

FCC/ISED
RF
TEST REPORT

ISSUED BY
Shenzhen BALUN Technology Co., Ltd.



FOR
HUAWEI MateBook

ISSUED TO
Huawei Technologies Co., Ltd.

Administration Building, Headquarters of Huawei Technologies Co., Ltd.,
Bantian, Longgang District, Shenzhen, 518129, China

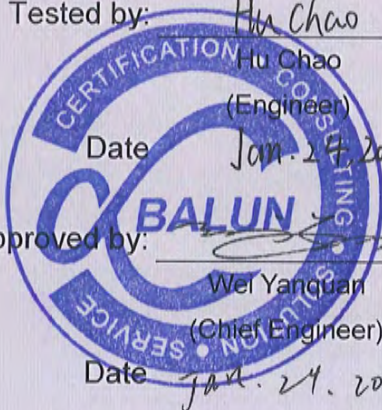


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Date: Jan. 24, 2019



Report No.: BL-SZ18C0049-603
EUT Name: HUAWEI MateBook
Model Name: KLV-W29 (refer section 2.4)
Brand Name: HUAWEI
Test Standard: 47 CFR Part 15 Subpart C
RSS-Gen (Issue 5, April 2018)
RSS-247 (Issue 2, February 2017)
FCC ID: QISKLV-WX9
ISED Number: 6369A-KLVWX9

Test Conclusion: Pass
Test Date: Nov. 17, 2018 ~ Jan. 16, 2019
Date of Issue: Jan. 24, 2019

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Revision History

<u>Version</u>	<u>Issue Date</u>	<u>Revisions Content</u>
<u>Rev. 01</u>	<u>Jan. 22, 2019</u>	<u>Initial Issue</u>
<u>Rev. 02</u>	<u>Jan. 24, 2019</u>	<u>Updated the test date</u>

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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	<p>The laboratory has been listed by Industry Canada to perform electromagnetic emission measurements. The recognition numbers of test site are 11524A-1.</p> <p>The laboratory is a testing organization accredited by FCC as a accredited testing laboratory. The designation number is CN1196.</p> <p>The laboratory is a testing organization accredited by American Association for Laboratory Accreditation(A2LA) according to ISO/IEC 17025.The accreditation certificate is 4344.01.</p> <p>The laboratory is a testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L6791.</p>
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°C to 25°C
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 v6.2.
- (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.

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	Huawei Technologies Co., Ltd.
Address	Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, China

2.2 Manufacturer Information

Manufacturer	Huawei Technologies Co., Ltd.
Address	Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, China

2.3 Factory Information

Factory	N/A
Address	N/A

2.4 General Description for Equipment under Test (EUT)

EUT Name	HUAWEI MateBook
Model Name Under Test	KLV-W29
Series Model Name	KLV-W09, KLV-W19, KLV-WXXXXX (The "X" in model name can be 0 to 9, A to Z, a to z, "-" or blank, only differences are model names for trading purpose)
Description of Model name differentiation	Refer section 2.5
Hardware Version	NB8510_PCB_MB_V5 HF
Software Version	1.5.0.10(C001)
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A

2.5 Differences Description

	KLV-W29 (with GPU version)	KLV-W19 (with GPU version)	KLV-W19 (without GPU version)	KLV-W09 (without GPU version)
PCB layout	The same	The same	The same	The same
Main board	The same	The same	Delete GPU chip and related components	Delete GPU chip and related components
Frequency bands	The same, Support Wi-Fi 2.4G&5G, Support BT	The same, Support Wi-Fi 2.4G&5G, Support BT	The same, Support Wi-Fi 2.4G&5G, Support BT	The same, Support Wi-Fi 2.4G&5G, Support BT
BT/Wi-Fi antenna	The same	The same	The same	The same
Appearance	The same	The same	The same	The same
Dimension	The same	The same	The same	The same
CPU	Intel core i7, Support Max 4.6GHz	Intel core i5, Support Max 3.9GHz	Intel core i5, Support Max 3.9GHz	Intel core i3, Support Max 3.9GHz
GPU	Support	Support	Not support	Not support
Memory	16G/8G	8G	8G	4G
SSD	512G/256G	512G/256G	512G/256G	256G
Rear camera	Not support	Not support	Not support	Not support
Front camera	The same	The same	The same	The same
Adapter	The same	The same	The same	The same
Battery	The same	The same	The same	The same
Accessories	Docking Station	Docking Station	Docking Station	Docking Station
Note 1: The models KLV-W29, KLV-W19 and KLV-W09 are identical each other, except model name and main board and memory and CPU and GPU and SSD.				
Note 2: Tested on model KLV-W29 to represent the other model and configuration in this report.				

2.6 Ancillary Equipment

Ancillary Equipment 1	Rechargeable Li-ion Polymer Battery	
	Brand Name	HUAWEI
	Model No.	HB4593R1ECW
	Serial No.	N/A
	Capacity	7410 mAh
	Rated Voltage	7.6 V
	Limit Charge Voltage	8.7 V
Ancillary Equipment 2	Adapter 1	
	Brand Name	HUAWEI
	Model No.	HW-200325BP0 (UK Plug)
	Serial No.	C978Y9J7F00037
	Rated Input	100-240 V~, 1.8 A, 50/60 Hz
	Rated Output	5 V= 2 A / 9 V= 2 A / 12 V= 2 A /

		15 V= 3 A / 20 V= 3.25 A
	Manufacturer	Huawei Technologies Co.,Ltd.
Ancillary Equipment 3	Adapter 2	
	Brand Name	HUAWEI
	Model No.	HW-200325UP0 (US Plug)
	Serial No.	C976Y1J8P00105
	Rated Input	100-240 V~, 1.8 A, 50/60 Hz
	Rated Output	5 V= 2 A / 9 V= 2 A / 12 V= 2 A / 15 V= 3 A / 20 V= 3.25 A
	Manufacturer	Huawei Technologies Co.,Ltd.
Ancillary Equipment 4	Adapter 3	
	Brand Name	HUAWEI
	Model No.	HW-200325EP0 (EU Plug)
	Serial No.	C974Y1J8W01169
	Rated Input	100-240 V~, 1.8 A, 50/60 Hz
	Rated Output	5 V= 2 A / 9 V= 2 A / 12 V= 2 A / 15 V= 3 A / 20 V= 3.25 A
	Manufacturer	Huawei Technologies Co.,Ltd.
Ancillary Equipment 5	Adapter 4	
	Brand Name	HUAWEI
	Model No.	HW-200325CP0 (GB Plug)
	Serial No.	C973Y1J7800783
	Rated Input	100-240 V~, 1.8 A, 50/60 Hz
	Rated Output	5 V= 2 A / 9 V= 2 A / 12 V= 2 A / 15 V= 3 A / 20 V= 3.25 A
	Manufacturer	Huawei Technologies Co.,Ltd.
Ancillary Equipment 6	Adapter 5	
	Brand Name	HUAWEI
	Model No.	HW-200325AP0 (AU Plug)
	Serial No.	C973Y1J7800783
	Rated Input	100-240 V~, 1.8 A, 50/60 Hz
	Rated Output	5 V= 2 A / 9 V= 2 A / 12 V= 2 A / 15 V= 3 A / 20 V= 3.25 A
	Manufacturer	Huawei Technologies Co.,Ltd.
Ancillary Equipment 7	Docking Station	
	Model No.	AD11
	Serial No.	N/A
	Manufacturer	Huawei Technologies Co.,Ltd.
Ancillary Equipment 8	USB-C to USB-A	
Ancillary Equipment 9	USB Cable	
	Length (Approx.)	1.8 m
Note: All adapter models only with different plug for marketing purpose. We select HW-200325UP0 (US Plug) during testing.		

2.7 Technical Information

Network and Wireless connectivity	Bluetooth 5.0 (BR+EDR+BLE) 2.4G WIFI 802.11b, 802.11g, 802.11n(HT20/40) 5G WIFI 802.11a, 802.11n(HT20/40), 802.11ac(VHT20/40/80/160)
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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 $f_c = 2412 \text{ MHz} + (N-1)*5 \text{ MHz}$, 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 $f_c = 2412 \text{ MHz} + (N-1)*5 \text{ MHz}$, where - f_c = "Operating Frequency" in MHz, - N = "Channel Number" with the range from 3 to 9.	
Modulation Type	DSSS, OFDM	
Product Type	<input type="checkbox"/> Mobile <input checked="" type="checkbox"/> Portable <input type="checkbox"/> Fix Location	
Antenna System (eg., MIMO, Smart Antenna)	Cyclic Delay Diversity (CDD) for 802.11n Basic methodology with N_{ANT} transmit antennas, each with the same directional gain G_{ANT} dBi for 802.11b/g	
Categorization as Correlated or Completely Uncorrelated	Categorization as Correlated	
Antenna Type	Antenna 0 (ANT 0)	PIFA Antenna
	Antenna 1 (ANT 1)	
Antenna Gain	Antenna 0 (ANT 0)	1 dBi
	Antenna 1 (ANT 1)	
Total directional gain for 802.11n	For power spectral density(PSD) measurements	4 dBi Formulas: Directional gain = $G_{ANT} + \text{Array Gain}$, $\text{Array Gain} = 10 \log(N_{ANT}/N_{SS}) \text{ dB}$. $N_{SS} = 1$, G_{ANT} set equal to the gain of the antenna having the highest gain.
	For power measurements	1 dBi Formulas: Directional gain = $G_{ANT} + \text{Array Gain}$, $\text{Array Gain} = 0$, G_{ANT} set equal to the gain of the antenna having the highest gain.
Total directional gain for 802.11b/g	For power spectral density(PSD) measurements	0 dBi Formulas: Directional gain = $10 \log[(10G_1 / 20 + 10G_2 / 20 + \dots + 10G_N / 20)^2 / N_{ANT}] \text{ dBi}$
	For power measurements	0 dBi Formulas: Directional gain = $10 \log[(10G_1 / 20 + 10G_2 / 20 + \dots + 10G_N / 20)^2 / N_{ANT}] \text{ dBi}$
About the Product	Only the WIFI 802.11b, 802.11g and 802.11n (HT20/40) was tested in this report.	

Mode	Antenna		
	Antenna 0	Antenna 1	Antenna 0 + Antenna1
802.11b	√	√	--
802.11g	√	√	--
802.11n20	√	√	√
802.11n40	√	√	√

Note: The Antenna 0 is the Aux antenna (DRTU Chain A). The Antenna 1 is the Main antenna (DRTU Chain B).

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
	QPSK	13/19.5
	16QAM	26/39
	64QAM	52/58.5/65
OFDM (802.11n-40MHz)	BPSK	13.5
	QPSK	27/40.5
	16QAM	54/81/108
	64QAM	121.5/135

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.

802.11b: 1Mbps

802.11g: 6Mbps

802.11n20 and 802. 11n40 (SISO): HT0

802.11n40 and 802. 11n40 (MIMO): HT8

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.

2.8 Additional Instructions

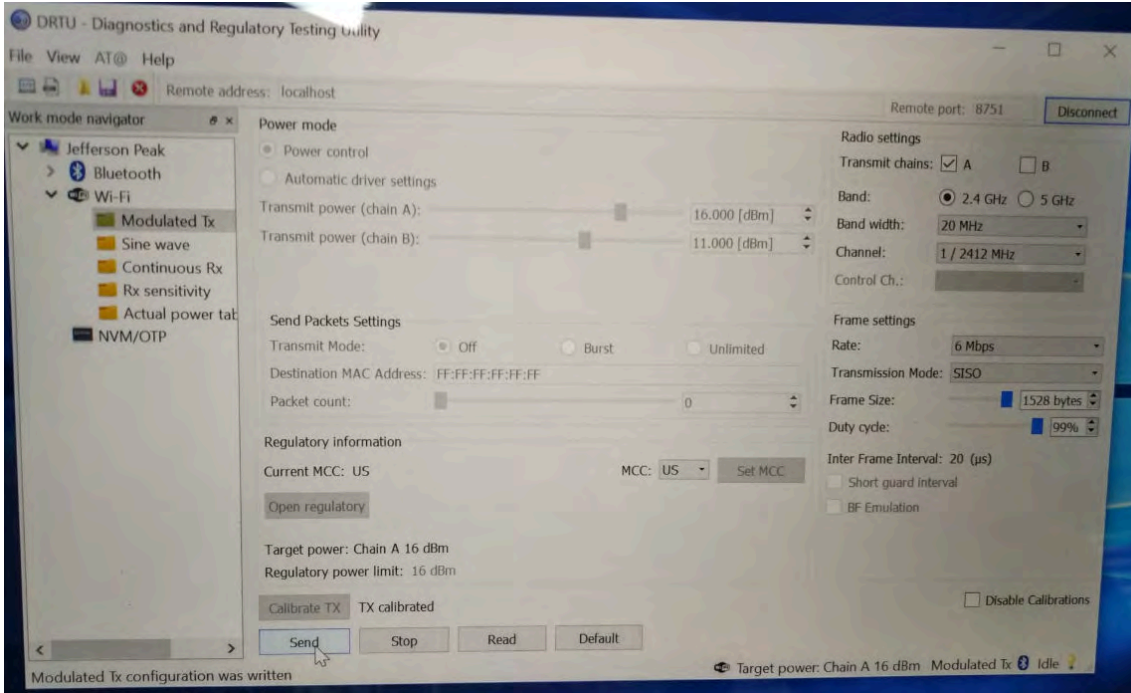
EUT Software Settings:

Mode	<input checked="" type="checkbox"/> Special software is used. The software provided by client to enable the EUT under transmission condition continuously at specific channel frequencies individually.
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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	Test software is set by engineering instruction "DRTU V11.1812.0-07288" in engineering mode			
Mode	Channel	Soft Set		
		SISO ANT0	SISO ANT1	MIMO ANT0+1
802.11 b	1	15.50	15.50	--
	2	15.50	16.50	--
	6	15.50	16.50	--
	11	15.50	16.50	--
802.11 g	1	15.50	15.50	--
	2	15.50	16.50	--
	6	15.50	16.50	--
	11	15.50	16.50	--
802.11 n20	1	15.50	15.50	13.00
	2	15.50	16.50	13.50
	6	15.50	16.50	13.50
	11	15.50	16.50	13.50
802.11 n40	3	13.50	13.50	10.50
	6	13.50	13.50	10.50
	9	13.50	13.50	10.50

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 D01v05	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, Apr. 2018)	General Requirements for Compliance of Radio Apparatus
5	RSS-247 (Issue 2, February 2017)	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; 15.247(b)	RSS-247, 5.4 (6)	N/A	Pass ^{Note 1}
2	Output Power	15.247(b)	RSS-247, 5.4 (4)	ANNEX A.1	Pass
3	6dB Bandwidth	15.247(a)	RSS-GEN, 6.6; RSS-247, 5.2 (1)	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)	15.209; 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 (2)	ANNEX A.8	Pass
10	Receiver Spurious Emissions	N/A	RSS-Gen, 7.1.2	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°C to +25°C
Working Voltage of the EUT	NV (Normal Voltage)	7.6 V

4.2 Test Equipment List

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Spectrum Analyzer	ROHDE&SCHWARZ	FSV-30	103118	2018.06.15	2019.06.14
Switch Unit with OSP-B157	ROHDE&SCHWARZ	OSP120	101270	2018.06.15	2019.06.14
EMI Receiver	KEYSIGHT	N9038A	MY53220118	2018.11.07	2019.11.06
EMI Receiver	ROHDE&SCHWARZ	ESRP	101036	2018.06.13	2019.06.12
LISN	SCHWARZBECK	NSLK 8127	8127-687	2018.06.13	2019.06.12
Power Splitter	KMW	DCPD-LDC	1305003215	--	--
Power Sensor	ROHDE&SCHWARZ	NRP-Z21	103971	2018.06.15	2019.06.14
Attenuator (20 dB)	KMW	ZA-S1-201	110617091	--	--
Attenuator (6 dB)	KMW	ZA-S1-61	1305003189	--	--
DC Power Supply	ROHDE&SCHWARZ	HMP2020	018141664	2018.06.14	2019.06.13
Temperature Chamber	ANGELANTIONI SCIENCE	NTH64-40A	1310	2018.06.26	2019.06.25
Test Antenna- Loop(9 kHz-30 MHz)	SCHWARZBECK	FMZB 1519	1519-037	2017.11.09	2019.11.08
Test Antenna- Bi-Log(30 MHz-3 GHz)	SCHWARZBECK	VULB 9163	9163-624	2017.07.22	2019.07.21
Test Antenna- Horn(1-18 GHz)	SCHWARZBECK	BBHA 9120D	9120D-1148	2018.07.11	2020.07.10
Test Antenna- Horn(15-26.5 GHz)	SCHWARZBECK	BBHA 9170	9170-305	2018.06.21	2019.06.20
Test Antenna- Horn (18-40 GHz)	A-INFO	LB- 180400KF	J211060273	2017.01.06	2019.01.05
Anechoic Chamber	RAINFORD	9m*6m*6m	N/A	2017.02.21	2019.02.20
Anechoic Chamber	EMC Electronic Co., Ltd	20.10*11.60 *7.35m	N/A	2017.08.08	2019.08.07
Signal Generator	ROHDE&SCHWARZ	SMB100A	177746	2018.06.15	2019.06.14
Power Amplifier	OPHIR RF	5225F	1037	2018.02.16	2019.02.15
Power Amplifier	OPHIR RF	5273F	1016	2018.02.16	2019.02.15
Directional Coupler	Werlantone	C5982-10	109275	N/A	N/A
Directional Coupler	Werlantone	CHP-273E	S00801z-01	N/A	N/A
Amplifier	COM-MW	KL_LNA_18	N/A	2018.06.26	2019.06.25

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
		-40G-01			
RF Cable 1	ROHDE&SCHWARZ	JUNFLON	APR0914004	2018.07.10	2019.10.09
RF Cable 2	Huber&suhner	RG_400_/U	N/A	2018.07.10	2019.10.09
RF Cable 3	Huber&suhner	RG_400_/U	N/A	2018.07.10	2019.10.09
RF Cable 4	Huber&suhner	SX_04172_ B-60	N/A	2018.07.10	2019.10.09
RF Cable 5	COM-MW	RFJA360- 2.92mm- J/J3M	N/A	2018.07.10	2019.10.09

Note: The calibration period on the Cable is three month.

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	$\pm 4\%$
RF output power, conducted	± 1.4 dB
Power Spectral Density, conducted	± 2.5 dB
Unwanted Emissions, conducted	± 2.8 dB
All emissions, radiated	± 5.4 dB
Temperature	$\pm 1^\circ\text{C}$
Humidity	$\pm 4\%$

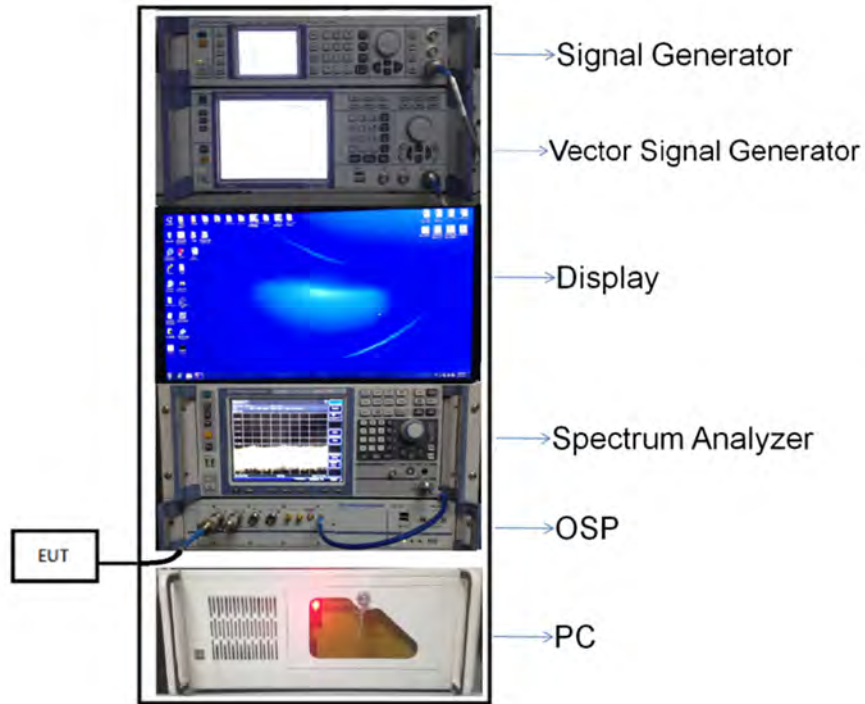
4.4 Description of Test Setup

4.4.1 For Antenna Port Test

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

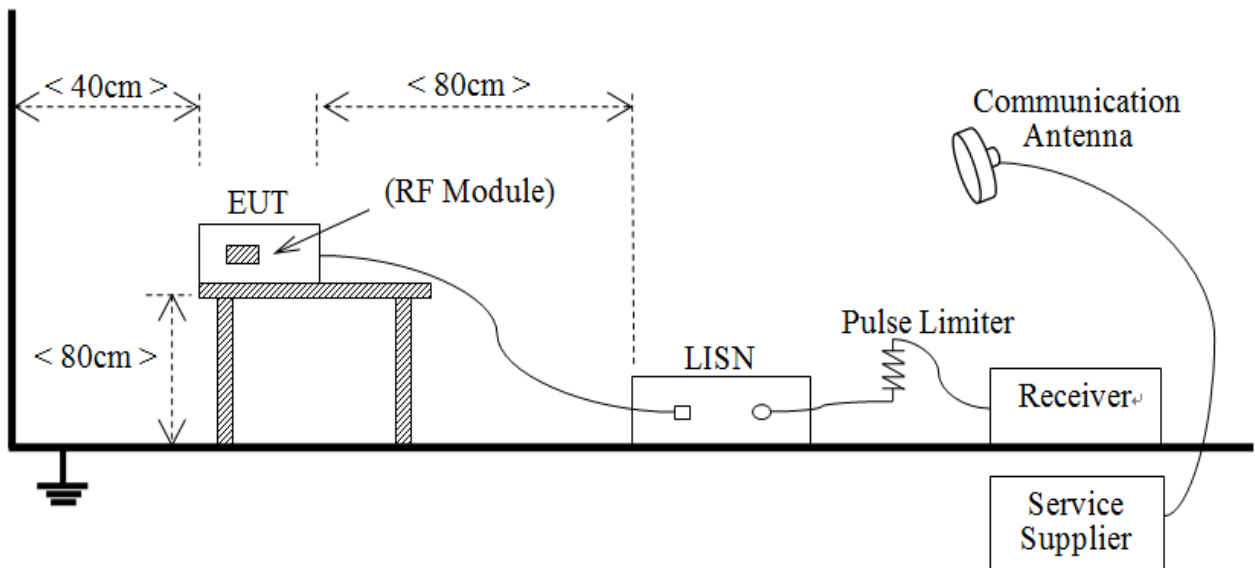
For example: the measurement value is 10 dBm and the cable 0.5dBm used, then the final result of EUT:

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



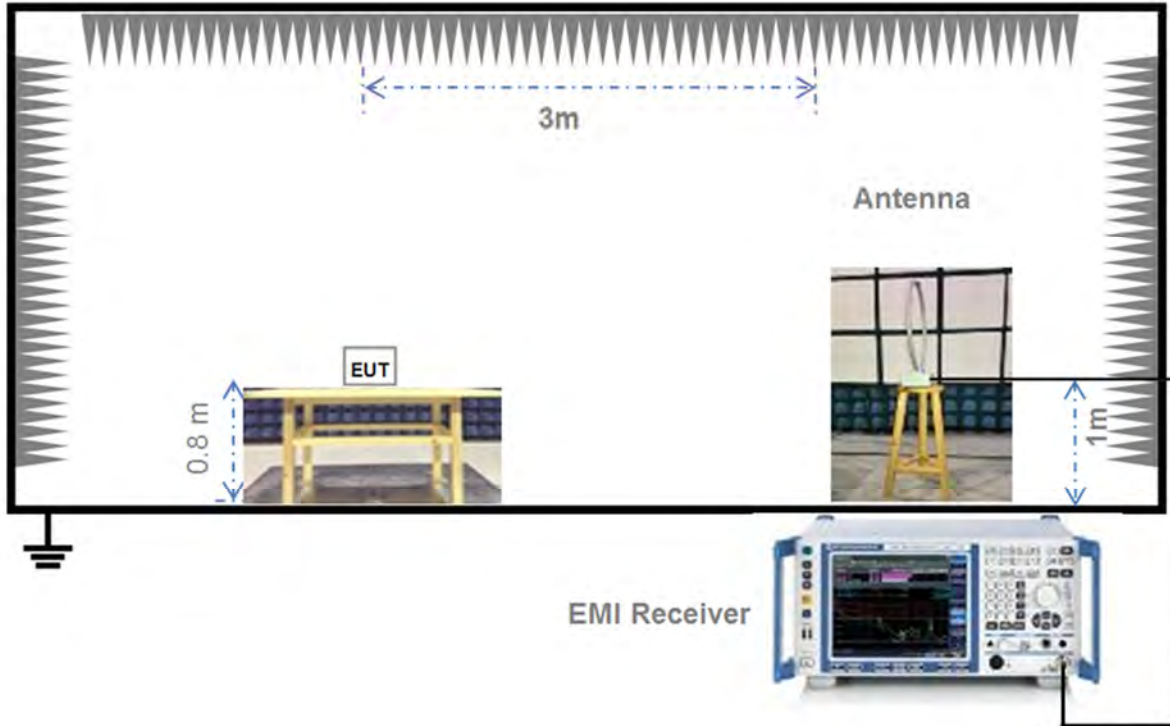
(Diagram 1)

4.4.2 For AC Power Supply Port Test



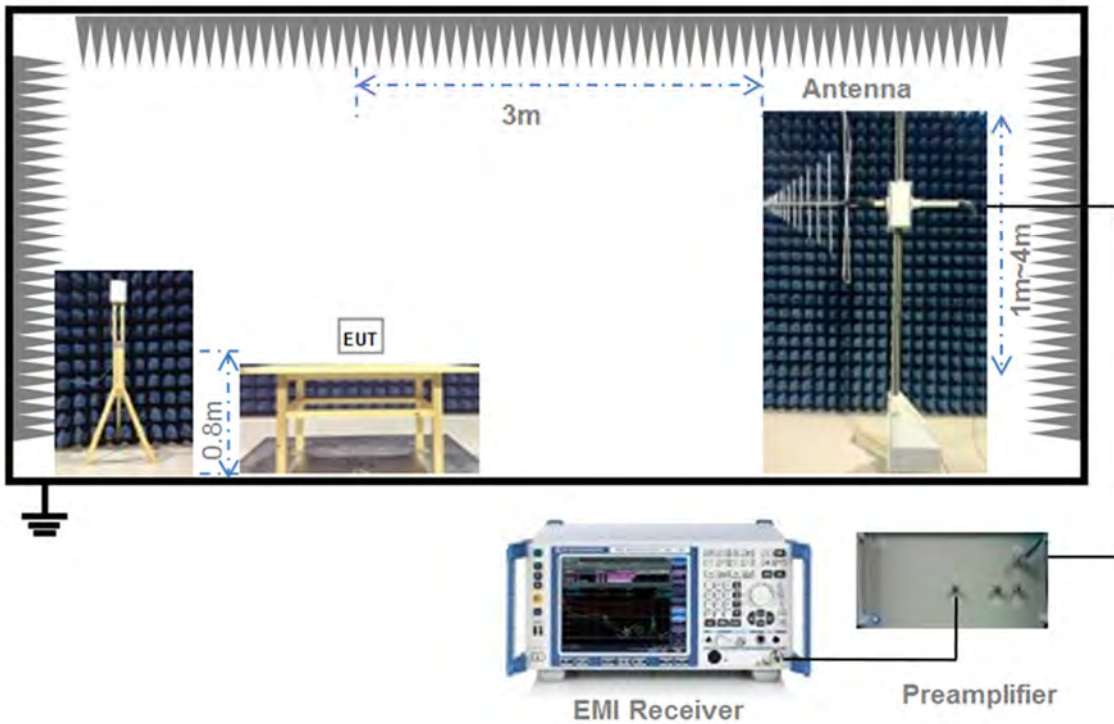
(Diagram 2)

4.4.3 For Radiated Test (Below 30 MHz)



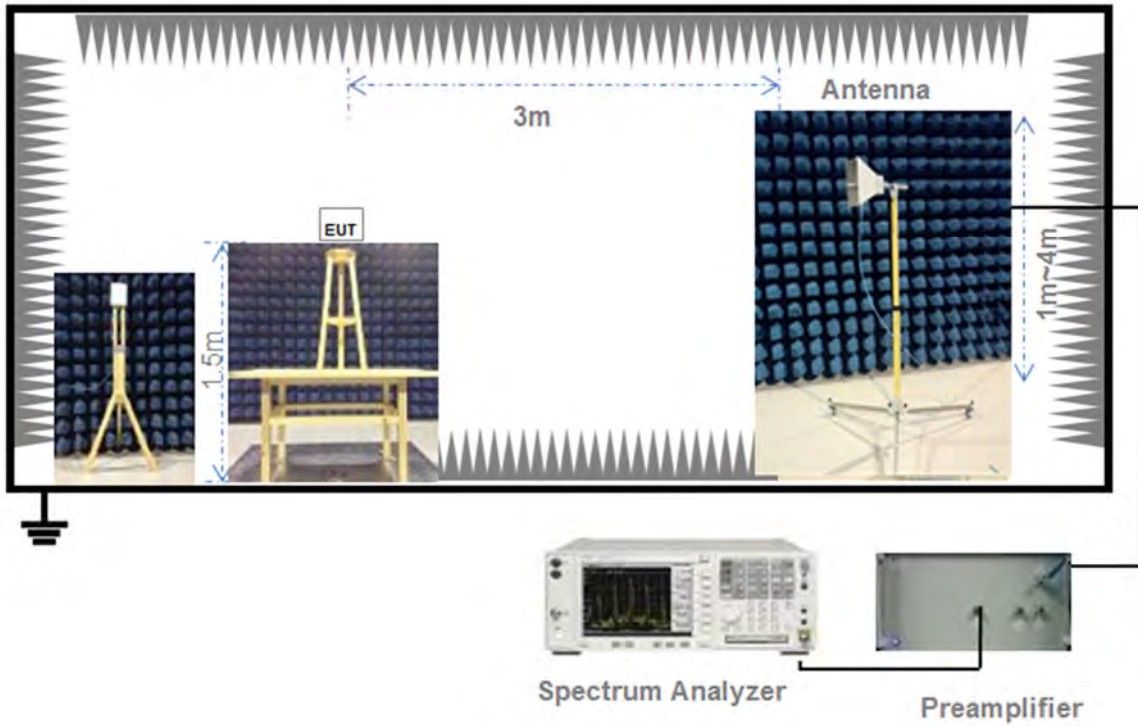
(Diagram 3)

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:

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

where:

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

EIRP = equivalent isotropic radiated power in dBm

D = specified measurement distance in meters.

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

5 TEST ITEMS

5.1 Antenna Requirements

5.1.1 Relevant Standards

FCC §15.203 & 15.247(b); RSS-247, 5.4 (6)

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.	The antennas of the product are permanently attached. There are no provisions for connection to an external antenna.

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 (4)

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 $10\log(1/x)$, 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 $RBW \geq OBW$ if possible; otherwise, set RBW to the largest available value.

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

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

5.2.4 Test Result

Please refer to ANNEX A.1.

5.3 6dB Bandwidth

5.3.1 Limit

FCC §15.247(a); RSS-GEN, 6.6

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) \geq 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 $\geq 3 \times$ RBW.

Detector = peak.

Sweep time = auto couple.

Trace mode = max hold.

Allow trace to fully stabilize.

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

Emission level measurement

Use the following spectrum analyzer settings:

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

Set the RBW = 100 kHz.

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

Detector = peak.

Sweep time = auto couple.

Trace mode = max hold.

Allow trace to fully stabilize.

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

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

5.4.4 Test Result

Please refer to ANNEX A.3.

5.5 Band Edge (Authorized-band band-edge)

5.5.1 Limit

FCC §15.247(d); RSS-GEN, 8.9, RSS-247, 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 $\geq 98\%$). Use the procedure described in 13.2.3 when using an average detector and the EUT cannot be configured to transmit continuously but the duty cycle is constant (i.e., duty cycle variations are less than ± 2 percent). Use the procedure described in 13.2.4 when using an average detector for those cases where the EUT cannot be configured to transmit continuously and the duty cycle is not constant (duty cycle variations equal or exceed 2 percent).

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

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

Set span to 2 MHz

RBW = 100 kHz.

VBW $\geq 3 \times$ RBW.

Detector = peak.

Sweep time = auto.

Trace mode = max hold.

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

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

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

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

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

Attenuation: Auto (at least 10 dB preferred).

Sweep time: Coupled.

Resolution bandwidth: 100 kHz.

Video bandwidth: 300 kHz.

Detector: Peak.

Trace: Max hold.

5.5.4 Test Result

Please refer to ANNEX A.4.

5.6 Conducted Emission

5.6.1 Limit

FCC §15.207; RSS-GEN, 8.8

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

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

5.6.2 Test Setup

See section 4.4.2 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(c); 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:

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

where:

E = electric field strength in dBμV/m,

EIRP = equivalent isotropic radiated power in dBm

D = specified measurement distance in meters.

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

Quasi-Peak measurement procedure

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

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

Peak power measurement procedure

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

- a) RBW = as specified in Table 1.
- b) VBW ≥ 3 x RBW.
- c) Detector = Peak.
- d) Sweep time = auto.
- e) Trace mode = max hold.
- f) Allow sweeps to continue until the trace stabilizes. (Note that the required measurement time may be longer for low duty cycle applications).

Table 1—RBW as a function of frequency

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

> 1000 MHz	1 MHz
------------	-------

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

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

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

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

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

Determining the applicable transmit antenna gain

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

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

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

Radiated spurious emission test

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

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

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

The power of the EUT transmitting frequency should be ignored.

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

Use the following spectrum analyzer settings:

Span = wide enough to fully capture the emission being measured

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

VBW \geq RBW

Sweep = auto

Detector function = peak

Trace = max hold

5.7.4 Test Result

Please refer to ANNEX A.6.

5.8 Band Edge (Restricted-band band-edge)

5.8.1 Limit

FCC §15.209&15.247(c); 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 $f \geq 1$ GHz, 100 kHz for $f < 1$ GHz

VBW \geq RBW

Sweep = auto

Detector function = peak

Trace = max hold

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

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

5.8.4 Test Result

Please refer to ANNEX A.7.

5.9 Power Spectral density (PSD)

5.9.1 Limit

FCC §15.247(d); RSS-247, 5.2 (2)

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

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

Detector = peak.

Sweep time = auto couple.

Trace mode = max hold.

Allow trace to fully stabilize.

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

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

5.9.4 Test Result

Please refer to ANNEX A.8.

ANNEX A TEST RESULT

A.1 Output Power

Duty Cycle

Test Mode	Duty Cycle(%)	T (ms)	1/T(kHz)
802.11b	99.0	12.322	0.08
802.11g	98.1	2.050	0.49
802.11n-20 MHz	98.0	1.910	0.52
802.11n-40 MHz	96.0	0.938	1.08

Average Power Test Data

SISO ANT0

802.11b Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
1	15.60	36.31	30	1000	Pass
2	15.80	38.02			Pass
6	15.70	37.15			Pass
11	15.60	36.31			Pass

802.11g Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
1	15.80	38.02	30	1000	Pass
2	15.70	37.15			Pass
6	15.70	37.15			Pass
11	15.90	38.90			Pass

802.11n-20 MHz Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
1	15.80	38.02	30	1000	Pass
2	15.90	38.90			Pass
6	15.90	38.90			Pass
11	15.70	37.15			Pass

802.11n-40 MHz Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
3	13.80	23.99	30	1000	Pass
6	13.90	24.55			Pass
9	13.60	22.91			Pass

SISO ANT1
802.11b Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
1	15.60	36.31	30	1000	Pass
2	16.80	47.86			Pass
6	16.70	46.77			Pass
11	16.70	46.77			Pass

802.11g Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
1	15.60	36.31	30	1000	Pass
2	16.80	47.86			Pass
6	16.80	48.86			Pass
11	16.70	46.77			Pass

802.11n-20 MHz Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
1	15.80	38.02	30	1000	Pass
2	16.70	46.77			Pass
6	16.60	45.71			Pass
11	16.70	46.77			Pass

802.11n-40 MHz Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
3	13.80	23.99	30	1000	Pass
6	13.90	24.55			Pass
9	13.70	23.44			Pass

MIMO

802.11n-20 MHz Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
1	15.80	38.02	30	1000	Pass
2	16.30	42.66			Pass
6	16.40	43.65			Pass
11	16.20	41.69			Pass

802.11n-40 MHz Mode:

Channel	Measured Output Average Power		Limit		Verdict
	dBm	mW	dBm	mW	
3	13.80	23.99	30	1000	Pass
6	13.90	24.55			Pass
9	13.70	23.44			Pass

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

SISO ANT0

802.11b Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
1	16.60	45.71	36	4	Pass
2	16.80	47.86			Pass
6	16.70	46.77			Pass
11	16.60	45.71			Pass

802.11g Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
1	16.80	47.86	36	4	Pass
2	16.70	46.77			Pass
6	16.70	46.77			Pass
11	16.90	48.98			Pass

802.11n-20 MHz Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
1	16.80	47.86	36	4	Pass
2	16.90	48.98			Pass
6	16.90	48.98			Pass
11	16.70	46.77			Pass

802.11n-40 MHz Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
3	14.80	30.20	36	4	Pass
6	14.90	30.90			Pass
9	14.60	28.84			Pass

SISO ANT1
802.11b Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
1	16.60	45.71	36	4	Pass
2	17.80	60.26			Pass
6	17.70	58.88			Pass
11	17.70	58.88			Pass

802.11g Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
1	16.60	45.71	36	4	Pass
2	17.80	60.26			Pass
6	17.80	60.26			Pass
11	17.70	58.88			Pass

802.11n-20 MHz Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
1	16.80	47.86	36	4	Pass
2	17.70	58.88			Pass
6	17.60	57.54			Pass
11	17.70	58.88			Pass

802.11n-40 MHz Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
3	14.80	30.20	36	4	Pass
6	14.90	30.90			Pass
9	14.70	29.51			Pass

MIMO

802.11n-20 MHz Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
1	16.80	47.86	36	4	Pass
2	17.30	53.70			Pass
6	17.40	54.95			Pass
11	17.20	52.48			Pass

802.11n-40 MHz Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
3	14.80	30.20	36	4	Pass
6	14.90	30.90			Pass
9	14.70	29.51			Pass

PK Power Test Data
SISO ANT 0
802.11b Mode:

Channel	Measured Output PK Power		Limit		Verdict
	dBm	mW	dBm	mW	
1	18.04	63.68	30	1000	Pass
6	19.14	82.04			Pass
11	18.91	77.80			Pass

802.11g Mode:

Channel	Measured Output PK Power		Limit		Verdict
	dBm	mW	dBm	mW	
1	24.53	283.79	30	1000	Pass
6	24.60	288.40			Pass
11	24.45	278.61			Pass

802.11n-20 MHz Mode:

Channel	Measured Output PK Power		Limit		Verdict
	dBm	mW	dBm	mW	
1	24.44	277.97	30	1000	Pass
6	24.61	289.07			Pass
11	24.29	268.53			Pass

802.11n-40 MHz Mode:

Channel	Measured Output PK Power		Limit		Verdict
	dBm	mW	dBm	mW	
3	22.74	187.93	30	1000	Pass
6	22.88	194.09			Pass
9	22.65	184.08			Pass

PK Power Test Data
SISO ANT 1
802.11b Mode:

Channel	Measured Output PK Power		Limit		Verdict
	dBm	mW	dBm	mW	
1	18.60	72.44	30	1000	Pass
6	19.75	94.41			Pass
11	19.37	86.50			Pass

802.11g Mode:

Channel	Measured Output PK Power		Limit		Verdict
	dBm	mW	dBm	mW	
1	24.26	266.69	30	1000	Pass
6	25.24	334.20			Pass
11	25.22	332.66			Pass

802.11n-20 MHz Mode:

Channel	Measured Output PK Power		Limit		Verdict
	dBm	mW	dBm	mW	
1	24.14	259.42	30	1000	Pass
6	25.27	336.51			Pass
11	25.19	330.37			Pass

802.11n-40 MHz Mode:

Channel	Measured Output PK Power		Limit		Verdict
	dBm	mW	dBm	mW	
3	22.74	187.93	30	1000	Pass
6	22.77	189.23			Pass
9	22.68	185.35			Pass

PK Power Test DataMIMO

802.11n-20 MHz Mode:

Channel	Measured Output PK Power		Limit		Verdict
	dBm	mW	dBm	mW	
1	24.71	295.67	30	1000	Pass
6	25.35	343.03			Pass
11	25.20	331.44			Pass

802.11n-40 MHz Mode:

Channel	Measured Output PK Power		Limit		Verdict
	dBm	mW	dBm	mW	
3	22.91	195.42	30	1000	Pass
6	22.92	195.84			Pass
9	22.76	188.81			Pass

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

SISO ANT 0

802.11b Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
1	19.04	80.17	36	4	Pass
6	20.14	103.28			Pass
11	19.91	97.95			Pass

802.11g Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
1	25.53	357.27	36	4	Pass
6	25.60	363.08			Pass
11	25.45	350.75			Pass

802.11n-20 MHz Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
1	25.44	349.95	36	4	Pass
6	25.61	363.92			Pass
11	25.29	338.06			Pass

802.11n-40 MHz Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
3	23.74	236.59	36	4	Pass
6	23.88	244.34			Pass
9	23.65	231.74			Pass

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

SISO ANT 1

802.11b Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
1	19.60	91.20	36	4	Pass
6	20.75	118.85			Pass
11	20.37	108.89			Pass

802.11g Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
1	25.26	335.74	36	4	Pass
6	26.24	420.73			Pass
11	26.22	418.79			Pass

802.11n-20 MHz Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
1	25.14	326.59	36	4	Pass
6	26.27	423.64			Pass
11	26.19	415.91			Pass

802.11n-40 MHz Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
3	23.74	236.59	36	4	Pass
6	23.77	238.23			Pass
9	23.68	233.35			Pass

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

802.11n-20 MHz Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
1	25.71	372.23	36	4	Pass
6	26.35	431.86			Pass
11	26.20	417.25			Pass

802.11n-40 MHz Mode:

Channel	E.I.R.P		Limit		Verdict
	dBm	mW	dBm	W	
3	23.91	246.02	36	4	Pass
6	23.92	246.55			Pass
9	23.76	237.69			Pass

A.2 Bandwidth

Test Data

SISO ANT0

802.11b Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	10.162598	13.429812	≥ 500
Middle	10.162598	13.429812	≥ 500
High	10.162598	13.429812	≥ 500

802.11g Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	16.470703	17.829233	≥ 500
Middle	16.420654	17.829233	≥ 500
High	16.420654	17.829233	≥ 500

802.11n-20MHz Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	17.671875	18.755427	≥ 500
Middle	17.671875	18.813314	≥ 500
High	17.671875	18.813314	≥ 500

802.11n-40MHz Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	36.422607	36.700000	≥ 500
Middle	36.422607	36.600000	≥ 500
High	36.372559	36.600000	≥ 500

Test DataSISO ANT1

802.11b Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	10.162598	13.371925	≥500
Middle	10.162598	13.429812	≥500
High	10.162598	14.992764	≥500

802.11g Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	16.470703	17.829233	≥500
Middle	16.470703	17.771346	≥500
High	16.470703	17.771346	≥500

802.11n-20MHz Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	17.671875	18.639653	≥500
Middle	17.671875	18.697540	≥500
High	17.671875	18.755427	≥500

802.11n-40MHz Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	36.422607	36.600000	≥500
Middle	36.422607	36.600000	≥500
High	36.422607	36.600000	≥500

Test DataMIMO ANT0

802.11n-20MHz Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	17.671875	18.639653	≥500
Middle	17.671875	18.639653	≥500
High	17.671875	18.813314	≥500

802.11n-40MHz Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	36.422607	36.600000	≥500
Middle	36.422607	36.600000	≥500
High	36.472656	36.600000	≥500

MIMO ANT1

802.11n-20MHz Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	17.671875	18.292330	≥500
Middle	17.671875	18.350217	≥500
High	17.671875	18.176556	≥500

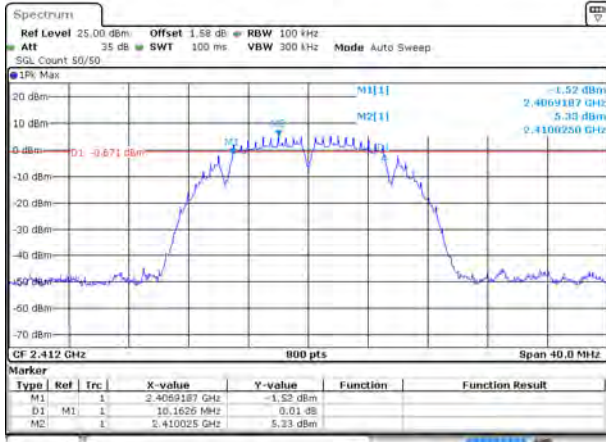
802.11n-40MHz Mode:

Channel	6 dB Bandwidth (MHz)	99% Bandwidth (MHz)	6 dB Bandwidth Limits (kHz)
Low	36.472656	36.300000	≥500
Middle	36.472656	36.300000	≥500
High	36.472656	36.300000	≥500

Test plots (6dB Bandwidth)

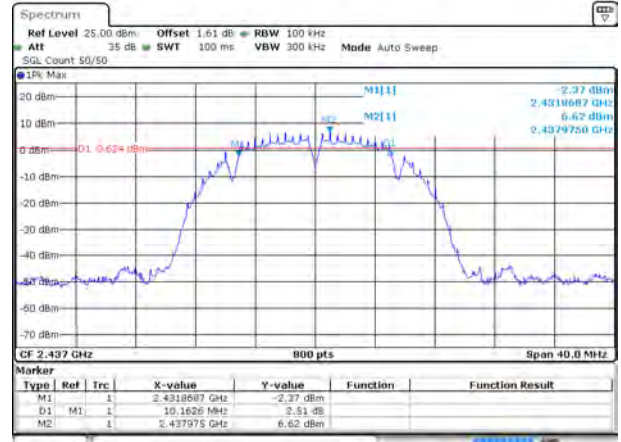
SISO ANT0

802.11b LOW CHANNEL



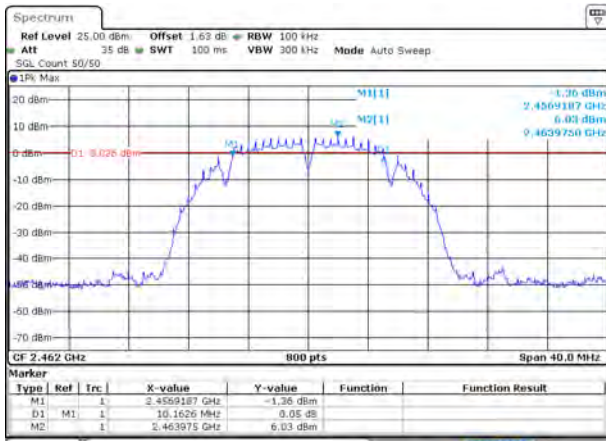
Date: 25 NOV 2018 13:40:05

802.11b MIDDLE CHANNEL



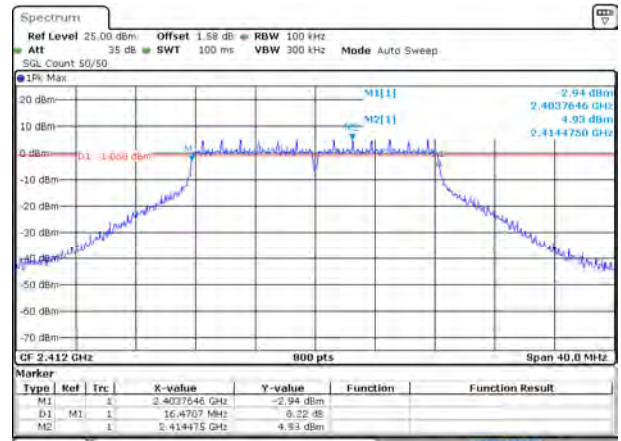
Date: 25 NOV 2018 13:45:46

802.11b HIGH CHANNEL



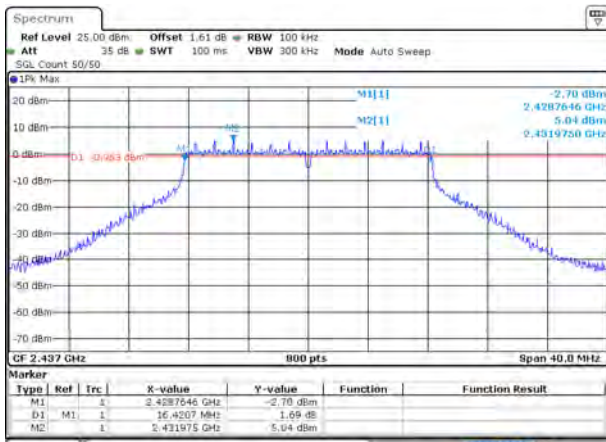
Date: 25 NOV 2018 13:47:27

802.11g LOW CHANNEL



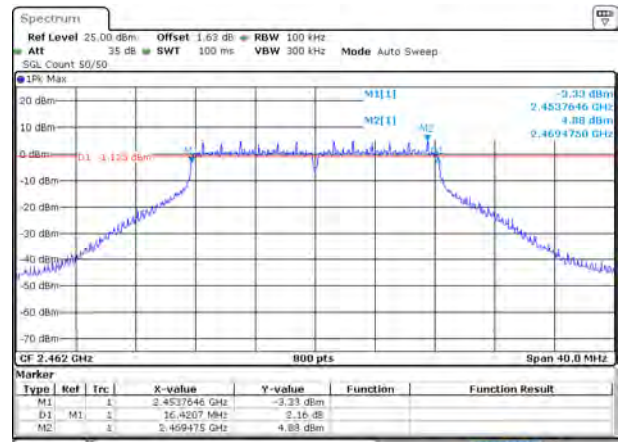
Date: 25 NOV 2018 13:49:37

802.11g MIDDLE CHANNEL



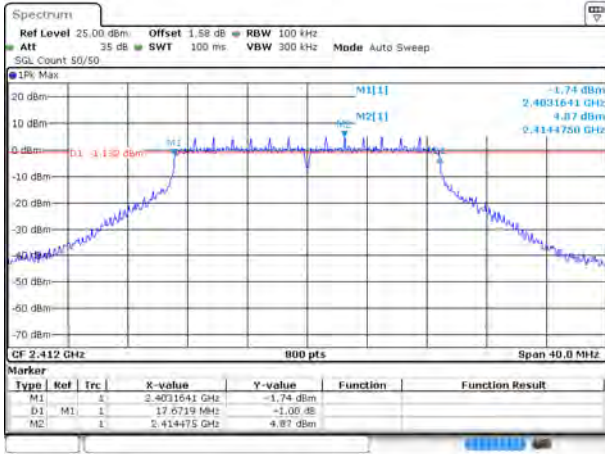
Date: 25 NOV 2018 13:51:15

802.11g HIGH CHANNEL



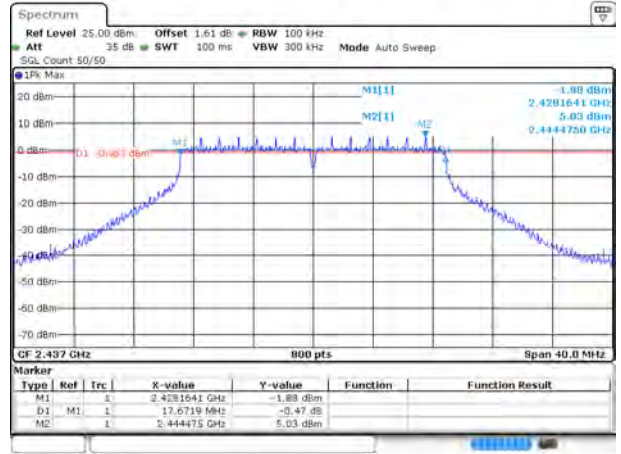
Date: 25 NOV 2018 13:52:56

802.11n-20 MHz LOW CHANNEL



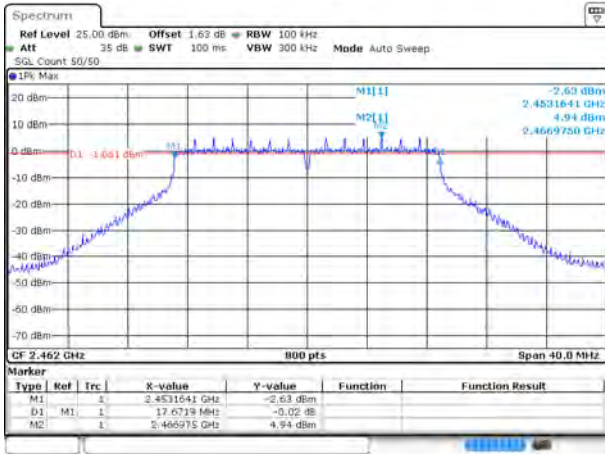
Date: 25 NOV 2018 13:54:33

802.11 n-20 MHz MIDDLE CHANNEL



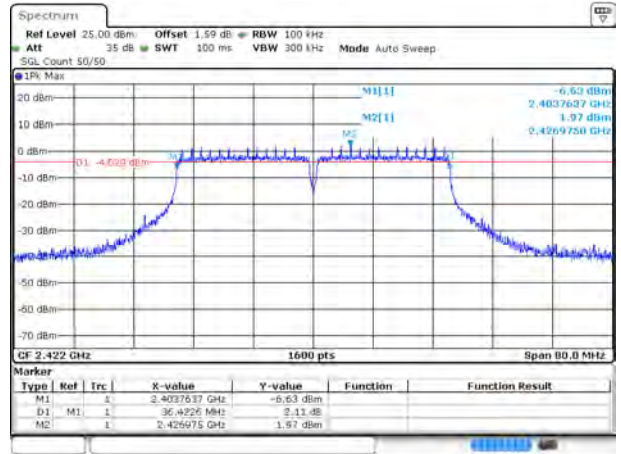
Date: 25 NOV 2018 13:56:01

802.11n-20 MHz HIGH CHANNEL



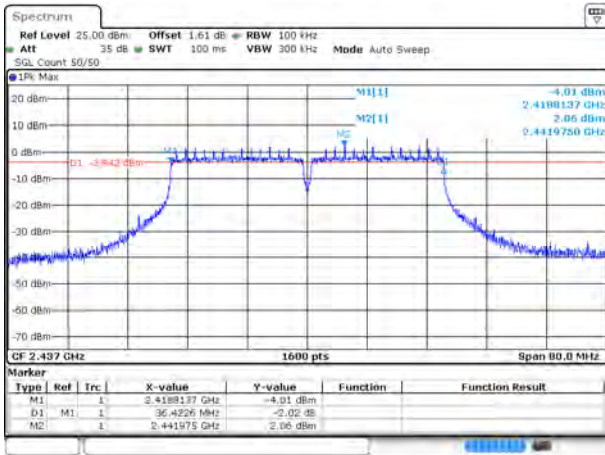
Date: 25 NOV 2018 13:57:26

802.11n-40 MHz LOW CHANNEL



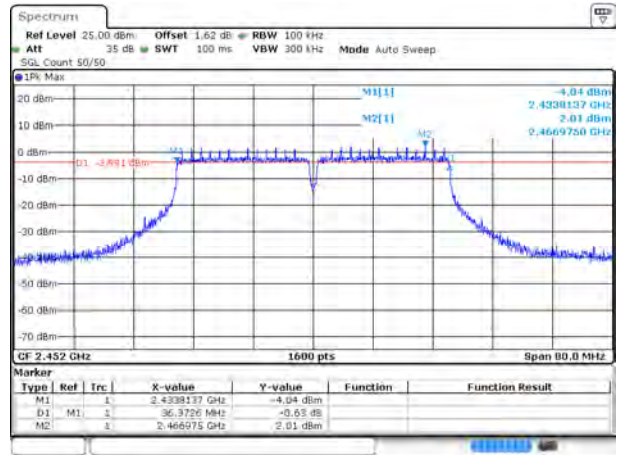
Date: 25 NOV 2018 13:58:04

802.11n-40 MHz MIDDLE CHANNEL



Date: 25 NOV 2018 14:00:36

802.11n-40 MHz HIGH CHANNEL

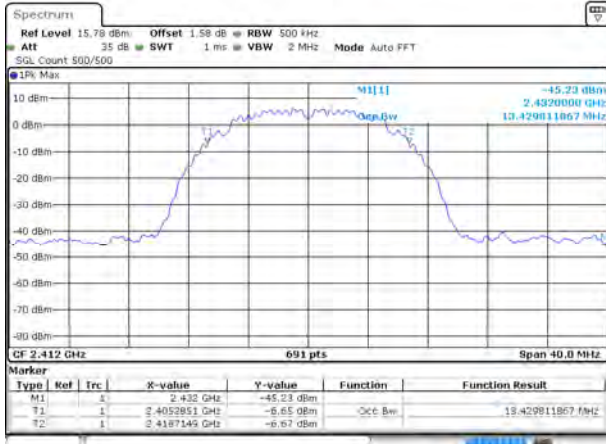


Date: 25 NOV 2018 14:02:02

Test plots (99% Bandwidth)

