

FCC Test Report

FCC ID : PPQ-WCBN3514A
Equipment : Wi-Fi (11a/b/g/n/ac 2Tx2R)+BT (V4.2LE)
SDIO Combo Module
Brand Name : LITE-ON
Model Name : WCBN3514A
Applicant : LITE-ON Technology Corp.
Bldg. C, 90, Chien 1 Road, Chung Ho, New
Taipei City 23585, Taiwan, R.O.C
Manufacturer : LITE-ON TECHNOLOGY (Changzhou) CO.,
LTD
A9 Building, No.88 Yanghu Road, Wujin
Hi-Tech Industrial Development
Zone, Changzhou City, Jiangsu Province
213100 China
Standard : 47 CFR FCC Part 15.247

The product was received on Jan. 04, 2019, and testing was started from Apr. 08, 2019 and completed on Apr. 27, 2019. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.



Approved by: Allen Lin

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)



Table of Contents

HISTORY OF THIS TEST REPORT3

SUMMARY OF TEST RESULT4

1 GENERAL DESCRIPTION5

1.1 Information.....5

1.2 Testing Applied Standards9

1.3 Testing Location Information9

1.4 Measurement Uncertainty9

2 TEST CONFIGURATION OF EUT.....10

2.1 Test Condition10

2.2 Test Channel Mode10

2.3 The Worst Case Measurement Configuration.....11

2.4 Support Equipment.....12

2.5 Test Setup Diagram13

3 TRANSMITTER TEST RESULT15

3.1 AC Power-line Conducted Emissions15

3.2 DTS Bandwidth.....16

3.3 Maximum Conducted Output Power17

3.4 Power Spectral Density19

3.5 Emissions in Non-restricted Frequency Bands20

3.6 Emissions in Restricted Frequency Bands.....21

4 TEST EQUIPMENT AND CALIBRATION DATA25

APPENDIX A. TEST RESULTS OF AC POWER-LINE CONDUCTED EMISSIONS

APPENDIX B. TEST RESULTS OF DTS BANDWIDTH

APPENDIX C. TEST RESULTS OF MAXIMUM CONDUCTED OUTPUT POWER

APPENDIX D. TEST RESULTS OF POWER SPECTRAL DENSITY

APPENDIX E. TEST RESULTS OF EMISSIONS IN NON-RESTRICTED FREQUENCY BANDS

APPENDIX F. TEST RESULTS OF EMISSIONS IN RESTRICTED FREQUENCY BANDS

APPENDIX G. TEST PHOTOS

PHOTOGRAPHS OF EUT V01



History of this test report

Report No.	Version	Description	Issued Date
FR910405AC	01	Initial issue of report	May 30, 2019



Summary of Test Result

Report Clause	Ref. Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	FCC 15.203
3.1	15.207	AC Power-line Conducted Emissions	PASS	FCC 15.207
3.2	15.247(a)	DTS Bandwidth	PASS	≥500kHz
3.3	15.247(b)	Maximum Conducted Output Power	PASS	Power [dBm]: 30
3.4	15.247(e)	Power Spectral Density	PASS	PSD [dBm/3kHz]: 8
3.5	15.247(d)	Emissions in Non-restricted Frequency Bands	PASS	Non-Restricted Bands: > 30 dBc
3.6	15.247(d)	Emissions in Restricted Frequency Bands	PASS	Restricted Bands: FCC 15.209

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and explanations:

None

Reviewed by: Sam Tsai

Report Producer: Debby Hung



1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
2400-2483.5	b, g, n (HT20), ac (VHT20)	2412-2462	1-11 [11]
2400-2483.5	n (HT40), ac (VHT40)	2422-2452	3-9 [7]

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11b	20	2TX
2.4-2.4835GHz	802.11g	20	2TX
2.4-2.4835GHz	802.11ac VHT20	20	2TX
2.4-2.4835GHz	802.11ac VHT40	40	2TX

Note:

- ♦ 11b mode uses a combination of DSSS-DBPSK, DQPSK, CCK modulation.
- ♦ 11g, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- ♦ VHT20, VHT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- ♦ BWch is the nominal channel bandwidth.



1.1.2 Antenna Information

Group.	Ant.	Project	Brand	P/N	Antenna Type	Connector
1	1	-	Walsin	RFMTA401020IMLB701	PIFA	Mini i-Pex
	2					
	3					
2	4	(Sparrow 10 inch)	Shenzhen South Star Technology Co., LTD	N12-4140-R0A	PIFA	N/A
	5			N12-4141-R0A		
	6			N14-0594-R0A		
3	7	(Sparrow 8 inch)	Shenzhen South Star Technology Co., LTD	N12-4142-R0A	PIFA	N/A
	8			N12-4143-R0A		
	9			N14-0595-R0A		
4	10	-	INPAQ	EAA65404602	PIFA	N/A
	11			EAA65404601		
	12			EAA65404701		
5	13	-	Airgain	N2420SDAR-T6-G120U4LI (Rev B)	PIFA	Mini i-Pex
	14			N2420DCB3-T10-G200U4LI (Rev B)		
	15			N2410MST-T-G85U4LI (Rev G)		



Group.	Ant.	Port	Gain (dBi)		
			2.4G	5G	BT
1	1	1	3.52	4.18	-
	2	2	3.52	4.18	-
	3	1	-	-	3.52
2	4	1	2.97	4.04	-
	5	2	3.41	4.05	-
	6	1	-	-	3.31
3	7	1	3.35	3.97	-
	8	2	3.35	3.86	-
	9	1	-	-	2.86
4	10	1	2.99	3.46	-
	11	2	3.06	3.23	-
	12	1	-	-	2.74
5	13	1	4.00	4.80	-
	14	2	4.00	4.30	-
	15	1	-	-	2.70

Note : EUT can match with above antennas for using. Higher gain in each type of antenna was used to perform the worst configuration and result of that was recorded as the final test result.

For 2.4GHz function:

For IEEE 802.11 b/g/n mode (2TX/2RX)
 Ant 1, 2, 4, 5, 7, 8, 10, 11, 13, 14 could transmit/receive.

For BT function:

For IEEE 802.15.1 Bluetooth mode (1TX/1RX)
 Ant 3, 6, 9, 12, 15 could transmit/receive.

For 5GHz function:

For IEEE 802.11 a/n/ac mode (2TX/2RX)
 Ant 1, 2, 4, 5, 7, 8, 10, 11, 13, 14 could transmit/receive.



1.1.3 EUT Information

Operational Condition	
EUT Power Type	From AC Adapter
EUT Function	<input checked="" type="checkbox"/> Point-to-multipoint <input type="checkbox"/> Point-to-point
Type of EUT	
<input checked="" type="checkbox"/>	Stand-alone
<input type="checkbox"/>	Combined (EUT where the radio part is fully integrated within another device)
	Combined Equipment - Brand Name / Model No.: ...
<input type="checkbox"/>	Plug-in radio (EUT intended for a variety of host systems)
	Host System - Brand Name / Model No.: ...
<input type="checkbox"/>	Other:

1.1.4 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11b	0.991	0.04	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11g	0.943	0.25	2.051m	1k
802.11ac VHT20	0.891	0.5	986.25u	3k
802.11ac VHT40	0.797	0.99	498.75u	3k

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.



1.2 Testing Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ◆ 47 CFR FCC Part 15
- ◆ ANSI C63.10-2013
- ◆ KDB 558074 D01 v05r02
- ◆ KDB 662911 D01 v02r01

1.3 Testing Location Information

Testing Location			
<input checked="" type="checkbox"/>	HWA YA	ADD : No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)	
		TEL : 886-3-327-3456	FAX : 886-3-327-0973
Test site Designation No. TW1190 with FCC.			
<input type="checkbox"/>	JHUBEI	ADD : No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County, Taiwan (R.O.C.)	
		TEL : 886-3-656-9065	FAX : 886-3-656-9085
Test site Designation No. TW0006 with FCC.			

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
AC Conduction	CO04-HY	Lego	23.1~25.1°C / 54.1~56.3%	09/Apr/2019
RF Conducted	TH01-HY	Clara	24.1~24.9°C / 61.8~67.8%	09/Apr/2019
Radiated	03CH02-HY	Patrick	21.2~23.4°C / 53.9~57.8%	08/Apr/2019~27/Apr/2019

1.4 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2))

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	3.54 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	1.6 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.9 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.3 dB	Confidence levels of 95%
Temperature	0.7 °C	Confidence levels of 95%
Humidity	4 %	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Condition

RF Conducted	Abbreviation	Remark
TnomVnom	Tnom	20°C
-	Vnom	110V

2.2 Test Channel Mode


Test Software Version	QCARCT 3.0.197.0
-----------------------	------------------

Mode	PowerSetting
802.11b_Nss1,(1Mbps)_2TX	-
2412MHz	16
2417MHz	20
2437MHz	22
2457MHz	19
2462MHz	19
802.11g_Nss1,(6Mbps)_2TX	-
2412MHz	15
2417MHz	20
2437MHz	23
2457MHz	16
2462MHz	12
802.11ac VHT20_Nss1,(MCS0)_2TX	-
2412MHz	15
2417MHz	20
2437MHz	23
2457MHz	16
2462MHz	12
802.11ac VHT40_Nss1,(MCS0)_2TX	-
2422MHz	13
2437MHz	13
2447MHz	12
2452MHz	10

2.3 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral
Operating Mode	CTX
1	Adapter mode

The Worst Case Mode for Following Conformance Tests	
Tests Item	DTS Bandwidth Maximum Conducted Output Power Power Spectral Density Emissions in Non-restricted Frequency Bands
Test Condition	Conducted measurement at transmit chains

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emissions in Restricted Frequency Bands
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	CTX
1	Adapter mode
Operating Mode > 1GHz	CTX
Orthogonal Planes of EUT	Z Plane
	
Worst Planes of EUT	V



2.4 Support Equipment

Support Equipment – AC Conduction				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Fixture	LITE-ON	WCBN3510A_EVB	-
2	AC adapter	AOBAOLIKE	ABLK-01	-

Note.Support equipment No.1 was provided by customer.

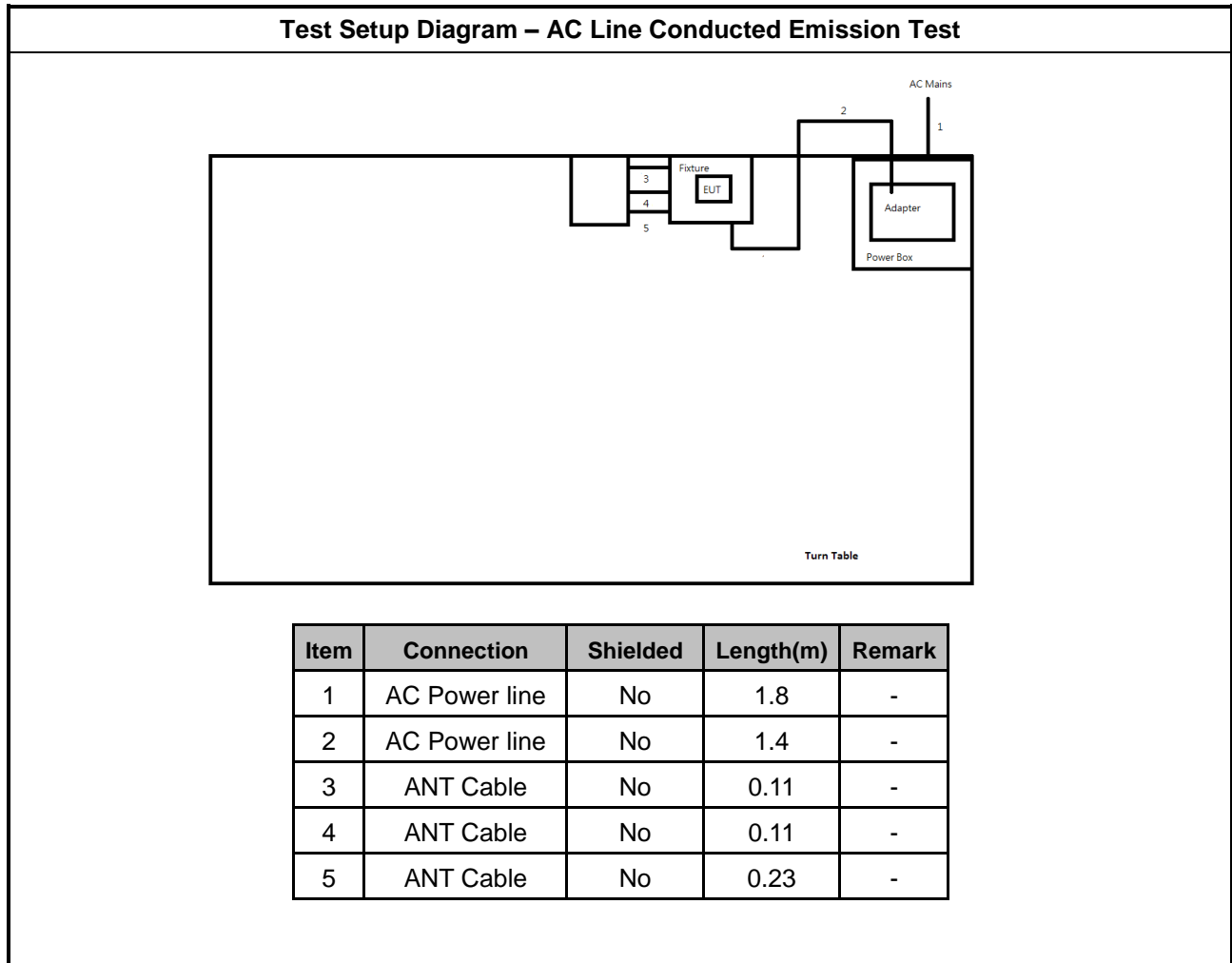
Support Equipment – RF Conducted				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook	DELL	E5410	R33002 / DOC
2	Adapter for NB	DELL	HA65NM130	R35737 / DOC
3	Fixture	LITE-ON	WCBN3510A_EVB	-
4	AC adapter	AOBAOLIKE	ABLK-01	-

Note.Support equipment No.3 was provided by customer.

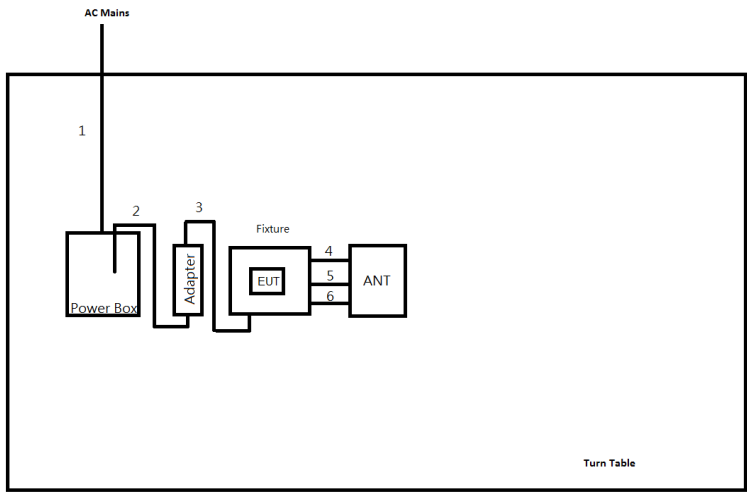
Support Equipment – Radiated Emission				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Fixture	LITE-ON	WCBN3510A_EVB	-
2	AC adapter	AOBAOLIKE	ABLK-01	-

Note.Support equipment No.1 was provided by customer.

2.5 Test Setup Diagram



Test Setup Diagram - Radiated Test



Item	Connection	Shielded	Length(m)	Remark
1	AC Power line	No	1.8	-
2	AC Power line	No	0.4	-
3	DC Power line	No	0.42	-
4	ANT Cable	No	0.11	-
5	ANT Cable	No	0.11	-
6	ANT Cable	No	0.23	-

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

Note 1: * Decreases with the logarithm of the frequency.

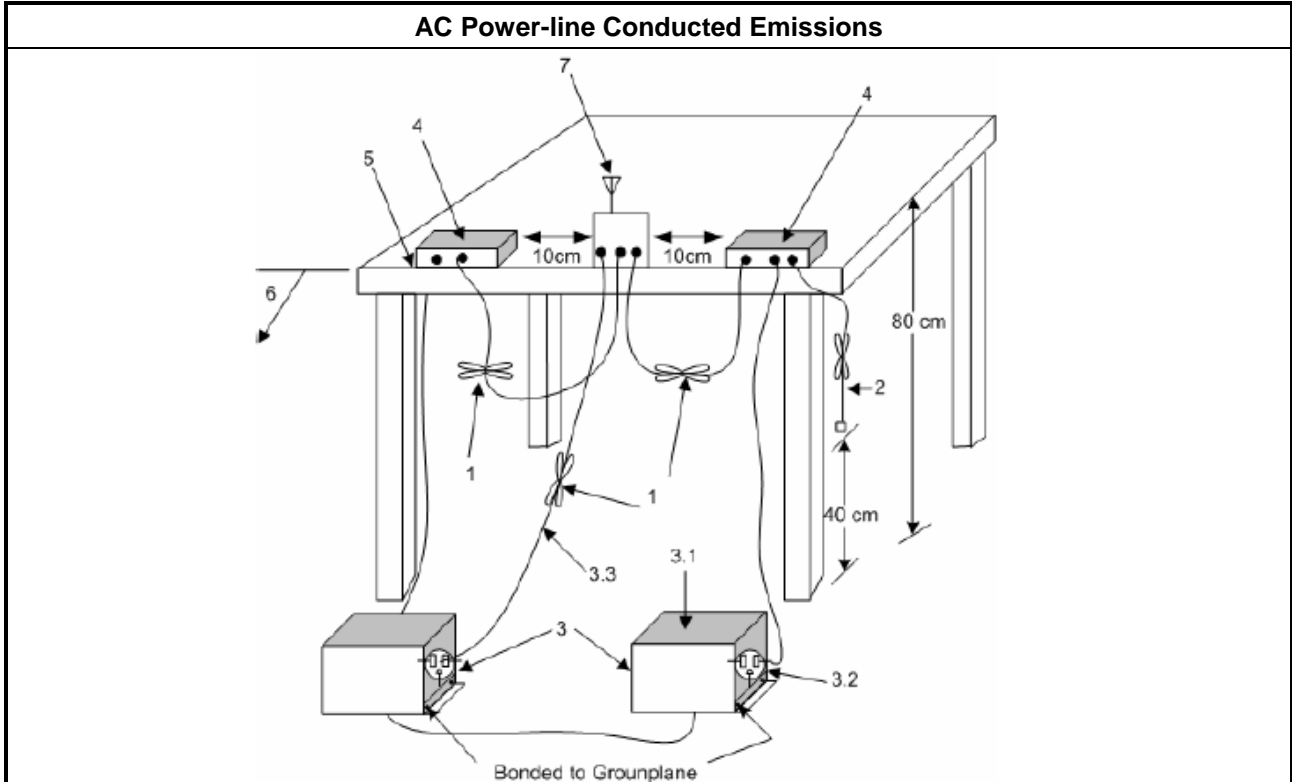
3.1.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

Test Method
<input checked="" type="checkbox"/> Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

3.1.4 Test Setup



3.1.5 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 DTS Bandwidth

3.2.1 6dB Bandwidth Limit

6dB Bandwidth Limit	
Systems using digital modulation techniques:	
<ul style="list-style-type: none"> ▪ 6 dB bandwidth \geq 500 kHz. 	

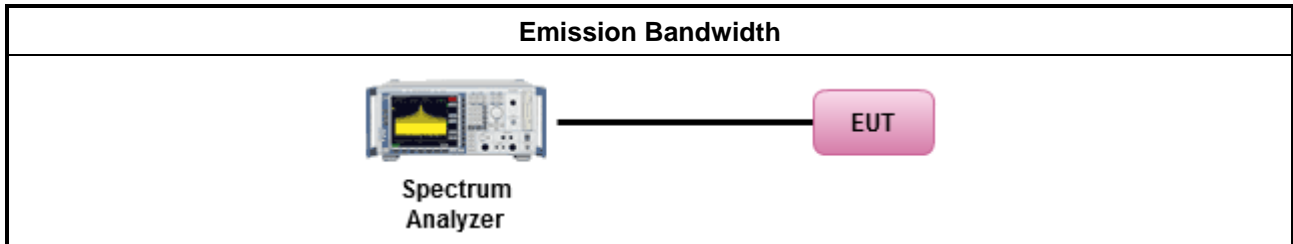
3.2.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.2.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> ▪ For the emission bandwidth shall be measured using one of the options below: 	
<input checked="" type="checkbox"/>	Refer as KDB 558074. clause 8.2 (11.8 of ANSI C63.10) DTS bandwidth measurement.
<input type="checkbox"/>	Refer as RSS-Gen, clause 6.7 for for occupied bandwidth testing.
<input type="checkbox"/>	Refer as ANSI C63.10, clause 6.9.3 for occupied bandwidth testing.

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit	
	<ul style="list-style-type: none"> ▪ If $G_{TX} \leq 6$ dBi, then $P_{Out} \leq 30$ dBm (1 W)
	<ul style="list-style-type: none"> ▪ Point-to-multipoint systems (P2M): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ dBm
	<ul style="list-style-type: none"> ▪ Point-to-point systems (P2P): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	<ul style="list-style-type: none"> ▪ Smart antenna system (SAS):
	<ul style="list-style-type: none"> - Single beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	<ul style="list-style-type: none"> - Overlap beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	<ul style="list-style-type: none"> - Aggregate power on all beams: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3 + 8$ dB dBm
e.i.r.p. Power Limit:	
	<ul style="list-style-type: none"> ▪ 2400-2483.5 MHz Band
	<ul style="list-style-type: none"> ▪ Point-to-multipoint systems (P2M): $P_{eirp} \leq 36$ dBm (4 W)
	<ul style="list-style-type: none"> ▪ Point-to-point systems (P2P): $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX}])$ dBm
	<ul style="list-style-type: none"> ▪ Smart antenna system (SAS)
	<ul style="list-style-type: none"> - Single beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm
	<ul style="list-style-type: none"> - Overlap beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm
	<ul style="list-style-type: none"> - Aggregate power on all beams: $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX} + 8])$ dBm
<p>P_{Out} = maximum peak conducted output power or maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.</p>	

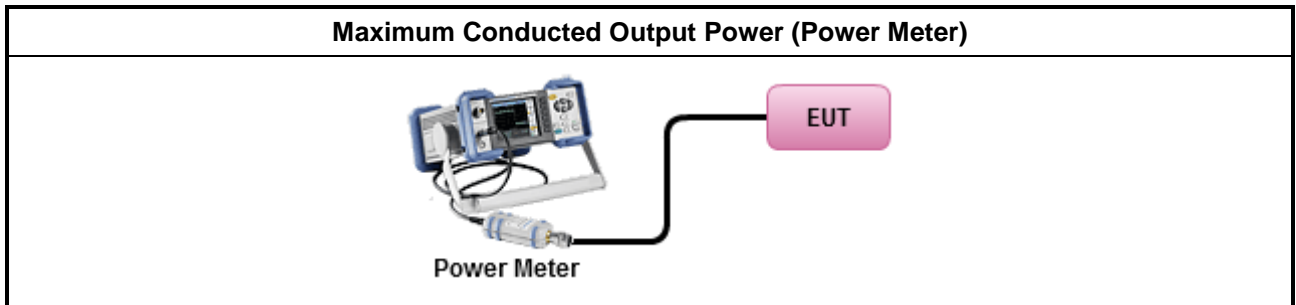
3.3.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.3.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> ▪ Maximum Peak Conducted Output Power 	
<input type="checkbox"/>	Refer as KDB 558074, clause 8.3.1.1 (11.9.1.1 of ANSI C63.10) RBW ≥ EBW method.
<input type="checkbox"/>	Refer as KDB 558074, clause 8.3.1.2 (11.9.1.2 of ANSI C63.10) integrated band power method.
<input type="checkbox"/>	Refer as KDB 558074, clause 8.3.1.3 (11.9.1.3 of ANSI C63.10) peak power meter.
<ul style="list-style-type: none"> ▪ Maximum Average Conducted Output Power 	
<input type="checkbox"/>	Refer as KDB 558074, clause 8.3.2.2 (11.9.2.2 of ANSI C63.10) using a spectrum analyzer.
<input checked="" type="checkbox"/>	Refer as KDB 558074, clause 8.3.2.3 (11.9.2.3 of ANSI C63.10) using a power meter.
<ul style="list-style-type: none"> ▪ For conducted measurement. 	
<ul style="list-style-type: none"> ▪ If the EUT supports multiple transmit chains using options given below: Refer as KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them. 	
<ul style="list-style-type: none"> ▪ If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$ 	

3.3.4 Test Setup



3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

Power Spectral Density Limit
<ul style="list-style-type: none"> Power Spectral Density (PSD) \leq 8 dBm/3kHz

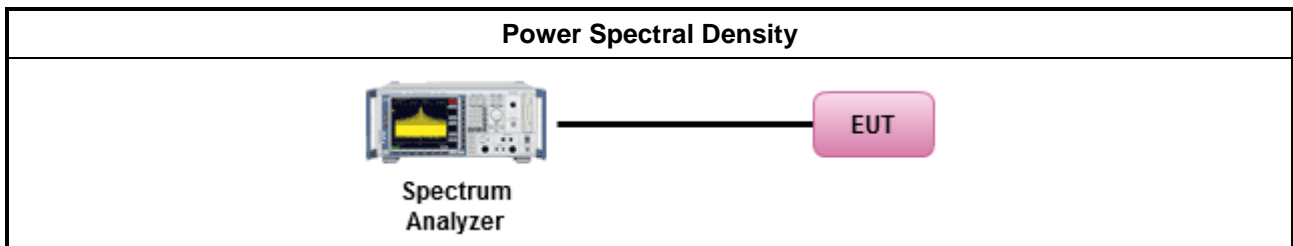
3.4.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.4.3 Test Procedures

Test Method
<ul style="list-style-type: none"> Peak power spectral density procedures that the same method as used to determine the conducted output power. If maximum peak conducted output power was measured to demonstrate compliance to the output power limit, then the peak PSD procedure below (Method PKPSD) shall be used. If maximum conducted output power was measured to demonstrate compliance to the output power limit, then one of the average PSD procedures shall be used, as applicable based on the following criteria (the peak PSD procedure is also an acceptable option).
<input checked="" type="checkbox"/> Refer as KDB 558074, clause 8.4 (11.10 of ANSI C63.10) Method PKPSD.
<ul style="list-style-type: none"> For conducted measurement.
<ul style="list-style-type: none"> If The EUT supports multiple transmit chains using options given below: <ul style="list-style-type: none"> Measure and sum the spectra across the outputs. Refer as KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.

3.4.4 Test Setup



3.4.5 Test Result of Power Spectral Density

Refer as Appendix D

3.5 Emissions in Non-restricted Frequency Bands

3.5.1 Emissions in Non-restricted Frequency Bands Limit

Un-restricted Band Emissions Limit	
RF output power procedure	Limit (dB)
Peak output power procedure	20
Average output power procedure	30

Note 1: If the peak output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the peak conducted output power measured within any 100 kHz outside the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum measured in-band peak PSD level.

Note 2: If the average output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the power in any 100 kHz outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum measured in-band average PSD level.

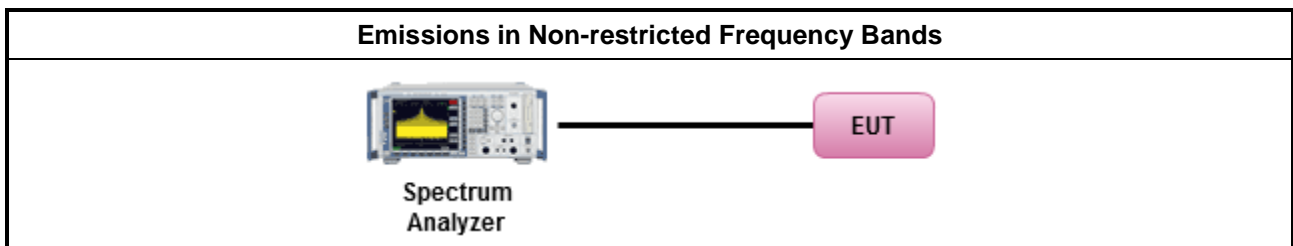
3.5.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.5.3 Test Procedures

Test Method
<ul style="list-style-type: none"> Refer as KDB 558074, clause 8.5 (11.11 of ANSI C63.10) for non-restricted frequency bands.

3.5.4 Test Setup



3.5.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix E



3.6 Emissions in Restricted Frequency Bands

3.6.1 Emissions in Restricted Frequency Bands Limit

Restricted Band Emissions Limit			
Frequency Range (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m)	Measure Distance (m)
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300
0.490~1.705	24000/F(kHz)	33.8 - 23	30
1.705~30.0	30	29	30
30~88	100	40	3
88~216	150	43.5	3
216~960	200	46	3
Above 960	500	54	3

Note 1: Test distance for frequencies at or above 30 MHz, measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

Note 2: Test distance for frequencies at below 30 MHz, measurements may be performed at a distance closer than the EUT limit distance; however, an attempt should be made to avoid making measurements in the near field. When performing measurements below 30 MHz at a closer distance than the limit distance, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two or more distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). The test report shall specify the extrapolation method used to determine compliance of the EUT.

Note 3: Using the distance of 1m during the test for above 18 GHz, and the test value to correct for the distance factor at 3m.

3.6.2 Measuring Instruments

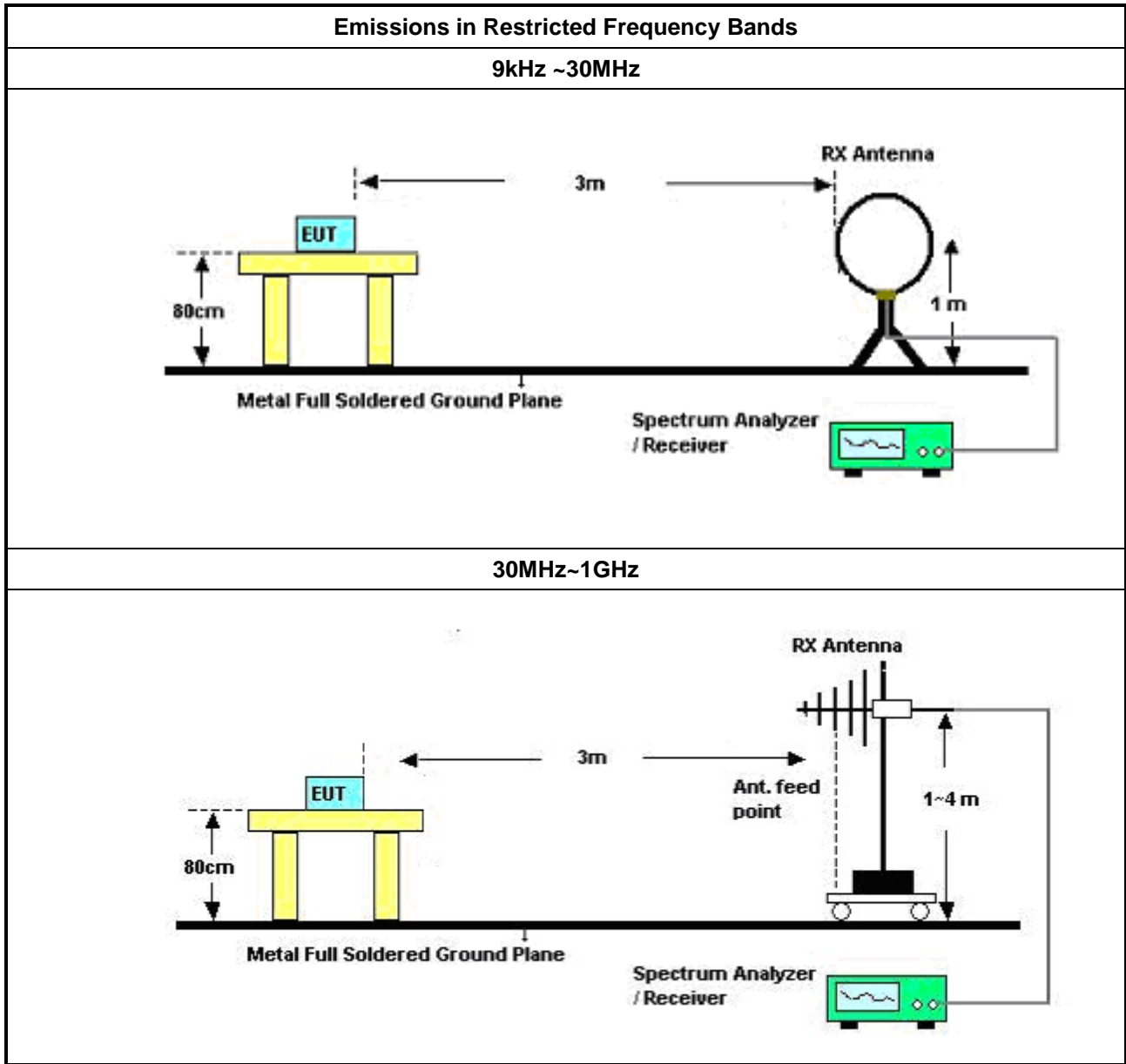
Refer a test equipment and calibration data table in this test report.

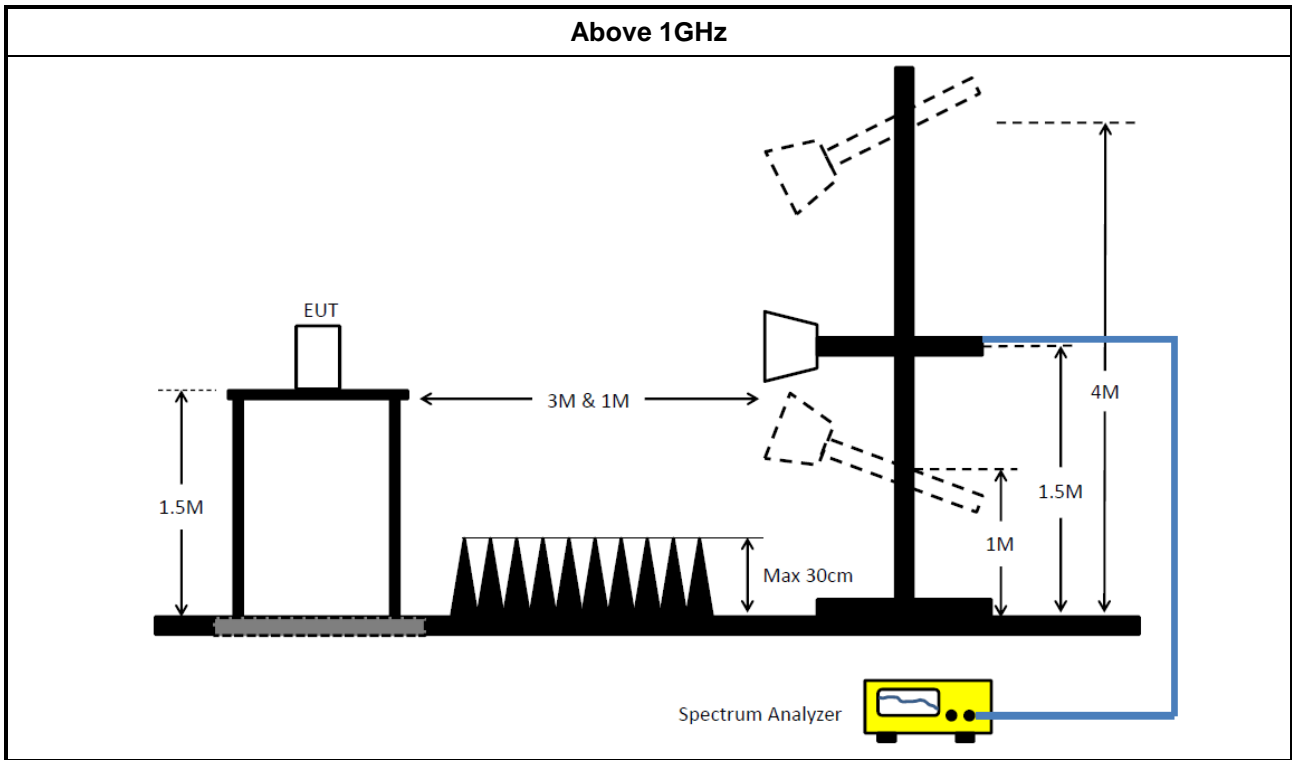


3.6.3 Test Procedures

Test Method	
	<ul style="list-style-type: none">▪ The average emission levels shall be measured in [duty cycle \geq 98 or duty factor].
	<ul style="list-style-type: none">▪ Refer as ANSI C63.10, clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.
	<ul style="list-style-type: none">▪ For the transmitter unwanted emissions shall be measured using following options below:
	<ul style="list-style-type: none">▪ Refer as KDB 558074, clause 8.6 (11.12 of ANSI C63.10) for restricted frequency bands.
	<ul style="list-style-type: none">▪ For the transmitter band-edge emissions shall be measured using following options below:
	<ul style="list-style-type: none">▪ Refer as KDB 558074 clause 8.7.1, When the performing peak or average radiated measurements, emissions within 2 MHz of the authorized band edge may be measured using the marker-delta method described below.
	<ul style="list-style-type: none">▪ Refer as KDB 558074, clause 8.7.2 (6.10.6 of ANSI C63.10) for marker-delta method for band-edge measurements.
	<ul style="list-style-type: none">▪ Refer as KDB 558074, clause 8.7.3 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).
	<ul style="list-style-type: none">▪ Use the following spectrum analyzer settings:
	<ul style="list-style-type: none">▪ Set RBW=100 kHz for $f < 1$ GHz; VBW=3 * RBW; Sweep = auto; Detector function = peak; Trace = max hold.
	<ul style="list-style-type: none">▪ Set RBW = 1 MHz, VBW= 3MHz for $f \geq 1$ GHz for peak measurement. For average measurement, refer as 1.1.4.

