



FCC RADIO TEST REPORT

FCC ID : A4RG9S9B
Equipment : Phone
Model Name : G9S9B
Applicant : Google LLC
1600 Amphitheatre Parkway,
Mountain View, California, 94043 USA
Standard : FCC Part 15 Subpart E §15.407

The product was received on Jun. 08, 2021 and testing was started from Jun. 09, 2021 and completed on Aug. 22, 2021. We, Sporton International Inc. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Louis Wu

Approved by: Louis Wu

Sporton International Inc. EMC & Wireless Communications Laboratory

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



Table of Contents

History of this test report.....	3
Summary of Test Result.....	4
1 General Description	5
1.1 Product Feature of Equipment Under Test.....	5
1.2 Product Specification of Equipment Under Test.....	6
1.3 Modification of EUT	8
1.4 Testing Location	8
1.5 Applicable Standards.....	8
2 Test Configuration of Equipment Under Test	9
2.1 Carrier Frequency and Channel	9
2.2 Test Mode.....	10
2.3 Connection Diagram of Test System.....	12
2.4 Support Unit used in test configuration and system	13
2.5 EUT Operation Test Setup	13
2.6 Measurement Results Explanation Example.....	13
3 Test Result	14
3.1 26dB & 99% Occupied Bandwidth Measurement	14
3.2 Maximum Conducted Output Power Measurement	17
3.3 Power Spectral Density Measurement	19
3.4 Unwanted Emissions Measurement.....	23
3.5 AC Conducted Emission Measurement.....	28
3.6 Antenna Requirements.....	30
4 List of Measuring Equipment.....	31
5 Uncertainty of Evaluation	33
Appendix A. Conducted Test Results	
Appendix B. AC Conducted Emission Test Result	
Appendix C. Radiated Spurious Emission	
Appendix D. Radiated Spurious Emission Plots	
Appendix E. Duty Cycle Plots	



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 1.57 dB at 5149.760 MHz
3.5	15.207	AC Conducted Emission	Pass	Under limit 10.57 dB at 0.501 MHz
3.6	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: William Chen

Report Producer: Lucy Wu



1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
Equipment	Phone
Model Name	G9S9B
FCC ID	A4RG9S9B
EUT supports Radios application	GSM/EGPRS/WCDMA/HSPA/LTE/5G NR /NFC/GNSS/WPC/WPT WLAN 11b/g/n HT20 WLAN 11a/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80/VHT160 WLAN 11ax HE20/HE40/HE80/HE160 Bluetooth BR/EDR/LE

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

EUT Information List	
S/N	Performed Test Item
15211FDF60007M	Conducted Measurement
15201FDF60005H	Radiated Spurious Emission
15201FDF60009S	Conducted Emission



1.2 Product Specification of Equipment Under Test

Product Specification subjective to this standard	
Tx/Rx Frequency Range	5180 MHz ~ 5240 MHz 5260 MHz ~ 5320 MHz 5500 MHz ~ 5720 MHz
Maximum Output Power	<p><5180 MHz ~ 5240 MHz> MIMO <Ant. 4+3> 802.11a: 20.89 dBm / 0.1227 W 802.11n HT20: 20.89 dBm / 0.1227 W 802.11n HT40: 22.79 dBm / 0.1901 W 802.11ac VHT20: 20.99 dBm / 0.1256 W 802.11ac VHT40: 22.89 dBm / 0.1945 W 802.11ac VHT80: 18.15 dBm / 0.0653 W 802.11ac VHT160: 17.84 dBm / 0.0608 W 802.11ax HE20: 21.09 dBm / 0.1285 W 802.11ax HE40: 22.99 dBm / 0.1991 W 802.11ax HE80: 18.25 dBm / 0.0668 W 802.11ax HE160: 17.94 dBm / 0.0622 W</p> <p><5260 MHz ~ 5320 MHz> MIMO <Ant. 4+3> 802.11a: 21.29 dBm / 0.1346 W 802.11n HT20: 21.29 dBm / 0.1346 W 802.11n HT40: 22.74 dBm / 0.1879 W 802.11ac VHT20: 21.39 dBm / 0.1377 W 802.11ac VHT40: 22.84 dBm / 0.1923 W 802.11ac VHT80: 18.84 dBm / 0.0766 W 802.11ax HE20: 21.49 dBm / 0.1409 W 802.11ax HE40: 22.94 dBm / 0.1968 W 802.11ax HE80: 18.94 dBm / 0.0783 W</p> <p><5500 MHz ~ 5720 MHz> MIMO <Ant. 4+3> 802.11a: 21.54 dBm / 0.1426 W 802.11n HT20: 21.59 dBm / 0.1442 W 802.11n HT40: 22.74 dBm / 0.1879 W 802.11ac VHT20: 21.69 dBm / 0.1476 W 802.11ac VHT40: 22.84 dBm / 0.1923 W 802.11ac VHT80: 22.84 dBm / 0.1923 W 802.11ac VHT160: 19.24 dBm / 0.0839 W 802.11ax HE20: 21.79 dBm / 0.1510 W 802.11ax HE40: 22.94 dBm / 0.1968 W 802.11ax HE80: 22.94 dBm / 0.1968 W 802.11ax HE160: 19.34 dBm / 0.0859 W</p>



Product Specification subjective to this standard							
99% Occupied Bandwidth	MIMO <Ant. 4> 802.11a: 17.33 MHz 802.11ax HE20: 19.28 MHz 802.11ax HE40: 38.76 MHz 802.11ax HE80: 77.32 MHz 802.11ax HE160: 156.56 MHz MIMO <Ant. 3> 802.11a: 17.18 MHz 802.11ax HE20: 19.23 MHz 802.11ax HE40: 38.86 MHz 802.11ax HE80: 77.32 MHz 802.11ax HE160: 156.56 MHz						
Antenna Type	<5180 MHz ~ 5240 MHz> <Ant. 4> : ILA Antenna <Ant. 3> : IFA Antenna <5260 MHz ~ 5320 MHz> <Ant. 4> : ILA Antenna <Ant. 3> : IFA Antenna <5500 MHz ~ 5720 MHz> <Ant. 4> : ILA Antenna <Ant. 3> : IFA Antenna						
Antenna Gain	<5180 MHz ~ 5240 MHz> <Ant. 4> : -0.4 dBi <Ant. 3> : -3.6 dBi <5260 MHz ~ 5320 MHz> <Ant. 4> : -1.1 dBi <Ant. 3> : -4.1 dBi <5500 MHz ~ 5720 MHz> <Ant. 4> : -0.8 dBi <Ant. 3> : -1.9 dBi						
Type of Modulation	802.11a/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11ac : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM) 802.11ax : OFDMA (BPSK / QPSK / 16QAM / 64QAM / 256QAM / 1024QAM)						
Antenna Function Description	<table border="1"> <thead> <tr> <th></th> <th>Ant. 4</th> <th>Ant. 3</th> </tr> </thead> <tbody> <tr> <td>802.11 a/n/ac/ax MIMO</td> <td>V</td> <td>V</td> </tr> </tbody> </table>		Ant. 4	Ant. 3	802.11 a/n/ac/ax MIMO	V	V
	Ant. 4	Ant. 3					
802.11 a/n/ac/ax MIMO	V	V					

Remark:

- MIMO Ant. 4+3 Directional Gain is a calculated result from MIMO Ant. 4 and MIMO Ant. 3. The formula used in calculation is documented in section 3.6.
Power of MIMO Ant. 4 + Ant. 3 is a calculated result from sum of the power MIMO Ant. 4 and MIMO Ant. 3.
- The above EUT's information was declared by manufacturer. Please refer to Comments and Explanations in report summary.



1.3 Modification of EUT

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

1.4 Testing Location

Test Site	Sporton International Inc. EMC & Wireless Communications Laboratory
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978
Test Site No.	Sporton Site No. TH02-HY, CO05-HY

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

Test Site	Sporton International Inc. Wensan Laboratory
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
Test Site No.	Sporton Site No. 03CH13-HY (TAF Code: 3786)
Remark	The Radiated Spurious Emission test item subcontracted to Sporton International Inc. Wensan Laboratory.

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

FCC designation No.: TW1190 and TW3786

1.5 Applicable Standards

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

- ♦ FCC Part 15 Subpart E
- ♦ FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
- ♦ FCC KDB 414788 D01 Radiated Test Site v01r01.
- ♦ FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
- ♦ ANSI C63.10-2013

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. The TAF code is not including all the FCC KDB listed without accreditation.



2 Test Configuration of Equipment Under Test

- a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conduction emission (150 kHz to 30 MHz), radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). The measured emission level of the EUT was maximized by rotating the EUT on a turntable, adjusting the orientation of the EUT and EUT antenna in three orthogonal axis (X: flat, Y: portrait, Z: landscape), and adjusting the measurement antenna orientation, following C63.10 exploratory test procedures and find X plane as worst plane.
- 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)
5150-5350 MHz	50 [@]	5250
5470-5725 MHz	114 [@]	5570



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

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

Note:

1. The above Frequency and Channel in "*" were 802.11n HT40 and 802.11ac VHT40 and 802.11ax HE40.
2. The above Frequency and Channel in "[#]" were 802.11ac VHT80 and 802.11ax HE80.
3. The above Frequency and Channel in "@[#]" were 802.11ac VHT160 and 802.11ax HE160.

2.2 Test Mode

This device support 26/52/106/242/484/996-tone RU but does not support 2x996-tone RU on 160MHz channel.

The PSD of partial RU is reduced to be smaller than full RU according to TCB workshop interim guidance.

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

MIMO Mode

Modulation	Data Rate
802.11a	6 Mbps
802.11n HT20 (Covered by HE20)	MCS0
802.11n HT40 (Covered by HE40)	MCS0
802.11ac VHT20 (Covered by HE20)	MCS0
802.11ac VHT40 (Covered by HE40)	MCS0
802.11ac VHT80 (Covered by HE80)	MCS0
802.11ac VHT160 (Covered by HE160)	MCS0
802.11ax HE20	MCS0
802.11ax HE40	MCS0
802.11ax HE80	MCS0
802.11ax HE160	MCS0



Test Cases	
AC Conducted Emission	Mode 1 : WLAN (5GHz) Link + Bluetooth Link + USB Cable 1 (Charging from AC Adapter 2)
Remark:	
1. For Radiated Test Cases, the tests were performed with Adapter 2 and USB Cable 1. 2. During the preliminary test, both charging modes (Adapter mode and WPC Charging mode) were verified. It is determined that the adaptor mode is the worst case for official test.	

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
		802.11ax HE20	802.11ax HE20	802.11ax HE20
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
		802.11ax HE40	802.11ax HE40	802.11ax HE40
L	Low	38	54	102
M	Middle	-	-	110
H	High	46	62	134
Straddle		-	-	142

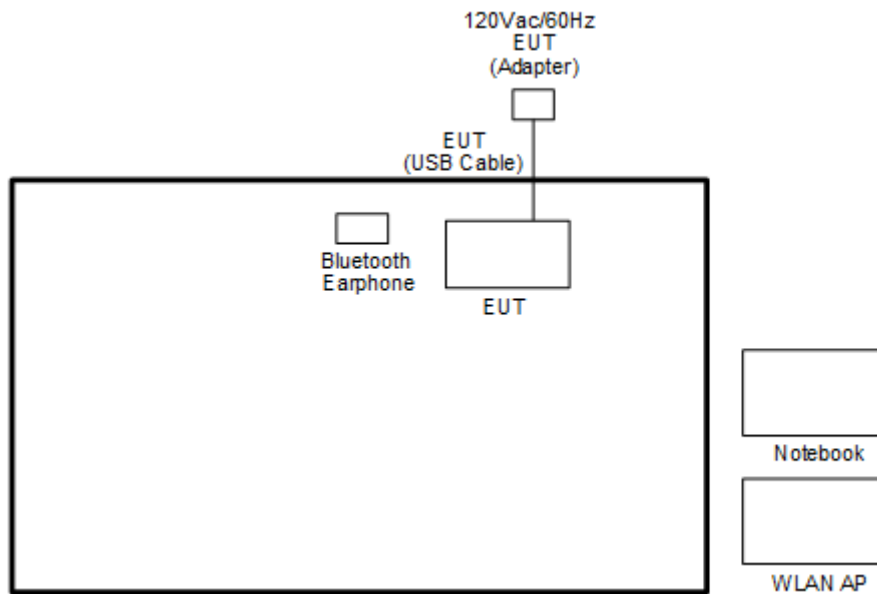
Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725MHz
		802.11ax HE80	802.11ax HE80	802.11ax HE80
L	Low	-	-	106
M	Middle	42	58	-
H	High	-	-	122
Straddle		-	-	138

BW160	5150-5350 MHz	5470-5725MHz
	802.11ax HE160	802.11ax HE160
Ch. #	50	114

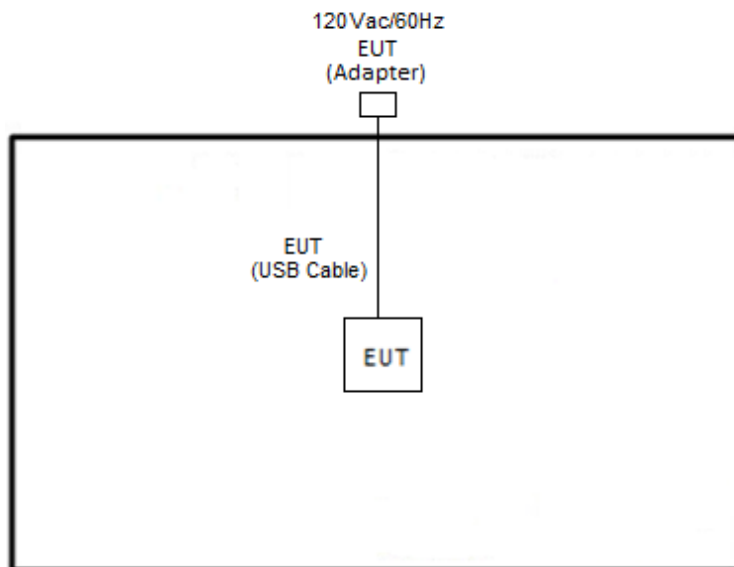
Remark: For radiation spurious emission, the final modulation and the worst data rate was reference the max RF conducted power.

2.3 Connection Diagram of Test System

<AC Conducted Emission Mode>



<WLAN Tx Mode>





2.4 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Bluetooth Earphone	Google	G1013	N/A	N/A	N/A
2.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
3.	Notebook	DELL	Latitude E3480	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m

2.5 EUT Operation Test Setup

The RF test items, utility “adb command V_1.0.36” 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 10 dB 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.

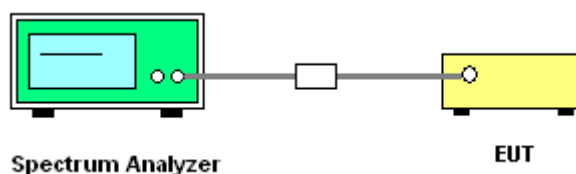
3.1.2 Measuring Instruments

See list of measuring equipment of this test report.

3.1.3 Test Procedures

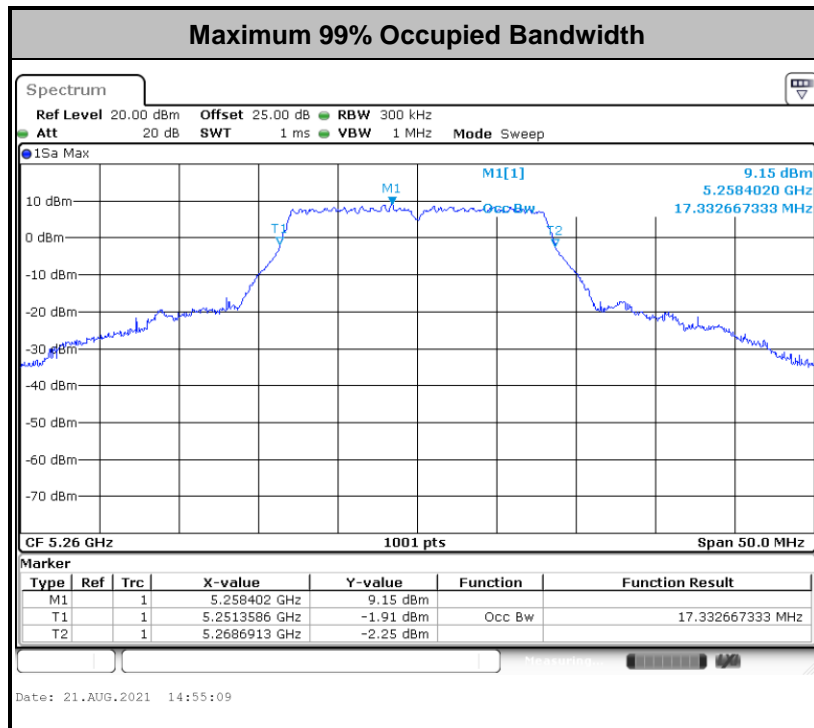
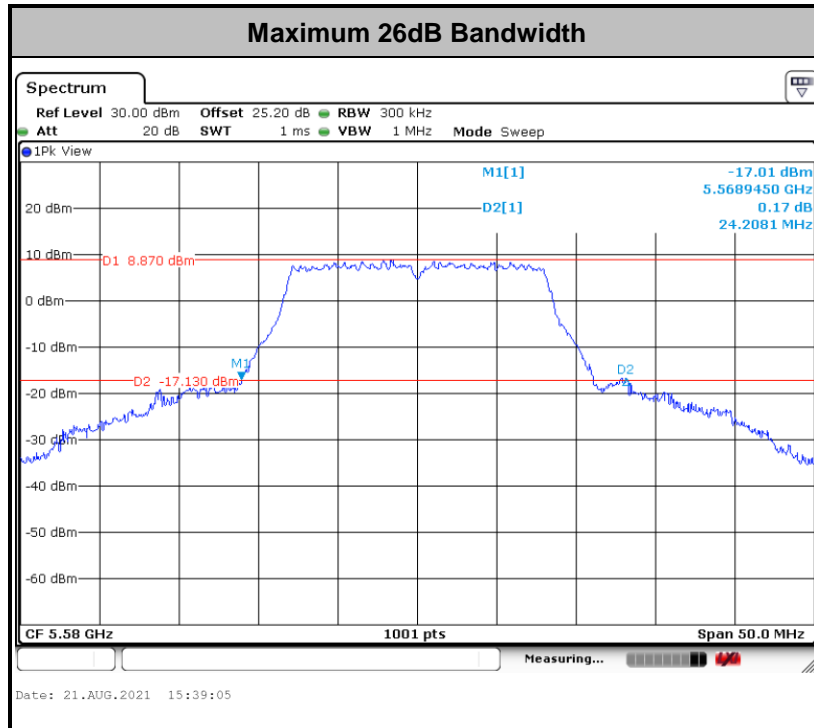
1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section C) Emission bandwidth
2. Set RBW = approximately 1% of the emission bandwidth.
3. Set the VBW > RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 26 dB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

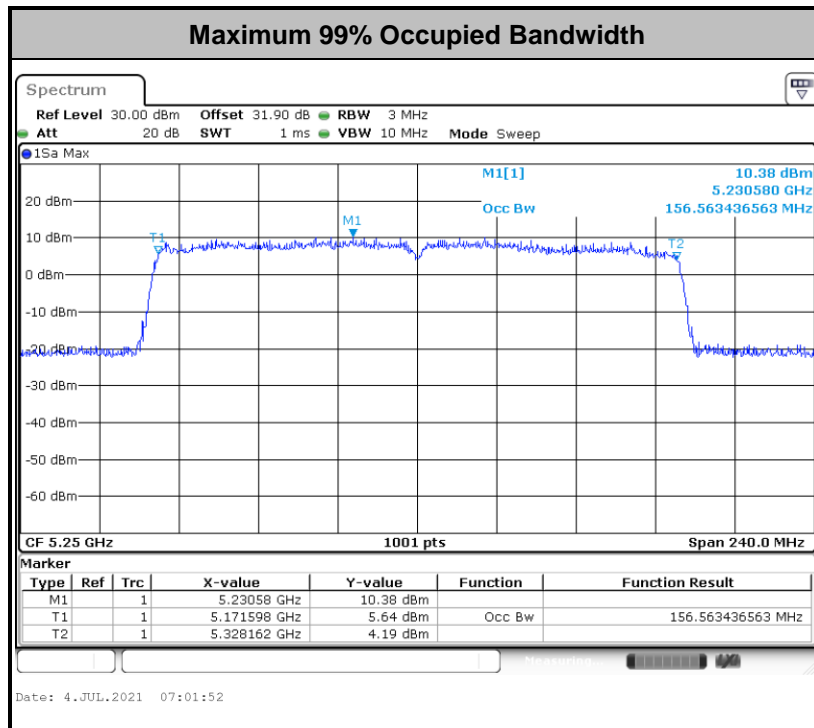
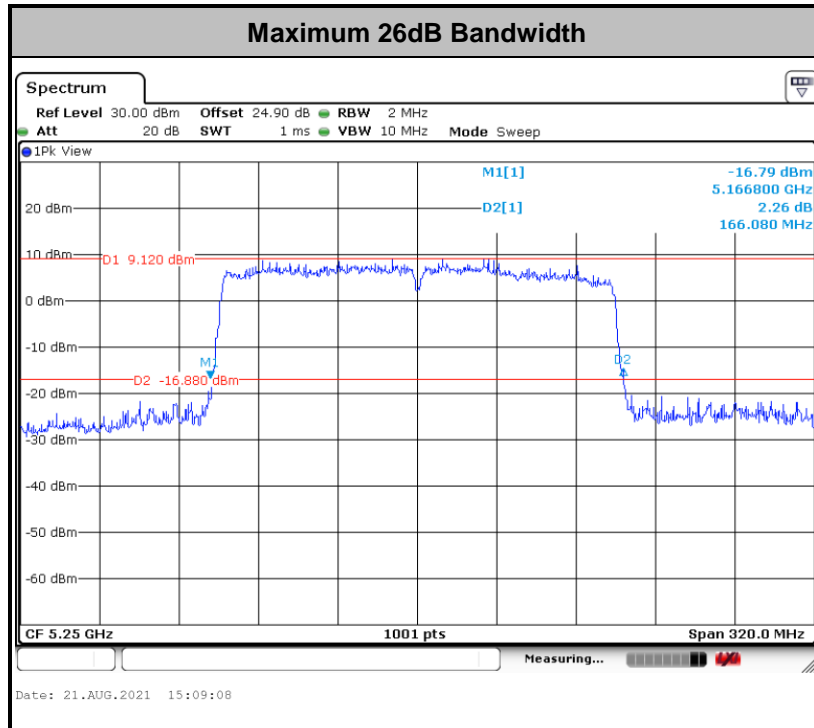
Please refer to Appendix A.



Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.



<802.11ax Modes>



Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.



3.2 Maximum Conducted Output Power Measurement

3.2.1 Limit of Maximum Conducted Output Power

<FCC 14-30 CFR 15.407>

For the 5.15–5.25 GHz bands:

■ For mobile and portable client devices in the 5.15–5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW. For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W.

For the 5.25–5.725 GHz bands:

■ The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm 10 log B, where B is the 26 dB emission bandwidth in megahertz.

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

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

Note that U-NII-2 band, devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

3.2.2 Measuring Instruments

See list of measuring equipment of this test report.

3.2.3 Test Procedures

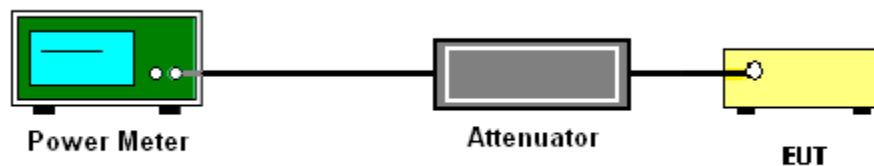
The testing follows Method PM-G of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

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

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

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

3.2.4 Test Setup



3.2.5 Test Result of Maximum Conducted Output Power

Please refer to Appendix A.



3.3 Power Spectral Density Measurement

3.3.1 Limit of Power Spectral Density

<FCC 14-30 CFR 15.407>

For the 5.15–5.25 GHz bands:

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

For the 5.25–5.725 GHz bands:

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

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

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

3.3.2 Measuring Instruments

See list of measuring equipment of this test report.

3.3.3 Test Procedures

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

Method SA-3

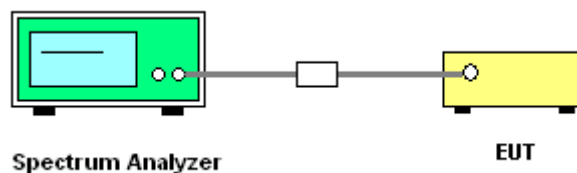
(power averaging (rms) detection with max hold):

- Set span to encompass the entire emission bandwidth (EBW) of the signal.
 - Set RBW = 1 MHz.
 - Set VBW \geq 3 MHz.
 - Number of points in sweep \geq 2 Span / RBW.
 - Sweep time \leq (number of points in sweep) \times T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
Detector = power averaging (rms).
 - Trace mode = max hold.
 - Allow max hold to run for at least 60 seconds, or longer as needed to allow the trace to stabilize.
1. The RF output of EUT was connected to the spectrum analyzer by a low loss cable.
 2. Each plot has already offset with cable loss, and attenuator loss. Measure the PPSD and record it.
 3. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

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

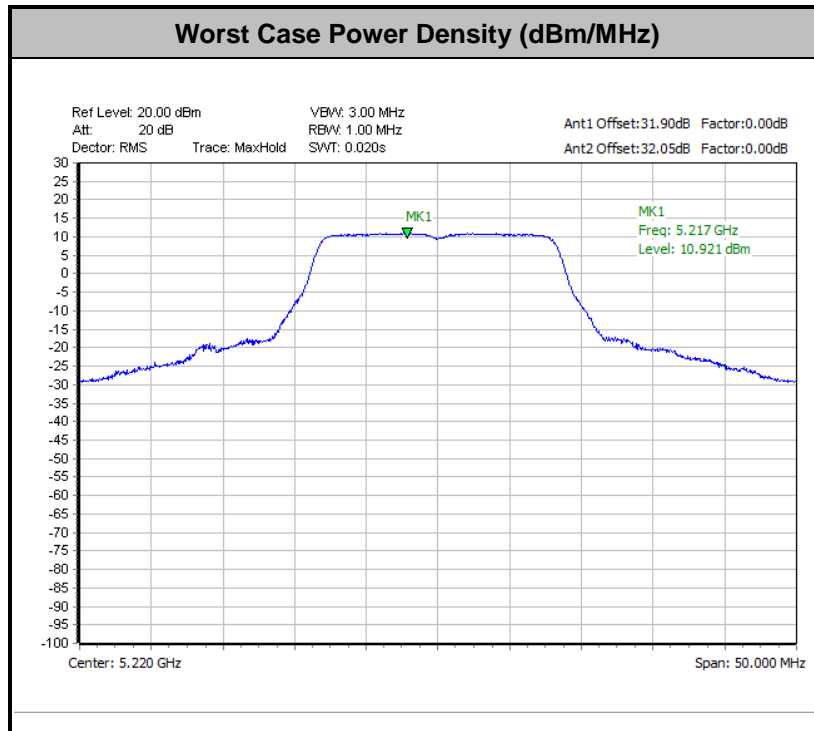
The total final Power Spectral Density is from a device with 2 transmitter outputs. The spectrum measurements of the individual outputs are all performed with the same span and number of points; the spectrum value in the first spectral bin of output 1 is summed with that in the first spectral bin of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

3.3.4 Test Setup

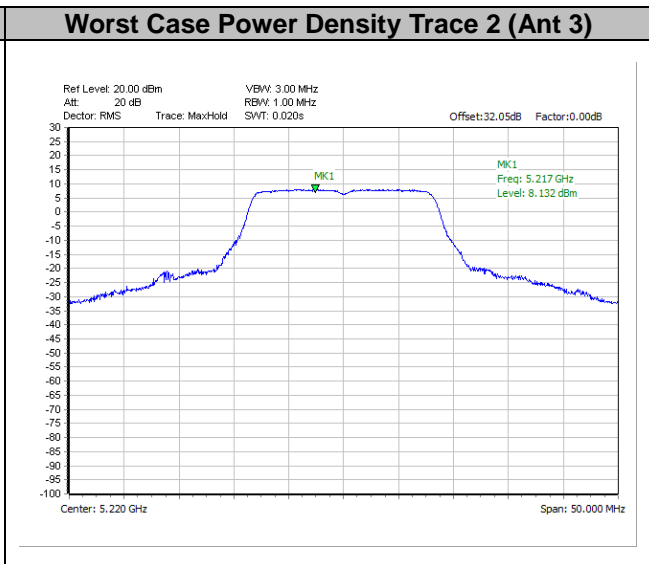
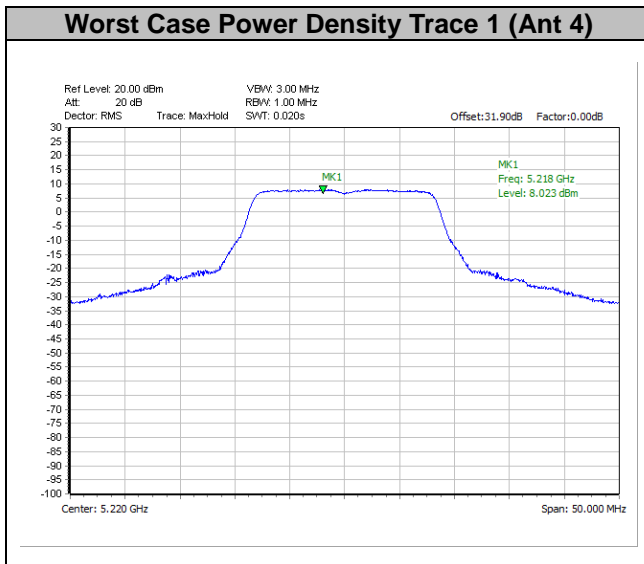


3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.

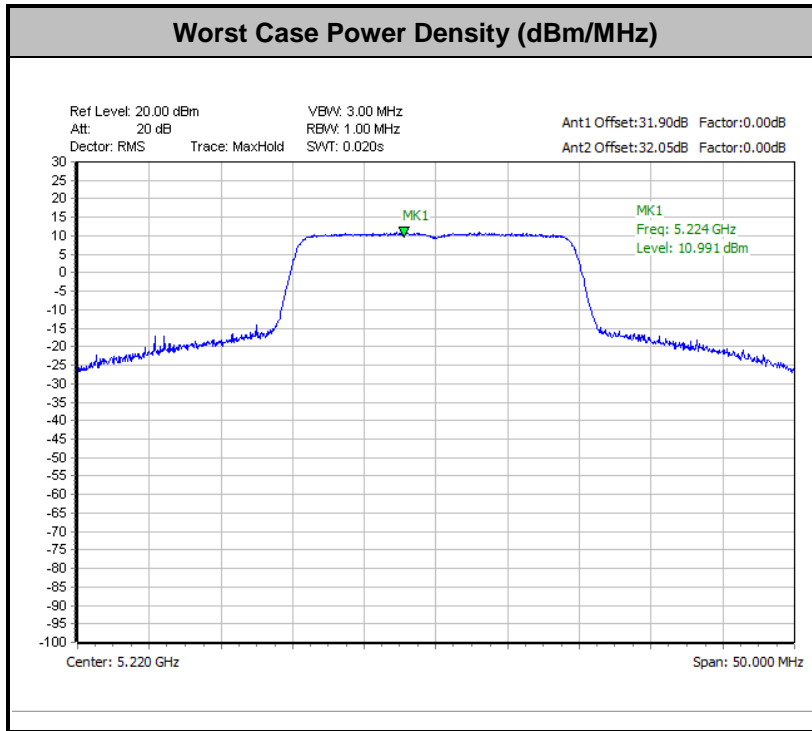


Remark: The test plot is showing a bin by bin combined result mathematically adds two traces.

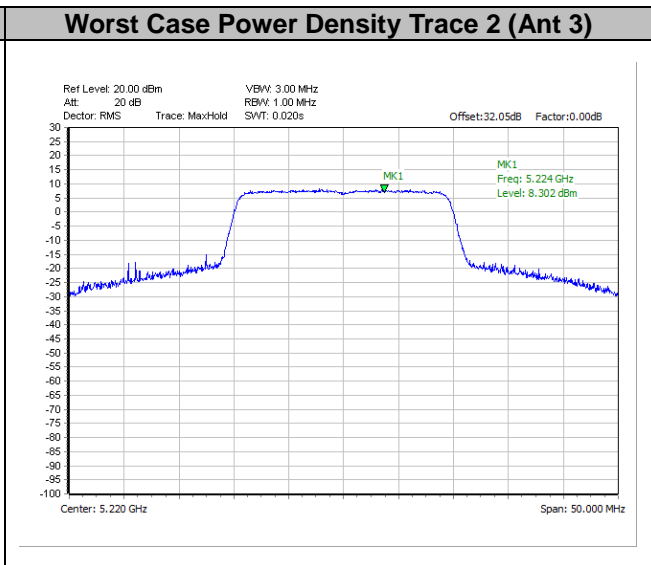
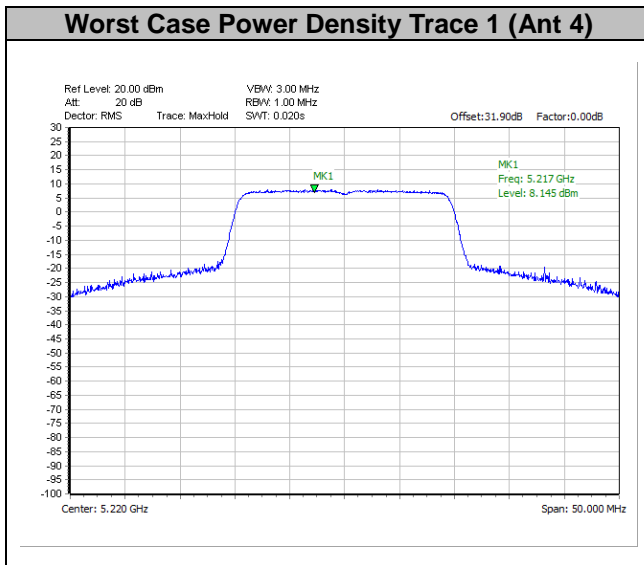




<802.11ax Modes>



Remark: The test plot is showing a bin by bin combined result mathematically adds two traces.





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.

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



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

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

(i) Sections 15.407(b)(1-3) specifies the unwanted emissions limit for the U-NII-1 and U-NII-2 bands. As specified, emissions above 1000 MHz that are outside of the restricted bands are subject to a peak emission limit of -27 dBm/MHz.

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

3.4.2 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 1000 MHz

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

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

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

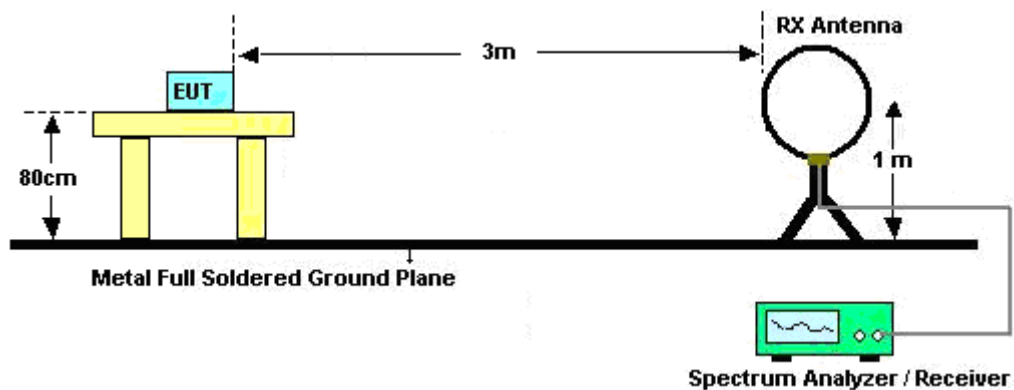
(3) Procedures for Average Unwanted Emissions Measurements Above 1000 MHz

- 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.

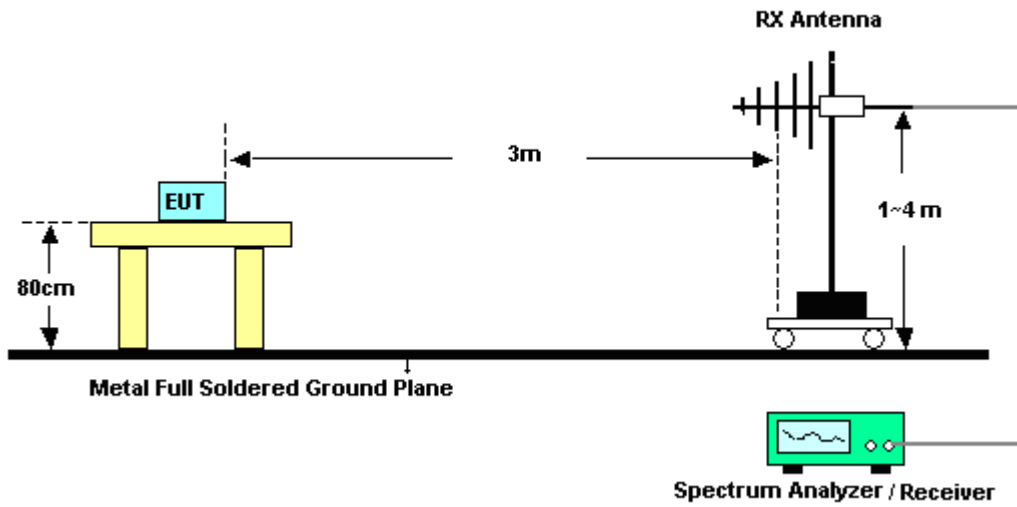
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1 GHz and 1.5 meter for frequency above 1 GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband 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 1 GHz, 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 1 GHz, the emission level of the EUT in peak mode was 20 dB 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

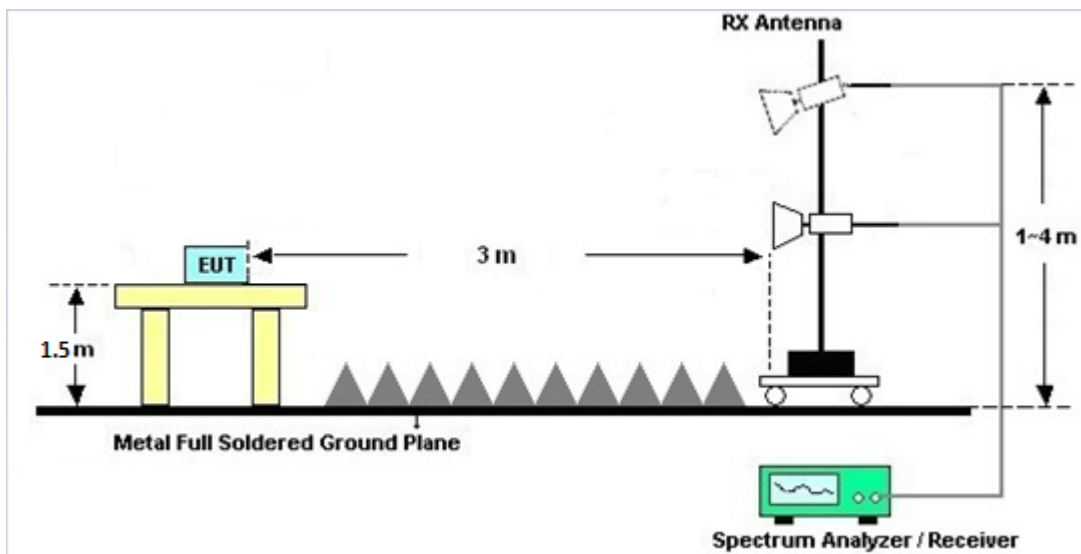
For radiated emissions below 30MHz



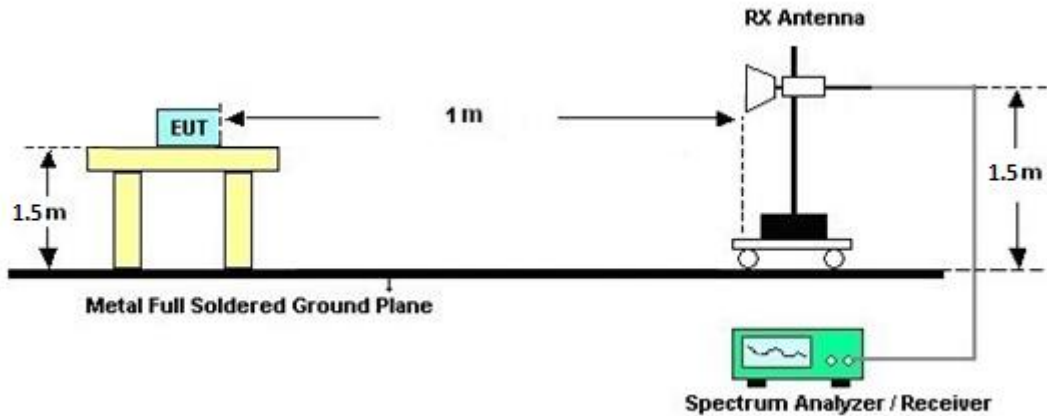
For radiated emissions from 30MHz to 1GHz



For radiated test from 1GHz to 18GHz



For radiated test 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 adequate comparison measurement 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.

