FCC RF Test Report

APPLICANT	:	Motorola Mobility LLC
EQUIPMENT	:	Mobile Cellular Phone
BRAND NAME	:	Motorola
MODEL NAME	:	XT2215-1
FCC ID	:	IHDT56AA5
STANDARD	:	FCC Part 15 Subpart E §15.407
CLASSIFICATION	:	(NII) Unlicensed National Information Infrastructure
TEST DATE(S)	:	Dec. 27, 2021 ~ Jan. 21, 2022

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

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

Reviewed by: Derreck Chen / Supervisor

Approved by: Eric Shih / Manager

Sporton International Inc. (ShenZhen)
1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055
People's Republic of China

TABLE OF CONTENTS

REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR1N0903-01D	Rev. 01	Initial issue of report	Feb. 18, 2022

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.1	2.1049 & 15.403(i)	26dB & 99% Bandwidth	-	Report only	-
3.2	15.407(a)	Maximum Conducted Output Power	≤ 24 dBm	Pass	-
3.3	15.407(a)	Power Spectral Density	≤ 11 dBm	Pass	-
3.4	15.407(b)	Unwanted Emissions	15.407(b) & 15.209(a)	Pass	Under limit 3.19 dB at 5148.720 MHz
3.5	15.207	AC Conducted Emission	15.207(a)	Pass	Under limit 15.36 dB at 0.550 MHz
3.6	15.203 & 15.407(a)	Antenna Requirement	15.203 & 15.407(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	XT2215-1
FCC ID	IHDT56AA5
IMEI Code	Conducted:351626420008754 Conduction: 351626420010552 Radiation: 351626420009141
HW Version	DVT2
SW Version	S1SD32.29
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 Frequency Range	5180 MHz ~ 5240 MHz 5260 MHz ~ 5320 MHz 5500 MHz ~ 5700 MHz
Maximum Output Power to Antenna	**<5180 MHz ~ 5240 MHz>** 802.11a : 18.35 dBm / 0.0684 W 802.11n HT20 : 18.08 dBm / 0.0643 W 802.11n HT40 : 17.06 dBm / 0.0508 W 802.11ac VHT20 : 17.27 dBm / 0.0533 W 802.11ac VHT40 : 16.07 dBm / 0.0405 W 802.11ac VHT80 : 13.63 dBm / 0.0231 W **<5260 MHz ~ 5320 MHz>** 802.11a : 18.23 dBm / 0.0665 W 802.11n HT20 : 18.29 dBm / 0.0675 W 802.11n HT40 : 17.05 dBm / 0.0507 W 802.11ac VHT20 : 17.19 dBm / 0.0524 W 802.11ac VHT40 : 16.09 dBm / 0.0406 W 802.11ac VHT80 : 14.15 dBm / 0.0260 W **<5500 MHz ~ 5700 MHz >** 802.11a : 18.35 dBm / 0.0684 W 802.11n HT20 : 18.12 dBm / 0.0649 W 802.11n HT40 : 17.25 dBm / 0.0531 W 802.11ac VHT20 : 17.14 dBm / 0.0518 W 802.11ac VHT40 : 16.38 dBm / 0.0435 W 802.11ac VHT80 : 13.93 dBm / 0.0247 W
99% Occupied Bandwidth	**<5180 MHz ~ 5240 MHz>** 802.11a : 16.83 MHz 802.11n HT20 : 17.93 MHz 802.11n HT40 : 36.56 MHz 802.11ac VHT80 : 75.76 MHz **<5260 MHz ~ 5320 MHz>** 802.11a : 16.83 MHz 802.11n HT20 : 17.98 MHz 802.11n HT40 : 36.56 MHz 802.11ac VHT80 : 75.64 MHz **<5500 MHz ~ 5700 MHz >** 802.11a : 16.83 MHz 802.11n HT20 : 17.93 MHz 802.11n HT40 : 36.66 MHz 802.11ac VHT80 : 75.64 MHz
Antenna Type / Gain	**<5180 MHz ~ 5240 MHz>** PIFA Antenna with gain -6.0 dBi **<5260 MHz ~ 5320 MHz>** PIFA Antenna with gain -6.0 dBi **<5500 MHz ~ 5700 MHz>** PIFA Antenna with gain -6.5 dBi
Type of Modulation	802.11a/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11ac : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM)

Note:

1. WLAN operation in 5600 MHz ~ 5650 MHz is notched.
2. 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.

1.5 Modification of EUT

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

1.6 Testing Location

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

Test Firm	Sporton International Inc. (Shenzhen)		
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 Inc. (Shenzhen)		
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.**
	03CH03-SZ	CN1256	421272

1.7 Test Software

Item	Site	Manufacturer	Name	Version
1.	03CH03-SZ	AUDIX	E3	6.2009-8-24
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.
- 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	**Brand Name**	Motorola(Chenyang)	**Model Name**	MC-101
AC Adapter 2	**Brand Name**	Motorola(Salcomp)	**Model Name**	MC-101
AC Adapter 3	**Brand Name**	Motorola(AOHAI)	**Model Name**	MC-101
Battery	**Brand Name**	Motorola(ATL)	**Model Name**	MD50
USB Cable 1	**Brand Name**	Motorola(Saibao)	**Model Name**	SC18D22297
USB Cable 2	**Brand Name**	Motorola(Cabletech)	**Model Name**	SC18D22298
USB Cable 3	**Brand Name**	Motorola(Luxshare)	**Model Name**	SC18D22299

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)
5180-5240 MHz U-NII-1	36	5180	44	5220
	38*	5190	46*	5230
	40	5200	48	5240
	42#	5210	-	-

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

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

Note:

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

2.2 Test Mode

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

Modulation	Data Rate
802.11a	6 Mbps
802.11n HT20	MCS0
802.11n HT40	MCS0
802.11ac VHT80	MCS0

Test Cases	
AC Conducted Emission	Mode 1 : GSM 850 Idle+ Bluetooth Link+WLAN Link(5G)+USB Cable1 (Charging from Adapter1) +Earphone+Battery

Remark:

1. For Radiated Test Cases, The tests were performed with Adapter 1, Battery, Earphone and USB Cable 1.

Simultaneous transmission
802.11n HT40 CH38(5190MHz)+LTE Band 48 Link

Ch. #		U-NII-1 : 5180-5240 MHz	U-NII-2A : 5260-5320 MHz	U-NII-2C : 5500-5700MHz
		802.11a	802.11a	802.11a
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140

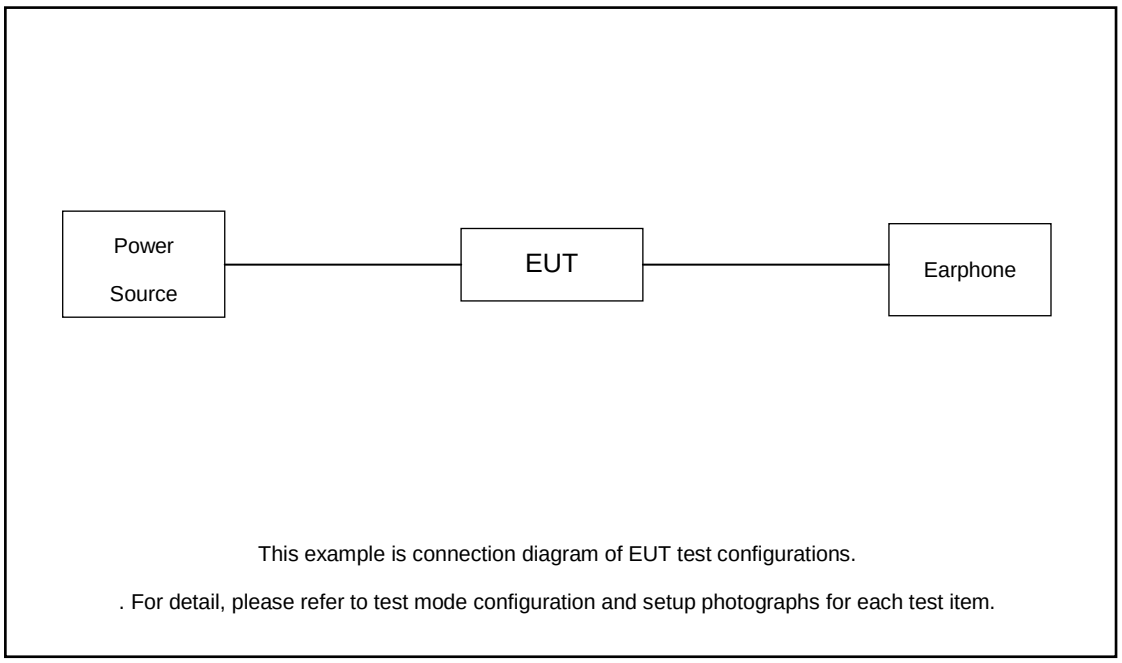
Ch. #		U-NII-1 : 5180-5240 MHz	U-NII-2A : 5260-5320 MHz	U-NII-2C : 5500-5700MHz
		802.11n HT20	802.11n HT20	802.11n HT20
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140

Ch. #		U-NII-1 : 5180-5240 MHz	U-NII-2A : 5260-5320 MHz	U-NII-2C : 5500-5700MHz
		802.11n HT40	802.11n HT40	802.11n HT40
L	Low	38	54	102
M	Middle	-	-	110
H	High	46	62	134

Ch. #		U-NII-1 : 5180-5240 MHz	U-NII-2A : 5260-5320 MHz	U-NII-2C : 5500-5700MHz
		802.11ac VHT80	802.11ac VHT80	802.11ac VHT80
L	Low	-	-	-
M	Middle	42	58	106
H	High	-	-	-

2.3 Connection Diagram of Test System

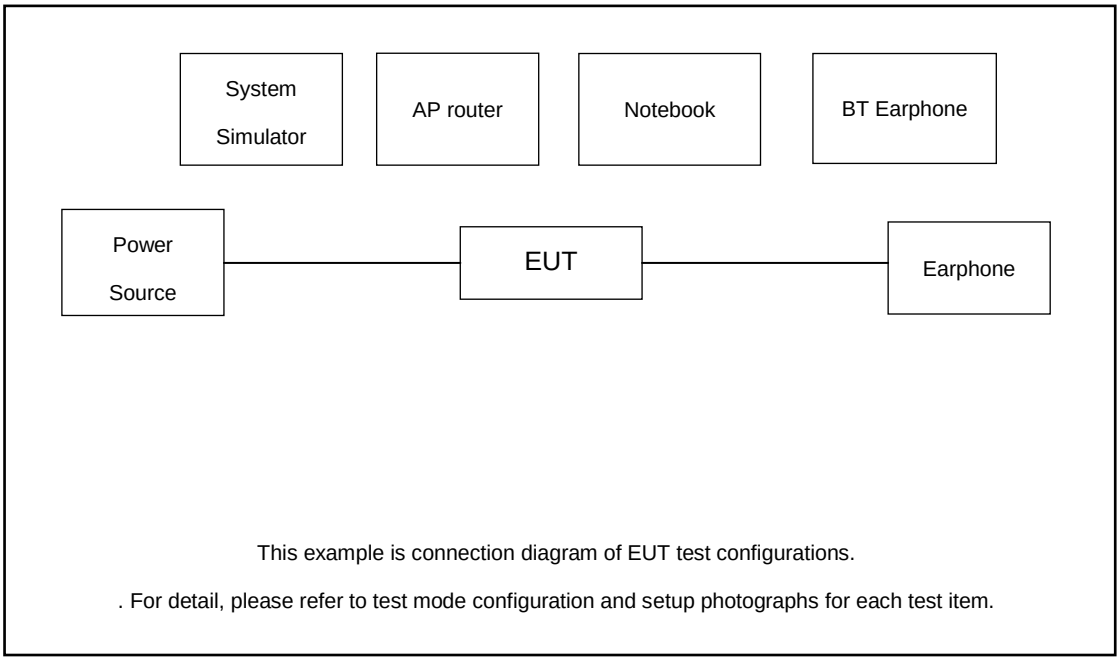
< Radiated Emission >



This example is connection diagram of EUT test configurations.

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

< AC Conducted Emission >



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-820L	KA2IR820LA1	N/A	Unshielded,1.8m
3.	Notebook	Lenovo	E540	FCC DoC	N/A	AC I/P : Unshielded, 1.2m DC O/P : Shielded, 1.8m
4.	Bluetooth Earphone	Samsung	EO-MG900	N/A	N/A	N/A
5.	Earphone	MOTO	N/A	N/A	Unshielded,1.2m	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 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 2.8 dB and 10dB attenuator.

Offset(dB) = RF cable loss(dB) + attenuator factor(dB).

= 2.8 + 10 = 12.8 (dB)

3 Test Result

3.1 26dB & 99% Occupied Bandwidth Measurement

3.1.1 Description of 26dB & 99% Occupied Bandwidth

This section is for reporting purpose only.

There is no restriction limits for bandwidth.

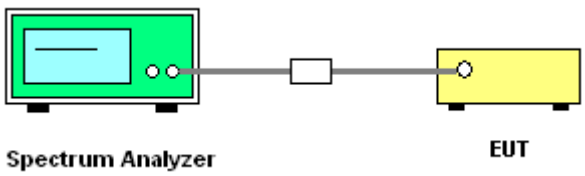
3.1.2 Measuring Instruments

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
2. Set RBW = approximately 1% of the emission bandwidth.
3. Set the VBW > RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.
7. For 99% Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) is set 1% to 5% of the OBW and set the Video bandwidth (VBW) ≥ 3 * RBW.
8. Measure and record the results in the test report.

