

# FCC Test Report

Equipment : 802.11b/g/n RTL8723BS Combo module  
Brand Name : REALTEK  
Model No. : RTL8723BS  
FCC ID : TX2-RTL8723BS  
Standard : 47 CFR FCC Part 15.247  
Operating Band : 2400 MHz – 2483.5 MHz  
Function :  Point-to-multipoint;  Point-to-point  
Applicant /  
Manufacturer : Realtek Semiconductor Corp.  
No. 2, Innovation Road II, Hsinchu Science Park,  
Hsinchu 300, Taiwan

This is a partial report for permissive change. The product sample received on Nov. 06, 2017 and completely tested on Nov. 09, 2017. We, SPORTON, 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 test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.

  
Phoenix Chen / Assistant Manager





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**APPENDIX A. TEST RESULTS OF MAXIMUM CONDUCTED OUTPUT POWER**

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

**APPENDIX C. TEST RESULTS OF EMISSIONS IN RESTRICTED FREQUENCY BANDS**

**APPENDIX D. TEST PHOTOS**

**PHOTOGRAPHS OF EUT v01**



### Summary of Test Result

Conformance Test Specifications				
Report Clause	Ref. Std. Clause	Description	Limit	Result
1.1.2	15.203	Antenna Requirement	FCC 15.203	Complied
3.1	15.247(b)	Maximum Conducted Output Power	Power [dBm]:30	Complied
3.2	15.247(d)	Emissions in Non-restricted Frequency Bands	Non-Restricted Bands: > 30 dBc	Complied
3.3	15.247(d)	Emissions in Restricted Frequency Bands	Restricted Bands: FCC 15.209	Complied





# 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)	2412-2462	1-11 [11]
2400-2483.5	n (HT40)	2422-2452	3-9 [7]

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11b	20	1TX
2.4-2.4835GHz	802.11g	20	1TX
2.4-2.4835GHz	802.11n HT20	20	1TX
2.4-2.4835GHz	802.11n HT40	40	1TX

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.
- BWch is the nominal channel bandwidth.

### 1.1.2 Antenna Information

Ant.	Port	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	1	MDLINK	MBMC01551682G	Dipole Antenna	Reversed-SMA	2

### 1.1.3 EUT Information

Operational Condition	
EUT Power Type	From Host System
Beamforming Function	<input type="checkbox"/> With beamforming <input checked="" type="checkbox"/> Without beamforming
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	1	0	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11g	1	0	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11n HT20	1	0	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11n HT40	1	0	n/a (DC>=0.98)	n/a (DC>=0.98)

**1.1.5 Table for Permissive Change**

This product is an extension of original one reported under Sporton project number: FR431858AA

Below is the table for the change of the product with respect to the original one.

Modifications	Performance Checking
1. Add dipole antenna 2. Update standard to ANSI C63.10-2013	1. Maximum Conducted Output Power is evaluated. 2. Emissions in Non-restricted Frequency Bands is evaluated. 3. Emissions in Restricted Frequency Bands is evaluated.

**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 v04

**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
RF Conducted	TH06-HY	Barry	24°C / 58%	07/Nov/2017
Radiated	03CH02-HY	Andy	22.5°C / 59%	09/Nov/2017



### 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)	3.6 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	2.1 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	2.6 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	2.9 dB	Confidence levels of 95%
Conducted Emission	1.3 dB	Confidence levels of 95%



## 2 Test Configuration of EUT

### 2.1 Test Condition

RF Conducted	Abbreviation	Remark
TnomVnom	Tnom	20°C
-	Vnom	120V

### 2.2 Test Channel Mode




Test Software	command
---------------	---------

Mode	Power Setting
802.11b_Nss1,(1Mbps)_1TX	-
2412MHz	45
2437MHz	44
2462MHz	44
802.11g_Nss1,(6Mbps)_1TX	-
2412MHz	51
2437MHz	56
2462MHz	50
802.11n HT20_Nss1,(MCS0)_1TX	-
2412MHz	49
2437MHz	56
2462MHz	49
802.11n HT40_Nss1,(MCS0)_1TX	-
2422MHz	52
2437MHz	55
2452MHz	51



### 2.3 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	Maximum Conducted Output Power 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		
Orthogonal Planes of EUT	X Plane	Y Plane	Z Plane
			
Worst Planes of EUT		V	

### 2.4 Support Equipment

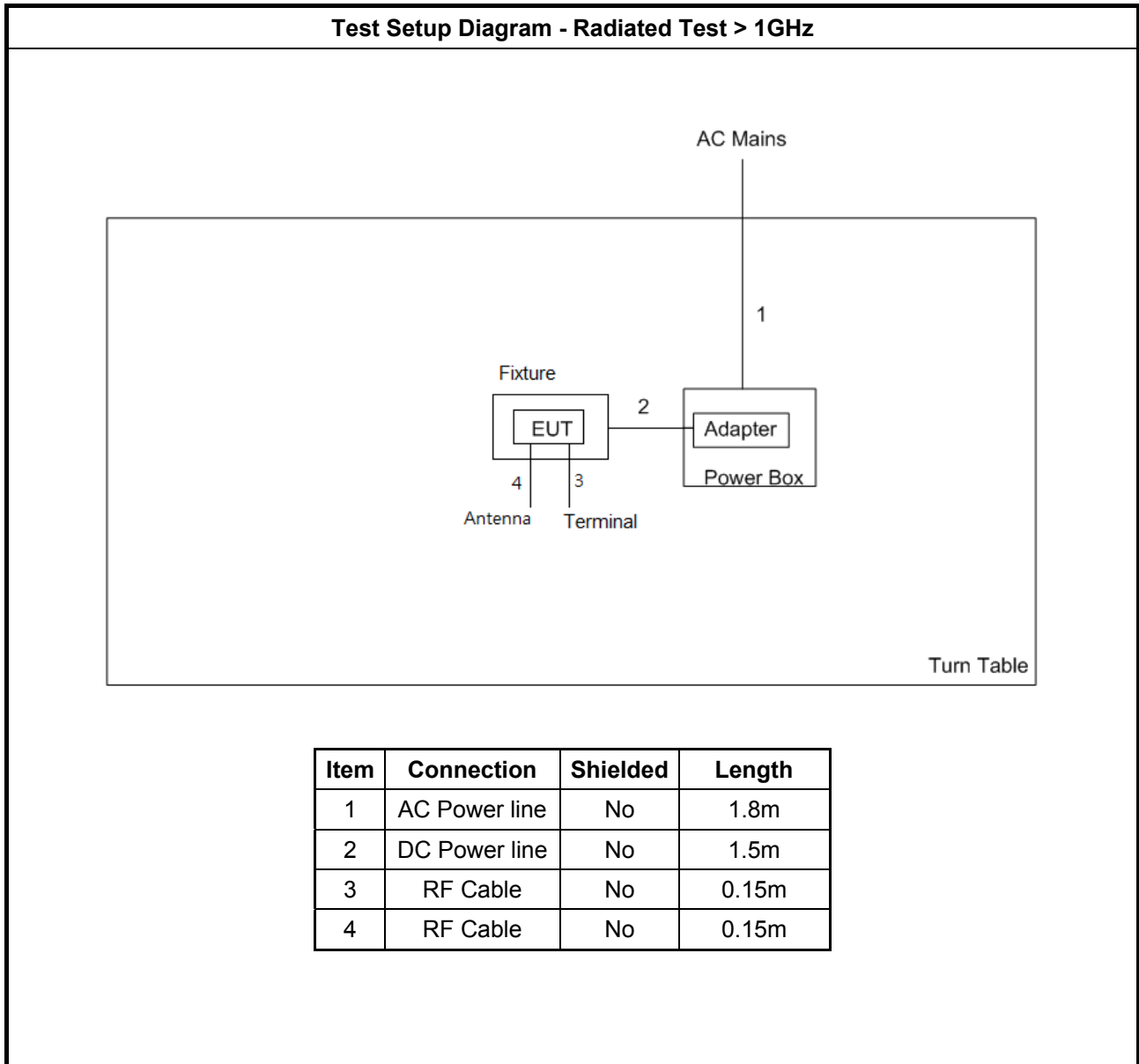
Support Equipment - RF Conducted				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook	DELL	E5410	DoC
2	Adapter for Notebook	DELL	HA65NM130	DoC
3	Fixture	-	-	-

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

Support Equipment - Radiated Emission				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Fixture	-	-	-
2	Antenna	MDLINK	MBMC01551682G	-
3	AC adapter	Phihong	PSC15R-050	DoC

Note: Support equipment No.1 and 2 was provided by customer.

## 2.5 Test Setup Diagram



### 3 Transmitter Test Result

#### 3.1 Maximum Conducted Output Power

##### 3.1.1 Maximum Conducted Output Power Limit

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

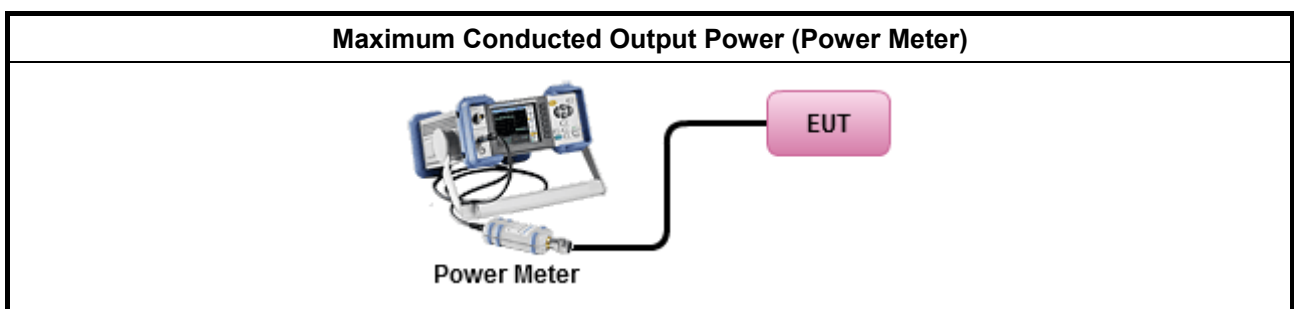
##### 3.1.2 Measuring Instruments

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

### 3.1.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> <li>Maximum Peak Conducted Output Power</li> </ul>	
<input type="checkbox"/>	Refer as KDB 558074, clause 9.1.1 Option 1 (RBW ≥ EBW method).
<input type="checkbox"/>	Refer as KDB 558074, clause 9.1.2 Option 2 (integrated band power method)
<input type="checkbox"/>	Refer as KDB 558074, clause 9.1.3 Option 3 (peak power meter for VBW ≥ DTS BW)
<ul style="list-style-type: none"> <li>Maximum Average Conducted Output Power</li> </ul>	
Duty cycle ≥ 98%	
<input type="checkbox"/>	Refer as KDB 558074, clause 9.2.2.4 Method AVGSA-2 (spectral trace averaging).
Duty cycle < 98%	
<input type="checkbox"/>	Refer as KDB 558074, clause 9.2.2.5 Method AVGSA-2 Alt. (slow sweep speed)
RF power meter and average over on/off periods with duty factor or gated trigger	
<input checked="" type="checkbox"/>	Refer as KDB 558074, clause 9.2.3.1 Method AVGPM (using an RF average power meter).
<ul style="list-style-type: none"> <li>For conducted measurement.</li> </ul>	
<ul style="list-style-type: none"> <li>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.</li> </ul>	
<ul style="list-style-type: none"> <li>If multiple transmit chains, EIRP calculation could be following as methods:  <math>P_{total} = P_1 + P_2 + \dots + P_n</math>                      (calculated in linear unit [mW] and transfer to log unit [dBm])  <math>EIRP_{total} = P_{total} + DG</math> </li> </ul>	

### 3.1.4 Test Setup



### 3.1.5 Test Result of Maximum Conducted Output Power

Refer as Appendix A

### 3.2 Emissions in Non-restricted Frequency Bands

#### 3.2.1 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.

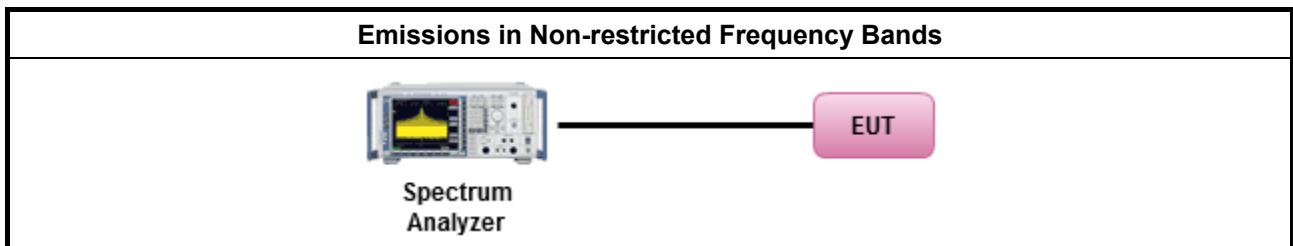
#### 3.2.2 Measuring Instruments

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"> <li>Refer as KDB 558074, clause 11 for unwanted emissions into non-restricted bands.</li> </ul>

#### 3.2.4 Test Setup



#### 3.2.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix B

### 3.3 Emissions in Restricted Frequency Bands

#### 3.3.1 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.

#### 3.3.2 Measuring Instruments

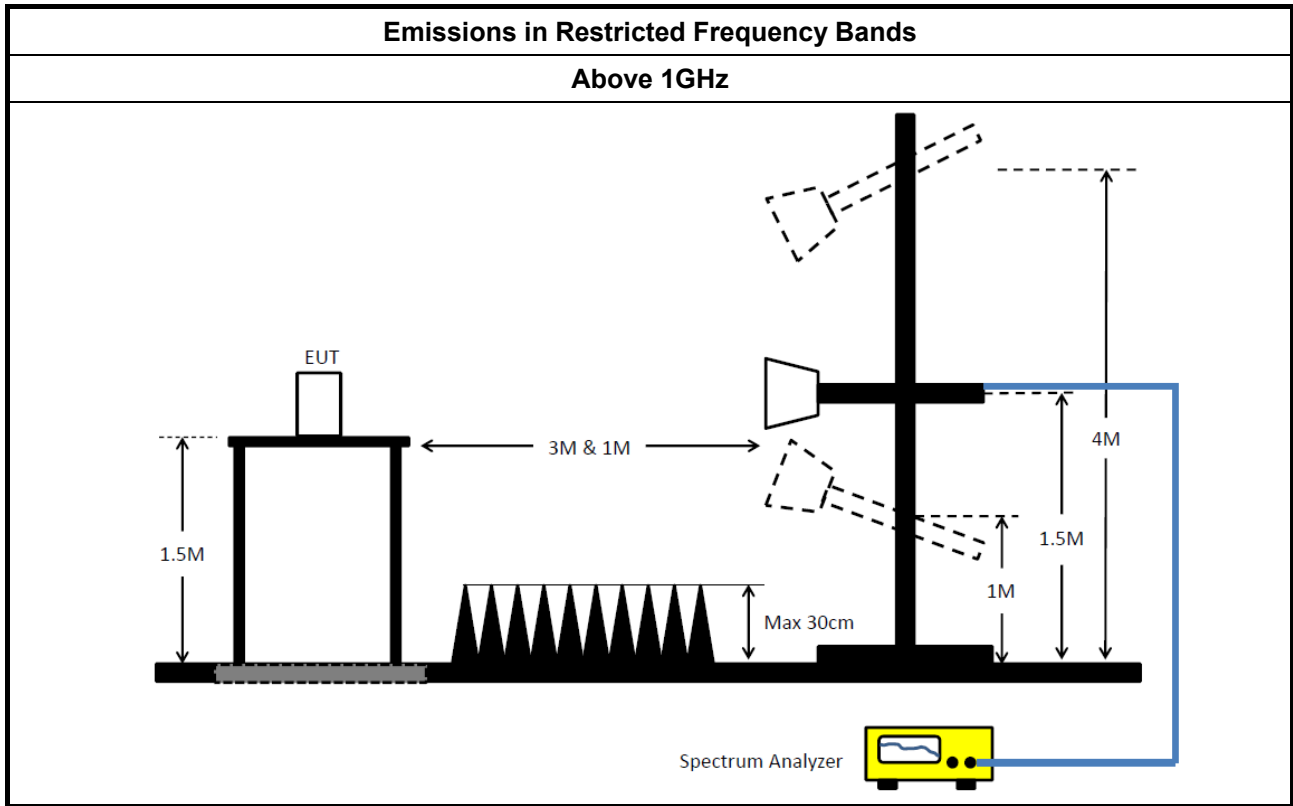
Refer a test equipment and calibration data table in this test report.



3.3.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> <li>The average emission levels shall be measured in [duty cycle <math>\geq</math> 98 or duty factor].</li> </ul>	
<ul style="list-style-type: none"> <li>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.</li> </ul>	
<ul style="list-style-type: none"> <li>For the transmitter unwanted emissions shall be measured using following options below:</li> </ul>	
	<ul style="list-style-type: none"> <li>Refer as KDB 558074, clause 12 for unwanted emissions into restricted bands.</li> </ul>
<input checked="" type="checkbox"/>	Refer as KDB 558074, clause 12.2.5.3 (ANSI C63.10, clause 4.1.4.2.3), Reduced VBW $\geq$ 1/T.
<input checked="" type="checkbox"/>	Refer as KDB 558074, clause 12.2.4 measurement procedure peak limit.
<ul style="list-style-type: none"> <li>For the transmitter band-edge emissions shall be measured using following options below:</li> </ul>	
	<ul style="list-style-type: none"> <li>Refer as KDB 558074 clause 13.1, 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.</li> </ul>
	<ul style="list-style-type: none"> <li>Refer as KDB 558074, clause 13.2 (ANSI C63.10, clause 6.10.6) for marker-delta method for band-edge measurements.</li> </ul>
	<ul style="list-style-type: none"> <li>Refer as KDB 558074, clause 13.3 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).</li> </ul>
<ul style="list-style-type: none"> <li>For conducted and cabinet radiation measurement, refer as KDB 558074, clause 12.2.2.</li> </ul>	
	<ul style="list-style-type: none"> <li>For conducted unwanted emissions into restricted bands (absolute emission limits). Devices with multiple transmit chains using options given below:               <ol style="list-style-type: none"> <li>Measure and sum the spectra across the outputs or</li> <li>Measure and add 10 log(N) dB</li> </ol> </li> </ul>
	<ul style="list-style-type: none"> <li>For KDB 662911 The methodology described here may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance may be demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred.</li> </ul>

### 3.3.4 Test Setup



### 3.3.5 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.

### 3.3.6 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix C





## 4 Test Equipment and Calibration Data

### Instrument for Radiated Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSP40	100305	9kHz - 40GHz	30/Dec/2016	29/Dec/2017
3m Semi Anechoic	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz ~ 18GHz	12/Dec/2016	11/Dec/2017
Amplifier	Ketsight	8449B	3008A02602	1GHz-26.5GHz	19/Sep/2017	18/Sep/2018
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA9120D 01531	1GHz-18GHz	11/May/2017	10/May/2018
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170154	18GHz-40GHz	06/Feb/2017	05/Feb/2018
Amplifier	MITEQ	JS44-18004000-3 3-8P	1840917	18GHz-40GHz	06/Feb/2017	05/Feb/2018
RF Cable-high	SUHNER	SUCOFLEX104	MY34918/4	1GHz ~ 40GHz	26/Jan/2017	25/Jan/2018

### 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	30/Dec/2016	29/Dec/2017
Power Sensor	Anritsu	MA2411B	1027452	300MHz ~ 40GHz	24/Feb/2017	23/Feb/2018
Power Meter	Anritsu	ML2495A	1124009	300MHz ~ 40GHz	24/Feb/2017	23/Feb/2018
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	27/Jul/2017	26/Jul/2018
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY677/3	30MHz ~ 26.5GHz	25/Aug/2017	24/Aug/2018
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY678/3	30MHz ~ 26.5GHz	25/Aug/2017	24/Aug/2018
RF Cable-0.5m	HUBER+SUHNER	SUCOFLEX_104	MY10717/4	30MHz ~ 26.5GHz	25/Aug/2017	24/Aug/2018



Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_1TX	16.42	0.04385
802.11g_Nss1,(6Mbps)_1TX	16.20	0.04169
802.11n HT20_Nss1,(MCS0)_1TX	16.12	0.04093
802.11n HT40_Nss1,(MCS0)_1TX	14.64	0.02911

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-
2412MHz_TnomVnom	Pass	2	16.42	16.42	30.00
2437MHz_TnomVnom	Pass	2	16.19	16.19	30.00
2462MHz_TnomVnom	Pass	2	16.01	16.01	30.00
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-
2412MHz_TnomVnom	Pass	2	14.13	14.13	30.00
2437MHz_TnomVnom	Pass	2	16.20	16.20	30.00
2462MHz_TnomVnom	Pass	2	14.08	14.08	30.00
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-
2412MHz_TnomVnom	Pass	2	13.25	13.25	30.00
2437MHz_TnomVnom	Pass	2	16.12	16.12	30.00
2462MHz_TnomVnom	Pass	2	13.22	13.22	30.00
802.11n HT40_Nss1,(MCS0)_1TX	-	-	-	-	-
2422MHz_TnomVnom	Pass	2	13.20	13.20	30.00
2437MHz_TnomVnom	Pass	2	14.64	14.64	30.00
2452MHz_TnomVnom	Pass	2	12.99	12.99	30.00

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

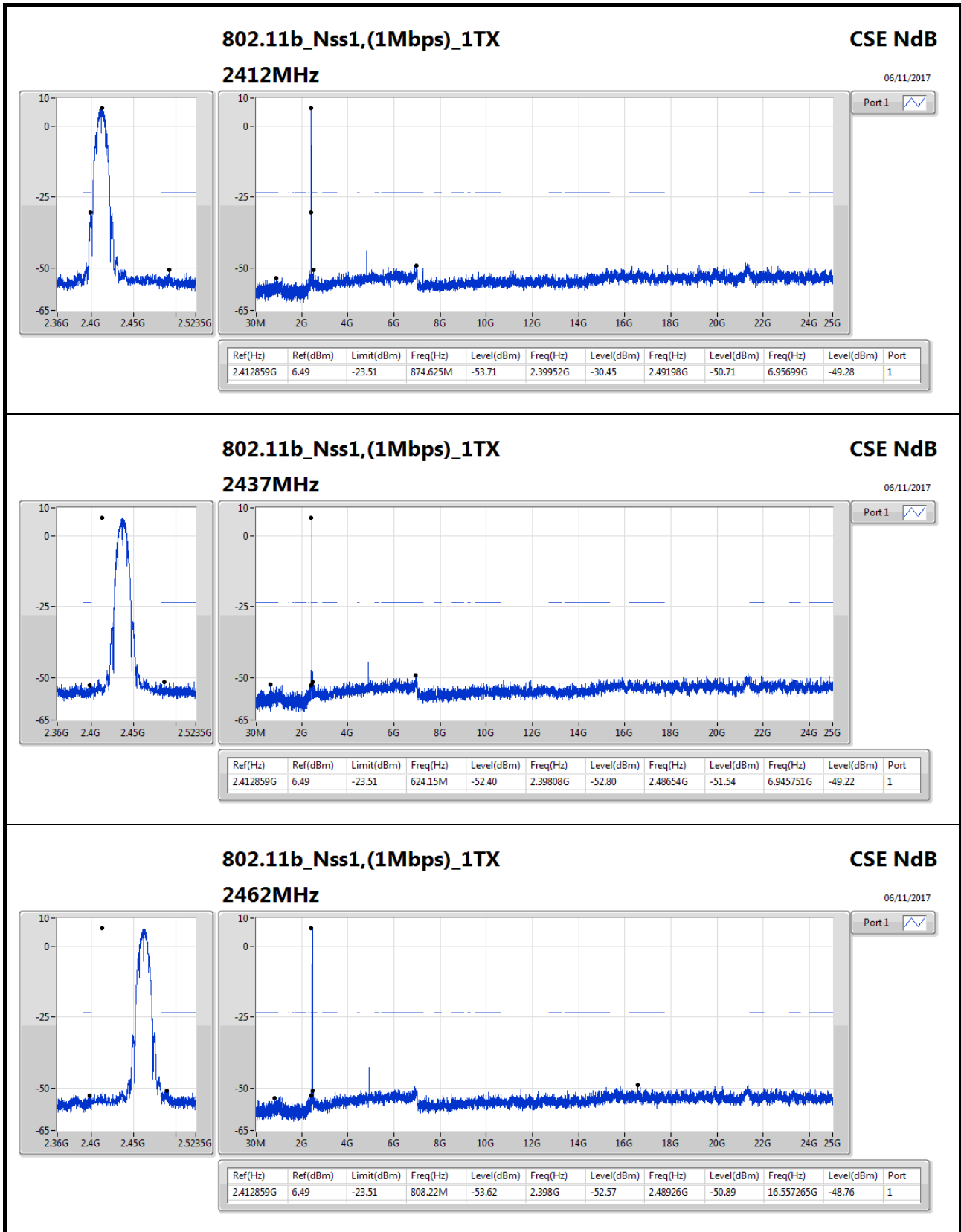


Summary

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)_1TX	Pass	2.412859G	6.49	-23.51	874.625M	-53.71	2.39952G	-30.45	2.49198G	-50.71	6.95699G	-49.28	1
802.11g_Nss1,(6Mbps)_1TX	Pass	2.429225G	1.77	-28.23	2.30408G	-53.49	2.39984G	-34.69	2.49198G	-48.16	6.883941G	-49.62	1
802.11n HT20_Nss1,(MCS0)_1TX	Pass	2.434068G	1.95	-28.05	2.30175G	-53.90	2.39992G	-34.90	2.49198G	-48.88	6.937323G	-49.12	1
802.11n HT40_Nss1,(MCS0)_1TX	Pass	2.437909G	-3.18	-33.18	723.87M	-53.62	2.39984G	-39.29	2.5019G	-48.92	23.277999G	-49.54	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)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	2.412859G	6.49	-23.51	874.625M	-53.71	2.39952G	-30.45	2.49198G	-50.71	6.95699G	-49.28	1
2437MHz_TnomVnom	Pass	2.412859G	6.49	-23.51	624.15M	-52.40	2.39808G	-52.80	2.48654G	-51.54	6.945751G	-49.22	1
2462MHz_TnomVnom	Pass	2.412859G	6.49	-23.51	808.22M	-53.62	2.398G	-52.57	2.48926G	-50.89	16.557265G	-48.76	1
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	2.429225G	1.77	-28.23	2.30408G	-53.49	2.39984G	-34.69	2.49198G	-48.16	6.883941G	-49.62	1
2437MHz_TnomVnom	Pass	2.429225G	1.77	-28.23	956.175M	-54.21	2.39952G	-51.97	2.51702G	-48.56	6.920465G	-48.52	1
2462MHz_TnomVnom	Pass	2.429225G	1.77	-28.23	845.5M	-53.96	2.39768G	-52.90	2.48486G	-46.31	17.310227G	-49.32	1
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	2.434068G	1.95	-28.05	2.30175G	-53.90	2.39992G	-34.90	2.49198G	-48.88	6.937323G	-49.12	1
2437MHz_TnomVnom	Pass	2.434068G	1.95	-28.05	622.985M	-53.52	2.39888G	-51.14	2.51702G	-48.95	6.940132G	-48.70	1
2462MHz_TnomVnom	Pass	2.434068G	1.95	-28.05	811.715M	-54.08	2.39104G	-53.14	2.48358G	-46.96	2.540357G	-48.68	1
802.11n HT40_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz_TnomVnom	Pass	2.437909G	-3.18	-33.18	723.87M	-53.62	2.39984G	-39.29	2.5019G	-48.92	23.277999G	-49.54	1
2437MHz_TnomVnom	Pass	2.437909G	-3.18	-33.18	2.18947G	-53.64	2.39856G	-41.07	2.48382G	-41.40	16.883596G	-49.62	1
2452MHz_TnomVnom	Pass	2.437909G	-3.18	-33.18	2.17344G	-53.94	2.39712G	-52.12	2.4843G	-40.49	16.872378G	-49.73	1



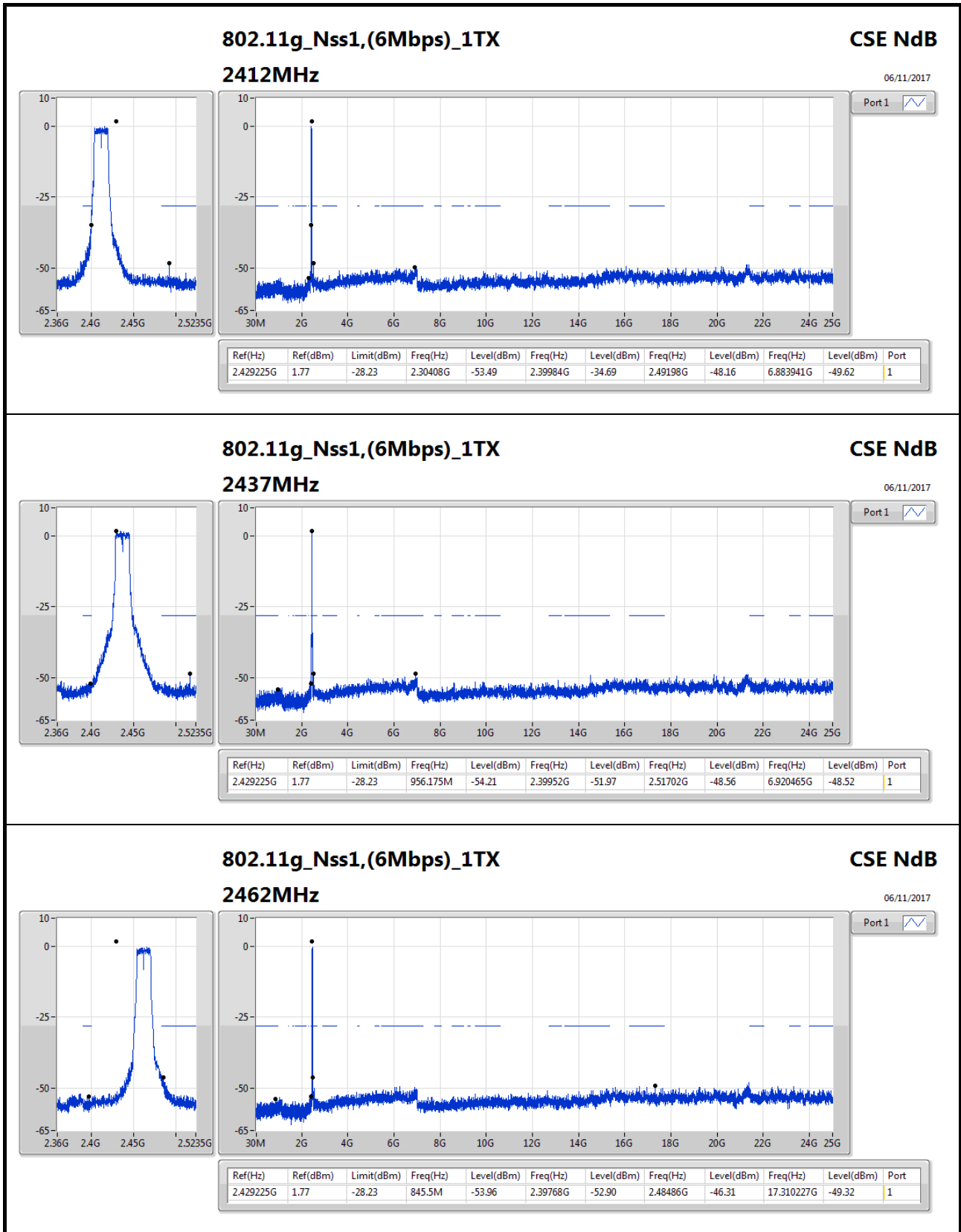
**802.11b\_Nss1,(1Mbps)\_1TX**

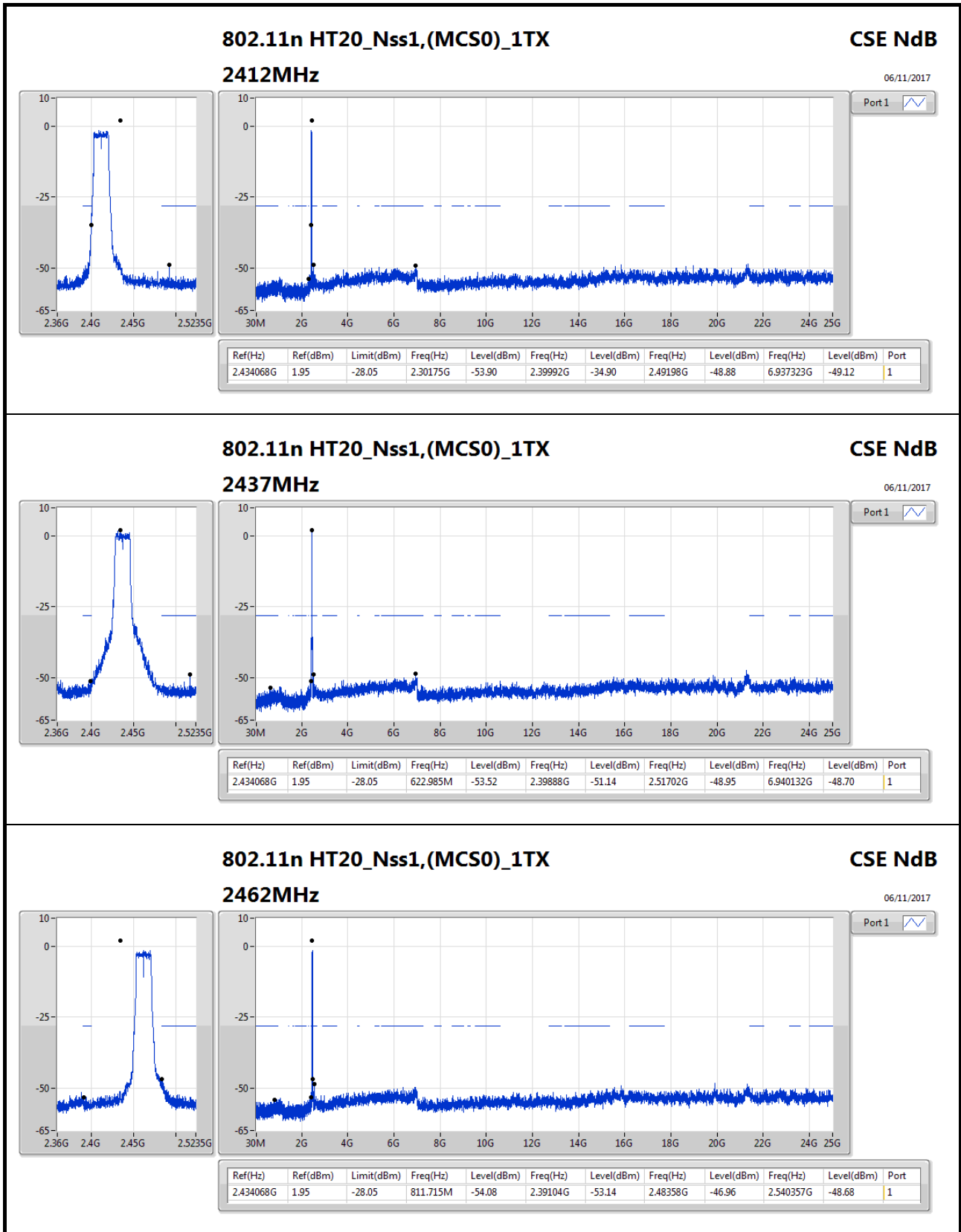
**2462MHz**

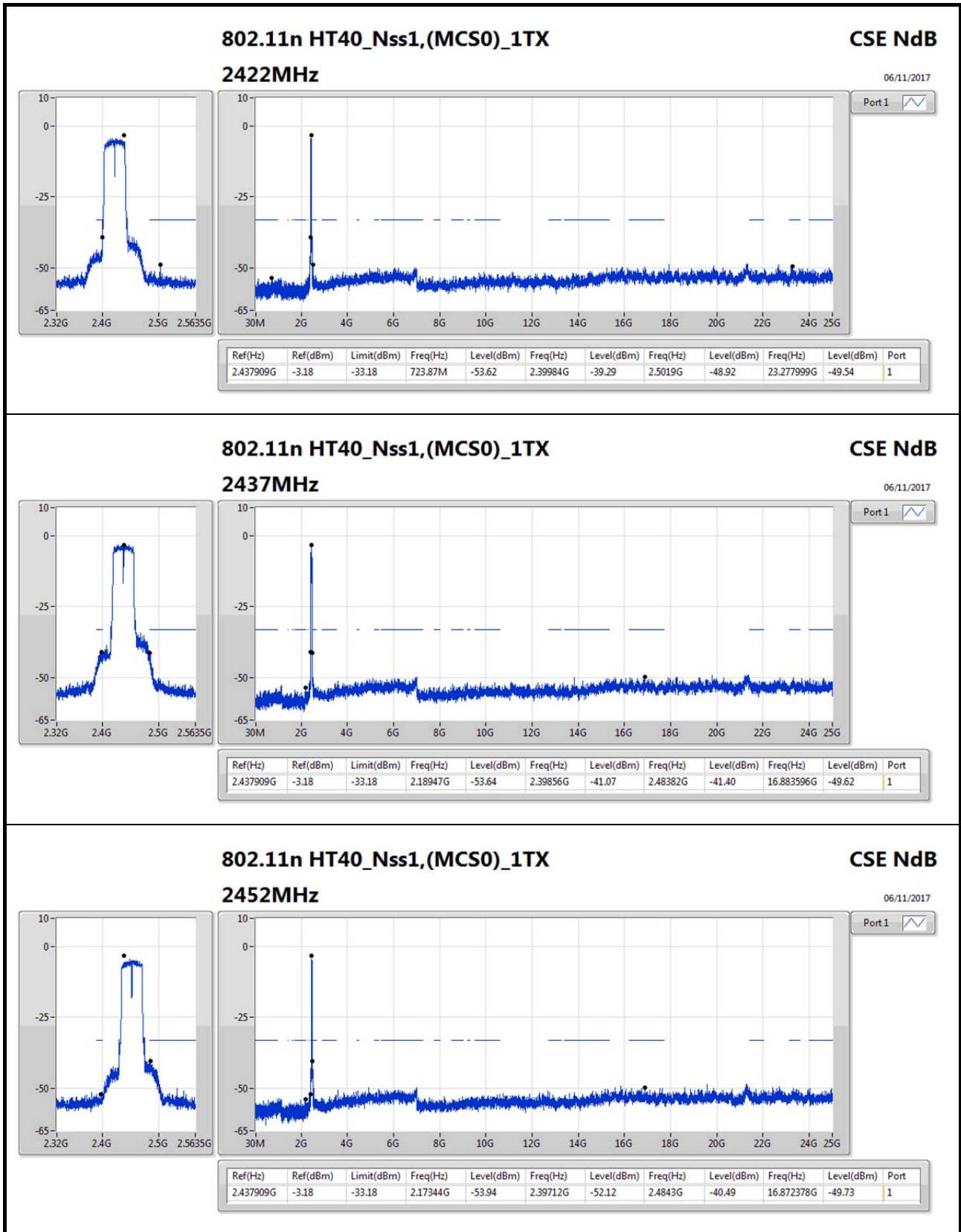
**CSE NdB**

06/11/2017

Port 1









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)_1TX	Pass	AV	2.4862G	48.06	54.00	-5.94	33.10	3	Vertical	159	3.28	-
802.11g_Nss1,(6Mbps)_1TX	Pass	AV	2.4836G	49.25	54.00	-4.75	33.09	3	Vertical	155	3.26	-
802.11n HT20_Nss1,(MCS0)_1TX	Pass	AV	2.4836G	48.77	54.00	-5.23	33.09	3	Vertical	156	3.69	-
802.11n HT40_Nss1,(MCS0)_1TX	Pass	AV	2.484G	51.58	54.00	-2.42	33.10	3	Vertical	145	3.69	-





