

TEST REPORT

Applicant: ShenZhen Foscam Intelligent Technology Co. Ltd.
Address: Room 902, Building 1B, Shenzhen International innovationValley, Xingke 1stStreet, Nanshan District, Shenzhen, Guangdong, China, 518055.
Equipment Type: Wireless IP Camera
Model Name: C8M (refer to section 2.3)
Brand Name: FOSCAM
FCC ID: ZDEC8M
Test Standard: 47 CFR Part 15 Subpart C (refer to section 3.1)
Sample Arrival Date: Mar. 10, 2026
Test Date: Mar. 23, 2026 - Mar. 29, 2026
Date of Issue: Jun. 25, 2026

ISSUED BY:

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(Testing Director)



Revision History

Version	Issue Date	Revisions
<u>Rev. 01</u>	<u>May 28, 2026</u>	<u>Initial Issue</u>
<u>Rev. 02</u>	<u>Jun. 25, 2026</u>	1. <u>Add the data of the C5M model for Chapters A.5 A.6 and A.7.</u>
		2. <u>Updated the Test Equipment List in Section 4.2.</u>
		3. <u>Updated the ANNEX B TEST SETUP PHOTOS.</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.

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	ShenZhen Foscam Intelligent Technology Co. Ltd.
Address	Room 902, Building 1B, Shenzhen International innovationValley, Xingke 1stStreet, Nanshan District, Shenzhen, Guangdong, China, 518055.

2.2 Manufacturer Information

Manufacturer	ShenZhen Foscam Intelligent Technology Co. Ltd.
Address	Room 902, Building 1B, Shenzhen International innovationValley, Xingke 1stStreet, Nanshan District, Shenzhen, Guangdong, China, 518055.

2.3 General Description for Equipment under Test (EUT)

EUT Name	Wireless IP Camera
Model Name Under Test	C8M
Series Model Name	C8B, C8D, C8P, C5M, C5B, C5D, C5P
Description of Model name differentiation	1. Different model designations are adopted for different customers. 2. For C5M and C8M models, the specifications of the SoC, sensor, camera lens and power supply are different; all other configurations are identical. (this information provided by the applicant)
Hardware Version	C8M: V1.0 C5M: V3.0
Software Version	N/A
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A

2.4 Technical Information

Network and Wireless connectivity	WIFI 802.11a, 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	FPC Antenna
Antenna Gain	2.93 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	ANSI C63.10-2020	American National Standard for Procedures for Compliance Testing of Unlicensed Wireless Devices
3	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.	Test Result	Verdict
1	Antenna Requirement	15.203	N/A	Pass ^{Note 1}
2	Output Power	15.247 (b)	ANNEX A.1	Pass
3	Occupied Bandwidth	15.247 (a)	ANNEX A.2	Pass
4	Conducted Spurious Emission	15.247 (d)	ANNEX A.3	Pass
5	Band Edge(Authorized-band band-edge)	15.247 (d)	ANNEX A.4	Pass
6	Conducted Emission	15.207	ANNEX A.5	Pass
7	Radiated Spurious Emission	15.209; 15.247 (d)	ANNEX A.6	Pass
8	Band Edge(Restricted-band band-edge)	15.209; 15.247 (d)	ANNEX A.7	Pass
9	Power spectral density (PSD)	15.247 (e)	ANNEX A.8	Pass

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

4 GENERAL TEST CONFIGURATIONS

4.1 Test Environments

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

Relative Humidity	41% to 65%	
Atmospheric Pressure	100 kPa to 102 kPa	
Temperature	NT (Normal Temperature)	+18.7℃ to +26.5℃
Working Voltage of the EUT	NV (Normal Voltage)	5 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
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	3117	00108482	2025.10.19	2028.10.18
Test Antenna-Loop	Schwarzbeck	FMZB 1513-60	00015	2024.05.07	2026.05.06
Anechoic Chamber	YIHENG	C8-966	N/A	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
Spectrum Analyzer	KEYSIGHT	N9020A	MY56060127	2025.12.25	2026.12.24
Test Antenna-Horn	Schwarzbeck	BBHA 9120D	02459	2023.10.26	2026.10.25
Anechoic Chamber	EMC Electronic Co, Ltd	9m*6m*6m	/	2024.11.25	2027.08.25

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°C
Humidity	4%

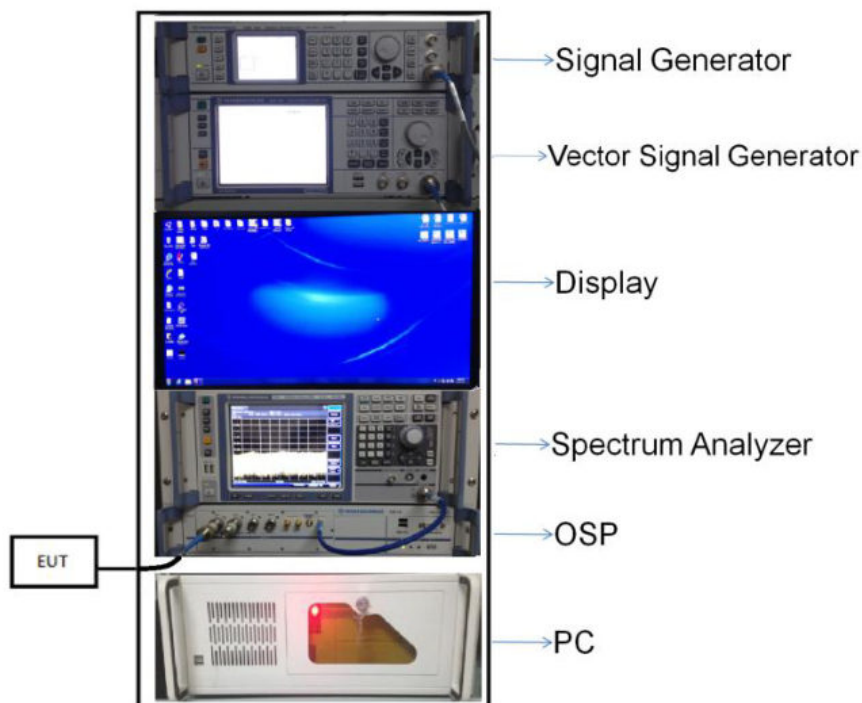
4.5 Description of Test Setup

4.5.1 For Antenna Port Test

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

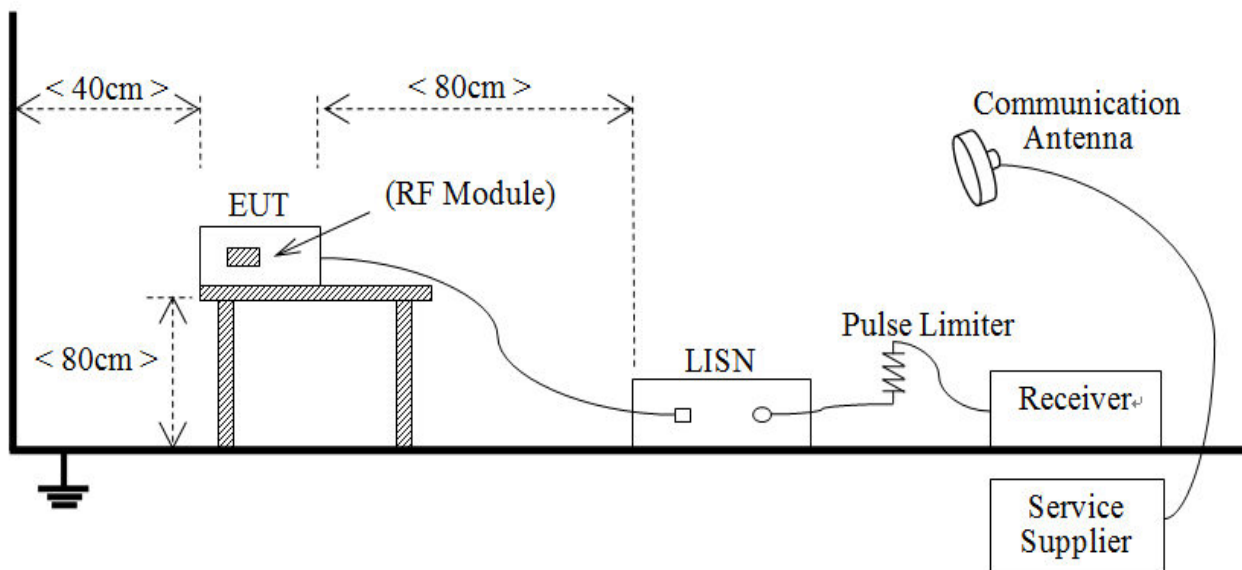
For example: the measurement value is 10 dBm and the cable 0.5dBm used, then the final result of EUT:

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



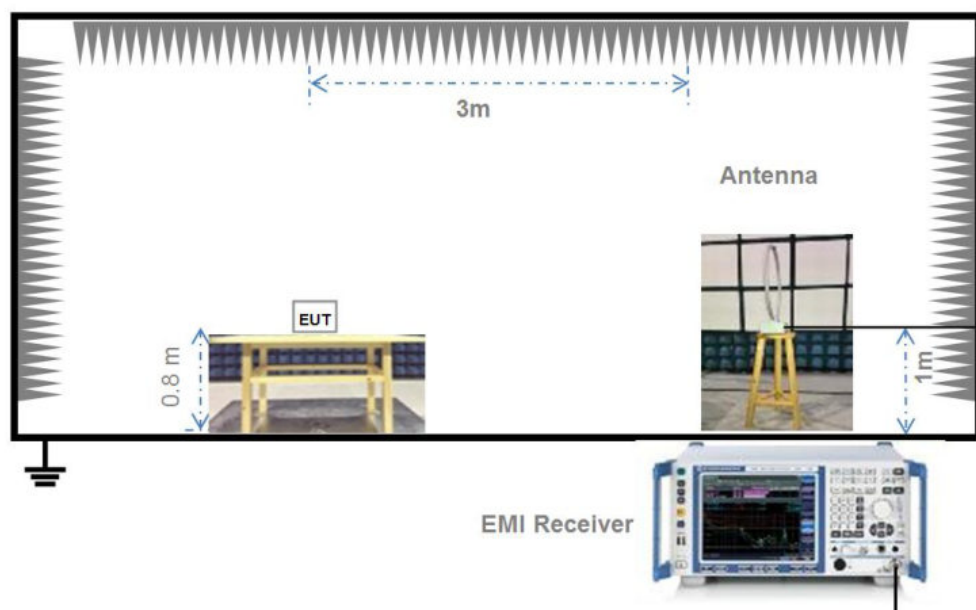
(Diagram 1)

4.5.2 For AC Power Supply Port Test



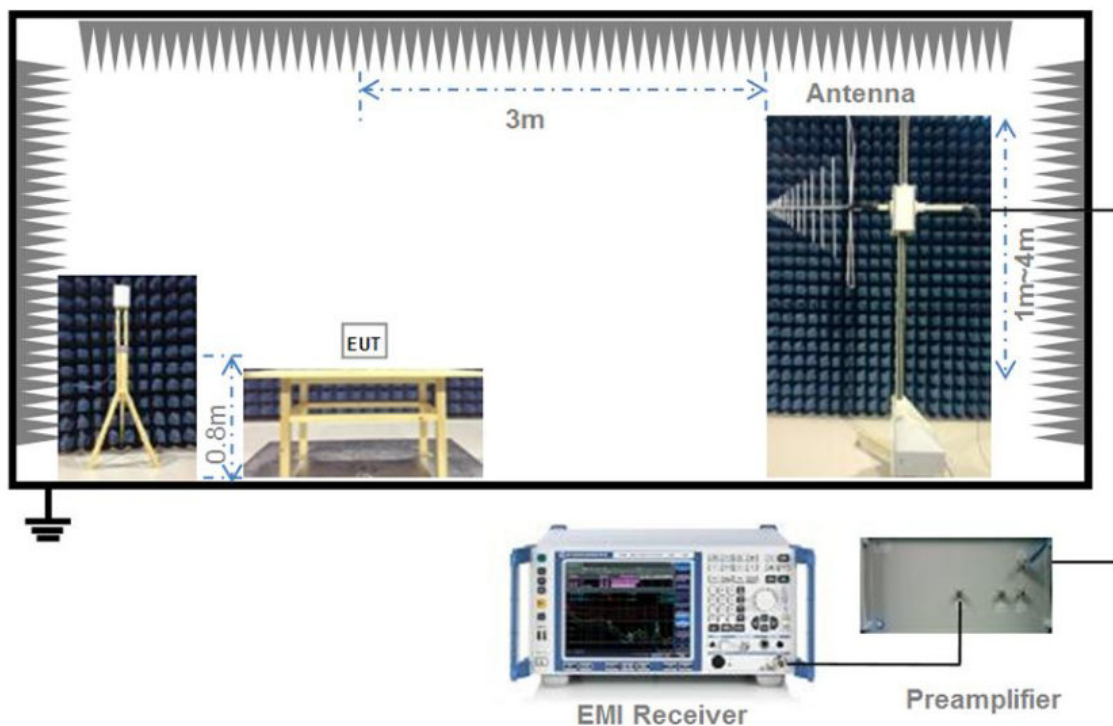
(Diagram 2)

4.5.3 For Radiated Test (Below 30 MHz)



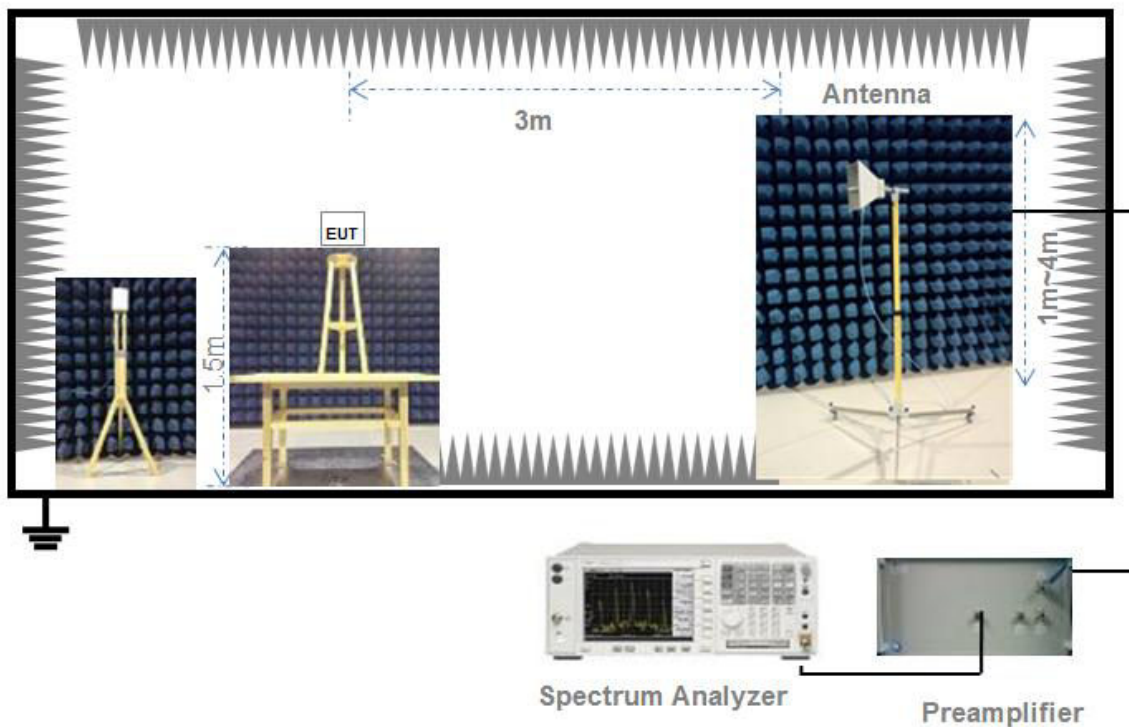
(Diagram 3)

4.5.4 For Radiated Test (30 MHz-1 GHz) (以下选 1 张图，确认 3m 还是 10m 与数据对应)



(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

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)

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.

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.

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)

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 = 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 = 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)

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)

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

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)

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 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) $RBW = 1 \text{ MHz}$ (unless otherwise specified).
- d) $VBW \geq 3 \times RBW$.
- e) Detector = RMS, if $\text{span}/(\# \text{ of points in sweep}) \leq (RBW/2)$. 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)

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)

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	8.413	8.493	99.06%	0.04
802.11g	1.393	1.55	89.87%	0.46
802.11n-20 MHz	5.082	5.28	96.25%	0.17
802.11n-40 MHz	4.886	5.103	95.75%	0.19

Peak Power Test Data

802.11b Mode:

Channel	Measured Output Peak Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	19.87	97.05	30	1000	Pass
Middle	19.84	96.38			Pass
High	19.36	86.30			Pass

802.11g Mode:

Channel	Measured Output Peak Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	25.00	316.23	30	1000	Pass
Middle	24.86	306.20			Pass
High	24.65	291.74			Pass

802.11n-20 MHz Mode:

Channel	Measured Output Peak Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	24.93	311.17	30	1000	Pass
Middle	24.79	301.30			Pass
High	24.50	281.84			Pass

802.11n-40 MHz Mode:

Channel	Measured Output Peak Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	24.83	304.09	30	1000	Pass
Middle	24.89	308.32			Pass
High	24.91	309.74			Pass

Average Power Test Data

802.11b Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	16.89	48.87	30	1000	Pass
Middle	16.84	48.31			Pass
High	16.35	43.15			Pass

802.11g Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	16.88	48.75	30	1000	Pass
Middle	16.73	47.10			Pass
High	16.50	44.67			Pass

802.11n-20 MHz Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	16.83	48.19	30	1000	Pass
Middle	16.67	46.45			Pass
High	16.37	43.35			Pass

802.11n-40 MHz Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	16.56	45.29	30	1000	Pass
Middle	16.62	45.92			Pass
High	16.36	43.25			Pass

A.2 Occupied Bandwidth

Test Data

802.11b Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	9.400000	13.255000	≥ 500
Middle	9.400000	13.298000	≥ 500
High	9.400000	13.292000	≥ 500

802.11g Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	16.600000	18.014000	≥ 500
Middle	16.500000	18.032000	≥ 500
High	16.600000	18.059000	≥ 500

802.11n-20MHz Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	17.700000	19.066000	≥ 500
Middle	17.800000	19.056000	≥ 500
High	17.800000	19.105000	≥ 500

802.11n-40MHz Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	36.800000	36.735000	≥ 500
Middle	36.800000	36.723000	≥ 500
High	36.800000	36.740000	≥ 500

