

TEST REPORT

Applicant: Woan Technology (Shenzhen) Co., Ltd.
Address: Room 1101, Qiancheng Commercial Center, No. 5
Haicheng Road, Mabu Community, Xixiang Sub-
district, Bao'an District, Shenzhen, Guangdong, P.R.
China, 518100
Equipment Type: SwitchBot Solar Pan/Tilt Cam 2K
Model Name: W10102000 (refer to section 2.3)
Brand Name: SwitchBot
FCC ID: 2AKXB-W10102000
ISED Number: 28651-W10102000
Test Standard: 47 CFR Part 15 Subpart C
RSS-Gen Issue 5
RSS-247 Issue 4
(refer to section 3.1)
Sample Arrival Date: May 19, 2026
Test Date: May 24, 2026 - May 25, 2026
Date of Issue: Aug. 26, 2026

ISSUED BY:

Shenzhen BALUN Technology Co., Ltd.

**Tested by:** Li Renyu**Checked by:** Li Ganming**Approved by:** Tolan Tu

(Testing Director)



Revision History

Version	Issue Date	Revisions
<u>Rev. 01</u>	<u>Aug. 26, 2026</u>	<u>Initial Issue</u>

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1 GENERAL INFORMATION

1.1 Test Laboratory

Name	Shenzhen BALUN Technology Co., Ltd.
Address	601, Building 2, Intelligent Connected Vehicle Industrial Park, No.55, Xiangshan Road, Luotian Community, Yanluo Sub-district, Bao'an District, Shenzhen
Phone Number	+86 755 6685 0100

1.2 Test Location

Name	Shenzhen BALUN Technology Co., Ltd.
Location	☐ Building 2, Intelligent Connected Vehicle Industrial Park, No.55, Xiangshan Road, Luotian Community, Yanluo Sub-district, Bao'an District, Shenzhen, Guangdong
	☒ 1/F., Building B, Ganghongji High-Tech Intelligent Industrial Park, No.1008, Songbai Road, Yangguang Community, Xili Subdistrict, Nanshan District, Shenzhen, Guangdong
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	Woan Technology (Shenzhen) Co., Ltd.
Address	Room 1101, Qiancheng Commercial Center, No. 5 Haicheng Road, Mabuo Community, Xixiang Sub-district, Bao'an District, Shenzhen, Guangdong, P.R. China, 518100

2.2 Manufacturer Information

Manufacturer	Woan Technology (Shenzhen) Co., Ltd.
Address	Room 1101, Qiancheng Commercial Center, No. 5 Haicheng Road, Mabuo Community, Xixiang Sub-district, Bao'an District, Shenzhen, Guangdong, P.R. China, 518100

2.3 General Description for Equipment under Test (EUT)

EUT Name	SwitchBot Solar Pan/Tilt Cam 2K
Model Name Under Test	W10102000
Series Model Name	W10102001, W10102002, W10102003, W10102004, W10102005
Description of Model name differentiation	All models are same with electrical parameters and internal circuit structure, but only differ in model name. (this information provided by the applicant)
HVIN Number	W10102000
Serial Number	1309.26081400043
Hardware Version	V04
Software Version	V1.00.048
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A

2.4 Technical Information

Network and Wireless connectivity	Bluetooth (BLE) WIFI 802.11b, 802.11g and 802.11n
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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
Product Type	☒ Mobile ☐ Portable ☐ Fix Location
Antenna System (eg., MIMO, Smart Antenna)	N/A
Categorization as Correlated or Completely Uncorrelated	N/A
Antenna Type	Dipole Antenna
Antenna Gain	1.4 dBi
About the Product	Only the WIFI 802.11b, 802.11g and 802.11n (HT20/40) 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		

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

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	1/6/6.5/13.5 Mbps	1/6/11	3/6/9
Occupied Bandwidth	11b/11g/11n20/11n40	1/6/6.5/13.5 Mbps	1/6/11	3/6/9
Conducted Spurious Emission	11b/11g/11n20/11n40	1/6/6.5/13.5 Mbps	1/6/11	3/6/9
Conducted Emission	11b/11g/11n20/11n40	1/6/6.5/13.5 Mbps	1/6/11	3/6/9
Radiated Spurious Emission	11b/11g/11n20/11n40	1/6/6.5/13.5 Mbps	1/6/11	3/6/9
Band Edge	11b/11g/11n20/11n40	1/6/6.5/13.5 Mbps	1/6/11	3/6/9
Power spectral density (PSD)	11b/11g/11n20/11n40	1/6/6.5/13.5 Mbps	1/6/11	3/6/9

Note: The above EUT information in section 2.5 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 Licence Exempt 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-Gen, 6.8	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	45% to 73%	
Atmospheric Pressure	100 kPa to 102 kPa	
Temperature	NT (Normal Temperature)	+19.8℃ to +27.5℃
Working Voltage of the EUT	NV (Normal Voltage)	3.6 V

4.2 Test Equipment List

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Spectrum Analyzer	KEYSIGHT	N9020A	MY54420186	2026.05.11	2027.05.10
Power meter	R&S	NRP8S	101498	2025.07.07	2026.07.06
Spectrum Analyzer	KEYSIGHT	N9020A	MY56060127	2025.12.25	2026.12.24
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	2026.05.12	2027.05.11
Anechoic Chamber	YIHENG	C8-966	N/A	2024.05.12	2027.05.11
EMI Receiver	Keysight	N9038A	MY55330121	2025.12.26	2026.12.25
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	2025.12.26	2026.12.25
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	V3.0.1.528	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°C
Humidity	4%

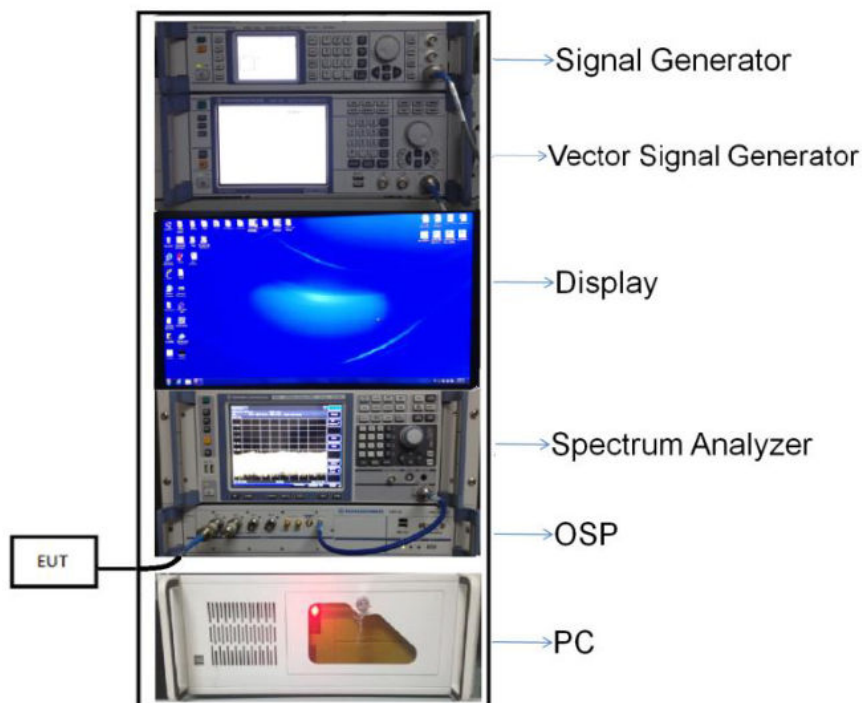
4.5 Description of Test Setup

4.5.1 For Antenna Port Test

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

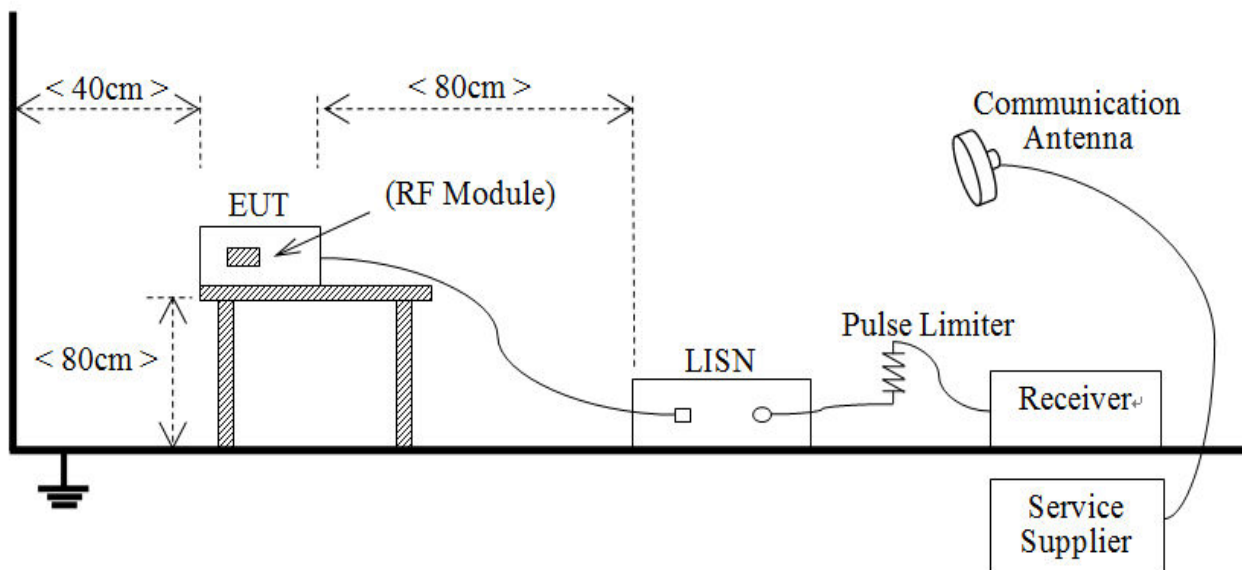
For example: the measurement value is 10 dBm and the cable 0.5dBm used, then the final result of EUT:

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



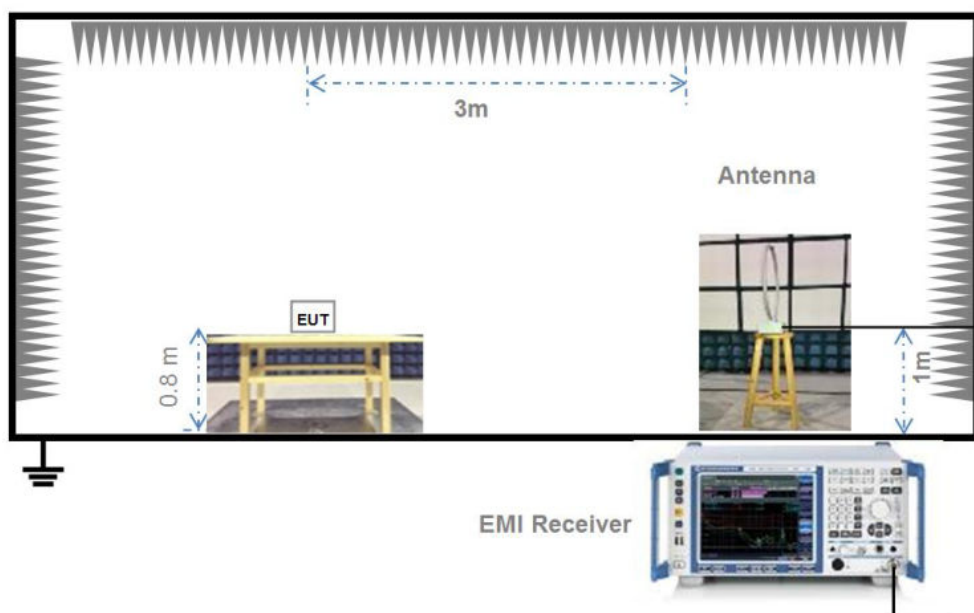
(Diagram 1)

4.5.2 For AC Power Supply Port Test



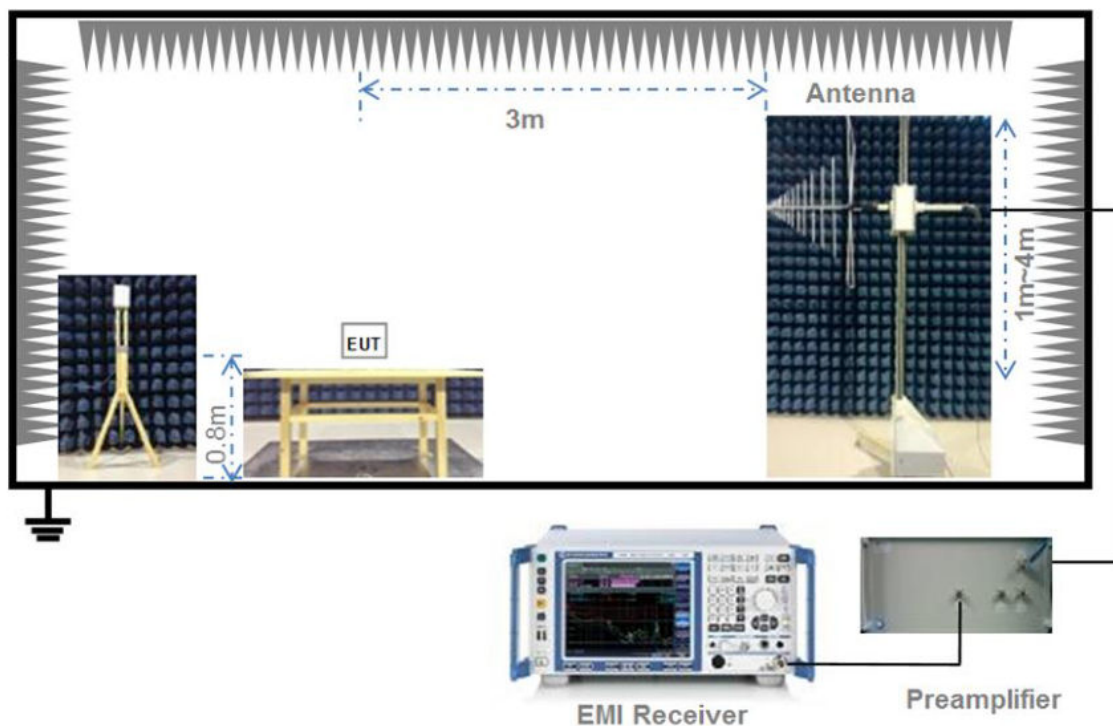
(Diagram 2)

4.5.3 For Radiated Test (Below 30 MHz)



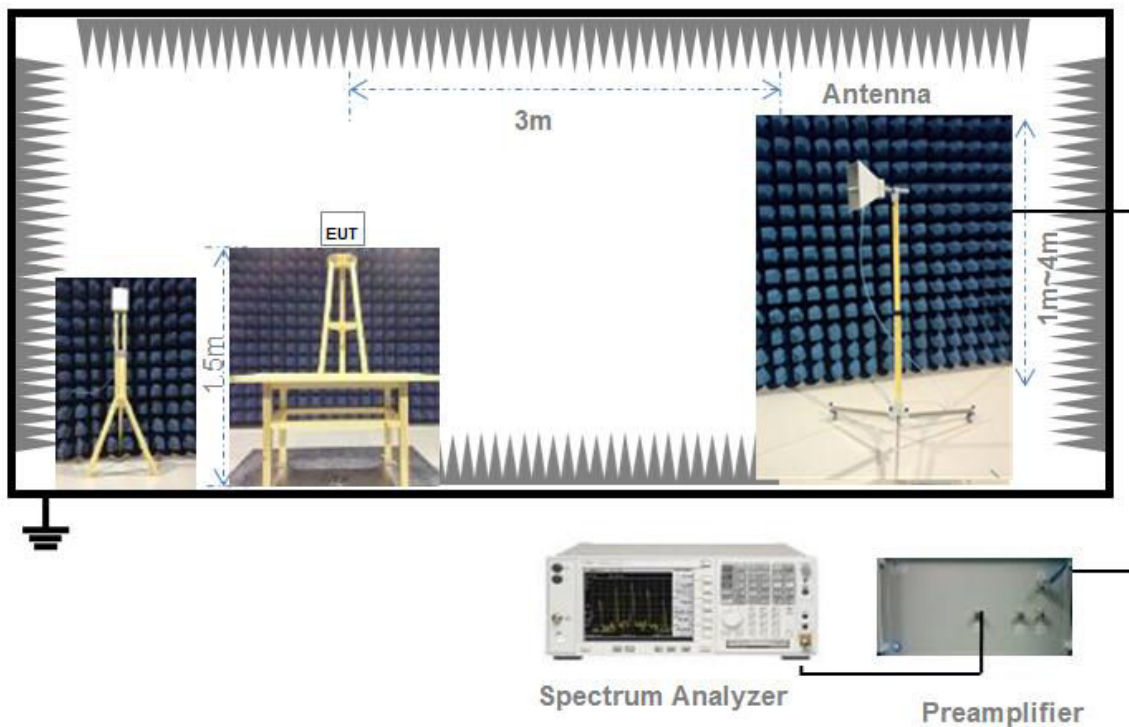
(Diagram 3)

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-Gen, 6.8

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

Option 1:

Use the following spectrum analyzer settings:

Set RBW = shall be in the range of 1% to 5% of the OBW but not less than 100 kHz.

