FCC RF Test Report

APPLICANT	:	MeiG Smart Technology Co., Ltd
EQUIPMENT	:	5G MIFI
BRAND NAME	:	MEIGLink
MODEL NAME	:	SRT873
FCC ID	:	2APJ4-SRT873
STANDARD	:	FCC Part 15 Subpart E §15.407
CLASSIFICATION	:	(NII) Unlicensed National Information Infrastructure
TEST DATE(S)	:	Jul. 04, 2021 ~ Nov. 19, 2021

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

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

Jason Jia

Reviewed by: Jason Jia / Supervisor

Alex wang

Approved by: Alex Wang / Manager

ACCREDITED
Cert #5145.02

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

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR133010B	Rev. 01	Initial issue of report	Nov. 19, 2021

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	≤ 30 dBm	Pass	-
3.3	15.407(a)	Power Spectral Density	≤ 17 dBm	Pass	-
3.4	15.407(b)	Unwanted Emissions	15.407(b) & 15.209(a)	Pass	Under limit 3.39 dB at 5149.920 MHz
3.5	15.207	AC Conducted Emission	15.207(a)	Pass	Under limit 12.11 dB at 0.168 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
Floor 2, Office Building No.5, Lingxia Road, Fenghuang Community, Fuyong Street, Bao 'an District, Shenzhen

1.2 Manufacturer

MeiG Smart Technology Co., Ltd
Floor 2, Office Building No.5, Lingxia Road, Fenghuang Community, Fuyong Street, Bao 'an District, Shenzhen

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	5G MIFI
Brand Name	MEIGLink
Model Name	SRT873
FCC ID	2APJ4-SRT873
HW Version	873_V1.01_PCB
SW Version	K873HSVL_6.0.01_EQ102
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
Maximum Output Power to Antenna	**<SISO Ant. 1>** 802.11a : 12.76 dBm / 0.0189 W **<SISO Ant. 2>** 802.11a : 13.10 dBm / 0.0204 W **<MIMO Ant.1+2>** **<5180 MHz ~ 5240 MHz>** 802.11n HT20 : 16.16 dBm / 0.0413 W 802.11n HT40 : 16.07 dBm / 0.0405 W 802.11ac VHT20 : 15.20 dBm / 0.0331 W 802.11ac VHT40 : 14.95 dBm / 0.0313 W 802.11ac VHT80 : 14.75 dBm / 0.0299 W 802.11ax HE20 : 13.19 dBm / 0.0208 W 802.11ax HE40 : 13.13 dBm / 0.0206 W 802.11ax HE80 : 13.16 dBm / 0.0207 W
99% Occupied Bandwidth	**<SISO Ant.1>** 802.11a : 16.88 MHz **<SISO Ant. 2>** 802.11a : 16.83 MHz **<MIMO Ant.1+2>** **<5180 MHz ~ 5240 MHz>** 802.11n HT20 : 17.93 MHz 802.11n HT40 : 36.16 MHz 802.11ac VHT80 : 75.40 MHz 802.11ax HE20 : 19.18 MHz 802.11ax HE40 : 37.86 MHz 802.11ax HE80 : 77.20 MHz
Antenna Type / Gain	**<5150 MHz ~ 5250 MHz>** <Ant. 1> : FPC Antenna with gain 3.6 dBi <Ant. 2> : FPC Antenna with gain 4.7 dBi
Type of Modulation	802.11a/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11ac/ax : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM / 1024QAM)
Antenna Function Description	<table><tr><td></td><td>Ant. 1</td><td>Ant. 2</td></tr><tr><td>802.11 a SISO</td><td>V</td><td>V</td></tr><tr><td>802.11 n/ac/ax MIMO</td><td colspan="2">V</td></tr></table>

Note: For 802.11n HT20 / ac VHT20 and 802.11n HT40 / ac VHT40 mode, the whole testing have assessed only 802.11n HT20/HT40 by referring to their maximum conducted power.

1.5 Modification of EUT

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

1.6 Testing Location

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

Test Firm	Sporton International (Kunshan) Inc.		
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158 FAX : +86-512-57900958		
Test Site No.	**Sporton Site No.**	**FCC Designation No.**	**FCC Test Firm Registration No.**
	CO01-KS 03CH05-KS TH01-KS	CN1257	314309

1.7 Test Software

Item	Site	Manufacturer	Name	Version
1.	03CH05-KS	AUDIX	E3	6.2009-8-24al
2.	CO01-KS	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 (X 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)
5150-5250 MHz U-NII-1	36	5180	44	5220
	38*	5190	46*	5230
	40	5200	48	5240
	42#	5210		

Note:

1. The above Frequency and Channel in "*" were 802.11n HT40, 802.11ac VHT40 and 802.11ax HE40.
2. The above Frequency and Channel in "#" were 802.11ac VHT80 and 802.11ax HE80.

2.2 Test Mode

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

Single Mode

Modulation	Data Rate
802.11a	6 Mbps

MIMO Mode

Modulation	Data Rate
802.11n HT20	MCS0
802.11n HT40	MCS0
802.11ac VHT80	MCS0
802.11ax HE20	MCS0
802.11ax HE40	MCS0
802.11ax HE80	MCS0

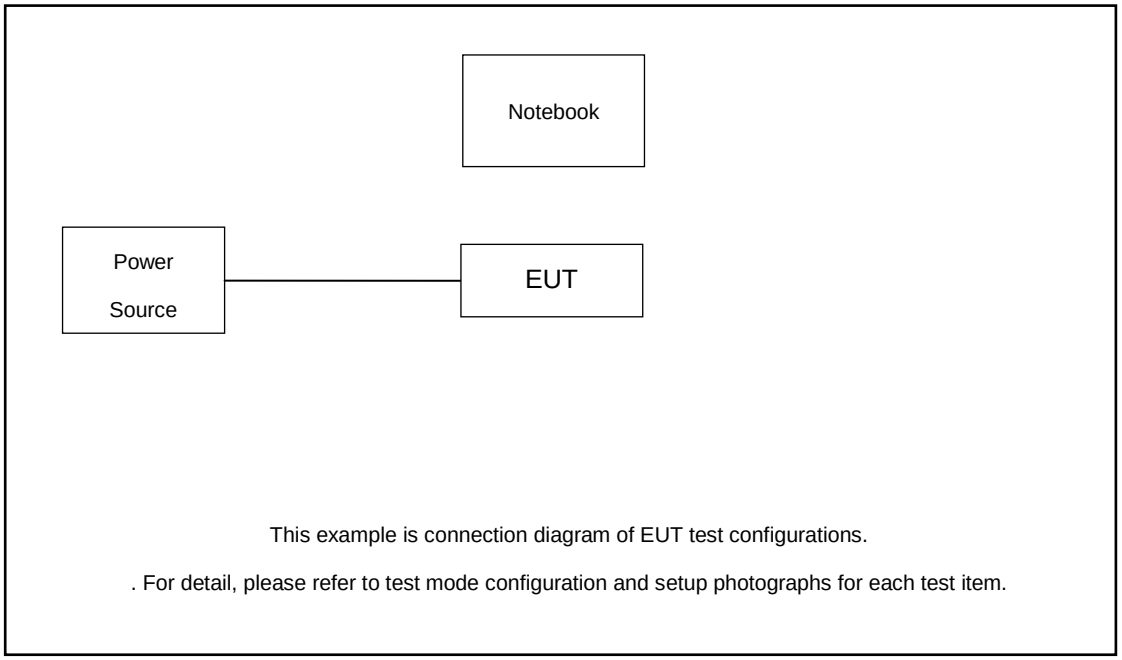
Test Cases	
AC Conducted Emission	Mode 1 : WLAN Link(5G) + USB Cable (Charging from Adapter)
Remark: For Radiated Test Cases, The tests were performance with Adapter and USB Cable.	

Ch. #		U-NII-1：5150-5250 MHz	U-NII-1：5150-5250 MHz	U-NII-1：5150-5250 MHz
		802.11a	802.11n HT20	802.11n HT40
L	Low	36	36	38
M	Middle	44	44	-
H	High	48	48	46

Ch. #		U-NII-1：5150-5250 MHz
		802.11ac VHT80
L	Low	-
M	Middle	42
H	High	-

Ch. #		U-NII-1：5150-5250 MHz	U-NII-1：5150-5250 MHz	U-NII-1：5150-5250 MHz
		802.11ax HE20	802.11ax HE40	802.11ax HE80
L	Low	36	38	-
M	Middle	44	-	42
H	High	48	46	-

2.3 Connection Diagram of Test System



2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Notebook	Lenovo	G480	QDS-BRCM1050I	N/A	AC I/P: Unshielded, 1.8 m DC O/P: Shielded, 1.8 m

2.5 EUT Operation Test Setup

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

For AC power line conducted emissions, the EUT was set to connect with the 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 between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

Example :

The spectrum analyzer offset is derived from RF cable loss.

Offset = RF cable loss.

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

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

= 7.2 (dB)

3 Test Result

3.1 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.

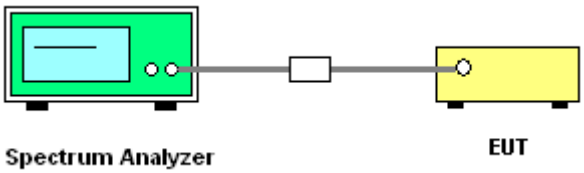
3.1.2 Measuring Instruments

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 1MHz and set the Video bandwidth (VBW) ≥ 3 * RBW.
8. Measure and record the results in the test report.

3.1.4 Test Setup

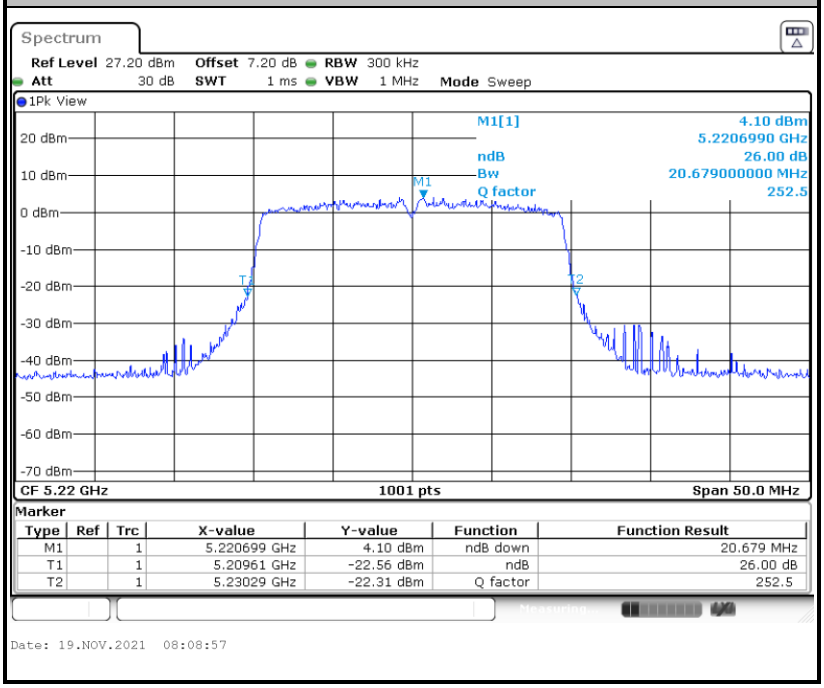


3.1.5 Test Result of 26dB & 99% Occupied Bandwidth

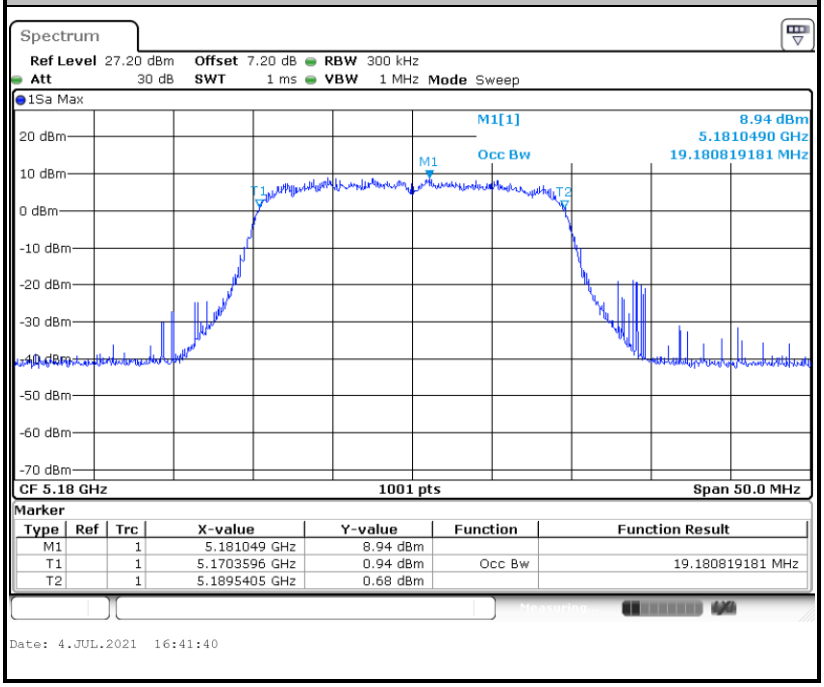
Please refer to Appendix A.