Test Plots

6 dB Bandwidth

802.11b LOW CHANNEL



802.11b MIDDLE CHANNEL



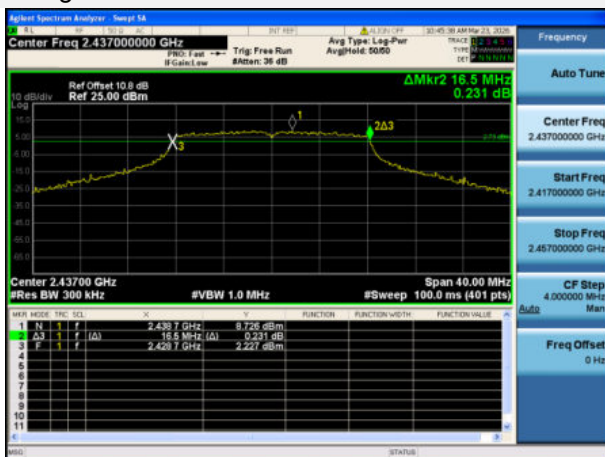
802.11b HIGH CHANNEL



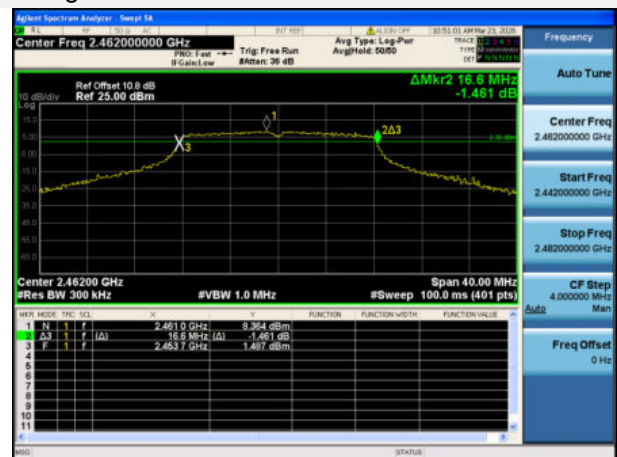
802.11g LOW CHANNEL



802.11g MIDDLE CHANNEL



802.11g HIGH CHANNEL



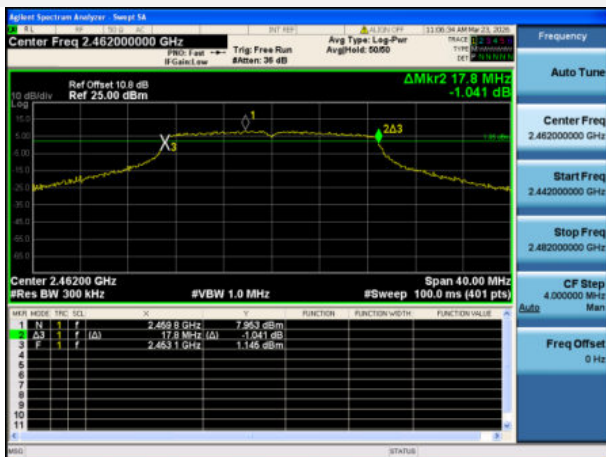
802.11n-20 MHz LOW CHANNEL



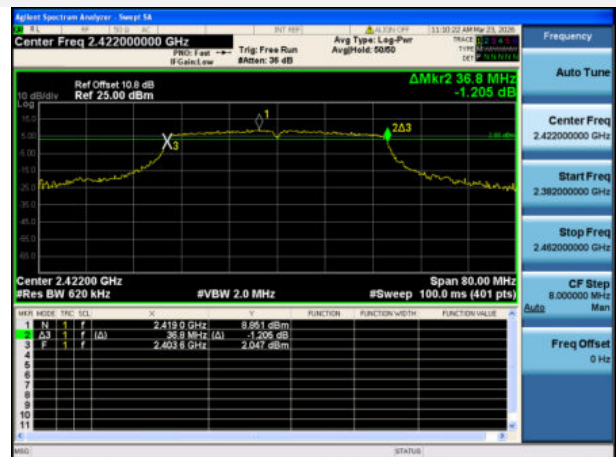
802.11n-20 MHz MIDDLE CHANNEL



802.11n-20 MHz HIGH CHANNEL



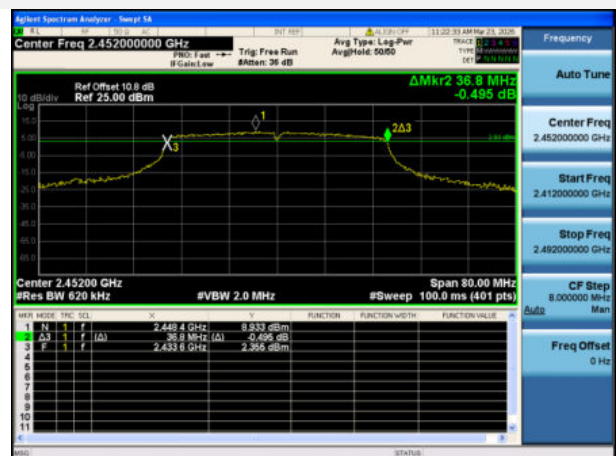
802.11n-40 MHz LOW CHANNEL



802.11n-40 MHz MIDDLE CHANNEL



802.11n-40 MHz HIGH CHANNEL



99% Bandwidth

802.11b LOW CHANNEL



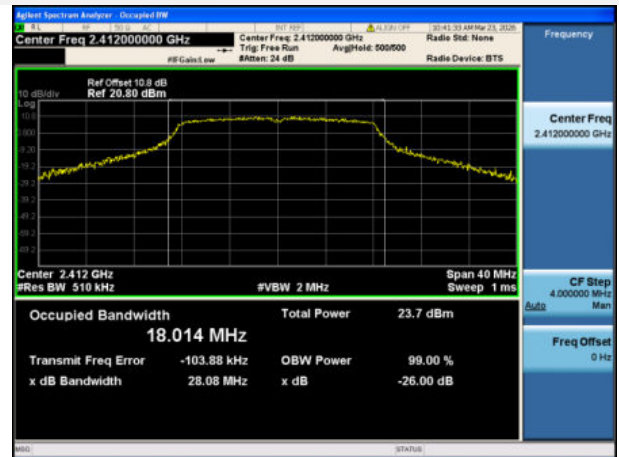
802.11b MIDDLE CHANNEL



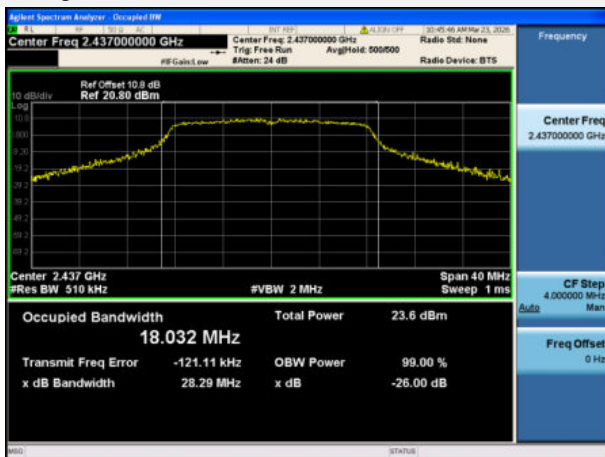
802.11b HIGH CHANNEL



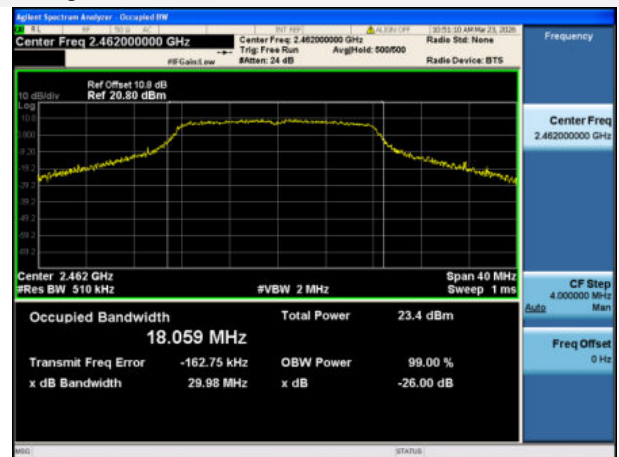
802.11g LOW CHANNEL



802.11g MIDDLE CHANNEL



802.11g HIGH CHANNEL



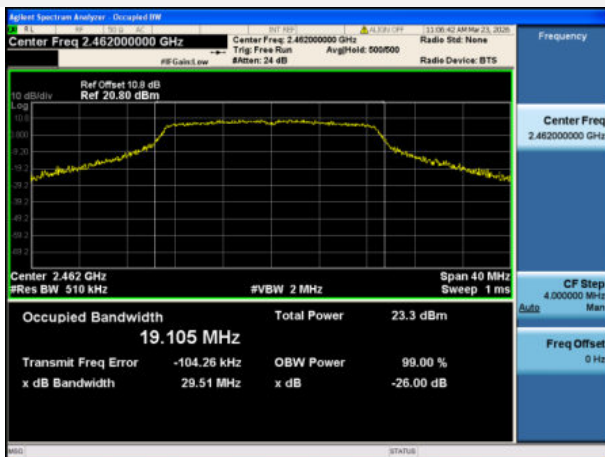
802.11n-20 MHz LOW CHANNEL



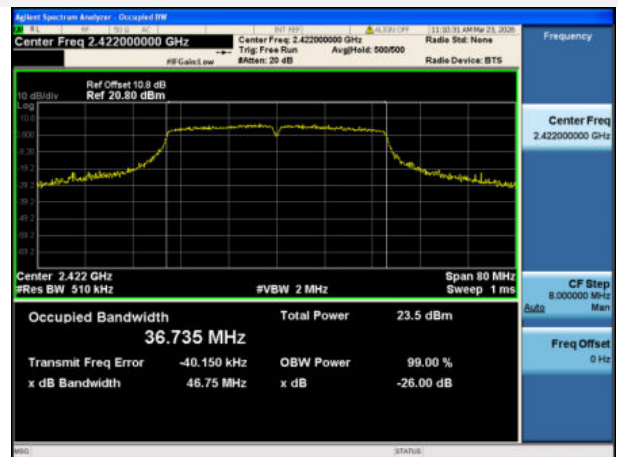
802.11n-20 MHz MIDDLE CHANNEL



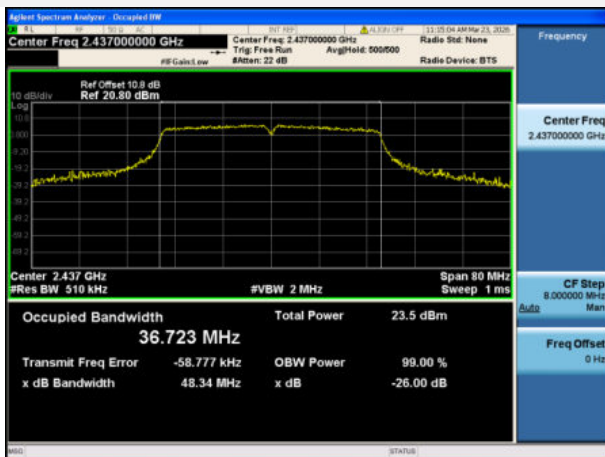
802.11n-20 MHz HIGH CHANNEL



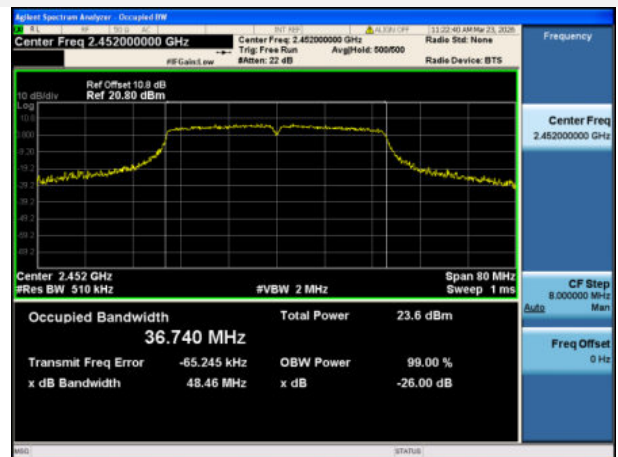
802.11n-40 MHz LOW CHANNEL



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	-34.31	8.63	-11.37	Pass
Middle	-33.63	8.54	-11.46	Pass
High	-34.28	8.11	-11.89	Pass

802.11g Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-37.20	6.38	-13.62	Pass
Middle	-37.11	6.29	-13.71	Pass
High	-37.38	6.15	-13.85	Pass

802.11n-20MHz Mode:

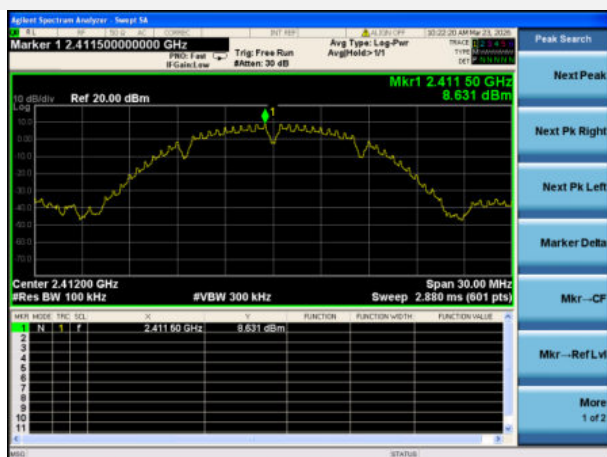
Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-36.94	5.47	-14.53	Pass
Middle	-36.22	6.34	-13.66	Pass
High	-37.38	5.96	-14.04	Pass

802.11n-40MHz Mode:

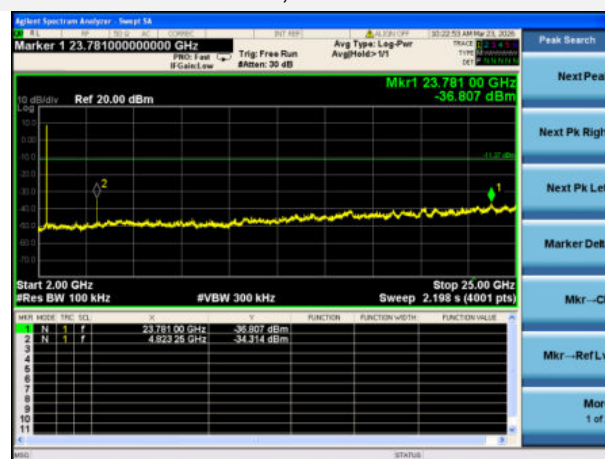
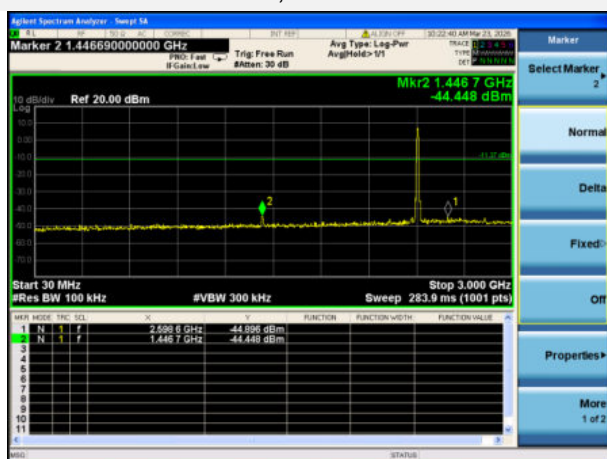
Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-35.87	2.99	-17.01	Pass
Middle	-35.18	2.96	-17.04	Pass
High	-34.49	2.87	-17.13	Pass

Test Plots

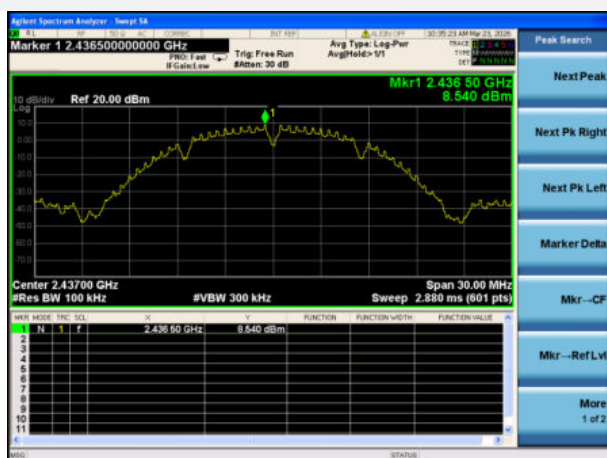
802.11b LOW CHANNEL CARRIER LEVEL



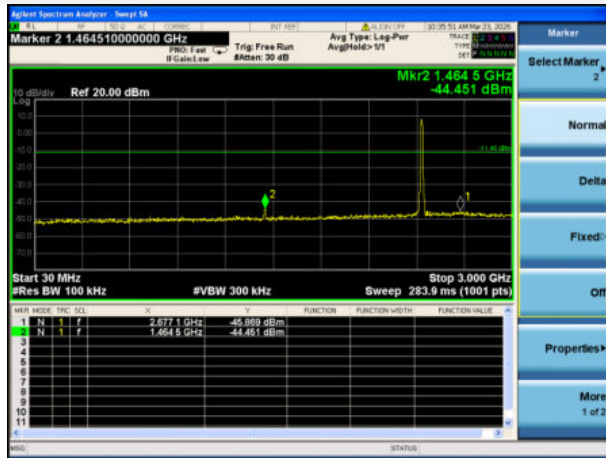
802.11b LOW CHANNEL, SPURIOUS 30 MHz ~ 3 GHz 802.11b LOW CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



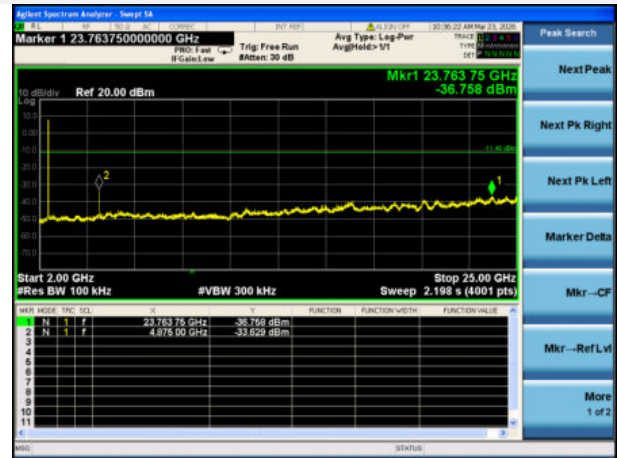
802.11b MIDDLE CHANNEL CARRIER LEVEL



802.11b MIDDLE CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



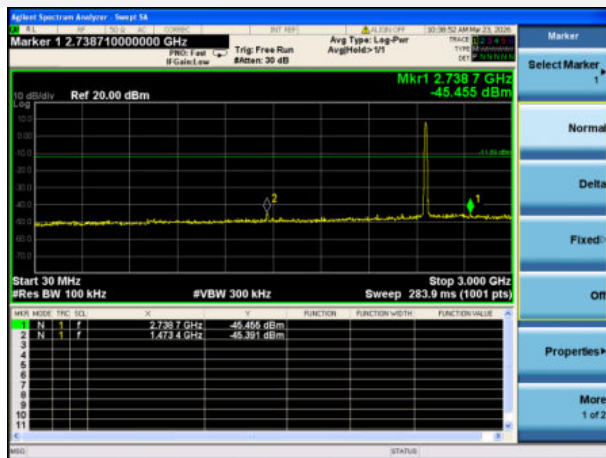
802.11b MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



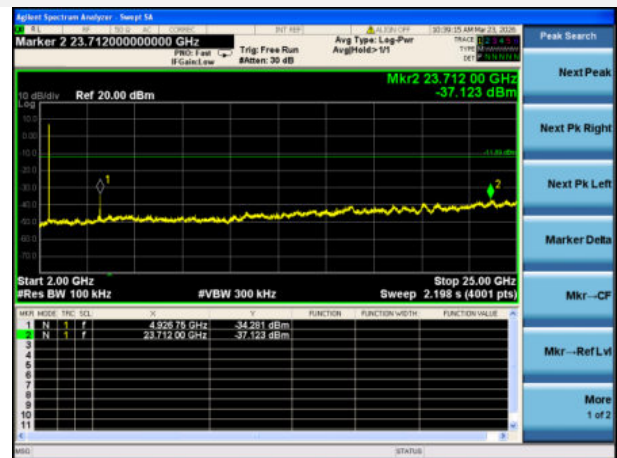
802.11b HIGH CHANNEL CARRIER LEVEL



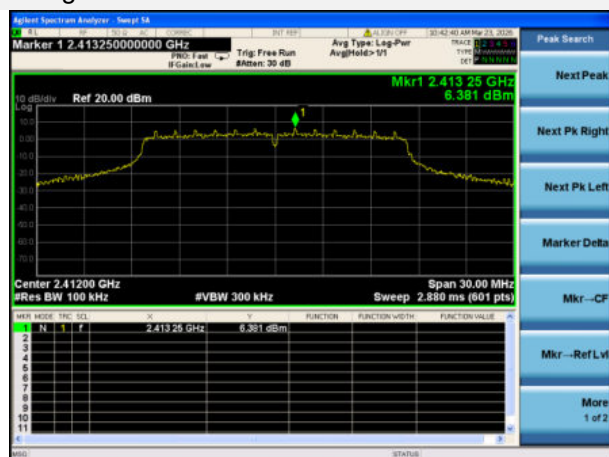
802.11b HIGH CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



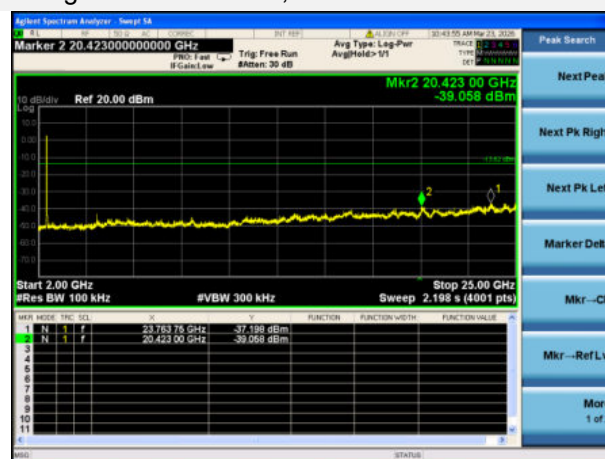
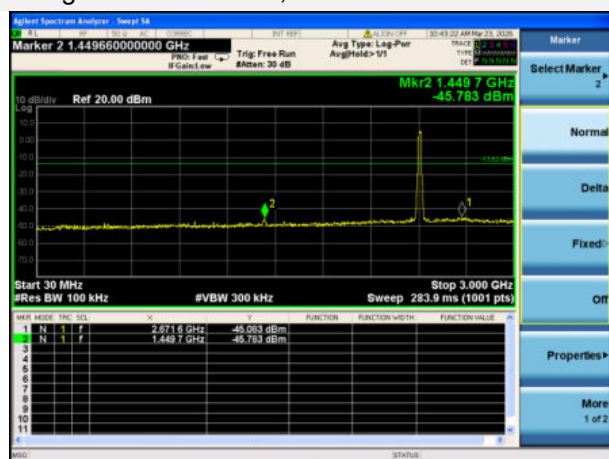
802.11b HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



802.11g LOW CHANNEL CARRIER LEVEL



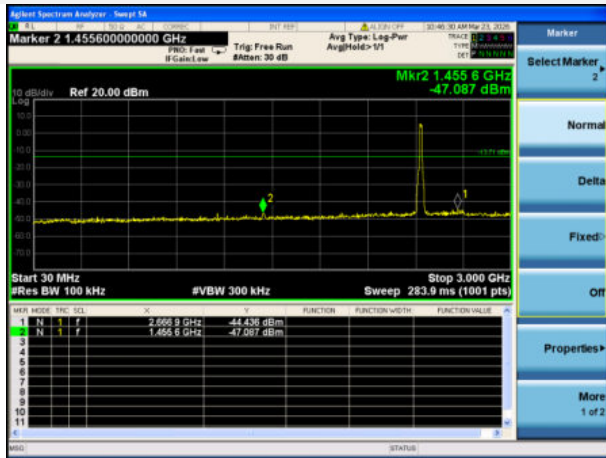
802.11g LOW CHANNEL, SPURIOUS 30 MHz ~ 3 GHz 802.11g LOW CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



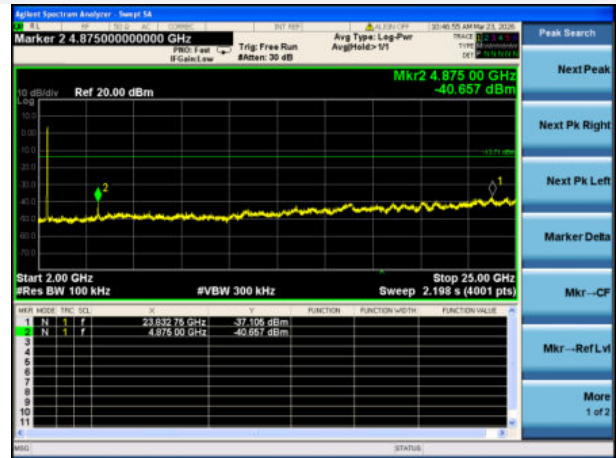
802.11g MIDDLE CHANNEL CARRIER LEVEL



802.11g MIDDLE CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



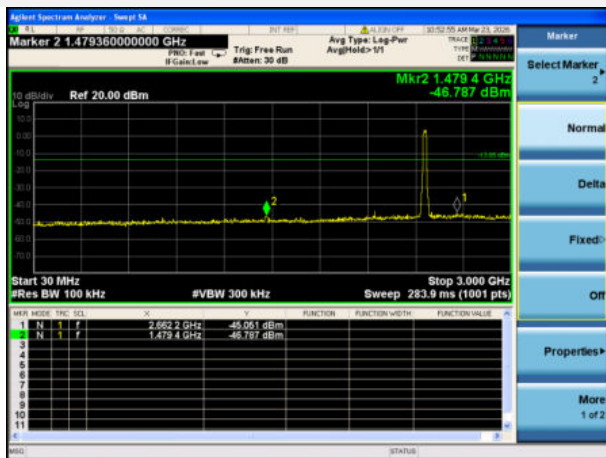
802.11g MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



