ACCREDITED
CERT#4344.01

TEST REPORT

Applicant:	Acer Incorporated
Address:	8F, 88, Sec.1 Xintai 5th Rd. Xizhi, New Taipei City 221, Taiwan
Equipment Type:	Tablet PC
Model Name:	A25015
Brand Name:	acer
Marketing Name:	Iconia A14, A14-11MN
FCC ID:	HLZA25015
ISED Number:	1754F-A25015
Test Standard:	47 CFR Part 15 Subpart C RSS-Gen Issue 5 RSS-247 Issue 4 (refer to section 3.1)
Sample Arrival Date:	Aug. 19, 2025
Test Date:	Sep. 01, 2025 - Oct. 16, 2025
Date of Issue:	Oct. 17, 2025

ISSUED BY:

Shenzhen BALUN Technology Co., Ltd.

Tested by: Julie Zhu **Checked by:** Ye Hongji **Approved by:** Sunny Zou (Technical Director)

Julie zhu Ye Hongji Sunny Zou

Revision History

Version	Issue Date	Revisions
Rev. 01	Oct. 17, 2025	Initial Issue

TABLE OF CONTENTS

1 GENERAL INFORMATION 4

1.1 Test Laboratory 4

1.2 Test Location 4

2 PRODUCT INFORMATION 5

2.1 Applicant Information 5

2.2 Manufacturer Information 5

2.3 General Description for Equipment under Test (EUT) 5

2.4 Technical Information 6

3 SUMMARY OF TEST RESULTS 9

3.1 Test Standards 9

3.2 Test Verdict 9

4 GENERAL TEST CONFIGURATIONS 10

4.1 Test Environments 10

4.2 Test Equipment List 10

4.3 Test Software List 10

4.4 Measurement Uncertainty 11

4.5 Description of Test Setup 11

4.6 Measurement Results Explanation Example 14

5 TEST ITEMS 15

5.1 Antenna Requirements 15

5.2 Output Power 16

5.3 Occupied Bandwidth 18

5.4 Conducted Spurious Emission 19

5.5 Band Edge (Authorized-band band-edge) 21

5.6 Conducted Emission 23
5.7 Radiated Spurious Emission 24
5.8 Band Edge (Restricted-band band-edge) 29
5.9 Power Spectral density (PSD) 30
ANNEX A TEST RESULT 31
A.1 Output Power 31
A.2 Occupied Bandwidth 35
A.3 Conducted Spurious Emissions 43
A.4 Band Edge (Authorized-band band-edge) 57
A.5 Conducted Emissions 63
A.6 Radiated Emission 65
A.7 Band Edge (Restricted-band band-edge) 86
A.8 Power Spectral Density (PSD) 90
ANNEX B TEST SETUP PHOTOS 95
ANNEX C EUT EXTERNAL PHOTOS 95
ANNEX D EUT INTERNAL PHOTOS 95

1 GENERAL INFORMATION

1.1 Test Laboratory

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

1.2 Test Location

Name	Shenzhen BALUN Technology Co., Ltd.
Location	☑ Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
	☐ 1/F, Building B, Ganghongji High-tech Intelligent Industrial Park, No. 1008, Songbai Road, Yangguang Community, Xili Sub-district, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Accreditation Certificate	The laboratory is a testing organization accredited by FCC as a accredited testing laboratory. The designation number is CN1196. The laboratory has been listed by Industry Canada to perform electromagnetic emission measurements. The recognition numbers of test site are 11524A.

2 PRODUCT INFORMATION

2.1 Applicant Information

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

2.2 Manufacturer Information

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

2.3 General Description for Equipment under Test (EUT)

EUT Name	Tablet PC
Model Name Under Test	A25015
Series Model Name	N/A
Description of Model name differentiation	N/A
Marketing Name	Iconia A14, A14-11MN
Serial Number	NBLK311001533100019H00
Hardware Version	T30A733-U15T5A
Software Version	Android 15
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A

2.4 Technical Information

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

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

Frequency Range	802.11b/g/n/ax(20 MHz): 2.412 GHz - 2.462 GHz f_c = 2412 MHz + (N-1)*5 MHz, where - f_c = “Operating Frequency” in MHz, - N = “Channel Number” with the range from 1 to 11. 802.11n/ax(40 MHz): 2.422 GHz - 2.452 GHz f_c = 2412 MHz + (N-1)*5 MHz, where - f_c = “Operating Frequency” in MHz, - N = “Channel Number” with the range from 3 to 9.
Modulation Technology	DSSS, OFDM, OFDMA
Product Type	☐ Mobile ☒ Portable ☐ Fix Location
Antenna System (eg., MIMO, Smart Antenna)	N/A
Categorization as Correlated or Completely Uncorrelated	N/A
Antenna Type	PIFA Antenna
Antenna Gain	3.15 dBi
About the Product	Only the WIFI 802.11b, 802.11g, 802.11n (HT20/40) and 802.11ax (HE20/40) was tested in this report.

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

Modulation technology	Modulation Type	Transfer Rate (Mbps)(Single RF path)
DSSS (802.11b)	DBPSK	1
	DQPSK	2
	CCK	5.5/11
OFDM (802.11g)	BPSK	6/9
	QPSK	12/18
	16QAM	24/36
	64QAM	48/54
OFDM (802.11n-20 MHz)	BPSK	6.5/7.2
	QPSK	13/19.5/14.4/21.7
	16QAM	26/39/28.9/43.3
	64QAM	52/58.5/65/57.8/65/72.2
OFDM (802.11n-40 MHz)	BPSK	13.5/15
	QPSK	27/40.5/30/45
	16QAM	54/81/60/90
	64QAM	108/121.5/135/120/150
OFDMA (802.11ax-20 MHz)	BPSK	4
	QPSK	16/24/17/26
	16QAM	33/49/34/52
	64QAM	65/73/81/69/77/86
	256QAM	98/108/103/115
	1024QAM	122/135/129/143
OFDMA (802.11ax-40 MHz)	BPSK	8/9
	QPSK	33/49/34/52
	16QAM	65/98/69/103
	64QAM	130/146/163/138/155/172
	256QAM	195/217/207/229
	1024QAM	244/271/258/287

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

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

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

3 SUMMARY OF TEST RESULTS

3.1 Test Standards

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

3.2 Test Verdict

No.	Description	FCC PART No.	ISED Part No.	Test Result	Verdict
1	Antenna Requirement	15.203	RSS-247, 5.4 (f)	N/A	Pass[Note 1]
2	Output Power	15.247 (b)	RSS-247, 5.4 (d)	ANNEX A.1	Pass
3	Occupied Bandwidth	15.247 (a)	RSS-GEN, 6.7; RSS-247, 5.2 (a)	ANNEX A.2	Pass
4	Conducted Spurious Emission	15.247 (d)	RSS-247, 5.5	ANNEX A.3	Pass
5	Band Edge(Authorized-band band-edge)	15.247 (d)	RSS-GEN, 8.9; RSS-247, 5.5	ANNEX A.4	Pass
6	Conducted Emission	15.207	RSS-GEN, 8.8	ANNEX A.5	Pass
7	Radiated Spurious Emission	15.209; 15.247 (d)	RSS-247, 5.5	ANNEX A.6	Pass
8	Band Edge(Restricted-band band-edge)	15.209; 15.247 (d)	RSS-247, 5.5	ANNEX A.7	Pass
9	Power spectral density (PSD)	15.247 (e)	RSS-247, 5.2 (b)	ANNEX A.8	Pass
10	Receiver Spurious Emissions	N/A	RSS-Gen, 7.3	N/A	N/A [Note 2]

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

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

4 GENERAL TEST CONFIGURATIONS

4.1 Test Environments

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

Relative Humidity	50% to 63%	
Atmospheric Pressure	100 kPa to 102 kPa	
Temperature	NT (Normal Temperature)	+21.6℃ to +24.5℃
Working Voltage of the EUT	NV (Normal Voltage)	3.80 V

4.2 Test Equipment List

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Spectrum Analyzer	KEYSIGHT	N9020A	MY46471071	2025.06.16	2026.06.15
Power Sensor	KEYSIGHT	U2063XA	MY58000247	2025.06.16	2026.06.15
Spectrum Analyzer	KEYSIGHT	N9020A	MY52510065	2025.06.16	2026.06.15
Test Antenna-Horn	SCHWARZBECK	BBHA 9120D	01631	2025.02.22	2028.02.21
Test Antenna-Horn	A-INFO	LB-180400KF	J211060273	2024.06.15	2027.06.14
Anechoic Chamber	RAINFORD	9m*6m*6m	144	2025.01.04	2028.01.03
Amplifier	COM-MV	LSCX_LNA1-12G-01	180602	2025.06.17	2026.06.16
Amplifier	COM-MV	XKu_LNA7-18G-01	180601	2025.06.17	2026.06.16
EMI Receiver	ROHDE&SCHWARZ	ESRP	101036	2025.06.16	2026.06.15
Test Antenna-Bi-Log	SCHWARZBECK	VULB 9168	9168-01162	2023.08.04	2026.08.03
Test Antenna-Loop	SCHWARZBECK	FMZB 1519	1519-037	2024.01.23	2027.01.22
Amplifier	COM-MV	ZT30-1000M	B2018054558	2024.11.28	2025.11.27
Anechoic Chamber	EMC Electronic Co., Ltd	20.10*11.60*7.35m	130	2024.07.13	2027.07.12
EMI Receiver	KEYSIGHT	N9010B	MY57110309	2025.06.16	2026.06.15
LISN	SCHWARZBECK	NSLK 8127	8127-687	2025.04.29	2026.04.28
Shielded Enclosure	YiHeng Electronic Co., Ltd	3.5m*3.1m*2.8m	112	2025.02.14	2028.02.13

4.3 Test Software List

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

4.4 Measurement Uncertainty

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

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

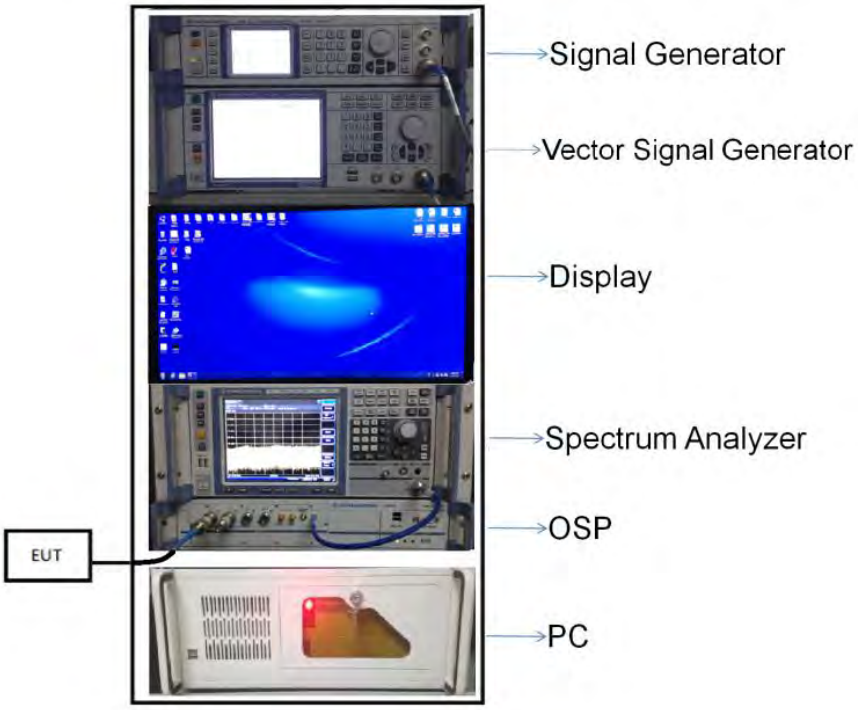
Parameters	Uncertainty
Occupied Channel Bandwidth	2.8%
RF output power, conducted	1.28 dB
Power Spectral Density, conducted	1.30 dB
Unwanted Emissions, conducted	1.84 dB
All emissions, radiated	5.36 dB
Temperature	0.8℃
Humidity	4%

4.5 Description of Test Setup

4.5.1 For Antenna Port Test

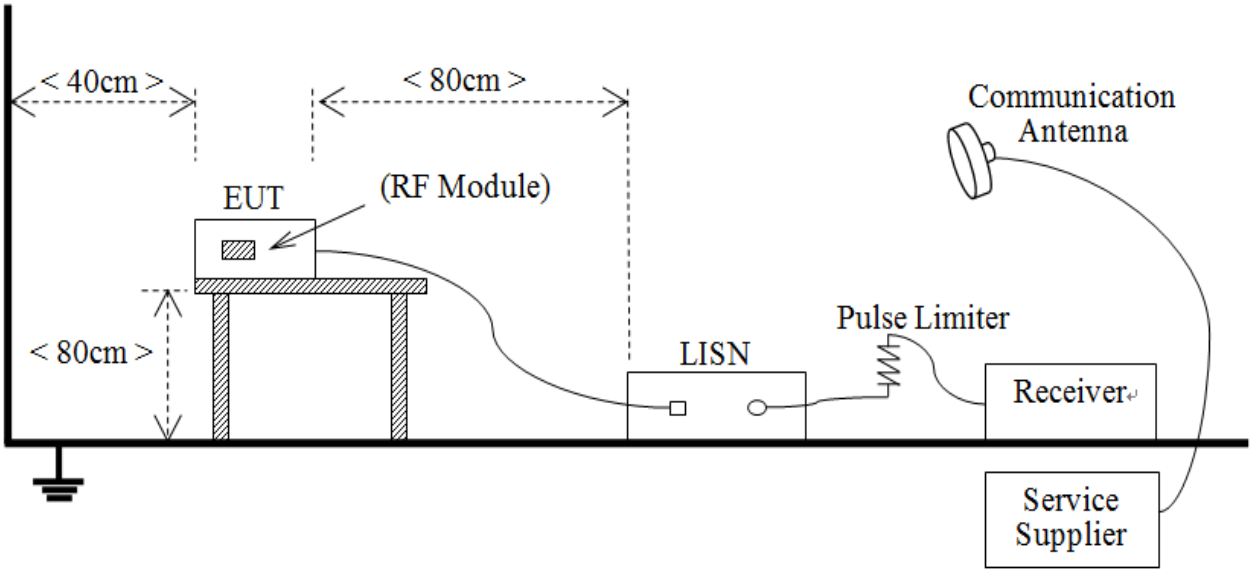
Conducted value (dBm) = Measurement value (dBm) + cable loss (dB)

For example: the measurement value is 10 dBm and the cable 0.5dBm used, then the final result of EUT:
Conducted value (dBm) = 10 dBm + 0.5 dB = 10.5 dBm



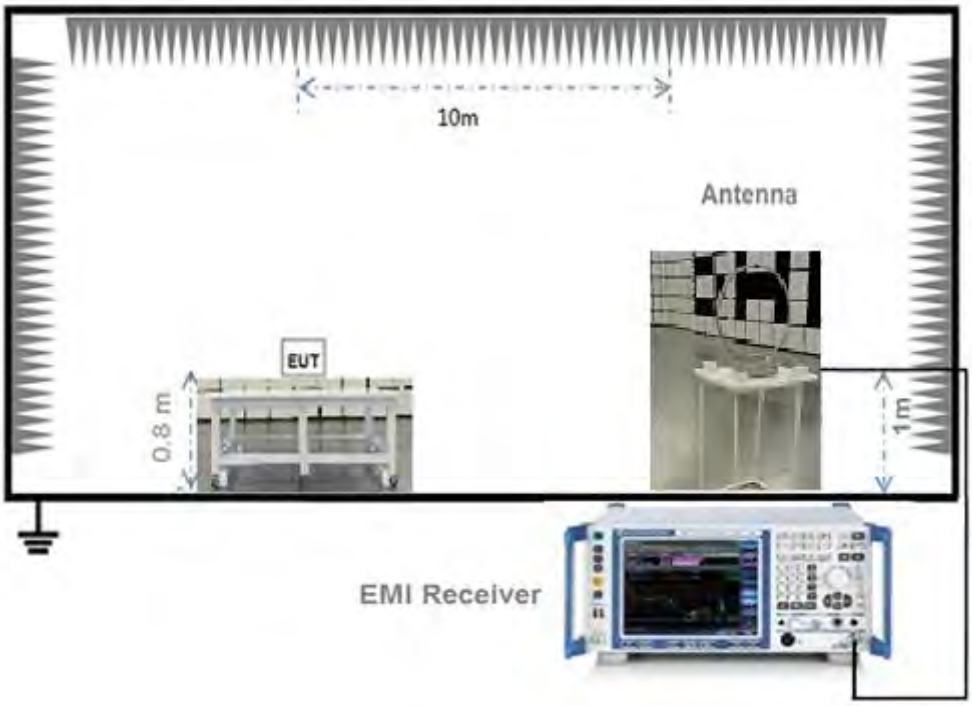
(Diagram 1)

4.5.2 For AC Power Supply Port Test



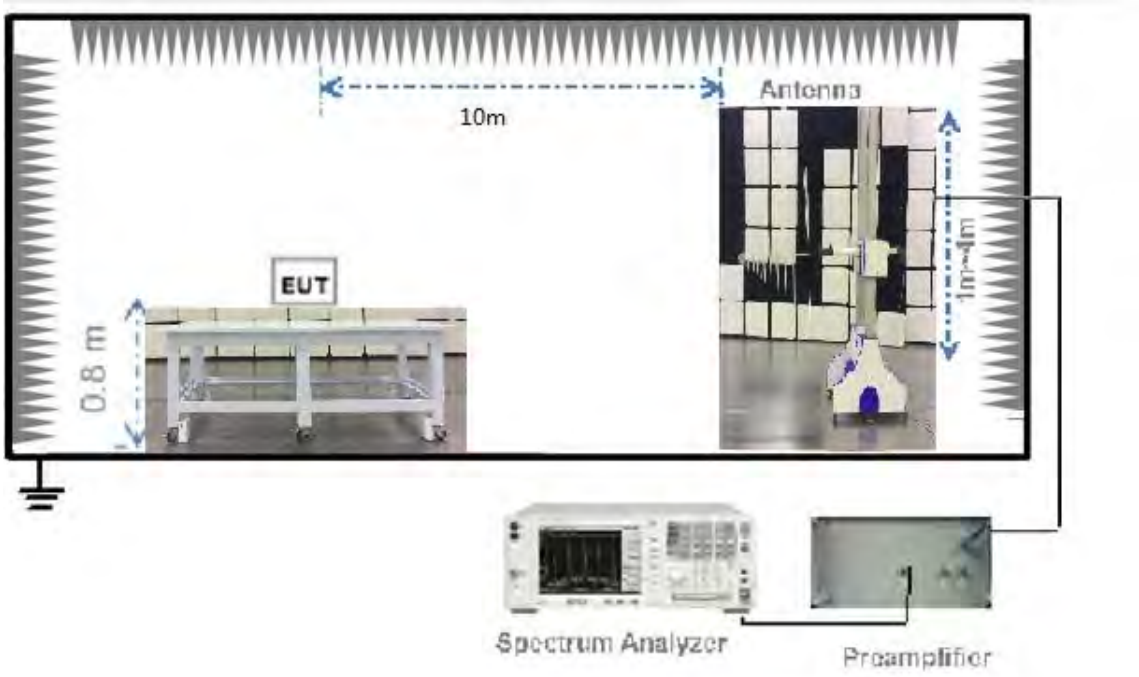
(Diagram 2)

4.5.3 For Radiated Test (Below 30 MHz)



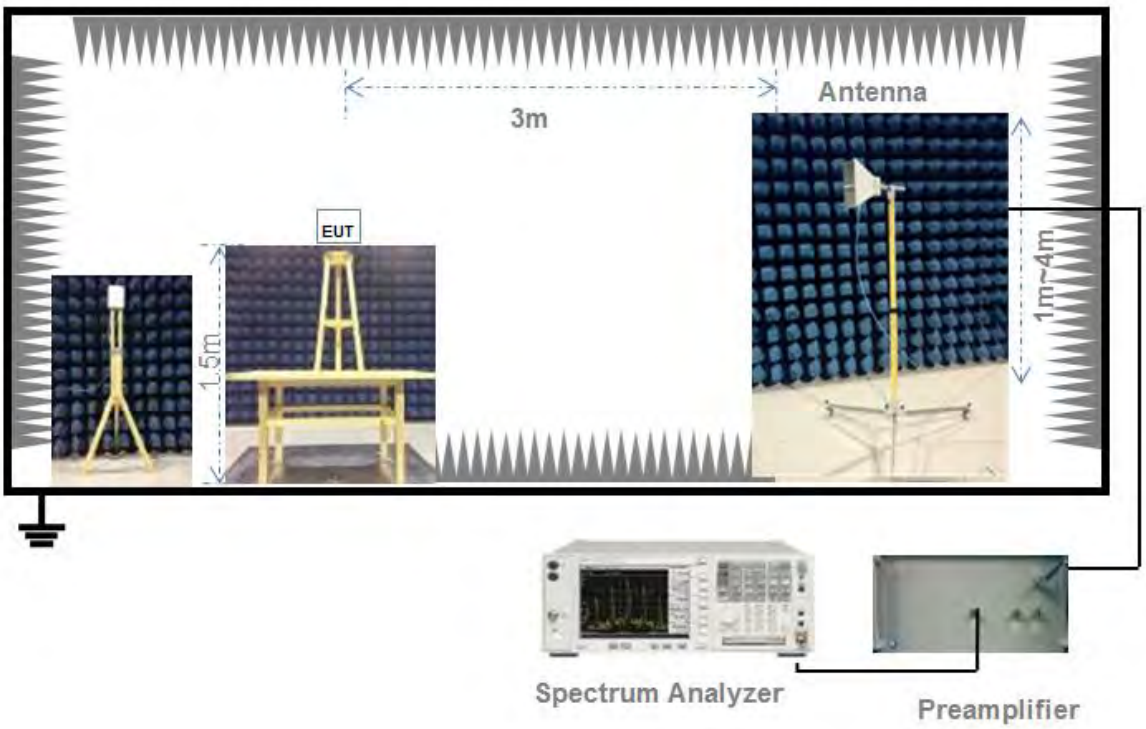
(Diagram 3)

4.5.4 For Radiated Test (30 MHz-1 GHz)



(Diagram 4)

4.5.5 For Radiated Test (Above 1 GHz)



(Diagram 5)

4.6 Measurement Results Explanation Example

4.6.1 For conducted test items:

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

4.6.2 For radiated band edges and spurious emission test:

$$E = EIRP - 20\log D + 104.8$$

where:

E = electric field strength in dBμV/m,

EIRP = equivalent isotropic radiated power in dBm

D = specified measurement distance in meters.