SISO ANT0

802.11b LOW CHANNEL



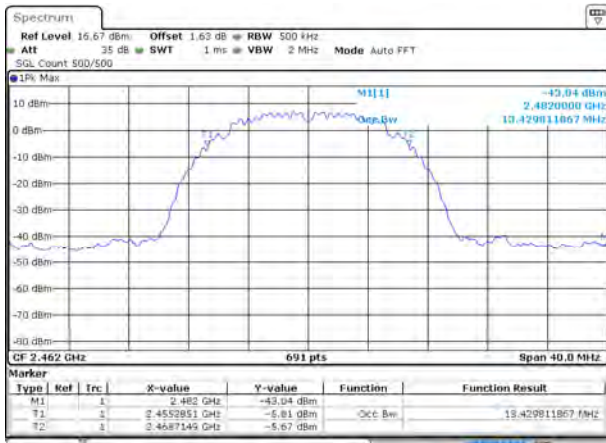
Date: 25 NOV 2018 13:40:17

802.11b MIDDLE CHANNEL



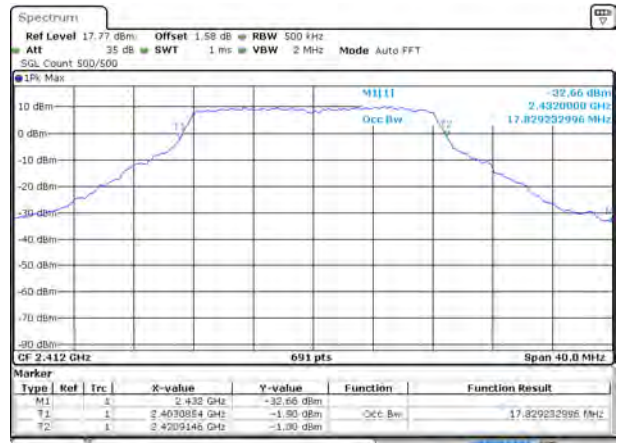
Date: 25 NOV 2018 13:45:54

802.11b HIGH CHANNEL



Date: 25 NOV 2018 13:47:35

802.11g LOW CHANNEL



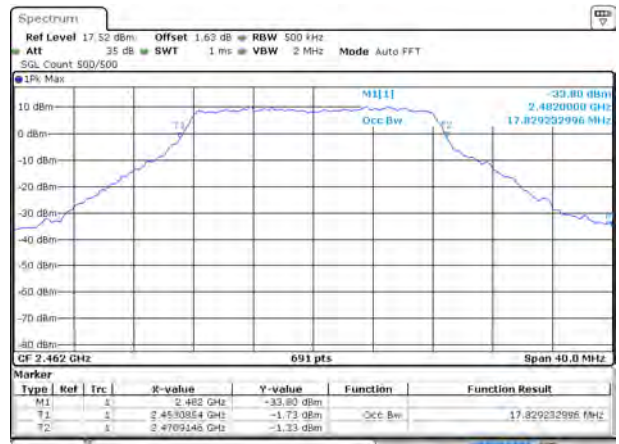
Date: 25 NOV 2018 13:48:46

802.11g MIDDLE CHANNEL



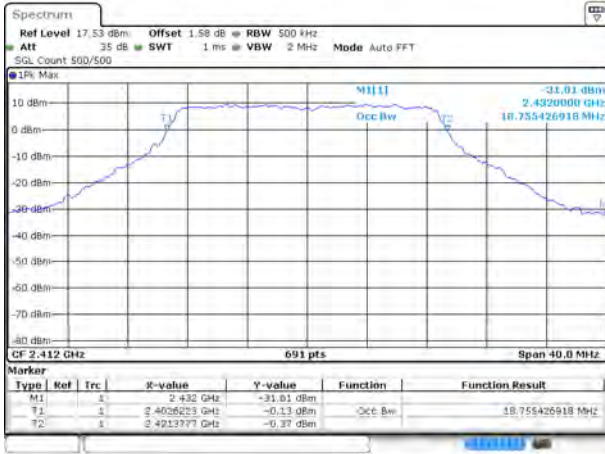
Date: 25 NOV 2018 13:51:26

802.11g HIGH CHANNEL



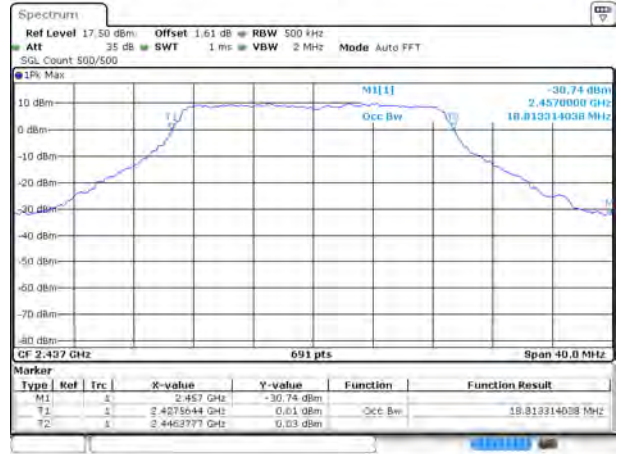
Date: 25 NOV 2018 13:53:05

802.11n-20 MHz LOW CHANNEL



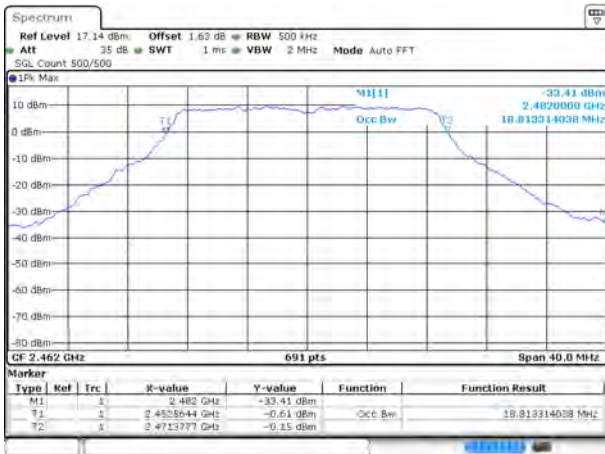
Date: 26 NOV 2016 13:54:49

802.11 n-20 MHz MIDDLE CHANNEL



Date: 26 NOV 2016 13:56:10

802.11n-20 MHz HIGH CHANNEL



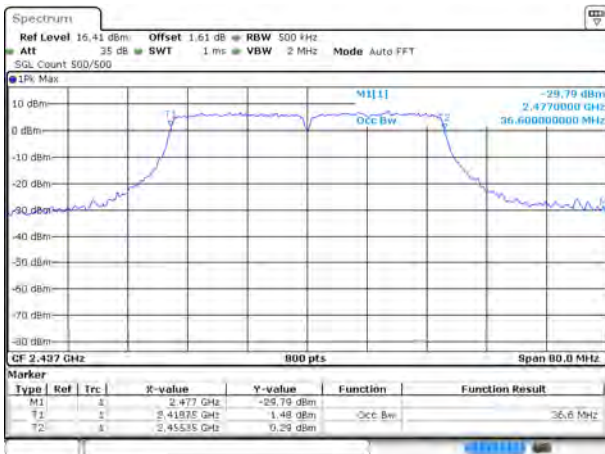
Date: 26 NOV 2016 13:57:37

802.11n-40 MHz LOW CHANNEL



Date: 26 NOV 2016 13:56:15

802.11n-40 MHz MIDDLE CHANNEL



Date: 26 NOV 2016 14:00:50

802.11n-40 MHz HIGH CHANNEL

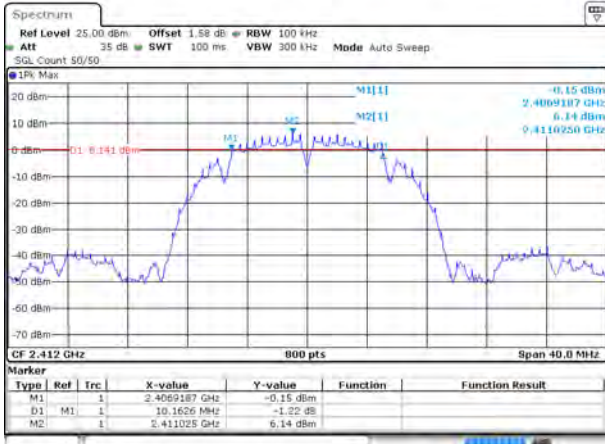


Date: 26 NOV 2016 14:02:13

Test plots (6dB Bandwidth)

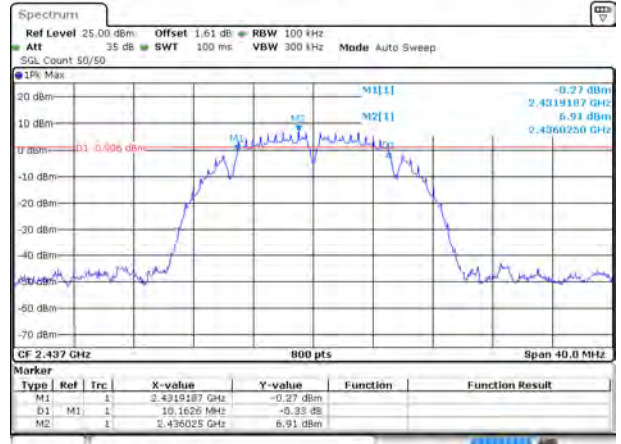
SISO ANT1

802.11b LOW CHANNEL



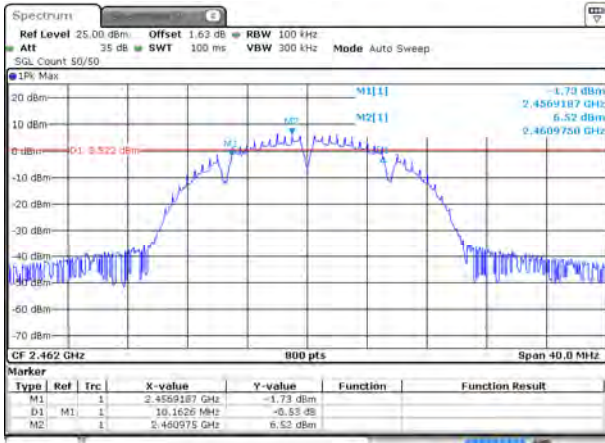
Date: 25 NOV 2018 14:06:14

802.11b MIDDLE CHANNEL



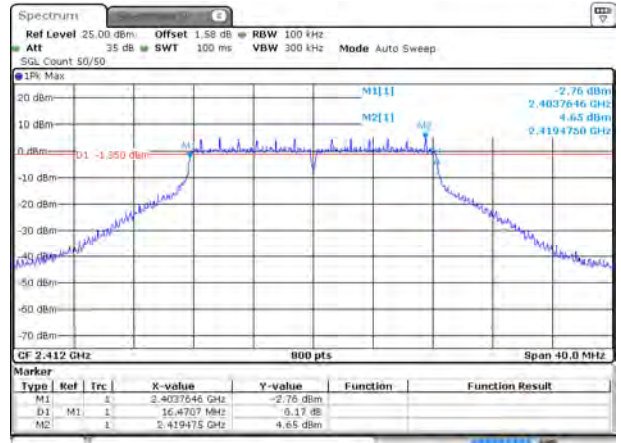
Date: 25 NOV 2018 14:07:56

802.11b HIGH CHANNEL



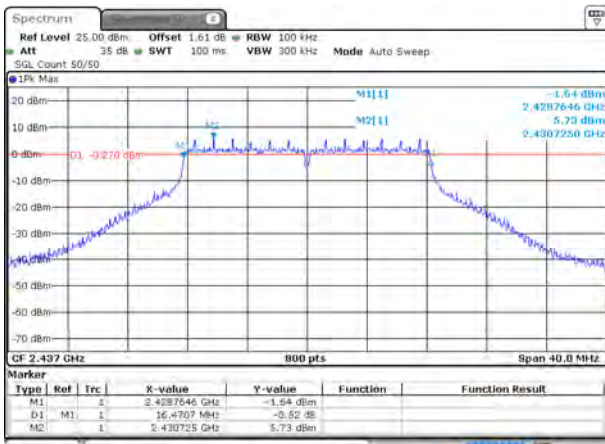
Date: 25 NOV 2018 19:18:09

802.11g LOW CHANNEL



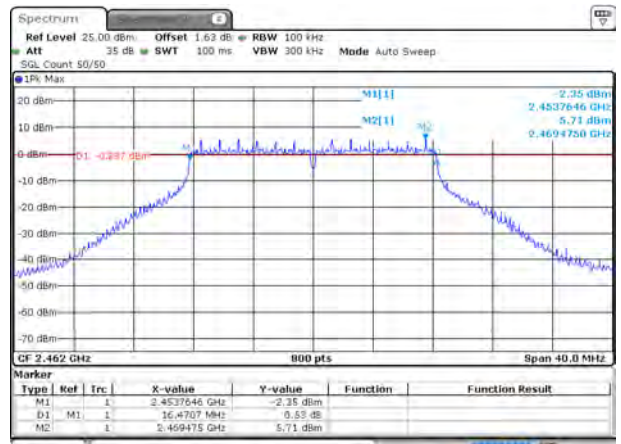
Date: 25 NOV 2018 19:21:18

802.11g MIDDLE CHANNEL



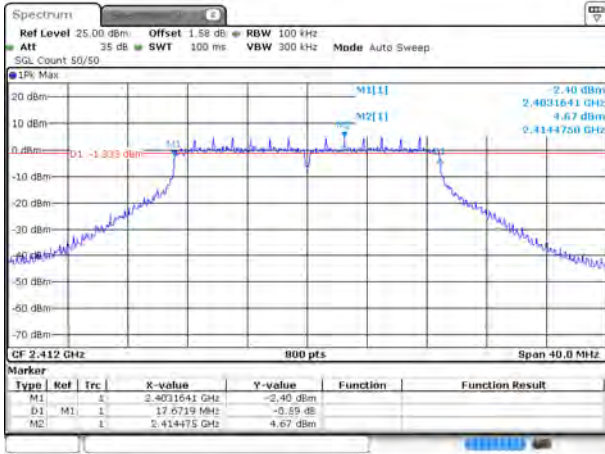
Date: 25 NOV 2018 19:23:09

802.11g HIGH CHANNEL



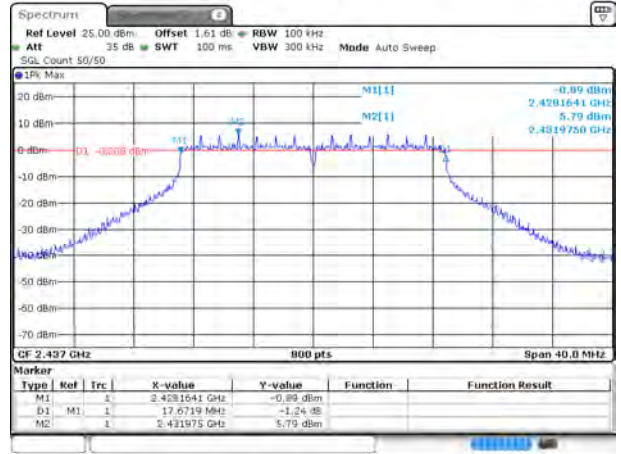
Date: 25 NOV 2018 19:24:43

802.11n-20 MHz LOW CHANNEL



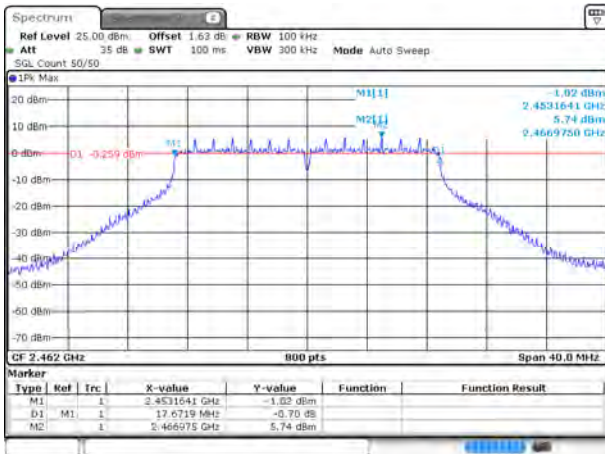
Date: 25 NOV 2018 19:28:34

802.11 n-20 MHz MIDDLE CHANNEL



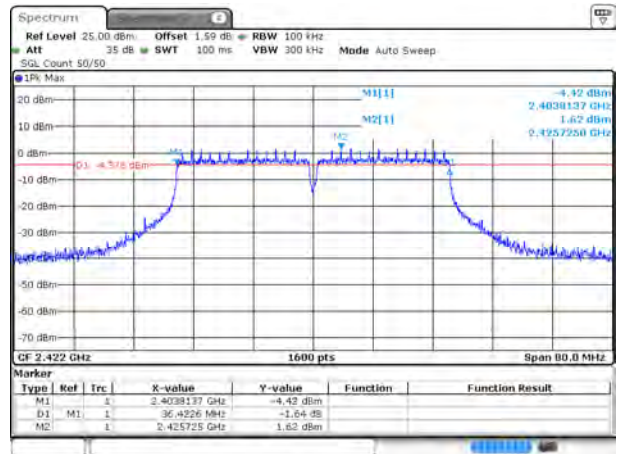
Date: 25 NOV 2018 19:28:26

802.11n-20 MHz HIGH CHANNEL



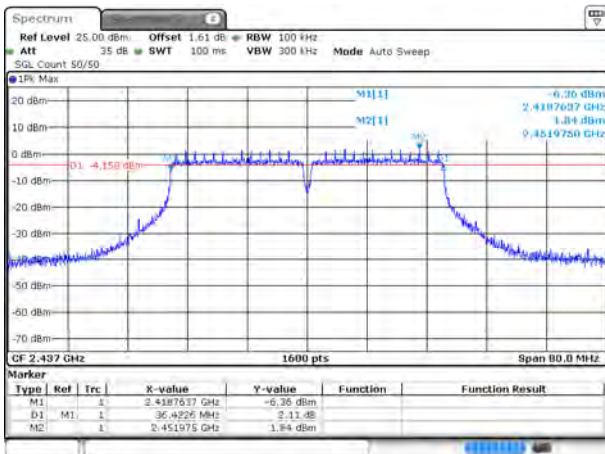
Date: 25 NOV 2018 19:30:03

802.11n-40 MHz LOW CHANNEL



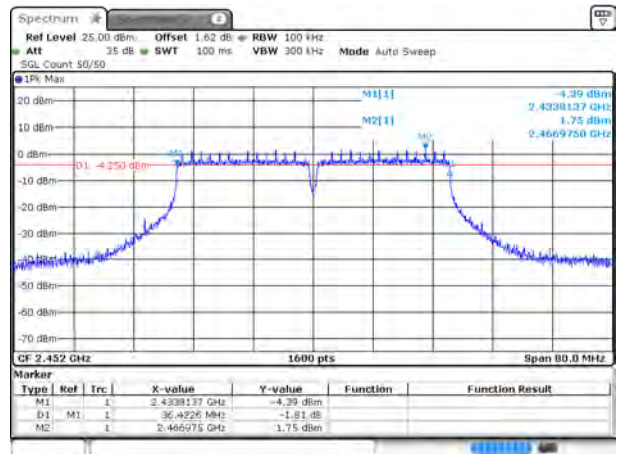
Date: 25 NOV 2018 19:34:27

802.11n-40 MHz MIDDLE CHANNEL



Date: 25 NOV 2018 19:36:14

802.11n-40 MHz HIGH CHANNEL

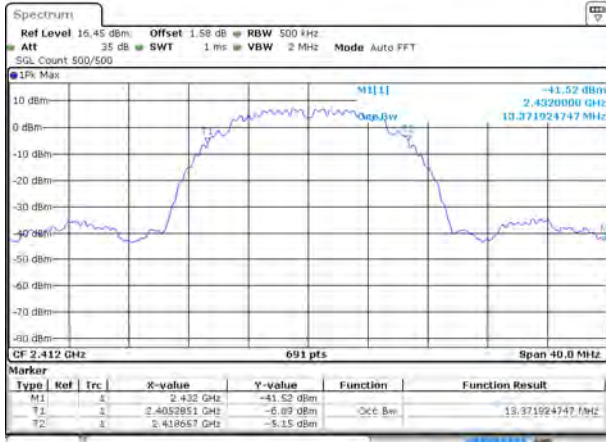


Date: 25 NOV 2018 19:37:52

Test plots (99% Bandwidth)

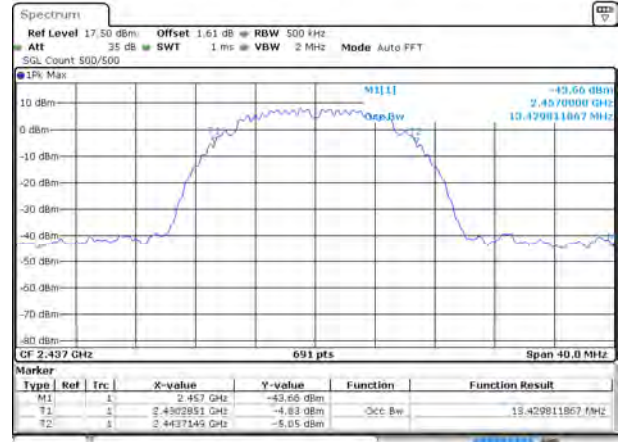
SISO ANT1

802.11b LOW CHANNEL



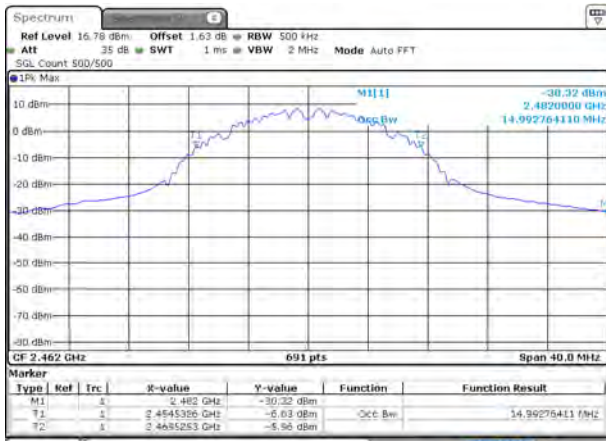
Date: 25 MAR 2018 14:05:25

802.11b MIDDLE CHANNEL



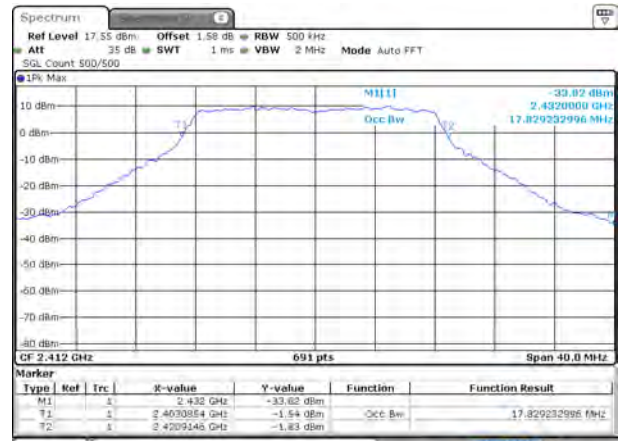
Date: 25 MAR 2018 14:04:05

802.11b HIGH CHANNEL



Date: 25 MAR 2018 19:19:05

802.11g LOW CHANNEL



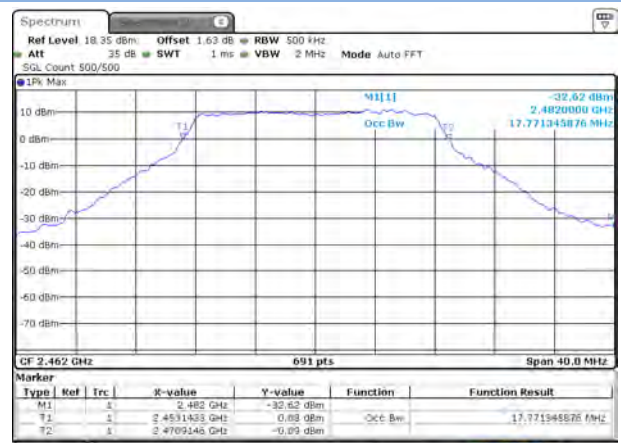
Date: 25 MAR 2018 19:21:26

802.11g MIDDLE CHANNEL



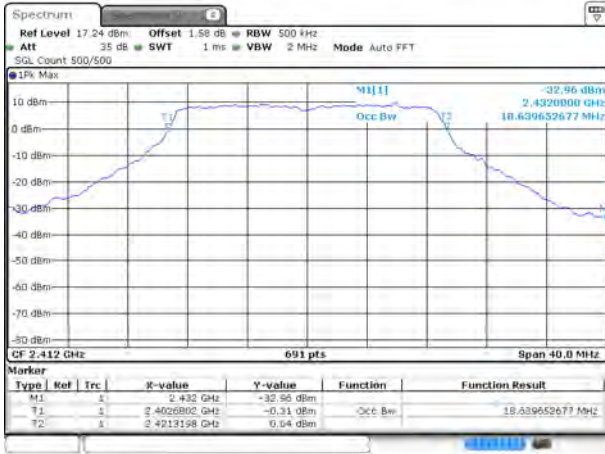
Date: 25 MAR 2018 19:23:47

802.11g HIGH CHANNEL



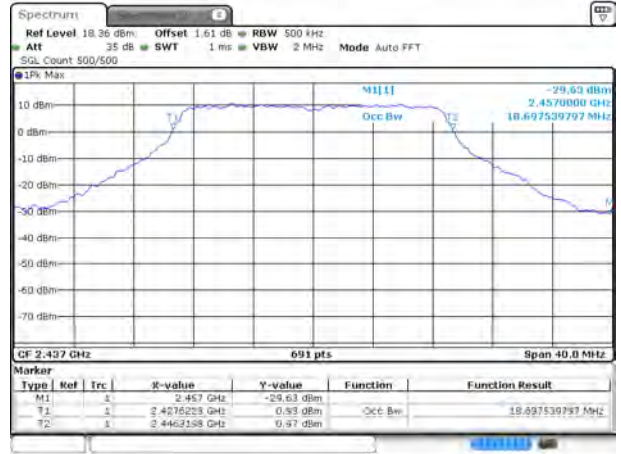
Date: 25 MAR 2018 19:24:52

802.11n-20 MHz LOW CHANNEL



Date: 20 Nov 2018 19:28:45

802.11 n-20 MHz MIDDLE CHANNEL



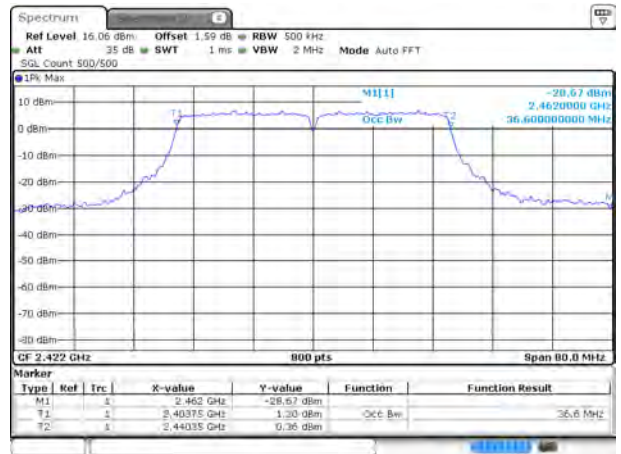
Date: 20 Nov 2018 19:28:34

802.11n-20 MHz HIGH CHANNEL



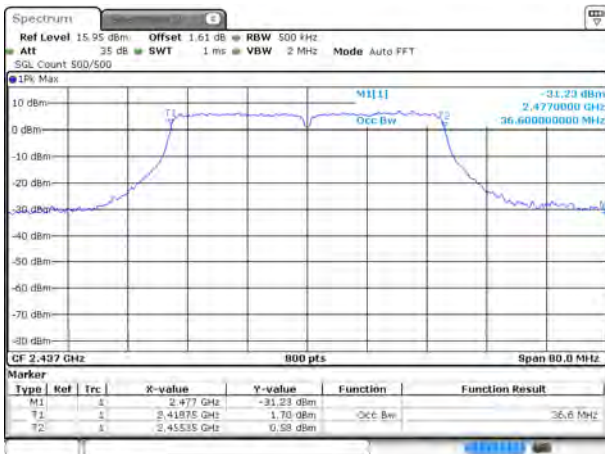
Date: 20 Nov 2018 19:30:12

802.11n-40 MHz LOW CHANNEL



Date: 20 Nov 2018 19:34:38

802.11n-40 MHz MIDDLE CHANNEL



Date: 20 Nov 2018 19:36:26

802.11n-40 MHz HIGH CHANNEL

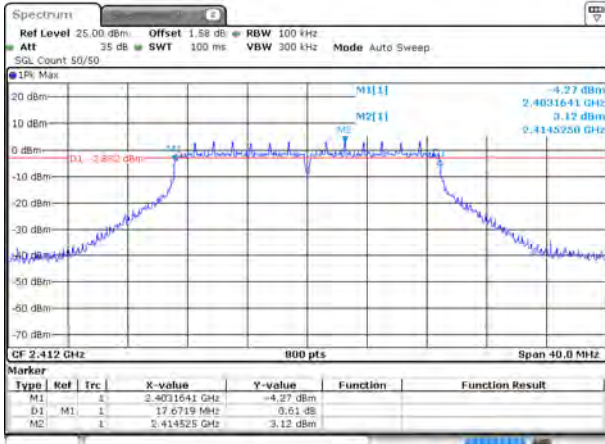


Date: 20 Nov 2018 19:38:02

Test plots (6dB Bandwidth)

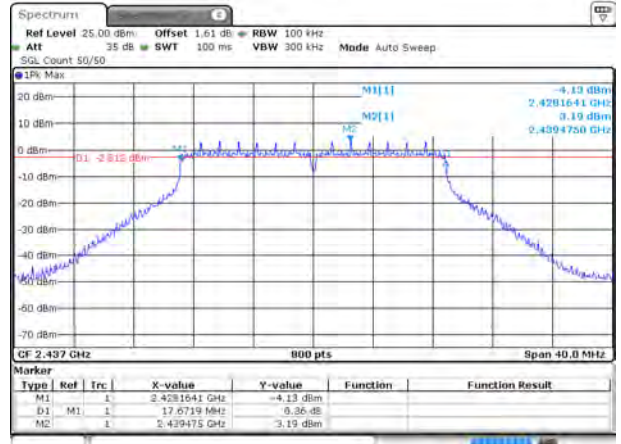
MIMO ANTO

802.11n-20 MHz LOW CHANNEL



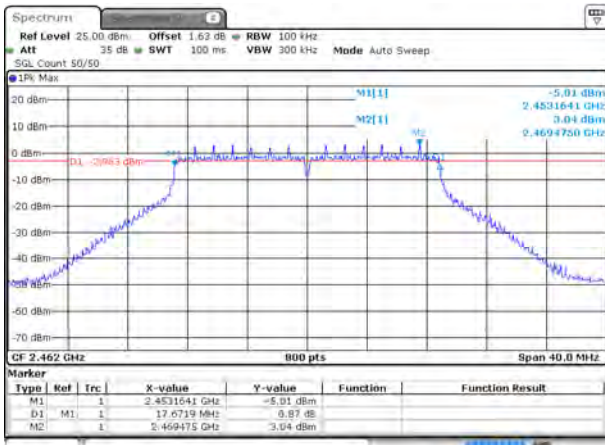
Date: 25 NOV 2018 19:51:05

802.11 n-20 MHz MIDDLE CHANNEL



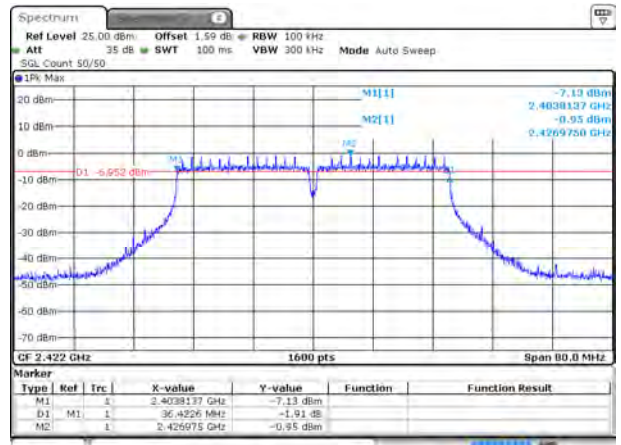
Date: 25 NOV 2018 19:53:30

802.11n-20 MHz HIGH CHANNEL



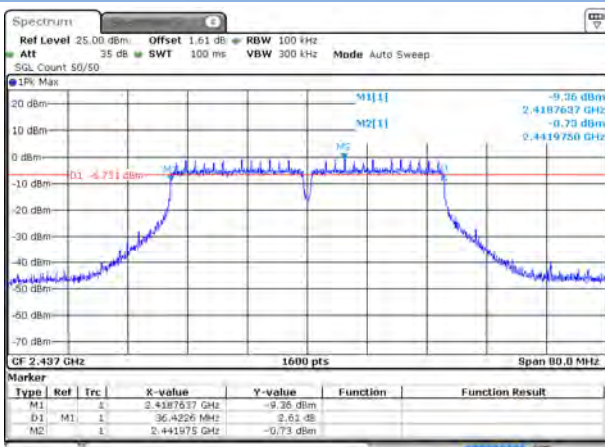
Date: 25 NOV 2018 19:55:17

802.11n-40 MHz LOW CHANNEL



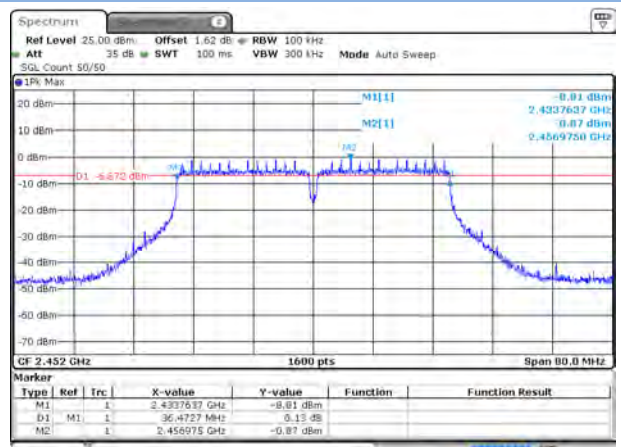
Date: 25 NOV 2018 19:57:05

802.11n-40 MHz MIDDLE CHANNEL



Date: 25 NOV 2018 19:58:44

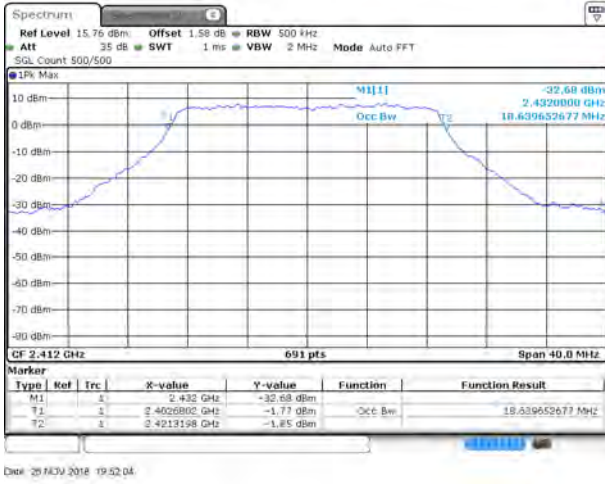
802.11n-40 MHz HIGH CHANNEL



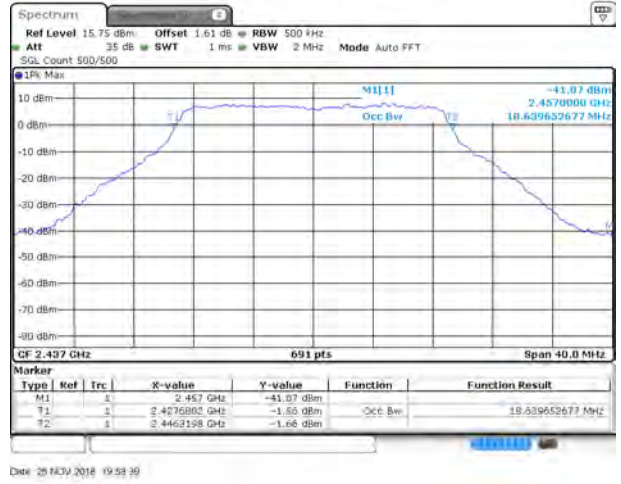
Date: 25 NOV 2018 20:00:15

Test plots (99% Bandwidth)
MIMO ANTO

802.11n-20 MHz LOW CHANNEL



802.11 n-20 MHz MIDDLE CHANNEL



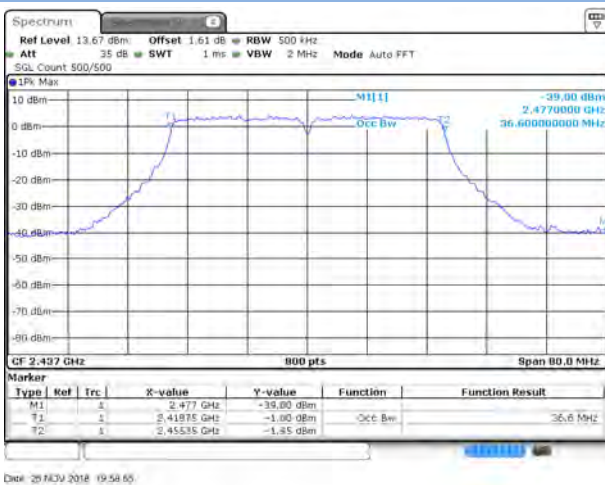
802.11n-20 MHz HIGH CHANNEL



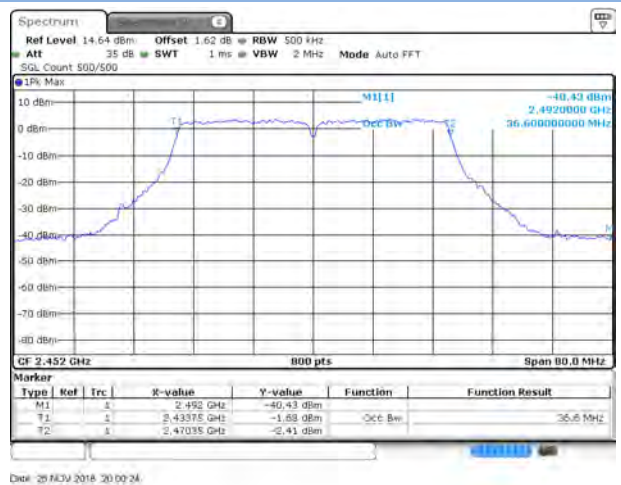
802.11n-40 MHz LOW CHANNEL



802.11n-40 MHz MIDDLE CHANNEL



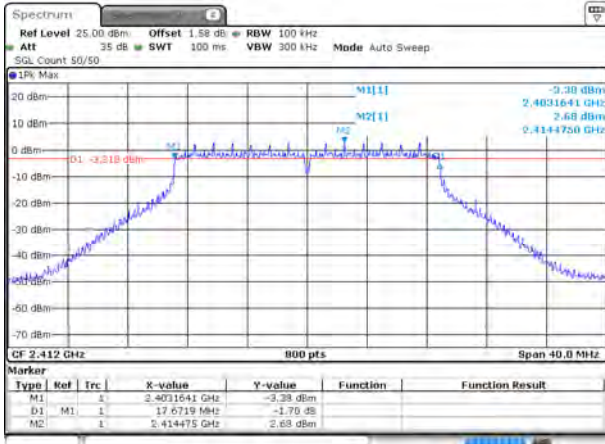
802.11n-40 MHz HIGH CHANNEL



Test plots (6dB Bandwidth)

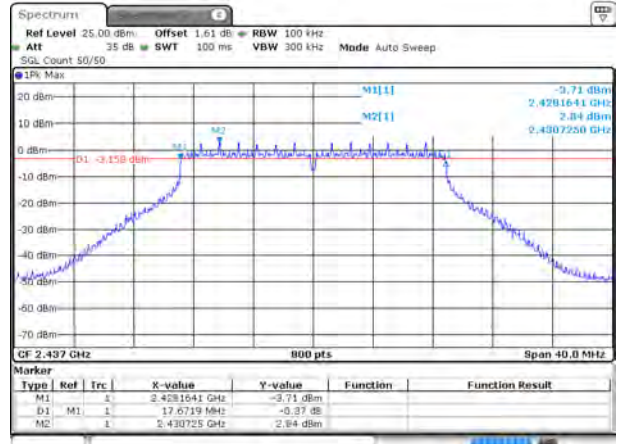
MIMO ANT1

802.11n-20 MHz LOW CHANNEL



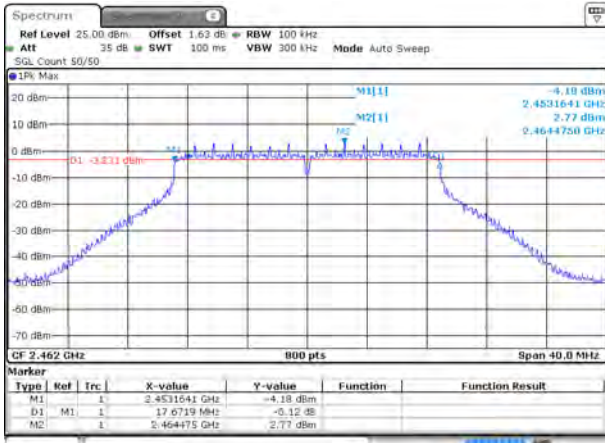
Date: 25 NOV 2018 19:41:01

802.11 n-20 MHz MIDDLE CHANNEL



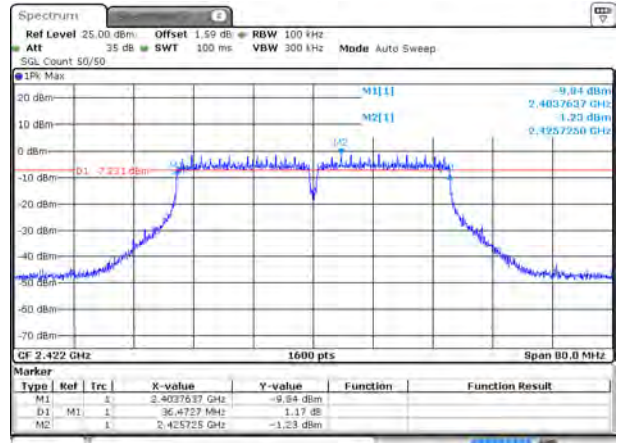
Date: 25 NOV 2018 19:42:45

802.11n-20 MHz HIGH CHANNEL



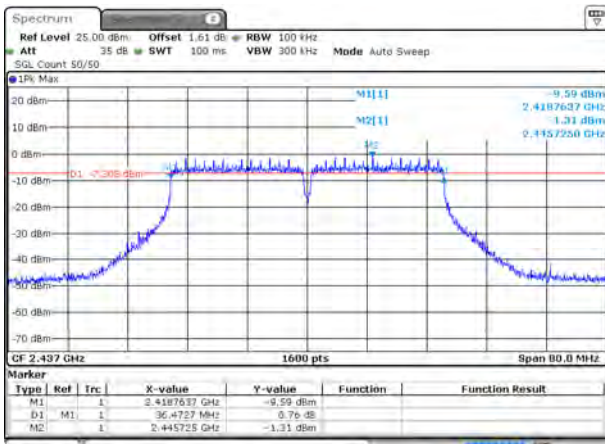
Date: 25 NOV 2018 19:44:09

802.11n-40 MHz LOW CHANNEL



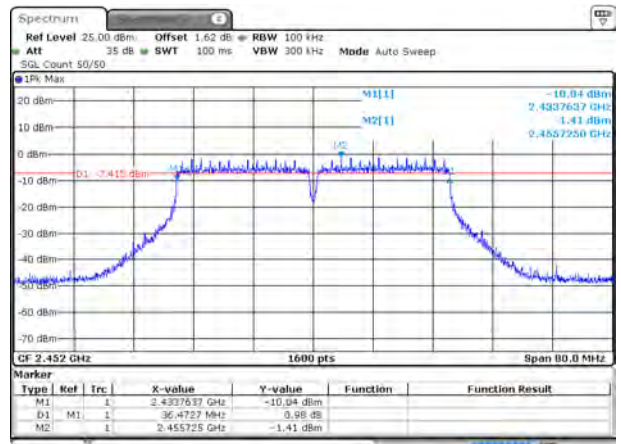
Date: 25 NOV 2018 19:45:58

802.11n-40 MHz MIDDLE CHANNEL



Date: 25 NOV 2018 19:47:38

802.11n-40 MHz HIGH CHANNEL



Date: 25 NOV 2018 19:49:09

Test plots (99% Bandwidth)

