

# FCC Test Report

**FCC ID** : YL6VDB770  
**Equipment** : Video Doorbell  
**Brand Name** : Alarm.com  
**Model Name** : ADC-VDB770  
**Applicant** : Alarm.com Incorporated  
8281 Greensboro Drive Suite 100 , Tysons,  
VA 22102 , USA  
**Manufacturer 1** : Chicony Electronics (Dong Guan ) Co.,Ltd.  
San Zhong Guan Li Qu, Qingxi Town,  
Dongguan City Guangdong 523651 China  
**Manufacturer 2** : Chicony Electronics (Thailand) Co.,Ltd.  
82 Moo 4 T. Takham A. Bangpakong,  
Chachoengsao 24130  
**Standard** : 47 CFR FCC Part 15.247

The product was received on Jul. 30, 2019, and testing was started from Aug. 08, 2019 and completed on Dec. 13, 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 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.)



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### History of this test report

Report No.	Version	Description	Issued Date
FR962620AC	01	Initial issue of report	Aug. 12, 2020



### Summary of Test Result

Report Clause	Ref. Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
3.1	15.207	AC Power-line Conducted Emissions	PASS	-
3.2	15.247(a)	DTS Bandwidth	PASS	-
3.3	15.247(b)	Maximum Conducted Output Power	PASS	-
3.4	15.247(e)	Power Spectral Density	PASS	-
3.5	15.247(d)	Emissions in Non-restricted Frequency Bands	PASS	-
3.6	15.247(d)	Emissions in Restricted Frequency Bands	PASS	-

**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:** Yunha Liou

# 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]

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	802.11n HT20	20	2TX

Note:

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

### 1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector
1	Weison	-	dipole	I-PEX
2	Weison	-	dipole	I-PEX

Ant.	Port	Gain (dBi)					BT
		2.4G	5G				
			U-NII-1	U-NII-2A	U-NII-2C		
1	1	0.86	1.48	1.11	1.90	1.90	0.86
2	2	1.76	1.60	1.83	1.98	1.50	-

Note 1: The EUT has two antennas.

**For 2.4GHz function:**

For IEEE 802.11 b/g/n mode (2TX/2RX)

Ant. 1 (port 1) and Ant. 2 (port 2) could transmit/receive simultaneously.

**For BT function:**

For IEEE 802.15.1 Bluetooth mode (1TX/1RX)

Ant. 1 (port 1) could transmit/receive.

**For 5GHz function:**

For IEEE 802.11 a/n/ac mode (2TX/2RX)

Ant. 1 (port 1) and Ant. 2 (port 2) could transmit/receive simultaneously.



1.1.3 EUT Information

Operational Condition	
EUT Power Type	From Transformer
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	0.934	0.3	1.429m	1k
802.11n HT20	0.929	0.32	1.337m	1k

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
- ♦ KDB 414788 D01 v01r01

### 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.		
<input checked="" type="checkbox"/>	Wen Shan	ADD : No.14-1, Ln. 19, Wen 33rd St., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.) TEL : 886-3-318-0787      FAX : 886-3-318-0287
Test site Designation No. TW1097 with FCC.		

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
AC Conduction	CO04-HY	Edward	22.3~26.2°C / 51.8~70.1%	23/Sep/2019
RF Conducted	TH07-HY	Alan	23.5~25.6C / 65~69%	08/Aug/2019~ 12/Dec/2019
Radiated	03CH09-HY	Edward	21.2~22.7°C / 56.2~61.2%	06/Aug/2019~ 13/Dec/2019
	03CH03-HY	Jeff	21.0~23.8°C / 49~68%	06/Aug/2019~ 13/Dec/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)	0.9 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	2.4 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.6 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.0 dB	Confidence levels of 95%
Temperature	0.41 °C	Confidence levels of 95%
Humidity	3.4 %	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	CMD
---------------	-----




Mode	Power Setting
802.11b_Nss1,(1Mbps)_2TX	-
2412MHz	72
2417MHz	88
2437MHz	88
2462MHz	88
802.11g_Nss1,(6Mbps)_2TX	-
2412MHz	63
2417MHz	68
2437MHz	88
2457MHz	88
2462MHz	63
802.11n HT20_Nss1,(MCS0)_2TX	-
2412MHz	52
2417MHz	64
2437MHz	88
2457MHz	88
2462MHz	57



### 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	Switching Power Supply 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	Switching Power Supply mode		
Operating Mode > 1GHz	CTX		
Orthogonal Planes of EUT	X Plane	Y Plane	Z Plane
			
Worst Planes of EUT			V



## 2.4 Support Equipment

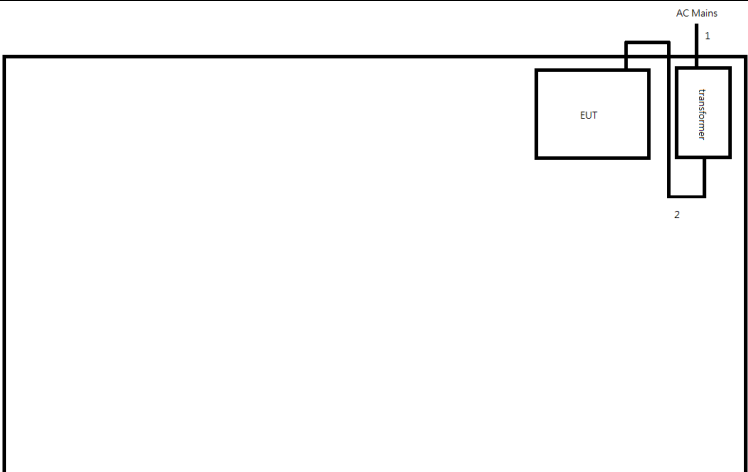
Support Equipment – AC Conduction / Radiated					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Power Cable	Volex	V1625	-	Note 1
2	Transformer	TRIAD	VPL24-11000 C	-	-
3	AC Power Cable	-	-	-	Note 1

Note 1 : No.1, 3 was provided by customer.

Support Equipment – Conducted					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Notebook	DELL	E5410	DoC	-
2	Adapter for NB	DELL	HA65NM130	DoC	-

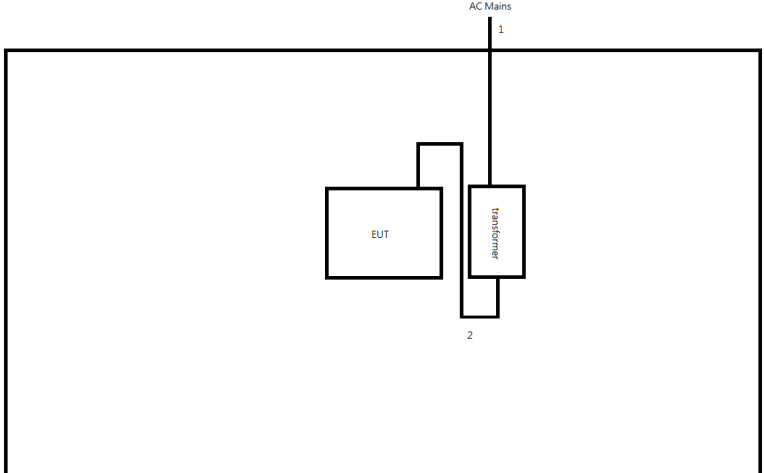
## 2.5 Test Setup Diagram

**Test Setup Diagram – AC Line Conducted Emission Test**



Item	Connection	Shielded	Length(m)	Remark
1	AC Power Cable	No	2.0	-
2	Power Cable	No	1.0	-

**Test Setup Diagram - Radiated Test**



Item	Connection	Shielded	Length(m)	Remark
1	AC Power Cable	No	2.0	-
2	Power Cable	No	1.0	-



### 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.

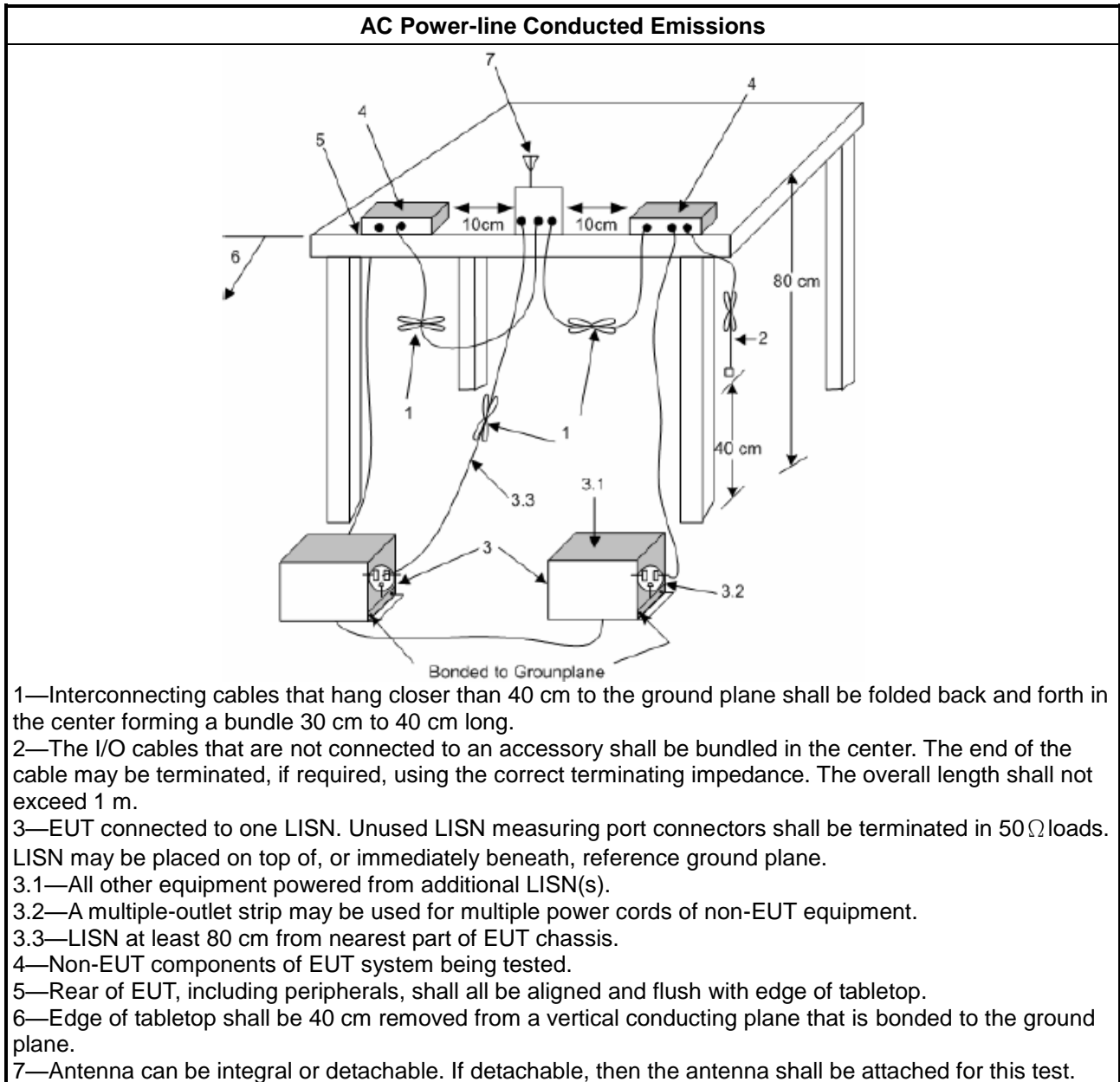
##### 3.1.2 Measuring Instruments

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:	
▪	6 dB bandwidth $\geq$ 500 kHz.

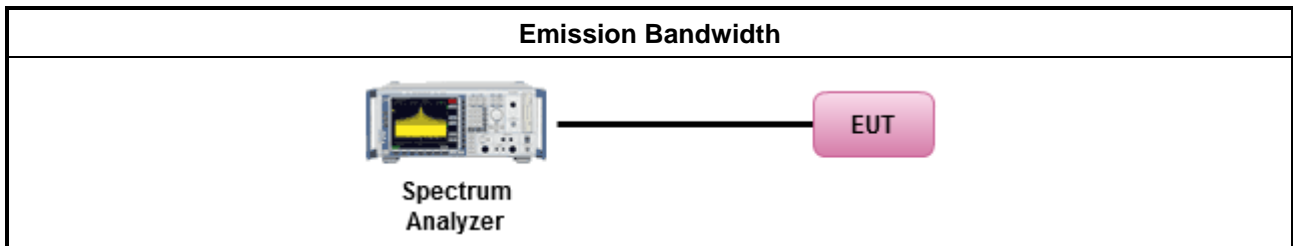
#### 3.2.2 Measuring Instruments

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

#### 3.2.3 Test Procedures

Test Method	
▪	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"> <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> dB 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>	

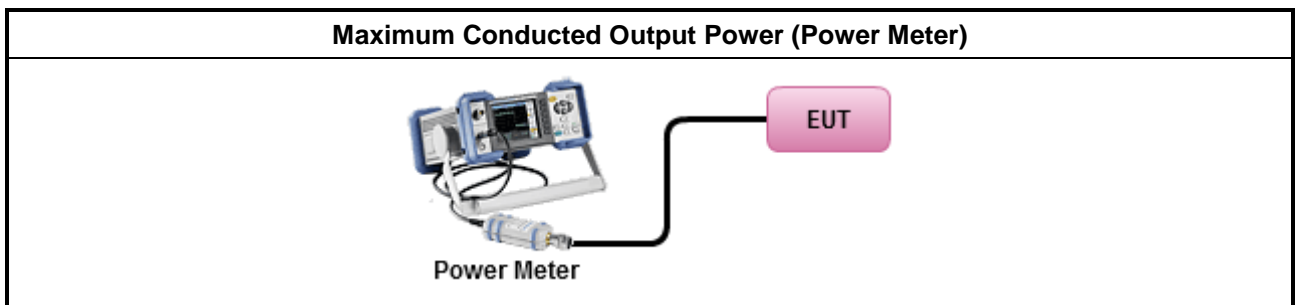
#### 3.3.2 Measuring Instruments

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>▪ Maximum Peak Conducted Output Power</li> </ul>	
<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"> <li>▪ Maximum Average Conducted Output Power</li> </ul>	
<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"> <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 display="block">P_{total} = P_1 + P_2 + \dots + P_n</math>                     (calculated in linear unit [mW] and transfer to log unit [dBm])  <math display="block">EIRP_{total} = P_{total} + DG</math> </li> </ul>	

### 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"> <li>Power Spectral Density (PSD) <math>\leq</math> 8 dBm/3kHz</li> </ul>

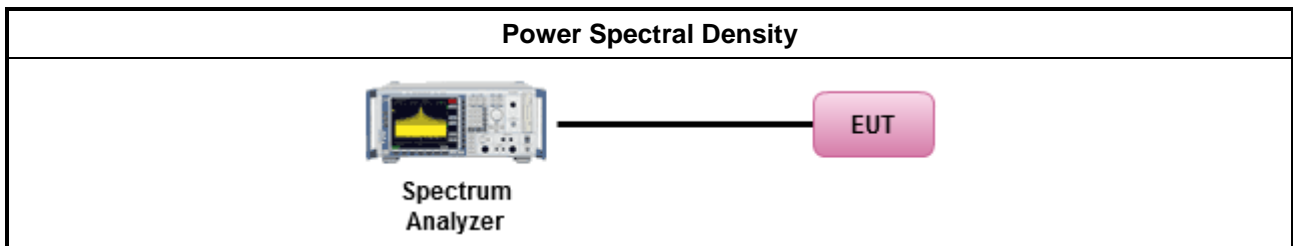
#### 3.4.2 Measuring Instruments

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"> <li>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).</li> </ul>
<input checked="" type="checkbox"/> Refer as KDB 558074, clause 8.4 (11.10 of ANSI C63.10) Max. PSD.
<ul style="list-style-type: none"> <li>For conducted measurement.             <ul style="list-style-type: none"> <li>If The EUT supports multiple transmit chains using options given below:                 <ul style="list-style-type: none"> <li>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.</li> </ul> </li> </ul> </li> </ul>

#### 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 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 level.

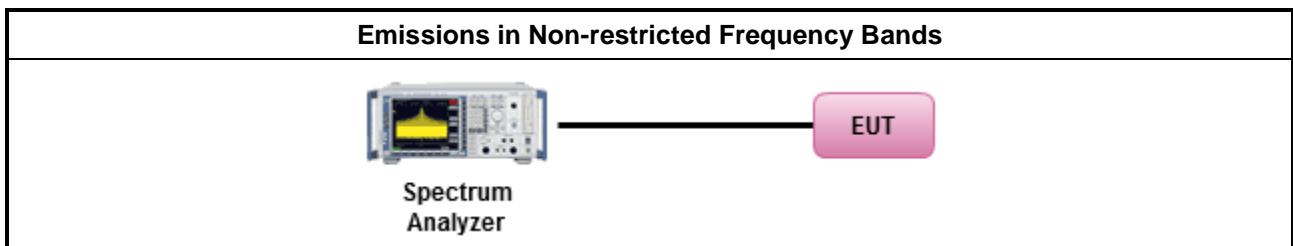
#### 3.5.2 Measuring Instruments

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"> <li>Refer as KDB 558074, clause 8.5 (11.11 of ANSI C63.10) for non-restricted frequency bands.</li> </ul>

#### 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

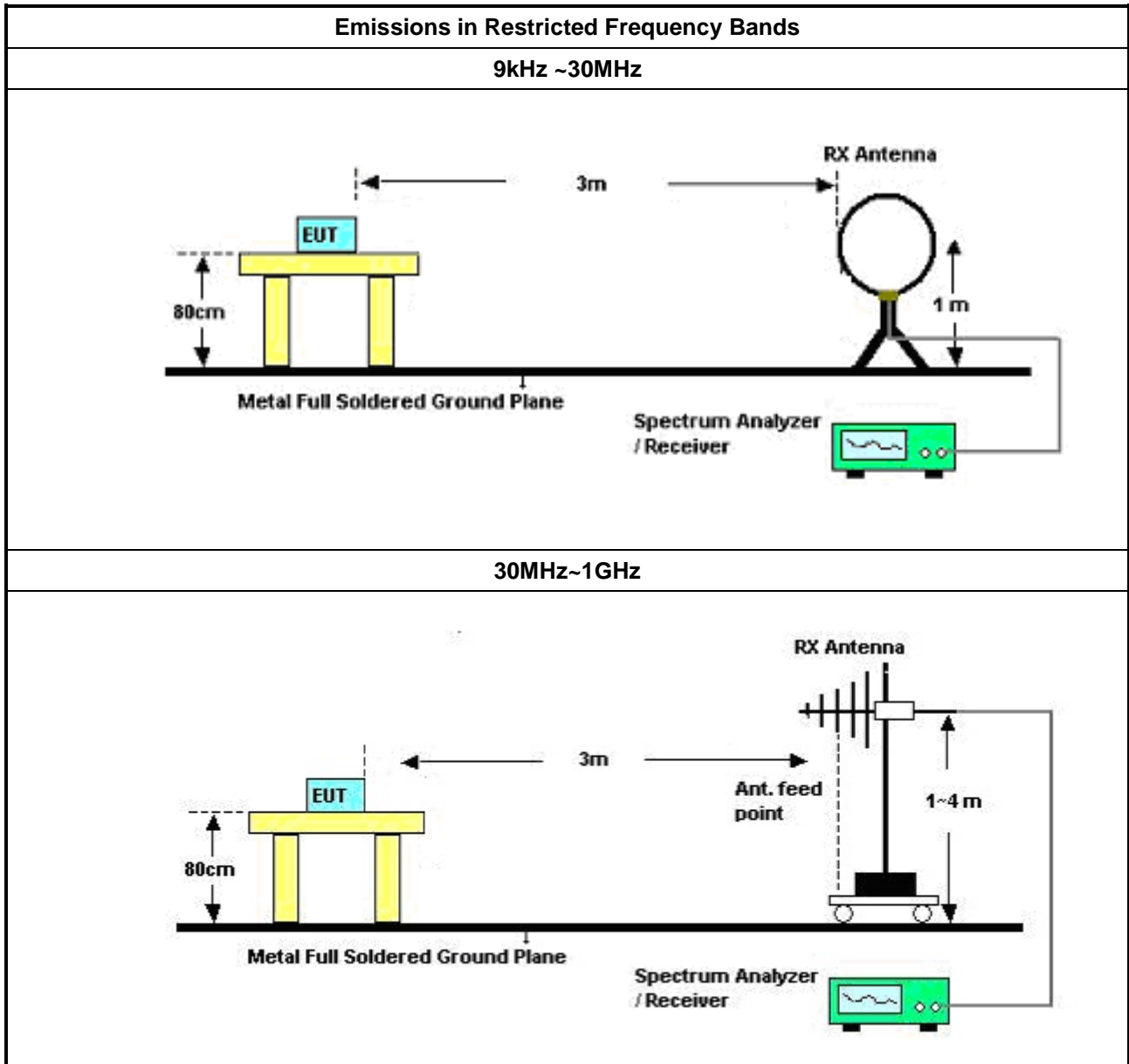
Refer a test equipment and calibration data table in this test report.

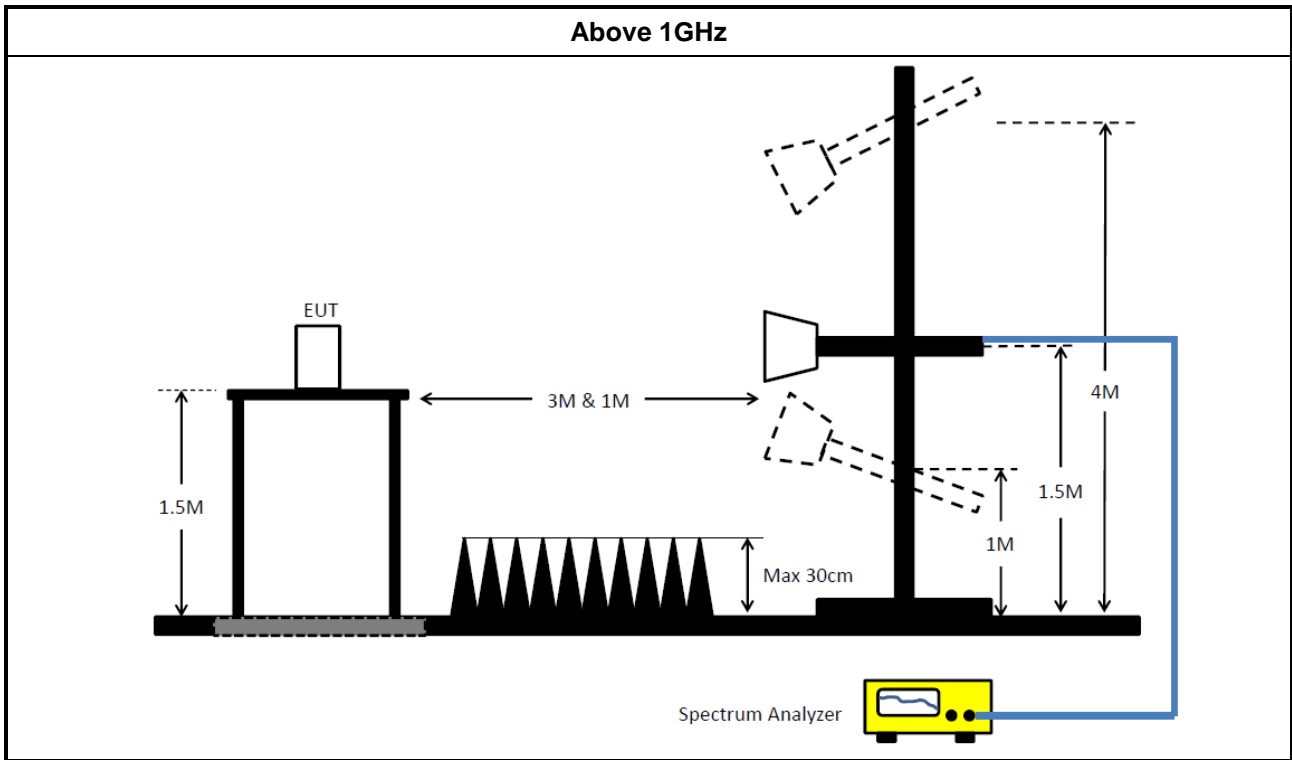


3.6.3 Test Procedures

Test Method	
	<ul style="list-style-type: none"> <li>▪ The average emission levels shall be measured in [duty cycle ≥ 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 8.6 (11.12 of ANSI C63.10) for restricted frequency bands.</li> </ul>
	<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 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.</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Refer as KDB 558074, clause 8.7.2 (6.10.6 of ANSI C63.10) for marker-delta method for band-edge measurements.</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Refer as KDB 558074, clause 8.7.3 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels.</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Use the following spectrum analyzer settings:</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Set RBW=100 kHz for <math>f &lt; 1</math> GHz; VBW=3 * RBW; Sweep = auto; Detector function = peak; Trace = max hold.</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Set RBW = 1 MHz, VBW= 3MHz for <math>f \geq 1</math> GHz for peak measurement. For average measurement, refer as 1.1.4.</li> </ul>
	<ul style="list-style-type: none"> <li>▪ KDB 414788 Open-Field Test Sites and Chamber Correlation Justification.</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Based on FCC 15.31 (f) (2): measurements may be performed at a distance closer than that specified in regulations; however, an attempt should be made to avoid making measurements in the near field.</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Open-field site and chamber correlation testing had been performed and chamber measured test result is the worst case test result.</li> </ul>

### 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	ESR3	102052	9kHz ~ 3.6GHz	09/Apr/2019	08/Apr/2020
LISN	R&S	ENV216	101295	9kHz ~ 30MHz	08/Nov/2018	07/Nov/2019
RF Cable-CON	MTJ	RG142	CB002-CO	9kHz ~ 200MHz	12/Sep/2019	11/Sep/2020
AC POWER	APC	AFC-11005G	F310050055	47Hz ~ 63Hz 5 ~ 300V	NCR	NCR
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9kHz ~ 30MHz	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
Pulse Power Sensor	Anritsu	MA2411B	1027452	300MHz ~ 40GHz	14/Mar/2019	13/Mar/2020
Power Meter	Anritsu	ML2495A	1124009	300MHz ~ 40GHz	14/Mar/2019	13/Mar/2020
SMB100A Signal Generator	R&S	SMB100A03	181147	100kHz ~ 40GHz	12/Nov/2018	10/Nov/2020

**Instrument for Radiated Test (03CH09-HY)**

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	30MHz ~ 1GHz	22/Apr/2019	21/Apr/2020
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	1GHz ~ 18GHz	13/Jun/2019	12/Jun/2020
Microwave System Prempplier	Agilent	8449B	3008A02326	1GHz ~ 26.5GHz	15/Jul/2019	14/Jul/2020
Amplifier	EMC	EMC9135	980232	9KHz~1GHz	09/Apr/2019	08/Apr/2020
EMI Test Receiver	R&S	ESR3	102052	9kHz ~ 3.6GHz	09/Apr/2019	08/Apr/2020
EXA Signal Analyer	KEYSIGHT	N9010A	MY54200882	10Hz ~ 44GHz	26/Jul/2019	25/Jul/2020
Bilog Antenna & 5dB Attenuator	TESEQ & MTJ	CBL6111D & MTJ6102-05	35418 / 3	30MHz~1GHz	04/Oct/2018	03/Oct/2019
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA9120 D 1534	1GHz~18GHz	22/May/2019	21/May/2020
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170221	18GHz~40GHz	22/May/2019	21/May/2020
Preamplifier	MITEQ	TTA1840-35-HG	1864481	18GHz ~ 40GHz	05/Aug/2019	04/Aug/2020
Loop Antenna	TESEQ	HLA 6120	31244	9k-30MHz	15/Mar/2019	14/Mar/2020
LF-CABLE-20190 218	Jye Bao	RG142	CB028	9kHz ~ 1GHz	18/Feb/2019	17/Feb/2020
RF Cable-high	HUBER+SUHNER	SUCOFLEX104	SN 556626/4 + 17173/4	1GHz ~ 40GHz	03/Jul/2019	02/Jul/2020





