RF TEST REPORT

ISSUED BY
Shenzhen BALUN Technology Co., Ltd.

FOR

Puductor 2 Robot

ISSUED TO
SHENZHEN PUDU TECHNOLOGY CO., LTD.

Room 501, Building A, Block 1, Phase 1, Shenzhen International Inno Valley, Dashi 1st Road, Nanshan District, Shenzhen, China

Tested by: Ye Hongji
Date: Sep. 23, 2021

Approved by: Liao Jianming
(Technical Director)
Date: Sep. 23, 2021

Report No.:	BL-SZ2160056-603
EUT Name:	Puductor 2 Robot
Model Name:	PJ2
Brand Name:	PUDU
Test Standard:	47 CFR Part 15 Subpart C
	RSS-Gen Issue 5
	RSS-247 Issue 2
FCC ID:	2AXDW-PJ2
ISED Number:	26126-PJ2
Test Conclusion:	Pass
Test Date:	Jun. 23, 2021 ~ Aug. 15, 2021
Date of Issue:	Sep. 23, 2021

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Revision History

Version	Issue Date	Revisions Content
Rev. 01	Sep. 14, 2021	Initial Issue
Rev. 02	Sep. 23, 2021	Updated the information and remarks in section 2.5

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1 ADMINISTRATIVE DATA (GENERAL INFORMATION)

1.1 Identification of the Testing Laboratory

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

1.2 Identification of the Responsible Testing Location

Test Location	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1st FL, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Accreditation Certificate	The laboratory has been listed by Industry Canada to perform electromagnetic emission measurements. The recognition numbers of test site are 11524A-1. The laboratory is a testing organization accredited by FCC as a accredited testing laboratory. The designation number is CN1196.
Description	All measurement facilities used to collect the measurement data are located at Block B, FL 1, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China 518055

1.3 Laboratory Condition

Ambient Temperature	20℃ to 25℃
Ambient Relative Humidity	45% to 55%
Ambient Pressure	100 kPa to 102 kPa

1.4 Announce

(1) The test report reference to the report template version v6.4.

(2) The test report is invalid if not marked with the signatures of the persons responsible for preparing and approving the test report.

(3) The test report is invalid if there is any evidence and/or falsification.

(4) The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein.

(5) This document may not be altered or revised in any way unless done so by BALUN and all revisions are duly noted in the revisions section.

(6) Content of the test report, in part or in full, cannot be used for publicity and/or promotional purposes without prior written approval from the laboratory.

(7) The laboratory is only responsible for the data released by the laboratory, except for the part provided by the applicant.

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	SHENZHEN PUDU TECHNOLOGY CO., LTD.
Address	Room 501, Building A, Block 1, Phase 1, Shenzhen International Inno Valley, Dashi 1st Road, Nanshan D istrict, Shenzhen, China

2.2 Manufacturer Information

Manufacturer	SHENZHEN PUDU TECHNOLOGY CO., LTD.
Address	Room 501, Building A, Block 1, Phase 1, Shenzhen International Inno Valley, Dashi 1st Road, Nanshan District, Shenzhen, China

2.3 Factory Information

Factory	Dongguan Legion Electronic Technology Co., Ltd.
Address	Room 101, No.88, Pingshan Industrial Road, Tangxia No. 135 Dongkeng Road, Dongkeng Town, Dongguan, P. R. China

2.4 General Description for Equipment under Test (EUT)

EUT Type	Puductor 2 Robot
Model Name Under Test	PJ2
Series Model Name	N/A
Description of Model name differentiation	N/A
Serial Number	65001611310007
Hardware Version	V3
Software Version	V7.1.1.22
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A

2.5 Technical Information

Network and Wireless connectivity	Bluetooth (BR+EDR+BLE) WIFI 802.11a, 802.11b, 802.11g, 802.11n(HT20/40) and 802.11ac U-NII-1/2A/2C/3

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

Frequency Range		802.11b/g/n(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(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 Type		DSSS, OFDM
Product Type		☒ Mobile ☐ Portable ☐ Fix Location
Antenna System (eg., MIMO, Smart Antenna)		Cyclic Delay Diversity (CDD) for 802.11n Basic methodology with *NANT* transmit antennas, each with the same directional gain *GANT* dBi for 802.11b/g
Categorization as Correlated or Completely Uncorrelated		Categorization as Correlated
Antenna Type	Main Antenna	FPC Antenna
	Aux. Antenna	
Antenna Gain	Main Antenna	1.88 dBi (In test items related to antenna gain, the final results reflect this figure. This value is provided by the applicant.)
	Aux. Antenna	
Total directional gain	For power spectral density(PSD) measurements	1.88 dBi Formulas: Directional gain = GANT + Array Gain, *Array Gain = 10 log(NANT/NSS) dB*. *NSS* =2, GANT set equal to the gain of the antenna having the highest gain.
	For power measurements	1.88 dBi Formulas: Directional gain = GANT + Array Gain, *Array Gain* = 0, GANT set equal to the gain of the antenna having the highest gain.
	For Conducted Out-of-Band and Spurious Measurements	1.88 dBi Formulas: Directional gain = GANT + Array Gain, *Array Gain = 10 log(NANT/NSS) dB*. *NSS* =2, GANT set equal to the gain of the antenna having the highest gain.
About the Product		Only the WIFI 802.11b, 802.11g and 802.11n (HT20/40) was tested in this report.
Note: This report reflects the test data of two EUT Module, One is Ap module and the other is ESP Module. AP Module has Main Antenna, Aux. Antenna, and MIMO Antenna. ESP Module only single Antenna. Two modules cannot fire at the same time.		

AP module

Mode	Antenna		
	Main Antenna	Aux. Antenna	MIMO
802.11b	√	√	--
802.11g	√	√	--
802.11n20	√	√	√
802.11n40	√	√	√
Note: All the configurations were tested, but only the worst data was shown in this report.			

ESP module

Mode	Antenna		
	Main Antenna	Aux. Antenna	MIMO
802.11b	√	-	-
802.11g	√	-	-
802.11n20	√	-	-
802.11n40	√	-	-
Note: All the configurations were tested, but only the worst case was reported in this report.			

Modulation technology	Modulation Type	Transfer Rate (Mbps)
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-20MHz)	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-40MHz)	BPSK	13.5/15
	QPSK	27/40.5/30/45
	16QAM	54/81/60/90
	64QAM	108/121.5/135/120/150

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

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

Note: The above EUT information in section 2.4 and 2.6 was declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or user's manual.

2.6 Additional Instructions

AP module

EUT Software Settings:

Mode	☒ Special software is used. The software provided by client to enable the EUT under transmission condition continuously at specific channel frequencies individually.

During testing, Channel and Power Controlling Software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product.

Power level setup in software					
Test Software Version	AMPAK				
Support Units (Software installation media)	Description	Manufacturer	Model		
	Notebook	Lenovo	X220		
Mode	Channel	Soft Set			
		Main Antenna	Aux. Antenna	MIMO-Main Antenna	MIMO-Aux. Antenna
802.11 b	1	69	67	--	--
	6	70	67	--	--
	11	70	67	--	--
802.11 g	1	58	65	--	--
	6	60	62	--	--
	11	61	62	--	--
802.11 n20	1	57	63	48	48
	6	59	62	54	54
	11	59	62	54	54
802.11 n40	3	48	51	38	38
	6	52	55	51	51
	9	52	55	51	51

Run software:

ESP module

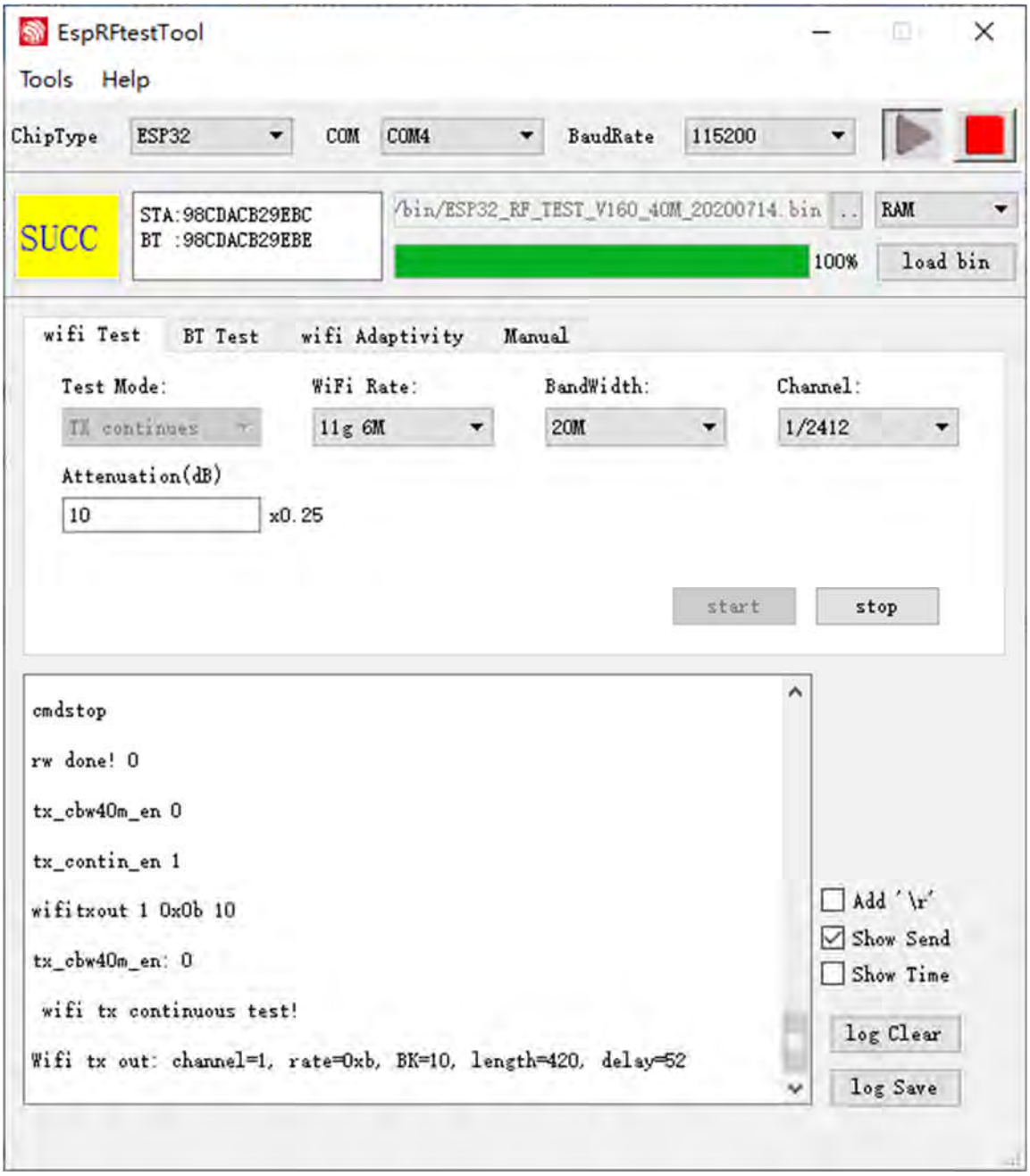
EUT Software Settings:

Mode	☒ Special software is used. The software provided by client to enable the EUT under transmission condition continuously at specific channel frequencies individually.

During testing, Channel and Power Controlling Software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product.

Power level setup in software			
Test Software Version	EspRFtestTool		
Support Units (Software installation media)	Description	Manufacturer	Model
	Notebook	Lenovo	X220
Mode	Channel	Soft Set	
802.11 b	1	12	
	6	12	
	11	12	
802.11 g	1	10	
	6	10	
	11	10	
802.11 n20	1	10	
	6	10	
	11	10	
802.11 n40	3	8	
	6	8	
	9	8	

Run software:



3 SUMMARY OF TEST RESULTS

3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 15, Subpart C	Miscellaneous Wireless Communications Services
2	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	KDB Publication 662911 D01v02r01	Emissions Testing of Transmitters with Multiple Outputs in the Same Band (e.g., MIMO, Smart Antenna, etc)
4	RSS-Gen Issue 5	General Requirements for Compliance of Radio Apparatus
5	RSS-247 Issue 2	Digital Transmission Systems (DTSs), Frequency Hopping Systems(FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices
6	ANSI C63.10-2013	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices

3.2 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	6dB 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]: Please refer to section 5.1.

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

4 GENERAL TEST CONFIGURATIONS

4.1 Test Environments

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

Relative Humidity	45% - 55%	
Atmospheric Pressure	100 kPa - 102 kPa	
Temperature	NT (Normal Temperature)	+22℃ to +25℃
Working Voltage of the EUT	NV (Normal Voltage)	26 V

4.2 Test Equipment List

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Spectrum Analyzer	ROHDE&SCHWARZ	FSV-40	101544	2021.04.01	2022.03.31
Bluetooth Signaling Unit	ROHDE&SCHWARZ	CMW500	142028	2021.06.01	2022.05.31
EMI Receiver	KEYSIGHT	N9038A	MY53220118	2021.06.01	2022.05.31
EMI Receiver	ROHDE&SCHWARZ	ESRP	101036	2021.06.01	2022.05.31
LISN	SCHWARZBECK	NSLK 8127	8127-687	2021.06.01	2022.05.31
Test Antenna-Loop(9 kHz-30 MHz)	SCHWARZBECK	FMZB 1519	1519-037	2019.10.29	2021.10.28
Test Antenna-Bi-Log(30 MHz-3 GHz)	SCHWARZBECK	VULB 9163	9163-624	2019.07.02	2022.07.01
Test Antenna-Horn(1-18 GHz)	SCHWARZBECK	BBHA 9120D	9120D-1917	2019.07.02	2022.07.01
Test Antenna-Horn (18-40 GHz)	A-INFO	LB-180400KF	J211060273	2021.01.05	2023.01.04
Anechoic Chamber	RAINFORD	9m*6m*6m	N/A	2017.02.21	2022.02.20
Anechoic Chamber	EMC Electronic Co., Ltd	20.10*11.60 *7.35m	N/A	2019.08.08	2022.08.07
Shielded Enclosure	ChangNing	CN-130701	130703	--	--

4.3 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.

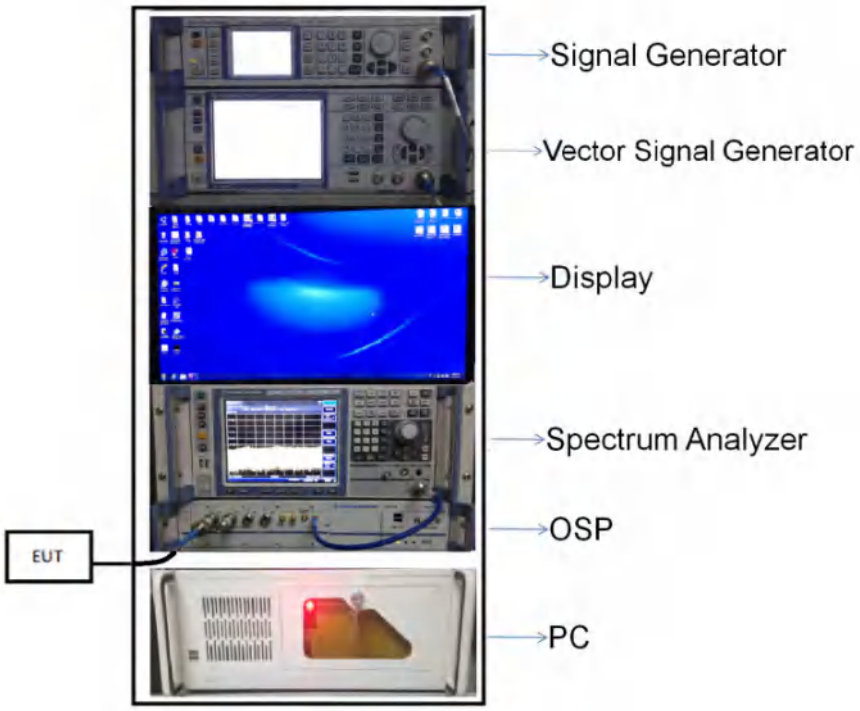
Measurement	Value
Occupied Channel Bandwidth	±2.8%
RF output power, conducted	±1.28 dB
Power Spectral Density, conducted	±1.30 dB
Unwanted Emissions, conducted	±1.84 dB
All emissions, radiated	±5.36 dB
Temperature	±0.82°C
Humidity	±4.1%

4.4 Description of Test Setup

4.4.1 For Antenna Port Test

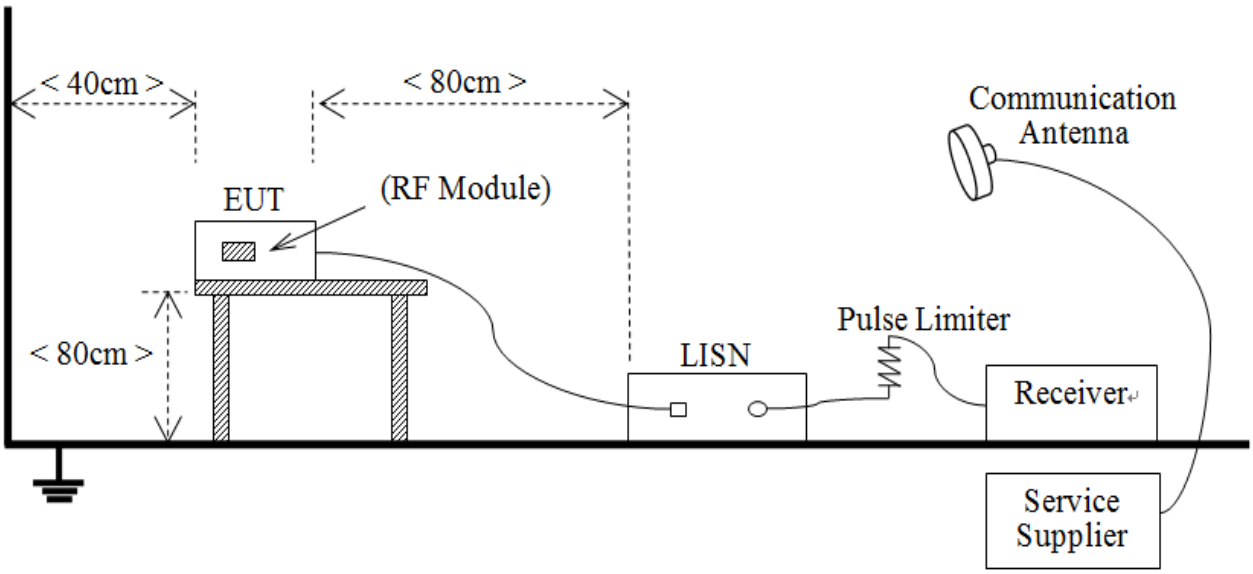
Conducted value (dBm) = Measurement value (dBm) + cable loss (dB)

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



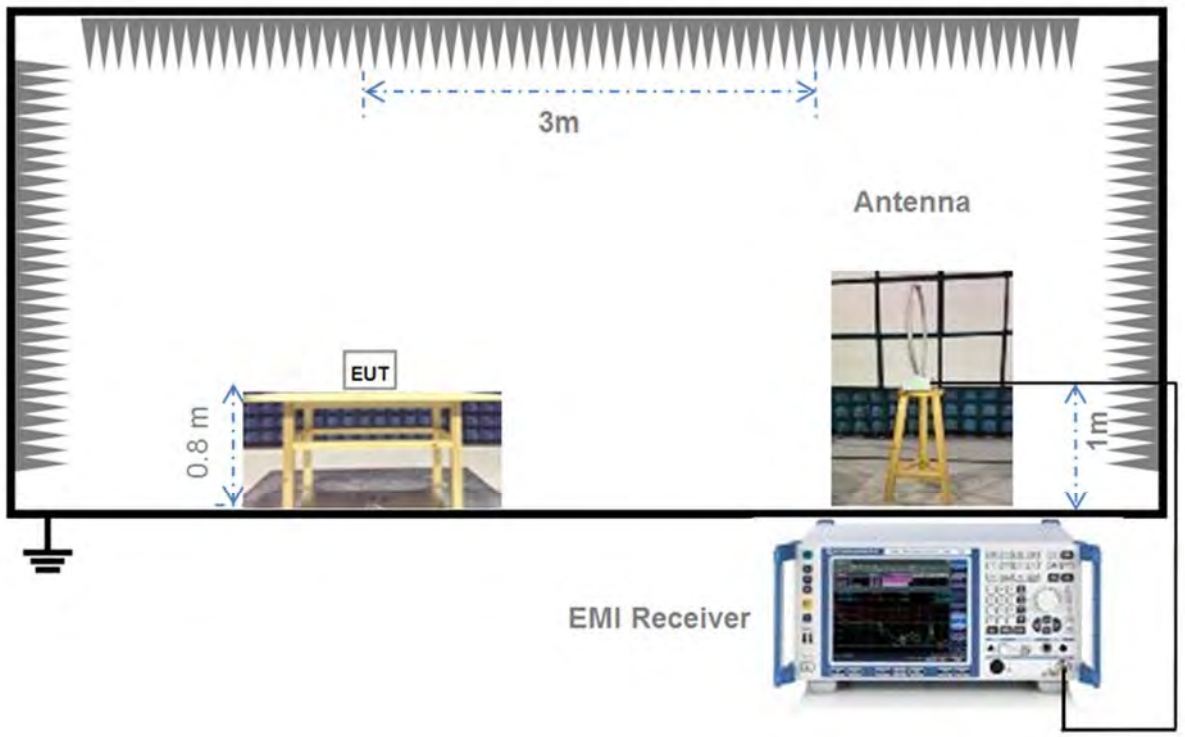
(Diagram 1)

4.4.2 For AC Power Supply Port Test



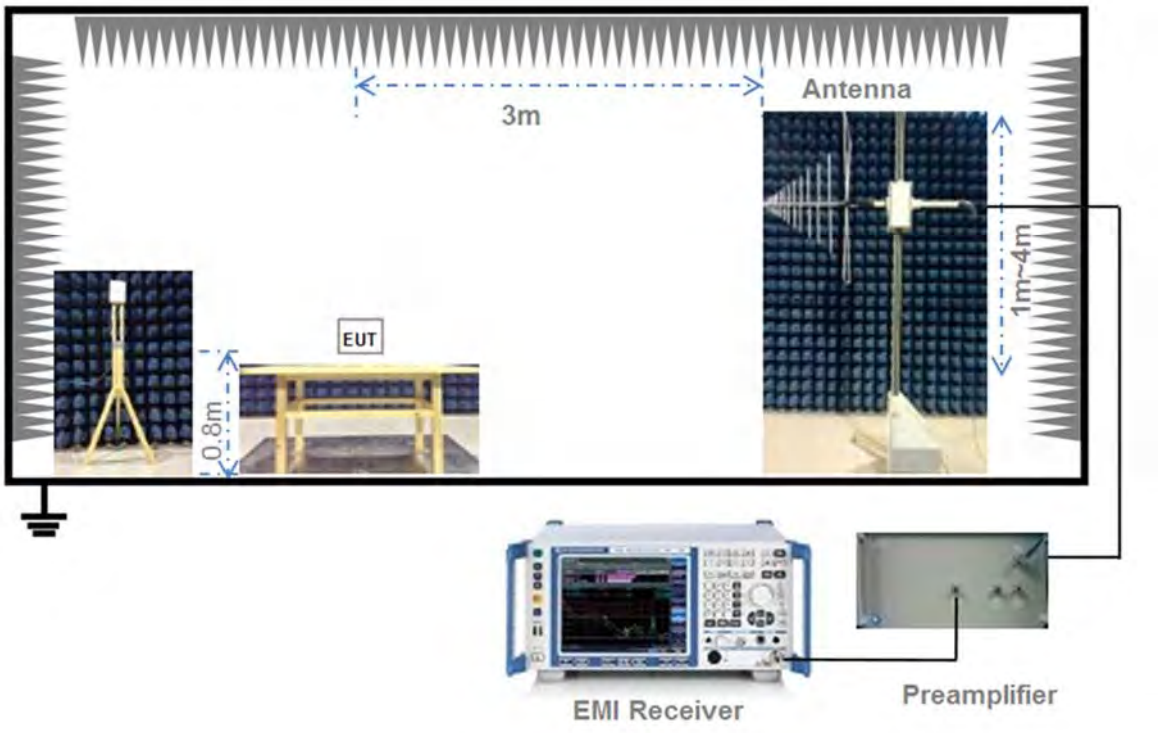
(Diagram 2)

4.4.3 For Radiated Test (Below 30 MHz)



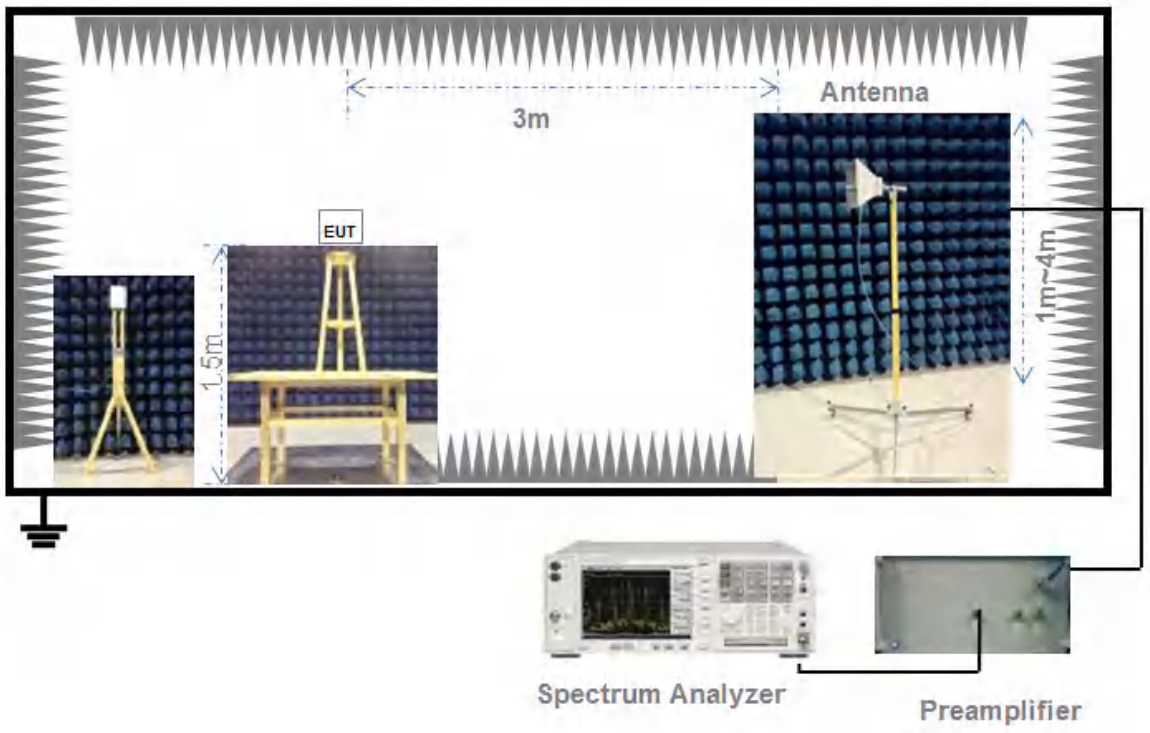
(Diagram 3)

4.4.4 For Radiated Test (30 MHz-1 GHz)



(Diagram 4)

4.4.5 For Radiated Test (Above 1 GHz)



(Diagram 5)

4.5 Measurement Results Explanation Example

4.5.1 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.

4.5.2 For radiated band edges and spurious emission test:

E = EIRP – 20log 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 4.4.1 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.

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 as

described in Section 6.0.

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 to the measurement result.

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 6dB 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 4.4.1 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 4.4.1 for test setup description for the antenna port. The photo of test setup please refer to ANNEX B.

5.4.3 Test Procedure

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

a) If the maximum peak conducted output power procedure was used to demonstrate compliance as described in 9.1, then the peak output power measured in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz (i.e., 20 dBc).

b) If maximum conducted (average) output power was used to demonstrate compliance as described in 9.2, then the peak power in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum in-band peak PSD level in 100 kHz (i.e., 30 dBc).

c) In either case, attenuation to levels below the 15.209 general radiated emissions limits is not required.

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

Reference level measurement

Establish a reference level by using the following procedure:

Set instrument center frequency to DTS channel center frequency.

Set the span to ≥ 1.5 times the DTS bandwidth.

Set the RBW = 100 kHz.

Set the VBW ≥ 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 4.4.1 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 $\geqslant$ 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 $\geqslant$ 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 4.4.2 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 4.4.3 to 4.4.5 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 – 20log 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 4.4.1 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 4.4.1 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 $\leqslant$ RBW $\leqslant$ 100 kHz.

Set the VBW $\geqslant$ 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

AP module

Test Mode	On Time (ms)	On+Off time (ms)	Duty Cycle
802.11b	8.402	8.447	99.47%
802.11g	1.395	1.437	97.08%
802.11n-20 MHz	1.307	1.35	96.81%
802.11n-40 MHz	0.6472	0.688	94.07%

ESP module

Test Mode	On Time (ms)	On+Off time (ms)	Duty Cycle
802.11b	10	10	100.00%
802.11g	10	10	100.00%
802.11n-20 MHz	10	10	100.00%
802.11n-40 MHz	10	10	100.00%

AP module

Peak Power Test Data

Main Antenna

802.11b Mode:

Channel	Measured Output Peak Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	18.25	66.83	30	1000	Pass
Middle	18.22	66.37			Pass
High	17.94	62.23			Pass

802.11g Mode:

Channel	Measured Output Peak Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	19.67	92.68	30	1000	Pass
Middle	19.81	95.72			Pass
High	19.24	83.95			Pass

802.11n-20 MHz Mode:

Channel	Measured Output Peak Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	19.52	89.54	30	1000	Pass
Middle	19.81	95.72			Pass
High	18.83	76.38			Pass

802.11n-40 MHz Mode:

Channel	Measured Output Peak Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	17.79	60.12	30	1000	Pass
Middle	18.52	71.12			Pass
High	18.18	65.77			Pass

Aux. Antenna

802.11b Mode:

Channel	Measured Output Peak Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	17.94	62.23	30	1000	Pass
Middle	17.93	62.09			Pass
High	18.44	69.82			Pass

802.11g Mode:

Channel	Measured Output Peak Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	22.29	169.43	30	1000	Pass
Middle	21.22	132.43			Pass
High	21.48	140.60			Pass

802.11n-20 MHz Mode:

Channel	Measured Output Peak Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	21.94	156.31	30	1000	Pass
Middle	21.10	128.82			Pass
High	21.35	136.46			Pass

802.11n-40 MHz Mode:

Channel	Measured Output Peak Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	19.52	89.54	30	1000	Pass
Middle	20.15	103.51			Pass
High	20.32	107.65			Pass

MIMO-Main Antenna

802.11n-20 MHz Mode:

Channel	Measured Output Peak Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	17.30	53.70	30	1000	Pass
Middle	18.63	72.95			Pass
High	17.51	56.36			Pass

802.11n-40 MHz Mode:

Channel	Measured Output Peak Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	14.61	28.91	30	1000	Pass
Middle	18.17	65.61			Pass
High	17.66	58.34			Pass

MIMO-Aux. Antenna

802.11n-20 MHz Mode:

Channel	Measured Output Peak Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	18.92	77.98	30	1000	Pass
Middle	19.93	98.40			Pass
High	20.14	103.28			Pass

802.11n-40 MHz Mode:

Channel	Measured Output Peak Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	16.05	40.27	30	1000	Pass
Middle	19.83	96.16			Pass
High	19.90	97.72			Pass

MIMO

802.11n-20 MHz Mode:

Channel	Measured Output Peak Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	21.20	131.69	30	1000	Pass
Middle	22.34	171.35			Pass
High	22.03	159.64			Pass

802.11n-40 MHz Mode:

Channel	Measured Output Peak Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	18.40	69.18	30	1000	Pass
Middle	22.09	161.78			Pass
High	21.93	156.07			Pass

ESP module

Peak Power Test Data

802.11b Mode:

Channel	Measured Output Peak Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	22.17	164.82	30	1000	Pass
Middle	22.20	165.96			Pass
High	22.49	177.42			Pass

802.11g Mode:

Channel	Measured Output Peak Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	22.03	159.59	30	1000	Pass
Middle	22.15	164.06			Pass
High	22.44	175.39			Pass

802.11n-20 MHz Mode:

Channel	Measured Output Peak Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	22.16	164.44	30	1000	Pass
Middle	22.34	171.40			Pass
High	22.63	183.23			Pass

802.11n-40 MHz Mode:

Channel	Measured Output Peak Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	23.25	211.35	30	1000	Pass
Middle	23.16	207.01			Pass
High	23.35	216.27			Pass

AP module

Average Power Test Data

Main Antenna

802.11b Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	15.03	31.84	30	1000	Pass
Middle	15.30	33.88			Pass
High	14.86	30.62			Pass

802.11g Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	11.61	14.49	30	1000	Pass
Middle	11.74	14.93			Pass
High	11.12	12.94			Pass

802.11n-20 MHz Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	11.27	13.40	30	1000	Pass
Middle	11.51	14.16			Pass
High	10.37	10.89			Pass

802.11n-40 MHz Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	9.29	8.49	30	1000	Pass
Middle	10.17	10.40			Pass
High	9.71	9.35			Pass

Aux. Antenna

802.11b Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	15.04	31.92	30	1000	Pass
Middle	15.09	32.28			Pass
High	15.23	33.34			Pass

802.11g Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	14.05	25.41	30	1000	Pass
Middle	13.11	20.46			Pass
High	13.41	21.93			Pass

802.11n-20 MHz Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	13.62	23.01	30	1000	Pass
Middle	12.77	18.92			Pass
High	13.03	20.09			Pass

802.11n-40 MHz Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	10.95	12.45	30	1000	Pass
Middle	11.80	15.14			Pass
High	11.95	15.67			Pass

MIMO-Main Antenna

802.11n-20 MHz Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	9.08	8.09	30	1000	Pass
Middle	10.26	10.62			Pass
High	9.10	8.13			Pass

802.11n-40 MHz Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	6.33	4.30	30	1000	Pass
Middle	9.66	9.25			Pass
High	9.25	8.41			Pass

MIMO-Aux. Antenna

802.11n-20 MHz Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	9.97	9.93	30	1000	Pass
Middle	11.07	12.79			Pass
High	11.08	12.82			Pass

802.11n-40 MHz Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	7.12	5.15	30	1000	Pass
Middle	10.90	12.30			Pass
High	10.97	12.50			Pass

MIMO

802.11n-20 MHz Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	12.56	18.02	30	1000	Pass
Middle	13.69	23.41			Pass
High	13.21	20.95			Pass

802.11n-40 MHz Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	9.75	9.45	30	1000	Pass
Middle	13.33	21.55			Pass
High	13.20	20.92			Pass

ESP module

Average Power Test Data

802.11b Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	15.18	32.96	30	1000	Pass
Middle	15.14	32.66			Pass
High	15.43	34.91			Pass

802.11g Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	14.13	25.88	30	1000	Pass
Middle	14.25	26.61			Pass
High	14.54	28.44			Pass

802.11n-20 MHz Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	14.33	27.10	30	1000	Pass
Middle	14.50	28.18			Pass
High	14.80	30.20			Pass

802.11n-40 MHz Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
Low	15.09	32.28	30	1000	Pass
Middle	14.99	31.55			Pass
High	15.18	32.96			Pass

AP module

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

Main Antenna

802.11b Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
Low	20.13	103.04	36	4	Pass
Middle	20.10	102.33			Pass
High	19.82	95.94			Pass

802.11g Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
Low	21.55	142.89	36	4	Pass
Middle	21.69	147.57			Pass
High	21.12	129.42			Pass

802.11n-20 MHz Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
Low	21.40	138.04	36	4	Pass
Middle	21.69	147.57			Pass
High	20.71	117.76			Pass

802.11n-40 MHz Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
Low	19.67	92.68	36	4	Pass
Middle	20.40	109.65			Pass
High	20.06	101.39			Pass

Aux. Antenna

802.11b Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
Low	19.82	95.94	36	4	Pass
Middle	19.81	95.72			Pass
High	20.32	107.65			Pass

802.11g Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
Low	24.17	261.22	36	4	Pass
Middle	23.10	204.17			Pass
High	23.36	216.77			Pass

802.11n-20 MHz Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
Low	23.82	240.99	36	4	Pass
Middle	22.98	198.61			Pass
High	23.23	210.38			Pass

802.11n-40 MHz Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
Low	21.40	138.04	36	4	Pass
Middle	22.03	159.59			Pass
High	22.20	165.96			Pass

MIMO-Main Antenna

802.11n-20 MHz Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
Low	19.18	82.79	36	4	Pass
Middle	20.51	112.46			Pass
High	19.39	86.90			Pass

802.11n-40 MHz Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
Low	16.49	44.57	36	4	Pass
Middle	20.05	101.16			Pass
High	19.54	89.95			Pass

MIMO-Aux. Antenna

802.11n-20 MHz Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
Low	20.80	120.23	36	4	Pass
Middle	21.81	151.71			Pass
High	22.02	159.22			Pass

802.11n-40 MHz Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
Low	17.93	62.09	36	4	Pass
Middle	21.71	148.25			Pass
High	22.02	159.22			Pass

MIMO

802.11n-20 MHz Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
Low	24.96	313.33	36	4	Pass
Middle	26.10	407.38			Pass
High	25.79	379.31			Pass

802.11n-40 MHz Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
Low	22.16	164.44	36	4	Pass
Middle	25.85	384.59			Pass
High	25.84	383.71			Pass

ESP module

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

802.11b Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
Low	24.05	254.10	36	4	Pass
Middle	24.08	255.86			Pass
High	24.37	273.53			Pass

802.11g Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
Low	23.91	246.04	36	4	Pass
Middle	24.03	252.93			Pass
High	24.32	270.40			Pass

802.11n-20 MHz Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
Low	24.04	253.51	36	4	Pass
Middle	24.22	264.24			Pass
High	24.51	282.49			Pass

802.11n-40 MHz Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
Low	25.13	325.84	36	4	Pass
Middle	25.04	319.15			Pass
High	25.23	333.43			Pass

A.2 Bandwidth

Test Data

AP module

Main Antenna

802.11b Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	9.150000	11.825000	⩾500
Middle	9.100000	11.765000	⩾500
High	9.150000	11.692000	⩾500

802.11g Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	16.450000	17.785000	⩾500
Middle	16.450000	17.903000	⩾500
High	16.450000	17.883000	⩾500

802.11n-20MHz Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	17.650000	18.733000	⩾500
Middle	17.650000	18.799000	⩾500
High	17.650000	18.824000	⩾500

802.11n-40MHz Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	36.400000	36.560000	⩾500
Middle	36.400000	36.628000	⩾500
High	36.400000	36.567000	⩾500

Aux. Antenna

802.11b Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	9.150000	11.731000	⩾500
Middle	9.150000	11.652000	⩾500
High	9.100000	11.659000	⩾500

802.11g Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	16.450000	17.813000	⩾500
Middle	16.450000	17.770000	⩾500
High	16.450000	17.792000	⩾500

802.11n-20MHz Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	17.650000	18.626000	⩾500
Middle	17.650000	18.647000	⩾500
High	17.650000	18.684000	⩾500

802.11n-40MHz Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	36.400000	36.549000	⩾500
Middle	36.400000	36.515000	⩾500
High	36.400000	36.501000	⩾500

ESP module

802.11b Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	10.150000	13.114000	⩾500
Middle	10.150000	13.076000	⩾500
High	10.150000	13.083000	⩾500

802.11g Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	16.550000	17.129000	⩾500
Middle	16.550000	17.078000	⩾500
High	16.600000	17.092000	⩾500

802.11n-20MHz Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	17.800000	17.836000	⩾500
Middle	17.750000	17.805000	⩾500
High	17.700000	17.812000	⩾500

802.11n-40MHz Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	36.500000	36.689000	⩾500
Middle	36.550000	36.622000	⩾500
High	36.550000	36.646000	⩾500

Test plots

AP module

Main Antenna

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

802.11 n-20 MHz MIDDLE CHANNEL

802.11n-20 MHz HIGH CHANNEL

802.11n-40 MHz LOW CHANNEL

802.11n-40 MHz MIDDLE CHANNEL

802.11n-40 MHz HIGH CHANNEL

99% Bandwidth

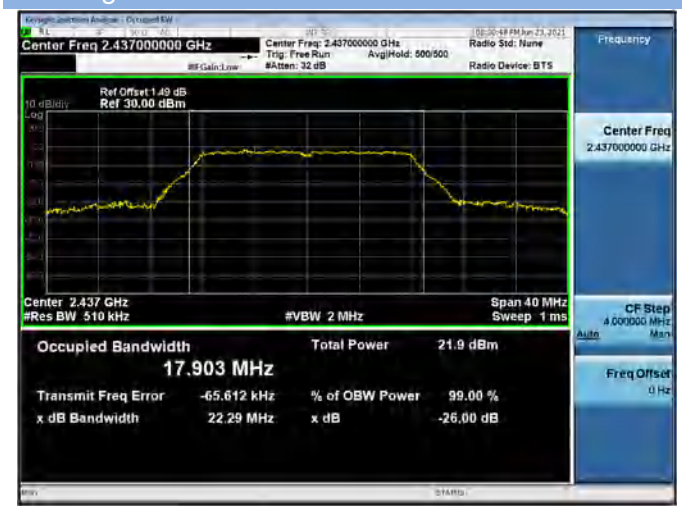
802.11b LOW CHANNEL

802.11b MIDDLE CHANNEL

802.11b HIGH CHANNEL

802.11g LOW CHANNEL

802.11g MIDDLE CHANNEL



802.11g HIGH CHANNEL

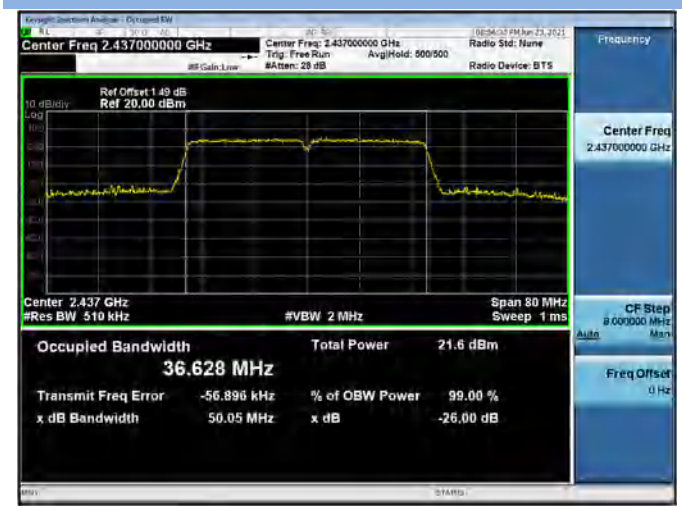
802.11n-20 MHz LOW CHANNEL

802.11 n-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

Aux. Antenna

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

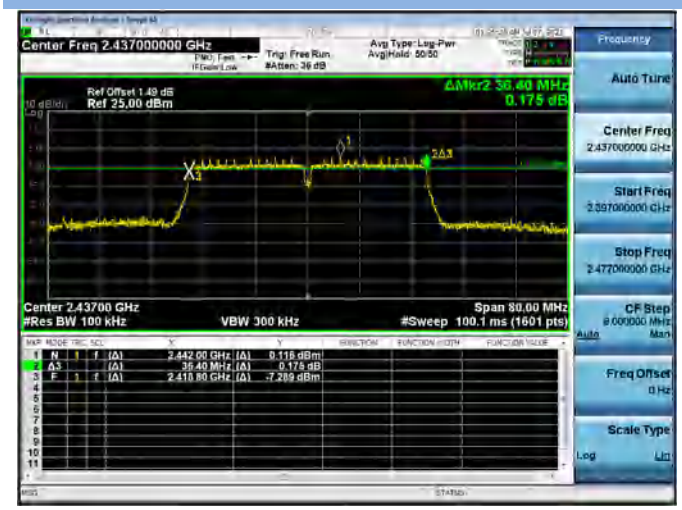
802.11n-20 MHz LOW CHANNEL

802.11 n-20 MHz MIDDLE CHANNEL

802.11n-20 MHz HIGH CHANNEL

802.11n-40 MHz LOW CHANNEL

802.11n-40 MHz MIDDLE CHANNEL



802.11n-40 MHz HIGH CHANNEL

99% Bandwidth

802.11b LOW CHANNEL

802.11b MIDDLE CHANNEL

802.11b HIGH CHANNEL

802.11g LOW CHANNEL

802.11g MIDDLE CHANNEL

802.11g HIGH CHANNEL

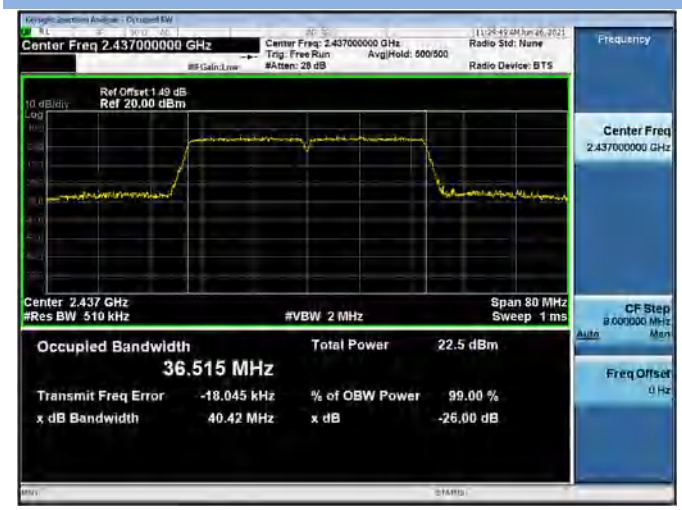
802.11n-20 MHz LOW CHANNEL

802.11 n-20 MHz MIDDLE CHANNEL

802.11n-20 MHz HIGH CHANNEL

802.11n-40 MHz LOW CHANNEL

802.11n-40 MHz MIDDLE CHANNEL



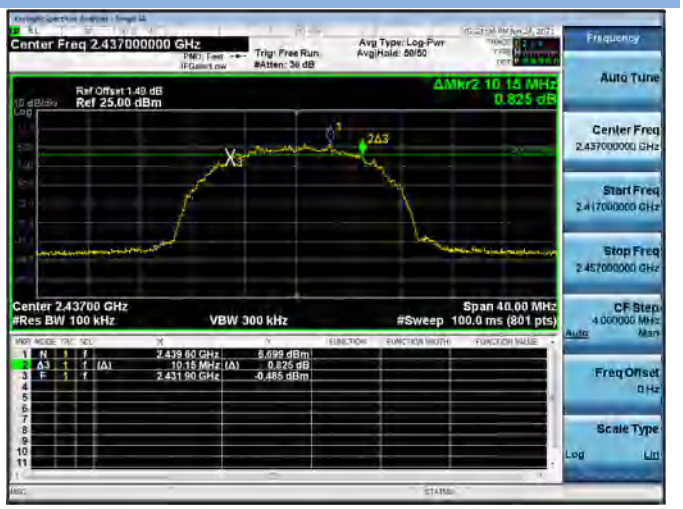
802.11n-40 MHz HIGH CHANNEL

ESP module

6 dB Bandwidth

802.11b LOW CHANNEL

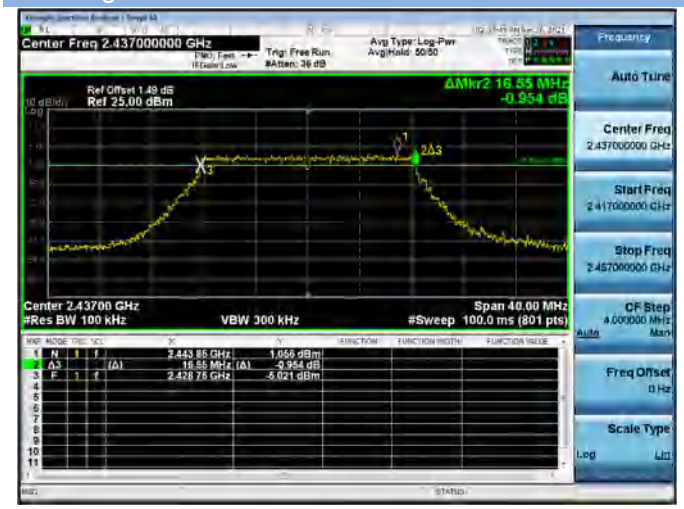
802.11b MIDDLE CHANNEL



802.11b HIGH CHANNEL

802.11g LOW CHANNEL

802.11g MIDDLE CHANNEL

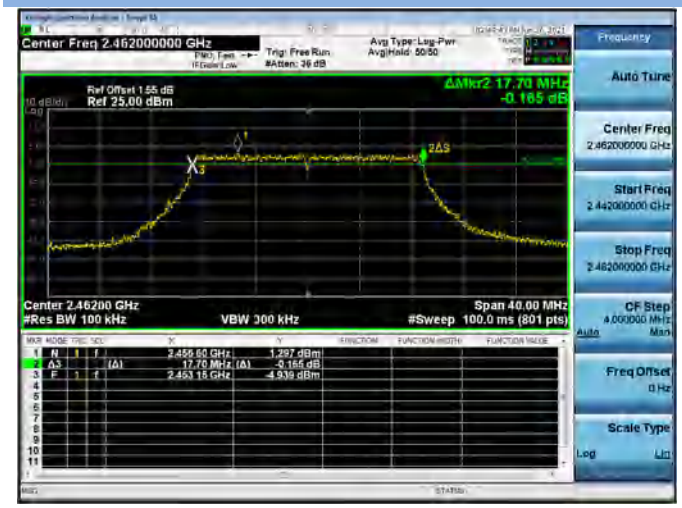


802.11g HIGH CHANNEL

802.11n-20 MHz LOW CHANNEL

802.11 n-20 MHz MIDDLE CHANNEL

802.11n-20 MHz HIGH CHANNEL



802.11n-40 MHz LOW CHANNEL

802.11n-40 MHz MIDDLE CHANNEL

802.11n-40 MHz HIGH CHANNEL

99% Bandwidth

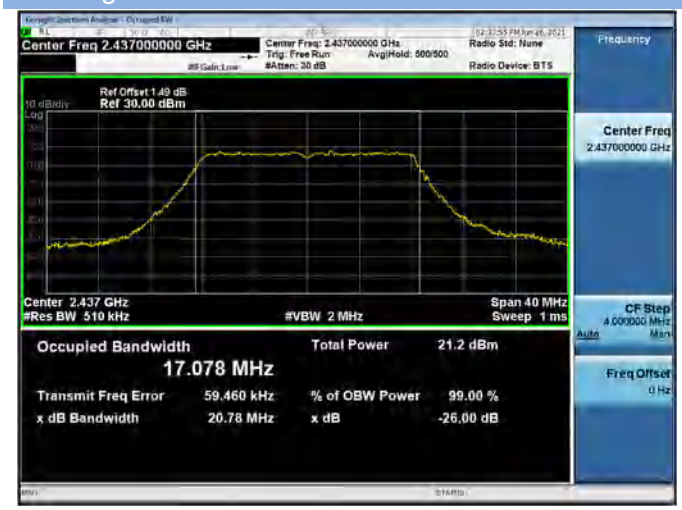
802.11b LOW CHANNEL

802.11b MIDDLE CHANNEL

802.11b HIGH CHANNEL

802.11g LOW CHANNEL

802.11g MIDDLE CHANNEL



802.11g HIGH CHANNEL

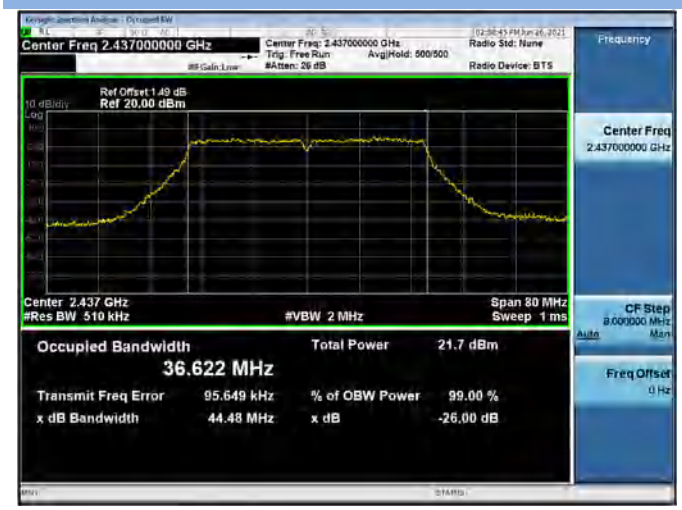
802.11n-20 MHz LOW CHANNEL

802.11 n-20 MHz MIDDLE CHANNEL

802.11n-20 MHz HIGH CHANNEL

802.11n-40 MHz LOW CHANNEL

802.11n-40 MHz MIDDLE CHANNEL



802.11n-40 MHz HIGH CHANNEL

A.3 Conducted Spurious Emissions

Test Data

AP module

Main Antenna

802.11b Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-48.19	6.94	-13.06	Pass
Middle	-47.42	6.91	-13.09	Pass
High	-47.07	6.54	-13.46	Pass

