FCC RF Test Report

APPLICANT	:	Motorola Mobility LLC
EQUIPMENT	:	Mobile Cellular Phone
BRAND NAME	:	Motorola
MODEL NAME	:	XT2125-4
FCC ID	:	IHDT56ZR1
STANDARD	:	FCC Part 15 Subpart E § 15.407
CLASSIFICATION	:	(NII) Unlicensed National Information Infrastructure

The product was received on Nov. 02, 2020 and testing was completed on Dec. 12, 2020. We, Sporton International (Kunshan) 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 (Kunshan) Inc., the test report shall not be reproduced except in full.

Reviewed by: Jason Jia / Supervisor

Approved by: James Huang / Manager

ACCREDITED Cert #5145.02

Sporton International (Kunshan) Inc.
No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300
People's Republic of China

TABLE OF CONTENTS

REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR0N0201F	Rev. 01	Initial issue of report	Dec. 18, 2020

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 3.99 dB at 5648.800 MHz
3.5	15.207	AC Conducted Emission	15.207(a)	Pass	Under limit 3.69 dB at 11.683 MHz
3.6	15.407(c)	Automatically Discontinue Transmission	Discontinue Transmission	Pass	-
3.7	15.203 & 15.407(a)	Antenna Requirement	N/A	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.

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	XT2125-4
FCC ID	IHDT56ZR1
EUT supports Radios application	CDMA/GSM/WCDMA/LTE/5G NR/GNSS/NFC WLAN 2.4GHz 802.11b/g/n HT20 WLAN 2.4GHz 802.11ax HE20 WLAN 5GHz 802.11a/n HT20/HT40 WLAN 5GHz 802.11ac VHT20/VHT40/VHT80 WLAN 5GHz 802.11ax HE20/HE40/HE80 Bluetooth BR/EDR/LE
IMEI Code	Conducted :N/A Conduction: 350019820013734/350019820013742 Radiation: 354001150012839/354001150012847
HW Version	DVT
SW Version	RRT31.32
EUT Stage	Identical Prototype

Remark:

1. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.
2. There are two types of EUT, please refer the product equality declaration exhibit submitted. According to the difference, we choose the sample 1 to full test.

1.4 Product Specification of Equipment Under Test

<table>
<tr><th colspan="2">Standards-related Product Specification</th></tr>
<tr><td>Tx/Rx Channel Frequency Range</td><td>5745 MHz ~ 5825 MHz</td></tr>
<tr><td>Maximum Output Power</td><td><MIMO Ant.1+2>
802.11a : 20.77 dBm / 0.1194 W
802.11n HT20 : 20.71 dBm / 0.1178 W
802.11n HT40 : 20.77 dBm / 0.1194 W
802.11ac VHT20: 20.73 dBm / 0.1183 W
802.11ac VHT40: 20.78 dBm / 0.1197 W
802.11ac VHT80: 20.67 dBm / 0.1167 W
802.11ax HE20: 20.80 dBm / 0.1202 W
802.11ax HE40: 20.85 dBm / 0.1216 W
802.11ax HE80: 20.69 dBm / 0.1172 W</td></tr>
<tr><td>99% Occupied Bandwidth</td><td><MIMO Ant.1+2>
802.11a : 17.03 MHz
802.11ac VHT20 : 18.08 MHz
802.11ac VHT40 : 36.26 MHz
802.11ac VHT80 : 75.40 MHz
802.11ax HE20 : 19.48 MHz
802.11ax HE40 : 38.16 MHz
802.11ax HE80 : 77.32 MHz</td></tr>
<tr><td>Type of Modulation</td><td>802.11a/n/ac/ax : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM / 1024QAM)</td></tr>
<tr><td>Antenna Type / Gain</td><td><Ant. 1> : PIFA Antenna with gain -7.60 dBi
<Ant. 2> : PIFA Antenna with gain -8.00 dBi</td></tr>
<tr><td>Antenna Function Description</td><td>
<table>
<tr><td></td><td>Ant. 1</td><td>Ant. 2</td></tr>
<tr><td>802.11 a/n/ac/ax SISO</td><td>V</td><td>V</td></tr>
<tr><td>802.11 a/n/ac/ax MIMO</td><td colspan="2">V</td></tr>
</table>
</td></tr>
</table>

Remark:

1. For WLAN SISO & MIMO mode, the whole testing has assessed only MIMO mode by referring to their higher conducted power.
2. For 802.11n HT20 / ac VHT20 and 802.11n HT40 / ac VHT40 mode, the whole testing have assessed only 802.11ac VHT20/ VHT40 by referring to the higher output power.
3. For 802.11ax mode, Partial RU combinations were verified for conducted power/PSD/Radiated Band edge which is lower conducted power than full RU mode.

1.5 Specification of Accessory

Specification of Accessory				
AC Adapter 1(US)	**Brand Name**	Motorola (Chenyang)	**Model Name**	MC-201
AC Adapter 1(EU)	**Brand Name**	Motorola (Chenyang)	**Model Name**	MC-202
AC Adapter 1(UK)	**Brand Name**	Motorola (Chenyang)	**Model Name**	MC-203
AC Adapter 1(IN)	**Brand Name**	Motorola (Chenyang)	**Model Name**	MC-204
AC Adapter 1(AU)	**Brand Name**	Motorola (Chenyang)	**Model Name**	MC-205
AC Adapter 1(AR)	**Brand Name**	Motorola (Chenyang)	**Model Name**	MC-206
AC Adapter 1(BR)	**Brand Name**	Motorola (Chenyang)	**Model Name**	MC-207
AC Adapter 2(US)	**Brand Name**	Motorola (Acbel)	**Model Name**	MC-201
AC Adapter 2(EU)	**Brand Name**	Motorola (Acbel)	**Model Name**	MC-202
AC Adapter 2(UK)	**Brand Name**	Motorola (Acbel)	**Model Name**	MC-203
AC Adapter 2(AU)	**Brand Name**	Motorola (Acbel)	**Model Name**	MC-205
AC Adapter 2(AR)	**Brand Name**	Motorola (Acbel)	**Model Name**	MC-206
AC Adapter 2(CHILE)	**Brand Name**	Motorola (Acbel)	**Model Name**	MC-209
AC Adapter 3(BR)	**Brand Name**	Motorola (Dynalf)	**Model Name**	MC-207
AC Adapter 4(BR)	**Brand Name**	Motorola (Salcomp)	**Model Name**	MC-207
Battery 1	**Brand Name**	Motorola (ATL)	**Model Name**	LZ50
Battery 2	**Brand Name**	Motorola (SCUD)	**Model Name**	LZ50
Earphone 1	**Brand Name**	Motorola (Lyand)	**Model Name**	MH191
Earphone 2	**Brand Name**	Motorola(Lianchuang)	**Model Name**	MH191
Earphone 3	**Brand Name**	Motorola (Lyand)	**Model Name**	MH181
Earphone 4	**Brand Name**	Motorola (Cosonic)	**Model Name**	MH181
USB Cable 1	**Brand Name**	Motorola (Saibao)	**Model Name**	SC18C24367
USB Cable 2	**Brand Name**	Motorola (Luxshare)	**Model Name**	SC18C24368
USB Cable 3	**Brand Name**	Motorola (I SHENG)	**Model Name**	SC18C28955

1.6 Modification of EUT

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

1.7 Testing Location

Sporton International (Kunshan) Inc. is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

Test Firm	Sporton International (Kunshan) Inc.		
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158 FAX : +86-512-57900958		
Test Site No.	**Sporton Site No.**	**FCC Designation No.**	**FCC Test Firm Registration No.**
	CO01-KS 03CH06-KS TH01-KS	CN1257	314309

1.8 Test Software

Item	Site	Manufacture	Name	Version
1.	03CH06-KS	AUDIX	E3	6.2009-8-24al
2.	CO01-KS	AUDIX	E3	6.2009-8-24

1.9 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.

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 Band 4 (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, 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

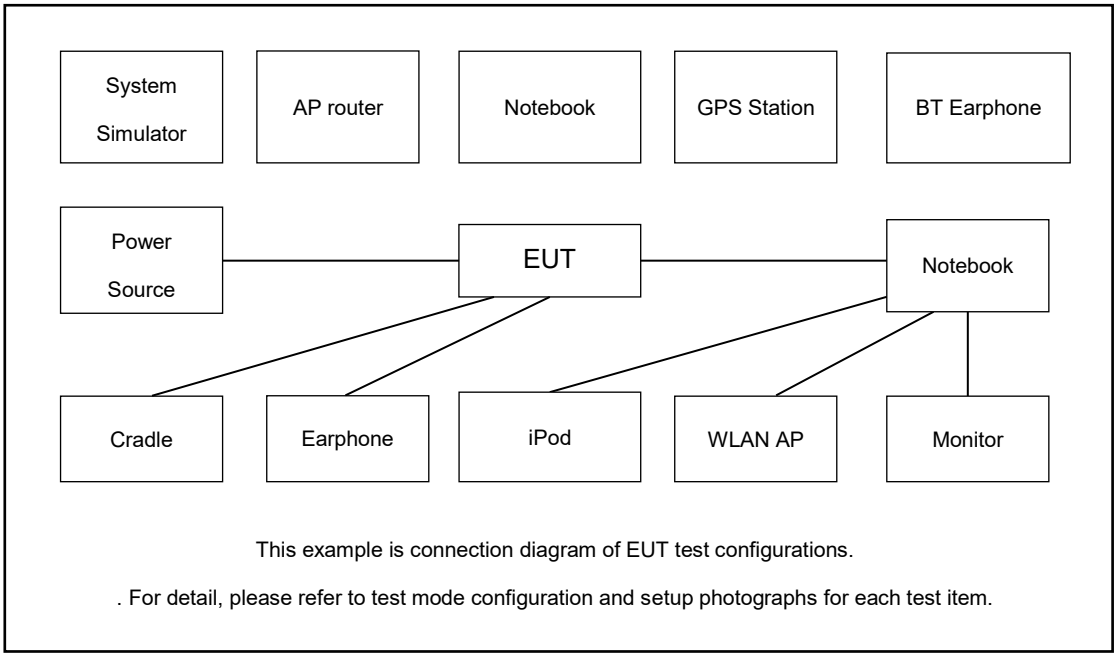
Modulation	Data Rate
802.11a	6 Mbps
802.11ac VHT20	MCS0
802.11ac VHT40	MCS0
802.11ac VHT80	MCS0
802.11ax HE20	MCS0
802.11ax HE40	MCS0
802.11ax HE80	MCS0

AC Conducted Emission	Mode 1 : GSM 850 Idle + BT Link + WLAN Link(5G) + Earphone 4 + USB Cable 1(Charging from Adapter 4)
Remark: For Radiated Test Cases, The tests were performance with Adapter 1, Battery 1, Earphone 1 and USB Cable 1	

Ch. #		Band IV : 5745-5825 MHz			
		802.11a	802.11ac VHT20	802.11ac VHT40	802.11ac VHT80
L	Low	149	149	151	-
M	Middle	157	157	-	155
H	High	165	165	159	-

Ch. #		Band IV : 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



This example is connection diagram of EUT test configurations.

. For detail, please refer to test mode configuration and setup photographs for each test item.

2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Base Station	Anritsu	MT8820C	N/A	N/A	Unshielded,1.8m
2.	WLAN AP	D-link	DIR-655	KA21R655B1	N/A	Unshielded,1.8m
3.	Notebook	Lenovo	G480	QDS-BRCM1050I	N/A	AC I/P: Unshielded, 1.8 m DC O/P: Shielded, 1.8 m
4.	Bluetooth Earphone	Lenovo	LBH308	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 continuous 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 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.

Offset = RF cable loss.

Following shows an offset computation example with cable loss 7.2 dB.

Offset(dB) = RF cable loss(dB).

= 7.2 (dB)

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.

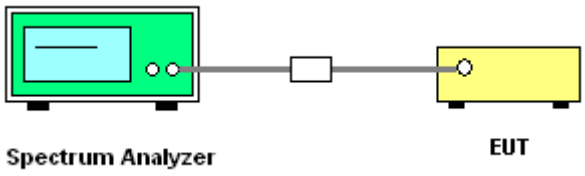
3.1.2 Measuring Instruments

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 ≥ 3 x 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.