Set the video bandwidth (VBW) ≥ 3 RBW.

Detector = Peak.

Trace mode = max hold.

Sweep = No faster than coupled (auto) time.

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.

Option 2:

The automatic bandwidth measurement capability of an instrument may be employed using the X dB bandwidth mode with X set to 6 dB, if the functionality described in 11.8.1 (i.e., RBW = 100 kHz,

VBW $\geq 3 \times$ RBW, and peak detector with maximum hold) is implemented by the instrumentation function. When using this capability, care shall be taken so that the bandwidth measurement is not influenced by any intermediate power nulls in the fundamental emission that might be ≥ 6 dB.

99% bandwidth:

Use the following spectrum analyzer settings:

Set RBW = shall be in the range of 1% to 5% of the OBW.

Set the video bandwidth (VBW) ≥ 3 RBW.

Set the Span to 1.5 to 5 times of OBW.

Detector = Peak.

Trace mode = max hold.

The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power of the given 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 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 = No faster than coupled auto time.

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 = No faster than coupled auto time.

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.

5.5.4 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 (μV/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 C63.10-2020 + Cor. 1-2023 + C63.10a-2024 + Errata to C63.10a-2024 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 C63.10-2020 + Cor. 1-2023 + C63.10a-2024 + Errata to C63.10a-2024. 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 following procedures may be used to determine the average field strength or power of an unwanted emission that is within 2 MHz of the authorized band-edge. Use the procedure described in 11.12.3.2.2 when using an average detector and the EUT can be configured to transmit continuously (i.e., $D \geq 98\%$). Use the procedure described in 11.12.3.2.3 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 $\pm 2\%$). Use the procedure described in 11.12.3.2.4 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%).

If the EUT can be configured or modified to transmit continuously ($D \geq 98\%$), measured using the following method (with EUT transmitting continuously):

Use the following spectrum analyzer settings:

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

RBW = 100 kHz.

VBW $\geq [3 \times \text{RBW}]$.

Detector = Power averaging (rms), if $[\text{span} / (\# \text{ of points in sweep})] \leq (\text{RBW} / 2)$.

Averaging type = power (i.e., rms):

As an alternative, the detector and averaging type may be set for linear voltage averaging.

Some instruments require linear display mode to use linear voltage averaging. Log or dB averaging shall not be used.

Sweep time = auto.

Perform a trace average of at least 100 traces.

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.

If continuous transmission of the EUT ($D \geq 98\%$) cannot be achieved and the duty cycle is constant (duty cycle variations are less $\pm 2\%$), then the following procedure may be used to measure the average power of unwanted emissions within 2 MHz of the authorized band-edge:

RBW = 100 kHz.

VBW $\geq [3 \times \text{RBW}]$.

Detector = Power averaging (rms), if $[\text{span} / (\# \text{ of points in sweep})] \leq (\text{RBW} / 2)$.

Averaging type = power (i.e., rms):

Detector = Power averaging (rms), if $[\text{span} / (\# \text{ of points in sweep})] \leq (\text{RBW} / 2)$. Satisfying this condition might 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.

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 to use linear voltage averaging. Log or dB averaging shall not be used.

Sweep time = auto.

Perform a trace average of at least 100 traces.

Compute the power by integrating the spectrum over 1 MHz using the instrument's band-power measurement function with band limits set equal to the emission frequency (femission) ± 0.5 MHz. If the spectrum analyzer 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.

A correction factor shall be added to the measurement results prior to comparing with the emission limit to compute the emission level that would have been measured had the test been performed at 100% 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 $[10 \log (1 / D)]$, where D is the duty cycle.

2) If linear voltage averaging mode was used in step f), then the applicable correction factor is $[20 \log (1 / D)]$, where D is the duty cycle.

3) If a specific emission is demonstrated to be continuous ($D \geq 98\%$) rather than turning ON and

OFF with the transmit cycle, then no duty cycle correction is required for that emission.

Reduction of the measured emission amplitude levels to account for operational duty cycle is not permitted. Determining compliance is based on emission levels occurring during transmission—it is not based on an average across ON and OFF times of the transmitter.

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	8.370	8.400	99.64%	0.02
802.11g	1.388	1.403	98.93%	0.05
802.11n-20 MHz	5.076	5.100	99.53%	0.02
802.11n-40 MHz	0.646	0.659	98.03%	0.09

Peak Power Test Data

802.11b Mode:

Channel	Measured Output Peak Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	16.67	46.45	30	1000	Pass
Middle	17.30	53.70			Pass
High	17.53	56.62			Pass

802.11g Mode:

Channel	Measured Output Peak Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	17.39	54.83	30	1000	Pass
Middle	17.95	62.37			Pass
High	18.73	74.64			Pass

802.11n-20 MHz Mode:

Channel	Measured Output Peak Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	16.85	48.42	30	1000	Pass
Middle	17.95	62.37			Pass
High	19.31	85.31			Pass

802.11n-40 MHz Mode:

Channel	Measured Output Peak Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	16.93	49.32	30	1000	Pass
Middle	16.58	45.50			Pass
High	16.40	43.65			Pass

Average Power Test Data

802.11b Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	13.32	21.48	30	1000	Pass
Middle	13.88	24.43			Pass
High	14.10	25.70			Pass

802.11g Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	9.58	9.08	30	1000	Pass
Middle	10.14	10.33			Pass
High	10.79	11.99			Pass

802.11n-20 MHz Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	9.18	8.28	30	1000	Pass
Middle	10.11	10.26			Pass
High	11.30	13.49			Pass

802.11n-40 MHz Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	9.16	8.24	30	1000	Pass
Middle	8.74	7.48			Pass
High	8.55	7.16			Pass

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

802.11b Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
Low	18.07	64.12	36	4	Pass
Middle	18.70	74.13			Pass
High	18.93	78.16			Pass

802.11g Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
Low	18.79	75.68	36	4	Pass
Middle	19.35	86.10			Pass
High	20.13	103.04			Pass

802.11n-20 MHz Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
Low	18.25	66.83	36	4	Pass
Middle	19.35	86.10			Pass
High	20.71	117.76			Pass

802.11n-40 MHz Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
Low	18.33	68.08	36	4	Pass
Middle	17.98	62.81			Pass
High	17.80	60.26			Pass

A.2 Occupied Bandwidth

Test Data

802.11b Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	14.400000	16.597000	≥ 500
Middle	14.400000	16.485000	≥ 500
High	14.400000	16.729000	≥ 500

802.11g Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	16.600000	17.301000	≥ 500
Middle	16.700000	17.495000	≥ 500
High	16.700000	17.416000	≥ 500

802.11n-20MHz Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	17.500000	18.402000	≥ 500
Middle	17.500000	18.403000	≥ 500
High	17.800000	18.329000	≥ 500

802.11n-40MHz Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	35.600000	36.379000	≥ 500
Middle	36.400000	36.469000	≥ 500
High	36.400000	36.516000	≥ 500

Test Plots

6 dB Bandwidth

802.11b LOW CHANNEL



802.11b MIDDLE CHANNEL



802.11b HIGH CHANNEL



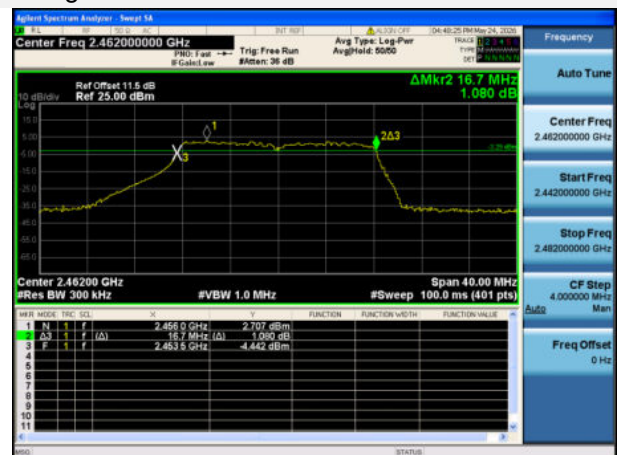
802.11g LOW CHANNEL



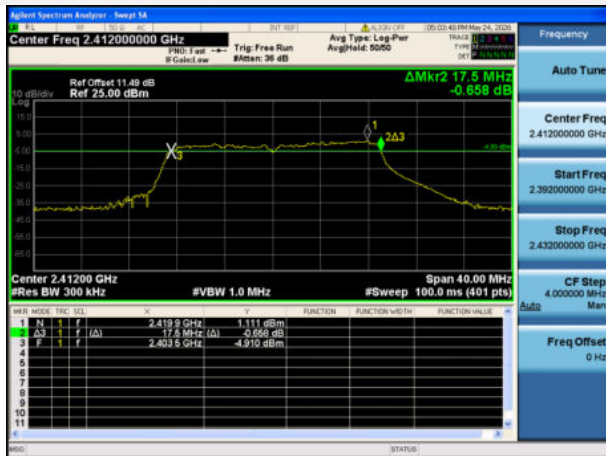
802.11g MIDDLE CHANNEL



802.11g HIGH CHANNEL



802.11n-20 MHz LOW CHANNEL



802.11n-20 MHz MIDDLE CHANNEL



802.11n-20 MHz HIGH CHANNEL



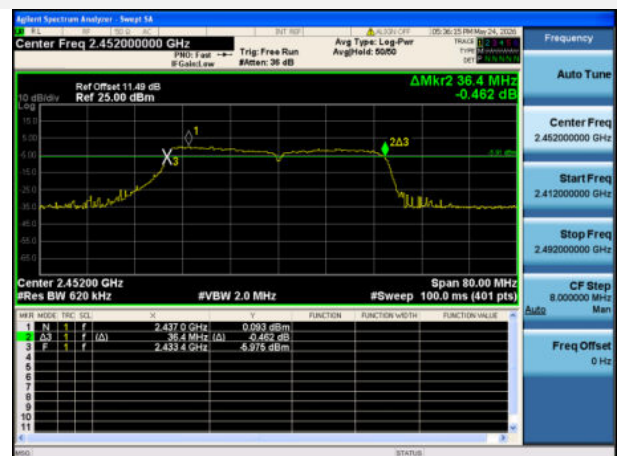
802.11n-40 MHz LOW CHANNEL



802.11n-40 MHz MIDDLE CHANNEL



802.11n-40 MHz HIGH CHANNEL



99% Bandwidth

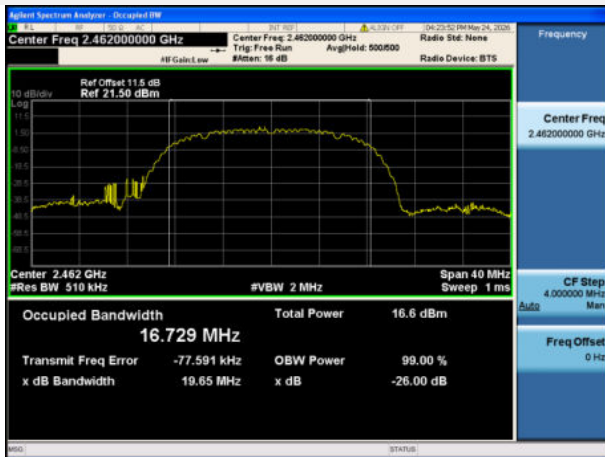
802.11b LOW CHANNEL



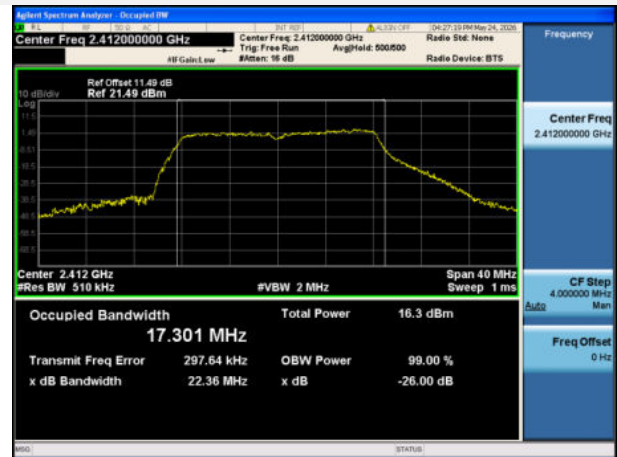
802.11b MIDDLE CHANNEL



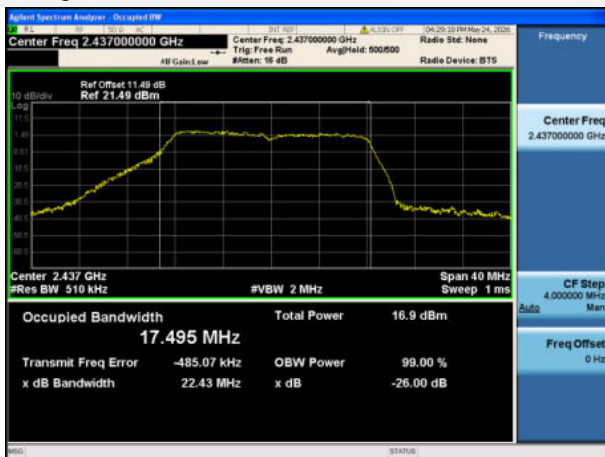
802.11b HIGH CHANNEL



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



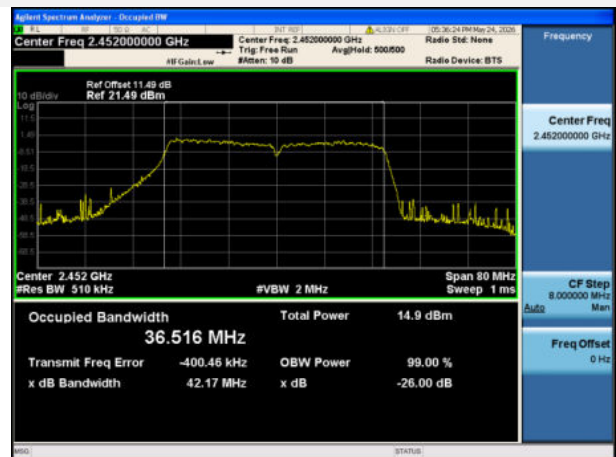
802.11n-40 MHz LOW CHANNEL



802.11n-40 MHz MIDDLE CHANNEL



802.11n-40 MHz HIGH CHANNEL



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	-34.00	2.06	-17.94	Pass
Middle	-34.26	2.59	-17.41	Pass
High	-34.47	2.80	-17.20	Pass

802.11g Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-34.05	-0.28	-20.28	Pass
Middle	-33.47	0.03	-19.97	Pass
High	-33.26	-0.50	-20.50	Pass

802.11n-20MHz Mode:

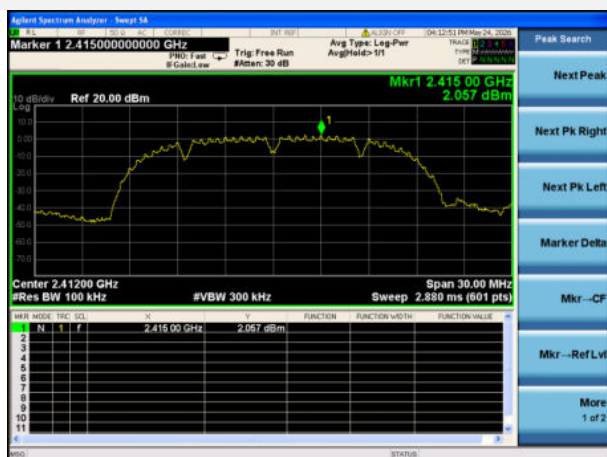
Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-35.24	-2.81	-22.81	Pass
Middle	-34.09	-1.13	-21.13	Pass
High	-35.84	0.37	-19.63	Pass

802.11n-40MHz Mode:

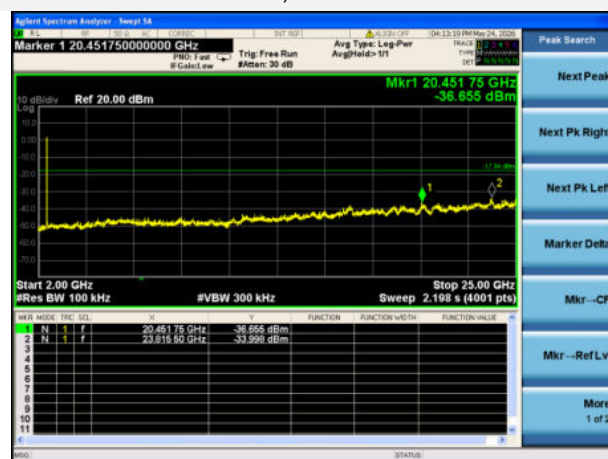
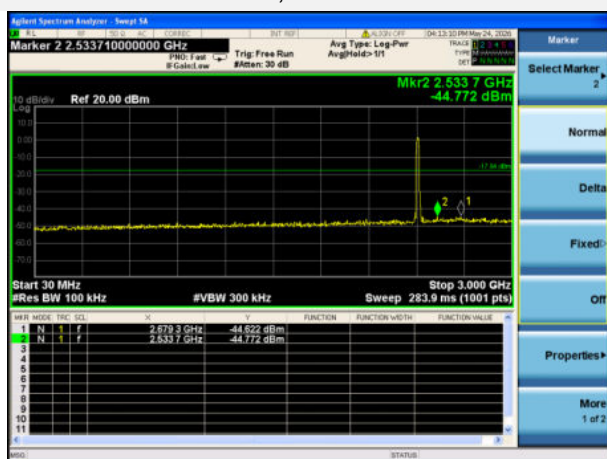
Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-34.18	-3.60	-23.60	Pass
Middle	-33.04	-5.22	-25.22	Pass
High	-33.82	-4.68	-24.68	Pass

Test Plots

802.11b LOW CHANNEL CARRIER LEVEL



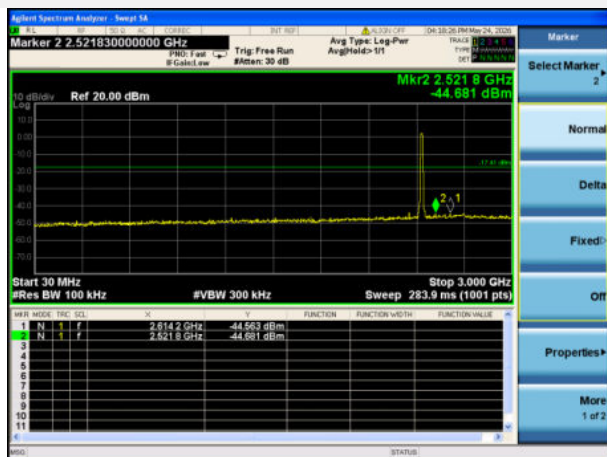
802.11b LOW CHANNEL, SPURIOUS 30 MHz ~ 3 GHz 802.11b LOW CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



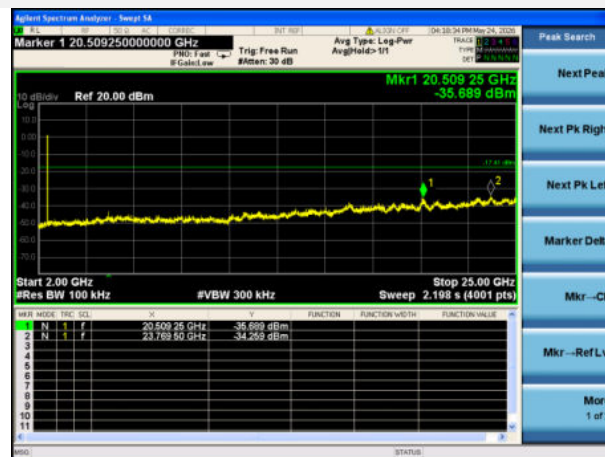
802.11b MIDDLE CHANNEL CARRIER LEVEL



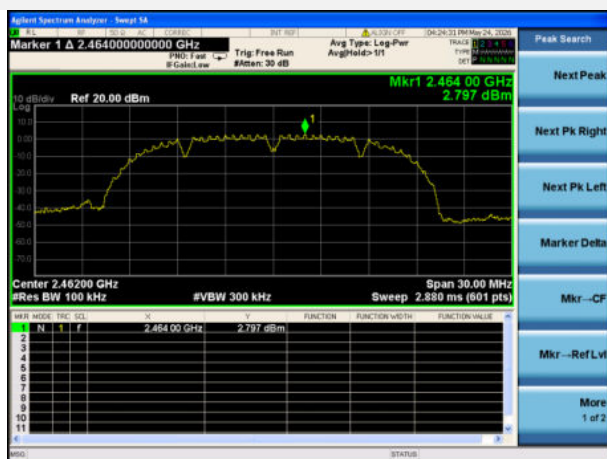
802.11b MIDDLE CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



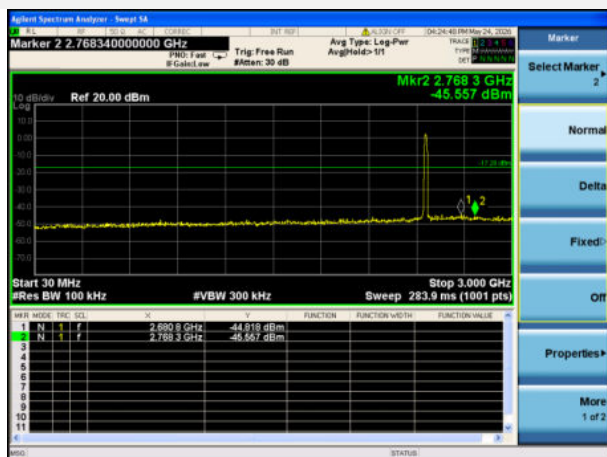
802.11b MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



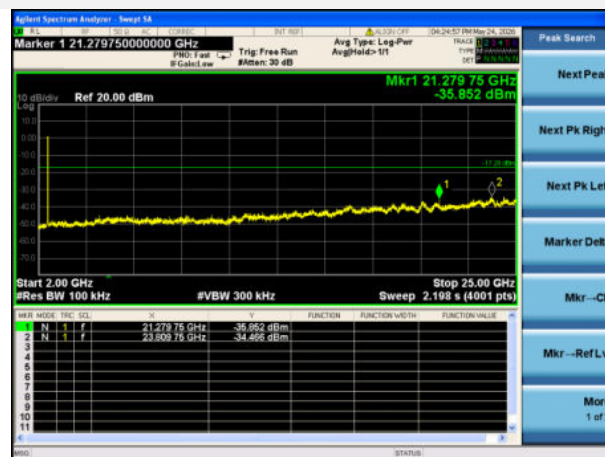
802.11b HIGH CHANNEL CARRIER LEVEL



802.11b HIGH CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



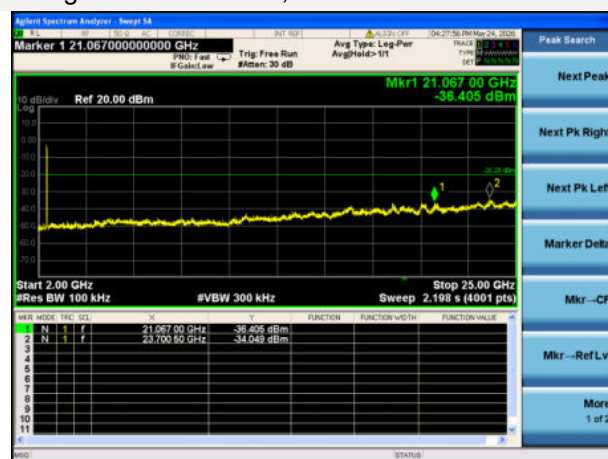
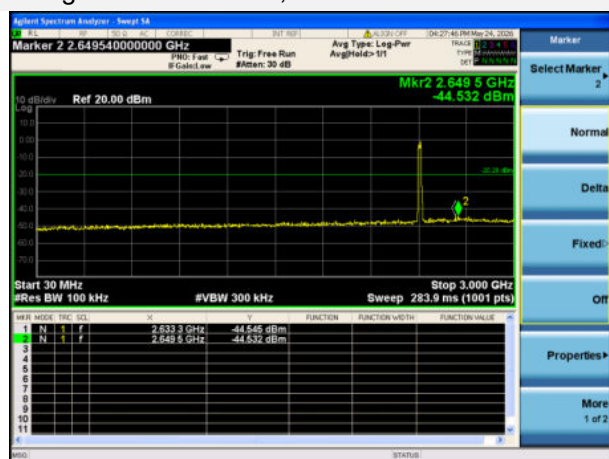
802.11b HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



802.11g LOW CHANNEL CARRIER LEVEL



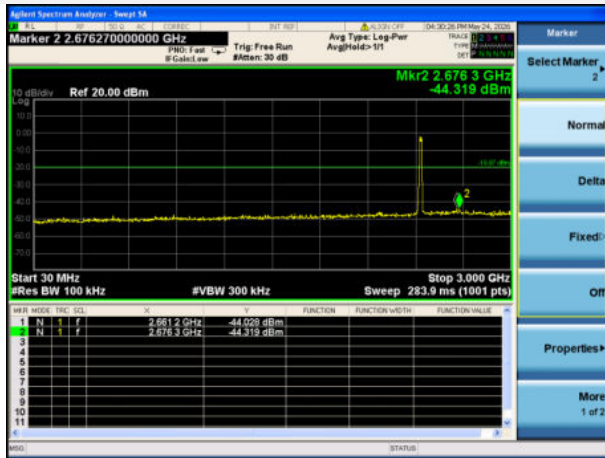
802.11g LOW CHANNEL, SPURIOUS 30 MHz ~ 3 GHz 802.11g LOW CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



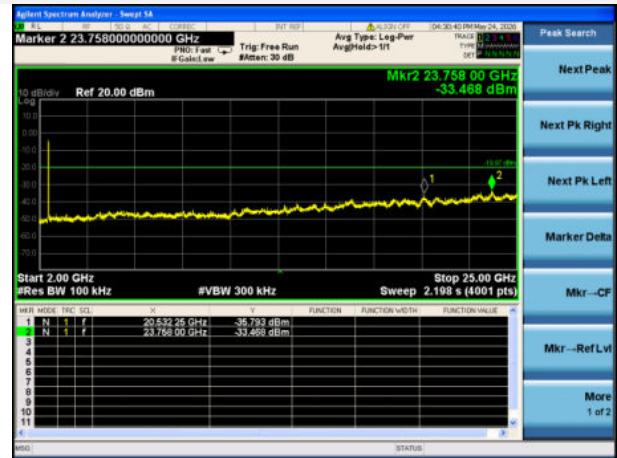
802.11g MIDDLE CHANNEL CARRIER LEVEL



802.11g MIDDLE CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



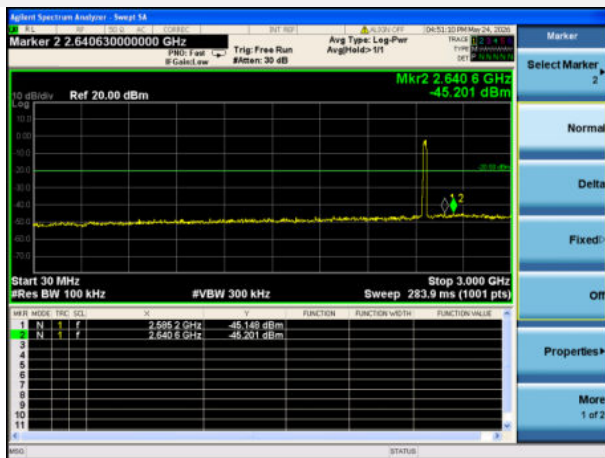
802.11g MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



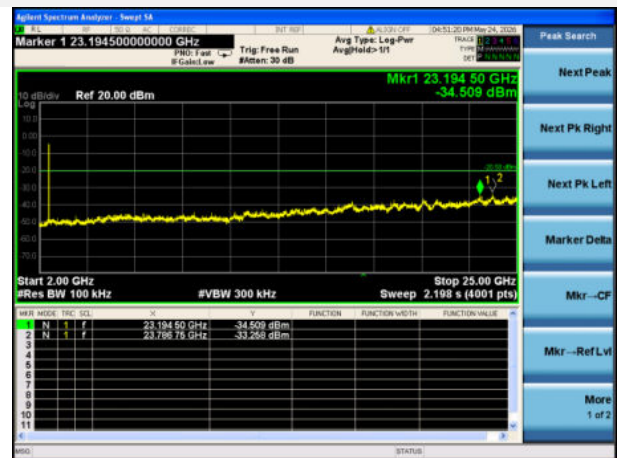
802.11g HIGH CHANNEL CARRIER LEVEL



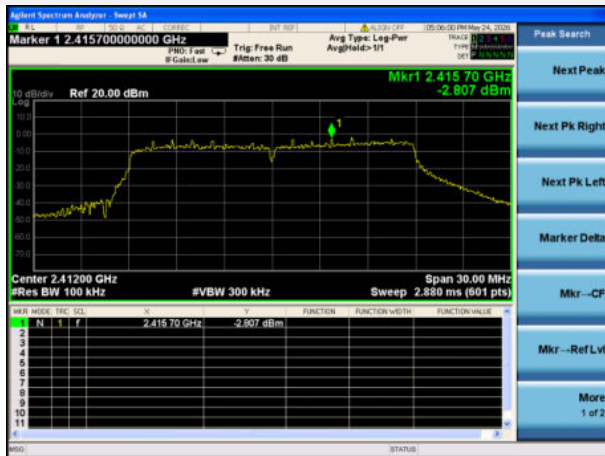
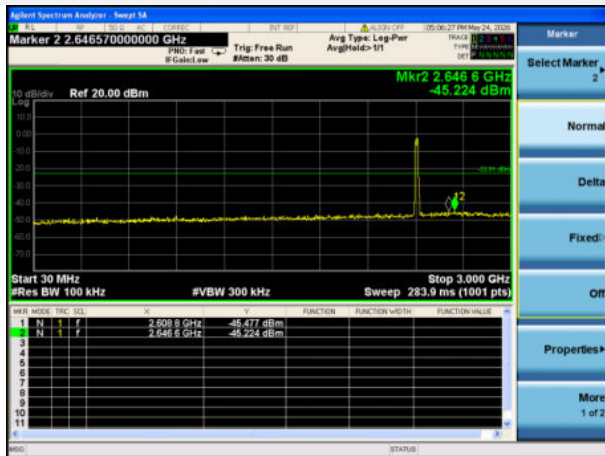
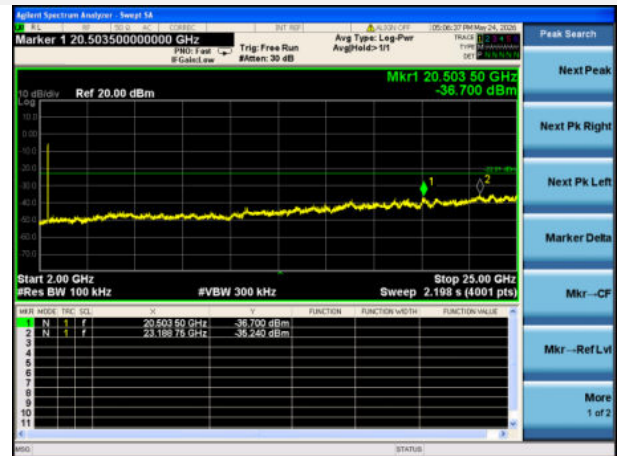
802.11g HIGH CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



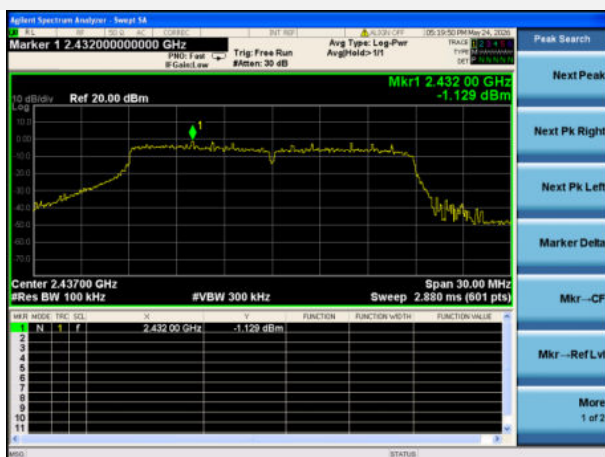
802.11g HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



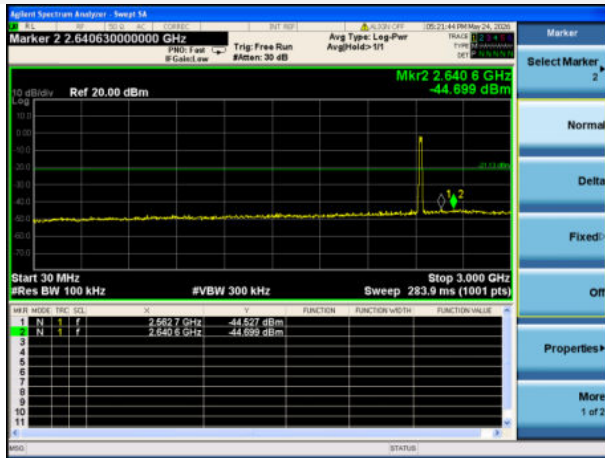
802.11n-20 MHz LOW CHANNEL CARRIER LEVEL