802.11g Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-49.10	0.59	-19.41	Pass
Middle	-49.46	0.74	-19.26	Pass
High	-47.58	0.01	-19.99	Pass

802.11n-20MHz Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-48.61	0.23	-19.78	Pass
Middle	-48.27	0.75	-19.25	Pass
High	-47.99	-0.54	-20.54	Pass

802.11n-40MHz Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-48.89	-4.57	-24.57	Pass
Middle	-48.94	-3.76	-23.76	Pass
High	-49.32	-4.26	-24.26	Pass

Aux. Antenna

802.11b Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-48.37	6.62	-13.38	Pass
Middle	-48.70	6.75	-13.25	Pass
High	-48.10	6.88	-13.12	Pass

802.11g Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-49.18	2.83	-17.17	Pass
Middle	-48.29	2.03	-17.97	Pass
High	-47.94	2.31	-17.69	Pass

802.11n-20MHz Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-48.00	2.47	-17.53	Pass
Middle	-47.89	2.18	-17.82	Pass
High	-47.67	2.00	-18.00	Pass

802.11n-40MHz Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-48.91	-2.98	-22.98	Pass
Middle	-48.87	-2.10	-22.10	Pass
High	-48.75	-2.07	-22.07	Pass

MIMO-Main Antenna

802.11n-20MHz Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-48.49	-1.92	-21.92	Pass
Middle	-48.18	-0.49	-20.49	Pass
High	-49.31	-1.91	-21.91	Pass

802.11n-40MHz Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-49.68	-7.81	-27.81	Pass
Middle	-46.35	-3.97	-23.97	Pass
High	-47.87	-4.56	-24.56	Pass

MIMO-Aux. Antenna

802.11n-20MHz Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-49.66	-0.95	-20.95	Pass
Middle	-48.77	0.29	-19.71	Pass
High	-47.62	0.21	-19.79	Pass

802.11n-40MHz Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-48.02	-6.80	-26.80	Pass
Middle	-49.45	-3.11	-23.11	Pass
High	-49.32	-2.64	-22.64	Pass

ESP module

802.11b Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-42.80	6.66	-13.34	Pass
Middle	-43.61	6.85	-13.15	Pass
High	-42.28	7.01	-13.00	Pass

802.11g Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-42.59	1.25	-18.75	Pass
Middle	-43.82	1.45	-18.55	Pass
High	-43.19	1.44	-18.56	Pass

802.11n-20MHz Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-42.53	0.83	-19.17	Pass
Middle	-43.43	1.18	-18.82	Pass
High	-43.37	1.36	-18.64	Pass

802.11n-40MHz Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-43.04	-1.30	-21.30	Pass
Middle	-43.31	-1.51	-21.51	Pass
High	-43.18	-1.53	-21.53	Pass

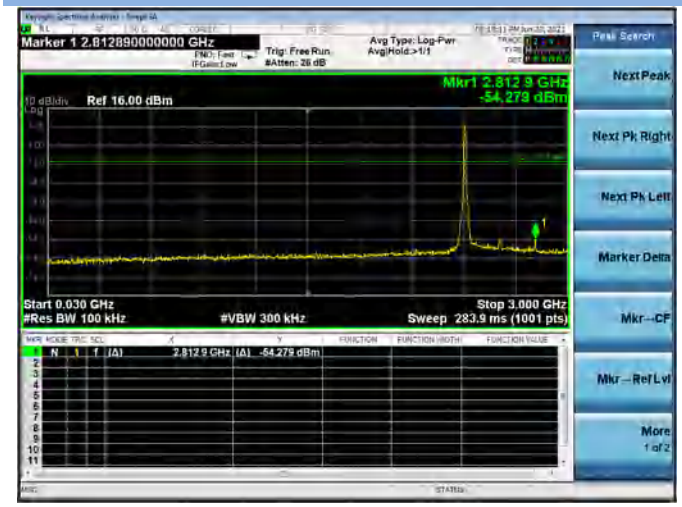
Test Plots

AP module

Main Antenna

802.11b LOW CHANNEL CARRIER LEVEL

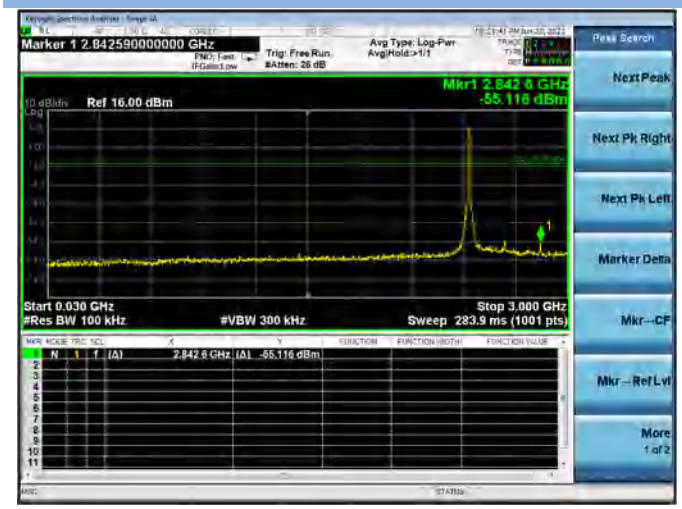
802.11b LOW CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



802.11b LOW CHANNEL, SPURIOUS 2 GHz ~ 25 GHz

802.11b MIDDLE CHANNEL CARRIER LEVEL

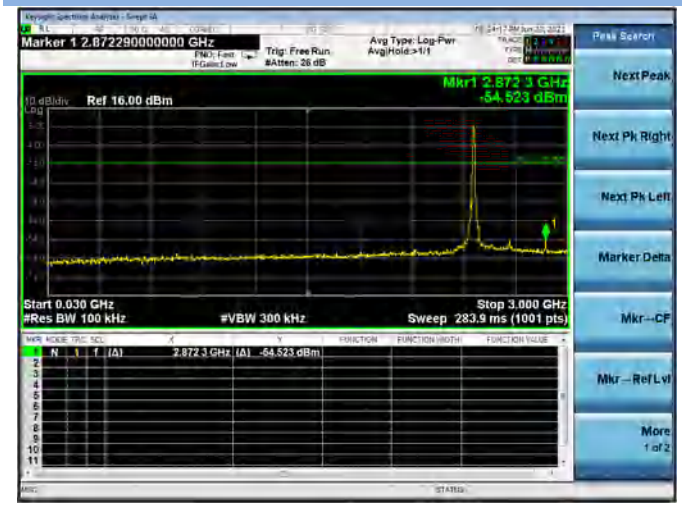
802.11b MIDDLE CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



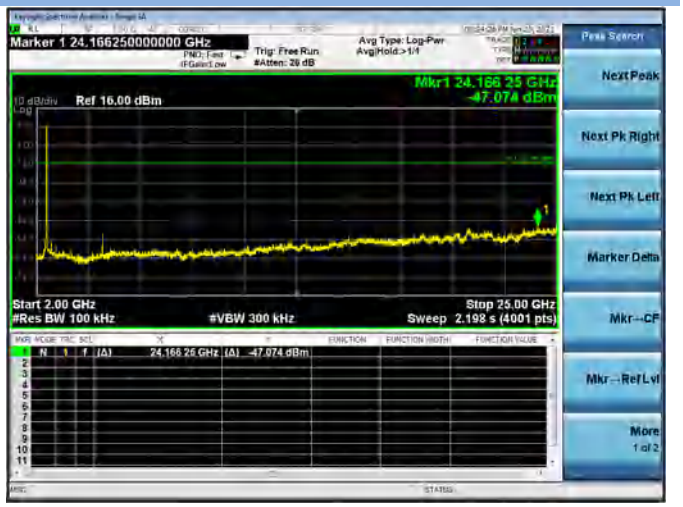
802.11b MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz

802.11b HIGH CHANNEL CARRIER LEVEL

802.11b HIGH CHANNEL, SPURIOUS 30 MHz ~ 3 GHz

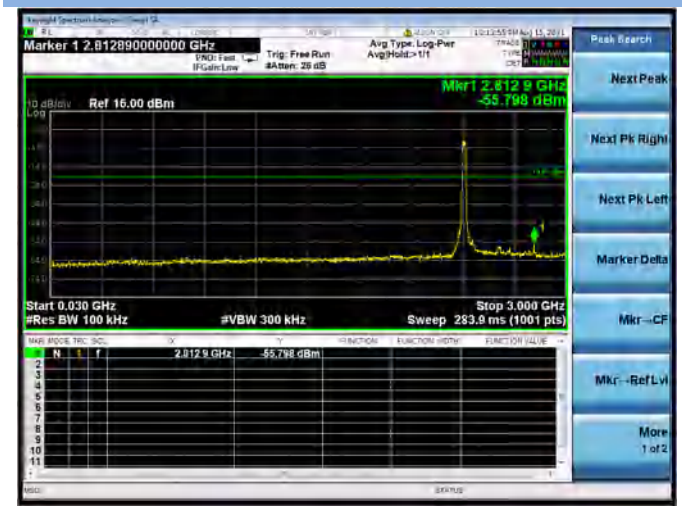


802.11b HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



802.11g LOW CHANNEL CARRIER LEVEL

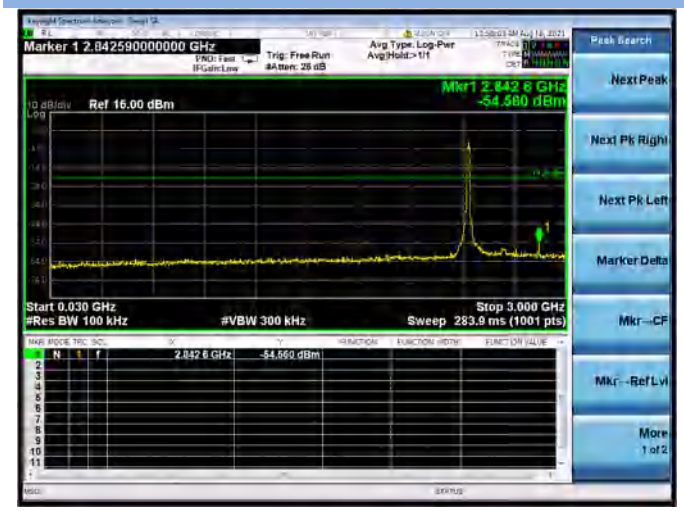
802.11g LOW CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



802.11g LOW CHANNEL, SPURIOUS 2 GHz ~ 25 GHz

802.11g MIDDLE CHANNEL CARRIER LEVEL

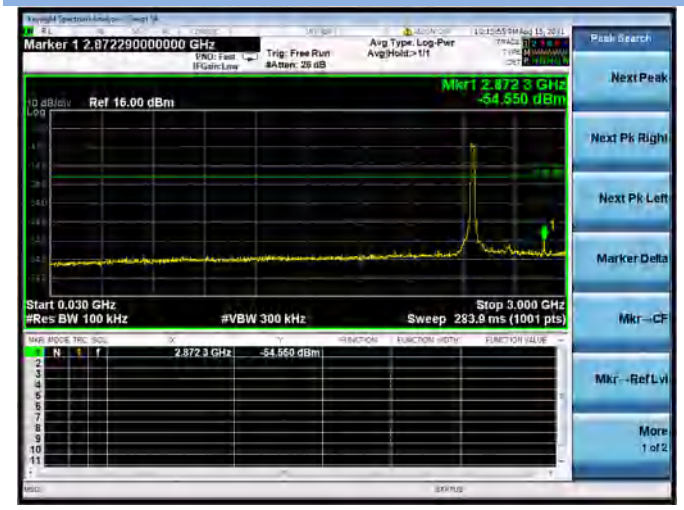
802.11g MIDDLE CHANNEL, SPURIOUS
30 MHz ~ 3 GHz



802.11g MIDDLE CHANNEL, SPURIOUS
2 GHz ~ 25 GHz

802.11g HIGH CHANNEL CARRIER LEVEL

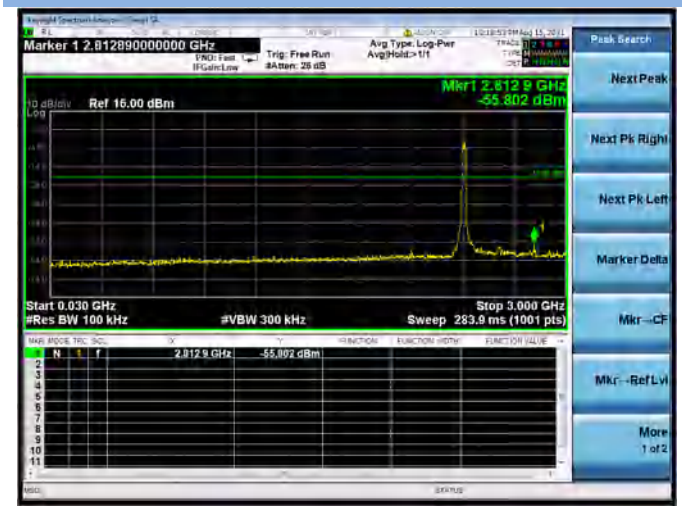
802.11g HIGH CHANNEL, SPURIOUS
30 MHz ~ 3 GHz



802.11g HIGH CHANNEL, SPURIOUS
2 GHz ~ 25 GHz

802.11n-20 LOW CHANNEL CARRIER LEVEL

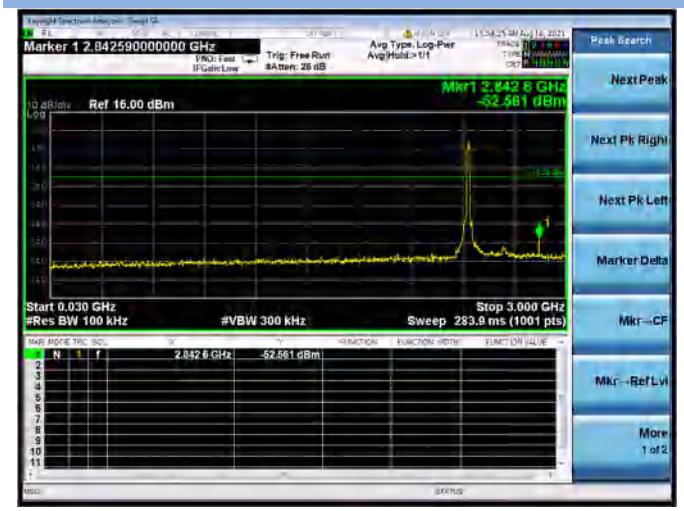
802.11n-20 LOW CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



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

802.11n-20 MIDDLE CHANNEL CARRIER LEVEL

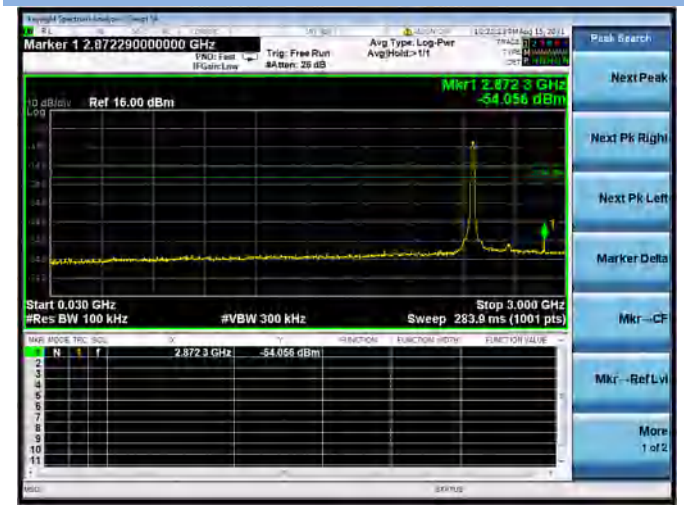
802.11n-20 MIDDLE CHANNEL, SPURIOUS
30 MHz ~ 3 GHz



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

802.11n-20 HIGH CHANNEL CARRIER LEVEL

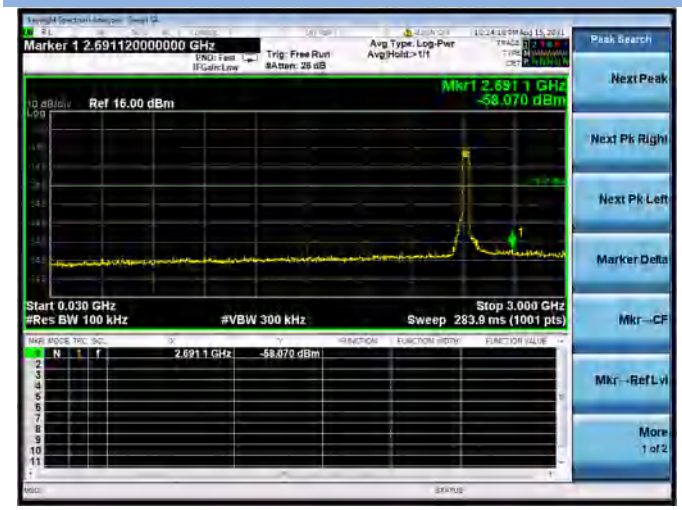
802.11n-20 HIGH CHANNEL, SPURIOUS
30 MHz ~ 3 GHz



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

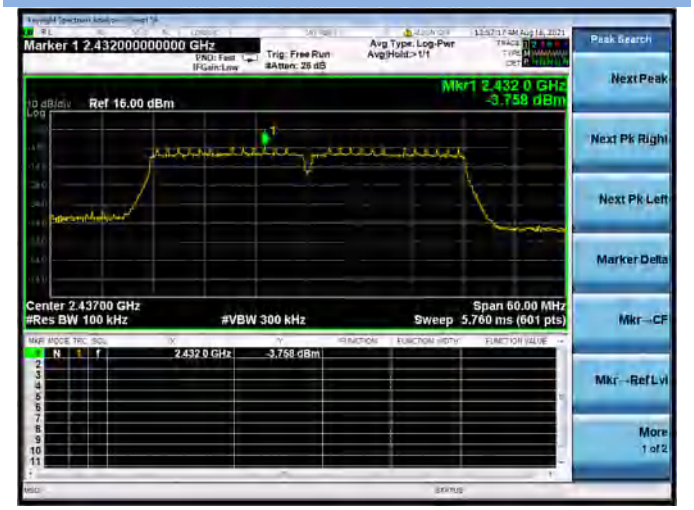
802.11n-40 LOW CHANNEL CARRIER LEVEL

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

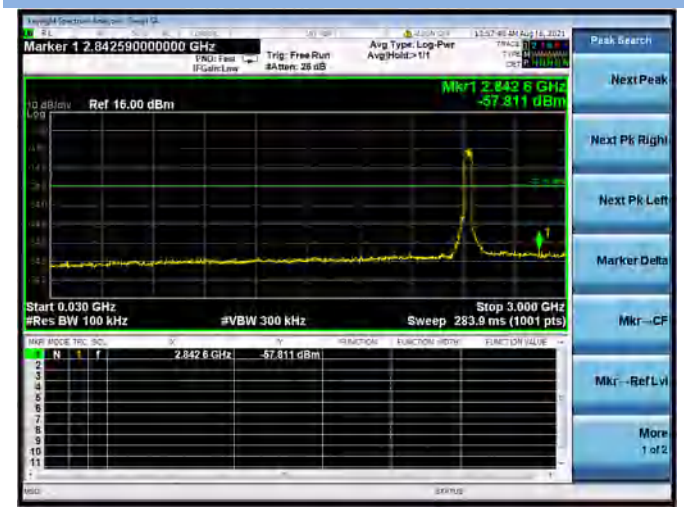


802.11n-40 LOW CHANNEL, SPURIOUS 2 GHz ~ 25 GHz

802.11n-40 MIDDLE CHANNEL CARRIER LEVEL

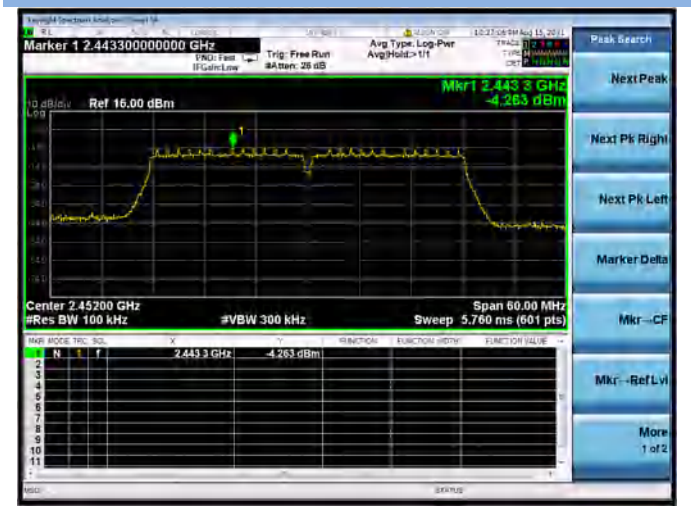


802.11n-40 MIDDLE CHANNEL, SPURIOUS
30 MHz ~ 3 GHz

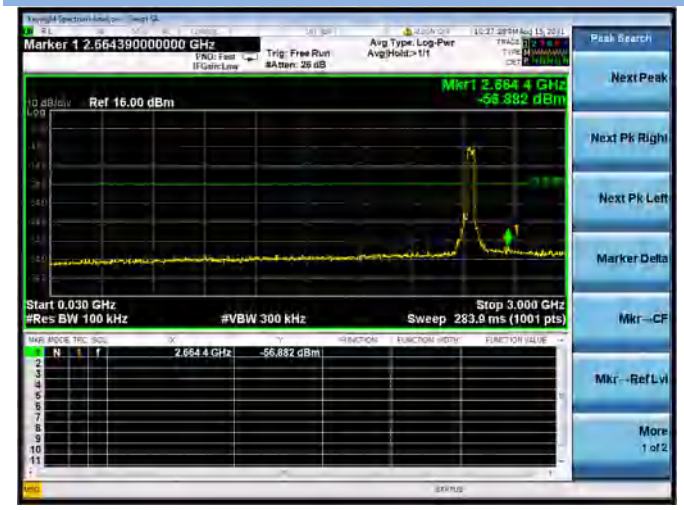


802.11n-40 MIDDLE CHANNEL, SPURIOUS
2 GHz ~ 25 GHz

802.11n-40 HIGH CHANNEL CARRIER LEVEL



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

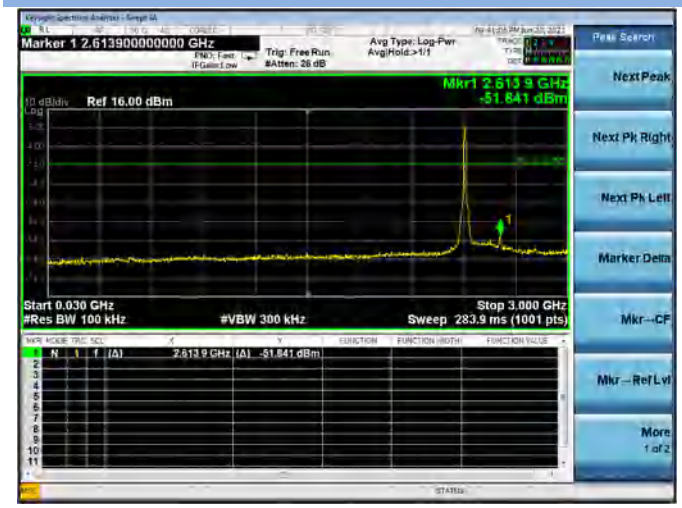


802.11n-40 HIGH CHANNEL, SPURIOUS
2 GHz ~ 25 GHz

Aux. Antenna

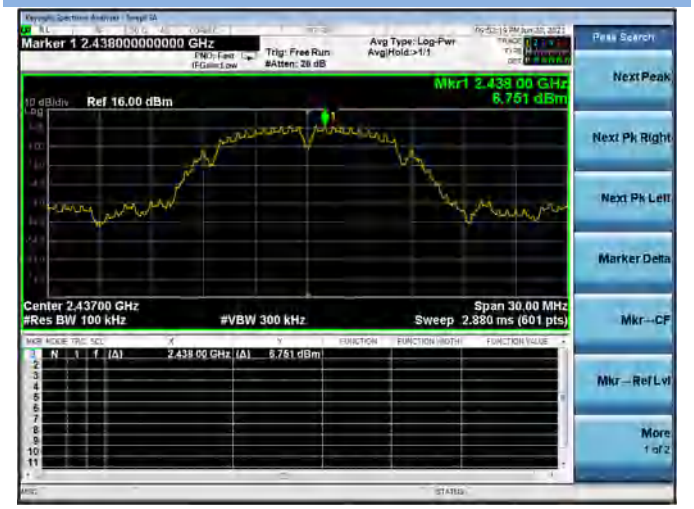
802.11b LOW CHANNEL CARRIER LEVEL

802.11b LOW CHANNEL, SPURIOUS 30 MHz ~ 3 GHz

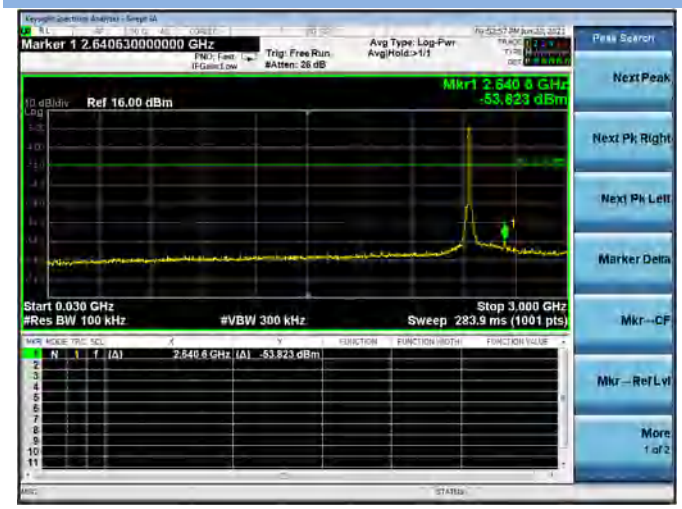


802.11b LOW CHANNEL, SPURIOUS 2 GHz ~ 25 GHz

802.11b MIDDLE CHANNEL CARRIER LEVEL



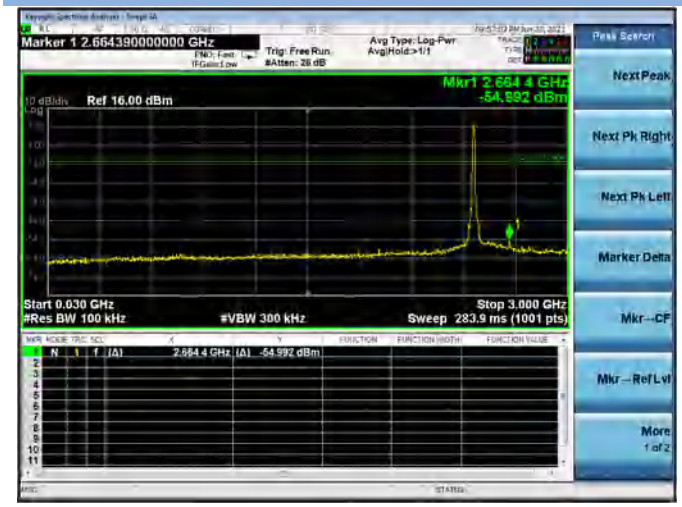
802.11b MIDDLE CHANNEL, SPURIOUS
30 MHz ~ 3 GHz



802.11b MIDDLE CHANNEL, SPURIOUS
2 GHz ~ 25 GHz

802.11b HIGH CHANNEL CARRIER LEVEL

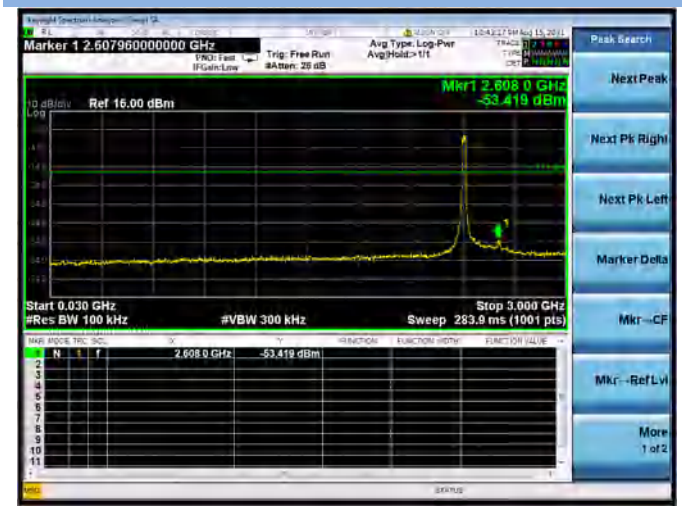
802.11b HIGH CHANNEL, SPURIOUS
30 MHz ~ 3 GHz



802.11b HIGH CHANNEL, SPURIOUS
2 GHz ~ 25 GHz

802.11g LOW CHANNEL CARRIER LEVEL

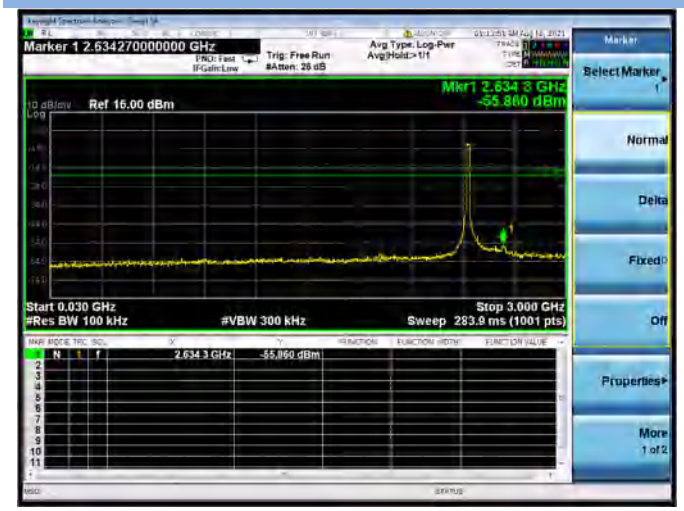
802.11g LOW CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



802.11g LOW CHANNEL, SPURIOUS 2 GHz ~ 25 GHz

802.11g MIDDLE CHANNEL CARRIER LEVEL

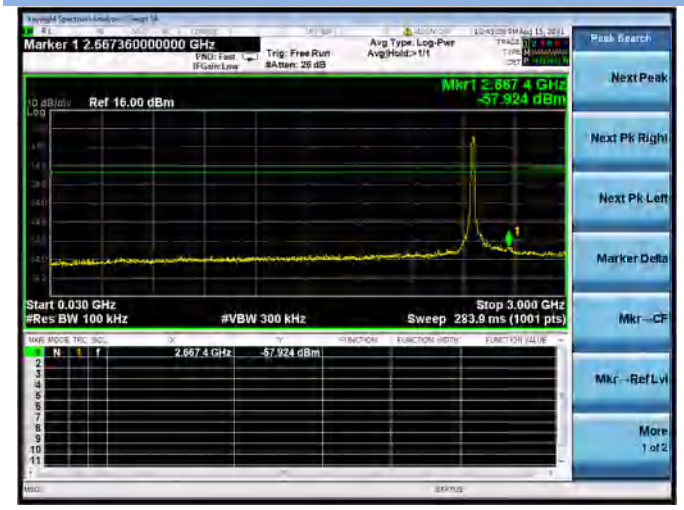
802.11g MIDDLE CHANNEL, SPURIOUS
30 MHz ~ 3 GHz



802.11g MIDDLE CHANNEL, SPURIOUS
2 GHz ~ 25 GHz

802.11g HIGH CHANNEL CARRIER LEVEL

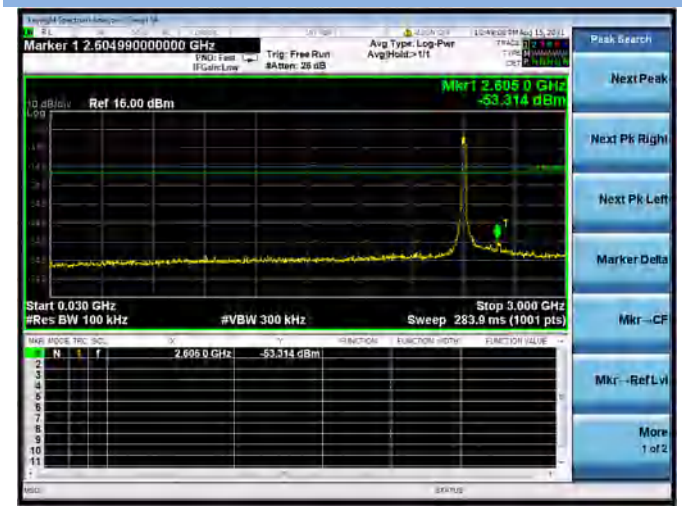
802.11g HIGH CHANNEL, SPURIOUS
30 MHz ~ 3 GHz



802.11g HIGH CHANNEL, SPURIOUS
2 GHz ~ 25 GHz

802.11n-20 LOW CHANNEL CARRIER LEVEL

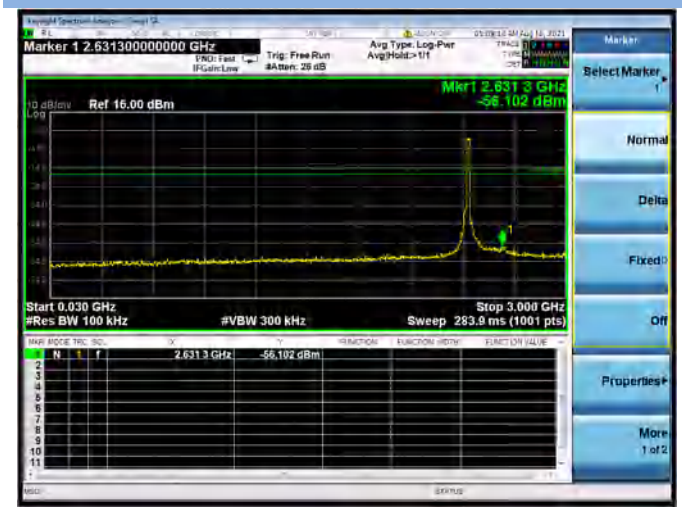
802.11n-20 LOW CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



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

802.11n-20 MIDDLE CHANNEL CARRIER LEVEL

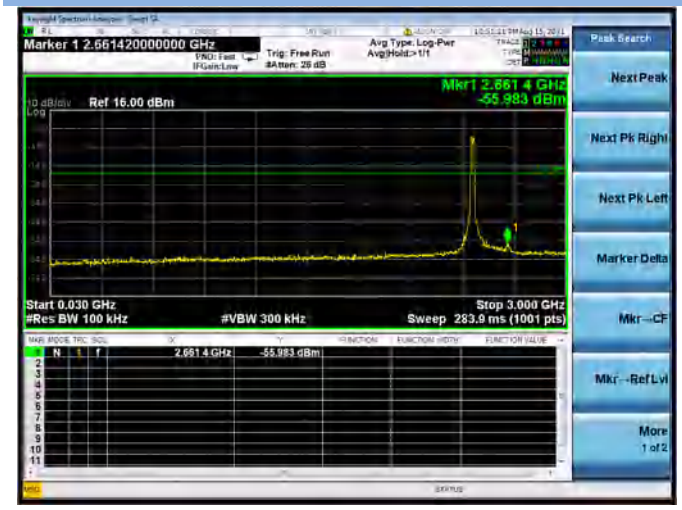
802.11n-20 MIDDLE CHANNEL, SPURIOUS
30 MHz ~ 3 GHz



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

802.11n-20 HIGH CHANNEL CARRIER LEVEL

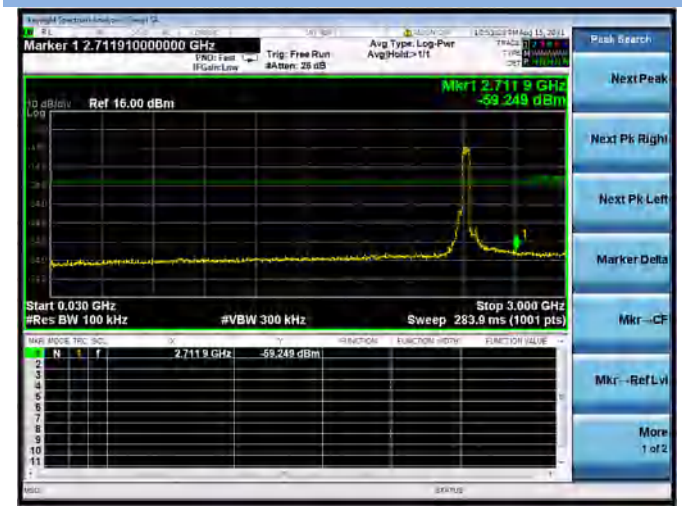
802.11n-20 HIGH CHANNEL, SPURIOUS
30 MHz ~ 3 GHz



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

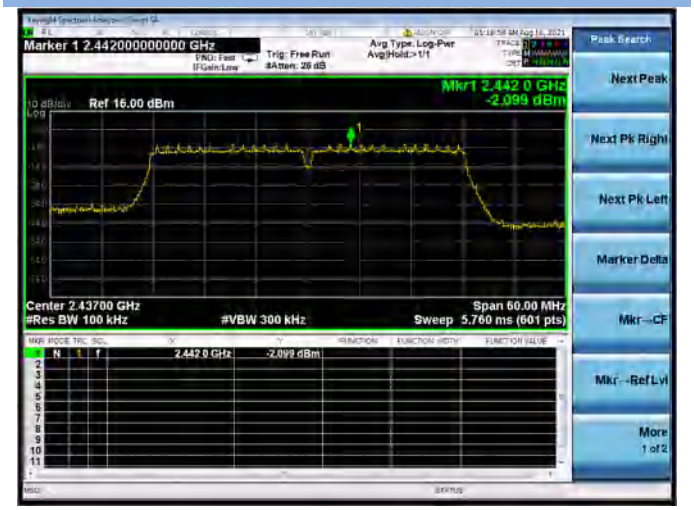
802.11n-40 LOW CHANNEL CARRIER LEVEL

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

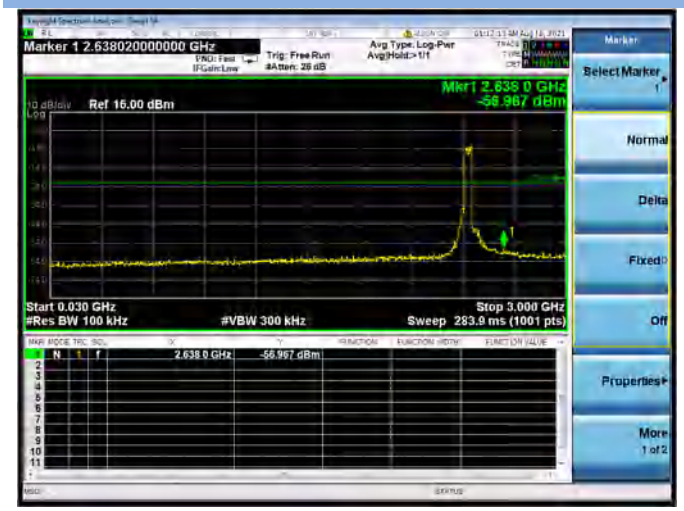


802.11n-40 LOW CHANNEL, SPURIOUS 2 GHz ~ 25 GHz

802.11n-40 MIDDLE CHANNEL CARRIER LEVEL

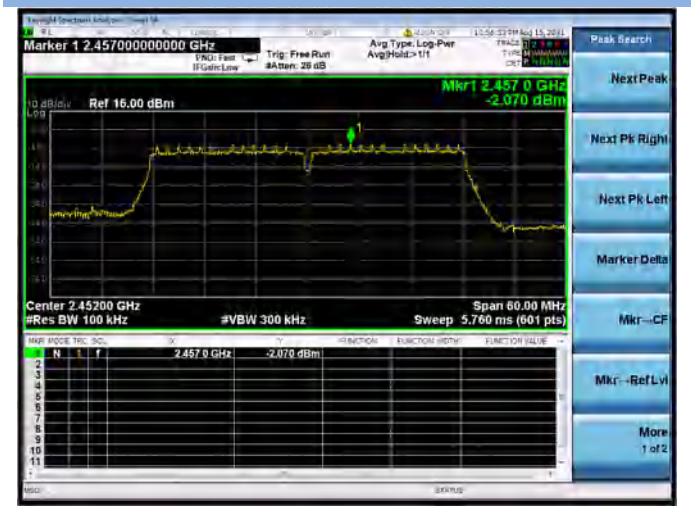


802.11n-40 MIDDLE CHANNEL, SPURIOUS
30 MHz ~ 3 GHz

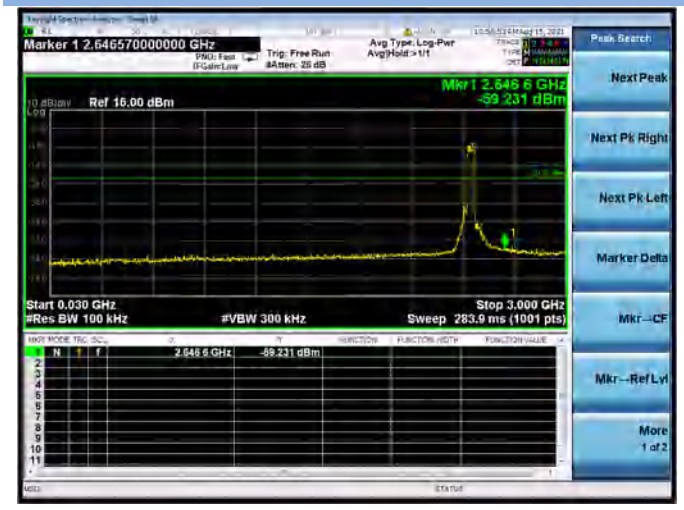


802.11n-40 MIDDLE CHANNEL, SPURIOUS
2 GHz ~ 25 GHz

802.11n-40 HIGH CHANNEL CARRIER LEVEL



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

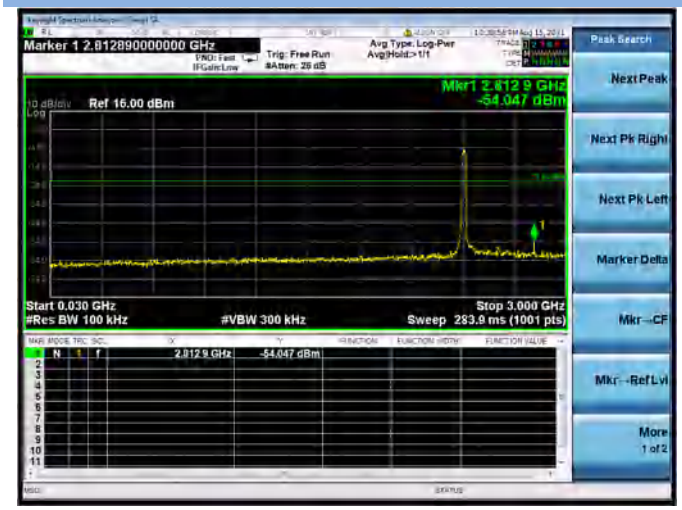


802.11n-40 HIGH CHANNEL, SPURIOUS
2 GHz ~ 25 GHz

MIMO-Main Antenna

802.11n-20 LOW CHANNEL CARRIER LEVEL

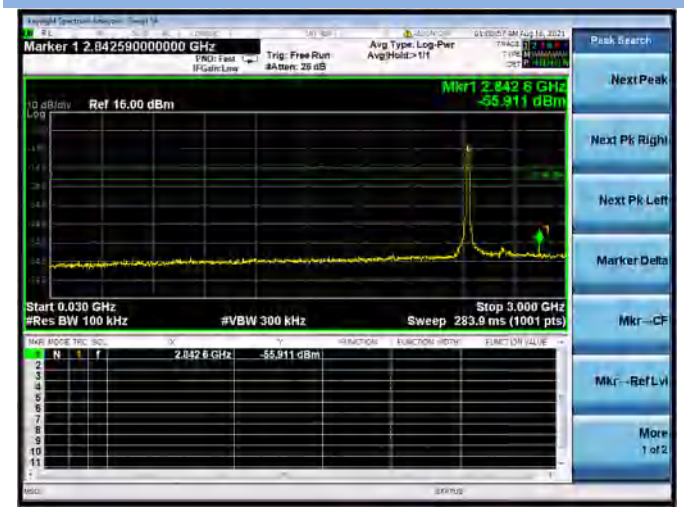
802.11n-20 LOW CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



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

802.11n-20 MIDDLE CHANNEL CARRIER LEVEL

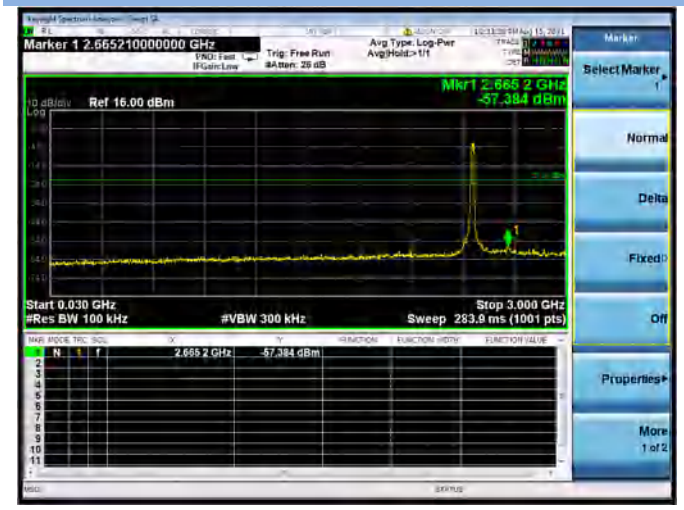
802.11n-20 MIDDLE CHANNEL, SPURIOUS
30 MHz ~ 3 GHz



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

802.11n-20 HIGH CHANNEL CARRIER LEVEL

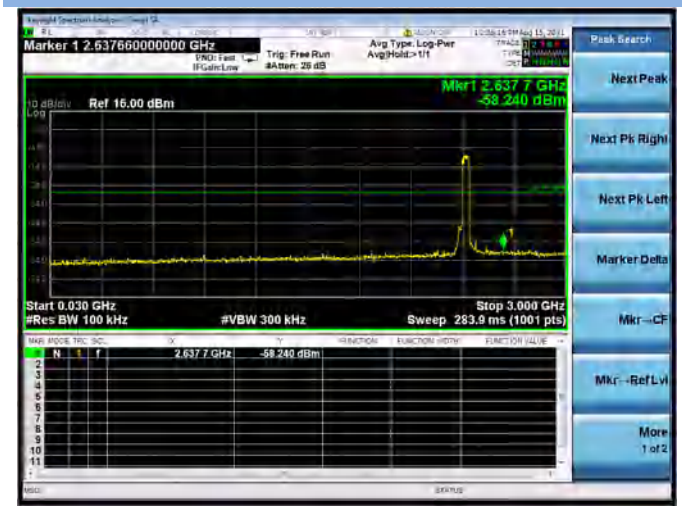
802.11n-20 HIGH CHANNEL, SPURIOUS
30 MHz ~ 3 GHz



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

802.11n-40 LOW CHANNEL CARRIER LEVEL

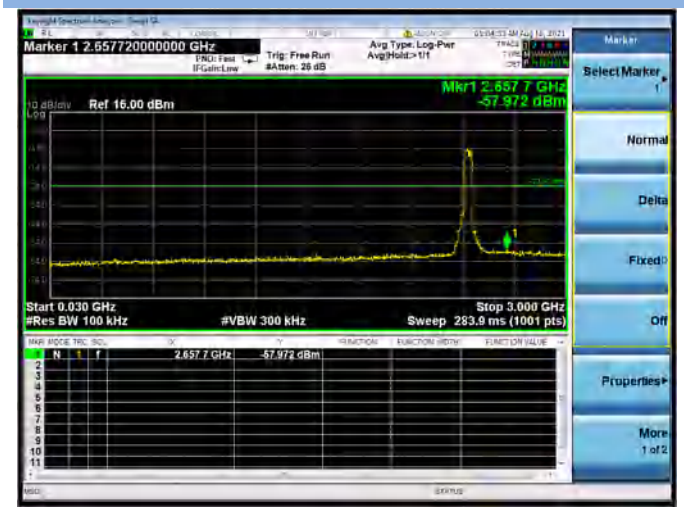
802.11n-40 LOW CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



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

802.11n-40 MIDDLE CHANNEL CARRIER LEVEL

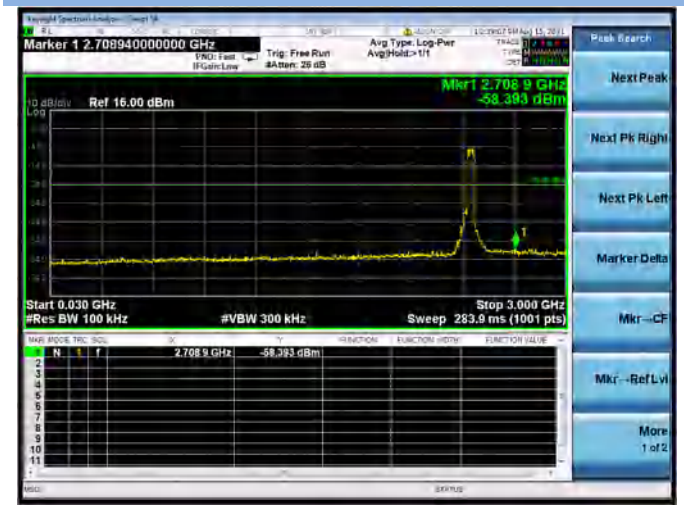
802.11n-40 MIDDLE CHANNEL, SPURIOUS
30 MHz ~ 3 GHz



