



TEST REPORT

Applicant: Acer Incorporated
Address: 8F, 88, Sec.1 Xintai 5th Rd. Xizhi, New Taipei City
221, Taiwan
Equipment Type: Tablet PC
Model Name: A26002
Brand Name: acer
Marketing Name: Iconia Duo D12, D12-11M
FCC ID: HLZA26002
ISED Number: 1754F-A26002
Test Standard: 47 CFR Part 15 Subpart C
RSS-Gen Issue 5
RSS-247 Issue 4
(refer to section 3.1)
Sample Arrival Date: Dec. 17, 2025
Test Date: Dec. 24, 2025 - Jan. 21, 2026
Date of Issue: Mar. 25, 2026

ISSUED BY:

Shenzhen BALUN Technology Co., Ltd.

**Tested by:** Julie Zhu**Checked by:** Ye Hongji**Approved by:** Tolan Tu
(Testing Director)

Revision History

Version	Issue Date	Revisions
<u>Rev. 01</u>	<u>Mar. 25, 2026</u>	<u>Initial Issue</u>

TABLE OF CONTENTS

1	GENERAL INFORMATION	4
1.1	Test Laboratory	4
1.2	Test Location	4
2	PRODUCT INFORMATION	5
2.1	Applicant Information	5
2.2	Manufacturer Information	5
2.3	General Description for Equipment under Test (EUT)	5
2.4	Technical Information	6
2.5	Channel List	7
3	SUMMARY OF TEST RESULTS	9
3.1	Test Standards	9
3.2	Test Verdict	9
4	GENERAL TEST CONFIGURATIONS	10
4.1	Test Environments	10
4.2	Test Equipment List	10
4.3	Test Software List	10
4.4	Measurement Uncertainty	11
4.5	Description of Test Setup	11
4.6	Measurement Results Explanation Example	14
5	TEST ITEMS	15
5.1	Antenna Requirements	15
5.2	Output Power	16
5.3	Occupied Bandwidth	18
5.4	Conducted Spurious Emission	19

5.5	Band Edge (Authorized-band band-edge).....	21
5.6	Conducted Emission	23
5.7	Radiated Spurious Emission	24
5.8	Band Edge (Restricted-band band-edge).....	29
5.9	Power Spectral density (PSD).....	30
ANNEX A	TEST RESULT	31
A.1	Output Power	31
A.2	Occupied Bandwidth	35
A.3	Conducted Spurious Emissions	43
A.4	Band Edge (Authorized-band band-edge).....	57
A.5	Conducted Emissions.....	63
A.6	Radiated Emission	65
A.7	Band Edge (Restricted-band band-edge).....	103
A.8	Power Spectral Density (PSD)	115
ANNEX B	TEST SETUP PHOTOS	120
ANNEX C	EUT EXTERNAL PHOTOS	120
ANNEX D	EUT INTERNAL PHOTOS	120

1 GENERAL INFORMATION

1.1 Test Laboratory

Name	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Phone Number	+86 755 6685 0100

1.2 Test Location

Name	Shenzhen BALUN Technology Co., Ltd.
Location	☐ Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
	☒ 1/F, Building B, Ganghongji High-tech Intelligent Industrial Park, No. 1008, Songbai Road, Yangguang Community, Xili Sub-district, Nanshan District, Shenzhen, Guangdong Province, P. R. China
	☐ Building 2, Intelligent Connected Vehicle Industrial Park, No. 55, Xiangshan Road, Luotian Community, Yanluo Sub-district, Bao'an District, Shenzhen, Guangdong Province, China
Accreditation Certificate	The laboratory is a testing organization accredited by FCC as a accredited testing laboratory. The designation number is CN1196. The laboratory has been listed by Industry Canada to perform electromagnetic emission measurements. The CAB identifier number is CN0030.

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	Acer Incorporated
Address	8F, 88, Sec.1 Xintai 5th Rd. Xizhi, New Taipei City 221, Taiwan

2.2 Manufacturer Information

Manufacturer	Acer Incorporated
Address	8F, 88, Sec.1 Xintai 5th Rd. Xizhi, New Taipei City 221, Taiwan

2.3 General Description for Equipment under Test (EUT)

EUT Name	Tablet PC
Model Name Under Test	A26002
Series Model Name	N/A
Description of Model name differentiation	N/A
Marketing Name	Iconia Duo D12, D12-11M
Serial Number	1Z5225779251200023
Hardware Version	M112TCR100
Software Version	Android 16
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A

2.4 Technical Information

Network and Wireless connectivity	Bluetooth (BR+EDR+BLE) WIFI 802.11a, 802.11b, 802.11g, 802.11n, 802.11ac and 802.11ax GPS, GLONASS
-----------------------------------	--

The requirement for the following technical information of the EUT was tested in this report:

Frequency Range	2.400 GHz - 2.4835 GHz
Modulation Technology	DSSS, OFDM, OFDMA
Product Type	☐ Mobile ☒ Portable ☐ Fix Location
Antenna System (eg., MIMO, Smart Antenna)	N/A
Categorization as Correlated or Completely Uncorrelated	N/A
Antenna Type	PIFA Antenna
Antenna Gain	-0.38 dBi
About the Product	Only the WIFI 802.11b, 802.11g, 802.11n (HT20/40) and 802.11ax (HE20/40) was tested in this report.

2.5 Channel List

20 MHz		40 MHz	
Channel Number	Frequency (MHz)	Channel Number	Frequency (MHz)
1	2412	3	2422
2	2417	4	2427
3	2422	5	2432
4	2427	6	2437
5	2432	7	2442
6	2437	8	2447
7	2442	9	2452
8	2447		
9	2452		
10	2457		
11	2462		

802.11ax RU configuration table					
Mode	Full RU (SU)	RU_26	RU_52	RU_106	RU_242
802.11ax20	√	--	--	--	--
802.11ax40	√	--	--	--	--

Modulation technology	Modulation Type	Transfer Rate (Mbps)(Single RF path)
DSSS (802.11b)	DBPSK	1
	DQPSK	2
	CCK	5.5/11
OFDM (802.11g)	BPSK	6/9
	QPSK	12/18
	16QAM	24/36
	64QAM	48/54
OFDM (802.11n-20 MHz)	BPSK	6.5/7.2
	QPSK	13/19.5/14.4/21.7
	16QAM	26/39/28.9/43.3
	64QAM	52/58.5/65/57.8/65/72.2
OFDM (802.11n-40 MHz)	BPSK	13.5/15
	QPSK	27/40.5/30/45
	16QAM	54/81/60/90
	64QAM	108/121.5/135/120/150
OFDMA (802.11ax-20 MHz)	BPSK	4
	QPSK	16/24/17/26
	16QAM	33/49/34/52
	64QAM	65/73/81/69/77/86
	256QAM	98/108/103/115
	1024QAM	122/135/129/143

OFDMA (802.11ax-40 MHz)	BPSK	8/9
	QPSK	33/49/34/52
	16QAM	65/98/69/103
	64QAM	130/146/163/138/155/172
	256QAM	195/217/207/229
	1024QAM	244/271/258/287

Note: Preliminary tests were performed in different data rate in above table to find the worst radiated emission. The data rate shown in the table below is the worst-case rate with respect to the specific test item. Investigation has been done on all the possible configurations for searching the worst cases. The following table is a list of the test modes shown in this test report.

Test Items	Mode	Data Rate	Channel	
Output Power	11b/11g/11n20/11n40/ 11ax20/11ax40	1/6/6.5/13.5/ 4/8 Mbps	1/6/11	3/6/9
Occupied Bandwidth	11b/11g/11n20/11n40/ 11ax20/11ax40	1/6/6.5/13.5/ 4/8 Mbps	1/6/11	3/6/9
Conducted Spurious Emission	11b/11g/11n20/11n40/ 11ax20/11ax40	1/6/6.5/13.5/ 4/8 Mbps	1/6/11	3/6/9
Conducted Emission	11b/11g/11n20/11n40/ 11ax20/11ax40	1/6/6.5/13.5/ 4/8 Mbps	1/6/11	3/6/9
Radiated Spurious Emission	11b/11g/11n20/11n40/ 11ax20/11ax40	1/6/6.5/13.5/ 4/8 Mbps	1/6/11	3/6/9
Band Edge	11b/11g/11n20/11n40/ 11ax20/11ax40	1/6/6.5/13.5/ 4/8 Mbps	1/6/11	3/6/9
Power spectral density (PSD)	11b/11g/11n20/11n40/ 11ax20/11ax40	1/6/6.5/13.5/ 4/8 Mbps	1/6/11	3/6/9

Note: The above EUT information in section 2.4 was declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or user's manual.

3 SUMMARY OF TEST RESULTS

3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 15, Subpart C	Intentional radiators of radio frequency equipment
2	RSS-Gen Issue 5	General Requirements for Compliance of Radio Apparatus
3	RSS-247 Issue 4	Digital Transmission Systems, Frequency Hopping Systems and LicenceExempt Local Area Network Devices in 902-928 MHz, 2400-2483.5 MHz, 5150-5350 MHz, and 5470-5895 MHz bands
4	ANSI C63.10-2020 + Cor. 1-2023 + C63.10a-2024 + Errata to C63.10a-2024	American National Standard for Procedures for Compliance Testing of Unlicensed Wireless Devices
5	KDB Publication 558074 D01v05r02☆	GUIDANCE FOR COMPLIANCE MEASUREMENTS ON DIGITAL TRANSMISSION SYSTEM, FREQUENCY HOPPING SPREAD SPECTRUM SYSTEM, AND HYBRID SYSTEM DEVICES OPERATING UNDER SECTION 15.247 OF THE FCC RULES

3.2 Test Verdict

No.	Description	FCC PART No.	ISED Part No.	Test Result	Verdict
1	Antenna Requirement	15.203	RSS-247, 6.5 (c)	N/A	Pass ^{Note 1}
2	Output Power	15.247 (b)	RSS-247, 6.3.2	ANNEX A.1	Pass
3	Occupied Bandwidth	15.247 (a)	RSS-GEN, 6.7; RSS-247, 6.3.1(a)	ANNEX A.2	Pass
4	Conducted Spurious Emission	15.247 (d)	RSS-247, 6.6	ANNEX A.3	Pass
5	Band Edge(Authorized-band band-edge)	15.247 (d)	RSS-247, 6.6	ANNEX A.4	Pass
6	Conducted Emission	15.207	RSS-GEN, 8.8	ANNEX A.5	Pass
7	Radiated Spurious Emission	15.209; 15.247 (d)	RSS-247, 6.6	ANNEX A.6	Pass
8	Band Edge(Restricted-band band-edge)	15.209; 15.247 (d)	RSS-247, 6.6	ANNEX A.7	Pass
9	Power spectral density (PSD)	15.247 (e)	RSS-247, 6.3.1(b)	ANNEX A.8	Pass
10	Receiver Spurious Emissions	N/A	RSS-Gen, 7.3	N/A	N/A ^{Note 2}

Note ¹: The EUT has a permanently and irreplaceable attached antenna, which complies with the requirement FCC 15.203.

Note ²: Only radio communication receivers operating in stand-alone mode within the band 30-960 MHz, as well as scanner receivers, are subject to Industry Canada requirements, so this test is not applicable.

4 GENERAL TEST CONFIGURATIONS

4.1 Test Environments

During the measurement, the normal environmental conditions were within the listed ranges:

Relative Humidity	36% to 59%	
Atmospheric Pressure	100 kPa to 102 kPa	
Temperature	NT (Normal Temperature)	+19.8℃ to +24.3℃
Working Voltage of the EUT	NV (Normal Voltage)	3.80 V

4.2 Test Equipment List

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Spectrum Analyzer	KEYSIGHT	N9020A	MY54420186	2025.05.21	2026.05.20
Power meter	R&S	NRP8S	101498	2025.07.07	2026.07.06
Spectrum Analyzer	KEYSIGHT	N9020A	MY56060127	2025.02.27	2026.02.26
Test Antenna-Horn	A-INFO	LB-180400KF	J211060273	2024.06.15	2027.06.14
Test Antenna-Bi-Log	Schwarzbeck	VULB 9163	01414	2023.11.03	2026.11.02
Test Antenna-Horn	Schwarzbeck	BBHA 9120D	02459	2023.10.26	2026.10.25
Test Antenna-Loop	Schwarzbeck	FMZB 1513-60	00015	2024.05.07	2026.05.06
Anechoic Chamber	YIHENG	C8-966	107	2024.05.12	2027.05.11
EMI Receiver	Keysight	N9038A	MY55330121	2025.04.16	2026.04.15
Filtering unit	balun	SU319F	LW-SZ19D0001F01	N/A	N/A
Switching unit	BALUN	SU319	LW-SZ19D0001S01	N/A	N/A
EMI Receiver	keysight	N9038B	MY61380132	2025.04.01	2026.03.31
LISN	SCHWARZBECK MESS- ELEKTRONIK	NSLK8127	01009	2025.07.15	2026.07.14
Shielded Enclosure	YiHeng Electronic Co., Ltd	4.3m*2.9m*2.4 m	235	2024.11.05	2027.11.04

4.3 Test Software List

Description	Manufacturer	Software Version	Serial No.	Applicable test Setup
BL410R	BALUN	V2.1.1.488	N/A	The section 4.5.1
BL410E	BALUN	V22.930	N/A	The section 4.5.2&4.5.3&4.5.4&4.5.5

4.4 Measurement Uncertainty

The following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2.

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.

Parameters	Uncertainty
Occupied Channel Bandwidth	2.8%
RF output power, conducted	1.28 dB
Power Spectral Density, conducted	1.30 dB
Unwanted Emissions, conducted	1.84 dB
All emissions, radiated	5.36 dB
Temperature	0.8℃
Humidity	4%

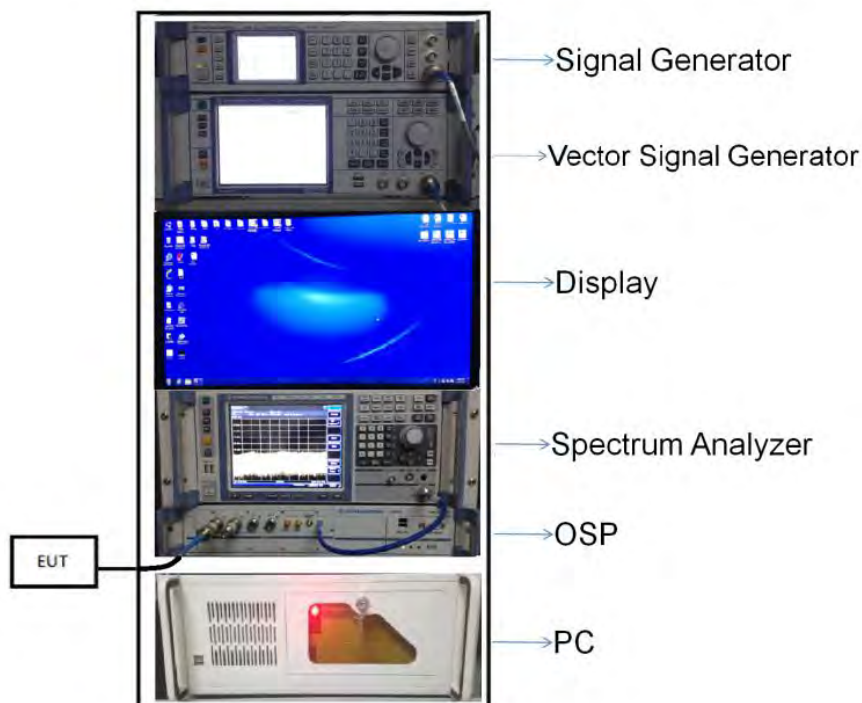
4.5 Description of Test Setup

4.5.1 For Antenna Port Test

Conducted value (dBm) = Measurement value (dBm) + cable loss (dB)

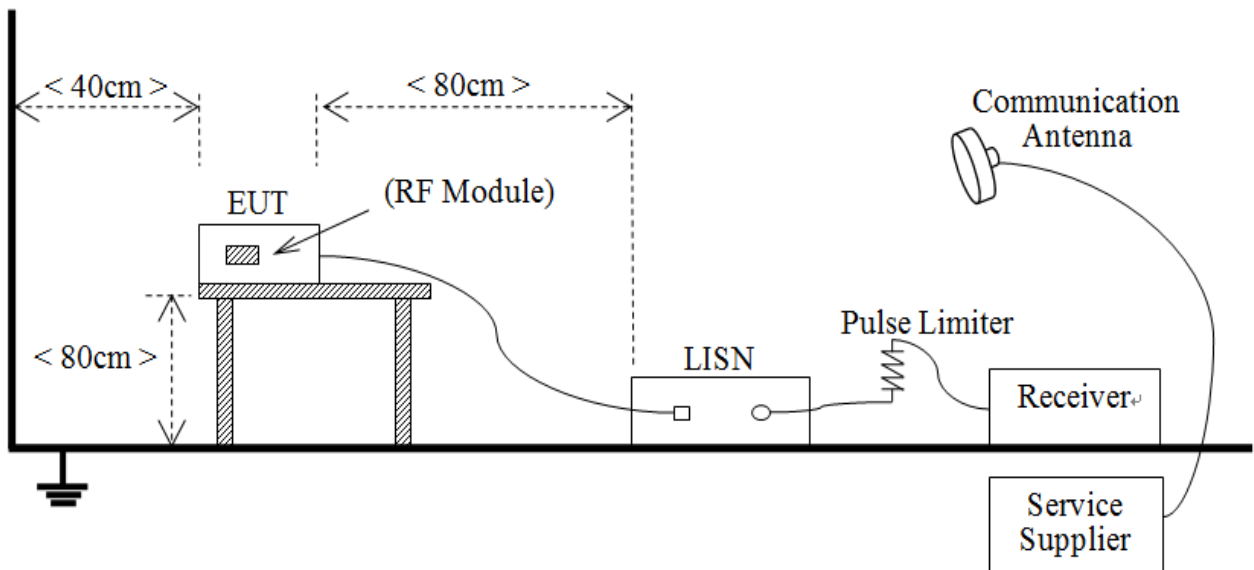
For example: the measurement value is 10 dBm and the cable 0.5dBm used, then the final result of EUT:

Conducted value (dBm) = 10 dBm + 0.5 dB = 10.5 dBm



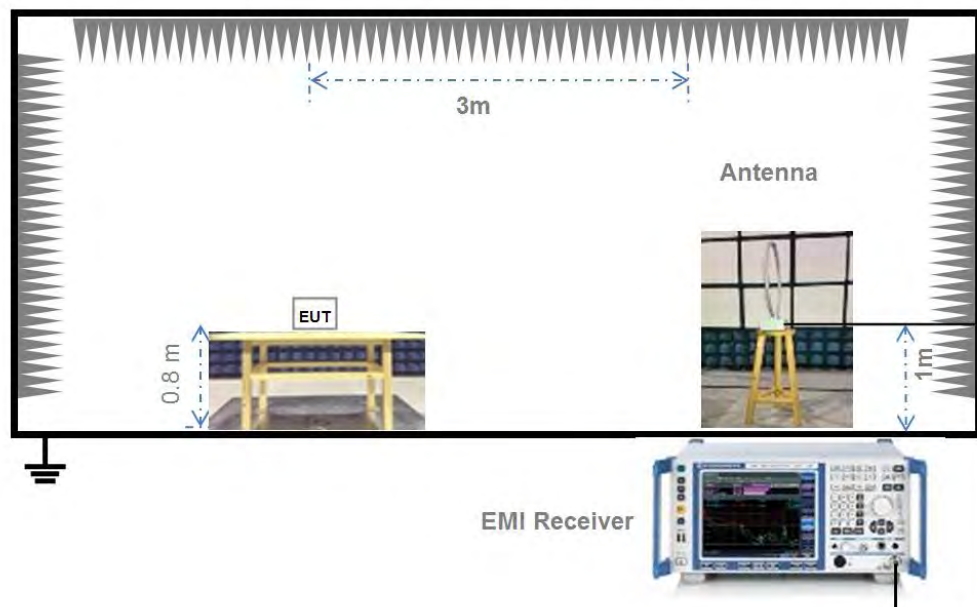
(Diagram 1)

4.5.2 For AC Power Supply Port Test



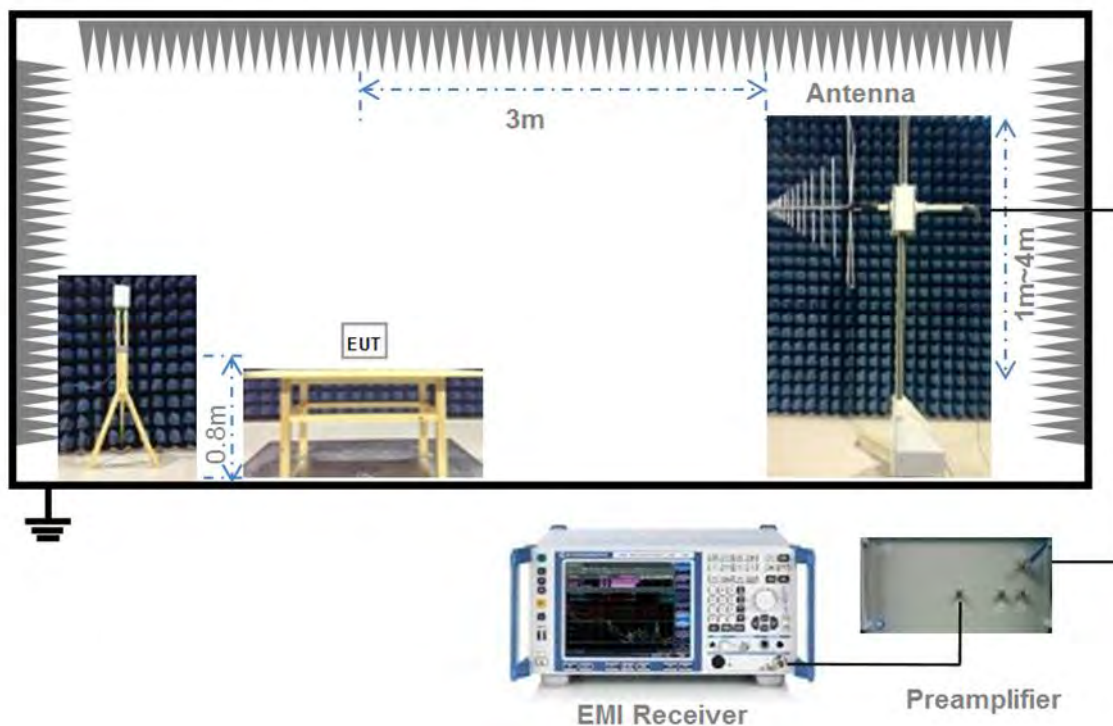
(Diagram 2)

4.5.3 For Radiated Test (Below 30 MHz)



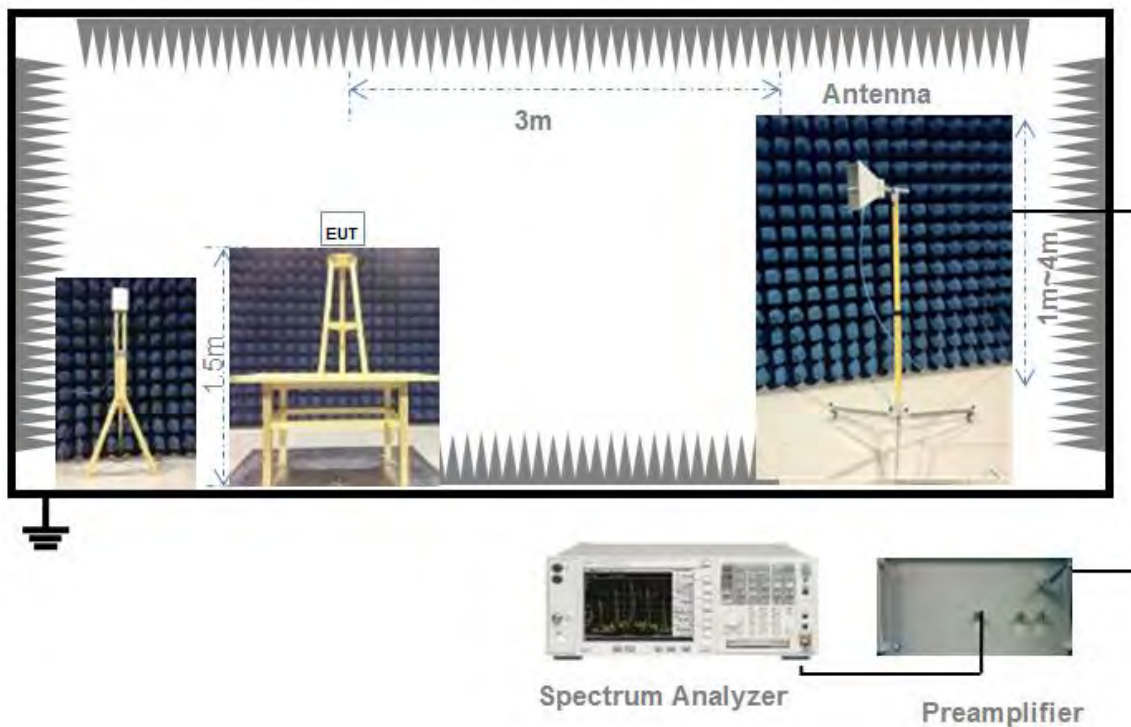
(Diagram 3)

4.5.4 For Radiated Test (30 MHz-1 GHz)



(Diagram 4)

4.5.5 For Radiated Test (Above 1 GHz)



(Diagram 5)

4.6 Measurement Results Explanation Example

4.6.1 For conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

4.6.2 For radiated band edges and spurious emission test:

$$E = \text{EIRP} - 20\log D + 104.8$$

where:

E = electric field strength in dB μ V/m,

EIRP = equivalent isotropic radiated power in dBm

D = specified measurement distance in meters.

EIRP = Measure Conducted output power Value (dBm) + Maximum transmit antenna gain (dBi) + the appropriate maximum ground reflection factor (dB)

5 TEST ITEMS

5.1 Antenna Requirements

5.1.1 Relevant Standards

FCC §15.203; RSS-247, 6.5 (c)

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of § 15.211, § 15.213, § 15.217, § 15.219, or § 15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with § 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

If directional gain of transmitting antennas is greater than 6 dBi, the power shall be reduced by the same level in dB comparing to gain minus 6 dBi. For the fixed point-to-point operation, the power shall be reduced by one dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the FCC rule.

5.1.2 Antenna Anti-Replacement Construction

The Antenna Anti-Replacement as following method:

Protected Method	Description
The antenna is embedded in the product.	An embedded-in antenna design is used.

Reference Documents	Item
Photo	Please refer to the EUT Photo documents.

5.1.3 Antenna Gain

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

5.2 Output Power

5.2.1 Test Limit

FCC § 15.247(b); RSS-247, 6.3.2

For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements.

RSS-247, 6.3.2

For DTS operating in the band 2400-2483.5 MHz, the maximum peak conducted output power shall not exceed 1W, and the e.i.r.p. shall not exceed 4 W, except as provided in section 6.5 a) and b).

5.2.2 Test Setup

See section 4.5.1 for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

5.2.3 Test Procedure

Maximum peak conducted output power

The maximum peak conducted output power may be measured using a broadband peak RF power meter. The power meter shall have a video bandwidth that is greater than or equal to the DTS bandwidth and shall utilize a fast-responding diode detector.

The EUT shall be transmitted at its maximum power control level.

EIRP= Maximum peak conducted output power +Antenna Gain.

Maximum conducted (average) output power (Reporting Only)

a) As an alternative to spectrum analyzer or EMI receiver measurements, measurements may be performed using a wideband RF power meter with a thermocouple detector or equivalent if all of the conditions listed below are satisfied.

- 1) The EUT is configured to transmit continuously, or to transmit with a constant duty factor.
 - 2) At all times when the EUT is transmitting, it shall be transmitting at its maximum power control level.
 - 3) The integration period of the power meter exceeds the repetition period of the transmitted signal by at least a factor of five.
- b) If the transmitter does not transmit continuously, measure the duty cycle (x) of the transmitter output signal.
- c) Measure the average power of the transmitter. This measurement is an average over both the on and

off periods of the transmitter.

d) Adjust the measurement in dBm by adding $10\log(1/x)$, where x is the duty cycle.

Measurements of duty cycle

The zero-span mode on a spectrum analyzer or EMI receiver if the response time and spacing between bins on the sweep are sufficient to permit accurate measurements of the on and off times of the transmitted signal.

Set the center frequency of the instrument to the center frequency of the transmission.

Set $RBW \geq OBW$ if possible; otherwise, set RBW to the largest available value.

Set $VBW \geq RBW$. Set detector = peak or average.

The zero-span measurement method shall not be used unless both RBW and VBW are $> 50/T$ and the number of sweep points across duration T exceeds 100. (For example, if VBW and/or RBW are limited to 3 MHz, then the zero-span method of measuring duty cycle shall not be used if $T \leq 16.7$ microseconds.)

5.2.4 Test Result

Please refer to ANNEX A.1.

5.3 Occupied Bandwidth

5.3.1 Limit

FCC §15.247(a); RSS-GEN, 6.7; RSS-247, 6.3.1(a)

Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 100 kHz. In order to make an accurate measurement, set the span greater than RBW. The 6 dB bandwidth must be greater than 500 kHz.

5.3.2 Test Setup

See section 4.5.1 for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

5.3.3 Test Procedure

Use the following spectrum analyzer settings:

Set RBW = 100 kHz.

Set the video bandwidth (VBW) ≥ 3 RBW.

Detector = Peak.

Trace mode = max hold.

Sweep = auto couple.

Allow the trace to stabilize.

Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

5.3.4 Test Result

Please refer to ANNEX A.2.

5.4 Conducted Spurious Emission

5.4.1 Limit

FCC §15.247(d); RSS-247, 6.6

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.

5.4.2 Test Setup

See section 4.5.1 for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

5.4.3 Test Procedure

The DTS rules specify that in any 100 kHz bandwidth outside of the authorized frequency band, the power shall be attenuated according to the following conditions:

- a) If the maximum peak conducted output power procedure was used to demonstrate compliance as described in 9.1, then the peak output power measured in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz (i.e., 20 dBc).
- b) If maximum conducted (average) output power was used to demonstrate compliance as described in 9.2, then the peak power in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum in-band peak PSD level in 100 kHz (i.e., 30 dBc).
- c) In either case, attenuation to levels below the 15.209 general radiated emissions limits is not required.

The following procedures shall be used to demonstrate compliance to these limits. Note that these procedures can be used in either an antenna-port conducted or radiated test set-up. Radiated tests must conform to the test site requirements and utilize maximization procedures defined herein.

Reference level measurement

Establish a reference level by using the following procedure:

Set instrument center frequency to DTS channel center frequency.

Set the span to ≥ 1.5 times the DTS bandwidth.

Set the RBW = 100 kHz.

Set the VBW $\geq 3 \times$ RBW.

Detector = peak.

Sweep time = auto couple.

Trace mode = max hold.

Allow trace to fully stabilize.

Use the peak marker function to determine the maximum PSD level.

Emission level measurement

Use the following spectrum analyzer settings:

Span = wide enough to capture the peak level of the in-band emission and all spurious emissions (e.g., harmonics) from the lowest frequency generated in the EUT up through the 10th harmonic. Typically, several plots are required to cover this entire span.

Set the RBW = 100 kHz.

Set the VBW $\geq 3 \times$ RBW.

Detector = peak.

Sweep time = auto couple.

Trace mode = max hold.

Allow trace to fully stabilize.

Use the peak marker function to determine the maximum amplitude level.

Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) are attenuated by at least the minimum requirements specified in 11.1 a) or 11.1 b). Report the three highest emissions relative to the limit.

5.4.4 Test Result

Please refer to ANNEX A.3.

5.5 Band Edge (Authorized-band band-edge)

5.5.1 Limit

FCC §15.247(d); RSS-GEN, 8.9, RSS-247, 6.6

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.

5.5.2 Test Setup

See section 4.5.1 for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

5.5.3 Test Procedure

The following procedures may be used to determine the peak or average field strength or power of an unwanted emission that is within 2 MHz of the authorized band edge. If a peak detector is utilized, use the procedure described in 13.2.1. Use the procedure described in 13.2.2 when using an average detector and the EUT can be configured to transmit continuously (i.e., duty cycle $\geq 98\%$). Use the procedure described in 13.2.3 when using an average detector and the EUT cannot be configured to transmit continuously but the duty cycle is constant (i.e., duty cycle variations are less than ± 2 percent). Use the procedure described in 13.2.4 when using an average detector for those cases where the EUT cannot be configured to transmit continuously and the duty cycle is not constant (duty cycle variations equal or exceed 2 percent).

When using a peak detector to measure unwanted emissions at or near the band edge (within 2 MHz of the authorized band), the following integration procedure can be used.

Set instrument center frequency to the frequency of the emission to be measured (must be within 2 MHz of the authorized band edge).

Set span to 2 MHz

RBW = 100 kHz.

VBW $\geq 3 \times$ RBW.

Detector = peak.

Sweep time = auto.

Trace mode = max hold.

Allow sweep to continue until the trace stabilizes (required measurement time may increase for low duty cycle applications)

Compute the power by integrating the spectrum over 1 MHz using the analyzer's band power measurement function with band limits set equal to the emission frequency (femission) ± 0.5 MHz. If the instrument does not have a band power function, then sum the amplitude levels (in power units) at 100 kHz intervals extending across the 1 MHz spectrum defined by femission ± 0.5 MHz.