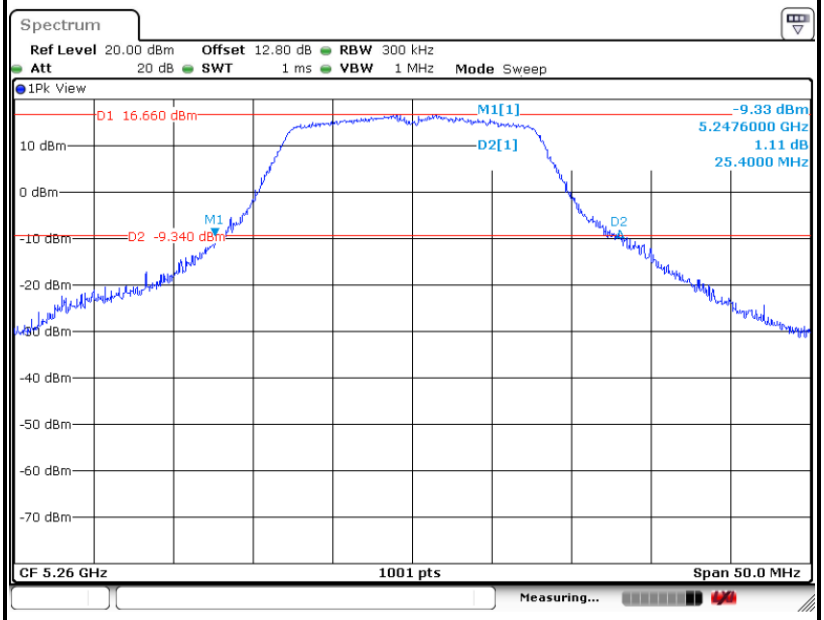
3.1.4 Test Setup



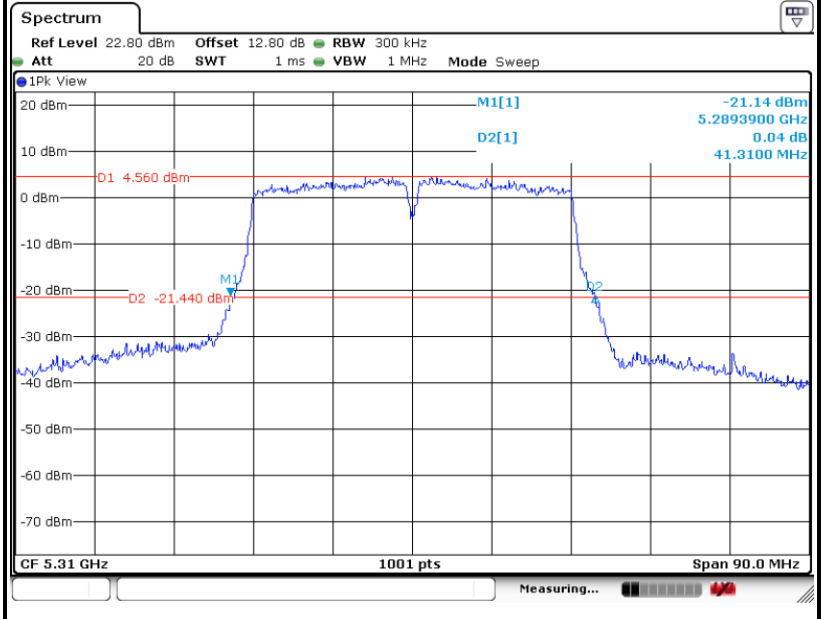
3.1.5 Test Result of 26dB & 99% Occupied Bandwidth

Please refer to Appendix A.

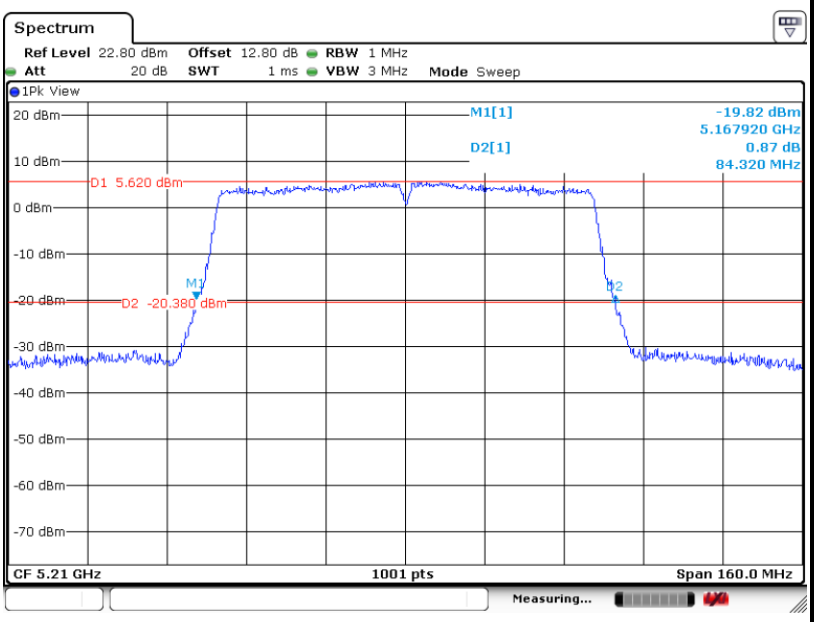
Maximum 26dB Bandwidth for 20M BW



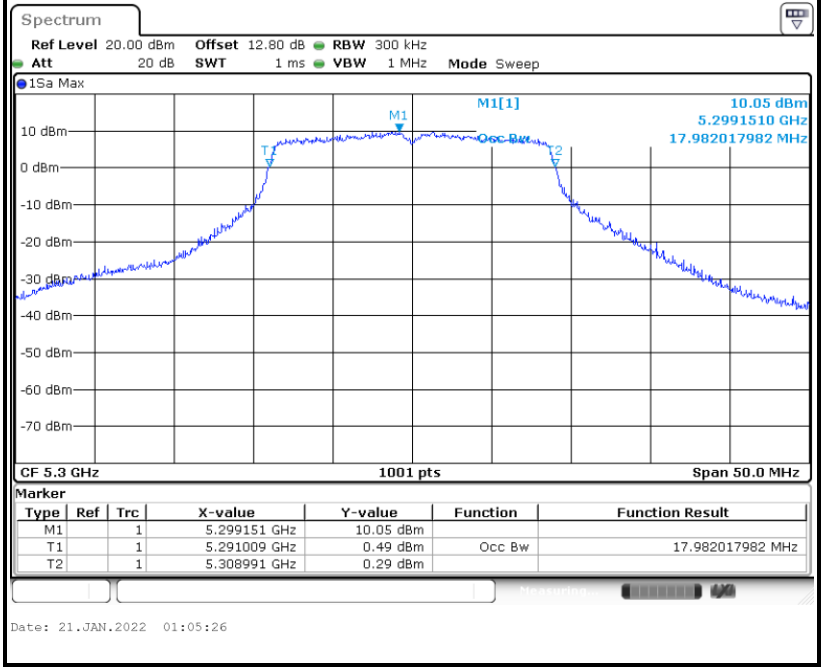
Maximum 26dB Bandwidth for 40M BW



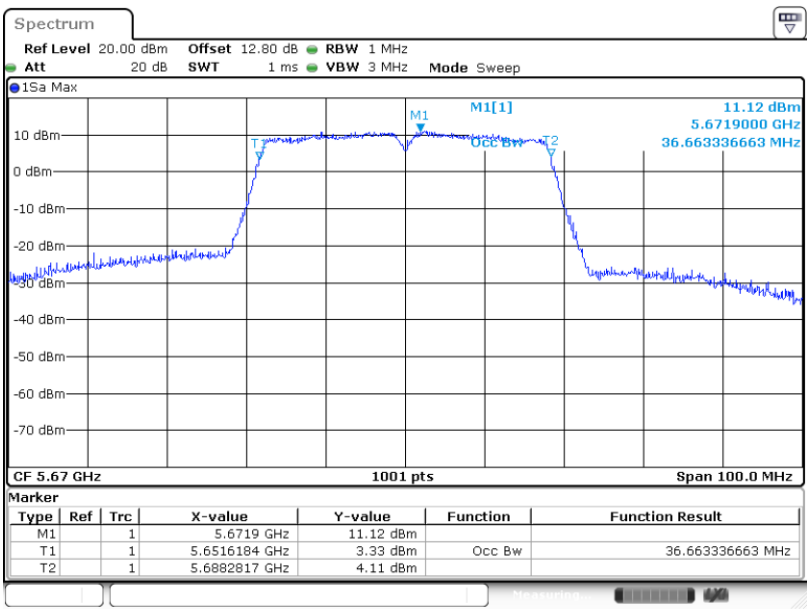
Maximum 26dB Bandwidth for 80M BW



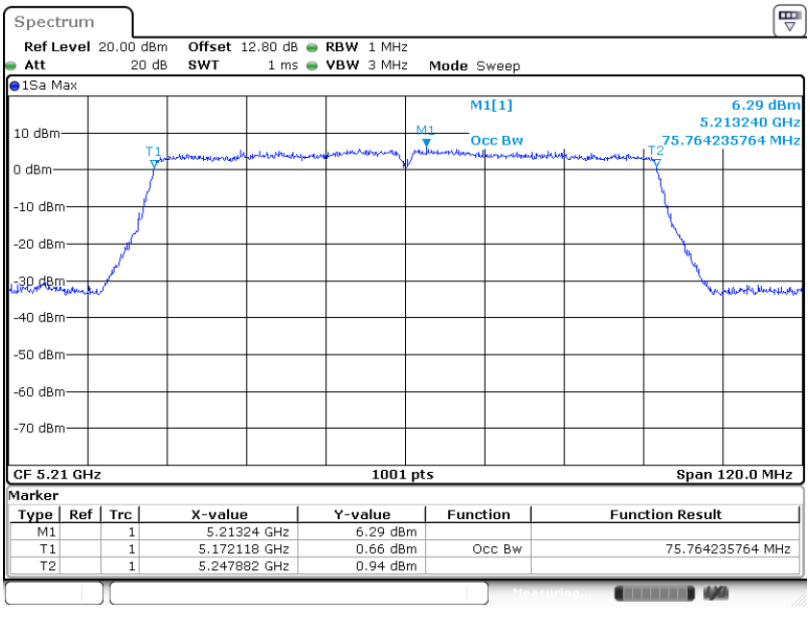
Maximum 99% Occupied Bandwidth for 20M BW



Maximum 99% Occupied Bandwidth for 40M BW



Maximum 99% Occupied Bandwidth for 80M BW



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

3.2 Maximum Conducted Output Power Measurement

3.2.1 Limit of Maximum Conducted Output Power

<FCC 14-30 CFR 15.407>

For mobile and portable client devices in the 5.15–5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW.

For the 5.25–5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm 10 log B, where B is the 26 dB emission bandwidth in megahertz.

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

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

3.2.2 Measuring Instruments

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

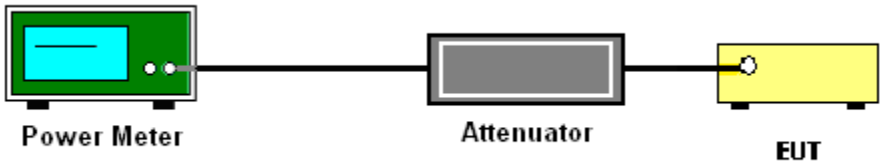
3.2.3 Test Procedures

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

<FCC 14-30 CFR 15.407>

For mobile and portable client devices in the 5.15–5.25 GHz band, the maximum power spectral density shall not exceed 11dBm in any 1 megahertz band.

For the 5.25–5.725 GHz bands, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz 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.

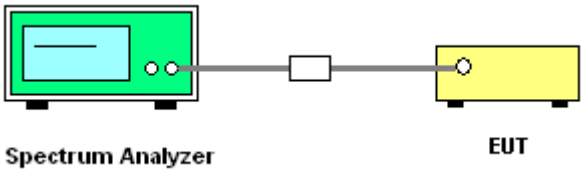
 # Method SA-2 #

(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 = 1 MHz.
- Set VBW ≥ 3 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(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.

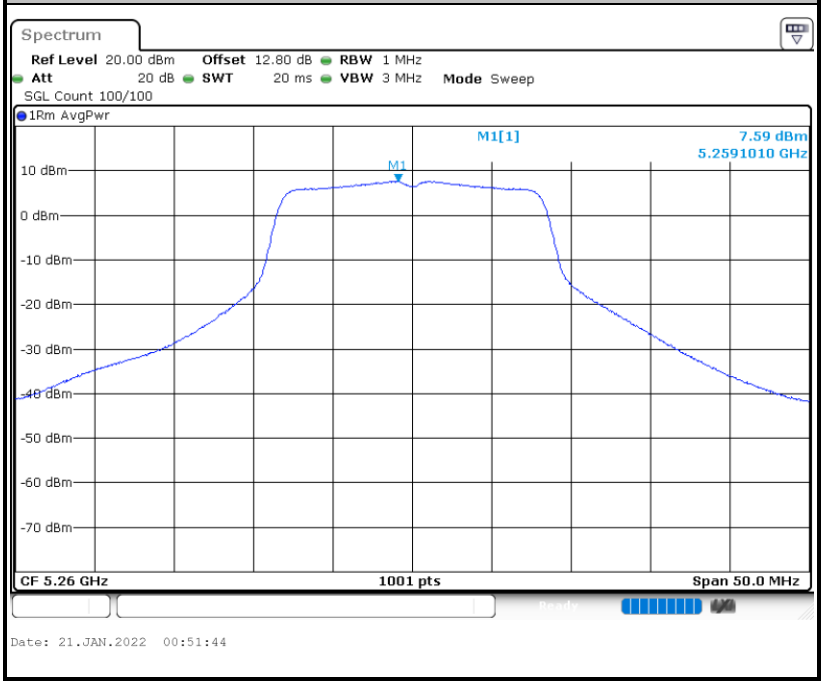
3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.

