

# FCC Test Report

Equipment : AC1900 Wi-Fi Router  
Brand Name : Amped Wireless  
Model No. : B1900RT  
FCC ID : ZTT-B1900RT  
Standard : 47 CFR FCC Part 15.247  
Operating Band : 2400 MHz – 2483.5 MHz  
Function : ☒ Point-to-multipoint; ☐ Point-to-point  
Applicant / Manufacturer : AMPED WIRELESS  
13089 Peyton Dr. #C307, Chino Hills, CA 91709,USA

The product sample received on Apr. 27, 2017 and completely tested on Jul. 05, 2017. We, SPORTON, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

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

  
Phoenix Chen  
SPORTON INTERNATIONAL INC.



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## Summary of Test Result

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

## Revision History

[illegible]

# 1 General Description

## 1.1 Information

### 1.1.1 RF General Information

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

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11b	20	1TX(Port 1)
2.4-2.4835GHz	802.11g	20	1TX(Port 1)
2.4-2.4835GHz	802.11n HT20	20	3TX
2.4-2.4835GHz	802.11ac VHT20	20	3TX
2.4-2.4835GHz	802.11n HT40	40	3TX
2.4-2.4835GHz	802.11ac VHT40	40	3TX

**Note:**

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

### 1.1.2 Antenna Information

Ant.	Port	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
0	0	Cortec	AN2450-50F26GBX	Dipole Antenna	I-PEX	3.50
1	1	Cortec	AN2450-50F27GGX	Dipole Antenna	I-PEX	2.90
2	2	Cortec	AN2450-50F26GBX	Dipole Antenna	I-PEX	3.50
3	3	LYNwave	-	PIFA Antenna	I-PEX	2.10

**Note :**

1. IEEE 802.11b/g only includes 1T/1R and Port 1 for emission.
2. IEEE 802.11n/ac supports 3T/4R and CDD function.

### 1.1.3 EUT Information

Identify EUT			
SW / HW	N/A		
Operational Condition			
EUT Power Type	From AC Adapter		
Beamforming Function	<input type="checkbox"/> With beamforming	<input checked="" type="checkbox"/> Without beamforming	
Type of EUT			
<input checked="" type="checkbox"/>	Stand-alone		
<input type="checkbox"/>	Combined (EUT where the radio part is fully integrated within another device)		
	Combined Equipment - Brand Name / Model No.:		...
<input type="checkbox"/>	Plug-in radio (EUT intended for a variety of host systems)		
	Host System - Brand Name / Model No.:		...
<input type="checkbox"/>	Other:		

### 1.1.4 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11b	1	0	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11g	0.999	0.004	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ac VHT20	0.99	0.044	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ac VHT40	0.996	0.017	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)

## 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
- ♦ ANSI C63.4-2014
- ♦ KDB 558074 D01 v04
- ♦ KDB 662911 D01 v02r01
- ♦ KDB 644545 D03 v01

### 1.3 Testing Location Information

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

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH01-HY	Gary	21.4°C / 65%	05/Jul/2017
Radiated (Below 1GHz)	03CH01-HY	Terry	23.2°C / 56%	05/Jul/2017
Radiated (Above 1GHz)	03CH09-HY	Terry	22.1°C / 58%	03/Jul/2017
AC Conduction	CO04-HY	Teddy	21°C / 57%	05/Jul/2017

### 1.4 Measurement Uncertainty

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

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	3.6 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	2.1 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	2.6 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	2.9 dB	Confidence levels of 95%
Conducted Emission	1.3 dB	Confidence levels of 95%

## 2 Test Configuration of EUT

### 2.1 Test Condition

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

### 2.2 Test Channel Mode

Test Software Version	RTL819 x 3.4 -2016/01/15
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Mode	Power Setting
802.11b_(1Mbps)_1TX	-
2412MHz	45
2437MHz	52
2462MHz	52
802.11g_(6Mbps)_1TX	-
2412MHz	53
2437MHz	63
2462MHz	50
802.11ac VHT20_Nss1,(MCS0)_3TX	-
2412MHz	49,49,49
2437MHz	63,63,63
2462MHz	48,48,48
802.11ac VHT40_Nss1,(MCS0)_3TX	-
2422MHz	40,40,40
2437MHz	50,50,50
2452MHz	43,43,43



## 2.3 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
<b>Tests Item</b>	AC power-line conducted emissions
<b>Condition</b>	AC power-line conducted measurement for line and neutral
<b>Operating Mode</b>	Normal link
1	Router mode , WIFI 2.4G & 5G Link + Adapter, WAN 1Gbps,Lan 1Gbps (Y axis)

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

The Worst Case Mode for Following Conformance Tests	
<b>Tests Item</b>	Emissions in Restricted Frequency Bands
<b>Test Condition</b>	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.
<b>Operating Mode&lt;1GHz</b>	Normal link
1	Adapter mode
<b>Operating Mode&gt;1GHz</b>	CTX
<b>Orthogonal Planes of EUT</b>	<b>Y Plane</b>
	
<b>Worst Planes of EUT</b>	V

The Worst Case Mode for Following Conformance Tests	
<b>Tests Item</b>	Simultaneous Transmission Analysis
<b>Test Condition</b>	Radiated measurement
<b>Operating Mode</b>	Normal Link
1	2.4GHz+5GHz
Refer to Sporton Test Report No.: FA742738 for Co-location RF Exposure Evaluation and Appendix G for Radiated Emission Co-location.	

## 2.4 Accessories

Accessories				
AC Adapter 1 (US Plug)	Brand Name	APD	Model Name	WA-24Q12FU
	Power Rating	I/P: <u>100</u> - <u>240</u> Vac, <u>50-60</u> Hz, <u>0.7</u> A, O/P: <u>12</u> Vdc, <u>2</u> A		
	Power Cord	<u>1.5</u> meter, non-shielded cable, w/o ferrite core		
Stand	Brand Name	-	Model Name	-

Reminder: Regarding to more detail and other information, please refer to user manual.

## 2.5 Support Equipment

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

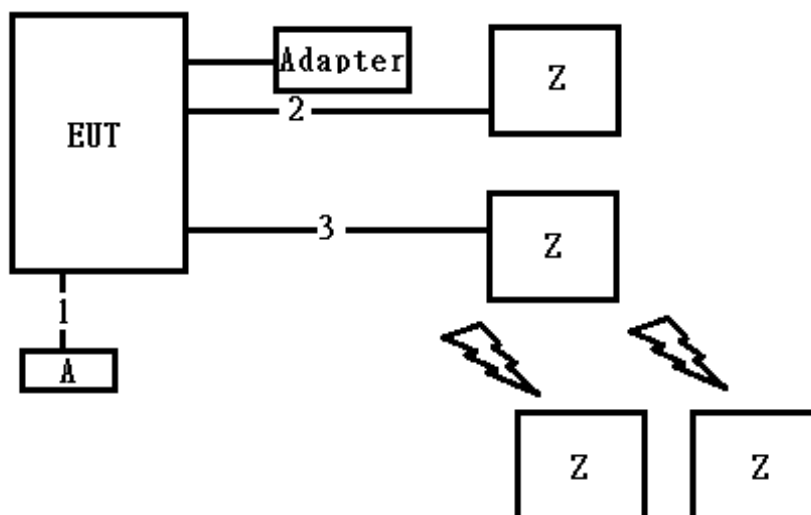
Support Equipment – Radiated Emission Below 1G				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook	DELL	E5530	DoC
2	Notebook	DELL	E5540	DoC
3	Load	-	-	-

Support Equipment – Radiated Emission Above 1G				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook (Remote)	DELL	E5530	DoC

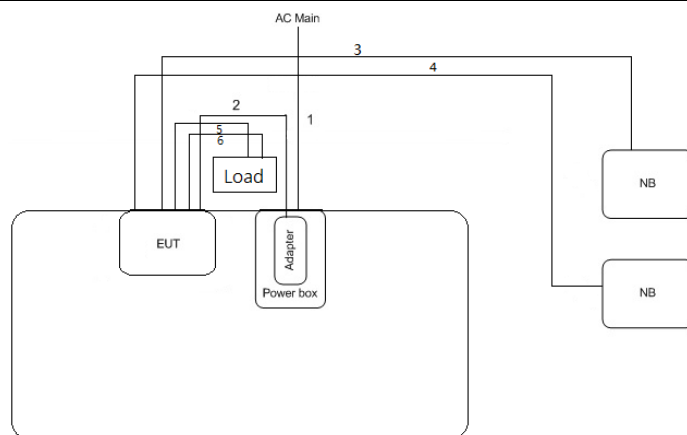
Support Equipment – AC Conduction				
No.	Equipment	Brand Name	Model Name	FCC ID
1	NoteBook 1(WAN Port) (Remote)	DELL	Latitude E5430	DoC
2	NoteBook 2(LAN Port) (Remote)	DELL	Latitude E5430	DoC
3	NoteBook *2 (Remote)	DELL	P55G	DoC
4	Load	-	-	-

## 2.6 Test Setup Diagram

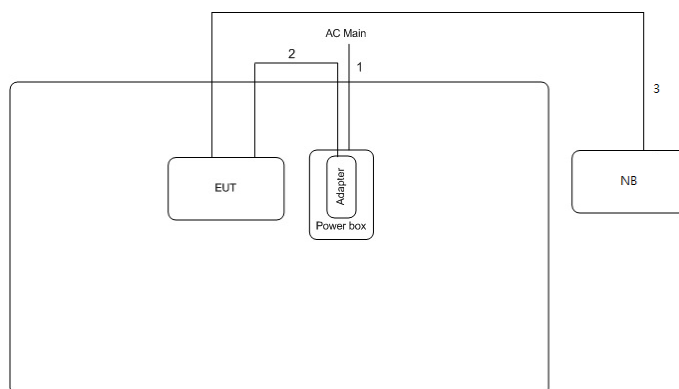
**Test Setup Diagram – AC Line Conducted Emission Test**



Item	Connection	Shielded	Length	Remark
1	DC Power line	No	1.5m	-
2	AC Power line	No	-	-
3	AC Power line	No	-	-
A	Dummy Load	No	1m	-
Z	NoteBook 1(WAN Port)	No	10m	-
Z	NoteBook 2(LAN Port)	No	10m	-
Z	NoteBook *2	-	-	-

**Test Setup Diagram - Radiated Test Below 1GHz**


Item	Connection	Shielded	Length(m)	Remark
1	AC Power cable	No	1.8m	-
2	DC Power cable	No	1.5m	-
3	RJ45 cable	No	10m	-
4	RJ45 cable	No	10m	-
5	RJ45 cable	No	0.8m	-
6	RJ45 cable	No	0.8m	-

**Test Setup Diagram - Radiated Test Above 1GHz**


Item	Connection	Shielded	Length(m)	Remark
1	AC Power cable	No	1.8m	-
2	DC Power cable	No	1.5m	-
3	RJ45 cable	No	10m	-

### 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.

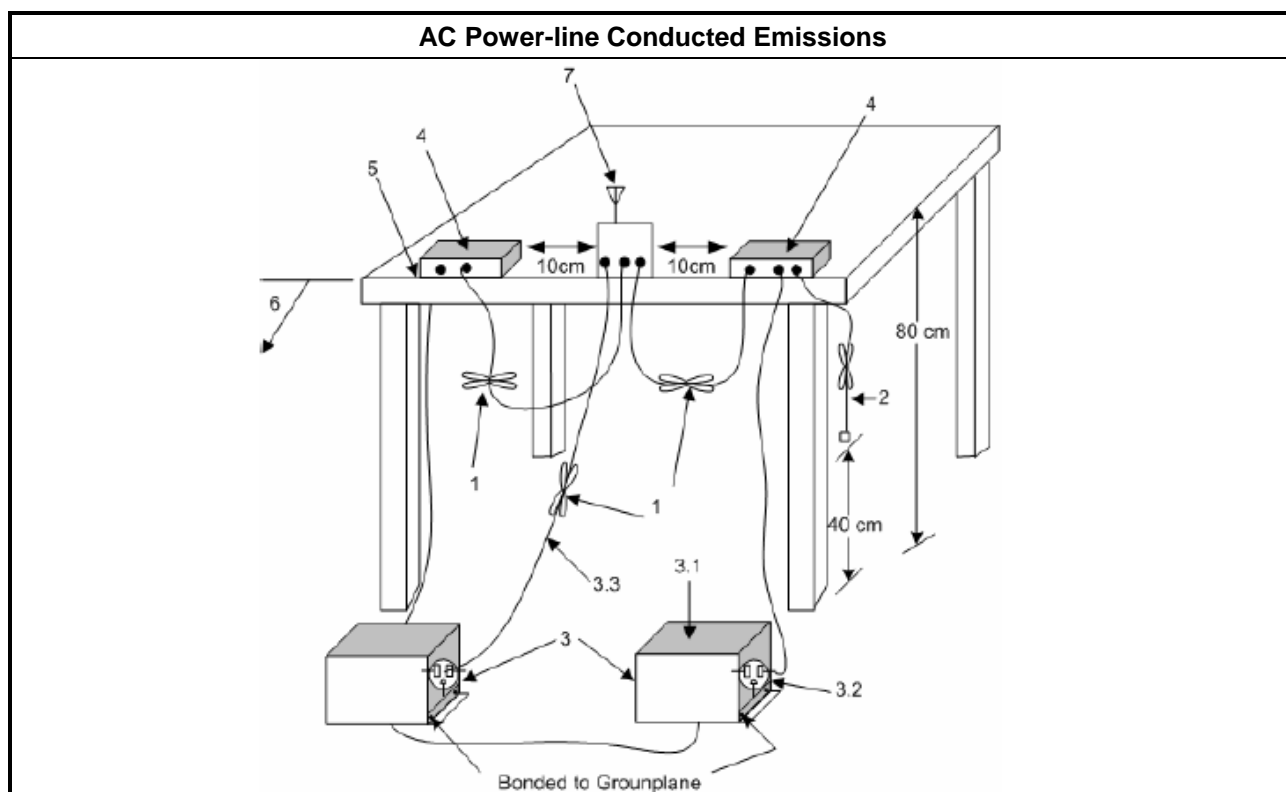
### 3.1.2 Measuring Instruments

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	
<b>Systems using digital modulation techniques:</b>	
▪	6 dB bandwidth $\geq$ 500 kHz.

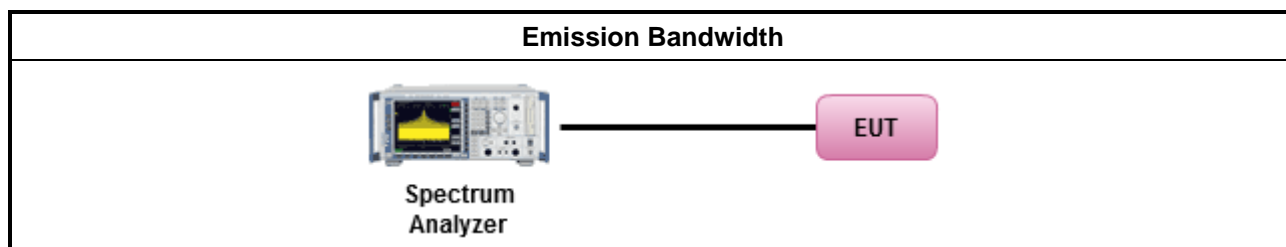
### 3.2.2 Measuring Instruments

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 8.1 Option 1 for 6 dB bandwidth measurement.
<input type="checkbox"/>	Refer as KDB 558074, clause 8.2 Option 2 for 6 dB bandwidth measurement.
<input type="checkbox"/>	Refer as RSS-Gen, clause 6.6 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		
	▪	If $G_{TX} \leq 6$ dBi, then $P_{Out} \leq 30$ dBm (1 W)
	▪	Point-to-multipoint systems (P2M): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ dBm
	▪	Point-to-point systems (P2P): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	▪	Smart antenna system (SAS):
	-	Single beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	-	Overlap beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	-	Aggregate power on all beams: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3 + 8$ dB dBm
e.i.r.p. Power Limit:		
	▪	2400-2483.5 MHz Band
	▪	Point-to-multipoint systems (P2M): $P_{eirp} \leq 36$ dBm (4 W)
	▪	Point-to-point systems (P2P): $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX}])$ dBm
	▪	Smart antenna system (SAS)
	-	Single beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm
	-	Overlap beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm
	-	Aggregate power on all beams: $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX} + 8])$ dBm
$P_{Out}$ = maximum peak conducted output power or maximum conducted output power in dBm, $G_{TX}$ = the maximum transmitting antenna directional gain in dBi.		

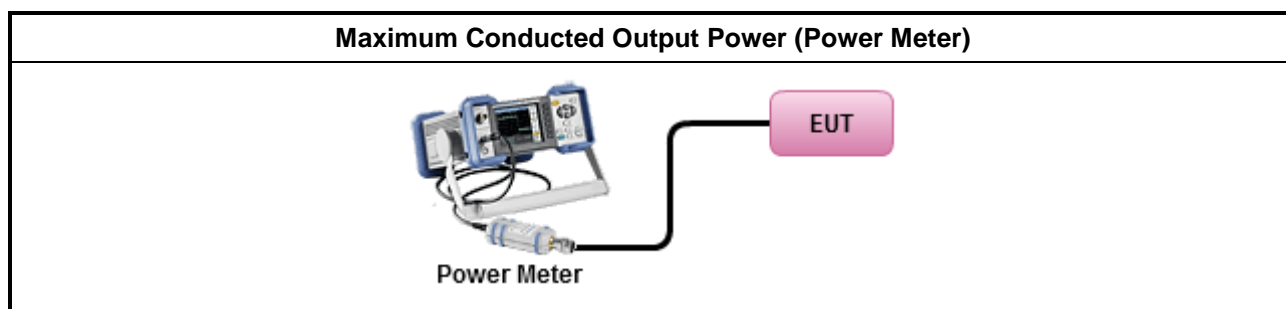
#### 3.3.2 Measuring Instruments

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 9.1.1 Option 1 (RBW ≥ EBW method).
<input type="checkbox"/>	Refer as KDB 558074, clause 9.1.2 Option 2 (integrated band power method)
<input type="checkbox"/>	Refer as KDB 558074, clause 9.1.3 Option 3 (peak power meter for VBW ≥ DTS BW)
<ul style="list-style-type: none"> <li>Maximum Average Conducted Output Power</li> </ul>	
Duty cycle ≥ 98%	
<input type="checkbox"/>	Refer as KDB 558074, clause 9.2.2.4 Method AVGSA-2 (spectral trace averaging).
Duty cycle < 98%	
<input type="checkbox"/>	Refer as KDB 558074, clause 9.2.2.5 Method AVGSA-2 Alt. (slow sweep speed)
RF power meter and average over on/off periods with duty factor or gated trigger	
<input checked="" type="checkbox"/>	Refer as KDB 558074, clause 9.2.3.1 Method AVGPM (using an RF average power meter).
<ul style="list-style-type: none"> <li>For conducted measurement.</li> </ul>	
<ul style="list-style-type: none"> <li>If the EUT supports multiple transmit chains using options given below: Refer as KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.</li> </ul>	
<ul style="list-style-type: none"> <li>If multiple transmit chains, EIRP calculation could be following as methods:  <math 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	
▪	Power Spectral Density (PSD) $\leq$ 8 dBm/3kHz

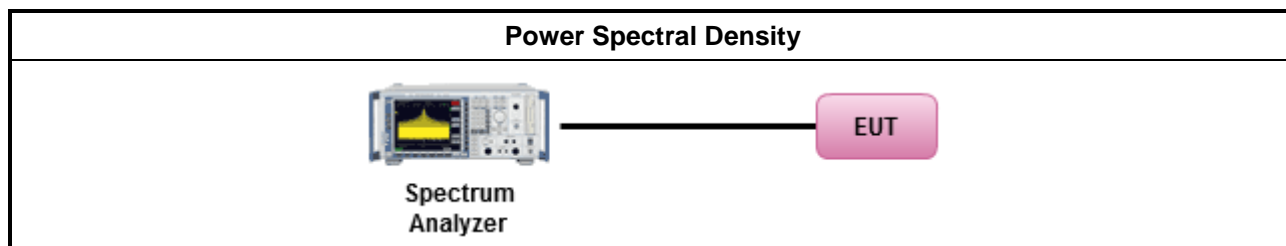
#### 3.4.2 Measuring Instruments

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

#### 3.4.3 Test Procedures

Test Method	
▪	Peak power spectral density procedures that the same method as used to determine the conducted output power. If maximum peak conducted output power was measured to demonstrate compliance to the output power limit, then the peak PSD procedure below (Method PKPSD) shall be used. If maximum conducted output power was measured to demonstrate compliance to the output power limit, then one of the average PSD procedures shall be used, as applicable based on the following criteria (the peak PSD procedure is also an acceptable option).
<input checked="" type="checkbox"/>	Refer as KDB 558074, clause 10.2 Method PKPSD (RBW=3-100kHz; Detector=peak).
▪	For conducted measurement.
▪	If The EUT supports multiple transmit chains using options given below:
<input checked="" type="checkbox"/>	Measure and sum the spectra across the outputs. Refer as KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.

#### 3.4.4 Test Setup



#### 3.4.5 Test Result of Power Spectral Density

Refer as Appendix D

### 3.5 Emissions in Non-restricted Frequency Bands

#### 3.5.1 Emissions in Non-restricted Frequency Bands Limit

Un-restricted Band Emissions Limit	
RF output power procedure	Limit (dB)
Peak output power procedure	20
Average output power procedure	30
<p>Note 1: If the peak output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the peak conducted output power measured within any 100 kHz outside the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum measured in-band peak PSD level.</p> <p>Note 2: If the average output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the power in any 100 kHz outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum measured in-band average PSD level.</p>	

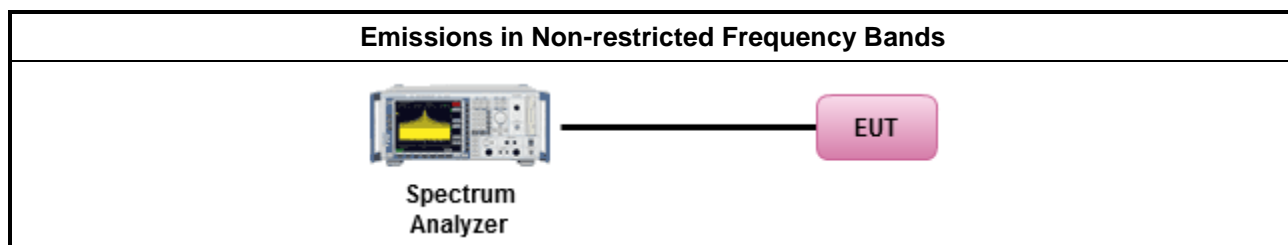
#### 3.5.2 Measuring Instruments

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 11 for unwanted emissions into non-restricted 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.

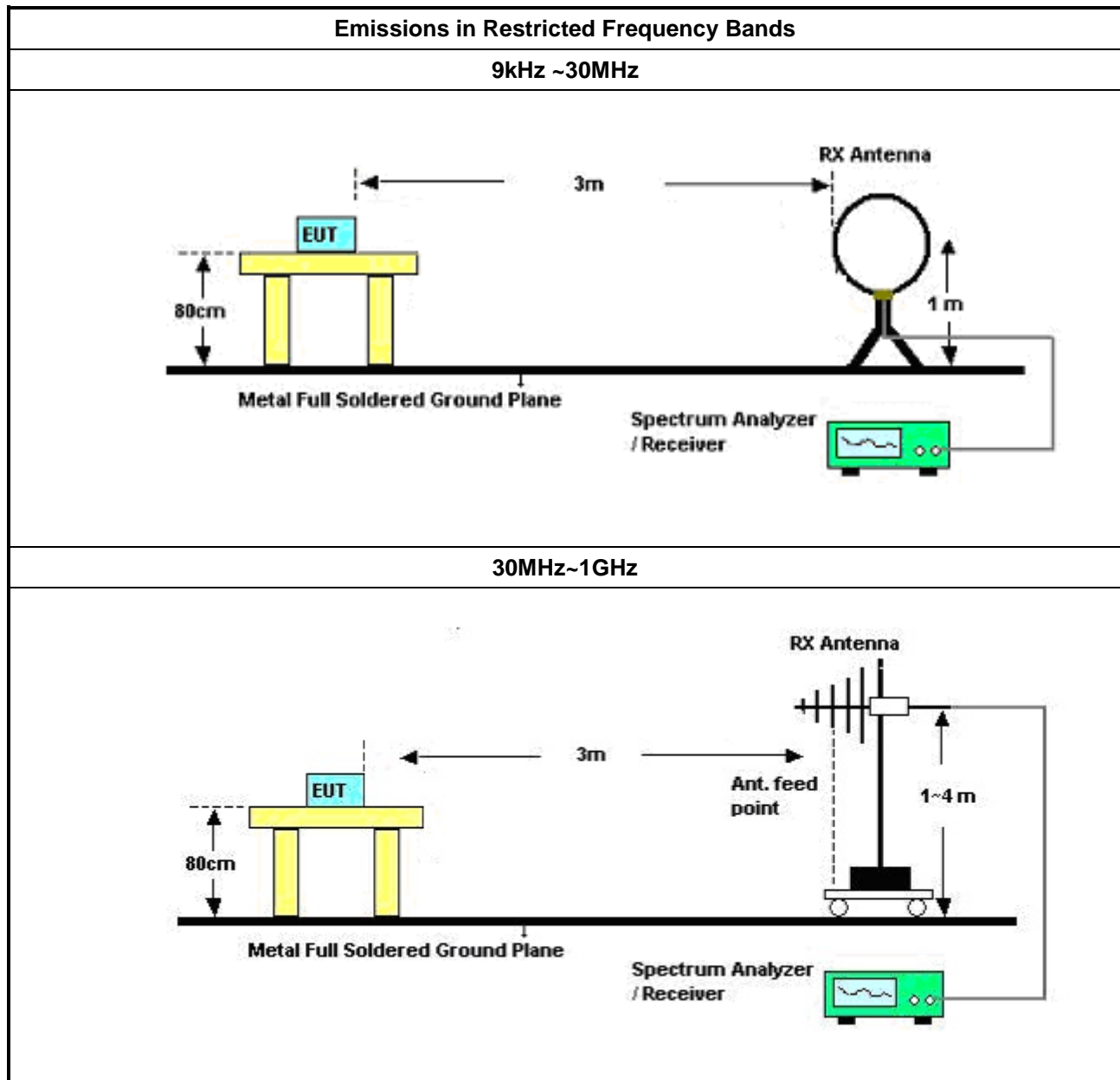
#### 3.6.2 Measuring Instruments

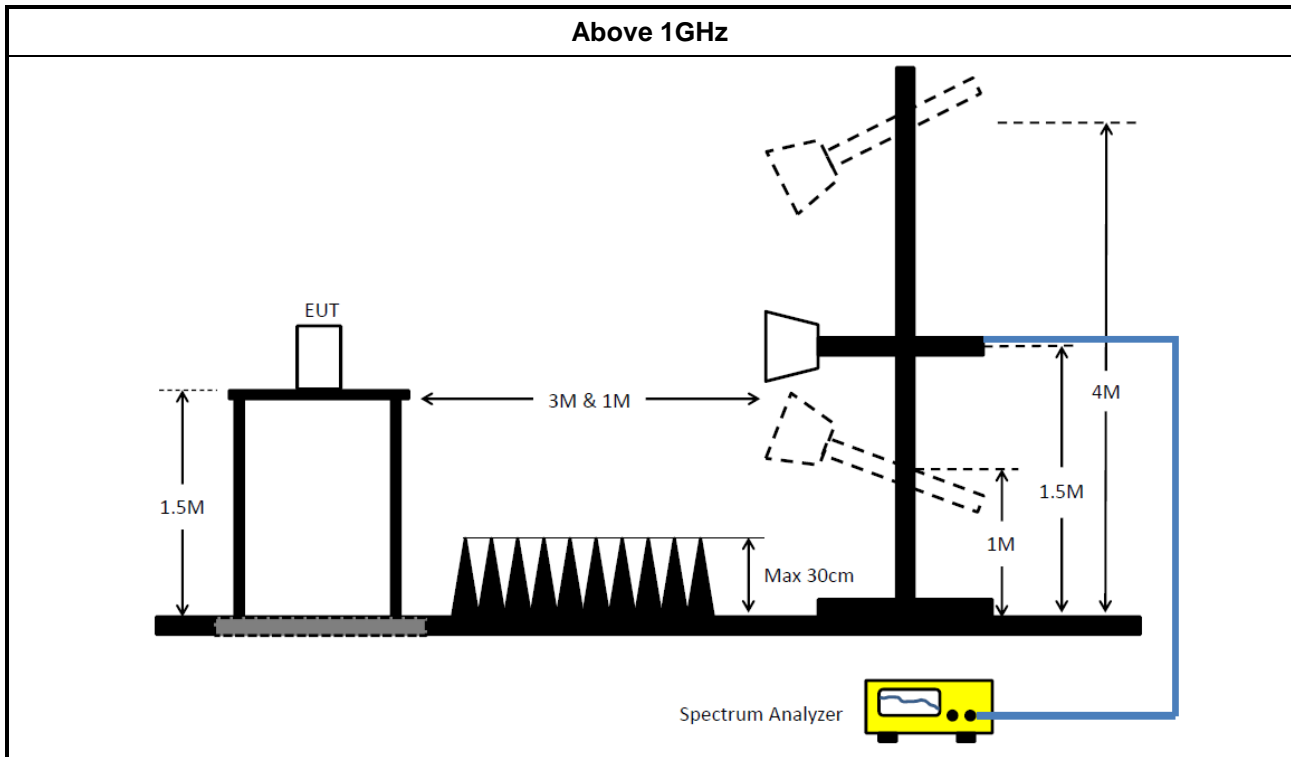
Refer a test equipment and calibration data table in this test report.