Standard method(The 99% OBW of the fundamental emission is without 2 MHz of the authorized band):

Span: Wide enough to capture the peak level of the emission operating on the channel closest to the band edge, as well as any modulation products that fall outside of the authorized band of operation.

Reference level: As required to keep the signal from exceeding the maximum instrument input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than $[10 \log (\text{OBW/RBW})]$ below the reference level. Specific guidance is given in 4.1.5.2.

Attenuation: Auto (at least 10 dB preferred).

Sweep time: Coupled.

Resolution bandwidth: 100 kHz.

Video bandwidth: 300 kHz.

Detector: Peak.

Trace: Max hold.

5.5.4 Test Result

Please refer to ANNEX A.4.

5.6 Conducted Emission

5.6.1 Limit

FCC §15.207; RSS-GEN, 8.8

For an intentional radiator 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 within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50 μ H/50 Ω line impedance stabilization network (LISN).

Frequency range (MHz)	Conducted Limit (dB μ V)	
	Quai-peak	Average
0.15 - 0.50	66 to 56	56 to 46
0.50 - 5	56	46
0.50 - 30	60	50

5.6.2 Test Setup

See section 4.5.2 for test setup description for the AC power supply port. The photo of test setup please refer to ANNEX B.

5.6.3 Test Procedure

The maximum conducted interference is searched using Peak (PK), if the emission levels more than the AV and QP limits, and that have narrow margins from the AV and QP limits will be re-measured with AV and QP detectors. Tests for both L phase and N phase lines of the power mains connected to the EUT are performed. Refer to recorded points and plots below.

Devices subject to Part 15 must be tested for all available U.S. voltages and frequencies (such as a nominal 120 VAC, 50/60 Hz and 240 VAC, 50/60 Hz) for which the device is capable of operation. A device rated for 50/60 Hz operation need not be tested at both frequencies provided the radiated and line conducted emissions are the same at both frequencies.

5.6.4 Test Result

Please refer to ANNEX A.5.

5.7 Radiated Spurious Emission

5.7.1 Limit

FCC §15.209&15.247(d); RSS-247, 6.6

Radiated emission outside the frequency band attenuation below the general limits specified in FCC section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in FCC section 15.205(a), must also comply with the radiated emission limits specified in FCC section 15.209(a).

According to FCC section 15.209 (a), except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength ($\mu\text{V/m}$)	Measurement Distance (m)
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

Note:

1. For Above 1000 MHz, the emission limit in this paragraph is based on measurement instrumentation employing an average detector, measurement using instrumentation with a peak detector function, corresponding to 20dB above the maximum permitted average limit.
2. For above 1000 MHz, limit field strength of harmonics: 54dBuV/m@3m (AV) and 74dBuV/m@3m (PK).

5.7.2 Test Setup

See section 4.5.3 to 4.5.5 for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

5.7.3 Test Procedure

Since the emission limits are specified in terms of radiated field strength levels, measurements performed to demonstrate compliance have traditionally relied on a radiated test configuration. Radiated measurements remain the principal method for demonstrating compliance to the specified limits; however antenna-port conducted measurements are also now acceptable to demonstrate compliance (see below for details). When radiated measurements are utilized, test site requirements and procedures for maximizing and measuring radiated emissions that are described in ANSI C63.10 shall be followed.

Antenna-port conducted measurements may also be used as an alternative to radiated measurements for demonstrating compliance in the restricted frequency bands. If conducted measurements are performed, then proper impedance matching must be ensured and an additional radiated test for cabinet/case spurious emissions is required.

General Procedure for conducted measurements in restricted bands

- a) Measure the conducted output power (in dBm) using the detector specified (see guidance regarding measurement procedures for determining quasi-peak, peak, and average conducted output power, respectively).
- b) Add the maximum transmit antenna gain (in dBi) to the measured output power level to determine the EIRP level (see guidance on determining the applicable antenna gain)
- c) Add the appropriate maximum ground reflection factor to the EIRP level (6 dB for frequencies ≤ 30 MHz, 4.7 dB for frequencies between 30 MHz and 1000 MHz, inclusive and 0 dB for frequencies > 1000 MHz).
- d) For devices with multiple antenna-ports, measure the power of each individual chain and sum the EIRP of all chains in linear terms (e.g., Watts, mW).
- e) Convert the resultant EIRP level to an equivalent electric field strength using the following relationship:

$$E = \text{EIRP} - 20\log D + 104.8$$

where:

E = electric field strength in dB μ V/m,

EIRP = equivalent isotropic radiated power in dBm

D = specified measurement distance in meters.

- f) Compare the resultant electric field strength level to the applicable limit.
- g) Perform radiated spurious emission test.

Quasi-Peak measurement procedure

The specifications for measurements using the CISPR quasi-peak detector can be found in Publication 16 of the International Special Committee on Radio Frequency Interference (CISPR) of the International Electrotechnical Commission.

As an alternative to CISPR quasi-peak measurement, compliance can be demonstrated to the applicable emission limits using a peak detector.

Peak power measurement procedure

Peak emission levels are measured by setting the instrument as follows:

- a) RBW = as specified in Table 1.
- b) VBW $\geq 3 \times$ RBW.
- c) Detector = Peak.
- d) Sweep time = auto.
- e) Trace mode = max hold.
- f) Allow sweeps to continue until the trace stabilizes. (Note that the required measurement time may be

longer for low duty cycle applications).

Table 1—RBW as a function of frequency

Frequency	RBW
9-150 kHz	200-300 Hz
0.15-30 MHz	9-10 kHz
30-1000 MHz	100-120 kHz
> 1000 MHz	1 MHz

If the peak-detected amplitude can be shown to comply with the average limit, then it is not necessary to perform a separate average measurement.

Trace averaging across on and off times of the EUT transmissions followed by duty cycle correction

If continuous transmission of the EUT (i.e., duty cycle ≥ 98 percent) cannot be achieved and the duty cycle is constant (i.e., duty cycle variations are less than ± 2 percent), then the following procedure shall be used:

- a) The EUT shall be configured to operate at the maximum achievable duty cycle.
- b) Measure the duty cycle, x , of the transmitter output signal as described in section 6.0.
- c) RBW = 1 MHz (unless otherwise specified).
- d) VBW $\geq 3 \times$ RBW.
- e) Detector = RMS, if $\text{span}/(\# \text{ of points in sweep}) \leq (\text{RBW}/2)$. Satisfying this condition may require increasing the number of points in the sweep or reducing the span. If this condition cannot be satisfied, then the detector mode shall be set to peak.
- f) Averaging type = power (i.e., RMS).
 - 1) As an alternative, the detector and averaging type may be set for linear voltage averaging.
 - 2) Some instruments require linear display mode in order to use linear voltage averaging. Log or dB averaging shall not be used.
- g) Sweep time = auto.
- h) Perform a trace average of at least 100 traces.
- i) A correction factor shall be added to the measurement results prior to comparing to the emission limit in order to compute the emission level that would have been measured had the test been performed at 100 percent duty cycle. The correction factor is computed as follows:
 - 1) If power averaging (RMS) mode was used in step f), then the applicable correction factor is $10 \log(1/x)$, where x is the duty cycle.
 - 2) If linear voltage averaging mode was used in step f), then the applicable correction factor is $20 \log(1/x)$, where x is the duty cycle.
 - 3) If a specific emission is demonstrated to be continuous (≥ 98 percent duty cycle) rather than turning on and off with the transmit cycle, then no duty cycle correction is required for that emission.

NOTE: Reduction of the measured emission amplitude levels to account for operational duty factor is not permitted. Compliance is based on emission levels occurring during transmission - not on an average across on and off times of the transmitter.

Determining the applicable transmit antenna gain

A conducted power measurement will determine the maximum output power associated with a restricted band emission; however, in order to determine the associated EIRP level, the gain of the transmitting antenna (in dBi) must be added to the measured output power (in dBm).

Since the out-of-band characteristics of the EUT transmit antenna will often be unknown, the use of a conservative antenna gain value is necessary. Thus, when determining the EIRP based on the measured conducted power, the upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands, or 2 dBi, whichever is greater. However, for devices that operate in multiple frequency bands while using the same transmit antenna, the highest gain of the antenna within the operating band nearest in frequency to the restricted band emission being measured may be used in lieu of the overall highest gain when the emission is at a frequency that is within 20 percent of the nearest band edge frequency, but in no case shall a value less than 2 dBi be used.

See KDB 662911 for guidance on calculating the additional array gain term when determining the effective antenna gain for a EUT with multiple outputs occupying the same or overlapping frequency ranges in the same band.

Radiated spurious emission test

An additional consideration when performing conducted measurements of restricted band emissions is that unwanted emissions radiating from the EUT cabinet, control circuits, power leads, or intermediate circuit elements will likely go undetected in a conducted measurement configuration. To address this concern, a radiated test shall be performed to ensure that emissions emanating from the EUT cabinet (rather than the antenna port) also comply with the applicable limits.

For these cabinet radiated spurious emission measurements the EUT transmit antenna may be replaced with a termination matching the nominal impedance of the antenna. Procedures for performing radiated measurements are specified in ANSI C63.10. All detected emissions shall comply with the applicable limits.

The measurement frequency range is from 30 MHz to the 10th harmonic of the fundamental frequency. The Turn Table is actuated to turn from 0° to 360°, and both horizontal and vertical polarizations of the Test Antenna are used to find the maximum radiated power. Mid channels on all channel bandwidth verified. Only the worst RB size/offset presented.

The power of the EUT transmitting frequency should be ignored.

All Spurious Emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

Use the following spectrum analyzer settings:

Span = wide enough to fully capture the emission being measured

RBW = 1 MHz for $f \geq 1$ GHz, 100 kHz for $f < 1$ GHz

VBW $\geq$ RBW

Sweep = auto

Detector function = peak

Trace = max hold

5.7.4 Test Result

Please refer to ANNEX A.6.

5.8 Band Edge (Restricted-band band-edge)

5.8.1 Limit

FCC §15.209&15.247(d); RSS-247, 6.6

Radiated emission outside the frequency band attenuation below the general limits specified in FCC section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in FCC section 15.205(a), must also comply with the radiated emission limits specified in FCC section 15.209(a).

5.8.2 Test Setup

See section 4.5.1 for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

5.8.3 Test Procedure

The measurement frequency range is from 9 kHz to the 10th harmonic of the fundamental frequency. The Turn Table is actuated to turn from 0° to 360°, and both horizontal and vertical polarizations of the Test Antenna are used to find the maximum radiated power. Mid channels on all channel bandwidth verified. Only the worst RB size/offset presented.

The power of the EUT transmitting frequency should be ignored.

All Spurious Emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

Use the following spectrum analyzer settings:

Span = wide enough to fully capture the emission being measured

RBW = 1 MHz for $f \geq 1$ GHz, 100 kHz for $f < 1$ GHz

VBW $\geq$ RBW

Sweep = auto

Detector function = peak

Trace = max hold

For measurement below 1GHz, If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported, Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

For transmitters operating above 1 GHz repeat the measurement with an average detector.

5.8.4 Test Result

Please refer to ANNEX A.7.

5.9 Power Spectral density (PSD)

5.9.1 Limit

FCC §15.247(e); RSS-247, 6.3.1 (b)

The same method of determining the conducted output power shall be used to determine the power spectral density. If a peak output power is measured, then a peak power spectral density measurement is required. If an average output power is measured, then an average power spectral density measurement should be used.

5.9.2 Test Setup

See section 4.5.1 for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

5.9.3 Test Procedure

Set analyzer center frequency to DTS channel center frequency.

Set the span to 1.5 times the DTS bandwidth.

Set the RBW to: $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$.

Set the VBW $\geq 3 \text{ RBW}$.

Detector = peak.

Sweep time = auto couple.

Trace mode = max hold.

Allow trace to fully stabilize.

Use the peak marker function to determine the maximum amplitude level within the RBW.

If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

5.9.4 Test Result

Please refer to ANNEX A.8.

ANNEX A TEST RESULT

A.1 Output Power

Duty Cycle

Test Mode	On Time (ms)	On+Off time (ms)	Duty Cycle	Duty Factor
802.11b	8.340	8.620	96.75%	0.14
802.11g	1.385	1.640	84.45%	0.73
802.11n-20 MHz	1.290	1.550	83.23%	0.80
802.11n-40 MHz	0.645	0.900	71.67%	1.45
802.11ax-20 MHz	3.852	4.404	87.47%	0.58
802.11ax-40 MHz	3.816	4.392	86.89%	0.61

Peak Power Test Data**802.11b Mode:**

Channel	Measured Output Peak Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	14.15	26.00	30	1000	Pass
Middle	13.90	24.55			Pass
High	15.03	31.84			Pass

802.11g Mode:

Channel	Measured Output Peak Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	21.20	131.83	30	1000	Pass
Middle	21.26	133.66			Pass
High	21.47	140.28			Pass

802.11n-20 MHz Mode:

Channel	Measured Output Peak Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	21.95	156.68	30	1000	Pass
Middle	22.00	158.49			Pass
High	22.22	166.72			Pass

802.11n-40 MHz Mode:

Channel	Measured Output Peak Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	22.44	175.39	30	1000	Pass
Middle	22.48	177.01			Pass
High	22.54	179.47			Pass

802.11ax-20 MHz(SU) Mode:

Channel	Measured Output Peak Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	23.41	219.28	30	1000	Pass
Middle	23.39	218.27			Pass
High	23.56	226.99			Pass

802.11ax-40 MHz(SU) Mode:

Channel	Measured Output Peak Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	23.34	215.77	30	1000	Pass
Middle	23.33	215.28			Pass
High	23.46	221.82			Pass

Average Power Test Data

802.11b Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	11.14	13.00	30	1000	Pass
Middle	10.93	12.39			Pass
High	11.94	15.63			Pass

802.11g Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	16.13	41.02	30	1000	Pass
Middle	15.88	38.73			Pass
High	16.10	40.74			Pass

802.11n-20 MHz Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	16.27	42.36	30	1000	Pass
Middle	16.42	43.85			Pass
High	16.41	43.75			Pass

802.11n-40 MHz Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	16.00	39.81	30	1000	Pass
Middle	16.03	40.09			Pass
High	16.09	40.64			Pass

802.11ax-20 MHz(SU) Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	16.20	41.69	30	1000	Pass
Middle	16.17	41.40			Pass
High	16.36	43.25			Pass

802.11ax-40 MHz(SU) Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	16.87	48.64	30	1000	Pass
Middle	16.82	48.08			Pass
High	16.84	48.31			Pass

E.I.R.P Test Data (For ISSED)

802.11b Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
Low	13.77	23.82	36	4	Pass
Middle	13.52	22.49			Pass
High	14.65	29.17			Pass

802.11g Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
Low	20.82	120.78	36	4	Pass
Middle	20.88	122.46			Pass
High	21.09	128.53			Pass

802.11n-20 MHz Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
Low	21.57	143.55	36	4	Pass
Middle	21.62	145.21			Pass
High	21.84	152.76			Pass

802.11n-40 MHz Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
Low	22.06	160.69	36	4	Pass
Middle	22.10	162.18			Pass
High	22.16	164.44			Pass

802.11ax-20 MHz(SU) Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
Low	23.03	200.91	36	4	Pass
Middle	23.01	199.99			Pass
High	23.18	207.97			Pass

802.11ax-40 MHz(SU) Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
Low	22.96	197.70	36	4	Pass
Middle	22.95	197.24			Pass
High	23.08	203.24			Pass

A.2 Occupied Bandwidth

Test Data

802.11b Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	8.300000	12.673000	≥500
Middle	8.300000	12.663000	≥500
High	8.300000	12.647000	≥500

802.11g Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	16.300000	17.458000	≥500
Middle	16.400000	17.626000	≥500
High	16.400000	17.556000	≥500

802.11n-20MHz Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	17.700000	18.462000	≥500
Middle	17.600000	18.905000	≥500
High	17.500000	18.548000	≥500

802.11n-40MHz Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	36.000000	36.355000	≥500
Middle	36.000000	36.533000	≥500
High	36.200000	36.517000	≥500

802.11ax-20 MHz(SU) Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	18.800000	18.936000	≥500
Middle	18.900000	19.126000	≥500
High	18.900000	19.072000	≥500

802.11ax-40 MHz(SU) Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	37.800000	37.664000	≥500
Middle	37.600000	37.703000	≥500
High	37.200000	37.640000	≥500

Test Plots

6 dB Bandwidth

802.11b LOW CHANNEL



802.11b MIDDLE CHANNEL



802.11b HIGH CHANNEL



802.11g LOW CHANNEL



802.11g MIDDLE CHANNEL



802.11g HIGH CHANNEL



802.11n-20 MHz LOW CHANNEL



802.11n-20 MHz MIDDLE CHANNEL



802.11n-20 MHz HIGH CHANNEL



802.11n-40 MHz LOW CHANNEL



802.11n-40 MHz MIDDLE CHANNEL



802.11n-40 MHz HIGH CHANNEL



802.11ax-20 MHz(SU) LOW CHANNEL



802.11ax-20 MHz(SU) MIDDLE CHANNEL



802.11ax-20 MHz(SU) HIGH CHANNEL



802.11ax-40 MHz(SU) LOW CHANNEL



802.11ax-40 MHz(SU) MIDDLE CHANNEL



802.11ax-40 MHz(SU) HIGH CHANNEL



99% Bandwidth

802.11b LOW CHANNEL



802.11b MIDDLE CHANNEL



802.11b HIGH CHANNEL



802.11g LOW CHANNEL



802.11g MIDDLE CHANNEL



802.11g HIGH CHANNEL



802.11n-20 MHz LOW CHANNEL



802.11n-20 MHz MIDDLE CHANNEL



802.11n-20 MHz HIGH CHANNEL



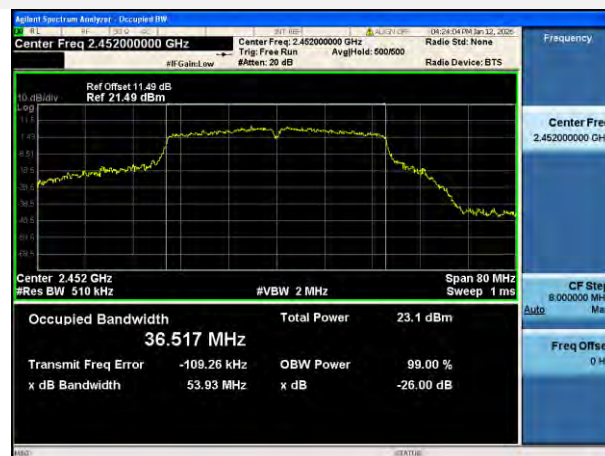
802.11n-40 MHz LOW CHANNEL



802.11n-40 MHz MIDDLE CHANNEL



802.11n-40 MHz HIGH CHANNEL



802.11ax-20 MHz(SU) LOW CHANNEL



802.11ax-20 MHz(SU) MIDDLE CHANNEL



802.11ax-20 MHz(SU) HIGH CHANNEL



802.11ax-40 MHz(SU) LOW CHANNEL



802.11ax-40 MHz(SU) MIDDLE CHANNEL



802.11ax-40 MHz(SU) HIGH CHANNEL



A.3 Conducted Spurious Emissions

Test Data

802.11b Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-36.42	2.17	-17.83	Pass
Middle	-34.91	1.94	-18.06	Pass
High	-36.66	3.12	-16.88	Pass

802.11g Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-33.66	5.64	-14.36	Pass
Middle	-35.65	5.16	-14.84	Pass
High	-33.59	5.96	-14.04	Pass

802.11n-20MHz Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-34.23	6.73	-13.27	Pass
Middle	-36.74	6.61	-13.39	Pass
High	-34.62	6.68	-13.32	Pass

802.11n-40MHz Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-36.62	4.78	-15.22	Pass
Middle	-35.48	3.72	-16.28	Pass
High	-36.36	3.70	-16.30	Pass

802.11ax-20 MHz(SU) Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-33.74	6.53	-13.47	Pass
Middle	-34.07	6.38	-13.62	Pass
High	-34.05	5.51	-14.49	Pass

802.11ax-40 MHz(SU) Mode:

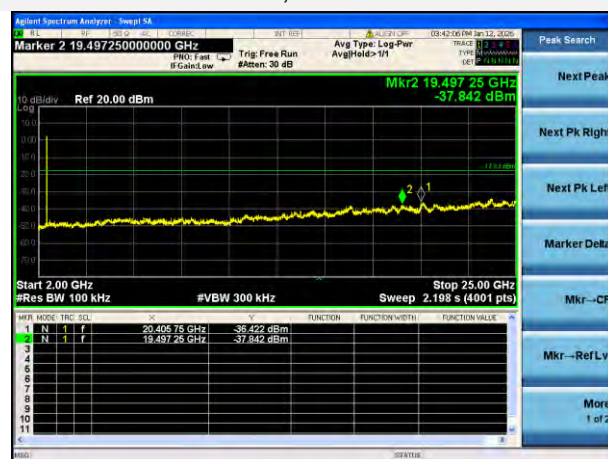
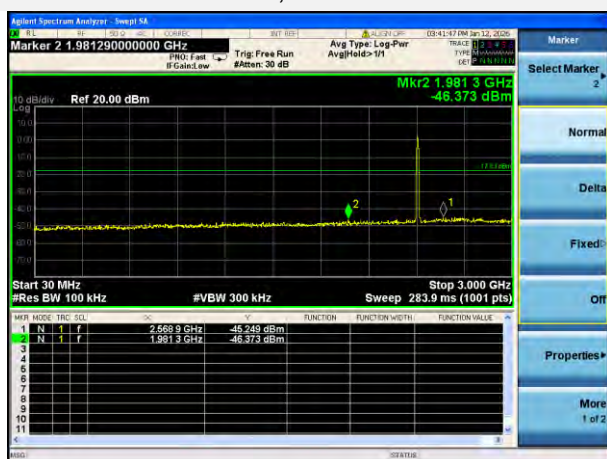
Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-34.33	2.58	-17.42	Pass
Middle	-34.44	1.55	-18.45	Pass
High	-35.94	2.78	-17.22	Pass

Test Plots

802.11b LOW CHANNEL CARRIER LEVEL



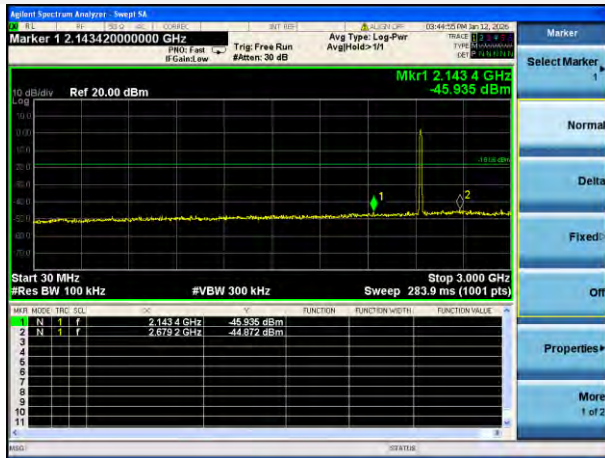
802.11b LOW CHANNEL, SPURIOUS 30 MHz ~ 3 GHz 802.11b LOW CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



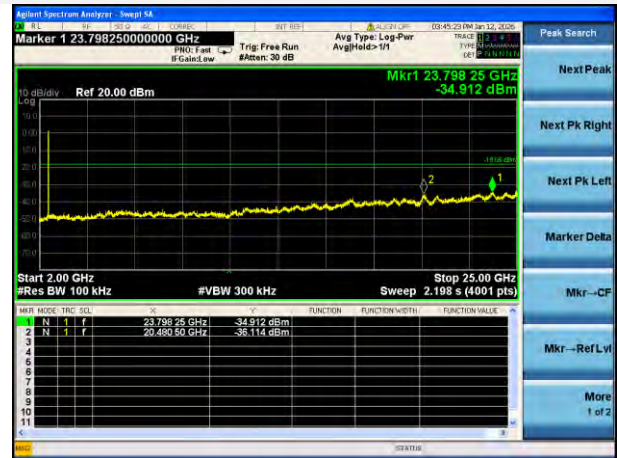
802.11b MIDDLE CHANNEL CARRIER LEVEL



802.11b MIDDLE CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



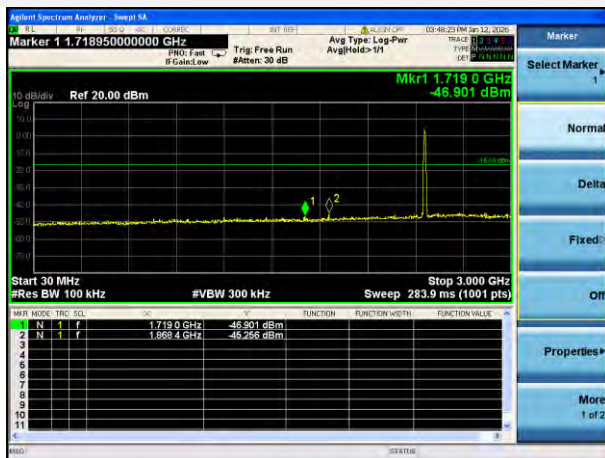
802.11b MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



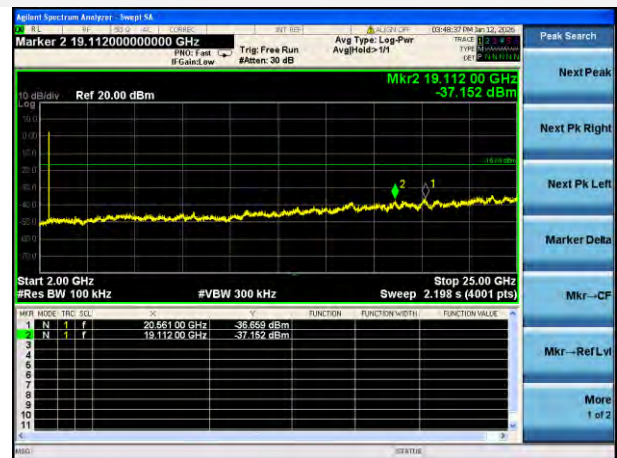
802.11b HIGH CHANNEL CARRIER LEVEL



802.11b HIGH CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



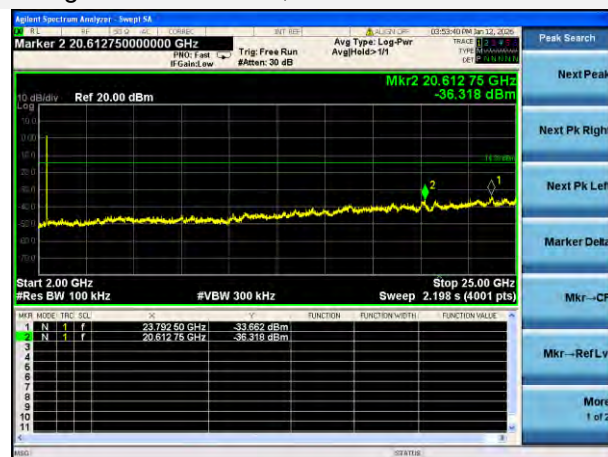
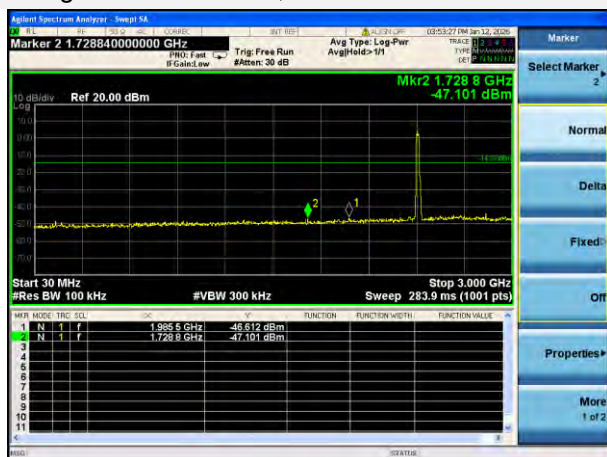
802.11b HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



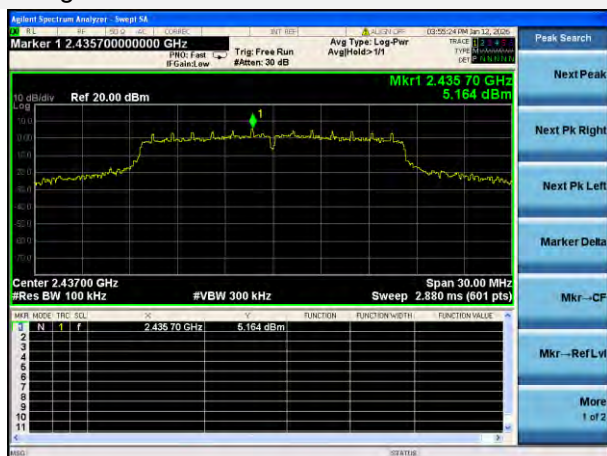
802.11g LOW CHANNEL CARRIER LEVEL



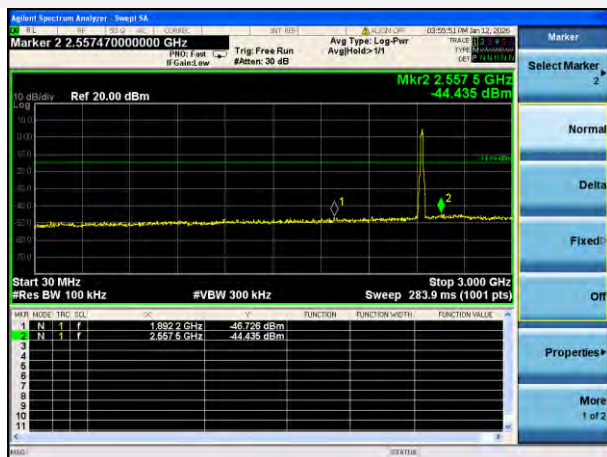
802.11g LOW CHANNEL, SPURIOUS 30 MHz ~ 3 GHz 802.11g LOW CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



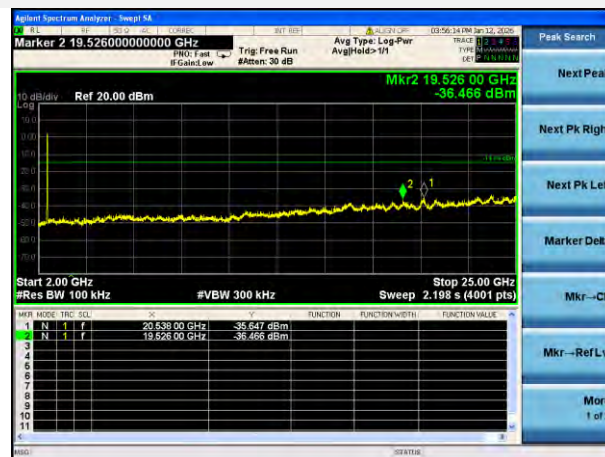
802.11g MIDDLE CHANNEL CARRIER LEVEL



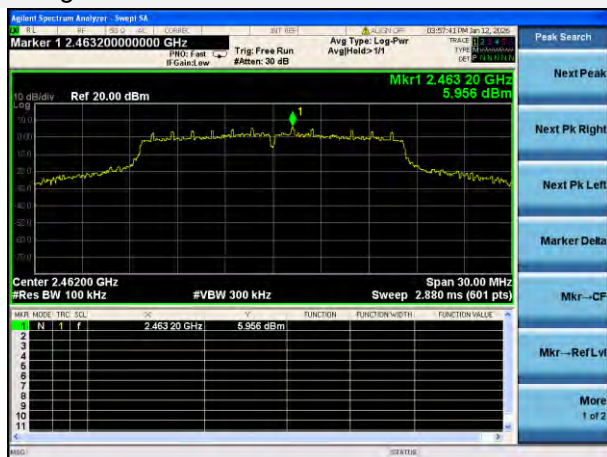
802.11g MIDDLE CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



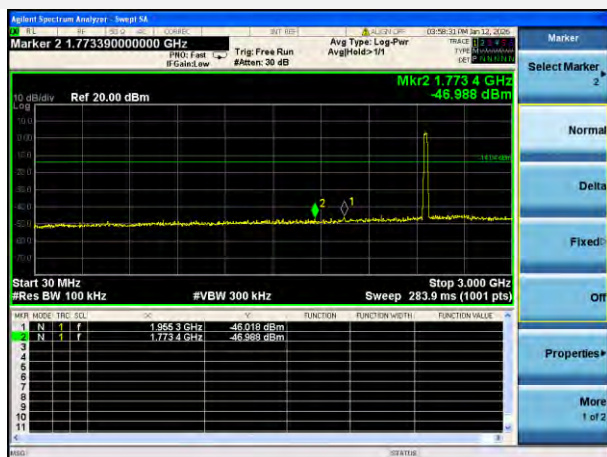
802.11g MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



