



FCC RF Test Report

APPLICANT : MeiG Smart Technology Co., Ltd
EQUIPMENT : CPE
BRAND NAME : MEIGLink
MODEL NAME : SLT866
FCC ID : 2APJ4-SLT866
STANDARD : FCC Part 15 Subpart E §15.407
CLASSIFICATION : (NII) Unlicensed National Information Infrastructure
TEST DATE(S) : Oct. 17, 2022 ~ Nov. 14, 2022

We, Sporton International Inc. (Kunshan), 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.

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

Jason Jia

Approved by: Jason Jia



Sporton International Inc. (Kunshan)

**No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300
People's Republic of China**



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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR293023C	Rev. 01	Initial issue of report	Dec. 28, 2022

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 3.03 dB at 11650.000 MHz
3.5	15.207	AC Conducted Emission	15.207(a)	Pass	Under limit 4.78 dB at 0.518 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

MeiG Smart Technology Co., Ltd

2nd Floor, Office Building, No.5 Lingxia Road, Fenghuang, Fuyong Street, Bao'an District, Shenzhen

1.2 Manufacturer

MeiG Smart Technology Co., Ltd

2nd Floor, Office Building, No.5 Lingxia Road, Fenghuang, Fuyong Street, Bao'an District, Shenzhen

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	CPE
Brand Name	MEIGLink
Model Name	SLT866
FCC ID	2APJ4-SLT866
IMEI Code	Conducted: 864630066663518 Conduction: 864630066663344 Radiation: 864630066663484
HW Version	SLT866_V1.01_PCB
SW Version	SLT866_EQ100_C44_V1403
EUT Stage	Identical Prototype

1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx/Rx Channel Frequency Range	5745 MHz ~ 5825 MHz
Maximum Output Power	<Ant.0> 802.11a : 13.14 dBm / 0.0206 W <MIMO Ant.0+1> 802.11n HT20 : 16.73 dBm / 0.0471 W 802.11n HT40 : 16.04 dBm / 0.0402 W 802.11ac VHT20: 14.99 dBm / 0.0316 W 802.11ac VHT40: 14.95 dBm / 0.0313 W 802.11ac VHT80: 14.41 dBm / 0.0276 W
99% Occupied Bandwidth	<Ant.0> 802.11a : 16.48 MHz <MIMO Ant.0+1> 802.11n HT20 : 17.68 MHz 802.11n HT40 : 36.36 MHz 802.11ac VHT80 : 75.16 MHz
Antenna Type / Gain	<Ant. 0> : Fixed Internal Antenna with gain 1.4 dBi <Ant. 1> : Fixed Internal Antenna with gain 1.4 dBi
Type of Modulation	802.11a/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11ac : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM)

Note:



1. 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.
2. For WLAN SISO & MIMO (CDD) mode, the whole testing has assessed only MIMO mode by referring to the higher normal 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. (Kunshan) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

Test Firm	Sporton International Inc. (Kunshan)		
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	CN1257	314309

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.
	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

Test data subcontracted: conducted and radiation test items in section 3.1 ~ 3.4 of this report.



1.7 Test Software

Item	Site	Manufacturer	Name	Version
1.	CO01-KS	AUDIX	E3	6.2009-8-24
2.	03CH03-SZ	AUDIX	E3	6.2009-8-24

1.8 Applicable Standards

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

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

Remark:

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

2 Test Configuration of Equipment Under Test

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

2.1 Carrier Frequency and Channel

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

Note:

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

MIMO Mode

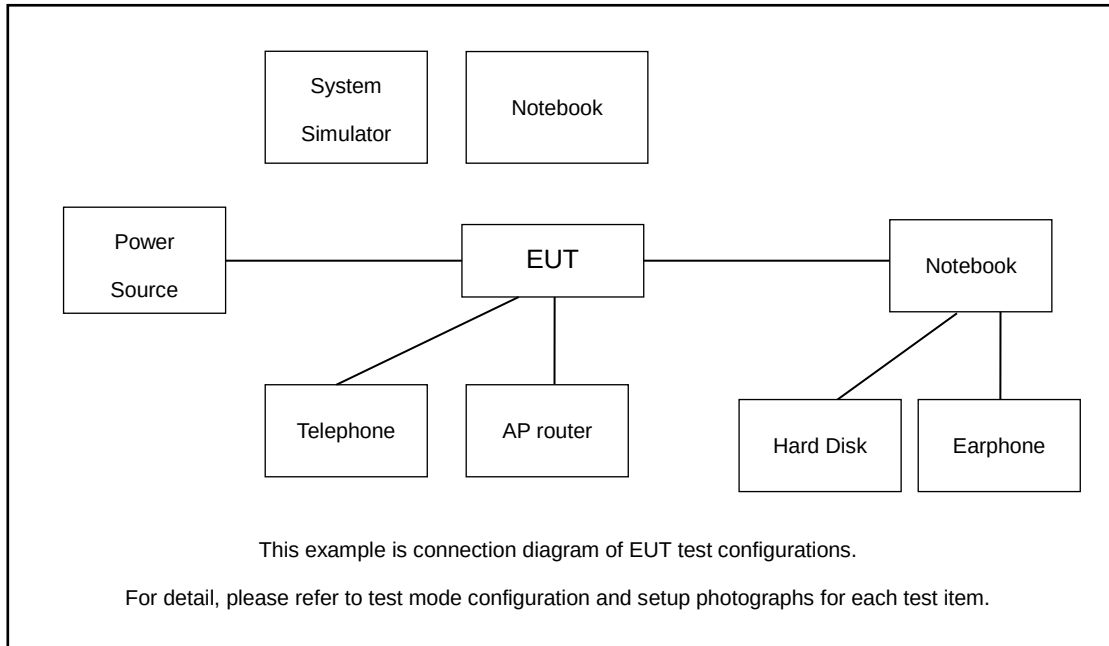
Modulation	Data Rate
802.11a	6 Mbps
802.11n HT20	MCS0
802.11n HT40	MCS0
802.11ac VHT80	MCS0

AC Conducted Emission	Mode 1 : LTE Band 5 Idle + WLAN Link(5G) + full load + Power from Adapter 1
Remark: For Conducted Emission, the accessories are chosen from Part 15B worst case.	

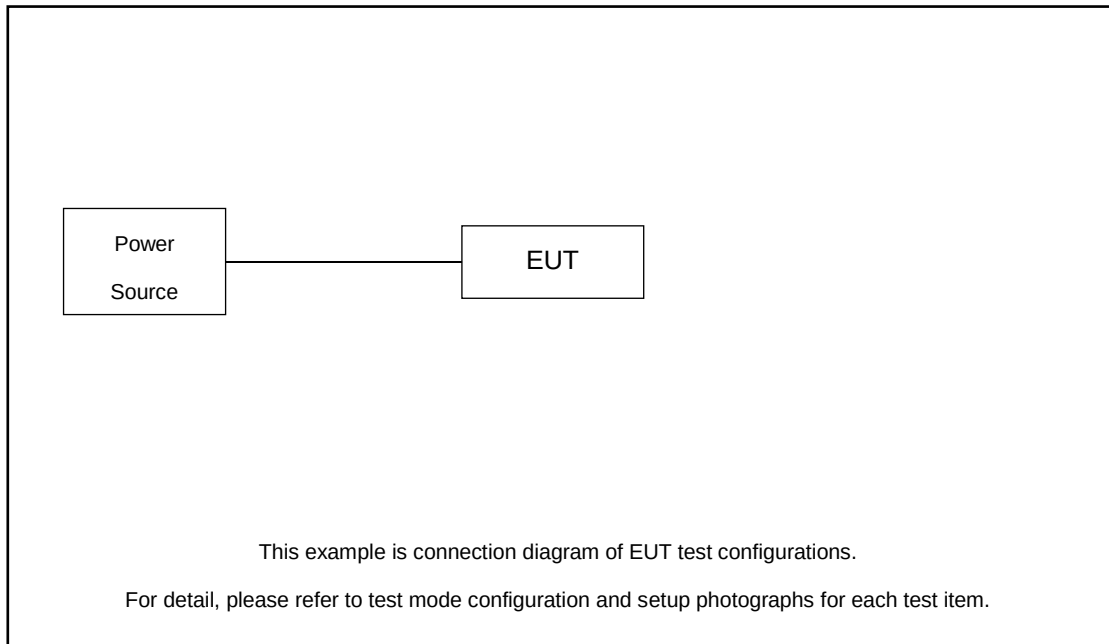
Ch. #		U-NII-3 : 5745-5825 MHz			
		802.11a	802.11n HT20	802.11n HT40	802.11ac VHT80
L	Low	149	149	151	-
M	Middle	157	157	-	155
H	High	165	165	159	-

2.3 Connection Diagram of Test System

For Conducted Emission:



For Radiated Emission:



2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	LTE Base Station	Anritus	MT8821C	N/A	N/A	Unshielded,1.8m
2.	WLAN AP	D-link	DIR-655	KA21R655B1	N/A	Unshielded,1.8m
3.	Notebook	Lenovo	V130-15IKB005	N/A	N/A	AC I/P: Unshielded, 1.8 m DC O/P: Shielded, 1.8 m
4.	Telephone	bubugao	HCD007(6082)TSD	N/A	N/A	N/A
5.	Earphone	Lenovo	P121	N/A	N/A	Unshielded,1.2m
6.	Hard Disk	Lenovo	F310	DoC	Shielded, 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.

For AC power line conducted emissions, the EUT was set to connect with the Notebook 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.

$$\begin{aligned}
 \text{Offset(dB)} &= \text{RF cable loss(dB)} + \text{attenuator factor(dB)}. \\
 &= 2.8 + 10 = 12.8 \text{ (dB)}
 \end{aligned}$$

3 Test Result

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

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

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

26dB and 99% Occupied bandwidth are reporting only.

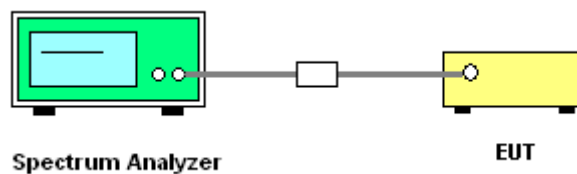
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
Section C) Emission bandwidth for the band 5.725-5.85GHz
2. For 6dB BW, Set RBW = 100kHz.
For 26dB BW, Set RBW = approximately 1% of the emission bandwidth.
For 99% OBW, Set RBW = 1% to 5% of the OBW.
3. For 26dB BW, Set the VBW > RBW.
For 6dB BW & 99% OBW, Set the VBW $\geq 3 \times$ RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 6 dB down from the peak of the emission.
7. Measure and record the results in the test report.