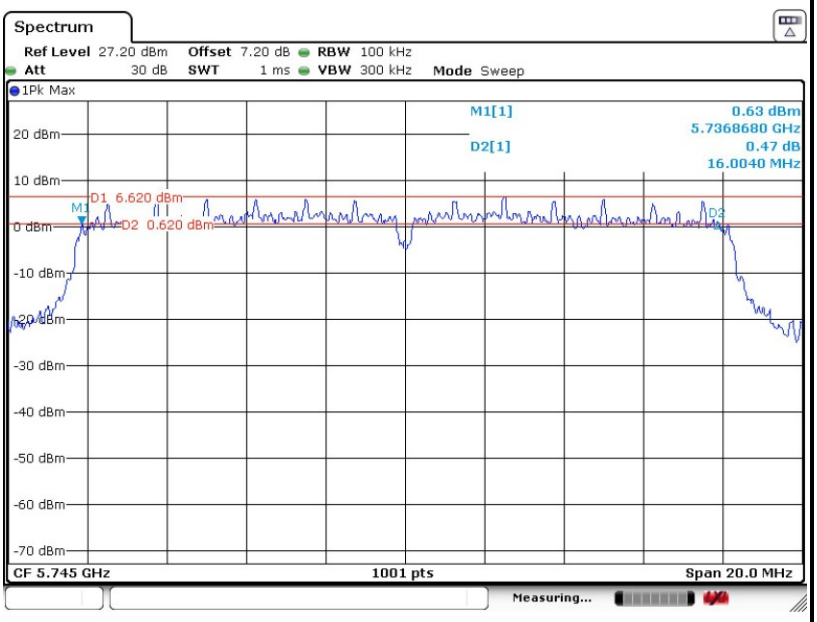
3.1.4 Test Setup



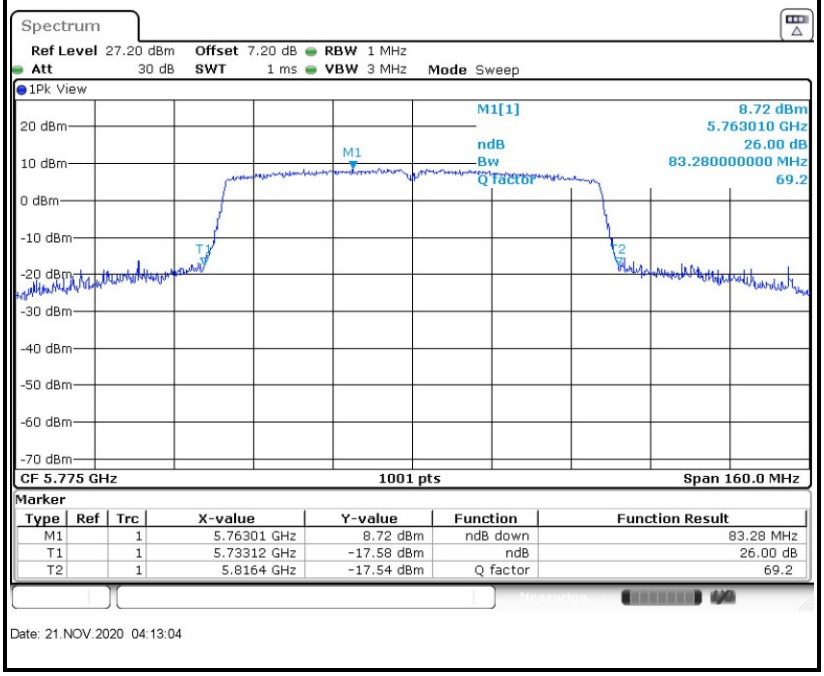
3.1.5 Test Result of 6dB Bandwidth

Please refer to Appendix A.

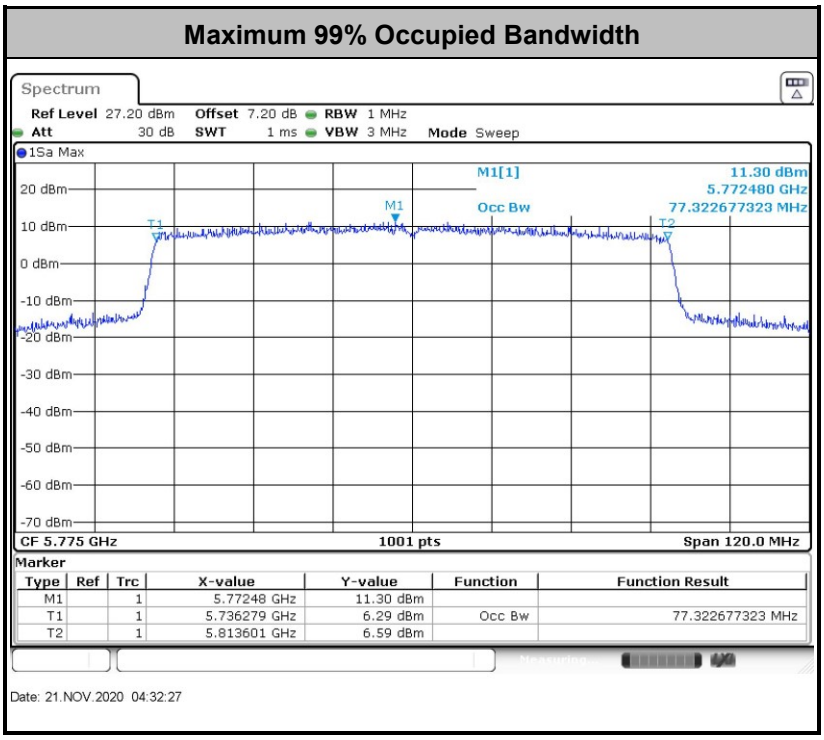
Minimum 6dB Bandwidth



Maximum 26dB Bandwidth



Maximum 99% Occupied Bandwidth



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.

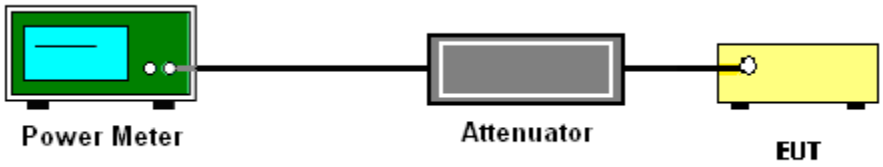
3.2.3 Test Procedures

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).

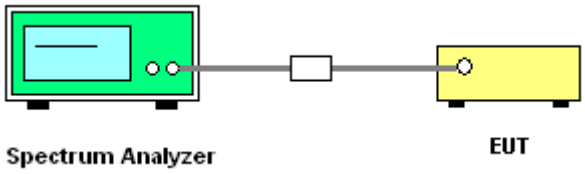
- Measure the duty cycle.
- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 300 kHz.
- Set VBW ≥ 1 MHz.
- Number of points in sweep ≥ 2 Span / RBW.
- Sweep time = auto.
- Detector = RMS
- Trace average at least 100 traces in power averaging mode.
- Add 10 log(500kHz/RBW) 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_{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_{ANT}) dB is added to each spectrum value before comparing to the emission limit. The addition of 10 log(N_{ANT}) dB serves to apportion the emission limit among the N_{ANT} outputs so that each output is permitted to contribute no more than $1/N_{ANT}$ th of the PSD limit.

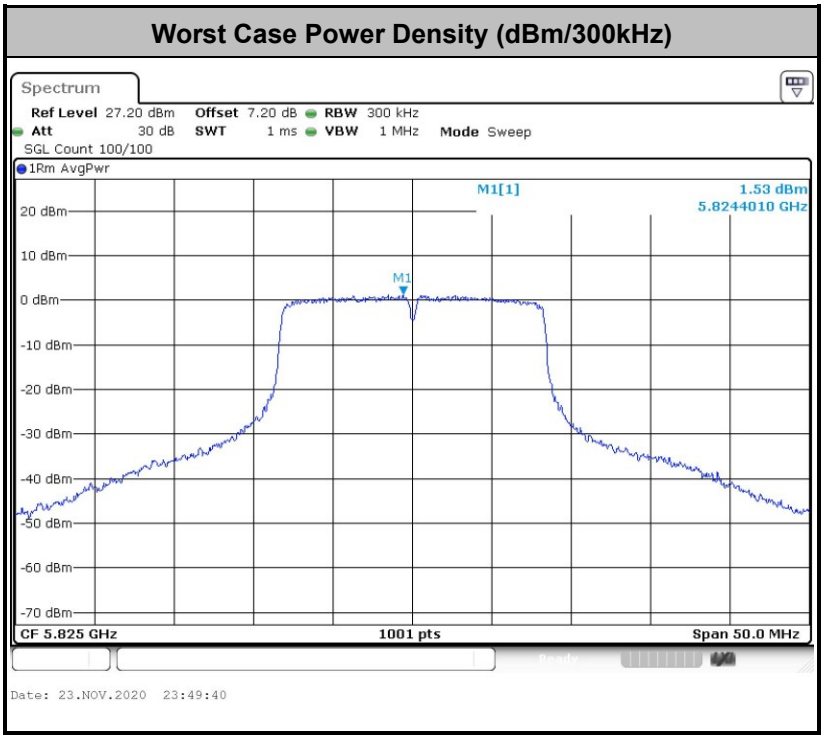
3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.

Worst Case Power Density (dBm/300kHz)



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.

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

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

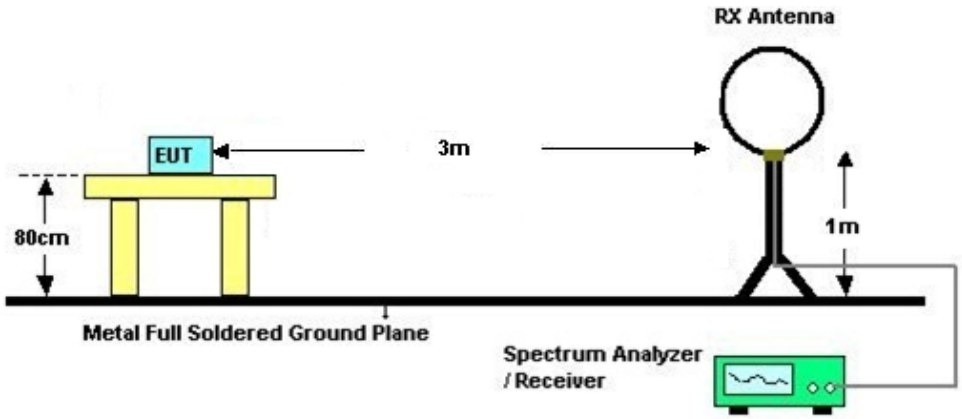
   (2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz
   - RBW = 1 MHz
   - VBW ≥ 3 MHz
   - Detector = Peak
   - Sweep time = auto
   - Trace mode = max hold

   (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 ≥ 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.

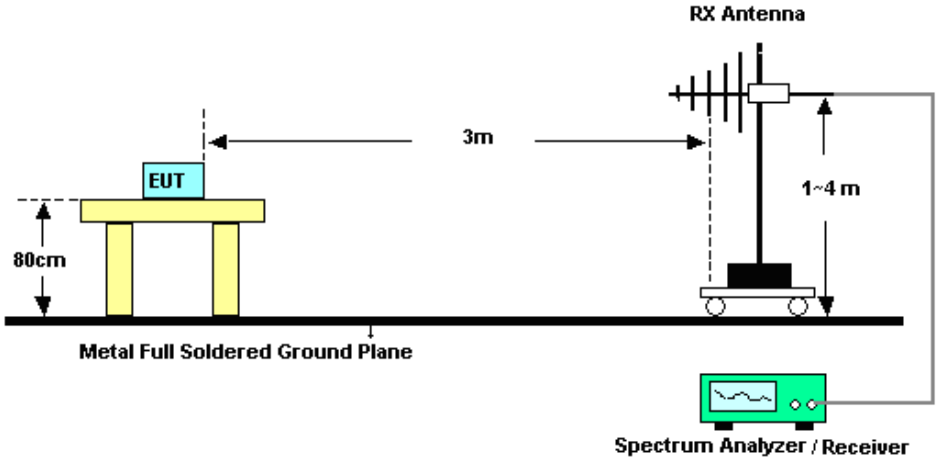
4. The antenna is a broadband antenna and its height is adjusted between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT was arranged to its worst 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

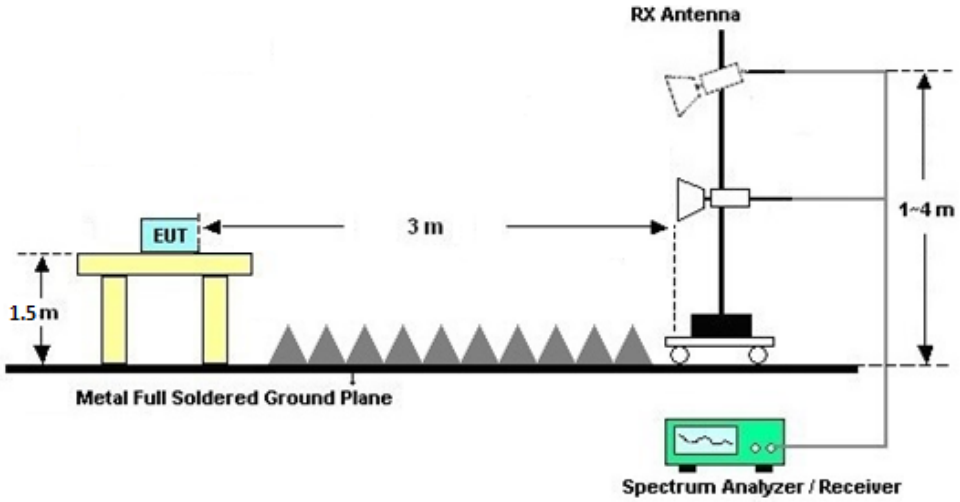
For radiated emissions below 30MHz



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 (dBμV)	
	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.