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

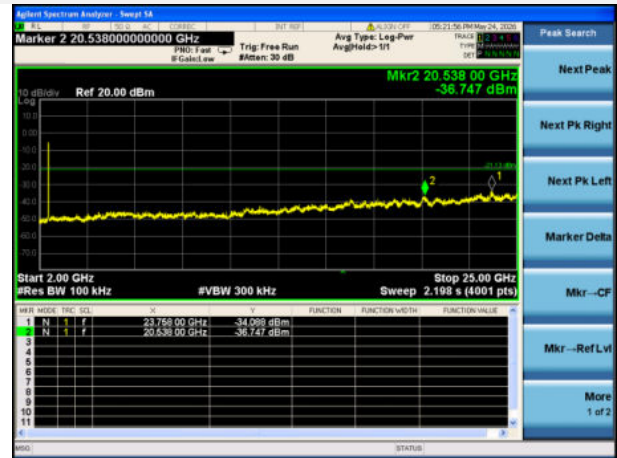
802.11n-20 MHz MIDDLE CHANNEL CARRIER LEVEL



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



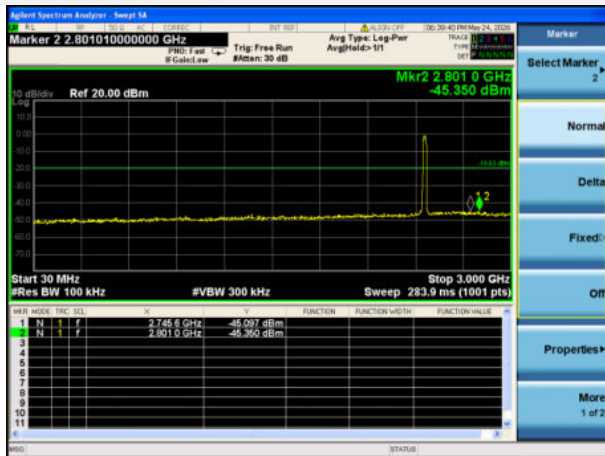
802.11n-20 MHz MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



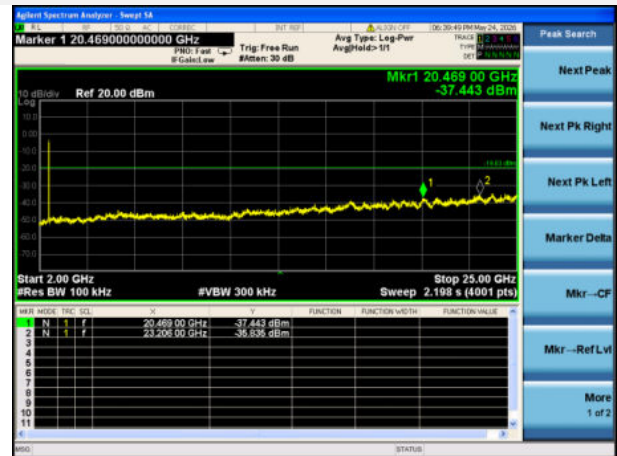
802.11n-20 MHz HIGH CHANNEL CARRIER LEVEL



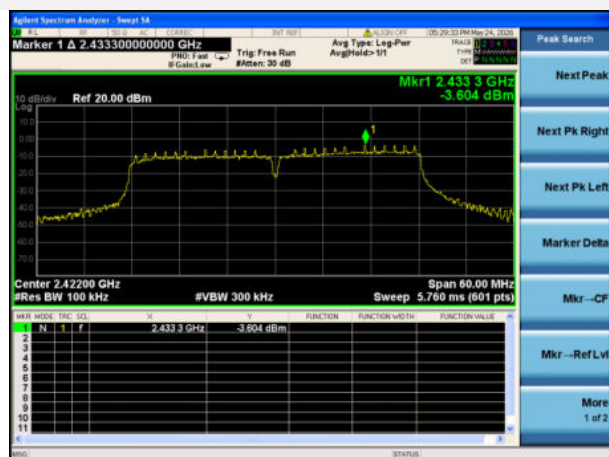
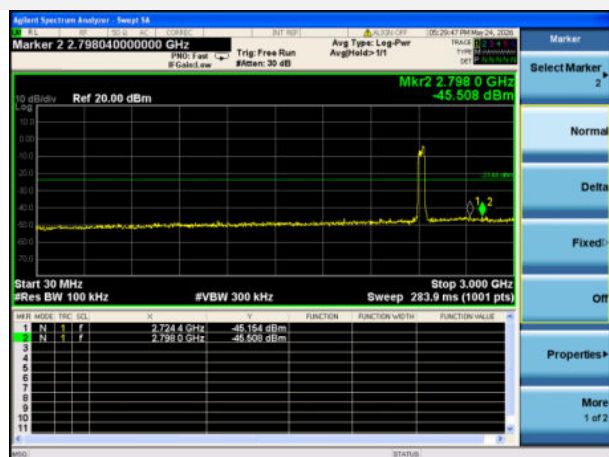
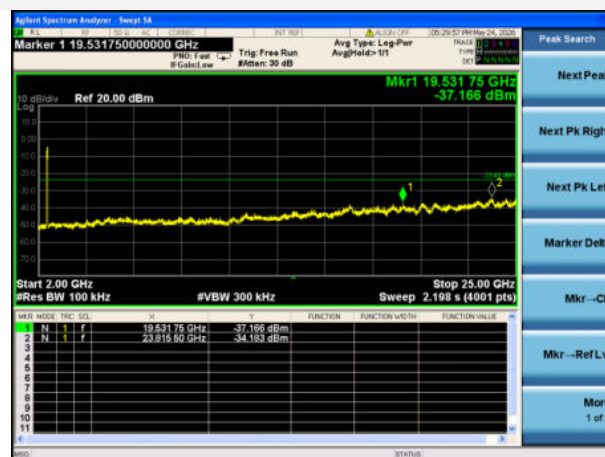
802.11n-20 MHz HIGH CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



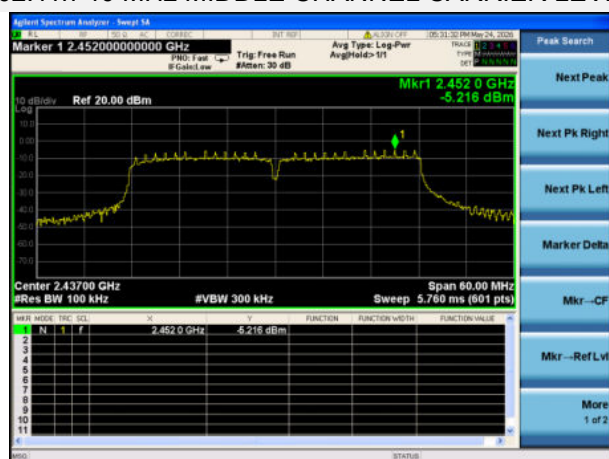
802.11n-20 MHz HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



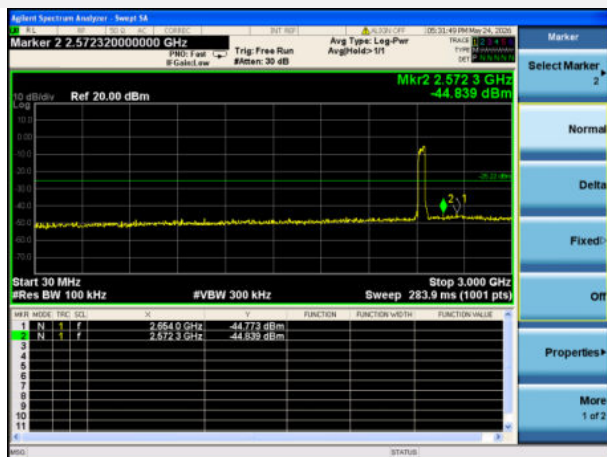
802.11n-40 MHz LOW CHANNEL CARRIER LEVEL

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

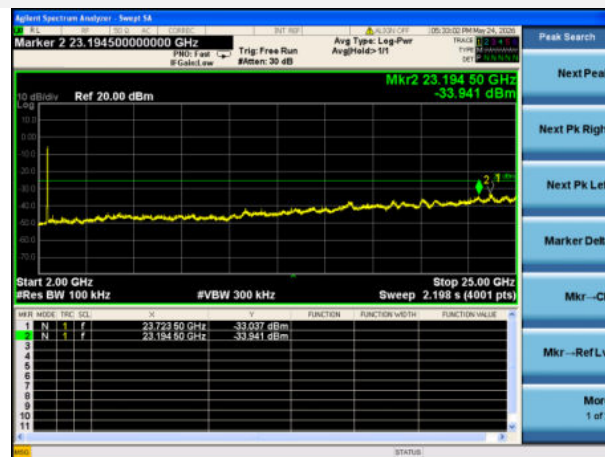
802.11n-40 MHz MIDDLE CHANNEL CARRIER LEVEL



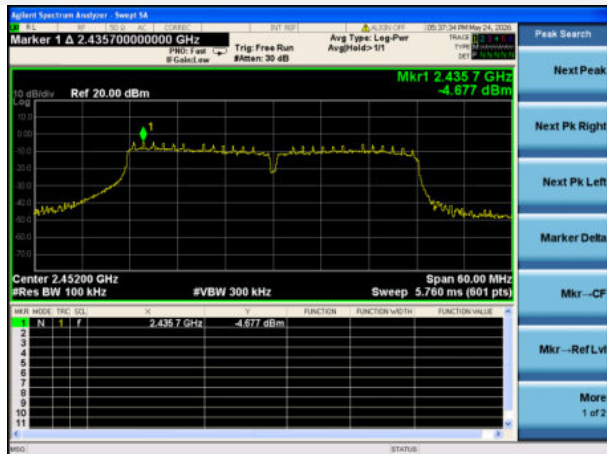
802.11n-40 MHz MIDDLE CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



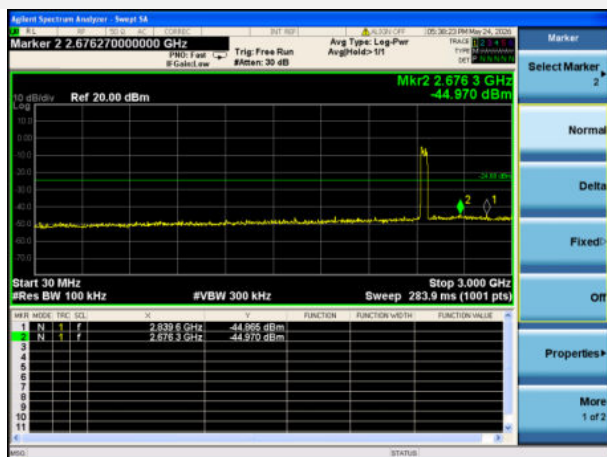
802.11n-40 MHz MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



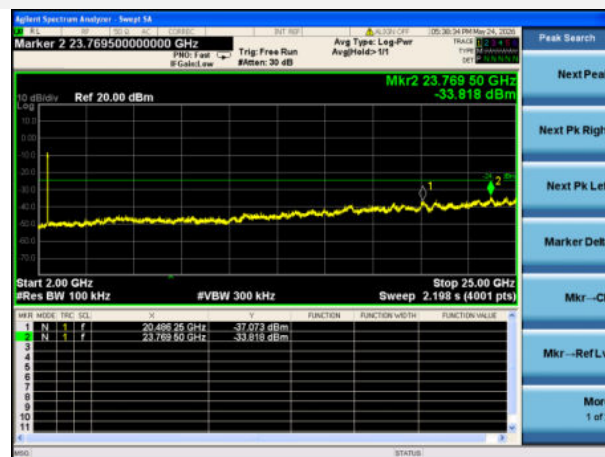
802.11n-40 MHz HIGH CHANNEL CARRIER LEVEL



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



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



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	-41.44	2.06	-17.94	Pass
High Channel	-47.65	2.80	-17.20	Pass

802.11g Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-43.66	-0.28	-20.28	Pass
High Channel	-47.11	-0.50	-20.50	Pass

802.11n-20 MHz Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-41.12	-2.81	-22.81	Pass
High Channel	-47.46	0.37	-19.63	Pass

802.11n-40 MHz Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-40.01	-3.60	-23.60	Pass
High Channel	-47.57	-4.68	-24.68	Pass

Test Plots

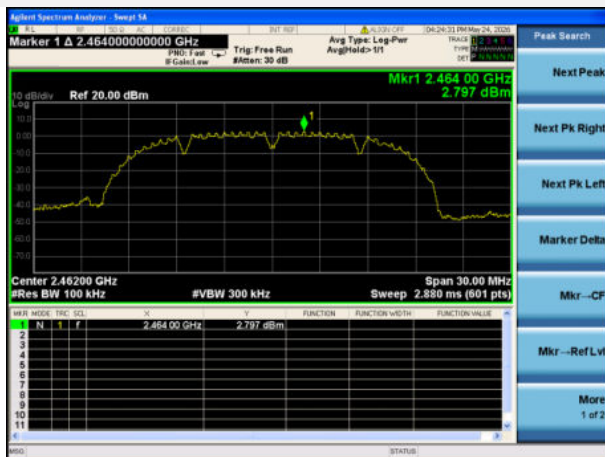
802.11b LOW CHANNEL, CARRIER LEVEL



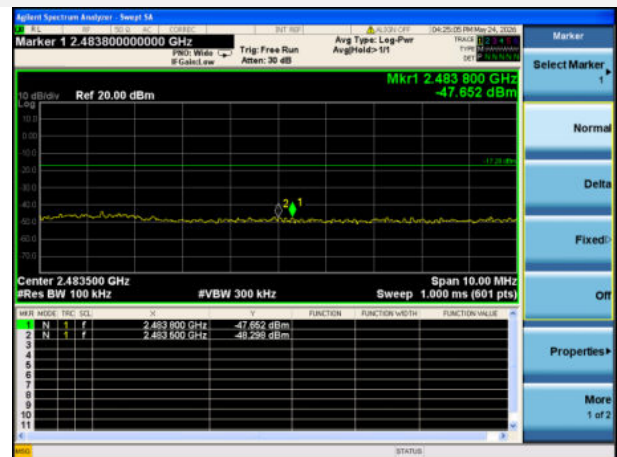
802.11b LOW CHANNEL, BAND EDGE



802.11b HIGH CHANNEL, CARRIER LEVEL



802.11b HIGH CHANNEL, BAND EDGE



802.11g LOW CHANNEL, CARRIER LEVEL



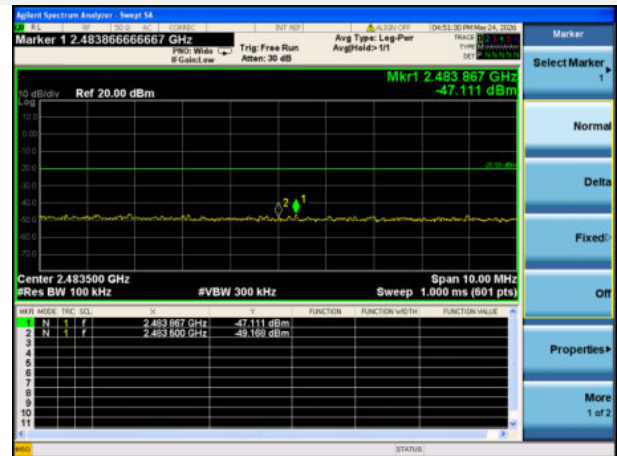
802.11g LOW CHANNEL, BAND EDGE



802.11g HIGH CHANNEL, CARRIER LEVEL



802.11g HIGH CHANNEL, BAND EDGE



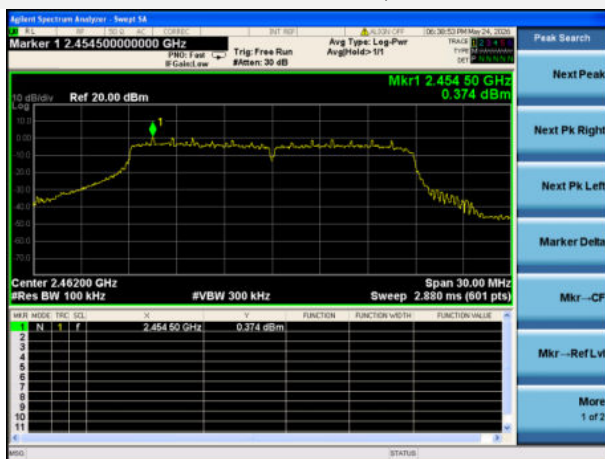
802.11n-20 MHz LOW CHANNEL, CARRIER LEVEL