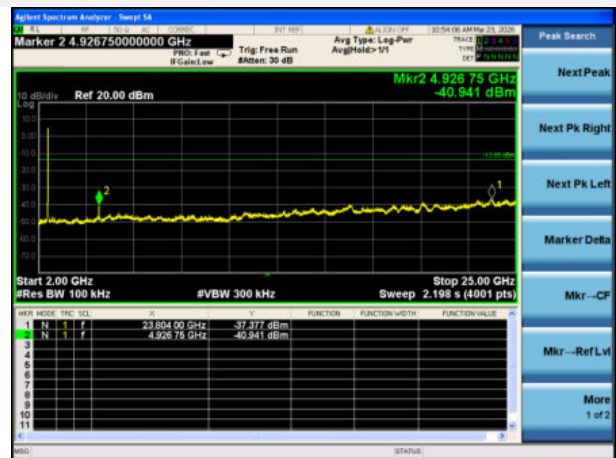
802.11g HIGH CHANNEL CARRIER LEVEL



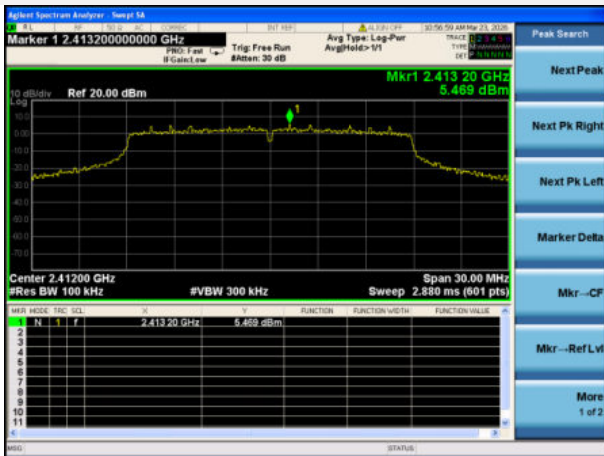
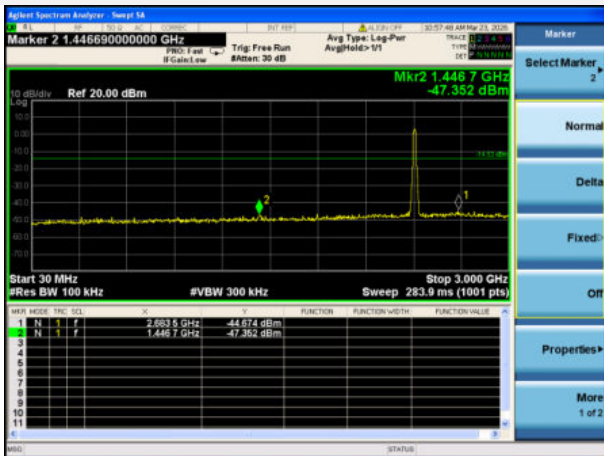
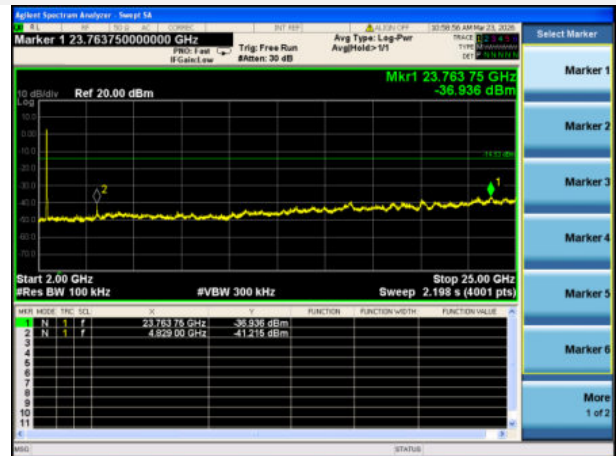
802.11g HIGH CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



802.11g HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



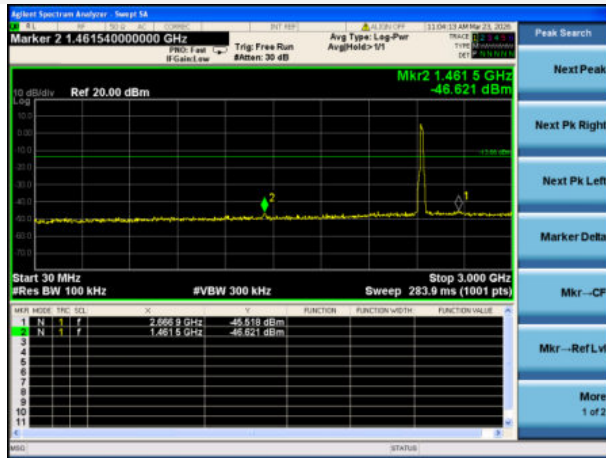
802.11n-20 MHz LOW CHANNEL CARRIER LEVEL

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

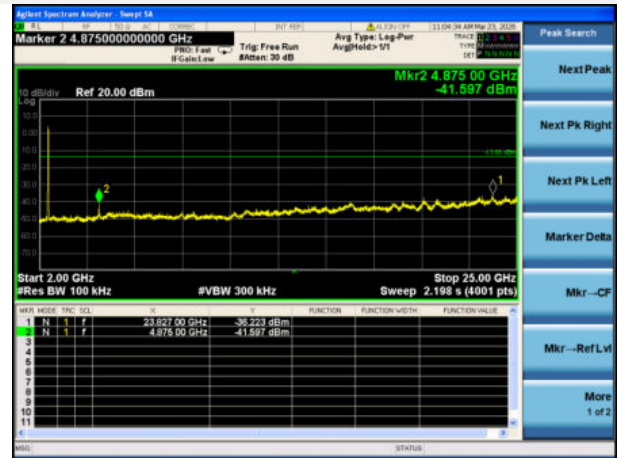
802.11n-20 MHz MIDDLE CHANNEL CARRIER LEVEL



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



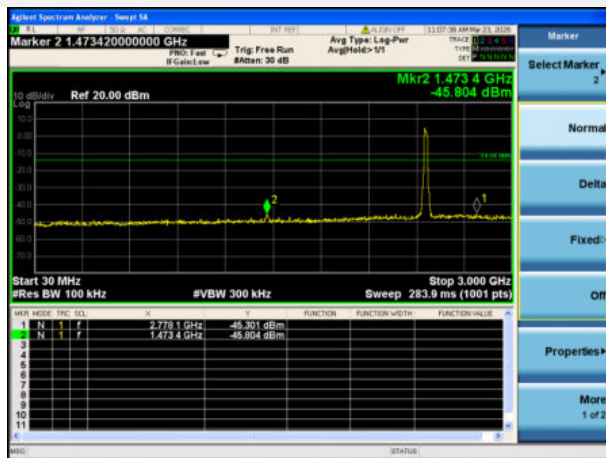
802.11n-20 MHz MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



802.11n-20 MHz HIGH CHANNEL CARRIER LEVEL



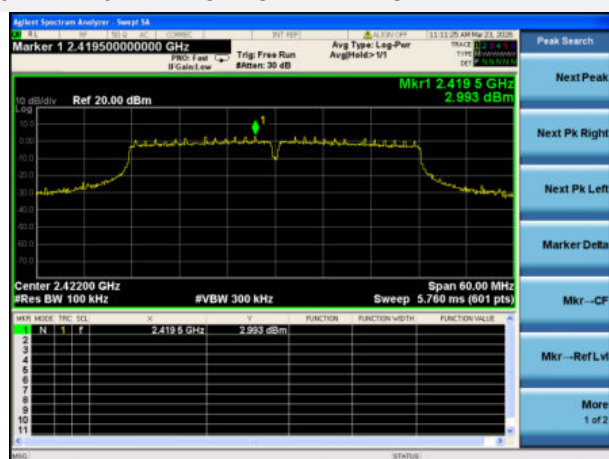
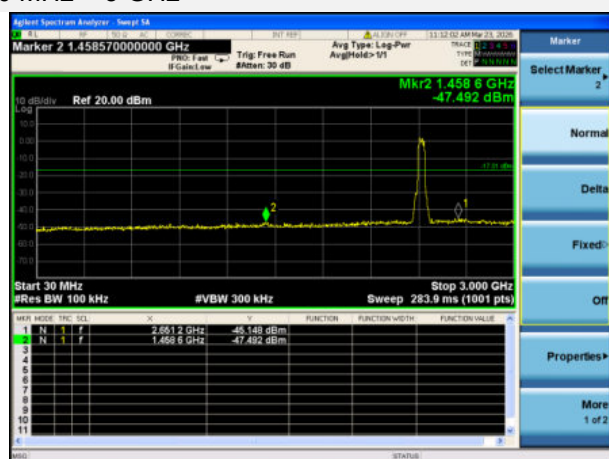
802.11n-20 MHz HIGH CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



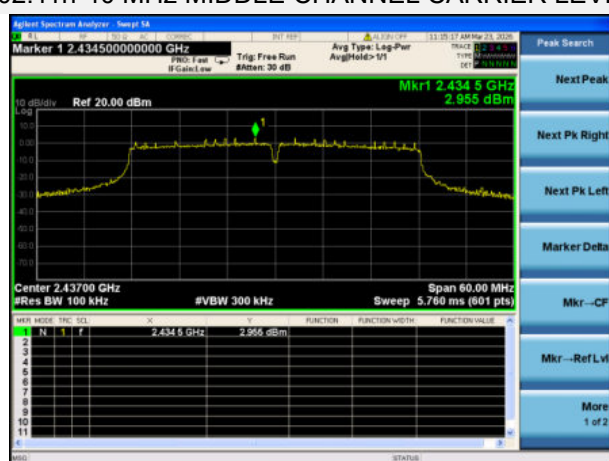
802.11n-20 MHz HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



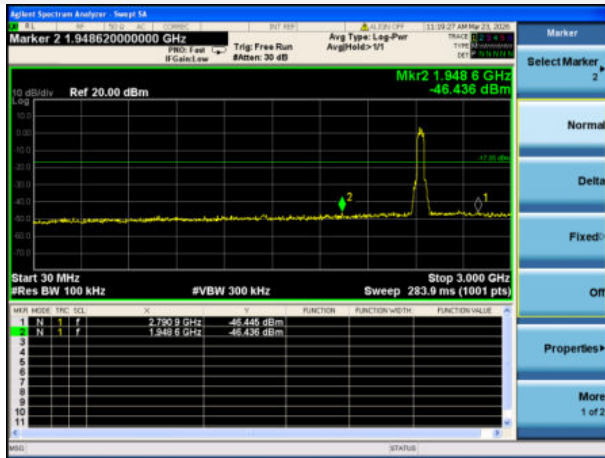
802.11n-40 MHz LOW CHANNEL CARRIER LEVEL

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

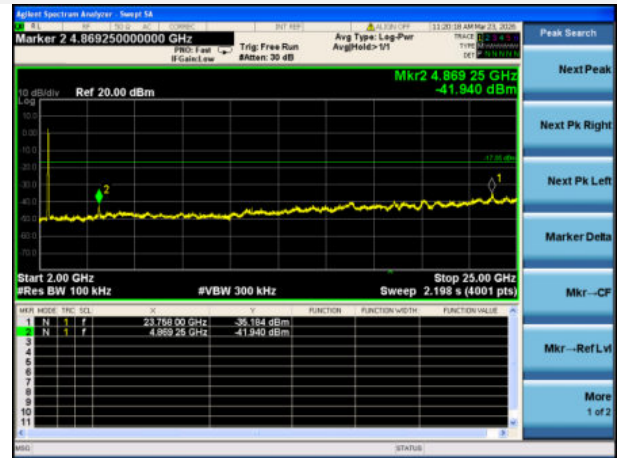
802.11n-40 MHz MIDDLE CHANNEL CARRIER LEVEL



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



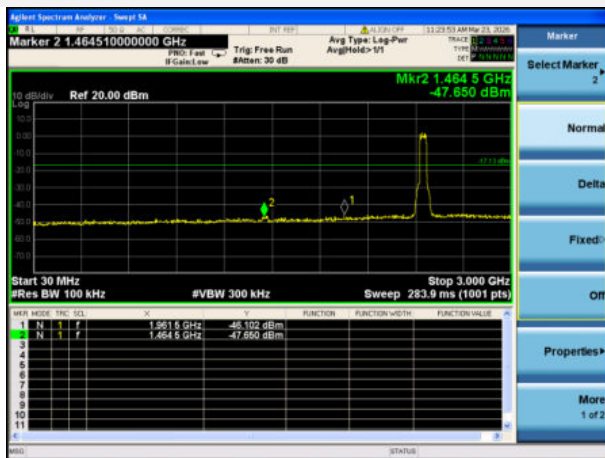
802.11n-40 MHz MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



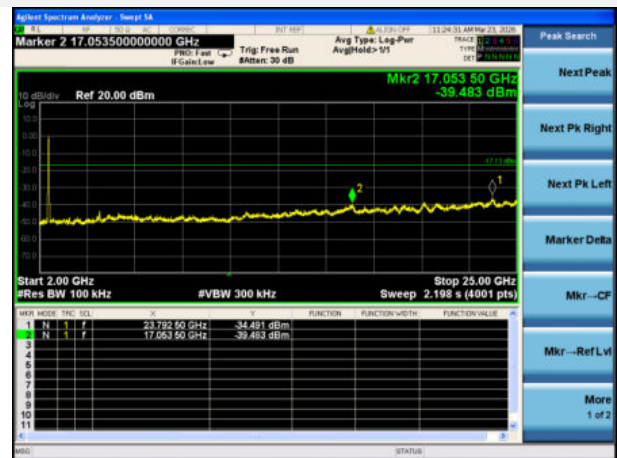
802.11n-40 MHz HIGH CHANNEL CARRIER LEVEL



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	-35.94	8.63	-11.37	Pass
High Channel	-46.82	8.11	-11.89	Pass

802.11g Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-21.99	6.38	-13.62	Pass
High Channel	-37.14	6.15	-13.85	Pass

802.11n-20 MHz Mode:

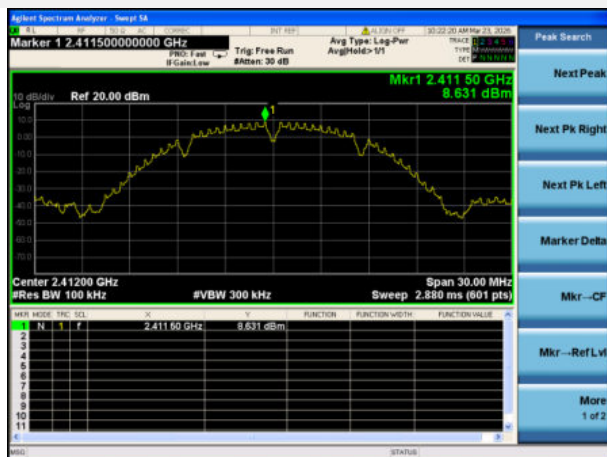
Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-20.53	5.47	-14.53	Pass
High Channel	-34.09	5.96	-14.04	Pass

802.11n-40 MHz Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-24.67	2.99	-17.01	Pass
High Channel	-30.00	2.87	-17.13	Pass

Test Plots

802.11b LOW CHANNEL, CARRIER LEVEL



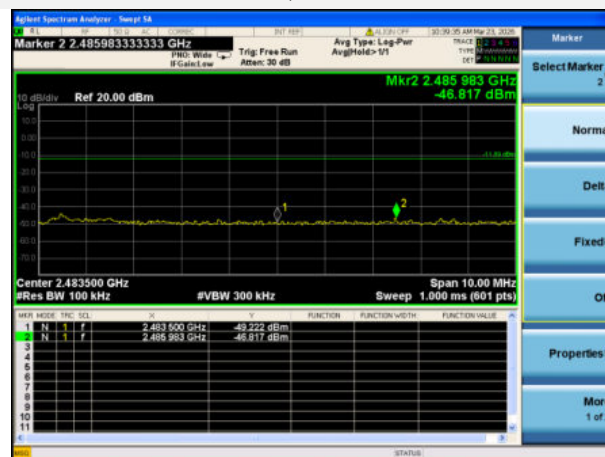
802.11b LOW CHANNEL, BAND EDGE



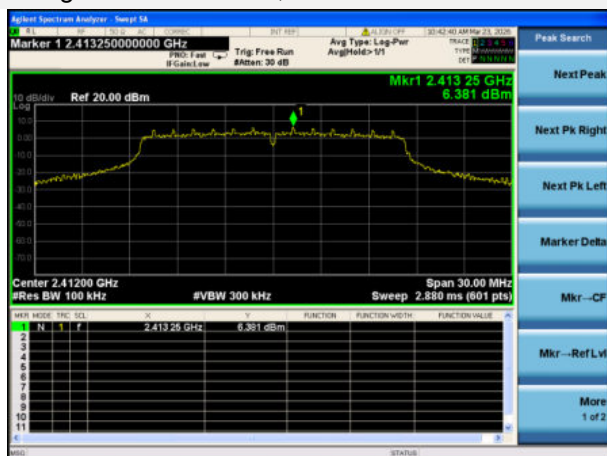
802.11b HIGH CHANNEL, CARRIER LEVEL



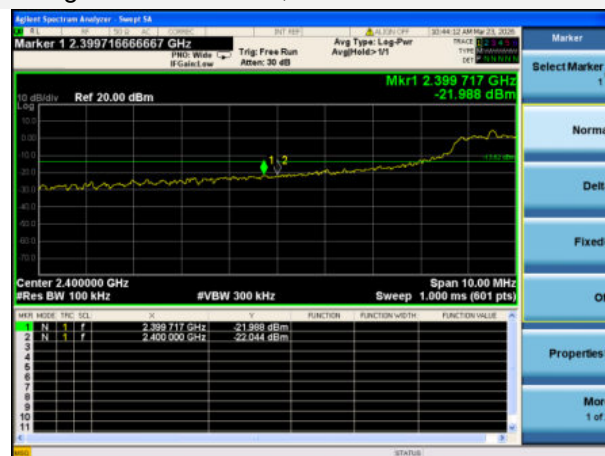
802.11b HIGH CHANNEL, BAND EDGE



802.11g LOW CHANNEL, CARRIER LEVEL



802.11g LOW CHANNEL, BAND EDGE



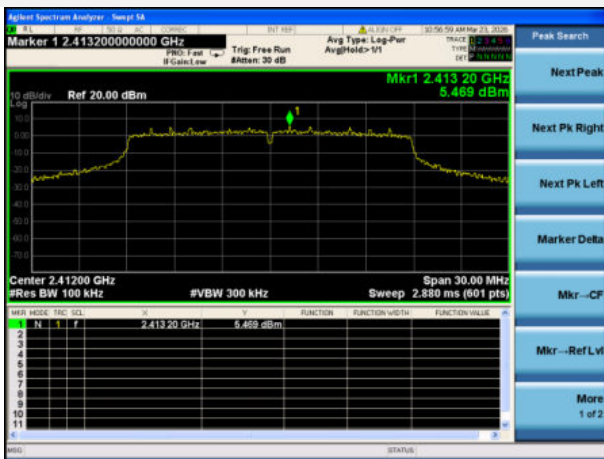
802.11g HIGH CHANNEL, CARRIER LEVEL



802.11g HIGH CHANNEL, BAND EDGE



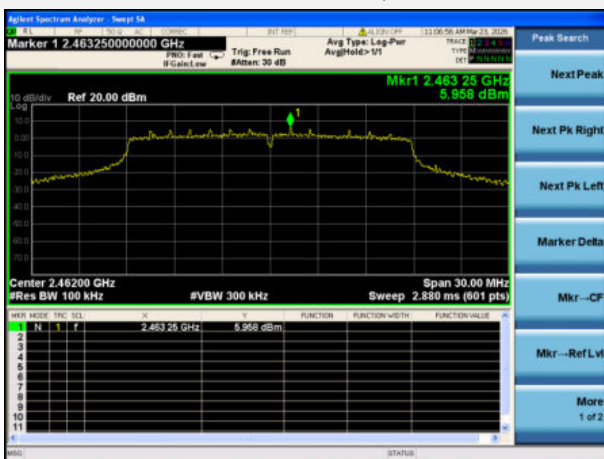
802.11n-20 MHz LOW CHANNEL, CARRIER LEVEL



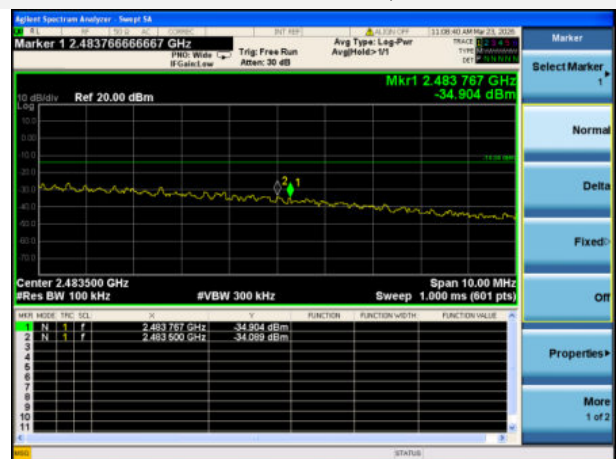
802.11n-20 MHz LOW CHANNEL, BAND EDGE



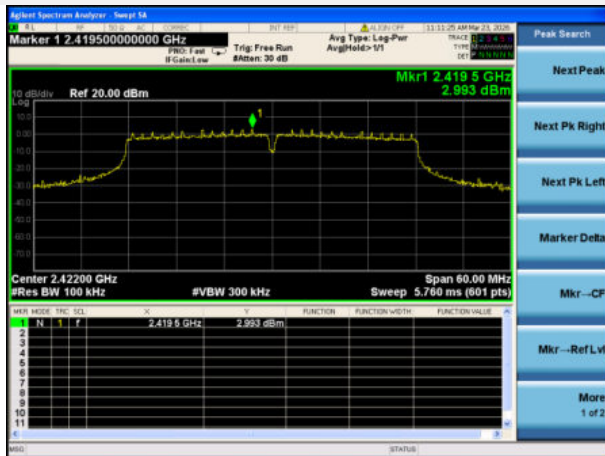
802.11n-20 MHz HIGH CHANNEL, CARRIER LEVEL



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

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

Note ²: 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.