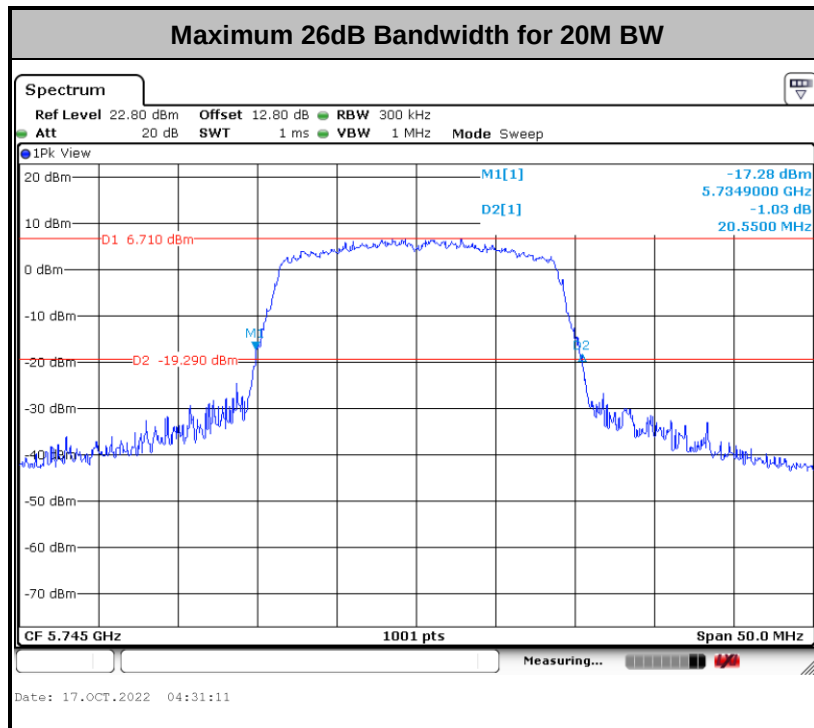
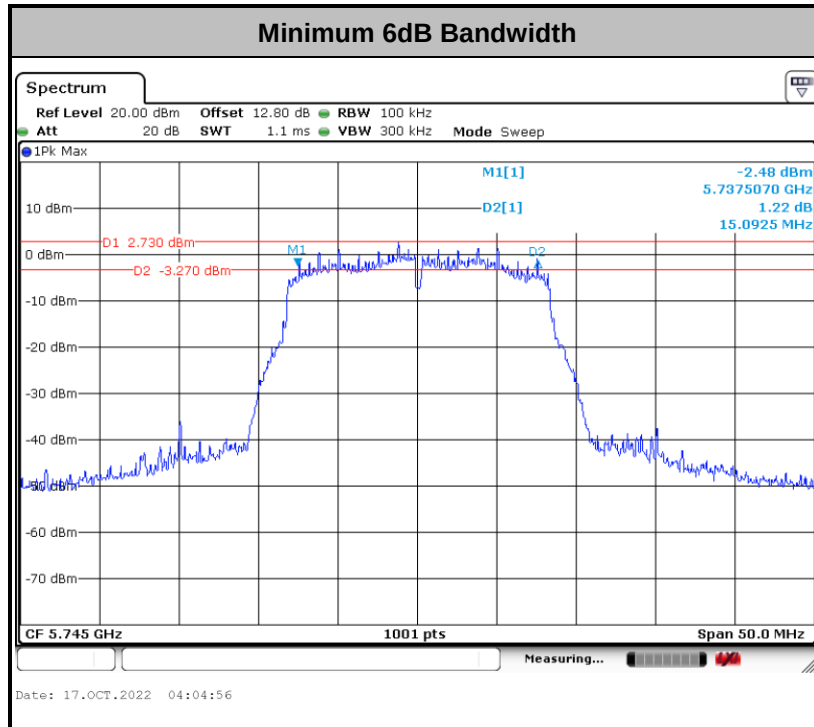
3.1.4 Test Setup

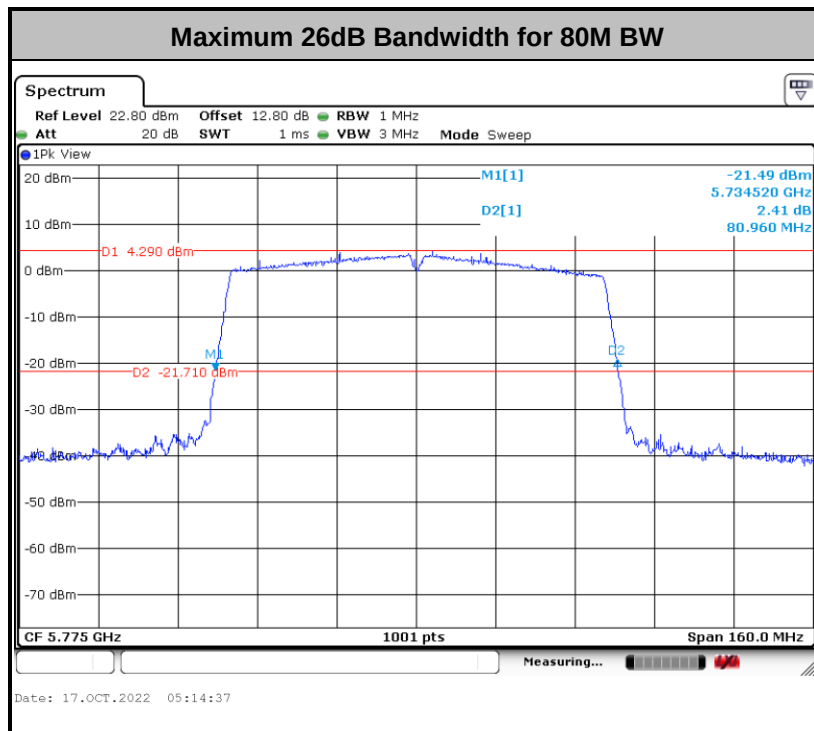
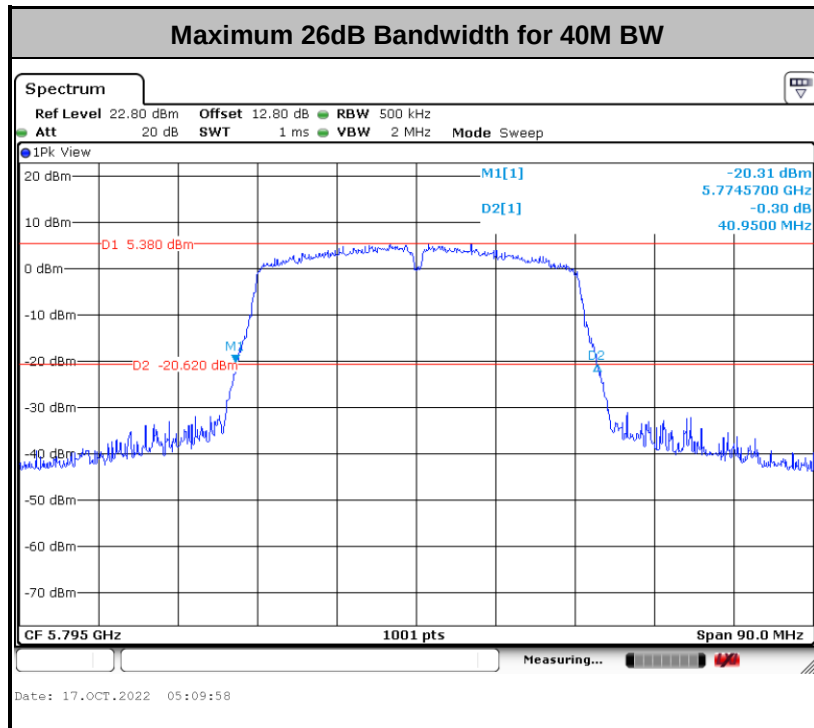


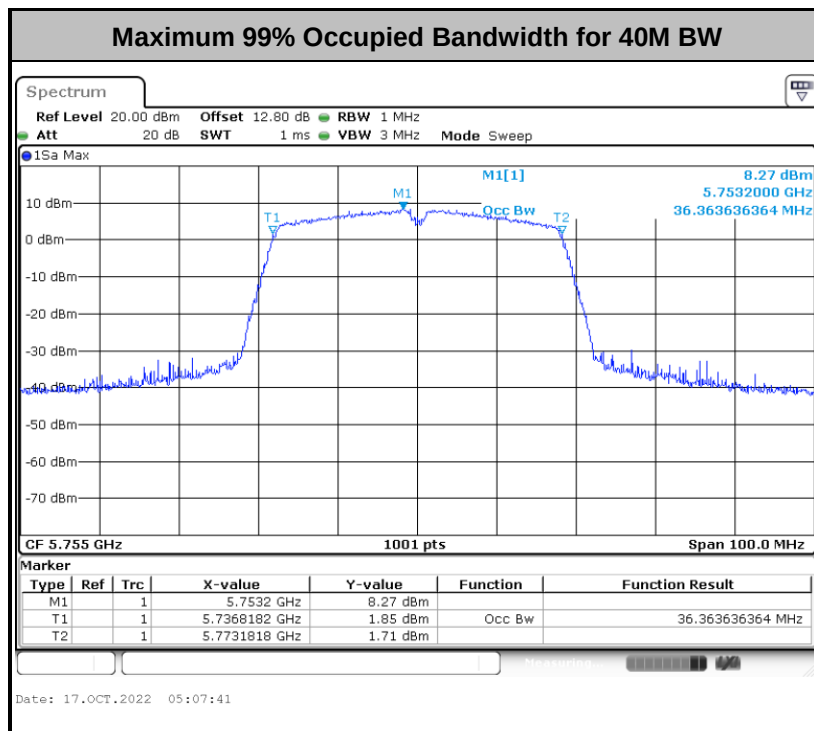
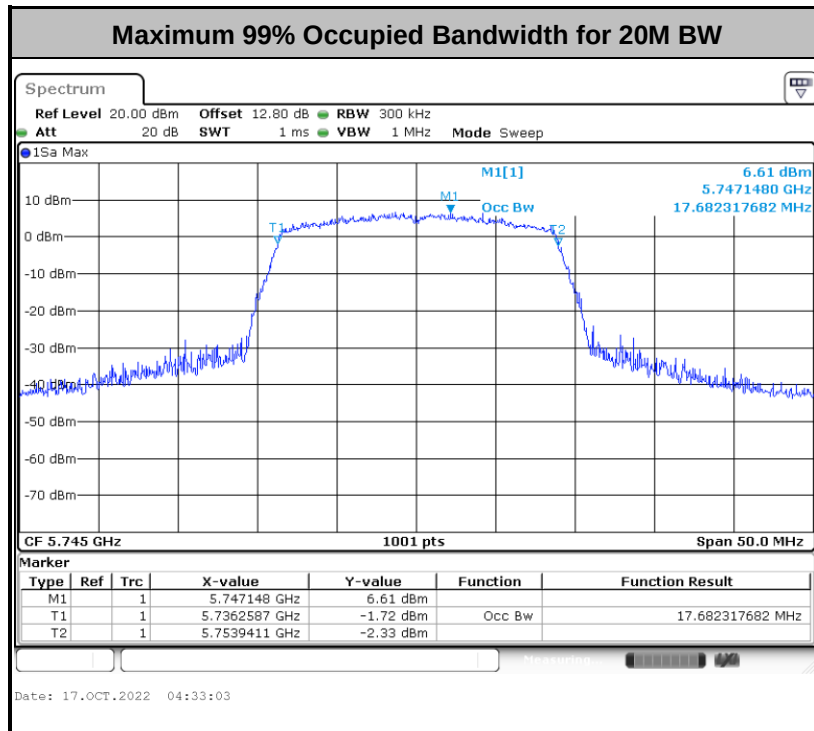


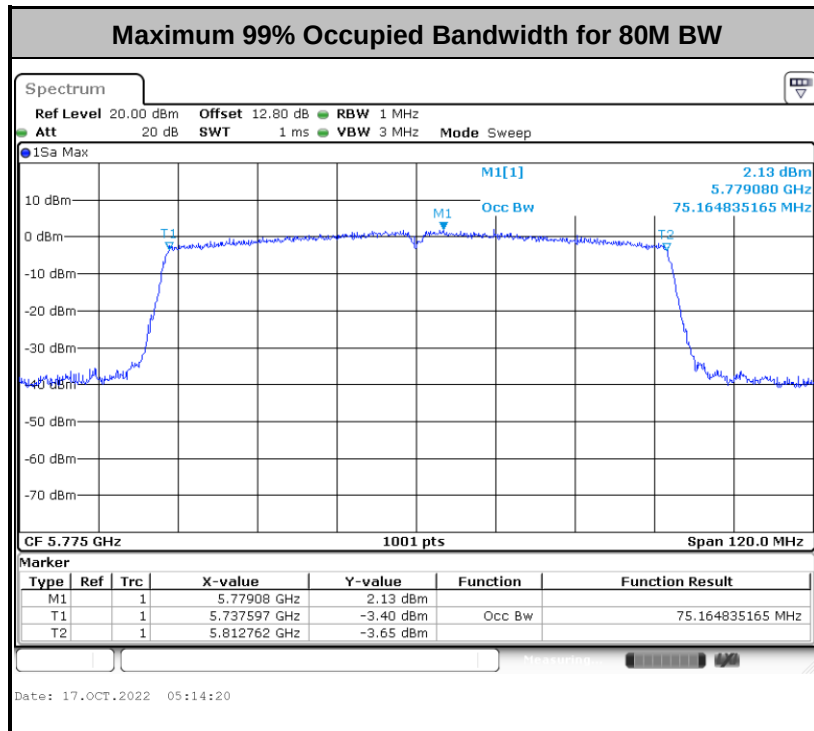
3.1.5 Test Result of 6dB Bandwidth

Please refer to Appendix A.