Worst Case Power Density (dBm/MHz)



Note: Average Power Density (dB) = Measured value+ Duty Factor

3.4 Unwanted Emissions Measurement

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

3.4.1 Limit of Unwanted Emissions

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

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

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

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

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

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) ANSI C63.10-2013 clause 12.7.3 note 97

As specified by regulatory requirements, emissions above 1000 MHz that are outside of the restricted bands are subject to a peak emission limit. However, an out-of-band emission that complies with both the average and peak general regulatory limits is not required to satisfy the peak emission limit.

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

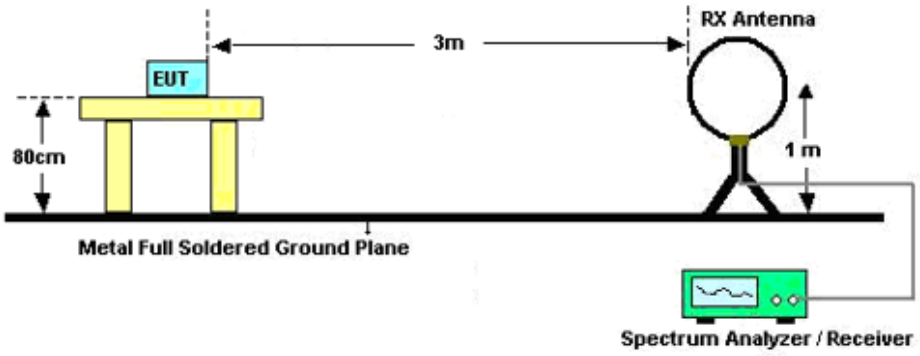
   (3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz

   - 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.

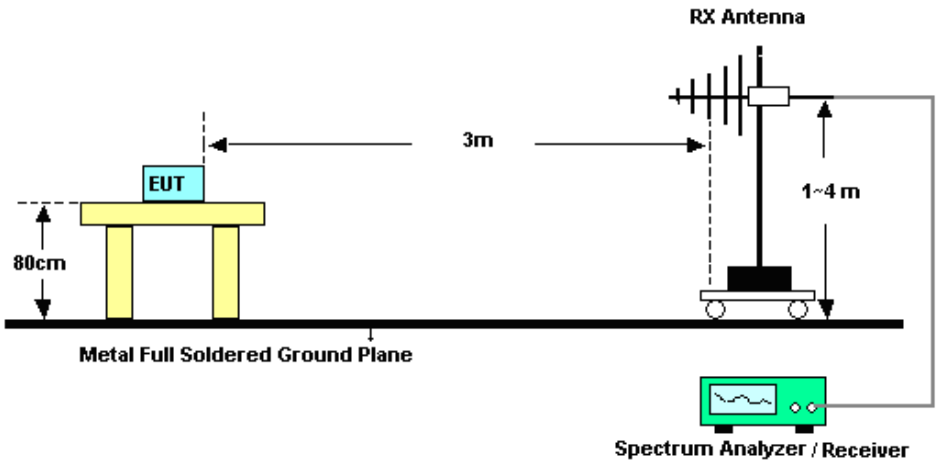
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband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

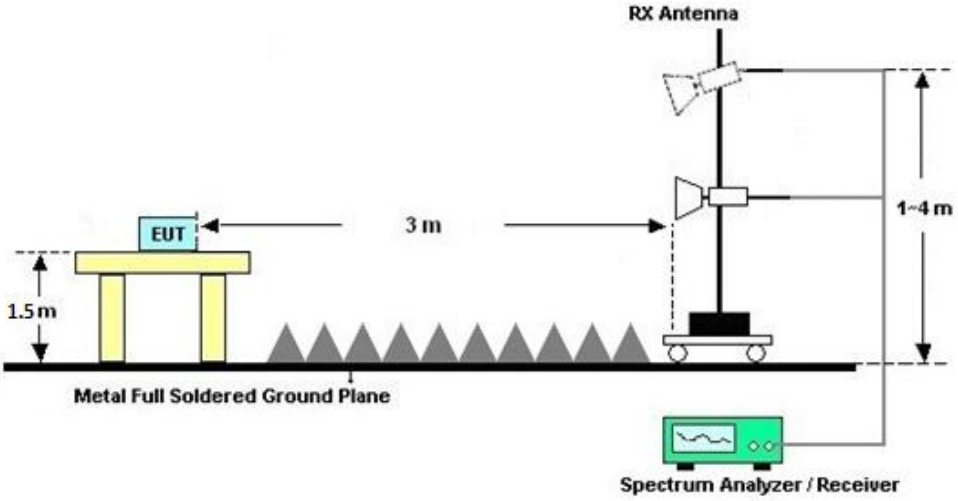
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



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

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

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

3.4.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix C.

3.4.7 Duty Cycle

Please refer to Appendix D.

3.4.8 Test Result of Radiated Spurious Emissions (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.

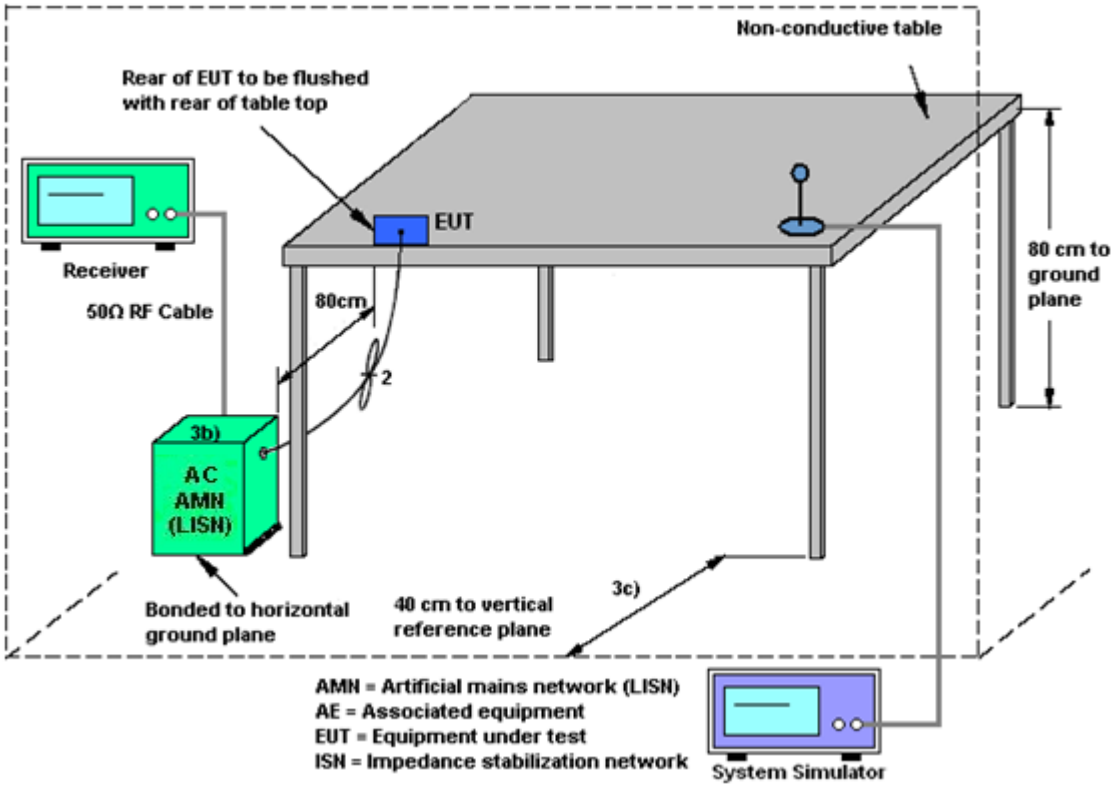
3.5.2 Measuring Instruments

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 Antenna Requirements

3.6.1 Standard Applicable

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

3.6.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.6.3 Antenna Gain

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

4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EMI Receiver	R&S	ESR7	101630	9kHz~7GHz;	Mar. 08, 2021	Dec. 27, 2021	Mar. 07, 2022	Conduction (CO01-SZ)
AC LISN	R&S	ENV216	100063	9kHz~30MHz	Sep. 01, 2021	Dec. 27, 2021	Aug. 31, 2022	Conduction (CO01-SZ)
AC LISN (for auxiliary equipment)	EMCO	3816/2SH	00103892	9kHz~30MHz	Oct. 15, 2021	Dec. 27, 2021	Oct. 14, 2022	Conduction (CO01-SZ)
AC Power Source	Chroma	61602	616020000891	100Vac~250Vac	Jul. 14, 2021	Dec. 27, 2021	Jul. 13, 2022	Conduction (CO01-SZ)
Spectrum Analyzer	R&S	FSV40	101078	10Hz~40GHz	Apr. 08, 2021	Jan. 21, 2022	Apr. 07, 2022	Conducted (TH01-SZ)
Pulse Power Senor	Anritsu	MA2411B	1207253	30MHz~40GHz	Dec. 24, 2021	Jan. 21, 2022	Dec. 23, 2022	Conducted (TH01-SZ)
Power Meter	Anritsu	ML2495A	1218010	50MHz Bandwidth	Dec. 24, 2021	Jan. 21, 2022	Dec. 23, 2022	Conducted (TH01-SZ)
EMI Test Receiver&SA	KEYSIGHT	N9038A	MY54450083	20Hz~8.4GHz	Apr. 07, 2021	Jan. 01, 2022 ~Jan. 05, 2022	Apr. 06, 2022	Radiation (03CH03-SZ)
EXA Spectrum Anaiyzer	KEYSIGHT	N9010A	MY55150246	10Hz~44GHz;	Apr. 07, 2021	Jan. 01, 2022 ~Jan. 05, 2022	Apr. 06, 2022	Radiation (03CH03-SZ)
Loop Antenna	R&S	HFH2-Z2	100354	9kHz~30MHz	Jun. 22, 2021	Jan. 01, 2022 ~Jan. 05, 2022	Jun. 21, 2022	Radiation (03CH03-SZ)
Bilog Antenna	TeseQ	CBL6112D	35408	30MHz-2GHz	Jun. 22, 2021	Jan. 01, 2022 ~Jan. 05, 2022	Jun. 21, 2022	Radiation (03CH03-SZ)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00119436	1GHz~18GHz	Jul. 25, 2021	Jan. 01, 2022 ~Jan. 05, 2022	Jul. 24, 2022	Radiation (03CH03-SZ)
HF Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz	Oct. 22, 2021	Jan. 01, 2022 ~Jan. 05, 2022	Oct. 21, 2022	Radiation (03CH03-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18Ghz-40GHz	Apr. 11, 2021	Jan. 01, 2022 ~Jan. 05, 2022	Apr. 10, 2022	Radiation (03CH03-SZ)
Amplifier	Burgeon	BPA-530	102211	0.01Hz ~3000MHz	Oct. 22, 2021	Jan. 01, 2022 ~Jan. 05, 2022	Oct. 21, 2022	Radiation (03CH03-SZ)
HF Amplifier	MITEQ	AMF-7D-00101800-30-10P-R	1943528	1GHz~18GHz	Oct. 22, 2021	Jan. 01, 2022 ~Jan. 05, 2022	Oct. 21, 2022	Radiation (03CH03-SZ)
Amplifier	Agilent Technologies	83017A	MY39501302	500MHz~26.5GHz	Dec. 30, 2021	Jan. 01, 2022 ~Jan. 05, 2022	Dec. 29, 2022	Radiation (03CH03-SZ)
AC Power Source	Chroma	61601	616010001985	N/A	NCR	Jan. 01, 2022 ~Jan. 05, 2022	NCR	Radiation (03CH03-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Jan. 01, 2022 ~Jan. 05, 2022	NCR	Radiation (03CH03-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Jan. 01, 2022 ~Jan. 05, 2022	NCR	Radiation (03CH03-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**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.9dB**

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

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

---------- THE END ----------

Appendix A. Conducted Test Results

Appendix A. Test Result of Conducted Test Items

Test Engineer:	Tang ZhaoYang	Temperature:	21~25	°C
Test Date:	2021/12/27	Relative Humidity:	51~54	%

Report Number : FR1N0903-01D

TEST RESULTS DATA
26dB and 99% OBW

U-NII-1						
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)	26 dB Bandwidth (MHz)
11a	6Mbps	1	36	5180	16.78	24.40
11a	6Mbps	1	44	5220	16.83	24.05
11a	6Mbps	1	48	5240	16.83	24.45
HT20	MCS0	1	36	5180	17.88	24.50
HT20	MCS0	1	44	5220	17.93	24.90
HT20	MCS0	1	48	5240	17.93	24.90
HT40	MCS0	1	38	5190	36.56	40.95
HT40	MCS0	1	46	5230	36.56	41.22
VHT80	MCS0	1	42	5210	75.76	84.32