**Instrument for Radiated Test (03CH03-HY)**

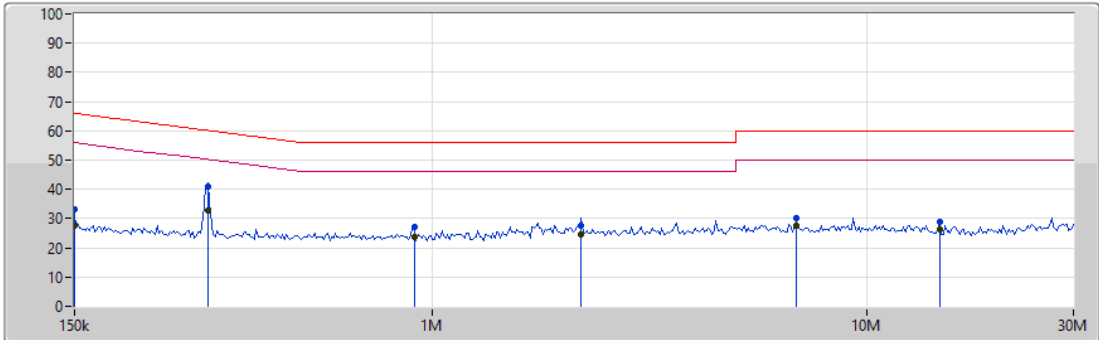
Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30MHz ~ 1GHz 3m	30/Aug/2018	29/Aug/2019
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	1GHz ~ 18GHz 3m	31/Oct/2018	30/Oct/2019
Amplifier	HP	8447D	2944A08033	10kHz ~ 1.3GHz	22/Apr/2019	21/Apr/2020
Amplifier	HP	8447D	2944A08033	10kHz ~ 1.3GHz	14/Apr/2020	13/Apr/2021
EMC Receiver	R&S	ESR3	102051	9kHz ~ 3.6GHz	28/May/2019	27/May/2020
Microwave System Preamplifier	KEYSIGHT	83017A	MY53270196	1GHz ~ 26.5GHz	05/Sep/2018	04/Sep/2019
Microwave System Preamplifier	KEYSIGHT	83017A	MY53270196	1GHz ~ 26.5GHz	09/Sep/2019	08/Sep/2020
Signal Analyzer	R&S	FSV40	101515	10Hz ~ 40GHz	19/Dec/2018	18/Dec/2019
Signal Analyzer	R&S	FSV40	101500	10Hz ~ 40GHz	15/Aug/2019	14/Aug/2020
RF CABLE 6m	HUBER+SUHNER	SUOFLEX 104	SN 805801/4	1GHz ~ 40GHz	21/Mar/2019	20/Mar/2020
RF CABLE 5m	HUBER+SUHNER	SUOFLEX 104	SN 804300/4	1GHz ~ 40GHz	17/Jun/2019	16/Jun/2020
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170221	18GHz~40GHz	22/Mar/2019	21/Mar/2020
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1531	1GHz ~ 18GHz	09/Mar/ 2019	08/Mar/2020
Preamplifier	MITEQ	TTA1840-35-HG	1864481	18GHz~40GHz	24/Aug/2018	23/Aug/2019
Preamplifier	MITEQ	TTA1840-35-HG	1864481	18GHz~40GHz	05/Aug/2019	04/Aug/2020
Loop Antenna	TESEQ	HLA 6120	31244	9kHz ~ 30MHz	15/Mar/2019	14/Mar/2020



AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Neutral
Operating Function	Switching Power Supply mode		

23/09/2019



Legend for the graph:

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

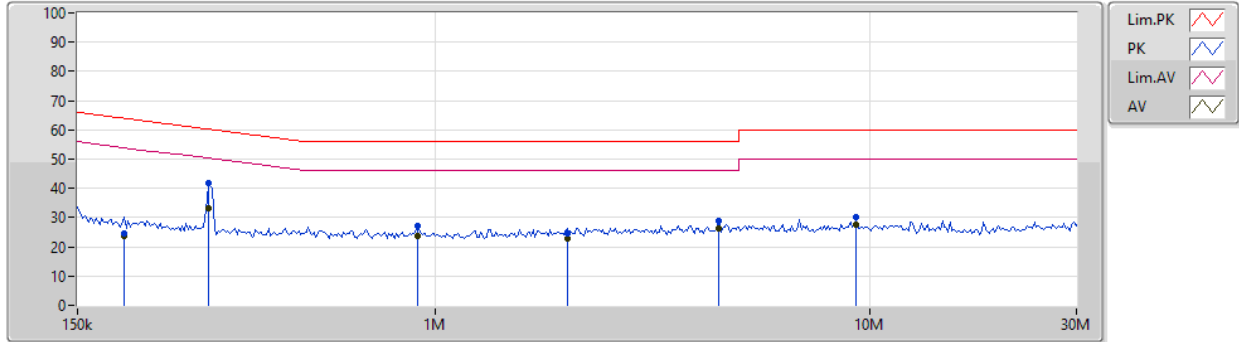
Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	150k	33.35	66.00	-32.65	19.48	Neutral	-	13.87	9.60	0.01	9.87
AV	150k	27.43	56.00	-28.57	19.48	Neutral	-	7.95	9.60	0.01	9.87
QP	304.025k	41.12	60.13	-19.01	19.48	Neutral	-	21.64	9.59	0.01	9.88
AV	304.025k	32.64	50.13	-17.49	19.48	Neutral	"Worst"	13.16	9.59	0.01	9.88
QP	908.364k	27.37	56.00	-28.63	19.49	Neutral	-	7.88	9.59	0.02	9.88
AV	908.364k	23.87	46.00	-22.13	19.49	Neutral	-	4.38	9.59	0.02	9.88
QP	2.202M	27.72	56.00	-28.28	19.53	Neutral	-	8.19	9.61	0.03	9.89
AV	2.202M	24.36	46.00	-21.64	19.53	Neutral	-	4.83	9.61	0.03	9.89
QP	6.915M	29.98	60.00	-30.02	19.60	Neutral	-	10.38	9.65	0.06	9.89
AV	6.915M	27.43	50.00	-22.57	19.60	Neutral	-	7.83	9.65	0.06	9.89
QP	14.731M	28.84	60.00	-31.16	19.67	Neutral	-	9.17	9.68	0.09	9.90
AV	14.731M	26.32	50.00	-23.68	19.67	Neutral	-	6.65	9.68	0.09	9.90



AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Line
Operating Function	Switching Power Supply mode		

23/09/2019



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	192.365k	24.70	63.93	-39.23	19.48	Line	-	5.22	9.60	0.01	9.87
AV	192.365k	23.75	53.93	-30.18	19.48	Line	-	4.27	9.60	0.01	9.87
QP	301.015k	41.98	60.21	-18.23	19.48	Line	-	22.50	9.59	0.01	9.88
AV	301.015k	33.09	50.21	-17.12	19.48	Line	"Worst"	13.61	9.59	0.01	9.88
QP	908.364k	27.08	56.00	-28.92	19.50	Line	-	7.58	9.60	0.02	9.88
AV	908.364k	23.73	46.00	-22.27	19.50	Line	-	4.23	9.60	0.02	9.88
QP	2.014M	24.54	56.00	-31.46	19.54	Line	-	5.00	9.62	0.03	9.89
AV	2.014M	22.67	46.00	-23.33	19.54	Line	-	3.13	9.62	0.03	9.89
QP	4.508M	28.81	56.00	-27.19	19.58	Line	-	9.23	9.64	0.05	9.89
AV	4.508M	26.28	46.00	-19.72	19.58	Line	-	6.70	9.64	0.05	9.89
QP	9.321M	30.07	60.00	-29.93	19.63	Line	-	10.44	9.67	0.07	9.89
AV	9.321M	27.40	50.00	-22.60	19.63	Line	-	7.77	9.67	0.07	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	8.075M	12.594M	12M6G1D	7.55M	11.094M
802.11g_Nss1,(6Mbps)_2TX	16.35M	18.991M	19M0D1D	16.3M	16.692M
802.11n HT20_Nss1,(MCS0)_2TX	17.575M	18.916M	18M9D1D	17.2M	17.816M

**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	8M	11.094M	8.025M	11.119M
2437MHz	Pass	500k	8.025M	12.594M	8.075M	12.394M
2462MHz	Pass	500k	7.55M	11.369M	8.025M	11.244M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.325M	16.692M	16.325M	16.717M
2437MHz	Pass	500k	16.3M	18.991M	16.325M	18.166M
2462MHz	Pass	500k	16.3M	16.817M	16.35M	16.717M
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	17.525M	17.866M	17.575M	17.816M
2437MHz	Pass	500k	17.275M	18.916M	17.55M	18.641M
2462MHz	Pass	500k	17.2M	18.071M	17.575M	17.991M

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

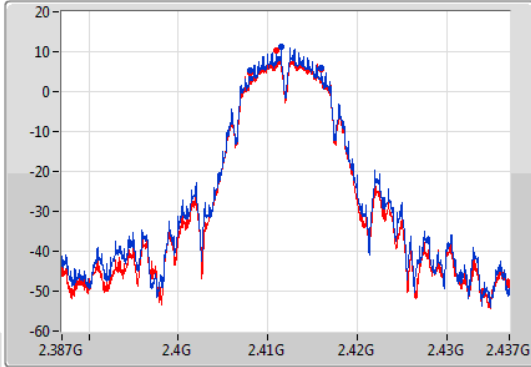
### 802.11b\_Nss1,(1Mbps)\_2TX

EBW

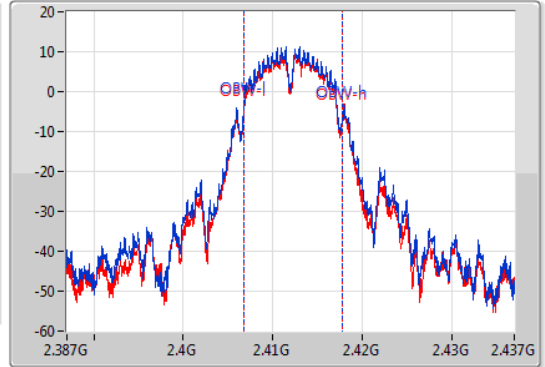
2412MHz

08/08/2019

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
8M	2.408G	2.416G	11.094M	2.406728G	2.417822G	500k	1
8.025M	2.407975G	2.416G	11.119M	2.406728G	2.417847G	500k	2

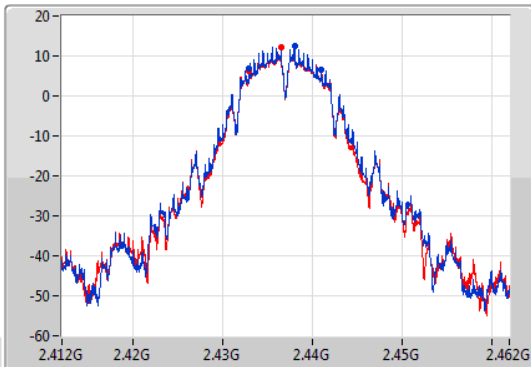
### 802.11b\_Nss1,(1Mbps)\_2TX

EBW

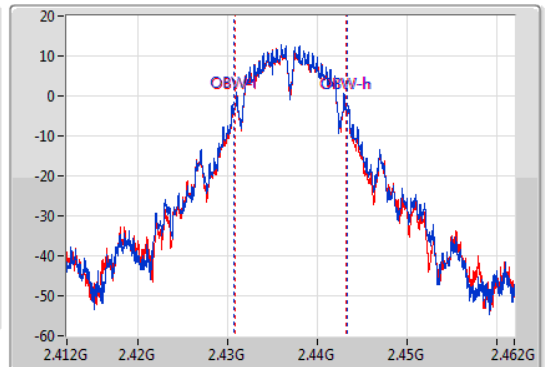
2437MHz

08/08/2019

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



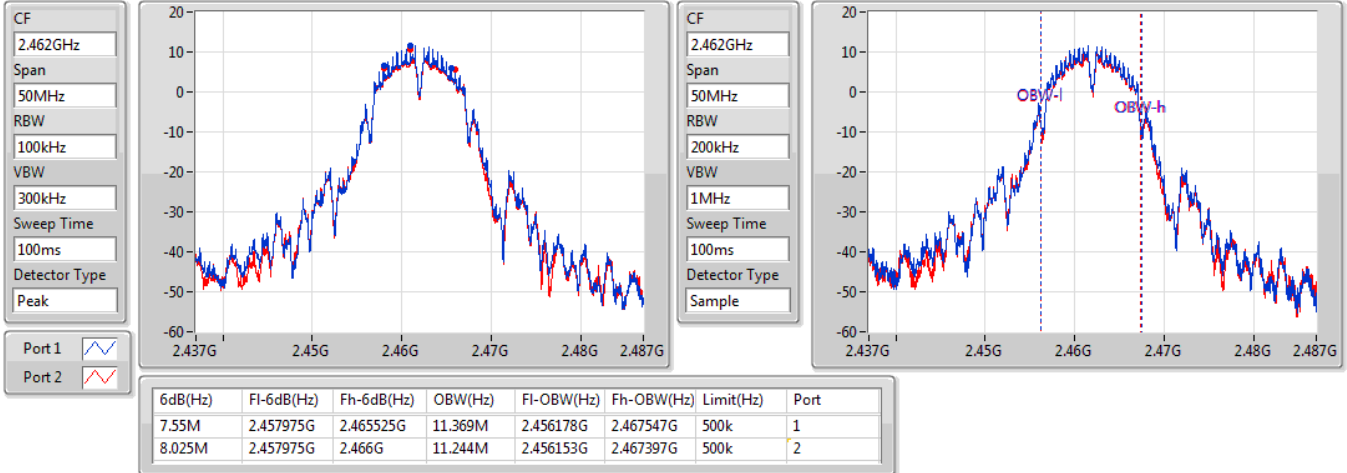
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
8.025M	2.43295G	2.440975G	12.594M	2.430678G	2.443272G	500k	1
8.075M	2.43295G	2.441025G	12.394M	2.430753G	2.443147G	500k	2

### 802.11b\_Nss1,(1Mbps)\_2TX

EBW

2462MHz

08/08/2019

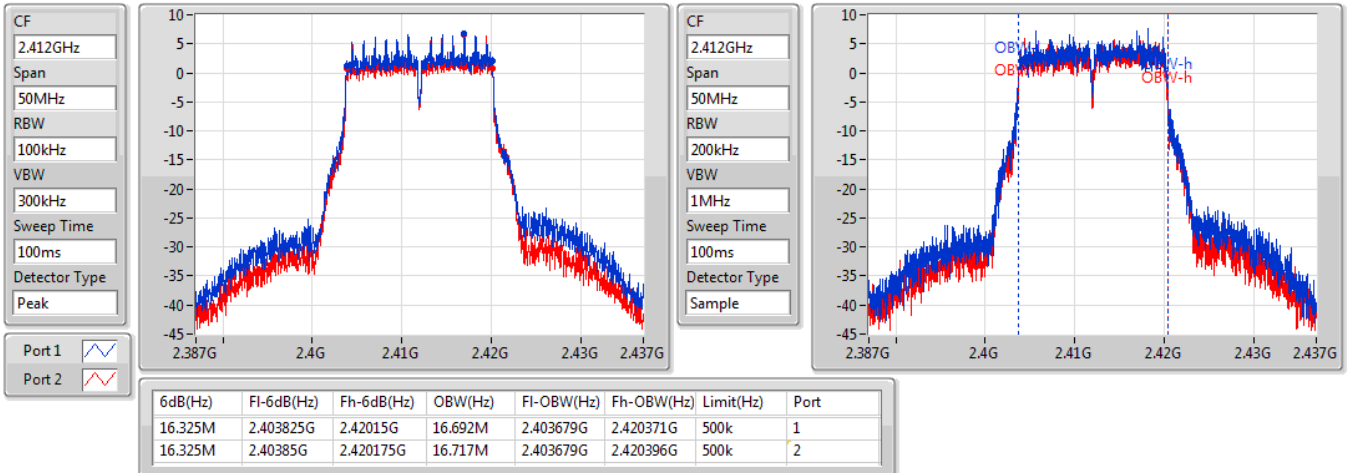


### 802.11g\_Nss1,(6Mbps)\_2TX

EBW

2412MHz

08/08/2019



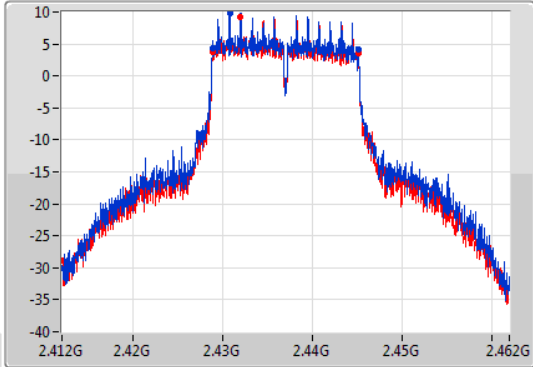
### 802.11g\_Nss1,(6Mbps)\_2TX

EBW

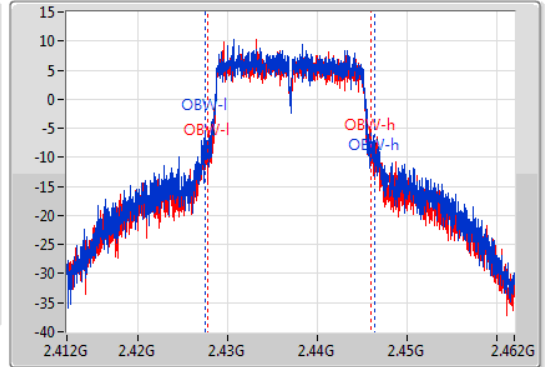
2437MHz

08/08/2019

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
16.3M	2.428825G	2.445125G	18.991M	2.427405G	2.446395G	500k	1
16.325M	2.428825G	2.44515G	18.166M	2.42778G	2.445946G	500k	2

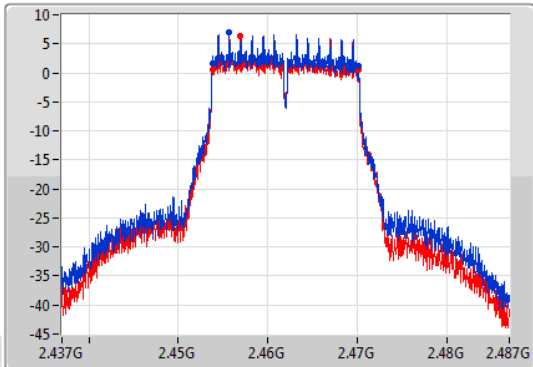
### 802.11g\_Nss1,(6Mbps)\_2TX

EBW

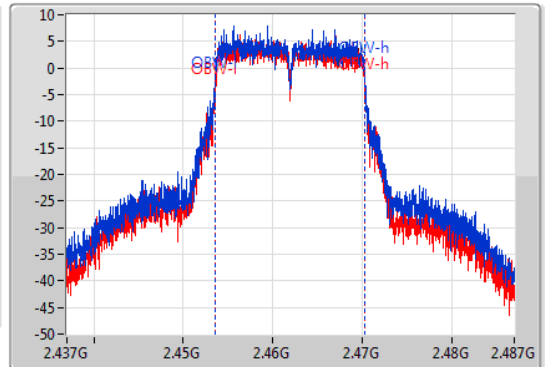
2462MHz

08/08/2019

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
16.3M	2.453825G	2.470125G	16.817M	2.453504G	2.470321G	500k	1
16.35M	2.4538G	2.47015G	16.717M	2.453579G	2.470296G	500k	2

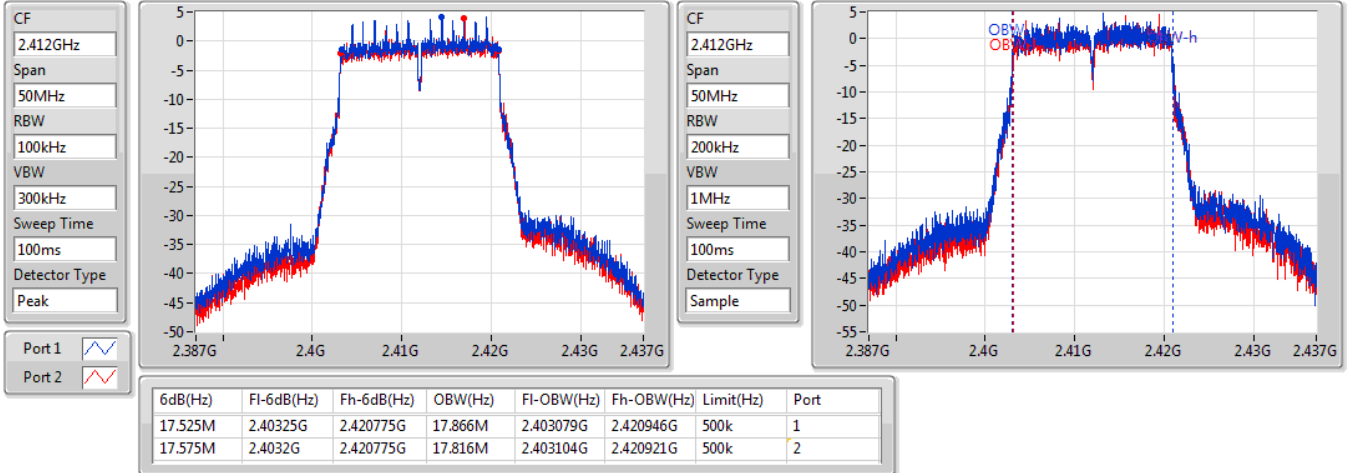


### 802.11n HT20\_Nss1,(MCS0)\_2TX

EBW

2412MHz

08/08/2019

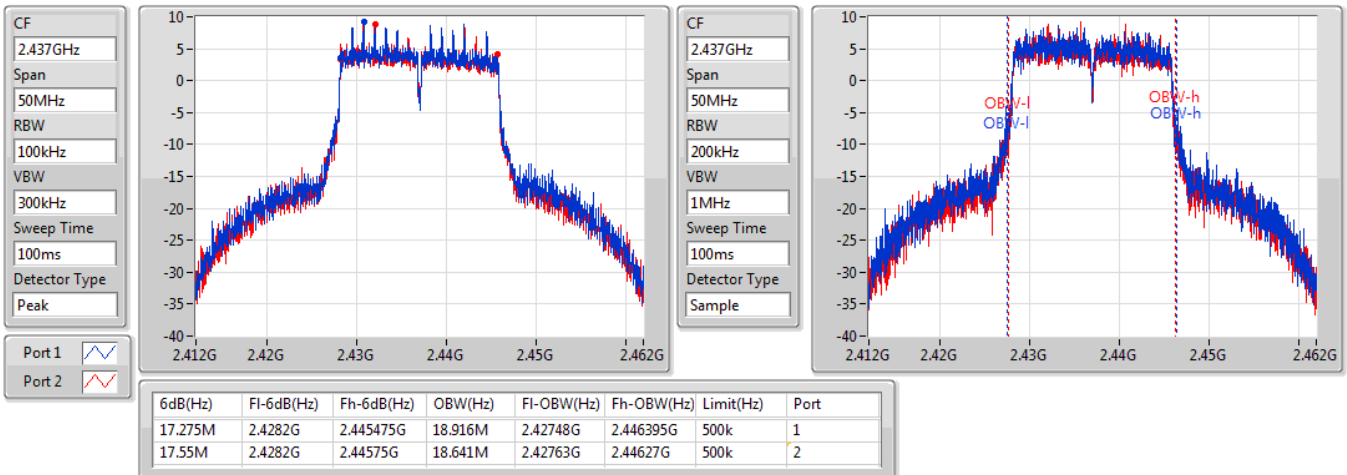


### 802.11n HT20\_Nss1,(MCS0)\_2TX

EBW

2437MHz

08/08/2019



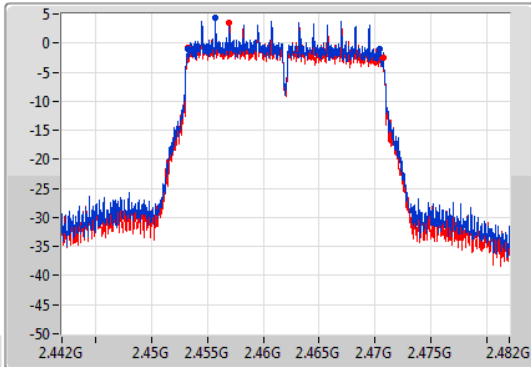
### 802.11n HT20\_Nss1,(MCS0)\_2TX

EBW

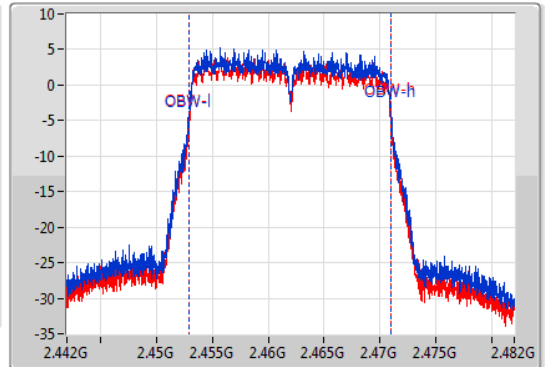
2462MHz

26/11/2019

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



CF  
2.462GHz  
Span  
40MHz  
RBW  
200kHz  
VBW  
1MHz  
Sweep Time  
100ms  
Detector Type  
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.2M	2.4532G	2.4704G	18.071M	2.452885G	2.470956G	500k	1
17.575M	2.4532G	2.470775G	17.991M	2.452925G	2.470916G	500k	2



**Summary**

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_2TX	23.89	0.24491
802.11g_Nss1,(6Mbps)_2TX	23.31	0.21429
802.11n HT20_Nss1,(MCS0)_2TX	22.57	0.18072



**Result**

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	1.76	19.16	18.50	21.85	30.00
2417MHz	Pass	1.76	21.06	20.70	23.89	30.00
2437MHz	Pass	1.76	20.90	20.61	23.77	30.00
2462MHz	Pass	1.76	19.59	19.05	22.34	30.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	1.76	17.96	17.31	20.66	30.00
2417MHz	Pass	1.76	19.56	18.72	22.17	30.00
2437MHz	Pass	1.76	20.49	20.11	23.31	30.00
2457MHz	Pass	1.76	19.60	18.93	22.29	30.00
2462MHz	Pass	1.76	18.23	17.41	20.85	30.00
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	1.76	15.13	14.63	17.90	30.00
2417MHz	Pass	1.76	18.09	17.55	20.84	30.00
2437MHz	Pass	1.76	19.70	19.42	22.57	30.00
2457MHz	Pass	1.76	19.09	18.42	21.78	30.00
2462MHz	Pass	1.76	16.34	15.62	19.01	30.00