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)_1TX	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.3854G	46.81	54.00	-7.19	32.70	3	Horizontal	222	2.79	-
2412MHz	Pass	AV	2.4128G	91.57	Inf	-Inf	32.81	3	Horizontal	222	2.79	-
2412MHz	Pass	PK	2.3656G	57.89	74.00	-16.11	32.63	3	Horizontal	222	2.79	-
2412MHz	Pass	PK	2.4128G	93.41	Inf	-Inf	32.81	3	Horizontal	222	2.79	-
2412MHz	Pass	AV	2.3876G	47.24	54.00	-6.76	32.71	3	Vertical	168	3.39	-
2412MHz	Pass	AV	2.4112G	100.87	Inf	-Inf	32.80	3	Vertical	168	3.39	-
2412MHz	Pass	PK	2.3878G	57.73	74.00	-16.27	32.71	3	Vertical	168	3.39	-
2412MHz	Pass	PK	2.4116G	102.70	Inf	-Inf	32.81	3	Vertical	168	3.39	-
2412MHz	Pass	AV	4.8263G	36.80	54.00	-17.20	4.16	3	Horizontal	42	1.38	-
2412MHz	Pass	PK	4.82641G	46.01	74.00	-27.99	4.16	3	Horizontal	42	1.38	-
2412MHz	Pass	AV	4.82399G	40.21	54.00	-13.79	4.15	3	Vertical	338	1.16	-
2412MHz	Pass	PK	4.82395G	47.02	74.00	-26.98	4.15	3	Vertical	338	1.16	-
2437MHz	Pass	AV	2.3614G	46.77	54.00	-7.23	32.61	3	Horizontal	223	1.06	-
2437MHz	Pass	AV	2.4362G	90.38	Inf	-Inf	32.90	3	Horizontal	223	1.06	-
2437MHz	Pass	AV	2.4954G	47.67	54.00	-6.33	33.14	3	Horizontal	223	1.06	-
2437MHz	Pass	PK	2.3706G	58.11	74.00	-15.89	32.65	3	Horizontal	223	1.06	-
2437MHz	Pass	PK	2.4366G	92.17	Inf	-Inf	32.91	3	Horizontal	223	1.06	-
2437MHz	Pass	PK	2.4982G	57.79	74.00	-16.21	33.15	3	Horizontal	223	1.06	-
2437MHz	Pass	AV	2.389G	46.81	54.00	-7.19	32.72	3	Vertical	194	3.64	-
2437MHz	Pass	AV	2.4378G	98.59	Inf	-Inf	32.91	3	Vertical	194	3.64	-
2437MHz	Pass	AV	2.4986G	47.67	54.00	-6.33	33.15	3	Vertical	194	3.64	-
2437MHz	Pass	PK	2.3498G	58.62	74.00	-15.38	32.56	3	Vertical	194	3.64	-
2437MHz	Pass	PK	2.4374G	100.47	Inf	-Inf	32.91	3	Vertical	194	3.64	-
2437MHz	Pass	PK	2.493G	58.55	74.00	-15.45	33.13	3	Vertical	194	3.64	-
2437MHz	Pass	AV	4.87397G	36.39	54.00	-17.61	4.27	3	Horizontal	152	1.47	-
2437MHz	Pass	PK	4.87425G	45.53	74.00	-28.47	4.28	3	Horizontal	152	1.47	-
2437MHz	Pass	AV	4.87397G	40.18	54.00	-13.82	4.27	3	Vertical	196	1.26	-
2437MHz	Pass	PK	4.87411G	47.22	74.00	-26.78	4.28	3	Vertical	196	1.26	-
2462MHz	Pass	AV	2.4612G	89.75	Inf	-Inf	33.00	3	Horizontal	219	1.03	-
2462MHz	Pass	AV	2.4924G	47.67	54.00	-6.33	33.13	3	Horizontal	219	1.03	-
2462MHz	Pass	PK	2.4616G	91.59	Inf	-Inf	33.01	3	Horizontal	219	1.03	-
2462MHz	Pass	PK	2.4878G	58.16	74.00	-15.84	33.11	3	Horizontal	219	1.03	-
2462MHz	Pass	AV	2.4612G	100.11	Inf	-Inf	33.00	3	Vertical	159	3.28	-
2462MHz	Pass	AV	2.4862G	48.06	54.00	-5.94	33.10	3	Vertical	159	3.28	-
2462MHz	Pass	PK	2.4616G	101.92	Inf	-Inf	33.01	3	Vertical	159	3.28	-
2462MHz	Pass	PK	2.4906G	58.49	74.00	-15.51	33.12	3	Vertical	159	3.28	-
2462MHz	Pass	AV	4.92402G	38.99	54.00	-15.01	4.40	3	Horizontal	147	1.50	-
2462MHz	Pass	PK	4.92391G	47.45	74.00	-26.55	4.40	3	Horizontal	147	1.50	-
2462MHz	Pass	AV	4.92397G	43.06	54.00	-10.94	4.40	3	Vertical	313	1.49	-
2462MHz	Pass	PK	4.92396G	49.46	74.00	-24.54	4.40	3	Vertical	313	1.49	-
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.3832G	46.90	54.00	-7.10	32.69	3	Horizontal	221	1.05	-
2412MHz	Pass	AV	2.4054G	85.75	Inf	-Inf	32.78	3	Horizontal	221	1.05	-
2412MHz	Pass	PK	2.3784G	57.81	74.00	-16.19	32.68	3	Horizontal	221	1.05	-
2412MHz	Pass	PK	2.4056G	92.51	Inf	-Inf	32.78	3	Horizontal	221	1.05	-
2412MHz	Pass	AV	2.39G	47.71	54.00	-6.29	32.72	3	Vertical	156	3.41	-
2412MHz	Pass	AV	2.411G	95.29	Inf	-Inf	32.80	3	Vertical	156	3.41	-



RSE TX above 1GHz Result

Appendix C

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2412MHz	Pass	PK	2.3892G	59.25	74.00	-14.75	32.72	3	Vertical	156	3.41	-
2412MHz	Pass	PK	2.4134G	102.09	Inf	-Inf	32.81	3	Vertical	156	3.41	-
2412MHz	Pass	AV	4.82648G	34.52	54.00	-19.48	4.16	3	Horizontal	37	2.22	-
2412MHz	Pass	PK	4.82649G	46.24	74.00	-27.76	4.16	3	Horizontal	37	2.22	-
2412MHz	Pass	AV	4.82648G	34.34	54.00	-19.66	4.16	3	Vertical	294	1.18	-
2412MHz	Pass	PK	4.8261G	44.61	74.00	-29.39	4.16	3	Vertical	294	1.18	-
2437MHz	Pass	AV	2.3558G	46.80	54.00	-7.20	32.59	3	Horizontal	217	1.07	-
2437MHz	Pass	AV	2.4362G	86.86	Inf	-Inf	32.90	3	Horizontal	217	1.07	-
2437MHz	Pass	AV	2.499G	47.71	54.00	-6.29	33.16	3	Horizontal	217	1.07	-
2437MHz	Pass	PK	2.3566G	57.79	74.00	-16.21	32.59	3	Horizontal	217	1.07	-
2437MHz	Pass	PK	2.4386G	93.62	Inf	-Inf	32.91	3	Horizontal	217	1.07	-
2437MHz	Pass	PK	2.4998G	58.39	74.00	-15.61	33.16	3	Horizontal	217	1.07	-
2437MHz	Pass	AV	2.3642G	47.01	54.00	-6.99	32.62	3	Vertical	157	3.69	-
2437MHz	Pass	AV	2.4438G	97.17	Inf	-Inf	32.94	3	Vertical	157	3.69	-
2437MHz	Pass	AV	2.4866G	47.76	54.00	-6.24	33.11	3	Vertical	157	3.69	-
2437MHz	Pass	PK	2.3422G	57.54	74.00	-16.46	32.53	3	Vertical	157	3.69	-
2437MHz	Pass	PK	2.4438G	103.78	Inf	-Inf	32.94	3	Vertical	157	3.69	-
2437MHz	Pass	PK	2.4938G	58.08	74.00	-15.92	33.14	3	Vertical	157	3.69	-
2437MHz	Pass	AV	4.88732G	35.32	54.00	-18.68	4.31	3	Horizontal	153	1.12	-
2437MHz	Pass	PK	4.88336G	45.97	74.00	-28.03	4.30	3	Horizontal	153	1.12	-
2437MHz	Pass	AV	4.874G	37.37	54.00	-16.62	4.27	3	Vertical	267	1.88	-
2437MHz	Pass	PK	4.87436G	47.62	74.00	-26.38	4.28	3	Vertical	267	1.88	-
2462MHz	Pass	AV	2.455G	85.19	Inf	-Inf	32.98	3	Horizontal	216	1.01	-
2462MHz	Pass	AV	2.4838G	47.77	54.00	-6.23	33.10	3	Horizontal	216	1.01	-
2462MHz	Pass	PK	2.4556G	91.87	Inf	-Inf	32.98	3	Horizontal	216	1.01	-
2462MHz	Pass	PK	2.4946G	58.18	74.00	-15.82	33.14	3	Horizontal	216	1.01	-
2462MHz	Pass	AV	2.461G	94.66	Inf	-Inf	33.00	3	Vertical	155	3.26	-
2462MHz	Pass	AV	2.4836G	49.25	54.00	-4.75	33.09	3	Vertical	155	3.26	-
2462MHz	Pass	PK	2.4634G	101.46	Inf	-Inf	33.01	3	Vertical	155	3.26	-
2462MHz	Pass	PK	2.4836G	61.13	74.00	-12.87	33.09	3	Vertical	155	3.26	-
2462MHz	Pass	AV	4.92221G	34.57	54.00	-19.43	4.40	3	Horizontal	320	1.88	-
2462MHz	Pass	PK	4.92495G	45.67	74.00	-28.33	4.40	3	Horizontal	320	1.88	-
2462MHz	Pass	AV	4.92439G	34.62	54.00	-19.38	4.40	3	Vertical	162	2.21	-
2462MHz	Pass	PK	4.92291G	45.42	74.00	-28.58	4.40	3	Vertical	162	2.21	-
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.3824G	46.86	54.00	-7.14	32.69	3	Horizontal	214	1.09	-
2412MHz	Pass	AV	2.4048G	84.19	Inf	-Inf	32.78	3	Horizontal	214	1.09	-
2412MHz	Pass	PK	2.3624G	57.55	74.00	-16.45	32.61	3	Horizontal	214	1.09	-
2412MHz	Pass	PK	2.409G	91.45	Inf	-Inf	32.80	3	Horizontal	214	1.09	-
2412MHz	Pass	AV	2.39G	47.25	54.00	-6.75	32.72	3	Vertical	153	3.39	-
2412MHz	Pass	AV	2.411G	93.97	Inf	-Inf	32.80	3	Vertical	153	3.39	-
2412MHz	Pass	PK	2.3686G	57.75	74.00	-16.25	32.64	3	Vertical	153	3.39	-
2412MHz	Pass	PK	2.409G	101.36	Inf	-Inf	32.80	3	Vertical	153	3.39	-
2412MHz	Pass	AV	4.83066G	33.87	54.00	-20.13	4.17	3	Horizontal	47	1.50	-
2412MHz	Pass	PK	4.8372G	45.05	74.00	-28.95	4.18	3	Horizontal	47	1.50	-
2412MHz	Pass	AV	4.809G	33.83	54.00	-20.17	4.11	3	Vertical	360	1.50	-
2412MHz	Pass	PK	4.81014G	45.04	74.00	-28.96	4.12	3	Vertical	360	1.50	-
2437MHz	Pass	AV	2.3774G	46.80	54.00	-7.20	32.67	3	Horizontal	212	1.07	-
2437MHz	Pass	AV	2.4362G	86.31	Inf	-Inf	32.90	3	Horizontal	212	1.07	-



RSE TX above 1GHz Result

Appendix C

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2437MHz	Pass	AV	2.4882G	47.71	54.00	-6.29	33.11	3	Horizontal	212	1.07	-
2437MHz	Pass	PK	2.3686G	57.69	74.00	-16.31	32.64	3	Horizontal	212	1.07	-
2437MHz	Pass	PK	2.4342G	93.69	Inf	-Inf	32.90	3	Horizontal	212	1.07	-
2437MHz	Pass	PK	2.4906G	58.05	74.00	-15.95	33.12	3	Horizontal	212	1.07	-
2437MHz	Pass	AV	2.3658G	46.88	54.00	-7.12	32.63	3	Vertical	150	3.69	-
2437MHz	Pass	AV	2.4442G	96.50	Inf	-Inf	32.94	3	Vertical	150	3.69	-
2437MHz	Pass	AV	2.485G	47.78	54.00	-6.22	33.10	3	Vertical	150	3.69	-
2437MHz	Pass	PK	2.3658G	57.98	74.00	-16.02	32.63	3	Vertical	150	3.69	-
2437MHz	Pass	PK	2.4338G	103.23	Inf	-Inf	32.90	3	Vertical	150	3.69	-
2437MHz	Pass	PK	2.4914G	58.15	74.00	-15.85	33.13	3	Vertical	150	3.69	-
2437MHz	Pass	AV	4.87952G	34.87	54.00	-19.13	4.29	3	Vertical	137	1.18	-
2437MHz	Pass	AV	4.88174G	34.29	54.00	-19.71	4.29	3	Vertical	100	1.47	-
2437MHz	Pass	PK	4.87298G	46.48	74.00	-27.52	4.27	3	Vertical	137	1.18	-
2437MHz	Pass	PK	4.88588G	44.72	74.00	-29.28	4.30	3	Vertical	100	1.47	-
2462MHz	Pass	AV	2.4546G	83.69	Inf	-Inf	32.98	3	Horizontal	208	1.03	-
2462MHz	Pass	AV	2.484G	47.73	54.00	-6.27	33.10	3	Horizontal	208	1.03	-
2462MHz	Pass	PK	2.459G	90.65	Inf	-Inf	33.00	3	Horizontal	208	1.03	-
2462MHz	Pass	PK	2.4896G	58.25	74.00	-15.75	33.12	3	Horizontal	208	1.03	-
2462MHz	Pass	AV	2.4546G	92.54	Inf	-Inf	32.98	3	Vertical	156	3.69	-
2462MHz	Pass	AV	2.4836G	48.77	54.00	-5.23	33.09	3	Vertical	156	3.69	-
2462MHz	Pass	PK	2.459G	99.81	Inf	-Inf	33.00	3	Vertical	156	3.69	-
2462MHz	Pass	PK	2.484G	60.37	74.00	-13.63	33.10	3	Vertical	156	3.69	-
2462MHz	Pass	AV	4.93384G	34.81	54.00	-19.19	4.42	3	Horizontal	268	1.10	-
2462MHz	Pass	PK	4.93618G	45.93	74.00	-28.07	4.43	3	Horizontal	268	1.10	-
2462MHz	Pass	AV	4.924G	35.45	54.00	-18.55	4.40	3	Vertical	162	1.64	-
2462MHz	Pass	PK	4.92616G	46.41	74.00	-27.59	4.41	3	Vertical	162	1.64	-
802.11n HT40_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	AV	2.3896G	46.99	54.00	-7.01	32.72	3	Horizontal	207	2.80	-
2422MHz	Pass	AV	2.4184G	81.98	Inf	-Inf	32.83	3	Horizontal	207	2.80	-
2422MHz	Pass	AV	2.4948G	47.57	54.00	-6.43	33.14	3	Horizontal	207	2.80	-
2422MHz	Pass	PK	2.382G	57.76	74.00	-16.24	32.69	3	Horizontal	207	2.80	-
2422MHz	Pass	PK	2.42G	89.29	Inf	-Inf	32.84	3	Horizontal	207	2.80	-
2422MHz	Pass	PK	2.492G	58.11	74.00	-15.89	33.13	3	Horizontal	207	2.80	-
2422MHz	Pass	AV	2.3888G	49.08	54.00	-4.92	32.72	3	Vertical	144	3.42	-
2422MHz	Pass	AV	2.4132G	90.35	Inf	-Inf	32.81	3	Vertical	144	3.42	-
2422MHz	Pass	AV	2.4988G	47.99	54.00	-6.01	33.16	3	Vertical	144	3.42	-
2422MHz	Pass	PK	2.3888G	60.16	74.00	-13.84	32.72	3	Vertical	144	3.42	-
2422MHz	Pass	PK	2.4144G	97.72	Inf	-Inf	32.82	3	Vertical	144	3.42	-
2422MHz	Pass	PK	2.4964G	58.24	74.00	-15.76	33.15	3	Vertical	144	3.42	-
2422MHz	Pass	AV	4.841G	33.81	54.00	-20.19	4.19	3	Horizontal	342	1.58	-
2422MHz	Pass	PK	4.83968G	44.40	74.00	-29.60	4.19	3	Horizontal	342	1.58	-
2422MHz	Pass	AV	4.84256G	33.88	54.00	-20.12	4.20	3	Vertical	30	1.07	-
2422MHz	Pass	PK	4.85186G	44.75	74.00	-29.25	4.22	3	Vertical	30	1.07	-
2437MHz	Pass	AV	2.3862G	46.88	54.00	-7.12	32.71	3	Horizontal	206	1.06	-
2437MHz	Pass	AV	2.4334G	81.60	Inf	-Inf	32.89	3	Horizontal	206	1.06	-
2437MHz	Pass	AV	2.4842G	48.05	54.00	-5.95	33.10	3	Horizontal	206	1.06	-
2437MHz	Pass	PK	2.3738G	58.23	74.00	-15.77	32.66	3	Horizontal	206	1.06	-
2437MHz	Pass	PK	2.435G	89.15	Inf	-Inf	32.90	3	Horizontal	206	1.06	-
2437MHz	Pass	PK	2.4926G	58.47	74.00	-15.53	33.13	3	Horizontal	206	1.06	-



**RSE TX above 1GHz Result**

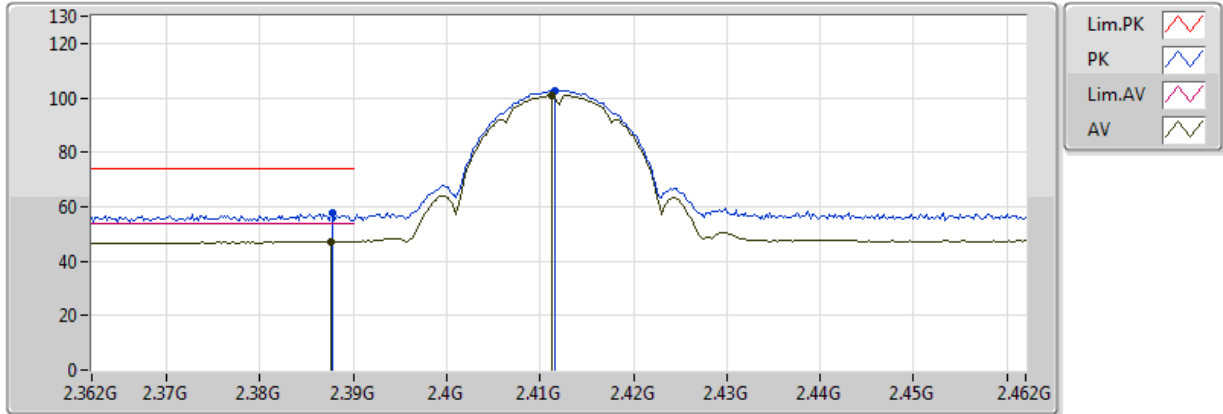
**Appendix C**

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2437MHz	Pass	AV	2.3894G	47.43	54.00	-6.57	32.72	3	Vertical	145	3.69	-
2437MHz	Pass	AV	2.4418G	92.14	Inf	-Inf	32.93	3	Vertical	145	3.69	-
2437MHz	Pass	AV	2.4838G	50.98	54.00	-3.02	33.10	3	Vertical	145	3.69	-
2437MHz	Pass	PK	2.361G	57.47	74.00	-16.53	32.61	3	Vertical	145	3.69	-
2437MHz	Pass	PK	2.4438G	99.39	Inf	-Inf	32.94	3	Vertical	145	3.69	-
2437MHz	Pass	PK	2.4842G	61.69	74.00	-12.31	33.10	3	Vertical	145	3.69	-
2437MHz	Pass	AV	4.88804G	34.27	54.00	-19.73	4.31	3	Horizontal	11	1.73	-
2437MHz	Pass	PK	4.87958G	44.77	74.00	-29.23	4.29	3	Horizontal	11	1.73	-
2437MHz	Pass	AV	4.88876G	34.25	54.00	-19.75	4.31	3	Vertical	336	1.17	-
2437MHz	Pass	PK	4.88234G	45.60	74.00	-28.40	4.30	3	Vertical	336	1.17	-
2452MHz	Pass	AV	2.3872G	46.82	54.00	-7.18	32.71	3	Horizontal	207	1.04	-
2452MHz	Pass	AV	2.4508G	80.16	Inf	-Inf	32.96	3	Horizontal	207	1.04	-
2452MHz	Pass	AV	2.5G	47.62	54.00	-6.38	33.16	3	Horizontal	207	1.04	-
2452MHz	Pass	PK	2.3772G	57.29	74.00	-16.71	32.67	3	Horizontal	207	1.04	-
2452MHz	Pass	PK	2.45G	87.70	Inf	-Inf	32.96	3	Horizontal	207	1.04	-
2452MHz	Pass	PK	2.4848G	58.46	74.00	-15.54	33.10	3	Horizontal	207	1.04	-
2452MHz	Pass	AV	2.3676G	46.86	54.00	-7.14	32.63	3	Vertical	145	3.69	-
2452MHz	Pass	AV	2.4468G	90.40	Inf	-Inf	32.95	3	Vertical	145	3.69	-
2452MHz	Pass	AV	2.484G	51.58	54.00	-2.42	33.10	3	Vertical	145	3.69	-
2452MHz	Pass	PK	2.3636G	57.98	74.00	-16.02	32.62	3	Vertical	145	3.69	-
2452MHz	Pass	PK	2.45G	97.71	Inf	-Inf	32.96	3	Vertical	145	3.69	-
2452MHz	Pass	PK	2.4872G	63.69	74.00	-10.31	33.11	3	Vertical	145	3.69	-
2452MHz	Pass	AV	4.9169G	34.61	54.00	-19.39	4.38	3	Horizontal	317	2.16	-
2452MHz	Pass	PK	4.8917G	45.32	74.00	-28.68	4.32	3	Horizontal	317	2.16	-
2452MHz	Pass	AV	4.91588G	34.55	54.00	-19.45	4.38	3	Vertical	89	1.50	-
2452MHz	Pass	PK	4.91768G	45.21	74.00	-28.79	4.38	3	Vertical	89	1.50	-