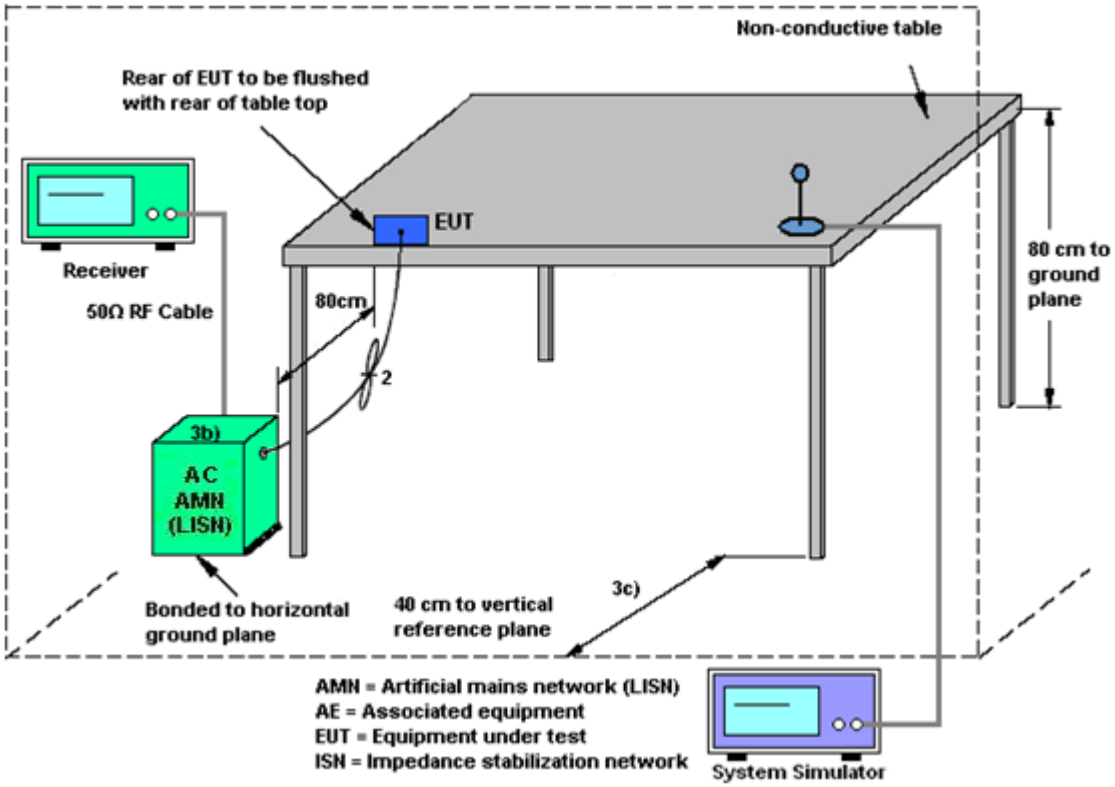
3.5.2 Measuring Instruments

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

FCC KDB 662911 D01 Multiple Transmitter Output 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.

	Ant. 1 (dBi)	Ant. 2 (dBi)	DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
Band IV	-7.60	-8.00	-7.60	-7.60	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	FSV30	101338	10Hz~30GHz	Apr. 14, 2020	Nov. 21, 2020~ Nov. 23, 2020	Apr. 13, 2021	Conducted (TH01-KS)
Pulse Power Senor	Anritsu	MA2411B	0917070	300MHz~40GHz	Jan. 15, 2020	Nov. 21, 2020~ Nov. 23, 2020	Jan. 14, 2021	Conducted (TH01-KS)
Power Meter	Anritsu	ML2495A	1005002	50MHz Bandwidth	Jan. 08, 2020	Nov. 21, 2020~ Nov. 23, 2020	Jan. 07, 2021	Conducted (TH01-KS)
EMI Test Receiver	Keysight	N9038A	MY56400004	3Hz~8.5GHz;Max 30dBm	Oct. 17, 2020	Dec. 12, 2020	Oct. 16, 2021	Radiation (03CH06-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55150208	10Hz-44GHz	Apr. 14, 2020	Dec. 12, 2020	Apr. 13, 2021	Radiation (03CH06-KS)
Loop Antenna	R&S	HFH2-Z2	100321	9kHz~30MHz	Nov. 01, 2020	Dec. 12, 2020	Oct. 31, 2021	Radiation (03CH06-KS)
Bilog Antenna	TeseQ	CBL6111D	49921	30MHz-1GHz	May 29, 2020	Dec. 12, 2020	May 28, 2021	Radiation (03CH06-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00218652	1GHz~18GHz	Apr. 27, 2020	Dec. 12, 2020	Apr. 26, 2021	Radiation (03CH06-KS)
SHF-EHF Horn	Com-power	AH-840	101115	18GHz~40GHz	Jun. 05, 2020	Dec. 12, 2020	Jun. 04, 2021	Radiation (03CH06-KS)
Amplifier	SONOMA	310N	187289	9KHz ~1GHZ	Apr. 14, 2020	Dec. 12, 2020	Apr. 13, 2021	Radiation (03CH06-KS)
Amplifier	MITEQ	EM18G40GGA	060728	18~40GHz	Jan. 08, 2020	Dec. 12, 2020	Jan. 07, 2021	Radiation (03CH06-KS)
high gain Amplifier	MITEQ	AMF-7D-00101800-30-10P	2025788	1Ghz-18Ghz	Jan. 02, 2020	Dec. 12, 2020	Jan. 01, 2021	Radiation (03CH06-KS)
Amplifier	Keysight	83017A	MY53270203	500MHz~26.5GHz	Apr. 15, 2020	Dec. 12, 2020	Apr. 14, 2021	Radiation (03CH06-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Dec. 12, 2020	NCR	Radiation (03CH06-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Dec. 12, 2020	NCR	Radiation (03CH06-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Dec. 12, 2020	NCR	Radiation (03CH06-KS)
EMI Receiver	R&S	ESCI7	100768	9kHz~7GHz;	Apr. 14, 2020	Nov. 12, 2020	Apr. 13, 2021	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060103	9kHz~30MHz	Oct. 17, 2020	Nov. 12, 2020	Oct. 16, 2021	Conduction (CO01-KS)
AC LISN	MessTec	AN3016	060105	9kHz~30MHz	Oct. 27, 2020	Nov. 12, 2020	Oct. 26, 2021	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP000000811	AC 0V~300V, 45Hz~1000Hz	Oct. 17, 2020	Nov. 12, 2020	Oct. 16, 2021	Conduction (CO01-KS)

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))	**2.9dB**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**5.0dB**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**5.0dB**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**5.0dB**

Appendix A. Conducted Test Results

Report Number : FR0N0201F

Test Engineer:	Rise liu	Temperature:	21~25	°C
Test Date:	2020/11/21~2020/11/23	Relative Humidity:	51~54	%

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	17.03	16.98	21.18	20.13	16.00	16.28	0.5		Pass
11a	6Mbps	2	157	5785	16.98	16.98	20.63	20.28	16.02	16.28	0.5		Pass
11a	6Mbps	2	165	5825	16.93	17.03	20.53	20.23	16.28	16.30	0.5		Pass
VHT20	MCS0	2	149	5745	18.08	18.03	21.83	21.23	16.76	17.02	0.5		Pass
VHT20	MCS0	2	157	5785	18.03	18.08	21.73	21.68	17.28	17.02	0.5		Pass
VHT20	MCS0	2	165	5825	17.98	18.08	21.33	21.43	16.90	16.90	0.5		Pass
VHT40	MCS0	2	151	5755	36.26	36.26	41.45	40.64	35.64	35.12	0.5		Pass
VHT40	MCS0	2	159	5795	36.26	36.16	40.55	40.55	35.45	35.08	0.5		Pass
VHT80	MCS0	2	155	5775	75.40	75.40	83.28	81.84	72.13	75.12	0.5		Pass
HE20	MCS0	2	149	5745	19.38	19.48	22.23	22.08	18.50	18.32	0.5		Pass
HE20	MCS0	2	157	5785	19.33	19.43	21.93	22.53	18.42	18.66	0.5		Pass
HE20	MCS0	2	165	5825	19.48	19.48	22.38	22.13	18.48	18.52	0.5		Pass
HE40	MCS0	2	151	5755	38.16	38.06	41.72	41.45	37.12	37.36	0.5		Pass
HE40	MCS0	2	159	5795	38.06	38.06	41.81	41.36	37.20	37.64	0.5		Pass
HE80	MCS0	2	155	5775	77.32	77.32	83.12	82.48	77.20	76.80	0.5		Pass

TEST RESULTS DATA
Average Power Table

Band IV															
Mod.	Data Rate	NTX	CH.	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	5745	0.03	0.03	18.01	17.49	20.77	30.00		-7.60			Pass
11a	6Mbps	2	157	5785	0.03	0.03	17.74	17.25	20.51	30.00		-7.60			Pass
11a	6Mbps	2	165	5825	0.03	0.03	17.47	17.23	20.36	30.00		-7.60			Pass
HT20	MCS0	2	149	5745	0.00	0.00	18.01	17.36	20.71	30.00		-7.60			Pass
HT20	MCS0	2	157	5785	0.00	0.00	17.68	17.23	20.47	30.00		-7.60			Pass
HT20	MCS0	2	165	5825	0.00	0.00	17.44	17.20	20.33	30.00		-7.60			Pass
HT40	MCS0	2	151	5755	0.00	0.00	18.08	17.41	20.77	30.00		-7.60			Pass
HT40	MCS0	2	159	5795	0.00	0.00	17.82	17.11	20.49	30.00		-7.60			Pass
VHT20	MCS0	2	149	5745	0.00	0.00	18.03	17.38	20.73	30.00		-7.60			Pass
VHT20	MCS0	2	157	5785	0.00	0.00	17.70	17.25	20.49	30.00		-7.60			Pass
VHT20	MCS0	2	165	5825	0.00	0.00	17.45	17.26	20.37	30.00		-7.60			Pass
VHT40	MCS0	2	151	5755	0.00	0.00	18.09	17.43	20.78	30.00		-7.60			Pass
VHT40	MCS0	2	159	5795	0.00	0.00	17.89	17.14	20.54	30.00		-7.60			Pass
VHT80	MCS0	2	155	5775	0.00	0.00	18.09	17.18	20.67	30.00		-7.60			Pass
HE20	MCS0	2	149	5745	0.00	0.00	18.03	17.53	20.80	30.00		-7.60			Pass
HE20	MCS0	2	157	5785	0.00	0.00	17.98	17.31	20.67	30.00		-7.60			Pass
HE20	MCS0	2	165	5825	0.00	0.00	17.53	17.28	20.42	30.00		-7.60			Pass
HE40	MCS0	2	151	5755	0.00	0.00	18.17	17.41	20.85	30.00		-7.60			Pass
HE40	MCS0	2	159	5795	0.00	0.00	17.98	17.12	20.58	30.00		-7.60			Pass
HE80	MCS0	2	155	5775	0.00	0.00	18.09	17..23	20.69	30.00		-7.60			Pass
HE20-26RU	MCS0	2	149	5745	0.00	0.00	7.45	8.06	10.78	30.00		-7.60			Pass
HE20-26RU	MCS0	2	165	5825	0.00	0.00	6.64	7.93	10.34	30.00		-7.60			Pass
HE20-52RU	MCS0	2	149	5745	0.00	0.00	9.70	10.74	13.26	30.00		-7.60			Pass
HE20-52RU	MCS0	2	165	5825	0.00	0.00	9.39	10.89	13.21	30.00		-7.60			Pass
HE20-106RU	MCS0	2	149	5745	0.00	0.00	12.92	13.88	16.44	30.00		-7.60			Pass
HE20-106RU	MCS0	2	165	5825	0.00	0.00	12.78	14.00	16.44	30.00		-7.60			Pass
HE40-242RU	MCS0	2	151	5755	0.00	0.00	14.43	15.45	17.98	30.00		-7.60			Pass
HE40-242RU	MCS0	2	159	5795	0.00	0.00	13.96	14.99	17.52	30.00		-7.60			Pass
HE80-484RU-L	MCS0	2	155	5775	0.00	0.00	14.39	15.20	17.82	30.00		-7.60			Pass
HE80-484RU-R	MCS0	2	155	5775	0.00	0.00	14.19	14.84	17.54	30.00		-7.60			Pass

