



# FCC RADIO TEST REPORT

**FCC ID** : TLZ-CU462  
**Equipment** : IEEE 802.11 b/g/n 1T1R WLAN and Bluetooth Low Energy Microcontroller Module  
**Brand Name** : AzureWave  
**Model Name** : AW-CU462  
**Applicant** : AzureWave Technologies, Inc.  
8F., No.94, Baozhong Rd. , Xindian Dist., New Taipei City , Taiwan 231  
**Standard** : 47 CFR FCC Part 15.247

The product was received on May 19, 2020, and testing was started from May 27, 2020 and completed on Jun. 24, 2020. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

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

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



Approved by: Cliff Chang

**SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory**

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



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TEL : 886-3-656-9065  
FAX : 886-3-656-9085  
Report Template No.: CB-A10\_10 Ver1.2



## Summary of Test Result

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

**Declaration of Conformity:**

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

**Comments and Explanations:**

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

**Reviewed by: Sam Chen**

**Report Producer: Wendy Pan**



# 1 General Description

## 1.1 Information

### 1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
2400-2483.5	b, g, n (HT20)	2412-2462	1-11 [11]

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

Note:

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

### 1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	Remark
1	Azurewave	AW-CU462	PCB Printing Antenna	N/A	2.1	1TX/1RX

Note: The above information was declared by manufacturer.

### 1.1.3 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	1	0	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11n HT20	1	0	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)

Note:

- ♦ DC is Duty Cycle.
- ♦ DCF is Duty Cycle Factor.

### 1.1.4 EUT Operational Condition

EUT Power Type	From host system			
Beamforming Function	<input type="checkbox"/>	With beamforming	<input checked="" type="checkbox"/>	Without beamforming
Function	<input checked="" type="checkbox"/>	Point-to-multipoint	<input type="checkbox"/>	Point-to-point
Test Software Version	UI_mptool(2V0)			

Note: The above information was declared by manufacturer.

### 1.1.5 Table for EUT source

The EUT has two source which are identical to each other in all aspects except for the following table:

Item	EUT 1 (Main Source)				
	Flash	X'tal	Power Inductor	RF Inductor	capacitance
Brand Name	GigaDevice	SIWARD	TDK	TDK	Murata
Model Name	GD25Q32CTIGR	XTL571100-A 263-101	MLP2012S2R2M T0S1	MLG0603P1N0B T000 MLG0603P2N2B T000	GRM0335C1E1R5C D01D
Item	EUT 2 (Second Source)				
	Flash	X'tal	Power Inductor	RF Inductor	capacitance
Brand Name	XTX	TXC	TAI-TECH	Sunlord	EYANG
Model Name	XT25F32B-S	7M40000010	PI201210UF-2R2 M-0A8-NB	SDCL0603Q1N0 BT02B01 SDCL0603Q2N2 BT02B01	C0201C0G1R5C500 NTA



## 1.2 Applicable 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

The following reference test guidance is not within the scope of accreditation of TAF.

- ♦ FCC KDB 558074 D01 v05r02
- ♦ FCC KDB 414788 D01 v01r01

## 1.3 Testing Location Information

Testing Location				
<input 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
<input checked="" type="checkbox"/>	JHUBEI	ADD : No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C.	TEL : 886-3-656-9065	FAX : 886-3-656-9085

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH03-CB	Brian Sin	24-24.6°C / 64-70%	May 27, 2020 ~ May 28, 2020
Radiated<1GHz	03CH01-CB	Paul Chen	28.4-29.2°C / 58-63	Jun. 19, 2020
Radiated>1GHz	03CH03-CB	Brian Sin	23.9-24.8°C / 65-68	May 27, 2020
AC Conduction	CO01-CB	Ryo Fan	23~24°C / 62~63%	Jun. 24, 2020

Test site Designation No. TW0006 with FCC.

Test site registered number IC 4086D with Industry Canada.