For 20MHz:

Maximum 26dB Bandwidth

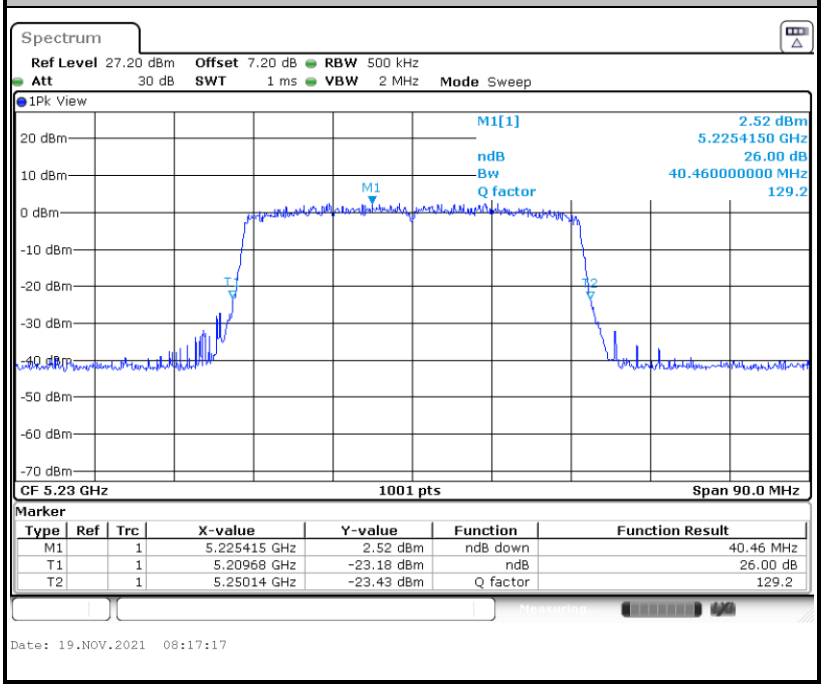


Maximum 99% Occupied Bandwidth

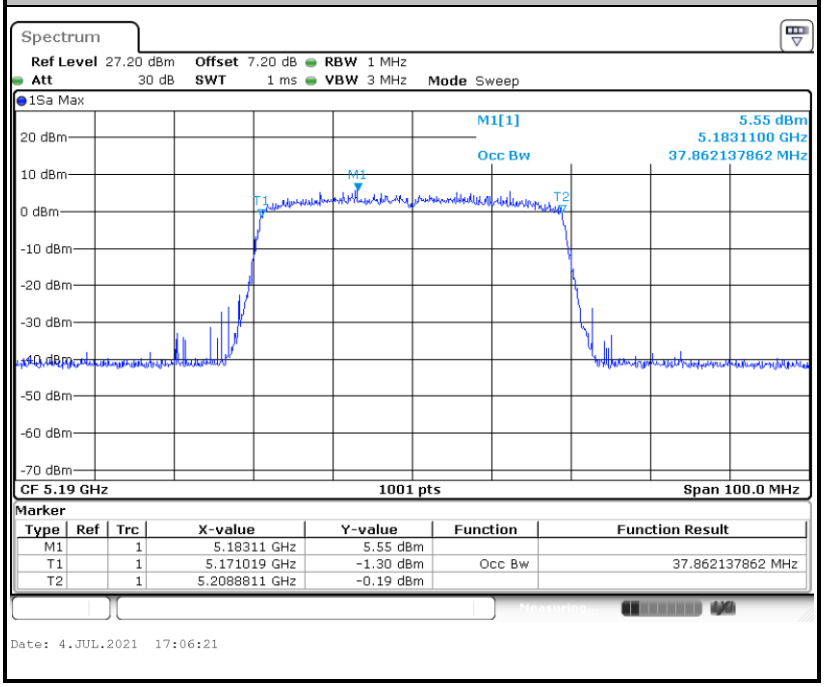


For 40MHz:

Maximum 26dB Bandwidth

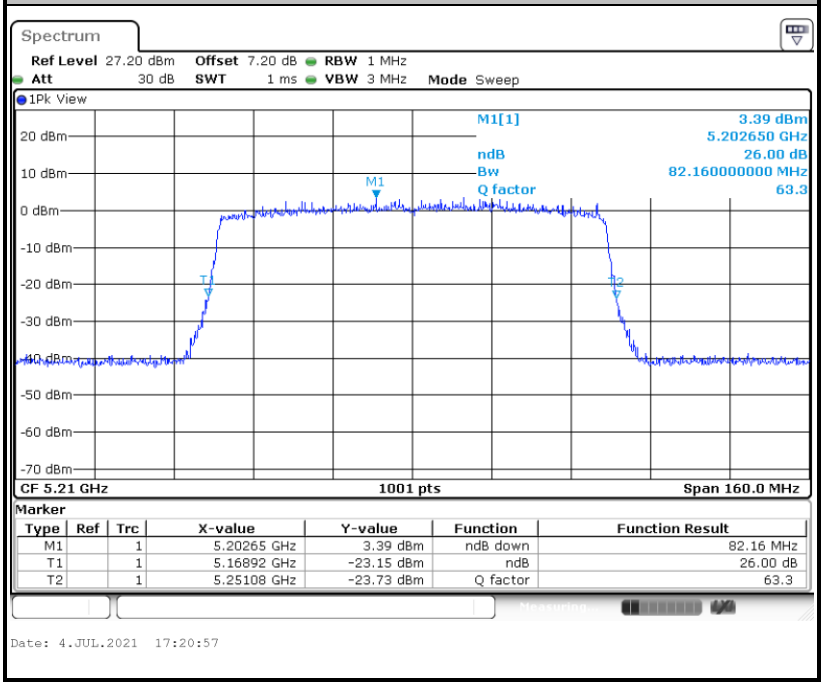


Maximum 99% Occupied Bandwidth

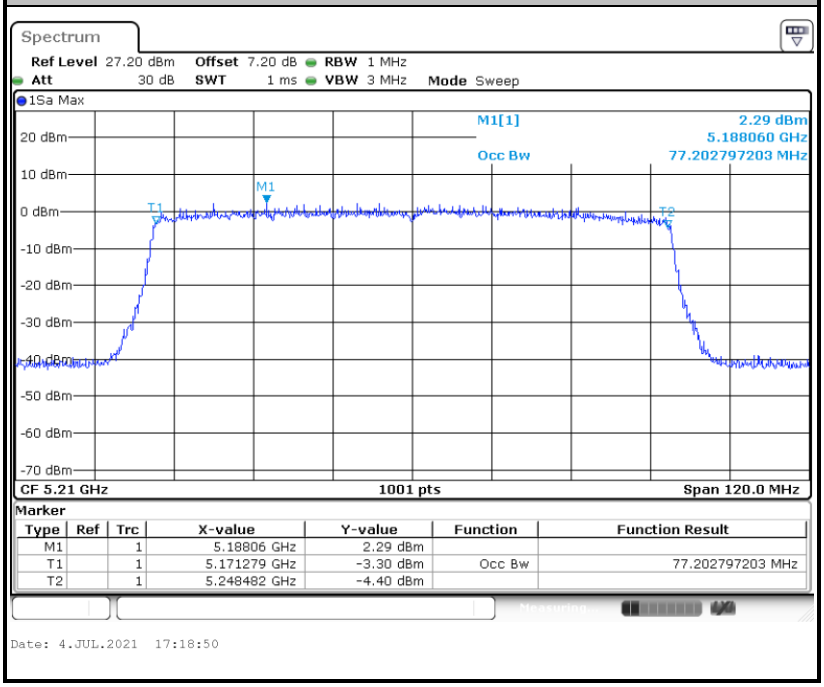


For 80MHz:

Maximum 26dB Bandwidth



Maximum 99% Occupied Bandwidth



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

3.2 Maximum Conducted Output Power Measurement

3.2.1 Limit of Maximum Conducted Output Power

<FCC 14-30 CFR 15.407>

For an access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W.

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

3.2.2 Measuring Instruments

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

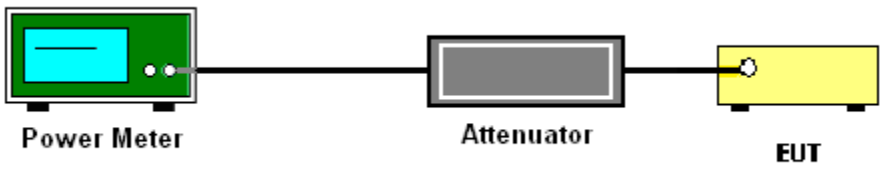
3.2.3 Test Procedures

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

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

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

3.2.4 Test Setup



3.2.5 Test Result of Maximum Conducted Output Power

Please refer to Appendix A.

3.3 Power Spectral Density Measurement

3.3.1 Limit of Power Spectral Density

<FCC 14-30 CFR 15.407>

For an access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 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.

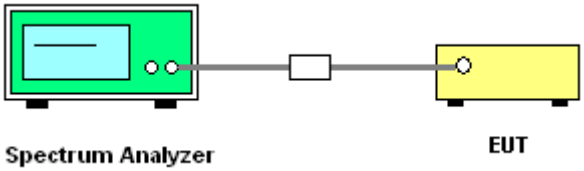
 # Method SA-2 #

(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. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

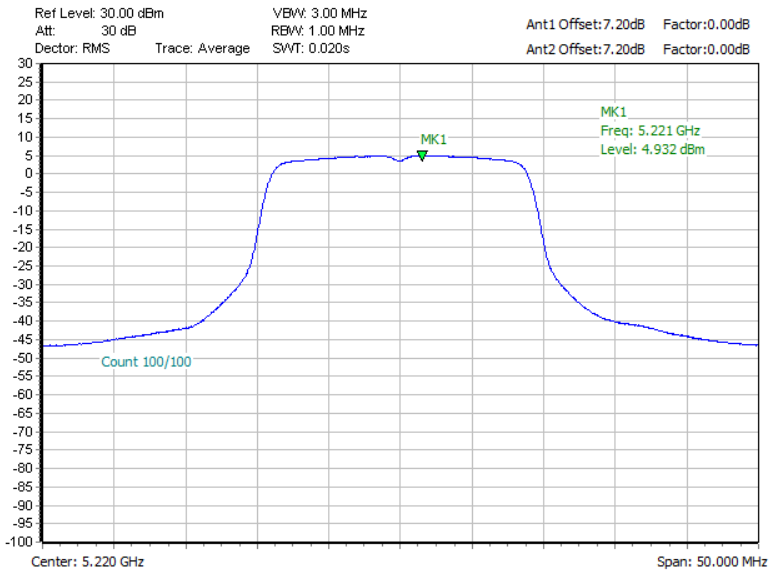
3.3.4 Test Setup



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.

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

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

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

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

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

where

EIRP is the equivalent isotropically radiated power, in dBm

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

d_{Meas} is the measurement distance, in m

3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section G) Unwanted emissions measurement.