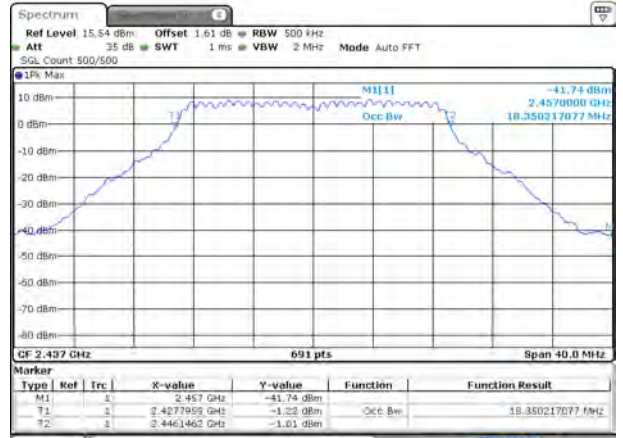
MIMO ANT1

802.11n-20 MHz LOW CHANNEL



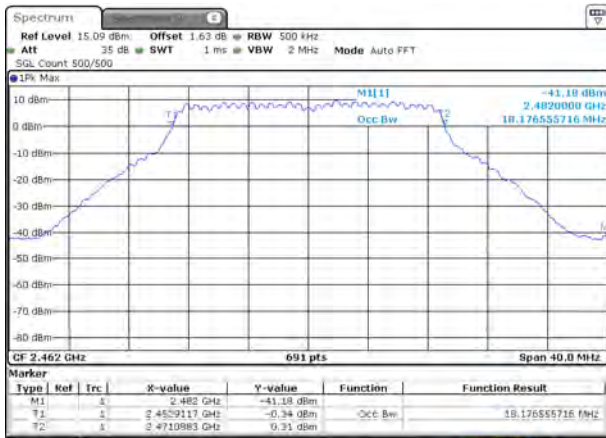
Date: 26 Feb 2016 19:41:10

802.11 n-20 MHz MIDDLE CHANNEL



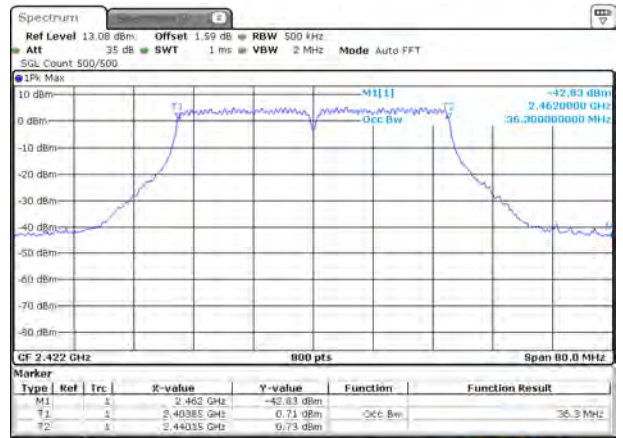
Date: 26 Feb 2016 19:42:04

802.11n-20 MHz HIGH CHANNEL



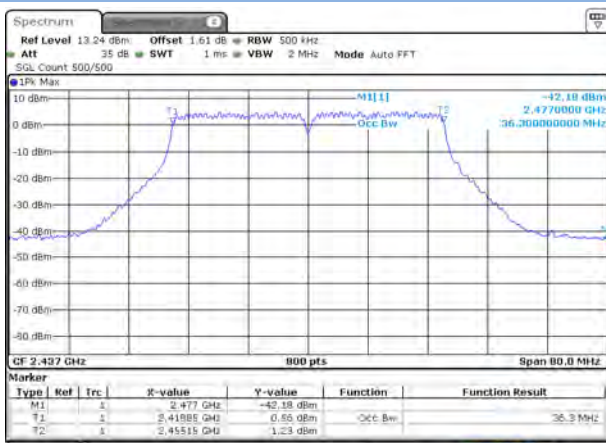
Date: 26 Feb 2016 19:44:16

802.11n-40 MHz LOW CHANNEL



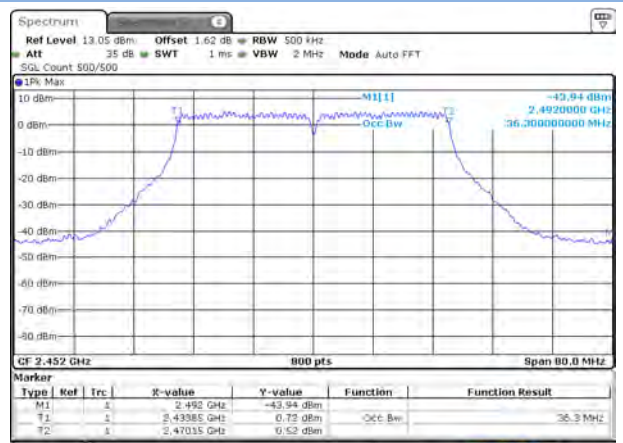
Date: 26 Feb 2016 19:46:06

802.11n-40 MHz MIDDLE CHANNEL



Date: 26 Feb 2016 19:47:49

802.11n-40 MHz HIGH CHANNEL



Date: 26 Feb 2016 19:49:20

A.3 Conducted Spurious Emissions

Test Data

SISO ANT0

802.11b Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-53.35	5.69	-14.31	Pass
Middle	-46.95	5.72	-14.28	Pass
High	-47.64	5.31	-14.69	Pass

802.11g Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-49.78	5.17	-14.83	Pass
Middle	-50.82	2.43	-17.57	Pass
High	-50.62	4.72	-15.28	Pass

802.11n-20MHz Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-50.17	4.90	-15.10	Pass
Middle	-51.16	5.33	-14.67	Pass
High	-50.94	4.53	-15.47	Pass

802.11n-40MHz Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-49.51	1.87	-18.13	Pass
Middle	-50.31	2.01	-17.99	Pass
High	-50.93	1.89	-18.11	Pass

SISO ANT1
802.11b Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-46.51	6.19	-13.81	Pass
Middle	-44.42	7.54	-12.46	Pass
High	-45.97	6.94	-13.06	Pass

802.11g Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-49.47	4.89	-15.11	Pass
Middle	-51.21	5.90	-14.10	Pass
High	-50.93	5.55	-14.45	Pass

802.11n-20MHz Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-50.39	4.90	-15.10	Pass
Middle	-50.47	5.85	-14.15	Pass
High	-49.03	5.05	-14.95	Pass

802.11n-40MHz Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-50.06	1.69	-18.31	Pass
Middle	-54.15	1.86	-18.14	Pass
High	-49.76	1.19	-18.81	Pass

MIMO ANT0

802.11n-20MHz Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-50.78	3.00	-17.00	Pass
Middle	-50.73	3.19	-16.81	Pass
High	-50.61	3.15	-16.85	Pass

802.11n-40MHz Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-50.51	-0.80	-20.80	Pass
Middle	-50.16	-1.19	-21.19	Pass
High	-49.58	-1.39	-21.39	Pass

MIMO ANT1

802.11n-20MHz Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-50.73	1.84	-18.16	Pass
Middle	-50.59	3.01	-16.99	Pass
High	-50.38	2.77	-17.23	Pass

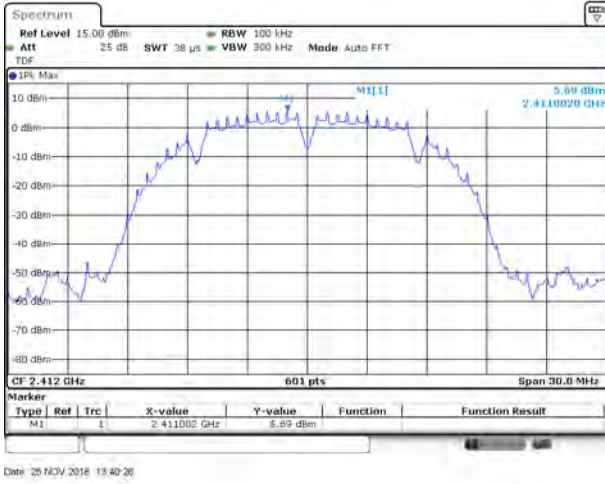
802.11n-40MHz Mode:

Channel	Measured Max. Out of Band Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low	-49.60	-1.70	-21.70	Pass
Middle	-50.27	-1.67	-21.67	Pass
High	-50.50	-1.68	-21.68	Pass

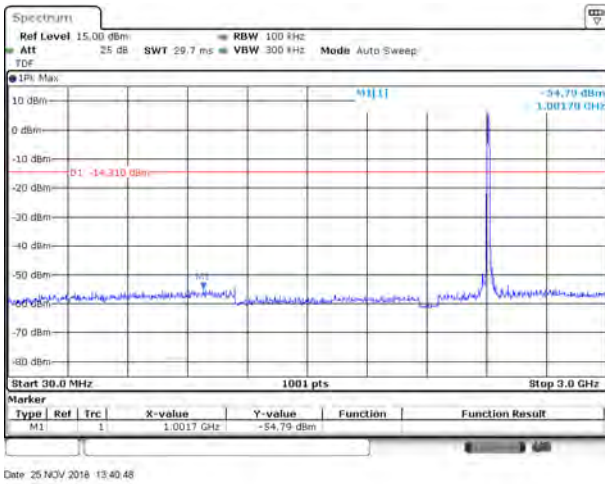
Test Plots

SISO ANT0

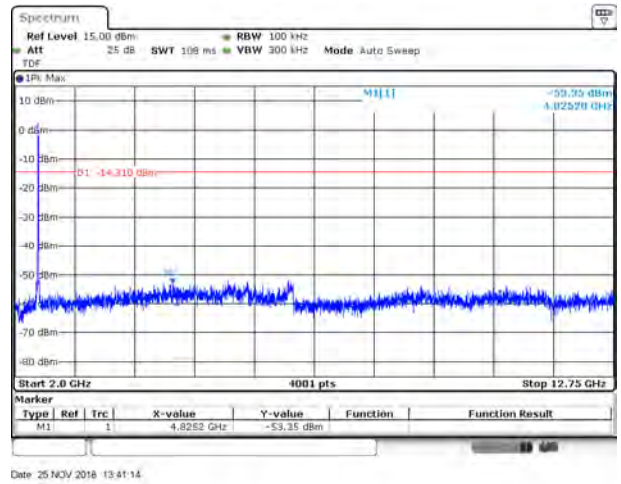
802.11b LOW CHANNEL CARRIER LEVEL



802.11b LOW CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



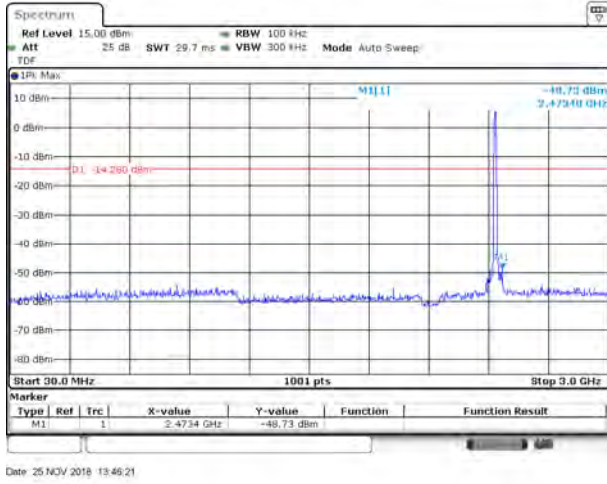
802.11b LOW CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



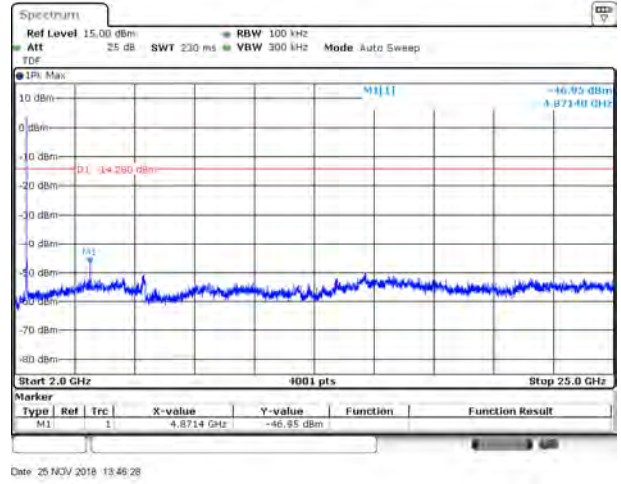
802.11b MIDDLE CHANNEL CARRIER LEVEL



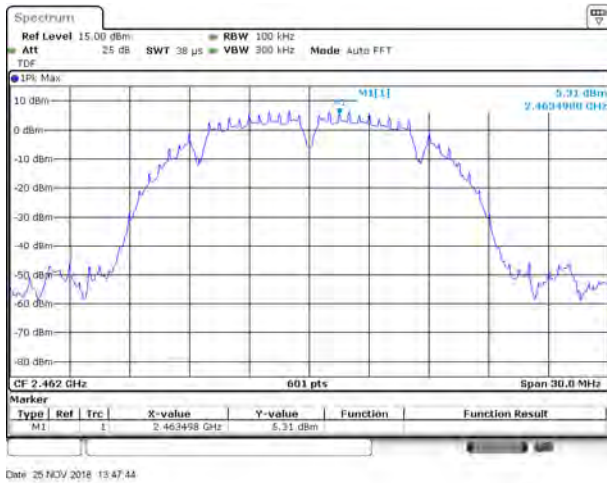
802.11b MIDDLE CHANNEL, SPURIOUS
30 MHz ~ 3 GHz



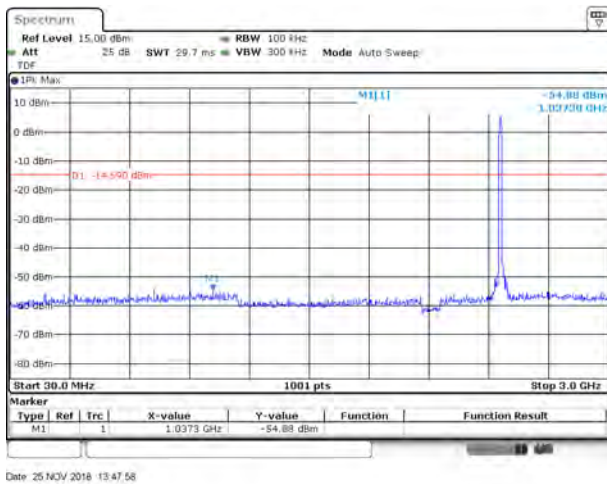
802.11b MIDDLE CHANNEL, SPURIOUS
2 GHz ~ 25 GHz



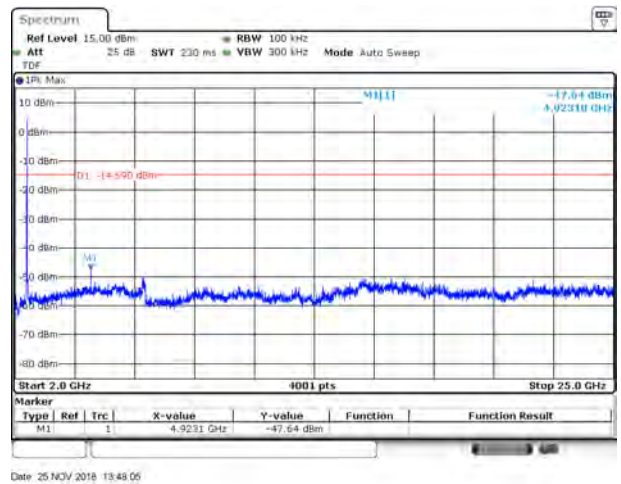
802.11b HIGH CHANNEL CARRIER LEVEL



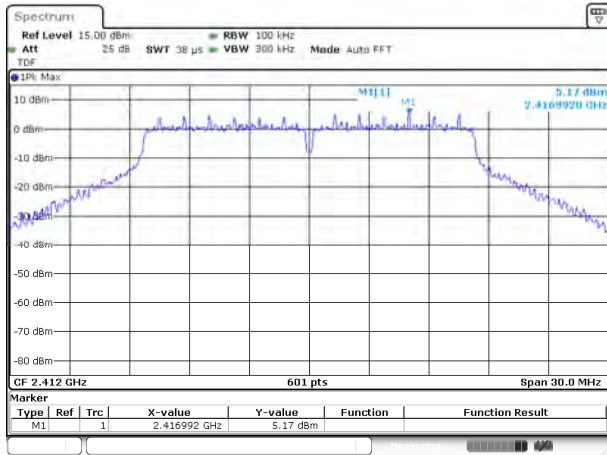
802.11b HIGH CHANNEL, SPURIOUS
30 MHz ~ 3 GHz



802.11b HIGH CHANNEL, SPURIOUS
2 GHz ~ 25 GHz

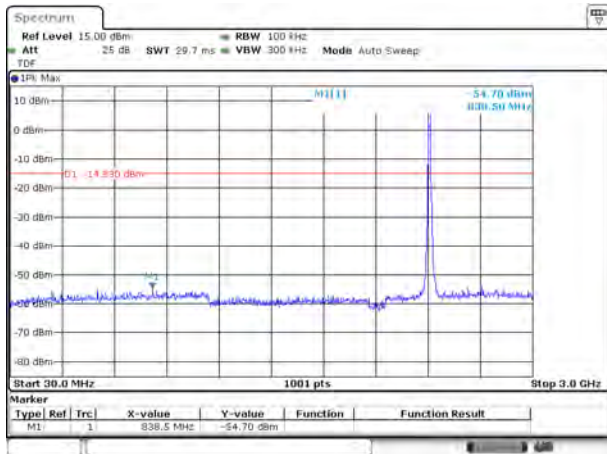


802.11g LOW CHANNEL CARRIER LEVEL



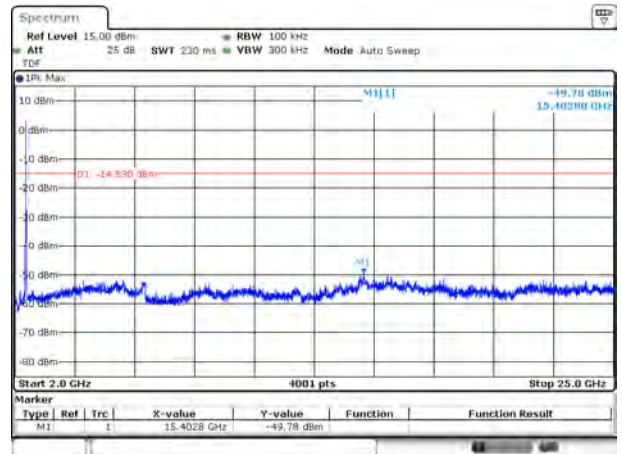
Date: 25.NOV.2018 13:49:53

802.11g LOW CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



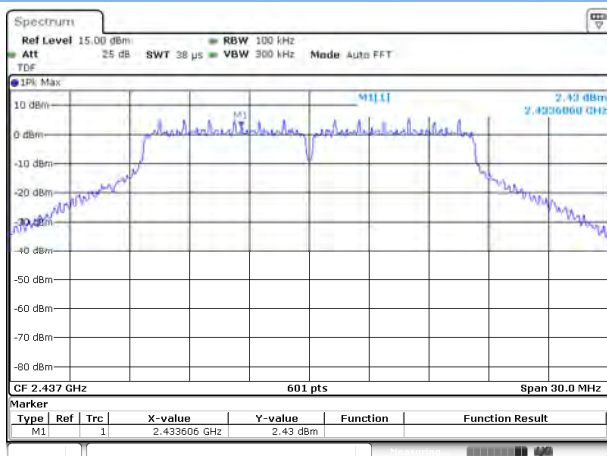
Date: 25.NOV.2018 13:50:06

802.11g LOW CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



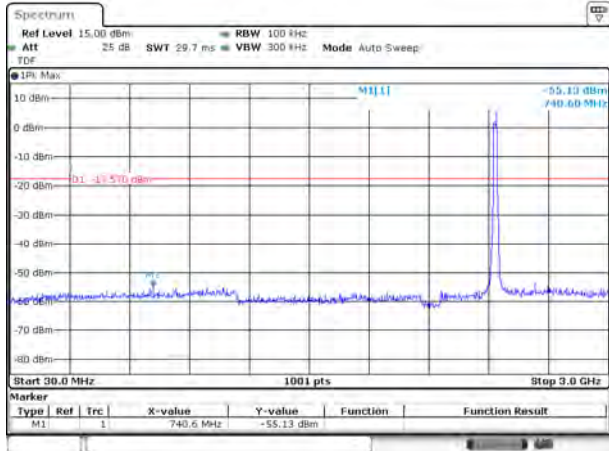
Date: 25.NOV.2018 13:50:13

802.11g MIDDLE CHANNEL CARRIER LEVEL



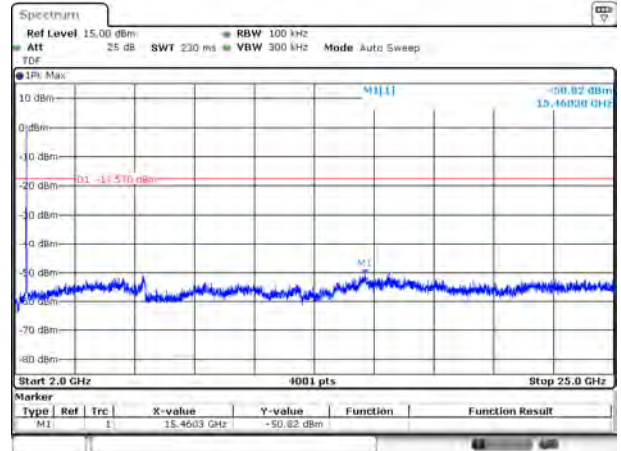
Date: 25.NOV.2018 13:51:34

802.11g MIDDLE CHANNEL, SPURIOUS
30 MHz ~ 3 GHz



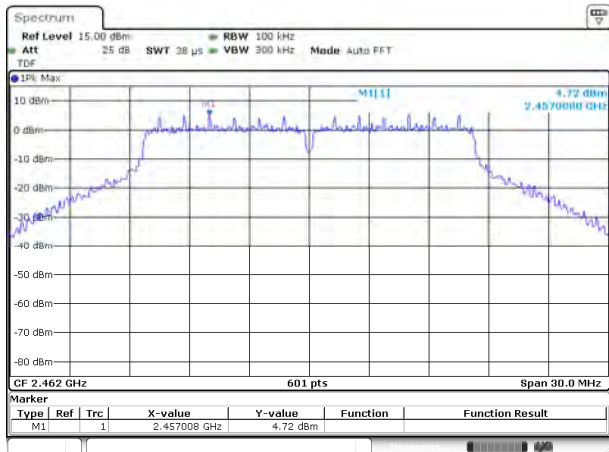
Date: 25 NOV 2016 13:51:51

802.11g MIDDLE CHANNEL, SPURIOUS
2 GHz ~ 25 GHz



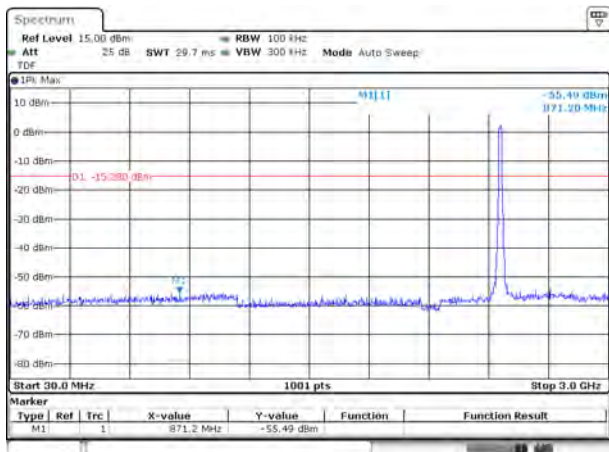
Date: 25 NOV 2016 13:51:58

802.11g HIGH CHANNEL CARRIER LEVEL



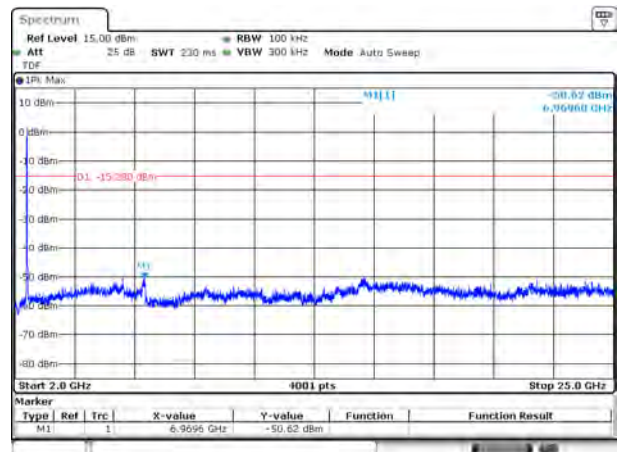
Date: 25 NOV 2016 13:53:13

802.11g HIGH CHANNEL, SPURIOUS
30 MHz ~ 3 GHz



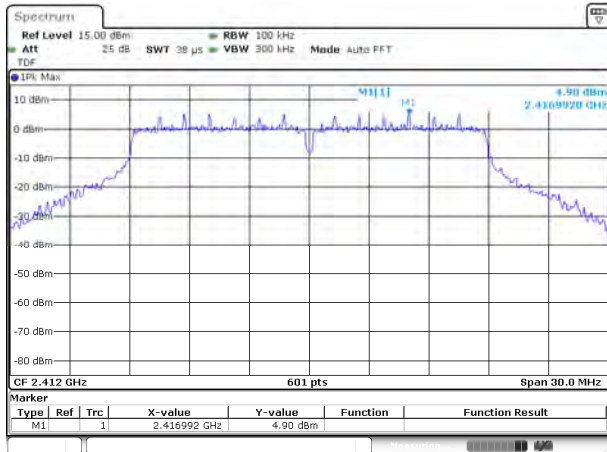
Date: 25 NOV 2016 13:53:27

802.11g HIGH CHANNEL, SPURIOUS
2 GHz ~ 25 GHz



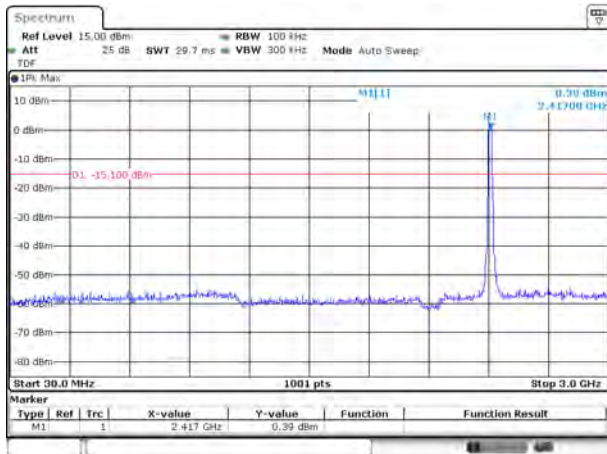
Date: 25 NOV 2016 13:53:33

802.11n-20 LOW CHANNEL CARRIER LEVEL



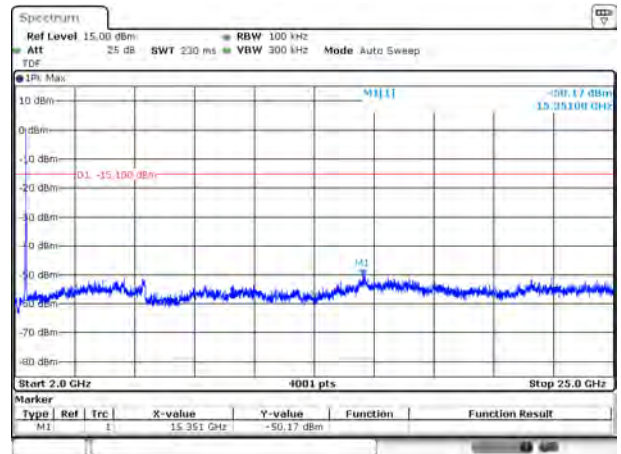
Date: 25.NOV.2018 13:54:52

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



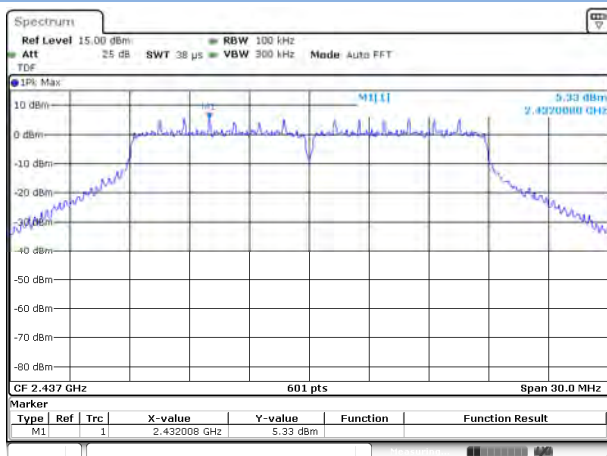
Date: 25.NOV.2018 13:55:05

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



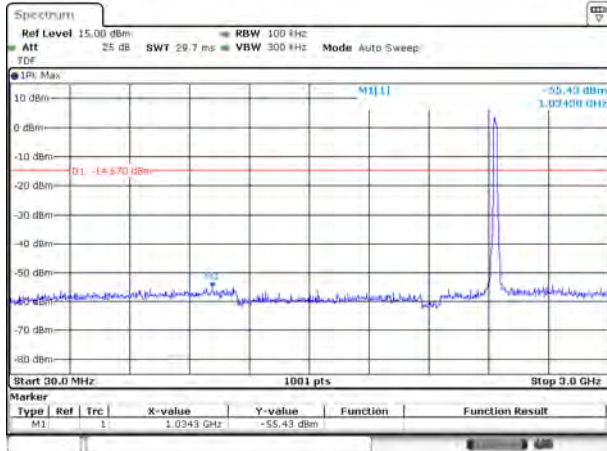
Date: 25.NOV.2018 13:55:11

802.11n-20 MIDDLE CHANNEL CARRIER LEVEL



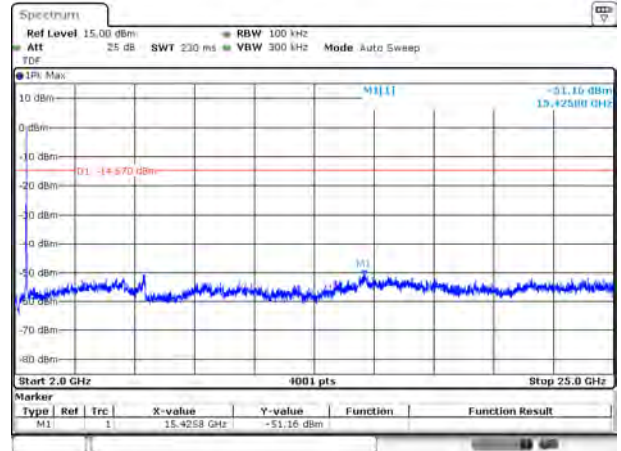
Date: 25.NOV.2018 13:56:21

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



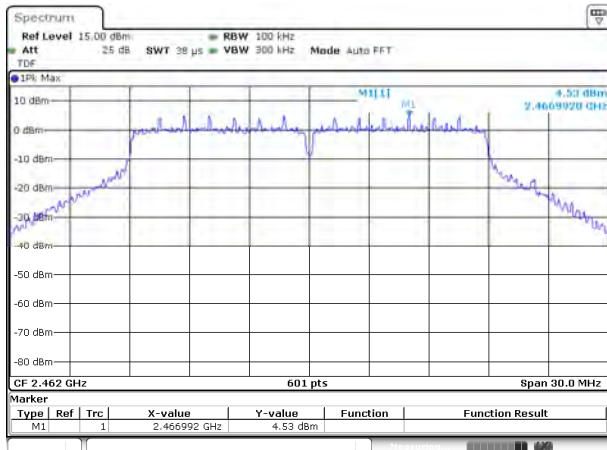
Date: 25 NOV 2016 13:56:34

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



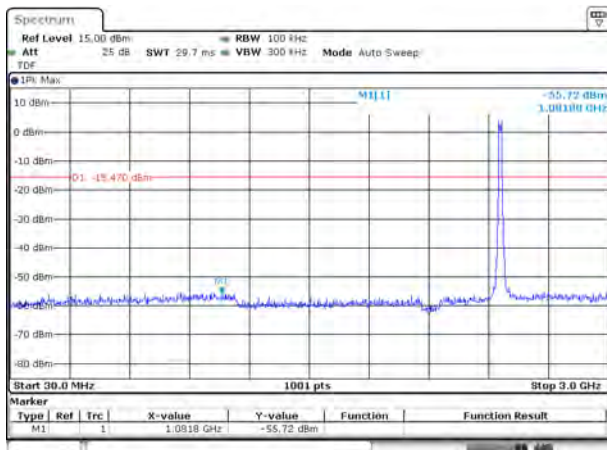
Date: 25 NOV 2016 13:56:41

802.11n-20 HIGH CHANNEL CARRIER LEVEL



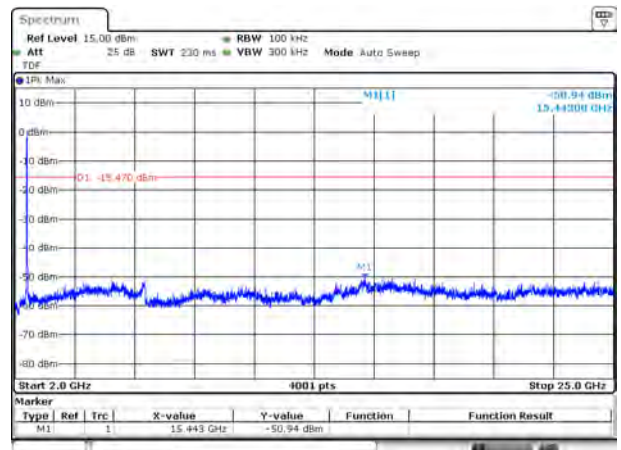
Date: 25 NOV 2016 13:57:45

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



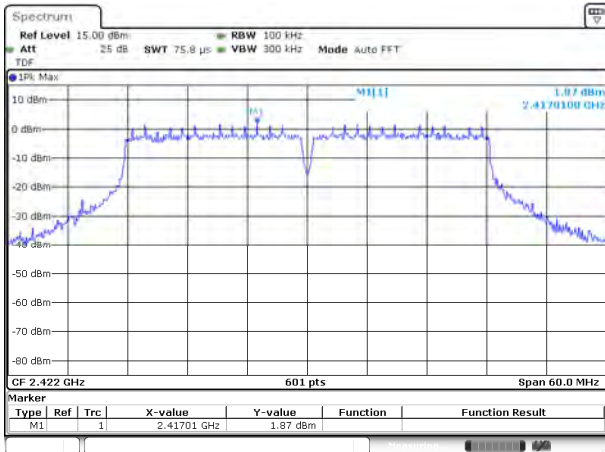
Date: 25 NOV 2016 13:57:59

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



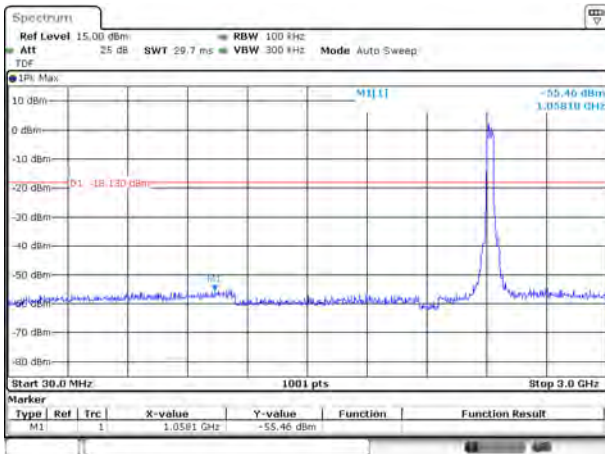
Date: 25 NOV 2016 13:58:05

802.11n-40 LOW CHANNEL CARRIER LEVEL



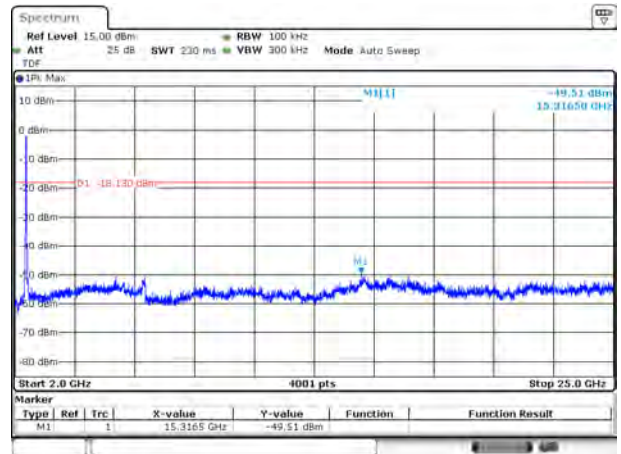
Date: 25.NOV.2018 13:59:25

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



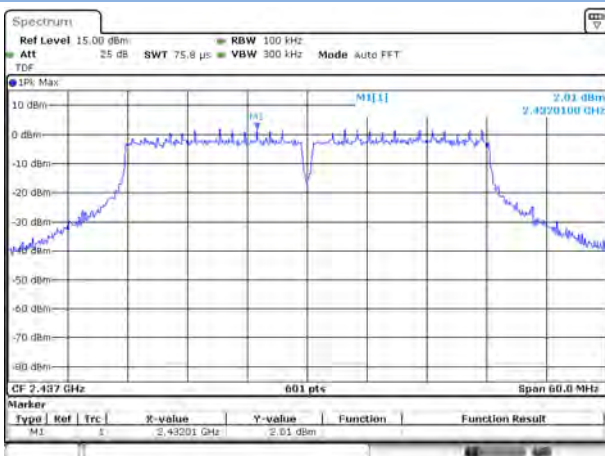
Date: 25.NOV.2018 13:59:37

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



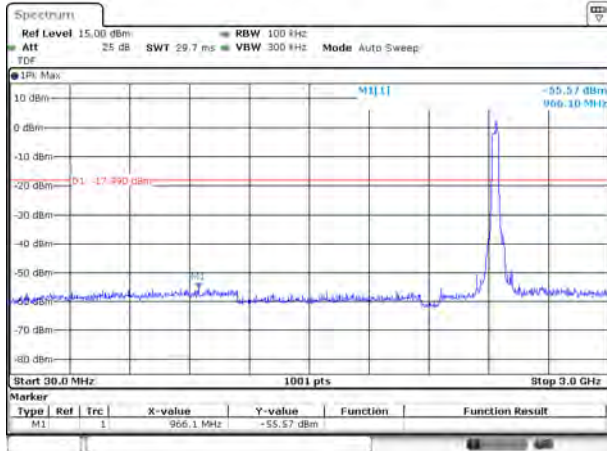
Date: 25.NOV.2018 13:59:44

802.11n-40 MIDDLE CHANNEL CARRIER LEVEL



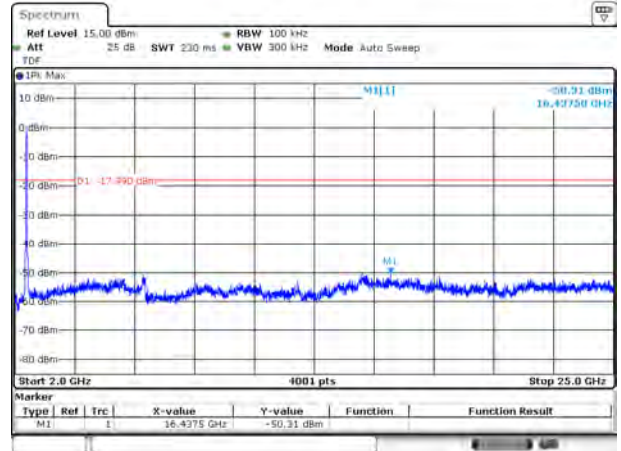
Date: 25.NOV.2018 14:00:55

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



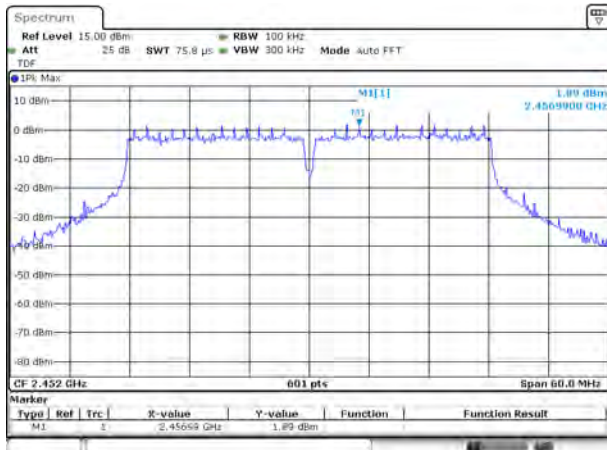
Date: 25 NOV 2016 14:01:11

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



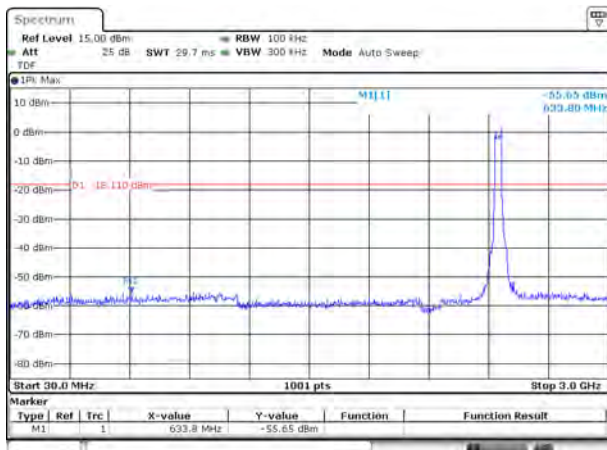
Date: 25 NOV 2016 14:01:16

802.11n-40 HIGH CHANNEL CARRIER LEVEL



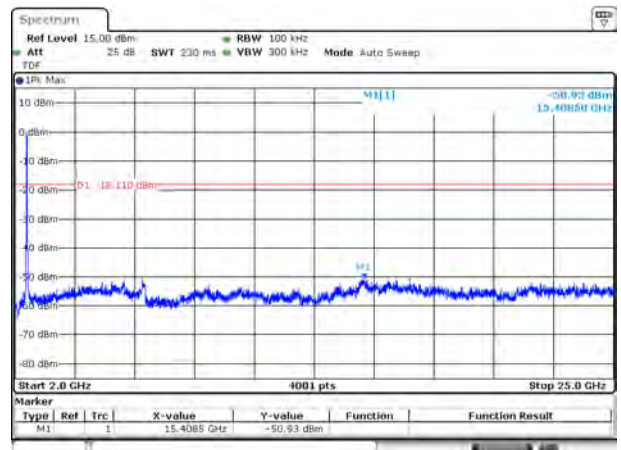
Date: 25 NOV 2016 14:02:22

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



Date: 25 NOV 2016 14:02:34

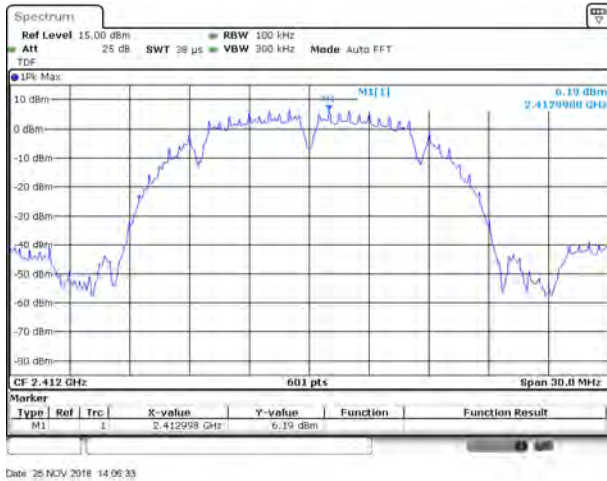
802.11n-40 HIGH CHANNEL, SPURIOUS
2 GHz ~ 25 GHz



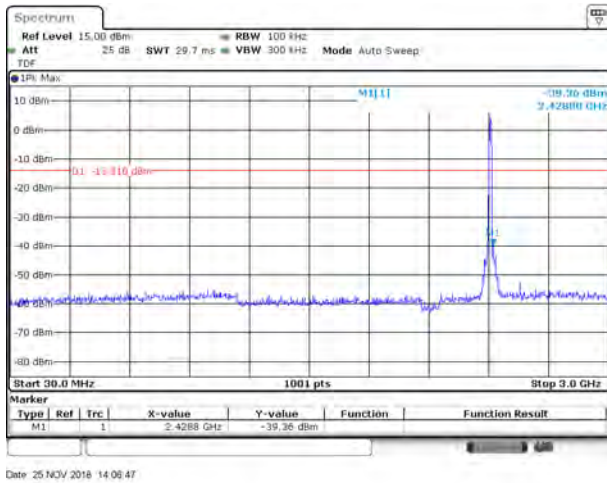
Date: 25 NOV 2016 14:02:41

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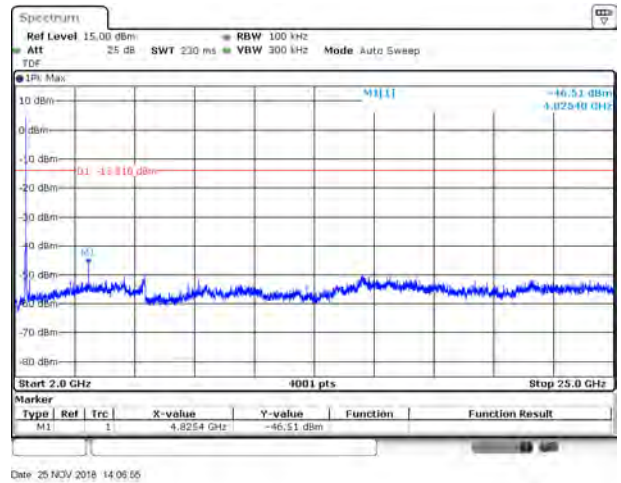
802.11b LOW CHANNEL CARRIER LEVEL



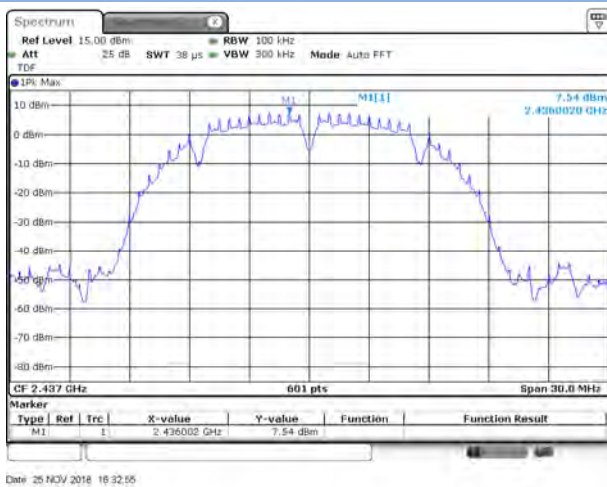
802.11b LOW CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



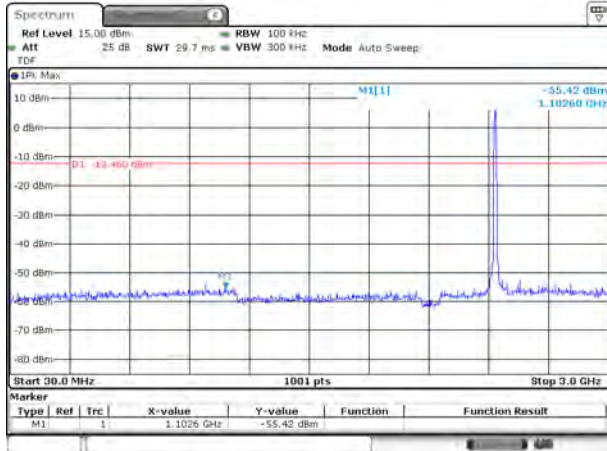
802.11b LOW CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