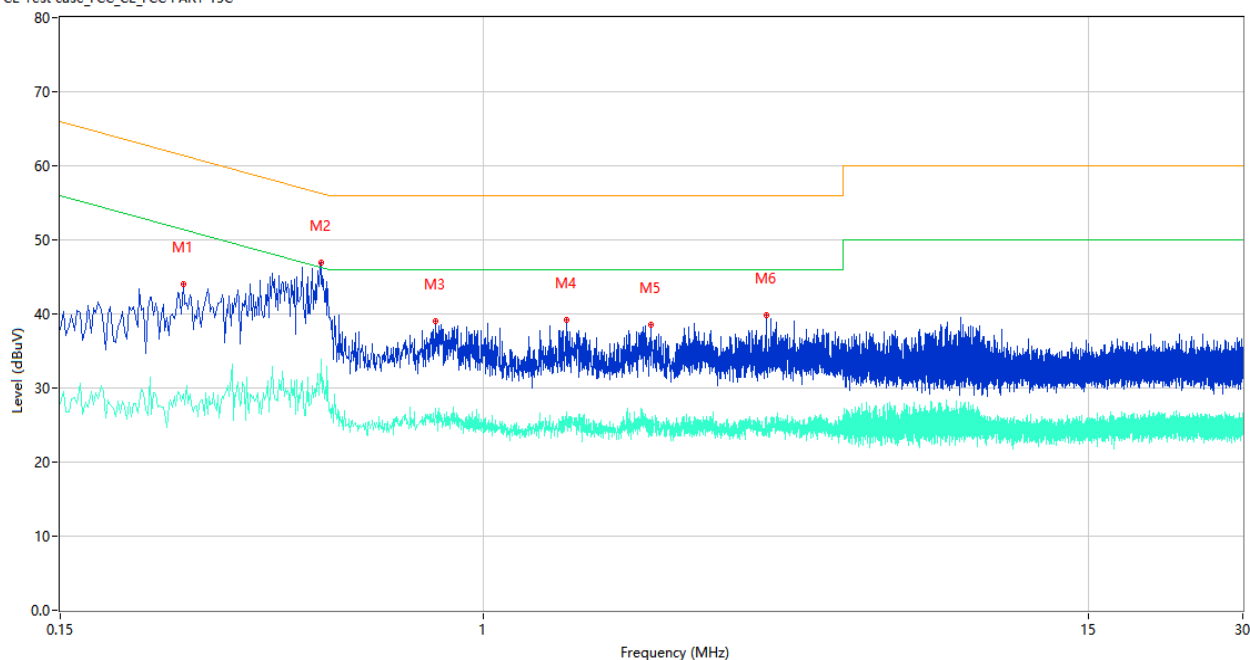
Note ³: Results (dBuV) = Original reading level of Spectrum Analyzer (dBuV) + Factor (dB)

Test Data and Plots

C8M

PHASE L

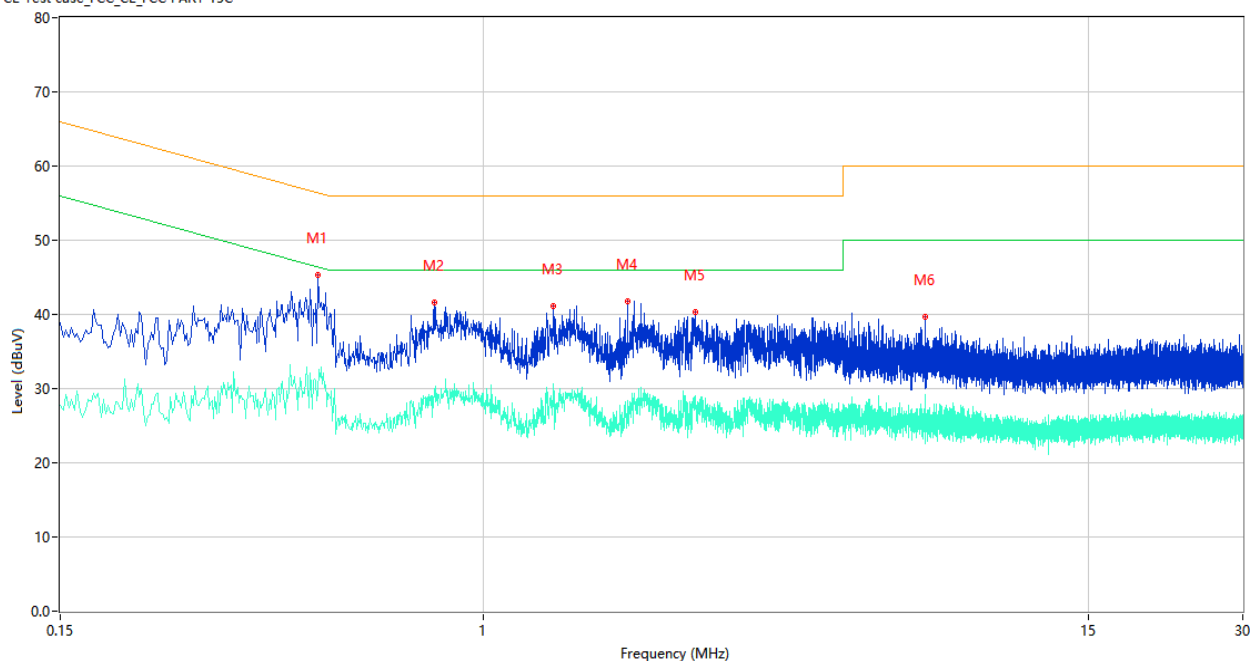
CE Test case_FCC_CE_FCC PART 15C



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.260	44.00	9.82	61.43	17.43	Peak	L	Pass
1**	0.260	29.16	9.82	51.43	22.27	AV	L	Pass
2	0.484	46.87	10.06	56.27	9.40	Peak	L	Pass
2**	0.484	33.95	10.06	46.27	12.32	AV	L	Pass
3	0.808	39.09	10.60	56.00	16.91	Peak	L	Pass
3**	0.808	27.33	10.60	46.00	18.67	AV	L	Pass
4	1.452	39.20	10.13	56.00	16.80	Peak	L	Pass
4**	1.452	26.70	10.13	46.00	19.30	AV	L	Pass
5	2.114	38.57	10.06	56.00	17.43	Peak	L	Pass
5**	2.114	23.94	10.06	46.00	22.06	AV	L	Pass
6	3.542	39.88	10.26	56.00	16.12	Peak	L	Pass
6**	3.542	26.09	10.26	46.00	19.91	AV	L	Pass

PHASE N

CE Test case_FCC_CE_FCC PART 15C

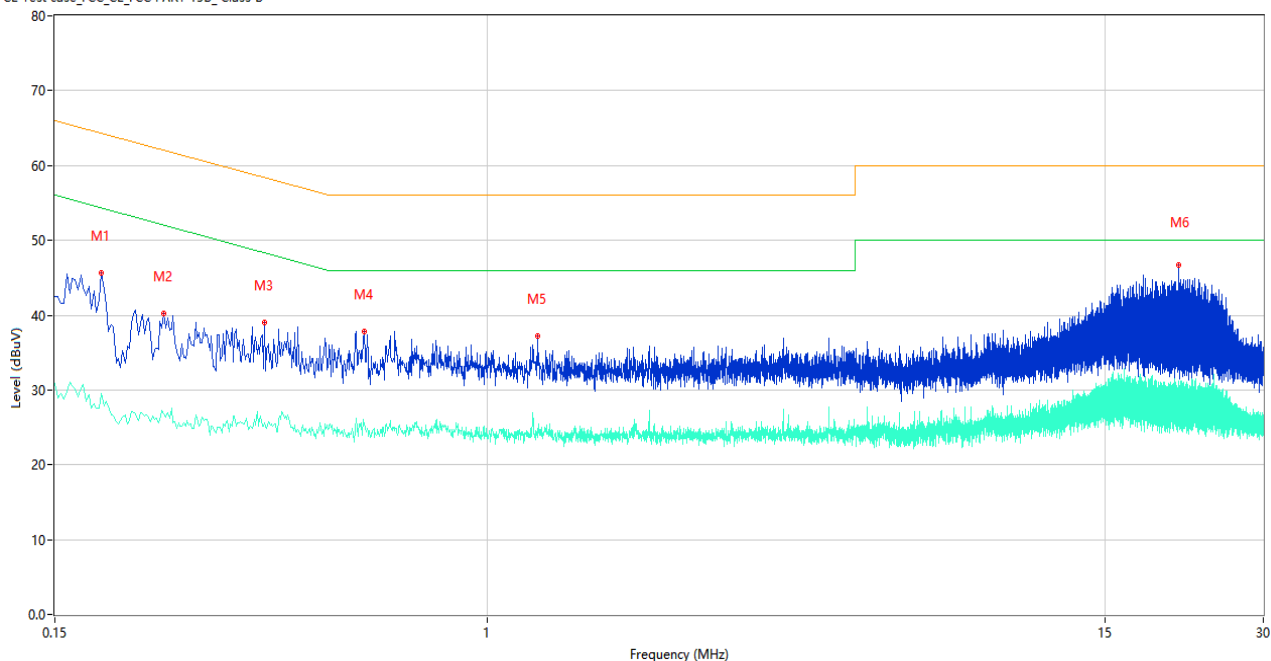


No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.476	45.28	10.06	56.41	11.13	Peak	N	Pass
1**	0.476	29.43	10.06	46.41	16.98	AV	N	Pass
2	0.804	41.55	10.59	56.00	14.45	Peak	N	Pass
2**	0.804	29.78	10.59	46.00	16.22	AV	N	Pass
3	1.368	41.18	9.96	56.00	14.82	Peak	N	Pass
3**	1.368	30.71	9.96	46.00	15.29	AV	N	Pass
4	1.908	41.78	10.69	56.00	14.22	Peak	N	Pass
4**	1.908	28.47	10.69	46.00	17.53	AV	N	Pass
5	2.580	40.35	9.87	56.00	15.65	Peak	N	Pass
5**	2.580	27.85	9.87	46.00	18.15	AV	N	Pass
6	7.220	39.68	10.46	60.00	20.32	Peak	N	Pass
6**	7.220	24.69	10.46	50.00	25.31	AV	N	Pass

C5M

PHASE L

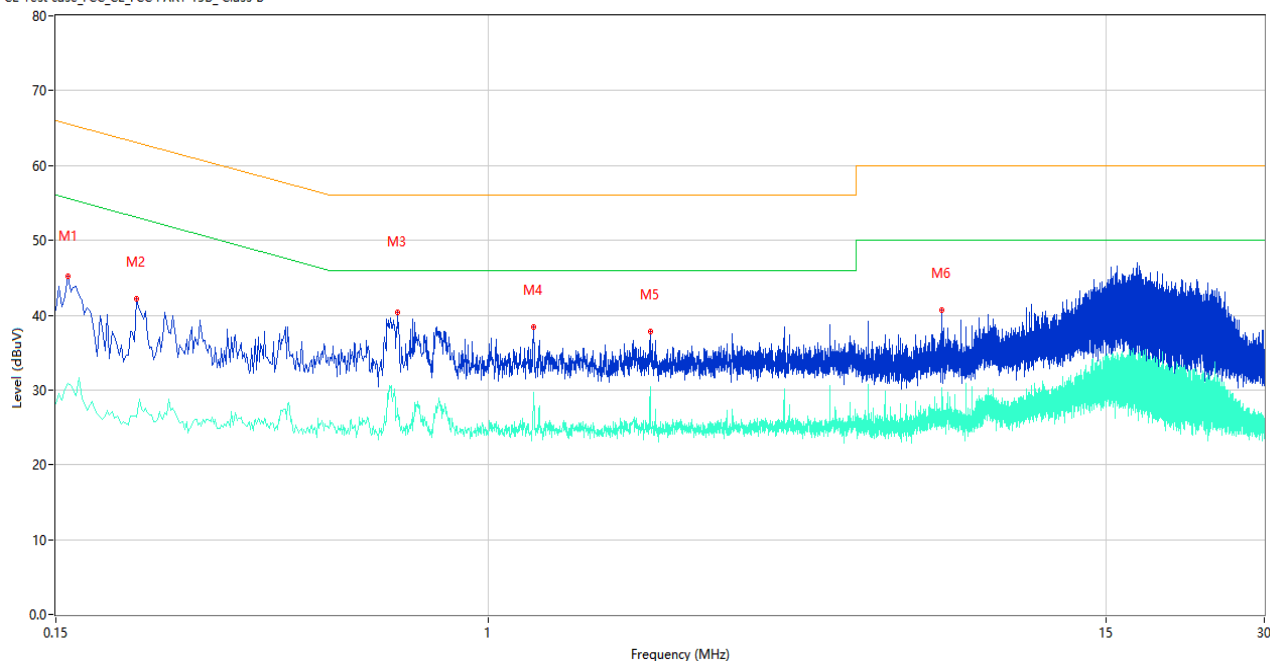
CE Test case_FCC_CE_FCC PART 15B_Class B



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.184	45.62	9.84	64.30	18.68	Peak	L	Pass
1**	0.184	29.49	9.84	54.30	24.81	AV	L	Pass
2	0.242	40.20	9.83	62.03	21.83	Peak	L	Pass
2**	0.242	26.88	9.83	52.03	25.15	AV	L	Pass
3	0.376	39.00	10.71	58.37	19.37	Peak	L	Pass
3**	0.376	25.60	10.71	48.37	22.77	AV	L	Pass
4	0.582	37.78	10.17	56.00	18.22	Peak	L	Pass
4**	0.582	25.45	10.17	46.00	20.55	AV	L	Pass
5	1.244	37.25	10.45	56.00	18.75	Peak	L	Pass
5**	1.244	24.89	10.45	46.00	21.11	AV	L	Pass
6	20.692	46.70	11.08	60.00	13.30	Peak	L	Pass
6**	20.692	29.90	11.08	50.00	20.10	AV	L	Pass

PHASE N

CE Test case_FCC_CE_FCC PART 15B_Class B



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.158	45.26	9.86	65.57	20.31	Peak	N	Pass
1**	0.158	30.84	9.86	55.57	24.73	AV	N	Pass
2	0.214	42.20	9.83	63.05	20.85	Peak	N	Pass
2**	0.214	26.32	9.83	53.05	26.73	AV	N	Pass
3	0.672	40.33	10.47	56.00	15.67	Peak	N	Pass
3**	0.672	27.50	10.47	46.00	18.50	AV	N	Pass
4	1.216	38.44	10.14	56.00	17.56	Peak	N	Pass
4**	1.216	28.90	10.14	46.00	17.10	AV	N	Pass
5	2.030	37.75	10.45	56.00	18.25	Peak	N	Pass
5**	2.030	30.39	10.45	46.00	15.61	AV	N	Pass
6	7.310	40.64	10.14	60.00	19.36	Peak	N	Pass
6**	7.310	30.34	10.14	50.00	19.66	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.

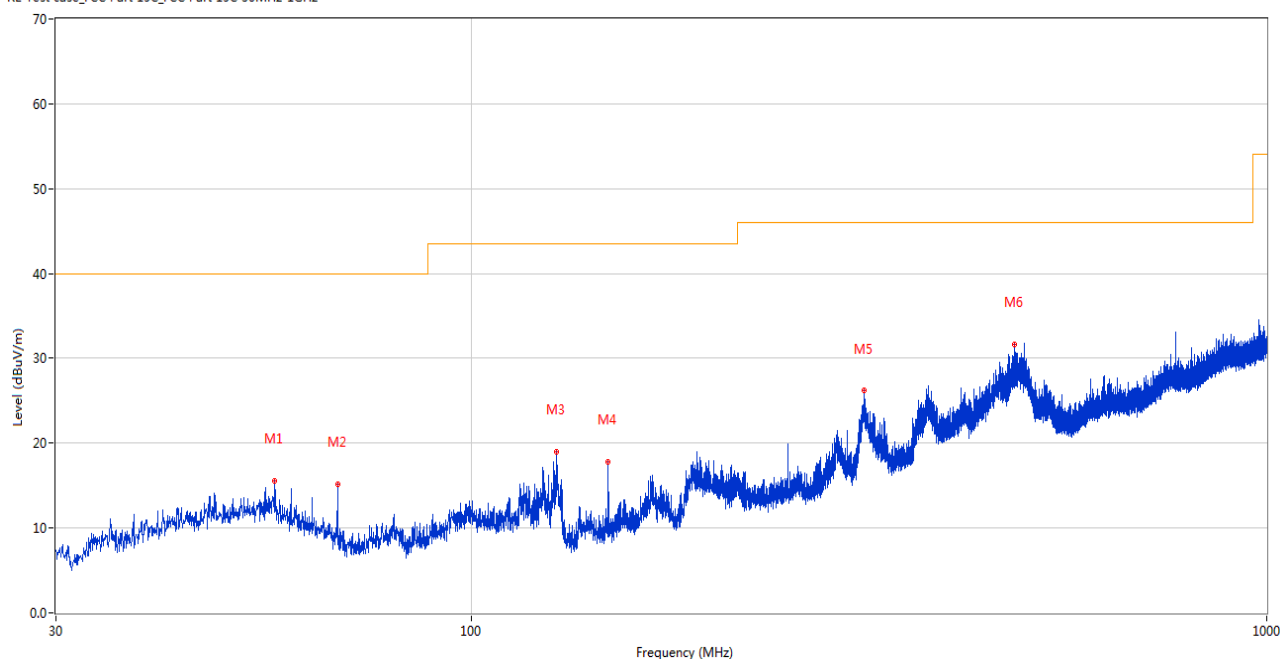
Note⁴: The EUT is working in the Normal link mode below 1 GHz. All modes have been tested and normal link mode is worst.

Test Data and Plots

C8M

30 MHz to 1 GHz, ANT H

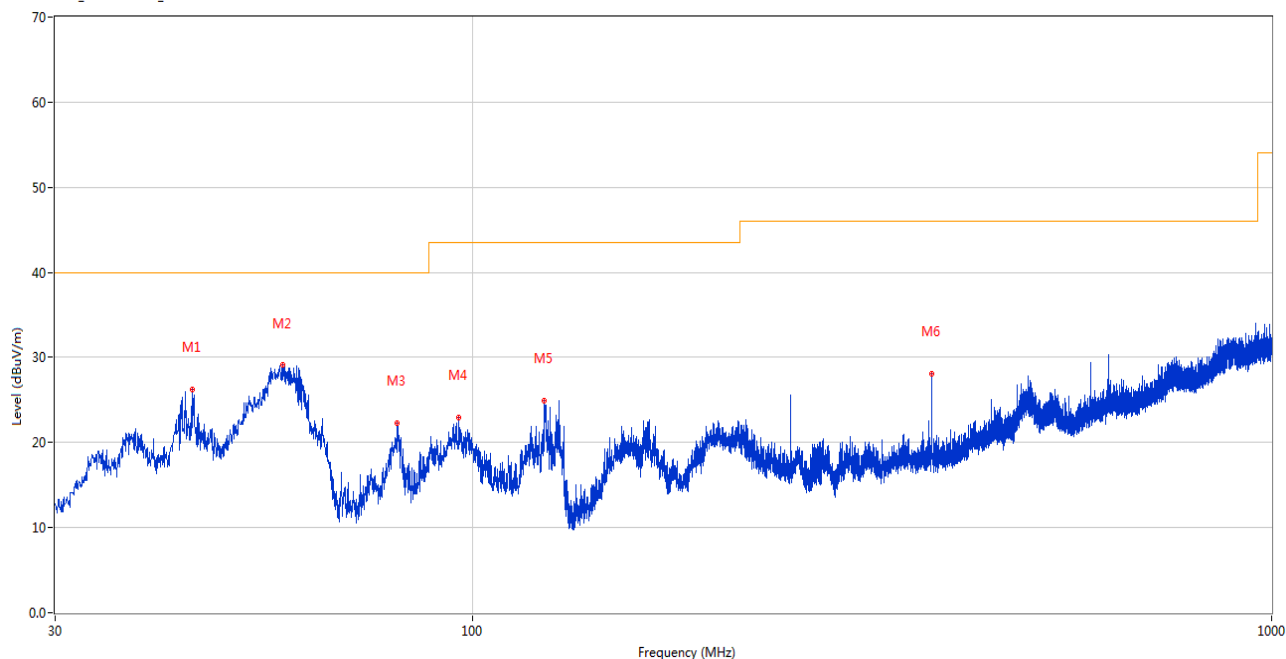
RE Test case_FCC Part 15C_FCC Part 15C 30MHz-1GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	56.529	15.60	-24.73	40.0	24.40	Peak	256.80	100	Horizontal	Pass
2	67.782	15.22	-27.44	40.0	24.78	Peak	188.50	100	Horizontal	Pass
3	127.970	18.96	-28.07	43.5	24.54	Peak	157.00	100	Horizontal	Pass
4	148.534	17.74	-28.78	43.5	25.76	Peak	274.80	100	Horizontal	Pass
5	311.591	26.17	-21.20	46.0	19.83	Peak	36.60	100	Horizontal	Pass
6	481.583	31.62	-16.57	46.0	14.38	Peak	46.20	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	44.599	26.29	-24.52	40.0	13.71	Peak	25.90	100	Vertical	Pass
2	57.888	29.07	-24.69	40.0	10.93	Peak	22.00	100	Vertical	Pass
3	80.489	22.34	-30.51	40.0	17.66	Peak	262.20	100	Vertical	Pass
4	95.960	22.97	-26.48	43.5	20.53	Peak	297.50	100	Vertical	Pass
5	122.878	24.93	-27.56	43.5	18.57	Peak	33.60	100	Vertical	Pass
6	375.029	28.11	-19.33	46.0	17.89	Peak	80.60	100	Vertical	Pass

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

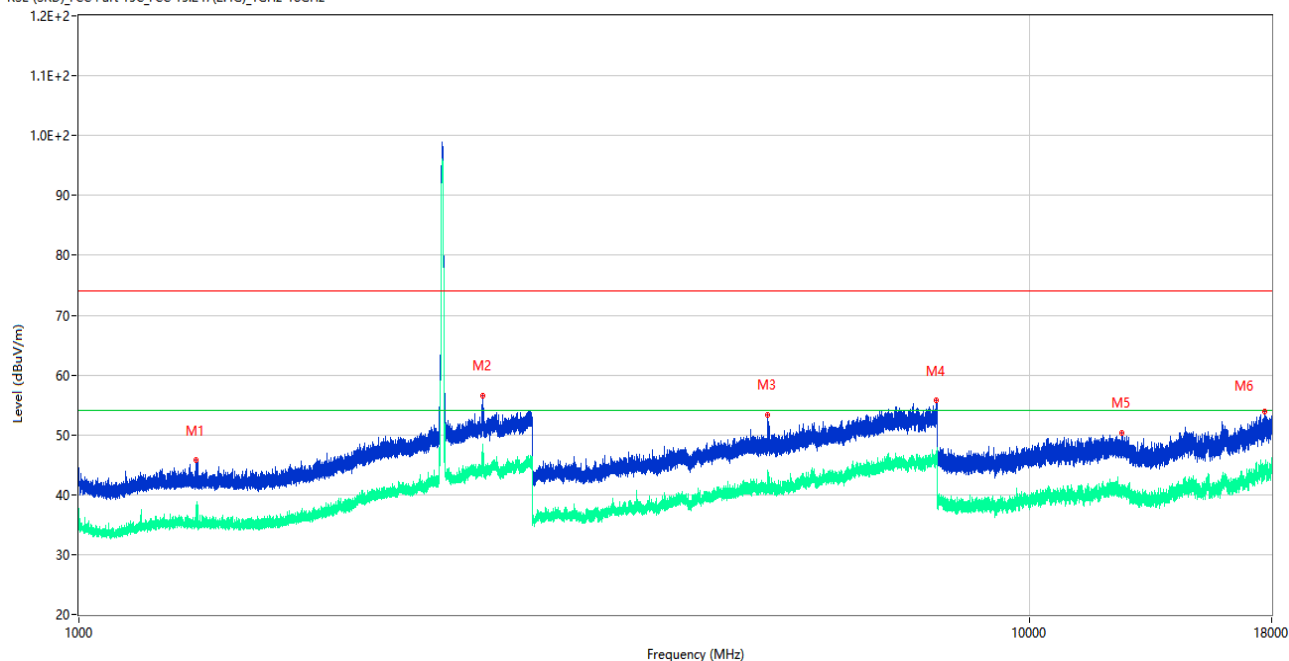
Note ²: The spurious above 18G is noise only, do not show on the report.

