



FCC RF Test Report

APPLICANT : Motorola Mobility LLC
EQUIPMENT : Mobile Cellular Phone
BRAND NAME : Motorola
MODEL NAME : XT2143-1
FCC ID : IHDT56ZP3
STANDARD : FCC Part 15 Subpart E §15.407
CLASSIFICATION : (NII) Unlicensed National Information Infrastructure
TEST DATE(S) : Jun. 03, 2021 ~ Jun. 11, 2021

We, Sporton International (ShenZhen) Inc., would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International (ShenZhen) Inc., the test report shall not be reproduced except in full.

Reviewed by: Derreck Chen / Supervisor

Approved by: Eric Shih / Manager



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People's Republic of China**



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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR151701F	Rev. 01	Initial issue of report	Jun. 29, 2021

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.1	15.403(i)	6dB, 26dB and 99% Occupied Bandwidth	> 500kHz	Pass	-
3.2	15.407(a)	Maximum Conducted Output Power	≤ 30 dBm	Pass	-
3.3	15.407(a)	Power Spectral Density	≤ 30 dBm/500kHz	Pass	-
3.4	15.407(b)	Unwanted Emissions	15.407(b)(4)(i) & 15.209(a)	Pass	Under limit 3.95 dB at 5644.800 MHz
3.5	15.207	AC Conducted Emission	15.207(a)	Pass	Under limit 13.45 dB at 0.190 MHz
3.6	15.407(c)	Automatically Discontinue Transmission	Discontinue Transmission	Pass	-
3.7	15.203 & 15.407(a)	Antenna Requirement	N/A	N/A	-

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.



1 General Description

1.1 Applicant

Motorola Mobility LLC

222 W, Merchandise Mart Plaza, Chicago IL 60654 USA

1.2 Manufacturer

Motorola Mobility LLC

222 W, Merchandise Mart Plaza, Chicago IL 60654 USA

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Mobile Cellular Phone
Brand Name	Motorola
Model Name	XT2143-1
FCC ID	IHDT56ZP3
EUT supports Radios application	GSM/WCDMA/LTE/5G NR WLAN 2.4GHz 802.11b/g/n HT20 WLAN 2.4GHz 802.11ac/ax VHT20/HE20 WLAN 5GHz 802.11a/n HT20/HT40 WLAN 5GHz 802.11ac VHT20/VHT40/VHT80/VHT160 WLAN 5GHz 802.11ax HE20/HE40/HE80/HE160 WLAN 6GHz 802.11a/n HT20/HT40 WLAN 6GHz 802.11ac VHT20/VHT40/VHT80/VHT160 WLAN 6GHz 802.11ax HE20/HE40/HE80/HE160 Bluetooth BR/EDR/LE NFC and GNSS
IMEI Code	Conducted: 353121920026637/353121920026645 Conduction: 353121920024616/353121920024624 Radiation: 353121920043038/353121920043046
HW Version	DVT2
SW Version	RRG31.35
EUT Stage	Identical Prototype

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

1.4 Product Specification of Equipment Under Test

Standards-related Product Specification				
Tx/Rx Channel Frequency Range		5745 MHz ~ 5825 MHz		
Maximum Output Power		<MIMO Ant. 1+2> <5745 MHz ~ 5825 MHz> 802.11a : 20.55 dBm / 0.1135 W 802.11n HT20 : 20.14 dBm / 0.1033 W 802.11n HT40 : 19.93 dBm / 0.0984 W 802.11ac VHT20: 20.13 dBm / 0.1030 W 802.11ac VHT40: 19.91 dBm / 0.0979 W 802.11ac VHT80: 18.81 dBm / 0.0760 W 802.11ax HE20 : 20.32 dBm / 0.1076 W 802.11ax HE40 : 19.70 dBm / 0.0933 W 802.11ax HE80 : 18.81 dBm / 0.0760 W		
99% Occupied Bandwidth		<MIMO Ant. 1+2> <5745 MHz ~ 5825 MHz> 802.11a : 16.38 MHz 802.11n HT20 : 17.63 MHz 802.11n HT40 : 36.36 MHz 802.11ac VHT80 : 76.12 MHz 802.11ax HE20 : 18.98 MHz 802.11ax HE40 : 37.96 MHz 802.11ax HE80 : 77.92 MHz		
Type of Modulation		802.11a/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11ac/ax : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM / 1024QAM)		
Antenna Type / Gain		<Ant. 1> : PIFA antenna with gain -4.5 dBi <Ant. 2> : PIFA Antenna with gain -3.3 dBi		
Antenna Function Description			Ant. 1	Ant. 2
		802.11 a/n/ac/ax MIMO	V	V

Note:

- For 802.11n HT20 / ac VHT20 and 802.11n HT40 / ac VHT40 mode, the whole testing have assessed only 802.11n HT20/ HT40 by referring to their maximum conducted power.
- The EUT supports for MIMO mode only.

1.5 Modification of EUT

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

1.6 Testing Location

Sporton International (Shenzhen) Inc. is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.01.

Test Firm	Sporton International (Shenzhen) Inc.		
Test Site Location	1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055 People's Republic of China TEL: +86-755-86379589 FAX: +86-755-86379595		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	CO01-SZ TH01-SZ	CN1256	421272

Test Firm	Sporton International (Shenzhen) Inc.		
Test Site Location	101, 1st Floor, Block B, Building 1, No. 2, Tengfeng 4th Road, Fenghuang Community, Fuyong Street, Baoan District, Shenzhen City Guangdong Province China 518103 TEL: +86-755-33202398		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	03CH02-SZ	CN1256	421272

1.7 Test Software

Item	Site	Manufacturer	Name	Version
1.	03CH02-SZ	AUDIX	E3	6.2009-8-24a
2.	CO01-SZ	AUDIX	E3	6.120613b

1.8 Applicable Standards

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

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

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.



1.9 Specification of Accessory

Specification of Accessory				
AC Adapter 1(US)	Brand Name	Motorola(Salom)	Model Name	MC-301
AC Adapter 1(EU)	Brand Name	Motorola(Salom)	Model Name	MC-302
AC Adapter 1(UK)	Brand Name	Motorola(Salom)	Model Name	MC-303
AC Adapter 1(Brazil)	Brand Name	Motorola(Salom)	Model Name	MC-307
AC Adapter 1(AU)	Brand Name	Motorola(Salom)	Model Name	MC-305
AC Adapter 2(US)	Brand Name	Motorola(Acbel)	Model Name	MC-301
AC Adapter 2(EU)	Brand Name	Motorola(Acbel)	Model Name	MC-302
AC Adapter 2(UK)	Brand Name	Motorola(Acbel)	Model Name	MC-303
AC Adapter 2(AU)	Brand Name	Motorola(Acbel)	Model Name	MC-305
AC Adapter 2(IN)	Brand Name	Motorola(Acbel)	Model Name	MC-304
AC Adapter 3(Brazil)	Brand Name	Motorola(Flex)	Model Name	MC-307
Battery	Brand Name	Motorola(ATL)	Model Name	MB40
Earphone 1	Brand Name	Motorola(Lyand)	Model Name	MH191(SH38C81577)
Earphone 2	Brand Name	Motorola(LCHSE)	Model Name	MH191(SH38C81576)
Earphone 3 (Brazil only)	Brand Name	Motorola(Lyand)	Model Name	MH181(SH38C37773)
Earphone 4 (Brazil only)	Brand Name	Motorola(Cosonic)	Model Name	MH181(SH38C44959)
USB Cable 1	Brand Name	Motorola(Luxshare)	Model Name	SC18D13217
USB Cable 2	Brand Name	Motorola(Saibao)	Model Name	SC18D13215
USB Cable 3	Brand Name	Motorola(Cabletech)	Model Name	SC18D13216
Type C to audio cable	Brand Name	Motorola(Luxshare)	Model Name	SC18C27844

2 Test Configuration of Equipment Under Test

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

2.1 Carrier Frequency and Channel

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5745-5825 MHz U-NII-3	149	5745	157	5785
	151*	5755	159*	5795
	153	5765	161	5805
	155 [#]	5775	165	5825

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.

2.2 Test Mode

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	MCS0
802.11n HT40	MCS0
802.11ac VHT80	MCS0
802.11ax HE20	MCS0
802.11ax HE40	MCS0
802.11ax HE80	MCS0

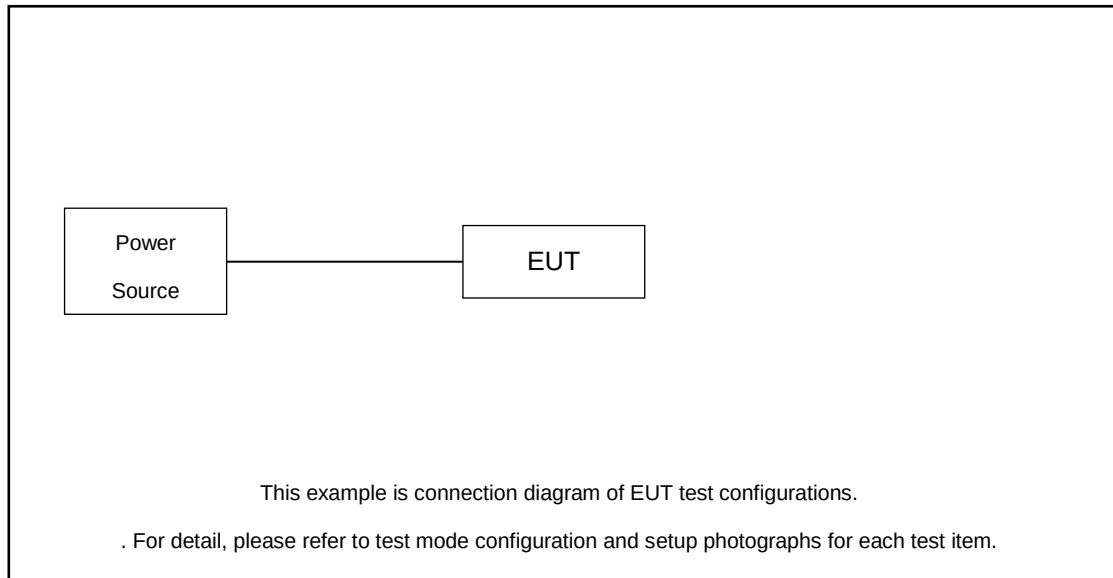
AC Conducted Emission	Mode 1 : GSM850 Idle + Bluetooth Link + WLAN Link(5G) + USB Cable 1(Charging from Adapter 3) + Battery
Remark: For Radiated Test Cases, The tests were performed with Adapter 1, Battery and USB Cable 1.	

Ch. #		U-NII-3 : 5745-5825 MHz			
		802.11a	802.11n HT20	802.11n HT40	802.11ac VHT80
L	Low	149	149	151	-
M	Middle	157	157	-	155
H	High	165	165	159	-

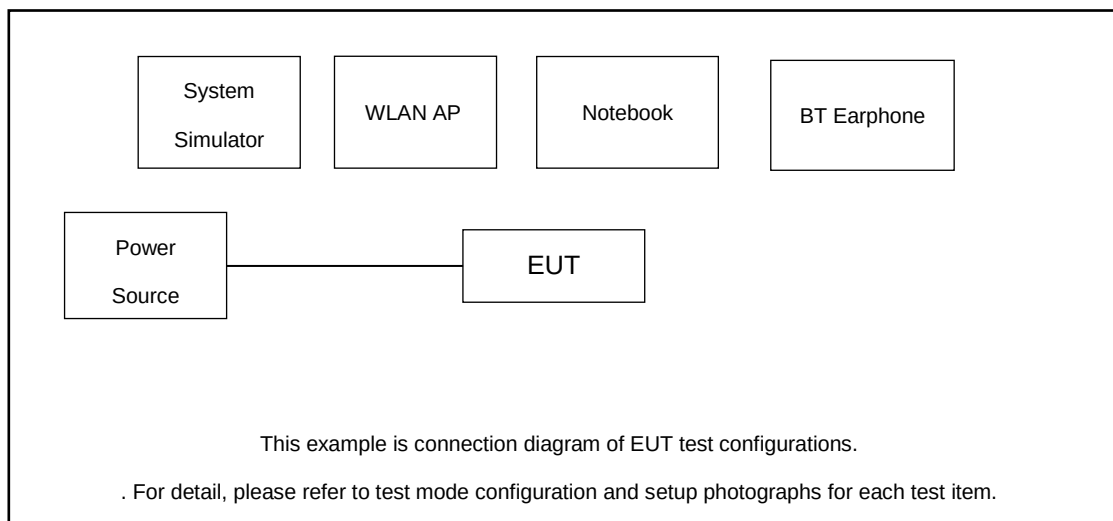
Ch. #		U-NII-3 : 5745-5825 MHz		
		802.11ax HE20	802.11ax HE40	802.11ax HE80
L	Low	149	151	-
M	Middle	157	-	155
H	High	165	159	-

2.3 Connection Diagram of Test System

For Radiated Emission



For Conducted Emission



2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	System Simulator	R&S	CMU 200	N/A	N/A	Unshielded, 1.8 m
2.	WLAN AP	D-Link	DIR-820L	KA2IR820LA1	N/A	Unshielded, 1.8m
3.	Notebook	DELL	Inspiron 15-7570	Fcc DoC	N/A	AC I/P: Unshielded, 1.8 m DC O/P: Shielded, 1.8 m
4.	Bluetooth Earphone	Samsung	EO-MG900	N/A	N/A	N/A

2.5 EUT Operation Test Setup

For WLAN RF test items, an engineering test program was provided and enabled to make EUT continuously transmit/receive.

For AC power line conducted emissions, the EUT was set to connect with the WLAN AP under large package sizes transmission.

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 4.7 dB and 20dB attenuator.

$$\begin{aligned}
 \text{Offset(dB)} &= \text{RF cable loss(dB)} + \text{attenuator factor(dB)}. \\
 &= 4.7 + 20 = 24.7 \text{ (dB)}
 \end{aligned}$$

3 Test Result

3.1 6dB and 26dB and 99% Occupied Bandwidth Measurement

3.1.1 Description of 6dB and 26dB and 99% Occupied Bandwidth

The minimum 6 dB bandwidth shall be at least 500 kHz.