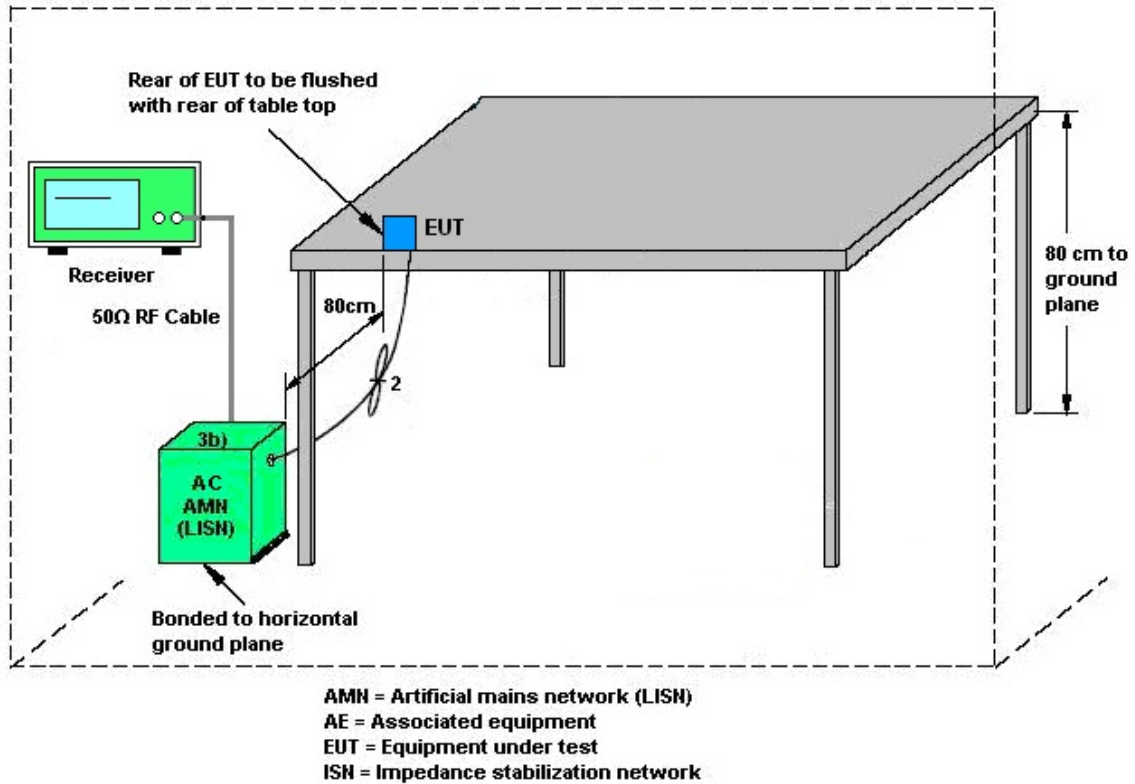
3.5.2 Measuring Instruments

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 shall 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 Antenna Requirements

3.6.1 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.

3.6.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.6.3 Antenna Gain

<CDD Modes >

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

Directional gain = G_{ANT} + Array Gain, where Array Gain is as follows.

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

Array Gain = $10 \log(N_{ANT}/N_{SS}=1)$ dB.

For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$.

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

The EUT supports CDD mode.

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

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

The power and PSD limit should be modified if the directional gain of EUT is over 6 dBi,

The directional gain "DG" is calculated as following table.

<CDD Modes>						
			DG	DG	Power	PSD
			for	for	Limit	Limit
	Ant. 4	Ant. 3	Power	PSD	Reduction	Reduction
	(dBi)	(dBi)	(dBi)	(dBi)	(dB)	(dB)
Band I	-0.40	-3.60	-0.40	1.16	0.00	0.00
Band II	-1.10	-4.10	-1.10	0.54	0.00	0.00
Band III	-0.80	-1.90	-0.80	1.68	0.00	0.00

Power limit reduction = Composite gain – 6dBi, (min = 0)

PSD limit reduction = Composite gain + PSD Array gain – 6dBi, (min = 0)



4 List of Measuring Equipment

Instrument	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	Jan. 04, 2021	Jun. 09, 2021~ Jul. 28, 2021	Jan. 03, 2022	Radiation (03CH13-HY)
Amplifier	Sonoma-Instrument	310 N	187282	9KHz~1GHz	Dec. 16, 2020	Jun. 09, 2021~ Jul. 28, 2021	Dec. 15, 2021	Radiation (03CH13-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-124 1	1GHz ~ 18GHz	Jul. 15, 2020	Jun. 09, 2021~ Jul. 13, 2021	Jul. 14, 2021	Radiation (03CH13-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-124 1	1GHz ~ 18GHz	Jul. 13, 2021	Jul. 13, 2021~ Jul. 28, 2021	Jul. 12, 2022	Radiation (03CH13-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1590074	1GHz~18GHz	May 18, 2021	Jun. 09, 2021~ Jul. 28, 2021	May 17, 2022	Radiation (03CH13-HY)
Preamplifier	Keysight	83017A	MY532701 47	1GHz~26.5GHz	Oct. 28, 2020	Jun. 09, 2021~ Jul. 28, 2021	Oct. 27, 2021	Radiation (03CH13-HY)
Signal Generator	Anritsu	MG3694C	163401	0.1Hz~40GHz	Jan. 31, 2021	Jun. 09, 2021~ Jul. 28, 2021	Jan. 30, 2022	Radiation (03CH13-HY)
Spectrum Analyzer	Keysight	N9010A	MY553705 26	10Hz~44GHz	Mar. 18, 2021	Jun. 09, 2021~ Jul. 28, 2021	Mar. 17, 2022	Radiation (03CH13-HY)
Controller	EMEC	EM1000	N/A	Control Turn table & Ant Mast	N/A	Jun. 09, 2021~ Jul. 28, 2021	N/A	Radiation (03CH13-HY)
Antenna Mast	EMEC	AM-BS-4500- B	N/A	1m~4m	N/A	Jun. 09, 2021~ Jul. 28, 2021	N/A	Radiation (03CH13-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	Jun. 09, 2021~ Jul. 28, 2021	N/A	Radiation (03CH13-HY)
Software	Audix	E3 6.2009-8-24	RK-00099 2	N/A	N/A	Jun. 09, 2021~ Jul. 28, 2021	N/A	Radiation (03CH13-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz ~ 40GHz	Dec. 11, 2020	Jun. 09, 2021~ Jul. 28, 2021	Dec. 10, 2021	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126E	0030/126E	30M-18G	Feb. 10, 2021	Jun. 09, 2021~ Jul. 28, 2021	Feb. 09, 2022	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	804793/4	30M-18G	Feb. 10, 2021	Jun. 09, 2021~ Jul. 28, 2021	Feb. 09, 2022	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	505134/2	30M~40GHz	Feb. 22, 2021	Jun. 09, 2021~ Jul. 28, 2021	Feb. 21, 2022	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY4274/2	30MHz~40GHz	Mar. 11, 2021	Jun. 09, 2021~ Jul. 28, 2021	Mar. 10, 2022	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY24961/ 4	30M-18G	Feb. 10, 2021	Jun. 09, 2021~ Jul. 28, 2021	Feb. 09, 2022	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY9837/4 PE	9kHz~30MHz	Mar. 11, 2021	Jun. 09, 2021~ Jul. 28, 2021	Mar. 10, 2022	Radiation (03CH11-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170 584	18GHz- 40GHz	Dec. 11, 2020	Jun. 09, 2021~ Jul. 28, 2021	Dec. 10, 2021	Radiation (03CH13-HY)
Hygrometer	TECPEL	DTM-303B	TP200879	N/A	Oct. 22, 2020	Jun. 09, 2021~ Jul. 28, 2021	Oct. 21, 2021	Radiation (03CH13-HY)
Filter	Wainwright	WHKX8-5872. 5-6750-18000 -40ST	Sn5	6.75GHz High Pass Filter	Mar. 11, 2021	Jun. 09, 2021~ Jul. 28, 2021	Mar. 10, 2022	Radiation (03CH13-HY)
Filter	Wainwright	WHKX12-270 0-3000-18000 -60SS	SN2	3GHz High Pass Filter	May 17, 2021	Jun. 09, 2021~ Jul. 28, 2021	May 16, 2020	Radiation (03CH13-HY)



Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Hygrometer	Testo	608-H1	34893241	N/A	Mar. 03, 2021	Jun. 10, 2021~ Aug. 22, 2021	Mar. 02, 2022	Conducted (TH02-HY)
Power Sensor	DARE	RPR3006W	RPR6W-2 101001	10MHz~8GHz	Feb. 03, 2021	Jun. 10, 2021~ Aug. 22, 2021	Feb. 02, 2022	Conducted (TH02-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101397	10Hz~40GHz	Nov. 27, 2020	Jun. 10, 2021~ Jul. 27, 2021	Nov. 26, 2021	Conducted (TH02-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101565	10Hz ~ 40GHz	Nov. 13, 2020	Aug. 21, 2021~ Aug. 22, 2021	Nov. 12, 2021	Conducted (TH02-HY)
Switch Box & RF Cable	EM Electronics	EMSW18SE	SW200302	N/A	Mar. 17, 2021	Jun. 10, 2021~ Aug. 22, 2021	Mar. 16, 2022	Conducted (TH02-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Jul. 02, 2021	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9kHz~3.6GHz	Nov. 30, 2020	Jul. 02, 2021	Nov. 29, 2021	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34913912	N/A	Nov. 18, 2020	Jul. 02, 2021	Nov. 17, 2021	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Nov. 16, 2020	Jul. 02, 2021	Nov. 15, 2021	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Jul. 02, 2021	N/A	Conduction (CO05-HY)
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100851	N/A	Feb. 25, 2021	Jul. 02, 2021	Feb. 24, 2022	Conduction (CO05-HY)
LISN Cable	MVE	RG-400	260260	N/A	Dec. 31, 2020	Jul. 02, 2021	Dec. 30, 2021	Conduction (CO05-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 dB
---	--------

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

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

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.8 dB
---	--------

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

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

Appendix A. Test Result of Conducted Test Items

Test Engineer:	Shiming Liu	Temperature:	21.9~25.9	°C
Test Date:	2021/6/10~2021/8/22	Relative Humidity:	45.9~58.7	%

TEST RESULTS DATA
26dB and 99% OBW

Band I MIMO													
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 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	
11a	6Mbps	2	36	5180	17.23	17.08	21.70	21.90	-	-	22.33		
11a	6Mbps	2	44	5220	17.18	17.03	21.70	22.01	-	-	22.31		
11a	6Mbps	2	48	5240	17.23	17.08	21.75	21.95	-	-	22.33		

TEST RESULTS DATA
Average Power Table

FCC Band I MIMO												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
					Ant 4	Ant 3	SUM	Ant 4	Ant 3	Ant 4	Ant 3	
11a	6Mbps	2	36	5180	17.90	17.85	20.89	24.00		-0.40	Pass	
11a	6Mbps	2	44	5220	18.00	17.75	20.89	24.00		-0.40	Pass	
11a	6Mbps	2	48	5240	18.00	17.75	20.89	24.00		-0.40	Pass	
HT20	MCS0	2	36	5180	17.10	16.95	20.04	24.00		-0.40	Pass	
HT20	MCS0	2	44	5220	17.70	17.65	20.69	24.00		-0.40	Pass	
HT20	MCS0	2	48	5240	17.90	17.85	20.89	24.00		-0.40	Pass	
HT40	MCS0	2	38	5190	16.40	16.05	19.24	24.00		-0.40	Pass	
HT40	MCS0	2	46	5230	19.80	19.75	22.79	24.00		-0.40	Pass	
VHT20	MCS0	2	36	5180	17.20	17.05	20.14	24.00		-0.40	Pass	
VHT20	MCS0	2	44	5220	17.80	17.75	20.79	24.00		-0.40	Pass	
VHT20	MCS0	2	48	5240	18.00	17.95	20.99	24.00		-0.40	Pass	
VHT40	MCS0	2	38	5190	16.50	16.15	19.34	24.00		-0.40	Pass	
VHT40	MCS0	2	46	5230	19.90	19.85	22.89	24.00		-0.40	Pass	
VHT80	MCS0	2	42	5210	15.50	14.75	18.15	24.00		-0.40	Pass	
VHT160	MCS0	2	50	5250	15.00	14.65	17.84	24.00		-0.40	Pass	

TEST RESULTS DATA
Power Spectral Density

FCC Band I MIMO												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail
					Ant 4	Ant 3	SUM	Ant 4	Ant 3	Ant 4	Ant 3	
11a	6Mbps	2	36	5180			10.48	11.00	1.16		Pass	
11a	6Mbps	2	44	5220			10.92	11.00	1.16		Pass	
11a	6Mbps	2	48	5240			10.32	11.00	1.16		Pass	

TEST RESULTS DATA
26dB and 99% OBW

Band II MIMO															
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 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	
11a	6Mbps	2	52	5260	17.33	17.13	22.06	22.70	23.34		29.34		23.98		
11a	6Mbps	2	60	5300	17.33	17.18	21.91	22.06	23.35		29.35		23.98		
11a	6Mbps	2	64	5320	17.33	17.18	22.16	22.04	23.35		29.35		23.98		

TEST RESULTS DATA
Average Power Table

FCC Band II MIMO													
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 4	Ant 3	SUM	Ant 4	Ant 3	Ant 4	Ant 3		
11a	6Mbps	2	52	5260	18.40	18.15	21.29	23.98		-1.10		30	Pass
11a	6Mbps	2	60	5300	18.30	18.05	21.19	23.98		-1.10		30	Pass
11a	6Mbps	2	64	5320	18.30	18.15	21.24	23.98		-1.10		30	Pass
HT20	MCS0	2	52	5260	18.30	18.25	21.29	23.98		-1.10		30	Pass
HT20	MCS0	2	60	5300	18.20	18.15	21.19	23.98		-1.10		30	Pass
HT20	MCS0	2	64	5320	17.20	17.25	20.24	23.98		-1.10		30	Pass
HT40	MCS0	2	54	5270	19.80	19.65	22.74	23.98		-1.10		30	Pass
HT40	MCS0	2	62	5310	15.60	15.75	18.69	23.98		-1.10		30	Pass
VHT20	MCS0	2	52	5260	18.40	18.35	21.39	23.98		-1.10		30	Pass
VHT20	MCS0	2	60	5300	18.30	18.25	21.29	23.98		-1.10		30	Pass
VHT20	MCS0	2	64	5320	17.30	17.35	20.34	23.98		-1.10		30	Pass
VHT40	MCS0	2	54	5270	19.90	19.75	22.84	23.98		-1.10		30	Pass
VHT40	MCS0	2	62	5310	15.70	15.85	18.79	23.98		-1.10		30	Pass
VHT80	MCS0	2	58	5290	15.40	15.25	18.34	23.98		-1.10		30	Pass

TEST RESULTS DATA
Power Spectral Density

Band II MIMO												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail
					Ant 4	Ant 3	SUM	Ant 4	Ant 3	Ant 4	Ant 3	
11a	6Mbps	2	52	5260			10.77	11.00		0.54		Pass
11a	6Mbps	2	60	5300			10.62	11.00		0.54		Pass
11a	6Mbps	2	64	5320			10.72	11.00		0.54		Pass

TEST RESULTS DATA
26dB and 99% OBW

Band III MIMO																
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 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3
11a	6Mbps	2	100	5500	17.18	16.98	21.70	21.60	23.30	29.30	23.98	----	----			
11a	6Mbps	2	116	5580	17.33	17.03	24.21	22.00	23.31	29.31	23.98	----	----			
11a	6Mbps	2	140	5700	17.18	17.03	21.65	21.60	23.31	29.31	23.98	----	----			

Band III straddle channel MIMO																
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 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3
11a	6Mbps	2	144	5720	13.64	13.44	15.95	15.95	22.28	28.28	23.03	3.2	3.2			

TEST RESULTS DATA
Average Power Table

FCC Band III MIMO													
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 4	Ant 3	SUM	Ant 4	Ant 3	Ant 4	Ant 3		
11a	6Mbps	2	100	5500	15.70	15.85	18.79	23.98		-0.80		30	Pass
11a	6Mbps	2	116	5580	18.20	18.55	21.39	23.98		-0.80		30	Pass
11a	6Mbps	2	140	5700	17.30	17.15	20.24	23.98		-0.80		30	Pass
HT20	MCS0	2	100	5500	15.60	15.55	18.59	23.98		-0.80		30	Pass
HT20	MCS0	2	116	5580	18.30	18.55	21.44	23.98		-0.80		30	Pass
HT20	MCS0	2	140	5700	16.30	16.05	19.19	23.98		-0.80		30	Pass
HT40	MCS0	2	102	5510	16.50	16.45	19.49	23.98		-0.80		30	Pass
HT40	MCS0	2	110	5550	19.40	19.75	22.59	23.98		-0.80		30	Pass
HT40	MCS0	2	134	5670	19.70	19.75	22.74	23.98		-0.80		30	Pass
VHT20	MCS0	2	100	5500	15.70	15.65	18.69	23.98		-0.80		30	Pass
VHT20	MCS0	2	116	5580	18.40	18.65	21.54	23.98		-0.80		30	Pass
VHT20	MCS0	2	140	5700	16.40	16.15	19.29	23.98		-0.80		30	Pass
VHT40	MCS0	2	102	5510	16.60	16.55	19.59	23.98		-0.80		30	Pass
VHT40	MCS0	2	110	5550	19.50	19.85	22.69	23.98		-0.80		30	Pass
VHT40	MCS0	2	134	5670	19.80	19.85	22.84	23.98		-0.80		30	Pass
VHT80	MCS0	2	106	5530	16.00	15.95	18.99	23.98		-0.80		30	Pass
VHT80	MCS0	2	122	5610	19.60	19.75	22.69	23.98		-0.80		30	Pass
VHT160	MCS0	2	114	5570	16.20	16.25	19.24	23.98		-0.80		30	Pass