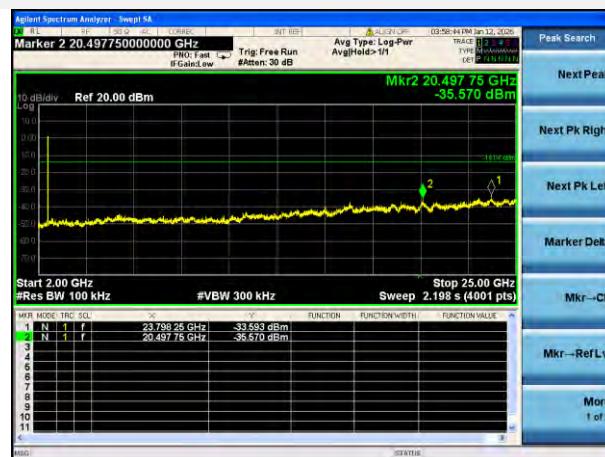
802.11g HIGH CHANNEL CARRIER LEVEL



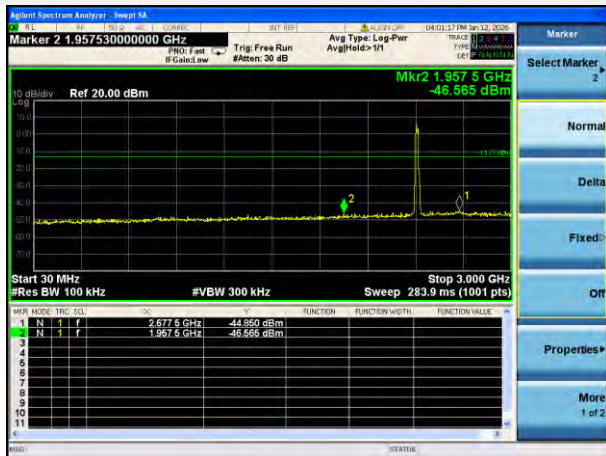
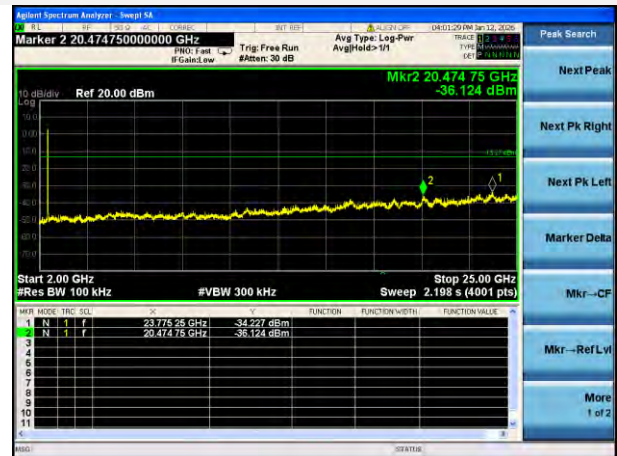
802.11g HIGH CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



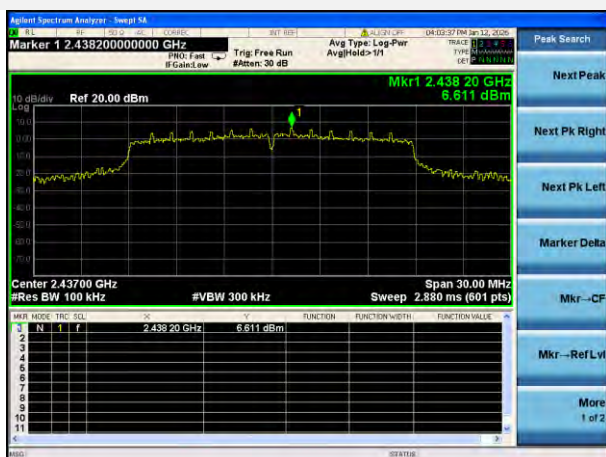
802.11g HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



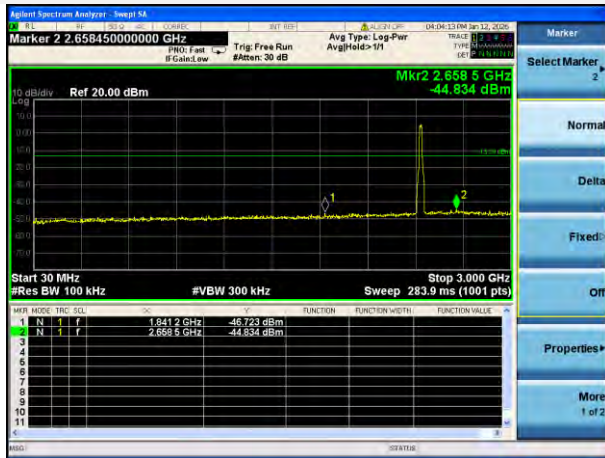
802.11n-20 MHz LOW CHANNEL CARRIER LEVEL

802.11n-20 MHz LOW CHANNEL, SPURIOUS
30 MHz ~ 3 GHz802.11n-20 MHz LOW CHANNEL, SPURIOUS
2 GHz ~ 25 GHz

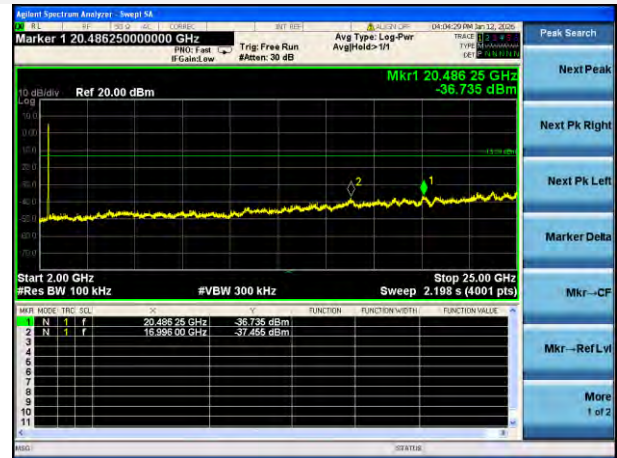
802.11n-20 MHz MIDDLE CHANNEL CARRIER LEVEL



802.11n-20 MHz MIDDLE CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



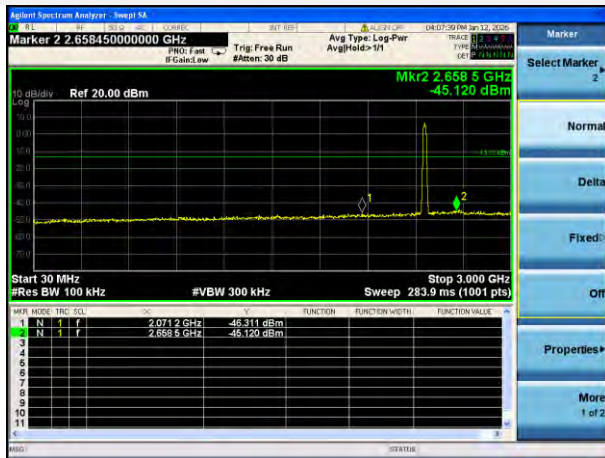
802.11n-20 MHz MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



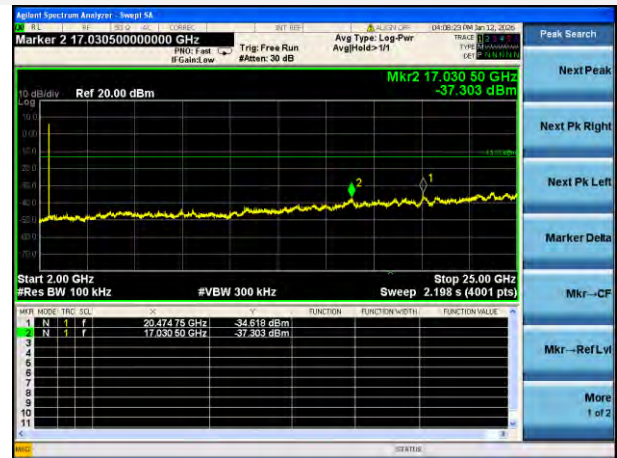
802.11n-20 MHz HIGH CHANNEL CARRIER LEVEL



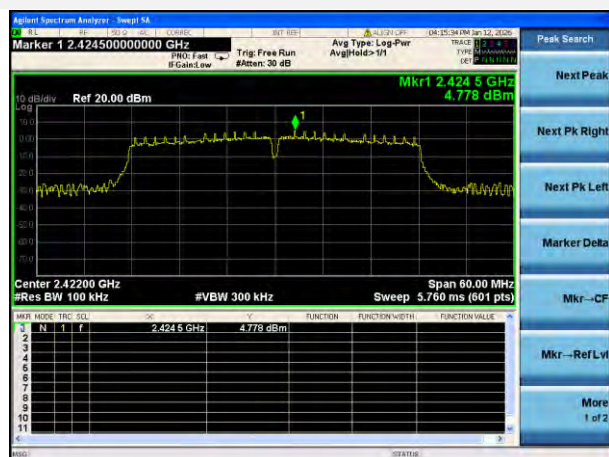
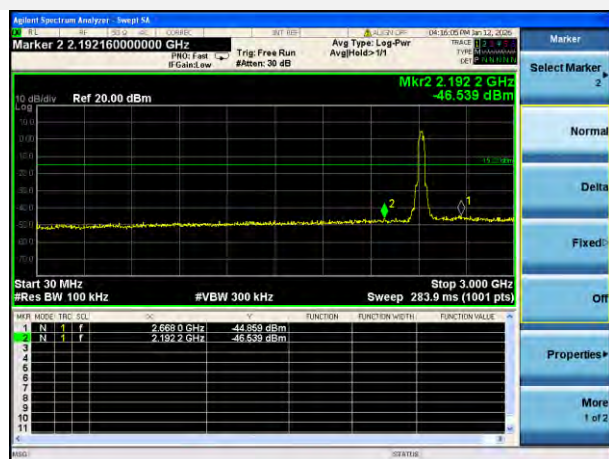
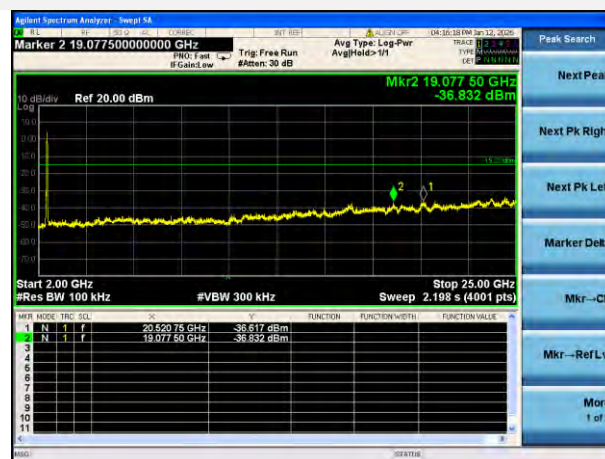
802.11n-20 MHz HIGH CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



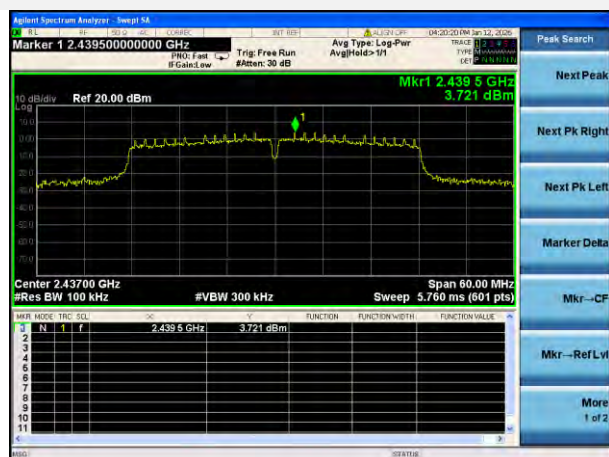
802.11n-20 MHz HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



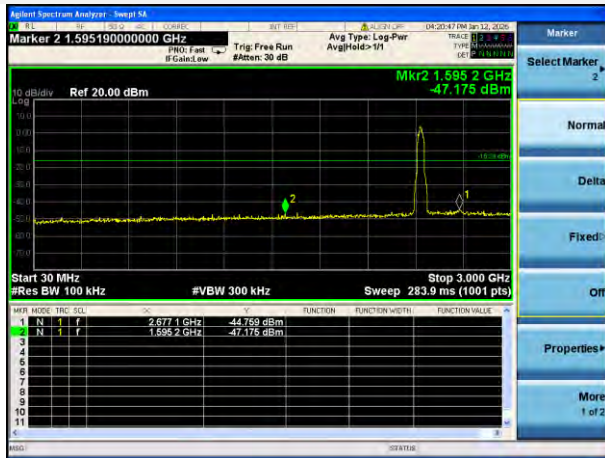
802.11n-40 MHz LOW CHANNEL CARRIER LEVEL

802.11n-40 MHz LOW CHANNEL, SPURIOUS
30 MHz ~ 3 GHz802.11n-40 MHz LOW CHANNEL, SPURIOUS
2 GHz ~ 25 GHz

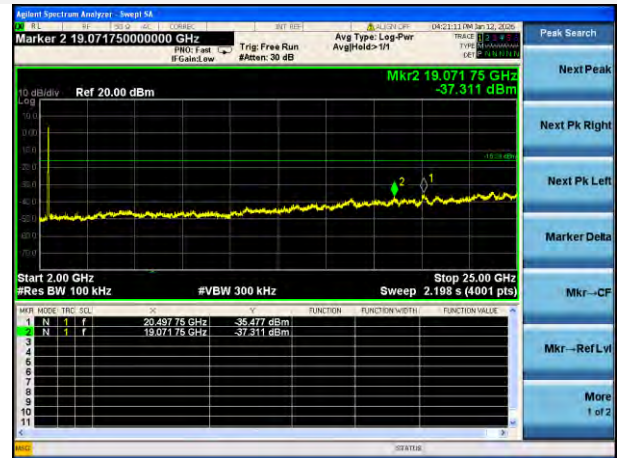
802.11n-40 MHz MIDDLE CHANNEL CARRIER LEVEL



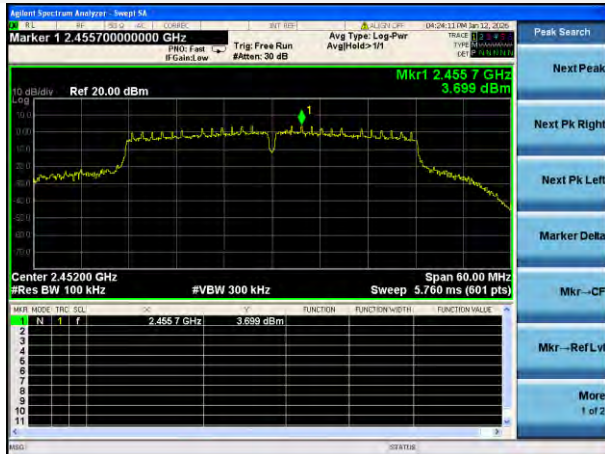
802.11n-40 MHz MIDDLE CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



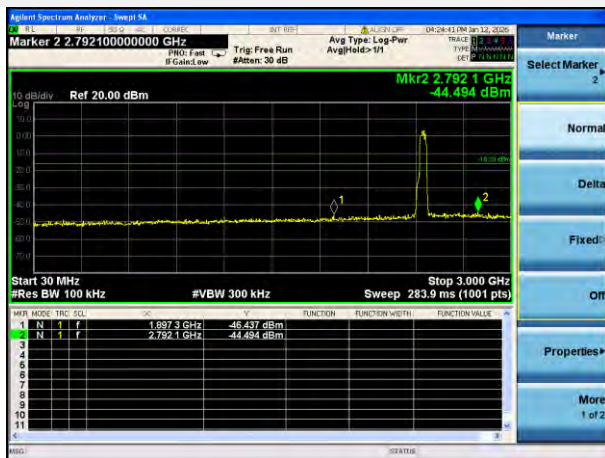
802.11n-40 MHz MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



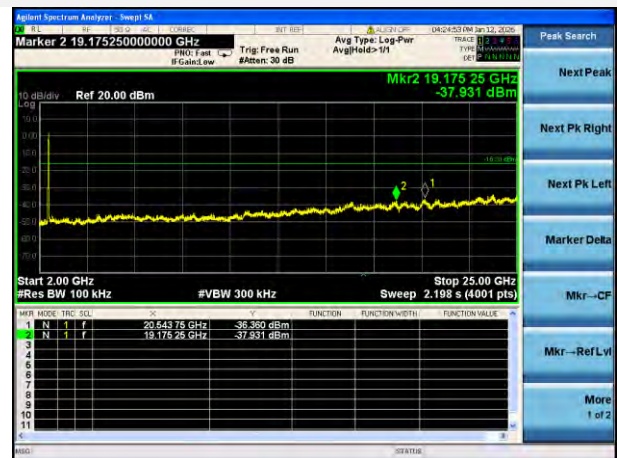
802.11n-40 MHz HIGH CHANNEL CARRIER LEVEL



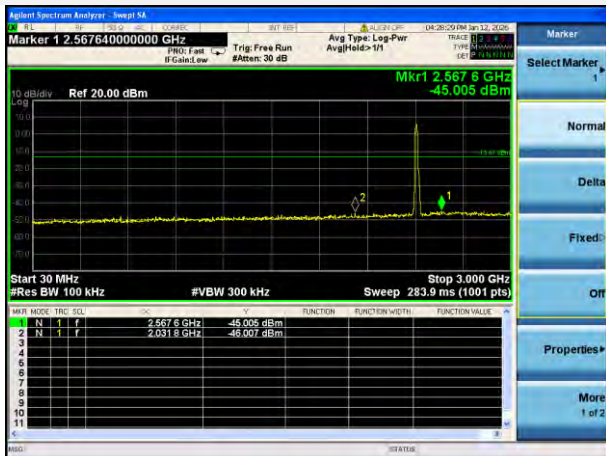
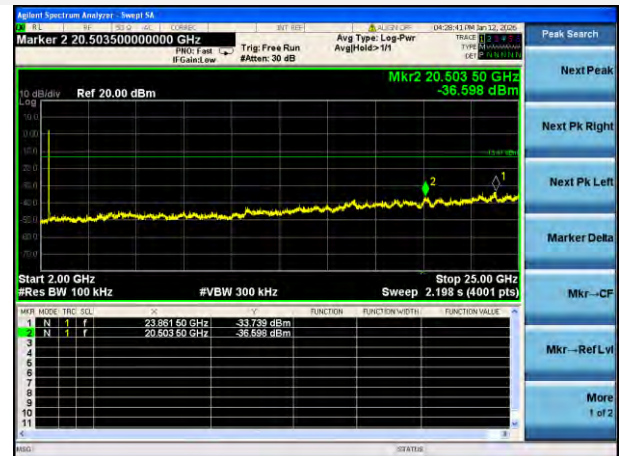
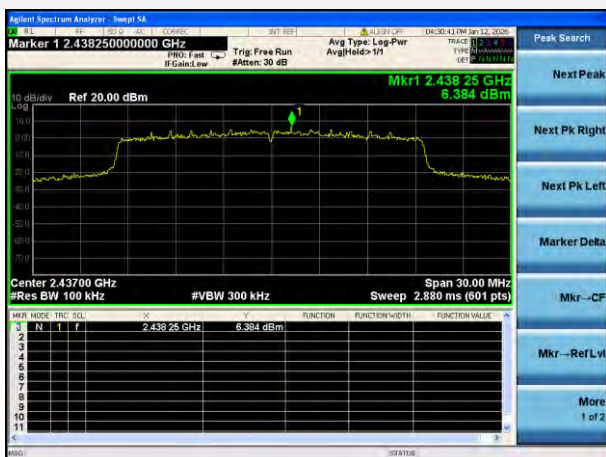
802.11n-40 MHz HIGH CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



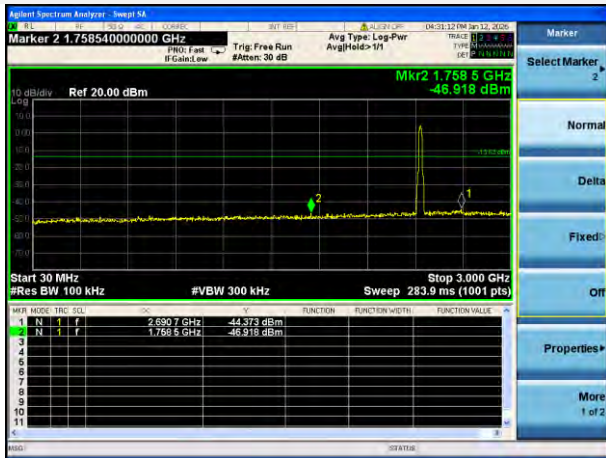
802.11n-40 MHz HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



802.11ax-20 MHz(SU) LOW CHANNEL CARRIER LEVEL

802.11ax-20 MHz(SU) LOW CHANNEL, SPURIOUS
30 MHz ~ 3 GHz802.11ax-20 MHz(SU) LOW CHANNEL, SPURIOUS
2 GHz ~ 25 GHz802.11ax-20 MHz(SU) MIDDLE CHANNEL CARRIER
LEVEL

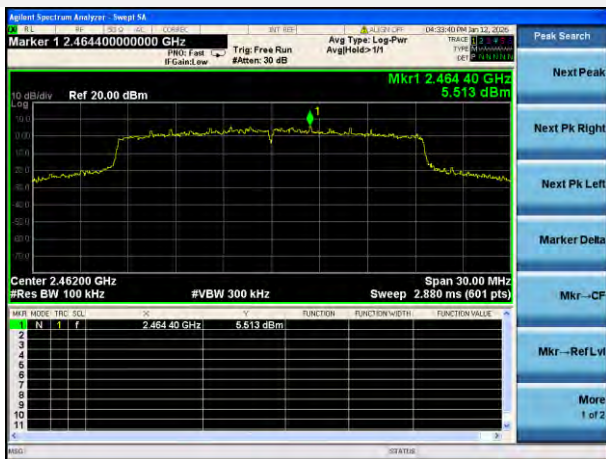
802.11ax-20 MHz(SU) MIDDLE CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



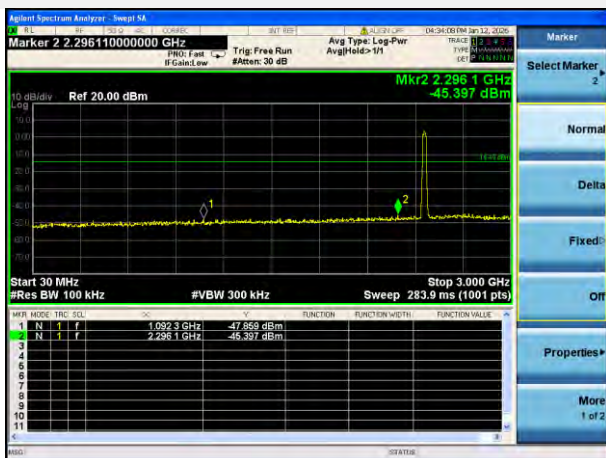
802.11ax-20 MHz(SU) MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



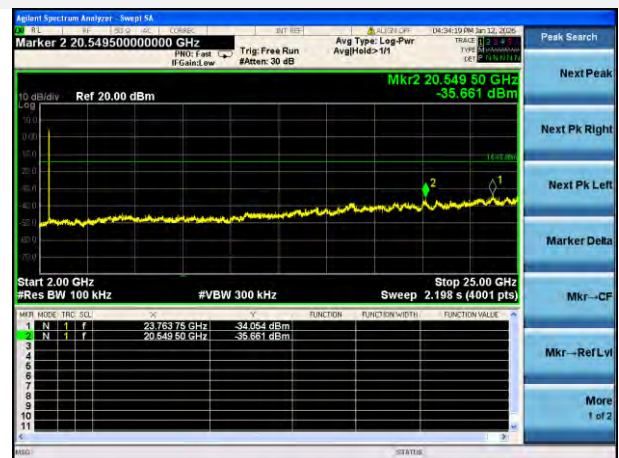
802.11ax-20 MHz(SU) HIGH CHANNEL CARRIER LEVEL



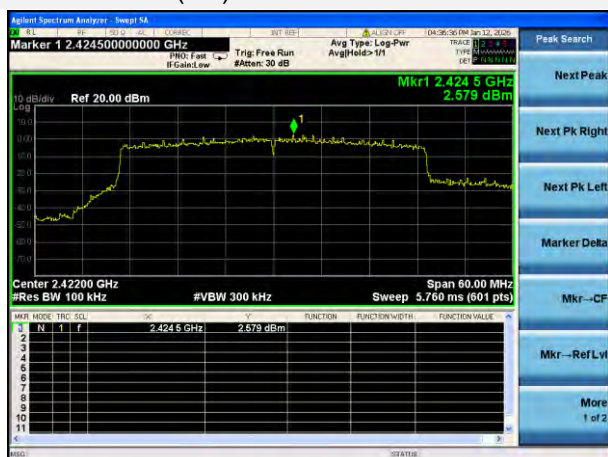
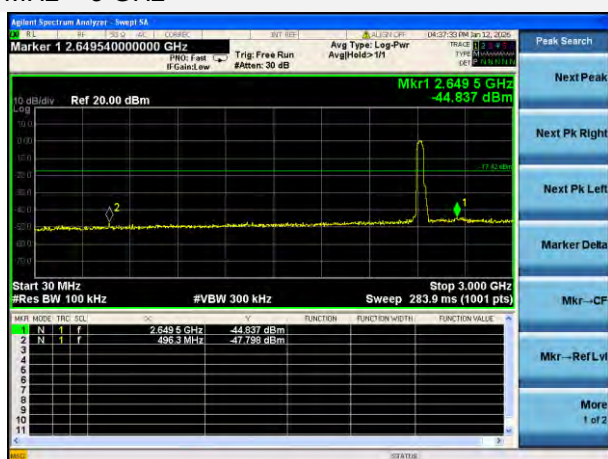
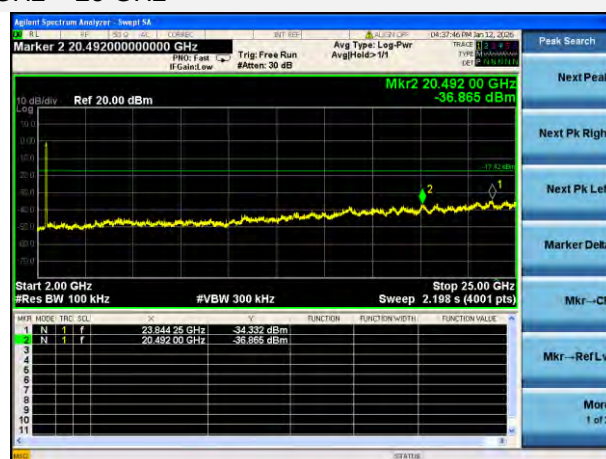
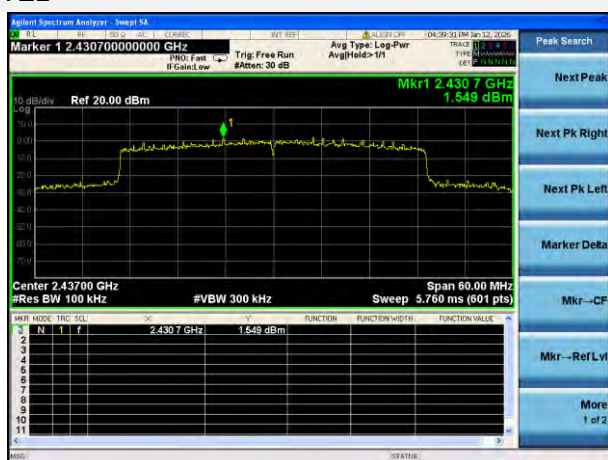
802.11ax-20 MHz(SU) HIGH CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



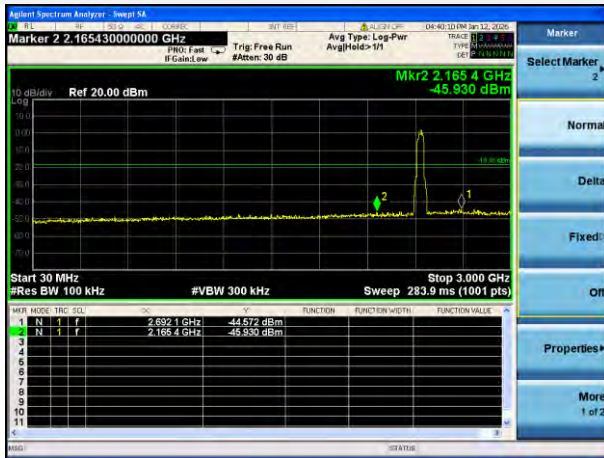
802.11ax-20 MHz(SU) HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



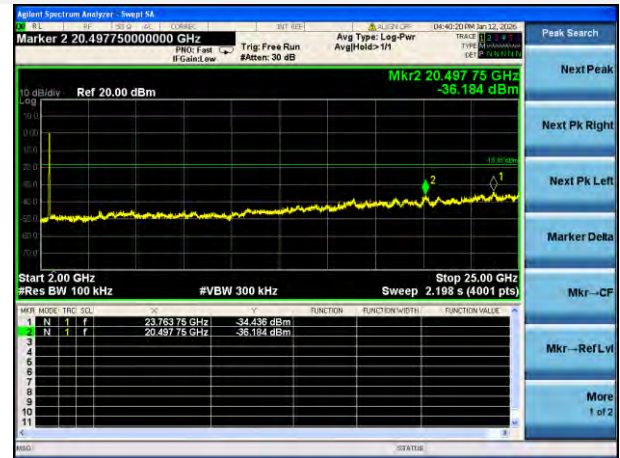
802.11ax-40 MHz(SU) LOW CHANNEL CARRIER LEVEL

802.11ax-40 MHz(SU) LOW CHANNEL, SPURIOUS
30 MHz ~ 3 GHz802.11ax-40 MHz(SU) LOW CHANNEL, SPURIOUS
2 GHz ~ 25 GHz802.11ax-40 MHz(SU) MIDDLE CHANNEL CARRIER
LEVEL

802.11ax-40 MHz(SU) MIDDLE CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



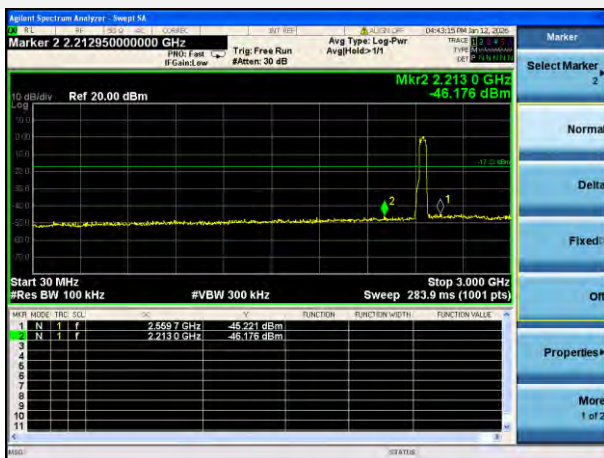
802.11ax-40 MHz(SU) MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



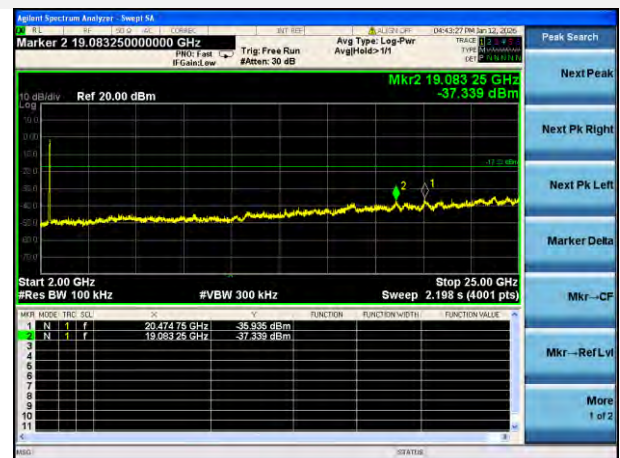
802.11ax-40 MHz(SU) HIGH CHANNEL CARRIER LEVEL



802.11ax-40 MHz(SU) HIGH CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



802.11ax-40 MHz(SU) HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



A.4 Band Edge (Authorized-band band-edge)

Note: The 99% OBW of the fundamental emission is without 2 MHz of the authorized band.

