = 1 MHz.
 - Set VBW \geq 3 MHz
 - Number of points in sweep \geq 2 Span / RBW.
 - Sweep time \leq (number of points in sweep) \times T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
 - Detector = power averaging (rms).
 - Trace mode = max hold.
 - Allow max hold to run for at least 60 seconds, or longer as needed to allow the trace to stabilize.
1. The RF output of EUT was connected to the spectrum analyzer by a low loss cable.
 2. Each plot has already offset with cable loss, and attenuator loss. Measure the PPSD and record it.

3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.





3.4 Unwanted Emissions Measurement

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

3.4.1 Limit of Unwanted Emissions

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

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

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

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

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

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

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

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

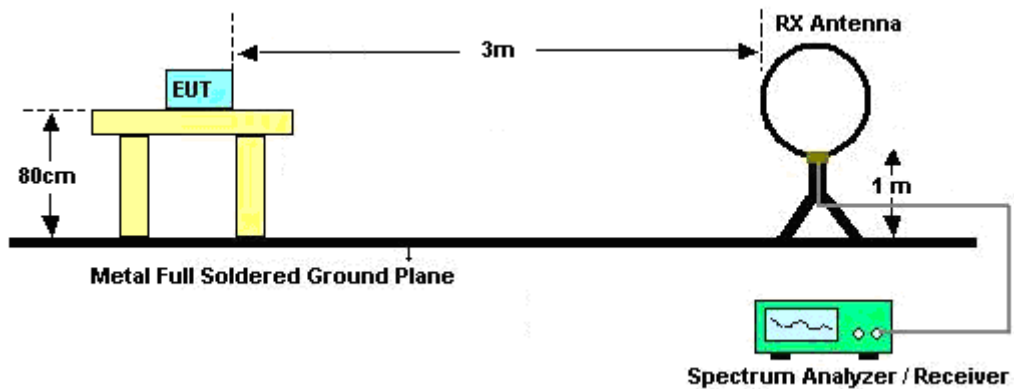
3.4.3 Test Procedures

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 \geq 3 MHz
 - Detector = Peak
 - Sweep time = auto
 - Trace mode = max hold
 - (3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz
 - RBW = 1 MHz
 - VBW = 10 Hz, when duty cycle is no less than 98 percent.
 - VBW \geq $1/T$, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband antenna and its height is adjusted between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.

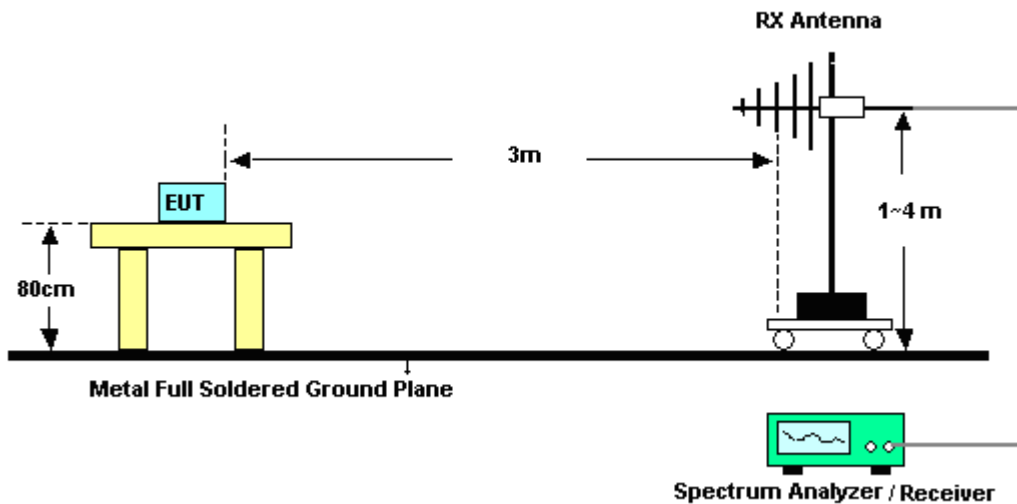
5. For each suspected emission, the EUT was arranged to its worst case and then adjust the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. For testing below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
7. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

3.4.4 Test Setup

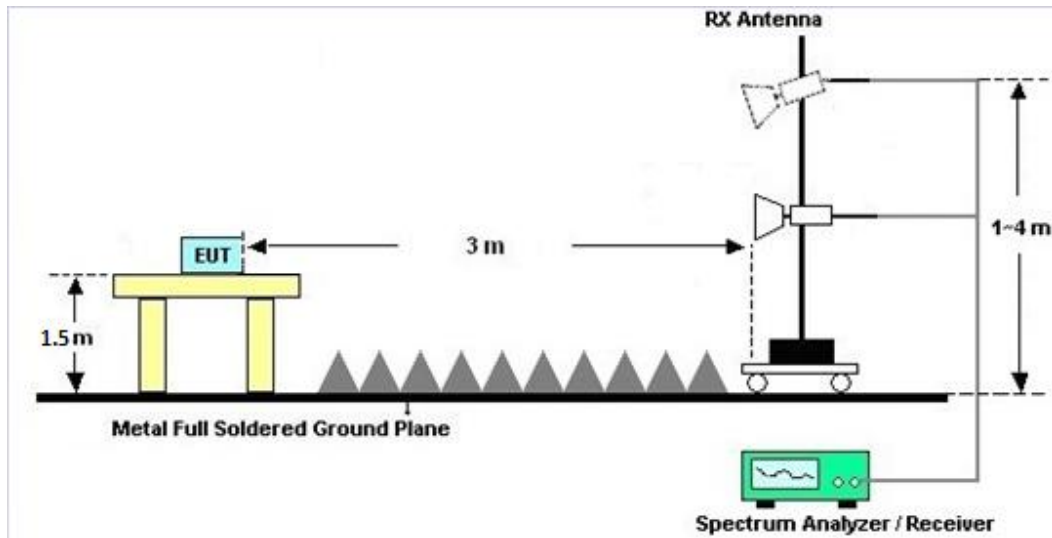
For radiated emissions below 30MHz



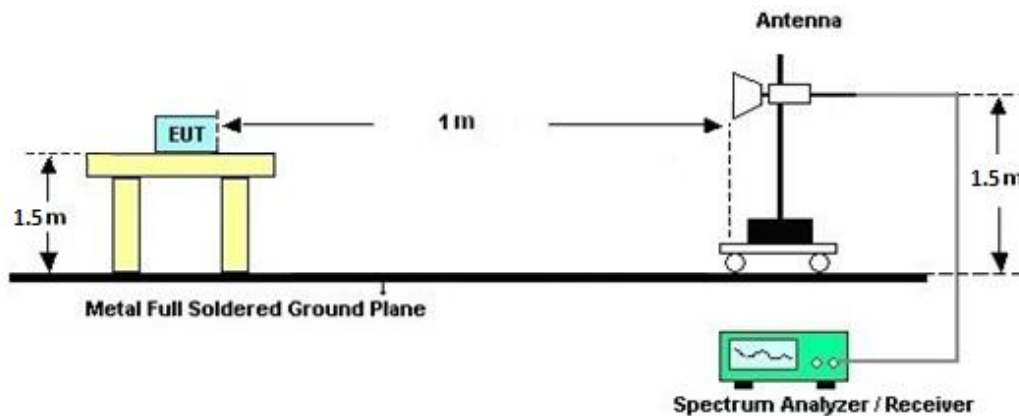
For radiated emissions from 30MHz to 1GHz



For radiated emissions from 1GHz to 18GHz



For radiated emissions above 18GHz



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.

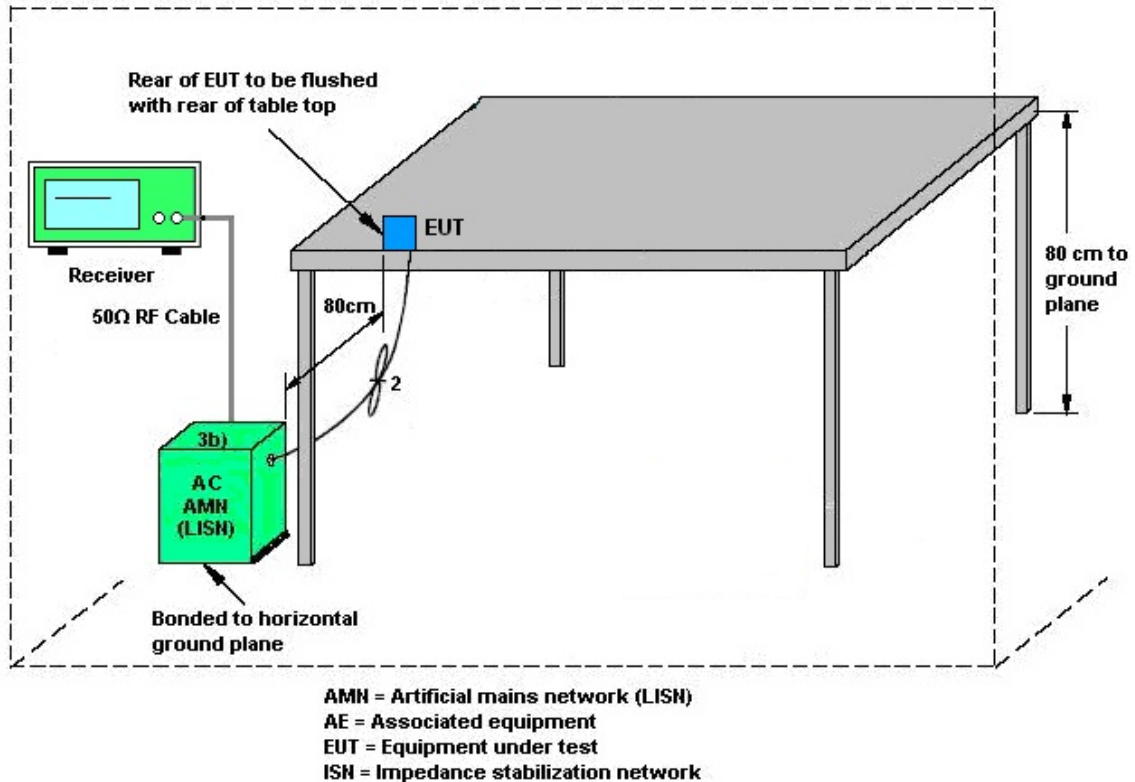
3.5.2 Measuring Instruments

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

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



3.7 Antenna Requirements

3.7.1 Standard Applicable

If transmitting antenna directional gain is greater than 6 dBi, both the peak transmit power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.7.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.7.3 Antenna Gain