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

802.11n-40 HIGH CHANNEL CARRIER LEVEL

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

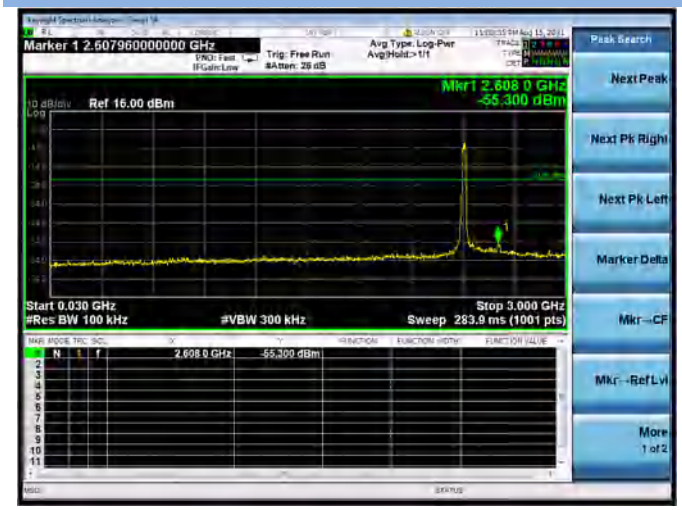


802.11n-40 HIGH CHANNEL, SPURIOUS
2 GHz ~ 25 GHz

MIMO-Aux. Antenna

802.11n-20 LOW CHANNEL CARRIER LEVEL

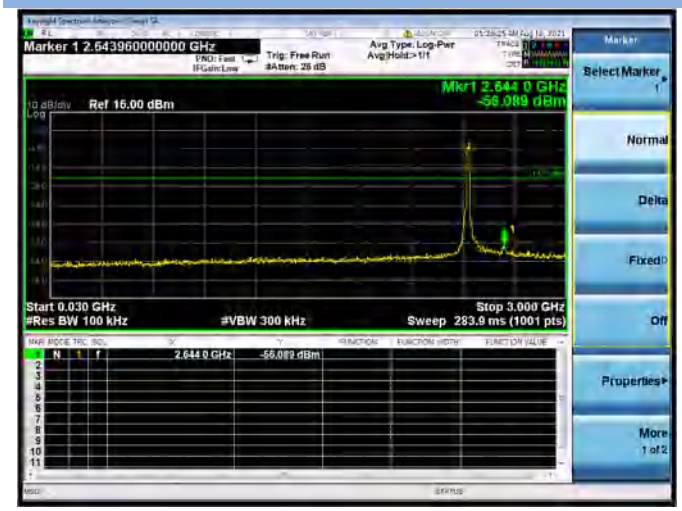
802.11n-20 LOW CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



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

802.11n-20 MIDDLE CHANNEL CARRIER LEVEL

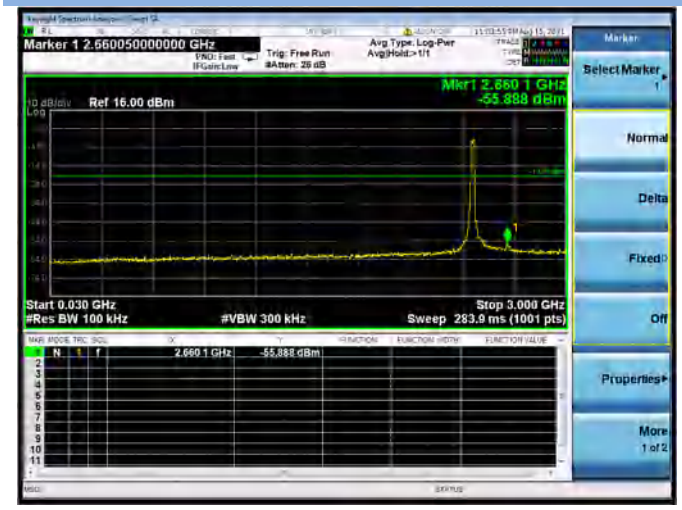
802.11n-20 MIDDLE CHANNEL, SPURIOUS
30 MHz ~ 3 GHz



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

802.11n-20 HIGH CHANNEL CARRIER LEVEL

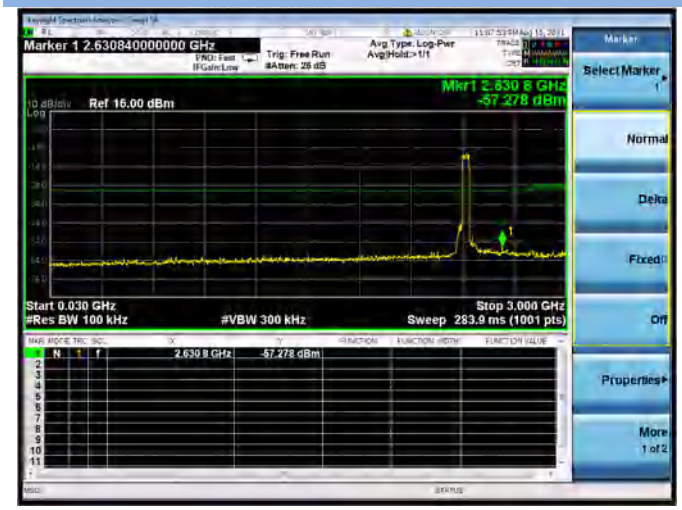
802.11n-20 HIGH CHANNEL, SPURIOUS
30 MHz ~ 3 GHz



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

802.11n-40 LOW CHANNEL CARRIER LEVEL

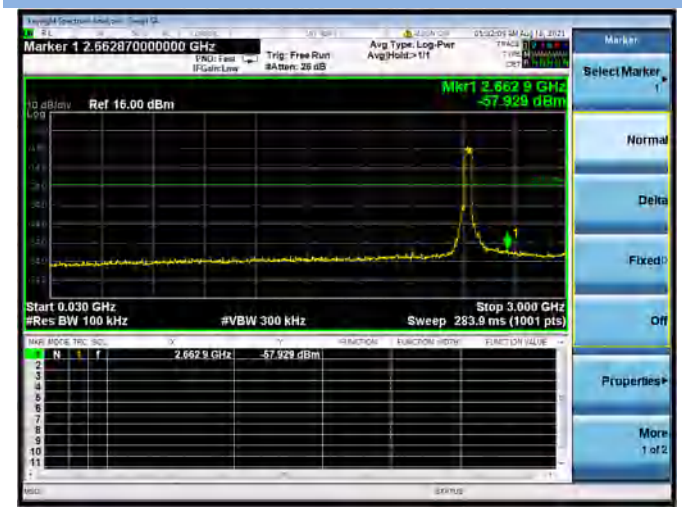
802.11n-40 LOW CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



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

802.11n-40 MIDDLE CHANNEL CARRIER LEVEL

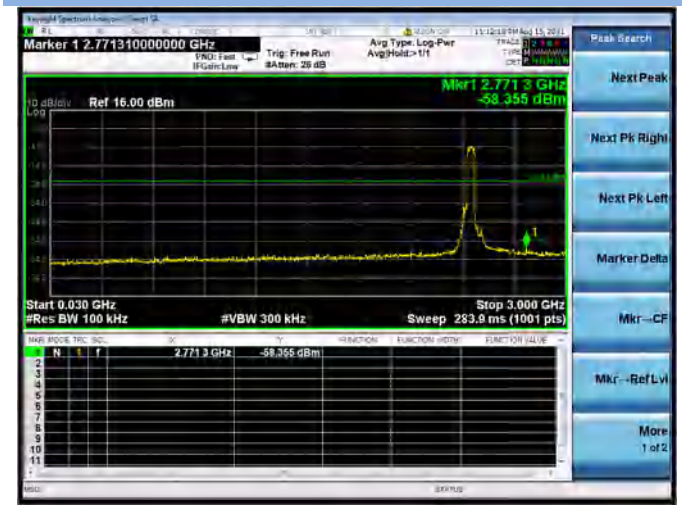
802.11n-40 MIDDLE CHANNEL, SPURIOUS
30 MHz ~ 3 GHz



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

802.11n-40 HIGH CHANNEL CARRIER LEVEL

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

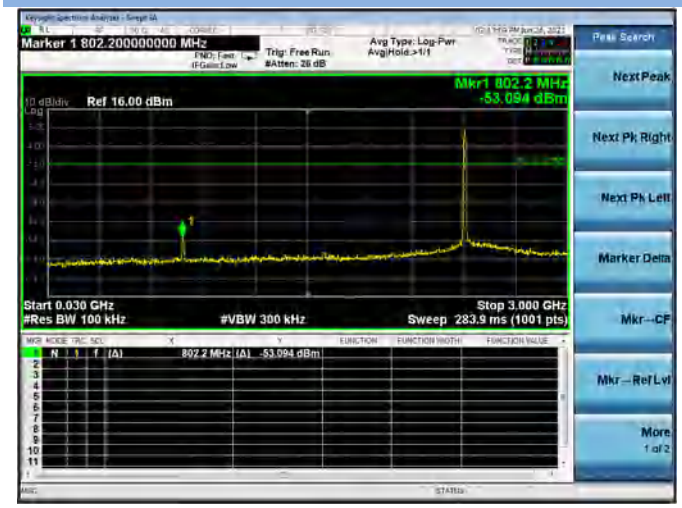


802.11n-40 HIGH CHANNEL, SPURIOUS
2 GHz ~ 25 GHz

ESP module

802.11b LOW CHANNEL CARRIER LEVEL

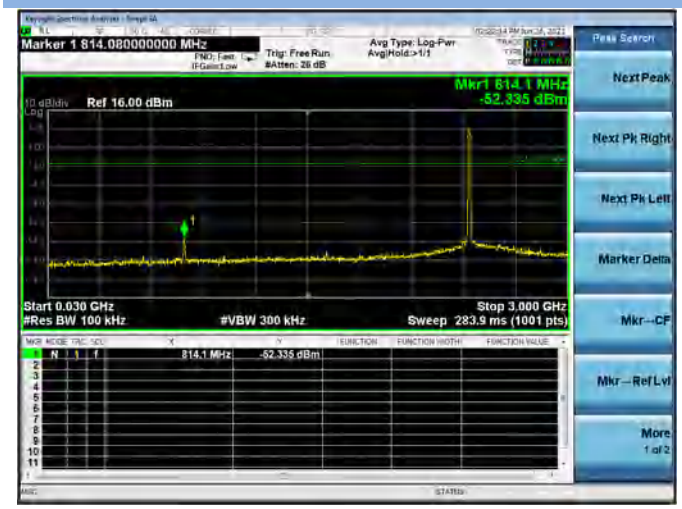
802.11b LOW CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



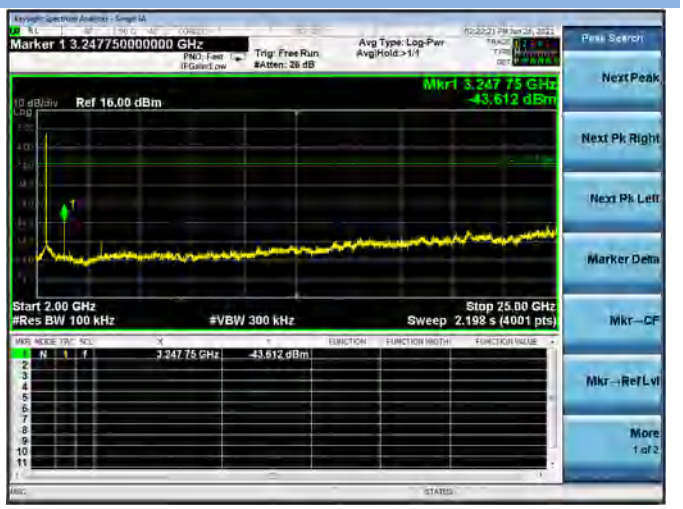
802.11b LOW CHANNEL, SPURIOUS 2 GHz ~ 25 GHz

802.11b MIDDLE CHANNEL CARRIER LEVEL

802.11b MIDDLE CHANNEL, SPURIOUS 30 MHz ~ 3 GHz

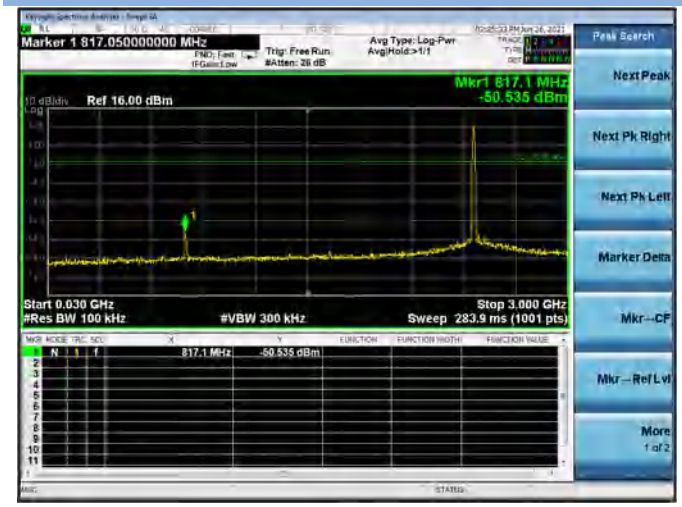


802.11b MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



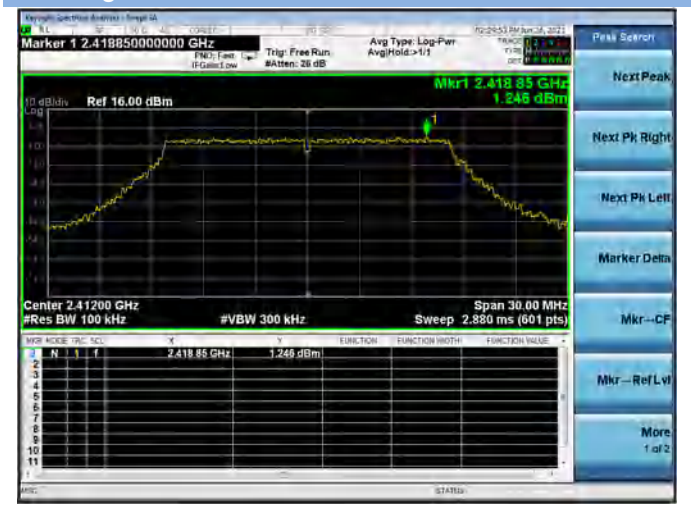
802.11b HIGH CHANNEL CARRIER LEVEL

802.11b HIGH CHANNEL, SPURIOUS 30 MHz ~ 3 GHz

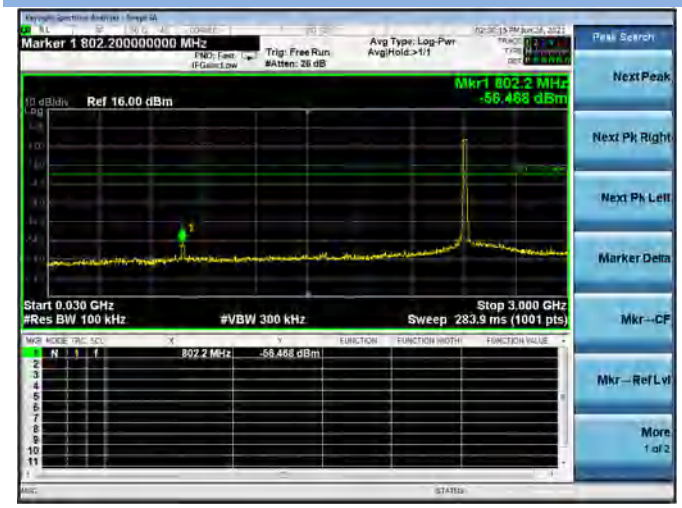


802.11b HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz

802.11g LOW CHANNEL CARRIER LEVEL

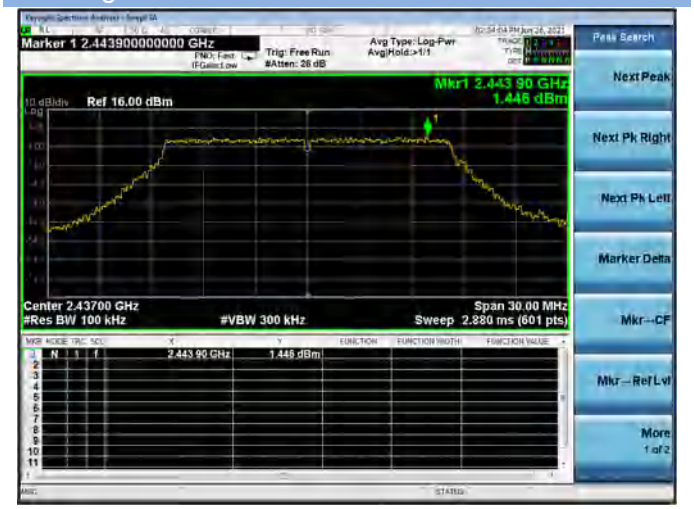


802.11g LOW CHANNEL, SPURIOUS 30 MHz ~ 3 GHz

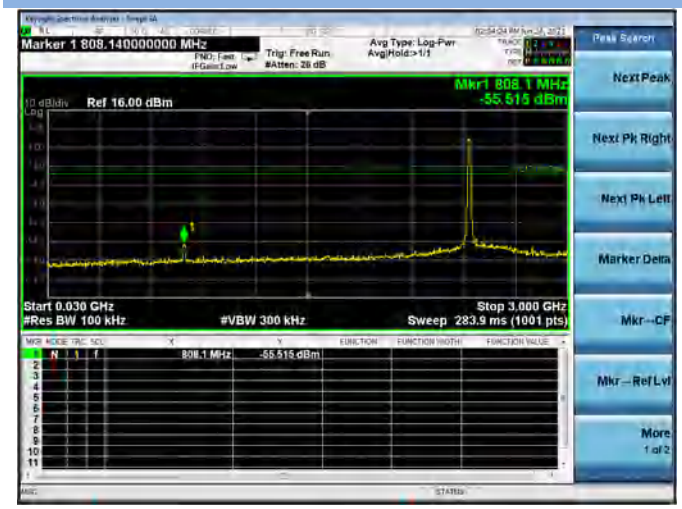


802.11g LOW CHANNEL, SPURIOUS 2 GHz ~ 25 GHz

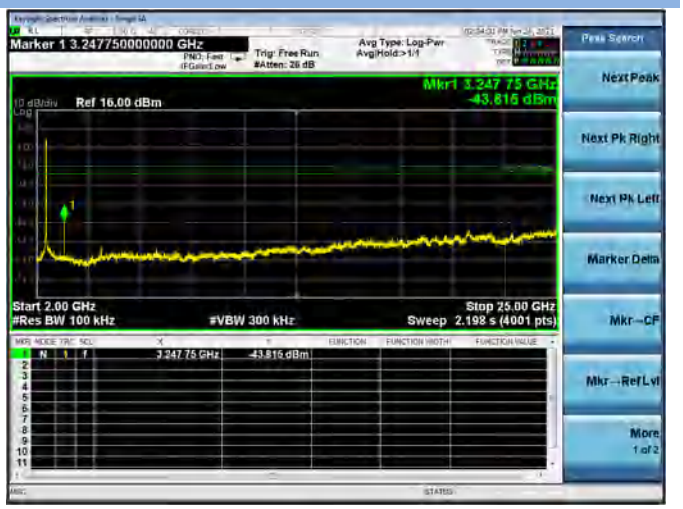
802.11g MIDDLE CHANNEL CARRIER LEVEL



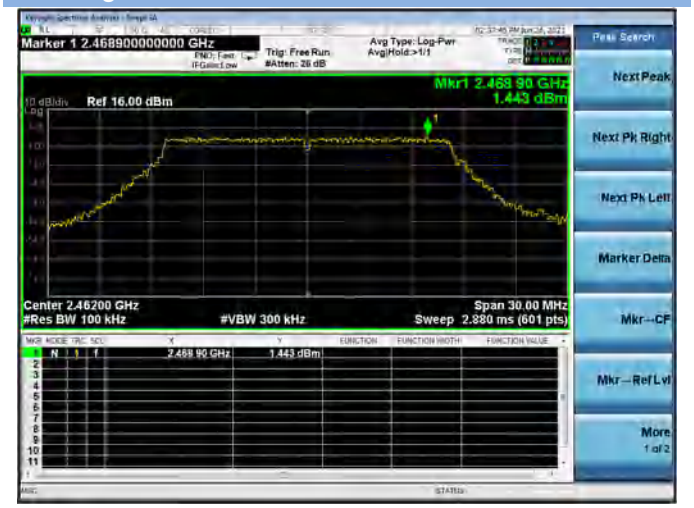
802.11g MIDDLE CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



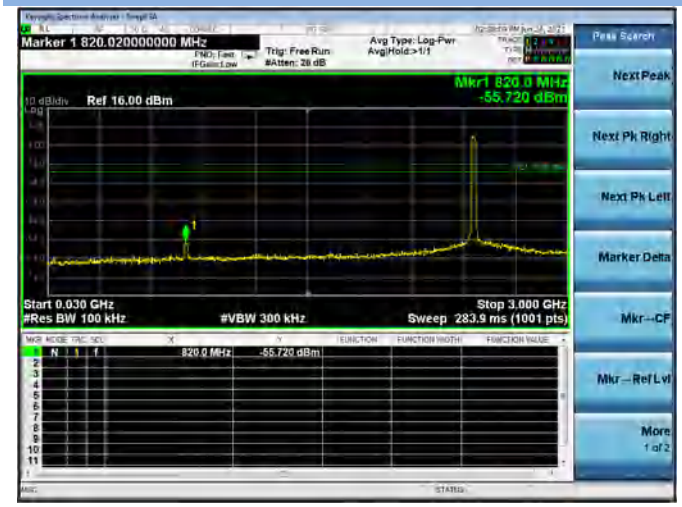
802.11g MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



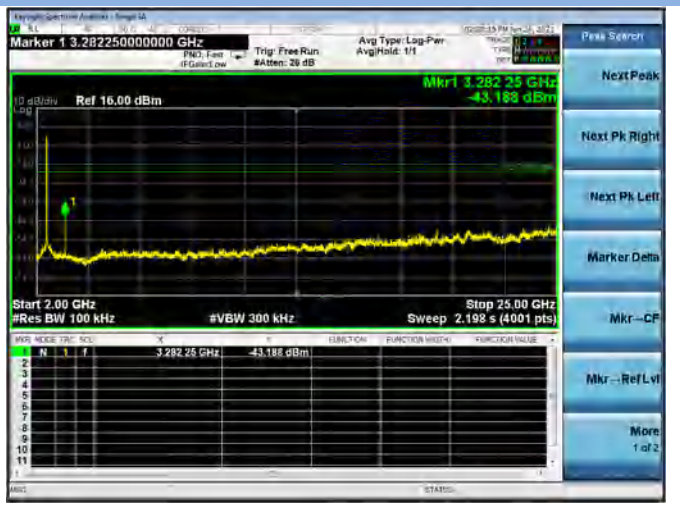
802.11g HIGH CHANNEL CARRIER LEVEL



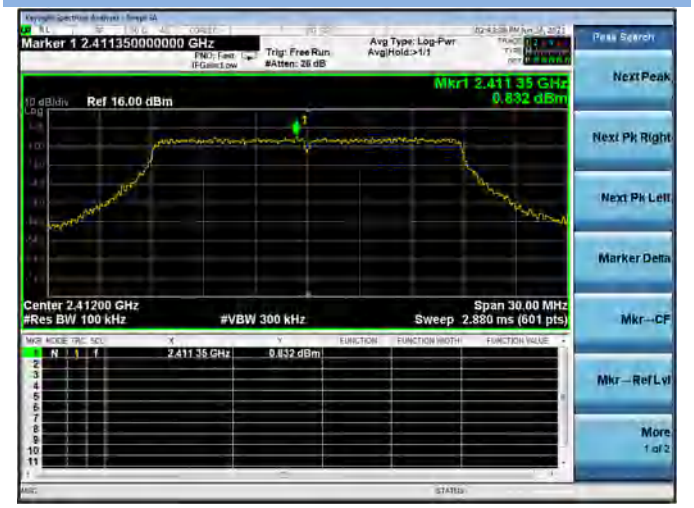
802.11g HIGH CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



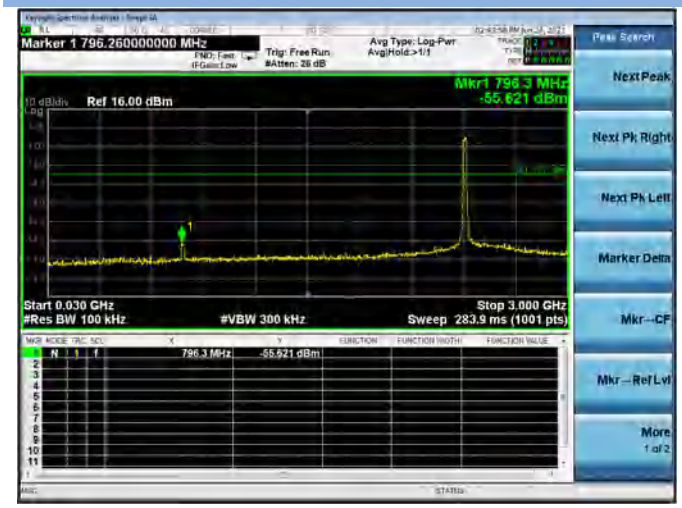
802.11g HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



802.11n-20 LOW CHANNEL CARRIER LEVEL

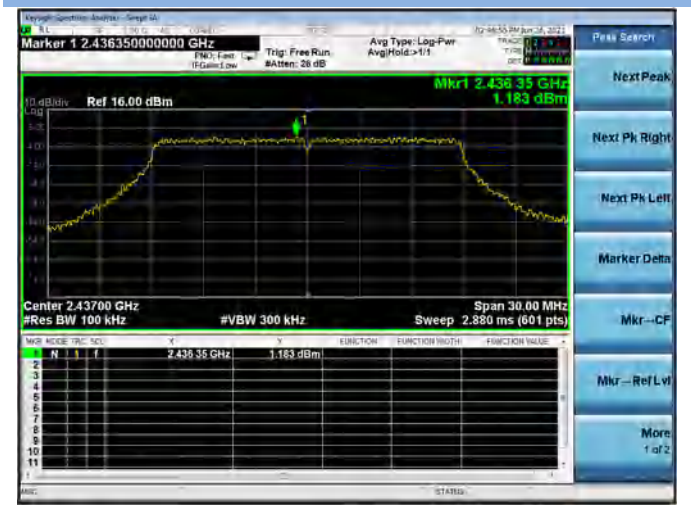


802.11n-20 LOW CHANNEL, SPURIOUS 30 MHz ~ 3 GHz

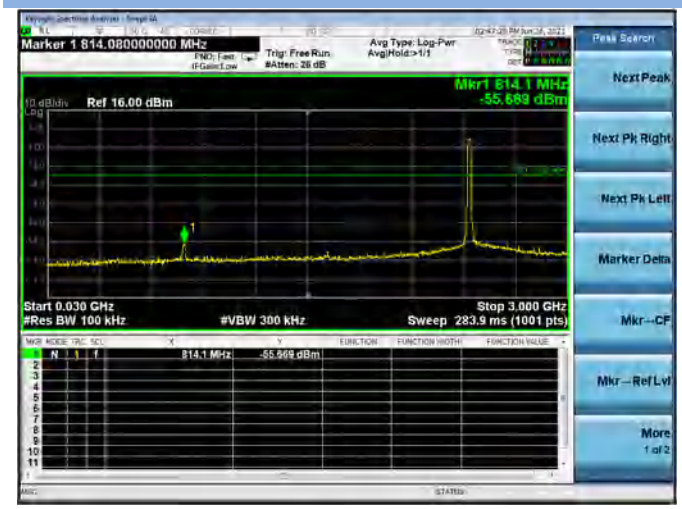


802.11n-20 LOW CHANNEL, SPURIOUS 2 GHz ~ 25 GHz

802.11n-20 MIDDLE CHANNEL CARRIER LEVEL

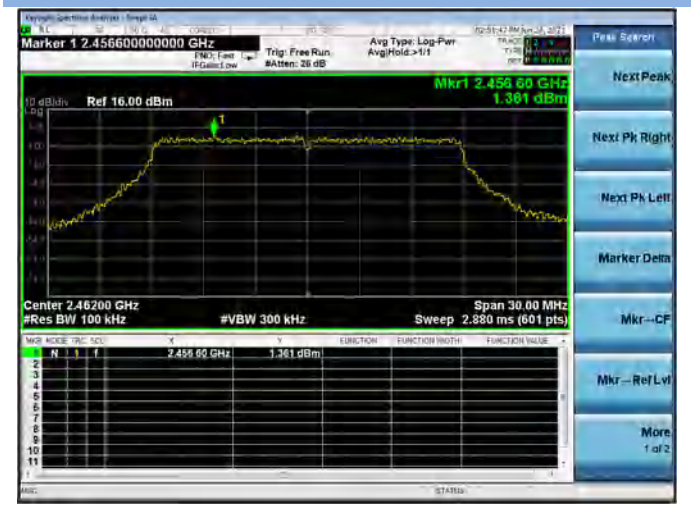


802.11n-20 MIDDLE CHANNEL, SPURIOUS 30 MHz ~ 3 GHz

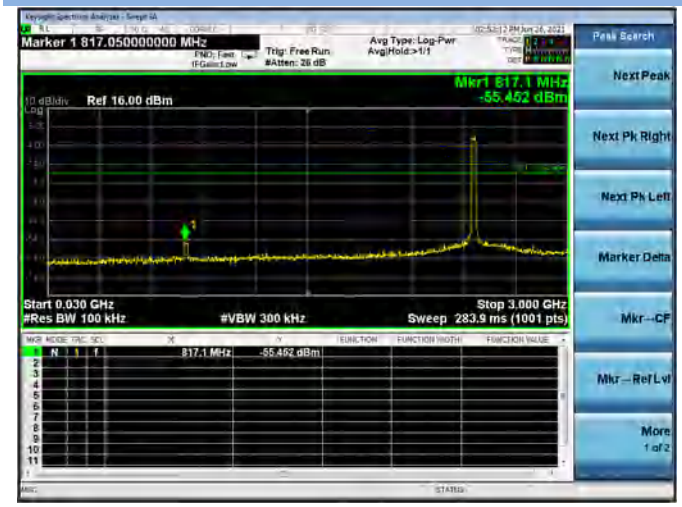


802.11n-20 MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz

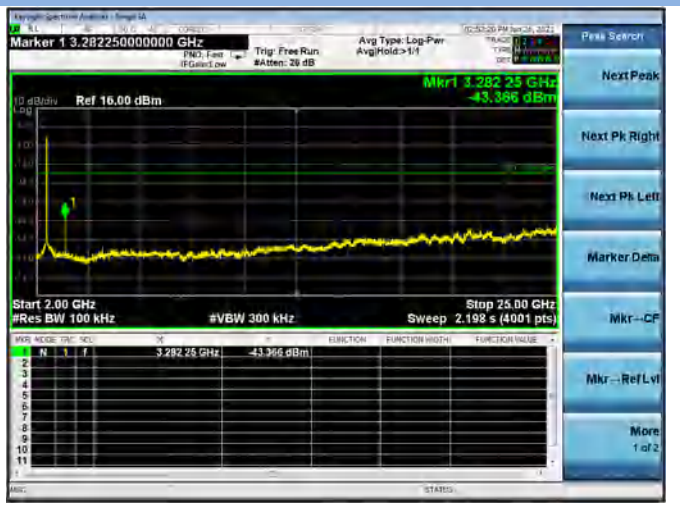
802.11n-20 HIGH CHANNEL CARRIER LEVEL



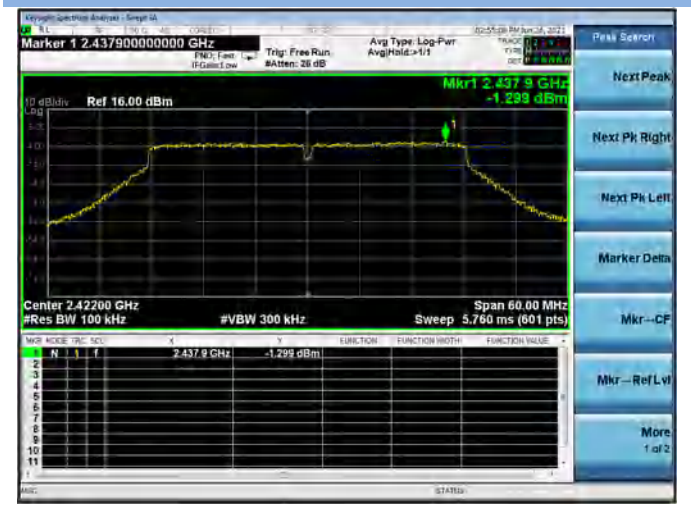
802.11n-20 HIGH CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



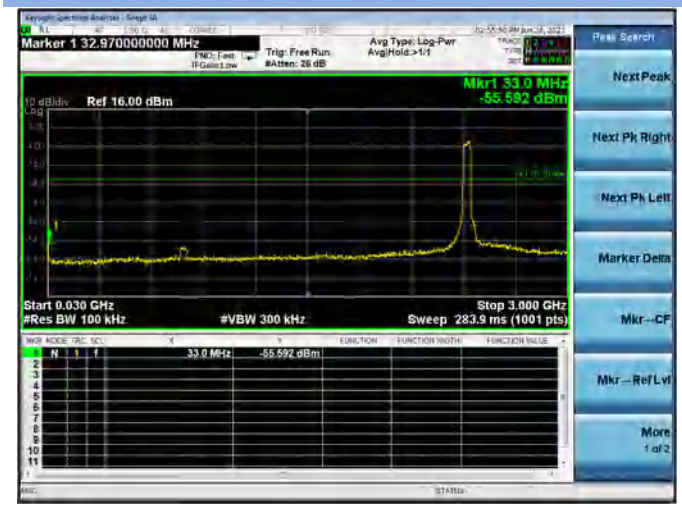
802.11n-20 HIGH CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



802.11n-40 LOW CHANNEL CARRIER LEVEL

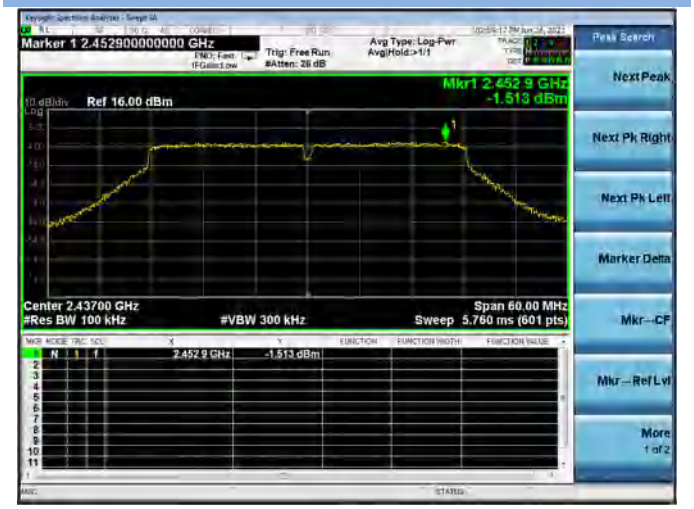


802.11n-40 LOW CHANNEL, SPURIOUS 30 MHz ~ 3 GHz

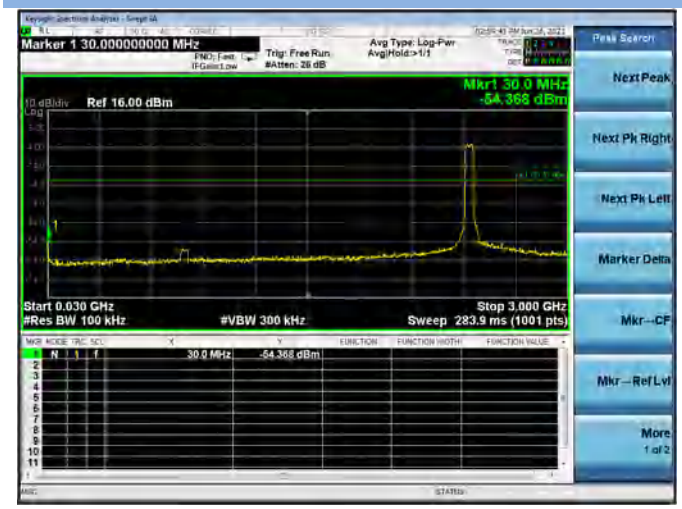


802.11n-40 LOW CHANNEL, SPURIOUS 2 GHz ~ 25 GHz

802.11n-40 MIDDLE CHANNEL CARRIER LEVEL

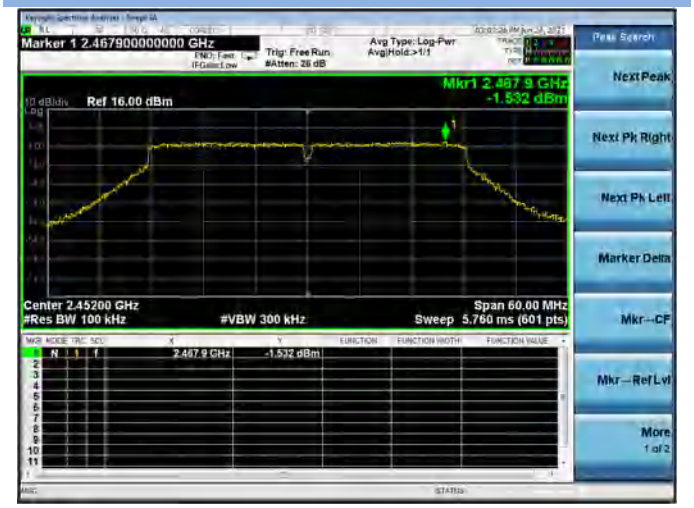


802.11n-40 MIDDLE CHANNEL, SPURIOUS 30 MHz ~ 3 GHz

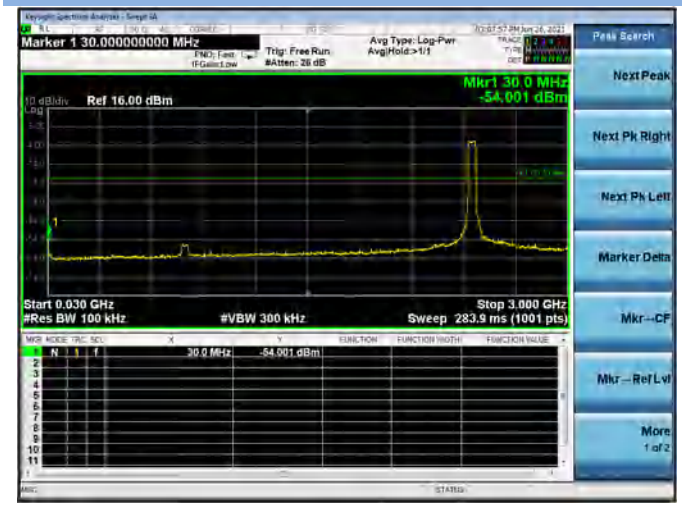


802.11n-40 MIDDLE CHANNEL, SPURIOUS 2 GHz ~ 25 GHz

802.11n-40 HIGH CHANNEL CARRIER LEVEL



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



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

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

Test Data

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

AP module

Main Antenna

802.11b Mode：

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-37.48	6.94	-13.06	Pass
High Channel	-47.41	6.54	-13.46	Pass

802.11g Mode：

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-35.72	0.59	-19.41	Pass
High Channel	-36.76	0.01	-19.99	Pass

802.11n-20 MHz Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-29.89	0.23	-19.78	Pass
High Channel	-35.14	-0.54	-20.54	Pass

802.11n-40 MHz Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-30.75	-4.57	-24.57	Pass
High Channel	-32.70	-4.26	-24.26	Pass

Aux. Antenna

802.11b Mode：

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-36.29	6.62	-13.38	Pass
High Channel	-45.41	6.88	-13.12	Pass

802.11g Mode：

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-33.21	2.83	-17.17	Pass
High Channel	-37.84	2.31	-17.69	Pass

802.11n-20 MHz Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-34.79	2.47	-17.53	Pass
High Channel	-36.97	2.00	-18.00	Pass

802.11n-40 MHz Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-32.68	-2.98	-22.98	Pass
High Channel	-32.48	-2.07	-22.07	Pass

MIMO-Main Antenna

802.11n-20 MHz Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-38.01	-1.92	-21.92	Pass
High Channel	-43.92	-1.91	-21.91	Pass

802.11n-40 MHz Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-37.43	-7.81	-27.81	Pass
High Channel	-43.76	-4.56	-24.56	Pass

MIMO-Aux. Antenna

802.11n-20 MHz Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-38.27	-0.95	-20.95	Pass
High Channel	-48.22	0.21	-19.79	Pass

802.11n-40 MHz Mode:

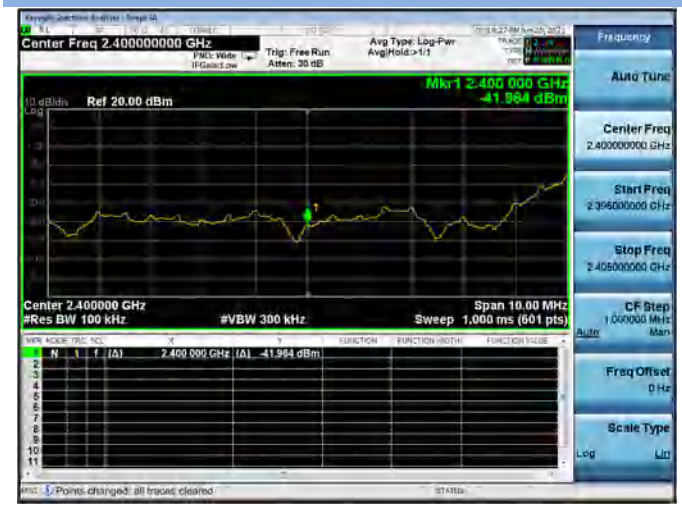
Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-38.79	-6.80	-26.80	Pass
High Channel	-47.76	-2.64	-22.64	Pass

Test Plots

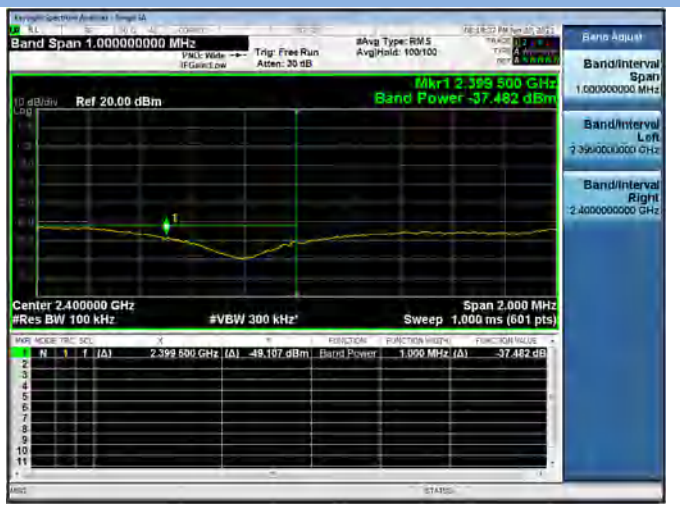
AP module

Main Antenna

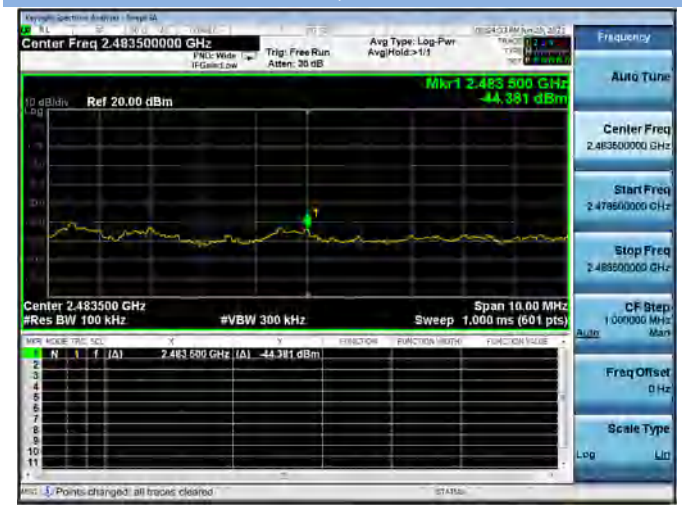
802.11b LOW CHANNEL, Carrier level



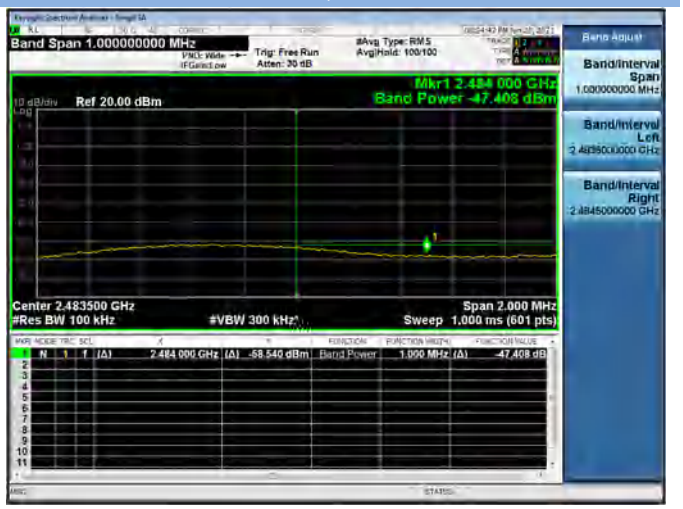
802.11b LOW CHANNEL, Reference level



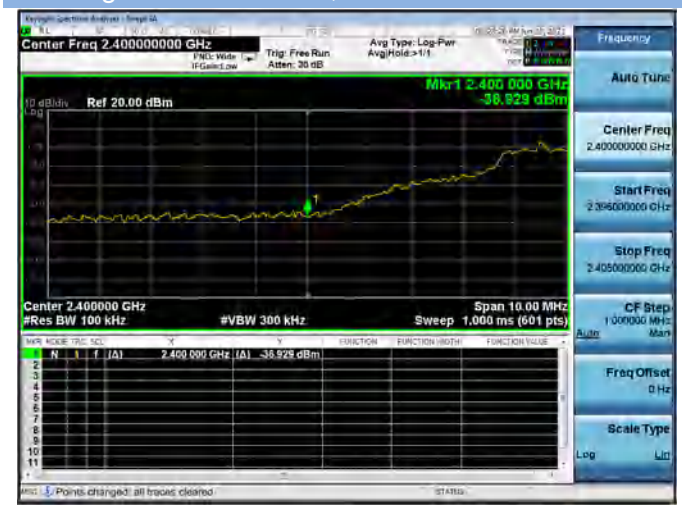
802.11b HIGH CHANNEL, Carrier level



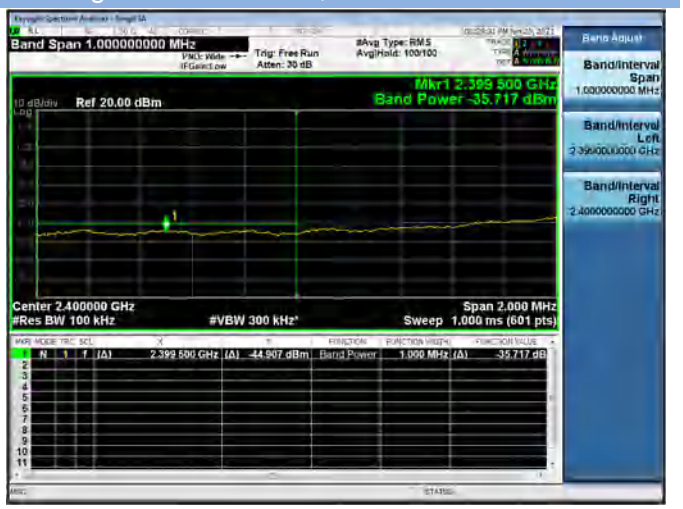
802.11b HIGH CHANNEL, Reference level



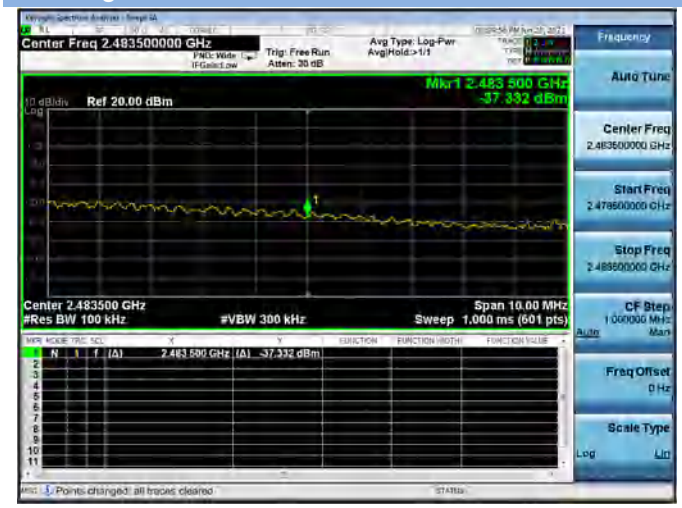
802.11g LOW CHANNEL, Carrier level



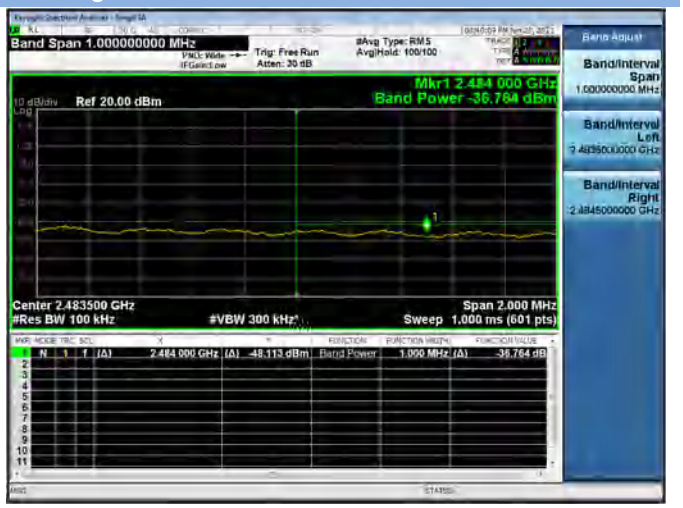
802.11g LOW CHANNEL, Reference level



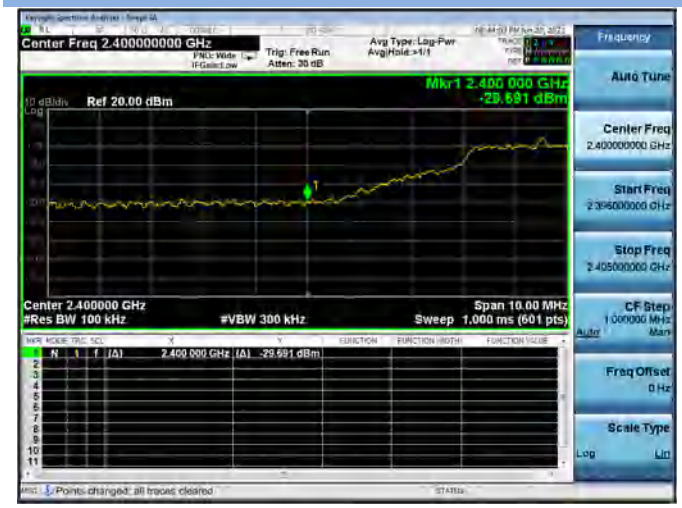
802.11g HIGH CHANNEL, Carrier level



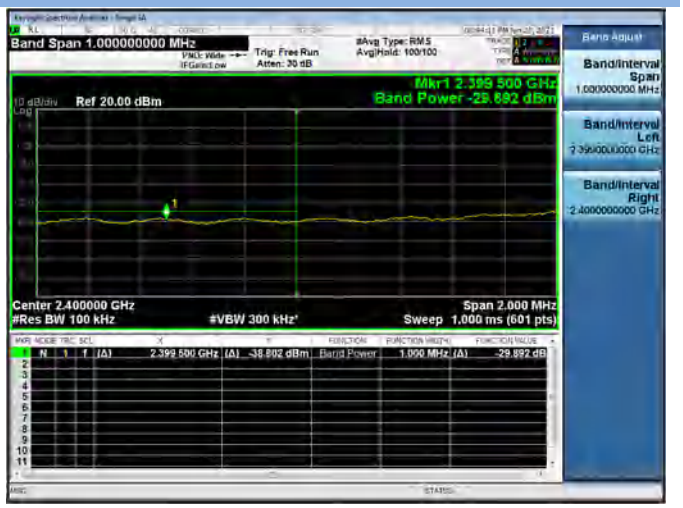
802.11g HIGH CHANNEL, Reference level



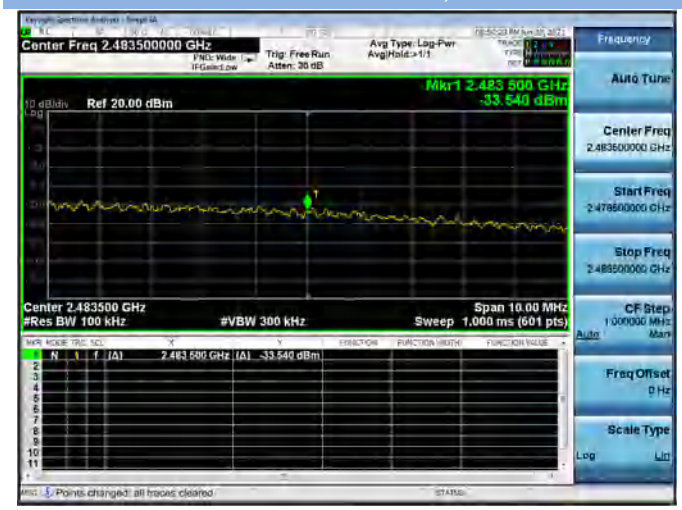
802.11n-20 MHz LOW CHANNEL, Carrier level