3.6.4 Test Setup





3.6.5 Test Result of Emissions in Restricted Frequency Bands (Below 30MHz)

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

3.6.6 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F



4 Test Equipment and Calibration Data

Instrument for AC Conduction

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMC Receiver	R&S	ESR	102051	9KHz ~ 3.6GHz	03/May/2018	02/May/2019
LISN	R&S	ENV216	101295	9kHz ~ 30MHz	08/Nov/2018	07/Nov/2019
RF Cable-CON	MTJ	RG142	CB002-CO	9kHz ~ 200MHz	17/Sep/2018	16/Sep/2019
AC POWER	APC	AFC-11005G	F310050055	47Hz~63Hz 5~300V	NCR	NCR
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9 kHz ~ 30 MHz	12/Oct/2018	11/Oct/2019

NCR : Non-Calibration Require

Instrument for Conducted Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101013	10Hz~40GHz	13/Mar/2019	12/Mar/2020
SMB100A Signal Generator	R&S	SMB100A03	181147	100kHz~40GHz	12/Nov/2018	10/Nov/2020
Power Sensor	Anritsu	MA2411B	0917017	300MHz ~ 40GHz	19/Feb/2019	18/Feb/2020
Power Meter	Anritsu	ML2495A	0949003	300MHz ~ 40GHz	19/Feb/2019	18/Feb/2020
Cable 0.2m	HUBER	MY10710/4	RF Cable - 01	30MHz~18G	11/Jan/2019	10/Jan/2020
Cable 0.2m	HUBER	MY10711/4	RF Cable - 02	30MHz~18G	11/Jan/2019	10/Jan/2020
Cable 0.5m	HUBER	MY10714/4	RF Cable - 05	30MHz~18G	11/Jan/2019	10/Jan/2020

**Instrument for Radiated Test**

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	30MHz ~ 1GHz 3m	19/Oct/2018	18/Oct/2019
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz ~ 18GHz 3m	17/Oct/2018	16/Oct/2019
Amplifier	Agilent	8447D	2944A11149	100kHz ~ 1.3GHz	27Jul/2018	02/Jul/2019
Microwave Preamplifier	Agilent	8449B	3008A02373	1GHz ~ 26.5GHz	23/Oct/2018	22/Oct/2019
Signal Analyzer	R&S	FSV40	101500	10Hz ~ 40GHz	18/Jul/2018	17/Jul/2019
RF Cable-R03m	Jye Bao	RG142	CB017	9kHz ~ 1GHz	18/Jan/2019	17/Jan/2020
RF Cable-high	SUHNER	SUCOFLEX1 04	MY34918/4	1GHz ~ 40GHz	18/Jan/2019	17/Jan/2020
Bilog Antenna & 5dB Attenuator	SCHAFFNER / MTJ	CBL 6112B / MTJ6102-05	2723 / 2	30MHz ~ 1GHz	08/Sep/2018	07/Sep/2019
EMI Test Receiver	R&S	ESR3	102051	9kHz ~ 3.6GHz	03/May/2018	02/May/2019
Loop Antenna	TESEQ	HLA 6120	31244	9k-30MHz	15/Mar/2019	14/Mar/2020
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170221	15GHz ~ 40GHz	22/Mar/2019	21/Mar/2020
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 01543	1GHz ~ 18GHz	11/May/2018	10/May/2019

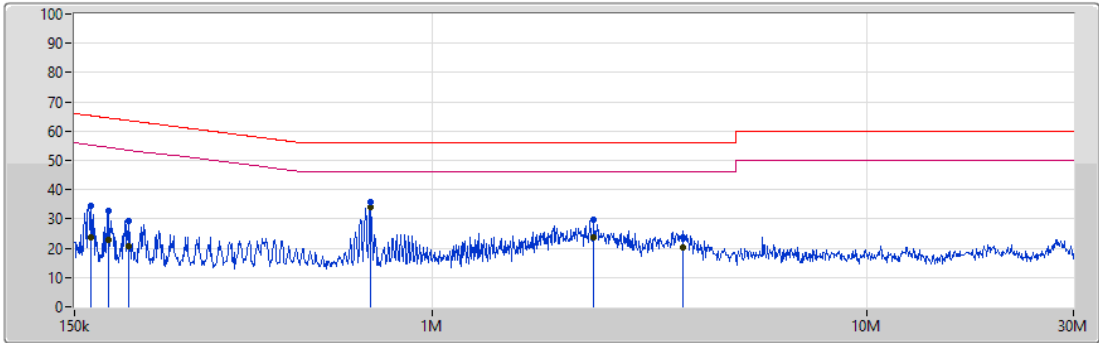


AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Neutral
Operating Function	Adapter Mode		

AC Conduction_Mode 1

09/04/2019



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	163.769k	34.40	65.27	-30.87	19.48	Neutral	-	14.92	9.60	0.01	9.87
AV	163.769k	23.50	55.27	-31.77	19.48	Neutral	-	4.02	9.60	0.01	9.87
QP	180.236k	32.67	64.47	-31.80	19.47	Neutral	-	13.20	9.59	0.01	9.87
AV	180.236k	22.66	54.47	-31.81	19.47	Neutral	-	3.19	9.59	0.01	9.87
QP	199.949k	29.52	63.61	-34.09	19.47	Neutral	-	10.05	9.59	0.01	9.87
AV	199.949k	20.85	53.61	-32.76	19.47	Neutral	-	1.38	9.59	0.01	9.87
QP	720.179k	35.69	56.00	-20.31	19.49	Neutral	-	16.20	9.59	0.02	9.88
AV	720.179k	34.08	46.00	-11.92	19.49	Neutral	"Worst"	14.59	9.59	0.02	9.88
QP	2.357M	29.79	56.00	-26.21	19.54	Neutral	-	10.25	9.61	0.04	9.89
AV	2.357M	23.77	46.00	-22.23	19.54	Neutral	-	4.23	9.61	0.04	9.89
QP	3.79M	23.86	56.00	-32.14	19.54	Neutral	-	4.32	9.61	0.04	9.89
AV	3.79M	20.42	46.00	-25.58	19.54	Neutral	-	0.88	9.61	0.04	9.89

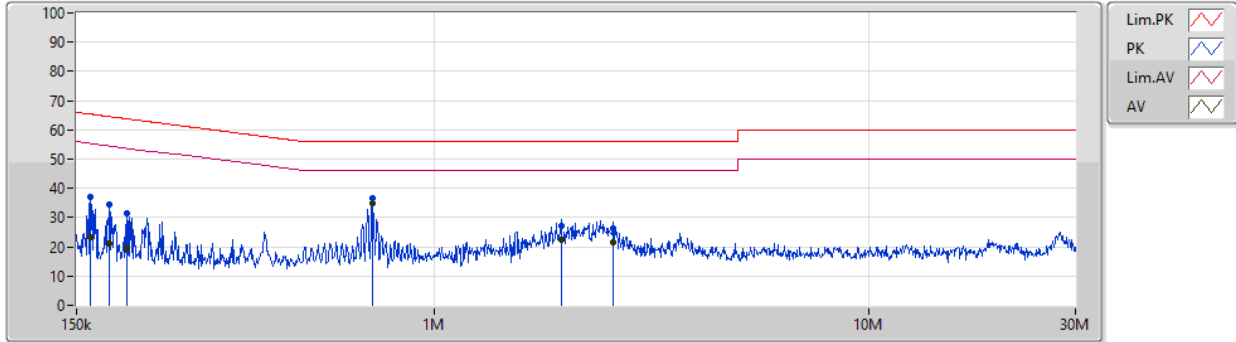


AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Line
Operating Function	Adapter Mode		

AC Conduction_Mode 1

09/04/2019



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	161.82k	37.26	65.37	-28.11	19.48	Line	-	17.78	9.60	0.01	9.87
AV	161.82k	23.22	55.37	-32.15	19.48	Line	-	3.74	9.60	0.01	9.87
QP	178.803k	34.39	64.55	-30.16	19.48	Line	-	14.91	9.60	0.01	9.87
AV	178.803k	21.24	54.55	-33.31	19.48	Line	-	1.76	9.60	0.01	9.87
QP	195.997k	31.38	63.78	-32.40	19.48	Line	-	11.90	9.60	0.01	9.87
AV	195.997k	19.58	53.78	-34.20	19.48	Line	-	0.10	9.60	0.01	9.87
QP	720.179k	36.77	56.00	-19.23	19.50	Line	-	17.27	9.60	0.02	9.88
AV	720.179k	35.00	46.00	-11.00	19.50	Line	"Worst"	15.50	9.60	0.02	9.88
QP	1.962M	27.25	56.00	-28.75	19.54	Line	-	7.71	9.62	0.03	9.89
AV	1.962M	22.60	46.00	-23.40	19.54	Line	-	3.06	9.62	0.03	9.89
QP	2.584M	26.27	56.00	-29.73	19.55	Line	-	6.72	9.62	0.04	9.89
AV	2.584M	21.45	46.00	-24.55	19.55	Line	-	1.90	9.62	0.04	9.89

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	10M	16.067M	16M1G1D	8.025M	13.343M
802.11g_Nss1,(6Mbps)_2TX	16.325M	22.939M	22M9D1D	15.45M	16.417M
802.11ac VHT20_Nss1,(MCS0)_2TX	16.9M	22.714M	22M7D1D	15.675M	17.566M
802.11ac VHT40_Nss1,(MCS0)_2TX	35.9M	36.182M	36M2D1D	35.3M	36.032M

Max-N dB = Maximum 6dB down bandwidth; **Max-OBW** = Maximum 99% occupied bandwidth;

Min-N dB = Minimum 6dB down bandwidth; **Min-OBW** = Minimum 99% occupied bandwidth;

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	9M	14.118M	8.075M	13.343M
2437MHz	Pass	500k	10M	16.067M	9.025M	15.067M
2462MHz	Pass	500k	8.5M	15.017M	8.025M	14.018M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.25M	16.417M	16.325M	16.417M
2437MHz	Pass	500k	15.45M	22.939M	15.7M	21.814M
2462MHz	Pass	500k	16.275M	16.417M	16.325M	16.417M
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.65M	17.616M	16.9M	17.591M
2437MHz	Pass	500k	15.675M	22.714M	16.875M	21.614M
2462MHz	Pass	500k	16.625M	17.566M	16.9M	17.566M
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	35.35M	36.082M	35.9M	36.082M
2437MHz	Pass	500k	35.7M	36.082M	35.7M	36.182M
2452MHz	Pass	500k	35.5M	36.132M	35.3M	36.032M

Port X-N dB = Port X 6dB down bandwidth; Port X-OBW = Port X 99% occupied bandwidth;

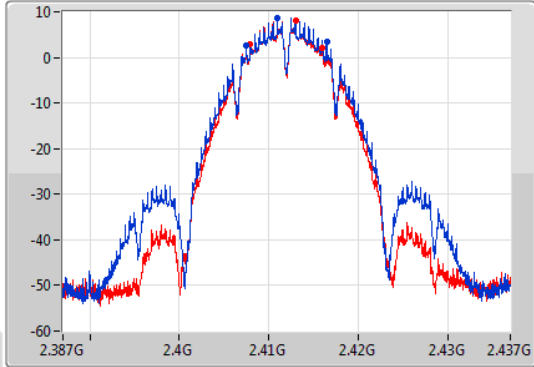
802.11b_Nss1,(1Mbps)_2TX

EBW

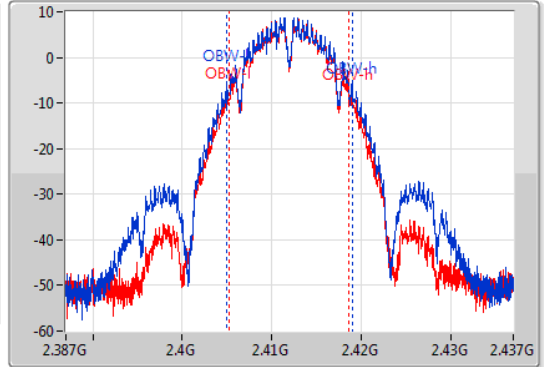
2412MHz

09/04/2019

CF
2.412GHz
Span
50MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak



CF
2.412GHz
Span
50MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
9M	2.407475G	2.416475G	14.118M	2.404954G	2.419071G	500k	1
8.075M	2.40795G	2.416025G	13.343M	2.405303G	2.418647G	500k	2

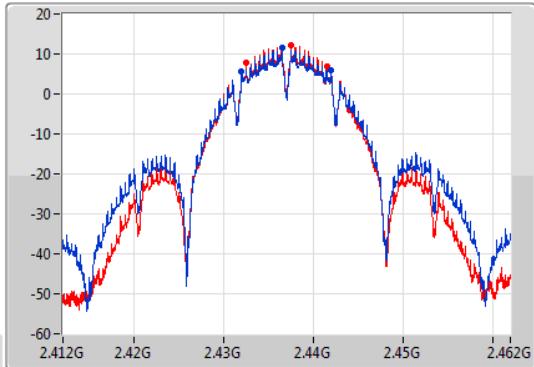
802.11b_Nss1,(1Mbps)_2TX

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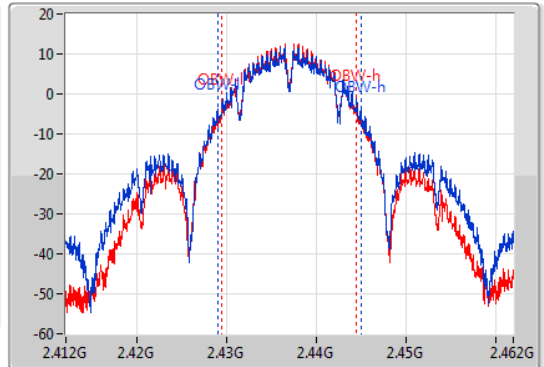
2437MHz

09/04/2019

CF
2.437GHz
Span
50MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak



CF
2.437GHz
Span
50MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
10M	2.431975G	2.441975G	16.067M	2.428929G	2.444996G	500k	1
9.025M	2.432475G	2.4415G	15.067M	2.429404G	2.444471G	500k	2

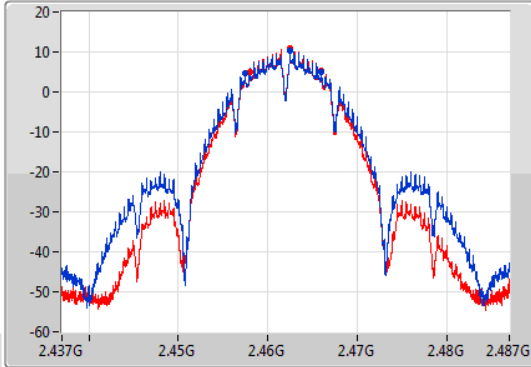
802.11b_Nss1,(1Mbps)_2TX

EBW

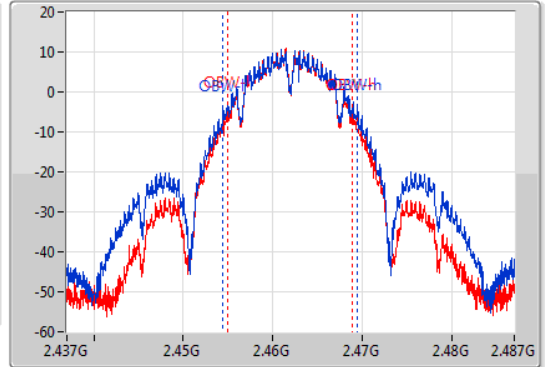
2462MHz

09/04/2019

CF
2.462GHz
Span
50MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak



CF
2.462GHz
Span
50MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
8.5M	2.4575G	2.466G	15.017M	2.454454G	2.469471G	500k	1
8.025M	2.457975G	2.466G	14.018M	2.454929G	2.468947G	500k	2

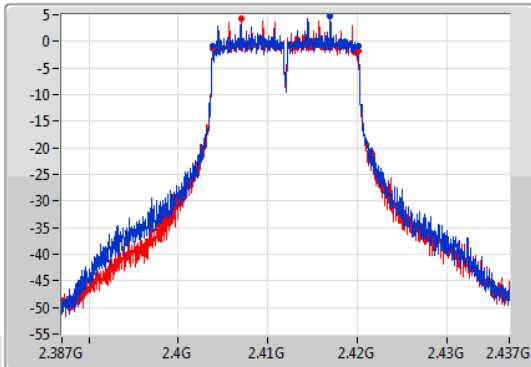
802.11g_Nss1,(6Mbps)_2TX

EBW

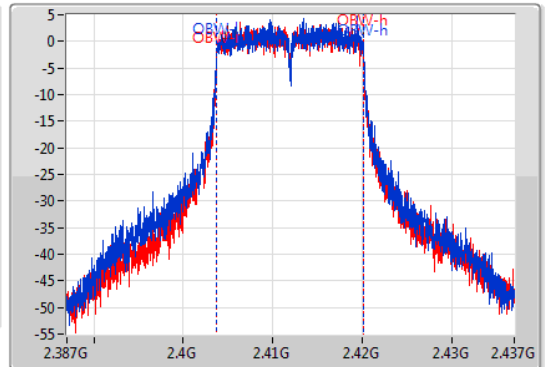
2412MHz

09/04/2019

CF
2.412GHz
Span
50MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak



CF
2.412GHz
Span
50MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.25M	2.40385G	2.4201G	16.417M	2.403754G	2.420171G	500k	1
16.325M	2.403825G	2.42015G	16.417M	2.403754G	2.420171G	500k	2

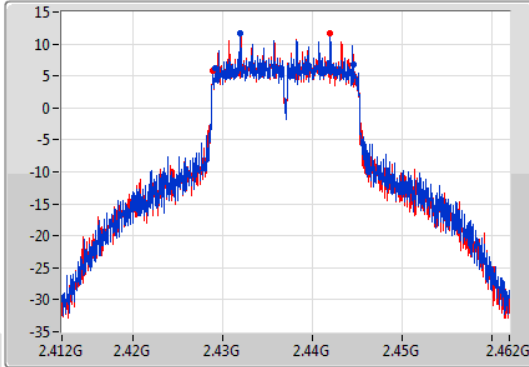
802.11g_Nss1,(6Mbps)_2TX

EBW

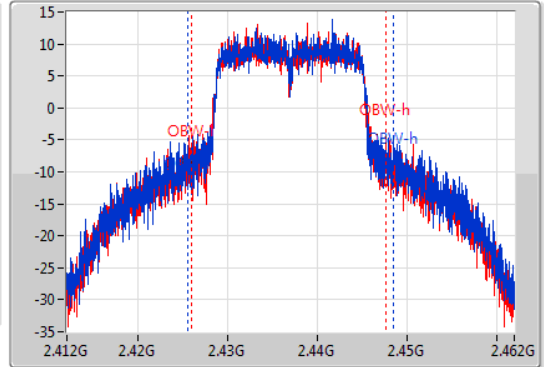
2437MHz

09/04/2019

CF
2.437GHz
Span
50MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak



CF
2.437GHz
Span
50MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.45M	2.4291G	2.44455G	22.939M	2.425556G	2.448494G	500k	1
15.7M	2.42885G	2.44455G	21.814M	2.425881G	2.447695G	500k	2

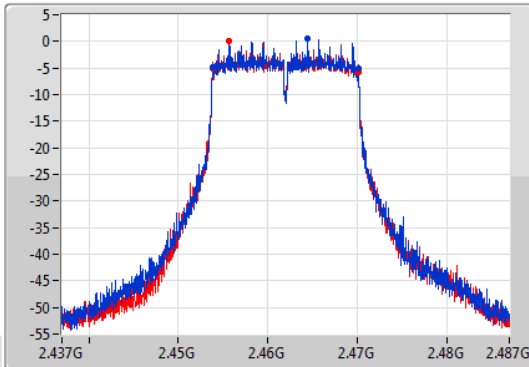
802.11g_Nss1,(6Mbps)_2TX

EBW

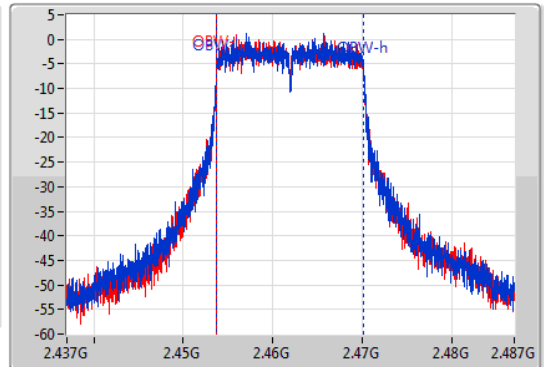
2462MHz

09/04/2019

CF
2.462GHz
Span
50MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak



CF
2.462GHz
Span
50MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Sample



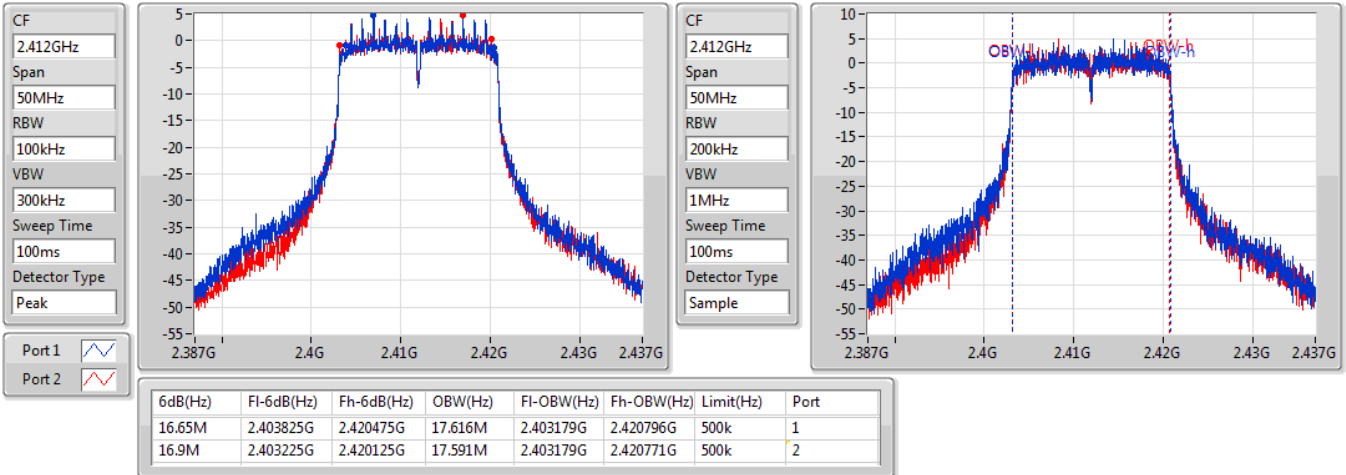
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.275M	2.45385G	2.470125G	16.417M	2.453754G	2.470171G	500k	1
16.325M	2.453825G	2.47015G	16.417M	2.453754G	2.470171G	500k	2

802.11ac VHT20_Nss1,(MCS0)_2TX

EBW

2412MHz

09/04/2019

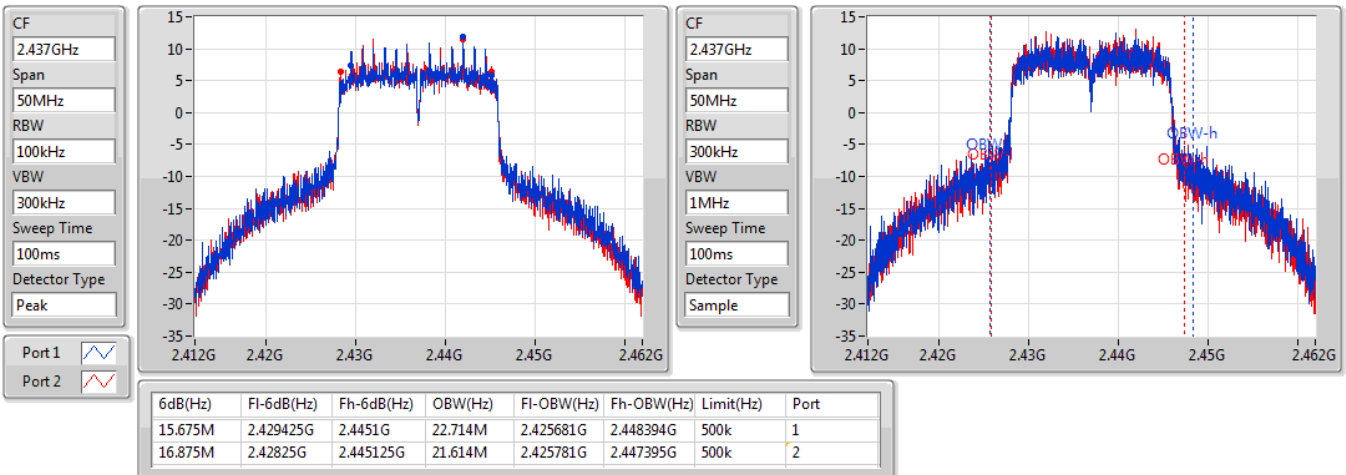


802.11ac VHT20_Nss1,(MCS0)_2TX

EBW

2437MHz

09/04/2019

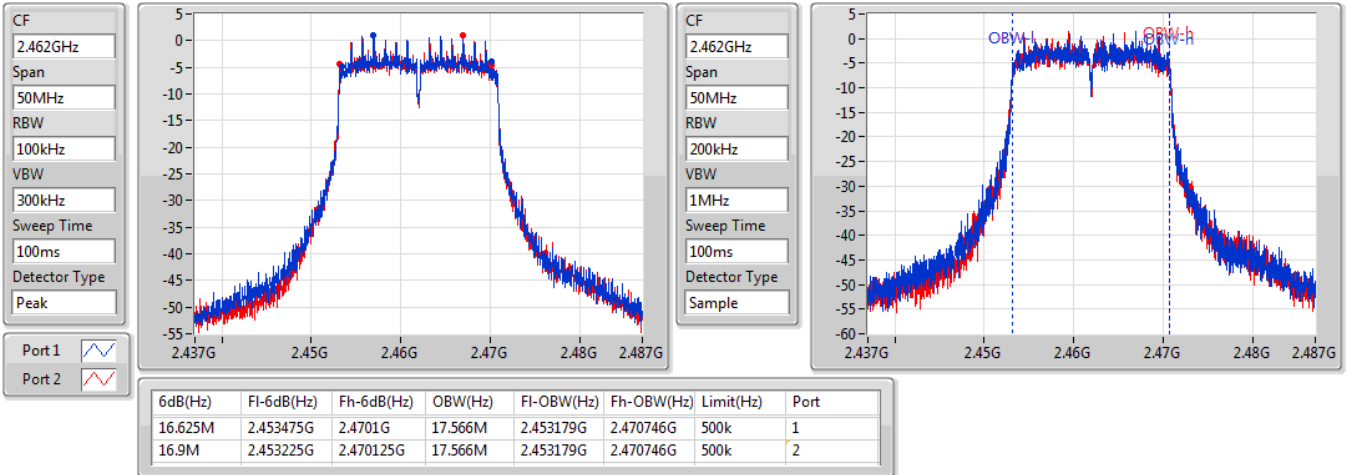


802.11ac VHT20_Nss1,(MCS0)_2TX

EBW

2462MHz

09/04/2019

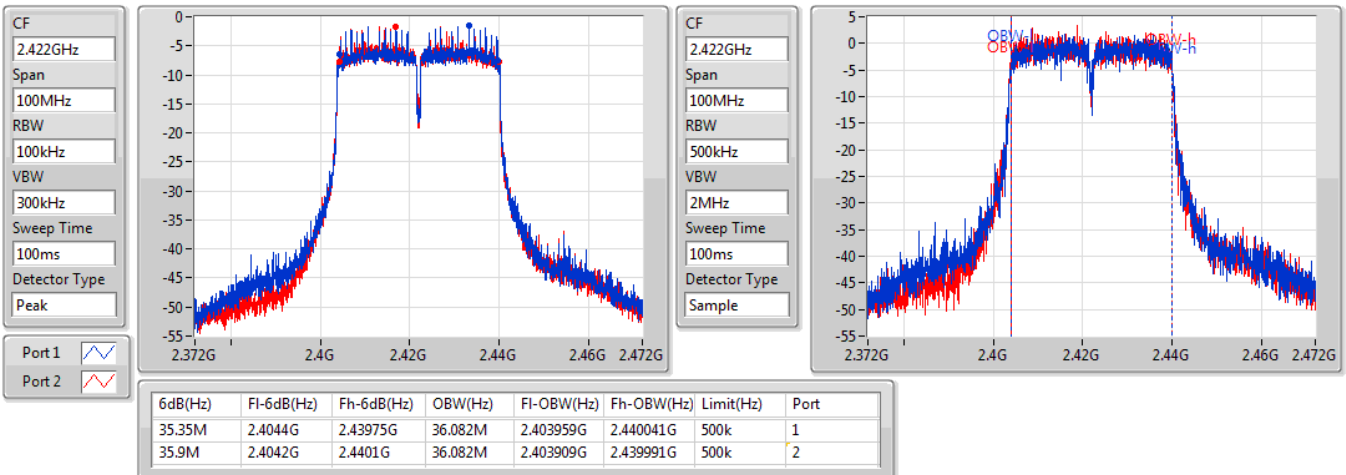


802.11ac VHT40_Nss1,(MCS0)_2TX

EBW

2422MHz

09/04/2019

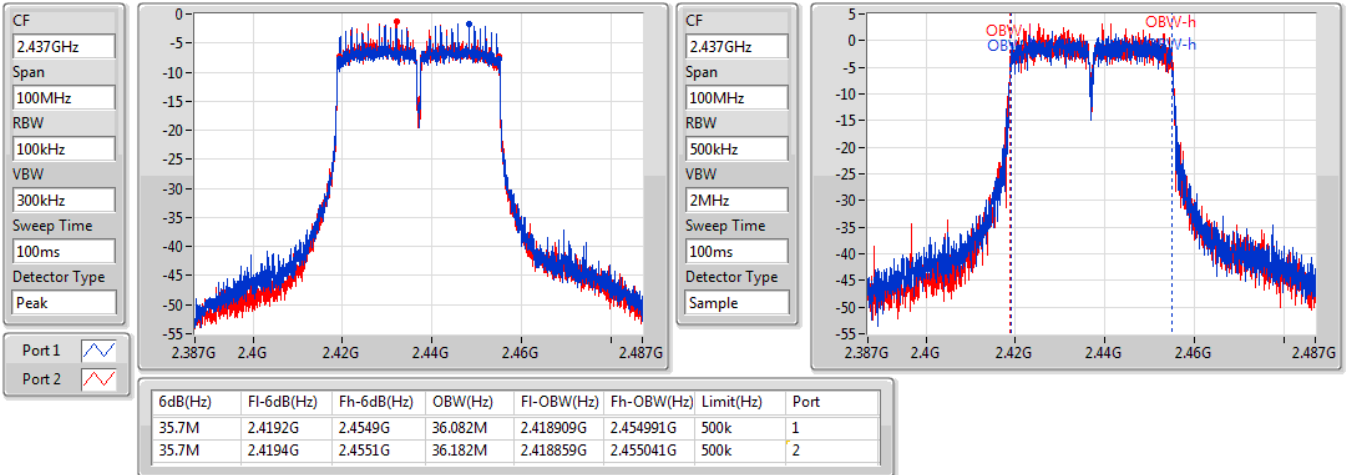


802.11ac VHT40_Nss1,(MCS0)_2TX

EBW

2437MHz

09/04/2019

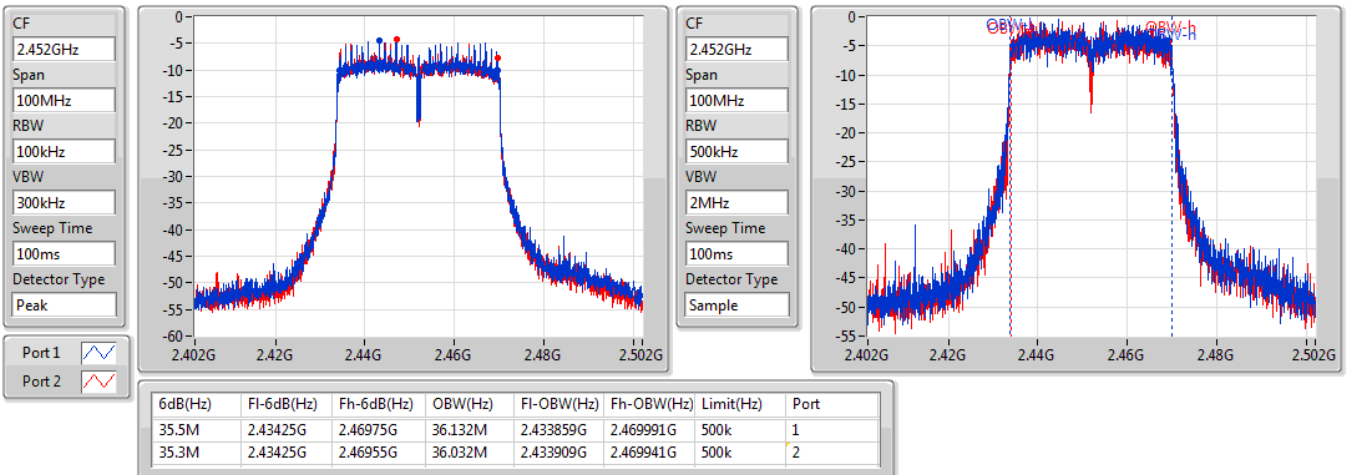


802.11ac VHT40_Nss1,(MCS0)_2TX

EBW

2452MHz

09/04/2019





Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_2TX	23.86	0.24322
802.11g_Nss1,(6Mbps)_2TX	24.78	0.30061
802.11ac VHT20_Nss1,(MCS0)_2TX	24.78	0.30061
802.11ac VHT40_Nss1,(MCS0)_2TX	15.73	0.03741



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.00	17.47	17.16	20.33	30.00
2417MHz	Pass	4.00	19.74	20.20	22.99	30.00
2437MHz	Pass	4.00	20.51	21.16	23.86	30.00
2457MHz	Pass	4.00	19.22	19.40	22.32	30.00
2462MHz	Pass	4.00	19.26	19.31	22.30	30.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.00	15.68	15.54	18.62	30.00
2417MHz	Pass	4.00	20.01	19.97	23.00	30.00
2437MHz	Pass	4.00	21.72	21.82	24.78	30.00
2457MHz	Pass	4.00	16.58	16.31	19.46	30.00
2462MHz	Pass	4.00	12.11	12.10	15.12	30.00
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.00	15.50	15.34	18.43	30.00
2417MHz	Pass	4.00	19.92	19.88	22.91	30.00
2437MHz	Pass	4.00	21.73	21.80	24.78	30.00
2457MHz	Pass	4.00	16.47	16.21	19.35	30.00
2462MHz	Pass	4.00	11.89	11.80	14.86	30.00
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	4.00	12.75	12.69	15.73	30.00
2437MHz	Pass	4.00	12.59	12.28	15.45	30.00
2447MHz	Pass	4.00	11.75	11.76	14.77	30.00
2452MHz	Pass	4.00	10.01	9.72	12.88	30.00

DG = Directional Gain; Port X = Port X output power



Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_2TX	-1.14
802.11g_Nss1,(6Mbps)_2TX	-3.60
802.11ac VHT20_Nss1,(MCS0)_2TX	-3.05
802.11ac VHT40_Nss1,(MCS0)_2TX	-10.99

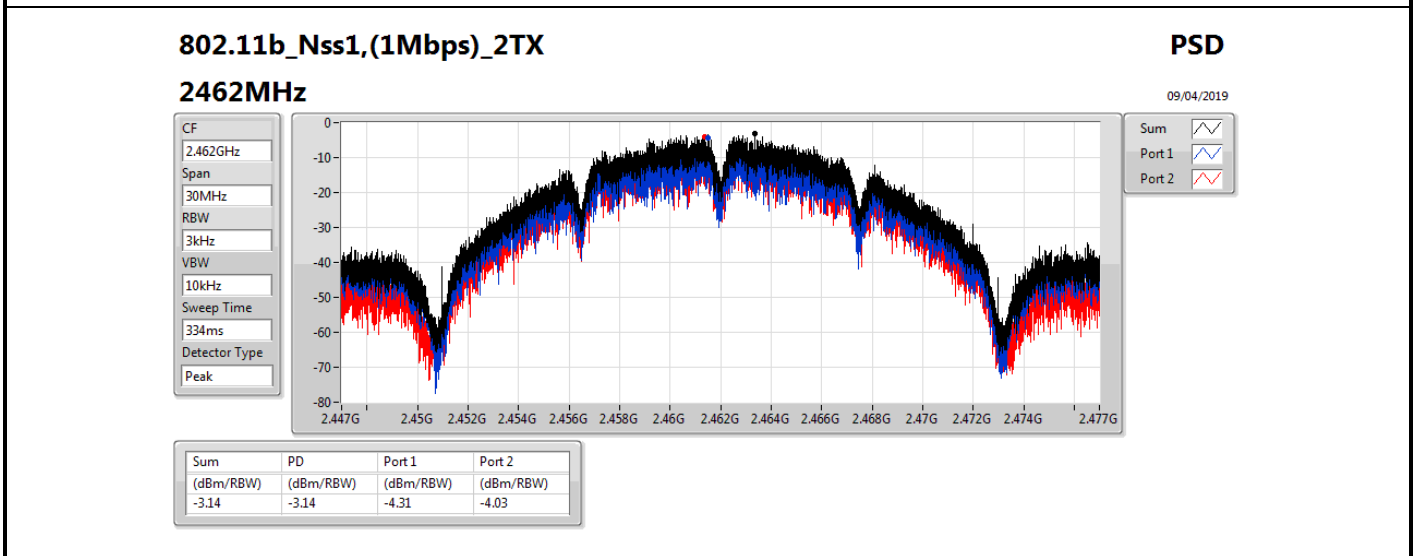
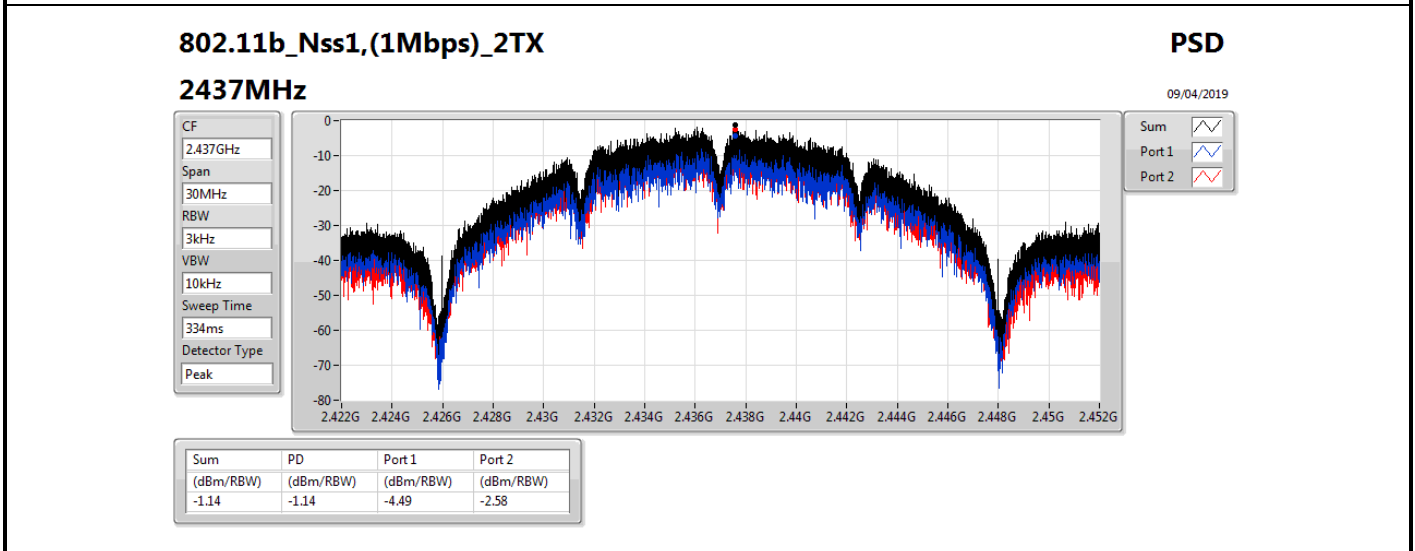
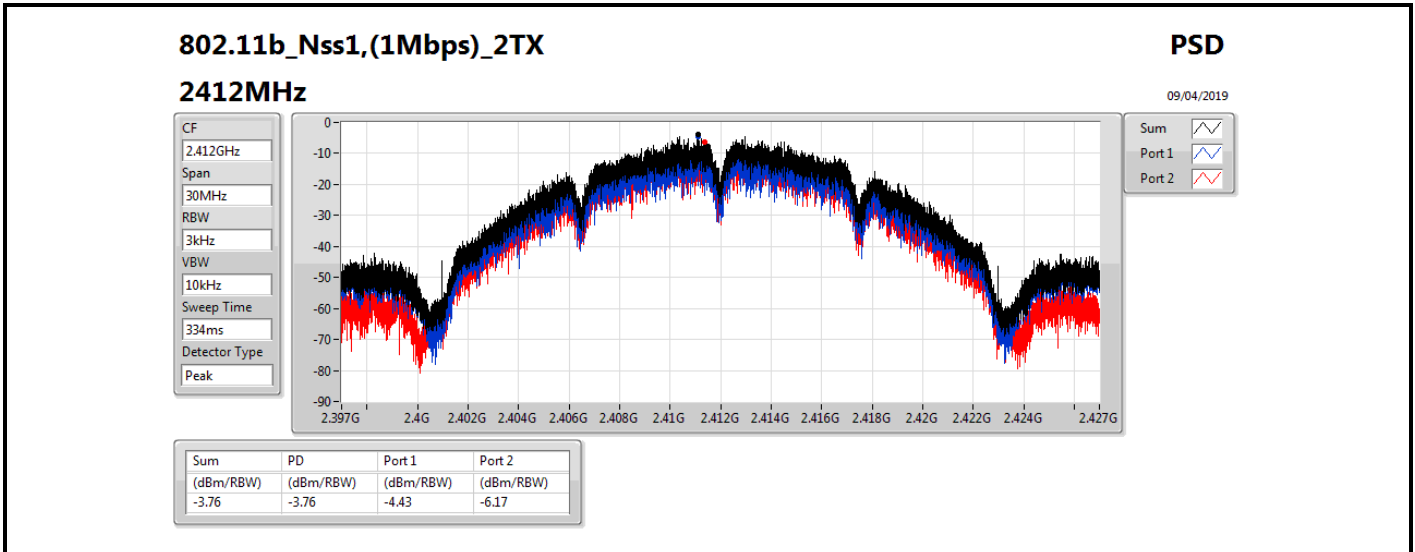
RBW=3 kHz.