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



4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Jul. 14, 2020	Nov. 05, 2020~ Nov. 20, 2020	Jul. 13, 2021	Radiation (03CH16-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00802N1D01 N-06	41912 & 05	30MHz to 1GHz	Feb. 09, 2020	Nov. 05, 2020~ Nov. 20, 2020	Feb. 08, 2021	Radiation (03CH16-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA 9170	BBHA9170 584	18GHz~40GHz	Dec. 10, 2019	Nov. 05, 2020~ Nov. 20, 2020	Dec. 09, 2020	Radiation (03CH16-HY)
Amplifier	SONOMA	310N	371607	9kHz~1G	Sep. 30, 2020	Nov. 05, 2020~ Nov. 20, 2020	Sep. 29, 2021	Radiation (03CH16-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-152 2	1G~18GHz	Sep. 29, 2020	Nov. 05, 2020~ Nov. 20, 2020	Sep. 28, 2021	Radiation (03CH16-HY)
Preamplifier	Jet-Power	JPA0118-55-3 03	171000180 0054001	1GHz~18GHz	Sep. 04, 2020	Nov. 05, 2020~ Nov. 20, 2020	Sep. 03, 2021	Radiation (03CH16-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz ~40GHz	Dec. 13, 2019	Nov. 05, 2020~ Nov. 20, 2020	Dec. 12, 2020	Radiation (03CH16-HY)
Preamplifier	Keysight	83017A	MY532702 64	1GHz~26.5GHz	Dec. 11, 2019	Nov. 05, 2020~ Nov. 20, 2020	Dec. 10, 2020	Radiation (03CH16-HY)
EMI Test Receiver	Keysight	N9038A (MXE)	MY572901 11	3Hz~26.5GHz	Dec. 05, 2019	Nov. 05, 2020~ Nov. 20, 2020	Dec. 04, 2020	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY11680/ 4PE	NA	Aug. 29, 2020	Nov. 05, 2020~ Nov. 20, 2020	Aug. 28, 2021	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY11688/ 4PE	NA	Aug. 29, 2020	Nov. 05, 2020~ Nov. 20, 2020	Aug. 28, 2021	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	EC-A5-300 -5757	NA	Aug. 29, 2020	Nov. 05, 2020~ Nov. 20, 2020	Aug. 28, 2021	Radiation (03CH16-HY)
Hygrometer	TECPEL	DTM-303B	TP200881	QA-3-031	Oct. 22, 2020	Nov. 05, 2020~ Nov. 20, 2020	Oct. 21, 2021	Radiation (03CH16-HY)
Software	Audix	E3 6.2009-8-24	RK-001136	N/A	N/A	Nov. 05, 2020~ Nov. 20, 2020	N/A	Radiation (03CH16-HY)
Controller	ChainTek	3000-1	N/A	Control Turn table & Ant Mast	N/A	Nov. 05, 2020~ Nov. 20, 2020	N/A	Radiation (03CH16-HY)
Antenna Mast	ChainTek	MBS-520-1	N/A	1m~4m	N/A	Nov. 05, 2020~ Nov. 20, 2020	N/A	Radiation (03CH16-HY)
Turn Table	ChainTek	T-200-S-1	N/A	0~360 Degree	N/A	Nov. 05, 2020~ Nov. 20, 2020	N/A	Radiation (03CH16-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Nov. 24, 2020	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102317	9kHz~3.6GHz	Sep. 11, 2020	Nov. 24, 2020	Sep. 10, 2021	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Nov. 16, 2020	Nov. 24, 2020	Nov. 15, 2021	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Nov. 24, 2020	N/A	Conduction (CO05-HY)
LF Cable	HUBER + SUHNER	RG-214/U	LF01	N/A	Jan. 02, 2020	Nov. 24, 2020	Jan. 01, 2021	Conduction (CO05-HY)
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100851	N/A	Jan. 02, 2020	Nov. 24, 2020	Jan. 01, 2021	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34893241	N/A	Mar. 02, 2020	Nov. 24, 2020	Mar. 01, 2021	Conduction (CO05-HY)



Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Hygrometer	Testo	608-H1	34893241	N/A	Mar. 02, 2020	Oct. 07, 2020~ Dec. 15, 2020	Mar. 01, 2021	Conducted (TH05-HY)
Power Sensor	DARE	RPR3006W	16I00054S NO10	10MHz~6GHz	Dec. 23, 2019	Oct. 07, 2020~ Dec. 15, 2020	Dec. 22, 2020	Conducted (TH05-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101566	10Hz ~ 40GHz	Jul. 22, 2020	Oct. 07, 2020~ Dec. 15, 2020	Jul. 21, 2021	Conducted (TH05-HY)
Switch Box & RF Cable	EM Electronics	EMSW18SE	SW200302	N/A	Mar. 17, 2020	Oct. 07, 2020~ Dec. 15, 2020	Mar. 16, 2021	Conducted (TH05-HY)



5 Uncertainty of Evaluation

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

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.5
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Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	6.3
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Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.7
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Appendix A. Test Result of Conducted Test Items

Test Engineer:	Eason Huang/Hank Hsu	Temperature:	21~25	°C
Test Date:	2020/10/7~2020/12/15	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	16.83	-	25.15	-	-	-	22.26	-	
11a	6Mbps	1	44	5220	16.78	-	24.85	-	-	-	22.25	-	
11a	6Mbps	1	48	5240	16.78	-	25.00	-	-	-	22.25	-	
HT20	MCS0	1	36	5180	17.93	-	26.05	-	-	-	22.54	-	
HT20	MCS0	1	44	5220	17.98	-	26.45	-	-	-	22.55	-	
HT20	MCS0	1	48	5240	17.98	-	26.85	-	-	-	22.55	-	
HT40	MCS0	1	38	5190	36.66	-	42.21	-	-	-	23.01	-	
HT40	MCS0	1	46	5230	36.46	-	42.39	-	-	-	23.01	-	
VHT80	MCS0	1	42	5210	76.84	-	83.04	-	-	-	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	17.40	-		24.00	-	2.00	-	Pass
11a	6Mbps	1	44	5220	17.10	-		24.00	-	2.00	-	Pass
11a	6Mbps	1	48	5240	17.20	-		24.00	-	2.00	-	Pass
HT20	MCS0	1	36	5180	17.40	-		24.00	-	2.00	-	Pass
HT20	MCS0	1	44	5220	17.40	-		24.00	-	2.00	-	Pass
HT20	MCS0	1	48	5240	17.40	-		24.00	-	2.00	-	Pass
HT40	MCS0	1	38	5190	17.40	-		24.00	-	2.00	-	Pass
HT40	MCS0	1	46	5230	17.40	-		24.00	-	2.00	-	Pass
VHT20	MCS0	1	36	5180	17.30	-		24.00	-	2.00	-	Pass
VHT20	MCS0	1	44	5220	17.30	-		24.00	-	2.00	-	Pass
VHT20	MCS0	1	48	5240	17.30	-		24.00	-	2.00	-	Pass
VHT40	MCS0	1	38	5190	17.30	-		24.00	-	2.00	-	Pass
VHT40	MCS0	1	46	5230	17.30	-		24.00	-	2.00	-	Pass
VHT80	MCS0	1	42	5210	17.40	-		24.00	-	2.00	-	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	7.07	-		11.00	-	2.00	-		Pass
11a	6Mbps	1	44	5220	6.93	-		11.00	-	2.00	-		Pass
11a	6Mbps	1	48	5240	6.56	-		11.00	-	2.00	-		Pass
HT20	MCS0	1	36	5180	7.39	-		11.00	-	2.00	-		Pass
HT20	MCS0	1	44	5220	7.49	-		11.00	-	2.00	-		Pass
HT20	MCS0	1	48	5240	7.68	-		11.00	-	2.00	-		Pass
HT40	MCS0	1	38	5190	4.11	-		11.00	-	2.00	-		Pass
HT40	MCS0	1	46	5230	4.32	-		11.00	-	2.00	-		Pass
VHT80	MCS0	1	42	5210	1.45	-		11.00	-	2.00	-		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	16.83	-	24.95	-	23.26	-	29.26	-	23.98	-	
11a	6Mbps	1	60	5300	16.83	-	24.80	-	23.26	-	29.26	-	23.98	-	
11a	6Mbps	1	64	5320	16.83	-	24.90	-	23.26	-	29.26	-	23.98	-	
HT20	MCS0	1	52	5260	17.98	-	26.20	-	23.55	-	29.55	-	23.98	-	
HT20	MCS0	1	60	5300	17.98	-	25.65	-	23.55	-	29.55	-	23.98	-	
HT20	MCS0	1	64	5320	17.98	-	25.55	-	23.55	-	29.55	-	23.98	-	
HT40	MCS0	1	54	5270	36.56	-	42.21	-	23.98	-	30.00	-	23.98	-	
HT40	MCS0	1	62	5310	36.56	-	42.39	-	23.98	-	30.00	-	23.98	-	
VHT80	MCS0	1	58	5290	76.96	-	84.32	-	23.98	-	30.00	-	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	18.40	-		23.98	-	2.78	-	26.99	Pass
11a	6Mbps	1	60	5300	18.10	-		23.98	-	2.78	-	26.99	Pass
11a	6Mbps	1	64	5320	18.40	-		23.98	-	2.78	-	26.99	Pass
HT20	MCS0	1	52	5260	18.40	-		23.98	-	2.78	-	26.99	Pass
HT20	MCS0	1	60	5300	18.20	-		23.98	-	2.78	-	26.99	Pass
HT20	MCS0	1	64	5320	18.30	-		23.98	-	2.78	-	26.99	Pass
HT40	MCS0	1	54	5270	17.30	-		23.98	-	2.78	-	26.99	Pass
HT40	MCS0	1	62	5310	17.20	-		23.98	-	2.78	-	26.99	Pass
VHT20	MCS0	1	52	5260	18.30	-		23.98	-	2.78	-	26.99	Pass
VHT20	MCS0	1	60	5300	18.10	-		23.98	-	2.78	-	26.99	Pass
VHT20	MCS0	1	64	5320	18.20	-		23.98	-	2.78	-	26.99	Pass
VHT40	MCS0	1	54	5270	17.20	-		23.98	-	2.78	-	26.99	Pass
VHT40	MCS0	1	62	5310	17.10	-		23.98	-	2.78	-	26.99	Pass
VHT80	MCS0	1	58	5290	17.20	-		23.98	-	2.78	-	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	8.34	-		11.00	-	2.78	-	Pass
11a	6Mbps	1	60	5300	8.29	-		11.00	-	2.78	-	Pass
11a	6Mbps	1	64	5320	8.31	-		11.00	-	2.78	-	Pass
HT20	MCS0	1	52	5260	8.71	-		11.00	-	2.78	-	Pass
HT20	MCS0	1	60	5300	8.57	-		11.00	-	2.78	-	Pass
HT20	MCS0	1	64	5320	8.61	-		11.00	-	2.78	-	Pass
HT40	MCS0	1	54	5270	3.93	-		11.00	-	2.78	-	Pass
HT40	MCS0	1	62	5310	4.10	-		11.00	-	2.78	-	Pass
VHT80	MCS0	1	58	5290	1.14	-		11.00	-	2.78	-	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	16.83	-	25.20	-	23.26	-	29.26	-	23.98	-	----	----
11a	6Mbps	1	116	5580	16.83	-	25.05	-	23.26	-	29.26	-	23.98	-	----	----
11a	6Mbps	1	140	5700	16.83	-	25.05	-	23.26	-	29.26	-	23.98	-	----	----
HT20	MCS0	1	100	5500	17.93	-	25.45	-	23.54	-	29.54	-	23.98	-	----	----
HT20	MCS0	1	116	5580	17.93	-	25.90	-	23.54	-	29.54	-	23.98	-	----	----
HT20	MCS0	1	140	5700	17.93	-	25.90	-	23.54	-	29.54	-	23.98	-	----	----
HT40	MCS0	1	102	5510	36.66	-	42.12	-	23.98	-	30.00	-	23.98	-	----	----
HT40	MCS0	1	110	5550	36.56	-	42.39	-	23.98	-	30.00	-	23.98	-	----	----
HT40	MCS0	1	134	5670	36.56	-	42.30	-	23.98	-	30.00	-	23.98	-	----	----
VHT80	MCS0	1	106	5530	76.84	-	83.52	-	23.98	-	30.00	-	23.98	-	----	----

Band III straddle channel single antenna																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth In U-NII 2C (MHz)		26 dB Bandwidth In U-NII 2C (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		6 dB Bandwidth for Straddle Channel (MHz)	
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2
11a	6Mbps	1	144	5720	13.44	-	17.50	-	22.28	-	28.28	-	23.43	-	2.85	-
HT20	MCS0	1	144	5720	13.99	-	18.05	-	22.46	-	28.46	-	23.56	-	2.6	-
HT40	MCS0	1	142	5710	33.28	-	35.97	-	23.98	-	30.00	-	23.98	-	2.91	-
VHT80	MCS0	1	138	5690	73.36	-	76.76	-	23.98	-	30.00	-	23.98	-	2.6	-