26dB and 99% Occupied bandwidth are reporting only.

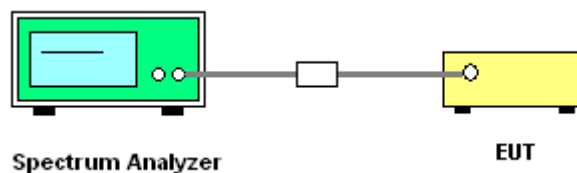
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

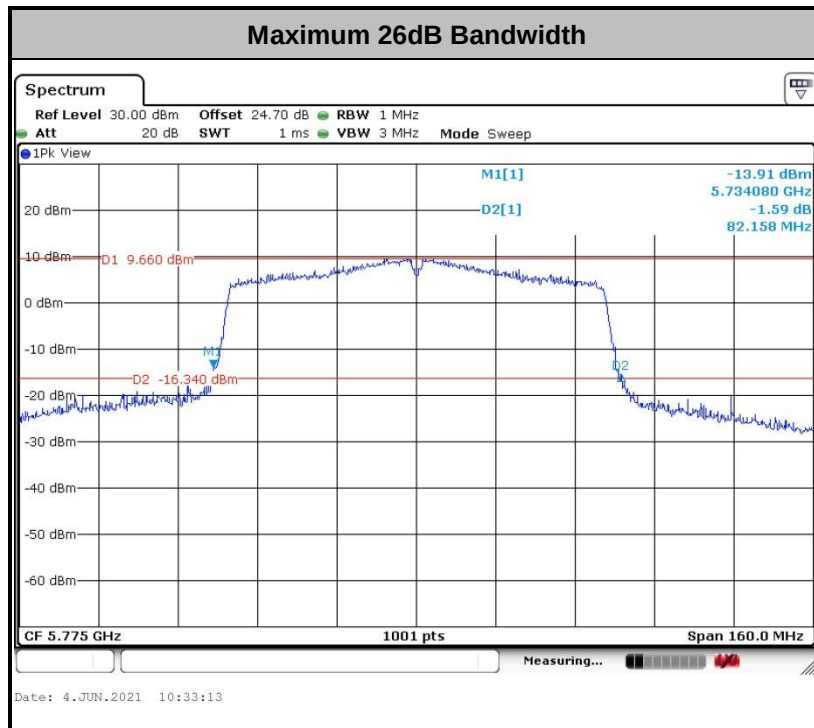
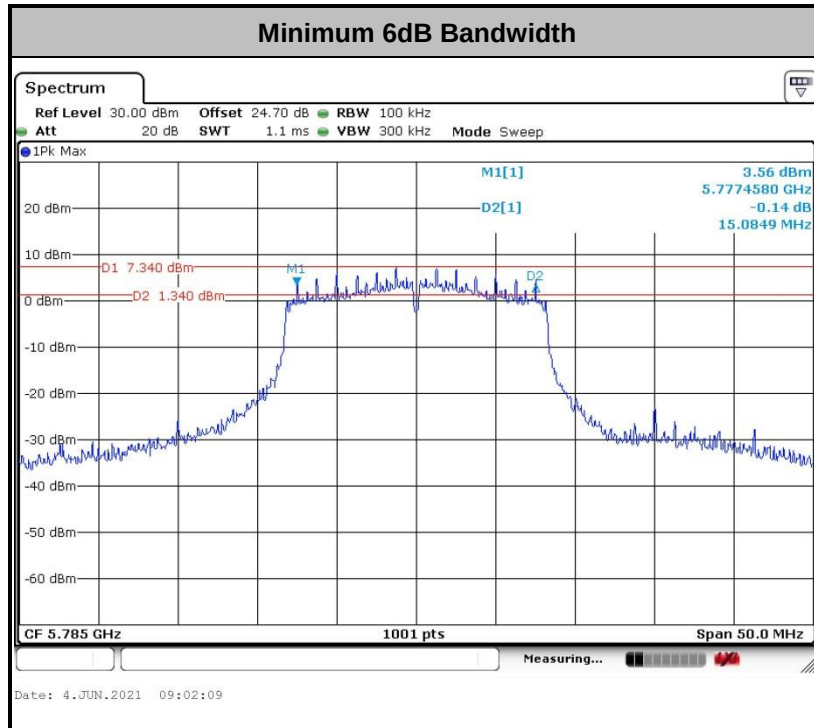
1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
Section C) Emission bandwidth for the band 5.725-5.85GHz
2. Set RBW = 100kHz.
3. Set the VBW $\geq 3 \times$ RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 6 dB down from the peak of the emission.
7. Measure and record the results in the test report.

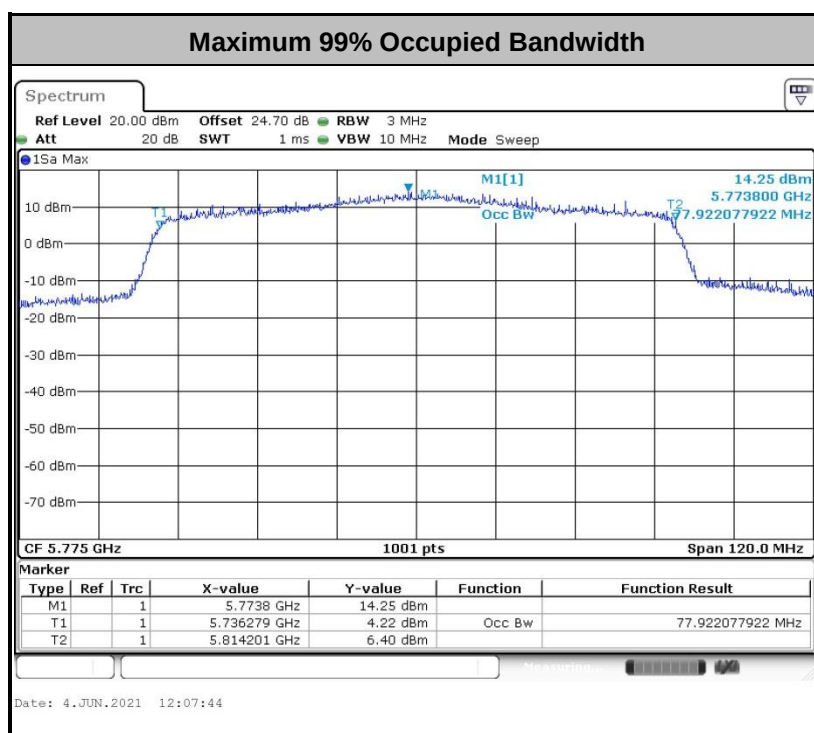
3.1.4 Test Setup



3.1.5 Test Result of 6dB Bandwidth

Please refer to Appendix A.





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

3.2 Maximum Conducted Output Power Measurement

3.2.1 Limit of Maximum Conducted Output Power

For the band 5.725–5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W.

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.

3.2.2 Measuring Instruments

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

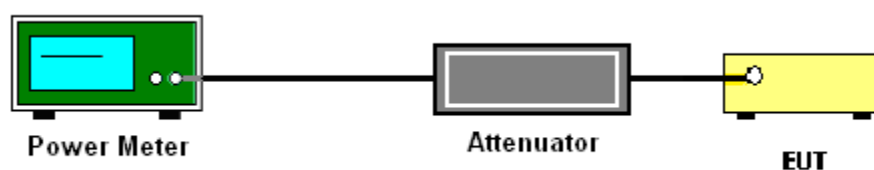
3.2.3 Test Procedures

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

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

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

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

For the band 5.725–5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band.

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

3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

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

Method SA-2

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

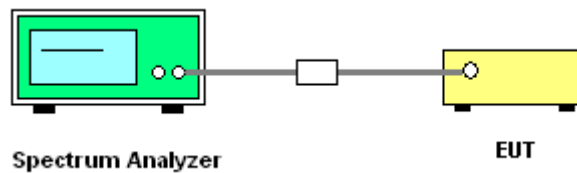
- Measure the duty cycle.
- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 300 kHz.
- Set VBW $\geq$ 1 MHz.
- Number of points in sweep $\geq$ 2 Span / RBW.
- Sweep time = auto.
- Detector = RMS
- Trace average at least 100 traces in power averaging mode.
- Add $10 \log(500\text{kHz}/\text{RBW})$ to the test result.
- Add $10 \log(1/x)$, where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times. For example, add $10 \log(1/0.25) = 6$ dB if the duty cycle is 25 percent.

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

Method (c): Measure and add $10 \log(N_{\text{ANT}})$ dB.

With this technique, spectrum measurements are performed at each output of the device, but rather than summing the spectra or the spectral peaks across the outputs, the quantity $10 \log(N_{\text{ANT}})$ dB is added to each spectrum value before comparing to the emission limit. The addition of $10 \log(N_{\text{ANT}})$ dB serves to apportion the emission limit among the N_{ANT} outputs so that each output is permitted to contribute no more than $1/N_{\text{ANT}}^{\text{th}}$ of the PSD limit.

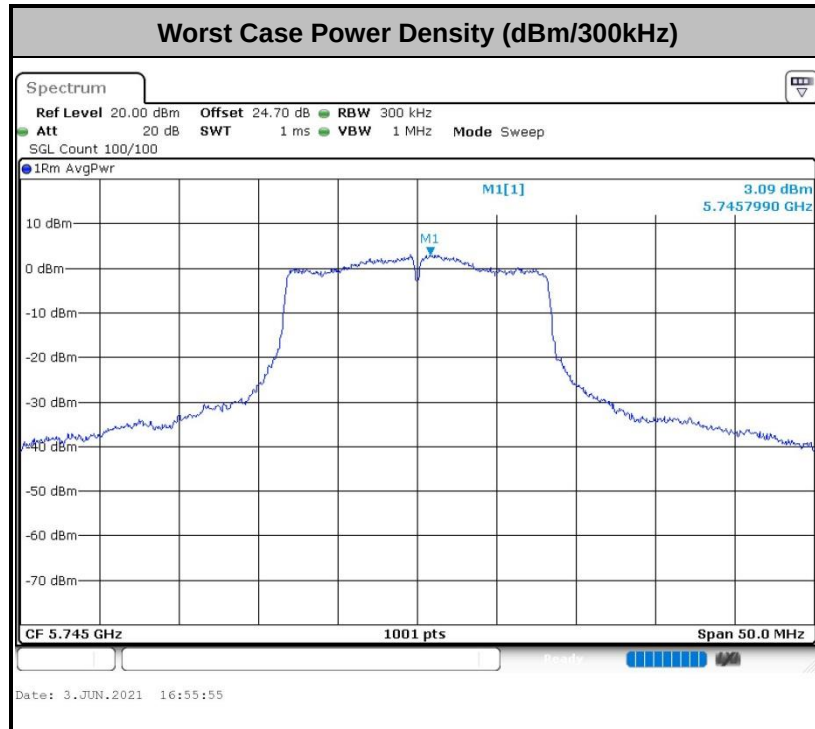
3.3.4 Test Setup





3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.



3.4 Unwanted Emissions Measurement

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

3.4.1 Limit of Unwanted Emissions

- (1) For transmitters operating in the 5.725-5.85 GHz band:

15.407(b)(4)(i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

- (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

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

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

$$\text{EIRP} = E_{\text{Meas}} + 20\log(d_{\text{Meas}}) - 104.7$$

where

EIRP is the equivalent isotropically radiated power, in dBm

E_{Meas} is the field strength of the emission at the measurement distance, in dBμV/m

d_{Meas} is the measurement distance, in m

3.4.2 Measuring Instruments

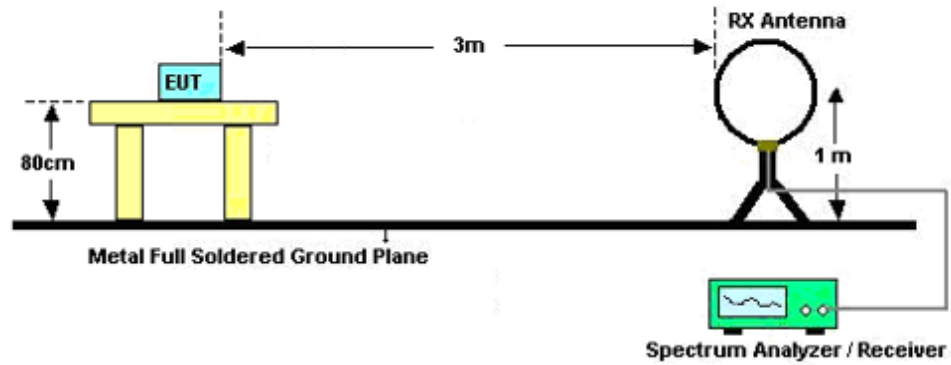
The measuring equipment is listed in the section 4 of this test report.