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1530.098	44.42	74.0	29.58	Peak	348.00	100	Horizontal	Pass
1**	1530.098	34.72	54.0	19.28	AV	348.00	100	Horizontal	Pass
2	2972.073	54.77	74.0	19.23	Peak	344.00	200	Horizontal	Pass
2**	2972.073	45.82	54.0	8.18	AV	344.00	200	Horizontal	Pass
3	4249.078	48.21	74.0	25.79	Peak	244.00	200	Horizontal	Pass
3**	4249.078	38.57	54.0	15.43	AV	244.00	200	Horizontal	Pass
4	7258.269	55.12	74.0	18.88	Peak	89.00	300	Horizontal	Pass
4**	7258.269	45.10	54.0	8.90	AV	89.00	300	Horizontal	Pass
5	10849.701	49.62	74.0	24.38	Peak	349.00	100	Horizontal	Pass
5**	10849.701	40.64	54.0	13.36	AV	349.00	100	Horizontal	Pass
6	17543.960	54.75	74.0	19.25	Peak	102.00	100	Horizontal	Pass
6**	17543.960	44.80	54.0	9.20	AV	102.00	100	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	1307.227	45.17	74.0	28.83	Peak	229.00	300	Vertical	Pass
1**	1307.227	35.81	54.0	18.19	AV	229.00	300	Vertical	Pass
2	2659.556	56.86	74.0	17.14	Peak	72.00	200	Vertical	Pass
2**	2659.556	46.11	54.0	7.89	AV	72.00	200	Vertical	Pass
3	4824.676	53.15	74.0	20.85	Peak	243.00	200	Vertical	Pass
3**	4824.676	50.29	54.0	3.71	AV	243.00	200	Vertical	Pass
4	7993.014	55.79	74.0	18.21	Peak	95.00	100	Vertical	Pass
4**	7993.014	47.37	54.0	6.63	AV	95.00	100	Vertical	Pass
5	10893.391	49.61	74.0	24.39	Peak	90.00	400	Vertical	Pass
5**	10893.391	39.92	54.0	14.08	AV	90.00	400	Vertical	Pass
6	17467.988	53.27	74.0	20.73	Peak	103.00	300	Vertical	Pass
6**	17467.988	43.98	54.0	10.03	AV	103.00	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	1531.115	44.32	74.0	29.68	Peak	56.00	400	Horizontal	Pass
1**	1531.115	34.13	54.0	19.87	AV	56.00	400	Horizontal	Pass
2	2974.571	54.08	74.0	19.92	Peak	232.00	200	Horizontal	Pass
2**	2974.571	45.00	54.0	9.00	AV	232.00	200	Horizontal	Pass
3	4244.248	47.51	74.0	26.49	Peak	120.00	200	Horizontal	Pass
3**	4244.248	37.93	54.0	16.07	AV	120.00	200	Horizontal	Pass
4	7263.569	54.53	74.0	19.47	Peak	13.00	400	Horizontal	Pass
4**	7263.569	44.95	54.0	9.05	AV	13.00	400	Horizontal	Pass
5	10853.647	48.91	74.0	25.09	Peak	207.00	300	Horizontal	Pass
5**	10853.647	39.91	54.0	14.09	AV	207.00	300	Horizontal	Pass
6	17541.772	54.12	74.0	19.88	Peak	272.00	400	Horizontal	Pass
6**	17541.772	44.38	54.0	9.62	AV	272.00	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	1307.675	45.11	74.0	28.89	Peak	158.00	300	Vertical	Pass
1**	1307.675	35.66	54.0	18.34	AV	158.00	300	Vertical	Pass
2	2660.135	56.84	74.0	17.16	Peak	168.00	400	Vertical	Pass
2**	2660.135	45.60	54.0	8.40	AV	168.00	400	Vertical	Pass
3	4822.201	52.31	74.0	21.69	Peak	300.00	200	Vertical	Pass
3**	4822.201	49.60	54.0	4.40	AV	300.00	200	Vertical	Pass
4	7990.795	55.70	74.0	18.30	Peak	138.00	100	Vertical	Pass
4**	7990.795	47.19	54.0	6.81	AV	138.00	100	Vertical	Pass
5	10889.877	49.11	74.0	24.89	Peak	82.00	300	Vertical	Pass
5**	10889.877	39.11	54.0	14.89	AV	82.00	300	Vertical	Pass
6	17469.816	52.37	74.0	21.63	Peak	292.00	200	Vertical	Pass
6**	17469.816	43.26	54.0	10.75	AV	292.00	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	1529.114	44.04	74.0	29.96	Peak	149.00	200	Horizontal	Pass
1**	1529.114	34.31	54.0	19.69	AV	149.00	200	Horizontal	Pass
2	2979.538	54.12	74.0	19.88	Peak	324.00	400	Horizontal	Pass
2**	2979.538	45.39	54.0	8.61	AV	324.00	400	Horizontal	Pass
3	4244.036	47.48	74.0	26.52	Peak	100.00	200	Horizontal	Pass
3**	4244.036	38.09	54.0	15.91	AV	100.00	200	Horizontal	Pass
4	7262.325	54.46	74.0	19.54	Peak	36.00	200	Horizontal	Pass
4**	7262.325	44.71	54.0	9.29	AV	36.00	200	Horizontal	Pass
5	10850.210	49.21	74.0	24.79	Peak	90.00	100	Horizontal	Pass
5**	10850.210	39.79	54.0	14.21	AV	90.00	100	Horizontal	Pass
6	17543.434	54.38	74.0	19.62	Peak	233.00	300	Horizontal	Pass
6**	17543.434	43.94	54.0	10.06	AV	233.00	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	1312.033	44.50	74.0	29.50	Peak	187.00	300	Vertical	Pass
1**	1312.033	34.82	54.0	19.18	AV	187.00	300	Vertical	Pass
2	2659.333	56.28	74.0	17.72	Peak	326.00	100	Vertical	Pass
2**	2659.333	45.46	54.0	8.54	AV	326.00	100	Vertical	Pass
3	4825.872	52.28	74.0	21.72	Peak	241.00	200	Vertical	Pass
3**	4825.872	49.36	54.0	4.64	AV	241.00	200	Vertical	Pass
4	7992.925	55.75	74.0	18.25	Peak	218.00	400	Vertical	Pass
4**	7992.925	46.81	54.0	7.19	AV	218.00	400	Vertical	Pass
5	10895.664	49.40	74.0	24.60	Peak	92.00	300	Vertical	Pass
5**	10895.664	39.56	54.0	14.44	AV	92.00	300	Vertical	Pass
6	17470.110	53.19	74.0	20.81	Peak	300.00	100	Vertical	Pass
6**	17470.110	42.99	54.0	11.02	AV	300.00	100	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	1527.878	43.99	74.0	30.01	Peak	168.00	400	Horizontal	Pass
1**	1527.878	33.73	54.0	20.27	AV	168.00	400	Horizontal	Pass
2	2973.525	53.97	74.0	20.03	Peak	179.00	100	Horizontal	Pass
2**	2973.525	44.83	54.0	9.17	AV	179.00	100	Horizontal	Pass
3	4242.427	47.50	74.0	26.50	Peak	217.00	200	Horizontal	Pass
3**	4242.427	38.26	54.0	15.74	AV	217.00	200	Horizontal	Pass
4	7264.485	54.17	74.0	19.83	Peak	152.00	100	Horizontal	Pass
4**	7264.485	44.28	54.0	9.72	AV	152.00	100	Horizontal	Pass
5	10849.954	49.18	74.0	24.82	Peak	36.00	400	Horizontal	Pass
5**	10849.954	40.19	54.0	13.81	AV	36.00	400	Horizontal	Pass
6	17540.066	54.06	74.0	19.94	Peak	142.00	300	Horizontal	Pass
6**	17540.066	43.98	54.0	10.02	AV	142.00	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	1309.013	44.34	74.0	29.66	Peak	46.00	300	Vertical	Pass
1**	1309.013	34.77	54.0	19.23	AV	46.00	300	Vertical	Pass
2	2664.355	56.01	74.0	17.99	Peak	228.00	400	Vertical	Pass
2**	2664.355	44.65	54.0	9.35	AV	228.00	400	Vertical	Pass
3	4827.106	51.45	74.0	22.55	Peak	203.00	200	Vertical	Pass
3**	4827.106	49.17	54.0	4.83	AV	203.00	200	Vertical	Pass
4	7989.144	55.66	74.0	18.34	Peak	175.00	100	Vertical	Pass
4**	7989.144	46.64	54.0	7.36	AV	175.00	100	Vertical	Pass
5	10888.292	48.11	74.0	25.89	Peak	171.00	300	Vertical	Pass
5**	10888.292	38.88	54.0	15.12	AV	171.00	300	Vertical	Pass
6	17466.347	52.32	74.0	21.68	Peak	283.00	100	Vertical	Pass
6**	17466.347	42.41	54.0	11.60	AV	283.00	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	1527.172	44.31	74.0	29.69	Peak	250.00	300	Horizontal	Pass
1**	1527.172	33.47	54.0	20.53	AV	250.00	300	Horizontal	Pass
2	2978.606	53.57	74.0	20.43	Peak	126.00	200	Horizontal	Pass
2**	2978.606	44.14	54.0	9.86	AV	126.00	200	Horizontal	Pass
3	4249.694	47.06	74.0	26.94	Peak	167.00	200	Horizontal	Pass
3**	4249.694	37.30	54.0	16.70	AV	167.00	200	Horizontal	Pass
4	7261.682	54.37	74.0	19.63	Peak	16.00	200	Horizontal	Pass
4**	7261.682	44.66	54.0	9.34	AV	16.00	200	Horizontal	Pass
5	10850.230	48.09	74.0	25.91	Peak	346.00	400	Horizontal	Pass
5**	10850.230	39.13	54.0	14.87	AV	346.00	400	Horizontal	Pass
6	17544.091	53.17	74.0	20.83	Peak	336.00	100	Horizontal	Pass
6**	17544.091	43.68	54.0	10.32	AV	336.00	100	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	1313.350	44.11	74.0	29.89	Peak	341.00	300	Vertical	Pass
1**	1313.350	33.86	54.0	20.14	AV	341.00	300	Vertical	Pass
2	2661.034	56.03	74.0	17.97	Peak	146.00	400	Vertical	Pass
2**	2661.034	44.81	54.0	9.19	AV	146.00	400	Vertical	Pass
3	4820.572	51.33	74.0	22.67	Peak	253.00	200	Vertical	Pass
3**	4820.572	48.56	54.0	5.44	AV	253.00	200	Vertical	Pass
4	7989.754	55.20	74.0	18.80	Peak	28.00	400	Vertical	Pass
4**	7989.754	45.97	54.0	8.03	AV	28.00	400	Vertical	Pass
5	10890.017	49.17	74.0	24.83	Peak	100.00	300	Vertical	Pass
5**	10890.017	39.10	54.0	14.90	AV	100.00	300	Vertical	Pass
6	17470.812	53.06	74.0	20.94	Peak	193.00	300	Vertical	Pass
6**	17470.812	42.13	54.0	11.88	AV	193.00	300	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	1531.870	44.02	74.0	29.98	Peak	34.00	200	Horizontal	Pass
1**	1531.870	33.38	54.0	20.62	AV	34.00	200	Horizontal	Pass
2	2972.544	53.51	74.0	20.49	Peak	23.00	400	Horizontal	Pass
2**	2972.544	44.81	54.0	9.19	AV	23.00	400	Horizontal	Pass
3	4245.877	46.72	74.0	27.28	Peak	130.00	200	Horizontal	Pass
3**	4245.877	37.60	54.0	16.40	AV	130.00	200	Horizontal	Pass
4	7263.904	54.30	74.0	19.70	Peak	44.00	300	Horizontal	Pass
4**	7263.904	44.08	54.0	9.92	AV	44.00	300	Horizontal	Pass
5	10851.121	48.85	74.0	25.15	Peak	281.00	300	Horizontal	Pass
5**	10851.121	39.12	54.0	14.88	AV	281.00	300	Horizontal	Pass
6	17541.229	53.49	74.0	20.51	Peak	153.00	100	Horizontal	Pass
6**	17541.229	43.18	54.0	10.82	AV	153.00	100	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	1311.577	44.33	74.0	29.67	Peak	235.00	100	Vertical	Pass
1**	1311.577	34.77	54.0	19.24	AV	235.00	100	Vertical	Pass
2	2658.697	55.92	74.0	18.08	Peak	270.00	400	Vertical	Pass
2**	2658.697	44.58	54.0	9.42	AV	270.00	400	Vertical	Pass
3	4821.171	51.36	74.0	22.64	Peak	50.00	200	Vertical	Pass
3**	4821.171	49.08	54.0	4.92	AV	50.00	200	Vertical	Pass
4	7989.525	55.64	74.0	18.36	Peak	269.00	200	Vertical	Pass
4**	7989.525	46.59	54.0	7.41	AV	269.00	200	Vertical	Pass
5	10894.151	48.08	74.0	25.92	Peak	44.00	200	Vertical	Pass
5**	10894.151	38.84	54.0	15.16	AV	44.00	200	Vertical	Pass
6	17468.703	52.26	74.0	21.75	Peak	109.00	200	Vertical	Pass
6**	17468.703	42.34	54.0	11.66	AV	109.00	200	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	1530.152	43.95	74.0	30.06	Peak	257.00	100	Horizontal	Pass
1**	1530.152	33.68	54.0	20.32	AV	257.00	100	Horizontal	Pass
2	2977.036	53.96	74.0	20.04	Peak	60.00	300	Horizontal	Pass
2**	2977.036	44.81	54.0	9.19	AV	60.00	300	Horizontal	Pass
3	4246.217	47.45	74.0	26.55	Peak	193.00	200	Horizontal	Pass
3**	4246.217	38.25	54.0	15.75	AV	193.00	200	Horizontal	Pass
4	7264.309	54.10	74.0	19.90	Peak	53.00	200	Horizontal	Pass
4**	7264.309	44.24	54.0	9.76	AV	53.00	200	Horizontal	Pass
5	10851.178	49.11	74.0	24.89	Peak	313.00	400	Horizontal	Pass
5**	10851.178	40.15	54.0	13.86	AV	313.00	400	Horizontal	Pass
6	17542.120	53.99	74.0	20.01	Peak	52.00	200	Horizontal	Pass
6**	17542.120	43.91	54.0	10.09	AV	52.00	200	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	1305.480	44.04	74.0	29.96	Peak	235.00	100	Vertical	Pass
1**	1305.480	33.76	54.0	20.24	AV	235.00	100	Vertical	Pass
2	2658.510	55.99	74.0	18.01	Peak	179.00	300	Vertical	Pass
2**	2658.510	44.76	54.0	9.24	AV	179.00	300	Vertical	Pass
3	4822.862	51.29	74.0	22.71	Peak	170.00	200	Vertical	Pass
3**	4822.862	48.54	54.0	5.46	AV	170.00	200	Vertical	Pass
4	7991.866	55.19	74.0	18.81	Peak	260.00	200	Vertical	Pass
4**	7991.866	45.92	54.0	8.09	AV	260.00	200	Vertical	Pass
5	10890.113	49.08	74.0	24.92	Peak	187.00	300	Vertical	Pass
5**	10890.113	39.05	54.0	14.95	AV	187.00	300	Vertical	Pass
6	17469.742	52.97	74.0	21.03	Peak	66.00	100	Vertical	Pass
6**	17469.742	42.12	54.0	11.88	AV	66.00	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	1528.645	44.41	74.0	29.59	Peak	232.00	200	Horizontal	Pass
1**	1528.645	34.69	54.0	19.31	AV	232.00	200	Horizontal	Pass
2	2979.968	54.76	74.0	19.24	Peak	303.00	100	Horizontal	Pass
2**	2979.968	45.78	54.0	8.22	AV	303.00	100	Horizontal	Pass
3	4249.610	48.19	74.0	25.81	Peak	127.00	200	Horizontal	Pass
3**	4249.610	38.57	54.0	15.43	AV	127.00	200	Horizontal	Pass
4	7264.318	55.08	74.0	18.92	Peak	131.00	100	Horizontal	Pass
4**	7264.318	45.06	54.0	8.94	AV	131.00	100	Horizontal	Pass
5	10854.905	49.57	74.0	24.43	Peak	318.00	300	Horizontal	Pass
5**	10854.905	40.62	54.0	13.38	AV	318.00	300	Horizontal	Pass
6	17544.483	54.65	74.0	19.35	Peak	42.00	400	Horizontal	Pass
6**	17544.483	44.78	54.0	9.22	AV	42.00	400	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	1309.226	44.03	74.0	29.97	Peak	51.00	300	Vertical	Pass
1**	1309.226	34.20	54.0	19.81	AV	51.00	300	Vertical	Pass
2	2657.251	55.81	74.0	18.19	Peak	314.00	100	Vertical	Pass
2**	2657.251	44.36	54.0	9.64	AV	314.00	100	Vertical	Pass
3	4823.861	50.98	74.0	23.02	Peak	53.00	200	Vertical	Pass
3**	4823.861	49.06	54.0	4.94	AV	53.00	200	Vertical	Pass
4	7990.293	55.27	74.0	18.73	Peak	6.00	100	Vertical	Pass
4**	7990.293	46.32	54.0	7.68	AV	6.00	100	Vertical	Pass
5	10890.914	47.47	74.0	26.53	Peak	166.00	400	Vertical	Pass
5**	10890.914	38.50	54.0	15.50	AV	166.00	400	Vertical	Pass
6	17471.351	51.93	74.0	22.08	Peak	64.00	200	Vertical	Pass
6**	17471.351	42.27	54.0	11.73	AV	64.00	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	1531.035	44.40	74.0	29.60	Peak	70.00	300	Horizontal	Pass
1**	1531.035	34.66	54.0	19.35	AV	70.00	300	Horizontal	Pass
2	2977.194	54.68	74.0	19.32	Peak	51.00	400	Horizontal	Pass
2**	2977.194	45.81	54.0	8.19	AV	51.00	400	Horizontal	Pass
3	4243.136	48.15	74.0	25.85	Peak	69.00	200	Horizontal	Pass
3**	4243.136	38.48	54.0	15.52	AV	69.00	200	Horizontal	Pass
4	7263.528	55.10	74.0	18.91	Peak	150.00	200	Horizontal	Pass
4**	7263.528	45.10	54.0	8.90	AV	150.00	200	Horizontal	Pass
5	10855.245	49.57	74.0	24.43	Peak	49.00	100	Horizontal	Pass
5**	10855.245	40.60	54.0	13.40	AV	49.00	100	Horizontal	Pass
6	17539.651	54.65	74.0	19.35	Peak	182.00	300	Horizontal	Pass
6**	17539.651	44.73	54.0	9.27	AV	182.00	300	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	1307.078	44.02	74.0	29.98	Peak	316.00	200	Vertical	Pass
1**	1307.078	33.38	54.0	20.62	AV	316.00	200	Vertical	Pass
2	2659.711	55.48	74.0	18.52	Peak	347.00	100	Vertical	Pass
2**	2659.711	44.52	54.0	9.48	AV	347.00	100	Vertical	Pass
3	4825.965	50.96	74.0	23.04	Peak	254.00	200	Vertical	Pass
3**	4825.965	48.40	54.0	5.60	AV	254.00	200	Vertical	Pass
4	7993.565	55.16	74.0	18.84	Peak	115.00	200	Vertical	Pass
4**	7993.565	45.67	54.0	8.34	AV	115.00	200	Vertical	Pass
5	10892.543	49.04	74.0	24.96	Peak	299.00	100	Vertical	Pass
5**	10892.543	38.57	54.0	15.43	AV	299.00	100	Vertical	Pass
6	17467.143	52.36	74.0	21.64	Peak	105.00	200	Vertical	Pass
6**	17467.143	41.97	54.0	12.03	AV	105.00	200	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	1531.052	44.42	74.0	29.58	Peak	93.00	400	Horizontal	Pass
1**	1531.052	34.69	54.0	19.31	AV	93.00	400	Horizontal	Pass
2	2977.149	54.70	74.0	19.30	Peak	263.00	300	Horizontal	Pass
2**	2977.149	45.75	54.0	8.25	AV	263.00	300	Horizontal	Pass
3	4242.845	48.17	74.0	25.83	Peak	200.00	200	Horizontal	Pass
3**	4242.845	38.51	54.0	15.49	AV	200.00	200	Horizontal	Pass
4	7260.873	55.05	74.0	18.95	Peak	313.00	200	Horizontal	Pass
4**	7260.873	45.06	54.0	8.95	AV	313.00	200	Horizontal	Pass
5	10854.559	49.53	74.0	24.47	Peak	75.00	200	Horizontal	Pass
5**	10854.559	40.56	54.0	13.44	AV	75.00	200	Horizontal	Pass
6	17544.290	54.70	74.0	19.31	Peak	156.00	400	Horizontal	Pass
6**	17544.290	44.76	54.0	9.24	AV	156.00	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	1308.622	44.51	74.0	29.49	Peak	213.00	200	Vertical	Pass
1**	1308.622	34.90	54.0	19.10	AV	213.00	200	Vertical	Pass
2	2657.523	56.35	74.0	17.65	Peak	173.00	200	Vertical	Pass
2**	2657.523	45.85	54.0	8.15	AV	173.00	200	Vertical	Pass
3	4822.629	52.48	74.0	21.52	Peak	13.00	200	Vertical	Pass
3**	4822.629	49.29	54.0	4.71	AV	13.00	200	Vertical	Pass
4	7996.197	55.58	74.0	18.42	Peak	114.00	200	Vertical	Pass
4**	7996.197	46.73	54.0	7.27	AV	114.00	200	Vertical	Pass
5	10893.357	48.62	74.0	25.38	Peak	298.00	300	Vertical	Pass
5**	10893.357	39.88	54.0	14.12	AV	298.00	300	Vertical	Pass
6	17468.989	52.34	74.0	21.66	Peak	29.00	400	Vertical	Pass
6**	17468.989	43.72	54.0	10.29	AV	29.00	400	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	1525.416	43.53	74.0	30.47	Peak	141.00	200	Horizontal	Pass
1**	1525.416	33.55	54.0	20.45	AV	141.00	200	Horizontal	Pass
2	2978.953	53.86	74.0	20.14	Peak	272.00	400	Horizontal	Pass
2**	2978.953	44.74	54.0	9.26	AV	272.00	400	Horizontal	Pass
3	4246.345	47.24	74.0	26.76	Peak	110.00	200	Horizontal	Pass
3**	4246.345	37.81	54.0	16.19	AV	110.00	200	Horizontal	Pass
4	7260.389	53.72	74.0	20.28	Peak	215.00	400	Horizontal	Pass
4**	7260.389	44.09	54.0	9.91	AV	215.00	400	Horizontal	Pass
5	10855.306	48.64	74.0	25.36	Peak	9.00	300	Horizontal	Pass
5**	10855.306	39.65	54.0	14.35	AV	9.00	300	Horizontal	Pass
6	17545.538	53.83	74.0	20.17	Peak	167.00	300	Horizontal	Pass
6**	17545.538	44.12	54.0	9.88	AV	167.00	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	1307.233	44.54	74.0	29.46	Peak	239.00	100	Vertical	Pass
1**	1307.233	35.14	54.0	18.86	AV	239.00	100	Vertical	Pass
2	2664.128	55.95	74.0	18.05	Peak	280.00	400	Vertical	Pass
2**	2664.128	45.26	54.0	8.74	AV	280.00	400	Vertical	Pass
3	4825.508	51.31	74.0	22.69	Peak	3.00	200	Vertical	Pass
3**	4825.508	49.46	54.0	4.54	AV	3.00	200	Vertical	Pass
4	7995.384	55.20	74.0	18.80	Peak	307.00	400	Vertical	Pass
4**	7995.384	46.79	54.0	7.21	AV	307.00	400	Vertical	Pass
5	10892.972	48.47	74.0	25.53	Peak	59.00	300	Vertical	Pass
5**	10892.972	38.76	54.0	15.24	AV	59.00	300	Vertical	Pass
6	17471.841	51.59	74.0	22.41	Peak	237.00	200	Vertical	Pass
6**	17471.841	42.36	54.0	11.65	AV	237.00	200	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	1528.819	44.34	74.0	29.66	Peak	356.00	100	Horizontal	Pass
1**	1528.819	34.00	54.0	20.00	AV	356.00	100	Horizontal	Pass
2	2977.558	54.56	74.0	19.44	Peak	231.00	100	Horizontal	Pass
2**	2977.558	45.03	54.0	8.97	AV	231.00	100	Horizontal	Pass
3	4246.922	47.77	74.0	26.23	Peak	84.00	200	Horizontal	Pass
3**	4246.922	38.07	54.0	15.93	AV	84.00	200	Horizontal	Pass
4	7261.855	54.58	74.0	19.42	Peak	230.00	400	Horizontal	Pass
4**	7261.855	44.94	54.0	9.06	AV	230.00	400	Horizontal	Pass
5	10852.586	49.57	74.0	24.43	Peak	232.00	200	Horizontal	Pass
5**	10852.586	39.97	54.0	14.03	AV	232.00	200	Horizontal	Pass
6	17545.843	54.03	74.0	19.97	Peak	293.00	400	Horizontal	Pass
6**	17545.843	44.70	54.0	9.30	AV	293.00	400	Horizontal	Pass