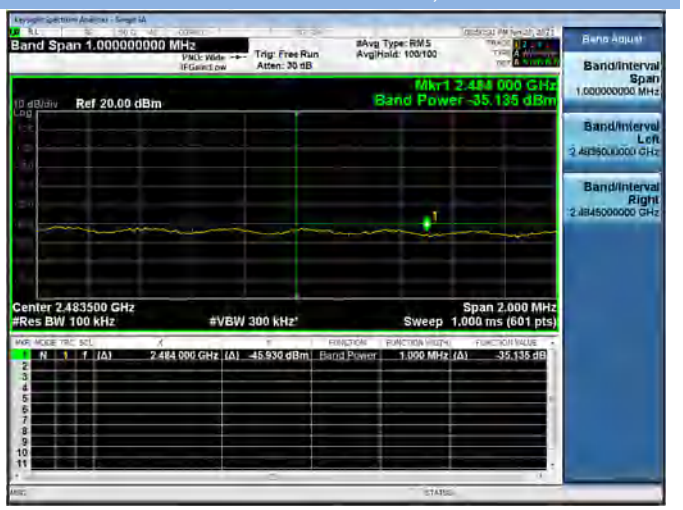
802.11n-20 MHz LOW CHANNEL, Reference level



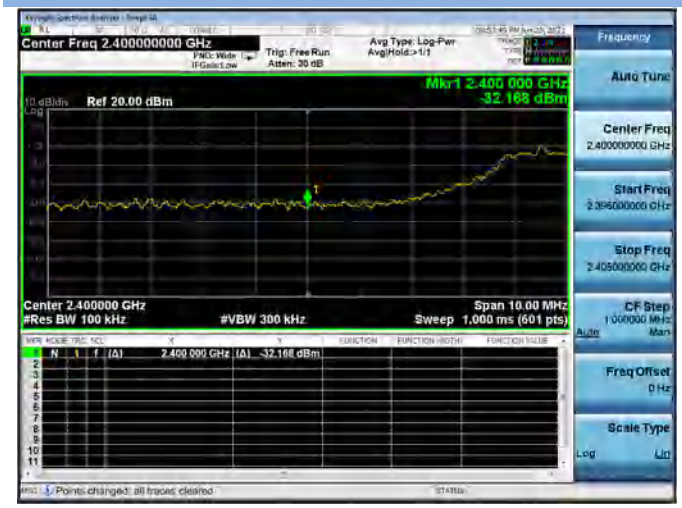
802.11n-20 MHz HIGH CHANNEL, Carrier level



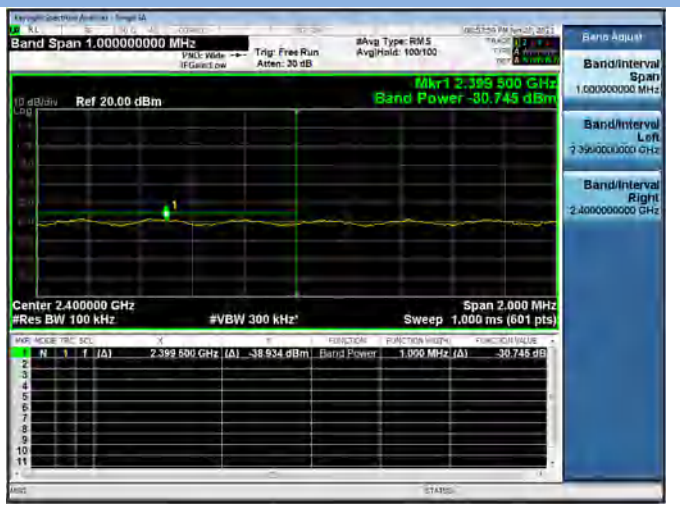
802.11n-20 MHz HIGH CHANNEL, Reference level



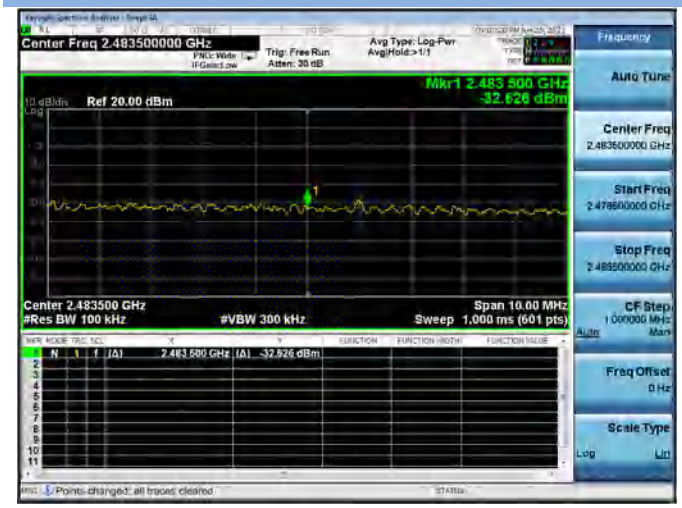
802.11n-40 MHz LOW CHANNEL, Carrier level



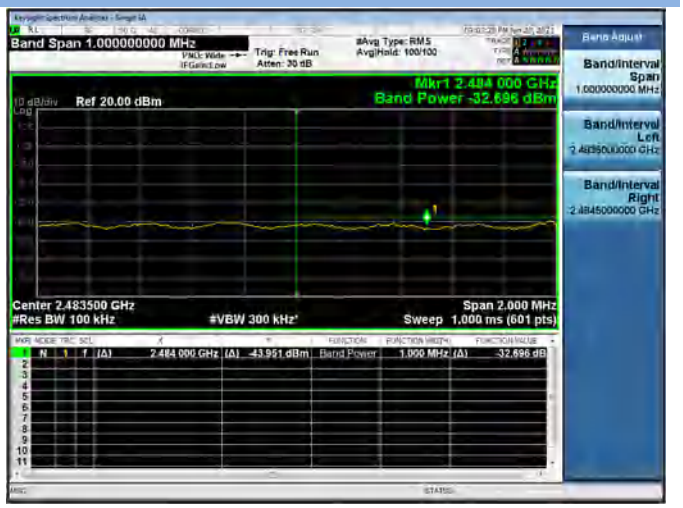
802.11n-40 MHz LOW CHANNEL, Reference level



802.11n-40 MHz HIGH CHANNEL, Carrier level

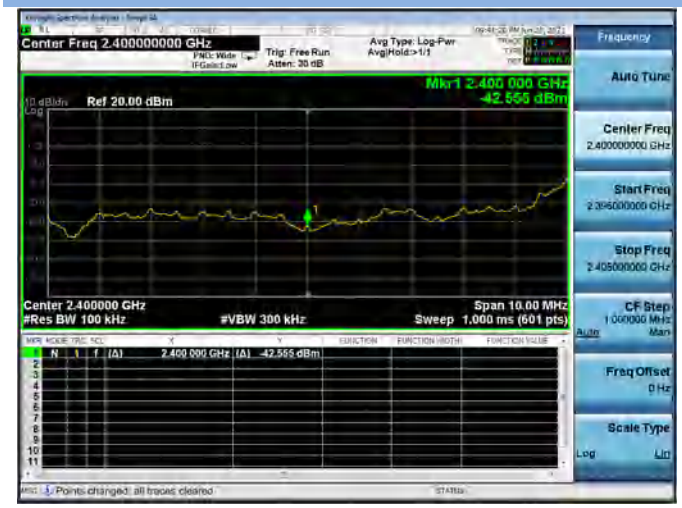


802.11n-40 MHz HIGH CHANNEL, Reference level



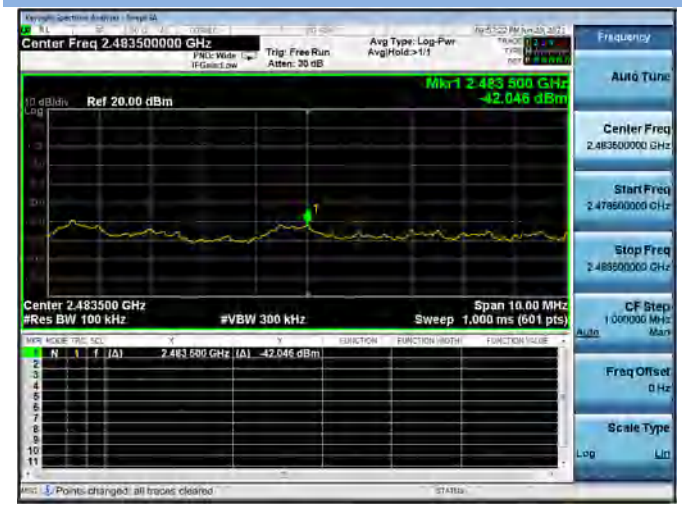
Aux. Antenna

802.11b LOW CHANNEL, Carrier level

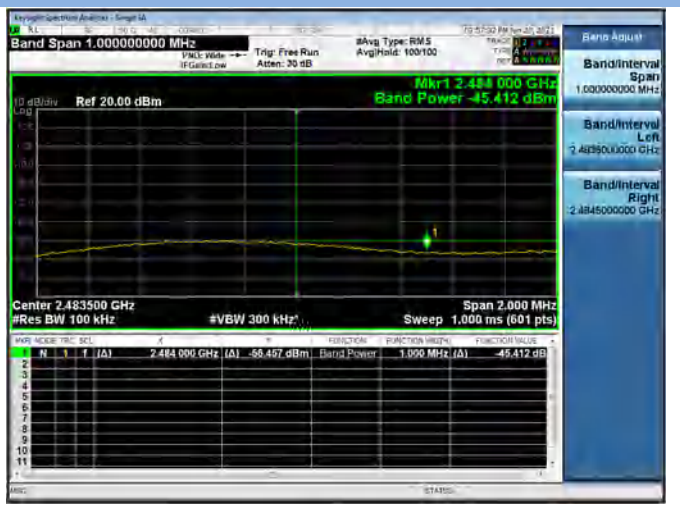


802.11b LOW CHANNEL, Reference level

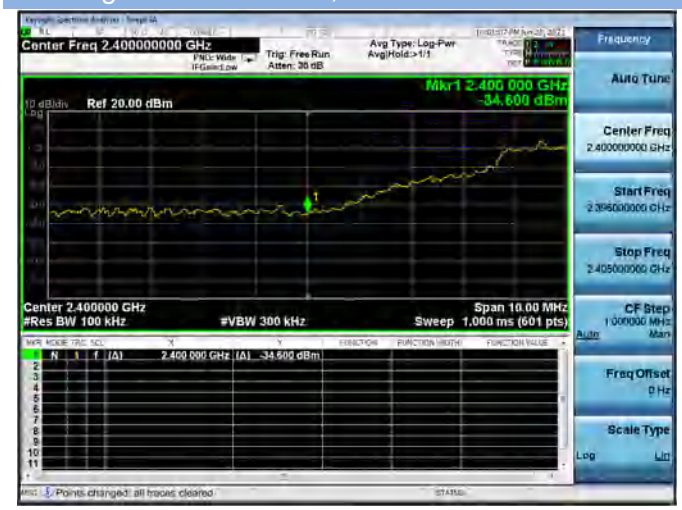
802.11b HIGH CHANNEL, Carrier level



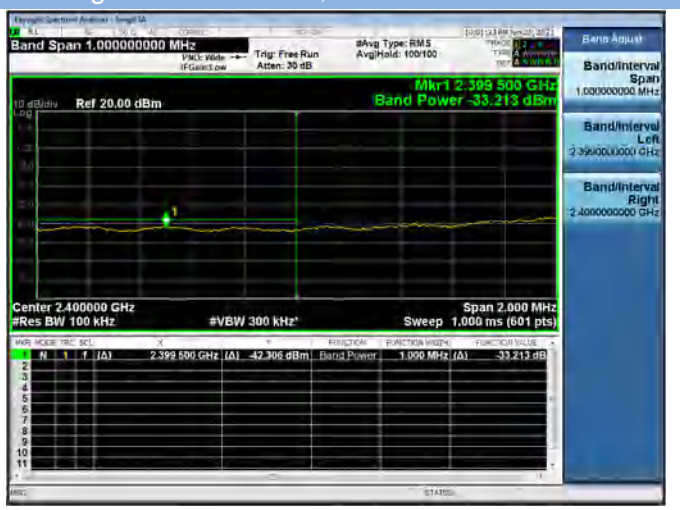
802.11b HIGH CHANNEL, Reference level



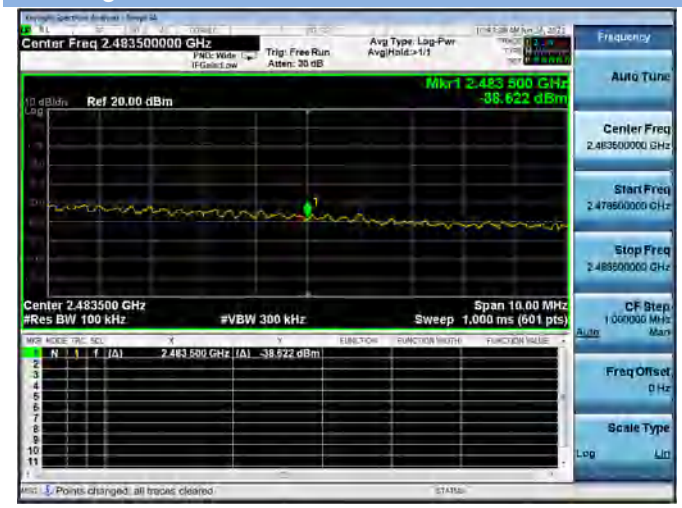
802.11g LOW CHANNEL, Carrier level



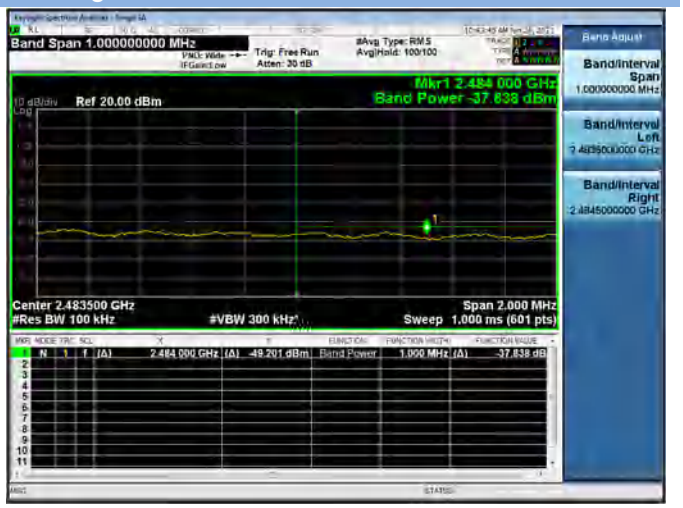
802.11g LOW CHANNEL, Reference level



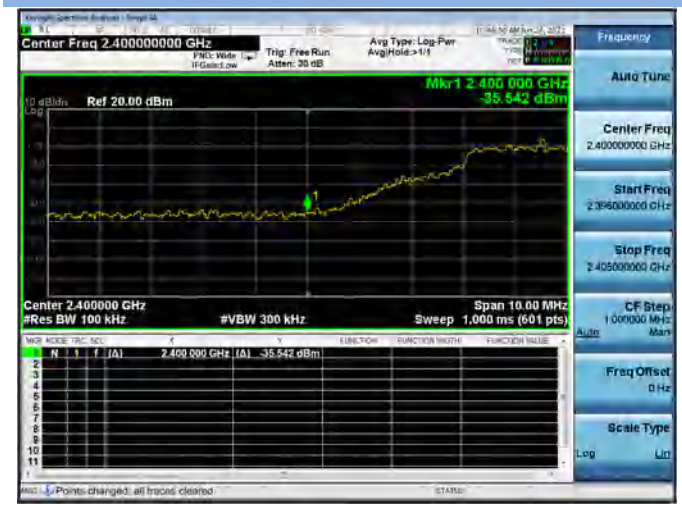
802.11g HIGH CHANNEL, Carrier level



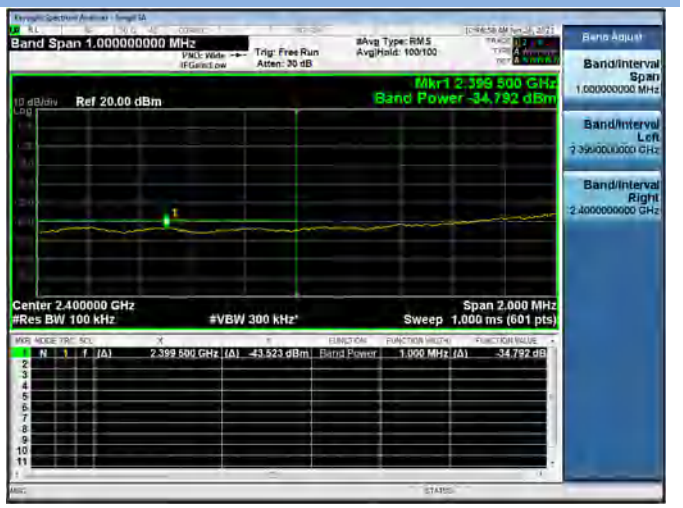
802.11g HIGH CHANNEL, Reference level



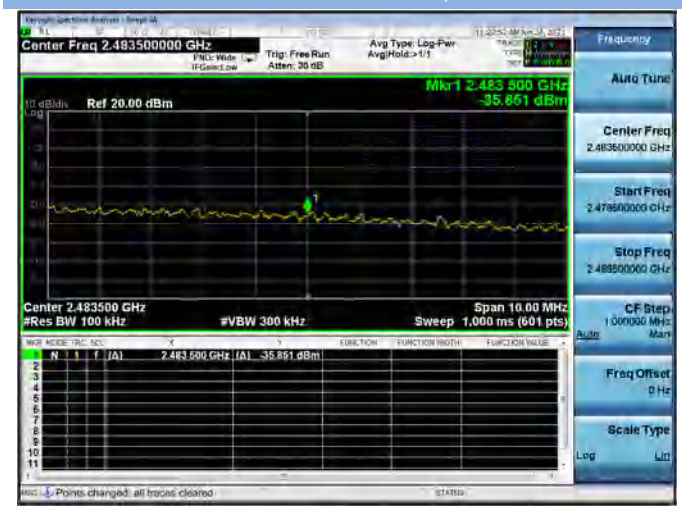
802.11n-20 MHz LOW CHANNEL, Carrier level



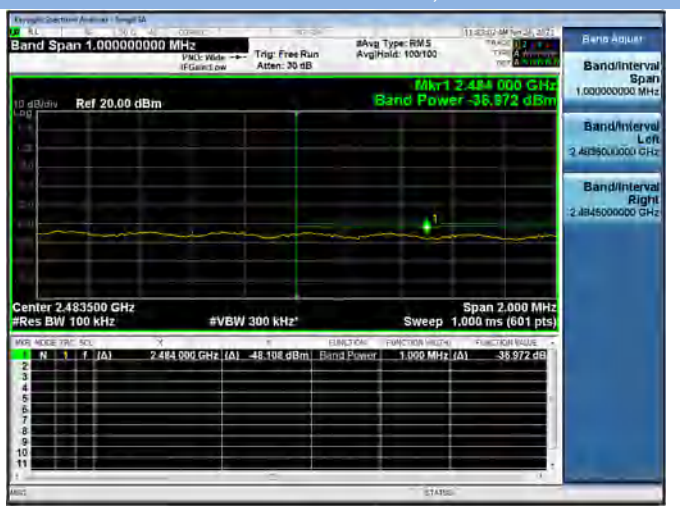
802.11n-20 MHz LOW CHANNEL, Reference level



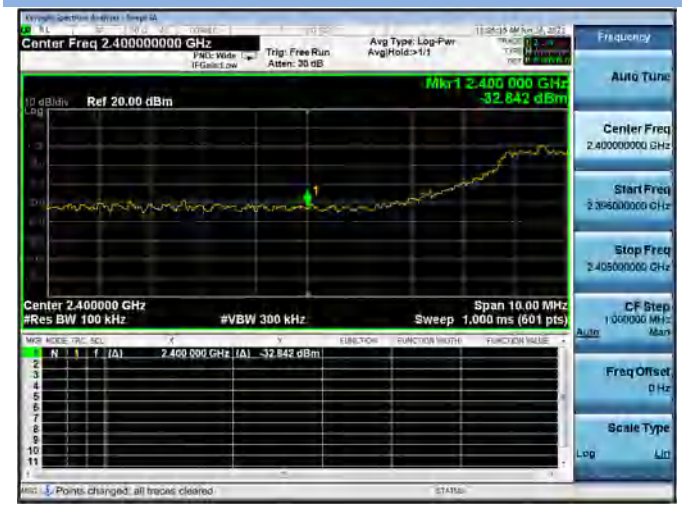
802.11n-20 MHz HIGH CHANNEL, Carrier level



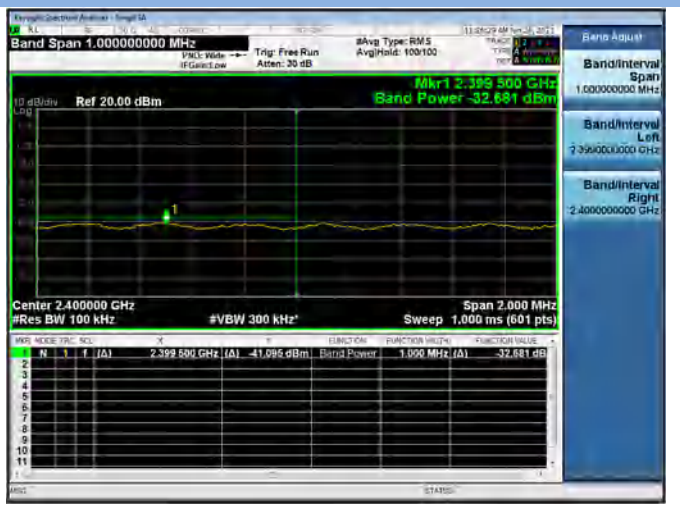
802.11n-20 MHz HIGH CHANNEL, Reference level



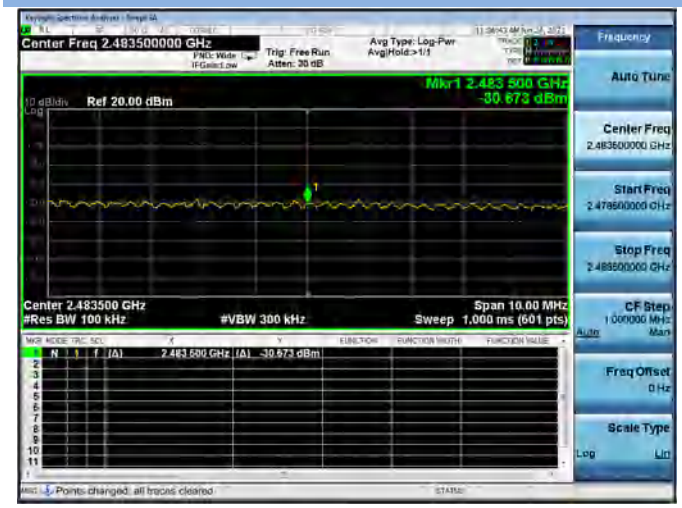
802.11n-40 MHz LOW CHANNEL, Carrier level



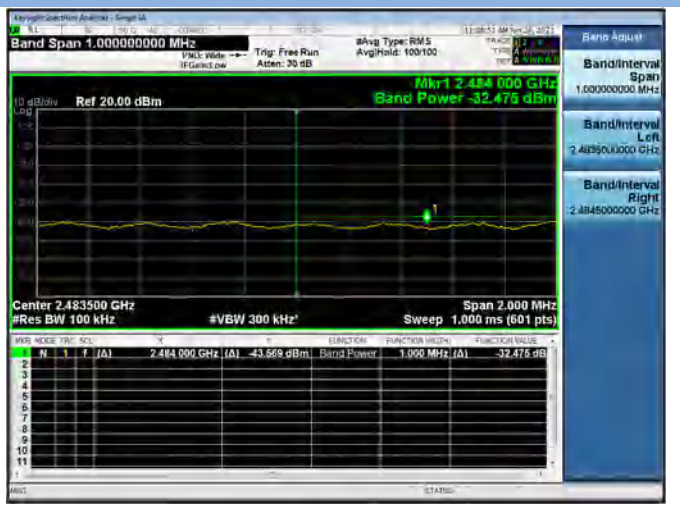
802.11n-40 MHz LOW CHANNEL, Reference level



802.11n-40 MHz HIGH CHANNEL, Carrier level



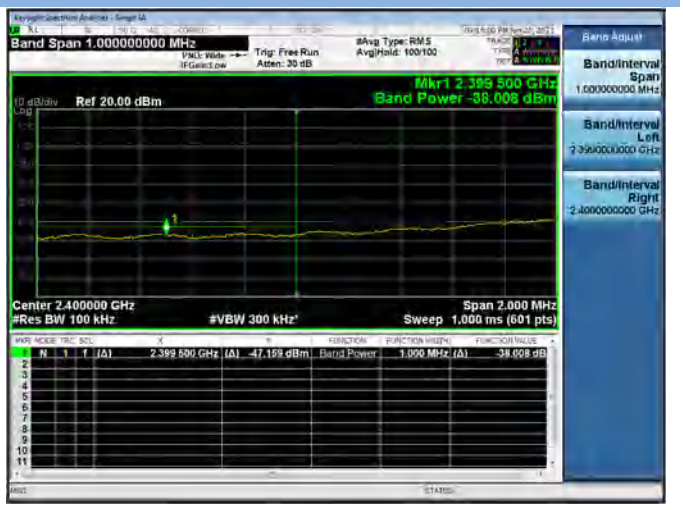
802.11n-40 MHz HIGH CHANNEL, Reference level



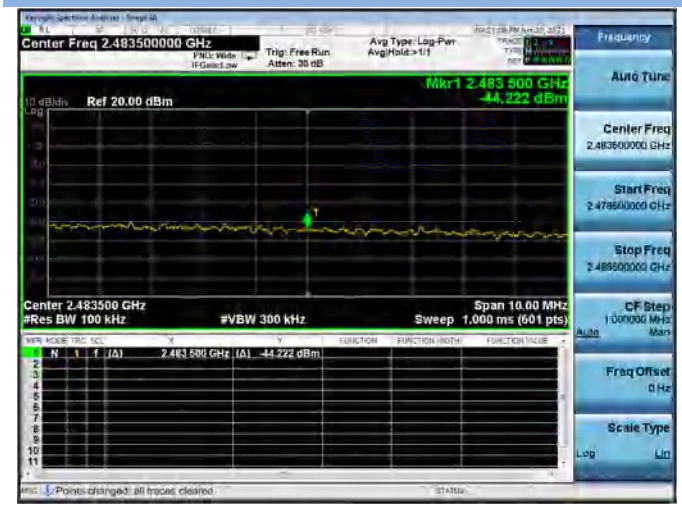
MIMO-Main Antenna

802.11n-20 MHz LOW CHANNEL, Carrier level

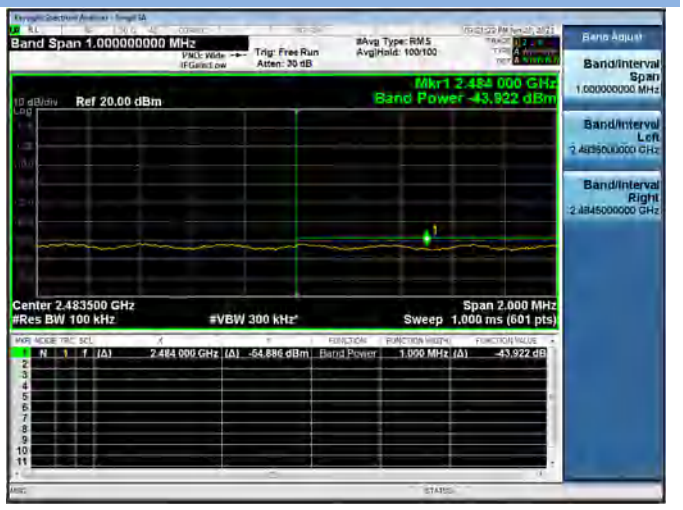
802.11n-20 MHz LOW CHANNEL, Reference level



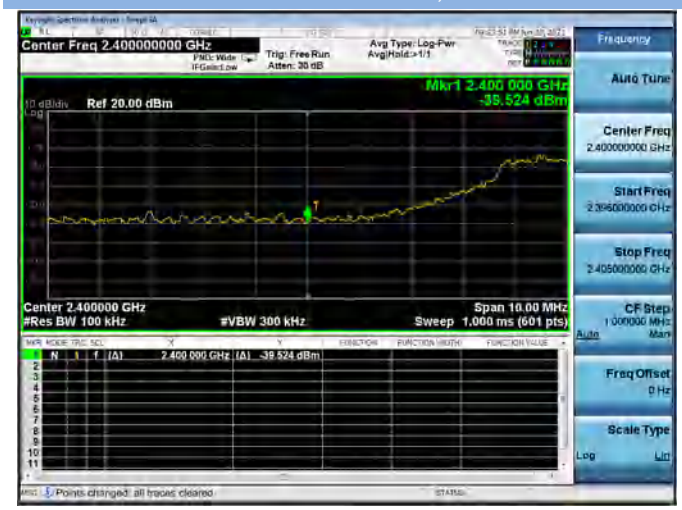
802.11n-20 MHz HIGH CHANNEL, Carrier level



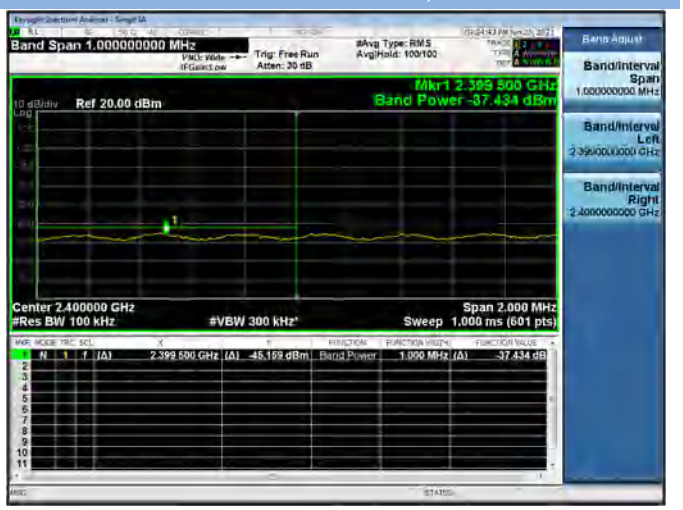
802.11n-20 MHz HIGH CHANNEL, Reference level



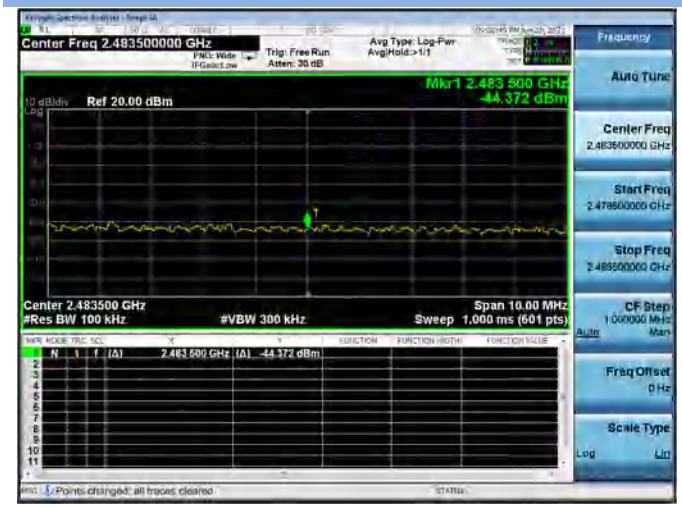
802.11n-40 MHz LOW CHANNEL, Carrier level



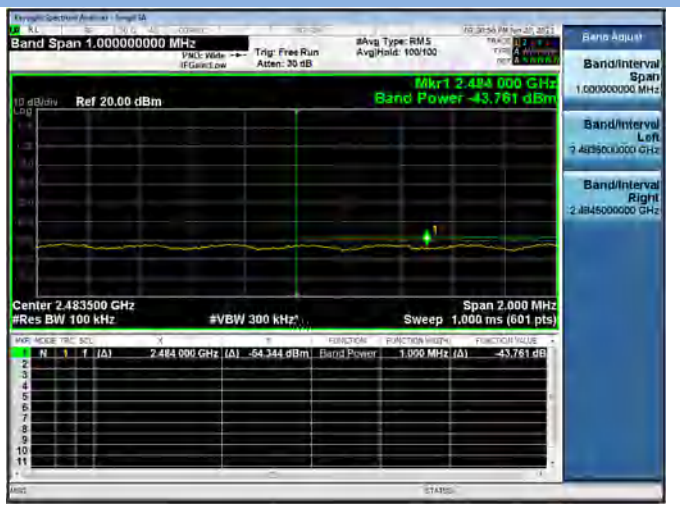
802.11n-40 MHz LOW CHANNEL, Reference level



802.11n-40 MHz HIGH CHANNEL, Carrier level

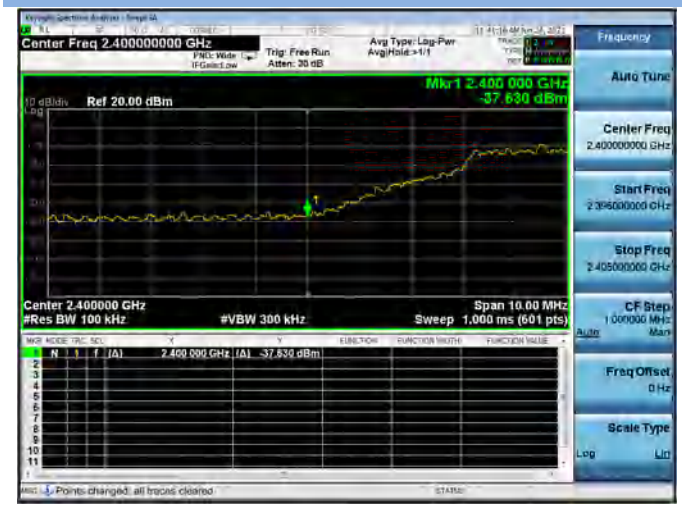


802.11n-40 MHz HIGH CHANNEL, Reference level

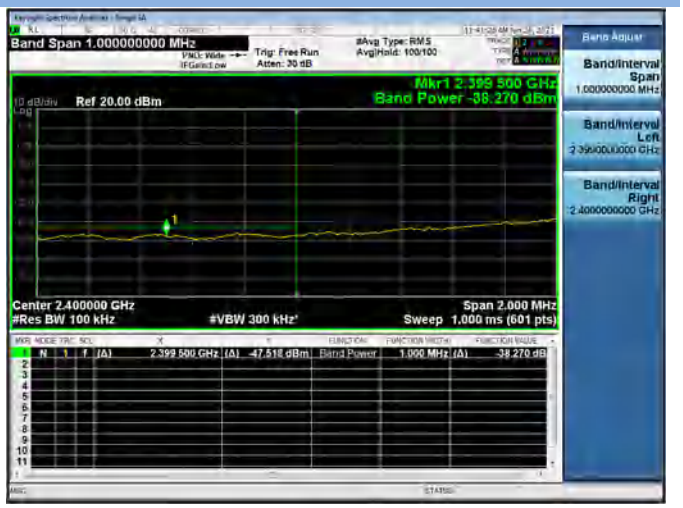


MIMO-Aux. Antenna

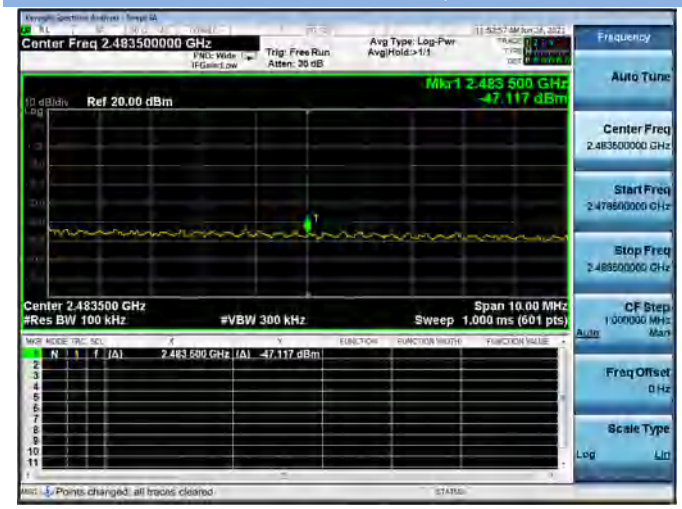
802.11n-20 MHz LOW CHANNEL, Carrier level



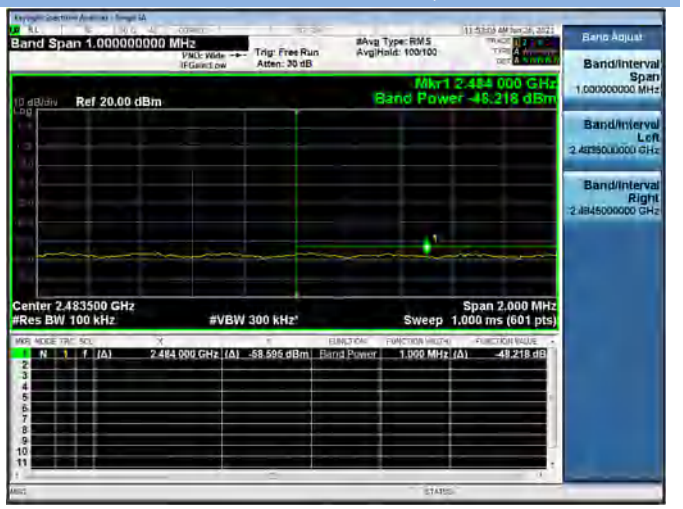
802.11n-20 MHz LOW CHANNEL, Reference level



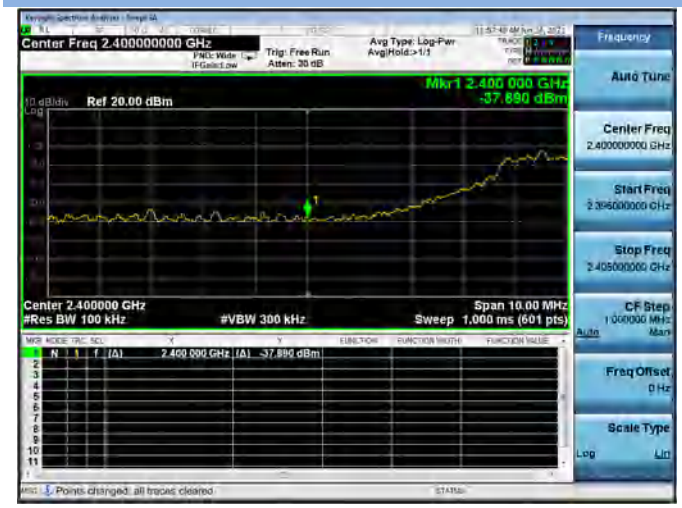
802.11n-20 MHz HIGH CHANNEL, Carrier level



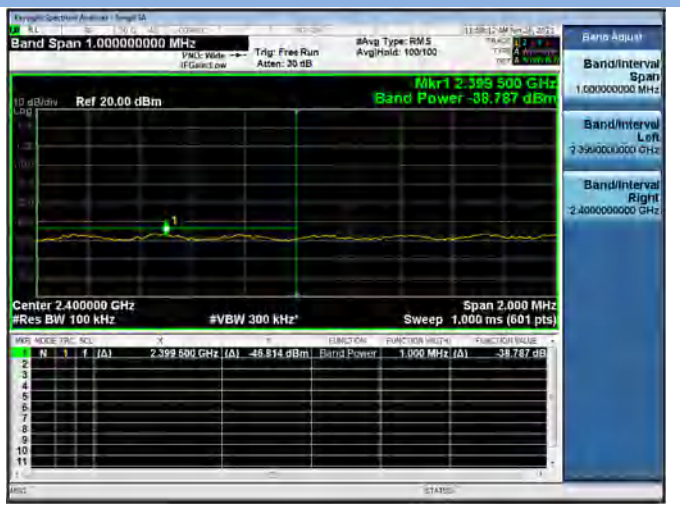
802.11n-20 MHz HIGH CHANNEL, Reference level



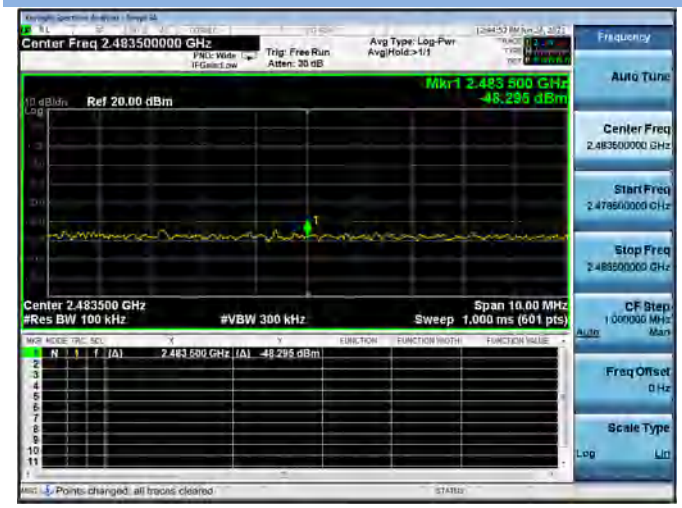
802.11n-40 MHz LOW CHANNEL, Carrier level



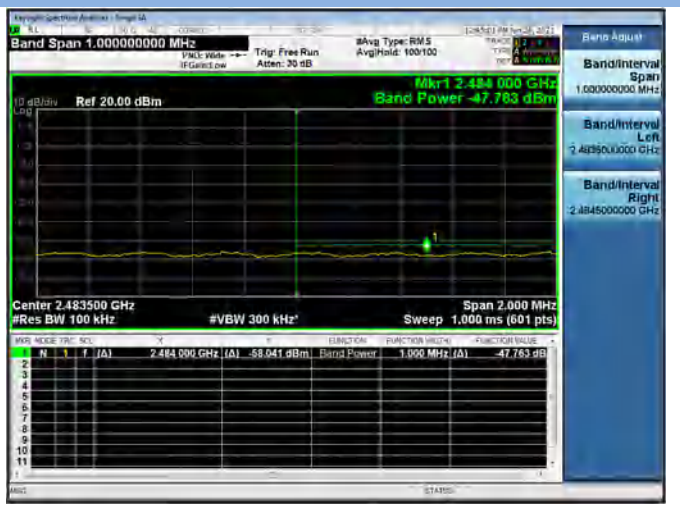
802.11n-40 MHz LOW CHANNEL, Reference level



802.11n-40 MHz HIGH CHANNEL, Carrier level



802.11n-40 MHz HIGH CHANNEL, Reference level



ESP module

802.11b Mode：

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-50.69	6.66	-13.34	Pass
High Channel	-53.88	7.01	-13.00	Pass

802.11g Mode：

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-38.88	1.25	-18.75	Pass
High Channel	-51.07	1.44	-18.56	Pass

802.11n-20 MHz Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-38.88	0.83	-19.17	Pass
High Channel	-49.62	1.36	-18.64	Pass

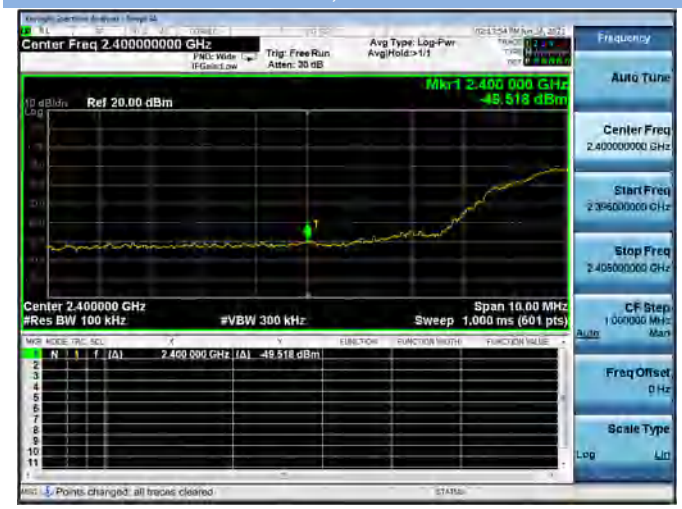
802.11n-40 MHz Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-28.34	-1.30	-21.30	Pass
High Channel	-43.72	-1.53	-21.53	Pass