### 3.6.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> <li>The average emission levels shall be measured in [duty cycle <math>\geq 98</math> or duty factor].</li> </ul>	
<ul style="list-style-type: none"> <li>Refer as ANSI C63.10, clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.</li> </ul>	
<ul style="list-style-type: none"> <li>For the transmitter unwanted emissions shall be measured using following options below:</li> </ul>	
	<ul style="list-style-type: none"> <li>Refer as KDB 558074, clause 12 for unwanted emissions into restricted bands.</li> </ul>
	<input checked="" type="checkbox"/> Refer as KDB 558074, clause 12.2.5.3 (ANSI C63.10, clause 4.1.4.2.3), Reduced VBW $\geq 1/T$ .
	<input checked="" type="checkbox"/> Refer as KDB 558074, clause 12.2.4 measurement procedure peak limit.
<ul style="list-style-type: none"> <li>For the transmitter band-edge emissions shall be measured using following options below:</li> </ul>	
	<ul style="list-style-type: none"> <li>Refer as KDB 558074 clause 13.1, When the performing peak or average radiated measurements, emissions within 2 MHz of the authorized band edge may be measured using the marker-delta method described below.</li> </ul>
	<ul style="list-style-type: none"> <li>Refer as KDB 558074, clause 13.2 (ANSI C63.10, clause 6.10.6) for marker-delta method for band-edge measurements.</li> </ul>
	<ul style="list-style-type: none"> <li>Refer as KDB 558074, clause 13.3 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).</li> </ul>
<ul style="list-style-type: none"> <li>For conducted and cabinet radiation measurement, refer as KDB 558074, clause 12.2.2.</li> </ul>	
	<ul style="list-style-type: none"> <li>For conducted unwanted emissions into restricted bands (absolute emission limits). Devices with multiple transmit chains using options given below: (1) Measure and sum the spectra across the outputs or (2) Measure and add 10 log(N) dB</li> </ul>
	<ul style="list-style-type: none"> <li>For KDB 662911 The methodology described here may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance may be demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred.</li> </ul>

### 3.6.4 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. All amplitude of spurious emissions that are attenuated by more than 20 dB 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	102051	9KHz ~ 3.6GHz	29/Apr/2017	28/Apr/2018
LISN	R&S	ENV216	101295	9kHz ~ 30MHz	15/Nov/2016	14/Nov/2017
RF Cable-CON	HUBER+SUHNER	RG213/U	07611832020001	9kHz ~ 30MHz	24/Oct/2016	23/Oct/2017
Impuls Begrenzer Puls e Limiter	R&S	ESH3-Z2	100921	10 kHz ~ 30 MHz	20/Oct/2016	19/Oct/2017

### Instrument for Radiated Test - Below 1GHz

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH01-HY	30 MHz ~ 1 GHz	15/Mar/2017	14/Mar/2018
Amplifier	COM-POWER	PA-103	161050	1 MHz ~ 1 GHz	11/Jul/2016	10/Jul/2017
Spectrum	R&S	FSV40	100593	9kHz ~ 40GHz	26/Oct/2016	25/Oct/2017
Bilog Antenna with 5dB Attenuator	SCHAFFNER& MTJ	CBL6112D & MTJ6102-05	2678&001	30 MHz ~ 2 GHz	30/Jul/2016	29/Jul/2017
Loop Antenna	TESEQ	HLA 6120	24155	9 kHz~30 MHz	02/Mar/2017	01/Mar/2018
RF Cable-R03m	Jye Bao	RG142	CB019	9kHz ~ 1GHz	03/Jan/2017	02/Jan/2018

### Instrument for Radiated Test - Above 1GHz

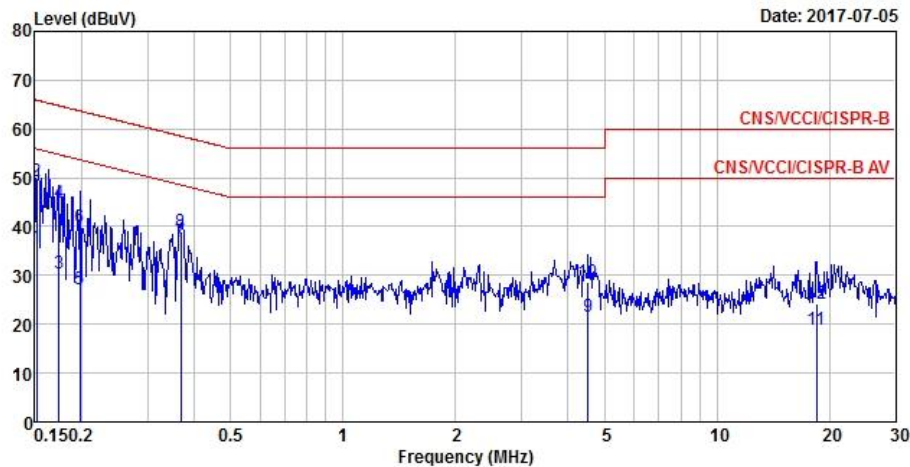
Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	30MHz ~ 1GHz	25/Apr/2017	24/Apr/2018
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	1GHz ~ 18GHz	18/Jun/2017	17/Jun/2018
Amplifier	Agilent	8449B	3008A02096	1GHz ~ 26.5GHz	25/Apr/2017	24/Apr/2018
Spectrum Analyzer	KEYSIGHT	N9010A	MY54200882	10Hz ~ 44GHz	15/Jul/2016	14/Jul/2017
Horn Antenna	SCHWARZBECK	BBHA 9120D	BBHA9120D 1534	1GHz~18GHz	28/Apr/2017	27/Apr/2018
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170614	18GHz ~ 40GHz	06/Feb/2017	05/Feb/2018
Amplifier	EMC INSTRUMENTS	EMC184045B & PE7005-6	980192	18GHz ~ 40GHz	24/Aug/2016	23/Aug/2017
RF Cable-high	Jye Bao	RG142	03CH09-HY	1GHz ~ 40GHz	23/Jul/2016	22/Jul/2017

**Instrument for Conducted Test**

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101013	9kHz~40GHz	30/Dec/2016	29/Dec/ 2017
Power Sensor	Anritsu	MA2411B	0917017	300MHz ~ 40GHz	10/Feb/2017	09/Feb/2018
Power Meter	Anritsu	ML2495A	0949003	300MHz ~ 40GHz	10/Feb/2017	09/Feb/2018
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	21/Jul/2016	20/Jul/2017
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY10710/4	30MHz ~ 26.5GHz	02/Oct/2016	01/Oct/2017
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY10709/4	30MHz ~ 26.5GHz	02/Oct/2016	01/Oct/2017
RF Cable-0.5m	HUBER+SUHNER	SUCOFLEX_104	MY10713/4	30MHz ~ 26.5GHz	02/Oct/2016	01/Oct/2017

## AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Neutral
Operating Function	Normal link		

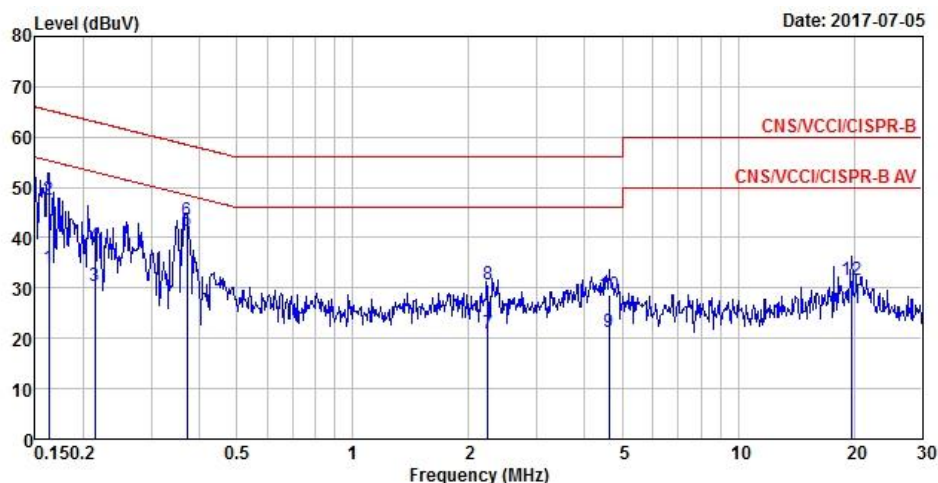


	Freq	Level	Over	Limit	Read	LISN	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.15	35.82	-20.11	55.93	26.00	9.60	0.22	Average
2	0.15	49.44	-16.49	65.93	39.62	9.60	0.22	QP
3	0.17	30.46	-24.31	54.77	20.56	9.64	0.26	Average
4	0.17	44.79	-19.98	64.77	34.89	9.64	0.26	QP
5	0.20	27.18	-26.53	53.71	17.21	9.67	0.30	Average
6	0.20	39.99	-23.72	63.71	30.02	9.67	0.30	QP
7 MAX	0.37	36.77	-11.76	48.53	27.02	9.63	0.12	Average
8	0.37	39.07	-19.46	58.53	29.32	9.63	0.12	QP
9	4.53	21.48	-24.52	46.00	11.66	9.71	0.11	Average
10	4.53	28.65	-27.35	56.00	18.83	9.71	0.11	QP
11	18.43	18.84	-31.16	50.00	8.77	9.87	0.20	Average
12	18.43	24.11	-35.89	60.00	14.04	9.87	0.20	QP

Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.  
 Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)

## AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Line
Operating Function	Normal link		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.16	33.92	-21.42	55.34	24.02	9.66	0.24	Average
2	0.16	47.67	-17.67	65.34	37.77	9.66	0.24	QP
3	0.21	30.33	-22.70	53.03	20.40	9.65	0.28	Average
4	0.21	38.51	-24.52	63.03	28.58	9.65	0.28	QP
5 MAX	0.37	41.36	-7.10	48.46	31.56	9.68	0.12	Average
6	0.37	43.32	-15.14	58.46	33.52	9.68	0.12	QP
7	2.24	21.02	-24.98	46.00	10.96	9.79	0.27	Average
8	2.24	30.68	-25.32	56.00	20.62	9.79	0.27	QP
9	4.63	21.38	-24.62	46.00	11.49	9.77	0.12	Average
10	4.63	28.75	-27.25	56.00	18.86	9.77	0.12	QP
11	19.71	26.10	-23.90	50.00	16.00	9.90	0.20	Average
12	19.71	31.59	-28.41	60.00	21.49	9.90	0.20	QP

Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.  
 Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)

**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
802.11b_(1Mbps)_1TX	-	-	-	-	-
2.4-2.4835GHz	10.125M	15.242M	15M2G1D	10.1M	15.017M
802.11g_(6Mbps)_1TX	-	-	-	-	-
2.4-2.4835GHz	16.5M	20.665M	20M7D1D	16.4M	16.517M
802.11ac VHT20_Nss1,(MCS0)_3TX	-	-	-	-	-
2.4-2.4835GHz	17.775M	19.315M	19M3D1D	17.6M	17.666M
802.11ac VHT40_Nss1,(MCS0)_3TX	-	-	-	-	-
2.4-2.4835GHz	36.45M	36.482M	36M5D1D	36.35M	36.082M

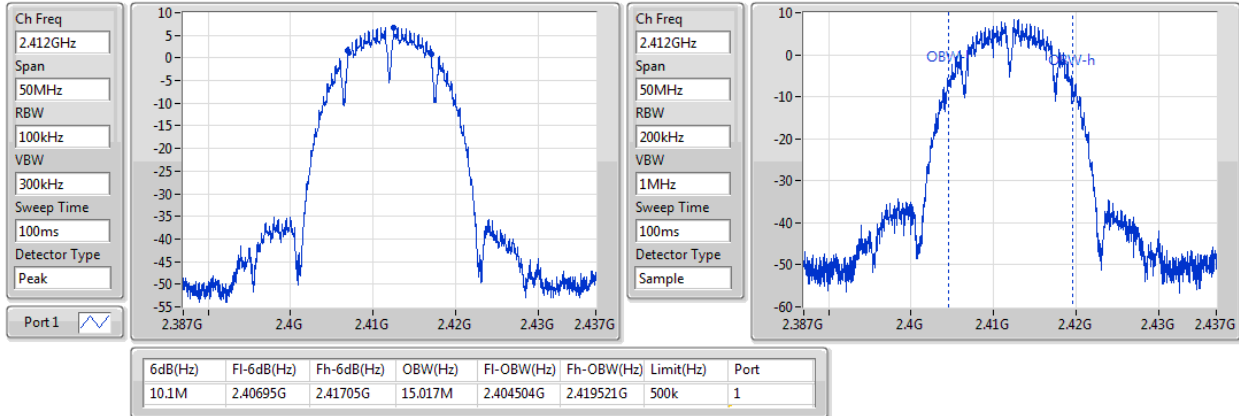
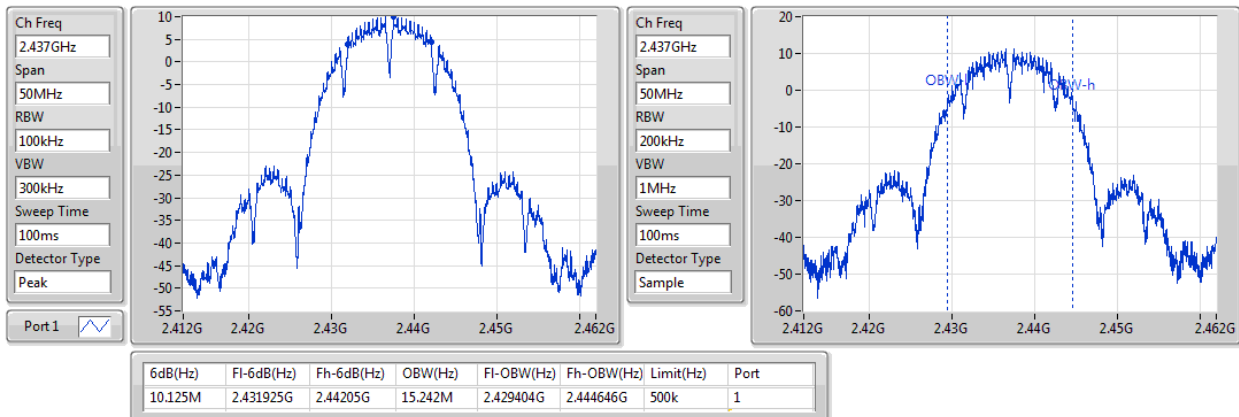
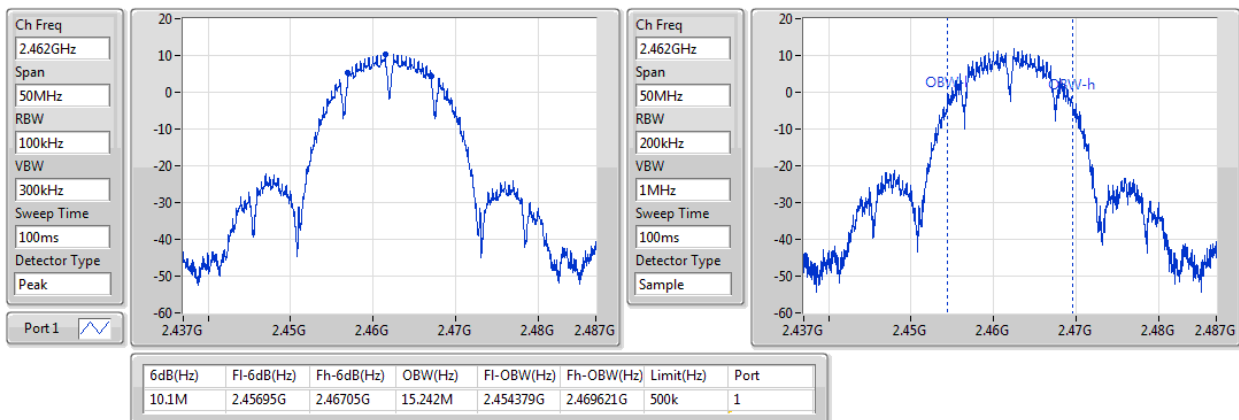
**Max-N dB** = Maximum 6dB down bandwidth; **Max-OBW** = Maximum 99% occupied bandwidth;

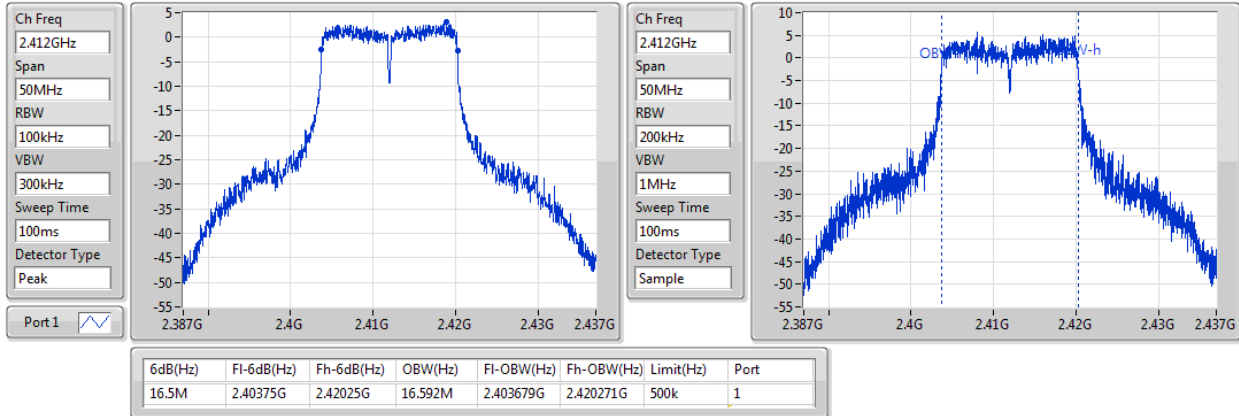
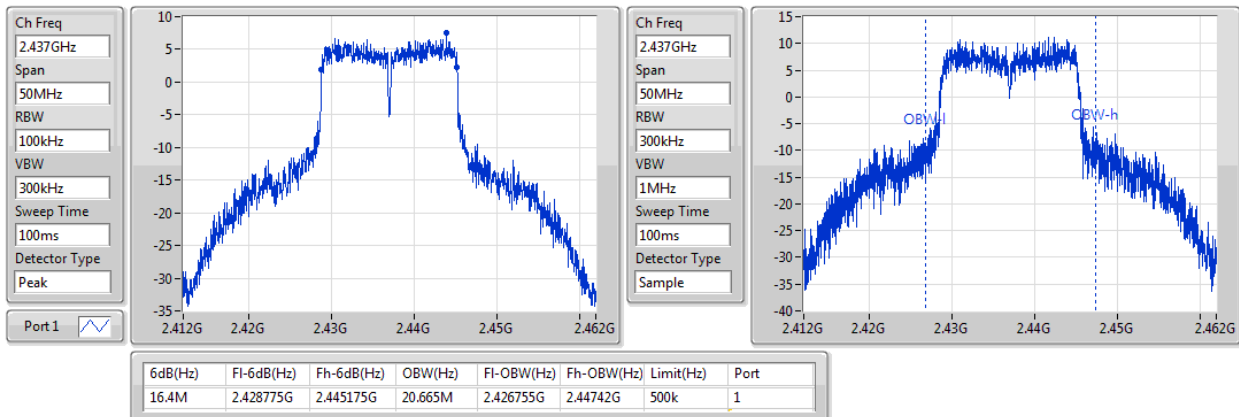
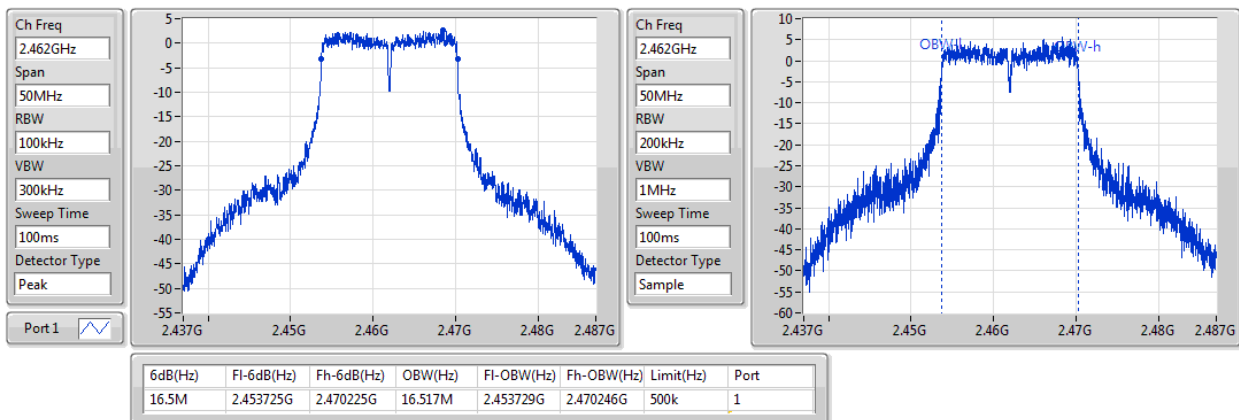
**Min-N dB** = Minimum 6dB down bandwidth; **Min-OBW** = Minimum 99% occupied bandwidth;

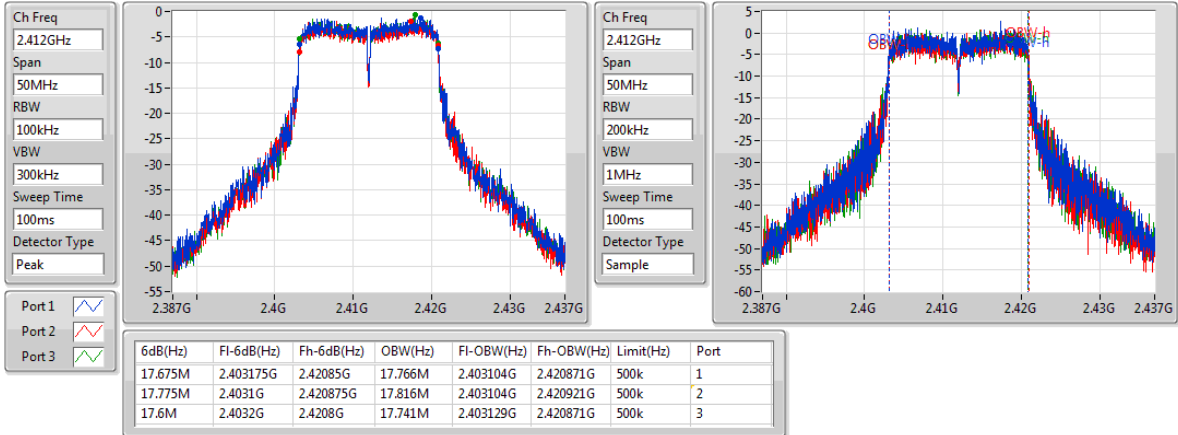
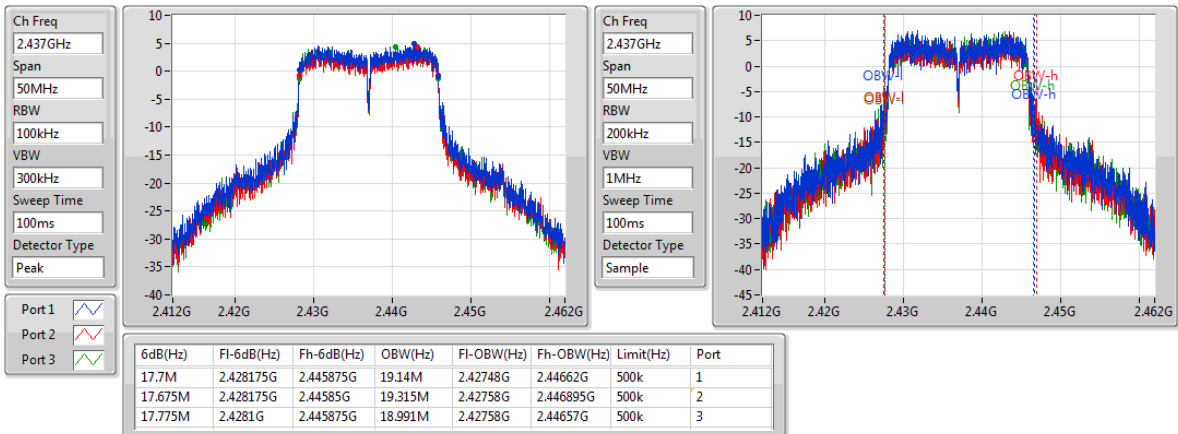
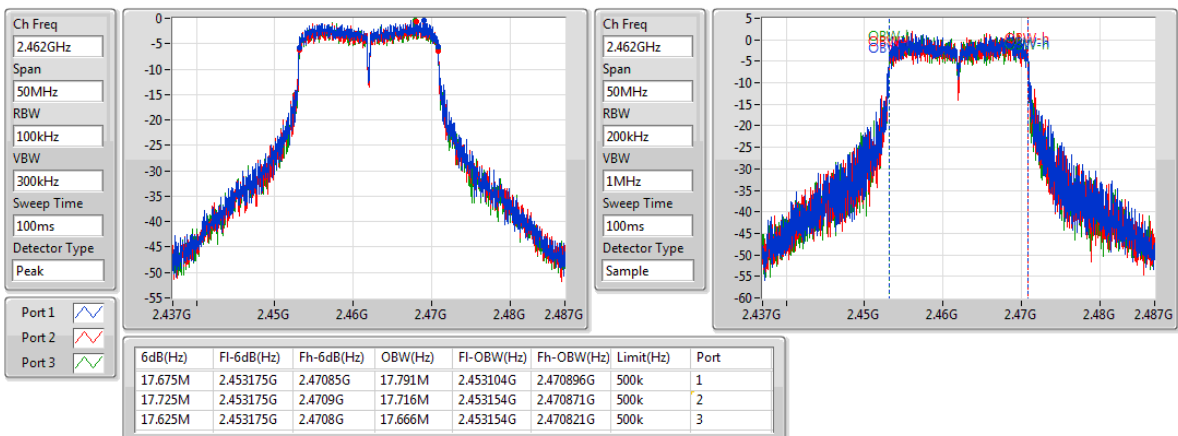
**Result**