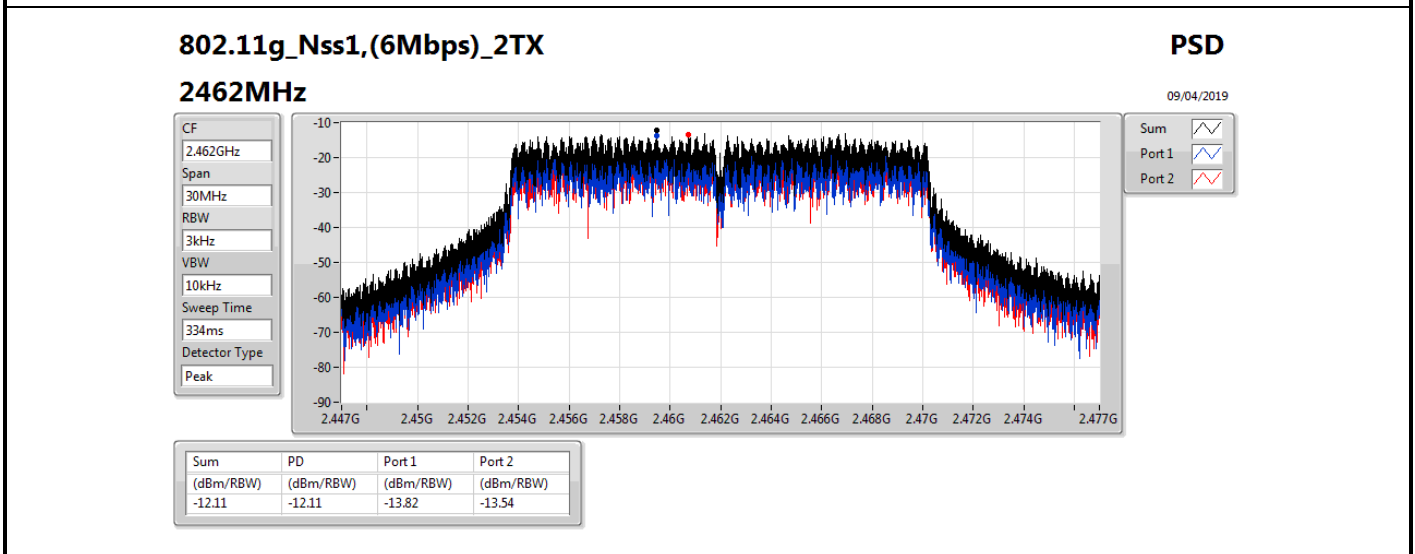
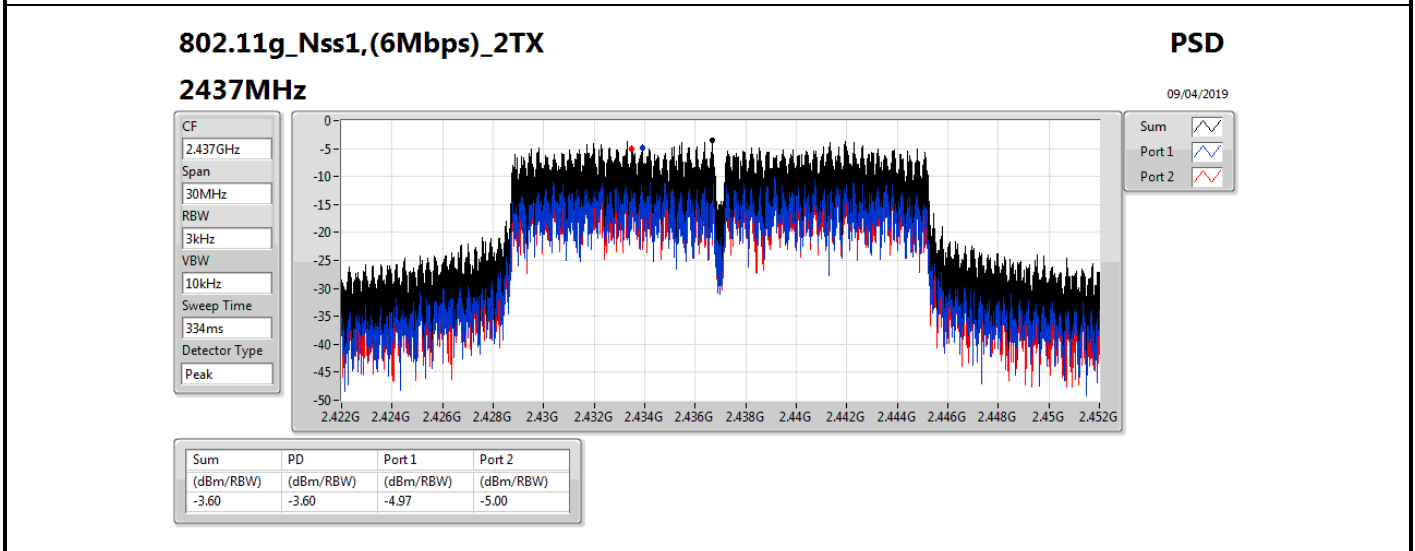
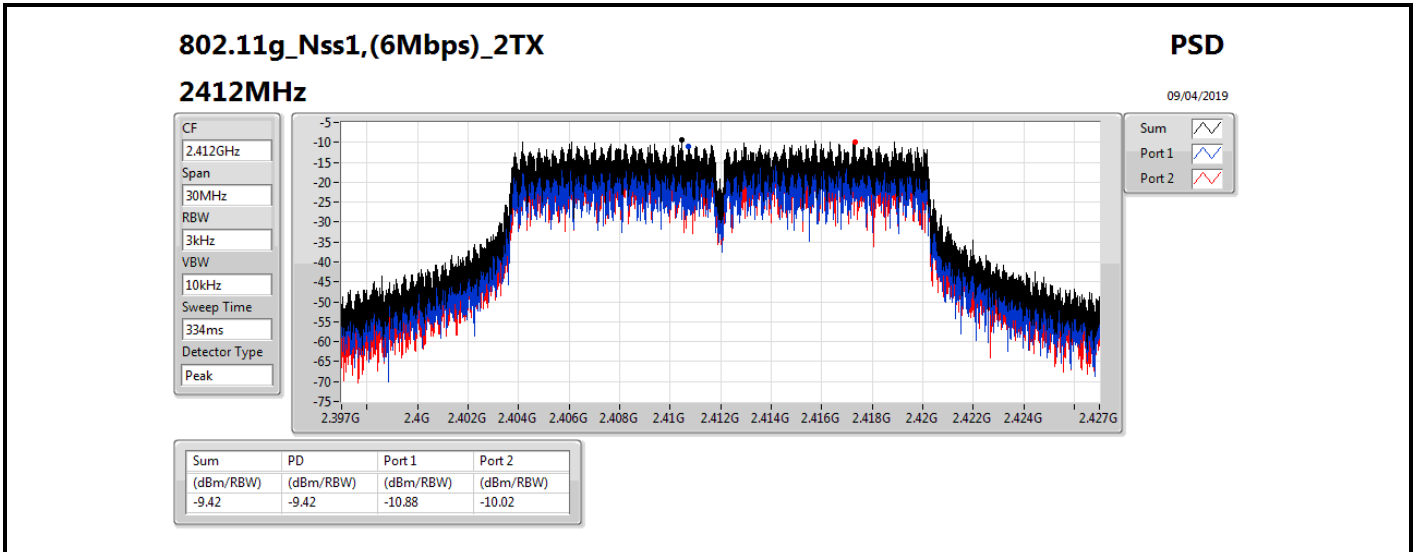
Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	7.01	-4.43	-6.17	-3.76	6.99
2437MHz	Pass	7.01	-4.49	-2.58	-1.14	6.99
2462MHz	Pass	7.01	-4.31	-4.03	-3.14	6.99
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	7.01	-10.88	-10.02	-9.42	6.99
2437MHz	Pass	7.01	-4.97	-5.00	-3.60	6.99
2462MHz	Pass	7.01	-13.82	-13.54	-12.11	6.99
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	7.01	-10.98	-11.20	-9.73	6.99
2437MHz	Pass	7.01	-4.95	-4.88	-3.05	6.99
2462MHz	Pass	7.01	-13.54	-14.65	-13.08	6.99
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	7.01	-15.28	-17.31	-14.19	6.99
2437MHz	Pass	7.01	-16.50	-16.94	-14.84	6.99
2452MHz	Pass	7.01	-11.34	-18.56	-10.99	6.99

DG = Directional Gain; RBW=3 kHz;

PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;



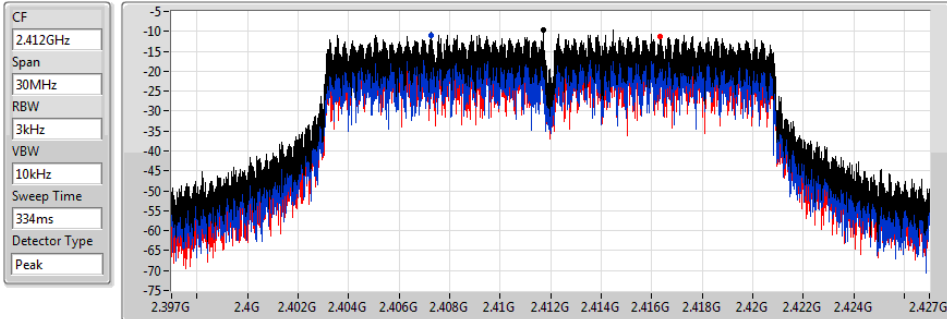



802.11ac VHT20_Nss1,(MCS0)_2TX


PSD


2412MHz

09/04/2019



Sum 

Port 1 

Port 2 

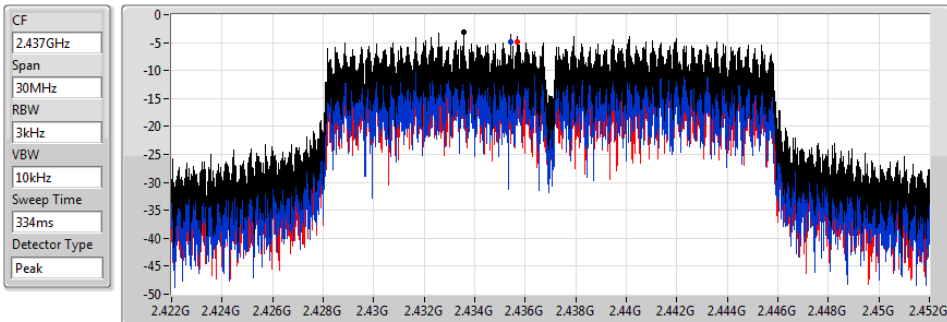
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-9.73	-9.73	-10.98	-11.20


802.11ac VHT20_Nss1,(MCS0)_2TX


PSD


2437MHz

09/04/2019



Sum 

Port 1 

Port 2 

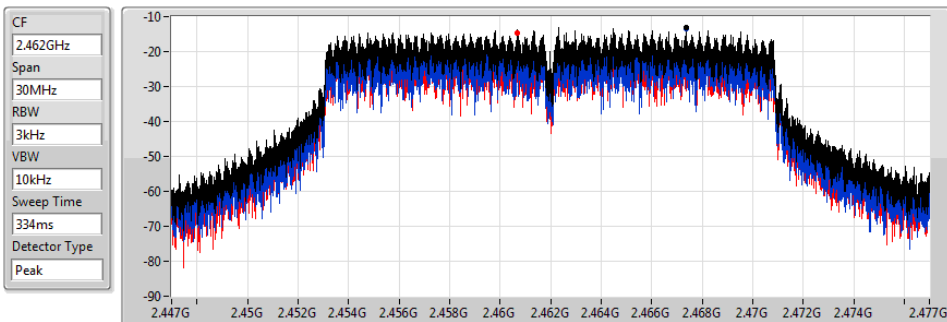
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.05	-3.05	-4.95	-4.88


802.11ac VHT20_Nss1,(MCS0)_2TX


PSD


2462MHz

09/04/2019

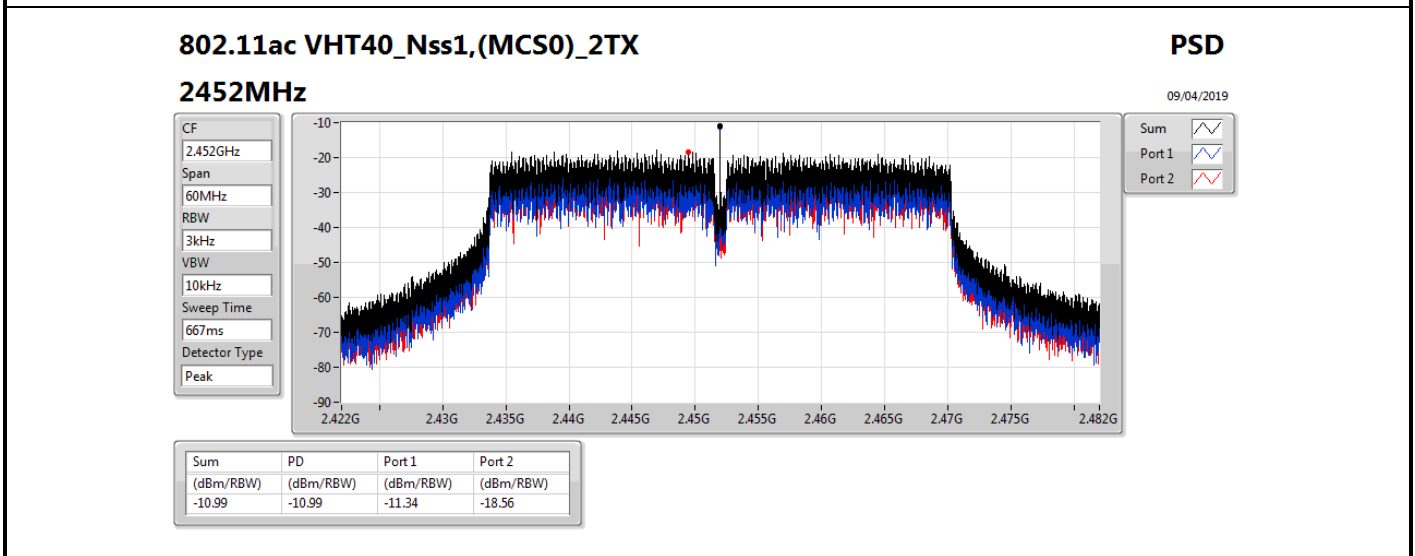
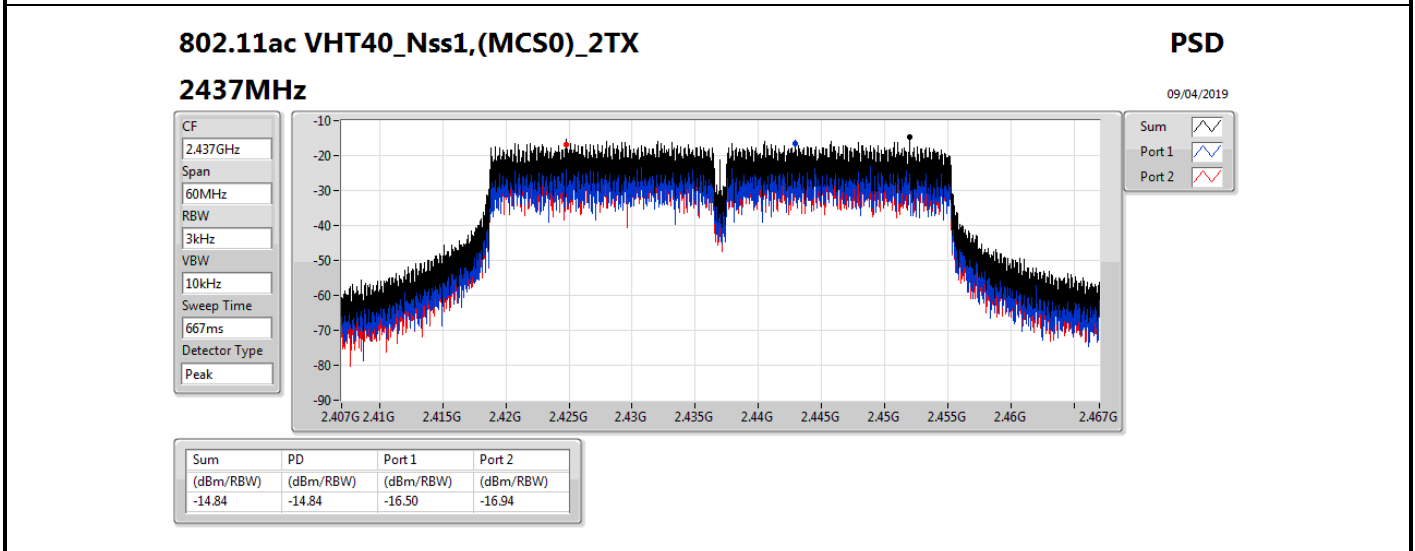
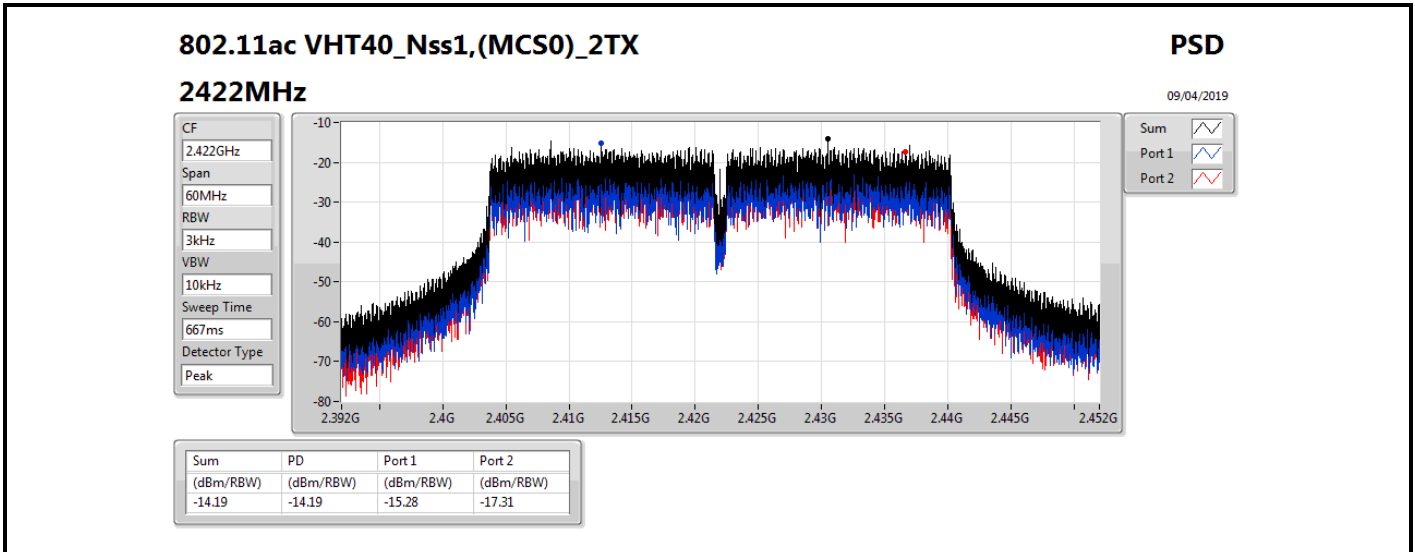


Sum 

Port 1 

Port 2 

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-13.08	-13.08	-13.54	-14.65



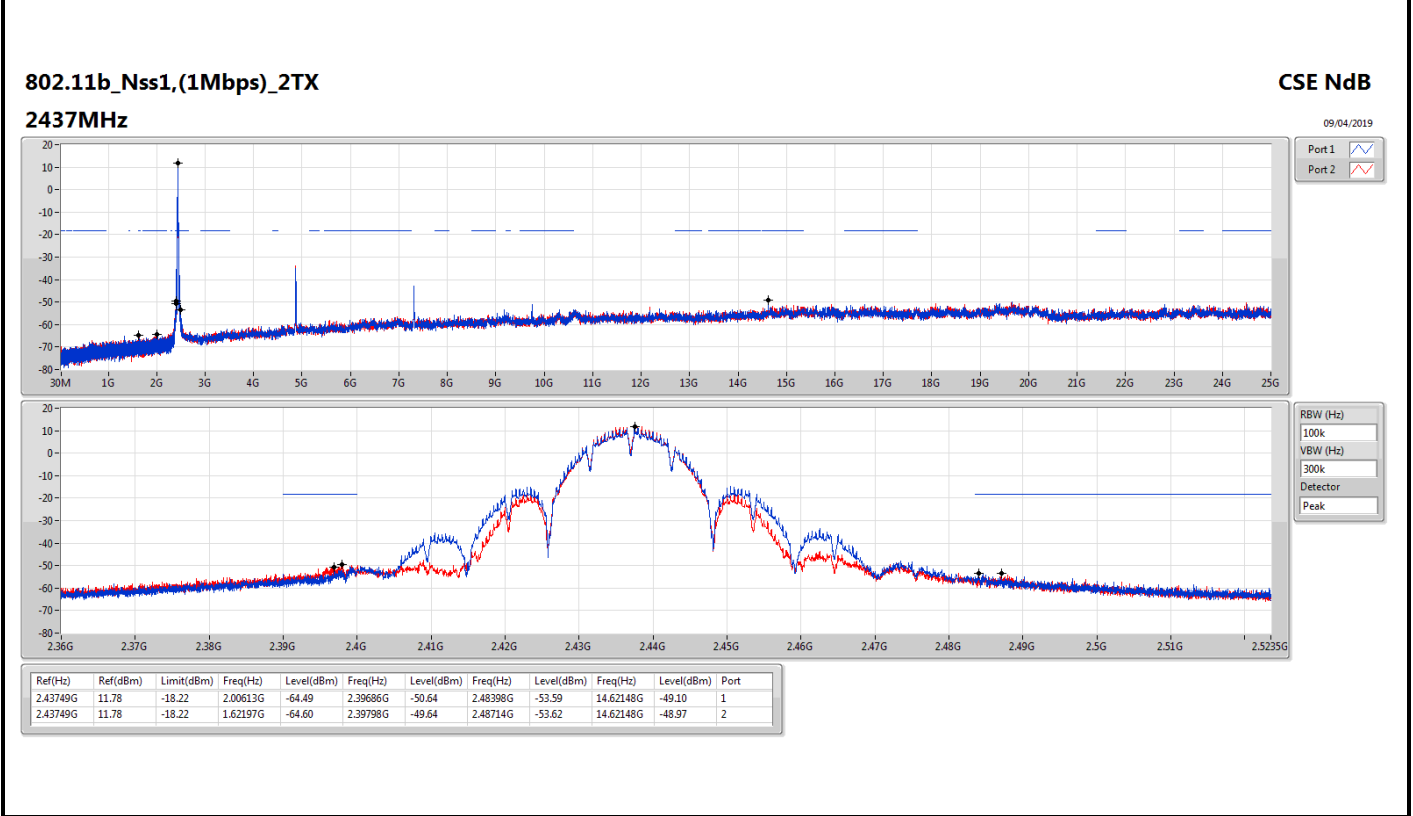
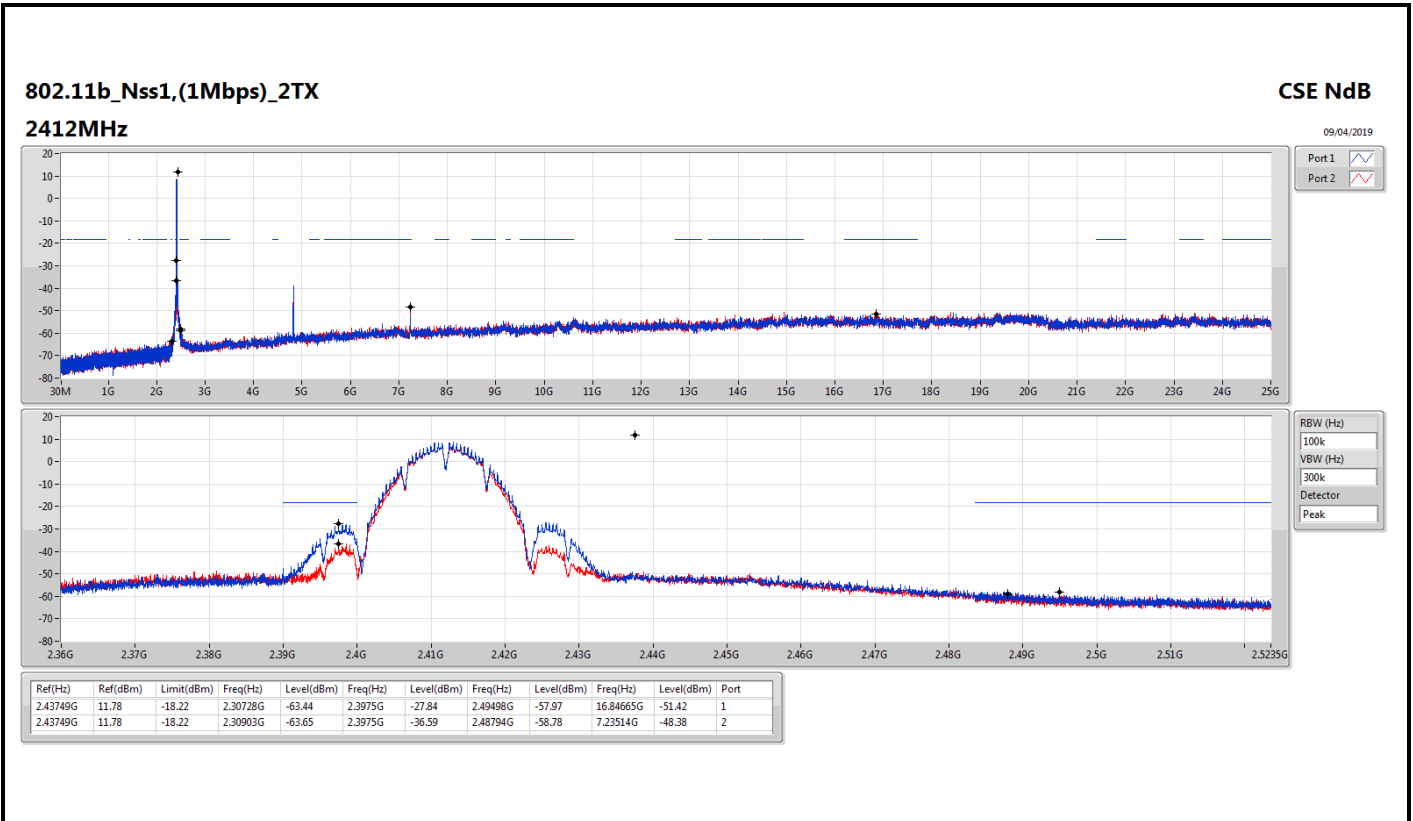


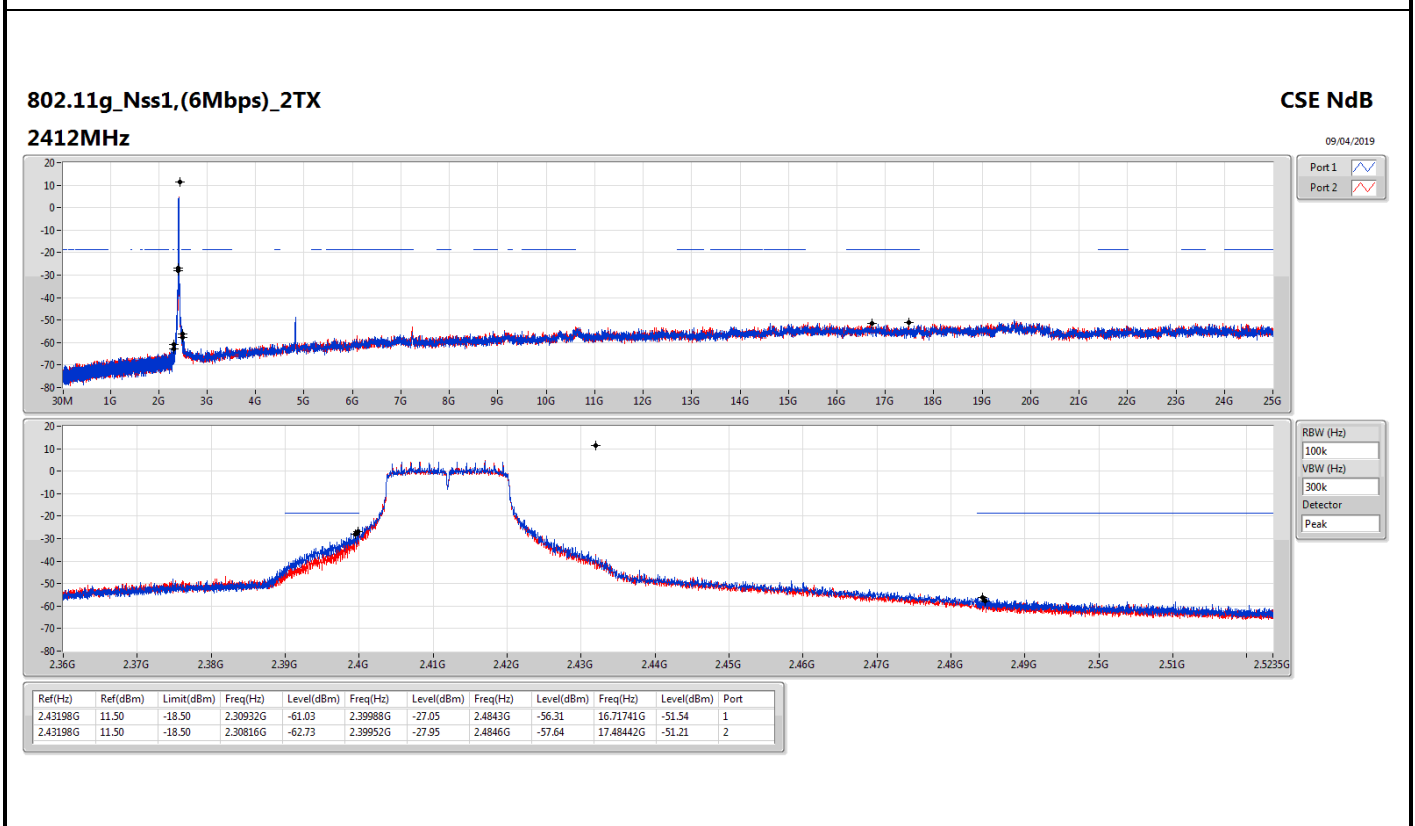
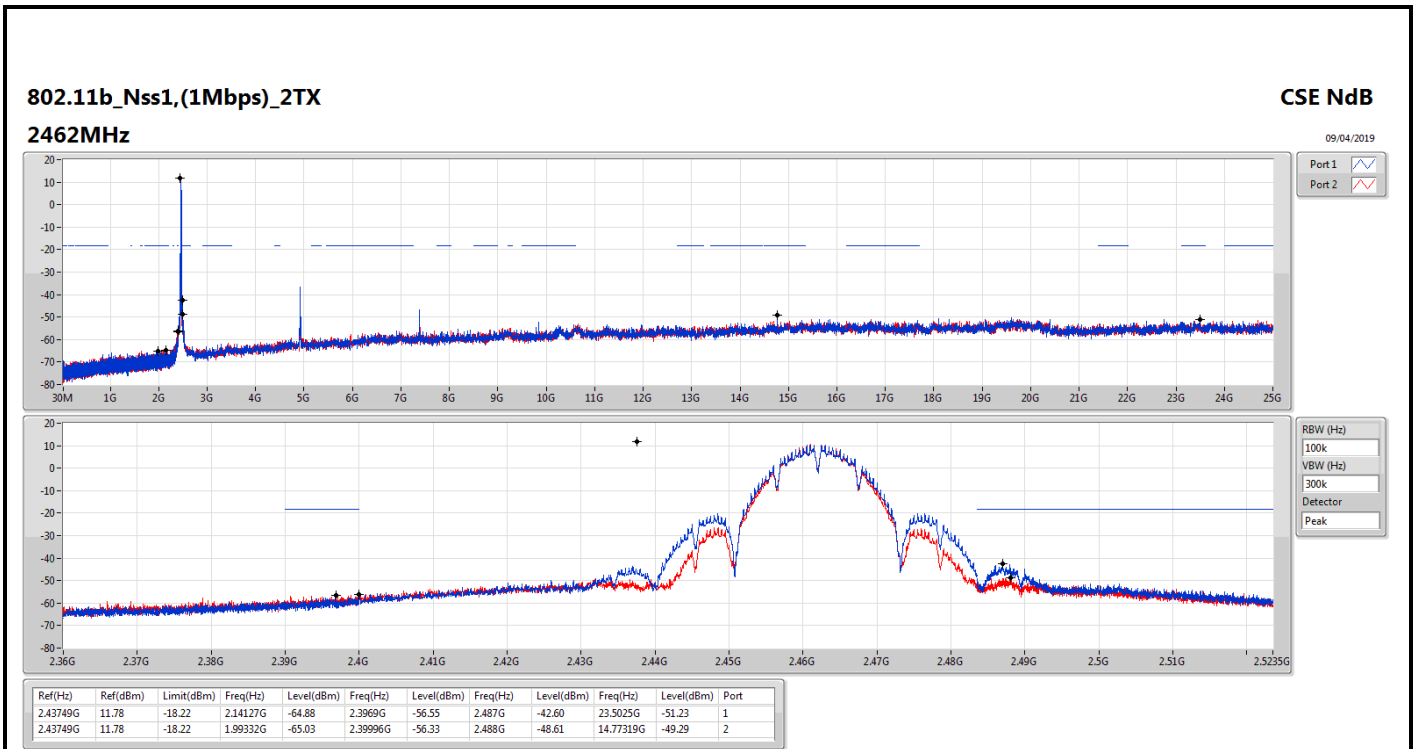
Summary