Test Data

802.11b Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-45.72	2.17	-17.83	Pass
High Channel	-47.34	3.12	-16.88	Pass

802.11g Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-39.35	5.64	-14.36	Pass
High Channel	-47.41	5.96	-14.04	Pass

802.11n-20 MHz Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-38.04	6.73	-13.27	Pass
High Channel	-45.27	6.68	-13.32	Pass

802.11n-40 MHz Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-31.79	4.78	-15.22	Pass
High Channel	-43.77	3.70	-16.30	Pass

802.11ax-20 MHz(SU) Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-39.17	6.53	-13.47	Pass
High Channel	-46.37	5.51	-14.49	Pass

802.11ax-40 MHz(SU) Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-32.40	2.58	-17.42	Pass
High Channel	-44.95	2.78	-17.22	Pass

Test Plots

802.11b LOW CHANNEL, CARRIER LEVEL



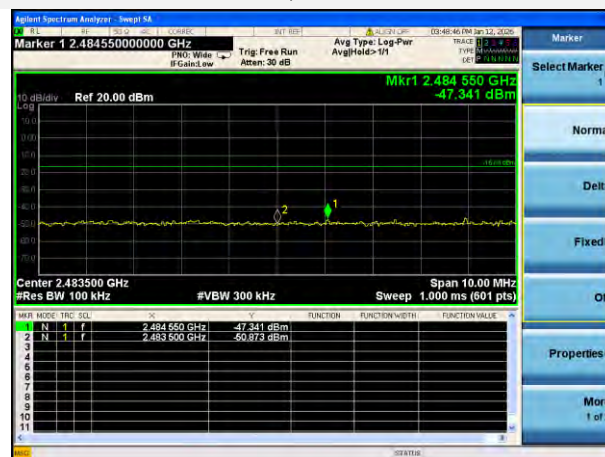
802.11b LOW CHANNEL, BAND EDGE



802.11b HIGH CHANNEL, CARRIER LEVEL



802.11b HIGH CHANNEL, BAND EDGE



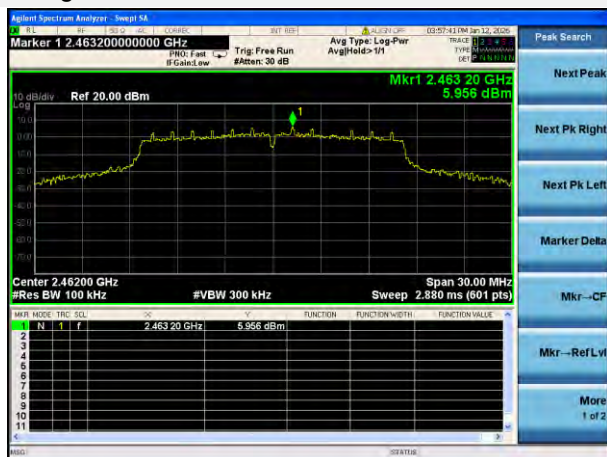
802.11g LOW CHANNEL, CARRIER LEVEL



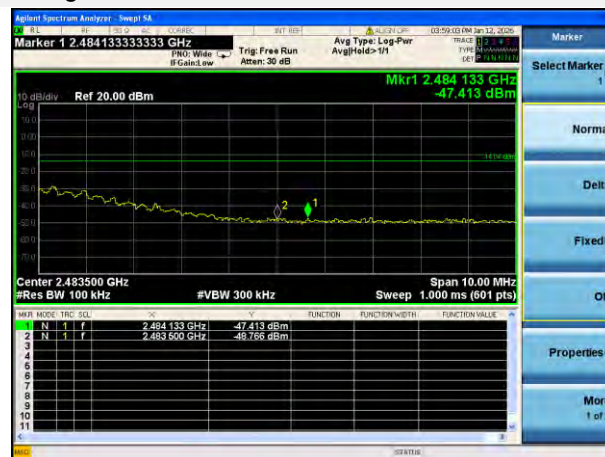
802.11g LOW CHANNEL, BAND EDGE



802.11g HIGH CHANNEL, CARRIER LEVEL



802.11g HIGH CHANNEL, BAND EDGE



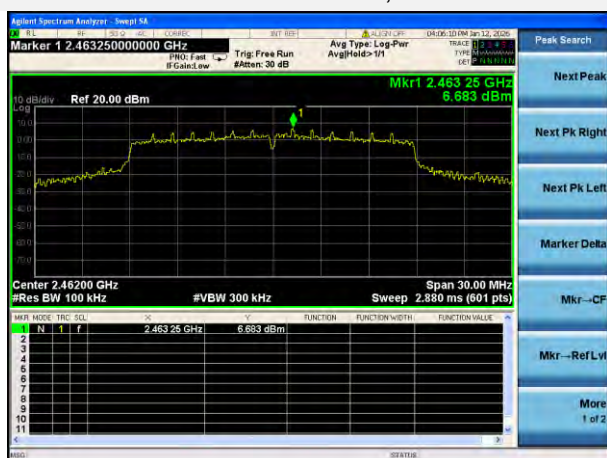
802.11n-20 MHz LOW CHANNEL, CARRIER LEVEL



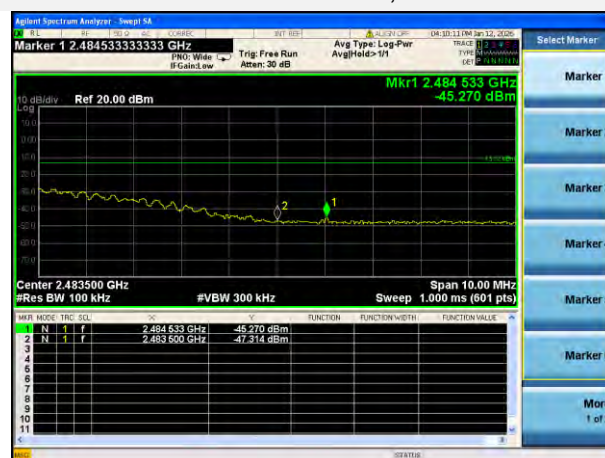
802.11n-20 MHz LOW CHANNEL, BAND EDGE



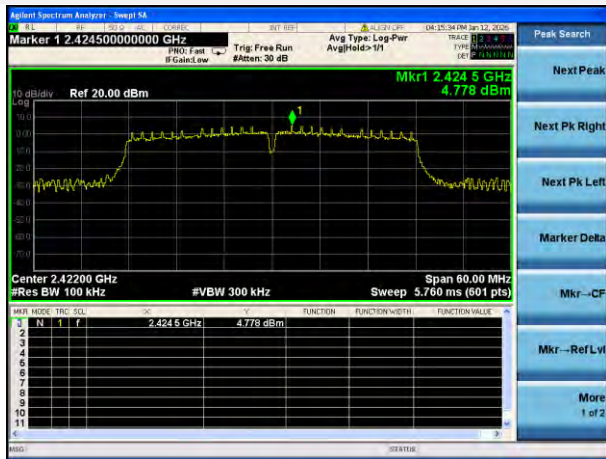
802.11n-20 MHz HIGH CHANNEL, CARRIER LEVEL



802.11n-20 MHz HIGH CHANNEL, BAND EDGE



802.11n-40 MHz LOW CHANNEL, CARRIER LEVEL



802.11n-40 MHz LOW CHANNEL, BAND EDGE



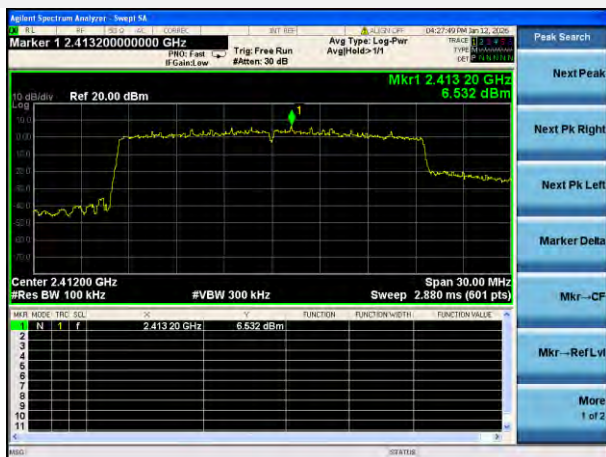
802.11n-40 MHz HIGH CHANNEL, CARRIER LEVEL



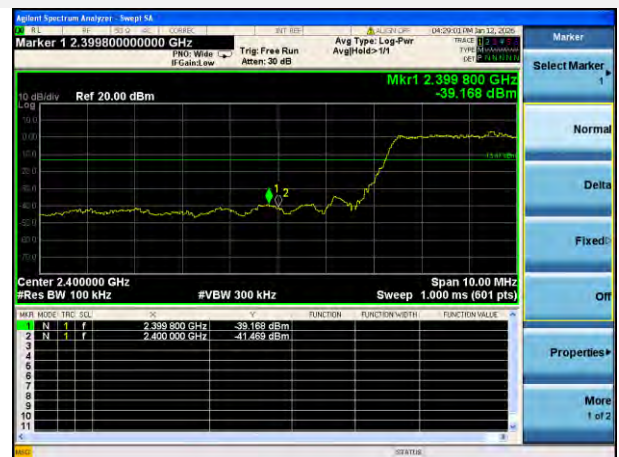
802.11n-40 MHz HIGH CHANNEL, BAND EDGE



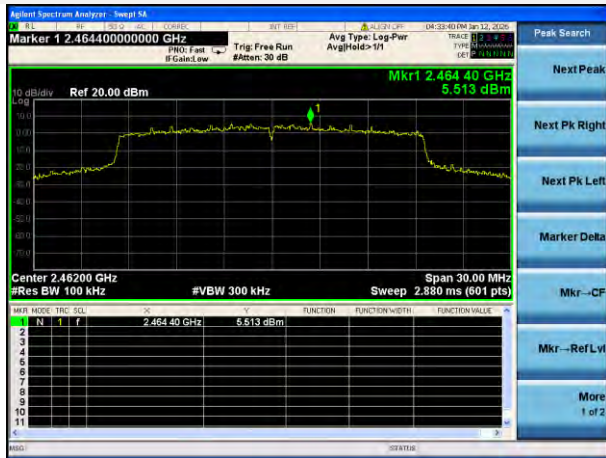
802.11ax-20 MHz(SU) LOW CHANNEL, CARRIER LEVEL



802.11ax-20 MHz(SU) LOW CHANNEL, BAND EDGE



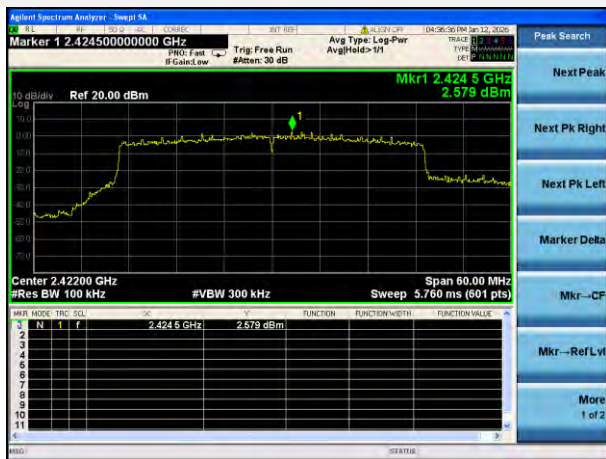
802.11ax-20 MHz(SU) HIGH CHANNEL, CARRIER LEVEL



802.11ax-20 MHz(SU) HIGH CHANNEL, BAND EDGE



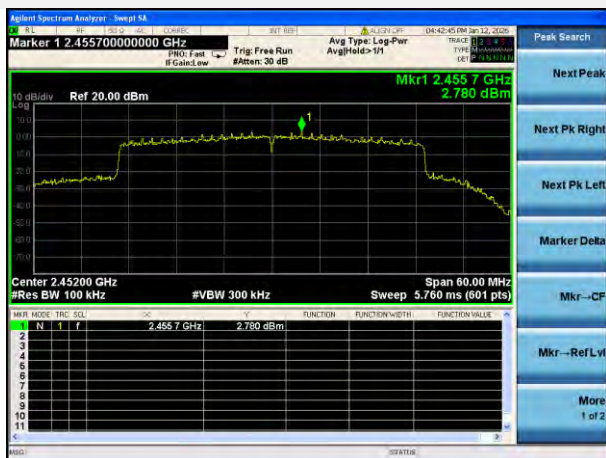
802.11ax-40 MHz(SU) LOW CHANNEL, CARRIER LEVEL



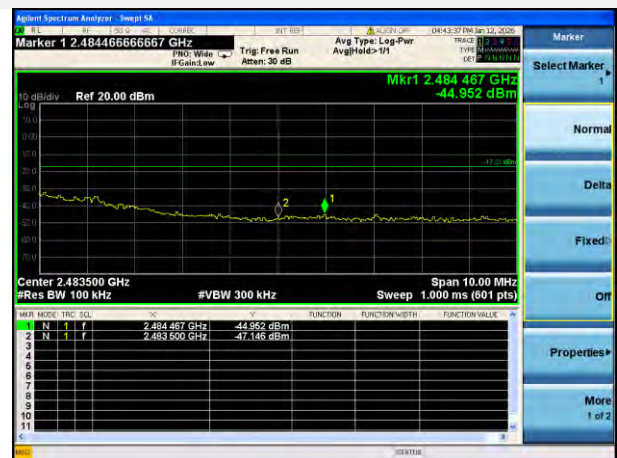
802.11ax-40 MHz(SU) LOW CHANNEL, BAND EDGE



802.11ax-40 MHz(SU) HIGH CHANNEL, CARRIER LEVEL



802.11ax-40 MHz(SU) HIGH CHANNEL, BAND EDGE



A.5 Conducted Emissions

Note¹: The EUT is working in the Normal link mode. All modes have been tested and normal link mode is worst.

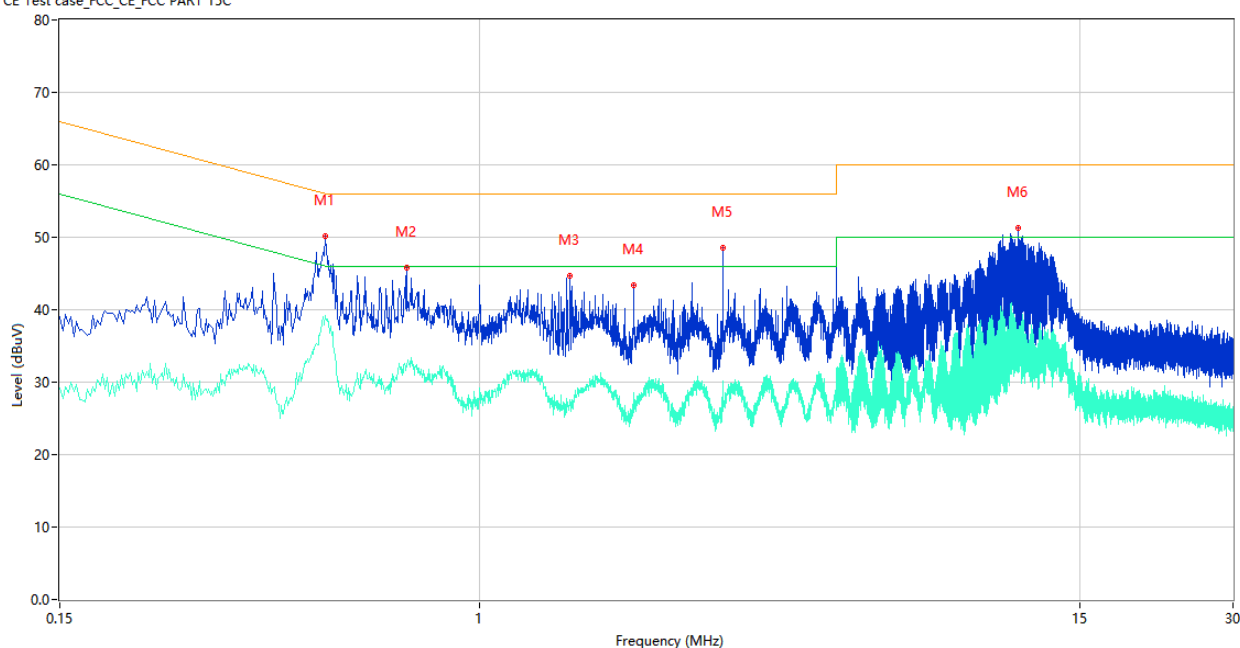
Note²: Devices subject to Part 15 must be tested for all available U.S. voltages and frequencies (such as a nominal 120 VAC, 60 Hz and 240 VAC, 50 Hz) for which the device is capable of operation. So, The configuration 120 VAC, 60 Hz and 240 VAC, 50 Hz were tested respectively, but only the worst configuration (120 VAC, 60 Hz) shown here.

Note³: Results (dBuV) = Original reading level of Spectrum Analyzer (dBuV) + Factor (dB)

Test Data and Plots

PHASE L

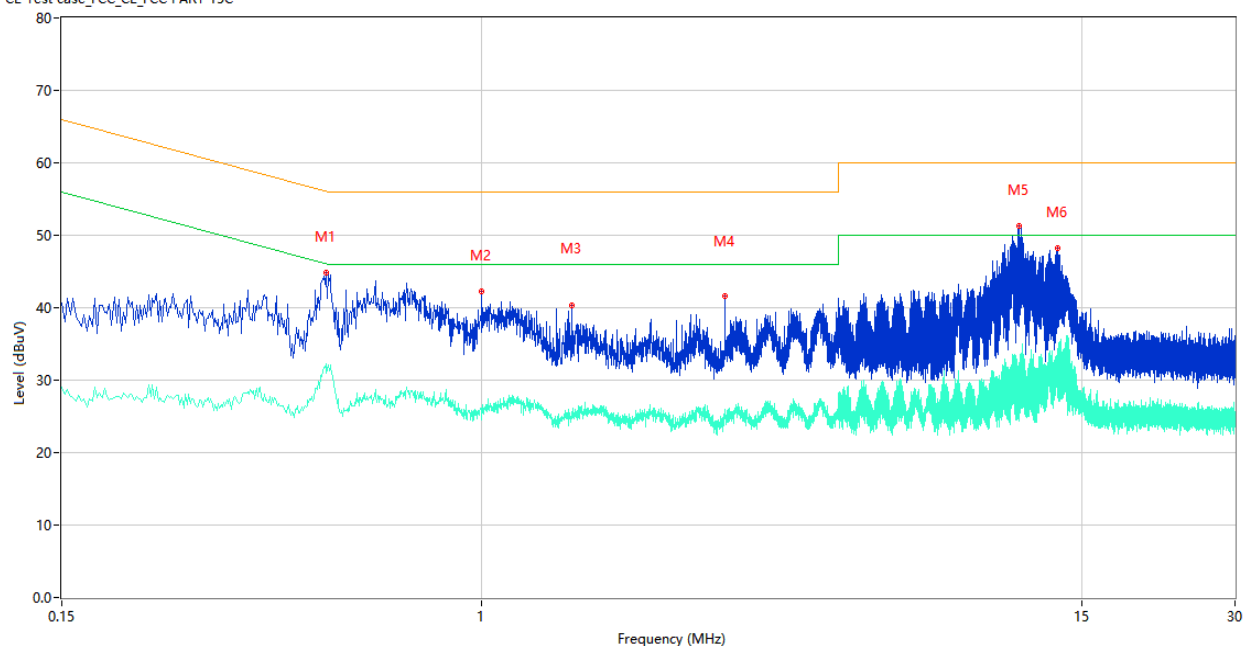
CE Test case_FCC_CE_FCC PART 15C



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.498	50.12	10.04	56.03	5.91	Peak	L	Pass
1**	0.498	39.24	10.04	46.03	6.79	AV	L	Pass
2	0.718	45.78	10.53	56.00	10.22	Peak	L	Pass
2**	0.718	32.23	10.53	46.00	13.77	AV	L	Pass
3	1.500	44.60	10.33	56.00	11.40	Peak	L	Pass
3**	1.500	27.62	10.33	46.00	18.38	AV	L	Pass
4	2.004	43.38	10.30	56.00	12.62	Peak	L	Pass
4**	2.004	25.80	10.30	46.00	20.20	AV	L	Pass
5	3.000	48.56	10.32	56.00	7.44	Peak	L	Pass
5**	3.000	30.22	10.32	46.00	15.78	AV	L	Pass
6	11.390	51.30	10.67	60.00	8.70	Peak	L	Pass
6**	11.390	36.28	10.67	50.00	13.72	AV	L	Pass

PHASE N

CE Test case_FCC_CE_FCC PART 15C



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.494	44.91	10.05	56.10	11.19	Peak	N	Pass
1**	0.494	32.22	10.05	46.10	13.88	AV	N	Pass
2	1.000	42.32	10.03	56.00	13.68	Peak	N	Pass
2**	1.000	25.91	10.03	46.00	20.09	AV	N	Pass
3	1.502	40.34	10.32	56.00	15.66	Peak	N	Pass
3**	1.502	25.66	10.32	46.00	20.34	AV	N	Pass
4	2.996	41.64	10.34	56.00	14.36	Peak	N	Pass
4**	2.996	26.04	10.34	46.00	19.96	AV	N	Pass
5	11.338	51.22	10.38	60.00	8.78	Peak	N	Pass
5**	11.338	26.11	10.38	50.00	23.89	AV	N	Pass
6	13.450	48.25	10.51	60.00	11.75	Peak	N	Pass
6**	13.450	31.98	10.51	50.00	18.02	AV	N	Pass

A.6 Radiated Emission

Note¹: The symbol of “--” in the table which means not application.

Note²: For the test data above 1 GHz, According the ANSI C63.10-2020, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

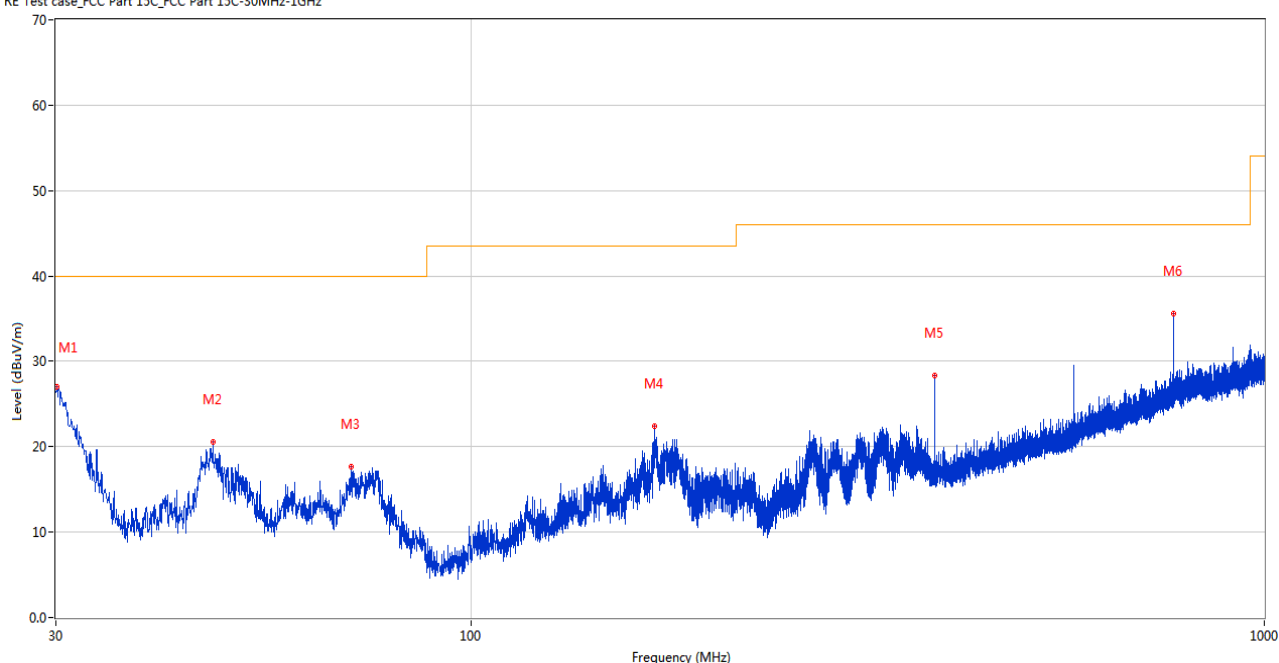
Note³: The low frequency, which started from 9 kHz to 30 MHz, was pre-scanned and the result which was 20 dB lower than the limit line per 15.31(o) was not reported.

Note⁴: The EUT is working in the Normal link mode below 1 GHz. All modes have been tested and normal link mode is worst.

Test Data and Plots

30 MHz to 1 GHz, ANT H

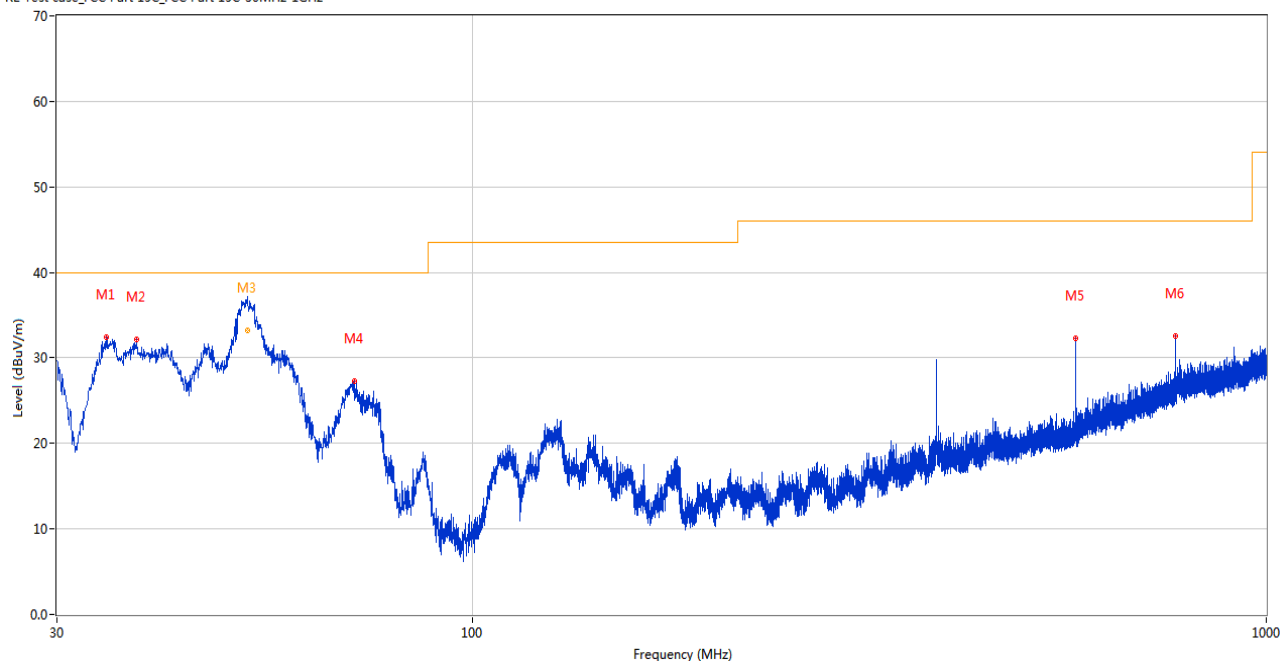
RE Test case_FCC Part 15C_FCC Part 15C-30MHz-1GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	30.097	27.01	-27.08	40.0	12.99	Peak	173.00	100	Horizontal	Pass
2	47.363	20.54	-25.02	40.0	19.46	Peak	292.00	100	Horizontal	Pass
3	70.594	17.72	-27.26	40.0	22.28	Peak	360.00	100	Horizontal	Pass
4	170.602	22.40	-24.85	43.5	21.10	Peak	229.00	100	Horizontal	Pass
5	384.002	28.29	-20.17	46.0	17.71	Peak	241.00	100	Horizontal	Pass
6	767.976	35.64	-10.77	46.0	10.36	Peak	109.00	100	Horizontal	Pass

30 MHz to 1 GHz, ANT V

RE Test case_FCC Part 15C_FCC Part 15C-30MHz-1GHz



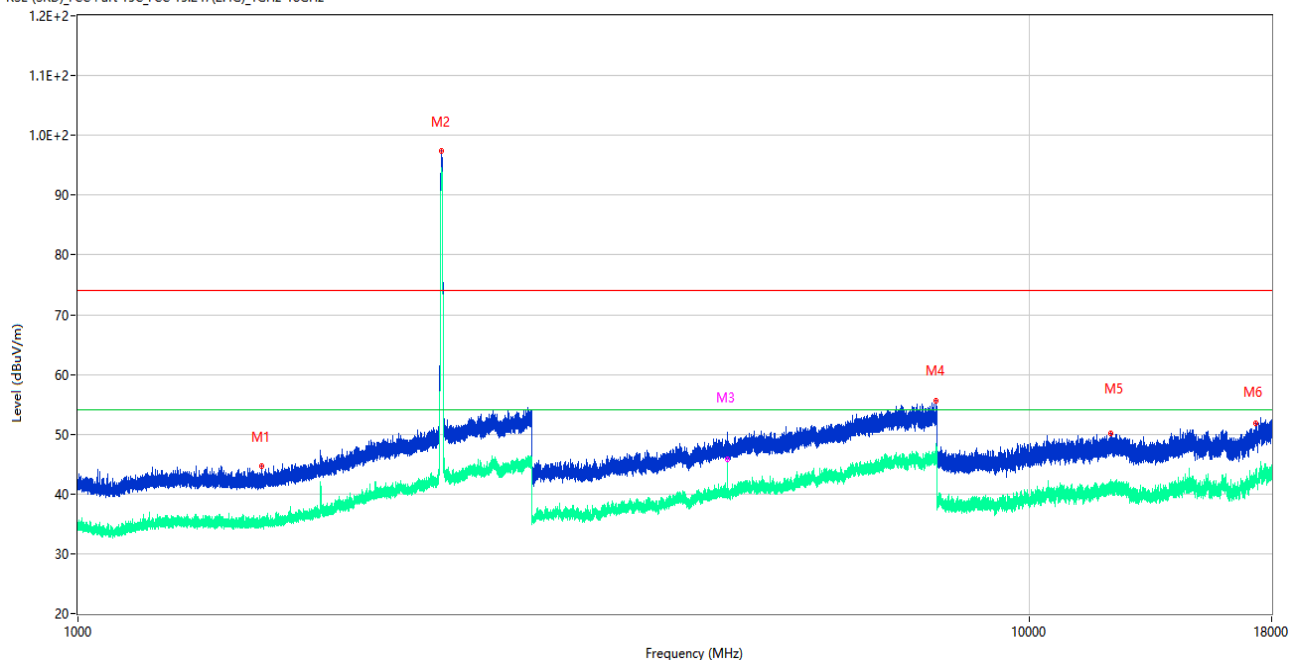
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	34.656	32.45	-26.63	40.0	7.55	Peak	96.00	100	Vertical	Pass
2	37.809	32.23	-26.04	40.0	7.77	Peak	94.00	100	Vertical	Pass
3	52.068	37.22	-25.10	40.0	2.78	Peak	63.00	100	Vertical	Pass
3*	52.068	33.27	-25.10	40.0	6.73	QP	63.00	100	Vertical	Pass
4	71.079	27.24	-27.34	40.0	12.76	Peak	60.00	100	Vertical	Pass
5	575.964	32.29	-15.15	46.0	13.71	Peak	123.00	100	Vertical	Pass
6	767.976	32.60	-10.77	46.0	13.40	Peak	346.00	100	Vertical	Pass

Note ¹: The marked spikes near 2400 MHz with circle should be ignored because they are Fundamental signal.

Note ²: The spurious above 18G is noise only, do not show on the report.