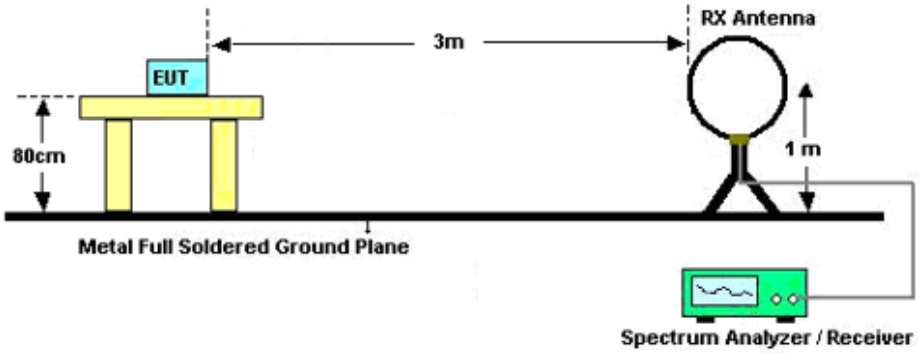
   (1) Procedure for Unwanted Emissions Measurements Below 1000MHz
   - RBW = 120 kHz
   - VBW = 300 kHz
   - Detector = Peak
   - Trace mode = max hold

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

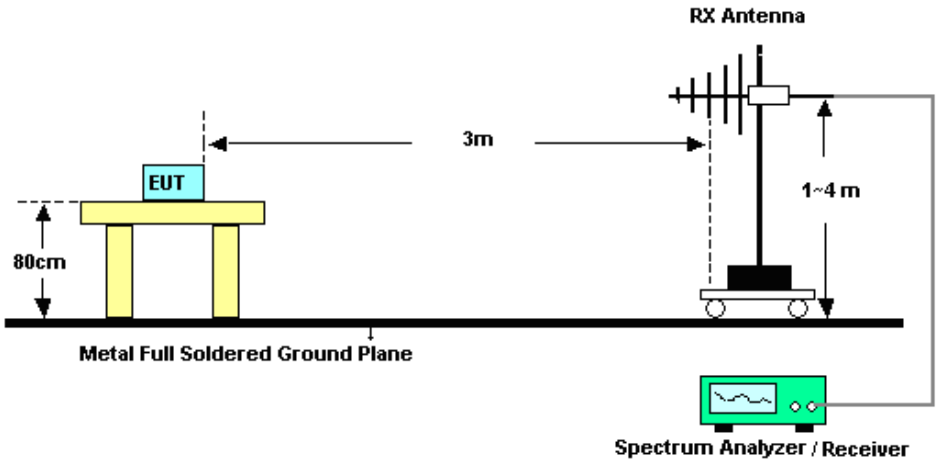
   (3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz
   - RBW = 1 MHz
   - VBW = 10 Hz, when duty cycle is no less than 98 percent.
   - VBW ≥ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting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

3.4.4 Test Setup

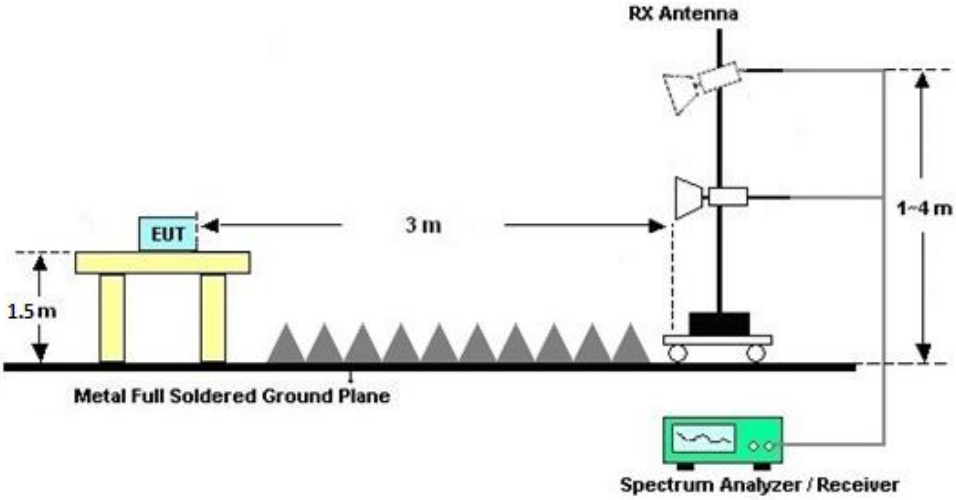
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



3.4.5 Test Results of Radiated 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.

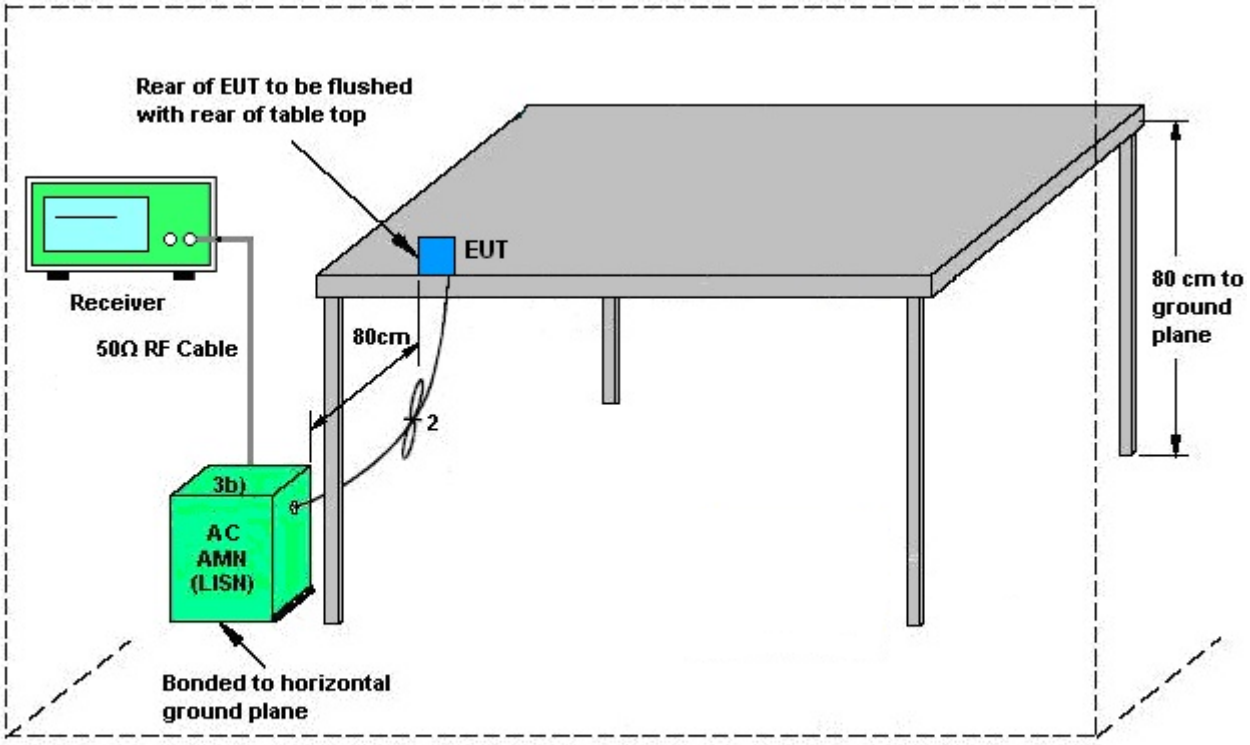
3.5.2 Measuring Instruments

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



AMN = Artificial mains network (LISN)
AE = Associated equipment
EUT = Equipment under test
ISN = Impedance stabilization network

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 = GANT + 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 GANT 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>

	Ant. 1 (dBi)	Ant. 2 (dBi)	DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
Band I	3.60	4.70	4.70	7.18	0.00	1.18

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

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

4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101040	10Hz~40GHz	Nov. 01, 2020	Jul. 04, 2021~ Nov. 19, 2021	Oct. 31, 2021	Conducted (TH01-KS)
Spectrum Analyzer	R&S	FSV40	101040	10Hz~40GHz	Oct. 31, 2021		Oct. 30, 2022	Conducted (TH01-KS)
Pulse Power Senor	Anritsu	MA2411B	0917070	300MHz~40GHz	Jan. 07, 2021	Jul. 04, 2021~ Nov. 19, 2021	Jan. 06, 2022	Conducted (TH01-KS)
Power Meter	Anritsu	ML2495A	1005002	50MHz Bandwidth	Jan. 07, 2021	Jul. 04, 2021~ Nov. 19, 2021	Jan. 06, 2022	Conducted (TH01-KS)
EMI Test Receiver	Keysight	N9038A	MY56400004	3Hz~8.5GHz;Max 30dBm	Oct. 17, 2020	Jul. 22, 2021	Oct. 16, 2021	Radiation (03CH05-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55150244	10Hz-44G,MAX 30dB	Apr. 13, 2021	Jul. 22, 2021	Apr. 12, 2022	Radiation (03CH05-KS)
Loop Antenna	R&S	HFH2-Z2	100321	9kHz~30MHz	Nov. 01, 2020	Jul. 22, 2021	Oct. 31, 2021	Radiation (03CH05-KS)
Bilog Antenna	TeseQ	CBL6111D	49922	30MHz-1GHz	Jun. 04 ,2021	Jul. 22, 2021	Jun. 03, 2022	Radiation (03CH05-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00218652	1GHz~18GHz	Apr. 24, 2021	Jul. 22, 2021	Apr. 23, 2022	Radiation (03CH05-KS)
SHF-EHF Horn	Com-power	AH-840	101115	18GHz~40GHz	Nov. 10, 2020	Jul. 22, 2021	Nov. 09, 2021	Radiation (03CH05-KS)
Amplifier	SONOMA	310N	187289	9KHz-1GHz	Apr. 12, 2021	Jul. 22, 2021	Apr. 11, 2022	Radiation (03CH05-KS)
Amplifier	MITEQ	EM18G40GGA	060728	18~40GHz	Jan. 07, 2021	Jul. 22, 2021	Jan. 06, 2022	Radiation (03CH05-KS)
high gain Amplifier	MITEQ	AMF-7D-00101800-30-10P	2012228	1Ghz-18Ghz	Oct. 17, 2020	Jul. 22, 2021	Oct. 16, 2021	Radiation (03CH05-KS)
Amplifier	Keysight	83017A	MY53270316	500MHz~26.5GHz	Oct. 17, 2020	Jul. 22, 2021	Oct. 16, 2021	Radiation (03CH05-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Jul. 22, 2021	NCR	Radiation (03CH05-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Jul. 22, 2021	NCR	Radiation (03CH05-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Jul. 22, 2021	NCR	Radiation (03CH05-KS)
EMI Receiver	R&S	ESCI7	100768	9kHz~7GHz;	Apr. 21, 2021	Jul. 11, 2021	Apr. 20, 2022	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060103	9kHz~30MHz	Oct. 17, 2020	Jul. 11, 2021	Oct. 16, 2021	Conduction (CO01-KS)
AC LISN	R&S	ENV216	100334	9kHz~30MHz	Oct. 17, 2020	Jul. 11, 2021	Oct. 16, 2021	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP000000811	AC 0V~300V, 45Hz~1000Hz	Oct. 17, 2020	Jul. 11, 2021	Oct. 16, 2021	Conduction (CO01-KS)

NCR: No Calibration Required.