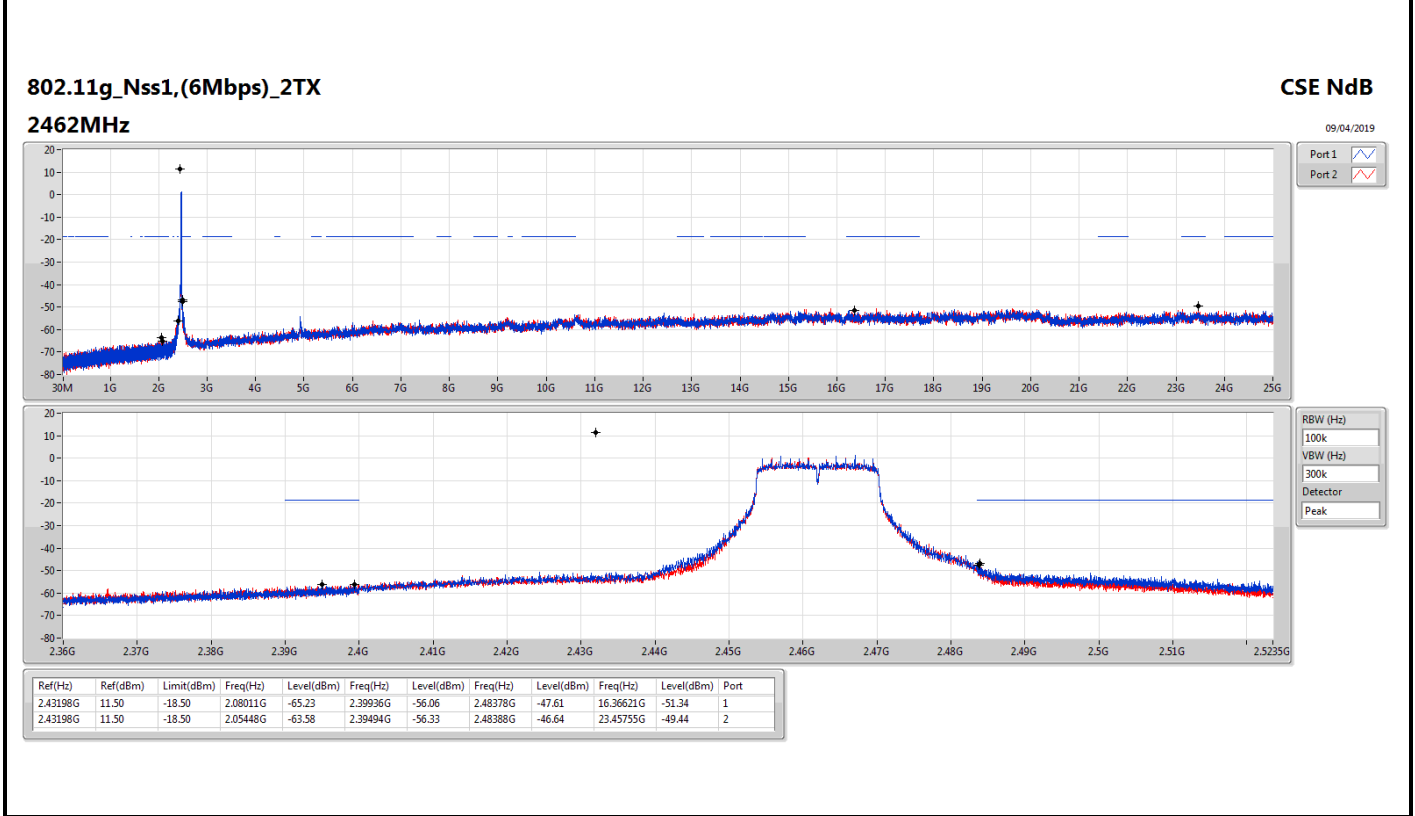
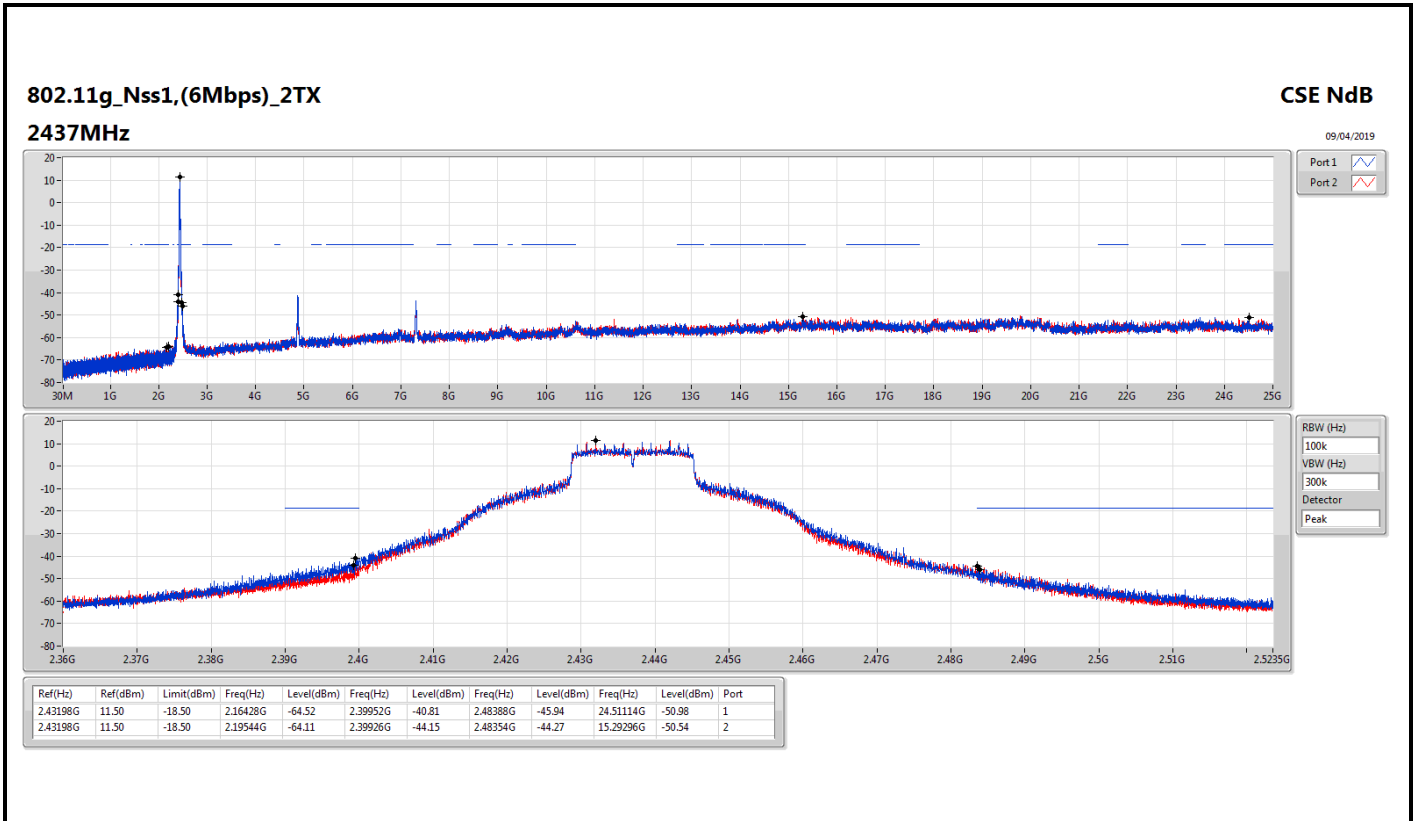
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	Pass	2.43749G	11.78	-18.22	2.30728G	-63.44	2.3975G	-27.84	2.49498G	-57.97	16.84665G	-51.42	1
802.11g_Nss1,(6Mbps)_2TX	Pass	2.43198G	11.50	-18.50	2.30932G	-61.03	2.39988G	-27.05	2.4843G	-56.31	16.71741G	-51.54	1
802.11ac VHT20_Nss1,(MCS0)_2TX	Pass	2.43198G	11.58	-18.42	2.30932G	-63.45	2.39972G	-28.23	2.48746G	-56.25	17.65861G	-51.31	1
802.11ac VHT40_Nss1,(MCS0)_2TX	Pass	2.43198G	-1.54	-31.54	2.30741G	-61.72	2.39912G	-33.59	2.48378G	-51.85	21.8056G	-51.13	1

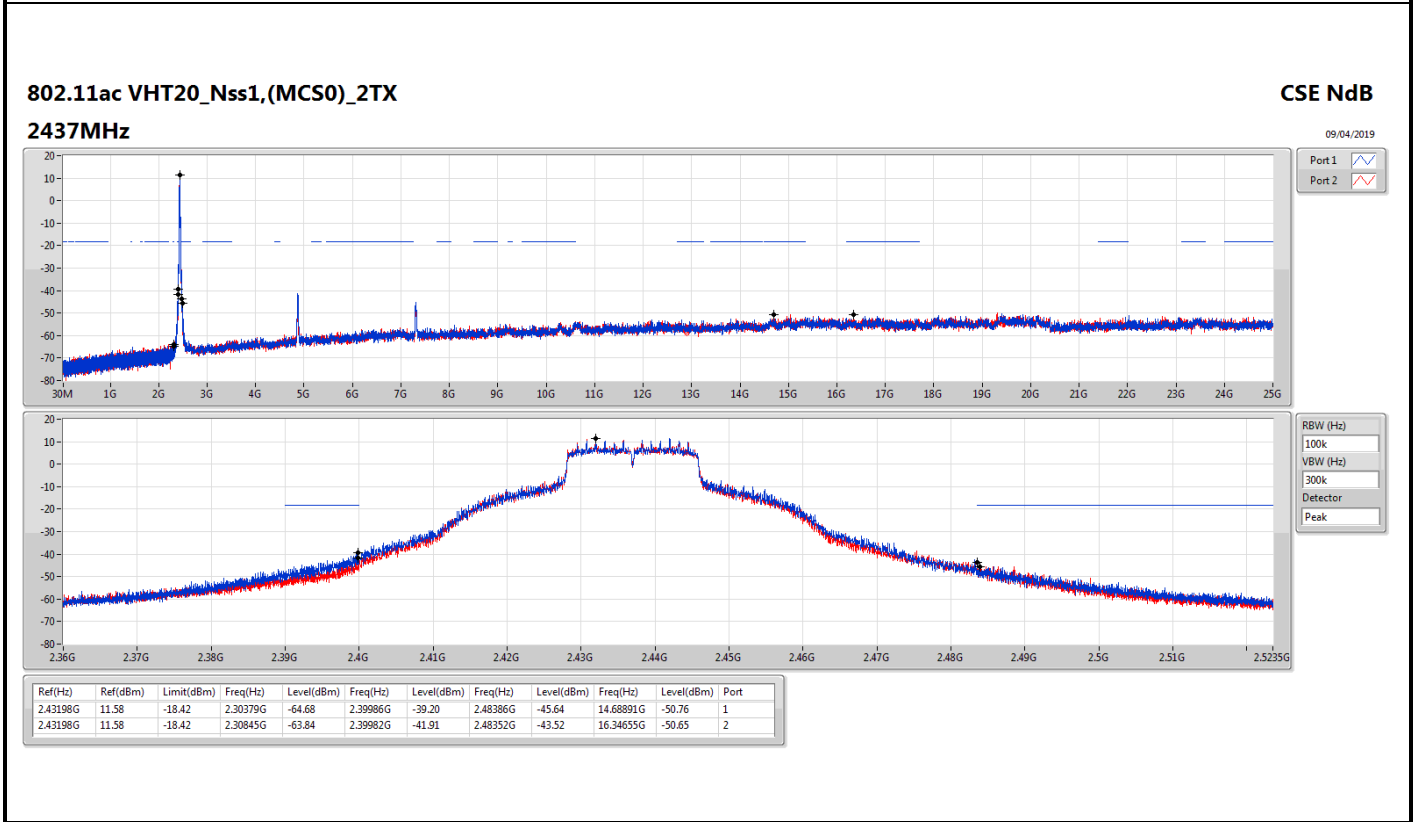
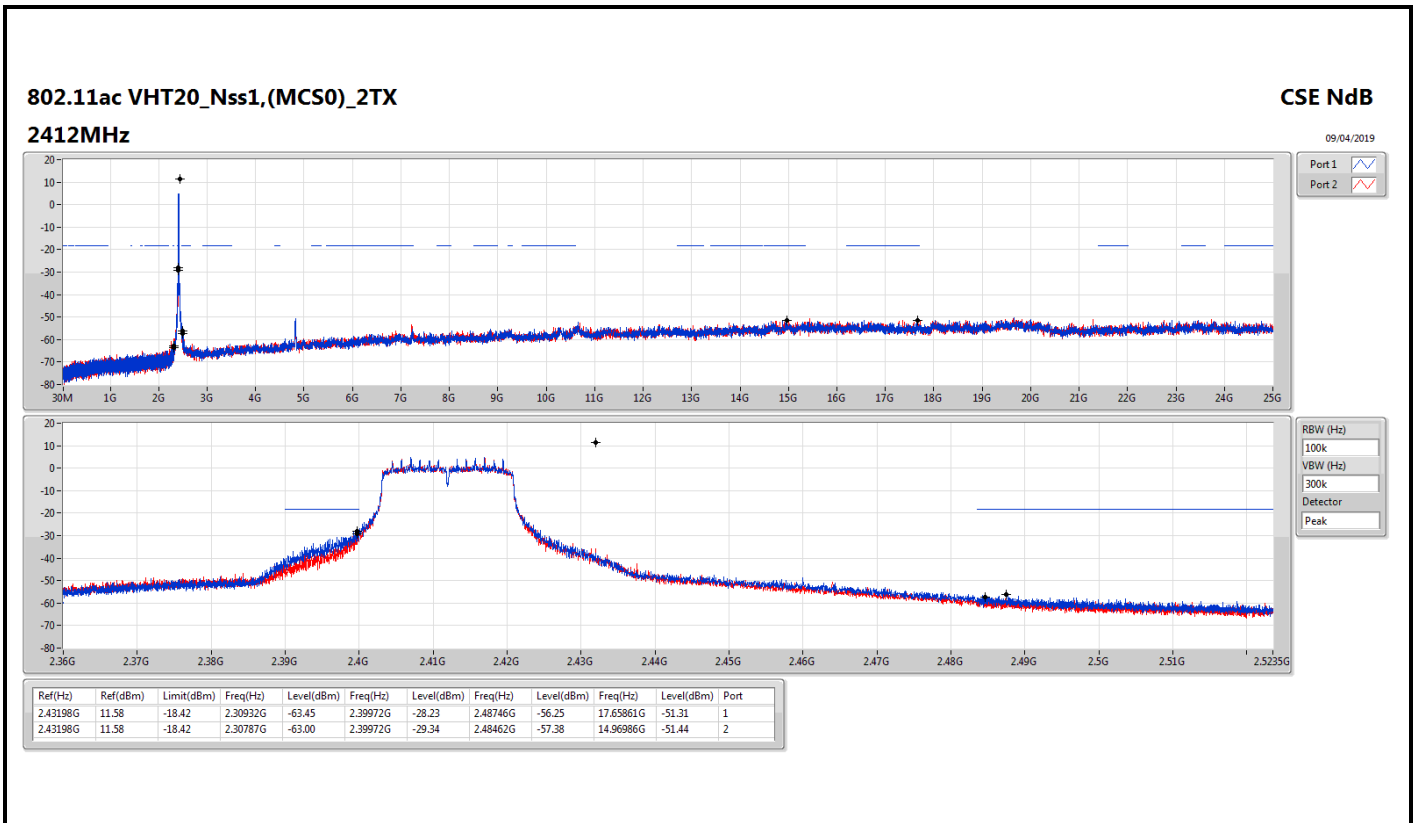
Result

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43749G	11.78	-18.22	2.30728G	-63.44	2.3975G	-27.84	2.49498G	-57.97	16.84665G	-51.42	1
2412MHz	Pass	2.43749G	11.78	-18.22	2.30903G	-63.65	2.3975G	-36.59	2.48794G	-58.78	7.23514G	-48.38	2
2437MHz	Pass	2.43749G	11.78	-18.22	2.00613G	-64.49	2.39686G	-50.64	2.48398G	-53.59	14.62148G	-49.10	1
2437MHz	Pass	2.43749G	11.78	-18.22	1.62197G	-64.60	2.39798G	-49.64	2.48714G	-53.62	14.62148G	-48.97	2
2462MHz	Pass	2.43749G	11.78	-18.22	2.14127G	-64.88	2.3969G	-56.55	2.487G	-42.60	23.5025G	-51.23	1
2462MHz	Pass	2.43749G	11.78	-18.22	1.99332G	-65.03	2.39996G	-56.33	2.488G	-48.61	14.77319G	-49.29	2
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43198G	11.50	-18.50	2.30932G	-61.03	2.39988G	-27.05	2.4843G	-56.31	16.71741G	-51.54	1
2412MHz	Pass	2.43198G	11.50	-18.50	2.30816G	-62.73	2.39952G	-27.95	2.4846G	-57.64	17.48442G	-51.21	2
2437MHz	Pass	2.43198G	11.50	-18.50	2.16428G	-64.52	2.39952G	-40.81	2.48388G	-45.94	24.51114G	-50.98	1
2437MHz	Pass	2.43198G	11.50	-18.50	2.19544G	-64.11	2.39926G	-44.15	2.48354G	-44.27	15.29296G	-50.54	2
2462MHz	Pass	2.43198G	11.50	-18.50	2.08011G	-65.23	2.39936G	-56.06	2.48378G	-47.61	16.36621G	-51.34	1
2462MHz	Pass	2.43198G	11.50	-18.50	2.05448G	-63.58	2.39494G	-56.33	2.48388G	-46.64	23.45755G	-49.44	2
802.11ac_VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43198G	11.58	-18.42	2.30932G	-63.45	2.39972G	-28.23	2.48746G	-56.25	17.65861G	-51.31	1
2412MHz	Pass	2.43198G	11.58	-18.42	2.30787G	-63.00	2.39972G	-29.34	2.48462G	-57.38	14.96986G	-51.44	2
2437MHz	Pass	2.43198G	11.58	-18.42	2.30379G	-64.68	2.39986G	-39.20	2.48386G	-45.64	14.68891G	-50.76	1
2437MHz	Pass	2.43198G	11.58	-18.42	2.30845G	-63.84	2.39982G	-41.91	2.48352G	-43.52	16.34655G	-50.65	2
2462MHz	Pass	2.43198G	11.58	-18.42	1.75012G	-65.12	2.3997G	-56.08	2.48458G	-45.84	23.39293G	-51.60	1
2462MHz	Pass	2.43198G	11.58	-18.42	2.30612G	-64.20	2.39998G	-55.20	2.48384G	-45.66	16.34093G	-50.92	2
802.11ac_VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.43198G	-1.54	-31.54	2.30741G	-61.72	2.39912G	-33.59	2.48378G	-51.85	21.8056G	-51.13	1
2422MHz	Pass	2.43198G	-1.54	-31.54	2.30798G	-62.75	2.39952G	-34.07	2.4851G	-53.37	23.41542G	-50.11	2
2437MHz	Pass	2.43198G	-1.54	-31.54	2.30197G	-63.36	2.39952G	-41.17	2.48498G	-47.03	23.43505G	-49.64	1
2437MHz	Pass	2.43198G	-1.54	-31.54	2.30998G	-63.46	2.39952G	-46.41	2.48474G	-47.80	23.41262G	-49.63	2
2452MHz	Pass	2.43198G	-1.54	-31.54	2.30311G	-64.10	2.39564G	-52.02	2.48446G	-40.97	15.3495G	-51.39	1
2452MHz	Pass	2.43198G	-1.54	-31.54	2.30426G	-64.15	2.39932G	-53.01	2.48446G	-42.79	15.27939G	-51.25	2





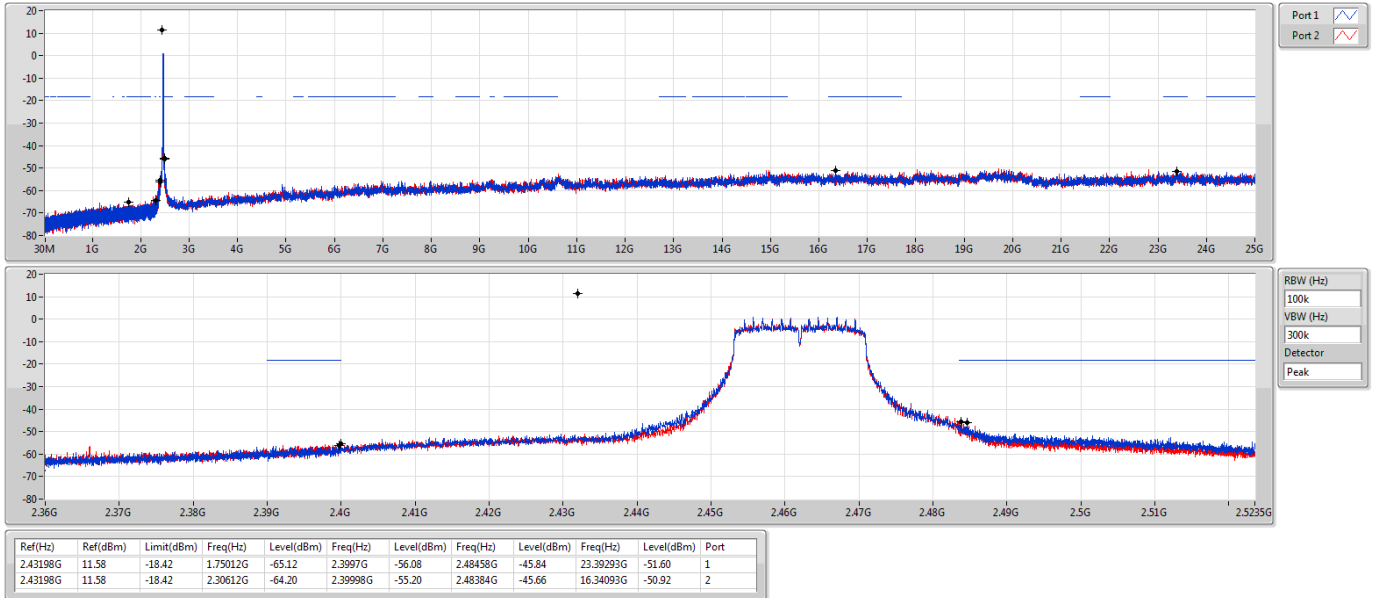




802.11ac VHT20_Nss1,(MCS0)_2TX

CSE NdB

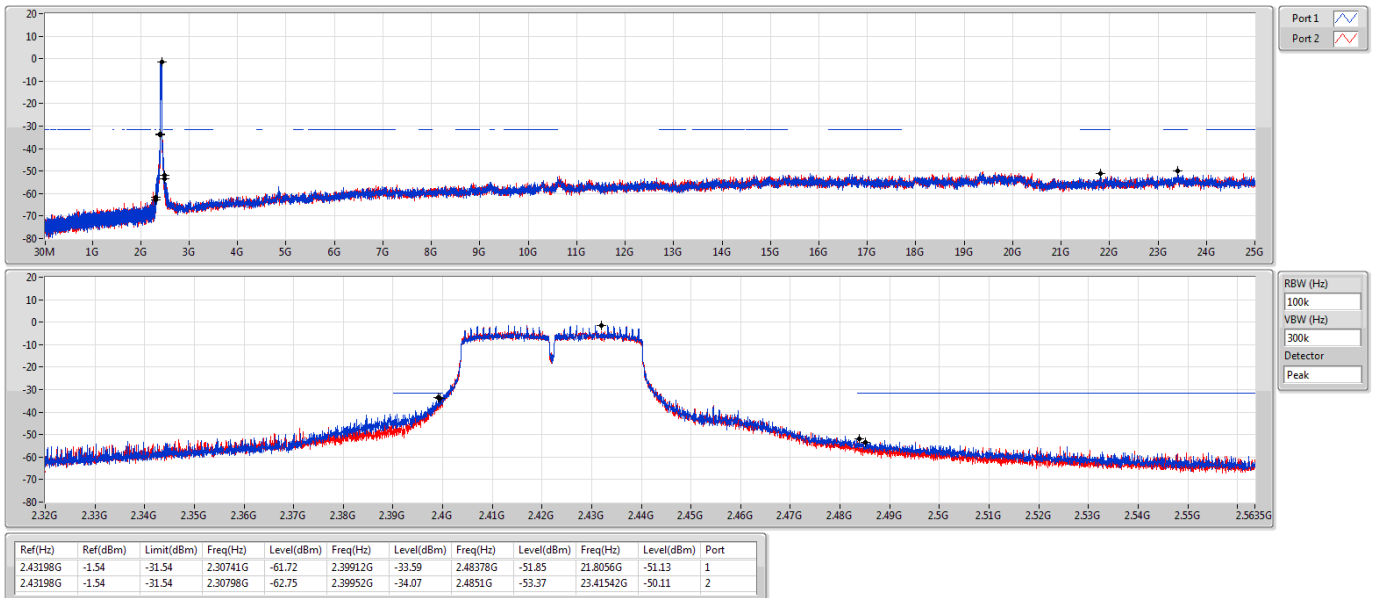
2462MHz



802.11ac VHT40_Nss1,(MCS0)_2TX

CSE NdB

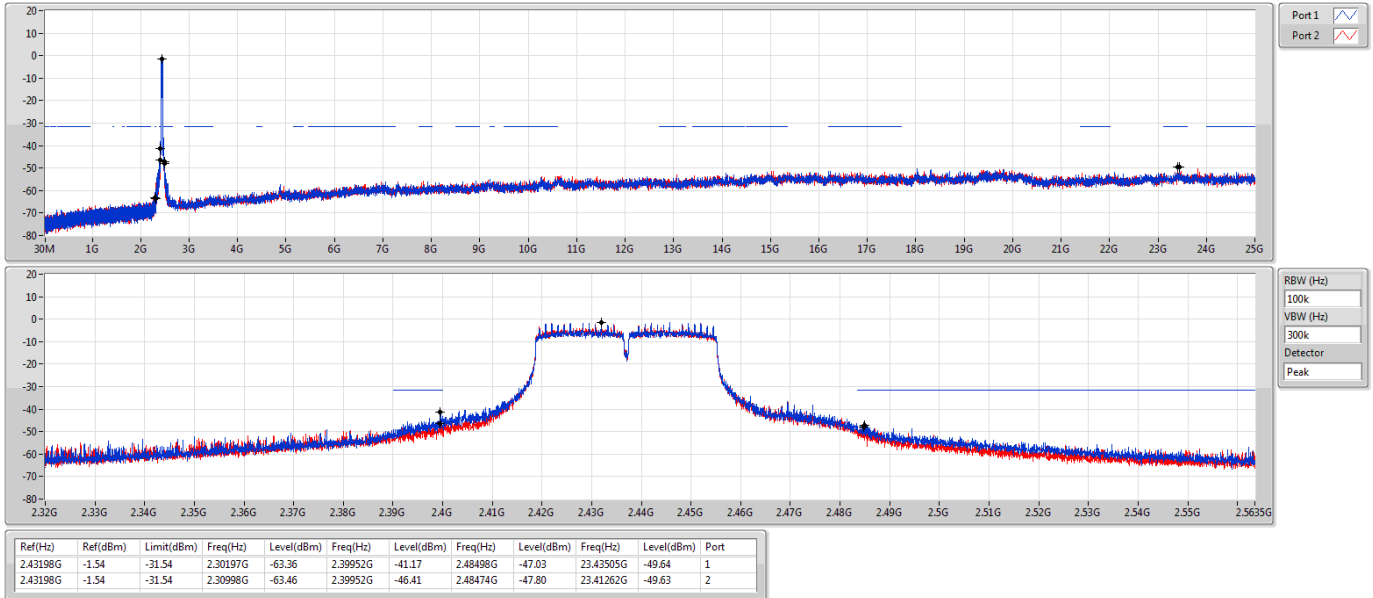
2422MHz



802.11ac VHT40_Nss1,(MCS0)_2TX

CSE NdB

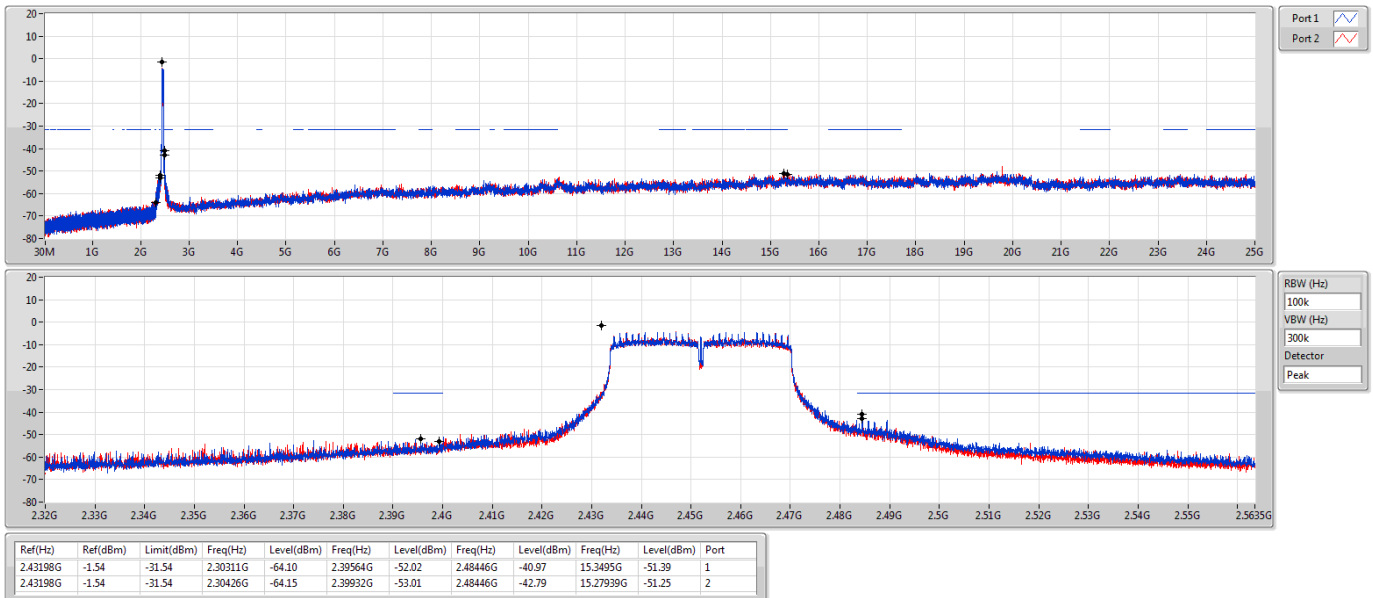
2437MHz



802.11ac VHT40_Nss1,(MCS0)_2TX

CSE NdB

2452MHz





Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11ac VHT40_Nss1,(MCS0)_2TX	Pass	PK	76.56M	36.99	40.00	-3.01	-15.15	3	Vertical	0	1.00	-



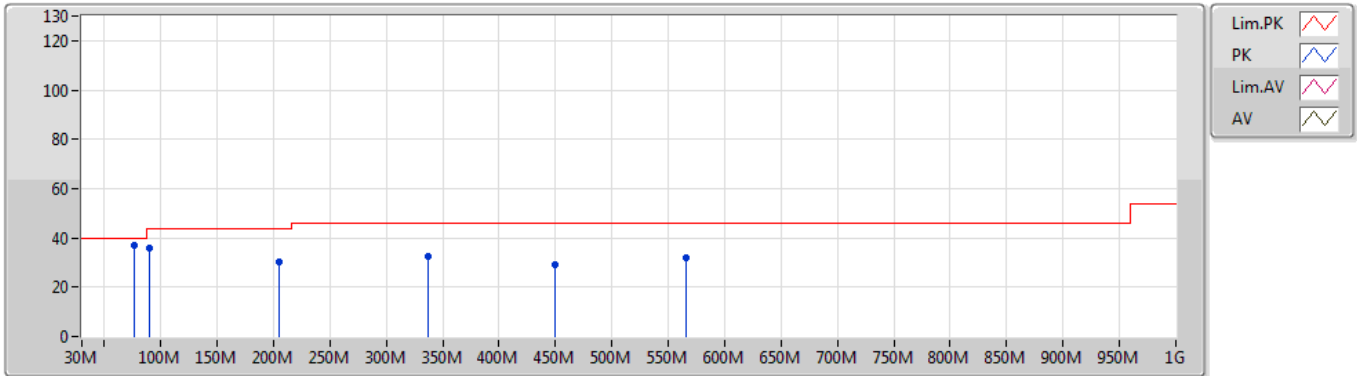
Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
2437MHz	Pass	PK	76.56M	36.99	40.00	-3.01	-15.15	3	Vertical	0	1.00	-
2437MHz	Pass	PK	90.14M	35.70	43.50	-7.80	-12.55	3	Vertical	0	1.00	-
2437MHz	Pass	PK	204.6M	30.08	43.50	-13.42	-10.57	3	Vertical	0	1.00	-
2437MHz	Pass	PK	336.52M	32.41	46.00	-13.59	-5.40	3	Vertical	0	1.00	-
2437MHz	Pass	PK	449.04M	29.33	46.00	-16.67	-2.92	3	Vertical	0	1.00	-
2437MHz	Pass	PK	565.44M	31.95	46.00	-14.05	-1.05	3	Vertical	0	1.00	-
2437MHz	Pass	PK	90.14M	30.40	43.50	-13.10	-12.55	3	Horizontal	360	1.00	-
2437MHz	Pass	PK	117.3M	29.89	43.50	-13.61	-8.93	3	Horizontal	360	1.00	-
2437MHz	Pass	PK	237.58M	30.86	46.00	-15.14	-8.46	3	Horizontal	360	1.00	-
2437MHz	Pass	PK	334.58M	37.06	46.00	-8.94	-5.40	3	Horizontal	360	1.00	-
2437MHz	Pass	PK	452.92M	33.99	46.00	-12.01	-2.86	3	Horizontal	360	1.00	-
2437MHz	Pass	PK	567.38M	32.06	46.00	-13.94	-1.10	3	Horizontal	360	1.00	-

802.11ac VHT40_Nss1,(MCS0)_2TX

08/04/2019

2437MHz_Adapter

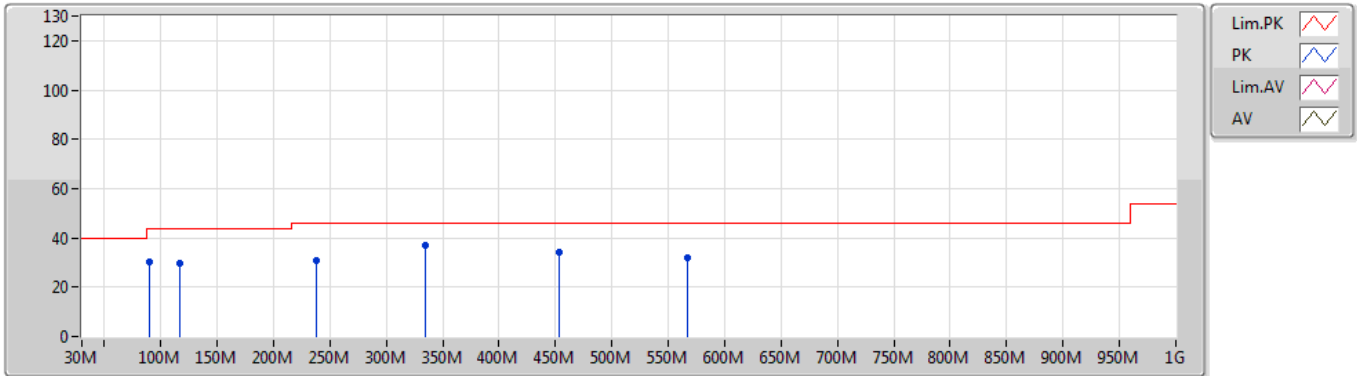


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
PK	76.56M	36.99	40.00	-3.01	-15.15	3	Vertical	0	1.00	-
PK	90.14M	35.70	43.50	-7.80	-12.55	3	Vertical	0	1.00	-
PK	204.6M	30.08	43.50	-13.42	-10.57	3	Vertical	0	1.00	-
PK	336.52M	32.41	46.00	-13.59	-5.40	3	Vertical	0	1.00	-
PK	449.04M	29.33	46.00	-16.67	-2.92	3	Vertical	0	1.00	-
PK	565.44M	31.95	46.00	-14.05	-1.05	3	Vertical	0	1.00	-

802.11ac VHT40_Nss1,(MCS0)_2TX

08/04/2019

2437MHz_Adapter



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
PK	90.14M	30.40	43.50	-13.10	-12.55	3	Horizontal	360	1.00	-
PK	117.3M	29.89	43.50	-13.61	-8.93	3	Horizontal	360	1.00	-
PK	237.58M	30.86	46.00	-15.14	-8.46	3	Horizontal	360	1.00	-
PK	334.58M	37.06	46.00	-8.94	-5.40	3	Horizontal	360	1.00	-
PK	452.92M	33.99	46.00	-12.01	-2.86	3	Horizontal	360	1.00	-
PK	567.38M	32.06	46.00	-13.94	-1.10	3	Horizontal	360	1.00	-



Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	Pass	AV	2.39G	53.63	54.00	-0.37	31.86	3	Horizontal	30	2.71	-
802.11g_Nss1,(6Mbps)_2TX	Pass	AV	2.3898G	53.89	54.00	-0.11	31.86	3	Horizontal	29	2.40	-
802.11ac VHT20_Nss1,(MCS0)_2TX	Pass	AV	2.3898G	53.77	54.00	-0.23	35.04	3	Horizontal	92	2.60	-
802.11ac VHT40_Nss1,(MCS0)_2TX	Pass	AV	2.4838G	53.70	54.00	-0.30	32.19	3	Horizontal	13	1.50	-



Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.3898G	49.69	54.00	-4.31	35.04	3	Vertical	280	2.00	-
2412MHz	Pass	AV	2.4128G	102.38	Inf	-Inf	35.00	3	Vertical	280	2.00	-
2412MHz	Pass	PK	2.3684G	62.10	74.00	-11.90	35.10	3	Vertical	280	2.00	-
2412MHz	Pass	PK	2.4128G	104.69	Inf	-Inf	35.00	3	Vertical	280	2.00	-
2412MHz	Pass	AV	2.39G	50.18	54.00	-3.82	35.04	3	Horizontal	92	2.54	-
2412MHz	Pass	AV	2.4128G	107.04	Inf	-Inf	35.00	3	Horizontal	92	2.54	-
2412MHz	Pass	PK	2.3822G	62.21	74.00	-11.79	35.06	3	Horizontal	92	2.54	-
2412MHz	Pass	PK	2.4128G	109.42	Inf	-Inf	35.00	3	Horizontal	92	2.54	-
2412MHz	Pass	AV	4.82394G	47.43	54.00	-6.57	11.13	3	Vertical	308	2.48	-
2412MHz	Pass	PK	4.824G	53.79	74.00	-20.21	11.13	3	Vertical	308	2.48	-
2412MHz	Pass	AV	4.82394G	53.45	54.00	-0.55	11.13	3	Horizontal	91	2.99	-
2412MHz	Pass	PK	4.82388G	57.01	74.00	-16.99	11.13	3	Horizontal	91	2.99	-
2417MHz	Pass	AV	2.39G	48.73	54.00	-5.27	31.86	3	Vertical	148	2.99	-
2417MHz	Pass	AV	2.4178G	108.21	Inf	-Inf	31.95	3	Vertical	148	2.99	-
2417MHz	Pass	PK	2.3888G	59.60	74.00	-14.40	31.85	3	Vertical	148	2.99	-
2417MHz	Pass	PK	2.4178G	110.20	Inf	-Inf	31.95	3	Vertical	148	2.99	-
2417MHz	Pass	AV	2.39G	53.63	54.00	-0.37	31.86	3	Horizontal	30	2.71	-
2417MHz	Pass	AV	2.4178G	111.71	Inf	-Inf	31.95	3	Horizontal	30	2.71	-
2417MHz	Pass	PK	2.39G	61.81	74.00	-12.19	31.86	3	Horizontal	30	2.71	-
2417MHz	Pass	PK	2.4178G	113.67	Inf	-Inf	31.95	3	Horizontal	30	2.71	-
2437MHz	Pass	AV	2.337G	49.03	54.00	-4.97	35.18	3	Vertical	277	2.17	-
2437MHz	Pass	AV	2.4378G	107.66	Inf	-Inf	34.99	3	Vertical	277	2.17	-
2437MHz	Pass	AV	2.4838G	49.87	54.00	-4.13	34.96	3	Vertical	277	2.17	-
2437MHz	Pass	PK	2.3474G	61.30	74.00	-12.70	35.15	3	Vertical	277	2.17	-
2437MHz	Pass	PK	2.4378G	109.87	Inf	-Inf	34.99	3	Vertical	277	2.17	-
2437MHz	Pass	PK	2.4846G	62.32	74.00	-11.68	34.96	3	Vertical	277	2.17	-
2437MHz	Pass	AV	2.3886G	49.44	54.00	-4.56	35.05	3	Horizontal	93	1.01	-
2437MHz	Pass	AV	2.4378G	111.63	Inf	-Inf	34.99	3	Horizontal	93	1.01	-
2437MHz	Pass	AV	2.4842G	50.13	54.00	-3.87	34.96	3	Horizontal	93	1.01	-
2437MHz	Pass	PK	2.3866G	62.22	74.00	-11.78	35.05	3	Horizontal	93	1.01	-
2437MHz	Pass	PK	2.4378G	113.99	Inf	-Inf	34.99	3	Horizontal	93	1.01	-
2437MHz	Pass	PK	2.4886G	62.80	74.00	-11.20	34.95	3	Horizontal	93	1.01	-
2437MHz	Pass	AV	4.87394G	49.34	54.00	-4.66	11.22	3	Vertical	309	2.43	-
2437MHz	Pass	AV	7.3104G	43.98	54.00	-10.02	16.72	3	Vertical	135	1.54	-
2437MHz	Pass	PK	4.87388G	54.24	74.00	-19.76	11.22	3	Vertical	309	2.43	-
2437MHz	Pass	PK	7.2981G	56.48	74.00	-17.52	16.73	3	Vertical	135	1.54	-
2437MHz	Pass	AV	4.87394G	53.37	54.00	-0.63	11.22	3	Horizontal	99	2.99	-
2437MHz	Pass	AV	7.32462G	43.83	54.00	-10.17	16.71	3	Horizontal	8	2.87	-
2437MHz	Pass	PK	4.874G	57.04	74.00	-16.96	11.22	3	Horizontal	99	2.99	-
2437MHz	Pass	PK	7.3173G	56.70	74.00	-17.30	16.71	3	Horizontal	8	2.87	-
2457MHz	Pass	AV	2.4578G	107.62	Inf	-Inf	32.10	3	Vertical	337	2.93	-
2457MHz	Pass	AV	2.4838G	49.80	54.00	-4.20	32.19	3	Vertical	337	2.93	-
2457MHz	Pass	PK	2.4578G	109.61	Inf	-Inf	32.10	3	Vertical	337	2.93	-
2457MHz	Pass	PK	2.4838G	60.55	74.00	-13.45	32.19	3	Vertical	337	2.93	-
2457MHz	Pass	AV	2.4578G	110.69	Inf	-Inf	32.10	3	Horizontal	27	1.07	-
2457MHz	Pass	AV	2.4835G	53.08	54.00	-0.92	32.19	3	Horizontal	27	1.07	-
2457MHz	Pass	PK	2.4578G	112.75	Inf	-Inf	32.10	3	Horizontal	27	1.07	-



Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2457MHz	Pass	PK	2.484G	61.65	74.00	-12.35	32.19	3	Horizontal	27	1.07	-
2462MHz	Pass	AV	2.4612G	107.12	Inf	-Inf	34.98	3	Vertical	275	2.22	-
2462MHz	Pass	AV	2.4872G	52.17	54.00	-1.83	34.96	3	Vertical	275	2.22	-
2462MHz	Pass	PK	2.461G	109.53	Inf	-Inf	34.98	3	Vertical	275	2.22	-
2462MHz	Pass	PK	2.4858G	63.97	74.00	-10.03	34.96	3	Vertical	275	2.22	-
2462MHz	Pass	AV	2.4612G	110.36	Inf	-Inf	34.98	3	Horizontal	90	2.80	-
2462MHz	Pass	AV	2.4868G	53.30	54.00	-0.70	34.96	3	Horizontal	90	2.80	-
2462MHz	Pass	PK	2.461G	112.72	Inf	-Inf	34.98	3	Horizontal	90	2.80	-
2462MHz	Pass	PK	2.4872G	63.86	74.00	-10.14	34.96	3	Horizontal	90	2.80	-
2462MHz	Pass	AV	4.92388G	48.91	54.00	-5.09	11.36	3	Vertical	172	2.96	-
2462MHz	Pass	AV	7.38528G	44.48	54.00	-9.52	16.63	3	Vertical	0	2.91	-
2462MHz	Pass	PK	4.924G	54.80	74.00	-19.20	11.36	3	Vertical	172	2.96	-
2462MHz	Pass	PK	7.37796G	56.61	74.00	-17.39	16.64	3	Vertical	0	2.91	-
2462MHz	Pass	AV	4.92394G	49.90	54.00	-4.10	11.36	3	Horizontal	98	2.91	-
2462MHz	Pass	AV	7.39878G	43.70	54.00	-10.30	16.62	3	Horizontal	203	1.50	-
2462MHz	Pass	PK	4.92394G	55.73	74.00	-18.27	11.36	3	Horizontal	98	2.91	-
2462MHz	Pass	PK	7.3839G	56.62	74.00	-17.38	16.64	3	Horizontal	203	1.50	-
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.39G	51.28	54.00	-2.72	35.04	3	Vertical	277	2.23	-
2412MHz	Pass	AV	2.417G	97.67	Inf	-Inf	35.01	3	Vertical	277	2.23	-
2412MHz	Pass	PK	2.39G	63.38	74.00	-10.62	35.04	3	Vertical	277	2.23	-
2412MHz	Pass	PK	2.4168G	106.61	Inf	-Inf	35.01	3	Vertical	277	2.23	-
2412MHz	Pass	AV	2.3898G	53.06	54.00	-0.94	35.04	3	Horizontal	88	2.58	-
2412MHz	Pass	AV	2.4066G	102.45	Inf	-Inf	35.01	3	Horizontal	88	2.58	-
2412MHz	Pass	PK	2.3898G	66.45	74.00	-7.55	35.04	3	Horizontal	88	2.58	-
2412MHz	Pass	PK	2.4086G	111.94	Inf	-Inf	35.01	3	Horizontal	88	2.58	-
2412MHz	Pass	AV	4.8223G	39.97	54.00	-14.03	11.13	3	Vertical	338	2.80	-
2412MHz	Pass	PK	4.8268G	51.72	74.00	-22.28	11.14	3	Vertical	338	2.80	-
2412MHz	Pass	AV	4.8215G	43.00	54.00	-11.00	11.13	3	Horizontal	128	2.91	-
2412MHz	Pass	PK	4.8271G	55.14	74.00	-18.86	11.14	3	Horizontal	128	2.91	-
2417MHz	Pass	AV	2.39G	51.69	54.00	-2.31	31.86	3	Vertical	3	2.69	-
2417MHz	Pass	AV	2.4126G	102.72	Inf	-Inf	31.93	3	Vertical	3	2.69	-
2417MHz	Pass	PK	2.39G	63.91	74.00	-10.09	31.86	3	Vertical	3	2.69	-
2417MHz	Pass	PK	2.4152G	111.43	Inf	-Inf	31.95	3	Vertical	3	2.69	-
2417MHz	Pass	AV	2.3898G	53.89	54.00	-0.11	31.86	3	Horizontal	29	2.40	-
2417MHz	Pass	AV	2.4216G	107.72	Inf	-Inf	31.97	3	Horizontal	29	2.40	-
2417MHz	Pass	PK	2.3898G	66.63	74.00	-7.37	31.86	3	Horizontal	29	2.40	-
2417MHz	Pass	PK	2.4194G	115.91	Inf	-Inf	31.96	3	Horizontal	29	2.40	-
2437MHz	Pass	AV	2.3882G	49.93	54.00	-4.07	35.05	3	Vertical	276	2.17	-
2437MHz	Pass	AV	2.4394G	104.66	Inf	-Inf	34.99	3	Vertical	276	2.17	-
2437MHz	Pass	AV	2.4838G	51.96	54.00	-2.04	34.96	3	Vertical	276	2.17	-
2437MHz	Pass	PK	2.3718G	61.79	74.00	-12.21	35.09	3	Vertical	276	2.17	-
2437MHz	Pass	PK	2.4394G	113.38	Inf	-Inf	34.99	3	Vertical	276	2.17	-
2437MHz	Pass	PK	2.4835G	67.76	74.00	-6.24	34.96	3	Vertical	276	2.17	-
2437MHz	Pass	AV	2.387G	50.16	54.00	-3.84	35.05	3	Horizontal	31	1.98	-
2437MHz	Pass	AV	2.4342G	108.15	Inf	-Inf	34.99	3	Horizontal	31	1.98	-
2437MHz	Pass	AV	2.4838G	52.94	54.00	-1.06	34.96	3	Horizontal	31	1.98	-
2437MHz	Pass	PK	2.385G	61.67	74.00	-12.33	35.05	3	Horizontal	31	1.98	-
2437MHz	Pass	PK	2.4338G	116.83	Inf	-Inf	34.99	3	Horizontal	31	1.98	-



Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2437MHz	Pass	PK	2.4842G	65.03	74.00	-8.97	34.96	3	Horizontal	31	1.98	-
2437MHz	Pass	AV	4.87142G	41.88	54.00	-12.12	11.22	3	Vertical	189	2.84	-
2437MHz	Pass	AV	7.31856G	44.70	54.00	-9.30	16.71	3	Vertical	78	1.67	-
2437MHz	Pass	PK	4.87136G	53.76	74.00	-20.24	11.22	3	Vertical	189	2.84	-
2437MHz	Pass	PK	7.31538G	56.87	74.00	-17.13	16.71	3	Vertical	78	1.67	-
2437MHz	Pass	AV	4.87142G	47.90	54.00	-6.10	11.22	3	Horizontal	114	2.97	-
2437MHz	Pass	AV	7.31868G	44.70	54.00	-9.30	16.71	3	Horizontal	49	1.35	-
2437MHz	Pass	PK	4.87676G	60.31	74.00	-13.69	11.23	3	Horizontal	114	2.97	-
2437MHz	Pass	PK	7.30236G	57.19	74.00	-16.81	16.73	3	Horizontal	49	1.35	-
2457MHz	Pass	AV	2.4516G	100.97	Inf	-Inf	32.07	3	Vertical	337	2.96	-
2457MHz	Pass	AV	2.4835G	49.56	54.00	-4.44	32.19	3	Vertical	337	2.96	-
2457MHz	Pass	PK	2.4512G	110.00	Inf	-Inf	32.07	3	Vertical	337	2.96	-
2457MHz	Pass	PK	2.4962G	60.60	74.00	-13.40	32.23	3	Vertical	337	2.96	-
2457MHz	Pass	AV	2.4518G	103.55	Inf	-Inf	32.07	3	Horizontal	29	2.96	-
2457MHz	Pass	AV	2.4842G	53.40	54.00	-0.60	32.19	3	Horizontal	29	2.96	-
2457MHz	Pass	PK	2.4538G	111.68	Inf	-Inf	32.08	3	Horizontal	29	2.96	-
2457MHz	Pass	PK	2.485G	64.46	74.00	-9.54	32.19	3	Horizontal	29	2.96	-
2462MHz	Pass	AV	2.457G	96.54	Inf	-Inf	34.98	3	Vertical	277	2.22	-
2462MHz	Pass	AV	2.4838G	51.96	54.00	-2.04	34.96	3	Vertical	277	2.22	-
2462MHz	Pass	PK	2.4588G	105.39	Inf	-Inf	34.97	3	Vertical	277	2.22	-
2462MHz	Pass	PK	2.4844G	63.81	74.00	-10.19	34.96	3	Vertical	277	2.22	-
2462MHz	Pass	AV	2.4568G	100.26	Inf	-Inf	34.98	3	Horizontal	86	2.87	-
2462MHz	Pass	AV	2.4838G	52.56	54.00	-1.44	34.96	3	Horizontal	86	2.87	-
2462MHz	Pass	PK	2.4588G	109.84	Inf	-Inf	34.97	3	Horizontal	86	2.87	-
2462MHz	Pass	PK	2.484G	64.56	74.00	-9.44	34.96	3	Horizontal	86	2.87	-
2462MHz	Pass	AV	4.9264G	39.09	54.00	-14.91	11.37	3	Vertical	142	2.92	-
2462MHz	Pass	AV	7.39236G	44.43	54.00	-9.57	16.63	3	Vertical	275	1.87	-
2462MHz	Pass	PK	4.9046G	50.82	74.00	-23.18	11.28	3	Vertical	142	2.92	-
2462MHz	Pass	PK	7.40076G	56.86	74.00	-17.14	16.62	3	Vertical	275	1.87	-
2462MHz	Pass	AV	4.9216G	39.93	54.00	-14.07	11.35	3	Horizontal	132	1.01	-
2462MHz	Pass	AV	7.401G	44.63	54.00	-9.37	16.62	3	Horizontal	210	1.41	-
2462MHz	Pass	PK	4.9216G	52.81	74.00	-21.19	11.35	3	Horizontal	132	1.01	-
2462MHz	Pass	PK	7.39686G	57.07	74.00	-16.93	16.61	3	Horizontal	210	1.41	-
802.11ac VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.39G	52.25	54.00	-1.75	35.04	3	Vertical	280	2.25	-
2412MHz	Pass	AV	2.4184G	96.34	Inf	-Inf	35.00	3	Vertical	280	2.25	-
2412MHz	Pass	PK	2.39G	63.33	74.00	-10.67	35.04	3	Vertical	280	2.25	-
2412MHz	Pass	PK	2.4158G	105.58	Inf	-Inf	35.01	3	Vertical	280	2.25	-
2412MHz	Pass	AV	2.3898G	53.77	54.00	-0.23	35.04	3	Horizontal	92	2.60	-
2412MHz	Pass	AV	2.4054G	99.98	Inf	-Inf	35.01	3	Horizontal	92	2.60	-
2412MHz	Pass	PK	2.3894G	64.35	74.00	-9.65	35.04	3	Horizontal	92	2.60	-
2412MHz	Pass	PK	2.4096G	109.57	Inf	-Inf	35.01	3	Horizontal	92	2.60	-
2412MHz	Pass	AV	4.82562G	38.41	54.00	-15.59	3.50	3	Vertical	168	1.82	-
2412MHz	Pass	PK	4.82271G	51.27	74.00	-22.73	3.49	3	Vertical	168	1.82	-
2412MHz	Pass	AV	4.8256G	41.03	54.00	-12.97	3.50	3	Horizontal	35	2.89	-
2412MHz	Pass	PK	4.8317G	54.34	74.00	-19.66	3.51	3	Horizontal	35	2.89	-
2417MHz	Pass	AV	2.3896G	50.80	54.00	-3.20	31.86	3	Vertical	337	2.69	-
2417MHz	Pass	AV	2.4124G	102.51	Inf	-Inf	31.93	3	Vertical	337	2.69	-
2417MHz	Pass	PK	2.3896G	61.29	74.00	-12.71	31.86	3	Vertical	337	2.69	-



Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2417MHz	Pass	PK	2.4196G	110.39	Inf	-Inf	31.96	3	Vertical	337	2.69	-
2417MHz	Pass	AV	2.39G	53.13	54.00	-0.87	31.86	3	Horizontal	30	2.39	-
2417MHz	Pass	AV	2.415G	107.44	Inf	-Inf	31.95	3	Horizontal	30	2.39	-
2417MHz	Pass	PK	2.389G	63.45	74.00	-10.55	31.85	3	Horizontal	30	2.39	-
2417MHz	Pass	PK	2.415G	116.14	Inf	-Inf	31.95	3	Horizontal	30	2.39	-
2437MHz	Pass	AV	2.3898G	50.85	54.00	-3.15	35.04	3	Vertical	277	2.17	-
2437MHz	Pass	AV	2.439G	104.33	Inf	-Inf	34.99	3	Vertical	277	2.17	-
2437MHz	Pass	AV	2.4838G	52.94	54.00	-1.06	34.96	3	Vertical	277	2.17	-
2437MHz	Pass	PK	2.3562G	61.69	74.00	-12.31	35.13	3	Vertical	277	2.17	-
2437MHz	Pass	PK	2.439G	113.47	Inf	-Inf	34.99	3	Vertical	277	2.17	-
2437MHz	Pass	PK	2.4862G	63.76	74.00	-10.24	34.96	3	Vertical	277	2.17	-
2437MHz	Pass	AV	2.389G	50.63	54.00	-3.37	35.04	3	Horizontal	42	2.53	-
2437MHz	Pass	AV	2.4394G	106.30	Inf	-Inf	34.99	3	Horizontal	42	2.53	-
2437MHz	Pass	AV	2.4838G	52.94	54.00	-1.06	34.96	3	Horizontal	42	2.53	-
2437MHz	Pass	PK	2.3858G	61.73	74.00	-12.27	35.05	3	Horizontal	42	2.53	-
2437MHz	Pass	PK	2.4434G	115.29	Inf	-Inf	34.98	3	Horizontal	42	2.53	-
2437MHz	Pass	PK	2.4835G	63.32	74.00	-10.68	34.96	3	Horizontal	42	2.53	-
2437MHz	Pass	AV	4.8752G	48.05	54.00	-5.95	3.62	3	Vertical	8	2.86	-
2437MHz	Pass	PK	4.8746G	59.72	74.00	-14.28	3.61	3	Vertical	8	2.86	-
2437MHz	Pass	AV	4.8751G	51.75	54.00	-2.25	3.62	3	Horizontal	304	1.01	-
2437MHz	Pass	PK	4.8817G	62.54	74.00	-11.46	3.63	3	Horizontal	304	1.01	-
2457MHz	Pass	AV	2.4548G	100.39	Inf	-Inf	32.08	3	Vertical	338	2.95	-
2457MHz	Pass	AV	2.4835G	50.25	54.00	-3.75	32.19	3	Vertical	338	2.95	-
2457MHz	Pass	PK	2.4558G	108.69	Inf	-Inf	32.09	3	Vertical	338	2.95	-
2457MHz	Pass	PK	2.4838G	61.82	74.00	-12.18	32.19	3	Vertical	338	2.95	-
2457MHz	Pass	AV	2.4546G	103.21	Inf	-Inf	32.08	3	Horizontal	15	1.10	-
2457MHz	Pass	AV	2.4844G	53.24	54.00	-0.76	32.19	3	Horizontal	15	1.10	-
2457MHz	Pass	PK	2.4558G	111.51	Inf	-Inf	32.09	3	Horizontal	15	1.10	-
2457MHz	Pass	PK	2.4858G	63.18	74.00	-10.82	32.20	3	Horizontal	15	1.10	-
2462MHz	Pass	AV	2.4598G	94.99	Inf	-Inf	34.98	3	Vertical	276	2.22	-
2462MHz	Pass	AV	2.4835G	52.36	54.00	-1.64	34.96	3	Vertical	276	2.22	-
2462MHz	Pass	PK	2.4574G	104.27	Inf	-Inf	34.98	3	Vertical	276	2.22	-
2462MHz	Pass	PK	2.4958G	63.09	74.00	-10.91	34.95	3	Vertical	276	2.22	-
2462MHz	Pass	AV	2.4598G	97.95	Inf	-Inf	34.98	3	Horizontal	92	2.80	-
2462MHz	Pass	AV	2.4835G	53.64	54.00	-0.36	34.96	3	Horizontal	92	2.80	-
2462MHz	Pass	PK	2.457G	107.99	Inf	-Inf	34.98	3	Horizontal	92	2.80	-
2462MHz	Pass	PK	2.485G	64.81	74.00	-9.19	34.96	3	Horizontal	92	2.80	-
2462MHz	Pass	AV	4.92527G	36.52	54.00	-17.48	3.74	3	Vertical	11	1.41	-
2462MHz	Pass	PK	4.92216G	49.02	74.00	-24.98	3.73	3	Vertical	11	1.41	-
2462MHz	Pass	AV	4.92335G	39.30	54.00	-14.70	3.73	3	Horizontal	285	1.86	-
2462MHz	Pass	PK	4.9261G	52.68	74.00	-21.32	3.74	3	Horizontal	285	1.86	-
802.11ac VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	AV	2.3896G	51.87	54.00	-2.13	35.04	3	Vertical	278	2.05	-
2422MHz	Pass	AV	2.4296G	91.77	Inf	-Inf	34.99	3	Vertical	278	2.05	-
2422MHz	Pass	AV	2.4852G	51.10	54.00	-2.90	34.96	3	Vertical	278	2.05	-
2422MHz	Pass	PK	2.3844G	64.58	74.00	-9.42	35.05	3	Vertical	278	2.05	-
2422MHz	Pass	PK	2.4344G	100.73	Inf	-Inf	34.99	3	Vertical	278	2.05	-
2422MHz	Pass	PK	2.4936G	62.31	74.00	-11.69	34.95	3	Vertical	278	2.05	-
2422MHz	Pass	AV	2.3892G	53.13	54.00	-0.87	35.04	3	Horizontal	90	1.00	-



Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2422MHz	Pass	AV	2.4296G	95.14	Inf	-Inf	34.99	3	Horizontal	90	1.00	-
2422MHz	Pass	AV	2.4844G	51.32	54.00	-2.68	34.96	3	Horizontal	90	1.00	-
2422MHz	Pass	PK	2.3892G	69.60	74.00	-4.40	35.04	3	Horizontal	90	1.00	-
2422MHz	Pass	PK	2.4244G	105.06	Inf	-Inf	35.00	3	Horizontal	90	1.00	-
2422MHz	Pass	PK	2.4952G	63.69	74.00	-10.31	34.95	3	Horizontal	90	1.00	-
2422MHz	Pass	AV	4.84419G	32.25	54.00	-21.75	3.54	3	Vertical	155	1.69	-
2422MHz	Pass	PK	4.84407G	42.87	74.00	-31.13	3.54	3	Vertical	155	1.69	-
2422MHz	Pass	AV	4.84369G	35.51	54.00	-18.49	3.54	3	Horizontal	296	1.46	-
2422MHz	Pass	PK	4.84533G	44.37	74.00	-29.63	3.54	3	Horizontal	296	1.46	-
2437MHz	Pass	AV	2.3486G	50.45	54.00	-3.55	35.15	3	Vertical	276	2.19	-
2437MHz	Pass	AV	2.4446G	92.35	Inf	-Inf	34.98	3	Vertical	276	2.19	-
2437MHz	Pass	AV	2.4835G	52.75	54.00	-1.25	34.96	3	Vertical	276	2.19	-
2437MHz	Pass	PK	2.3634G	62.38	74.00	-11.62	35.11	3	Vertical	276	2.19	-
2437MHz	Pass	PK	2.4474G	101.93	Inf	-Inf	34.99	3	Vertical	276	2.19	-
2437MHz	Pass	PK	2.4835G	63.32	74.00	-10.68	34.96	3	Vertical	276	2.19	-
2437MHz	Pass	AV	2.3898G	51.07	54.00	-2.93	35.04	3	Horizontal	91	1.01	-
2437MHz	Pass	AV	2.4406G	94.95	Inf	-Inf	34.99	3	Horizontal	91	1.01	-
2437MHz	Pass	AV	2.4838G	52.94	54.00	-1.06	34.96	3	Horizontal	91	1.01	-
2437MHz	Pass	PK	2.3862G	65.49	74.00	-8.51	35.06	3	Horizontal	91	1.01	-
2437MHz	Pass	PK	2.433G	105.07	Inf	-Inf	34.99	3	Horizontal	91	1.01	-
2437MHz	Pass	PK	2.4858G	65.17	74.00	-8.83	34.96	3	Horizontal	91	1.01	-
2437MHz	Pass	AV	4.87518G	34.95	54.00	-19.05	3.62	3	Vertical	104	1.73	-
2437MHz	Pass	PK	4.87277G	46.89	74.00	-27.11	3.61	3	Vertical	104	1.73	-
2437MHz	Pass	AV	4.8753G	36.74	54.00	-17.26	3.62	3	Horizontal	115	1.01	-
2437MHz	Pass	PK	4.8812G	48.12	74.00	-25.88	3.63	3	Horizontal	115	1.01	-
2447MHz	Pass	AV	2.3886G	48.71	54.00	-5.29	31.85	3	Vertical	338	2.94	-
2447MHz	Pass	AV	2.439G	92.22	Inf	-Inf	32.03	3	Vertical	338	2.94	-
2447MHz	Pass	AV	2.4842G	50.90	54.00	-3.10	32.19	3	Vertical	338	2.94	-
2447MHz	Pass	PK	2.3558G	59.27	74.00	-14.73	31.73	3	Vertical	338	2.94	-
2447MHz	Pass	PK	2.4342G	101.52	Inf	-Inf	32.01	3	Vertical	338	2.94	-
2447MHz	Pass	PK	2.4842G	61.00	74.00	-13.00	32.19	3	Vertical	338	2.94	-
2447MHz	Pass	AV	2.3894G	48.72	54.00	-5.28	31.85	3	Horizontal	13	1.50	-
2447MHz	Pass	AV	2.4502G	93.70	Inf	-Inf	32.07	3	Horizontal	13	1.50	-
2447MHz	Pass	AV	2.4838G	53.70	54.00	-0.30	32.19	3	Horizontal	13	1.50	-
2447MHz	Pass	PK	2.3878G	61.11	74.00	-12.89	31.85	3	Horizontal	13	1.50	-
2447MHz	Pass	PK	2.4562G	103.63	Inf	-Inf	32.09	3	Horizontal	13	1.50	-
2447MHz	Pass	PK	2.4922G	65.61	74.00	-8.39	32.22	3	Horizontal	13	1.50	-
2452MHz	Pass	AV	2.3884G	50.63	54.00	-3.37	35.05	3	Vertical	274	2.23	-
2452MHz	Pass	AV	2.4484G	89.44	Inf	-Inf	34.98	3	Vertical	274	2.23	-
2452MHz	Pass	AV	2.4848G	52.37	54.00	-1.63	34.96	3	Vertical	274	2.23	-
2452MHz	Pass	PK	2.39G	61.45	74.00	-12.55	35.04	3	Vertical	274	2.23	-
2452MHz	Pass	PK	2.4504G	98.15	Inf	-Inf	34.98	3	Vertical	274	2.23	-
2452MHz	Pass	PK	2.4844G	63.21	74.00	-10.79	34.96	3	Vertical	274	2.23	-
2452MHz	Pass	AV	2.3532G	50.42	54.00	-3.58	35.14	3	Horizontal	90	2.81	-
2452MHz	Pass	AV	2.4552G	92.95	Inf	-Inf	34.98	3	Horizontal	90	2.81	-
2452MHz	Pass	AV	2.4835G	53.65	54.00	-0.35	34.96	3	Horizontal	90	2.81	-
2452MHz	Pass	PK	2.368G	61.67	74.00	-12.33	35.10	3	Horizontal	90	2.81	-
2452MHz	Pass	PK	2.462G	103.68	Inf	-Inf	34.98	3	Horizontal	90	2.81	-
2452MHz	Pass	PK	2.4844G	66.92	74.00	-7.08	34.96	3	Horizontal	90	2.81	-

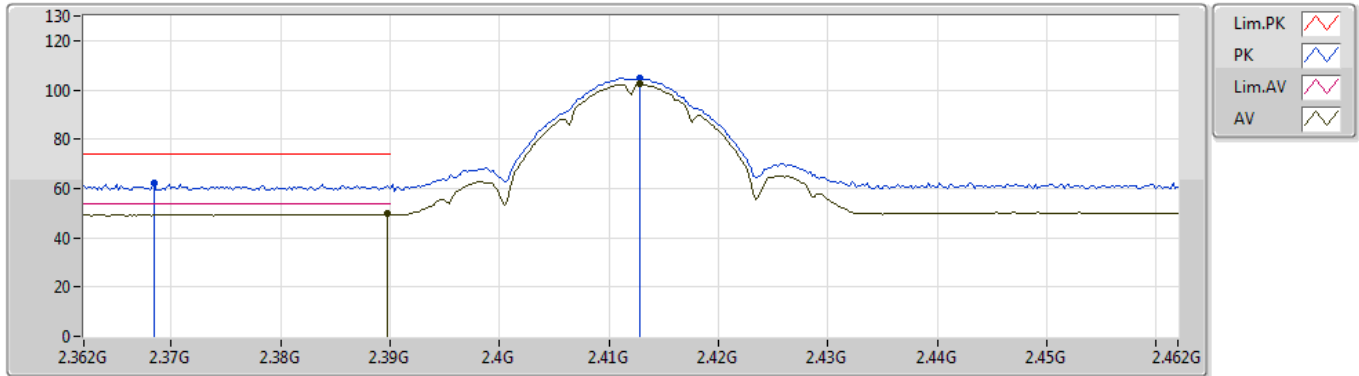


Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2452MHz	Pass	AV	4.90217G	32.43	54.00	-21.57	3.68	3	Vertical	198	1.86	-
2452MHz	Pass	PK	4.9036G	43.51	74.00	-30.49	3.69	3	Vertical	198	1.86	-
2452MHz	Pass	AV	4.90318G	33.45	54.00	-20.55	3.69	3	Horizontal	86	2.11	-
2452MHz	Pass	PK	4.90588G	44.43	74.00	-29.57	3.69	3	Horizontal	86	2.11	-

802.11b_Nss1,(1Mbps)_2TX

04/04/2019

2412MHz_TX

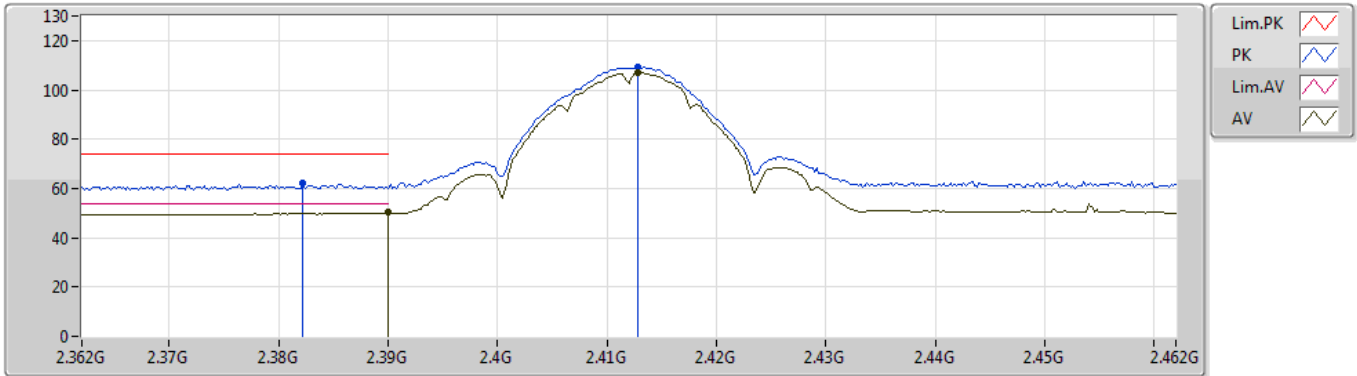


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	2.3898G	49.69	54.00	-4.31	35.04	3	Vertical	280	2.00	-
AV	2.4128G	102.38	Inf	-Inf	35.00	3	Vertical	280	2.00	-
PK	2.3684G	62.10	74.00	-11.90	35.10	3	Vertical	280	2.00	-
PK	2.4128G	104.69	Inf	-Inf	35.00	3	Vertical	280	2.00	-

802.11b_Nss1,(1Mbps)_2TX

04/04/2019

2412MHz_TX

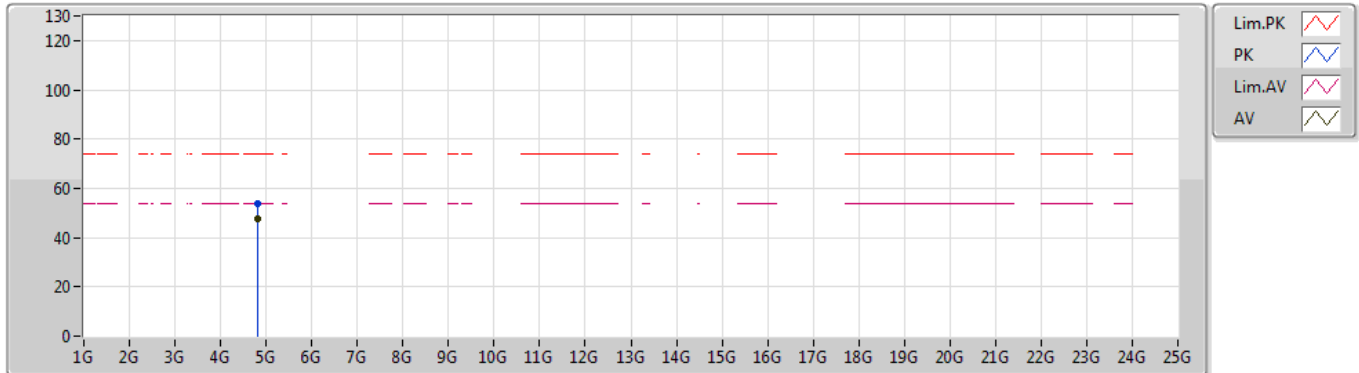


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	2.39G	50.18	54.00	-3.82	35.04	3	Horizontal	92	2.54	-
AV	2.4128G	107.04	Inf	-Inf	35.00	3	Horizontal	92	2.54	-
PK	2.3822G	62.21	74.00	-11.79	35.06	3	Horizontal	92	2.54	-
PK	2.4128G	109.42	Inf	-Inf	35.00	3	Horizontal	92	2.54	-

802.11b_Nss1,(1Mbps)_2TX

04/04/2019

2412MHz_TX

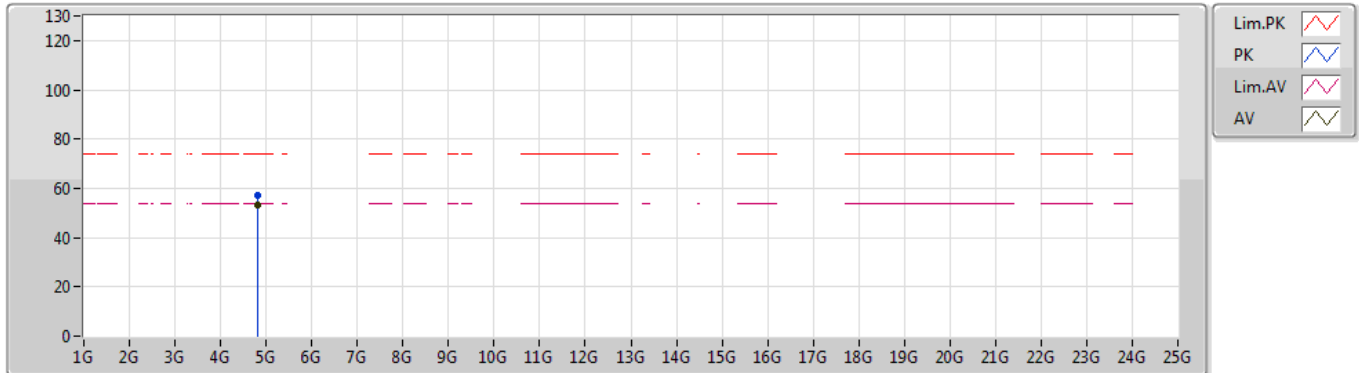


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	4.82394G	47.43	54.00	-6.57	11.13	3	Vertical	308	2.48	-
PK	4.824G	53.79	74.00	-20.21	11.13	3	Vertical	308	2.48	-

802.11b_Nss1,(1Mbps)_2TX

04/04/2019

2412MHz_TX

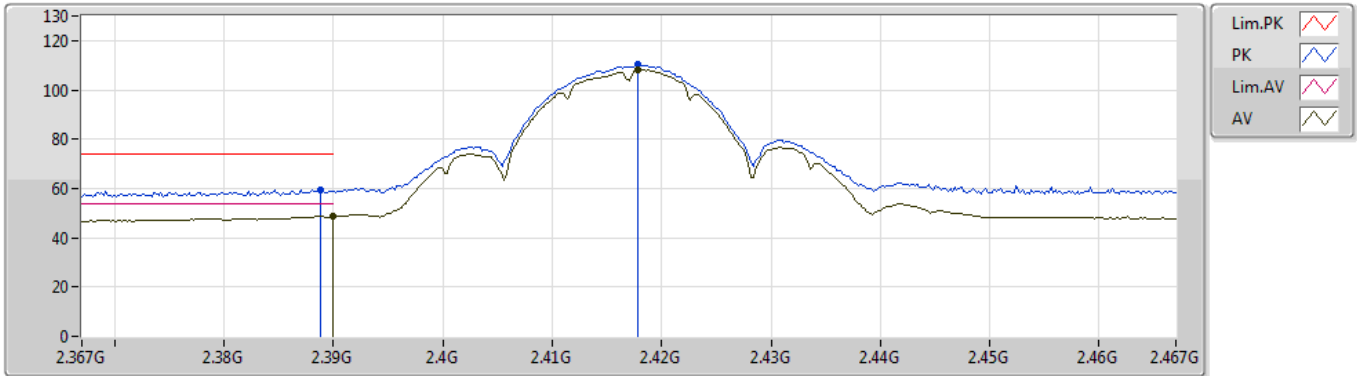


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	4.82394G	53.45	54.00	-0.55	11.13	3	Horizontal	91	2.99	-
PK	4.82388G	57.01	74.00	-16.99	11.13	3	Horizontal	91	2.99	-

802.11b_Nss1,(1Mbps)_2TX

04/04/2019

2417MHz_TX

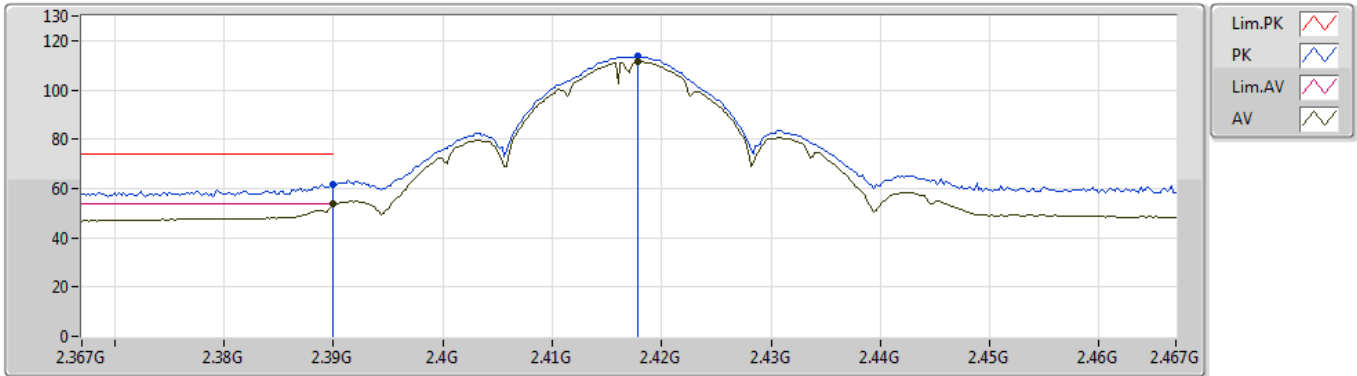


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	2.39G	48.73	54.00	-5.27	31.86	3	Vertical	148	2.99	-
AV	2.4178G	108.21	Inf	-Inf	31.95	3	Vertical	148	2.99	-
PK	2.3888G	59.60	74.00	-14.40	31.85	3	Vertical	148	2.99	-
PK	2.4178G	110.20	Inf	-Inf	31.95	3	Vertical	148	2.99	-

802.11b_Nss1,(1Mbps)_2TX

04/04/2019

2417MHz_TX

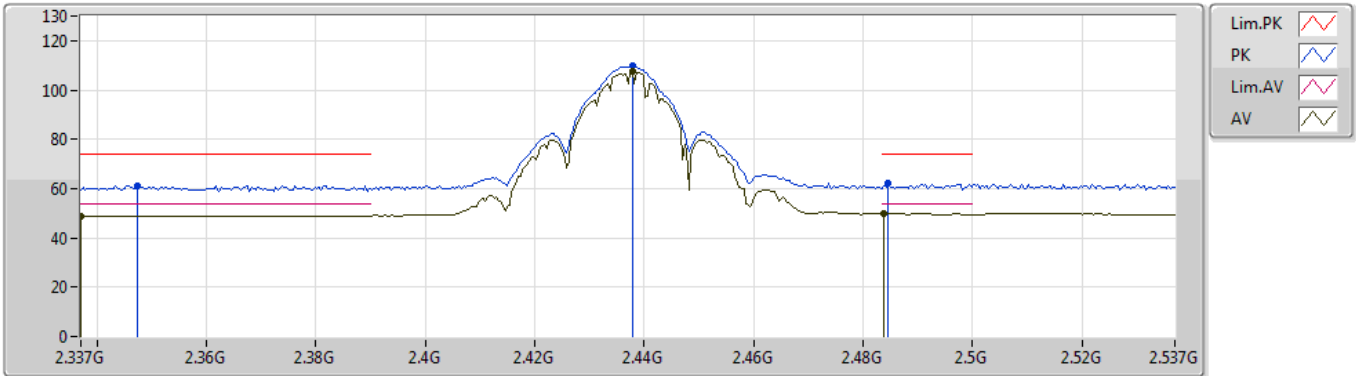


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	2.39G	53.63	54.00	-0.37	31.86	3	Horizontal	30	2.71	-
AV	2.4178G	111.71	Inf	-Inf	31.95	3	Horizontal	30	2.71	-
PK	2.39G	61.81	74.00	-12.19	31.86	3	Horizontal	30	2.71	-
PK	2.4178G	113.67	Inf	-Inf	31.95	3	Horizontal	30	2.71	-