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

5 TEST ITEMS

5.1 Antenna Requirements

5.1.1 Relevant Standards

FCC §15.203; RSS-247, 5.4 (f)
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of § 15.211, § 15.213, § 15.217, § 15.219, or § 15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with § 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

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

5.1.2 Antenna Anti-Replacement Construction

The Antenna Anti-Replacement as following method:

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

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

5.1.3 Antenna Gain

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

5.2 Output Power

5.2.1 Test Limit

FCC § 15.247(b); RSS-247, 5.4 (d)

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.

EIRP= Maximum peak conducted output power +Antenna Gain.

Maximum conducted (average) output power (Reporting Only)

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

1) The EUT is configured to transmit continuously, or to transmit with a constant duty factor.

2) At all times when the EUT is transmitting, it shall be transmitting at its maximum power control level.

3) The integration period of the power meter exceeds the repetition period of the transmitted signal by at least a factor of five.

b) If the transmitter does not transmit continuously, measure the duty cycle (x) of the transmitter output signal.

c) Measure the average power of the transmitter. This measurement is an average over both the on and off periods of the transmitter.

d) Adjust the measurement in dBm by adding 10log (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 ≥ OBW if possible; otherwise, set RBW to the largest available value.

Set VBW ≥ 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 ≤ 16.7 microseconds.)

5.2.4 Test Result

Please refer to ANNEX A.1.

5.3 Occupied Bandwidth

5.3.1 Limit

FCC §15.247(a); RSS-GEN, 6.7; RSS-247, 5.2 (a)

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

5.3.2 Test Setup

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

5.3.3 Test Procedure

Use the following spectrum analyzer settings:

Set RBW = 100 kHz.

Set the video bandwidth (VBW) ⩾ 3 RBW.

Detector = Peak.

Trace mode = max hold.

Sweep = auto couple.

Allow the trace to stabilize.

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

5.3.4 Test Result

Please refer to ANNEX A.2.

5.4 Conducted Spurious Emission

5.4.1 Limit

FCC §15.247(d); RSS-247, 5.5

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.

<u>Reference level measurement</u>

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 ⩾ 3 x 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 ⩾ 3 x RBW.

Detector = peak.

Sweep time = auto couple.

Trace mode = max hold.

Allow trace to fully stabilize.

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

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

5.4.4 Test Result

Please refer to ANNEX A.3.

5.5 Band Edge (Authorized-band band-edge)

5.5.1 Limit

FCC §15.247(d); RSS-GEN, 8.9, RSS-247, 5.5

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 ⩾ 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 ⩾ 3 x 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 (OBW/RBW)] below the reference level. Specific guidance is given in 4.1.5.2.

Attenuation: Auto (at least 10 dB preferred).

Sweep time: Coupled.

Resolution bandwidth: 100 kHz.

Video bandwidth: 300 kHz.

Detector: Peak.

Trace: Max hold.

5.5.4 Test Result

Please refer to ANNEX A.4.

5.6 Conducted Emission

5.6.1 Limit

FCC §15.207; RSS-GEN, 8.8

For an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50μH/50Ω line impedance stabilization network (LISN).

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

5.6.2 Test Setup

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

5.6.3 Test Procedure

The maximum conducted interference is searched using Peak (PK), if the emission levels more than the AV and QP limits, and that have narrow margins from the AV and QP limits will be re-measured with AV and QP detectors. Tests for both L phase and N phase lines of the power mains connected to the EUT are performed. Refer to recorded points and plots below.
Devices subject to Part 15 must be tested for all available U.S. voltages and frequencies (such as a nominal 120 VAC, 50/60 Hz and 240 VAC, 50/60 Hz) for which the device is capable of operation. A device rated for 50/60 Hz operation need not be tested at both frequencies provided the radiated and line conducted emissions are the same at both frequencies.

5.6.4 Test Result

Please refer to ANNEX A.5.

5.7 Radiated Spurious Emission

5.7.1 Limit

FCC §15.209&15.247(d); RSS-247, 5.5

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:

$E = EIRP – 20\log D + 104.8$

where:

E = electric field strength in dBμV/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 ≥ 3 x RBW.

c) Detector = Peak.

d) Sweep time = auto.

e) Trace mode = max hold.

f) Allow sweeps to continue until the trace stabilizes. (Note that the required measurement time may be

longer for low duty cycle applications).

Table 1—RBW as a function of frequency

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

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

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

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

a) The EUT shall be configured to operate at the maximum achievable duty cycle.

b) Measure the duty cycle, x, of the transmitter output signal as described in section 6.0.

c) RBW = 1 MHz (unless otherwise specified).

d) VBW ≥ 3 x RBW.

e) Detector = RMS, if span/(# of points in sweep) ≤ (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 ≥ 1 GHz, 100 kHz for f < 1 GHz
VBW ≥ RBW
Sweep = auto
Detector function = peak
Trace = max hold

5.7.4 Test Result

Please refer to ANNEX A.6.

5.8 Band Edge (Restricted-band band-edge)

5.8.1 Limit

FCC §15.209&15.247(d); RSS-247, 5.5

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 ≥ 1 GHz, 100 kHz for f < 1 GHz
VBW ≥ RBW
Sweep = auto
Detector function = peak
Trace = max hold

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

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

5.8.4 Test Result

Please refer to ANNEX A.7.

5.9 Power Spectral density (PSD)

5.9.1 Limit

FCC §15.247(e); RSS-247, 5.2 (b)

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

5.9.2 Test Setup

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

5.9.3 Test Procedure

Set analyzer center frequency to DTS channel center frequency.

Set the span to 1.5 times the DTS bandwidth.

Set the RBW to: 3 kHz ⩽ RBW ⩽ 100 kHz.

Set the VBW ⩾ 3 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	8.40	8.59	97.79%	0.10
802.11g	1.39	1.59	87.72%	0.57
802.11n-20 MHz	5.08	5.29	96.01%	0.18
802.11n-40 MHz	4.86	5.31	91.49%	0.39
802.11ax-20 MHz	3.87	4.10	94.31%	0.25
802.11ax-40 MHz	3.87	3.96	97.72%	0.10

Peak Power Test Data

802.11b Mode:

Channel	Measured Output Peak Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	11.36	13.68	30	1000	Pass
Middle	13.94	24.77			Pass
High	12.55	17.99			Pass

802.11g Mode:

Channel	Measured Output Peak Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	16.62	45.92	30	1000	Pass
Middle	19.74	94.19			Pass
High	21.16	130.62			Pass

802.11n-20 MHz Mode:

Channel	Measured Output Peak Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	16.98	49.89	30	1000	Pass
Middle	22.06	160.69			Pass
High	19.72	93.76			Pass

802.11n-40 MHz Mode:

Channel	Measured Output Peak Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	19.13	81.85	30	1000	Pass
Middle	22.21	166.34			Pass
High	18.15	65.31			Pass

802.11ax-20 MHz(SU) Mode:

Channel	Measured Output Peak Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	21.25	133.35	30	1000	Pass
Middle	23.71	234.96			Pass
High	23.59	228.56			Pass

802.11ax-40 MHz(SU) Mode:

Channel	Measured Output Peak Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	20.96	124.74	30	1000	Pass
Middle	23.90	245.47			Pass
High	19.93	98.40			Pass

Average Power Test Data

802.11b Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	9.10	8.13	30	1000	Pass
Middle	11.70	14.79			Pass
High	10.28	10.67			Pass

802.11g Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	11.11	12.91	30	1000	Pass
Middle	14.45	27.86			Pass
High	15.78	37.84			Pass

802.11n-20 MHz Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	12.31	17.02	30	1000	Pass
Middle	17.32	53.95			Pass
High	15.01	31.70			Pass

802.11n-40 MHz Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	13.98	25.00	30	1000	Pass
Middle	17.31	53.83			Pass
High	13.32	21.48			Pass

802.11ax-20 MHz(SU) Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	14.21	26.36	30	1000	Pass
Middle	17.21	52.60			Pass
High	16.94	49.43			Pass

802.11ax-40 MHz(SU) Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	13.95	24.83	30	1000	Pass
Middle	17.25	53.09			Pass
High	13.29	21.33			Pass

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

802.11b Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
Low	14.51	28.25	36	4	Pass
Middle	17.09	51.17			Pass
High	15.70	37.15			Pass

802.11g Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
Low	19.77	94.84	36	4	Pass
Middle	22.89	194.54			Pass
High	24.31	269.77			Pass

802.11n-20 MHz Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
Low	20.13	103.04	36	4	Pass
Middle	25.21	331.89			Pass
High	22.87	193.64			Pass

802.11n-40 MHz Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
Low	22.28	169.04	36	4	Pass
Middle	25.36	343.56			Pass
High	21.30	134.90			Pass

802.11ax-20 MHz(SU) Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
Low	24.40	275.42	36	4	Pass
Middle	26.86	485.29			Pass
High	26.74	472.06			Pass

802.11ax-40 MHz(SU) Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
Low	24.11	257.63	36	4	Pass
Middle	27.05	506.99			Pass
High	23.08	203.24			Pass

A.2 Occupied Bandwidth

Test Data

802.11b Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	9.200000	13.095000	≥500
Middle	9.200000	13.104000	≥500
High	9.200000	13.107000	≥500

802.11g Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	16.500000	17.898000	≥500
Middle	16.000000	17.195000	≥500
High	15.700000	17.283000	≥500

802.11n-20MHz Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	17.200000	19.001000	≥500
Middle	15.700000	18.540000	≥500
High	15.500000	18.261000	≥500

802.11n-40MHz Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	35.500000	36.592000	≥500
Middle	34.000000	36.692000	≥500
High	35.400000	36.598000	≥500

802.11ax-20 MHz(SU) Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	18.700000	19.446000	≥500
Middle	16.100000	19.094000	≥500
High	17.800000	19.177000	≥500

802.11ax-40 MHz(SU) Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	36.500000	37.934000	≥500
Middle	36.900000	37.878000	≥500
High	36.900000	37.895000	≥500

Test Plots

6 dB Bandwidth

802.11b LOW CHANNEL

802.11b MIDDLE CHANNEL

802.11b HIGH CHANNEL

802.11g LOW CHANNEL

802.11g MIDDLE CHANNEL

802.11g HIGH CHANNEL

802.11n-20 MHz LOW CHANNEL

802.11n-20 MHz MIDDLE CHANNEL

802.11n-20 MHz HIGH CHANNEL

802.11n-40 MHz LOW CHANNEL

802.11n-40 MHz MIDDLE CHANNEL

802.11n-40 MHz HIGH CHANNEL

802.11ax-20 MHz(SU) LOW CHANNEL

802.11ax-20 MHz(SU) MIDDLE CHANNEL

802.11ax-20 MHz(SU) HIGH CHANNEL

802.11ax-40 MHz(SU) LOW CHANNEL

802.11ax-40 MHz(SU) MIDDLE CHANNEL

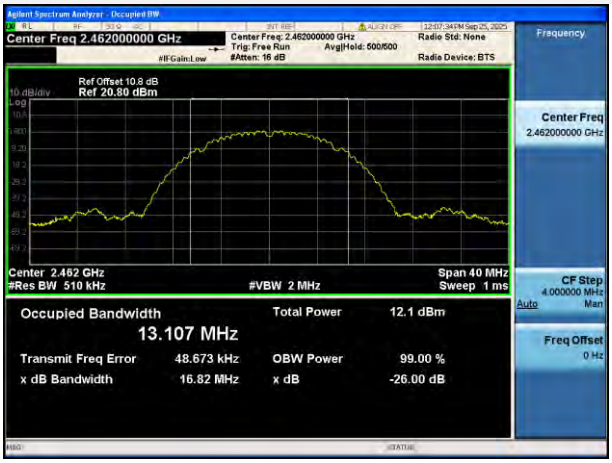
802.11ax-40 MHz(SU) HIGH CHANNEL

99% Bandwidth

802.11b LOW CHANNEL

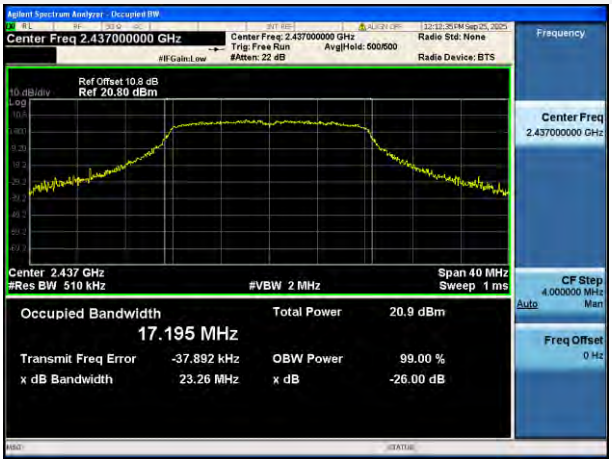
802.11b MIDDLE CHANNEL

802.11b HIGH CHANNEL

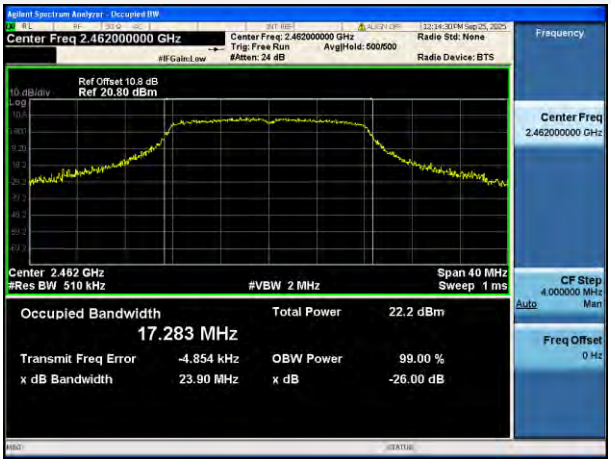


802.11g LOW CHANNEL

802.11g MIDDLE CHANNEL



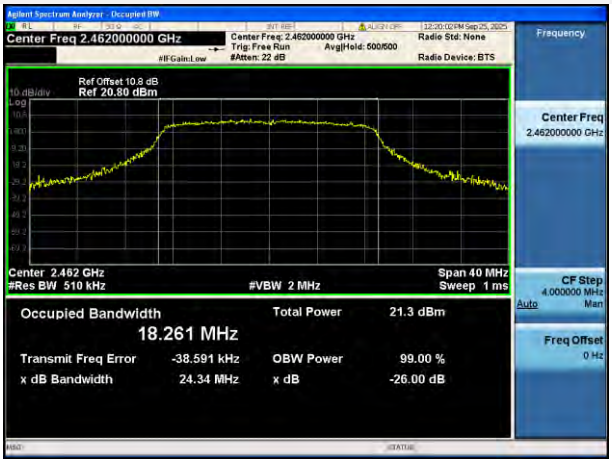
802.11g HIGH CHANNEL



802.11n-20 MHz LOW CHANNEL

802.11n-20 MHz MIDDLE CHANNEL

802.11n-20 MHz HIGH CHANNEL



802.11n-40 MHz LOW CHANNEL

802.11n-40 MHz MIDDLE CHANNEL

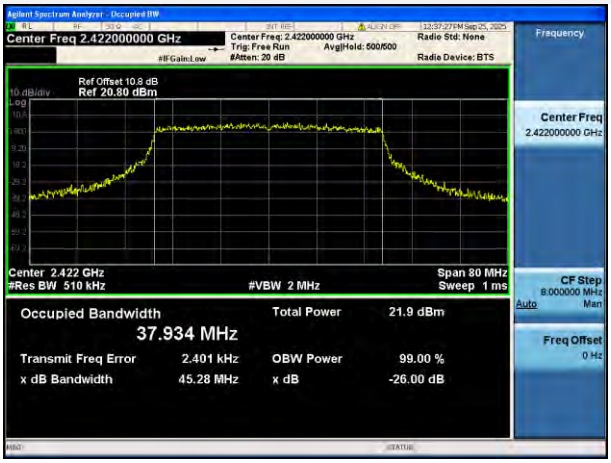
802.11n-40 MHz HIGH CHANNEL

802.11ax-20 MHz(SU) LOW CHANNEL

802.11ax-20 MHz(SU) MIDDLE CHANNEL

802.11ax-20 MHz(SU) HIGH CHANNEL

802.11ax-40 MHz(SU) LOW CHANNEL



802.11ax-40 MHz(SU) MIDDLE CHANNEL

802.11ax-40 MHz(SU) HIGH CHANNEL

A.3 Conducted Spurious Emissions

Test Data

802.11b Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-37.83	-0.08	-20.08	Pass
Middle	-37.99	2.75	-17.25	Pass
High	-35.43	1.38	-18.62	Pass

802.11g Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-36.09	0.00	-20.00	Pass
Middle	-36.79	3.56	-16.44	Pass
High	-36.74	5.03	-14.97	Pass

802.11n-20MHz Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-36.80	1.09	-18.91	Pass
Middle	-36.04	6.65	-13.35	Pass
High	-36.71	4.14	-15.86	Pass

802.11n-40MHz Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-36.45	-0.17	-20.17	Pass
Middle	-37.02	2.68	-17.32	Pass
High	-36.58	-0.90	-20.90	Pass

802.11ax-20 MHz(SU) Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-36.63	2.95	-17.05	Pass
Middle	-37.83	6.47	-13.53	Pass
High	-35.89	5.52	-14.48	Pass

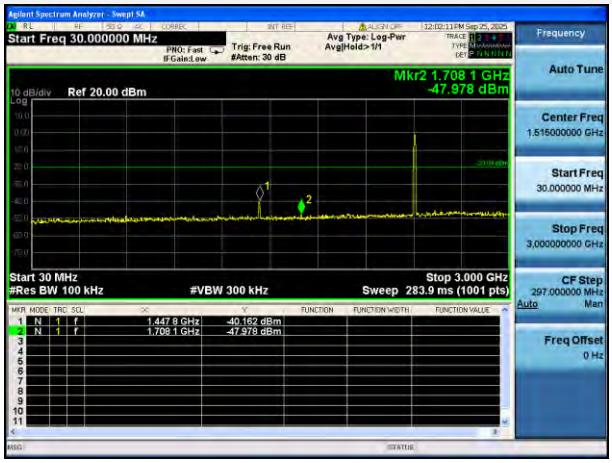
802.11ax-40 MHz(SU) Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-36.06	-0.12	-20.12	Pass
Middle	-37.07	3.31	-16.69	Pass
High	-36.22	-1.13	-21.13	Pass