FCC Band III straddle channel MIMO													
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 4	Ant 3	SUM	Ant 4	Ant 3	Ant 4	Ant 3		
11a	6Mbps	2	144	5720	18.50	18.55	21.54	23.03		-0.80		30	Pass
HT20	MCS0	2	144	5720	18.60	18.55	21.59	23.98		-0.80		30	Pass
HT40	MCS0	2	142	5710	19.70	19.75	22.74	23.98		-0.80		30	Pass
VHT20	MCS0	2	144	5720	18.70	18.65	21.69	23.98		-0.80		30	Pass
VHT40	MCS0	2	142	5710	19.80	19.85	22.84	23.98		-0.80		30	Pass
VHT80	MCS0	2	138	5690	19.90	19.75	22.84	23.98		-0.80		30	Pass

TEST RESULTS DATA
Power Spectral Density

Band III MIMO												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail
					Ant 4	Ant 3	SUM	Ant 4	Ant 3	Ant 4	Ant 3	
11a	6Mbps	2	100	5500			8.29	11.00	1.68		Pass	
11a	6Mbps	2	116	5580			10.79	11.00	1.68		Pass	
11a	6Mbps	2	140	5700			9.44	11.00	1.68		Pass	

Band III straddle channel MIMO												
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail
					Ant 4	Ant 3	SUM	Ant 4	Ant 3	Ant 4	Ant 3	
11a	6Mbps	2	144	5720			10.80	11.00	1.68		Pass	

TEST RESULTS DATA
26dB and 99% OBW

Band I MIMO														
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	RU Config.	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		Note
						Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	
HE20	MCS0	2	36	5180	Full	19.18	19.18	21.74	21.80	-	-	22.83	22.83	
HE20	MCS0	2	44	5220	Full	19.18	19.18	22.46	25.00	-	-	22.83	22.83	
HE20	MCS0	2	48	5240	Full	19.18	19.18	22.61	24.16	-	-	22.83	22.83	
HE40	MCS0	2	38	5190	Full	37.86	37.86	39.96	39.78	-	-	23.01	23.01	
HE40	MCS0	2	46	5230	Full	38.76	38.86	68.94	73.00	-	-	23.01	23.01	
HE80	MCS0	2	42	5210	Full	77.08	76.96	82.40	81.60	-	-	23.01	23.01	
HE160	MCS0	2	50	5250	Full	156.56	156.56	166.08	164.48	-	-	23.01	23.01	

TEST RESULTS DATA
Average Power Table

FCC Band I MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
						Ant 4	Ant 3	SUM	Ant 4	Ant 3	Ant 4	Ant 3	
HE20	MCS0	2	36	5180	Full	17.30	17.15	20.24	24.00	24.00	-0.40	-0.40	Pass
HE20	MCS0	2	36	5180	26/0	7.90	8.35	11.14	24.00	24.00	-0.40	-0.40	Pass
HE20	MCS0	2	36	5180	52/37	10.90	10.85	13.89	24.00	24.00	-0.40	-0.40	Pass
HE20	MCS0	2	36	5180	106/53	13.80	13.65	16.74	24.00	24.00	-0.40	-0.40	Pass
HE20	MCS0	2	44	5220	Full	17.90	17.85	20.89	24.00	24.00	-0.40	-0.40	Pass
HE20	MCS0	2	44	5220	26/4	9.90	9.55	12.74	24.00	24.00	-0.40	-0.40	Pass
HE20	MCS0	2	44	5220	52/39	14.10	14.15	17.14	24.00	24.00	-0.40	-0.40	Pass
HE20	MCS0	2	44	5220	106/53	14.50	14.45	17.49	24.00	24.00	-0.40	-0.40	Pass
HE20	MCS0	2	48	5240	Full	18.10	18.05	21.09	24.00	24.00	-0.40	-0.40	Pass
HE20	MCS0	2	48	5240	26/8	8.00	8.75	11.40	24.00	24.00	-0.40	-0.40	Pass
HE20	MCS0	2	48	5240	52/40	11.40	11.35	14.39	24.00	24.00	-0.40	-0.40	Pass
HE20	MCS0	2	48	5240	106/54	14.30	14.35	17.34	24.00	24.00	-0.40	-0.40	Pass
HE40	MCS0	2	38	5190	Full	16.60	16.25	19.44	24.00	24.00	-0.40	-0.40	Pass
HE40	MCS0	2	46	5230	Full	20.00	19.95	22.99	24.00	24.00	-0.40	-0.40	Pass
HE80	MCS0	2	42	5210	Full	15.60	14.85	18.25	24.00	24.00	-0.40	-0.40	Pass
HE160	MCS0	2	50	5250	Full	15.10	14.75	17.94	24.00	24.00	-0.40	-0.40	Pass

TEST RESULTS DATA
Power Spectral Density

FCC Band I MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail
						Ant 4	Ant 3	SUM	Ant 4	Ant 3	Ant 4	Ant 3	
HE20	MCS0	2	36	5180	Full			9.80	11.00	1.16			Pass
HE20	MCS0	2	36	5180	26/0			9.66	11.00	1.16			Pass
HE20	MCS0	2	36	5180	52/37			9.76	11.00	1.16			Pass
HE20	MCS0	2	36	5180	106/53			9.62	11.00	1.16			Pass
HE20	MCS0	2	44	5220	Full			10.99	11.00	1.16			Pass
HE20	MCS0	2	44	5220	26/4			10.82	11.00	1.16			Pass
HE20	MCS0	2	44	5220	52/39			10.89	11.00	1.16			Pass
HE20	MCS0	2	44	5220	106/53			10.67	11.00	1.16			Pass
HE20	MCS0	2	48	5240	Full			10.40	11.00	1.16			Pass
HE20	MCS0	2	48	5240	26/8			10.26	11.00	1.16			Pass
HE20	MCS0	2	48	5240	52/40			10.31	11.00	1.16			Pass
HE20	MCS0	2	48	5240	106/54			10.30	11.00	1.16			Pass
HE40	MCS0	2	38	5190	Full			6.23	11.00	1.16			Pass
HE40	MCS0	2	46	5230	Full			9.88	11.00	1.16			Pass
HE80	MCS0	2	42	5210	Full			1.99	11.00	1.16			Pass
HE160	MCS0	2	50	5250	Full			-1.34	11.00	1.16			Pass

TEST RESULTS DATA
26dB and 99% OBW

Band II MIMO																
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	RU Config.	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 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	
HE20	MCS0	2	52	5260	Full	19.28	19.23	22.67	27.91	23.84		29.84		23.98		
HE20	MCS0	2	60	5300	Full	19.23	19.23	22.85	25.26	23.84		29.84		23.98		
HE20	MCS0	2	64	5320	Full	19.18	19.23	21.85	21.91	23.83		29.83		23.98		
HE40	MCS0	2	54	5270	Full	38.76	38.86	59.41	57.51	23.98		30.00		23.98		
HE40	MCS0	2	62	5310	Full	37.86	37.86	40.05	39.87	23.98		30.00		23.98		
HE80	MCS0	2	58	5290	Full	77.08	76.96	82.24	81.76	23.98		30.00		23.98		

TEST RESULTS DATA
Average Power Table

FCC Band II MIMO														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
						Ant 4	Ant 3	SUM	Ant 4	Ant 3	Ant 4	Ant 3		
HE20	MCS0	2	52	5260	Full	18.50	18.45	21.49	23.98	23.98	-1.10	-1.10	30	Pass
HE20	MCS0	2	52	5260	26/0	8.90	8.55	11.74	23.98	23.98	-1.10	-1.10	30	Pass
HE20	MCS0	2	52	5260	52/37	12.10	11.95	15.04	23.98	23.98	-1.10	-1.10	30	Pass
HE20	MCS0	2	52	5260	106/53	15.30	14.75	18.04	23.98	23.98	-1.10	-1.10	30	Pass
HE20	MCS0	2	60	5300	Full	18.40	18.35	21.39	23.98	23.98	-1.10	-1.10	30	Pass
HE20	MCS0	2	60	5300	26/4	9.90	9.75	12.84	23.98	23.98	-1.10	-1.10	30	Pass
HE20	MCS0	2	60	5300	52/39	11.60	11.65	14.64	23.98	23.98	-1.10	-1.10	30	Pass
HE20	MCS0	2	60	5300	106/54	14.80	14.75	17.79	23.98	23.98	-1.10	-1.10	30	Pass
HE20	MCS0	2	64	5320	Full	17.40	17.45	20.44	23.98	23.98	-1.10	-1.10	30	Pass
HE20	MCS0	2	64	5320	26/8	7.50	7.65	10.59	23.98	23.98	-1.10	-1.10	30	Pass
HE20	MCS0	2	64	5320	52/40	10.40	10.55	13.49	23.98	23.98	-1.10	-1.10	30	Pass
HE20	MCS0	2	64	5320	106/54	14.00	14.05	17.04	23.98	23.98	-1.10	-1.10	30	Pass
HE40	MCS0	2	54	5270	Full	20.00	19.85	22.94	23.98	23.98	-1.10	-1.10	30	Pass
HE40	MCS0	2	62	5310	Full	15.80	15.95	18.89	23.98	23.98	-1.10	-1.10	30	Pass
HE80	MCS0	2	58	5290	Full	15.50	15.35	18.44	23.98	23.98	-1.10	-1.10	30	Pass

TEST RESULTS DATA
Power Spectral Density

Band II MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail
						Ant 4	Ant 3	SUM	Ant 4	Ant 3	Ant 4	Ant 3	
HE20	MCS0	2	52	5260	Full			10.97	11.00		0.54		Pass
HE20	MCS0	2	52	5260	26/0			10.54	11.00		0.54		Pass
HE20	MCS0	2	52	5260	52/37			10.78	11.00		0.54		Pass
HE20	MCS0	2	52	5260	106/53			10.79	11.00		0.54		Pass
HE20	MCS0	2	60	5300	Full			10.96	11.00		0.54		Pass
HE20	MCS0	2	60	5300	26/4			10.83	11.00		0.54		Pass
HE20	MCS0	2	60	5300	52/39			10.58	11.00		0.54		Pass
HE20	MCS0	2	60	5300	106/54			10.59	11.00		0.54		Pass
HE20	MCS0	2	64	5320	Full			9.92	11.00		0.54		Pass
HE20	MCS0	2	64	5320	26/8			9.59	11.00		0.54		Pass
HE20	MCS0	2	64	5320	52/40			9.52	11.00		0.54		Pass
HE20	MCS0	2	64	5320	106/54			9.83	11.00		0.54		Pass
HE40	MCS0	2	54	5270	Full			9.90	11.00		0.54		Pass
HE40	MCS0	2	62	5310	Full			5.65	11.00		0.54		Pass
HE80	MCS0	2	58	5290	Full			2.00	11.00		0.54		Pass

TEST RESULTS DATA
26dB and 99% OBW

Band III MIMO																	
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	RU Config.	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 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3
HE20	MCS0	2	100	5500	Full	19.18	19.08	21.70	21.60	23.81	23.81	29.81	29.81	23.98	23.98	----	----
HE20	MCS0	2	116	5580	Full	19.28	19.23	26.10	22.61	23.84	23.84	29.84	29.84	23.98	23.98	----	----
HE20	MCS0	2	140	5700	Full	19.18	19.13	21.85	21.85	23.82	23.82	29.82	29.82	23.98	23.98	----	----
HE40	MCS0	2	102	5510	Full	37.96	37.76	39.87	39.60	23.98	23.98	30.00	30.00	23.98	23.98	----	----
HE40	MCS0	2	110	5550	Full	38.66	38.46	57.88	44.47	23.98	23.98	30.00	30.00	23.98	23.98	----	----
HE40	MCS0	2	134	5670	Full	38.36	38.36	58.86	54.64	23.98	23.98	30.00	30.00	23.98	23.98	----	----
HE80	MCS0	2	106	5530	Full	77.08	76.96	82.08	81.76	23.98	23.98	30.00	30.00	23.98	23.98	----	----
HE80	MCS0	2	122	5610	Full	77.32	77.32	130.24	103.52	23.98	23.98	30.00	30.00	23.98	23.98	----	----
HE160	MCS0	2	114	5570	Full	156.56	156.56	165.12	165.44	23.98	23.98	30.00	30.00	23.98	23.98	----	----

Band III straddle channel MIMO																	
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	RU Config.	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 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3	Ant 4	Ant 3
HE20	MCS0	2	144	5720	Full	14.64	14.64	16.05	17.65	22.66	22.66	28.66	28.66	23.06	23.06	4.5	4.45
HE40	MCS0	2	142	5710	Full	34.18	34.18	42.19	38.96	23.98	23.98	30.00	30.00	23.98	23.98	3.72	3.63
HE80	MCS0	2	138	5690	Full	73.60	73.60	92.60	96.60	23.98	23.98	30.00	30.00	23.98	23.98	3.562	3.082

TEST RESULTS DATA
Average Power Table

FCC Band III MIMO														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
						Ant 4	Ant 3	SUM	Ant 4	Ant 3	Ant 4	Ant 3		
HE20	MCS0	2	100	5500	Full	15.80	15.75	18.79	23.98		-0.80	30	Pass	
HE20	MCS0	2	100	5500	26/0	5.90	5.85	8.89	23.98		-0.80	30	Pass	
HE20	MCS0	2	100	5500	52/37	9.30	9.75	12.54	23.98		-0.80	30	Pass	
HE20	MCS0	2	100	5500	106/53	11.80	12.35	15.09	23.98		-0.80	30	Pass	
HE20	MCS0	2	116	5580	Full	18.50	18.75	21.64	23.98		-0.80	30	Pass	
HE20	MCS0	2	116	5580	26/4	9.70	9.95	12.84	23.98		-0.80	30	Pass	
HE20	MCS0	2	116	5580	52/38	11.40	11.65	14.54	23.98		-0.80	30	Pass	
HE20	MCS0	2	116	5580	106/53	14.90	14.85	17.89	23.98		-0.80	30	Pass	
HE20	MCS0	2	140	5700	Full	16.50	16.25	19.39	23.98		-0.80	30	Pass	
HE20	MCS0	2	140	5700	26/8	6.90	6.65	9.79	23.98		-0.80	30	Pass	
HE20	MCS0	2	140	5700	52/40	9.50	9.35	12.44	23.98		-0.80	30	Pass	
HE20	MCS0	2	140	5700	106/54	12.70	12.35	15.54	23.98		-0.80	30	Pass	
HE40	MCS0	2	102	5510	Full	16.70	16.65	19.69	23.98		-0.80	30	Pass	
HE40	MCS0	2	110	5550	Full	19.60	19.95	22.79	23.98		-0.80	30	Pass	
HE40	MCS0	2	134	5670	Full	19.90	19.95	22.94	23.98		-0.80	30	Pass	
HE80	MCS0	2	106	5530	Full	16.10	16.05	19.09	23.98		-0.80	30	Pass	
HE80	MCS0	2	122	5610	Full	19.70	19.85	22.79	23.98		-0.80	30	Pass	
HE160	MCS0	2	114	5570	Full	16.30	16.35	19.34	23.98		-0.80	30	Pass	

FCC Band III straddle channel MIMO														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
						Ant 4	Ant 3	SUM	Ant 4	Ant 3	Ant 4	Ant 3		
HE20	MCS0	2	144	5720	Full	18.80	18.75	21.79	23.06		-0.80	30	Pass	
HE20	MCS0	2	144	5720	26/8	9.10	8.75	11.94	23.06		-0.80	30	Pass	
HE20	MCS0	2	144	5720	52/40	11.50	11.25	14.39	23.06		-0.80	30	Pass	
HE20	MCS0	2	144	5720	106/54	15.10	14.65	17.89	23.06		-0.80	30	Pass	
HE40	MCS0	2	142	5710	Full	19.90	19.95	22.94	23.98		-0.80	30	Pass	
HE80	MCS0	2	138	5690	Full	20.00	19.85	22.94	23.98		-0.80	30	Pass	

TEST RESULTS DATA
Power Spectral Density

Band III MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail
						Ant 4	Ant 3	SUM	Ant 4	Ant 3	Ant 4	Ant 3	
HE20	MCS0	2	100	5500	Full			8.41		11.00		1.68	Pass
HE20	MCS0	2	100	5500	26/0			8.00		11.00		1.68	Pass
HE20	MCS0	2	100	5500	52/37			8.39		11.00		1.68	Pass
HE20	MCS0	2	100	5500	106/53			8.27		11.00		1.68	Pass
HE20	MCS0	2	116	5580	Full			10.98		11.00		1.68	Pass
HE20	MCS0	2	116	5580	26/4			10.87		11.00		1.68	Pass
HE20	MCS0	2	116	5580	52/38			10.79		11.00		1.68	Pass
HE20	MCS0	2	116	5580	106/53			10.89		11.00		1.68	Pass
HE20	MCS0	2	140	5700	Full			8.61		11.00		1.68	Pass
HE20	MCS0	2	140	5700	26/8			8.56		11.00		1.68	Pass
HE20	MCS0	2	140	5700	52/40			8.44		11.00		1.68	Pass
HE20	MCS0	2	140	5700	106/54			8.59		11.00		1.68	Pass
HE40	MCS0	2	102	5510	Full			6.54		11.00		1.68	Pass
HE40	MCS0	2	110	5550	Full			9.80		11.00		1.68	Pass
HE40	MCS0	2	134	5670	Full			9.56		11.00		1.68	Pass
HE80	MCS0	2	106	5530	Full			2.79		11.00		1.68	Pass
HE80	MCS0	2	122	5610	Full			6.50		11.00		1.68	Pass
HE160	MCS0	2	114	5570	Full			0.10		11.00		1.68	Pass

Band III straddle channel MIMO													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail
						Ant 4	Ant 3	SUM	Ant 4	Ant 3	Ant 4	Ant 3	
HE20	MCS0	2	144	5720	Full			10.89		11.00		1.68	Pass
HE20	MCS0	2	144	5720	26/8			10.75		11.00		1.68	Pass
HE20	MCS0	2	144	5720	52/40			10.46		11.00		1.68	Pass
HE20	MCS0	2	144	5720	106/54			10.83		11.00		1.68	Pass
HE40	MCS0	2	142	5710	Full			9.37		11.00		1.68	Pass
HE80	MCS0	2	138	5690	Full			6.49		11.00		1.68	Pass



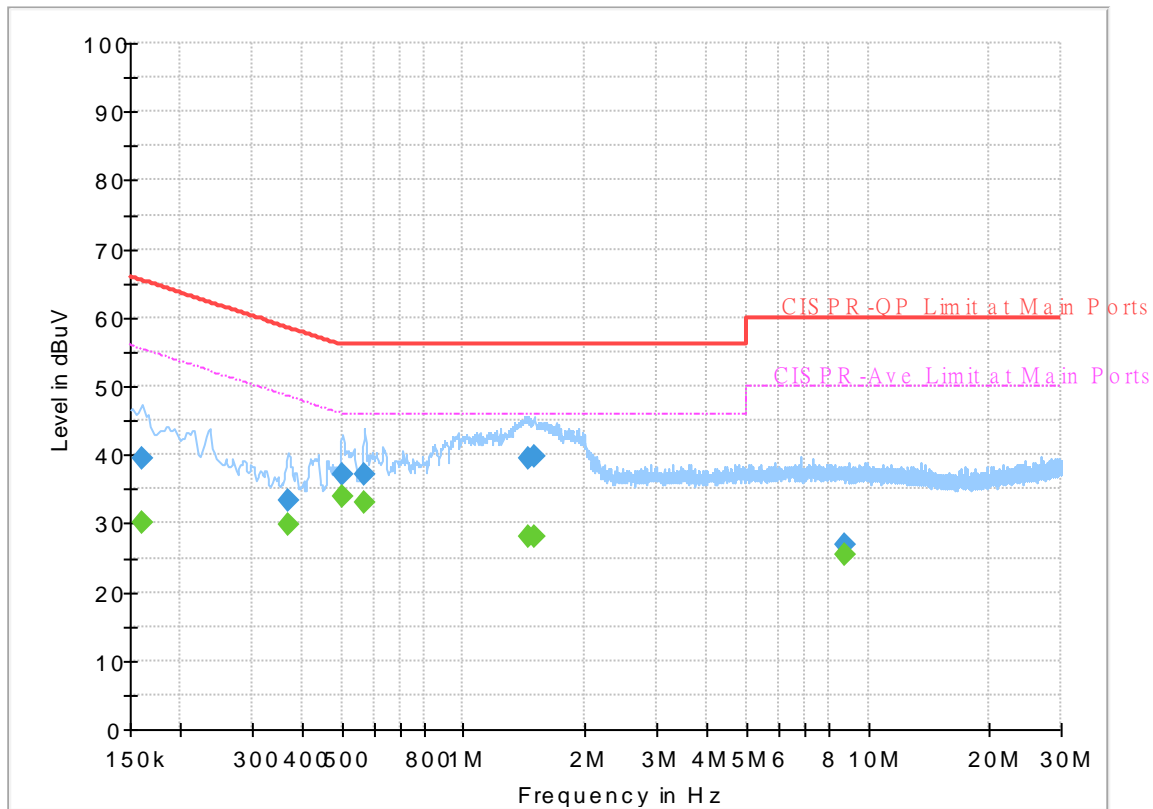
Appendix B. AC Conducted Emission Test Results