1 GHz to 18 GHz, ANT H 802.11b Low Channel

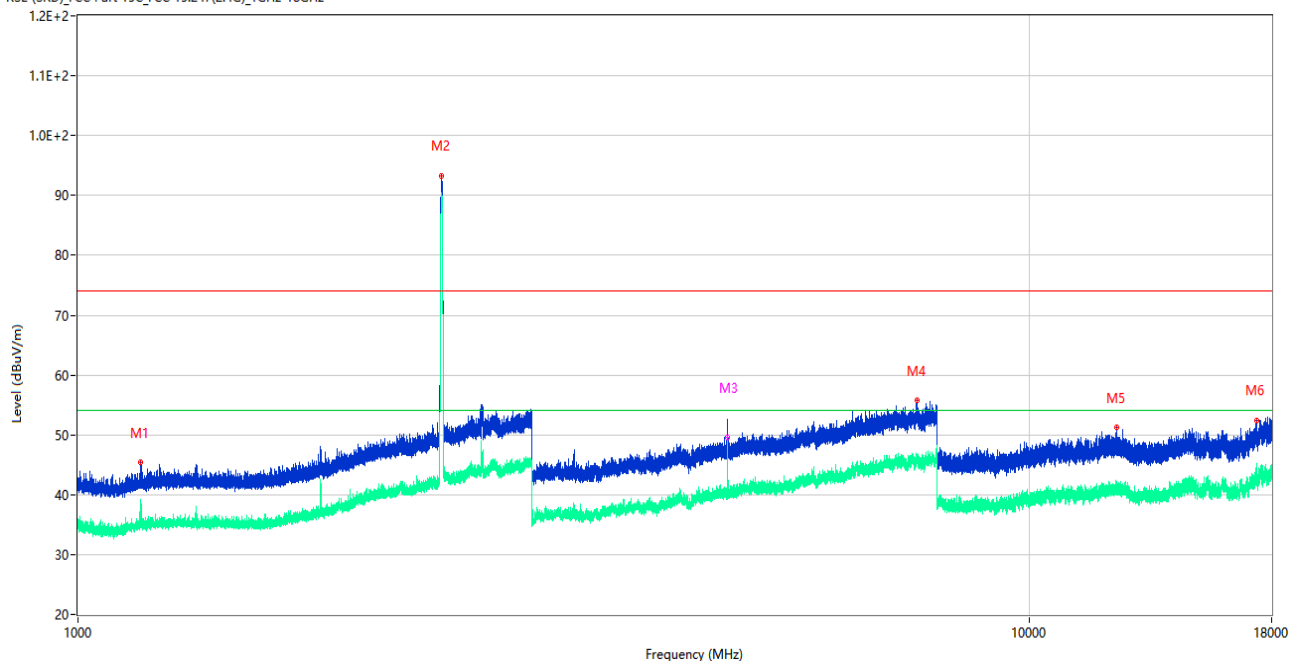
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1561.100	44.65	74.0	29.35	Peak	110.00	400	Horizontal	Pass
1**	1561.100	35.37	54.0	18.63	AV	110.00	400	Horizontal	Pass
2	2413.100	97.38	74.0	-23.38	Peak	66.00	150	Horizontal	N/A
2**	2413.100	94.55	54.0	-40.55	AV	66.00	150	Horizontal	N/A
3	4824.000	50.35	74.0	23.65	Peak	181.00	150	Horizontal	Pass
3**	4824.000	45.74	54.0	8.26	AV	181.00	150	Horizontal	Pass
4	7989.000	55.62	74.0	18.38	Peak	119.00	300	Horizontal	Pass
4**	7989.000	46.89	54.0	7.11	AV	119.00	300	Horizontal	Pass
5	12180.950	50.09	74.0	23.91	Peak	32.00	200	Horizontal	Pass
5**	12180.950	41.64	54.0	12.36	AV	32.00	200	Horizontal	Pass
6	17335.349	51.88	74.0	22.12	Peak	93.00	200	Horizontal	Pass
6**	17335.349	43.24	54.0	10.76	AV	93.00	200	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11b Low Channel

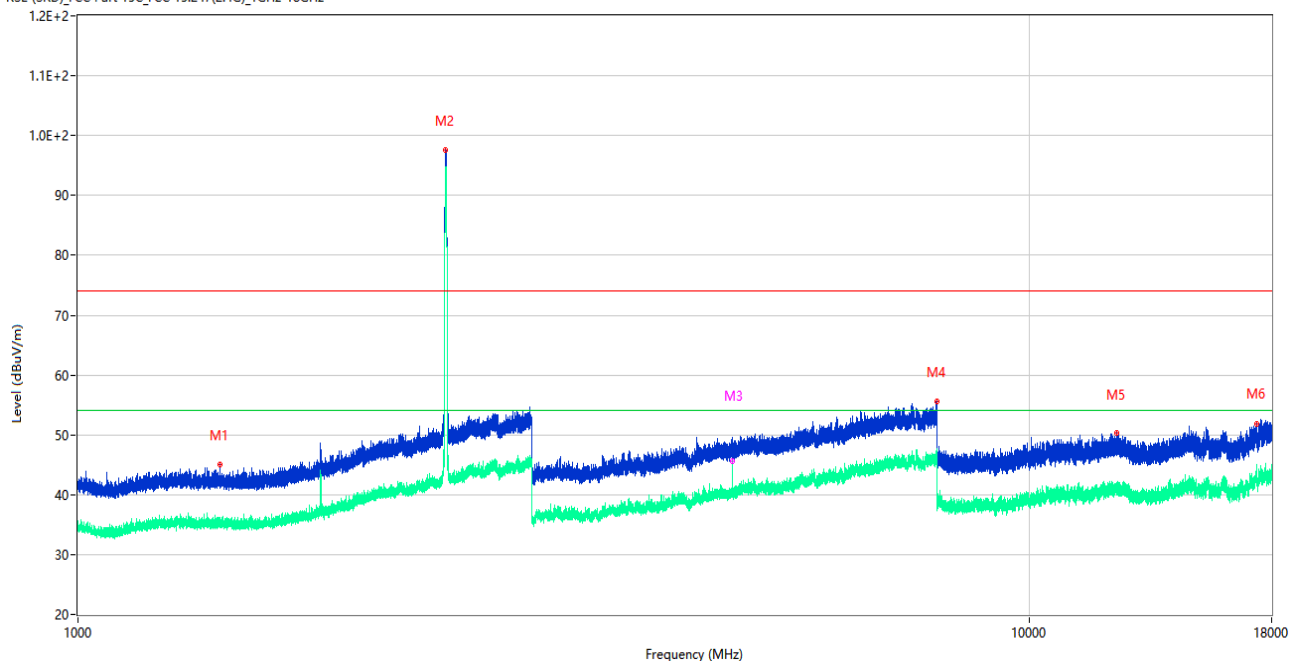
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1164.100	45.34	74.0	28.66	Peak	296.00	100	Vertical	Pass
1**	1164.100	36.29	54.0	17.71	AV	296.00	100	Vertical	Pass
2	2410.800	93.29	74.0	-19.29	Peak	267.00	100	Vertical	N/A
2**	2410.800	90.40	54.0	-36.40	AV	267.00	100	Vertical	N/A
3	4824.000	52.65	74.0	21.35	Peak	204.00	150	Vertical	Pass
3**	4824.000	49.65	54.0	4.35	AV	204.00	150	Vertical	Pass
4	7627.500	55.70	74.0	18.30	Peak	182.00	100	Vertical	Pass
4**	7627.500	46.00	54.0	8.00	AV	182.00	100	Vertical	Pass
5	12358.838	51.18	74.0	22.82	Peak	152.00	400	Vertical	Pass
5**	12358.838	41.45	54.0	12.55	AV	152.00	400	Vertical	Pass
6	17357.136	52.46	74.0	21.54	Peak	359.00	100	Vertical	Pass
6**	17357.136	43.57	54.0	10.43	AV	359.00	100	Vertical	Pass

1 GHz to 18 GHz, ANT H 802.11b Middle Channel

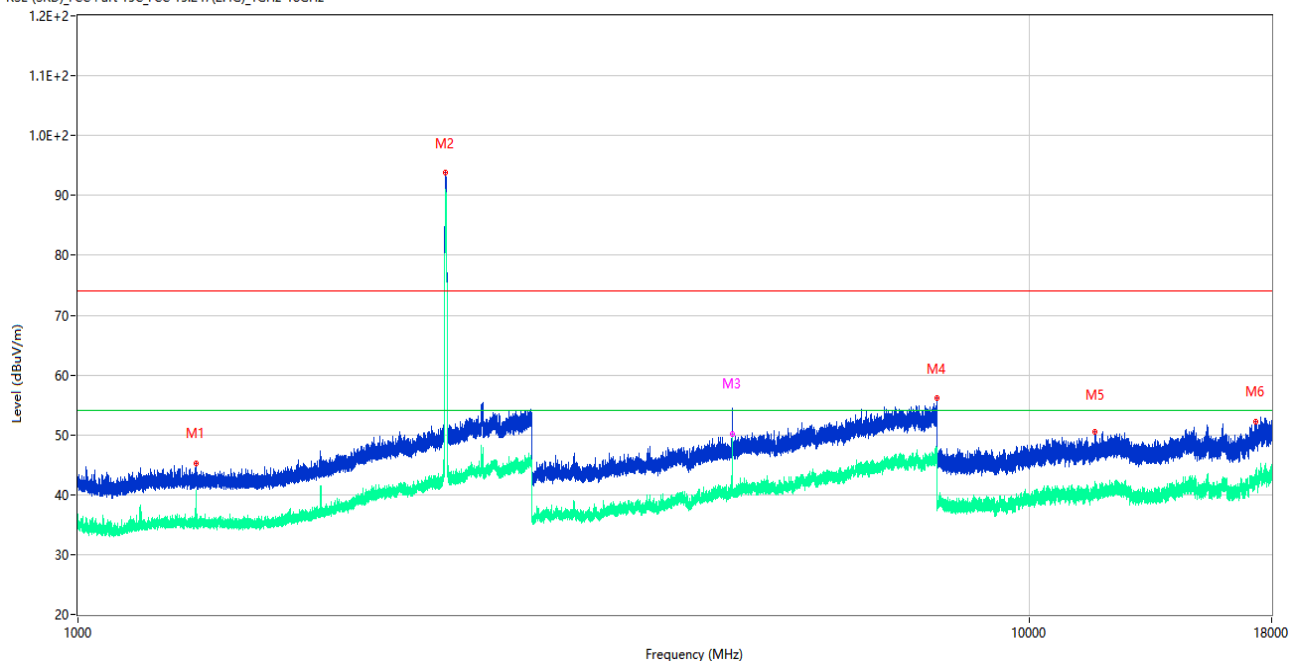
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1410.900	44.97	74.0	29.03	Peak	112.00	100	Horizontal	Pass
1**	1410.900	34.89	54.0	19.11	AV	112.00	100	Horizontal	Pass
2	2435.800	97.58	74.0	-23.58	Peak	307.00	100	Horizontal	N/A
2**	2435.800	94.70	54.0	-40.70	AV	307.00	100	Horizontal	N/A
3	4874.000	49.51	74.0	24.49	Peak	181.00	150	Horizontal	Pass
3**	4874.000	45.55	54.0	8.45	AV	181.00	150	Horizontal	Pass
4	7998.250	55.50	74.0	18.50	Peak	223.00	100	Horizontal	Pass
4**	7998.250	46.61	54.0	7.39	AV	223.00	100	Horizontal	Pass
5	12356.463	50.23	74.0	23.77	Peak	0.00	400	Horizontal	Pass
5**	12356.463	41.02	54.0	12.98	AV	0.00	400	Horizontal	Pass
6	17354.250	51.87	74.0	22.13	Peak	284.00	300	Horizontal	Pass
6**	17354.250	44.03	54.0	9.97	AV	284.00	300	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11b Middle Channel

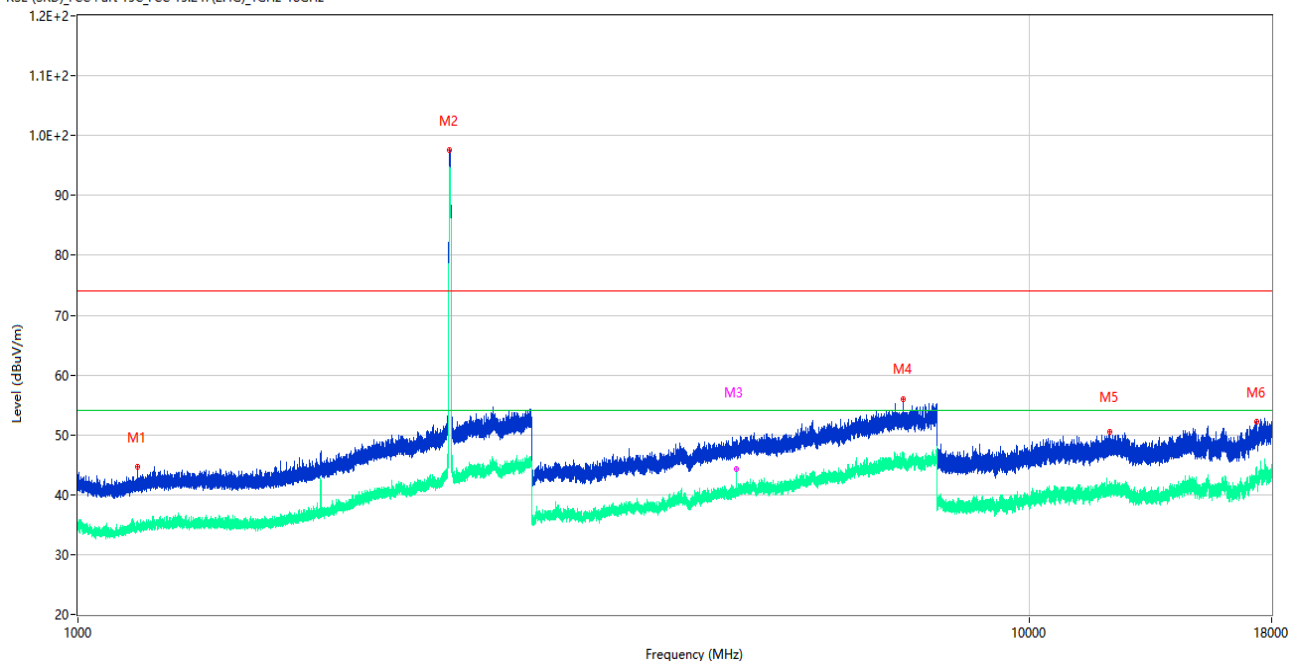
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1332.100	45.32	74.0	28.68	Peak	313.00	100	Vertical	Pass
1**	1332.100	36.30	54.0	17.70	AV	313.00	100	Vertical	Pass
2	2435.800	93.76	74.0	-19.76	Peak	267.00	200	Vertical	N/A
2**	2435.800	90.80	54.0	-36.80	AV	267.00	200	Vertical	N/A
3	4874.000	54.49	74.0	19.51	Peak	3.00	150	Vertical	Pass
3**	4874.000	50.20	54.0	3.80	AV	3.00	150	Vertical	Pass
4	7999.750	56.09	74.0	17.91	Peak	140.00	200	Vertical	Pass
4**	7999.750	47.07	54.0	6.93	AV	140.00	200	Vertical	Pass
5	11725.662	50.51	74.0	23.49	Peak	0.00	300	Vertical	Pass
5**	11725.662	39.89	54.0	14.11	AV	0.00	300	Vertical	Pass
6	17339.288	52.24	74.0	21.76	Peak	77.00	200	Vertical	Pass
6**	17339.288	43.21	54.0	10.79	AV	77.00	200	Vertical	Pass

1 GHz to 18 GHz, ANT H 802.11b High Channel

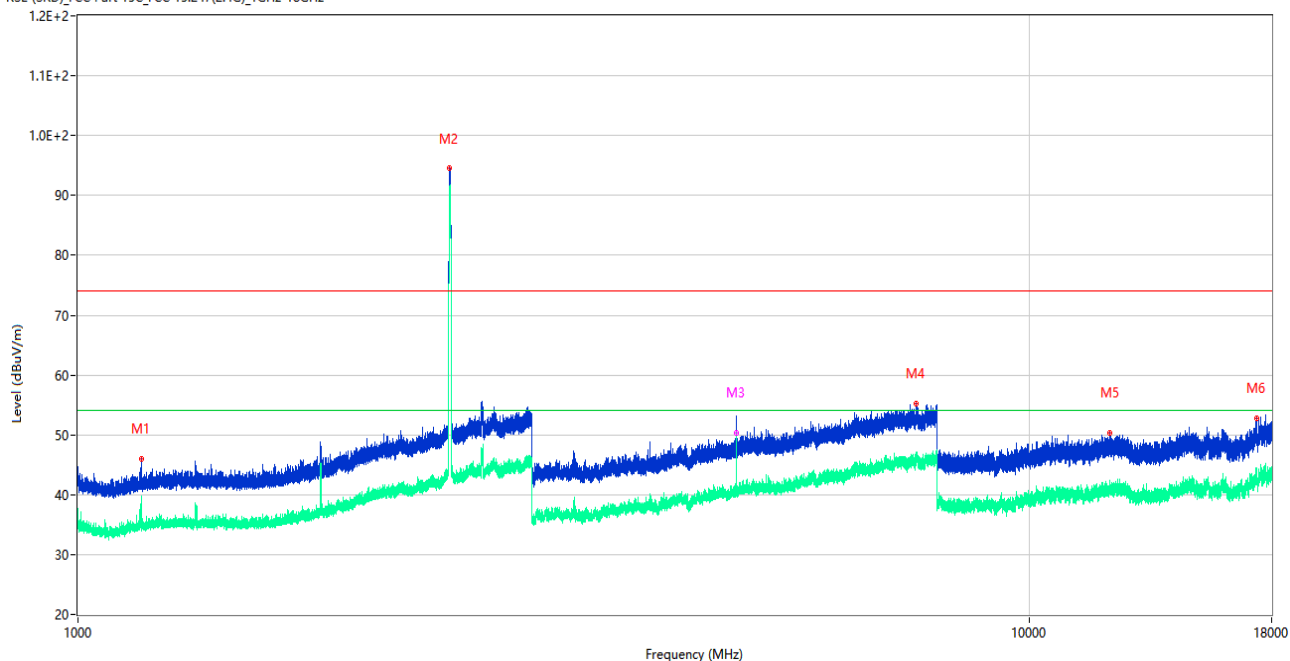
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1155.700	44.62	74.0	29.38	Peak	65.00	100	Horizontal	Pass
1**	1155.700	34.94	54.0	19.06	AV	65.00	100	Horizontal	Pass
2	2460.800	97.50	74.0	-23.50	Peak	157.00	100	Horizontal	N/A
2**	2460.800	94.59	54.0	-40.59	AV	157.00	100	Horizontal	N/A
3	4924.250	48.92	74.0	25.08	Peak	263.00	150	Horizontal	Pass
3**	4924.250	44.25	54.0	9.75	AV	263.00	150	Horizontal	Pass
4	7379.750	56.03	74.0	17.97	Peak	26.00	200	Horizontal	Pass
4**	7379.750	45.76	54.0	8.24	AV	26.00	200	Horizontal	Pass
5	12170.025	50.52	74.0	23.48	Peak	59.00	400	Horizontal	Pass
5**	12170.025	40.66	54.0	13.34	AV	59.00	400	Horizontal	Pass
6	17352.411	52.12	74.0	21.88	Peak	317.00	100	Horizontal	Pass
6**	17352.411	43.60	54.0	10.40	AV	317.00	100	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11b High Channel

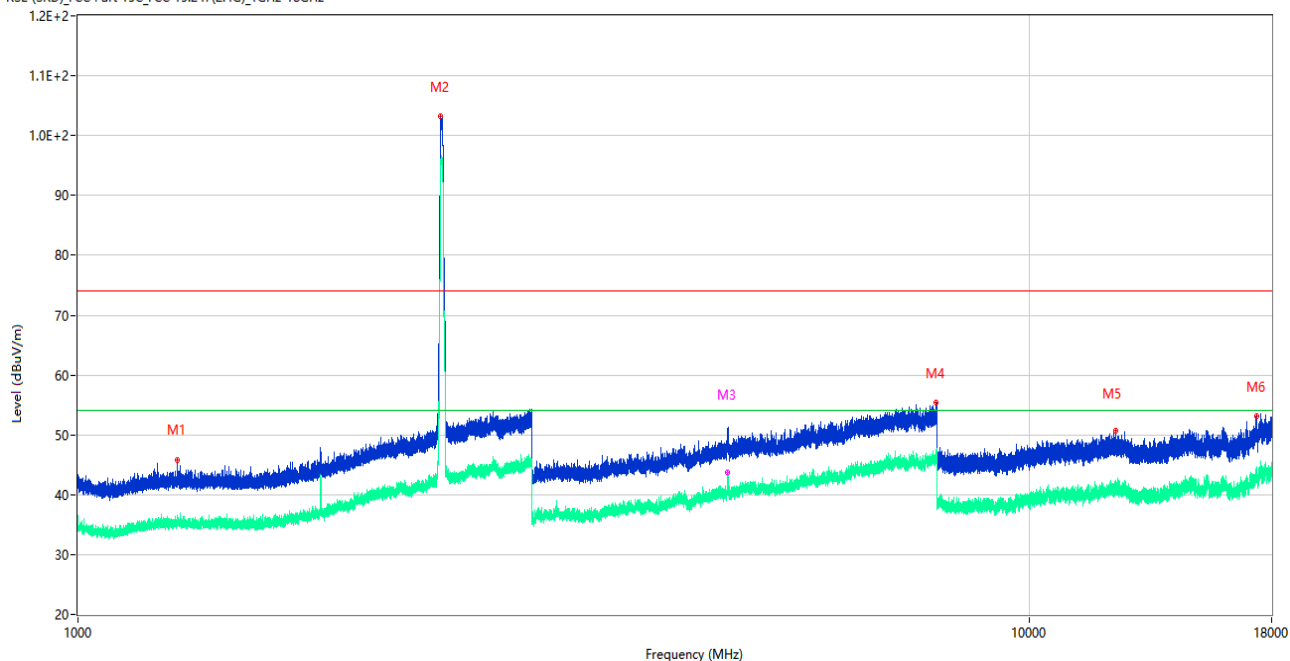
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1166.100	46.07	74.0	27.93	Peak	263.00	200	Vertical	Pass
1**	1166.100	35.59	54.0	18.41	AV	263.00	200	Vertical	Pass
2	2460.800	94.51	74.0	-20.51	Peak	240.00	100	Vertical	N/A
2**	2460.800	91.64	54.0	-37.64	AV	240.00	100	Vertical	N/A
3	4924.000	52.92	74.0	21.08	Peak	1.00	150	Vertical	Pass
3**	4924.000	50.33	54.0	3.67	AV	1.00	150	Vertical	Pass
4	7611.000	55.22	74.0	18.78	Peak	191.00	300	Vertical	Pass
4**	7611.000	46.10	54.0	7.90	AV	191.00	300	Vertical	Pass
5	12170.025	50.33	74.0	23.67	Peak	292.00	200	Vertical	Pass
5**	12170.025	42.25	54.0	11.75	AV	292.00	200	Vertical	Pass
6	17356.614	52.80	74.0	21.20	Peak	21.00	400	Vertical	Pass
6**	17356.614	44.29	54.0	9.71	AV	21.00	400	Vertical	Pass

1 GHz to 18 GHz, ANT H 802.11g Low Channel

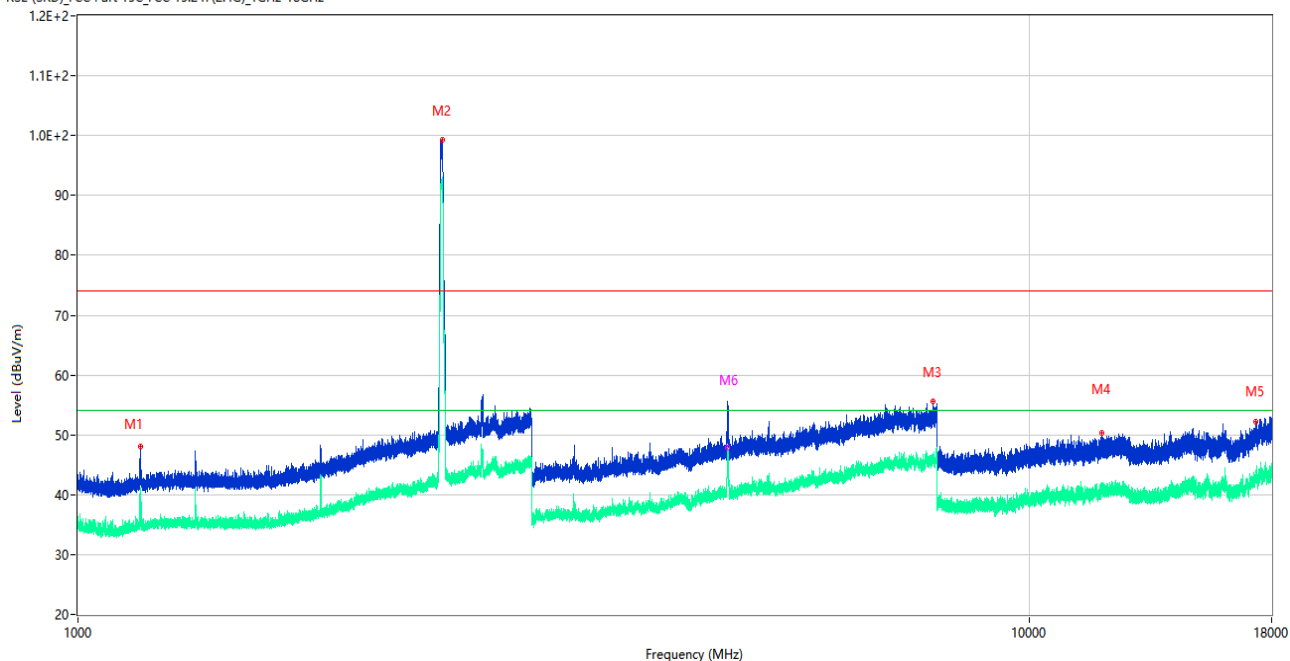
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1273.300	45.85	74.0	28.15	Peak	170.00	300	Horizontal	Pass
1**	1273.300	35.55	54.0	18.45	AV	170.00	300	Horizontal	Pass
2	2407.400	103.20	74.0	-29.20	Peak	328.00	150	Horizontal	N/A
2**	2407.400	95.29	54.0	-41.29	AV	328.00	150	Horizontal	N/A
3	4824.500	48.97	74.0	25.03	Peak	224.00	150	Horizontal	Pass
3**	4824.500	43.68	54.0	10.32	AV	224.00	150	Horizontal	Pass
4	7990.000	55.39	74.0	18.61	Peak	171.00	100	Horizontal	Pass
4**	7990.000	46.71	54.0	7.29	AV	171.00	100	Horizontal	Pass
5	12342.925	50.64	74.0	23.36	Peak	133.00	400	Horizontal	Pass
5**	12342.925	41.71	54.0	12.29	AV	133.00	400	Horizontal	Pass
6	17355.037	53.10	74.0	20.90	Peak	132.00	100	Horizontal	Pass
6**	17355.037	43.59	54.0	10.41	AV	132.00	100	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11g Low Channel

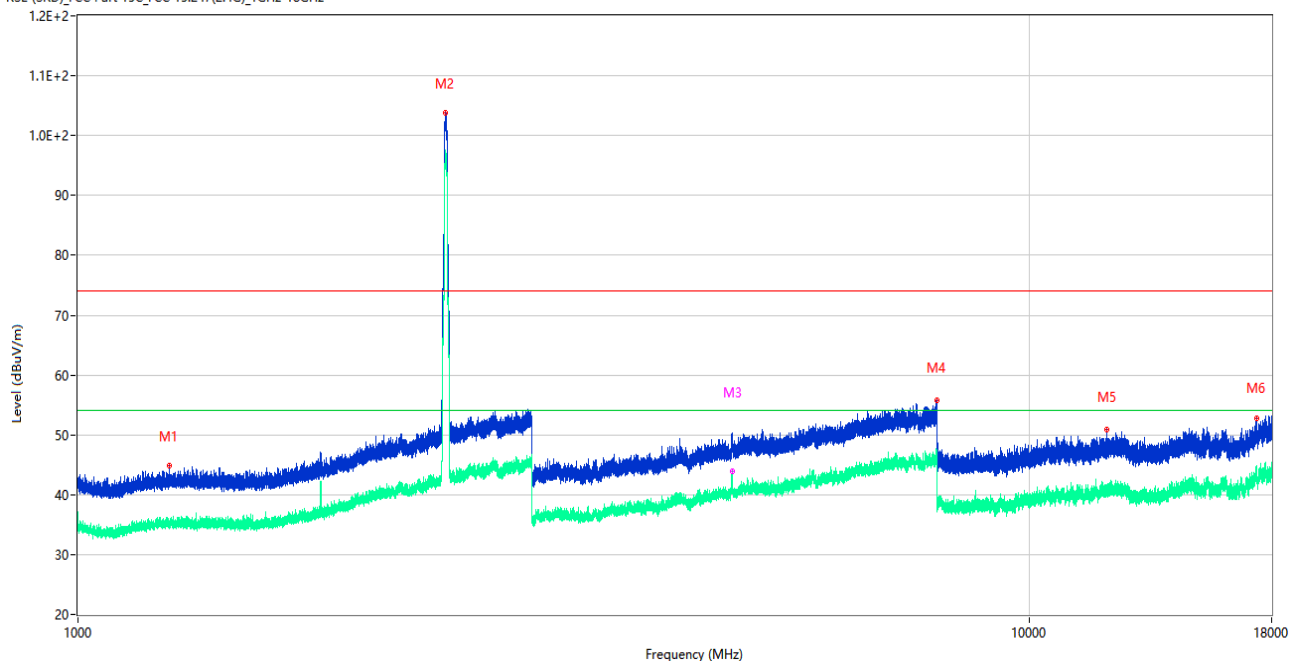
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1163.600	48.01	74.0	25.99	Peak	259.00	200	Vertical	Pass
1**	1163.600	39.50	54.0	14.50	AV	259.00	200	Vertical	Pass
2	2415.300	99.27	74.0	-25.27	Peak	259.00	200	Vertical	N/A
2**	2415.300	91.53	54.0	-37.53	AV	259.00	200	Vertical	N/A
3	7932.750	55.51	74.0	18.49	Peak	2.00	300	Vertical	Pass
3**	7932.750	45.88	54.0	8.12	AV	2.00	300	Vertical	Pass
4	11917.799	50.41	74.0	23.59	Peak	298.00	200	Vertical	Pass
4**	11917.799	40.57	54.0	13.43	AV	298.00	200	Vertical	Pass
5	17332.199	52.25	74.0	21.75	Peak	308.00	400	Vertical	Pass
5**	17332.199	43.24	54.0	10.76	AV	308.00	400	Vertical	Pass
6	4825.000	53.33	74.0	20.67	Peak	212.00	150	Vertical	Pass
6**	4825.000	47.94	54.0	6.06	AV	212.00	150	Vertical	Pass

1 GHz to 18 GHz, ANT H 802.11g Middle Channel

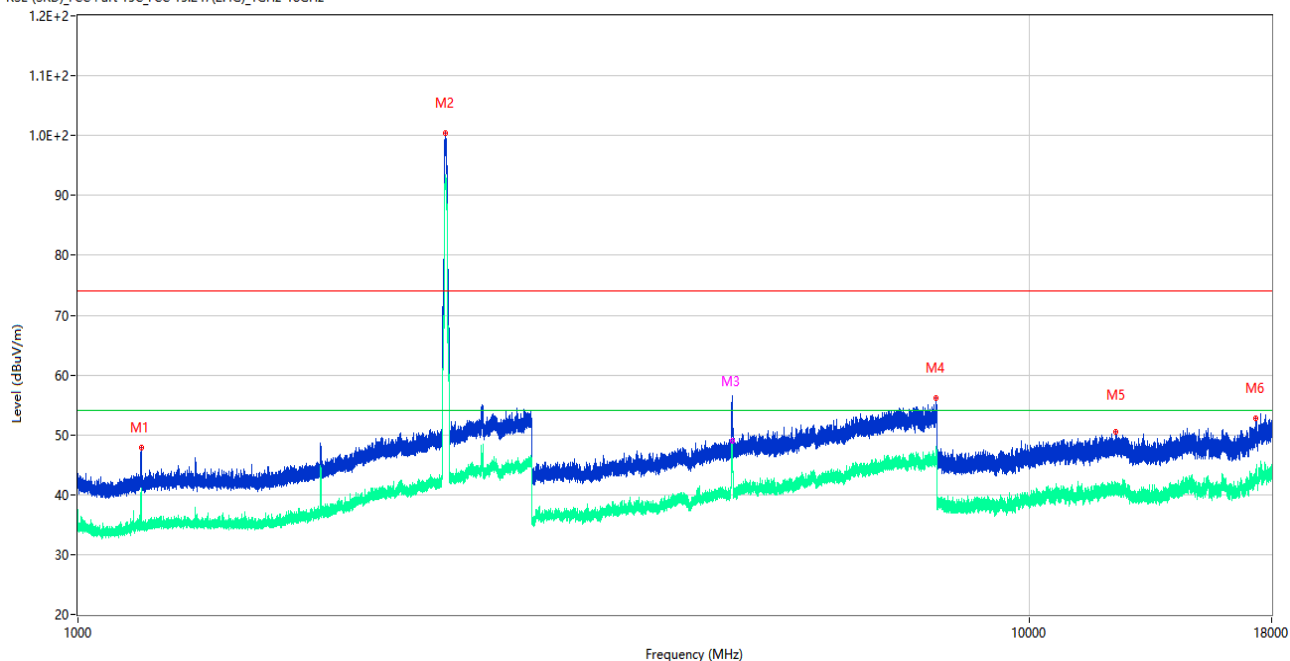
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1247.700	44.79	74.0	29.21	Peak	215.00	300	Horizontal	Pass
1**	1247.700	35.30	54.0	18.70	AV	215.00	300	Horizontal	Pass
2	2435.800	103.78	74.0	-29.78	Peak	311.00	150	Horizontal	N/A
2**	2435.800	96.78	54.0	-42.78	AV	311.00	150	Horizontal	N/A
3	4876.000	48.41	74.0	25.59	Peak	168.00	150	Horizontal	Pass
3**	4876.000	43.94	54.0	10.06	AV	168.00	150	Horizontal	Pass
4	7996.000	55.82	74.0	18.18	Peak	189.00	200	Horizontal	Pass
4**	7996.000	46.83	54.0	7.17	AV	189.00	200	Horizontal	Pass
5	12085.474	50.84	74.0	23.16	Peak	241.00	400	Horizontal	Pass
5**	12085.474	40.03	54.0	13.97	AV	241.00	400	Horizontal	Pass
6	17364.488	52.79	74.0	21.21	Peak	289.00	200	Horizontal	Pass
6**	17364.488	43.43	54.0	10.57	AV	289.00	200	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11g Middle Channel

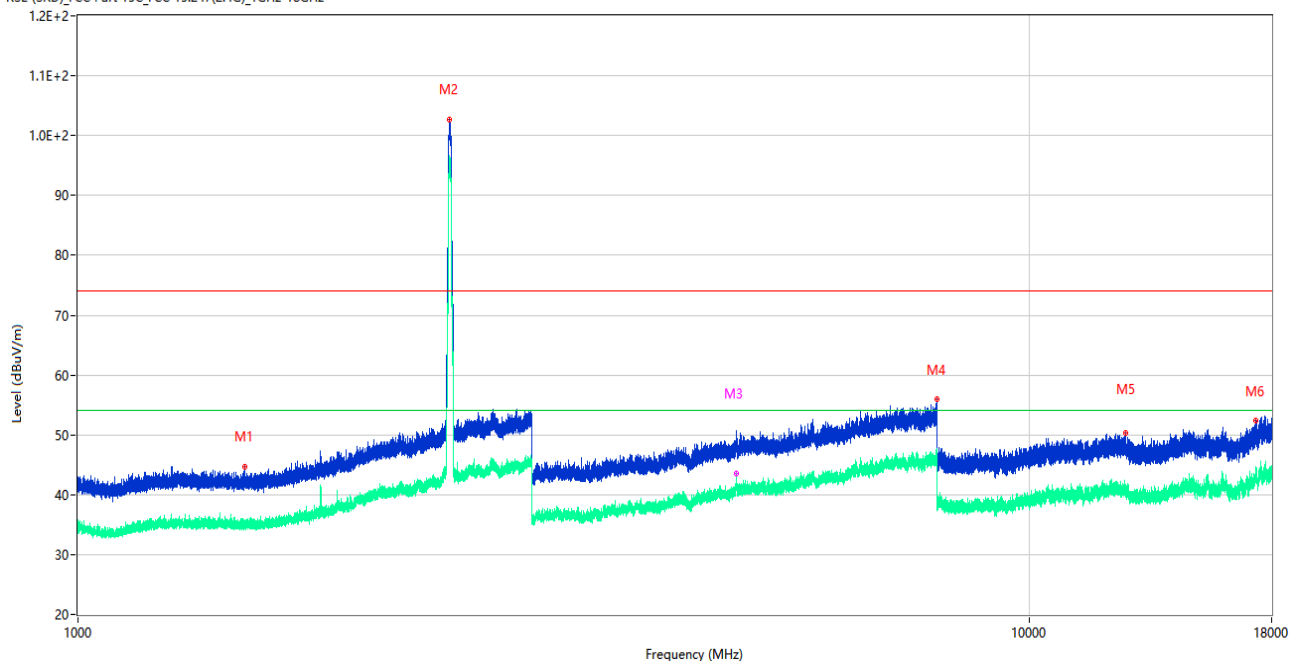
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1165.600	47.84	74.0	26.16	Peak	305.00	100	Vertical	Pass
1**	1165.600	41.17	54.0	12.83	AV	305.00	100	Vertical	Pass
2	2432.500	100.44	74.0	-26.44	Peak	268.00	150	Vertical	N/A
2**	2432.500	91.47	54.0	-37.47	AV	268.00	150	Vertical	N/A
3	4875.250	54.63	74.0	19.37	Peak	0.00	150	Vertical	Pass
3**	4875.250	48.98	54.0	5.02	AV	0.00	150	Vertical	Pass
4	7987.000	56.25	74.0	17.75	Peak	160.00	200	Vertical	Pass
4**	7987.000	46.60	54.0	7.40	AV	160.00	200	Vertical	Pass
5	12332.951	50.55	74.0	23.45	Peak	138.00	200	Vertical	Pass
5**	12332.951	41.58	54.0	12.42	AV	138.00	200	Vertical	Pass
6	17330.887	52.86	74.0	21.14	Peak	360.00	100	Vertical	Pass
6**	17330.887	43.32	54.0	10.68	AV	360.00	100	Vertical	Pass