3.4.3 Test Procedures

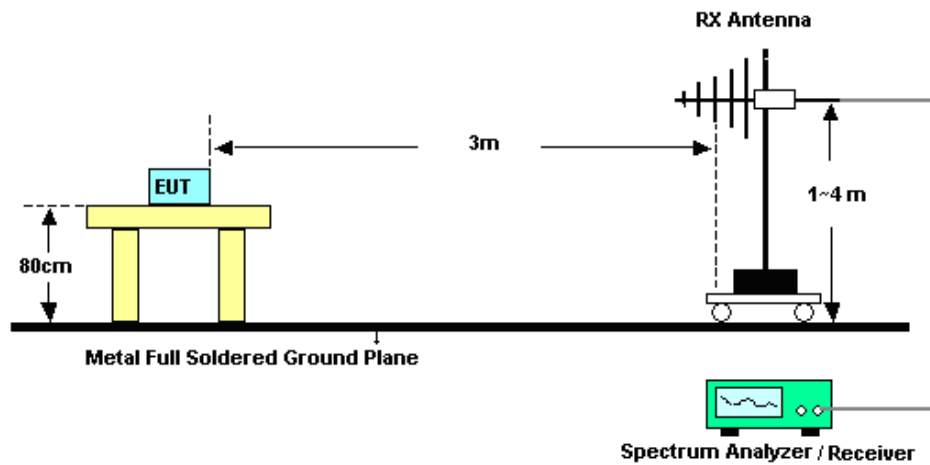
1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section G) Unwanted emissions measurement.
 - (1) Procedure for Unwanted Emissions Measurements Below 1000MHz
 - RBW = 120 kHz
 - VBW = 300 kHz
 - Detector = Peak
 - Trace mode = max hold
 - (2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz
 - RBW = 1 MHz
 - VBW $\geq$ 3 MHz
 - Detector = Peak
 - Sweep time = auto
 - Trace mode = max hold
 - (3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz
 - RBW = 1 MHz
 - VBW = 10 Hz, when duty cycle is no less than 98 percent.
 - VBW $\geq$ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband antenna and its height is adjusted between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT was arranged to its worst case and then adjust the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. For testing below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
7. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than peak limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

3.4.4 Test Setup

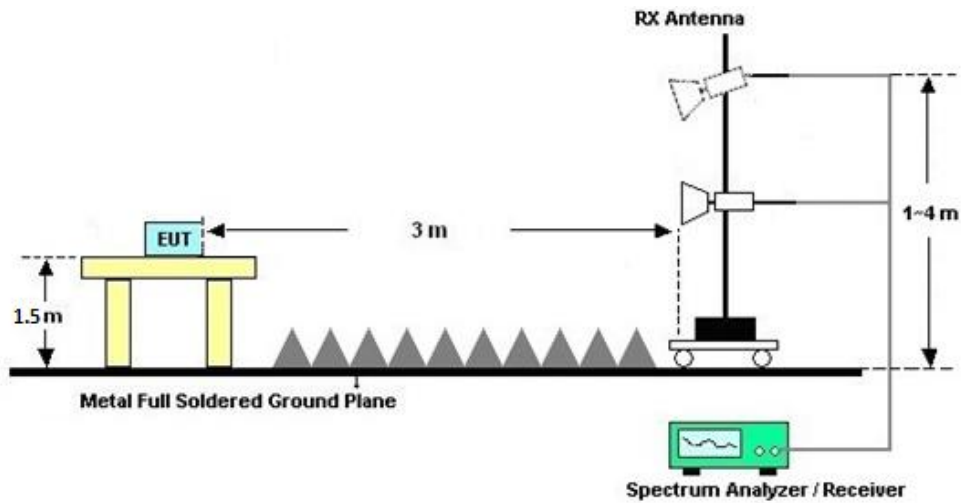
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



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

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

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

3.4.6 Test Result of Radiated Band Edges

Please refer to Appendix C.

3.4.7 Duty Cycle

Please refer to Appendix D.

3.4.8 Test Result of Unwanted Radiated Emission (30MHz ~ 10th Harmonic or 40GHz, whichever is lower)

Please refer to Appendix C.

3.5 AC Conducted Emission Measurement

3.5.1 Limit of AC Conducted Emission

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

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

*Decreases with the logarithm of the frequency.

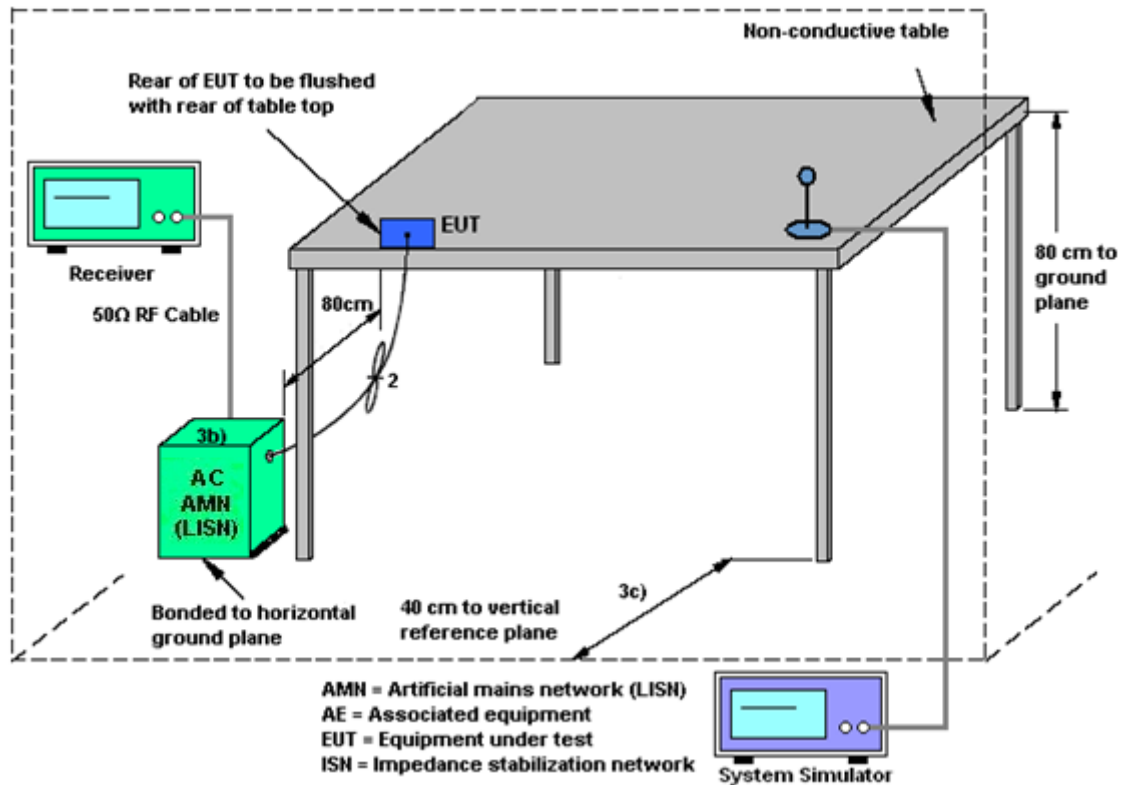
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

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

3.5.4 Test Setup



3.5.5 Test Result of AC Conducted Emission

Please refer to Appendix B.



3.6 Automatically Discontinue Transmission

3.6.1 Limit of Automatically Discontinue Transmission

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signaling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization to describe how this requirement is met.

3.6.2 Measuring Instruments

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

3.6.3 Test Result of Automatically Discontinue Transmission

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

3.7 Antenna Requirements

3.7.1 Standard Applicable

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

3.7.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.7.3 Antenna Gain

<CDD Modes >

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

Directional gain = 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 for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
	Ant. 1 (dBi)	Ant. 2 (dBi)				
Band IV	-4.50	-3.30	-3.30	-0.87	0.00	0.00

$Power\ Limit\ Reduction = DG(Power) - 6dBi, (min = 0)$

$PSD\ Limit\ Reduction = DG(PSD) - 6dBi, (min = 0)$



4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101078	10Hz~40GHz	Apr. 08, 2021	Jun. 03, 2021~ Jun. 04, 2021	Apr. 07, 2022	Conducted (TH01-SZ)
Pulse Power Sensor	Anritsu	MA2411B	1207253	30MHz~40GHz	Dec. 25, 2020	Jun. 03, 2021~ Jun. 04, 2021	Dec. 24, 2021	Conducted (TH01-SZ)
Power Meter	Anritsu	ML2495A	1218010	50MHz Bandwidth	Dec. 25, 2020	Jun. 03, 2021~ Jun. 04, 2021	Dec. 24, 2021	Conducted (TH01-SZ)
EXA Spectrum Analyzer	KEYSIGHT	N9010A	MY55150213	10Hz~44GHz	Jul. 21, 2020	Jun. 09, 2021	Jul. 20, 2021	Radiation (03CH02-SZ)
Loop Antenna	R&S	HFH2-Z2	100354	9kHz~30MHz	Jun. 22, 2020	Jun. 09, 2021	Jun. 21, 2021	Radiation (03CH02-SZ)
Bilog Antenna	TeseQ	CBL6112D	35407	30MHz~2GHz	Jul. 15, 2020	Jun. 09, 2021	Jul. 14, 2021	Radiation (03CH02-SZ)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00119436	1GHz~18GHz	Jul. 25, 2020	Jun. 09, 2021	Jul. 24, 2021	Radiation (03CH02-SZ)
HF Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz	Jul. 21, 2020	Jun. 09, 2021	Jul. 20, 2021	Radiation (03CH02-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18GHz~40GHz	Apr. 23, 2021	Jun. 09, 2021	Apr. 22, 2022	Radiation (03CH02-SZ)
LF Amplifier	Burgeon	BPA-530	102211	0.01~3000Mhz	Oct. 16, 2020	Jun. 09, 2021	Oct. 15, 2021	Radiation (03CH02-SZ)
HF Amplifier	MITEQ	AMF-7D-0010 1800-30-10P-R	1943528	1GHz~18GHz	Oct. 16, 2020	Jun. 09, 2021	Oct. 15, 2021	Radiation (03CH02-SZ)
HF Amplifier	KEYSIGHT	83017A	MY53270105	0.5GHz~26.5GHz	Oct. 16, 2020	Jun. 09, 2021	Oct. 15, 2021	Radiation (03CH02-SZ)
AC Power Source	Chroma	61601	616010002470	N/A	NCR	Jun. 09, 2021	NCR	Radiation (03CH02-SZ)
Turn Table	Chaintek	T-200	N/A	0~360 degree	NCR	Jun. 09, 2021	NCR	Radiation (03CH02-SZ)
Antenna Mast	Chaintek	MBS-400	N/A	1 m~4 m	NCR	Jun. 09, 2021	NCR	Radiation (03CH02-SZ)
EMI Receiver	R&S	ESR7	101630	9kHz~7GHz;	Mar. 07, 2021	Jun. 11, 2021	Mar. 06, 2022	Conduction (CO01-SZ)
AC LISN	EMCO	3816/2 LISN	00103912	9kHz~30MHz	Dec. 25, 2020	Jun. 11, 2021	Dec. 24, 2021	Conduction (CO01-SZ)
AC LISN (for auxiliary equipment)	EMCO	3816/2SH	00103892	9kHz~30MHz	Oct. 15, 2020	Jun. 11, 2021	Oct. 14, 2021	Conduction (CO01-SZ)
AC Power Source	Chroma	61602	616020000891	100Vac~250Vac	Jul. 21, 2020	Jun. 11, 2021	Jul. 20, 2021	Conduction (CO01-SZ)

NCR: No Calibration Required

5 Uncertainty of Evaluation

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI 63.10-2013. All the measurement uncertainty value were shown with a coverage K=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.2dB
---	-------

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.0dB
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Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.1dB
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Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.1dB
---	-------



Appendix A. Conducted Test Results

Report Number : FR151701F

Test Engineer:	Liu Qiu Qiu	Temperature:	24~26	°C
Test Date:	2021/6/3~2021/6/4	Relative Humidity:	50~53	%

TEST RESULTS DATA
6dB and 26dB EBW and 99% OBW

Band IV													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26dB Bandwidth (MHz)		6 dB Bandwidth (MHz)		6 dB Bandwidth Min. Limit (MHz)		Pass/Fail
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	2	149	5745	16.38	16.33	20.93	20.18	15.14	15.09	0.5		Pass
11a	6Mbps	2	157	5785	16.38	16.33	20.93	20.53	15.09	15.08	0.5		Pass
11a	6Mbps	2	165	5825	16.38	16.33	20.93	20.08	15.08	15.08	0.5		Pass
HT20	MCS0	2	149	5745	17.63	17.53	23.48	21.83	15.08	16.23	0.5		Pass
HT20	MCS0	2	157	5785	17.58	17.58	22.58	21.63	15.08	16.23	0.5		Pass
HT20	MCS0	2	165	5825	17.58	17.53	21.93	22.13	15.08	16.28	0.5		Pass
HT40	MCS0	2	151	5755	36.26	36.16	41.09	40.73	35.06	35.06	0.5		Pass
HT40	MCS0	2	159	5795	36.36	36.36	41.54	41.90	35.06	35.06	0.5		Pass
VHT80	MCS0	2	155	5775	75.76	76.12	82.16	81.36	72.57	75.13	0.5		Pass
HE20	MCS0	2	149	5745	18.93	18.93	24.93	22.58	15.43	16.03	0.5		Pass
HE20	MCS0	2	157	5785	18.93	18.93	24.48	22.63	16.28	15.48	0.5		Pass
HE20	MCS0	2	165	5825	18.93	18.98	22.53	23.03	16.48	15.93	0.5		Pass
HE40	MCS0	2	151	5755	37.86	37.86	41.45	41.45	36.32	35.06	0.5		Pass
HE40	MCS0	2	159	5795	37.86	37.96	43.16	41.90	36.32	35.51	0.5		Pass
HE80	MCS0	2	155	5775	77.68	77.92	81.84	81.52	75.13	70.01	0.5		Pass