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



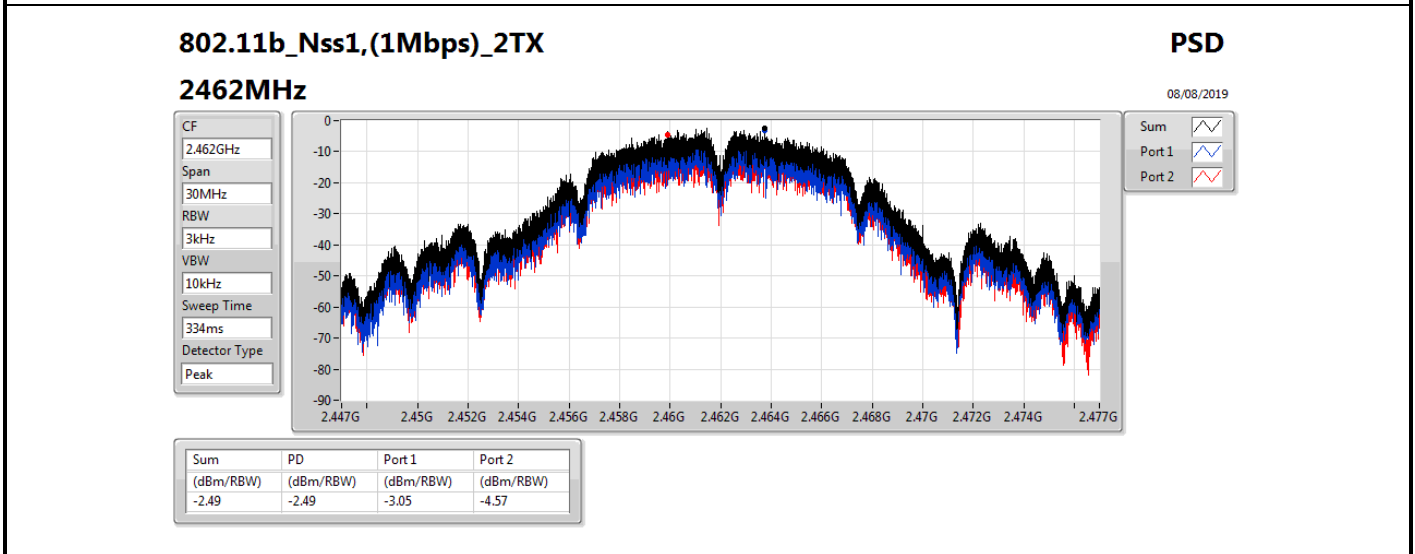
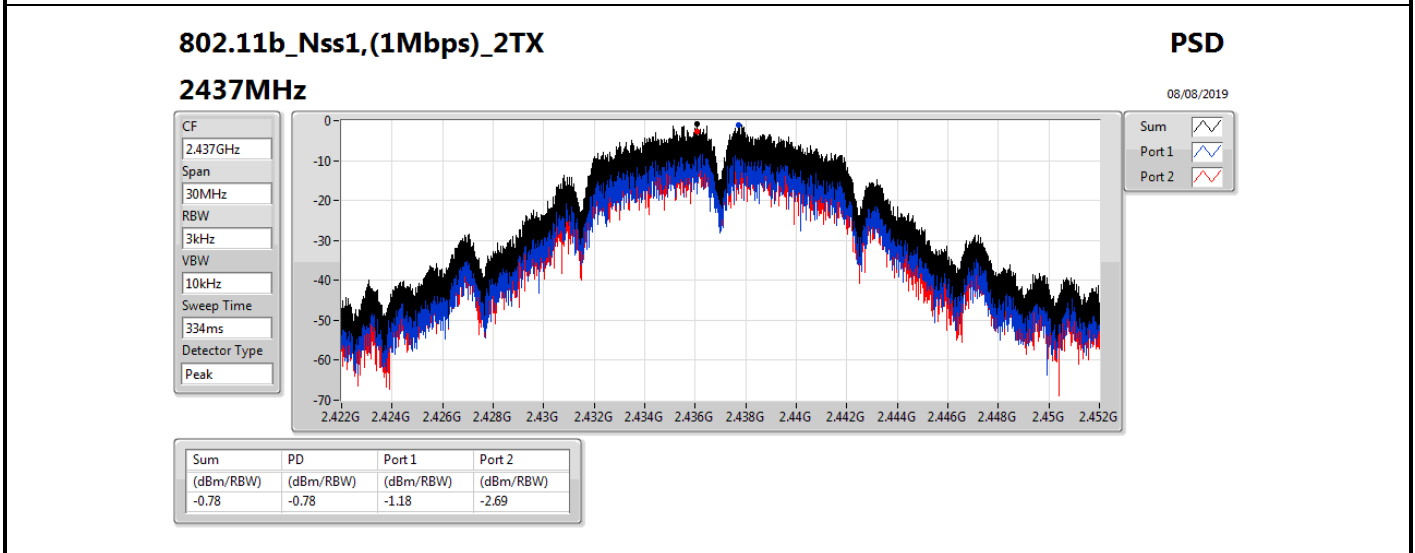
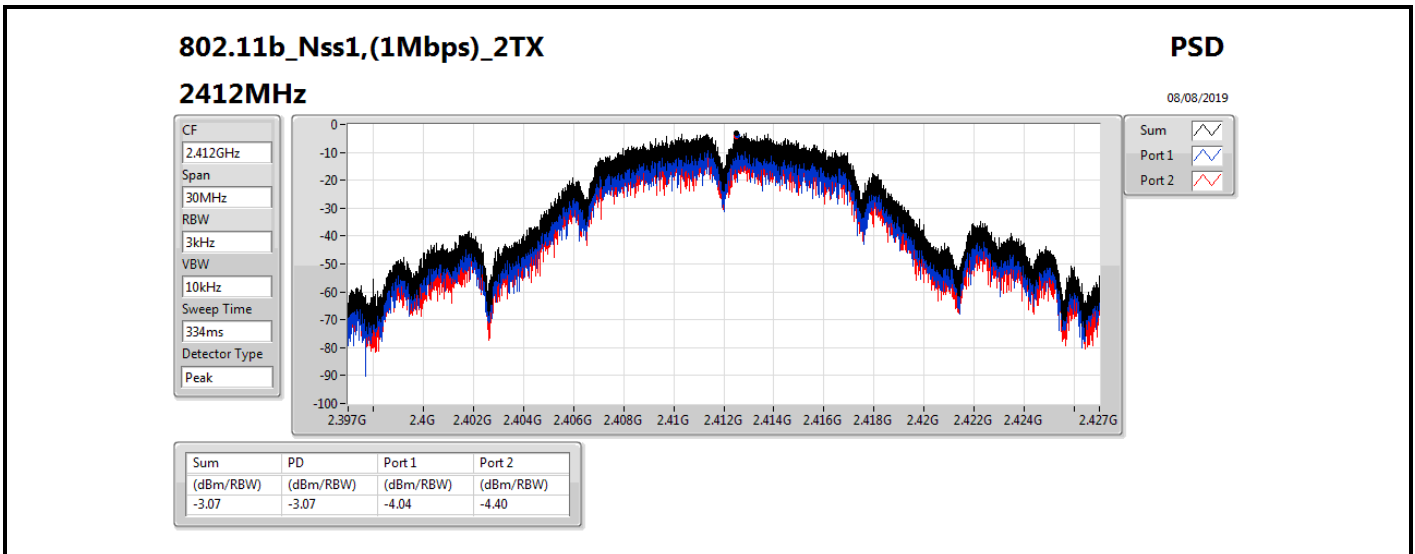
Summary

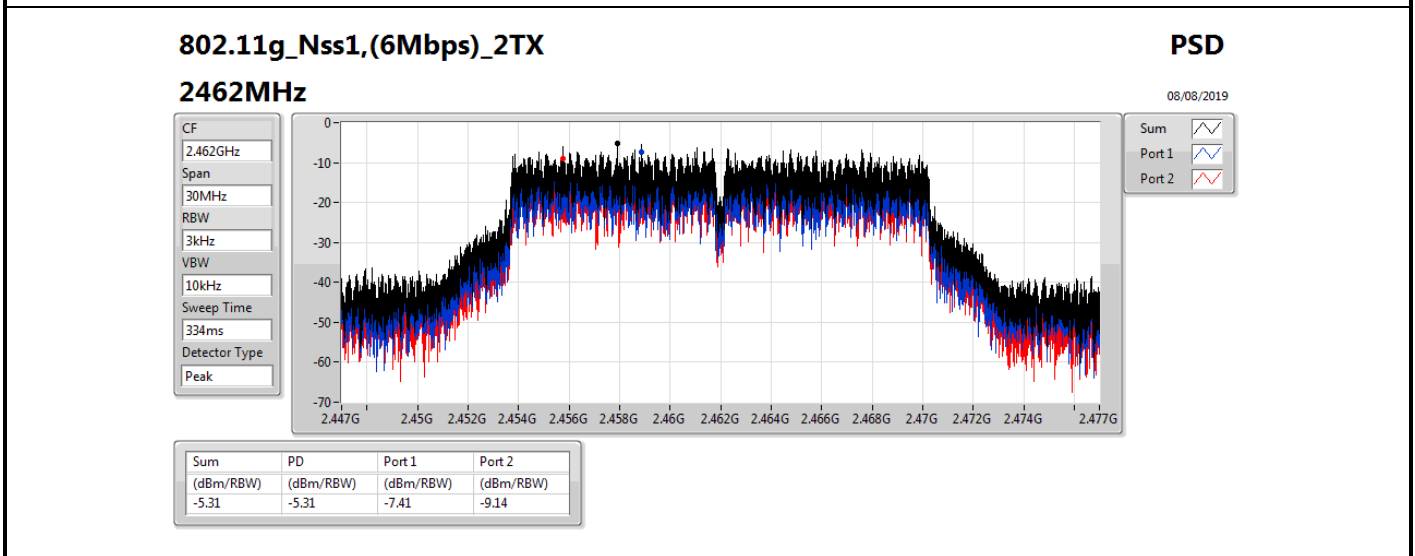
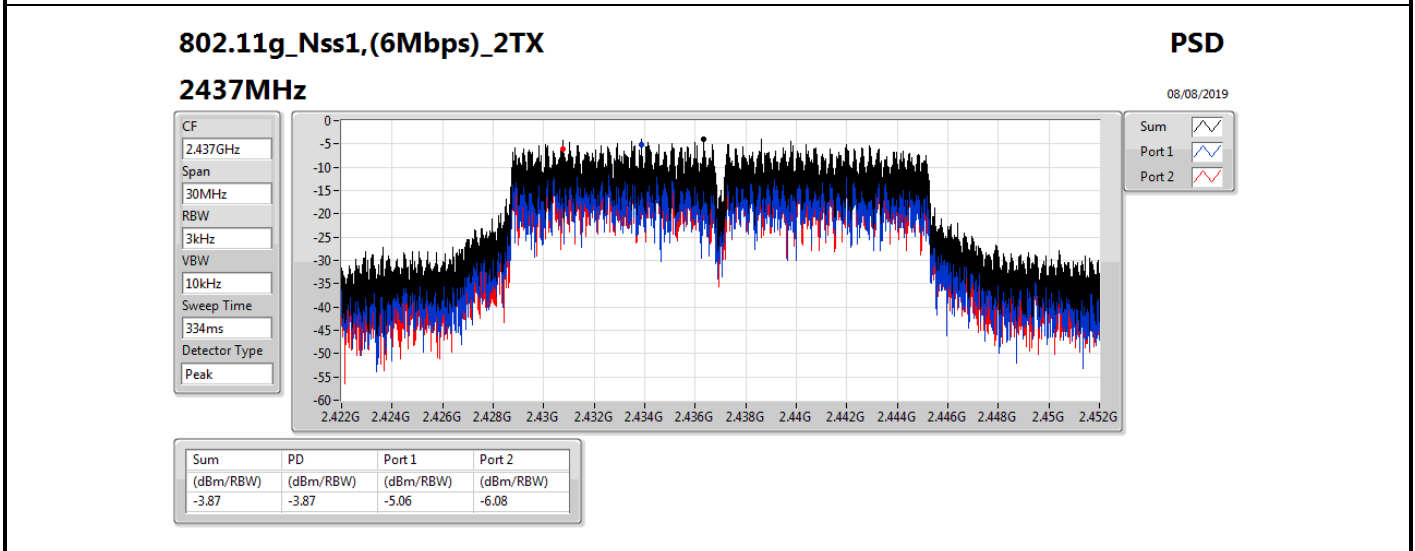
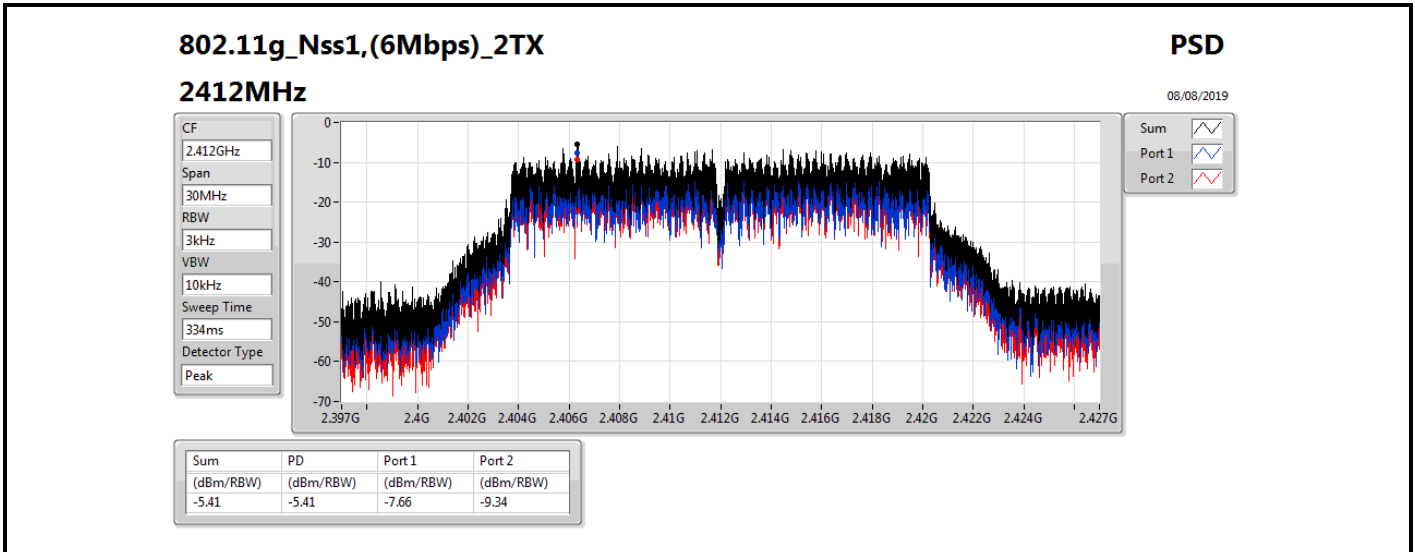
Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_2TX	-0.78
802.11g_Nss1,(6Mbps)_2TX	-3.87
802.11n HT20_Nss1,(MCS0)_2TX	-5.26

**Result**

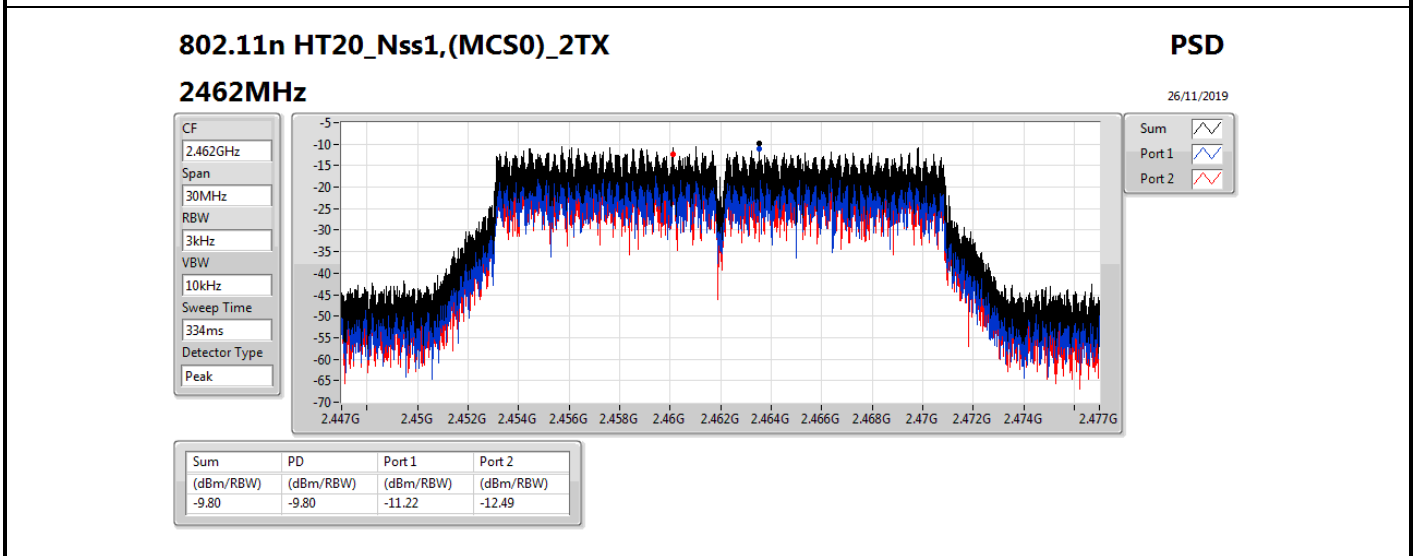
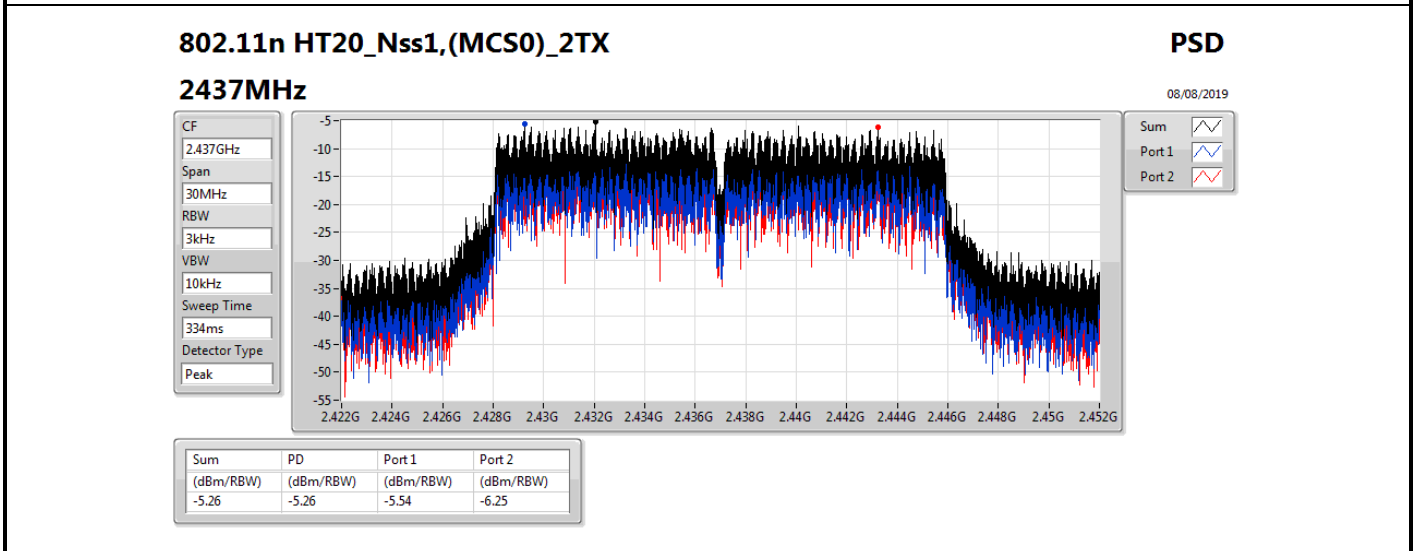
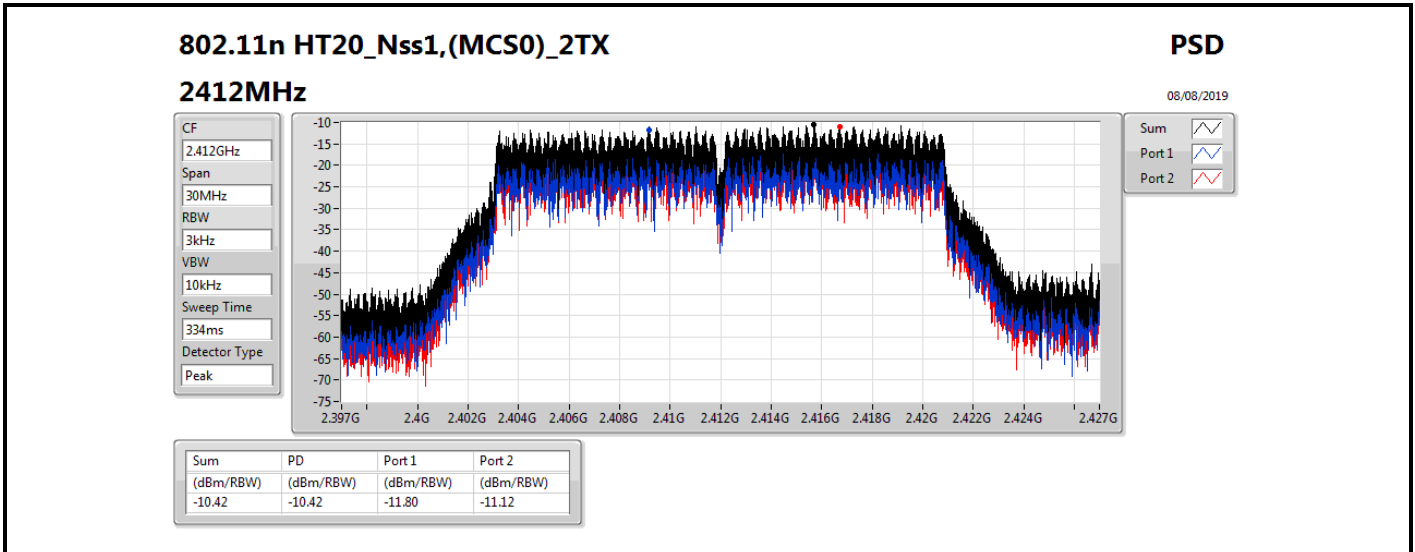
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.33	-4.04	-4.40	-3.07	8.00
2437MHz	Pass	4.33	-1.18	-2.69	-0.78	8.00
2462MHz	Pass	4.33	-3.05	-4.57	-2.49	8.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.33	-7.66	-9.34	-5.41	8.00
2437MHz	Pass	4.33	-5.06	-6.08	-3.87	8.00
2462MHz	Pass	4.33	-7.41	-9.14	-5.31	8.00
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.33	-11.80	-11.12	-10.42	8.00
2437MHz	Pass	4.33	-5.54	-6.25	-5.26	8.00
2462MHz	Pass	4.33	-11.22	-12.49	-9.80	8.00

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









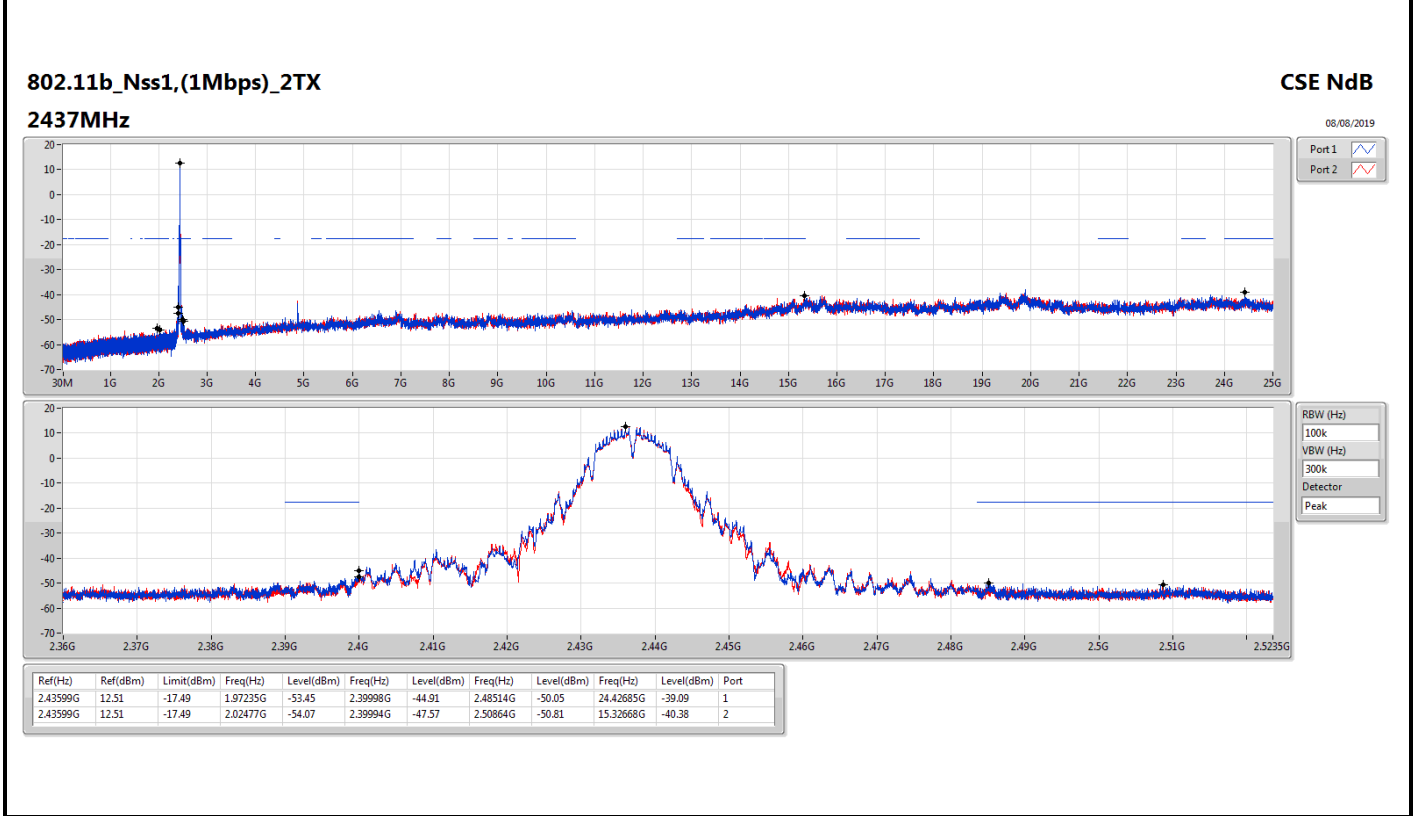
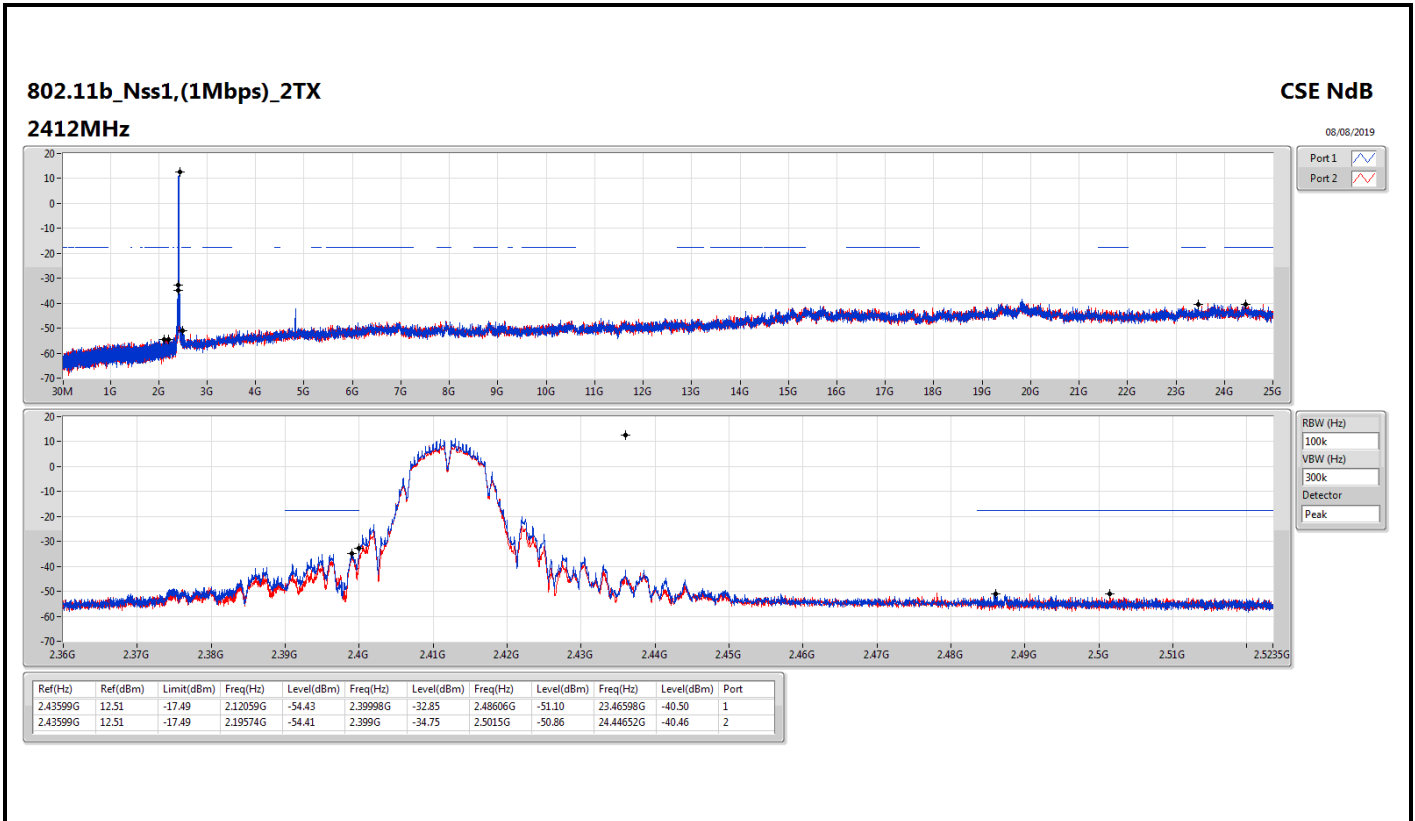