Test Engineer :	Howard Huang	Temperature :	23~26°C
		Relative Humidity :	40~50%

EUT Information

Report NO : 0D2942-04
 Test Mode : Mode 1
 Test Voltage : 120Vac/60Hz
 Phase : Line

Full Spectrum



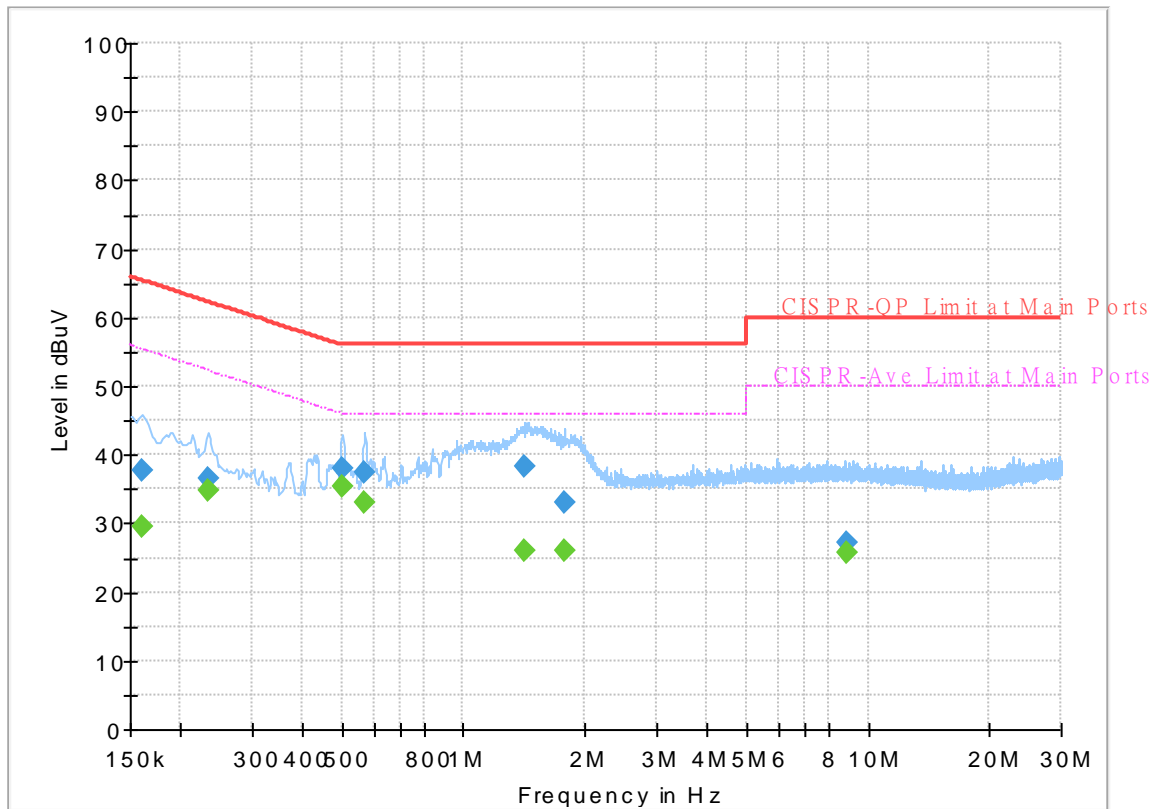
Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.161250	---	30.10	55.40	25.30	L1	OFF	19.5
0.161250	39.37	---	65.40	26.03	L1	OFF	19.5
0.368250	---	29.86	48.54	18.68	L1	OFF	19.5
0.368250	33.19	---	58.54	25.35	L1	OFF	19.5
0.503250	---	33.96	46.00	12.04	L1	OFF	19.7
0.503250	37.11	---	56.00	18.89	L1	OFF	19.7
0.568500	---	32.97	46.00	13.03	L1	OFF	19.7
0.568500	37.24	---	56.00	18.76	L1	OFF	19.7
1.441500	---	27.99	46.00	18.01	L1	OFF	20.0
1.441500	39.43	---	56.00	16.57	L1	OFF	20.0
1.493250	---	28.07	46.00	17.93	L1	OFF	20.0
1.493250	39.67	---	56.00	16.33	L1	OFF	20.0
8.720250	---	25.54	50.00	24.46	L1	OFF	20.0
8.720250	26.97	---	60.00	33.03	L1	OFF	20.0

EUT Information

Report NO : 0D2942-04
 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)
0.161250	---	29.57	55.40	25.83	N	OFF	19.5
0.161250	37.73	---	65.40	27.67	N	OFF	19.5
0.233250	---	34.72	52.33	17.61	N	OFF	19.5
0.233250	36.55	---	62.33	25.78	N	OFF	19.5
0.501000	---	35.43	46.00	10.57	N	OFF	19.7
0.501000	37.94	---	56.00	18.06	N	OFF	19.7
0.568500	---	32.94	46.00	13.06	N	OFF	19.8
0.568500	37.37	---	56.00	18.63	N	OFF	19.8
1.421250	---	25.88	46.00	20.12	N	OFF	20.0
1.421250	38.22	---	56.00	17.78	N	OFF	20.0
1.783500	---	26.00	46.00	20.00	N	OFF	20.0
1.783500	33.06	---	56.00	22.94	N	OFF	20.0
8.828250	---	25.74	50.00	24.26	N	OFF	20.0
8.828250	27.19	---	60.00	32.81	N	OFF	20.0



Appendix C. Radiated Spurious Emission

Test Engineer :	Daniel Lee, Jacky Hong and Wilson Wu	Temperature :	20~25°C
		Relative Humidity :	40~60%

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

WIFI Ant.	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamplifier Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11a CH 36 5180MHz		5143.78	62.92	-11.08	74	52.14	31.91	6.28	27.41	110	312	P	H	
		5149.76	51.64	-2.36	54	40.87	31.9	6.28	27.41	110	312	A	H	
	*	5180	114.14	-	-	103.48	31.78	6.28	27.4	110	312	P	H	
	*	5180	107.02	-	-	96.36	31.78	6.28	27.4	110	312	A	H	
													H	
														H
			5149.76	59.04	-14.96	74	48.27	31.9	6.28	27.41	400	345	P	V
			5150	48.37	-5.63	54	37.6	31.9	6.28	27.41	400	345	A	V
	*		5180	111.45	-	-	100.79	31.78	6.28	27.4	400	345	P	V
	*		5180	103.62	-	-	92.96	31.78	6.28	27.4	400	345	A	V
														V
														V
802.11a CH 44 5220MHz		5142.74	54.54	-19.46	74	43.76	31.91	6.28	27.41	100	314	P	H	
		5131.56	44.56	-9.44	54	33.77	31.94	6.27	27.42	100	314	A	H	
	*	5220	114.13	-	-	103.68	31.54	6.3	27.39	100	314	P	H	
	*	5220	106.97	-	-	96.52	31.54	6.3	27.39	100	314	A	H	
			5360.6	55.34	-18.66	74	44.99	31.34	6.37	27.36	100	314	P	H
			5356.4	43.25	-10.75	54	32.91	31.33	6.37	27.36	100	314	A	H
			5100.88	54.69	-19.31	74	43.84	32	6.27	27.42	392	347	P	V
			5114.14	43.97	-10.03	54	33.15	31.97	6.27	27.42	392	347	A	V
	*		5220	110.4	-	-	99.95	31.54	6.3	27.39	392	347	P	V
	*		5220	102.89	-	-	92.44	31.54	6.3	27.39	392	347	A	V
			5391.12	50.78	-23.22	74	40.28	31.46	6.39	27.35	392	347	P	V
			5411.84	42.18	-11.82	54	31.58	31.55	6.39	27.34	392	347	A	V



802.11a CH 48 5240MHz		5120.64	54.69	-19.31	74	43.88	31.96	6.27	27.42	116	321	P	H
		5100.1	44.61	-9.39	54	33.76	32	6.27	27.42	116	321	A	H
	*	5240	114.1	-	-	103.8	31.38	6.31	27.39	116	321	P	H
	*	5240	106.92	-	-	96.62	31.38	6.31	27.39	116	321	A	H
		5386.92	55.84	-18.16	74	45.36	31.45	6.38	27.35	116	321	P	H
		5361.44	43.3	-10.7	54	32.94	31.35	6.37	27.36	116	321	A	H
		5109.72	53.03	-20.97	74	42.2	31.98	6.27	27.42	389	346	P	V
		5117.52	44.08	-9.92	54	33.27	31.96	6.27	27.42	389	346	A	V
	*	5240	109.83	-	-	99.53	31.38	6.31	27.39	389	346	P	V
	*	5240	102.42	-	-	92.12	31.38	6.31	27.39	389	346	A	V
		5377.4	51.37	-22.63	74	40.93	31.41	6.38	27.35	389	346	P	V
		5458.04	42.29	-11.71	54	31.49	31.72	6.41	27.33	389	346	A	V
Remark	<ol style="list-style-type: none"> 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. 4+3	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	47.56	-20.64	68.2	54.03	39.84	10.15	56.46	100	0	P	H	
		15540	44.88	-29.12	74	50.43	38.6	12.03	56.18	100	0	P	H	
		18000	56.88	-17.12	74	52.3	48.1	13.2	56.72	254	195	P	H	
		18000	46.78	-7.22	54	42.2	48.1	13.2	56.72	254	195	A	H	
													H	
													H	
			10360	48.56	-19.64	68.2	55.03	39.84	10.15	56.46	100	0	P	V
			15540	46.93	-27.07	74	52.48	38.6	12.03	56.18	100	0	P	V
			17978	56.55	-17.45	74	52.6	47.48	13.19	56.72	298	206	P	V
			17978	46.35	-7.65	54	42.4	47.48	13.19	56.72	298	206	A	V
													V	
													V	
802.11a CH 44 5220MHz		10440	48.04	-20.16	68.2	54.35	39.96	10.19	56.46	100	0	P	H	
		15660	44.47	-29.53	74	50.06	38.3	12.04	55.93	100	0	P	H	
		17978	55.95	-18.05	74	52	47.48	13.19	56.72	212	188	P	H	
		17978	46.05	-7.95	54	42.1	47.48	13.19	56.72	212	188	A	H	
													H	
													H	
			10440	48.18	-20.02	68.2	54.49	39.96	10.19	56.46	100	0	P	V
			15660	46.48	-27.52	74	52.07	38.3	12.04	55.93	100	0	P	V
			17967	56.43	-17.57	74	52.8	47.18	13.17	56.72	285	218	P	V
			17967	46.23	-7.77	54	42.6	47.18	13.17	56.72	285	218	A	V
													V	
													V	



802.11a CH 48 5240MHz		10480	47.51	-20.69	68.2	53.84	39.92	10.21	56.46	100	0	P	H
		15720	44.85	-29.15	74	50.38	38.22	12.05	55.8	100	0	P	H
		18000	56.38	-17.62	74	51.8	48.1	13.2	56.72	265	302	P	H
		18000	46.68	-7.32	54	42.1	48.1	13.2	56.72	265	302	A	H
													H
													H
		10480	48.93	-19.27	68.2	55.26	39.92	10.21	56.46	100	0	P	V
		15720	46.14	-27.86	74	51.67	38.22	12.05	55.8	100	0	P	V
		18000	56.28	-17.72	74	51.7	48.1	13.2	56.72	287	208	P	V
		18000	46.88	-7.12	54	42.3	48.1	13.2	56.72	287	208	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz
WIFI 802.11ax HE20 Full (Band Edge @ 3m)

WIFI Ant. 4+3	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)	
802.11ax HE20 Full CH 36 5180MHz		5145.34	59.71	-14.29	74	48.93	31.91	6.28	27.41	109	312	P	H	
		5148.98	50.97	-3.03	54	40.2	31.9	6.28	27.41	109	312	A	H	
	*	5180	113.21	-	-	102.55	31.78	6.28	27.4	109	312	P	H	
	*	5180	103.9	-	-	93.24	31.78	6.28	27.4	109	312	A	H	
													H	
														H
			5147.94	59.46	-14.54	74	48.69	31.9	6.28	27.41	400	347	P	V
			5148.98	47.51	-6.49	54	36.74	31.9	6.28	27.41	400	347	A	V
		*	5180	109.32	-	-	98.66	31.78	6.28	27.4	400	347	P	V
		*	5180	100.76	-	-	90.1	31.78	6.28	27.4	400	347	A	V
													V	
													V	
802.11ax HE20 Full CH 44 5220MHz		5143	55.64	-18.36	74	44.86	31.91	6.28	27.41	124	314	P	H	
		5133.12	45.14	-8.86	54	34.36	31.93	6.27	27.42	124	314	A	H	
		* 5220	113.78	-	-	103.33	31.54	6.3	27.39	124	314	P	H	
		* 5220	104.69	-	-	94.24	31.54	6.3	27.39	124	314	A	H	
			5375.72	52.81	-21.19	74	42.38	31.4	6.38	27.35	124	314	P	H
			5403.44	43.73	-10.27	54	33.18	31.51	6.39	27.35	124	314	A	H
			5137.8	54.2	-19.8	74	43.42	31.92	6.27	27.41	393	346	P	V
			5105.82	44.74	-9.26	54	33.9	31.99	6.27	27.42	393	346	A	V
		*	5220	109.46	-	-	99.01	31.54	6.3	27.39	393	346	P	V
		*	5220	100.63	-	-	90.18	31.54	6.3	27.39	393	346	A	V
		5393.64	52.98	-21.02	74	42.47	31.47	6.39	27.35	393	346	P	V	
		5452.72	42.95	-11.05	54	32.16	31.71	6.41	27.33	393	346	A	V	



802.11ax HE20 Full CH 48 5240MHz		5146.64	54.02	-19.98	74	43.24	31.91	6.28	27.41	100	317	P	H
		5089.18	44.08	-9.92	54	33.31	31.94	6.26	27.43	100	317	A	H
	*	5240	114.11	-	-	103.81	31.38	6.31	27.39	100	317	P	H
	*	5240	104.32	-	-	94.02	31.38	6.31	27.39	100	317	A	H
		5367.6	56.13	-17.87	74	45.74	31.37	6.37	27.35	100	317	P	H
		5356.4	43.17	-10.83	54	32.83	31.33	6.37	27.36	100	317	A	H
		5106.86	52.52	-21.48	74	41.68	31.99	6.27	27.42	316	110	P	V
		5100.62	43.77	-10.23	54	32.92	32	6.27	27.42	316	110	A	V
	*	5240	110.49	-	-	100.19	31.38	6.31	27.39	316	110	P	V
	*	5240	101.43	-	-	91.13	31.38	6.31	27.39	316	110	A	V
		5365.64	54.94	-19.06	74	44.56	31.36	6.37	27.35	316	110	P	V
		5447.12	42.48	-11.52	54	31.72	31.69	6.4	27.33	316	110	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11ax HE20 Full (Harmonic @ 3m)

WIFI Ant. 4+3	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)	
802.11ax HE20 Full CH 36 5180MHz		10360	47.53	-20.67	68.2	54	39.84	10.15	56.46	100	0	P	H	
		15540	44.72	-29.28	74	50.27	38.6	12.03	56.18	100	0	P	H	
		17978	56.25	-17.75	74	52.3	47.48	13.19	56.72	241	205	P	H	
		17978	46.35	-7.65	54	42.4	47.48	13.19	56.72	241	205	A	H	
													H	
													H	
			10360	48.35	-19.85	68.2	54.82	39.84	10.15	56.46	100	0	P	V
			15540	45	-29	74	50.55	38.6	12.03	56.18	100	0	P	V
			17978	56.55	-17.45	74	52.6	47.48	13.19	56.72	285	245	P	V
			17978	46.25	-7.75	54	42.3	47.48	13.19	56.72	285	245	A	V
													V	
													V	
802.11ax HE20 Full CH 44 5220MHz		10440	48.38	-19.82	68.2	54.69	39.96	10.19	56.46	100	0	P	H	
		15660	44.35	-29.65	74	49.94	38.3	12.04	55.93	100	0	P	H	
		17978	56.15	-17.85	74	52.2	47.48	13.19	56.72	287	209	P	H	
		17978	46.15	-7.85	54	42.2	47.48	13.19	56.72	287	209	A	H	
													H	
													H	
			10440	48.02	-20.18	68.2	54.33	39.96	10.19	56.46	100	0	P	V
			15660	45.24	-28.76	74	50.83	38.3	12.04	55.93	100	0	P	V
			17989	56.86	-17.14	74	52.6	47.79	13.19	56.72	296	305	P	V
			17989	46.66	-7.34	54	42.4	47.79	13.19	56.72	296	305	A	V
													V	
													V	



802.11ax HE20 Full CH 48 5240MHz		10480	47.9	-20.3	68.2	54.23	39.92	10.21	56.46	100	0	P	H
		15720	44.95	-29.05	74	50.48	38.22	12.05	55.8	100	0	P	H
		17989	56.16	-17.84	74	51.9	47.79	13.19	56.72	247	195	P	H
		17989	46.36	-7.64	54	42.1	47.79	13.19	56.72	247	195	A	H
													H
													H
		10480	48.32	-19.88	68.2	54.65	39.92	10.21	56.46	100	0	P	V
		15720	44.99	-29.01	74	50.52	38.22	12.05	55.8	100	0	P	V
		17978	56.25	-17.75	74	52.3	47.48	13.19	56.72	265	296	P	V
		17978	45.95	-8.05	54	42	47.48	13.19	56.72	265	296	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz
WIFI 802.11ax HE40 Full (Band Edge @ 3m)