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)
802.11b_(1Mbps)_1TX	-	-	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	500k	10.1M	15.017M				
2437MHz_TnomVnom	Pass	500k	10.125M	15.242M				
2462MHz_TnomVnom	Pass	500k	10.1M	15.242M				
802.11g_(6Mbps)_1TX	-	-	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	500k	16.5M	16.592M				
2437MHz_TnomVnom	Pass	500k	16.4M	20.665M				
2462MHz_TnomVnom	Pass	500k	16.5M	16.517M				
802.11ac VHT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	500k	17.675M	17.766M	17.775M	17.816M	17.6M	17.741M
2437MHz_TnomVnom	Pass	500k	17.7M	19.14M	17.675M	19.315M	17.775M	18.991M
2462MHz_TnomVnom	Pass	500k	17.675M	17.791M	17.725M	17.716M	17.625M	17.666M
802.11ac VHT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
2422MHz_TnomVnom	Pass	500k	36.35M	36.082M	36.4M	36.132M	36.35M	36.182M
2437MHz_TnomVnom	Pass	500k	36.35M	36.332M	36.45M	36.482M	36.35M	36.332M
2452MHz_TnomVnom	Pass	500k	36.35M	36.232M	36.45M	36.132M	36.45M	36.132M

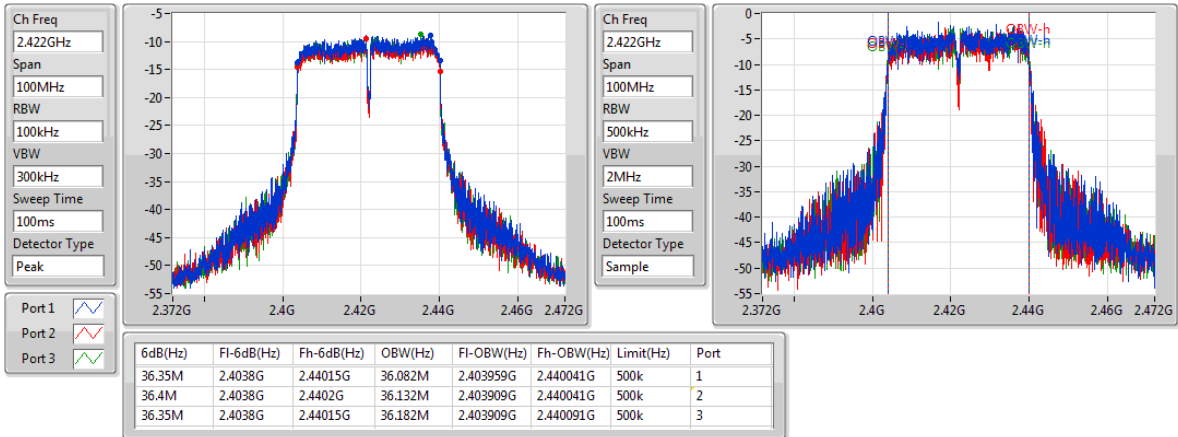
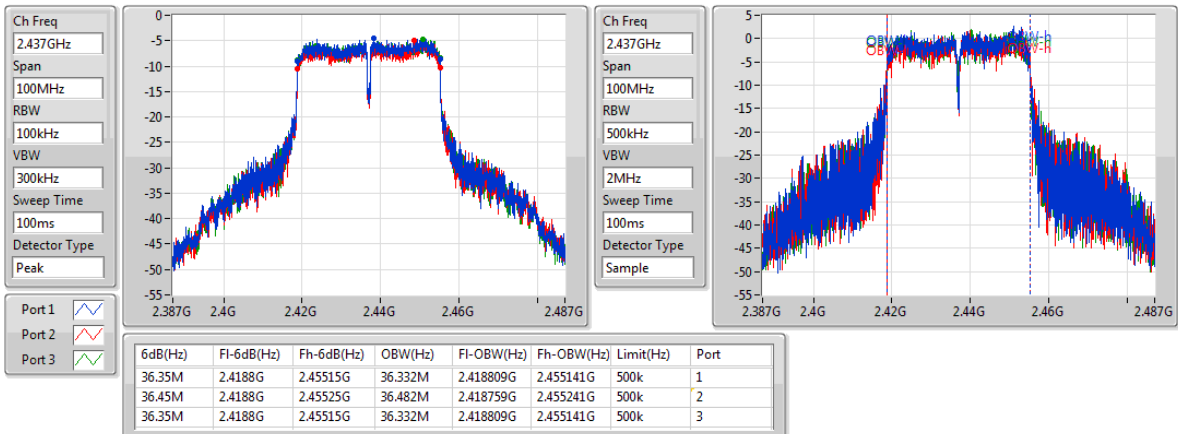
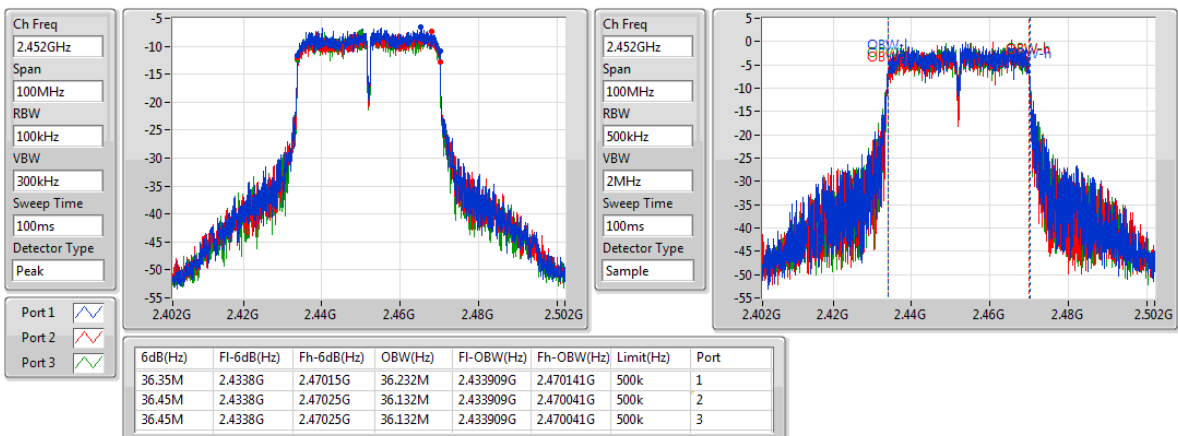
**Port X-N dB** = Port X 6dB down bandwidth; **Port X-OBW** = Port X 99% occupied bandwidth;

**802.11b\_(1Mbps)\_1TX**
**EBW**
**2412MHz**

**802.11b\_(1Mbps)\_1TX**
**EBW**
**2437MHz**

**802.11b\_(1Mbps)\_1TX**
**EBW**
**2462MHz**


**802.11g\_(6Mbps)\_1TX**
**EBW**
**2412MHz**

**802.11g\_(6Mbps)\_1TX**
**EBW**
**2437MHz**

**802.11g\_(6Mbps)\_1TX**
**EBW**
**2462MHz**


**802.11ac VHT20\_Nss1,(MCS0)\_3TX**
**EBW**
**2412MHz**

**802.11ac VHT20\_Nss1,(MCS0)\_3TX**
**EBW**
**2437MHz**

**802.11ac VHT20\_Nss1,(MCS0)\_3TX**
**EBW**
**2462MHz**




**802.11ac VHT40\_Nss1,(MCS0)\_3TX**
**EBW**
**2422MHz**

**802.11ac VHT40\_Nss1,(MCS0)\_3TX**
**EBW**
**2437MHz**

**802.11ac VHT40\_Nss1,(MCS0)\_3TX**
**EBW**
**2452MHz**


**Summary**

Mode	Total Power (dBm)	Total Power (W)
802.11b_(1Mbps)_1TX	-	-
2.4-2.4835GHz	20.97	0.12503
802.11g_(6Mbps)_1TX	-	-
2.4-2.4835GHz	20.75	0.11885
802.11ac VHT20_Nss1,(MCS0)_3TX	-	-
2.4-2.4835GHz	23.02	0.20045
802.11ac VHT40_Nss1,(MCS0)_3TX	-	-
2.4-2.4835GHz	17.27	0.05333

**Result**

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_(1Mbps)_1TX	-	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	2.90	17.39			17.39	30.00
2437MHz_TnomVnom	Pass	2.90	20.55			20.55	30.00
2462MHz_TnomVnom	Pass	2.90	20.97			20.97	30.00
802.11g_(6Mbps)_1TX	-	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	2.90	17.05			17.05	30.00
2437MHz_TnomVnom	Pass	2.90	20.75			20.75	30.00
2462MHz_TnomVnom	Pass	2.90	16.92			16.92	30.00
802.11ac VHT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	3.50	12.98	12.34	12.79	17.49	30.00
2437MHz_TnomVnom	Pass	3.50	18.54	17.82	18.36	23.02	30.00
2462MHz_TnomVnom	Pass	3.50	13.56	13.26	13.32	18.15	30.00
802.11ac VHT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2422MHz_TnomVnom	Pass	3.50	8.35	7.74	8.13	12.85	30.00
2437MHz_TnomVnom	Pass	3.50	12.74	12.17	12.58	17.27	30.00
2452MHz_TnomVnom	Pass	3.50	10.46	10.10	10.21	15.03	30.00

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

**Summary**

Mode	PD (dBm/RBW)
802.11b_(1Mbps)_1TX	-
2.4-2.4835GHz	-9.79
802.11g_(6Mbps)_1TX	-
2.4-2.4835GHz	-7.93
802.11ac VHT20_Nss1,(MCS0)_3TX	-
2.4-2.4835GHz	-4.49
802.11ac VHT40_Nss1,(MCS0)_3TX	-
2.4-2.4835GHz	-11.05

RBW=3kHz.

**Result**

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_(1Mbps)_1TX	-	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	2.90	-13.32			-13.32	8.00
2437MHz_TnomVnom	Pass	2.90	-10.10			-10.10	8.00
2462MHz_TnomVnom	Pass	2.90	-9.79			-9.79	8.00
802.11g_(6Mbps)_1TX	-	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	2.90	-11.56			-11.56	8.00
2437MHz_TnomVnom	Pass	2.90	-7.93			-7.93	8.00
2462MHz_TnomVnom	Pass	2.90	-11.81			-11.81	8.00
802.11ac VHT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	7.62	-12.78	-11.67	-13.13	-9.35	6.38
2437MHz_TnomVnom	Pass	7.62	-7.66	-7.69	-8.29	-4.49	6.38
2462MHz_TnomVnom	Pass	7.62	-11.98	-11.51	-12.22	-8.03	6.38
802.11ac VHT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2422MHz_TnomVnom	Pass	7.62	-19.35	-20.58	-20.51	-17.13	6.38
2437MHz_TnomVnom	Pass	7.62	-14.45	-15.46	-15.16	-11.05	6.38
2452MHz_TnomVnom	Pass	7.62	-17.36	-18.31	-17.29	-14.45	6.38

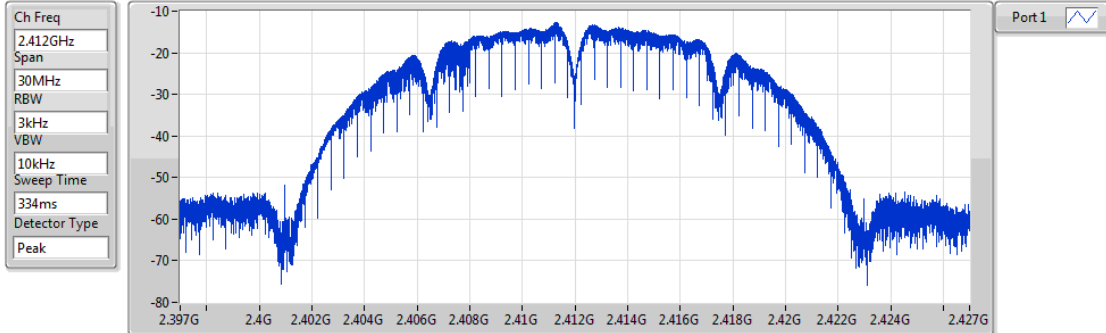
**DG** = Directional Gain; RBW=3kHz;

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

### 802.11b\_(1Mbps)\_1TX

PSD

2412MHz

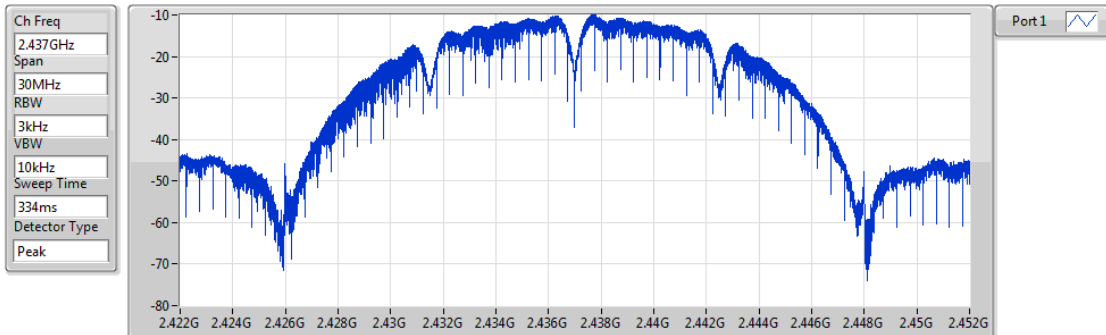


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-13.32	-13.32	-13.32

### 802.11b\_(1Mbps)\_1TX

PSD

2437MHz

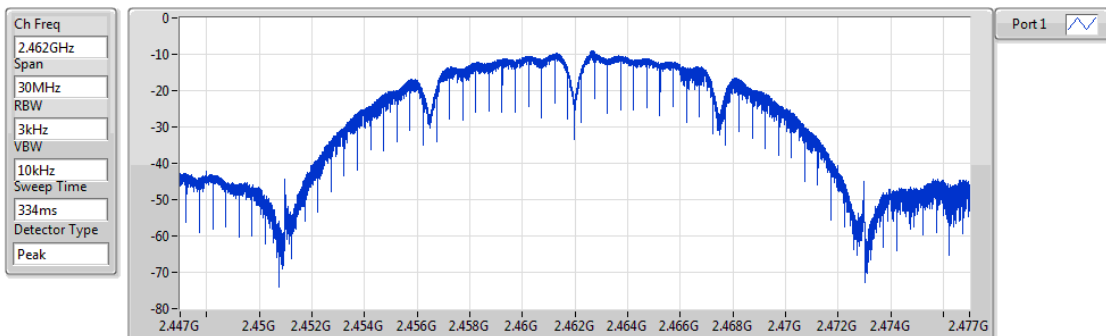


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-10.10	-10.10	-10.10

### 802.11b\_(1Mbps)\_1TX

PSD

2462MHz

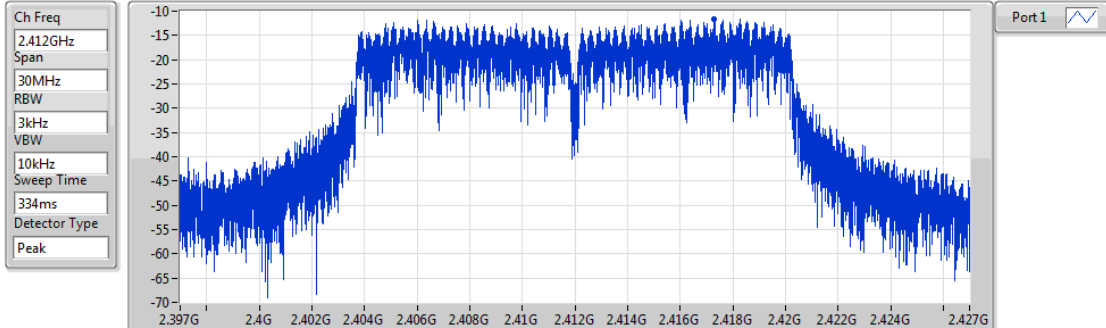


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-9.79	-9.79	-9.79

### 802.11g\_(6Mbps)\_1TX

PSD

2412MHz

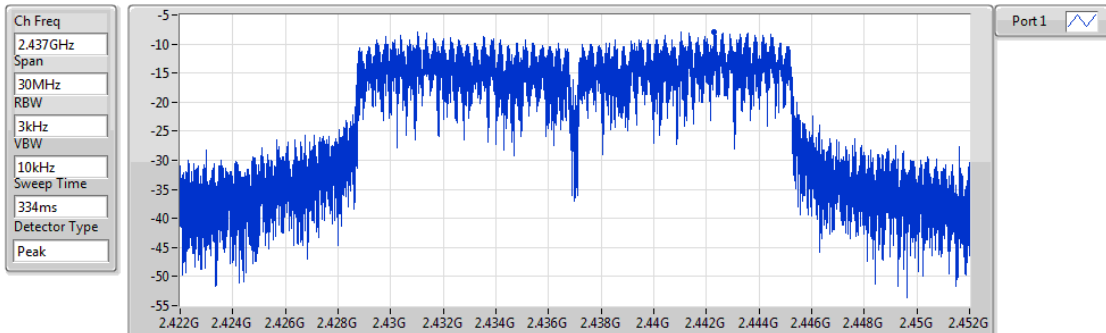


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-11.56	-11.56	-11.56

### 802.11g\_(6Mbps)\_1TX

PSD

2437MHz

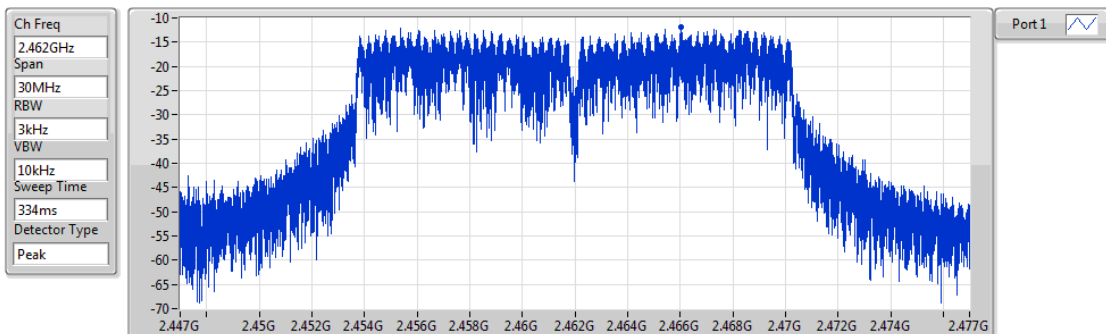


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.93	-7.93	-7.93

### 802.11g\_(6Mbps)\_1TX

PSD

2462MHz

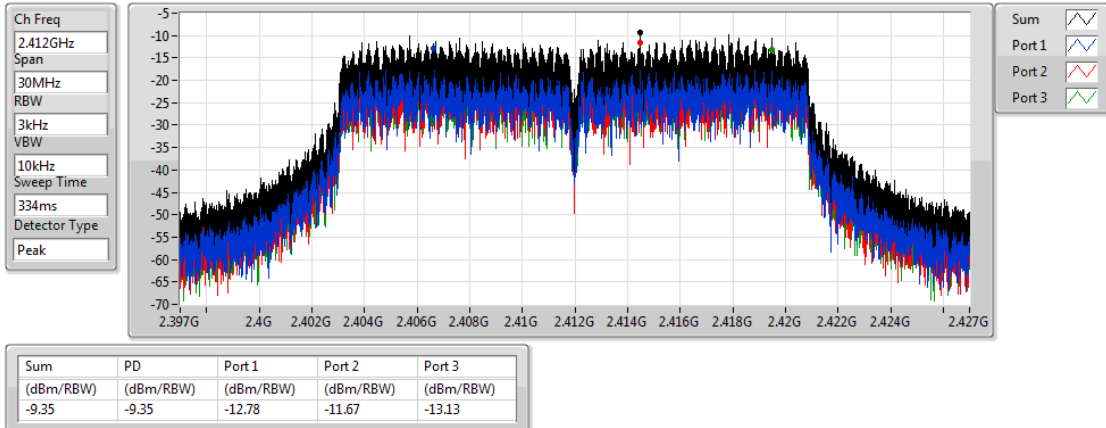


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-11.81	-11.81	-11.81

### 802.11ac VHT20\_Nss1,(MCS0)\_3TX

PSD

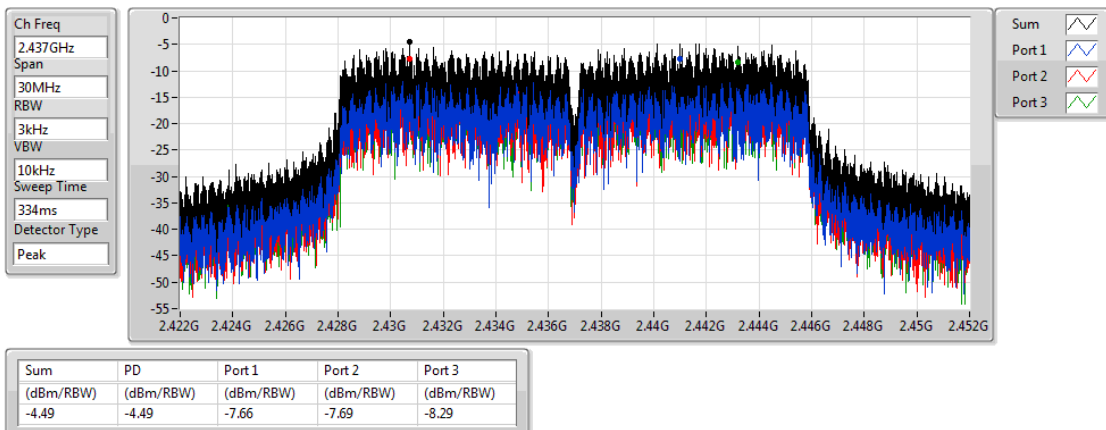
2412MHz



### 802.11ac VHT20\_Nss1,(MCS0)\_3TX

PSD

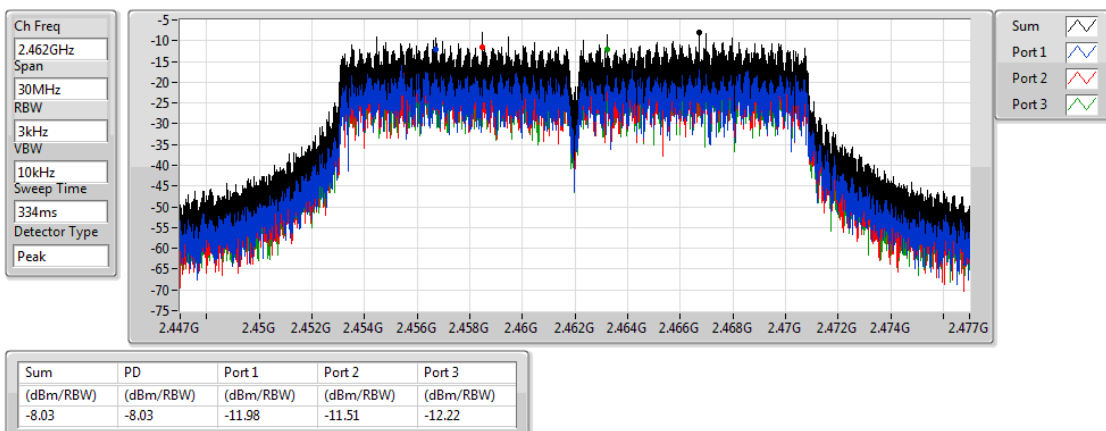
2437MHz



### 802.11ac VHT20\_Nss1,(MCS0)\_3TX

PSD

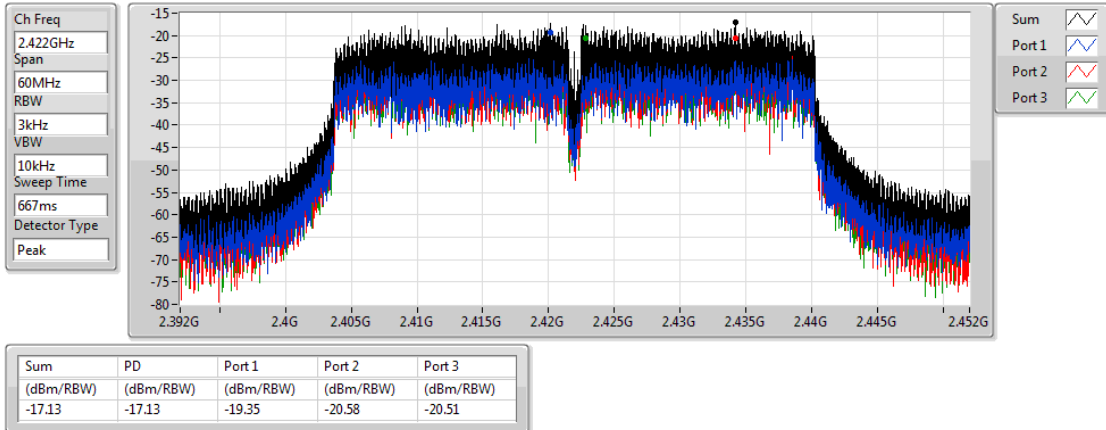
2462MHz



### 802.11ac VHT40\_Nss1,(MCS0)\_3TX

PSD

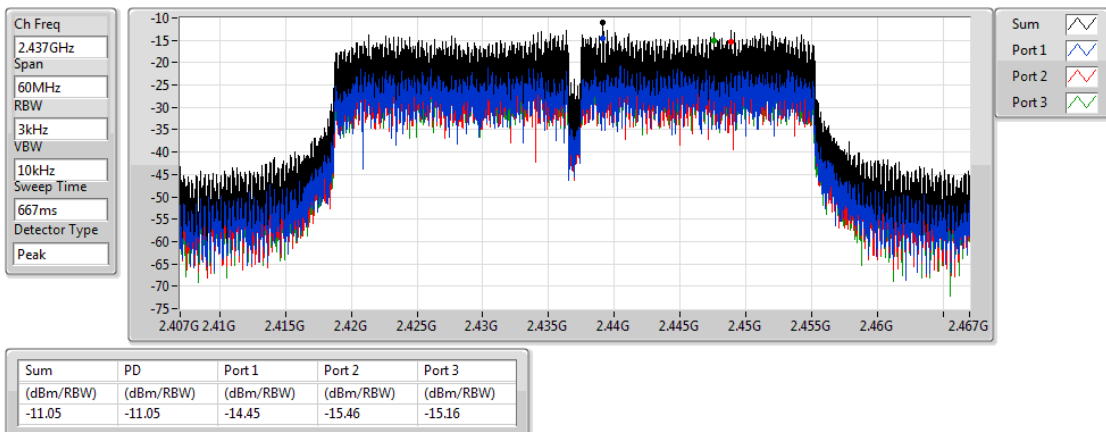
2422MHz



### 802.11ac VHT40\_Nss1,(MCS0)\_3TX

PSD

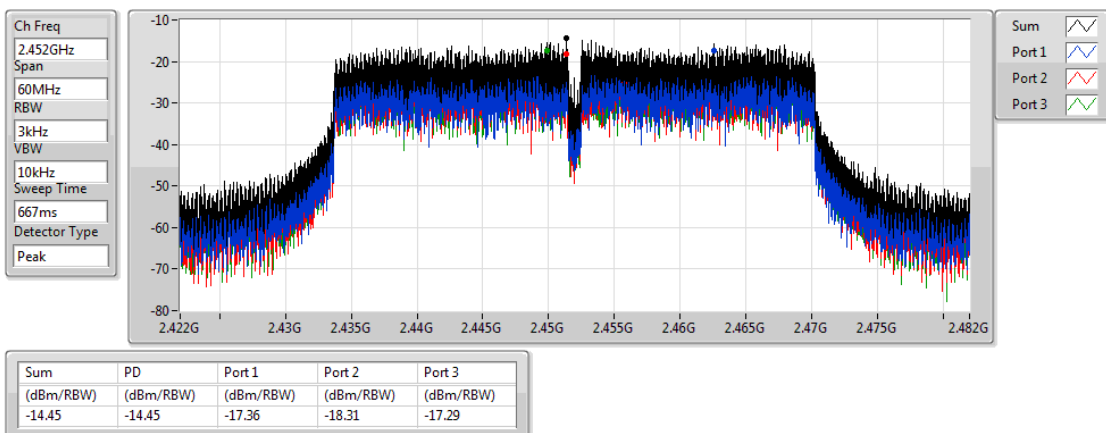
2437MHz



### 802.11ac VHT40\_Nss1,(MCS0)\_3TX

PSD

2452MHz



### Summary

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11ac VHT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	2.442585G	4.22	-25.78	2.191075G	-54.08	2.39976G	-26.31	2.52086G	-53.29	6.819321G	-48.42	1