### 802.11b\_Nss1,(1Mbps)\_1TX

### 2412MHz\_TX

09/11/2017



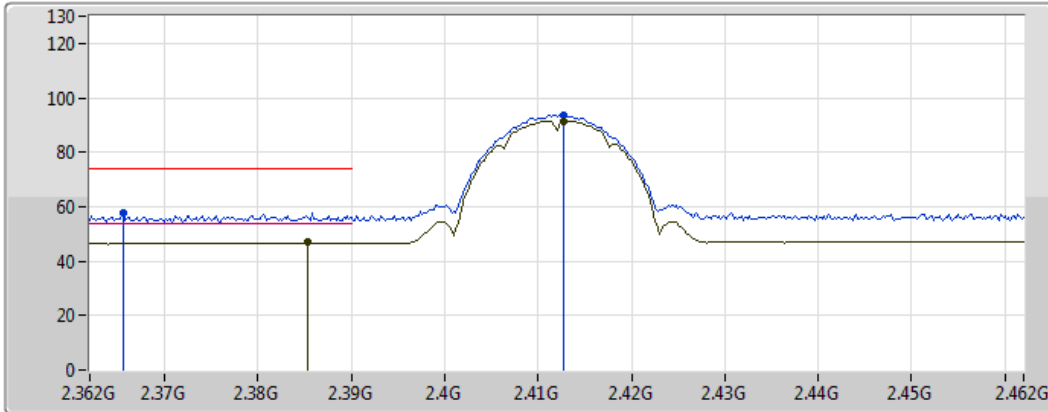
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3876G	47.24	54.00	-6.76	32.71	3	Vertical	168	3.39	-	14.53	26.99	5.73	-
AV	2.4112G	100.87	Inf	-Inf	32.80	3	Vertical	168	3.39	-	68.07	27.05	5.75	-
PK	2.3878G	57.73	74.00	-16.27	32.71	3	Vertical	168	3.39	-	25.02	26.99	5.73	-
PK	2.4116G	102.70	Inf	-Inf	32.81	3	Vertical	168	3.39	-	69.89	27.05	5.75	-



### 802.11b\_Nss1,(1Mbps)\_1TX

### 2412MHz\_TX

09/11/2017



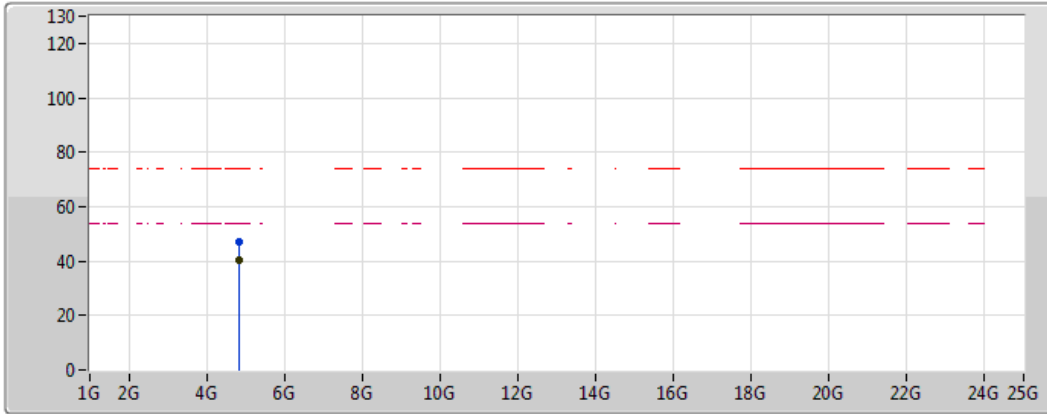
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3854G	46.81	54.00	-7.19	32.70	3	Horizontal	222	2.79	-	14.10	26.98	5.72	-
AV	2.4128G	91.57	Inf	-Inf	32.81	3	Horizontal	222	2.79	-	58.76	27.06	5.76	-
PK	2.3656G	57.89	74.00	-16.11	32.63	3	Horizontal	222	2.79	-	25.26	26.92	5.70	-
PK	2.4128G	93.41	Inf	-Inf	32.81	3	Horizontal	222	2.79	-	60.60	27.06	5.76	-



### 802.11b\_Nss1,(1Mbps)\_1TX

### 2412MHz\_TX

09/11/2017



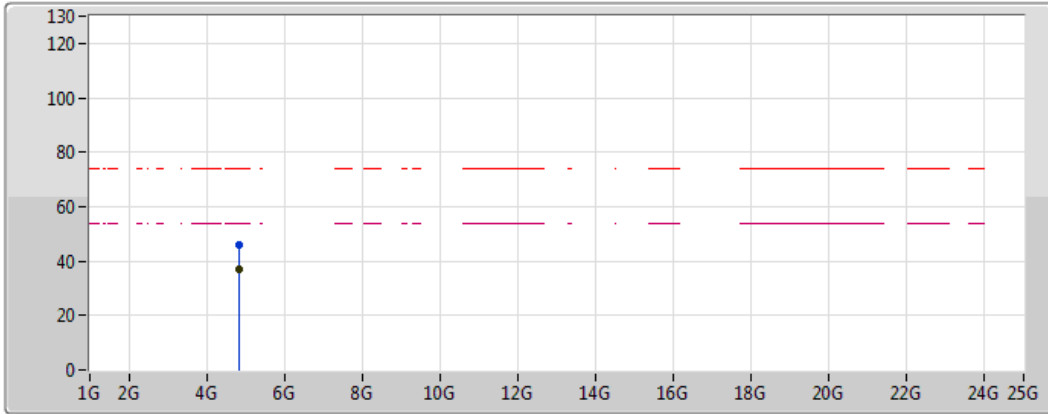
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.82399G	40.21	54.00	-13.79	4.15	3	Vertical	338	1.16	-	36.06	31.22	8.11	35.18
PK	4.82395G	47.02	74.00	-26.98	4.15	3	Vertical	338	1.16	-	42.87	31.22	8.11	35.18



### 802.11b\_Nss1,(1Mbps)\_1TX

### 2412MHz\_TX

09/11/2017



Lim.PK	
PK	
Lim.AV	
AV	

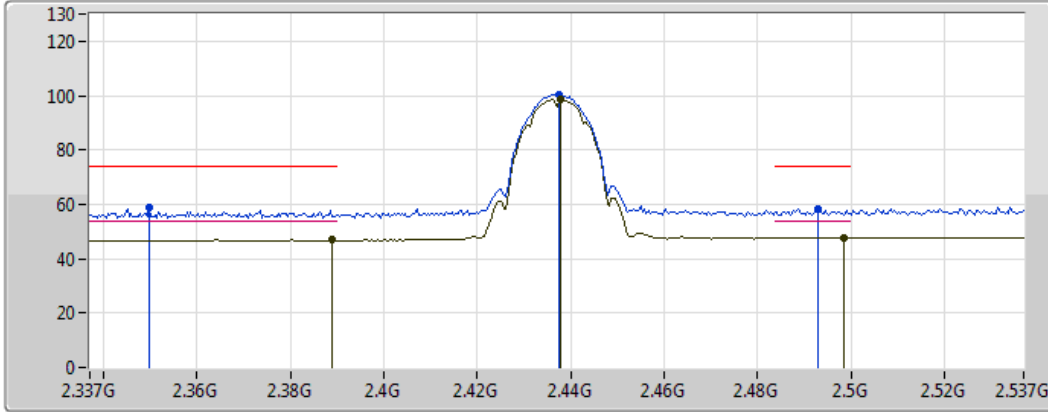
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.8263G	36.80	54.00	-17.20	4.16	3	Horizontal	42	1.38	-	32.64	31.22	8.11	35.18
PK	4.82641G	46.01	74.00	-27.99	4.16	3	Horizontal	42	1.38	-	41.85	31.22	8.11	35.18



### 802.11b\_Nss1,(1Mbps)\_1TX

### 2437MHz\_TX

09/11/2017



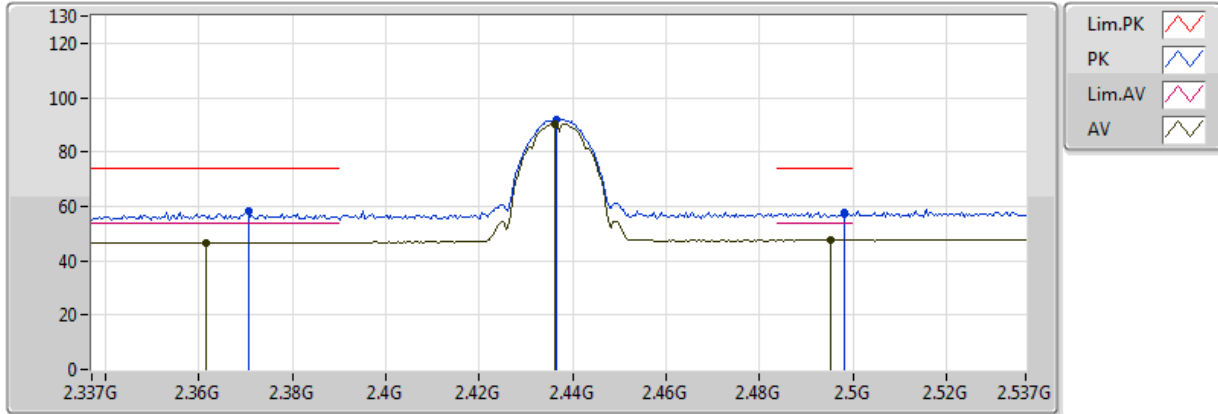
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.389G	46.81	54.00	-7.19	32.72	3	Vertical	194	3.64	-	14.09	26.99	5.73	-
AV	2.4378G	98.59	Inf	-Inf	32.91	3	Vertical	194	3.64	-	65.68	27.13	5.79	-
AV	2.4986G	47.67	54.00	-6.33	33.15	3	Vertical	194	3.64	-	14.52	27.30	5.86	-
PK	2.3498G	58.62	74.00	-15.38	32.56	3	Vertical	194	3.64	-	26.06	26.88	5.68	-
PK	2.4374G	100.47	Inf	-Inf	32.91	3	Vertical	194	3.64	-	67.56	27.12	5.78	-
PK	2.493G	58.55	74.00	-15.45	33.13	3	Vertical	194	3.64	-	25.41	27.28	5.85	-



### 802.11b\_Nss1,(1Mbps)\_1TX

### 2437MHz\_TX

09/11/2017



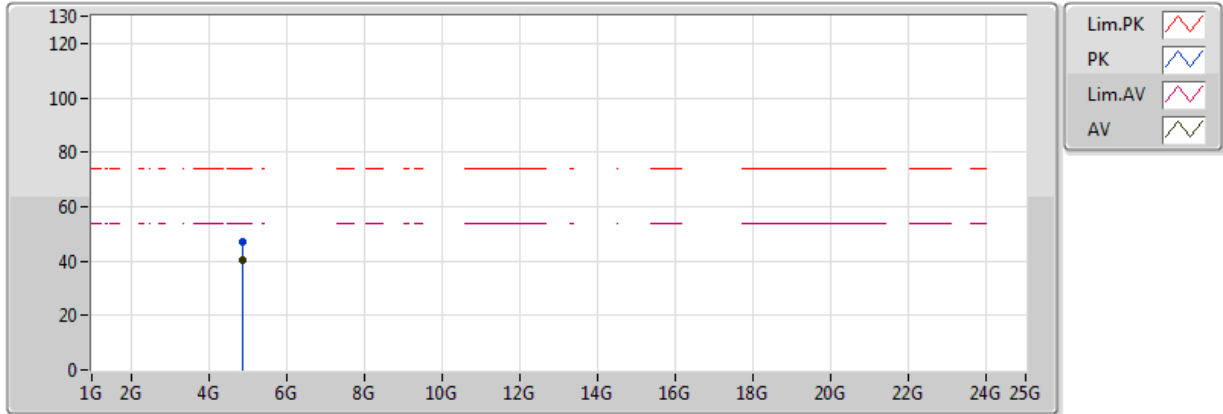
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3614G	46.77	54.00	-7.23	32.61	3	Horizontal	223	1.06	-	14.17	26.91	5.70	-
AV	2.4362G	90.38	Inf	-Inf	32.90	3	Horizontal	223	1.06	-	57.47	27.12	5.78	-
AV	2.4954G	47.67	54.00	-6.33	33.14	3	Horizontal	223	1.06	-	14.52	27.29	5.85	-
PK	2.3706G	58.11	74.00	-15.89	32.65	3	Horizontal	223	1.06	-	25.46	26.94	5.71	-
PK	2.4366G	92.17	Inf	-Inf	32.91	3	Horizontal	223	1.06	-	59.26	27.12	5.78	-
PK	2.4982G	57.79	74.00	-16.21	33.15	3	Horizontal	223	1.06	-	24.64	27.29	5.86	-



### 802.11b\_Nss1,(1Mbps)\_1TX

### 2437MHz\_TX

09/11/2017



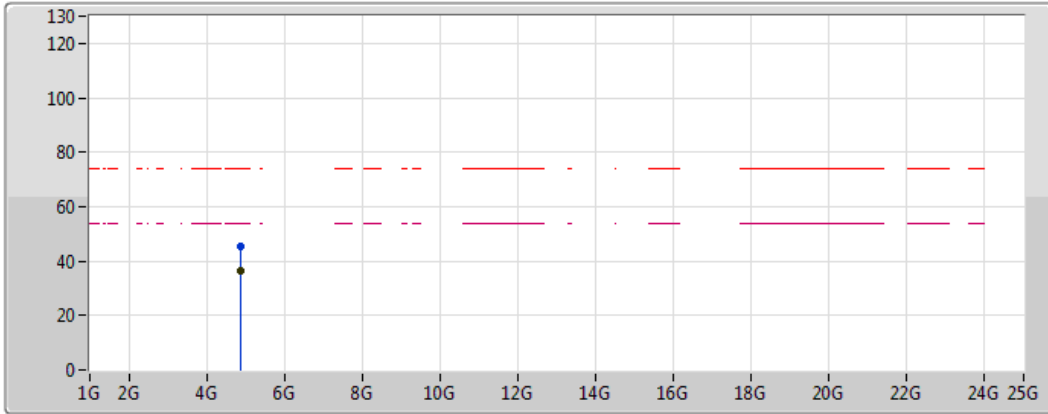
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.87397G	40.18	54.00	-13.82	4.27	3	Vertical	196	1.26	-	35.91	31.30	8.17	35.19
PK	4.87411G	47.22	74.00	-26.78	4.28	3	Vertical	196	1.26	-	42.95	31.30	8.17	35.19



### 802.11b\_Nss1,(1Mbps)\_1TX

### 2437MHz\_TX

09/11/2017



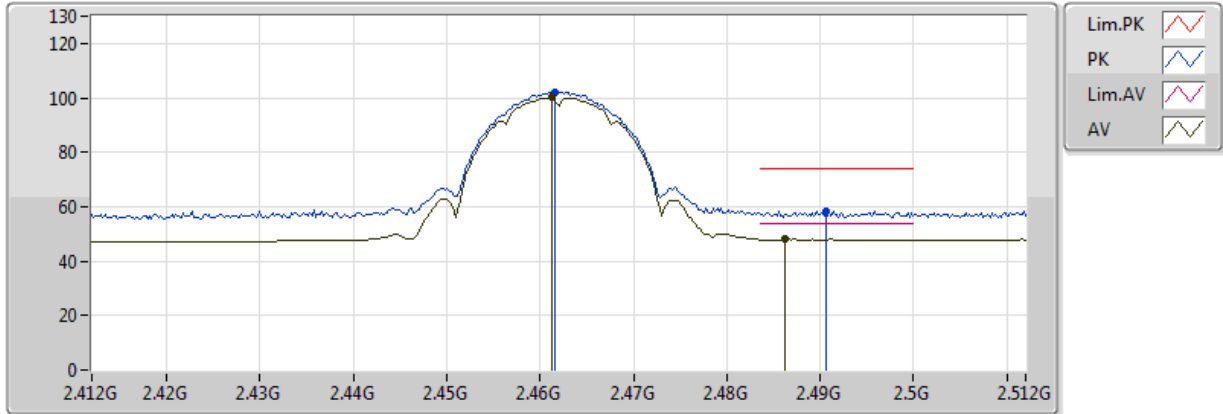
Lim.PK	
PK	
Lim.AV	
AV	

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.87397G	36.39	54.00	-17.61	4.27	3	Horizontal	152	1.47	-	32.12	31.30	8.17	35.19
PK	4.87425G	45.53	74.00	-28.47	4.28	3	Horizontal	152	1.47	-	41.25	31.30	8.17	35.19

### 802.11b\_Nss1,(1Mbps)\_1TX

### 2462MHz\_TX

09/11/2017

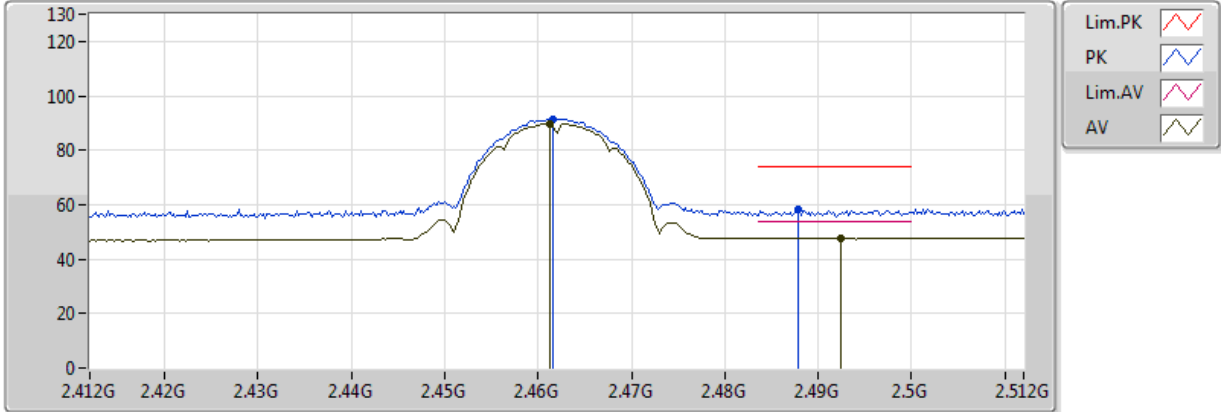


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.4612G	100.11	Inf	-Inf	33.00	3	Vertical	159	3.28	-	67.10	27.19	5.81	-
AV	2.4862G	48.06	54.00	-5.94	33.10	3	Vertical	159	3.28	-	14.96	27.26	5.84	-
PK	2.4616G	101.92	Inf	-Inf	33.01	3	Vertical	159	3.28	-	68.91	27.19	5.81	-
PK	2.4906G	58.49	74.00	-15.51	33.12	3	Vertical	159	3.28	-	25.37	27.27	5.85	-