## 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)	2.0 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	5.1 dB	Confidence levels of 95%
Conducted Emission	2.4 dB	Confidence levels of 95%
Output Power Measurement	1.5 dB	Confidence levels of 95%
Power Density Measurement	2.4 dB	Confidence levels of 95%
Bandwidth Measurement	2%	Confidence levels of 95%



## 2 Test Configuration of EUT

### 2.1 Test Channel Mode

Mode	Power Setting
802.11b_Nss1,(1Mbps)_1TX	-
2412MHz	116
2417MHz	118
2437MHz	127
2457MHz	115
2462MHz	114
802.11g_Nss1,(6Mbps)_1TX	-
2412MHz	94
2417MHz	100
2437MHz	115
2457MHz	102
2462MHz	98
802.11n HT20_Nss1,(MCS0)_1TX	-
2412MHz	94
2417MHz	99
2437MHz	112
2457MHz	102
2462MHz	97



## 2.2 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	EUT 1
2	EUT 2
For operating mode 1 is the worst case and it was record in this test report.	

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 EUT has two sources, after evaluating, second source has been evaluated to be the worst case, so it was selected to test and record in this test report.	
<b>Test Mode</b>	EUT 2

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	EUT 1 in Z axis
2	EUT 1 in Y axis
Mode 1 has been evaluated to be the worst case between Mode 1~2, thus measurement for Mode 3 will follow this same test mode.	
3	EUT 2 in Z axis
For operating mode 1 is the worst case and it was record in this test report.	
<b>Operating Mode &gt; 1GHz</b>	CTX
1. The EUT was performed at X axis, Y axis and Z axis position test, and the worst case was found at Z axis. So the measurement will follow this same test configuration. 2. The EUT has two sources, after evaluating, second source has been evaluated to be the worst case, so it was selected to test and record in this test report.	
1	EUT 2 in Z axis



## **2.3 EUT Operation during Test**

For CTX Mode:

The EUT was programmed to be in continuously transmitting mode.

For Normal Link:

During the test, the EUT operation to normal function.

## **2.4 Accessories**

N/A



## 2.5 Support Equipment

**For AC Conduction:**

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Fixture	Azurewave	AW-CU462-I1	N/A
B	NB	DELL	E6430	N/A
C	Earphone	e-Power	S90W	N/A
D	Mouse	HP	FM100	N/A
E	AP Router	ASUS	RP-N53	MSQ-RPN53
F	Smart phone	Samsung	Galaxy J2	A3LSMJ200F
G	AP NB	DELL	E6430	N/A