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

3.2 Maximum Conducted Output Power Measurement

3.2.1 Limit of Maximum Conducted Output Power

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

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

3.2.2 Measuring Instruments

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

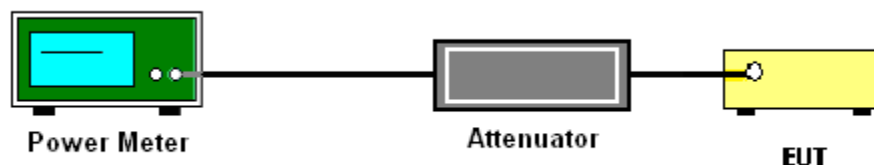
3.2.3 Test Procedures

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

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

1. Measurement is performed using a wideband RF power meter.
2. The EUT is configured to transmit continuously with a consistent duty cycle at its maximum power control level.
3. Measure the average power of the transmitter, and the average power is corrected with duty factor, $10 \log(1/x)$, where x is the duty cycle.
4. For MIMO mode, the measure-and-sum technique should be used for measuring the in-band transmit power of a device.

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).

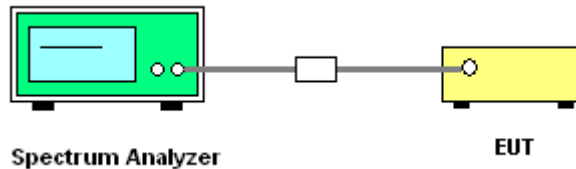
- Measure the duty cycle.
 - Set span to encompass the entire emission bandwidth (EBW) of the signal.
 - Set RBW = 500KHz (or 300 kHz if the SA can't set RBW=500KHz).
 - Set VBW $\geq$ 1 MHz.
 - Number of points in sweep $\geq$ 2 Span / RBW.
 - Sweep time = auto.
 - Detector = RMS
 - Trace average at least 100 traces in power averaging mode.
 - If the SA can't set RBW=500KHz, then add $10 \log(500\text{kHz}/\text{RBW})$ to the test result
 - Add $10 \log(1/x)$, where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times. For example, add $10 \log(1/0.25) = 6$ dB if the duty cycle is 25 percent.
1. The RF output of EUT was connected to the spectrum analyzer by a low loss cable.
 2. Each plot has already offset with cable loss, and attenuator loss. Measure the PPSD and record it.
 3. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

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

With this technique, spectrum measurements are performed at each output of the device, but

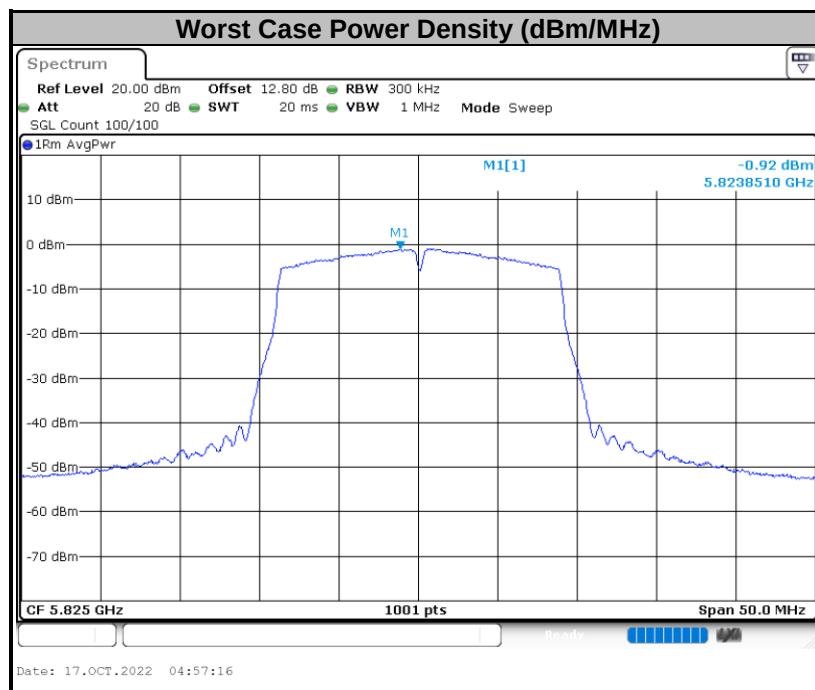
rather than summing the spectra or the spectral peaks across the outputs, the quantity $10 \log(N_{\text{ANT}})$ dB is added to each spectrum value before comparing to the emission limit. The addition of $10 \log(N_{\text{ANT}})$ dB serves to apportion the emission limit among the N_{ANT} outputs so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

3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.



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 5.725-5.85 GHz band:

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

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

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

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

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

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

where

EIRP is the equivalent isotropically radiated power, in dBm

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

d_{Meas} is the measurement distance, in m

3.4.2 Measuring Instruments

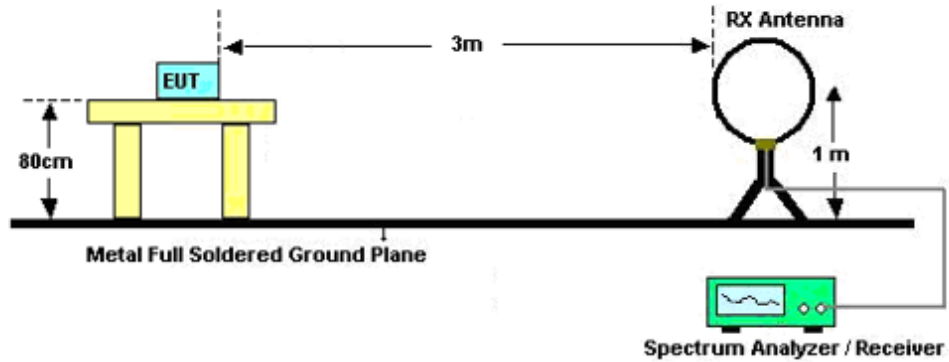
The measuring equipment is listed in the section 4 of this test report.

3.4.3 Test Procedures

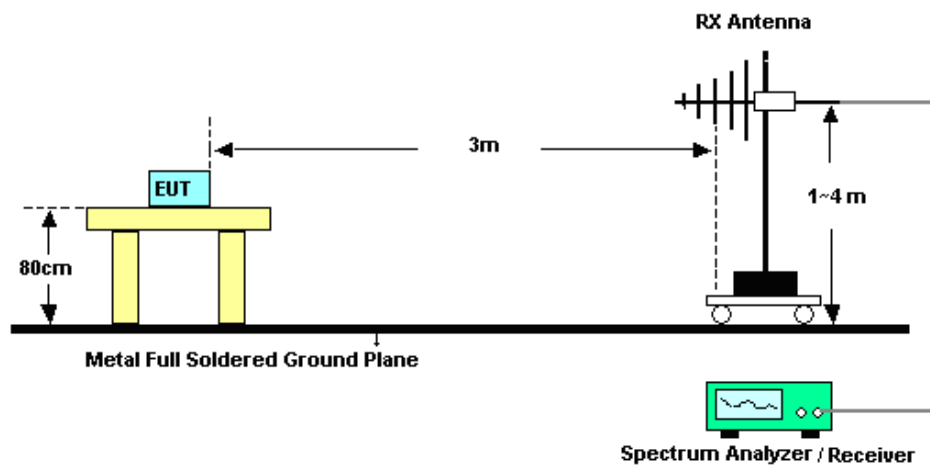
1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
Section G) Unwanted emissions measurement.
 - (1) Procedure for Unwanted Emissions Measurements Below 1000MHz
 - RBW = 120 kHz
 - VBW = 300 kHz
 - Detector = Peak
 - Trace mode = max hold
 - (2) Procedure for Peak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

3.4.4 Test Setup

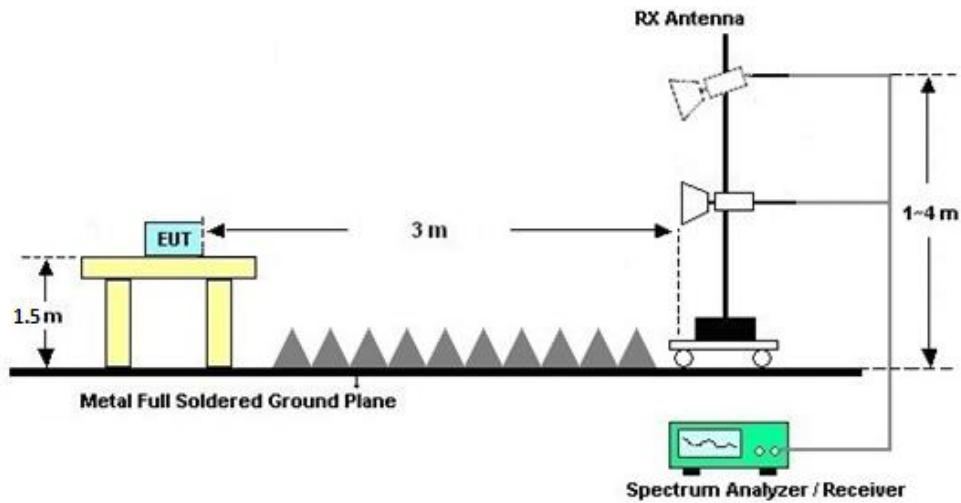
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



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

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

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

3.4.6 Test Result of Radiated Band Edges

Please refer to Appendix C&D.

3.4.7 Duty Cycle

Please refer to Appendix E.

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

Please refer to Appendix C&D.

3.5 AC Conducted Emission Measurement

3.5.1 Limit of AC Conducted Emission

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

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

*Decreases with the logarithm of the frequency.

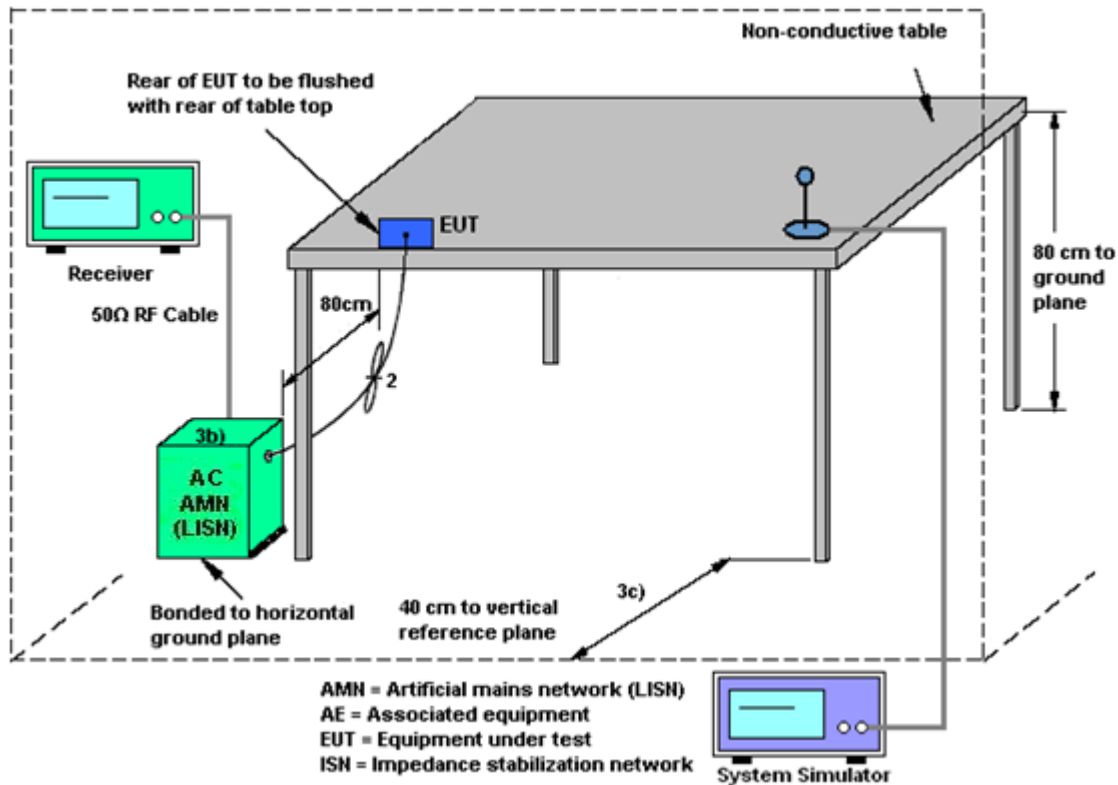
3.5.2 Measuring Instruments

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

<CDD Modes >

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

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

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

Array Gain = 10 log(NANT/NSS=1) dB.