5 Uncertainty of Evaluation

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

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**2.9dB**

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

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

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

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

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

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

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

Appendix A. Conducted Test Results

Report Number : FR133010B

Test Engineer:	Albert Shi	Temperature:	21~25	°C
Test Date:	2021/7/4~2021/11/19	Relative Humidity:	51~54	%

TEST RESULTS DATA
26dB and 99% OBW

Band I														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)			Note
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	36	5180	16.73	16.73	18.88	18.68	-		22.23	22.23		
11a	6Mbps	1	44	5220	16.78	16.78	19.03	18.73	-		22.25	22.25		
11a	6Mbps	1	48	5240	16.88	16.83	19.03	18.78	-		22.27	22.26		
HT20	MCS0	2	36	5180	17.88	17.93	20.08	19.73	-		22.52			
HT20	MCS0	2	44	5220	17.88	17.88	20.08	20.08	-		22.52			
HT20	MCS0	2	48	5240	17.93	17.88	20.08	19.88	-		22.52			
HT40	MCS0	2	38	5190	36.16	36.06	39.56	39.56	-		23.01			
HT40	MCS0	2	46	5230	36.06	36.06	39.56	39.65	-		23.01			
VHT80	MCS0	2	42	5210	75.40	75.28	81.52	81.68	-		23.01			
HE20	MCS0	2	36	5180	19.18	19.13	20.53	20.63	-		22.82			
HE20	MCS0	2	44	5220	19.18	19.18	20.68	20.63	-		22.83			
HE20	MCS0	2	48	5240	19.13	19.13	20.68	20.63	-		22.82			
HE40	MCS0	2	38	5190	37.86	37.86	40.10	40.19	-		23.01			
HE40	MCS0	2	46	5230	37.86	37.66	40.46	40.37	-		23.01			
HE80	MCS0	2	42	5210	77.20	77.08	81.36	82.16	-		23.01			

Report Number : FR133010B

TEST RESULTS DATA
Average Power Table

FCC Band I															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)			Pass/Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	36	5180	0.08	0.05	12.76	13.10		30.00	30.00	3.60	4.70		Pass
11a	6Mbps	1	44	5220	0.08	0.05	12.59	13.03		30.00	30.00	3.60	4.70		Pass
11a	6Mbps	1	48	5240	0.08	0.05	12.51	12.81		30.00	30.00	3.60	4.70		Pass
HT20	MCS0	2	36	5180	0.00	0.00	12.84	13.43	16.16	30.00		4.70			Pass
HT20	MCS0	2	44	5220	0.00	0.00	12.65	13.41	16.06	30.00		4.70			Pass
HT20	MCS0	2	48	5240	0.00	0.00	12.47	13.32	15.93	30.00		4.70			Pass
HT40	MCS0	2	38	5190	0.00	0.00	12.68	13.41	16.07	30.00		4.70			Pass
HT40	MCS0	2	46	5230	0.00	0.00	12.37	13.16	15.79	30.00		4.70			Pass
VHT20	MCS0	2	36	5180	0.00	0.00	12.06	12.32	15.20	30.00		4.70			Pass
VHT20	MCS0	2	44	5220	0.00	0.00	11.55	12.38	15.00	30.00		4.70			Pass
VHT20	MCS0	2	48	5240	0.00	0.00	11.48	12.15	14.84	30.00		4.70			Pass
VHT40	MCS0	2	38	5190	0.00	0.00	11.63	12.22	14.95	30.00		4.70			Pass
VHT40	MCS0	2	46	5230	0.00	0.00	11.36	12.11	14.76	30.00		4.70			Pass
VHT80	MCS0	2	42	5210	0.00	0.00	11.53	11.94	14.75	30.00		4.70			Pass
HE20	MCS0	2	36	5180	0.00	0.00	10.06	10.30	13.19	30.00		4.70			Pass
HE20	26RU	2	36	5180	0.00	0.00	2.09	1.85	4.98	30.00		4.70			Pass
HE20	52RU	2	36	5180	0.00	0.00	3.70	3.38	6.55	30.00		4.70			Pass
HE20	106RU	2	36	5180	0.00	0.00	7.55	7.02	10.30	30.00		4.70			Pass
HE20	MCS0	2	44	5220	0.00	0.00	9.88	10.15	13.03	30.00		4.70			Pass
HE20	26RU	2	44	5220	0.00	0.00	2.01	2.00	5.01	30.00		4.70			Pass
HE20	52RU	2	44	5220	0.00	0.00	3.80	3.69	6.76	30.00		4.70			Pass
HE20	106RU	2	44	5220	0.00	0.00	7.10	6.80	9.96	30.00		4.70			Pass
HE20	MCS0	2	48	5240	0.00	0.00	9.77	10.06	12.93	30.00		4.70			Pass
HE40	MCS0	2	38	5190	0.00	0.00	9.81	10.31	13.08	30.00		4.70			Pass
HE40	242RU	2	38	5190	0.00	0.00	8.49	8.60	11.56	30.00		4.70			Pass
HE40	MCS0	2	46	5230	0.00	0.00	9.85	10.37	13.13	30.00		4.70			Pass
HE40	242RU	2	46	5230	0.00	0.00	8.41	8.40	11.42	30.00		4.70			Pass
HE80	MCS0	2	42	5210	0.00	0.00	9.92	10.37	13.16	30.00		4.70			Pass
HE80	484RU	2	42	5210	0.00	0.00	7.01	6.65	9.84	30.00		4.70			Pass

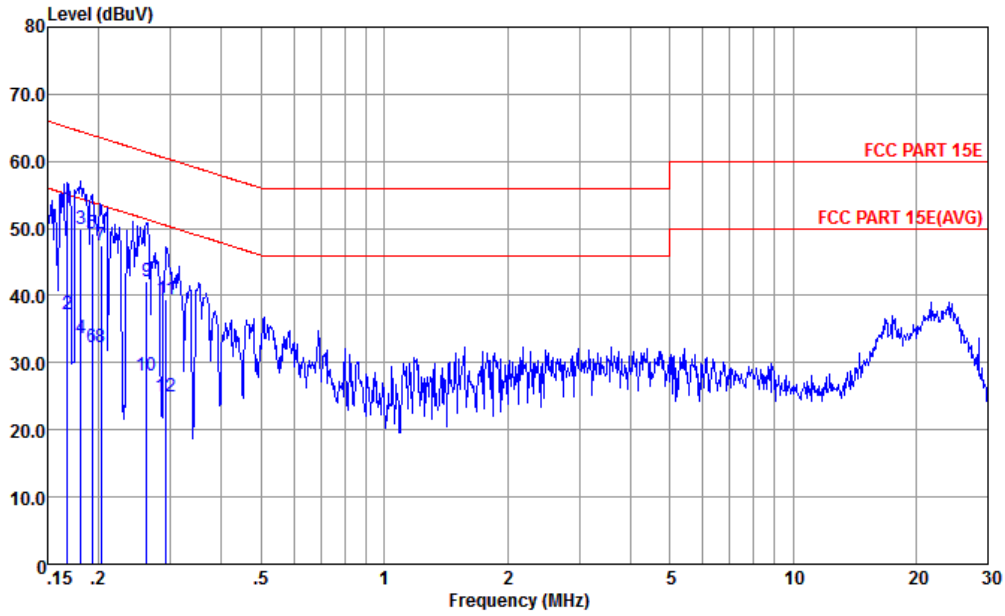
Report Number : FR133010B

TEST RESULTS DATA
Power Spectral Density

FCC Band I																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)			Pass /Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	36	5180	0.08	0.05	0.63	1.00		17.00	17.00	3.60	4.70		Pass
11a	6Mbps	1	44	5220	0.08	0.05	0.41	0.88		17.00	17.00	3.60	4.70		Pass
11a	6Mbps	1	48	5240	0.08	0.05	0.07	0.53		17.00	17.00	3.60	4.70		Pass
HT20	MCS0	2	36	5180	0.00	0.00			4.79	15.82		7.18			Pass
HT20	MCS0	2	44	5220	0.00	0.00			4.93	15.82		7.18			Pass
HT20	MCS0	2	48	5240	0.00	0.00			4.66	15.82		7.18			Pass
HT40	MCS0	2	38	5190	0.00	0.00			1.43	15.82		7.18			Pass
HT40	MCS0	2	46	5230	0.00	0.00			1.52	15.82		7.18			Pass
VHT80	MCS0	2	42	5210	0.00	0.00			-3.03	15.82		7.18			Pass
HE20	MCS0	2	36	5180	0.00	0.00			1.00	15.82		7.18			Pass
HE20	26RU	2	36	5180	0.00	0.00			0.98	15.82		7.18			Pass
HE20	52RU	2	36	5180	0.00	0.00			0.61	15.82		7.18			Pass
HE20	106RU	2	36	5180	0.00	0.00			0.59	15.82		7.18			Pass
HE20	MCS0	2	44	5220	0.00	0.00			0.69	15.82		7.18			Pass
HE20	26RU	2	44	5220	0.00	0.00			0.07	15.82		7.18			Pass
HE20	52RU	2	44	5220	0.00	0.00			0.32	15.82		7.18			Pass
HE20	106RU	2	44	5220	0.00	0.00			0.67	15.82		7.18			Pass
HE20	MCS0	2	48	5240	0.00	0.00			0.87	15.82		7.18			Pass
HE20	26RU	2	48	5240	0.00	0.00			0.83	15.82		7.18			Pass
HE20	52RU	2	48	5240	0.00	0.00			0.40	15.82		7.18			Pass
HE20	106RU	2	48	5240	0.00	0.00			0.48	15.82		7.18			Pass
HE40	MCS0	2	38	5190	0.00	0.00			-1.88	15.82		7.18			Pass
HE40	242RU	2	38	5190	0.00	0.00			-1.10	15.82		7.18			Pass
HE40	MCS0	2	46	5230	0.00	0.00			-2.14	15.82		7.18			Pass
HE40	242RU	2	46	5230	0.00	0.00			-2.25	15.82		7.18			Pass
HE80	MCS0	2	42	5210	0.00	0.00			-5.05	15.82		7.18			Pass
HE80	484RU	2	42	5210	0.00	0.00			-5.54	15.82		7.18			Pass

Appendix B. AC Conducted Emission Test Results

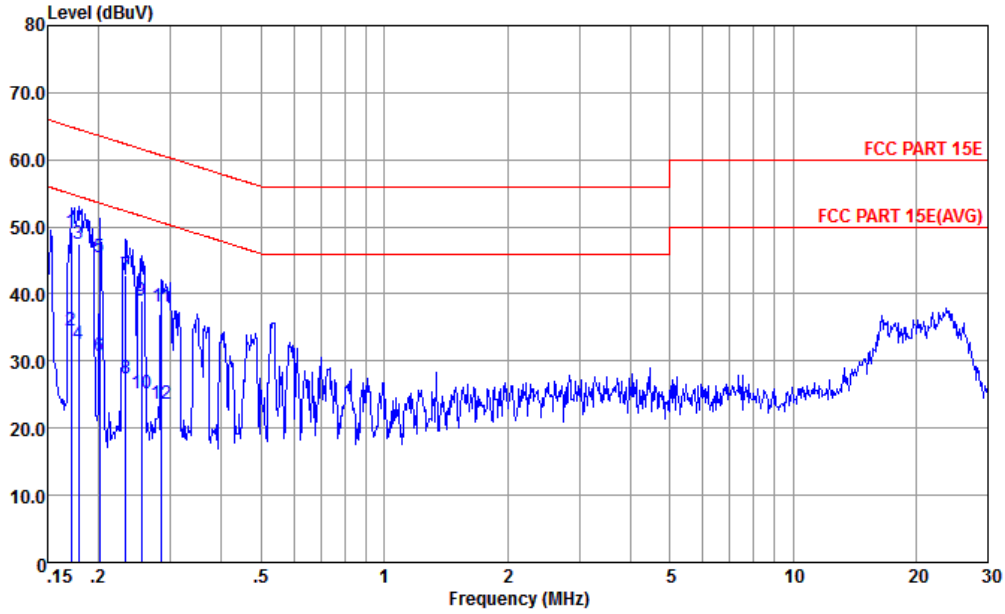
Test Engineer :	Amos Zhang	**Temperature :**	25.3~26.2℃
		Relative Humidity :	38~40%
Test Voltage :	120Vac / 60Hz	**Phase :**	Line
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



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

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1 *	0.168	52.97	-12.11	65.08	32.90	9.64	10.43	QP
2	0.168	37.27	-17.81	55.08	17.20	9.64	10.43	Average
3	0.181	49.95	-14.51	64.46	29.91	9.64	10.40	QP
4	0.181	33.65	-20.81	54.46	13.61	9.64	10.40	Average
5	0.192	49.22	-14.71	63.93	29.20	9.64	10.38	QP
6	0.192	32.22	-21.71	53.93	12.20	9.64	10.38	Average
7	0.203	47.51	-15.98	63.49	27.51	9.64	10.36	QP
8	0.203	32.21	-21.28	53.49	12.21	9.64	10.36	Average
9	0.262	42.17	-19.21	61.38	22.20	9.64	10.33	QP
10	0.262	28.17	-23.21	51.38	8.20	9.64	10.33	Average
11	0.292	39.45	-21.01	60.46	19.50	9.64	10.31	QP
12	0.292	25.05	-25.41	50.46	5.10	9.64	10.31	Average