Report Number : FR1N0903-01D

TEST RESULTS DATA
Average Power Table

U-NII-1										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)	FCC Conducted Power (dBm)	Average Conducted Power Limit (dBm)	DG (dBi)		Pass/Fail
11a	6Mbps	1	36	5180	0.12	18.35	24.00	-6.00		Pass
11a	6Mbps	1	44	5220	0.12	18.22	24.00	-6.00		Pass
11a	6Mbps	1	48	5240	0.12	18.27	24.00	-6.00		Pass
HT20	MCS0	1	36	5180	0.10	18.08	24.00	-6.00		Pass
HT20	MCS0	1	44	5220	0.10	18.02	24.00	-6.00		Pass
HT20	MCS0	1	48	5240	0.10	18.06	24.00	-6.00		Pass
HT40	MCS0	1	38	5190	0.17	15.47	24.00	-6.00		Pass
HT40	MCS0	1	46	5230	0.17	17.06	24.00	-6.00		Pass
VHT20	MCS0	1	36	5180	0.10	17.25	24.00	-6.00		Pass
VHT20	MCS0	1	44	5220	0.10	17.20	24.00	-6.00		Pass
VHT20	MCS0	1	48	5240	0.10	17.27	24.00	-6.00		Pass
VHT40	MCS0	1	38	5190	0.17	15.44	24.00	-6.00		Pass
VHT40	MCS0	1	46	5230	0.17	16.07	24.00	-6.00		Pass
VHT80	MCS0	1	42	5210	0.34	13.63	24.00	-6.00		Pass

Report Number : FR1N0903-01D

TEST RESULTS DATA
Power Spectral Density

U-NII-1										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)	Average Power Density (dBm/MHz)	Average PSD Limit (dBm/MHz)	DG (dBi)	-	Pass/Fail
11a	6Mbps	1	36	5180	0.12	7.20	11.00	-6.00		Pass
11a	6Mbps	1	44	5220	0.12	7.29	11.00	-6.00		Pass
11a	6Mbps	1	48	5240	0.12	7.57	11.00	-6.00		Pass
HT20	MCS0	1	36	5180	0.10	6.62	11.00	-6.00		Pass
HT20	MCS0	1	44	5220	0.10	6.64	11.00	-6.00		Pass
HT20	MCS0	1	48	5240	0.10	6.97	11.00	-6.00		Pass
HT40	MCS0	1	38	5190	0.17	1.08	11.00	-6.00		Pass
HT40	MCS0	1	46	5230	0.17	3.16	11.00	-6.00		Pass
VHT80	MCS0	1	42	5210	0.34	-3.18	11.00	-6.00		Pass

Report Number : FR1N0903-01D

TEST RESULTS DATA
26dB and 99% OBW

U-NII-2A								
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)	26 dB Bandwidth (MHz)	FCC 26dB Bandwidth Power Limit (dBm)	Note
11a	6M bps	1	52	5260	16.83	25.40	23.98	
11a	6M bps	1	60	5300	16.78	25.05	23.98	
11a	6M bps	1	64	5320	16.78	24.35	23.98	
HT20	MCS 0	1	52	5260	17.93	24.50	23.98	
HT20	MCS 0	1	60	5300	17.98	24.80	23.98	
HT20	MCS 0	1	64	5320	17.88	24.90	23.98	
HT40	MCS 0	1	54	5270	36.56	40.86	23.98	
HT40	MCS 0	1	62	5310	36.56	41.31	23.98	
VHT80	MCS 0	1	58	5290	75.64	83.84	23.98	

Report Number : FR1N0903-01D

TEST RESULTS DATA
Average Power Table

U-NII-2A										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)	Average Conducted Power (dBm)	FCC Conducted Power Limit (dBm)	DG (dBi)	EIRP Power Limit (dBm)	Pass/Fail
11a	6M bps	1	52	5260	0.12	18.23	23.98	-6.00	26.99	Pass
11a	6M bps	1	60	5300	0.12	18.13	23.98	-6.00	26.99	Pass
11a	6M bps	1	64	5320	0.12	18.10	23.98	-6.00	26.99	Pass
HT20	MCS 0	1	52	5260	0.10	18.04	23.98	-6.00	26.99	Pass
HT20	MCS 0	1	60	5300	0.10	18.29	23.98	-6.00	26.99	Pass
HT20	MCS 0	1	64	5320	0.10	18.18	23.98	-6.00	26.99	Pass
HT40	MCS 0	1	54	5270	0.17	17.05	23.98	-6.00	26.99	Pass
HT40	MCS 0	1	62	5310	0.17	15.65	23.98	-6.00	26.99	Pass
VHT20	MCS 0	1	52	5260	0.10	17.19	23.98	-6.00	26.99	Pass
VHT20	MCS 0	1	60	5300	0.10	17.14	23.98	-6.00	26.99	Pass
VHT20	MCS 0	1	64	5320	0.10	17.01	23.98	-6.00	26.99	Pass
VHT40	MCS 0	1	54	5270	0.17	16.09	23.98	-6.00	26.99	Pass
VHT40	MCS 0	1	62	5310	0.17	15.25	23.98	-6.00	26.99	Pass
VHT80	MCS 0	1	58	5290	0.34	14.15	23.98	-6.00	26.99	Pass

Report Number : FR1N0903-01D

TEST RESULTS DATA
Power Spectral Density

U-NII-2A										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)	Average Power Density (dBm/MHz)	Average PSD Limit (dBm/MHz)	DG (dBi)		Pass/Fail
11a	6M bps	1	52	5260	0.12	7.71	11.00	-6.00		Pass
11a	6M bps	1	60	5300	0.12	7.46	11.00	-6.00		Pass
11a	6M bps	1	64	5320	0.12	7.43	11.00	-6.00		Pass
HT20	MCS 0	1	52	5260	0.10	7.20	11.00	-6.00		Pass
HT20	MCS 0	1	60	5300	0.10	6.99	11.00	-6.00		Pass
HT20	MCS 0	1	64	5320	0.10	6.97	11.00	-6.00		Pass
HT40	MCS 0	1	54	5270	0.17	3.24	11.00	-6.00		Pass
HT40	MCS 0	1	62	5310	0.17	1.79	11.00	-6.00		Pass
VHT80	MCS 0	1	58	5290	0.34	-3.26	11.00	-6.00		Pass

Report Number : FR1N0903-01D

TEST RESULTS DATA
26dB and 99% OBW

U-NII-2C								
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)	26 dB Bandwidth (MHz)	FCC 26dB Bandwidth Power Limit (dBm)	Note
11a	6M bps	1	100	5500	16.83	24.55	23.98	
11a	6M bps	1	116	5580	16.78	24.35	23.98	
11a	6M bps	1	140	5700	16.78	24.50	23.98	
HT20	MCS 0	1	100	5500	17.93	24.90	23.98	
HT20	MCS 0	1	116	5580	17.93	24.35	23.98	
HT20	MCS 0	1	140	5700	17.93	24.00	23.98	
HT40	MCS 0	1	102	5510	36.56	41.22	23.98	
HT40	MCS 0	1	110	5550	36.56	41.04	23.98	
HT40	MCS 0	1	134	5670	36.66	41.13	23.98	
VHT80	MCS 0	1	106	5530	75.64	83.84	23.98	

Report Number : FR1N0903-01D

TEST RESULTS DATA
Average Power Table

U-NII-2C										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)	Average Conducted Power (dBm)	FCC Conducted Power Limit (dBm)	DG (dBi)	EIRP Power Limit (dBm)	Pass/Fail
11a	6M bps	1	100	5500	0.12	18.33	23.98	-6.50	26.99	Pass
11a	6M bps	1	116	5580	0.12	18.35	23.98	-6.50	26.99	Pass
11a	6M bps	1	140	5700	0.12	18.31	23.98	-6.50	26.99	Pass
HT20	MCS 0	1	100	5500	0.10	18.12	23.98	-6.50	26.99	Pass
HT20	MCS 0	1	116	5580	0.10	18.10	23.98	-6.50	26.99	Pass
HT20	MCS 0	1	140	5700	0.10	18.06	23.98	-6.50	26.99	Pass
HT40	MCS 0	1	102	5510	0.17	16.64	23.98	-6.50	26.99	Pass
HT40	MCS 0	1	110	5550	0.17	17.25	23.98	-6.50	26.99	Pass
HT40	MCS 0	1	134	5670	0.17	17.19	23.98	-6.50	26.99	Pass
VHT20	MCS 0	1	100	5500	0.10	17.14	23.98	-6.50	26.99	Pass
VHT20	MCS 0	1	116	5580	0.10	17.06	23.98	-6.50	26.99	Pass
VHT20	MCS 0	1	140	5700	0.10	17.09	23.98	-6.50	26.99	Pass
VHT40	MCS 0	1	102	5510	0.17	16.27	23.98	-6.50	26.99	Pass
VHT40	MCS 0	1	110	5550	0.17	16.29	23.98	-6.50	26.99	Pass
VHT40	MCS 0	1	134	5670	0.17	16.38	23.98	-6.50	26.99	Pass
VHT80	MCS 0	1	106	5530	0.34	13.93	23.98	-6.50	26.99	Pass

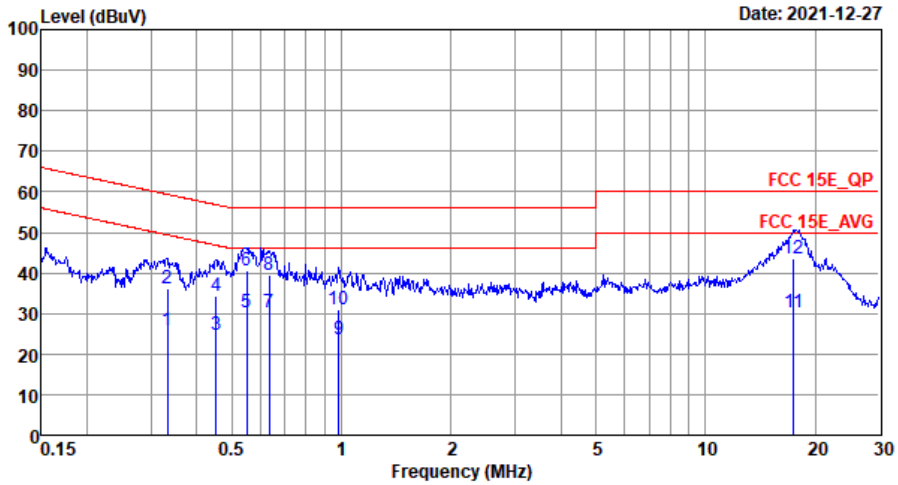
Report Number : FR1N0903-01D

TEST RESULTS DATA
Power Spectral Density

U-NII-2C										
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)	Average Power Density (dBm/MHz)	Average PSD Limit (dBm/MHz)	DG (dBi)		Pass/Fail
11a	6M bps	1	100	5500	0.12	7.27	11.00	-6.50		Pass
11a	6M bps	1	116	5580	0.12	7.38	11.00	-6.50		Pass
11a	6M bps	1	140	5700	0.12	7.12	11.00	-6.50		Pass
HT20	MCS 0	1	100	5500	0.10	6.77	11.00	-6.50		Pass
HT20	MCS 0	1	116	5580	0.10	6.90	11.00	-6.50		Pass
HT20	MCS 0	1	140	5700	0.10	6.68	11.00	-6.50		Pass
HT40	MCS 0	1	102	5510	0.17	2.46	11.00	-6.50		Pass
HT40	MCS 0	1	110	5550	0.17	2.99	11.00	-6.50		Pass
HT40	MCS 0	1	134	5670	0.17	2.51	11.00	-6.50		Pass
VHT80	MCS 0	1	106	5530	0.34	-2.92	11.00	-6.50		Pass

Appendix B. AC Conducted Emission Test Results

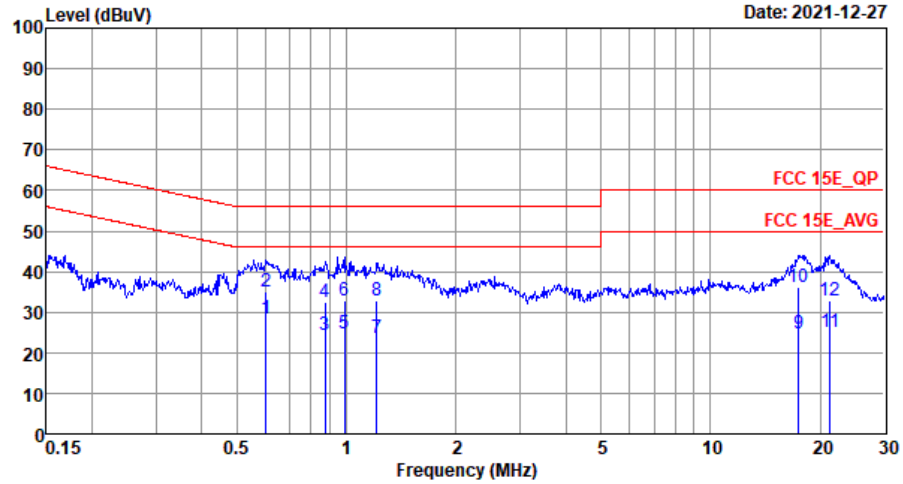
Test Engineer :	Xie YuQiang	**Temperature :**	22~25℃
		Relative Humidity :	50~55%
Test Voltage :	120Vac / 60Hz	**Phase :**	Line