For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for NANT ≤ 4.

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

The EUT supports CDD mode.

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

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

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

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

<CDD Modes>						
			DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
	Ant. 0 (dBi)	Ant. 1 (dBi)				
Band IV	1.40	1.40	1.40	4.41	0.00	0.00

Power Limit Reduction = DG(Power) – 6dBi, (min = 0)

PSD Limit Reduction = DG(PSD) – 6dBi, (min = 0)



4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101078	10Hz~40GHz	Apr. 07, 2022	Oct. 17, 2022	Apr. 08, 2023	Conducted (TH01-SZ)
Pulse Power Sensor	Anritsu	MA2411B	1339473	30MHz~40GHz	Dec. 28, 2021	Oct. 17, 2022	Dec. 27, 2022	Conducted (TH01-SZ)
Power Meter	Anritsu	ML2495A	1542004	50MHz Bandwidth	Dec. 28, 2021	Oct. 17, 2022	Dec. 27, 2022	Conducted (TH01-SZ)
EMI Test Receiver&SA	KEYSIGHT	N9038A	MY54450083	20Hz~8.4GHz	Apr. 06, 2022	Oct. 21, 2022~Nov. 14, 2022	Apr. 05, 2023	Radiation (03CH03-SZ)
EXA Spectrum Analyzer	KEYSIGHT	N9010A	MY55150246	10Hz~44GHz;	Apr. 06, 2022	Oct. 21, 2022~Nov. 14, 2022	Apr. 05, 2023	Radiation (03CH03-SZ)
Loop Antenna	R&S	HFH2-Z2	100354	9kHz~30MHz	Jul. 28, 2022	Oct. 21, 2022~Nov. 14, 2022	Jul. 27, 2024	Radiation (03CH03-SZ)
Bilog Antenna	TeseQ	CBL6112D	35408	30MHz~2GHz	Aug. 09, 2021	Oct. 21, 2022~Nov. 14, 2022	Aug. 08, 2023	Radiation (03CH03-SZ)
Double Ridge Horn Antenna	SCHWARZBECK	BBHA9120D	9120D-1355	1GHz~18GHz	Apr. 08, 2022	Oct. 21, 2022~Nov. 14, 2022	Apr. 07, 2023	Radiation (03CH03-SZ)
HF Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz	Jul. 06, 2022	Oct. 21, 2022~Nov. 14, 2022	Jul. 05, 2023	Radiation (03CH03-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18GHz~40GHz	Apr. 10, 2022	Oct. 21, 2022~Nov. 14, 2022	Apr. 09, 2023	Radiation (03CH03-SZ)
Amplifier	Burgeon	BPA-530	102211	0.01Hz~3000MHz	Oct. 19, 2022	Oct. 21, 2022~Nov. 14, 2022	Oct. 18, 2023	Radiation (03CH03-SZ)
HF Amplifier	MITEQ	AMF-7D-00101800-30-10P-R	1943528	1GHz~18GHz	Oct. 19, 2022	Oct. 21, 2022~Nov. 14, 2022	Oct. 18, 2023	Radiation (03CH03-SZ)
Amplifier	Agilent Technologies	83017A	MY39501302	500MHz~26.5GHz	Dec. 27, 2021	Oct. 21, 2022~Nov. 14, 2022	Dec. 26, 2022	Radiation (03CH03-SZ)
AC Power Source	Chroma	61601	616010002729	1 N/A	Nov. 11, 2021	Oct. 21, 2022~Nov. 14, 2022	Nov. 10, 2022	Radiation (03CH03-SZ)
AC Power Source	Chroma	61601	616010002729	1 N/A	Nov. 10, 2022		Nov. 09, 2023	Radiation (03CH03-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Oct. 21, 2022~Nov. 14, 2022	NCR	Radiation (03CH03-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Oct. 21, 2022~Nov. 14, 2022	NCR	Radiation (03CH03-SZ)
EMI Receiver	R&S	ESC17	100768	9kHz~7GHz;	May 24, 2022	Oct. 27, 2022	May 23, 2023	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060103	9kHz~30MHz	Oct. 13, 2022	Oct. 27, 2022	Oct. 12, 2023	Conduction (CO01-KS)
AC LISN	MessTec	AN3016	060105	9kHz~30MHz	May 24, 2022	Oct. 27, 2022	May 23, 2023	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP000000811	AC 0V~300V, 45Hz~1000Hz	Oct. 12, 2022	Oct. 27, 2022	Oct. 11, 2023	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 Measurement

Test Item	Uncertainty
Conducted Power	± 1.34 dB
Conducted Emissions	± 1.34 dB
Occupied Channel Bandwidth	± 0.13 %
Conducted Power Spectral Density	± 1.32 dB

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.78dB
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

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

Test Engineer:	Zheng jianhan	Temperature:	21~25	°C
Test Date:	2022/10/17	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 0	Ant 1	Ant 0	Ant 1	Ant 0	Ant 1	Ant 0	Ant 1	
11a	6Mbps	1	149	5745	16.43	-	19.95	-	15.09	-	0.5	-	Pass
11a	6Mbps	1	157	5785	16.48	-	19.95	-	15.09	-	0.5	-	Pass
11a	6Mbps	1	165	5825	16.48	-	19.90	-	15.44	-	0.5	-	Pass
HT20	MCS0	2	149	5745	17.58	17.68	20.15	20.55	15.69	15.09	0.5		Pass
HT20	MCS0	2	157	5785	17.58	17.68	20.20	20.35	16.29	15.44	0.5		Pass
HT20	MCS0	2	165	5825	17.53	17.68	20.15	20.35	15.74	15.09	0.5		Pass
HT40	MCS0	2	151	5755	36.26	36.36	40.23	40.86	35.08	35.08	0.5		Pass
HT40	MCS0	2	159	5795	36.26	36.26	40.23	40.95	35.08	35.08	0.5		Pass
VHT80	MCS0	2	155	5775	75.16	75.16	80.80	80.96	75.16	75.16	0.5		Pass

TEST RESULTS DATA
Average Power Table

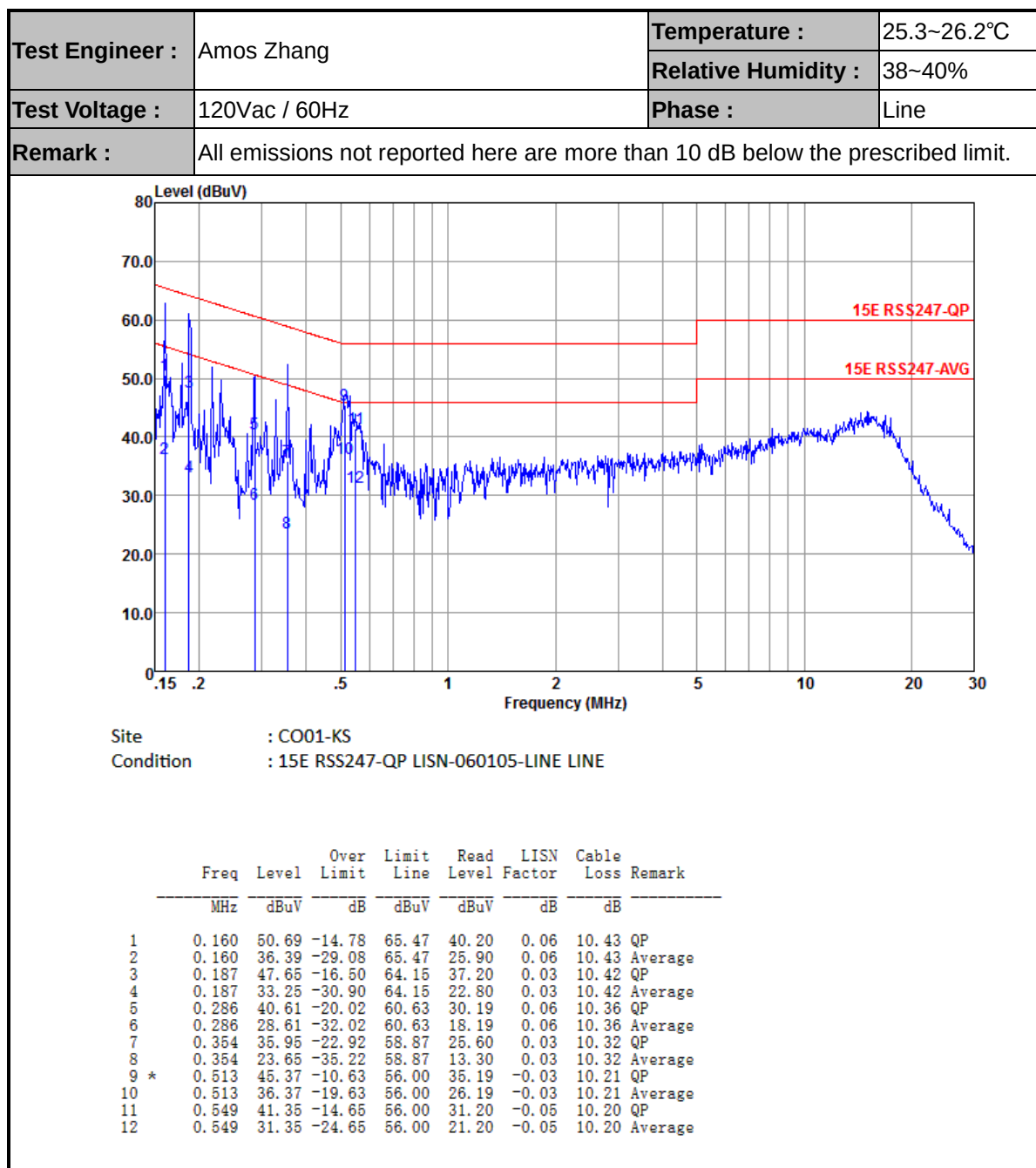
Band IV															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)			Pass/Fail
					Ant 0	Ant 1	Ant 0	Ant 1	SUM	Ant 0	Ant 1	Ant 0	Ant 1		
11a	6Mbps	1	149	5745	0.18		13.14			30.00		1.40			Pass
11a	6Mbps	1	157	5785	0.18		12.95			30.00		1.40			Pass
11a	6Mbps	1	165	5825	0.18		10.41			30.00		1.40			Pass
HT20	MCS0	2	149	5745	0.21	0.19	12.36	14.75	16.73	30.00		1.40			Pass
HT20	MCS0	2	157	5785	0.21	0.19	12.06	14.24	16.30	30.00		1.40			Pass
HT20	MCS0	2	165	5825	0.21	0.19	11.52	13.83	15.84	30.00		1.40			Pass
HT40	MCS0	2	151	5755	0.42	0.39	11.00	13.60	15.50	30.00		1.40			Pass
HT40	MCS0	2	159	5795	0.42	0.39	12.20	13.73	16.04	30.00		1.40			Pass
VHT20	MCS0	2	149	5745	0.36	0.37	10.14	12.88	14.73	30.00		1.40			Pass
VHT20	MCS0	2	157	5785	0.36	0.37	10.58	12.15	14.45	30.00		1.40			Pass
VHT20	MCS0	2	165	5825	0.36	0.37	10.91	12.83	14.99	30.00		1.40		Pass	
VHT40	MCS0	2	151	5755	0.69	0.69	10.77	12.81	14.92	30.00		1.40		Pass	
VHT40	MCS0	2	159	5795	0.69	0.69	10.95	12.74	14.95	30.00		1.40		Pass	
VHT80	MCS0	2	155	5775	0.46	0.44	10.28	12.28	14.41	30.00		1.40		Pass	