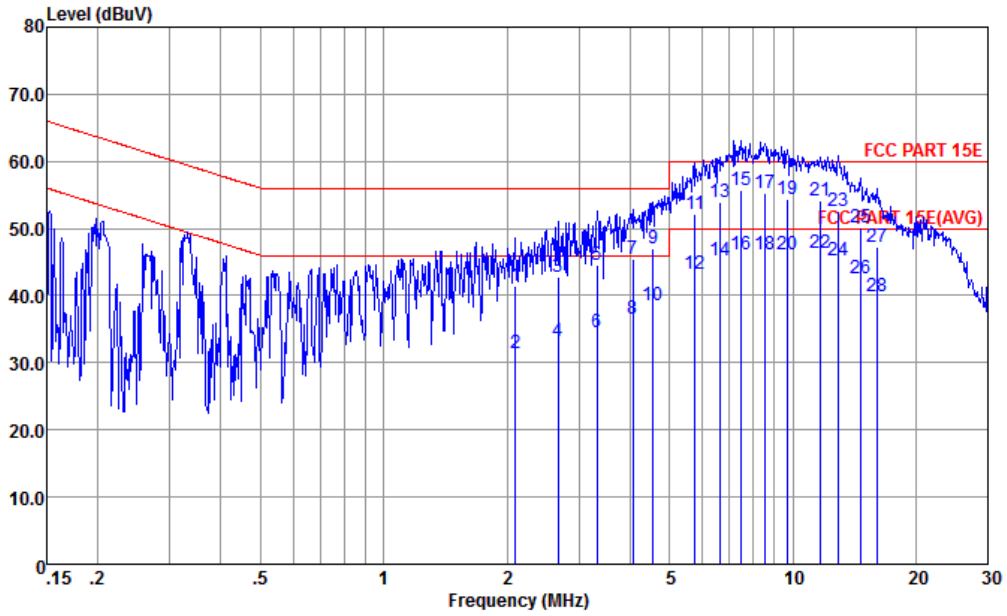
Report Number : FR0N0201F

TEST RESULTS DATA
Power Spectral Density

Band IV																
Mod.	Data Rate	NTX	CH.	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	5745	0.03	0.03	2.22				6.66	30.00		-7.60		Pass
11a	6Mbps	2	157	5785	0.03	0.03	2.22				6.41	30.00		-7.60		Pass
11a	6Mbps	2	165	5825	0.03	0.03	2.22				6.79	30.00		-7.60		Pass
VHT20	MCS0	2	149	5745	0.00	0.00	2.22				6.26	30.00		-7.60		Pass
VHT20	MCS0	2	157	5785	0.00	0.00	2.22				6.34	30.00		-7.60		Pass
VHT20	MCS0	2	165	5825	0.00	0.00	2.22				6.60	30.00		-7.60		Pass
VHT40	MCS0	2	151	5755	0.00	0.00	2.22				3.61	30.00		-7.60		Pass
VHT40	MCS0	2	159	5795	0.00	0.00	2.22				2.96	30.00		-7.60		Pass
VHT80	MCS0	2	155	5775	0.00	0.00	2.22				0.54	30.00		-7.60		Pass
HE20	MCS0	2	149	5745	0.00	0.00	2.22				6.28	30.00		-7.60		Pass
HE20	MCS0	2	157	5785	0.00	0.00	2.22				6.06	30.00		-7.60		Pass
HE20	MCS0	2	165	5825	0.00	0.00	2.22				6.26	30.00		-7.60		Pass
HE40	MCS0	2	151	5755	0.00	0.00	2.22				4.08	30.00		-7.60		Pass
HE40	MCS0	2	159	5795	0.00	0.00	2.22				3.30	30.00		-7.60		Pass
HE80	MCS0	2	155	5775	0.00	0.00	2.22				-0.03	30.00		-7.60		Pass
HE20-26RU	MCS0	2	149	5745	0.00	0.00	2.22				5.86	30.00		-7.60		Pass
HE20-26RU	MCS0	2	165	5825	0.00	0.00	2.22				5.82	30.00		-7.60		Pass
HE20-52RU	MCS0	2	149	5745	0.00	0.00	2.22				5.78	30.00		-7.60		Pass
HE20-52RU	MCS0	2	165	5825	0.00	0.00	2.22				5.95	30.00		-7.60		Pass
HE20-106RU	MCS0	2	149	5745	0.00	0.00	2.22				5.98	30.00		-7.60		Pass
HE20-106RU	MCS0	2	165	5825	0.00	0.00	2.22				5.87	30.00		-7.60		Pass
HE40-242RU	MCS0	2	151	5755	0.00	0.00	2.22				3.84	30.00		-7.60		Pass
HE40-242RU	MCS0	2	159	5795	0.00	0.00	2.22				3.29	30.00		-7.60		Pass
HE80-484RU-L	MCS0	2	155	5775	0.00	0.00	2.22				0.58	30.00		-7.60		Pass
HE80-484RU-R	MCS0	2	155	5775	0.00	0.00	2.22				0.33	30.00		-7.60		Pass

Appendix B. AC Conducted Emission Test Results

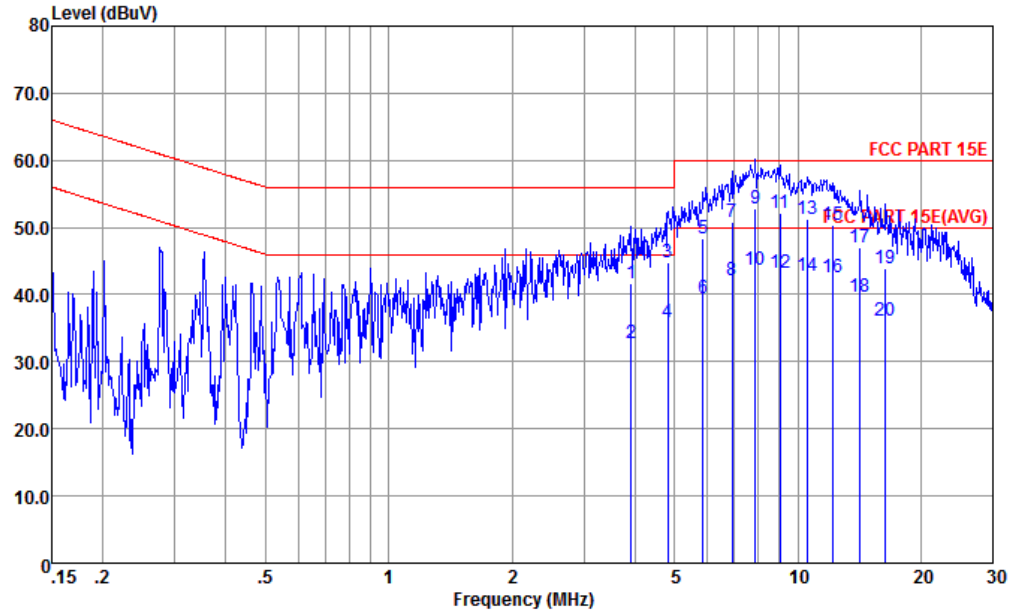
Test Engineer :	Amos Zhang	**Temperature :**	25.3~26.2℃
		Relative Humidity :	38~40%
Test Voltage :	120Vac / 60Hz	**Phase :**	Line



Site : CO01-KS
Condition : FCC PART 15E TWO-LISN-CN02-L LINE

		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1		2.099	41.48	-14.52	56.00	21.30	9.95	10.23	QP
2		2.099	31.38	-14.62	46.00	11.20	9.95	10.23	Average
3		2.664	42.86	-13.14	56.00	22.59	10.03	10.24	QP
4		2.664	33.16	-12.84	46.00	12.89	10.03	10.24	Average
5		3.328	44.54	-11.46	56.00	24.19	10.10	10.25	QP
6		3.328	34.64	-11.36	46.00	14.29	10.10	10.25	Average
7		4.070	45.52	-10.48	56.00	25.10	10.17	10.25	QP
8		4.070	36.62	-9.38	46.00	16.20	10.17	10.25	Average
9		4.549	47.07	-8.93	56.00	26.60	10.21	10.26	QP
10		4.549	38.57	-7.43	46.00	18.10	10.21	10.26	Average
11		5.774	52.19	-7.81	60.00	31.61	10.30	10.28	QP
12		5.774	43.19	-6.81	50.00	22.61	10.30	10.28	Average
13		6.627	53.96	-6.04	60.00	33.30	10.36	10.30	QP
14		6.627	45.26	-4.74	50.00	24.60	10.36	10.30	Average
15		7.486	55.82	-4.18	60.00	35.10	10.41	10.31	QP
16		7.486	46.22	-3.78	50.00	25.50	10.41	10.31	Average
17		8.546	55.37	-4.63	60.00	34.60	10.45	10.32	QP
18		8.546	46.07	-3.93	50.00	25.30	10.45	10.32	Average
19		9.705	54.33	-5.67	60.00	33.50	10.49	10.34	QP
20		9.705	46.03	-3.97	50.00	25.20	10.49	10.34	Average
21		11.683	54.21	-5.79	60.00	33.20	10.65	10.36	QP
22	*	11.683	46.31	-3.69	50.00	25.30	10.65	10.36	Average
23		12.920	52.62	-7.38	60.00	31.49	10.75	10.38	QP
24		12.920	45.22	-4.78	50.00	24.09	10.75	10.38	Average
25		14.672	50.07	-9.93	60.00	28.80	10.88	10.39	QP
26		14.672	42.47	-7.53	50.00	21.20	10.88	10.39	Average
27		16.140	47.29	-12.71	60.00	25.90	10.97	10.42	QP
28		16.140	39.99	-10.01	50.00	18.60	10.97	10.42	Average

Test Engineer :	Amos Zhang	Temperature :	25.3~26.2℃
		Relative Humidity :	38~40%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral



Site : CO01-KS
Condition : FCC PART 15E TWO-LISN-CN02-N NEUTRAL

		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1		3.922	41.62	-14.38	56.00	21.20	10.17	10.25	QP
2		3.922	32.72	-13.28	46.00	12.30	10.17	10.25	Average
3		4.822	44.71	-11.29	56.00	24.20	10.24	10.27	QP
4		4.822	35.81	-10.19	46.00	15.30	10.24	10.27	Average
5		5.867	48.25	-11.75	60.00	27.64	10.33	10.28	QP
6		5.867	39.52	-10.48	50.00	18.91	10.33	10.28	Average
7		6.914	50.91	-9.09	60.00	30.20	10.41	10.30	QP
8		6.914	42.01	-7.99	50.00	21.30	10.41	10.30	Average
9		7.893	52.88	-7.12	60.00	32.10	10.46	10.32	QP
10	*	7.893	43.68	-6.32	50.00	22.90	10.46	10.32	Average
11		9.059	52.04	-7.96	60.00	31.20	10.51	10.33	QP
12		9.059	43.14	-6.86	50.00	22.30	10.51	10.33	Average
13		10.564	51.26	-8.74	60.00	30.30	10.61	10.35	QP
14		10.564	42.86	-7.14	50.00	21.90	10.61	10.35	Average
15		12.188	50.46	-9.54	60.00	29.30	10.79	10.37	QP
16		12.188	42.46	-7.54	50.00	21.30	10.79	10.37	Average
17		14.213	46.97	-13.03	60.00	25.60	10.98	10.39	QP
18		14.213	39.67	-10.33	50.00	18.30	10.98	10.39	Average
19		16.398	43.80	-16.20	60.00	22.20	11.17	10.43	QP
20		16.398	36.20	-13.80	50.00	14.60	11.17	10.43	Average

Note:

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

Appendix C. Radiated Spurious Emission

Band 4 - 5725~5850MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path 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		5601.6	54.01	-14.29	68.3	40.01	35.77	11.57	33.34	147	7	P	H
		5698	54.87	-48.96	103.83	40.77	35.82	11.65	33.37	147	7	P	H
		5716.4	69.69	-40.2	109.89	55.58	35.83	11.66	33.38	147	7	P	H
		5722.4	73.32	-43.05	116.37	59.18	35.84	11.68	33.38	147	7	P	H
		5746	113.14	-	-	98.99	35.85	11.69	33.39	147	7	P	H
		5746	106.84	-	-	92.69	35.85	11.69	33.39	147	7	A	H
		5637.2	53.59	-14.71	68.3	39.55	35.8	11.6	33.36	127	349	P	V
		5662.8	54.58	-23.22	77.8	40.51	35.81	11.62	33.36	127	349	P	V
		5718.8	68.77	-41.79	110.56	54.63	35.84	11.68	33.38	127	349	P	V
		5724.8	72.23	-49.61	121.84	58.09	35.84	11.68	33.38	127	349	P	V
		5746	110.84	-	-	96.69	35.85	11.69	33.39	127	349	P	V
		5746	103.48	-	-	89.33	35.85	11.69	33.39	127	349	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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 165 5825MHz		5852.8	69.87	-46.05	115.92	55.59	35.89	11.81	33.42	174	9	P	H
		5858	63.52	-46.54	110.06	49.2	35.9	11.84	33.42	174	9	P	H
		5911.6	54.35	-23.84	78.19	39.92	35.96	11.91	33.44	174	9	P	H
		5972	54.84	-13.46	68.3	40.29	36.02	11.99	33.46	174	9	P	H
		5830	112.25	-	-	98	35.88	11.79	33.42	174	9	P	H
		5830	104.98	-	-	90.73	35.88	11.79	33.42	174	9	A	H
		5850.8	69.72	-50.76	120.48	55.44	35.89	11.81	33.42	159	7	P	V
		5855.6	60.87	-49.86	110.73	46.55	35.9	11.84	33.42	159	7	P	V
		5893.6	55.24	-36.26	91.5	40.85	35.94	11.89	33.44	159	7	P	V
		5991.2	54.83	-13.47	68.3	40.2	36.06	12.04	33.47	159	7	P	V
		5830	109.78	-	-	95.53	35.88	11.79	33.42	159	7	P	V
		5830	102.54	-	-	88.29	35.88	11.79	33.42	159	7	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 4 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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 149 5745MHz		11489.48	46.7	-27.3	74	51.58	40.19	16.87	61.94	100	360	P	H
		11489.48	45.87	-28.13	74	50.75	40.19	16.87	61.94	100	360	P	V
802.11a CH 157 5785MHz		11569.56	45.75	-28.25	74	50.5	40.27	16.94	61.96	100	360	P	H
		11569.56	46.2	-27.8	74	50.95	40.27	16.94	61.96	100	360	P	V
802.11a CH 165 5825MHz		11649.64	46.11	-27.89	74	50.74	40.34	17.01	61.98	100	360	P	H
		11649.64	46.04	-27.96	74	50.67	40.34	17.01	61.98	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 4 5725~5850MHz

WIFI 802.11ac VHT20 (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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5600.4	55.1	-13.2	68.3	41.1	35.77	11.57	33.34	152	7	P	H
		5698.4	56.51	-47.61	104.12	42.41	35.82	11.65	33.37	152	7	P	H
		5720	69.54	-41.36	110.9	55.4	35.84	11.68	33.38	152	7	P	H
		5721.6	72.05	-42.5	114.55	57.91	35.84	11.68	33.38	152	7	P	H
802.11ac		5740	112.9	-	-	98.74	35.85	11.69	33.38	152	7	P	H
VHT20		5740	106.2	-	-	92.04	35.85	11.69	33.38	152	7	A	H
CH 149		5612.4	55.09	-13.21	68.3	41.09	35.77	11.57	33.34	127	359	P	V
5745MHz		5651.6	54.4	-15.09	69.49	40.33	35.81	11.62	33.36	127	359	P	V
		5720	64.97	-45.93	110.9	50.83	35.84	11.68	33.38	127	359	P	V
		5724.8	71.31	-50.53	121.84	57.17	35.84	11.68	33.38	127	359	P	V
		5746	110.21	-	-	96.06	35.85	11.69	33.39	127	359	P	V
		5746	103.65	-	-	89.5	35.85	11.69	33.39	127	359	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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 165 5825MHz		5850	67.76	-54.54	122.3	53.48	35.89	11.81	33.42	199	2	P	H
		5855.1	56.2	-54.67	110.87	41.88	35.9	11.84	33.42	199	2	P	H
		5878.8	55.25	-47.23	102.48	40.9	35.92	11.86	33.43	199	2	P	H
		5950.8	54.99	-13.31	68.3	40.47	36	11.97	33.45	199	2	P	H
		5830	111.57	-	-	97.32	35.88	11.79	33.42	199	2	P	H
		5830	104.51	-	-	90.26	35.88	11.79	33.42	199	2	A	H
		5854	64.17	-49.01	113.18	49.85	35.9	11.84	33.42	125	360	P	V
		5855.1	59.55	-51.32	110.87	45.23	35.9	11.84	33.42	125	360	P	V
		5883.2	54.56	-44.65	99.21	40.22	35.92	11.86	33.44	125	360	P	V
		5978.4	55.3	-13	68.3	40.7	36.04	12.02	33.46	125	360	P	V
		5824	109.83	-	-	95.57	35.88	11.79	33.41	125	360	P	V
		5824	102.48	-	-	88.22	35.88	11.79	33.41	125	360	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 4 5725~5850MHz

WIFI 802.11ac VHT20 (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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 149 5745MHz		11489.48	45.66	-28.34	74	50.54	40.19	16.87	61.94	100	360	P	H
		11489.48	46.6	-27.4	74	51.48	40.19	16.87	61.94	100	360	P	V
802.11ac VHT20 CH 157 5785MHz		11569.56	46.03	-27.97	74	50.78	40.27	16.94	61.96	100	360	P	H
		11569.56	46.17	-27.83	74	50.92	40.27	16.94	61.96	100	360	P	V
802.11ac VHT20 CH 165 5825MHz		11649.64	45.56	-28.44	74	50.19	40.34	17.01	61.98	100	360	P	H
		11649.64	46.9	-27.1	74	51.53	40.34	17.01	61.98	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 4 5725~5850MHz

WIFI 802.11ac VHT40 (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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5632	54.08	-14.22	68.3	40.06	35.78	11.59	33.35	147	5	P	H
		5698	69.79	-34.04	103.83	55.69	35.82	11.65	33.37	147	5	P	H
		5719.6	79	-31.79	110.79	64.86	35.84	11.68	33.38	147	5	P	H
		5722	79.42	-36.04	115.46	65.28	35.84	11.68	33.38	147	5	P	H
		5852	54.75	-62.99	117.74	40.47	35.89	11.81	33.42	147	5	P	H
		5864.8	54.64	-53.51	108.15	40.33	35.9	11.84	33.43	147	5	P	H
		5919.6	54.85	-17.43	72.28	40.43	35.96	11.91	33.45	147	5	P	H
		5982.4	55.53	-12.77	68.3	40.93	36.04	12.02	33.46	147	5	P	H
802.11ac		5758	110.98	-	-	96.81	35.85	11.71	33.39	147	5	P	H
VHT40		5758	103.6	-	-	89.43	35.85	11.71	33.39	147	5	A	H
CH 151		5628.8	53.9	-14.4	68.3	39.88	35.78	11.59	33.35	111	351	P	V
5755MHz		5700	67.16	-38.14	105.3	53.06	35.82	11.65	33.37	111	351	P	V
		5720	76.44	-34.46	110.9	62.3	35.84	11.68	33.38	111	351	P	V
		5724	79.42	-40.6	120.02	65.28	35.84	11.68	33.38	111	351	P	V
		5853.2	53.18	-61.82	115	38.9	35.89	11.81	33.42	111	351	P	V
		5868	53.82	-53.44	107.26	39.51	35.9	11.84	33.43	111	351	P	V
		5904	54.49	-29.31	83.8	40.1	35.94	11.89	33.44	111	351	P	V
		5948	55.32	-12.98	68.3	40.8	36	11.97	33.45	111	351	P	V
		5752	108.58	-	-	94.41	35.85	11.71	33.39	111	351	P	V
		5752	100.75	-	-	86.58	35.85	11.71	33.39	111	351	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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5608	56.19	-12.11	68.3	42.19	35.77	11.57	33.34	163	3	P	H
		5698.4	55.41	-48.71	104.12	41.31	35.82	11.65	33.37	163	3	P	H
		5715.6	58.66	-51.01	109.67	44.55	35.83	11.66	33.38	163	3	P	H
		5721.6	58.98	-55.57	114.55	44.84	35.84	11.68	33.38	163	3	P	H
		5850.4	67.23	-54.16	121.39	52.95	35.89	11.81	33.42	163	3	P	H
		5860.8	62.46	-46.81	109.27	48.14	35.9	11.84	33.42	163	3	P	H
		5882.4	54.97	-44.83	99.8	40.63	35.92	11.86	33.44	163	3	P	H
		5945.6	54.96	-13.34	68.3	40.44	36	11.97	33.45	163	3	P	H
802.11ac		5800	110.16	-	-	95.96	35.87	11.74	33.41	163	3	P	H
VHT40		5800	102.67	-	-	88.47	35.87	11.74	33.41	163	3	A	H
CH 159		5605.6	55.18	-13.12	68.3	41.18	35.77	11.57	33.34	106	8	P	V
5795MHz		5664	54.03	-24.66	78.69	39.96	35.81	11.62	33.36	106	8	P	V
		5720	55.58	-55.32	110.9	41.44	35.84	11.68	33.38	106	8	P	V
		5724.8	58.81	-63.03	121.84	44.67	35.84	11.68	33.38	106	8	P	V
		5854.8	61.28	-50.08	111.36	46.96	35.9	11.84	33.42	106	8	P	V
		5855.2	61.36	-49.48	110.84	47.04	35.9	11.84	33.42	106	8	P	V
		5887.6	54.68	-41.27	95.95	40.29	35.94	11.89	33.44	106	8	P	V
		5970.4	54.14	-14.16	68.3	39.59	36.02	11.99	33.46	106	8	P	V
		5794	106.69	-	-	92.49	35.87	11.74	33.41	106	8	P	V
		5794	99.93	-	-	85.73	35.87	11.74	33.41	106	8	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 4 5725~5850MHz

WIFI 802.11ac VHT40 (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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 151 5755MHz		11509.5	46.28	-27.72	74	51.14	40.2	16.88	61.94	100	360	P	H
		11509.5	45.49	-28.51	74	50.35	40.2	16.88	61.94	100	360	P	V
802.11ac VHT40 CH 159 5795MHz		11589.58	47.25	-26.75	74	51.97	40.29	16.96	61.97	100	360	P	H
		11589.58	45.53	-28.47	74	50.25	40.29	16.96	61.97	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 4 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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5648.4	63.29	-5.01	68.3	49.25	35.8	11.6	33.36	102	3	P	H
		5700	74.46	-30.84	105.3	60.36	35.82	11.65	33.37	102	3	P	H
		5712.8	80.6	-28.29	108.89	66.49	35.83	11.66	33.38	102	3	P	H
		5724.4	82.73	-38.2	120.93	68.59	35.84	11.68	33.38	102	3	P	H
		5850.4	74.84	-46.55	121.39	60.56	35.89	11.81	33.42	102	3	P	H
		5859.2	74.46	-35.26	109.72	60.14	35.9	11.84	33.42	102	3	P	H
		5878	62.46	-40.61	103.07	48.11	35.92	11.86	33.43	102	3	P	H
		5950	56.83	-11.47	68.3	42.31	36	11.97	33.45	102	3	P	H
802.11ac		5770	107.17	-	-	92.99	35.86	11.72	33.4	102	3	P	H
VHT80		5770	100.03	-	-	85.85	35.86	11.72	33.4	102	3	A	H
CH 155		5647.2	63.43	-4.87	68.3	49.39	35.8	11.6	33.36	101	349	P	V
5775MHz		5699.2	70.87	-33.84	104.71	56.77	35.82	11.65	33.37	101	349	P	V
		5719.6	78.06	-32.73	110.79	63.92	35.84	11.68	33.38	101	349	P	V
		5724.8	77.73	-44.11	121.84	63.59	35.84	11.68	33.38	101	349	P	V
		5850.4	71.34	-50.05	121.39	57.06	35.89	11.81	33.42	101	349	P	V
		5858	71.81	-38.25	110.06	57.49	35.9	11.84	33.42	101	349	P	V
		5875.2	64.33	-40.82	105.15	49.98	35.92	11.86	33.43	101	349	P	V
		5926.8	56.42	-11.88	68.3	41.95	35.98	11.94	33.45	101	349	P	V
		5782	104.22	-	-	90.04	35.86	11.72	33.4	101	349	P	V
		5782	97.27	-	-	83.09	35.86	11.72	33.4	101	349	A	V

Remark

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

Band 4 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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 155 5775MHz		11549.54	46.95	-27.05	74	51.73	40.25	16.93	61.96	300	0	P	H
		11549.54	46.57	-27.43	74	51.35	40.25	16.93	61.96	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 4 - 5725~5850MHz