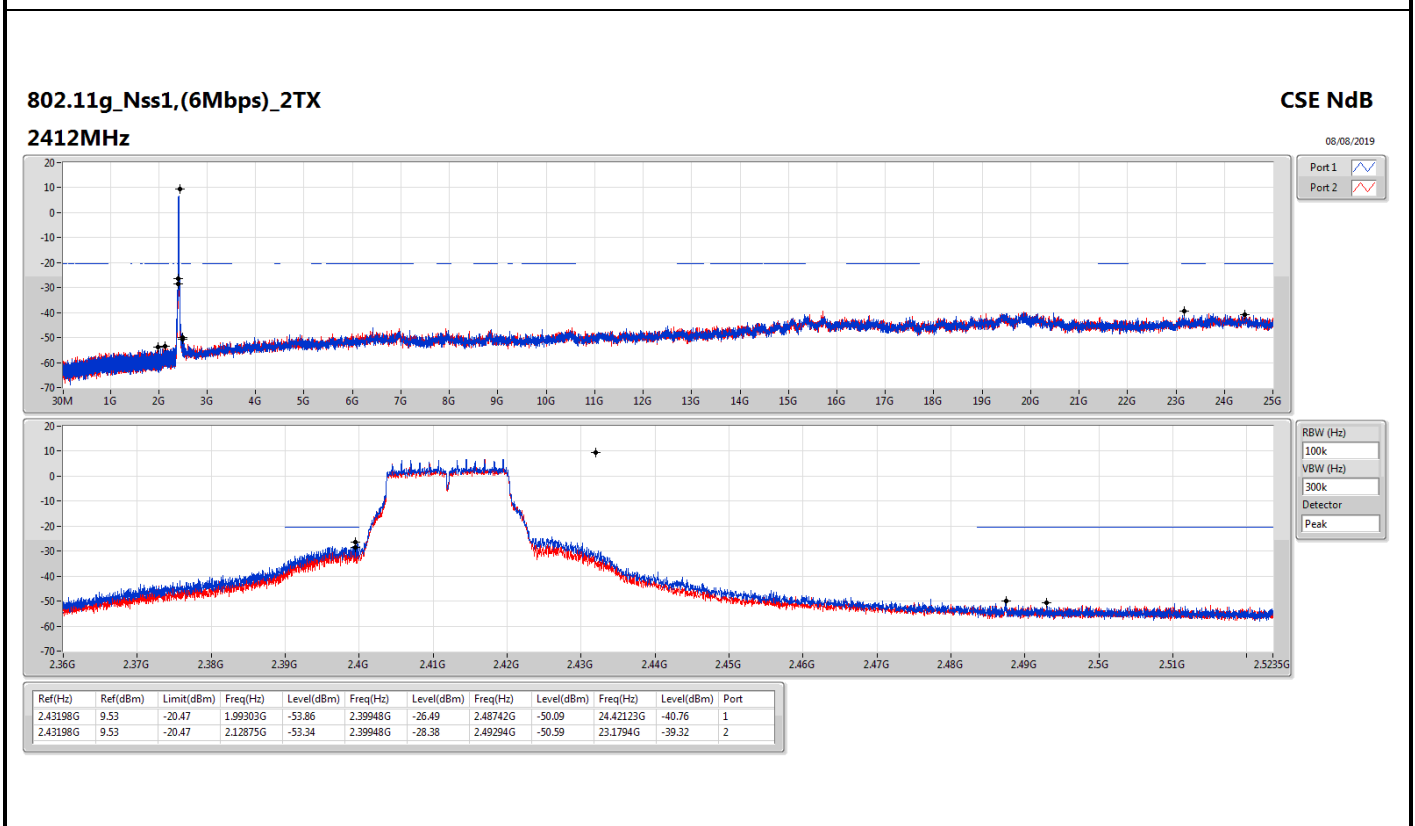
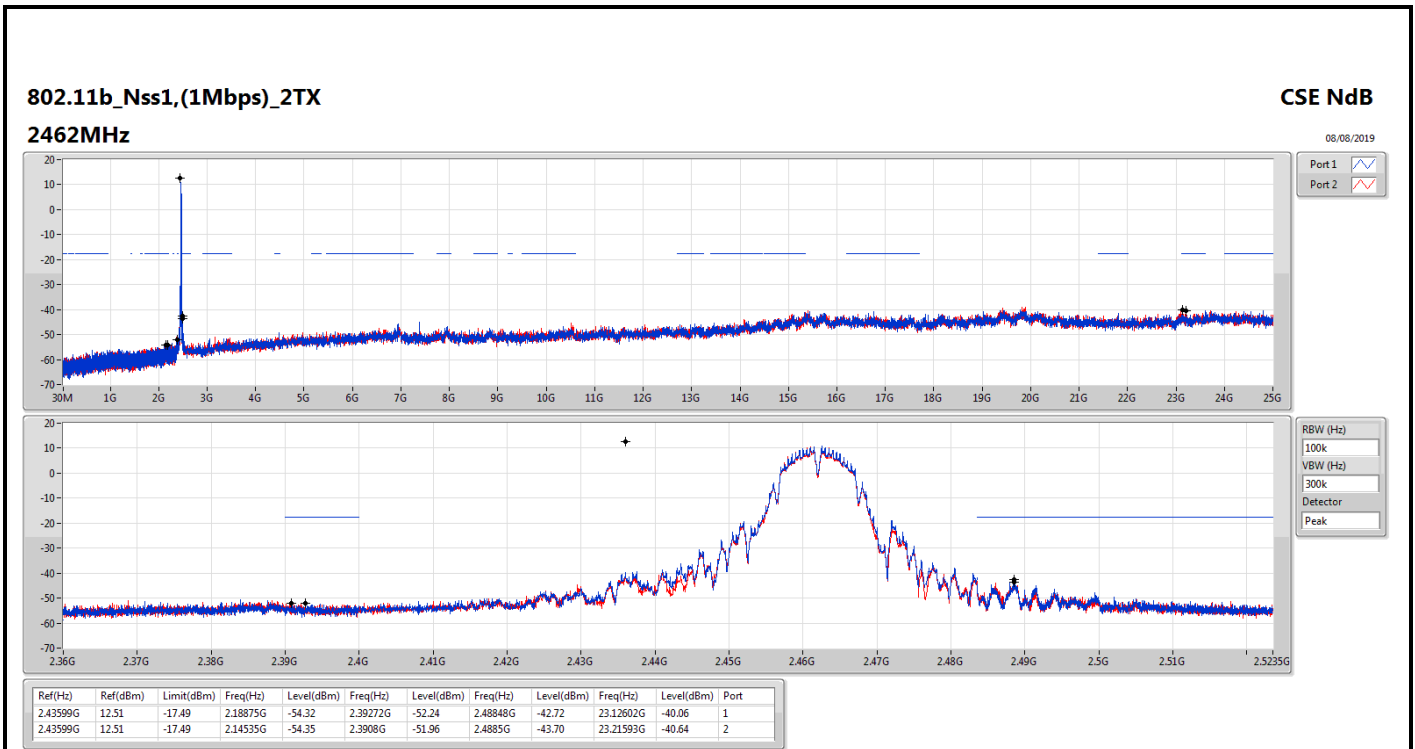
Summary

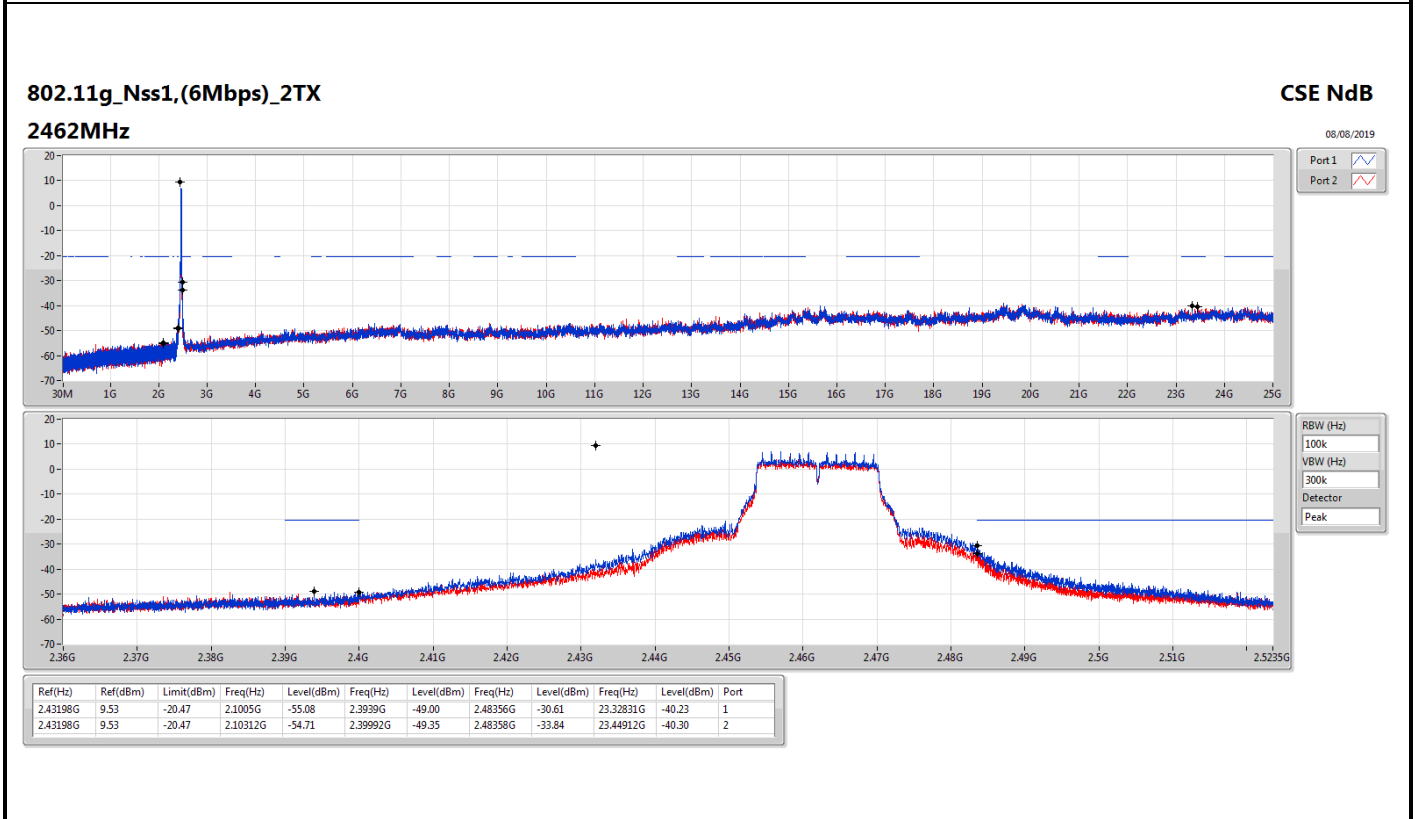
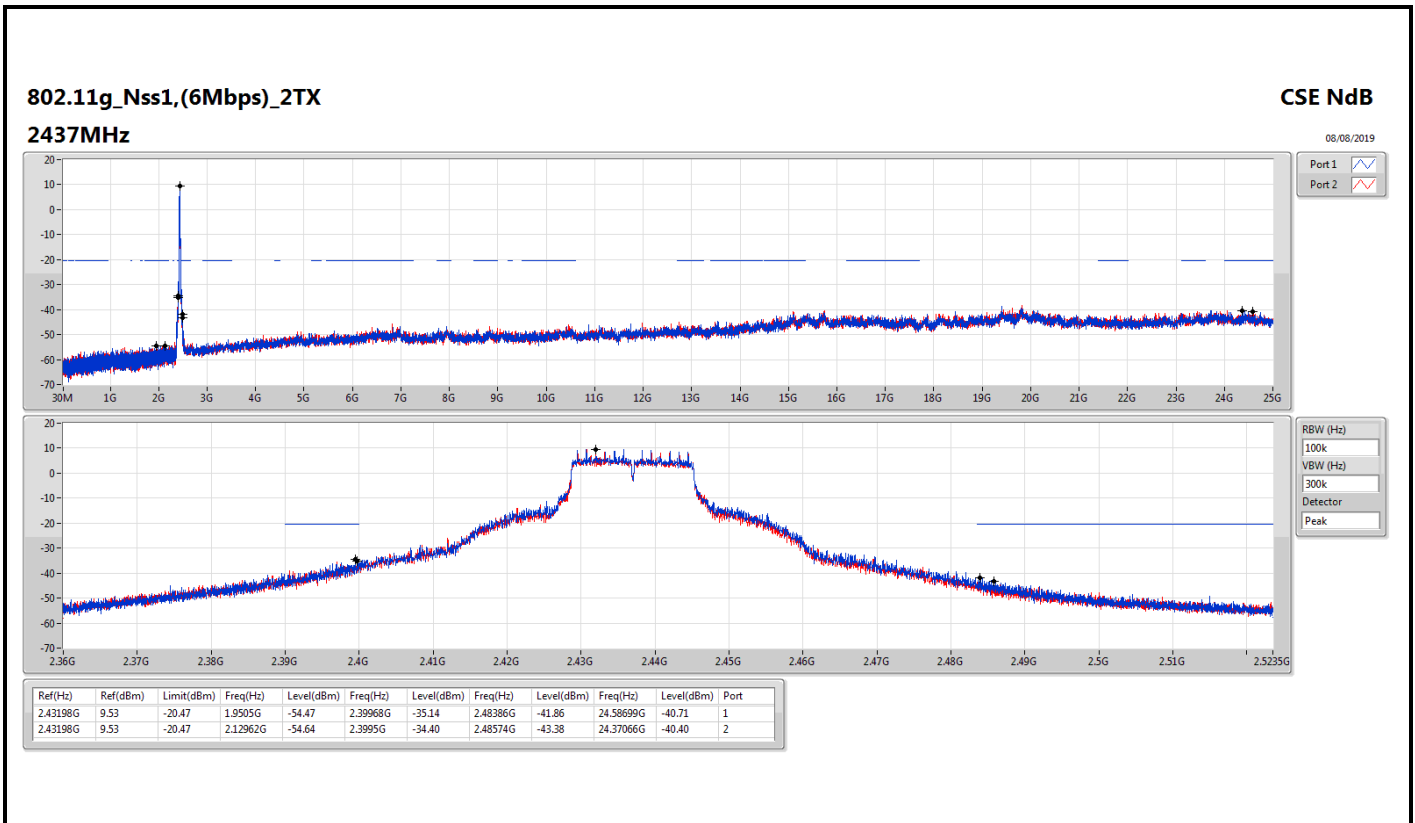
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	Pass	2.43599G	12.51	-17.49	2.12059G	-54.43	2.39998G	-32.85	2.48606G	-51.10	23.46598G	-40.50	1		
802.11g_Nss1,(6Mbps)_2TX	Pass	2.43198G	9.53	-20.47	1.99303G	-53.86	2.39948G	-26.49	2.48742G	-50.09	24.42123G	-40.76	1		
802.11n HT20_Nss1,(MCS0)_2TX	Pass	2.43073G	7.89	-22.11	1.98458G	-55.55	2.39858G	-52.56	2.4835G	-35.74	2.4836G	-34.43	24.59261G	-42.70	1

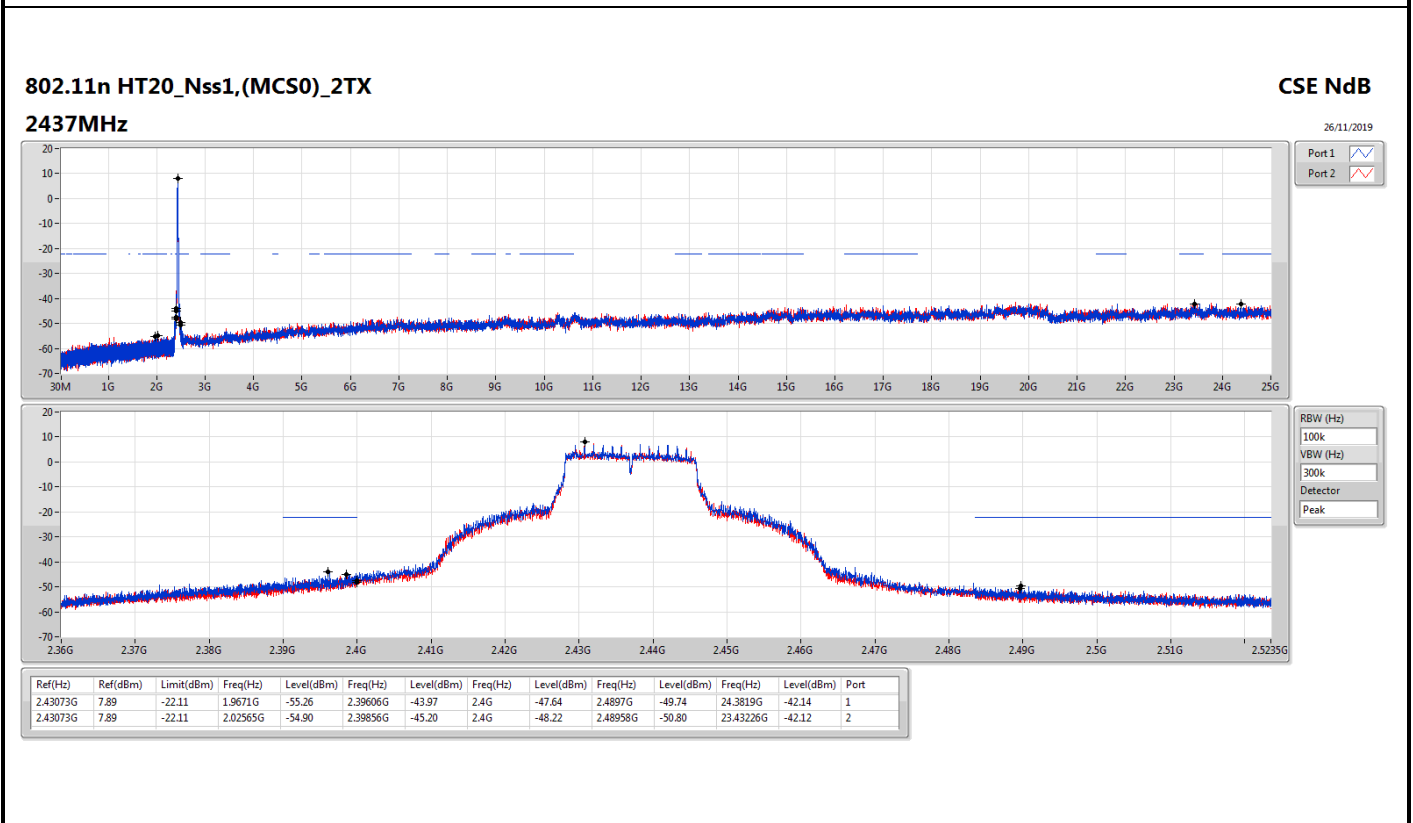
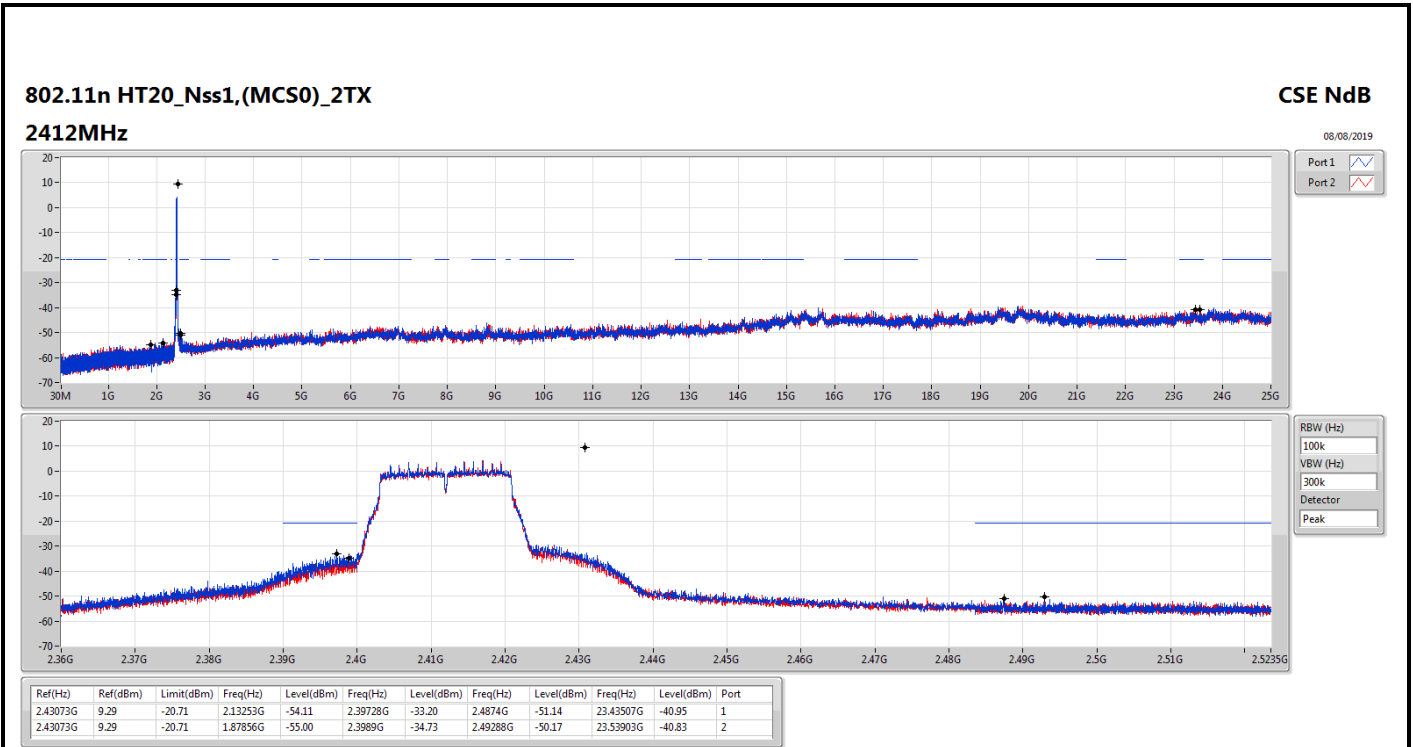
Result

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43599G	12.51	-17.49	2.12059G	-54.43	2.39998G	-32.85	2.48606G	-51.10	23.46598G	-40.50	1		
2412MHz	Pass	2.43599G	12.51	-17.49	2.19574G	-54.41	2.399G	-34.75	2.5015G	-50.86	24.44652G	-40.46	2		
2437MHz	Pass	2.43599G	12.51	-17.49	1.97235G	-53.45	2.39998G	-44.91	2.48514G	-50.05	24.42685G	-39.09	1		
2437MHz	Pass	2.43599G	12.51	-17.49	2.02477G	-54.07	2.39994G	-47.57	2.50864G	-50.81	15.32668G	-40.38	2		
2462MHz	Pass	2.43599G	12.51	-17.49	2.18875G	-54.32	2.39272G	-52.24	2.48848G	-42.72	23.12602G	-40.06	1		
2462MHz	Pass	2.43599G	12.51	-17.49	2.14535G	-54.35	2.3908G	-51.96	2.4885G	-43.70	23.21593G	-40.64	2		
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43198G	9.53	-20.47	1.99303G	-53.86	2.39948G	-26.49	2.48742G	-50.09	24.42123G	-40.76	1		
2412MHz	Pass	2.43198G	9.53	-20.47	2.12875G	-53.34	2.39948G	-28.38	2.49294G	-50.59	23.1794G	-39.32	2		
2437MHz	Pass	2.43198G	9.53	-20.47	1.9505G	-54.47	2.39968G	-35.14	2.48386G	-41.86	24.58699G	-40.71	1		
2437MHz	Pass	2.43198G	9.53	-20.47	2.12962G	-54.64	2.3995G	-34.40	2.48574G	-43.38	24.37066G	-40.40	2		
2462MHz	Pass	2.43198G	9.53	-20.47	2.1005G	-55.08	2.3939G	-49.00	2.48356G	-30.61	23.32831G	-40.23	1		
2462MHz	Pass	2.43198G	9.53	-20.47	2.10312G	-54.71	2.39992G	-49.35	2.48358G	-33.84	23.44912G	-40.30	2		
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43073G	9.29	-20.71	2.13253G	-54.11	2.39728G	-33.20	2.4874G	-51.14	23.43507G	-40.95	1		
2412MHz	Pass	2.43073G	9.29	-20.71	1.87856G	-55.00	2.3989G	-34.73	2.49288G	-50.17	23.53903G	-40.83	2		
2437MHz	Pass	2.43073G	7.89	-22.11	1.9671G	-55.26	2.39606G	-43.97	2.4G	-47.64	2.4897G	-49.74	24.3819G	-42.14	1
2437MHz	Pass	2.43073G	7.89	-22.11	2.02565G	-54.90	2.39856G	-45.20	2.4G	-48.22	2.48958G	-50.80	23.43226G	-42.12	2
2462MHz	Pass	2.43073G	7.89	-22.11	1.98458G	-55.55	2.39858G	-52.56	2.4835G	-35.74	2.4836G	-34.43	24.59261G	-42.70	1
2462MHz	Pass	2.43073G	7.89	-22.11	2.14797G	-54.78	2.39896G	-52.50	2.4835G	-38.32	2.48388G	-35.14	23.42384G	-40.24	2







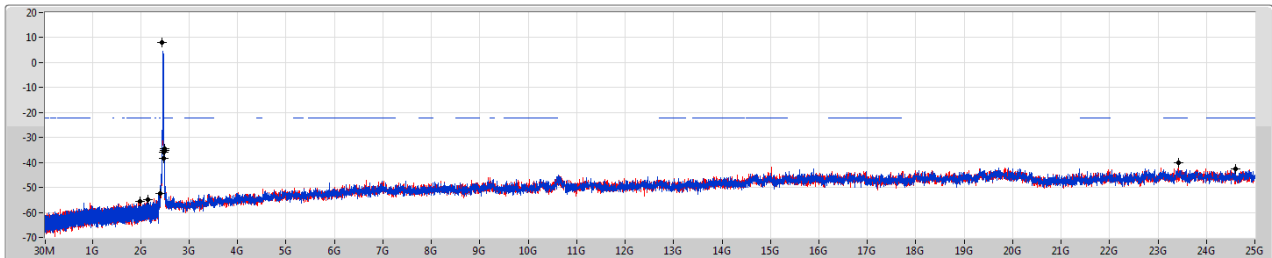


802.11n HT20\_Nss1,(MCS0)\_2TX

2462MHz

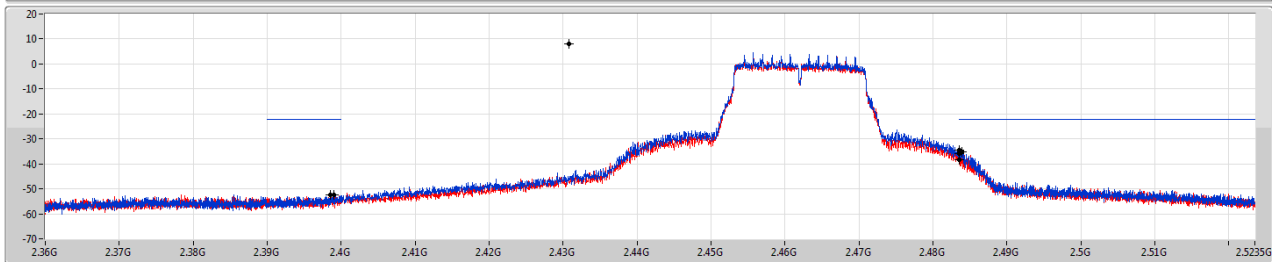
CSE NdB

26/11/2019



Port 1 

Port 2 



RBW (Hz)

VBW (Hz)

Detector

Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43073G	7.89	-22.11	1.98458G	-55.55	2.39858G	-52.56	2.4835G	-35.74	2.4836G	-34.43	24.59261G	-42.70	1
2.43073G	7.89	-22.11	2.14797G	-54.78	2.39896G	-52.50	2.4835G	-38.32	2.48388G	-35.14	23.42384G	-40.24	2





Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
802.11n HT20_Nss1,(MCS0)_2TX	Pass	PK	359.8M	39.35	46.00	-6.65	3	Vertical	360	1.00	-