TEST RESULTS DATA
Power Spectral Density

Band IV																
Mod.	Data Rate	N _{TX}	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 0	Ant 1	Ant 0	Ant 1	Ant 0	Ant 1	SUM	Ant 0	Ant 1	Ant 0	Ant 1	
11a	6Mbps	1	149	5745	0.18		2.22	2.22	0.10			30.00		1.40		Pass
11a	6Mbps	1	157	5785	0.18		2.22	2.22	-0.09			30.00		1.40		Pass
11a	6Mbps	1	165	5825	0.18		2.22	2.22	0.30			30.00		1.40		Pass
HT20	MCS0	2	149	5745	0.21	0.19	2.22				4.39	30.00		4.41		Pass
HT20	MCS0	2	157	5785	0.21	0.19	2.22				3.71	30.00		4.41		Pass
HT20	MCS0	2	165	5825	0.21	0.19	2.22				4.50	30.00		4.41		Pass
HT40	MCS0	2	151	5755	0.42	0.39	2.22				0.51	30.00		4.41		Pass
HT40	MCS0	2	159	5795	0.42	0.39	2.22				0.47	30.00		4.41		Pass
VHT80	MCS0	2	155	5775	0.46	0.44	2.22				-4.46	30.00		4.41		Pass

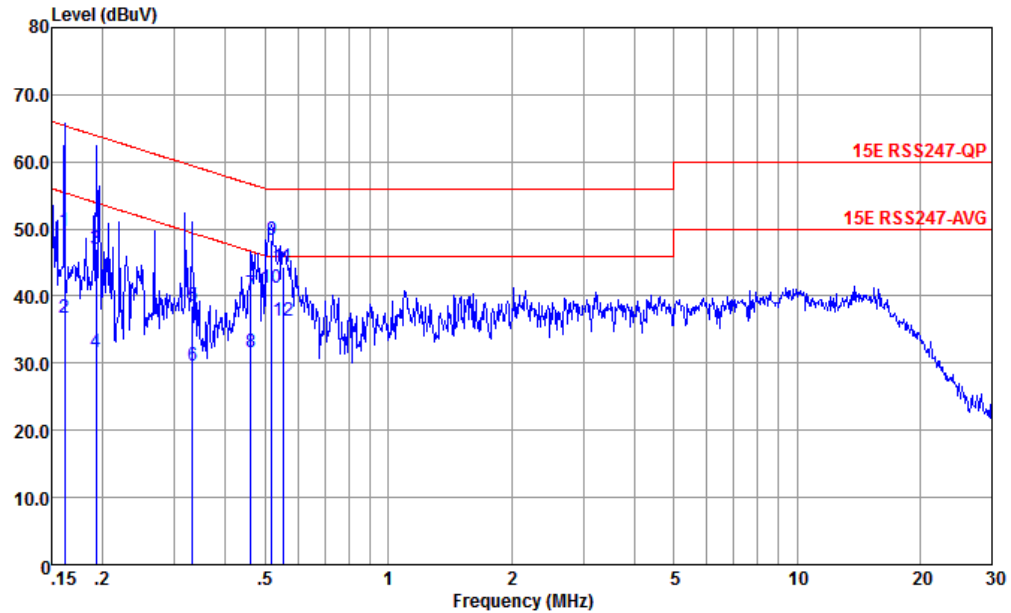


Appendix B. AC Conducted Emission Test Results





Test Engineer :	Amos Zhang	Temperature :	25.3~26.2°C
		Relative Humidity :	38~40%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Site : CO01-KS
Condition : 15E RSS247-QP LISN-060105-NEUTRAL NEUTRAL

	Freq	Level	Over	Limit	Read	LISN	Cable	Remark
	MHz	dBuV	Limit	Line	Level	Factor	Loss	
			dB	dBuV	dBuV	dB	dB	
1	0.162	49.66	-15.72	65.38	39.19	0.04	10.43	QP
2	0.162	36.66	-18.72	55.38	26.19	0.04	10.43	Average
3	0.192	47.07	-16.86	63.93	36.60	0.05	10.42	QP
4	0.192	31.67	-22.26	53.93	21.20	0.05	10.42	Average
5	0.332	38.48	-20.92	59.40	28.21	-0.06	10.33	QP
6	0.332	29.58	-19.82	49.40	19.31	-0.06	10.33	Average
7	0.461	40.37	-16.30	56.67	30.21	-0.08	10.24	QP
8	0.461	31.67	-15.00	46.67	21.51	-0.08	10.24	Average
9	0.518	48.42	-7.58	56.00	38.30	-0.08	10.20	QP
10 *	0.518	41.22	-4.78	46.00	31.10	-0.08	10.20	Average
11	0.552	44.31	-11.69	56.00	34.19	-0.08	10.20	QP
12	0.552	36.31	-9.69	46.00	26.19	-0.08	10.20	Average

Note:

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



Appendix C. Radiated Spurious Emission

Band 4 - 5725~5850MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Margin	Limit Line	Read Level	Antenna Factor	Path Loss	Preampl Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
0		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 149 5745MHz		5633.2	50.86	-17.44	68.3	41.19	34.69	8.36	33.38	100	32	P	H
		5696	51.51	-50.75	102.26	41.53	34.83	8.51	33.36	100	32	P	H
		5718.4	53.34	-57.01	110.35	43.16	34.88	8.65	33.35	100	32	P	H
		5724.4	56.62	-64.21	120.83	46.43	34.89	8.65	33.35	100	32	P	H
	*	5745	104.36	-	-	93.97	34.94	8.8	33.35	100	32	P	H
		5745	98.26	-	-	87.87	34.94	8.8	33.35	100	32	A	H
		5636.4	56.84	-11.46	68.3	47.15	34.7	8.36	33.37	264	162	P	V
		5689.6	58.41	-39.14	97.55	48.44	34.82	8.51	33.36	264	162	P	V
		5719.2	60.65	-49.93	110.58	50.47	34.88	8.65	33.35	264	162	P	V
		5723.8	61.07	-58.39	119.46	50.88	34.89	8.65	33.35	264	162	P	V
	*	5745	113.11	-	-	102.72	34.94	8.8	33.35	264	162	P	V
		5745	106.94	-	-	96.55	34.94	8.8	33.35	264	162	A	V



WIFI Ant. 0	Note	Frequency (MHz)	Level (dBμV/m)	Margin (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	*	5825	102.83	-	-	92.15	35.12	8.89	33.33	100	30	P	H
		5825	96.89	-	-	86.21	35.12	8.89	33.33	100	30	A	H
		5852.6	54.02	-62.25	116.27	43.28	35.18	8.89	33.33	100	30	P	H
		5858.4	51.97	-57.88	109.85	41.26	35.19	8.85	33.33	100	30	P	H
		5919.2	51.4	-21.08	72.48	40.6	35.32	8.8	33.32	100	30	P	H
		5939.4	52.3	-16	68.3	41.48	35.37	8.76	33.31	100	30	P	H
	*	5825	110.83	-	-	100.15	35.12	8.89	33.33	228	172	P	V
		5825	103.78	-	-	93.1	35.12	8.89	33.33	228	172	A	V
		5853.4	59.66	-54.79	114.45	48.92	35.18	8.89	33.33	228	172	P	V
		5857.6	60.5	-49.57	110.07	49.79	35.19	8.85	33.33	228	172	P	V
		5889.4	56.93	-37.58	94.51	46.15	35.26	8.85	33.33	228	172	P	V
		5931	54.33	-13.97	68.3	43.49	35.35	8.8	33.31	228	172	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 0	Note	Frequency (MHz)	Level (dBμV/m)	Margin (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		11490	54.25	-19.75	74	57.11	39.4	11.45	53.71	181	113	P	H
		11490	49.45	-4.55	54	52.31	39.4	11.45	53.71	181	113	A	H
		17235	50.3	-18	68.3	47.15	42.35	13.17	52.37	-	-	P	H
		11490	57.02	-16.98	74	59.88	39.4	11.45	53.71	160	360	P	V
		11490	50.35	-3.65	54	53.21	39.4	11.45	53.71	160	360	A	V
		17235	50.64	-17.66	68.3	47.49	42.35	13.17	52.37	-	-	P	V
802.11a CH 157 5785MHz		11570	54.61	-19.39	74	57.27	39.5	11.49	53.65	201	26	P	H
		11570	48.56	-5.44	54	51.22	39.5	11.49	53.65	201	26	A	H
		17355	52.82	-15.48	68.3	49.74	42.33	13.2	52.45	-	-	P	H
		11570	57.86	-16.14	74	60.52	39.5	11.49	53.65	400	6	P	V
		11570	50.73	-3.27	54	53.39	39.5	11.49	53.65	400	6	A	V
		17355	51.21	-17.09	68.3	48.13	42.33	13.2	52.45	-	-	P	V
802.11a CH 165 5825MHz		11650	57.64	-16.36	74	60.11	39.61	11.53	53.61	201	32	P	H
		11650	49.84	-4.16	54	52.31	39.61	11.53	53.61	201	32	A	H
		17475	53.1	-15.2	68.3	50.1	42.31	13.22	52.53	-	-	P	H
		11650	58.54	-15.46	74	61.01	39.61	11.53	53.61	400	358	P	V
		11650	50.87	-3.13	54	53.34	39.61	11.53	53.61	400	358	A	V
		17475	52.68	-15.62	68.3	49.68	42.31	13.22	52.53	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 0+1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (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 149 5745MHz		5648.4	48.86	-19.44	68.3	39.14	34.73	8.36	33.37	100	30	P	H
		5698.2	48.92	-54.96	103.88	38.93	34.84	8.51	33.36	100	30	P	H
		5716.8	50.64	-59.27	109.91	40.46	34.88	8.65	33.35	100	30	P	H
		5724.6	50.99	-70.3	121.29	40.8	34.89	8.65	33.35	100	30	P	H
	*	5745	100.31	-	-	89.92	34.94	8.8	33.35	100	30	P	H
		5745	94.26	-	-	83.87	34.94	8.8	33.35	100	30	A	H
		5614.4	51.91	-16.39	68.3	42.42	34.65	8.22	33.38	252	161	P	V
		5691.4	53.82	-45.06	98.88	43.85	34.82	8.51	33.36	252	161	P	V
		5710.6	56.03	-52.14	108.17	45.88	34.86	8.65	33.36	252	161	P	V
		5724.2	58.25	-62.13	120.38	48.06	34.89	8.65	33.35	252	161	P	V
	*	5745	110.19	-	-	99.8	34.94	8.8	33.35	252	161	P	V
		5745	103.94	-	-	93.55	34.94	8.8	33.35	252	161	A	V