802.11b_Nss1,(1Mbps)_2TX

04/04/2019

2437MHz_TX

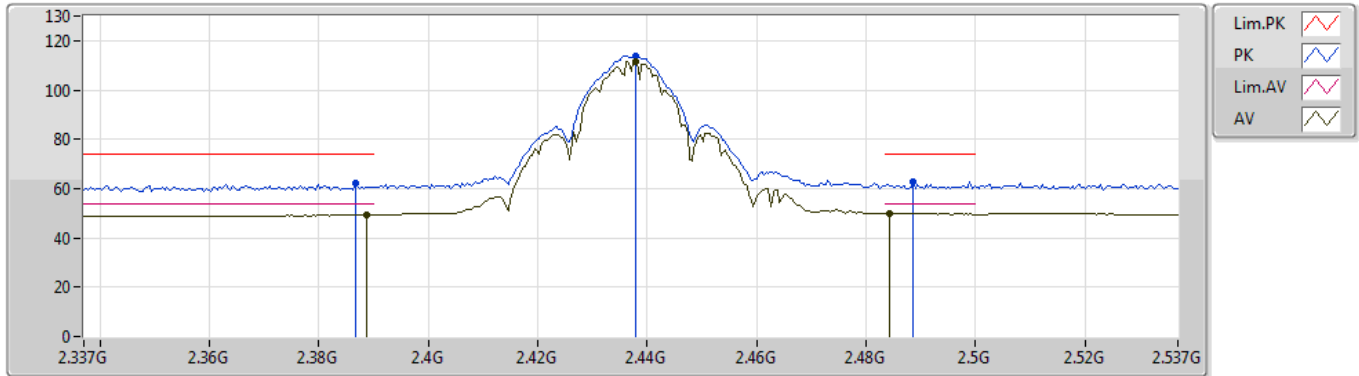


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	2.337G	49.03	54.00	-4.97	35.18	3	Vertical	277	2.17	-
AV	2.4378G	107.66	Inf	-Inf	34.99	3	Vertical	277	2.17	-
AV	2.4838G	49.87	54.00	-4.13	34.96	3	Vertical	277	2.17	-
PK	2.3474G	61.30	74.00	-12.70	35.15	3	Vertical	277	2.17	-
PK	2.4378G	109.87	Inf	-Inf	34.99	3	Vertical	277	2.17	-
PK	2.4846G	62.32	74.00	-11.68	34.96	3	Vertical	277	2.17	-

802.11b_Nss1,(1Mbps)_2TX

04/04/2019

2437MHz_TX

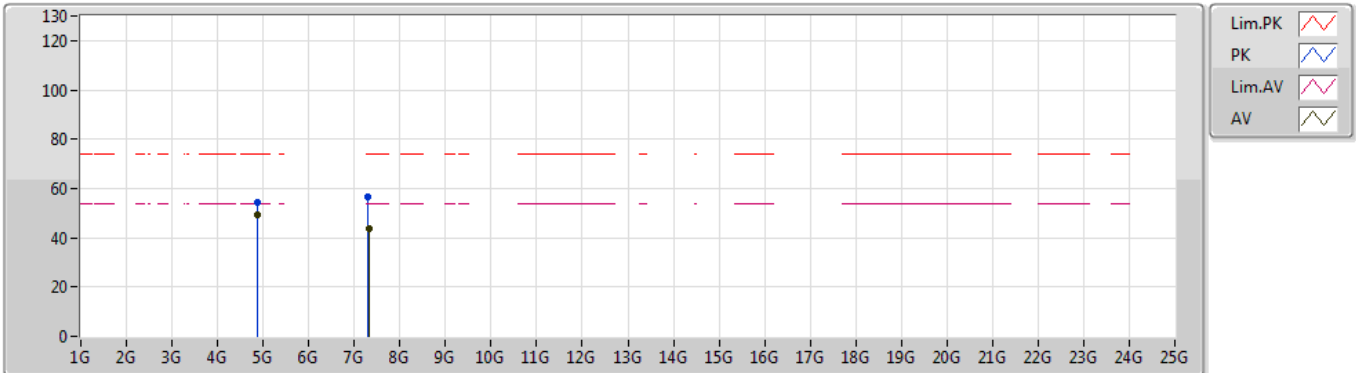


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	2.3886G	49.44	54.00	-4.56	35.05	3	Horizontal	93	1.01	-
AV	2.4378G	111.63	Inf	-Inf	34.99	3	Horizontal	93	1.01	-
AV	2.4842G	50.13	54.00	-3.87	34.96	3	Horizontal	93	1.01	-
PK	2.3866G	62.22	74.00	-11.78	35.05	3	Horizontal	93	1.01	-
PK	2.4378G	113.99	Inf	-Inf	34.99	3	Horizontal	93	1.01	-
PK	2.4886G	62.80	74.00	-11.20	34.95	3	Horizontal	93	1.01	-

802.11b_Nss1,(1Mbps)_2TX

04/04/2019

2437MHz_TX

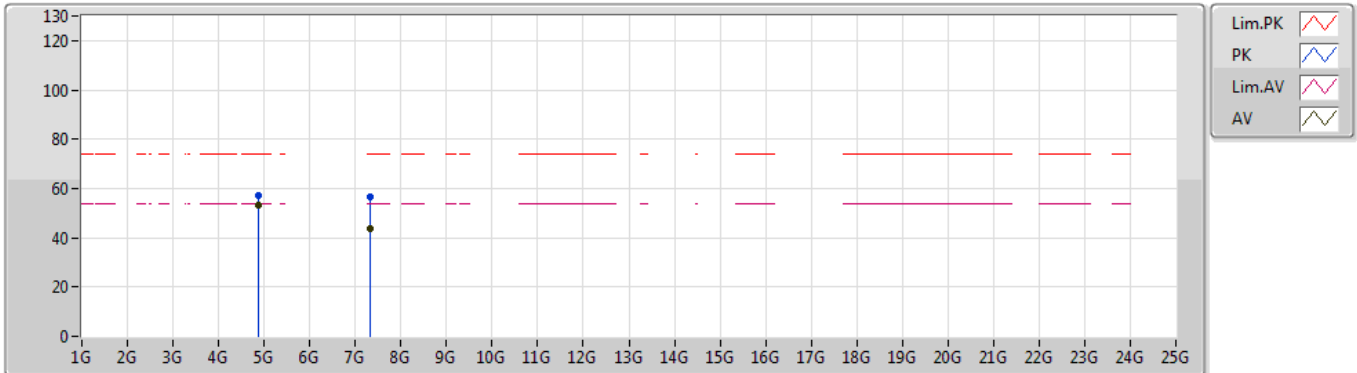


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	4.87394G	49.34	54.00	-4.66	11.22	3	Vertical	309	2.43	-
AV	7.3104G	43.98	54.00	-10.02	16.72	3	Vertical	135	1.54	-
PK	4.87388G	54.24	74.00	-19.76	11.22	3	Vertical	309	2.43	-
PK	7.2981G	56.48	74.00	-17.52	16.73	3	Vertical	135	1.54	-

802.11b_Nss1,(1Mbps)_2TX

04/04/2019

2437MHz_TX

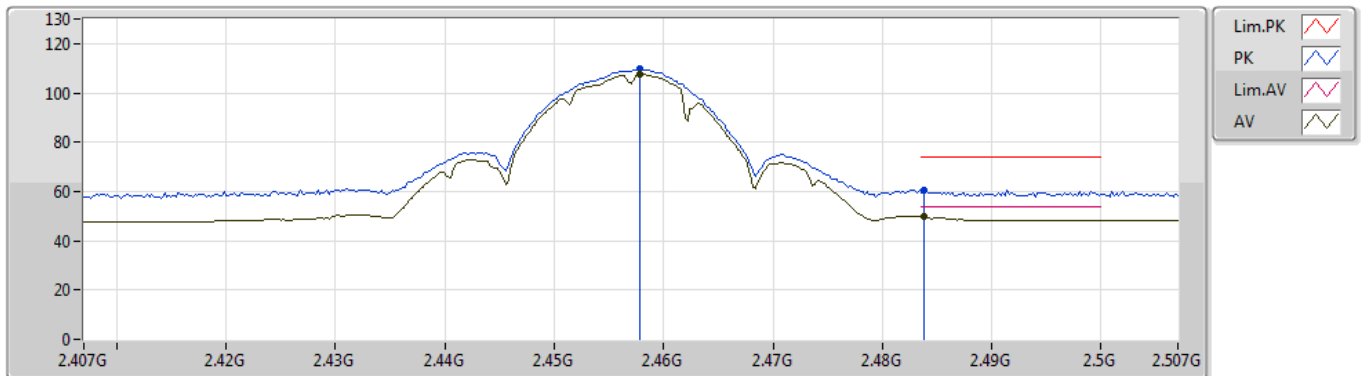


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	4.87394G	53.37	54.00	-0.63	11.22	3	Horizontal	99	2.99	-
AV	7.32462G	43.83	54.00	-10.17	16.71	3	Horizontal	8	2.87	-
PK	4.874G	57.04	74.00	-16.96	11.22	3	Horizontal	99	2.99	-
PK	7.3173G	56.70	74.00	-17.30	16.71	3	Horizontal	8	2.87	-

802.11b_Nss1,(1Mbps)_2TX

04/04/2019

2457MHz_TX

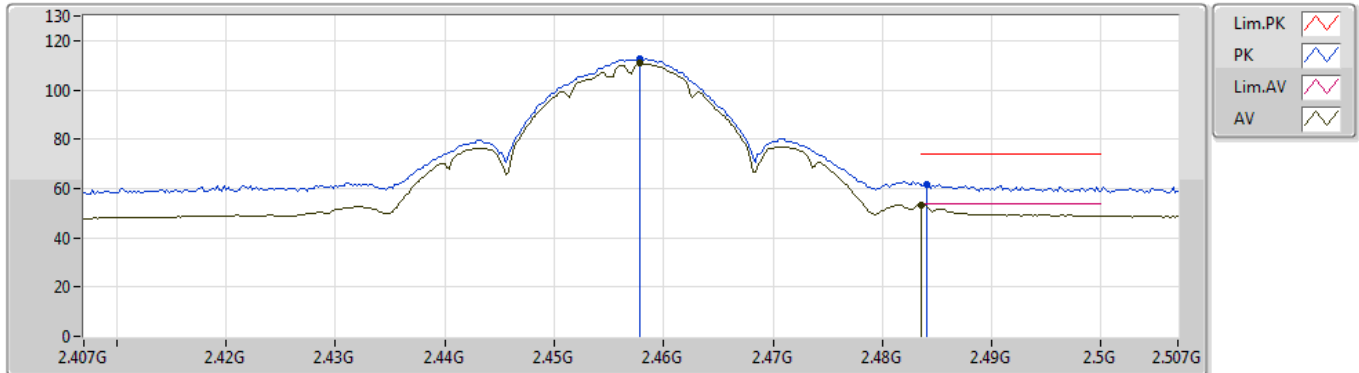


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	2.4578G	107.62	Inf	-Inf	32.10	3	Vertical	337	2.93	-
AV	2.4838G	49.80	54.00	-4.20	32.19	3	Vertical	337	2.93	-
PK	2.4578G	109.61	Inf	-Inf	32.10	3	Vertical	337	2.93	-
PK	2.4838G	60.55	74.00	-13.45	32.19	3	Vertical	337	2.93	-

802.11b_Nss1,(1Mbps)_2TX

04/04/2019

2457MHz_TX

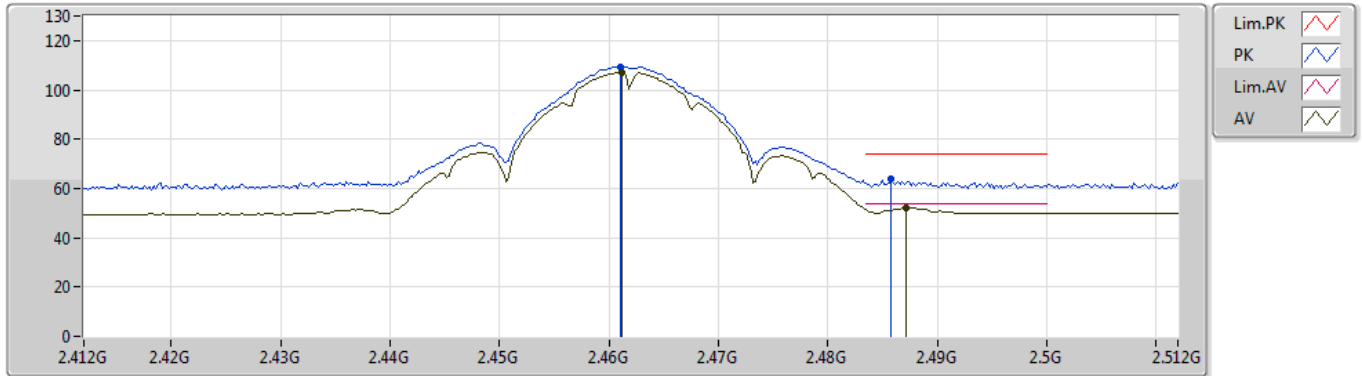


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	2.4578G	110.69	Inf	-Inf	32.10	3	Horizontal	27	1.07	-
AV	2.4835G	53.08	54.00	-0.92	32.19	3	Horizontal	27	1.07	-
PK	2.4578G	112.75	Inf	-Inf	32.10	3	Horizontal	27	1.07	-
PK	2.484G	61.65	74.00	-12.35	32.19	3	Horizontal	27	1.07	-

802.11b_Nss1,(1Mbps)_2TX

04/04/2019

2462MHz_TX

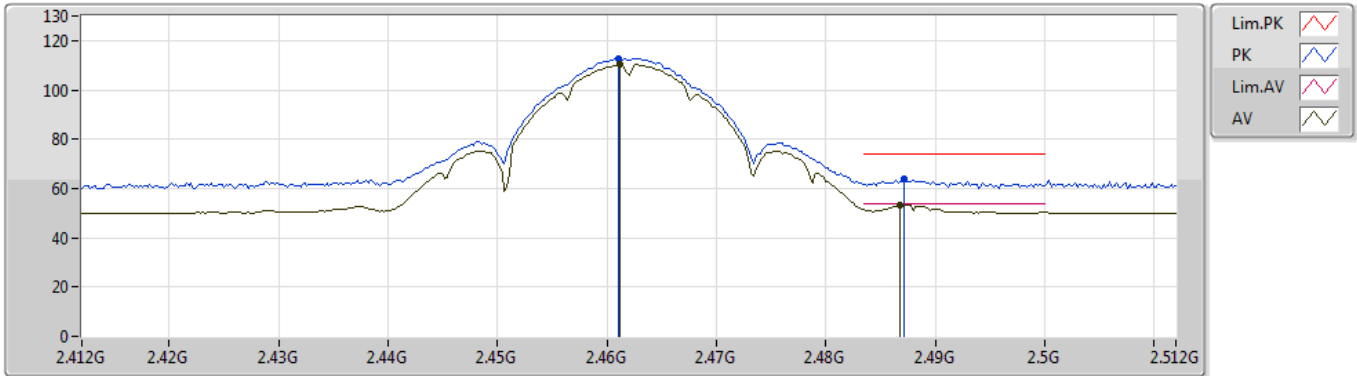


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	2.4612G	107.12	Inf	-Inf	34.98	3	Vertical	275	2.22	-
AV	2.4872G	52.17	54.00	-1.83	34.96	3	Vertical	275	2.22	-
PK	2.461G	109.53	Inf	-Inf	34.98	3	Vertical	275	2.22	-
PK	2.4858G	63.97	74.00	-10.03	34.96	3	Vertical	275	2.22	-

802.11b_Nss1,(1Mbps)_2TX

04/04/2019

2462MHz_TX

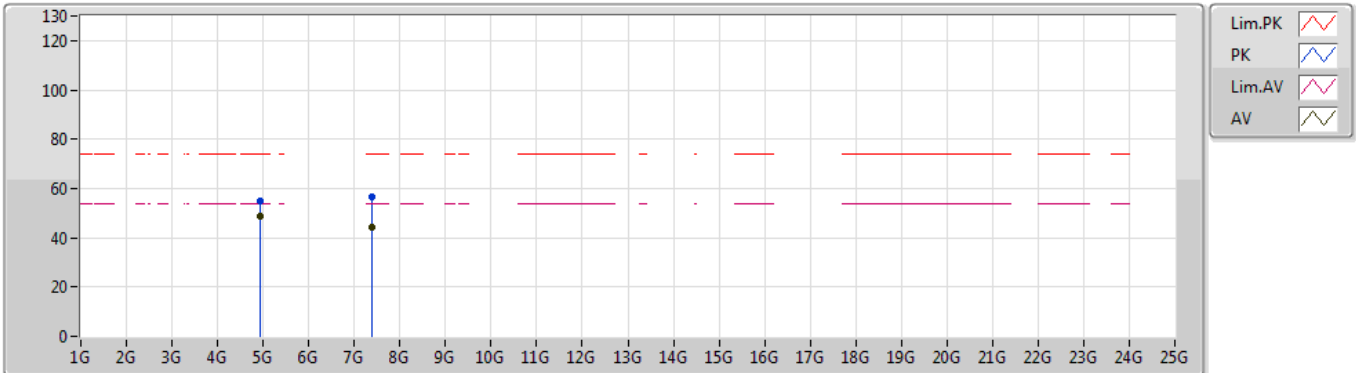


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	2.4612G	110.36	Inf	-Inf	34.98	3	Horizontal	90	2.80	-
AV	2.4868G	53.30	54.00	-0.70	34.96	3	Horizontal	90	2.80	-
PK	2.461G	112.72	Inf	-Inf	34.98	3	Horizontal	90	2.80	-
PK	2.4872G	63.86	74.00	-10.14	34.96	3	Horizontal	90	2.80	-

802.11b_Nss1,(1Mbps)_2TX

04/04/2019

2462MHz_TX

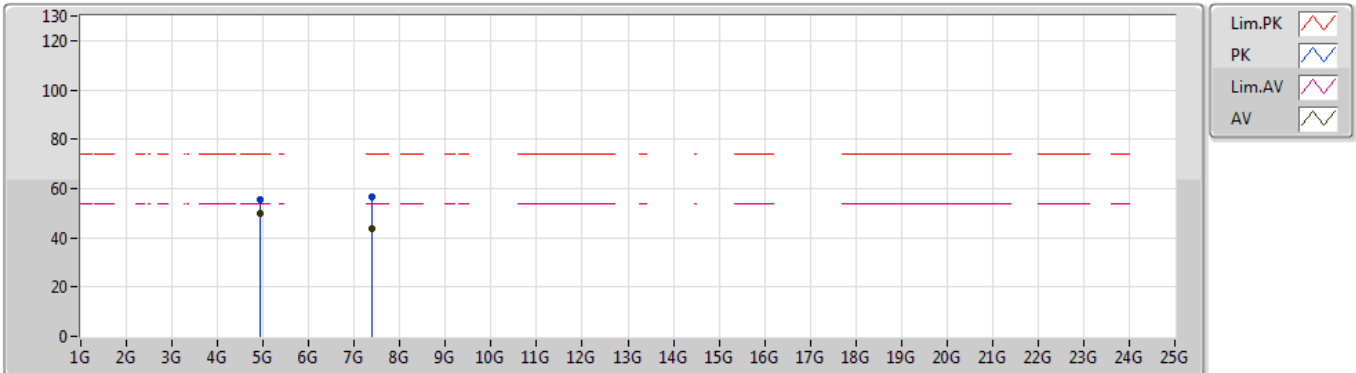


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	4.92388G	48.91	54.00	-5.09	11.36	3	Vertical	172	2.96	-
AV	7.38528G	44.48	54.00	-9.52	16.63	3	Vertical	0	2.91	-
PK	4.924G	54.80	74.00	-19.20	11.36	3	Vertical	172	2.96	-
PK	7.37796G	56.61	74.00	-17.39	16.64	3	Vertical	0	2.91	-

802.11b_Nss1,(1Mbps)_2TX

04/04/2019

2462MHz_TX

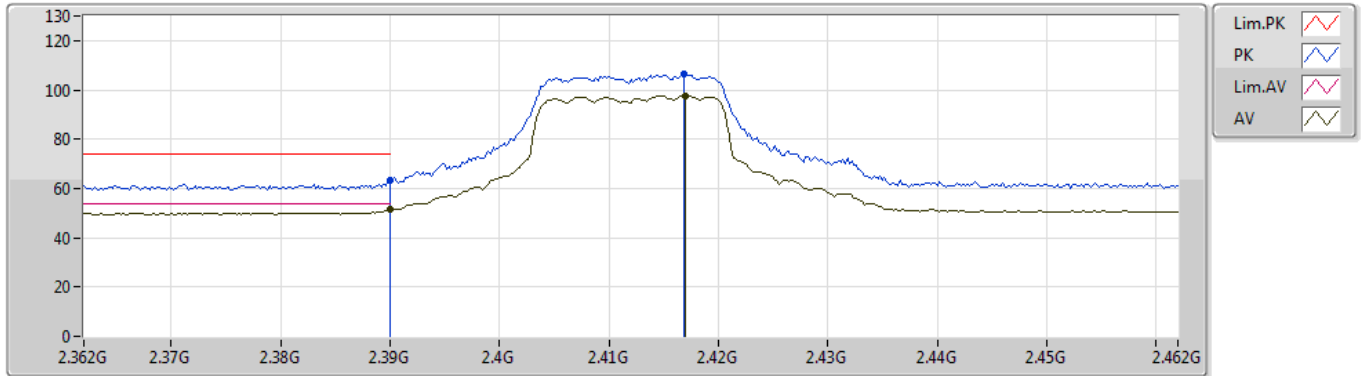


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	4.92394G	49.90	54.00	-4.10	11.36	3	Horizontal	98	2.91	-
AV	7.39878G	43.70	54.00	-10.30	16.62	3	Horizontal	203	1.50	-
PK	4.92394G	55.73	74.00	-18.27	11.36	3	Horizontal	98	2.91	-
PK	7.3839G	56.62	74.00	-17.38	16.64	3	Horizontal	203	1.50	-

802.11g_Nss1,(6Mbps)_2TX

04/04/2019

2412MHz_TX

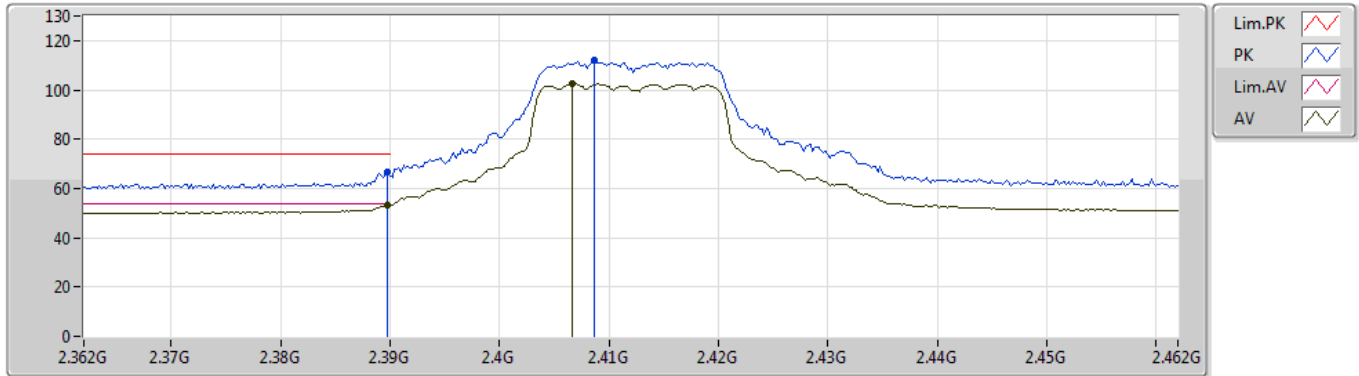


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	2.39G	51.28	54.00	-2.72	35.04	3	Vertical	277	2.23	-
AV	2.417G	97.67	Inf	-Inf	35.01	3	Vertical	277	2.23	-
PK	2.39G	63.38	74.00	-10.62	35.04	3	Vertical	277	2.23	-
PK	2.4168G	106.61	Inf	-Inf	35.01	3	Vertical	277	2.23	-

802.11g_Nss1,(6Mbps)_2TX

04/04/2019

2412MHz_TX

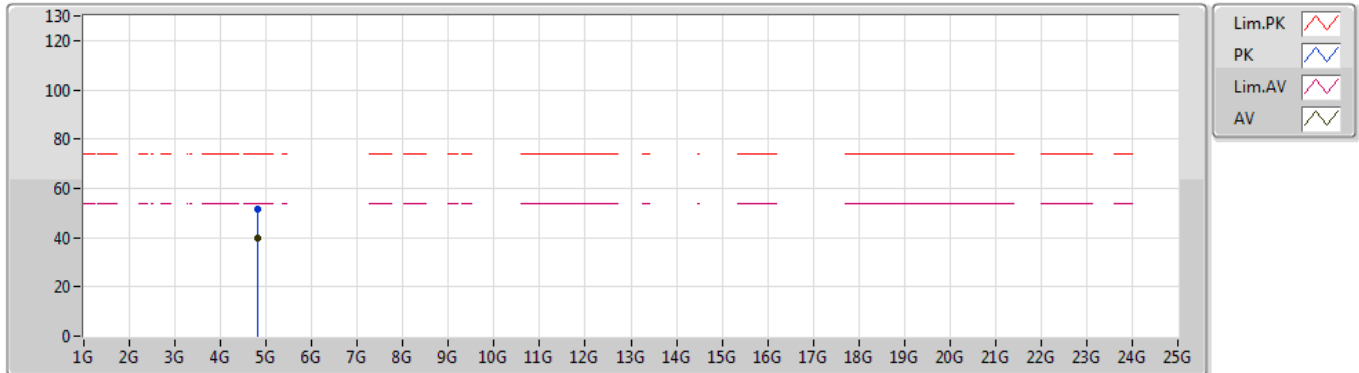


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	2.3898G	53.06	54.00	-0.94	35.04	3	Horizontal	88	2.58	-
AV	2.4066G	102.45	Inf	-Inf	35.01	3	Horizontal	88	2.58	-
PK	2.3898G	66.45	74.00	-7.55	35.04	3	Horizontal	88	2.58	-
PK	2.4086G	111.94	Inf	-Inf	35.01	3	Horizontal	88	2.58	-

802.11g_Nss1,(6Mbps)_2TX

04/04/2019

2412MHz_TX

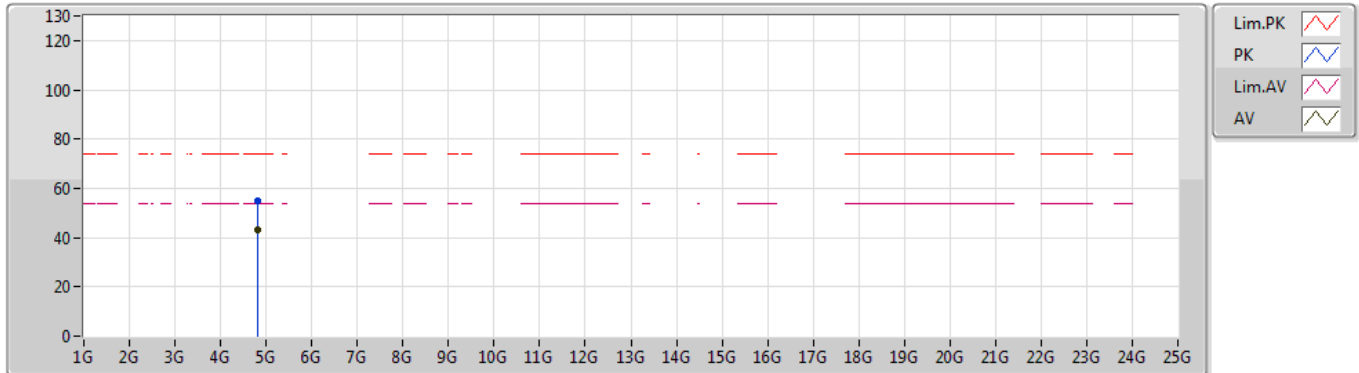


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	4.8223G	39.97	54.00	-14.03	11.13	3	Vertical	338	2.80	-
PK	4.8268G	51.72	74.00	-22.28	11.14	3	Vertical	338	2.80	-

802.11g_Nss1,(6Mbps)_2TX

04/04/2019

2412MHz_TX

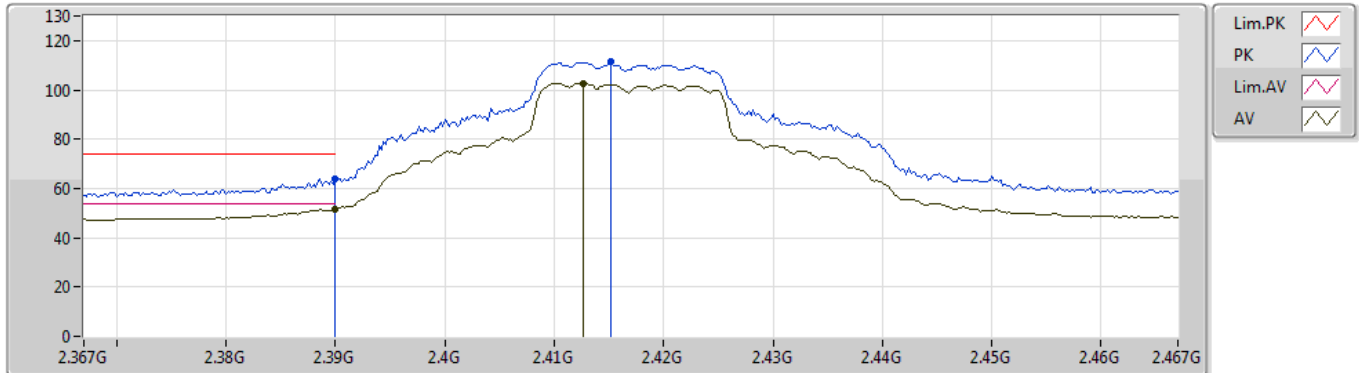


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	4.8215G	43.00	54.00	-11.00	11.13	3	Horizontal	128	2.91	-
PK	4.8271G	55.14	74.00	-18.86	11.14	3	Horizontal	128	2.91	-

802.11g_Nss1,(6Mbps)_2TX

04/04/2019

2417MHz_TX

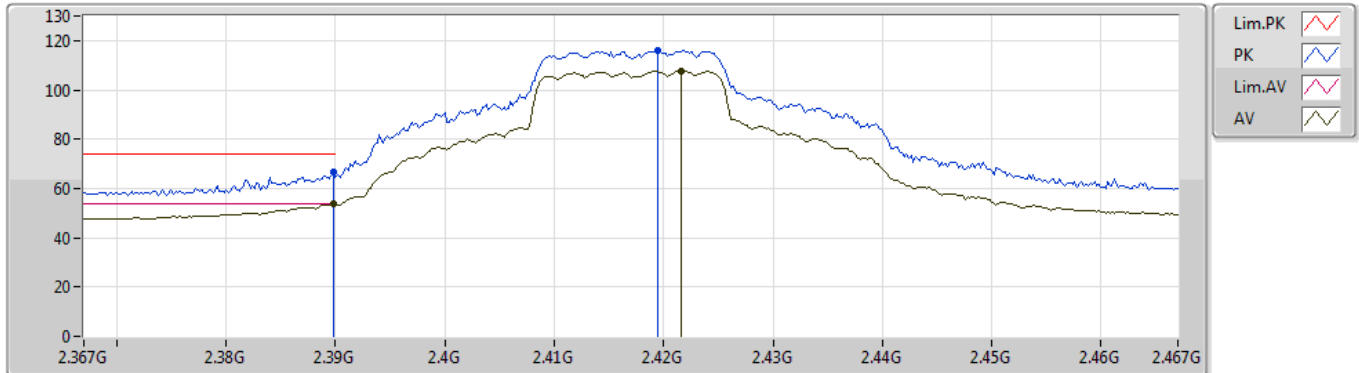


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	2.39G	51.69	54.00	-2.31	31.86	3	Vertical	3	2.69	-
AV	2.4126G	102.72	Inf	-Inf	31.93	3	Vertical	3	2.69	-
PK	2.39G	63.91	74.00	-10.09	31.86	3	Vertical	3	2.69	-
PK	2.4152G	111.43	Inf	-Inf	31.95	3	Vertical	3	2.69	-

802.11g_Nss1,(6Mbps)_2TX

04/04/2019

2417MHz_TX

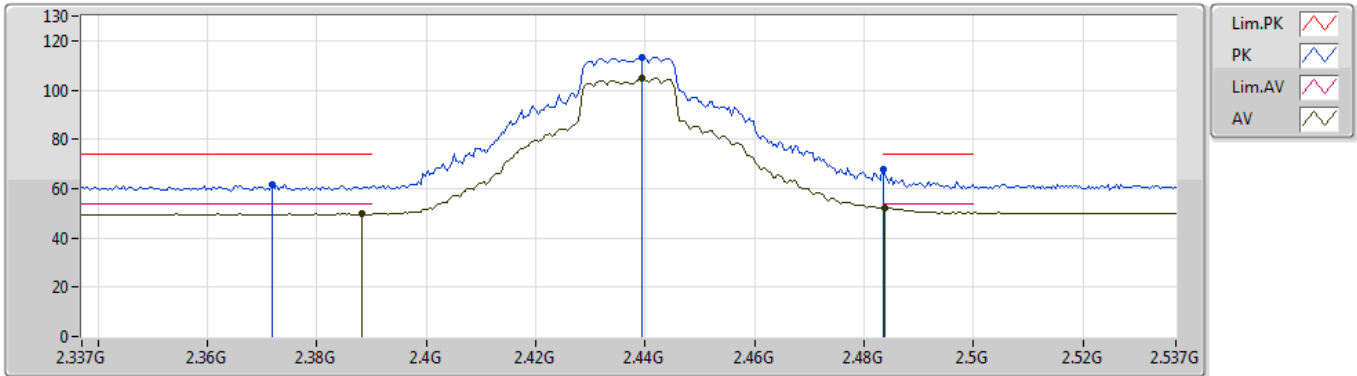


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	2.3898G	53.89	54.00	-0.11	31.86	3	Horizontal	29	2.40	-
AV	2.4216G	107.72	Inf	-Inf	31.97	3	Horizontal	29	2.40	-
PK	2.3898G	66.63	74.00	-7.37	31.86	3	Horizontal	29	2.40	-
PK	2.4194G	115.91	Inf	-Inf	31.96	3	Horizontal	29	2.40	-

802.11g_Nss1,(6Mbps)_2TX

04/04/2019

2437MHz_TX

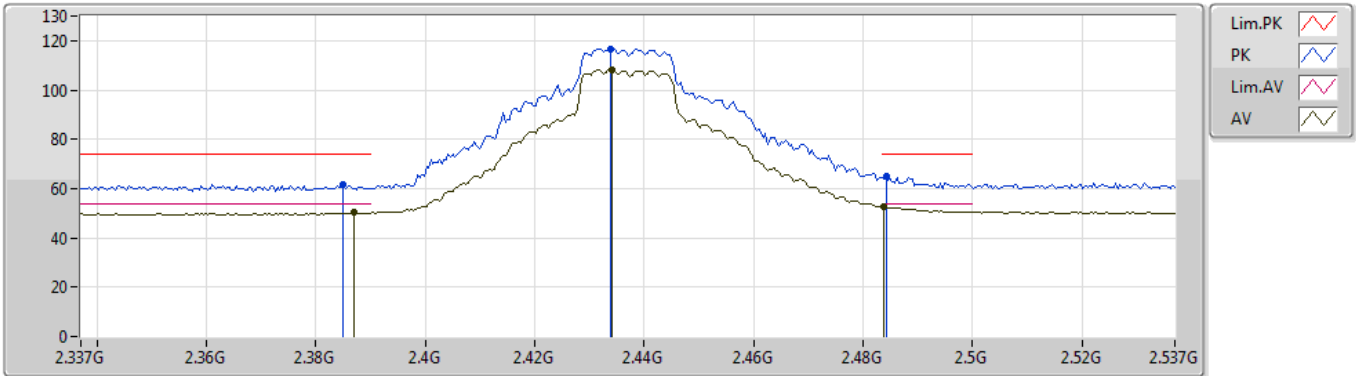


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	2.3882G	49.93	54.00	-4.07	35.05	3	Vertical	276	2.17	-
AV	2.4394G	104.66	Inf	-Inf	34.99	3	Vertical	276	2.17	-
AV	2.4838G	51.96	54.00	-2.04	34.96	3	Vertical	276	2.17	-
PK	2.3718G	61.79	74.00	-12.21	35.09	3	Vertical	276	2.17	-
PK	2.4394G	113.38	Inf	-Inf	34.99	3	Vertical	276	2.17	-
PK	2.4835G	67.76	74.00	-6.24	34.96	3	Vertical	276	2.17	-

802.11g_Nss1,(6Mbps)_2TX

04/04/2019

2437MHz_TX

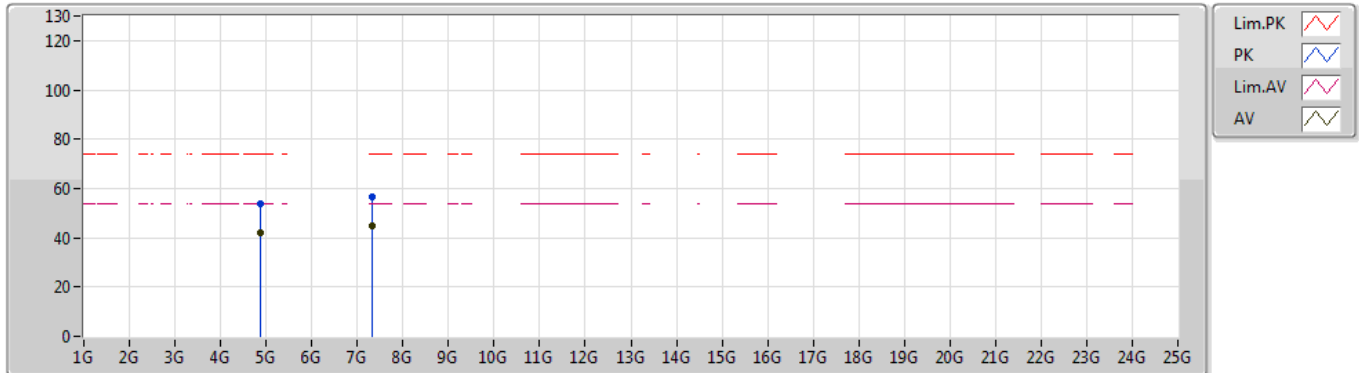


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	2.387G	50.16	54.00	-3.84	35.05	3	Horizontal	31	1.98	-
AV	2.4342G	108.15	Inf	-Inf	34.99	3	Horizontal	31	1.98	-
AV	2.4838G	52.94	54.00	-1.06	34.96	3	Horizontal	31	1.98	-
PK	2.385G	61.67	74.00	-12.33	35.05	3	Horizontal	31	1.98	-
PK	2.4338G	116.83	Inf	-Inf	34.99	3	Horizontal	31	1.98	-
PK	2.4842G	65.03	74.00	-8.97	34.96	3	Horizontal	31	1.98	-

802.11g_Nss1,(6Mbps)_2TX

04/04/2019

2437MHz_TX

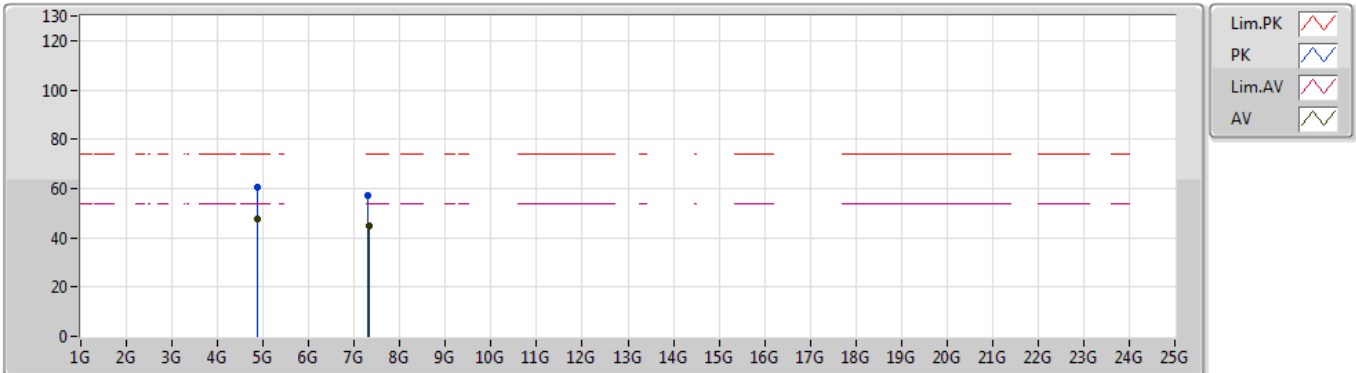


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	4.87142G	41.88	54.00	-12.12	11.22	3	Vertical	189	2.84	-
AV	7.31856G	44.70	54.00	-9.30	16.71	3	Vertical	78	1.67	-
PK	4.87136G	53.76	74.00	-20.24	11.22	3	Vertical	189	2.84	-
PK	7.31538G	56.87	74.00	-17.13	16.71	3	Vertical	78	1.67	-