1 GHz to 18 GHz, ANT H 802.11g High Channel

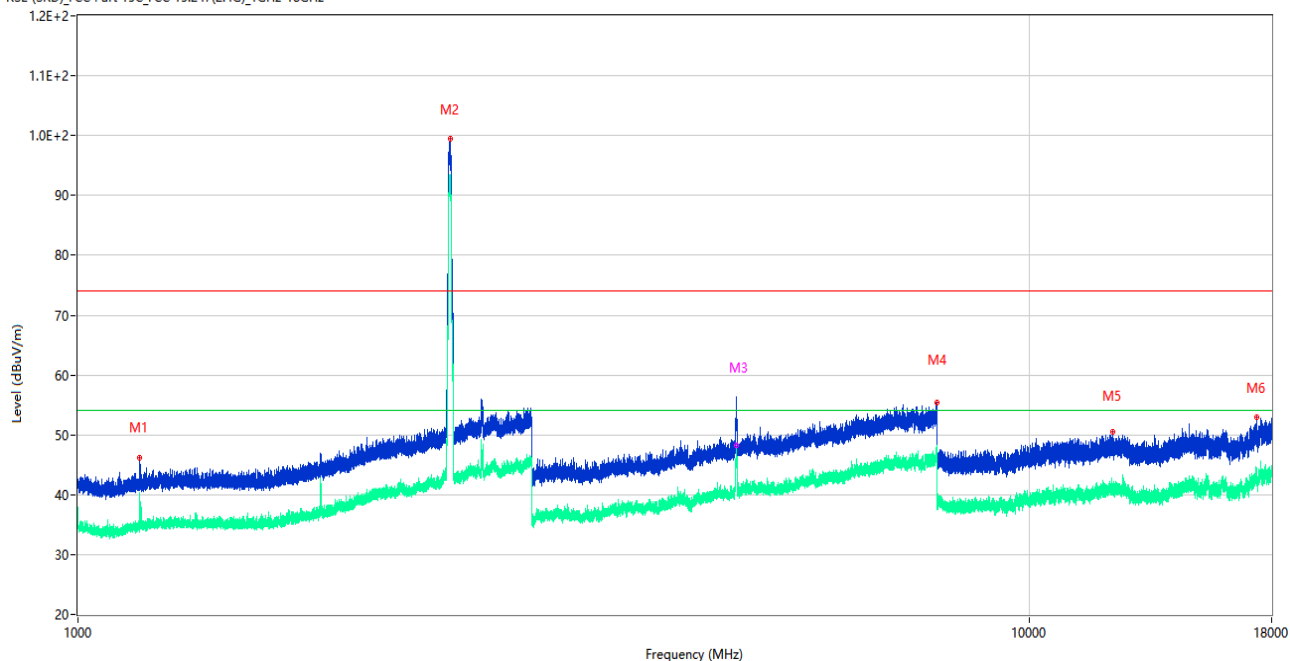
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1498.400	44.67	74.0	29.33	Peak	90.00	100	Horizontal	Pass
1**	1498.400	34.61	54.0	19.39	AV	90.00	100	Horizontal	Pass
2	2457.600	102.75	74.0	-28.75	Peak	157.00	150	Horizontal	N/A
2**	2457.600	94.01	54.0	-40.01	AV	157.00	150	Horizontal	N/A
3	4921.750	48.45	74.0	25.55	Peak	193.00	150	Horizontal	Pass
3**	4921.750	43.48	54.0	10.52	AV	193.00	150	Horizontal	Pass
4	7995.750	55.94	74.0	18.06	Peak	356.00	200	Horizontal	Pass
4**	7995.750	47.74	54.0	6.26	AV	356.00	200	Horizontal	Pass
5	12625.549	50.26	74.0	23.74	Peak	290.00	100	Horizontal	Pass
5**	12625.549	40.90	54.0	13.10	AV	290.00	100	Horizontal	Pass
6	17339.552	52.35	74.0	21.65	Peak	5.00	100	Horizontal	Pass
6**	17339.552	43.44	54.0	10.56	AV	5.00	100	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11g High Channel

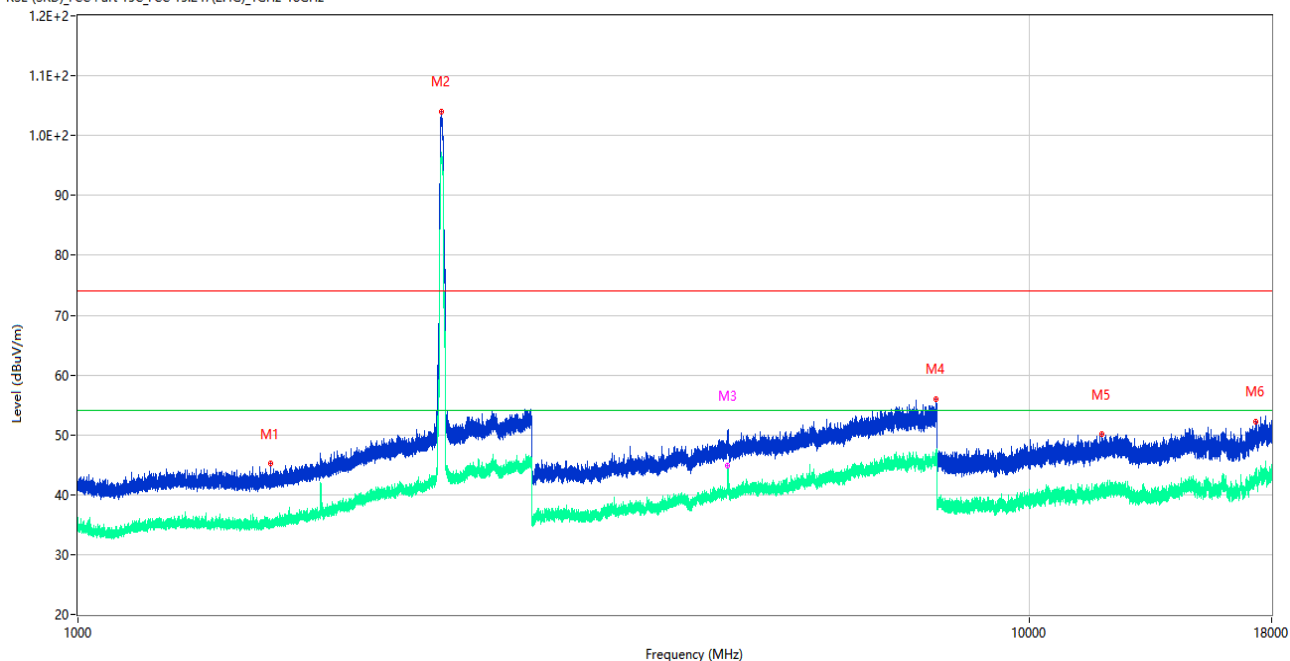
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1161.400	46.20	74.0	27.80	Peak	312.00	300	Vertical	Pass
1**	1161.400	34.36	54.0	19.64	AV	312.00	300	Vertical	Pass
2	2461.300	99.44	74.0	-25.44	Peak	238.00	200	Vertical	N/A
2**	2461.300	92.49	54.0	-38.49	AV	238.00	200	Vertical	N/A
3	4926.500	53.25	74.0	20.75	Peak	360.00	150	Vertical	Pass
3**	4926.500	48.33	54.0	5.67	AV	360.00	150	Vertical	Pass
4	7997.500	55.48	74.0	18.52	Peak	255.00	100	Vertical	Pass
4**	7997.500	46.79	54.0	7.21	AV	255.00	100	Vertical	Pass
5	12242.938	50.54	74.0	23.46	Peak	316.00	200	Vertical	Pass
5**	12242.938	40.61	54.0	13.39	AV	316.00	200	Vertical	Pass
6	17347.949	52.95	74.0	21.05	Peak	194.00	200	Vertical	Pass
6**	17347.949	43.39	54.0	10.61	AV	194.00	200	Vertical	Pass

1 GHz to 18 GHz, ANT H 802.11n20 Low Channel

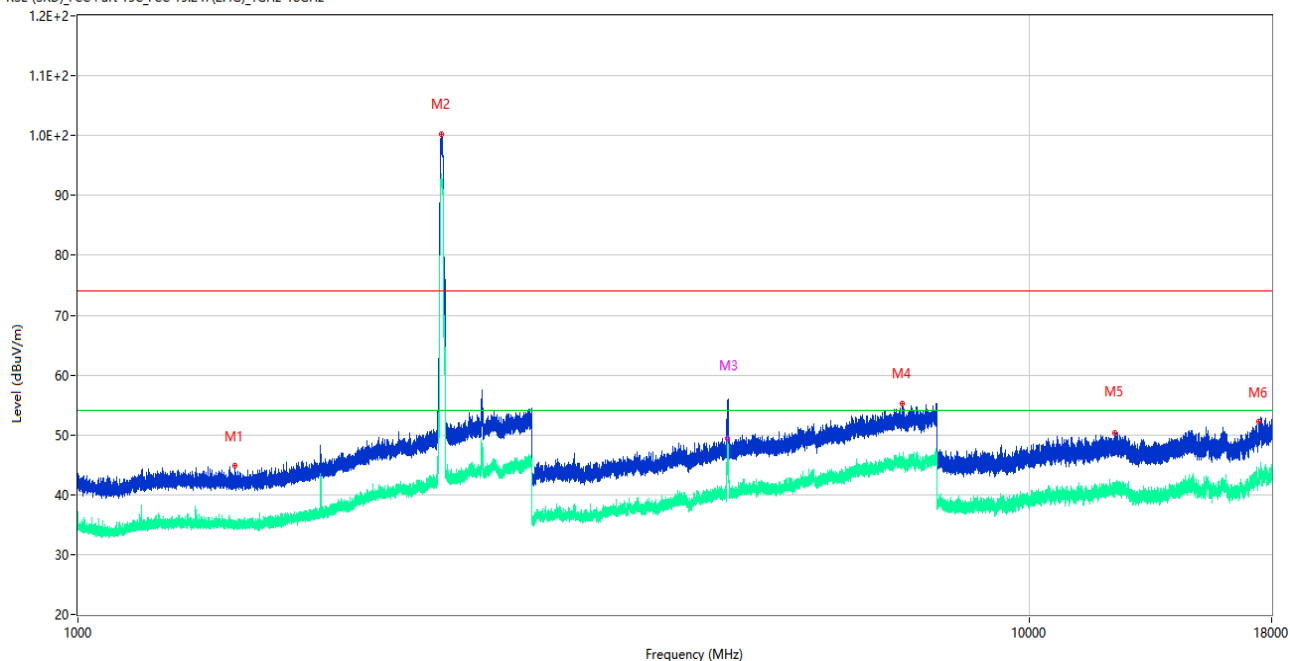
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1593.600	45.21	74.0	28.79	Peak	217.00	100	Horizontal	Pass
1**	1593.600	35.31	54.0	18.69	AV	217.00	100	Horizontal	Pass
2	2413.000	104.08	74.0	-30.08	Peak	67.00	100	Horizontal	N/A
2**	2413.000	97.08	54.0	-43.08	AV	67.00	100	Horizontal	N/A
3	4825.000	49.56	74.0	24.44	Peak	193.00	150	Horizontal	Pass
3**	4825.000	44.91	54.0	9.09	AV	193.00	150	Horizontal	Pass
4	7992.500	55.98	74.0	18.02	Peak	203.00	300	Horizontal	Pass
4**	7992.500	46.95	54.0	7.05	AV	203.00	300	Horizontal	Pass
5	11940.125	50.21	74.0	23.79	Peak	0.00	100	Horizontal	Pass
5**	11940.125	40.70	54.0	13.30	AV	0.00	100	Horizontal	Pass
6	17341.125	52.29	74.0	21.71	Peak	106.00	400	Horizontal	Pass
6**	17341.125	42.95	54.0	11.05	AV	106.00	400	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11n20 Low Channel

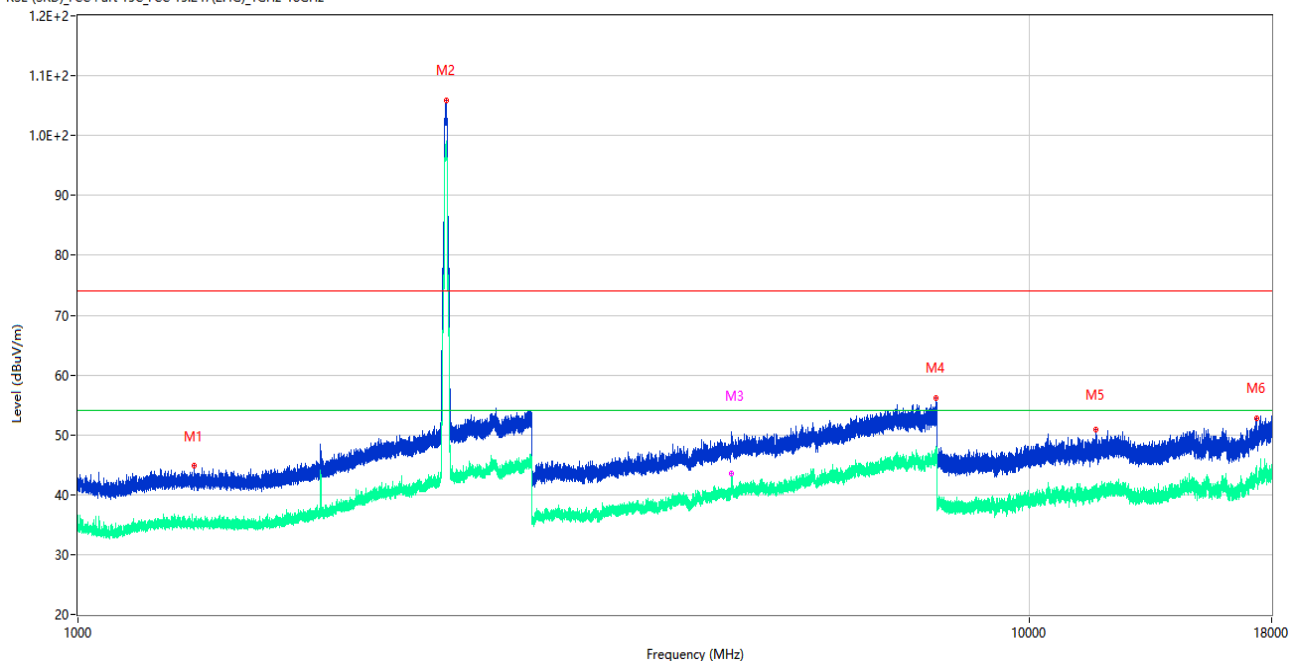
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1462.900	44.81	74.0	29.19	Peak	6.00	100	Vertical	Pass
1**	1462.900	34.71	54.0	19.29	AV	6.00	100	Vertical	Pass
2	2410.800	100.23	74.0	-26.23	Peak	267.00	150	Vertical	N/A
2**	2410.800	91.86	54.0	-37.86	AV	267.00	150	Vertical	N/A
3	4824.000	52.41	74.0	21.59	Peak	360.00	150	Vertical	Pass
3**	4824.000	49.43	54.0	4.57	AV	360.00	150	Vertical	Pass
4	7355.500	55.26	74.0	18.74	Peak	26.00	100	Vertical	Pass
4**	7355.500	44.95	54.0	9.05	AV	26.00	100	Vertical	Pass
5	12318.937	50.41	74.0	23.59	Peak	208.00	200	Vertical	Pass
5**	12318.937	40.87	54.0	13.13	AV	208.00	200	Vertical	Pass
6	17461.088	52.11	74.0	21.89	Peak	107.00	400	Vertical	Pass
6**	17461.088	42.81	54.0	11.19	AV	107.00	400	Vertical	Pass

1 GHz to 18 GHz, ANT H 802.11n20 Middle Channel

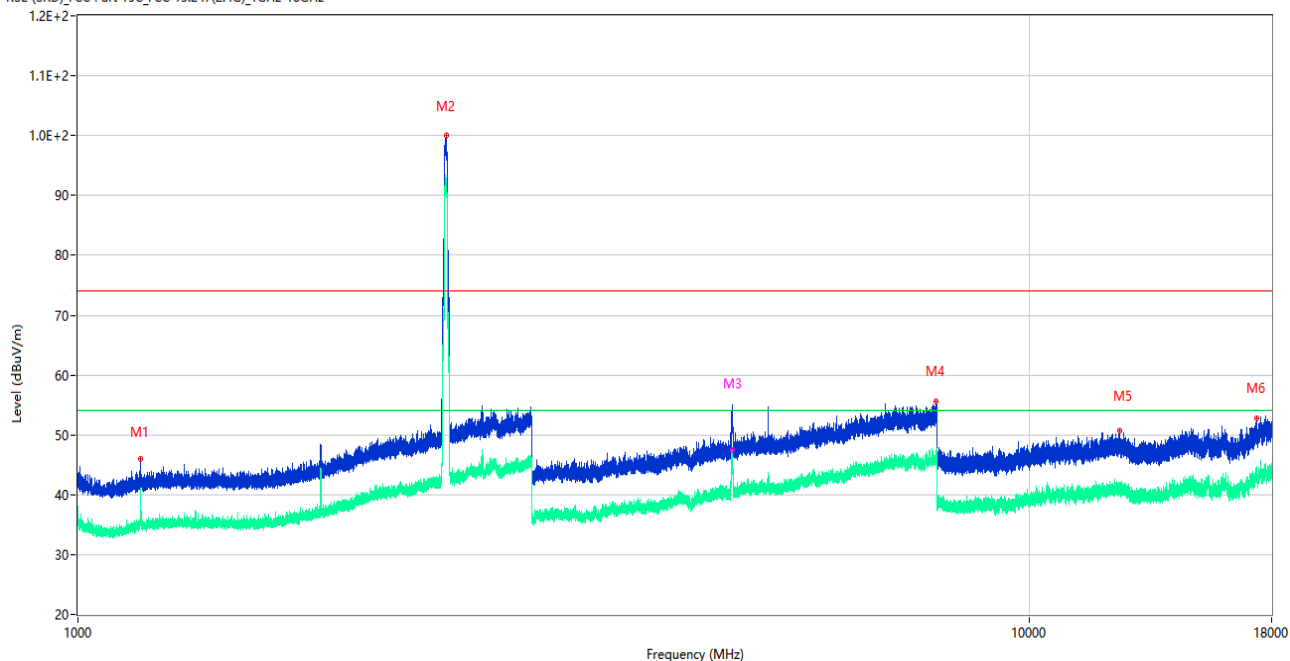
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1326.400	44.77	74.0	29.23	Peak	224.00	300	Horizontal	Pass
1**	1326.400	35.64	54.0	18.36	AV	224.00	300	Horizontal	Pass
2	2439.700	105.89	74.0	-31.89	Peak	0.00	100	Horizontal	N/A
2**	2439.700	97.37	54.0	-43.37	AV	0.00	100	Horizontal	N/A
3	4871.000	48.18	74.0	25.82	Peak	161.00	150	Horizontal	Pass
3**	4871.000	43.47	54.0	10.53	AV	161.00	150	Horizontal	Pass
4	7988.500	56.17	74.0	17.83	Peak	264.00	200	Horizontal	Pass
4**	7988.500	46.57	54.0	7.43	AV	264.00	200	Horizontal	Pass
5	11769.362	50.94	74.0	23.06	Peak	215.00	100	Horizontal	Pass
5**	11769.362	40.62	54.0	13.38	AV	215.00	100	Horizontal	Pass
6	17354.512	52.84	74.0	21.16	Peak	359.00	200	Horizontal	Pass
6**	17354.512	43.86	54.0	10.14	AV	359.00	200	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11n20 Middle Channel

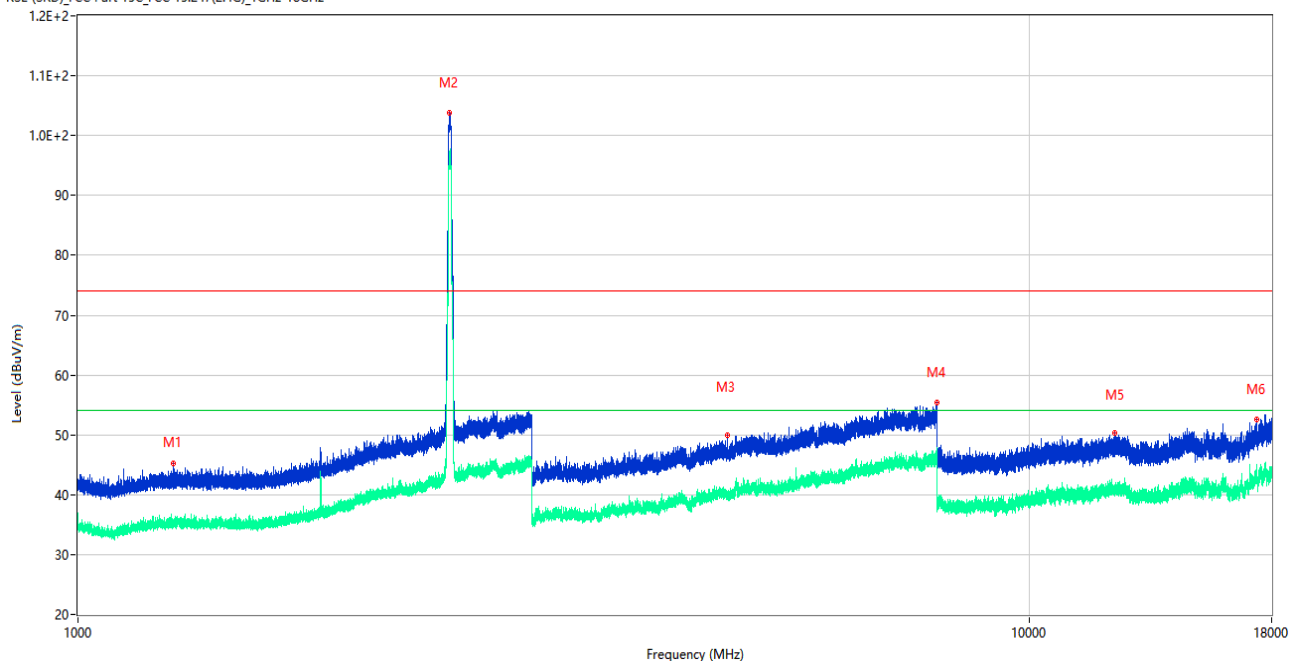
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1162.900	46.03	74.0	27.97	Peak	343.00	300	Vertical	Pass
1**	1162.900	35.73	54.0	18.27	AV	343.00	300	Vertical	Pass
2	2438.300	100.01	74.0	-26.01	Peak	269.00	100	Vertical	N/A
2**	2438.300	92.65	54.0	-38.65	AV	269.00	100	Vertical	N/A
3	4875.750	51.83	74.0	22.17	Peak	181.00	150	Vertical	Pass
3**	4875.750	47.48	54.0	6.52	AV	181.00	150	Vertical	Pass
4	7994.000	55.64	74.0	18.36	Peak	181.00	400	Vertical	Pass
4**	7994.000	46.83	54.0	7.17	AV	181.00	400	Vertical	Pass
5	12472.125	50.78	74.0	23.22	Peak	171.00	200	Vertical	Pass
5**	12472.125	40.78	54.0	13.22	AV	171.00	200	Vertical	Pass
6	17348.999	52.79	74.0	21.21	Peak	2.00	200	Vertical	Pass
6**	17348.999	43.31	54.0	10.69	AV	2.00	200	Vertical	Pass

1 GHz to 18 GHz, ANT H 802.11n20 High Channel

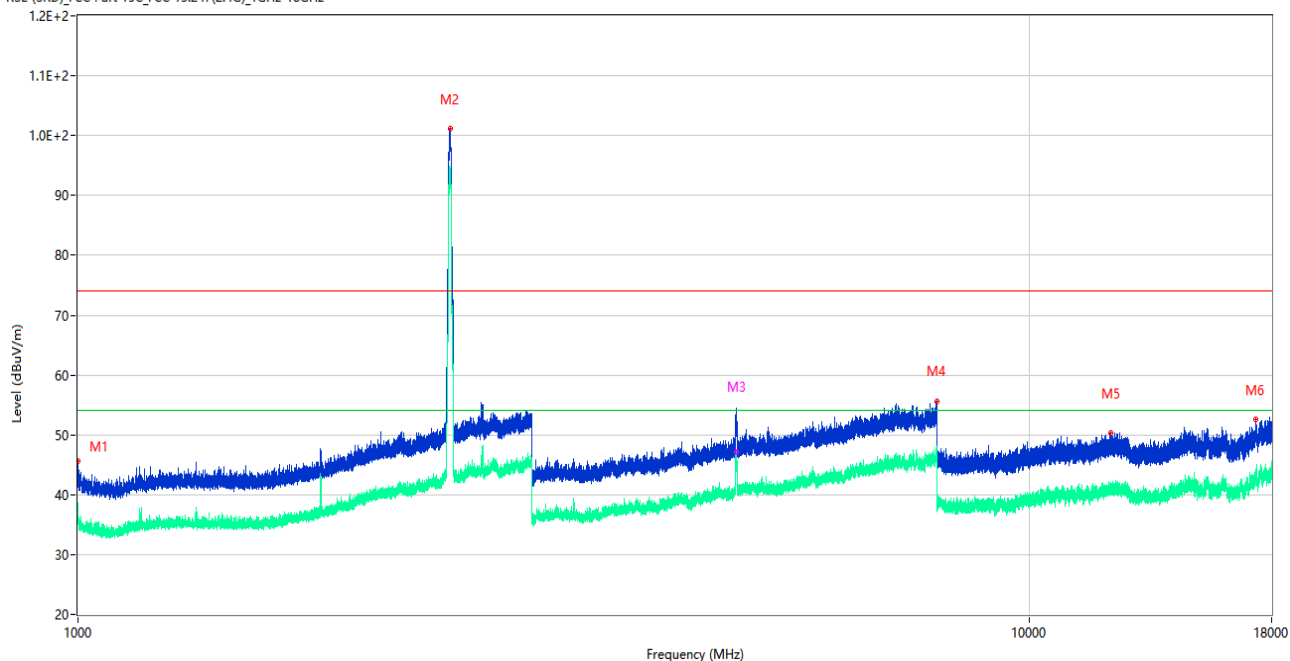
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1261.100	45.23	74.0	28.77	Peak	187.00	400	Horizontal	Pass
1**	1261.100	35.25	54.0	18.75	AV	187.00	400	Horizontal	Pass
2	2460.200	103.83	74.0	-29.83	Peak	308.00	200	Horizontal	N/A
2**	2460.200	96.48	54.0	-42.48	AV	308.00	200	Horizontal	N/A
3	4822.750	49.92	74.0	24.08	Peak	305.00	100	Horizontal	Pass
3**	4822.750	39.71	54.0	14.29	AV	305.00	100	Horizontal	Pass
4	7998.500	55.40	74.0	18.60	Peak	360.00	400	Horizontal	Pass
4**	7998.500	46.34	54.0	7.66	AV	360.00	400	Horizontal	Pass
5	12299.225	50.35	74.0	23.65	Peak	222.00	300	Horizontal	Pass
5**	12299.225	40.65	54.0	13.35	AV	222.00	300	Horizontal	Pass
6	17347.949	52.63	74.0	21.37	Peak	308.00	100	Horizontal	Pass
6**	17347.949	43.42	54.0	10.58	AV	308.00	100	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11n20 High Channel

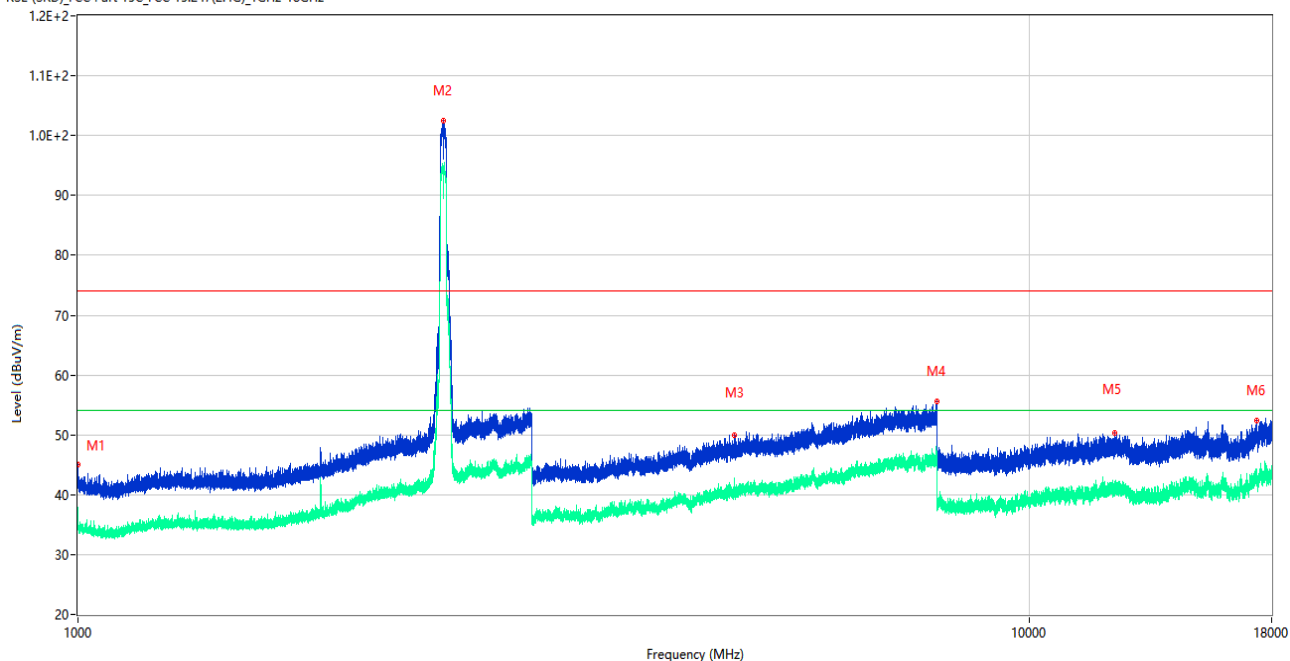
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1000.200	45.65	74.0	28.35	Peak	6.00	300	Vertical	Pass
1**	1000.200	38.18	54.0	15.82	AV	6.00	300	Vertical	Pass
2	2463.000	101.15	74.0	-27.15	Peak	231.00	150	Vertical	N/A
2**	2463.000	94.57	54.0	-40.57	AV	231.00	150	Vertical	N/A
3	4921.750	51.55	74.0	22.45	Peak	11.00	150	Vertical	Pass
3**	4921.750	47.16	54.0	6.84	AV	11.00	150	Vertical	Pass
4	7997.000	55.63	74.0	18.37	Peak	243.00	200	Vertical	Pass
4**	7997.000	47.00	54.0	7.00	AV	243.00	200	Vertical	Pass
5	12184.988	50.35	74.0	23.65	Peak	65.00	200	Vertical	Pass
5**	12184.988	40.21	54.0	13.79	AV	65.00	200	Vertical	Pass
6	17338.499	52.55	74.0	21.45	Peak	215.00	300	Vertical	Pass
6**	17338.499	43.62	54.0	10.38	AV	215.00	300	Vertical	Pass