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	18.40	-		23.98	-	3.63	-	26.99	Pass
11a	6Mbps	1	116	5580	18.30	-		23.98	-	3.63	-	26.99	Pass
11a	6Mbps	1	140	5700	18.30	-		23.98	-	3.63	-	26.99	Pass
HT20	MCS0	1	100	5500	18.40	-		23.98	-	3.63	-	26.99	Pass
HT20	MCS0	1	116	5580	18.30	-		23.98	-	3.63	-	26.99	Pass
HT20	MCS0	1	140	5700	18.30	-		23.98	-	3.63	-	26.99	Pass
HT40	MCS0	1	102	5510	17.30	-		23.98	-	3.63	-	26.99	Pass
HT40	MCS0	1	110	5550	17.20	-		23.98	-	3.63	-	26.99	Pass
HT40	MCS0	1	134	5670	17.20	-		23.98	-	3.63	-	26.99	Pass
VHT20	MCS0	1	100	5500	18.30	-		23.98	-	3.63	-	26.99	Pass
VHT20	MCS0	1	116	5580	18.20	-		23.98	-	3.63	-	26.99	Pass
VHT20	MCS0	1	140	5700	18.20	-		23.98	-	3.63	-	26.99	Pass
VHT40	MCS0	1	102	5510	17.20	-		23.98	-	3.63	-	26.99	Pass
VHT40	MCS0	1	110	5550	17.10	-		23.98	-	3.63	-	26.99	Pass
VHT40	MCS0	1	134	5670	17.10	-		23.98	-	3.63	-	26.99	Pass
VHT80	MCS0	1	106	5530	17.20	-		23.98	-	3.63	-	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	18.10	-		23.43	-	3.63	-	26.99	Pass
HT20	MCS0	1	144	5720	18.10	-		23.56	-	3.63	-	26.99	Pass
HT40	MCS0	1	142	5710	17.20	-		23.98	-	3.63	-	26.99	Pass
VHT20	MCS0	1	144	5720	18.00	-		23.98	-	3.63	-	26.99	Pass
VHT40	MCS0	1	142	5710	17.10	-		23.98	-	3.63	-	26.99	Pass
VHT80	MCS0	1	138	5690	17.40	-		23.98	-	3.63	-	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	8.56	-		11.00	-	3.63	-		Pass
11a	6Mbps	1	116	5580	8.48	-		11.00	-	3.63	-		Pass
11a	6Mbps	1	140	5700	8.42	-		11.00	-	3.63	-		Pass
HT20	MCS0	1	100	5500	8.91	-		11.00	-	3.63	-		Pass
HT20	MCS0	1	116	5580	8.86	-		11.00	-	3.63	-		Pass
HT20	MCS0	1	140	5700	8.66	-		11.00	-	3.63	-		Pass
HT40	MCS0	1	102	5510	4.15	-		11.00	-	3.63	-		Pass
HT40	MCS0	1	110	5550	4.15	-		11.00	-	3.63	-		Pass
HT40	MCS0	1	134	5670	4.04	-		11.00	-	3.63	-		Pass
VHT80	MCS0	1	106	5530	1.48	-		11.00	-	3.63	-		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	8.48	-		11.00	-	3.63	-		Pass
HT20	MCS0	1	144	5720	8.36	-		11.00	-	3.63	-		Pass
HT40	MCS0	1	142	5710	3.64	-		11.00	-	3.63	-		Pass
VHT80	MCS0	1	138	5690	1.45	-		11.00	-	3.63	-		Pass



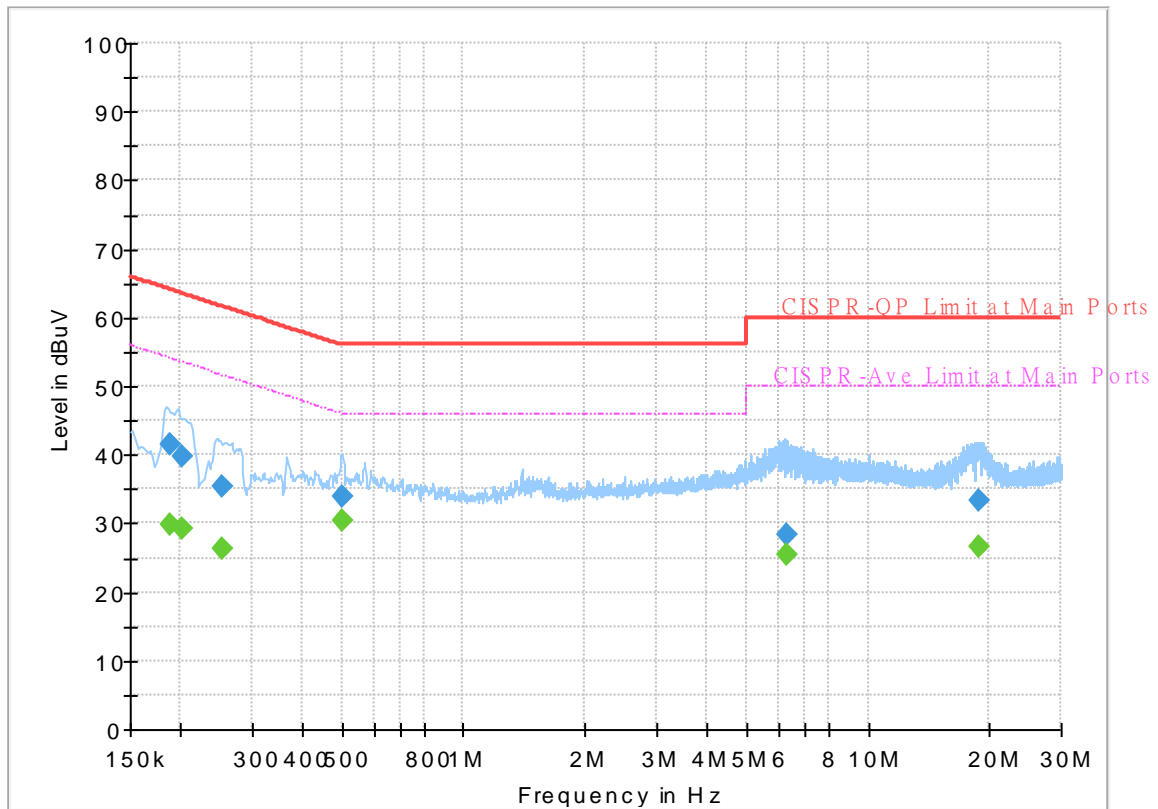
Appendix B. AC Conducted Emission Test Results

Test Engineer :	Tom Lee	Temperature :	23~26°C
		Relative Humidity :	40~50%

EUT Information

Report NO : 091742
 Test Mode : Mode 1
 Test Voltage : 120Vac/60Hz
 Phase : Line

Full Spectrum



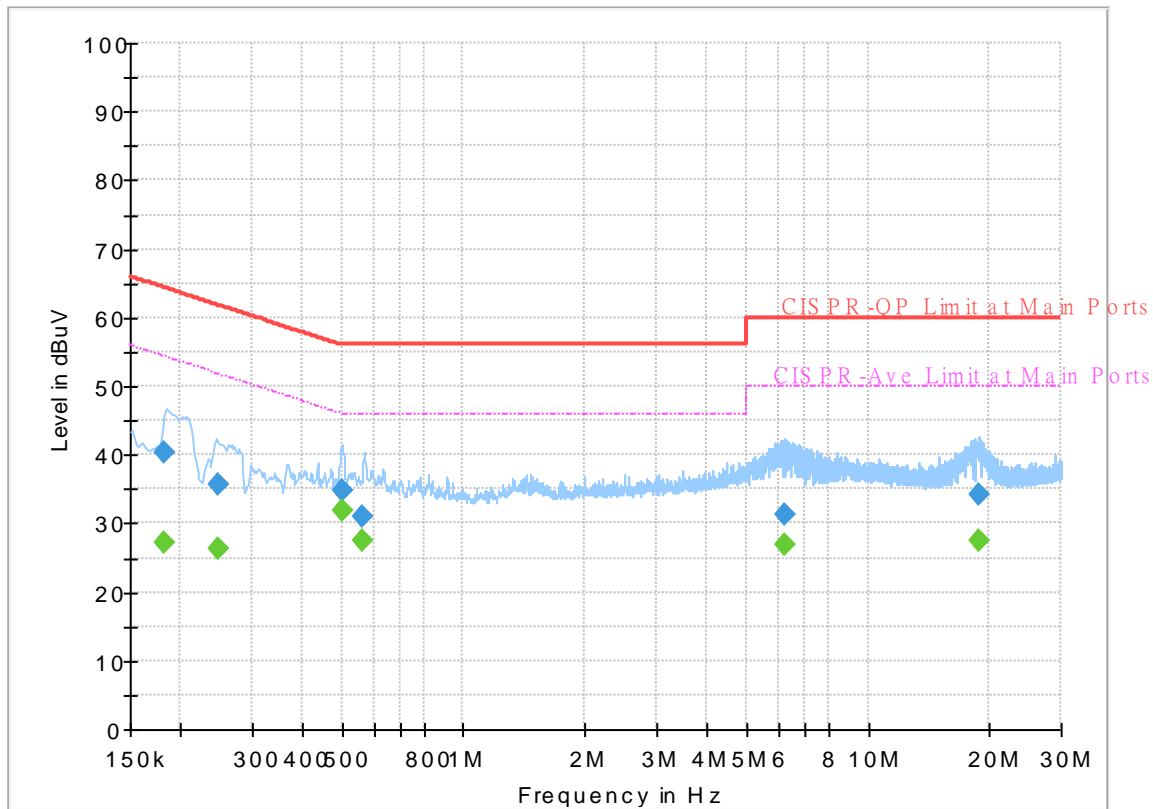
Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.188250	---	29.89	54.11	24.22	L1	OFF	19.6
0.188250	41.65	---	64.11	22.46	L1	OFF	19.6
0.201750	---	29.13	53.54	24.41	L1	OFF	19.5
0.201750	39.82	---	63.54	23.72	L1	OFF	19.5
0.254760	---	26.29	51.60	25.31	L1	OFF	19.5
0.254760	35.35	---	61.60	26.25	L1	OFF	19.5
0.503430	---	30.49	46.00	15.51	L1	OFF	19.5
0.503430	33.79	---	56.00	22.21	L1	OFF	19.5
6.270000	---	25.40	50.00	24.60	L1	OFF	19.9
6.270000	28.49	---	60.00	31.51	L1	OFF	19.9
18.903660	---	26.67	50.00	23.33	L1	OFF	20.2
18.903660	33.24	---	60.00	26.76	L1	OFF	20.2

EUT Information

Report NO : 091742
 Test Mode : Mode 1
 Test Voltage : 120Vac/60Hz
 Phase : Neutral

Full Spectrum



Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.181590	---	27.24	54.41	27.17	N	OFF	19.6
0.181590	40.22	---	64.41	24.19	N	OFF	19.6
0.246930	---	26.27	51.86	25.59	N	OFF	19.6
0.246930	35.71	---	61.86	26.15	N	OFF	19.6
0.502890	---	31.76	46.00	14.24	N	OFF	19.6
0.502890	34.86	---	56.00	21.14	N	OFF	19.6
0.564360	---	27.35	46.00	18.65	N	OFF	19.6
0.564360	30.88	---	56.00	25.12	N	OFF	19.6
6.218250	---	26.77	50.00	23.23	N	OFF	19.9
6.218250	31.24	---	60.00	28.76	N	OFF	19.9
18.771000	---	27.60	50.00	22.40	N	OFF	20.3
18.771000	34.14	---	60.00	25.86	N	OFF	20.3



Appendix C. Radiated Spurious Emission

Test Engineer :	Andy Yang and Caster Liao	Temperature :	20~25°C
		Relative Humidity :	50~60%

Band 1 - 5150~5250MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.	
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.		
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)	
802.11a CH 36 5180MHz		5149.24	56.69	-17.31	74	40.69	31.8	13.05	28.85	174	5	P	H	
		5147.94	43.38	-10.62	54	27.39	31.8	13.04	28.85	174	5	A	H	
	*	5180	103.82	-	-	87.92	31.68	13.09	28.87	174	5	P	H	
	*	5180	96.36	-	-	80.46	31.68	13.09	28.87	174	5	A	H	
													H	
													H	
			5142.22	62.24	-11.76	74	46.24	31.8	13.04	28.84	102	23	P	V
			5147.68	44.74	-9.26	54	28.75	31.8	13.04	28.85	102	23	A	V
	*		5180	109.01	-	-	93.11	31.68	13.09	28.87	102	23	P	V
	*		5180	101.18	-	-	85.28	31.68	13.09	28.87	102	23	A	V
													V	
													V	
802.11a CH 44 5220MHz		5067.08	54.85	-19.15	74	39.03	31.67	12.94	28.79	101	6	P	H	
		5150	43.15	-10.85	54	27.15	31.8	13.05	28.85	101	6	A	H	
	*	5220	104.07	-	-	88.34	31.48	13.15	28.9	101	6	P	H	
	*	5220	96.59	-	-	80.86	31.48	13.15	28.9	101	6	A	H	
			5430.6	53.45	-20.55	74	37.5	31.48	13.5	29.03	101	6	P	H
			5447.68	42.58	-11.42	54	26.53	31.59	13.51	29.05	101	6	A	H
			5092.56	55.63	-18.37	74	39.69	31.77	12.98	28.81	109	22	P	V
			5149.5	43.46	-10.54	54	27.46	31.8	13.05	28.85	109	22	A	V
	*		5220	107.76	-	-	92.03	31.48	13.15	28.9	109	22	P	V
	*		5220	100.29	-	-	84.56	31.48	13.15	28.9	109	22	A	V
			5375.44	54.3	-19.7	74	38.67	31.2	13.43	29	109	22	P	V
			5445.72	42.61	-11.39	54	26.57	31.57	13.51	29.04	109	22	A	V