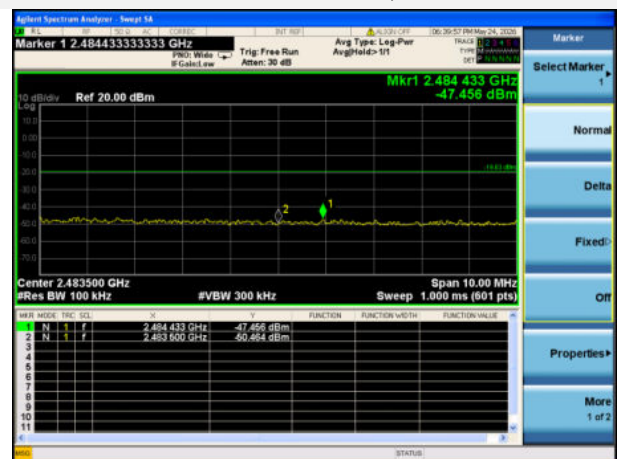
802.11n-20 MHz LOW CHANNEL, BAND EDGE



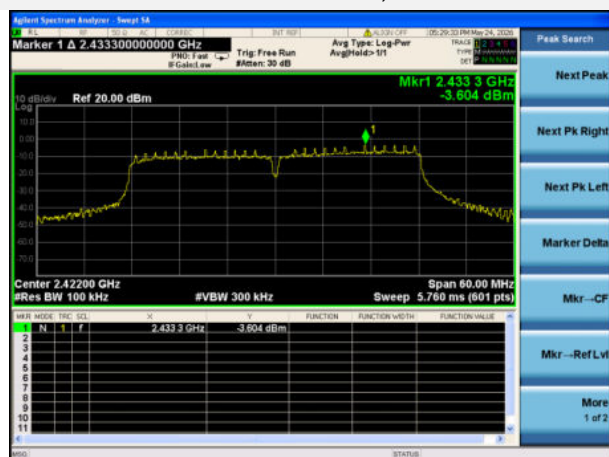
802.11n-20 MHz HIGH CHANNEL, CARRIER LEVEL



802.11n-20 MHz HIGH CHANNEL, BAND EDGE



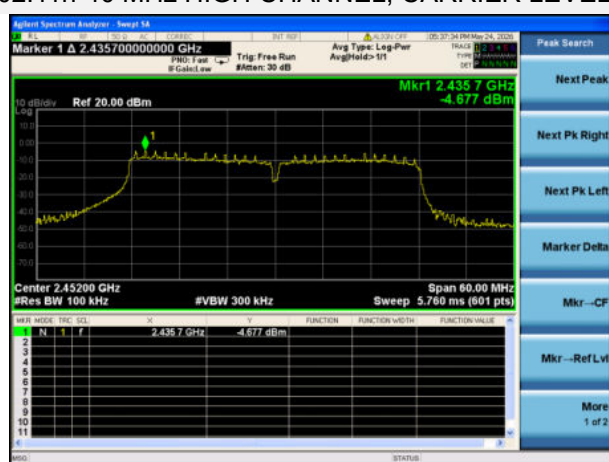
802.11n-40 MHz LOW CHANNEL, CARRIER LEVEL



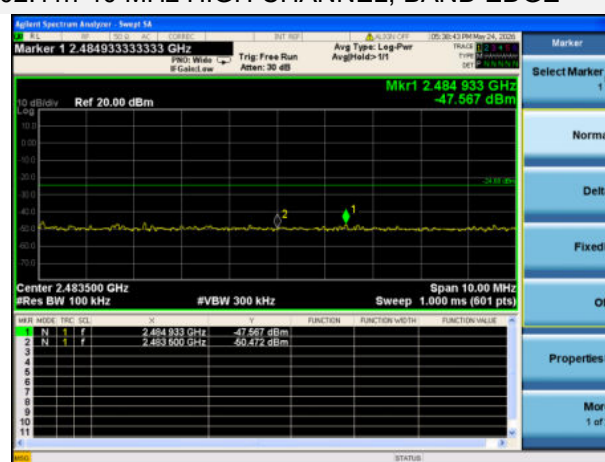
802.11n-40 MHz LOW CHANNEL, BAND EDGE



802.11n-40 MHz HIGH CHANNEL, CARRIER LEVEL



802.11n-40 MHz HIGH CHANNEL, BAND EDGE



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.

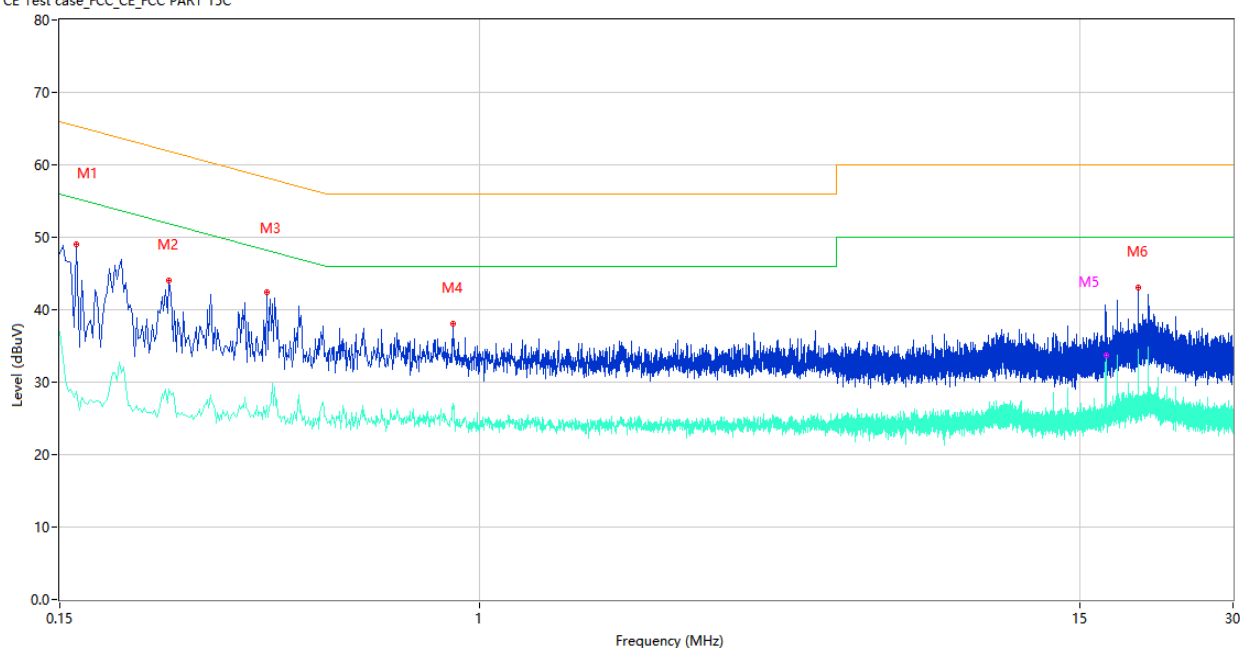
Note²: Devices subject to Part 15 must be tested for all available U.S. voltages and frequencies (such as a nominal 120 VAC, 60 Hz and 240 VAC, 50 Hz) for which the device is capable of operation. So, The configuration 120 VAC, 60 Hz and 240 VAC, 50 Hz were tested respectively, but only the worst configuration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

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

Test Data and Plots

PHASE L

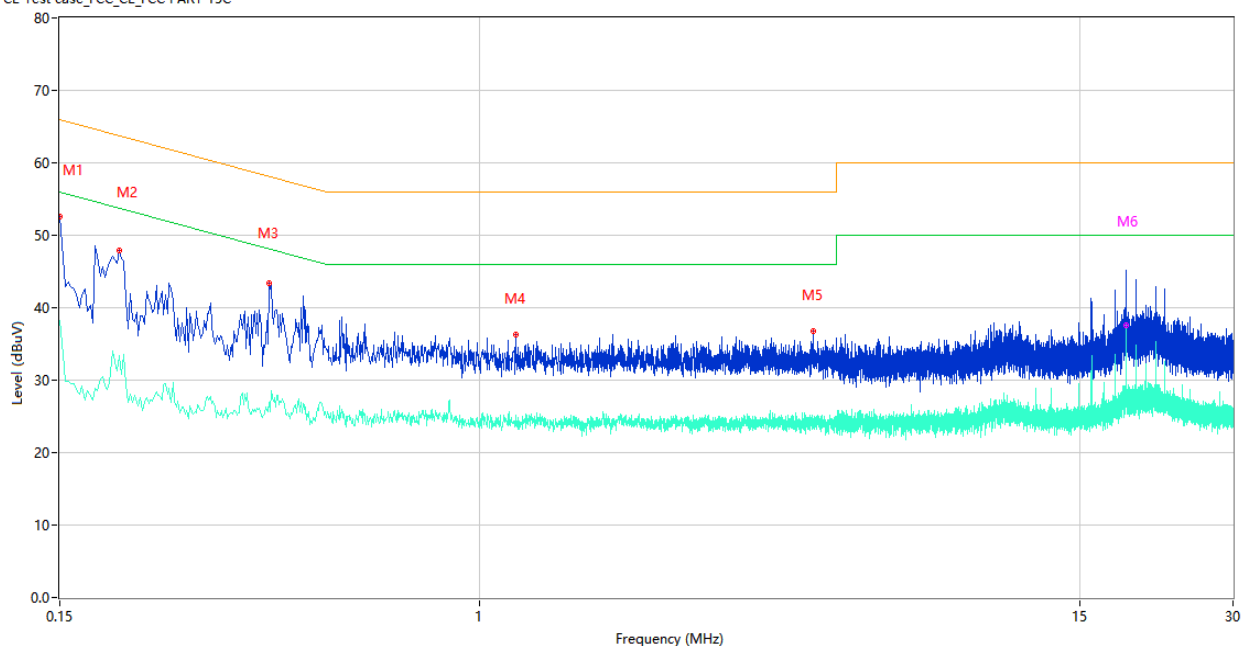
CE Test case_FCC_CE_FCC PART 15C



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.162	49.01	9.85	65.36	16.35	Peak	L	Pass
1**	0.162	28.74	9.85	55.36	26.62	AV	L	Pass
2	0.246	44.03	9.82	61.89	17.86	Peak	L	Pass
2**	0.246	29.03	9.82	51.89	22.86	AV	L	Pass
3	0.382	42.47	10.69	58.24	15.77	Peak	L	Pass
3**	0.382	26.84	10.69	48.24	21.40	AV	L	Pass
4	0.888	38.05	10.34	56.00	17.95	Peak	L	Pass
4**	0.888	27.03	10.34	46.00	18.97	AV	L	Pass
5	16.890	39.73	10.73	60.00	20.27	Peak	L	Pass
5**	16.890	33.73	10.73	50.00	16.27	AV	L	Pass
6	19.564	43.06	10.91	60.00	16.94	Peak	L	Pass
6**	19.564	34.45	10.91	50.00	15.55	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	0.150	52.53	9.86	66.00	13.47	Peak	N	Pass
1**	0.150	38.28	9.86	56.00	17.72	AV	N	Pass
2	0.196	47.90	9.84	63.78	15.88	Peak	N	Pass
2**	0.196	33.34	9.84	53.78	20.44	AV	N	Pass
3	0.386	43.44	10.67	58.15	14.71	Peak	N	Pass
3**	0.386	26.91	10.67	48.15	21.24	AV	N	Pass
4	1.176	36.28	10.19	56.00	19.72	Peak	N	Pass
4**	1.176	25.15	10.19	46.00	20.85	AV	N	Pass
5	4.508	36.80	10.48	56.00	19.20	Peak	N	Pass
5**	4.508	24.66	10.48	46.00	21.34	AV	N	Pass
6	18.494	45.17	10.85	60.00	14.83	Peak	N	Pass
6**	18.494	37.62	10.85	50.00	12.38	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 + Cor. 1-2023 + C63.10a-2024 + Errata to C63.10a-2024, 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.

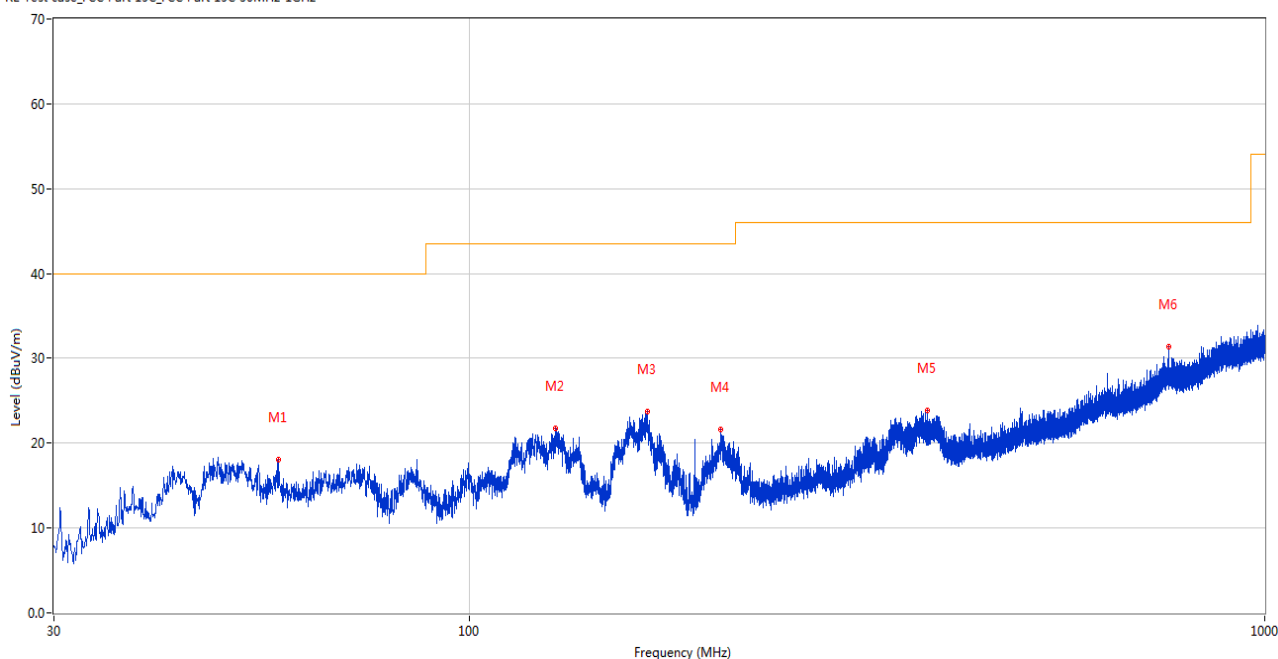
Note³: The low frequency, which started from 9 kHz to 30 MHz, was pre-scanned and the result which was 20 dB lower than the limit line per 15.31(o) was not reported.