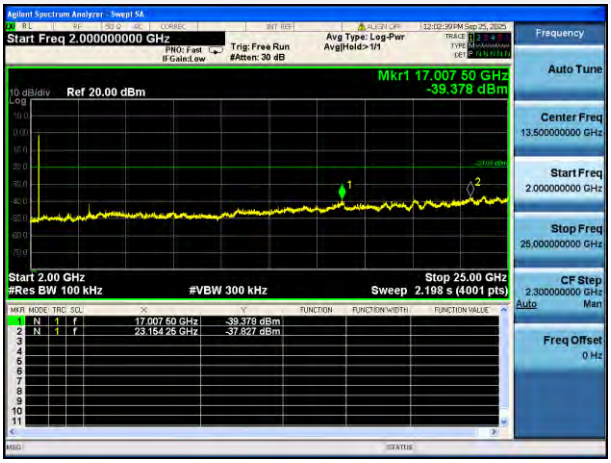
Test Plots

802.11b LOW CHANNEL CARRIER LEVEL

802.11b LOW CHANNEL, SPURIOUS 30 MHz ~ 3 GHz

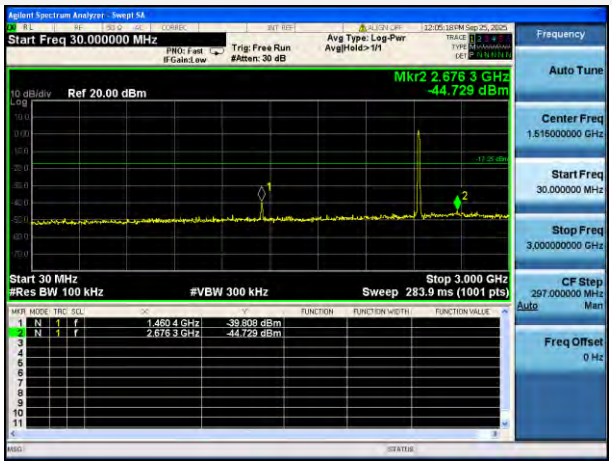


802.11b LOW CHANNEL, SPURIOUS 2 GHz ~ 25 GHz

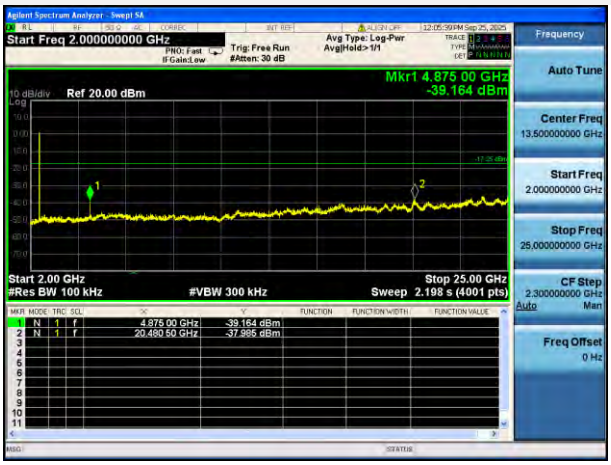


802.11b MIDDLE CHANNEL CARRIER LEVEL

802.11b MIDDLE CHANNEL, SPURIOUS
30 MHz ~ 3 GHz

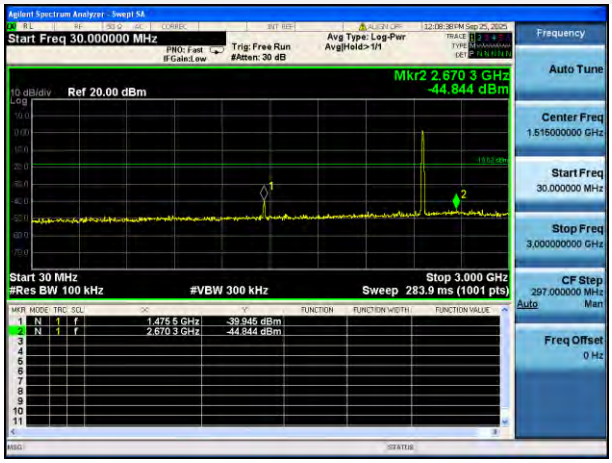


802.11b MIDDLE CHANNEL, SPURIOUS
2 GHz ~ 25 GHz

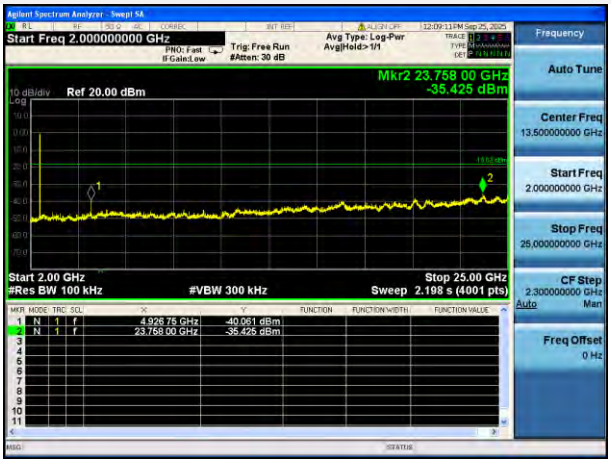


802.11b HIGH CHANNEL CARRIER LEVEL

802.11b HIGH CHANNEL, SPURIOUS
30 MHz ~ 3 GHz

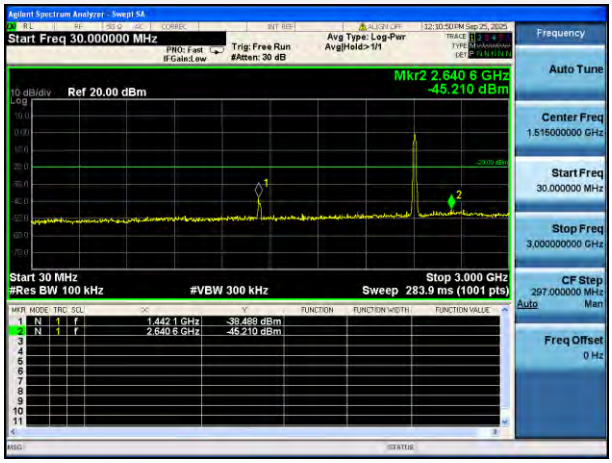


802.11b HIGH CHANNEL, SPURIOUS
2 GHz ~ 25 GHz

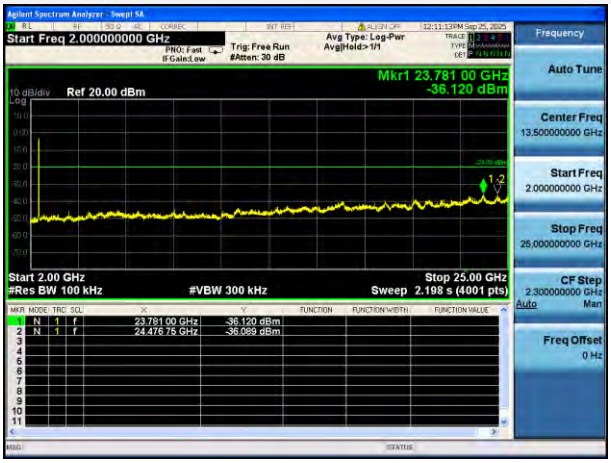


802.11g LOW CHANNEL CARRIER LEVEL

802.11g LOW CHANNEL, SPURIOUS 30 MHz ~ 3 GHz

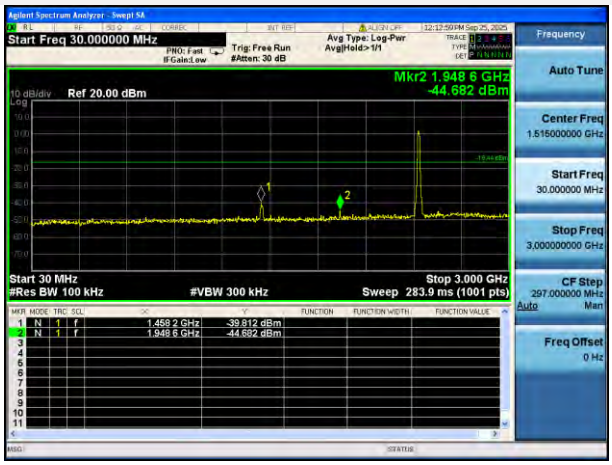


802.11g LOW CHANNEL, SPURIOUS 2 GHz ~ 25 GHz

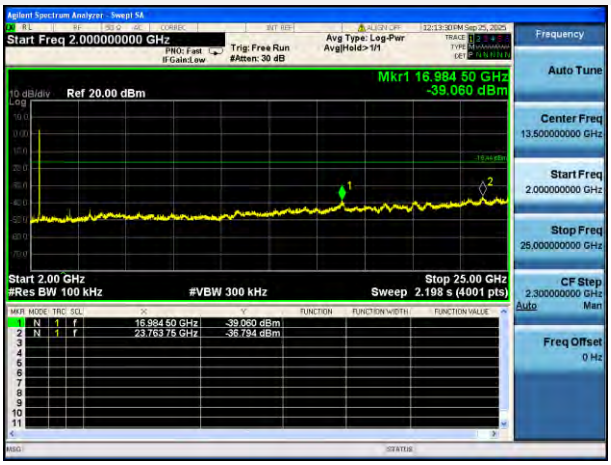


802.11g MIDDLE CHANNEL CARRIER LEVEL

802.11g MIDDLE CHANNEL, SPURIOUS
30 MHz ~ 3 GHz

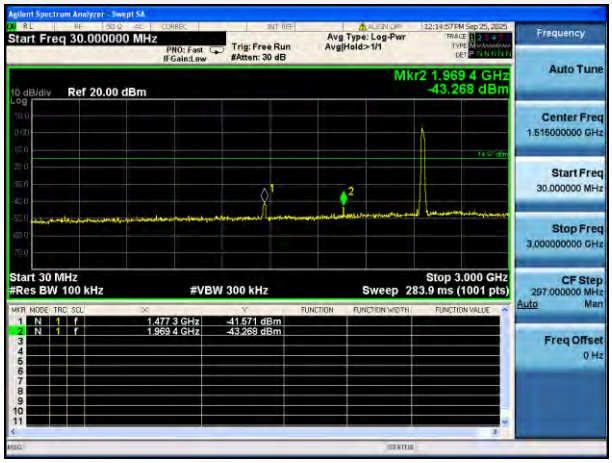


802.11g MIDDLE CHANNEL, SPURIOUS
2 GHz ~ 25 GHz

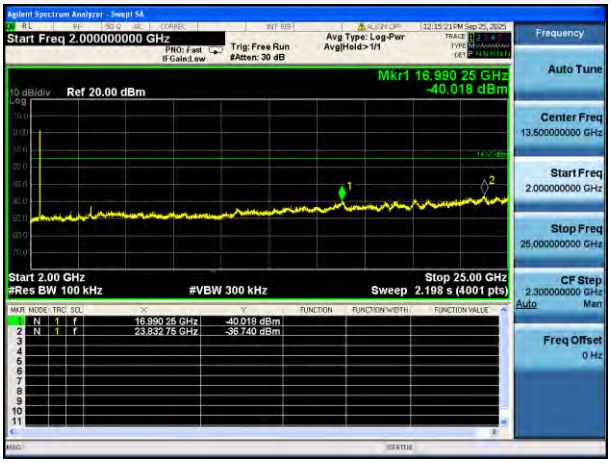


802.11g HIGH CHANNEL CARRIER LEVEL

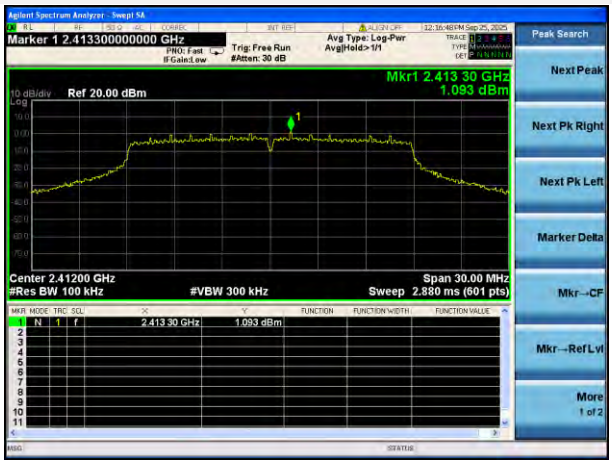
802.11g HIGH CHANNEL, SPURIOUS
30 MHz ~ 3 GHz



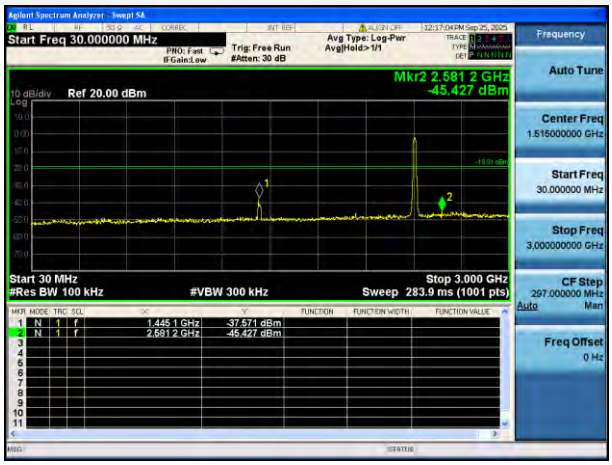
802.11g HIGH CHANNEL, SPURIOUS
2 GHz ~ 25 GHz



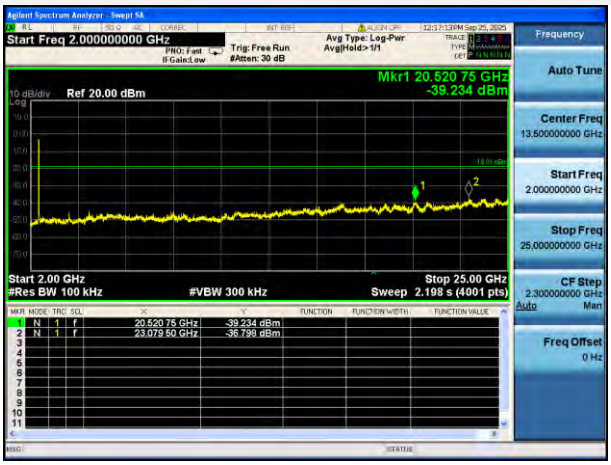
802.11n-20 MHz LOW CHANNEL CARRIER LEVEL



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

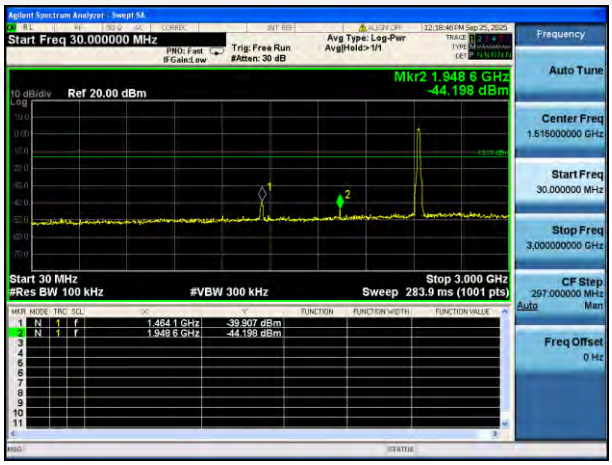


802.11n-20 MHz LOW CHANNEL, SPURIOUS 2 GHz ~ 25 GHz

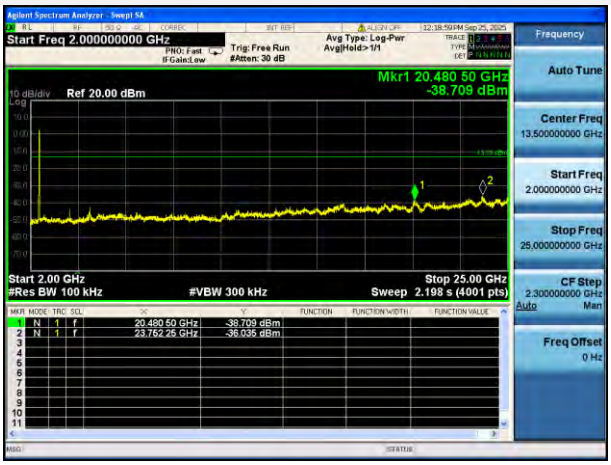


802.11n-20 MHz MIDDLE CHANNEL CARRIER LEVEL

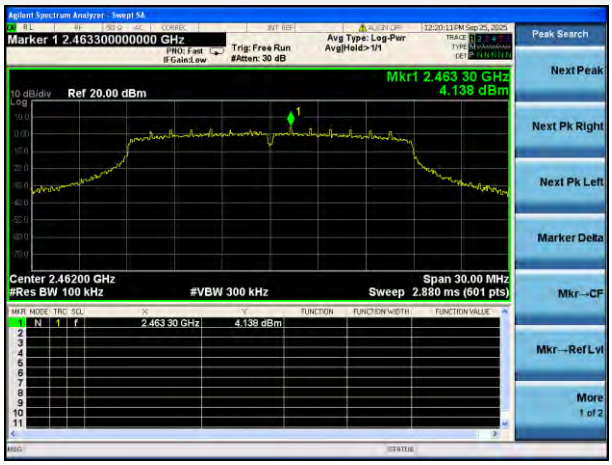
802.11n-20 MHz MIDDLE CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



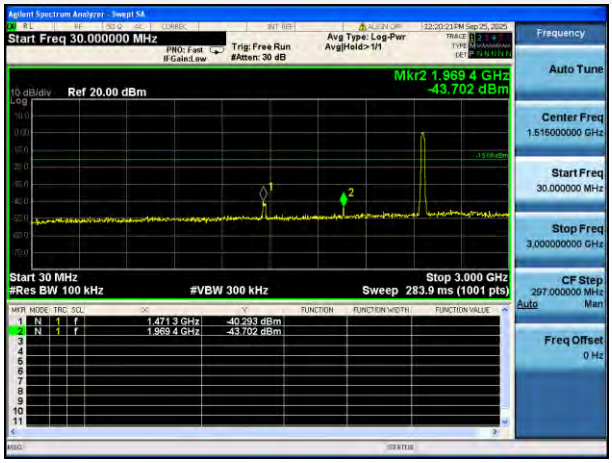
802.11n-20 MHz MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



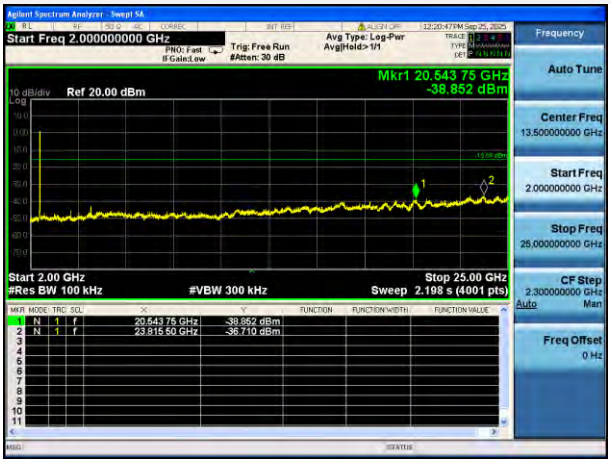
802.11n-20 MHz HIGH CHANNEL CARRIER LEVEL



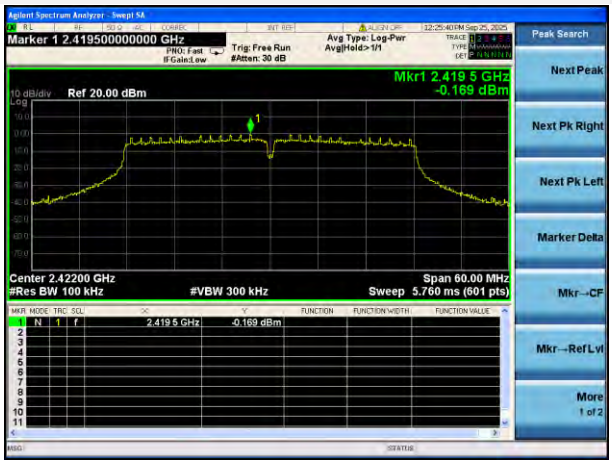
802.11n-20 MHz HIGH CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



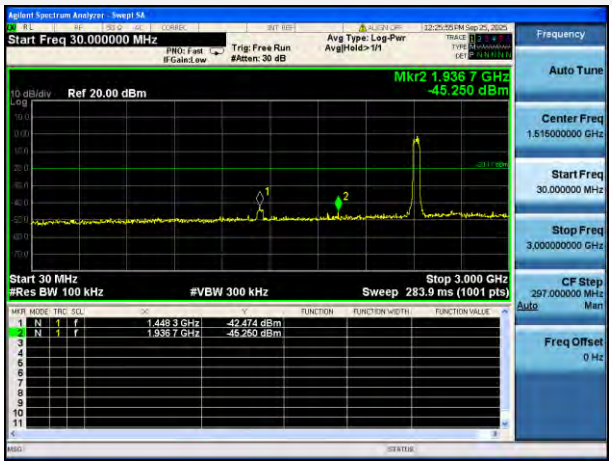
802.11n-20 MHz HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



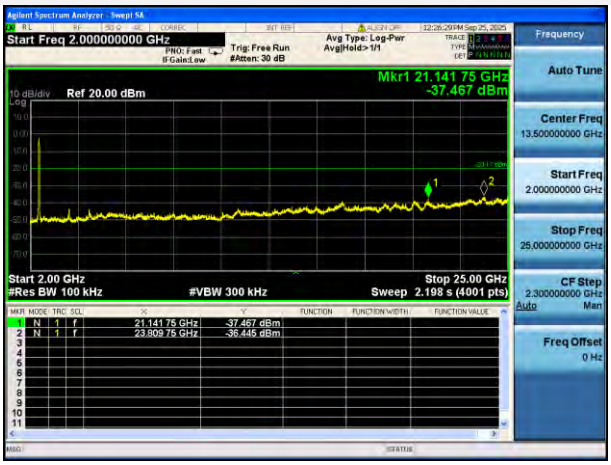
802.11n-40 MHz LOW CHANNEL CARRIER LEVEL