WIFI Ant. 0+1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (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 165 5825MHz	*	5825	100.49	-	-	89.81	35.12	8.89	33.33	105	29	P	H
		5825	94.22	-	-	83.54	35.12	8.89	33.33	105	29	A	H
		5852.6	51.22	-65.05	116.27	40.48	35.18	8.89	33.33	105	29	P	H
		5865.4	51.49	-56.4	107.89	40.77	35.2	8.85	33.33	105	29	P	H
		5911.2	50.83	-27.55	78.38	40.05	35.3	8.8	33.32	105	29	P	H
		5930.2	50	-18.3	68.3	39.16	35.35	8.8	33.31	105	29	P	H
	*	5825	111.29	-	-	100.61	35.12	8.89	33.33	221	163	P	V
		5825	105.22	-	-	94.54	35.12	8.89	33.33	221	163	A	V
		5850.2	59.62	-62.12	121.74	48.89	35.17	8.89	33.33	221	163	P	V
		5856.2	59.5	-50.96	110.46	48.8	35.18	8.85	33.33	221	163	P	V
		5897.6	56.23	-32.21	88.44	45.48	35.27	8.8	33.32	221	163	P	V
		5938.8	55.08	-13.22	68.3	44.26	35.37	8.76	33.31	221	163	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 0+1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (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 149 5745MHz		11490	54.85	-19.15	74	57.71	39.4	11.45	53.71	256	36	P	H
		11490	47.27	-6.73	54	50.13	39.4	11.45	53.71	256	36	A	H
		17235	52.55	-15.75	68.3	49.4	42.35	13.17	52.37	-	-	P	H
		11490	56.89	-17.11	74	59.75	39.4	11.45	53.71	400	357	P	V
		11490	48.51	-5.49	54	51.37	39.4	11.45	53.71	400	357	A	V
		17235	52.27	-16.03	68.3	49.12	42.35	13.17	52.37	-	-	P	V
802.11n HT20 CH 157 5785MHz		11570	53.69	-20.31	74	56.35	39.5	11.49	53.65	201	29	P	H
		11570	48.35	-5.65	54	51.01	39.5	11.49	53.65	201	29	A	H
		17355	52.1	-16.2	68.3	49.02	42.33	13.2	52.45	-	-	P	H
		11570	57.56	-16.44	74	60.22	39.5	11.49	53.65	400	6	P	V
		11570	50.53	-3.47	54	53.19	39.5	11.49	53.65	400	6	A	V
		17355	51.31	-16.99	68.3	48.23	42.33	13.2	52.45	-	-	P	V
802.11n HT20 CH 165 5825MHz		11650	55.62	-18.38	74	58.09	39.61	11.53	53.61	296	36	P	H
		11650	48.48	-5.52	54	50.95	39.61	11.53	53.61	296	36	A	H
		17475	52.2	-16.1	68.3	49.2	42.31	13.22	52.53	-	-	P	H
		11650	58.75	-15.25	74	61.22	39.61	11.53	53.61	393	6	P	V
		11650	50.97	-3.03	54	53.44	39.61	11.53	53.61	393	6	A	V
		17475	52.44	-15.86	68.3	49.44	42.31	13.22	52.53	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 0+1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (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 151 5755MHz		5635.6	48.87	-19.43	68.3	39.18	34.7	8.36	33.37	100	28	P	H
		5698.6	49.01	-55.16	104.17	39.02	34.84	8.51	33.36	100	28	P	H
		5718.6	51.87	-58.54	110.41	41.69	34.88	8.65	33.35	100	28	P	H
		5724.8	50.95	-70.79	121.74	40.76	34.89	8.65	33.35	100	28	P	H
	*	5755	97.04	-	-	86.63	34.96	8.8	33.35	100	28	P	H
		5755	90.96	-	-	80.55	34.96	8.8	33.35	100	28	A	H
		5854.2	48.61	-64.01	112.62	37.87	35.18	8.89	33.33	100	28	P	H
		5860	49.71	-59.69	109.4	39	35.19	8.85	33.33	100	28	P	H
		5904.4	49.65	-33.76	83.41	38.88	35.29	8.8	33.32	100	28	P	H
		5930.2	50.16	-18.14	68.3	39.32	35.35	8.8	33.31	100	28	P	H
		5636.4	52.41	-15.89	68.3	42.72	34.7	8.36	33.37	221	169	P	V
		5698.2	55.91	-47.97	103.88	45.92	34.84	8.51	33.36	221	169	P	V
		5718.2	59.94	-50.36	110.3	49.76	34.88	8.65	33.35	221	169	P	V
		5722.4	62.57	-53.7	116.27	52.38	34.89	8.65	33.35	221	169	P	V
	*	5755	108.41	-	-	98	34.96	8.8	33.35	221	169	P	V
		5755	102.27	-	-	91.86	34.96	8.8	33.35	221	169	A	V
		5854.6	51.61	-60.1	111.71	40.87	35.18	8.89	33.33	221	169	P	V
		5865	51.52	-56.48	108	40.8	35.2	8.85	33.33	221	169	P	V
		5903.8	51.54	-32.31	83.85	40.77	35.29	8.8	33.32	221	169	P	V
		5947.8	51.76	-16.54	68.3	40.92	35.39	8.76	33.31	221	169	P	V



WIFI Ant. 0+1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (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 159 5795MHz		5636	49.28	-19.02	68.3	39.59	34.7	8.36	33.37	100	29	P	H
		5690.2	48.88	-49.11	97.99	38.91	34.82	8.51	33.36	100	29	P	H
		5710.8	49.11	-59.12	108.23	38.96	34.86	8.65	33.36	100	29	P	H
		5725	48.95	-73.25	122.2	38.75	34.9	8.65	33.35	100	29	P	H
	*	5795	97.01	-	-	86.36	35.05	8.94	33.34	100	29	P	H
		5795	90.87	-	-	80.22	35.05	8.94	33.34	100	29	A	H
		5851.2	49.51	-69.95	119.46	38.78	35.17	8.89	33.33	100	29	P	H
		5871.2	50.13	-56.13	106.26	39.39	35.22	8.85	33.33	100	29	P	H
		5913.8	50.25	-26.21	76.46	39.46	35.31	8.8	33.32	100	29	P	H
		5947	49.44	-18.86	68.3	38.61	35.38	8.76	33.31	100	29	P	H
		5648.8	51.21	-17.09	68.3	41.49	34.73	8.36	33.37	245	174	P	V
		5691	52.25	-46.33	98.58	42.28	34.82	8.51	33.36	245	174	P	V
		5710.6	52.61	-55.56	108.17	42.46	34.86	8.65	33.36	245	174	P	V
		5723.4	52.02	-66.53	118.55	41.83	34.89	8.65	33.35	245	174	P	V
	*	5795	108.78	-	-	98.13	35.05	8.94	33.34	245	174	P	V
		5795	102.87	-	-	92.22	35.05	8.94	33.34	245	174	A	V
		5852.6	54.19	-62.08	116.27	43.45	35.18	8.89	33.33	245	174	P	V
		5872.2	53.09	-52.89	105.98	42.35	35.22	8.85	33.33	245	174	P	V
		5905.4	52.99	-29.68	82.67	42.22	35.29	8.8	33.32	245	174	P	V
		5939.8	52.01	-16.29	68.3	41.19	35.37	8.76	33.31	245	174	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 0+1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (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 151 5755MHz		11510	52.17	-21.83	74	55	39.41	11.45	53.69	217	110	P	H
		11510	43.99	-10.01	54	46.82	39.41	11.45	53.69	217	110	A	H
		17265	49.39	-18.91	68.3	46.25	42.35	13.18	52.39	-	-	P	H
		11510	55.17	-18.83	74	58	39.41	11.45	53.69	200	341	P	V
		11510	47.17	-6.83	54	50	39.41	11.45	53.69	200	341	A	V
		17265	50.41	-17.89	68.3	47.27	42.35	13.18	52.39	-	-	P	V
802.11n HT40 CH 159 5795MHz		11590	47.92	-26.08	74	50.52	39.53	11.51	53.64	-	-	P	H
		17385	50.26	-18.04	68.3	47.21	42.32	13.2	52.47	-	-	P	H
		11590	58.39	-15.61	74	60.99	39.53	11.51	53.64	186	343	P	V
		11590	49.62	-4.38	54	52.22	39.53	11.51	53.64	186	343	A	V
		17385	50.08	-18.22	68.3	47.03	42.32	13.2	52.47	-	-		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. 0+1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (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		5649.2	48.28	-20.02	68.3	38.56	34.73	8.36	33.37	100	30	P	H
		5670.4	49.76	-33.63	83.39	39.85	34.77	8.51	33.37	100	30	P	H
		5718.8	51.94	-58.52	110.46	41.76	34.88	8.65	33.35	100	30	P	H
		5723.2	53.84	-64.26	118.1	43.65	34.89	8.65	33.35	100	30	P	H
	*	5775	93.23	-	-	82.77	35.01	8.8	33.35	100	30	P	H
		5775	87.01	-	-	76.55	35.01	8.8	33.35	100	30	A	H
		5851.8	50.88	-67.22	118.1	40.15	35.17	8.89	33.33	100	30	P	H
		5869.8	50.31	-56.34	106.65	39.58	35.21	8.85	33.33	100	30	P	H
		5885.4	51.31	-46.17	97.48	40.54	35.25	8.85	33.33	100	30	P	H
		5949.4	49.45	-18.85	68.3	38.61	35.39	8.76	33.31	100	30	P	H
		5643.6	51.39	-16.91	68.3	41.68	34.72	8.36	33.37	209	165	P	V
		5698.6	55.91	-48.26	104.17	45.92	34.84	8.51	33.36	209	165	P	V
		5715.6	59.06	-50.51	109.57	48.89	34.87	8.65	33.35	209	165	P	V
		5722.6	59.89	-56.84	116.73	49.7	34.89	8.65	33.35	209	165	P	V
	*	5775	102.84	-	-	92.38	35.01	8.8	33.35	209	165	P	V
		5775	96.72	-	-	86.26	35.01	8.8	33.35	209	165	A	V
		5854.8	55.16	-56.1	111.26	44.42	35.18	8.89	33.33	209	165	P	V
		5869	53.89	-52.99	106.88	43.16	35.21	8.85	33.33	209	165	P	V
		5899.6	52.84	-34.12	86.96	42.08	35.28	8.8	33.32	209	165	P	V
		5943.8	51.42	-16.88	68.3	40.59	35.38	8.76	33.31	209	165	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 (Harmonic @ 3m)**

WIFI Ant. 0+1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (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		11550	48.43	-25.57	74	51.13	39.47	11.49	53.66	-	-	P	H
VHT80		17325	50.07	-18.23	68.3	46.97	42.33	13.2	52.43	-	-	P	H
CH 155		11550	49.64	-24.36	74	52.34	39.47	11.49	53.66	-	-	P	V
5775MHz		17325	50.06	-18.24	68.3	46.96	42.33	13.2	52.43	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 4 5725~5850MHz

Emission below 1GHz

WIFI 802.11a (LF @ 3m)

WIFI Ant. 0+1	Note	Frequency (MHz)	Level (dBμV/m)	Margin (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 LF		44.55	21.44	-18.56	40	35.18	19.61	1.6	34.95	-	-	P	H
		143.49	28.15	-15.35	43.5	42.14	18.43	2.29	34.71	-	-	P	H
		309.36	21.21	-24.79	46	33.23	19.33	3.25	34.6	-	-	P	H
		499.48	24.92	-21.08	46	32.69	23.35	3.38	34.5	-	-	P	H
		633.34	27.46	-18.54	46	32.15	26.2	3.64	34.53	-	-	P	H
		846.74	30.83	-15.17	46	32.01	28.74	4.38	34.3	-	-	P	H
		46.49	30.78	-9.22	40	44.51	19.62	1.61	34.96	-	-	P	V
		121.18	34.17	-9.33	43.5	50.14	16.63	2.16	34.76	-	-	P	V
		177.44	31.26	-12.24	43.5	46.14	17.34	2.48	34.7	-	-	P	V
		329.73	21.28	-24.72	46	32.75	19.78	3.35	34.6	-	-	P	V
		500.45	26.16	-19.84	46	33.92	23.36	3.38	34.5	-	-	P	V
		702.21	28.5	-17.5	46	32.04	27.12	3.74	34.4	-	-	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 Margin line.
P/A	Peak or Average
H/V	Horizontal or Vertical



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

WIFI	Note	Frequency	Level	Margin	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.					Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
0+1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
CH 01													
2412MHz		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

1. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB)
2. Level(dBμV/m) = Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
3. Margin (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. Margin (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. Margin (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. Radiated Spurious Emission Plots

Note symbol

-L	Low channel location
-R	High channel location



Band 4 - 5725~5850MHz
WIFI 802.11a (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
0	Horizontal	Fundamental
Peak	Date: 1 Level (dBm/Vm) Date: 2022-10-21 PEAK: 115.32 Site : 03CH03-S2 Condition : PEAK_BE(B4)_16-24 3m ANT3117_0557 HORIZONTAL Project : 293023 Mode : Mode 10 IMEI : 86463006663484 Plane : ANT 180 with Accessories GM PowerSetting 22	Date: 2 Level (dBm/Vm) Date: 2022-10-21 PEAK: 115.40 Site : 03CH03-S2 Condition : PEAK_BE(B4)_16-24 3m ANT3117_0557 HORIZONTAL Project : 293023 Mode : Mode 10 IMEI : 86463006663484 Plane : ANT 180 with Accessories GM PowerSetting 22



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
0	Vertical	Fundamental
Peak	Date: 3 Date: 2022-10-21 PEAK: 115.50 Site : 03CH03-SZ Condition : PEAK_BE(B4)_16-24 3m ANT3117_0057 VERTICAL Project : 293023 Mode : Mode 10 MEI : 86463000963484 Plane : ANT 150 with Accessories : GM PowerSetting 22	Date: 4 Date: 2022-10-21 PEAK: 115.407 Site : 03CH03-SZ Condition : PEAK_BE(B4)_16-24 3m ANT3117_0057 VERTICAL Project : 293023 Mode : Mode 10 MEI : 86463000963484 Plane : ANT 150 with Accessories : GM PowerSetting 22