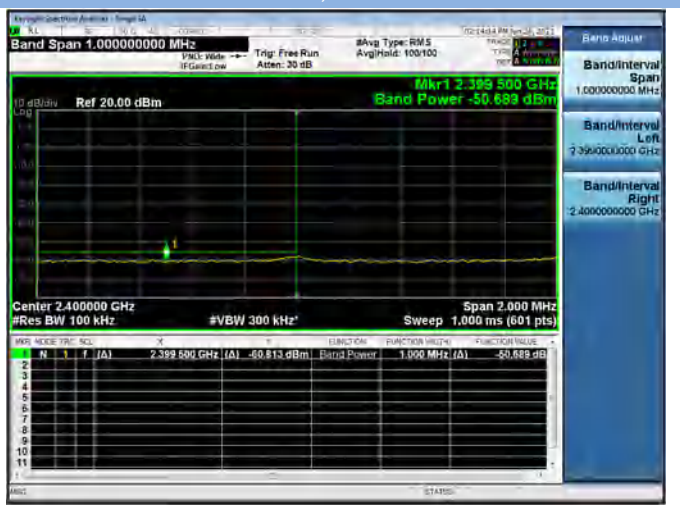
Test Plots

ESP module

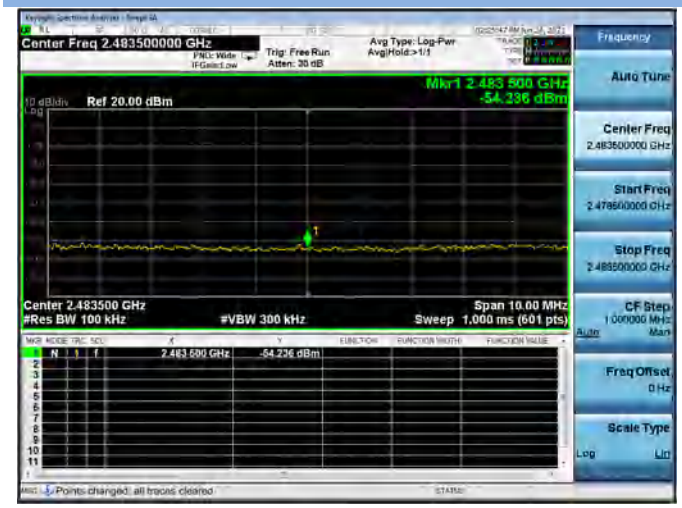
802.11b LOW CHANNEL, Carrier level



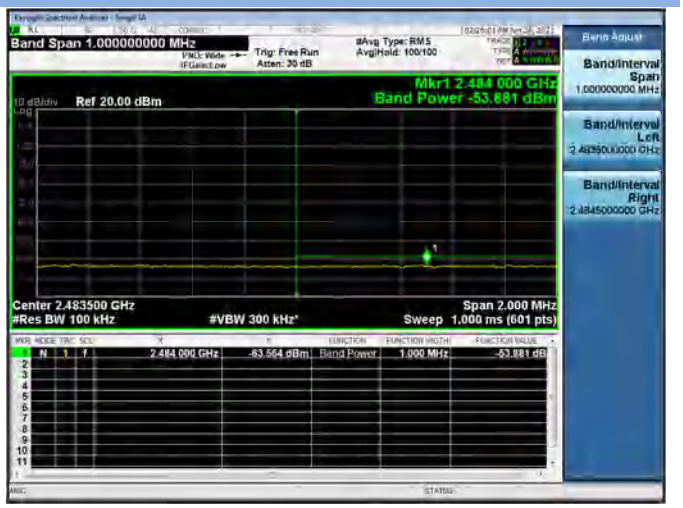
802.11b LOW CHANNEL, Reference level



802.11b HIGH CHANNEL, Carrier level

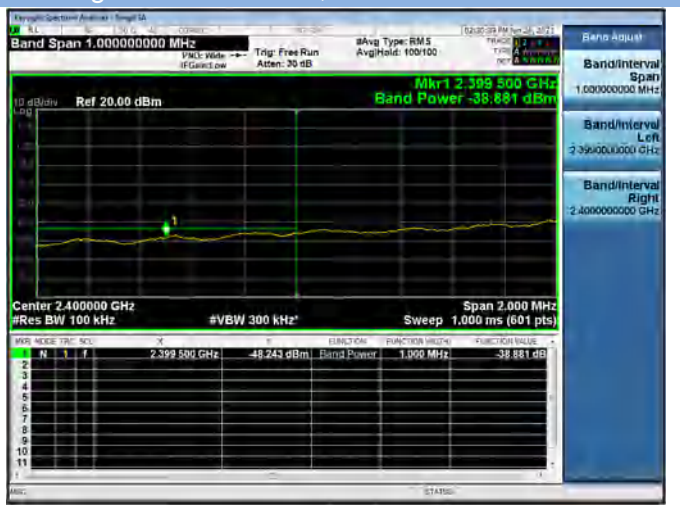


802.11b HIGH CHANNEL, Reference level

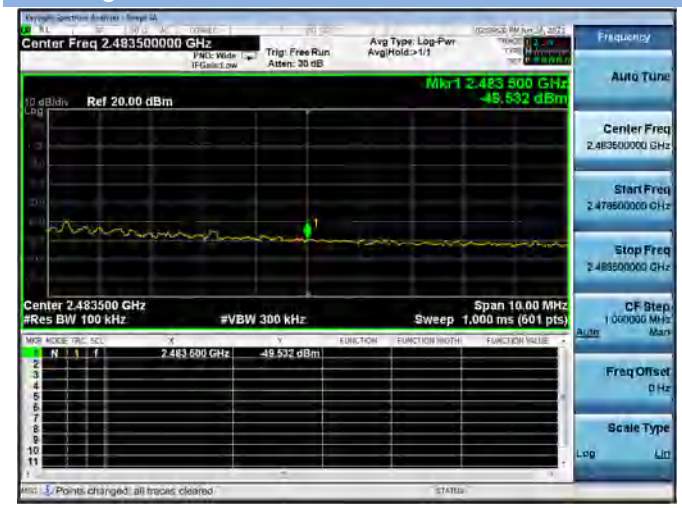


802.11g LOW CHANNEL, Carrier level

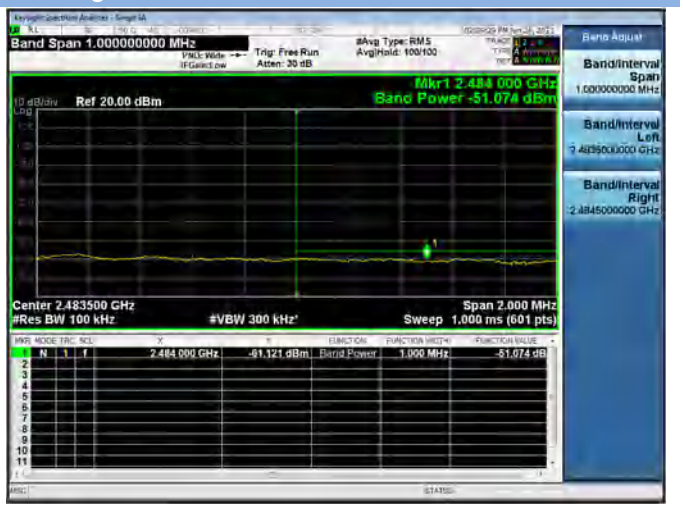
802.11g LOW CHANNEL, Reference level



802.11g HIGH CHANNEL, Carrier level

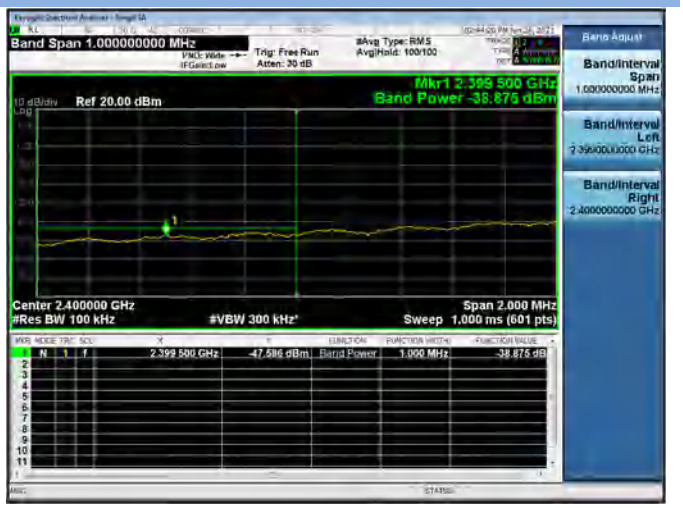


802.11g HIGH CHANNEL, Reference level

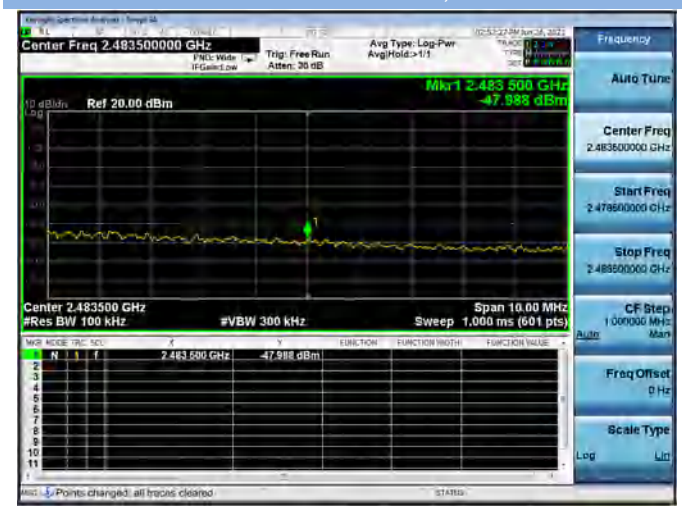


802.11n-20 MHz LOW CHANNEL, Carrier level

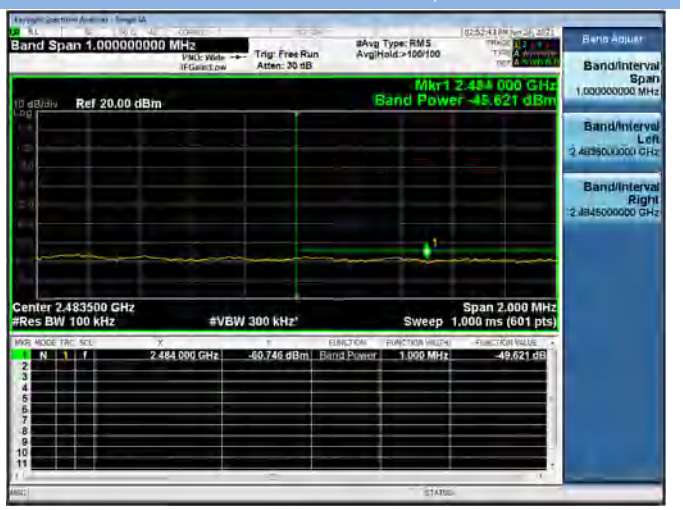
802.11n-20 MHz LOW CHANNEL, Reference level



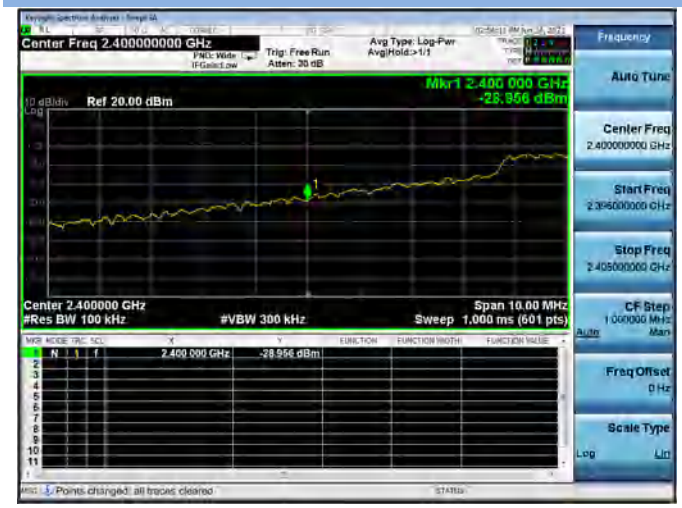
802.11n-20 MHz HIGH CHANNEL, Carrier level



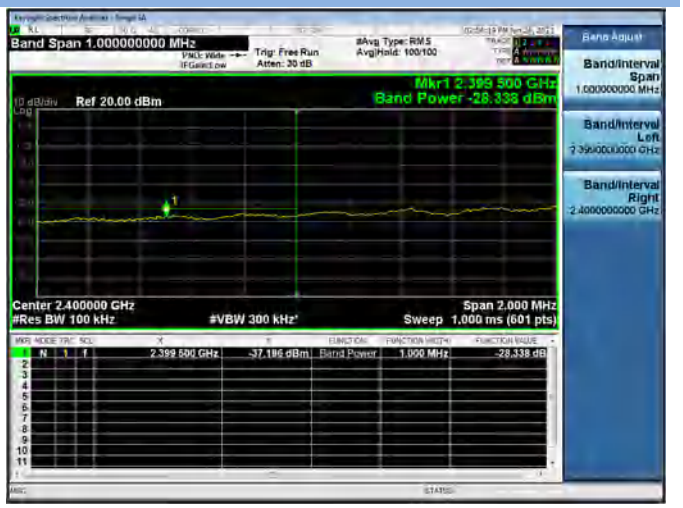
802.11n-20 MHz HIGH CHANNEL, Reference level



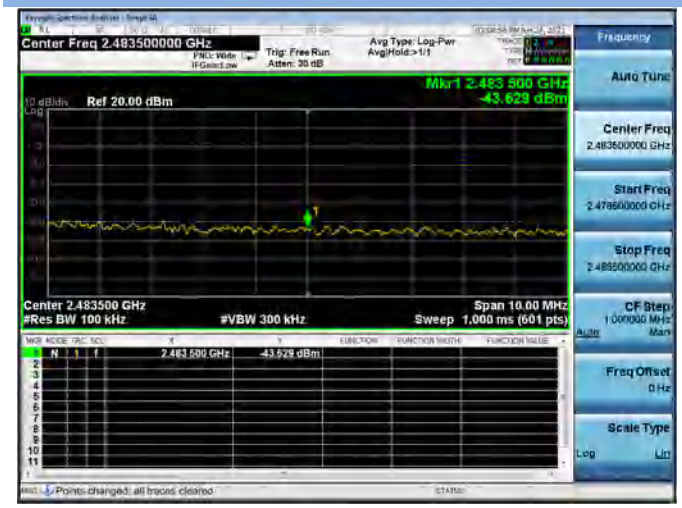
802.11n-40 MHz LOW CHANNEL, Carrier level



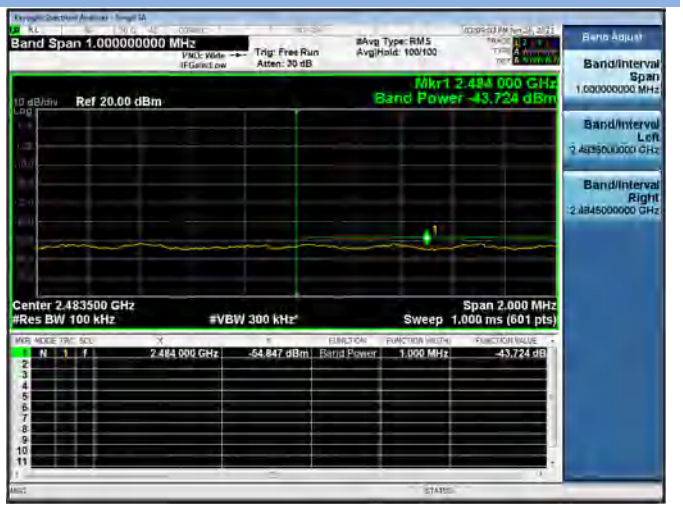
802.11n-40 MHz LOW CHANNEL, Reference level



802.11n-40 MHz HIGH CHANNEL, Carrier level



802.11n-40 MHz HIGH CHANNEL, Reference level



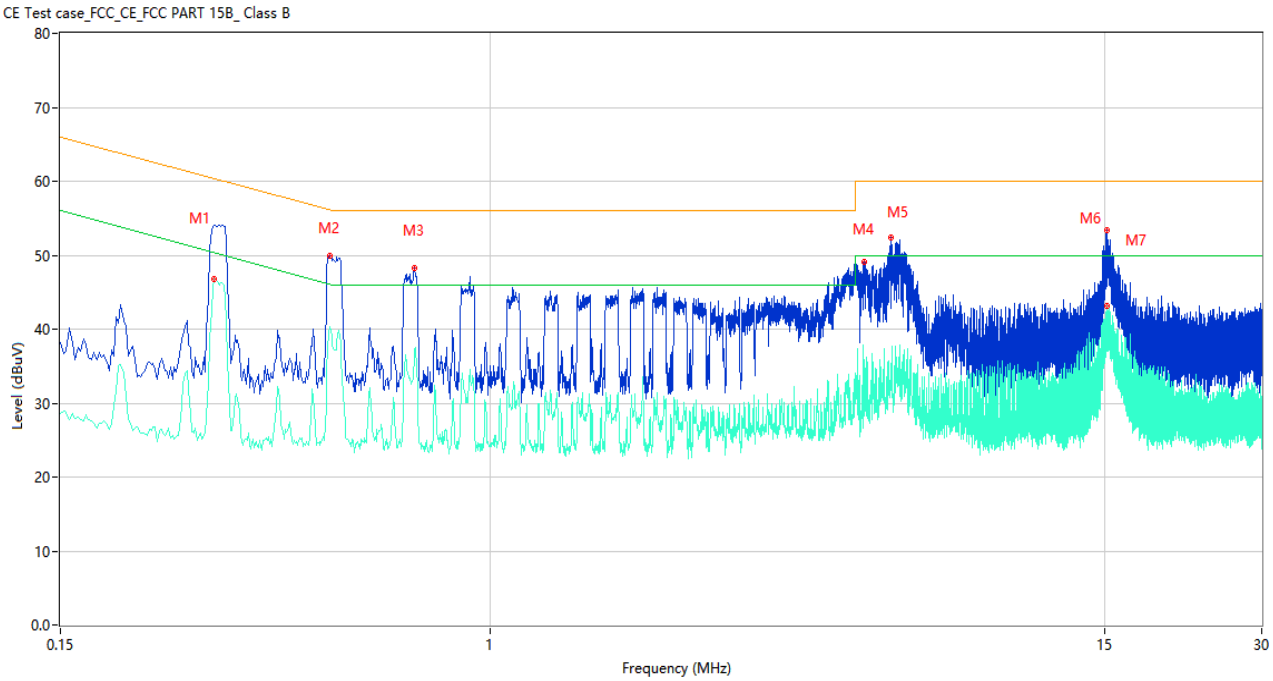
A.5 Conducted Emissions

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

Test Data and Plots

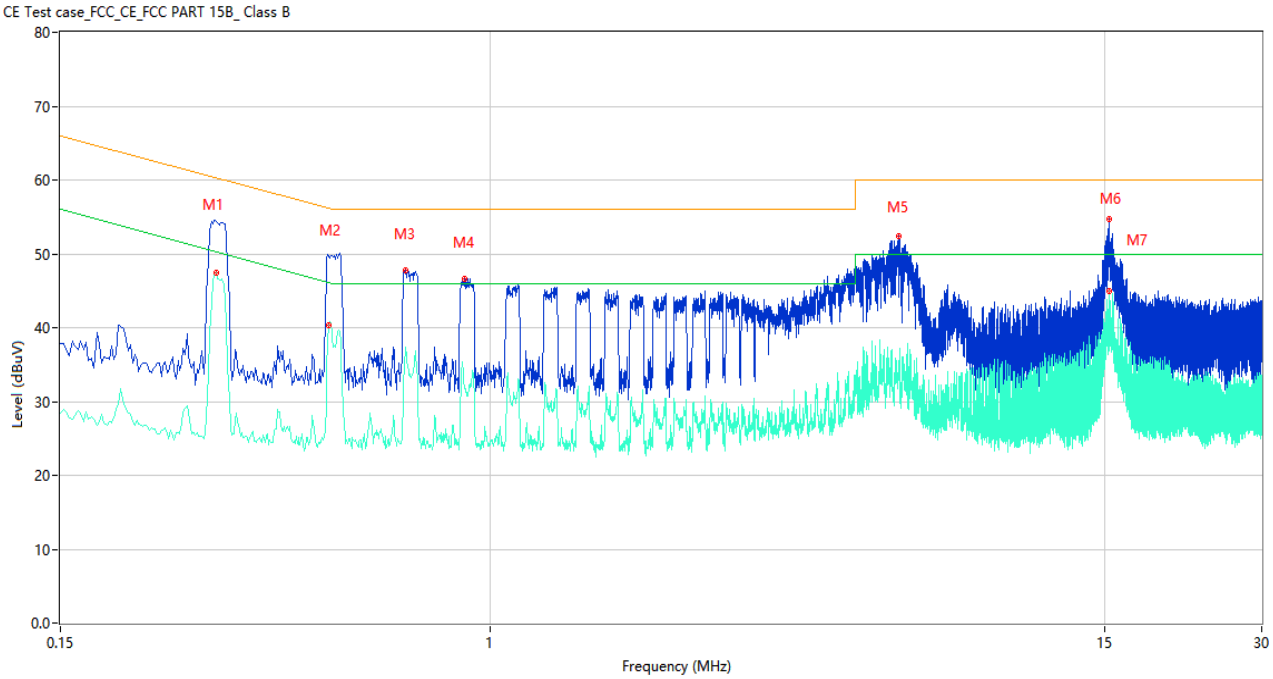
AP module

PHASE L



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.296	53.98	10.33	60.35	-6.37	Peak	L	Pass
1**	0.296	46.74	10.33	50.35	-3.61	AV	L	Pass
2	0.492	49.92	10.29	56.13	-6.21	Peak	L	Pass
2**	0.492	40.31	10.29	46.13	-5.82	AV	L	Pass
3	0.714	48.31	10.27	56.00	-7.69	Peak	L	Pass
3**	0.714	35.25	10.27	46.00	-10.75	AV	L	Pass
4	5.204	49.08	10.32	60.00	-10.92	Peak	L	Pass
4**	5.204	34.57	10.32	50.00	-15.43	AV	L	Pass
5	5.860	52.39	10.33	60.00	-7.61	Peak	L	Pass
5**	5.860	34.37	10.33	50.00	-15.63	AV	L	Pass
6	15.136	53.32	10.41	60.00	-6.68	Peak	L	Pass
6**	15.136	39.64	10.41	50.00	-10.36	AV	L	Pass
7	15.192	50.31	10.41	60.00	-9.69	Peak	L	Pass
7**	15.192	43.15	10.41	50.00	-6.85	AV	L	Pass

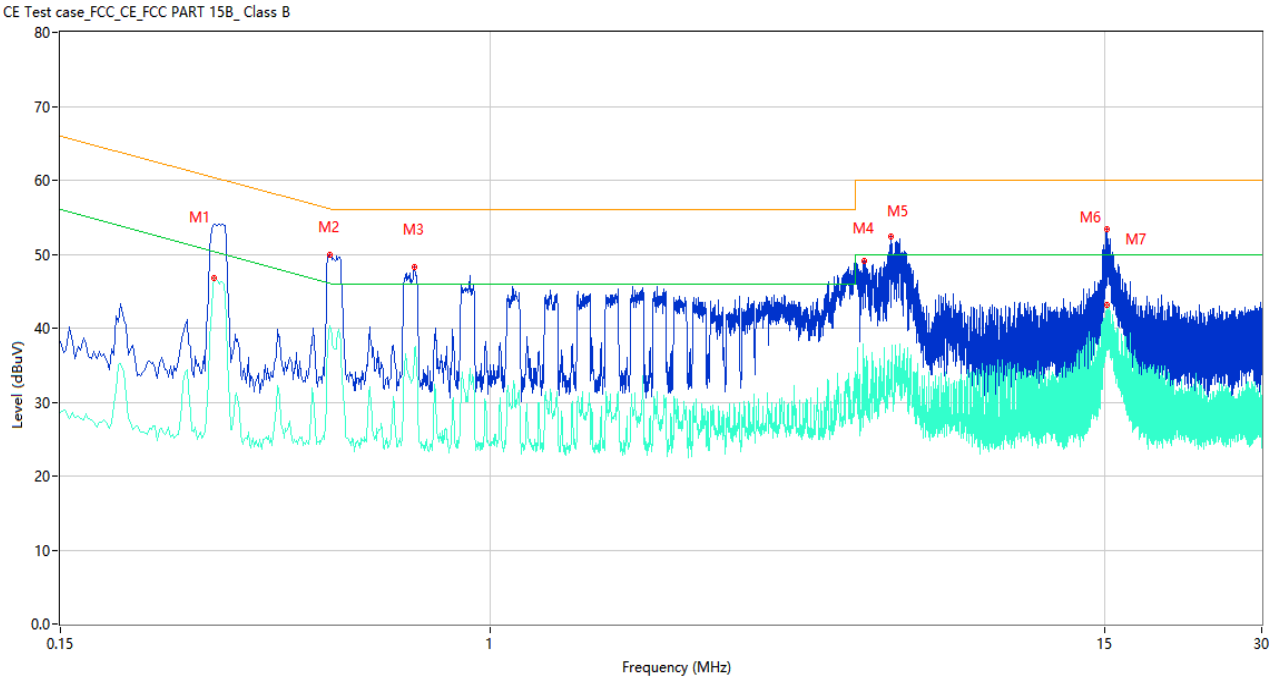
PHASE N



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.298	54.33	10.33	60.30	-5.97	Peak	N	Pass
1**	0.298	47.38	10.33	50.30	-2.92	AV	N	Pass
2	0.490	49.72	10.29	56.17	-6.45	Peak	N	Pass
2**	0.490	40.25	10.29	46.17	-5.92	AV	N	Pass
3	0.688	47.79	10.27	56.00	-8.21	Peak	N	Pass
3**	0.688	37.36	10.27	46.00	-8.64	AV	N	Pass
4	0.892	46.56	10.25	56.00	-9.44	Peak	N	Pass
4**	0.892	31.82	10.25	46.00	-14.18	AV	N	Pass
5	6.040	52.34	10.33	60.00	-7.66	Peak	N	Pass
5**	6.040	35.52	10.33	50.00	-14.48	AV	N	Pass
6	15.298	54.66	10.42	60.00	-5.34	Peak	N	Pass
6**	15.298	44.98	10.42	50.00	-5.02	AV	N	Pass
7	15.298	54.66	10.42	60.00	-5.34	Peak	N	Pass
7**	15.298	44.98	10.42	50.00	-5.02	AV	N	Pass

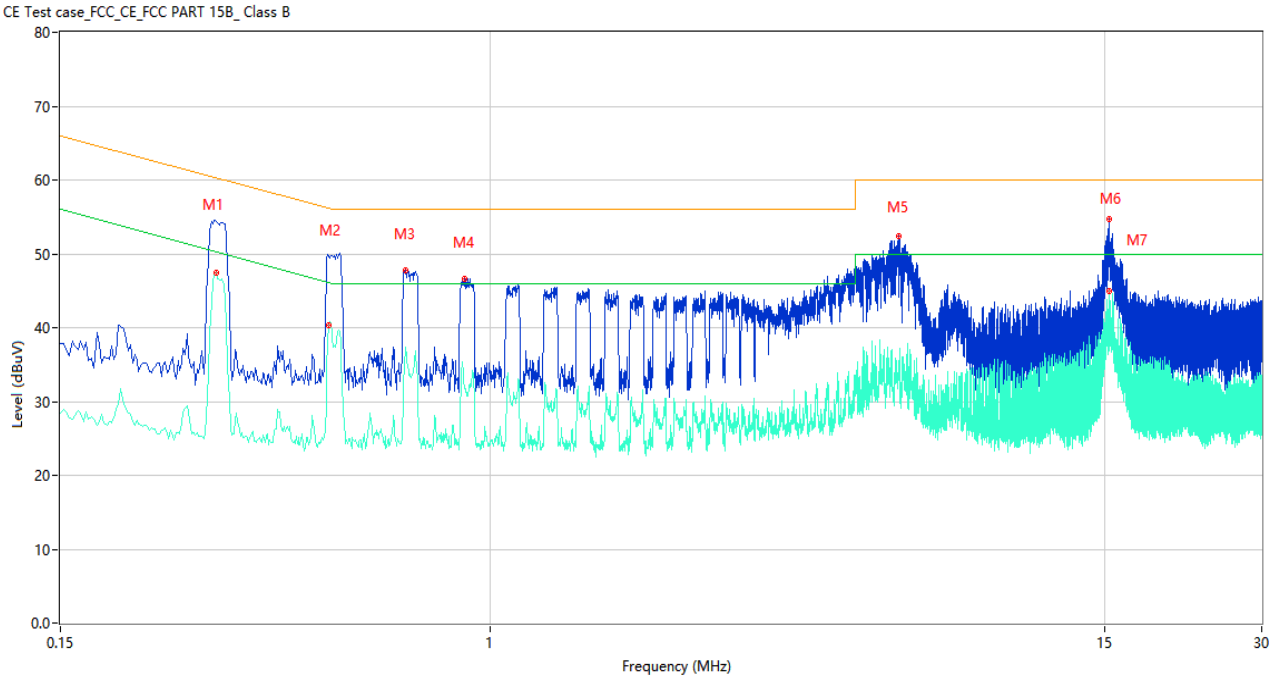
ESP module

PHASE L



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.296	53.98	10.33	60.35	-6.37	Peak	L	Pass
1**	0.296	46.74	10.33	50.35	-3.61	AV	L	Pass
2	0.492	49.92	10.29	56.13	-6.21	Peak	L	Pass
2**	0.492	40.31	10.29	46.13	-5.82	AV	L	Pass
3	0.714	48.31	10.27	56.00	-7.69	Peak	L	Pass
3**	0.714	35.25	10.27	46.00	-10.75	AV	L	Pass
4	5.204	49.08	10.32	60.00	-10.92	Peak	L	Pass
4**	5.204	34.57	10.32	50.00	-15.43	AV	L	Pass
5	5.860	52.39	10.33	60.00	-7.61	Peak	L	Pass
5**	5.860	34.37	10.33	50.00	-15.63	AV	L	Pass
6	15.136	53.32	10.41	60.00	-6.68	Peak	L	Pass
6**	15.136	39.64	10.41	50.00	-10.36	AV	L	Pass
7	15.192	50.31	10.41	60.00	-9.69	Peak	L	Pass
7**	15.192	43.15	10.41	50.00	-6.85	AV	L	Pass

PHASE N



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.298	54.33	10.33	60.30	-5.97	Peak	N	Pass
1**	0.298	47.38	10.33	50.30	-2.92	AV	N	Pass
2	0.490	49.72	10.29	56.17	-6.45	Peak	N	Pass
2**	0.490	40.25	10.29	46.17	-5.92	AV	N	Pass
3	0.688	47.79	10.27	56.00	-8.21	Peak	N	Pass
3**	0.688	37.36	10.27	46.00	-8.64	AV	N	Pass
4	0.892	46.56	10.25	56.00	-9.44	Peak	N	Pass
4**	0.892	31.82	10.25	46.00	-14.18	AV	N	Pass
5	6.040	52.34	10.33	60.00	-7.66	Peak	N	Pass
5**	6.040	35.52	10.33	50.00	-14.48	AV	N	Pass
6	15.298	54.66	10.42	60.00	-5.34	Peak	N	Pass
6**	15.298	44.98	10.42	50.00	-5.02	AV	N	Pass
7	15.298	54.66	10.42	60.00	-5.34	Peak	N	Pass
7**	15.298	44.98	10.42	50.00	-5.02	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 C63.10-2013, 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.

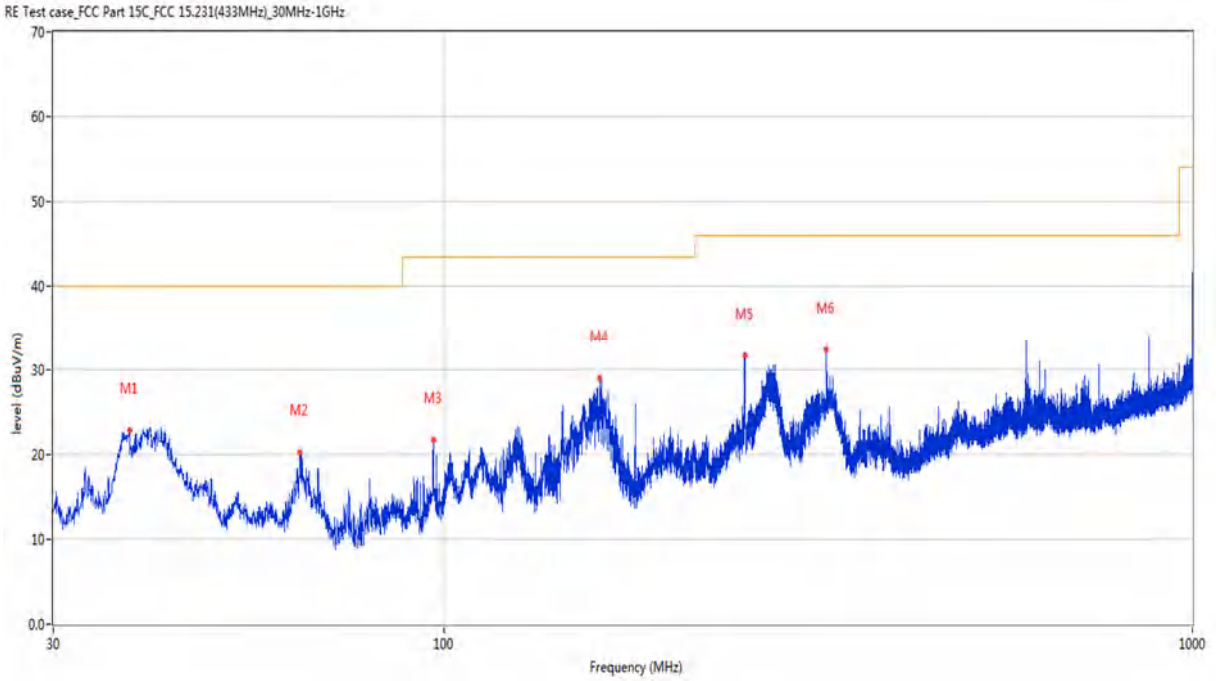
Note [3]: The low frequency, which started from 9 kHz to 30 MHz, was pre-scanned and the result which was 20 dB lower than the limit line per 15.31(o) was not reported.

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

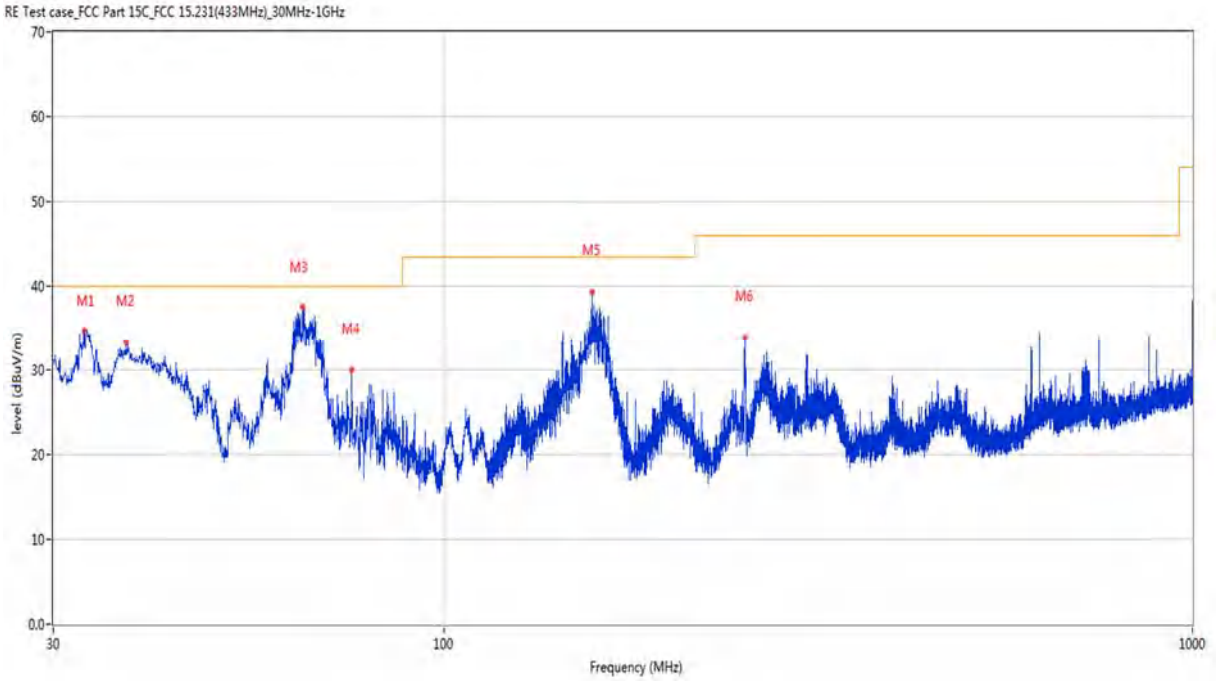
AP module

30 MHz to 1 GHz, ANT H



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	37.906	22.89	-24.50	40.0	-17.11	Peak	226.50	200	Horizontal	Pass
2	64.095	20.33	-24.95	40.0	-19.67	Peak	0.00	200	Horizontal	Pass
3	96.639	21.72	-24.80	43.5	-21.78	Peak	3.60	200	Horizontal	Pass
4	161.290	28.99	-27.19	43.5	-14.51	Peak	110.70	200	Horizontal	Pass
5	252.033	31.70	-22.81	46.0	-14.30	Peak	88.10	100	Horizontal	Pass
6	324.104	32.42	-21.02	46.0	-13.58	Peak	230.60	200	Horizontal	Pass

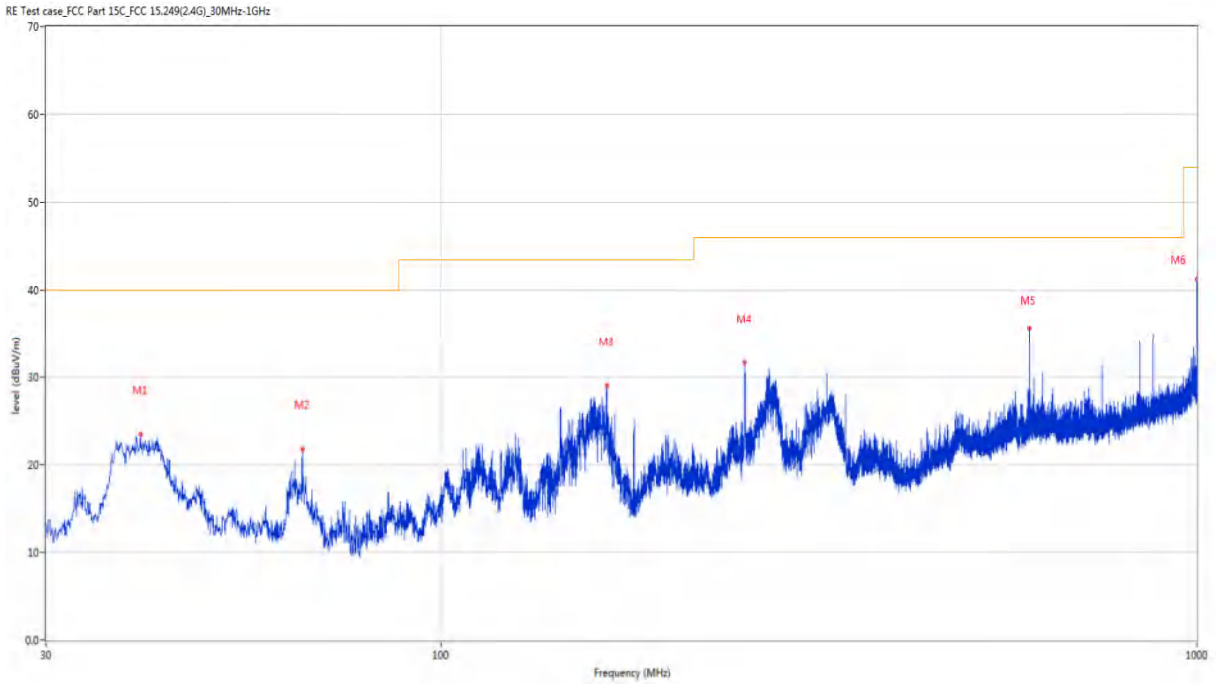
30 MHz to 1 GHz, ANT V



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	33.007	34.72	-26.37	40.0	-5.28	Peak	44.30	100	Vertical	Pass
2	37.566	33.26	-24.55	40.0	-6.74	Peak	355.40	100	Vertical	Pass
3	64.629	37.56	-25.00	40.0	-2.44	Peak	309.30	100	Vertical	Pass
4	75.154	30.04	-28.55	40.0	-9.96	Peak	154.00	100	Vertical	Pass
5	157.555	39.31	-27.63	43.5	-4.19	Peak	157.90	100	Vertical	Pass
6	252.178	33.84	-22.80	46.0	-12.16	Peak	221.90	200	Vertical	Pass

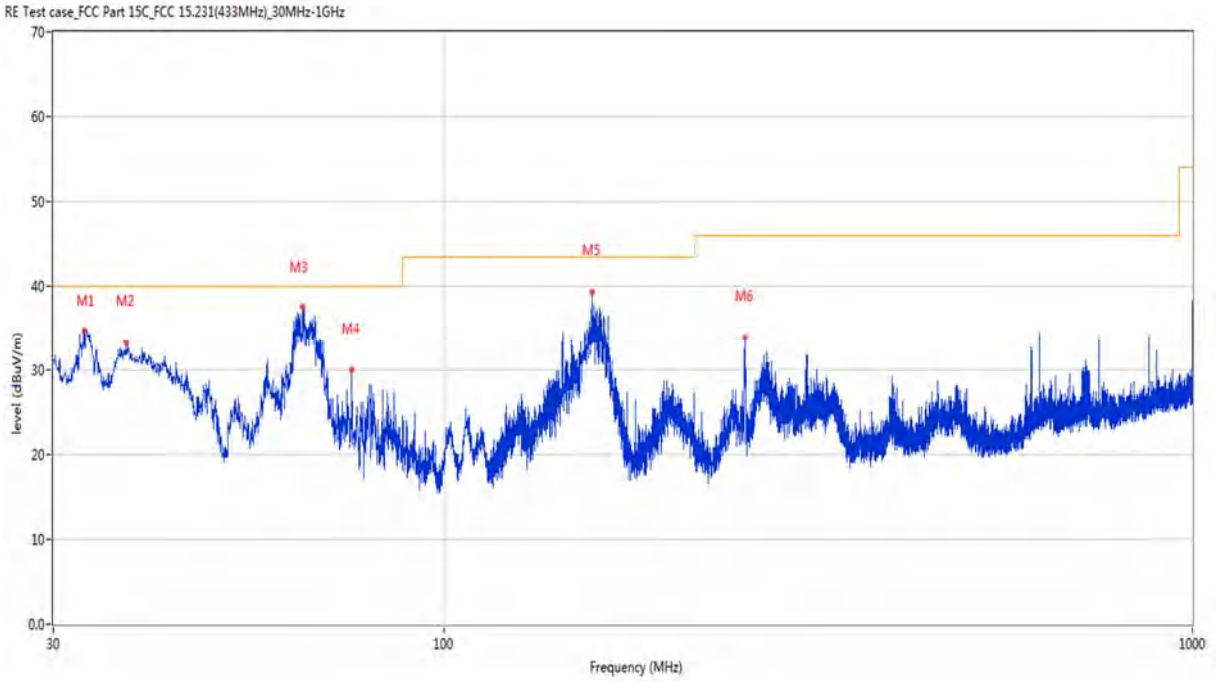
ESP module

30 MHz to 1 GHz, ANT H



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	39.991	23.50	-24.17	40.0	-16.50	Peak	245.20	200	Horizontal	Pass
2	65.502	21.83	-25.08	40.0	-18.17	Peak	344.40	100	Horizontal	Pass
3	165.557	29.06	-26.74	43.5	-14.44	Peak	98.10	100	Horizontal	Pass
4	252.178	31.73	-22.80	46.0	-14.27	Peak	98.10	100	Horizontal	Pass
5	600.020	35.73	-14.57	46.0	-10.27	Peak	361.00	200	Horizontal	Pass
6	1000.000	41.27	-9.26	54.0	-12.73	Peak	276.10	100	Horizontal	Pass

30 MHz to 1 GHz, ANT V



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	33.007	34.72	-26.37	40.0	-5.28	Peak	44.30	100	Vertical	Pass
2	37.566	33.26	-24.55	40.0	-6.74	Peak	355.40	100	Vertical	Pass
3	64.629	37.56	-25.00	40.0	-2.44	Peak	309.30	100	Vertical	Pass
4	75.154	30.04	-28.55	40.0	-9.96	Peak	154.00	100	Vertical	Pass
5	157.555	39.31	-27.63	43.5	-4.19	Peak	157.90	100	Vertical	Pass
6	252.178	33.84	-22.80	46.0	-12.16	Peak	221.90	200	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.