802.11g_Nss1,(6Mbps)_2TX

04/04/2019

2437MHz_TX

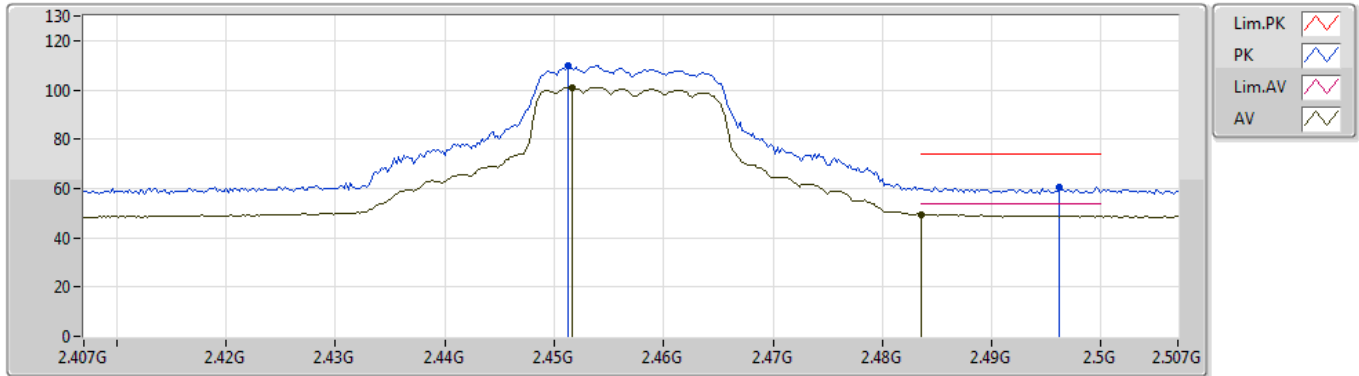


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	4.87142G	47.90	54.00	-6.10	11.22	3	Horizontal	114	2.97	-
AV	7.31868G	44.70	54.00	-9.30	16.71	3	Horizontal	49	1.35	-
PK	4.87676G	60.31	74.00	-13.69	11.23	3	Horizontal	114	2.97	-
PK	7.30236G	57.19	74.00	-16.81	16.73	3	Horizontal	49	1.35	-

802.11g_Nss1,(6Mbps)_2TX

04/04/2019

2457MHz_TX

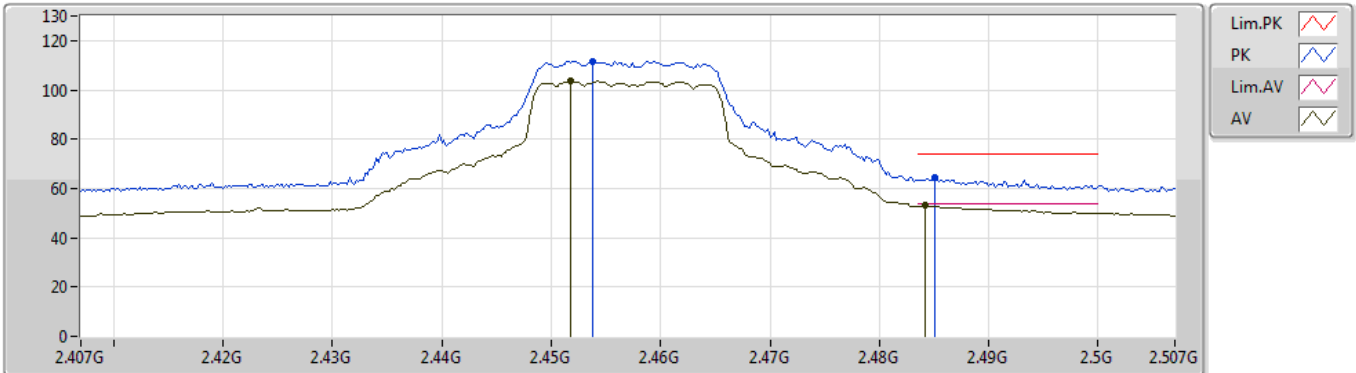


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	2.4516G	100.97	Inf	-Inf	32.07	3	Vertical	337	2.96	-
AV	2.4835G	49.56	54.00	-4.44	32.19	3	Vertical	337	2.96	-
PK	2.4512G	110.00	Inf	-Inf	32.07	3	Vertical	337	2.96	-
PK	2.4962G	60.60	74.00	-13.40	32.23	3	Vertical	337	2.96	-

802.11g_Nss1,(6Mbps)_2TX

04/04/2019

2457MHz_TX

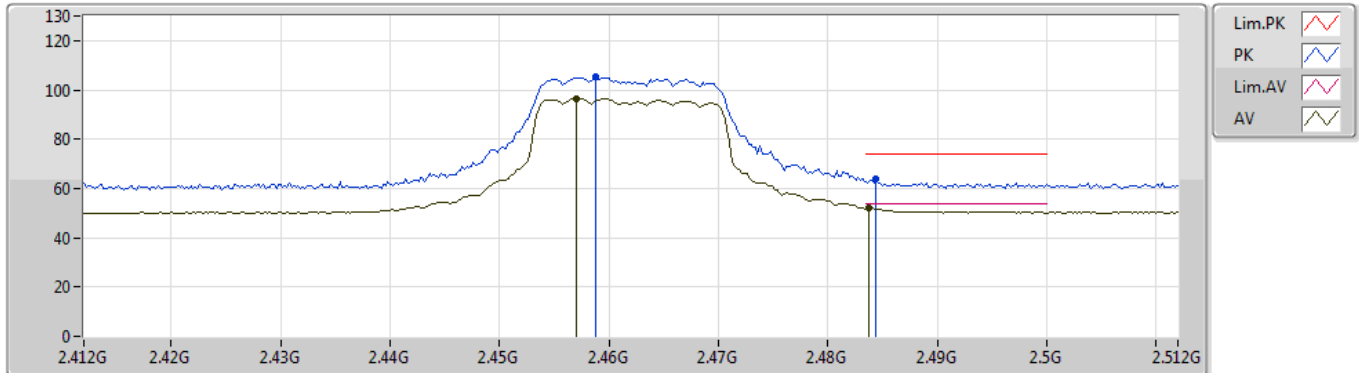


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	2.4518G	103.55	Inf	-Inf	32.07	3	Horizontal	29	2.96	-
AV	2.4842G	53.40	54.00	-0.60	32.19	3	Horizontal	29	2.96	-
PK	2.4538G	111.68	Inf	-Inf	32.08	3	Horizontal	29	2.96	-
PK	2.485G	64.46	74.00	-9.54	32.19	3	Horizontal	29	2.96	-

802.11g_Nss1,(6Mbps)_2TX

04/04/2019

2462MHz_TX

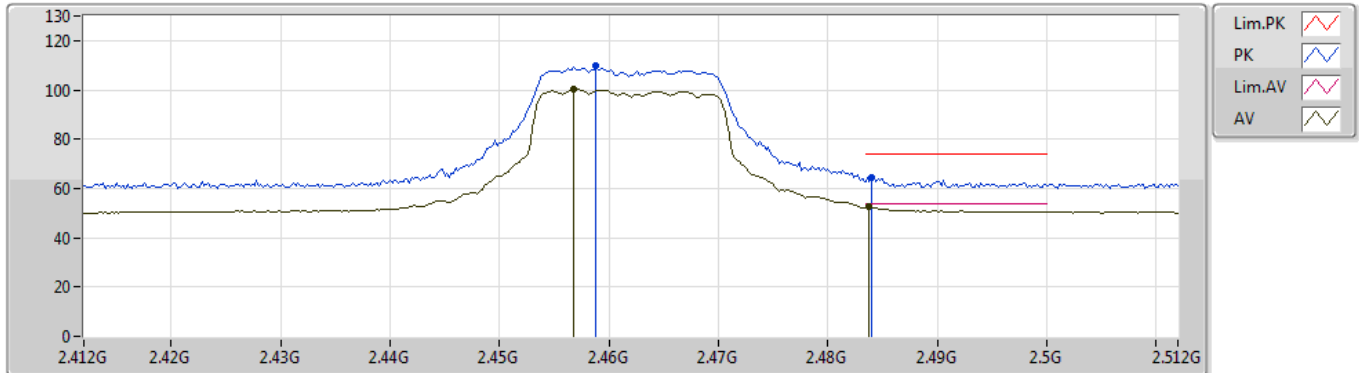


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	2.457G	96.54	Inf	-Inf	34.98	3	Vertical	277	2.22	-
AV	2.4838G	51.96	54.00	-2.04	34.96	3	Vertical	277	2.22	-
PK	2.4588G	105.39	Inf	-Inf	34.97	3	Vertical	277	2.22	-
PK	2.4844G	63.81	74.00	-10.19	34.96	3	Vertical	277	2.22	-

802.11g_Nss1,(6Mbps)_2TX

04/04/2019

2462MHz_TX

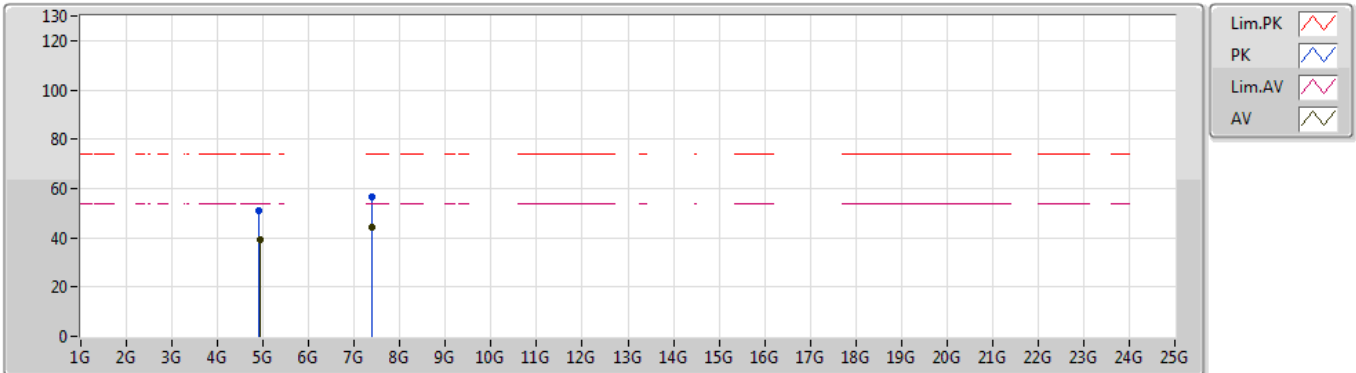


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	2.4568G	100.26	Inf	-Inf	34.98	3	Horizontal	86	2.87	-
AV	2.4838G	52.56	54.00	-1.44	34.96	3	Horizontal	86	2.87	-
PK	2.4588G	109.84	Inf	-Inf	34.97	3	Horizontal	86	2.87	-
PK	2.484G	64.56	74.00	-9.44	34.96	3	Horizontal	86	2.87	-

802.11g_Nss1,(6Mbps)_2TX

04/04/2019

2462MHz_TX

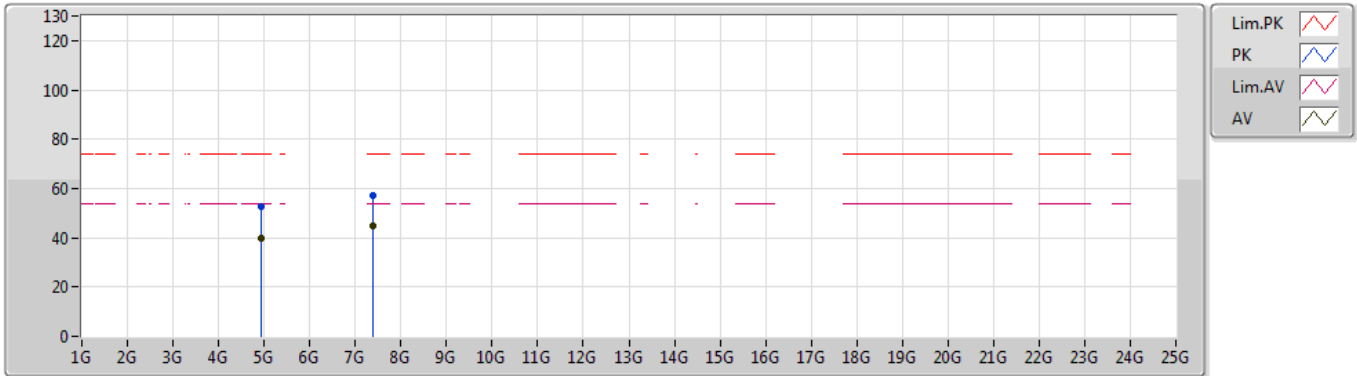


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	4.9264G	39.09	54.00	-14.91	11.37	3	Vertical	142	2.92	-
AV	7.39236G	44.43	54.00	-9.57	16.63	3	Vertical	275	1.87	-
PK	4.9046G	50.82	74.00	-23.18	11.28	3	Vertical	142	2.92	-
PK	7.40076G	56.86	74.00	-17.14	16.62	3	Vertical	275	1.87	-

802.11g_Nss1,(6Mbps)_2TX

04/04/2019

2462MHz_TX

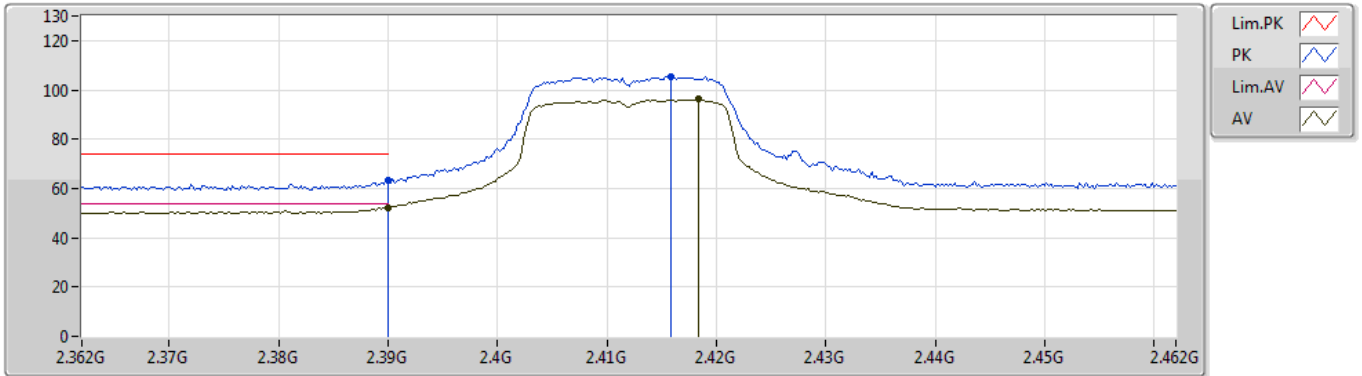


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	4.9216G	39.93	54.00	-14.07	11.35	3	Horizontal	132	1.01	-
AV	7.401G	44.63	54.00	-9.37	16.62	3	Horizontal	210	1.41	-
PK	4.9216G	52.81	74.00	-21.19	11.35	3	Horizontal	132	1.01	-
PK	7.39686G	57.07	74.00	-16.93	16.61	3	Horizontal	210	1.41	-

802.11ac VHT20_Nss1,(MCS0)_2TX

04/04/2019

2412MHz_TX

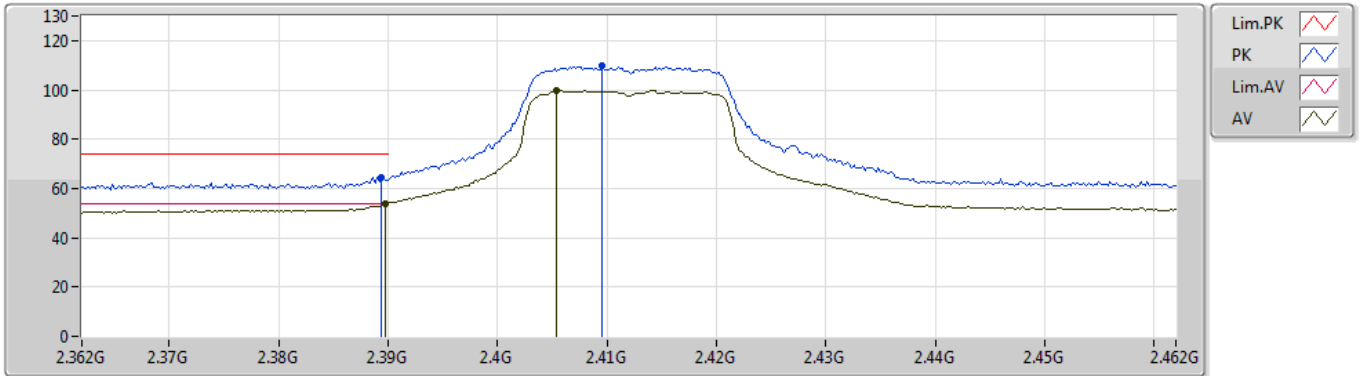


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	2.39G	52.25	54.00	-1.75	35.04	3	Vertical	280	2.25	-
AV	2.4184G	96.34	Inf	-Inf	35.00	3	Vertical	280	2.25	-
PK	2.39G	63.33	74.00	-10.67	35.04	3	Vertical	280	2.25	-
PK	2.4158G	105.58	Inf	-Inf	35.01	3	Vertical	280	2.25	-

802.11ac VHT20_Nss1,(MCS0)_2TX

04/04/2019

2412MHz_TX

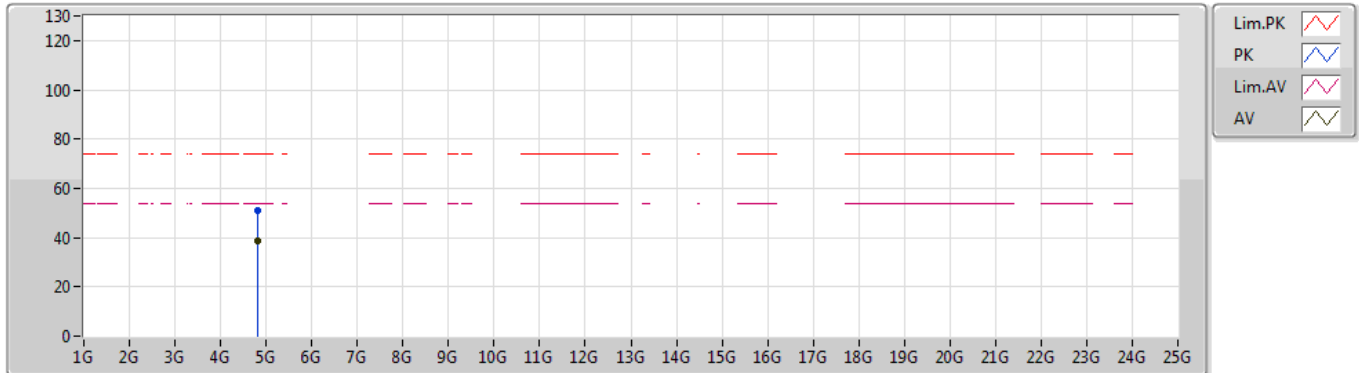


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	2.3898G	53.77	54.00	-0.23	35.04	3	Horizontal	92	2.60	-
AV	2.4054G	99.98	Inf	-Inf	35.01	3	Horizontal	92	2.60	-
PK	2.3894G	64.35	74.00	-9.65	35.04	3	Horizontal	92	2.60	-
PK	2.4096G	109.57	Inf	-Inf	35.01	3	Horizontal	92	2.60	-

802.11ac VHT20_Nss1,(MCS0)_2TX

04/04/2019

2412MHz_TX

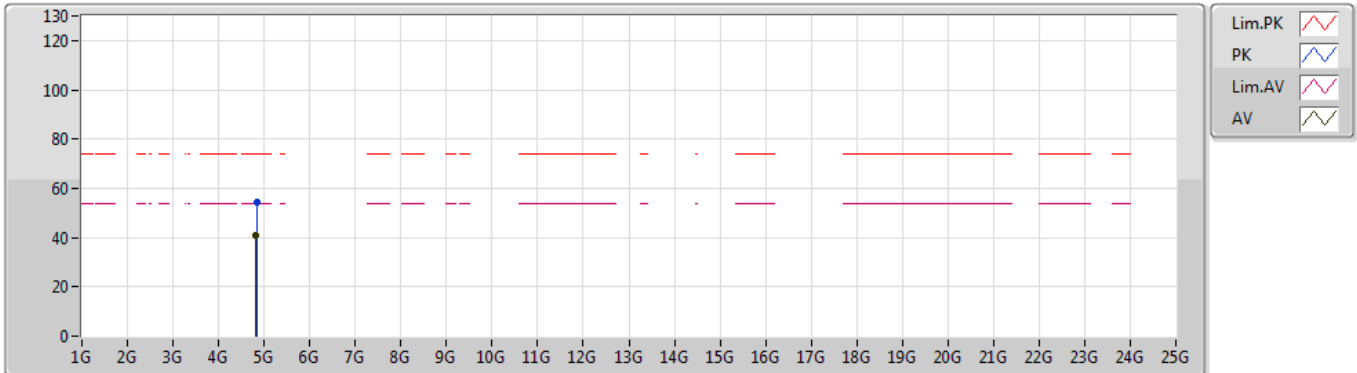


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	4.82562G	38.41	54.00	-15.59	3.50	3	Vertical	168	1.82	-
PK	4.82271G	51.27	74.00	-22.73	3.49	3	Vertical	168	1.82	-

802.11ac VHT20_Nss1,(MCS0)_2TX

04/04/2019

2412MHz_TX

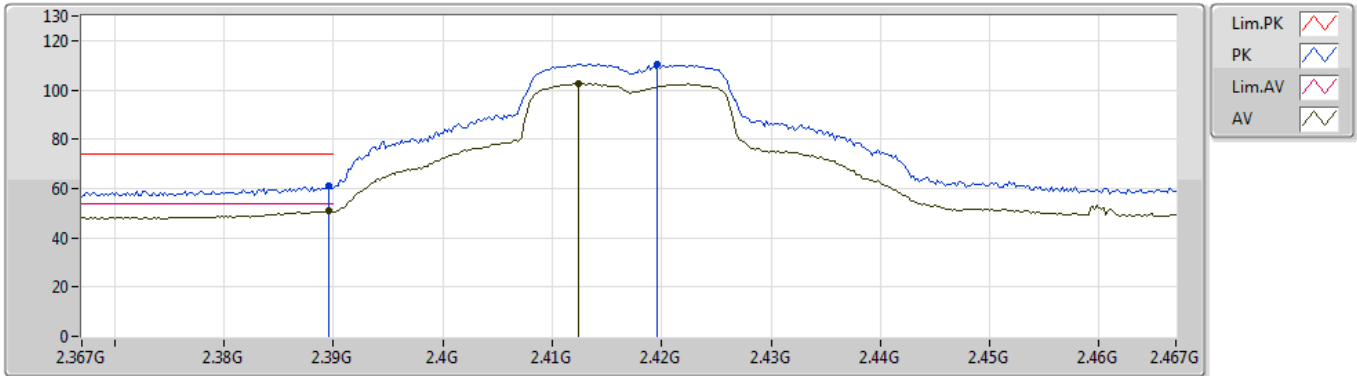


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	4.8256G	41.03	54.00	-12.97	3.50	3	Horizontal	35	2.89	-
PK	4.8317G	54.34	74.00	-19.66	3.51	3	Horizontal	35	2.89	-

802.11ac VHT20_Nss1,(MCS0)_2TX

04/04/2019

2417MHz_TX

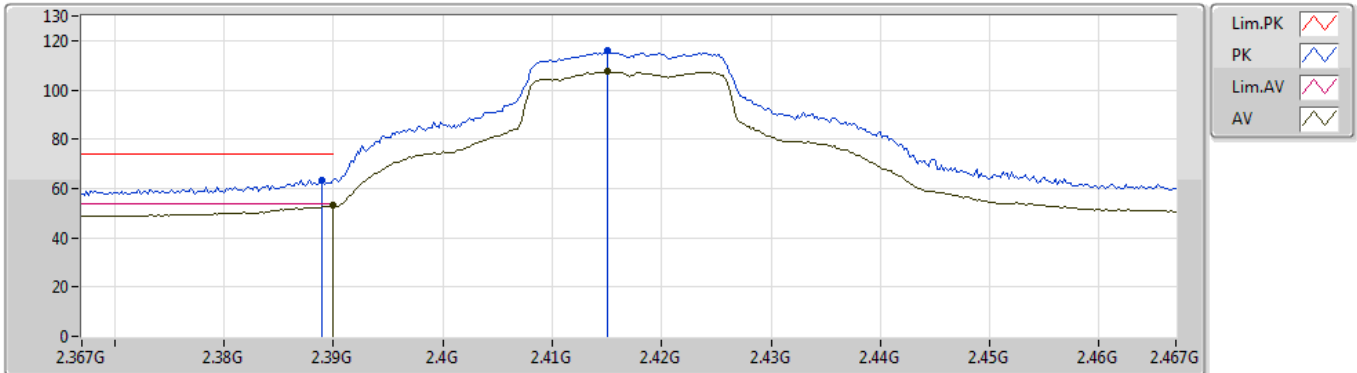


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	2.3896G	50.80	54.00	-3.20	31.86	3	Vertical	337	2.69	-
AV	2.4124G	102.51	Inf	-Inf	31.93	3	Vertical	337	2.69	-
PK	2.3896G	61.29	74.00	-12.71	31.86	3	Vertical	337	2.69	-
PK	2.4196G	110.39	Inf	-Inf	31.96	3	Vertical	337	2.69	-

802.11ac VHT20_Nss1,(MCS0)_2TX

04/04/2019

2417MHz_TX

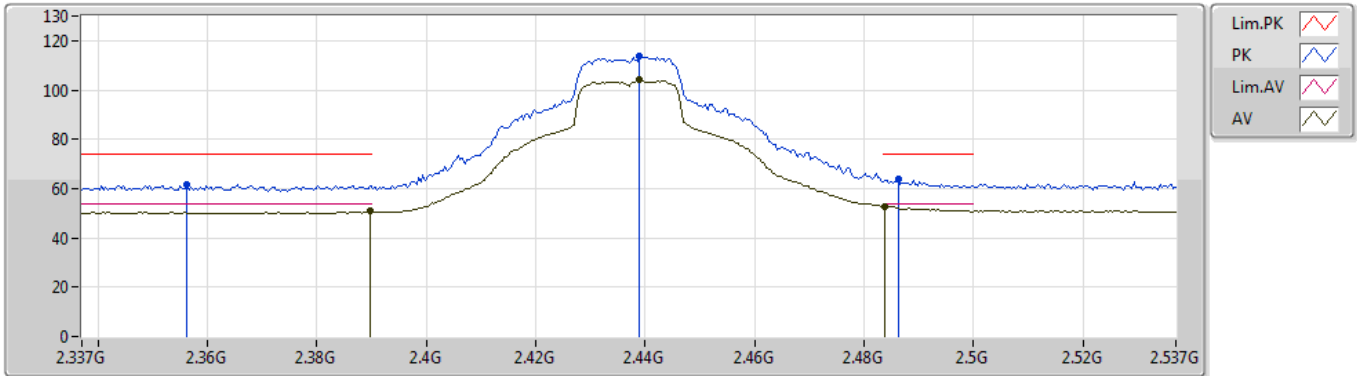


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	2.39G	53.13	54.00	-0.87	31.86	3	Horizontal	30	2.39	-
AV	2.415G	107.44	Inf	-Inf	31.95	3	Horizontal	30	2.39	-
PK	2.389G	63.45	74.00	-10.55	31.85	3	Horizontal	30	2.39	-
PK	2.415G	116.14	Inf	-Inf	31.95	3	Horizontal	30	2.39	-

802.11ac VHT20_Nss1,(MCS0)_2TX

04/04/2019

2437MHz_TX

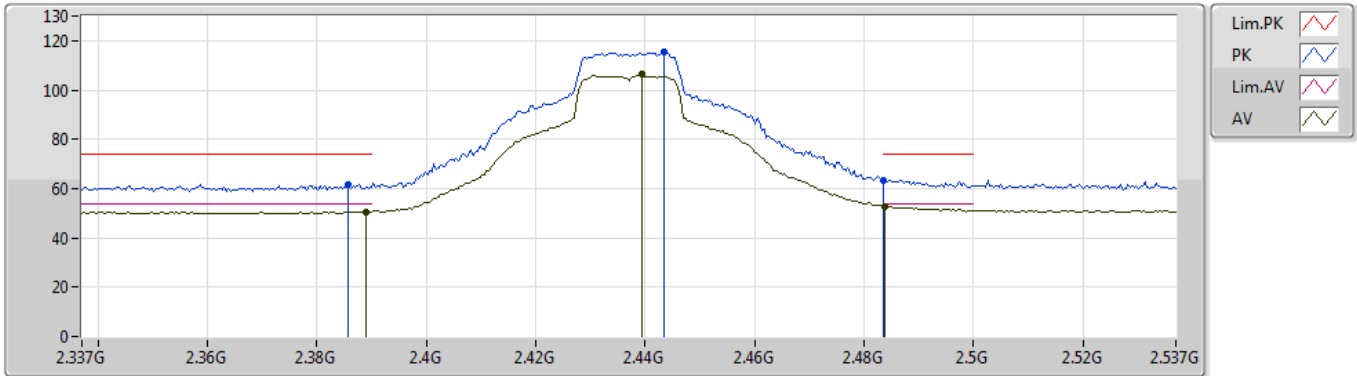


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	2.3898G	50.85	54.00	-3.15	35.04	3	Vertical	277	2.17	-
AV	2.439G	104.33	Inf	-Inf	34.99	3	Vertical	277	2.17	-
AV	2.4838G	52.94	54.00	-1.06	34.96	3	Vertical	277	2.17	-
PK	2.3562G	61.69	74.00	-12.31	35.13	3	Vertical	277	2.17	-
PK	2.439G	113.47	Inf	-Inf	34.99	3	Vertical	277	2.17	-
PK	2.4862G	63.76	74.00	-10.24	34.96	3	Vertical	277	2.17	-

802.11ac VHT20_Nss1,(MCS0)_2TX

04/04/2019

2437MHz_TX

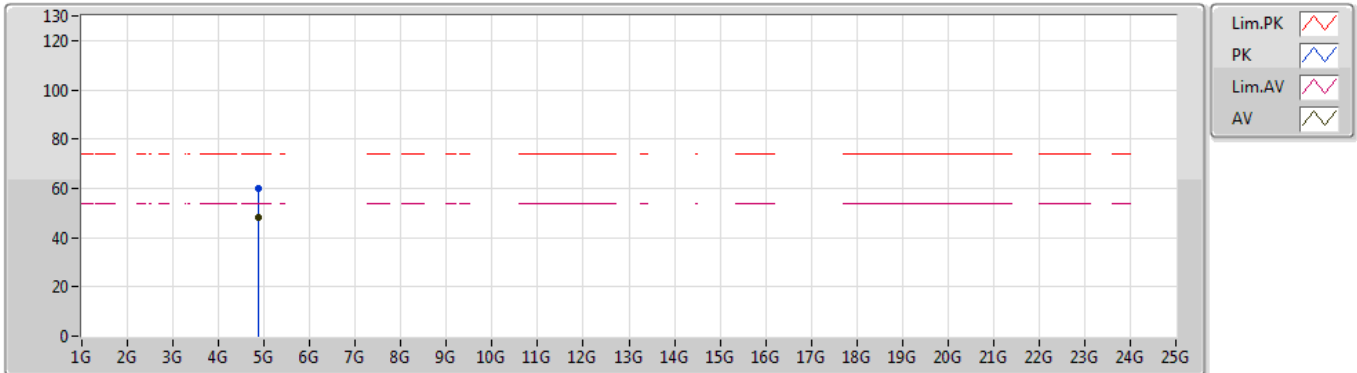


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	2.389G	50.63	54.00	-3.37	35.04	3	Horizontal	42	2.53	-
AV	2.4394G	106.30	Inf	-Inf	34.99	3	Horizontal	42	2.53	-
AV	2.4838G	52.94	54.00	-1.06	34.96	3	Horizontal	42	2.53	-
PK	2.3858G	61.73	74.00	-12.27	35.05	3	Horizontal	42	2.53	-
PK	2.4434G	115.29	Inf	-Inf	34.98	3	Horizontal	42	2.53	-
PK	2.4835G	63.32	74.00	-10.68	34.96	3	Horizontal	42	2.53	-

802.11ac VHT20_Nss1,(MCS0)_2TX

04/04/2019

2437MHz_TX

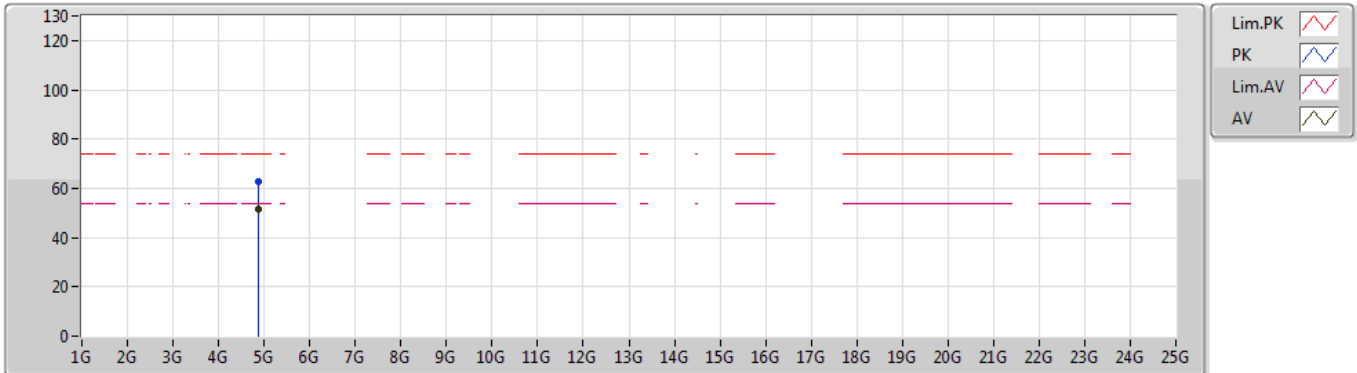


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	4.8752G	48.05	54.00	-5.95	3.62	3	Vertical	8	2.86	-
PK	4.8746G	59.72	74.00	-14.28	3.61	3	Vertical	8	2.86	-

802.11ac VHT20_Nss1,(MCS0)_2TX

04/04/2019

2437MHz_TX

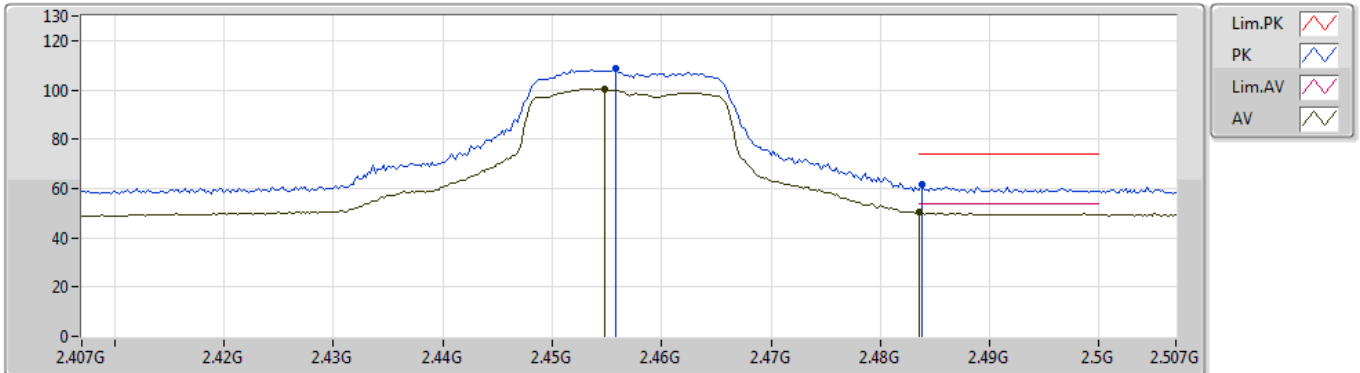


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	4.8751G	51.75	54.00	-2.25	3.62	3	Horizontal	304	1.01	-
PK	4.8817G	62.54	74.00	-11.46	3.63	3	Horizontal	304	1.01	-

802.11ac VHT20_Nss1,(MCS0)_2TX

04/04/2019

2457MHz_TX

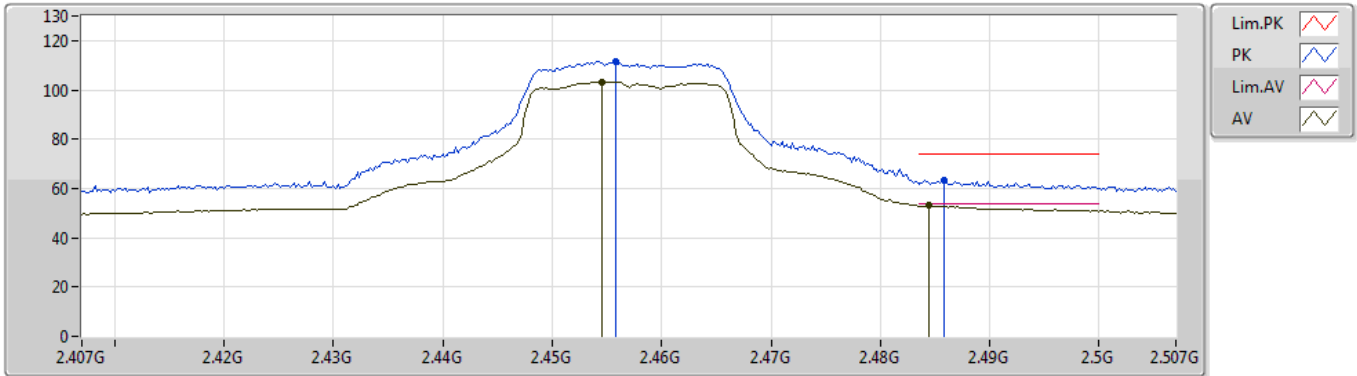


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	2.4548G	100.39	Inf	-Inf	32.08	3	Vertical	338	2.95	-
AV	2.4835G	50.25	54.00	-3.75	32.19	3	Vertical	338	2.95	-
PK	2.4558G	108.69	Inf	-Inf	32.09	3	Vertical	338	2.95	-
PK	2.4838G	61.82	74.00	-12.18	32.19	3	Vertical	338	2.95	-