WIFI Ant. 4+3	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)	
802.11ax HE40 Full CH 38 5190MHz		5150	59.39	-14.61	74	48.62	31.9	6.28	27.41	100	315	P	H	
		5149.76	52.43	-1.57	54	41.66	31.9	6.28	27.41	100	315	A	H	
	*	5190	109.08	-	-	98.45	31.74	6.29	27.4	100	315	P	H	
	*	5190	99.39	-	-	88.76	31.74	6.29	27.4	100	315	A	H	
		5412.96	51.71	-22.29	74	41.11	31.55	6.39	27.34	100	315	P	H	
		5354.72	42.54	-11.46	54	32.21	31.32	6.37	27.36	100	315	A	H	
		5149.24	59.05	-14.95	74	48.28	31.9	6.28	27.41	312	110	P	V	
		5150.02	48.93	-101.07	150	38.16	31.9	6.28	27.41	312	110	A	V	
	*	5190	104.61	-	-	93.98	31.74	6.29	27.4	312	110	P	V	
	*	5190	95.58	-	-	84.95	31.74	6.29	27.4	312	110	A	V	
		5418.28	51.24	-22.76	74	40.61	31.57	6.4	27.34	312	110	P	V	
		5448.24	42.18	-11.82	54	31.42	31.69	6.4	27.33	312	110	A	V	
	802.11ax HE40 Full CH 46 5230MHz		5147.94	58.18	-15.82	74	47.41	31.9	6.28	27.41	100	316	P	H
			5150	49.12	-4.88	54	38.35	31.9	6.28	27.41	100	316	A	H
*		5230	113.21	-	-	102.84	31.46	6.3	27.39	100	316	P	H	
*		5230	103.57	-	-	93.2	31.46	6.3	27.39	100	316	A	H	
		5368.72	52.76	-21.24	74	42.37	31.37	6.37	27.35	100	316	P	H	
		5357.8	44.65	-9.35	54	34.31	31.33	6.37	27.36	100	316	A	H	
		5147.16	55.75	-18.25	74	44.97	31.91	6.28	27.41	278	122	P	V	
		5150	46.78	-7.22	54	36.01	31.9	6.28	27.41	278	122	A	V	
*		5230	109.71	-	-	99.34	31.46	6.3	27.39	278	122	P	V	
*		5230	100.85	-	-	90.48	31.46	6.3	27.39	278	122	A	V	
	5403.72	51.82	-22.18	74	41.27	31.51	6.39	27.35	278	122	P	V		
	5387.2	43.57	-10.43	54	33.09	31.45	6.38	27.35	278	122	A	V		
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



Band 1 5150~5250MHz

WIFI 802.11ax HE40 Full (Harmonic @ 3m)

WIFI Ant. 4+3	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)	
802.11ax HE40 Full CH 38 5190MHz		10380	47.32	-20.88	68.2	53.7	39.92	10.16	56.46	100	0	P	H	
		15570	45.08	-28.92	74	50.72	38.45	12.03	56.12	100	0	P	H	
		17978	56.25	-17.75	74	52.3	47.48	13.19	56.72	255	220	P	H	
		17978	46.35	-7.65	54	42.4	47.48	13.19	56.72	255	220	A	H	
													H	
													H	
			10380	47.16	-21.04	68.2	53.54	39.92	10.16	56.46	100	0	P	V
			15570	45.71	-28.29	74	51.35	38.45	12.03	56.12	100	0	P	V
			18000	57.08	-16.92	74	52.5	48.1	13.2	56.72	298	228	P	V
			18000	46.68	-7.32	54	42.1	48.1	13.2	56.72	298	228	A	V
													V	
													V	
802.11ax HE40 Full CH 46 5230MHz		10460	47.9	-20.3	68.2	54.22	39.94	10.2	56.46	100	0	P	H	
		15690	44.53	-29.47	74	50.05	38.3	12.04	55.86	100	0	P	H	
		17989	56.16	-17.84	74	51.9	47.79	13.19	56.72	255	220	P	H	
		17989	46.46	-7.54	54	42.2	47.79	13.19	56.72	255	220	A	H	
													H	
													H	
			10460	47.98	-20.22	68.2	54.3	39.94	10.2	56.46	100	0	P	V
			15690	49.09	-24.91	74	54.61	38.3	12.04	55.86	100	0	P	V
			18000	56.88	-17.12	74	52.3	48.1	13.2	56.72	305	263	P	V
			18000	46.68	-7.32	54	42.1	48.1	13.2	56.72	305	263	A	V
													V	
													V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



Band 1 5150~5250MHz
WIFI 802.11ax HE80 Full (Band Edge @ 3m)

WIFI Ant. 4+3	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)
802.11ax HE80 Full CH 42 5210MHz		5137.02	61.46	-12.54	74	50.67	31.93	6.27	27.41	100	315	P	H
		5150	49.86	-4.14	54	39.09	31.9	6.28	27.41	100	315	A	H
	*	5210	107.51	-	-	96.99	31.62	6.3	27.4	100	315	P	H
	*	5210	97.32	-	-	86.8	31.62	6.3	27.4	100	315	A	H
		5366.48	51.37	-22.63	74	40.98	31.37	6.37	27.35	100	315	P	H
		5350.24	43.27	-10.73	54	32.96	31.3	6.37	27.36	100	315	A	H
		5145.34	57.7	-16.3	74	46.92	31.91	6.28	27.41	400	351	P	V
		5144.56	47.74	-6.26	54	36.96	31.91	6.28	27.41	400	351	A	V
	*	5210	103.37	-	-	92.85	31.62	6.3	27.4	400	351	P	V
	*	5210	93.79	-	-	83.27	31.62	6.3	27.4	400	351	A	V
	5414.36	51.07	-22.93	74	40.46	31.56	6.39	27.34	400	351	P	V	
	5449.92	42.19	-11.81	54	31.42	31.7	6.4	27.33	400	351	A	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11ax HE80 Full (Harmonic @ 3m)

WIFI Ant. 4+3	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)	
802.11ax HE80 Full CH 42 5210MHz		10420	46.86	-21.34	68.2	53.16	39.98	10.18	56.46	100	0	P	H	
		15630	45.43	-28.57	74	51.09	38.3	12.03	55.99	100	0	P	H	
		18000	56.38	-17.62	74	51.8	48.1	13.2	56.72	246	236	P	H	
		18000	46.78	-7.22	54	42.2	48.1	13.2	56.72	246	236	A	H	
													H	
														H
			10420	46.96	-21.24	68.2	53.26	39.98	10.18	56.46	100	0	P	V
			15630	44.87	-29.13	74	50.53	38.3	12.03	55.99	100	0	P	V
			17967	55.83	-18.17	74	52.2	47.18	13.17	56.72	279	189	P	V
			17967	45.93	-8.07	54	42.3	47.18	13.17	56.72	279	189	A	V
													V	
													V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



Band 1 5150~5250MHz

WIFI 802.11ax HE160 Full (Band Edge @ 3m)

WIFI Ant. 4+3	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)
802.11ax HE160 Full CH 50 5250MHz		5139.1	57.79	-16.21	74	47.01	31.92	6.27	27.41	100	314	P	H
		5149.76	46.43	-7.57	54	35.66	31.9	6.28	27.41	100	314	A	H
	*	5250	103.21	-	-	92.98	31.3	6.32	27.39	100	314	P	H
	*	5250	94.21	-	-	83.98	31.3	6.32	27.39	100	314	A	H
		5384.12	60.24	-13.76	74	49.77	31.44	6.38	27.35	100	314	P	H
		5351.92	51.74	-2.26	54	41.42	31.31	6.37	27.36	100	314	A	H
		5149.5	55.88	-18.12	74	45.11	31.9	6.28	27.41	344	355	P	V
		5146.9	45.37	-8.63	54	34.59	31.91	6.28	27.41	344	355	A	V
	*	5250	101.12	-	-	90.89	31.3	6.32	27.39	344	355	P	V
	*	5250	90.35	-	-	80.12	31.3	6.32	27.39	344	355	A	V
		5408.76	57.61	-16.39	74	47.02	31.54	6.39	27.34	344	355	P	V
		5352.48	47.32	-6.68	54	37	31.31	6.37	27.36	344	355	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11ax HE80 Full (Harmonic @ 3m)

WIFI Ant. 4+3	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)	
802.11ax HE160 Full CH 50 5250MHz		10500	48.11	-20.09	68.2	54.45	39.9	10.22	56.46	100	0	P	H	
		15750	45.4	-28.6	74	50.99	38.1	12.05	55.74	100	0	P	H	
		17978	55.74	-18.26	74	51.79	47.48	13.19	56.72	118	191	P	H	
		17978	47.5	-6.5	54	43.55	47.48	13.19	56.72	118	191	A	H	
													H	
													H	
			10500	47.39	-20.81	68.2	53.73	39.9	10.22	56.46	100	0	P	V
			15750	45.15	-28.85	74	50.74	38.1	12.05	55.74	100	0	P	V
			17989	56.34	-17.66	74	52.08	47.79	13.19	56.72	174	212	P	V
			17989	47.91	-6.09	54	43.65	47.79	13.19	56.72	174	212	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 (Band Edge @ 3m)

WiFi Ant. 4+3	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		5140.76	56.02	-17.98	74	45.23	31.92	6.28	27.41	122	319	P	H
		5139.74	44.86	-9.14	54	34.08	31.92	6.27	27.41	122	319	A	H
	*	5260	117.35	-	-	107.11	31.3	6.32	27.38	122	319	P	H
	*	5260	109.78	-	-	99.54	31.3	6.32	27.38	122	319	A	H
		5386.32	59.83	-14.17	74	49.35	31.45	6.38	27.35	122	319	P	H
		5359.92	43.9	-10.1	54	33.55	31.34	6.37	27.36	122	319	A	H
		5127.84	57.7	-16.3	74	46.91	31.94	6.27	27.42	306	117	P	V
		5107.44	43.82	-10.18	54	32.98	31.99	6.27	27.42	306	117	A	V
	*	5260	113.22	-	-	102.98	31.3	6.32	27.38	306	117	P	V
	*	5260	105.39	-	-	95.15	31.3	6.32	27.38	306	117	A	V
		5386.56	60.43	-13.57	74	49.95	31.45	6.38	27.35	306	117	P	V
		5381.04	43.05	-10.95	54	32.6	31.42	6.38	27.35	306	117	A	V
802.11a CH 60 5300MHz		5144.5	58.34	-15.66	74	47.56	31.91	6.28	27.41	112	322	P	H
		5131.92	45.01	-8.99	54	34.22	31.94	6.27	27.42	112	322	A	H
	*	5300	117.65	-	-	107.38	31.3	6.34	27.37	112	322	P	H
	*	5300	109.95	-	-	99.68	31.3	6.34	27.37	112	322	A	H
		5350.32	65.93	-8.07	74	55.62	31.3	6.37	27.36	112	322	P	H
		5352.24	47.89	-6.11	54	37.57	31.31	6.37	27.36	112	322	A	H
		5133.62	54.82	-19.18	74	44.04	31.93	6.27	27.42	382	348	P	V
		5130.9	44.04	-9.96	54	33.25	31.94	6.27	27.42	382	348	A	V
	*	5300	112.08	-	-	101.81	31.3	6.34	27.37	382	348	P	V
	*	5300	104.62	-	-	94.35	31.3	6.34	27.37	382	348	A	V
		5358.48	60.6	-13.4	74	50.26	31.33	6.37	27.36	382	348	P	V
		5350.08	43.92	-10.08	54	33.61	31.3	6.37	27.36	382	348	A	V



802.11a CH 64 5320MHz	*	5320	115.2	-	-	104.92	31.3	6.35	27.37	126	323	P	H
	*	5320	107.23	-	-	96.95	31.3	6.35	27.37	126	323	A	H
		5351.2	67.33	-6.67	74	57.02	31.3	6.37	27.36	126	323	P	H
		5352.16	51.02	-2.98	54	40.7	31.31	6.37	27.36	126	323	A	H
													H
													H
	*	5320	109.42	-	-	99.14	31.3	6.35	27.37	400	349	P	V
	*	5320	101.83	-	-	91.55	31.3	6.35	27.37	400	349	A	V
		5354.88	63.65	-10.35	74	53.32	31.32	6.37	27.36	400	349	P	V
		5350.08	47.81	-6.19	54	37.5	31.3	6.37	27.36	400	349	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. 4+3	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	47.41	-20.79	68.2	53.65	39.96	10.23	56.43	100	0	P	H	
		15780	45.88	-28.12	74	51.52	37.98	12.05	55.67	100	0	P	H	
		18000	54.84	-19.16	74	50.26	48.1	13.2	56.72	171	219	P	H	
		18000	44.93	-9.07	54	40.35	48.1	13.2	56.72	171	219	A	H	
													H	
														H
			10520	48.62	-19.58	68.2	54.86	39.96	10.23	56.43	100	0	P	V
			15780	59.36	-14.64	74	65	37.98	12.05	55.67	100	4	P	V
			15780	46.97	-7.03	54	52.61	37.98	12.05	55.67	100	4	A	V
			17989	55.56	-18.44	74	51.3	47.79	13.19	56.72	100	158	P	V
			17989	45.43	-8.57	54	41.17	47.79	13.19	56.72	100	158	A	V
														V
802.11a CH 60 5300MHz		10600	49.43	-24.57	74	55.28	40.2	10.27	56.32	100	0	P	H	
		15900	47.85	-26.15	74	53.39	37.8	12.07	55.41	100	0	P	H	
		17989	55.6	-18.4	74	51.34	47.79	13.19	56.72	192	208	P	H	
		17989	45.65	-8.35	54	41.39	47.79	13.19	56.72	192	208	A	H	
													H	
														H
			10600	49.24	-24.76	74	55.09	40.2	10.27	56.32	100	0	P	V
			15900	62.19	-11.81	74	67.73	37.8	12.07	55.41	100	2	P	V
			15900	49.54	-4.46	54	55.08	37.8	12.07	55.41	100	2	A	V
			18000	55.84	-18.16	74	51.26	48.1	13.2	56.72	121	173	P	V
			18000	45.94	-8.06	54	41.36	48.1	13.2	56.72	121	173	A	V
														V



802.11a CH 64 5320MHz		10640	48.11	-25.89	74	53.89	40.2	10.29	56.27	100	0	P	H
		15960	44.36	-29.64	74	49.78	37.8	12.07	55.29	100	0	P	H
		17989	55.52	-18.48	74	51.26	47.79	13.19	56.72	180	232	P	H
		17989	45.59	-8.41	54	41.33	47.79	13.19	56.72	180	232	A	H
													H
													H
		10640	48.29	-25.71	74	54.07	40.2	10.29	56.27	100	0	P	V
		15960	48.91	-25.09	74	54.33	37.8	12.07	55.29	100	0	P	V
		18000	55.34	-18.66	74	50.76	48.1	13.2	56.72	110	172	P	V
		18000	45.44	-8.56	54	40.86	48.1	13.2	56.72	110	172	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 802.11ax HE20 Full (Band Edge @ 3m)

WIFI Ant. 4+3	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)	
802.11ax HE20 Full CH 52 5260MHz		5148.58	55.72	-18.28	74	44.95	31.9	6.28	27.41	100	318	P	H	
		5130.22	44.68	-9.32	54	33.89	31.94	6.27	27.42	100	318	A	H	
	*	5260	116.51	-	-	106.27	31.3	6.32	27.38	100	318	P	H	
	*	5260	107.26	-	-	97.02	31.3	6.32	27.38	100	318	A	H	
		5386.56	60.37	-13.63	74	49.89	31.45	6.38	27.35	100	318	P	H	
		5351.52	44.11	-9.89	54	33.79	31.31	6.37	27.36	100	318	A	H	
		5128.86	56.45	-17.55	74	45.66	31.94	6.27	27.42	307	110	P	V	
		5120.02	43.72	-10.28	54	32.91	31.96	6.27	27.42	307	110	A	V	
	*	5260	114.95	-	-	104.71	31.3	6.32	27.38	307	110	P	V	
	*	5260	104.24	-	-	94	31.3	6.32	27.38	307	110	A	V	
		5395.68	58.95	-15.05	74	48.43	31.48	6.39	27.35	307	110	P	V	
		5397.6	43.35	-10.65	54	32.82	31.49	6.39	27.35	307	110	A	V	
	802.11ax HE20 Full CH 60 5300MHz		5137.7	54.37	-19.63	74	43.59	31.92	6.27	27.41	123	316	P	H
			5139.74	44.6	-9.4	54	33.82	31.92	6.27	27.41	123	316	A	H
*		5300	116.71	-	-	106.44	31.3	6.34	27.37	123	316	P	H	
*		5300	107.23	-	-	96.96	31.3	6.34	27.37	123	316	A	H	
		5350.32	66.18	-7.82	74	55.87	31.3	6.37	27.36	123	316	P	H	
		5350.08	51.32	-2.68	54	41.01	31.3	6.37	27.36	123	316	A	H	
		5124.44	52.84	-21.16	74	42.04	31.95	6.27	27.42	325	110	P	V	
		5104.72	43.56	-10.44	54	32.72	31.99	6.27	27.42	325	110	A	V	
*		5300	114.95	-	-	104.68	31.3	6.34	27.37	325	110	P	V	
*		5300	103.71	-	-	93.44	31.3	6.34	27.37	325	110	A	V	
	5362.08	64.24	-9.76	74	53.88	31.35	6.37	27.36	325	110	P	V		
	5350.32	47.75	-6.25	54	37.44	31.3	6.37	27.36	325	110	A	V		



802.11ax HE20 Full CH 64 5320MHz	*	5320	114.5	-	-	104.22	31.3	6.35	27.37	119	316	P	H
	*	5320	103.84	-	-	93.56	31.3	6.35	27.37	119	316	A	H
		5353.28	67.86	-6.14	74	57.54	31.31	6.37	27.36	119	316	P	H
		5350.08	51.89	-2.11	54	41.58	31.3	6.37	27.36	119	316	A	H
													H
													H
	*	5320	111.73	-	-	101.45	31.3	6.35	27.37	310	109	P	V
	*	5320	100.97	-	-	90.69	31.3	6.35	27.37	310	109	A	V
		5353.28	66.68	-7.32	74	56.36	31.31	6.37	27.36	310	109	P	V
		5350.56	48.73	-5.27	54	38.42	31.3	6.37	27.36	310	109	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 802.11ax HE20 Full (Harmonic @ 3m)

WIFI Ant. 4+3	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)	
802.11ax HE20 Full CH 52 5260MHz		10520	47.33	-20.87	68.2	53.57	39.96	10.23	56.43	100	0	P	H	
		15780	46.03	-27.97	74	51.67	37.98	12.05	55.67	100	0	P	H	
		17956	54.82	-19.18	74	51.51	46.87	13.16	56.72	175	202	P	H	
		17956	44.71	-9.29	54	41.4	46.87	13.16	56.72	175	202	A	H	
													H	
														H
			10520	48.35	-19.85	68.2	54.59	39.96	10.23	56.43	100	0	P	V
			15780	58.1	-15.9	74	63.74	37.98	12.05	55.67	100	5	P	V
			15780	47	-7	54	52.64	37.98	12.05	55.67	100	5	A	V
			17989	55.34	-18.66	74	51.08	47.79	13.19	56.72	113	158	P	V
			17989	45.42	-8.58	54	41.16	47.79	13.19	56.72	113	158	A	V
														V
802.11ax HE20 Full CH 60 5300MHz		10600	48.67	-25.33	74	54.52	40.2	10.27	56.32	100	0	P	H	
		15900	48.09	-25.91	74	53.63	37.8	12.07	55.41	100	0	P	H	
		17978	55.32	-18.68	74	51.37	47.48	13.19	56.72	177	232	P	H	
		17978	45.35	-8.65	54	41.4	47.48	13.19	56.72	177	232	A	H	
													H	
														H
			10600	49.67	-24.33	74	55.52	40.2	10.27	56.32	100	0	P	V
			15900	61.49	-12.51	74	67.03	37.8	12.07	55.41	100	2	P	V
			15900	48.26	-5.74	54	53.8	37.8	12.07	55.41	100	2	A	V
			17989	56.17	-17.83	74	51.91	47.79	13.19	56.72	113	172	P	V
			17989	46.11	-7.89	54	41.85	47.79	13.19	56.72	113	172	A	V
														V



802.11ax HE20 Full CH 64 5320MHz		10640	47.39	-26.61	74	53.17	40.2	10.29	56.27	100	0	P	H
		15960	43.99	-30.01	74	49.41	37.8	12.07	55.29	100	0	P	H
		18000	55.38	-18.62	74	50.8	48.1	13.2	56.72	183	210	P	H
		18000	45.23	-8.77	54	40.65	48.1	13.2	56.72	183	210	A	H
													H
													H
		10640	47.76	-26.24	74	53.54	40.2	10.29	56.27	100	0	P	V
		15960	48.01	-25.99	74	53.43	37.8	12.07	55.29	100	0	P	V
		17989	55.18	-18.82	74	50.92	47.79	13.19	56.72	102	158	P	V
		17989	45.09	-8.91	54	40.83	47.79	13.19	56.72	102	158	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 802.11ax HE40 Full (Band Edge @ 3m)