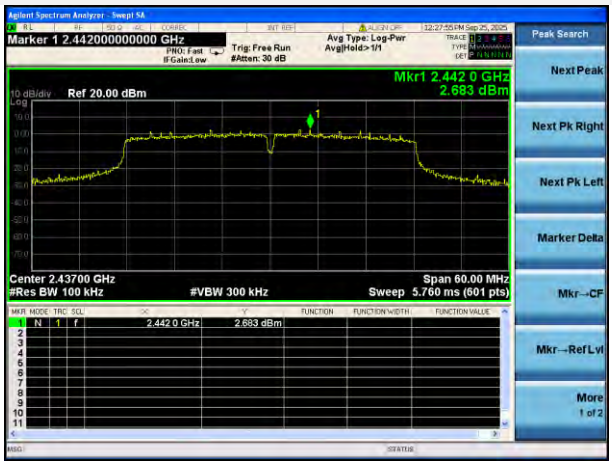
802.11n-40 MHz LOW CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



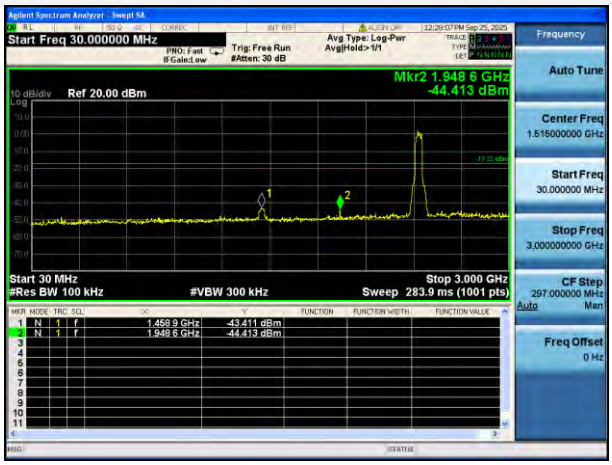
802.11n-40 MHz LOW CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



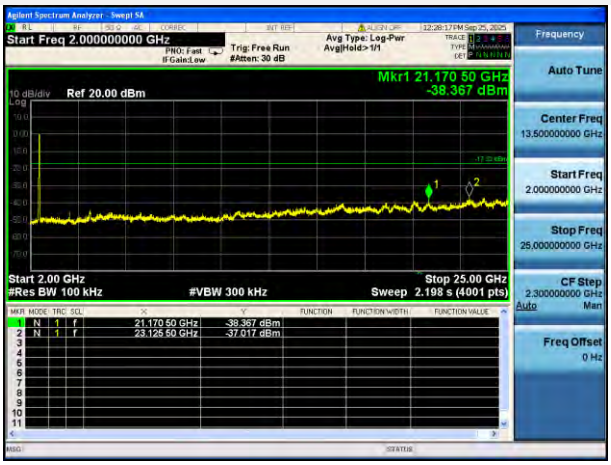
802.11n-40 MHz MIDDLE CHANNEL CARRIER LEVEL



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

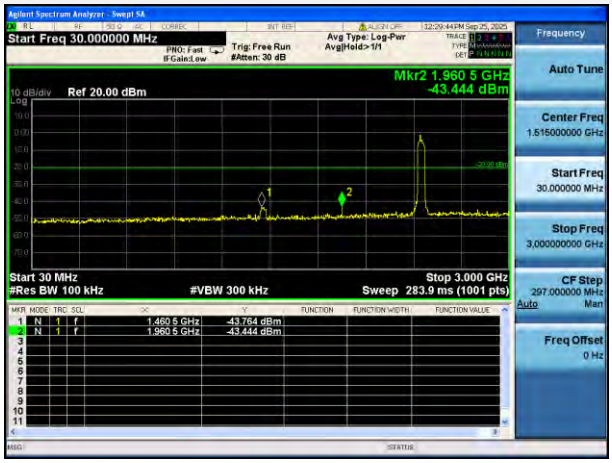


802.11n-40 MHz MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz

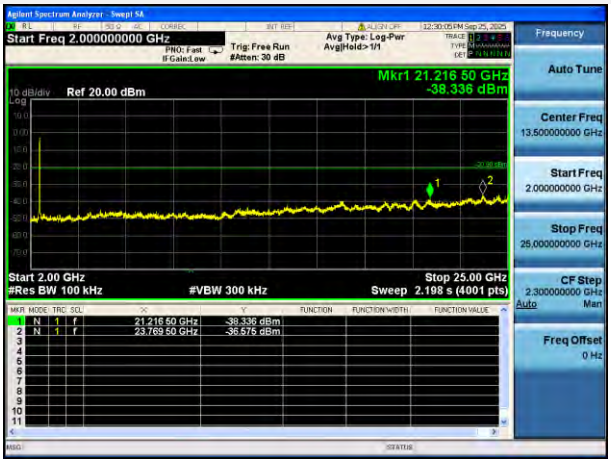


802.11n-40 MHz HIGH CHANNEL CARRIER LEVEL

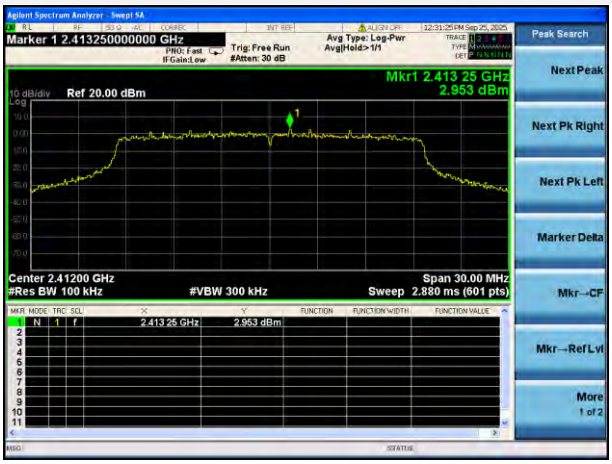
802.11n-40 MHz HIGH CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



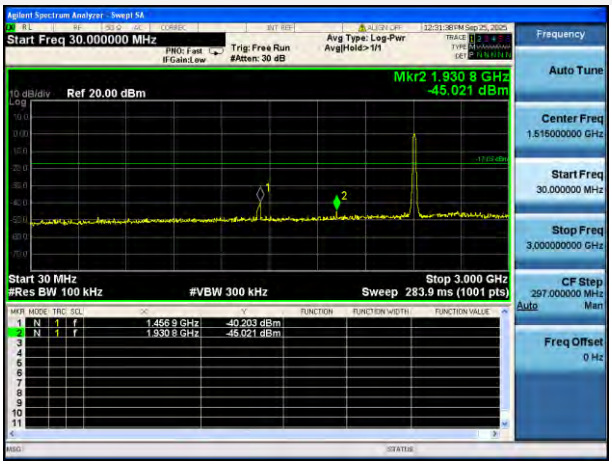
802.11n-40 MHz HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



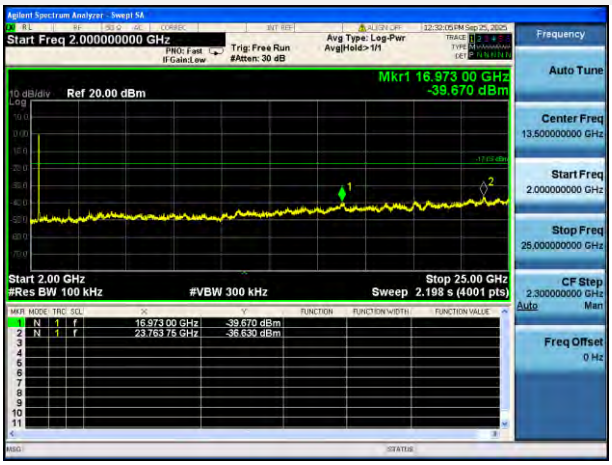
802.11ax-20 MHz(SU) LOW CHANNEL CARRIER LEVEL



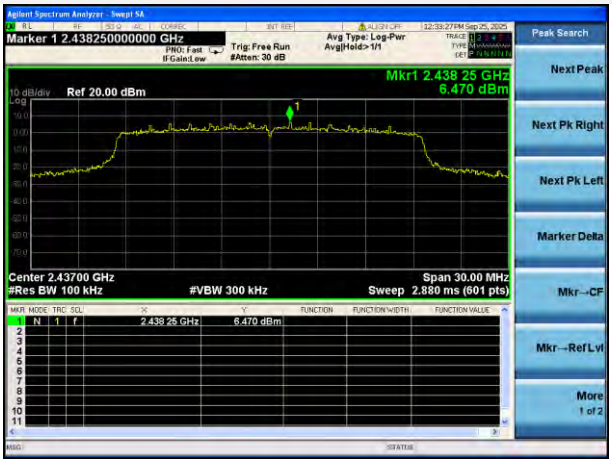
802.11ax-20 MHz(SU) LOW CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



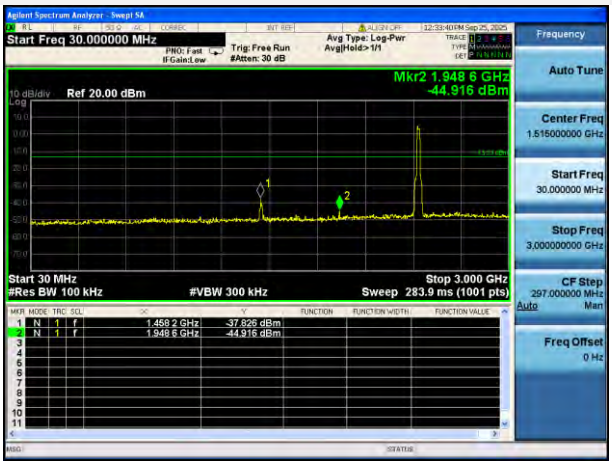
802.11ax-20 MHz(SU) LOW CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



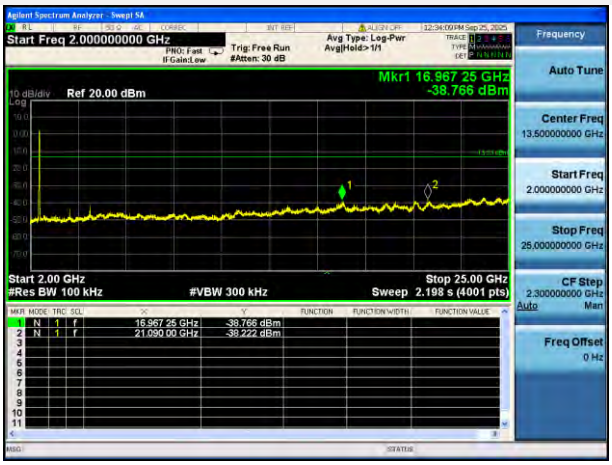
802.11ax-20 MHz(SU) MIDDLE CHANNEL CARRIER LEVEL



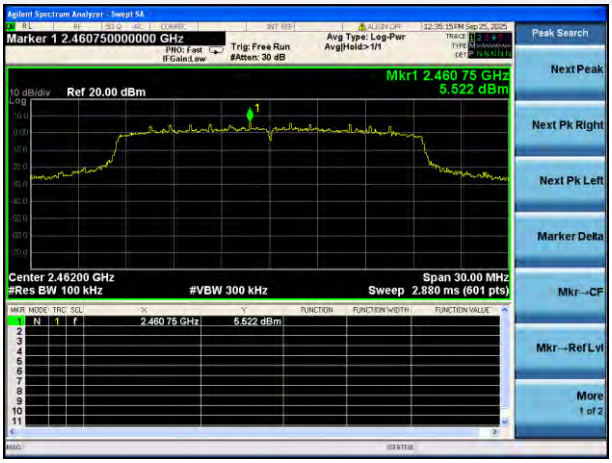
802.11ax-20 MHz(SU) MIDDLE CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



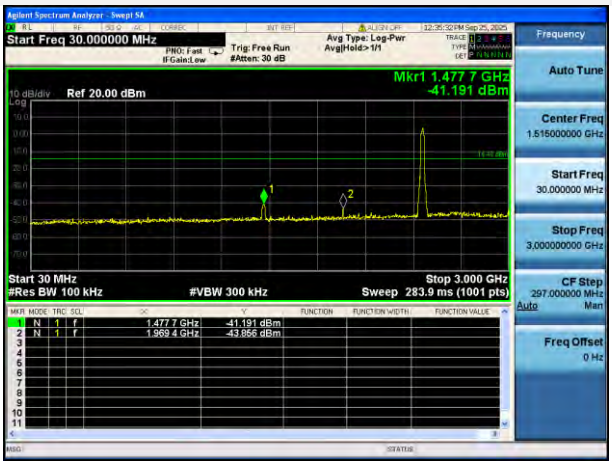
802.11ax-20 MHz(SU) MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



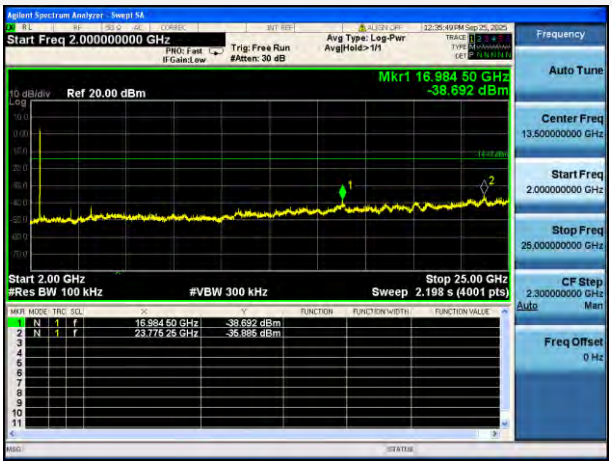
802.11ax-20 MHz(SU) HIGH CHANNEL CARRIER LEVEL



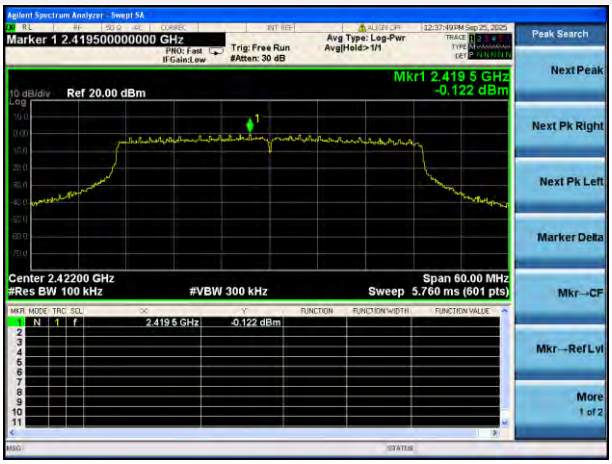
802.11ax-20 MHz(SU) HIGH CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



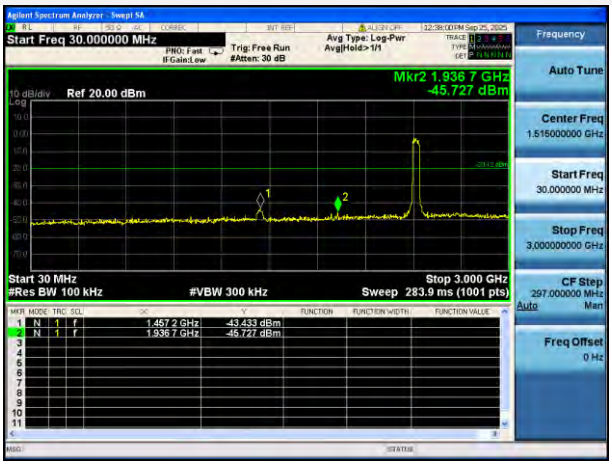
802.11ax-20 MHz(SU) HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



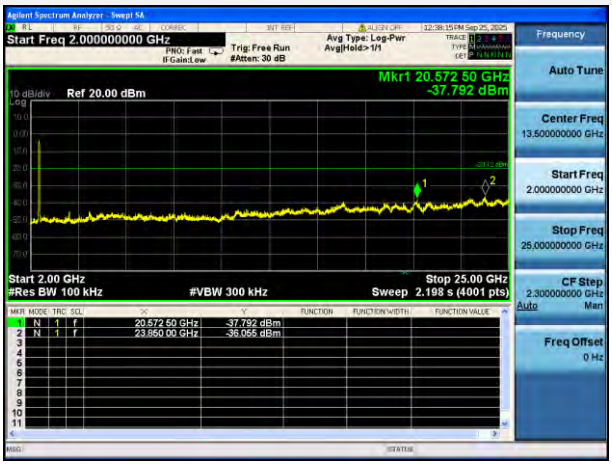
802.11ax-40 MHz(SU) LOW CHANNEL CARRIER LEVEL



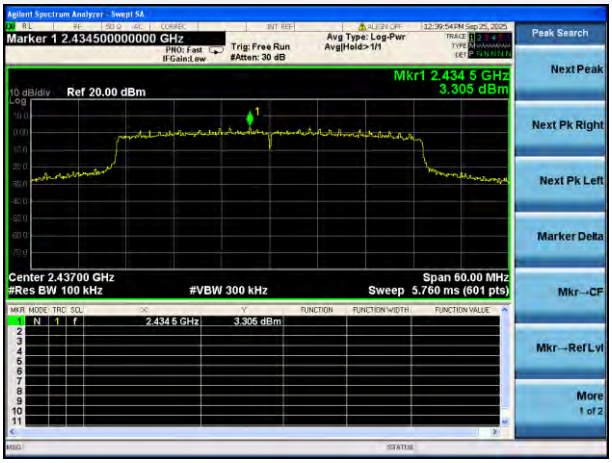
802.11ax-40 MHz(SU) LOW CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



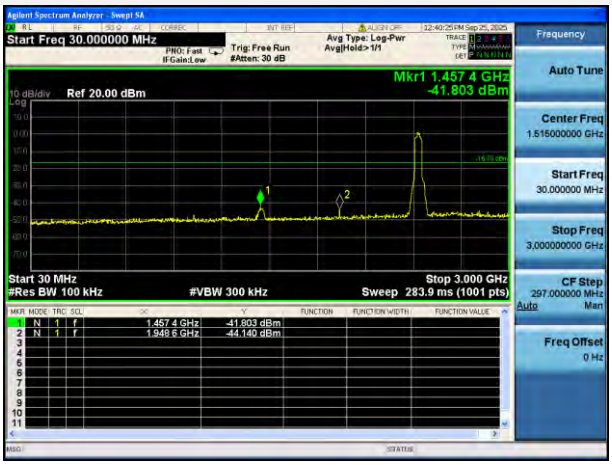
802.11ax-40 MHz(SU) LOW CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



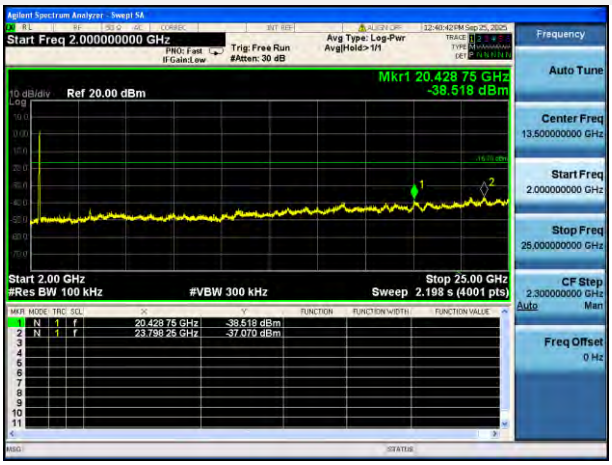
802.11ax-40 MHz(SU) MIDDLE CHANNEL CARRIER LEVEL



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

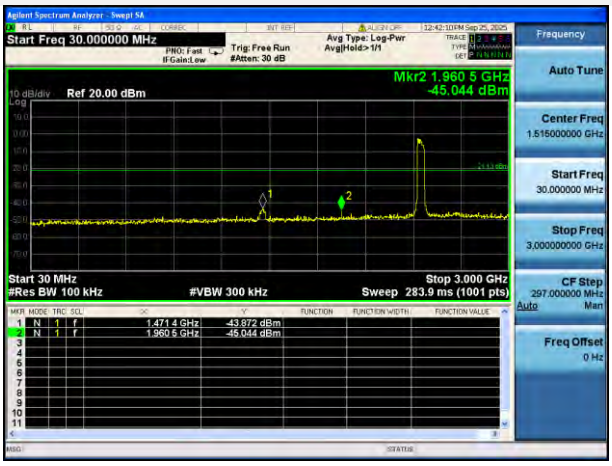


802.11ax-40 MHz(SU) MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz

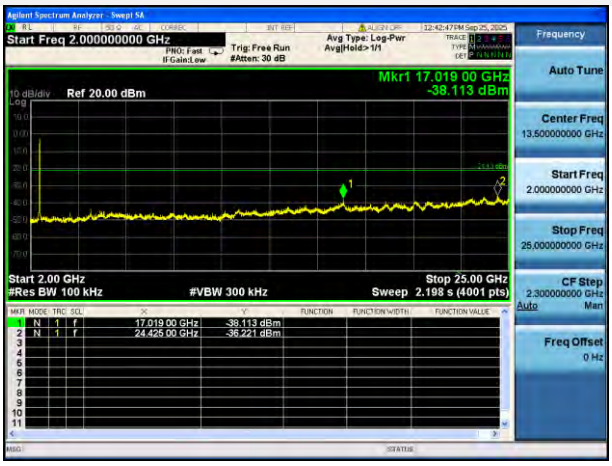


802.11ax-40 MHz(SU) HIGH CHANNEL CARRIER LEVEL

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



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



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

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

Test Data

802.11b Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-45.58	-0.08	-20.08	Pass
High Channel	-48.69	1.38	-18.62	Pass