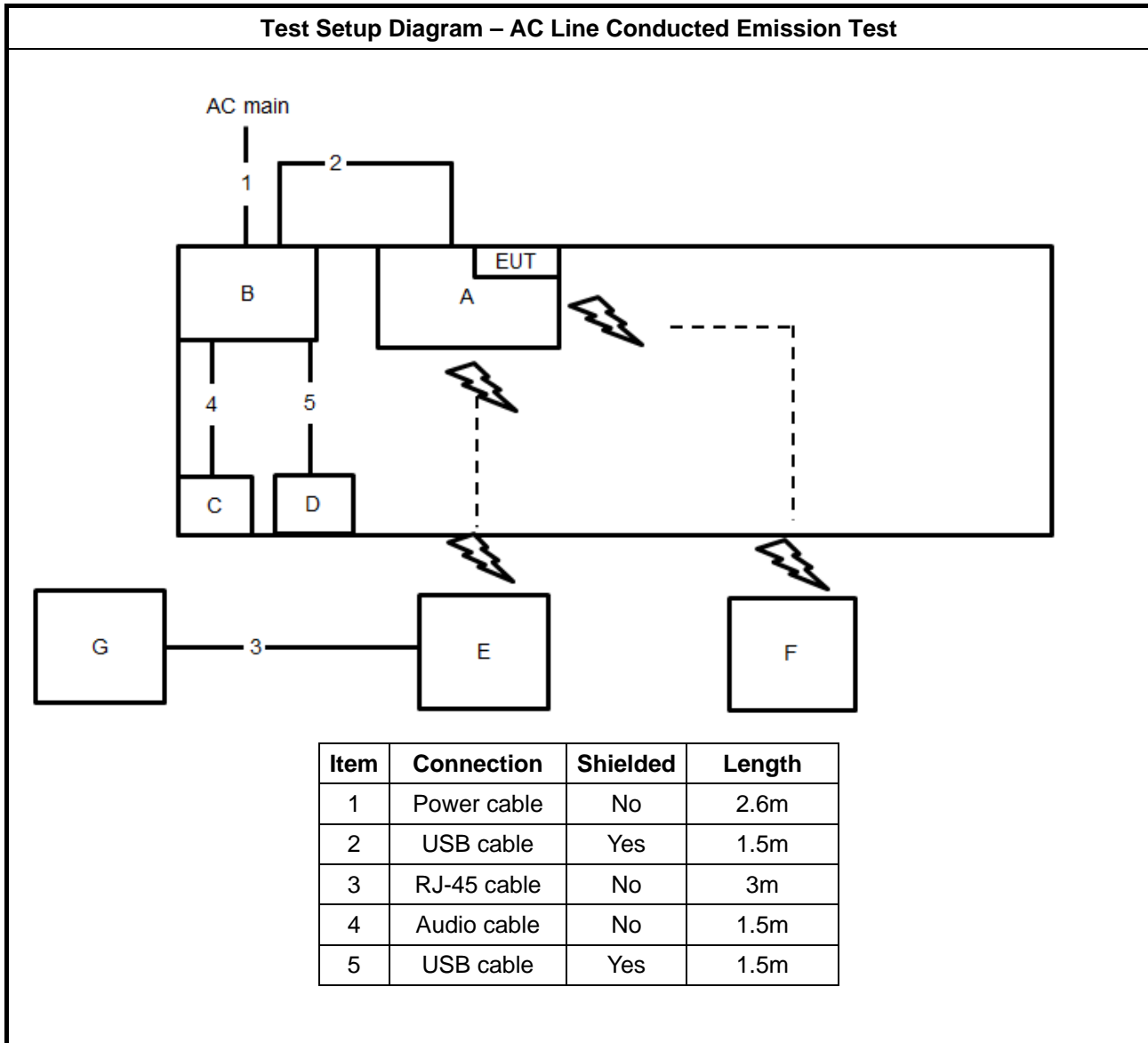
**For Radiated (below 1GHz):**

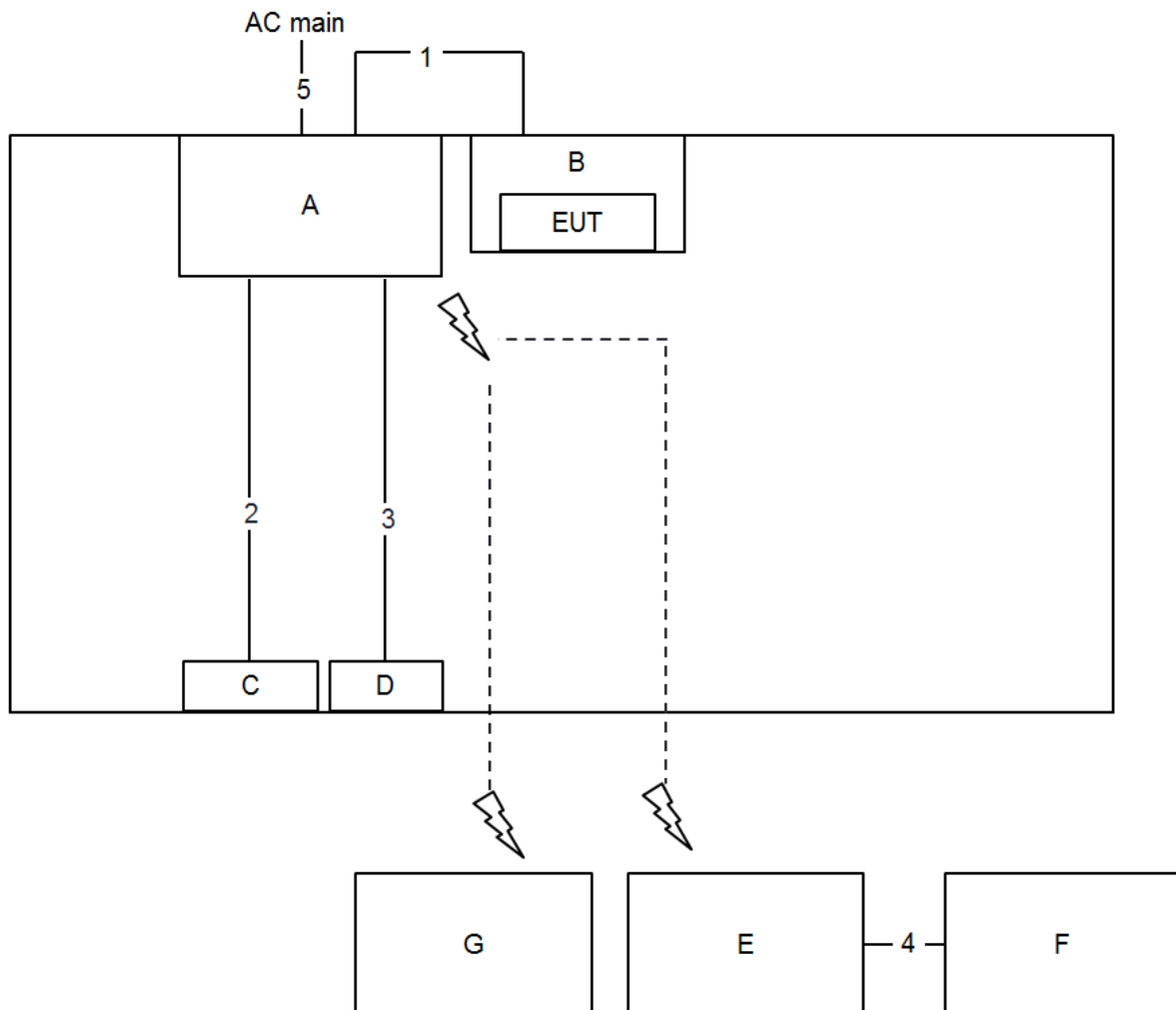
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A
B	Fixture	Azurewave	AW-CU462-I1	N/A
C	Earphone	e-Power	S90W	N/A
D	Mouse	Logitech	M-U0026	N/A