Test Engineer :	Amos Zhang	**Temperature :**	25.3~26.2℃
		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 : FCC PART 15E TWO-LISN-CN02-N NEUTRAL

	Freq MHz	Level dBuV	Over Limit dB	Limit Line dBuV	Read Level dBuV	LISN Factor dB	Cable Loss dB	Remark
1 *	0.171	49.17	-15.73	64.90	28.90	9.84	10.43	QP
2	0.171	34.47	-20.43	54.90	14.20	9.84	10.43	Average
3	0.179	47.57	-16.98	64.55	27.31	9.85	10.41	QP
4	0.179	32.57	-21.98	54.55	12.31	9.85	10.41	Average
5	0.201	45.45	-18.13	63.58	25.20	9.89	10.36	QP
6	0.201	30.85	-22.73	53.58	10.60	9.89	10.36	Average
7	0.233	42.70	-19.65	62.35	22.51	9.85	10.34	QP
8	0.233	27.40	-24.95	52.35	7.21	9.85	10.34	Average
9	0.255	39.06	-22.54	61.60	18.90	9.83	10.33	QP
10	0.255	25.26	-26.34	51.60	5.10	9.83	10.33	Average
11	0.285	38.22	-22.46	60.68	18.11	9.80	10.31	QP
12	0.285	23.72	-26.96	50.68	3.61	9.80	10.31	Average

Note:

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

Appendix C. Radiated Spurious Emission

UNII I - 5150~5250MHz

ANT1 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		5146.08	58.96	-15.04	74	42.94	35.03	11.6	30.61	107	249	P	H
	!	5100.16	48.22	-5.78	54	32.3	34.98	11.54	30.6	107	249	A	H
	*	5176	108.91	-	-	92.84	35.06	11.63	30.62	107	249	P	H
		5176	101.15	-	-	85.08	35.06	11.63	30.62	107	249	A	H
		5106.72	58.85	-15.15	74	42.89	35	11.56	30.6	301	71	P	V
		5100.48	48.18	-5.82	54	32.26	34.98	11.54	30.6	301	71	A	V
	*	5176	105.98	-	-	89.91	35.06	11.63	30.62	301	71	P	V
		5176	98.31	-	-	82.24	35.06	11.63	30.62	301	71	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII I 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	44.29	-24.01	68.3	49.7	38.32	16.95	60.68	300	0	P	H
		10360	45.09	-23.21	68.3	50.5	38.32	16.95	60.68	300	0	P	V
802.11a CH 44 5220MHz		10438.44	46.28	-22.02	68.3	51.56	38.35	17.03	60.66	300	0	P	H
		10438.44	45.22	-23.08	68.3	50.5	38.35	17.03	60.66	300	0	P	V
802.11a CH 48 5240MHz		10480	45.59	-22.71	68.3	50.79	38.36	17.09	60.65	300	0	P	H
		10480	44.55	-23.75	68.3	49.75	38.36	17.09	60.65	300	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

ANT2 WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 36 5180MHz		5127.36	57.83	-16.17	74	41.84	35.01	11.58	30.6	400	351	P	H
	!	5100.64	48.19	-5.81	54	32.27	34.98	11.54	30.6	400	351	A	H
	*	5176	108.21	-	-	92.14	35.06	11.63	30.62	400	351	P	H
		5176	100.42	-	-	84.35	35.06	11.63	30.62	400	351	A	H
		5114.24	59.46	-14.54	74	43.5	35	11.56	30.6	302	89	P	V
		5100.8	48.15	-5.85	54	32.23	34.98	11.54	30.6	302	89	A	V
	*	5182	103.87	-	-	87.8	35.06	11.63	30.62	302	89	P	V
		5182	96.2	-	-	80.13	35.06	11.63	30.62	302	89	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII I 5150~5250MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 36 5180MHz		10360	45.02	-23.28	68.3	50.43	38.32	16.95	60.68	300	0	P	H
		10360	44.96	-23.34	68.3	50.37	38.32	16.95	60.68	300	0	P	V
802.11a CH 44 5220MHz		10440	44.29	-24.01	68.3	49.57	38.35	17.03	60.66	300	0	P	H
		10440	44.53	-23.77	68.3	49.81	38.35	17.03	60.66	300	0	P	V
802.11a CH 48 5240MHz		10480	45.25	-23.05	68.3	50.45	38.36	17.09	60.65	300	0	P	H
		10480	44.84	-23.46	68.3	50.04	38.36	17.09	60.65	300	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 36 5180MHz		5101.12	56.87	-17.13	74	43	34.55	11.54	32.22	288	0	P	H
		5110.4	46.5	-7.5	54	32.58	34.58	11.56	32.22	288	0	A	H
	*	5182	105.01	-	-	90.95	34.67	11.63	32.24	288	0	P	H
		5182	97.56	-	-	83.5	34.67	11.63	32.24	288	0	A	H
		5120.8	56.79	-17.21	74	42.88	34.58	11.56	32.23	303	84	P	V
		5115.68	46.45	-7.55	54	32.54	34.58	11.56	32.23	303	84	A	V
	*	5176	104.12	-	-	90.06	34.67	11.63	32.24	303	84	P	V
		5176	96.61	-	-	82.55	34.67	11.63	32.24	303	84	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII I 5150~5250MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 36 5180MHz		10358.36	44.31	-23.99	68.3	50.48	37.58	16.93	60.68	100	360	P	H
		10358.36	45.59	-22.71	68.3	51.76	37.58	16.93	60.68	100	360	P	V
802.11n HT20 CH 44 5220MHz		10438.44	44.48	-23.82	68.3	50.46	37.65	17.03	60.66	100	360	P	H
		10438.44	46.11	-22.19	68.3	52.09	37.65	17.03	60.66	100	360	P	V
802.11n HT20 CH 48 5240MHz		10478.47	44.41	-23.89	68.3	50.28	37.69	17.09	60.65	100	360	P	H
		10478.47	44.49	-23.81	68.3	50.36	37.69	17.09	60.65	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII I 5150~5250MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	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		5144.32	58.17	-15.83	74	44.18	34.62	11.6	32.23	203	0	P	H
		5149.76	47.06	-6.94	54	33.07	34.62	11.6	32.23	203	0	A	H
	*	5194	102.11	-	-	88	34.7	11.65	32.24	203	0	P	H
		5194	95.07	-	-	80.96	34.7	11.65	32.24	203	0	A	H
		5372.82	54.92	-19.08	74	40.67	34.7	11.82	32.27	203	0	P	H
		5357.34	45.19	-8.81	54	30.96	34.7	11.8	32.27	203	0	A	H
		5142.56	57.55	-16.45	74	43.56	34.62	11.6	32.23	304	81	P	V
		5149.92	46.79	-7.21	54	32.8	34.62	11.6	32.23	304	81	A	V
	*	5194	101.42	-	-	87.31	34.7	11.65	32.24	304	81	P	V
		5194	94.14	-	-	80.03	34.7	11.65	32.24	304	81	A	V
		5351.76	56.04	-17.96	74	41.81	34.7	11.8	32.27	304	81	P	V
		5356.8	45.28	-8.72	54	31.05	34.7	11.8	32.27	304	81	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII I 5150~5250MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	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		10378.38	44.77	-23.53	68.3	50.86	37.61	16.97	60.67	100	360	P	H
		10378.38	43.97	-24.33	68.3	50.06	37.61	16.97	60.67	100	360	P	V
802.11n HT40 CH 46 5230MHz		10458.46	44.17	-24.13	68.3	50.12	37.66	17.05	60.66	100	360	P	H
		10458.46	45.01	-23.29	68.3	50.96	37.66	17.05	60.66	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII I 5150~5250MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 42 5210MHz		5143.36	58.63	-15.37	74	44.64	34.62	11.6	32.23	242	0	P	H
		5150	46.91	-7.09	54	32.92	34.62	11.6	32.23	242	0	A	H
	*	5194	98.35	-	-	84.24	34.7	11.65	32.24	242	0	P	H
		5194	91.15	-	-	77.04	34.7	11.65	32.24	242	0	A	H
		5351.94	55.34	-18.66	74	41.11	34.7	11.8	32.27	242	0	P	H
		5352.66	45.2	-8.8	54	30.97	34.7	11.8	32.27	242	0	A	H
		5112.96	57.24	-16.76	74	43.32	34.58	11.56	32.22	300	94	P	V
		5144.48	46.62	-7.38	54	32.63	34.62	11.6	32.23	300	94	A	V
	*	5194	96.65	-	-	82.54	34.7	11.65	32.24	300	94	P	V
		5194	89.06	-	-	74.95	34.7	11.65	32.24	300	94	A	V
		5364.9	55.4	-18.6	74	41.15	34.7	11.82	32.27	300	94	P	V
		5350.5	45.14	-8.86	54	30.91	34.7	11.8	32.27	300	94	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII I 5150~5250MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 42 5210MHz		10418.42	44.5	-23.8	68.3	50.53	37.63	17.01	60.67	300	0	P	H
		10418.42	44.01	-24.29	68.3	50.04	37.63	17.01	60.67	300	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

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

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full CH 36 5180MHz		5117.92	55.99	-18.01	74	42.08	34.58	11.56	32.23	113	68	P	H
		5100.96	45.47	-8.53	54	31.6	34.55	11.54	32.22	113	68	A	H
	*	5176	103.77	-	-	89.71	34.67	11.63	32.24	113	68	P	H
		5176	95.32	-	-	81.26	34.67	11.63	32.24	113	68	A	H
		5100.32	55.95	-18.05	74	42.08	34.55	11.54	32.22	325	79	P	V
		5111.52	45.48	-8.52	54	31.56	34.58	11.56	32.22	325	79	A	V
	*	5182	102.3	-	-	88.24	34.67	11.63	32.24	325	79	P	V
		5182	96.82	-	-	82.76	34.67	11.63	32.24	325	79	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII I 5150~5250MHz

WIFI 802.11ax HE20 Full (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full CH 36 5180MHz		10360	44.41	-23.89	68.3	50.55	37.59	16.95	60.68	300	0	P	H
		10360	43.82	-24.48	68.3	49.96	37.59	16.95	60.68	300	0	P	V
802.11ax HE20 Full CH 44 5220MHz		10440	45.3	-23	68.3	51.28	37.65	17.03	60.66	300	0	P	H
		10440	45.6	-22.7	68.3	51.58	37.65	17.03	60.66	300	0	P	V
802.11ax HE20 Full CH 48 5240MHz		10480	45.73	-22.57	68.3	51.6	37.69	17.09	60.65	300	0	P	H
		10480	45.47	-22.83	68.3	51.34	37.69	17.09	60.65	300	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII I 5150~5250MHz

WIFI 802.11ax HE20 Partial 26 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Partial 26/0 CH 36 5180MHz		5137.44	57.27	-16.73	74	43.32	34.6	11.58	32.23	183	0	P	H
		5113.92	46.76	-7.24	54	32.84	34.58	11.56	32.22	183	0	A	H
		5170	106.65	-	-	92.63	34.65	11.61	32.24	183	0	P	H
		5170	100.69	-	-	86.67	34.65	11.61	32.24	183	0	A	H
		5125.76	57.77	-16.23	74	43.82	34.6	11.58	32.23	328	80	P	V
		5100.48	46.77	-7.23	54	32.9	34.55	11.54	32.22	328	80	A	V
		5170	107.35	-	-	93.33	34.65	11.61	32.24	328	80	P	V
		5170	99.98	-	-	85.96	34.65	11.61	32.24	328	80	A	V
802.11ax HE20 Partial 26/8 CH 48 5240MHz		5382	55.67	-18.33	74	41.41	34.7	11.84	32.28	360	219	P	H
		5350.32	45.56	-8.44	54	31.33	34.7	11.8	32.27	360	219	A	H
		5248	96.31	-	-	82.16	34.7	11.7	32.25	360	219	P	H
		5248	90.06	-	-	75.91	34.7	11.7	32.25	360	219	A	H
		5364.36	55.39	-18.61	74	41.14	34.7	11.82	32.27	315	84	P	V
		5355.9	45.53	-8.47	54	31.3	34.7	11.8	32.27	315	84	A	V
		5248	104.83	-	-	90.68	34.7	11.7	32.25	315	84	P	V
		5248	98.8	-	-	84.65	34.7	11.7	32.25	315	84	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII I 5150~5250MHz