### Result

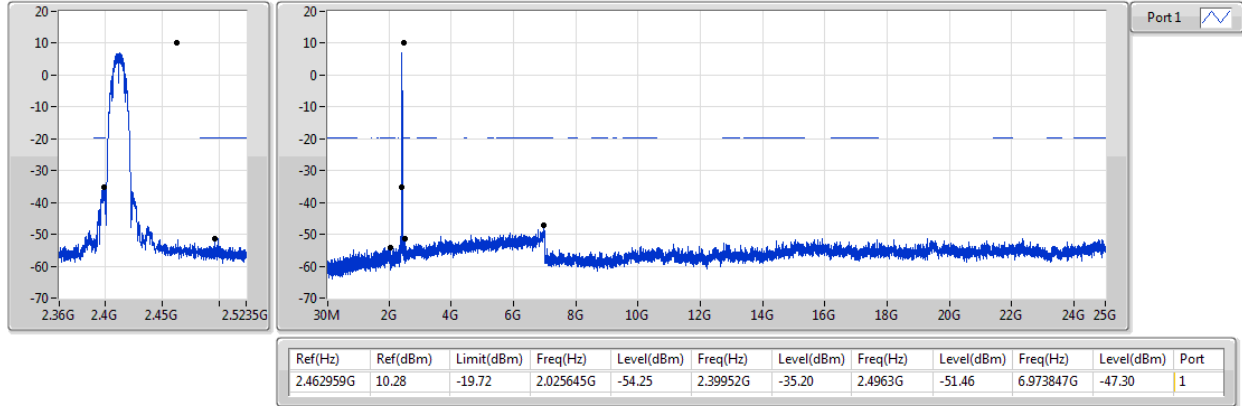
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11b_(1Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	2.462959G	10.28	-19.72	2.025645G	-54.25	2.39952G	-35.20	2.4963G	-51.46	6.973847G	-47.30	1
2437MHz_TnomVnom	Pass	2.462959G	10.28	-19.72	1.89633G	-54.23	2.39928G	-50.66	2.48566G	-52.00	6.976657G	-47.17	1
2462MHz_TnomVnom	Pass	2.462959G	10.28	-19.72	1.99186G	-54.29	2.39992G	-54.40	2.48798G	-40.25	6.774368G	-48.25	1
802.11g_(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	2.44008G	6.43	-23.57	1.83109G	-53.56	2.39992G	-24.64	2.49806G	-53.33	6.996324G	-47.68	1
2437MHz_TnomVnom	Pass	2.44008G	6.43	-23.57	1.860215G	-53.33	2.3992G	-43.65	2.48534G	-45.88	6.95699G	-46.99	1
2462MHz_TnomVnom	Pass	2.44008G	6.43	-23.57	1.713425G	-53.83	2.39712G	-54.42	2.4839G	-40.03	6.973847G	-48.30	1
802.11ac VHT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz_TnomVnom	Pass	2.442585G	4.22	-25.78	2.191075G	-54.08	2.39976G	-26.31	2.52086G	-53.29	6.819321G	-48.42	1
2412MHz_TnomVnom	Pass	2.442585G	4.22	-25.78	2.081565G	-59.25	2.39976G	-27.06	2.49206G	-57.66	6.347315G	-54.14	2
2412MHz_TnomVnom	Pass	2.442585G	4.22	-25.78	1.962735G	-59.11	2.39976G	-27.93	2.50006G	-56.99	6.996324G	-53.31	3
2437MHz_TnomVnom	Pass	2.442585G	4.22	-25.78	1.9639G	-53.79	2.39984G	-44.67	2.48422G	-45.13	6.850226G	-47.58	1
2437MHz_TnomVnom	Pass	2.442585G	4.22	-25.78	2.309905G	-60.05	2.3964G	-45.49	2.48462G	-47.08	6.973847G	-53.97	2
2437MHz_TnomVnom	Pass	2.442585G	4.22	-25.78	1.99186G	-58.34	2.39984G	-45.04	2.48374G	-47.83	6.799654G	-53.69	3
2462MHz_TnomVnom	Pass	2.442585G	4.22	-25.78	1.818275G	-53.94	2.39984G	-54.63	2.48366G	-41.97	6.968228G	-48.29	1
2462MHz_TnomVnom	Pass	2.442585G	4.22	-25.78	1.96856G	-58.69	2.39344G	-58.88	2.48366G	-43.92	16.284737G	-53.16	2
2462MHz_TnomVnom	Pass	2.442585G	4.22	-25.78	1.94293G	-59.67	2.39992G	-58.21	2.48358G	-44.24	6.973847G	-53.40	3
802.11ac VHT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz_TnomVnom	Pass	2.450768G	-3.99	-33.99	1.737195G	-53.22	2.39824G	-34.91	2.51422G	-52.71	6.92179G	-47.84	1
2422MHz_TnomVnom	Pass	2.450768G	-3.99	-33.99	1.984515G	-59.96	2.39984G	-36.46	2.4939G	-56.88	15.136354G	-53.69	2
2422MHz_TnomVnom	Pass	2.450768G	-3.99	-33.99	1.98337G	-59.67	2.39968G	-35.80	2.49998G	-57.57	24.652234G	-53.96	3
2437MHz_TnomVnom	Pass	2.450768G	-3.99	-33.99	1.817345G	-54.00	2.39952G	-35.82	2.48478G	-41.70	6.994709G	-47.55	1
2437MHz_TnomVnom	Pass	2.450768G	-3.99	-33.99	1.90551G	-59.19	2.39888G	-35.71	2.48382G	-43.64	6.961054G	-53.37	2
2437MHz_TnomVnom	Pass	2.450768G	-3.99	-33.99	2.0223G	-60.02	2.39728G	-35.93	2.48606G	-44.86	6.983491G	-54.06	3
2452MHz_TnomVnom	Pass	2.450768G	-3.99	-33.99	1.80704G	-52.80	2.39664G	-53.24	2.48398G	-36.35	6.980686G	-48.21	1
2452MHz_TnomVnom	Pass	2.450768G	-3.99	-33.99	2.19176G	-59.83	2.39824G	-55.44	2.48622G	-37.14	6.969468G	-54.07	2
2452MHz_TnomVnom	Pass	2.450768G	-3.99	-33.99	1.819635G	-59.66	2.39664G	-56.61	2.48478G	-38.77	6.991904G	-53.16	3



## 802.11b\_(1Mbps)\_1TX

CSE NdB

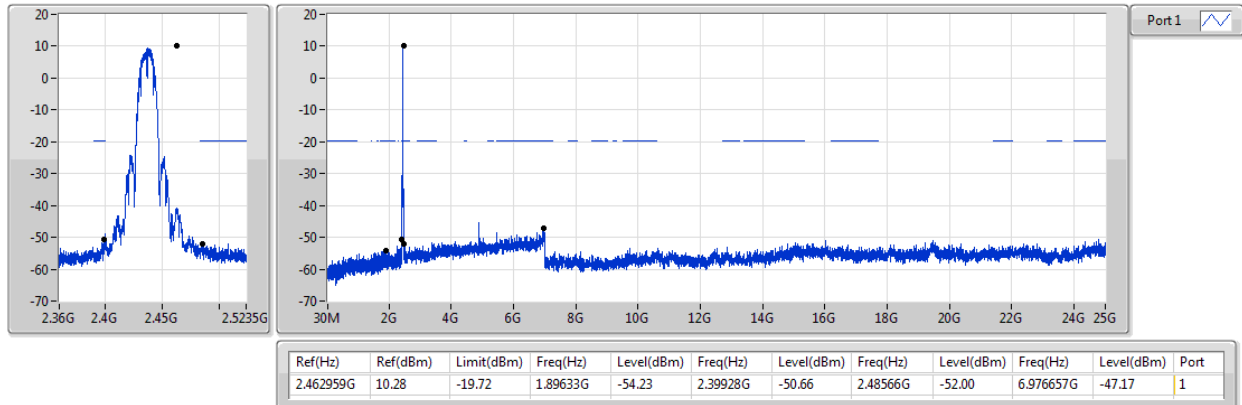
2412MHz



## 802.11b\_(1Mbps)\_1TX

CSE NdB

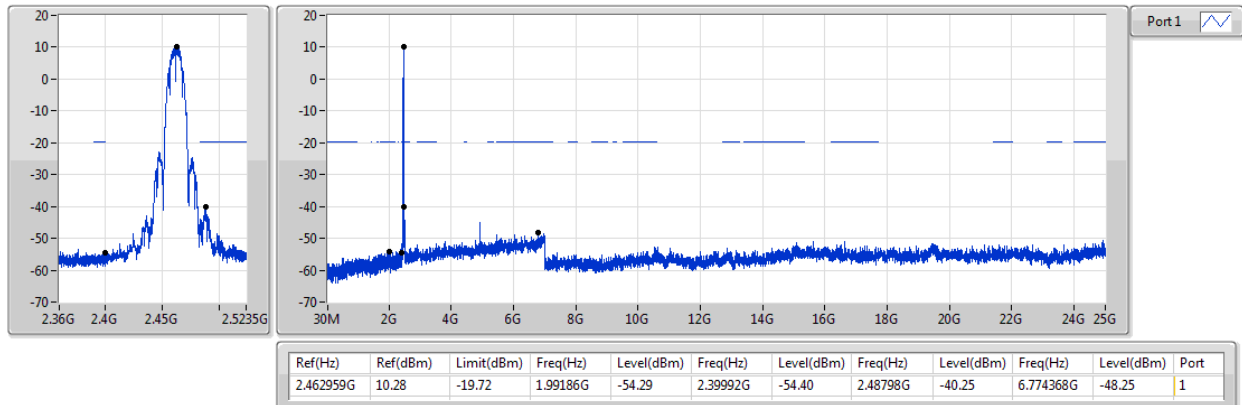
2437MHz



## 802.11b\_(1Mbps)\_1TX

CSE NdB

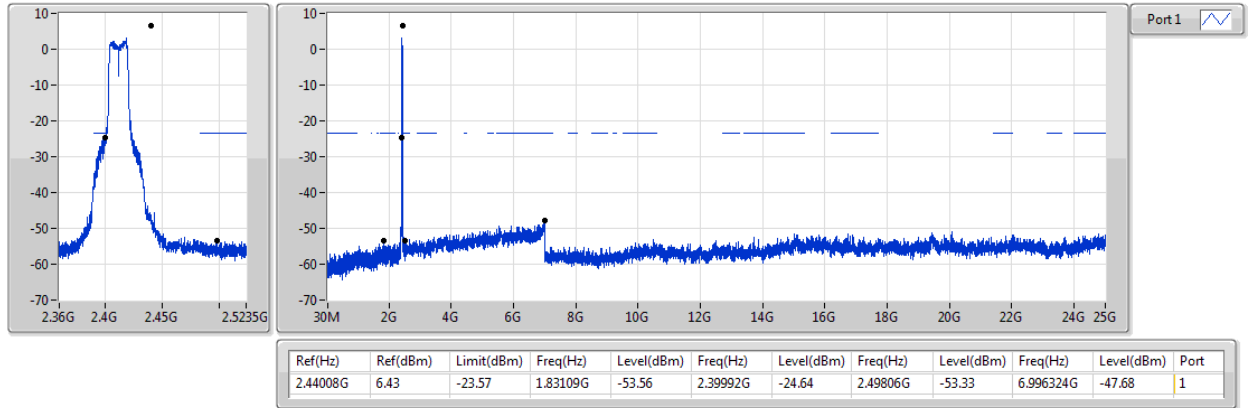
2462MHz



## 802.11g\_(6Mbps)\_1TX

CSE NdB

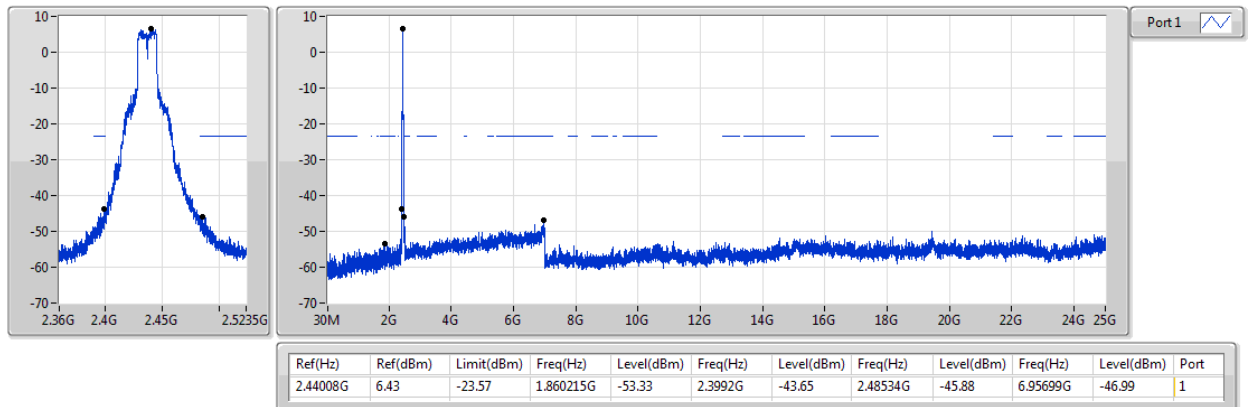
2412MHz



## 802.11g\_(6Mbps)\_1TX

CSE NdB

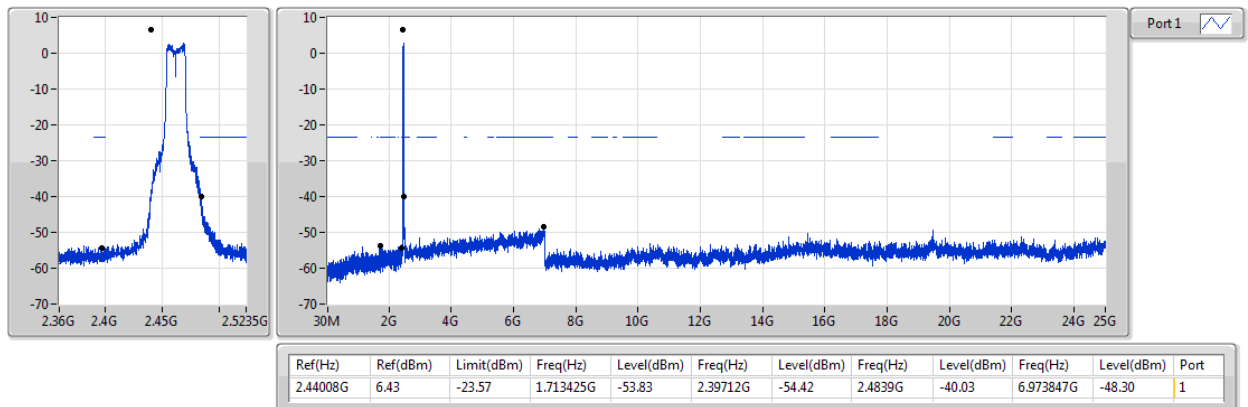
2437MHz



## 802.11g\_(6Mbps)\_1TX

CSE NdB

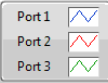
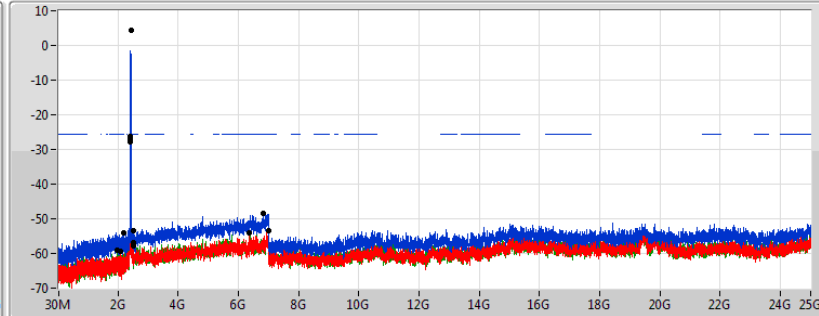
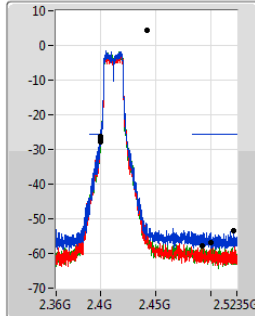
2462MHz



## 802.11ac VHT20\_Nss1,(MCS0)\_3TX

CSE NdB

2412MHz

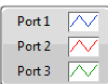
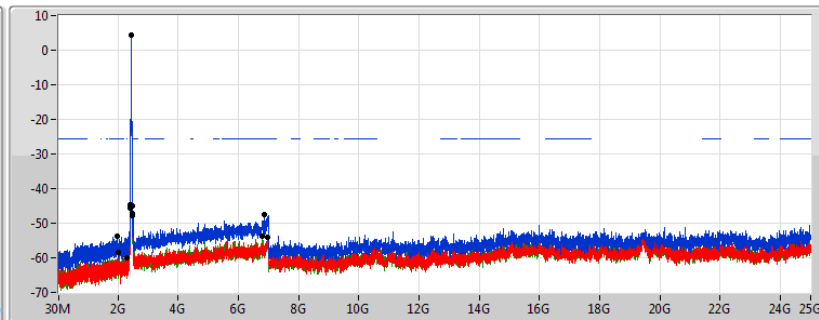
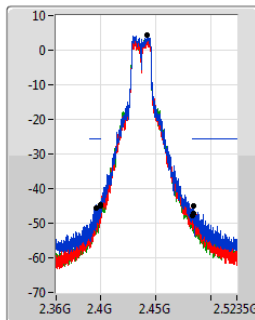


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.442585G	4.22	-25.78	2.191075G	-54.08	2.39976G	-26.31	2.52086G	-53.29	6.819321G	-48.42	1
2.442585G	4.22	-25.78	2.081565G	-59.25	2.39976G	-27.06	2.49206G	-57.66	6.347315G	-54.14	2
2.442585G	4.22	-25.78	1.962735G	-59.11	2.39976G	-27.93	2.50006G	-56.99	6.996324G	-53.31	3

## 802.11ac VHT20\_Nss1,(MCS0)\_3TX

CSE NdB

2437MHz

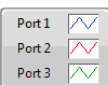
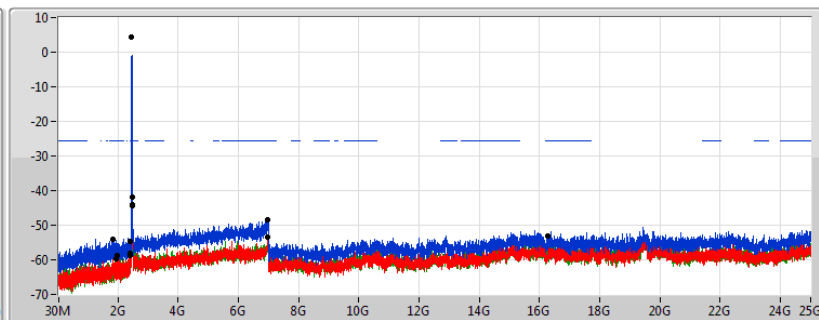
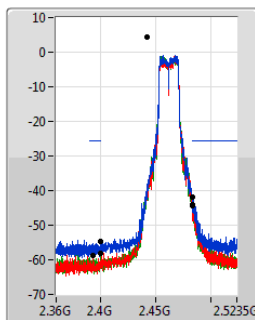


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.442585G	4.22	-25.78	1.9639G	-53.79	2.39984G	-44.67	2.48422G	-45.13	6.850226G	-47.58	1
2.442585G	4.22	-25.78	2.309905G	-60.05	2.3964G	-45.49	2.48462G	-47.08	6.973847G	-53.97	2
2.442585G	4.22	-25.78	1.99186G	-58.34	2.39984G	-45.04	2.48374G	-47.83	6.799654G	-53.69	3

## 802.11ac VHT20\_Nss1,(MCS0)\_3TX

CSE NdB

2462MHz

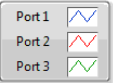
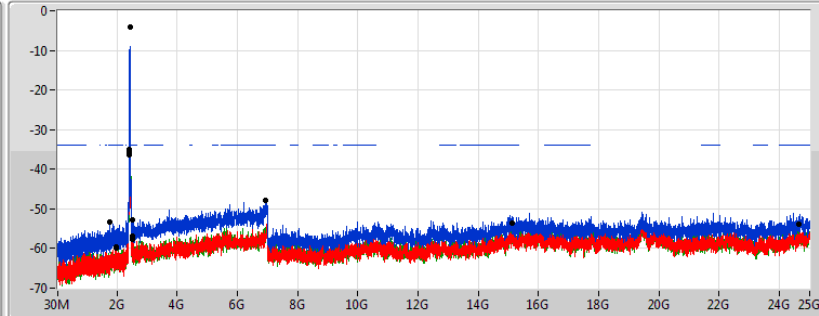
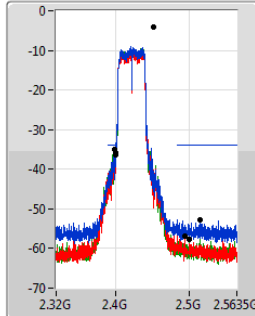


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.442585G	4.22	-25.78	1.818275G	-53.94	2.39984G	-54.63	2.48366G	-41.97	6.968228G	-48.29	1
2.442585G	4.22	-25.78	1.96856G	-58.69	2.39344G	-58.88	2.48366G	-43.92	16.284737G	-53.16	2
2.442585G	4.22	-25.78	1.94293G	-59.67	2.39992G	-58.21	2.48358G	-44.24	6.973847G	-53.40	3

## 802.11ac VHT40\_Nss1,(MCS0)\_3TX

CSE NdB

2422MHz

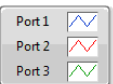
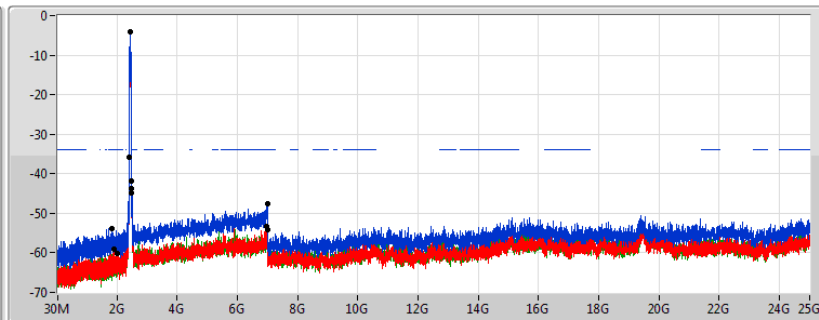
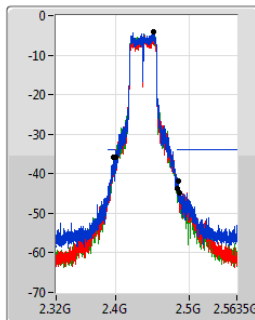


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.450768G	-3.99	-33.99	1.737195G	-53.22	2.39824G	-34.91	2.51422G	-52.71	6.92179G	-47.84	1
2.450768G	-3.99	-33.99	1.984515G	-59.96	2.39984G	-36.46	2.4939G	-56.88	15.136354G	-53.69	2
2.450768G	-3.99	-33.99	1.98337G	-59.67	2.39968G	-35.80	2.49998G	-57.57	24.652234G	-53.96	3

## 802.11ac VHT40\_Nss1,(MCS0)\_3TX

CSE NdB

2437MHz

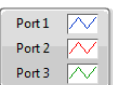
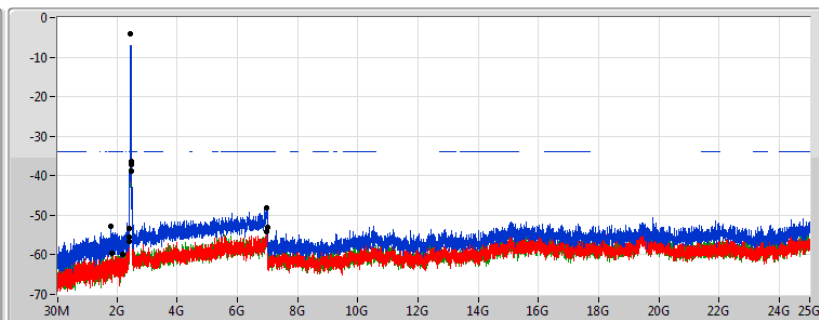
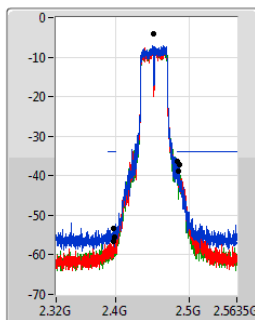


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.450768G	-3.99	-33.99	1.817345G	-54.00	2.39952G	-35.82	2.48478G	-41.70	6.994709G	-47.55	1
2.450768G	-3.99	-33.99	1.90551G	-59.19	2.39888G	-35.71	2.48382G	-43.64	6.961054G	-53.37	2
2.450768G	-3.99	-33.99	2.0223G	-60.02	2.39728G	-35.93	2.48606G	-44.86	6.983491G	-54.06	3

## 802.11ac VHT40\_Nss1,(MCS0)\_3TX

CSE NdB

2452MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.450768G	-3.99	-33.99	1.80704G	-52.80	2.39664G	-53.24	2.48398G	-36.35	6.980686G	-48.21	1
2.450768G	-3.99	-33.99	2.19176G	-59.83	2.39824G	-55.44	2.48622G	-37.14	6.969468G	-54.07	2
2.450768G	-3.99	-33.99	1.819635G	-59.66	2.39664G	-56.61	2.48478G	-38.77	6.991904G	-53.16	3



## RSE below 1GHz Result

## Appendix F.1

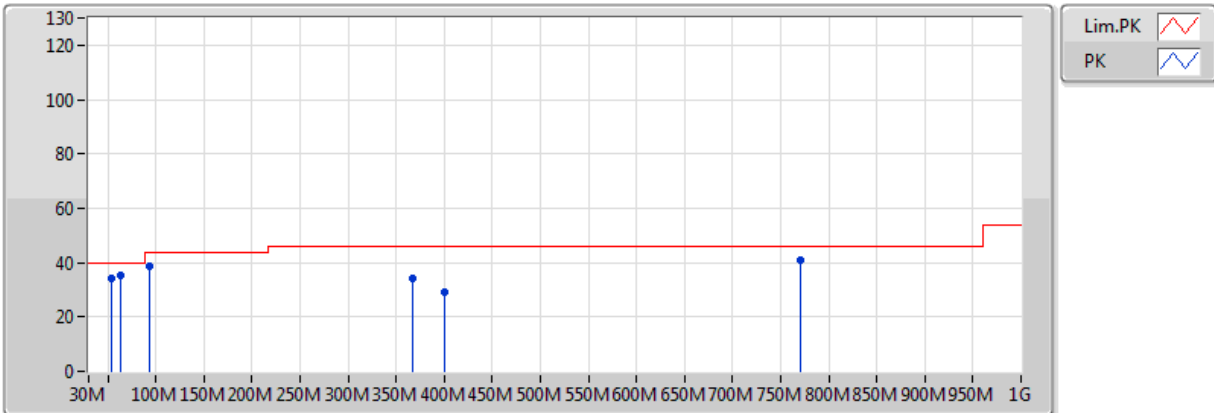
### Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
Mode 1	Pass	PK	94.02M	38.86	43.50	-4.64	-21.08	3	Vertical	0	1.00	-

## Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
Mode 1	Pass	PK	117.3M	28.44	43.50	-15.06	-18.61	3	Horizontal	360	1.00	-
Mode 1	Pass	PK	156.1M	27.68	43.50	-15.82	-18.76	3	Horizontal	360	1.00	-
Mode 1	Pass	PK	289.96M	35.18	46.00	-10.82	-15.65	3	Horizontal	360	1.00	-
Mode 1	Pass	PK	353.98M	35.10	46.00	-10.90	-13.97	3	Horizontal	360	1.00	-
Mode 1	Pass	PK	509.18M	32.71	46.00	-13.29	-10.10	3	Horizontal	360	1.00	-
Mode 1	Pass	PK	769.14M	39.87	46.00	-6.13	-5.91	3	Horizontal	360	1.00	-
Mode 1	Pass	PK	94.02M	38.86	43.50	-4.64	-21.08	3	Vertical	0	1.00	-
Mode 1	Pass	PK	367.56M	33.97	46.00	-12.03	-13.59	3	Vertical	0	1.00	-
Mode 1	Pass	PK	400.54M	29.06	46.00	-16.94	-12.49	3	Vertical	0	1.00	-
Mode 1	Pass	PK	771.08M	40.71	46.00	-5.29	-5.88	3	Vertical	0	1.00	-
Mode 1	Pass	QP	53.28M	34.16	40.00	-5.84	-23.88	3	Vertical	316	1.01	-
Mode 1	Pass	QP	62.98M	35.18	40.00	-4.82	-24.90	3	Vertical	9	2.03	-

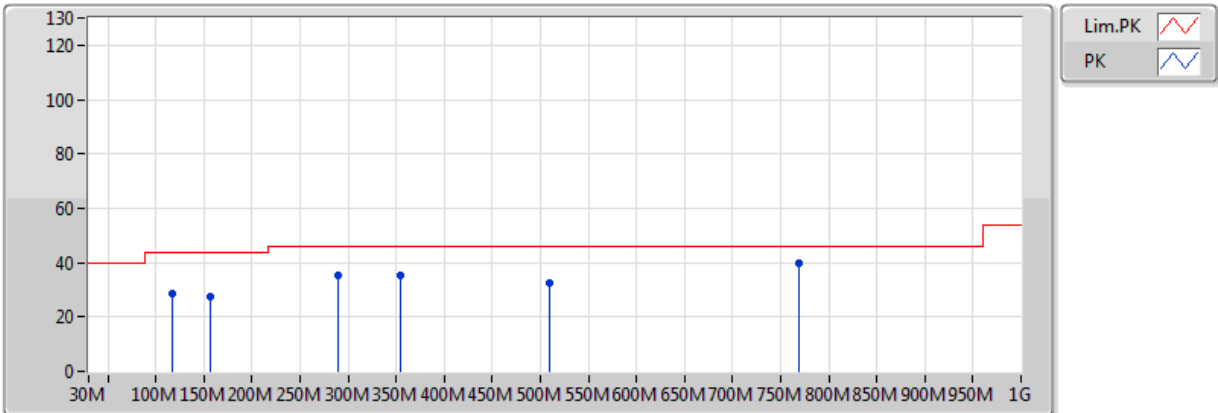
## Radiated-below 1GHz\_Mode 1



EUT : Y Ant : Z

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	94.02M	38.86	43.50	-4.64	-21.08	3	Vertical	0	1.00	-	59.94	14.20	1.56	36.84
PK	367.56M	33.97	46.00	-12.03	-13.59	3	Vertical	0	1.00	-	47.56	19.79	3.18	36.56
PK	400.54M	29.06	46.00	-16.94	-12.49	3	Vertical	0	1.00	-	41.55	20.80	3.32	36.61
PK	771.08M	40.71	46.00	-5.29	-5.88	3	Vertical	0	1.00	-	46.59	26.87	4.69	37.44
QP	53.28M	34.16	40.00	-5.84	-23.88	3	Vertical	316	1.01	-	58.04	12.04	1.20	37.13
QP	62.98M	35.18	40.00	-4.82	-24.90	3	Vertical	9	2.03	-	60.08	10.88	1.28	37.06

## Radiated-below 1GHz\_Mode 1



EUT : Y Ant : Z

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	117.3M	28.44	43.50	-15.06	-18.61	3	Horizontal	360	1.00	-	47.05	16.36	1.76	36.73
PK	156.1M	27.68	43.50	-15.82	-18.76	3	Horizontal	360	1.00	-	46.44	15.74	2.07	36.57
PK	289.96M	35.18	46.00	-10.82	-15.65	3	Horizontal	360	1.00	-	50.83	17.88	2.90	36.43
PK	353.98M	35.10	46.00	-10.90	-13.97	3	Horizontal	360	1.00	-	49.07	19.43	3.13	36.53
PK	509.18M	32.71	46.00	-13.29	-10.10	3	Horizontal	360	1.00	-	42.81	22.89	3.96	36.95
PK	769.14M	39.87	46.00	-6.13	-5.91	3	Horizontal	360	1.00	-	45.78	26.85	4.67	37.44



**Summary**

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11ac VHT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	PK	2.4838G	73.76	74.00	-0.24	2.28	3	Horizontal	119	1.90	-

## Result

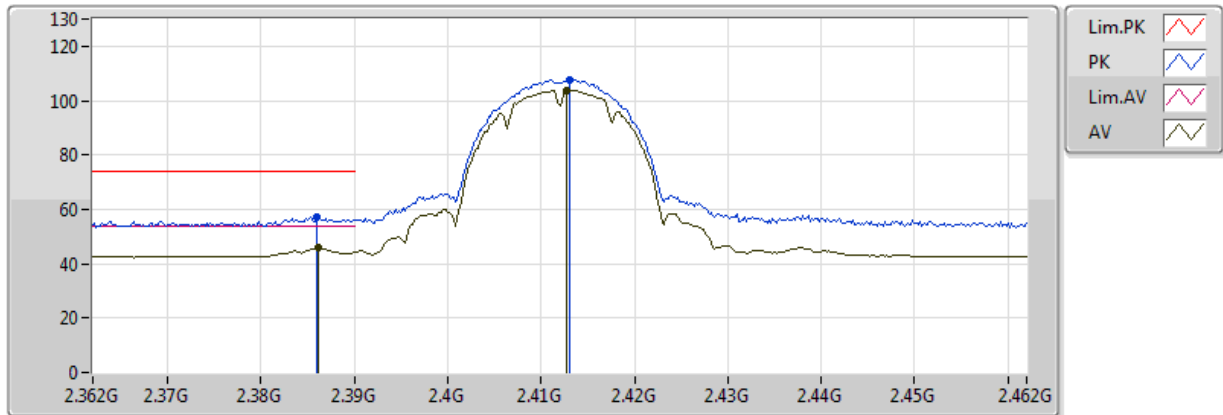
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11b_(1Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.3862G	45.69	54.00	-8.31	2.08	3	Horizontal	267	1.76	-
2412MHz	Pass	AV	2.4128G	103.64	Inf	-Inf	2.14	3	Horizontal	267	1.76	-
2412MHz	Pass	PK	2.386G	57.03	74.00	-16.97	2.08	3	Horizontal	267	1.76	-
2412MHz	Pass	PK	2.413G	107.76	Inf	-Inf	2.14	3	Horizontal	267	1.76	-
2412MHz	Pass	AV	4.824G	45.10	54.00	-8.90	6.73	3	Vertical	61	1.58	-
2412MHz	Pass	AV	4.824G	53.72	54.00	-0.28	6.73	3	Vertical	89	1.02	-
2412MHz	Pass	PK	4.824G	51.95	74.00	-22.05	6.73	3	Vertical	61	1.58	-
2412MHz	Pass	PK	4.824G	57.25	74.00	-16.75	6.73	3	Vertical	89	1.02	-
2437MHz	Pass	AV	2.3894G	42.94	54.00	-11.06	2.09	3	Horizontal	91	1.09	-
2437MHz	Pass	AV	2.4362G	105.55	Inf	-Inf	2.19	3	Horizontal	91	1.09	-
2437MHz	Pass	AV	2.4854G	43.28	54.00	-10.72	2.28	3	Horizontal	91	1.09	-
2437MHz	Pass	PK	2.3654G	55.76	74.00	-18.24	2.03	3	Horizontal	91	1.09	-
2437MHz	Pass	PK	2.4362G	109.44	Inf	-Inf	2.19	3	Horizontal	91	1.09	-
2437MHz	Pass	PK	2.4934G	55.51	74.00	-18.49	2.30	3	Horizontal	91	1.09	-
2437MHz	Pass	AV	4.874G	53.59	54.00	-0.41	6.82	3	Horizontal	41	1.53	-
2437MHz	Pass	PK	4.874G	57.21	74.00	-16.79	6.82	3	Horizontal	41	1.53	-
2437MHz	Pass	AV	4.874G	46.83	54.00	-7.17	6.82	3	Vertical	67	1.44	-
2437MHz	Pass	PK	4.874G	52.79	74.00	-21.21	6.82	3	Vertical	67	1.44	-
2462MHz	Pass	AV	2.4612G	107.16	Inf	-Inf	2.24	3	Horizontal	263	2.61	-
2462MHz	Pass	AV	2.4878G	53.37	54.00	-0.63	2.29	3	Horizontal	263	2.61	-
2462MHz	Pass	PK	2.4612G	110.95	Inf	-Inf	2.24	3	Horizontal	263	2.61	-
2462MHz	Pass	PK	2.491G	61.14	74.00	-12.86	2.29	3	Horizontal	263	2.61	-
2462MHz	Pass	AV	4.924G	49.98	54.00	-4.02	6.92	3	Horizontal	31	1.50	-
2462MHz	Pass	PK	4.924G	55.71	74.00	-18.29	6.92	3	Horizontal	31	1.50	-
2462MHz	Pass	AV	4.924G	43.95	54.00	-10.05	6.92	3	Vertical	68	1.35	-
2462MHz	Pass	PK	4.924G	51.48	74.00	-22.52	6.92	3	Vertical	68	1.35	-
802.11g_(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.39G	53.58	54.00	-0.42	2.09	3	Horizontal	267	1.99	-
2412MHz	Pass	AV	2.4182G	100.30	Inf	-Inf	2.15	3	Horizontal	267	1.99	-
2412MHz	Pass	PK	2.3898G	71.89	74.00	-2.11	2.09	3	Horizontal	267	1.99	-
2412MHz	Pass	PK	2.4176G	109.56	Inf	-Inf	2.15	3	Horizontal	267	1.99	-
2412MHz	Pass	AV	4.824G	40.70	54.00	-13.30	6.73	3	Horizontal	88	1.01	-
2412MHz	Pass	PK	4.824G	53.08	74.00	-20.92	6.73	3	Horizontal	88	1.01	-
2412MHz	Pass	AV	4.824G	36.78	54.00	-17.22	6.73	3	Vertical	71	1.40	-
2412MHz	Pass	PK	4.824G	50.06	74.00	-23.94	6.73	3	Vertical	71	1.40	-
2437MHz	Pass	AV	2.3894G	44.55	54.00	-9.45	2.09	3	Horizontal	90	1.50	-
2437MHz	Pass	AV	2.4318G	102.38	Inf	-Inf	2.18	3	Horizontal	90	1.50	-
2437MHz	Pass	AV	2.483502G	45.58	54.00	-8.42	2.28	3	Horizontal	90	1.50	-
2437MHz	Pass	PK	2.3886G	58.06	74.00	-15.94	2.09	3	Horizontal	90	1.50	-
2437MHz	Pass	PK	2.4298G	111.90	Inf	-Inf	2.18	3	Horizontal	90	1.50	-
2437MHz	Pass	PK	2.485G	61.72	74.00	-12.28	2.28	3	Horizontal	90	1.50	-
2437MHz	Pass	AV	4.874G	40.29	54.00	-13.71	6.82	3	Horizontal	41	1.53	-
2437MHz	Pass	PK	4.874G	53.55	74.00	-20.45	6.82	3	Horizontal	41	1.53	-
2437MHz	Pass	AV	4.874G	37.37	54.00	-16.63	6.82	3	Vertical	71	1.34	-
2437MHz	Pass	PK	4.874G	49.31	74.00	-24.69	6.82	3	Vertical	71	1.34	-
2462MHz	Pass	AV	2.4558G	99.30	Inf	-Inf	2.23	3	Horizontal	263	2.31	-
2462MHz	Pass	AV	2.483502G	53.17	54.00	-0.83	2.28	3	Horizontal	263	2.31	-

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2462MHz	Pass	PK	2.4556G	109.27	Inf	-Inf	2.23	3	Horizontal	263	2.31	-
2462MHz	Pass	PK	2.483502G	68.68	74.00	-5.32	2.28	3	Horizontal	263	2.31	-
2462MHz	Pass	AV	4.924G	36.91	54.00	-17.09	6.92	3	Horizontal	35	1.49	-
2462MHz	Pass	PK	4.924G	49.87	74.00	-24.13	6.92	3	Horizontal	35	1.49	-
2462MHz	Pass	AV	4.924G	36.12	54.00	-17.88	6.92	3	Vertical	67	1.50	-
2462MHz	Pass	PK	4.924G	49.68	74.00	-24.32	6.92	3	Vertical	67	1.50	-
802.11ac VHT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.39G	52.54	54.00	-1.46	2.09	3	Horizontal	96	1.69	-
2412MHz	Pass	AV	2.4186G	101.68	Inf	-Inf	2.16	3	Horizontal	96	1.69	-
2412MHz	Pass	PK	2.39G	70.11	74.00	-3.89	2.09	3	Horizontal	96	1.69	-
2412MHz	Pass	PK	2.4182G	111.58	Inf	-Inf	2.15	3	Horizontal	96	1.69	-
2412MHz	Pass	AV	4.824G	39.72	54.00	-14.28	6.73	3	Horizontal	103	2.75	-
2412MHz	Pass	PK	4.824G	53.96	74.00	-20.04	6.73	3	Horizontal	103	2.75	-
2412MHz	Pass	AV	4.824G	35.85	54.00	-18.15	6.73	3	Vertical	63	1.37	-
2412MHz	Pass	PK	4.824G	49.20	74.00	-24.80	6.73	3	Vertical	63	1.37	-
2437MHz	Pass	AV	2.389998G	45.35	54.00	-8.65	2.09	3	Horizontal	121	1.35	-
2437MHz	Pass	AV	2.4302G	105.94	Inf	-Inf	2.18	3	Horizontal	121	1.35	-
2437MHz	Pass	AV	2.483502G	46.84	54.00	-7.16	2.28	3	Horizontal	121	1.35	-
2437MHz	Pass	PK	2.3834G	60.70	74.00	-13.30	2.08	3	Horizontal	121	1.35	-
2437MHz	Pass	PK	2.4318G	115.59	Inf	-Inf	2.18	3	Horizontal	121	1.35	-
2437MHz	Pass	PK	2.483502G	65.17	74.00	-8.83	2.28	3	Horizontal	121	1.35	-
2437MHz	Pass	AV	4.874G	44.38	54.00	-9.62	6.82	3	Horizontal	88	1.70	-
2437MHz	Pass	PK	4.874G	59.48	74.00	-14.52	6.82	3	Horizontal	88	1.70	-
2437MHz	Pass	AV	4.874G	36.87	54.00	-17.13	6.82	3	Vertical	129	1.64	-
2437MHz	Pass	PK	4.874G	49.63	74.00	-24.37	6.82	3	Vertical	129	1.64	-
2462MHz	Pass	AV	2.4678G	100.64	Inf	-Inf	2.25	3	Horizontal	270	1.40	-
2462MHz	Pass	AV	2.483502G	53.12	54.00	-0.88	2.28	3	Horizontal	270	1.40	-
2462MHz	Pass	PK	2.467G	110.67	Inf	-Inf	2.25	3	Horizontal	270	1.40	-
2462MHz	Pass	PK	2.4836G	72.53	74.00	-1.47	2.28	3	Horizontal	270	1.40	-
2462MHz	Pass	AV	4.924G	38.31	54.00	-15.69	6.92	3	Horizontal	83	1.04	-
2462MHz	Pass	PK	4.924G	52.13	74.00	-21.87	6.92	3	Horizontal	83	1.04	-
2462MHz	Pass	AV	4.924G	36.25	54.00	-17.75	6.92	3	Vertical	44	1.60	-
2462MHz	Pass	PK	4.924G	49.16	74.00	-24.84	6.92	3	Vertical	44	1.60	-
802.11ac VHT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	AV	2.39G	47.87	54.00	-6.13	2.09	3	Horizontal	118	1.49	-
2422MHz	Pass	AV	2.4196G	92.92	Inf	-Inf	2.16	3	Horizontal	118	1.49	-
2422MHz	Pass	AV	2.5G	44.47	54.00	-9.53	2.31	3	Horizontal	118	1.49	-
2422MHz	Pass	PK	2.3888G	73.11	74.00	-0.89	2.09	3	Horizontal	118	1.49	-
2422MHz	Pass	PK	2.4192G	103.82	Inf	-Inf	2.16	3	Horizontal	118	1.49	-
2422MHz	Pass	PK	2.4972G	55.96	74.00	-18.04	2.30	3	Horizontal	118	1.49	-
2422MHz	Pass	AV	4.844G	36.98	54.00	-17.02	6.76	3	Horizontal	102	2.90	-
2422MHz	Pass	PK	4.844G	49.35	74.00	-24.65	6.76	3	Horizontal	102	2.90	-
2422MHz	Pass	AV	4.844G	35.42	54.00	-18.58	6.76	3	Vertical	128	1.70	-
2422MHz	Pass	PK	4.844G	49.23	74.00	-24.77	6.76	3	Vertical	128	1.70	-
2437MHz	Pass	AV	2.389998G	51.80	54.00	-2.20	2.09	3	Horizontal	119	1.90	-
2437MHz	Pass	AV	2.4514G	98.37	Inf	-Inf	2.22	3	Horizontal	119	1.90	-
2437MHz	Pass	AV	2.483502G	53.35	54.00	-0.65	2.28	3	Horizontal	119	1.90	-
2437MHz	Pass	PK	2.389998G	71.27	74.00	-2.73	2.09	3	Horizontal	119	1.90	-
2437MHz	Pass	PK	2.4534G	109.58	Inf	-Inf	2.22	3	Horizontal	119	1.90	-

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2437MHz	Pass	PK	2.4838G	73.76	74.00	-0.24	2.28	3	Horizontal	119	1.90	-
2437MHz	Pass	AV	4.874G	36.54	54.00	-17.46	6.82	3	Horizontal	60	1.50	-
2437MHz	Pass	PK	4.874G	49.56	74.00	-24.44	6.82	3	Horizontal	60	1.50	-
2437MHz	Pass	AV	4.874G	34.89	54.00	-19.11	6.82	3	Vertical	11	1.31	-
2437MHz	Pass	PK	4.874G	47.83	74.00	-26.17	6.82	3	Vertical	11	1.31	-
2452MHz	Pass	AV	2.39G	43.11	54.00	-10.89	2.09	3	Horizontal	270	1.48	-
2452MHz	Pass	AV	2.4496G	90.85	Inf	-Inf	2.21	3	Horizontal	270	1.48	-
2452MHz	Pass	AV	2.484G	49.02	54.00	-4.98	2.28	3	Horizontal	270	1.48	-
2452MHz	Pass	PK	2.3884G	57.31	74.00	-16.69	2.09	3	Horizontal	270	1.48	-
2452MHz	Pass	PK	2.45G	101.98	Inf	-Inf	2.21	3	Horizontal	270	1.48	-
2452MHz	Pass	PK	2.484G	73.72	74.00	-0.28	2.28	3	Horizontal	270	1.48	-
2452MHz	Pass	AV	4.904G	39.75	54.00	-14.25	6.88	3	Horizontal	65	2.07	-
2452MHz	Pass	PK	4.904G	52.00	74.00	-22.00	6.88	3	Horizontal	65	2.07	-
2452MHz	Pass	AV	4.904G	37.92	54.00	-16.08	6.88	3	Vertical	6	1.45	-
2452MHz	Pass	PK	4.904G	50.86	74.00	-23.14	6.88	3	Vertical	6	1.45	-

## 802.11b\_(1Mbps)\_1TX

## 2412MHz\_TX

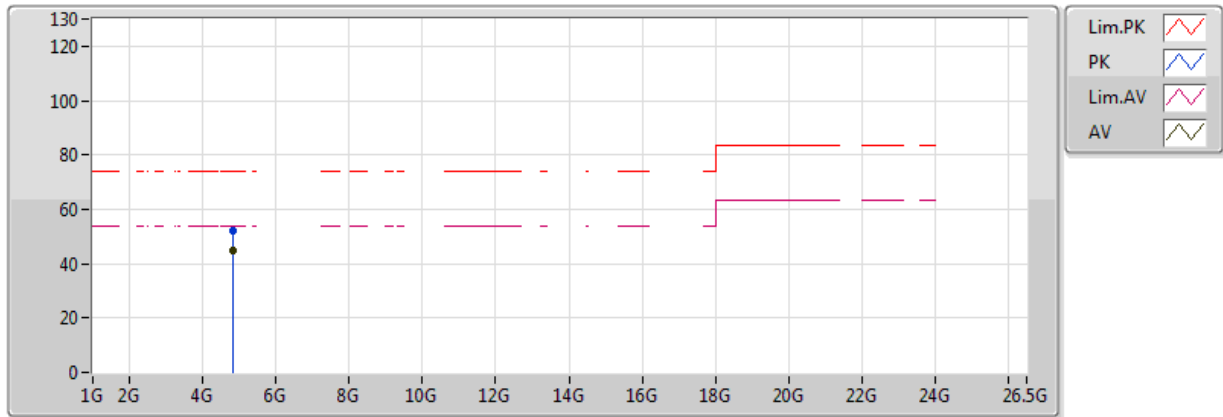


Eut:Y axis  
Ant:Z axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3862G	45.69	54.00	-8.31	2.08	3	Horizontal	267	1.76	-	43.60	32.16	5.18	35.26
AV	2.4128G	103.64	Inf	-Inf	2.14	3	Horizontal	267	1.76	-	101.50	32.20	5.21	35.26
PK	2.386G	57.03	74.00	-16.97	2.08	3	Horizontal	267	1.76	-	54.95	32.16	5.18	35.26
PK	2.413G	107.76	Inf	-Inf	2.14	3	Horizontal	267	1.76	-	105.61	32.20	5.21	35.26

## 802.11b\_(1Mbps)\_1TX

## 2412MHz\_TX

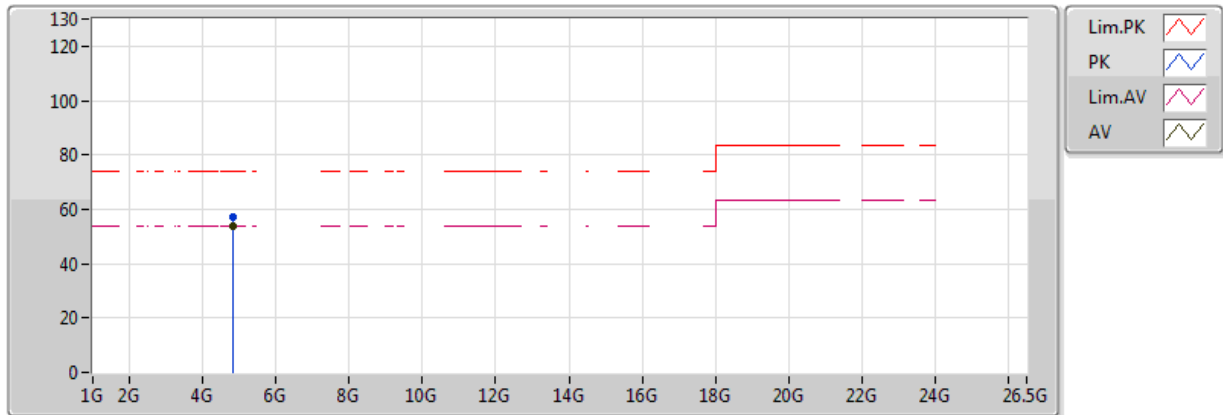


Eut:Y axis  
Ant:Z axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.824G	45.10	54.00	-8.90	6.73	3	Vertical	61	1.58	-	38.37	34.23	7.37	34.87
PK	4.824G	51.95	74.00	-22.05	6.73	3	Vertical	61	1.58	-	45.22	34.23	7.37	34.87

### 802.11b\_(1Mbps)\_1TX

### 2412MHz\_TX

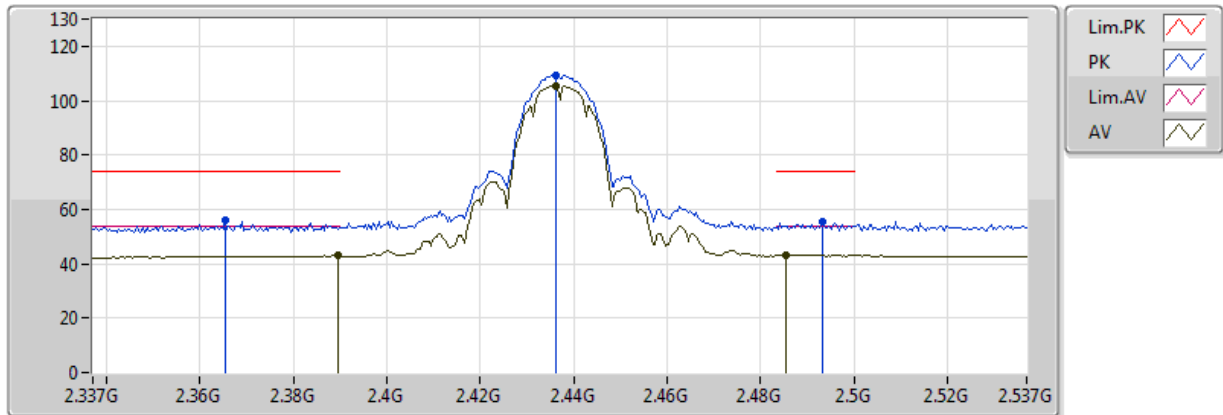


Eut:Y axis  
Ant:Z axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.824G	53.72	54.00	-0.28	6.73	3	Vertical	89	1.02	-	46.99	34.23	7.37	34.87
PK	4.824G	57.25	74.00	-16.75	6.73	3	Vertical	89	1.02	-	50.52	34.23	7.37	34.87