E	WLAN AP	NETGEAR	WNDR3300v2	PY309300116
F	Notebook	DELL	E4300	N/A
G	Smart phone	Samsung	Galaxy J2	A3LSMJ200F

**For Radiated (above 1GHz) and RF Conducted:**

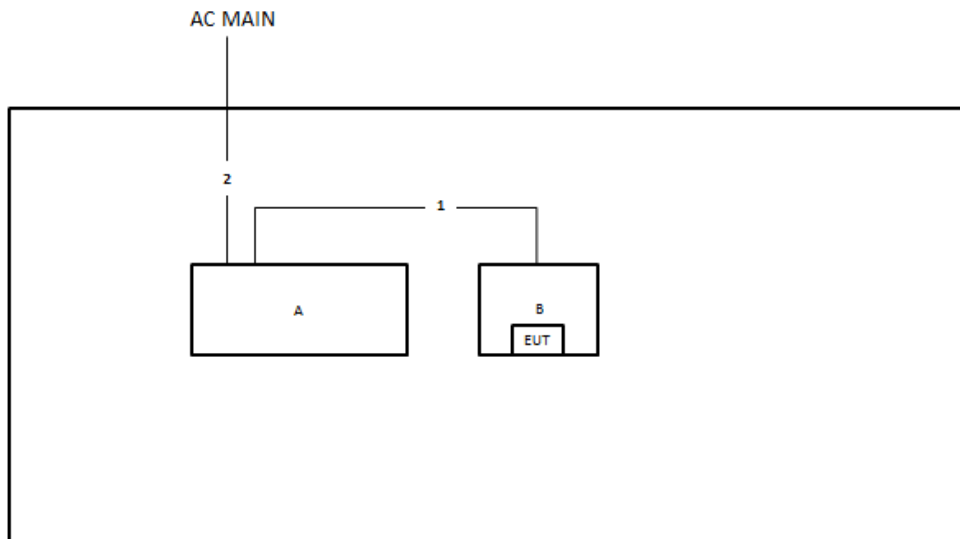
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A
B	Fixture	Azurewave	AW-CU462-I1	N/A