802.11g Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-28.57	0.00	-20.00	Pass
High Channel	-40.82	5.03	-14.97	Pass

802.11n-20 MHz Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-28.08	1.09	-18.91	Pass
High Channel	-38.26	4.14	-15.86	Pass

802.11n-40 MHz Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-30.51	-0.17	-20.17	Pass
High Channel	-41.59	-0.90	-20.90	Pass

802.11ax-20 MHz(SU) Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-25.34	2.95	-17.05	Pass
High Channel	-33.94	5.52	-14.48	Pass

802.11ax-40 MHz(SU) Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-27.89	-0.12	-20.12	Pass
High Channel	-39.21	-1.13	-21.13	Pass

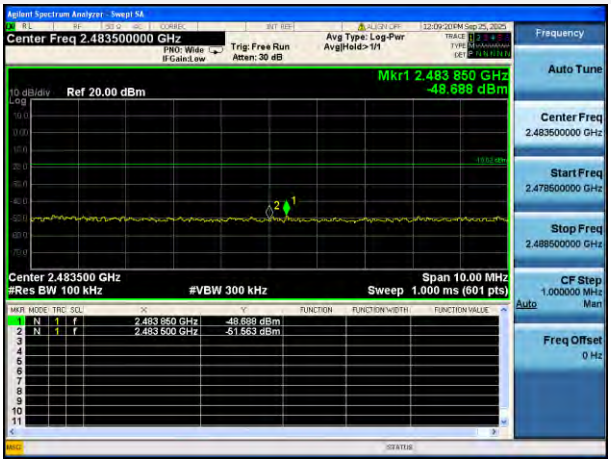
Test Plots

802.11b LOW CHANNEL, CARRIER LEVEL

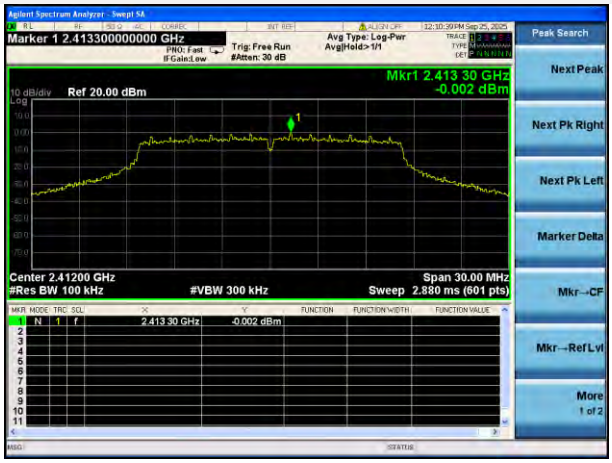
802.11b LOW CHANNEL, BAND EDGE

802.11b HIGH CHANNEL, CARRIER LEVEL

802.11b HIGH CHANNEL, BAND EDGE



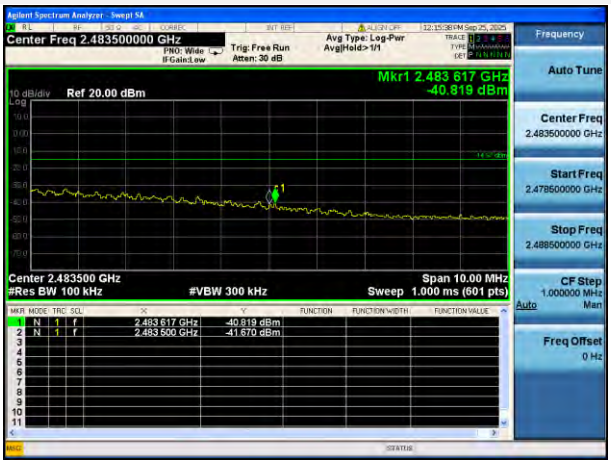
802.11g LOW CHANNEL, CARRIER LEVEL



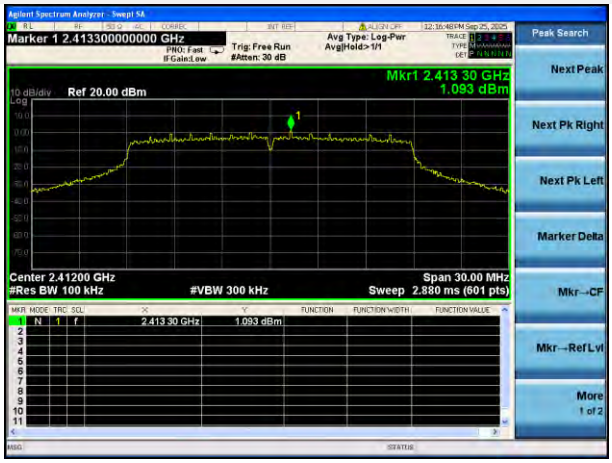
802.11g LOW CHANNEL, BAND EDGE

802.11g HIGH CHANNEL, CARRIER LEVEL

802.11g HIGH CHANNEL, BAND EDGE

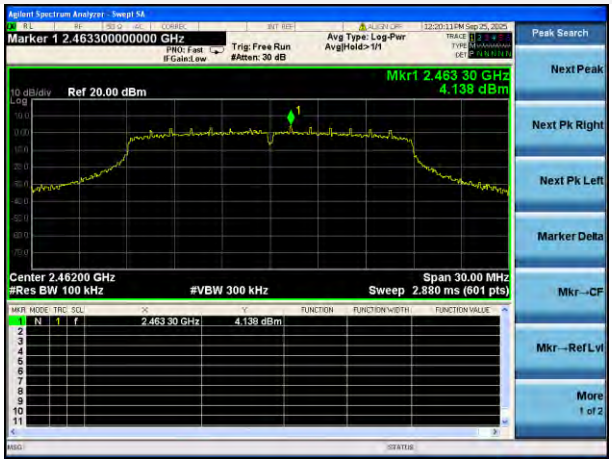


802.11n-20 MHz LOW CHANNEL, CARRIER LEVEL

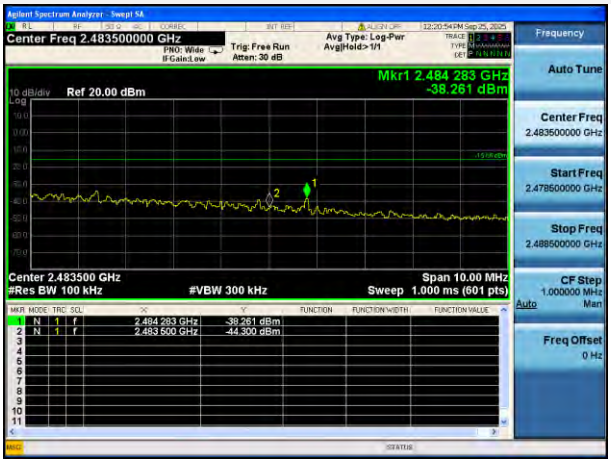


802.11n-20 MHz LOW CHANNEL, BAND EDGE

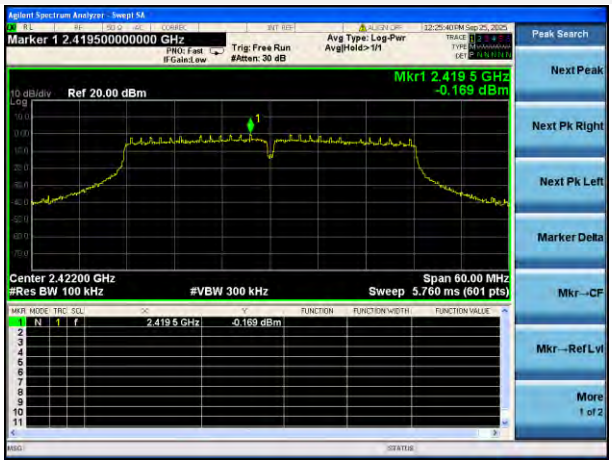
802.11n-20 MHz HIGH CHANNEL, CARRIER LEVEL



802.11n-20 MHz HIGH CHANNEL, BAND EDGE



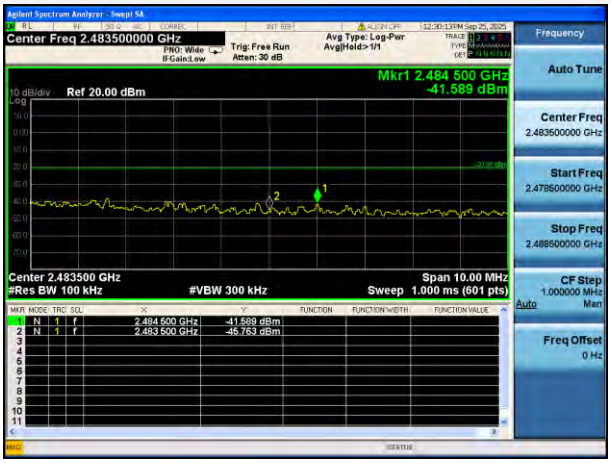
802.11n-40 MHz LOW CHANNEL, CARRIER LEVEL



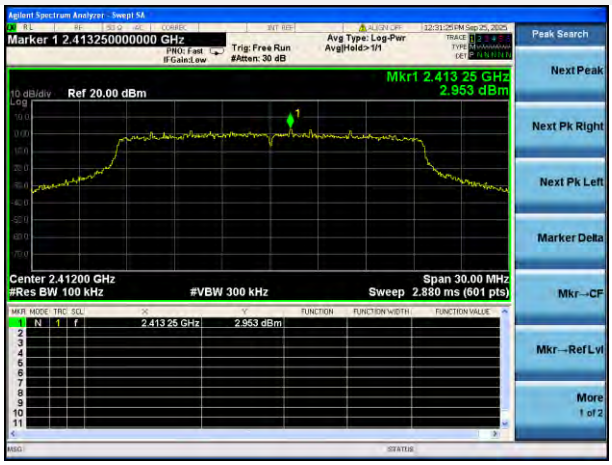
802.11n-40 MHz LOW CHANNEL, BAND EDGE

802.11n-40 MHz HIGH CHANNEL, CARRIER LEVEL

802.11n-40 MHz HIGH CHANNEL, BAND EDGE

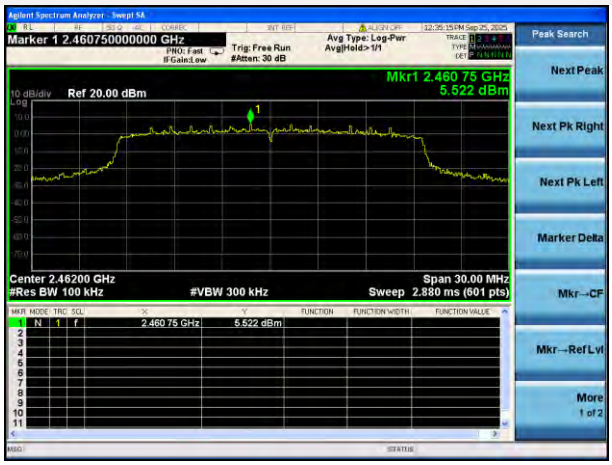


802.11ax-20 MHz(SU) LOW CHANNEL, CARRIER LEVEL



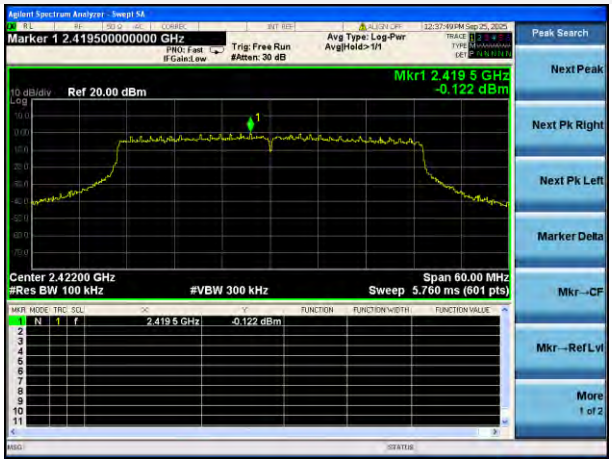
802.11ax-20 MHz(SU) LOW CHANNEL, BAND EDGE

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



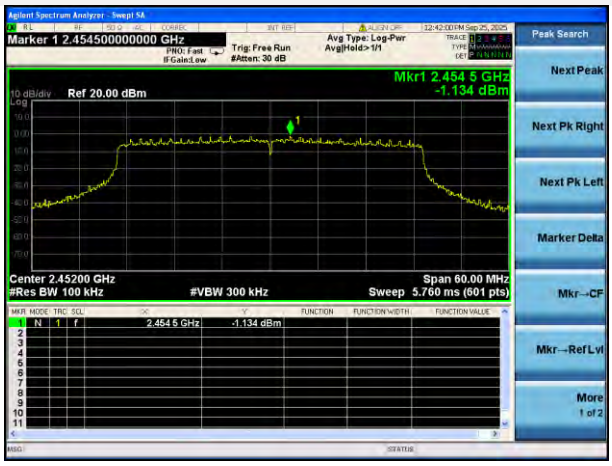
802.11ax-20 MHz(SU) HIGH CHANNEL, BAND EDGE

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

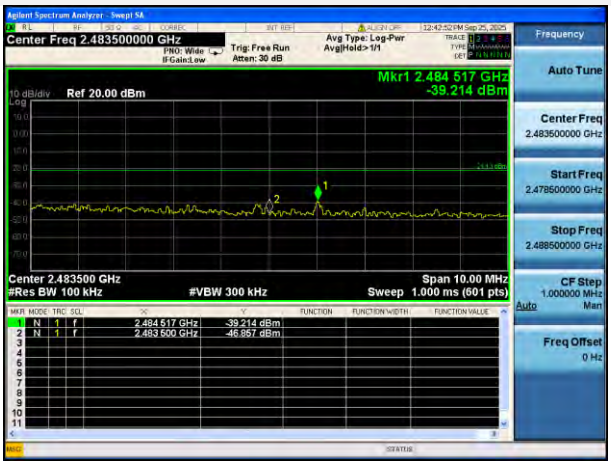


802.11ax-40 MHz(SU) LOW CHANNEL, BAND EDGE

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



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



A.5 Conducted Emissions

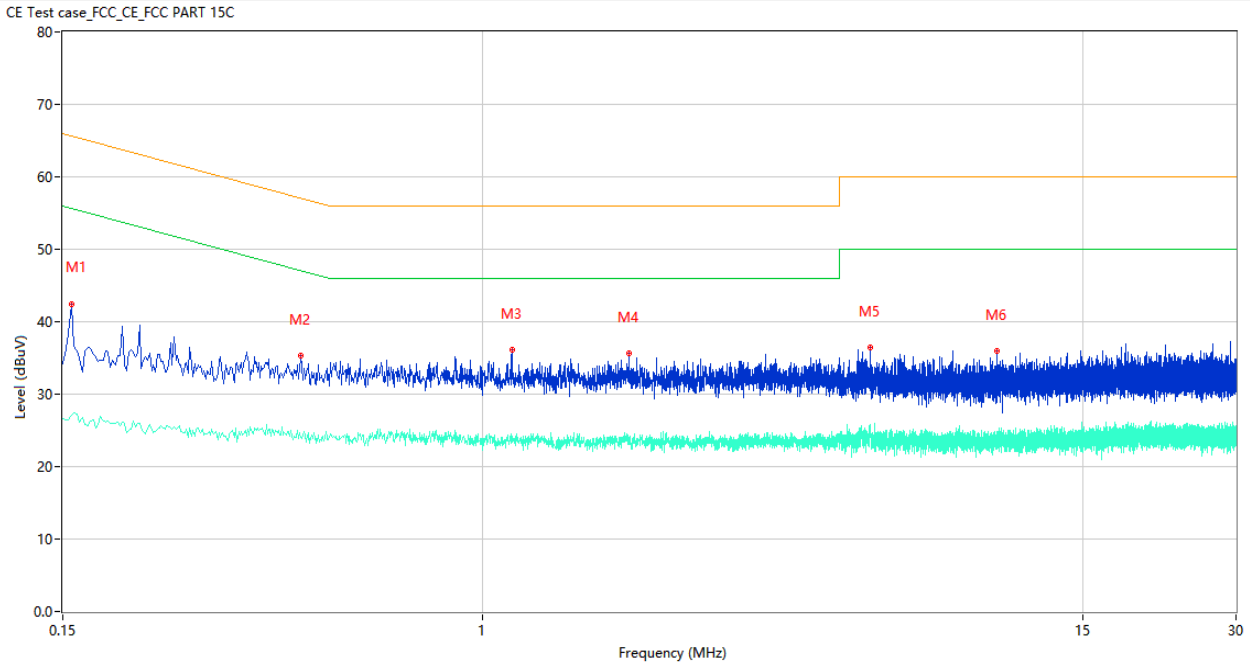
Note [1]: The EUT is working in the Normal link mode. All modes have been tested and normal link mode is worst.

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)

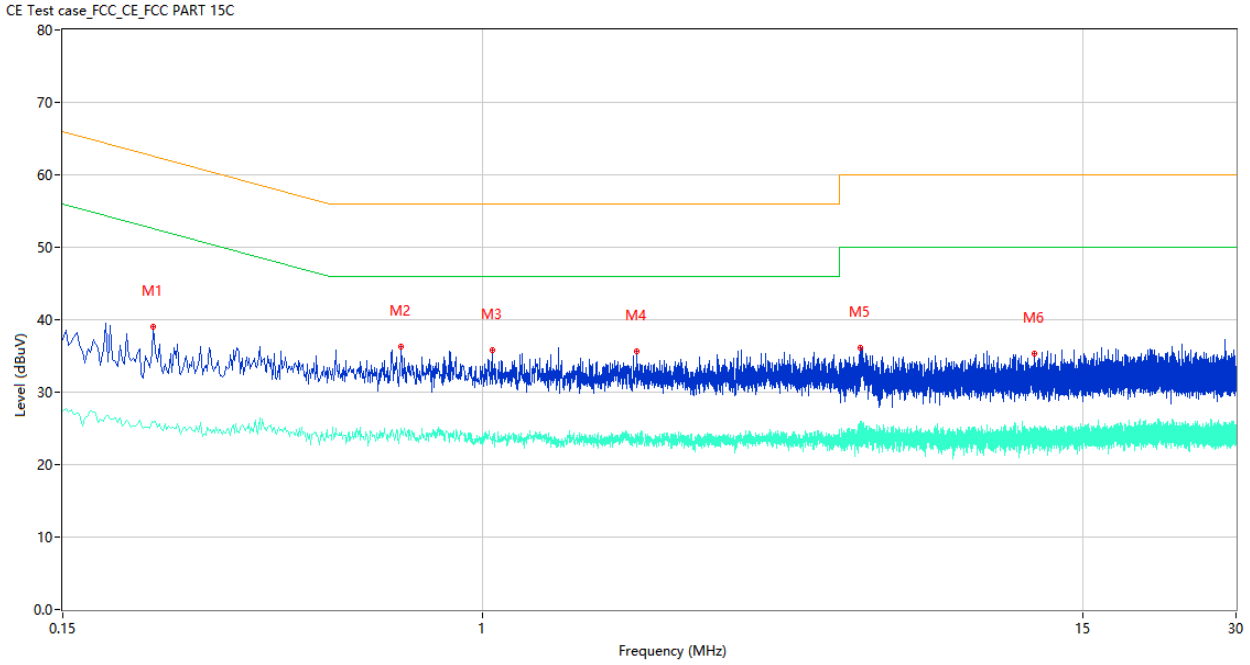
Test Data and Plots

PHASE L



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.156	42.38	9.86	65.67	23.29	Peak	L	Pass
1**	0.156	27.08	9.86	55.67	28.59	AV	L	Pass
2	0.440	35.34	10.19	57.06	21.72	Peak	L	Pass
2**	0.440	24.06	10.19	47.06	23.00	AV	L	Pass
3	1.142	36.20	10.41	56.00	19.80	Peak	L	Pass
3**	1.142	23.47	10.41	46.00	22.53	AV	L	Pass
4	1.930	35.65	10.43	56.00	20.35	Peak	L	Pass
4**	1.930	23.57	10.43	46.00	22.43	AV	L	Pass
5	5.742	36.46	10.67	60.00	23.54	Peak	L	Pass
5**	5.742	25.85	10.67	50.00	24.15	AV	L	Pass
6	10.186	35.89	10.60	60.00	24.11	Peak	L	Pass
6**	10.186	24.91	10.60	50.00	25.09	AV	L	Pass

PHASE N



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin (dB)	Detector	Line	Verdict
1	0.226	39.02	9.83	62.60	23.58	Peak	N	Pass
1**	0.226	25.80	9.83	52.60	26.80	AV	N	Pass
2	0.692	36.35	10.65	56.00	19.65	Peak	N	Pass
2**	0.692	25.00	10.65	46.00	21.00	AV	N	Pass
3	1.044	35.76	10.21	56.00	20.24	Peak	N	Pass
3**	1.044	23.86	10.21	46.00	22.14	AV	N	Pass
4	2.002	35.65	10.29	56.00	20.35	Peak	N	Pass
4**	2.002	23.98	10.29	46.00	22.02	AV	N	Pass
5	5.498	36.18	10.42	60.00	23.82	Peak	N	Pass
5**	5.498	22.51	10.42	50.00	27.49	AV	N	Pass
6	12.072	35.27	10.50	60.00	24.73	Peak	N	Pass
6**	12.072	24.57	10.50	50.00	25.43	AV	N	Pass

A.6 Radiated Emission

Note [1]: The symbol of "--" in the table which means not application.