WIFI 802.11ax20_Full(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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax20 CH 149 5745MHz		5637.6	54.95	-13.35	68.3	40.91	35.8	11.6	33.36	167	0	P	H
		5699.2	55.8	-48.91	104.71	41.7	35.82	11.65	33.37	167	0	P	H
		5719.6	75.15	-35.64	110.79	61.01	35.84	11.68	33.38	167	0	P	H
		5720.25	73.7	-37.77	111.47	59.56	35.84	11.68	33.38	167	0	P	H
		5752	114.06	-	-	99.89	35.85	11.71	33.39	167	0	P	H
		5752	105.42	-	-	91.25	35.85	11.71	33.39	167	0	A	H
		5627.6	54.78	-13.52	68.3	40.76	35.78	11.59	33.35	175	0	P	V
		5693.2	55.75	-44.54	100.29	41.65	35.82	11.65	33.37	175	0	P	V
		5715.6	67.2	-42.47	109.67	53.09	35.83	11.66	33.38	175	0	P	V
		5724.8	76.34	-45.5	121.84	62.2	35.84	11.68	33.38	175	0	P	V
		5746	111.41	-	-	97.26	35.85	11.69	33.39	175	0	P	V
		5746	103.88	-	-	89.73	35.85	11.69	33.39	175	0	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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax20 CH 165 5825MHz		5851.2	71.03	-48.53	119.56	56.75	35.89	11.81	33.42	198	13	P	H
		5855.21	64.8	-46.04	110.84	50.48	35.9	11.84	33.42	198	13	P	H
		5893.6	55.45	-36.05	91.5	41.06	35.94	11.89	33.44	198	13	P	H
		5940	55.45	-12.85	68.3	40.93	36	11.97	33.45	198	13	P	H
		5824	113.12	-	-	98.86	35.88	11.79	33.41	198	13	P	H
		5824	105.54	-	-	91.28	35.88	11.79	33.41	198	13	A	H
		5852.4	69.12	-47.71	116.83	54.84	35.89	11.81	33.42	136	0	P	V
		5855.14	62.65	-48.21	110.86	48.33	35.9	11.84	33.42	136	0	P	V
		5919.6	55.4	-16.88	72.28	40.98	35.96	11.91	33.45	136	0	P	V
		5953.2	55.55	-12.75	68.3	41.04	36	11.97	33.46	136	0	P	V
		5836	109.67	-	-	95.42	35.88	11.79	33.42	136	0	P	V
		5836	102.69	-	-	88.44	35.88	11.79	33.42	136	0	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 4 5725~5850MHz

WIFI 802. 11ax HE20_Full (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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax20 CH 149 5745MHz		11489.48	46.62	-27.38	74	51.5	40.19	16.87	61.94	100	360	P	H
		11489.48	46.28	-27.72	74	51.16	40.19	16.87	61.94	100	360	P	V
802.11ax20 CH 157 5785MHz		11569.56	46.82	-27.18	74	51.57	40.27	16.94	61.96	100	360	P	H
		11569.56	46.02	-27.98	74	50.77	40.27	16.94	61.96	100	360	P	V
802.11ax20 CH 165 5825MHz		11649.64	46.56	-27.44	74	51.19	40.34	17.01	61.98	300	0	P	H
		11649.64	46.9	-27.1	74	51.53	40.34	17.01	61.98	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 4 5725~5850MHz

WIFI 802.11ax HE20_Partial 26 (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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Partial 26/0 CH 149 5745MHz		5622	54.04	-14.26	68.3	40.02	35.78	11.59	33.35	100	339	P	H
		5695.2	55.4	-46.36	101.76	41.3	35.82	11.65	33.37	100	339	P	H
		5712	54.13	-54.53	108.66	40.02	35.83	11.66	33.38	100	339	P	H
		5724	55.63	-64.39	120.02	41.49	35.84	11.68	33.38	100	339	P	H
		5734	110.31	-	-	96.17	35.84	11.68	33.38	100	339	P	H
		5734	105.13	-	-	90.99	35.84	11.68	33.38	100	339	A	H
		5649.2	54.64	-13.66	68.3	40.6	35.8	11.6	33.36	172	11	P	V
		5650	54.48	-13.82	68.3	40.41	35.81	11.62	33.36	172	11	P	V
		5703.2	53.98	-52.22	106.2	39.86	35.83	11.66	33.37	172	11	P	V
		5721.6	53.22	-61.33	114.55	39.08	35.84	11.68	33.38	172	11	P	V
		5734	111.94	-	-	97.8	35.84	11.68	33.38	172	11	P	V
		5734	104.28	-	-	90.14	35.84	11.68	33.38	172	11	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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Partial 26/8 CH 165 5825MHz		5854.4	54.19	-58.08	112.27	39.87	35.9	11.84	33.42	100	338	P	H
		5863.2	54.14	-54.46	108.6	39.82	35.9	11.84	33.42	100	338	P	H
		5878.4	54.95	-47.82	102.77	40.6	35.92	11.86	33.43	100	338	P	H
		5967.6	55.73	-12.57	68.3	41.18	36.02	11.99	33.46	100	338	P	H
		5836	109.9	-	-	95.65	35.88	11.79	33.42	100	338	P	H
		5836	102.05	-	-	87.8	35.88	11.79	33.42	100	338	A	H
		5850	52.55	-69.75	122.3	38.27	35.89	11.81	33.42	109	15	P	V
		5859.2	54.51	-55.21	109.72	40.19	35.9	11.84	33.42	109	15	P	V
		5919.2	54.37	-18.21	72.58	39.95	35.96	11.91	33.45	109	15	P	V
		5992.4	55.37	-12.93	68.3	40.74	36.06	12.04	33.47	109	15	P	V
		5836	110.35	-	-	96.1	35.88	11.79	33.42	109	15	P	V
		5836	102.96	-	-	88.71	35.88	11.79	33.42	109	15	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 4 5725~5850MHz

WIFI 802.11ax HE20_Partial 52 (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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Partial 52/37 CH 149 5745MHz		5603.6	54.3	-14	68.3	40.3	35.77	11.57	33.34	101	340	P	H
		5658.8	54.51	-20.33	74.84	40.44	35.81	11.62	33.36	101	340	P	H
		5709.6	54.5	-53.49	107.99	40.39	35.83	11.66	33.38	101	340	P	H
		5724.4	59.18	-61.75	120.93	45.04	35.84	11.68	33.38	101	340	P	H
		5740	112.1	-	-	97.94	35.85	11.69	33.38	101	340	P	H
		5740	104.51	-	-	90.35	35.85	11.69	33.38	101	340	A	H
		5613.6	54	-14.3	68.3	40	35.77	11.57	33.34	113	12	P	V
		5689.6	54.55	-43.08	97.63	40.45	35.82	11.65	33.37	113	12	P	V
		5712.8	54.85	-54.04	108.89	40.74	35.83	11.66	33.38	113	12	P	V
		5724	53.94	-66.08	120.02	39.8	35.84	11.68	33.38	113	12	P	V
		5740	111.36	-	-	97.2	35.85	11.69	33.38	113	12	P	V
		5740	103.89	-	-	89.73	35.85	11.69	33.38	113	12	A	V
802.11ax HE20 Partial 52/40 CH 165 5825MHz		5851.2	54.08	-65.48	119.56	39.8	35.89	11.81	33.42	100	342	P	H
		5856.4	54.19	-56.32	110.51	39.87	35.9	11.84	33.42	100	342	P	H
		5905.6	55.93	-26.69	82.62	41.5	35.96	11.91	33.44	100	342	P	H
		5969.2	55.53	-12.77	68.3	40.98	36.02	11.99	33.46	100	342	P	H
		5836	109.98	-	-	95.73	35.88	11.79	33.42	100	342	P	H
		5836	102.5	-	-	88.25	35.88	11.79	33.42	100	342	A	H
		5851.6	54.76	-63.89	118.65	40.48	35.89	11.81	33.42	109	17	P	V
		5867.2	54.26	-53.22	107.48	39.95	35.9	11.84	33.43	109	17	P	V
		5886.4	54.29	-42.55	96.84	39.95	35.92	11.86	33.44	109	17	P	V
		5998.8	55.16	-13.14	68.3	40.53	36.06	12.04	33.47	109	17	P	V
		5830	111.33	-	-	97.08	35.88	11.79	33.42	109	17	P	V
		5830	103.8	-	-	89.55	35.88	11.79	33.42	109	17	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 4 5725~5850MHz

WIFI 802.11ax HE20_Partial 106 (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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Partial 106/53 CH 149 5745MHz		5610	54.36	-13.94	68.3	40.36	35.77	11.57	33.34	101	339	P	H
		5668.8	54.77	-27.48	82.25	40.68	35.82	11.63	33.36	101	339	P	H
		5715.2	61.05	-48.51	109.56	46.94	35.83	11.66	33.38	101	339	P	H
		5724.4	68.81	-52.12	120.93	54.67	35.84	11.68	33.38	101	339	P	H
		5740	113.01	-	-	98.85	35.85	11.69	33.38	101	339	P	H
		5740	105.41	-	-	91.25	35.85	11.69	33.38	101	339	A	H
		5618	54.27	-14.03	68.3	40.24	35.78	11.59	33.34	112	18	P	V
		5678	54.53	-34.53	89.06	40.45	35.82	11.63	33.37	112	18	P	V
		5719.6	63.64	-47.15	110.79	49.5	35.84	11.68	33.38	112	18	P	V
		5724.8	68.87	-52.97	121.84	54.73	35.84	11.68	33.38	112	18	P	V
		5740	111.63	-	-	97.47	35.85	11.69	33.38	112	18	P	V
		5740	103.5	-	-	89.34	35.85	11.69	33.38	112	18	A	V
802.11ax HE20 Partial 106/54 CH 165 5825MHz		5852.8	54.85	-61.07	115.92	40.57	35.89	11.81	33.42	100	340	P	H
		5857.6	62.69	-47.48	110.17	48.37	35.9	11.84	33.42	100	340	P	H
		5912.4	54.4	-23.19	77.59	39.97	35.96	11.91	33.44	100	340	P	H
		5981.6	54.47	-13.83	68.3	39.87	36.04	12.02	33.46	100	340	P	H
		5830	110.34	-	-	96.09	35.88	11.79	33.42	100	340	P	H
		5830	103.42	-	-	89.17	35.88	11.79	33.42	100	340	A	H
		5850.4	54.81	-66.58	121.39	40.53	35.89	11.81	33.42	129	16	P	V
		5863.6	54.93	-53.56	108.49	40.61	35.9	11.84	33.42	129	16	P	V
		5889.2	55.09	-39.67	94.76	40.7	35.94	11.89	33.44	129	16	P	V
		5942.4	55.09	-13.21	68.3	40.57	36	11.97	33.45	129	16	P	V
		5836	111.66	-	-	97.41	35.88	11.79	33.42	129	16	P	V
		5836	104.28	-	-	90.03	35.88	11.79	33.42	129	16	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 4 5725~5850MHz

WIFI 802.11ax HE40_Full (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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5646	56.24	-12.06	68.3	42.2	35.8	11.6	33.36	169	360	P	H
		5699.2	70.21	-34.5	104.71	56.11	35.82	11.65	33.37	169	360	P	H
		5718.8	79.86	-30.7	110.56	65.72	35.84	11.68	33.38	169	360	P	H
		5721.2	78.84	-34.8	113.64	64.7	35.84	11.68	33.38	169	360	P	H
		5850.8	53.77	-66.71	120.48	39.49	35.89	11.81	33.42	169	360	P	H
		5869.2	53.96	-52.96	106.92	39.65	35.9	11.84	33.43	169	360	P	H
		5922.8	54.8	-15.12	69.92	40.33	35.98	11.94	33.45	169	360	P	H
		5998.8	54.91	-13.39	68.3	40.28	36.06	12.04	33.47	169	360	P	H
802.11ax		5770	110.72	-	-	96.54	35.86	11.72	33.4	169	360	P	H
HE40 Full		5770	103.83	-	-	89.65	35.86	11.72	33.4	169	360	A	H
CH 151		5646.4	54.47	-13.83	68.3	40.43	35.8	11.6	33.36	109	15	P	V
5755MHz		5692.8	65.86	-34.13	99.99	51.76	35.82	11.65	33.37	109	15	P	V
		5715.2	73.75	-35.81	109.56	59.64	35.83	11.66	33.38	109	15	P	V
		5722	78.95	-36.51	115.46	64.81	35.84	11.68	33.38	109	15	P	V
		5851.2	52.75	-66.81	119.56	38.47	35.89	11.81	33.42	109	15	P	V
		5860	54.19	-55.31	109.5	39.87	35.9	11.84	33.42	109	15	P	V
		5901.2	54.64	-31.23	85.87	40.25	35.94	11.89	33.44	109	15	P	V
		5938.4	54.79	-13.51	68.3	40.32	35.98	11.94	33.45	109	15	P	V
		5752	108.05	-	-	93.88	35.85	11.71	33.39	109	15	P	V
		5752	100.99	-	-	86.82	35.85	11.71	33.39	109	15	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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5610.8	54.06	-14.24	68.3	40.06	35.77	11.57	33.34	177	0	P	H
		5688.4	56.12	-40.62	96.74	42.02	35.82	11.65	33.37	177	0	P	H
		5719.2	58.96	-51.72	110.68	44.82	35.84	11.68	33.38	177	0	P	H
		5724	60.48	-59.54	120.02	46.34	35.84	11.68	33.38	177	0	P	H
		5850.8	67.47	-53.01	120.48	53.19	35.89	11.81	33.42	177	0	P	H
		5856.8	62.99	-47.41	110.4	48.67	35.9	11.84	33.42	177	0	P	H
		5879.6	55.71	-46.17	101.88	41.36	35.92	11.86	33.43	177	0	P	H
		5944.8	54.92	-13.38	68.3	40.4	36	11.97	33.45	177	0	P	H
802.11ax		5788	111.74	-	-	97.53	35.87	11.74	33.4	177	0	P	H
HE40 Full		5788	102.66	-	-	88.45	35.87	11.74	33.4	177	0	A	H
CH 159		5612.8	54.35	-13.95	68.3	40.35	35.77	11.57	33.34	159	0	P	V
5795MHz		5672.4	53.97	-30.95	84.92	39.89	35.82	11.63	33.37	159	0	P	V
		5713.2	56.74	-52.26	109	42.63	35.83	11.66	33.38	159	0	P	V
		5724.4	60.96	-59.97	120.93	46.82	35.84	11.68	33.38	159	0	P	V
		5853.6	63.47	-50.62	114.09	49.15	35.9	11.84	33.42	159	0	P	V
		5856	62.45	-48.17	110.62	48.13	35.9	11.84	33.42	159	0	P	V
		5908.4	54.47	-26.08	80.55	40.04	35.96	11.91	33.44	159	0	P	V
		5927.2	55.5	-12.8	68.3	41.03	35.98	11.94	33.45	159	0	P	V
		5806	109.43	-	-	95.2	35.88	11.76	33.41	159	0	P	V
		5806	100.66	-	-	86.43	35.88	11.76	33.41	159	0	A	V