Site : CO01-SZ
Condition: FCC 15E QP LISN 20210901_L LINE

		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1		0.33	25.71	-23.69	49.40	4.50	10.11	11.10	Average
2		0.33	36.31	-23.09	59.40	15.10	10.11	11.10	QP
3		0.45	24.69	-22.16	46.85	2.90	10.11	11.68	Average
4		0.45	34.19	-22.66	56.85	12.40	10.11	11.68	QP
5		0.55	30.14	-15.86	46.00	8.40	10.11	11.63	Average
6	*	0.55	40.64	-15.36	56.00	18.90	10.11	11.63	QP
7		0.63	30.33	-15.67	46.00	8.90	10.12	11.31	Average
8		0.63	39.53	-16.47	56.00	18.10	10.12	11.31	QP
9		0.98	23.49	-22.51	46.00	3.10	10.12	10.27	Average
10		0.98	30.89	-25.11	56.00	10.50	10.12	10.27	QP
11		17.47	30.12	-19.88	50.00	9.90	9.87	10.35	Average
12		17.47	43.52	-16.48	60.00	23.30	9.87	10.35	QP

Test Engineer :	Xie YuQiang	Temperature :	22~25℃
		Relative Humidity :	50~55%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral



Site : CO01-SZ
Condition: FCC 15E_QP LISN_20210901_N NEUTRAL

		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	*	0.60	28.26	-17.74	46.00	6.60	10.24	11.42	Average
2		0.60	35.06	-20.94	56.00	13.40	10.24	11.42	QP
3		0.88	24.38	-21.62	46.00	3.60	10.23	10.55	Average
4		0.88	32.38	-23.62	56.00	11.60	10.23	10.55	QP
5		0.99	24.79	-21.21	46.00	4.30	10.22	10.27	Average
6		0.99	32.99	-23.01	56.00	12.50	10.22	10.27	QP
7		1.21	23.58	-22.42	46.00	3.10	10.25	10.23	Average
8		1.21	32.98	-23.02	56.00	12.50	10.25	10.23	QP
9		17.47	24.85	-25.15	50.00	4.70	9.80	10.35	Average
10		17.47	36.25	-23.75	60.00	16.10	9.80	10.35	QP
11		21.26	25.23	-24.77	50.00	5.00	9.88	10.35	Average
12		21.26	32.73	-27.27	60.00	12.50	9.88	10.35	QP

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

5150~5250MHz

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		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 36 5180MHz		5139.36	56.83	-17.17	74	48.02	34.16	7.46	32.81	283	323	P	H
		5150	47.26	-6.74	54	38.43	34.2	7.48	32.85	283	323	A	H
	*	5180	107.98	-	-	99.08	34.26	7.53	32.89	283	323	P	H
		5180	100.9	-	-	92	34.26	7.53	32.89	283	323	A	H
		5149.24	51.83	-22.17	74	43	34.2	7.48	32.85	285	269	P	V
		5150	44.18	-9.82	54	35.35	34.2	7.48	32.85	285	269	A	V
	*	5180	105.2	-	-	96.3	34.26	7.53	32.89	285	269	P	V
		5180	96.9	-	-	88	34.26	7.53	32.89	285	269	A	V
802.11a CH 44 5220MHz		5147.16	50.4	-23.6	74	41.58	34.19	7.48	32.85	278	324	P	H
		5150	42.28	-11.72	54	33.45	34.2	7.48	32.85	278	324	A	H
	*	5220	108.59	-	-	99.66	34.34	7.57	32.98	278	324	P	H
		5220	101.94	-	-	93.01	34.34	7.57	32.98	278	324	A	H
		5429.04	49.15	-24.85	74	40.18	34.5	7.79	33.32	278	324	P	H
		5434.08	40.04	-13.96	54	31.07	34.5	7.79	33.32	278	324	A	H
		5055.9	50.04	-23.96	74	41.46	33.91	7.35	32.68	273	259	P	V
		5147.16	41.65	-12.35	54	32.83	34.19	7.48	32.85	273	259	A	V
	*	5220	105.31	-	-	96.38	34.34	7.57	32.98	273	259	P	V
		5220	97.97	-	-	89.04	34.34	7.57	32.98	273	259	A	V
		5373.36	48.65	-25.35	74	39.65	34.5	7.69	33.19	273	259	P	V
		5449.44	39.94	-14.06	54	30.92	34.5	7.84	33.32	273	259	A	V

802.11a CH 48 5240MHz		5094.38	50	-24	74	41.37	33.99	7.41	32.77	280	320	P	H
		5010.14	41.44	-12.56	54	32.88	33.9	7.26	32.6	280	320	A	H
	*	5240	108.93	-	-	99.94	34.38	7.59	32.98	280	320	P	H
		5240	100.99	-	-	92	34.38	7.59	32.98	280	320	A	H
		5378.64	48.67	-25.33	74	39.7	34.5	7.7	33.23	280	320	P	H
		5435.76	40.08	-13.92	54	31.11	34.5	7.79	33.32	280	320	A	H
		5004.42	50.25	-23.75	74	41.69	33.9	7.26	32.6	275	253	P	V
		5033.28	41.02	-12.98	54	32.47	33.9	7.29	32.64	275	253	A	V
	*	5240	105.7	-	-	96.71	34.38	7.59	32.98	275	253	P	V
		5240	97.99	-	-	89	34.38	7.59	32.98	275	253	A	V
		5424.96	47.95	-26.05	74	38.97	34.5	7.75	33.27	275	253	P	V
		5438.16	39.91	-14.09	54	30.94	34.5	7.79	33.32	275	253	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

5150~5250MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 36 5180MHz		10360	48.28	-20.02	68.3	59.28	37.19	10.8	58.99	-	-	P	H
		15540	50.1	-23.9	74	55.33	40.03	13.67	58.93	-	-	P	H
		10360	47.38	-20.92	68.3	58.38	37.19	10.8	58.99	-	-	P	V
		15540	49.53	-24.47	74	54.76	40.03	13.67	58.93	-	-	P	V
802.11a CH 44 5220MHz		10440	47.09	-21.21	68.3	57.92	37.25	10.84	58.92	-	-	P	H
		15660	50.03	-23.97	74	55.2	40.13	13.76	59.06	-	-	P	H
		10440	47.59	-20.71	68.3	58.42	37.25	10.84	58.92	-	-	P	V
		15660	49.62	-24.38	74	54.79	40.13	13.76	59.06	-	-	P	V
802.11a CH 48 5240MHz		10480	47.91	-20.39	68.3	58.62	37.28	10.87	58.86	-	-	P	H
		15720	49.52	-24.48	74	54.65	40.18	13.81	59.12	-	-	P	H
		10480	48.3	-20	68.3	59.01	37.28	10.87	58.86	-	-	P	V
		15720	49.82	-24.18	74	54.95	40.18	13.81	59.12	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

5150~5250MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5144.3	56.62	-17.38	74	47.81	34.18	7.48	32.85	281	324	P	H
		5149.76	47.74	-6.26	54	38.91	34.2	7.48	32.85	281	324	A	H
802.11n	*	5180	108.98	-	-	100.08	34.26	7.53	32.89	281	324	P	H
HT20		5180	101.9	-	-	93	34.26	7.53	32.89	281	324	A	H
CH 36		5148.2	53.51	-20.49	74	44.69	34.19	7.48	32.85	273	259	P	V
5180MHz		5148.46	45.42	-8.58	54	36.6	34.19	7.48	32.85	273	259	A	V
	*	5180	104.5	-	-	95.6	34.26	7.53	32.89	273	259	P	V
		5180	97.9	-	-	89	34.26	7.53	32.89	273	259	A	V
		5147.16	51.01	-22.99	74	42.19	34.19	7.48	32.85	277	325	P	H
		5147.68	42.55	-11.45	54	33.73	34.19	7.48	32.85	277	325	A	H
	*	5220	108.11	-	-	99.18	34.34	7.57	32.98	277	325	P	H
		5220	101.94	-	-	93.01	34.34	7.57	32.98	277	325	A	H
802.11n		5456.16	48.87	-25.13	74	39.89	34.5	7.84	33.36	277	325	P	H
HT20		5450.4	40.01	-13.99	54	30.99	34.5	7.84	33.32	277	325	A	H
CH 44		5072.8	50.11	-23.89	74	41.51	33.95	7.38	32.73	277	258	P	V
5220MHz		5147.68	41.32	-12.68	54	32.5	34.19	7.48	32.85	277	258	A	V
	*	5220	104.28	-	-	95.35	34.34	7.57	32.98	277	258	P	V
		5220	96.94	-	-	88.01	34.34	7.57	32.98	277	258	A	V
		5440.08	49.14	-24.86	74	40.17	34.5	7.79	33.32	277	258	P	V
		5442.24	39.83	-14.17	54	30.86	34.5	7.79	33.32	277	258	A	V

		5039.78	49.47	-24.53	74	40.93	33.9	7.32	32.68	277	325	P	H
		5146.38	41.3	-12.7	54	32.48	34.19	7.48	32.85	277	325	A	H
	*	5240	108.5	-	-	99.51	34.38	7.59	32.98	277	325	P	H
		5240	101.99	-	-	93	34.38	7.59	32.98	277	325	A	H
802.11n		5429.04	48.21	-25.79	74	39.24	34.5	7.79	33.32	277	325	P	H
HT20		5425.44	39.94	-14.06	54	30.96	34.5	7.75	33.27	277	325	A	H
CH 48		5133.38	50	-24	74	41.22	34.13	7.46	32.81	274	258	P	V
5240MHz		5054.6	41.25	-12.75	54	32.67	33.91	7.35	32.68	274	258	A	V
	*	5240	105.08	-	-	96.09	34.38	7.59	32.98	274	258	P	V
		5240	97.99	-	-	89	34.38	7.59	32.98	274	258	A	V
		5365.44	49.52	-24.48	74	40.52	34.5	7.69	33.19	274	258	P	V
		5444.4	39.91	-14.09	54	30.94	34.5	7.79	33.32	274	258	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

5150~5250MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n		10360	48.31	-19.99	68.3	59.31	37.19	10.8	58.99	-	-	P	H
HT20		15540	47.84	-26.16	74	53.07	40.03	13.67	58.93	-	-	P	H
CH 36		10360	47.24	-21.06	68.3	58.24	37.19	10.8	58.99	-	-	P	V
5180MHz		15540	48.01	-25.99	74	53.24	40.03	13.67	58.93	-	-	P	V
802.11n		10440	46.88	-21.42	68.3	57.71	37.25	10.84	58.92	-	-	P	H
HT20		15660	49.62	-24.38	74	54.79	40.13	13.76	59.06	-	-	P	H
CH 44		10440	47.57	-20.73	68.3	58.4	37.25	10.84	58.92	-	-	P	V
5220MHz		15660	49.91	-24.09	74	55.08	40.13	13.76	59.06	-	-	P	V
802.11n		10480	47.83	-20.47	68.3	58.54	37.28	10.87	58.86	-	-	P	H
HT20		15720	50.22	-23.78	74	55.35	40.18	13.81	59.12	-	-	P	H
CH 48		10480	47.43	-20.87	68.3	58.14	37.28	10.87	58.86	-	-	P	V
5240MHz		15720	49.14	-24.86	74	54.27	40.18	13.81	59.12	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

5150~5250MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 38 5190MHz		5148.72	59.56	-14.44	74	50.74	34.19	7.48	32.85	118	323	P	H
		5148.72	50.81	-3.19	54	41.99	34.19	7.48	32.85	118	323	A	H
	*	5190	103.41	-	-	94.49	34.28	7.53	32.89	118	323	P	H
		5190	96.6	-	-	87.68	34.28	7.53	32.89	118	323	A	H
		5401.76	49.17	-24.83	74	40.23	34.5	7.71	33.27	118	323	P	H
		5429.76	40.61	-13.39	54	31.64	34.5	7.79	33.32	118	323	A	H
		5147.42	52.48	-21.52	74	43.66	34.19	7.48	32.85	179	310	P	V
		5148.2	44.51	-9.49	54	35.69	34.19	7.48	32.85	179	310	A	V
	*	5190	97.77	-	-	88.85	34.28	7.53	32.89	179	310	P	V
		5190	89.29	-	-	80.37	34.28	7.53	32.89	179	310	A	V
		5429.76	48.82	-25.18	74	39.85	34.5	7.79	33.32	179	310	P	V
		5438.44	40.41	-13.59	54	31.44	34.5	7.79	33.32	179	310	A	V
802.11n HT40 CH 46 5230MHz		5148.72	52.79	-21.21	74	43.97	34.19	7.48	32.85	116	318	P	H
		5149.76	44.18	-9.82	54	35.35	34.2	7.48	32.85	116	318	A	H
	*	5230	104.69	-	-	95.72	34.36	7.59	32.98	116	318	P	H
		5230	97.62	-	-	88.65	34.36	7.59	32.98	116	318	A	H
		5450.88	49.12	-24.88	74	40.1	34.5	7.84	33.32	116	318	P	H
		5430.96	40.82	-13.18	54	31.85	34.5	7.79	33.32	116	318	A	H
		5147.42	50.34	-23.66	74	41.52	34.19	7.48	32.85	197	298	P	V
		5150	41.45	-12.55	54	32.62	34.2	7.48	32.85	197	298	A	V
	*	5230	99.99	-	-	91.02	34.36	7.59	32.98	197	298	P	V
		5230	93.7	-	-	84.73	34.36	7.59	32.98	197	298	A	V
		5417.52	49.33	-24.67	74	40.35	34.5	7.75	33.27	197	298	P	V
		5437.68	40.48	-13.52	54	31.51	34.5	7.79	33.32	197	298	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