## 2.6 Test Setup Diagram



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


Item	Connection	Shielded	Length
1	USB cable	Yes	1.8m
2	Audio cable	No	1.4m
3	USB cable	Yes	1.8m
4	RJ-45 cable	No	1.5m
5	Power Cable	No	2.6m

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


Item	Connection	Shielded	Length
1	USB cable	Yes	1.8m
2	Power Cable	No	2.6m



### 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.

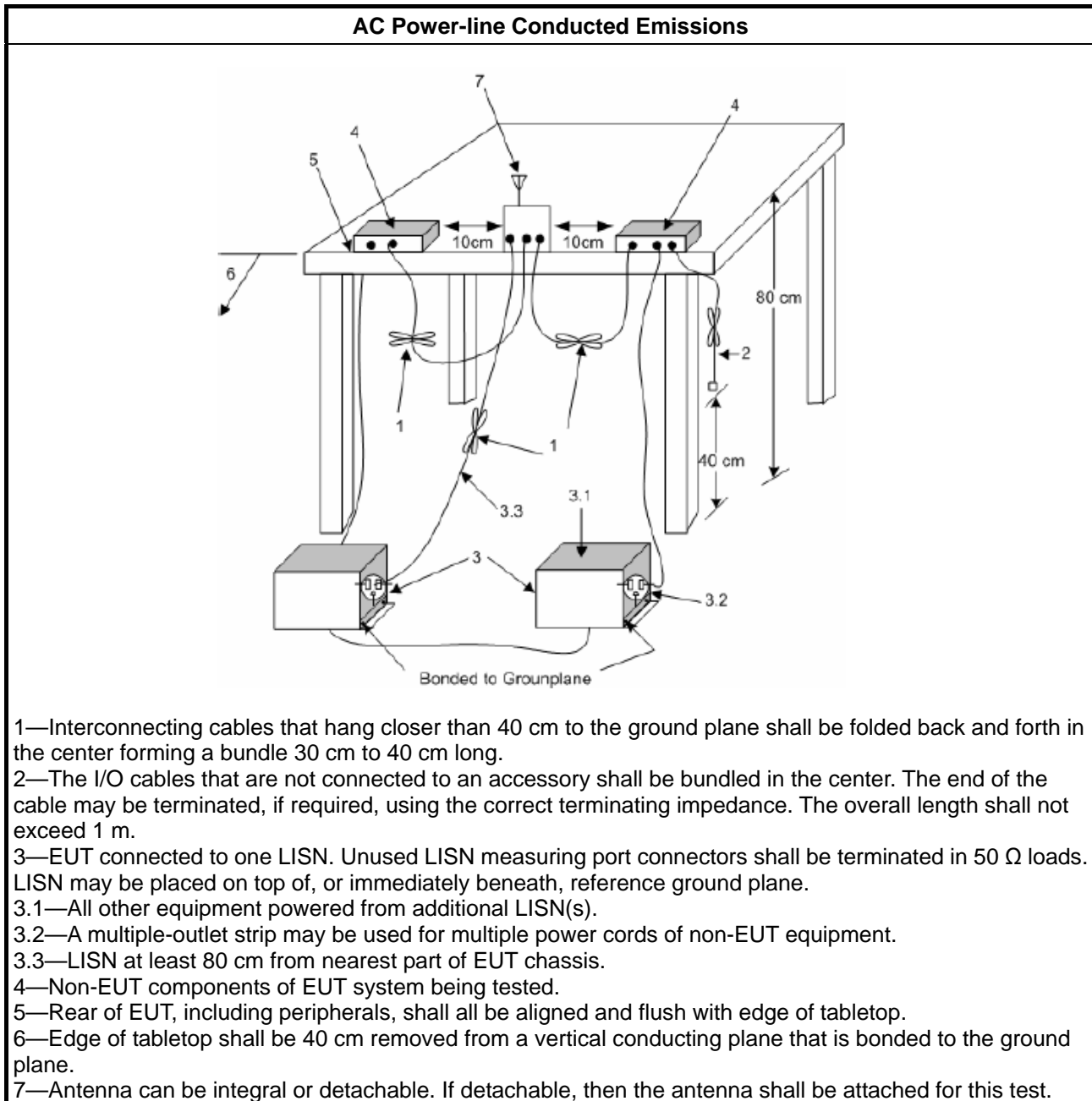
##### 3.1.2 Measuring Instruments

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 Measurement Results Calculation

The measured Level is calculated using:

- Corrected Reading (dBuV) = LISN Factor + Cable Loss + Read Level = Level
- Margin = - Limit + (Read Level + LISN Factor + Cable Loss)

### 3.1.6 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>
<ul style="list-style-type: none"> <li>6 dB bandwidth <math>\geq</math> 500 kHz.</li> </ul>