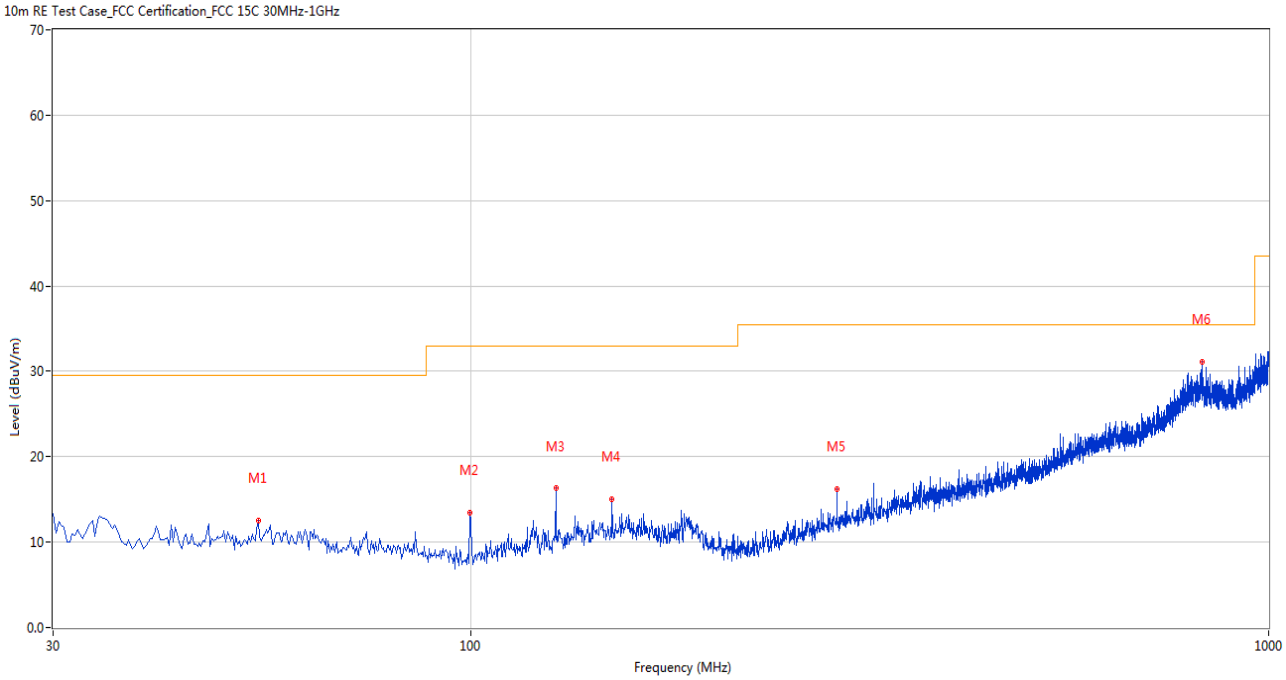
Note [2]: For the test data above 1 GHz，According the ANSI C63.10-2020, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

Note [3]: 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.

Note [4]: The EUT is working in the Normal link mode below 1 GHz. All modes have been tested and normal link mode is worst.

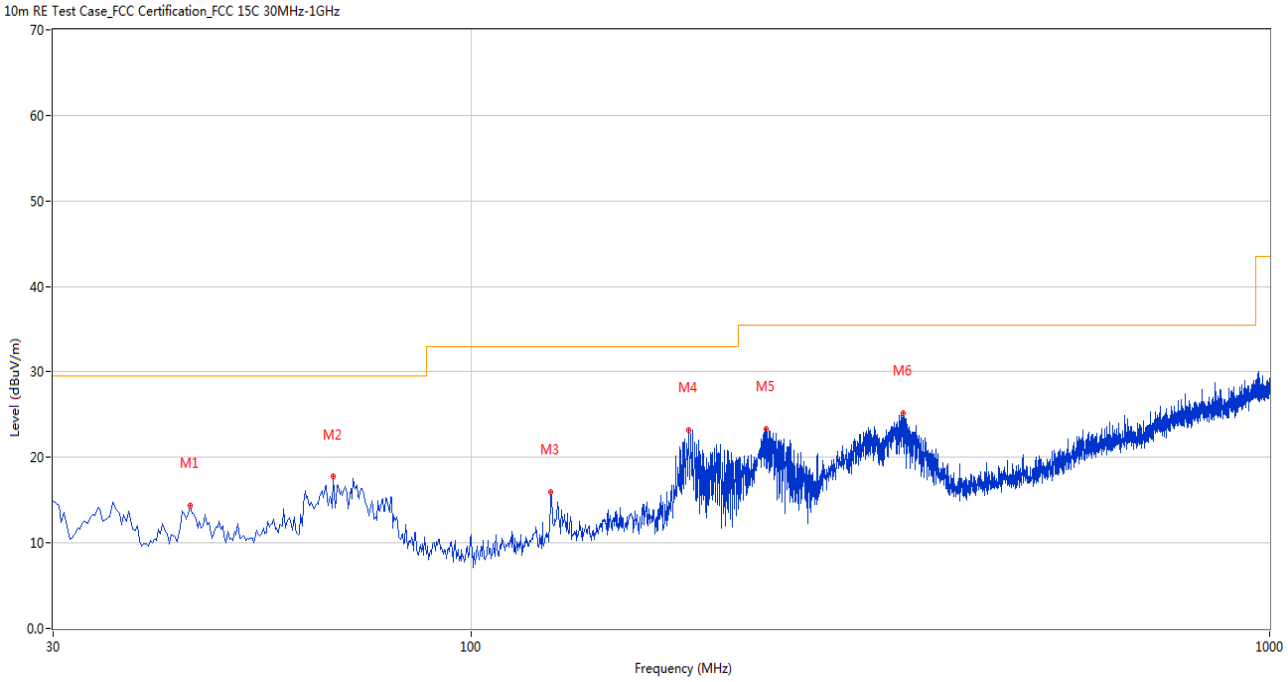
Test Data and Plots

30 MHz to 1 GHz, ANT H



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	54.244	12.52	-27.10	29.5	16.98	Peak	78.00	100	Horizontal	Pass
2	99.823	13.43	-29.96	33.0	19.57	Peak	53.00	100	Horizontal	Pass
3	127.946	16.29	-27.47	33.0	16.71	Peak	183.00	100	Horizontal	Pass
4	150.492	14.98	-26.24	33.0	18.02	Peak	202.00	100	Horizontal	Pass
5	287.956	16.21	-25.91	35.5	19.29	Peak	255.00	100	Horizontal	Pass
6	824.959	31.09	-11.93	35.5	4.41	Peak	159.00	100	Horizontal	Pass

30 MHz to 1 GHz, ANT V



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	44.546	14.42	-26.78	29.5	15.08	Peak	245.00	100	Vertical	Pass
2	67.336	17.73	-28.74	29.5	11.77	Peak	295.00	100	Vertical	Pass
3	126.006	16.00	-27.67	33.0	17.00	Peak	307.00	100	Vertical	Pass
4	187.586	23.26	-28.45	33.0	9.74	Peak	341.00	100	Vertical	Pass
5	234.376	23.39	-28.48	35.5	12.11	Peak	354.00	100	Vertical	Pass
6	348.080	25.14	-24.21	35.5	10.36	Peak	313.00	100	Vertical	Pass

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

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

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1330.900	43.40	74.0	30.60	Peak	164.00	200	Horizontal	Pass
1**	1330.900	31.35	54.0	22.65	AV	164.00	200	Horizontal	Pass
2	2413.100	84.90	74.0	-10.90	Peak	97.00	200	Horizontal	N/A
2**	2413.100	82.00	54.0	-28.00	AV	97.00	200	Horizontal	N/A
3	4824.200	48.30	74.0	25.70	Peak	185.00	150	Horizontal	Pass
3**	4824.200	44.42	54.0	9.58	AV	185.00	150	Horizontal	Pass
4	6986.000	51.80	74.0	22.20	Peak	360.00	300	Horizontal	Pass
4**	6986.000	43.39	54.0	10.61	AV	360.00	300	Horizontal	Pass
5	12451.863	47.23	74.0	26.77	Peak	241.00	200	Horizontal	Pass
5**	12451.863	37.93	54.0	16.07	AV	241.00	200	Horizontal	Pass
6	14441.287	50.56	74.0	23.44	Peak	351.00	100	Horizontal	Pass
6**	14441.287	40.61	54.0	13.39	AV	351.00	100	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1158.600	45.21	74.0	28.79	Peak	62.00	200	Vertical	Pass
1**	1158.600	31.56	54.0	22.44	AV	62.00	200	Vertical	Pass
2	2410.800	92.85	74.0	-18.85	Peak	155.00	100	Vertical	N/A
2**	2410.800	89.91	54.0	-35.91	AV	155.00	100	Vertical	N/A
3	4824.200	51.75	74.0	22.25	Peak	344.00	150	Vertical	Pass
3**	4824.200	49.47	54.0	4.53	AV	344.00	150	Vertical	Pass
4	6989.600	51.75	74.0	22.25	Peak	0.00	100	Vertical	Pass
4**	6989.600	43.63	54.0	10.37	AV	0.00	100	Vertical	Pass
5	12453.012	47.88	74.0	26.12	Peak	44.00	200	Vertical	Pass
5**	12453.012	39.28	54.0	14.72	AV	44.00	200	Vertical	Pass
6	16365.938	50.45	74.0	23.55	Peak	350.00	100	Vertical	Pass
6**	16365.938	41.26	54.0	12.74	AV	350.00	100	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	1553.600	41.29	74.0	32.71	Peak	360.00	200	Horizontal	Pass
1**	1553.600	31.19	54.0	22.81	AV	360.00	200	Horizontal	Pass
2	2437.000	86.91	74.0	-12.91	Peak	88.00	200	Horizontal	N/A
2**	2437.000	82.42	54.0	-28.42	AV	88.00	200	Horizontal	N/A
3	4874.200	48.43	74.0	25.57	Peak	315.00	150	Horizontal	Pass
3**	4874.200	43.63	54.0	10.37	AV	315.00	150	Horizontal	Pass
4	6989.800	51.94	74.0	22.06	Peak	265.00	200	Horizontal	Pass
4**	6989.800	43.76	54.0	10.24	AV	265.00	200	Horizontal	Pass
5	12286.550	47.17	74.0	26.83	Peak	360.00	100	Horizontal	Pass
5**	12286.550	38.12	54.0	15.88	AV	360.00	100	Horizontal	Pass
6	17092.801	50.34	74.0	23.66	Peak	191.00	100	Horizontal	Pass
6**	17092.801	41.28	54.0	12.72	AV	191.00	100	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	1165.700	45.36	74.0	28.64	Peak	85.00	400	Vertical	Pass
1**	1165.700	32.95	54.0	21.05	AV	85.00	400	Vertical	Pass
2	2438.200	95.38	74.0	-21.38	Peak	153.00	100	Vertical	N/A
2**	2438.200	92.64	54.0	-38.64	AV	153.00	100	Vertical	N/A
3	4874.200	51.03	74.0	22.97	Peak	338.00	150	Vertical	Pass
3**	4874.200	48.79	54.0	5.21	AV	338.00	150	Vertical	Pass
4	6985.200	52.72	74.0	21.28	Peak	81.00	300	Vertical	Pass
4**	6985.200	43.31	54.0	10.69	AV	81.00	300	Vertical	Pass
5	11314.513	48.15	74.0	25.85	Peak	154.00	200	Vertical	Pass
5**	11314.513	38.28	54.0	15.72	AV	154.00	200	Vertical	Pass
6	15837.525	50.67	74.0	23.33	Peak	227.00	200	Vertical	Pass
6**	15837.525	39.92	54.0	14.08	AV	227.00	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	1328.600	41.72	74.0	32.28	Peak	116.00	100	Horizontal	Pass
1**	1328.600	31.17	54.0	22.83	AV	116.00	100	Horizontal	Pass
2	2460.800	87.56	74.0	-13.56	Peak	83.00	150	Horizontal	N/A
2**	2460.800	84.67	54.0	-30.67	AV	83.00	150	Horizontal	N/A
3	4924.200	47.99	74.0	26.01	Peak	213.00	150	Horizontal	Pass
3**	4924.200	44.07	54.0	9.93	AV	213.00	150	Horizontal	Pass
4	6979.600	52.75	74.0	21.25	Peak	360.00	200	Horizontal	Pass
4**	6979.600	44.02	54.0	9.98	AV	360.00	200	Horizontal	Pass
5	11906.475	47.49	74.0	26.51	Peak	0.00	400	Horizontal	Pass
5**	11906.475	38.62	54.0	15.38	AV	0.00	400	Horizontal	Pass
6	16967.850	50.39	74.0	23.61	Peak	323.00	100	Horizontal	Pass
6**	16967.850	40.80	54.0	13.20	AV	323.00	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	1162.200	47.22	74.0	26.78	Peak	86.00	100	Vertical	Pass
1**	1162.200	30.64	54.0	23.36	AV	86.00	100	Vertical	Pass
2	2463.200	94.97	74.0	-20.97	Peak	145.00	150	Vertical	N/A
2**	2463.200	92.09	54.0	-38.09	AV	145.00	150	Vertical	N/A
3	4924.400	53.57	74.0	20.43	Peak	329.00	150	Vertical	Pass
3**	4924.400	50.62	54.0	3.38	AV	329.00	150	Vertical	Pass
4	7000.000	51.65	74.0	22.35	Peak	156.00	200	Vertical	Pass
4**	7000.000	42.66	54.0	11.34	AV	156.00	200	Vertical	Pass
5	12482.338	47.42	74.0	26.58	Peak	23.00	100	Vertical	Pass
5**	12482.338	38.66	54.0	15.34	AV	23.00	100	Vertical	Pass
6	15007.237	50.33	74.0	23.67	Peak	350.00	400	Vertical	Pass
6**	15007.237	40.62	54.0	13.38	AV	350.00	400	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	1331.100	41.23	74.0	32.77	Peak	177.00	300	Horizontal	Pass
1**	1331.100	35.32	54.0	18.68	AV	177.00	300	Horizontal	Pass
2	2413.100	89.43	74.0	-15.43	Peak	101.00	150	Horizontal	N/A
2**	2413.100	82.03	54.0	-28.03	AV	101.00	150	Horizontal	N/A
3	4823.400	49.50	74.0	24.50	Peak	141.00	150	Horizontal	Pass
3**	4823.400	43.41	54.0	10.59	AV	141.00	150	Horizontal	Pass
4	6988.200	51.91	74.0	22.09	Peak	0.00	400	Horizontal	Pass
4**	6988.200	43.45	54.0	10.55	AV	0.00	400	Horizontal	Pass
5	11426.925	47.72	74.0	26.28	Peak	290.00	300	Horizontal	Pass
5**	11426.925	37.74	54.0	16.26	AV	290.00	300	Horizontal	Pass
6	16862.324	50.52	74.0	23.48	Peak	305.00	300	Horizontal	Pass
6**	16862.324	40.77	54.0	13.23	AV	305.00	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	1161.800	44.40	74.0	29.60	Peak	88.00	100	Vertical	Pass
1**	1161.800	32.26	54.0	21.74	AV	88.00	100	Vertical	Pass
2	2410.600	97.40	74.0	-23.40	Peak	154.00	200	Vertical	N/A
2**	2410.600	90.03	54.0	-36.03	AV	154.00	200	Vertical	N/A
3	4824.600	50.92	74.0	23.08	Peak	329.00	150	Vertical	Pass
3**	4824.600	47.84	54.0	6.16	AV	329.00	150	Vertical	Pass
4	5788.800	54.05	74.0	19.95	Peak	360.00	300	Vertical	Pass
4**	5788.800	41.22	54.0	12.78	AV	360.00	300	Vertical	Pass
5	11912.513	47.27	74.0	26.73	Peak	341.00	200	Vertical	Pass
5**	11912.513	38.23	54.0	15.77	AV	341.00	200	Vertical	Pass
6	17431.163	50.57	74.0	23.43	Peak	0.00	400	Vertical	Pass
6**	17431.163	41.35	54.0	12.65	AV	0.00	400	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	1411.400	40.64	74.0	33.36	Peak	79.00	200	Horizontal	Pass
1**	1411.400	31.15	54.0	22.85	AV	79.00	200	Horizontal	Pass
2	2439.400	88.16	74.0	-14.16	Peak	110.00	100	Horizontal	N/A
2**	2439.400	81.01	54.0	-27.01	AV	110.00	100	Horizontal	N/A
3	4874.000	49.27	74.0	24.73	Peak	187.00	150	Horizontal	Pass
3**	4874.000	42.93	54.0	11.07	AV	187.00	150	Horizontal	Pass
4	6991.200	51.74	74.0	22.26	Peak	360.00	200	Horizontal	Pass
4**	6991.200	43.74	54.0	10.26	AV	360.00	200	Horizontal	Pass
5	10836.688	48.05	74.0	25.95	Peak	344.00	400	Horizontal	Pass
5**	10836.688	38.24	54.0	15.76	AV	344.00	400	Horizontal	Pass
6	17481.038	51.16	74.0	22.84	Peak	0.00	400	Horizontal	Pass
6**	17481.038	40.19	54.0	13.81	AV	0.00	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	1160.900	44.57	74.0	29.43	Peak	108.00	100	Vertical	Pass
1**	1160.900	29.85	54.0	24.15	AV	108.00	100	Vertical	Pass
2	2438.300	100.32	74.0	-26.32	Peak	171.00	200	Vertical	N/A
2**	2438.300	93.18	54.0	-39.18	AV	171.00	200	Vertical	N/A
3	4874.000	56.46	74.0	17.54	Peak	171.00	200	Vertical	Pass
3**	4874.000	47.05	54.0	6.95	AV	171.00	200	Vertical	Pass
4	4875.000	53.34	74.0	20.66	Peak	329.00	150	Vertical	Pass
4**	4875.000	48.53	54.0	5.47	AV	329.00	150	Vertical	Pass
5	11888.075	47.07	74.0	26.93	Peak	24.00	400	Vertical	Pass
5**	11888.075	38.81	54.0	15.19	AV	24.00	400	Vertical	Pass
6	16793.287	51.38	74.0	22.62	Peak	225.00	100	Vertical	Pass
6**	16793.287	40.79	54.0	13.21	AV	225.00	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	1595.400	40.96	74.0	33.04	Peak	4.00	300	Horizontal	Pass
1**	1595.400	30.69	54.0	23.31	AV	4.00	300	Horizontal	Pass
2	2458.900	96.03	74.0	-22.03	Peak	88.00	200	Horizontal	N/A
2**	2458.900	88.45	54.0	-34.45	AV	88.00	200	Horizontal	N/A
3	4925.400	48.48	74.0	25.52	Peak	62.00	150	Horizontal	Pass
3**	4925.400	43.46	54.0	10.54	AV	62.00	150	Horizontal	Pass
4	6983.000	52.35	74.0	21.65	Peak	154.00	300	Horizontal	Pass
4**	6983.000	42.68	54.0	11.32	AV	154.00	300	Horizontal	Pass
5	11996.463	47.86	74.0	26.14	Peak	0.00	100	Horizontal	Pass
5**	11996.463	38.05	54.0	15.95	AV	0.00	100	Horizontal	Pass
6	17436.412	50.38	74.0	23.62	Peak	292.00	400	Horizontal	Pass
6**	17436.412	41.21	54.0	12.79	AV	292.00	400	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	1164.200	44.30	74.0	29.70	Peak	80.00	100	Vertical	Pass
1**	1164.200	31.08	54.0	22.92	AV	80.00	100	Vertical	Pass
2	2460.800	102.74	74.0	-28.74	Peak	147.00	150	Vertical	N/A
2**	2460.800	95.06	54.0	-41.06	AV	147.00	150	Vertical	N/A
3	4923.400	55.63	74.0	18.37	Peak	327.00	150	Vertical	Pass
3**	4923.400	50.71	54.0	3.29	AV	327.00	150	Vertical	Pass
4	6992.000	52.98	74.0	21.02	Peak	109.00	200	Vertical	Pass
4**	6992.000	43.30	54.0	10.70	AV	109.00	200	Vertical	Pass
5	11293.237	47.65	74.0	26.35	Peak	165.00	100	Vertical	Pass
5**	11293.237	38.77	54.0	15.23	AV	165.00	100	Vertical	Pass
6	16989.113	50.15	74.0	23.85	Peak	24.00	400	Vertical	Pass
6**	16989.113	40.73	54.0	13.27	AV	24.00	400	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	1329.800	41.39	74.0	32.61	Peak	47.00	200	Horizontal	Pass
1**	1329.800	31.09	54.0	22.91	AV	47.00	200	Horizontal	Pass
2	2413.300	87.36	74.0	-13.36	Peak	56.00	200	Horizontal	N/A
2**	2413.300	79.95	54.0	-25.95	AV	56.00	200	Horizontal	N/A
3	4825.000	48.29	74.0	25.71	Peak	63.00	150	Horizontal	Pass
3**	4825.000	43.25	54.0	10.75	AV	63.00	150	Horizontal	Pass
4	6617.600	52.85	74.0	21.15	Peak	63.00	100	Horizontal	Pass
4**	6617.600	41.61	54.0	12.39	AV	63.00	100	Horizontal	Pass
5	10894.474	47.57	74.0	26.43	Peak	172.00	400	Horizontal	Pass
5**	10894.474	37.56	54.0	16.44	AV	172.00	400	Horizontal	Pass
6	14419.237	50.56	74.0	23.44	Peak	0.00	400	Horizontal	Pass
6**	14419.237	41.06	54.0	12.94	AV	0.00	400	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	1166.000	47.12	74.0	26.88	Peak	99.00	300	Vertical	Pass
1**	1166.000	32.07	54.0	21.93	AV	99.00	300	Vertical	Pass
2	2413.800	97.97	74.0	-23.97	Peak	149.00	150	Vertical	N/A
2**	2413.800	90.45	54.0	-36.45	AV	149.00	150	Vertical	N/A
3	4821.400	52.75	74.0	21.25	Peak	330.00	150	Vertical	Pass
3**	4821.400	49.45	54.0	4.55	AV	330.00	150	Vertical	Pass
4	4824.200	57.17	74.0	16.83	Peak	186.00	100	Vertical	Pass
4**	4824.200	46.63	54.0	7.37	AV	186.00	100	Vertical	Pass
5	12549.900	46.98	74.0	27.02	Peak	0.00	100	Vertical	Pass
5**	12549.900	38.22	54.0	15.78	AV	0.00	100	Vertical	Pass
6	15854.850	50.48	74.0	23.52	Peak	59.00	150	Vertical	Pass
6**	15854.850	40.56	54.0	13.44	AV	59.00	150	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	1329.800	41.01	74.0	32.99	Peak	158.00	400	Horizontal	Pass
1**	1329.800	31.17	54.0	22.83	AV	158.00	400	Horizontal	Pass
2	2438.300	94.31	74.0	-20.31	Peak	89.00	200	Horizontal	N/A
2**	2438.300	87.09	54.0	-33.09	AV	89.00	200	Horizontal	N/A
3	4870.600	48.88	74.0	25.12	Peak	302.00	150	Horizontal	Pass
3**	4870.600	45.14	54.0	8.86	AV	302.00	150	Horizontal	Pass
4	6994.800	52.21	74.0	21.79	Peak	16.00	400	Horizontal	Pass
4**	6994.800	42.50	54.0	11.50	AV	16.00	400	Horizontal	Pass
5	11885.487	47.67	74.0	26.33	Peak	48.00	300	Horizontal	Pass
5**	11885.487	38.52	54.0	15.48	AV	48.00	300	Horizontal	Pass
6	16736.850	51.07	74.0	22.93	Peak	142.00	100	Horizontal	Pass
6**	16736.850	40.73	54.0	13.27	AV	142.00	100	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1161.300	46.81	74.0	27.19	Peak	81.00	300	Vertical	Pass
1**	1161.300	31.49	54.0	22.51	AV	81.00	300	Vertical	Pass
2	2439.700	102.32	74.0	-28.32	Peak	147.00	150	Vertical	N/A
2**	2439.700	95.04	54.0	-41.04	AV	147.00	150	Vertical	N/A
3	4867.800	55.05	74.0	18.95	Peak	343.00	150	Vertical	Pass
3**	4867.800	50.80	54.0	3.20	AV	343.00	150	Vertical	Pass
4	6980.800	52.01	74.0	21.99	Peak	296.00	100	Vertical	Pass
4**	6980.800	43.42	54.0	10.58	AV	296.00	100	Vertical	Pass
5	11895.838	47.36	74.0	26.64	Peak	360.00	300	Vertical	Pass
5**	11895.838	38.08	54.0	15.92	AV	360.00	300	Vertical	Pass
6	17424.337	50.39	74.0	23.61	Peak	360.00	200	Vertical	Pass
6**	17424.337	41.14	54.0	12.86	AV	360.00	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	1581.400	40.81	74.0	33.19	Peak	360.00	200	Horizontal	Pass
1**	1581.400	31.86	54.0	22.14	AV	360.00	200	Horizontal	Pass
2	2460.600	95.58	74.0	-21.58	Peak	93.00	100	Horizontal	N/A
2**	2460.600	87.94	54.0	-33.94	AV	93.00	100	Horizontal	N/A
3	4927.200	50.38	74.0	23.62	Peak	64.00	150	Horizontal	Pass
3**	4927.200	41.63	54.0	12.37	AV	64.00	150	Horizontal	Pass
4	6989.600	52.22	74.0	21.78	Peak	32.00	400	Horizontal	Pass
4**	6989.600	43.87	54.0	10.13	AV	32.00	400	Horizontal	Pass
5	12489.238	47.07	74.0	26.93	Peak	205.00	300	Horizontal	Pass
5**	12489.238	38.06	54.0	15.94	AV	205.00	300	Horizontal	Pass
6	16321.575	50.69	74.0	23.31	Peak	348.00	100	Horizontal	Pass
6**	16321.575	40.43	54.0	13.57	AV	348.00	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	1329.100	45.13	74.0	28.87	Peak	56.00	400	Vertical	Pass
1**	1329.100	31.14	54.0	22.86	AV	56.00	400	Vertical	Pass
2	2463.200	102.77	74.0	-28.77	Peak	152.00	200	Vertical	N/A
2**	2463.200	94.86	54.0	-40.86	AV	152.00	200	Vertical	N/A
3	4924.400	54.31	74.0	19.69	Peak	336.00	150	Vertical	Pass
3**	4924.400	50.22	54.0	3.78	AV	336.00	150	Vertical	Pass
4	6991.200	52.64	74.0	21.36	Peak	360.00	200	Vertical	Pass
4**	6991.200	43.08	54.0	10.92	AV	360.00	200	Vertical	Pass
5	12462.213	47.94	74.0	26.06	Peak	95.00	400	Vertical	Pass
5**	12462.213	37.61	54.0	16.39	AV	95.00	400	Vertical	Pass
6	16358.850	51.56	74.0	22.44	Peak	0.00	400	Vertical	Pass
6**	16358.850	41.07	54.0	12.93	AV	0.00	400	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	1302.200	41.15	74.0	32.85	Peak	203.00	100	Horizontal	Pass
1**	1302.200	30.69	54.0	23.31	AV	203.00	100	Horizontal	Pass
2	2415.400	91.23	74.0	-17.23	Peak	98.00	100	Horizontal	N/A
2**	2415.400	83.40	54.0	-29.40	AV	98.00	100	Horizontal	N/A
3	4847.400	49.01	74.0	24.99	Peak	64.00	150	Horizontal	Pass
3**	4847.400	44.28	54.0	9.72	AV	64.00	150	Horizontal	Pass
4	6987.600	51.59	74.0	22.41	Peak	264.00	300	Horizontal	Pass
4**	6987.600	43.85	54.0	10.15	AV	264.00	300	Horizontal	Pass
5	11158.400	47.17	74.0	26.83	Peak	105.00	100	Horizontal	Pass
5**	11158.400	37.66	54.0	16.34	AV	105.00	100	Horizontal	Pass
6	17088.863	50.12	74.0	23.88	Peak	0.00	100	Horizontal	Pass
6**	17088.863	41.03	54.0	12.97	AV	0.00	100	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	1163.900	45.81	74.0	28.19	Peak	45.00	200	Vertical	Pass
1**	1163.900	32.86	54.0	21.14	AV	45.00	200	Vertical	Pass
2	2413.500	99.00	74.0	-25.00	Peak	150.00	100	Vertical	N/A
2**	2413.500	91.48	54.0	-37.48	AV	150.00	100	Vertical	N/A
3	4844.800	54.30	74.0	19.70	Peak	352.00	150	Vertical	Pass
3**	4844.800	50.39	54.0	3.61	AV	352.00	150	Vertical	Pass
4	6995.600	52.09	74.0	21.91	Peak	215.00	400	Vertical	Pass
4**	6995.600	43.41	54.0	10.59	AV	215.00	400	Vertical	Pass
5	11898.424	47.17	74.0	26.83	Peak	0.00	300	Vertical	Pass
5**	11898.424	38.74	54.0	15.26	AV	0.00	300	Vertical	Pass
6	15571.875	51.14	74.0	22.86	Peak	0.00	100	Vertical	Pass
6**	15571.875	40.64	54.0	13.36	AV	0.00	100	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	1363.600	41.09	74.0	32.91	Peak	337.00	200	Horizontal	Pass
1**	1363.600	30.68	54.0	23.32	AV	337.00	200	Horizontal	Pass
2	2435.500	92.02	74.0	-18.02	Peak	88.00	200	Horizontal	N/A
2**	2435.500	84.29	54.0	-30.29	AV	88.00	200	Horizontal	N/A
3	4856.400	48.61	74.0	25.39	Peak	66.00	150	Horizontal	Pass
3**	4856.400	42.79	54.0	11.21	AV	66.00	150	Horizontal	Pass
4	6989.600	52.13	74.0	21.87	Peak	167.00	200	Horizontal	Pass
4**	6989.600	43.63	54.0	10.37	AV	167.00	200	Horizontal	Pass
5	11033.338	47.30	74.0	26.70	Peak	334.00	200	Horizontal	Pass
5**	11033.338	38.24	54.0	15.76	AV	334.00	200	Horizontal	Pass
6	17391.526	50.62	74.0	23.38	Peak	348.00	200	Horizontal	Pass
6**	17391.526	41.44	54.0	12.56	AV	348.00	200	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	1164.000	47.32	74.0	26.68	Peak	65.00	400	Vertical	Pass
1**	1164.000	35.10	54.0	18.90	AV	65.00	400	Vertical	Pass
2	2434.900	99.82	74.0	-25.82	Peak	153.00	150	Vertical	N/A
2**	2434.900	91.78	54.0	-37.78	AV	153.00	150	Vertical	N/A
3	4874.600	53.01	74.0	20.99	Peak	348.00	150	Vertical	Pass
3**	4874.600	48.96	54.0	5.04	AV	348.00	150	Vertical	Pass
4	6987.800	52.83	74.0	21.17	Peak	360.00	100	Vertical	Pass
4**	6987.800	43.25	54.0	10.75	AV	360.00	100	Vertical	Pass
5	11285.188	47.09	74.0	26.91	Peak	153.00	300	Vertical	Pass
5**	11285.188	38.26	54.0	15.74	AV	153.00	300	Vertical	Pass
6	16982.813	51.04	74.0	22.96	Peak	228.00	400	Vertical	Pass
6**	16982.813	40.93	54.0	13.07	AV	228.00	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	1418.400	40.59	74.0	33.41	Peak	360.00	400	Horizontal	Pass
1**	1418.400	31.88	54.0	22.12	AV	360.00	400	Horizontal	Pass
2	2457.900	92.56	74.0	-18.56	Peak	89.00	150	Horizontal	N/A
2**	2457.900	85.65	54.0	-31.65	AV	89.00	150	Horizontal	N/A
3	4966.000	48.68	74.0	25.32	Peak	360.00	150	Horizontal	Pass
3**	4966.000	40.19	54.0	13.81	AV	360.00	150	Horizontal	Pass
4	6979.200	52.47	74.0	21.53	Peak	231.00	400	Horizontal	Pass
4**	6979.200	43.01	54.0	10.99	AV	231.00	400	Horizontal	Pass
5	11902.737	47.50	74.0	26.50	Peak	0.00	300	Horizontal	Pass
5**	11902.737	39.32	54.0	14.68	AV	0.00	300	Horizontal	Pass
6	17047.912	51.01	74.0	22.99	Peak	142.00	300	Horizontal	Pass
6**	17047.912	40.79	54.0	13.21	AV	142.00	300	Horizontal	Pass