5150~5250MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n		10380	46.66	-21.64	68.3	49.7	37.2	10.81	51.05	-	-	P	H
HT40		15570	49.04	-24.96	74	48	40.06	13.7	52.72	-	-	P	H
CH 38		10380	46.73	-21.57	68.3	49.77	37.2	10.81	51.05	-	-	P	V
5190MHz		15570	49.51	-24.49	74	48.47	40.06	13.7	52.72	-	-	P	V
802.11n		10460	46.12	-22.18	68.3	49.08	37.27	10.85	51.08	-	-	P	H
HT40		15690	48.3	-25.7	74	47.3	40.15	13.79	52.94	-	-	P	H
CH 46		10460	46.79	-21.51	68.3	49.75	37.27	10.85	51.08	-	-	P	V
5230MHz		15690	48.78	-25.22	74	47.78	40.15	13.79	52.94	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

5150~5250MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 42 5210MHz		5149.24	59.86	-14.14	74	51.03	34.2	7.48	32.85	124	318	P	H
		5148.98	50.42	-3.58	54	41.59	34.2	7.48	32.85	124	318	A	H
	*	5210	97.93	-	-	88.98	34.32	7.57	32.94	124	318	P	H
		5210	91.53	-	-	82.58	34.32	7.57	32.94	124	318	A	H
		5385.6	49.03	-24.97	74	40.06	34.5	7.7	33.23	124	318	P	H
		5426.88	40.61	-13.39	54	31.63	34.5	7.75	33.27	124	318	A	H
		5131.56	51.97	-22.03	74	43.19	34.13	7.46	32.81	170	297	P	V
		5146.38	43.89	-10.11	54	35.07	34.19	7.48	32.85	170	297	A	V
	*	5210	92.98	-	-	84.03	34.32	7.57	32.94	170	297	P	V
		5210	86.9	-	-	77.95	34.32	7.57	32.94	170	297	A	V
		5419.44	48.47	-25.53	74	39.49	34.5	7.75	33.27	170	297	P	V
		5448.24	40.55	-13.45	54	31.53	34.5	7.84	33.32	170	297	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

5150~5250MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 42 5210MHz		10420	46.92	-21.38	68.3	49.92	37.24	10.83	51.07	-	-	P	H
		15630	49.35	-24.65	74	48.35	40.1	13.75	52.85	-	-	P	H
		10420	46.01	-22.29	68.3	49.01	37.24	10.83	51.07	-	-	P	V
		15630	50.61	-23.39	74	49.61	40.1	13.75	52.85	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

5250~5350MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 52 5260MHz		5021.84	51.36	-22.64	74	42.81	33.9	7.29	32.64	273	319	P	H
		5046.54	41.31	-12.69	54	32.77	33.9	7.32	32.68	273	319	A	H
	*	5260	108.88	-	-	99.88	34.4	7.62	33.02	273	319	P	H
		5260	102	-	-	93	34.4	7.62	33.02	273	319	A	H
		5425.2	49.29	-24.71	74	40.31	34.5	7.75	33.27	273	319	P	H
		5351.04	40.34	-13.66	54	31.35	34.5	7.68	33.19	273	319	A	H
		5089.44	50.25	-23.75	74	41.63	33.98	7.41	32.77	276	258	P	V
		5006.76	41.15	-12.85	54	32.59	33.9	7.26	32.6	276	258	A	V
	*	5260	105.17	-	-	96.17	34.4	7.62	33.02	276	258	P	V
		5260	98	-	-	89	34.4	7.62	33.02	276	258	A	V
		5443.2	48.63	-25.37	74	39.66	34.5	7.79	33.32	276	258	P	V
		5430	39.87	-14.13	54	30.9	34.5	7.79	33.32	276	258	A	V
802.11a CH 60 5300MHz		5002.45	49.96	-24.04	74	41.43	33.9	7.23	32.6	270	317	P	H
		5042.35	41.28	-12.72	54	32.74	33.9	7.32	32.68	270	317	A	H
	*	5300	108.96	-	-	100.02	34.4	7.65	33.11	270	317	P	H
		5300	101.94	-	-	93	34.4	7.65	33.11	270	317	A	H
		5356.56	51.21	-22.79	74	42.22	34.5	7.68	33.19	270	317	P	H
		5352.96	43.22	-10.78	54	34.23	34.5	7.68	33.19	270	317	A	H
		5003.5	49.98	-24.02	74	41.42	33.9	7.26	32.6	263	260	P	V
		5009.1	41.14	-12.86	54	32.58	33.9	7.26	32.6	263	260	A	V
	*	5300	106.01	-	-	97.07	34.4	7.65	33.11	263	260	P	V
		5300	97.94	-	-	89	34.4	7.65	33.11	263	260	A	V
		5369.76	49.83	-24.17	74	40.83	34.5	7.69	33.19	263	260	P	V
		5350.32	41.81	-12.19	54	32.82	34.5	7.68	33.19	263	260	A	V

802.11a CH 64 5320MHz	*	5320	108.6	-	-	99.61	34.44	7.66	33.11	270	325	P	H
		5320	100.59	-	-	91.6	34.44	7.66	33.11	270	325	A	H
		5355.84	56.64	-17.36	74	47.65	34.5	7.68	33.19	270	325	P	H
		5350.4	48.68	-5.32	54	39.69	34.5	7.68	33.19	270	325	A	H
	*	5320	105.99	-	-	97	34.44	7.66	33.11	267	259	P	V
		5320	97.99	-	-	89	34.44	7.66	33.11	267	259	A	V
		5350.24	54.27	-19.73	74	45.28	34.5	7.68	33.19	267	259	P	V
		5350.56	45.59	-8.41	54	36.6	34.5	7.68	33.19	267	259	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

5250~5350MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 52 5260MHz		10520	47.35	-20.95	68.3	57.96	37.33	10.88	58.82	-	-	P	H
		15780	49.63	-24.37	74	54.74	40.22	13.85	59.18	-	-	P	H
		10520	47.23	-21.07	68.3	57.84	37.33	10.88	58.82	-	-	P	V
		15780	49.77	-24.23	74	54.88	40.22	13.85	59.18	-	-	P	V
802.11a CH 60 5300MHz		10600	47.72	-26.28	74	58.08	37.44	10.93	58.73	-	-	P	H
		15900	48.65	-25.35	74	53.69	40.32	13.94	59.3	-	-	P	H
		10600	47.12	-26.88	74	57.48	37.44	10.93	58.73	-	-	P	V
		15900	48.35	-25.65	74	53.39	40.32	13.94	59.3	-	-	P	V
802.11a CH 64 5320MHz		10640	48.03	-25.97	74	58.27	37.5	10.95	58.69	-	-	P	H
		15960	48.89	-25.11	74	53.9	40.37	13.99	59.37	-	-	P	H
		10640	49.36	-24.64	74	59.6	37.5	10.95	58.69	-	-	P	V
		15960	50.19	-23.81	74	55.2	40.37	13.99	59.37	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

5250~5350MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 52 5260MHz		5124.28	50.38	-23.62	74	41.63	34.1	7.46	32.81	186	324	P	H
		5149.24	41.25	-12.75	54	32.42	34.2	7.48	32.85	186	324	A	H
	*	5260	109.43	-	-	100.43	34.4	7.62	33.02	186	324	P	H
		5260	102	-	-	93	34.4	7.62	33.02	186	324	A	H
		5368.32	48.76	-25.24	74	39.76	34.5	7.69	33.19	186	324	P	H
		5350.8	40.63	-13.37	54	31.64	34.5	7.68	33.19	186	324	A	H
		5038.74	49.99	-24.01	74	41.45	33.9	7.32	32.68	284	254	P	V
		5046.02	41.11	-12.89	54	32.57	33.9	7.32	32.68	284	254	A	V
	*	5260	103.97	-	-	94.97	34.4	7.62	33.02	284	254	P	V
		5260	97	-	-	88	34.4	7.62	33.02	284	254	A	V
		5395.44	48.09	-25.91	74	39.11	34.5	7.71	33.23	284	254	P	V
		5449.44	39.88	-14.12	54	30.86	34.5	7.84	33.32	284	254	A	V
802.11n HT20 CH 60 5300MHz		5049.35	51.19	-22.81	74	42.65	33.9	7.32	32.68	137	315	P	H
		5135.45	41.14	-12.86	54	32.35	34.14	7.46	32.81	137	315	A	H
	*	5300	110.32	-	-	101.38	34.4	7.65	33.11	137	315	P	H
		5300	102.71	-	-	93.77	34.4	7.65	33.11	137	315	A	H
		5351.28	53.87	-20.13	74	44.88	34.5	7.68	33.19	137	315	P	H
		5350.08	45.08	-8.92	54	36.09	34.5	7.68	33.19	137	315	A	H
		5003.15	50.14	-23.86	74	41.61	33.9	7.23	32.6	231	267	P	V
		5090.3	40.9	-13.1	54	32.28	33.98	7.41	32.77	231	267	A	V
	*	5300	104.47	-	-	95.53	34.4	7.65	33.11	231	267	P	V
		5300	97.03	-	-	88.09	34.4	7.65	33.11	231	267	A	V
		5350.8	50.55	-23.45	74	41.56	34.5	7.68	33.19	231	267	P	V
		5351.28	41.9	-12.1	54	32.91	34.5	7.68	33.19	231	267	A	V

	*	5320	110.23	-	-	101.24	34.44	7.66	33.11	145	311	P	H
		5320	103.12	-	-	94.13	34.44	7.66	33.11	145	311	A	H
802.11n		5350.08	58.39	-15.61	74	49.4	34.5	7.68	33.19	145	311	P	H
HT20		5350.08	49.81	-4.19	54	40.82	34.5	7.68	33.19	145	311	A	H
CH 64	*	5320	103.49	-	-	94.5	34.44	7.66	33.11	202	289	P	V
5320MHz		5320	96.1	-	-	87.11	34.44	7.66	33.11	202	289	A	V
		5350.56	52.83	-21.17	74	43.84	34.5	7.68	33.19	202	289	P	V
		5350.08	44.67	-9.33	54	35.68	34.5	7.68	33.19	202	289	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

5250~5350MHz

WIFI 802.11n HT20 (Harmonic @ 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		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n		10520	48.04	-20.26	68.3	58.65	37.33	10.88	58.82	-	-	P	H
HT20		15780	49.48	-24.52	74	54.59	40.22	13.85	59.18	-	-	P	H
CH 52		10520	47.99	-20.31	68.3	58.6	37.33	10.88	58.82	-	-	P	V
5260MHz		15780	49.95	-24.05	74	55.06	40.22	13.85	59.18	-	-	P	V
802.11n		10600	49.05	-24.95	74	59.41	37.44	10.93	58.73	-	-	P	H
HT20		15900	48.66	-25.34	74	53.7	40.32	13.94	59.3	-	-	P	H
CH 60		10600	48.86	-25.14	74	59.22	37.44	10.93	58.73	-	-	P	V
5300MHz		15900	49.99	-24.01	74	55.03	40.32	13.94	59.3	-	-	P	V
802.11n		10640	46.73	-27.27	74	49.46	37.5	10.95	51.18	-	-	P	H
HT20		15960	49.96	-24.04	74	49.04	40.37	13.99	53.44	-	-	P	H
CH 64		10640	47.59	-26.41	74	50.32	37.5	10.95	51.18	-	-	P	V
5320MHz		15960	49.69	-24.31	74	48.77	40.37	13.99	53.44	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

5250~5350MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 54 5270MHz		5015.75	50.91	-23.09	74	42.39	33.9	7.26	32.64	117	318	P	H
		5147.7	42.71	-11.29	54	33.89	34.19	7.48	32.85	117	318	A	H
	*	5270	105.08	-	-	96.08	34.4	7.62	33.02	117	318	P	H
		5270	97.76	-	-	88.76	34.4	7.62	33.02	117	318	A	H
		5352.48	51.46	-22.54	74	42.47	34.5	7.68	33.19	117	318	P	H
		5352	44.54	-9.46	54	35.55	34.5	7.68	33.19	117	318	A	H
		5014	49.79	-24.21	74	41.27	33.9	7.26	32.64	352	280	P	V
		5132.65	41.17	-12.83	54	32.39	34.13	7.46	32.81	352	280	A	V
	*	5270	100.31	-	-	91.31	34.4	7.62	33.02	352	280	P	V
		5270	92.65	-	-	83.65	34.4	7.62	33.02	352	280	A	V
		5426.4	49.86	-24.14	74	40.88	34.5	7.75	33.27	352	280	P	V
		5350.08	41.93	-12.07	54	32.94	34.5	7.68	33.19	352	280	A	V
802.11n HT40 CH 62 5310MHz		5022.05	50.52	-23.48	74	41.97	33.9	7.29	32.64	136	320	P	H
		5108.5	41.54	-12.46	54	32.85	34.03	7.43	32.77	136	320	A	H
	*	5310	102.7	-	-	93.73	34.42	7.66	33.11	136	320	P	H
		5310	95.72	-	-	86.75	34.42	7.66	33.11	136	320	A	H
		5352.48	57.06	-16.94	74	48.07	34.5	7.68	33.19	136	320	P	H
		5350.32	50.34	-3.66	54	41.35	34.5	7.68	33.19	136	320	A	H
		5147.7	50.47	-23.53	74	41.65	34.19	7.48	32.85	165	298	P	V
		5147.35	41.26	-12.74	54	32.44	34.19	7.48	32.85	165	298	A	V
	*	5310	98.16	-	-	89.19	34.42	7.66	33.11	165	298	P	V
		5310	90.31	-	-	81.34	34.42	7.66	33.11	165	298	A	V
		5352.24	53.26	-20.74	74	44.27	34.5	7.68	33.19	165	298	P	V
		5350.32	44.47	-9.53	54	35.48	34.5	7.68	33.19	165	298	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