TEST RESULTS DATA
Average Power Table

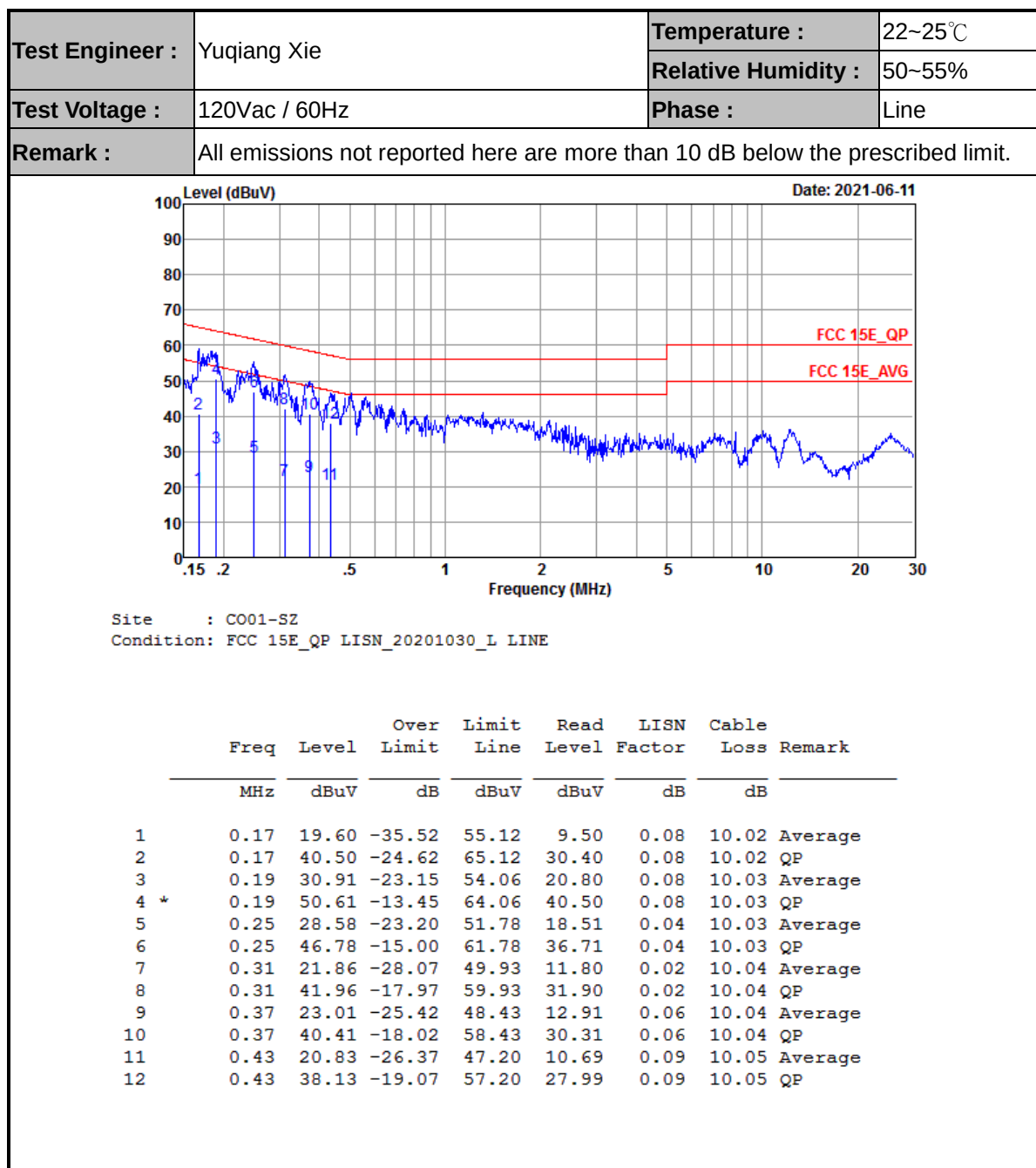
Band IV															
Mod.	Data Rate	N _{Tx}	CH.	RU Config	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
						Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	2	149	Full	5745	0.09	0.09	17.99	17.01	20.54	30.00	-3.30		Pass	
11a	6Mbps	2	157	Full	5785	0.09	0.09	17.92	17.12	20.55	30.00	-3.30		Pass	
11a	6Mbps	2	165	Full	5825	0.09	0.09	17.34	17.49	20.43	30.00	-3.30		Pass	
HT20	MCS0	2	149	Full	5745	0.00	0.00	17.60	16.59	20.13	30.00	-3.30		Pass	
HT20	MCS0	2	157	Full	5785	0.00	0.00	17.51	16.72	20.14	30.00	-3.30		Pass	
HT20	MCS0	2	165	Full	5825	0.00	0.00	16.94	17.08	20.02	30.00	-3.30		Pass	
HT40	MCS0	2	151	Full	5755	0.00	0.00	16.06	15.16	18.64	30.00	-3.30		Pass	
HT40	MCS0	2	159	Full	5795	0.00	0.00	17.36	16.44	19.93	30.00	-3.30		Pass	
VHT20	MCS0	2	149	Full	5745	0.00	0.00	17.59	16.54	20.11	30.00	-3.30		Pass	
VHT20	MCS0	2	157	Full	5785	0.00	0.00	17.50	16.70	20.13	30.00	-3.30		Pass	
VHT20	MCS0	2	165	Full	5825	0.00	0.00	16.92	17.05	20.00	30.00	-3.30		Pass	
VHT40	MCS0	2	151	Full	5755	0.00	0.00	16.05	15.13	18.62	30.00	-3.30		Pass	
VHT40	MCS0	2	159	Full	5795	0.00	0.00	17.34	16.40	19.91	30.00	-3.30		Pass	
VHT80	MCS0	2	155	Full	5775	0.00	0.00	16.40	15.10	18.81	30.00	-3.30		Pass	
HE20	MCS0	2	149	Full	5745	0.00	0.00	17.83	16.70	20.31	30.00	-3.30		Pass	
HE20	MCS0	2	149	26/0	5745	0.00	0.00	10.75	8.40	12.74	30.00	-3.30		Pass	
HE20	MCS0	2	149	52/37	5745	0.00	0.00	13.55	11.45	15.64	30.00	-3.30		Pass	
HE20	MCS0	2	149	106/53	5745	0.00	0.00	16.31	14.66	18.57	30.00	-3.30		Pass	
HE20	MCS0	2	157	Full	5785	0.00	0.00	17.72	16.86	20.32	30.00	-3.30		Pass	
HE20	MCS0	2	165	Full	5825	0.00	0.00	17.19	17.23	20.22	30.00	-3.30		Pass	
HE20	MCS0	2	165	26/8	5825	0.00	0.00	9.88	9.38	12.65	30.00	-3.30		Pass	
HE20	MCS0	2	165	52/40	5825	0.00	0.00	12.51	12.14	15.34	30.00	-3.30		Pass	
HE20	MCS0	2	165	106/54	5825	0.00	0.00	15.40	15.23	18.33	30.00	-3.30		Pass	
HE40	MCS0	2	151	Full	5755	0.00	0.00	16.01	15.00	18.54	30.00	-3.30		Pass	
HE40	MCS0	2	151	242/61	5755	0.00	0.00	15.14	12.32	16.97	30.00	-3.30		Pass	
HE40	MCS0	2	159	Full	5795	0.00	0.00	17.14	16.18	19.70	30.00	-3.30		Pass	
HE40	MCS0	2	159	242/62	5795	0.00	0.00	15.90	14.62	18.32	30.00	-3.30		Pass	
HE80	MCS0	2	155	Full	5775	0.00	0.00	16.40	15.11	18.81	30.00	-3.30		Pass	
HE80	MCS0	2	155	484/65	5775	0.00	0.00	13.72	13.25	16.50	30.00	-3.30		Pass	
HE80	MCS0	2	155	484/66	5775	0.00	0.00	13.57	13.07	16.34	30.00	-3.30		Pass	

TEST RESULTS DATA
Power Spectral Density

Band IV																	
Mod.	Data Rate	NTx	CH.	RU Config	Freq. (MHz)	Duty Factor (dB)		10log (500kHz /RBW) Factor (dB)		Average Power Density (dBm/500kHz)			Average PSD Limit (dBm/500kHz)		DG (dBi)		Pass /Fail
						Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	2	149	Full	5745	0.09	0.09	2.22				8.41	30.00		-0.87	Pass	
11a	6Mbps	2	157	Full	5785	0.09	0.09	2.22				8.12	30.00		-0.87	Pass	
11a	6Mbps	2	165	Full	5825	0.09	0.09	2.22				7.80	30.00		-0.87	Pass	
HT20	MCS0	2	149	Full	5745	0.00	0.00	2.22				8.36	30.00		-0.87	Pass	
HT20	MCS0	2	157	Full	5785	0.00	0.00	2.22				7.51	30.00		-0.87	Pass	
HT20	MCS0	2	165	Full	5825	0.00	0.00	2.22				7.09	30.00		-0.87	Pass	
HT40	MCS0	2	151	Full	5755	0.00	0.00	2.22				4.56	30.00		-0.87	Pass	
HT40	MCS0	2	159	Full	5795	0.00	0.00	2.22				4.83	30.00		-0.87	Pass	
VHT80	MCS0	2	155	Full	5775	0.00	0.00	2.22				1.29	30.00		-0.87	Pass	
HE20	MCS0	2	149	Full	5745	0.00	0.00	2.22				8.40	30.00		-0.87	Pass	
HE20	MCS0	2	149	26/0	5745	0.00	0.00	2.22				8.12	30.00		-0.87	Pass	
HE20	MCS0	2	149	52/37	5745	0.00	0.00	2.22				7.98	30.00		-0.87	Pass	
HE20	MCS0	2	149	106/53	5745	0.00	0.00	2.22				7.82	30.00		-0.87	Pass	
HE20	MCS0	2	157	Full	5785	0.00	0.00	2.22				7.96	30.00		-0.87	Pass	
HE20	MCS0	2	165	Full	5825	0.00	0.00	2.22				7.81	30.00		-0.87	Pass	
HE20	MCS0	2	165	26/8	5825	0.00	0.00	2.22				6.91	30.00		-0.87	Pass	
HE20	MCS0	2	165	52/40	5825	0.00	0.00	2.22				6.67	30.00		-0.87	Pass	
HE20	MCS0	2	165	106/54	5825	0.00	0.00	2.22				7.09	30.00		-0.87	Pass	
HE40	MCS0	2	151	Full	5755	0.00	0.00	2.22				3.92	30.00		-0.87	Pass	
HE40	MCS0	2	151	242/61	5755	0.00	0.00	2.22				3.38	30.00		-0.87	Pass	
HE40	MCS0	2	159	Full	5795	0.00	0.00	2.22			4.36	30.00		-0.87	Pass		
HE40	MCS0	2	159	242/62	5795	0.00	0.00	2.22			3.86	30.00		-0.87	Pass		
HE80	MCS0	2	155	Full	5775	0.00	0.00	2.22			1.52	30.00		-0.87	Pass		
HE80	MCS0	2	155	484/65	5775	0.00	0.00	2.22			0.70	30.00		-0.87	Pass		
HE80	MCS0	2	155	484/66	5775	0.00	0.00	2.22			0.50	30.00		-0.87	Pass		

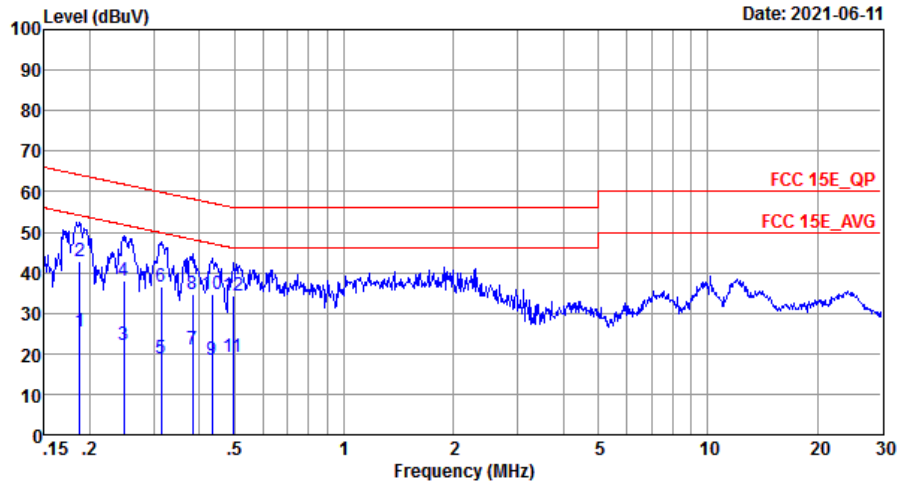


Appendix B. AC Conducted Emission Test Results





Test Engineer :	Yuqiang Xie	Temperature :	22~25℃
		Relative Humidity :	50~55%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Site : C001-SZ
Condition: FCC 15E_QP LISN_20201030_N NEUTRAL

	Freq	Level	Over	Limit	Read	LISN	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
			dB	dBuV	dBuV	dB	dB	
1	0.19	25.41	-28.74	54.15	15.30	0.08	10.03	Average
2 *	0.19	42.71	-21.44	64.15	32.60	0.08	10.03	QP
3	0.25	22.28	-29.54	51.82	12.21	0.04	10.03	Average
4	0.25	37.88	-23.94	61.82	27.81	0.04	10.03	QP
5	0.31	18.96	-30.88	49.84	8.90	0.02	10.04	Average
6	0.31	36.56	-23.28	59.84	26.50	0.02	10.04	QP
7	0.38	21.11	-27.10	48.21	11.00	0.07	10.04	Average
8	0.38	34.61	-23.60	58.21	24.50	0.07	10.04	QP
9	0.43	18.63	-28.57	47.20	8.49	0.09	10.05	Average
10	0.43	34.83	-22.37	57.20	24.69	0.09	10.05	QP
11	0.49	19.05	-27.05	46.10	8.90	0.10	10.05	Average
12	0.49	34.35	-21.75	56.10	24.20	0.10	10.05	QP

Note:

- Level(dBμV) = Read Level(dBμV) + LISN Factor(dB) + Cable Loss(dB)
- Over Limit(dB) = Level(dBμV) – Limit Line(dBμV)



Appendix C. Radiated Spurious Emission

5725~5850MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 149 5745MHz		5648.8	53.49	-14.81	68.3	44.12	31.73	10.58	32.94	137	346	P	H
		5699	63.75	-40.72	104.47	54.08	32	10.59	32.92	137	346	P	H
		5717	72.02	-37.94	109.96	62.29	32.03	10.61	32.91	137	346	P	H
		5724.4	76.98	-43.85	120.83	67.21	32.07	10.61	32.91	137	346	P	H
	*	5745	111.07	-	-	101.25	32.1	10.62	32.9	137	346	P	H
		5745	106.22	-	-	96.4	32.1	10.62	32.9	137	346	A	H
		5639.6	48.91	-19.39	68.3	39.54	31.73	10.58	32.94	140	339	P	V
		5699.8	59.18	-45.87	105.05	49.49	32	10.61	32.92	140	339	P	V
		5717.2	66.44	-43.58	110.02	56.71	32.03	10.61	32.91	140	339	P	V
		5724.6	72.42	-48.87	121.29	62.65	32.07	10.61	32.91	140	339	P	V
	*	5745	105.12	-	-	95.3	32.1	10.62	32.9	140	339	P	V
		5745	99.98	-	-	90.16	32.1	10.62	32.9	140	339	A	V



WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 157 5785MHz		5639.2	57.07	-11.23	68.3	47.7	31.73	10.58	32.94	120	352	P	H
		5694.4	68.53	-32.55	101.08	58.86	32	10.59	32.92	120	352	P	H
		5718.2	73.04	-37.26	110.3	63.27	32.07	10.61	32.91	120	352	P	H
		5721.6	72.83	-41.62	114.45	63.06	32.07	10.61	32.91	120	352	P	H
	*	5785	111.1	-	-	101.17	32.17	10.64	32.88	120	352	P	H
		5785	104.28	-	-	94.35	32.17	10.64	32.88	120	352	A	H
		5850.4	70.17	-51.12	121.29	59.95	32.4	10.68	32.86	120	352	P	H
		5870.6	67.87	-38.56	106.43	57.54	32.47	10.71	32.85	120	352	P	H
		5875	66.64	-38.56	105.2	56.31	32.47	10.71	32.85	120	352	P	H
		5925.8	58.28	-10.02	68.3	47.73	32.63	10.75	32.83	120	352	P	H
		5646.2	53.31	-14.99	68.3	43.94	31.73	10.58	32.94	182	335	P	V
		5698.2	62.43	-41.45	103.88	52.76	32	10.59	32.92	182	335	P	V
		5707.2	69.02	-38.2	107.22	59.29	32.03	10.61	32.91	182	335	P	V
		5723.6	69.78	-49.23	119.01	60.01	32.07	10.61	32.91	182	335	P	V
	*	5785	105.78	-	-	95.85	32.17	10.64	32.88	182	335	P	V
		5785	97.29	-	-	87.36	32.17	10.64	32.88	182	335	A	V
		5854.6	66.29	-45.42	111.71	56.04	32.43	10.68	32.86	182	335	P	V
		5863.6	62.78	-45.61	108.39	52.49	32.43	10.71	32.85	182	335	P	V
		5888.4	56.01	-39.24	95.25	45.64	32.5	10.71	32.84	182	335	P	V
		5931.4	52.51	-15.79	68.3	41.96	32.63	10.75	32.83	182	335	P	V



WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 165 5825MHz	*	5825	110.79	-	-	100.65	32.33	10.68	32.87	126	325	P	H
		5825	105.69	-	-	95.55	32.33	10.68	32.87	126	325	A	H
		5850	70.46	-51.74	122.2	60.24	32.4	10.68	32.86	126	325	P	H
		5860.8	63.86	-45.31	109.17	53.57	32.43	10.71	32.85	126	325	P	H
		5876.4	52.74	-51.42	104.16	42.41	32.47	10.71	32.85	126	325	P	H
		5949.4	47.8	-20.5	68.3	37.14	32.7	10.78	32.82	126	325	P	H
	*	5825	104.97	-	-	94.83	32.33	10.68	32.87	173	327	P	V
		5825	98.54	-	-	88.4	32.33	10.68	32.87	173	327	A	V
		5850.4	62.26	-59.03	121.29	52.04	32.4	10.68	32.86	173	327	P	V
		5855.2	60.02	-50.72	110.74	49.77	32.43	10.68	32.86	173	327	P	V
		5875.6	52.39	-52.36	104.75	42.06	32.47	10.71	32.85	173	327	P	V
		5944	47.82	-20.48	68.3	37.16	32.7	10.78	32.82	173	327	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



5725~5850MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 149 5745MHz		11490	50.68	-23.32	74	50.9	40.07	12.32	52.61	164	301	P	H
		17235	52.15	-16.15	68.3	48.77	40.33	15.58	52.53	170	360	P	H
		11490	50.49	-23.51	74	50.71	40.07	12.32	52.61	164	301	P	V
		17235	52.81	-15.49	68.3	49.43	40.33	15.58	52.53	170	360	P	V
802.11a CH 157 5785MHz		11570	50.08	-23.92	74	50.5	39.9	12.31	52.63	175	198	P	H
		17355	53.18	-15.12	68.3	49.23	40.95	15.65	52.65	189	185	P	H
		11570	50.39	-23.61	74	50.81	39.9	12.31	52.63	175	198	P	V
		17355	52.06	-16.24	68.3	48.11	40.95	15.65	52.65	189	185	P	V
802.11a CH 165 5825MHz		11650	50.15	-23.85	74	50.85	39.6	12.36	52.66	156	347	P	H
		17475	53.9	-14.4	68.3	49.38	41.5	15.79	52.77	150	360	P	H
		11650	50.18	-23.82	74	50.88	39.6	12.36	52.66	156	347	P	V
		17475	54.32	-13.98	68.3	49.8	41.5	15.79	52.77	150	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



5725~5850MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 149 5745MHz		5649.8	53.69	-14.61	68.3	44.35	31.7	10.58	32.94	126	325	P	H
		5700	64.77	-40.43	105.2	55.08	32	10.61	32.92	126	325	P	H
		5716.6	71.96	-37.89	109.85	62.23	32.03	10.61	32.91	126	325	P	H
		5720.4	74.08	-37.63	111.71	64.31	32.07	10.61	32.91	126	325	P	H
	*	5745	112.3	-	-	102.48	32.1	10.62	32.9	126	325	P	H
		5745	105.48	-	-	95.66	32.1	10.62	32.9	126	325	A	H
		5647	47.99	-20.31	68.3	38.62	31.73	10.58	32.94	185	321	P	V
		5698.4	58.65	-45.37	104.02	48.98	32	10.59	32.92	185	321	P	V
		5711.4	64.66	-43.73	108.39	54.93	32.03	10.61	32.91	185	321	P	V
		5724.6	68.86	-52.43	121.29	59.09	32.07	10.61	32.91	185	321	P	V
	*	5745	106.93	-	-	97.11	32.1	10.62	32.9	185	321	P	V
		5745	99.26	-	-	89.44	32.1	10.62	32.9	185	321	A	V



WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 157 5785MHz		5639.8	58.23	-10.07	68.3	48.86	31.73	10.58	32.94	106	350	P	H
		5693.4	66.02	-34.33	100.35	56.35	32	10.59	32.92	106	350	P	H
		5718.6	72.47	-37.94	110.41	62.7	32.07	10.61	32.91	106	350	P	H
		5725	72.72	-49.48	122.2	62.95	32.07	10.61	32.91	106	350	P	H
	*	5785	111.67	-	-	101.74	32.17	10.64	32.88	106	350	P	H
		5785	104.62	-	-	94.69	32.17	10.64	32.88	106	350	A	H
		5850.2	72.64	-49.1	121.74	62.42	32.4	10.68	32.86	106	350	P	H
		5859	71.44	-38.24	109.68	61.15	32.43	10.71	32.85	106	350	P	H
		5878	62.49	-40.48	102.97	52.16	32.47	10.71	32.85	106	350	P	H
		5935.4	60.57	-7.73	68.3	49.98	32.63	10.78	32.82	106	350	P	H
		5629.8	53.45	-14.85	68.3	44.04	31.77	10.58	32.94	182	335	P	V
		5695.8	61.3	-40.81	102.11	51.63	32	10.59	32.92	182	335	P	V
		5719	66.48	-44.04	110.52	56.71	32.07	10.61	32.91	182	335	P	V
		5723.8	62.73	-56.73	119.46	52.96	32.07	10.61	32.91	182	335	P	V
	*	5785	104.73	-	-	94.8	32.17	10.64	32.88	182	335	P	V
		5785	96.89	-	-	86.96	32.17	10.64	32.88	182	335	A	V
		5850	69.51	-52.69	122.2	59.29	32.4	10.68	32.86	182	335	P	V
		5863.6	64.09	-44.3	108.39	53.8	32.43	10.71	32.85	182	335	P	V
		5876	61.03	-43.43	104.46	50.7	32.47	10.71	32.85	182	335	P	V
		5931.6	53.86	-14.44	68.3	43.31	32.63	10.75	32.83	182	335	P	V



WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 165 5825MHz	*	5825	112.67	-	-	102.53	32.33	10.68	32.87	148	323	P	H
		5825	106.34	-	-	96.2	32.33	10.68	32.87	148	323	A	H
		5853	63.3	-52.06	115.36	53.08	32.4	10.68	32.86	148	323	P	H
		5856.2	59.88	-50.58	110.46	49.6	32.43	10.71	32.86	148	323	P	H
		5918.6	49.22	-23.7	72.92	38.73	32.57	10.75	32.83	148	323	P	H
		5925.4	48.77	-19.53	68.3	38.22	32.63	10.75	32.83	148	323	P	H
	*	5825	103.78	-	-	93.64	32.33	10.68	32.87	206	314	P	V
		5825	97.24	-	-	87.1	32.33	10.68	32.87	206	314	A	V
		5850.2	55.59	-66.15	121.74	45.37	32.4	10.68	32.86	206	314	P	V
		5855.4	51.96	-58.73	110.69	41.71	32.43	10.68	32.86	206	314	P	V
		5877.2	49.17	-54.4	103.57	38.84	32.47	10.71	32.85	206	314	P	V
		5927.2	48.69	-19.61	68.3	38.14	32.63	10.75	32.83	206	314	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



5725~5850MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n		11490	51.51	-22.49	74	51.73	40.07	12.32	52.61	164	301	P	H
HT20		17235	52.48	-15.82	68.3	49.1	40.33	15.58	52.53	170	360	P	H
CH 149		11490	51.44	-22.56	74	51.66	40.07	12.32	52.61	164	301	P	V
5745MHz		17235	53.36	-14.94	68.3	49.98	40.33	15.58	52.53	170	360	P	V
802.11n		11570	50.09	-23.91	74	50.51	39.9	12.31	52.63	175	198	P	H
HT20		17355	52.66	-15.64	68.3	48.71	40.95	15.65	52.65	189	185	P	H
CH 157		11570	50.13	-23.87	74	50.55	39.9	12.31	52.63	175	198	P	V
5785MHz		17355	52.72	-15.58	68.3	48.77	40.95	15.65	52.65	189	185	P	V
802.11n		11650	50.46	-23.54	74	51.16	39.6	12.36	52.66	156	347	P	H
HT20		17475	53.56	-14.74	68.3	49.04	41.5	15.79	52.77	150	360	P	H
CH 165		11650	50.68	-23.32	74	51.38	39.6	12.36	52.66	156	347	P	V
5825MHz		17475	53.93	-14.37	68.3	49.41	41.5	15.79	52.77	150	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



5725~5850MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 151 5755MHz		5649.8	50.62	-17.68	68.3	41.28	31.7	10.58	32.94	132	349	P	H
		5690.8	64.24	-34.19	98.43	54.57	32	10.59	32.92	132	349	P	H
		5714.2	71.92	-37.26	109.18	62.19	32.03	10.61	32.91	132	349	P	H
		5724.4	75	-45.83	120.83	65.23	32.07	10.61	32.91	132	349	P	H
		5755	107.09	-	-	97.24	32.13	10.62	32.9	132	349	P	H
		5755	99.55	-	-	89.7	32.13	10.62	32.9	132	349	A	H
		5852	51.36	-66.28	117.64	41.14	32.4	10.68	32.86	132	349	P	H
		5856	53.02	-57.5	110.52	42.74	32.43	10.71	32.86	132	349	P	H
		5881.8	49.76	-50.39	100.15	39.43	32.47	10.71	32.85	132	349	P	H
		5929.6	48.46	-19.84	68.3	37.91	32.63	10.75	32.83	132	349	P	H
		5648	49.27	-19.03	68.3	39.9	31.73	10.58	32.94	174	342	P	V
		5697.6	61.91	-41.53	103.44	52.24	32	10.59	32.92	174	342	P	V
		5719	66.37	-44.15	110.52	56.6	32.07	10.61	32.91	174	342	P	V
		5720.4	68	-43.71	111.71	58.23	32.07	10.61	32.91	174	342	P	V
		5755	100.58	-	-	90.73	32.13	10.62	32.9	174	342	P	V
		5755	94.09	-	-	84.24	32.13	10.62	32.9	174	342	A	V
		5852	52.02	-65.62	117.64	41.8	32.4	10.68	32.86	132	349	P	V
		5862	52.13	-56.71	108.84	41.84	32.43	10.71	32.85	132	349	P	V
		5881.8	51.42	-48.73	100.15	41.09	32.47	10.71	32.85	132	349	P	V
		5931.2	49.65	-18.65	68.3	39.1	32.63	10.75	32.83	132	349	P	V



WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 159 5795MHz		5648	57.18	-11.12	68.3	47.81	31.73	10.58	32.94	150	347	P	H
		5697.8	61.5	-42.08	103.58	51.83	32	10.59	32.92	150	347	P	H
		5718.2	64.27	-46.03	110.3	54.5	32.07	10.61	32.91	150	347	P	H
		5724.2	64.31	-56.07	120.38	54.54	32.07	10.61	32.91	150	347	P	H
		5795	108.71	-	-	98.75	32.2	10.64	32.88	150	347	P	H
		5795	101.52	-	-	91.56	32.2	10.64	32.88	150	347	A	H
		5850.4	67.67	-53.62	121.29	57.45	32.4	10.68	32.86	150	347	P	H
		5857	66.27	-43.97	110.24	55.99	32.43	10.71	32.86	150	347	P	H
		5892.8	62.62	-29.37	91.99	52.25	32.5	10.71	32.84	150	347	P	H
		5942.4	54.85	-13.45	68.3	44.19	32.7	10.78	32.82	150	347	P	H
		5635.2	49.24	-19.06	68.3	39.87	31.73	10.58	32.94	208	348	P	V
		5698.8	57.67	-46.65	104.32	48	32	10.59	32.92	208	348	P	V
		5718.6	58.66	-51.75	110.41	48.89	32.07	10.61	32.91	208	348	P	V
		5724.8	57.36	-64.38	121.74	47.59	32.07	10.61	32.91	208	348	P	V
		5795	102.23	-	-	92.27	32.2	10.64	32.88	208	348	P	V
		5795	94.32	-	-	84.36	32.2	10.64	32.88	208	348	A	V
		5850.4	59.77	-61.52	121.29	49.55	32.4	10.68	32.86	208	348	P	V
		5856.2	59.48	-50.98	110.46	49.2	32.43	10.71	32.86	208	348	P	V
		5875.6	52.08	-52.67	104.75	41.75	32.47	10.71	32.85	208	348	P	V
		5935.6	50.12	-18.18	68.3	39.53	32.63	10.78	32.82	208	348	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