Result

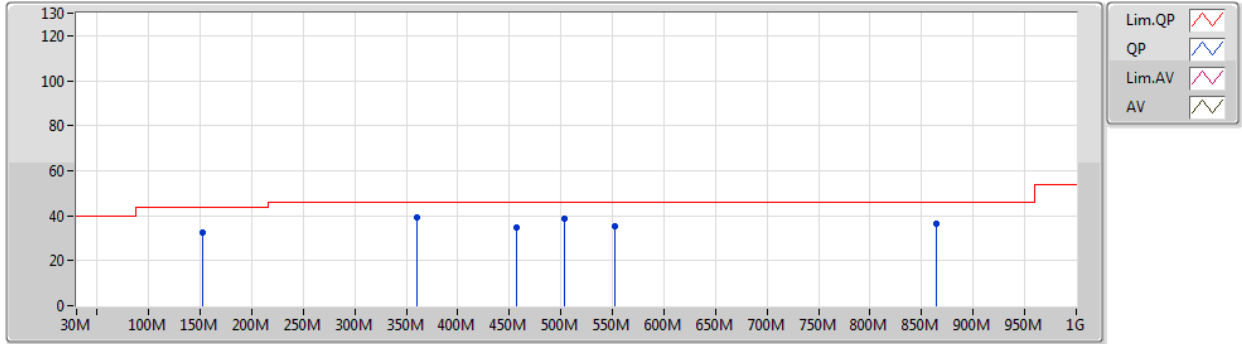
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11n HT20_Nss1.(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-
2437MHz	Pass	PK	152.22M	32.75	43.50	-10.75	3	Vertical	360	1.00	-
2437MHz	Pass	PK	359.8M	39.35	46.00	-6.65	3	Vertical	360	1.00	-
2437MHz	Pass	PK	456.8M	34.83	46.00	-11.17	3	Vertical	360	1.00	-
2437MHz	Pass	PK	503.36M	38.50	46.00	-7.50	3	Vertical	360	1.00	-
2437MHz	Pass	PK	551.86M	35.54	46.00	-10.46	3	Vertical	360	1.00	-
2437MHz	Pass	PK	864.2M	36.65	46.00	-9.35	3	Vertical	360	1.00	-
2437MHz	Pass	PK	264.74M	39.14	46.00	-6.86	3	Horizontal	0	2.00	-
2437MHz	Pass	PK	311.3M	39.10	46.00	-6.90	3	Horizontal	0	2.00	-
2437MHz	Pass	PK	359.8M	39.01	46.00	-6.99	3	Horizontal	0	2.00	-
2437MHz	Pass	PK	551.86M	37.75	46.00	-8.25	3	Horizontal	0	2.00	-
2437MHz	Pass	PK	792.42M	36.13	46.00	-9.87	3	Horizontal	0	2.00	-
2437MHz	Pass	PK	864.2M	38.85	46.00	-7.15	3	Horizontal	0	2.00	-



802.11n HT20\_Nss1,(MCS0)\_2TX

08/08/2019

2437MHz\_AC



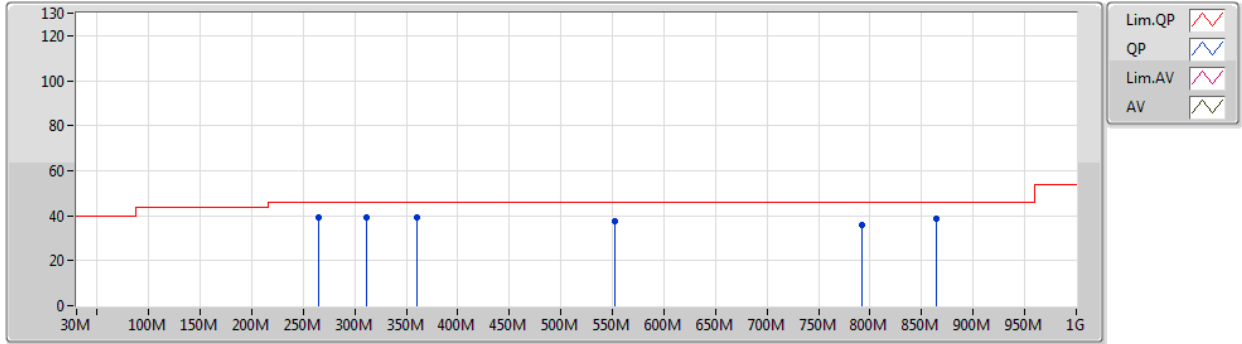
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	152.22M	32.75	43.50	-10.75	-19.80	3	Vertical	360	1.00	-	52.55	15.98	1.00	36.78
PK	359.8M	39.35	46.00	-6.65	-15.35	3	Vertical	360	1.00	-	54.70	19.70	1.60	36.65
PK	456.8M	34.83	46.00	-11.17	-12.91	3	Vertical	360	1.00	-	47.74	22.14	1.84	36.89
PK	503.36M	38.50	46.00	-7.50	-12.19	3	Vertical	360	1.00	-	50.69	22.97	1.89	37.05
PK	551.86M	35.54	46.00	-10.46	-11.10	3	Vertical	360	1.00	-	46.64	24.20	2.02	37.32
PK	864.2M	36.65	46.00	-9.35	-6.98	3	Vertical	360	1.00	-	43.63	28.22	2.51	37.71



802.11n HT20\_Nss1,(MCS0)\_2TX

08/08/2019

2437MHz\_AC



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	264.74M	39.14	46.00	-6.86	-15.89	3	Horizontal	0	2.00	-	55.03	19.31	1.33	36.53
PK	311.3M	39.10	46.00	-6.90	-16.76	3	Horizontal	0	2.00	-	55.86	18.33	1.47	36.56
PK	359.8M	39.01	46.00	-6.99	-15.35	3	Horizontal	0	2.00	-	54.36	19.70	1.60	36.65
PK	551.86M	37.75	46.00	-8.25	-11.10	3	Horizontal	0	2.00	-	48.85	24.20	2.02	37.32
PK	792.42M	36.13	46.00	-9.87	-8.21	3	Horizontal	0	2.00	-	44.34	27.10	2.44	37.75
PK	864.2M	38.85	46.00	-7.15	-6.98	3	Horizontal	0	2.00	-	45.83	28.22	2.51	37.71



Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	Pass	AV	2.3874G	53.75	54.00	-0.25	3	Horizontal	112	1.03	-
802.11g_Nss1,(6Mbps)_2TX	Pass	AV	2.4836G	53.95	54.00	-0.05	3	Horizontal	250	2.82	-
802.11n HT20_Nss1,(MCS0)_2TX	Pass	AV	2.3888G	53.93	54.00	-0.07	3	Horizontal	119	1.00	-



Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.3872G	48.43	54.00	-5.57	3	Vertical	149	1.84	-
2412MHz	Pass	AV	2.4128G	101.28	Inf	-Inf	3	Vertical	149	1.84	-
2412MHz	Pass	PK	2.3872G	60.53	74.00	-13.47	3	Vertical	149	1.84	-
2412MHz	Pass	PK	2.413G	103.63	Inf	-Inf	3	Vertical	149	1.84	-
2412MHz	Pass	PK	2.3866G	62.82	74.00	-11.18	3	Horizontal	112	1.03	-
2412MHz	Pass	AV	2.3874G	53.75	54.00	-0.25	3	Horizontal	112	1.03	-
2412MHz	Pass	PK	2.4112G	110.74	Inf	-Inf	3	Horizontal	112	1.03	-
2412MHz	Pass	AV	2.4112G	108.47	Inf	-Inf	3	Horizontal	112	1.03	-
2412MHz	Pass	AV	4.82409G	49.03	54.00	-4.97	3	Vertical	19	2.54	-
2412MHz	Pass	PK	4.82402G	54.11	74.00	-19.89	3	Vertical	19	2.54	-
2412MHz	Pass	AV	4.82414G	48.27	54.00	-5.73	3	Horizontal	284	2.09	-
2412MHz	Pass	PK	4.82408G	54.02	74.00	-19.98	3	Horizontal	284	2.09	-
2417MHz	Pass	AV	2.3888G	47.06	54.00	-6.94	3	Vertical	147	1.83	-
2417MHz	Pass	AV	2.4178G	101.39	Inf	-Inf	3	Vertical	147	1.83	-
2417MHz	Pass	PK	2.388G	60.33	74.00	-13.67	3	Vertical	147	1.83	-
2417MHz	Pass	PK	2.418G	103.81	Inf	-Inf	3	Vertical	147	1.83	-
2417MHz	Pass	AV	2.3888G	48.88	54.00	-5.12	3	Horizontal	128	1.09	-
2417MHz	Pass	AV	2.4162G	107.42	Inf	-Inf	3	Horizontal	128	1.09	-
2417MHz	Pass	PK	2.3868G	60.88	74.00	-13.12	3	Horizontal	128	1.09	-
2417MHz	Pass	PK	2.418G	110.21	Inf	-Inf	3	Horizontal	128	1.09	-
2437MHz	Pass	AV	2.3566G	46.79	54.00	-7.21	3	Vertical	139	2.75	-
2437MHz	Pass	AV	2.4362G	104.42	Inf	-Inf	3	Vertical	139	2.75	-
2437MHz	Pass	AV	2.497G	46.92	54.00	-7.08	3	Vertical	139	2.75	-
2437MHz	Pass	PK	2.3618G	59.94	74.00	-14.06	3	Vertical	139	2.75	-
2437MHz	Pass	PK	2.4362G	106.61	Inf	-Inf	3	Vertical	139	2.75	-
2437MHz	Pass	PK	2.4914G	60.56	74.00	-13.44	3	Vertical	139	2.75	-
2437MHz	Pass	AV	2.3774G	47.08	54.00	-6.92	3	Horizontal	110	2.70	-
2437MHz	Pass	AV	2.4362G	108.99	Inf	-Inf	3	Horizontal	110	2.70	-
2437MHz	Pass	AV	2.4954G	47.08	54.00	-6.92	3	Horizontal	110	2.70	-
2437MHz	Pass	PK	2.3638G	60.22	74.00	-13.78	3	Horizontal	110	2.70	-
2437MHz	Pass	PK	2.4362G	111.19	Inf	-Inf	3	Horizontal	110	2.70	-
2437MHz	Pass	PK	2.4998G	61.30	74.00	-12.70	3	Horizontal	110	2.70	-
2437MHz	Pass	AV	4.87409G	43.35	54.00	-10.65	3	Vertical	151	2.59	-
2437MHz	Pass	PK	4.87402G	51.22	74.00	-22.78	3	Vertical	151	2.59	-
2437MHz	Pass	AV	4.87411G	45.25	54.00	-8.75	3	Horizontal	278	2.47	-
2437MHz	Pass	PK	4.87413G	52.32	74.00	-21.68	3	Horizontal	278	2.47	-
2462MHz	Pass	AV	2.4614G	104.15	Inf	-Inf	3	Vertical	146	2.38	-
2462MHz	Pass	AV	2.4835G	48.52	54.00	-5.48	3	Vertical	146	2.38	-
2462MHz	Pass	PK	2.4612G	106.37	Inf	-Inf	3	Vertical	146	2.38	-
2462MHz	Pass	PK	2.494G	60.14	74.00	-13.86	3	Vertical	146	2.38	-
2462MHz	Pass	AV	2.4614G	104.24	Inf	-Inf	3	Horizontal	111	2.39	-
2462MHz	Pass	AV	2.4835G	48.81	54.00	-5.19	3	Horizontal	111	2.39	-
2462MHz	Pass	PK	2.4612G	106.47	Inf	-Inf	3	Horizontal	111	2.39	-
2462MHz	Pass	PK	2.4858G	60.58	74.00	-13.42	3	Horizontal	111	2.39	-
2462MHz	Pass	AV	4.92416G	42.75	54.00	-11.25	3	Vertical	53	2.19	-
2462MHz	Pass	PK	4.92409G	51.76	74.00	-22.24	3	Vertical	53	2.19	-
2462MHz	Pass	AV	4.92414G	46.77	54.00	-7.23	3	Horizontal	281	2.30	-



Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2462MHz	Pass	PK	4.92404G	53.30	74.00	-20.70	3	Horizontal	281	2.30	-
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.39G	53.14	54.00	-0.86	3	Vertical	290	2.04	-
2412MHz	Pass	AV	2.4142G	98.24	Inf	-Inf	3	Vertical	290	2.04	-
2412MHz	Pass	PK	2.3892G	66.96	74.00	-7.04	3	Vertical	290	2.04	-
2412MHz	Pass	PK	2.4142G	107.31	Inf	-Inf	3	Vertical	290	2.04	-
2412MHz	Pass	AV	2.39G	53.92	54.00	-0.08	3	Horizontal	119	1.01	-
2412MHz	Pass	AV	2.4112G	100.93	Inf	-Inf	3	Horizontal	119	1.01	-
2412MHz	Pass	PK	2.3896G	68.50	74.00	-5.50	3	Horizontal	119	1.01	-
2412MHz	Pass	PK	2.4112G	109.81	Inf	-Inf	3	Horizontal	119	1.01	-
2412MHz	Pass	AV	4.8243G	37.21	54.00	-16.79	3	Vertical	45	1.97	-
2412MHz	Pass	PK	4.81901G	49.97	74.00	-24.03	3	Vertical	45	1.97	-
2412MHz	Pass	AV	4.823G	37.28	54.00	-16.72	3	Horizontal	266	2.52	-
2412MHz	Pass	PK	4.8229G	49.64	74.00	-24.36	3	Horizontal	266	2.52	-
2417MHz	Pass	AV	2.3898G	51.70	54.00	-2.30	3	Vertical	290	2.92	-
2417MHz	Pass	AV	2.424G	98.26	Inf	-Inf	3	Vertical	290	2.92	-
2417MHz	Pass	PK	2.39G	66.44	74.00	-7.56	3	Vertical	290	2.92	-
2417MHz	Pass	PK	2.4188G	107.33	Inf	-Inf	3	Vertical	290	2.92	-
2417MHz	Pass	AV	2.39G	53.94	54.00	-0.06	3	Horizontal	115	1.00	-
2417MHz	Pass	AV	2.4162G	101.82	Inf	-Inf	3	Horizontal	115	1.00	-
2417MHz	Pass	PK	2.3898G	69.87	74.00	-4.13	3	Horizontal	115	1.00	-
2417MHz	Pass	PK	2.416G	110.96	Inf	-Inf	3	Horizontal	115	1.00	-
2437MHz	Pass	AV	2.3894G	49.31	54.00	-4.69	3	Vertical	280	1.43	-
2437MHz	Pass	AV	2.4342G	99.70	Inf	-Inf	3	Vertical	280	1.43	-
2437MHz	Pass	AV	2.4842G	48.32	54.00	-5.68	3	Vertical	280	1.43	-
2437MHz	Pass	PK	2.3898G	61.82	74.00	-12.18	3	Vertical	280	1.43	-
2437MHz	Pass	PK	2.439G	108.64	Inf	-Inf	3	Vertical	280	1.43	-
2437MHz	Pass	PK	2.4838G	60.31	74.00	-13.69	3	Vertical	280	1.43	-
2437MHz	Pass	AV	2.3898G	51.87	54.00	-2.13	3	Horizontal	110	2.67	-
2437MHz	Pass	AV	2.431G	103.03	Inf	-Inf	3	Horizontal	110	2.67	-
2437MHz	Pass	AV	2.4842G	48.83	54.00	-5.17	3	Horizontal	110	2.67	-
2437MHz	Pass	PK	2.3894G	65.70	74.00	-8.30	3	Horizontal	110	2.67	-
2437MHz	Pass	PK	2.4314G	111.78	Inf	-Inf	3	Horizontal	110	2.67	-
2437MHz	Pass	PK	2.4858G	62.11	74.00	-11.89	3	Horizontal	110	2.67	-
2437MHz	Pass	AV	4.87472G	36.63	54.00	-17.37	3	Vertical	215	2.23	-
2437MHz	Pass	PK	4.87892G	49.32	74.00	-24.68	3	Vertical	215	2.23	-
2437MHz	Pass	AV	4.87208G	37.21	54.00	-16.79	3	Horizontal	258	1.00	-
2437MHz	Pass	PK	4.87304G	50.39	74.00	-23.61	3	Horizontal	258	1.00	-
2457MHz	Pass	AV	2.4538G	100.81	Inf	-Inf	3	Vertical	300	2.77	-
2457MHz	Pass	AV	2.4835G	53.83	54.00	-0.17	3	Vertical	300	2.77	-
2457MHz	Pass	PK	2.459G	109.99	Inf	-Inf	3	Vertical	300	2.77	-
2457MHz	Pass	PK	2.484G	68.73	74.00	-5.27	3	Vertical	300	2.77	-
2457MHz	Pass	AV	2.4536G	101.72	Inf	-Inf	3	Horizontal	248	2.79	-
2457MHz	Pass	AV	2.4838G	53.86	54.00	-0.14	3	Horizontal	248	2.79	-
2457MHz	Pass	PK	2.453G	110.84	Inf	-Inf	3	Horizontal	248	2.79	-
2457MHz	Pass	PK	2.4835G	69.64	74.00	-4.36	3	Horizontal	248	2.79	-
2462MHz	Pass	AV	2.4586G	100.52	Inf	-Inf	3	Vertical	301	2.77	-
2462MHz	Pass	AV	2.4836G	53.91	54.00	-0.09	3	Vertical	301	2.77	-
2462MHz	Pass	PK	2.458G	109.64	Inf	-Inf	3	Vertical	301	2.77	-



Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2462MHz	Pass	PK	2.4836G	70.36	74.00	-3.64	3	Vertical	301	2.77	-
2462MHz	Pass	AV	2.4586G	101.15	Inf	-Inf	3	Horizontal	250	2.82	-
2462MHz	Pass	AV	2.4836G	53.95	54.00	-0.05	3	Horizontal	250	2.82	-
2462MHz	Pass	PK	2.458G	110.18	Inf	-Inf	3	Horizontal	250	2.82	-
2462MHz	Pass	PK	2.4836G	71.90	74.00	-2.10	3	Horizontal	250	2.82	-
2462MHz	Pass	AV	4.93252G	36.49	54.00	-17.51	3	Vertical	350	1.00	-
2462MHz	Pass	PK	4.93522G	49.27	74.00	-24.73	3	Vertical	350	1.00	-
2462MHz	Pass	AV	4.92904G	37.55	54.00	-16.45	3	Horizontal	266	2.02	-
2462MHz	Pass	PK	4.92352G	50.06	74.00	-23.94	3	Horizontal	266	2.02	-
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.39G	53.61	54.00	-0.39	3	Vertical	288	2.03	-
2412MHz	Pass	AV	2.418G	94.62	Inf	-Inf	3	Vertical	288	2.03	-
2412MHz	Pass	PK	2.3898G	69.05	74.00	-4.95	3	Vertical	288	2.03	-
2412MHz	Pass	PK	2.415G	103.89	Inf	-Inf	3	Vertical	288	2.03	-
2412MHz	Pass	AV	2.3888G	53.93	54.00	-0.07	3	Horizontal	119	1.00	-
2412MHz	Pass	AV	2.4188G	97.09	Inf	-Inf	3	Horizontal	119	1.00	-
2412MHz	Pass	PK	2.39G	69.78	74.00	-4.22	3	Horizontal	119	1.00	-
2412MHz	Pass	PK	2.4164G	106.36	Inf	-Inf	3	Horizontal	119	1.00	-
2412MHz	Pass	AV	4.83234G	36.52	54.00	-17.48	3	Vertical	190	1.50	-
2412MHz	Pass	PK	4.83372G	48.79	74.00	-25.21	3	Vertical	190	1.50	-
2412MHz	Pass	AV	4.83762G	36.56	54.00	-17.44	3	Horizontal	62	2.90	-
2412MHz	Pass	PK	4.83336G	49.21	74.00	-24.79	3	Horizontal	62	2.90	-
2417MHz	Pass	AV	2.39G	52.53	54.00	-1.47	3	Vertical	289	2.05	-
2417MHz	Pass	AV	2.4178G	96.93	Inf	-Inf	3	Vertical	289	2.05	-
2417MHz	Pass	PK	2.3874G	65.19	74.00	-8.81	3	Vertical	289	2.05	-
2417MHz	Pass	PK	2.4156G	106.48	Inf	-Inf	3	Vertical	289	2.05	-
2417MHz	Pass	AV	2.3896G	53.88	54.00	-0.12	3	Horizontal	117	1.00	-
2417MHz	Pass	AV	2.424G	99.57	Inf	-Inf	3	Horizontal	117	1.00	-
2417MHz	Pass	PK	2.3892G	67.83	74.00	-6.17	3	Horizontal	117	1.00	-
2417MHz	Pass	PK	2.4216G	108.80	Inf	-Inf	3	Horizontal	117	1.00	-
2437MHz	Pass	AV	2.3858G	47.56	54.00	-6.44	3	Vertical	276	1.42	-
2437MHz	Pass	AV	2.4358G	97.86	Inf	-Inf	3	Vertical	276	1.42	-
2437MHz	Pass	AV	2.4854G	47.57	54.00	-6.43	3	Vertical	276	1.42	-
2437MHz	Pass	PK	2.387G	59.83	74.00	-14.17	3	Vertical	276	1.42	-
2437MHz	Pass	PK	2.433G	107.15	Inf	-Inf	3	Vertical	276	1.42	-
2437MHz	Pass	PK	2.491G	59.81	74.00	-14.19	3	Vertical	276	1.42	-
2437MHz	Pass	AV	2.389G	48.25	54.00	-5.75	3	Horizontal	101	1.50	-
2437MHz	Pass	AV	2.4318G	99.67	Inf	-Inf	3	Horizontal	101	1.50	-
2437MHz	Pass	AV	2.4838G	47.68	54.00	-6.32	3	Horizontal	101	1.50	-
2437MHz	Pass	PK	2.3806G	60.50	74.00	-13.50	3	Horizontal	101	1.50	-
2437MHz	Pass	PK	2.4318G	108.76	Inf	-Inf	3	Horizontal	101	1.50	-
2437MHz	Pass	PK	2.4938G	60.50	74.00	-13.50	3	Horizontal	101	1.50	-
2437MHz	Pass	AV	4.87592G	36.29	54.00	-17.71	3	Vertical	150	1.70	-
2437MHz	Pass	PK	4.88276G	48.98	74.00	-25.02	3	Vertical	150	1.70	-
2437MHz	Pass	AV	4.8782G	36.50	54.00	-17.50	3	Horizontal	35	2.24	-
2437MHz	Pass	PK	4.86854G	49.79	74.00	-24.21	3	Horizontal	35	2.24	-
2457MHz	Pass	AV	2.4554G	99.82	Inf	-Inf	3	Vertical	300	2.77	-
2457MHz	Pass	AV	2.4835G	52.09	54.00	-1.91	3	Vertical	300	2.77	-
2457MHz	Pass	PK	2.4552G	109.70	Inf	-Inf	3	Vertical	300	2.77	-





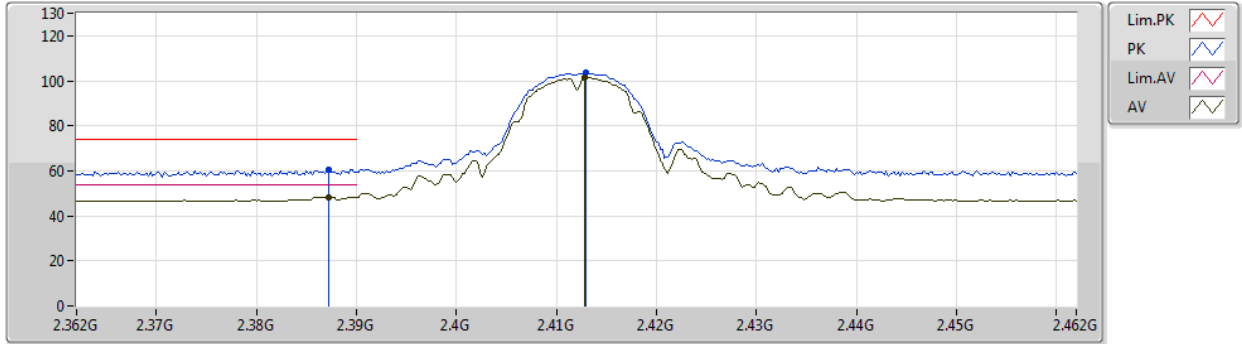
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2457MHz	Pass	PK	2.4835G	65.91	74.00	-8.09	3	Vertical	300	2.77	-
2457MHz	Pass	AV	2.453G	100.66	Inf	-Inf	3	Horizontal	248	2.78	-
2457MHz	Pass	AV	2.4836G	52.79	54.00	-1.21	3	Horizontal	248	2.78	-
2457MHz	Pass	PK	2.4552G	109.76	Inf	-Inf	3	Horizontal	248	2.78	-
2457MHz	Pass	PK	2.4836G	65.32	74.00	-8.68	3	Horizontal	248	2.78	-
2462MHz	Pass	AV	2.456G	94.53	Inf	-Inf	3	Vertical	128	1.90	-
2462MHz	Pass	AV	2.4835G	52.00	54.00	-2.00	3	Vertical	128	1.90	-
2462MHz	Pass	PK	2.4584G	105.14	Inf	-Inf	3	Vertical	128	1.90	-
2462MHz	Pass	PK	2.484G	67.28	74.00	-6.72	3	Vertical	128	1.90	-
2462MHz	Pass	AV	2.454G	97.79	Inf	-Inf	3	Horizontal	116	3.00	-
2462MHz	Pass	AV	2.4836G	53.65	54.00	-0.35	3	Horizontal	116	3.00	-
2462MHz	Pass	PK	2.4554G	106.80	Inf	-Inf	3	Horizontal	116	3.00	-
2462MHz	Pass	PK	2.484G	67.65	74.00	-6.35	3	Horizontal	116	3.00	-
2462MHz	Pass	AV	4.9303G	36.61	54.00	-17.39	3	Vertical	278	2.80	-
2462MHz	Pass	PK	4.93366G	49.05	74.00	-24.95	3	Vertical	278	2.80	-
2462MHz	Pass	AV	4.92646G	37.23	54.00	-16.77	3	Horizontal	258	1.01	-
2462MHz	Pass	PK	4.92298G	49.96	74.00	-24.04	3	Horizontal	258	1.01	-



802.11b\_Nss1,(1Mbps)\_2TX

06/08/2019

2412MHz\_TX



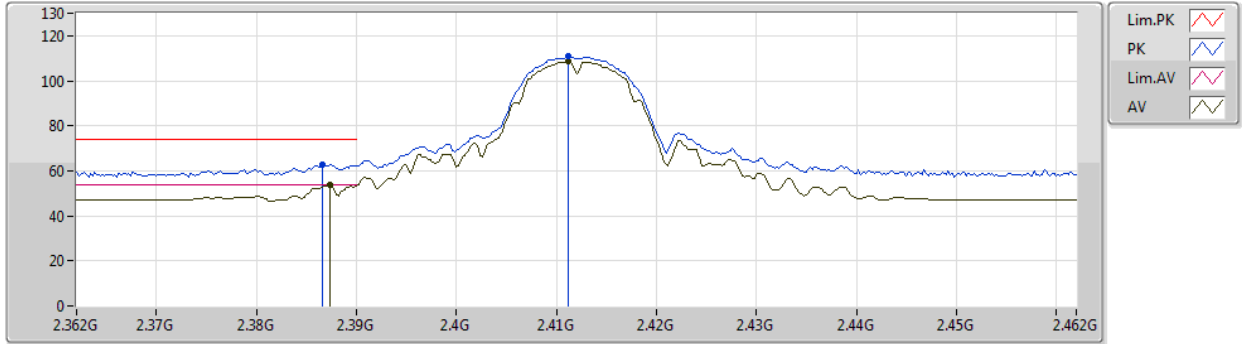
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3872G	48.43	54.00	-5.57	34.98	3	Vertical	149	1.84	-	13.45	27.65	7.33	-
AV	2.4128G	101.28	Inf	-Inf	34.91	3	Vertical	149	1.84	-	66.37	27.57	7.34	-
PK	2.3872G	60.53	74.00	-13.47	34.98	3	Vertical	149	1.84	-	25.55	27.65	7.33	-
PK	2.413G	103.63	Inf	-Inf	34.91	3	Vertical	149	1.84	-	68.72	27.57	7.34	-



802.11b\_Nss1,(1Mbps)\_2TX

06/08/2019

2412MHz\_TX



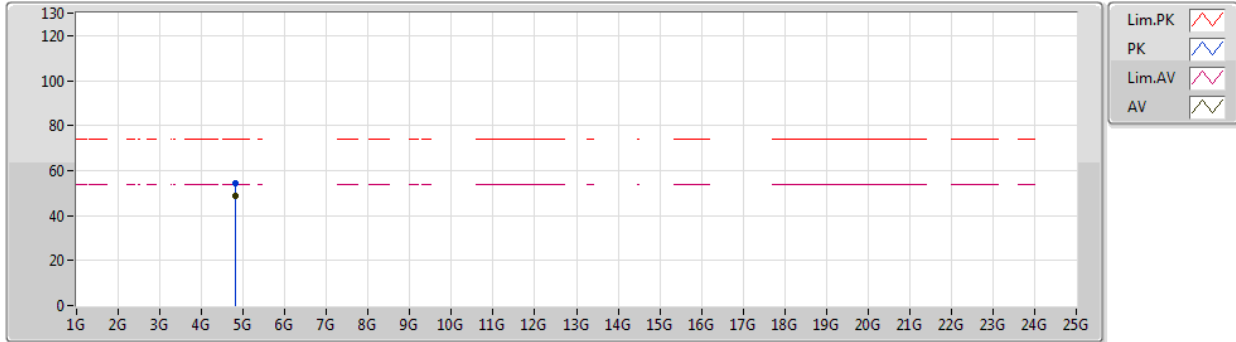
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	2.3866G	62.82	74.00	-11.18	34.98	3	Horizontal	112	1.03	-	27.84	27.65	7.33	-
AV	2.3874G	53.75	54.00	-0.25	34.98	3	Horizontal	112	1.03	-	18.77	27.65	7.33	-
PK	2.4112G	110.74	Inf	-Inf	34.92	3	Horizontal	112	1.03	-	75.82	27.58	7.34	-
AV	2.4112G	108.47	Inf	-Inf	34.92	3	Horizontal	112	1.03	-	73.55	27.58	7.34	-