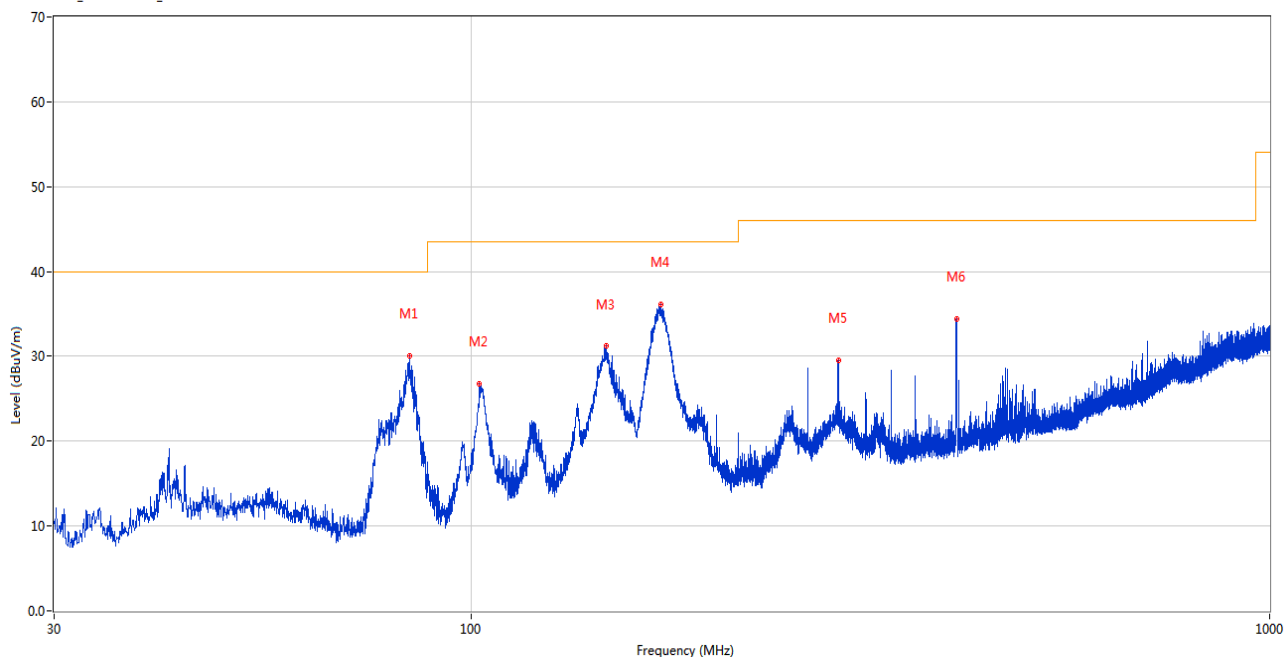
1 GHz to 18 GHz, ANT V 802.11n40 High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1309.589	44.95	74.0	29.05	Peak	56.00	300	Vertical	Pass
1**	1309.589	35.79	54.0	18.21	AV	56.00	300	Vertical	Pass
2	2661.127	56.25	74.0	17.75	Peak	176.00	400	Vertical	Pass
2**	2661.127	45.71	54.0	8.29	AV	176.00	400	Vertical	Pass
3	4825.896	52.58	74.0	21.42	Peak	258.00	200	Vertical	Pass
3**	4825.896	50.10	54.0	3.90	AV	258.00	200	Vertical	Pass
4	7995.303	55.67	74.0	18.33	Peak	275.00	200	Vertical	Pass
4**	7995.303	47.05	54.0	6.95	AV	275.00	200	Vertical	Pass
5	10894.803	48.90	74.0	25.10	Peak	44.00	200	Vertical	Pass
5**	10894.803	39.58	54.0	14.42	AV	44.00	200	Vertical	Pass
6	17466.424	52.43	74.0	21.57	Peak	238.00	400	Vertical	Pass
6**	17466.424	43.90	54.0	10.11	AV	238.00	400	Vertical	Pass

C5M

30 MHz to 1 GHz, ANT H

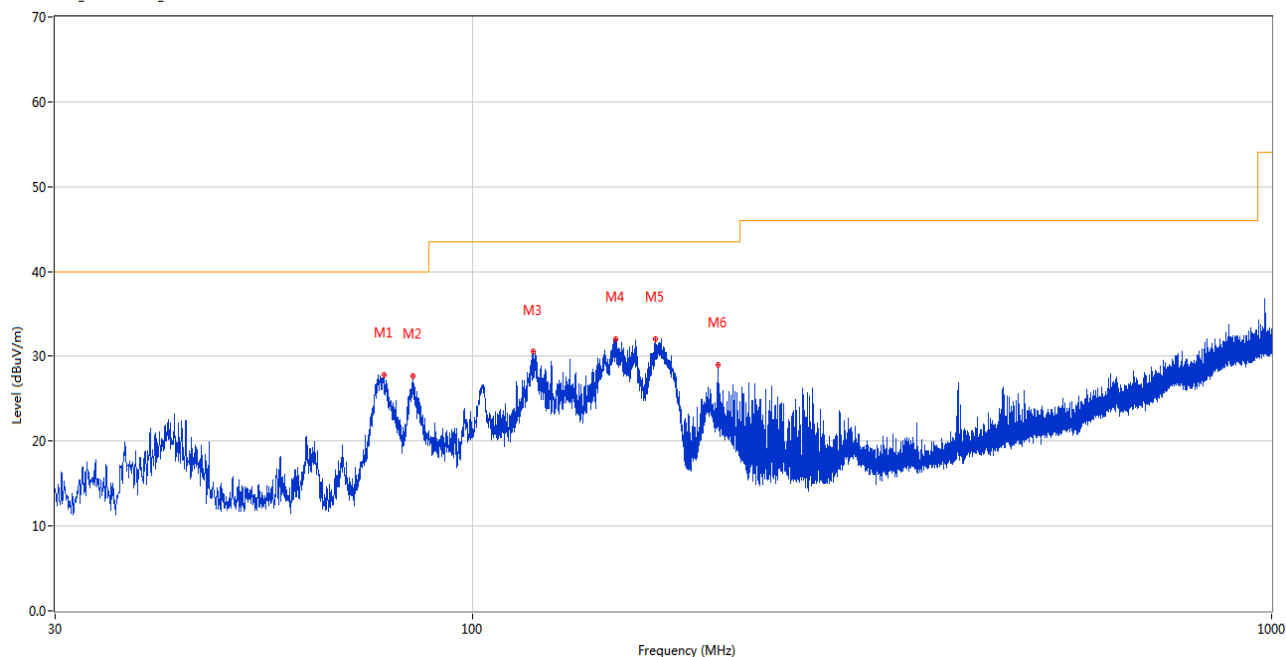
RE Test case_FCC Part 15B_FCC Part 15B Class B 30MHz-1GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	83.689	30.12	-29.82	40.0	9.88	Peak	199.70	200	Horizontal	Pass
2	102.265	26.74	-25.66	43.5	16.76	Peak	0.00	200	Horizontal	Pass
3	147.564	31.18	-28.82	43.5	12.32	Peak	199.70	200	Horizontal	Pass
4	172.542	36.08	-26.85	43.5	7.42	Peak	226.80	200	Horizontal	Pass
5	288.020	29.52	-21.77	46.0	16.48	Peak	13.20	100	Horizontal	Pass
6	405.584	34.45	-18.12	46.0	11.55	Peak	309.00	100	Horizontal	Pass

30 MHz to 1 GHz, ANT V

RE Test case_FCC Part 15B_FCC Part 15B Class B 30MHz-1GHz



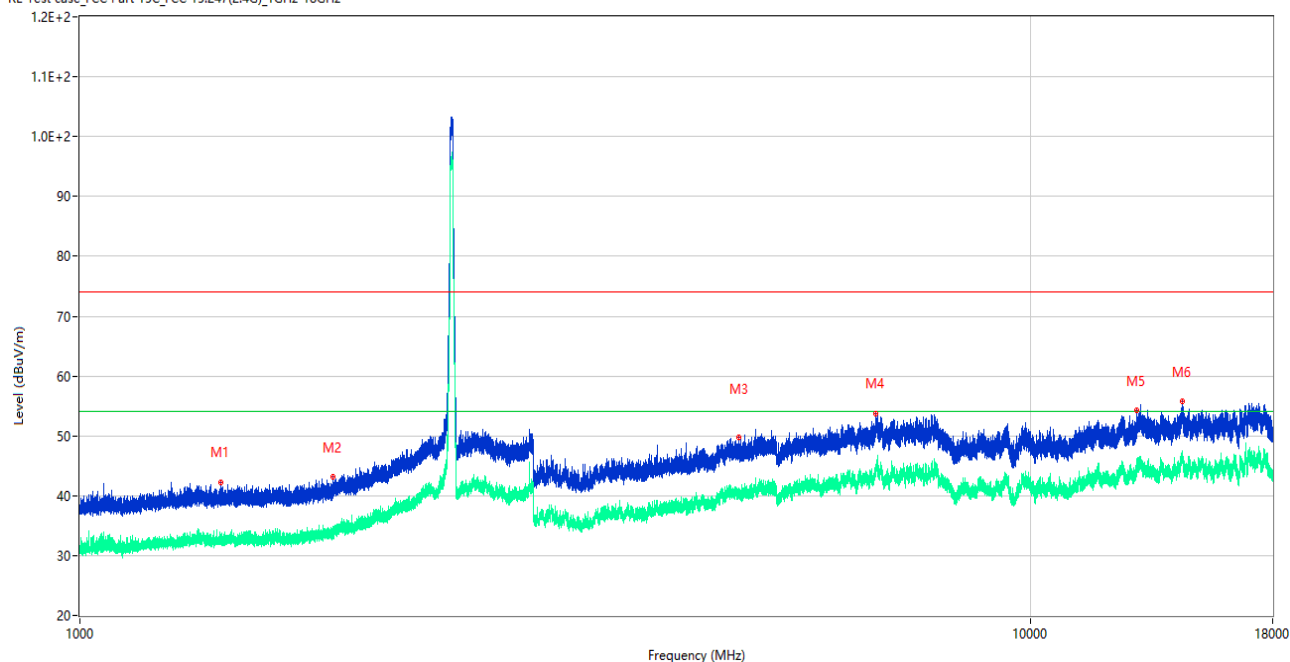
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	77.481	27.83	-30.50	40.0	12.17	Peak	252.20	100	Vertical	Pass
2	84.029	27.64	-29.70	40.0	12.36	Peak	0.00	100	Vertical	Pass
3	118.852	30.53	-26.79	43.5	12.97	Peak	81.90	100	Vertical	Pass
4	150.765	32.09	-28.62	43.5	11.41	Peak	294.20	100	Vertical	Pass
5	169.098	32.01	-27.05	43.5	11.49	Peak	192.50	100	Vertical	Pass
6	202.902	28.99	-24.63	43.5	14.51	Peak	206.90	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	1405.706	42.31	74.0	31.69	Peak	276.00	100	Horizontal	Pass
1**	1405.706	32.23	54.0	21.77	AV	276.00	100	Horizontal	Pass
2	1845.095	43.27	74.0	30.73	Peak	357.00	400	Horizontal	Pass
2**	1845.095	34.03	54.0	19.97	AV	357.00	400	Horizontal	Pass
3	4942.054	50.05	74.0	23.95	Peak	205.00	200	Horizontal	Pass
3**	4942.054	40.13	54.0	13.87	AV	205.00	200	Horizontal	Pass
4	6887.103	53.91	74.0	20.09	Peak	183.00	400	Horizontal	Pass
4**	6887.103	44.64	54.0	9.36	AV	183.00	400	Horizontal	Pass
5	12953.240	54.36	74.0	19.64	Peak	102.00	400	Horizontal	Pass
5**	12953.240	44.37	54.0	9.63	AV	102.00	400	Horizontal	Pass
6	14450.159	55.79	74.0	18.21	Peak	14.00	200	Horizontal	Pass
6**	14450.159	46.41	54.0	7.59	AV	14.00	200	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	1170.313	51.94	74.0	22.06	Peak	289.00	100	Vertical	Pass
1**	1170.313	35.26	54.0	18.74	AV	289.00	100	Vertical	Pass
2	1329.606	45.23	74.0	28.77	Peak	282.00	300	Vertical	Pass
2**	1329.606	33.43	54.0	20.57	AV	282.00	300	Vertical	Pass
3	4742.593	49.51	74.0	24.50	Peak	344.00	200	Vertical	Pass
3**	4742.593	40.69	54.0	13.31	AV	344.00	200	Vertical	Pass
4	7597.622	54.30	74.0	19.70	Peak	257.00	400	Vertical	Pass
4**	7597.622	44.01	54.0	10.00	AV	257.00	400	Vertical	Pass
5	12474.301	54.07	74.0	19.93	Peak	161.00	300	Vertical	Pass
5**	12474.301	44.55	54.0	9.45	AV	161.00	300	Vertical	Pass
6	14446.565	55.63	74.0	18.37	Peak	159.00	300	Vertical	Pass
6**	14446.565	46.22	54.0	7.78	AV	159.00	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	1241.786	41.37	74.0	32.63	Peak	54.00	200	Horizontal	Pass
1**	1241.786	32.02	54.0	21.98	AV	54.00	200	Horizontal	Pass
2	1905.692	42.83	74.0	31.17	Peak	102.00	100	Horizontal	Pass
2**	1905.692	33.10	54.0	20.90	AV	102.00	100	Horizontal	Pass
3	4875.522	48.51	74.0	25.49	Peak	291.00	200	Horizontal	Pass
3**	4875.522	40.51	54.0	13.49	AV	291.00	200	Horizontal	Pass
4	7976.828	53.37	74.0	20.63	Peak	63.00	400	Horizontal	Pass
4**	7976.828	44.51	54.0	9.49	AV	63.00	400	Horizontal	Pass
5	12936.489	52.95	74.0	21.05	Peak	254.00	300	Horizontal	Pass
5**	12936.489	44.22	54.0	9.78	AV	254.00	300	Horizontal	Pass
6	17402.019	55.19	74.0	18.81	Peak	334.00	300	Horizontal	Pass
6**	17402.019	46.16	54.0	7.84	AV	334.00	300	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	1163.821	51.62	74.0	22.38	Peak	127.00	400	Vertical	Pass
1**	1163.821	35.25	54.0	18.75	AV	127.00	400	Vertical	Pass
2	1333.513	44.63	74.0	29.37	Peak	197.00	100	Vertical	Pass
2**	1333.513	32.44	54.0	21.56	AV	197.00	100	Vertical	Pass
3	4741.949	49.21	74.0	24.80	Peak	332.00	200	Vertical	Pass
3**	4741.949	39.95	54.0	14.05	AV	332.00	200	Vertical	Pass