5725~5850MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n		11650	50.68	-23.32	74	51.38	39.6	12.36	52.66	156	347	P	H
HT40		17475	53.93	-14.37	68.3	49.41	41.5	15.79	52.77	150	360	P	H
CH 151		11650	50.46	-23.54	74	51.16	39.6	12.36	52.66	156	347	P	V
5755MHz		17475	53.56	-14.74	68.3	49.04	41.5	15.79	52.77	150	360	P	V
802.11n		11590	49.69	-24.31	74	50.16	39.85	12.31	52.63	170	300	P	H
HT40		17385	53.28	-15.02	68.3	48.99	41.18	15.79	52.68	150	200	P	H
CH 159		11590	50.14	-23.86	74	50.61	39.85	12.31	52.63	170	300	P	V
5795MHz		17385	52.63	-15.67	68.3	48.34	41.18	15.79	52.68	150	200	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



5725~5850MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 155 5775MHz		5647.4	59.53	-8.77	68.3	50.16	31.73	10.58	32.94	129	352	P	H
		5699.6	70.46	-34.45	104.91	60.77	32	10.61	32.92	129	352	P	H
		5716.4	72.12	-37.67	109.79	62.39	32.03	10.61	32.91	129	352	P	H
		5723	74.41	-43.23	117.64	64.64	32.07	10.61	32.91	129	352	P	H
		5775	105.1	-	-	95.2	32.17	10.62	32.89	129	352	P	H
		5775	97.59	-	-	87.69	32.17	10.62	32.89	129	352	A	H
		5850	63.37	-58.83	122.2	53.15	32.4	10.68	32.86	129	352	P	H
		5855	62.4	-48.4	110.8	52.15	32.43	10.68	32.86	129	352	P	H
		5881	58	-42.74	100.74	47.67	32.47	10.71	32.85	129	352	P	H
		5925	51.9	-16.3	68.2	41.35	32.63	10.75	32.83	129	352	P	H
		5649	54.48	-13.82	68.3	45.11	31.73	10.58	32.94	208	348	P	V
		5696.8	65.12	-37.73	102.85	55.45	32	10.59	32.92	208	348	P	V
		5718.8	67.69	-42.77	110.46	57.92	32.07	10.61	32.91	208	348	P	V
		5723.6	67.03	-51.98	119.01	57.26	32.07	10.61	32.91	208	348	P	V
		5775	100.97	-	-	91.07	32.17	10.62	32.89	208	348	P	V
		5775	93.53	-	-	83.63	32.17	10.62	32.89	208	348	A	V
		5851.8	57.67	-60.43	118.1	47.45	32.4	10.68	32.86	208	348	P	V
		5858.2	56.3	-53.6	109.9	46.01	32.43	10.71	32.85	208	348	P	V
		5878.4	52.58	-50.09	102.67	42.25	32.47	10.71	32.85	208	348	P	V
		5930	49.24	-19.06	68.3	38.69	32.63	10.75	32.83	208	348	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

**5725~5850MHz****WIFI 802.11ac VHT80 (Harmonic @ 3m)**

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac		11550	50.15	-23.85	74	50.5	39.95	12.32	52.62	160	360	P	H
VHT80		17325	52.17	-16.13	68.3	48.55	40.72	15.52	52.62	170	360	P	H
CH 155		11550	50.66	-23.34	74	51.01	39.95	12.32	52.62	160	360	P	V
5775MHz		17325	52.06	-16.24	68.3	48.44	40.72	15.52	52.62	170	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



5725~5850MHz

WIFI 802.11ax HE20 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ax HE20 CH 149 5745MHz		5648.8	49.05	-19.25	68.3	39.68	31.73	10.58	32.94	100	340	P	H
		5699	64.06	-40.41	104.47	54.39	32	10.59	32.92	100	340	P	H
		5718.4	70.99	-39.36	110.35	61.22	32.07	10.61	32.91	100	340	P	H
		5725	74.53	-47.67	122.2	64.76	32.07	10.61	32.91	100	340	P	H
	*	5745	113.38	-	-	103.56	32.1	10.62	32.9	100	340	P	H
		5745	106	-	-	96.18	32.1	10.62	32.9	100	340	A	H
		5607.8	47.51	-20.79	68.3	38.1	31.8	10.56	32.95	116	338	P	V
		5696.4	55.62	-46.93	102.55	45.95	32	10.59	32.92	116	338	P	V
		5717	64	-45.96	109.96	54.27	32.03	10.61	32.91	116	338	P	V
		5724.6	66.84	-54.45	121.29	57.07	32.07	10.61	32.91	116	338	P	V
	*	5755	104.82	-	-	94.97	32.13	10.62	32.9	116	338	P	V
		5755	97.99	-	-	88.14	32.13	10.62	32.9	116	338	A	V



WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 CH 157 5785MHz		5644.8	60.2	-8.1	68.3	50.83	31.73	10.58	32.94	108	352	P	H
		5699.6	74.39	-30.52	104.91	64.7	32	10.61	32.92	108	352	P	H
		5718	78.93	-31.31	110.24	69.16	32.07	10.61	32.91	108	352	P	H
		5720.4	79.81	-31.9	111.71	70.04	32.07	10.61	32.91	108	352	P	H
	*	5785	111.63	-	-	101.7	32.17	10.64	32.88	108	352	P	H
		5785	103.62	-	-	93.69	32.17	10.64	32.88	108	352	A	H
		5850	76.77	-45.43	122.2	66.55	32.4	10.68	32.86	108	352	P	H
		5861.4	74.17	-34.84	109.01	63.88	32.43	10.71	32.85	108	352	P	H
		5893.6	67.78	-23.62	91.4	57.41	32.5	10.71	32.84	108	352	P	H
		5928.2	60.8	-7.5	68.3	50.25	32.63	10.75	32.83	108	352	P	H
		5637.6	55.29	-13.01	68.3	45.92	31.73	10.58	32.94	207	349	P	V
		5696	71.5	-30.76	102.26	61.83	32	10.59	32.92	207	349	P	V
		5715.4	73.07	-36.44	109.51	63.34	32.03	10.61	32.91	207	349	P	V
		5722.2	72.86	-42.96	115.82	63.09	32.07	10.61	32.91	207	349	P	V
	*	5785	104.51	-	-	94.58	32.17	10.64	32.88	207	349	P	V
		5785	96.46	-	-	86.53	32.17	10.64	32.88	207	349	A	V
		5850.2	75.39	-46.35	121.74	65.17	32.4	10.68	32.86	207	349	P	V
		5859.2	69.36	-40.26	109.62	59.07	32.43	10.71	32.85	207	349	P	V
		5902.4	63.97	-20.92	84.89	53.56	32.5	10.75	32.84	207	349	P	V
		5928.4	57.65	-10.65	68.3	47.1	32.63	10.75	32.83	207	349	P	V



WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 CH 165 5825MHz	*	5825	111.84	-	-	101.7	32.33	10.68	32.87	138	339	P	H
		5825	105.99	-	-	95.85	32.33	10.68	32.87	138	339	A	H
		5850.8	73.83	-46.55	120.38	63.61	32.4	10.68	32.86	138	339	P	H
		5855.4	70.33	-40.36	110.69	60.08	32.43	10.68	32.86	138	339	P	H
		5877.4	52.14	-51.28	103.42	41.81	32.47	10.71	32.85	138	339	P	H
		5932.8	48.41	-19.89	68.3	37.86	32.63	10.75	32.83	138	339	P	H
	*	5825	101.97	-	-	91.83	32.33	10.68	32.87	116	338	P	V
		5825	94.34	-	-	84.2	32.33	10.68	32.87	116	338	A	V
		5850	70.37	-51.83	122.2	60.15	32.4	10.68	32.86	116	338	P	V
		5859.2	59.58	-50.04	109.62	49.29	32.43	10.71	32.85	116	338	P	V
		5909	48.73	-31.28	80.01	38.24	32.57	10.75	32.83	116	338	P	V
		5942.2	48.57	-19.73	68.3	37.91	32.7	10.78	32.82	116	338	P	V
Remark	1. No other spurious found.												
	2. All results are PASS against Peak and Average limit line.												



5725~5850MHz

WIFI 802.11ax HE20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax		11490	50.95	-23.05	74	51.17	40.07	12.32	52.61	164	301	P	H
HE20		17235	52.11	-16.19	68.3	48.73	40.33	15.58	52.53	170	360	P	H
CH 149		11490	50.65	-23.35	74	50.87	40.07	12.32	52.61	164	301	P	V
5745MHz		17235	51.62	-16.68	68.3	48.24	40.33	15.58	52.53	170	360	P	V
802.11ax		11570	50.43	-23.57	74	50.85	39.9	12.31	52.63	175	198	P	H
HE20		17355	53.33	-14.97	68.3	49.38	40.95	15.65	52.65	189	185	P	H
CH 157		11570	49.56	-24.44	74	49.98	39.9	12.31	52.63	175	198	P	V
5785MHz		17355	52.46	-15.84	68.3	48.51	40.95	15.65	52.65	189	185	P	V
802.11ax		11650	51.08	-22.92	74	51.78	39.6	12.36	52.66	156	347	P	H
HE20		17475	53.71	-14.59	68.3	49.19	41.5	15.79	52.77	150	360	P	H
CH 165		11650	49.63	-24.37	74	50.33	39.6	12.36	52.66	156	347	P	V
5825MHz		17475	54.21	-14.09	68.3	49.69	41.5	15.79	52.77	150	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



5725~5850MHz

WIFI 802.11ax HE40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 CH 151 5755MHz		5644.2	51.71	-16.59	68.3	42.34	31.73	10.58	32.94	133	349	P	H
		5692	65.03	-34.29	99.32	55.36	32	10.59	32.92	133	349	P	H
		5714.6	75.95	-33.34	109.29	66.22	32.03	10.61	32.91	133	349	P	H
		5722.2	75.03	-40.79	115.82	65.26	32.07	10.61	32.91	133	349	P	H
		5755	106.66	-	-	96.81	32.13	10.62	32.9	133	349	P	H
		5755	99.99	-	-	90.14	32.13	10.62	32.9	133	349	A	H
		5851.6	52.63	-65.92	118.55	42.41	32.4	10.68	32.86	133	349	P	H
		5860.6	52.83	-56.4	109.23	42.54	32.43	10.71	32.85	133	349	P	H
		5878	50.44	-52.53	102.97	40.11	32.47	10.71	32.85	133	349	P	H
		5929	49.28	-19.02	68.3	38.73	32.63	10.75	32.83	133	349	P	H
		5649.6	49.31	-18.99	68.3	39.97	31.7	10.58	32.94	187	348	P	V
		5700	61.92	-43.28	105.2	52.23	32	10.61	32.92	187	348	P	V
		5718.2	68.12	-42.18	110.3	58.35	32.07	10.61	32.91	187	348	P	V
		5722.8	67.73	-49.45	117.18	57.96	32.07	10.61	32.91	187	348	P	V
		5755	100.03	-	-	90.18	32.13	10.62	32.9	187	348	P	V
		5755	93.09	-	-	83.24	32.13	10.62	32.9	187	348	A	V
		5850.4	48.29	-73	121.29	38.07	32.4	10.68	32.86	187	348	P	V
		5865.2	48.52	-59.42	107.94	38.23	32.43	10.71	32.85	187	348	P	V
		5920	48.84	-23.05	71.89	38.35	32.57	10.75	32.83	187	348	P	V
		5949	49.17	-19.13	68.3	38.51	32.7	10.78	32.82	187	348	P	V



WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 CH 159 5795MHz		5649.4	59.49	-8.81	68.3	50.12	31.73	10.58	32.94	120	345	P	H
		5699.2	66.46	-38.15	104.61	56.79	32	10.59	32.92	120	345	P	H
		5713.2	69.77	-39.13	108.9	60.04	32.03	10.61	32.91	120	345	P	H
		5724.4	69.56	-51.27	120.83	59.79	32.07	10.61	32.91	120	345	P	H
		5795	107.31	-	-	97.35	32.2	10.64	32.88	120	345	P	H
		5795	101.42	-	-	91.46	32.2	10.64	32.88	120	345	A	H
		5851.8	71.86	-46.24	118.1	61.64	32.4	10.68	32.86	120	345	P	H
		5858.6	72.6	-37.19	109.79	62.31	32.43	10.71	32.85	120	345	P	H
		5880	67.17	-34.32	101.49	56.84	32.47	10.71	32.85	120	345	P	H
		5926.2	63.08	-5.22	68.3	52.53	32.63	10.75	32.83	120	345	P	H
		5649.6	57.32	-10.98	68.3	47.98	31.7	10.58	32.94	160	348	P	V
		5680.2	63.47	-27.16	90.63	53.95	31.85	10.59	32.92	160	348	P	V
		5711.2	64.96	-43.38	108.34	55.23	32.03	10.61	32.91	160	348	P	V
		5725	66.35	-55.85	122.2	56.58	32.07	10.61	32.91	160	348	P	V
		5795	99.93	-	-	89.97	32.2	10.64	32.88	160	348	P	V
		5795	92.98	-	-	83.02	32.2	10.64	32.88	160	348	A	V
		5852	64.36	-53.28	117.64	54.14	32.4	10.68	32.86	160	348	P	V
		5859	65.6	-44.08	109.68	55.31	32.43	10.71	32.85	160	348	P	V
		5876.6	62.49	-41.52	104.01	52.16	32.47	10.71	32.85	160	348	P	V
		5928.2	57.42	-10.88	68.3	46.87	32.63	10.75	32.83	160	348	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



5725~5850MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax		11510	50.28	-23.72	74	50.44	40.1	12.34	52.6	176	186	P	H
HE40		17265	51.6	-16.7	68.3	48.19	40.47	15.51	52.57	189	163	P	H
CH 151		11510	51.14	-22.86	74	51.3	40.1	12.34	52.6	176	186	P	V
5755MHz		17265	53.95	-14.35	68.3	50.54	40.47	15.51	52.57	189	163	P	V
802.11ax		11590	49.9	-24.1	74	50.37	39.85	12.31	52.63	170	300	P	H
HE40		17385	52.84	-15.46	68.3	48.55	41.18	15.79	52.68	150	200	P	H
CH 159		11590	50.6	-23.4	74	51.07	39.85	12.31	52.63	170	300	P	V
5795MHz		17385	52.71	-15.59	68.3	48.42	41.18	15.79	52.68	150	200	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