## 802.11b\_(1Mbps)\_1TX

## 2437MHz\_TX



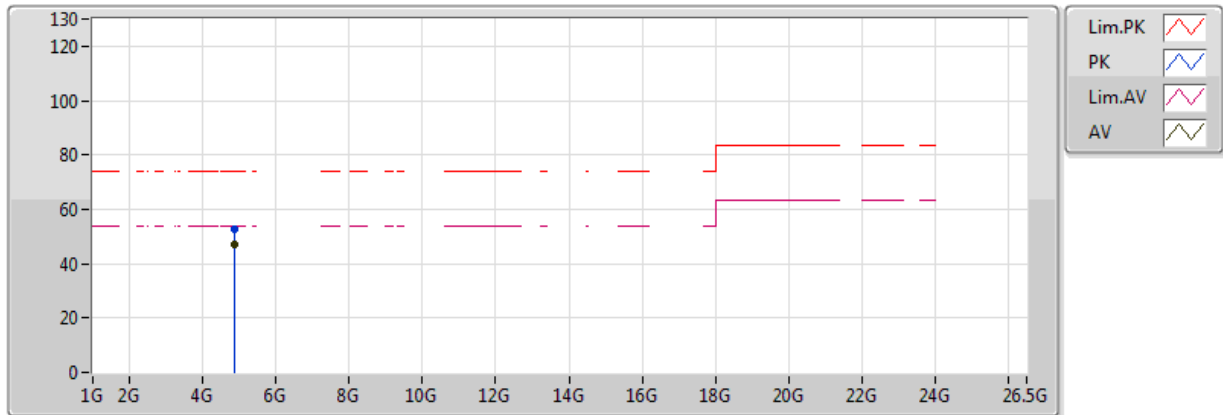
Eut:Y axis  
Ant:Z axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3894G	42.94	54.00	-11.06	2.09	3	Horizontal	91	1.09	-	40.85	32.17	5.18	35.26
AV	2.4362G	105.55	Inf	-Inf	2.19	3	Horizontal	91	1.09	-	103.36	32.22	5.23	35.27
AV	2.4854G	43.28	54.00	-10.72	2.28	3	Horizontal	91	1.09	-	41.00	32.28	5.28	35.28
PK	2.3654G	55.76	74.00	-18.24	2.03	3	Horizontal	91	1.09	-	53.73	32.14	5.15	35.26
PK	2.4362G	109.44	Inf	-Inf	2.19	3	Horizontal	91	1.09	-	107.25	32.22	5.23	35.27
PK	2.4934G	55.51	74.00	-18.49	2.30	3	Horizontal	91	1.09	-	53.21	32.29	5.28	35.28



## 802.11b\_(1Mbps)\_1TX

## 2437MHz\_TX

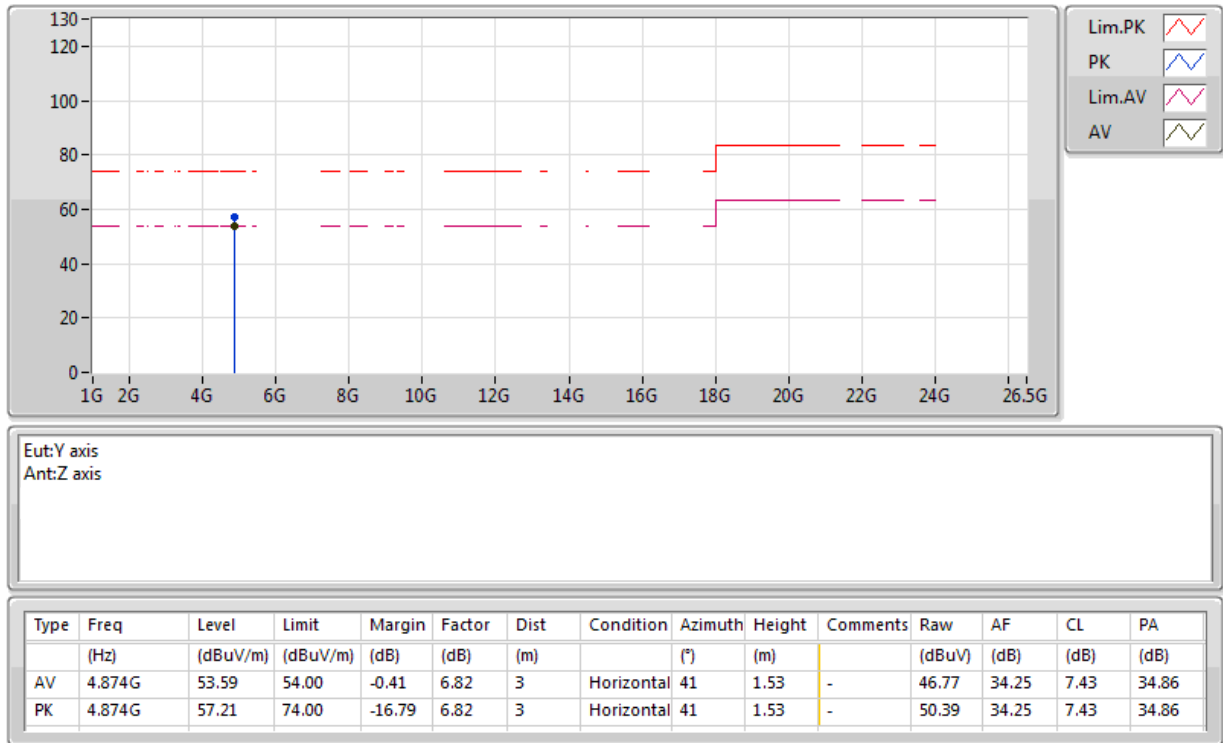


Eut:Y axis  
Ant:Z axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.874G	46.83	54.00	-7.17	6.82	3	Vertical	67	1.44	-	40.01	34.25	7.43	34.86
PK	4.874G	52.79	74.00	-21.21	6.82	3	Vertical	67	1.44	-	45.97	34.25	7.43	34.86

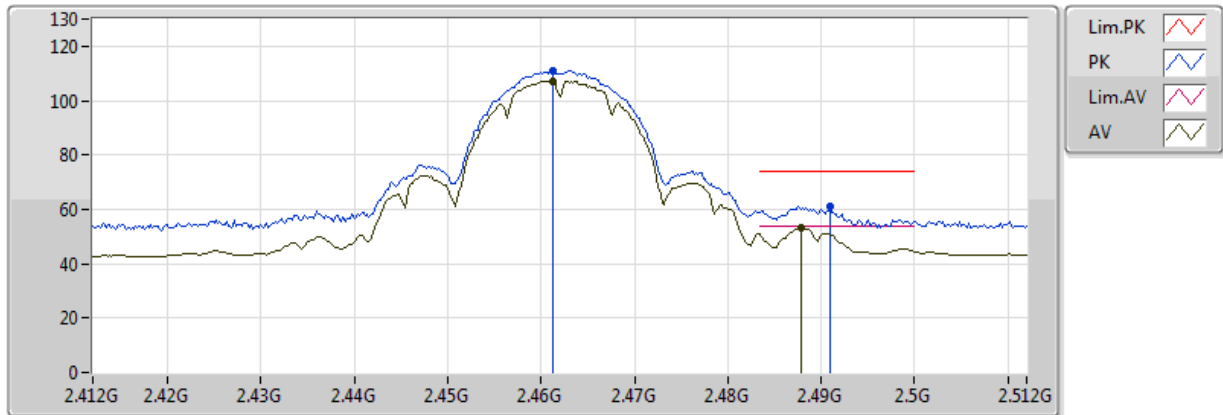
## 802.11b\_(1Mbps)\_1TX

### 2437MHz\_TX



### 802.11b\_(1Mbps)\_1TX

### 2462MHz\_TX

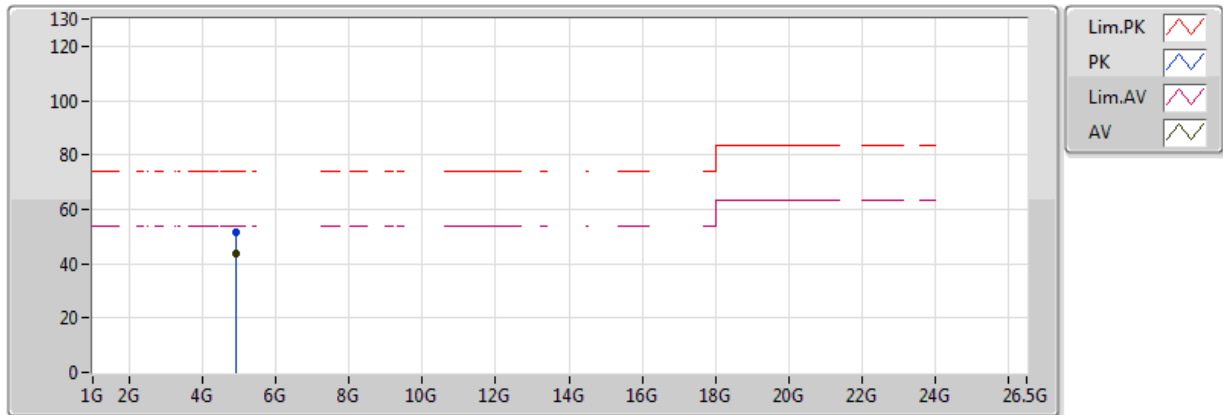


Eut:Y axis  
Ant:Z axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.4612G	107.16	Inf	-Inf	2.24	3	Horizontal	263	2.61	-	104.93	32.25	5.26	35.27
AV	2.4878G	53.37	54.00	-0.63	2.29	3	Horizontal	263	2.61	-	51.08	32.29	5.28	35.28
PK	2.4612G	110.95	Inf	-Inf	2.24	3	Horizontal	263	2.61	-	108.71	32.25	5.26	35.27
PK	2.491G	61.14	74.00	-12.86	2.29	3	Horizontal	263	2.61	-	58.85	32.29	5.28	35.28

## 802.11b\_(1Mbps)\_1TX

## 2462MHz\_TX

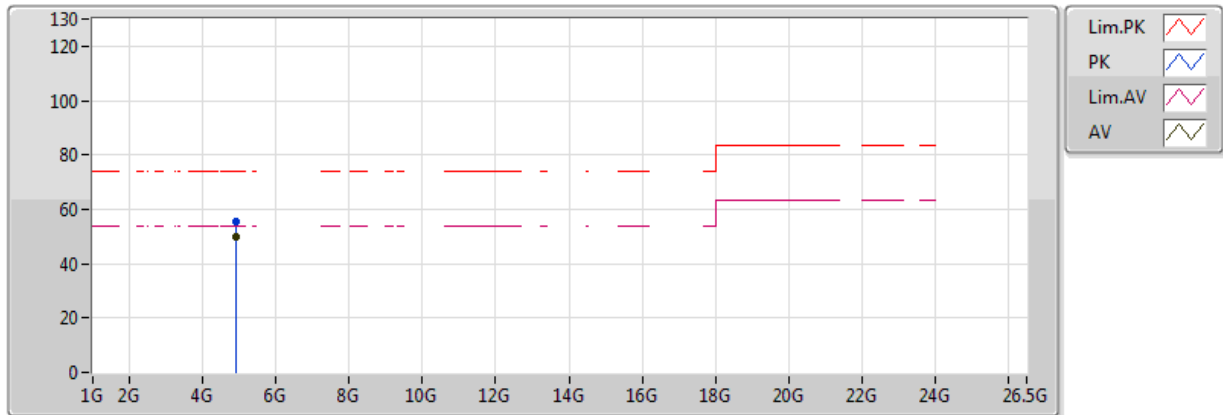


Eut:Y axis  
Ant:Z axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.924G	43.95	54.00	-10.05	6.92	3	Vertical	68	1.35	-	37.03	34.27	7.49	34.84
PK	4.924G	51.48	74.00	-22.52	6.92	3	Vertical	68	1.35	-	44.56	34.27	7.49	34.84

### 802.11b\_(1Mbps)\_1TX

### 2462MHz\_TX

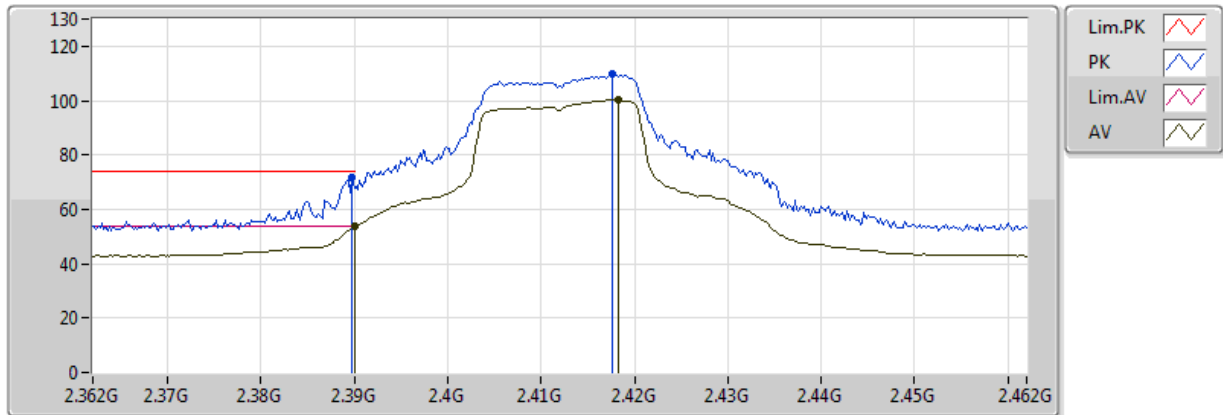


Eut:Y axis  
Ant:Z axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.924G	49.98	54.00	-4.02	6.92	3	Horizontal	31	1.50	-	43.06	34.27	7.49	34.84
PK	4.924G	55.71	74.00	-18.29	6.92	3	Horizontal	31	1.50	-	48.79	34.27	7.49	34.84

## 802.11g\_(6Mbps)\_1TX

## 2412MHz\_TX

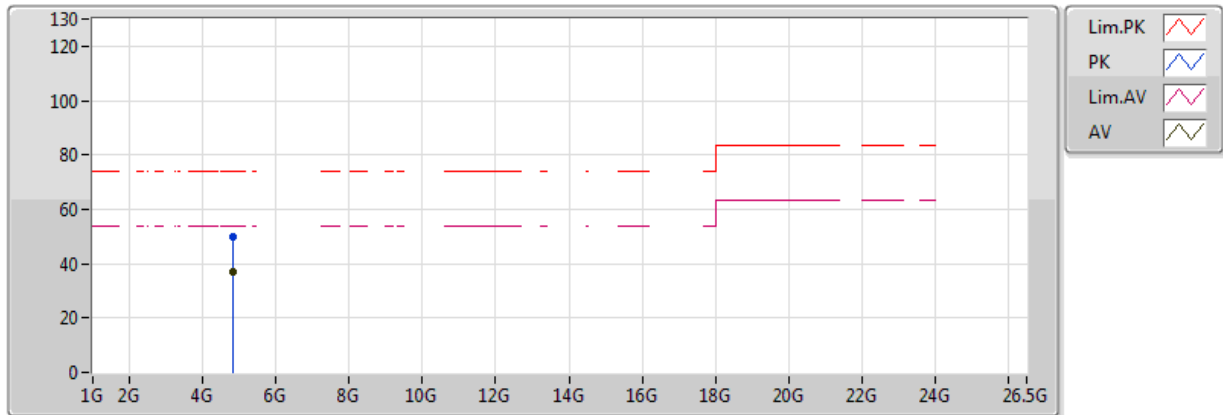


Eut:Y axis  
Ant:Z axis

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.39G	53.58	54.00	-0.42	2.09	3	Horizontal	267	1.99	-	51.49	32.17	5.18	35.26
AV	2.4182G	100.30	Inf	-Inf	2.15	3	Horizontal	267	1.99	-	98.14	32.20	5.22	35.26
PK	2.3898G	71.89	74.00	-2.11	2.09	3	Horizontal	267	1.99	-	69.80	32.17	5.18	35.26
PK	2.4176G	109.56	Inf	-Inf	2.15	3	Horizontal	267	1.99	-	107.41	32.20	5.22	35.26

### 802.11g\_(6Mbps)\_1TX

### 2412MHz\_TX

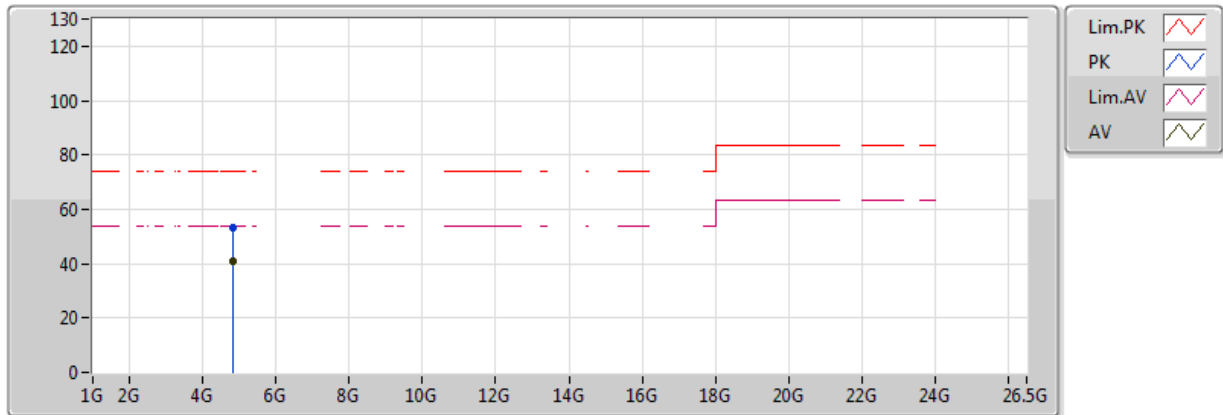


Eut:Y axis  
Ant:Z axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.824G	36.78	54.00	-17.22	6.73	3	Vertical	71	1.40	-	30.05	34.23	7.37	34.87
PK	4.824G	50.06	74.00	-23.94	6.73	3	Vertical	71	1.40	-	43.33	34.23	7.37	34.87

## 802.11g\_(6Mbps)\_1TX

## 2412MHz\_TX



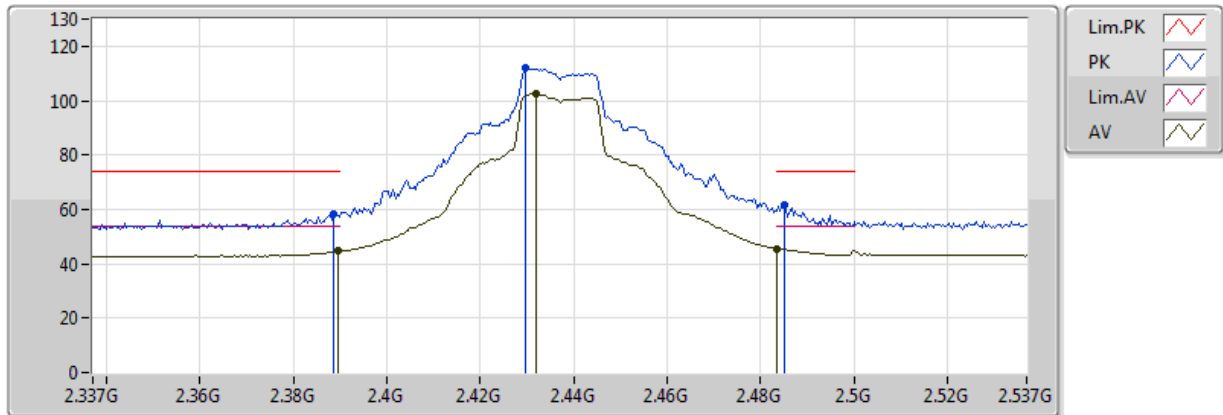
Eut:Y axis  
Ant:Z axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.824G	40.70	54.00	-13.30	6.73	3	Horizontal	88	1.01	-	33.97	34.23	7.37	34.87
PK	4.824G	53.08	74.00	-20.92	6.73	3	Horizontal	88	1.01	-	46.35	34.23	7.37	34.87



### 802.11g\_(6Mbps)\_1TX

### 2437MHz\_TX

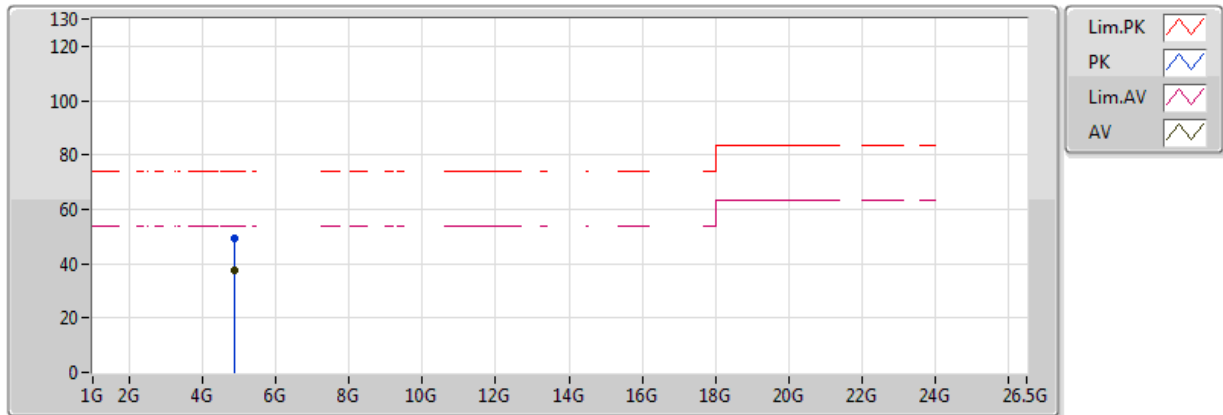


Eut:Y axis  
Ant:Z axis

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3894G	44.55	54.00	-9.45	2.09	3	Horizontal	90	1.50	-	42.46	32.17	5.18	35.26
AV	2.4318G	102.38	Inf	-Inf	2.18	3	Horizontal	90	1.50	-	100.20	32.22	5.23	35.27
AV	2.483502G	45.58	54.00	-8.42	2.28	3	Horizontal	90	1.50	-	43.30	32.28	5.28	35.28
PK	2.3886G	58.06	74.00	-15.94	2.09	3	Horizontal	90	1.50	-	55.97	32.17	5.18	35.26
PK	2.4298G	111.90	Inf	-Inf	2.18	3	Horizontal	90	1.50	-	109.72	32.22	5.23	35.27
PK	2.485G	61.72	74.00	-12.28	2.28	3	Horizontal	90	1.50	-	59.44	32.28	5.28	35.28

## 802.11g\_(6Mbps)\_1TX

## 2437MHz\_TX

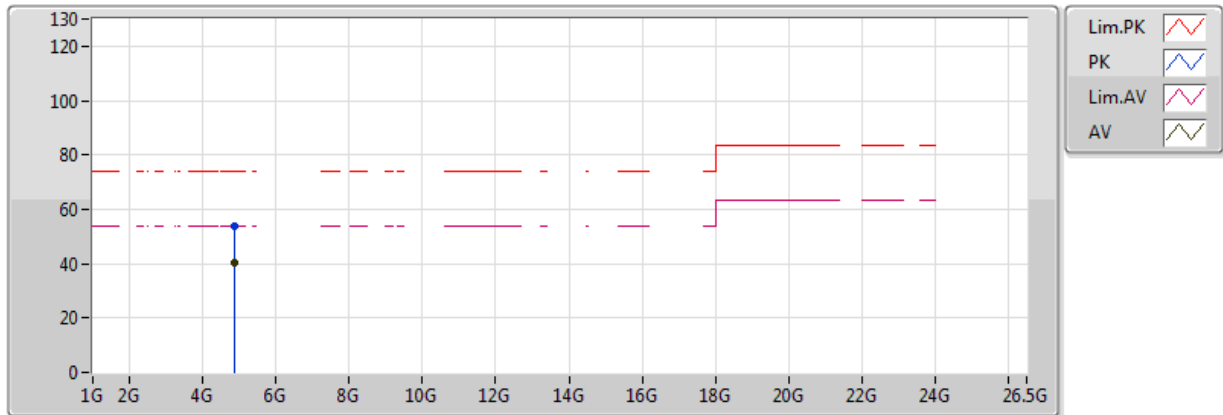


Eut:Y axis  
Ant:Z axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.874G	37.37	54.00	-16.63	6.82	3	Vertical	71	1.34	-	30.55	34.25	7.43	34.86
PK	4.874G	49.31	74.00	-24.69	6.82	3	Vertical	71	1.34	-	42.49	34.25	7.43	34.86

### 802.11g\_(6Mbps)\_1TX

### 2437MHz\_TX

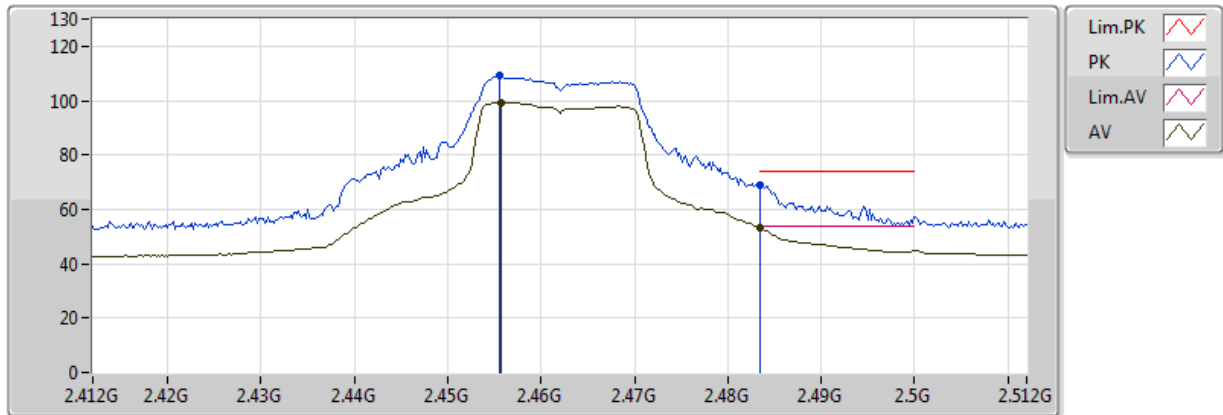


Eut:Y axis  
Ant:Z axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.874G	40.29	54.00	-13.71	6.82	3	Horizontal	41	1.53	-	33.47	34.25	7.43	34.86
PK	4.874G	53.55	74.00	-20.45	6.82	3	Horizontal	41	1.53	-	46.73	34.25	7.43	34.86

### 802.11g\_(6Mbps)\_1TX

### 2462MHz\_TX

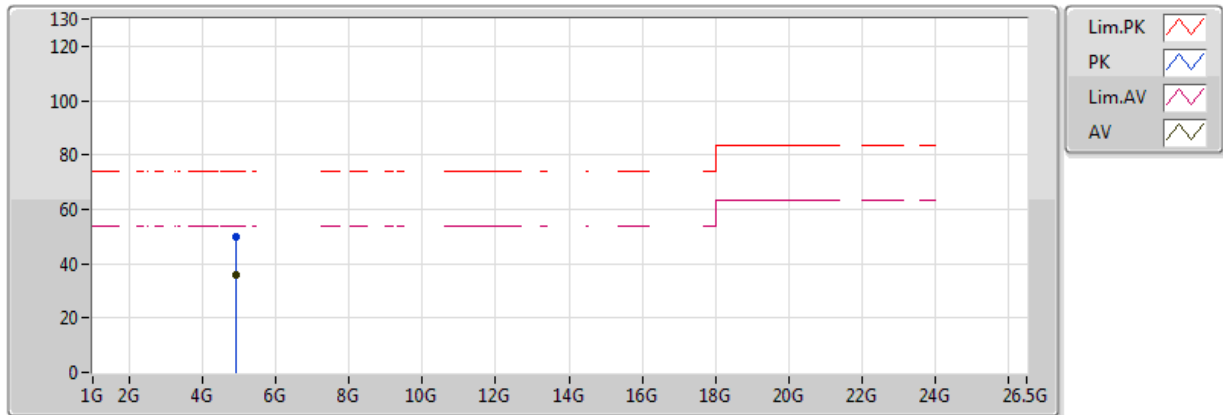


Eut:Y axis  
Ant:Z axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.4558G	99.30	Inf	-Inf	2.23	3	Horizontal	263	2.31	-	97.07	32.25	5.25	35.27
AV	2.483502G	53.17	54.00	-0.83	2.28	3	Horizontal	263	2.31	-	50.89	32.28	5.28	35.28
PK	2.4556G	109.27	Inf	-Inf	2.23	3	Horizontal	263	2.31	-	107.04	32.25	5.25	35.27
PK	2.483502G	68.68	74.00	-5.32	2.28	3	Horizontal	263	2.31	-	66.40	32.28	5.28	35.28