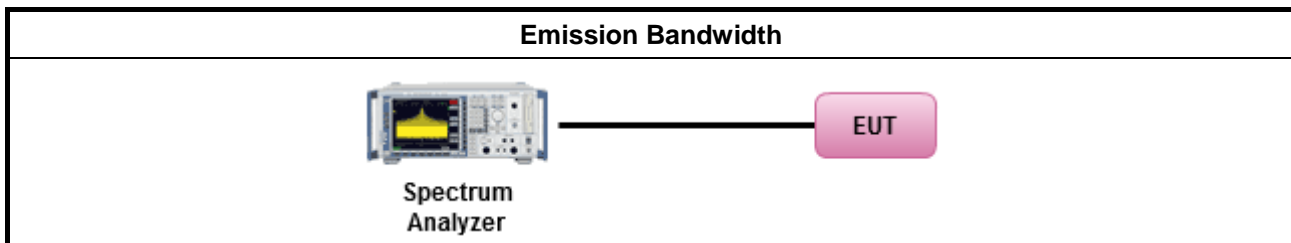
### 3.2.2 Measuring Instruments

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

### 3.2.3 Test Procedures

Test Method
<ul style="list-style-type: none"> <li>For the emission bandwidth shall be measured using one of the options below:</li> </ul>
<input checked="" type="checkbox"/> Refer as FCC KDB 558074, clause 8.2 & C63.10 clause 11.8.1 Option 1 for 6 dB bandwidth measurement.
<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.2 & C63.10 clause 11.8.2 Option 2 for 6 dB bandwidth measurement.
<input type="checkbox"/> Refer as ANSI C63.10, clause 6.9.1 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
$P_{Out}$ = 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

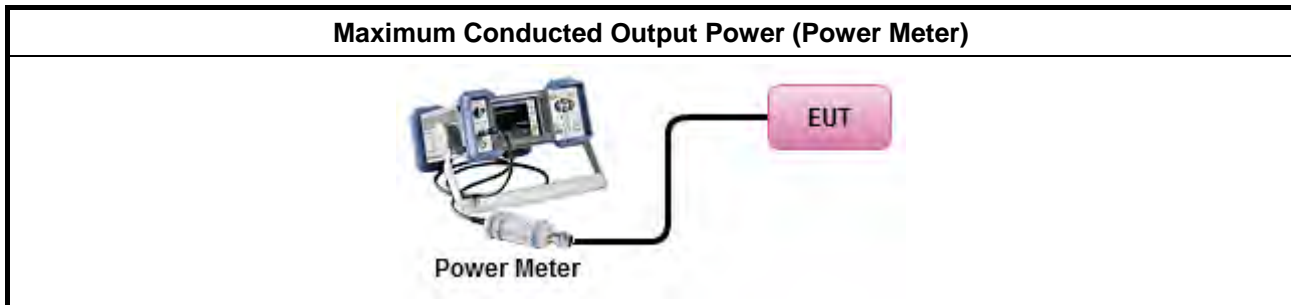
Refer a test equipment and calibration data table in this test report.