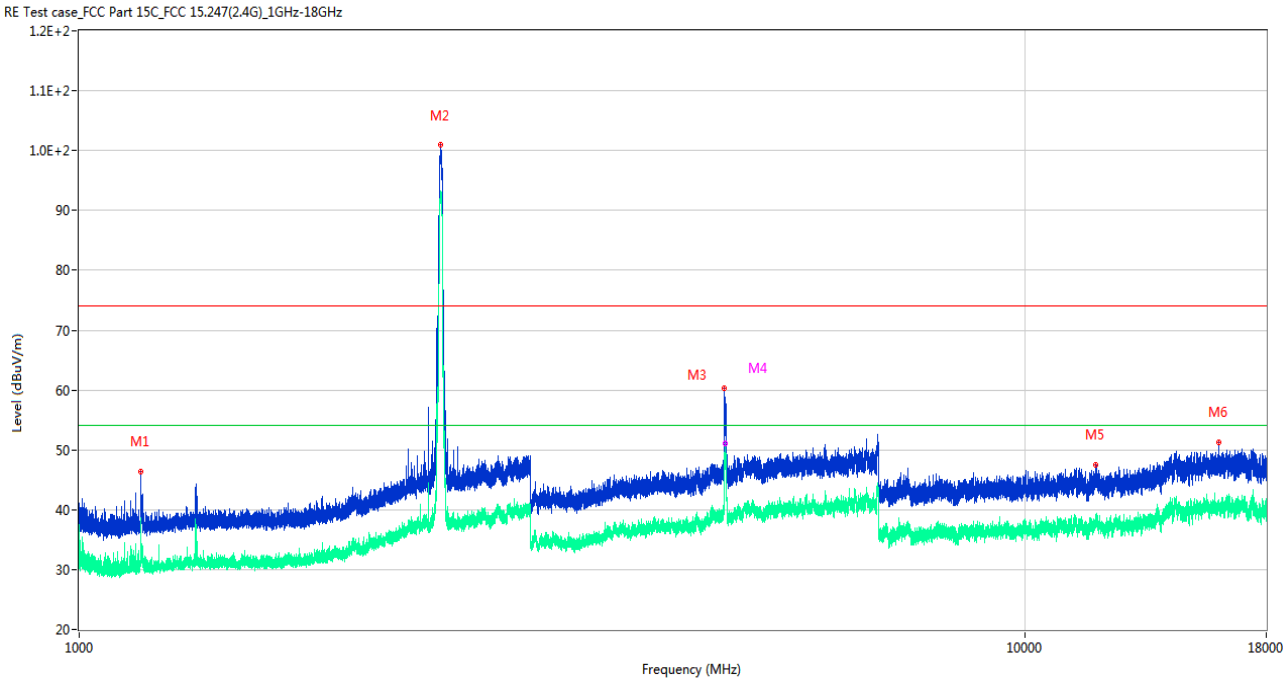
1 GHz to 18 GHz, ANT V 802.11n40 High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1162.000	45.33	74.0	28.67	Peak	46.00	400	Vertical	Pass
1**	1162.000	35.82	54.0	18.18	AV	46.00	400	Vertical	Pass
2	2450.300	100.20	74.0	-26.20	Peak	161.00	100	Vertical	N/A
2**	2450.300	92.08	54.0	-38.08	AV	161.00	100	Vertical	N/A
3	4906.200	50.99	74.0	23.01	Peak	331.00	150	Vertical	Pass
3**	4906.200	46.30	54.0	7.70	AV	331.00	150	Vertical	Pass
4	5885.400	53.31	74.0	20.69	Peak	0.00	400	Vertical	Pass
4**	5885.400	40.88	54.0	13.12	AV	0.00	400	Vertical	Pass
5	12600.212	47.39	74.0	26.61	Peak	0.00	100	Vertical	Pass
5**	12600.212	38.48	54.0	15.52	AV	0.00	100	Vertical	Pass
6	16301.625	50.37	74.0	23.63	Peak	30.00	200	Vertical	Pass
6**	16301.625	40.36	54.0	13.64	AV	30.00	200	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1403.200	40.96	74.0	33.04	Peak	201.00	200	Horizontal	Pass
1**	1403.200	31.30	54.0	22.70	AV	201.00	200	Horizontal	Pass
2	2411.000	90.66	74.0	-16.66	Peak	107.00	100	Horizontal	N/A
2**	2411.000	82.14	54.0	-28.14	AV	107.00	100	Horizontal	N/A
3	4823.400	50.63	74.0	23.37	Peak	188.00	150	Horizontal	Pass
3**	4823.400	45.68	54.0	8.32	AV	188.00	150	Horizontal	Pass
4	6986.800	52.11	74.0	21.89	Peak	219.00	100	Horizontal	Pass
4**	6986.800	43.28	54.0	10.72	AV	219.00	100	Horizontal	Pass
5	12490.100	47.59	74.0	26.41	Peak	48.00	300	Horizontal	Pass
5**	12490.100	38.20	54.0	15.80	AV	48.00	300	Horizontal	Pass
6	17396.775	50.45	74.0	23.55	Peak	175.00	100	Horizontal	Pass
6**	17396.775	41.48	54.0	12.52	AV	175.00	100	Horizontal	Pass