AP module

Main Antenna

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1500.100	46.77	-15.20	74.0	-27.23	Peak	53.00	150	Horizontal	Pass
1**	1500.100	35.31	-15.20	54.0	-18.69	AV	53.00	150	Horizontal	Pass
2	2411.100	102.23	-10.37	74.0	28.23	Peak	329.00	150	Horizontal	N/A
2**	2411.100	100.23	-10.37	54.0	46.23	AV	329.00	150	Horizontal	N/A
3	4700.800	48.42	-2.27	74.0	-25.58	Peak	75.00	150	Horizontal	Pass
3**	4700.800	38.75	-2.27	54.0	-15.25	AV	75.00	150	Horizontal	Pass
4	6980.000	52.77	4.90	74.0	-21.23	Peak	275.00	150	Horizontal	Pass
4**	6980.000	43.84	4.90	54.0	-10.16	AV	275.00	150	Horizontal	Pass
5	12165.800	50.15	20.11	74.0	-23.85	Peak	100.00	150	Horizontal	Pass
5**	12165.800	38.25	20.11	54.0	-15.75	AV	100.00	150	Horizontal	Pass
6	17536.162	56.48	24.18	74.0	-17.52	Peak	333.00	150	Horizontal	Pass
6**	17536.162	44.87	24.18	54.0	-9.13	AV	333.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2101.500	55.22	-11.37	74.0	-18.78	Peak	339.00	150	Vertical	Pass
1**	2101.500	34.16	-11.37	54.0	-19.84	AV	339.00	150	Vertical	Pass
2	2411.100	98.18	-10.37	74.0	24.18	Peak	304.00	150	Vertical	N/A
2**	2411.100	96.28	-10.37	54.0	42.28	AV	304.00	150	Vertical	N/A
3	4550.800	48.01	-2.66	74.0	-25.99	Peak	356.00	150	Vertical	Pass
3**	4550.800	38.15	-2.66	54.0	-15.85	AV	356.00	150	Vertical	Pass
4	6909.800	52.74	4.65	74.0	-21.26	Peak	96.00	150	Vertical	Pass
4**	6909.800	43.48	4.65	54.0	-10.52	AV	96.00	150	Vertical	Pass
5	12174.425	50.54	20.20	74.0	-23.46	Peak	14.00	150	Vertical	Pass
5**	12174.425	39.14	20.20	54.0	-14.86	AV	14.00	150	Vertical	Pass
6	17922.824	57.00	24.46	74.0	-17.00	Peak	54.00	150	Vertical	Pass
6**	17922.824	44.86	24.46	54.0	-9.14	AV	54.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1498.600	48.28	-15.16	74.0	-25.72	Peak	74.00	150	Horizontal	Pass
1**	1498.600	28.68	-15.16	54.0	-25.32	AV	74.00	150	Horizontal	Pass
2	2436.100	102.16	-10.62	74.0	28.16	Peak	327.00	150	Horizontal	N/A
2**	2436.100	99.81	-10.62	54.0	45.81	AV	327.00	150	Horizontal	N/A
3	4873.800	48.76	-1.53	74.0	-25.24	Peak	61.00	150	Horizontal	Pass
3**	4873.800	42.15	-1.53	54.0	-11.85	AV	61.00	150	Horizontal	Pass
4	6977.000	52.70	5.12	74.0	-21.30	Peak	4.00	150	Horizontal	Pass
4**	6977.000	42.70	5.12	54.0	-11.30	AV	4.00	150	Horizontal	Pass
5	12166.662	50.08	20.12	74.0	-23.92	Peak	141.00	150	Horizontal	Pass
5**	12166.662	38.28	20.12	54.0	-15.72	AV	141.00	150	Horizontal	Pass
6	17430.114	56.46	23.64	74.0	-17.54	Peak	84.00	150	Horizontal	Pass
6**	17430.114	45.47	23.64	54.0	-8.53	AV	84.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1993.900	50.54	-13.43	74.0	-23.46	Peak	362.00	150	Vertical	Pass
1**	1993.900	40.67	-13.43	54.0	-13.33	AV	362.00	150	Vertical	Pass
2	2437.800	98.08	-10.60	74.0	24.08	Peak	163.00	150	Vertical	N/A
2**	2437.800	95.88	-10.60	54.0	41.88	AV	163.00	150	Vertical	N/A
3	4899.000	49.07	-0.91	74.0	-24.93	Peak	296.00	150	Vertical	Pass
3**	4899.000	39.55	-0.91	54.0	-14.45	AV	296.00	150	Vertical	Pass
4	6980.000	52.99	4.90	74.0	-21.01	Peak	19.00	150	Vertical	Pass
4**	6980.000	42.62	4.90	54.0	-11.38	AV	19.00	150	Vertical	Pass
5	11765.313	50.40	18.81	74.0	-23.60	Peak	309.00	150	Vertical	Pass
5**	11765.313	38.17	18.81	54.0	-15.83	AV	309.00	150	Vertical	Pass
6	17862.713	56.92	24.27	74.0	-17.08	Peak	0.00	150	Vertical	Pass
6**	17862.713	45.26	24.27	54.0	-8.74	AV	0.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2099.500	49.08	-11.64	74.0	-24.92	Peak	176.00	150	Horizontal	Pass
1**	2099.500	33.24	-11.64	54.0	-20.76	AV	176.00	150	Horizontal	Pass
2	2462.900	102.56	-10.46	74.0	28.56	Peak	333.00	150	Horizontal	N/A
2**	2462.900	100.66	-10.46	54.0	46.66	AV	333.00	150	Horizontal	N/A
3	4924.000	49.10	-1.10	74.0	-24.90	Peak	361.00	150	Horizontal	Pass
3**	4924.000	44.71	-1.10	54.0	-9.29	AV	361.00	150	Horizontal	Pass
4	6977.200	53.20	5.10	74.0	-20.80	Peak	115.00	150	Horizontal	Pass
4**	6977.200	43.66	5.10	54.0	-10.34	AV	115.00	150	Horizontal	Pass
5	12139.924	50.55	19.85	74.0	-23.45	Peak	66.00	150	Horizontal	Pass
5**	12139.924	38.91	19.85	54.0	-15.09	AV	66.00	150	Horizontal	Pass
6	17777.400	56.68	23.73	74.0	-17.32	Peak	45.00	150	Horizontal	Pass
6**	17777.400	45.77	23.73	54.0	-8.23	AV	45.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1991.300	51.37	-13.42	74.0	-22.63	Peak	23.00	150	Vertical	Pass
1**	1991.300	38.51	-13.42	54.0	-15.49	AV	23.00	150	Vertical	Pass
2	2461.100	100.33	-10.46	74.0	26.33	Peak	159.00	150	Vertical	N/A
2**	2461.100	98.19	-10.46	54.0	44.19	AV	159.00	150	Vertical	N/A
3	4923.800	49.30	-1.10	74.0	-24.70	Peak	37.00	150	Vertical	Pass
3**	4923.800	42.43	-1.10	54.0	-11.57	AV	37.00	150	Vertical	Pass
4	6921.000	52.75	4.51	74.0	-21.25	Peak	340.00	150	Vertical	Pass
4**	6921.000	43.90	4.51	54.0	-10.10	AV	340.00	150	Vertical	Pass
5	12473.425	50.17	18.60	74.0	-23.83	Peak	242.00	150	Vertical	Pass
5**	12473.425	38.68	18.60	54.0	-15.32	AV	242.00	150	Vertical	Pass
6	17301.750	56.77	24.57	74.0	-17.23	Peak	150.00	150	Vertical	Pass
6**	17301.750	45.36	24.57	54.0	-8.64	AV	150.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2094.200	45.90	-11.66	74.0	-28.10	Peak	362.00	150	Horizontal	Pass
1**	2094.200	32.83	-11.66	54.0	-21.17	AV	362.00	150	Horizontal	Pass
2	2416.200	102.40	-10.07	74.0	28.40	Peak	333.00	150	Horizontal	N/A
2**	2416.200	96.41	-10.07	54.0	42.41	AV	333.00	150	Horizontal	N/A
3	4826.000	48.74	-1.32	74.0	-25.26	Peak	354.00	150	Horizontal	Pass
3**	4826.000	39.68	-1.32	54.0	-14.32	AV	354.00	150	Horizontal	Pass
4	6979.000	52.20	4.96	74.0	-21.80	Peak	74.00	150	Horizontal	Pass
4**	6979.000	43.37	4.96	54.0	-10.63	AV	74.00	150	Horizontal	Pass
5	12475.725	50.68	18.60	74.0	-23.32	Peak	15.00	150	Horizontal	Pass
5**	12475.725	38.23	18.60	54.0	-15.77	AV	15.00	150	Horizontal	Pass
6	17245.575	56.40	24.20	74.0	-17.60	Peak	82.00	150	Horizontal	Pass
6**	17245.575	45.62	24.20	54.0	-8.38	AV	82.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1991.200	53.31	-13.42	74.0	-20.69	Peak	0.00	150	Vertical	Pass
1**	1991.200	42.29	-13.42	54.0	-11.71	AV	0.00	150	Vertical	Pass
2	2418.500	98.07	-9.97	74.0	24.07	Peak	188.00	150	Vertical	N/A
2**	2418.500	90.96	-9.97	54.0	36.96	AV	188.00	150	Vertical	N/A
3	4525.000	47.66	-2.62	74.0	-26.34	Peak	5.00	150	Vertical	Pass
3**	4525.000	38.03	-2.62	54.0	-15.97	AV	5.00	150	Vertical	Pass
4	6913.800	52.42	4.78	74.0	-21.58	Peak	226.00	150	Vertical	Pass
4**	6913.800	45.23	4.78	54.0	-8.77	AV	226.00	150	Vertical	Pass
5	12079.549	51.06	19.22	74.0	-22.94	Peak	221.00	150	Vertical	Pass
5**	12079.549	40.22	19.22	54.0	-13.78	AV	221.00	150	Vertical	Pass
6	17257.912	56.78	24.23	74.0	-17.22	Peak	97.00	150	Vertical	Pass
6**	17257.912	45.99	24.23	54.0	-8.01	AV	97.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1503.000	47.28	-15.01	74.0	-26.72	Peak	67.00	150	Horizontal	Pass
1**	1503.000	28.51	-15.01	54.0	-25.49	AV	67.00	150	Horizontal	Pass
2	2432.400	103.48	-10.40	74.0	29.48	Peak	338.00	150	Horizontal	N/A
2**	2432.400	96.27	-10.40	54.0	42.27	AV	338.00	150	Horizontal	N/A
3	4996.000	49.14	-0.97	74.0	-24.86	Peak	336.00	150	Horizontal	Pass
3**	4996.000	39.23	-0.97	54.0	-14.77	AV	336.00	150	Horizontal	Pass
4	6918.800	52.97	4.53	74.0	-21.03	Peak	63.00	150	Horizontal	Pass
4**	6918.800	42.66	4.53	54.0	-11.34	AV	63.00	150	Horizontal	Pass
5	12219.563	50.84	20.45	74.0	-23.16	Peak	134.00	150	Horizontal	Pass
5**	12219.563	38.22	20.45	54.0	-15.78	AV	134.00	150	Horizontal	Pass
6	17684.738	57.32	24.45	74.0	-16.68	Peak	346.00	150	Horizontal	Pass
6**	17684.738	45.89	24.45	54.0	-8.11	AV	346.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1993.100	52.01	-13.45	74.0	-21.99	Peak	5.00	150	Vertical	Pass
1**	1993.100	40.46	-13.45	54.0	-13.54	AV	5.00	150	Vertical	Pass
2	2443.400	100.50	-10.45	74.0	26.50	Peak	159.00	150	Vertical	N/A
2**	2443.400	93.13	-10.45	54.0	39.13	AV	159.00	150	Vertical	N/A
3	4900.200	49.43	-0.93	74.0	-24.57	Peak	124.00	150	Vertical	Pass
3**	4900.200	39.39	-0.93	54.0	-14.61	AV	124.00	150	Vertical	Pass
4	6921.000	52.19	4.51	74.0	-21.81	Peak	202.00	150	Vertical	Pass
4**	6921.000	42.91	4.51	54.0	-11.09	AV	202.00	150	Vertical	Pass
5	11767.900	50.31	18.79	74.0	-23.69	Peak	-1.00	150	Vertical	Pass
5**	11767.900	39.11	18.79	54.0	-14.89	AV	-1.00	150	Vertical	Pass
6	17954.849	56.23	24.31	74.0	-17.77	Peak	282.00	150	Vertical	Pass
6**	17954.849	45.24	24.31	54.0	-8.76	AV	282.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2176.400	48.31	-10.52	74.0	-25.69	Peak	186.00	150	Horizontal	Pass
1**	2176.400	30.09	-10.52	54.0	-23.91	AV	186.00	150	Horizontal	Pass
2	2457.100	102.55	-10.23	74.0	28.55	Peak	328.00	150	Horizontal	N/A
2**	2457.100	95.31	-10.23	54.0	41.31	AV	328.00	150	Horizontal	N/A
3	4793.400	48.89	-1.59	74.0	-25.11	Peak	200.00	150	Horizontal	Pass
3**	4793.400	39.53	-1.59	54.0	-14.47	AV	200.00	150	Horizontal	Pass
4	6981.800	52.65	4.75	74.0	-21.35	Peak	200.00	150	Horizontal	Pass
4**	6981.800	43.29	4.75	54.0	-10.71	AV	200.00	150	Horizontal	Pass
5	12170.687	50.22	20.16	74.0	-23.78	Peak	312.00	150	Horizontal	Pass
5**	12170.687	38.39	20.16	54.0	-15.61	AV	312.00	150	Horizontal	Pass
6	17801.812	57.00	23.88	74.0	-17.00	Peak	298.00	150	Horizontal	Pass
6**	17801.812	44.96	23.88	54.0	-9.04	AV	298.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1994.800	51.65	-13.37	74.0	-22.35	Peak	15.00	150	Vertical	Pass
1**	1994.800	38.95	-13.37	54.0	-15.05	AV	15.00	150	Vertical	Pass
2	2457.900	99.56	-10.26	74.0	25.56	Peak	163.00	150	Vertical	N/A
2**	2457.900	91.91	-10.26	54.0	37.91	AV	163.00	150	Vertical	N/A
3	4499.800	48.24	-2.61	74.0	-25.76	Peak	351.00	150	Vertical	Pass
3**	4499.800	41.10	-2.61	54.0	-12.90	AV	351.00	150	Vertical	Pass
4	6981.200	52.32	4.81	74.0	-21.68	Peak	232.00	150	Vertical	Pass
4**	6981.200	43.20	4.81	54.0	-10.80	AV	232.00	150	Vertical	Pass
5	12428.575	50.48	18.86	74.0	-23.52	Peak	296.00	150	Vertical	Pass
5**	12428.575	38.35	18.86	54.0	-15.65	AV	296.00	150	Vertical	Pass
6	17268.412	56.87	24.35	74.0	-17.13	Peak	244.00	150	Vertical	Pass
6**	17268.412	45.68	24.35	54.0	-8.32	AV	244.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1501.800	45.82	-15.06	74.0	-28.18	Peak	156.00	150	Horizontal	Pass
1**	1501.800	27.39	-15.06	54.0	-26.61	AV	156.00	150	Horizontal	Pass
2	2411.400	104.92	-10.35	74.0	30.92	Peak	337.00	150	Horizontal	N/A
2**	2411.400	97.42	-10.35	54.0	43.42	AV	337.00	150	Horizontal	N/A
3	4790.800	48.57	-1.84	74.0	-25.43	Peak	44.00	150	Horizontal	Pass
3**	4790.800	38.81	-1.84	54.0	-15.19	AV	44.00	150	Horizontal	Pass
4	6913.400	52.84	4.77	74.0	-21.16	Peak	123.00	150	Horizontal	Pass
4**	6913.400	43.47	4.77	54.0	-10.53	AV	123.00	150	Horizontal	Pass
5	12219.563	50.78	20.45	74.0	-23.22	Peak	37.00	150	Horizontal	Pass
5**	12219.563	38.80	20.45	54.0	-15.20	AV	37.00	150	Horizontal	Pass
6	17693.925	56.95	24.44	74.0	-17.05	Peak	226.00	150	Horizontal	Pass
6**	17693.925	46.95	24.44	54.0	-7.05	AV	226.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2100.000	54.82	-11.58	74.0	-19.18	Peak	331.00	150	Vertical	Pass
1**	2100.000	48.73	-11.58	54.0	-5.27	AV	331.00	150	Vertical	Pass
2	2413.000	99.37	-10.19	74.0	25.37	Peak	160.00	150	Vertical	N/A
2**	2413.000	93.37	-10.19	54.0	39.37	AV	160.00	150	Vertical	N/A
3	4922.000	48.88	-1.13	74.0	-25.12	Peak	298.00	150	Vertical	Pass
3**	4922.000	40.36	-1.13	54.0	-13.64	AV	298.00	150	Vertical	Pass
4	6998.400	52.35	3.97	74.0	-21.65	Peak	2.00	150	Vertical	Pass
4**	6998.400	43.51	3.97	54.0	-10.49	AV	2.00	150	Vertical	Pass
5	11766.750	50.64	18.80	74.0	-23.36	Peak	362.00	150	Vertical	Pass
5**	11766.750	38.59	18.80	54.0	-15.41	AV	362.00	150	Vertical	Pass
6	17993.699	56.77	24.86	74.0	-17.23	Peak	361.00	150	Vertical	Pass
6**	17993.699	45.65	24.86	54.0	-8.35	AV	361.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1994.900	47.02	-13.37	74.0	-26.98	Peak	269.00	150	Horizontal	Pass
1**	1994.900	32.44	-13.37	54.0	-21.56	AV	269.00	150	Horizontal	Pass
2	2438.200	105.49	-10.58	74.0	31.49	Peak	325.00	150	Horizontal	N/A
2**	2438.200	98.82	-10.58	54.0	44.82	AV	325.00	150	Horizontal	N/A
3	4802.400	48.85	-1.28	74.0	-25.15	Peak	-2.00	150	Horizontal	Pass
3**	4802.400	38.95	-1.28	54.0	-15.05	AV	-2.00	150	Horizontal	Pass
4	6998.000	53.46	4.03	74.0	-20.54	Peak	-2.00	150	Horizontal	Pass
4**	6998.000	43.83	4.03	54.0	-10.17	AV	-2.00	150	Horizontal	Pass
5	12179.313	50.64	20.25	74.0	-23.36	Peak	-1.00	150	Horizontal	Pass
5**	12179.313	38.63	20.25	54.0	-15.37	AV	-1.00	150	Horizontal	Pass
6	17912.324	57.45	24.51	74.0	-16.55	Peak	167.00	150	Horizontal	Pass
6**	17912.324	46.03	24.51	54.0	-7.97	AV	167.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1993.200	52.72	-13.45	74.0	-21.28	Peak	21.00	150	Vertical	Pass
1**	1993.200	40.85	-13.45	54.0	-13.15	AV	21.00	150	Vertical	Pass
2	2428.900	98.77	-10.29	74.0	24.77	Peak	317.00	150	Vertical	N/A
2**	2428.900	92.00	-10.29	54.0	38.00	AV	317.00	150	Vertical	N/A
3	4921.400	49.24	-1.12	74.0	-24.76	Peak	360.00	150	Vertical	Pass
3**	4921.400	38.74	-1.12	54.0	-15.26	AV	360.00	150	Vertical	Pass
4	6989.600	53.14	4.60	74.0	-20.86	Peak	341.00	150	Vertical	Pass
4**	6989.600	43.26	4.60	54.0	-10.74	AV	341.00	150	Vertical	Pass
5	12125.263	50.18	19.69	74.0	-23.82	Peak	-1.00	150	Vertical	Pass
5**	12125.263	37.71	19.69	54.0	-16.29	AV	-1.00	150	Vertical	Pass
6	17293.089	56.69	24.56	74.0	-17.31	Peak	28.00	150	Vertical	Pass
6**	17293.089	46.76	24.56	54.0	-7.24	AV	28.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2099.700	50.62	-11.63	74.0	-23.38	Peak	177.00	150	Horizontal	Pass
1**	2099.700	35.52	-11.63	54.0	-18.48	AV	177.00	150	Horizontal	Pass
2	2460.400	102.96	-10.42	74.0	28.96	Peak	329.00	150	Horizontal	N/A
2**	2460.400	95.18	-10.42	54.0	41.18	AV	329.00	150	Horizontal	N/A
3	5270.000	49.95	-0.51	74.0	-24.05	Peak	49.00	150	Horizontal	Pass
3**	5270.000	39.78	-0.51	54.0	-14.22	AV	49.00	150	Horizontal	Pass
4	6917.000	53.32	4.69	74.0	-20.68	Peak	153.00	150	Horizontal	Pass
4**	6917.000	43.15	4.69	54.0	-10.85	AV	153.00	150	Horizontal	Pass
5	11018.675	50.82	18.94	74.0	-23.18	Peak	339.00	150	Horizontal	Pass
5**	11018.675	37.57	18.94	54.0	-16.43	AV	339.00	150	Horizontal	Pass
6	17664.526	57.09	24.29	74.0	-16.91	Peak	349.00	150	Horizontal	Pass
6**	17664.526	45.51	24.29	54.0	-8.49	AV	349.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1991.700	52.09	-13.43	74.0	-21.91	Peak	19.00	150	Vertical	Pass
1**	1991.700	38.36	-13.43	54.0	-15.64	AV	19.00	150	Vertical	Pass
2	2468.400	94.90	-10.65	74.0	20.90	Peak	183.00	150	Vertical	N/A
2**	2468.400	87.39	-10.65	54.0	33.39	AV	183.00	150	Vertical	N/A
3	4499.800	47.57	-2.61	74.0	-26.43	Peak	195.00	150	Vertical	Pass
3**	4499.800	42.02	-2.61	54.0	-11.98	AV	195.00	150	Vertical	Pass
4	6974.400	52.58	5.18	74.0	-21.42	Peak	313.00	150	Vertical	Pass
4**	6974.400	43.50	5.18	54.0	-10.50	AV	313.00	150	Vertical	Pass
5	11619.838	50.52	20.24	74.0	-23.48	Peak	193.00	150	Vertical	Pass
5**	11619.838	38.36	20.24	54.0	-15.64	AV	193.00	150	Vertical	Pass
6	17780.552	56.92	23.73	74.0	-17.08	Peak	115.00	150	Vertical	Pass
6**	17780.552	45.19	23.73	54.0	-8.81	AV	115.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1499.900	48.00	-15.19	74.0	-26.00	Peak	52.00	150	Horizontal	Pass
1**	1499.900	32.07	-15.19	54.0	-21.93	AV	52.00	150	Horizontal	Pass
2	2434.800	101.34	-10.56	74.0	27.34	Peak	322.00	150	Horizontal	N/A
2**	2434.800	93.02	-10.56	54.0	39.02	AV	322.00	150	Horizontal	N/A
3	4972.800	49.50	-1.59	74.0	-24.50	Peak	6.00	150	Horizontal	Pass
3**	4972.800	39.39	-1.59	54.0	-14.61	AV	6.00	150	Horizontal	Pass
4	8072.950	49.59	18.51	74.0	-24.41	Peak	344.00	150	Horizontal	Pass
4**	8072.950	37.17	18.51	54.0	-16.83	AV	344.00	150	Horizontal	Pass
5	11783.425	50.17	18.68	74.0	-23.83	Peak	30.00	150	Horizontal	Pass
5**	11783.425	37.57	18.68	54.0	-16.43	AV	30.00	150	Horizontal	Pass
6	17242.161	56.58	24.21	74.0	-17.42	Peak	49.00	150	Horizontal	Pass
6**	17242.161	44.85	24.21	54.0	-9.15	AV	49.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1991.600	53.10	-13.42	74.0	-20.90	Peak	362.00	150	Vertical	Pass
1**	1991.600	36.54	-13.42	54.0	-17.46	AV	362.00	150	Vertical	Pass
2	2416.700	93.53	-10.04	74.0	19.53	Peak	305.00	150	Vertical	N/A
2**	2416.700	87.16	-10.04	54.0	33.16	AV	305.00	150	Vertical	N/A
3	4768.400	48.61	-2.16	74.0	-25.39	Peak	9.00	150	Vertical	Pass
3**	4768.400	38.78	-2.16	54.0	-15.22	AV	9.00	150	Vertical	Pass
4	6655.400	52.86	4.59	74.0	-21.14	Peak	197.00	150	Vertical	Pass
4**	6655.400	43.40	4.59	54.0	-10.60	AV	197.00	150	Vertical	Pass
5	12085.300	50.85	19.27	74.0	-23.15	Peak	114.00	150	Vertical	Pass
5**	12085.300	38.53	19.27	54.0	-15.47	AV	114.00	150	Vertical	Pass
6	17989.239	56.56	24.81	74.0	-17.44	Peak	360.00	150	Vertical	Pass
6**	17989.239	45.64	24.81	54.0	-8.36	AV	360.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1500.400	48.08	-15.19	74.0	-25.92	Peak	122.00	150	Horizontal	Pass
1**	1500.400	33.92	-15.19	54.0	-20.08	AV	122.00	150	Horizontal	Pass
2	2441.000	102.37	-10.52	74.0	28.37	Peak	328.00	150	Horizontal	N/A
2**	2441.000	94.86	-10.52	54.0	40.86	AV	328.00	150	Horizontal	N/A
3	4934.600	48.75	-1.14	74.0	-25.25	Peak	19.00	150	Horizontal	Pass
3**	4934.600	40.19	-1.14	54.0	-13.81	AV	19.00	150	Horizontal	Pass
4	6968.000	53.14	5.11	74.0	-20.86	Peak	19.00	150	Horizontal	Pass
4**	6968.000	44.68	5.11	54.0	-9.32	AV	19.00	150	Horizontal	Pass
5	10501.750	49.91	18.36	74.0	-24.09	Peak	149.00	150	Horizontal	Pass
5**	10501.750	38.16	18.36	54.0	-15.84	AV	149.00	150	Horizontal	Pass
6	17287.313	57.24	24.53	74.0	-16.76	Peak	41.00	150	Horizontal	Pass
6**	17287.313	45.33	24.53	54.0	-8.67	AV	41.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1684.200	52.81	-15.21	74.0	-21.19	Peak	282.00	150	Vertical	Pass
1**	1684.200	38.74	-15.21	54.0	-15.26	AV	282.00	150	Vertical	Pass
2	2426.100	94.65	-10.08	74.0	20.65	Peak	304.00	150	Vertical	N/A
2**	2426.100	87.55	-10.08	54.0	33.55	AV	304.00	150	Vertical	N/A
3	4633.200	48.00	-2.30	74.0	-26.00	Peak	-2.00	150	Vertical	Pass
3**	4633.200	38.16	-2.30	54.0	-15.84	AV	-2.00	150	Vertical	Pass
4	6951.800	52.94	4.31	74.0	-21.06	Peak	94.00	150	Vertical	Pass
4**	6951.800	43.15	4.31	54.0	-10.85	AV	94.00	150	Vertical	Pass
5	12206.050	50.42	20.44	74.0	-23.58	Peak	146.00	150	Vertical	Pass
5**	12206.050	38.10	20.44	54.0	-15.90	AV	146.00	150	Vertical	Pass
6	17926.762	57.26	24.43	74.0	-16.74	Peak	254.00	150	Vertical	Pass
6**	17926.762	45.62	24.43	54.0	-8.38	AV	254.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2100.500	50.36	-11.51	74.0	-23.64	Peak	172.00	150	Horizontal	Pass
1**	2100.500	34.72	-11.51	54.0	-19.28	AV	172.00	150	Horizontal	Pass
2	2460.100	99.10	-10.40	74.0	25.10	Peak	320.00	150	Horizontal	N/A
2**	2460.100	92.29	-10.40	54.0	38.29	AV	320.00	150	Horizontal	N/A
3	5058.000	49.32	-0.65	74.0	-24.68	Peak	241.00	150	Horizontal	Pass
3**	5058.000	39.72	-0.65	54.0	-14.28	AV	241.00	150	Horizontal	Pass
4	6999.000	52.64	3.89	74.0	-21.36	Peak	36.00	150	Horizontal	Pass
4**	6999.000	43.58	3.89	54.0	-10.42	AV	36.00	150	Horizontal	Pass
5	11647.438	50.22	20.38	74.0	-23.78	Peak	207.00	150	Horizontal	Pass
5**	11647.438	38.85	20.38	54.0	-15.15	AV	207.00	150	Horizontal	Pass
6	17251.351	56.63	24.20	74.0	-17.37	Peak	188.00	150	Horizontal	Pass
6**	17251.351	45.54	24.20	54.0	-8.46	AV	188.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1994.300	53.48	-13.40	74.0	-20.52	Peak	359.00	150	Vertical	Pass
1**	1994.300	37.98	-13.40	54.0	-16.02	AV	359.00	150	Vertical	Pass
2	2461.400	90.44	-10.46	74.0	16.44	Peak	317.00	150	Vertical	N/A
2**	2461.400	83.92	-10.46	54.0	29.92	AV	317.00	150	Vertical	N/A
3	4500.000	48.13	-2.62	74.0	-25.87	Peak	-2.00	150	Vertical	Pass
3**	4500.000	45.26	-2.62	54.0	-8.74	AV	-2.00	150	Vertical	Pass
4	6986.600	53.11	4.44	74.0	-20.89	Peak	325.00	150	Vertical	Pass
4**	6986.600	42.56	4.44	54.0	-11.44	AV	325.00	150	Vertical	Pass
5	12182.187	50.32	20.28	74.0	-23.68	Peak	265.00	150	Vertical	Pass
5**	12182.187	39.10	20.28	54.0	-14.90	AV	265.00	150	Vertical	Pass
6	17695.238	57.06	24.44	74.0	-16.94	Peak	319.00	150	Vertical	Pass
6**	17695.238	45.23	24.44	54.0	-8.77	AV	319.00	150	Vertical	Pass

Aux. Antenna

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1497.400	48.71	-15.08	74.0	-25.29	Peak	40.00	150	Horizontal	Pass
1**	1497.400	31.05	-15.08	54.0	-22.95	AV	40.00	150	Horizontal	Pass
2	2411.000	99.26	-10.37	74.0	25.26	Peak	104.00	150	Horizontal	N/A
2**	2411.000	97.26	-10.37	54.0	43.26	AV	104.00	150	Horizontal	N/A
3	4814.200	48.77	-1.25	74.0	-25.23	Peak	57.00	150	Horizontal	Pass
3**	4814.200	38.60	-1.25	54.0	-15.40	AV	57.00	150	Horizontal	Pass
4	6974.200	52.29	5.17	74.0	-21.71	Peak	35.00	150	Horizontal	Pass
4**	6974.200	43.53	5.17	54.0	-10.47	AV	35.00	150	Horizontal	Pass
5	12210.650	50.97	20.44	74.0	-23.03	Peak	230.00	150	Horizontal	Pass
5**	12210.650	38.53	20.44	54.0	-15.47	AV	230.00	150	Horizontal	Pass
6	17333.512	56.63	24.07	74.0	-17.37	Peak	197.00	150	Horizontal	Pass
6**	17333.512	45.58	24.07	54.0	-8.42	AV	197.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1995.100	53.46	-13.36	74.0	-20.54	Peak	0.00	150	Vertical	Pass
1**	1995.100	43.12	-13.36	54.0	-10.88	AV	0.00	150	Vertical	Pass
2	2412.900	94.65	-10.20	74.0	20.65	Peak	141.00	150	Vertical	N/A
2**	2412.900	92.33	-10.20	54.0	38.33	AV	141.00	150	Vertical	N/A
3	4500.000	48.15	-2.62	74.0	-25.85	Peak	248.00	150	Vertical	Pass
3**	4500.000	45.93	-2.62	54.0	-8.07	AV	248.00	150	Vertical	Pass
4	6724.600	52.77	3.87	74.0	-21.23	Peak	154.00	150	Vertical	Pass
4**	6724.600	42.65	3.87	54.0	-11.35	AV	154.00	150	Vertical	Pass
5	12210.076	50.66	20.44	74.0	-23.34	Peak	327.00	150	Vertical	Pass
5**	12210.076	38.93	20.44	54.0	-15.07	AV	327.00	150	Vertical	Pass
6	17858.775	57.08	24.23	74.0	-16.92	Peak	197.00	150	Vertical	Pass
6**	17858.775	46.30	24.23	54.0	-7.70	AV	197.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1510.100	46.45	-15.02	74.0	-27.55	Peak	37.00	150	Horizontal	Pass
1**	1510.100	33.65	-15.02	54.0	-20.35	AV	37.00	150	Horizontal	Pass
2	2437.900	99.01	-10.59	74.0	25.01	Peak	129.00	150	Horizontal	N/A
2**	2437.900	96.95	-10.59	54.0	42.95	AV	129.00	150	Horizontal	N/A
3	4904.000	49.13	-0.92	74.0	-24.87	Peak	4.00	150	Horizontal	Pass
3**	4904.000	40.22	-0.92	54.0	-13.78	AV	4.00	150	Horizontal	Pass
4	6902.600	52.77	4.61	74.0	-21.23	Peak	251.00	150	Horizontal	Pass
4**	6902.600	42.84	4.61	54.0	-11.16	AV	251.00	150	Horizontal	Pass
5	12182.762	51.07	20.28	74.0	-22.93	Peak	289.00	150	Horizontal	Pass
5**	12182.762	38.17	20.28	54.0	-15.83	AV	289.00	150	Horizontal	Pass
6	17284.688	56.18	24.52	74.0	-17.82	Peak	334.00	150	Horizontal	Pass
6**	17284.688	45.73	24.52	54.0	-8.27	AV	334.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1991.900	52.02	-13.43	74.0	-21.98	Peak	362.00	150	Vertical	Pass
1**	1991.900	41.53	-13.43	54.0	-12.47	AV	362.00	150	Vertical	Pass
2	2436.100	93.56	-10.62	74.0	19.56	Peak	145.00	150	Vertical	N/A
2**	2436.100	91.24	-10.62	54.0	37.24	AV	145.00	150	Vertical	N/A
3	4873.800	48.99	-1.53	74.0	-25.01	Peak	130.00	150	Vertical	Pass
3**	4873.800	42.39	-1.53	54.0	-11.61	AV	130.00	150	Vertical	Pass
4	6966.400	53.09	4.94	74.0	-20.91	Peak	316.00	150	Vertical	Pass
4**	6966.400	43.03	4.94	54.0	-10.97	AV	316.00	150	Vertical	Pass
5	11620.412	50.68	20.24	74.0	-23.32	Peak	68.00	150	Vertical	Pass
5**	11620.412	39.14	20.24	54.0	-14.86	AV	68.00	150	Vertical	Pass
6	17322.750	57.07	24.27	74.0	-16.93	Peak	218.00	150	Vertical	Pass
6**	17322.750	44.93	24.27	54.0	-9.07	AV	218.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2100.000	48.48	-11.58	74.0	-25.52	Peak	362.00	150	Horizontal	Pass
1**	2100.000	37.82	-11.58	54.0	-16.18	AV	362.00	150	Horizontal	Pass
2	2462.800	97.71	-10.46	74.0	23.71	Peak	83.00	150	Horizontal	N/A
2**	2462.800	95.16	-10.46	54.0	41.16	AV	83.00	150	Horizontal	N/A
3	4923.800	49.57	-1.10	74.0	-24.43	Peak	147.00	150	Horizontal	Pass
3**	4923.800	41.62	-1.10	54.0	-12.38	AV	147.00	150	Horizontal	Pass
4	6932.200	52.47	4.38	74.0	-21.53	Peak	346.00	150	Horizontal	Pass
4**	6932.200	42.90	4.38	54.0	-11.10	AV	346.00	150	Horizontal	Pass
5	11631.337	51.15	20.31	74.0	-22.85	Peak	236.00	150	Horizontal	Pass
5**	11631.337	38.41	20.31	54.0	-15.59	AV	236.00	150	Horizontal	Pass
6	17708.886	57.02	24.31	74.0	-16.98	Peak	174.00	150	Horizontal	Pass
6**	17708.886	45.23	24.31	54.0	-8.77	AV	174.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1995.700	52.90	-13.36	74.0	-21.10	Peak	16.00	150	Vertical	Pass
1**	1995.700	45.52	-13.36	54.0	-8.48	AV	16.00	150	Vertical	Pass
2	2462.900	94.12	-10.46	74.0	20.12	Peak	143.00	150	Vertical	N/A
2**	2462.900	91.72	-10.46	54.0	37.72	AV	143.00	150	Vertical	N/A
3	4924.200	50.01	-1.09	74.0	-23.99	Peak	176.00	150	Vertical	Pass
3**	4924.200	46.51	-1.09	54.0	-7.49	AV	176.00	150	Vertical	Pass
4	6965.600	52.84	4.86	74.0	-21.16	Peak	-2.00	150	Vertical	Pass
4**	6965.600	41.83	4.86	54.0	-12.17	AV	-2.00	150	Vertical	Pass
5	12135.326	50.15	19.80	74.0	-23.85	Peak	232.00	150	Vertical	Pass
5**	12135.326	38.72	19.80	54.0	-15.28	AV	232.00	150	Vertical	Pass
6	17481.824	57.26	23.97	74.0	-16.74	Peak	197.00	150	Vertical	Pass
6**	17481.824	44.77	23.97	54.0	-9.23	AV	197.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1499.800	46.39	-15.19	74.0	-27.61	Peak	52.00	150	Horizontal	Pass
1**	1499.800	37.01	-15.19	54.0	-16.99	AV	52.00	150	Horizontal	Pass
2	2407.300	101.52	-10.64	74.0	27.52	Peak	67.00	150	Horizontal	N/A
2**	2407.300	94.21	-10.64	54.0	40.21	AV	67.00	150	Horizontal	N/A
3	4758.200	48.74	-2.20	74.0	-25.26	Peak	330.00	150	Horizontal	Pass
3**	4758.200	39.42	-2.20	54.0	-14.58	AV	330.00	150	Horizontal	Pass
4	6939.000	53.27	4.48	74.0	-20.73	Peak	60.00	150	Horizontal	Pass
4**	6939.000	42.80	4.48	54.0	-11.20	AV	60.00	150	Horizontal	Pass
5	12190.238	50.37	20.35	74.0	-23.63	Peak	235.00	150	Horizontal	Pass
5**	12190.238	38.64	20.35	54.0	-15.36	AV	235.00	150	Horizontal	Pass
6	17848.801	57.76	24.10	74.0	-16.24	Peak	59.00	150	Horizontal	Pass
6**	17848.801	46.04	24.10	54.0	-7.96	AV	59.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1686.100	51.05	-15.22	74.0	-22.95	Peak	272.00	150	Vertical	Pass
1**	1686.100	39.98	-15.22	54.0	-14.02	AV	272.00	150	Vertical	Pass
2	2410.400	96.46	-10.40	74.0	22.46	Peak	134.00	150	Vertical	N/A
2**	2410.400	88.66	-10.40	54.0	34.66	AV	134.00	150	Vertical	N/A
3	4769.400	49.12	-2.18	74.0	-24.88	Peak	252.00	150	Vertical	Pass
3**	4769.400	39.24	-2.18	54.0	-14.76	AV	252.00	150	Vertical	Pass
4	6792.200	52.59	3.32	74.0	-21.41	Peak	360.00	150	Vertical	Pass
4**	6792.200	41.47	3.32	54.0	-12.53	AV	360.00	150	Vertical	Pass
5	12696.237	50.25	18.98	74.0	-23.75	Peak	345.00	150	Vertical	Pass
5**	12696.237	38.69	18.98	54.0	-15.31	AV	345.00	150	Vertical	Pass
6	17877.676	57.04	24.41	74.0	-16.96	Peak	0.00	150	Vertical	Pass
6**	17877.676	45.47	24.41	54.0	-8.53	AV	0.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1498.300	47.39	-15.16	74.0	-26.61	Peak	58.00	150	Horizontal	Pass
1**	1498.300	35.41	-15.16	54.0	-18.59	AV	58.00	150	Horizontal	Pass
2	2435.700	100.79	-10.62	74.0	26.79	Peak	142.00	150	Horizontal	N/A
2**	2435.700	93.61	-10.62	54.0	39.61	AV	142.00	150	Horizontal	N/A
3	4961.800	49.82	-1.54	74.0	-24.18	Peak	360.00	150	Horizontal	Pass
3**	4961.800	39.06	-1.54	54.0	-14.94	AV	360.00	150	Horizontal	Pass
4	6989.200	53.29	4.65	74.0	-20.71	Peak	224.00	150	Horizontal	Pass
4**	6989.200	43.66	4.65	54.0	-10.34	AV	224.00	150	Horizontal	Pass
5	11598.276	50.50	20.11	74.0	-23.50	Peak	39.00	150	Horizontal	Pass
5**	11598.276	38.72	20.11	54.0	-15.28	AV	39.00	150	Horizontal	Pass
6	17797.614	56.97	23.86	74.0	-17.03	Peak	291.00	150	Horizontal	Pass
6**	17797.614	45.49	23.86	54.0	-8.51	AV	291.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1744.600	53.77	-14.92	74.0	-20.23	Peak	292.00	150	Vertical	Pass
1**	1744.600	37.80	-14.92	54.0	-16.20	AV	292.00	150	Vertical	Pass
2	2430.100	96.06	-10.36	74.0	22.06	Peak	135.00	150	Vertical	N/A
2**	2430.100	89.21	-10.36	54.0	35.21	AV	135.00	150	Vertical	N/A
3	4953.600	48.92	-1.63	74.0	-25.08	Peak	4.00	150	Vertical	Pass
3**	4953.600	39.56	-1.63	54.0	-14.44	AV	4.00	150	Vertical	Pass
4	6966.800	52.52	4.98	74.0	-21.48	Peak	204.00	150	Vertical	Pass
4**	6966.800	42.30	4.98	54.0	-11.70	AV	204.00	150	Vertical	Pass
5	12152.575	51.16	19.95	74.0	-22.84	Peak	176.00	150	Vertical	Pass
5**	12152.575	38.64	19.95	54.0	-15.36	AV	176.00	150	Vertical	Pass
6	17805.224	56.89	23.88	74.0	-17.11	Peak	211.00	150	Vertical	Pass
6**	17805.224	44.86	23.88	54.0	-9.14	AV	211.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1499.000	45.77	-15.17	74.0	-28.23	Peak	312.00	150	Horizontal	Pass
1**	1499.000	35.19	-15.17	54.0	-18.81	AV	312.00	150	Horizontal	Pass
2	2457.400	98.54	-10.24	74.0	24.54	Peak	93.00	150	Horizontal	N/A
2**	2457.400	91.76	-10.24	54.0	37.76	AV	93.00	150	Horizontal	N/A
3	4432.200	47.57	-2.20	74.0	-26.43	Peak	79.00	150	Horizontal	Pass
3**	4432.200	37.80	-2.20	54.0	-16.20	AV	79.00	150	Horizontal	Pass
4	6944.200	52.32	4.40	74.0	-21.68	Peak	193.00	150	Horizontal	Pass
4**	6944.200	42.51	4.40	54.0	-11.49	AV	193.00	150	Horizontal	Pass
5	12379.125	51.12	19.41	74.0	-22.88	Peak	345.00	150	Horizontal	Pass
5**	12379.125	38.14	19.41	54.0	-15.86	AV	345.00	150	Horizontal	Pass
6	17697.599	56.84	24.44	74.0	-17.16	Peak	120.00	150	Horizontal	Pass
6**	17697.599	45.75	24.44	54.0	-8.25	AV	120.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1682.200	52.72	-15.22	74.0	-21.28	Peak	294.00	150	Vertical	Pass
1**	1682.200	35.38	-15.22	54.0	-18.62	AV	294.00	150	Vertical	Pass
2	2462.700	94.79	-10.46	74.0	20.79	Peak	148.00	150	Vertical	N/A
2**	2462.700	87.43	-10.46	54.0	33.43	AV	148.00	150	Vertical	N/A
3	4555.600	48.16	-2.60	74.0	-25.84	Peak	105.00	150	Vertical	Pass
3**	4555.600	38.56	-2.60	54.0	-15.44	AV	105.00	150	Vertical	Pass
4	6918.800	52.90	4.53	74.0	-21.10	Peak	126.00	150	Vertical	Pass
4**	6918.800	43.93	4.53	54.0	-10.07	AV	126.00	150	Vertical	Pass
5	12455.888	51.07	18.62	74.0	-22.93	Peak	-1.00	150	Vertical	Pass
5**	12455.888	38.37	18.62	54.0	-15.63	AV	-1.00	150	Vertical	Pass
6	17294.399	56.11	24.57	74.0	-17.89	Peak	36.00	150	Vertical	Pass
6**	17294.399	45.42	24.57	54.0	-8.58	AV	36.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2100.000	50.52	-11.58	74.0	-23.48	Peak	89.00	150	Horizontal	Pass
1**	2100.000	33.48	-11.58	54.0	-20.52	AV	89.00	150	Horizontal	Pass
2	2416.400	100.21	-10.06	74.0	26.21	Peak	111.00	150	Horizontal	N/A
2**	2416.400	93.79	-10.06	54.0	39.79	AV	111.00	150	Horizontal	N/A
3	4737.800	48.73	-1.99	74.0	-25.27	Peak	313.00	150	Horizontal	Pass
3**	4737.800	38.70	-1.99	54.0	-15.30	AV	313.00	150	Horizontal	Pass
4	6912.600	52.74	4.74	74.0	-21.26	Peak	29.00	150	Horizontal	Pass
4**	6912.600	43.25	4.74	54.0	-10.75	AV	29.00	150	Horizontal	Pass
5	10491.400	50.84	18.47	74.0	-23.16	Peak	362.00	150	Horizontal	Pass
5**	10491.400	38.30	18.47	54.0	-15.70	AV	362.00	150	Horizontal	Pass
6	17235.864	57.17	24.15	74.0	-16.83	Peak	0.00	150	Horizontal	Pass
6**	17235.864	45.84	24.15	54.0	-8.16	AV	0.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1683.000	54.43	-15.21	74.0	-19.57	Peak	283.00	150	Vertical	Pass
1**	1683.000	32.48	-15.21	54.0	-21.52	AV	283.00	150	Vertical	Pass
2	2416.700	95.38	-10.04	74.0	21.38	Peak	131.00	150	Vertical	N/A
2**	2416.700	89.16	-10.04	54.0	35.16	AV	131.00	150	Vertical	N/A
3	4499.800	47.80	-2.61	74.0	-26.20	Peak	258.00	150	Vertical	Pass
3**	4499.800	44.16	-2.61	54.0	-9.84	AV	258.00	150	Vertical	Pass
4	6908.400	52.59	4.79	74.0	-21.41	Peak	279.00	150	Vertical	Pass
4**	6908.400	43.14	4.79	54.0	-10.86	AV	279.00	150	Vertical	Pass
5	12298.050	50.80	20.00	74.0	-23.20	Peak	43.00	150	Vertical	Pass
5**	12298.050	38.41	20.00	54.0	-15.59	AV	43.00	150	Vertical	Pass
6	17845.649	56.60	24.09	74.0	-17.40	Peak	64.00	150	Vertical	Pass
6**	17845.649	45.60	24.09	54.0	-8.40	AV	64.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1992.100	45.98	-13.43	74.0	-28.02	Peak	250.00	150	Horizontal	Pass
1**	1992.100	30.51	-13.43	54.0	-23.49	AV	250.00	150	Horizontal	Pass
2	2431.400	100.68	-10.41	74.0	26.68	Peak	125.00	150	Horizontal	N/A
2**	2431.400	93.70	-10.41	54.0	39.70	AV	125.00	150	Horizontal	N/A
3	4932.600	49.05	-1.09	74.0	-24.95	Peak	319.00	150	Horizontal	Pass
3**	4932.600	39.43	-1.09	54.0	-14.57	AV	319.00	150	Horizontal	Pass
4	6961.000	52.89	4.67	74.0	-21.11	Peak	319.00	150	Horizontal	Pass
4**	6961.000	43.63	4.67	54.0	-10.37	AV	319.00	150	Horizontal	Pass
5	11871.688	49.96	18.07	74.0	-24.04	Peak	230.00	150	Horizontal	Pass
5**	11871.688	38.98	18.07	54.0	-15.02	AV	230.00	150	Horizontal	Pass
6	17888.963	57.02	24.49	74.0	-16.98	Peak	14.00	150	Horizontal	Pass
6**	17888.963	46.08	24.49	54.0	-7.92	AV	14.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1745.900	52.98	-14.93	74.0	-21.02	Peak	273.00	150	Vertical	Pass
1**	1745.900	34.94	-14.93	54.0	-19.06	AV	273.00	150	Vertical	Pass
2	2431.100	96.78	-10.41	74.0	22.78	Peak	127.00	150	Vertical	N/A
2**	2431.100	88.60	-10.41	54.0	34.60	AV	127.00	150	Vertical	N/A
3	4935.000	49.40	-1.21	74.0	-24.60	Peak	283.00	150	Vertical	Pass
3**	4935.000	40.81	-1.21	54.0	-13.19	AV	283.00	150	Vertical	Pass
4	6967.400	52.64	5.05	74.0	-21.36	Peak	246.00	150	Vertical	Pass
4**	6967.400	43.53	5.05	54.0	-10.47	AV	246.00	150	Vertical	Pass
5	12272.175	50.31	20.29	74.0	-23.69	Peak	111.00	150	Vertical	Pass
5**	12272.175	38.18	20.29	54.0	-15.82	AV	111.00	150	Vertical	Pass
6	17335.876	56.45	24.02	74.0	-17.55	Peak	11.00	150	Vertical	Pass
6**	17335.876	44.61	24.02	54.0	-9.39	AV	11.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1991.500	48.13	-13.42	74.0	-25.87	Peak	194.00	150	Horizontal	Pass
1**	1991.500	38.25	-13.42	54.0	-15.75	AV	194.00	150	Horizontal	Pass
2	2459.600	98.46	-10.35	74.0	24.46	Peak	95.00	150	Horizontal	N/A
2**	2459.600	91.22	-10.35	54.0	37.22	AV	95.00	150	Horizontal	N/A
3	4933.000	49.81	-1.09	74.0	-24.19	Peak	149.00	150	Horizontal	Pass
3**	4933.000	41.21	-1.09	54.0	-12.79	AV	149.00	150	Horizontal	Pass
4	6920.800	53.48	4.51	74.0	-20.52	Peak	149.00	150	Horizontal	Pass
4**	6920.800	43.23	4.51	54.0	-10.77	AV	149.00	150	Horizontal	Pass
5	11764.163	50.04	18.82	74.0	-23.96	Peak	297.00	150	Horizontal	Pass
5**	11764.163	38.64	18.82	54.0	-15.36	AV	297.00	150	Horizontal	Pass
6	17740.913	56.37	23.93	74.0	-17.63	Peak	98.00	150	Horizontal	Pass
6**	17740.913	46.03	23.93	54.0	-7.97	AV	98.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1994.200	53.06	-13.41	74.0	-20.94	Peak	362.00	150	Vertical	Pass
1**	1994.200	45.52	-13.41	54.0	-8.48	AV	362.00	150	Vertical	Pass
2	2468.500	94.65	-10.65	74.0	20.65	Peak	138.00	150	Vertical	N/A
2**	2468.500	87.46	-10.65	54.0	33.46	AV	138.00	150	Vertical	N/A
3	4827.000	48.92	-1.39	74.0	-25.08	Peak	143.00	150	Vertical	Pass
3**	4827.000	38.71	-1.39	54.0	-15.29	AV	143.00	150	Vertical	Pass
4	6986.800	52.15	4.41	74.0	-21.85	Peak	128.00	150	Vertical	Pass
4**	6986.800	42.53	4.41	54.0	-11.47	AV	128.00	150	Vertical	Pass
5	12697.099	51.00	18.98	74.0	-23.00	Peak	255.00	150	Vertical	Pass
5**	12697.099	38.49	18.98	54.0	-15.51	AV	255.00	150	Vertical	Pass
6	17856.938	57.03	24.20	74.0	-16.97	Peak	343.00	150	Vertical	Pass
6**	17856.938	45.35	24.20	54.0	-8.65	AV	343.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1498.000	46.20	-15.14	74.0	-27.80	Peak	122.00	150	Horizontal	Pass
1**	1498.000	32.33	-15.14	54.0	-21.67	AV	122.00	150	Horizontal	Pass
2	2410.200	94.73	-10.41	74.0	20.73	Peak	93.00	150	Horizontal	N/A
2**	2410.200	88.98	-10.41	54.0	34.98	AV	93.00	150	Horizontal	N/A
3	4922.800	49.08	-1.12	74.0	-24.92	Peak	360.00	150	Horizontal	Pass
3**	4922.800	39.04	-1.12	54.0	-14.96	AV	360.00	150	Horizontal	Pass
4	6662.600	52.84	4.23	74.0	-21.16	Peak	11.00	150	Horizontal	Pass
4**	6662.600	42.92	4.23	54.0	-11.08	AV	11.00	150	Horizontal	Pass
5	11811.025	50.72	18.46	74.0	-23.28	Peak	-1.00	150	Horizontal	Pass
5**	11811.025	38.27	18.46	54.0	-15.73	AV	-1.00	150	Horizontal	Pass
6	17862.713	56.80	24.27	74.0	-17.20	Peak	329.00	150	Horizontal	Pass
6**	17862.713	45.59	24.27	54.0	-8.41	AV	329.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1992.600	52.10	-13.44	74.0	-21.90	Peak	362.00	150	Vertical	Pass
1**	1992.600	43.01	-13.44	54.0	-10.99	AV	362.00	150	Vertical	Pass
2	2409.200	90.01	-10.48	74.0	16.01	Peak	128.00	150	Vertical	N/A
2**	2409.200	82.02	-10.48	54.0	28.02	AV	128.00	150	Vertical	N/A
3	4500.000	47.34	-2.62	74.0	-26.66	Peak	360.00	150	Vertical	Pass
3**	4500.000	43.66	-2.62	54.0	-10.34	AV	360.00	150	Vertical	Pass
4	6973.600	52.40	5.14	74.0	-21.60	Peak	252.00	150	Vertical	Pass
4**	6973.600	43.80	5.14	54.0	-10.20	AV	252.00	150	Vertical	Pass
5	12149.987	50.76	19.92	74.0	-23.24	Peak	353.00	150	Vertical	Pass
5**	12149.987	39.30	19.92	54.0	-14.70	AV	353.00	150	Vertical	Pass
6	17307.525	56.58	24.49	74.0	-17.42	Peak	60.00	150	Vertical	Pass
6**	17307.525	45.82	24.49	54.0	-8.18	AV	60.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1500.800	47.79	-15.15	74.0	-26.21	Peak	316.00	150	Horizontal	Pass
1**	1500.800	36.69	-15.15	54.0	-17.31	AV	316.00	150	Horizontal	Pass
2	2429.000	97.61	-10.29	74.0	23.61	Peak	139.00	150	Horizontal	N/A
2**	2429.000	91.52	-10.29	54.0	37.52	AV	139.00	150	Horizontal	N/A
3	4556.200	47.98	-2.63	74.0	-26.02	Peak	206.00	150	Horizontal	Pass
3**	4556.200	38.64	-2.63	54.0	-15.36	AV	206.00	150	Horizontal	Pass
4	6506.800	52.77	3.20	74.0	-21.23	Peak	117.00	150	Horizontal	Pass
4**	6506.800	41.72	3.20	54.0	-12.28	AV	117.00	150	Horizontal	Pass
5	11775.375	51.26	18.74	74.0	-22.74	Peak	274.00	150	Horizontal	Pass
5**	11775.375	39.34	18.74	54.0	-14.66	AV	274.00	150	Horizontal	Pass
6	17841.713	56.92	24.08	74.0	-17.08	Peak	330.00	150	Horizontal	Pass
6**	17841.713	45.16	24.08	54.0	-8.84	AV	330.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1743.100	52.08	-14.99	74.0	-21.92	Peak	292.00	150	Vertical	Pass
1**	1743.100	43.96	-14.99	54.0	-10.04	AV	292.00	150	Vertical	Pass
2	2423.000	92.56	-10.11	74.0	18.56	Peak	132.00	150	Vertical	N/A
2**	2423.000	85.88	-10.11	54.0	31.88	AV	132.00	150	Vertical	N/A
3	4903.200	49.91	-0.84	74.0	-24.09	Peak	340.00	150	Vertical	Pass
3**	4903.200	40.40	-0.84	54.0	-13.60	AV	340.00	150	Vertical	Pass
4	6913.400	52.76	4.77	74.0	-21.24	Peak	252.00	150	Vertical	Pass
4**	6913.400	43.29	4.77	54.0	-10.71	AV	252.00	150	Vertical	Pass
5	11603.162	50.10	20.15	74.0	-23.90	Peak	-1.00	150	Vertical	Pass
5**	11603.162	38.13	20.15	54.0	-15.87	AV	-1.00	150	Vertical	Pass
6	17657.438	57.15	24.24	74.0	-16.85	Peak	360.00	150	Vertical	Pass
6**	17657.438	44.64	24.24	54.0	-9.36	AV	360.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2101.400	47.05	-11.39	74.0	-26.95	Peak	362.00	150	Horizontal	Pass
1**	2101.400	36.92	-11.39	54.0	-17.08	AV	362.00	150	Horizontal	Pass
2	2467.400	95.52	-10.64	74.0	21.52	Peak	67.00	150	Horizontal	N/A
2**	2467.400	87.74	-10.64	54.0	33.74	AV	67.00	150	Horizontal	N/A
3	4559.600	48.34	-2.64	74.0	-25.66	Peak	271.00	150	Horizontal	Pass
3**	4559.600	38.17	-2.64	54.0	-15.83	AV	271.00	150	Horizontal	Pass
4	6977.400	53.16	5.08	74.0	-20.84	Peak	244.00	150	Horizontal	Pass
4**	6977.400	43.31	5.08	54.0	-10.69	AV	244.00	150	Horizontal	Pass
5	11571.537	50.10	19.84	74.0	-23.90	Peak	192.00	150	Horizontal	Pass
5**	11571.537	39.07	19.84	54.0	-14.93	AV	192.00	150	Horizontal	Pass
6	17285.738	57.25	24.53	74.0	-16.75	Peak	258.00	150	Horizontal	Pass
6**	17285.738	45.53	24.53	54.0	-8.47	AV	258.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1500.000	52.94	-15.19	74.0	-21.06	Peak	7.00	150	Vertical	Pass
1**	1500.000	32.86	-15.19	54.0	-21.14	AV	7.00	150	Vertical	Pass
2	2465.300	90.78	-10.54	74.0	16.78	Peak	137.00	150	Vertical	N/A
2**	2465.300	84.83	-10.54	54.0	30.83	AV	137.00	150	Vertical	N/A
3	5278.000	49.66	-0.51	74.0	-24.34	Peak	245.00	150	Vertical	Pass
3**	5278.000	40.83	-0.51	54.0	-13.17	AV	245.00	150	Vertical	Pass
4	6917.600	52.84	4.64	74.0	-21.16	Peak	361.00	150	Vertical	Pass
4**	6917.600	44.64	4.64	54.0	-9.36	AV	361.00	150	Vertical	Pass
5	12441.800	50.86	18.74	74.0	-23.14	Peak	75.00	150	Vertical	Pass
5**	12441.800	38.55	18.74	54.0	-15.45	AV	75.00	150	Vertical	Pass
6	17258.963	57.04	24.24	74.0	-16.96	Peak	113.00	150	Vertical	Pass
6**	17258.963	45.43	24.24	54.0	-8.57	AV	113.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2100.300	50.59	-11.54	74.0	-23.41	Peak	362.00	150	Horizontal	Pass
1**	2100.300	43.15	-11.54	54.0	-10.85	AV	362.00	150	Horizontal	Pass
2	2408.600	104.38	-10.53	74.0	30.38	Peak	336.00	150	Horizontal	N/A
2**	2408.600	98.11	-10.53	54.0	44.11	AV	336.00	150	Horizontal	N/A
3	4899.000	49.19	-0.91	74.0	-24.81	Peak	53.00	150	Horizontal	Pass
3**	4899.000	38.53	-0.91	54.0	-15.47	AV	53.00	150	Horizontal	Pass
4	6940.400	53.09	4.57	74.0	-20.91	Peak	361.00	150	Horizontal	Pass
4**	6940.400	42.20	4.57	54.0	-11.80	AV	361.00	150	Horizontal	Pass
5	11600.287	49.82	20.13	74.0	-24.18	Peak	362.00	150	Horizontal	Pass
5**	11600.287	39.04	20.13	54.0	-14.96	AV	362.00	150	Horizontal	Pass
6	17518.838	57.04	24.06	74.0	-16.96	Peak	223.00	150	Horizontal	Pass
6**	17518.838	45.76	24.06	54.0	-8.24	AV	223.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2101.600	54.25	-11.36	74.0	-19.75	Peak	362.00	150	Vertical	Pass
1**	2101.600	42.67	-11.36	54.0	-11.33	AV	362.00	150	Vertical	Pass
2	2405.700	97.84	-10.78	74.0	23.84	Peak	299.00	150	Vertical	N/A
2**	2405.700	90.04	-10.78	54.0	36.04	AV	299.00	150	Vertical	N/A
3	4951.200	49.11	-1.62	74.0	-24.89	Peak	228.00	150	Vertical	Pass
3**	4951.200	40.05	-1.62	54.0	-13.95	AV	228.00	150	Vertical	Pass
4	6963.600	52.73	4.78	74.0	-21.27	Peak	286.00	150	Vertical	Pass
4**	6963.600	42.67	4.78	54.0	-11.33	AV	286.00	150	Vertical	Pass
5	10953.125	49.59	18.66	74.0	-24.41	Peak	144.00	150	Vertical	Pass
5**	10953.125	37.71	18.66	54.0	-16.29	AV	144.00	150	Vertical	Pass
6	17876.888	57.44	24.40	74.0	-16.56	Peak	346.00	150	Vertical	Pass
6**	17876.888	45.35	24.40	54.0	-8.65	AV	346.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1995.200	46.50	-13.35	74.0	-27.50	Peak	200.00	150	Horizontal	Pass
1**	1995.200	35.87	-13.35	54.0	-18.13	AV	200.00	150	Horizontal	Pass
2	2433.500	102.50	-10.43	74.0	28.50	Peak	318.00	150	Horizontal	N/A
2**	2433.500	97.37	-10.43	54.0	43.37	AV	318.00	150	Horizontal	N/A
3	4978.800	48.98	-1.32	74.0	-25.02	Peak	120.00	150	Horizontal	Pass
3**	4978.800	38.75	-1.32	54.0	-15.25	AV	120.00	150	Horizontal	Pass
4	6413.800	52.97	3.98	74.0	-21.03	Peak	361.00	150	Horizontal	Pass
4**	6413.800	42.34	3.98	54.0	-11.66	AV	361.00	150	Horizontal	Pass
5	10481.625	50.47	18.59	74.0	-23.53	Peak	343.00	150	Horizontal	Pass
5**	10481.625	38.17	18.59	54.0	-15.83	AV	343.00	150	Horizontal	Pass
6	17715.188	57.13	24.21	74.0	-16.87	Peak	233.00	150	Horizontal	Pass
6**	17715.188	46.56	24.21	54.0	-7.44	AV	233.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1743.200	54.06	-14.98	74.0	-19.94	Peak	290.00	150	Vertical	Pass
1**	1743.200	41.41	-14.98	54.0	-12.59	AV	290.00	150	Vertical	Pass
2	2438.800	96.00	-10.56	74.0	22.00	Peak	317.00	150	Vertical	N/A
2**	2438.800	90.45	-10.56	54.0	36.45	AV	317.00	150	Vertical	N/A
3	4559.600	48.58	-2.64	74.0	-25.42	Peak	361.00	150	Vertical	Pass
3**	4559.600	37.89	-2.64	54.0	-16.11	AV	361.00	150	Vertical	Pass
4	6992.000	53.54	4.30	74.0	-20.46	Peak	285.00	150	Vertical	Pass
4**	6992.000	42.65	4.30	54.0	-11.35	AV	285.00	150	Vertical	Pass
5	12204.900	50.50	20.44	74.0	-23.50	Peak	124.00	150	Vertical	Pass
5**	12204.900	40.69	20.44	54.0	-13.31	AV	124.00	150	Vertical	Pass
6	17249.776	57.81	24.20	74.0	-16.19	Peak	141.00	150	Vertical	Pass
6**	17249.776	45.75	24.20	54.0	-8.25	AV	141.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1503.200	45.98	-15.02	74.0	-28.02	Peak	316.00	150	Horizontal	Pass
1**	1503.200	28.44	-15.02	54.0	-25.56	AV	316.00	150	Horizontal	Pass
2	2468.900	102.78	-10.66	74.0	28.78	Peak	341.00	150	Horizontal	N/A
2**	2468.900	92.31	-10.66	54.0	38.31	AV	341.00	150	Horizontal	N/A
3	4947.400	49.04	-1.55	74.0	-24.96	Peak	82.00	150	Horizontal	Pass
3**	4947.400	40.07	-1.55	54.0	-13.93	AV	82.00	150	Horizontal	Pass
4	6988.600	52.30	4.57	74.0	-21.70	Peak	192.00	150	Horizontal	Pass
4**	6988.600	43.88	4.57	54.0	-10.12	AV	192.00	150	Horizontal	Pass
5	11607.763	50.01	20.17	74.0	-23.99	Peak	306.00	150	Horizontal	Pass
5**	11607.763	39.70	20.17	54.0	-14.30	AV	306.00	150	Horizontal	Pass
6	17728.051	56.81	24.06	74.0	-17.19	Peak	16.00	150	Horizontal	Pass
6**	17728.051	45.43	24.06	54.0	-8.57	AV	16.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1993.500	52.80	-13.45	74.0	-21.20	Peak	362.00	150	Vertical	Pass
1**	1993.500	38.87	-13.45	54.0	-15.13	AV	362.00	150	Vertical	Pass
2	2467.600	96.52	-10.65	74.0	22.52	Peak	188.00	150	Vertical	N/A
2**	2467.600	91.37	-10.65	54.0	37.37	AV	188.00	150	Vertical	N/A
3	5013.600	49.79	-0.70	74.0	-24.21	Peak	189.00	150	Vertical	Pass
3**	5013.600	39.42	-0.70	54.0	-14.58	AV	189.00	150	Vertical	Pass
4	6968.200	53.07	5.12	74.0	-20.93	Peak	266.00	150	Vertical	Pass
4**	6968.200	43.18	5.12	54.0	-10.82	AV	266.00	150	Vertical	Pass
5	12418.800	51.50	18.95	74.0	-22.50	Peak	219.00	150	Vertical	Pass
5**	12418.800	38.40	18.95	54.0	-15.60	AV	219.00	150	Vertical	Pass
6	17227.463	56.64	24.04	74.0	-17.36	Peak	284.00	150	Vertical	Pass
6**	17227.463	45.60	24.04	54.0	-8.40	AV	284.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1995.300	46.05	-13.35	74.0	-27.95	Peak	247.00	150	Horizontal	Pass
1**	1995.300	39.87	-13.35	54.0	-14.13	AV	247.00	150	Horizontal	Pass
2	2427.800	98.68	-10.19	74.0	24.68	Peak	323.00	150	Horizontal	N/A
2**	2427.800	89.49	-10.19	54.0	35.49	AV	323.00	150	Horizontal	N/A
3	4794.400	48.55	-1.54	74.0	-25.45	Peak	-2.00	150	Horizontal	Pass
3**	4794.400	39.68	-1.54	54.0	-14.32	AV	-2.00	150	Horizontal	Pass
4	6988.800	52.58	4.60	74.0	-21.42	Peak	325.00	150	Horizontal	Pass
4**	6988.800	42.75	4.60	54.0	-11.25	AV	325.00	150	Horizontal	Pass
5	12351.237	50.45	19.70	74.0	-23.55	Peak	-1.00	150	Horizontal	Pass
5**	12351.237	39.61	19.70	54.0	-14.39	AV	-1.00	150	Horizontal	Pass
6	17289.937	56.84	24.55	74.0	-17.16	Peak	136.00	150	Horizontal	Pass
6**	17289.937	44.90	24.55	54.0	-9.10	AV	136.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1747.000	52.69	-14.94	74.0	-21.31	Peak	304.00	150	Vertical	Pass
1**	1747.000	38.18	-14.94	54.0	-15.82	AV	304.00	150	Vertical	Pass
2	2410.600	92.85	-10.39	74.0	18.85	Peak	304.00	150	Vertical	N/A
2**	2410.600	84.68	-10.39	54.0	30.68	AV	304.00	150	Vertical	N/A
3	4309.800	47.58	-3.46	74.0	-26.42	Peak	48.00	150	Vertical	Pass
3**	4309.800	38.88	-3.46	54.0	-15.12	AV	48.00	150	Vertical	Pass
4	6921.200	52.45	4.51	74.0	-21.55	Peak	107.00	150	Vertical	Pass
4**	6921.200	42.91	4.51	54.0	-11.09	AV	107.00	150	Vertical	Pass
5	12145.100	50.93	19.88	74.0	-23.07	Peak	50.00	150	Vertical	Pass
5**	12145.100	38.10	19.88	54.0	-15.90	AV	50.00	150	Vertical	Pass
6	17509.913	56.96	24.00	74.0	-17.04	Peak	15.00	150	Vertical	Pass
6**	17509.913	45.42	24.00	54.0	-8.58	AV	15.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1995.300	44.54	-13.35	74.0	-29.46	Peak	239.00	150	Horizontal	Pass
1**	1995.300	36.41	-13.35	54.0	-17.59	AV	239.00	150	Horizontal	Pass
2	2432.700	100.32	-10.40	74.0	26.32	Peak	344.00	150	Horizontal	N/A
2**	2432.700	92.10	-10.40	54.0	38.10	AV	344.00	150	Horizontal	N/A
3	4794.400	49.11	-1.54	74.0	-24.89	Peak	361.00	150	Horizontal	Pass
3**	4794.400	39.07	-1.54	54.0	-14.93	AV	361.00	150	Horizontal	Pass
4	6490.000	52.56	2.80	74.0	-21.44	Peak	171.00	150	Horizontal	Pass
4**	6490.000	42.93	2.80	54.0	-11.07	AV	171.00	150	Horizontal	Pass
5	12433.175	50.84	18.82	74.0	-23.16	Peak	225.00	150	Horizontal	Pass
5**	12433.175	38.44	18.82	54.0	-15.56	AV	225.00	150	Horizontal	Pass
6	17254.238	57.04	24.22	74.0	-16.96	Peak	360.00	150	Horizontal	Pass
6**	17254.238	45.65	24.22	54.0	-8.35	AV	360.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1742.400	53.16	-15.01	74.0	-20.84	Peak	301.00	150	Vertical	Pass
1**	1742.400	41.80	-15.01	54.0	-12.20	AV	301.00	150	Vertical	Pass
2	2421.200	93.81	-10.06	74.0	19.81	Peak	326.00	150	Vertical	N/A
2**	2421.200	87.33	-10.06	54.0	33.33	AV	326.00	150	Vertical	N/A
3	5051.200	49.30	-0.94	74.0	-24.70	Peak	234.00	150	Vertical	Pass
3**	5051.200	40.21	-0.94	54.0	-13.79	AV	234.00	150	Vertical	Pass
4	6979.800	52.91	4.91	74.0	-21.09	Peak	121.00	150	Vertical	Pass
4**	6979.800	42.84	4.91	54.0	-11.16	AV	121.00	150	Vertical	Pass
5	12332.262	50.80	19.84	74.0	-23.20	Peak	92.00	150	Vertical	Pass
5**	12332.262	39.46	19.84	54.0	-14.54	AV	92.00	150	Vertical	Pass
6	17267.626	56.75	24.34	74.0	-17.25	Peak	89.00	150	Vertical	Pass
6**	17267.626	45.59	24.34	54.0	-8.41	AV	89.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1994.000	47.01	-13.42	74.0	-26.99	Peak	205.00	150	Horizontal	Pass
1**	1994.000	33.99	-13.42	54.0	-20.01	AV	205.00	150	Horizontal	Pass
2	2465.900	100.01	-10.67	74.0	26.01	Peak	335.00	150	Horizontal	N/A
2**	2465.900	92.24	-10.67	54.0	38.24	AV	335.00	150	Horizontal	N/A
3	4874.200	48.90	-1.55	74.0	-25.10	Peak	232.00	150	Horizontal	Pass
3**	4874.200	39.26	-1.55	54.0	-14.74	AV	232.00	150	Horizontal	Pass
4	6994.800	53.12	4.05	74.0	-20.88	Peak	340.00	150	Horizontal	Pass
4**	6994.800	42.80	4.05	54.0	-11.20	AV	340.00	150	Horizontal	Pass
5	11683.088	50.40	20.03	74.0	-23.60	Peak	287.00	150	Horizontal	Pass
5**	11683.088	38.55	20.03	54.0	-15.45	AV	287.00	150	Horizontal	Pass
6	17859.037	56.79	24.23	74.0	-17.21	Peak	0.00	150	Horizontal	Pass
6**	17859.037	45.27	24.23	54.0	-8.73	AV	0.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1689.400	52.14	-15.20	74.0	-21.86	Peak	291.00	150	Vertical	Pass
1**	1689.400	40.70	-15.20	54.0	-13.30	AV	291.00	150	Vertical	Pass
2	2465.100	95.40	-10.52	74.0	21.40	Peak	182.00	150	Vertical	N/A
2**	2465.100	87.25	-10.52	54.0	33.25	AV	182.00	150	Vertical	N/A
3	3891.800	48.42	-5.14	74.0	-25.58	Peak	280.00	150	Vertical	Pass
3**	3891.800	36.89	-5.14	54.0	-17.11	AV	280.00	150	Vertical	Pass
4	6926.000	52.71	4.22	74.0	-21.29	Peak	2.00	150	Vertical	Pass
4**	6926.000	43.42	4.22	54.0	-10.58	AV	2.00	150	Vertical	Pass
5	12203.750	50.84	20.44	74.0	-23.16	Peak	1.00	150	Vertical	Pass
5**	12203.750	39.71	20.44	54.0	-14.29	AV	1.00	150	Vertical	Pass
6	17999.739	57.22	24.92	74.0	-16.78	Peak	7.00	150	Vertical	Pass
6**	17999.739	44.96	24.92	54.0	-9.04	AV	7.00	150	Vertical	Pass