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

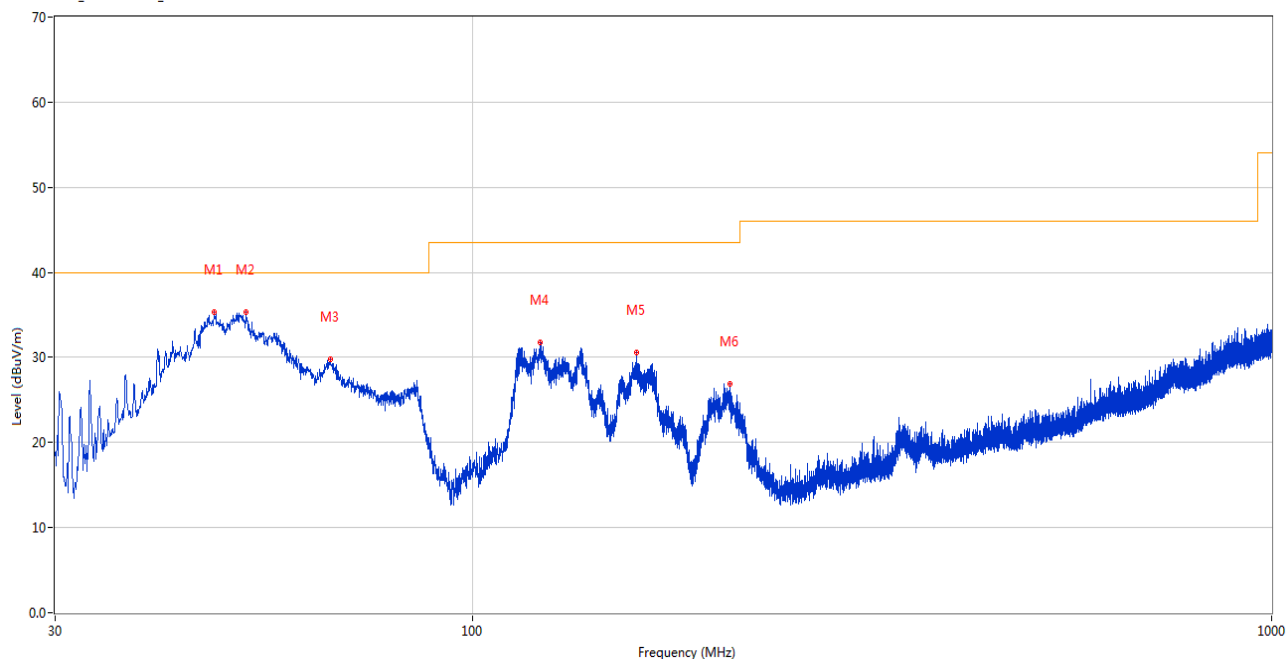
RE Test case_FCC Part 15C_FCC Part 15C 30MHz-1GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	57.403	18.04	-24.80	40.0	21.96	Peak	58.30	100	Horizontal	Pass
2	128.115	21.78	-28.08	43.5	21.72	Peak	113.60	100	Horizontal	Pass
3	167.158	23.77	-27.22	43.5	19.73	Peak	121.30	100	Horizontal	Pass
4	206.928	21.61	-24.78	43.5	21.89	Peak	140.10	100	Horizontal	Pass
5	376.241	23.90	-19.28	46.0	22.10	Peak	103.60	100	Horizontal	Pass
6	756.336	31.34	-8.70	46.0	14.66	Peak	246.20	100	Horizontal	Pass

30 MHz to 1 GHz, ANT V

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



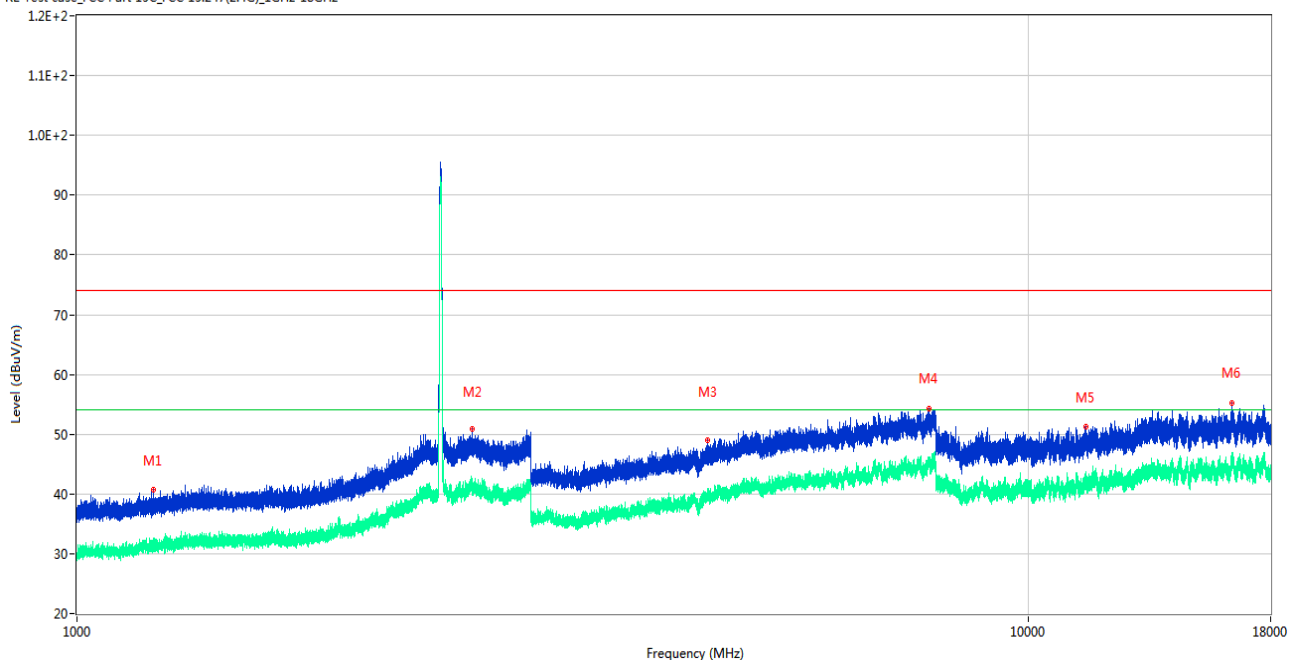
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	47.460	35.30	-24.16	40.0	4.70	Peak	106.60	100	Vertical	Pass
2	52.068	35.32	-24.06	40.0	4.68	Peak	7.10	100	Vertical	Pass
3	66.326	29.84	-26.92	40.0	10.16	Peak	194.40	100	Vertical	Pass
4	121.520	31.76	-27.27	43.5	11.74	Peak	92.20	100	Vertical	Pass
5	160.416	30.57	-27.65	43.5	12.93	Peak	67.30	100	Vertical	Pass
6	209.935	26.87	-24.74	43.5	16.63	Peak	96.10	100	Vertical	Pass

Note¹: The marked spikes near 2400 MHz with circle should be ignored because they are Fundamental signal.

Note²: The spurious above 18G is noise only, do not show on the report.