WIFI Ant. 4+3	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)
802.11ax HE40 Full CH 54 5270MHz		5131.92	54.74	-19.26	74	43.95	31.94	6.27	27.42	100	317	P	H
		5147.56	45.14	-8.86	54	34.37	31.9	6.28	27.41	100	317	A	H
	*	5270	112.55	-	-	102.31	31.3	6.32	27.38	100	317	P	H
	*	5270	102.95	-	-	92.71	31.3	6.32	27.38	100	317	A	H
		5350.8	58.27	-15.73	74	47.96	31.3	6.37	27.36	100	317	P	H
		5351.04	49.19	-4.81	54	38.88	31.3	6.37	27.36	100	317	A	H
		5146.54	54.76	-19.24	74	43.98	31.91	6.28	27.41	287	122	P	V
		5107.78	44.21	-9.79	54	33.38	31.98	6.27	27.42	287	122	A	V
	*	5270	110.8	-	-	100.56	31.3	6.32	27.38	287	122	P	V
	*	5270	101.45	-	-	91.21	31.3	6.32	27.38	287	122	A	V
		5399.52	58.12	-15.88	74	47.58	31.5	6.39	27.35	287	122	P	V
		5350.32	47.24	-6.76	54	36.93	31.3	6.37	27.36	287	122	A	V
	802.11ax HE40 Full CH 62 5310MHz		5121.38	54.4	-19.6	74	43.59	31.96	6.27	27.42	100	323	P
		5116.62	44.13	-9.87	54	33.31	31.97	6.27	27.42	100	323	A	H
*		5310	108.79	-	-	98.52	31.3	6.34	27.37	100	323	P	H
*		5310	99.12	-	-	88.85	31.3	6.34	27.37	100	323	A	H
		5351.52	63.41	-10.59	74	53.09	31.31	6.37	27.36	100	323	P	H
		5350.08	51.47	-2.53	54	41.16	31.3	6.37	27.36	100	323	A	H
		5090.78	52.72	-21.28	74	41.95	31.94	6.26	27.43	283	121	P	V
		5114.92	43.46	-10.54	54	32.64	31.97	6.27	27.42	283	121	A	V
*		5310	106.53	-	-	96.26	31.3	6.34	27.37	283	121	P	V
*		5310	96.77	-	-	86.5	31.3	6.34	27.37	283	121	A	V
	5352.48	60.46	-13.54	74	50.14	31.31	6.37	27.36	283	121	P	V	
	5350.32	50.02	-3.98	54	39.71	31.3	6.37	27.36	283	121	A	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

WIFI 802.11ax HE40 Full (Harmonic @ 3m)

WIFI Ant. 4+3	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)	
802.11ax HE40 Full CH 54 5270MHz		10540	46.32	-21.88	68.2	52.46	40.02	10.24	56.4	100	0	P	H	
		15810	44.81	-29.19	74	50.47	37.89	12.06	55.61	100	0	P	H	
		17967	55.29	-18.71	74	51.66	47.18	13.17	56.72	175	213	P	H	
		17967	45.25	-8.75	54	41.62	47.18	13.17	56.72	175	213	A	H	
													H	
														H
			10540	46.69	-21.51	68.2	52.83	40.02	10.24	56.4	100	0	P	V
			15810	52.6	-21.4	74	58.26	37.89	12.06	55.61	100	3	P	V
			15810	40.17	-13.83	54	45.83	37.89	12.06	55.61	100	3	A	V
			17989	55.68	-18.32	74	51.42	47.79	13.19	56.72	107	165	P	V
		17989	45.58	-8.42	54	41.32	47.79	13.19	56.72	107	165	A	V	
													V	
802.11ax HE40 Full CH 62 5310MHz		10620	47.7	-26.3	74	53.51	40.2	10.28	56.29	100	0	P	H	
		15930	44.97	-29.03	74	50.45	37.8	12.07	55.35	100	0	P	H	
		17978	55.47	-18.53	74	51.52	47.48	13.19	56.72	189	213	P	H	
		17978	45.3	-8.7	54	41.35	47.48	13.19	56.72	189	213	A	H	
													H	
														H
			10620	46.8	-27.2	74	52.61	40.2	10.28	56.29	100	0	P	V
			15930	44.8	-29.2	74	50.28	37.8	12.07	55.35	100	0	P	V
			18000	55.98	-18.02	74	51.4	48.1	13.2	56.72	118	162	P	V
			18000	45.86	-8.14	54	41.28	48.1	13.2	56.72	118	162	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 802.11ax HE80 Full (Band Edge @ 3m)

Table with 14 columns: WIFI Ant. 4+3, 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 test results for frequencies like 5138.04, 5129.88, 5290, 5358.72, 5352.48, 5096.56, 5089.76, 5290, 5290, 5354.88, 5351.76.

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



Band 2 5250~5350MHz

WIFI 802.11ax HE80 Full (Harmonic @ 3m)

WIFI Ant. 4+3	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)	
802.11ax HE80 Full CH 58 5290MHz		10580	47.24	-20.96	68.2	53.19	40.14	10.26	56.35	100	0	P	H	
		15870	43.45	-30.55	74	49.03	37.83	12.07	55.48	100	0	P	H	
		18000	55.69	-18.31	74	51.11	48.1	13.2	56.72	188	231	P	H	
		18000	45.63	-8.37	54	41.05	48.1	13.2	56.72	188	231	A	H	
													H	
													H	
			10580	46.88	-21.32	68.2	52.83	40.14	10.26	56.35	100	0	P	V
			15870	44.06	-29.94	74	49.64	37.83	12.07	55.48	100	0	P	V
			17967	55.61	-18.39	74	51.98	47.18	13.17	56.72	109	171	P	V
			17967	45.45	-8.55	54	41.82	47.18	13.17	56.72	109	171	A	V
													V	
													V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



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

WIFI Ant. 4+3	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		5459.12	63.67	-10.33	74	52.87	31.72	6.41	27.33	100	344	P	H	
		5468.4	66.36	-1.84	68.2	55.54	31.74	6.41	27.33	100	344	P	H	
		5457.52	44.67	-9.33	54	33.87	31.72	6.41	27.33	100	344	A	H	
	*	5500	109.92	-	-	99.02	31.8	6.42	27.32	100	344	P	H	
	*	5500	102.84	-	-	91.94	31.8	6.42	27.32	100	344	A	H	
														H
			5457.84	61.48	-12.52	74	50.68	31.72	6.41	27.33	352	116	P	V
			5468.72	65.41	-2.79	68.2	54.59	31.74	6.41	27.33	352	116	P	V
			5459.44	43.88	-10.12	54	33.08	31.72	6.41	27.33	352	116	A	V
	*		5500	109.62	-	-	98.72	31.8	6.42	27.32	352	116	P	V
	*		5500	100.83	-	-	89.93	31.8	6.42	27.32	352	116	A	V
														V
802.11a CH 116 5580MHz		5449.12	57.31	-16.69	74	46.54	31.7	6.4	27.33	103	345	P	H	
		5460.64	56.51	-11.69	68.2	45.71	31.72	6.41	27.33	103	345	P	H	
		5446.48	43.74	-10.26	54	32.98	31.69	6.4	27.33	103	345	A	H	
	*	5580	114.48	-	-	103.6	31.82	6.44	27.38	103	345	P	H	
	*	5580	107.04	-	-	96.16	31.82	6.44	27.38	103	345	A	H	
			5751.455	54.73	-13.47	68.2	43.73	32.1	6.4	27.5	103	345	P	H
			5456.8	58.21	-15.79	74	47.42	31.71	6.41	27.33	327	118	P	V
			5465.68	52.27	-15.93	68.2	41.46	31.73	6.41	27.33	327	118	P	V
			5459.68	43.57	-10.43	54	32.77	31.72	6.41	27.33	327	118	A	V
	*		5580	114.46	-	-	103.58	31.82	6.44	27.38	327	118	P	V
	*		5580	106.22	-	-	95.34	31.82	6.44	27.38	327	118	A	V
			5726.57	55.48	-12.72	68.2	44.5	32.05	6.41	27.48	327	118	P	V



802.11a CH 140 5700MHz	*	5700	111.34	-	-	100.38	32	6.42	27.46	100	344	P	H
	*	5700	103.68	-	-	92.72	32	6.42	27.46	100	344	A	H
		5726.44	66.17	-2.03	68.2	55.19	32.05	6.41	27.48	100	344	P	H
													H
													H
													H
	*	5700	110.44	-	-	99.48	32	6.42	27.46	347	118	P	V
	*	5700	101.92	-	-	90.96	32	6.42	27.46	347	118	A	V
		5727	66.56	-1.64	68.2	55.58	32.05	6.41	27.48	347	118	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. 4+3	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	47.41	-26.59	74	52.31	40.4	10.47	55.77	100	0	P	H	
		16500	47.64	-20.56	68.2	51.29	39.4	12.26	55.31	100	0	P	H	
		18000	56.48	-17.52	74	51.9	48.1	13.2	56.72	265	164	P	H	
		18000	46.68	-7.32	54	42.1	48.1	13.2	56.72	265	164	A	H	
													H	
													H	
			11000	47.96	-26.04	74	52.86	40.4	10.47	55.77	100	0	P	V
			16500	45.73	-22.47	68.2	49.38	39.4	12.26	55.31	100	0	P	V
			17989	55.86	-18.14	74	51.6	47.79	13.19	56.72	305	225	P	V
			17989	46.36	-7.64	54	42.1	47.79	13.19	56.72	305	225	A	V
													V	
													V	
802.11a CH 116 5580MHz		11160	46.98	-27.02	74	52.33	39.88	10.54	55.77	100	0	P	H	
		16740	50.66	-17.54	68.2	53.76	40.08	12.35	55.53	100	0	P	H	
		18000	56.78	-17.22	74	52.2	48.1	13.2	56.72	245	108	P	H	
		18000	46.78	-7.22	54	42.2	48.1	13.2	56.72	245	108	A	H	
		11160	46.98	-27.02	74	52.33	39.88	10.54	55.77	100	0	P	H	
													H	
			11160	48.65	-25.35	74	54	39.88	10.54	55.77	100	0	P	V
			16740	56.67	-11.53	68.2	59.77	40.08	12.35	55.53	100	0	P	V
			18000	56.38	-17.62	74	51.8	48.1	13.2	56.72	306	222	P	V
			18000	46.78	-7.22	54	42.2	48.1	13.2	56.72	306	222	A	V
													V	
													V	



802.11a CH 140 5700MHz		11400	47.41	-26.59	74	52.75	39.8	10.64	55.78	100	0	P	H
		17100	47.77	-20.43	68.2	51.4	39.8	12.52	55.95	100	0	P	H
		18000	56.18	-17.82	74	51.6	48.1	13.2	56.72	214	109	P	H
		18000	46.48	-7.52	54	41.9	48.1	13.2	56.72	214	109	A	H
													H
													H
		11400	47.42	-26.58	74	52.76	39.8	10.64	55.78	100	0	P	V
		17100	50.63	-17.57	68.2	54.26	39.8	12.52	55.95	100	0	P	V
		18000	56.68	-17.32	74	52.1	48.1	13.2	56.72	258	225	P	V
		18000	46.78	-7.22	54	42.2	48.1	13.2	56.72	258	225	A	V
													V
													V
Remark	<ol style="list-style-type: none"> 1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 												



Band 3 - 5470~5725MHz
WIFI 802.11ax HE20 Full (Band Edge @ 3m)

WIFI Ant. 4+3	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)
802.11ax HE20 Full CH 100 5500MHz		5459.6	65.14	-8.86	74	54.34	31.72	6.41	27.33	106	330	P	H
		5465.04	66.52	-1.68	68.2	55.71	31.73	6.41	27.33	106	330	P	H
		5459.12	44.69	-9.31	54	33.89	31.72	6.41	27.33	106	330	A	H
	*	5500	110.84	-	-	99.94	31.8	6.42	27.32	106	330	P	H
	*	5500	100.57	-	-	89.67	31.8	6.42	27.32	106	330	A	H
		5459.6	62.94	-11.06	74	52.14	31.72	6.41	27.33	300	109	P	V
		5467.28	65.5	-2.7	68.2	54.69	31.73	6.41	27.33	300	109	P	V
		5459.6	43.84	-10.16	54	33.04	31.72	6.41	27.33	300	109	A	V
	*	5500	109.29	-	-	98.39	31.8	6.42	27.32	300	109	P	V
	*	5500	99.05	-	-	88.15	31.8	6.42	27.32	300	109	A	V
													V
													V
802.11ax HE20 Full CH 116 5580MHz		5391.28	52.69	-21.31	74	42.18	31.47	6.39	27.35	100	320	P	H
		5463.52	52.58	-15.62	68.2	41.77	31.73	6.41	27.33	100	320	P	H
		5442.88	43.78	-10.22	54	33.04	31.67	6.4	27.33	100	320	A	H
	*	5580	114.16	-	-	103.28	31.82	6.44	27.38	100	320	P	H
	*	5580	104.65	-	-	93.77	31.82	6.44	27.38	100	320	A	H
		5740.115	52.81	-15.39	68.2	41.81	32.08	6.41	27.49	100	320	P	H
		5429.68	52.6	-21.4	74	41.92	31.62	6.4	27.34	294	109	P	V
		5466.4	51.82	-16.38	68.2	41.01	31.73	6.41	27.33	294	109	P	V
		5459.92	43.58	-10.42	54	32.78	31.72	6.41	27.33	294	109	A	V
	*	5580	114.21	-	-	103.33	31.82	6.44	27.38	294	109	P	V
*	5580	104.18	-	-	93.3	31.82	6.44	27.38	294	109	A	V	
	5754.92	50.89	-17.31	68.2	39.89	32.1	6.4	27.5	294	109	P	V	



802.11ax HE20 Full CH 140 5700MHz	*	5700	110.81	-	-	99.85	32	6.42	27.46	100	333	P	H
	*	5700	101.38	-	-	90.42	32	6.42	27.46	100	333	A	H
		5725.56	66.03	-2.17	68.2	55.05	32.05	6.41	27.48	100	333	P	H
													H
													H
													H
	*	5700	108.53	-	-	97.57	32	6.42	27.46	315	111	P	V
	*	5700	98.97	-	-	88.01	32	6.42	27.46	315	111	A	V
		5725.64	65.93	-2.27	68.2	54.95	32.05	6.41	27.48	315	111	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 802.11ax HE20 (Harmonic @ 3m)

WIFI Ant. 4+3	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)	
802.11ax HE20 Full CH 100 5500MHz		11000	47.36	-26.64	74	52.26	40.4	10.47	55.77	100	0	P	H	
		16500	46.33	-21.87	68.2	49.98	39.4	12.26	55.31	100	0	P	H	
		17989	56.46	-17.54	74	52.2	47.79	13.19	56.72	244	185	P	H	
		17989	46.56	-7.44	54	42.3	47.79	13.19	56.72	244	185	A	H	
													H	
													H	
			11000	47.93	-26.07	74	52.83	40.4	10.47	55.77	100	0	P	V
			16500	46.53	-21.67	68.2	50.18	39.4	12.26	55.31	100	0	P	V
			18000	56.38	-17.62	74	51.8	48.1	13.2	56.72	299	160	P	V
			18000	46.78	-7.22	54	42.2	48.1	13.2	56.72	299	160	A	V
												V		
												V		
802.11ax HE20 Full CH 116 5580MHz		11160	47.98	-26.02	74	53.33	39.88	10.54	55.77	100	0	P	H	
		16740	49.16	-19.04	68.2	52.26	40.08	12.35	55.53	100	0	P	H	
		17978	55.85	-18.15	74	51.9	47.48	13.19	56.72	252	301	P	H	
		17978	46.15	-7.85	54	42.2	47.48	13.19	56.72	252	301	A	H	
													H	
													H	
			11160	47.56	-26.44	74	52.91	39.88	10.54	55.77	100	0	P	V
			16740	58.01	-10.19	68.2	61.11	40.08	12.35	55.53	100	0	P	V
			18000	56.68	-17.32	74	52.1	48.1	13.2	56.72	295	220	P	V
			18000	46.88	-7.12	54	42.3	48.1	13.2	56.72	295	220	A	V
												V		
												V		



802.11ax HE20 Full CH 140 5700MHz		11400	47.12	-26.88	74	52.46	39.8	10.64	55.78	100	0	P	H
		17100	47.31	-20.89	68.2	50.94	39.8	12.52	55.95	100	0	P	H
		17978	57.15	-16.85	74	53.2	47.48	13.19	56.72	255	220	P	H
		17978	46.45	-7.55	54	42.5	47.48	13.19	56.72	255	220	A	H
													H
													H
		11400	48.29	-25.71	74	53.63	39.8	10.64	55.78	100	0	P	V
		17100	47.52	-20.68	68.2	51.15	39.8	12.52	55.95	100	0	P	V
		18000	56.08	-17.92	74	51.5	48.1	13.2	56.72	352	175	P	V
		18000	46.98	-7.02	54	42.4	48.1	13.2	56.72	352	175	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



**Band 3 5470~5725MHz
WIFI 802.11ax HE40 Full (Band Edge @ 3m)**

WIFI Ant. 4+3	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)
802.11ax HE40 Full CH 102 5510MHz		5457.52	60.19	-13.81	74	49.39	31.72	6.41	27.33	100	323	P	H
		5468.8	64.2	-4	68.2	53.38	31.74	6.41	27.33	100	323	P	H
		5459.92	47.54	-6.46	54	36.74	31.72	6.41	27.33	100	323	A	H
	*	5510	108.31	-	-	97.44	31.78	6.42	27.33	100	323	P	H
	*	5510	98.34	-	-	87.47	31.78	6.42	27.33	100	323	A	H
		5756.18	50.38	-17.82	68.2	39.38	32.1	6.4	27.5	100	323	P	H
		5458.96	54.71	-19.29	74	43.91	31.72	6.41	27.33	281	121	P	V
		5464.48	61.11	-7.09	68.2	50.3	31.73	6.41	27.33	281	121	P	V
		5459.68	46.21	-7.79	54	35.41	31.72	6.41	27.33	281	121	A	V
	*	5510	107.57	-	-	96.7	31.78	6.42	27.33	281	121	P	V
	*	5510	98.2	-	-	87.33	31.78	6.42	27.33	281	121	A	V
	5737.91	51.2	-17	68.2	40.2	32.08	6.41	27.49	281	121	P	V	
802.11ax HE40 Full CH 110 5550MHz		5435.68	56.34	-17.66	74	45.64	31.64	6.4	27.34	100	337	P	H
		5468.8	57.47	-10.73	68.2	46.65	31.74	6.41	27.33	100	337	P	H
		5458.96	46.58	-7.42	54	35.78	31.72	6.41	27.33	100	337	A	H
	*	5550	111.23	-	-	100.46	31.7	6.43	27.36	100	337	P	H
	*	5550	103.43	-	-	92.66	31.7	6.43	27.36	100	337	A	H
		5730.035	54.2	-14	68.2	43.22	32.06	6.41	27.49	100	337	P	H
		5407.12	52.97	-21.03	74	42.39	31.53	6.39	27.34	282	118	P	V
		5469.76	56.37	-11.83	68.2	45.55	31.74	6.41	27.33	282	118	P	V
		5459.92	45.88	-8.12	54	35.08	31.72	6.41	27.33	282	118	A	V
	*	5550	111.54	-	-	100.77	31.7	6.43	27.36	282	118	P	V
	*	5550	102.67	-	-	91.9	31.7	6.43	27.36	282	118	A	V
	5746.415	52.14	-16.06	68.2	41.14	32.09	6.41	27.5	282	118	P	V	