802.11b MIDDLE CHANNEL CARRIER LEVEL

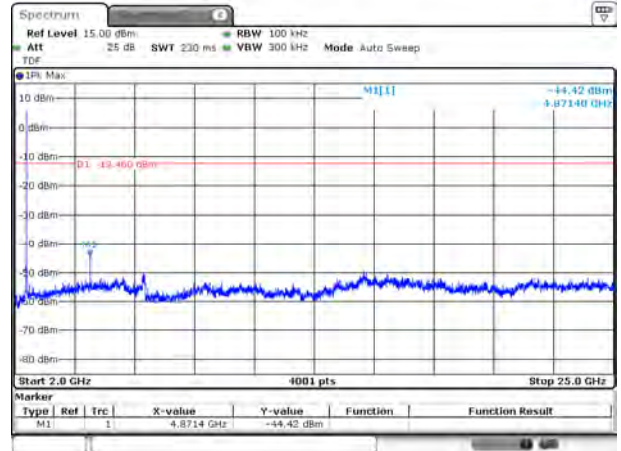


802.11b MIDDLE CHANNEL, SPURIOUS
30 MHz ~ 3 GHz



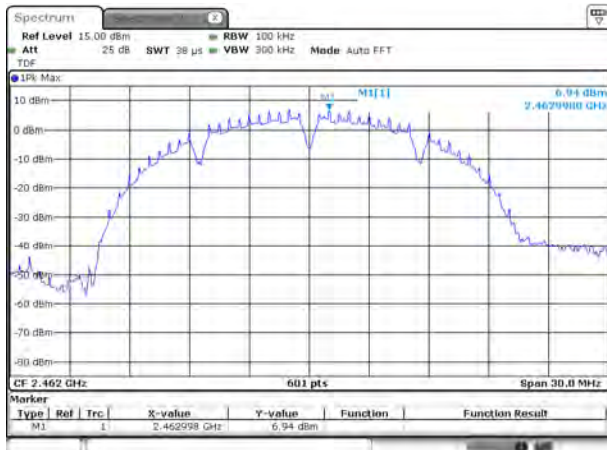
Date: 25 NOV 2018 16:33:13

802.11b MIDDLE CHANNEL, SPURIOUS
2 GHz ~ 25 GHz



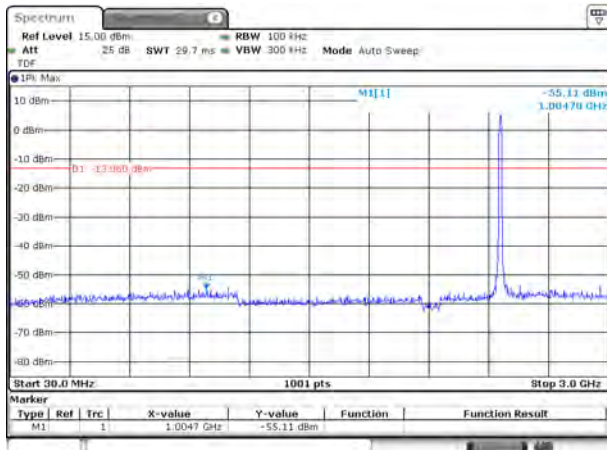
Date: 25 NOV 2018 16:33:22

802.11b HIGH CHANNEL CARRIER LEVEL



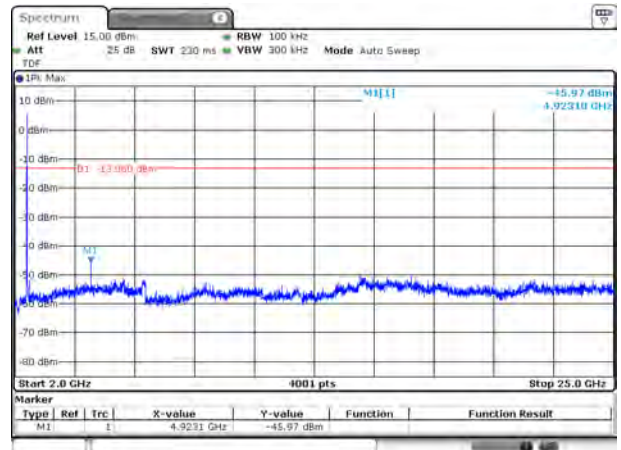
Date: 25 NOV 2018 19:19:15

802.11b HIGH CHANNEL, SPURIOUS
30 MHz ~ 3 GHz



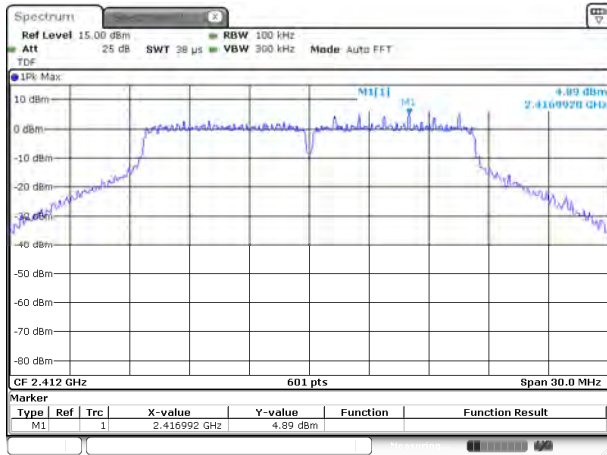
Date: 25 NOV 2018 19:19:32

802.11b HIGH CHANNEL, SPURIOUS
2 GHz ~ 25 GHz



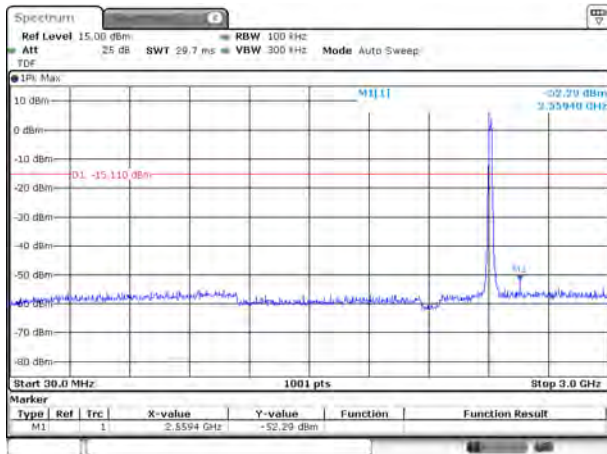
Date: 25 NOV 2018 19:19:40

802.11g LOW CHANNEL CARRIER LEVEL



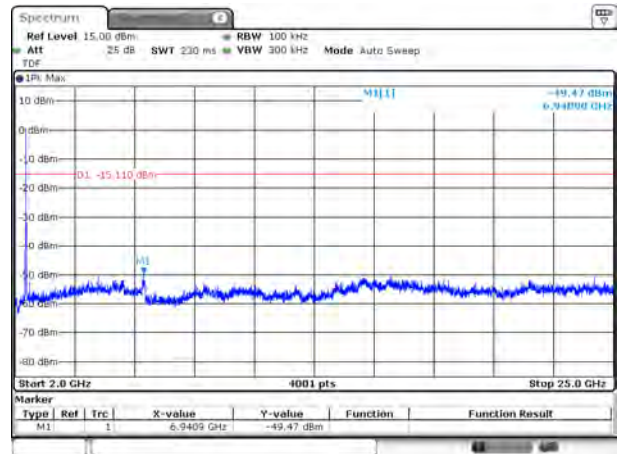
Date: 25.NOV.2018 19:21:38

802.11g LOW CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



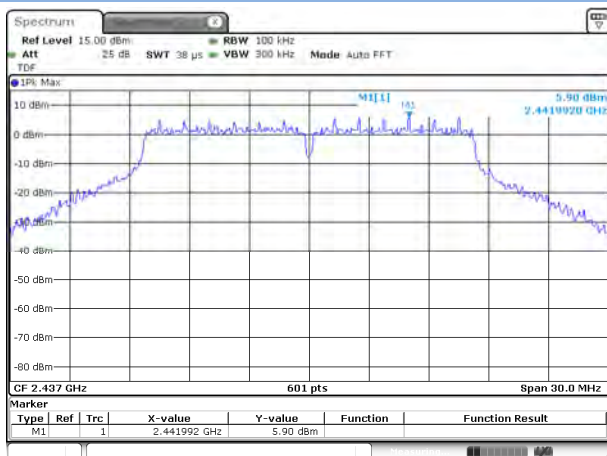
Date: 25.NOV.2018 19:21:52

802.11g LOW CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



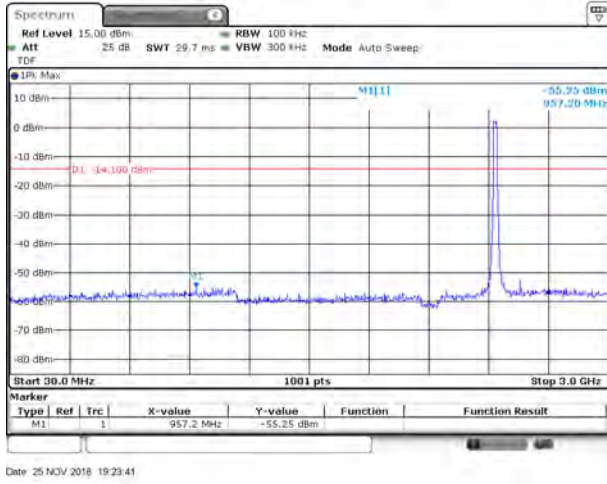
Date: 25.NOV.2018 19:21:59

802.11g MIDDLE CHANNEL CARRIER LEVEL

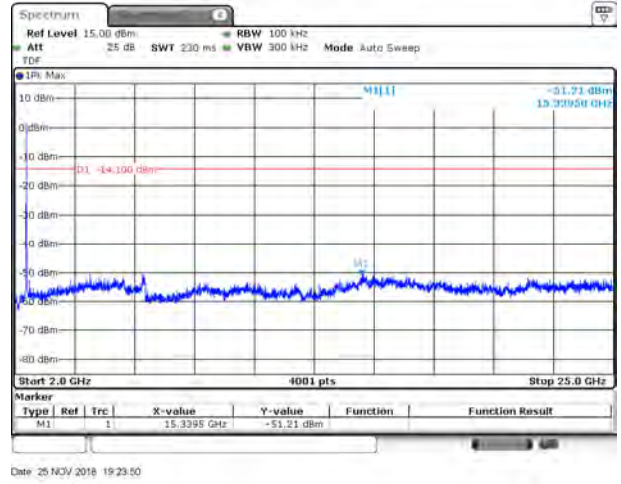


Date: 25.NOV.2018 19:23:27

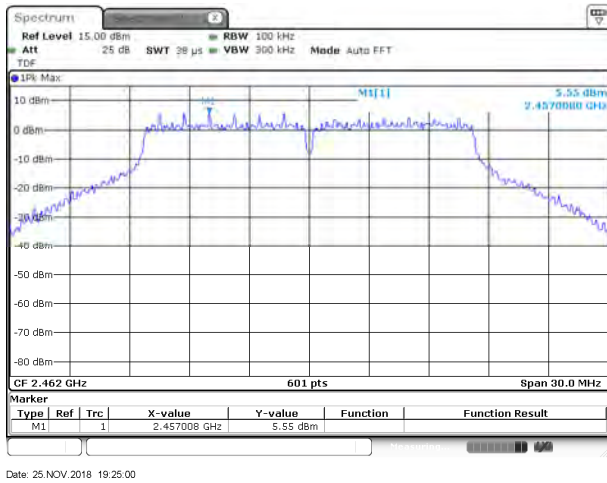
802.11g MIDDLE CHANNEL, SPURIOUS
30 MHz ~ 3 GHz



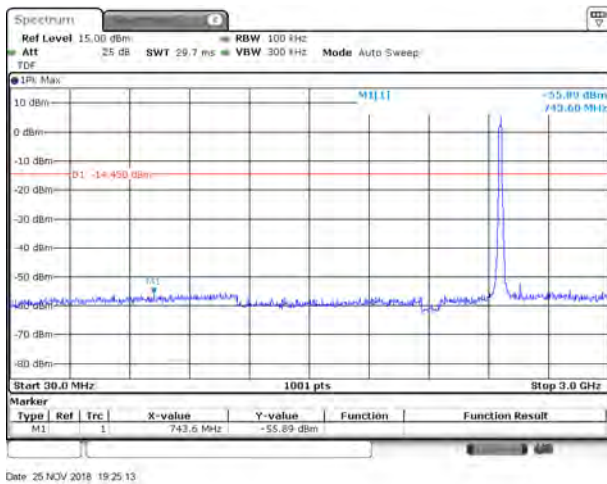
802.11g MIDDLE CHANNEL, SPURIOUS
2 GHz ~ 25 GHz



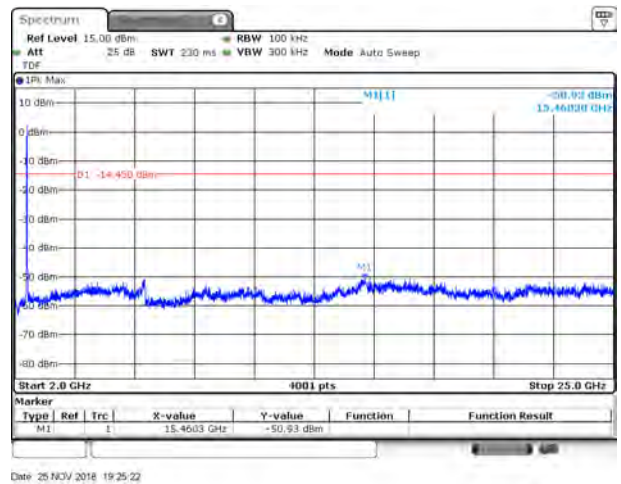
802.11g HIGH CHANNEL CARRIER LEVEL



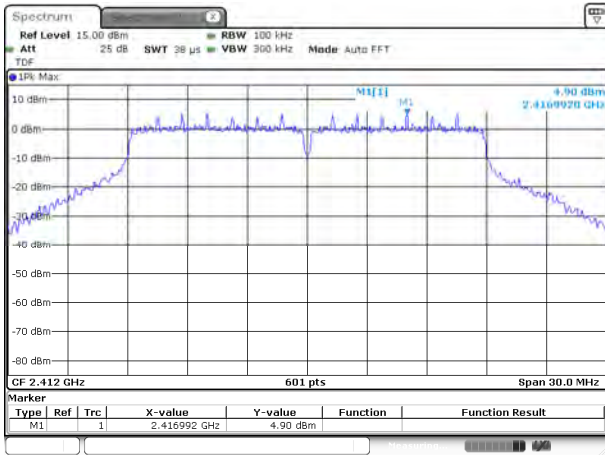
802.11g HIGH CHANNEL, SPURIOUS
30 MHz ~ 3 GHz



802.11g HIGH CHANNEL, SPURIOUS
2 GHz ~ 25 GHz

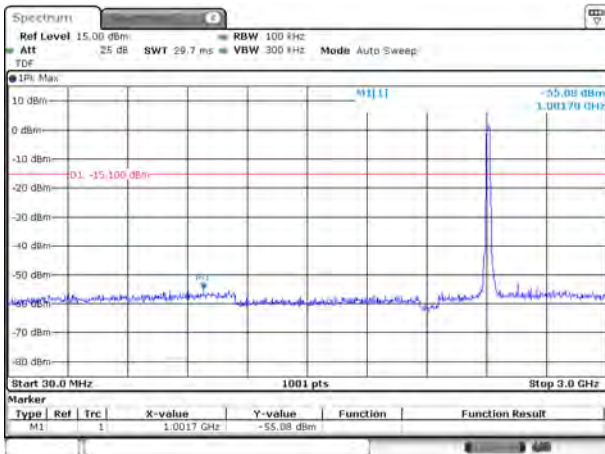


802.11n-20 LOW CHANNEL CARRIER LEVEL



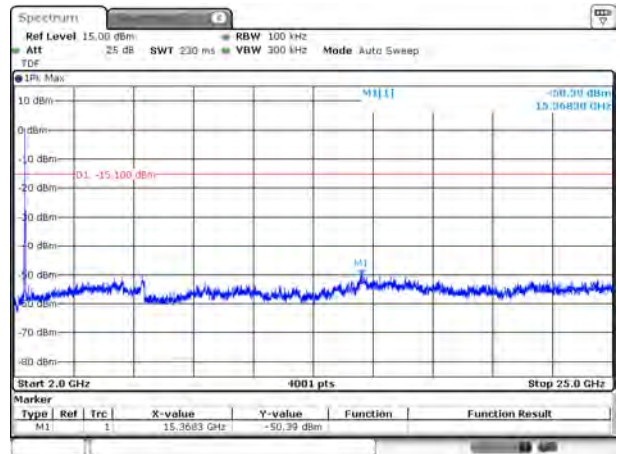
Date: 25.NOV.2018 19:26:54

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



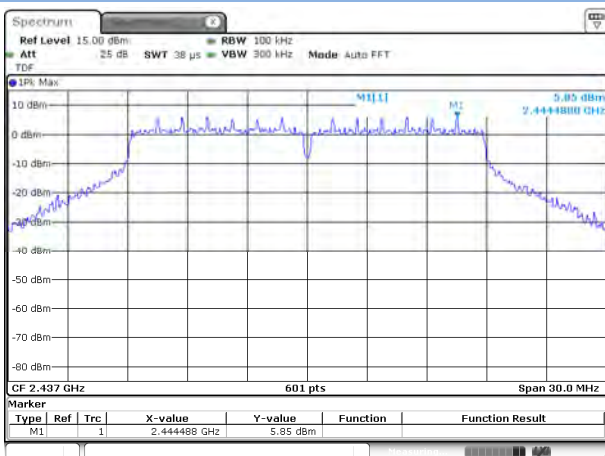
Date: 25.NOV.2018 19:27:07

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



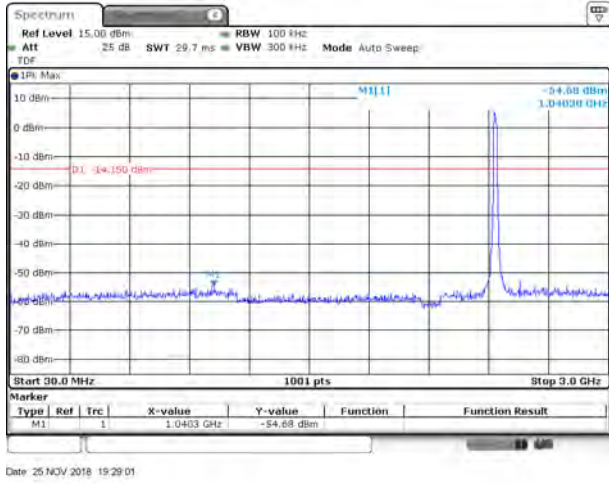
Date: 25.NOV.2018 19:27:16

802.11n-20 MIDDLE CHANNEL CARRIER LEVEL

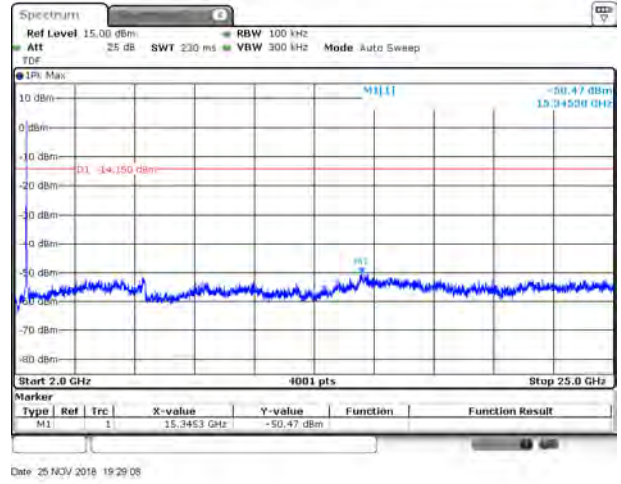


Date: 25.NOV.2018 19:28:47

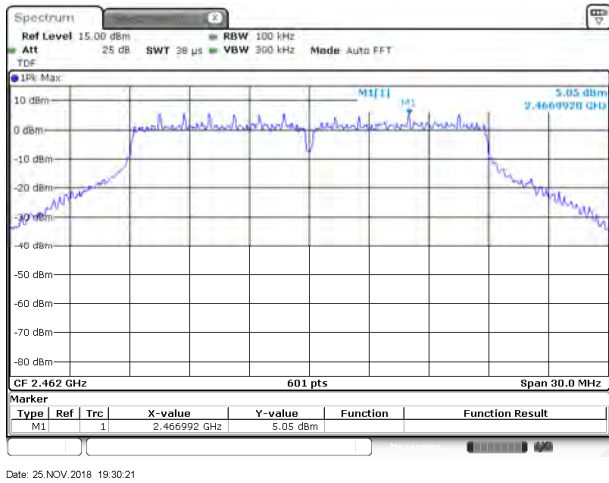
802.11n-20 MIDDLE CHANNEL, SPURIOUS
30 MHz ~ 3 GHz



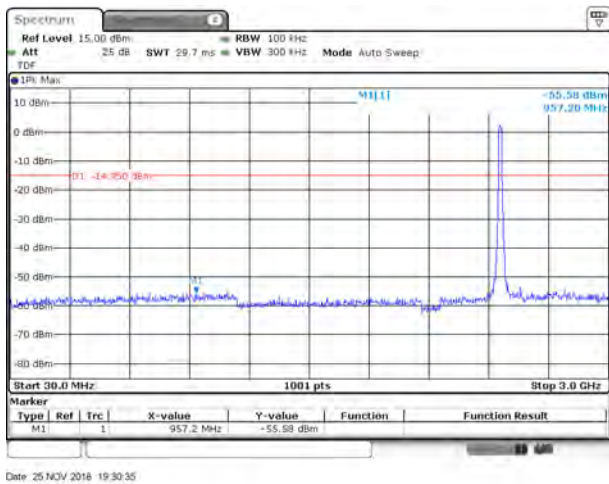
802.11n-20 MIDDLE CHANNEL, SPURIOUS
2 GHz ~ 25 GHz



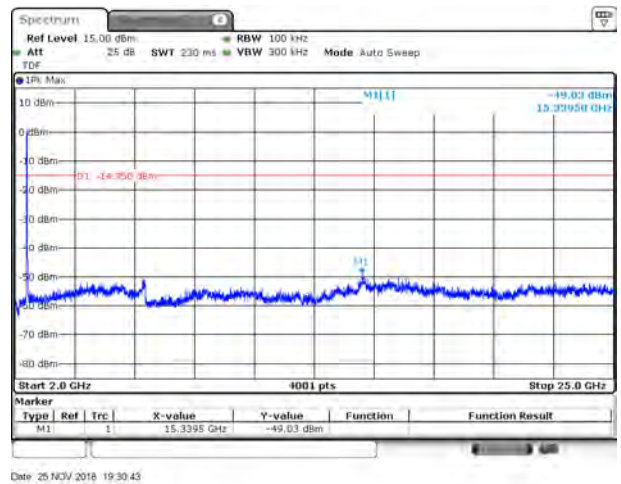
802.11n-20 HIGH CHANNEL CARRIER LEVEL



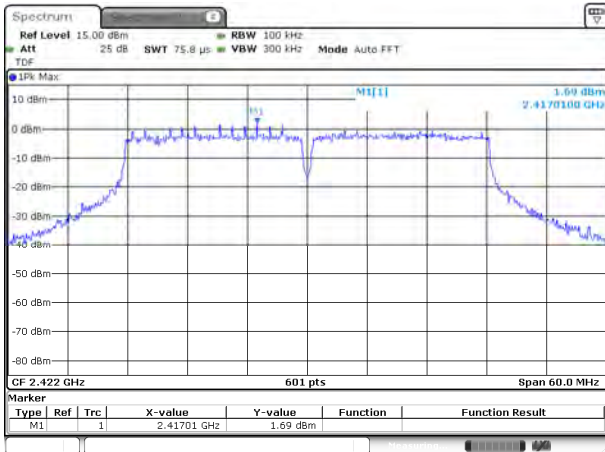
802.11n-20 HIGH CHANNEL, SPURIOUS
30 MHz ~ 3 GHz



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

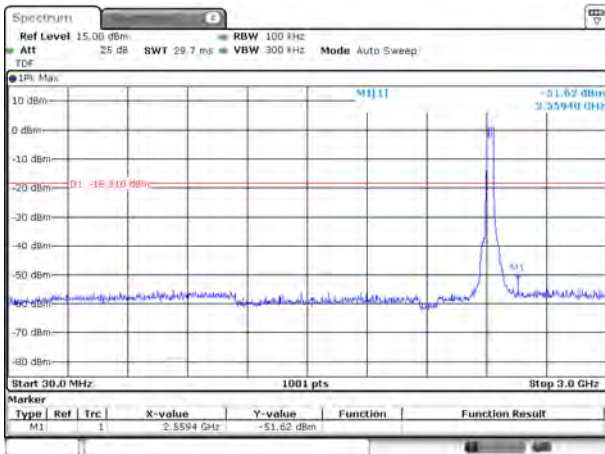


802.11n-40 LOW CHANNEL CARRIER LEVEL



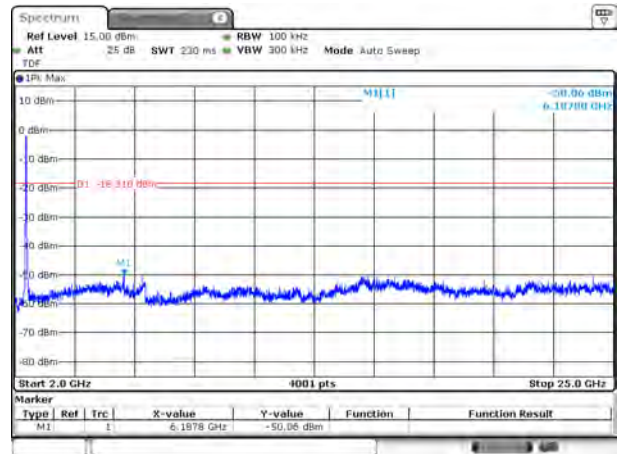
Date: 25.NOV.2018 19:34:50

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



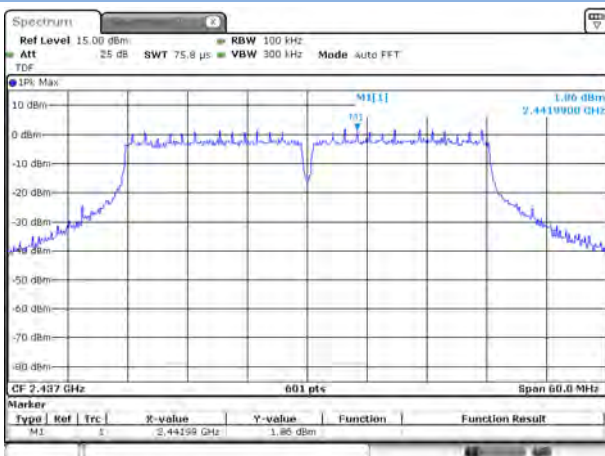
Date: 25.NOV.2018 19:35:05

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



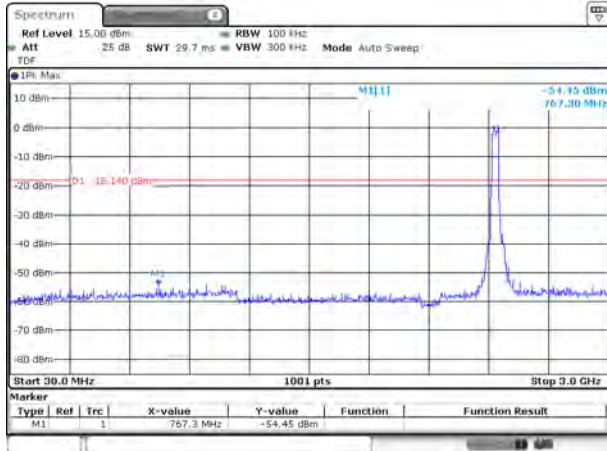
Date: 25.NOV.2018 19:35:13

802.11n-40 MIDDLE CHANNEL CARRIER LEVEL



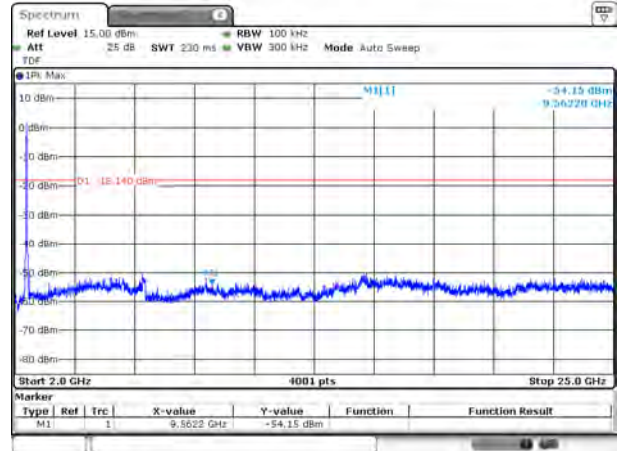
Date: 25.NOV.2018 19:36:37

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



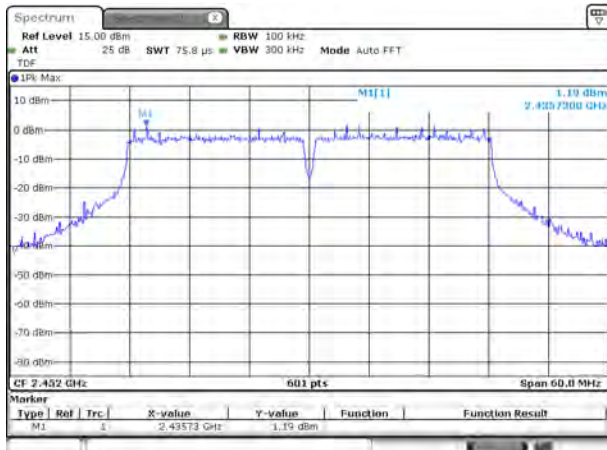
Date: 25 NOV 2018 19:36:53

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



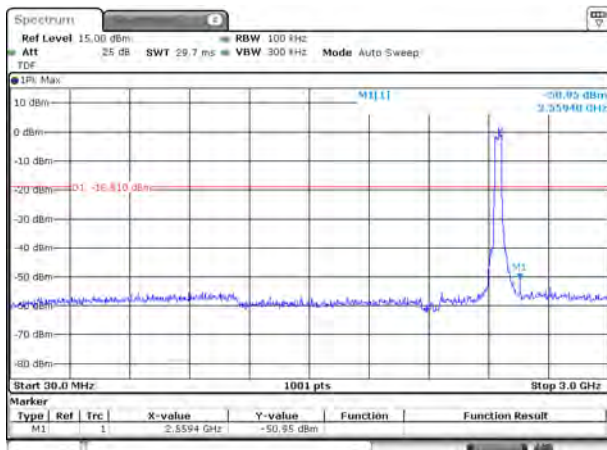
Date: 25 NOV 2018 19:37:00

802.11n-40 HIGH CHANNEL CARRIER LEVEL



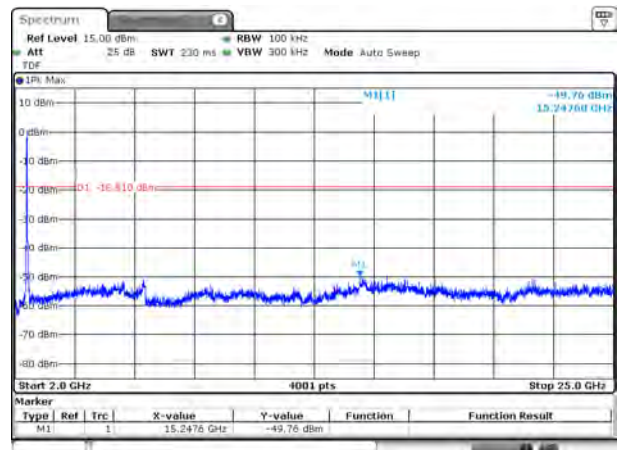
Date: 25 NOV 2018 19:38:13

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



Date: 25 NOV 2018 19:38:30

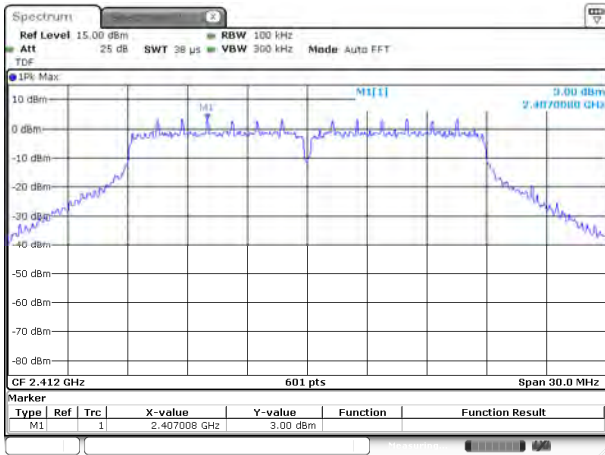
802.11n-40 HIGH CHANNEL, SPURIOUS
2 GHz ~ 25 GHz



Date: 25 NOV 2018 19:38:39

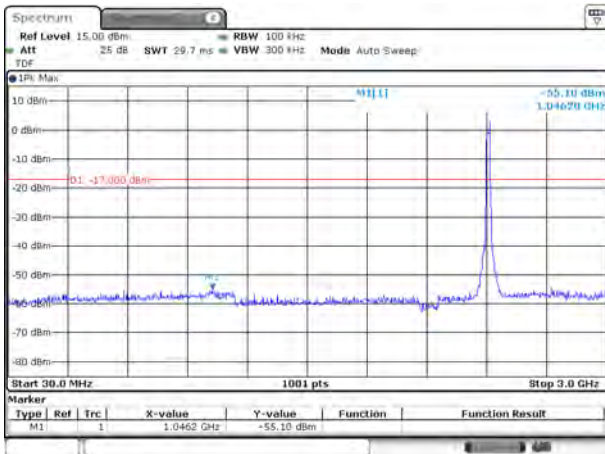
MIMO ANTO

802.11n-20 LOW CHANNEL CARRIER LEVEL



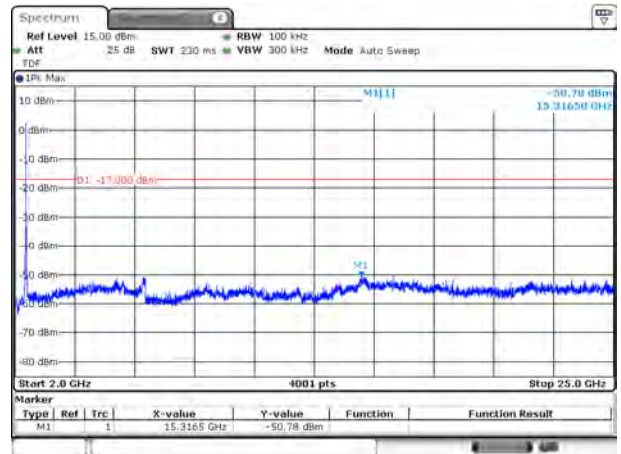
Date: 25.NOV.2018 19:52:12

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



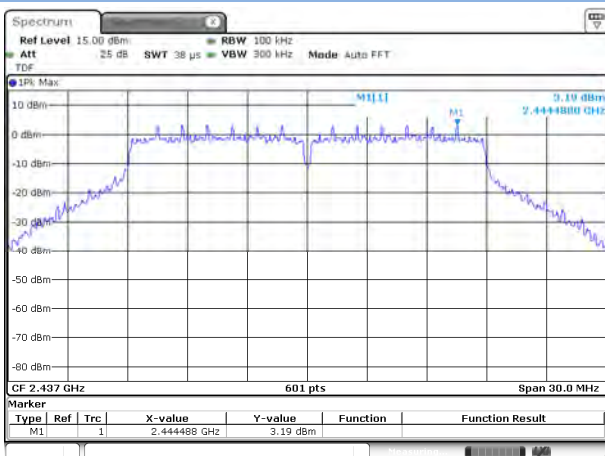
Date: 25.NOV.2018 19:52:26

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



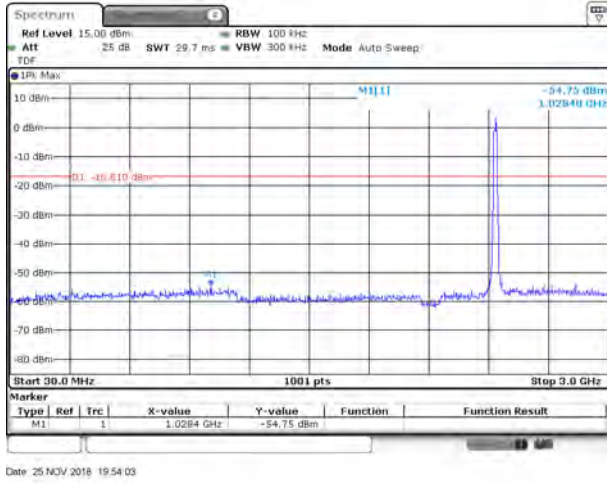
Date: 25.NOV.2018 19:52:34

802.11n-20 MIDDLE CHANNEL CARRIER LEVEL

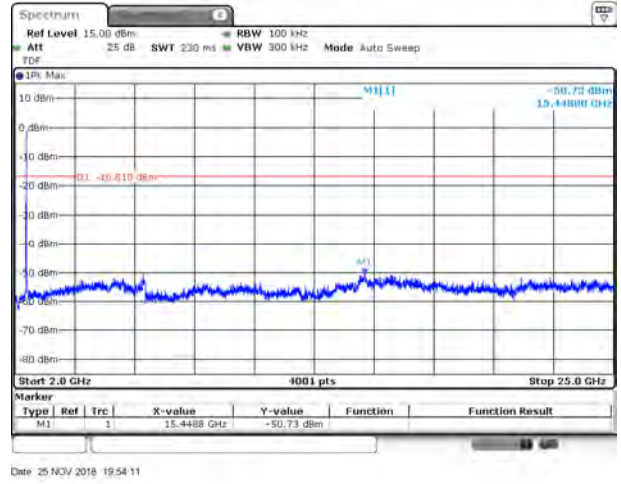


Date: 25.NOV.2018 19:53:47

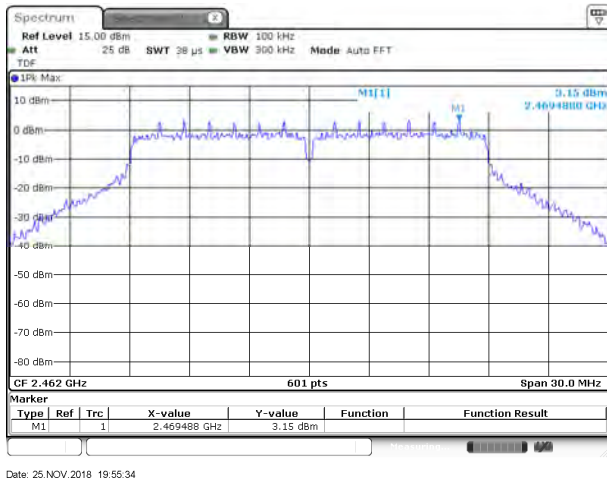
802.11n-20 MIDDLE CHANNEL, SPURIOUS
30 MHz ~ 3 GHz



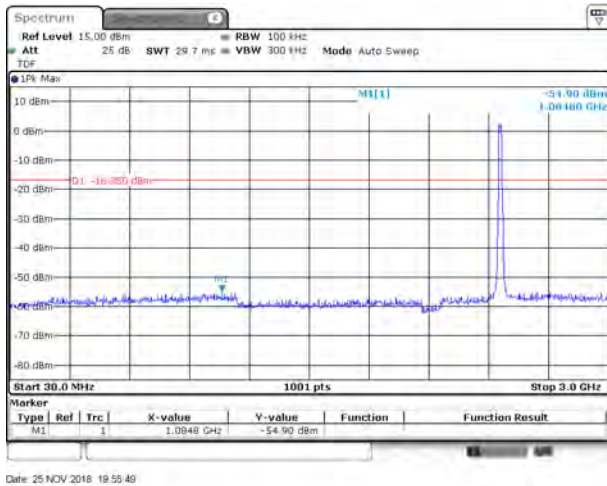
802.11n-20 MIDDLE CHANNEL, SPURIOUS
2 GHz ~ 25 GHz



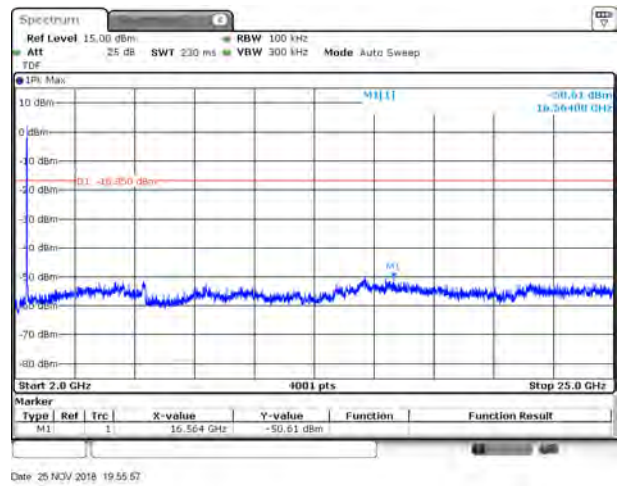
802.11n-20 HIGH CHANNEL CARRIER LEVEL



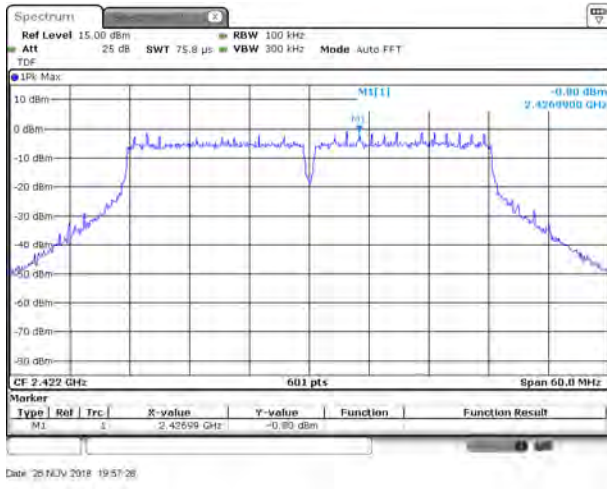
802.11n-20 HIGH CHANNEL, SPURIOUS
30 MHz ~ 3 GHz



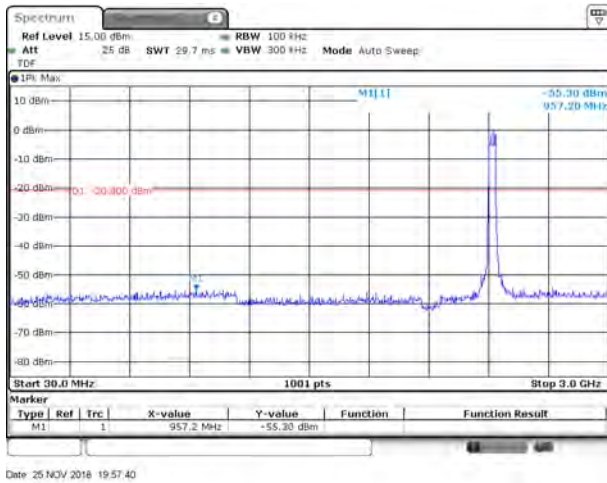
802.11n-20 HIGH CHANNEL, SPURIOUS
2 GHz ~ 25 GHz



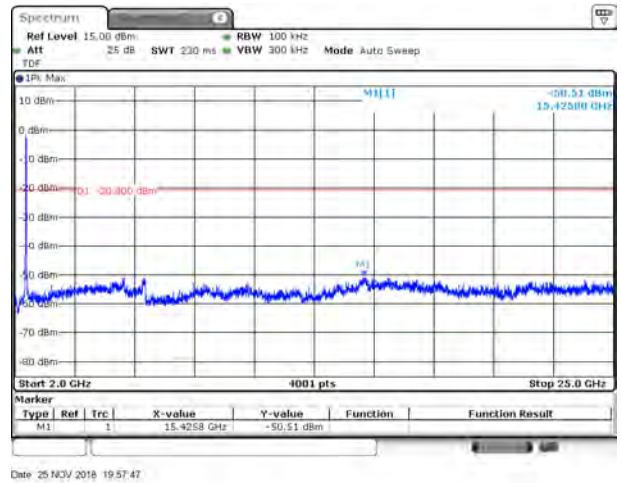
802.11n-40 LOW CHANNEL CARRIER LEVEL



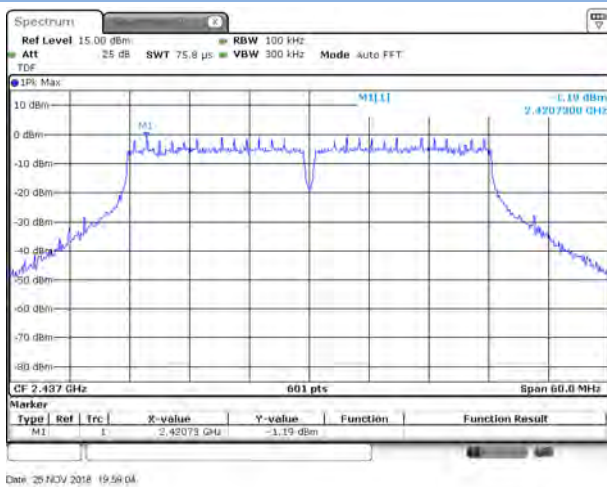
802.11n-40 LOW CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



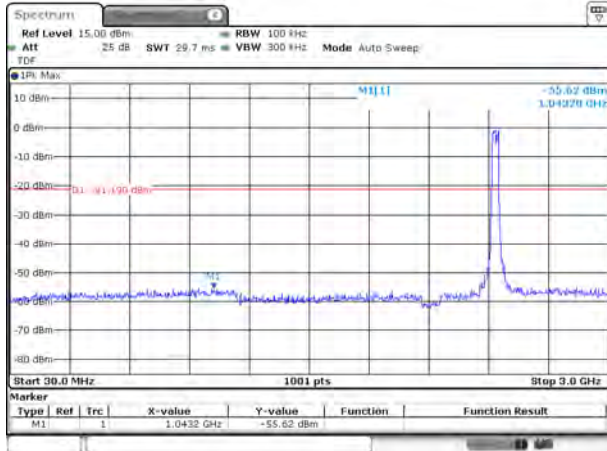
802.11n-40 LOW CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



802.11n-40 MIDDLE CHANNEL CARRIER LEVEL

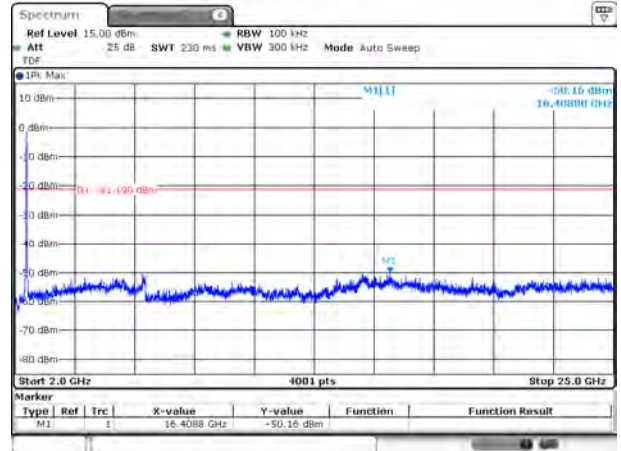


802.11n-40 MIDDLE CHANNEL, SPURIOUS
30 MHz ~ 3 GHz



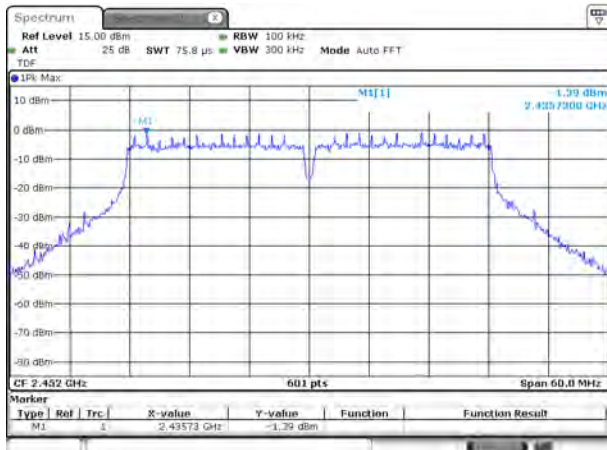
Date: 25 NOV 2016 19:59:16

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



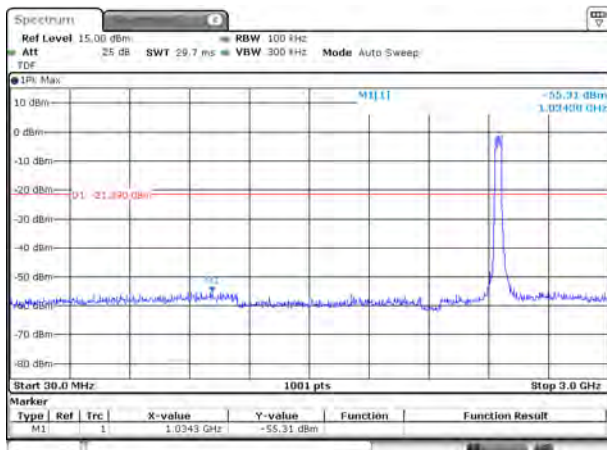
Date: 25 NOV 2016 19:59:24

802.11n-40 HIGH CHANNEL CARRIER LEVEL



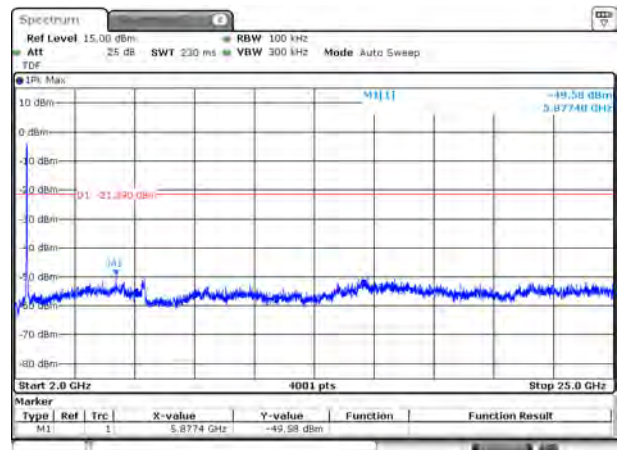
Date: 25 NOV 2016 20:09:34

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



Date: 25 NOV 2016 20:00:45

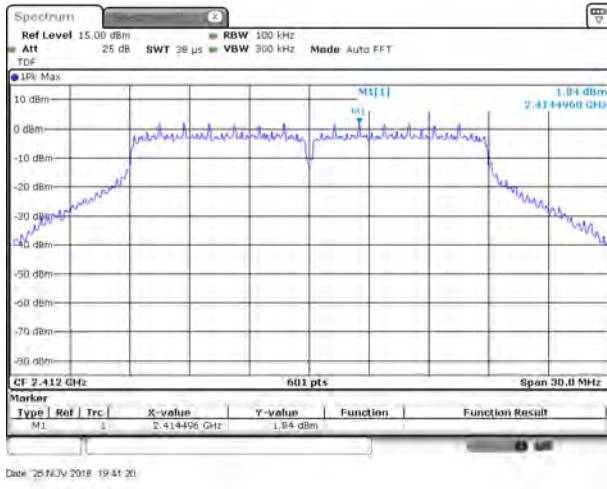
802.11n-40 HIGH CHANNEL, SPURIOUS
2 GHz ~ 25 GHz



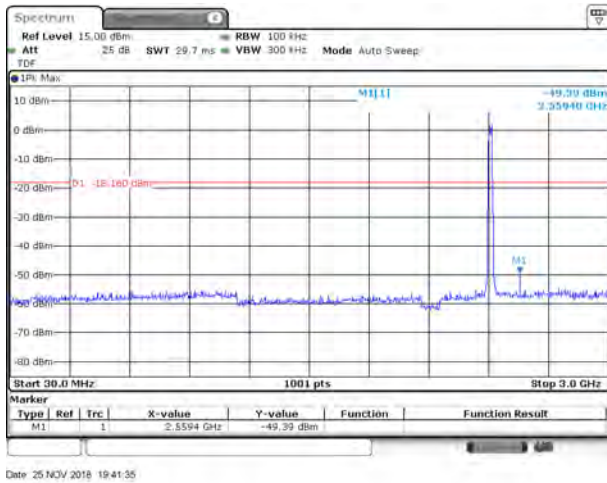
Date: 25 NOV 2016 20:00:52

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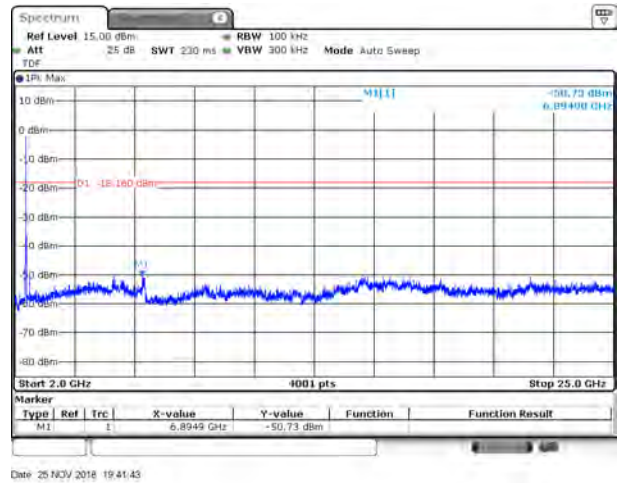
802.11n-20 LOW CHANNEL CARRIER LEVEL



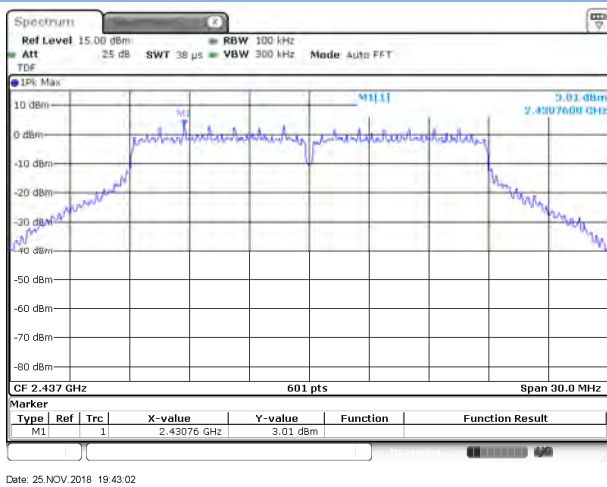
802.11n-20 LOW CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



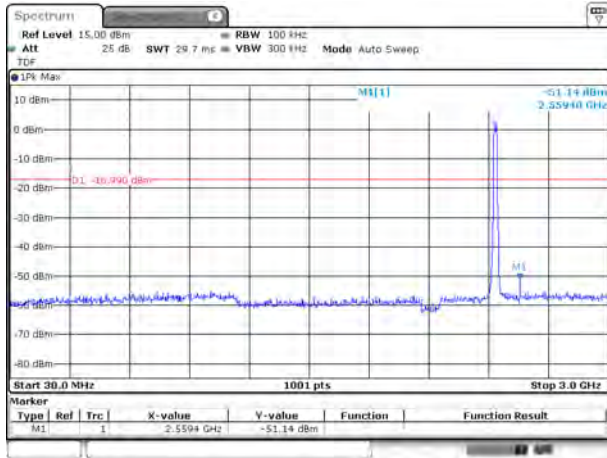
802.11n-20 LOW CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