ESP module

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1702.700	44.23	-15.11	74.0	-29.77	Peak	313.00	150	Horizontal	Pass
1**	1702.700	28.19	-15.11	54.0	-25.81	AV	313.00	150	Horizontal	Pass
2	2412.500	104.43	-10.25	74.0	30.43	Peak	53.00	150	Horizontal	N/A
2**	2412.500	98.67	-10.25	54.0	44.67	AV	53.00	150	Horizontal	N/A
3	4825.000	50.57	-1.39	74.0	-23.43	Peak	112.00	150	Horizontal	Pass
3**	4825.000	46.21	-1.39	54.0	-7.79	AV	112.00	150	Horizontal	Pass
4	6674.800	53.15	3.39	74.0	-20.85	Peak	357.00	150	Horizontal	Pass
4**	6674.800	43.01	3.39	54.0	-10.99	AV	357.00	150	Horizontal	Pass
5	12331.975	50.58	19.84	74.0	-23.42	Peak	40.00	150	Horizontal	Pass
5**	12331.975	40.74	19.84	54.0	-13.26	AV	40.00	150	Horizontal	Pass
6	17316.448	56.93	24.37	74.0	-17.07	Peak	0.00	150	Horizontal	Pass
6**	17316.448	45.10	24.37	54.0	-8.90	AV	0.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1991.100	50.92	-13.42	74.0	-23.08	Peak	128.00	150	Vertical	Pass
1**	1991.100	29.93	-13.42	54.0	-24.07	AV	128.00	150	Vertical	Pass
2	2412.500	99.45	-10.25	74.0	25.45	Peak	145.00	150	Vertical	N/A
2**	2412.500	92.10	-10.25	54.0	38.10	AV	145.00	150	Vertical	N/A
3	3216.200	46.71	-6.94	74.0	-27.29	Peak	216.00	150	Vertical	Pass
3**	3216.200	45.09	-6.94	54.0	-8.91	AV	216.00	150	Vertical	Pass
4	4825.000	51.68	-1.39	74.0	-22.32	Peak	325.00	150	Vertical	Pass
4**	4825.000	47.22	-1.39	54.0	-6.78	AV	325.00	150	Vertical	Pass
5	12415.062	51.70	19.00	74.0	-22.30	Peak	362.00	150	Vertical	Pass
5**	12415.062	39.93	19.00	54.0	-14.07	AV	362.00	150	Vertical	Pass
6	17826.224	57.12	23.96	74.0	-16.88	Peak	252.00	150	Vertical	Pass
6**	17826.224	45.96	23.96	54.0	-8.04	AV	252.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1993.100	50.39	-13.45	74.0	-23.61	Peak	215.00	150	Horizontal	Pass
1**	1993.100	28.52	-13.45	54.0	-25.48	AV	215.00	150	Horizontal	Pass
2	2437.300	104.96	-10.61	74.0	30.96	Peak	117.00	150	Horizontal	N/A
2**	2437.300	97.42	-10.61	54.0	43.42	AV	117.00	150	Horizontal	N/A
3	4874.000	53.00	-1.54	74.0	-21.00	Peak	119.00	150	Horizontal	Pass
3**	4874.000	43.61	-1.54	54.0	-10.39	AV	119.00	150	Horizontal	Pass
4	6915.200	53.31	4.79	74.0	-20.69	Peak	131.00	150	Horizontal	Pass
4**	6915.200	44.08	4.79	54.0	-9.92	AV	131.00	150	Horizontal	Pass
5	12735.337	50.86	18.90	74.0	-23.14	Peak	248.00	150	Horizontal	Pass
5**	12735.337	37.94	18.90	54.0	-16.06	AV	248.00	150	Horizontal	Pass
6	17283.375	56.87	24.51	74.0	-17.13	Peak	204.00	150	Horizontal	Pass
6**	17283.375	45.59	24.51	54.0	-8.41	AV	204.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1993.300	48.83	-13.46	74.0	-25.17	Peak	12.00	150	Vertical	Pass
1**	1993.300	40.21	-13.46	54.0	-13.79	AV	12.00	150	Vertical	Pass
2	2437.300	99.06	-10.61	74.0	25.06	Peak	139.00	150	Vertical	N/A
2**	2437.300	92.91	-10.61	54.0	38.91	AV	139.00	150	Vertical	N/A
3	3249.400	46.30	-6.83	74.0	-27.70	Peak	213.00	150	Vertical	Pass
3**	3249.400	43.65	-6.83	54.0	-10.35	AV	213.00	150	Vertical	Pass
4	4873.200	49.65	-1.52	74.0	-24.35	Peak	339.00	150	Vertical	Pass
4**	4873.200	45.58	-1.52	54.0	-8.42	AV	339.00	150	Vertical	Pass
5	12378.550	51.39	19.41	74.0	-22.61	Peak	223.00	150	Vertical	Pass
5**	12378.550	39.72	19.41	54.0	-14.28	AV	223.00	150	Vertical	Pass
6	17300.699	56.91	24.59	74.0	-17.09	Peak	18.00	150	Vertical	Pass
6**	17300.699	45.96	24.59	54.0	-8.04	AV	18.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1993.200	44.33	-13.45	74.0	-29.67	Peak	222.00	150	Horizontal	Pass
1**	1993.200	27.32	-13.45	54.0	-26.68	AV	222.00	150	Horizontal	Pass
2	2463.700	105.36	-10.48	74.0	31.36	Peak	46.00	150	Horizontal	N/A
2**	2463.700	98.91	-10.48	54.0	44.91	AV	46.00	150	Horizontal	N/A
3	4920.600	50.08	-1.06	74.0	-23.92	Peak	107.00	150	Horizontal	Pass
3**	4920.600	42.03	-1.06	54.0	-11.97	AV	107.00	150	Horizontal	Pass
4	6980.200	53.95	4.88	74.0	-20.05	Peak	57.00	150	Horizontal	Pass
4**	6980.200	43.32	4.88	54.0	-10.68	AV	57.00	150	Horizontal	Pass
5	12215.250	50.61	20.45	74.0	-23.39	Peak	151.00	150	Horizontal	Pass
5**	12215.250	38.76	20.45	54.0	-15.24	AV	151.00	150	Horizontal	Pass
6	17411.213	57.23	23.64	74.0	-16.77	Peak	176.00	150	Horizontal	Pass
6**	17411.213	44.96	23.64	54.0	-9.04	AV	176.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1992.600	48.65	-13.44	74.0	-25.35	Peak	-2.00	150	Vertical	Pass
1**	1992.600	29.26	-13.44	54.0	-24.74	AV	-2.00	150	Vertical	Pass
2	2462.300	100.23	-10.46	74.0	26.23	Peak	139.00	150	Vertical	N/A
2**	2462.300	94.17	-10.46	54.0	40.17	AV	139.00	150	Vertical	N/A
3	4923.400	49.92	-1.11	74.0	-24.08	Peak	332.00	150	Vertical	Pass
3**	4923.400	47.14	-1.11	54.0	-6.86	AV	332.00	150	Vertical	Pass
4	6356.800	53.83	2.89	74.0	-20.17	Peak	-1.00	150	Vertical	Pass
4**	6356.800	42.25	2.89	54.0	-11.75	AV	-1.00	150	Vertical	Pass
5	12184.776	51.07	20.30	74.0	-22.93	Peak	294.00	150	Vertical	Pass
5**	12184.776	40.12	20.30	54.0	-13.88	AV	294.00	150	Vertical	Pass
6	17652.713	57.07	24.25	74.0	-16.93	Peak	256.00	150	Vertical	Pass
6**	17652.713	45.04	24.25	54.0	-8.96	AV	256.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1500.300	50.12	-15.20	74.0	-23.88	Peak	152.00	150	Horizontal	Pass
1**	1500.300	41.30	-15.20	54.0	-12.70	AV	152.00	150	Horizontal	Pass
2	2419.600	100.62	-10.00	74.0	26.62	Peak	80.00	150	Horizontal	N/A
2**	2419.600	93.70	-10.00	54.0	39.70	AV	80.00	150	Horizontal	N/A
3	4816.200	50.71	-1.33	74.0	-23.29	Peak	115.00	150	Horizontal	Pass
3**	4816.200	40.44	-1.33	54.0	-13.56	AV	115.00	150	Horizontal	Pass
4	6758.400	53.53	4.24	74.0	-20.47	Peak	54.00	150	Horizontal	Pass
4**	6758.400	42.95	4.24	54.0	-11.05	AV	54.00	150	Horizontal	Pass
5	12420.813	50.92	18.93	74.0	-23.08	Peak	135.00	150	Horizontal	Pass
5**	12420.813	39.67	18.93	54.0	-14.33	AV	135.00	150	Horizontal	Pass
6	17363.438	57.08	23.71	74.0	-16.92	Peak	257.00	150	Horizontal	Pass
6**	17363.438	44.43	23.71	54.0	-9.57	AV	257.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1995.700	51.76	-13.36	74.0	-22.24	Peak	5.00	150	Vertical	Pass
1**	1995.700	42.69	-13.36	54.0	-11.31	AV	5.00	150	Vertical	Pass
2	2412.600	94.85	-10.24	74.0	20.85	Peak	133.00	150	Vertical	N/A
2**	2412.600	87.31	-10.24	54.0	33.31	AV	133.00	150	Vertical	N/A
3	4820.800	52.31	-1.39	74.0	-21.69	Peak	156.00	150	Vertical	Pass
3**	4820.800	41.43	-1.39	54.0	-12.57	AV	156.00	150	Vertical	Pass
4	6992.400	53.11	4.23	74.0	-20.89	Peak	143.00	150	Vertical	Pass
4**	6992.400	43.49	4.23	54.0	-10.51	AV	143.00	150	Vertical	Pass
5	12996.487	51.00	19.36	74.0	-23.00	Peak	-1.00	150	Vertical	Pass
5**	12996.487	38.00	19.36	54.0	-16.00	AV	-1.00	150	Vertical	Pass
6	17861.925	57.19	24.26	74.0	-16.81	Peak	178.00	150	Vertical	Pass
6**	17861.925	45.80	24.26	54.0	-8.20	AV	178.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1993.400	46.49	-13.45	74.0	-27.51	Peak	181.00	150	Horizontal	Pass
1**	1993.400	30.00	-13.45	54.0	-24.00	AV	181.00	150	Horizontal	Pass
2	2430.400	100.49	-10.38	74.0	26.49	Peak	287.00	150	Horizontal	N/A
2**	2430.400	93.90	-10.38	54.0	39.90	AV	287.00	150	Horizontal	N/A
3	4876.000	49.27	-1.46	74.0	-24.73	Peak	346.00	150	Horizontal	Pass
3**	4876.000	41.63	-1.46	54.0	-12.37	AV	346.00	150	Horizontal	Pass
4	6931.400	52.64	4.36	74.0	-21.36	Peak	4.00	150	Horizontal	Pass
4**	6931.400	43.54	4.36	54.0	-10.46	AV	4.00	150	Horizontal	Pass
5	12356.125	50.49	19.67	74.0	-23.51	Peak	141.00	150	Horizontal	Pass
5**	12356.125	40.14	19.67	54.0	-13.86	AV	141.00	150	Horizontal	Pass
6	17470.538	56.88	23.83	74.0	-17.12	Peak	129.00	150	Horizontal	Pass
6**	17470.538	44.92	23.83	54.0	-9.08	AV	129.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1992.600	52.37	-13.44	74.0	-21.63	Peak	-1.00	150	Vertical	Pass
1**	1992.600	39.45	-13.44	54.0	-14.55	AV	-1.00	150	Vertical	Pass
2	2442.400	95.77	-10.49	74.0	21.77	Peak	138.00	150	Vertical	N/A
2**	2442.400	89.36	-10.49	54.0	35.36	AV	138.00	150	Vertical	N/A
3	3249.400	47.44	-6.83	74.0	-26.56	Peak	223.00	150	Vertical	Pass
3**	3249.400	44.40	-6.83	54.0	-9.60	AV	223.00	150	Vertical	Pass
4	4869.400	51.07	-1.45	74.0	-22.93	Peak	320.00	150	Vertical	Pass
4**	4869.400	42.95	-1.45	54.0	-11.05	AV	320.00	150	Vertical	Pass
5	9905.762	50.82	17.73	74.0	-23.18	Peak	258.00	150	Vertical	Pass
5**	9905.762	37.26	17.73	54.0	-16.74	AV	258.00	150	Vertical	Pass
6	17197.537	57.02	23.78	74.0	-16.98	Peak	270.00	150	Vertical	Pass
6**	17197.537	44.98	23.78	54.0	-9.02	AV	270.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1994.100	45.76	-13.41	74.0	-28.24	Peak	217.00	150	Horizontal	Pass
1**	1994.100	28.01	-13.41	54.0	-25.99	AV	217.00	150	Horizontal	Pass
2	2466.900	102.11	-10.63	74.0	28.11	Peak	44.00	150	Horizontal	N/A
2**	2466.900	94.80	-10.63	54.0	40.80	AV	44.00	150	Horizontal	N/A
3	4922.400	49.94	-1.12	74.0	-24.06	Peak	-1.00	150	Horizontal	Pass
3**	4922.400	41.41	-1.12	54.0	-12.59	AV	-1.00	150	Horizontal	Pass
4	6975.200	53.11	5.17	74.0	-20.89	Peak	228.00	150	Horizontal	Pass
4**	6975.200	43.78	5.17	54.0	-10.22	AV	228.00	150	Horizontal	Pass
5	12358.713	51.06	19.65	74.0	-22.94	Peak	28.00	150	Horizontal	Pass
5**	12358.713	40.07	19.65	54.0	-13.93	AV	28.00	150	Horizontal	Pass
6	17999.213	57.30	24.91	74.0	-16.70	Peak	-1.00	150	Horizontal	Pass
6**	17999.213	45.66	24.91	54.0	-8.34	AV	-1.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1861.800	51.58	-13.46	74.0	-22.42	Peak	294.00	150	Vertical	Pass
1**	1861.800	28.59	-13.46	54.0	-25.41	AV	294.00	150	Vertical	Pass
2	2463.900	97.38	-10.49	74.0	23.38	Peak	135.00	150	Vertical	N/A
2**	2463.900	90.93	-10.49	54.0	36.93	AV	135.00	150	Vertical	N/A
3	3282.600	45.90	-6.72	74.0	-28.10	Peak	327.00	150	Vertical	Pass
3**	3282.600	39.92	-6.72	54.0	-14.08	AV	327.00	150	Vertical	Pass
4	4920.400	51.37	-1.05	74.0	-22.63	Peak	318.00	150	Vertical	Pass
4**	4920.400	41.83	-1.05	54.0	-12.17	AV	318.00	150	Vertical	Pass
5	12157.463	51.07	20.01	74.0	-22.93	Peak	256.00	150	Vertical	Pass
5**	12157.463	40.35	20.01	54.0	-13.65	AV	256.00	150	Vertical	Pass
6	17940.937	57.81	24.34	74.0	-16.19	Peak	95.00	150	Vertical	Pass
6**	17940.937	44.53	24.34	54.0	-9.47	AV	95.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1820.200	42.99	-14.56	74.0	-31.01	Peak	197.00	150	Horizontal	Pass
1**	1820.200	26.70	-14.56	54.0	-27.30	AV	197.00	150	Horizontal	Pass
2	2412.200	100.31	-10.29	74.0	26.31	Peak	77.00	150	Horizontal	N/A
2**	2412.200	91.48	-10.29	54.0	37.48	AV	77.00	150	Horizontal	N/A
3	4822.400	49.83	-1.48	74.0	-24.17	Peak	117.00	150	Horizontal	Pass
3**	4822.400	41.23	-1.48	54.0	-12.77	AV	117.00	150	Horizontal	Pass
4	6903.600	53.11	4.55	74.0	-20.89	Peak	149.00	150	Horizontal	Pass
4**	6903.600	44.29	4.55	54.0	-9.71	AV	149.00	150	Horizontal	Pass
5	11597.987	50.45	20.11	74.0	-23.55	Peak	158.00	150	Horizontal	Pass
5**	11597.987	39.25	20.11	54.0	-14.75	AV	158.00	150	Horizontal	Pass
6	17948.287	57.08	24.28	74.0	-16.92	Peak	362.00	150	Horizontal	Pass
6**	17948.287	44.89	24.28	54.0	-9.11	AV	362.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1992.200	50.64	-13.44	74.0	-23.36	Peak	-2.00	150	Vertical	Pass
1**	1992.200	40.78	-13.44	54.0	-13.22	AV	-2.00	150	Vertical	Pass
2	2407.300	93.20	-10.64	74.0	19.20	Peak	128.00	150	Vertical	N/A
2**	2407.300	85.17	-10.64	54.0	31.17	AV	128.00	150	Vertical	S
3	3216.000	47.44	-6.94	74.0	-26.56	Peak	224.00	150	Vertical	Pass
3**	3216.000	43.18	-6.94	54.0	-10.82	AV	224.00	150	Vertical	Pass
4	4826.600	49.39	-1.36	74.0	-24.61	Peak	315.00	150	Vertical	Pass
4**	4826.600	45.39	-1.36	54.0	-8.61	AV	315.00	150	Vertical	Pass
5	12347.787	51.17	19.73	74.0	-22.83	Peak	135.00	150	Vertical	Pass
5**	12347.787	39.59	19.73	54.0	-14.41	AV	135.00	150	Vertical	Pass
6	17830.162	56.74	23.99	74.0	-17.26	Peak	201.00	150	Vertical	Pass
6**	17830.162	45.43	23.99	54.0	-8.57	AV	201.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1799.800	43.86	-14.62	74.0	-30.14	Peak	308.00	150	Horizontal	Pass
1**	1799.800	34.12	-14.62	54.0	-19.88	AV	308.00	150	Horizontal	Pass
2	2438.000	100.74	-10.59	74.0	26.74	Peak	75.00	150	Horizontal	N/A
2**	2438.000	93.46	-10.59	54.0	39.46	AV	75.00	150	Horizontal	N/A
3	4883.200	49.80	-1.17	74.0	-24.20	Peak	108.00	150	Horizontal	Pass
3**	4883.200	41.63	-1.17	54.0	-12.37	AV	108.00	150	Horizontal	Pass
4	6578.200	53.43	3.00	74.0	-20.57	Peak	263.00	150	Horizontal	Pass
4**	6578.200	43.04	3.00	54.0	-10.96	AV	263.00	150	Horizontal	Pass
5	12457.900	51.08	18.62	74.0	-22.92	Peak	346.00	150	Horizontal	Pass
5**	12457.900	38.52	18.62	54.0	-15.48	AV	346.00	150	Horizontal	Pass
6	17646.676	57.18	24.21	74.0	-16.82	Peak	86.00	150	Horizontal	Pass
6**	17646.676	46.09	24.21	54.0	-7.91	AV	86.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1995.800	50.42	-13.36	74.0	-23.58	Peak	-2.00	150	Vertical	Pass
1**	1995.800	35.76	-13.36	54.0	-18.24	AV	-2.00	150	Vertical	Pass
2	2441.400	94.91	-10.52	74.0	20.91	Peak	136.00	150	Vertical	N/A
2**	2441.400	87.52	-10.52	54.0	33.52	AV	136.00	150	Vertical	N/A
3	3249.200	46.33	-6.85	74.0	-27.67	Peak	165.00	150	Vertical	Pass
3**	3249.200	43.04	-6.85	54.0	-10.96	AV	165.00	150	Vertical	Pass
4	4878.000	50.90	-1.33	74.0	-23.10	Peak	165.00	150	Vertical	Pass
4**	4878.000	42.85	-1.33	54.0	-11.15	AV	165.00	150	Vertical	Pass
5	12464.800	51.21	18.61	74.0	-22.79	Peak	9.00	150	Vertical	Pass
5**	12464.800	37.87	18.61	54.0	-16.13	AV	9.00	150	Vertical	Pass
6	17897.886	58.39	24.54	74.0	-15.61	Peak	288.00	150	Vertical	Pass
6**	17897.886	46.27	24.54	54.0	-7.73	AV	288.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1995.300	46.39	-13.35	74.0	-27.61	Peak	213.00	150	Horizontal	Pass
1**	1995.300	32.02	-13.35	54.0	-21.98	AV	213.00	150	Horizontal	Pass
2	2463.600	102.23	-10.48	74.0	28.23	Peak	48.00	150	Horizontal	N/A
2**	2463.600	95.02	-10.48	54.0	41.02	AV	48.00	150	Horizontal	N/A
3	4924.200	49.40	-1.09	74.0	-24.60	Peak	123.00	150	Horizontal	Pass
3**	4924.200	41.11	-1.09	54.0	-12.89	AV	123.00	150	Horizontal	Pass
4	6977.600	54.49	5.07	74.0	-19.51	Peak	239.00	150	Horizontal	Pass
4**	6977.600	43.75	5.07	54.0	-10.25	AV	239.00	150	Horizontal	Pass
5	11612.075	50.55	20.20	74.0	-23.45	Peak	34.00	150	Horizontal	Pass
5**	11612.075	39.42	20.20	54.0	-14.58	AV	34.00	150	Horizontal	Pass
6	17171.551	56.07	23.51	74.0	-17.93	Peak	92.00	150	Horizontal	Pass
6**	17171.551	43.79	23.51	54.0	-10.21	AV	92.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1995.300	49.59	-13.35	74.0	-24.41	Peak	360.00	150	Vertical	Pass
1**	1995.300	28.26	-13.35	54.0	-25.74	AV	360.00	150	Vertical	Pass
2	2466.700	97.48	-10.62	74.0	23.48	Peak	135.00	150	Vertical	N/A
2**	2466.700	89.31	-10.62	54.0	35.31	AV	135.00	150	Vertical	N/A
3	3282.400	45.62	-6.69	74.0	-28.38	Peak	224.00	150	Vertical	Pass
3**	3282.400	37.82	-6.69	54.0	-16.18	AV	224.00	150	Vertical	Pass
4	4924.600	50.92	-1.09	74.0	-23.08	Peak	329.00	150	Vertical	Pass
4**	4924.600	42.17	-1.09	54.0	-11.83	AV	329.00	150	Vertical	Pass
5	11762.725	50.57	18.83	74.0	-23.43	Peak	21.00	150	Vertical	Pass
5**	11762.725	38.77	18.83	54.0	-15.23	AV	21.00	150	Vertical	Pass
6	17853.786	58.61	24.16	74.0	-15.39	Peak	331.00	150	Vertical	Pass
6**	17853.786	45.39	24.16	54.0	-8.61	AV	331.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1991.600	47.71	-13.42	74.0	-26.29	Peak	36.00	150	Horizontal	Pass
1**	1991.600	29.85	-13.42	54.0	-24.15	AV	36.00	150	Horizontal	Pass
2	2434.200	98.81	-10.50	74.0	24.81	Peak	122.00	150	Horizontal	N/A
2**	2434.200	90.95	-10.50	54.0	36.95	AV	122.00	150	Horizontal	N/A
3	4856.200	49.79	-1.25	74.0	-24.21	Peak	124.00	150	Horizontal	Pass
3**	4856.200	41.50	-1.25	54.0	-12.50	AV	124.00	150	Horizontal	Pass
4	6978.000	53.21	5.03	74.0	-20.79	Peak	-1.00	150	Horizontal	Pass
4**	6978.000	44.22	5.03	54.0	-9.78	AV	-1.00	150	Horizontal	Pass
5	12432.312	50.83	18.83	74.0	-23.17	Peak	-2.00	150	Horizontal	Pass
5**	12432.312	38.89	18.83	54.0	-15.11	AV	-2.00	150	Horizontal	Pass
6	17301.225	57.33	24.58	74.0	-16.67	Peak	167.00	150	Horizontal	Pass
6**	17301.225	45.97	24.58	54.0	-8.03	AV	167.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1991.700	52.70	-13.43	74.0	-21.30	Peak	-2.00	150	Vertical	Pass
1**	1991.700	43.83	-13.43	54.0	-10.17	AV	-2.00	150	Vertical	Pass
2	2434.700	93.77	-10.55	74.0	19.77	Peak	137.00	150	Vertical	N/A
2**	2434.700	86.44	-10.55	54.0	32.44	AV	137.00	150	Vertical	N/A
3	3229.400	45.87	-7.13	74.0	-28.13	Peak	212.00	150	Vertical	Pass
3**	3229.400	44.05	-7.13	54.0	-9.95	AV	212.00	150	Vertical	Pass
4	4835.200	50.11	-1.29	74.0	-23.89	Peak	341.00	150	Vertical	Pass
4**	4835.200	41.09	-1.29	54.0	-12.91	AV	341.00	150	Vertical	Pass
5	12365.325	50.62	19.57	74.0	-23.38	Peak	275.00	150	Vertical	Pass
5**	12365.325	39.37	19.57	54.0	-14.63	AV	275.00	150	Vertical	Pass
6	17824.125	58.58	23.94	74.0	-15.42	Peak	119.00	150	Vertical	Pass
6**	17824.125	44.95	23.94	54.0	-9.05	AV	119.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1992.700	48.59	-13.45	74.0	-25.41	Peak	210.00	150	Horizontal	Pass
1**	1992.700	29.17	-13.45	54.0	-24.83	AV	210.00	150	Horizontal	Pass
2	2447.500	98.35	-10.19	74.0	24.35	Peak	114.00	150	Horizontal	N/A
2**	2447.500	90.97	-10.19	54.0	36.97	AV	114.00	150	Horizontal	N/A
3	4873.800	49.96	-1.53	74.0	-24.04	Peak	125.00	150	Horizontal	Pass
3**	4873.800	40.71	-1.53	54.0	-13.29	AV	125.00	150	Horizontal	Pass
4	6758.600	53.00	4.23	74.0	-21.00	Peak	96.00	150	Horizontal	Pass
4**	6758.600	43.15	4.23	54.0	-10.85	AV	96.00	150	Horizontal	Pass
5	12344.050	50.19	19.75	74.0	-23.81	Peak	261.00	150	Horizontal	Pass
5**	12344.050	39.49	19.75	54.0	-14.51	AV	261.00	150	Horizontal	Pass
6	17655.075	57.11	24.24	74.0	-16.89	Peak	362.00	150	Horizontal	Pass
6**	17655.075	44.97	24.24	54.0	-9.03	AV	362.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1991.700	54.04	-13.43	74.0	-19.96	Peak	360.00	150	Vertical	Pass
1**	1991.700	46.19	-13.43	54.0	-7.81	AV	360.00	150	Vertical	Pass
2	2446.200	93.39	-10.35	74.0	19.39	Peak	123.00	150	Vertical	N/A
2**	2446.200	85.94	-10.35	54.0	31.94	AV	123.00	150	Vertical	N/A
3	3249.200	46.67	-6.85	74.0	-27.33	Peak	227.00	150	Vertical	Pass
3**	3249.200	41.28	-6.85	54.0	-12.72	AV	227.00	150	Vertical	Pass
4	5047.600	49.62	-0.91	74.0	-24.38	Peak	257.00	150	Vertical	Pass
4**	5047.600	40.47	-0.91	54.0	-13.53	AV	257.00	150	Vertical	Pass
5	12412.188	51.52	19.04	74.0	-22.48	Peak	289.00	150	Vertical	Pass
5**	12412.188	38.98	19.04	54.0	-15.02	AV	289.00	150	Vertical	Pass
6	17870.324	57.33	24.34	74.0	-16.67	Peak	110.00	150	Vertical	Pass
6**	17870.324	45.67	24.34	54.0	-8.33	AV	110.00	150	Vertical	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1995.400	50.60	-13.34	74.0	-23.40	Peak	223.00	150	Horizontal	Pass
1**	1995.400	28.94	-13.34	54.0	-25.06	AV	223.00	150	Horizontal	Pass
2	2454.600	100.01	-10.51	74.0	26.01	Peak	47.00	150	Horizontal	N/A
2**	2454.600	93.44	-10.51	54.0	39.44	AV	47.00	150	Horizontal	N/A
3	5028.400	49.36	-0.58	74.0	-24.64	Peak	38.00	150	Horizontal	Pass
3**	5028.400	39.06	-0.58	54.0	-14.94	AV	38.00	150	Horizontal	Pass
4	6973.600	53.37	5.14	74.0	-20.63	Peak	273.00	150	Horizontal	Pass
4**	6973.600	43.33	5.14	54.0	-10.67	AV	273.00	150	Horizontal	Pass
5	12161.487	51.22	20.06	74.0	-22.78	Peak	88.00	150	Horizontal	Pass
5**	12161.487	38.57	20.06	54.0	-15.43	AV	88.00	150	Horizontal	Pass
6	17735.926	57.70	23.99	74.0	-16.30	Peak	251.00	150	Horizontal	Pass
6**	17735.926	44.85	23.99	54.0	-9.15	AV	251.00	150	Horizontal	Pass

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

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1992.200	53.26	-13.44	74.0	-20.74	Peak	-2.00	150	Vertical	Pass
1**	1992.200	40.13	-13.44	54.0	-13.87	AV	-2.00	150	Vertical	Pass
2	2453.200	94.82	-10.46	74.0	20.82	Peak	129.00	150	Vertical	N/A
2**	2453.200	87.44	-10.46	54.0	33.44	AV	129.00	150	Vertical	N/A
3	3269.400	45.49	-5.86	74.0	-28.51	Peak	209.00	150	Vertical	Pass
3**	3269.400	40.65	-5.86	54.0	-13.35	AV	209.00	150	Vertical	Pass
4	4903.400	50.14	-0.86	74.0	-23.86	Peak	336.00	150	Vertical	Pass
4**	4903.400	42.38	-0.86	54.0	-11.62	AV	336.00	150	Vertical	Pass
5	12110.888	50.47	19.53	74.0	-23.53	Peak	287.00	150	Vertical	Pass
5**	12110.888	38.22	19.53	54.0	-15.78	AV	287.00	150	Vertical	Pass
6	17965.613	57.12	24.46	74.0	-16.88	Peak	342.00	150	Vertical	Pass
6**	17965.613	45.51	24.46	54.0	-8.49	AV	342.00	150	Vertical	Pass

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

Test Data

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 C63.10-2013, 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.

AP module

Main Antenna

Test Mode	Test Channel	Frequency (MHz)	Level (dBuV/m)	Factor (dB)	Limit Line (dBuV/m)	Margin (dB)	Remark	Verdict
802.11b	Low	2390.0	58.233	31.47	74	15.767	PEAK	Pass
		2390.0	50.668	31.47	54	3.332	AVERAGE	Pass
	HIGH	2483.5	56.728	31.40	74	17.272	PEAK	Pass
		2483.5	48.888	31.40	54	5.112	AVERAGE	Pass
802.11g	Low	2390.0	62.510	31.47	74	11.490	PEAK	Pass
		2390.0	50.844	31.47	54	3.156	AVERAGE	Pass
	HIGH	2483.5	63.311	31.40	74	10.689	PEAK	Pass
		2483.5	49.685	31.40	54	4.315	AVERAGE	Pass
802.11n20	Low	2390.0	63.451	31.47	74	10.549	PEAK	Pass
		2390.0	50.970	31.47	54	3.030	AVERAGE	Pass
	HIGH	2483.5	62.696	31.40	74	11.304	PEAK	Pass
		2483.5	48.516	31.40	54	5.484	AVERAGE	Pass
802.11n40	Low	2390.0	61.471	31.47	74	12.529	PEAK	Pass
		2390.0	50.520	31.47	54	3.480	AVERAGE	Pass
	HIGH	2483.5	60.581	31.40	74	13.419	PEAK	Pass
		2483.5	48.006	31.40	54	5.994	AVERAGE	Pass

Aux. Antenna

Test Mode	Test Channel	Frequency (MHz)	Level (dBuV/m)	Factor (dB)	Limit Line (dBuV/m)	Margin (dB)	Remark	Verdict
802.11b	Low	2390.0	56.026	31.47	74	17.974	PEAK	Pass
		2390.0	47.480	31.47	54	6.520	AVERAGE	Pass
	HIGH	2483.5	56.411	31.40	74	17.589	PEAK	Pass
		2483.5	48.935	31.40	54	5.065	AVERAGE	Pass
802.11g	Low	2390.0	60.574	31.47	74	13.426	PEAK	Pass
		2390.0	48.971	31.47	54	5.029	AVERAGE	Pass
	HIGH	2483.5	64.063	31.40	74	9.937	PEAK	Pass
		2483.5	49.888	31.40	54	4.112	AVERAGE	Pass
802.11n20	Low	2390.0	60.697	31.47	74	13.303	PEAK	Pass
		2390.0	48.546	31.47	54	5.454	AVERAGE	Pass
	HIGH	2483.5	66.832	31.40	74	7.168	PEAK	Pass
		2483.5	51.445	31.40	54	2.555	AVERAGE	Pass
802.11n40	Low	2390.0	59.212	31.47	74	14.788	PEAK	Pass
		2390.0	48.537	31.47	54	5.463	AVERAGE	Pass
	HIGH	2483.5	63.532	31.40	74	10.468	PEAK	Pass
		2483.5	50.475	31.40	54	3.525	AVERAGE	Pass

MIMO

Test Mode	Test Channel	Frequency (MHz)	Level (dBuV/m)	Factor (dB)	Limit Line (dBuV/m)	Margin (dB)	Remark	Verdict
802.11b	Low	2390.0	N/A	N/A	74	74.000	PEAK	Pass
		2390.0	N/A	N/A	54	N/A	AVERAGE	Pass
	HIGH	2483.5	N/A	N/A	74	74.000	PEAK	Pass
		2483.5	N/A	N/A	54	N/A	AVERAGE	Pass
802.11g	Low	2390.0	N/A	N/A	74	74.000	PEAK	Pass
		2390.0	N/A	N/A	54	N/A	AVERAGE	Pass
	HIGH	2483.5	N/A	N/A	74	74.000	PEAK	Pass
		2483.5	N/A	N/A	54	N/A	AVERAGE	Pass
802.11n20	Low	2390.0	63.638	31.47	74	10.362	PEAK	Pass
		2390.0	50.233	31.47	54	3.767	AVERAGE	Pass
	HIGH	2483.5	62.631	31.40	74	11.369	PEAK	Pass
		2483.5	50.161	31.40	54	3.839	AVERAGE	Pass
802.11n40	Low	2390.0	62.979	31.47	74	11.021	PEAK	Pass
		2390.0	50.773	31.47	54	3.227	AVERAGE	Pass
	HIGH	2483.5	63.093	31.40	74	10.907	PEAK	Pass
		2483.5	50.611	31.40	54	3.389	AVERAGE	Pass

ESP module

Test Mode	Test Channel	Frequency (MHz)	Level (dBuV/m)	Factor (dB)	Limit Line (dBuV/m)	Margin (dB)	Remark	Verdict
802.11b	Low	2390.0	53.537	31.47	74	20.463	PEAK	Pass
		2390.0	N/A	N/A	54	N/A	AVERAGE	Pass
	HIGH	2483.5	53.552	31.40	74	20.448	PEAK	Pass
		2483.5	N/A	N/A	54	N/A	AVERAGE	Pass
802.11g	Low	2390.0	55.464	31.47	74	18.536	PEAK	Pass
		2390.0	45.747	31.47	54	8.253	AVERAGE	Pass
	HIGH	2483.5	55.296	31.40	74	18.704	PEAK	Pass
		2483.5	44.641	31.40	54	9.359	AVERAGE	Pass
802.11n20	Low	2390.0	58.032	31.47	74	15.968	PEAK	Pass
		2390.0	46.098	31.47	54	7.902	AVERAGE	Pass
	HIGH	2483.5	56.195	31.40	74	17.805	PEAK	Pass
		2483.5	44.988	31.40	54	9.012	AVERAGE	Pass
802.11n40	Low	2390.0	60.349	31.47	74	13.651	PEAK	Pass
		2390.0	49.556	31.47	54	4.444	AVERAGE	Pass
	HIGH	2483.5	59.931	31.40	74	14.069	PEAK	Pass
		2483.5	48.459	31.40	54	5.541	AVERAGE	Pass