5725~5850MHz

WIFI 802.11ax HE80 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 CH 155 5775MHz		5645	57.95	-10.35	68.3	48.58	31.73	10.58	32.94	126	343	P	H
		5692.8	68.6	-31.31	99.91	58.93	32	10.59	32.92	126	343	P	H
		5719	72.08	-38.44	110.52	62.31	32.07	10.61	32.91	126	343	P	H
		5720.4	72.23	-39.48	111.71	62.46	32.07	10.61	32.91	126	343	P	H
		5775	106.19	-	-	96.29	32.17	10.62	32.89	126	343	P	H
		5775	99.76	-	-	89.86	32.17	10.62	32.89	126	343	A	H
		5852.2	63.33	-53.85	117.18	53.11	32.4	10.68	32.86	126	343	P	H
		5855.8	63.93	-46.65	110.58	53.65	32.43	10.71	32.86	126	343	P	H
		5880.8	59.84	-41.05	100.89	49.51	32.47	10.71	32.85	126	343	P	H
		5926.8	52.85	-15.45	68.3	42.3	32.63	10.75	32.83	126	343	P	H
		5644	56.73	-11.57	68.3	47.36	31.73	10.58	32.94	160	348	P	V
		5689.8	65.5	-32.2	97.7	55.83	32	10.59	32.92	160	348	P	V
		5718.2	66.98	-43.32	110.3	57.21	32.07	10.61	32.91	160	348	P	V
		5722.8	68.44	-48.74	117.18	58.67	32.07	10.61	32.91	160	348	P	V
		5775	98.6	-	-	88.7	32.17	10.62	32.89	160	348	P	V
		5775	91.94	-	-	82.04	32.17	10.62	32.89	160	348	A	V
		5853.2	58.75	-56.15	114.9	48.53	32.4	10.68	32.86	160	348	P	V
		5856.8	56.83	-53.47	110.3	46.55	32.43	10.71	32.86	160	348	P	V
		5875	53.35	-51.85	105.2	43.02	32.47	10.71	32.85	160	348	P	V
		5926	49.29	-19.01	68.3	38.74	32.63	10.75	32.83	160	348	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

**5725~5850MHz****WIFI 802.11ax HE80 (Harmonic @ 3m)**

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax		11550	51.12	-22.88	74	51.47	39.95	12.32	52.62	160	360	P	H
HE80		17325	52.41	-15.89	68.3	48.79	40.72	15.52	52.62	170	360	P	H
CH 155		11550	50.09	-23.91	74	50.44	39.95	12.32	52.62	160	360	P	V
5775MHz		17325	52.39	-15.91	68.3	48.77	40.72	15.52	52.62	170	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Partial RU:

5725~5850MHz

WIFI 802.11ax HE20 (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ax HE20 CH 149 5745MHz		5632	51.85	-16.45	68.3	44.76	32.39	8.08	33.38	114	355	P	H
		5692.2	66.38	-33.09	99.47	58.77	32.45	8.52	33.36	114	355	P	H
		5718.6	76.64	-33.77	110.41	69.06	32.48	8.45	33.35	114	355	P	H
		5720.8	76.38	-36.24	112.62	68.8	32.48	8.45	33.35	114	355	P	H
		5745	108.66	-	-	101.1	32.49	8.42	33.35	114	355	P	H
		5745	101.38	-	-	93.82	32.49	8.42	33.35	114	355	A	H
		5629.6	48.29	-20.01	68.3	41.2	32.39	8.08	33.38	100	352	P	V
		5696.6	63.46	-39.24	102.7	55.85	32.45	8.52	33.36	100	352	P	V
		5719	69.44	-41.08	110.52	61.86	32.48	8.45	33.35	100	352	P	V
		5723.2	70.12	-47.98	118.1	62.54	32.48	8.45	33.35	100	352	P	V
		5745	104.14	-	-	96.58	32.49	8.42	33.35	100	352	P	V
		5745	95.62	-	-	88.06	32.49	8.42	33.35	100	352	A	V
802.11ax HE20 CH 165 5825MHz		5825	109.1	-	-	101.48	32.57	8.38	33.33	100	355	P	H
		5825	101.5	-	-	93.88	32.57	8.38	33.33	100	355	A	H
		5851.4	77.4	-41.61	119.01	69.74	32.58	8.41	33.33	100	355	P	H
		5857	73.92	-36.32	110.24	66.21	32.6	8.44	33.33	100	355	P	H
		5875.6	67.79	-36.96	104.75	60.01	32.64	8.47	33.33	100	355	P	H
		5926.8	48.91	-19.39	68.3	40.93	32.76	8.53	33.31	100	355	P	H
		5825	102.74	-	-	95.12	32.57	8.38	33.33	100	343	P	V
		5825	96.17	-	-	88.55	32.57	8.38	33.33	100	343	A	V
		5850.8	71.63	-48.75	120.38	63.97	32.58	8.41	33.33	100	343	P	V
		5855	71.35	-39.45	110.8	63.64	32.6	8.44	33.33	100	343	P	V
		5880.2	58.81	-42.53	101.34	51.03	32.64	8.47	33.33	100	343	P	V
		5932	46.07	-22.23	68.3	38.09	32.76	8.53	33.31	100	343	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



5725~5850MHz

WIFI 802.11ax HE20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax		11490	48.89	-25.11	74	55.8	39.31	11.54	57.76	165	110	P	H
HE20		17235	48.17	-20.13	68.3	49.73	41.5	14.91	57.97	170	155	P	H
CH 149		11490	46.5	-27.5	74	53.41	39.31	11.54	57.76	165	110	P	V
5745MHz		17235	45.75	-22.55	68.3	47.31	41.5	14.91	57.97	170	155	P	V
802.11ax		11650	49.24	-24.76	74	55.95	39.21	11.67	57.59	156	347	P	H
HE20		17475	49.99	-18.31	68.3	49.44	42.9	15.29	57.64	150	360	P	H
CH 165		11650	46.28	-27.72	74	52.99	39.21	11.67	57.59	156	347	P	V
5825MHz		17475	47.88	-20.42	68.3	47.33	42.9	15.29	57.64	150	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



5725~5850MHz

WIFI 802.11ax HE40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 CH 151 5755MHz		5649.6	63.34	-4.96	68.3	55.99	32.42	8.3	33.37	113	354	P	H
		5690.4	71.2	-26.94	98.14	63.59	32.45	8.52	33.36	113	354	P	H
		5720	79.61	-31.19	110.8	72.03	32.48	8.45	33.35	113	354	P	H
		5724.2	83.12	-37.26	120.38	75.54	32.48	8.45	33.35	113	354	P	H
		5755	103.81	-	-	96.26	32.51	8.39	33.35	113	354	P	H
		5755	96.1	-	-	88.55	32.51	8.39	33.35	113	354	A	H
		5851.6	63.55	-55	118.55	55.89	32.58	8.41	33.33	113	354	P	H
		5868.2	63.95	-43.15	107.1	56.24	32.6	8.44	33.33	113	354	P	H
		5889.2	59.47	-35.19	94.66	51.62	32.68	8.5	33.33	113	354	P	H
		5933.4	52.82	-15.48	68.3	44.84	32.76	8.53	33.31	113	354	P	H
		5645.8	59.55	-8.75	68.3	52.33	32.4	8.19	33.37	109	342	P	V
		5693.2	67.27	-32.93	100.2	59.66	32.45	8.52	33.36	109	342	P	V
		5717.4	74.7	-35.37	110.07	67.1	32.46	8.49	33.35	109	342	P	V
		5721.8	78.63	-36.27	114.9	71.05	32.48	8.45	33.35	109	342	P	V
		5755	100.93	-	-	93.38	32.51	8.39	33.35	109	342	P	V
		5755	92.88	-	-	85.33	32.51	8.39	33.35	109	342	A	V
		5854.2	61.3	-51.32	112.62	53.59	32.6	8.44	33.33	109	342	P	V
		5858.4	59.26	-50.59	109.85	51.55	32.6	8.44	33.33	109	342	P	V
		5875.8	51.6	-53.01	104.61	43.82	32.64	8.47	33.33	109	342	P	V
		5936.6	48.39	-19.91	68.3	40.41	32.76	8.53	33.31	109	342	P	V



WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 CH 159 5795MHz		5600.4	46.67	-21.63	68.3	39.84	32.24	7.97	33.38	100	349	P	H
		5692.8	50.21	-49.7	99.91	42.77	32.28	8.52	33.36	100	349	P	H
		5720	60.18	-50.62	110.8	52.79	32.29	8.45	33.35	100	349	P	H
		5724.4	71.83	-49	120.83	64.44	32.29	8.45	33.35	100	349	P	H
		5795	105.8	-	-	98.28	32.54	8.32	33.34	100	349	P	H
		5795	98.89	-	-	91.37	32.54	8.32	33.34	100	349	A	H
		5854.8	74.45	-36.81	111.26	66.74	32.6	8.44	33.33	100	349	P	H
		5857.2	76.45	-33.73	110.18	68.74	32.6	8.44	33.33	100	349	P	H
		5875	68.31	-36.89	105.2	60.53	32.64	8.47	33.33	100	349	P	H
		5925.2	59.65	-8.65	68.3	51.67	32.76	8.53	33.31	100	349	P	H
		5641.2	55.86	-12.44	68.3	48.64	32.4	8.19	33.37	124	343	P	V
		5697.6	61.64	-41.8	103.44	54.03	32.45	8.52	33.36	124	343	P	V
		5713.2	68.5	-40.4	108.9	60.9	32.46	8.49	33.35	124	343	P	V
		5720.4	67.83	-43.88	111.71	60.25	32.48	8.45	33.35	124	343	P	V
		5795	100.48	-	-	92.96	32.54	8.32	33.34	124	343	P	V
		5795	91.9	-	-	84.38	32.54	8.32	33.34	124	343	A	V
		5850.6	71	-49.83	120.83	63.34	32.58	8.41	33.33	124	343	P	V
		5857.2	74.67	-35.51	110.18	66.96	32.6	8.44	33.33	124	343	P	V
		5878.8	66.5	-35.88	102.38	58.72	32.64	8.47	33.33	124	343	P	V
		5928.2	56.81	-11.49	68.3	48.83	32.76	8.53	33.31	124	343	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



5725~5850MHz

WIFI 802.11ax HE40 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11nsx		11510	49.7	-24.3	74	56.59	39.29	11.56	57.74	160	360	P	H
HE40		17265	48.46	-19.84	68.3	49.72	41.7	14.96	57.92	170	360	P	H
CH 151		11510	46.73	-27.27	74	53.62	39.29	11.56	57.74	160	360	P	V
5755MHz		17265	46.24	-22.06	68.3	47.5	41.7	14.96	57.92	170	360	P	V
802.11ax		11590	50.9	-23.1	74	57.62	39.3	11.63	57.65	170	300	P	H
HE40		17385	55.6	-12.7	68.3	54.17	44.03	15.15	57.75	150	200	P	H
CH 159		11590	50.35	-23.65	74	57.07	39.3	11.63	57.65	170	300	P	V
5795MHz		17385	55.12	-13.18	68.3	53.69	44.03	15.15	57.75	150	200	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



5725~5850MHz

WIFI 11ax HE80 CH155 Partial RU484-65 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
11ax HE80 CH155 Partial RU484-65 5775MHz		5644.8	64.35	-3.95	68.3	57.13	32.4	8.19	33.37	113	355	P	H
		5697.2	74.36	-28.78	103.14	66.75	32.45	8.52	33.36	113	355	P	H
		5719	79.33	-31.19	110.52	71.75	32.48	8.45	33.35	113	355	P	H
		5724.4	81.1	-39.73	120.83	73.52	32.48	8.45	33.35	113	355	P	H
		5775	101.53	-	-	94.01	32.52	8.35	33.35	113	355	P	H
		5775	93.84	-	-	86.32	32.52	8.35	33.35	113	355	A	H
		5850.6	73.58	-47.25	120.83	65.92	32.58	8.41	33.33	113	355	P	H
		5855.8	72.92	-37.66	110.58	65.21	32.6	8.44	33.33	113	355	P	H
		5883.8	68.42	-30.25	98.67	60.64	32.64	8.47	33.33	113	355	P	H
		5932.2	60.88	-7.42	68.3	52.9	32.76	8.53	33.31	113	355	P	H
		5648	61.36	-6.94	68.3	54.14	32.4	8.19	33.37	100	346	P	V
		5691.2	67.98	-30.75	98.73	60.37	32.45	8.52	33.36	100	346	P	V
		5714.4	75	-34.23	109.23	67.4	32.46	8.49	33.35	100	346	P	V
		5722.4	71.82	-44.45	116.27	64.24	32.48	8.45	33.35	100	346	P	V
		5775	94.06	-	-	86.54	32.52	8.35	33.35	100	346	P	V
		5775	86.59	-	-	79.07	32.52	8.35	33.35	100	346	A	V
		5853	67.68	-47.68	115.36	60.02	32.58	8.41	33.33	100	346	P	V
		5857.2	68.41	-41.77	110.18	60.7	32.6	8.44	33.33	100	346	P	V
		5876.4	59.99	-44.17	104.16	52.21	32.64	8.47	33.33	100	346	P	V
		5927.6	53.7	-14.6	68.3	45.72	32.76	8.53	33.31	100	346	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



5725~5850MHz

WIFI 11ax HE80 CH155 Partial RU484-66 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
11ax HE80 CH155 Partial RU484-66 5775MHz		5647.6	63.93	-4.37	68.3	56.71	32.4	8.19	33.37	100	354	P	H
		5693.6	75.24	-25.25	100.49	67.63	32.45	8.52	33.36	100	354	P	H
		5714.4	80.42	-28.81	109.23	72.82	32.46	8.49	33.35	100	354	P	H
		5721.2	82.69	-30.85	113.54	75.11	32.48	8.45	33.35	100	354	P	H
		5775	100.83	-	-	93.31	32.52	8.35	33.35	100	354	P	H
		5775	93.4	-	-	85.88	32.52	8.35	33.35	100	354	A	H
		5854.4	75.52	-36.65	112.17	67.81	32.6	8.44	33.33	100	354	P	H
		5861	75.36	-33.76	109.12	67.65	32.6	8.44	33.33	100	354	P	H
		5877.2	68.61	-34.96	103.57	60.83	32.64	8.47	33.33	100	354	P	H
		5927.2	61.93	-6.37	68.3	53.95	32.76	8.53	33.31	100	354	P	H
		5613.4	61.91	-6.39	68.3	54.93	32.39	7.97	33.38	135	341	P	V
		5691	68.01	-30.57	98.58	60.4	32.45	8.52	33.36	135	341	P	V
		5720	74.39	-36.41	110.8	66.81	32.48	8.45	33.35	135	341	P	V
		5723.8	76.14	-43.32	119.46	68.56	32.48	8.45	33.35	135	341	P	V
		5775	94.53	-	-	87.01	32.52	8.35	33.35	135	341	P	V
		5775	86.61	-	-	79.09	32.52	8.35	33.35	135	341	A	V
		5851.8	67.35	-50.75	118.1	59.69	32.58	8.41	33.33	135	341	P	V
		5860.8	65.81	-43.36	109.17	58.1	32.6	8.44	33.33	135	341	P	V
		5875.8	62.9	-41.71	104.61	55.12	32.64	8.47	33.33	135	341	P	V
		5925.4	55.63	-12.67	68.3	47.65	32.76	8.53	33.31	135	341	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



5725~5850MHz

WIFI 11ax HE80 CH155 Partial RU484-65 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
11ax 80 CH155 Partial RU484-65 5775MHz		11550	49.58	-24.42	74	56.36	39.3	11.6	57.68	160	360	P	H
		17325	53.4	-14.9	68.3	52.61	43.59	15.05	57.85	170	360	P	H
		11550	49.1	-24.9	74	55.88	39.3	11.6	57.68	160	360	P	V
		17325	53.25	-15.05	68.3	52.46	43.59	15.05	57.85	170	360	P	V
Remark		1. No other spurious found. 2. All results are PASS against Peak and Average limit line.											