802.11a CH 48 5240MHz		5101.92	54.87	-19.13	74	38.9	31.8	12.99	28.82	166	6	P	H
		5108.68	42.93	-11.07	54	26.95	31.8	13	28.82	166	6	A	H
	*	5240	103.19	-	-	87.56	31.36	13.18	28.91	166	6	P	H
	*	5240	95.69	-	-	80.06	31.36	13.18	28.91	166	6	A	H
		5447.68	53.97	-20.03	74	37.92	31.59	13.51	29.05	166	6	P	H
		5448.8	42.38	-11.62	54	26.33	31.59	13.51	29.05	166	6	A	H
		5145.86	55.22	-18.78	74	39.23	31.8	13.04	28.85	101	23	P	V
		5142.48	43.11	-10.89	54	27.11	31.8	13.04	28.84	101	23	A	V
	*	5240	107.08	-	-	91.45	31.36	13.18	28.91	101	23	P	V
	*	5240	99.39	-	-	83.76	31.36	13.18	28.91	101	23	A	V
		5353.04	53.8	-20.2	74	38.28	31.11	13.39	28.98	101	23	P	V
		5448.52	42.47	-11.53	54	26.42	31.59	13.51	29.05	101	23	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 36 5180MHz		10360	47.86	-20.34	68.2	50.43	39.44	19.39	61.4	100	0	P	H
		15540	45.7	-28.3	74	45.21	37.98	23.22	60.71	100	0	P	H
		17945	58.97	-15.03	74	42.31	48.15	25.43	56.92	100	0	P	H
		17945	47.52	-6.48	54	30.86	48.15	25.43	56.92	100	0	A	H
		10360	47.1	-21.1	68.2	49.67	39.44	19.39	61.4	100	0	P	V
		15540	45.89	-28.11	74	45.4	37.98	23.22	60.71	100	0	P	V
		17967	59.16	-14.84	74	41.94	48.61	25.43	56.83	100	0	P	V
		17967	47.66	-6.34	54	30.44	48.61	25.43	56.83	100	0	A	V
802.11a CH 44 5220MHz		10440	47.5	-20.7	68.2	49.91	39.68	19.43	61.52	100	0	P	H
		15660	44.68	-29.32	74	44.53	37.56	23.32	60.73	100	0	P	H
		17945	57.58	-16.42	74	40.92	48.15	25.43	56.92	100	0	P	H
		17945	47.45	-6.55	54	30.79	48.15	25.43	56.92	100	0	A	H
		10440	47.12	-21.08	68.2	49.53	39.68	19.43	61.52	100	0	P	V
		15660	44.59	-29.41	74	44.44	37.56	23.32	60.73	100	0	P	V
		17945	57.52	-16.48	74	40.86	48.15	25.43	56.92	100	0	P	V
		17945	47.2	-6.8	54	30.54	48.15	25.43	56.92	100	0	A	V
802.11a CH 48 5240MHz		10480	47.97	-20.23	68.2	50.33	39.76	19.45	61.57	100	0	P	H
		15720	45.8	-28.2	74	45.81	37.38	23.35	60.74	100	0	P	H
		17956	57.89	-16.11	74	40.95	48.38	25.44	56.88	100	0	P	H
		17956	47.64	-6.36	54	30.7	48.38	25.44	56.88	100	0	A	H
		10480	47.55	-20.65	68.2	49.91	39.76	19.45	61.57	100	0	P	V
		15720	45.24	-28.76	74	45.25	37.38	23.35	60.74	100	0	P	V
		17978	58.25	-15.75	74	40.76	48.84	25.44	56.79	100	0	P	V
		17978	47.87	-6.13	54	30.38	48.84	25.44	56.79	100	0	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 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11n HT20 CH 36 5180MHz		5147.68	56.37	-17.63	74	40.38	31.8	13.04	28.85	221	311	P	H	
		5148.98	44.35	-9.65	54	28.35	31.8	13.05	28.85	221	311	A	H	
	*	5180	104.56	-	-	88.66	31.68	13.09	28.87	221	311	P	H	
	*	5180	96.89	-	-	80.99	31.68	13.09	28.87	221	311	A	H	
													H	
														H
			5147.42	59.2	-14.8	74	43.21	31.8	13.04	28.85	148	34	P	V
			5147.94	44.69	-9.31	54	28.7	31.8	13.04	28.85	148	34	A	V
		*	5180	108.43	-	-	92.53	31.68	13.09	28.87	148	34	P	V
		*	5180	100.8	-	-	84.9	31.68	13.09	28.87	148	34	A	V
													V	
													V	
802.11n HT20 CH 44 5220MHz		5132.08	54.46	-19.54	74	38.47	31.8	13.03	28.84	235	11	P	H	
		5118.82	44.1	-9.9	54	28.12	31.8	13.01	28.83	235	11	A	H	
		* 5220	104.75	-	-	89.02	31.48	13.15	28.9	235	11	P	H	
		* 5220	97.07	-	-	81.34	31.48	13.15	28.9	235	11	A	H	
			5354.72	54.72	-19.28	74	39.19	31.12	13.39	28.98	235	11	P	H
			5457.48	43.6	-10.4	54	27.52	31.61	13.52	29.05	235	11	A	H
			5088.92	55.1	-18.9	74	39.18	31.76	12.97	28.81	159	34	P	V
			5150	44.37	-9.63	54	28.37	31.8	13.05	28.85	159	34	A	V
		*	5220	108.84	-	-	93.11	31.48	13.15	28.9	159	34	P	V
		*	5220	101.03	-	-	85.3	31.48	13.15	28.9	159	34	A	V
		5414.92	54.58	-19.42	74	38.73	31.39	13.48	29.02	159	34	P	V	
		5422.76	43.48	-10.52	54	27.58	31.44	13.49	29.03	159	34	A	V	