1 GHz to 18 GHz, ANT H 802.11n40 Low Channel

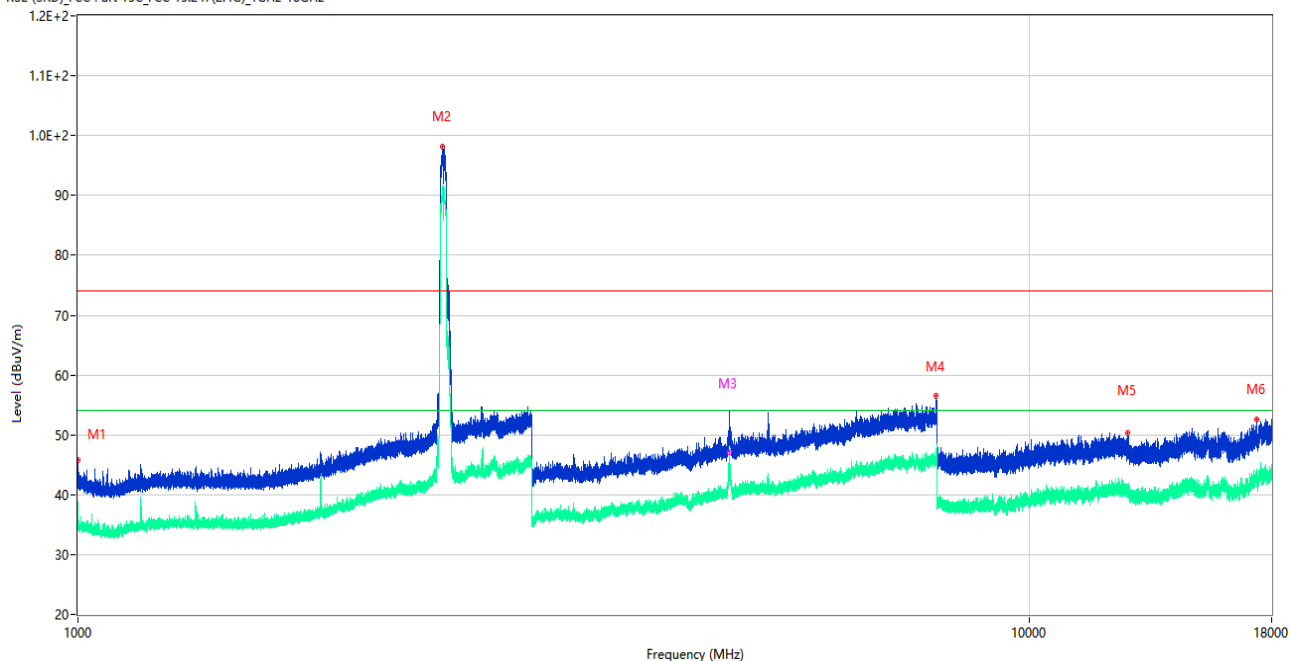
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1000.000	44.99	74.0	29.01	Peak	50.00	400	Horizontal	Pass
1**	1000.000	34.84	54.0	19.16	AV	50.00	400	Horizontal	Pass
2	2424.300	102.51	74.0	-28.51	Peak	73.00	100	Horizontal	N/A
2**	2424.300	94.98	54.0	-40.98	AV	73.00	100	Horizontal	N/A
3	4906.000	50.04	74.0	23.96	Peak	0.00	150	Horizontal	Pass
3**	4906.000	40.57	54.0	13.43	AV	0.00	150	Horizontal	Pass
4	7999.750	55.60	74.0	18.40	Peak	355.00	200	Horizontal	Pass
4**	7999.750	46.80	54.0	7.20	AV	355.00	200	Horizontal	Pass
5	12320.838	50.23	74.0	23.77	Peak	243.00	300	Horizontal	Pass
5**	12320.838	40.74	54.0	13.26	AV	243.00	300	Horizontal	Pass
6	17353.988	52.40	74.0	21.60	Peak	3.00	200	Horizontal	Pass
6**	17353.988	43.65	54.0	10.35	AV	3.00	200	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11n40 Low Channel

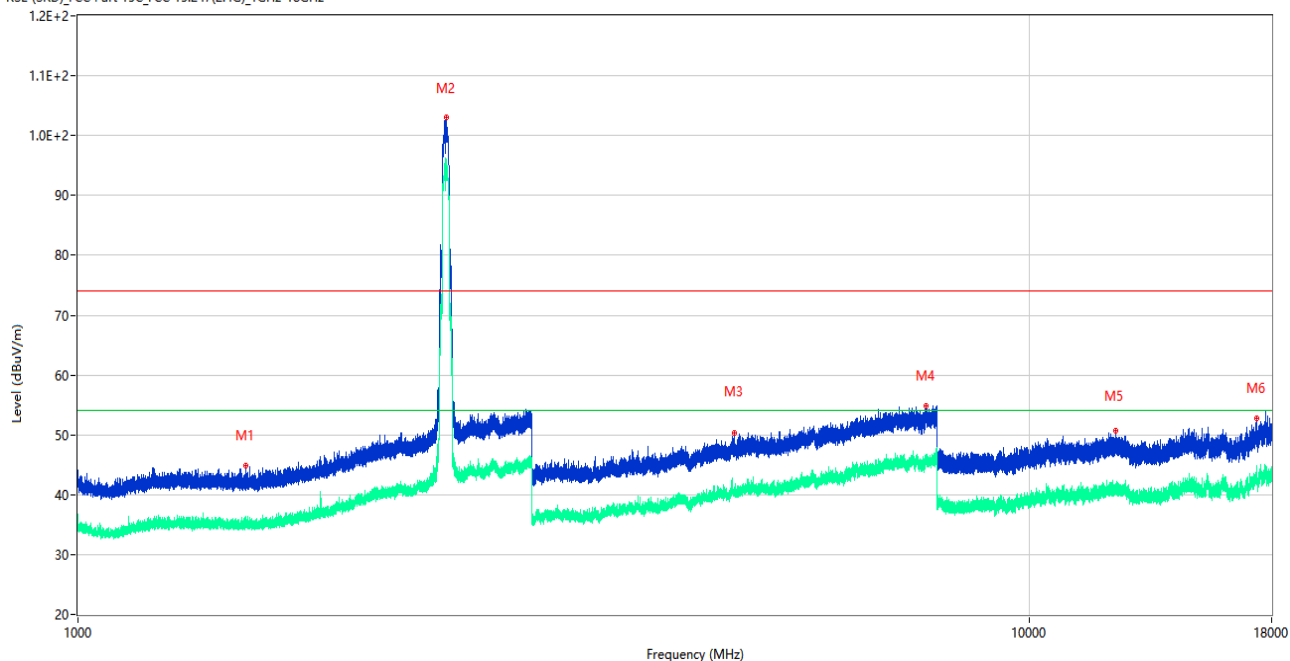
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1000.200	45.77	74.0	28.23	Peak	275.00	200	Vertical	Pass
1**	1000.200	37.55	54.0	16.45	AV	275.00	200	Vertical	Pass
2	2418.500	98.16	74.0	-24.16	Peak	52.00	150	Vertical	N/A
2**	2418.500	91.35	54.0	-37.35	AV	52.00	150	Vertical	N/A
3	4843.750	49.59	74.0	24.41	Peak	182.00	150	Vertical	Pass
3**	4843.750	47.18	54.0	6.82	AV	182.00	150	Vertical	Pass
4	7990.750	56.46	74.0	17.54	Peak	39.00	200	Vertical	Pass
4**	7990.750	46.47	54.0	7.53	AV	39.00	200	Vertical	Pass
5	12714.849	50.40	74.0	23.60	Peak	104.00	300	Vertical	Pass
5**	12714.849	40.29	54.0	13.71	AV	104.00	300	Vertical	Pass
6	17343.224	52.63	74.0	21.37	Peak	6.00	100	Vertical	Pass
6**	17343.224	43.28	54.0	10.72	AV	6.00	100	Vertical	Pass

1 GHz to 18 GHz, ANT H 802.11n40 Middle Channel

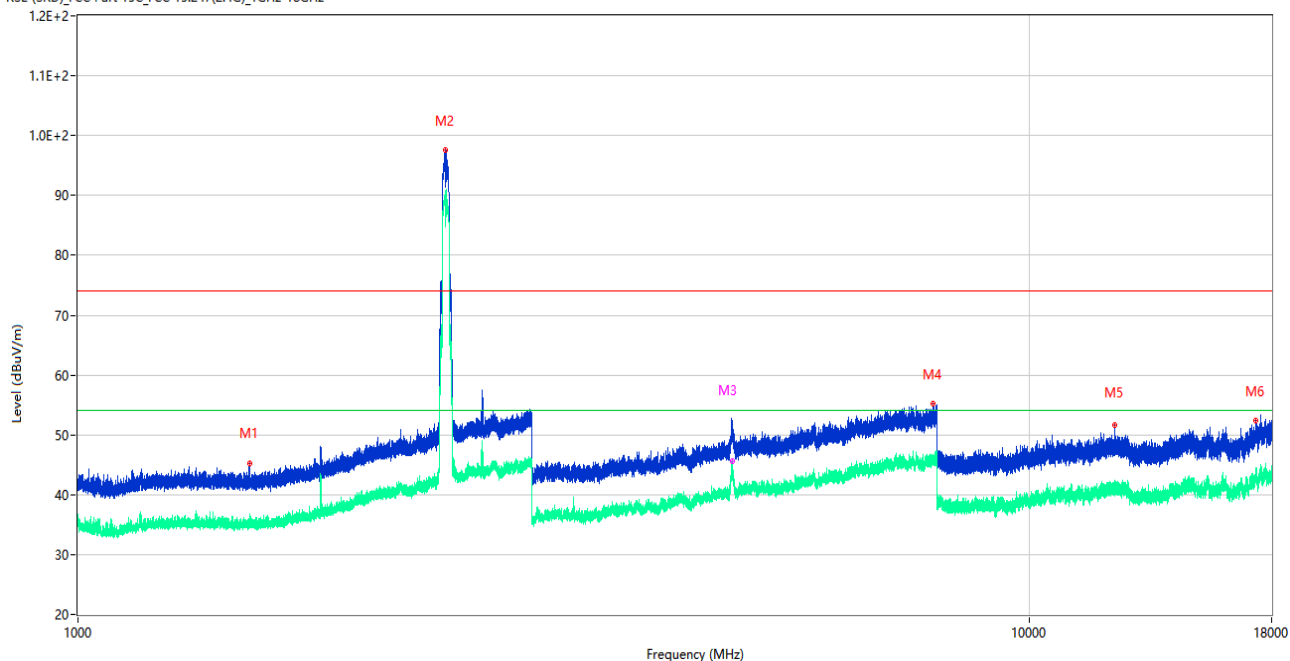
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1501.000	44.85	74.0	29.15	Peak	36.00	200	Horizontal	Pass
1**	1501.000	34.83	54.0	19.17	AV	36.00	200	Horizontal	Pass
2	2438.800	102.97	74.0	-28.97	Peak	313.00	100	Horizontal	N/A
2**	2438.800	95.40	54.0	-41.40	AV	313.00	100	Horizontal	N/A
3	4897.000	50.32	74.0	23.68	Peak	212.00	100	Horizontal	Pass
3**	4897.000	40.39	54.0	13.61	AV	212.00	100	Horizontal	Pass
4	7788.750	54.89	74.0	19.11	Peak	264.00	100	Horizontal	Pass
4**	7788.750	45.61	54.0	8.39	AV	264.00	100	Horizontal	Pass
5	12335.088	50.63	74.0	23.37	Peak	335.00	300	Horizontal	Pass
5**	12335.088	41.56	54.0	12.44	AV	335.00	300	Horizontal	Pass
6	17350.574	52.83	74.0	21.17	Peak	330.00	400	Horizontal	Pass
6**	17350.574	43.60	54.0	10.40	AV	330.00	400	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11n40 Middle Channel

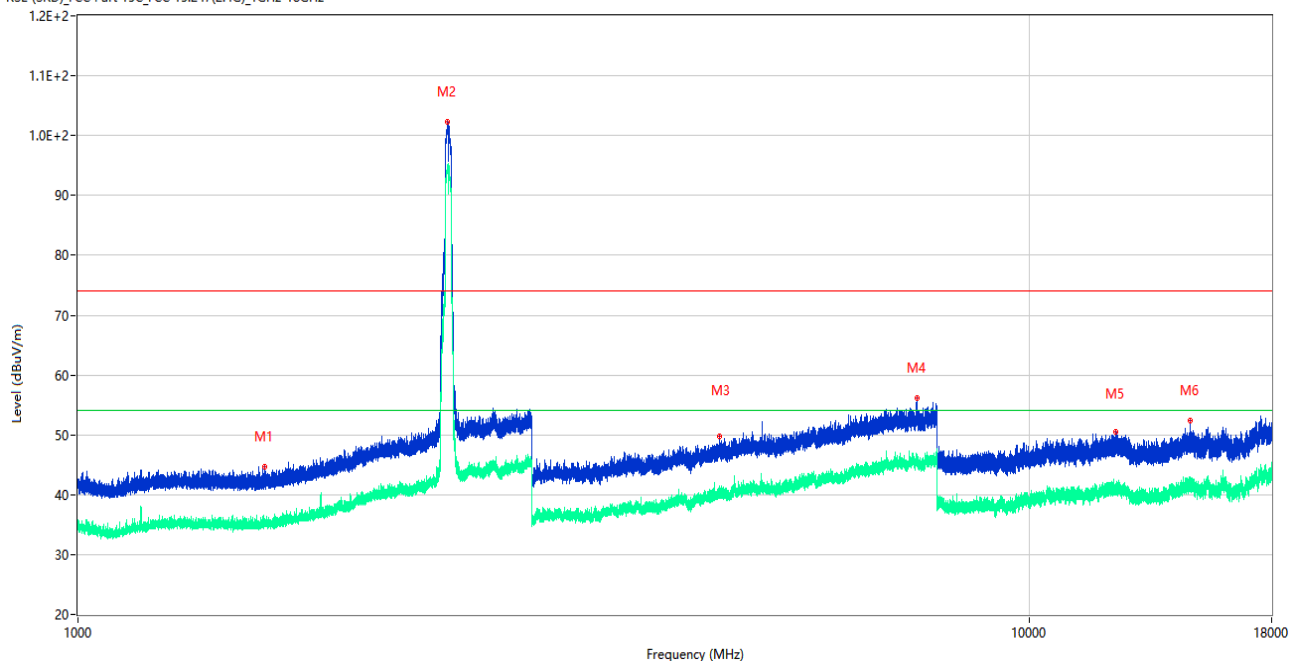
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1517.400	45.23	74.0	28.77	Peak	140.00	300	Vertical	Pass
1**	1517.400	35.83	54.0	18.17	AV	140.00	300	Vertical	Pass
2	2435.800	97.55	74.0	-23.55	Peak	267.00	150	Vertical	N/A
2**	2435.800	89.73	54.0	-35.73	AV	267.00	150	Vertical	N/A
3	4872.750	50.68	74.0	23.32	Peak	181.00	150	Vertical	Pass
3**	4872.750	45.70	54.0	8.30	AV	181.00	150	Vertical	Pass
4	7923.000	55.17	74.0	18.83	Peak	150.00	300	Vertical	Pass
4**	7923.000	46.26	54.0	7.74	AV	150.00	300	Vertical	Pass
5	12308.250	51.60	74.0	22.40	Peak	41.00	400	Vertical	Pass
5**	12308.250	40.18	54.0	13.82	AV	41.00	400	Vertical	Pass
6	17335.613	52.38	74.0	21.62	Peak	142.00	100	Vertical	Pass
6**	17335.613	43.45	54.0	10.55	AV	142.00	100	Vertical	Pass

1 GHz to 18 GHz, ANT H 802.11n40 High Channel

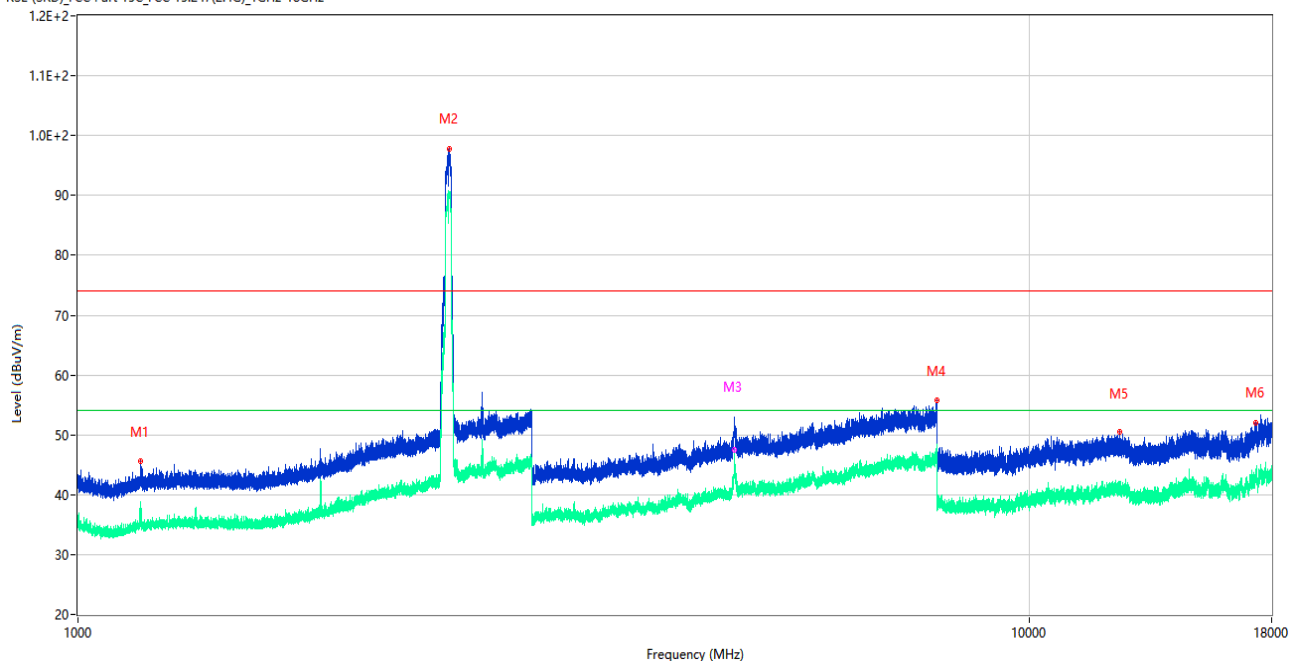
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1571.000	44.71	74.0	29.29	Peak	351.00	400	Horizontal	Pass
1**	1571.000	34.99	54.0	19.01	AV	351.00	400	Horizontal	Pass
2	2449.100	102.31	74.0	-28.31	Peak	359.00	100	Horizontal	N/A
2**	2449.100	95.16	54.0	-41.16	AV	359.00	100	Horizontal	N/A
3	4732.000	49.75	74.0	24.25	Peak	37.00	200	Horizontal	Pass
3**	4732.000	40.14	54.0	13.86	AV	37.00	200	Horizontal	Pass
4	7634.750	56.15	74.0	17.85	Peak	355.00	200	Horizontal	Pass
4**	7634.750	45.05	54.0	8.95	AV	355.00	200	Horizontal	Pass
5	12330.338	50.43	74.0	23.57	Peak	34.00	400	Horizontal	Pass
5**	12330.338	41.23	54.0	12.77	AV	34.00	400	Horizontal	Pass
6	14762.588	52.43	74.0	21.57	Peak	360.00	300	Horizontal	Pass
6**	14762.588	43.00	54.0	11.00	AV	360.00	300	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11n40 High Channel

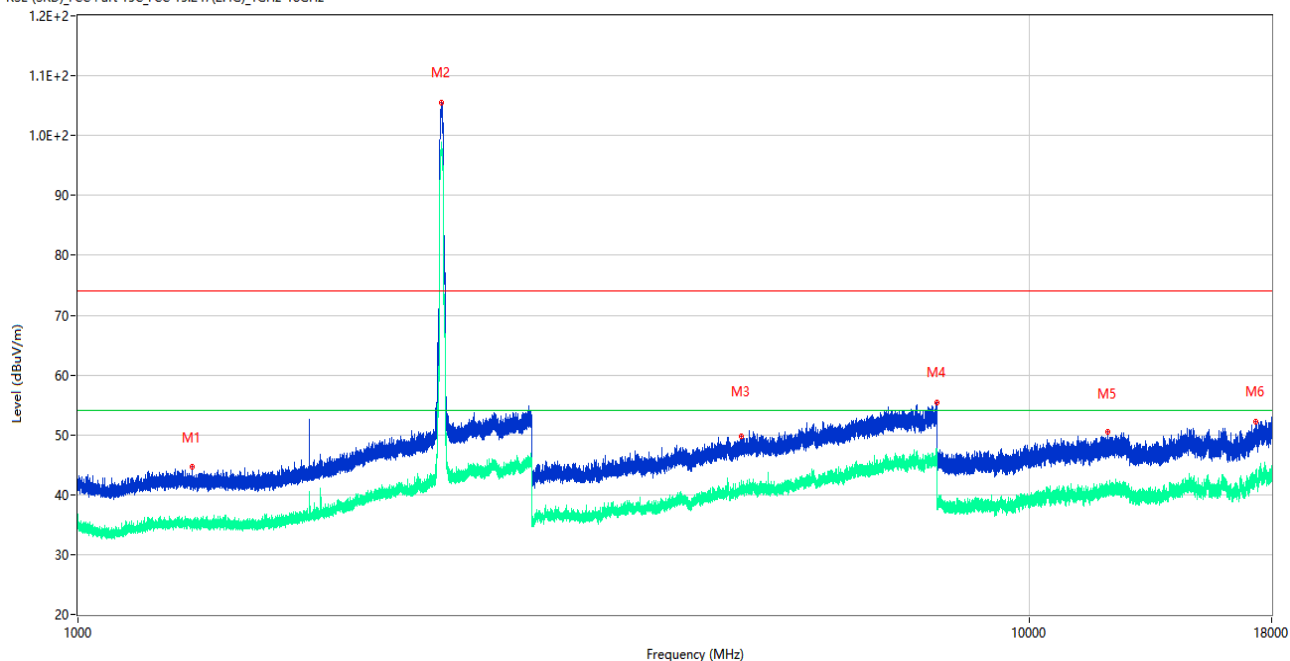
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1162.400	45.55	74.0	28.45	Peak	261.00	400	Vertical	Pass
1**	1162.400	36.64	54.0	17.36	AV	261.00	400	Vertical	Pass
2	2459.000	97.86	74.0	-23.86	Peak	238.00	150	Vertical	N/A
2**	2459.000	90.11	54.0	-36.11	AV	238.00	150	Vertical	N/A
3	4904.750	52.49	74.0	21.51	Peak	2.00	150	Vertical	Pass
3**	4904.750	47.49	54.0	6.51	AV	2.00	150	Vertical	Pass
4	7995.500	55.75	74.0	18.25	Peak	126.00	200	Vertical	Pass
4**	7995.500	46.31	54.0	7.69	AV	126.00	200	Vertical	Pass
5	12472.362	50.55	74.0	23.45	Peak	348.00	100	Vertical	Pass
5**	12472.362	40.49	54.0	13.51	AV	348.00	100	Vertical	Pass
6	17313.036	52.07	74.0	21.93	Peak	282.00	300	Vertical	Pass
6**	17313.036	43.65	54.0	10.35	AV	282.00	300	Vertical	Pass

1 GHz to 18 GHz, ANT H 802.11ax20(SU) Low Channel

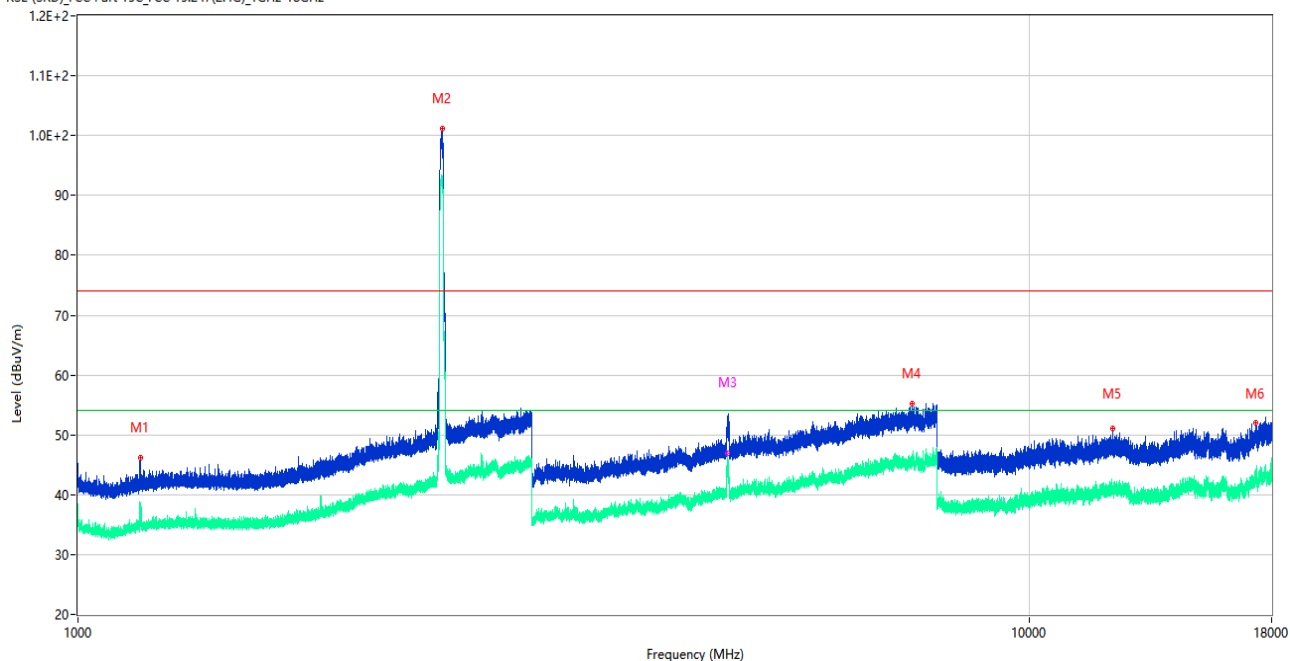
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1318.800	44.59	74.0	29.41	Peak	354.00	200	Horizontal	Pass
1**	1318.800	34.47	54.0	19.53	AV	354.00	200	Horizontal	Pass
2	2411.100	105.52	74.0	-31.52	Peak	73.00	200	Horizontal	N/A
2**	2411.100	98.39	54.0	-44.39	AV	73.00	200	Horizontal	N/A
3	4990.250	49.67	74.0	24.33	Peak	360.00	200	Horizontal	Pass
3**	4990.250	40.66	54.0	13.34	AV	360.00	200	Horizontal	Pass
4	7996.000	55.47	74.0	18.53	Peak	360.00	100	Horizontal	Pass
4**	7996.000	46.94	54.0	7.06	AV	360.00	100	Horizontal	Pass
5	12100.200	50.46	74.0	23.54	Peak	28.00	100	Horizontal	Pass
5**	12100.200	40.58	54.0	13.42	AV	28.00	100	Horizontal	Pass
6	17339.812	52.23	74.0	21.77	Peak	8.00	400	Horizontal	Pass
6**	17339.812	43.22	54.0	10.78	AV	8.00	400	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11ax20(SU) Low Channel

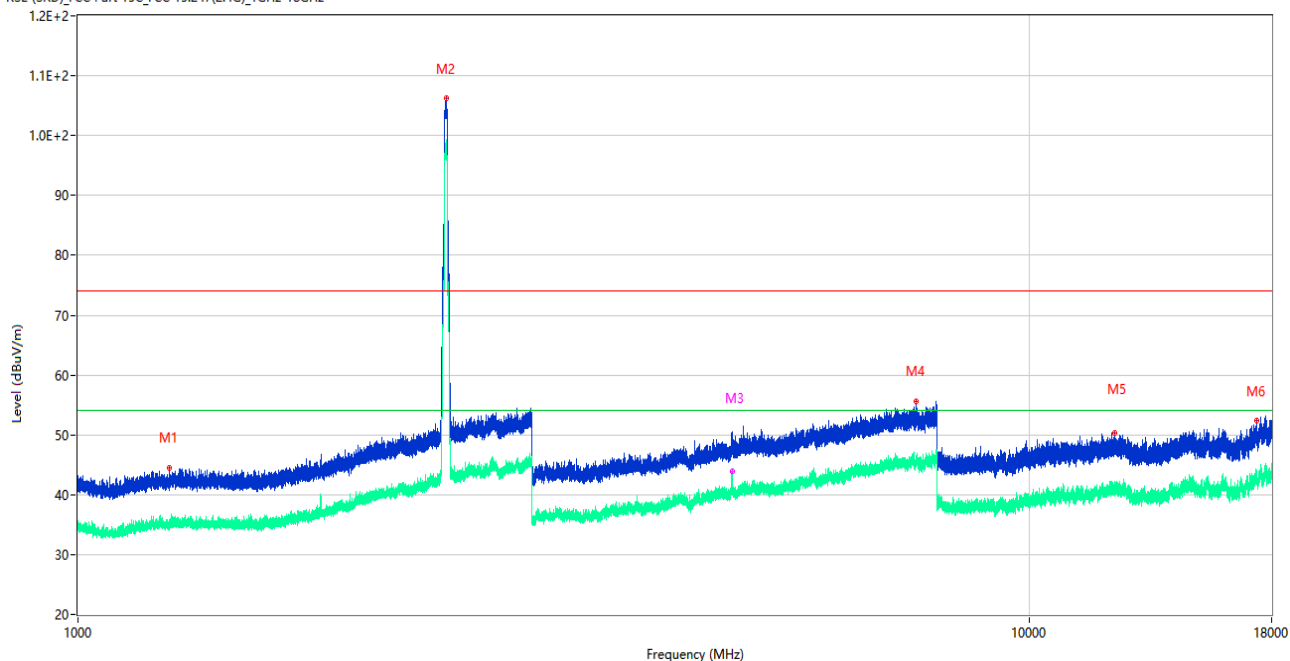
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1163.800	46.25	74.0	27.75	Peak	0.00	300	Vertical	Pass
1**	1163.800	36.68	54.0	17.32	AV	0.00	300	Vertical	Pass
2	2416.300	101.23	74.0	-27.23	Peak	44.00	200	Vertical	N/A
2**	2416.300	91.80	54.0	-37.80	AV	44.00	200	Vertical	N/A
3	4823.750	52.67	74.0	21.33	Peak	181.00	150	Vertical	Pass
3**	4823.750	46.84	54.0	7.16	AV	181.00	150	Vertical	Pass
4	7541.750	55.24	74.0	18.76	Peak	222.00	100	Vertical	Pass
4**	7541.750	45.33	54.0	8.67	AV	222.00	100	Vertical	Pass
5	12263.125	51.16	74.0	22.84	Peak	210.00	400	Vertical	Pass
5**	12263.125	40.40	54.0	13.60	AV	210.00	400	Vertical	Pass
6	17336.138	51.98	74.0	22.02	Peak	112.00	100	Vertical	Pass
6**	17336.138	43.19	54.0	10.81	AV	112.00	100	Vertical	Pass

1 GHz to 18 GHz, ANT H 802.11ax20(SU) Middle Channel

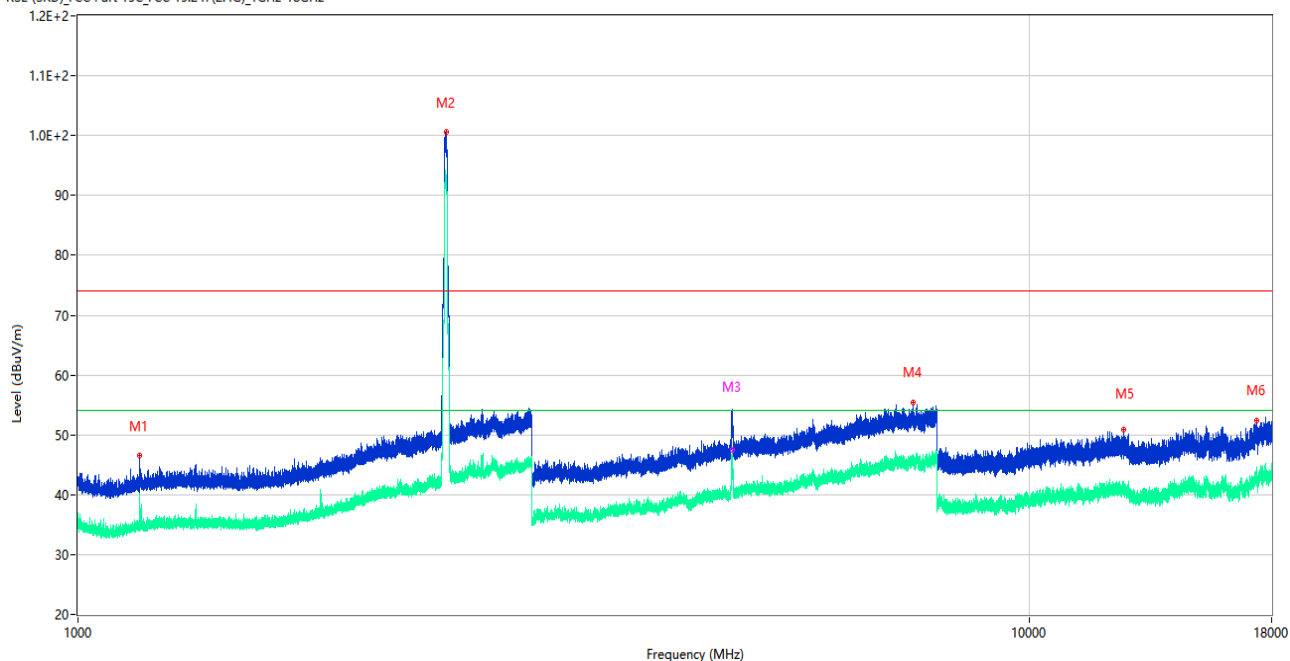
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1247.500	44.57	74.0	29.43	Peak	200.00	300	Horizontal	Pass
1**	1247.500	35.39	54.0	18.61	AV	200.00	300	Horizontal	Pass
2	2437.400	106.18	74.0	-32.18	Peak	6.00	200	Horizontal	N/A
2**	2437.400	98.49	54.0	-44.49	AV	6.00	200	Horizontal	N/A
3	4874.500	49.72	74.0	24.28	Peak	223.00	150	Horizontal	Pass
3**	4874.500	43.95	54.0	10.05	AV	223.00	150	Horizontal	Pass
4	7615.000	55.65	74.0	18.35	Peak	326.00	400	Horizontal	Pass
4**	7615.000	46.29	54.0	7.71	AV	326.00	400	Horizontal	Pass
5	12322.737	50.33	74.0	23.67	Peak	47.00	200	Horizontal	Pass
5**	12322.737	40.44	54.0	13.56	AV	47.00	200	Horizontal	Pass
6	17342.175	52.33	74.0	21.67	Peak	360.00	400	Horizontal	Pass
6**	17342.175	43.11	54.0	10.89	AV	360.00	400	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11ax20(SU) Middle Channel