802.11b\_Nss1,(1Mbps)\_2TX

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2412MHz\_TX



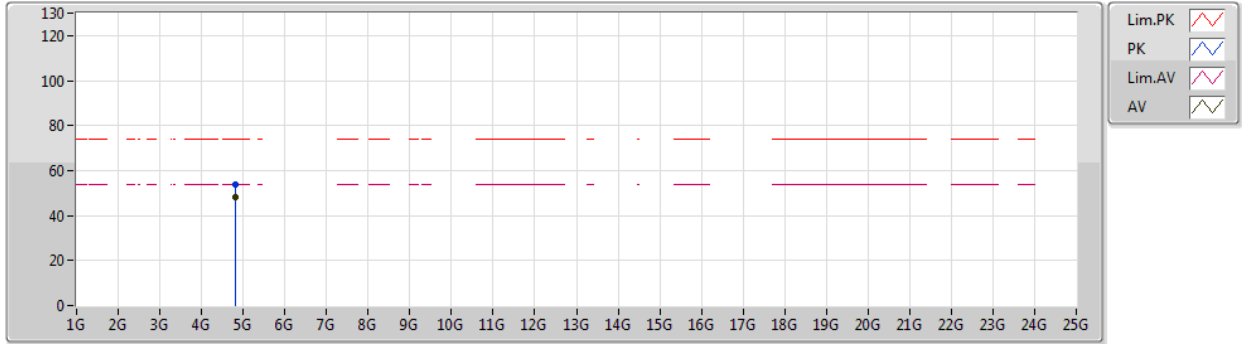
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AV	4.82409G	49.03	54.00	-4.97	6.99	3	Vertical	19	2.54	-	42.04	31.15	9.94	34.10
PK	4.82402G	54.11	74.00	-19.89	6.99	3	Vertical	19	2.54	-	47.12	31.15	9.94	34.10



802.11b\_Nss1,(1Mbps)\_2TX

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2412MHz\_TX



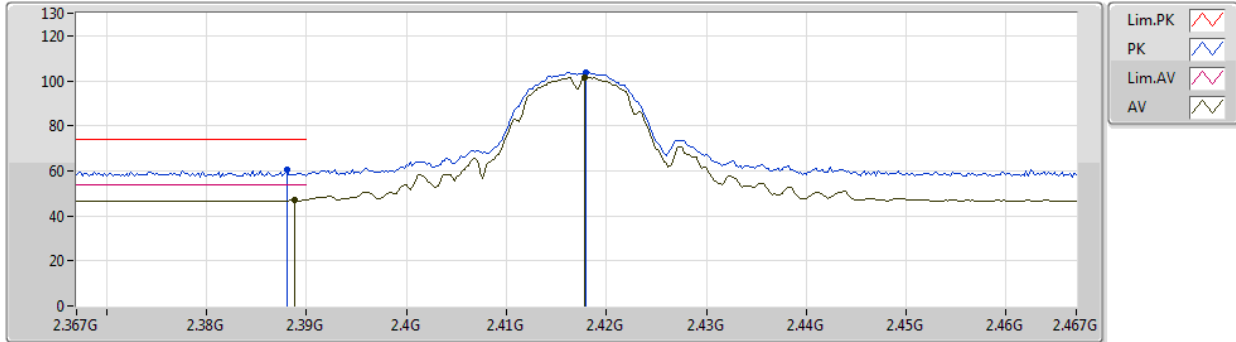
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AV	4.82414G	48.27	54.00	-5.73	6.99	3	Horizontal	284	2.09	-	41.28	31.15	9.94	34.10
PK	4.82408G	54.02	74.00	-19.98	6.99	3	Horizontal	284	2.09	-	47.03	31.15	9.94	34.10



802.11b\_Nss1,(1Mbps)\_2TX

06/08/2019

2417MHz\_TX

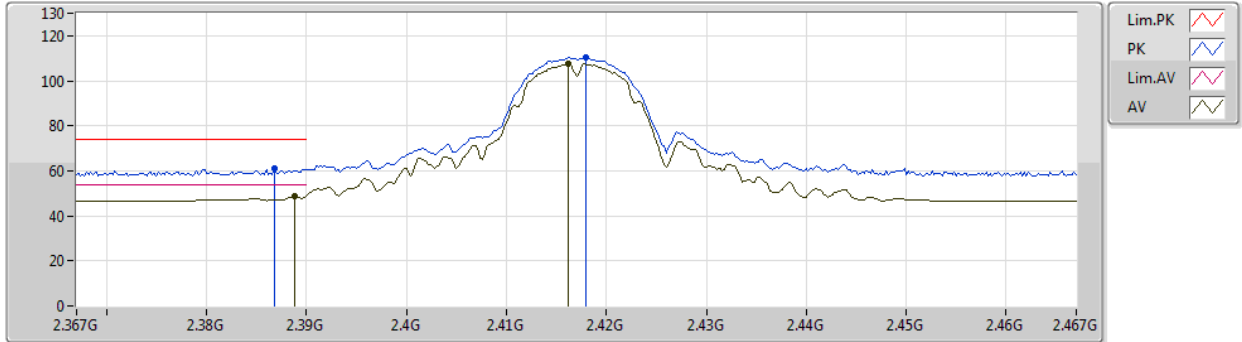


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3888G	47.06	54.00	-6.94	34.97	3	Vertical	147	1.83	-	12.09	27.64	7.33	-
AV	2.4178G	101.39	Inf	-Inf	34.90	3	Vertical	147	1.83	-	66.49	27.56	7.34	-
PK	2.388G	60.33	74.00	-13.67	34.98	3	Vertical	147	1.83	-	25.35	27.65	7.33	-
PK	2.418G	103.81	Inf	-Inf	34.90	3	Vertical	147	1.83	-	68.91	27.56	7.34	-

802.11b\_Nss1,(1Mbps)\_2TX

06/08/2019

2417MHz\_TX



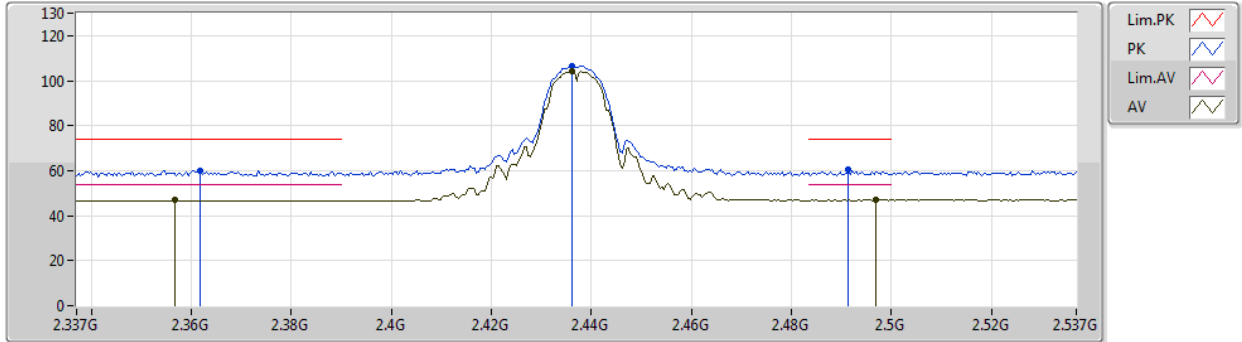
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3888G	48.88	54.00	-5.12	34.97	3	Horizontal	128	1.09	-	13.91	27.64	7.33	-
AV	2.4162G	107.42	Inf	-Inf	34.91	3	Horizontal	128	1.09	-	72.51	27.57	7.34	-
PK	2.3868G	60.88	74.00	-13.12	34.98	3	Horizontal	128	1.09	-	25.90	27.65	7.33	-
PK	2.418G	110.21	Inf	-Inf	34.90	3	Horizontal	128	1.09	-	75.31	27.56	7.34	-



802.11b\_Nss1,(1Mbps)\_2TX

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2437MHz\_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3566G	46.79	54.00	-7.21	35.11	3	Vertical	139	2.75	-	11.68	27.77	7.34	-
AV	2.4362G	104.42	Inf	-Inf	34.88	3	Vertical	139	2.75	-	69.54	27.53	7.35	-
AV	2.497G	46.92	54.00	-7.08	34.87	3	Vertical	139	2.75	-	12.05	27.50	7.37	-
PK	2.3618G	59.94	74.00	-14.06	35.09	3	Vertical	139	2.75	-	24.85	27.75	7.34	-
PK	2.4362G	106.61	Inf	-Inf	34.88	3	Vertical	139	2.75	-	71.73	27.53	7.35	-
PK	2.4914G	60.56	74.00	-13.44	34.87	3	Vertical	139	2.75	-	25.69	27.50	7.37	-

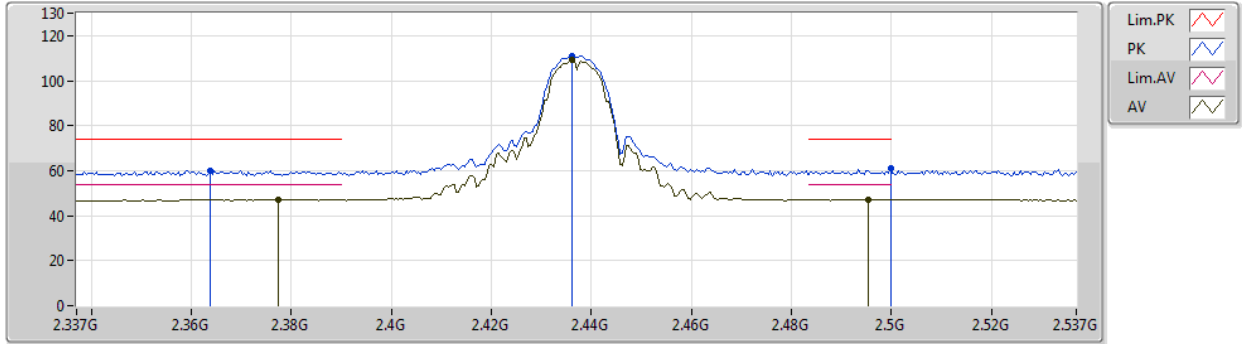




802.11b\_Nss1,(1Mbps)\_2TX

06/08/2019

2437MHz\_TX



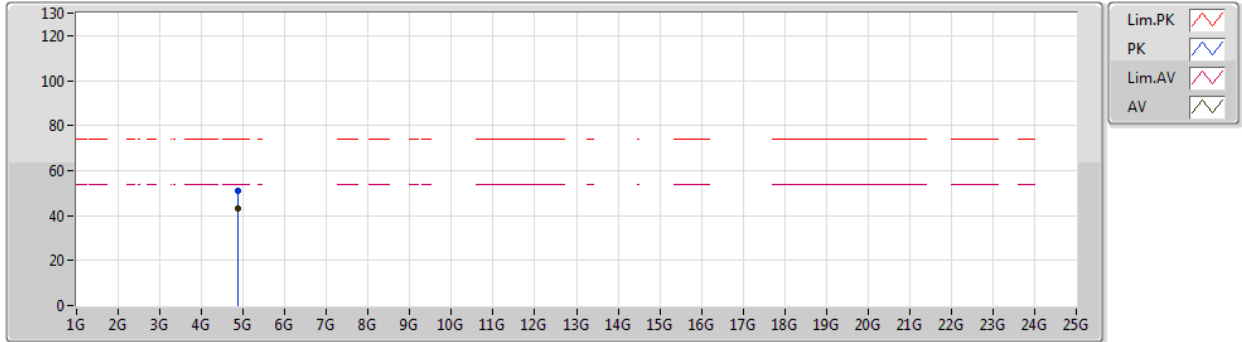
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3774G	47.08	54.00	-6.92	35.03	3	Horizontal	110	2.70	-	12.05	27.69	7.34	-
AV	2.4362G	108.99	Inf	-Inf	34.88	3	Horizontal	110	2.70	-	74.11	27.53	7.35	-
AV	2.4954G	47.08	54.00	-6.92	34.87	3	Horizontal	110	2.70	-	12.21	27.50	7.37	-
PK	2.3638G	60.22	74.00	-13.78	35.08	3	Horizontal	110	2.70	-	25.14	27.74	7.34	-
PK	2.4362G	111.19	Inf	-Inf	34.88	3	Horizontal	110	2.70	-	76.31	27.53	7.35	-
PK	2.4998G	61.30	74.00	-12.70	34.87	3	Horizontal	110	2.70	-	26.43	27.50	7.37	-



802.11b\_Nss1,(1Mbps)\_2TX

06/08/2019

2437MHz\_TX



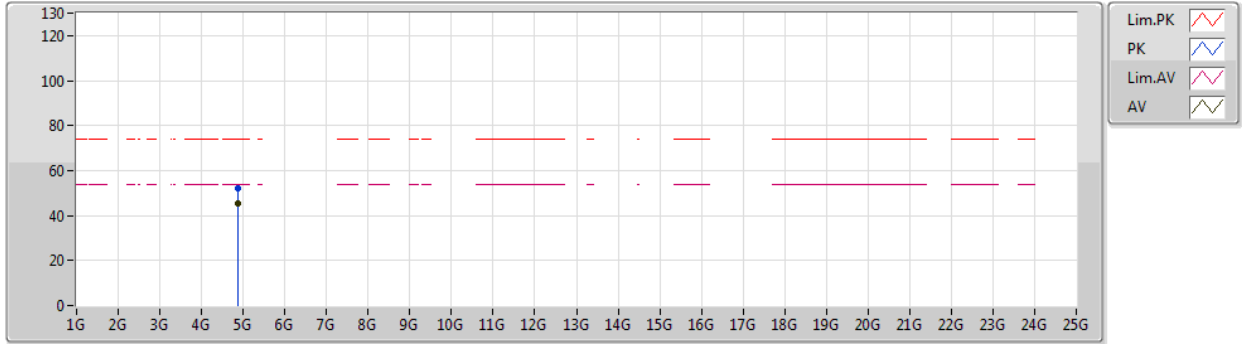
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.87409G	43.35	54.00	-10.65	7.03	3	Vertical	151	2.59	-	36.32	31.15	9.98	34.10
PK	4.87402G	51.22	74.00	-22.78	7.03	3	Vertical	151	2.59	-	44.19	31.15	9.98	34.10



802.11b\_Nss1,(1Mbps)\_2TX

06/08/2019

2437MHz\_TX



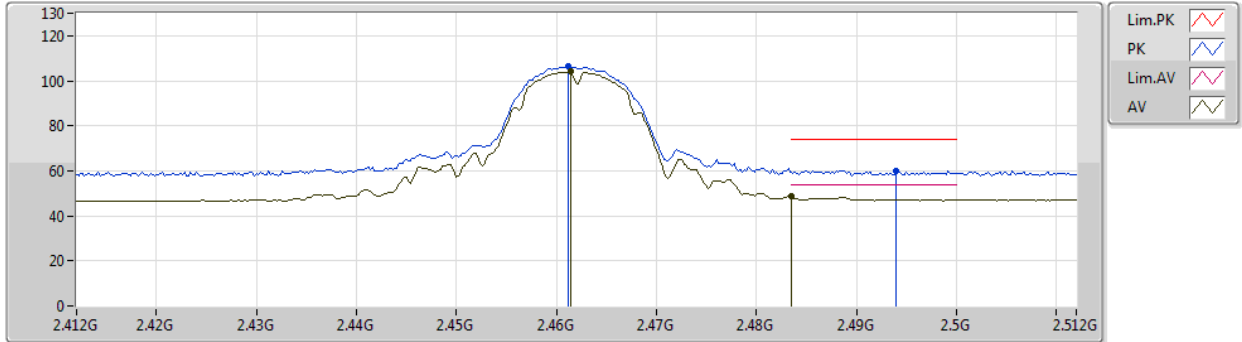
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.87411G	45.25	54.00	-8.75	7.03	3	Horizontal	278	2.47	-	38.22	31.15	9.98	34.10
PK	4.87413G	52.32	74.00	-21.68	7.03	3	Horizontal	278	2.47	-	45.29	31.15	9.98	34.10



802.11b\_Nss1,(1Mbps)\_2TX

06/08/2019

2462MHz\_TX



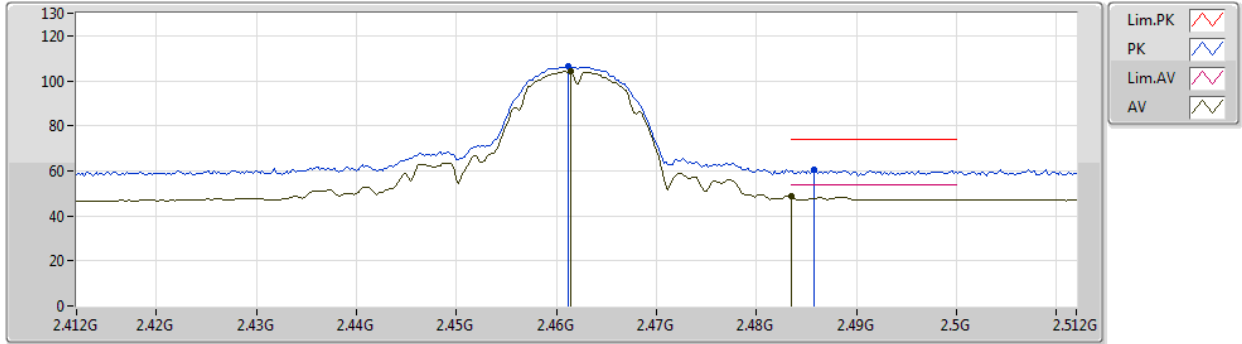
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AV	2.4614G	104.15	Inf	-Inf	34.86	3	Vertical	146	2.38	-	69.29	27.50	7.36	-
AV	2.4835G	48.52	54.00	-5.48	34.87	3	Vertical	146	2.38	-	13.65	27.50	7.37	-
PK	2.4612G	106.37	Inf	-Inf	34.86	3	Vertical	146	2.38	-	71.51	27.50	7.36	-
PK	2.494G	60.14	74.00	-13.86	34.87	3	Vertical	146	2.38	-	25.27	27.50	7.37	-



802.11b\_Nss1,(1Mbps)\_2TX

06/08/2019

2462MHz\_TX



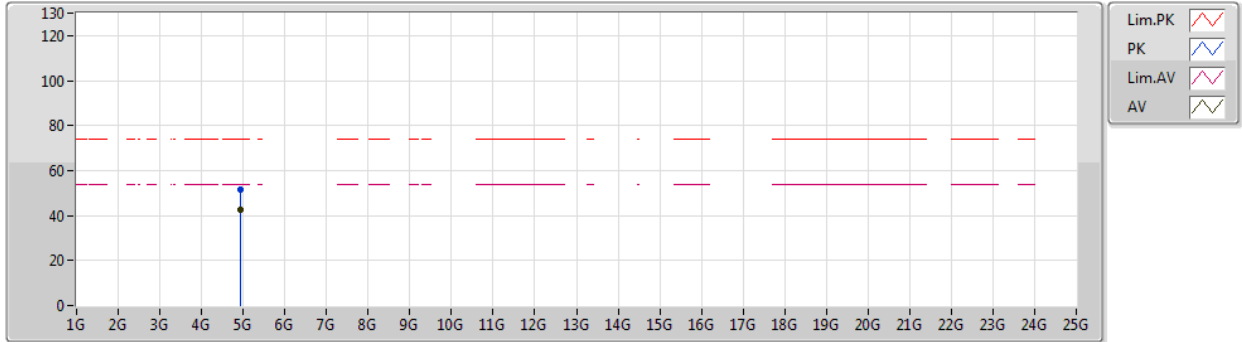
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.4614G	104.24	Inf	-Inf	34.86	3	Horizontal	111	2.39	-	69.38	27.50	7.36	-
AV	2.4835G	48.81	54.00	-5.19	34.87	3	Horizontal	111	2.39	-	13.94	27.50	7.37	-
PK	2.4612G	106.47	Inf	-Inf	34.86	3	Horizontal	111	2.39	-	71.61	27.50	7.36	-
PK	2.4858G	60.58	74.00	-13.42	34.87	3	Horizontal	111	2.39	-	25.71	27.50	7.37	-



802.11b\_Nss1,(1Mbps)\_2TX

06/08/2019

2462MHz\_TX



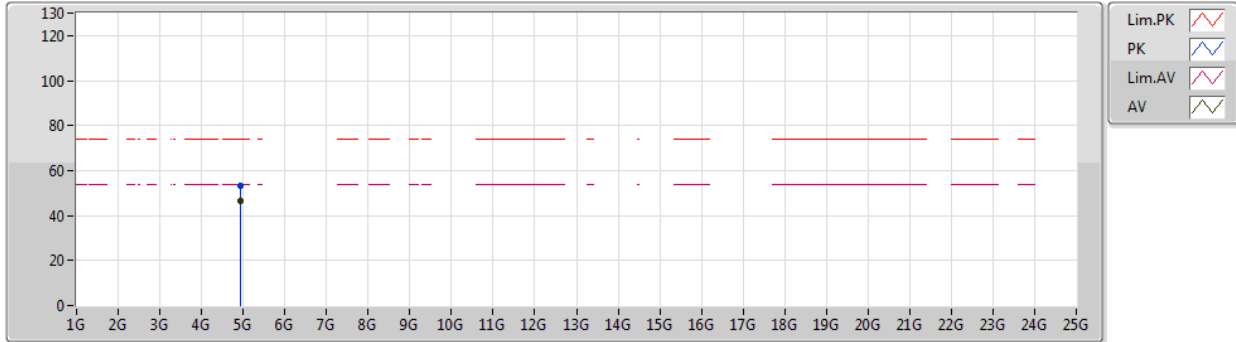
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.92416G	42.75	54.00	-11.25	7.13	3	Vertical	53	2.19	-	35.62	31.20	10.02	34.09
PK	4.92409G	51.76	74.00	-22.24	7.13	3	Vertical	53	2.19	-	44.63	31.20	10.02	34.09



802.11b\_Nss1,(1Mbps)\_2TX

06/08/2019

2462MHz\_TX



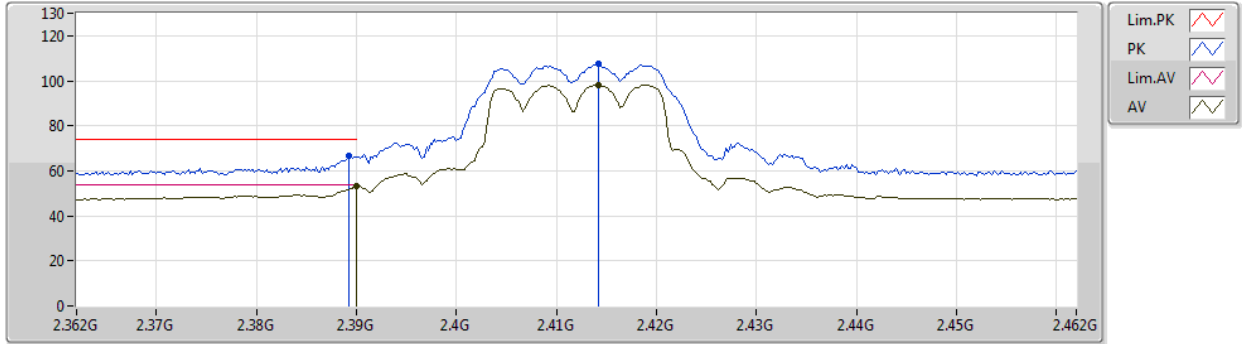
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.92414G	46.77	54.00	-7.23	7.13	3	Horizontal	281	2.30	-	39.64	31.20	10.02	34.09
PK	4.92404G	53.30	74.00	-20.70	7.13	3	Horizontal	281	2.30	-	46.17	31.20	10.02	34.09



802.11g\_Nss1,(6Mbps)\_2TX

06/08/2019

2412MHz\_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.39G	53.14	54.00	-0.86	34.97	3	Vertical	290	2.04	-	18.17	27.64	7.33	-
AV	2.4142G	98.24	Inf	-Inf	34.91	3	Vertical	290	2.04	-	63.33	27.57	7.34	-
PK	2.3892G	66.96	74.00	-7.04	34.97	3	Vertical	290	2.04	-	31.99	27.64	7.33	-
PK	2.4142G	107.31	Inf	-Inf	34.91	3	Vertical	290	2.04	-	72.40	27.57	7.34	-

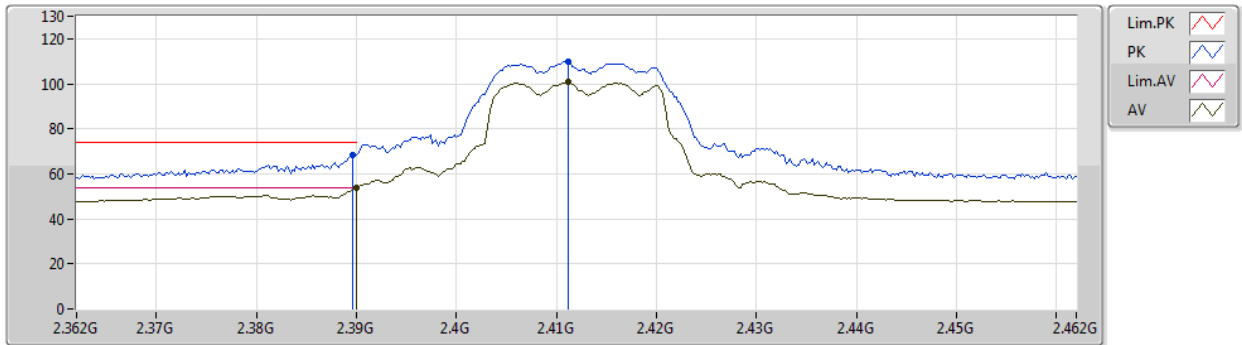




802.11g\_Nss1,(6Mbps)\_2TX

06/08/2019

2412MHz\_TX



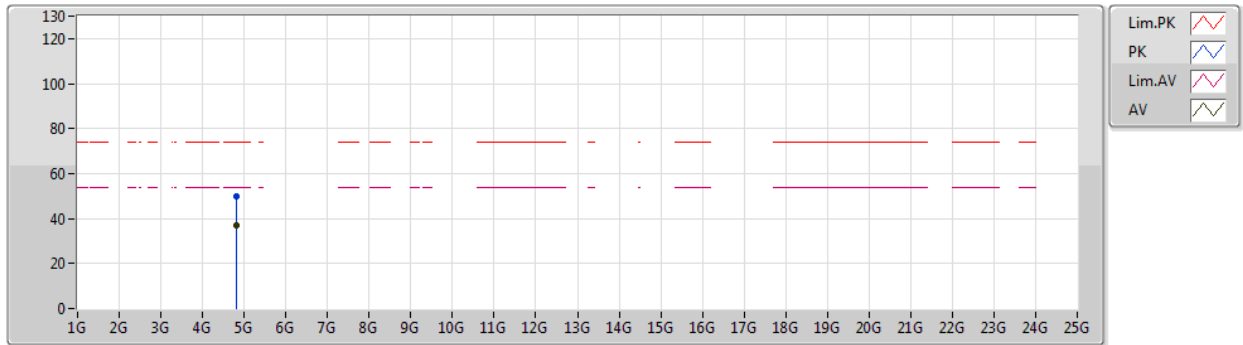
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.39G	53.92	54.00	-0.08	34.97	3	Horizontal	119	1.01	-	18.95	27.64	7.33	-
AV	2.4112G	100.93	Inf	-Inf	34.92	3	Horizontal	119	1.01	-	66.01	27.58	7.34	-
PK	2.3896G	68.50	74.00	-5.50	34.97	3	Horizontal	119	1.01	-	33.53	27.64	7.33	-
PK	2.4112G	109.81	Inf	-Inf	34.92	3	Horizontal	119	1.01	-	74.89	27.58	7.34	-