### 802.11b\_Nss1,(1Mbps)\_1TX

### 2462MHz\_TX

09/11/2017

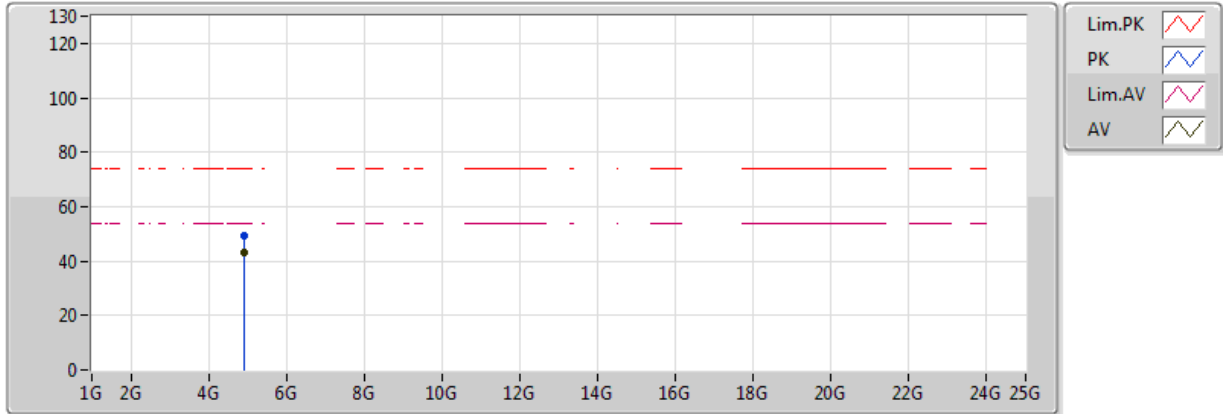


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.4612G	89.75	Inf	-Inf	33.00	3	Horizontal	219	1.03	-	56.75	27.19	5.81	-
AV	2.4924G	47.67	54.00	-6.33	33.13	3	Horizontal	219	1.03	-	14.54	27.28	5.85	-
PK	2.4616G	91.59	Inf	-Inf	33.01	3	Horizontal	219	1.03	-	58.59	27.19	5.81	-
PK	2.4878G	58.16	74.00	-15.84	33.11	3	Horizontal	219	1.03	-	25.05	27.27	5.85	-

### 802.11b\_Nss1,(1Mbps)\_1TX

### 2462MHz\_TX

09/11/2017

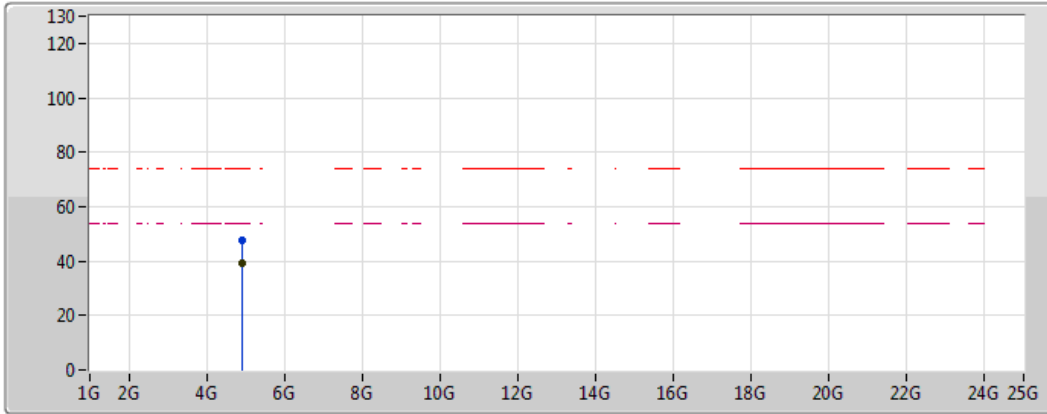






Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.92397G	43.06	54.00	-10.94	4.40	3	Vertical	313	1.49	-	38.66	31.38	8.23	35.20
PK	4.92396G	49.46	74.00	-24.54	4.40	3	Vertical	313	1.49	-	45.06	31.38	8.23	35.20

### 802.11b\_Nss1,(1Mbps)\_1TX

### 2462MHz\_TX

09/11/2017



Lim.PK	
PK	
Lim.AV	
AV	

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.92402G	38.99	54.00	-15.01	4.40	3	Horizontal	147	1.50	-	34.59	31.38	8.23	35.20
PK	4.92391G	47.45	74.00	-26.55	4.40	3	Horizontal	147	1.50	-	43.05	31.38	8.23	35.20

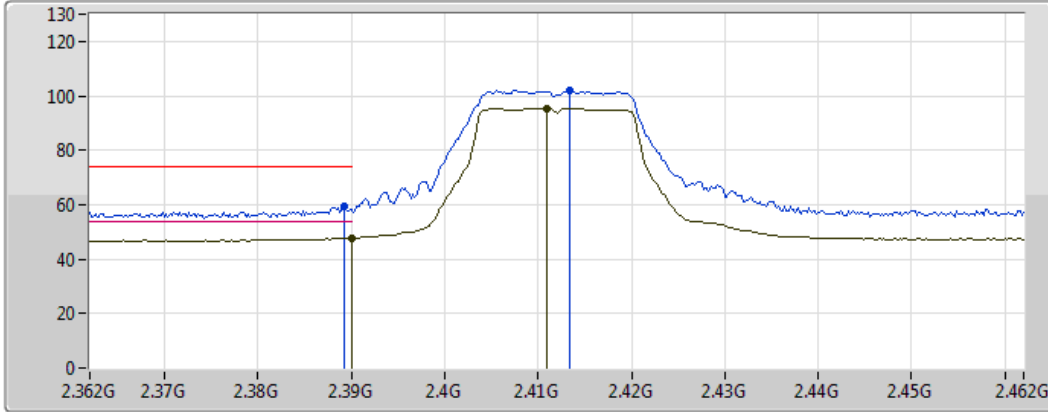




### 802.11g\_Nss1,(6Mbps)\_1TX

### 2412MHz\_TX

09/11/2017



Lim.PK	
PK	
Lim.AV	
AV	

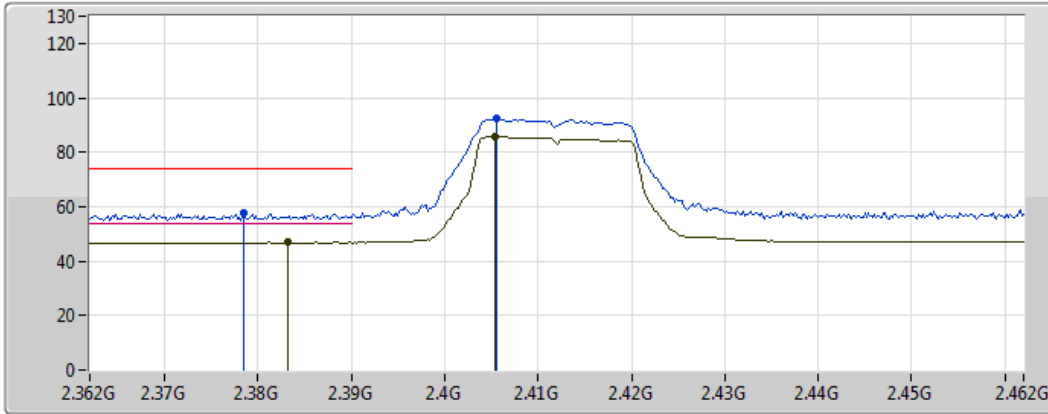
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.39G	47.71	54.00	-6.29	32.72	3	Vertical	156	3.41	-	14.99	26.99	5.73	-
AV	2.411G	95.29	Inf	-Inf	32.80	3	Vertical	156	3.41	-	62.49	27.05	5.75	-
PK	2.3892G	59.25	74.00	-14.75	32.72	3	Vertical	156	3.41	-	26.53	26.99	5.73	-
PK	2.4134G	102.09	Inf	-Inf	32.81	3	Vertical	156	3.41	-	69.28	27.06	5.76	-



### 802.11g\_Nss1,(6Mbps)\_1TX

### 2412MHz\_TX

09/11/2017



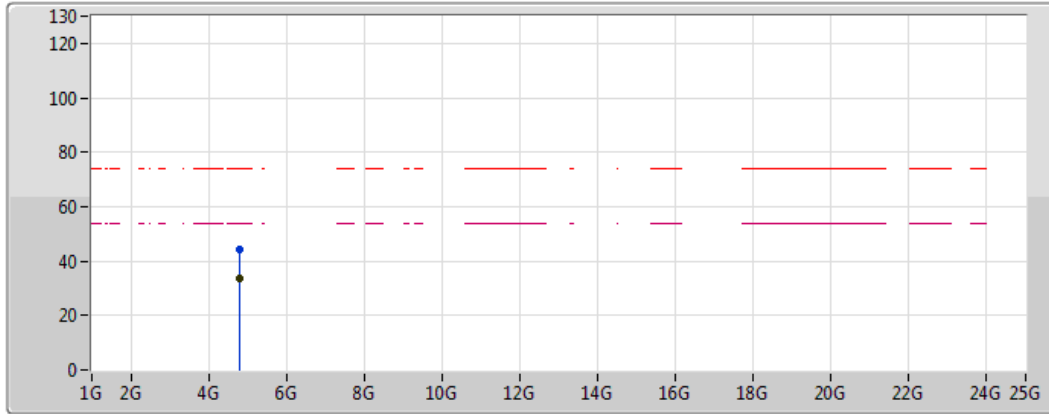
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3832G	46.90	54.00	-7.10	32.69	3	Horizontal	221	1.05	-	14.20	26.97	5.72	-
AV	2.4054G	85.75	Inf	-Inf	32.78	3	Horizontal	221	1.05	-	52.97	27.04	5.75	-
PK	2.3784G	57.81	74.00	-16.19	32.68	3	Horizontal	221	1.05	-	25.13	26.96	5.72	-
PK	2.4056G	92.51	Inf	-Inf	32.78	3	Horizontal	221	1.05	-	59.73	27.04	5.75	-



### 802.11g\_Nss1,(6Mbps)\_1TX

### 2412MHz\_TX

09/11/2017



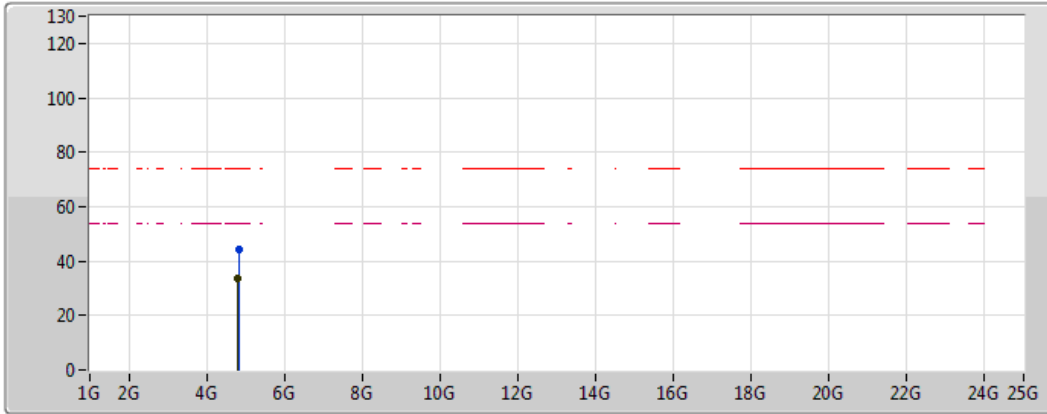
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.80906G	33.72	54.00	-20.28	4.11	3	Vertical	194	2.10	-	29.61	31.19	8.09	35.17
PK	4.80924G	44.14	74.00	-29.86	4.11	3	Vertical	194	2.10	-	40.03	31.19	8.09	35.17



### 802.11g\_Nss1,(6Mbps)\_1TX

### 2412MHz\_TX

09/11/2017



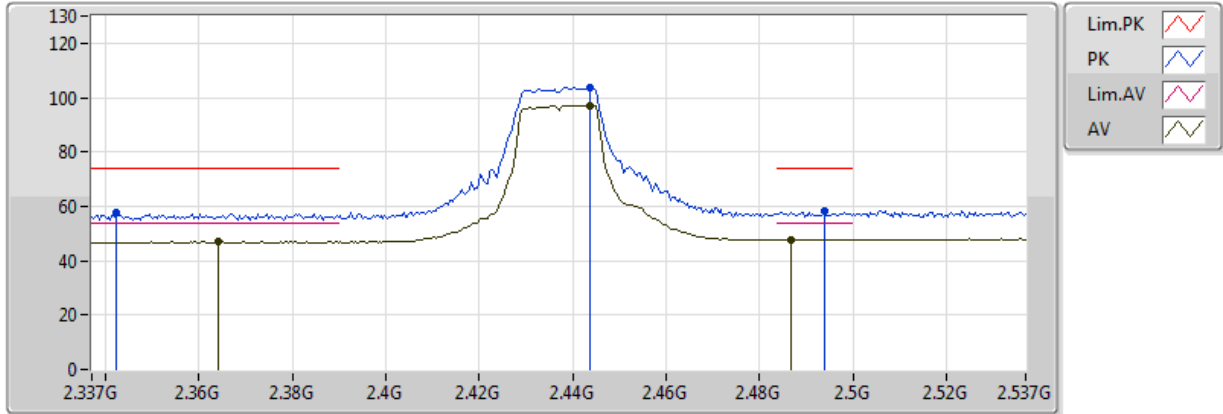
Lim.PK	
PK	
Lim.AV	
AV	

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.80906G	33.88	54.00	-20.12	4.11	3	Horizontal	238	2.05	-	29.77	31.19	8.09	35.17
PK	4.8357G	44.27	74.00	-29.73	4.18	3	Horizontal	238	2.05	-	40.09	31.24	8.12	35.18

### 802.11g\_Nss1,(6Mbps)\_1TX

### 2437MHz\_TX

09/11/2017



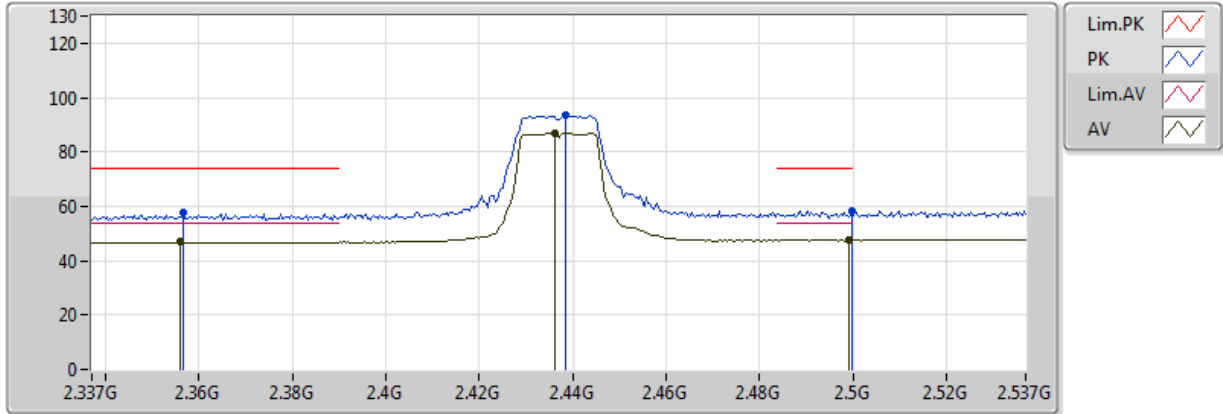
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3642G	47.01	54.00	-6.99	32.62	3	Vertical	157	3.69	-	14.39	26.92	5.70	-
AV	2.4438G	97.17	Inf	-Inf	32.94	3	Vertical	157	3.69	-	64.24	27.14	5.79	-
AV	2.4866G	47.76	54.00	-6.24	33.11	3	Vertical	157	3.69	-	14.65	27.26	5.84	-
PK	2.3422G	57.54	74.00	-16.46	32.53	3	Vertical	157	3.69	-	25.00	26.86	5.68	-
PK	2.4438G	103.78	Inf	-Inf	32.94	3	Vertical	157	3.69	-	70.85	27.14	5.79	-
PK	2.4938G	58.08	74.00	-15.92	33.14	3	Vertical	157	3.69	-	24.95	27.28	5.85	-



### 802.11g\_Nss1,(6Mbps)\_1TX

### 2437MHz\_TX

09/11/2017



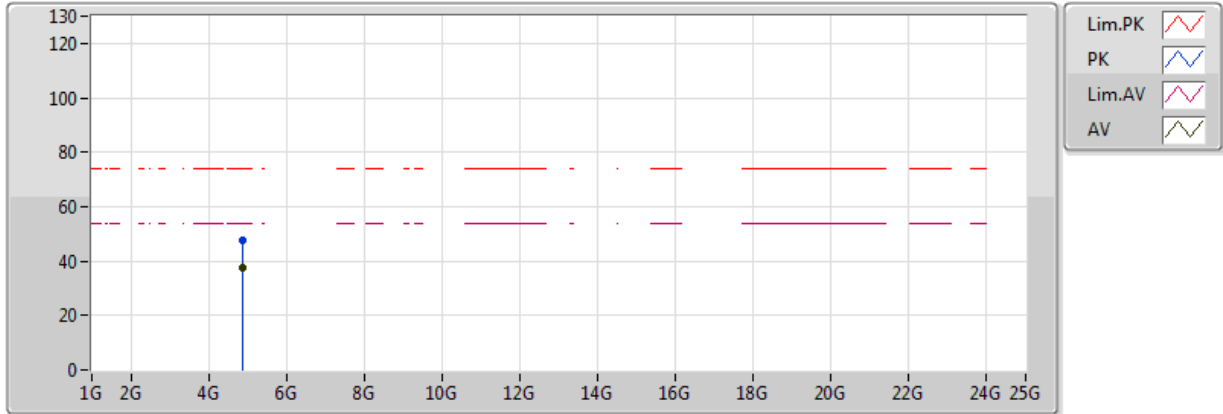
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3558G	46.80	54.00	-7.20	32.59	3	Horizontal	217	1.07	-	14.22	26.90	5.69	-
AV	2.4362G	86.86	Inf	-Inf	32.90	3	Horizontal	217	1.07	-	53.96	27.12	5.78	-
AV	2.499G	47.71	54.00	-6.29	33.16	3	Horizontal	217	1.07	-	14.56	27.30	5.86	-
PK	2.3566G	57.79	74.00	-16.21	32.59	3	Horizontal	217	1.07	-	25.20	26.90	5.69	-
PK	2.4386G	93.62	Inf	-Inf	32.91	3	Horizontal	217	1.07	-	60.71	27.13	5.79	-
PK	2.4998G	58.39	74.00	-15.61	33.16	3	Horizontal	217	1.07	-	25.23	27.30	5.86	-