4	7590.549	54.02	74.0	19.98	Peak	215.00	100	Vertical	Pass
4**	7590.549	43.15	54.0	10.86	AV	215.00	100	Vertical	Pass
5	12473.499	53.19	74.0	20.81	Peak	332.00	200	Vertical	Pass
5**	12473.499	44.38	54.0	9.62	AV	332.00	200	Vertical	Pass
6	14451.334	55.34	74.0	18.66	Peak	18.00	200	Vertical	Pass
6**	14451.334	45.59	54.0	8.41	AV	18.00	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	1241.897	41.32	74.0	32.68	Peak	64.00	100	Horizontal	Pass
1**	1241.897	32.02	54.0	21.98	AV	64.00	100	Horizontal	Pass
2	1903.888	43.20	74.0	30.80	Peak	230.00	400	Horizontal	Pass
2**	1903.888	34.04	54.0	19.96	AV	230.00	400	Horizontal	Pass
3	4876.336	48.49	74.0	25.51	Peak	50.00	200	Horizontal	Pass
3**	4876.336	40.47	54.0	13.53	AV	50.00	200	Horizontal	Pass
4	7978.456	54.32	74.0	19.68	Peak	280.00	300	Horizontal	Pass
4**	7978.456	43.85	54.0	10.15	AV	280.00	300	Horizontal	Pass
5	12933.321	53.04	74.0	20.96	Peak	138.00	200	Horizontal	Pass
5**	12933.321	44.18	54.0	9.82	AV	138.00	200	Horizontal	Pass
6	17405.634	54.62	74.0	19.38	Peak	202.00	100	Horizontal	Pass
6**	17405.634	45.64	54.0	8.36	AV	202.00	100	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	1166.603	51.45	74.0	22.55	Peak	326.00	400	Vertical	Pass
1**	1166.603	34.94	54.0	19.06	AV	326.00	400	Vertical	Pass
2	1332.962	45.21	74.0	28.79	Peak	97.00	400	Vertical	Pass
2**	1332.962	32.99	54.0	21.01	AV	97.00	400	Vertical	Pass
3	4736.257	49.16	74.0	24.85	Peak	94.00	200	Vertical	Pass
3**	4736.257	40.65	54.0	13.35	AV	94.00	200	Vertical	Pass
4	7593.011	54.09	74.0	19.91	Peak	74.00	200	Vertical	Pass
4**	7593.011	43.76	54.0	10.25	AV	74.00	200	Vertical	Pass
5	12476.540	53.27	74.0	20.73	Peak	207.00	300	Vertical	Pass
5**	12476.540	44.05	54.0	9.95	AV	207.00	300	Vertical	Pass
6	14447.543	55.19	74.0	18.81	Peak	128.00	100	Vertical	Pass
6**	14447.543	45.35	54.0	8.65	AV	128.00	100	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	1235.722	41.31	74.0	32.69	Peak	236.00	200	Horizontal	Pass
1**	1235.722	31.76	54.0	22.24	AV	236.00	200	Horizontal	Pass
2	1908.498	43.03	74.0	30.97	Peak	134.00	100	Horizontal	Pass
2**	1908.498	33.96	54.0	20.04	AV	134.00	100	Horizontal	Pass
3	4875.457	48.77	74.0	25.23	Peak	300.00	200	Horizontal	Pass
3**	4875.457	40.46	54.0	13.54	AV	300.00	200	Horizontal	Pass
4	7980.356	53.82	74.0	20.18	Peak	349.00	300	Horizontal	Pass
4**	7980.356	44.68	54.0	9.32	AV	349.00	300	Horizontal	Pass
5	12934.222	52.67	74.0	21.33	Peak	26.00	300	Horizontal	Pass
5**	12934.222	44.33	54.0	9.67	AV	26.00	300	Horizontal	Pass
6	17401.410	55.10	74.0	18.90	Peak	56.00	300	Horizontal	Pass
6**	17401.410	46.22	54.0	7.78	AV	56.00	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	1162.480	51.36	74.0	22.64	Peak	137.00	100	Vertical	Pass
1**	1162.480	34.50	54.0	19.50	AV	137.00	100	Vertical	Pass
2	1330.772	44.01	74.0	29.99	Peak	115.00	100	Vertical	Pass
2**	1330.772	31.90	54.0	22.10	AV	115.00	100	Vertical	Pass
3	4739.208	48.76	74.0	25.25	Peak	207.00	200	Vertical	Pass
3**	4739.208	39.05	54.0	14.95	AV	207.00	200	Vertical	Pass
4	7591.693	53.88	74.0	20.12	Peak	238.00	300	Vertical	Pass
4**	7591.693	42.98	54.0	11.03	AV	238.00	300	Vertical	Pass
5	12473.004	52.58	74.0	21.42	Peak	74.00	200	Vertical	Pass
5**	12473.004	43.63	54.0	10.37	AV	74.00	200	Vertical	Pass
6	14445.366	55.09	74.0	18.91	Peak	174.00	200	Vertical	Pass
6**	14445.366	44.89	54.0	9.11	AV	174.00	200	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	1239.330	40.86	74.0	33.14	Peak	277.00	100	Horizontal	Pass
1**	1239.330	31.99	54.0	22.01	AV	277.00	100	Horizontal	Pass
2	1908.161	42.72	74.0	31.28	Peak	304.00	300	Horizontal	Pass
2**	1908.161	32.26	54.0	21.74	AV	304.00	300	Horizontal	Pass
3	4873.967	47.81	74.0	26.19	Peak	68.00	200	Horizontal	Pass
3**	4873.967	39.90	54.0	14.10	AV	68.00	200	Horizontal	Pass
4	7981.940	53.27	74.0	20.73	Peak	292.00	100	Horizontal	Pass
4**	7981.940	44.01	54.0	9.99	AV	292.00	100	Horizontal	Pass
5	12937.278	52.36	74.0	21.64	Peak	256.00	300	Horizontal	Pass
5**	12937.278	44.15	54.0	9.85	AV	256.00	300	Horizontal	Pass
6	17402.567	54.33	74.0	19.67	Peak	275.00	400	Horizontal	Pass
6**	17402.567	46.03	54.0	7.97	AV	275.00	400	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	1162.871	51.33	74.0	22.67	Peak	76.00	200	Vertical	Pass
1**	1162.871	34.04	54.0	19.96	AV	76.00	200	Vertical	Pass
2	1334.176	45.04	74.0	28.96	Peak	182.00	300	Vertical	Pass
2**	1334.176	32.72	54.0	21.28	AV	182.00	300	Vertical	Pass
3	4737.601	48.25	74.0	25.76	Peak	259.00	200	Vertical	Pass
3**	4737.601	40.43	54.0	13.57	AV	259.00	200	Vertical	Pass
4	7596.983	53.09	74.0	20.91	Peak	221.00	300	Vertical	Pass
4**	7596.983	43.62	54.0	10.39	AV	221.00	300	Vertical	Pass
5	12477.651	53.12	74.0	20.88	Peak	265.00	300	Vertical	Pass
5**	12477.651	43.46	54.0	10.54	AV	265.00	300	Vertical	Pass
6	14450.070	54.68	74.0	19.32	Peak	291.00	100	Vertical	Pass
6**	14450.070	44.89	54.0	9.11	AV	291.00	100	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	1242.475	40.35	74.0	33.65	Peak	242.00	200	Horizontal	Pass
1**	1242.475	31.49	54.0	22.51	AV	242.00	200	Horizontal	Pass
2	1906.805	42.37	74.0	31.63	Peak	8.00	300	Horizontal	Pass
2**	1906.805	33.24	54.0	20.76	AV	8.00	300	Horizontal	Pass
3	4876.003	48.36	74.0	25.64	Peak	237.00	200	Horizontal	Pass
3**	4876.003	40.25	54.0	13.75	AV	237.00	200	Horizontal	Pass
4	7983.933	53.69	74.0	20.31	Peak	290.00	100	Horizontal	Pass
4**	7983.933	42.91	54.0	11.09	AV	290.00	100	Horizontal	Pass
5	12935.246	52.19	74.0	21.81	Peak	173.00	300	Horizontal	Pass
5**	12935.246	43.54	54.0	10.46	AV	173.00	300	Horizontal	Pass
6	17405.669	54.18	74.0	19.82	Peak	118.00	200	Horizontal	Pass
6**	17405.669	45.50	54.0	8.50	AV	118.00	200	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	1167.353	51.34	74.0	22.66	Peak	17.00	200	Vertical	Pass
1**	1167.353	34.47	54.0	19.53	AV	17.00	200	Vertical	Pass
2	1333.995	43.95	74.0	30.05	Peak	94.00	200	Vertical	Pass
2**	1333.995	31.89	54.0	22.11	AV	94.00	200	Vertical	Pass
3	4742.872	48.69	74.0	25.31	Peak	319.00	200	Vertical	Pass
3**	4742.872	38.99	54.0	15.01	AV	319.00	200	Vertical	Pass
4	7594.141	53.80	74.0	20.20	Peak	138.00	300	Vertical	Pass
4**	7594.141	42.92	54.0	11.08	AV	138.00	300	Vertical	Pass
5	12474.275	52.49	74.0	21.51	Peak	182.00	400	Vertical	Pass
5**	12474.275	43.57	54.0	10.43	AV	182.00	400	Vertical	Pass
6	14452.846	55.00	74.0	19.00	Peak	271.00	200	Vertical	Pass
6**	14452.846	44.85	54.0	9.15	AV	271.00	200	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	1238.088	41.21	74.0	32.79	Peak	175.00	300	Horizontal	Pass
1**	1238.088	31.76	54.0	22.24	AV	175.00	300	Horizontal	Pass
2	1907.712	43.00	74.0	31.00	Peak	207.00	200	Horizontal	Pass
2**	1907.712	33.88	54.0	20.13	AV	207.00	200	Horizontal	Pass
3	4876.147	48.70	74.0	25.30	Peak	9.00	200	Horizontal	Pass
3**	4876.147	40.45	54.0	13.55	AV	9.00	200	Horizontal	Pass
4	7977.098	53.73	74.0	20.27	Peak	125.00	100	Horizontal	Pass
4**	7977.098	44.63	54.0	9.37	AV	125.00	100	Horizontal	Pass
5	12932.785	52.64	74.0	21.37	Peak	73.00	100	Horizontal	Pass
5**	12932.785	44.31	54.0	9.69	AV	73.00	100	Horizontal	Pass
6	17402.824	55.08	74.0	18.92	Peak	151.00	100	Horizontal	Pass
6**	17402.824	46.15	54.0	7.85	AV	151.00	100	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	1167.475	51.24	74.0	22.76	Peak	240.00	200	Vertical	Pass
1**	1167.475	34.01	54.0	20.00	AV	240.00	200	Vertical	Pass
2	1332.514	45.01	74.0	28.99	Peak	338.00	400	Vertical	Pass
2**	1332.514	32.69	54.0	21.31	AV	338.00	400	Vertical	Pass
3	4740.950	48.20	74.0	25.80	Peak	243.00	200	Vertical	Pass
3**	4740.950	40.40	54.0	13.60	AV	243.00	200	Vertical	Pass
4	7596.025	53.03	74.0	20.97	Peak	92.00	300	Vertical	Pass
4**	7596.025	43.58	54.0	10.42	AV	92.00	300	Vertical	Pass
5	12472.029	53.10	74.0	20.90	Peak	335.00	200	Vertical	Pass
5**	12472.029	43.41	54.0	10.59	AV	335.00	200	Vertical	Pass
6	14452.679	54.59	74.0	19.41	Peak	261.00	200	Vertical	Pass
6**	14452.679	44.84	54.0	9.16	AV	261.00	200	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	1238.904	41.94	74.0	32.06	Peak	122.00	300	Horizontal	Pass
1**	1238.904	32.38	54.0	21.62	AV	122.00	300	Horizontal	Pass
2	1901.583	43.62	74.0	30.38	Peak	142.00	300	Horizontal	Pass
2**	1901.583	34.01	54.0	19.99	AV	142.00	300	Horizontal	Pass
3	4869.330	49.43	74.0	24.57	Peak	59.00	200	Horizontal	Pass
3**	4869.330	40.68	54.0	13.32	AV	59.00	200	Horizontal	Pass
4	7981.103	54.35	74.0	19.66	Peak	149.00	100	Horizontal	Pass
4**	7981.103	44.81	54.0	9.19	AV	149.00	100	Horizontal	Pass
5	12934.569	53.46	74.0	20.54	Peak	283.00	300	Horizontal	Pass
5**	12934.569	44.61	54.0	9.40	AV	283.00	300	Horizontal	Pass
6	17408.931	55.54	74.0	18.46	Peak	80.00	400	Horizontal	Pass
6**	17408.931	46.59	54.0	7.41	AV	80.00	400	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	1168.204	50.57	74.0	23.43	Peak	138.00	300	Vertical	Pass
1**	1168.204	33.89	54.0	20.11	AV	138.00	300	Vertical	Pass
2	1331.439	43.62	74.0	30.38	Peak	176.00	400	Vertical	Pass
2**	1331.439	31.77	54.0	22.23	AV	176.00	400	Vertical	Pass
3	4737.229	48.57	74.0	25.43	Peak	328.00	200	Vertical	Pass
3**	4737.229	38.25	54.0	15.75	AV	328.00	200	Vertical	Pass
4	7591.327	53.20	74.0	20.80	Peak	110.00	400	Vertical	Pass
4**	7591.327	42.12	54.0	11.88	AV	110.00	400	Vertical	Pass
5	12476.167	52.21	74.0	21.79	Peak	98.00	200	Vertical	Pass
5**	12476.167	42.66	54.0	11.34	AV	98.00	200	Vertical	Pass
6	14450.893	54.44	74.0	19.56	Peak	242.00	400	Vertical	Pass
6**	14450.893	43.95	54.0	10.05	AV	242.00	400	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	1238.159	41.98	74.0	32.02	Peak	285.00	200	Horizontal	Pass
1**	1238.159	32.36	54.0	21.64	AV	285.00	200	Horizontal	Pass
2	1907.970	43.56	74.0	30.44	Peak	107.00	100	Horizontal	Pass
2**	1907.970	34.02	54.0	19.98	AV	107.00	100	Horizontal	Pass
3	4872.846	49.37	74.0	24.63	Peak	234.00	200	Horizontal	Pass
3**	4872.846	40.63	54.0	13.37	AV	234.00	200	Horizontal	Pass
4	7978.557	54.36	74.0	19.64	Peak	22.00	100	Horizontal	Pass
4**	7978.557	44.72	54.0	9.28	AV	22.00	100	Horizontal	Pass
5	12933.354	53.43	74.0	20.58	Peak	94.00	300	Horizontal	Pass
5**	12933.354	44.57	54.0	9.44	AV	94.00	300	Horizontal	Pass
6	17408.623	55.54	74.0	18.46	Peak	136.00	100	Horizontal	Pass
6**	17408.623	46.61	54.0	7.40	AV	136.00	100	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	1164.590	51.17	74.0	22.83	Peak	310.00	400	Vertical	Pass
1**	1164.590	33.25	54.0	20.76	AV	310.00	400	Vertical	Pass
2	1330.274	44.23	74.0	29.77	Peak	308.00	400	Vertical	Pass
2**	1330.274	32.22	54.0	21.78	AV	308.00	400	Vertical	Pass
3	4743.163	47.37	74.0	26.63	Peak	176.00	200	Vertical	Pass
3**	4743.163	39.74	54.0	14.26	AV	176.00	200	Vertical	Pass
4	7594.043	52.49	74.0	21.51	Peak	317.00	400	Vertical	Pass
4**	7594.043	42.75	54.0	11.25	AV	317.00	400	Vertical	Pass
5	12472.996	52.56	74.0	21.44	Peak	153.00	200	Vertical	Pass
5**	12472.996	42.78	54.0	11.22	AV	153.00	200	Vertical	Pass
6	14449.572	53.87	74.0	20.13	Peak	335.00	100	Vertical	Pass
6**	14449.572	44.07	54.0	9.93	AV	335.00	100	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	1236.453	41.97	74.0	32.03	Peak	346.00	100	Horizontal	Pass
1**	1236.453	32.37	54.0	21.63	AV	346.00	100	Horizontal	Pass
2	1902.981	43.59	74.0	30.41	Peak	285.00	400	Horizontal	Pass
2**	1902.981	34.05	54.0	19.95	AV	285.00	400	Horizontal	Pass
3	4870.359	49.40	74.0	24.60	Peak	262.00	200	Horizontal	Pass
3**	4870.359	40.67	54.0	13.33	AV	262.00	200	Horizontal	Pass
4	7981.984	54.27	74.0	19.73	Peak	263.00	200	Horizontal	Pass
4**	7981.984	44.78	54.0	9.22	AV	263.00	200	Horizontal	Pass
5	12935.709	53.48	74.0	20.52	Peak	228.00	100	Horizontal	Pass
5**	12935.709	44.51	54.0	9.49	AV	228.00	100	Horizontal	Pass
6	17405.559	55.49	74.0	18.51	Peak	172.00	200	Horizontal	Pass
6**	17405.559	46.52	54.0	7.48	AV	172.00	200	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	1164.353	51.79	74.0	22.21	Peak	59.00	200	Vertical	Pass
1**	1164.353	34.77	54.0	19.23	AV	59.00	200	Vertical	Pass
2	1332.379	44.66	74.0	29.34	Peak	255.00	300	Vertical	Pass
2**	1332.379	33.30	54.0	20.70	AV	255.00	300	Vertical	Pass
3	4740.771	49.06	74.0	24.95	Peak	284.00	200	Vertical	Pass
3**	4740.771	40.41	54.0	13.59	AV	284.00	200	Vertical	Pass
4	7592.458	53.99	74.0	20.01	Peak	89.00	100	Vertical	Pass
4**	7592.458	43.37	54.0	10.64	AV	89.00	100	Vertical	Pass
5	12478.395	53.21	74.0	20.79	Peak	305.00	200	Vertical	Pass
5**	12478.395	44.30	54.0	9.70	AV	305.00	200	Vertical	Pass
6	14453.094	54.90	74.0	19.10	Peak	309.00	300	Vertical	Pass
6**	14453.094	46.14	54.0	7.86	AV	309.00	300	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	1238.870	40.37	74.0	33.63	Peak	222.00	200	Horizontal	Pass
1**	1238.870	31.50	54.0	22.50	AV	222.00	200	Horizontal	Pass
2	1902.416	41.96	74.0	32.04	Peak	162.00	100	Horizontal	Pass
2**	1902.416	32.58	54.0	21.42	AV	162.00	100	Horizontal	Pass
3	4870.679	47.69	74.0	26.31	Peak	8.00	200	Horizontal	Pass
3**	4870.679	39.66	54.0	14.34	AV	8.00	200	Horizontal	Pass
4	7981.988	52.62	74.0	21.38	Peak	109.00	100	Horizontal	Pass
4**	7981.988	43.92	54.0	10.08	AV	109.00	100	Horizontal	Pass
5	12934.219	52.65	74.0	21.35	Peak	34.00	300	Horizontal	Pass
5**	12934.219	44.14	54.0	9.86	AV	34.00	300	Horizontal	Pass
6	17406.092	54.58	74.0	19.42	Peak	264.00	100	Horizontal	Pass
6**	17406.092	45.30	54.0	8.70	AV	264.00	100	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	1162.471	51.23	74.0	22.77	Peak	259.00	100	Vertical	Pass
1**	1162.471	34.74	54.0	19.26	AV	259.00	100	Vertical	Pass
2	1328.618	44.33	74.0	29.67	Peak	48.00	100	Vertical	Pass
2**	1328.618	32.11	54.0	21.89	AV	48.00	100	Vertical	Pass
3	4739.468	48.70	74.0	25.31	Peak	19.00	200	Vertical	Pass
3**	4739.468	39.93	54.0	14.07	AV	19.00	200	Vertical	Pass
4	7595.640	53.62	74.0	20.38	Peak	76.00	100	Vertical	Pass
4**	7595.640	42.72	54.0	11.29	AV	76.00	100	Vertical	Pass
5	12477.238	52.61	74.0	21.39	Peak	168.00	400	Vertical	Pass
5**	12477.238	43.51	54.0	10.49	AV	168.00	400	Vertical	Pass
6	14451.168	54.34	74.0	19.66	Peak	335.00	400	Vertical	Pass
6**	14451.168	45.50	54.0	8.50	AV	335.00	400	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	1238.502	41.58	74.0	32.42	Peak	204.00	100	Horizontal	Pass
1**	1238.502	32.41	54.0	21.59	AV	204.00	100	Horizontal	Pass
2	1906.370	43.61	74.0	30.39	Peak	315.00	100	Horizontal	Pass
2**	1906.370	33.53	54.0	20.47	AV	315.00	100	Horizontal	Pass
3	4874.572	49.16	74.0	24.84	Peak	222.00	200	Horizontal	Pass
3**	4874.572	40.69	54.0	13.31	AV	222.00	200	Horizontal	Pass
4	7979.342	53.80	74.0	20.20	Peak	82.00	200	Horizontal	Pass
4**	7979.342	44.70	54.0	9.30	AV	82.00	200	Horizontal	Pass
5	12932.671	53.25	74.0	20.75	Peak	179.00	100	Horizontal	Pass
5**	12932.671	44.04	54.0	9.96	AV	179.00	100	Horizontal	Pass
6	17408.422	55.15	74.0	18.85	Peak	275.00	100	Horizontal	Pass
6**	17408.422	45.75	54.0	8.25	AV	275.00	100	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	1167.587	51.12	74.0	22.88	Peak	254.00	100	Vertical	Pass
1**	1167.587	35.11	54.0	18.89	AV	254.00	100	Vertical	Pass
2	1328.409	44.97	74.0	29.03	Peak	337.00	100	Vertical	Pass
2**	1328.409	33.32	54.0	20.68	AV	337.00	100	Vertical	Pass
3	4740.354	48.79	74.0	25.22	Peak	207.00	200	Vertical	Pass
3**	4740.354	40.64	54.0	13.36	AV	207.00	200	Vertical	Pass
4	7594.689	54.16	74.0	19.84	Peak	46.00	200	Vertical	Pass
4**	7594.689	43.96	54.0	10.05	AV	46.00	200	Vertical	Pass
5	12477.737	53.90	74.0	20.10	Peak	91.00	300	Vertical	Pass
5**	12477.737	44.17	54.0	9.83	AV	91.00	300	Vertical	Pass
6	14448.381	55.39	74.0	18.61	Peak	283.00	100	Vertical	Pass
6**	14448.381	45.68	54.0	8.32	AV	283.00	100	Vertical	Pass

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

Note¹: The lowest and highest channels are tested to verify the band edge emissions. Please refer to the following the plots for emissions values.

Note²: 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.

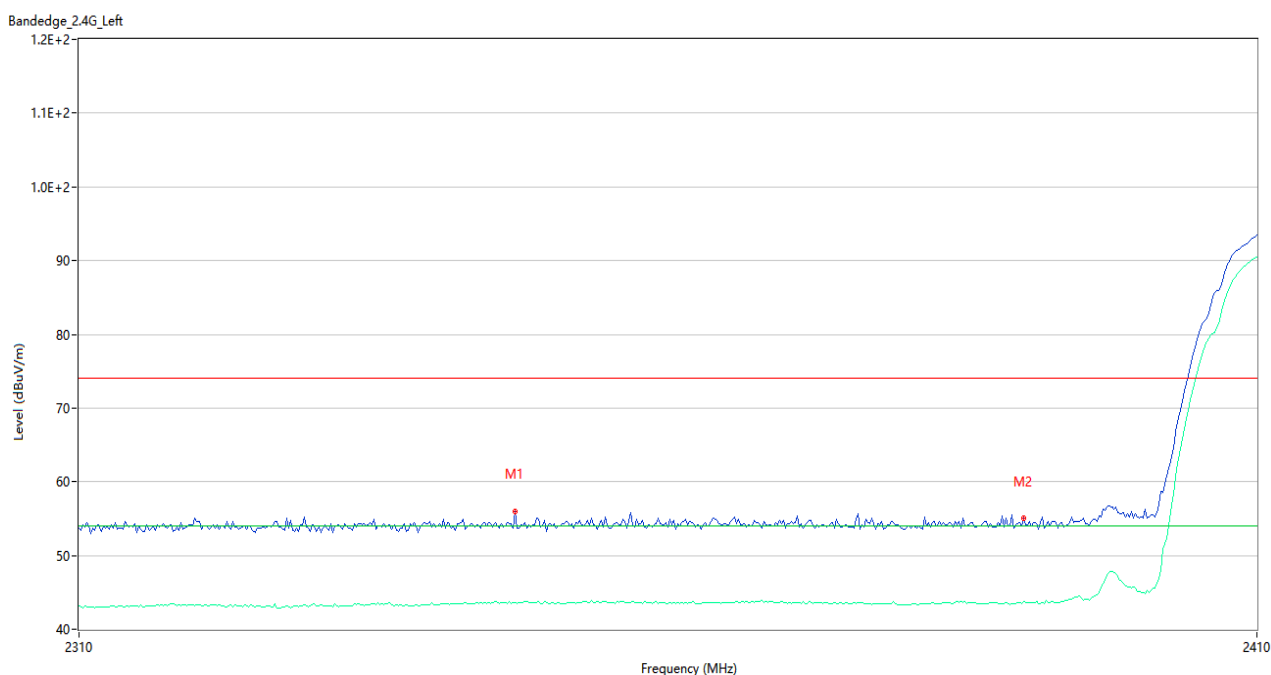
Note³: According the ANSI C63.10-2020, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

Note⁴: Both horizontal and vertical directions were pre tested, only the worst configuration has been reported in this report.