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

RE Test case_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	1205.233	40.73	74.0	33.27	Peak	76.00	400	Horizontal	Pass
1**	1205.233	30.73	54.0	23.27	AV	76.00	400	Horizontal	Pass
2	2604.580	50.95	74.0	23.05	Peak	105.00	300	Horizontal	Pass
2**	2604.580	41.44	54.0	12.56	AV	105.00	300	Horizontal	Pass
3	4603.644	49.16	74.0	24.84	Peak	243.00	200	Horizontal	Pass
3**	4603.644	39.57	54.0	14.43	AV	243.00	200	Horizontal	Pass
4	7860.083	54.51	74.0	19.49	Peak	229.00	100	Horizontal	Pass
4**	7860.083	45.49	54.0	8.51	AV	229.00	100	Horizontal	Pass
5	11510.856	51.47	74.0	22.53	Peak	302.00	200	Horizontal	Pass
5**	11510.856	41.12	54.0	12.88	AV	302.00	200	Horizontal	Pass
6	16394.183	55.46	74.0	18.54	Peak	308.00	100	Horizontal	Pass
6**	16394.183	45.82	54.0	8.18	AV	308.00	100	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1160.296	49.96	74.0	24.04	Peak	262.00	100	Vertical	Pass
1**	1160.296	36.86	54.0	17.14	AV	262.00	100	Vertical	Pass
2	1328.214	44.87	74.0	29.13	Peak	159.00	300	Vertical	Pass
2**	1328.214	33.44	54.0	20.56	AV	159.00	300	Vertical	Pass
3	4823.491	51.24	74.0	22.76	Peak	331.00	200	Vertical	Pass
3**	4823.491	41.86	54.0	12.14	AV	331.00	200	Vertical	Pass
4	7937.120	54.63	74.0	19.37	Peak	174.00	100	Vertical	Pass
4**	7937.120	45.49	54.0	8.51	AV	174.00	100	Vertical	Pass
5	12977.726	54.00	74.0	20.00	Peak	333.00	400	Vertical	Pass
5**	12977.726	44.82	54.0	9.18	AV	333.00	400	Vertical	Pass
6	17436.869	56.59	74.0	17.41	Peak	24.00	300	Vertical	Pass
6**	17436.869	44.53	54.0	9.47	AV	24.00	300	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1200.149	40.07	74.0	33.93	Peak	208.00	400	Horizontal	Pass
1**	1200.149	30.58	54.0	23.42	AV	208.00	400	Horizontal	Pass
2	2605.707	50.21	74.0	23.79	Peak	336.00	200	Horizontal	Pass
2**	2605.707	40.52	54.0	13.48	AV	336.00	200	Horizontal	Pass
3	4598.970	48.53	74.0	25.47	Peak	349.00	200	Horizontal	Pass
3**	4598.970	39.49	54.0	14.51	AV	349.00	200	Horizontal	Pass
4	7860.710	54.40	74.0	19.60	Peak	330.00	300	Horizontal	Pass
4**	7860.710	45.31	54.0	8.69	AV	330.00	300	Horizontal	Pass
5	11511.259	51.34	74.0	22.66	Peak	222.00	100	Horizontal	Pass
5**	11511.259	40.12	54.0	13.88	AV	222.00	100	Horizontal	Pass
6	16394.951	54.87	74.0	19.13	Peak	203.00	400	Horizontal	Pass
6**	16394.951	45.48	54.0	8.52	AV	203.00	400	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1162.685	49.94	74.0	24.06	Peak	226.00	100	Vertical	Pass
1**	1162.685	36.70	54.0	17.30	AV	226.00	100	Vertical	Pass
2	1327.169	44.25	74.0	29.75	Peak	92.00	300	Vertical	Pass
2**	1327.169	32.57	54.0	21.43	AV	92.00	300	Vertical	Pass
3	4822.236	50.26	74.0	23.74	Peak	112.00	200	Vertical	Pass
3**	4822.236	41.10	54.0	12.90	AV	112.00	200	Vertical	Pass
4	7935.309	53.63	74.0	20.37	Peak	114.00	200	Vertical	Pass
4**	7935.309	45.01	54.0	8.99	AV	114.00	200	Vertical	Pass
5	12976.295	53.21	74.0	20.79	Peak	118.00	100	Vertical	Pass
5**	12976.295	44.71	54.0	9.29	AV	118.00	100	Vertical	Pass
6	17437.234	55.82	74.0	18.18	Peak	273.00	200	Vertical	Pass
6**	17437.234	43.90	54.0	10.10	AV	273.00	200	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1204.162	39.99	74.0	34.01	Peak	92.00	200	Horizontal	Pass
1**	1204.162	30.67	54.0	23.33	AV	92.00	200	Horizontal	Pass
2	2605.694	50.30	74.0	23.70	Peak	132.00	100	Horizontal	Pass
2**	2605.694	41.09	54.0	12.91	AV	132.00	100	Horizontal	Pass
3	4601.353	48.17	74.0	25.83	Peak	146.00	200	Horizontal	Pass
3**	4601.353	39.32	54.0	14.68	AV	146.00	200	Horizontal	Pass
4	7861.369	53.73	74.0	20.27	Peak	243.00	100	Horizontal	Pass
4**	7861.369	44.60	54.0	9.40	AV	243.00	100	Horizontal	Pass
5	11510.882	50.63	74.0	23.37	Peak	138.00	200	Horizontal	Pass
5**	11510.882	40.75	54.0	13.25	AV	138.00	200	Horizontal	Pass
6	16392.356	54.87	74.0	19.13	Peak	106.00	300	Horizontal	Pass
6**	16392.356	45.18	54.0	8.82	AV	106.00	300	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1161.030	49.49	74.0	24.51	Peak	10.00	300	Vertical	Pass
1**	1161.030	36.64	54.0	17.36	AV	10.00	300	Vertical	Pass
2	1330.952	43.94	74.0	30.06	Peak	86.00	400	Vertical	Pass
2**	1330.952	32.70	54.0	21.30	AV	86.00	400	Vertical	Pass
3	4825.145	50.45	74.0	23.55	Peak	336.00	200	Vertical	Pass
3**	4825.145	40.98	54.0	13.02	AV	336.00	200	Vertical	Pass
4	7939.518	54.55	74.0	19.45	Peak	139.00	400	Vertical	Pass
4**	7939.518	44.84	54.0	9.16	AV	139.00	400	Vertical	Pass
5	12974.143	53.19	74.0	20.81	Peak	209.00	100	Vertical	Pass
5**	12974.143	43.91	54.0	10.09	AV	209.00	100	Vertical	Pass
6	17438.471	55.80	74.0	18.20	Peak	218.00	300	Vertical	Pass
6**	17438.471	44.35	54.0	9.65	AV	218.00	300	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1206.089	39.79	74.0	34.21	Peak	353.00	200	Horizontal	Pass
1**	1206.089	30.51	54.0	23.49	AV	353.00	200	Horizontal	Pass
2	2606.317	50.33	74.0	23.67	Peak	126.00	300	Horizontal	Pass
2**	2606.317	41.40	54.0	12.60	AV	126.00	300	Horizontal	Pass
3	4598.616	48.50	74.0	25.50	Peak	128.00	200	Horizontal	Pass
3**	4598.616	39.38	54.0	14.62	AV	128.00	200	Horizontal	Pass
4	7861.604	54.42	74.0	19.58	Peak	328.00	200	Horizontal	Pass
4**	7861.604	45.07	54.0	8.93	AV	328.00	200	Horizontal	Pass
5	11515.940	50.77	74.0	23.23	Peak	228.00	400	Horizontal	Pass
5**	11515.940	40.75	54.0	13.25	AV	228.00	400	Horizontal	Pass
6	16391.673	54.55	74.0	19.45	Peak	167.00	300	Horizontal	Pass
6**	16391.673	44.97	54.0	9.03	AV	167.00	300	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1165.834	49.63	74.0	24.37	Peak	171.00	300	Vertical	Pass
1**	1165.834	35.85	54.0	18.15	AV	171.00	300	Vertical	Pass
2	1326.739	43.53	74.0	30.47	Peak	332.00	300	Vertical	Pass
2**	1326.739	32.22	54.0	21.78	AV	332.00	300	Vertical	Pass
3	4819.607	49.34	74.0	24.66	Peak	174.00	200	Vertical	Pass
3**	4819.607	40.35	54.0	13.65	AV	174.00	200	Vertical	Pass
4	7939.593	52.86	74.0	21.14	Peak	170.00	300	Vertical	Pass
4**	7939.593	44.58	54.0	9.42	AV	170.00	300	Vertical	Pass
5	12981.244	52.96	74.0	21.04	Peak	101.00	100	Vertical	Pass
5**	12981.244	43.80	54.0	10.20	AV	101.00	100	Vertical	Pass
6	17442.346	55.36	74.0	18.64	Peak	207.00	100	Vertical	Pass
6**	17442.346	43.02	54.0	10.98	AV	207.00	100	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1201.330	39.50	74.0	34.50	Peak	296.00	400	Horizontal	Pass
1**	1201.330	29.58	54.0	24.42	AV	296.00	400	Horizontal	Pass
2	2601.875	49.49	74.0	24.51	Peak	18.00	400	Horizontal	Pass
2**	2601.875	40.30	54.0	13.70	AV	18.00	400	Horizontal	Pass
3	4599.853	48.21	74.0	25.79	Peak	67.00	200	Horizontal	Pass
3**	4599.853	38.63	54.0	15.37	AV	67.00	200	Horizontal	Pass
4	7860.255	54.35	74.0	19.65	Peak	333.00	400	Horizontal	Pass
4**	7860.255	44.91	54.0	9.09	AV	333.00	400	Horizontal	Pass
5	11512.356	50.71	74.0	23.29	Peak	76.00	100	Horizontal	Pass
5**	11512.356	39.16	54.0	14.84	AV	76.00	100	Horizontal	Pass
6	16393.209	53.98	74.0	20.02	Peak	353.00	300	Horizontal	Pass
6**	16393.209	44.82	54.0	9.18	AV	353.00	300	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1165.760	48.64	74.0	25.36	Peak	182.00	300	Vertical	Pass
1**	1165.760	36.11	54.0	17.89	AV	182.00	300	Vertical	Pass
2	1324.632	43.50	74.0	30.50	Peak	88.00	200	Vertical	Pass
2**	1324.632	31.94	54.0	22.06	AV	88.00	200	Vertical	Pass
3	4819.263	50.18	74.0	23.82	Peak	75.00	200	Vertical	Pass
3**	4819.263	40.63	54.0	13.37	AV	75.00	200	Vertical	Pass
4	7940.677	54.52	74.0	19.48	Peak	255.00	100	Vertical	Pass
4**	7940.677	44.21	54.0	9.79	AV	255.00	100	Vertical	Pass
5	12974.536	52.75	74.0	21.25	Peak	92.00	400	Vertical	Pass
5**	12974.536	43.81	54.0	10.19	AV	92.00	400	Vertical	Pass
6	17439.199	55.33	74.0	18.67	Peak	250.00	400	Vertical	Pass
6**	17439.199	43.55	54.0	10.45	AV	250.00	400	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1205.293	39.39	74.0	34.61	Peak	289.00	200	Horizontal	Pass
1**	1205.293	29.94	54.0	24.06	AV	289.00	200	Horizontal	Pass
2	2607.965	49.92	74.0	24.08	Peak	348.00	400	Horizontal	Pass
2**	2607.965	40.44	54.0	13.56	AV	348.00	400	Horizontal	Pass
3	4603.614	47.45	74.0	26.55	Peak	355.00	200	Horizontal	Pass
3**	4603.614	38.93	54.0	15.07	AV	355.00	200	Horizontal	Pass
4	7865.074	53.72	74.0	20.28	Peak	344.00	300	Horizontal	Pass
4**	7865.074	43.86	54.0	10.14	AV	344.00	300	Horizontal	Pass
5	11512.620	50.30	74.0	23.70	Peak	183.00	400	Horizontal	Pass
5**	11512.620	40.46	54.0	13.54	AV	183.00	400	Horizontal	Pass
6	16394.235	53.92	74.0	20.08	Peak	320.00	300	Horizontal	Pass
6**	16394.235	44.91	54.0	9.09	AV	320.00	300	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1166.209	49.61	74.0	24.39	Peak	142.00	400	Vertical	Pass
1**	1166.209	35.81	54.0	18.19	AV	142.00	400	Vertical	Pass
2	1331.371	43.46	74.0	30.54	Peak	253.00	400	Vertical	Pass
2**	1331.371	32.19	54.0	21.81	AV	253.00	400	Vertical	Pass
3	4820.890	49.33	74.0	24.67	Peak	161.00	200	Vertical	Pass
3**	4820.890	40.33	54.0	13.67	AV	161.00	200	Vertical	Pass
4	7934.998	52.84	74.0	21.16	Peak	113.00	100	Vertical	Pass
4**	7934.998	44.51	54.0	9.49	AV	113.00	100	Vertical	Pass
5	12975.378	52.87	74.0	21.13	Peak	278.00	300	Vertical	Pass
5**	12975.378	43.79	54.0	10.21	AV	278.00	300	Vertical	Pass
6	17442.335	55.34	74.0	18.66	Peak	8.00	100	Vertical	Pass
6**	17442.335	42.93	54.0	11.07	AV	8.00	100	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1200.332	39.77	74.0	34.23	Peak	7.00	300	Horizontal	Pass
1**	1200.332	30.41	54.0	23.59	AV	7.00	300	Horizontal	Pass
2	2607.772	50.32	74.0	23.68	Peak	120.00	100	Horizontal	Pass
2**	2607.772	41.32	54.0	12.68	AV	120.00	100	Horizontal	Pass
3	4601.255	48.48	74.0	25.52	Peak	297.00	200	Horizontal	Pass
3**	4601.255	39.36	54.0	14.64	AV	297.00	200	Horizontal	Pass
4	7863.914	54.38	74.0	19.62	Peak	197.00	400	Horizontal	Pass
4**	7863.914	45.06	54.0	8.94	AV	197.00	400	Horizontal	Pass
5	11514.295	50.73	74.0	23.27	Peak	32.00	200	Horizontal	Pass
5**	11514.295	40.66	54.0	13.34	AV	32.00	200	Horizontal	Pass
6	16392.560	54.45	74.0	19.55	Peak	89.00	300	Horizontal	Pass
6**	16392.560	44.93	54.0	9.07	AV	89.00	300	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1162.437	48.58	74.0	25.42	Peak	9.00	200	Vertical	Pass
1**	1162.437	36.04	54.0	17.96	AV	9.00	200	Vertical	Pass
2	1330.531	43.43	74.0	30.57	Peak	253.00	300	Vertical	Pass
2**	1330.531	31.91	54.0	22.09	AV	253.00	300	Vertical	Pass
3	4821.104	50.08	74.0	23.92	Peak	141.00	200	Vertical	Pass
3**	4821.104	40.57	54.0	13.43	AV	141.00	200	Vertical	Pass
4	7941.318	54.45	74.0	19.56	Peak	200.00	100	Vertical	Pass
4**	7941.318	44.21	54.0	9.79	AV	200.00	100	Vertical	Pass
5	12976.269	52.70	74.0	21.30	Peak	310.00	400	Vertical	Pass
5**	12976.269	43.80	54.0	10.20	AV	310.00	400	Vertical	Pass
6	17439.395	55.24	74.0	18.77	Peak	191.00	100	Vertical	Pass
6**	17439.395	43.46	54.0	10.54	AV	191.00	100	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1204.419	40.69	74.0	33.31	Peak	151.00	300	Horizontal	Pass
1**	1204.419	30.66	54.0	23.34	AV	151.00	300	Horizontal	Pass
2	2603.018	50.88	74.0	23.12	Peak	111.00	300	Horizontal	Pass
2**	2603.018	41.44	54.0	12.57	AV	111.00	300	Horizontal	Pass
3	4596.909	49.15	74.0	24.85	Peak	229.00	200	Horizontal	Pass
3**	4596.909	39.50	54.0	14.50	AV	229.00	200	Horizontal	Pass
4	7860.867	54.45	74.0	19.56	Peak	295.00	400	Horizontal	Pass
4**	7860.867	45.45	54.0	8.55	AV	295.00	400	Horizontal	Pass
5	11511.945	51.39	74.0	22.62	Peak	160.00	100	Horizontal	Pass
5**	11511.945	41.07	54.0	12.93	AV	160.00	100	Horizontal	Pass
6	16391.625	55.39	74.0	18.61	Peak	340.00	100	Horizontal	Pass
6**	16391.625	45.77	54.0	8.23	AV	340.00	100	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1158.682	48.90	74.0	25.10	Peak	188.00	300	Vertical	Pass
1**	1158.682	34.85	54.0	19.15	AV	188.00	300	Vertical	Pass
2	1326.312	43.09	74.0	30.91	Peak	62.00	300	Vertical	Pass
2**	1326.312	31.88	54.0	22.12	AV	62.00	300	Vertical	Pass
3	4823.643	49.19	74.0	24.81	Peak	76.00	200	Vertical	Pass
3**	4823.643	40.22	54.0	13.78	AV	76.00	200	Vertical	Pass
4	7938.030	52.00	74.0	22.00	Peak	222.00	100	Vertical	Pass
4**	7938.030	43.83	54.0	10.17	AV	222.00	100	Vertical	Pass
5	12977.571	51.90	74.0	22.10	Peak	298.00	200	Vertical	Pass
5**	12977.571	43.47	54.0	10.53	AV	298.00	200	Vertical	Pass
6	17443.081	54.98	74.0	19.02	Peak	334.00	200	Vertical	Pass
6**	17443.081	42.19	54.0	11.81	AV	334.00	200	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1201.018	40.72	74.0	33.28	Peak	199.00	400	Horizontal	Pass
1**	1201.018	30.66	54.0	23.34	AV	199.00	400	Horizontal	Pass
2	2608.544	50.86	74.0	23.15	Peak	331.00	100	Horizontal	Pass
2**	2608.544	41.39	54.0	12.61	AV	331.00	100	Horizontal	Pass
3	4596.890	49.12	74.0	24.88	Peak	207.00	200	Horizontal	Pass
3**	4596.890	39.49	54.0	14.51	AV	207.00	200	Horizontal	Pass
4	7864.783	54.41	74.0	19.59	Peak	165.00	400	Horizontal	Pass
4**	7864.783	45.47	54.0	8.53	AV	165.00	400	Horizontal	Pass
5	11510.778	51.42	74.0	22.58	Peak	36.00	400	Horizontal	Pass
5**	11510.778	41.07	54.0	12.93	AV	36.00	400	Horizontal	Pass
6	16392.075	55.45	74.0	18.55	Peak	52.00	200	Horizontal	Pass
6**	16392.075	45.77	54.0	8.23	AV	52.00	200	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1162.379	48.49	74.0	25.51	Peak	124.00	300	Vertical	Pass
1**	1162.379	35.10	54.0	18.90	AV	124.00	300	Vertical	Pass
2	1326.575	42.88	74.0	31.12	Peak	206.00	200	Vertical	Pass
2**	1326.575	31.60	54.0	22.40	AV	206.00	200	Vertical	Pass
3	4822.937	49.84	74.0	24.16	Peak	340.00	200	Vertical	Pass
3**	4822.937	40.44	54.0	13.56	AV	340.00	200	Vertical	Pass
4	7940.417	53.55	74.0	20.46	Peak	120.00	100	Vertical	Pass
4**	7940.417	43.78	54.0	10.22	AV	120.00	100	Vertical	Pass
5	12975.657	51.79	74.0	22.21	Peak	36.00	400	Vertical	Pass
5**	12975.657	43.42	54.0	10.58	AV	36.00	400	Vertical	Pass
6	17437.982	54.63	74.0	19.38	Peak	214.00	300	Vertical	Pass
6**	17437.982	42.93	54.0	11.07	AV	214.00	300	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1207.862	40.69	74.0	33.31	Peak	221.00	200	Horizontal	Pass
1**	1207.862	30.63	54.0	23.37	AV	221.00	200	Horizontal	Pass
2	2602.363	50.91	74.0	23.09	Peak	42.00	100	Horizontal	Pass
2**	2602.363	41.39	54.0	12.61	AV	42.00	100	Horizontal	Pass
3	4597.127	49.08	74.0	24.92	Peak	358.00	200	Horizontal	Pass
3**	4597.127	39.52	54.0	14.49	AV	358.00	200	Horizontal	Pass
4	7860.147	54.44	74.0	19.56	Peak	233.00	100	Horizontal	Pass
4**	7860.147	45.47	54.0	8.53	AV	233.00	100	Horizontal	Pass
5	11513.252	51.42	74.0	22.58	Peak	150.00	400	Horizontal	Pass
5**	11513.252	41.06	54.0	12.94	AV	150.00	400	Horizontal	Pass
6	16396.026	55.37	74.0	18.63	Peak	265.00	400	Horizontal	Pass
6**	16396.026	45.73	54.0	8.27	AV	265.00	400	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1159.430	49.10	74.0	24.90	Peak	155.00	400	Vertical	Pass
1**	1159.430	36.38	54.0	17.62	AV	155.00	400	Vertical	Pass
2	1325.263	44.19	74.0	29.81	Peak	264.00	200	Vertical	Pass
2**	1325.263	33.32	54.0	20.68	AV	264.00	200	Vertical	Pass
3	4820.157	50.86	74.0	23.14	Peak	309.00	200	Vertical	Pass
3**	4820.157	41.34	54.0	12.66	AV	309.00	200	Vertical	Pass
4	7934.232	54.20	74.0	19.80	Peak	127.00	400	Vertical	Pass
4**	7934.232	45.46	54.0	8.54	AV	127.00	400	Vertical	Pass
5	12981.084	53.12	74.0	20.88	Peak	322.00	200	Vertical	Pass
5**	12981.084	43.95	54.0	10.05	AV	322.00	200	Vertical	Pass
6	17439.606	56.41	74.0	17.59	Peak	55.00	200	Vertical	Pass
6**	17439.606	43.83	54.0	10.17	AV	55.00	200	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1206.325	39.87	74.0	34.13	Peak	358.00	400	Horizontal	Pass
1**	1206.325	29.98	54.0	24.02	AV	358.00	400	Horizontal	Pass
2	2604.896	50.08	74.0	23.92	Peak	283.00	400	Horizontal	Pass
2**	2604.896	40.00	54.0	14.00	AV	283.00	400	Horizontal	Pass
3	4603.637	48.36	74.0	25.64	Peak	292.00	200	Horizontal	Pass
3**	4603.637	38.78	54.0	15.22	AV	292.00	200	Horizontal	Pass
4	7861.909	54.12	74.0	19.88	Peak	216.00	100	Horizontal	Pass
4**	7861.909	45.02	54.0	8.98	AV	216.00	100	Horizontal	Pass
5	11514.273	51.06	74.0	22.94	Peak	145.00	400	Horizontal	Pass
5**	11514.273	40.03	54.0	13.97	AV	145.00	400	Horizontal	Pass
6	16392.169	54.69	74.0	19.31	Peak	242.00	300	Horizontal	Pass
6**	16392.169	44.96	54.0	9.04	AV	242.00	300	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1162.823	49.23	74.0	24.77	Peak	248.00	200	Vertical	Pass
1**	1162.823	36.30	54.0	17.70	AV	248.00	200	Vertical	Pass
2	1327.398	43.29	74.0	30.71	Peak	26.00	300	Vertical	Pass
2**	1327.398	31.58	54.0	22.42	AV	26.00	300	Vertical	Pass
3	4825.794	50.20	74.0	23.80	Peak	164.00	200	Vertical	Pass
3**	4825.794	41.06	54.0	12.94	AV	164.00	200	Vertical	Pass
4	7938.786	52.67	74.0	21.33	Peak	132.00	300	Vertical	Pass
4**	7938.786	44.36	54.0	9.64	AV	132.00	300	Vertical	Pass
5	12979.351	52.49	74.0	21.51	Peak	332.00	100	Vertical	Pass
5**	12979.351	44.36	54.0	9.64	AV	332.00	100	Vertical	Pass
6	17442.396	55.15	74.0	18.85	Peak	85.00	100	Vertical	Pass
6**	17442.396	43.28	54.0	10.72	AV	85.00	100	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1204.279	39.99	74.0	34.01	Peak	133.00	400	Horizontal	Pass
1**	1204.279	29.83	54.0	24.17	AV	133.00	400	Horizontal	Pass
2	2608.515	50.63	74.0	23.37	Peak	87.00	200	Horizontal	Pass
2**	2608.515	41.21	54.0	12.79	AV	87.00	200	Horizontal	Pass
3	4602.492	48.54	74.0	25.46	Peak	140.00	200	Horizontal	Pass
3**	4602.492	39.47	54.0	14.53	AV	140.00	200	Horizontal	Pass
4	7865.368	53.79	74.0	20.21	Peak	160.00	400	Horizontal	Pass
4**	7865.368	45.30	54.0	8.70	AV	160.00	400	Horizontal	Pass
5	11511.324	50.85	74.0	23.15	Peak	57.00	200	Horizontal	Pass
5**	11511.324	40.74	54.0	13.26	AV	57.00	200	Horizontal	Pass
6	16390.484	55.26	74.0	18.74	Peak	243.00	300	Horizontal	Pass
6**	16390.484	45.69	54.0	8.31	AV	243.00	300	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1165.824	49.76	74.0	24.24	Peak	156.00	100	Vertical	Pass
1**	1165.824	36.41	54.0	17.59	AV	156.00	100	Vertical	Pass
2	1327.841	44.23	74.0	29.77	Peak	355.00	300	Vertical	Pass
2**	1327.841	32.79	54.0	21.21	AV	355.00	300	Vertical	Pass
3	4824.525	50.24	74.0	23.76	Peak	117.00	200	Vertical	Pass
3**	4824.525	41.25	54.0	12.75	AV	117.00	200	Vertical	Pass
4	7936.106	53.88	74.0	20.12	Peak	315.00	100	Vertical	Pass
4**	7936.106	44.65	54.0	9.35	AV	315.00	100	Vertical	Pass
5	12974.572	53.93	74.0	20.07	Peak	136.00	400	Vertical	Pass
5**	12974.572	44.17	54.0	9.83	AV	136.00	400	Vertical	Pass
6	17443.620	56.35	74.0	17.65	Peak	243.00	300	Vertical	Pass
6**	17443.620	44.05	54.0	9.95	AV	243.00	300	Vertical	Pass

A.7 Band Edge (Restricted-band band-edge)

Note ¹: The lowest and highest channels are tested to verify the band edge emissions. Please refer to the following the plots for emissions values.

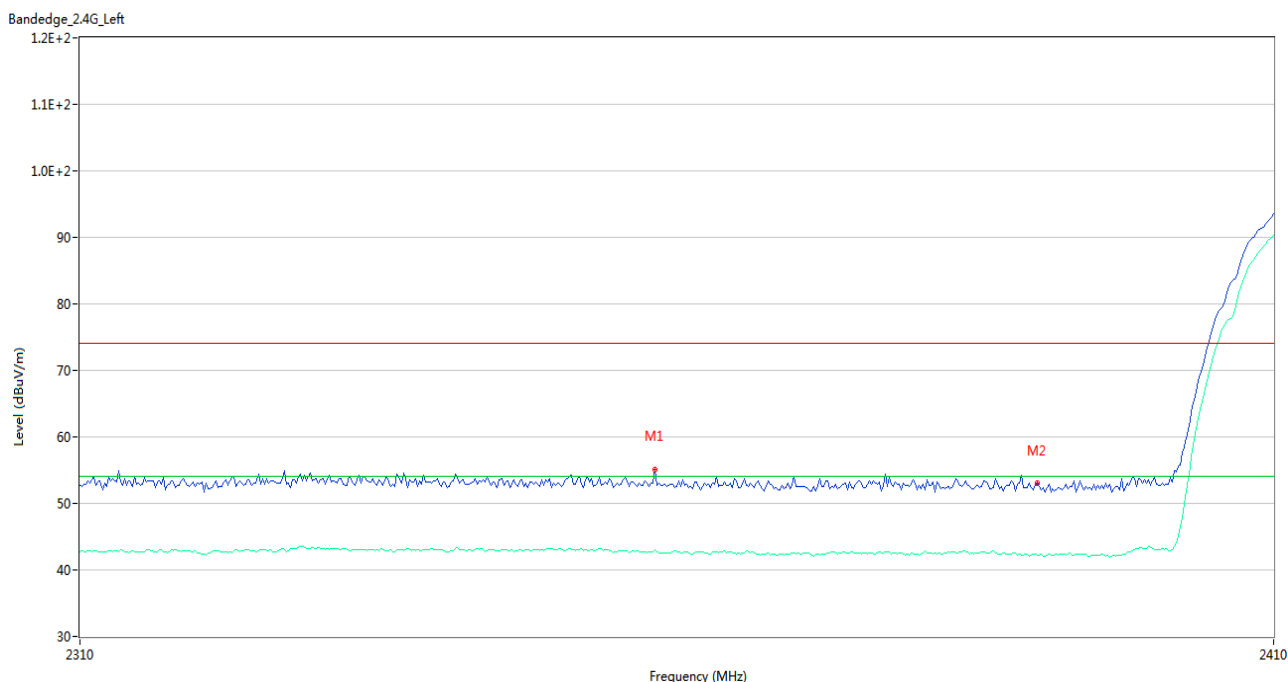
Note ²: The test data all are tested in the vertical and horizontal antenna which the trace is max hold. So these plots have shown the worst case.