WIFI 802.11ax HE20 Partial 52 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Partial 52/37 CH 36 5180MHz		5136.16	57.86	-16.14	74	43.91	34.6	11.58	32.23	100	360	P	H
		5108.8	46.8	-7.2	54	32.88	34.58	11.56	32.22	100	360	A	H
		5176	107.99	-	-	93.93	34.67	11.63	32.24	100	360	P	H
		5176	101.16	-	-	87.1	34.67	11.63	32.24	100	360	A	H
		5145.76	56.89	-17.11	74	42.9	34.62	11.6	32.23	258	91	P	V
		5100	46.74	-7.26	54	32.87	34.55	11.54	32.22	258	91	A	V
		5170	105.72	-	-	91.7	34.65	11.61	32.24	258	91	P	V
		5170	98.94	-	-	84.92	34.65	11.61	32.24	258	91	A	V
802.11ax HE20 Partial 52/40 CH 48 5240MHz		5399.64	55.2	-18.8	74	40.92	34.7	11.86	32.28	171	0	P	H
		5357.34	45.59	-8.41	54	31.36	34.7	11.8	32.27	171	0	A	H
		5248	108.29	-	-	94.14	34.7	11.7	32.25	171	0	P	H
		5248	100.6	-	-	86.45	34.7	11.7	32.25	171	0	A	H
		5370.48	56.89	-17.11	74	42.64	34.7	11.82	32.27	299	90	P	V
		5353.2	45.58	-8.42	54	31.35	34.7	11.8	32.27	299	90	A	V
		5248	107.56	-	-	93.41	34.7	11.7	32.25	299	90	P	V
		5248	99.23	-	-	85.08	34.7	11.7	32.25	299	90	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII I 5150~5250MHz

WIFI 802.11ax HE20 Partial 106 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Partial 106/53 CH 36 5180MHz		5132.96	57.43	-16.57	74	43.48	34.6	11.58	32.23	171	0	P	H
		5123.2	46.71	-7.29	54	32.76	34.6	11.58	32.23	171	0	A	H
		5176	106.65	-	-	92.59	34.67	11.63	32.24	171	0	P	H
		5176	98.63	-	-	84.57	34.67	11.63	32.24	171	0	A	H
		5134.08	57.31	-16.69	74	43.36	34.6	11.58	32.23	342	88	P	V
		5115.36	46.73	-7.27	54	32.82	34.58	11.56	32.23	342	88	A	V
		5170	104.52	-	-	90.5	34.65	11.61	32.24	342	88	P	V
		5170	96.58	-	-	82.56	34.65	11.61	32.24	342	88	A	V
802.11ax HE20 Partial 106/54 CH 48 5240MHz		5394.6	55.51	-18.49	74	41.23	34.7	11.86	32.28	178	0	P	H
		5356.62	45.52	-8.48	54	31.29	34.7	11.8	32.27	178	0	A	H
		5242	108.58	-	-	94.43	34.7	11.7	32.25	178	0	P	H
		5242	100.84	-	-	86.69	34.7	11.7	32.25	178	0	A	H
		5360.58	55.63	-18.37	74	41.38	34.7	11.82	32.27	316	78	P	V
		5355.36	45.46	-8.54	54	31.23	34.7	11.8	32.27	316	78	A	V
		5242	107.98	-	-	93.83	34.7	11.7	32.25	316	78	P	V
		5242	100.08	-	-	85.93	34.7	11.7	32.25	316	78	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII I 5150~5250MHz

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

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Full CH 38 5190MHz		5121.92	55.78	-18.22	74	41.87	34.58	11.56	32.23	100	62	P	H
		5148.96	45.55	-8.45	54	31.56	34.62	11.6	32.23	100	62	A	H
	*	5194	97.99	-	-	83.88	34.7	11.65	32.24	100	62	P	H
		5194	89.84	-	-	75.73	34.7	11.65	32.24	100	62	A	H
		5397.84	54.91	-19.09	74	40.63	34.7	11.86	32.28	100	62	P	H
		5396.22	44.82	-9.18	54	30.54	34.7	11.86	32.28	100	62	A	H
		5121.12	55.94	-18.06	74	42.03	34.58	11.56	32.23	343	81	P	V
		5149.76	45.49	-8.51	54	31.5	34.62	11.6	32.23	343	81	A	V
	*	5188	99.66	-	-	85.6	34.67	11.63	32.24	343	81	P	V
		5188	91.05	-	-	76.99	34.67	11.63	32.24	343	81	A	V
		5364.18	54.92	-19.08	74	40.67	34.7	11.82	32.27	343	81	P	V
		5396.76	44.7	-9.3	54	30.42	34.7	11.86	32.28	343	81	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII I 5150~5250MHz

WIFI 802.11ax HE40 Full (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Full CH 38 5190MHz		10380	45.27	-23.03	68.3	51.36	37.61	16.97	60.67	300	0	P	H
		10380	44.84	-23.46	68.3	50.93	37.61	16.97	60.67	300	0	P	V
802.11ax HE40 Full CH 46 5230MHz		10460	45.1	-23.2	68.3	51.05	37.66	17.05	60.66	300	0	P	H
		10460	44.6	-23.7	68.3	50.55	37.66	17.05	60.66	300	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII I 5150~5250MHz

WIFI 802.11ax HE40 Partial 242 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Partial 242/61 CH 38 5190MHz		5139.52	63.55	-10.45	74	49.56	34.62	11.6	32.23	120	359	P	H
		5149.89	47.9	-6.1	54	33.91	34.62	11.6	32.23	120	359	A	H
		5188	103.21	-	-	89.15	34.67	11.63	32.24	120	359	P	H
		5188	94.62	-	-	80.56	34.67	11.63	32.24	120	359	A	H
		5360.94	55.44	-18.56	74	41.19	34.7	11.82	32.27	120	359	P	H
		5353.92	45.28	-8.72	54	31.05	34.7	11.8	32.27	120	359	A	H
		5134.56	61.37	-12.63	74	47.42	34.6	11.58	32.23	367	333	P	V
		5149.44	46.73	-7.27	54	32.74	34.62	11.6	32.23	367	333	A	V
		5188	100.01	-	-	85.95	34.67	11.63	32.24	367	333	P	V
		5188	91.5	-	-	77.44	34.67	11.63	32.24	367	333	A	V
		5358.42	55.13	-18.87	74	40.9	34.7	11.8	32.27	367	333	P	V
		5359.14	45.29	-8.71	54	31.06	34.7	11.8	32.27	367	333	A	V
802.11ax HE40 Partial 242/62 CH 46 5230MHz		5116.48	56.68	-17.32	74	42.77	34.58	11.56	32.23	303	6	P	H
		5102.24	46.43	-7.57	54	32.56	34.55	11.54	32.22	303	6	A	H
		5236	103.57	-	-	89.44	34.7	11.68	32.25	303	6	P	H
		5236	94.97	-	-	80.84	34.7	11.68	32.25	303	6	A	H
		5382	54.62	-19.38	74	40.36	34.7	11.84	32.28	303	6	P	H
		5356.62	44.99	-9.01	54	30.76	34.7	11.8	32.27	303	6	A	H
		5127.2	56.89	-17.11	74	42.94	34.6	11.58	32.23	314	87	P	V
		5117.28	46.43	-7.57	54	32.52	34.58	11.56	32.23	314	87	A	V
		5236	101.02	-	-	86.89	34.7	11.68	32.25	314	87	P	V
		5236	93.07	-	-	78.94	34.7	11.68	32.25	314	87	A	V
		5367.6	55.84	-18.16	74	41.59	34.7	11.82	32.27	314	87	P	V
		5354.46	44.95	-9.05	54	30.72	34.7	11.8	32.27	314	87	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII I 5150~5250MHz

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

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Full CH 42 5210MHz		5147.2	57.43	-16.57	74	43.44	34.62	11.6	32.23	100	68	P	H
		5149.28	45.56	-8.44	54	31.57	34.62	11.6	32.23	100	68	A	H
	*	5218	97.3	-	-	83.17	34.7	11.67	32.24	100	68	P	H
		5218	88.07	-	-	73.94	34.7	11.67	32.24	100	68	A	H
		5367.6	55.15	-18.85	74	40.9	34.7	11.82	32.27	100	68	P	H
		5395.14	44.78	-9.22	54	30.5	34.7	11.86	32.28	100	68	A	H
		5130.56	56.06	-17.94	74	42.11	34.6	11.58	32.23	337	80	P	V
		5110.4	45.55	-8.45	54	31.63	34.58	11.56	32.22	337	80	A	V
	*	5224	95.51	-	-	81.39	34.7	11.67	32.25	337	80	P	V
		5224	87.14	-	-	73.02	34.7	11.67	32.25	337	80	A	V
		5382.54	54.6	-19.4	74	40.34	34.7	11.84	32.28	337	80	P	V
		5398.2	44.81	-9.19	54	30.53	34.7	11.86	32.28	337	80	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII I 5150~5250MHz

WIFI 802.11ax HE80 Full (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Full CH 42 5210MHz		10420	44.57	-23.73	68.3	50.6	37.63	17.01	60.67	300	0	P	H
		10420	45.24	-23.06	68.3	51.27	37.63	17.01	60.67	300	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII I 5150~5250MHz

WIFI 802.11ax HE80 Partial 484 left (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Partial 484/65 CH 42 5210MHz		5126.72	66.57	-7.43	74	52.62	34.6	11.58	32.23	100	355	P	H
		5149.92	50.61	-3.39	54	36.62	34.62	11.6	32.23	100	355	A	H
		5182	101.82	-	-	87.76	34.67	11.63	32.24	100	355	P	H
		5182	93.18	-	-	79.12	34.67	11.63	32.24	100	355	A	H
		5355.9	55.22	-18.78	74	40.99	34.7	11.8	32.27	100	355	P	H
		5358.06	45.03	-8.97	54	30.8	34.7	11.8	32.27	100	355	A	H
		5142.56	64.3	-9.7	74	50.31	34.62	11.6	32.23	304	89	P	V
		5115.04	46.47	-7.53	54	32.56	34.58	11.56	32.23	304	89	A	V
		5194	98.77	-	-	84.66	34.7	11.65	32.24	304	89	P	V
		5194	90.59	-	-	76.48	34.7	11.65	32.24	304	89	A	V
		5394.96	55.23	-18.77	74	40.95	34.7	11.86	32.28	304	89	P	V
		5357.34	44.98	-9.02	54	30.75	34.7	11.8	32.27	304	89	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII I 5150~5250MHz

WIFI 802.11ax HE80 Partial 484 Right (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Partial 484/65 CH 42 5210MHz		5118.4	67.93	-6.07	74	54.02	34.58	11.56	32.23	119	64	P	H
		5149.12	50.49	-3.51	54	36.5	34.62	11.6	32.23	119	64	A	H
		5236	102.55	-	-	88.42	34.7	11.68	32.25	119	64	P	H
		5236	93.83	-	-	79.7	34.7	11.68	32.25	119	64	A	H
		5351.04	58.65	-15.35	74	44.42	34.7	11.8	32.27	119	64	P	H
		5356.8	45.25	-8.75	54	31.02	34.7	11.8	32.27	119	64	A	H
		5139.36	65.91	-8.09	74	51.96	34.6	11.58	32.23	271	75	P	V
		5114.24	46.73	-7.27	54	32.81	34.58	11.56	32.22	271	75	A	V
		5242	101.51	-	-	87.36	34.7	11.7	32.25	271	75	P	V
		5242	91.98	-	-	77.83	34.7	11.7	32.25	271	75	A	V
		5395.5	54.9	-19.1	74	40.62	34.7	11.86	32.28	271	75	P	V
		5359.5	45.16	-8.84	54	30.93	34.7	11.8	32.27	271	75	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Emission below 1GHz