### 802.11g\_Nss1,(6Mbps)\_1TX

### 2437MHz\_TX

09/11/2017



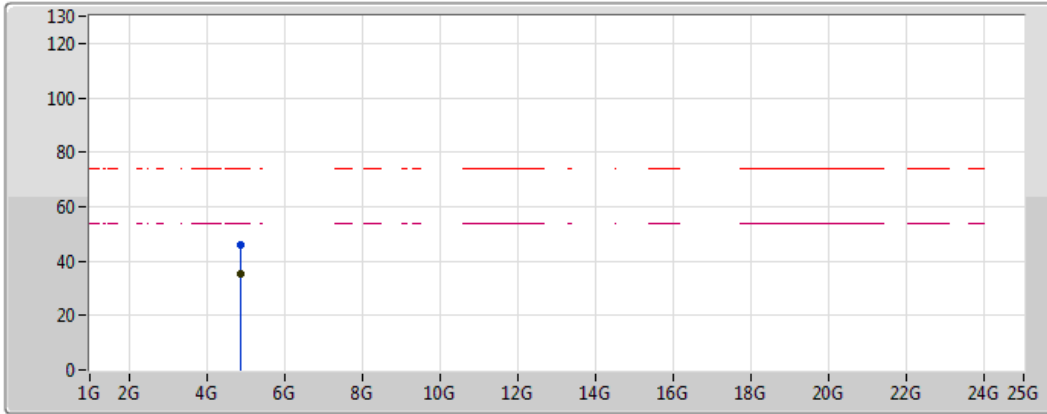
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.874G	37.37	54.00	-16.62	4.27	3	Vertical	267	1.88	-	33.10	31.30	8.17	35.19
PK	4.87436G	47.62	74.00	-26.38	4.28	3	Vertical	267	1.88	-	43.34	31.30	8.17	35.19



### 802.11g\_Nss1,(6Mbps)\_1TX

### 2437MHz\_TX

09/11/2017



Lim.PK	
PK	
Lim.AV	
AV	

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.88732G	35.32	54.00	-18.68	4.31	3	Horizontal	153	1.12	-	31.01	31.32	8.18	35.20
PK	4.88336G	45.97	74.00	-28.03	4.30	3	Horizontal	153	1.12	-	41.67	31.31	8.18	35.20

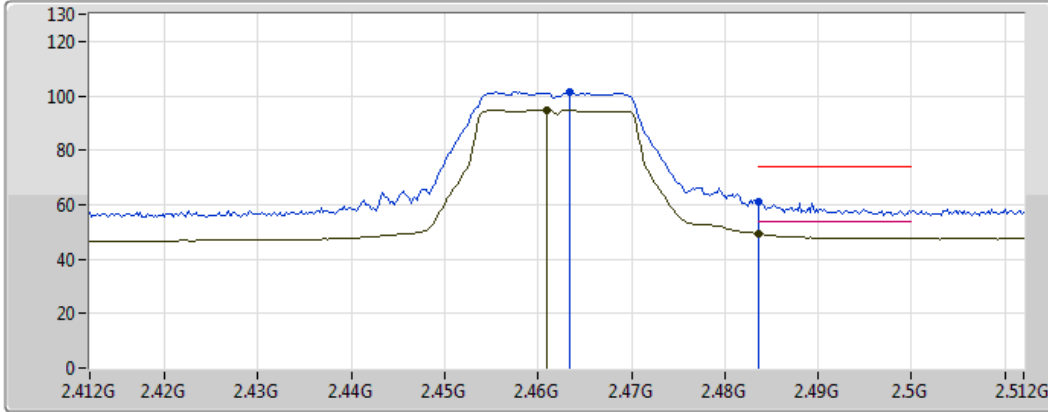




### 802.11g\_Nss1,(6Mbps)\_1TX

### 2462MHz\_TX

09/11/2017



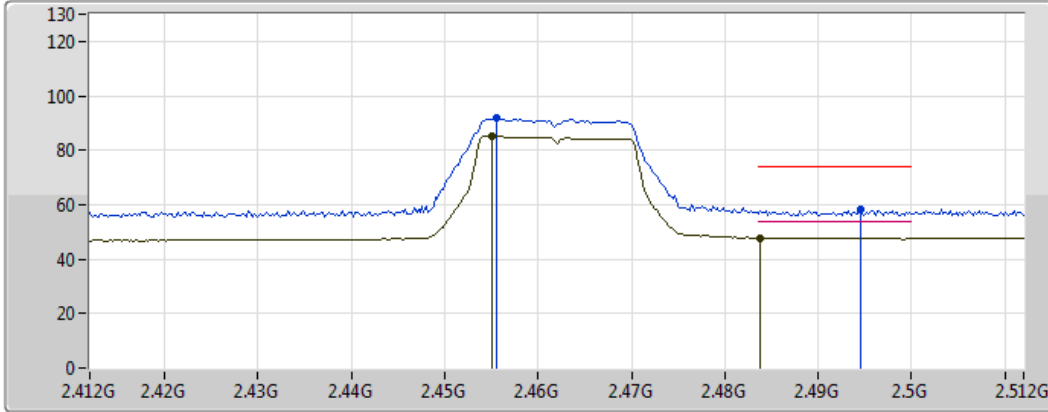
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.461G	94.66	Inf	-Inf	33.00	3	Vertical	155	3.26	-	61.66	27.19	5.81	-
AV	2.4836G	49.25	54.00	-4.75	33.09	3	Vertical	155	3.26	-	16.16	27.25	5.84	-
PK	2.4634G	101.46	Inf	-Inf	33.01	3	Vertical	155	3.26	-	68.45	27.20	5.82	-
PK	2.4836G	61.13	74.00	-12.87	33.09	3	Vertical	155	3.26	-	28.04	27.25	5.84	-



### 802.11g\_Nss1,(6Mbps)\_1TX

### 2462MHz\_TX

09/11/2017



Legend for plot:

- Lim.PK (Red line)
- PK (Blue line)
- Lim.AV (Pink line)
- AV (Green line)

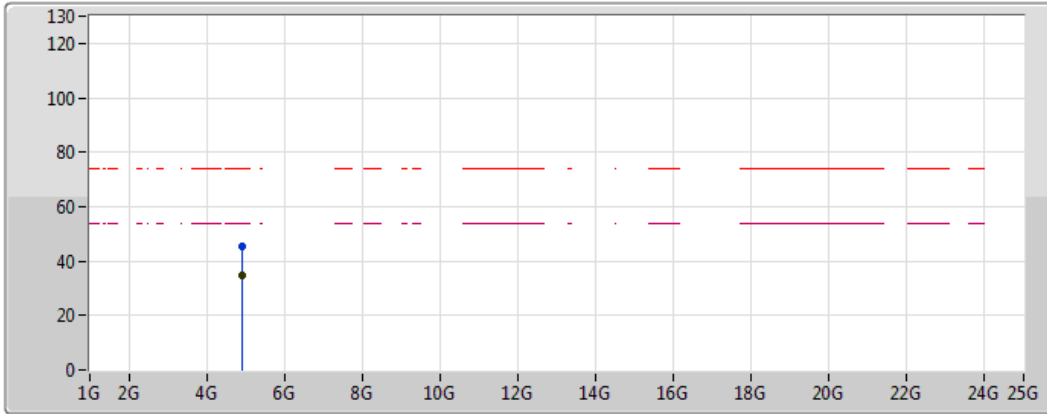
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.455G	85.19	Inf	-Inf	32.98	3	Horizontal	216	1.01	-	52.21	27.17	5.81	-
AV	2.4838G	47.77	54.00	-6.23	33.10	3	Horizontal	216	1.01	-	14.68	27.25	5.84	-
PK	2.4556G	91.87	Inf	-Inf	32.98	3	Horizontal	216	1.01	-	58.89	27.18	5.81	-
PK	2.4946G	58.18	74.00	-15.82	33.14	3	Horizontal	216	1.01	-	25.04	27.28	5.85	-



### 802.11g\_Nss1,(6Mbps)\_1TX

### 2462MHz\_TX

09/11/2017



Lim.PK	
PK	
Lim.AV	
AV	

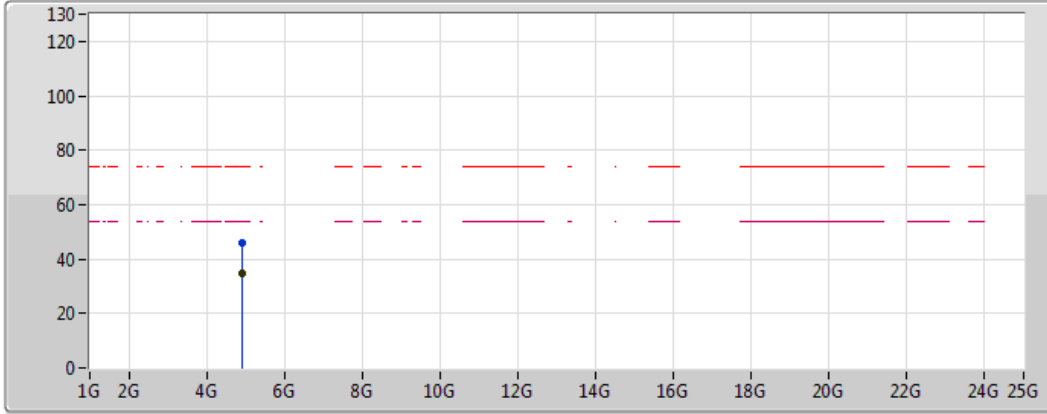
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.92439G	34.62	54.00	-19.38	4.40	3	Vertical	162	2.21	-	30.21	31.38	8.23	35.20
PK	4.92291G	45.42	74.00	-28.58	4.40	3	Vertical	162	2.21	-	41.02	31.38	8.23	35.20



### 802.11g\_Nss1,(6Mbps)\_1TX

### 2462MHz\_TX

09/11/2017



Lim.PK	
PK	
Lim.AV	
AV	

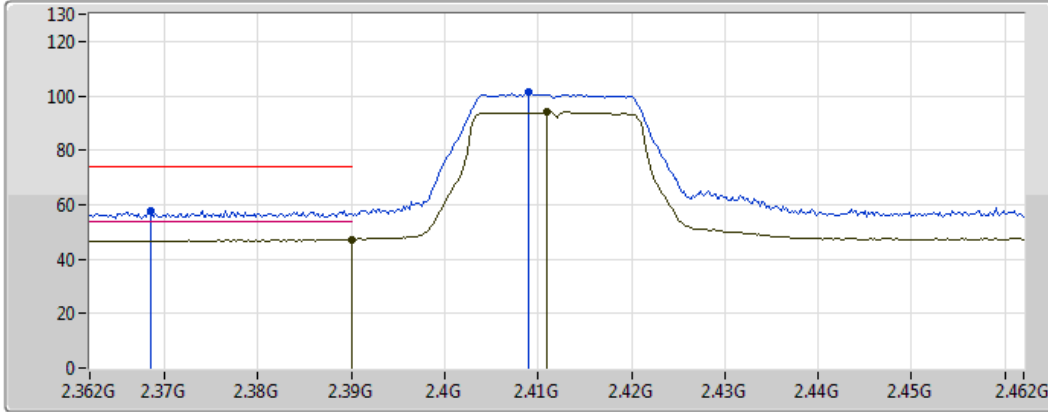
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.92221G	34.57	54.00	-19.43	4.40	3	Horizontal	320	1.88	-	30.17	31.38	8.22	35.20
PK	4.92495G	45.67	74.00	-28.33	4.40	3	Horizontal	320	1.88	-	41.27	31.38	8.23	35.20



802.11n HT20\_Nss1,(MCS0)\_1TX

2412MHz\_TX

09/11/2017



Legend for plot:

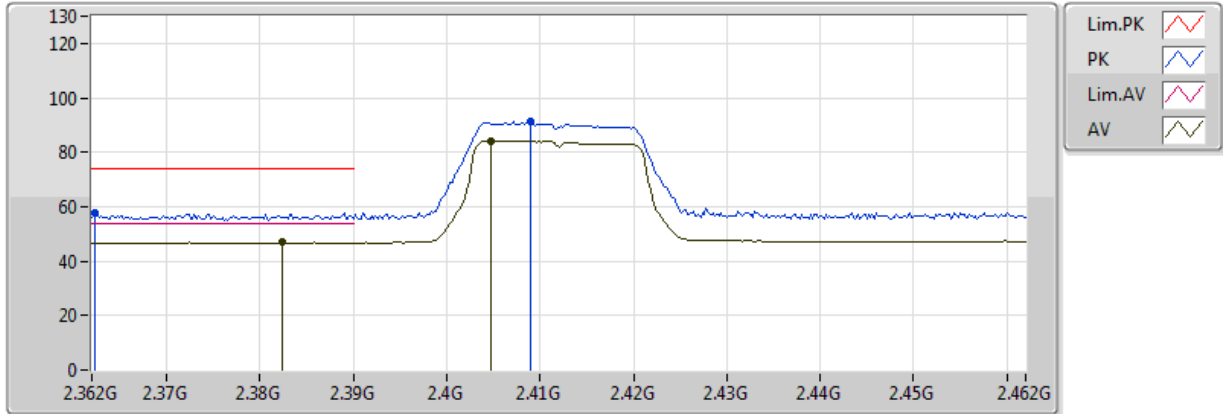
- Lim.PK (Red line)
- PK (Blue line)
- Lim.AV (Pink line)
- AV (Green line)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.39G	47.25	54.00	-6.75	32.72	3	Vertical	153	3.39	-	14.53	26.99	5.73	-
AV	2.411G	93.97	Inf	-Inf	32.80	3	Vertical	153	3.39	-	61.16	27.05	5.75	-
PK	2.3686G	57.75	74.00	-16.25	32.64	3	Vertical	153	3.39	-	25.11	26.93	5.71	-
PK	2.409G	101.36	Inf	-Inf	32.80	3	Vertical	153	3.39	-	68.56	27.05	5.75	-

### 802.11n HT20\_Nss1,(MCS0)\_1TX

### 2412MHz\_TX

09/11/2017

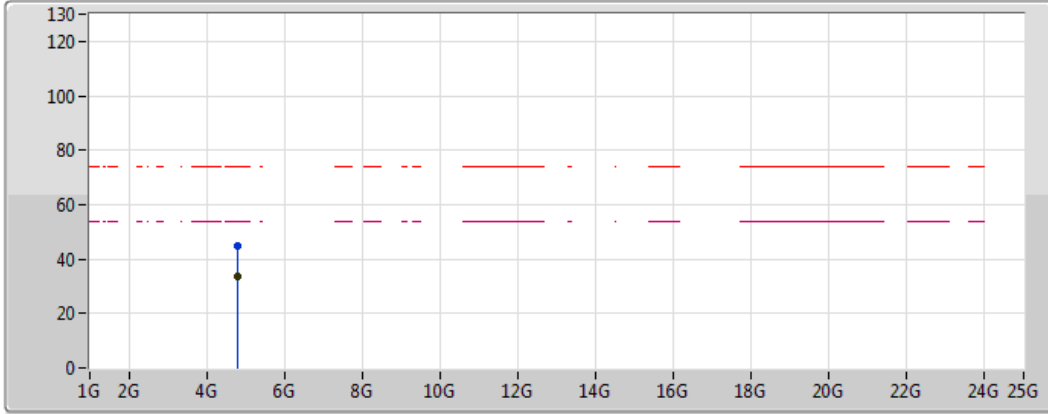





Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3824G	46.86	54.00	-7.14	32.69	3	Horizontal	214	1.09	-	14.17	26.97	5.72	-
AV	2.4048G	84.19	Inf	-Inf	32.78	3	Horizontal	214	1.09	-	51.41	27.03	5.75	-
PK	2.3624G	57.55	74.00	-16.45	32.61	3	Horizontal	214	1.09	-	24.93	26.91	5.70	-
PK	2.409G	91.45	Inf	-Inf	32.80	3	Horizontal	214	1.09	-	58.65	27.05	5.75	-

### 802.11n HT20\_Nss1,(MCS0)\_1TX

### 2412MHz\_TX

09/11/2017



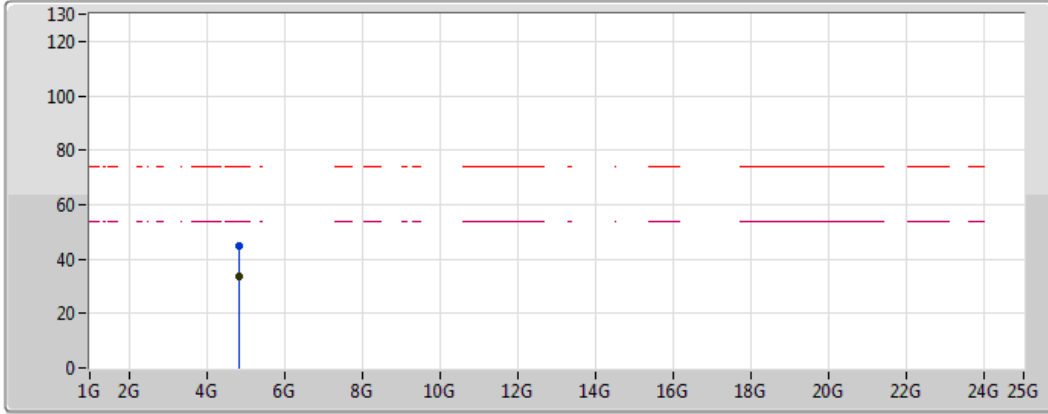
Lim.PK	
PK	
Lim.AV	
AV	





Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.809G	33.83	54.00	-20.17	4.11	3	Vertical	360	1.50	-	29.72	31.19	8.09	35.17
PK	4.81014G	45.04	74.00	-28.96	4.12	3	Vertical	360	1.50	-	40.93	31.20	8.09	35.17

### 802.11n HT20\_Nss1,(MCS0)\_1TX

### 2412MHz\_TX

09/11/2017



Lim.PK	
PK	
Lim.AV	
AV	

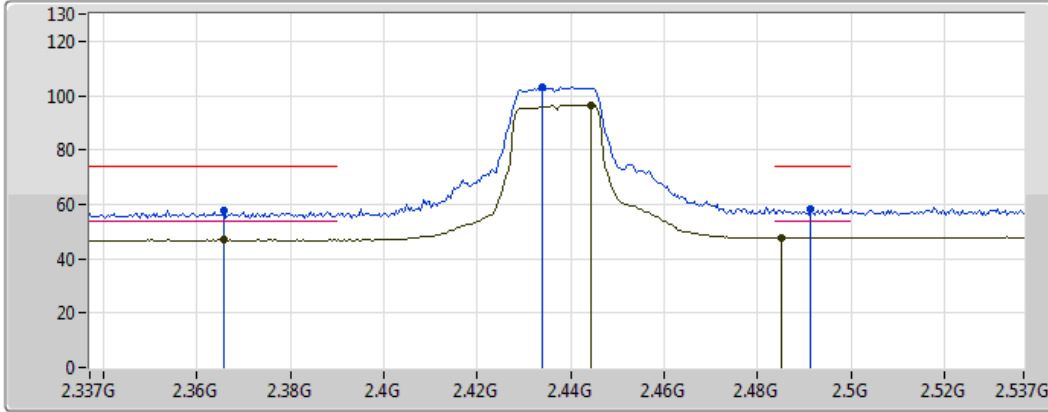
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.83066G	33.87	54.00	-20.13	4.17	3	Horizontal	47	1.50	-	29.70	31.23	8.12	35.18
PK	4.8372G	45.05	74.00	-28.95	4.18	3	Horizontal	47	1.50	-	40.87	31.24	8.12	35.18



### 802.11n HT20\_Nss1,(MCS0)\_1TX

### 2437MHz\_TX

09/11/2017



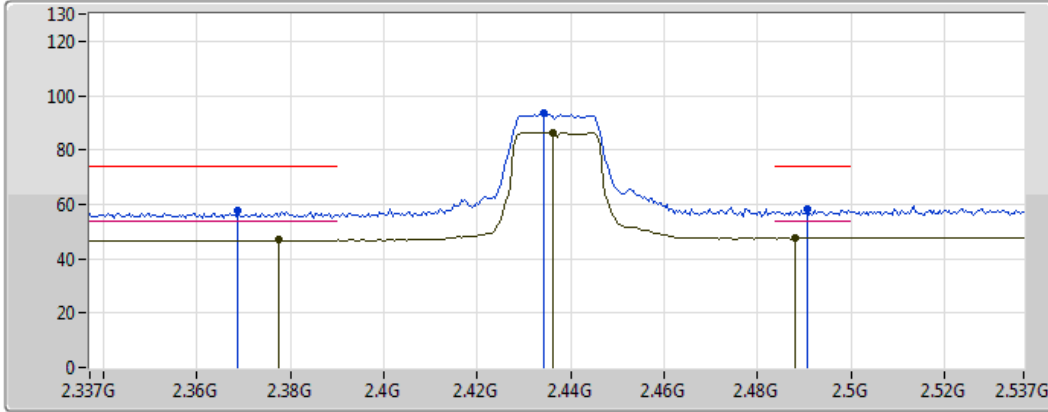
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3658G	46.88	54.00	-7.12	32.63	3	Vertical	150	3.69	-	14.25	26.92	5.70	-
AV	2.4442G	96.50	Inf	-Inf	32.94	3	Vertical	150	3.69	-	63.56	27.14	5.79	-
AV	2.485G	47.78	54.00	-6.22	33.10	3	Vertical	150	3.69	-	14.68	27.26	5.84	-
PK	2.3658G	57.98	74.00	-16.02	32.63	3	Vertical	150	3.69	-	25.36	26.92	5.70	-
PK	2.4338G	103.23	Inf	-Inf	32.90	3	Vertical	150	3.69	-	70.34	27.11	5.78	-
PK	2.4914G	58.15	74.00	-15.85	33.13	3	Vertical	150	3.69	-	25.02	27.28	5.85	-