802.11n HT20 CH 48 5240MHz		5076.96	54.84	-19.16	74	38.97	31.71	12.96	28.8	249	11	P	H
		5105.82	43.87	-10.13	54	27.9	31.8	12.99	28.82	249	11	A	H
	*	5240	105.32	-	-	89.69	31.36	13.18	28.91	249	11	P	H
	*	5240	97.39	-	-	81.76	31.36	13.18	28.91	249	11	A	H
		5391.96	53.9	-20.1	74	38.18	31.27	13.46	29.01	249	11	P	H
		5407.08	43.75	-10.25	54	27.95	31.34	13.48	29.02	249	11	A	H
		5094.12	56.8	-17.2	74	40.85	31.78	12.98	28.81	154	35	P	V
		5144.82	43.99	-10.01	54	28	31.8	13.04	28.85	154	35	A	V
	*	5240	108.31	-	-	92.68	31.36	13.18	28.91	154	35	P	V
	*	5240	100.21	-	-	84.58	31.36	13.18	28.91	154	35	A	V
		5404.84	54.31	-19.69	74	38.53	31.33	13.47	29.02	154	35	P	V
		5411.56	43.59	-10.41	54	27.76	31.37	13.48	29.02	154	35	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 36 5180MHz		10360	47.33	-20.87	68.2	49.9	39.44	19.39	61.4	100	0	P	H
		15540	45.91	-28.09	74	45.42	37.98	23.22	60.71	100	0	P	H
		17956	57.34	-16.66	74	40.4	48.38	25.44	56.88	100	0	P	H
		17956	47.35	-6.65	54	30.41	48.38	25.44	56.88	100	0	A	H
		10360	47.71	-20.49	68.2	50.28	39.44	19.39	61.4	100	0	P	V
		15540	46.68	-27.32	74	46.19	37.98	23.22	60.71	100	0	P	V
		17956	58.15	-15.85	74	41.21	48.38	25.44	56.88	100	0	P	V
802.11n HT20 CH 44 5220MHz		10440	47.12	-21.08	68.2	49.53	39.68	19.43	61.52	100	0	P	H
		15660	45.39	-28.61	74	45.24	37.56	23.32	60.73	100	0	P	H
		17978	58.33	-15.67	74	40.84	48.84	25.44	56.79	100	0	P	H
		17978	48.21	-5.79	54	30.72	48.84	25.44	56.79	100	0	A	H
		10440	48.38	-19.82	68.2	50.79	39.68	19.43	61.52	100	0	P	V
		15660	45.26	-28.74	74	45.11	37.56	23.32	60.73	100	0	P	V
		17956	57.54	-16.46	74	40.6	48.38	25.44	56.88	100	0	P	V
802.11n HT20 CH 48 5240MHz		17956	47.26	-6.74	54	30.32	48.38	25.44	56.88	100	0	A	V
		10480	48.58	-19.62	68.2	50.94	39.76	19.45	61.57	100	0	P	H
		15720	45.45	-28.55	74	45.46	37.38	23.35	60.74	100	0	P	H
		17956	58.61	-15.39	74	41.67	48.38	25.44	56.88	100	0	P	H
		17956	47.87	-6.13	54	30.93	48.38	25.44	56.88	100	0	A	H
		10480	47.85	-20.35	68.2	50.21	39.76	19.45	61.57	100	0	P	V
		15720	46.01	-27.99	74	46.02	37.38	23.35	60.74	100	0	P	V
Remark	1. No other spurious found.												
	2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 38 5190MHz		5143.52	55.77	-18.23	74	39.77	31.8	13.04	28.84	105	359	P	H
		5150	47.79	-6.21	54	31.79	31.8	13.05	28.85	105	359	A	H
	*	5190	101.27	-	-	85.41	31.64	13.1	28.88	105	359	P	H
	*	5190	93.44	-	-	77.58	31.64	13.1	28.88	105	359	A	H
		5412.68	53.69	-20.31	74	37.85	31.38	13.48	29.02	105	359	P	H
		5451.32	44.9	-9.1	54	28.84	31.6	13.51	29.05	105	359	A	H
		5145.86	59.04	-14.96	74	43.05	31.8	13.04	28.85	188	24	P	V
		5150	49.79	-4.21	54	33.79	31.8	13.05	28.85	188	24	A	V
	*	5190	104.82	-	-	88.93	31.67	13.09	28.87	188	24	P	V
	*	5190	97.16	-	-	81.27	31.67	13.09	28.87	188	24	A	V
		5363.96	54.13	-19.87	74	38.55	31.16	13.41	28.99	188	24	P	V
		5445.16	45.29	-8.71	54	29.25	31.57	13.51	29.04	188	24	A	V
802.11n HT40 CH 46 5230MHz		5143.78	55.06	-18.94	74	39.06	31.8	13.04	28.84	249	7	P	H
		5102.7	45.81	-8.19	54	29.84	31.8	12.99	28.82	249	7	A	H
	*	5230	101.1	-	-	85.42	31.42	13.16	28.9	249	7	P	H
	*	5230	93.28	-	-	77.6	31.42	13.16	28.9	249	7	A	H
		5435.36	54.44	-19.56	74	38.47	31.51	13.5	29.04	249	7	P	H
		5448.24	45.44	-8.56	54	29.39	31.59	13.51	29.05	249	7	A	H
		5124.02	55.07	-18.93	74	39.08	31.8	13.02	28.83	159	25	P	V
		5095.16	45.74	-8.26	54	29.79	31.78	12.98	28.81	159	25	A	V
	*	5230	104.4	-	-	88.72	31.42	13.16	28.9	159	25	P	V
	*	5230	96.75	-	-	81.07	31.42	13.16	28.9	159	25	A	V
	5427.8	54.03	-19.97	74	38.1	31.47	13.49	29.03	159	25	P	V	
	5443.76	44.96	-9.04	54	28.93	31.56	13.51	29.04	159	25	A	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 38 5190MHz		10380	48.1	-20.1	68.2	50.61	39.52	19.4	61.43	100	0	P	H
		15570	45.77	-28.23	74	45.34	37.89	23.25	60.71	100	0	P	H
		17978	58.54	-15.46	74	41.05	48.84	25.44	56.79	100	0	P	H
		17978	48.39	-5.61	54	30.9	48.84	25.44	56.79	100	0	A	H
		10380	47.86	-20.34	68.2	50.37	39.52	19.4	61.43	100	0	P	V
		15570	46.29	-27.71	74	45.86	37.89	23.25	60.71	100	0	P	V
		17956	57.79	-16.21	74	40.85	48.38	25.44	56.88	100	0	P	V
802.11n HT40 CH 46 5230MHz		10460	47.68	-20.52	68.2	50.06	39.72	19.44	61.54	100	0	P	H
		15690	45.68	-28.32	74	45.64	37.44	23.34	60.74	100	0	P	H
		17978	57.84	-16.16	74	40.35	48.84	25.44	56.79	100	0	P	H
		17978	48.17	-5.83	54	30.68	48.84	25.44	56.79	100	0	A	H
		10460	47.67	-20.53	68.2	50.05	39.72	19.44	61.54	100	0	P	V
		15690	46.12	-27.88	74	46.08	37.44	23.34	60.74	100	0	P	V
		17967	57.57	-16.43	74	40.35	48.61	25.44	56.83	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 42 5210MHz		5144.56	57.65	-16.35	74	41.66	31.8	13.04	28.85	240	39	P	H
		5146.38	49.38	-4.62	54	33.39	31.8	13.04	28.85	240	39	A	H
	*	5210	97.66	-	-	81.88	31.54	13.13	28.89	240	39	P	H
	*	5210	89.81	-	-	74.03	31.54	13.13	28.89	240	39	A	H
		5421.92	53.87	-20.13	74	37.98	31.43	13.49	29.03	240	39	P	H
		5459.16	45.25	-8.75	54	29.16	31.62	13.52	29.05	240	39	A	H
		5146.38	59.26	-14.74	74	43.27	31.8	13.04	28.85	158	24	P	V
		5149.76	51.29	-2.71	54	35.29	31.8	13.05	28.85	158	24	A	V
	*	5210	101.56	-	-	85.78	31.54	13.13	28.89	158	24	P	V
	*	5210	93.46	-	-	77.68	31.54	13.13	28.89	158	24	A	V
		5406.52	53.31	-20.69	74	37.51	31.34	13.48	29.02	158	24	P	V
	5413.24	44.28	-9.72	54	28.44	31.38	13.48	29.02	158	24	A	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 42 5210MHz		10420	47.16	-21.04	68.2	49.59	39.64	19.42	61.49	100	0	P	H
		15630	45.79	-28.21	74	45.55	37.68	23.29	60.73	100	0	P	H
		17956	57.81	-16.19	74	40.87	48.38	25.44	56.88	100	0	P	H
		17956	47.34	-6.66	54	30.4	48.38	25.44	56.88	100	0	A	H
		10420	47.66	-20.54	68.2	50.09	39.64	19.42	61.49	100	0	P	V
		15630	45.94	-28.06	74	45.7	37.68	23.29	60.73	100	0	P	V
		17967	58.37	-15.63	74	41.15	48.61	25.44	56.83	100	0	P	V
		17967	47.91	-6.09	54	30.69	48.61	25.44	56.83	100	0	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 - 5250~5350MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 52 5260MHz		5102.34	54.06	-19.94	74	38.09	31.8	12.99	28.82	102	6	P	H
		5131.24	42.98	-11.02	54	27	31.8	13.02	28.84	102	6	A	H
	*	5260	105.01	-	-	89.43	31.28	13.22	28.92	102	6	P	H
	*	5260	97.15	-	-	81.57	31.28	13.22	28.92	102	6	A	H
		5417.04	54.11	-19.89	74	38.26	31.4	13.48	29.03	102	6	P	H
		5443.2	42.5	-11.5	54	26.47	31.56	13.51	29.04	102	6	A	H
		5115.6	55.57	-18.43	74	39.6	31.8	13	28.83	119	23	P	V
		5135.32	43.09	-10.91	54	27.1	31.8	13.03	28.84	119	23	A	V
	*	5260	106.87	-	-	91.29	31.28	13.22	28.92	119	23	P	V
	*	5260	99.01	-	-	83.43	31.28	13.22	28.92	119	23	A	V
		5382.24	53.58	-20.42	74	37.91	31.23	13.44	29	119	23	P	V
		5450.88	42.52	-11.48	54	26.46	31.6	13.51	29.05	119	23	A	V
802.11a CH 60 5300MHz		5108.12	54.45	-19.55	74	38.47	31.8	13	28.82	103	6	P	H
		5132.94	42.69	-11.31	54	26.7	31.8	13.03	28.84	103	6	A	H
	*	5300	103.95	-	-	88.41	31.2	13.29	28.95	103	6	P	H
	*	5300	96.41	-	-	80.87	31.2	13.29	28.95	103	6	A	H
		5406.72	53.6	-20.4	74	37.8	31.34	13.48	29.02	103	6	P	H
		5449.92	42.26	-11.74	54	26.2	31.6	13.51	29.05	103	6	A	H
		5060.18	54.21	-19.79	74	38.42	31.64	12.94	28.79	100	24	P	V
		5097.92	42.89	-11.11	54	26.93	31.79	12.98	28.81	100	24	A	V
	*	5300	105.57	-	-	90.03	31.2	13.29	28.95	100	24	P	V
	*	5300	98.15	-	-	82.61	31.2	13.29	28.95	100	24	A	V
		5350.32	55.89	-18.11	74	40.39	31.1	13.38	28.98	100	24	P	V
		5352.24	42.57	-11.43	54	27.06	31.11	13.38	28.98	100	24	A	V



802.11a CH 64 5320MHz	*	5320	104.33	-	-	88.8	31.16	13.33	28.96	100	8	P	H
	*	5320	96.87	-	-	81.34	31.16	13.33	28.96	100	8	A	H
		5358.56	54.67	-19.33	74	39.13	31.13	13.4	28.99	100	8	P	H
		5352	42.49	-11.51	54	26.98	31.11	13.38	28.98	100	8	A	H
													H
													H
	*	5320	106.09	-	-	90.56	31.16	13.33	28.96	100	25	P	V
	*	5320	98.56	-	-	83.03	31.16	13.33	28.96	100	25	A	V
		5350.4	57.36	-16.64	74	41.86	31.1	13.38	28.98	100	25	P	V
		5350.08	42.91	-11.09	54	27.41	31.1	13.38	28.98	100	25	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 Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 52 5260MHz		10520	47.92	-20.28	68.2	50.23	39.8	19.49	61.6	100	0	P	H
		15780	45.51	-28.49	74	45.55	37.32	23.4	60.76	100	0	P	H
		18000	61.72	-12.28	74	43.67	49.3	25.45	56.7	100	0	P	H
		18000	48.81	-5.19	54	30.76	49.3	25.45	56.7	100	0	A	H
		10520	47.8	-20.4	68.2	50.11	39.8	19.49	61.6	100	0	P	V
		15780	44.93	-29.07	74	44.97	37.32	23.4	60.76	100	0	P	V
		17967	61.08	-12.92	74	43.86	48.61	25.44	56.83	100	0	P	V
		17967	48.05	-5.95	54	30.83	48.61	25.44	56.83	100	0	A	V
802.11a CH 60 5300MHz		10600	47.61	-26.39	74	49.88	39.8	19.53	61.6	100	0	P	H
		15900	47.49	-26.51	74	47.28	37.5	23.49	60.78	100	0	P	H
		17989	61.44	-12.56	74	43.66	49.07	25.45	56.74	100	0	P	H
		17989	48.52	-5.48	54	30.74	49.07	25.45	56.74	100	0	A	H
		10600	47.76	-26.24	74	50.03	39.8	19.53	61.6	100	0	P	V
		15900	45.69	-28.31	74	45.48	37.5	23.49	60.78	100	0	P	V
		17978	61.33	-12.67	74	43.84	48.84	25.44	56.79	100	0	P	V
		17978	48.24	-5.76	54	30.75	48.84	25.44	56.79	100	0	A	V
802.11a CH 64 5320MHz		10640	48.91	-25.09	74	51.16	39.8	19.55	61.6	100	0	P	H
		15960	46	-28	74	45.94	37.32	23.53	60.79	100	0	P	H
		17967	61.07	-12.93	74	43.85	48.61	25.44	56.83	100	0	P	H
		17967	48.04	-5.96	54	30.82	48.61	25.44	56.83	100	0	A	H
		10640	48.72	-25.28	74	50.97	39.8	19.55	61.6	100	0	P	V
		15960	45.28	-28.72	74	45.22	37.32	23.53	60.79	100	0	P	V
		17956	60.8	-13.2	74	43.86	48.38	25.44	56.88	100	0	P	V
		17956	47.87	-6.13	54	30.93	48.38	25.44	56.88	100	0	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 52 5260MHz		5061.2	54.98	-19.02	74	39.19	31.64	12.94	28.79	245	10	P	H
		5136.68	44.09	-9.91	54	28.1	31.8	13.03	28.84	245	10	A	H
	*	5260	105.03	-	-	89.45	31.28	13.22	28.92	245	10	P	H
	*	5260	97.19	-	-	81.61	31.28	13.22	28.92	245	10	A	H
		5455.68	54.05	-19.95	74	37.97	31.61	13.52	29.05	245	10	P	H
		5403.12	43.55	-10.45	54	27.78	31.32	13.47	29.02	245	10	A	H
		5086.02	55	-19	74	39.1	31.74	12.97	28.81	266	28	P	V
		5114.58	44.04	-9.96	54	28.07	31.8	13	28.83	266	28	A	V
	*	5260	108.49	-	-	92.91	31.28	13.22	28.92	266	28	P	V
	*	5260	100.8	-	-	85.22	31.28	13.22	28.92	266	28	A	V
		5442.24	55.36	-18.64	74	39.34	31.55	13.51	29.04	266	28	P	V
		5450.16	43.71	-10.29	54	27.65	31.6	13.51	29.05	266	28	A	V
	802.11n HT20 CH 60 5300MHz		5144.16	54.73	-19.27	74	38.74	31.8	13.04	28.85	241	5	P
		5094.86	43.95	-10.05	54	28	31.78	12.98	28.81	241	5	A	H
*		5300	104.81	-	-	89.27	31.2	13.29	28.95	241	5	P	H
*		5300	97.06	-	-	81.52	31.2	13.29	28.95	241	5	A	H
		5384.4	55.21	-18.79	74	39.53	31.24	13.44	29	241	5	P	H
		5351.28	44.03	-9.97	54	28.52	31.11	13.38	28.98	241	5	A	H
		5029.92	54.97	-19.03	74	39.28	31.56	12.9	28.77	259	31	P	V
		5083.3	43.94	-10.06	54	28.05	31.73	12.96	28.8	259	31	A	V
*		5300	108.42	-	-	92.88	31.2	13.29	28.95	259	31	P	V
*		5300	100.61	-	-	85.07	31.2	13.29	28.95	259	31	A	V
	5351.52	59.23	-14.77	74	43.72	31.11	13.38	28.98	259	31	P	V	
	5352.24	45	-9	54	29.49	31.11	13.38	28.98	259	31	A	V	