802.11g\_Nss1,(6Mbps)\_2TX

06/08/2019

2412MHz\_TX



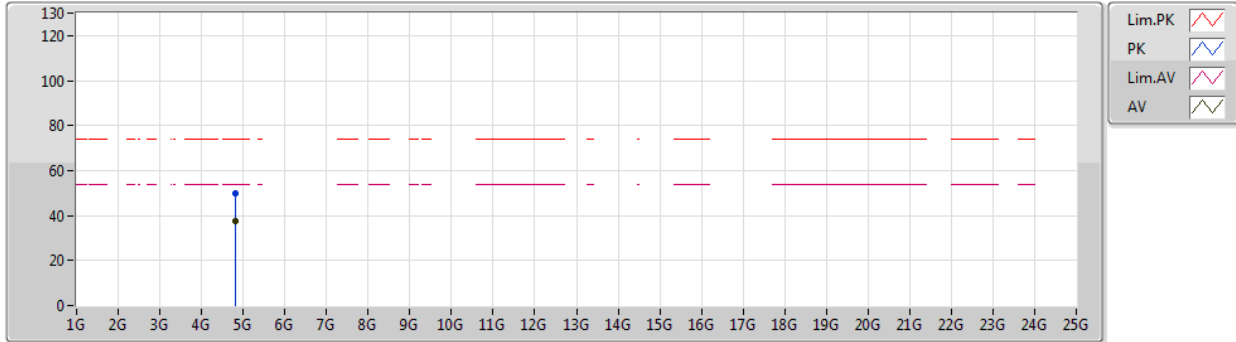
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.8243G	37.21	54.00	-16.79	6.99	3	Vertical	45	1.97	-	30.22	31.15	9.94	34.10
PK	4.81901G	49.97	74.00	-24.03	6.96	3	Vertical	45	1.97	-	43.01	31.14	9.93	34.11



802.11g\_Nss1,(6Mbps)\_2TX

06/08/2019

2412MHz\_TX



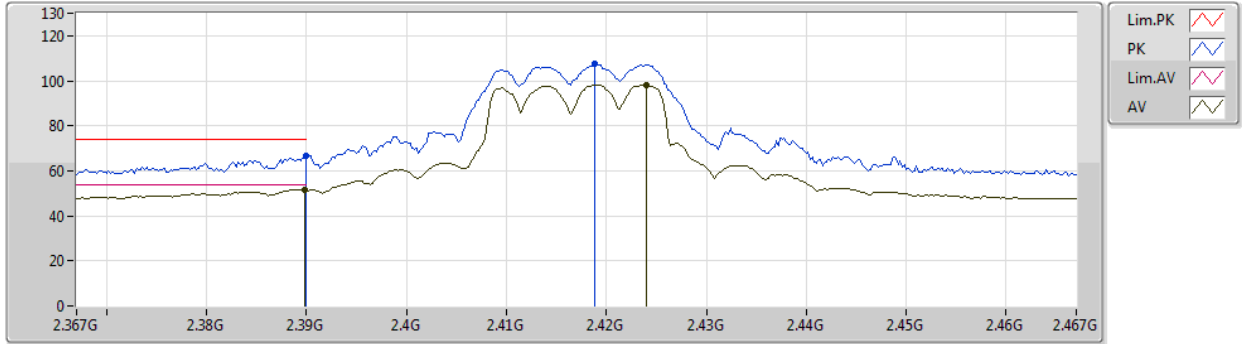
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.823G	37.28	54.00	-16.72	6.99	3	Horizontal	266	2.52	-	30.29	31.15	9.94	34.10
PK	4.8229G	49.64	74.00	-24.36	6.99	3	Horizontal	266	2.52	-	42.65	31.15	9.94	34.10



802.11g\_Nss1,(6Mbps)\_2TX

06/08/2019

2417MHz\_TX



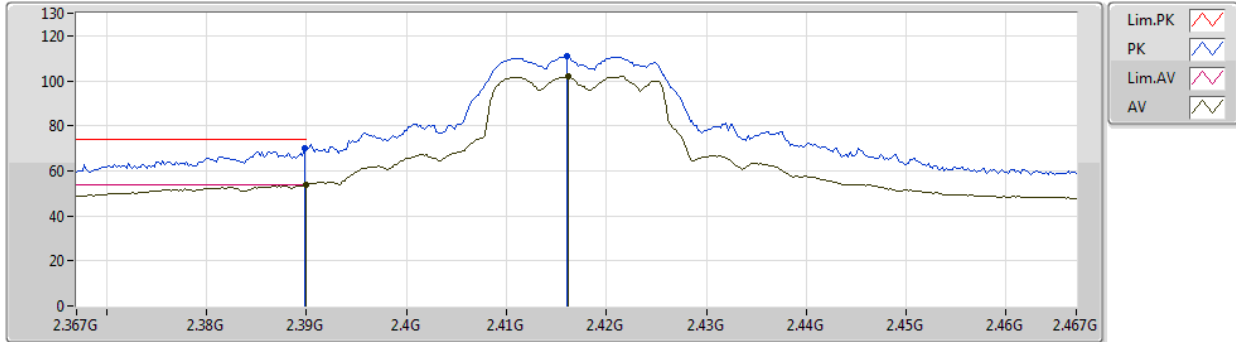
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3898G	51.70	54.00	-2.30	34.97	3	Vertical	290	2.92	-	16.73	27.64	7.33	-
AV	2.424G	98.26	Inf	-Inf	34.89	3	Vertical	290	2.92	-	63.37	27.55	7.34	-
PK	2.39G	66.44	74.00	-7.56	34.97	3	Vertical	290	2.92	-	31.47	27.64	7.33	-
PK	2.4188G	107.33	Inf	-Inf	34.90	3	Vertical	290	2.92	-	72.43	27.56	7.34	-



802.11g\_Nss1,(6Mbps)\_2TX

06/08/2019

2417MHz\_TX



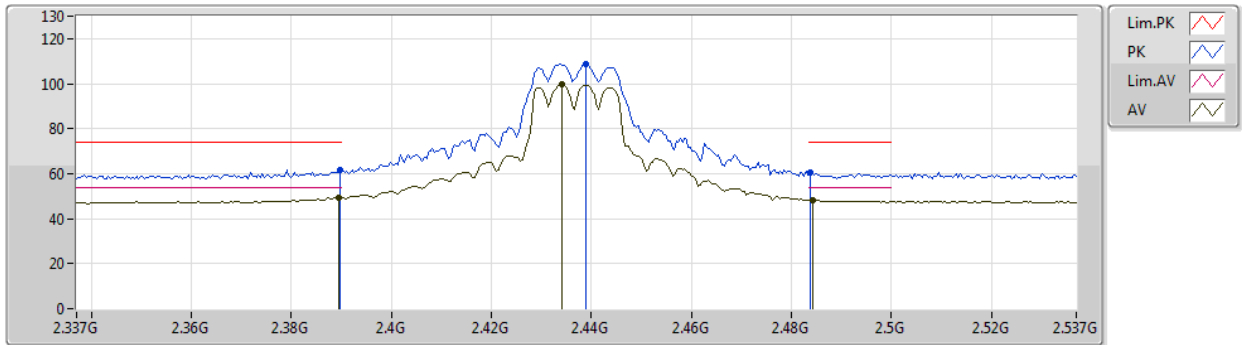
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.39G	53.94	54.00	-0.06	34.97	3	Horizontal	115	1.00	-	18.97	27.64	7.33	-
AV	2.4162G	101.82	Inf	-Inf	34.91	3	Horizontal	115	1.00	-	66.91	27.57	7.34	-
PK	2.3898G	69.87	74.00	-4.13	34.97	3	Horizontal	115	1.00	-	34.90	27.64	7.33	-
PK	2.416G	110.96	Inf	-Inf	34.91	3	Horizontal	115	1.00	-	76.05	27.57	7.34	-



802.11g\_Nss1,(6Mbps)\_2TX

06/08/2019

2437MHz\_TX



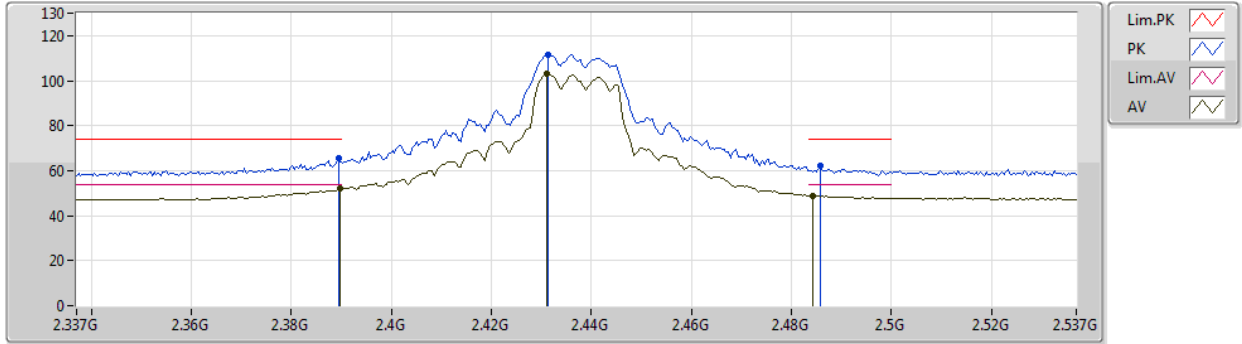
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3894G	49.31	54.00	-4.69	34.97	3	Vertical	280	1.43	-	14.34	27.64	7.33	-
AV	2.4342G	99.70	Inf	-Inf	34.88	3	Vertical	280	1.43	-	64.82	27.53	7.35	-
AV	2.4842G	48.32	54.00	-5.68	34.87	3	Vertical	280	1.43	-	13.45	27.50	7.37	-
PK	2.3898G	61.82	74.00	-12.18	34.97	3	Vertical	280	1.43	-	26.85	27.64	7.33	-
PK	2.439G	108.64	Inf	-Inf	34.87	3	Vertical	280	1.43	-	73.77	27.52	7.35	-
PK	2.4838G	60.31	74.00	-13.69	34.87	3	Vertical	280	1.43	-	25.44	27.50	7.37	-



802.11g\_Nss1,(6Mbps)\_2TX

06/08/2019

2437MHz\_TX



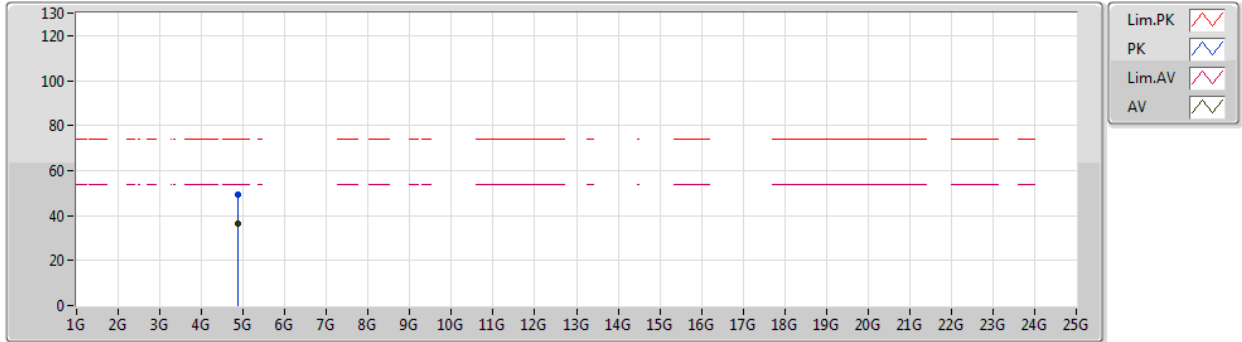
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3898G	51.87	54.00	-2.13	34.97	3	Horizontal	110	2.67	-	16.90	27.64	7.33	-
AV	2.431G	103.03	Inf	-Inf	34.89	3	Horizontal	110	2.67	-	68.14	27.54	7.35	-
AV	2.4842G	48.83	54.00	-5.17	34.87	3	Horizontal	110	2.67	-	13.96	27.50	7.37	-
PK	2.3894G	65.70	74.00	-8.30	34.97	3	Horizontal	110	2.67	-	30.73	27.64	7.33	-
PK	2.4314G	111.78	Inf	-Inf	34.89	3	Horizontal	110	2.67	-	76.89	27.54	7.35	-
PK	2.4858G	62.11	74.00	-11.89	34.87	3	Horizontal	110	2.67	-	27.24	27.50	7.37	-



802.11g\_Nss1,(6Mbps)\_2TX

06/08/2019

2437MHz\_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.87472G	36.63	54.00	-17.37	7.03	3	Vertical	215	2.23	-	29.60	31.15	9.98	34.10
PK	4.87892G	49.32	74.00	-24.68	7.02	3	Vertical	215	2.23	-	42.30	31.14	9.98	34.10

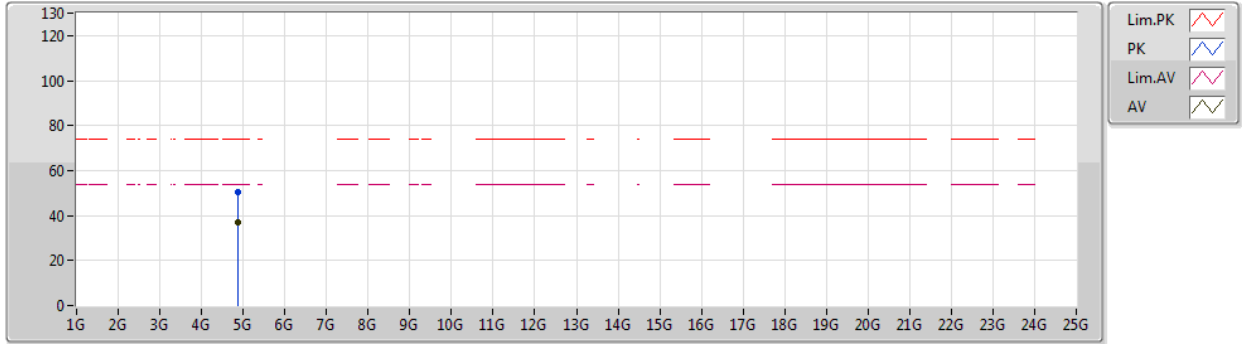




802.11g\_Nss1,(6Mbps)\_2TX

06/08/2019

2437MHz\_TX



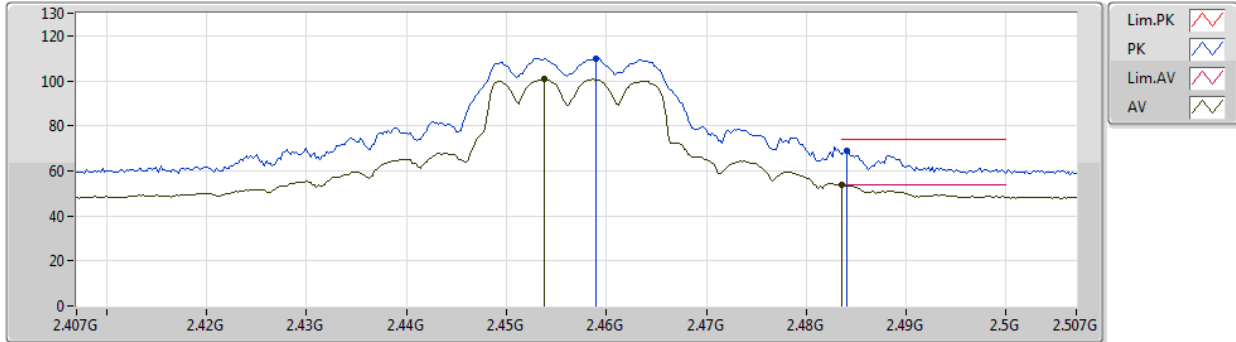
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.87208G	37.21	54.00	-16.79	7.04	3	Horizontal	258	1.00	-	30.17	31.16	9.98	34.10
PK	4.87304G	50.39	74.00	-23.61	7.03	3	Horizontal	258	1.00	-	43.36	31.15	9.98	34.10



802.11g\_Nss1,(6Mbps)\_2TX

06/08/2019

2457MHz\_TX



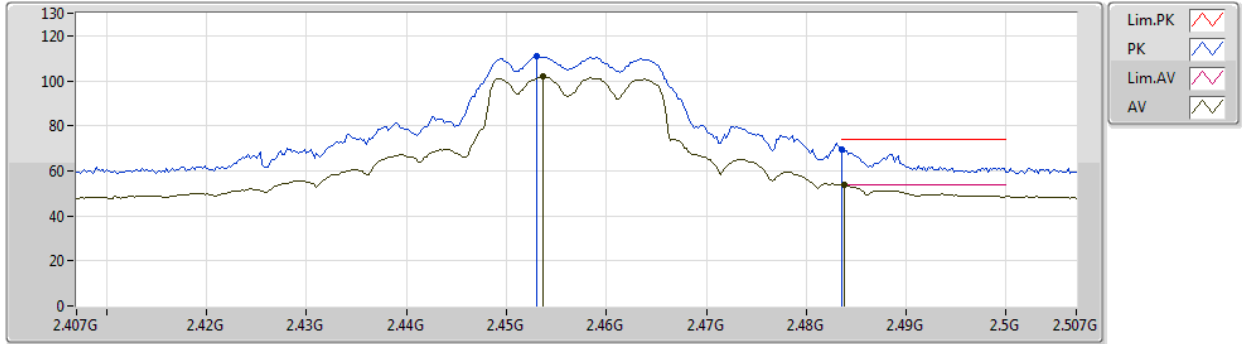
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.4538G	100.81	Inf	-Inf	34.85	3	Vertical	300	2.77	-	65.96	27.50	7.35	-
AV	2.4835G	53.83	54.00	-0.17	34.87	3	Vertical	300	2.77	-	18.96	27.50	7.37	-
PK	2.459G	109.99	Inf	-Inf	34.86	3	Vertical	300	2.77	-	75.13	27.50	7.36	-
PK	2.484G	68.73	74.00	-5.27	34.87	3	Vertical	300	2.77	-	33.86	27.50	7.37	-



802.11g\_Nss1,(6Mbps)\_2TX

06/08/2019

2457MHz\_TX



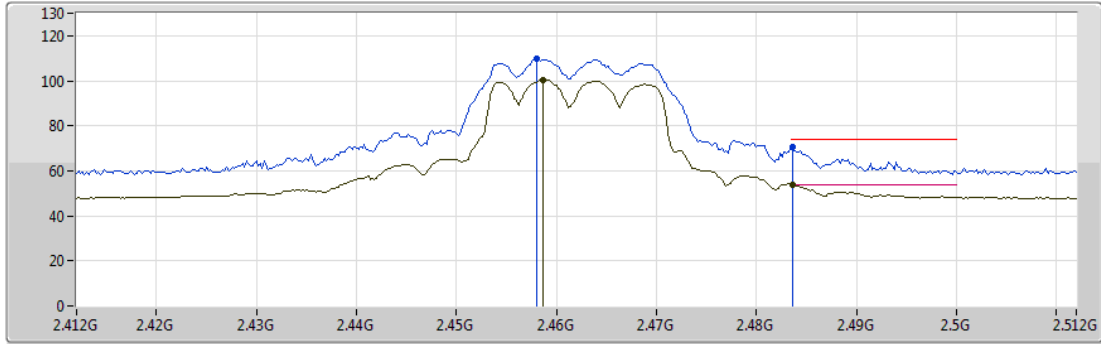
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.4536G	101.72	Inf	-Inf	34.85	3	Horizontal	248	2.79	-	66.87	27.50	7.35	-
AV	2.4838G	53.86	54.00	-0.14	34.87	3	Horizontal	248	2.79	-	18.99	27.50	7.37	-
PK	2.453G	110.84	Inf	-Inf	34.85	3	Horizontal	248	2.79	-	75.99	27.50	7.35	-
PK	2.4835G	69.64	74.00	-4.36	34.87	3	Horizontal	248	2.79	-	34.77	27.50	7.37	-



802.11g\_Nss1,(6Mbps)\_2TX

06/08/2019

2462MHz\_TX



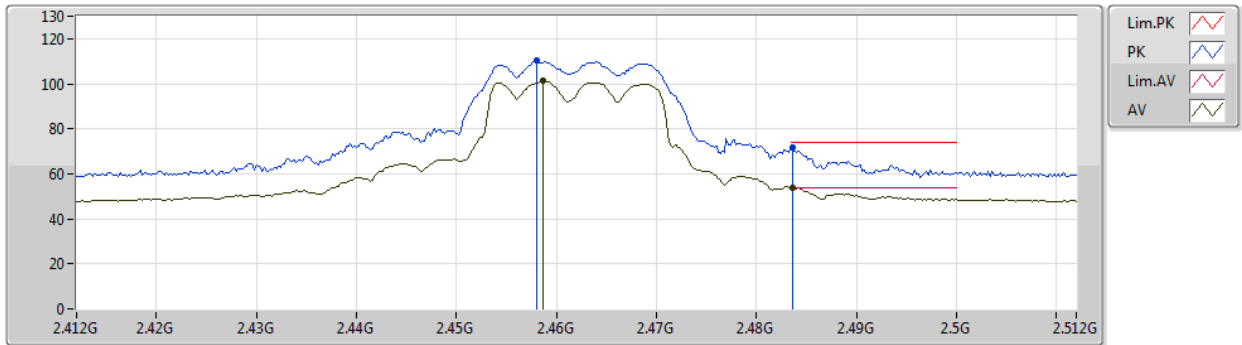
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.4586G	100.52	Inf	-Inf	34.86	3	Vertical	301	2.77	-	65.66	27.50	7.36	-
AV	2.4836G	53.91	54.00	-0.09	34.87	3	Vertical	301	2.77	-	19.04	27.50	7.37	-
PK	2.458G	109.64	Inf	-Inf	34.86	3	Vertical	301	2.77	-	74.78	27.50	7.36	-
PK	2.4836G	70.36	74.00	-3.64	34.87	3	Vertical	301	2.77	-	35.49	27.50	7.37	-



802.11g\_Nss1,(6Mbps)\_2TX

06/08/2019

2462MHz\_TX



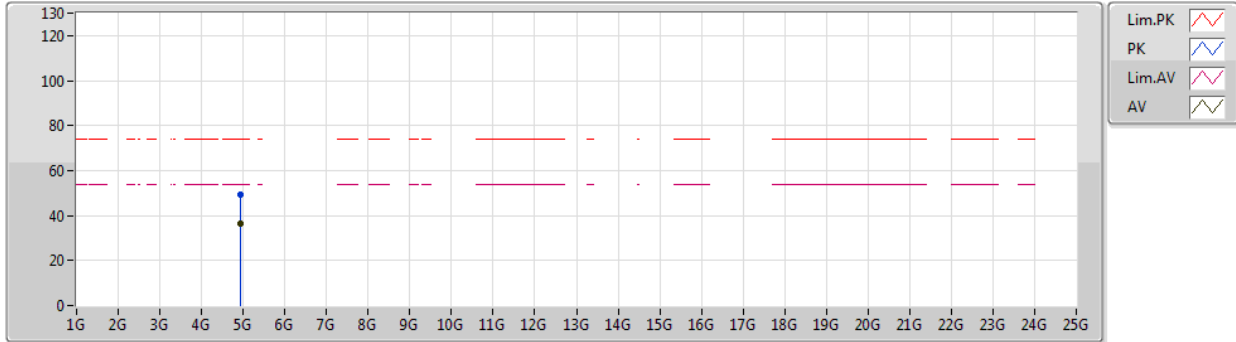
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.4586G	101.15	Inf	-Inf	34.86	3	Horizontal	250	2.82	-	66.29	27.50	7.36	-
AV	2.4836G	53.95	54.00	-0.05	34.87	3	Horizontal	250	2.82	-	19.08	27.50	7.37	-
PK	2.458G	110.18	Inf	-Inf	34.86	3	Horizontal	250	2.82	-	75.32	27.50	7.36	-
PK	2.4836G	71.90	74.00	-2.10	34.87	3	Horizontal	250	2.82	-	37.03	27.50	7.37	-



802.11g\_Nss1,(6Mbps)\_2TX

06/08/2019

2462MHz\_TX



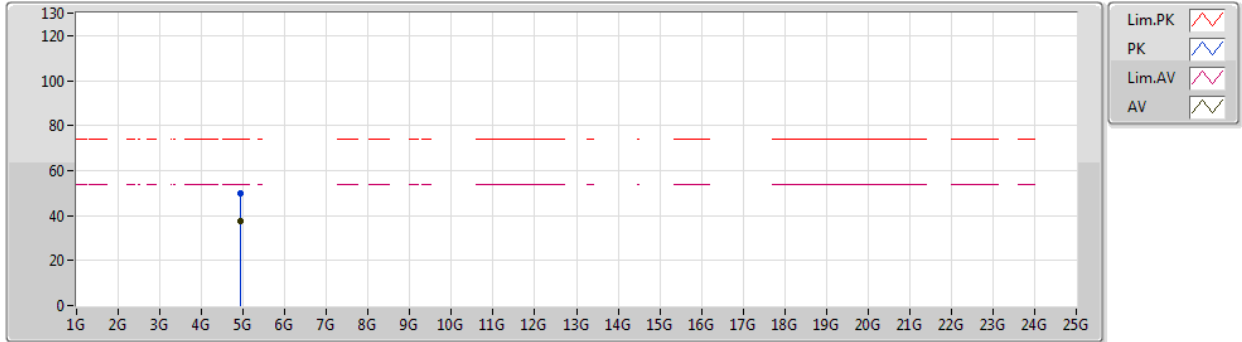
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.93252G	36.49	54.00	-17.51	7.16	3	Vertical	350	1.00	-	29.33	31.23	10.02	34.09
PK	4.93522G	49.27	74.00	-24.73	7.18	3	Vertical	350	1.00	-	42.09	31.24	10.03	34.09



802.11g\_Nss1,(6Mbps)\_2TX

06/08/2019

2462MHz\_TX



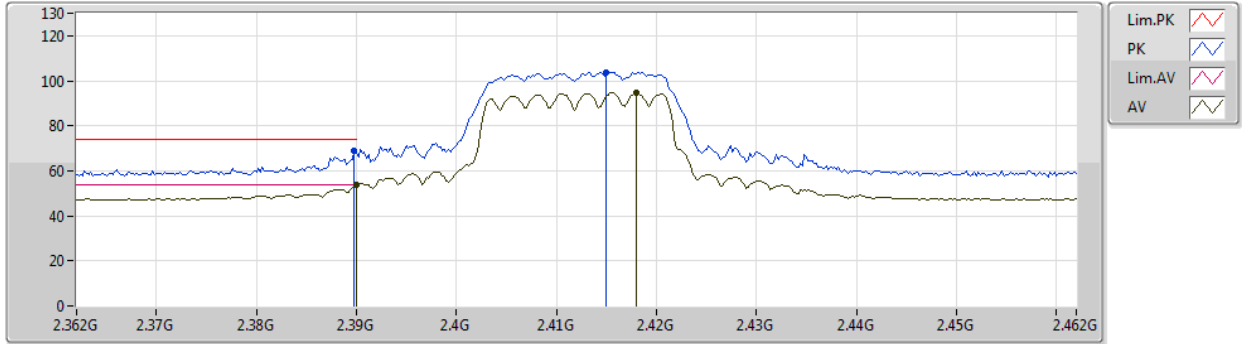
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.92904G	37.55	54.00	-16.45	7.15	3	Horizontal	266	2.02	-	30.40	31.22	10.02	34.09
PK	4.92352G	50.06	74.00	-23.94	7.12	3	Horizontal	266	2.02	-	42.94	31.19	10.02	34.09



802.11n HT20\_Nss1,(MCS0)\_2TX

06/08/2019

2412MHz\_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.39G	53.61	54.00	-0.39	34.97	3	Vertical	288	2.03	-	18.64	27.64	7.33	-
AV	2.418G	94.62	Inf	-Inf	34.90	3	Vertical	288	2.03	-	59.72	27.56	7.34	-
PK	2.3898G	69.05	74.00	-4.95	34.97	3	Vertical	288	2.03	-	34.08	27.64	7.33	-
PK	2.415G	103.89	Inf	-Inf	34.91	3	Vertical	288	2.03	-	68.98	27.57	7.34	-