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
0	Horizontal	Fundamental
Peak	Date: 2 Level (dBuV/m) Frequency (MHz) Site : 03CH03-SZ Condition : PEAK_BE(B4)_16-24 3m ANT3117_0057 HORIZONTAL Project : 293023 Mode : Mode 12 MEI : 86463000963484 Plane : ANT 150 with Accessories GM PowerSetting 1E	Date: 1 Level (dBuV/m) Frequency (MHz) Site : 03CH03-SZ Condition : PEAK_15.407 3m ANT3117_0057 HORIZONTAL Project : 293023 Mode : Mode 12 MEI : 86463000963484 Plane : ANT 150 with Accessories GM PowerSetting 1E



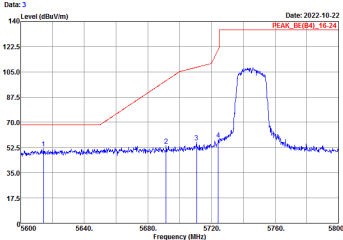
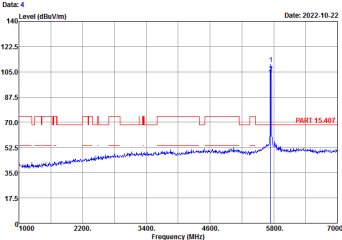
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
0	Vertical	Fundamental
Peak	Site : 03CH03-SZ Condition : PEAK_BE(B4)_16-24 3m ANT3117_0057 VERTICAL Project : 293023 Mode : Mode 12 MEI : 86463009683484 Plane : ANT 150 with Accessories : GM PowerSetting 1E	Site : 03CH03-SZ Condition : PEAK 15.407 3m ANT3117_0057 VERTICAL Project : 293023 Mode : Mode 12 MEI : 86463009683484 Plane : ANT 150 with Accessories : GM PowerSetting 1E



Band 4 5725~5850MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH149 5745MHz	
0+1	Horizontal	Fundamental
Peak	Date: 1 Level (dBuV/m) Date: 2022-10-22 PEAK: 116.24 Site : 03CH03-SZ Condition : PEAK (RES) 16-24 3m ANT3117_0057 HORIZONTAL Project : 293023 Mode : Mode 13 IMEI : 864630066663484 Plane : ANT 180 with Accessories MCS0 PowerSetting 20	Date: 2 Level (dBuV/m) Date: 2022-10-22 PEAK: 115.407 Site : 03CH03-SZ Condition : PEAK (RES) 16-24 3m ANT3117_0057 HORIZONTAL Project : 293023 Mode : Mode 13 IMEI : 864630066663484 Plane : ANT 180 with Accessories MCS0 PowerSetting 20

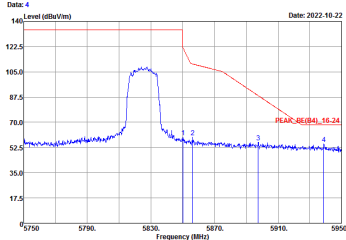
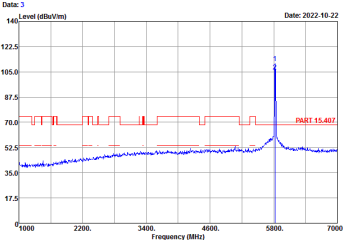


WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH149 5745MHz	
0+1	Vertical	Fundamental
Peak	Site : 03CH03-SZ Condition : PEAK_BE(B4)_16-24 3m ANT3117_0057 VERTICAL Project : 293023 Mode : Mode 13 MEI : 86463009693484 Plane : ANT 150 with Accessories MCS0 PowerSetting 20 	Site : 03CH03-SZ Condition : PART 15.407 3m ANT3117_0057 VERTICAL Project : 293023 Mode : Mode 13 MEI : 86463009693484 Plane : ANT 150 with Accessories MCS0 PowerSetting 20 



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH165 5825MHz	
0+1	Horizontal	Fundamental
Peak	Date: 2 Site : 03CH03-SZ Condition : PEAK_BE(B4)_16-24 3m ANT3117_0057 HORIZONTAL Project : 293023 Mode : Mode 15 MEI : 86463000963484 Plane : ANT 150 with Accessories MCS0 PowerSetting 20	Date: 1 Site : 03CH03-SZ Condition : PART 15.407 3m ANT3117_0057 HORIZONTAL Project : 293023 Mode : Mode 15 MEI : 86463000963484 Plane : ANT 150 with Accessories MCS0 PowerSetting 20



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH165 5825MHz	
0+1	Vertical	Fundamental
Peak	Site : 03CH03-SZ Condition : PEAK_BE(B4)_16-24 3m ANT3117_0057 VERTICAL Project : 293023 Mode : Mode 15 MEI : 86463009693484 Plane : ANT 150 with Accessories MCS0 PowerSetting 20 	Site : 03CH03-SZ Condition : PEAK 15.407 3m ANT3117_0057 VERTICAL Project : 293023 Mode : Mode 15 MEI : 86463009693484 Plane : ANT 150 with Accessories MCS0 PowerSetting 20 



Band 4 5725~5850MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH151 5755MHz	
0+1	Horizontal	Fundamental
Peak	Date: 1 Level (dBuV/m) Date: 2022-10-22 PEAK_BE(B4)_16-24 Site : 03CH03-SZ Condition : PEAK_BE(B4)_16-24 3m ANT3117_0057 HORIZONTAL Project : 293023 Mode : Mode 16 IMEI : 85463006663484 Plane : ANT 180 with Accessories MCSS PowerSetting 1E	Date: 2 Level (dBuV/m) Date: 2022-10-22 PEAK_BE(B4)_16-24 Site : 03CH03-SZ Condition : PEAK_BE(B4)_16-24 3m ANT3117_0057 HORIZONTAL Project : 293023 Mode : Mode 16 IMEI : 85463006663484 Plane : ANT 180 with Accessories MCSS PowerSetting 1E
Peak	Date: 3 Level (dBuV/m) Date: 2022-10-22 PEAK_BE(B4)_16-24 Site : 03CH03-SZ Condition : PEAK_BE(B4)_16-24 3m ANT3117_0057 HORIZONTAL Project : 293023 Mode : Mode 16 IMEI : 85463006663484 Plane : ANT 180 with Accessories MCSS PowerSetting 1E	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH151 5755MHz	
0+1	Vertical	Fundamental
Peak	Date: 4 Site : 03CH03-SZ Condition : PEAK_BE(B4)_16-24 3m ANT3117_0057 VERTICAL Project : 293023 Mode : Mode 16 IMEI : 86463006663484 Plane : ANT 150 with Accessories MCS0 PowerSetting 1E	Date: 5 Site : 03CH03-SZ Condition : PART 15.407 3m ANT3117_0057 VERTICAL Project : 293023 Mode : Mode 16 IMEI : 86463006663484 Plane : ANT 150 with Accessories MCS0 PowerSetting 1E
Peak	Date: 6 Site : 03CH03-SZ Condition : PEAK_BE(B4)_16-24 3m ANT3117_0057 VERTICAL Project : 293023 Mode : Mode 16 IMEI : 86463006663484 Plane : ANT 150 with Accessories MCS0 PowerSetting 1E	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH159 5795MHz	
0+1	Horizontal	Fundamental
Peak	Date: 1 Site : 03CH03-SZ Condition : PEAK_BE(B4)_16-24 3m ANT3117_0057 HORIZONTAL Project : 293023 Mode : Mode 17 IMEI : 86463006663484 Plane : ANT 150 with Accessories MCS0 PowerSetting 20	Date: 2 Site : 03CH03-SZ Condition : PEAK_BE(B4)_16-24 3m ANT3117_0057 HORIZONTAL Project : 293023 Mode : Mode 17 IMEI : 86463006663484 Plane : ANT 150 with Accessories MCS0 PowerSetting 20
Peak	Date: 3 Site : 03CH03-SZ Condition : PEAK_BE(B4)_16-24 3m ANT3117_0057 HORIZONTAL Project : 293023 Mode : Mode 17 IMEI : 86463006663484 Plane : ANT 150 with Accessories MCS0 PowerSetting 20	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH159 5795MHz	
0+1	Vertical	Fundamental
Peak	Date: 4 Site : 03CH03-SZ Condition : PEAK_BE(B4)_16-24 3m ANT3117_0557 VERTICAL Project : 293023 Mode : Mode 17 IMEI : 86463006653484 Plane : ANT 150 with Accessories MCS0 PowerSetting 20	Date: 5 Site : 03CH03-SZ Condition : PEAK_15.407 3m ANT3117_0557 VERTICAL Project : 293023 Mode : Mode 17 IMEI : 86463006653484 Plane : ANT 150 with Accessories MCS0 PowerSetting 20
Peak	Date: 6 Site : 03CH03-SZ Condition : PEAK_BE(B4)_16-24 3m ANT3117_0557 VERTICAL Project : 293023 Mode : Mode 17 IMEI : 86463006653484 Plane : ANT 150 with Accessories MCS0 PowerSetting 20	Left blank



Band 4 5725~5850MHz
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
0+1	Horizontal	Fundamental
Peak	Date: 1 Level (dBuV/m) 140 122.5 105.0 87.5 70.0 52.5 35.0 17.5 5600 5640 5680 5720 5760 5800 Frequency (MHz) Site : 03CH03-SZ Condition : PEAK_BE(B4)_16-24 3m ANT3117_0057 HORIZONTAL Project : 293023 Mode : Mode 18 IMEI : 854630066663484 Plane : ANT 180 with Accessories MCSS PowerSetting 1D Date: 2022-10-22 PEAK_BE(B4)_16-24	Date: 2 Level (dBuV/m) 140 122.5 105.0 87.5 70.0 52.5 35.0 17.5 1800 2200 3600 4600 5600 7000 Frequency (MHz) Site : 03CH03-SZ Condition : FUND 15-407 3m ANT3117_0057 HORIZONTAL Project : 293023 Mode : Mode 18 IMEI : 854630066663484 Plane : ANT 180 with Accessories MCSS PowerSetting 1D Date: 2022-10-22 FUND 15-407
Peak	Date: 3 Level (dBuV/m) 140 122.5 105.0 87.5 70.0 52.5 35.0 17.5 5750 5790 5830 5870 5910 5950 Frequency (MHz) Site : 03CH03-SZ Condition : PEAK_BE(B4)_16-24 3m ANT3117_0057 HORIZONTAL Project : 293023 Mode : Mode 18 IMEI : 854630066663484 Plane : ANT 180 with Accessories MCSS PowerSetting 1D Date: 2022-10-22 PEAK_BE(B4)_16-24	Left blank



WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
0+1	Vertical	Fundamental
Peak	Date: 4 Site : 03CH03-SZ Condition : PEAK_BE(B4)_16-24 3m ANT3117_0057 VERTICAL Project : 293023 Mode : Mode 18 IMEI : 86463009663484 Plane : ANT 150 with Accessories MCS0 PowerSetting 10	Date: 5 Site : 03CH03-SZ Condition : PART 15.407 3m ANT3117_0057 VERTICAL Project : 293023 Mode : Mode 18 IMEI : 86463009663484 Plane : ANT 150 with Accessories MCS0 PowerSetting 10
Peak	Date: 6 Site : 03CH03-SZ Condition : PEAK_BE(B4)_16-24 3m ANT3117_0057 VERTICAL Project : 293023 Mode : Mode 18 IMEI : 86463009663484 Plane : ANT 150 with Accessories MCS0 PowerSetting 10	Left blank



Band 4 - 5725~5850MHz
WIFI 802.11a (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH149 5745MHz	
0	Horizontal	Vertical
Peak Avg.	Date: 13 Site : 03CH03-S2 Condition : PART 15.407 3m ANT3117_0057 HORIZONTAL Project : 293023 Mode : Mode 10 IMEI : 86463006663484 Plane : ANT 180 with Accessories GM PowerSetting 22	Date: 14 Site : 03CH03-S2 Condition : PART 15.407 3m ANT3117_0057 VERTICAL Project : 293023 Mode : Mode 10 IMEI : 86463006663484 Plane : ANT 180 with Accessories GM PowerSetting 22