802.11n HT20 CH 64 5320MHz	*	5320	105.52	-	-	89.99	31.16	13.33	28.96	241	6	P	H
	*	5320	97.52	-	-	81.99	31.16	13.33	28.96	241	6	A	H
		5352.32	58.9	-15.1	74	43.39	31.11	13.38	28.98	241	6	P	H
		5352.32	44.4	-9.6	54	28.89	31.11	13.38	28.98	241	6	A	H
													H
													H
	*	5320	108.72	-	-	93.19	31.16	13.33	28.96	255	31	P	V
	*	5320	100.69	-	-	85.16	31.16	13.33	28.96	255	31	A	V
		5363.68	60.49	-13.51	74	44.93	31.15	13.4	28.99	255	31	P	V
		5350.24	45.04	-8.96	54	29.54	31.1	13.38	28.98	255	31	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 52 5260MHz		10520	47.43	-20.77	68.2	49.74	39.8	19.49	61.6	100	0	P	H
		15780	44.92	-29.08	74	44.96	37.32	23.4	60.76	100	0	P	H
		17989	58.88	-15.12	74	41.1	49.07	25.45	56.74	100	0	P	H
		17989	47.95	-6.05	54	30.17	49.07	25.45	56.74	100	0	A	H
		10520	48.07	-20.13	68.2	50.38	39.8	19.49	61.6	100	0	P	V
		15780	45.22	-28.78	74	45.26	37.32	23.4	60.76	100	0	P	V
		17967	58.4	-15.6	74	41.18	48.61	25.44	56.83	100	0	P	V
	17967	47.89	-6.11	54	30.67	48.61	25.44	56.83	100	0	A	V	
802.11n HT20 CH 60 5300MHz		10600	47.92	-26.08	74	50.19	39.8	19.53	61.6	100	0	P	H
		15900	46.01	-27.99	74	45.8	37.5	23.49	60.78	100	0	P	H
		17956	57.87	-16.13	74	40.93	48.38	25.44	56.88	100	0	P	H
		17956	47.7	-6.3	54	30.76	48.38	25.44	56.88	100	0	A	H
		10600	47.66	-26.34	74	49.93	39.8	19.53	61.6	100	0	P	V
		15900	46.1	-27.9	74	45.89	37.5	23.49	60.78	100	0	P	V
		17956	57.82	-16.18	74	40.88	48.38	25.44	56.88	100	0	P	V
	17956	47.54	-6.46	54	30.6	48.38	25.44	56.88	100	0	A	V	
802.11n HT20 CH 64 5320MHz		10640	48.1	-25.9	74	50.35	39.8	19.55	61.6	100	0	P	H
		15960	46.32	-27.68	74	46.26	37.32	23.53	60.79	100	0	P	H
		17956	57.62	-16.38	74	40.68	48.38	25.44	56.88	100	0	P	H
		17956	47.68	-6.32	54	30.74	48.38	25.44	56.88	100	0	A	H
		10640	48.3	-25.7	74	50.55	39.8	19.55	61.6	100	0	P	V
		15960	45.38	-28.62	74	45.32	37.32	23.53	60.79	100	0	P	V
		17967	57.91	-16.09	74	40.69	48.61	25.44	56.83	100	0	P	V
	17967	47.93	-6.07	54	30.71	48.61	25.44	56.83	100	0	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 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 54 5270MHz		5049.64	54.43	-19.57	74	38.69	31.6	12.92	28.78	104	6	P	H
		5106.42	45.8	-8.2	54	29.83	31.8	12.99	28.82	104	6	A	H
	*	5270	100.48	-	-	84.91	31.26	13.24	28.93	104	6	P	H
	*	5270	92.75	-	-	77.18	31.26	13.24	28.93	104	6	A	H
		5435.76	55.48	-18.52	74	39.51	31.51	13.5	29.04	104	6	P	H
		5434.32	45.28	-8.72	54	29.31	31.51	13.5	29.04	104	6	A	H
		5085.68	54.08	-19.92	74	38.18	31.74	12.97	28.81	194	26	P	V
		5126.14	45.68	-8.32	54	29.69	31.8	13.02	28.83	194	26	A	V
	*	5270	103.74	-	-	88.17	31.26	13.24	28.93	194	26	P	V
	*	5270	95.98	-	-	80.41	31.26	13.24	28.93	194	26	A	V
		5442	54.17	-19.83	74	38.15	31.55	13.51	29.04	194	26	P	V
		5426.16	45.23	-8.77	54	29.31	31.46	13.49	29.03	194	26	A	V
802.11n HT40 CH 62 5310MHz		5042.5	54.67	-19.33	74	38.95	31.59	12.91	28.78	241	2	P	H
		5107.44	45.61	-8.39	54	29.64	31.8	12.99	28.82	241	2	A	H
	*	5310	101.19	-	-	85.65	31.18	13.31	28.95	241	2	P	H
	*	5310	93.39	-	-	77.85	31.18	13.31	28.95	241	2	A	H
		5351.52	57.48	-16.52	74	41.97	31.11	13.38	28.98	241	2	P	H
		5350.08	45.4	-8.6	54	29.9	31.1	13.38	28.98	241	2	A	H
		5144.84	55.07	-18.93	74	39.08	31.8	13.04	28.85	114	24	P	V
		5087.72	45.93	-8.07	54	30.02	31.75	12.97	28.81	114	24	A	V
	*	5310	103.44	-	-	87.9	31.18	13.31	28.95	114	24	P	V
	*	5310	95.74	-	-	80.2	31.18	13.31	28.95	114	24	A	V
	5377.92	56.74	-17.26	74	41.1	31.21	13.43	29	114	24	P	V	
	5352	46.13	-7.87	54	30.62	31.11	13.38	28.98	114	24	A	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 54 5270MHz		10540	47.17	-21.03	68.2	49.47	39.8	19.5	61.6	100	0	P	H
		15810	45.04	-28.96	74	45.06	37.32	23.42	60.76	100	0	P	H
		17978	58.31	-15.69	74	40.82	48.84	25.44	56.79	100	0	P	H
		17978	48.48	-5.52	54	30.99	48.84	25.44	56.79	100	0	A	H
		10540	47.6	-20.6	68.2	49.9	39.8	19.5	61.6	100	0	P	V
		15810	45.32	-28.68	74	45.34	37.32	23.42	60.76	100	0	P	V
		17978	58.77	-15.23	74	41.28	48.84	25.44	56.79	100	0	P	V
802.11n HT40 CH 62 5310MHz		10620	49.05	-24.95	74	51.31	39.8	19.54	61.6	100	0	P	H
		15930	44.77	-29.23	74	44.64	37.41	23.51	60.79	100	0	P	H
		17978	57.94	-16.06	74	40.45	48.84	25.44	56.79	100	0	P	H
		17978	48.53	-5.47	54	31.04	48.84	25.44	56.79	100	0	A	H
		10620	47.74	-26.26	74	50	39.8	19.54	61.6	100	0	P	V
		15930	45.35	-28.65	74	45.22	37.41	23.51	60.79	100	0	P	V
		17945	57.77	-16.23	74	41.11	48.15	25.43	56.92	100	0	P	V
Remark	1. No other spurious found.												
	2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 58 5290MHz		5022.44	54.33	-19.67	74	38.66	31.54	12.89	28.76	100	1	P	H
		5089.42	45.58	-8.42	54	29.66	31.76	12.97	28.81	100	1	A	H
	*	5290	97.81	-	-	82.26	31.22	13.27	28.94	100	1	P	H
	*	5290	90.47	-	-	74.92	31.22	13.27	28.94	100	1	A	H
		5352.96	54.11	-19.89	74	38.59	31.11	13.39	28.98	100	1	P	H
		5350.08	46.09	-7.91	54	30.59	31.1	13.38	28.98	100	1	A	H
		5079.22	54.6	-19.4	74	38.72	31.72	12.96	28.8	230	30	P	V
		5148.58	45.72	-8.28	54	29.72	31.8	13.05	28.85	230	30	A	V
	*	5290	101.77	-	-	86.22	31.22	13.27	28.94	230	30	P	V
	*	5290	94.27	-	-	78.72	31.22	13.27	28.94	230	30	A	V
		5350.08	59.94	-14.06	74	44.44	31.1	13.38	28.98	230	30	P	V
		5359.92	47.04	-6.96	54	31.49	31.14	13.4	28.99	230	30	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 Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 58 5290MHz		10580	47.93	-20.27	68.2	50.21	39.8	19.52	61.6	100	0	P	H
		15870	45.14	-28.86	74	45	37.44	23.47	60.77	100	0	P	H
		17967	57.49	-16.51	74	40.27	48.61	25.44	56.83	100	0	P	H
		17967	48.29	-5.71	54	31.07	48.61	25.44	56.83	100	0	A	H
		10580	48.21	-19.99	68.2	50.49	39.8	19.52	61.6	100	0	P	V
		15870	45.34	-28.66	74	45.2	37.44	23.47	60.77	100	0	P	V
		17956	57.75	-16.25	74	40.81	48.38	25.44	56.88	100	0	P	V
		17956	48.01	-5.99	54	31.07	48.38	25.44	56.88	100	0	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11a CH 100 5500MHz		5457.84	55.9	-18.1	74	39.81	31.62	13.52	29.05	358	22	P	H	
		5468.24	57.27	-10.93	68.2	41.16	31.64	13.53	29.06	358	22	P	H	
		5457.84	43.2	-10.8	54	27.11	31.62	13.52	29.05	358	22	A	H	
	*	5500	106.01	-	-	89.83	31.7	13.56	29.08	358	22	P	H	
	*	5500	98.2	-	-	82.02	31.7	13.56	29.08	358	22	A	H	
														H
			5459.44	57.92	-16.08	74	41.83	31.62	13.52	29.05	281	34	P	V
			5468.4	57.67	-10.53	68.2	41.56	31.64	13.53	29.06	281	34	P	V
			5458	43.49	-10.51	54	27.4	31.62	13.52	29.05	281	34	A	V
	*		5500	107.73	-	-	91.55	31.7	13.56	29.08	281	34	P	V
	*		5500	99.73	-	-	83.55	31.7	13.56	29.08	281	34	A	V
														V
802.11a CH 116 5580MHz		5435.92	54.48	-19.52	74	38.5	31.52	13.5	29.04	357	23	P	H	
		5464.24	54.36	-13.84	68.2	38.27	31.63	13.52	29.06	357	23	P	H	
		5454.16	42.65	-11.35	54	26.57	31.61	13.52	29.05	357	23	A	H	
	*	5580	104.86	-	-	88.64	31.66	13.62	29.06	357	23	P	H	
	*	5580	97.43	-	-	81.21	31.66	13.62	29.06	357	23	A	H	
			5729.405	54.29	-13.91	68.2	37.67	31.88	13.76	29.02	357	23	P	H
			5390.8	54.2	-19.8	74	38.5	31.26	13.45	29.01	281	34	P	V
			5460.64	53.69	-14.51	68.2	37.6	31.62	13.52	29.05	281	34	P	V
			5452.72	42.71	-11.29	54	26.64	31.61	13.51	29.05	281	34	A	V
	*		5580	106.69	-	-	90.47	31.66	13.62	29.06	281	34	P	V
	*		5580	98.9	-	-	82.68	31.66	13.62	29.06	281	34	A	V
			5746.1	55.68	-12.52	68.2	38.95	31.98	13.77	29.02	281	34	P	V