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



No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1161.700	46.44	74.0	27.56	Peak	97.00	100	Vertical	Pass
1**	1161.700	35.19	54.0	18.81	AV	97.00	100	Vertical	Pass
2	2411.300	100.91	74.0	-26.91	Peak	156.00	200	Vertical	N/A
2**	2411.300	92.78	54.0	-38.78	AV	156.00	200	Vertical	N/A
3	4814.600	60.30	74.0	13.70	Peak	9.00	200	Vertical	Pass
3**	4814.600	47.40	54.0	6.60	AV	9.00	200	Vertical	Pass
4	4823.800	55.66	74.0	18.34	Peak	315.00	150	Vertical	Pass
4**	4823.800	50.98	54.0	3.02	AV	315.00	150	Vertical	Pass
5	11895.550	47.50	74.0	26.50	Peak	22.00	100	Vertical	Pass
5**	11895.550	38.89	54.0	15.11	AV	22.00	100	Vertical	Pass
6	16029.674	51.28	74.0	22.72	Peak	171.00	300	Vertical	Pass
6**	16029.674	40.40	54.0	13.60	AV	171.00	300	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1462.900	41.50	74.0	32.50	Peak	108.00	400	Horizontal	Pass
1**	1462.900	30.54	54.0	23.46	AV	108.00	400	Horizontal	Pass
2	2436.100	95.87	74.0	-21.87	Peak	91.00	200	Horizontal	N/A
2**	2436.100	86.88	54.0	-32.88	AV	91.00	200	Horizontal	N/A
3	4871.600	48.81	74.0	25.19	Peak	180.00	150	Horizontal	Pass
3**	4871.600	44.20	54.0	9.80	AV	180.00	150	Horizontal	Pass
4	6976.800	52.39	74.0	21.61	Peak	132.00	100	Horizontal	Pass
4**	6976.800	42.20	54.0	11.80	AV	132.00	100	Horizontal	Pass
5	12464.224	47.67	74.0	26.33	Peak	0.00	200	Horizontal	Pass
5**	12464.224	37.75	54.0	16.25	AV	0.00	200	Horizontal	Pass
6	17371.050	50.60	74.0	23.40	Peak	114.00	300	Horizontal	Pass
6**	17371.050	41.00	54.0	13.00	AV	114.00	300	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1332.500	44.98	74.0	29.02	Peak	69.00	200	Vertical	Pass
1**	1332.500	31.35	54.0	22.65	AV	69.00	200	Vertical	Pass
2	2435.200	103.47	74.0	-29.47	Peak	360.00	200	Vertical	N/A
2**	2435.200	94.41	54.0	-40.41	AV	360.00	200	Vertical	N/A
3	4869.800	54.37	74.0	19.63	Peak	351.00	150	Vertical	Pass
3**	4869.800	50.58	54.0	3.42	AV	351.00	150	Vertical	Pass
4	6980.200	52.24	74.0	21.76	Peak	134.00	100	Vertical	Pass
4**	6980.200	43.20	54.0	10.80	AV	134.00	100	Vertical	Pass
5	10251.912	47.16	74.0	26.84	Peak	178.00	100	Vertical	Pass
5**	10251.912	36.66	54.0	17.34	AV	178.00	100	Vertical	Pass
6	17414.363	50.65	74.0	23.35	Peak	360.00	100	Vertical	Pass
6**	17414.363	41.22	54.0	12.78	AV	360.00	100	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1485.500	41.12	74.0	32.88	Peak	165.00	100	Horizontal	Pass
1**	1485.500	32.08	54.0	21.92	AV	165.00	100	Horizontal	Pass
2	2458.500	96.75	74.0	-22.75	Peak	89.00	100	Horizontal	N/A
2**	2458.500	86.69	54.0	-32.69	AV	89.00	100	Horizontal	N/A
3	4922.000	49.28	74.0	24.72	Peak	195.00	150	Horizontal	Pass
3**	4922.000	41.35	54.0	12.65	AV	195.00	150	Horizontal	Pass
4	6981.000	52.40	74.0	21.60	Peak	130.00	400	Horizontal	Pass
4**	6981.000	43.38	54.0	10.62	AV	130.00	400	Horizontal	Pass
5	11040.812	47.41	74.0	26.59	Peak	130.00	200	Horizontal	Pass
5**	11040.812	36.84	54.0	17.16	AV	130.00	200	Horizontal	Pass
6	15500.213	50.64	74.0	23.36	Peak	113.00	300	Horizontal	Pass
6**	15500.213	40.06	54.0	13.94	AV	113.00	300	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1165.700	50.69	74.0	23.31	Peak	70.00	100	Vertical	Pass
1**	1165.700	41.98	54.0	12.02	AV	70.00	100	Vertical	Pass
2	2457.200	104.21	74.0	-30.21	Peak	156.00	150	Vertical	N/A
2**	2457.200	94.49	54.0	-40.49	AV	156.00	150	Vertical	N/A
3	4929.000	52.80	74.0	21.20	Peak	328.00	150	Vertical	Pass
3**	4929.000	48.70	54.0	5.30	AV	328.00	150	Vertical	Pass
4	6979.200	52.09	74.0	21.91	Peak	148.00	200	Vertical	Pass
4**	6979.200	43.08	54.0	10.92	AV	148.00	200	Vertical	Pass
5	11275.700	47.42	74.0	26.58	Peak	283.00	300	Vertical	Pass
5**	11275.700	37.82	54.0	16.18	AV	283.00	300	Vertical	Pass
6	16974.412	50.76	74.0	23.24	Peak	170.00	200	Vertical	Pass
6**	16974.412	42.16	54.0	11.84	AV	170.00	200	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1486.500	40.90	74.0	33.10	Peak	64.00	400	Horizontal	Pass
1**	1486.500	30.86	54.0	23.14	AV	64.00	400	Horizontal	Pass
2	2415.500	89.43	74.0	-15.43	Peak	107.00	100	Horizontal	N/A
2**	2415.500	79.52	54.0	-25.52	AV	107.00	100	Horizontal	N/A
3	4838.600	50.81	74.0	23.19	Peak	172.00	150	Horizontal	Pass
3**	4838.600	42.96	54.0	11.04	AV	172.00	150	Horizontal	Pass
4	4838.800	49.45	74.0	24.55	Peak	61.00	150	Horizontal	Pass
4**	4838.800	43.92	54.0	10.08	AV	61.00	150	Horizontal	Pass
5	8929.125	45.99	74.0	28.01	Peak	73.00	150	Horizontal	Pass
5**	8929.125	36.46	54.0	17.54	AV	73.00	150	Horizontal	Pass
6	17401.500	50.46	74.0	23.54	Peak	156.00	200	Horizontal	Pass
6**	17401.500	40.91	54.0	13.09	AV	156.00	200	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1165.400	46.67	74.0	27.33	Peak	90.00	200	Vertical	Pass
1**	1165.400	33.12	54.0	20.88	AV	90.00	200	Vertical	Pass
2	2414.400	99.96	74.0	-25.96	Peak	360.00	200	Vertical	N/A
2**	2414.400	90.37	54.0	-36.37	AV	360.00	200	Vertical	N/A
3	4834.600	51.74	74.0	22.26	Peak	176.00	150	Vertical	Pass
3**	4834.600	48.65	54.0	5.35	AV	176.00	150	Vertical	Pass
4	4840.200	57.04	74.0	16.96	Peak	3.00	200	Vertical	Pass
4**	4840.200	47.20	54.0	6.80	AV	3.00	200	Vertical	Pass
5	12579.225	47.37	74.0	26.63	Peak	0.00	200	Vertical	Pass
5**	12579.225	37.34	54.0	16.66	AV	0.00	200	Vertical	Pass
6	17098.313	50.63	74.0	23.37	Peak	41.00	200	Vertical	Pass
6**	17098.313	41.25	54.0	12.75	AV	41.00	200	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1457.800	40.73	74.0	33.27	Peak	99.00	400	Horizontal	Pass
1**	1457.800	31.41	54.0	22.59	AV	99.00	400	Horizontal	Pass
2	2450.000	93.15	74.0	-19.15	Peak	90.00	100	Horizontal	N/A
2**	2450.000	83.33	54.0	-29.33	AV	90.00	100	Horizontal	N/A
3	4862.200	49.48	74.0	24.52	Peak	180.00	100	Horizontal	Pass
3**	4862.200	40.80	54.0	13.20	AV	180.00	100	Horizontal	Pass
4	6989.600	53.12	74.0	20.88	Peak	130.00	300	Horizontal	Pass
4**	6989.600	44.36	54.0	9.64	AV	130.00	300	Horizontal	Pass
5	11897.850	47.30	74.0	26.70	Peak	0.00	200	Horizontal	Pass
5**	11897.850	38.30	54.0	15.70	AV	0.00	200	Horizontal	Pass
6	17058.150	50.72	74.0	23.28	Peak	262.00	400	Horizontal	Pass
6**	17058.150	41.15	54.0	12.85	AV	262.00	400	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1164.100	45.16	74.0	28.84	Peak	83.00	100	Vertical	Pass
1**	1164.100	38.48	54.0	15.52	AV	83.00	100	Vertical	Pass
2	2427.300	100.70	74.0	-26.70	Peak	360.00	100	Vertical	N/A
2**	2427.300	90.52	54.0	-36.52	AV	360.00	100	Vertical	N/A
3	4866.000	51.87	74.0	22.13	Peak	331.00	150	Vertical	Pass
3**	4866.000	48.14	54.0	5.86	AV	331.00	150	Vertical	Pass
4	6979.000	52.71	74.0	21.29	Peak	230.00	200	Vertical	Pass
4**	6979.000	42.99	54.0	11.01	AV	230.00	200	Vertical	Pass
5	11903.313	47.43	74.0	26.57	Peak	336.00	400	Vertical	Pass
5**	11903.313	38.25	54.0	15.75	AV	336.00	400	Vertical	Pass
6	15510.187	50.31	74.0	23.69	Peak	360.00	400	Vertical	Pass
6**	15510.187	40.60	54.0	13.40	AV	360.00	400	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1330.500	41.50	74.0	32.50	Peak	168.00	100	Horizontal	Pass
1**	1330.500	33.45	54.0	20.55	AV	168.00	100	Horizontal	Pass
2	2453.800	94.93	74.0	-20.93	Peak	83.00	150	Horizontal	N/A
2**	2453.800	84.83	54.0	-30.83	AV	83.00	150	Horizontal	N/A
3	4910.600	49.16	74.0	24.84	Peak	202.00	100	Horizontal	Pass
3**	4910.600	38.63	54.0	15.37	AV	202.00	100	Horizontal	Pass
4	6987.000	52.20	74.0	21.80	Peak	169.00	200	Horizontal	Pass
4**	6987.000	43.08	54.0	10.92	AV	169.00	200	Horizontal	Pass
5	11902.451	47.60	74.0	26.40	Peak	0.00	300	Horizontal	Pass
5**	11902.451	38.40	54.0	15.60	AV	0.00	300	Horizontal	Pass
6	16978.088	50.77	74.0	23.23	Peak	28.00	400	Horizontal	Pass
6**	16978.088	42.00	54.0	12.00	AV	28.00	400	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1166.600	46.45	74.0	27.55	Peak	81.00	100	Vertical	Pass
1**	1166.600	39.52	54.0	14.48	AV	81.00	100	Vertical	Pass
2	2450.400	101.24	74.0	-27.24	Peak	142.00	200	Vertical	N/A
2**	2450.400	92.04	54.0	-38.04	AV	142.00	200	Vertical	N/A
3	4899.800	50.16	74.0	23.84	Peak	348.00	150	Vertical	Pass
3**	4899.800	45.53	54.0	8.47	AV	348.00	150	Vertical	Pass
4	6988.600	52.12	74.0	21.88	Peak	182.00	400	Vertical	Pass
4**	6988.600	43.86	54.0	10.14	AV	182.00	400	Vertical	Pass
5	11283.174	47.30	74.0	26.70	Peak	0.00	200	Vertical	Pass
5**	11283.174	38.32	54.0	15.68	AV	0.00	200	Vertical	Pass
6	16978.613	50.82	74.0	23.18	Peak	55.00	100	Vertical	Pass
6**	16978.613	41.81	54.0	12.19	AV	55.00	100	Vertical	Pass

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

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

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

Note [3]: According the ANSI C63.10-2020, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

Note [4]: The Level (dBuV/m) has been corrected by factor.

Note [5]: Both horizontal and vertical directions were pre tested, only the worst configuration has been reported in this report.

Test Data

802.11b LOW CHANNEL

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2382.167	56.12	74.0	17.88	Peak	121.00	150	Vertical	Pass
1**	2382.167	43.95	54.0	10.05	AV	121.00	150	Vertical	Pass
2	2389.833	53.61	74.0	20.39	Peak	214.00	100	Vertical	Pass
2**	2389.833	43.68	54.0	10.32	AV	214.00	100	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	2483.550	54.07	74.0	19.93	Peak	167.00	150	Vertical	Pass
1**	2483.550	43.90	54.0	10.10	AV	167.00	150	Vertical	Pass
2	2484.350	55.75	74.0	18.25	Peak	156.00	150	Vertical	Pass
2**	2484.350	43.90	54.0	10.10	AV	156.00	150	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	2389.667	66.36	74.0	7.64	Peak	157.00	150	Vertical	Pass
1**	2389.667	48.89	54.0	5.11	AV	157.00	150	Vertical	Pass
2	2389.833	67.72	74.0	6.28	Peak	157.00	150	Vertical	Pass
2**	2389.833	50.10	54.0	3.90	AV	157.00	150	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	67.77	74.0	6.23	Peak	144.00	100	Vertical	Pass
1**	2483.500	49.36	54.0	4.64	AV	144.00	100	Vertical	Pass
2	2483.750	67.90	74.0	6.10	Peak	166.00	200	Vertical	Pass
2**	2483.750	49.24	54.0	4.76	AV	166.00	200	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	2389.500	65.33	74.0	8.67	Peak	2.00	100	Vertical	Pass
1**	2389.500	49.02	54.0	4.98	AV	2.00	100	Vertical	Pass
2	2389.833	68.41	74.0	5.59	Peak	0.00	200	Vertical	Pass
2**	2389.833	49.66	54.0	4.34	AV	0.00	200	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	2483.550	66.32	74.0	7.68	Peak	168.00	100	Vertical	Pass
1**	2483.550	50.07	54.0	3.93	AV	168.00	100	Vertical	Pass
2	2483.950	69.78	74.0	4.22	Peak	176.00	150	Vertical	Pass
2**	2483.950	48.93	54.0	5.07	AV	176.00	150	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	2389.333	66.19	74.0	7.81	Peak	167.00	200	Vertical	Pass
1**	2389.333	48.51	54.0	5.49	AV	167.00	200	Vertical	Pass
2	2389.833	65.34	74.0	8.66	Peak	149.00	150	Vertical	Pass
2**	2389.833	49.06	54.0	4.94	AV	149.00	150	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	63.70	74.0	10.30	Peak	169.00	200	Vertical	Pass
1**	2483.500	46.83	54.0	7.17	AV	169.00	200	Vertical	Pass
2	2484.100	64.50	74.0	9.50	Peak	165.00	150	Vertical	Pass
2**	2484.100	46.58	54.0	7.42	AV	165.00	150	Vertical	Pass

802.11ax20(SU) LOW CHANNEL

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2389.167	65.53	74.0	8.47	Peak	157.00	100	Vertical	Pass
1**	2389.167	48.12	54.0	5.88	AV	157.00	100	Vertical	Pass
2	2389.833	66.94	74.0	7.06	Peak	156.00	100	Vertical	Pass
2**	2389.833	49.52	54.0	4.48	AV	156.00	100	Vertical	Pass

802.11ax20(SU) HIGH CHANNEL

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2483.500	69.92	74.0	4.08	Peak	151.00	200	Vertical	Pass
1**	2483.500	50.41	54.0	3.59	AV	151.00	200	Vertical	Pass
2	2483.850	70.00	74.0	4.00	Peak	337.00	100	Vertical	Pass
2**	2483.850	50.33	54.0	3.67	AV	337.00	100	Vertical	Pass

802.11ax40(SU) LOW CHANNEL

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2383.000	64.26	74.0	9.74	Peak	0.00	150	Vertical	Pass
1**	2383.000	46.58	54.0	7.42	AV	0.00	150	Vertical	Pass
2	2389.833	64.31	74.0	9.69	Peak	148.00	150	Vertical	Pass
2**	2389.833	48.49	54.0	5.51	AV	148.00	150	Vertical	Pass

802.11ax40(SU) HIGH CHANNEL

No.	Frequency (MHz)	Results (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2483.500	63.03	74.0	10.97	Peak	173.00	100	Vertical	Pass
1**	2483.500	47.14	54.0	6.86	AV	173.00	100	Vertical	Pass
2	2484.300	64.87	74.0	9.13	Peak	146.00	150	Vertical	Pass
2**	2484.300	46.95	54.0	7.05	AV	146.00	150	Vertical	Pass

A.8 Power Spectral Density (PSD)

Test Data

802.11b Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-14.06	8
Middle	-12.45	8
High	-14.18	8

802.11g Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-15.46	8
Middle	-10.42	8
High	-10.46	8

802.11n-20 MHz Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-12.89	8
Middle	-8.96	8
High	-10.57	8

802.11n-40 MHz Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-15.75	8
Middle	-11.72	8
High	-15.65	8

802.11ax-20 MHz(SU) Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-13.88	8
Middle	-9.76	8
High	-9.45	8

802.11ax-40 MHz(SU) Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-16.55	8
Middle	-12.14	8
High	-16.62	8

Test Plots

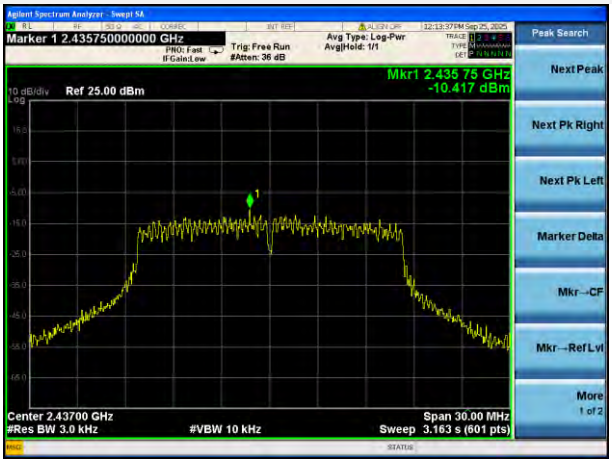
802.11b LOW CHANNEL

802.11b MIDDLE CHANNEL

802.11b HIGH CHANNEL

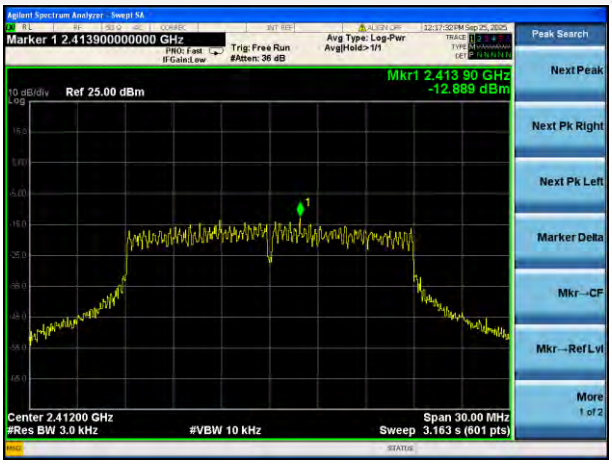
802.11g LOW CHANNEL

802.11g MIDDLE CHANNEL



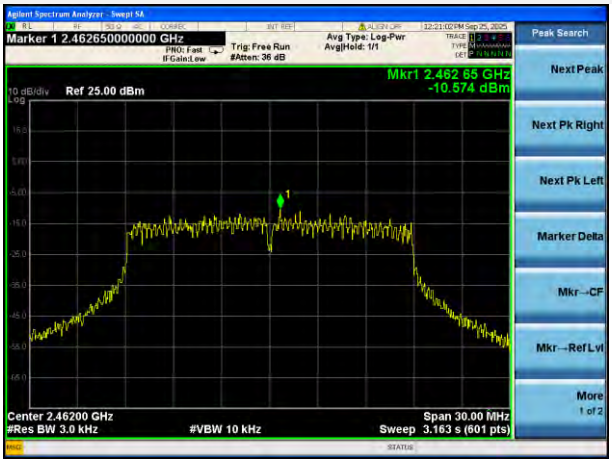
802.11g HIGH CHANNEL

802.11n-20 MHz LOW CHANNEL

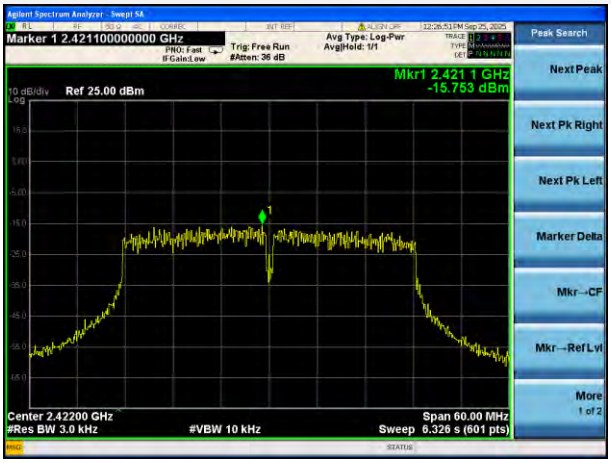


802.11n-20 MHz MIDDLE CHANNEL

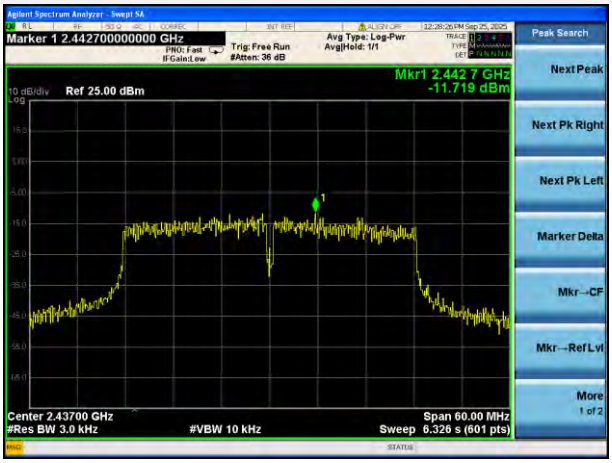
802.11n-20 MHz HIGH CHANNEL



802.11n-40 MHz LOW CHANNEL



802.11n-40 MHz MIDDLE CHANNEL



802.11n-40 MHz HIGH CHANNEL

802.11ax-20 MHz(SU) LOW CHANNEL

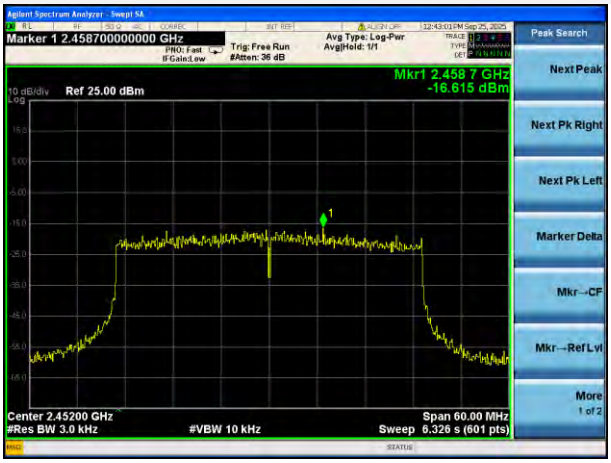
802.11ax-20 MHz(SU) MIDDLE CHANNEL

802.11ax-20 MHz(SU) HIGH CHANNEL

802.11ax-40 MHz(SU) LOW CHANNEL

802.11ax-40 MHz(SU) MIDDLE CHANNEL

802.11ax-40 MHz(SU) HIGH CHANNEL



ANNEX B TEST SETUP PHOTOS

Please refer the document “BL-SZ2581037-AR.PDF”.

ANNEX C EUT EXTERNAL PHOTOS

Please refer the document “BL-SZ2581037-AW.PDF”.

ANNEX D EUT INTERNAL PHOTOS

Please refer the document “BL-SZ2581037-AI.PDF”.

Statement

1. The laboratory guarantees the scientificity, accuracy and impartiality of the test, and is responsible for all the information in the report, except the information provided by the customer. The customer is responsible for the impact of the information provided on the validity of the results.
2. The report without China inspection body and laboratory Mandatory Approval (CMA) mark has no effect of proving to the society.
3. For the report with CNAS mark or A2LA mark, the items marked with "☆" are not within the accredited scope.
4. This report is invalid if it is altered, without the signature of the testing and approval personnel, or without the “inspection and testing dedicated stamp” or test report stamp.
5. The test data and results are only valid for the tested samples provided by the customer.
6. This report shall not be partially reproduced without the written permission of the laboratory.
7. Any objection shall be raised to the laboratory within 30 days after receiving the report.

--END OF REPORT--