### 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 FCC KDB 558074, clause 8.3.1.1 & C63.10 clause 11.9.1.1 (RBW ≥ EBW method).
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 8.3.1.3 & C63.10 clause 11.9.1.3 (peak power meter).
<ul style="list-style-type: none"> <li>Maximum Conducted Output Power</li> </ul>	
[duty cycle ≥ 98% or external video / power trigger]	
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.2 Method AVGSA-1.
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.3 Method AVGSA-1A. (alternative)
duty cycle < 98% and average over on/off periods with duty factor	
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.4 Method AVGSA-2.
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.5 Method AVGSA-2A (alternative)
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.6 Method AVGSA-3
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.7 Method AVGSA-3A (alternative)
Measurement using a power meter (PM)	
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 8.3.2.3 & C63.10 clause 11.9.2.3.1 Method AVGPM (using an RF average power meter).
<input checked="" type="checkbox"/>	Refer as FCC KDB 558074, clause 8.3.2.3 & C63.10 clause 11.9.2.3.2 Method AVGPM-G (using an gate 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 FCC 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

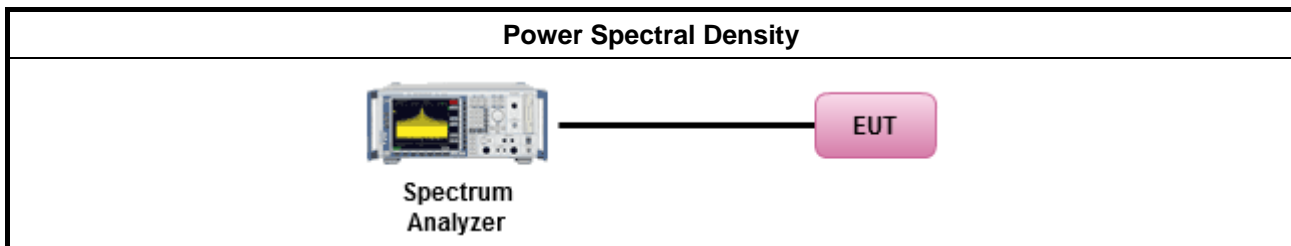
#### 3.4.2 Measuring Instruments

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 FCC KDB 558074, clause 8.4 & C63.10 clause 11.10 Method Max. PSD.
▪ For conducted measurement.	
▪ If The EUT supports multiple transmit chains using options given below:	
<input type="checkbox"/>	Option 1: Measure and sum the spectra across the outputs. Refer as FCC 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.
<input type="checkbox"/>	Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,
<input type="checkbox"/>	Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.

### 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 (dBc)
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>	

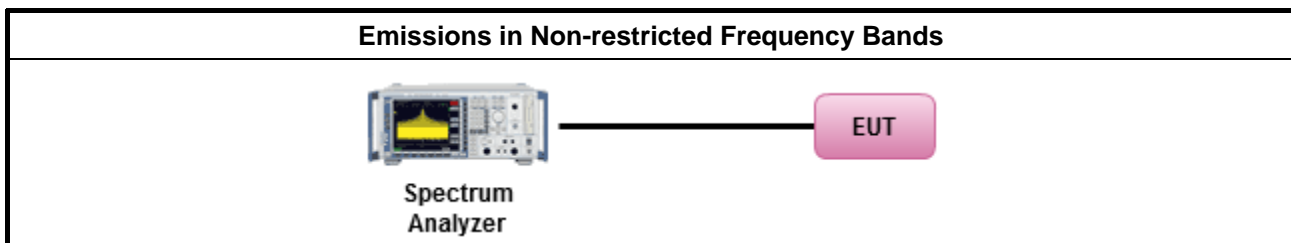
#### 3.5.2 Measuring Instruments

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 FCC KDB 558074, clause 8.5 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.