### 802.11g\_(6Mbps)\_1TX

### 2462MHz\_TX

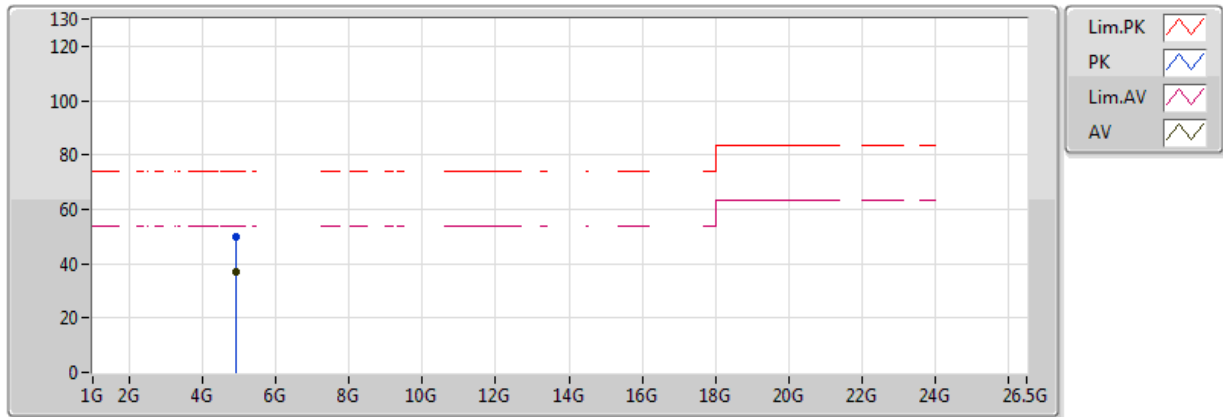


Eut:Y axis  
Ant:Z axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.924G	36.12	54.00	-17.88	6.92	3	Vertical	67	1.50	-	29.20	34.27	7.49	34.84
PK	4.924G	49.68	74.00	-24.32	6.92	3	Vertical	67	1.50	-	42.76	34.27	7.49	34.84

## 802.11g\_(6Mbps)\_1TX

## 2462MHz\_TX

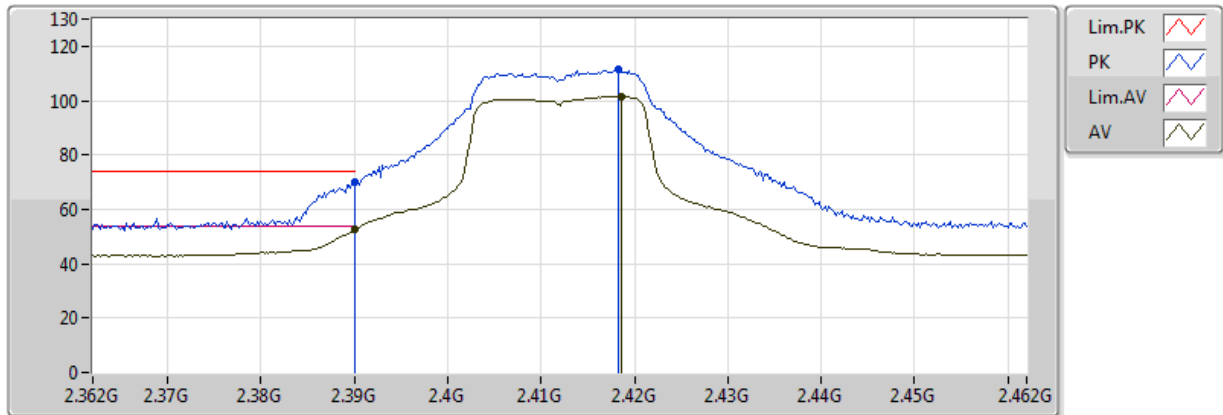


Eut:Y axis  
Ant:Z axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.924G	36.91	54.00	-17.09	6.92	3	Horizontal	35	1.49	-	29.99	34.27	7.49	34.84
PK	4.924G	49.87	74.00	-24.13	6.92	3	Horizontal	35	1.49	-	42.95	34.27	7.49	34.84

## 802.11ac VHT20\_Nss1,(MCS0)\_3TX

## 2412MHz\_TX

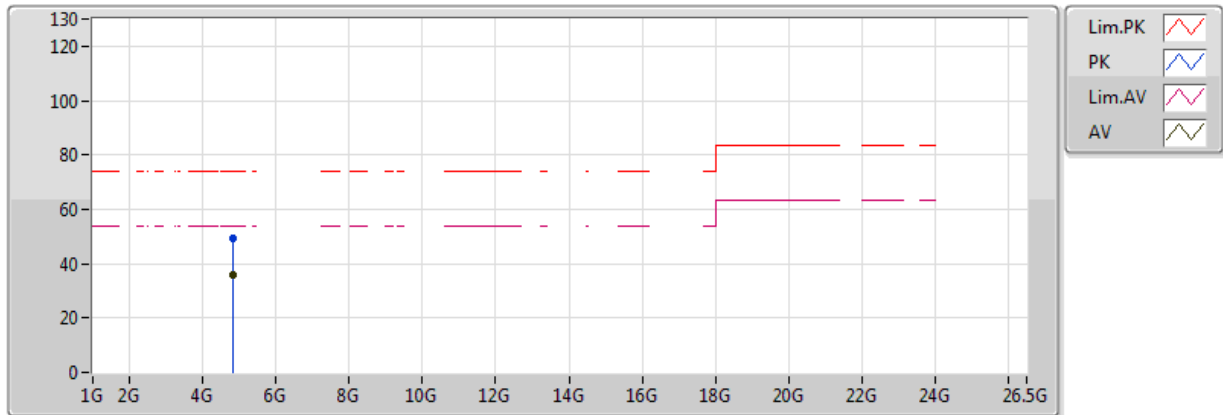


Eut:Y axis  
Ant:Z axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.39G	52.54	54.00	-1.46	2.09	3	Horizontal	96	1.69	-	50.44	32.17	5.18	35.26
AV	2.4186G	101.68	Inf	-Inf	2.16	3	Horizontal	96	1.69	-	99.53	32.20	5.22	35.26
PK	2.39G	70.11	74.00	-3.89	2.09	3	Horizontal	96	1.69	-	68.02	32.17	5.18	35.26
PK	2.4182G	111.58	Inf	-Inf	2.15	3	Horizontal	96	1.69	-	109.42	32.20	5.22	35.26

## 802.11ac VHT20\_Nss1,(MCS0)\_3TX

## 2412MHz\_TX



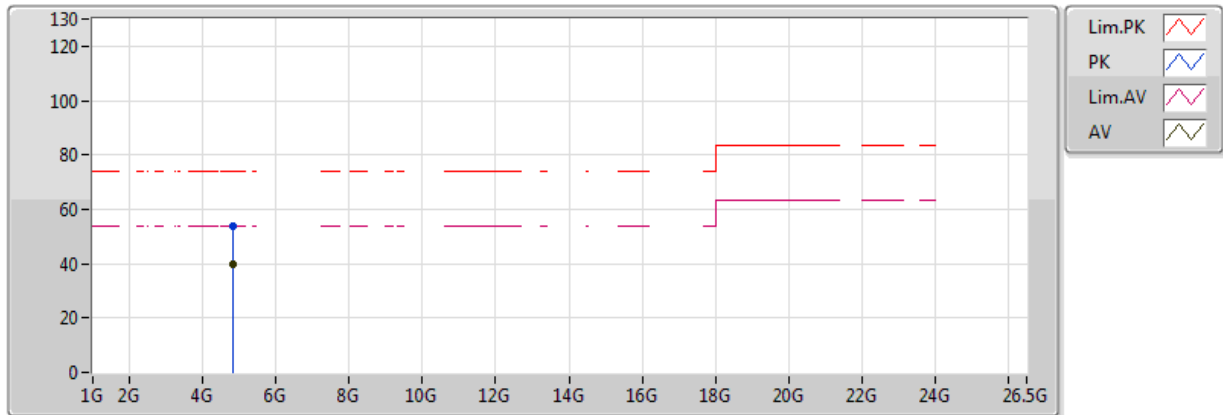
Eut:Y axis  
Ant:Z axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.824G	35.85	54.00	-18.15	6.73	3	Vertical	63	1.37	-	29.12	34.23	7.37	34.87
PK	4.824G	49.20	74.00	-24.80	6.73	3	Vertical	63	1.37	-	42.47	34.23	7.37	34.87



## 802.11ac VHT20\_Nss1,(MCS0)\_3TX

## 2412MHz\_TX

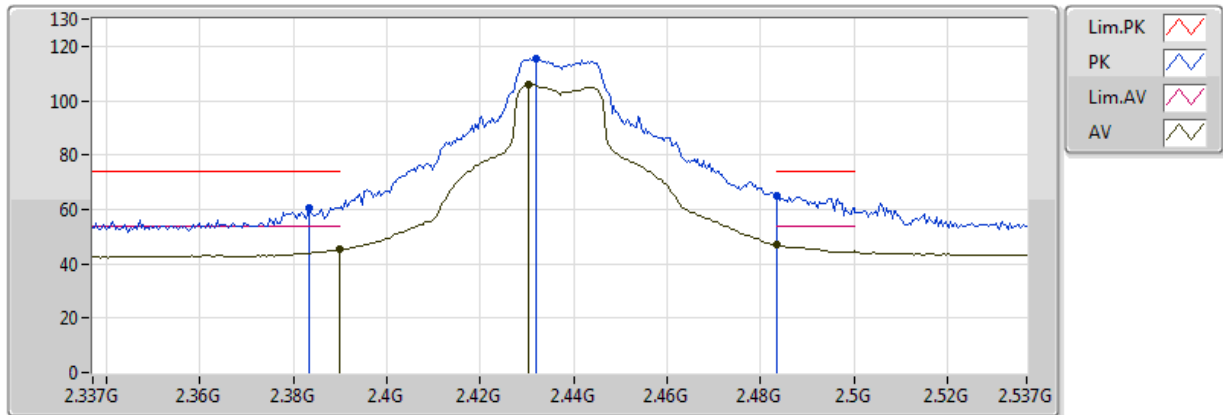


Eut:Y axis  
Ant:Z axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.824G	39.72	54.00	-14.28	6.73	3	Horizontal	103	2.75	-	32.99	34.23	7.37	34.87
PK	4.824G	53.96	74.00	-20.04	6.73	3	Horizontal	103	2.75	-	47.23	34.23	7.37	34.87

## 802.11ac VHT20\_Nss1,(MCS0)\_3TX

## 2437MHz\_TX

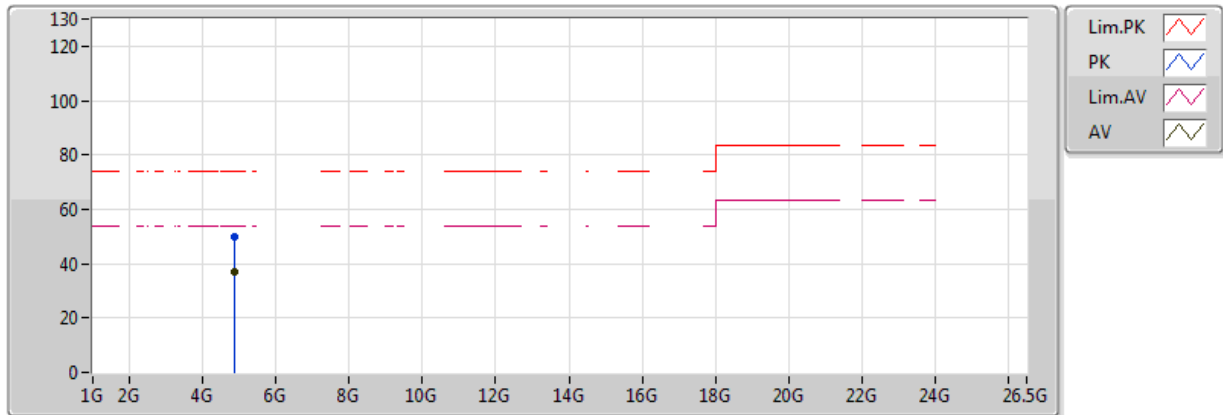


Eut:Y axis  
Ant:Z axis

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.389998G	45.35	54.00	-8.65	2.09	3	Horizontal	121	1.35	-	43.26	32.17	5.18	35.26
AV	2.4302G	105.94	Inf	-Inf	2.18	3	Horizontal	121	1.35	-	103.77	32.22	5.23	35.27
AV	2.483502G	46.84	54.00	-7.16	2.28	3	Horizontal	121	1.35	-	44.56	32.28	5.28	35.28
PK	2.3834G	60.70	74.00	-13.30	2.08	3	Horizontal	121	1.35	-	58.62	32.16	5.18	35.26
PK	2.4318G	115.59	Inf	-Inf	2.18	3	Horizontal	121	1.35	-	113.41	32.22	5.23	35.27
PK	2.483502G	65.17	74.00	-8.83	2.28	3	Horizontal	121	1.35	-	62.89	32.28	5.28	35.28

## 802.11ac VHT20\_Nss1,(MCS0)\_3TX

## 2437MHz\_TX

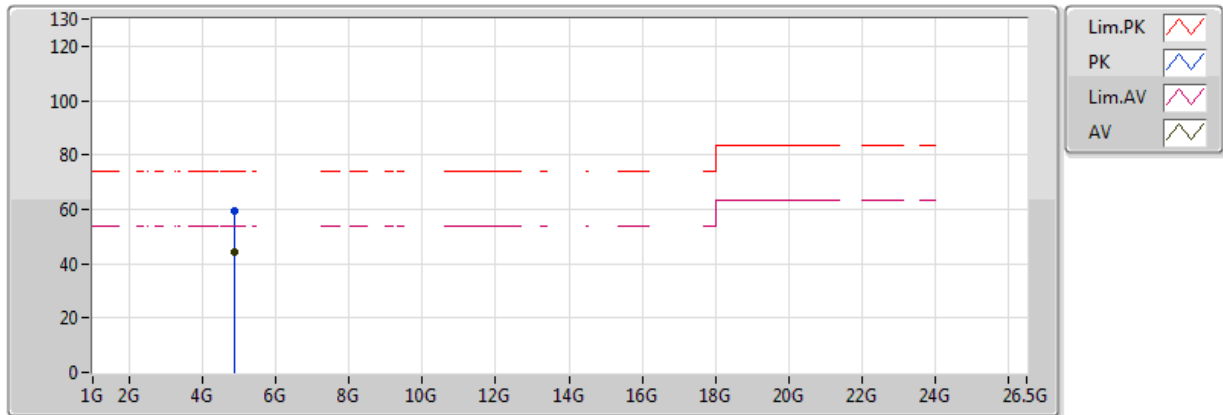


Eut:Y axis  
Ant:Z axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.874G	36.87	54.00	-17.13	6.82	3	Vertical	129	1.64	-	30.05	34.25	7.43	34.86
PK	4.874G	49.63	74.00	-24.37	6.82	3	Vertical	129	1.64	-	42.81	34.25	7.43	34.86

## 802.11ac VHT20\_Nss1,(MCS0)\_3TX

## 2437MHz\_TX

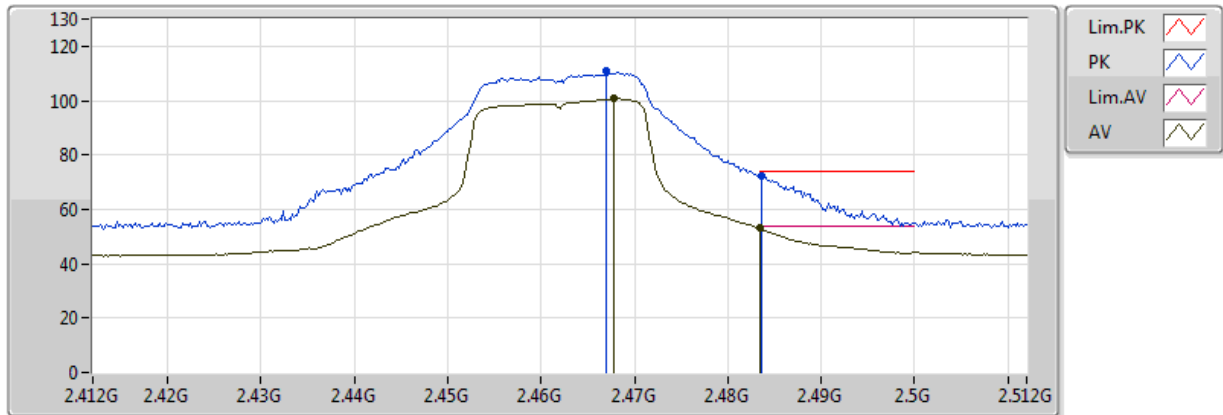


Eut:Y axis  
Ant:Z axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.874G	44.38	54.00	-9.62	6.82	3	Horizontal	88	1.70	-	37.56	34.25	7.43	34.86
PK	4.874G	59.48	74.00	-14.52	6.82	3	Horizontal	88	1.70	-	52.66	34.25	7.43	34.86

## 802.11ac VHT20\_Nss1,(MCS0)\_3TX

## 2462MHz\_TX

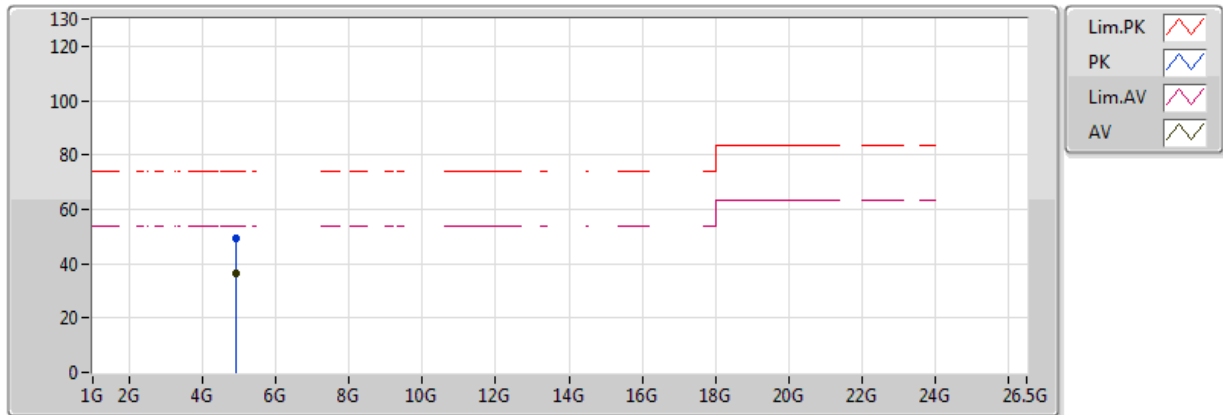


Eut:Y axis  
Ant:Z axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.4678G	100.64	Inf	-Inf	2.25	3	Horizontal	270	1.40	-	98.39	32.26	5.26	35.27
AV	2.483502G	53.12	54.00	-0.88	2.28	3	Horizontal	270	1.40	-	50.85	32.28	5.28	35.28
PK	2.467G	110.67	Inf	-Inf	2.25	3	Horizontal	270	1.40	-	108.43	32.26	5.26	35.27
PK	2.4836G	72.53	74.00	-1.47	2.28	3	Horizontal	270	1.40	-	70.25	32.28	5.28	35.28

## 802.11ac VHT20\_Nss1,(MCS0)\_3TX

## 2462MHz\_TX

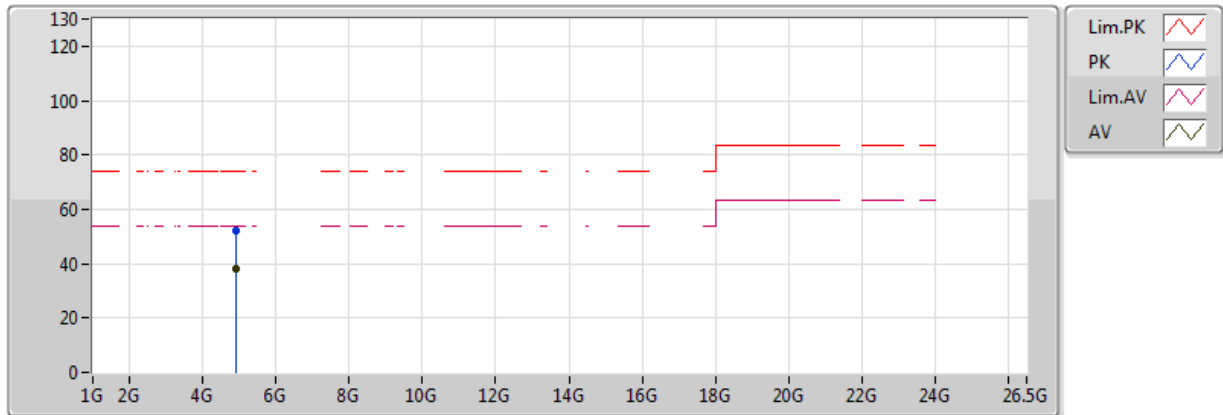


Eut:Y axis  
Ant:Z axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.924G	36.25	54.00	-17.75	6.92	3	Vertical	44	1.60	-	29.33	34.27	7.49	34.84
PK	4.924G	49.16	74.00	-24.84	6.92	3	Vertical	44	1.60	-	42.24	34.27	7.49	34.84

## 802.11ac VHT20\_Nss1,(MCS0)\_3TX

## 2462MHz\_TX

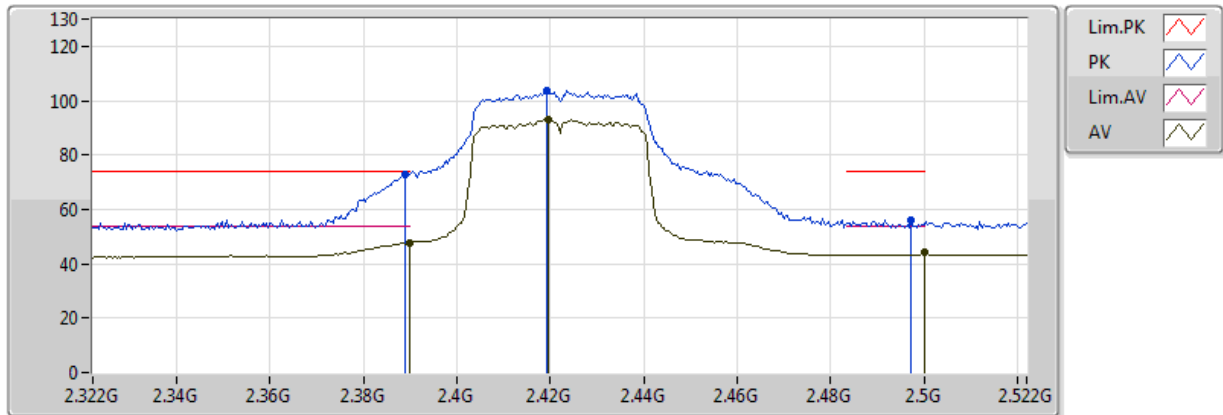


Eut:Y axis  
Ant:Z axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.924G	38.31	54.00	-15.69	6.92	3	Horizontal	83	1.04	-	31.39	34.27	7.49	34.84
PK	4.924G	52.13	74.00	-21.87	6.92	3	Horizontal	83	1.04	-	45.21	34.27	7.49	34.84

## 802.11ac VHT40\_Nss1,(MCS0)\_3TX

## 2422MHz\_TX



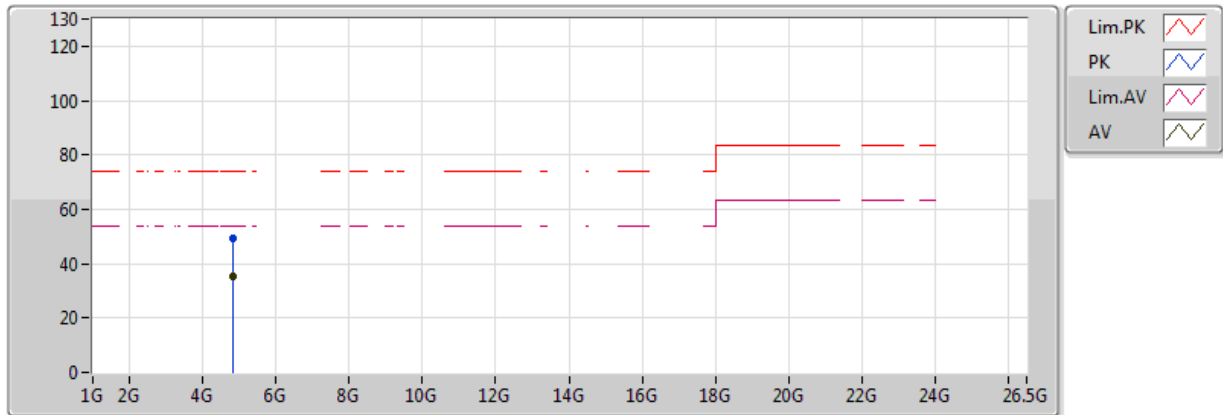
Eut:Y axis  
Ant:Z axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.39G	47.87	54.00	-6.13	2.09	3	Horizontal	118	1.49	-	45.78	32.17	5.18	35.26
AV	2.4196G	92.92	Inf	-Inf	2.16	3	Horizontal	118	1.49	-	90.76	32.20	5.22	35.26
AV	2.5G	44.47	54.00	-9.53	2.31	3	Horizontal	118	1.49	-	42.16	32.30	5.29	35.28
PK	2.3888G	73.11	74.00	-0.89	2.09	3	Horizontal	118	1.49	-	71.02	32.17	5.18	35.26
PK	2.4192G	103.82	Inf	-Inf	2.16	3	Horizontal	118	1.49	-	101.67	32.20	5.22	35.26
PK	2.4972G	55.96	74.00	-18.04	2.30	3	Horizontal	118	1.49	-	53.65	32.30	5.29	35.28



## 802.11ac VHT40\_Nss1,(MCS0)\_3TX

## 2422MHz\_TX

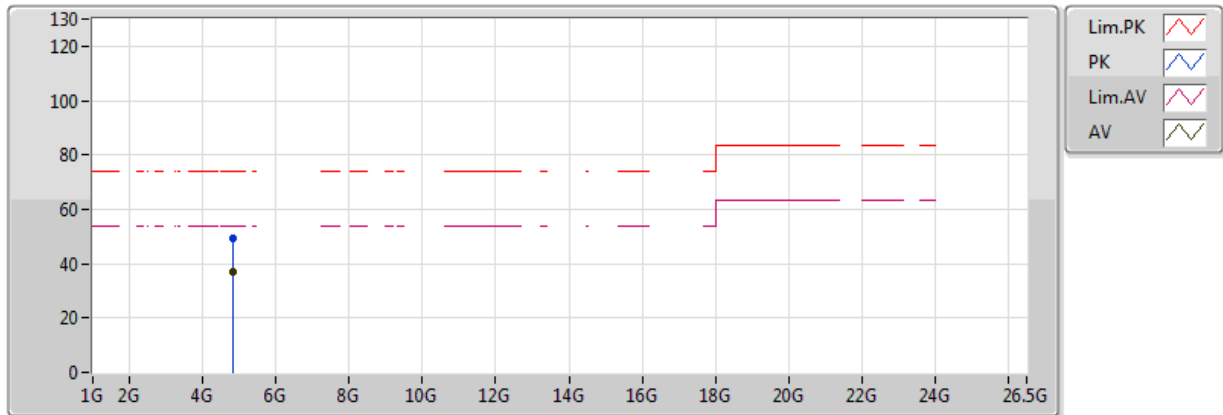


Eut:Y axis  
Ant:Z axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.844G	35.42	54.00	-18.58	6.76	3	Vertical	128	1.70	-	28.66	34.24	7.39	34.87
PK	4.844G	49.23	74.00	-24.77	6.76	3	Vertical	128	1.70	-	42.47	34.24	7.39	34.87