5725~5850MHz

WIFI 11ax HE80 CH155 Partial RU484-66 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
11ax HE80 CH155 Partial RU484-65 5775MHz		11550	50.3	-23.7	74	57.08	39.3	11.6	57.68	160	360	P	H
		17325	53.1	-15.2	68.3	52.31	43.59	15.05	57.85	170	360	P	H
		11550	49.93	-24.07	74	56.71	39.3	11.6	57.68	160	360	P	V
		17325	52.57	-15.73	68.3	51.78	43.59	15.05	57.85	170	360	P	V
Remark		1. No other spurious found. 2. All results are PASS against Peak and Average limit line.											



Emission below 1GHz

5GHz WIFI 11ax HE80 (LF @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
5GHz 802.11ax HE80 LF		48.43	24.43	-15.57	40	37.03	20.28	2.2	35.08	-	-	P	H
		170.65	29.25	-14.25	43.5	42.65	19.07	2.63	35.1	-	-	P	H
		278.32	25.03	-20.97	46	37.66	19.27	3.04	34.94	-	-	P	H
		336.52	26.64	-19.36	46	37.62	20.7	3.22	34.9	-	-	P	H
		457.77	29.18	-16.82	46	37.27	23.28	3.33	34.7	-	-	P	H
		689.6	32.14	-13.86	46	35.85	26.8	3.99	34.5	100	247	P	H
		47.46	29.26	-10.74	40	41.89	20.27	2.17	35.07	-	-	P	V
		94.02	28.34	-15.16	43.5	47.09	13.98	2.46	35.19	-	-	P	V
		158.04	35.76	-7.74	43.5	48.97	19.31	2.58	35.1	100	215	P	V
		324.88	26.62	-19.38	46	37.91	20.4	3.21	34.9	-	-	P	V
		478.14	29.26	-16.74	46	37.03	23.53	3.4	34.7	-	-	P	V
		542.16	30.25	-15.75	46	36.69	24.56	3.62	34.62	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

**Emission below 1GHz****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	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b		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. Level(dBμV/m) =

Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

2. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Cable 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) + Cable 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)

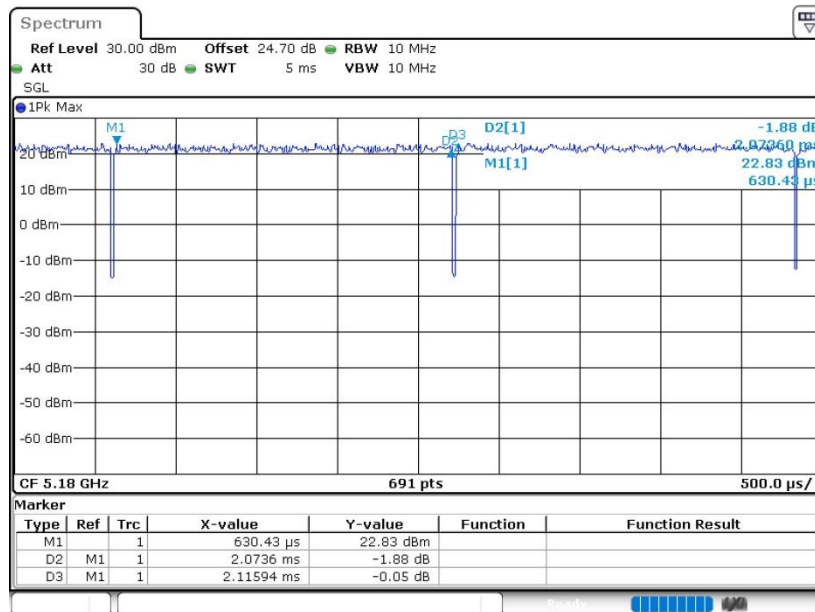
= -10.46(dB)

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

Appendix D. Duty Cycle Plots

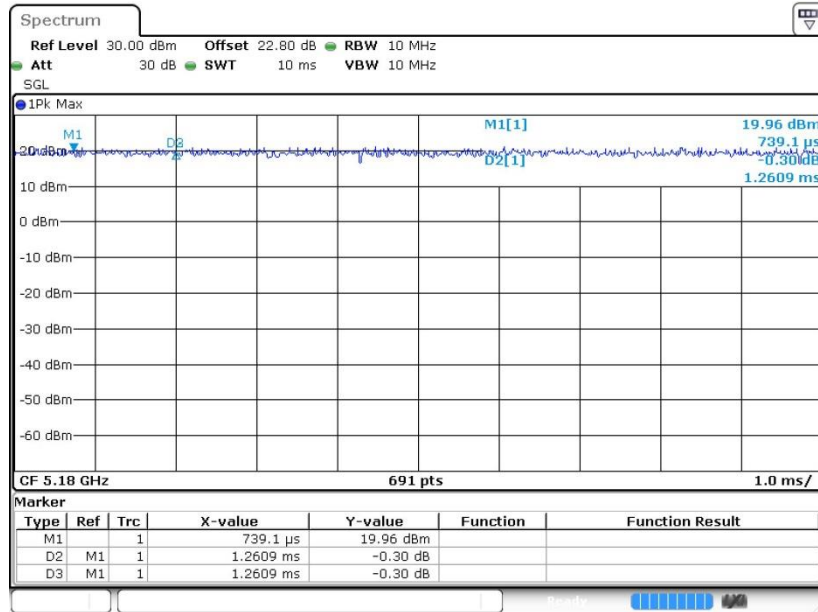
Antenna	Band	Duty Cycle(%)	T(ms)	1/T(kHz)	VBW Setting
1+2	802.11a	98.00	-	-	10Hz
1+2	802.11n HT20	100	-	-	10Hz
1+2	802.11n HT40	100	-	-	10Hz
1+2	802.11ac VHT80	100	-	-	10Hz
1+2	802.11ax HE20	100	-	-	10Hz
1+2	802.11ax HE40	100	-	-	10Hz
1+2	802.11ax HE80	100	-	-	10Hz

802.11a

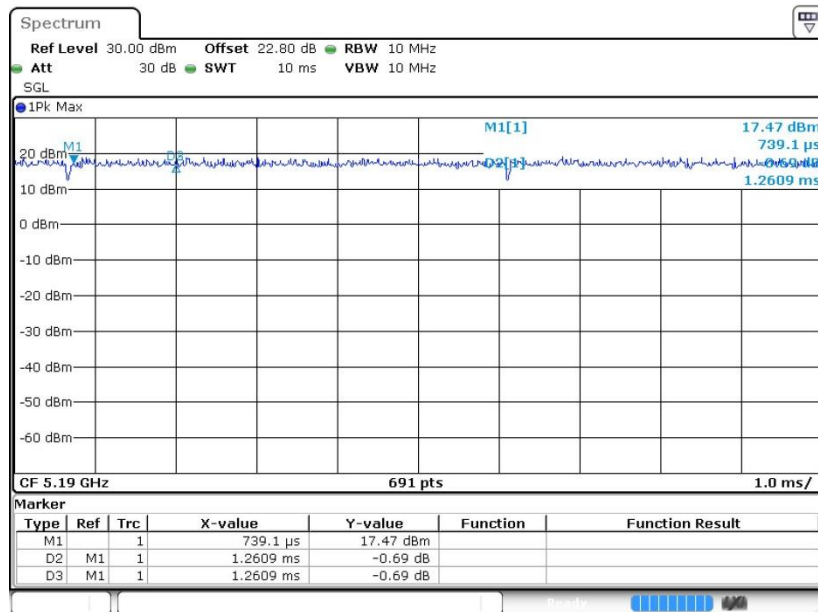




802.11n HT20

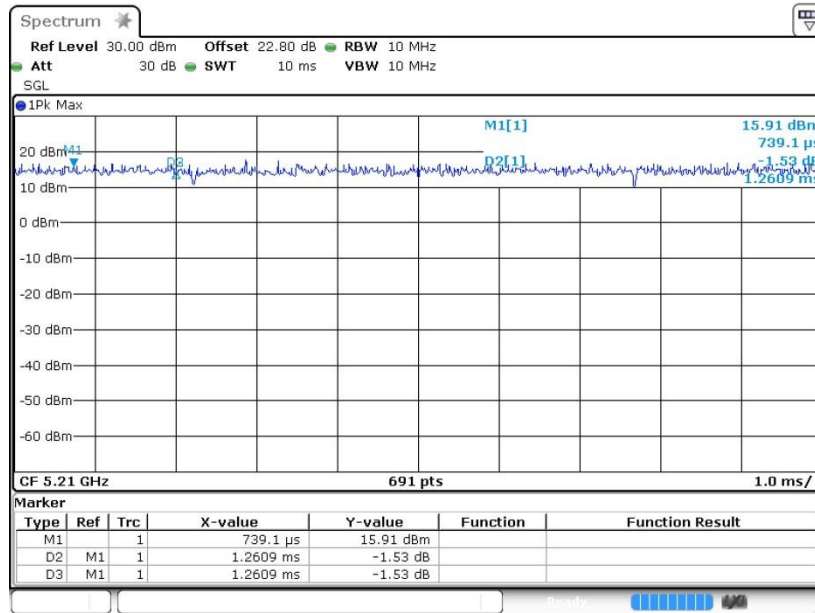


802.11n HT40

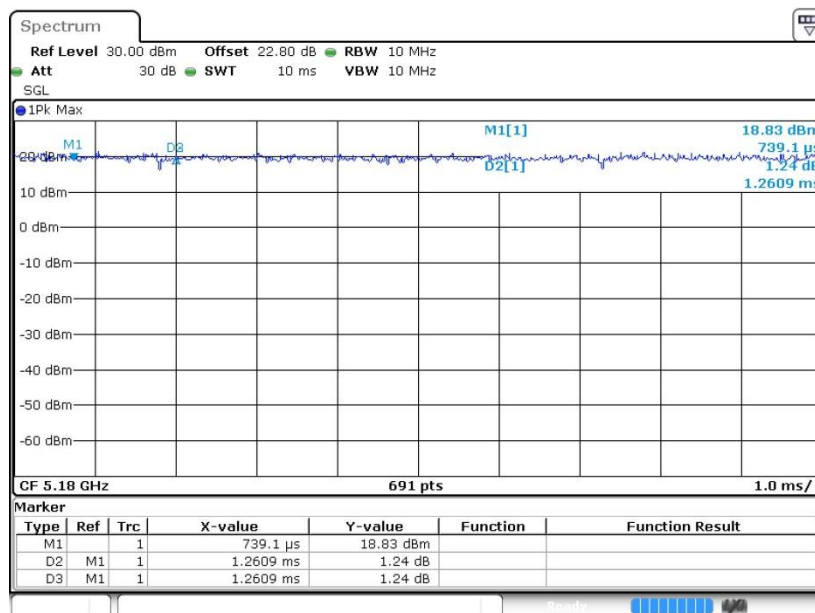




802.11ac VHT80

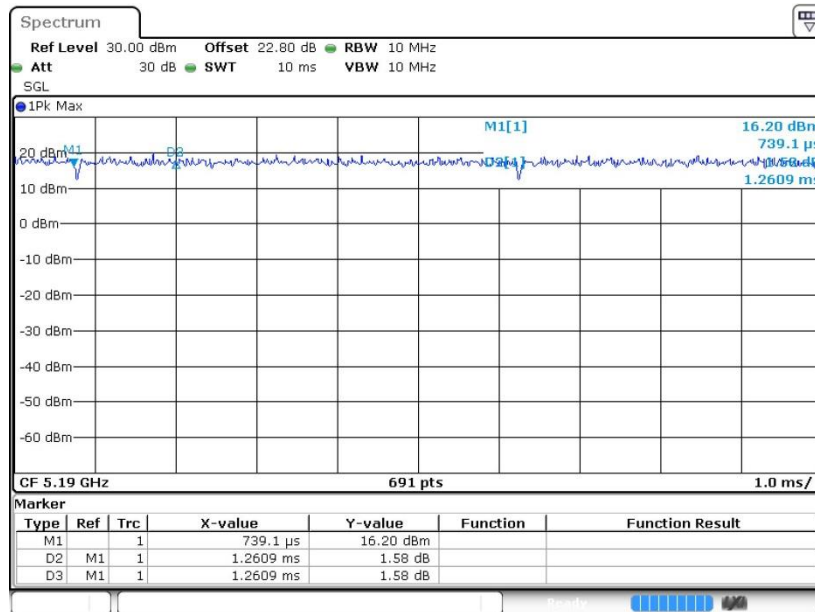


802.11ax HE20





802.11ax HE40



802.11ax HE80