802.11ac VHT20_Nss1,(MCS0)_2TX

04/04/2019

2457MHz_TX

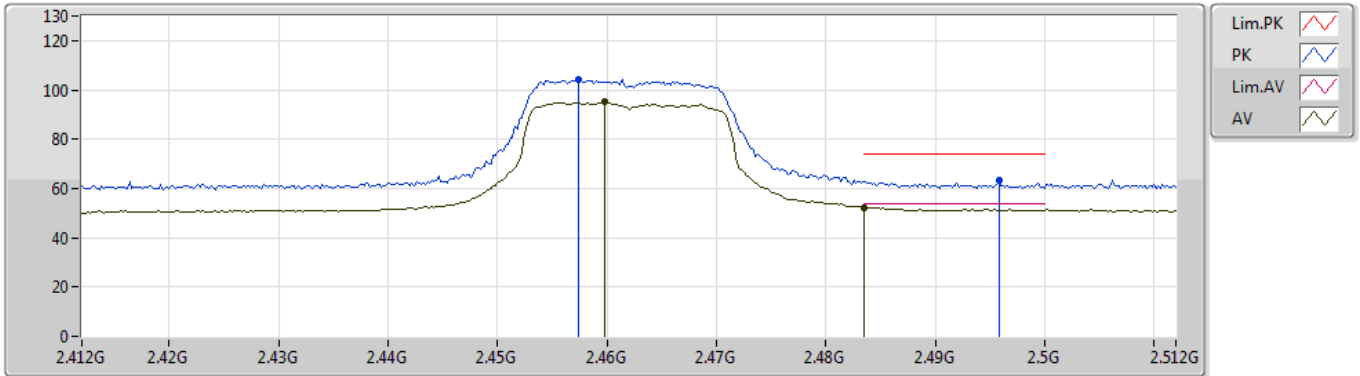


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	2.4546G	103.21	Inf	-Inf	32.08	3	Horizontal	15	1.10	-
AV	2.4844G	53.24	54.00	-0.76	32.19	3	Horizontal	15	1.10	-
PK	2.4558G	111.51	Inf	-Inf	32.09	3	Horizontal	15	1.10	-
PK	2.4858G	63.18	74.00	-10.82	32.20	3	Horizontal	15	1.10	-

802.11ac VHT20_Nss1,(MCS0)_2TX

04/04/2019

2462MHz_TX

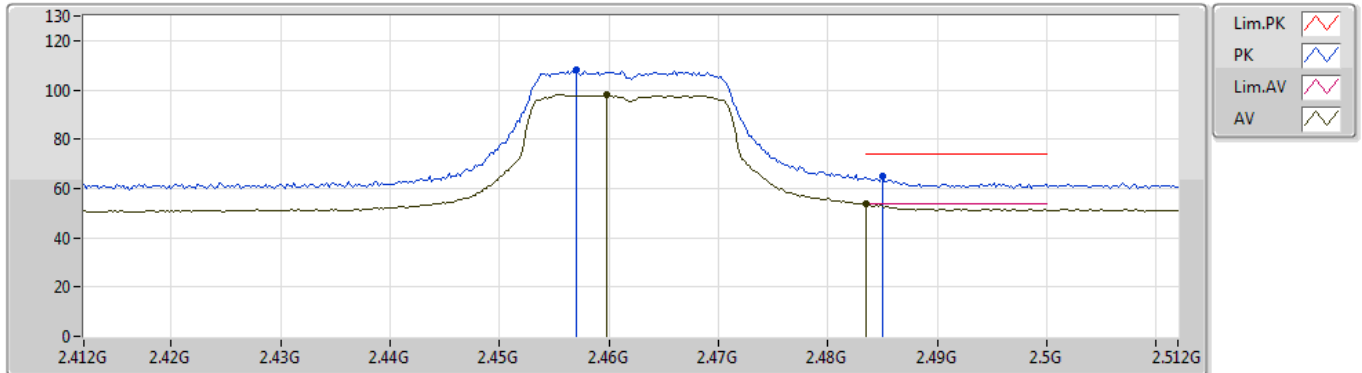


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	2.4598G	94.99	Inf	-Inf	34.98	3	Vertical	276	2.22	-
AV	2.4835G	52.36	54.00	-1.64	34.96	3	Vertical	276	2.22	-
PK	2.4574G	104.27	Inf	-Inf	34.98	3	Vertical	276	2.22	-
PK	2.4958G	63.09	74.00	-10.91	34.95	3	Vertical	276	2.22	-

802.11ac VHT20_Nss1,(MCS0)_2TX

04/04/2019

2462MHz_TX

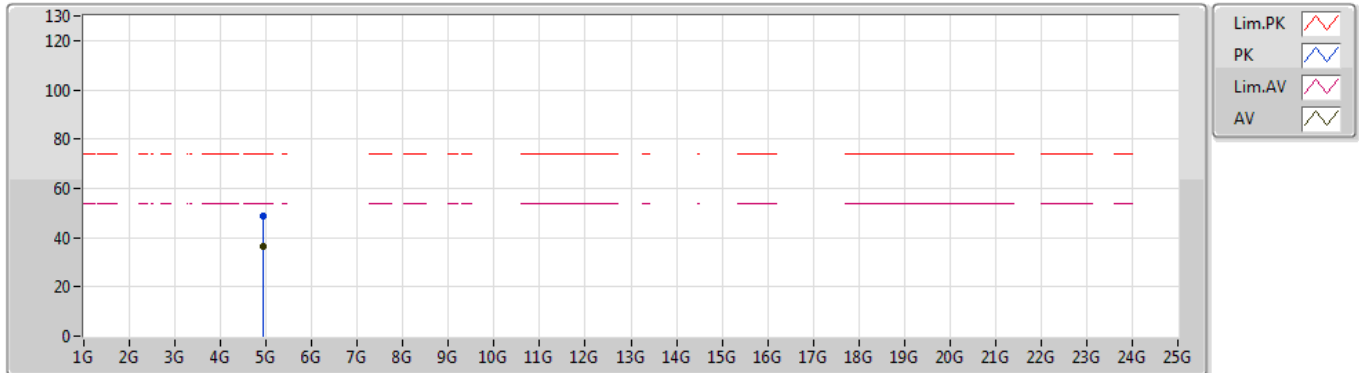


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	2.4598G	97.95	Inf	-Inf	34.98	3	Horizontal	92	2.80	-
AV	2.4835G	53.64	54.00	-0.36	34.96	3	Horizontal	92	2.80	-
PK	2.457G	107.99	Inf	-Inf	34.98	3	Horizontal	92	2.80	-
PK	2.485G	64.81	74.00	-9.19	34.96	3	Horizontal	92	2.80	-

802.11ac VHT20_Nss1,(MCS0)_2TX

04/04/2019

2462MHz_TX

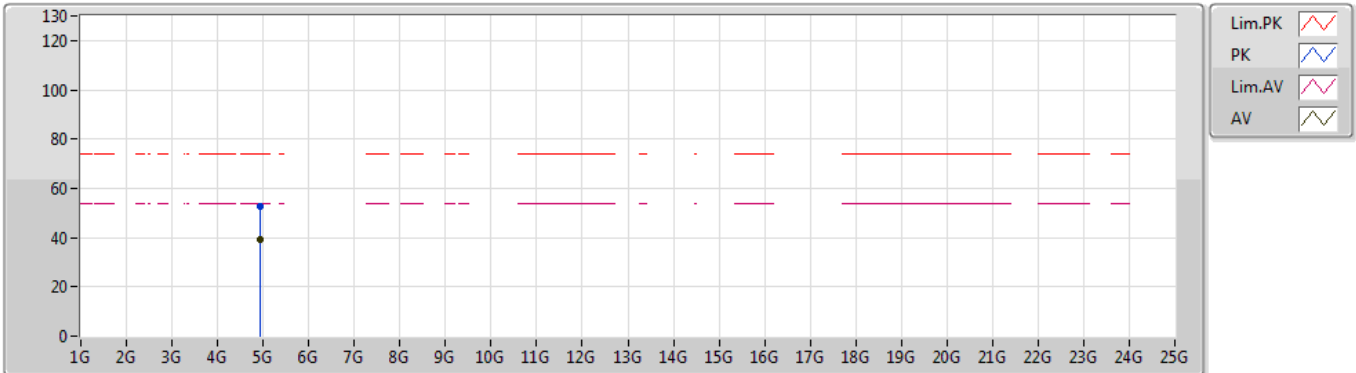


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	4.92527G	36.52	54.00	-17.48	3.74	3	Vertical	11	1.41	-
PK	4.92216G	49.02	74.00	-24.98	3.73	3	Vertical	11	1.41	-

802.11ac VHT20_Nss1,(MCS0)_2TX

04/04/2019

2462MHz_TX

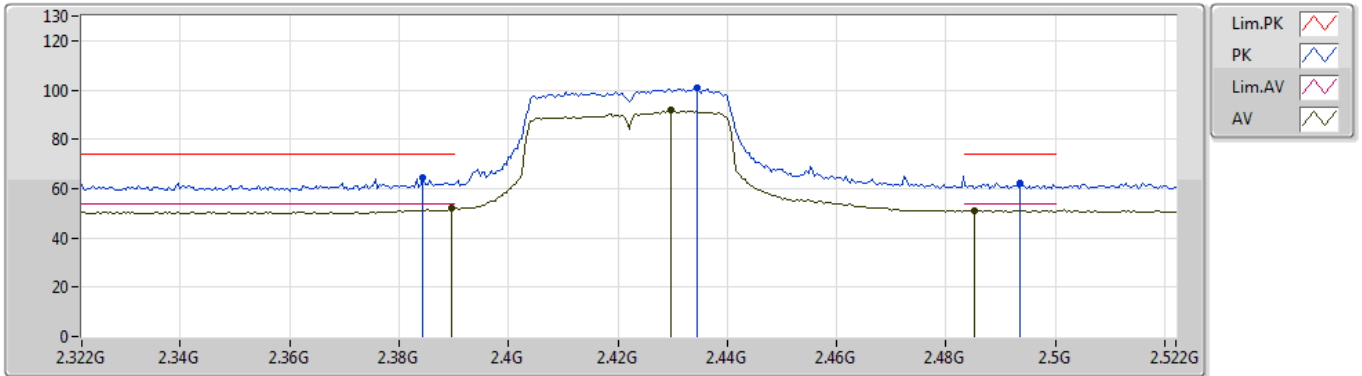


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	4.92335G	39.30	54.00	-14.70	3.73	3	Horizontal	285	1.86	-
PK	4.9261G	52.68	74.00	-21.32	3.74	3	Horizontal	285	1.86	-

802.11ac VHT40_Nss1,(MCS0)_2TX

04/04/2019

2422MHz_TX

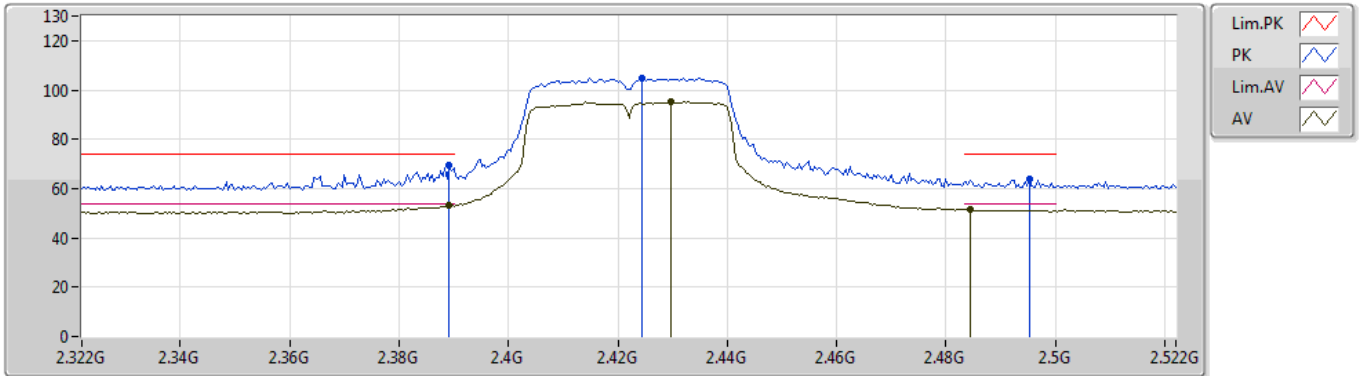


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	2.3896G	51.87	54.00	-2.13	35.04	3	Vertical	278	2.05	-
AV	2.4296G	91.77	Inf	-Inf	34.99	3	Vertical	278	2.05	-
AV	2.4852G	51.10	54.00	-2.90	34.96	3	Vertical	278	2.05	-
PK	2.3844G	64.58	74.00	-9.42	35.05	3	Vertical	278	2.05	-
PK	2.4344G	100.73	Inf	-Inf	34.99	3	Vertical	278	2.05	-
PK	2.4936G	62.31	74.00	-11.69	34.95	3	Vertical	278	2.05	-

802.11ac VHT40_Nss1,(MCS0)_2TX

04/04/2019

2422MHz_TX

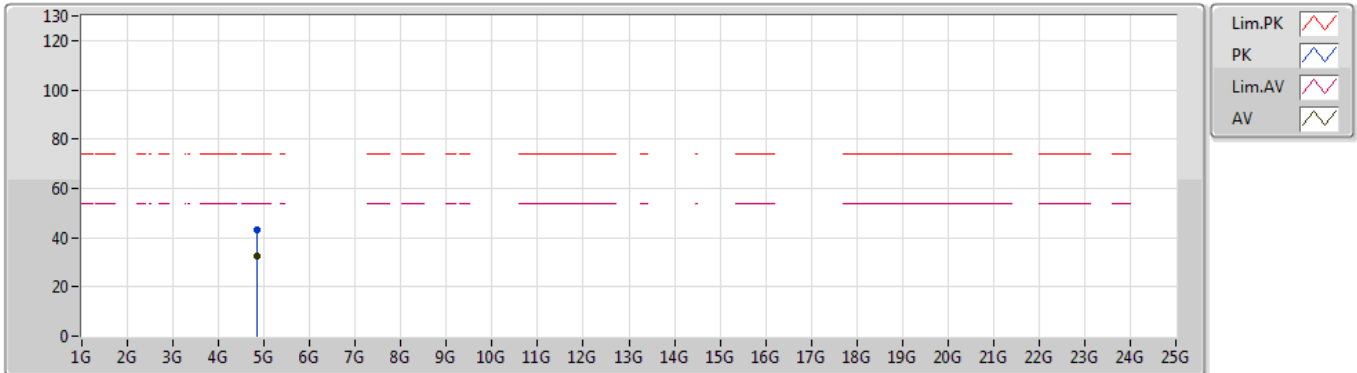


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	2.3892G	53.13	54.00	-0.87	35.04	3	Horizontal	90	1.00	-
AV	2.4296G	95.14	Inf	-Inf	34.99	3	Horizontal	90	1.00	-
AV	2.4844G	51.32	54.00	-2.68	34.96	3	Horizontal	90	1.00	-
PK	2.3892G	69.60	74.00	-4.40	35.04	3	Horizontal	90	1.00	-
PK	2.4244G	105.06	Inf	-Inf	35.00	3	Horizontal	90	1.00	-
PK	2.4952G	63.69	74.00	-10.31	34.95	3	Horizontal	90	1.00	-

802.11ac VHT40_Nss1,(MCS0)_2TX

04/04/2019

2422MHz_TX

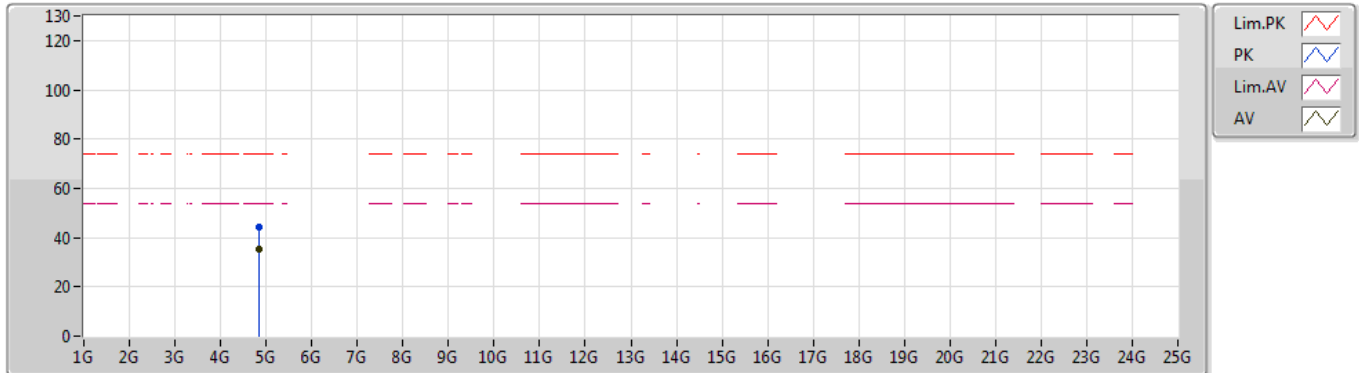


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	4.84419G	32.25	54.00	-21.75	3.54	3	Vertical	155	1.69	-
PK	4.84407G	42.87	74.00	-31.13	3.54	3	Vertical	155	1.69	-

802.11ac VHT40_Nss1,(MCS0)_2TX

04/04/2019

2422MHz_TX

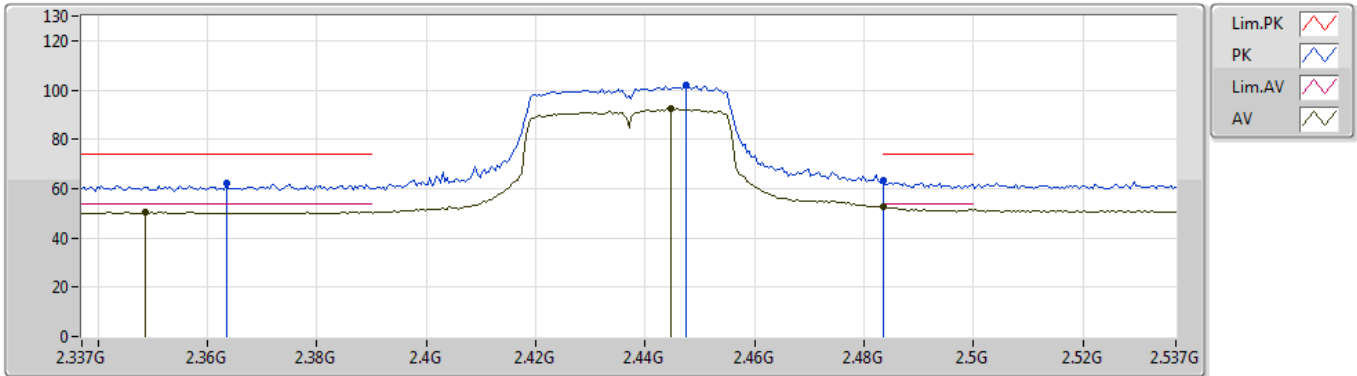


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	4.84369G	35.51	54.00	-18.49	3.54	3	Horizontal	296	1.46	-
PK	4.84533G	44.37	74.00	-29.63	3.54	3	Horizontal	296	1.46	-

802.11ac VHT40_Nss1,(MCS0)_2TX

04/04/2019

2437MHz_TX

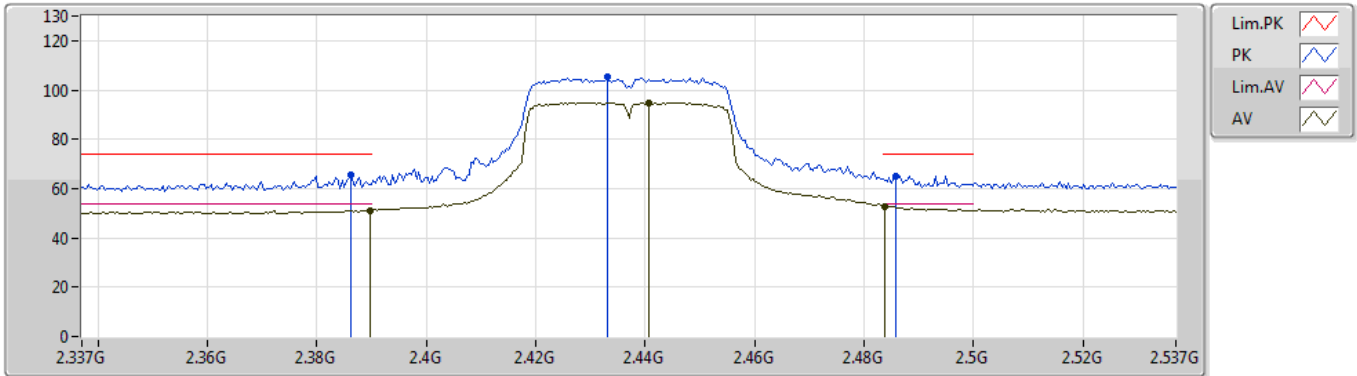


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	2.3486G	50.45	54.00	-3.55	35.15	3	Vertical	276	2.19	-
AV	2.4446G	92.35	Inf	-Inf	34.98	3	Vertical	276	2.19	-
AV	2.4835G	52.75	54.00	-1.25	34.96	3	Vertical	276	2.19	-
PK	2.3634G	62.38	74.00	-11.62	35.11	3	Vertical	276	2.19	-
PK	2.4474G	101.93	Inf	-Inf	34.99	3	Vertical	276	2.19	-
PK	2.4835G	63.32	74.00	-10.68	34.96	3	Vertical	276	2.19	-

802.11ac VHT40_Nss1,(MCS0)_2TX

04/04/2019

2437MHz_TX

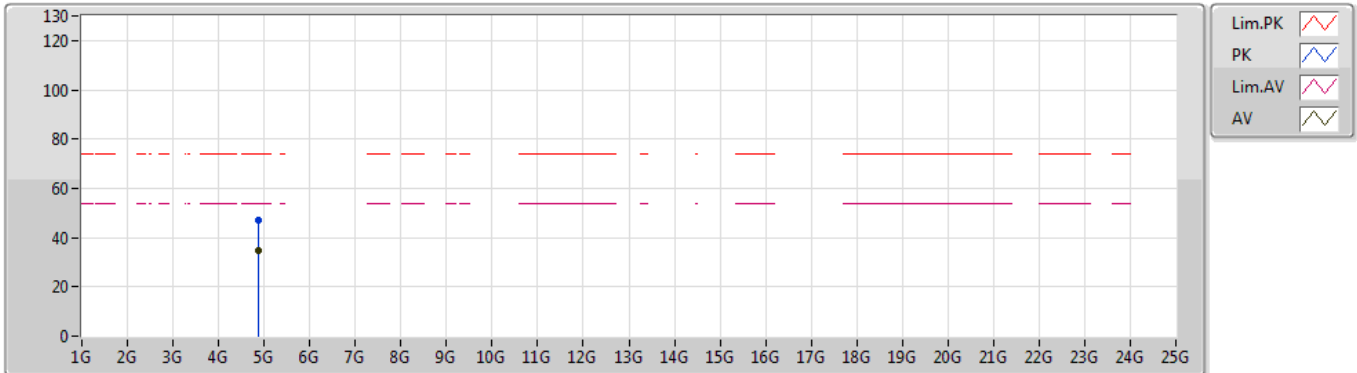


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	2.3898G	51.07	54.00	-2.93	35.04	3	Horizontal	91	1.01	-
AV	2.4406G	94.95	Inf	-Inf	34.99	3	Horizontal	91	1.01	-
AV	2.4838G	52.94	54.00	-1.06	34.96	3	Horizontal	91	1.01	-
PK	2.3862G	65.49	74.00	-8.51	35.06	3	Horizontal	91	1.01	-
PK	2.433G	105.07	Inf	-Inf	34.99	3	Horizontal	91	1.01	-
PK	2.4858G	65.17	74.00	-8.83	34.96	3	Horizontal	91	1.01	-

802.11ac VHT40_Nss1,(MCS0)_2TX

04/04/2019

2437MHz_TX

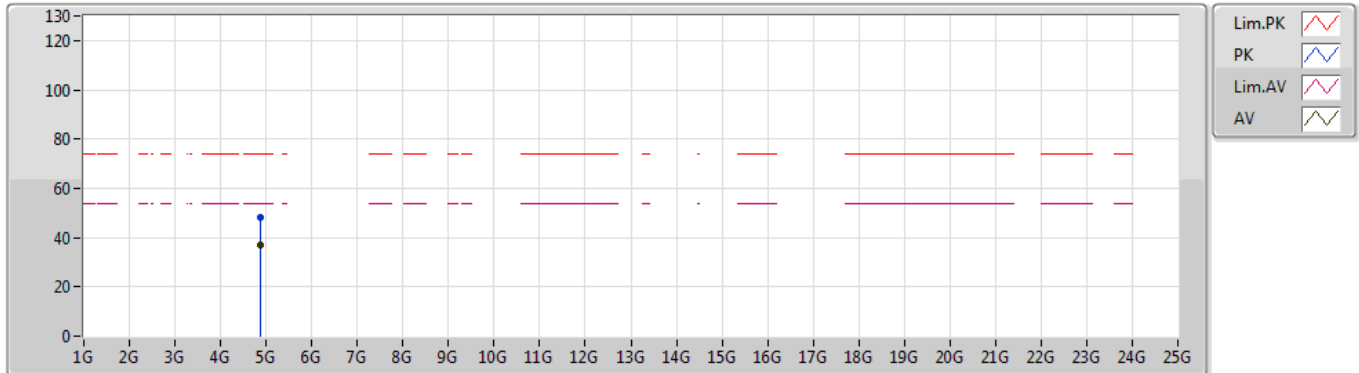


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	4.87518G	34.95	54.00	-19.05	3.62	3	Vertical	104	1.73	-
PK	4.87277G	46.89	74.00	-27.11	3.61	3	Vertical	104	1.73	-

802.11ac VHT40_Nss1,(MCS0)_2TX

04/04/2019

2437MHz_TX

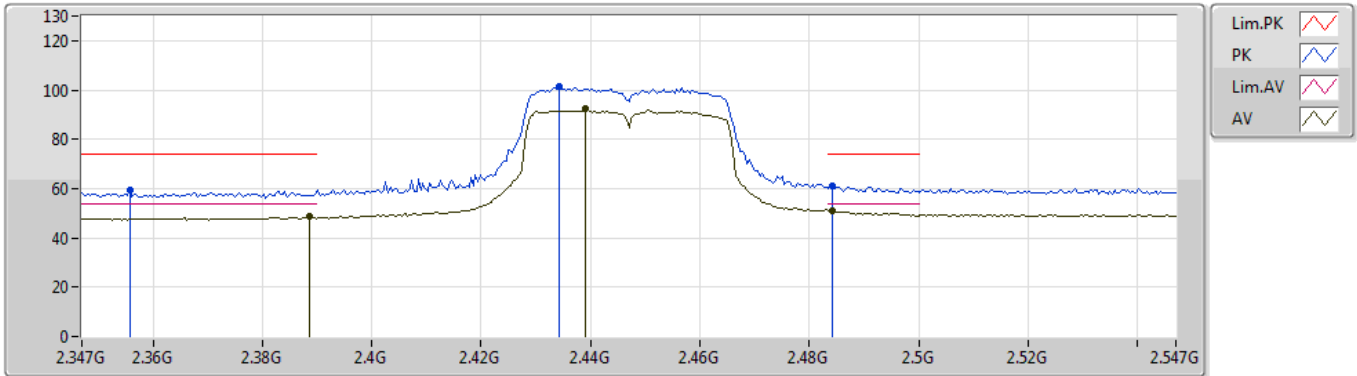


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	4.8753G	36.74	54.00	-17.26	3.62	3	Horizontal	115	1.01	-
PK	4.8812G	48.12	74.00	-25.88	3.63	3	Horizontal	115	1.01	-

802.11ac VHT40_Nss1,(MCS0)_2TX

04/04/2019

2447MHz_TX

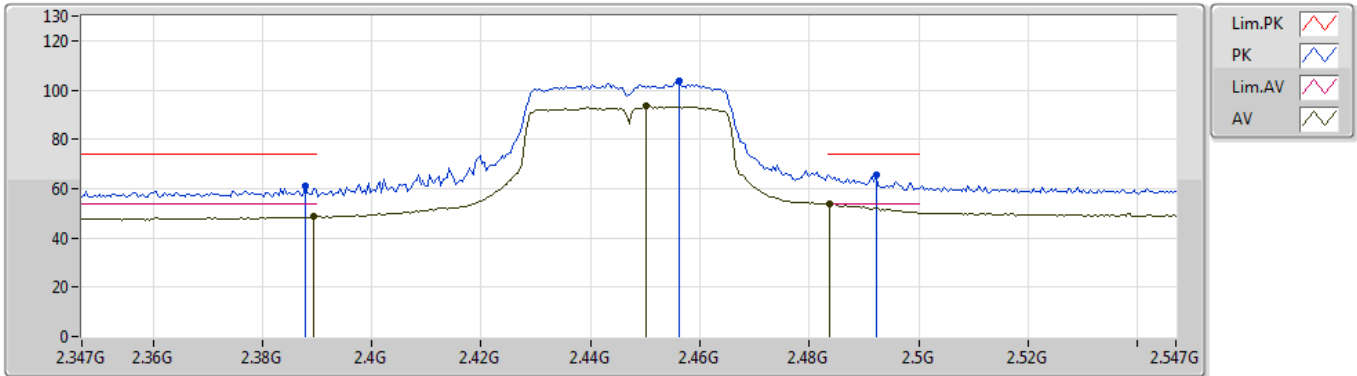


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	2.3886G	48.71	54.00	-5.29	31.85	3	Vertical	338	2.94	-
AV	2.439G	92.22	Inf	-Inf	32.03	3	Vertical	338	2.94	-
AV	2.4842G	50.90	54.00	-3.10	32.19	3	Vertical	338	2.94	-
PK	2.3558G	59.27	74.00	-14.73	31.73	3	Vertical	338	2.94	-
PK	2.4342G	101.52	Inf	-Inf	32.01	3	Vertical	338	2.94	-
PK	2.4842G	61.00	74.00	-13.00	32.19	3	Vertical	338	2.94	-

802.11ac VHT40_Nss1,(MCS0)_2TX

04/04/2019

2447MHz_TX

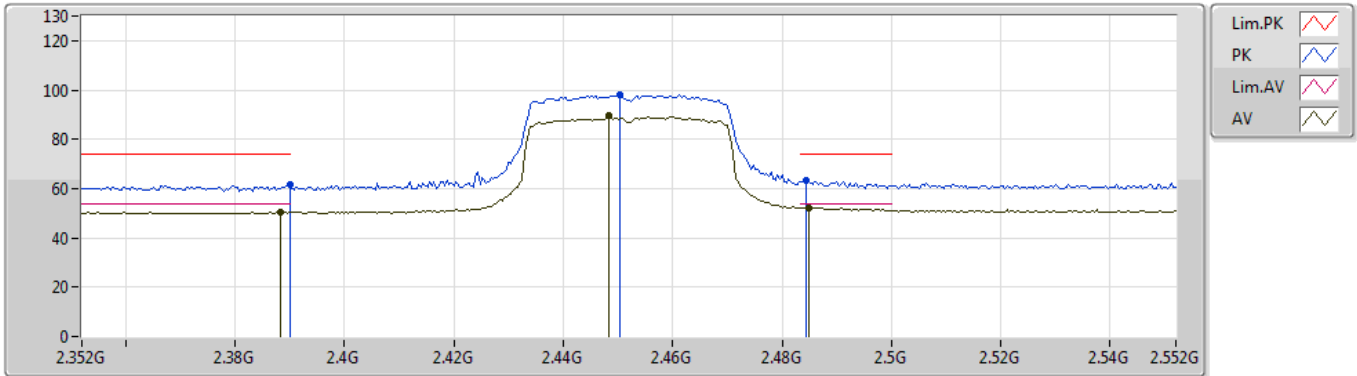


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	2.3894G	48.72	54.00	-5.28	31.85	3	Horizontal	13	1.50	-
AV	2.4502G	93.70	Inf	-Inf	32.07	3	Horizontal	13	1.50	-
AV	2.4838G	53.70	54.00	-0.30	32.19	3	Horizontal	13	1.50	-
PK	2.3878G	61.11	74.00	-12.89	31.85	3	Horizontal	13	1.50	-
PK	2.4562G	103.63	Inf	-Inf	32.09	3	Horizontal	13	1.50	-
PK	2.4922G	65.61	74.00	-8.39	32.22	3	Horizontal	13	1.50	-

802.11ac VHT40_Nss1,(MCS0)_2TX

04/04/2019

2452MHz_TX

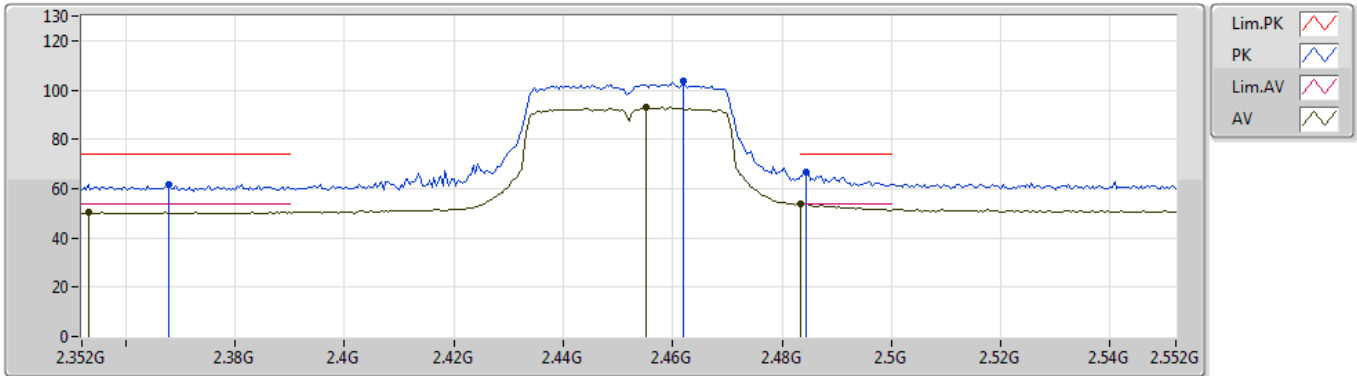


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	2.3884G	50.63	54.00	-3.37	35.05	3	Vertical	274	2.23	-
AV	2.4484G	89.44	Inf	-Inf	34.98	3	Vertical	274	2.23	-
AV	2.4848G	52.37	54.00	-1.63	34.96	3	Vertical	274	2.23	-
PK	2.39G	61.45	74.00	-12.55	35.04	3	Vertical	274	2.23	-
PK	2.4504G	98.15	Inf	-Inf	34.98	3	Vertical	274	2.23	-
PK	2.4844G	63.21	74.00	-10.79	34.96	3	Vertical	274	2.23	-

802.11ac VHT40_Nss1,(MCS0)_2TX

04/04/2019

2452MHz_TX

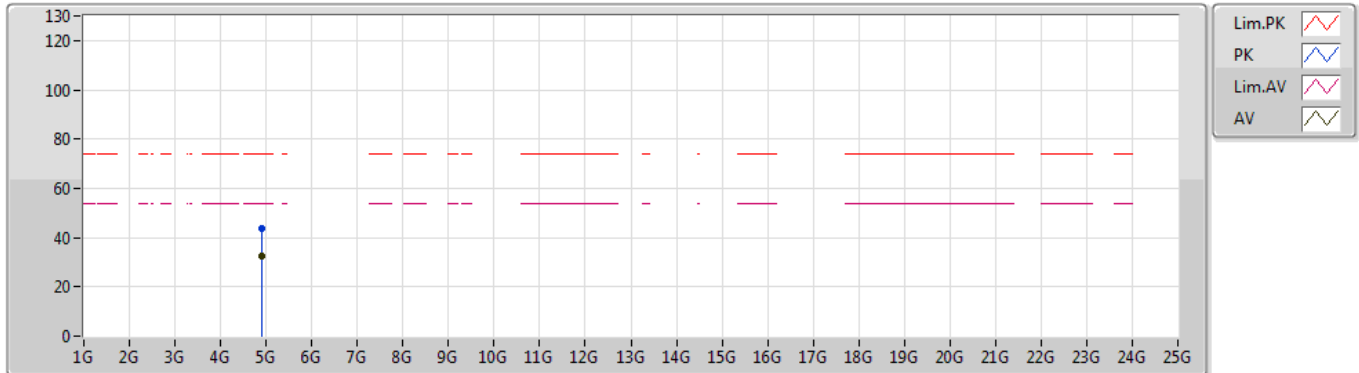


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	2.3532G	50.42	54.00	-3.58	35.14	3	Horizontal	90	2.81	-
AV	2.4552G	92.95	Inf	-Inf	34.98	3	Horizontal	90	2.81	-
AV	2.4835G	53.65	54.00	-0.35	34.96	3	Horizontal	90	2.81	-
PK	2.368G	61.67	74.00	-12.33	35.10	3	Horizontal	90	2.81	-
PK	2.462G	103.68	Inf	-Inf	34.98	3	Horizontal	90	2.81	-
PK	2.4844G	66.92	74.00	-7.08	34.96	3	Horizontal	90	2.81	-

802.11ac VHT40_Nss1,(MCS0)_2TX

04/04/2019

2452MHz_TX

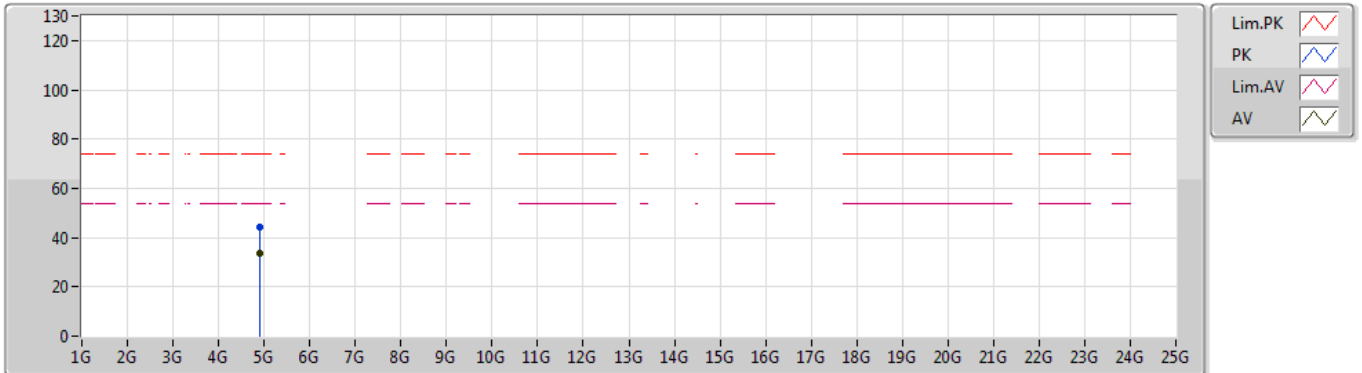


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	4.90217G	32.43	54.00	-21.57	3.68	3	Vertical	198	1.86	-
PK	4.9036G	43.51	74.00	-30.49	3.69	3	Vertical	198	1.86	-

802.11ac VHT40_Nss1,(MCS0)_2TX

04/04/2019

2452MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment
AV	4.90318G	33.45	54.00	-20.55	3.69	3	Horizontal	86	2.11	-
PK	4.90588G	44.43	74.00	-29.57	3.69	3	Horizontal	86	2.11	-