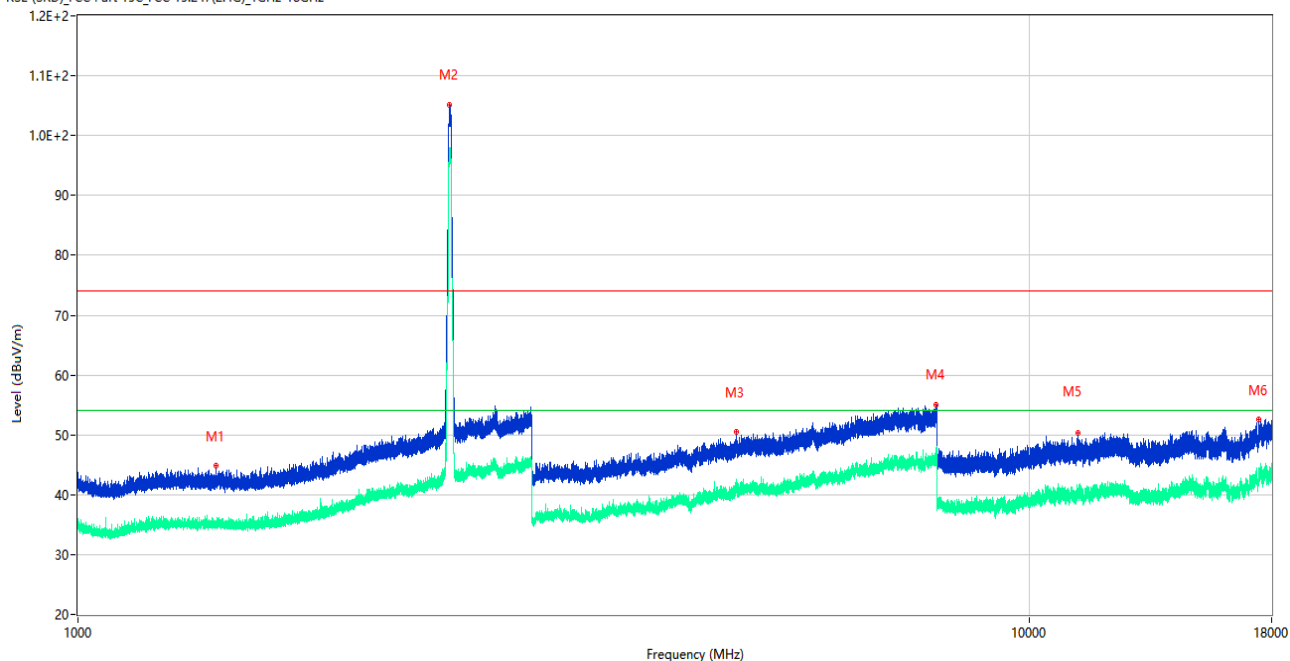
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1161.100	46.53	74.0	27.47	Peak	347.00	400	Vertical	Pass
1**	1161.100	34.82	54.0	19.18	AV	347.00	400	Vertical	Pass
2	2437.400	100.51	74.0	-26.51	Peak	269.00	200	Vertical	N/A
2**	2437.400	92.05	54.0	-38.05	AV	269.00	200	Vertical	N/A
3	4877.000	51.06	74.0	22.94	Peak	7.00	150	Vertical	Pass
3**	4877.000	47.56	54.0	6.44	AV	7.00	150	Vertical	Pass
4	7556.000	55.43	74.0	18.57	Peak	315.00	100	Vertical	Pass
4**	7556.000	45.33	54.0	8.67	AV	315.00	100	Vertical	Pass
5	12581.613	50.81	74.0	23.19	Peak	0.00	300	Vertical	Pass
5**	12581.613	40.88	54.0	13.12	AV	0.00	300	Vertical	Pass
6	17356.349	52.43	74.0	21.57	Peak	235.00	400	Vertical	Pass
6**	17356.349	43.14	54.0	10.86	AV	235.00	400	Vertical	Pass

1 GHz to 18 GHz, ANT H 802.11ax20(SU) High Channel

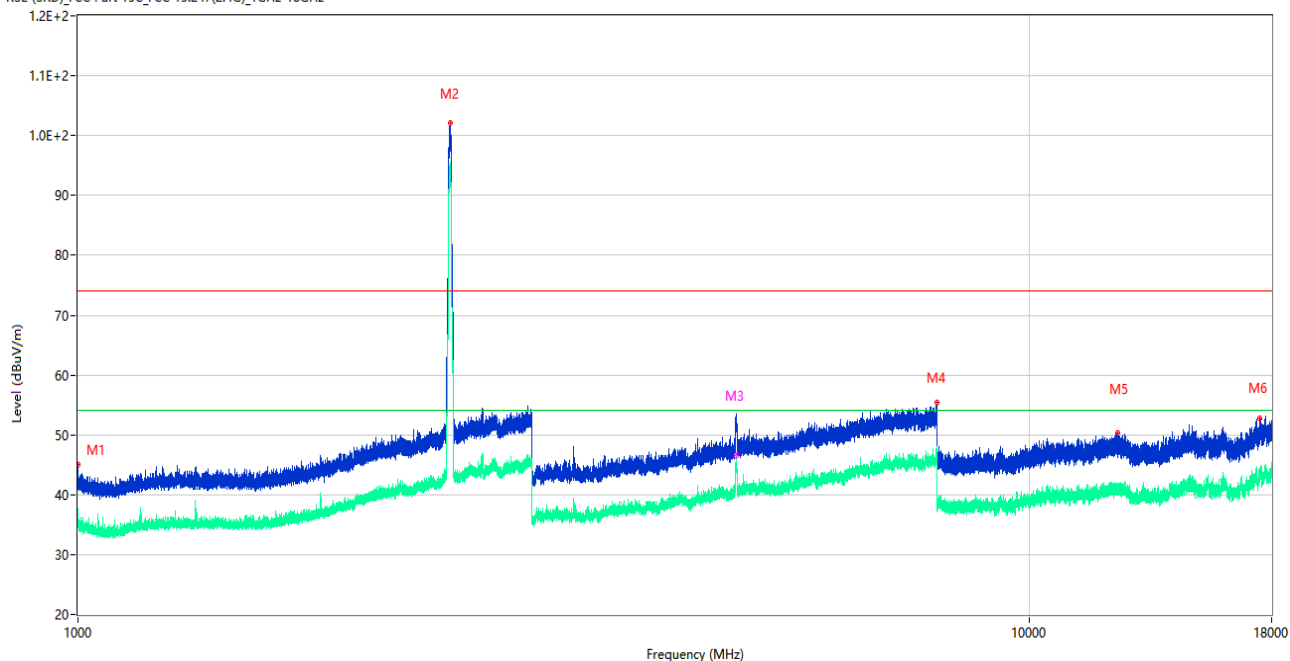
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1397.200	44.78	74.0	29.22	Peak	156.00	200	Horizontal	Pass
1**	1397.200	34.81	54.0	19.19	AV	156.00	200	Horizontal	Pass
2	2460.800	105.14	74.0	-31.14	Peak	358.00	200	Horizontal	N/A
2**	2460.800	97.34	54.0	-43.34	AV	358.00	200	Horizontal	N/A
3	4927.250	50.49	74.0	23.51	Peak	264.00	100	Horizontal	Pass
3**	4927.250	41.28	54.0	12.72	AV	264.00	100	Horizontal	Pass
4	7992.250	55.08	74.0	18.92	Peak	0.00	300	Horizontal	Pass
4**	7992.250	47.08	54.0	6.92	AV	0.00	300	Horizontal	Pass
5	11263.963	50.25	74.0	23.75	Peak	40.00	300	Horizontal	Pass
5**	11263.963	40.41	54.0	13.59	AV	40.00	300	Horizontal	Pass
6	17462.137	52.54	74.0	21.46	Peak	38.00	400	Horizontal	Pass
6**	17462.137	42.88	54.0	11.12	AV	38.00	400	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11ax20(SU) High Channel

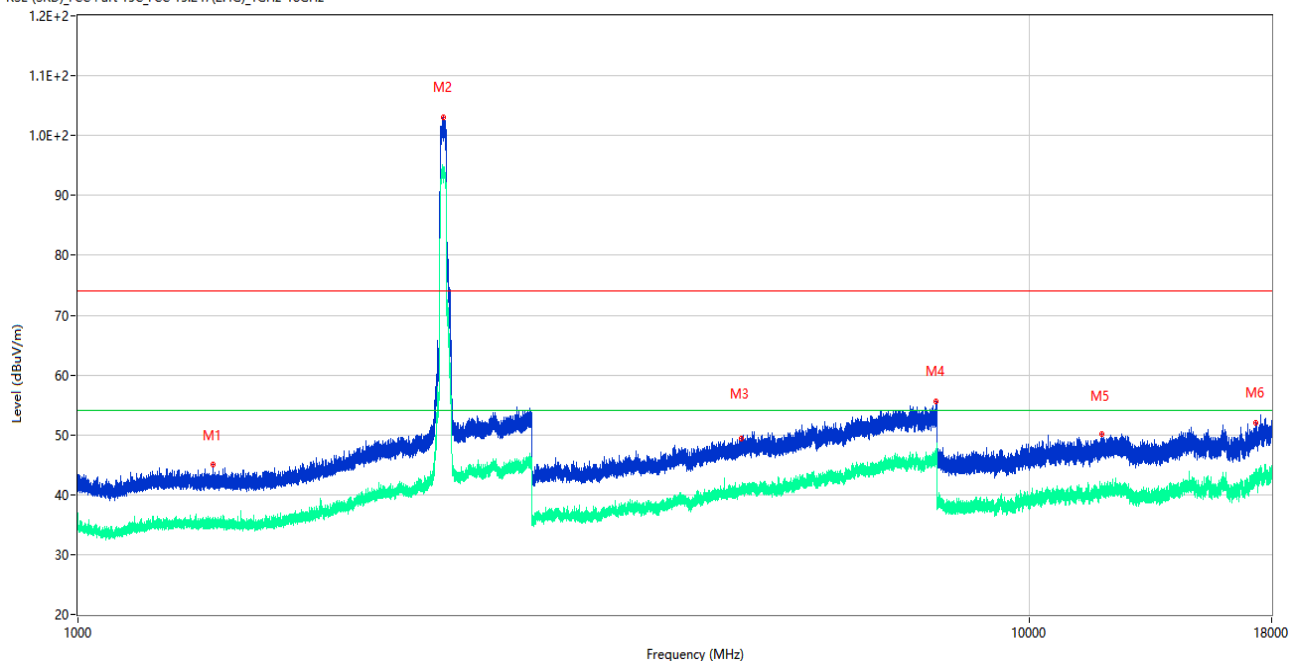
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1000.100	45.13	74.0	28.87	Peak	10.00	300	Vertical	Pass
1**	1000.100	37.66	54.0	16.34	AV	10.00	300	Vertical	Pass
2	2462.800	102.07	74.0	-28.07	Peak	233.00	100	Vertical	N/A
2**	2462.800	94.37	54.0	-40.37	AV	233.00	100	Vertical	N/A
3	4923.750	52.57	74.0	21.43	Peak	150.00	150	Vertical	Pass
3**	4923.750	46.52	54.0	7.48	AV	150.00	150	Vertical	Pass
4	7999.500	55.33	74.0	18.67	Peak	169.00	400	Vertical	Pass
4**	7999.500	47.40	54.0	6.60	AV	169.00	400	Vertical	Pass
5	12390.901	50.35	74.0	23.65	Peak	86.00	400	Vertical	Pass
5**	12390.901	40.47	54.0	13.53	AV	86.00	400	Vertical	Pass
6	17486.813	52.73	74.0	21.27	Peak	10.00	100	Vertical	Pass
6**	17486.813	43.90	54.0	10.10	AV	10.00	100	Vertical	Pass

1 GHz to 18 GHz, ANT H 802.11ax40(SU) Low Channel

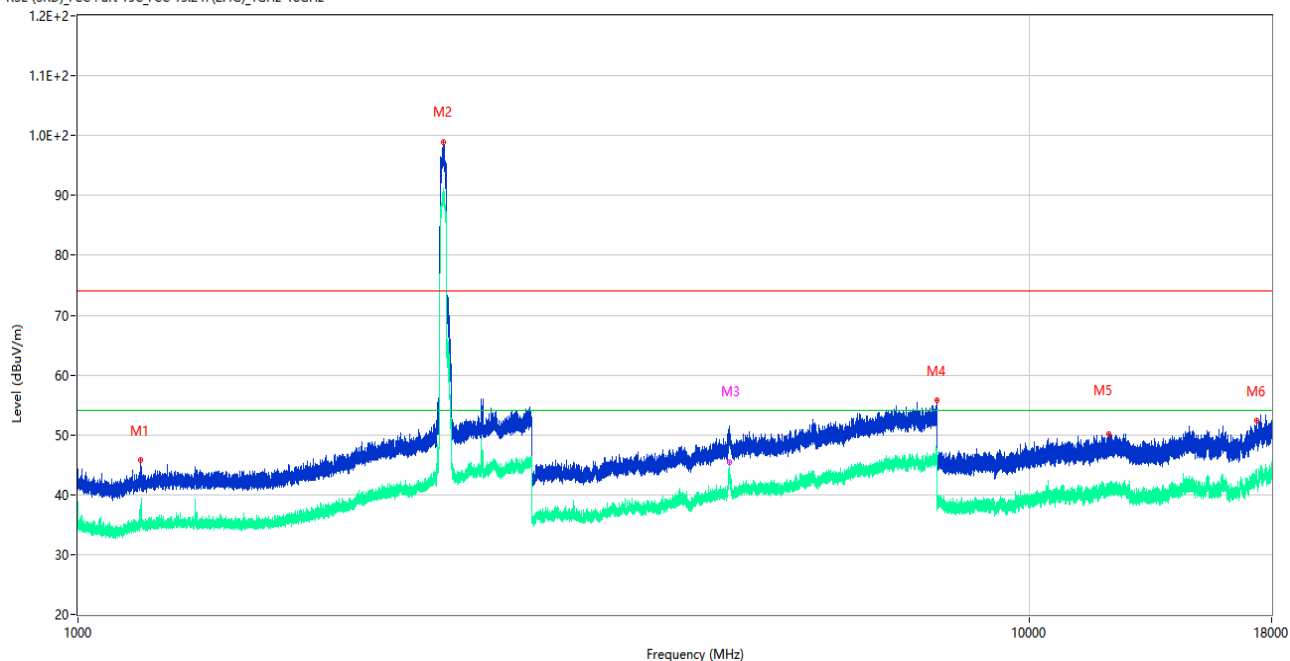
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1385.800	44.98	74.0	29.02	Peak	171.00	300	Horizontal	Pass
1**	1385.800	35.43	54.0	18.57	AV	171.00	300	Horizontal	Pass
2	2420.200	103.14	74.0	-29.14	Peak	73.00	100	Horizontal	N/A
2**	2420.200	94.43	54.0	-40.43	AV	73.00	100	Horizontal	N/A
3	4988.250	49.47	74.0	24.53	Peak	26.00	100	Horizontal	Pass
3**	4988.250	40.39	54.0	13.61	AV	26.00	100	Horizontal	Pass
4	7992.750	55.62	74.0	18.38	Peak	336.00	200	Horizontal	Pass
4**	7992.750	46.54	54.0	7.46	AV	336.00	200	Horizontal	Pass
5	11932.763	50.19	74.0	23.81	Peak	65.00	400	Horizontal	Pass
5**	11932.763	41.19	54.0	12.81	AV	65.00	400	Horizontal	Pass
6	17337.448	52.08	74.0	21.92	Peak	256.00	300	Horizontal	Pass
6**	17337.448	43.63	54.0	10.37	AV	256.00	300	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11ax40(SU) Low Channel

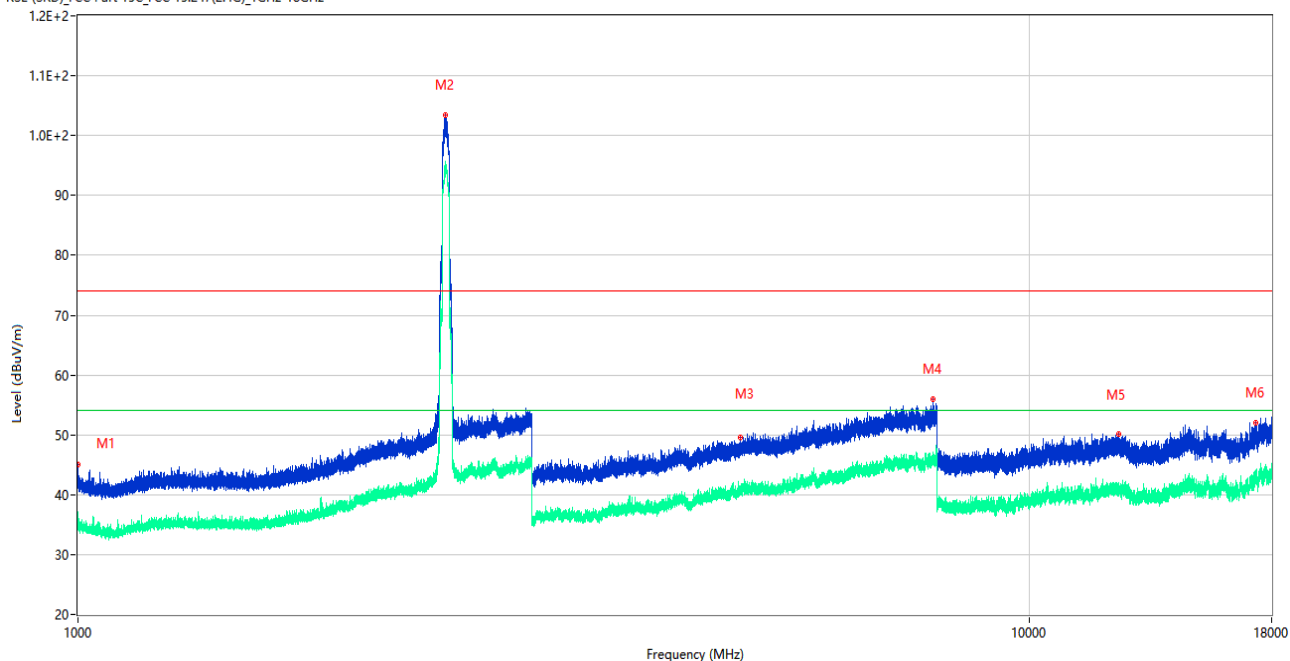
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1164.200	45.79	74.0	28.21	Peak	351.00	200	Vertical	Pass
1**	1164.200	35.28	54.0	18.72	AV	351.00	200	Vertical	Pass
2	2425.600	98.92	74.0	-24.92	Peak	43.00	100	Vertical	N/A
2**	2425.600	89.55	54.0	-35.55	AV	43.00	100	Vertical	N/A
3	4847.750	49.36	74.0	24.64	Peak	181.00	150	Vertical	Pass
3**	4847.750	45.38	54.0	8.62	AV	181.00	150	Vertical	Pass
4	7999.250	55.75	74.0	18.25	Peak	262.00	400	Vertical	Pass
4**	7999.250	46.94	54.0	7.06	AV	262.00	400	Vertical	Pass
5	12133.450	50.17	74.0	23.83	Peak	266.00	100	Vertical	Pass
5**	12133.450	40.43	54.0	13.57	AV	266.00	100	Vertical	Pass
6	17347.949	52.34	74.0	21.66	Peak	7.00	300	Vertical	Pass
6**	17347.949	43.18	54.0	10.82	AV	7.00	300	Vertical	Pass

1 GHz to 18 GHz, ANT H 802.11ax40(SU) Middle Channel

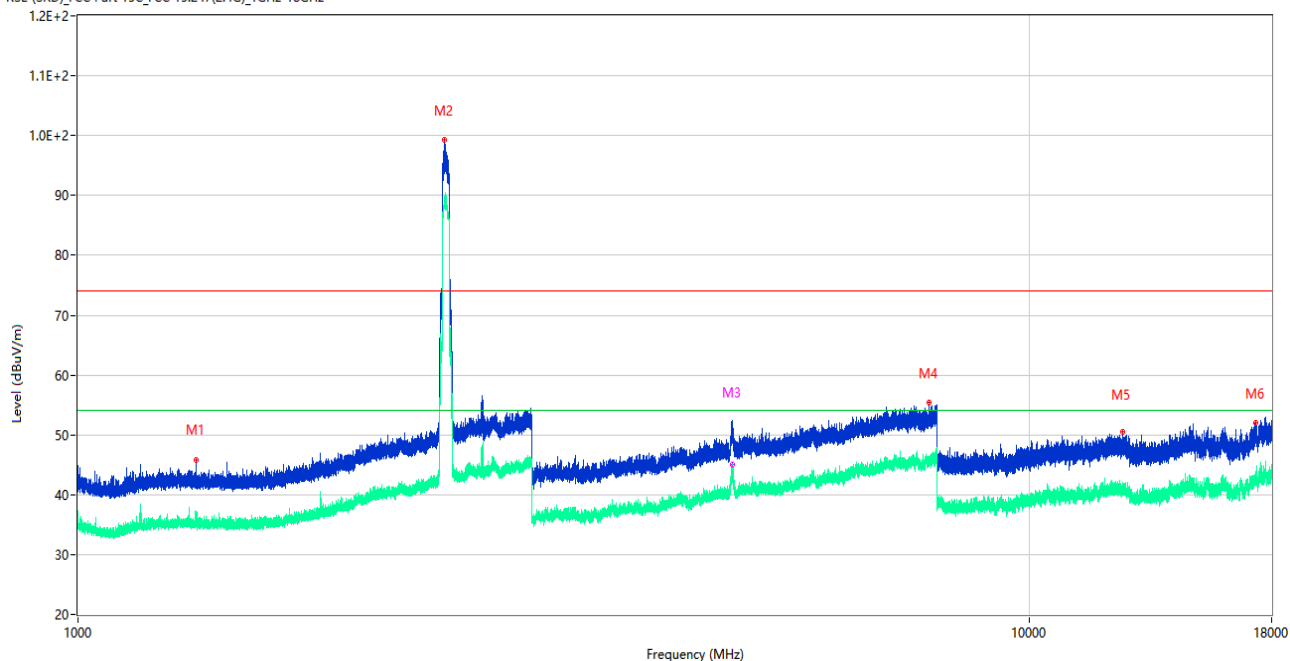
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1000.300	45.06	74.0	28.94	Peak	52.00	300	Horizontal	Pass
1**	1000.300	36.26	54.0	17.74	AV	52.00	300	Horizontal	Pass
2	2435.400	103.51	74.0	-29.51	Peak	73.00	150	Horizontal	N/A
2**	2435.400	95.67	54.0	-41.67	AV	73.00	150	Horizontal	N/A
3	4974.500	49.49	74.0	24.51	Peak	47.00	100	Horizontal	Pass
3**	4974.500	40.39	54.0	13.61	AV	47.00	100	Horizontal	Pass
4	7928.250	56.06	74.0	17.94	Peak	107.00	400	Horizontal	Pass
4**	7928.250	45.89	54.0	8.11	AV	107.00	400	Horizontal	Pass
5	12432.224	50.22	74.0	23.78	Peak	78.00	400	Horizontal	Pass
5**	12432.224	40.45	54.0	13.55	AV	78.00	400	Horizontal	Pass
6	17337.188	52.08	74.0	21.92	Peak	119.00	100	Horizontal	Pass
6**	17337.188	43.52	54.0	10.48	AV	119.00	100	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11ax40(SU) Middle Channel

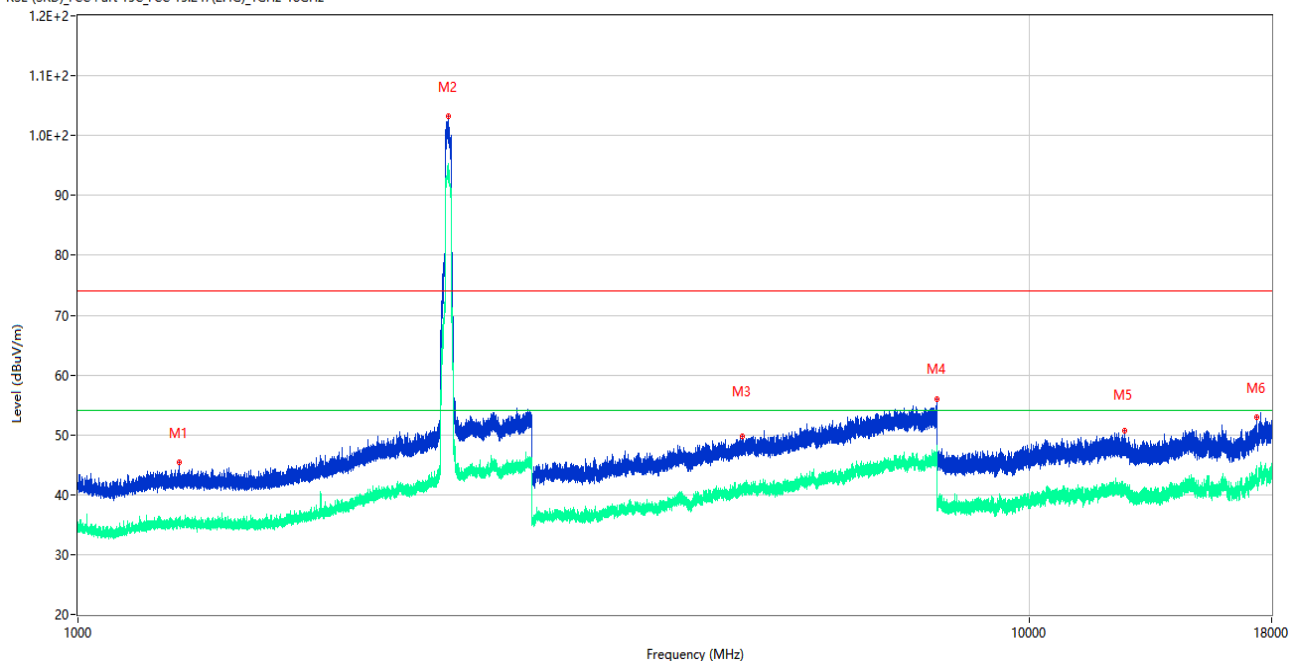
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1330.600	45.87	74.0	28.13	Peak	358.00	300	Vertical	Pass
1**	1330.600	35.33	54.0	18.67	AV	358.00	300	Vertical	Pass
2	2431.100	99.21	74.0	-25.21	Peak	269.00	100	Vertical	N/A
2**	2431.100	88.58	54.0	-34.58	AV	269.00	100	Vertical	N/A
3	4873.750	51.30	74.0	22.70	Peak	181.00	150	Vertical	Pass
3**	4873.750	45.11	54.0	8.89	AV	181.00	150	Vertical	Pass
4	7860.750	55.34	74.0	18.66	Peak	119.00	200	Vertical	Pass
4**	7860.750	45.44	54.0	8.56	AV	119.00	200	Vertical	Pass
5	12537.437	50.49	74.0	23.51	Peak	272.00	400	Vertical	Pass
5**	12537.437	40.91	54.0	13.09	AV	272.00	400	Vertical	Pass
6	17302.536	51.97	74.0	22.03	Peak	127.00	100	Vertical	Pass
6**	17302.536	42.69	54.0	11.31	AV	127.00	100	Vertical	Pass

1 GHz to 18 GHz, ANT H 802.11ax40(SU) High Channel

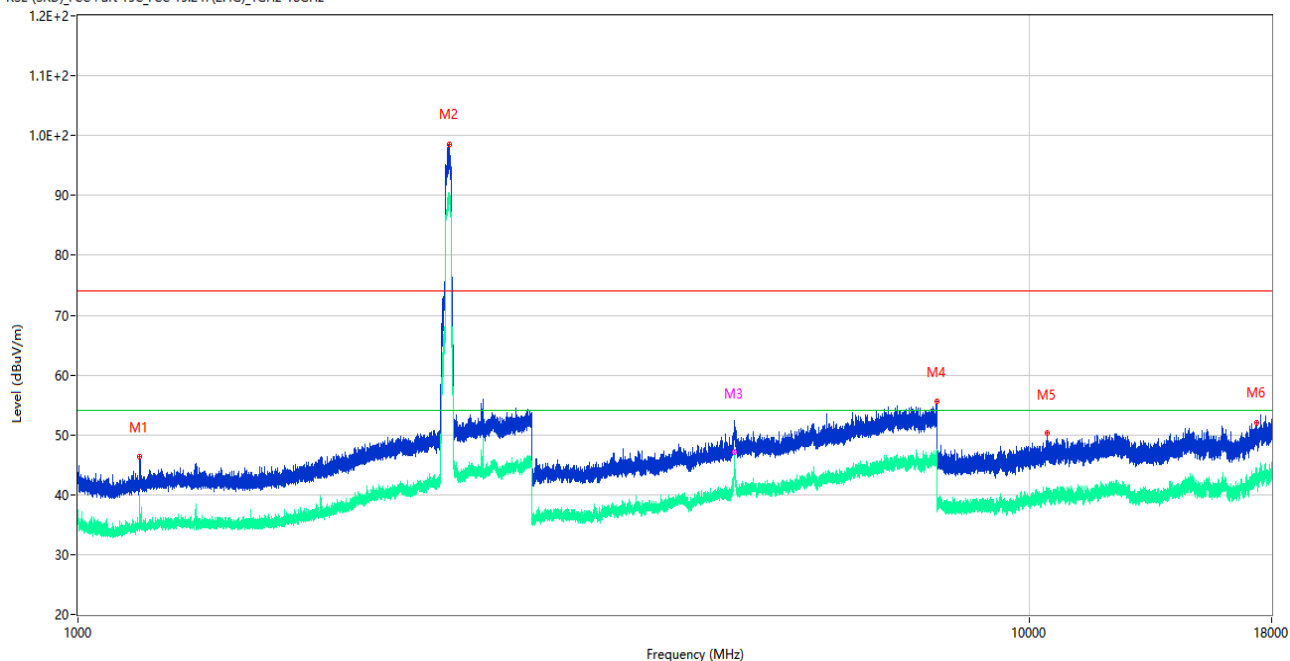
RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1278.900	45.36	74.0	28.64	Peak	125.00	200	Horizontal	Pass
1**	1278.900	36.13	54.0	17.87	AV	125.00	200	Horizontal	Pass
2	2454.400	103.19	74.0	-29.19	Peak	306.00	200	Horizontal	N/A
2**	2454.400	93.57	54.0	-39.57	AV	306.00	200	Horizontal	N/A
3	4995.250	49.66	74.0	24.34	Peak	334.00	100	Horizontal	Pass
3**	4995.250	40.06	54.0	13.94	AV	334.00	100	Horizontal	Pass
4	7999.250	56.06	74.0	17.94	Peak	0.00	100	Horizontal	Pass
4**	7999.250	48.17	54.0	5.83	AV	0.00	100	Horizontal	Pass
5	12612.250	50.62	74.0	23.38	Peak	356.00	300	Horizontal	Pass
5**	12612.250	40.78	54.0	13.22	AV	356.00	300	Horizontal	Pass
6	17354.512	52.92	74.0	21.08	Peak	158.00	200	Horizontal	Pass
6**	17354.512	43.80	54.0	10.20	AV	158.00	200	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11ax40(SU) High Channel

RSE (SRD)_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1161.900	46.32	74.0	27.68	Peak	321.00	200	Vertical	Pass
1**	1161.900	34.98	54.0	19.02	AV	321.00	200	Vertical	Pass
2	2455.900	98.62	74.0	-24.62	Peak	51.00	100	Vertical	N/A
2**	2455.900	90.21	54.0	-36.21	AV	51.00	100	Vertical	N/A
3	4902.750	51.43	74.0	22.57	Peak	24.00	150	Vertical	Pass
3**	4902.750	47.15	54.0	6.85	AV	24.00	150	Vertical	Pass
4	8000.000	55.55	74.0	18.45	Peak	66.00	200	Vertical	Pass
4**	8000.000	47.13	54.0	6.87	AV	66.00	200	Vertical	Pass
5	10450.763	50.29	74.0	23.71	Peak	153.00	200	Vertical	Pass
5**	10450.763	39.83	54.0	14.17	AV	153.00	200	Vertical	Pass
6	17352.937	52.04	74.0	21.96	Peak	126.00	400	Vertical	Pass
6**	17352.937	43.62	54.0	10.38	AV	126.00	400	Vertical	Pass