802.11ax HE40 Full CH 134 5670MHz		5443.1	51.81	-22.19	74	41.07	31.67	6.4	27.33	100	338	P	H
		5467.25	51.14	-17.06	68.2	40.33	31.73	6.41	27.33	100	338	P	H
		5458.5	43.09	-10.91	54	32.29	31.72	6.41	27.33	100	338	A	H
	*	5670	110.91	-	-	100.04	31.88	6.43	27.44	100	338	P	H
	*	5670	102.06	-	-	91.19	31.88	6.43	27.44	100	338	A	H
		5726.885	62.4	-5.8	68.2	51.42	32.05	6.41	27.48	100	338	P	H
		5447.65	51.67	-22.33	74	40.91	31.69	6.4	27.33	273	121	P	V
		5469.7	53.64	-14.56	68.2	42.82	31.74	6.41	27.33	273	121	P	V
		5454.65	43.35	-10.65	54	32.56	31.71	6.41	27.33	273	121	A	V
	*	5670	111.67	-	-	100.8	31.88	6.43	27.44	273	121	P	V
	*	5670	101.27	-	-	90.4	31.88	6.43	27.44	273	121	A	V
		5725.94	66.36	-1.84	68.2	55.38	32.05	6.41	27.48	273	121	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 5470~5725MHz

WIFI 802.11ax HE40 Full (Harmonic @ 3m)

WIFI Ant. 4+3	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)	
802.11ax HE40 Full CH 102 5510MHz		11020	47.28	-26.72	74	52.25	40.32	10.48	55.77	100	0	P	H	
		16530	44.9	-23.3	68.2	48.57	39.4	12.27	55.34	100	0	P	H	
		17978	55.01	-18.99	74	51.06	47.48	13.19	56.72	191	221	P	H	
		17978	47.4	-6.6	54	43.45	47.48	13.19	56.72	191	221	A	H	
													H	
													H	
			11020	47.42	-26.58	74	52.39	40.32	10.48	55.77	100	0	P	V
			16530	46.02	-22.18	68.2	49.69	39.4	12.27	55.34	100	0	P	V
			17978	55.49	-18.51	74	51.54	47.48	13.19	56.72	165	139	P	V
			17978	47.34	-6.66	54	43.39	47.48	13.19	56.72	165	139	A	V
													V	
													V	
802.11ax HE40 Full CH 110 5550MHz		11100	47.99	-26.01	74	53.25	40	10.51	55.77	100	0	P	H	
		16650	47.41	-20.79	68.2	50.85	39.7	12.31	55.45	100	0	P	H	
		17956	54.87	-19.13	74	51.56	46.87	13.16	56.72	201	167	P	H	
		17956	46.93	-7.07	54	43.62	46.87	13.16	56.72	201	167	A	H	
													H	
													H	
			11100	46.94	-27.06	74	52.2	40	10.51	55.77	100	0	P	V
			16650	49.69	-18.51	68.2	53.13	39.7	12.31	55.45	100	0	P	V
			17978	55.95	-18.05	74	52	47.48	13.19	56.72	163	192	P	V
			17978	47.45	-6.55	54	43.5	47.48	13.19	56.72	163	192	A	V
													V	
													V	



802.11ax HE40 Full CH 134 5670MHz		11340	46.96	-27.04	74	52.39	39.74	10.61	55.78	100	0	P	H
		17010	49.53	-18.67	68.2	52.71	40.16	12.45	55.79	100	0	P	H
		17978	55.28	-18.72	74	51.33	47.48	13.19	56.72	198	231	P	H
		17978	47.61	-6.39	54	43.66	47.48	13.19	56.72	198	231	A	H
													H
													H
		11340	47.22	-26.78	74	52.65	39.74	10.61	55.78	100	0	P	V
		17010	51.09	-17.11	68.2	54.27	40.16	12.45	55.79	100	0	P	V
		17967	55.81	-18.19	74	52.18	47.18	13.17	56.72	152	208	P	V
		17967	47.13	-6.87	54	43.5	47.18	13.17	56.72	152	208	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 5470~5725MHz
WIFI 802.11ax HE80 Full (Band Edge @ 3m)

WIFI Ant. 4+3	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)
802.11ax HE80 Full CH 106 5530MHz		5459.2	57.9	-16.1	74	47.1	31.72	6.41	27.33	131	336	P	H
		5468.32	60.59	-7.61	68.2	49.77	31.74	6.41	27.33	131	336	P	H
		5458.24	49.7	-4.3	54	38.9	31.72	6.41	27.33	131	336	A	H
	*	5530	105.45	-	-	94.62	31.74	6.43	27.34	131	336	P	H
	*	5530	96.2	-	-	85.37	31.74	6.43	27.34	131	336	A	H
		5727.83	52.01	-16.19	68.2	41.02	32.06	6.41	27.48	131	336	P	H
		5457.04	58.54	-15.46	74	47.75	31.71	6.41	27.33	272	119	P	V
		5467.36	58.75	-9.45	68.2	47.94	31.73	6.41	27.33	272	119	P	V
		5459.92	47.14	-6.86	54	36.34	31.72	6.41	27.33	272	119	A	V
	*	5530	104.91	-	-	94.08	31.74	6.43	27.34	272	119	P	V
	*	5530	95.16	-	-	84.33	31.74	6.43	27.34	272	119	A	V
		5725.94	52.09	-16.11	68.2	41.11	32.05	6.41	27.48	272	119	P	V
802.11ax HE80 Full CH 122 5610MHz		5453.68	56.59	-17.41	74	45.8	31.71	6.41	27.33	100	337	P	H
		5460.88	56.16	-12.04	68.2	45.36	31.72	6.41	27.33	100	337	P	H
		5458.96	48.7	-5.3	54	37.9	31.72	6.41	27.33	100	337	A	H
	*	5610	109.33	-	-	98.4	31.88	6.45	27.4	100	337	P	H
	*	5610	99.94	-	-	89.01	31.88	6.45	27.4	100	337	A	H
		5726.255	60.61	-7.59	68.2	49.63	32.05	6.41	27.48	100	337	P	H
		5450.32	55.12	-18.88	74	44.34	31.7	6.41	27.33	280	119	P	V
		5469.28	55.55	-12.65	68.2	44.73	31.74	6.41	27.33	280	119	P	V
		5459.68	47	-7	54	36.2	31.72	6.41	27.33	280	119	A	V
	*	5610	109.51	-	-	98.58	31.88	6.45	27.4	280	119	P	V
	*	5610	99.05	-	-	88.12	31.88	6.45	27.4	280	119	A	V
		5725	59.68	-8.52	68.2	48.7	32.05	6.41	27.48	280	119	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 5470~5725MHz

WIFI 802.11ax HE80 Full (Harmonic @ 3m)

WIFI Ant. 4+3	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)	
802.11ax HE80 Full CH 106 5530MHz		11060	48.22	-25.78	74	53.33	40.16	10.5	55.77	100	0	P	H	
		16590	46.31	-21.89	68.2	50.01	39.4	12.29	55.39	100	0	P	H	
		17967	55.03	-18.97	74	51.4	47.18	13.17	56.72	164	237	P	H	
		17967	47.29	-6.71	54	43.66	47.18	13.17	56.72	164	237	A	H	
													H	
													H	
														H
														V
														V
														V
802.11ax HE80 Full CH 122 5610MHz		11220	47.93	-26.07	74	53.36	39.78	10.56	55.77	100	0	P	H	
		16830	47.12	-21.08	68.2	50.18	40.17	12.38	55.61	100	0	P	H	
		17934	54.57	-19.43	74	51.89	46.25	13.15	56.72	152	204	P	H	
		17934	46.36	-7.64	54	43.68	46.25	13.15	56.72	152	204	A	H	
													H	
													H	
														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 802.11ax HE160 Full (Band Edge @ 3m)

WIFI Ant. 4+3	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)
802.11ax HE160 Full CH 114 5570MHz		5459.2	65.25	-8.75	74	54.45	31.72	6.41	27.33	148	322	P	H
		5469.04	64.44	-3.76	68.2	53.62	31.74	6.41	27.33	148	322	P	H
		5458.72	49.64	-4.36	54	38.84	31.72	6.41	27.33	148	322	A	H
	*	5570	103.93	-	-	93.08	31.78	6.44	27.37	148	322	P	H
	*	5570	92.86	-	-	82.01	31.78	6.44	27.37	148	322	A	H
		5725.94	66.19	-2.01	68.2	55.21	32.05	6.41	27.48	148	322	P	H
		5453.2	60.84	-13.16	74	50.05	31.71	6.41	27.33	348	358	P	V
		5464.96	61.13	-7.07	68.2	50.32	31.73	6.41	27.33	348	358	P	V
		5452.96	46.79	-7.21	54	36	31.71	6.41	27.33	348	358	A	V
	*	5570	98.41	-	-	87.56	31.78	6.44	27.37	348	358	P	V
*	5570	89	-	-	78.15	31.78	6.44	27.37	348	358	A	V	
		5731.925	58.82	-9.38	68.2	47.84	32.06	6.41	27.49	348	358	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



**Band 3 5470~5725MHz
WIFI 802.11ax HE160 Full (Harmonic @ 3m)**

WIFI Ant. 4+3	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)	
802.11ax HE160 Full CH 114 5570MHz		11140	47.45	-26.55	74	52.77	39.92	10.53	55.77	100	0	P	H	
		16710	46.65	-21.55	68.2	49.8	40.02	12.33	55.5	100	0	P	H	
		17978	55.66	-18.34	74	51.71	47.48	13.19	56.72	135	188	P	H	
		17978	47.74	-6.26	54	43.79	47.48	13.19	56.72	135	188	A	H	
													H	
														H
			11140	47.49	-26.51	74	52.81	39.92	10.53	55.77	100	0	P	V
			16710	46.34	-21.86	68.2	49.49	40.02	12.33	55.5	100	0	P	V
			17978	55.53	-18.47	74	51.58	47.48	13.19	56.72	109	226	P	V
			17978	47.45	-6.55	54	43.5	47.48	13.19	56.72	109	226	A	V
													V	
													V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



Band 3 - Straddle Channel
WIFI 802.11a (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.	
4+3		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 144 5720MHz		5436.97	52.67	-21.33	74	41.96	31.65	6.4	27.34	100	325	P	H
		5469.73	51.32	-16.88	68.2	40.5	31.74	6.41	27.33	100	325	P	H
		5452.57	42.5	-11.5	54	31.71	31.71	6.41	27.33	100	325	A	H
	*	5720	116.31	-	-	105.34	32.04	6.41	27.48	100	325	P	H
	*	5720	108.26	-	-	97.29	32.04	6.41	27.48	100	325	A	H
		5852.75	58.79	-9.41	68.2	47.62	32.31	6.43	27.57	100	325	P	H
		5449.45	51.47	-22.53	74	40.7	31.7	6.4	27.33	345	116	P	V
		5463.88	49.59	-18.61	68.2	38.78	31.73	6.41	27.33	345	116	P	V
		5451.01	42.23	-11.77	54	31.45	31.7	6.41	27.33	345	116	A	V
	*	5720	112.93	-	-	101.96	32.04	6.41	27.48	345	116	P	V
	*	5720	105.17	-	-	94.2	32.04	6.41	27.48	345	116	A	V
			5874	53.5	-14.7	68.2	42.24	32.4	6.45	27.59	345	116	P
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI Ant. 4+3	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)	
802.11a CH 144 5720MHz		11440	47.22	-26.78	74	52.43	39.92	10.65	55.78	100	0	P	H	
		17160	54.97	-13.23	68.2	58.61	39.86	12.56	56.06	100	0	P	H	
		17967	56.13	-17.87	74	52.5	47.18	13.17	56.72	241	198	P	H	
		17967	45.73	-8.27	54	42.1	47.18	13.17	56.72	241	198	A	H	
													H	
													H	
			11440	48.48	-25.52	74	53.69	39.92	10.65	55.78	100	0	P	V
			17160	59.53	-8.67	68.2	63.17	39.86	12.56	56.06	100	0	P	V
			18000	57.18	-16.82	74	52.6	48.1	13.2	56.72	320	205	P	V
			18000	46.78	-7.22	54	42.2	48.1	13.2	56.72	320	205	A	V
													V	
													V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



Band 3 - Straddle Channel
WIFI 802.11ax HE20 Full (Band Edge @ 3m)

WIFI Ant. 4+3	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)
802.11ax HE20 Full CH 144 5720MHz		5442.82	50.62	-23.38	74	39.88	31.67	6.4	27.33	113	322	P	H
		5469.34	51.59	-16.61	68.2	40.77	31.74	6.41	27.33	113	322	P	H
		5451.79	42.45	-11.55	54	31.67	31.7	6.41	27.33	113	322	A	H
	*	5720	115.27	-	-	104.3	32.04	6.41	27.48	113	322	P	H
	*	5720	105.74	-	-	94.77	32.04	6.41	27.48	113	322	A	H
		5922	53.91	-14.29	68.2	42.45	32.59	6.49	27.62	113	322	P	H
		5452.57	52.91	-21.09	74	42.12	31.71	6.41	27.33	324	124	P	V
		5467.78	52.71	-15.49	68.2	41.89	31.74	6.41	27.33	324	124	P	V
		5459.59	42.52	-11.48	54	31.72	31.72	6.41	27.33	324	124	A	V
	*	5720	114.26	-	-	103.29	32.04	6.41	27.48	324	124	P	V
	*	5720	104.18	-	-	93.21	32.04	6.41	27.48	324	124	A	V
	5921.25	53.92	-14.28	68.2	42.47	32.58	6.49	27.62	324	124	P	V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



**Band 3 - Straddle Channel
WIFI 802.11ax HE20 Full (Harmonic @ 3m)**

WIFI Ant. 4+3	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)	
802.11ax HE20 Full CH 144 5720MHz		11440	48.27	-25.73	74	53.48	39.92	10.65	55.78	100	0	P	H	
		17160	53.45	-14.75	68.2	57.09	39.86	12.56	56.06	100	0	P	H	
		18000	56.38	-17.62	74	51.8	48.1	13.2	56.72	255	202	P	H	
		18000	46.68	-7.32	54	42.1	48.1	13.2	56.72	255	202	A	H	
													H	
													H	
			11440	48.1	-25.9	74	53.31	39.92	10.65	55.78	100	0	P	V
			17160	58.17	-10.03	68.2	61.81	39.86	12.56	56.06	100	0	P	V
			17978	56.85	-17.15	74	52.9	47.48	13.19	56.72	296	305	P	V
			17978	46.55	-7.45	54	42.6	47.48	13.19	56.72	296	305	A	V
													V	
													V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



Band 3 - Straddle Channel
WIFI 802.11ax HE40 Full (Band Edge @ 3m)

WIFI Ant. 4+3	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)
802.11ax HE40 Full CH 142 5710MHz		5459.2	52.37	-21.63	74	41.57	31.72	6.41	27.33	100	339	P	H
		5466.22	51.83	-16.37	68.2	41.02	31.73	6.41	27.33	100	339	P	H
		5457.25	42.55	-11.45	54	31.76	31.71	6.41	27.33	100	339	A	H
	*	5710	111.93	-	-	100.96	32.02	6.42	27.47	100	339	P	H
	*	5710	102.24	-	-	91.27	32.02	6.42	27.47	100	339	A	H
		5862	53.76	-14.44	68.2	42.55	32.35	6.44	27.58	100	339	P	H
		5439.31	51.85	-22.15	74	41.13	31.66	6.4	27.34	284	120	P	V
		5467.78	50.99	-17.21	68.2	40.17	31.74	6.41	27.33	284	120	P	V
		5452.96	42.84	-11.16	54	32.05	31.71	6.41	27.33	284	120	A	V
	*	5710	110.92	-	-	99.95	32.02	6.42	27.47	284	120	P	V
	*	5710	101.06	-	-	90.09	32.02	6.42	27.47	284	120	A	V
		5851.75	54.59	-13.61	68.2	43.42	32.31	6.43	27.57	284	120	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



**Band 3 - Straddle Channel
WIFI 802.11ax HE40 Full (Harmonic @ 3m)**

WIFI Ant. 4+3	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)	
802.11ax HE40 Full CH 142 5710MHz		11420	47.5	-26.5	74	52.77	39.86	10.65	55.78	100	0	P	H	
		17130	51.46	-16.74	68.2	55.11	39.83	12.53	56.01	100	0	P	H	
		17978	55.58	-18.42	74	51.63	47.48	13.19	56.72	169	206	P	H	
		17978	47.52	-6.48	54	43.57	47.48	13.19	56.72	169	206	A	H	
													H	
														H
			11420	47.89	-26.11	74	53.16	39.86	10.65	55.78	100	0	P	V
			17130	54.88	-13.32	68.2	58.53	39.83	12.53	56.01	100	0	P	V
			17978	55.57	-18.43	74	51.62	47.48	13.19	56.72	158	225	P	V
			17978	47.47	-6.53	54	43.52	47.48	13.19	56.72	158	225	A	V
													V	
													V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



Band 3 Straddle Channel
WIFI 802.11ax HE80 Full (Band Edge @ 3m)

Table with 14 columns: WIFI Ant. 4+3, 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 test results for frequencies like 5457.64, 5462.32, 5458.03, 5690, 5855.5, 5422.15, 5462.71, 5451.79, 5690, 5690, 5854.6.

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



**Band 3 - Straddle Channel
WIFI 802.11ax HE80 Full (Harmonic @ 3m)**

WIFI Ant. 4+3	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)	
802.11ax HE80 Full CH 138 5690MHz		11380	47.36	-26.64	74	52.73	39.78	10.63	55.78	100	0	P	H	
		17070	47.93	-20.27	68.2	51.42	39.92	12.49	55.9	100	0	P	H	
		17978	55.79	-18.21	74	51.84	47.48	13.19	56.72	196	207	P	H	
		17978	47.54	-6.46	54	43.59	47.48	13.19	56.72	196	207	A	H	
													H	
														H
			11380	46.52	-27.48	74	51.89	39.78	10.63	55.78	100	0	P	V
			17070	49.38	-18.82	68.2	52.87	39.92	12.49	55.9	100	0	P	V
			17978	55.44	-18.56	74	51.49	47.48	13.19	56.72	112	198	P	V
			17978	47.31	-6.69	54	43.36	47.48	13.19	56.72	112	198	A	V
													V	
													V	
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.													



Emission above 18GHz

WIFI 802.11ax HE40 Full (SHF @ 1m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
4+3		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ax HE40 Full SHF		35578	45.43	-22.77	68.2	63.68	41.99	-1.27	58.97	150	0	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
			35622	45.82	-22.38	68.2	63.93	42.09	-1.25	58.95	150	0	P
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												



Emission below 1GHz

WIFI 802.11ax HE40 Full (LF @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.	
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.		
4+3		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)	
802.11ax HE40 Full LF		31.94	21.31	-18.69	40	29.65	23.36	0.53	32.23	-	-	P	H	
		124.09	22.99	-20.51	43.5	36.63	17.56	1.04	32.24	-	-	P	H	
		266.68	21.62	-24.38	46	32.61	19.51	1.5	32	-	-	P	H	
		586.78	26.84	-19.16	46	31.69	25.48	2.17	32.5	-	-	P	H	
		839.95	31.99	-14.01	46	32.17	28.41	2.62	31.21	-	-	P	H	
		934.04	32.58	-13.42	46	31.34	29.34	2.77	30.87	100	0	P	H	
														H
														H
														H
														H
														H
														H
			32.91	32.15	-7.85	40	40.89	22.95	0.54	32.23	100	0	P	V
			50.37	30.03	-9.97	40	47.53	14.13	0.66	32.29	-	-	P	V
			93.05	29.14	-14.36	43.5	45.34	15.15	0.89	32.24	-	-	P	V
			710.94	27.5	-18.5	46	30.91	26.2	2.39	32	-	-	P	V
			863.23	31.32	-14.68	46	30.92	28.89	2.66	31.15	-	-	P	V
			955.38	33.62	-12.38	46	31.01	30.56	2.81	30.76	-	-	P	V
														V
														V
													V	
													V	
													V	
													V	
Remark	1. No other spurious found. 2. All results are PASS against limit line.													



Note symbol

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



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

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
4+3		(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”.