5250~5350MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n		10540	46.8	-21.5	68.3	49.67	37.36	10.89	51.12	-	-	P	H
HT40		15810	49.38	-24.62	74	48.42	40.25	13.87	53.16	-	-	P	H
CH 54		10540	46.1	-22.2	68.3	48.97	37.36	10.89	51.12	-	-	P	V
5270MHz		15810	49.44	-24.56	74	48.48	40.25	13.87	53.16	-	-	P	V
802.11n		10620	46.47	-27.53	74	49.23	37.47	10.94	51.17	-	-	P	H
HT40		15930	48.53	-25.47	74	47.61	40.34	13.96	53.38	-	-	P	H
CH 62		10620	47.42	-26.58	74	50.18	37.47	10.94	51.17	-	-	P	V
5310MHz		15930	48.77	-25.23	74	47.85	40.34	13.96	53.38	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

5250~5350MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 58 5290MHz		5019.95	50.1	-23.9	74	41.58	33.9	7.26	32.64	145	311	P	H
		5150	41.46	-12.54	54	32.63	34.2	7.48	32.85	145	311	A	H
	*	5290	100.16	-	-	91.18	34.4	7.64	33.06	145	311	P	H
		5290	93.76	-	-	84.78	34.4	7.64	33.06	145	311	A	H
		5369.52	58.25	-15.75	74	49.25	34.5	7.69	33.19	145	311	P	H
		5352.72	50.25	-3.75	54	41.26	34.5	7.68	33.19	145	311	A	H
		5071.4	50.52	-23.48	74	41.96	33.94	7.35	32.73	147	279	P	V
		5049.7	41.19	-12.81	54	32.65	33.9	7.32	32.68	147	279	A	V
	*	5290	92.92	-	-	83.94	34.4	7.64	33.06	147	279	P	V
		5290	85.76	-	-	76.78	34.4	7.64	33.06	147	279	A	V
		5371.68	54.36	-19.64	74	45.36	34.5	7.69	33.19	147	279	P	V
		5352.24	45.18	-8.82	54	36.19	34.5	7.68	33.19	147	279	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

5250~5350MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 58 5290MHz		10580	47.35	-20.95	68.3	50.17	37.41	10.92	51.15	-	-	P	H
		15870	48.41	-25.59	74	47.47	40.3	13.92	53.28	-	-	P	H
		10580	46.71	-21.59	68.3	49.53	37.41	10.92	51.15	-	-	P	V
		15870	49.1	-24.9	74	48.16	40.3	13.92	53.28	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

5470~5725MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 100 5500MHz		5457.84	52.43	-21.57	74	43.45	34.5	7.84	33.36	280	316	P	H
		5469.52	56.37	-11.93	68.3	47.35	34.5	7.88	33.36	280	316	P	H
		5459.76	45.02	-8.98	54	36.04	34.5	7.84	33.36	280	316	A	H
	*	5500	107.66	-	-	98.6	34.5	7.96	33.4	280	316	P	H
		5500	100.06	-	-	91	34.5	7.96	33.4	280	316	A	H
		5427.92	50.06	-23.94	74	41.13	34.5	7.75	33.32	292	263	P	V
		5466.16	54.01	-14.29	68.3	44.99	34.5	7.88	33.36	292	263	P	V
		5459.44	42.35	-11.65	54	33.37	34.5	7.84	33.36	292	263	A	V
	*	5500	105.72	-	-	96.66	34.5	7.96	33.4	292	263	P	V
		5500	100.7	-	-	91.64	34.5	7.96	33.4	292	263	A	V
802.11a CH 116 5580MHz		5432.8	49.12	-24.88	74	40.15	34.5	7.79	33.32	213	305	P	H
		5464	48.84	-19.46	68.3	39.82	34.5	7.88	33.36	213	305	P	H
		5459.92	40.32	-13.68	54	31.34	34.5	7.84	33.36	213	305	A	H
	*	5580	107.84	-	-	98.76	34.5	7.97	33.39	213	305	P	H
		5580	100.72	-	-	91.64	34.5	7.97	33.39	213	305	A	H
		5759.33	49.52	-18.78	68.3	39.76	34.72	8.39	33.35	213	305	P	H
		5451.28	48.29	-25.71	74	39.27	34.5	7.84	33.32	314	261	P	V
		5466.4	47.27	-21.03	68.3	38.25	34.5	7.88	33.36	314	261	P	V
		5433.04	40.05	-13.95	54	31.08	34.5	7.79	33.32	314	261	A	V
	*	5580	103.04	-	-	93.96	34.5	7.97	33.39	314	261	P	V
		5580	95.08	-	-	86	34.5	7.97	33.39	314	261	A	V
		5728.145	49.83	-18.47	68.3	40.03	34.7	8.45	33.35	314	261	P	V

802.11a CH 140 5700MHz	*	5700	107.61	-	-	97.75	34.7	8.52	33.36	285	311	P	H
		5700	99.86	-	-	90	34.7	8.52	33.36	285	311	A	H
		5725.56	59.15	-9.15	68.3	49.35	34.7	8.45	33.35	285	311	P	H
	*	5700	102.8	-	-	92.94	34.7	8.52	33.36	300	263	P	V
		5700	95.86	-	-	86	34.7	8.52	33.36	300	263	A	V
		5733.08	54.36	-13.94	68.3	44.56	34.7	8.45	33.35	300	263	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

5470~5725MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 100 5500MHz		11000	49.48	-24.52	74	58.64	38	11.14	58.3	-	-	P	H
		16500	49.33	-18.97	68.3	52.65	41.25	14.27	58.84	-	-	P	H
		11000	48.31	-25.69	74	57.47	38	11.14	58.3	-	-	P	V
		16500	48.71	-19.59	68.3	52.03	41.25	14.27	58.84	-	-	P	V
802.11a CH 116 5580MHz		11160	49.03	-24.97	74	57.76	38.1	11.28	58.11	-	-	P	H
		16740	48.2	-20.1	68.3	50.72	41.66	14.4	58.58	-	-	P	H
		11160	48.22	-25.78	74	56.95	38.1	11.28	58.11	-	-	P	V
		16740	48.45	-19.85	68.3	50.97	41.66	14.4	58.58	-	-	P	V
802.11a CH 140 5700MHz		11400	49.64	-24.36	74	57.78	38.24	11.47	57.85	-	-	P	H
		17100	49.71	-18.59	68.3	51.21	41.97	14.69	58.16	-	-	P	H
		11400	49.11	-24.89	74	57.25	38.24	11.47	57.85	-	-	P	V
		17100	48.38	-19.92	68.3	49.88	41.97	14.69	58.16	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

5470~5725MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5458.8	52.36	-21.64	74	43.38	34.5	7.84	33.36	148	315	P	H
		5465.84	58	-10.3	68.3	48.98	34.5	7.88	33.36	148	315	P	H
		5460	45.25	-8.75	54	36.27	34.5	7.84	33.36	148	315	A	H
802.11n	*	5500	107.54	-	-	98.48	34.5	7.96	33.4	148	315	P	H
HT20		5500	100.31	-	-	91.25	34.5	7.96	33.4	148	315	A	H
CH 100		5444.56	50.61	-23.39	74	41.64	34.5	7.79	33.32	313	263	P	V
5500MHz		5465.68	53.53	-14.77	68.3	44.51	34.5	7.88	33.36	313	263	P	V
		5457.52	41.93	-12.07	54	32.95	34.5	7.84	33.36	313	263	A	V
	*	5500	102.85	-	-	93.79	34.5	7.96	33.4	313	263	P	V
		5500	96.18	-	-	87.12	34.5	7.96	33.4	313	263	A	V
		5416.96	49.06	-24.94	74	40.08	34.5	7.75	33.27	166	317	P	H
		5469.76	49.41	-18.89	68.3	40.39	34.5	7.88	33.36	166	317	P	H
		5458.48	40.5	-13.5	54	31.52	34.5	7.84	33.36	166	317	A	H
	*	5580	107.09	-	-	98.01	34.5	7.97	33.39	166	317	P	H
802.11n		5580	99.53	-	-	90.45	34.5	7.97	33.39	166	317	A	H
HT20		5738.855	50.56	-17.74	68.3	40.79	34.7	8.42	33.35	166	317	P	H
CH 116		5420.32	50.09	-23.91	74	41.11	34.5	7.75	33.27	341	248	P	V
5580MHz		5467.12	48.79	-19.51	68.3	39.77	34.5	7.88	33.36	341	248	P	V
		5446	40.08	-13.92	54	31.06	34.5	7.84	33.32	341	248	A	V
	*	5580	102.63	-	-	93.55	34.5	7.97	33.39	341	248	P	V
		5580	95.5	-	-	86.42	34.5	7.97	33.39	341	248	A	V
		5733.185	48.42	-19.88	68.3	38.62	34.7	8.45	33.35	341	248	P	V

	*	5700	107.19	-	-	97.33	34.7	8.52	33.36	180	319	P	H
802.11n		5700	99.62	-	-	89.76	34.7	8.52	33.36	180	319	A	H
HT20		5726.52	57.65	-10.65	68.3	47.85	34.7	8.45	33.35	180	319	P	H
CH 140	*	5700	102.52	-	-	92.66	34.7	8.52	33.36	326	254	P	V
5700MHz		5700	94.31	-	-	84.45	34.7	8.52	33.36	326	254	A	V
		5725.16	53.06	-15.24	68.3	43.26	34.7	8.45	33.35	326	254	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

5470~5725MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n		11000	48	-26	74	50.26	38	11.14	51.4	-	-	P	H
HT20		16500	48.73	-19.57	68.3	45.91	41.25	14.27	52.7	-	-	P	H
CH 100		11000	48.32	-25.68	74	50.58	38	11.14	51.4	-	-	P	V
5500MHz		16500	49.05	-19.25	68.3	46.23	41.25	14.27	52.7	-	-	P	V
802.11n		11160	47.42	-26.58	74	49.31	38.1	11.28	51.27	-	-	P	H
HT20		16740	49.8	-18.5	68.3	46.87	41.66	14.4	53.13	-	-	P	H
CH 116		11160	47.74	-26.26	74	49.63	38.1	11.28	51.27	-	-	P	V
5580MHz		16740	50.17	-18.13	68.3	47.24	41.66	14.4	53.13	-	-	P	V
802.11n		11400	47.53	-26.47	74	48.9	38.24	11.47	51.08	-	-	P	H
HT20		17100	49.75	-18.55	68.3	46.61	41.97	14.69	53.52	-	-	P	H
CH 140		11400	49.39	-24.61	74	50.76	38.24	11.47	51.08	-	-	P	V
5700MHz		17100	47.93	-20.37	68.3	44.79	41.97	14.69	53.52	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

5470~5725MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5459.44	57.79	-16.21	74	48.81	34.5	7.84	33.36	148	321	P	H
		5469.76	63.94	-4.36	68.3	54.92	34.5	7.88	33.36	148	321	P	H
		5459.92	49.97	-4.03	54	40.99	34.5	7.84	33.36	148	321	A	H
	*	5510	103.1	-	-	94.04	34.5	7.96	33.4	148	321	P	H
802.11n		5510	96.43	-	-	87.37	34.5	7.96	33.4	148	321	A	H
HT40		5739.17	50.13	-18.17	68.3	40.36	34.7	8.42	33.35	148	321	P	H
CH 102		5459.44	52.88	-21.12	74	43.9	34.5	7.84	33.36	191	277	P	V
5510MHz		5469.28	57.85	-10.45	68.3	48.83	34.5	7.88	33.36	191	277	P	V
		5459.92	46.22	-7.78	54	37.24	34.5	7.84	33.36	191	277	A	V
	*	5510	98.63	-	-	89.57	34.5	7.96	33.4	191	277	P	V
		5510	91.61	-	-	82.55	34.5	7.96	33.4	191	277	A	V
		5745.47	49.49	-18.81	68.3	39.72	34.7	8.42	33.35	191	277	P	V
		5453.44	50.21	-23.79	74	41.23	34.5	7.84	33.36	138	314	P	H
		5468.32	52.6	-15.7	68.3	43.58	34.5	7.88	33.36	138	314	P	H
		5459.2	42.48	-11.52	54	33.5	34.5	7.84	33.36	138	314	A	H
	*	5550	103.35	-	-	94.27	34.5	7.97	33.39	138	314	P	H
802.11n		5550	96.14	-	-	87.06	34.5	7.97	33.39	138	314	A	H
HT40		5743.58	49.38	-18.92	68.3	39.61	34.7	8.42	33.35	138	314	P	H
CH 110		5459.92	49.02	-24.98	74	40.04	34.5	7.84	33.36	189	268	P	V
5550MHz		5465.68	48.77	-19.53	68.3	39.75	34.5	7.88	33.36	189	268	P	V
		5455.84	40.99	-13.01	54	32.01	34.5	7.84	33.36	189	268	A	V
	*	5550	97.01	-	-	87.93	34.5	7.97	33.39	189	268	P	V
		5550	89.54	-	-	80.46	34.5	7.97	33.39	189	268	A	V
		5745.785	49.74	-18.56	68.3	39.97	34.7	8.42	33.35	189	268	P	V