802.11a CH 140 5700MHz	*	5700	106.17	-	-	89.77	31.7	13.73	29.03	347	23	P	H
	*	5700	98.75	-	-	82.35	31.7	13.73	29.03	347	23	A	H
		5742.2	59	-9.2	68.2	42.3	31.95	13.77	29.02	347	23	P	H
													H
													H
													H
	*	5700	108.1	-	-	91.7	31.7	13.73	29.03	134	42	P	V
	*	5700	100.43	-	-	84.03	31.7	13.73	29.03	134	42	A	V
		5726.52	60.59	-7.61	68.2	44.01	31.86	13.75	29.03	134	42	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 Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 100 5500MHz		11000	47.58	-26.42	74	49.33	40.1	19.75	61.6	100	0	P	H
		16500	48.02	-20.18	68.2	44.8	39	24.32	60.1	100	0	P	H
		17956	60.8	-13.2	74	43.86	48.38	25.44	56.88	100	0	P	H
		17956	47.55	-6.45	54	30.61	48.38	25.44	56.88	100	0	A	H
		11000	48.98	-25.02	74	50.73	40.1	19.75	61.6	100	0	P	V
		16500	47.94	-20.26	68.2	44.72	39	24.32	60.1	100	0	P	V
		18000	60.88	-13.12	74	42.83	49.3	25.45	56.7	100	0	P	V
		18000	48.06	-5.94	54	30.01	49.3	25.45	56.7	100	0	A	V
802.11a CH 116 5580MHz		11160	47.5	-26.5	74	49.28	39.82	19.87	61.47	100	0	P	H
		16740	49.24	-18.96	68.2	44.96	39.74	24.69	60.15	100	0	P	H
		17978	61.45	-12.55	74	43.96	48.84	25.44	56.79	100	0	P	H
		17978	48.02	-5.98	54	30.53	48.84	25.44	56.79	100	0	A	H
		11160	47.72	-26.28	74	49.5	39.82	19.87	61.47	100	0	P	V
		16740	49.4	-18.8	68.2	45.12	39.74	24.69	60.15	100	0	P	V
		17978	63.43	-10.57	74	45.94	48.84	25.44	56.79	100	0	P	V
		17978	48.26	-5.74	54	30.77	48.84	25.44	56.79	100	0	A	V
802.11a CH 140 5700MHz		11400	47.73	-26.27	74	48.97	40	20.04	61.28	100	0	P	H
		17100	49.38	-18.82	68.2	43.77	40.4	25.11	59.9	100	0	P	H
		17945	59.96	-14.04	74	43.3	48.15	25.43	56.92	100	0	P	H
		17945	47.07	-6.93	54	30.41	48.15	25.43	56.92	100	0	A	H
		11400	48.79	-25.21	74	50.03	40	20.04	61.28	100	0	P	V
		17100	49.13	-19.07	68.2	43.52	40.4	25.11	59.9	100	0	P	V
		17989	58.14	-15.86	74	40.36	49.07	25.45	56.74	100	0	P	V
		17989	48.04	-5.96	54	30.26	49.07	25.45	56.74	100	0	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11n HT20 CH 100 5500MHz		5454.64	57.39	-16.61	74	41.31	31.61	13.52	29.05	250	14	P	H	
		5466.64	56.27	-11.93	68.2	40.17	31.63	13.53	29.06	250	14	P	H	
		5455.44	44.09	-9.91	54	28.01	31.61	13.52	29.05	250	14	A	H	
	*	5500	105.75	-	-	89.57	31.7	13.56	29.08	250	14	P	H	
	*	5500	98.03	-	-	81.85	31.7	13.56	29.08	250	14	A	H	
														H
			5456.88	57.62	-16.38	74	41.54	31.61	13.52	29.05	271	34	P	V
			5469.04	59.57	-8.63	68.2	43.46	31.64	13.53	29.06	271	34	P	V
			5457.36	44.76	-9.24	54	28.68	31.61	13.52	29.05	271	34	A	V
	*		5500	107.58	-	-	91.4	31.7	13.56	29.08	271	34	P	V
	*		5500	99.96	-	-	83.78	31.7	13.56	29.08	271	34	A	V
														V
802.11n HT20 CH 116 5580MHz		5376.16	54.09	-19.91	74	38.46	31.2	13.43	29	226	17	P	H	
		5464.24	53.22	-14.98	68.2	37.13	31.63	13.52	29.06	226	17	P	H	
		5439.04	43.43	-10.57	54	27.44	31.53	13.5	29.04	226	17	A	H	
	*	5580	105.81	-	-	89.59	31.66	13.62	29.06	226	17	P	H	
	*	5580	97.98	-	-	81.76	31.66	13.62	29.06	226	17	A	H	
			5751.455	54.95	-13.25	68.2	38.19	32	13.78	29.02	226	17	P	H
			5418.88	54.27	-19.73	74	38.4	31.41	13.49	29.03	265	34	P	V
			5461.84	53.83	-14.37	68.2	37.74	31.62	13.52	29.05	265	34	P	V
			5452	43.79	-10.21	54	27.73	31.6	13.51	29.05	265	34	A	V
	*		5580	105.99	-	-	89.77	31.66	13.62	29.06	265	34	P	V
	*		5580	98.29	-	-	82.07	31.66	13.62	29.06	265	34	A	V
			5760.275	55.28	-12.92	68.2	38.52	32	13.78	29.02	265	34	P	V



802.11n HT20 CH 140 5700MHz	*	5700	107.93	-	-	91.53	31.7	13.73	29.03	135	42	P	V
	*	5700	99.91	-	-	83.51	31.7	13.73	29.03	135	42	A	V
		5738.76	60.69	-7.51	68.2	44.02	31.93	13.76	29.02	135	42	P	V
													H
													H
													H
	*	5700	107.94	-	-	91.54	31.7	13.73	29.03	266	33	P	H
	*	5700	100.19	-	-	83.79	31.7	13.73	29.03	266	33	A	H
		5726.12	62.08	-6.12	68.2	45.5	31.86	13.75	29.03	266	33	P	H
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 100 5500MHz		11000	47.32	-26.68	74	49.07	40.1	19.75	61.6	100	0	P	H
		16500	48.28	-19.92	68.2	45.06	39	24.32	60.1	100	0	P	H
		18000	61.75	-12.25	74	43.7	49.3	25.45	56.7	100	0	P	H
		18000	49.89	-4.11	54	31.84	49.3	25.45	56.7	100	0	A	H
		11000	47.94	-26.06	74	49.69	40.1	19.75	61.6	100	0	P	V
		16500	48.2	-20	68.2	44.98	39	24.32	60.1	100	0	P	V
		18000	62.4	-11.6	74	44.35	49.3	25.45	56.7	100	0	P	V
802.11n HT20 CH 116 5580MHz		11160	47.62	-26.38	74	49.4	39.82	19.87	61.47	100	0	P	H
		16740	48.9	-19.3	68.2	44.62	39.74	24.69	60.15	100	0	P	H
		17989	62.92	-11.08	74	45.14	49.07	25.45	56.74	100	0	P	H
		17989	50.25	-3.75	54	32.47	49.07	25.45	56.74	100	0	A	H
		11160	47.41	-26.59	74	49.19	39.82	19.87	61.47	100	0	P	V
		16740	49.98	-18.22	68.2	45.7	39.74	24.69	60.15	100	0	P	V
		17967	60.49	-13.51	74	43.27	48.61	25.44	56.83	100	0	P	V
802.11n HT20 CH 140 5700MHz		11400	48.69	-25.31	74	49.93	40	20.04	61.28	100	0	P	H
		17100	48.43	-19.77	68.2	42.82	40.4	25.11	59.9	100	0	P	H
		17989	62.41	-11.59	74	44.63	49.07	25.45	56.74	100	0	P	H
		17989	49.89	-4.11	54	32.11	49.07	25.45	56.74	100	0	A	H
		11400	48.4	-25.6	74	49.64	40	20.04	61.28	100	0	P	V
		17100	48.84	-19.36	68.2	43.23	40.4	25.11	59.9	100	0	P	V
		18000	61.74	-12.26	74	43.69	49.3	25.45	56.7	100	0	P	V
	18000	50.07	-3.93	54	32.02	49.3	25.45	56.7	100	0	A	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 102 5510MHz		5458.24	55.86	-18.14	74	39.77	31.62	13.52	29.05	100	76	P	H
		5467.84	57.73	-10.47	68.2	41.62	31.64	13.53	29.06	100	76	P	H
		5459.44	46.01	-7.99	54	29.92	31.62	13.52	29.05	100	76	A	H
	*	5510	100.85	-	-	84.69	31.68	13.56	29.08	100	76	P	H
	*	5510	93.14	-	-	76.98	31.68	13.56	29.08	100	76	A	H
		5760.275	54.59	-13.61	68.2	37.83	32	13.78	29.02	100	76	P	H
		5457.04	60.77	-13.23	74	44.69	31.61	13.52	29.05	103	26	P	V
		5468.08	62.09	-6.11	68.2	45.98	31.64	13.53	29.06	103	26	P	V
		5458.48	46.68	-7.32	54	30.59	31.62	13.52	29.05	103	26	A	V
	*	5510	103.13	-	-	86.97	31.68	13.56	29.08	103	26	P	V
	*	5510	95.35	-	-	79.19	31.68	13.56	29.08	103	26	A	V
		5754.605	55.73	-12.47	68.2	38.97	32	13.78	29.02	103	26	P	V
802.11n HT40 CH 110 5550MHz		5453.92	54.87	-19.13	74	38.79	31.61	13.52	29.05	348	26	P	H
		5467.12	53.36	-14.84	68.2	37.26	31.63	13.53	29.06	348	26	P	H
		5453.2	45.3	-8.7	54	29.22	31.61	13.52	29.05	348	26	A	H
	*	5550	101.45	-	-	85.32	31.6	13.6	29.07	348	26	P	H
	*	5550	93.72	-	-	77.59	31.6	13.6	29.07	348	26	A	H
		5751.455	56.97	-11.23	68.2	40.21	32	13.78	29.02	348	26	P	H
		5456.32	54.45	-19.55	74	38.37	31.61	13.52	29.05	107	25	P	V
		5462.32	53.91	-14.29	68.2	37.83	31.62	13.52	29.06	107	25	P	V
		5454.4	45.53	-8.47	54	29.45	31.61	13.52	29.05	107	25	A	V
	*	5550	102.46	-	-	86.33	31.6	13.6	29.07	107	25	P	V
	*	5550	94.81	-	-	78.68	31.6	13.6	29.07	107	25	A	V
		5742.635	55.48	-12.72	68.2	38.77	31.96	13.77	29.02	107	25	P	V