802.11n HT20\_Nss1,(MCS0)\_1TX

2437MHz\_TX

09/11/2017



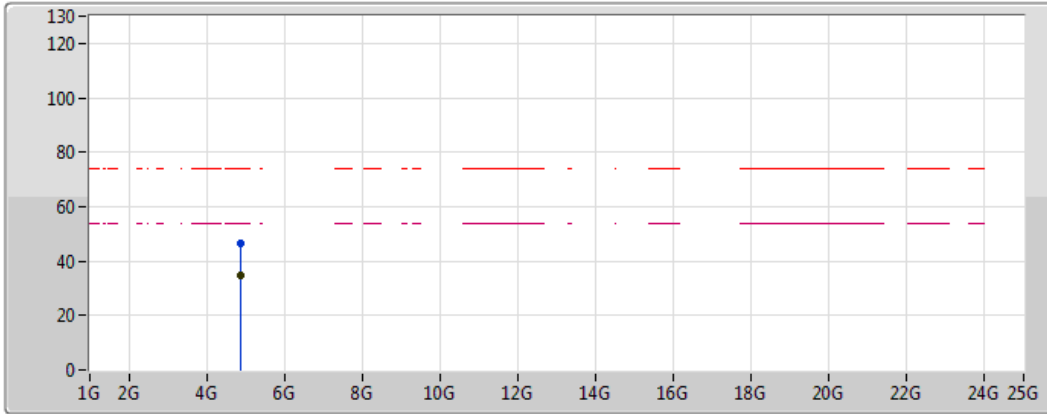
Lim.PK	
PK	
Lim.AV	
AV	





Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3774G	46.80	54.00	-7.20	32.67	3	Horizontal	212	1.07	-	14.13	26.96	5.72	-
AV	2.4362G	86.31	Inf	-Inf	32.90	3	Horizontal	212	1.07	-	53.40	27.12	5.78	-
AV	2.4882G	47.71	54.00	-6.29	33.11	3	Horizontal	212	1.07	-	14.60	27.27	5.85	-
PK	2.3686G	57.69	74.00	-16.31	32.64	3	Horizontal	212	1.07	-	25.06	26.93	5.71	-
PK	2.4342G	93.69	Inf	-Inf	32.90	3	Horizontal	212	1.07	-	60.79	27.12	5.78	-
PK	2.4906G	58.05	74.00	-15.95	33.12	3	Horizontal	212	1.07	-	24.93	27.27	5.85	-

### 802.11n HT20\_Nss1,(MCS0)\_1TX

### 2437MHz\_TX

09/11/2017



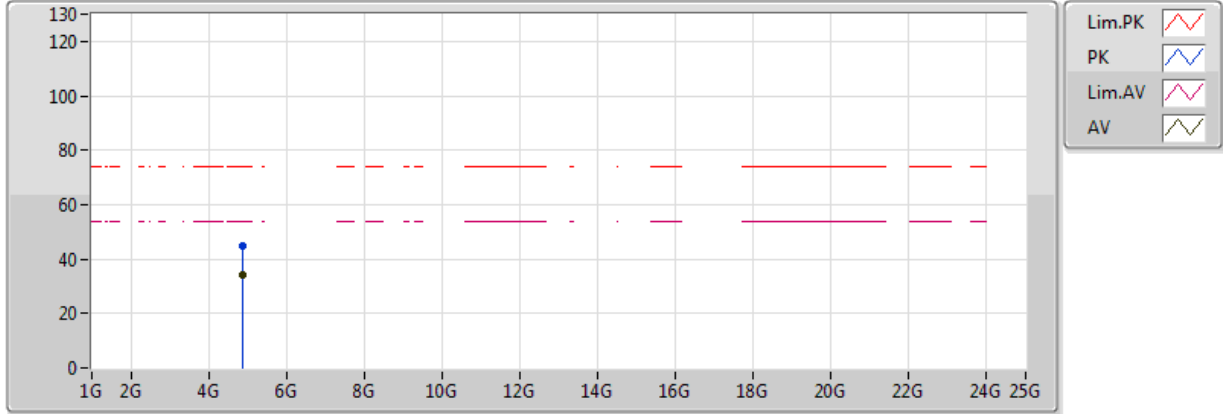
Lim.PK	
PK	
Lim.AV	
AV	

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.87952G	34.87	54.00	-19.13	4.29	3	Vertical	137	1.18	-	30.58	31.31	8.18	35.19
PK	4.87298G	46.48	74.00	-27.52	4.27	3	Vertical	137	1.18	-	42.21	31.30	8.17	35.19

### 802.11n HT20\_Nss1,(MCS0)\_1TX

### 2437MHz\_TX

09/11/2017

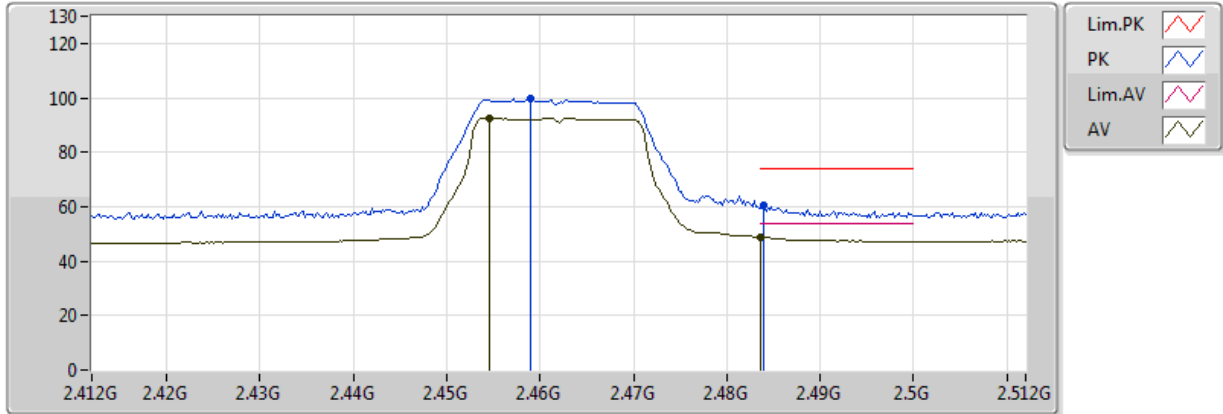


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.88174G	34.29	54.00	-19.71	4.29	3	Vertical	100	1.47	-	30.00	31.31	8.18	35.19
PK	4.88588G	44.72	74.00	-29.28	4.30	3	Vertical	100	1.47	-	40.41	31.32	8.18	35.20

### 802.11n HT20\_Nss1,(MCS0)\_1TX

### 2462MHz\_TX

09/11/2017



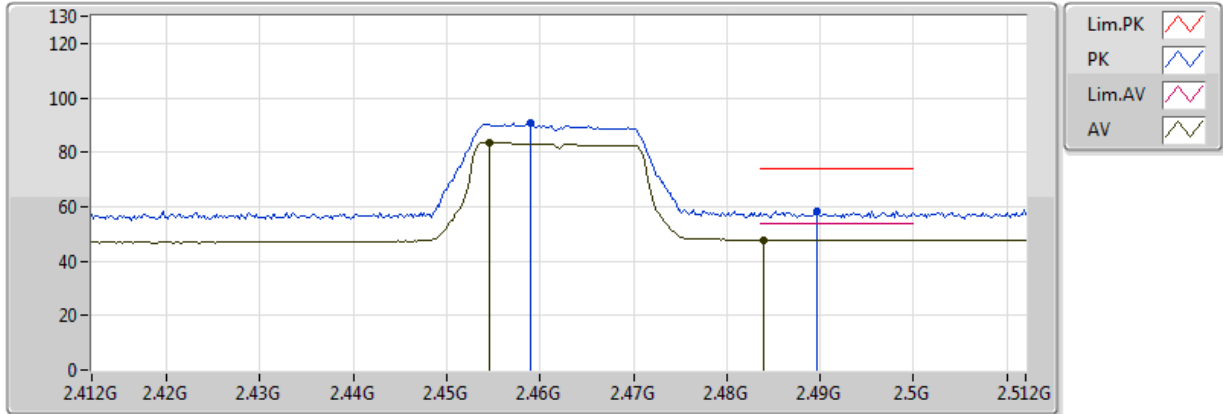
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.4546G	92.54	Inf	-Inf	32.98	3	Vertical	156	3.69	-	59.57	27.17	5.81	-
AV	2.4836G	48.77	54.00	-5.23	33.09	3	Vertical	156	3.69	-	15.67	27.25	5.84	-
PK	2.459G	99.81	Inf	-Inf	33.00	3	Vertical	156	3.69	-	66.81	27.19	5.81	-
PK	2.484G	60.37	74.00	-13.63	33.10	3	Vertical	156	3.69	-	27.28	27.26	5.84	-



### 802.11n HT20\_Nss1,(MCS0)\_1TX

### 2462MHz\_TX

09/11/2017

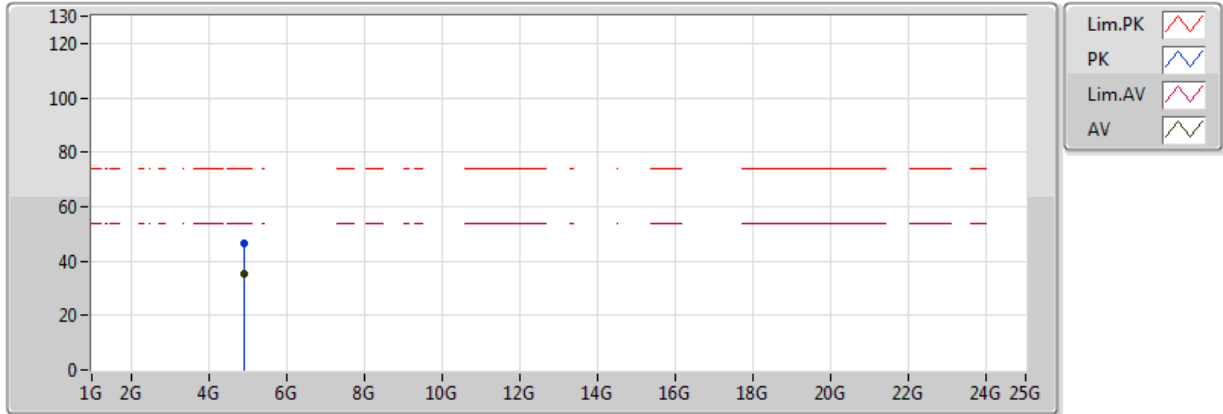


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.4546G	83.69	Inf	-Inf	32.98	3	Horizontal	208	1.03	-	50.71	27.17	5.81	-
AV	2.484G	47.73	54.00	-6.27	33.10	3	Horizontal	208	1.03	-	14.63	27.26	5.84	-
PK	2.459G	90.65	Inf	-Inf	33.00	3	Horizontal	208	1.03	-	57.65	27.19	5.81	-
PK	2.4896G	58.25	74.00	-15.75	33.12	3	Horizontal	208	1.03	-	25.13	27.27	5.85	-

### 802.11n HT20\_Nss1,(MCS0)\_1TX

### 2462MHz\_TX

09/11/2017

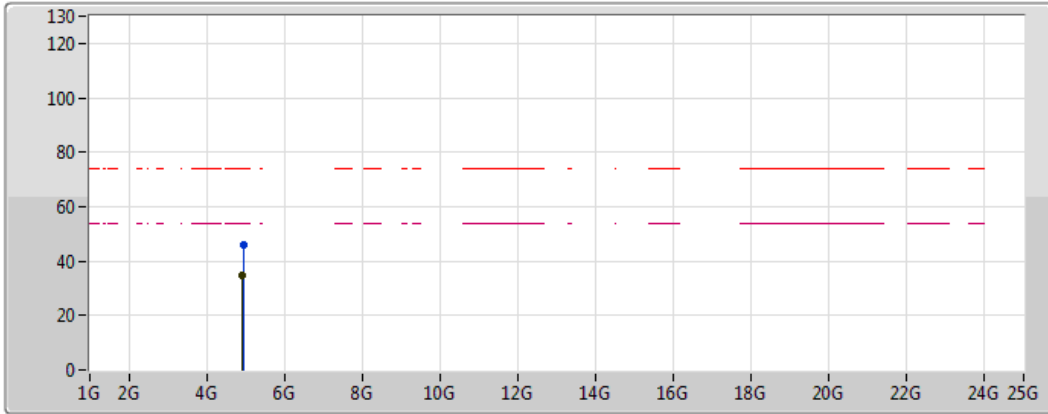






Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.924G	35.45	54.00	-18.55	4.40	3	Vertical	162	1.64	-	31.05	31.38	8.23	35.20
PK	4.92616G	46.41	74.00	-27.59	4.41	3	Vertical	162	1.64	-	42.01	31.38	8.23	35.21

### 802.11n HT20\_Nss1,(MCS0)\_1TX

### 2462MHz\_TX

09/11/2017



Lim.PK	
PK	
Lim.AV	
AV	

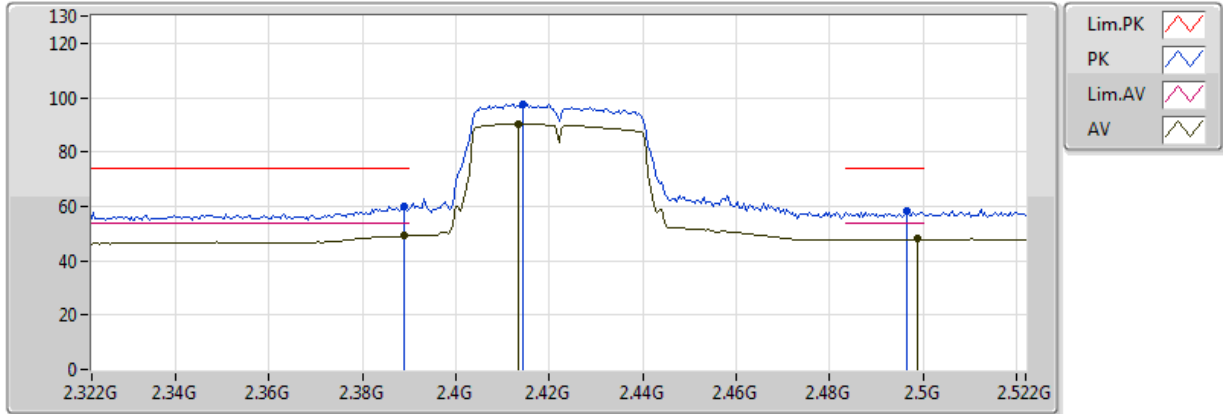
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.93384G	34.81	54.00	-19.19	4.42	3	Horizontal	268	1.10	-	30.39	31.39	8.24	35.21
PK	4.93618G	45.93	74.00	-28.07	4.43	3	Horizontal	268	1.10	-	41.50	31.40	8.24	35.21



### 802.11n HT40\_Nss1,(MCS0)\_1TX

### 2422MHz\_TX

09/11/2017

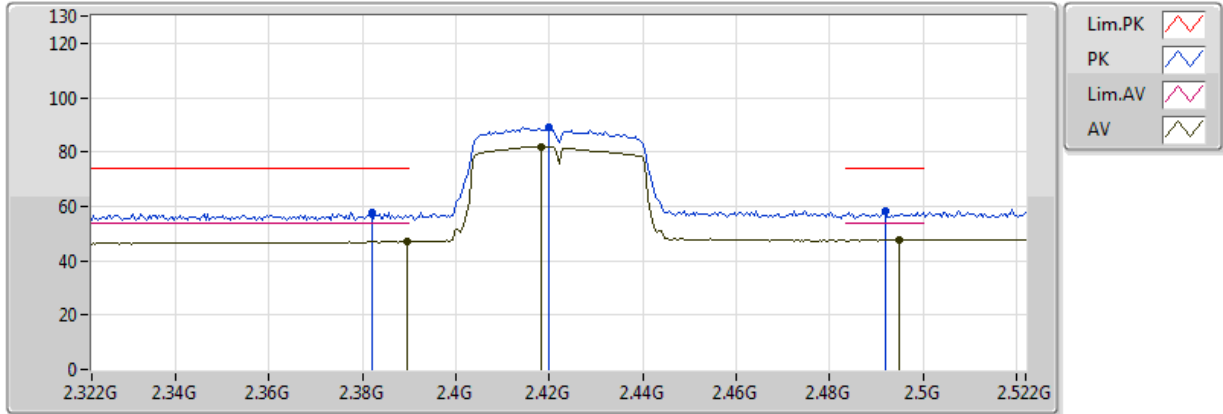


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3888G	49.08	54.00	-4.92	32.72	3	Vertical	144	3.42	-	16.36	26.99	5.73	-
AV	2.4132G	90.35	Inf	-Inf	32.81	3	Vertical	144	3.42	-	57.53	27.06	5.76	-
AV	2.4988G	47.99	54.00	-6.01	33.16	3	Vertical	144	3.42	-	14.83	27.30	5.86	-
PK	2.3888G	60.16	74.00	-13.84	32.72	3	Vertical	144	3.42	-	27.45	26.99	5.73	-
PK	2.4144G	97.72	Inf	-Inf	32.82	3	Vertical	144	3.42	-	64.90	27.06	5.76	-
PK	2.4964G	58.24	74.00	-15.76	33.15	3	Vertical	144	3.42	-	25.09	27.29	5.86	-

### 802.11n HT40\_Nss1,(MCS0)\_1TX

### 2422MHz\_TX

09/11/2017

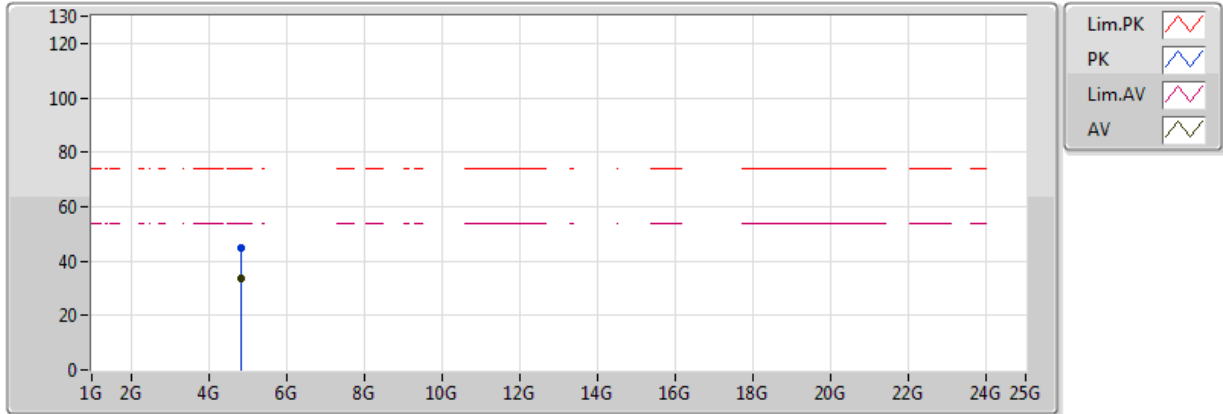


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3896G	46.99	54.00	-7.01	32.72	3	Horizontal	207	2.80	-	14.27	26.99	5.73	-
AV	2.4184G	81.98	Inf	-Inf	32.83	3	Horizontal	207	2.80	-	49.15	27.07	5.76	-
AV	2.4948G	47.57	54.00	-6.43	33.14	3	Horizontal	207	2.80	-	14.43	27.29	5.85	-
PK	2.382G	57.76	74.00	-16.24	32.69	3	Horizontal	207	2.80	-	25.07	26.97	5.72	-
PK	2.42G	89.29	Inf	-Inf	32.84	3	Horizontal	207	2.80	-	56.45	27.08	5.76	-
PK	2.492G	58.11	74.00	-15.89	33.13	3	Horizontal	207	2.80	-	24.98	27.28	5.85	-