		5436.1	48.54	-25.46	74	39.57	34.5	7.79	33.32	140	308	P	H
		5464.1	48.55	-19.75	68.3	39.53	34.5	7.88	33.36	140	308	P	H
		5438.9	40.71	-13.29	54	31.74	34.5	7.79	33.32	140	308	A	H
	*	5670	103.81	-	-	94.13	34.64	8.41	33.37	140	308	P	H
802.11n		5670	97.27	-	-	87.59	34.64	8.41	33.37	140	308	A	H
HT40		5726.85	53.96	-14.34	68.3	44.16	34.7	8.45	33.35	140	308	P	H
CH 134		5416.15	49.59	-24.41	74	40.61	34.5	7.75	33.27	147	270	P	V
5670MHz		5462.7	49.25	-19.05	68.3	40.23	34.5	7.88	33.36	147	270	P	V
		5441.35	40.69	-13.31	54	31.72	34.5	7.79	33.32	147	270	A	V
	*	5670	97.97	-	-	88.29	34.64	8.41	33.37	147	270	P	V
		5670	91.21	-	-	81.53	34.64	8.41	33.37	147	270	A	V
		5730.525	50.07	-18.23	68.3	40.27	34.7	8.45	33.35	147	270	P	V

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

5470~5725MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n		11020	47.71	-26.29	74	49.94	38.01	11.15	51.39	-	-	P	H
HT40		16530	50.18	-18.12	68.3	47.35	41.3	14.29	52.76	-	-	P	H
CH 102		11020	47.26	-26.74	74	49.49	38.01	11.15	51.39	-	-	P	V
5510MHz		16530	48.07	-20.23	68.3	45.24	41.3	14.29	52.76	-	-	P	V
802.11n		11100	47.26	-26.74	74	49.3	38.06	11.22	51.32	-	-	P	H
HT40		16650	50.5	-17.8	68.3	47.62	41.51	14.35	52.98	-	-	P	H
CH 110		11100	47.76	-26.24	74	49.8	38.06	11.22	51.32	-	-	P	V
5550MHz		16650	50.19	-18.11	68.3	47.31	41.51	14.35	52.98	-	-	P	V
802.11n		11340	48.21	-25.79	74	49.72	38.2	11.42	51.13	-	-	P	H
HT40		17010	48.36	-19.94	68.3	45.3	42.09	14.56	53.59	-	-	P	H
CH 134		11340	47.23	-26.77	74	48.74	38.2	11.42	51.13	-	-	P	V
5670MHz		17010	49.3	-19	68.3	46.24	42.09	14.56	53.59	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

5470~5725MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 106 5530MHz		5457.04	57.44	-16.56	74	48.46	34.5	7.84	33.36	154	316	P	H
		5470	59.55	-8.75	68.3	50.53	34.5	7.88	33.36	154	316	P	H
		5453.92	50.78	-3.22	54	41.8	34.5	7.84	33.36	154	316	A	H
	*	5530	98.91	-	-	89.85	34.5	7.96	33.4	154	316	P	H
		5530	92.31	-	-	83.25	34.5	7.96	33.4	154	316	A	H
		5729.72	50.15	-18.15	68.3	40.35	34.7	8.45	33.35	154	316	P	H
		5453.44	54.13	-19.87	74	45.15	34.5	7.84	33.36	334	265	P	V
		5467.84	55.98	-12.32	68.3	46.96	34.5	7.88	33.36	334	265	P	V
		5458.72	46.35	-7.65	54	37.37	34.5	7.84	33.36	334	265	A	V
	*	5530	93.18	-	-	84.12	34.5	7.96	33.4	334	265	P	V
		5530	86.81	-	-	77.75	34.5	7.96	33.4	334	265	A	V
		5759.96	49.06	-19.24	68.3	39.3	34.72	8.39	33.35	334	265	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

5470~5725MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 106 5530MHz		11060	47.06	-26.94	74	49.17	38.04	11.2	51.35	-	-	P	H
		16590	49.38	-18.92	68.3	46.52	41.4	14.32	52.86	-	-	P	H
		11060	47.24	-26.76	74	49.35	38.04	11.2	51.35	-	-	P	V
		16590	49.9	-18.4	68.3	47.04	41.4	14.32	52.86	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Emission below 1GHz

WIFI 802.11n HT40 (LF @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 LF		106.63	19.19	-24.31	43.5	36.04	15.87	2.47	35.19	-	-	P	H
		182.29	26.2	-17.3	43.5	40.91	17.71	2.68	35.1	-	-	P	H
		367.56	20.68	-25.32	46	30.98	21.3	3.26	34.86	-	-	P	H
		432.55	22.15	-23.85	46	30.81	22.77	3.3	34.73	-	-	P	H
		566.41	25	-21	46	30.71	25.13	3.73	34.57	-	-	P	H
		637.22	26.01	-19.99	46	30.4	26.22	3.89	34.5	-	-	P	H
		47.46	28.13	-11.87	40	40.76	20.27	2.17	35.07	-	-	P	H
		181.32	32.51	-10.99	43.5	47.11	17.82	2.68	35.1	-	-	P	H
		272.5	20.76	-25.24	46	33.72	19	3	34.96	-	-	P	V
		458.74	22.42	-23.58	46	30.49	23.3	3.33	34.7	-	-	P	V
		590.66	24.72	-21.28	46	29.77	25.62	3.85	34.52	-	-	P	V
		694.45	27.1	-18.9	46	30.71	26.88	4.01	34.5	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

<Simultaneous transmission>

WIFI 802.11n HT40 CH38 + LTE Band 48 Link (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		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 CH 38 5190MHz + LTE B48 Link		5143.78	53.86	-20.14	74	45.05	34.18	32.85	7.48	117	321	P	H
		5141.18	45.41	-8.59	54	36.62	34.16	32.85	7.48	117	321	A	H
		5190	107.05	-	-	98.13	34.28	32.89	7.53	117	321	P	H
		5190	99.6	-	-	90.68	34.28	32.89	7.53	117	321	A	H
		5451.04	48.73	-25.27	74	39.71	34.5	33.32	7.84	117	321	P	H
		5421.36	40.85	-13.15	54	31.87	34.5	33.27	7.75	117	321	A	H
		5056.42	51.72	-22.28	74	43.14	33.91	32.68	7.35	124	277	P	V
		5148.72	42.88	-11.12	54	34.06	34.19	32.85	7.48	124	277	A	V
		5190	102.27	-	-	93.35	34.28	32.89	7.53	124	277	P	V
		5190	95.29	-	-	86.37	34.28	32.89	7.53	124	277	A	V
		5357.8	48.94	-25.06	74	39.95	34.5	33.19	7.68	124	277	P	V
		5425.84	40.68	-13.32	54	31.7	34.5	33.27	7.75	124	277	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

WIFI 802.11n HT40 CH38 + LTE Band 48 Link (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 38 5190MHz + LTE B48 Link		7232	48.83	-19.47	68.3	38.19	35.59	8.74	33.69	-	-	P	H
		10380	46.3	-22	68.3	49.34	37.2	10.81	51.05	-	-	P	H
		10848	47.24	-26.76	74	31.83	37.79	11.06	33.44	-	-	P	H
		14464	49.48	-18.82	68.3	30.72	39.17	13	33.41	-	-	P	H
		15570	48.92	-25.08	74	47.88	40.06	13.7	52.72	-	-	P	H
		7232	49.84	-18.46	68.3	39.2	35.59	8.74	33.69	-	-	P	V
		10380	46.49	-21.81	68.3	49.53	37.2	10.81	51.05	-	-	P	V
		10848	47.48	-26.52	74	32.07	37.79	11.06	33.44	-	-	P	V
		14464	49.23	-19.07	68.3	30.47	39.17	13	33.41	-	-	P	V
		15570	49.42	-24.58	74	48.38	40.06	13.7	52.72	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average 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		(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)

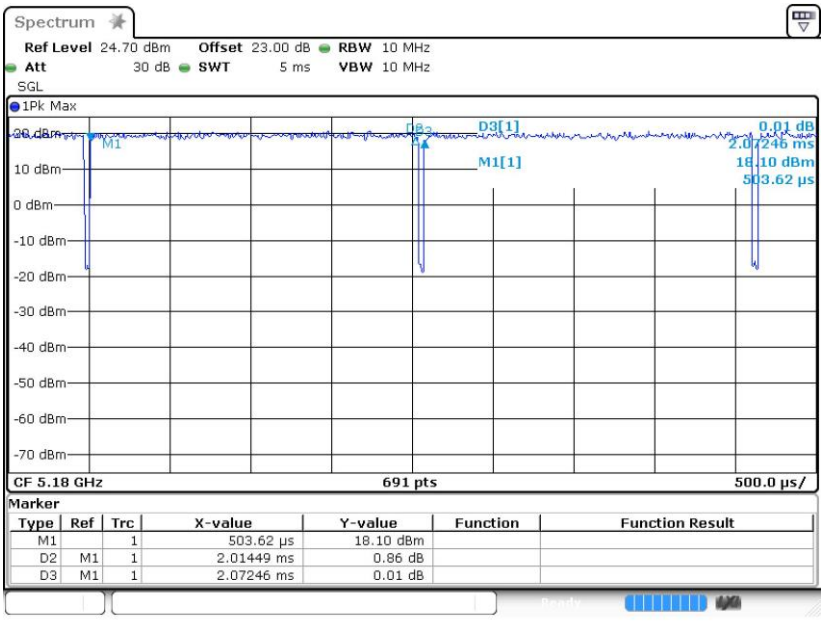
= -10.46(dB)

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

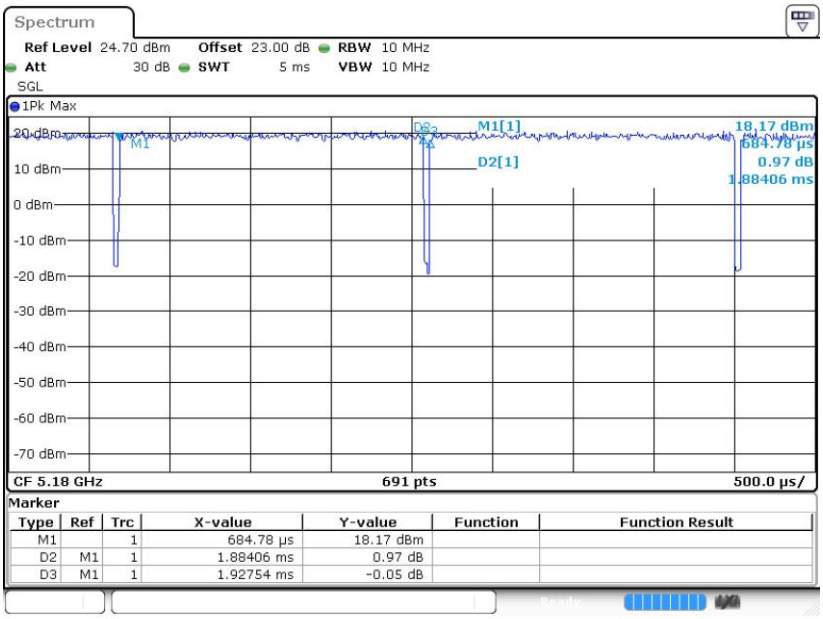
Appendix D. Duty Cycle Plots

Band	Duty Cycle(%)	T(ms)	1/T(kHz)	VBW Setting
802.11a	97.20	2.015	0.496	1KHz
802.11n HT20	97.74	1.884	0.531	1KHz
802.11n HT40	96.24	0.928	1.0781	3KHz
802.11ac VHT80	92.52	0.457	2.187	3KHz

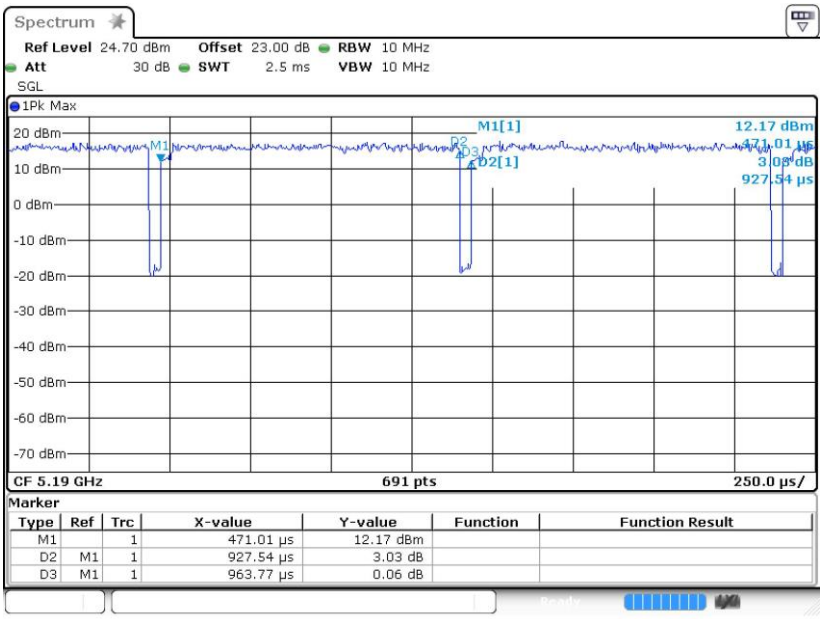
802.11a



802.11n HT20



802.11n HT40



802.11ac VHT80