Remark

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

Band 4 5725~5850MHz

WIFI 802.11ax HE40_Full (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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Full CH 151 5755MHz		11509.5	46.74	-27.26	74	51.6	40.2	16.88	61.94	300	0	P	H
		11509.5	46.32	-27.68	74	51.18	40.2	16.88	61.94	100	360	P	V
802.11ax HE40 Full CH 159 5795MHz		11589.58	46.33	-27.67	74	51.05	40.29	16.96	61.97	300	0	P	H
		11589.58	45.57	-28.43	74	50.29	40.29	16.96	61.97	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 4 5725~5850MHz

WIFI 802.11ax HE40_Partial 242 (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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5638.4	55.85	-12.45	68.3	41.81	35.8	11.6	33.36	108	344	P	H
		5695.6	62.58	-39.48	102.06	48.48	35.82	11.65	33.37	108	344	P	H
		5720	76.95	-33.95	110.9	62.81	35.84	11.68	33.38	108	344	P	H
		5724.4	79.44	-41.49	120.93	65.3	35.84	11.68	33.38	108	344	P	H
		5854	54.94	-58.24	113.18	40.62	35.9	11.84	33.42	108	344	P	H
		5867.6	54.59	-52.78	107.37	40.28	35.9	11.84	33.43	108	344	P	H
		5894.4	55.02	-35.89	90.91	40.63	35.94	11.89	33.44	108	344	P	H
802.11ax		5962	55.14	-13.16	68.3	40.59	36.02	11.99	33.46	108	344	P	H
HE40		5752	110.86	-	-	96.69	35.85	11.71	33.39	108	344	P	H
Partial		5752	103.57	-	-	89.4	35.85	11.71	33.39	108	344	A	H
242/62		5605.2	54.09	-14.21	68.3	40.09	35.77	11.57	33.34	117	17	P	V
CH 151		5700	63.7	-41.6	105.3	49.6	35.82	11.65	33.37	117	17	P	V
5755MHz		5719.2	76.37	-34.31	110.68	62.23	35.84	11.68	33.38	117	17	P	V
		5723.2	80.1	-38.1	118.2	65.96	35.84	11.68	33.38	117	17	P	V
		5852.4	55.62	-61.21	116.83	41.34	35.89	11.81	33.42	117	17	P	V
		5870	54.44	-52.26	106.7	40.13	35.9	11.84	33.43	117	17	P	V
		5882.4	54.48	-45.32	99.8	40.14	35.92	11.86	33.44	117	17	P	V
		5986.8	55.23	-13.07	68.3	40.64	36.04	12.02	33.47	117	17	P	V
		5740	111	-	-	96.84	35.85	11.69	33.38	117	17	P	V
		5740	103.01	-	-	88.85	35.85	11.69	33.38	117	17	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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Partial 242/62 CH 159 5795MHz		5639.2	54.02	-14.28	68.3	39.98	35.8	11.6	33.36	101	340	P	H
		5675.2	54.74	-32.25	86.99	40.66	35.82	11.63	33.37	101	340	P	H
		5715.2	62.87	-46.69	109.56	48.76	35.83	11.66	33.38	101	340	P	H
		5721.2	62.67	-50.97	113.64	48.53	35.84	11.68	33.38	101	340	P	H
		5850.4	54.83	-66.56	121.39	40.55	35.89	11.81	33.42	101	340	P	H
		5866.4	60.56	-47.15	107.71	46.25	35.9	11.84	33.43	101	340	P	H
		5896.4	55.09	-34.34	89.43	40.7	35.94	11.89	33.44	101	340	P	H
		5931.2	55.11	-13.19	68.3	40.64	35.98	11.94	33.45	101	340	P	H
		5806	111.28	-	-	97.05	35.88	11.76	33.41	101	340	P	H
		5806	101.73	-	-	87.5	35.88	11.76	33.41	101	340	A	H
		5642.8	53.89	-14.41	68.3	39.85	35.8	11.6	33.36	150	16	P	V
		5656.4	55.22	-17.83	73.05	41.15	35.81	11.62	33.36	150	16	P	V
		5718.8	57.16	-53.4	110.56	43.02	35.84	11.68	33.38	150	16	P	V
		5721.2	59.51	-54.13	113.64	45.37	35.84	11.68	33.38	150	16	P	V
		5850	55.43	-66.87	122.3	41.15	35.89	11.81	33.42	150	16	P	V
		5873.6	57.09	-48.6	105.69	42.74	35.92	11.86	33.43	150	16	P	V
		5877.2	56.73	-46.94	103.67	42.38	35.92	11.86	33.43	150	16	P	V
		5950.8	55.43	-12.87	68.3	40.91	36	11.97	33.45	150	16	P	V
		5800	110.84	-	-	96.64	35.87	11.74	33.41	150	16	P	V
		5800	102.1	-	-	87.9	35.87	11.74	33.41	150	16	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 4 5725~5850MHz

WIFI 802.11ax HE80_Full (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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5648.8	64.31	-3.99	68.3	50.27	35.8	11.6	33.36	202	360	P	H
		5697.6	74.35	-29.18	103.53	60.25	35.82	11.65	33.37	202	360	P	H
		5719.6	78.94	-31.85	110.79	64.8	35.84	11.68	33.38	202	360	P	H
		5721.6	77.84	-36.71	114.55	63.7	35.84	11.68	33.38	202	360	P	H
		5854	73.1	-40.08	113.18	58.78	35.9	11.84	33.42	202	360	P	H
		5861.6	72.48	-36.57	109.05	58.16	35.9	11.84	33.42	202	360	P	H
		5875.2	64.49	-40.66	105.15	50.14	35.92	11.86	33.43	202	360	P	H
		5940.4	56.37	-11.93	68.3	41.85	36	11.97	33.45	202	360	P	H
802.11ax		5770	108.59	-	-	94.41	35.86	11.72	33.4	202	360	P	H
HE80 Full		5770	100.24	-	-	86.06	35.86	11.72	33.4	202	360	A	H
CH 155		5638.8	60.03	-8.27	68.3	45.99	35.8	11.6	33.36	172	360	P	V
5775MHz		5696	69.53	-32.82	102.35	55.43	35.82	11.65	33.37	172	360	P	V
		5719.6	73.74	-37.05	110.79	59.6	35.84	11.68	33.38	172	360	P	V
		5723.2	75.06	-43.14	118.2	60.92	35.84	11.68	33.38	172	360	P	V
		5850.8	71.82	-48.66	120.48	57.54	35.89	11.81	33.42	172	360	P	V
		5855.12	70.25	-40.62	110.87	55.93	35.9	11.84	33.42	172	360	P	V
		5875.2	62.71	-42.44	105.15	48.36	35.92	11.86	33.43	172	360	P	V
		5968	56.11	-12.19	68.3	41.56	36.02	11.99	33.46	172	360	P	V
		5782	105.38	-	-	91.2	35.86	11.72	33.4	172	360	P	V
		5782	97.56	-	-	83.38	35.86	11.72	33.4	172	360	A	V

Remark

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

Band 4 5725~5850MHz

WIFI 802.11ax HE80_Full (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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Full CH 155 5775MHz		11549.54	46.08	-27.92	74	50.86	40.25	16.93	61.96	300	0	P	H
		11549.54	47.15	-26.85	74	51.93	40.25	16.93	61.96	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 4 5725~5850MHz

WIFI 802.11ax HE80_Partial 484 Left (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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Partial 484/66 CH 155 5775MHz		5619.6	57.88	-10.42	68.3	43.86	35.78	11.59	33.35	110	358	P	H
		5680.4	68.52	-22.31	90.83	54.44	35.82	11.63	33.37	110	358	P	H
		5716.8	77.76	-32.25	110.01	63.65	35.83	11.66	33.38	110	358	P	H
		5724	78.9	-41.12	120.02	64.76	35.84	11.68	33.38	110	358	P	H
		5852	57.15	-60.59	117.74	42.87	35.89	11.81	33.42	110	358	P	H
		5867.2	69.85	-37.63	107.48	55.54	35.9	11.84	33.43	110	358	P	H
		5878.8	61.86	-40.62	102.48	47.51	35.92	11.86	33.43	110	358	P	H
		5964.8	55.66	-12.64	68.3	41.11	36.02	11.99	33.46	110	358	P	H
		5752	109.43	-	-	95.26	35.85	11.71	33.39	110	358	P	H
		5752	101.87	-	-	87.7	35.85	11.71	33.39	110	358	A	H
		5616	54.66	-13.64	68.3	40.63	35.78	11.59	33.34	177	21	P	V
		5680.4	67.82	-23.01	90.83	53.74	35.82	11.63	33.37	177	21	P	V
		5717.2	77.62	-32.5	110.12	63.51	35.83	11.66	33.38	177	21	P	V
		5723.6	75.25	-43.86	119.11	61.11	35.84	11.68	33.38	177	21	P	V
		5852	53.86	-63.88	117.74	39.58	35.89	11.81	33.42	177	21	P	V
		5857.6	54.31	-55.86	110.17	39.99	35.9	11.84	33.42	177	21	P	V
		5913.6	54.98	-21.73	76.71	40.55	35.96	11.91	33.44	177	21	P	V
		5993.6	55.05	-13.25	68.3	40.42	36.06	12.04	33.47	177	21	P	V
		5752	107.76	-	-	93.59	35.85	11.71	33.39	177	21	P	V
		5752	99.07	-	-	84.9	35.85	11.71	33.39	177	21	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 4 5725~5850MHz

WIFI 802.11ax HE80_Partial 484 Right (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)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Partial 484/66 CH 155 5775MHz		5626.8	56.36	-11.94	68.3	42.34	35.78	11.59	33.35	100	344	P	H
		5685.6	70.09	-24.59	94.68	55.99	35.82	11.65	33.37	100	344	P	H
		5708	75.21	-32.33	107.54	61.1	35.83	11.66	33.38	100	344	P	H
		5724.8	71.34	-50.5	121.84	57.2	35.84	11.68	33.38	100	344	P	H
		5854.4	67.56	-44.71	112.27	53.24	35.9	11.84	33.42	100	344	P	H
		5858.8	61.99	-47.84	109.83	47.67	35.9	11.84	33.42	100	344	P	H
		5875.2	63.1	-42.05	105.15	48.75	35.92	11.86	33.43	100	344	P	H
		5982.4	55.1	-13.2	68.3	40.5	36.04	12.02	33.46	100	344	P	H
		5794	106.56	-	-	92.36	35.87	11.74	33.41	100	344	P	H
		5794	98.4	-	-	84.2	35.87	11.74	33.41	100	344	A	H
		5607.6	54.89	-13.41	68.3	40.89	35.77	11.57	33.34	119	15	P	V
		5660.8	61.96	-14.36	76.32	47.89	35.81	11.62	33.36	119	15	P	V
		5715.6	75.55	-34.12	109.67	61.44	35.83	11.66	33.38	119	15	P	V
		5722.8	65.74	-51.54	117.28	51.6	35.84	11.68	33.38	119	15	P	V
		5850.8	65.7	-54.78	120.48	51.42	35.89	11.81	33.42	119	15	P	V
		5860.8	67.6	-41.67	109.27	53.28	35.9	11.84	33.42	119	15	P	V
		5882.4	60.13	-39.67	99.8	45.79	35.92	11.86	33.44	119	15	P	V
		5979.2	55.34	-12.96	68.3	40.74	36.04	12.02	33.46	119	15	P	V
		5782	107.29	-	-	93.11	35.86	11.72	33.4	119	15	P	V
		5782	99.37	-	-	85.19	35.86	11.72	33.4	119	15	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Emission below 1GHz