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH157 5785MHz	
0	Horizontal	Vertical
Peak Avg.	Date: 11 Level (dBuV/m) Frequency (MHz) Site : 03CH03-SZ Condition : PART 15.407 3m ANT3117_0057 HORIZONTAL Project : 293023 Mode : Mode 11 MEI : 86463000963484 Plane : ANT 150 with Accessories GM PowerSetting 21	Date: 12 Level (dBuV/m) Frequency (MHz) Site : 03CH03-SZ Condition : PART 15.407 3m ANT3117_0057 VERTICAL Project : 293023 Mode : Mode 11 MEI : 86463000963484 Plane : ANT 150 with Accessories GM PowerSetting 21



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH165 5825MHz	
0	Horizontal	Vertical
Peak Avg.	Date: 19 Level (dBu/Vm) Frequency (MHz) Site : 03CH03-SZ Condition : PART 15.407 3m ANT3117_0057 HORIZONTAL Project : 293023 Mode : Mode 12 MEI : 86463000963484 Plane : ANT 150 with Accessories GM PowerSetting 1E	Date: 20 Level (dBu/Vm) Frequency (MHz) Site : 03CH03-SZ Condition : PART 15.407 3m ANT3117_0057 VERTICAL Project : 293023 Mode : Mode 12 MEI : 86463000963484 Plane : ANT 150 with Accessories GM PowerSetting 1E



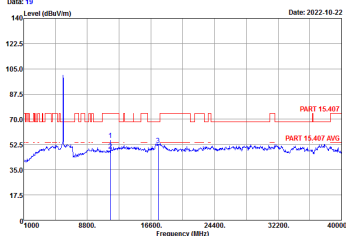
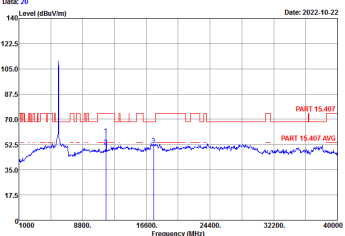
Band 4 5725~5850MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT20 CH149 5745MHz	
0+1	Horizontal	Vertical
Peak Avg.	Date: 13 Level (dBuV/m) Date: 2022.10.22 Site : 03CH03-SZ Condition : PART 15.407 3m ANT3117_0057 HORIZONTAL Project : 293023 Mode : Mode 13 IMEI : 864630066663484 Plane : ANT 180 with Accessories MCSD PowerSetting 20	Date: 14 Level (dBuV/m) Date: 2022.10.22 Site : 03CH03-SZ Condition : PART 15.407 3m ANT3117_0057 VERTICAL Project : 293023 Mode : Mode 13 IMEI : 864630066663484 Plane : ANT 180 with Accessories MCSD PowerSetting 20



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT20 CH157 5785MHz	
0+1	Horizontal	Vertical
Peak Avg.	Date: 7 Level (dBuV/m) Frequency (MHz) Site : 03CH03-SZ Condition : PART 15.407 3m ANT3117_0057 HORIZONTAL Project : 293023 Mode : Mode 14 MEI : 864630090963484 Plane : ANT 150 with Accessories MCS0 PowerSetting 20	Date: 8 Level (dBuV/m) Frequency (MHz) Site : 03CH03-SZ Condition : PART 15.407 3m ANT3117_0057 VERTICAL Project : 293023 Mode : Mode 14 MEI : 864630090963484 Plane : ANT 150 with Accessories MCS0 PowerSetting 20



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT20 CH165 5825MHz	
0+1	Horizontal	Vertical
Peak Avg.	Date: 19  Site : 03CH03-SZ Condition : PART 15.407 3m ANT3117_0057 HORIZONTAL Project : 293023 Mode : Mode 15 MEI : 86463000963484 Plane : ANT 150 with Accessories MCS0 PowerSetting 20	Date: 20  Site : 03CH03-SZ Condition : PART 15.407 3m ANT3117_0057 VERTICAL Project : 293023 Mode : Mode 15 MEI : 86463000963484 Plane : ANT 150 with Accessories MCS0 PowerSetting 20



Band 4 5725~5850MHz
WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT40 CH151 5755MHz	
0+1	Horizontal	Vertical
Peak Avg.	Date: 15 Level (dBuV/m) Date: 2022-10-22 Site : 03CH03-SZ Condition : PART 15.407 3m ANT3117_0057 HORIZONTAL Project : 293023 Mode : Mode 15 IMEI : 864630066663484 Plane : ANT 180 with Accessories MCSD PowerSetting IE	Date: 16 Level (dBuV/m) Date: 2022-10-22 Site : 03CH03-SZ Condition : PART 15.407 3m ANT3117_0057 VERTICAL Project : 293023 Mode : Mode 15 IMEI : 864630066663484 Plane : ANT 180 with Accessories MCSD PowerSetting IE



WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT40 CH159 5795MHz	
0+1	Horizontal	Vertical
Peak Avg.	Date: 15 Level (dBuV/m) Frequency (Hz) Site : 03CH03-SZ Condition : PART 15.407 3m ANT3117_0057 HORIZONTAL Project : 293023 Mode : Mode 17 MEI : 86463000963484 Plane : ANT 150 with Accessories MCS0 PowerSetting 20	Date: 16 Level (dBuV/m) Frequency (Hz) Site : 03CH03-SZ Condition : PART 15.407 3m ANT3117_0057 VERTICAL Project : 293023 Mode : Mode 17 MEI : 86463000963484 Plane : ANT 150 with Accessories MCS0 PowerSetting 20



Band 4 5725~5850MHz
WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
0+1	Horizontal	Vertical
Peak Avg.	Date: 15 Level (dBuV/m) Date: 2022.10.22 Site : 03CH03-SZ Condition : PART 15.407 3m ANT3117_0057 HORIZONTAL Project : 293023 Mode : Mode 10 IMEI : 864630066663484 Plane : ANT 100 with Accessories MCS0 PowerSetting ID	Date: 16 Level (dBuV/m) Date: 2022.10.22 Site : 03CH03-SZ Condition : PART 15.407 3m ANT3117_0057 VERTICAL Project : 293023 Mode : Mode 10 IMEI : 864630066663484 Plane : ANT 100 with Accessories MCS0 PowerSetting ID



Band 4 - 5725~5850MHz

Emission below 1GHz

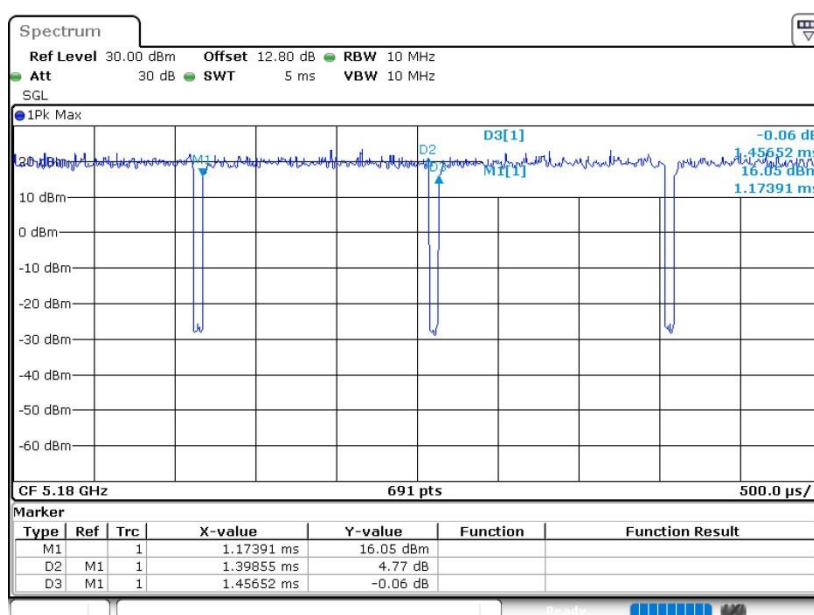
5GHz WIFI 802.11a (LF)

WIFI	5GHz WIFI	
ANT	802.11a LF	
0+1	Horizontal	Vertical
QP / Peak	Site : 03CH65-S2 Condition : FCC CLASS-B 3m VULB9168-01003 HORIZONTAL Project : 293023 Mode : Mode 21 MEI : 86463096663484 Plane : ANT 180 with Accessories GM PowerSetting 22	Site : 03CH65-S2 Condition : FCC CLASS-B 3m VULB9168-01003 VERTICAL Project : 293023 Mode : Mode 21 MEI : 86463096663484 Plane : ANT 180 with Accessories GM PowerSetting 22

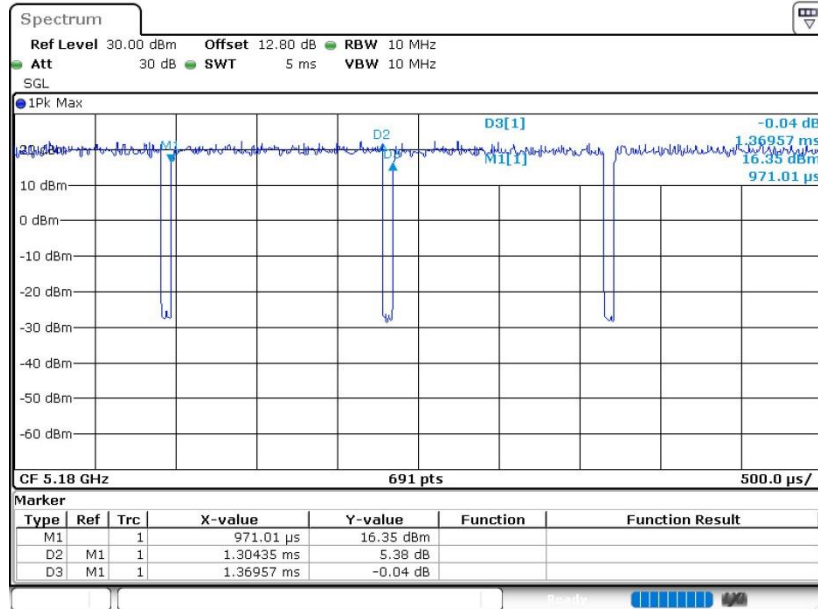
Appendix E. Duty Cycle Plots

Antenna	Band	Duty Cycle(%)	T(ms)	1/T(kHz)	VBW Setting
0	802.11a	96.02	1.399	0.715	1KHz
0+1	802.11n HT20	95.24	1.304	0.767	1KHz
0+1	802.11n HT40	90.80	0.644	1.554	3KHz
0+1	802.11ac VHT80	89.85	0.558	1.792	3KHz

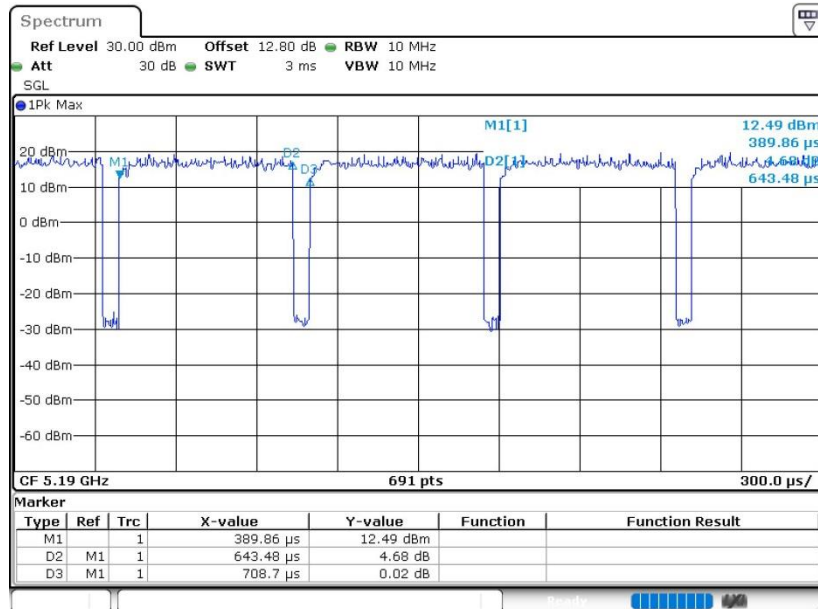
802.11a



802.11n HT20



802.11n HT40



802.11ac VHT80