802.11n-20 MIDDLE CHANNEL CARRIER LEVEL

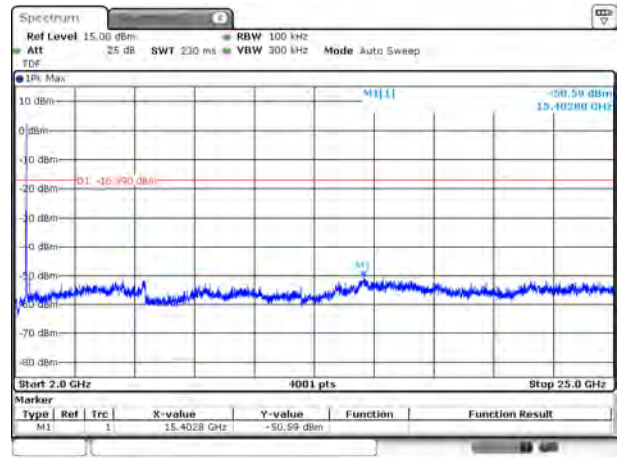


802.11n-20 MIDDLE CHANNEL, SPURIOUS
30 MHz ~ 3 GHz



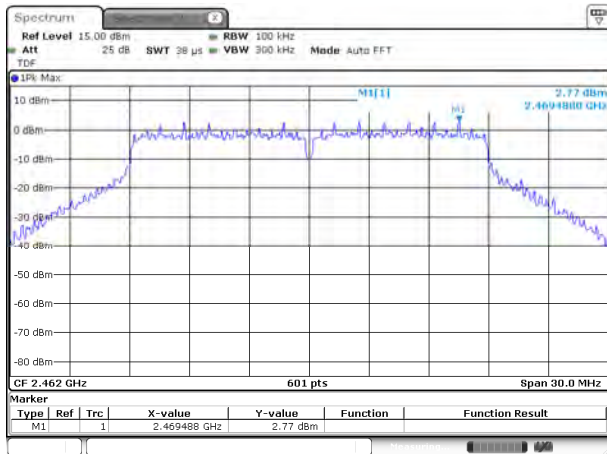
Date: 25 NOV 2016 19:43:15

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



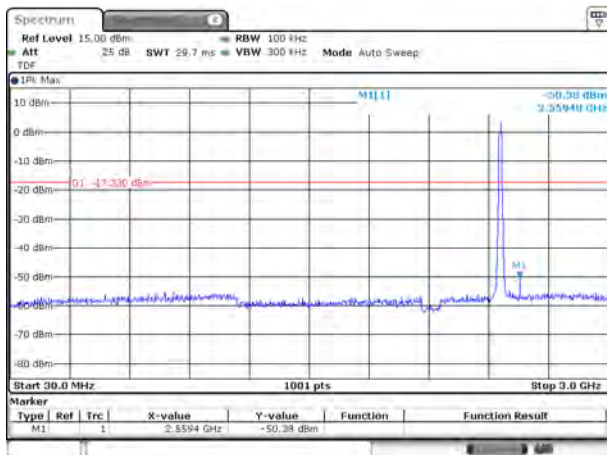
Date: 25 NOV 2016 19:43:22

802.11n-20 HIGH CHANNEL CARRIER LEVEL



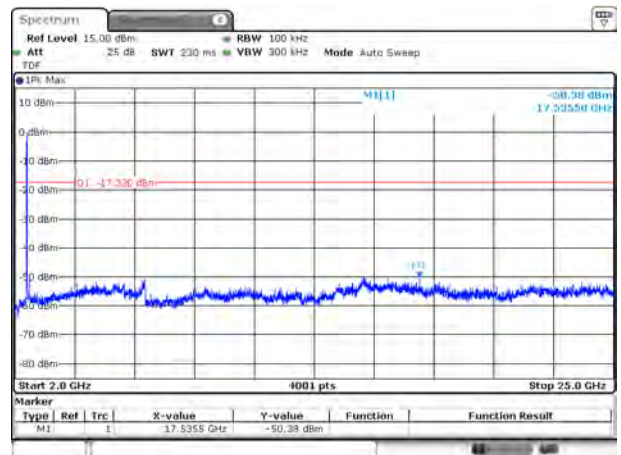
Date: 25 NOV 2016 19:44:26

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



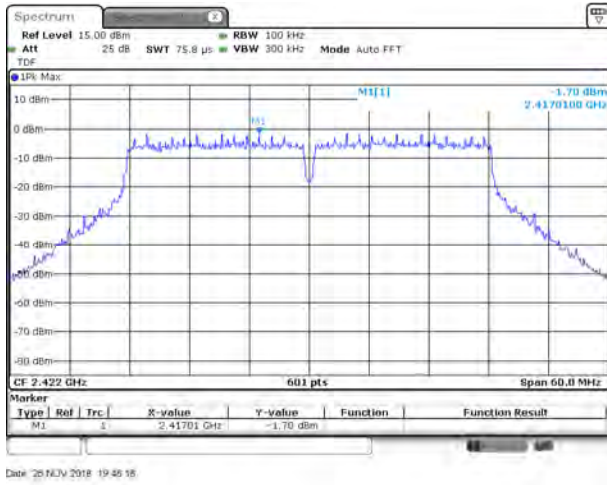
Date: 25 NOV 2016 19:44:40

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

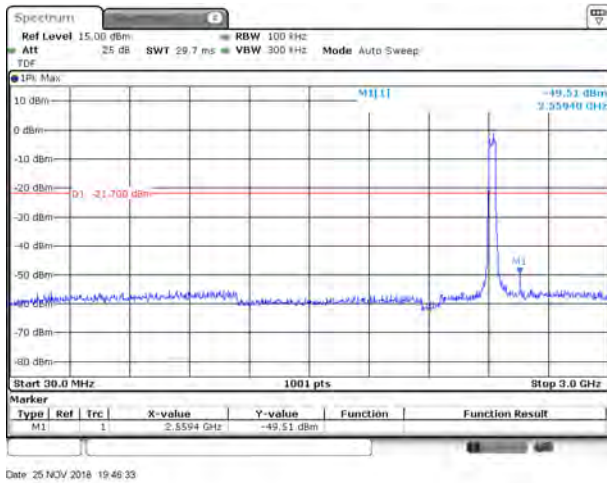


Date: 25 NOV 2016 19:44:48

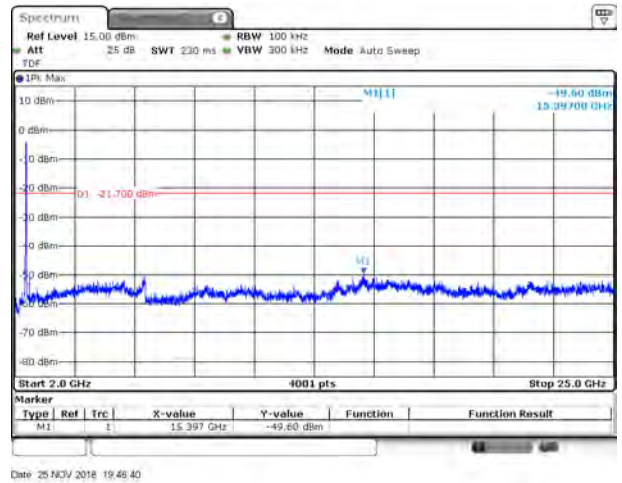
802.11n-40 LOW CHANNEL CARRIER LEVEL



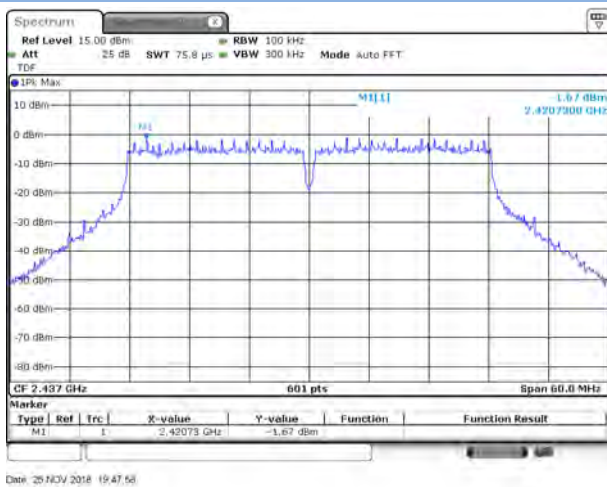
802.11n-40 LOW CHANNEL, SPURIOUS 30 MHz ~ 3 GHz



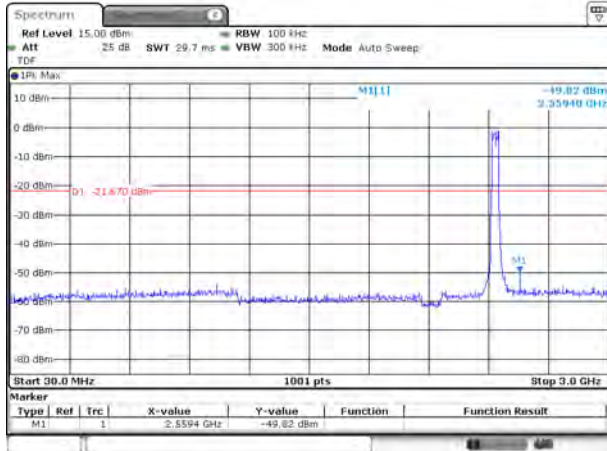
802.11n-40 LOW CHANNEL, SPURIOUS 2 GHz ~ 25 GHz



802.11n-40 MIDDLE CHANNEL CARRIER LEVEL

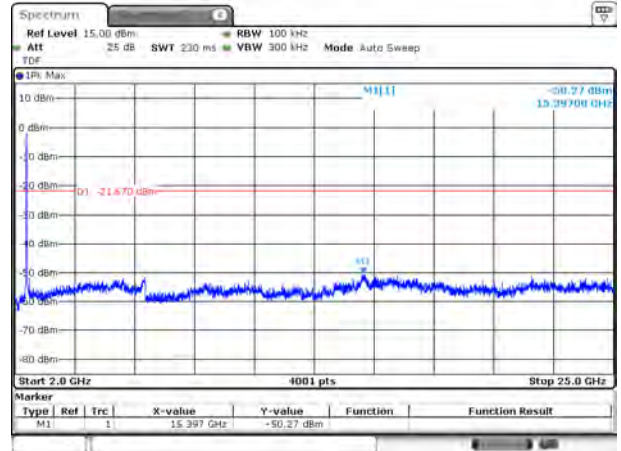


802.11n-40 MIDDLE CHANNEL, SPURIOUS
30 MHz ~ 3 GHz



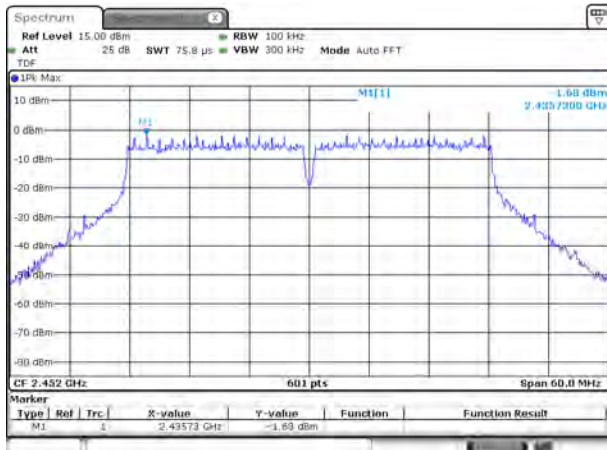
Date: 25 NOV 2018 19:48:12

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



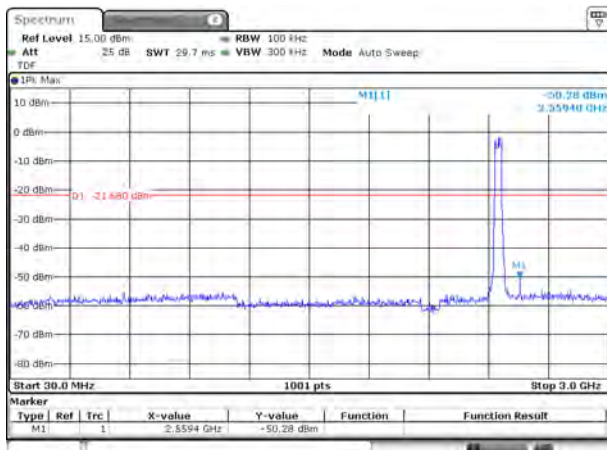
Date: 25 NOV 2018 19:48:20

802.11n-40 HIGH CHANNEL CARRIER LEVEL



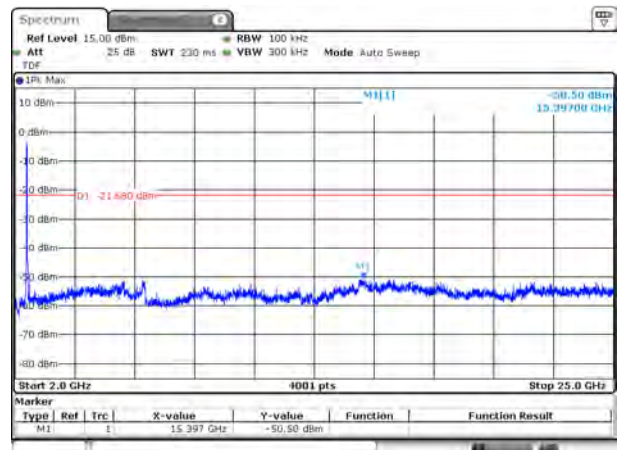
Date: 25 NOV 2018 19:49:30

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



Date: 25 NOV 2018 19:49:44

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



Date: 25 NOV 2018 19:49:51

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.

SISLANT0

802.11b Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-45.68	5.69	-14.31	Pass
High Channel	-48.44	5.31	-14.69	Pass

802.11g Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-22.82	5.17	-14.83	Pass
High Channel	-44.09	4.72	-15.28	Pass

802.11n-20 MHz Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-22.72	4.90	-15.10	Pass
High Channel	-43.91	4.53	-15.47	Pass

802.11n-40 MHz Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-26.97	1.87	-18.13	Pass
High Channel	-37.99	1.89	-18.11	Pass

SISI ANT1
802.11b Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-47.12	6.19	-13.81	Pass
High Channel	-47.24	6.94	-13.06	Pass

802.11g Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-23.09	4.89	-15.11	Pass
High Channel	-44.76	5.55	-14.45	Pass

802.11n-20 MHz Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-23.87	4.90	-15.10	Pass
High Channel	-42.82	5.05	-14.95	Pass

802.11n-40 MHz Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-28.01	1.69	-18.31	Pass
High Channel	-39.42	1.19	-18.81	Pass

MIMO ANT0

802.11n-20 MHz Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-26.28	3.00	-17.00	Pass
High Channel	-47.77	3.15	-16.85	Pass

802.11n-40 MHz Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-31.42	-0.80	-20.80	Pass
High Channel	-46.55	-1.39	-21.39	Pass

MIMO ANT1

802.11n-20 MHz Mode:

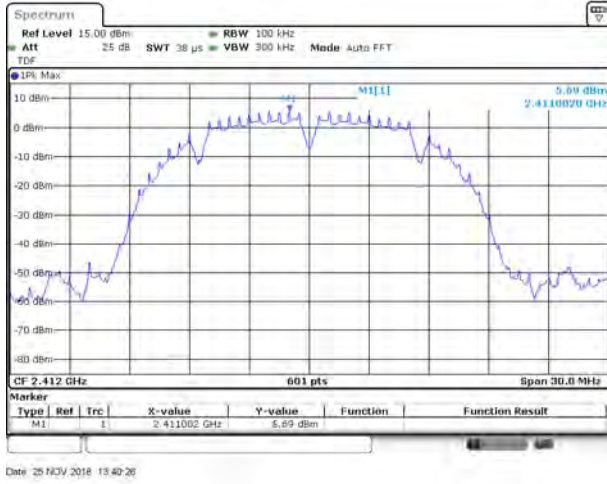
Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-27.41	1.84	-18.16	Pass
High Channel	-49.12	2.77	-17.23	Pass

802.11n-40 MHz Mode:

Channel	Measured Max. Band Edge Emission (dBm)	Limit (dBm)		Verdict
		Carrier Level	Calculated 20 dBc Limit	
Low Channel	-32.98	-1.70	-21.70	Pass
High Channel	-48.05	-1.68	-21.68	Pass

Test Plots
SISO ANT0

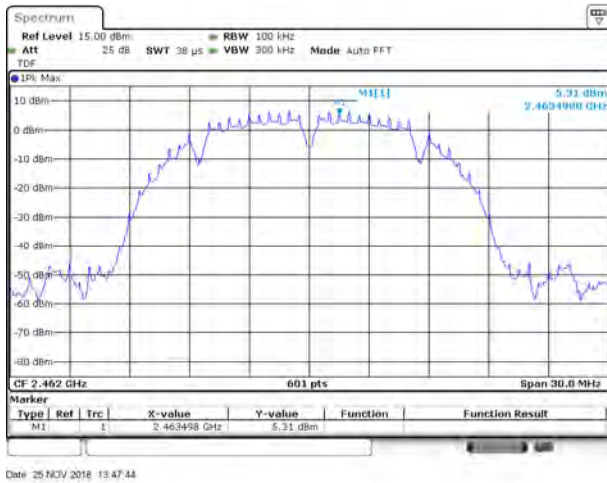
802.11b LOW CHANNEL, Carrier level



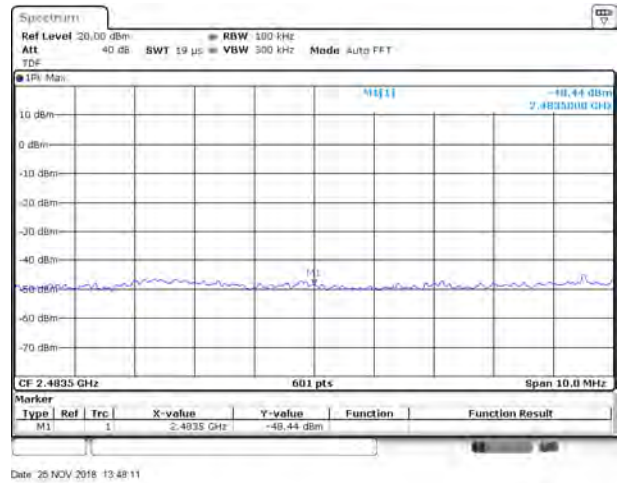
802.11b LOW CHANNEL, Reference level



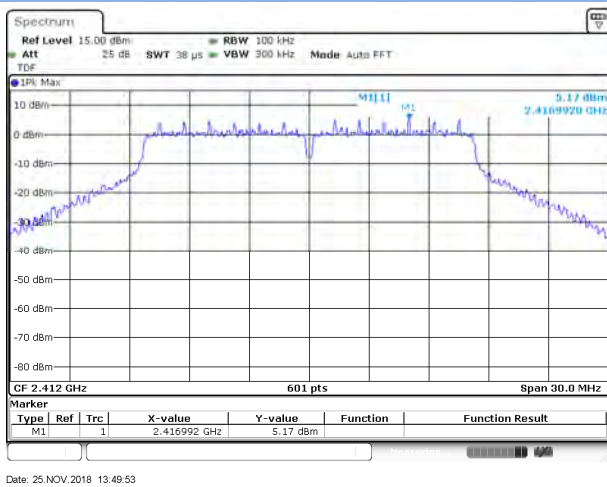
802.11b HIGH CHANNEL, Carrier level



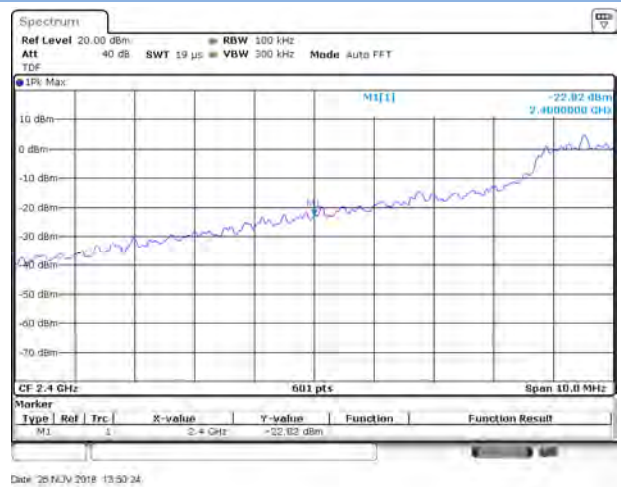
802.11b HIGH CHANNEL, Reference level



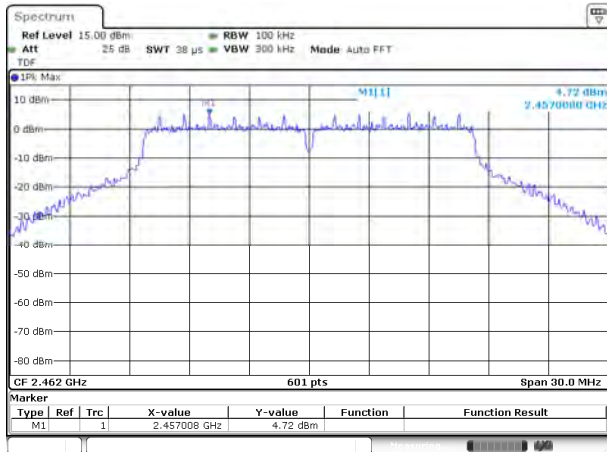
802.11g LOW CHANNEL, Carrier level



802.11g LOW CHANNEL, Reference level

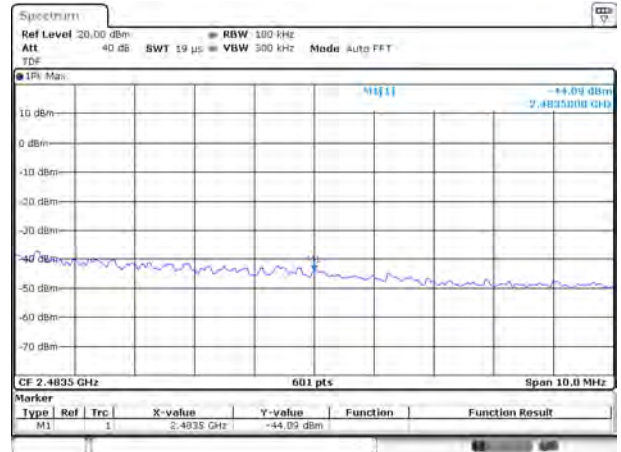


802.11g HIGH CHANNEL, Carrier level



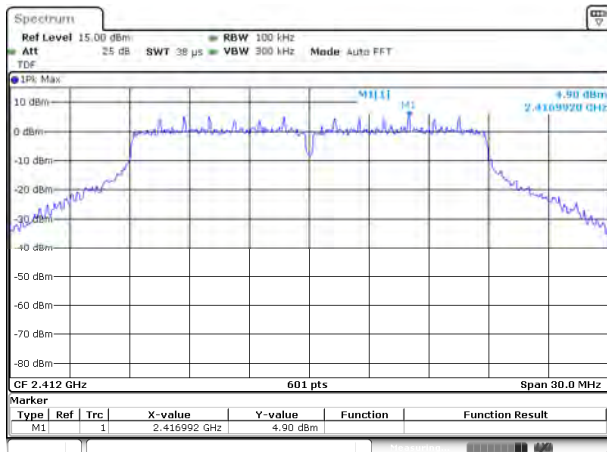
Date: 25.NOV.2018 13:53:13

802.11g HIGH CHANNEL, Reference level



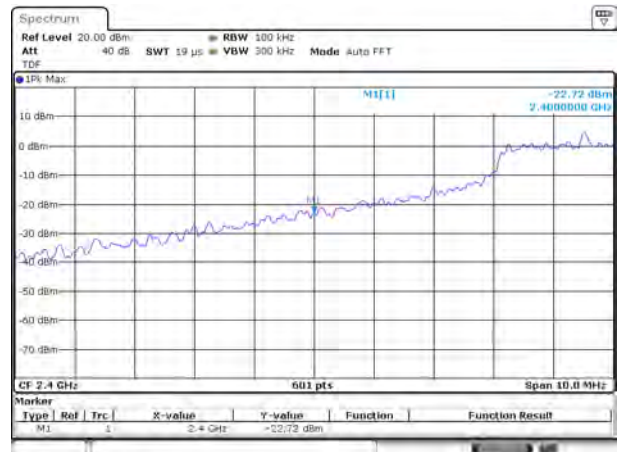
Date: 25.NOV.2018 13:53:40

802.11n-20 MHz LOW CHANNEL, Carrier level



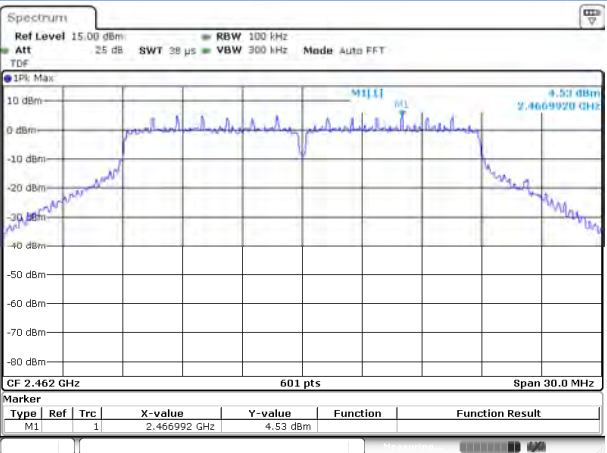
Date: 25.NOV.2018 13:54:52

802.11n-20 MHz LOW CHANNEL, Reference level



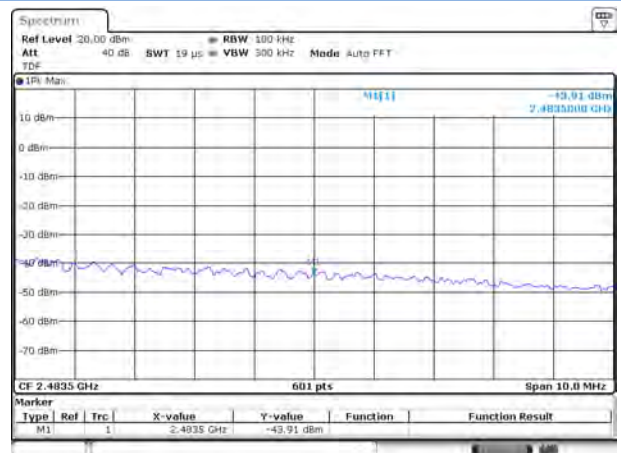
Date: 25.NOV.2018 13:55:18

802.11n-20 MHz HIGH CHANNEL, Carrier level



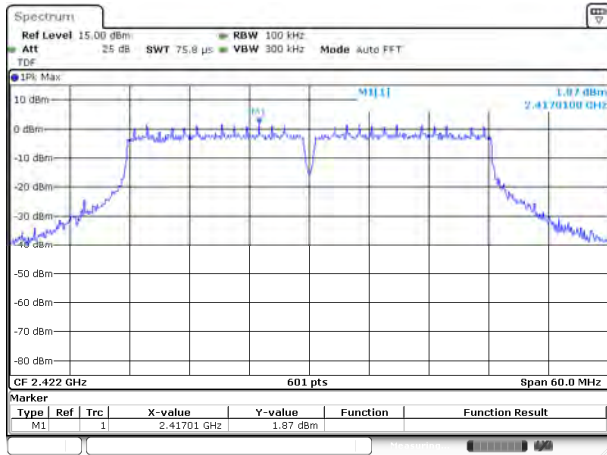
Date: 25.NOV.2018 13:57:45

802.11n-20 MHz HIGH CHANNEL, Reference level



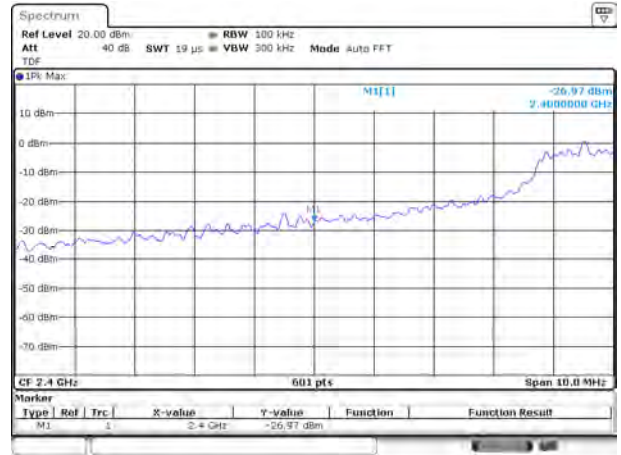
Date: 25.NOV.2018 13:58:12

802.11n-40 MHz LOW CHANNEL, Carrier level



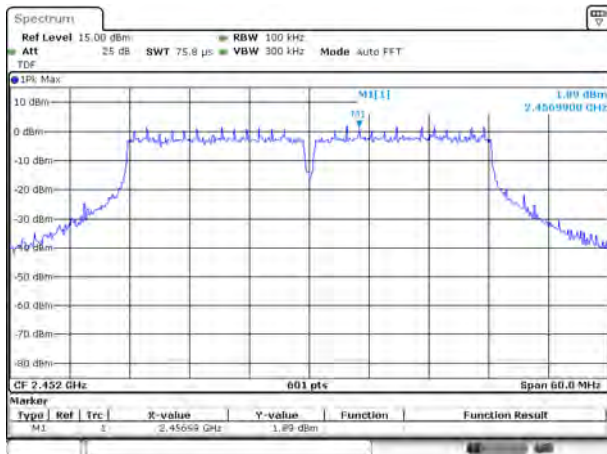
Date: 25.NOV.2018 13:59:25

802.11n-40 MHz LOW CHANNEL, Reference level



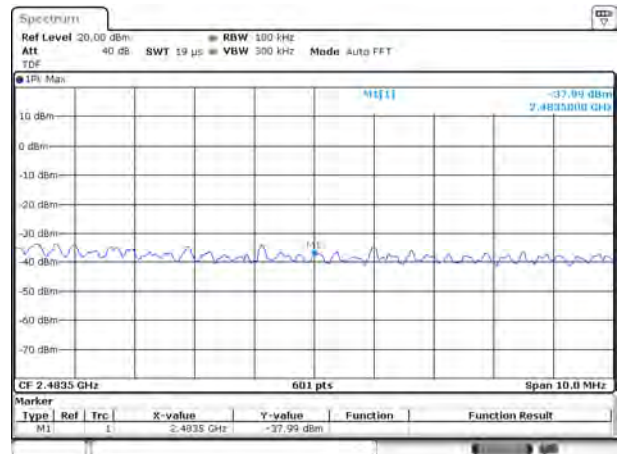
Date: 25.NOV.2018 13:59:52

802.11n-40 MHz HIGH CHANNEL, Carrier level



Date: 25.NOV.2018 14:02:22

802.11n-40 MHz HIGH CHANNEL, Reference level

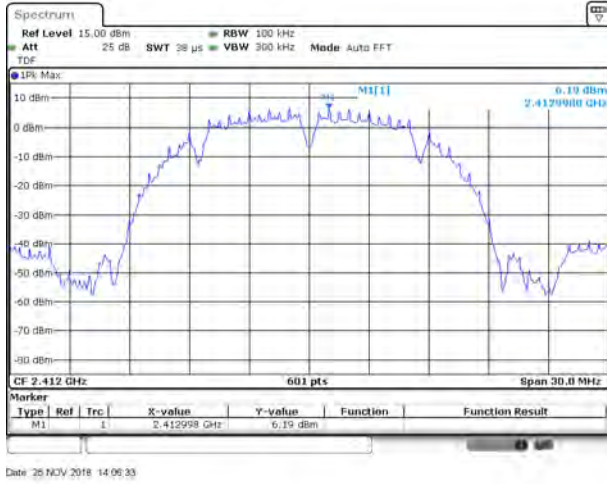


Date: 25.NOV.2018 14:02:47

Test Plots

SISO ANT1

802.11b LOW CHANNEL, Carrier level



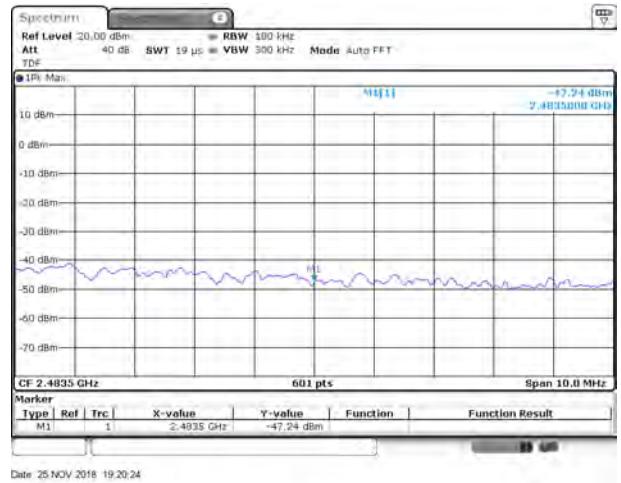
802.11b LOW CHANNEL, Reference level



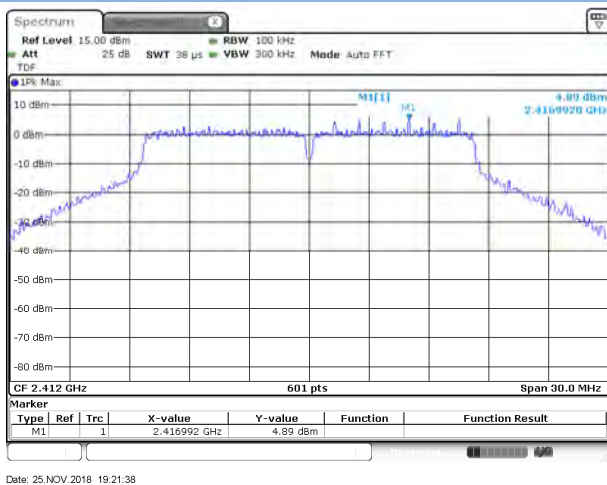
802.11b HIGH CHANNEL, Carrier level



802.11b HIGH CHANNEL, Reference level



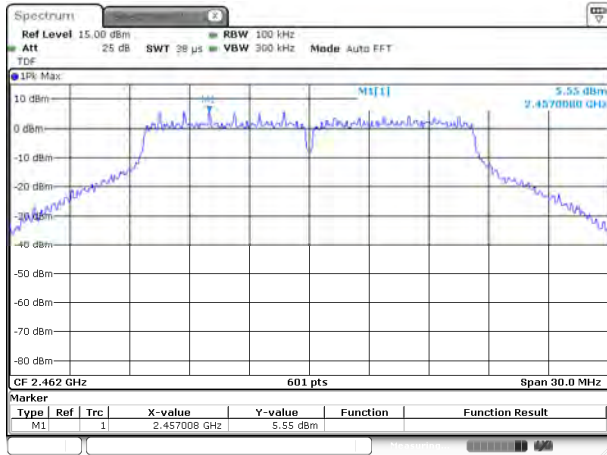
802.11g LOW CHANNEL, Carrier level



802.11g LOW CHANNEL, Reference level

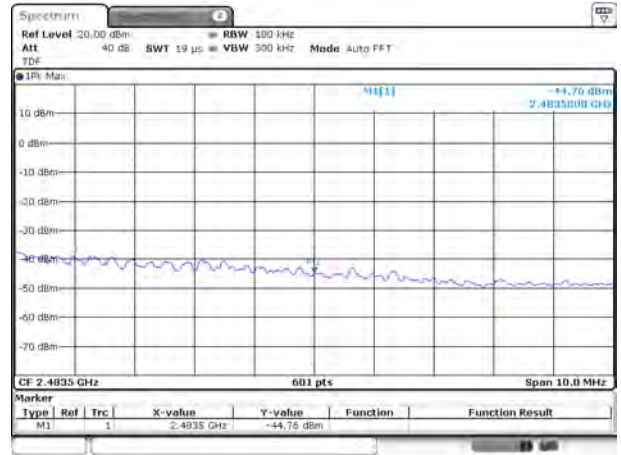


802.11g HIGH CHANNEL, Carrier level



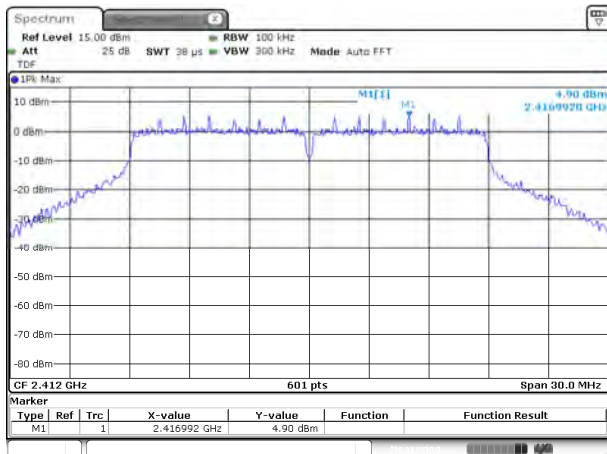
Date: 25.NOV.2018 19:25:00

802.11g HIGH CHANNEL, Reference level



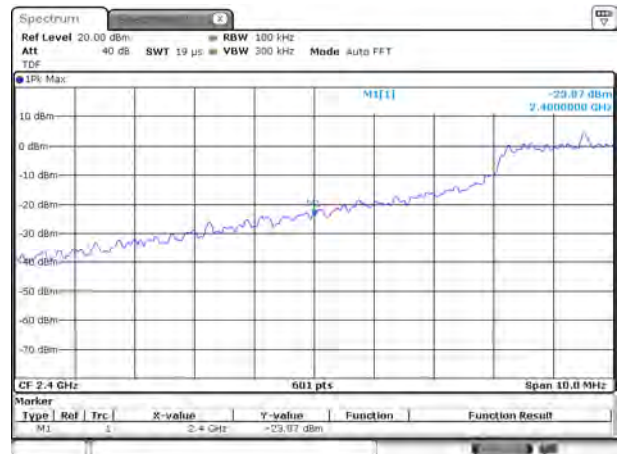
Date: 25.NOV.2018 19:25:29

802.11n-20 MHz LOW CHANNEL, Carrier level



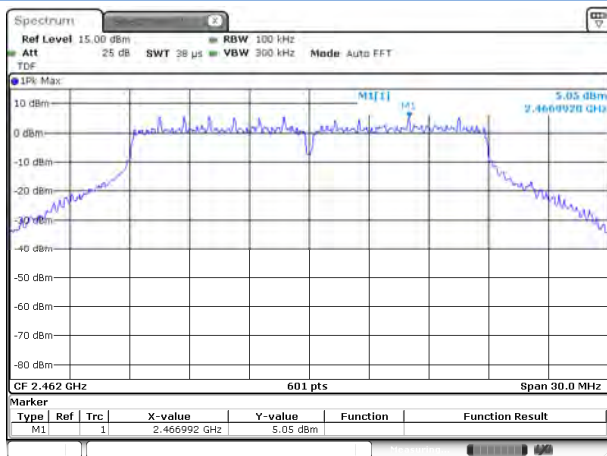
Date: 25.NOV.2018 19:26:54

802.11n-20 MHz LOW CHANNEL, Reference level



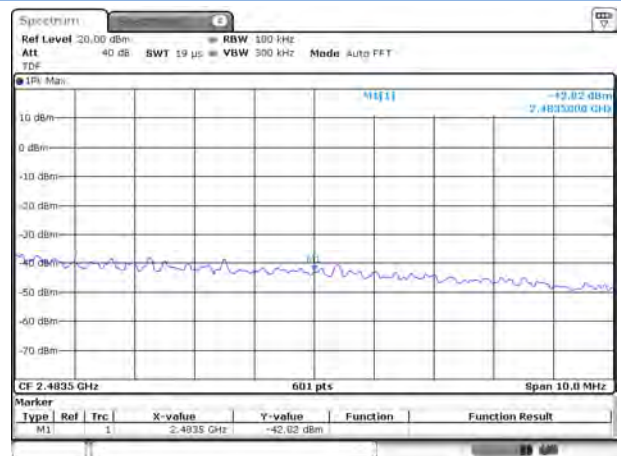
Date: 25.NOV.2018 19:27:23

802.11n-20 MHz HIGH CHANNEL, Carrier level



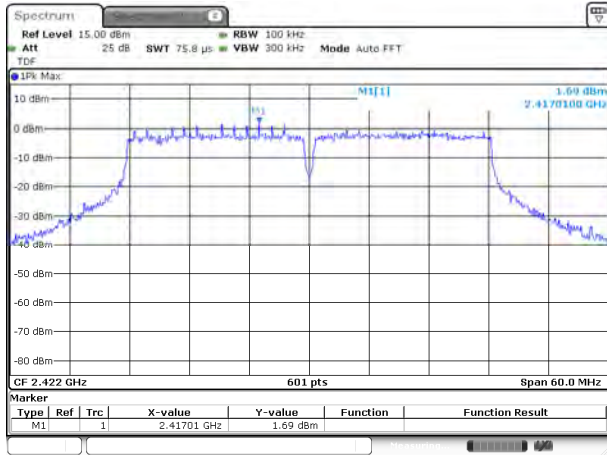
Date: 25.NOV.2018 19:30:21

802.11n-20 MHz HIGH CHANNEL, Reference level



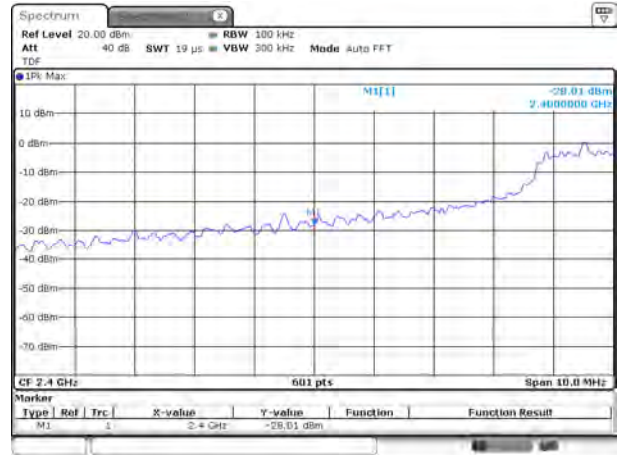
Date: 25.NOV.2018 19:30:50

802.11n-40 MHz LOW CHANNEL, Carrier level



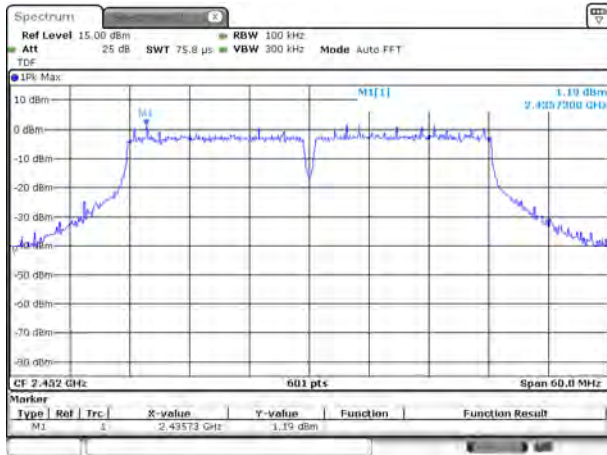
Date: 25.NOV.2018 19:34:50

802.11n-40 MHz LOW CHANNEL, Reference level



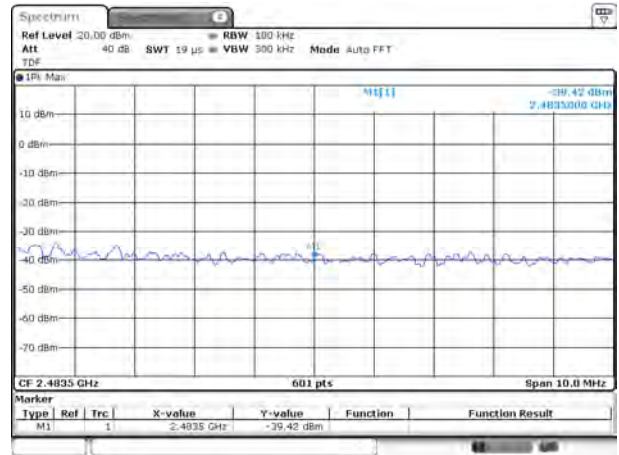
Date: 25.NOV.2018 19:35:20

802.11n-40 MHz HIGH CHANNEL, Carrier level



Date: 25.NOV.2018 19:38:15

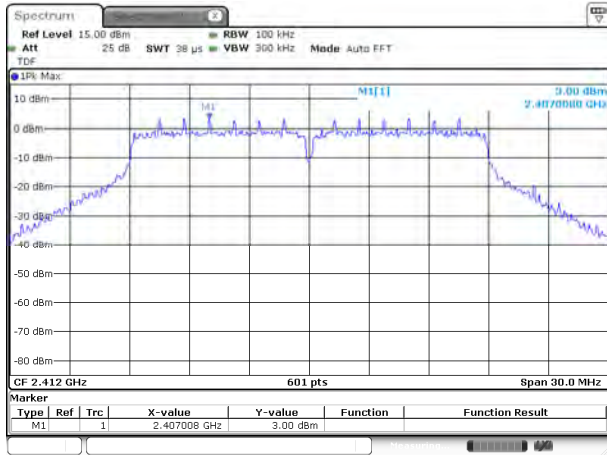
802.11n-40 MHz HIGH CHANNEL, Reference level



Date: 25.NOV.2018 19:38:45

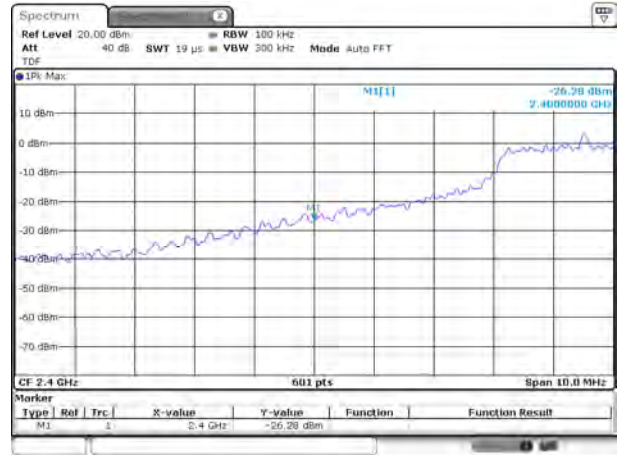
MIMO ANTO

802.11n-20 MHz LOW CHANNEL, Carrier level



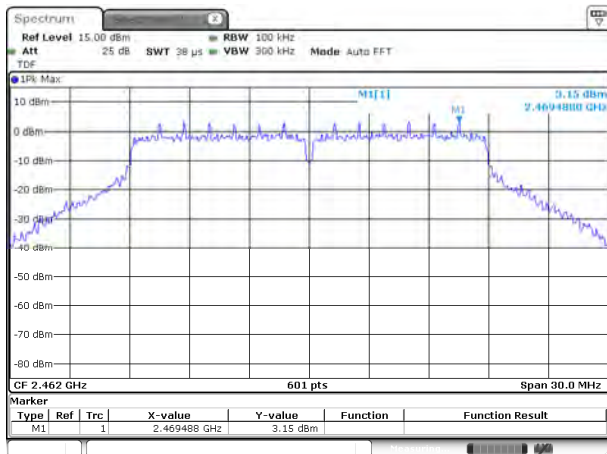
Date: 25.NOV.2018 19:52:12

802.11n-20 MHz LOW CHANNEL, Reference level



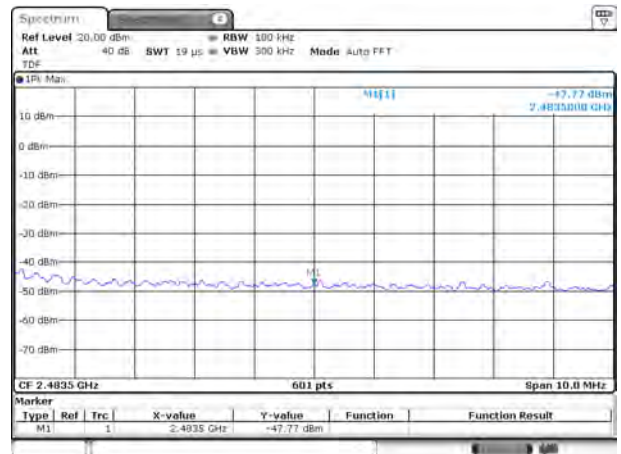
Date: 25.NOV.2018 19:52:41

802.11n-20 MHz HIGH CHANNEL, Carrier level



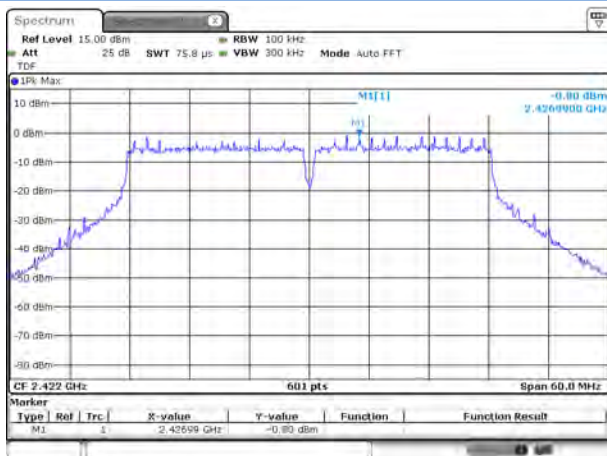
Date: 25.NOV.2018 19:55:34

802.11n-20 MHz HIGH CHANNEL, Reference level



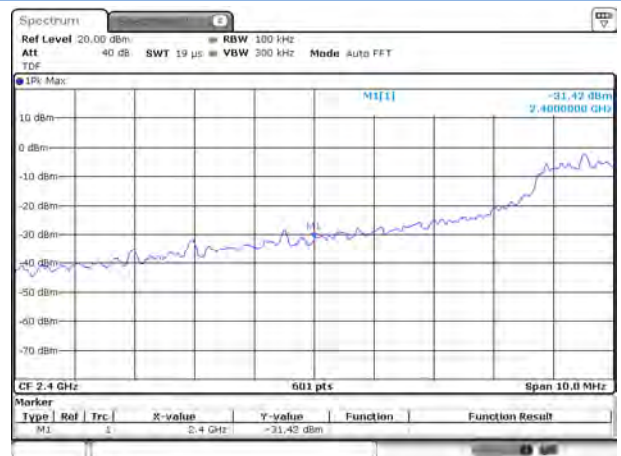
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802.11n-40 MHz LOW CHANNEL, Carrier level