5GHz WIFI 802.11ax 80 (LF)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
5GHz 802.11ax 80 LF		30	19.46	-20.54	40	25.75	25.1	0.81	32.2	-	-	P	H
		171.62	21.99	-21.51	43.5	36.22	15.59	2.28	32.1	-	-	P	H
		213.33	24.12	-19.38	43.5	38.47	15.23	2.55	32.13	-	-	P	H
		304.51	26.05	-19.95	46	35.66	19.45	3.05	32.11	-	-	P	H
		557.68	23.38	-22.62	46	26.11	25.46	4.11	32.3	-	-	P	H
		839.95	27.63	-18.37	46	25.9	29.08	5.03	32.38	100	360	P	H
		30.97	28.71	-11.29	40	35.5	24.57	0.84	32.2	100	360	P	V
		54.25	24.46	-15.54	40	41.99	13.4	1.27	32.2	-	-	P	V
		208.48	21.62	-21.88	43.5	36.03	15.19	2.52	32.12	-	-	P	V
		570.29	23.08	-22.92	46	25.67	25.56	4.15	32.3	-	-	P	V
		707.06	24.88	-21.12	46	25.56	26.91	4.62	32.21	-	-	P	V
		818.61	26.41	-19.59	46	25.17	28.61	4.97	32.34	-	-	P	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	**P**eak or **A**verage
H/V	**H**orizontal or **V**ertical

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

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

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

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)

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

= 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)

= 55.45 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)

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

= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)

= 43.54 (dBμV/m)

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

= 43.54(dBμV/m) – 54(dBμV/m)

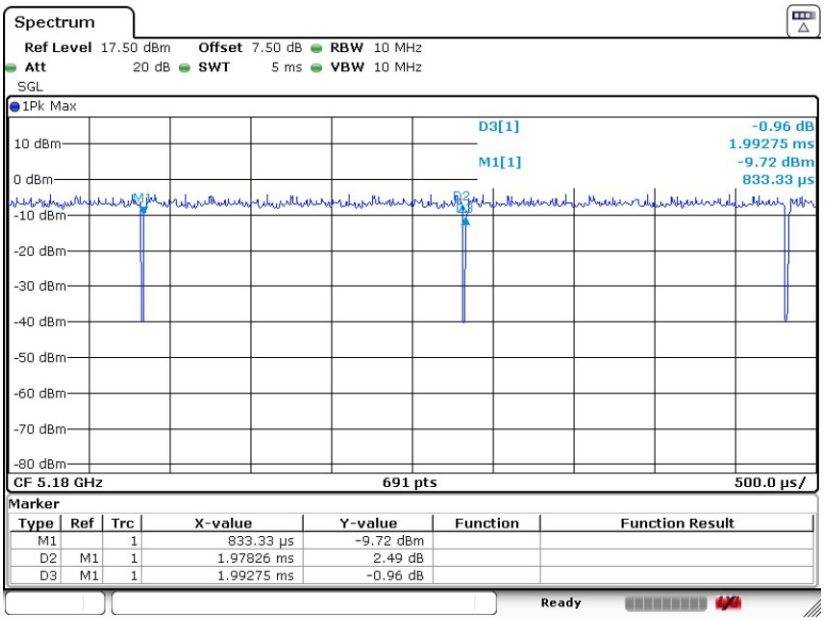
= -10.46(dB)

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

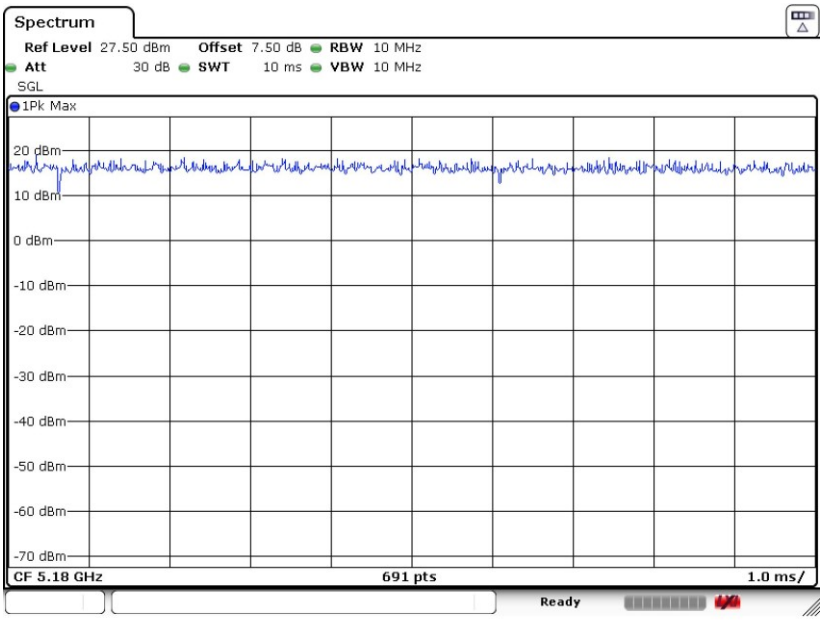
Appendix D. Duty Cycle Plots

Antenna	Band	Duty Cycle(%)	T(ms)	1/T(kHz)	VBW Setting
1+2	802.11a	99.27	-	-	10Hz
1+2	802.11ac VHT20	100	-	-	10Hz
1+2	802.11ac VHT40	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

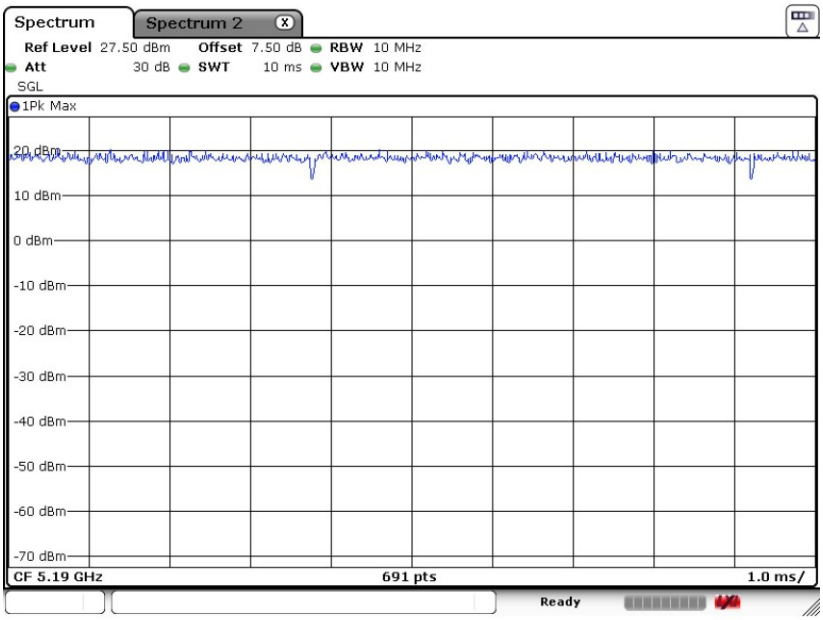
802.11a



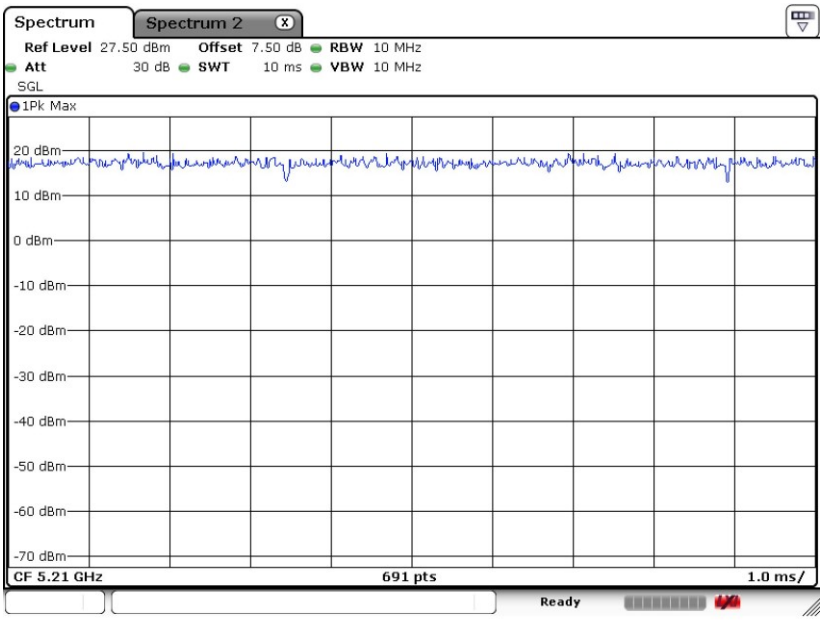
802.11ac VHT20



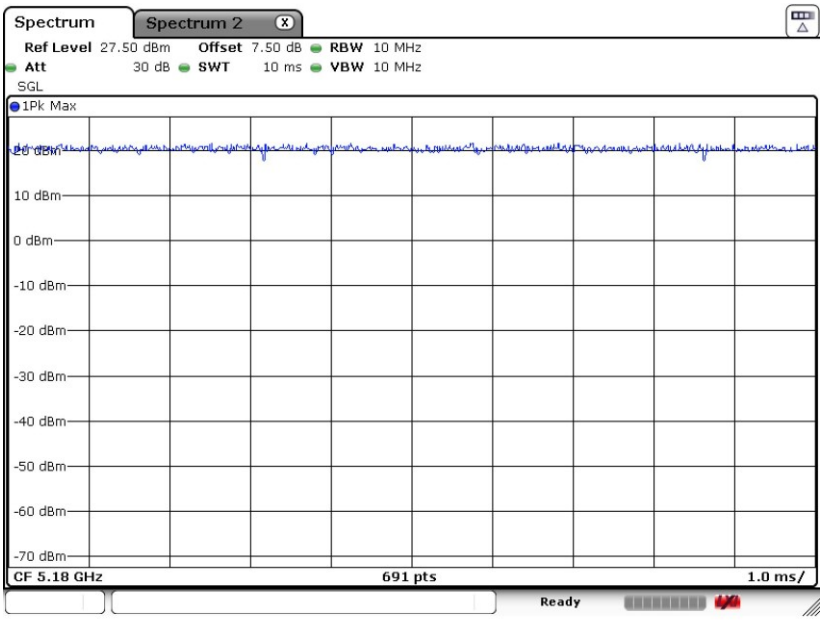
802.11ac VHT40



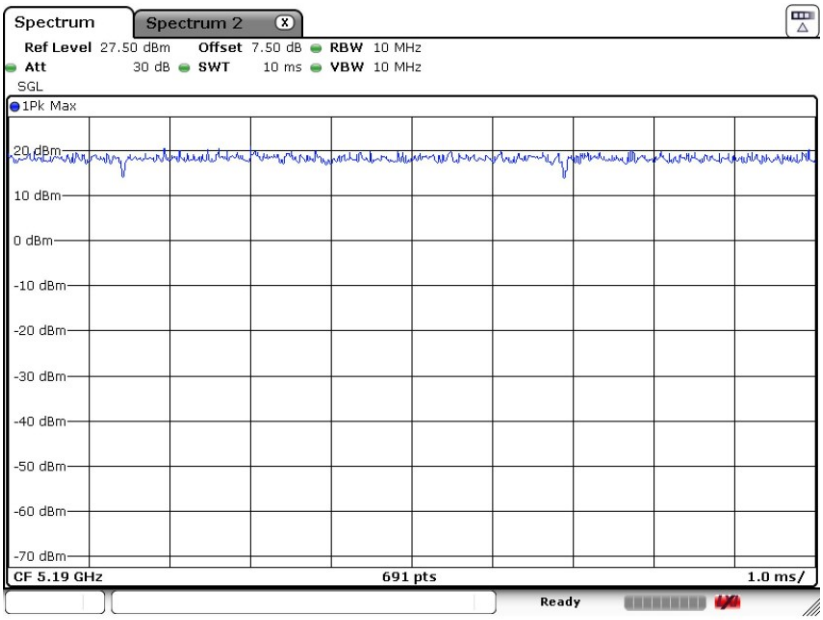
802.11ac VHT80



802.11ax HE20



802.11ax HE40



802.11ax HE80