5GHz WIFI 802. 11ax HE80 Partial 484 LF

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
5GHz 802. 11ax HE80 Partial 484 LF		43.58	21.69	-18.31	40	35.75	17.82	1	32.88	-	-	P	H
		136.7	26.45	-17.05	43.5	39.84	17.66	1.78	32.83	-	-	P	H
		261.83	24.45	-21.55	46	35.44	19.59	2.47	33.05	-	-	P	H
		312.27	30.04	-15.96	46	39.75	20.5	2.69	32.9	100	0	P	H
		331.67	28.48	-17.52	46	37.65	20.96	2.77	32.9	-	-	P	H
		551.86	26.22	-19.78	46	29.35	25.88	3.59	32.6	-	-	P	H
		42.61	33.53	-6.47	40	47.06	18.34	0.99	32.86	100	360	P	V
		134.76	28.32	-15.18	43.5	41.71	17.68	1.76	32.83	-	-	P	V
		314.21	26.54	-19.46	46	36.19	20.55	2.7	32.9	-	-	P	V
		528.58	25.68	-20.32	46	29.56	25.3	3.51	32.69	-	-	P	V
		725.49	26.27	-19.73	46	28.79	26.11	4.12	32.75	-	-	P	V
		835.1	27.54	-18.46	46	28.59	27.11	4.41	32.57	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

Note symbol

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

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

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

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

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)

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

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

= 55.45 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)

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

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

= 43.54 (dBμV/m)

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

= 43.54(dBμV/m) – 54(dBμV/m)

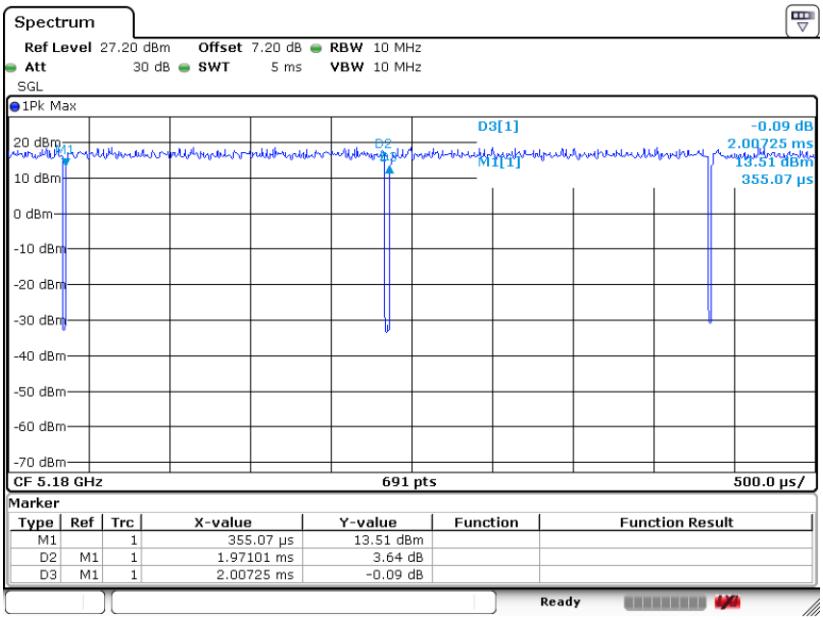
= -10.46(dB)

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

Appendix D. Duty Cycle Plots

Antenna	Band	Duty Cycle(%)	T(ms)	1/T(kHz)	VBW Setting
1	802.11a	98.19	-	-	10Hz
2	802.11a	98.91			10Hz
1+2(1)	802.11n HT20	100	-	-	10Hz
1+2(1)	802.11n HT40	100	-	-	10Hz
1+2(1)	802.11ac VHT80	100	-	-	10Hz
1+2(1)	802.11ax HE20	100	-	-	10Hz
1+2(1)	802.11ax HE40	100	-	-	10Hz
1+2(1)	802.11ax HE80	100	-	-	10Hz
1+2(1)	802.11ax HE20-RU26	97.53	4.58	0.22	0.24KHz
1+2(1)	802.11ax HE20-RU52	98.32	-	-	10Hz
1+2(1)	802.11ax HE20-RU106	95.91	4.75	0.21	0.22KHz
1+2(1)	802.11ax HE40-RU242	98.19	-	-	10Hz
1+2(1)	802.11ax HE80-RU484	98.19	-	-	10Hz

802.11a Ant 1



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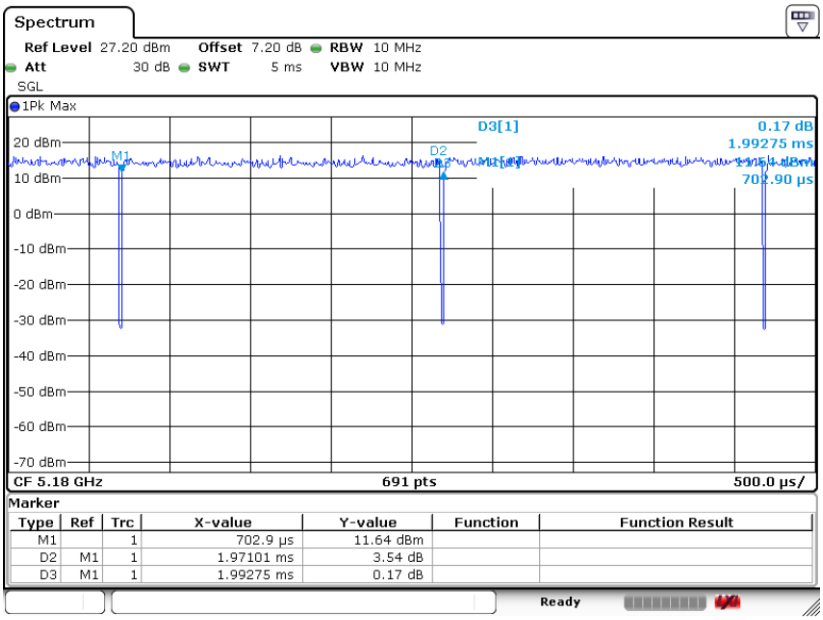
802.11a Ant 2



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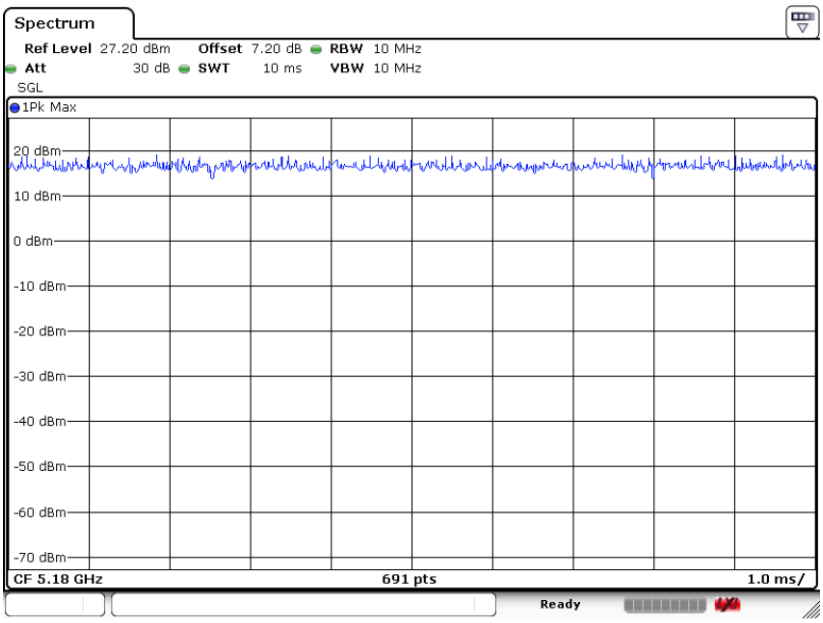
802.11n HT20



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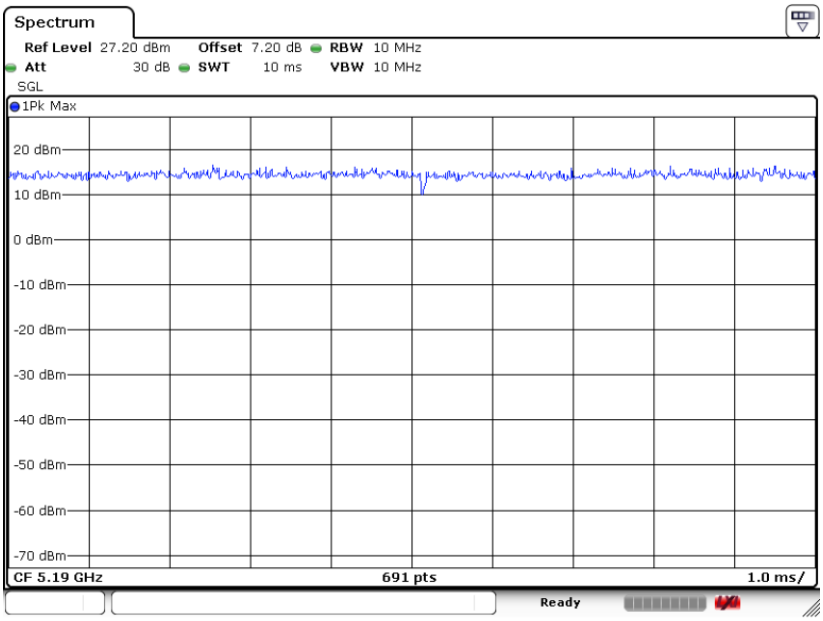
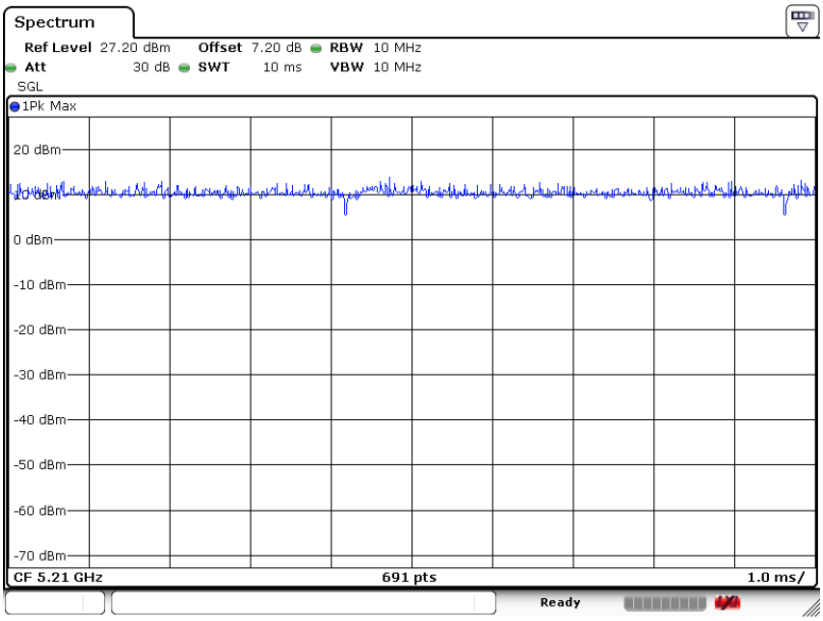
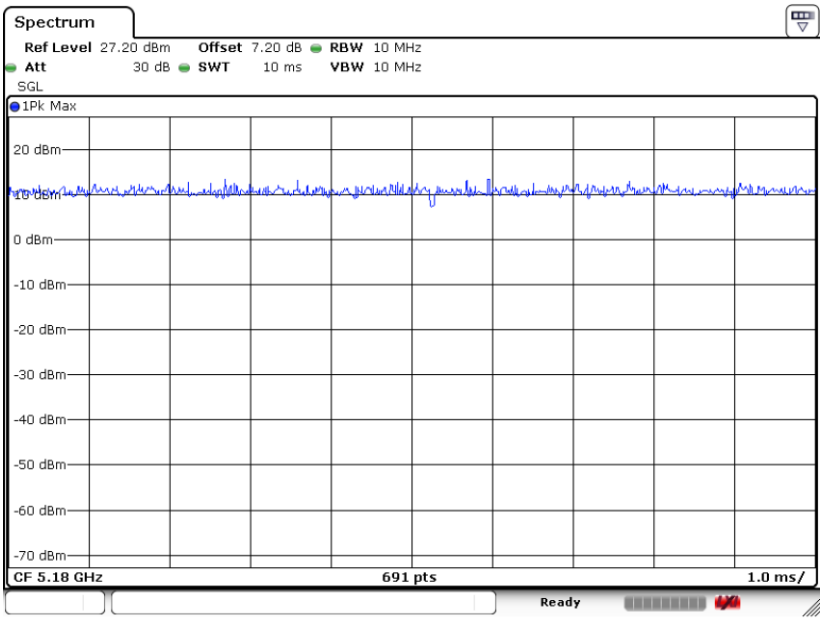