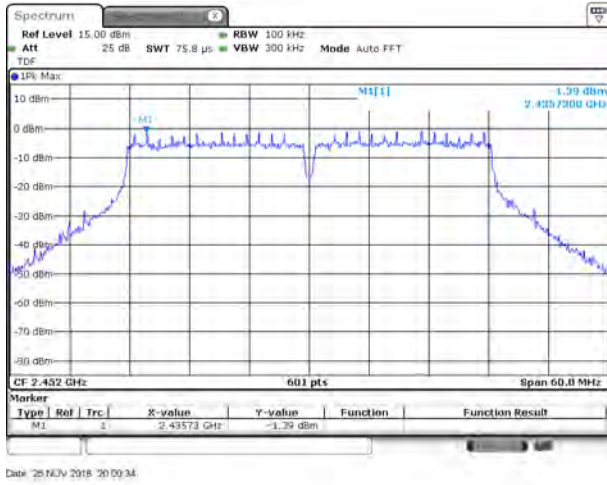
Date: 25.NOV.2018 19:57:26

802.11n-40 MHz LOW CHANNEL, Reference level

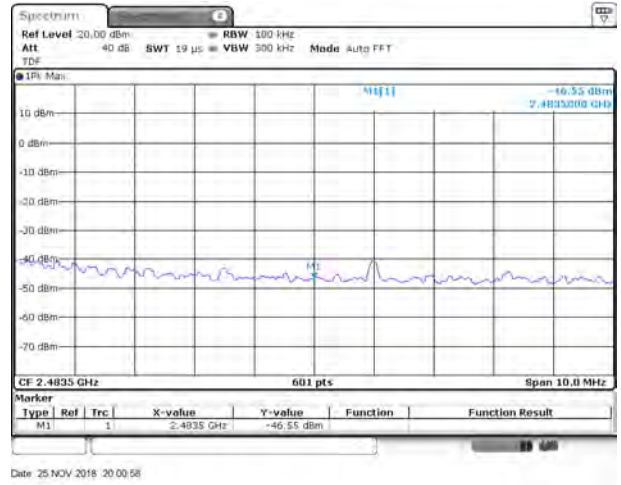


Date: 25.NOV.2018 19:57:54

802.11n-40 MHz HIGH CHANNEL, Carrier level

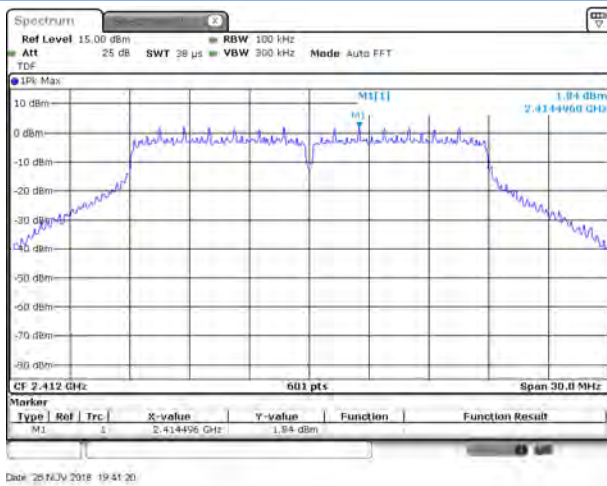


802.11n-40 MHz HIGH CHANNEL, Reference level



MIMO ANT1

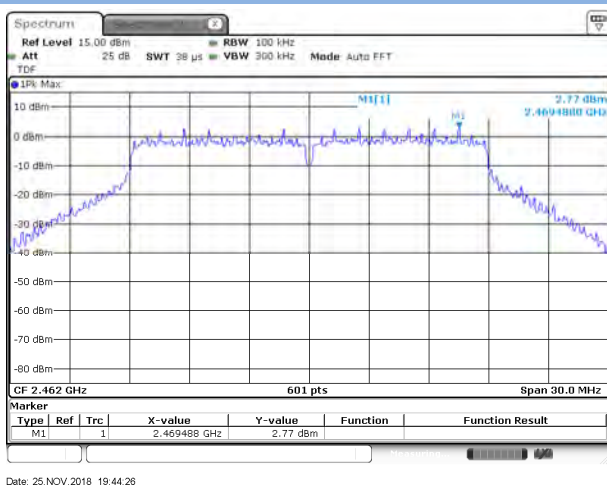
802.11n-20 MHz LOW CHANNEL, Carrier level



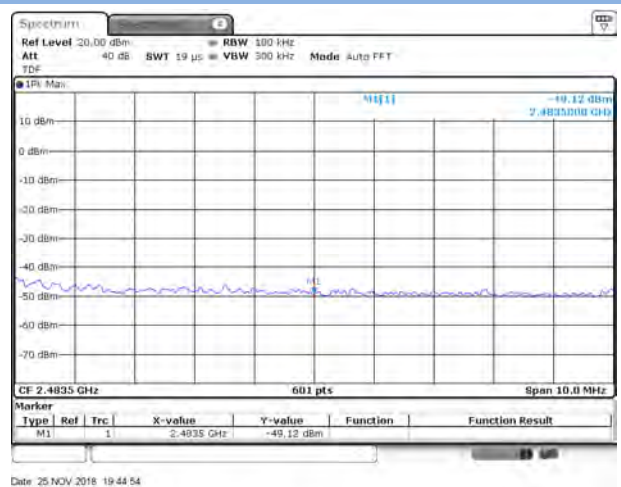
802.11n-20 MHz LOW CHANNEL, Reference level



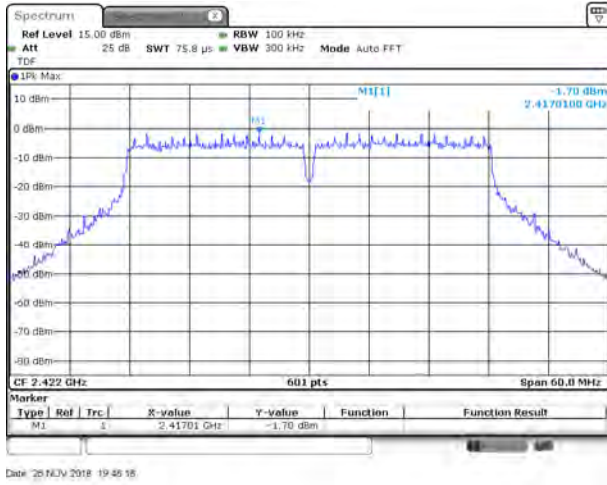
802.11n-20 MHz HIGH CHANNEL, Carrier level



802.11n-20 MHz HIGH CHANNEL, Reference level



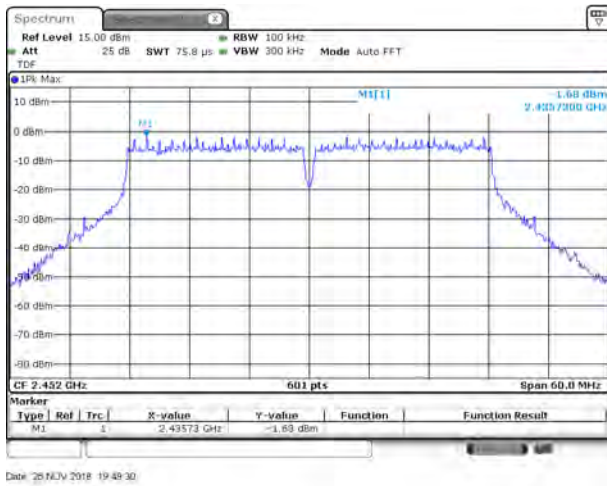
802.11n-40 MHz LOW CHANNEL, Carrier level



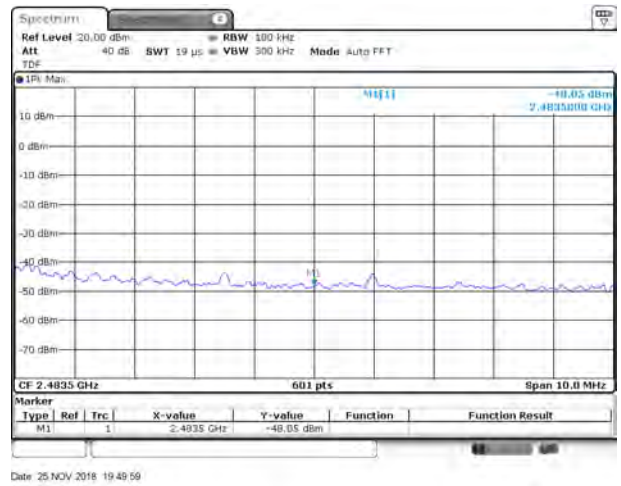
802.11n-40 MHz LOW CHANNEL, Reference level



802.11n-40 MHz HIGH CHANNEL, Carrier level



802.11n-40 MHz HIGH CHANNEL, Reference level



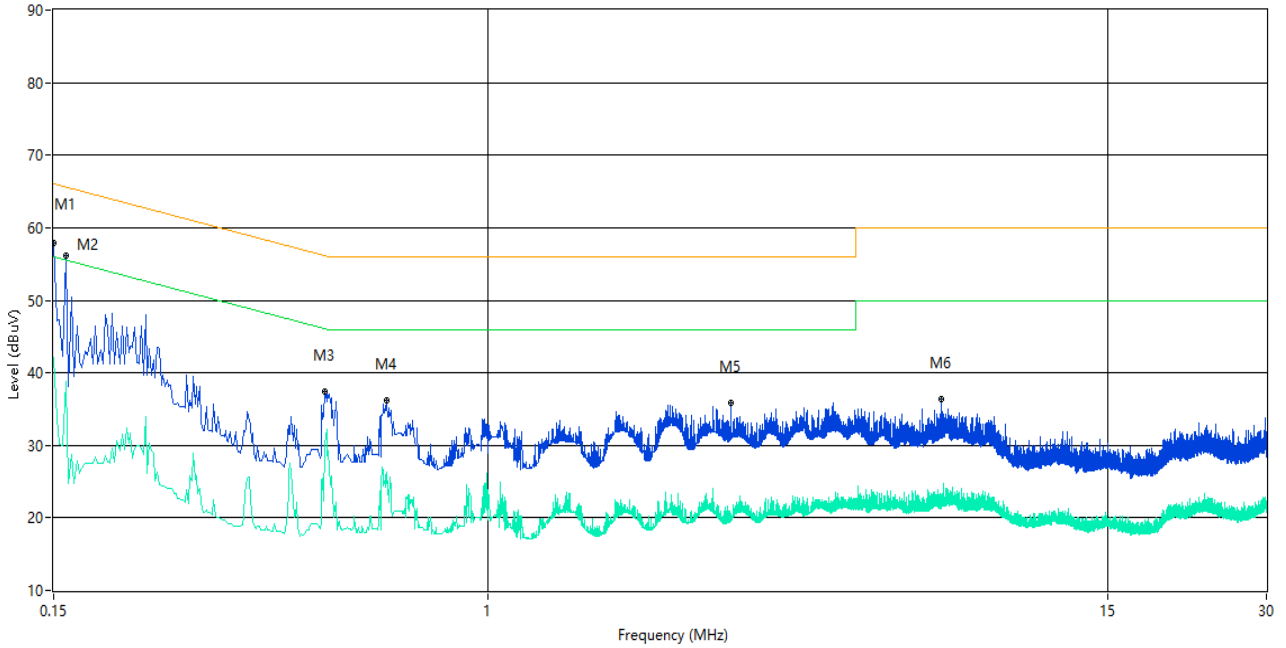
A.5 Conducted Emissions

Note 1: The EUT is working in the Normal link mode.

Test Data and Plots

PHASE L

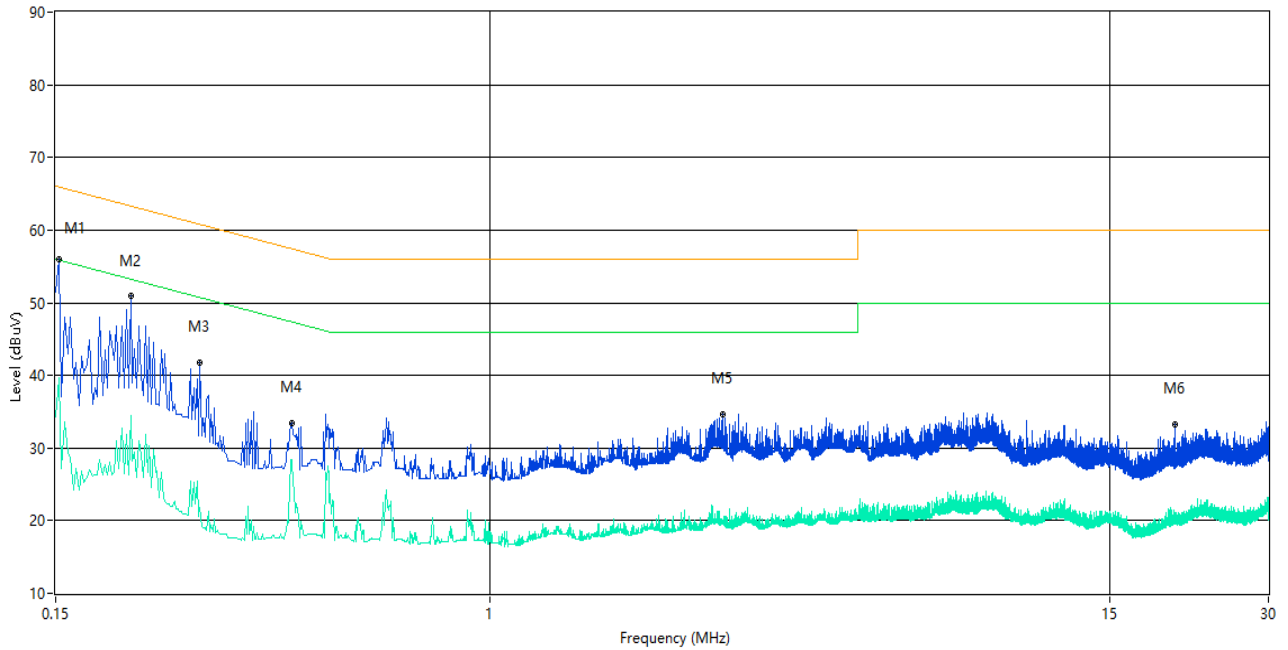
CE Test case_FCC_CE_FCC PART 15B_Class B



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.150	57.8	10.01	66.0	-8.20	Peak	L Line	Pass
1**	0.150	42.1	10.01	56.0	-13.90	AV	L Line	Pass
2	0.158	56.2	10.01	65.6	-9.40	Peak	L Line	Pass
2**	0.158	38.7	10.01	55.6	-16.90	AV	L Line	Pass
3	0.490	37.4	10.02	56.2	-18.80	Peak	L Line	Pass
3**	0.490	30.2	10.02	46.2	-16.00	AV	L Line	Pass
4	0.642	36.2	10.02	56.0	-19.80	Peak	L Line	Pass
4**	0.642	24.7	10.02	46.0	-21.30	AV	L Line	Pass
5	2.896	35.9	10.08	56.0	-20.10	Peak	L Line	Pass
5**	2.896	19.8	10.08	46.0	-26.20	AV	L Line	Pass
6	7.246	36.3	10.15	60.0	-23.70	Peak	L Line	Pass
6**	7.246	21.8	10.15	50.0	-28.20	AV	L Line	Pass

PHASE N

CE Test case_FCC_CE_FCC PART 15B_Class B



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.152	55.9	10.01	65.9	-10.00	Peak	N Line	Pass
1**	0.152	39.7	10.01	55.9	-16.20	AV	N Line	Pass
2	0.208	50.9	10.02	63.3	-12.40	Peak	N Line	Pass
2**	0.208	34.5	10.02	53.3	-18.80	AV	N Line	Pass
3	0.282	41.7	10.03	60.8	-19.10	Peak	N Line	Pass
3**	0.282	21.8	10.03	50.8	-29.00	AV	N Line	Pass
4	0.422	33.4	10.03	57.4	-24.00	Peak	N Line	Pass
4**	0.422	28.4	10.03	47.4	-19.00	AV	N Line	Pass
5	2.762	34.7	10.08	56.0	-21.30	Peak	N Line	Pass
5**	2.762	19.3	10.08	46.0	-26.70	AV	N Line	Pass
6	19.958	33.3	10.25	60.0	-26.70	Peak	N Line	Pass
6**	19.958	19.4	10.25	50.0	-30.60	AV	N Line	Pass

A.6 Radiated Emission

Note 1: The symbol of “--” in the table which means not application.

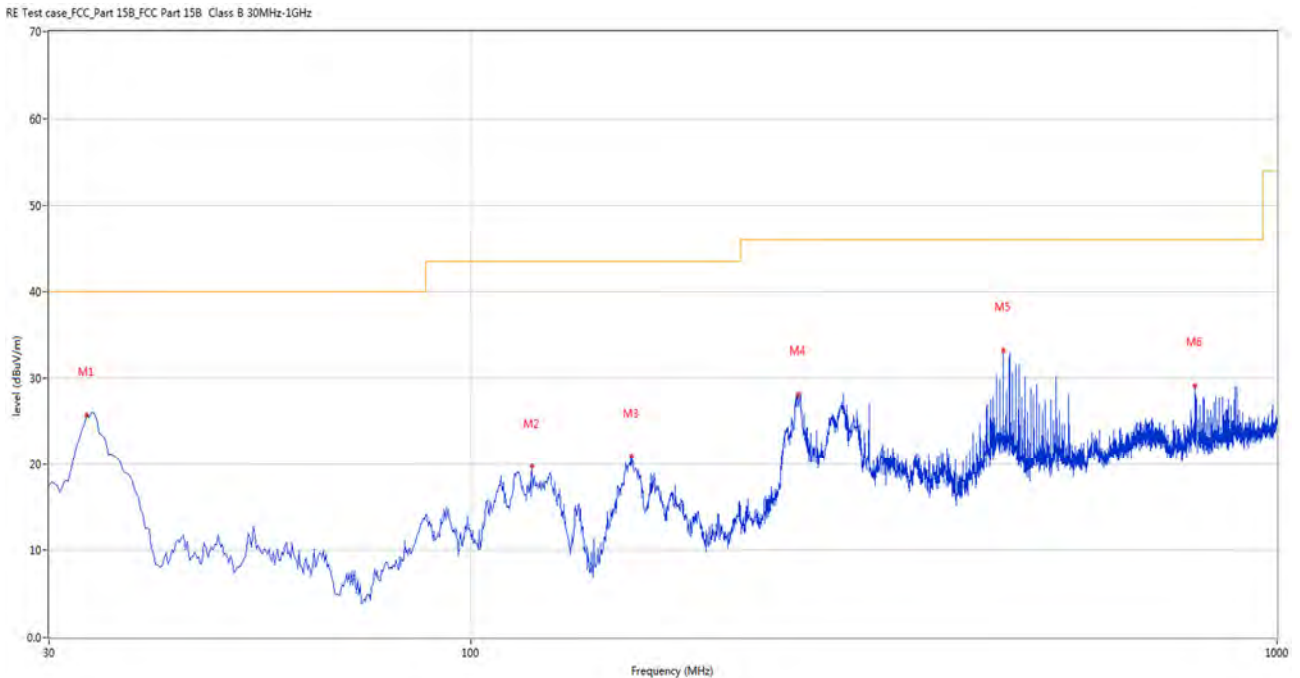
Note 2: For the test data above 1 GHz, According the ANSI C63.10-2013, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

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.

Test Data and Plots

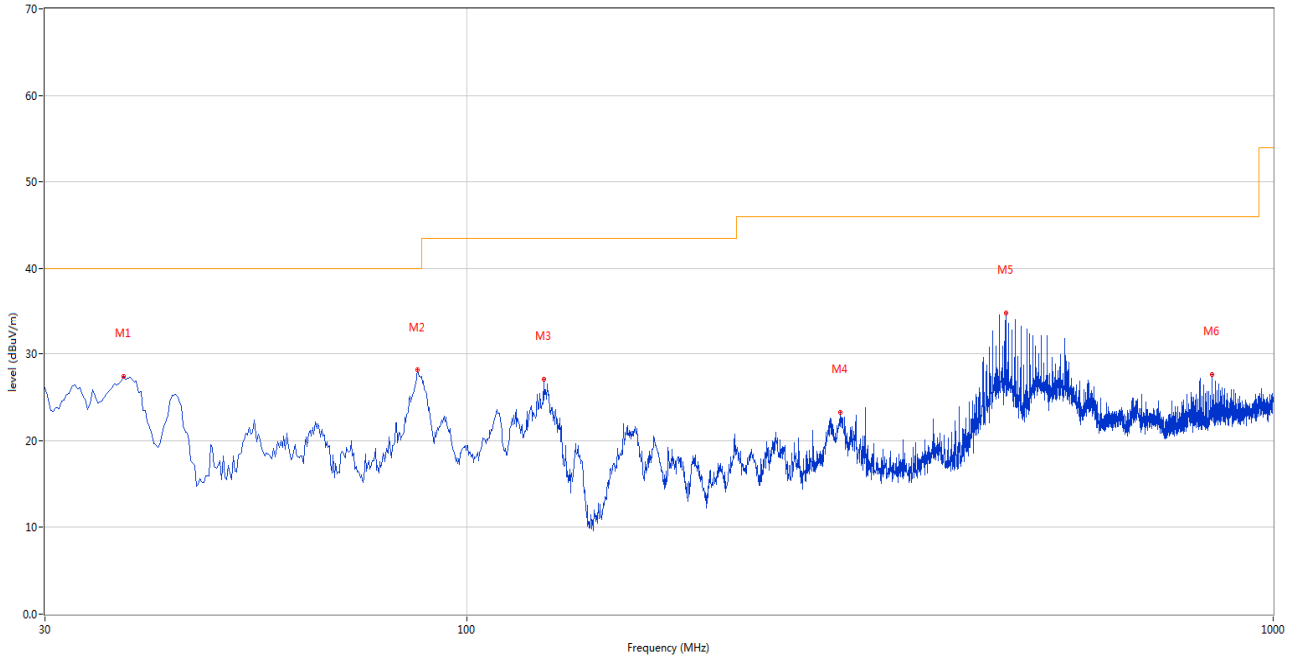
30 MHz to 1 GHz, ANT H



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	33.395	25.73	-26.65	40.0	-14.27	Peak	0.00	200	Horizontal	Pass
2	119.240	19.72	-26.36	43.5	-23.78	Peak	360.00	100	Horizontal	Pass
3	158.525	21.01	-27.76	43.5	-22.49	Peak	354.50	200	Horizontal	Pass
4	254.798	28.21	-23.02	46.0	-17.79	Peak	1.90	100	Horizontal	Pass
5	457.527	33.20	-17.99	46.0	-12.80	Peak	106.00	200	Horizontal	Pass
6	791.935	29.17	-12.07	46.0	-16.83	Peak	122.80	100	Horizontal	Pass

30 MHz to 1 GHz, ANT V

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



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	37.517	27.42	-25.11	40.0	-12.58	Peak	0.00	100	Vertical	Pass
2	86.988	28.14	-27.33	40.0	-11.86	Peak	122.70	100	Vertical	Pass
3	124.575	27.12	-26.94	43.5	-16.38	Peak	60.80	100	Vertical	Pass
4	290.445	23.21	-22.14	46.0	-22.79	Peak	81.60	100	Vertical	Pass
5	466.015	34.89	-17.80	46.0	-11.11	Peak	164.80	100	Vertical	Pass
6	839.950	27.66	-11.19	46.0	-18.34	Peak	101.70	100	Vertical	Pass

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

Note 2: The spurious from 18G-25G is noise only, do not show on the report.

SISO ANT0

1 GHz to 12.75 GHz, ANT H 802.11b Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1447.000	25.92	-17.30	54.0	-28.08	AV	223.00	150	H	Pass
1	1447.000	44.21	-17.30	74.0	-29.79	Peak	223.00	150	H	Pass
2**	2415.000	88.62	-12.56	54.0	34.62	AV	106.00	150	H	N/A
2	2415.000	92.73	-12.56	74.0	18.73	Peak	106.00	150	H	N/A
3**	3216.000	33.18	-7.93	54.0	-20.82	AV	360.00	150	H	Pass
3	3216.000	44.33	-7.93	74.0	-29.67	Peak	360.00	150	H	Pass
4**	4998.000	38.71	-2.96	54.0	-15.29	AV	267.00	150	H	Pass
4	4998.000	49.18	-2.96	74.0	-24.82	Peak	267.00	150	H	Pass
5**	6682.000	42.84	1.17	54.0	-11.16	AV	98.00	150	H	Pass
5	6682.000	54.34	1.17	74.0	-19.66	Peak	98.00	150	H	Pass
6**	14825.062	41.36	1.78	54.0	-12.64	AV	122.00	150	H	Pass
6	14825.062	53.96	1.78	74.0	-20.04	Peak	122.00	150	H	Pass

1 GHz to 12.75 GHz, ANT V 802.11b Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1626.000	26.73	-17.14	54.0	-27.27	AV	115.00	150	V	Pass
1	1626.000	37.00	-17.14	74.0	-37.00	Peak	115.00	150	V	Pass
2**	2415.000	88.88	-12.56	54.0	34.88	AV	304.00	150	V	N/A
2	2415.000	93.10	-12.56	74.0	19.10	Peak	304.00	150	V	N/A
3**	3018.000	33.13	-8.70	54.0	-20.87	AV	266.00	150	V	Pass
3	3018.000	44.07	-8.70	74.0	-29.93	Peak	266.00	150	V	Pass
4**	5112.000	39.80	-2.53	54.0	-14.20	AV	272.00	150	V	Pass
4	5112.000	49.76	-2.53	74.0	-24.24	Peak	272.00	150	V	Pass
5**	6669.000	43.33	1.98	54.0	-10.67	AV	210.00	150	V	Pass
5	6669.000	53.43	1.98	74.0	-20.57	Peak	210.00	150	V	Pass
6**	11506.562	39.19	0.13	54.0	-14.81	AV	61.00	150	V	Pass
6	11506.562	50.68	0.13	74.0	-23.32	Peak	61.00	150	V	Pass

1 GHz to 12.75 GHz, ANT H 802.11b Middle Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1598.000	27.01	-17.42	54.0	-26.99	AV	95.00	150	H	Pass
1	1598.000	38.73	-17.42	74.0	-35.27	Peak	95.00	150	H	Pass
2**	2440.000	88.07	-12.82	54.0	34.07	AV	108.00	150	H	N/A
2	2440.000	92.31	-12.82	74.0	18.31	Peak	108.00	150	H	N/A
3**	3375.000	33.46	-6.47	54.0	-20.54	AV	279.00	150	H	Pass
3	3375.000	44.53	-6.47	74.0	-29.47	Peak	279.00	150	H	Pass
4**	6681.000	43.67	1.49	54.0	-10.33	AV	266.00	150	H	Pass
4	6681.000	53.60	1.49	74.0	-20.40	Peak	266.00	150	H	Pass
5**	8875.938	38.28	-0.34	54.0	-15.72	AV	96.00	150	H	Pass
5	8875.938	48.99	-0.34	74.0	-25.01	Peak	96.00	150	H	Pass
6**	15234.562	42.68	2.06	54.0	-11.32	AV	253.00	150	H	Pass
6	15234.562	54.22	2.06	74.0	-19.78	Peak	253.00	150	H	Pass

1 GHz to 12.75 GHz, ANT V 802.11b Middle Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	2131.500	30.20	-14.12	54.0	-23.80	AV	146.00	150	V	Pass
1	2131.500	42.80	-14.12	74.0	-31.20	Peak	146.00	150	V	Pass
2**	2440.000	88.56	-12.82	54.0	34.56	AV	298.00	150	V	N/A
2	2440.000	92.49	-12.82	74.0	18.49	Peak	298.00	150	V	N/A
3**	3181.000	33.72	-8.12	54.0	-20.28	AV	1.00	150	V	Pass
3	3181.000	43.85	-8.12	74.0	-30.15	Peak	1.00	150	V	Pass
4**	4756.000	38.53	-2.83	54.0	-15.47	AV	313.00	150	V	Pass
4	4756.000	49.78	-2.83	74.0	-24.22	Peak	313.00	150	V	Pass
5**	9558.750	38.14	-0.18	54.0	-15.86	AV	230.00	150	V	Pass
5	9558.750	49.54	-0.18	74.0	-24.46	Peak	230.00	150	V	Pass
6**	15350.062	43.04	1.70	54.0	-10.96	AV	282.00	150	V	Pass
6	15350.062	54.01	1.70	74.0	-19.99	Peak	282.00	150	V	Pass

1 GHz to 12.75 GHz, ANT H 802.11b High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1613.500	26.22	-17.20	54.0	-27.78	AV	114.00	150	H	Pass
1	1613.500	36.56	-17.20	74.0	-37.44	Peak	114.00	150	H	Pass
2**	2465.000	89.13	-12.05	54.0	35.13	AV	47.00	150	H	N/A
2	2465.000	93.03	-12.05	74.0	19.03	Peak	47.00	150	H	N/A
3**	3210.000	33.96	-7.62	54.0	-20.04	AV	360.00	150	H	Pass
3	3210.000	44.91	-7.62	74.0	-29.09	Peak	360.00	150	H	Pass
4**	5259.000	38.46	-3.17	54.0	-15.54	AV	0.00	150	H	Pass
4	5259.000	50.30	-3.17	74.0	-23.70	Peak	0.00	150	H	Pass
5**	9593.250	38.47	0.04	54.0	-15.53	AV	352.00	150	H	Pass
5	9593.250	49.12	0.04	74.0	-24.88	Peak	352.00	150	H	Pass
6**	15200.437	42.34	1.71	54.0	-11.66	AV	82.00	150	H	Pass
6	15200.437	54.10	1.71	74.0	-19.90	Peak	82.00	150	H	Pass

1 GHz to 12.75 GHz, ANT V 802.11b High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	2126.500	29.74	-14.03	54.0	-24.26	AV	175.00	150	V	Pass
1	2126.500	42.10	-14.03	74.0	-31.90	Peak	175.00	150	V	Pass
2**	2465.000	89.15	-12.05	54.0	35.15	AV	123.00	150	V	N/A
2	2465.000	93.18	-12.05	74.0	19.18	Peak	123.00	150	V	N/A
3**	3218.000	34.03	-8.03	54.0	-19.97	AV	33.00	150	V	Pass
3	3218.000	43.95	-8.03	74.0	-30.05	Peak	33.00	150	V	Pass
4**	5766.000	39.89	-2.04	54.0	-14.11	AV	134.00	150	V	Pass
4	5766.000	51.14	-2.04	74.0	-22.86	Peak	134.00	150	V	Pass
5**	8472.000	38.27	-0.69	54.0	-15.73	AV	48.00	150	V	Pass
5	8472.000	49.69	-0.69	74.0	-24.31	Peak	48.00	150	V	Pass
6**	15339.563	42.53	1.72	54.0	-11.47	AV	357.00	150	V	Pass
6	15339.563	54.00	1.72	74.0	-20.00	Peak	357.00	150	V	Pass

1 GHz to 12.75 GHz, ANT H 802.11g Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1727.500	26.44	-16.89	54.0	-27.56	AV	156.00	150	H	Pass
1	1727.500	37.79	-16.89	74.0	-36.21	Peak	156.00	150	H	Pass
2**	2418.500	88.57	-12.44	54.0	34.57	AV	115.00	150	H	N/A
2	2418.500	95.64	-12.44	74.0	21.64	Peak	115.00	150	H	N/A
3**	3202.000	33.75	-6.97	54.0	-20.25	AV	360.00	150	H	Pass
3	3202.000	44.97	-6.97	74.0	-29.03	Peak	360.00	150	H	Pass
4**	5069.000	38.94	-2.60	54.0	-15.06	AV	0.00	150	H	Pass
4	5069.000	50.07	-2.60	74.0	-23.93	Peak	0.00	150	H	Pass
5**	8811.250	37.46	-0.51	54.0	-16.54	AV	291.00	150	H	Pass
5	8811.250	48.64	-0.51	74.0	-25.36	Peak	291.00	150	H	Pass
6**	15346.125	43.24	1.74	54.0	-10.76	AV	210.00	150	H	Pass
6	15346.125	54.09	1.74	74.0	-19.91	Peak	210.00	150	H	Pass

1 GHz to 12.75 GHz, ANT V 802.11g Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	2130.500	28.99	-14.13	54.0	-25.01	AV	173.00	150	V	Pass
1	2130.500	42.42	-14.13	74.0	-31.58	Peak	173.00	150	V	Pass
2**	2408.000	87.87	-12.30	54.0	33.87	AV	324.00	150	V	N/A
2	2408.000	96.33	-12.30	74.0	22.33	Peak	324.00	150	V	N/A
3**	3421.000	33.22	-7.48	54.0	-20.78	AV	169.00	150	V	Pass
3	3421.000	44.88	-7.48	74.0	-29.12	Peak	169.00	150	V	Pass
4**	6658.000	43.21	1.46	54.0	-10.79	AV	32.00	150	V	Pass
4	6658.000	53.61	1.46	74.0	-20.39	Peak	32.00	150	V	Pass
5**	8865.875	38.16	-0.34	54.0	-15.84	AV	0.00	150	V	Pass
5	8865.875	49.59	-0.34	74.0	-24.41	Peak	0.00	150	V	Pass
6**	15254.250	42.44	1.65	54.0	-11.56	AV	329.00	150	V	Pass
6	15254.250	53.79	1.65	74.0	-20.21	Peak	329.00	150	V	Pass

1 GHz to 12.75 GHz, ANT H 802.11g Middle Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1501.500	26.26	-17.26	54.0	-27.74	AV	341.00	150	H	Pass
1	1501.500	37.29	-17.26	74.0	-36.71	Peak	341.00	150	H	Pass
2**	2431.000	87.86	-12.98	54.0	33.86	AV	114.00	150	H	N/A
2	2431.000	95.90	-12.98	74.0	21.90	Peak	114.00	150	H	N/A
3**	3998.000	35.69	-4.12	54.0	-18.31	AV	208.00	150	H	Pass
3	3998.000	47.49	-4.12	74.0	-26.51	Peak	208.00	150	H	Pass
4**	6680.000	43.34	1.53	54.0	-10.66	AV	244.00	150	H	Pass
4	6680.000	53.47	1.53	74.0	-20.53	Peak	244.00	150	H	Pass
5**	9673.750	37.81	0.43	54.0	-16.19	AV	249.00	150	H	Pass
5	9673.750	48.77	0.43	74.0	-25.23	Peak	249.00	150	H	Pass
6**	14474.625	41.84	2.15	54.0	-12.16	AV	38.00	150	H	Pass
6	14474.625	52.86	2.15	74.0	-21.14	Peak	38.00	150	H	Pass

1 GHz to 12.75 GHz, ANT V 802.11g Middle Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1576.000	25.90	-17.24	54.0	-28.10	AV	187.00	150	V	Pass
1	1576.000	36.85	-17.24	74.0	-37.15	Peak	187.00	150	V	Pass
2**	2445.000	88.71	-12.87	54.0	34.71	AV	194.00	150	V	N/A
2	2445.000	96.34	-12.87	74.0	22.34	Peak	194.00	150	V	N/A
3**	3146.000	33.32	-8.33	54.0	-20.68	AV	325.00	150	V	Pass
3	3146.000	44.05	-8.33	74.0	-29.95	Peak	325.00	150	V	Pass
4**	5513.000	39.65	-2.40	54.0	-14.35	AV	54.00	150	V	Pass
4	5513.000	50.83	-2.40	74.0	-23.17	Peak	54.00	150	V	Pass
5**	9678.063	37.73	0.57	54.0	-16.27	AV	205.00	150	V	Pass
5	9678.063	49.91	0.57	74.0	-24.09	Peak	205.00	150	V	Pass
6**	15344.812	43.11	1.75	54.0	-10.89	AV	293.00	150	V	Pass
6	15344.812	53.54	1.75	74.0	-20.46	Peak	293.00	150	V	Pass

1 GHz to 12.75 GHz, ANT H 802.11g High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1504.000	26.20	-17.16	54.0	-27.80	AV	319.00	150	H	Pass
1	1504.000	36.97	-17.16	74.0	-37.03	Peak	319.00	150	H	Pass
2**	2469.000	88.59	-11.73	54.0	34.59	AV	115.00	150	H	N/A
2	2469.000	96.37	-11.73	74.0	22.37	Peak	115.00	150	H	N/A
3**	3660.000	35.29	-6.26	54.0	-18.71	AV	210.00	150	H	Pass
3	3660.000	45.68	-6.26	74.0	-28.32	Peak	210.00	150	H	Pass
4**	6662.000	43.27	1.74	54.0	-10.73	AV	305.00	150	H	Pass
4	6662.000	53.71	1.74	74.0	-20.29	Peak	305.00	150	H	Pass
5**	10822.313	39.06	0.94	54.0	-14.94	AV	141.00	150	H	Pass
5	10822.313	50.38	0.94	74.0	-23.62	Peak	141.00	150	H	Pass
6**	15342.188	42.97	1.74	54.0	-11.03	AV	160.00	150	H	Pass
6	15342.188	54.02	1.74	74.0	-19.98	Peak	160.00	150	H	Pass

1 GHz to 12.75 GHz, ANT V 802.11g High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	2133.000	30.92	-13.98	54.0	-23.08	AV	168.00	150	V	Pass
1	2133.000	44.98	-13.98	74.0	-29.02	Peak	168.00	150	V	Pass
2**	2469.500	89.41	-11.58	54.0	35.41	AV	203.00	150	V	N/A
2	2469.500	97.01	-11.58	74.0	23.01	Peak	203.00	150	V	N/A
3**	3988.000	35.86	-3.91	54.0	-18.14	AV	134.00	150	V	Pass
3	3988.000	46.53	-3.91	74.0	-27.47	Peak	134.00	150	V	Pass
4**	6671.000	43.73	2.08	54.0	-10.27	AV	134.00	150	V	Pass
4	6671.000	53.61	2.08	74.0	-20.39	Peak	134.00	150	V	Pass
5**	10563.562	38.19	-0.28	54.0	-15.81	AV	359.00	150	V	Pass
5	10563.562	50.09	-0.28	74.0	-23.91	Peak	359.00	150	V	Pass
6**	16040.438	42.77	1.75	54.0	-11.23	AV	67.00	150	V	Pass
6	16040.438	54.09	1.75	74.0	-19.91	Peak	67.00	150	V	Pass

1 GHz to 12.75 GHz, ANT H 802.11n20 Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1596.500	25.52	-17.44	54.0	-28.48	AV	261.00	150	H	Pass
1	1596.500	37.56	-17.44	74.0	-36.44	Peak	261.00	150	H	Pass
2**	2419.500	88.54	-12.53	54.0	34.54	AV	48.00	150	H	N/A
2	2419.500	96.23	-12.53	74.0	22.23	Peak	48.00	150	H	N/A
3**	3657.000	35.43	-6.21	54.0	-18.57	AV	259.00	150	H	Pass
3	3657.000	45.86	-6.21	74.0	-28.14	Peak	259.00	150	H	Pass
4**	6670.000	43.57	2.08	54.0	-10.43	AV	0.00	150	H	Pass
4	6670.000	53.30	2.08	74.0	-20.70	Peak	0.00	150	H	Pass
5**	10218.563	38.76	0.64	54.0	-15.24	AV	0.00	150	H	Pass
5	10218.563	50.22	0.64	74.0	-23.78	Peak	0.00	150	H	Pass
6**	15355.312	42.49	1.58	54.0	-11.51	AV	330.00	150	H	Pass
6	15355.312	54.16	1.58	74.0	-19.84	Peak	330.00	150	H	Pass

1 GHz to 12.75 GHz, ANT V 802.11n20 Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	2129.500	28.75	-14.14	54.0	-25.25	AV	333.00	150	V	Pass
1	2129.500	45.54	-14.14	74.0	-28.46	Peak	333.00	150	V	Pass
2**	2403.500	85.94	-12.11	54.0	31.94	AV	13.00	150	V	N/A
2	2403.500	96.57	-12.11	74.0	22.57	Peak	13.00	150	V	N/A
3**	4468.000	37.61	-3.92	54.0	-16.39	AV	251.00	150	V	Pass
3	4468.000	48.34	-3.92	74.0	-25.66	Peak	251.00	150	V	Pass
4**	6668.000	43.74	1.90	54.0	-10.26	AV	360.00	150	V	Pass
4	6668.000	53.30	1.90	74.0	-20.70	Peak	360.00	150	V	Pass
5**	10799.313	39.41	0.27	54.0	-14.59	AV	359.00	150	V	Pass
5	10799.313	50.31	0.27	74.0	-23.69	Peak	359.00	150	V	Pass
6**	14746.313	42.08	1.48	54.0	-11.92	AV	291.00	150	V	Pass
6	14746.313	53.53	1.48	74.0	-20.47	Peak	291.00	150	V	Pass

1 GHz to 12.75 GHz, ANT H 802.11n20 Middle Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1620.000	28.03	-17.21	54.0	-25.97	AV	315.00	150	H	Pass
1	1620.000	37.49	-17.21	74.0	-36.51	Peak	315.00	150	H	Pass
2**	2445.500	88.14	-12.87	54.0	34.14	AV	289.00	150	H	N/A
2	2445.500	95.53	-12.87	74.0	21.53	Peak	289.00	150	H	N/A
3**	3648.000	35.02	-7.23	54.0	-18.98	AV	186.00	150	H	Pass
3	3648.000	45.13	-7.23	74.0	-28.87	Peak	186.00	150	H	Pass
4**	6684.000	42.71	0.61	54.0	-11.29	AV	116.00	150	H	Pass
4	6684.000	53.55	0.61	74.0	-20.45	Peak	116.00	150	H	Pass
5**	8516.562	37.98	-1.11	54.0	-16.02	AV	170.00	150	H	Pass
5	8516.562	48.88	-1.11	74.0	-25.12	Peak	170.00	150	H	Pass
6**	15359.250	42.78	1.44	54.0	-11.22	AV	295.00	150	H	Pass
6	15359.250	53.98	1.44	74.0	-20.02	Peak	295.00	150	H	Pass

1 GHz to 12.75 GHz, ANT V 802.11n20 Middle Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	2130.500	31.31	-14.13	54.0	-22.69	AV	329.00	150	V	Pass
1	2130.500	45.39	-14.13	74.0	-28.61	Peak	329.00	150	V	Pass
2**	2445.000	88.29	-12.87	54.0	34.29	AV	0.00	150	V	N/A
2	2445.000	95.96	-12.87	74.0	21.96	Peak	0.00	150	V	N/A
3**	3665.000	36.15	-5.71	54.0	-17.85	AV	142.00	150	V	Pass
3	3665.000	45.68	-5.71	74.0	-28.32	Peak	142.00	150	V	Pass
4**	6576.000	41.33	-0.33	54.0	-12.67	AV	287.00	150	V	Pass
4	6576.000	53.07	-0.33	74.0	-20.93	Peak	287.00	150	V	Pass
5**	10290.437	39.09	0.44	54.0	-14.91	AV	139.00	150	V	Pass
5	10290.437	50.51	0.44	74.0	-23.49	Peak	139.00	150	V	Pass
6**	14760.750	42.16	1.47	54.0	-11.84	AV	227.00	150	V	Pass
6	14760.750	53.19	1.47	74.0	-20.81	Peak	227.00	150	V	Pass

1 GHz to 12.75 GHz, ANT H 802.11n20 High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1620.000	28.63	-17.21	54.0	-25.37	AV	280.00	150	H	Pass
1	1620.000	38.02	-17.21	74.0	-35.98	Peak	280.00	150	H	Pass
2**	2470.500	88.71	-11.84	54.0	34.71	AV	288.00	150	H	N/A
2	2470.500	96.58	-11.84	74.0	22.58	Peak	288.00	150	H	N/A
3**	3664.000	35.18	-5.83	54.0	-18.82	AV	313.00	150	H	Pass
3	3664.000	45.41	-5.83	74.0	-28.59	Peak	313.00	150	H	Pass
4**	6665.000	43.49	1.72	54.0	-10.51	AV	333.00	150	H	Pass
4	6665.000	53.29	1.72	74.0	-20.71	Peak	333.00	150	H	Pass
5**	9459.562	38.23	-0.18	54.0	-15.77	AV	117.00	150	H	Pass
5	9459.562	48.94	-0.18	74.0	-25.06	Peak	117.00	150	H	Pass
6**	14628.187	42.10	1.36	54.0	-11.90	AV	340.00	150	H	Pass
6	14628.187	53.14	1.36	74.0	-20.86	Peak	340.00	150	H	Pass

1 GHz to 12.75 GHz, ANT V 802.11n20 High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	2128.000	31.42	-14.21	54.0	-22.58	AV	348.00	150	V	Pass
1	2128.000	43.77	-14.21	74.0	-30.23	Peak	348.00	150	V	Pass
2**	2469.500	89.26	-11.58	54.0	35.26	AV	34.00	150	V	N/A
2	2469.500	96.71	-11.58	74.0	22.71	Peak	34.00	150	V	N/A
3**	3672.000	35.49	-5.02	54.0	-18.51	AV	175.00	150	V	Pass
3	3672.000	45.89	-5.02	74.0	-28.11	Peak	175.00	150	V	Pass
4**	6669.000	43.60	1.98	54.0	-10.40	AV	37.00	150	V	Pass
4	6669.000	53.78	1.98	74.0	-20.22	Peak	37.00	150	V	Pass
5**	8933.437	37.87	0.06	54.0	-16.13	AV	321.00	150	V	Pass
5	8933.437	49.88	0.06	74.0	-24.12	Peak	321.00	150	V	Pass
6**	15327.750	42.40	1.52	54.0	-11.60	AV	183.00	150	V	Pass
6	15327.750	54.52	1.52	74.0	-19.48	Peak	183.00	150	V	Pass

1 GHz to 12.75 GHz, ANT H 802.11n40 Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1599.500	25.82	-17.39	54.0	-28.18	AV	288.00	150	H	Pass
1	1599.500	39.15	-17.39	74.0	-34.85	Peak	288.00	150	H	Pass
2**	2406.000	87.44	-12.38	54.0	33.44	AV	288.00	150	H	N/A
2	2406.000	94.94	-12.38	74.0	20.94	Peak	288.00	150	H	N/A
3**	3781.000	34.31	-6.65	54.0	-19.69	AV	99.00	150	H	Pass
3	3781.000	45.48	-6.65	74.0	-28.52	Peak	99.00	150	H	Pass
4**	6654.000	42.78	0.99	54.0	-11.22	AV	143.00	150	H	Pass
4	6654.000	54.08	0.99	74.0	-19.92	Peak	143.00	150	H	Pass
5**	8464.813	38.23	-1.02	54.0	-15.77	AV	210.00	150	H	Pass
5	8464.813	48.48	-1.02	74.0	-25.52	Peak	210.00	150	H	Pass
6**	16377.750	42.84	2.50	54.0	-11.16	AV	348.00	150	H	Pass
6	16377.750	54.39	2.50	74.0	-19.61	Peak	348.00	150	H	Pass

1 GHz to 12.75 GHz, ANT V 802.11n40 Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	2130.000	29.80	-14.14	54.0	-24.20	AV	356.00	150	V	Pass
1	2130.000	47.13	-14.14	74.0	-26.87	Peak	356.00	150	V	Pass
2**	2433.000	86.29	-12.88	54.0	32.29	AV	16.00	150	V	N/A
2	2433.000	95.77	-12.88	74.0	21.77	Peak	16.00	150	V	N/A
3**	3661.000	36.23	-6.17	54.0	-17.77	AV	0.00	150	V	Pass
3	3661.000	45.42	-6.17	74.0	-28.58	Peak	0.00	150	V	Pass
4**	6669.000	43.69	1.98	54.0	-10.31	AV	19.00	150	V	Pass
4	6669.000	54.26	1.98	74.0	-19.74	Peak	19.00	150	V	Pass
5**	8486.375	38.51	-0.87	54.0	-15.49	AV	114.00	150	V	Pass
5	8486.375	49.44	-0.87	74.0	-24.56	Peak	114.00	150	V	Pass
6**	17526.188	44.11	3.33	54.0	-9.89	AV	299.00	150	V	Pass
6	17526.188	55.32	3.33	74.0	-18.68	Peak	299.00	150	V	Pass

1 GHz to 12.75 GHz, ANT H 802.11n40 Middle Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1849.500	27.38	-16.54	54.0	-26.62	AV	98.00	150	H	Pass
1	1849.500	38.40	-16.54	74.0	-35.60	Peak	98.00	150	H	Pass
2**	2422.500	86.44	-12.91	54.0	32.44	AV	288.00	150	H	N/A
2	2422.500	94.32	-12.91	74.0	20.32	Peak	288.00	150	H	N/A
3**	3698.000	34.46	-6.71	54.0	-19.54	AV	6.00	150	H	Pass
3	3698.000	45.99	-6.71	74.0	-28.01	Peak	6.00	150	H	Pass
4**	6674.000	43.35	1.92	54.0	-10.65	AV	0.00	150	H	Pass
4	6674.000	53.37	1.92	74.0	-20.63	Peak	0.00	150	H	Pass
5**	10168.250	38.40	0.13	54.0	-15.60	AV	25.00	150	H	Pass
5	10168.250	49.70	0.13	74.0	-24.30	Peak	25.00	150	H	Pass
6**	17431.687	43.82	4.49	54.0	-10.18	AV	195.00	150	H	Pass
6	17431.687	55.26	4.49	74.0	-18.74	Peak	195.00	150	H	Pass

1 GHz to 12.75 GHz, ANT V 802.11n40 Middle Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	2126.000	29.45	-13.91	54.0	-24.55	AV	346.00	150	V	Pass
1	2126.000	47.22	-13.91	74.0	-26.78	Peak	346.00	150	V	Pass
2**	2453.500	87.16	-12.75	54.0	33.16	AV	27.00	150	V	N/A
2	2453.500	95.40	-12.75	74.0	21.40	Peak	27.00	150	V	N/A
3**	3670.000	35.21	-5.67	54.0	-18.79	AV	1.00	150	V	Pass
3	3670.000	45.34	-5.67	74.0	-28.66	Peak	1.00	150	V	Pass
4**	6679.000	43.15	1.57	54.0	-10.85	AV	173.00	150	V	Pass
4	6679.000	54.22	1.57	74.0	-19.78	Peak	173.00	150	V	Pass
5**	9561.625	37.69	-0.18	54.0	-16.31	AV	217.00	150	V	Pass
5	9561.625	49.16	-0.18	74.0	-24.84	Peak	217.00	150	V	Pass
6**	13605.750	40.42	1.66	54.0	-13.58	AV	43.00	150	V	Pass
6	13605.750	52.06	1.66	74.0	-21.94	Peak	43.00	150	V	Pass

1 GHz to 12.75 GHz, ANT H 802.11n40 High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1792.000	26.92	-16.55	54.0	-27.08	AV	313.00	150	H	Pass
1	1792.000	38.10	-16.55	74.0	-35.90	Peak	313.00	150	H	Pass
2**	2448.000	86.15	-12.67	54.0	32.15	AV	291.00	150	H	N/A
2	2448.000	94.55	-12.67	74.0	20.55	Peak	291.00	150	H	N/A
3**	3481.000	34.58	-6.49	54.0	-19.42	AV	267.00	150	H	Pass
3	3481.000	45.29	-6.49	74.0	-28.71	Peak	267.00	150	H	Pass
4**	6675.000	43.60	1.88	54.0	-10.40	AV	339.00	150	H	Pass
4	6675.000	53.96	1.88	74.0	-20.04	Peak	339.00	150	H	Pass
5**	9202.250	37.66	-0.79	54.0	-16.34	AV	0.00	150	H	Pass
5	9202.250	49.06	-0.79	74.0	-24.94	Peak	0.00	150	H	Pass
6**	14496.938	41.60	1.77	54.0	-12.40	AV	194.00	150	H	Pass
6	14496.938	53.77	1.77	74.0	-20.23	Peak	194.00	150	H	Pass