## 802.11ac VHT40\_Nss1,(MCS0)\_3TX

## 2422MHz\_TX

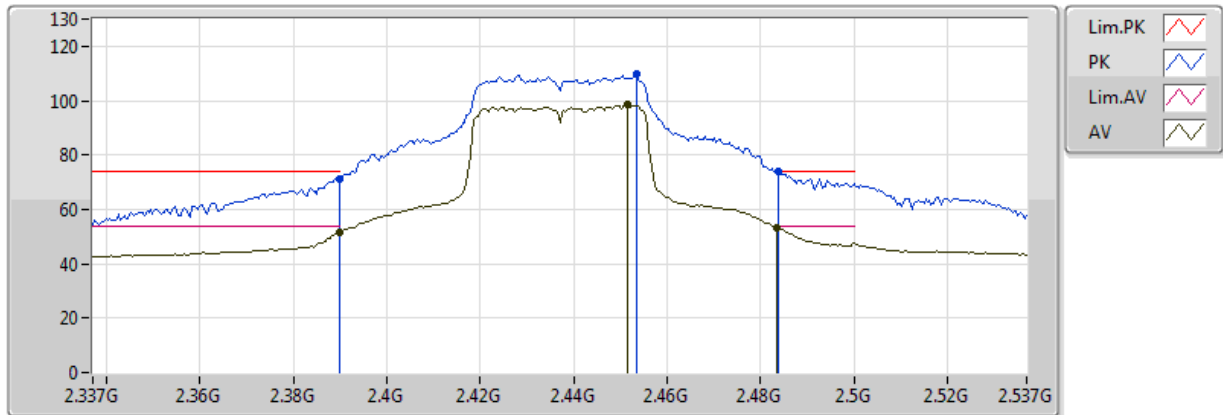


Eut:Y axis  
Ant:Z axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.844G	36.98	54.00	-17.02	6.76	3	Horizontal	102	2.90	-	30.22	34.24	7.39	34.87
PK	4.844G	49.35	74.00	-24.65	6.76	3	Horizontal	102	2.90	-	42.59	34.24	7.39	34.87

## 802.11ac VHT40\_Nss1,(MCS0)\_3TX

## 2437MHz\_TX

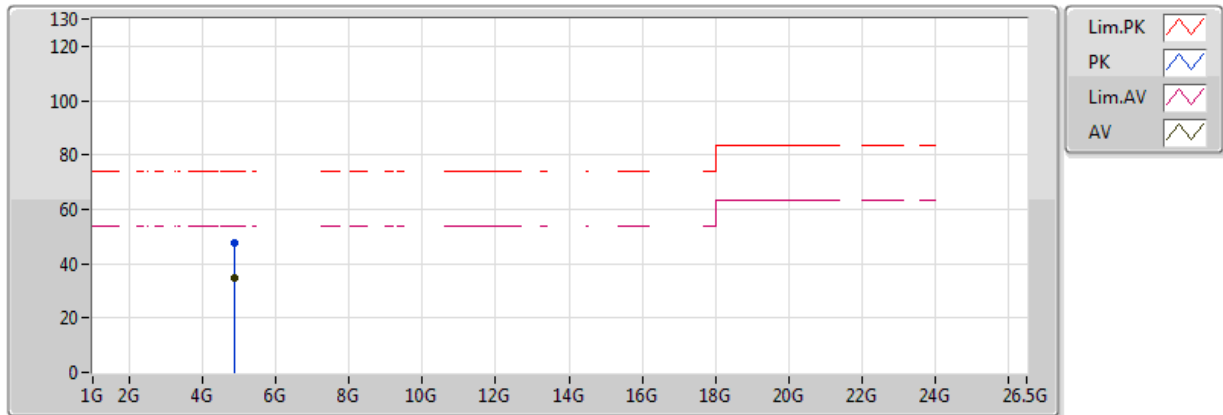


Eut:Y axis  
Ant:Z axis

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.389998G	51.80	54.00	-2.20	2.09	3	Horizontal	119	1.90	-	49.70	32.17	5.18	35.26
AV	2.4514G	98.37	Inf	-Inf	2.22	3	Horizontal	119	1.90	-	96.15	32.24	5.25	35.27
AV	2.483502G	53.35	54.00	-0.65	2.28	3	Horizontal	119	1.90	-	51.07	32.28	5.28	35.28
PK	2.389998G	71.27	74.00	-2.73	2.09	3	Horizontal	119	1.90	-	69.18	32.17	5.18	35.26
PK	2.4534G	109.58	Inf	-Inf	2.22	3	Horizontal	119	1.90	-	107.36	32.24	5.25	35.27
PK	2.4838G	73.76	74.00	-0.24	2.28	3	Horizontal	119	1.90	-	71.48	32.28	5.28	35.28

## 802.11ac VHT40\_Nss1,(MCS0)\_3TX

## 2437MHz\_TX

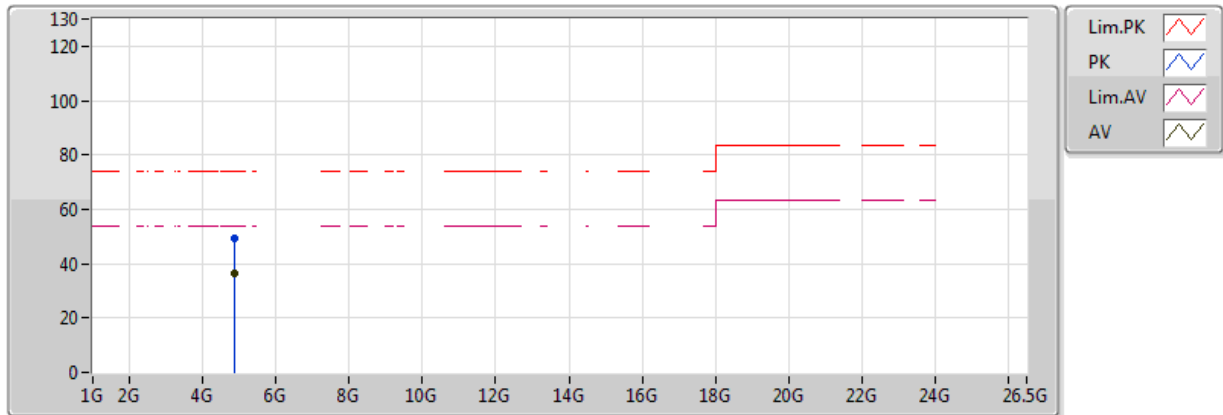


Eut:Y axis  
Ant:Z axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.874G	34.89	54.00	-19.11	6.82	3	Vertical	11	1.31	-	28.07	34.25	7.43	34.86
PK	4.874G	47.83	74.00	-26.17	6.82	3	Vertical	11	1.31	-	41.01	34.25	7.43	34.86

## 802.11ac VHT40\_Nss1,(MCS0)\_3TX

## 2437MHz\_TX

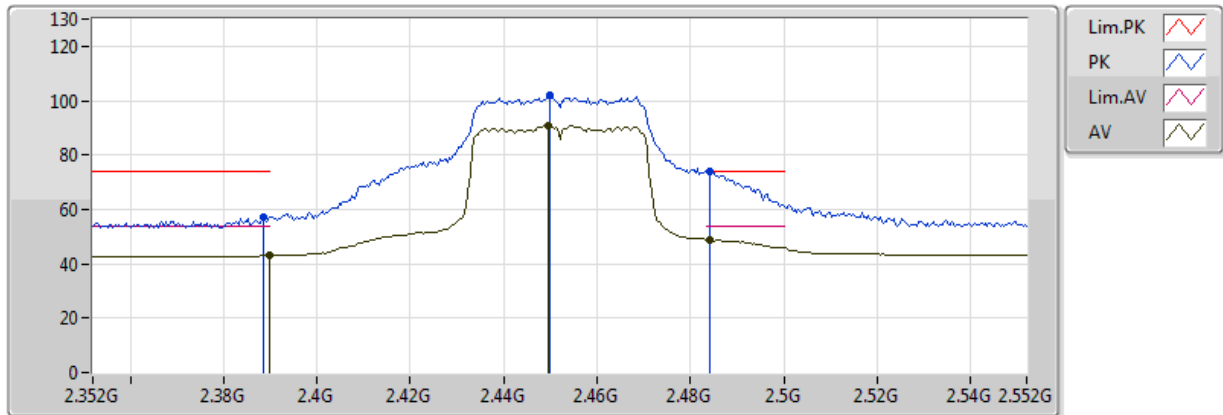


Eut:Y axis  
Ant:Z axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.874G	36.54	54.00	-17.46	6.82	3	Horizontal	60	1.50	-	29.72	34.25	7.43	34.86
PK	4.874G	49.56	74.00	-24.44	6.82	3	Horizontal	60	1.50	-	42.74	34.25	7.43	34.86

## 802.11ac VHT40\_Nss1,(MCS0)\_3TX

## 2452MHz\_TX

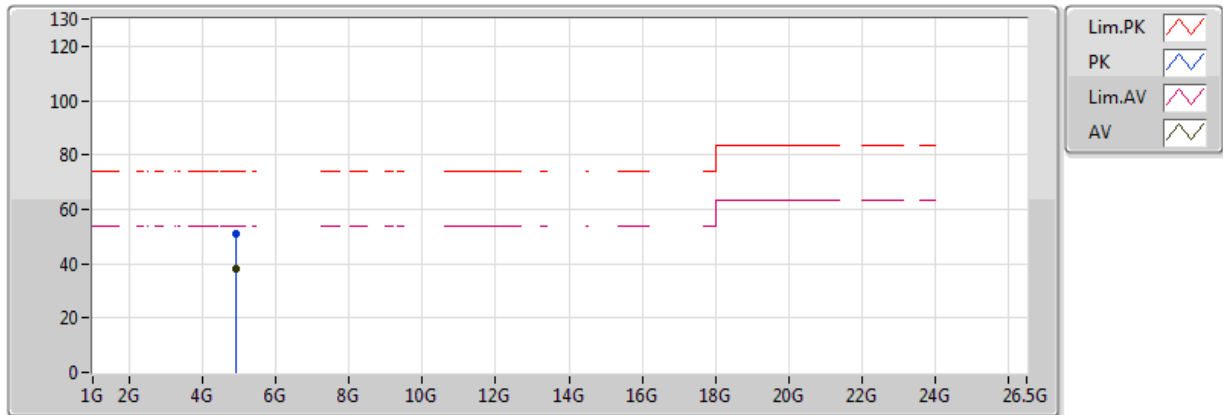


Eut:Y axis  
Ant:Z axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.39G	43.11	54.00	-10.89	2.09	3	Horizontal	270	1.48	-	41.02	32.17	5.18	35.26
AV	2.4496G	90.85	Inf	-Inf	2.21	3	Horizontal	270	1.48	-	88.63	32.24	5.24	35.27
AV	2.484G	49.02	54.00	-4.98	2.28	3	Horizontal	270	1.48	-	46.74	32.28	5.28	35.28
PK	2.3884G	57.31	74.00	-16.69	2.09	3	Horizontal	270	1.48	-	55.23	32.16	5.18	35.26
PK	2.45G	101.98	Inf	-Inf	2.21	3	Horizontal	270	1.48	-	99.77	32.24	5.25	35.27
PK	2.484G	73.72	74.00	-0.28	2.28	3	Horizontal	270	1.48	-	71.44	32.28	5.28	35.28

## 802.11ac VHT40\_Nss1,(MCS0)\_3TX

## 2452MHz\_TX

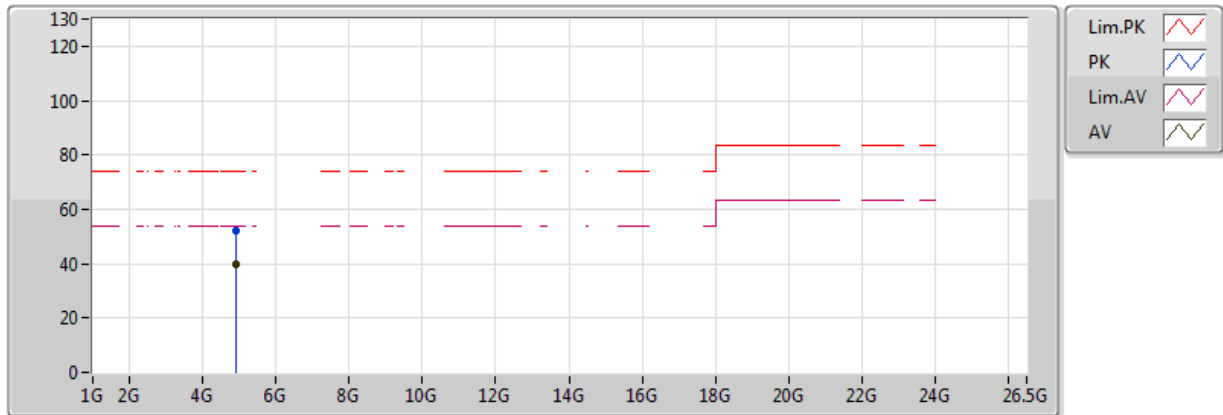


Eut:Y axis  
Ant:Z axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.904G	37.92	54.00	-16.08	6.88	3	Vertical	6	1.45	-	31.04	34.26	7.47	34.85
PK	4.904G	50.86	74.00	-23.14	6.88	3	Vertical	6	1.45	-	43.98	34.26	7.47	34.85

## 802.11ac VHT40\_Nss1,(MCS0)\_3TX

## 2452MHz\_TX



Eut:Y axis  
Ant:Z axis

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.904G	39.75	54.00	-14.25	6.88	3	Horizontal	65	2.07	-	32.87	34.26	7.47	34.85
PK	4.904G	52.00	74.00	-22.00	6.88	3	Horizontal	65	2.07	-	45.12	34.26	7.47	34.85





## RSE below 1GHz Result CO-LOCATION

Appendix G.1

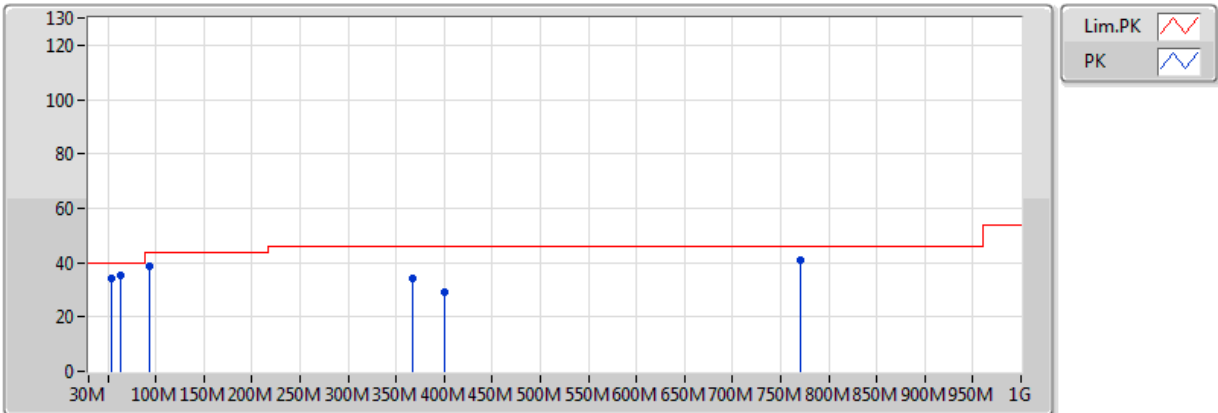
### Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
Mode 1	Pass	PK	94.02M	38.86	43.50	-4.64	-21.08	3	Vertical	0	1.00	-

### Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
Mode 1	Pass	PK	117.3M	28.44	43.50	-15.06	-18.61	3	Horizontal	360	1.00	-
Mode 1	Pass	PK	156.1M	27.68	43.50	-15.82	-18.76	3	Horizontal	360	1.00	-
Mode 1	Pass	PK	289.96M	35.18	46.00	-10.82	-15.65	3	Horizontal	360	1.00	-
Mode 1	Pass	PK	353.98M	35.10	46.00	-10.90	-13.97	3	Horizontal	360	1.00	-
Mode 1	Pass	PK	509.18M	32.71	46.00	-13.29	-10.10	3	Horizontal	360	1.00	-
Mode 1	Pass	PK	769.14M	39.87	46.00	-6.13	-5.91	3	Horizontal	360	1.00	-
Mode 1	Pass	PK	94.02M	38.86	43.50	-4.64	-21.08	3	Vertical	0	1.00	-
Mode 1	Pass	PK	367.56M	33.97	46.00	-12.03	-13.59	3	Vertical	0	1.00	-
Mode 1	Pass	PK	400.54M	29.06	46.00	-16.94	-12.49	3	Vertical	0	1.00	-
Mode 1	Pass	PK	771.08M	40.71	46.00	-5.29	-5.88	3	Vertical	0	1.00	-
Mode 1	Pass	QP	53.28M	34.16	40.00	-5.84	-23.88	3	Vertical	316	1.01	-
Mode 1	Pass	QP	62.98M	35.18	40.00	-4.82	-24.90	3	Vertical	9	2.03	-

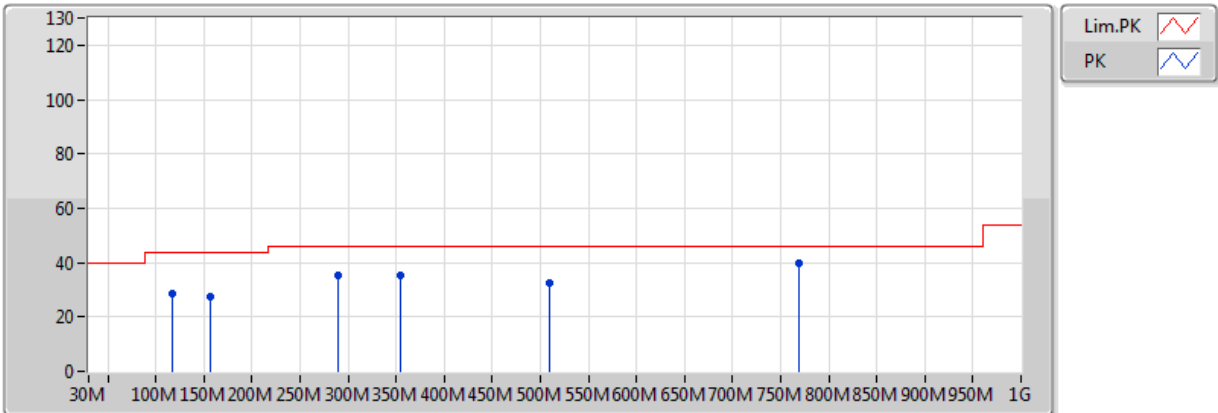
### Radiated-below 1GHz\_Mode 1



EUT : Y Ant : Z

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	94.02M	38.86	43.50	-4.64	-21.08	3	Vertical	0	1.00	-	59.94	14.20	1.56	36.84
PK	367.56M	33.97	46.00	-12.03	-13.59	3	Vertical	0	1.00	-	47.56	19.79	3.18	36.56
PK	400.54M	29.06	46.00	-16.94	-12.49	3	Vertical	0	1.00	-	41.55	20.80	3.32	36.61
PK	771.08M	40.71	46.00	-5.29	-5.88	3	Vertical	0	1.00	-	46.59	26.87	4.69	37.44
QP	53.28M	34.16	40.00	-5.84	-23.88	3	Vertical	316	1.01	-	58.04	12.04	1.20	37.13
QP	62.98M	35.18	40.00	-4.82	-24.90	3	Vertical	9	2.03	-	60.08	10.88	1.28	37.06

### Radiated-below 1GHz\_Mode 1



EUT : Y Ant : Z

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	117.3M	28.44	43.50	-15.06	-18.61	3	Horizontal	360	1.00	-	47.05	16.36	1.76	36.73
PK	156.1M	27.68	43.50	-15.82	-18.76	3	Horizontal	360	1.00	-	46.44	15.74	2.07	36.57
PK	289.96M	35.18	46.00	-10.82	-15.65	3	Horizontal	360	1.00	-	50.83	17.88	2.90	36.43
PK	353.98M	35.10	46.00	-10.90	-13.97	3	Horizontal	360	1.00	-	49.07	19.43	3.13	36.53
PK	509.18M	32.71	46.00	-13.29	-10.10	3	Horizontal	360	1.00	-	42.81	22.89	3.96	36.95
PK	769.14M	39.87	46.00	-6.13	-5.91	3	Horizontal	360	1.00	-	45.78	26.85	4.67	37.44



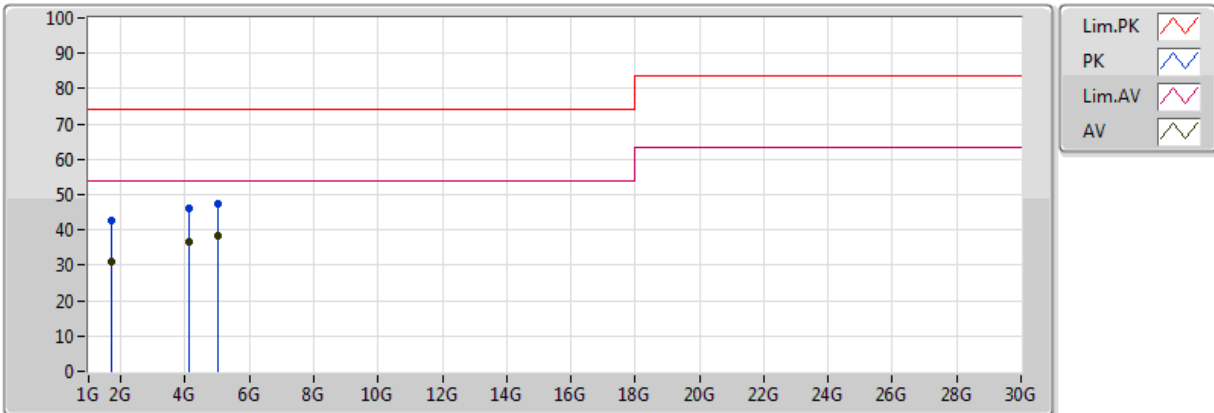
### Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
Mode 1	Pass	AV	1.432G	38.81	54.00	-15.19	-6.94	3	Horizontal	0	1.00	-

### Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
Mode 1	Pass	AV	1.432G	38.81	54.00	-15.19	-6.94	3	Horizontal	0	1.00	-
Mode 1	Pass	AV	5.034G	38.32	54.00	-15.68	2.78	3	Vertical	360	1.00	-
Mode 1	Pass	AV	5.304G	37.63	54.00	-16.37	3.06	3	Horizontal	0	1.00	-
Mode 1	Pass	AV	4.129G	36.61	54.00	-17.39	0.94	3	Vertical	360	1.00	-
Mode 1	Pass	AV	3.376G	35.03	54.00	-18.97	-0.86	3	Horizontal	0	1.00	-
Mode 1	Pass	AV	1.732G	31.11	54.00	-22.89	-6.03	3	Vertical	360	1.00	-
Mode 1	Pass	PK	5.304G	48.15	74.00	-25.85	3.06	3	Horizontal	0	1.00	-
Mode 1	Pass	PK	1.432G	47.87	74.00	-26.13	-6.94	3	Horizontal	0	1.00	-
Mode 1	Pass	PK	5.034G	47.21	74.00	-26.79	2.78	3	Vertical	360	1.00	-
Mode 1	Pass	PK	4.129G	46.32	74.00	-27.68	0.94	3	Vertical	360	1.00	-
Mode 1	Pass	PK	3.376G	44.23	74.00	-29.77	-0.86	3	Horizontal	0	1.00	-
Mode 1	Pass	PK	1.732G	42.55	74.00	-31.45	-6.03	3	Vertical	360	1.00	-

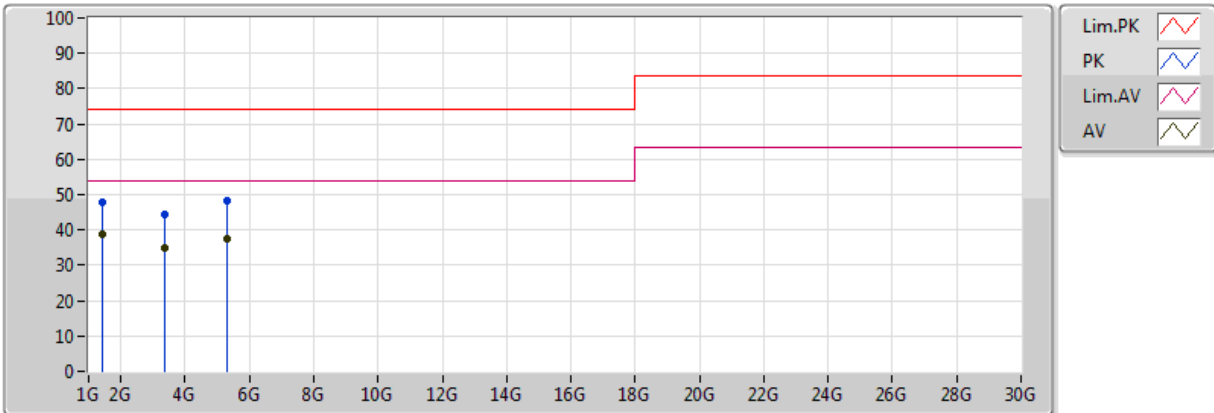
### Radiated-above 1GHz\_Mode 1



EUT = Y , ANT = Z

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	1.732G	31.11	54.00	-22.89	-6.03	3	Vertical	360	1.00	-	37.14	25.63	3.51	35.17
AV	4.129G	36.61	54.00	-17.39	0.94	3	Vertical	360	1.00	-	35.67	29.88	6.24	35.18
AV	5.034G	38.32	54.00	-15.68	2.78	3	Vertical	360	1.00	-	35.54	31.53	6.47	35.22
PK	1.732G	42.55	74.00	-31.45	-6.03	3	Vertical	360	1.00	-	48.58	25.63	3.51	35.17
PK	4.129G	46.32	74.00	-27.68	0.94	3	Vertical	360	1.00	-	45.38	29.88	6.24	35.18
PK	5.034G	47.21	74.00	-26.79	2.78	3	Vertical	360	1.00	-	44.43	31.53	6.47	35.22

### Radiated-above 1GHz\_Mode 1



EUT = Y , ANT = Z

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	1.432G	38.81	54.00	-15.19	-6.94	3	Horizontal	0	1.00	-	45.75	25.26	3.20	35.40
AV	3.376G	35.03	54.00	-18.97	-0.86	3	Horizontal	0	1.00	-	35.89	28.60	5.86	35.32
AV	5.304G	37.63	54.00	-16.37	3.06	3	Horizontal	0	1.00	-	34.57	31.74	6.51	35.19
PK	1.432G	47.87	74.00	-26.13	-6.94	3	Horizontal	0	1.00	-	54.81	25.26	3.20	35.40
PK	3.376G	44.23	74.00	-29.77	-0.86	3	Horizontal	0	1.00	-	45.09	28.60	5.86	35.32
PK	5.304G	48.15	74.00	-25.85	3.06	3	Horizontal	0	1.00	-	45.09	31.74	6.51	35.19