Note ³: According the ANSI C63.10-2020 + Cor. 1-2023 + C63.10a-2024 + Errata to C63.10a-2024, 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.

Note ⁴: Both horizontal and vertical directions were pre tested, only the worst configuration has been reported in this report.

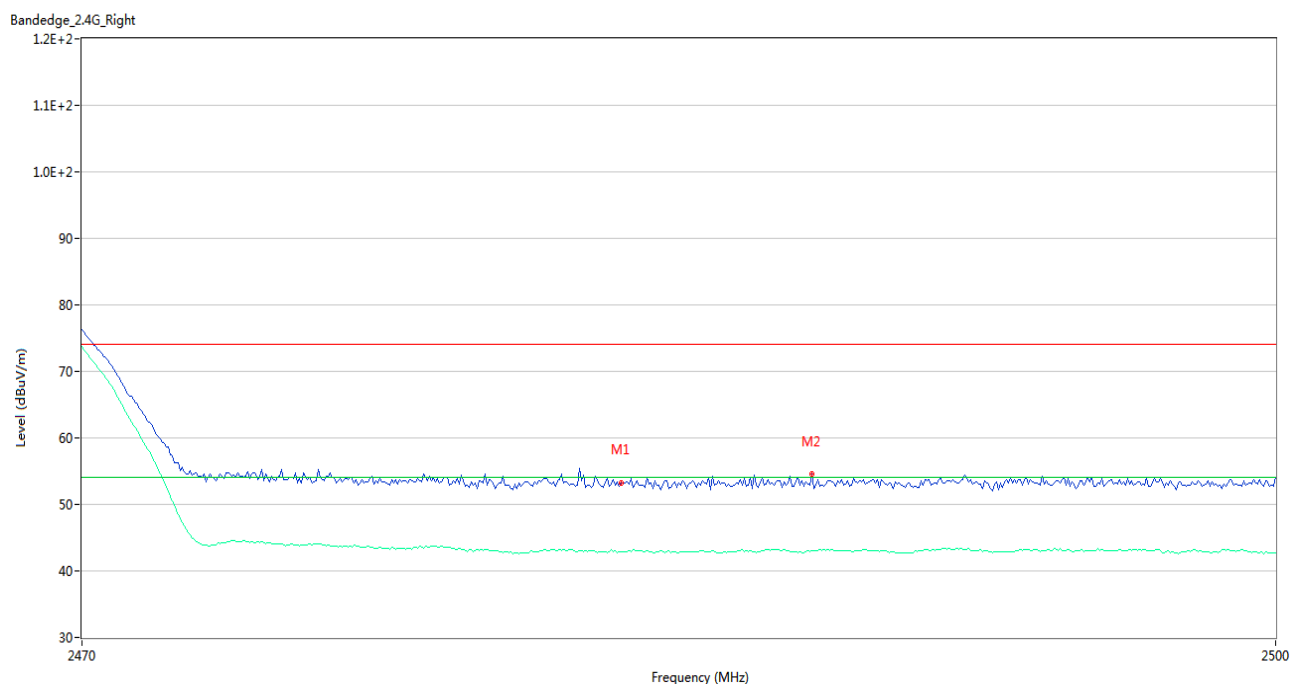
Test Data and Plots

802.11b LOW CHANNEL



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2357.243	54.10	74.0	19.90	Peak	161.00	100	Horizontal	Pass
1**	2357.243	42.69	54.0	11.31	AV	161.00	100	Horizontal	Pass
2	2390.000	52.14	74.0	21.86	Peak	82.00	100	Horizontal	Pass
2**	2390.000	41.24	54.0	12.76	AV	82.00	100	Horizontal	Pass

802.11b HIGH CHANNEL



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2483.500	53.22	74.0	20.78	Peak	250.00	200	Horizontal	Pass
1**	2483.500	41.98	54.0	12.02	AV	250.00	200	Horizontal	Pass
2	2489.673	53.53	74.0	20.47	Peak	244.00	100	Horizontal	Pass
2**	2489.673	42.47	54.0	11.53	AV	244.00	100	Horizontal	Pass

802.11g LOW CHANNEL

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2334.218	54.89	74.0	19.11	Peak	205.00	300	Horizontal	Pass
1**	2334.218	41.34	54.0	12.66	AV	205.00	300	Horizontal	Pass
2	2390.000	56.06	74.0	17.94	Peak	109.00	200	Horizontal	Pass
2**	2390.000	41.16	54.0	12.84	AV	109.00	200	Horizontal	Pass

802.11g HIGH CHANNEL

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2483.500	54.98	74.0	19.02	Peak	302.00	200	Horizontal	Pass
1**	2483.500	41.58	54.0	12.42	AV	302.00	200	Horizontal	Pass
2	2484.275	56.09	74.0	17.91	Peak	8.00	300	Horizontal	Pass
2**	2484.275	41.33	54.0	12.67	AV	8.00	300	Horizontal	Pass

802.11n20 LOW CHANNEL

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2387.523	56.57	74.0	17.43	Peak	102.00	200	Horizontal	Pass
1**	2387.523	41.80	54.0	12.20	AV	102.00	200	Horizontal	Pass
2	2390.000	56.06	74.0	17.94	Peak	161.00	200	Horizontal	Pass
2**	2390.000	41.29	54.0	12.71	AV	161.00	200	Horizontal	Pass

802.11n20 HIGH CHANNEL

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2483.500	53.18	74.0	20.82	Peak	85.00	300	Horizontal	Pass
1**	2483.500	41.94	54.0	12.06	AV	85.00	300	Horizontal	Pass
2	2485.991	54.98	74.0	19.02	Peak	201.00	100	Horizontal	Pass
2**	2485.991	41.05	54.0	12.95	AV	201.00	100	Horizontal	Pass

802.11n40 LOW CHANNEL

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2386.985	54.97	74.0	19.03	Peak	165.00	300	Horizontal	Pass
1**	2386.985	41.21	54.0	12.79	AV	165.00	300	Horizontal	Pass
2	2390.000	55.78	74.0	18.22	Peak	37.00	200	Horizontal	Pass
2**	2390.000	41.22	54.0	12.78	AV	37.00	200	Horizontal	Pass

802.11n40 HIGH CHANNEL

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2483.500	54.89	74.0	19.11	Peak	156.00	200	Horizontal	Pass
1**	2483.500	41.50	54.0	12.50	AV	156.00	200	Horizontal	Pass
2	2485.445	54.43	74.0	19.57	Peak	213.00	200	Horizontal	Pass
2**	2485.445	41.75	54.0	12.25	AV	213.00	200	Horizontal	Pass

A.8 Power Spectral Density (PSD)

Test Data

802.11b Mode:

Channel	Spectral Power Density (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
Low	-15.22	8	Pass
Middle	-13.25	8	Pass
High	-14.52	8	Pass

802.11g Mode:

Channel	Spectral Power Density (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
Low	-17.10	8	Pass
Middle	-15.87	8	Pass
High	-17.40	8	Pass

802.11n-20 MHz Mode:

Channel	Spectral Power Density (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
Low	-16.47	8	Pass
Middle	-17.79	8	Pass
High	-16.94	8	Pass

802.11n-40 MHz Mode:

Channel	Spectral Power Density (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
Low	-19.07	8	Pass
Middle	-20.37	8	Pass
High	-19.69	8	Pass

Test Plots

802.11b LOW CHANNEL



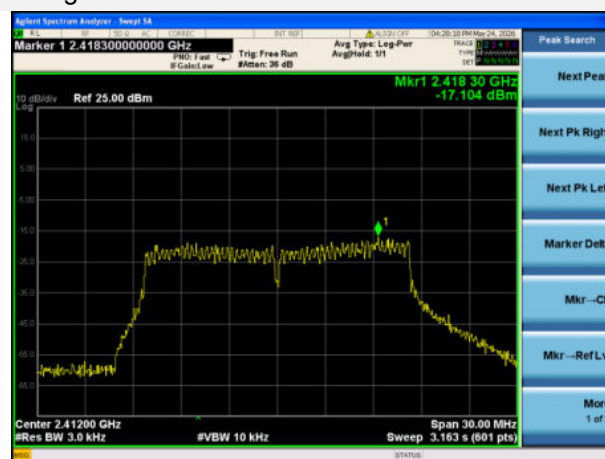
802.11b MIDDLE CHANNEL



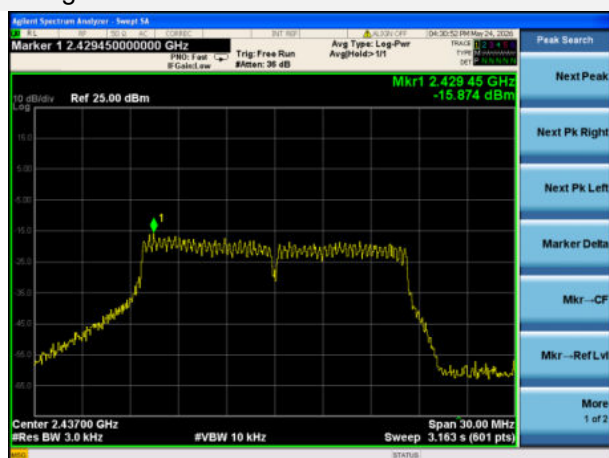
802.11b HIGH CHANNEL



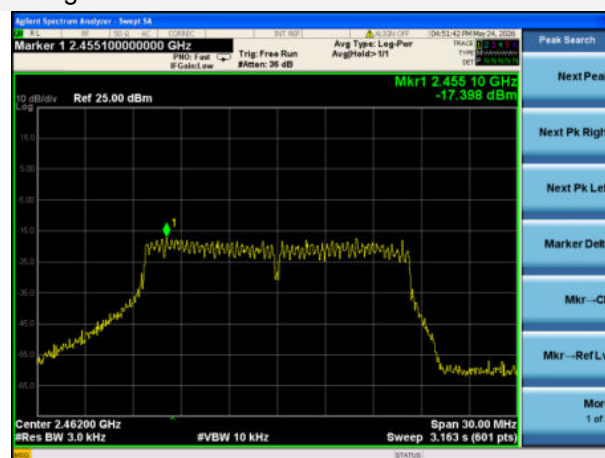
802.11g LOW CHANNEL



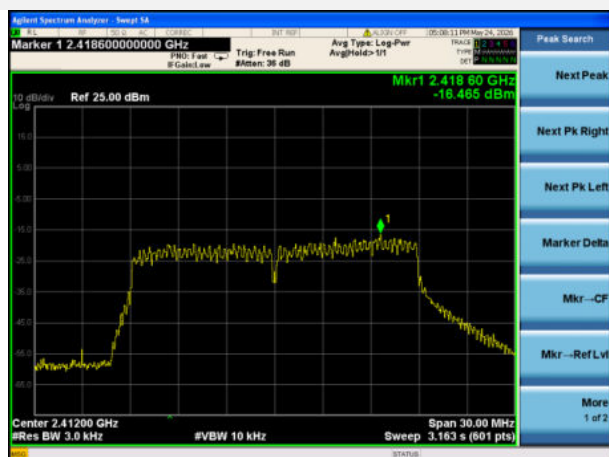
802.11g MIDDLE CHANNEL



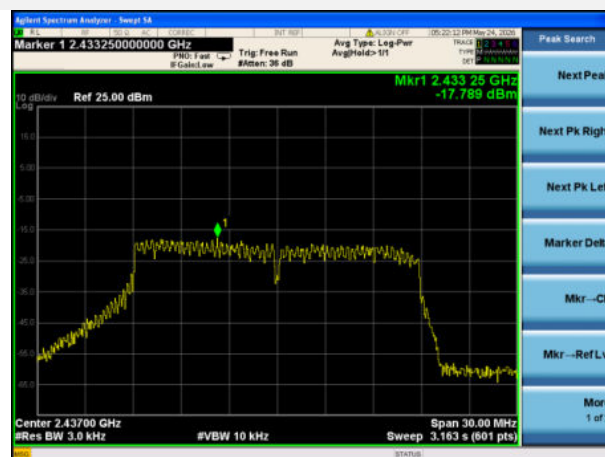
802.11g HIGH CHANNEL



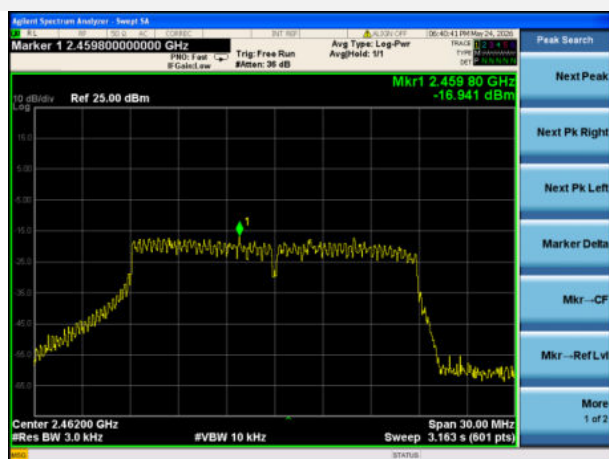
802.11n-20 MHz LOW CHANNEL



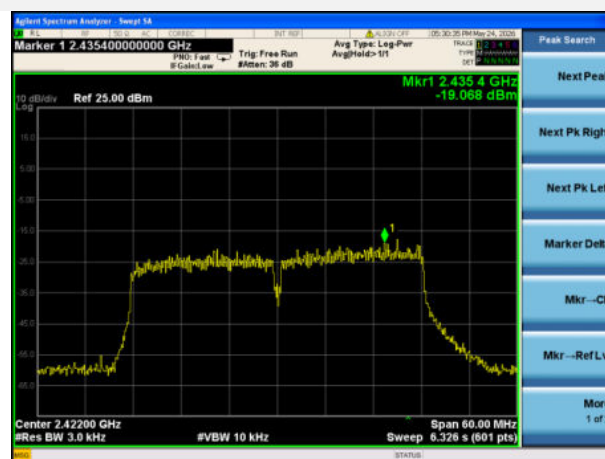
802.11n-20 MHz MIDDLE CHANNEL



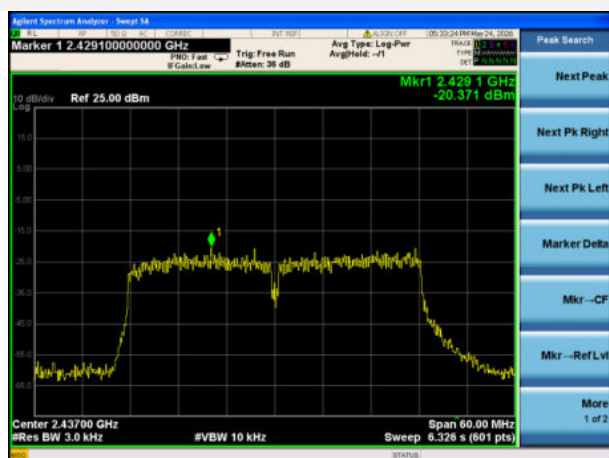
802.11n-20 MHz HIGH CHANNEL



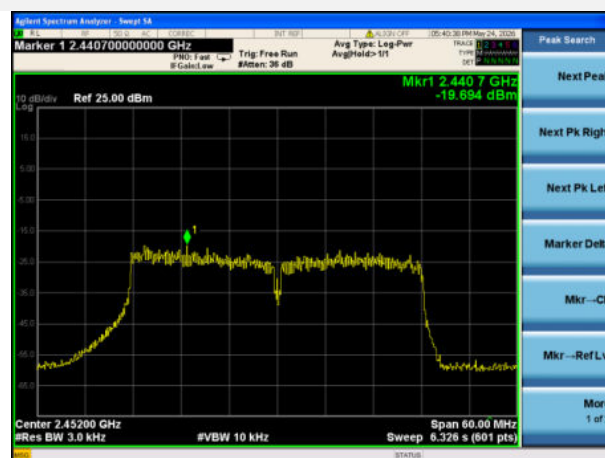
802.11n-40 MHz LOW CHANNEL



802.11n-40 MHz MIDDLE CHANNEL



802.11n-40 MHz HIGH CHANNEL



ANNEX B TEST SETUP PHOTOS

Please refer the document “Ti-EE26050305-AR.PDF”.

ANNEX C EUT EXTERNAL PHOTOS

Please refer the document “Ti-EE26050305-AW.PDF”.

ANNEX D EUT INTERNAL PHOTOS

Please refer the document “Ti-EE26050305-AI.PDF”.

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--END OF REPORT--