1 GHz to 12.75 GHz, ANT V 802.11n40 High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	2124.500	30.37	-13.80	54.0	-23.63	AV	360.00	150	V	Pass
1	2124.500	42.56	-13.80	74.0	-31.44	Peak	360.00	150	V	Pass
2**	2466.500	87.24	-12.19	54.0	33.24	AV	320.00	150	V	N/A
2	2466.500	95.46	-12.19	74.0	21.46	Peak	320.00	150	V	N/A
3**	3664.000	35.18	-5.83	54.0	-18.82	AV	328.00	150	V	Pass
3	3664.000	45.98	-5.83	74.0	-28.02	Peak	328.00	150	V	Pass
4**	6681.000	43.53	1.49	54.0	-10.47	AV	317.00	150	V	Pass
4	6681.000	53.20	1.49	74.0	-20.80	Peak	317.00	150	V	Pass
5**	8838.563	37.78	-0.38	54.0	-16.22	AV	345.00	150	V	Pass
5	8838.563	48.60	-0.38	74.0	-25.40	Peak	345.00	150	V	Pass
6**	17475.000	44.34	3.60	54.0	-9.66	AV	280.00	150	V	Pass
6	17475.000	56.04	3.60	74.0	-17.96	Peak	280.00	150	V	Pass

SISO ANT1
1 GHz to 12.75 GHz, ANT H 802.11b Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1412.500	25.87	-17.38	54.0	-28.13	AV	324.00	150	H	Pass
1	1412.500	37.51	-17.38	74.0	-36.49	Peak	324.00	150	H	Pass
2**	2416.000	89.70	-12.50	54.0	35.70	AV	272.00	150	H	Fail
2	2416.000	92.98	-12.50	74.0	18.98	Peak	272.00	150	H	N/A
3**	3216.000	33.61	-7.93	54.0	-20.39	AV	97.00	150	H	Pass
3	3216.000	44.38	-7.93	74.0	-29.62	Peak	97.00	150	H	Pass
4**	6667.000	44.29	1.87	54.0	-9.71	AV	153.00	150	H	Pass
4	6667.000	53.95	1.87	74.0	-20.05	Peak	153.00	150	H	Pass
5**	10845.312	39.07	0.93	54.0	-14.93	AV	352.00	150	H	Pass
5	10845.312	50.60	0.93	74.0	-23.40	Peak	352.00	150	H	Pass
6**	15129.562	42.00	2.06	54.0	-12.00	AV	108.00	150	H	Pass
6	15129.562	53.67	2.06	74.0	-20.33	Peak	108.00	150	H	Pass

1 GHz to 12.75 GHz, ANT V 802.11b Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	2128.500	32.09	-14.19	54.0	-21.91	AV	352.00	150	V	Pass
1	2128.500	45.54	-14.19	74.0	-28.46	Peak	352.00	150	V	Pass
2**	2415.000	88.87	-12.56	54.0	34.87	AV	360.00	150	V	Fail
2	2415.000	93.02	-12.56	74.0	19.02	Peak	360.00	150	V	N/A
3**	3646.000	35.25	-7.31	54.0	-18.75	AV	284.00	150	V	Pass
3	3646.000	45.97	-7.31	74.0	-28.03	Peak	284.00	150	V	Pass
4**	6678.000	43.73	1.62	54.0	-10.27	AV	0.00	150	V	Pass
4	6678.000	53.10	1.62	74.0	-20.90	Peak	0.00	150	V	Pass
5**	10838.125	38.92	1.00	54.0	-15.08	AV	356.00	150	V	Pass
5	10838.125	50.48	1.00	74.0	-23.52	Peak	356.00	150	V	Pass
6**	15331.687	42.67	1.56	54.0	-11.33	AV	19.00	150	V	Pass
6	15331.687	54.04	1.56	74.0	-19.96	Peak	19.00	150	V	Pass

1 GHz to 12.75 GHz, ANT H 802.11b Middle Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1981.000	28.32	-15.41	54.0	-25.68	AV	56.00	150	H	Pass
1	1981.000	38.62	-15.41	74.0	-35.38	Peak	56.00	150	H	Pass
2**	2440.000	88.22	-12.82	54.0	34.22	AV	56.00	150	H	Fail
2	2440.000	92.72	-12.82	74.0	18.72	Peak	56.00	150	H	N/A
3**	3940.000	35.19	-5.75	54.0	-18.81	AV	131.00	150	H	Pass
3	3940.000	46.09	-5.75	74.0	-27.91	Peak	131.00	150	H	Pass
4**	5887.000	40.24	-1.58	54.0	-13.76	AV	72.00	150	H	Pass
4	5887.000	52.12	-1.58	74.0	-21.88	Peak	72.00	150	H	Pass
5**	9199.375	38.27	-0.72	54.0	-15.73	AV	0.00	150	H	Pass
5	9199.375	49.29	-0.72	74.0	-24.71	Peak	0.00	150	H	Pass
6**	15024.562	41.47	1.94	54.0	-12.53	AV	313.00	150	H	Pass
6	15024.562	53.66	1.94	74.0	-20.34	Peak	313.00	150	H	Pass

1 GHz to 12.75 GHz, ANT V 802.11b Middle Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	2124.500	29.87	-13.80	54.0	-24.13	AV	5.00	150	V	Pass
1	2124.500	41.61	-13.80	74.0	-32.39	Peak	5.00	150	V	Pass
2**	2440.000	88.65	-12.82	54.0	34.65	AV	210.00	150	V	Fail
2	2440.000	92.76	-12.82	74.0	18.76	Peak	210.00	150	V	N/A
3**	4371.000	37.22	-4.25	54.0	-16.78	AV	105.00	150	V	Pass
3	4371.000	48.54	-4.25	74.0	-25.46	Peak	105.00	150	V	Pass
4**	6261.000	41.23	-0.58	54.0	-12.77	AV	360.00	150	V	Pass
4	6261.000	53.28	-0.58	74.0	-20.72	Peak	360.00	150	V	Pass
5**	10156.750	38.34	0.23	54.0	-15.66	AV	360.00	150	V	Pass
5	10156.750	49.94	0.23	74.0	-24.06	Peak	360.00	150	V	Pass
6**	15343.500	42.84	1.74	54.0	-11.16	AV	250.00	150	V	Pass
6	15343.500	53.77	1.74	74.0	-20.23	Peak	250.00	150	V	Pass

1 GHz to 12.75 GHz, ANT H 802.11b High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1512.500	26.26	-17.41	54.0	-27.74	AV	341.00	150	H	Pass
1	1512.500	37.17	-17.41	74.0	-36.83	Peak	341.00	150	H	Pass
2**	2465.000	88.87	-12.05	54.0	34.87	AV	44.00	150	H	Fail
2	2465.000	93.10	-12.05	74.0	19.10	Peak	44.00	150	H	N/A
3**	3975.000	36.31	-4.74	54.0	-17.69	AV	205.00	150	H	Pass
3	3975.000	46.35	-4.74	74.0	-27.65	Peak	205.00	150	H	Pass
4**	6673.000	43.75	1.94	54.0	-10.25	AV	355.00	150	H	Pass
4	6673.000	53.58	1.94	74.0	-20.42	Peak	355.00	150	H	Pass
5**	10228.625	38.29	0.79	54.0	-15.71	AV	103.00	150	H	Pass
5	10228.625	49.48	0.79	74.0	-24.52	Peak	103.00	150	H	Pass
6**	14754.187	42.16	1.41	54.0	-11.84	AV	354.00	150	H	Pass
6	14754.187	53.52	1.41	74.0	-20.48	Peak	354.00	150	H	Pass

1 GHz to 12.75 GHz, ANT V 802.11b High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1920.000	27.59	-15.91	54.0	-26.41	AV	360.00	150	V	Pass
1	1920.000	37.90	-15.91	74.0	-36.10	Peak	360.00	150	V	Pass
2**	2465.000	88.77	-12.05	54.0	34.77	AV	285.00	150	V	Fail
2	2465.000	93.17	-12.05	74.0	19.17	Peak	285.00	150	V	N/A
3**	4072.000	35.84	-5.41	54.0	-18.16	AV	298.00	150	V	Pass
3	4072.000	46.66	-5.41	74.0	-27.34	Peak	298.00	150	V	Pass
4**	6670.000	43.51	2.08	54.0	-10.49	AV	260.00	150	V	Pass
4	6670.000	54.22	2.08	74.0	-19.78	Peak	260.00	150	V	Pass
5**	10326.375	39.05	0.45	54.0	-14.95	AV	184.00	150	V	Pass
5	10326.375	50.01	0.45	74.0	-23.99	Peak	184.00	150	V	Pass
6**	15354.000	43.31	1.62	54.0	-10.69	AV	46.00	150	V	Pass
6	15354.000	54.61	1.62	74.0	-19.39	Peak	46.00	150	V	Pass

1 GHz to 12.75 GHz, ANT H 802.11g Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1620.000	27.13	-17.21	54.0	-26.87	AV	318.00	150	H	Pass
1	1620.000	36.98	-17.21	74.0	-37.02	Peak	318.00	150	H	Pass
2**	2419.000	88.57	-12.48	54.0	34.57	AV	56.00	150	H	Fail
2	2419.000	96.67	-12.48	74.0	22.67	Peak	56.00	150	H	N/A
3**	3681.000	34.54	-5.54	54.0	-19.46	AV	355.00	150	H	Pass
3	3681.000	45.75	-5.54	74.0	-28.25	Peak	355.00	150	H	Pass
4**	6681.000	44.27	1.49	54.0	-9.73	AV	124.00	150	H	Pass
4	6681.000	53.28	1.49	74.0	-20.72	Peak	124.00	150	H	Pass
5**	10163.937	38.89	0.14	54.0	-15.11	AV	360.00	150	H	Pass
5	10163.937	50.07	0.14	74.0	-23.93	Peak	360.00	150	H	Pass
6**	16048.312	42.96	1.69	54.0	-11.04	AV	48.00	150	H	Pass
6	16048.312	55.09	1.69	74.0	-18.91	Peak	48.00	150	H	Pass

1 GHz to 12.75 GHz, ANT V 802.11g Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	2125.000	29.56	-13.75	54.0	-24.44	AV	359.00	150	V	Pass
1	2125.000	43.54	-13.75	74.0	-30.46	Peak	359.00	150	V	Pass
2**	2419.500	88.84	-12.53	54.0	34.84	AV	341.00	150	V	Fail
2	2419.500	96.44	-12.53	74.0	22.44	Peak	341.00	150	V	N/A
3**	3824.000	35.20	-6.37	54.0	-18.80	AV	267.00	150	V	Pass
3	3824.000	46.25	-6.37	74.0	-27.75	Peak	267.00	150	V	Pass
4**	6284.000	41.84	-0.46	54.0	-12.16	AV	360.00	150	V	Pass
4	6284.000	51.68	-0.46	74.0	-22.32	Peak	360.00	150	V	Pass
5**	10253.062	39.04	1.20	54.0	-14.96	AV	258.00	150	V	Pass
5	10253.062	49.58	1.20	74.0	-24.42	Peak	258.00	150	V	Pass
6**	15339.563	42.57	1.72	54.0	-11.43	AV	270.00	150	V	Pass
6	15339.563	54.14	1.72	74.0	-19.86	Peak	270.00	150	V	Pass

1 GHz to 12.75 GHz, ANT H 802.11g Middle Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	2028.500	27.94	-15.48	54.0	-26.06	AV	98.00	150	H	Pass
1	2028.500	39.80	-15.48	74.0	-34.20	Peak	98.00	150	H	Pass
2**	2429.500	88.34	-12.95	54.0	34.34	AV	61.00	150	H	Fail
2	2429.500	95.90	-12.95	74.0	21.90	Peak	61.00	150	H	N/A
3**	4015.000	35.66	-5.33	54.0	-18.34	AV	274.00	150	H	Pass
3	4015.000	47.12	-5.33	74.0	-26.88	Peak	274.00	150	H	Pass
4**	6655.000	43.21	1.06	54.0	-10.79	AV	66.00	150	H	Pass
4	6655.000	54.04	1.06	74.0	-19.96	Peak	66.00	150	H	Pass
5**	9167.750	37.59	-1.04	54.0	-16.41	AV	340.00	150	H	Pass
5	9167.750	49.08	-1.04	74.0	-24.92	Peak	340.00	150	H	Pass
6**	15367.125	42.73	1.12	54.0	-11.27	AV	283.00	150	H	Pass
6	15367.125	54.37	1.12	74.0	-19.63	Peak	283.00	150	H	Pass

1 GHz to 12.75 GHz, ANT V 802.11g Middle Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	2129.500	28.90	-14.14	54.0	-25.10	AV	359.00	150	V	Pass
1	2129.500	43.78	-14.14	74.0	-30.22	Peak	359.00	150	V	Pass
2**	2443.000	87.77	-12.94	54.0	33.77	AV	342.00	150	V	Fail
2	2443.000	95.73	-12.94	74.0	21.73	Peak	342.00	150	V	N/A
3**	4534.000	37.90	-4.13	54.0	-16.10	AV	268.00	150	V	Pass
3	4534.000	48.45	-4.13	74.0	-25.55	Peak	268.00	150	V	Pass
4**	6671.000	43.63	2.08	54.0	-10.37	AV	0.00	150	V	Pass
4	6671.000	53.52	2.08	74.0	-20.48	Peak	0.00	150	V	Pass
5**	15033.125	38.56	-0.37	54.0	-15.44	AV	301.00	150	V	Pass
5	15033.125	49.86	-0.37	74.0	-24.14	Peak	301.00	150	V	Pass
6**	15669.000	42.69	1.85	54.0	-11.31	AV	354.00	150	V	Pass
6	15669.000	53.92	1.85	74.0	-20.08	Peak	354.00	150	V	Pass

1 GHz to 12.75 GHz, ANT H 802.11g High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1476.500	25.71	-17.56	54.0	-28.29	AV	196.00	150	H	Pass
1	1476.500	37.93	-17.56	74.0	-36.07	Peak	196.00	150	H	Pass
2**	2469.000	88.83	-11.73	54.0	34.83	AV	292.00	150	H	Fail
2	2469.000	96.44	-11.73	74.0	22.44	Peak	292.00	150	H	N/A
3**	4303.000	37.16	-3.91	54.0	-16.84	AV	0.00	150	H	Pass
3	4303.000	47.67	-3.91	74.0	-26.33	Peak	0.00	150	H	Pass
4**	6662.000	43.40	1.74	54.0	-10.60	AV	87.00	150	H	Pass
4	6662.000	54.16	1.74	74.0	-19.84	Peak	87.00	150	H	Pass
5**	10220.000	38.64	0.61	54.0	-15.36	AV	148.00	150	H	Pass
5	10220.000	49.87	0.61	74.0	-24.13	Peak	148.00	150	H	Pass
6**	14825.062	41.91	1.78	54.0	-12.09	AV	139.00	150	H	Pass
6	14825.062	53.36	1.78	74.0	-20.64	Peak	139.00	150	H	Pass

1 GHz to 12.75 GHz, ANT V 802.11g High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	2128.000	28.84	-14.21	54.0	-25.16	AV	336.00	150	V	Pass
1	2128.000	46.01	-14.21	74.0	-27.99	Peak	336.00	150	V	Pass
2**	2470.000	88.91	-11.71	54.0	34.91	AV	336.00	150	V	Fail
2	2470.000	96.81	-11.71	74.0	22.81	Peak	336.00	150	V	N/A
3**	4485.000	37.49	-3.48	54.0	-16.51	AV	0.00	150	V	Pass
3	4485.000	48.06	-3.48	74.0	-25.94	Peak	0.00	150	V	Pass
4**	6670.000	44.02	2.08	54.0	-9.98	AV	11.00	150	V	Pass
4	6670.000	53.19	2.08	74.0	-20.81	Peak	11.00	150	V	Pass
5**	9509.875	38.05	-0.03	54.0	-15.95	AV	27.00	150	V	Pass
5	9509.875	49.87	-0.03	74.0	-24.13	Peak	27.00	150	V	Pass
6**	14773.875	42.39	1.46	54.0	-11.61	AV	199.00	150	V	Pass
6	14773.875	52.71	1.46	74.0	-21.29	Peak	199.00	150	V	Pass

1 GHz to 12.75 GHz, ANT H 802.11n20 Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1940.000	27.78	-15.78	54.0	-26.22	AV	117.00	150	H	Pass
1	1940.000	39.39	-15.78	74.0	-34.61	Peak	117.00	150	H	Pass
2**	2419.500	88.47	-12.53	54.0	34.47	AV	42.00	150	H	Fail
2	2419.500	96.99	-12.53	74.0	22.99	Peak	42.00	150	H	N/A
3**	3684.000	35.06	-5.85	54.0	-18.94	AV	353.00	150	H	Pass
3	3684.000	45.89	-5.85	74.0	-28.11	Peak	353.00	150	H	Pass
4**	6670.000	43.75	2.08	54.0	-10.25	AV	353.00	150	H	Pass
4	6670.000	53.78	2.08	74.0	-20.22	Peak	353.00	150	H	Pass
5**	9456.687	38.58	-0.23	54.0	-15.42	AV	360.00	150	H	Pass
5	9456.687	49.42	-0.23	74.0	-24.58	Peak	360.00	150	H	Pass
6**	15340.875	43.10	1.73	54.0	-10.90	AV	53.00	150	H	Pass
6	15340.875	54.25	1.73	74.0	-19.75	Peak	53.00	150	H	Pass

1 GHz to 12.75 GHz, ANT V 802.11n20 Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	2123.500	29.35	-13.90	54.0	-24.65	AV	351.00	150	V	Pass
1	2123.500	45.40	-13.90	74.0	-28.60	Peak	351.00	150	V	Pass
2**	2404.000	88.26	-12.16	54.0	34.26	AV	211.00	150	V	Fail
2	2404.000	96.61	-12.16	74.0	22.61	Peak	211.00	150	V	N/A
3**	3664.000	35.43	-5.83	54.0	-18.57	AV	136.00	150	V	Pass
3	3664.000	46.11	-5.83	74.0	-27.89	Peak	136.00	150	V	Pass
4**	6654.000	42.61	0.99	54.0	-11.39	AV	338.00	150	V	Pass
4	6654.000	53.36	0.99	74.0	-20.64	Peak	338.00	150	V	Pass
5**	9599.000	38.74	0.08	54.0	-15.26	AV	111.00	150	V	Pass
5	9599.000	49.94	0.08	74.0	-24.06	Peak	111.00	150	V	Pass
6**	15676.875	43.05	2.01	54.0	-10.95	AV	360.00	150	V	Pass
6	15676.875	54.27	2.01	74.0	-19.73	Peak	360.00	150	V	Pass

1 GHz to 12.75 GHz, ANT H 802.11n20 Middle Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1906.000	28.11	-16.05	54.0	-25.89	AV	121.00	150	H	Pass
1	1906.000	38.46	-16.05	74.0	-35.54	Peak	121.00	150	H	Pass
2**	2429.500	88.17	-12.95	54.0	34.17	AV	44.00	150	H	Fail
2	2429.500	95.89	-12.95	74.0	21.89	Peak	44.00	150	H	N/A
3**	3674.000	35.36	-5.28	54.0	-18.64	AV	271.00	150	H	Pass
3	3674.000	45.34	-5.28	74.0	-28.66	Peak	271.00	150	H	Pass
4**	6672.000	43.84	2.00	54.0	-10.16	AV	291.00	150	H	Pass
4	6672.000	53.81	2.00	74.0	-20.19	Peak	291.00	150	H	Pass
5**	10199.875	39.14	0.87	54.0	-14.86	AV	134.00	150	H	Pass
5	10199.875	50.44	0.87	74.0	-23.56	Peak	134.00	150	H	Pass
6**	14932.688	41.87	0.97	54.0	-12.13	AV	88.00	150	H	Pass
6	14932.688	54.22	0.97	74.0	-19.78	Peak	88.00	150	H	Pass

1 GHz to 12.75 GHz, ANT V 802.11n20 Middle Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1906.000	28.11	-16.05	54.0	-25.89	AV	121.00	150	H	Pass
1	1906.000	38.46	-16.05	74.0	-35.54	Peak	121.00	150	H	Pass
2**	2429.500	88.17	-12.95	54.0	34.17	AV	44.00	150	H	Fail
2	2429.500	95.89	-12.95	74.0	21.89	Peak	44.00	150	H	N/A
3**	3674.000	35.36	-5.28	54.0	-18.64	AV	271.00	150	H	Pass
3	3674.000	45.34	-5.28	74.0	-28.66	Peak	271.00	150	H	Pass
4**	6672.000	43.84	2.00	54.0	-10.16	AV	291.00	150	H	Pass
4	6672.000	53.81	2.00	74.0	-20.19	Peak	291.00	150	H	Pass
5**	10199.875	39.14	0.87	54.0	-14.86	AV	134.00	150	H	Pass
5	10199.875	50.44	0.87	74.0	-23.56	Peak	134.00	150	H	Pass
6**	14932.688	41.87	0.97	54.0	-12.13	AV	88.00	150	H	Pass
6	14932.688	54.22	0.97	74.0	-19.78	Peak	88.00	150	H	Pass

1 GHz to 12.75 GHz, ANT H 802.11n20 High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1913.500	27.41	-16.06	54.0	-26.59	AV	8.00	150	H	Pass
1	1913.500	38.58	-16.06	74.0	-35.42	Peak	8.00	150	H	Pass
2**	2468.500	88.01	-11.91	54.0	34.01	AV	47.00	150	H	Fail
2	2468.500	96.69	-11.91	74.0	22.69	Peak	47.00	150	H	N/A
3**	3675.000	35.31	-5.26	54.0	-18.69	AV	142.00	150	H	Pass
3	3675.000	46.10	-5.26	74.0	-27.90	Peak	142.00	150	H	Pass
4**	5679.000	40.26	-1.87	54.0	-13.74	AV	312.00	150	H	Pass
4	5679.000	51.65	-1.87	74.0	-22.35	Peak	312.00	150	H	Pass
5**	9629.187	38.47	0.11	54.0	-15.53	AV	210.00	150	H	Pass
5	9629.187	49.57	0.11	74.0	-24.43	Peak	210.00	150	H	Pass
6**	14483.812	42.27	1.97	54.0	-11.73	AV	353.00	150	H	Pass
6	14483.812	53.21	1.97	74.0	-20.79	Peak	353.00	150	H	Pass

1 GHz to 12.75 GHz, ANT V 802.11n20 High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	2125.500	29.60	-13.79	54.0	-24.40	AV	336.00	150	V	Pass
1	2125.500	42.93	-13.79	74.0	-31.07	Peak	336.00	150	V	Pass
2**	2469.500	88.82	-11.58	54.0	34.82	AV	360.00	150	V	Fail
2	2469.500	96.78	-11.58	74.0	22.78	Peak	360.00	150	V	N/A
3**	3177.000	33.85	-8.25	54.0	-20.15	AV	0.00	150	V	Pass
3	3177.000	44.46	-8.25	74.0	-29.54	Peak	0.00	150	V	Pass
4**	4614.000	37.33	-3.73	54.0	-16.67	AV	334.00	150	V	Pass
4	4614.000	48.89	-3.73	74.0	-25.11	Peak	334.00	150	V	Pass
5**	10207.062	39.02	0.73	54.0	-14.98	AV	234.00	150	V	Pass
5	10207.062	49.56	0.73	74.0	-24.44	Peak	234.00	150	V	Pass
6**	16090.313	42.91	1.90	54.0	-11.09	AV	37.00	150	V	Pass
6	16090.313	54.98	1.90	74.0	-19.02	Peak	37.00	150	V	Pass

1 GHz to 12.75 GHz, ANT H 802.11n40 Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1066.000	26.46	-18.13	54.0	-27.54	AV	210.00	150	H	Pass
1	1066.000	39.82	-18.13	74.0	-34.18	Peak	210.00	150	H	Pass
2**	2427.000	91.15	-13.02	54.0	37.15	AV	89.00	150	H	N/A
2	2427.000	98.36	-13.02	74.0	24.36	Peak	89.00	150	H	N/A
3**	3673.000	35.40	-5.11	54.0	-18.60	AV	339.00	150	H	Pass
3	3673.000	45.26	-5.11	74.0	-28.74	Peak	339.00	150	H	Pass
4**	4825.000	38.42	-2.69	54.0	-15.58	AV	0.00	150	H	Pass
4	4825.000	49.98	-2.69	74.0	-24.02	Peak	0.00	150	H	Pass
5**	9471.062	38.02	-0.15	54.0	-15.98	AV	182.00	150	H	Pass
5	9471.062	48.96	-0.15	74.0	-25.04	Peak	182.00	150	H	Pass
6**	17154.750	43.42	3.13	54.0	-10.58	AV	0.00	150	H	Pass
6	17154.750	55.80	3.13	74.0	-18.20	Peak	0.00	150	H	Pass

1 GHz to 12.75 GHz, ANT V 802.11n40 Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1298.000	24.80	-17.18	54.0	-29.20	AV	92.00	150	V	Pass
1	1298.000	36.67	-17.18	74.0	-37.33	Peak	92.00	150	V	Pass
2**	2125.500	28.71	-13.79	54.0	-25.29	AV	136.00	150	V	Pass
2	2125.500	43.85	-13.79	74.0	-30.15	Peak	136.00	150	V	Pass
3**	2433.500	89.66	-12.86	54.0	35.66	AV	0.00	150	V	N/A
3	2433.500	97.27	-12.86	74.0	23.27	Peak	0.00	150	V	N/A
4**	5789.000	39.88	-1.95	54.0	-14.12	AV	62.00	150	V	Pass
4	5789.000	51.81	-1.95	74.0	-22.19	Peak	62.00	150	V	Pass
5**	6662.000	43.26	1.74	54.0	-10.74	AV	359.00	150	V	Pass
5	6662.000	53.80	1.74	74.0	-20.20	Peak	359.00	150	V	Pass
6**	14498.250	42.15	1.76	54.0	-11.85	AV	226.00	150	V	Pass
6	14498.250	52.93	1.76	74.0	-21.07	Peak	226.00	150	V	Pass

1 GHz to 12.75 GHz, ANT H 802.11n40 Middle Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1064.500	26.81	-18.25	54.0	-27.19	AV	209.00	150	H	Pass
1	1064.500	38.27	-18.25	74.0	-35.73	Peak	209.00	150	H	Pass
2**	2429.500	91.54	-12.95	54.0	37.54	AV	209.00	150	H	N/A
2	2429.500	99.13	-12.95	74.0	25.13	Peak	209.00	150	H	N/A
3**	3673.000	35.64	-5.11	54.0	-18.36	AV	263.00	150	H	Pass
3	3673.000	45.65	-5.11	74.0	-28.35	Peak	263.00	150	H	Pass
4**	6672.000	43.46	2.00	54.0	-10.54	AV	244.00	150	H	Pass
4	6672.000	53.84	2.00	74.0	-20.16	Peak	244.00	150	H	Pass
5**	9465.312	38.19	-0.17	54.0	-15.81	AV	85.00	150	H	Pass
5	9465.312	49.49	-0.17	74.0	-24.51	Peak	85.00	150	H	Pass
6**	13559.812	40.06	1.10	54.0	-13.94	AV	192.00	150	H	Pass
6	13559.812	52.42	1.10	74.0	-21.58	Peak	192.00	150	H	Pass

1 GHz to 12.75 GHz, ANT V 802.11n40 Middle Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1064.500	26.64	-18.25	54.0	-27.36	AV	38.00	150	V	Pass
1	1064.500	38.54	-18.25	74.0	-35.46	Peak	38.00	150	V	Pass
2**	2132.000	28.57	-14.08	54.0	-25.43	AV	163.00	150	V	Pass
2	2132.000	47.14	-14.08	74.0	-26.86	Peak	163.00	150	V	Pass
3**	2431.000	89.31	-12.98	54.0	35.31	AV	0.00	150	V	N/A
3	2431.000	97.09	-12.98	74.0	23.09	Peak	0.00	150	V	N/A
4**	6659.000	43.19	1.49	54.0	-10.81	AV	317.00	150	V	Pass
4	6659.000	54.11	1.49	74.0	-19.89	Peak	317.00	150	V	Pass
5**	8863.000	38.14	-0.39	54.0	-15.86	AV	42.00	150	V	Pass
5	8863.000	49.69	-0.39	74.0	-24.31	Peak	42.00	150	V	Pass
6**	17468.436	44.49	3.79	54.0	-9.51	AV	112.00	150	V	Pass
6	17468.436	56.17	3.79	74.0	-17.83	Peak	112.00	150	V	Pass

1 GHz to 12.75 GHz, ANT H 802.11n40 High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1066.500	25.51	-18.08	54.0	-28.49	AV	110.00	150	H	Pass
1	1066.500	39.00	-18.08	74.0	-35.00	Peak	110.00	150	H	Pass
2**	2438.000	91.12	-12.94	54.0	37.12	AV	83.00	150	H	N/A
2	2438.000	99.04	-12.94	74.0	25.04	Peak	83.00	150	H	N/A
3**	4683.000	37.99	-3.51	54.0	-16.01	AV	0.00	150	H	Pass
3	4683.000	48.67	-3.51	74.0	-25.33	Peak	0.00	150	H	Pass
4**	6672.000	43.56	2.00	54.0	-10.44	AV	252.00	150	H	Pass
4	6672.000	53.45	2.00	74.0	-20.55	Peak	252.00	150	H	Pass
5**	10667.062	39.17	0.04	54.0	-14.83	AV	234.00	150	H	Pass
5	10667.062	49.97	0.04	74.0	-24.03	Peak	234.00	150	H	Pass
6**	16316.063	42.61	1.88	54.0	-11.39	AV	1.00	150	H	Pass
6	16316.063	54.54	1.88	74.0	-19.46	Peak	1.00	150	H	Pass

1 GHz to 12.75 GHz, ANT V 802.11n40 High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1131.000	24.73	-17.88	54.0	-29.27	AV	298.00	150	V	Pass
1	1131.000	36.49	-17.88	74.0	-37.51	Peak	298.00	150	V	Pass
2**	2127.000	28.16	-14.16	54.0	-25.84	AV	150.00	150	V	Pass
2	2127.000	45.29	-14.16	74.0	-28.71	Peak	150.00	150	V	Pass
3**	2462.500	89.02	-12.43	54.0	35.02	AV	347.00	150	V	N/A
3	2462.500	97.73	-12.43	74.0	23.73	Peak	347.00	150	V	N/A
4**	6672.000	43.49	2.00	54.0	-10.51	AV	265.00	150	V	Pass
4	6672.000	53.40	2.00	74.0	-20.60	Peak	265.00	150	V	Pass
5**	11956.500	39.66	1.23	54.0	-14.34	AV	1.00	150	V	Pass
5	11956.500	51.00	1.23	74.0	-23.00	Peak	1.00	150	V	Pass
6**	16541.813	43.54	1.88	54.0	-10.46	AV	360.00	150	V	Pass
6	16541.813	55.11	1.88	74.0	-18.89	Peak	360.00	150	V	Pass

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1 GHz to 12.75 GHz, ANT H 802.11n20 Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1569.000	23.67	-17.33	54.0	-30.33	AV	227.00	150	H	Pass
1	1569.000	40.22	-17.33	74.0	-33.78	Peak	227.00	150	H	Pass
2**	2407.500	93.47	-12.33	54.0	39.47	AV	105.00	150	H	N/A
2	2407.500	101.99	-12.33	74.0	27.99	Peak	105.00	150	H	N/A
3**	2940.500	32.78	-9.04	54.0	-21.22	AV	206.00	150	H	Pass
3	2940.500	49.59	-9.04	74.0	-24.41	Peak	206.00	150	H	Pass
4**	4155.000	36.51	-4.56	54.0	-17.49	AV	166.00	150	H	Pass
4	4155.000	48.51	-4.56	74.0	-25.49	Peak	166.00	150	H	Pass
5**	6662.000	43.40	1.74	54.0	-10.60	AV	0.00	150	H	Pass
5	6662.000	54.04	1.74	74.0	-19.96	Peak	0.00	150	H	Pass
6**	12139.062	39.44	0.81	54.0	-14.56	AV	358.00	150	H	Pass
6	12139.062	51.03	0.81	74.0	-22.97	Peak	358.00	150	H	Pass

1 GHz to 12.75 GHz, ANT V 802.11n20 Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1778.500	24.16	-16.81	54.0	-29.84	AV	279.00	150	V	Pass
1	1778.500	41.75	-16.81	74.0	-32.25	Peak	279.00	150	V	Pass
2**	2414.000	94.98	-12.58	54.0	40.98	AV	0.00	150	V	N/A
2	2414.000	103.13	-12.58	74.0	29.13	Peak	0.00	150	V	N/A
3**	2560.000	31.78	-12.03	54.0	-22.22	AV	163.00	150	V	Pass
3	2560.000	47.60	-12.03	74.0	-26.40	Peak	163.00	150	V	Pass
4**	2784.000	32.78	-9.94	54.0	-21.22	AV	0.00	150	V	Pass
4	2784.000	48.84	-9.94	74.0	-25.16	Peak	0.00	150	V	Pass
5**	6678.000	43.69	1.62	54.0	-10.31	AV	128.00	150	V	Pass
5	6678.000	53.69	1.62	74.0	-20.31	Peak	128.00	150	V	Pass
6**	11989.562	39.68	1.34	54.0	-14.32	AV	341.00	150	V	Pass
6	11989.562	51.45	1.34	74.0	-22.55	Peak	341.00	150	V	Pass

1 GHz to 12.75 GHz, ANT H 802.11n20 Middle Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1307.500	23.45	-17.26	54.0	-30.55	AV	86.00	150	H	Pass
1	1307.500	39.77	-17.26	74.0	-34.23	Peak	86.00	150	H	Pass
2**	2432.500	93.50	-12.91	54.0	39.50	AV	109.00	150	H	N/A
2	2432.500	102.26	-12.91	74.0	28.26	Peak	109.00	150	H	N/A
3**	2673.000	31.88	-10.79	54.0	-22.12	AV	26.00	150	H	Pass
3	2673.000	48.47	-10.79	74.0	-25.53	Peak	26.00	150	H	Pass
4**	4006.000	35.92	-4.76	54.0	-18.08	AV	137.00	150	H	Pass
4	4006.000	46.81	-4.76	74.0	-27.19	Peak	137.00	150	H	Pass
5**	6676.000	43.57	1.77	54.0	-10.43	AV	318.00	150	H	Pass
5	6676.000	54.24	1.77	74.0	-19.76	Peak	318.00	150	H	Pass
6**	10999.125	38.93	-0.35	54.0	-15.07	AV	177.00	150	H	Pass
6	10999.125	51.08	-0.35	74.0	-22.92	Peak	177.00	150	H	Pass

1 GHz to 12.75 GHz, ANT V 802.11n20 Middle Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1407.000	23.48	-17.33	54.0	-30.52	AV	84.00	150	V	Pass
1	1407.000	40.00	-17.33	74.0	-34.00	Peak	84.00	150	V	Pass
2**	2439.500	93.88	-12.81	54.0	39.88	AV	360.00	150	V	N/A
2	2439.500	102.89	-12.81	74.0	28.89	Peak	360.00	150	V	N/A
3**	2938.000	32.60	-9.16	54.0	-21.40	AV	360.00	150	V	Pass
3	2938.000	48.50	-9.16	74.0	-25.50	Peak	360.00	150	V	Pass
4**	4628.000	38.41	-3.19	54.0	-15.59	AV	2.00	150	V	Pass
4	4628.000	49.38	-3.19	74.0	-24.62	Peak	2.00	150	V	Pass
5**	6654.000	43.00	0.99	54.0	-11.00	AV	298.00	150	V	Pass
5	6654.000	54.00	0.99	74.0	-20.00	Peak	298.00	150	V	Pass
6**	11658.937	39.97	0.43	54.0	-14.03	AV	0.00	150	V	Pass
6	11658.937	51.24	0.43	74.0	-22.76	Peak	0.00	150	V	Pass

1 GHz to 12.75 GHz, ANT H 802.11n20 High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1330.500	23.48	-17.09	54.0	-30.52	AV	298.00	150	H	Pass
1	1330.500	39.86	-17.09	74.0	-34.14	Peak	298.00	150	H	Pass
2**	2466.000	93.67	-12.12	54.0	39.67	AV	214.00	150	H	N/A
2	2466.000	103.14	-12.12	74.0	29.14	Peak	214.00	150	H	N/A
3**	2936.500	33.33	-9.10	54.0	-20.67	AV	337.00	150	H	Pass
3	2936.500	49.35	-9.10	74.0	-24.65	Peak	337.00	150	H	Pass
4**	4609.000	38.69	-3.24	54.0	-15.31	AV	10.00	150	H	Pass
4	4609.000	48.81	-3.24	74.0	-25.19	Peak	10.00	150	H	Pass
5**	6671.000	43.42	2.08	54.0	-10.58	AV	227.00	150	H	Pass
5	6671.000	53.89	2.08	74.0	-20.11	Peak	227.00	150	H	Pass
6**	10370.938	38.63	0.77	54.0	-15.37	AV	360.00	150	H	Pass
6	10370.938	50.22	0.77	74.0	-23.78	Peak	360.00	150	H	Pass

1 GHz to 12.75 GHz, ANT V 802.11n20 High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1422.500	23.38	-17.34	54.0	-30.62	AV	151.00	150	V	Pass
1	1422.500	40.35	-17.34	74.0	-33.65	Peak	151.00	150	V	Pass
2**	2455.500	93.87	-12.66	54.0	39.87	AV	360.00	150	V	N/A
2	2455.500	103.37	-12.66	74.0	29.37	Peak	360.00	150	V	N/A
3**	2685.000	31.54	-10.90	54.0	-22.46	AV	335.00	150	V	Pass
3	2685.000	47.44	-10.90	74.0	-26.56	Peak	335.00	150	V	Pass
4**	4879.000	38.42	-2.60	54.0	-15.58	AV	18.00	150	V	Pass
4	4879.000	49.57	-2.60	74.0	-24.43	Peak	18.00	150	V	Pass
5**	6677.000	43.80	1.67	54.0	-10.20	AV	3.00	150	V	Pass
5	6677.000	53.64	1.67	74.0	-20.36	Peak	3.00	150	V	Pass
6**	10636.875	39.25	-0.34	54.0	-14.75	AV	360.00	150	V	Pass
6	10636.875	50.37	-0.34	74.0	-23.63	Peak	360.00	150	V	Pass

1 GHz to 12.75 GHz, ANT H 802.11n40 Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1335.500	23.64	-17.37	54.0	-30.36	AV	0.00	150	H	Pass
1	1335.500	39.97	-17.37	74.0	-34.03	Peak	0.00	150	H	Pass
2**	2427.500	90.11	-13.00	54.0	36.11	AV	112.00	150	H	N/A
2	2427.500	98.65	-13.00	74.0	24.65	Peak	112.00	150	H	N/A
3**	2560.000	32.23	-12.03	54.0	-21.77	AV	245.00	150	H	Pass
3	2560.000	47.47	-12.03	74.0	-26.53	Peak	245.00	150	H	Pass
4**	5204.000	38.85	-2.76	54.0	-15.15	AV	335.00	150	H	Pass
4	5204.000	50.69	-2.76	74.0	-23.31	Peak	335.00	150	H	Pass
5**	6674.000	44.25	1.92	54.0	-9.75	AV	307.00	150	H	Pass
5	6674.000	53.25	1.92	74.0	-20.75	Peak	307.00	150	H	Pass
6**	11267.937	39.12	0.27	54.0	-14.88	AV	29.00	150	H	Pass
6	11267.937	50.20	0.27	74.0	-23.80	Peak	29.00	150	H	Pass

1 GHz to 12.75 GHz, ANT V 802.11n40 Low Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1226.500	22.73	-17.65	54.0	-31.27	AV	182.00	150	V	Pass
1	1226.500	39.03	-17.65	74.0	-34.97	Peak	182.00	150	V	Pass
2**	2428.000	90.53	-12.99	54.0	36.53	AV	2.00	150	V	N/A
2	2428.000	98.93	-12.99	74.0	24.93	Peak	2.00	150	V	N/A
3**	2932.000	32.80	-9.23	54.0	-21.20	AV	126.00	150	V	Pass
3	2932.000	49.18	-9.23	74.0	-24.82	Peak	126.00	150	V	Pass
4**	4311.000	37.11	-4.27	54.0	-16.89	AV	166.00	150	V	Pass
4	4311.000	48.14	-4.27	74.0	-25.86	Peak	166.00	150	V	Pass
5**	6662.000	43.45	1.74	54.0	-10.55	AV	253.00	150	V	Pass
5	6662.000	53.67	1.74	74.0	-20.33	Peak	253.00	150	V	Pass
6**	8022.063	37.26	-2.49	54.0	-16.74	AV	360.00	150	V	Pass
6	8022.063	49.30	-2.49	74.0	-24.70	Peak	360.00	150	V	Pass

1 GHz to 12.75 GHz, ANT H 802.11n40 Middle Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1397.000	23.70	-17.10	54.0	-30.30	AV	299.00	150	H	Pass
1	1397.000	39.90	-17.10	74.0	-34.10	Peak	299.00	150	H	Pass
2**	2445.500	91.01	-12.87	54.0	37.01	AV	93.00	150	H	N/A
2	2445.500	99.88	-12.87	74.0	25.88	Peak	93.00	150	H	N/A
3**	2908.000	32.34	-9.39	54.0	-21.66	AV	102.00	150	H	Pass
3	2908.000	48.95	-9.39	74.0	-25.05	Peak	102.00	150	H	Pass
4**	5686.000	40.08	-1.73	54.0	-13.92	AV	138.00	150	H	Pass
4	5686.000	51.71	-1.73	74.0	-22.29	Peak	138.00	150	H	Pass
5**	6670.000	43.88	2.08	54.0	-10.12	AV	146.00	150	H	Pass
5	6670.000	54.08	2.08	74.0	-19.92	Peak	146.00	150	H	Pass
6**	8060.875	37.11	-2.30	54.0	-16.89	AV	311.00	150	H	Pass
6	8060.875	49.08	-2.30	74.0	-24.92	Peak	311.00	150	H	Pass

1 GHz to 12.75 GHz, ANT V 802.11n40 Middle Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1783.500	23.91	-16.87	54.0	-30.09	AV	139.00	150	V	Pass
1	1783.500	41.28	-16.87	74.0	-32.72	Peak	139.00	150	V	Pass
2**	2447.500	91.97	-12.72	54.0	37.97	AV	319.00	150	V	N/A
2	2447.500	101.68	-12.72	74.0	27.68	Peak	319.00	150	V	N/A
3**	2969.500	32.77	-9.22	54.0	-21.23	AV	24.00	150	V	Pass
3	2969.500	49.06	-9.22	74.0	-24.94	Peak	24.00	150	V	Pass
4**	4889.000	38.46	-2.84	54.0	-15.54	AV	18.00	150	V	Pass
4	4889.000	49.81	-2.84	74.0	-24.19	Peak	18.00	150	V	Pass
5**	6681.000	43.57	1.49	54.0	-10.43	AV	41.00	150	V	Pass
5	6681.000	53.81	1.49	74.0	-20.19	Peak	41.00	150	V	Pass
6**	7782.000	37.58	-2.42	54.0	-16.42	AV	248.00	150	V	Pass
6	7782.000	48.93	-2.42	74.0	-25.07	Peak	248.00	150	V	Pass

1 GHz to 12.75 GHz, ANT H 802.11n40 High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1238.500	22.70	-17.73	54.0	-31.30	AV	345.00	150	H	Pass
1	1238.500	39.60	-17.73	74.0	-34.40	Peak	345.00	150	H	Pass
2**	2444.000	90.50	-12.91	54.0	36.50	AV	102.00	150	H	N/A
2	2444.000	99.35	-12.91	74.0	25.35	Peak	102.00	150	H	N/A
3**	3428.000	33.77	-7.26	54.0	-20.23	AV	274.00	150	H	Pass
3	3428.000	45.33	-7.26	74.0	-28.67	Peak	274.00	150	H	Pass
4**	5473.000	39.67	-1.80	54.0	-14.33	AV	282.00	150	H	Pass
4	5473.000	50.79	-1.80	74.0	-23.21	Peak	282.00	150	H	Pass
5**	6657.000	43.22	1.34	54.0	-10.78	AV	274.00	150	H	Pass
5	6657.000	53.86	1.34	74.0	-20.14	Peak	274.00	150	H	Pass
6**	10793.562	39.28	0.17	54.0	-14.72	AV	206.00	150	H	Pass
6	10793.562	50.85	0.17	74.0	-23.15	Peak	206.00	150	H	Pass

1 GHz to 12.75 GHz, ANT V 802.11n40 High Channel

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1**	1765.000	24.11	-17.13	54.0	-29.89	AV	142.00	150	V	Pass
1	1765.000	41.55	-17.13	74.0	-32.45	Peak	142.00	150	V	Pass
2**	2445.000	92.06	-12.87	54.0	38.06	AV	360.00	150	V	N/A
2	2445.000	150.55	-12.87	74.0	26.55	Peak	360.00	150	V	N/A
3**	2871.000	32.05	-10.04	54.0	-21.95	AV	0.00	150	V	Pass
3	2871.000	48.63	-10.04	74.0	-25.37	Peak	0.00	150	V	Pass
4**	4301.000	37.18	-3.71	54.0	-16.82	AV	294.00	150	V	Pass
4	4301.000	48.16	-3.71	74.0	-25.84	Peak	294.00	150	V	Pass
5**	6671.000	44.44	2.08	54.0	-9.56	AV	124.00	150	V	Pass
5	6671.000	54.46	2.08	74.0	-19.54	Peak	124.00	150	V	Pass
6**	8874.500	38.40	-0.35	54.0	-15.60	AV	258.00	150	V	Pass
6	8874.500	49.18	-0.35	74.0	-24.82	Peak	258.00	150	V	Pass

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

Test Data

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

Note²: The test data all are tested in the vertical and horizontal antenna which the trace is max hold. So these plots have shown the worst case.

Note³: According the ANSI C63.10-2013, 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.