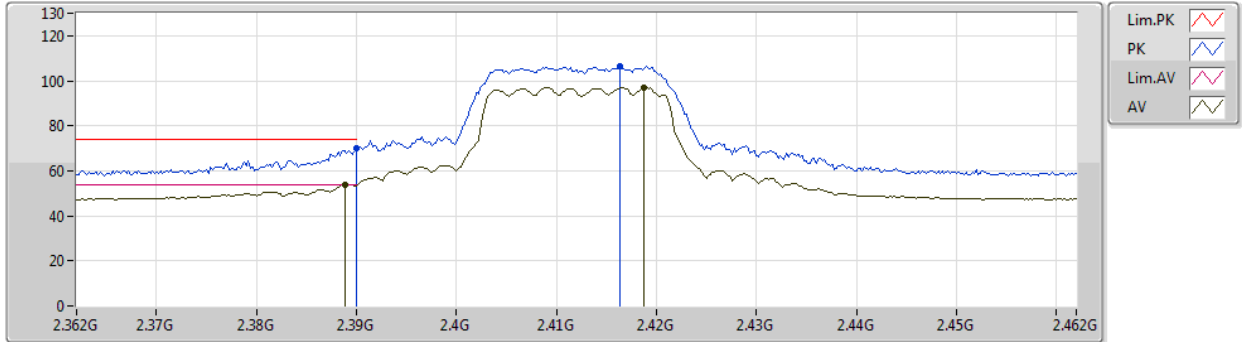




802.11n HT20\_Nss1,(MCS0)\_2TX

06/08/2019

2412MHz\_TX



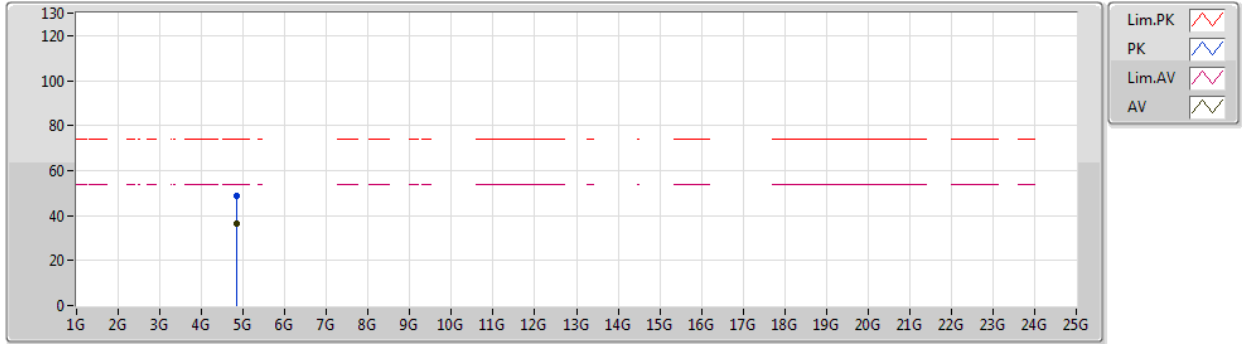
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3888G	53.93	54.00	-0.07	34.97	3	Horizontal	119	1.00	-	18.96	27.64	7.33	-
AV	2.4188G	97.09	Inf	-Inf	34.90	3	Horizontal	119	1.00	-	62.19	27.56	7.34	-
PK	2.39G	69.78	74.00	-4.22	34.97	3	Horizontal	119	1.00	-	34.81	27.64	7.33	-
PK	2.4164G	106.36	Inf	-Inf	34.91	3	Horizontal	119	1.00	-	71.45	27.57	7.34	-



802.11n HT20\_Nss1,(MCS0)\_2TX

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2412MHz\_TX



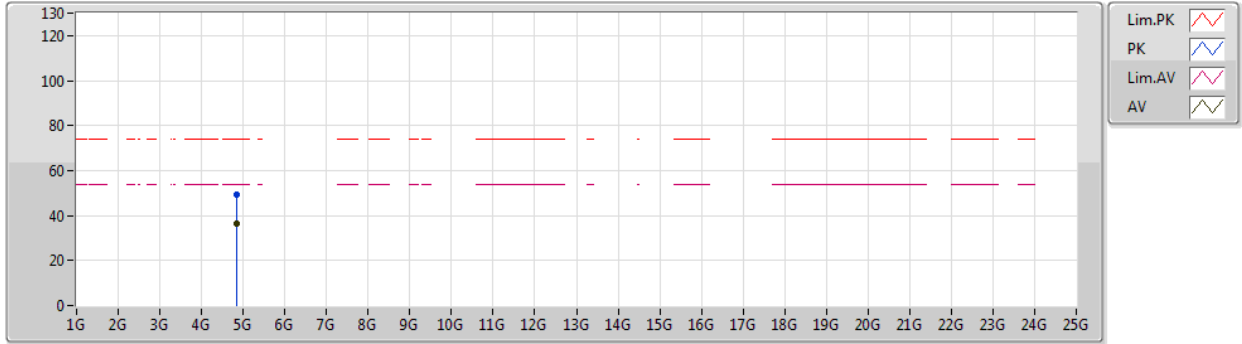
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AV	4.83234G	36.52	54.00	-17.48	7.00	3	Vertical	190	1.50	-	29.52	31.16	9.94	34.10
PK	4.83372G	48.79	74.00	-25.21	7.01	3	Vertical	190	1.50	-	41.78	31.17	9.94	34.10



802.11n HT20\_Nss1,(MCS0)\_2TX

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2412MHz\_TX



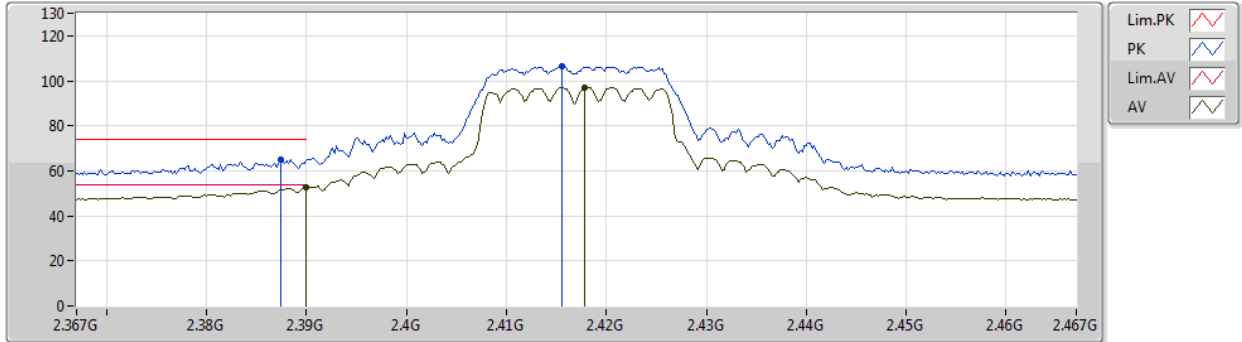
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.83762G	36.56	54.00	-17.44	7.03	3	Horizontal	62	2.90	-	29.53	31.18	9.95	34.10
PK	4.83336G	49.21	74.00	-24.79	7.01	3	Horizontal	62	2.90	-	42.20	31.17	9.94	34.10



802.11n HT20\_Nss1,(MCS0)\_2TX

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2417MHz\_TX



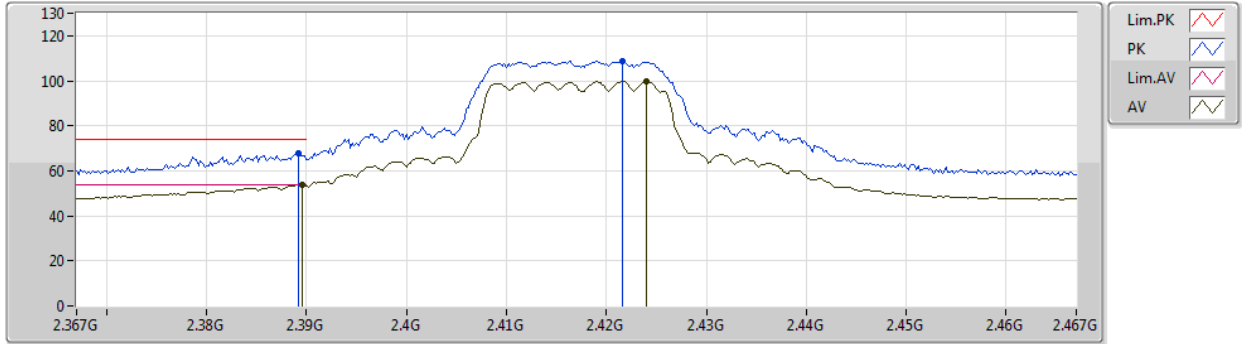
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.39G	52.53	54.00	-1.47	34.97	3	Vertical	289	2.05	-	17.56	27.64	7.33	-
AV	2.4178G	96.93	Inf	-Inf	34.90	3	Vertical	289	2.05	-	62.03	27.56	7.34	-
PK	2.3874G	65.19	74.00	-8.81	34.98	3	Vertical	289	2.05	-	30.21	27.65	7.33	-
PK	2.4156G	106.48	Inf	-Inf	34.91	3	Vertical	289	2.05	-	71.57	27.57	7.34	-



802.11n HT20\_Nss1,(MCS0)\_2TX

06/08/2019

2417MHz\_TX



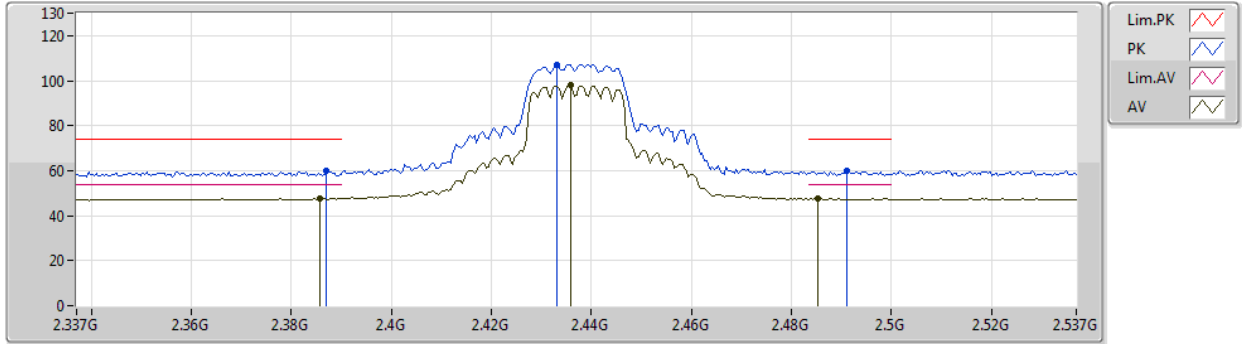
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3896G	53.88	54.00	-0.12	34.97	3	Horizontal	117	1.00	-	18.91	27.64	7.33	-
AV	2.424G	99.57	Inf	-Inf	34.89	3	Horizontal	117	1.00	-	64.68	27.55	7.34	-
PK	2.3892G	67.83	74.00	-6.17	34.97	3	Horizontal	117	1.00	-	32.86	27.64	7.33	-
PK	2.4216G	108.80	Inf	-Inf	34.90	3	Horizontal	117	1.00	-	73.90	27.56	7.34	-



802.11n HT20\_Nss1,(MCS0)\_2TX

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2437MHz\_TX



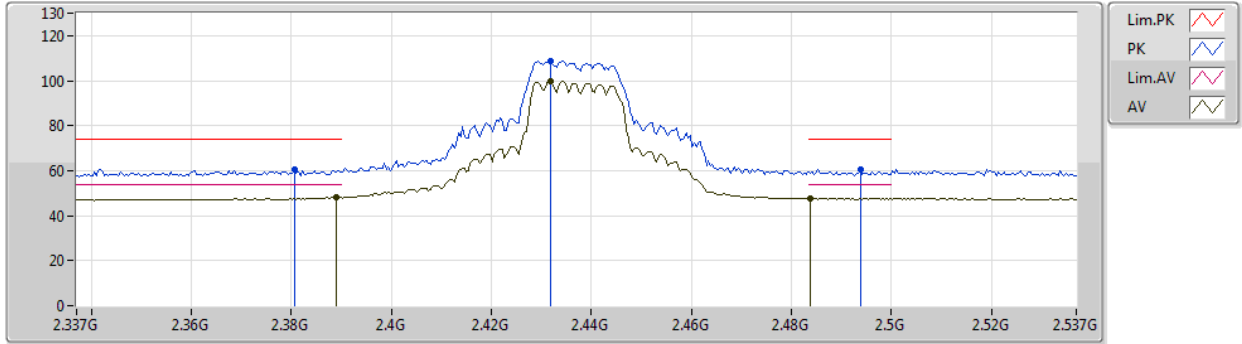
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3858G	47.56	54.00	-6.44	34.99	3	Vertical	276	1.42	-	12.57	27.66	7.33	-
AV	2.4358G	97.86	Inf	-Inf	34.88	3	Vertical	276	1.42	-	62.98	27.53	7.35	-
AV	2.4854G	47.57	54.00	-6.43	34.87	3	Vertical	276	1.42	-	12.70	27.50	7.37	-
PK	2.387G	59.83	74.00	-14.17	34.98	3	Vertical	276	1.42	-	24.85	27.65	7.33	-
PK	2.433G	107.15	Inf	-Inf	34.88	3	Vertical	276	1.42	-	72.27	27.53	7.35	-
PK	2.491G	59.81	74.00	-14.19	34.87	3	Vertical	276	1.42	-	24.94	27.50	7.37	-



802.11n HT20\_Nss1,(MCS0)\_2TX

06/08/2019

2437MHz\_TX



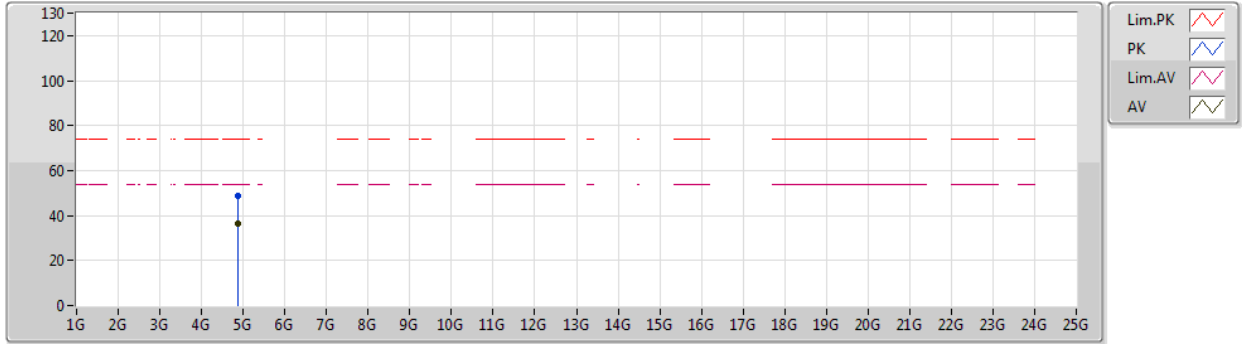
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.389G	48.25	54.00	-5.75	34.97	3	Horizontal	101	1.50	-	13.28	27.64	7.33	-
AV	2.4318G	99.67	Inf	-Inf	34.89	3	Horizontal	101	1.50	-	64.78	27.54	7.35	-
AV	2.4838G	47.68	54.00	-6.32	34.87	3	Horizontal	101	1.50	-	12.81	27.50	7.37	-
PK	2.3806G	60.50	74.00	-13.50	35.01	3	Horizontal	101	1.50	-	25.49	27.68	7.33	-
PK	2.4318G	108.76	Inf	-Inf	34.89	3	Horizontal	101	1.50	-	73.87	27.54	7.35	-
PK	2.4938G	60.50	74.00	-13.50	34.87	3	Horizontal	101	1.50	-	25.63	27.50	7.37	-



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2437MHz\_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.87592G	36.29	54.00	-17.71	7.03	3	Vertical	150	1.70	-	29.26	31.15	9.98	34.10
PK	4.88276G	48.98	74.00	-25.02	7.01	3	Vertical	150	1.70	-	41.97	31.13	9.98	34.10

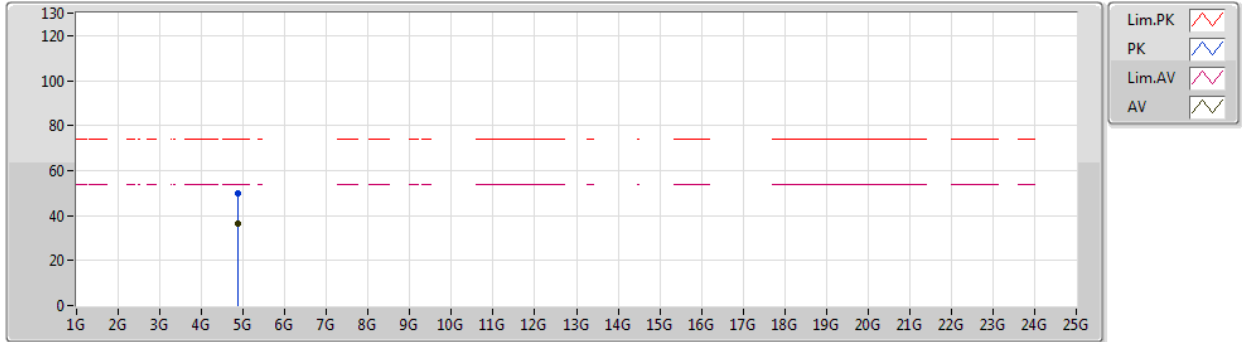




802.11n HT20\_Nss1,(MCS0)\_2TX

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2437MHz\_TX



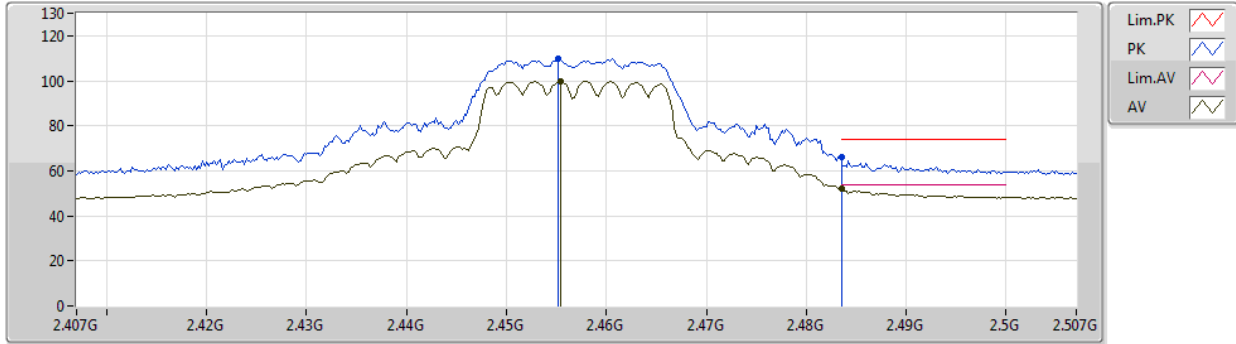
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.8782G	36.50	54.00	-17.50	7.02	3	Horizontal	35	2.24	-	29.48	31.14	9.98	34.10
PK	4.86854G	49.79	74.00	-24.21	7.03	3	Horizontal	35	2.24	-	42.76	31.16	9.97	34.10



802.11n HT20\_Nss1,(MCS0)\_2TX

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2457MHz\_TX



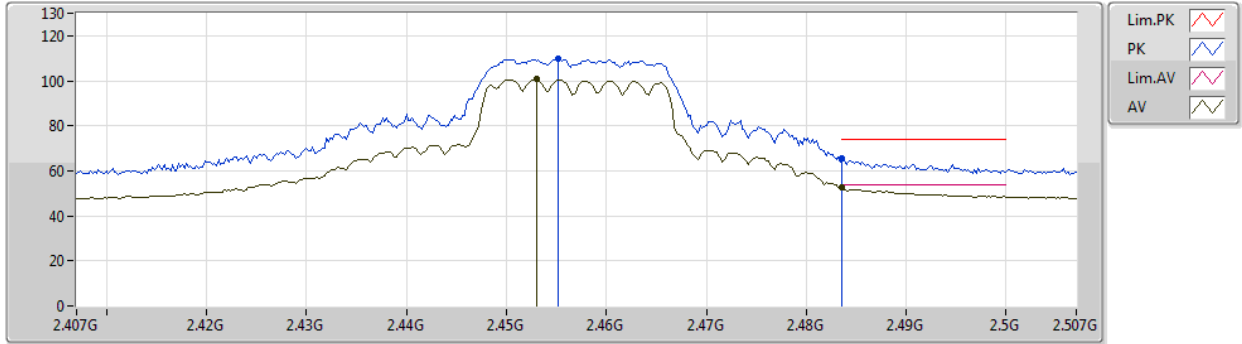
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.4554G	99.82	Inf	-Inf	34.86	3	Vertical	300	2.77	-	64.96	27.50	7.36	-
AV	2.4835G	52.09	54.00	-1.91	34.87	3	Vertical	300	2.77	-	17.22	27.50	7.37	-
PK	2.4552G	109.70	Inf	-Inf	34.86	3	Vertical	300	2.77	-	74.84	27.50	7.36	-
PK	2.4835G	65.91	74.00	-8.09	34.87	3	Vertical	300	2.77	-	31.04	27.50	7.37	-



802.11n HT20\_Nss1,(MCS0)\_2TX

06/08/2019

2457MHz\_TX



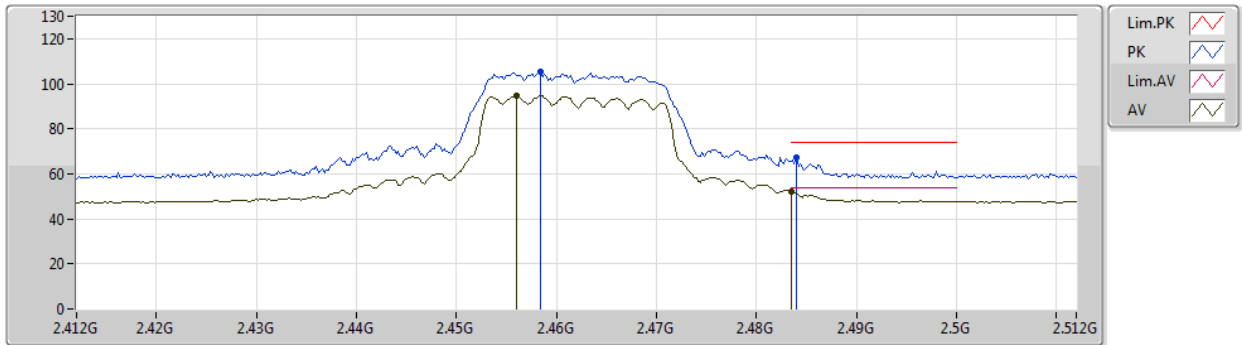
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.453G	100.66	Inf	-Inf	34.85	3	Horizontal	248	2.78	-	65.81	27.50	7.35	-
AV	2.4836G	52.79	54.00	-1.21	34.87	3	Horizontal	248	2.78	-	17.92	27.50	7.37	-
PK	2.4552G	109.76	Inf	-Inf	34.86	3	Horizontal	248	2.78	-	74.90	27.50	7.36	-
PK	2.4836G	65.32	74.00	-8.68	34.87	3	Horizontal	248	2.78	-	30.45	27.50	7.37	-



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2462MHz\_TX



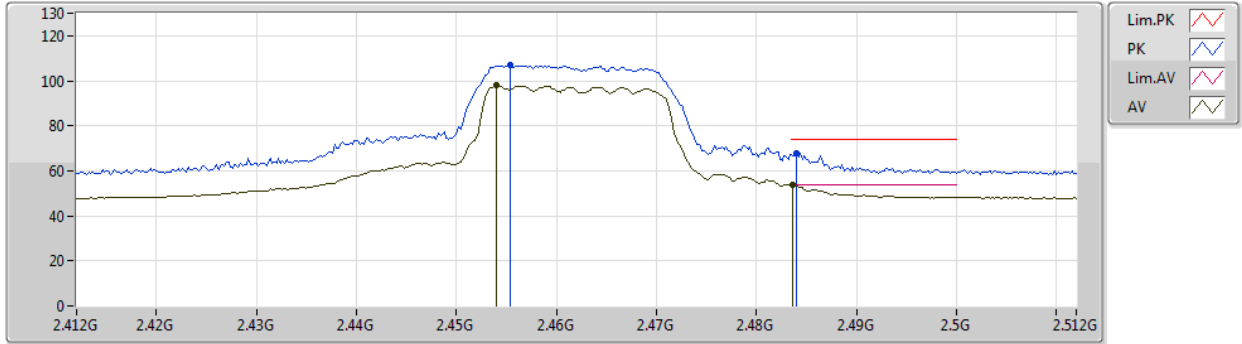
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.456G	94.53	Inf	-Inf	34.86	3	Vertical	128	1.90	-	59.67	27.50	7.36	-
AV	2.4835G	52.00	54.00	-2.00	34.87	3	Vertical	128	1.90	-	17.13	27.50	7.37	-
PK	2.4584G	105.14	Inf	-Inf	34.86	3	Vertical	128	1.90	-	70.28	27.50	7.36	-
PK	2.484G	67.28	74.00	-6.72	34.87	3	Vertical	128	1.90	-	32.41	27.50	7.37	-



802.11n HT20\_Nss1,(MCS0)\_2TX

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2462MHz\_TX



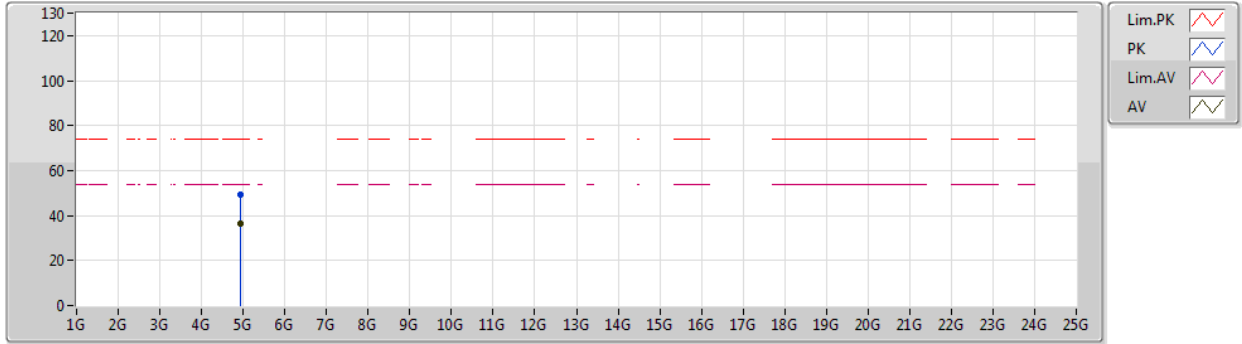
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.454G	97.79	Inf	-Inf	34.85	3	Horizontal	116	3.00	-	62.94	27.50	7.35	-
AV	2.4836G	53.65	54.00	-0.35	34.87	3	Horizontal	116	3.00	-	18.78	27.50	7.37	-
PK	2.4554G	106.80	Inf	-Inf	34.86	3	Horizontal	116	3.00	-	71.94	27.50	7.36	-
PK	2.484G	67.65	74.00	-6.35	34.87	3	Horizontal	116	3.00	-	32.78	27.50	7.37	-



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2462MHz\_TX



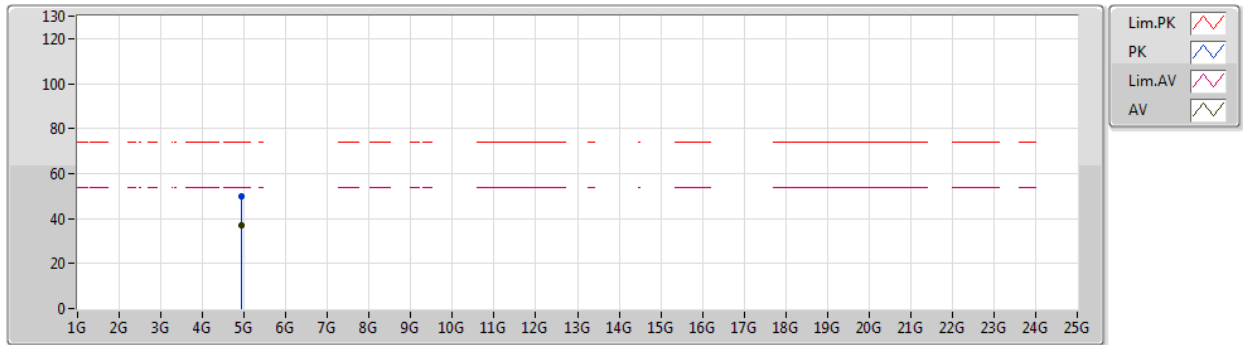
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.9303G	36.61	54.00	-17.39	7.15	3	Vertical	278	2.80	-	29.46	31.22	10.02	34.09
PK	4.93366G	49.05	74.00	-24.95	7.16	3	Vertical	278	2.80	-	41.89	31.23	10.02	34.09



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Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.92646G	37.23	54.00	-16.77	7.14	3	Horizontal	258	1.01	-	30.09	31.21	10.02	34.09
PK	4.92298G	49.96	74.00	-24.04	7.12	3	Horizontal	258	1.01	-	42.84	31.19	10.02	34.09