802.11ac VHT80



802.11ax HE20



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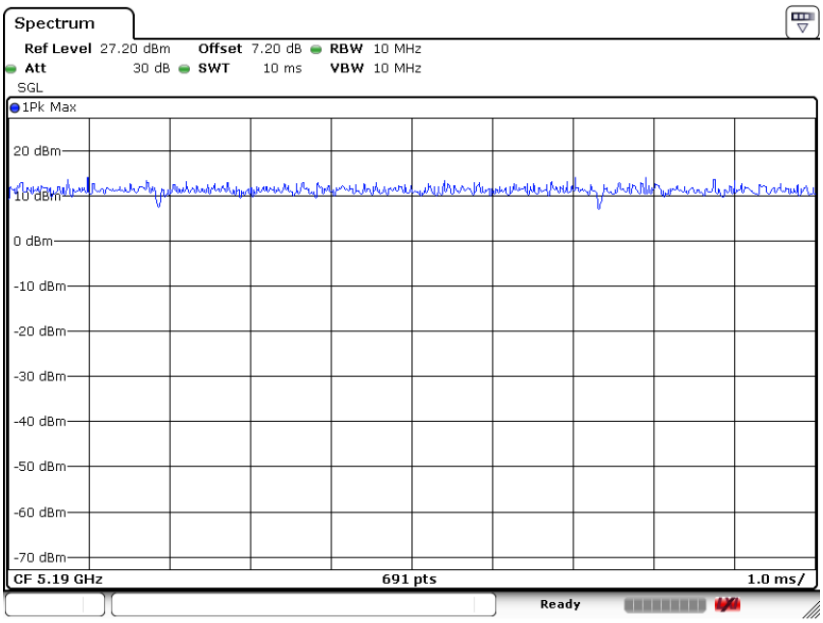

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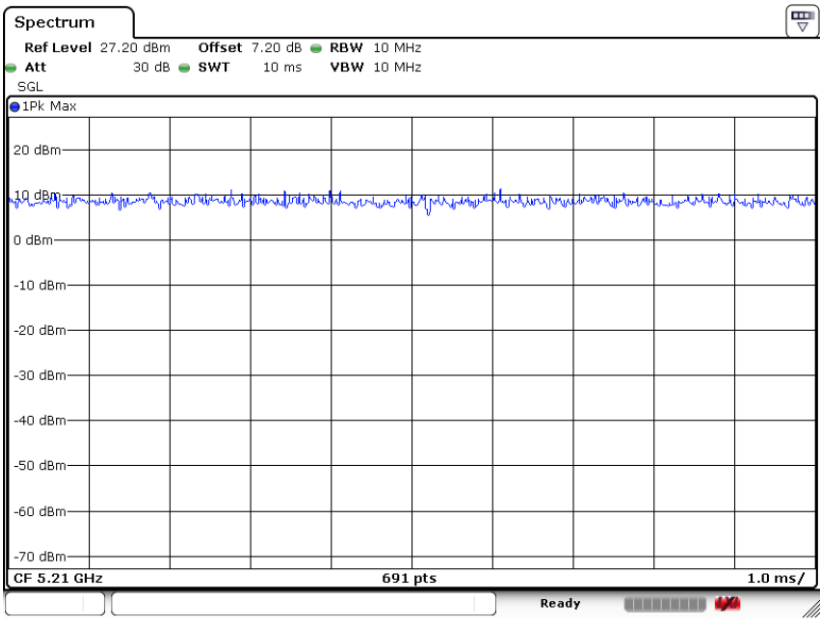

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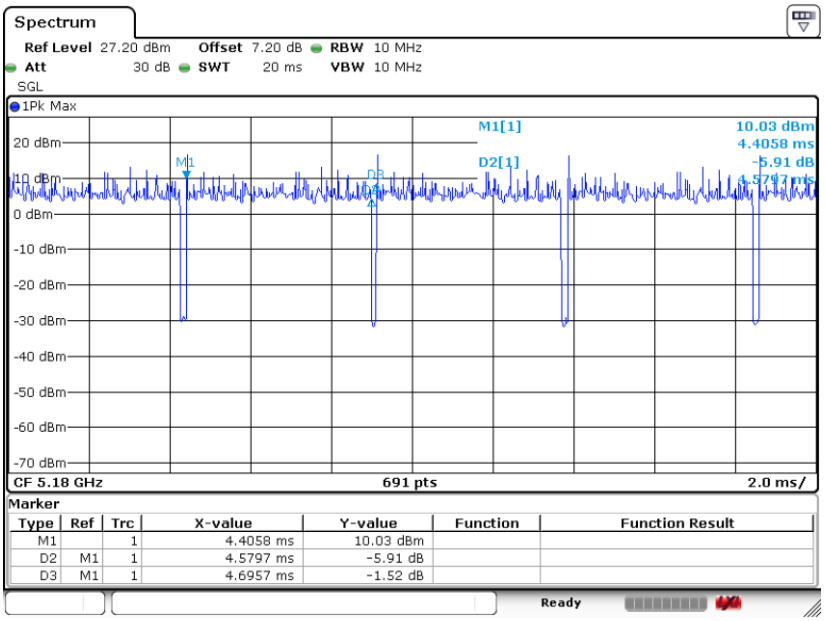

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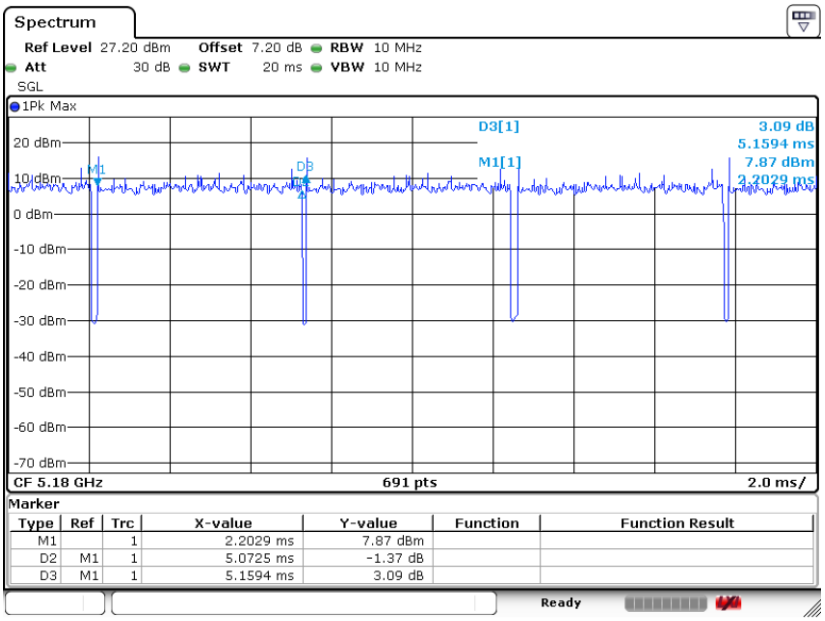

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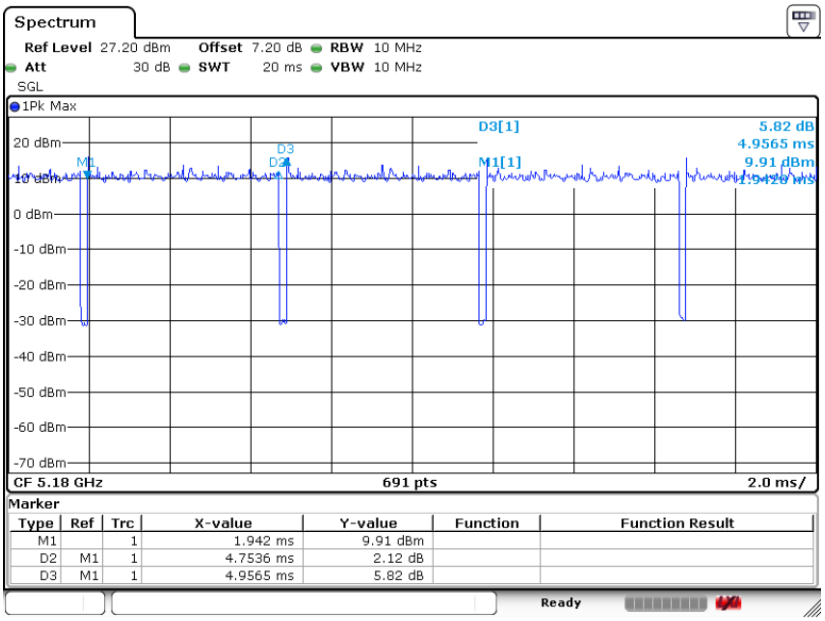

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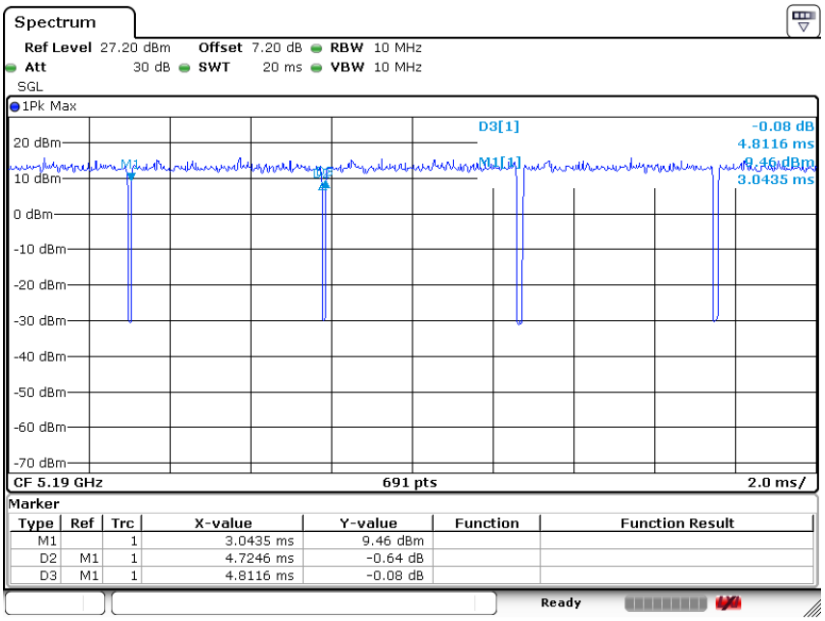

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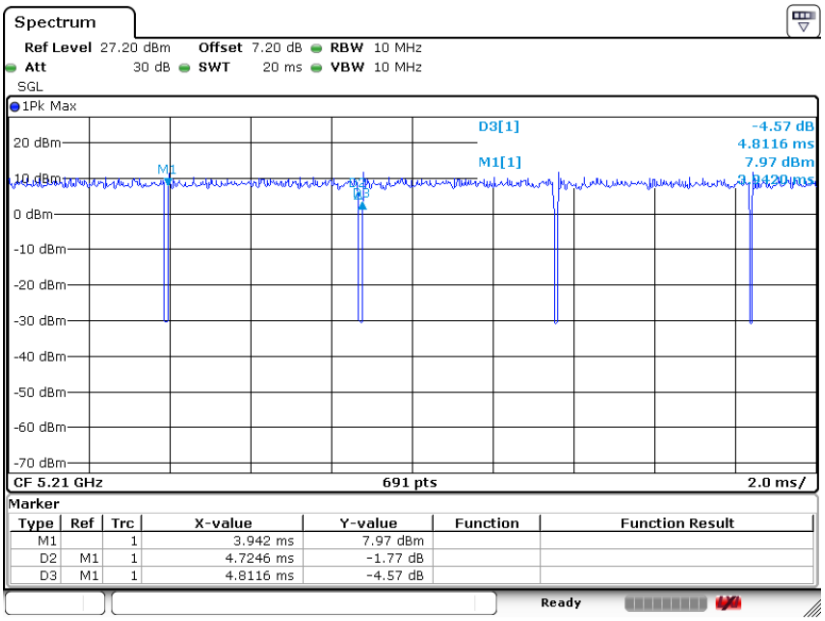

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