SISO ANT0

Test Mode	Test Channel	Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Remark	Verdict
802.11b	1	2390	52.164	74	21.836	PEAK	Pass
		2390	N/A	54	N/A	AVERAGE	N/A
	2	2345.575	52.333	74	21.667	PEAK	Pass
		2345.575	N/A	54	N/A	AVERAGE	N/A
	11	2483.5	52.295	74	21.705	PEAK	Pass
		2483.5	N/A	54	N/A	AVERAGE	N/A
802.11g	1	2390	62.439	74	11.561	PEAK	Pass
		2390	46.933	54	7.067	AVERAGE	Pass
	2	2390	50.610	74	23.390	PEAK	Pass
		2390	N/A	54	N/A	AVERAGE	N/A
	11	2483.5	54.495	74	19.505	PEAK	Pass
		2483.5	44.458	54	9.542	AVERAGE	Pass
802.11n20	1	2390	58.593	74	15.407	PEAK	Pass
		2390	45.965	54	8.035	AVERAGE	Pass
	2	2368.275	52.472	74	21.528	PEAK	Pass
		2368.275	N/A	54	N/A	AVERAGE	N/A
	11	2483.5	57.341	74	16.659	PEAK	Pass
		2483.5	44.091	54	9.909	AVERAGE	Pass
802.11n40	3	2390	61.570	74	12.43	PEAK	Pass
		2390	47.408	54	6.592	AVERAGE	Pass
	9	2483.5	67.253	74	6.747	PEAK	Pass
		2483.5	47.857	54	6.143	AVERAGE	Pass

SISO ANT1

Test Mode	Test Channel	Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Remark	Verdict
802.11b	1	2390	52.089	74	21.911	PEAK	Pass
		2390	N/A	54	N/A	AVERAGE	N/A
	2	2355.1	51.892	74	22.108	PEAK	Pass
		2355.1	N/A	54	N/A	AVERAGE	N/A
	11	2483.5	51.856	74	22.144	PEAK	Pass
		2483.5	N/A	54	N/A	AVERAGE	N/A
802.11g	1	2390	59.877	74	14.123	PEAK	Pass
		2390	42.386	54	11.614	AVERAGE	Pass
	2	2390	53.206	74	20.794	PEAK	Pass
		2390	N/A	54	N/A	AVERAGE	N/A
	11	2483.5	55.001	74	18.999	PEAK	Pass
		2483.5	43.095	54	10.905	AVERAGE	N/A
802.11n20	1	2390	56.024	74	17.976	PEAK	Pass
		2390	43.417	54	10.583	AVERAGE	Pass
	2	2386.525	54.051	74	19.949	PEAK	Pass
		2386.525	42.687	54	11.313	AVERAGE	Pass
	11	2483.5	61.268	74	12.732	PEAK	Pass
		2483.5	47.332	54	6.668	AVERAGE	Pass
802.11n40	3	2390	58.660	74	15.340	PEAK	Pass
		2390	42.512	54	11.488	AVERAGE	Pass
	9	2483.5	61.761	74	12.239	PEAK	Pass
		2483.5	45.341	54	8.659	AVERAGE	Pass

MIMO

Test Mode	Test Channel	Frequency (MHz)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Remark	Verdict
802.11n20	1	2390	53.302	74	20.698	PEAK	Pass
		2390	N/A	54	N/A	AVERAGE	Pass
	2	2354.05	52.944	74	21.056	PEAK	Pass
		2354.05	N/A	54	N/A	AVERAGE	Pass
	11	2483.5	52.838	74	21.162	PEAK	Pass
		2483.5	N/A	54	N/A	AVERAGE	Pass
802.11n40	3	2390	56.079	74	17.921	PEAK	Pass
		2390	43.928	54	10.072	AVERAGE	Pass
	9	2483.5	53.597	74	20.403	PEAK	Pass
		2483.5	N/A	54	N/A	AVERAGE	Pass

SISO ANT0

802.11b Mode:

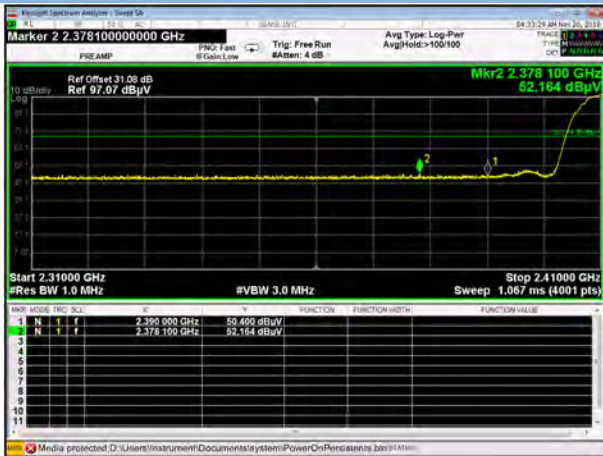
CHANNEL 1, PEAK



CHANNEL 2, PEAK

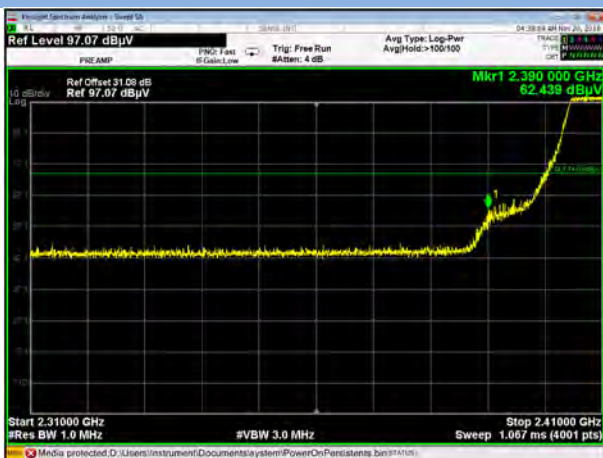


CHANNEL 11, PEAK



802.11g Mode:

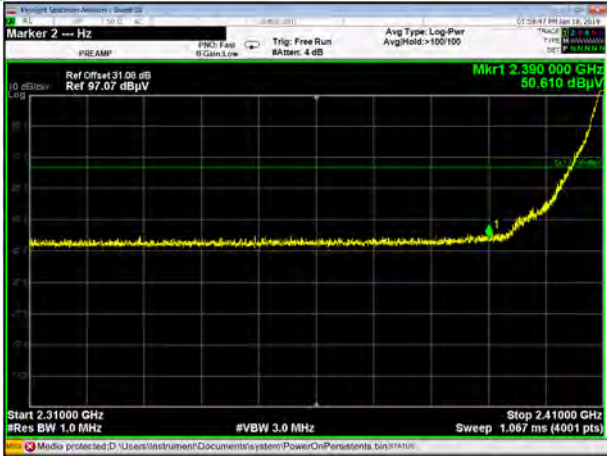
CHANNEL 1, PEAK



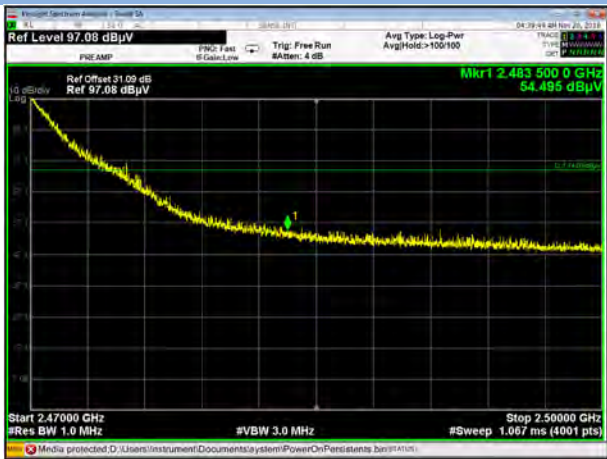
CHANNEL 1, AV



CHANNEL 2 PEAK



CHANNEL 11, PEAK

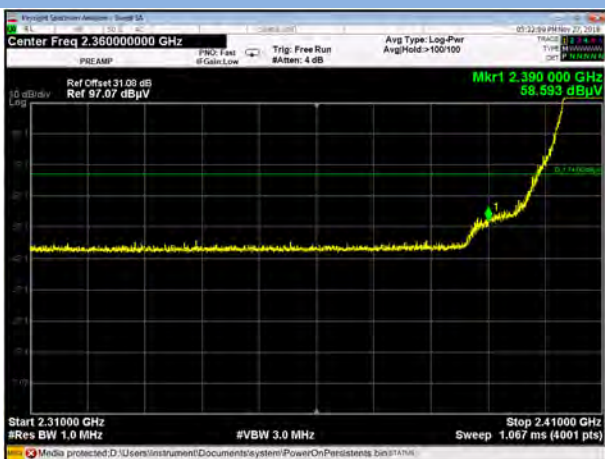


CHANNEL 11, AV

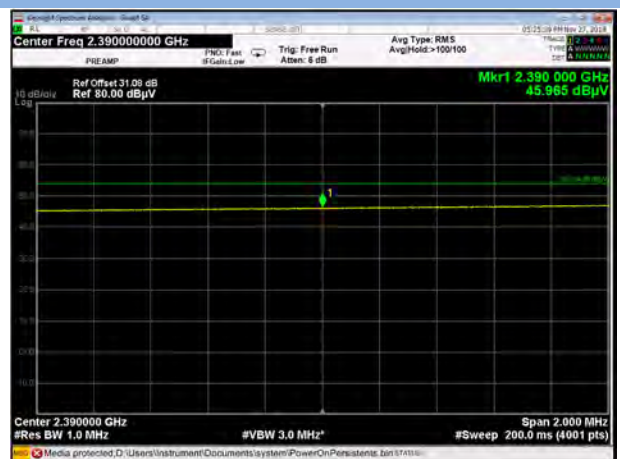


802.11n-20 MHz Mode:

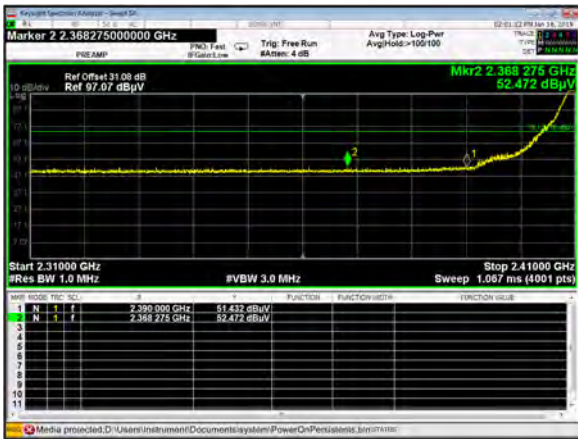
CHANNEL 1, PEAK



CHANNEL 1, AV



CHANNEL 2, PEAK



CHANNEL 11, PEAK



CHANNEL 11, AV



802.11n-40 MHz Mode:

CHANNEL 3, PEAK



CHANNEL 3, AV



CHANNEL 9, PEAK



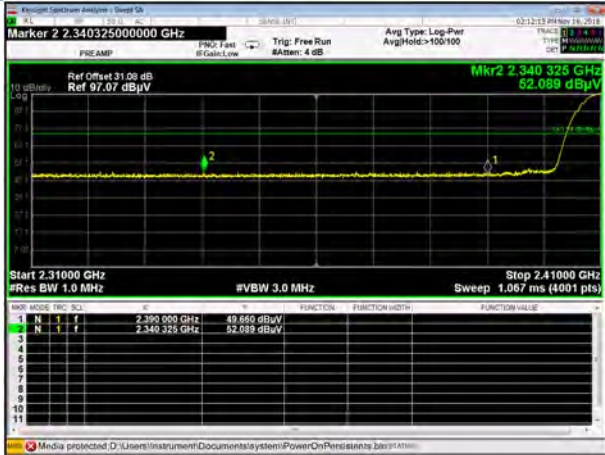
CHANNEL 9, AV



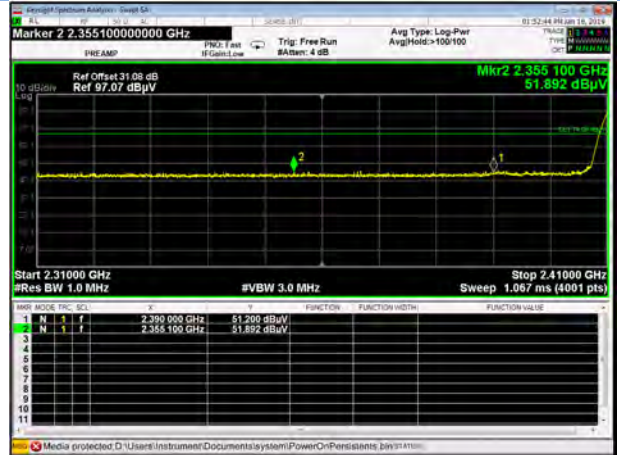
SISO ANT1

802.11b Mode:

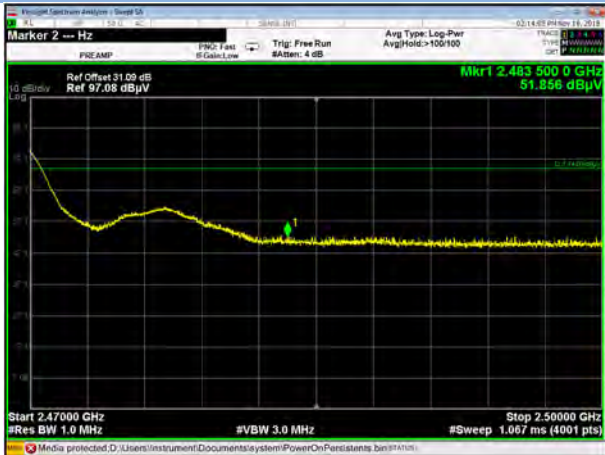
CHANNEL 1, PEAK



CHANNEL 2, PEAK

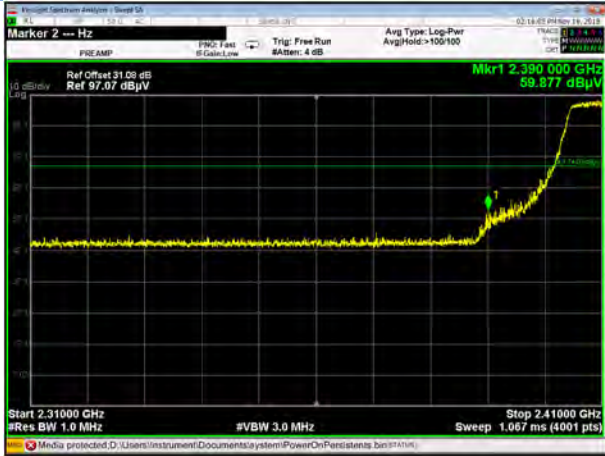


CHANNEL 11, PEAK



802.11g Mode:

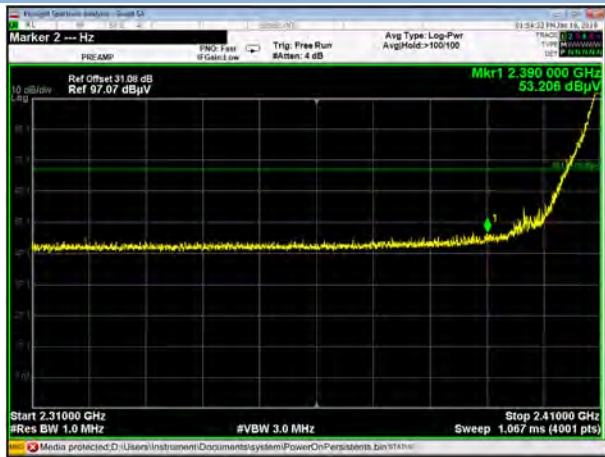
CHANNEL 1, PEAK



CHANNEL 1, AV



CHANNEL 2, PEAK



CHANNEL 11, PEAK

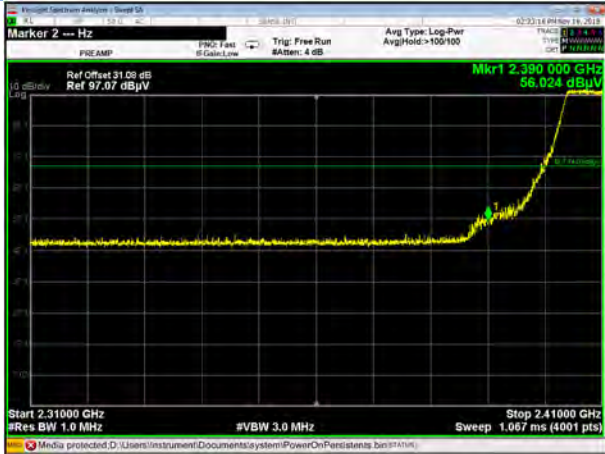


CHANNEL 11, AV



802.11n-20 MHz Mode:

CHANNEL 1, PEAK



CHANNEL 1, AV



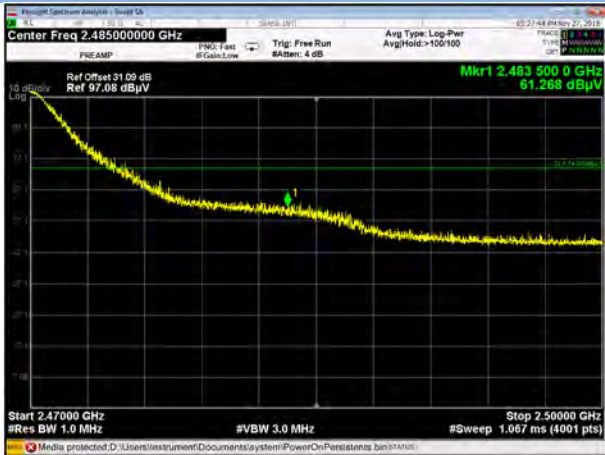
CHANNEL 2, PEAK



CHANNEL 2, AV



CHANNEL 11, PEAK

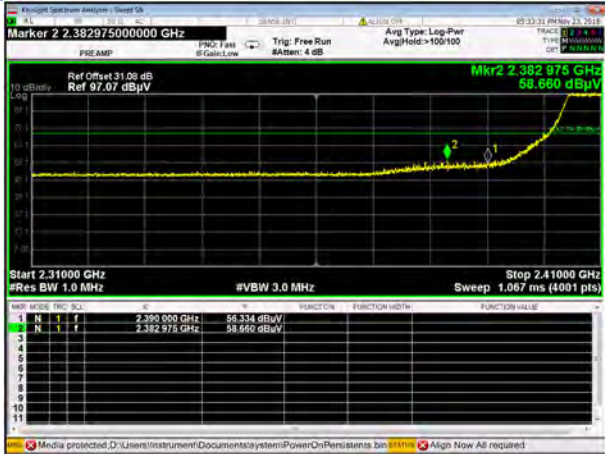


CHANNEL 11, AV

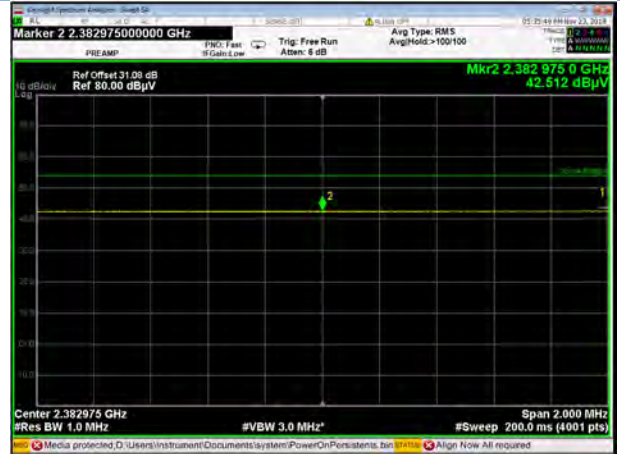


802.11n-40 MHz Mode:

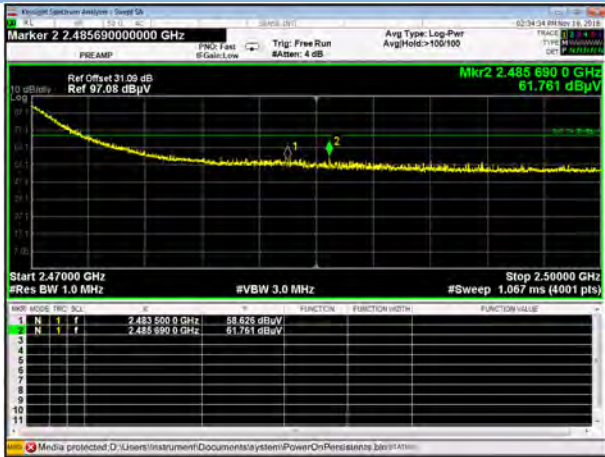
CHANNEL 3, PEAK



CHANNEL 3, AV



CHANNEL 9, PEAK



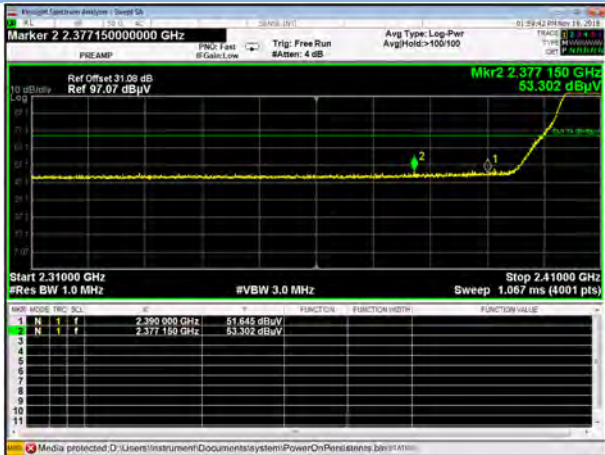
CHANNEL 9, AV



MIMO

802.11n-20 MHz Mode:

CHANNEL 1, PEAK



CHANNEL 2, PEAK



CHANNEL 11, PEAK



802.11n-40 MHz Mode:

CHANNEL 3, PEAK



CHANNEL 3, AV



CHANNEL 9, PEAK



A.8 Power Spectral Density (PSD)

Test Data

SISO ANT 0

802.11b Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-18.63	8
Middle	-17.52	8
High	-17.64	8

802.11g Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-19.56	8
Middle	-19.45	8
High	-19.90	8

802.11n-20 MHz Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-20.23	8
Middle	-19.75	8
High	-22.55	8

802.11n-40 MHz Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-22.87	8
Middle	-22.72	8
High	-22.81	8

SISO ANT 1

802.11b Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-17.89	8
Middle	-16.62	8
High	-17.27	8

802.11g Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-20.21	8
Middle	-18.90	8
High	-19.30	8

802.11n-20 MHz Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-20.24	8
Middle	-21.93	8
High	-21.56	8

802.11n-40 MHz Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-23.09	8
Middle	-22.89	8
High	-25.19	8

MIMO

802.11n-20 MHz Mode:

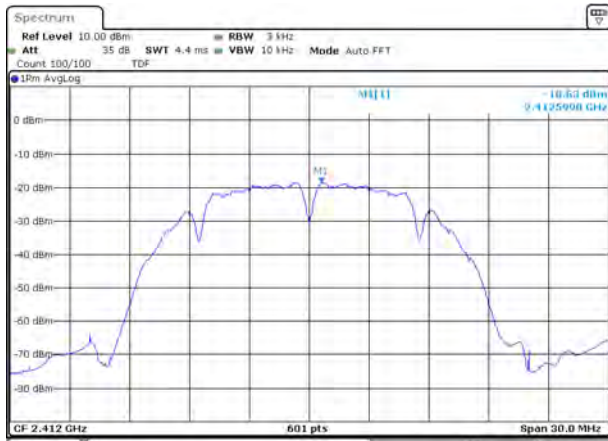
Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-19.45	8
Middle	-19.06	8
High	-19.24	8

802.11n-40 MHz Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-23.63	8
Middle	-22.66	8
High	-22.62	8

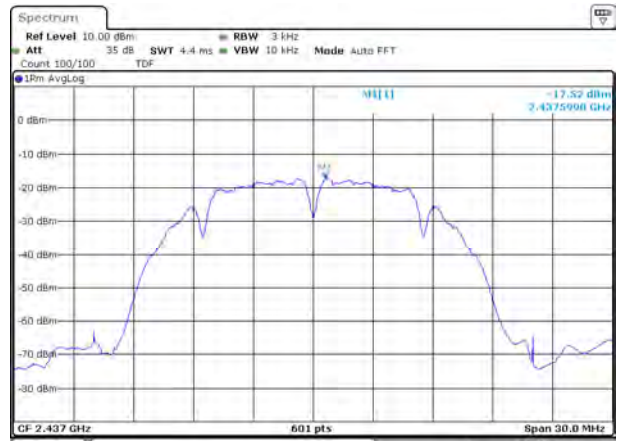
Test plots
SISO ANT0

802.11b LOW CHANNEL



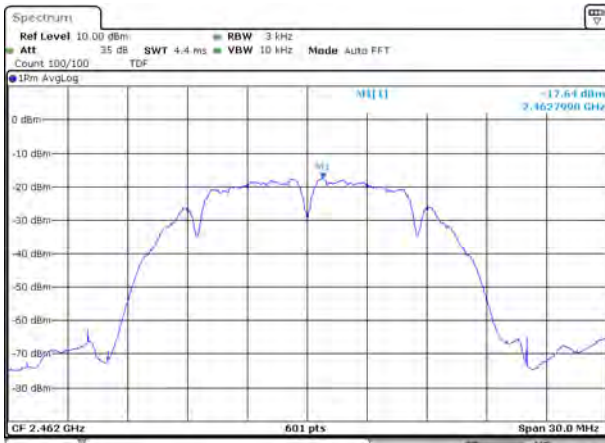
Date: 25 NOV 2018 13:43:19

802.11b MIDDLE CHANNEL



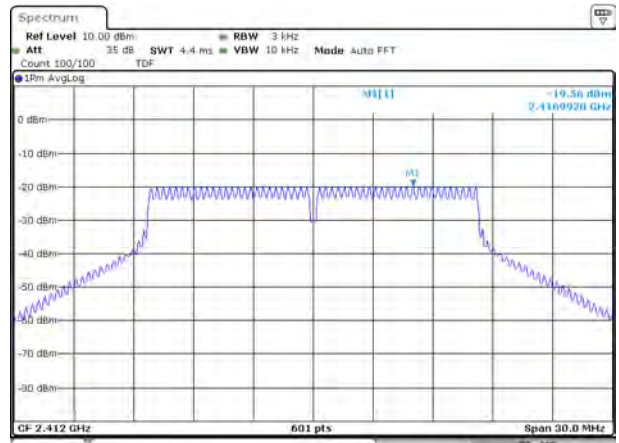
Date: 25 NOV 2018 13:46:36

802.11b HIGH CHANNEL



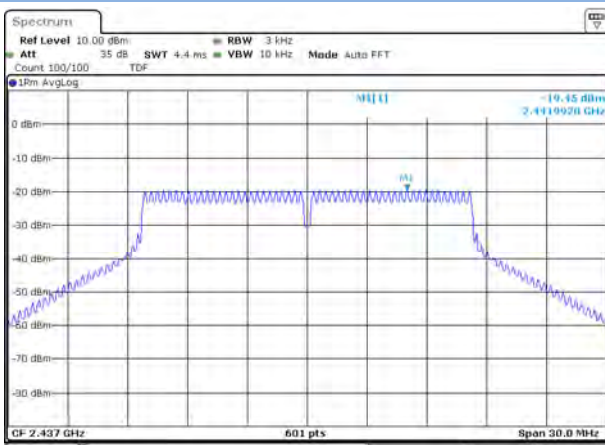
Date: 25 NOV 2018 13:48:25

802.11g LOW CHANNEL



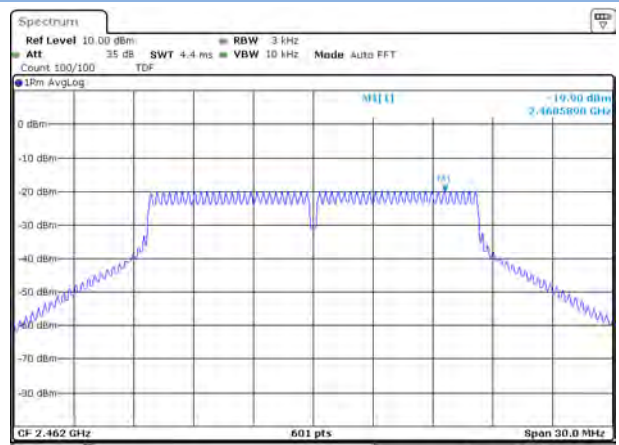
Date: 25 NOV 2018 13:50:41

802.11g MIDDLE CHANNEL



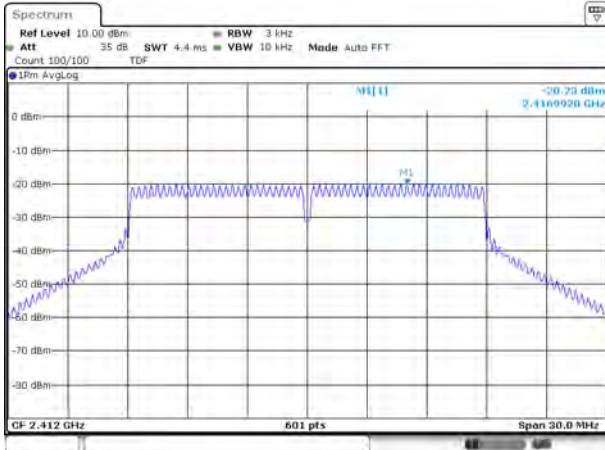
Date: 25 NOV 2018 13:52:05

802.11g HIGH CHANNEL



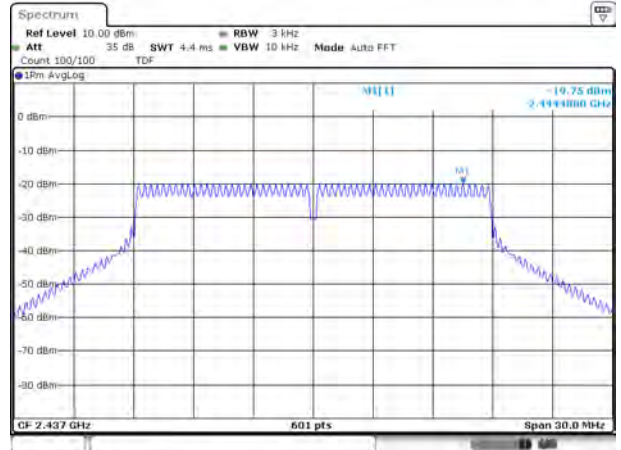
Date: 25 NOV 2018 13:53:00

802.11n-20 MHz LOW CHANNEL



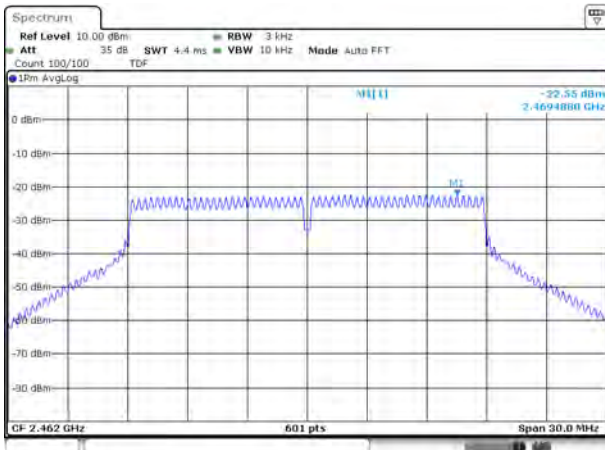
Date: 25 NOV 2018 13:55:29

802.11 n-20 MHz MIDDLE CHANNEL



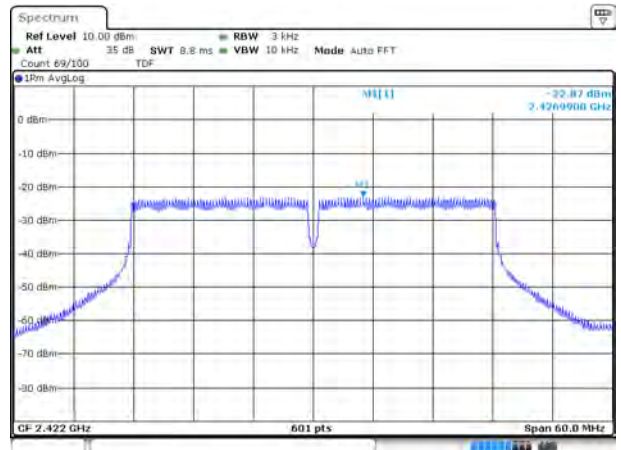
Date: 25 NOV 2018 13:56:47

802.11n-20 MHz HIGH CHANNEL



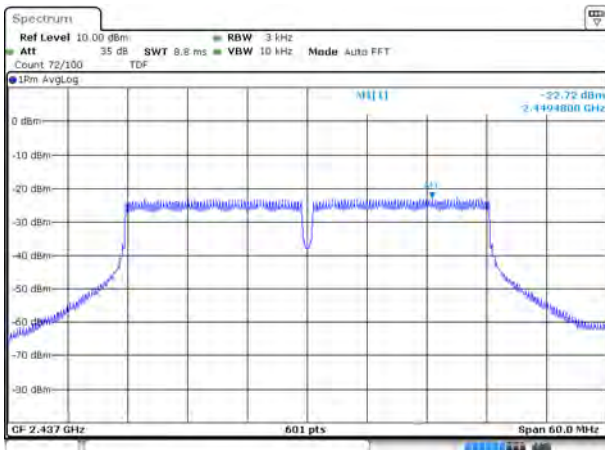
Date: 25 NOV 2018 13:58:23

802.11n-40 MHz LOW CHANNEL



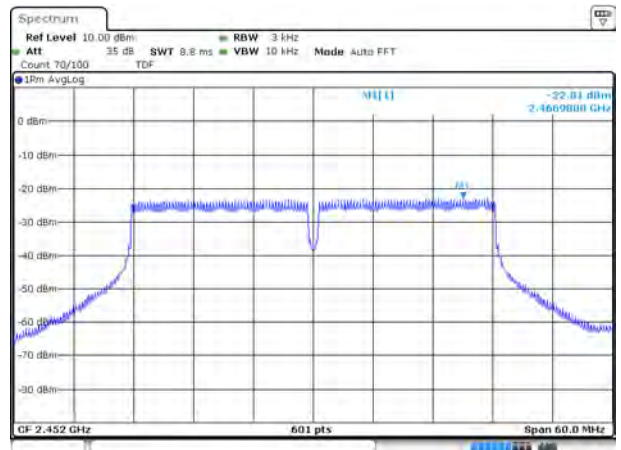
Date: 25 NOV 2018 14:00:03

802.11n-40 MHz MIDDLE CHANNEL



Date: 25 NOV 2018 14:01:24

802.11n-40 MHz HIGH CHANNEL



Date: 25 NOV 2018 14:02:56

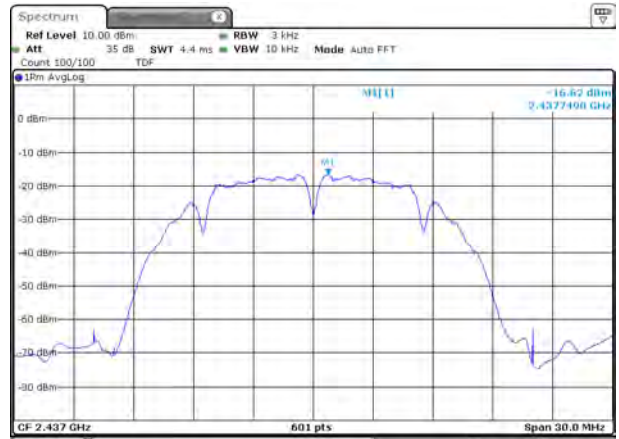
SISO ANT1

802.11b LOW CHANNEL



Date: 25 NOV 2016 14:07:15

802.11b MIDDLE CHANNEL



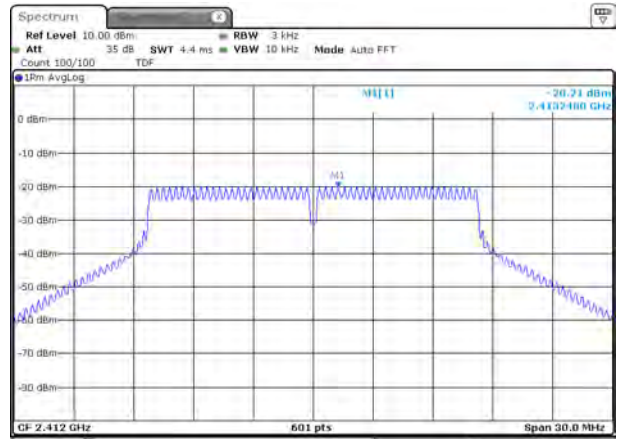
Date: 25 NOV 2016 18:33:29

802.11b HIGH CHANNEL



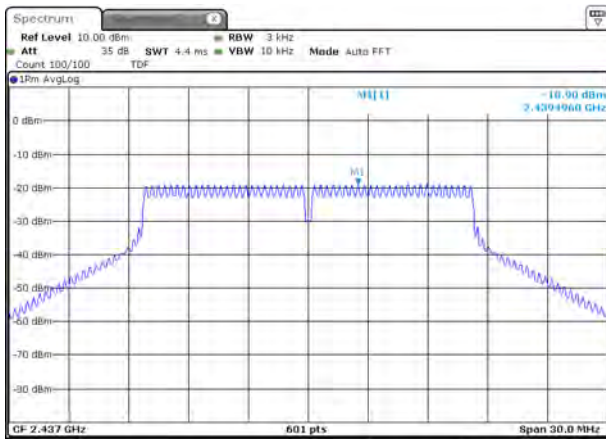
Date: 25 NOV 2016 19:20:00

802.11g LOW CHANNEL



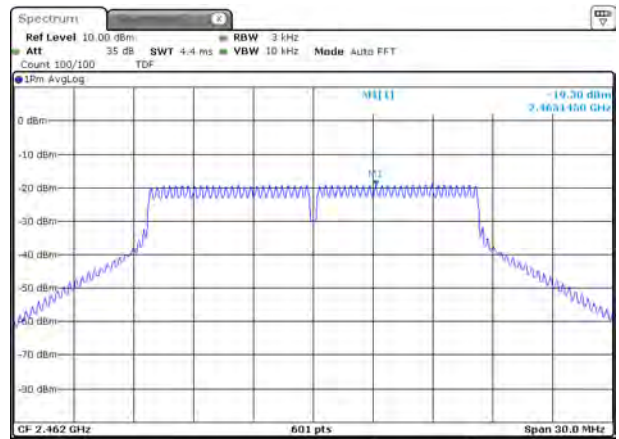
Date: 25 NOV 2016 19:22:19

802.11g MIDDLE CHANNEL



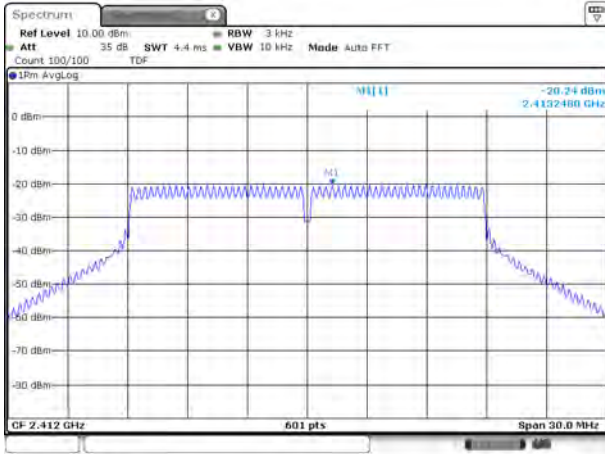
Date: 25 NOV 2016 19:24:00

802.11g HIGH CHANNEL



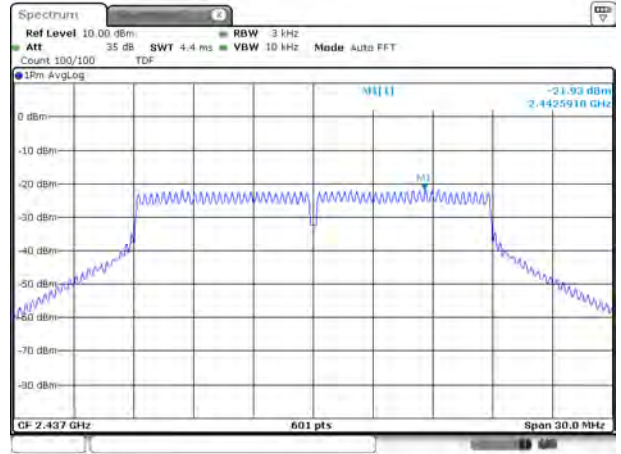
Date: 25 NOV 2016 19:25:40

802.11n-20 MHz LOW CHANNEL



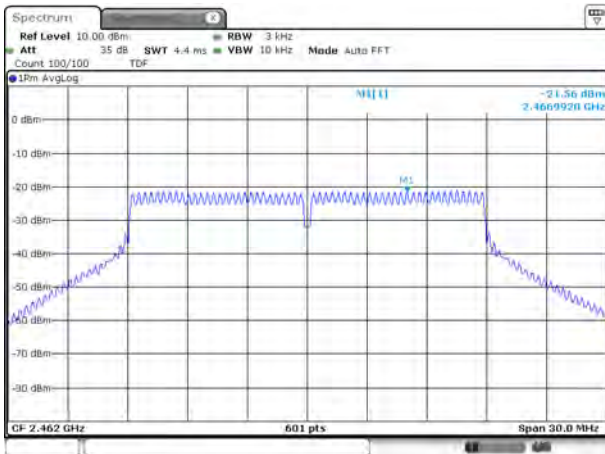
Date: 25 NOV 2018 19:27:34

802.11 n-20 MHz MIDDLE CHANNEL



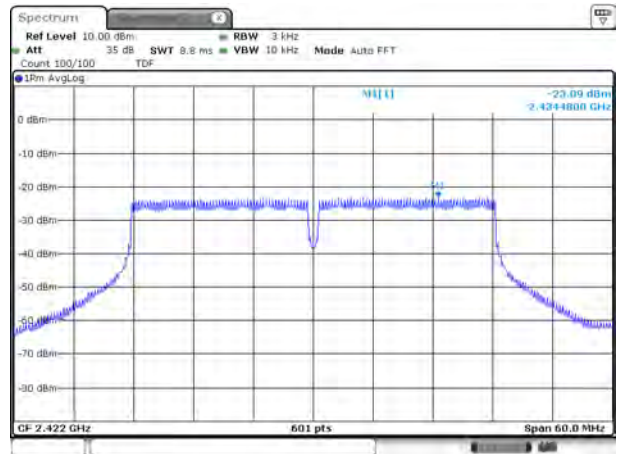
Date: 25 NOV 2018 19:29:15

802.11n-20 MHz HIGH CHANNEL



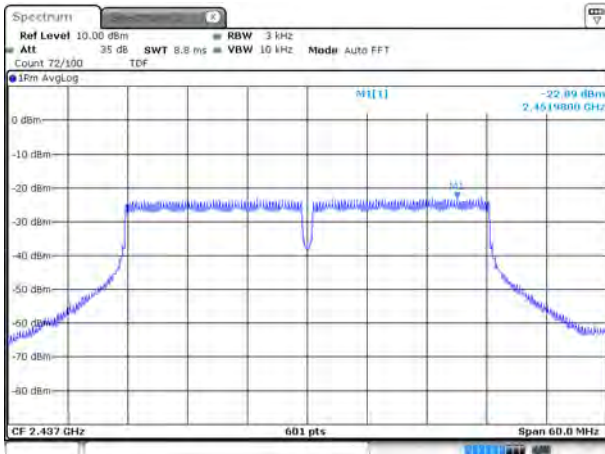
Date: 25 NOV 2018 19:31:04

802.11n-40 MHz LOW CHANNEL



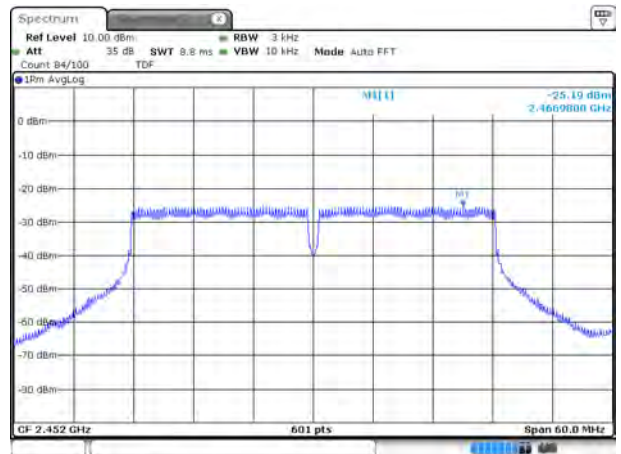
Date: 25 NOV 2018 19:35:34

802.11n-40 MHz MIDDLE CHANNEL



Date: 25 NOV 2018 19:37:07

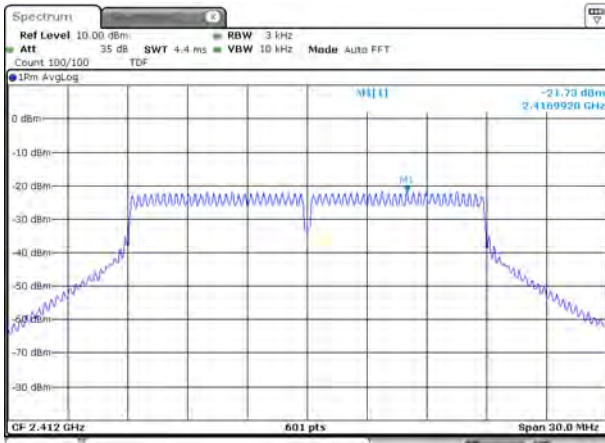
802.11n-40 MHz HIGH CHANNEL



Date: 25 NOV 2018 19:38:56

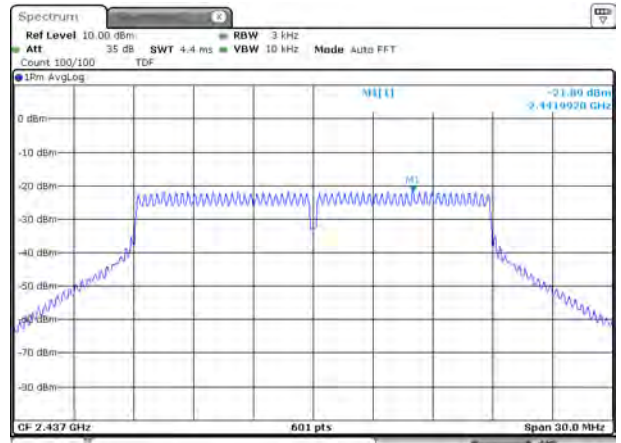
MIMO ANT0

802.11n-20 MHz LOW CHANNEL



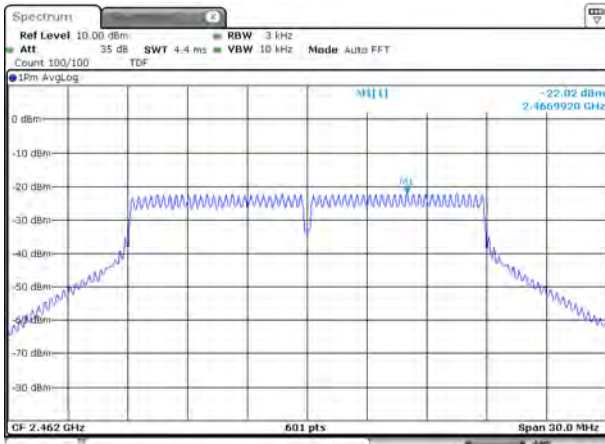
Date: 25 NOV 2016 19:52:55

802.11 n-20 MHz MIDDLE CHANNEL



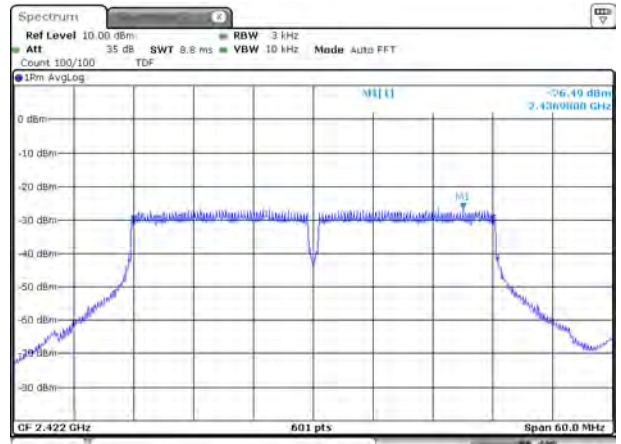
Date: 25 NOV 2016 19:54:35

802.11n-20 MHz HIGH CHANNEL



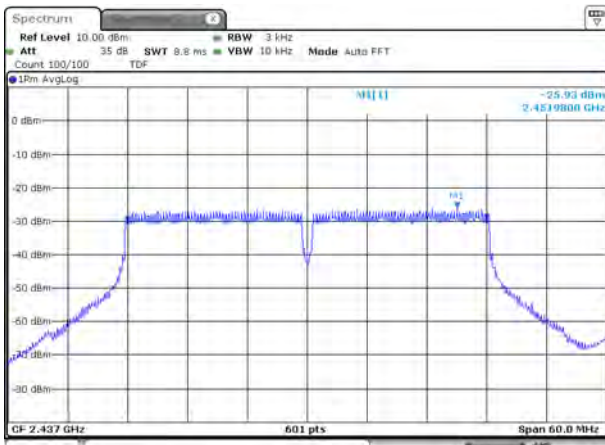
Date: 25 NOV 2016 19:56:15

802.11n-40 MHz LOW CHANNEL



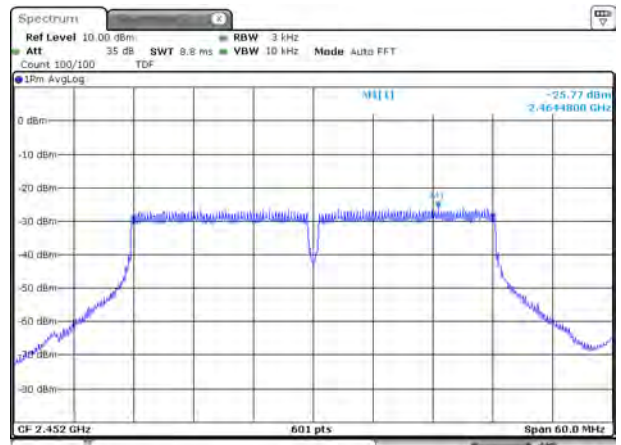
Date: 25 NOV 2016 19:58:08

802.11n-40 MHz MIDDLE CHANNEL



Date: 25 NOV 2016 19:59:34

802.11n-40 MHz HIGH CHANNEL

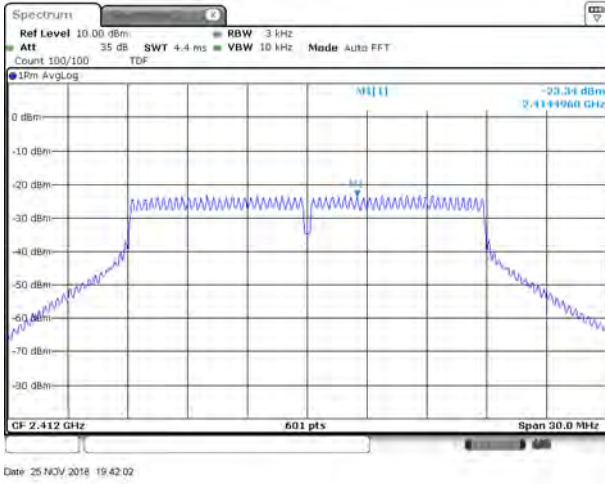


Date: 25 NOV 2016 20:01:15

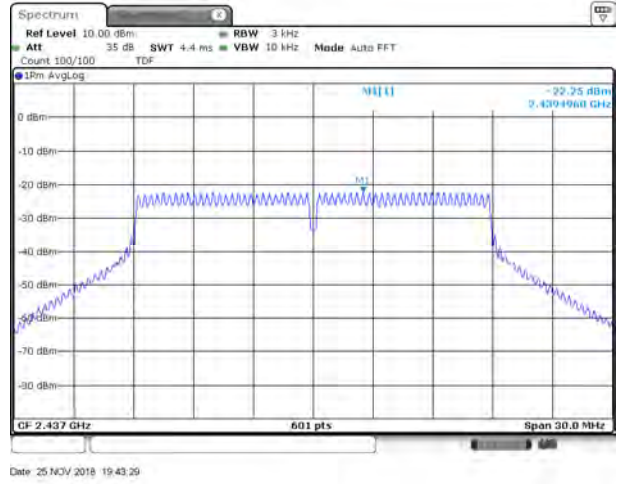
Test plots

MIMO ANT1

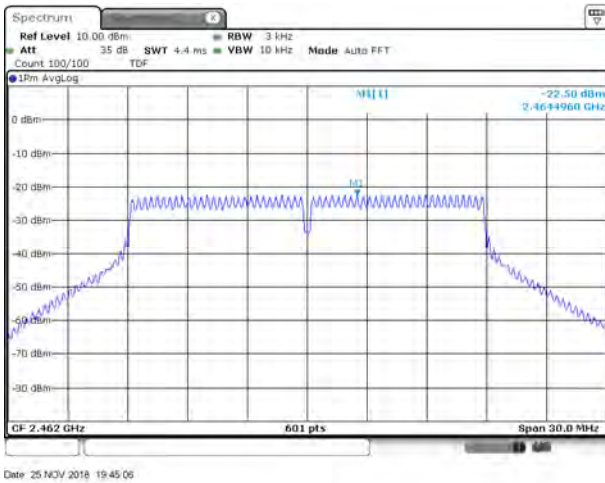
802.11n-20 MHz LOW CHANNEL



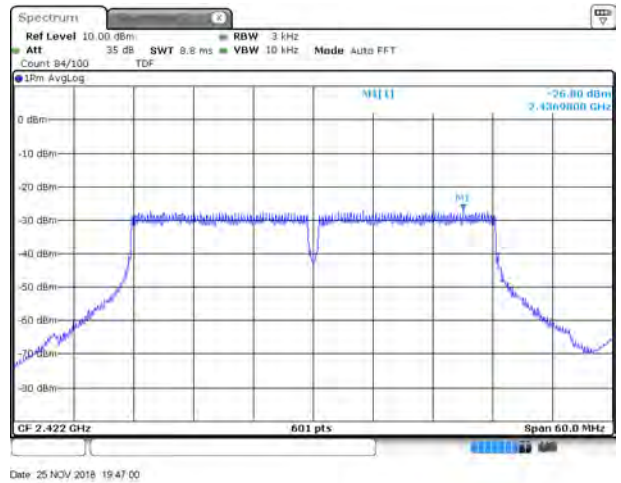
802.11 n-20 MHz MIDDLE CHANNEL



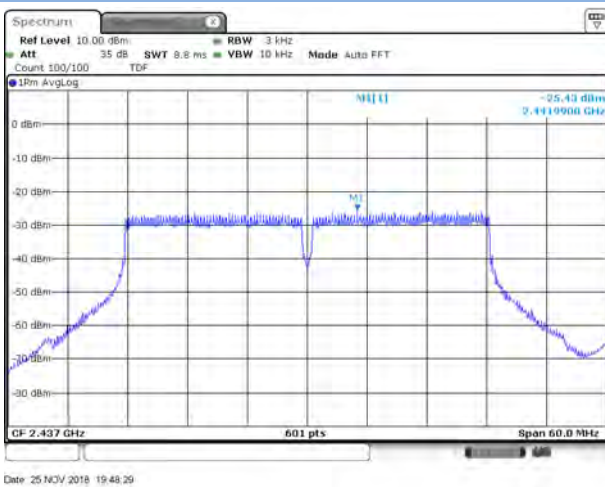
802.11n-20 MHz HIGH CHANNEL



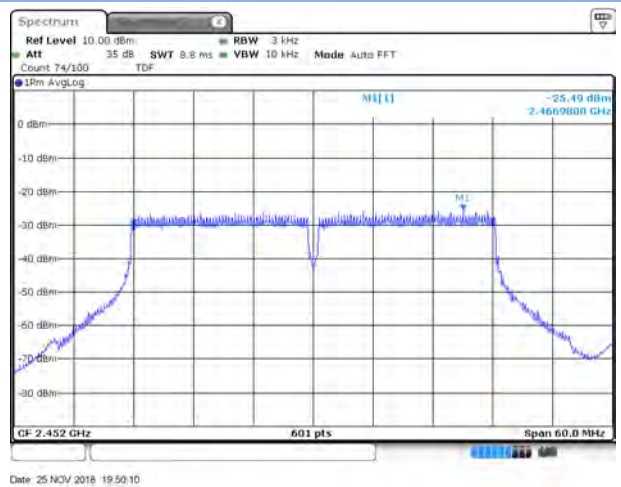
802.11n-40 MHz LOW CHANNEL



802.11n-40 MHz MIDDLE CHANNEL



802.11n-40 MHz HIGH CHANNEL



ANNEX B TEST SETUP PHOTOS

Please refer the document "BL-SZ18C0049-AR.pdf".

ANNEX C EUT EXTERNAL PHOTOS

Please refer the document "BL-SZ18C0049-AW.pdf".

ANNEX D EUT INTERNAL PHOTOS

Please refer the document "BL-SZ18C0049-AI.pdf".

--END OF REPORT--