Test Data and Plots

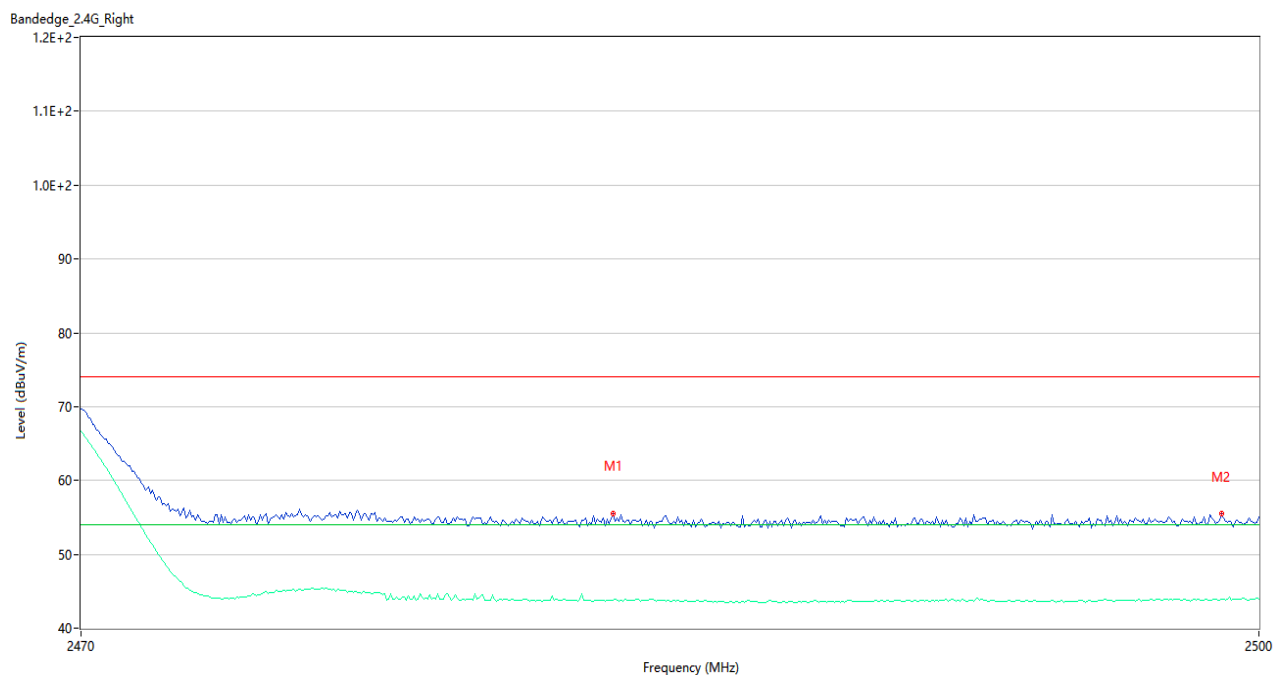
C8M

802.11b LOW CHANNEL



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2369.786	54.94	74.0	19.06	Peak	359.00	300	Vertical	Pass
1**	2369.786	43.21	54.0	10.79	AV	359.00	300	Vertical	Pass
2	2390.000	53.39	74.0	20.61	Peak	117.00	200	Vertical	Pass
2**	2390.000	43.04	54.0	10.96	AV	117.00	200	Vertical	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	55.17	74.0	18.83	Peak	342.00	200	Vertical	Pass
1**	2483.500	43.36	54.0	10.64	AV	342.00	200	Vertical	Pass
2	2499.977	55.21	74.0	18.79	Peak	208.00	100	Vertical	Pass
2**	2499.977	43.80	54.0	10.20	AV	208.00	100	Vertical	Pass

802.11g LOW CHANNEL

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2335.584	54.73	74.0	19.27	Peak	316.00	200	Vertical	Pass
1**	2335.584	42.85	54.0	11.15	AV	316.00	200	Vertical	Pass
2	2390.000	55.86	74.0	18.14	Peak	286.00	300	Vertical	Pass
2**	2390.000	42.65	54.0	11.35	AV	286.00	300	Vertical	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	55.95	74.0	18.05	Peak	252.00	200	Vertical	Pass
1**	2483.500	42.81	54.0	11.19	AV	252.00	200	Vertical	Pass
2	2484.537	56.17	74.0	17.83	Peak	317.00	100	Vertical	Pass
2**	2484.537	42.62	54.0	11.38	AV	317.00	100	Vertical	Pass

802.11n20 LOW CHANNEL

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2388.414	56.83	74.0	17.17	Peak	218.00	200	Vertical	Pass
1**	2388.414	42.41	54.0	11.59	AV	218.00	200	Vertical	Pass
2	2390.000	56.25	74.0	17.75	Peak	67.00	100	Vertical	Pass
2**	2390.000	42.04	54.0	11.96	AV	67.00	100	Vertical	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	59.13	74.0	14.87	Peak	201.00	100	Vertical	Pass
1**	2483.500	42.67	54.0	11.33	AV	201.00	100	Vertical	Pass
2	2484.576	59.25	74.0	14.75	Peak	303.00	100	Vertical	Pass
2**	2484.576	42.98	54.0	11.02	AV	303.00	100	Vertical	Pass

802.11n40 LOW CHANNEL

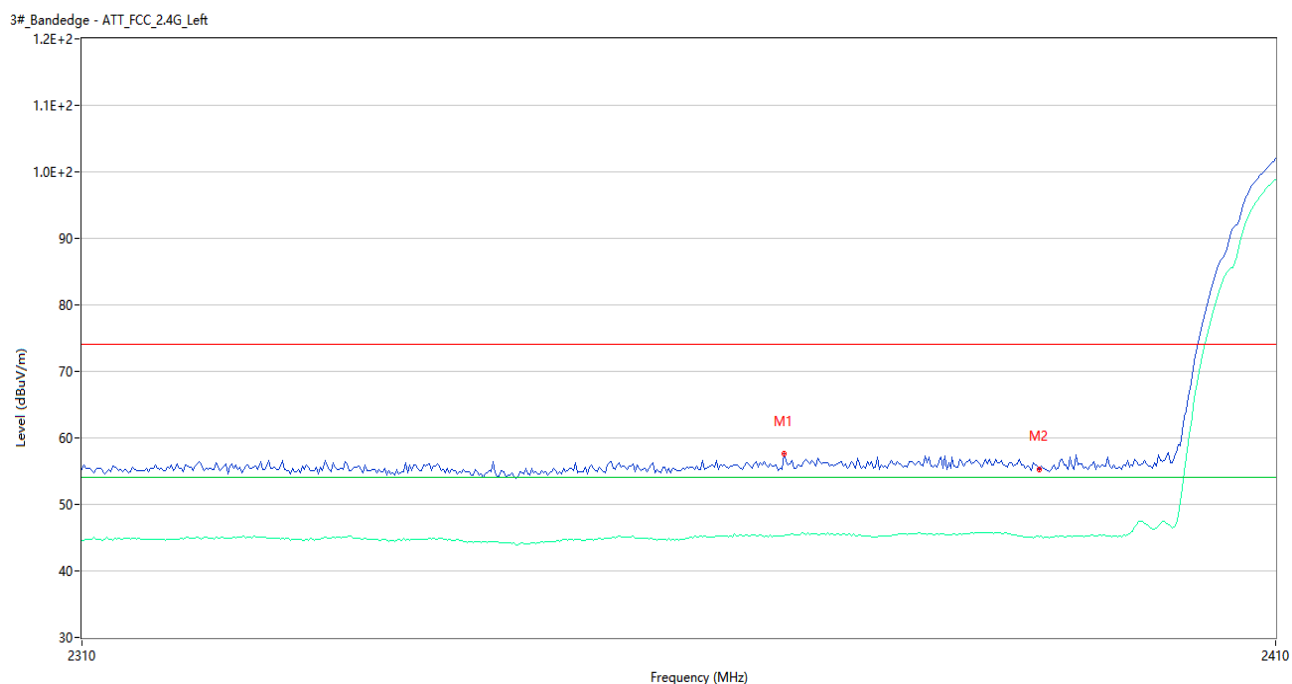
No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2380.547	55.25	74.0	18.75	Peak	289.00	300	Vertical	Pass
1**	2380.547	42.04	54.0	11.96	AV	289.00	300	Vertical	Pass
2	2390.000	54.15	74.0	19.85	Peak	320.00	200	Vertical	Pass
2**	2390.000	42.41	54.0	11.59	AV	320.00	200	Vertical	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	61.21	74.0	12.79	Peak	79.00	200	Vertical	Pass
1**	2483.500	42.64	54.0	11.36	AV	79.00	200	Vertical	Pass
2	2486.035	62.66	74.0	11.34	Peak	126.00	200	Vertical	Pass
2**	2486.035	42.55	54.0	11.45	AV	126.00	200	Vertical	Pass

C5M

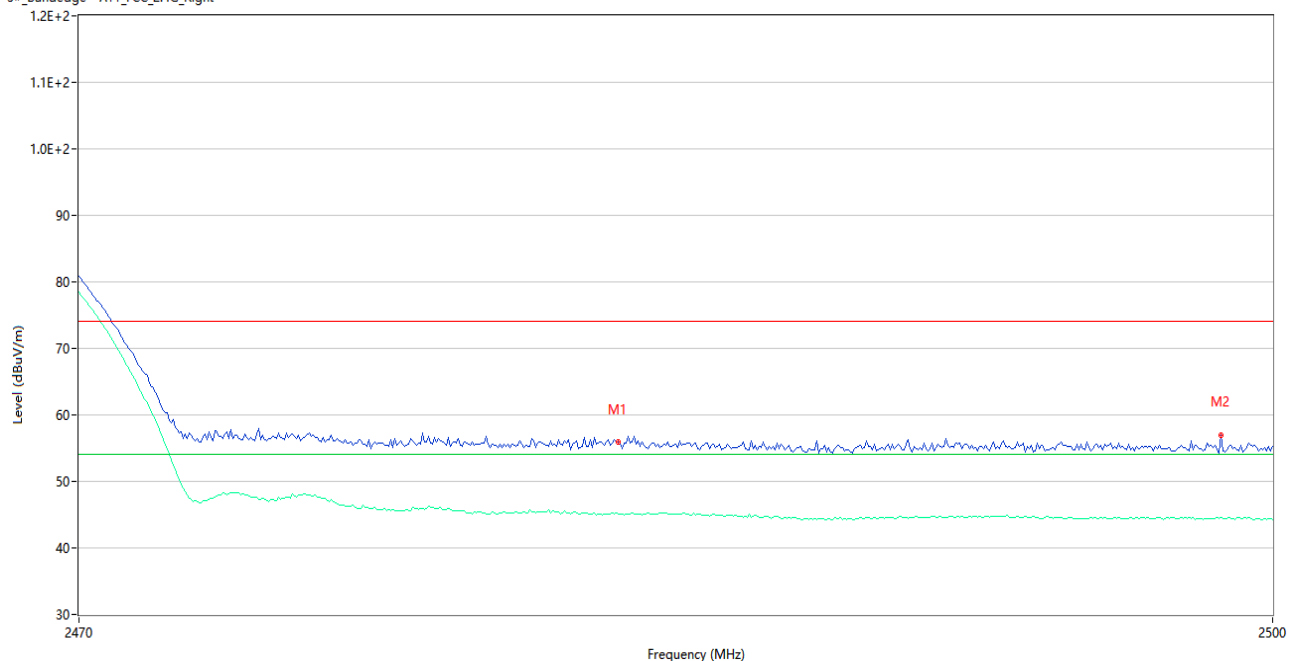
802.11b LOW CHANNEL



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2365.445	57.20	74.0	16.80	Peak	294.00	200	Horizontal	Pass
1**	2365.445	46.17	54.0	7.83	AV	294.00	200	Horizontal	Pass
2	2390.000	55.17	74.0	18.83	Peak	308.00	200	Horizontal	Pass
2**	2390.000	44.95	54.0	9.05	AV	308.00	200	Horizontal	Pass

802.11b HIGH CHANNEL

3#_Bandedge - ATT_FCC_2.4G_Right



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2483.500	54.00	74.0	20.00	Peak	224.00	300	Horizontal	Pass
1**	2483.500	44.17	54.0	9.83	AV	224.00	300	Horizontal	Pass
2	2491.982	56.87	74.0	17.13	Peak	259.00	100	Horizontal	Pass
2**	2491.982	45.59	54.0	8.41	AV	259.00	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	2335.458	55.53	74.0	18.47	Peak	237.00	200	Horizontal	Pass
1**	2335.458	43.35	54.0	10.65	AV	237.00	200	Horizontal	Pass
2	2390.000	55.85	74.0	18.15	Peak	184.00	100	Horizontal	Pass
2**	2390.000	44.81	54.0	9.19	AV	184.00	100	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	55.76	74.0	18.24	Peak	62.00	300	Horizontal	Pass
1**	2483.500	44.50	54.0	9.50	AV	62.00	300	Horizontal	Pass
2	2485.946	56.34	74.0	17.66	Peak	243.00	100	Horizontal	Pass
2**	2485.946	44.33	54.0	9.67	AV	243.00	100	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	2386.888	56.43	74.0	17.57	Peak	22.00	300	Horizontal	Pass
1**	2386.888	45.29	54.0	8.71	AV	22.00	300	Horizontal	Pass
2	2390.000	56.45	74.0	17.55	Peak	66.00	300	Horizontal	Pass
2**	2390.000	45.27	54.0	8.73	AV	66.00	300	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	59.01	74.0	14.99	Peak	18.00	200	Horizontal	Pass
1**	2483.500	44.25	54.0	9.75	AV	18.00	200	Horizontal	Pass
2	2485.226	58.93	74.0	15.07	Peak	73.00	300	Horizontal	Pass
2**	2485.226	44.06	54.0	9.94	AV	73.00	300	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	2378.884	55.69	74.0	18.31	Peak	246.00	300	Horizontal	Pass
1**	2378.884	42.05	54.0	11.95	AV	246.00	300	Horizontal	Pass
2	2390.000	53.73	74.0	20.27	Peak	11.00	200	Horizontal	Pass
2**	2390.000	43.39	54.0	10.61	AV	11.00	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	62.09	74.0	11.91	Peak	301.00	100	Horizontal	Pass
1**	2483.500	44.68	54.0	9.32	AV	301.00	100	Horizontal	Pass
2	2484.398	60.83	74.0	13.17	Peak	245.00	100	Horizontal	Pass
2**	2484.398	44.61	54.0	9.39	AV	245.00	100	Horizontal	Pass

A.8 Power Spectral Density (PSD)

Test Data

802.11b Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-6.78	8
Middle	-6.11	8
High	-6.15	8

802.11g Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-8.83	8
Middle	-8.52	8
High	-8.72	8

802.11n-20 MHz Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-8.88	8
Middle	-8.44	8
High	-9.07	8

802.11n-40 MHz Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-11.85	8
Middle	-11.37	8
High	-10.75	8

Test Plots

802.11b LOW CHANNEL



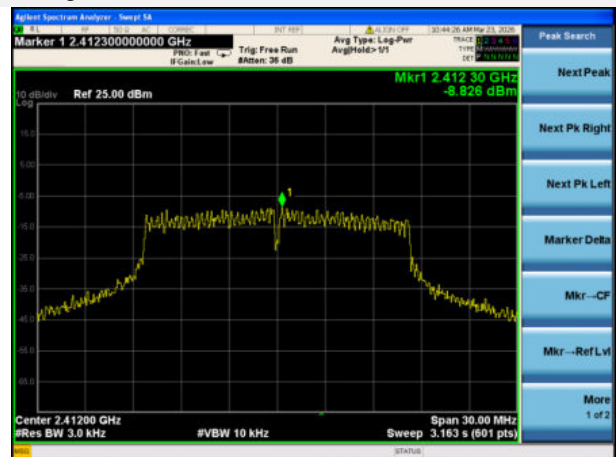
802.11b MIDDLE CHANNEL



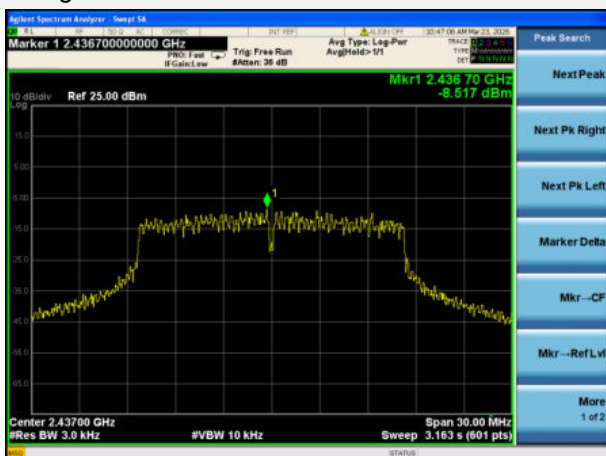
802.11b HIGH CHANNEL



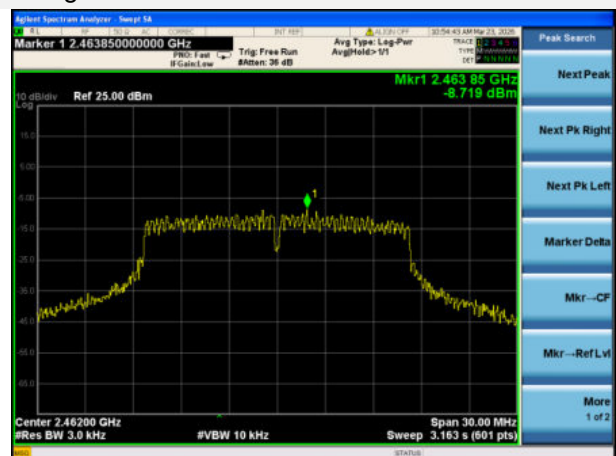
802.11g LOW CHANNEL



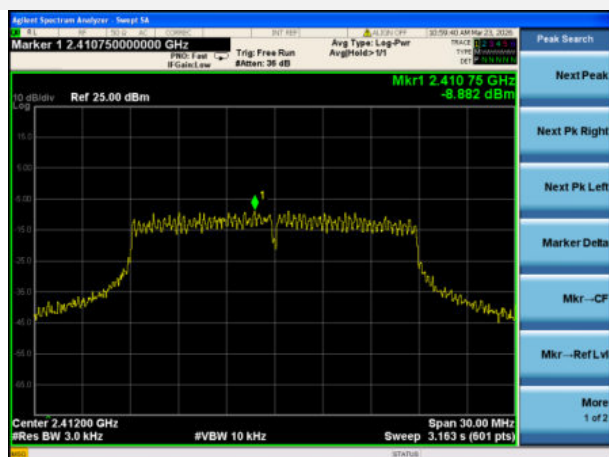
802.11g MIDDLE CHANNEL



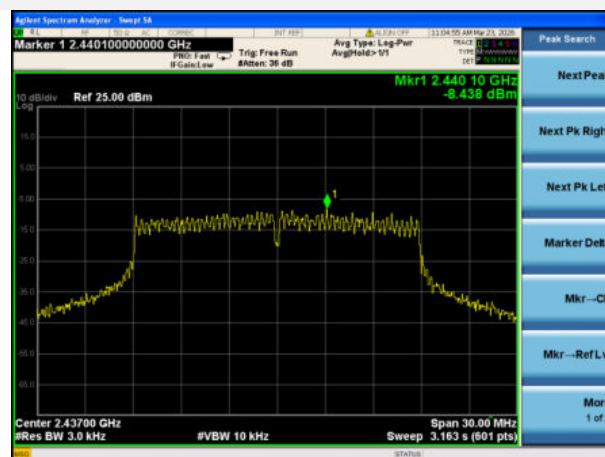
802.11g HIGH CHANNEL



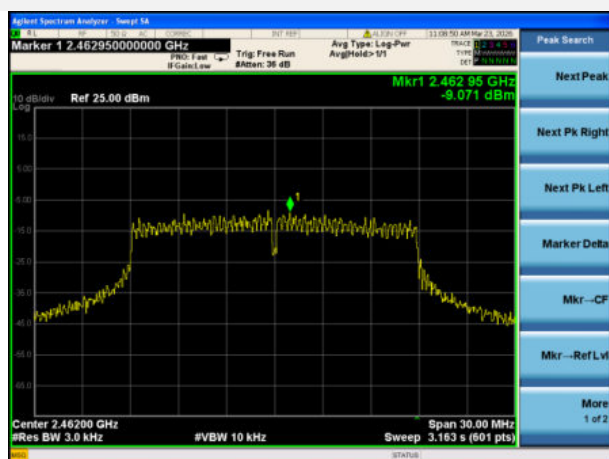
802.11n-20 MHz LOW CHANNEL



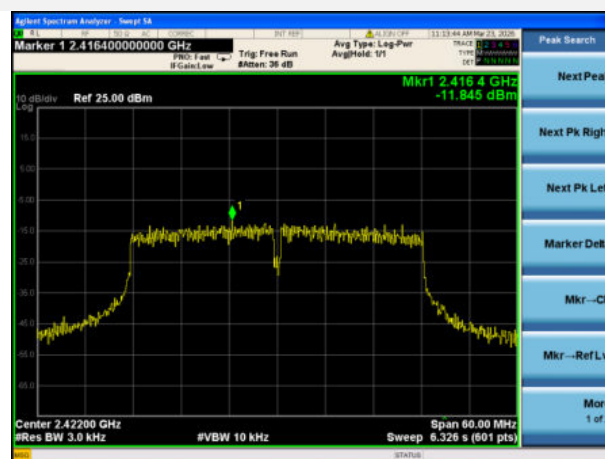
802.11n-20 MHz MIDDLE CHANNEL



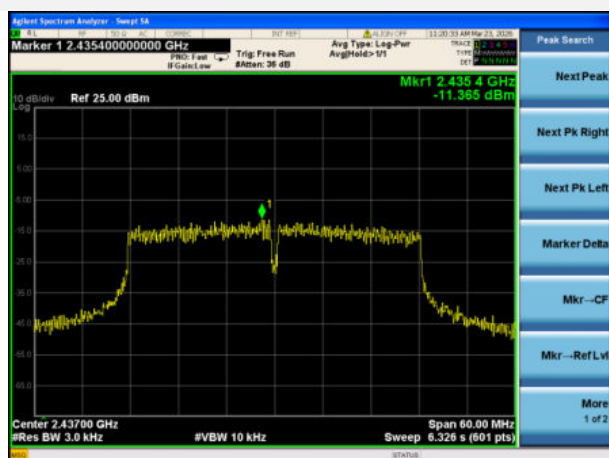
802.11n-20 MHz HIGH CHANNEL



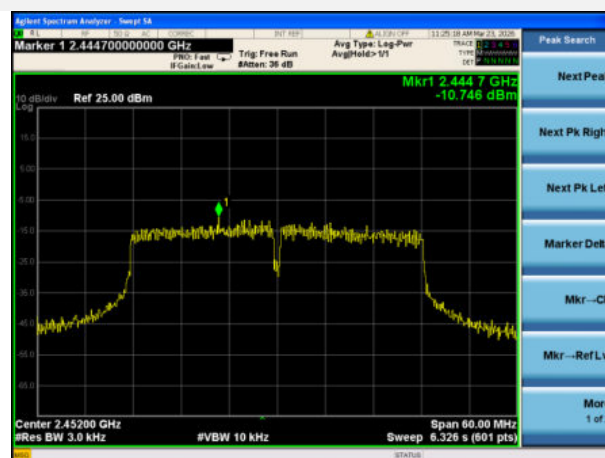
802.11n-40 MHz LOW CHANNEL



802.11n-40 MHz MIDDLE CHANNEL



802.11n-40 MHz HIGH CHANNEL



ANNEX B TEST SETUP PHOTOS

Please refer the document “Ti-EE26030263-AR.PDF”.

ANNEX C EUT EXTERNAL PHOTOS

Please refer the document “Ti-EE26030263-AW-1.PDF”.

ANNEX D EUT INTERNAL PHOTOS

Please refer the document “Ti-EE26030263-AI-1.PDF”.

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--END OF REPORT--