### 802.11n HT40\_Nss1,(MCS0)\_1TX

### 2422MHz\_TX

09/11/2017

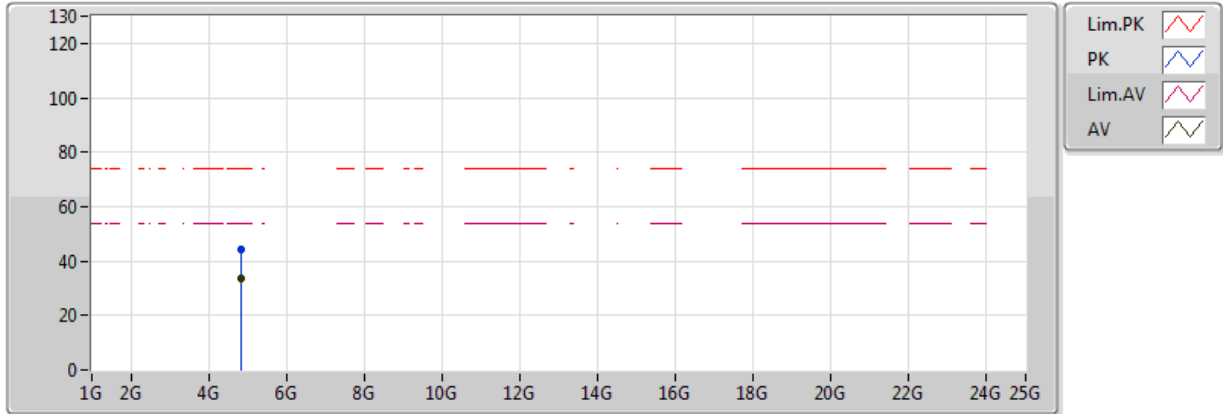


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.84256G	33.88	54.00	-20.12	4.20	3	Vertical	30	1.07	-	29.68	31.25	8.13	35.18
PK	4.85186G	44.75	74.00	-29.25	4.22	3	Vertical	30	1.07	-	40.53	31.26	8.14	35.19

### 802.11n HT40\_Nss1,(MCS0)\_1TX

### 2422MHz\_TX

09/11/2017



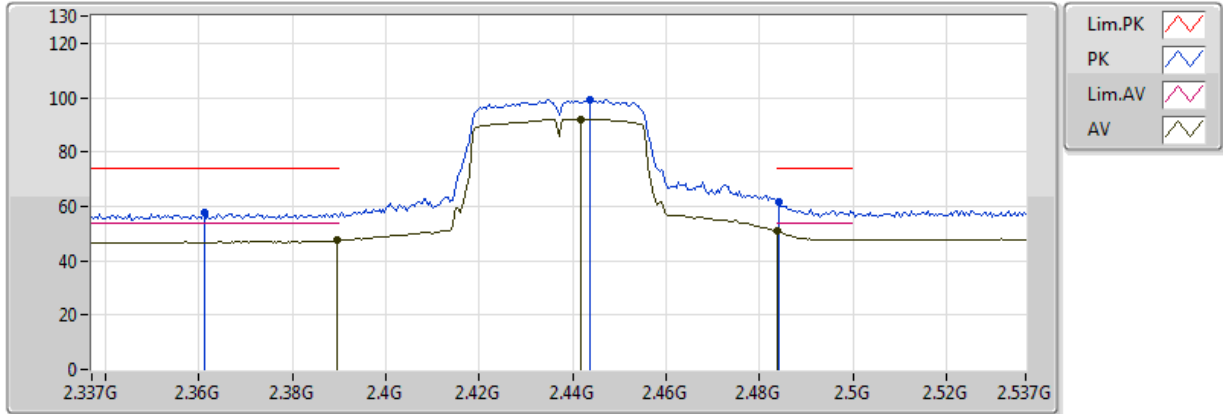
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.841G	33.81	54.00	-20.19	4.19	3	Horizontal	342	1.58	-	29.61	31.25	8.13	35.18
PK	4.83968G	44.40	74.00	-29.60	4.19	3	Horizontal	342	1.58	-	40.22	31.24	8.13	35.18



### 802.11n HT40\_Nss1,(MCS0)\_1TX

### 2437MHz\_TX

09/11/2017

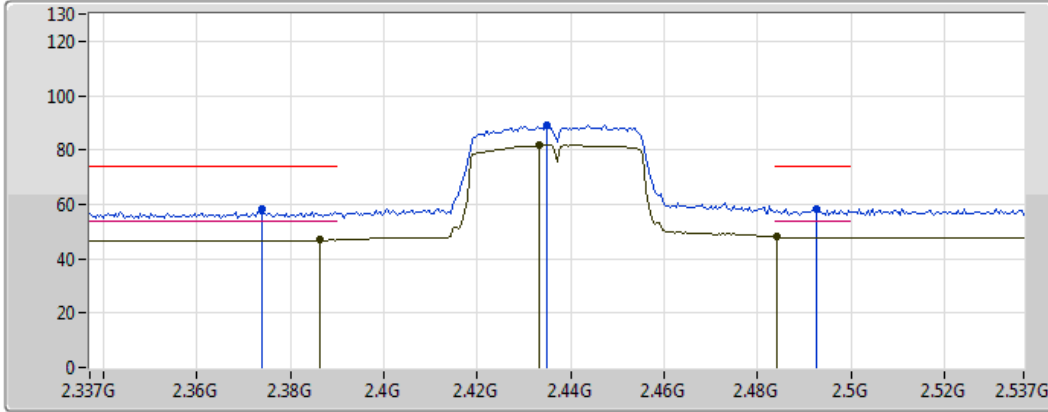






Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3894G	47.43	54.00	-6.57	32.72	3	Vertical	145	3.69	-	14.71	26.99	5.73	-
AV	2.4418G	92.14	Inf	-Inf	32.93	3	Vertical	145	3.69	-	59.22	27.14	5.79	-
AV	2.4838G	50.98	54.00	-3.02	33.10	3	Vertical	145	3.69	-	17.89	27.25	5.84	-
PK	2.361G	57.47	74.00	-16.53	32.61	3	Vertical	145	3.69	-	24.86	26.91	5.70	-
PK	2.4438G	99.39	Inf	-Inf	32.94	3	Vertical	145	3.69	-	66.46	27.14	5.79	-
PK	2.4842G	61.69	74.00	-12.31	33.10	3	Vertical	145	3.69	-	28.59	27.26	5.84	-

802.11n HT40\_Nss1,(MCS0)\_1TX

2437MHz\_TX

09/11/2017



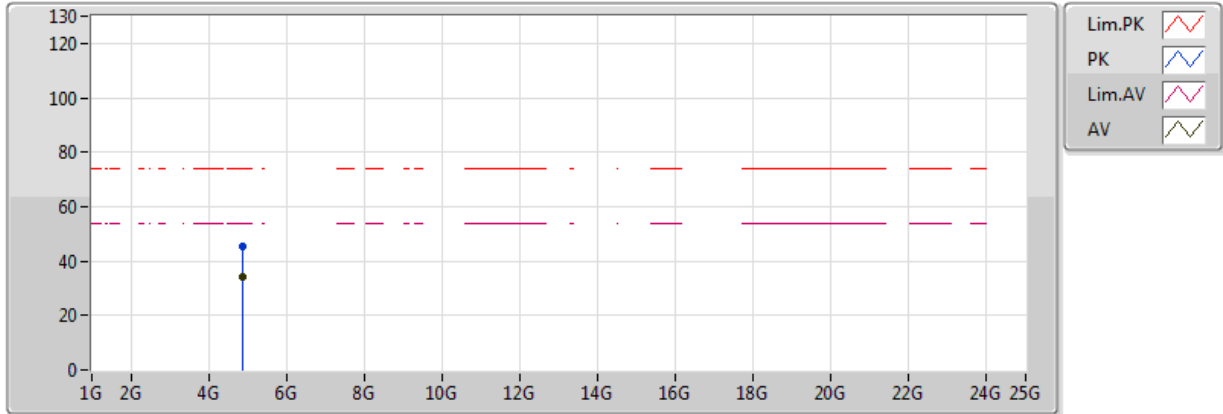
Lim.PK	
PK	
Lim.AV	
AV	

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3862G	46.88	54.00	-7.12	32.71	3	Horizontal	206	1.06	-	14.18	26.98	5.72	-
AV	2.4334G	81.60	Inf	-Inf	32.89	3	Horizontal	206	1.06	-	48.71	27.11	5.78	-
AV	2.4842G	48.05	54.00	-5.95	33.10	3	Horizontal	206	1.06	-	14.95	27.26	5.84	-
PK	2.3738G	58.23	74.00	-15.77	32.66	3	Horizontal	206	1.06	-	25.57	26.95	5.71	-
PK	2.435G	89.15	Inf	-Inf	32.90	3	Horizontal	206	1.06	-	56.25	27.12	5.78	-
PK	2.4926G	58.47	74.00	-15.53	33.13	3	Horizontal	206	1.06	-	25.34	27.28	5.85	-

### 802.11n HT40\_Nss1,(MCS0)\_1TX

### 2437MHz\_TX

09/11/2017

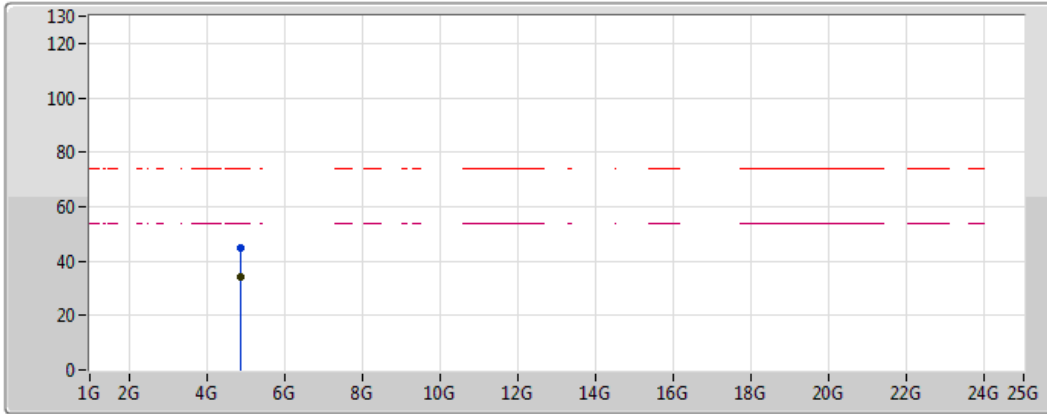






Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.88876G	34.25	54.00	-19.75	4.31	3	Vertical	336	1.17	-	29.93	31.32	8.19	35.20
PK	4.88234G	45.60	74.00	-28.40	4.30	3	Vertical	336	1.17	-	41.30	31.31	8.18	35.19

### 802.11n HT40\_Nss1,(MCS0)\_1TX

### 2437MHz\_TX

09/11/2017



Lim.PK	
PK	
Lim.AV	
AV	

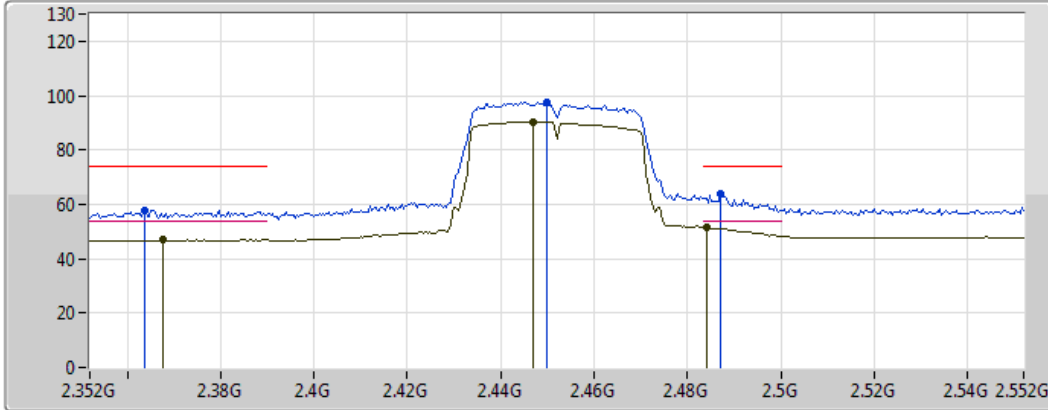
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.88804G	34.27	54.00	-19.73	4.31	3	Horizontal	11	1.73	-	29.96	31.32	8.19	35.20
PK	4.87958G	44.77	74.00	-29.23	4.29	3	Horizontal	11	1.73	-	40.49	31.31	8.18	35.19



802.11n HT40\_Nss1,(MCS0)\_1TX

2452MHz\_TX

09/11/2017



Legend for the spectrum plot:

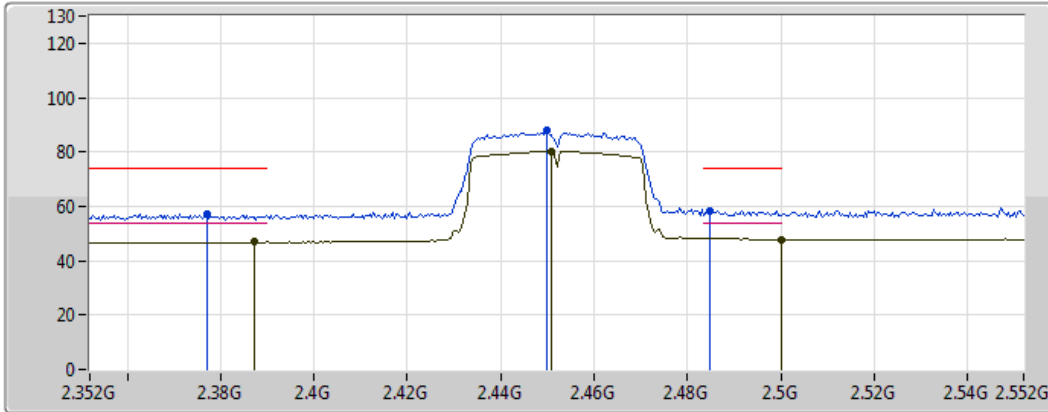
- Lim.PK: Red line with a peak symbol
- PK: Blue line with a peak symbol
- Lim.AV: Red line with a peak symbol
- AV: Black line with a peak symbol

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3676G	46.86	54.00	-7.14	32.63	3	Vertical	145	3.69	-	14.23	26.93	5.70	-
AV	2.4468G	90.40	Inf	-Inf	32.95	3	Vertical	145	3.69	-	57.45	27.15	5.80	-
AV	2.484G	51.58	54.00	-2.42	33.10	3	Vertical	145	3.69	-	18.49	27.26	5.84	-
PK	2.3636G	57.98	74.00	-16.02	32.62	3	Vertical	145	3.69	-	25.36	26.92	5.70	-
PK	2.45G	97.71	Inf	-Inf	32.96	3	Vertical	145	3.69	-	64.75	27.16	5.80	-
PK	2.4872G	63.69	74.00	-10.31	33.11	3	Vertical	145	3.69	-	30.58	27.26	5.84	-



**802.11n HT40\_Nss1,(MCS0)\_1TX  
2452MHz\_TX**

09/11/2017



Legend for plot markers:

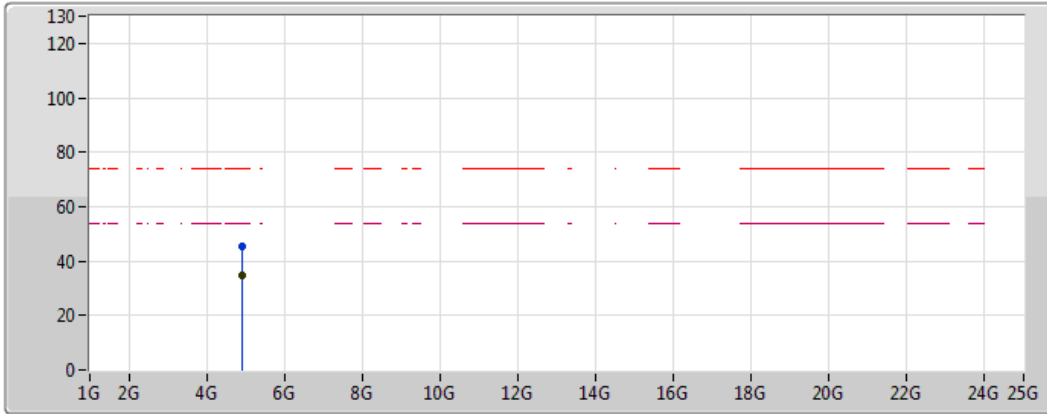
- Lim.PK (Red line)
- PK (Blue line)
- Lim.AV (Pink line)
- AV (Green line)





Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3872G	46.82	54.00	-7.18	32.71	3	Horizontal	207	1.04	-	14.11	26.98	5.73	-
AV	2.4508G	80.16	Inf	-Inf	32.96	3	Horizontal	207	1.04	-	47.20	27.16	5.80	-
AV	2.5G	47.62	54.00	-6.38	33.16	3	Horizontal	207	1.04	-	14.46	27.30	5.86	-
PK	2.3772G	57.29	74.00	-16.71	32.67	3	Horizontal	207	1.04	-	24.61	26.96	5.71	-
PK	2.45G	87.70	Inf	-Inf	32.96	3	Horizontal	207	1.04	-	54.74	27.16	5.80	-
PK	2.4848G	58.46	74.00	-15.54	33.10	3	Horizontal	207	1.04	-	25.36	27.26	5.84	-

### 802.11n HT40\_Nss1,(MCS0)\_1TX

### 2452MHz\_TX

09/11/2017



Lim.PK	
PK	
Lim.AV	
AV	

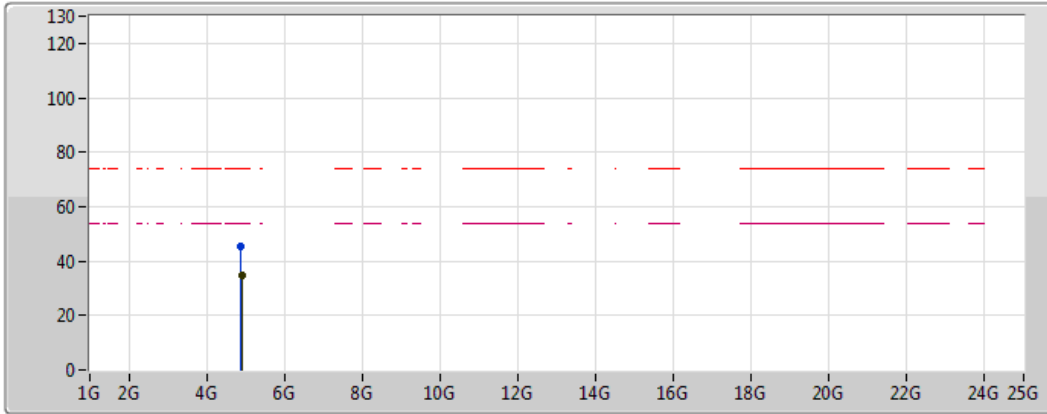
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.91588G	34.55	54.00	-19.45	4.38	3	Vertical	89	1.50	-	30.17	31.37	8.22	35.20
PK	4.91768G	45.21	74.00	-28.79	4.38	3	Vertical	89	1.50	-	40.82	31.37	8.22	35.20



802.11n HT40\_Nss1,(MCS0)\_1TX

2452MHz\_TX

09/11/2017



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.9169G	34.61	54.00	-19.39	4.38	3	Horizontal	317	2.16	-	30.23	31.37	8.22	35.20
PK	4.8917G	45.32	74.00	-28.68	4.32	3	Horizontal	317	2.16	-	41.00	31.33	8.19	35.20