Test plots

AP module

Main Antenna

802.11b Mode：

LOW CHANNEL, PEAK

LOW CHANNEL, AV1

LOW CHANNEL, AV2

HIGH CHANNEL, PEAK

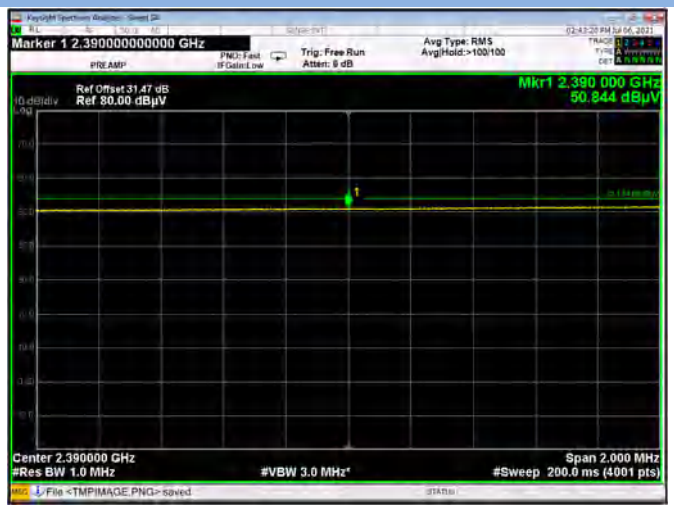
HIGH CHANNEL, AV1

HIGH CHANNEL, AV2

802.11g Mode：

LOW CHANNEL, PEAK

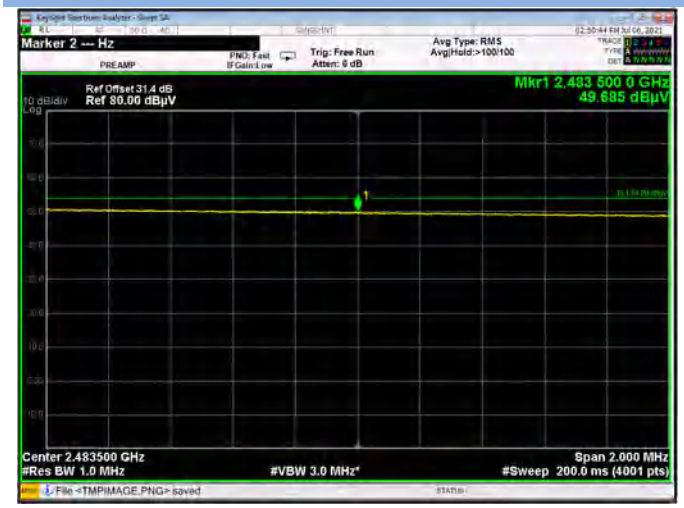
LOW CHANNEL, AV



HIGH CHANNEL, PEAK

HIGH CHANNEL, AV

HIGH CHANNEL, AV1



HIGH CHANNEL, AV2

802.11n-20 MHz Mode：

LOW CHANNEL, PEAK

LOW CHANNEL, AV1

LOW CHANNEL, AV2

HIGH CHANNEL, PEAK

HIGH CHANNEL, AV1

HIGH CHANNEL, AV2

802.11n-40 MHz Mode：

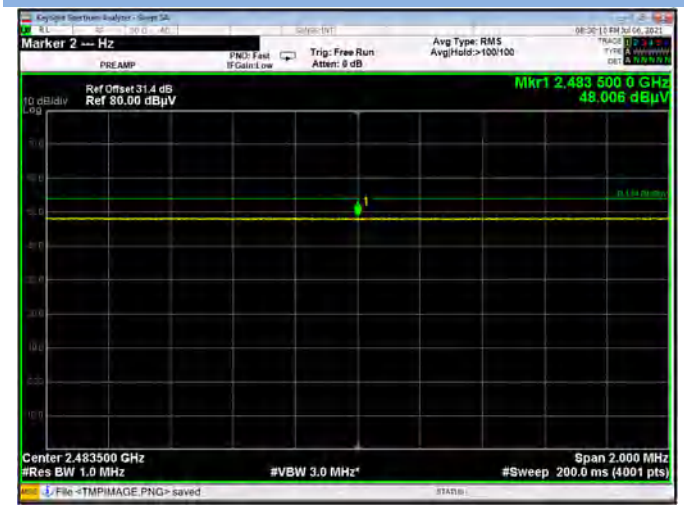
LOW CHANNEL, PEAK

LOW CHANNEL, AV

HIGH CHANNEL, PEAK

HIGH CHANNEL, AV

HIGH CHANNEL, AV1

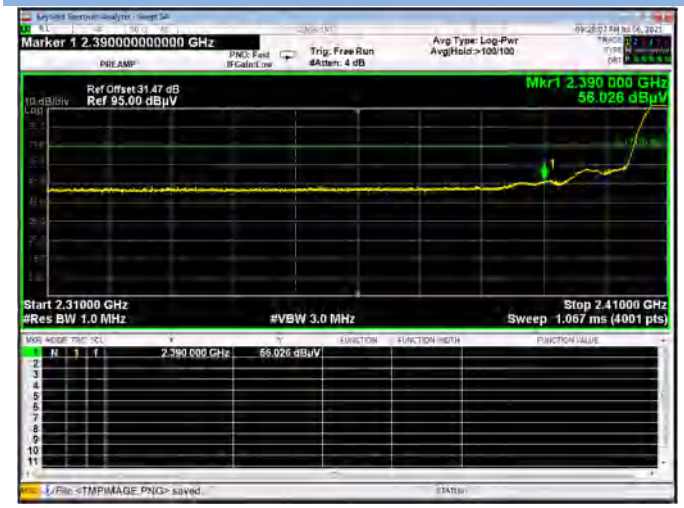


HIGH CHANNEL, AV2

Aux. Antenna

802.11b Mode：

LOW CHANNEL, PEAK



LOW CHANNEL, AV

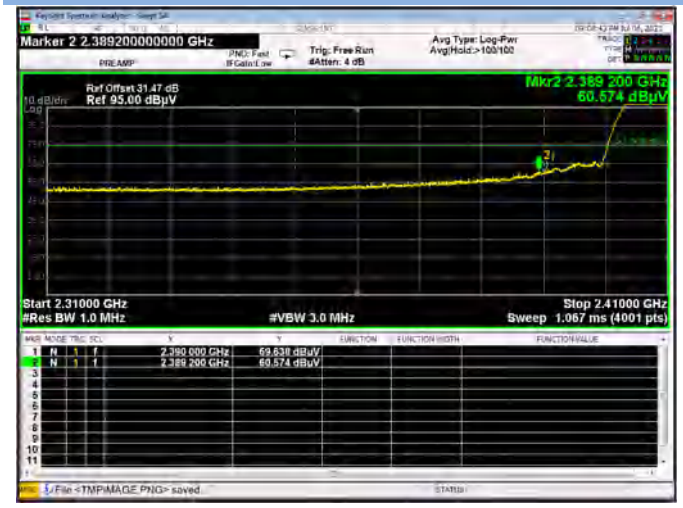
HIGH CHANNEL, PEAK

HIGH CHANNEL, AV1

HIGH CHANNEL, AV2

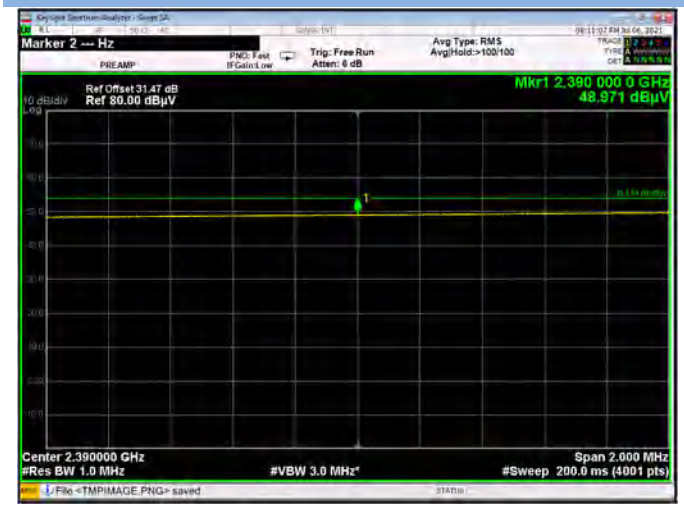
802.11g Mode：

LOW CHANNEL, PEAK



LOW CHANNEL, AV

LOW CHANNEL, AV1



LOW CHANNEL, AV2

HIGH CHANNEL, PEAK

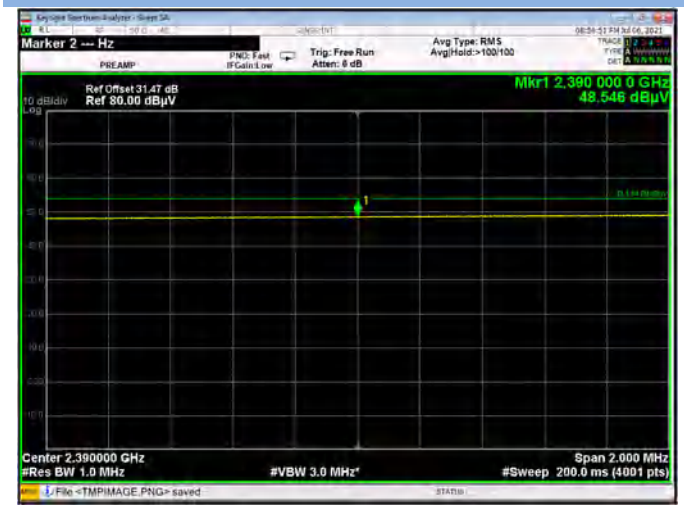
HIGH CHANNEL, AV1

HIGH CHANNEL, AV2

802.11n-20 MHz Mode：

LOW CHANNEL, PEAK

LOW CHANNEL, AV1



LOW CHANNEL, AV2

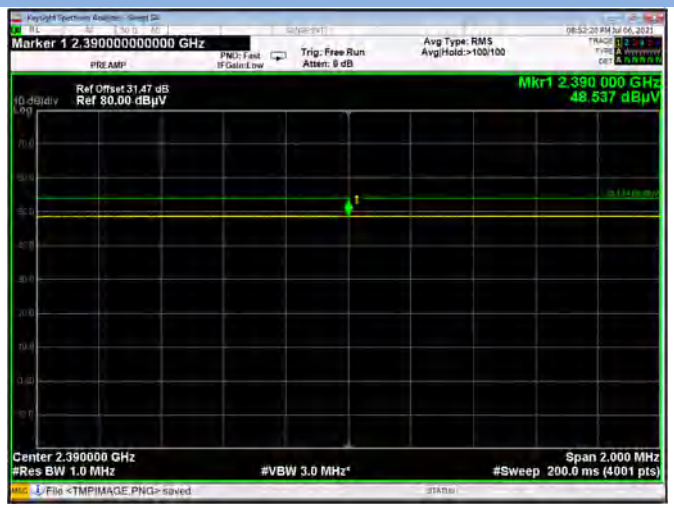
HIGH CHANNEL, PEAK

HIGH CHANNEL, AV

802.11n-40 MHz Mode：

LOW CHANNEL, PEAK

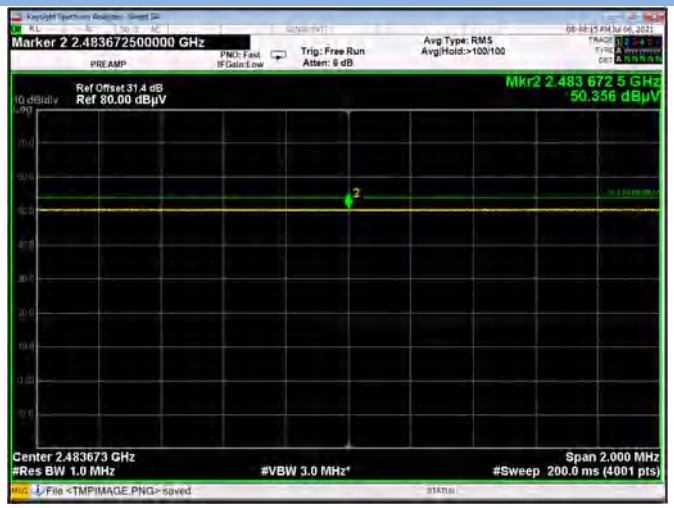
LOW CHANNEL, AV



HIGH CHANNEL, PEAK

HIGH CHANNEL, AV1

HIGH CHANNEL, AV2



MIMO

802.11n-20 MHz Mode：

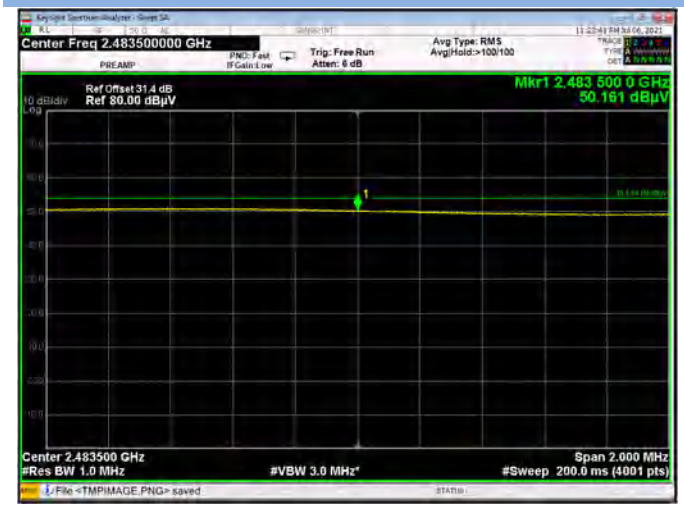
LOW CHANNEL, PEAK

LOW CHANNEL, AV1

LOW CHANNEL, AV2

HIGH CHANNEL, PEAK

HIGH CHANNEL, AV1

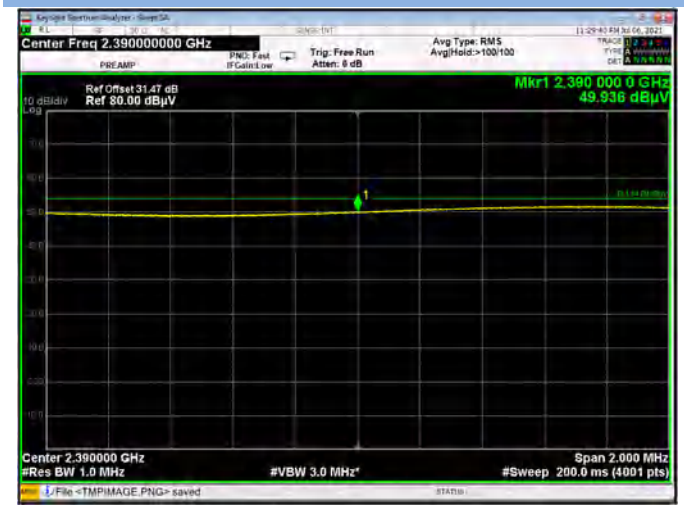


HIGH CHANNEL, AV2

802.11n-40 MHz Mode：

LOW CHANNEL, PEAK

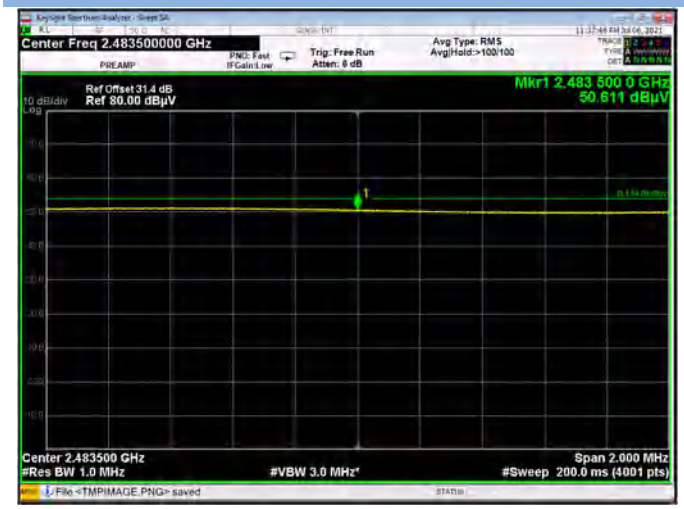
LOW CHANNEL, AV1



LOW CHANNEL, AV2

HIGH CHANNEL, PEAK

HIGH CHANNEL, AV1

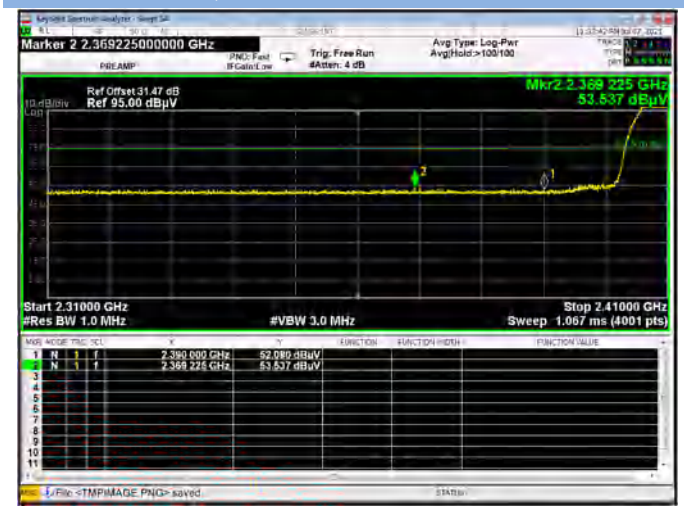


HIGH CHANNEL, AV2

ESP module

802.11b Mode：

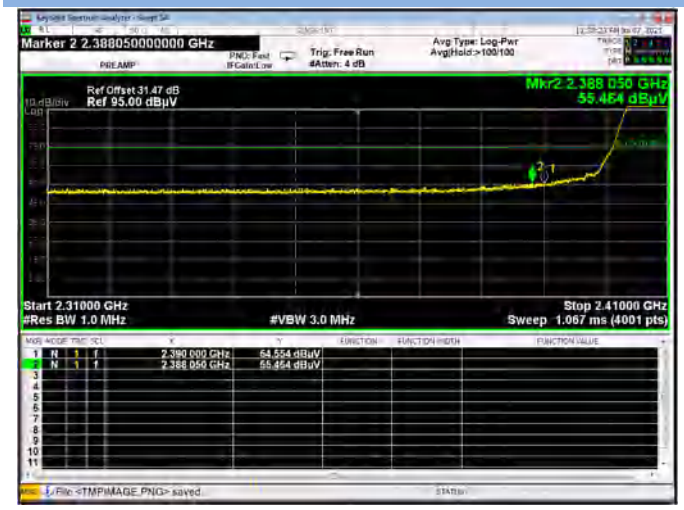
LOW CHANNEL, PEAK



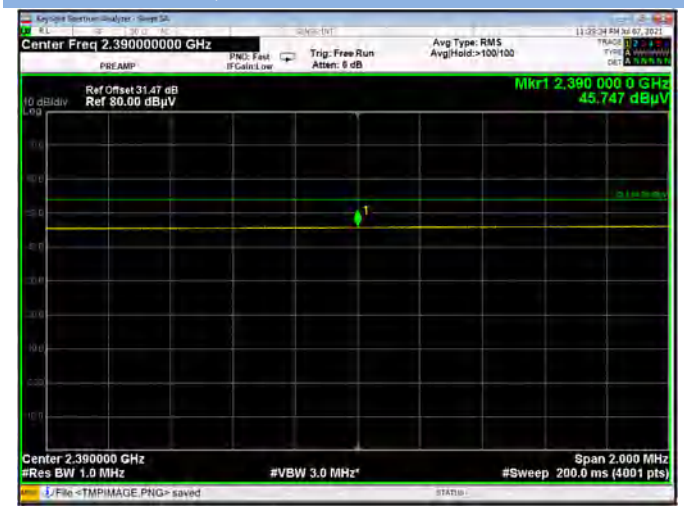
HIGH CHANNEL, PEAK

802.11g Mode：

LOW CHANNEL, PEAK



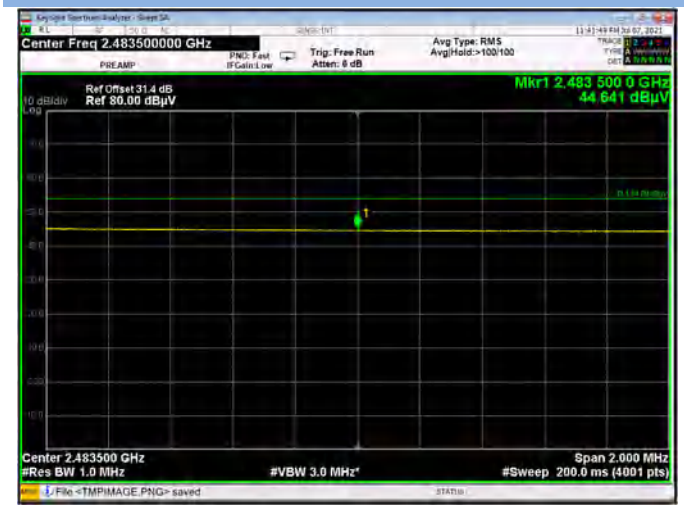
LOW CHANNEL, AV1



LOW CHANNEL, AV2

HIGH CHANNEL, PEAK

HIGH CHANNEL, AV1

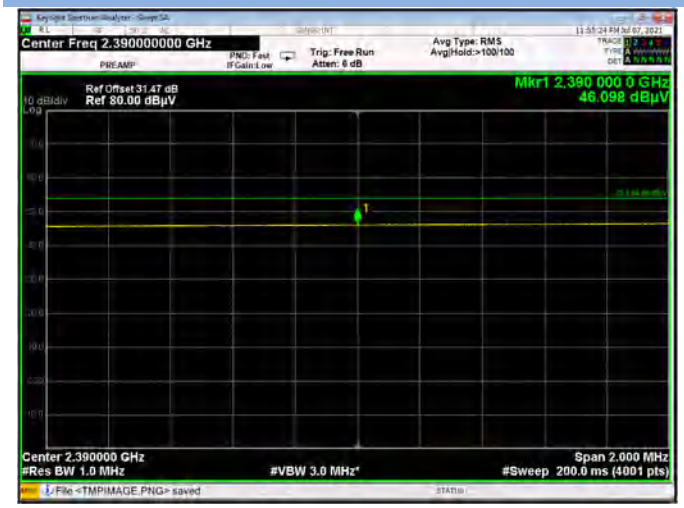


HIGH CHANNEL, AV2

802.11n-20 MHz Mode：

LOW CHANNEL, PEAK

LOW CHANNEL, AV1



LOW CHANNEL, AV2

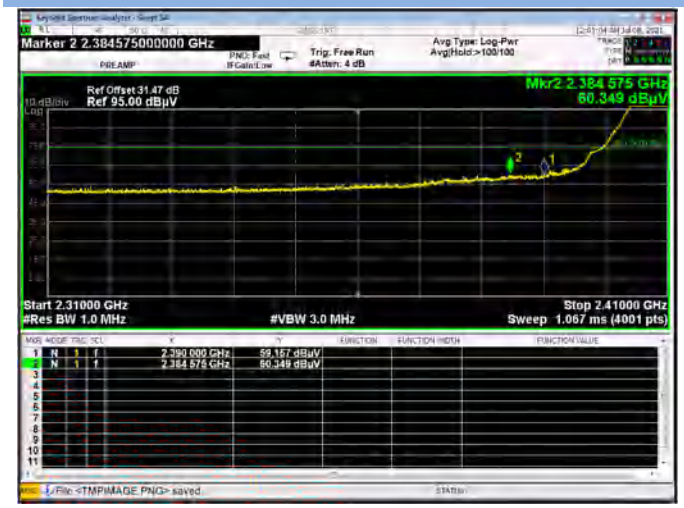
HIGH CHANNEL, PEAK

HIGH CHANNEL, AV1

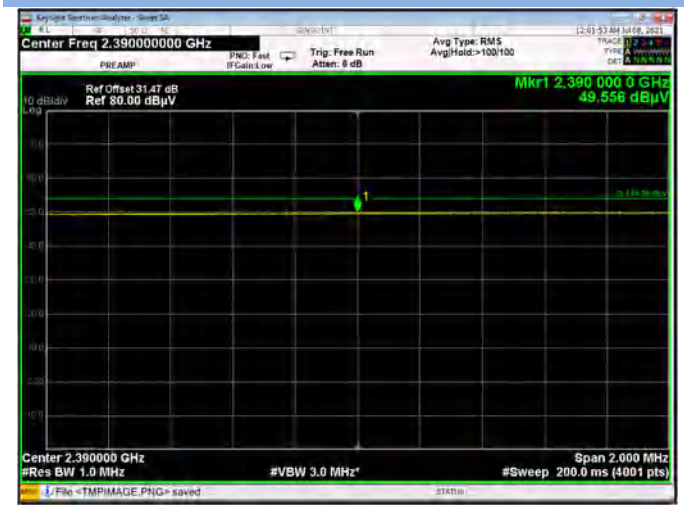
HIGH CHANNEL, AV2

802.11n-40 MHz Mode：

LOW CHANNEL, PEAK



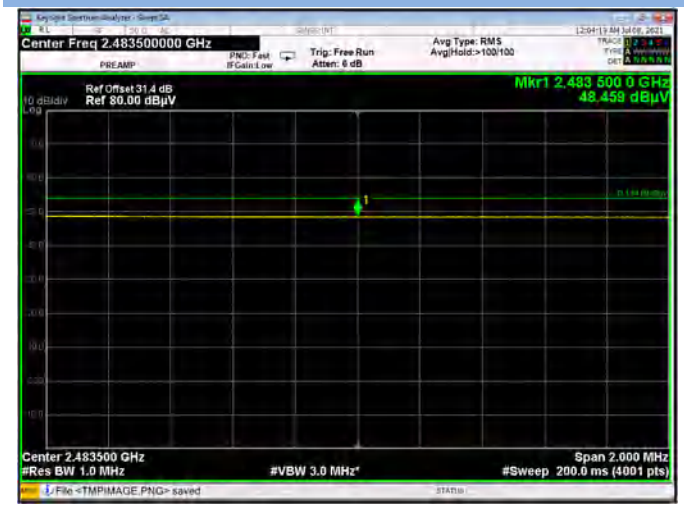
LOW CHANNEL, AV1



LOW CHANNEL, AV2

HIGH CHANNEL, PEAK

HIGH CHANNEL, AV1



HIGH CHANNEL, AV2

A.8 Power Spectral Density (PSD)

Test Data

AP module

Main Antenna

802.11b Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-16.93	8
Middle	-16.95	8
High	-17.38	8

802.11g Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-23.02	8
Middle	-23.19	8
High	-23.85	8

802.11n-20 MHz Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-24.34	8
Middle	-23.62	8
High	-24.83	8

802.11n-40 MHz Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-29.09	8
Middle	-28.57	8
High	-28.70	8

Aux. Antenna

802.11b Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-17.44	8
Middle	-17.43	8
High	-17.15	8

802.11g Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-20.67	8
Middle	-21.77	8
High	-21.62	8

802.11n-20 MHz Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-21.81	8
Middle	-22.57	8
High	-22.43	8

802.11n-40 MHz Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-27.35	8
Middle	-26.77	8
High	-26.65	8

MIMO-Main Antenna

802.11n-20 MHz Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-22.92	8
Middle	-23.35	8
High	-23.05	8

802.11n-40 MHz Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-26.52	8
Middle	-26.57	8
High	-26.63	8

MIMO-Aux. Antenna

802.11n-20 MHz Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-25.48	8
Middle	-24.40	8
High	-24.01	8

802.11n-40 MHz Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-31.41	8
Middle	-27.75	8
High	-27.52	8

ESP module

802.11b Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-18.18	8
Middle	-17.87	8
High	-17.79	8

802.11g Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-20.73	8
Middle	-20.60	8
High	-20.19	8

802.11n-20 MHz Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-20.91	8
Middle	-20.83	8
High	-20.54	8

802.11n-40 MHz Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-23.76	8
Middle	-23.87	8
High	-23.76	8

Test plots

AP module

Main Antenna

802.11b LOW CHANNEL

802.11b MIDDLE CHANNEL

802.11b HIGH CHANNEL

802.11g LOW CHANNEL

802.11g MIDDLE CHANNEL

802.11g HIGH CHANNEL

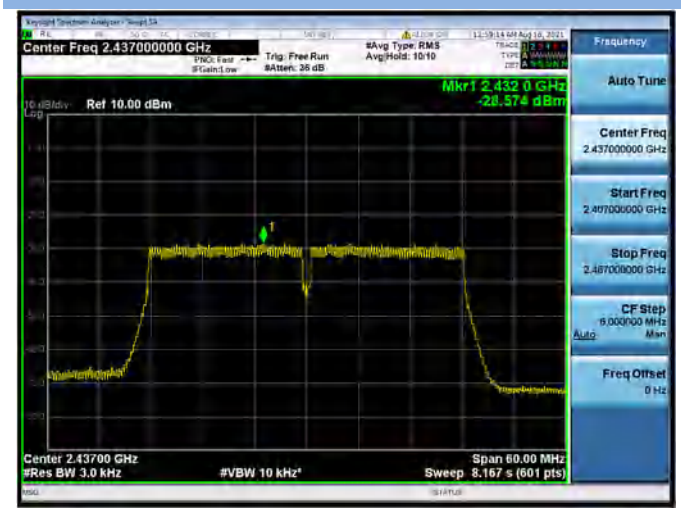
802.11n-20 MHz LOW CHANNEL

802.11 n-20 MHz MIDDLE CHANNEL

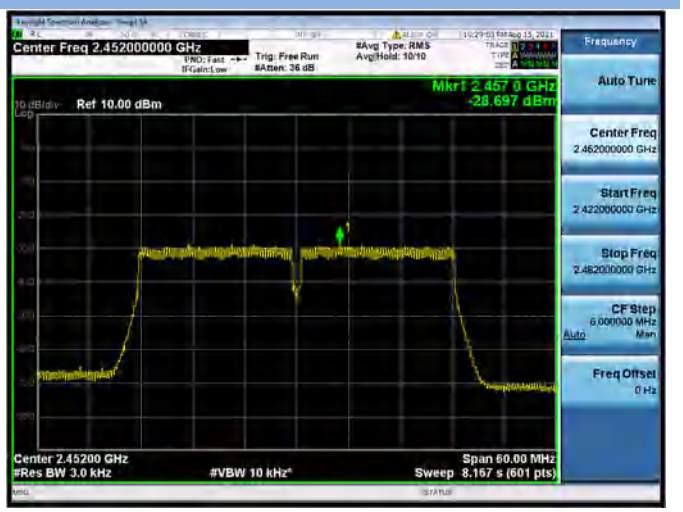
802.11n-20 MHz HIGH CHANNEL

802.11n-40 MHz LOW CHANNEL

802.11n-40 MHz MIDDLE CHANNEL



802.11n-40 MHz HIGH CHANNEL



Aux. Antenna

802.11b LOW CHANNEL

802.11b MIDDLE CHANNEL

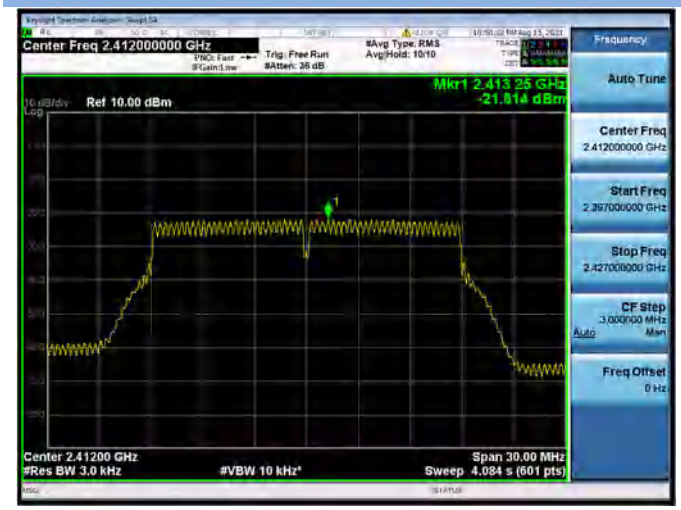
802.11b HIGH CHANNEL

802.11g LOW CHANNEL

802.11g MIDDLE CHANNEL

802.11g HIGH CHANNEL

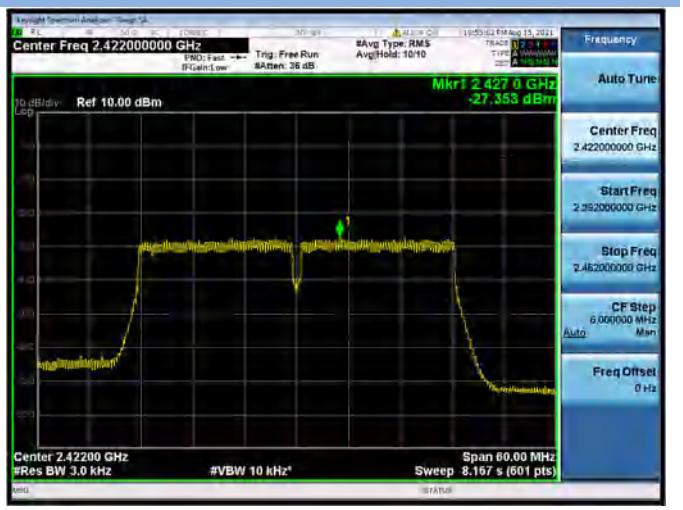
802.11n-20 MHz LOW CHANNEL



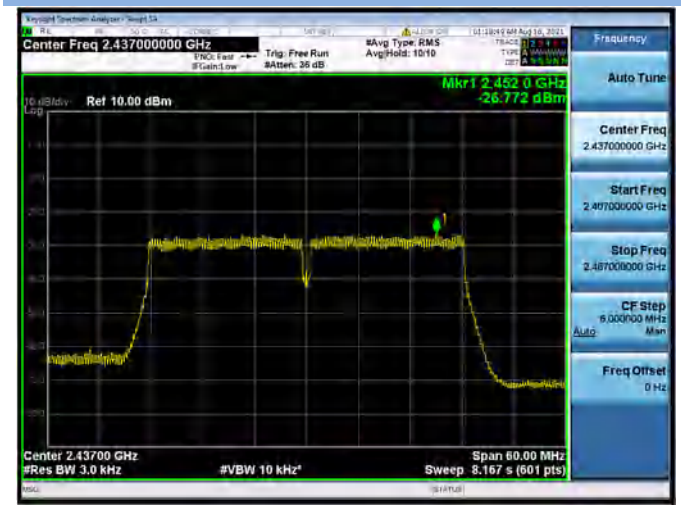
802.11 n-20 MHz MIDDLE CHANNEL

802.11n-20 MHz HIGH CHANNEL

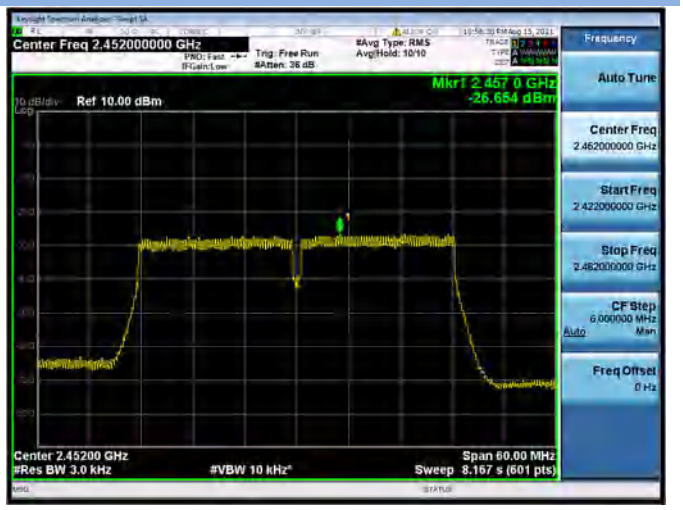
802.11n-40 MHz LOW CHANNEL



802.11n-40 MHz MIDDLE CHANNEL

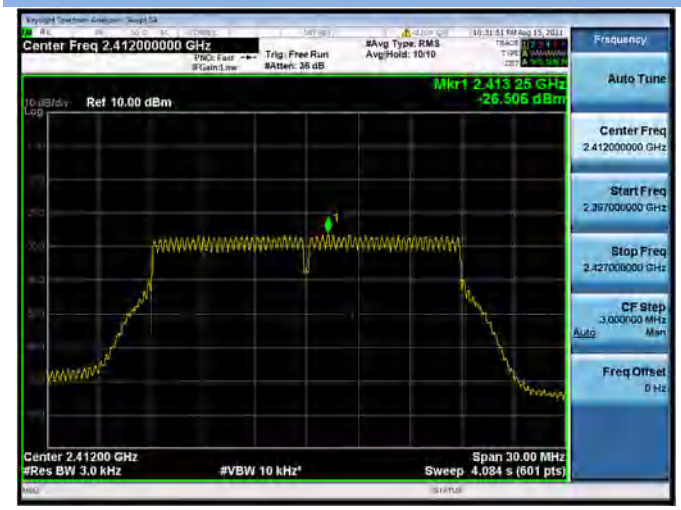


802.11n-40 MHz HIGH CHANNEL



MIMO-Main Antenna

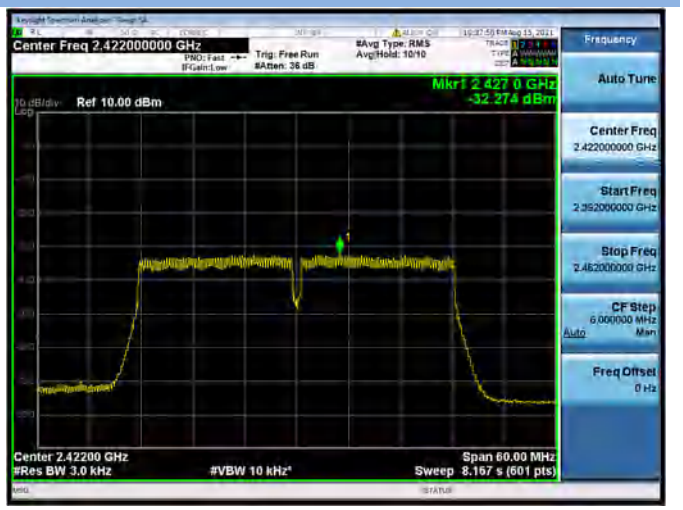
802.11n-20 MHz LOW CHANNEL



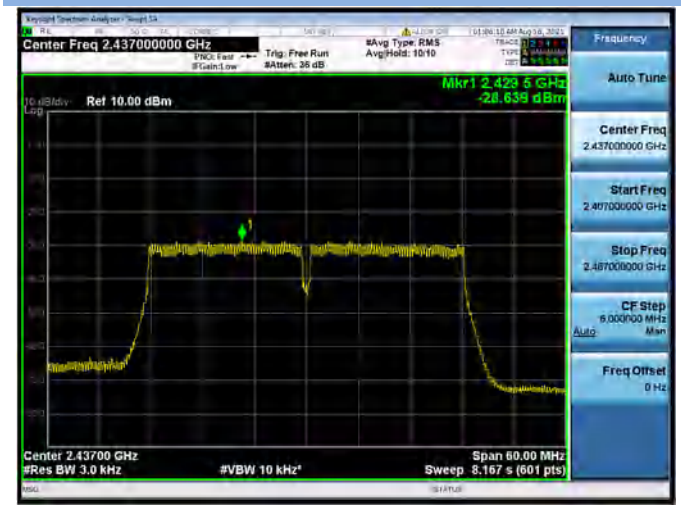
802.11 n-20 MHz MIDDLE CHANNEL

802.11n-20 MHz HIGH CHANNEL

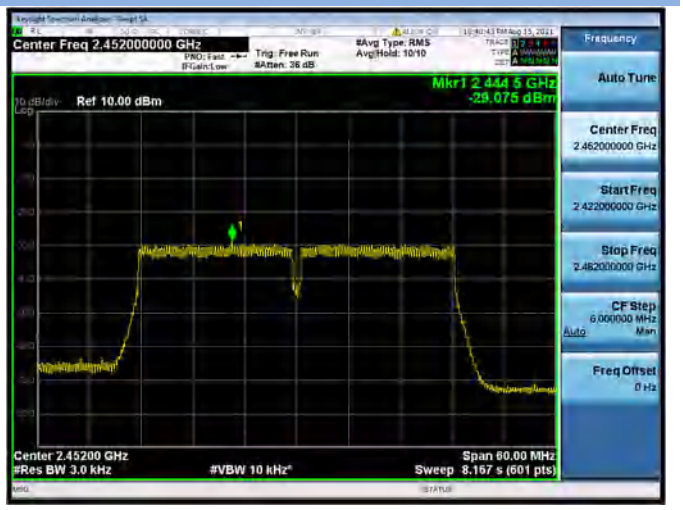
802.11n-40 MHz LOW CHANNEL



802.11n-40 MHz MIDDLE CHANNEL

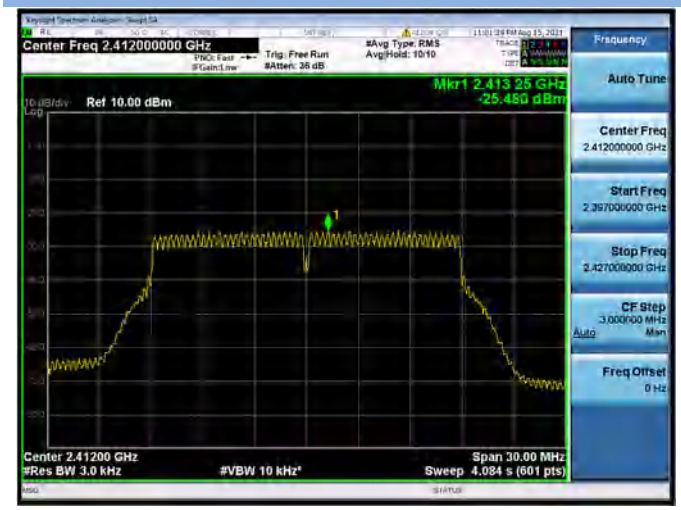


802.11n-40 MHz HIGH CHANNEL



MIMO-Main Antenna

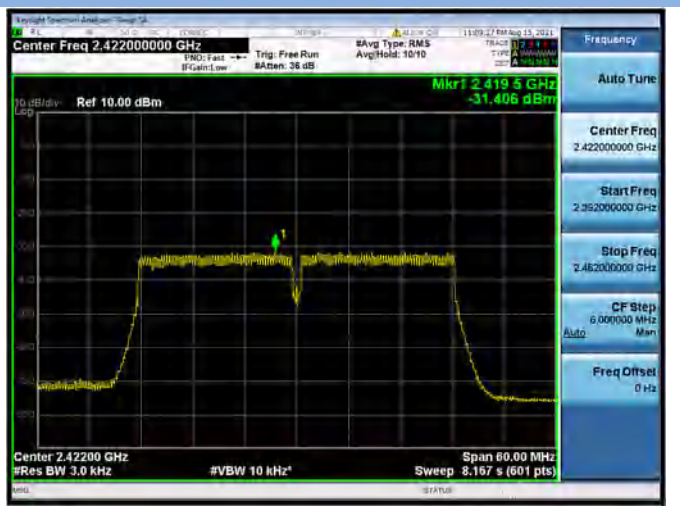
802.11n-20 MHz LOW CHANNEL



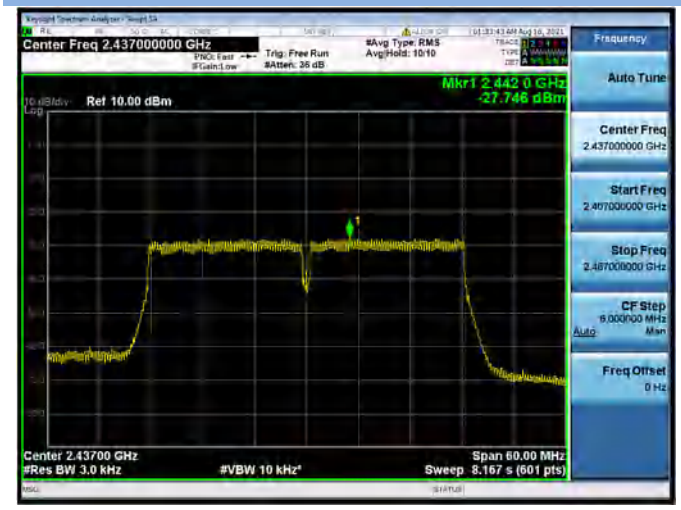
802.11 n-20 MHz MIDDLE CHANNEL

802.11n-20 MHz HIGH CHANNEL

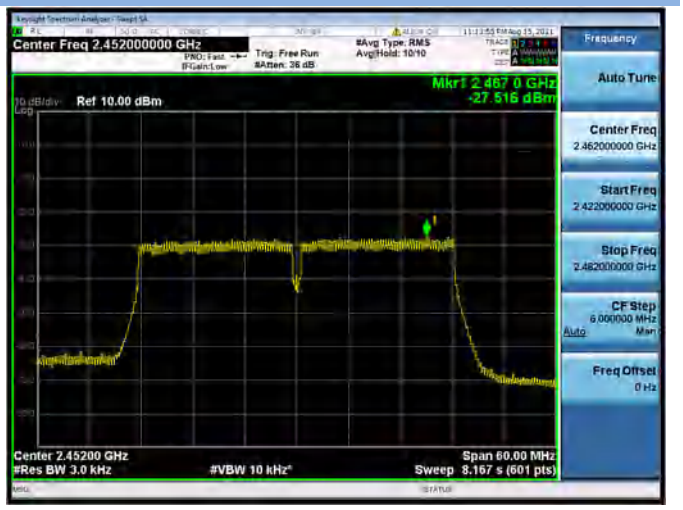
802.11n-40 MHz LOW CHANNEL



802.11n-40 MHz MIDDLE CHANNEL

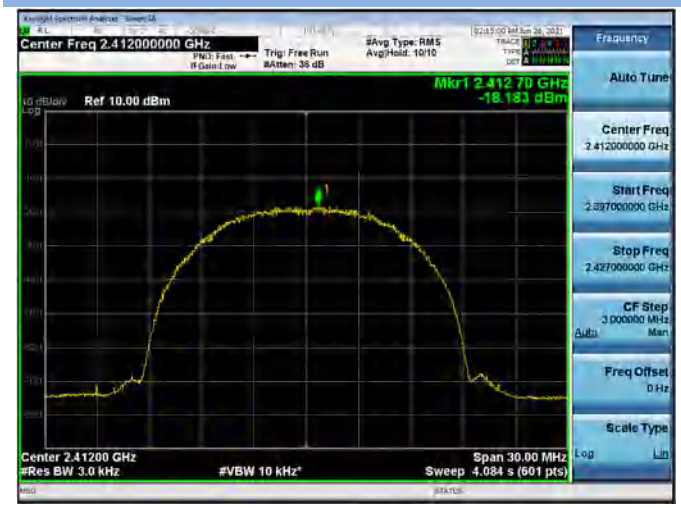


802.11n-40 MHz HIGH CHANNEL

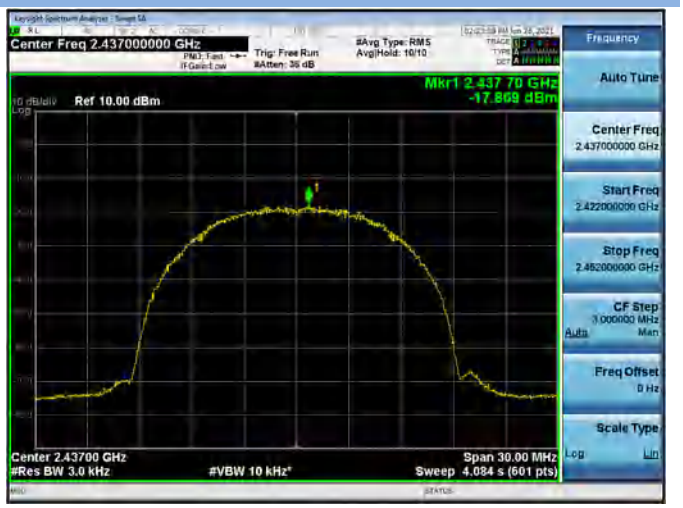


ESP module

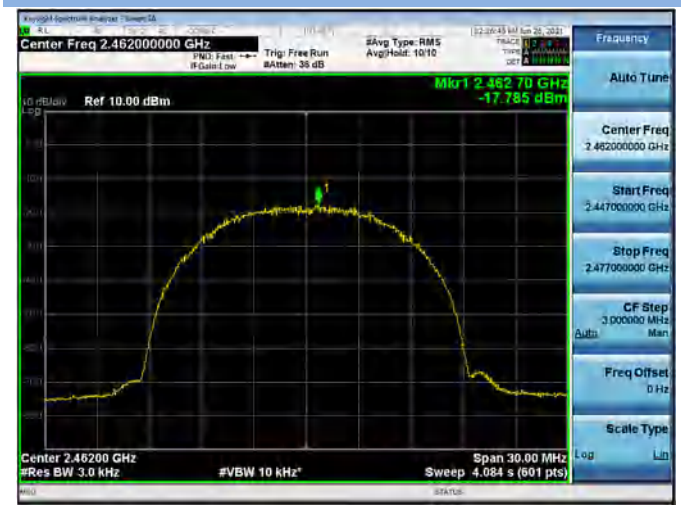
802.11b LOW CHANNEL



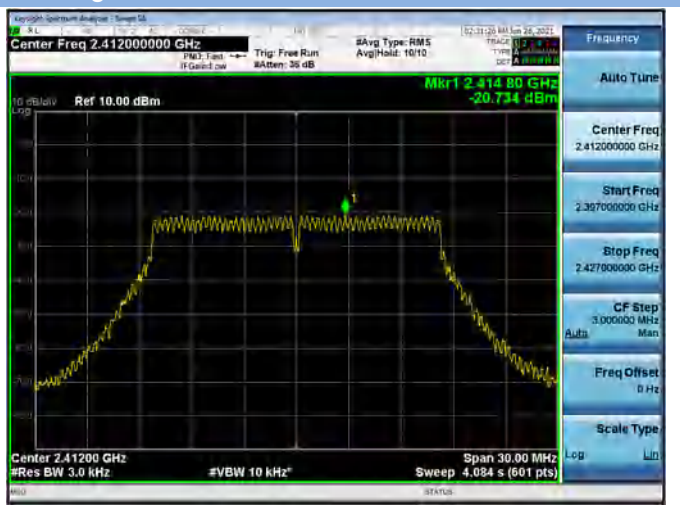
802.11b MIDDLE CHANNEL



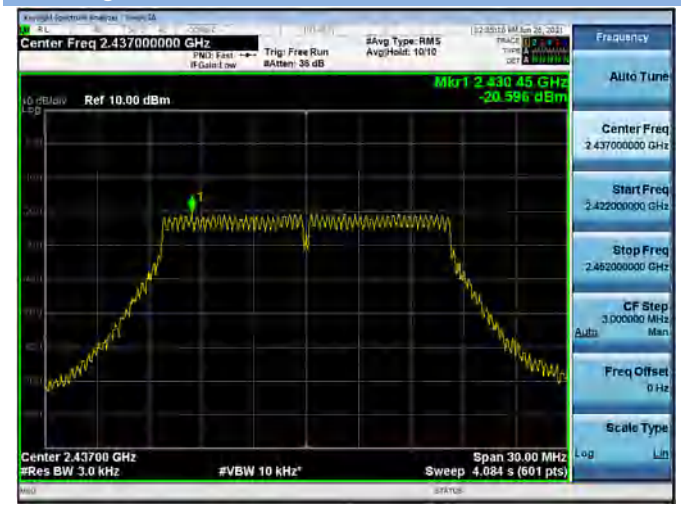
802.11b HIGH CHANNEL



802.11g LOW CHANNEL

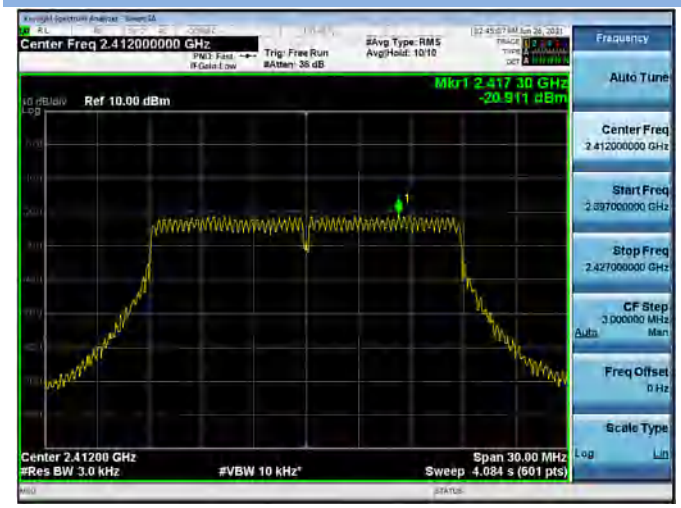


802.11g MIDDLE CHANNEL



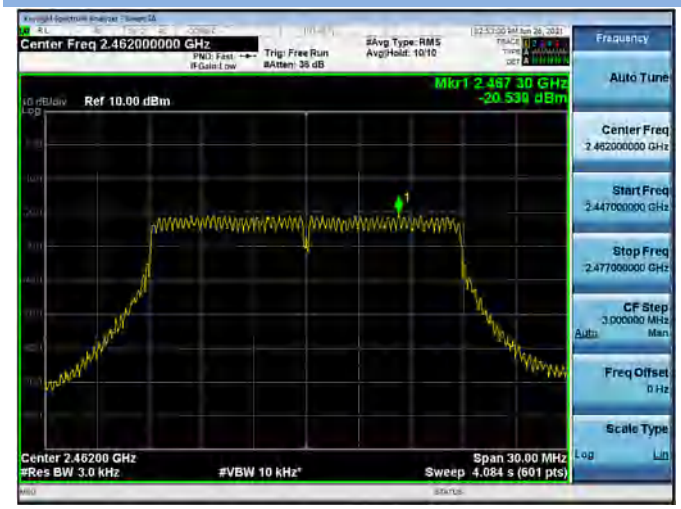
802.11g HIGH CHANNEL

802.11n-20 MHz LOW CHANNEL



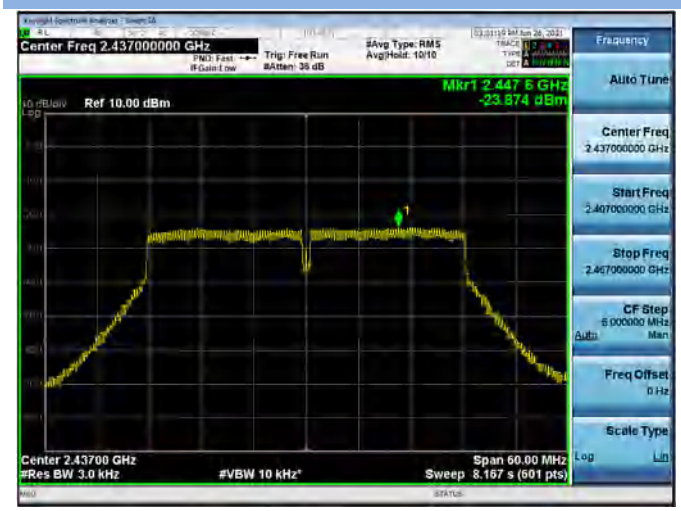
802.11 n-20 MHz MIDDLE CHANNEL

802.11n-20 MHz HIGH CHANNEL



802.11n-40 MHz LOW CHANNEL

802.11n-40 MHz MIDDLE CHANNEL



802.11n-40 MHz HIGH CHANNEL

ANNEX B TEST SETUP PHOTOS

Please refer the document “BL-SZ2160056-AR.pdf”.

ANNEX C EUT EXTERNAL PHOTOS

Please refer the document “BL-SZ2160056-AW.pdf”.

ANNEX D EUT INTERNAL PHOTOS

Please refer the document “BL-SZ2160056-AI.pdf”.

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