802.11n HT40 CH 134 5670MHz		5428.05	54.15	-19.85	74	38.22	31.47	13.49	29.03	349	26	P	H
		5470	53.46	-14.74	68.2	37.35	31.64	13.53	29.06	349	26	P	H
		5391.65	45.17	-8.83	54	29.46	31.27	13.45	29.01	349	26	A	H
	*	5670	102.43	-	-	86.13	31.64	13.7	29.04	349	26	P	H
	*	5670	94.57	-	-	78.27	31.64	13.7	29.04	349	26	A	H
		5731.75	57.45	-10.75	68.2	40.82	31.89	13.76	29.02	349	26	P	H
		5376.6	54.02	-19.98	74	38.38	31.21	13.43	29	130	39	P	V
		5469	53.58	-14.62	68.2	37.47	31.64	13.53	29.06	130	39	P	V
		5424.55	45.16	-8.84	54	29.25	31.45	13.49	29.03	130	39	A	V
	*	5670	103.46	-	-	87.16	31.64	13.7	29.04	130	39	P	V
	*	5670	95.68	-	-	79.38	31.64	13.7	29.04	130	39	A	V
		5728.075	59.19	-9.01	68.2	42.59	31.87	13.76	29.03	130	39	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 Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 102 5510MHz		11020	48.53	-25.47	74	50.27	40.08	19.76	61.58	100	0	P	H
		16530	48.14	-20.06	68.2	44.77	39.12	24.36	60.11	100	0	P	H
		17989	61.96	-12.04	74	44.18	49.07	25.45	56.74	100	0	P	H
		17989	50.86	-3.14	54	33.08	49.07	25.45	56.74	100	0	A	H
		11020	48.37	-25.63	74	50.11	40.08	19.76	61.58	100	0	P	V
		16530	47.82	-20.38	68.2	44.45	39.12	24.36	60.11	100	0	P	V
		17945	61.33	-12.67	74	44.67	48.15	25.43	56.92	100	0	P	V
		17945	49.84	-4.16	54	33.18	48.15	25.43	56.92	100	0	A	V
802.11n HT40 CH 110 5550MHz		11100	48.59	-25.41	74	50.29	40	19.82	61.52	100	0	P	H
		11650	49.07	-24.93	74	50.52	39.55	20.23	61.23	100	0	P	H
		18000	61.86	-12.14	74	43.81	49.3	25.45	56.7	100	0	P	H
		18000	50.89	-3.11	54	32.84	49.3	25.45	56.7	100	0	A	H
		11103	48.62	-25.38	74	50.32	39.99	19.83	61.52	100	0	P	V
		16647	48.61	-19.59	68.2	44.75	39.45	24.54	60.13	100	0	P	V
		17989	62.22	-11.78	74	44.44	49.07	25.45	56.74	100	0	P	V
		17989	50.69	-3.31	54	32.91	49.07	25.45	56.74	100	0	A	V
802.11n HT40 CH 134 5670MHz		11340	48.3	-25.7	74	49.81	39.82	20	61.33	100	0	P	H
		17010	49.08	-19.12	68.2	43.68	40.49	25.08	60.17	100	0	P	H
		17989	61	-13	74	43.22	49.07	25.45	56.74	100	0	P	H
		17989	50.47	-3.53	54	32.69	49.07	25.45	56.74	100	0	A	H
		11340	47.8	-26.2	74	49.31	39.82	20	61.33	100	0	P	V
		17010	49.12	-19.08	68.2	43.72	40.49	25.08	60.17	100	0	P	V
		18000	61.59	-12.41	74	43.54	49.3	25.45	56.7	100	0	P	V
		18000	50.84	-3.16	54	32.79	49.3	25.45	56.7	100	0	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 106 5530MHz		5455.36	57.18	-16.82	74	41.1	31.61	13.52	29.05	366	28	P	H
		5469.52	58.54	-9.66	68.2	42.43	31.64	13.53	29.06	366	28	P	H
		5459.68	50.22	-3.78	54	34.13	31.62	13.52	29.05	366	28	A	H
	*	5530	98.43	-	-	82.28	31.64	13.58	29.07	366	28	P	H
	*	5530	93.99	-	-	77.84	31.64	13.58	29.07	366	28	A	H
		5735.075	55.46	-12.74	68.2	38.81	31.91	13.76	29.02	366	28	P	H
		5446	60.33	-13.67	74	44.28	31.58	13.51	29.04	103	27	P	V
		5467.36	62.23	-5.97	68.2	46.13	31.63	13.53	29.06	103	27	P	V
		5459.2	52.23	-1.77	54	36.14	31.62	13.52	29.05	103	27	A	V
	*	5530	99.79	-	-	83.64	31.64	13.58	29.07	103	27	P	V
	*	5530	92.12	-	-	75.97	31.64	13.58	29.07	103	27	A	V
		5736.335	54.83	-13.37	68.2	38.17	31.92	13.76	29.02	103	27	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 5470~5725MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 106 5530MHz		11060	48.46	-25.54	74	50.18	40.04	19.79	61.55	100	0	P	H
		16590	48.13	-20.07	68.2	44.44	39.36	24.45	60.12	100	0	P	H
		17989	61.54	-12.46	74	43.76	49.07	25.45	56.74	100	0	P	H
		17989	50.37	-3.63	54	32.59	49.07	25.45	56.74	100	0	A	H
		11060	48.77	-25.23	74	50.49	40.04	19.79	61.55	100	0	P	V
		16590	48.43	-19.77	68.2	44.74	39.36	24.45	60.12	100	0	P	V
		17978	60.55	-13.45	74	43.06	48.84	25.44	56.79	100	0	P	V
		17978	50	-4	54	32.51	48.84	25.44	56.79	100	0	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel

WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 144 5720MHz		5442.04	55.77	-18.23	74	39.75	31.55	13.51	29.04	237	0	P	H
		5461.15	55.4	-12.8	68.2	39.31	31.62	13.52	29.05	237	0	P	H
		5449.06	42.27	-11.73	54	26.22	31.59	13.51	29.05	237	0	A	H
	*	5720	107.52	-	-	90.98	31.82	13.75	29.03	237	0	P	H
	*	5720	99.78	-	-	83.24	31.82	13.75	29.03	237	0	A	H
		5945.75	45.11	-23.09	68.2	27.98	32.29	13.81	28.97	237	0	P	H
		5412.79	55.74	-18.26	74	39.9	31.38	13.48	29.02	129	37	P	V
		5460.76	54.05	-14.15	68.2	37.96	31.62	13.52	29.05	129	37	P	V
		5452.18	42.34	-11.66	54	26.28	31.6	13.51	29.05	129	37	A	V
	*	5720	108.66	-	-	92.12	31.82	13.75	29.03	129	37	P	V
	*	5720	100.84	-	-	84.3	31.82	13.75	29.03	129	37	A	V
		5893.75	45.13	-23.07	68.2	28.12	32.19	13.81	28.99	129	37	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)

Table with 14 columns: WIFI Ant. 1, Note, Frequency (MHz), Level (dBµV/m), Over Limit (dB), Limit Line (dBµV/m), Read Level (dBµV), Antenna Factor (dB/m), Path Loss (dB), Preamp Factor (dB), Ant Pos (cm), Table Pos (deg), Peak Avg. (P/A), Pol. (H/V). Rows include data for 802.11a CH 144 (5720MHz) and a Remark section.



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

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 144 5720MHz		5446.33	55.47	-18.53	74	39.42	31.58	13.51	29.04	219	0	P	H
		5465.83	52.94	-15.26	68.2	36.84	31.63	13.53	29.06	219	0	P	H
		5429.56	43.42	-10.58	54	27.47	31.48	13.5	29.03	219	0	A	H
	*	5720	107.76	-	-	91.22	31.82	13.75	29.03	219	0	P	H
	*	5720	100	-	-	83.46	31.82	13.75	29.03	219	0	A	H
		5882.25	55.92	-12.28	68.2	38.94	32.16	13.81	28.99	219	0	P	H
		5452.57	53.65	-20.35	74	37.58	31.61	13.51	29.05	146	35	P	V
		5462.71	53.05	-15.15	68.2	36.96	31.63	13.52	29.06	146	35	P	V
		5427.61	43.64	-10.36	54	27.71	31.47	13.49	29.03	146	35	A	V
	*	5720	108.09	-	-	91.55	31.82	13.75	29.03	146	35	P	V
	*	5720	100.57	-	-	84.03	31.82	13.75	29.03	146	35	A	V
		5925.75	55.7	-12.5	68.2	38.62	32.25	13.81	28.98	146	35	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)

Table with 14 columns: WIFI Ant. 1, Note, Frequency (MHz), Level (dBµV/m), Over Limit (dB), Limit Line (dBµV/m), Read Level (dBµV), Antenna Factor (dB/m), Path Loss (dB), Preamp Factor (dB), Ant Pos (cm), Table Pos (deg), Peak Avg. (P/A), Pol. (H/V). Rows include data for 802.11n HT20 CH 144 5720MHz and a Remark section.



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

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 142 5710MHz		5365.6	53.88	-20.12	74	38.3	31.16	13.41	28.99	236	360	P	H
		5461.93	53.05	-15.15	68.2	36.96	31.62	13.52	29.05	236	360	P	H
		5456.08	44.61	-9.39	54	28.53	31.61	13.52	29.05	236	360	A	H
	*	5710	104.04	-	-	87.57	31.76	13.74	29.03	236	360	P	H
	*	5710	96.15	-	-	79.68	31.76	13.74	29.03	236	360	A	H
		5921	55.84	-12.36	68.2	38.77	32.24	13.81	28.98	236	360	P	H
		5405.77	54.8	-19.2	74	39.02	31.33	13.47	29.02	134	36	P	V
		5463.88	52.57	-15.63	68.2	36.48	31.63	13.52	29.06	134	36	P	V
		5450.62	44.75	-9.25	54	28.69	31.6	13.51	29.05	134	36	A	V
	*	5710	104.13	-	-	87.66	31.76	13.74	29.03	134	36	P	V
	*	5710	96.26	-	-	79.79	31.76	13.74	29.03	134	36	A	V
	5934.25	56.51	-11.69	68.2	39.41	32.27	13.81	28.98	134	36	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)

Table with 14 columns: WIFI Ant. 1, Note, Frequency (MHz), Level (dBµV/m), Over Limit (dB), Limit Line (dBµV/m), Read Level (dBµV), Antenna Factor (dB/m), Path Loss (dB), Preamp Factor (dB), Ant Pos (cm), Table Pos (deg), Peak Avg. (P/A), Pol. (H/V). Rows include frequencies 11420, 17130, 17989, 17989, 11420, 17130, 17945, 17945.

Remark

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



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

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 138 5690MHz		5415.52	54.17	-19.83	74	38.32	31.39	13.48	29.02	232	0	P	H
		5462.32	53.64	-14.56	68.2	37.56	31.62	13.52	29.06	232	0	P	H
		5417.86	45.03	-8.97	54	29.16	31.41	13.49	29.03	232	0	A	H
	*	5690	100.41	-	-	84.04	31.68	13.72	29.03	232	0	P	H
	*	5690	92.75	-	-	76.38	31.68	13.72	29.03	232	0	A	H
		5944.5	55.19	-13.01	68.2	38.06	32.29	13.81	28.97	232	0	P	H
		5403.04	55.35	-18.65	74	39.58	31.32	13.47	29.02	122	37	P	V
		5463.88	53.37	-14.83	68.2	37.28	31.63	13.52	29.06	122	37	P	V
		5449.06	44.9	-9.1	54	28.85	31.59	13.51	29.05	122	37	A	V
	*	5690	100.12	-	-	83.75	31.68	13.72	29.03	122	37	P	V
	*	5690	92.38	-	-	76.01	31.68	13.72	29.03	122	37	A	V
		5943	55.85	-12.35	68.2	38.72	32.29	13.81	28.97	122	37	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)

Table with 14 columns: WIFI Ant. 1, Note, Frequency (MHz), Level (dBµV/m), Over Limit (dB), Limit Line (dBµV/m), Read Level (dBµV), Antenna Factor (dB/m), Path Loss (dB), Preamp Factor (dB), Ant Pos (cm), Table Pos (deg), Peak Avg. (P/A), Pol. (H/V). Rows include data for 802.11ac VHT80 CH 138 5690MHz and a Remark section.



Emission above 18GHz

5GHz WIFI 802.11ac VHT80 (SHF)

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)
5GHz 802.11ac VHT80 SHF		20002	35.77	-38.23	74	40.55	37.8	11.22	53.8	150	0	P	H
		33730	43.17	-25.03	68.2	38.83	41.05	17.87	54.58	150	0	P	H
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			22906	39.15	-34.85	74	41.77	38.54	12.42	53.58	22906	0	P
		36458	44.3	-29.7	74	39.71	42.78	18.75	56.94	36458	0	P	V
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Remark	1. No other spurious found. 2. All results are PASS against limit line.												



Emission below 1GHz

5GHz WIFI 802.11ac VHT80 (LF)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.	
Ant.		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)	
5GHz 802.11ac VHT80 LF		62.01	29.35	-10.65	40	48.81	12.19	1.14	32.79	-	-	P	H	
		72.68	23.2	-16.8	40	41.94	12.74	1.26	32.74	-	-	P	H	
		160.95	22.07	-21.43	43.5	36.2	16.62	2.04	32.79	-	-	P	H	
		183.26	25.19	-18.31	43.5	40.72	15.1	2.23	32.86	-	-	P	H	
		211.39	22.54	-20.96	43.5	38.12	14.88	2.41	32.87	-	-	P	H	
		745.86	37.38	-8.62	46	37.65	27.65	4.69	32.61	100	0	P	H	
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			37.76	27.67	-12.33	40	39.14	20.51	0.8	32.78	-	-	P	V
			62.01	28.86	-11.14	40	48.32	12.19	1.14	32.79	-	-	P	V
			72.68	27.74	-12.26	40	46.48	12.74	1.26	32.74	-	-	P	V
			100.81	25.65	-17.85	43.5	40.37	16.32	1.56	32.6	-	-	P	V
			183.26	22.02	-21.48	43.5	37.55	15.1	2.23	32.86	-	-	P	V
			703.18	36.68	-9.32	46	38.22	26.28	4.59	32.41	100	0	P	V
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Remark	1. No other spurious found. 2. All results are PASS against limit line.													



Note symbol

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



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

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

1. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB)
2. Level(dBμV/m) = Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
3. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)
= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
= 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)
= 55.45 (dBμV/m)
2. Over Limit(dB)
= Level(dBμV/m) – Limit Line(dBμV/m)
= 55.45(dBμV/m) – 74(dBμV/m)
= -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)
= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)
= 43.54 (dBμV/m)
2. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)
= 43.54(dBμV/m) – 54(dBμV/m)
= -10.46(dB)

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