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

#### 3.6.2 Measuring Instruments

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

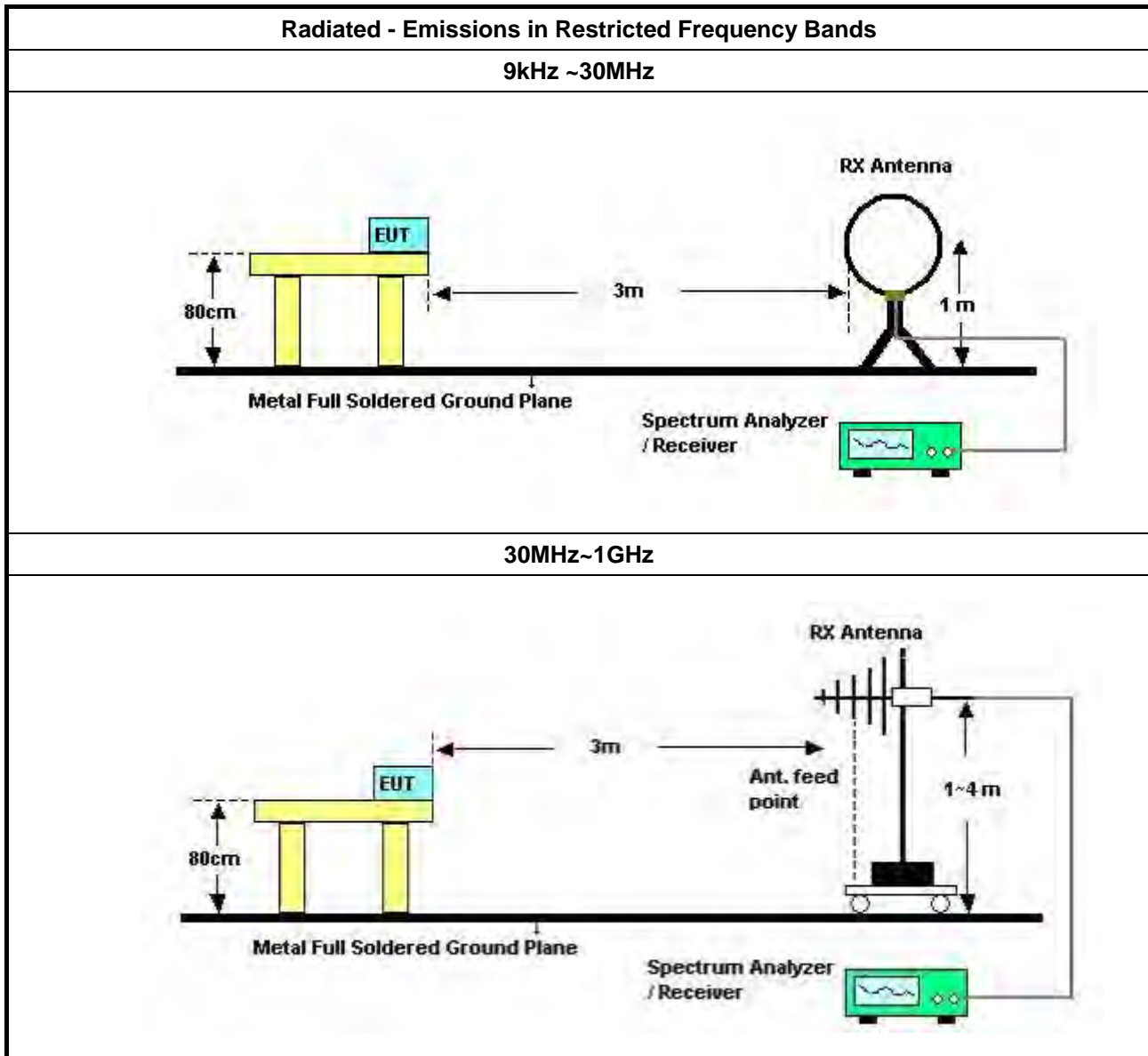


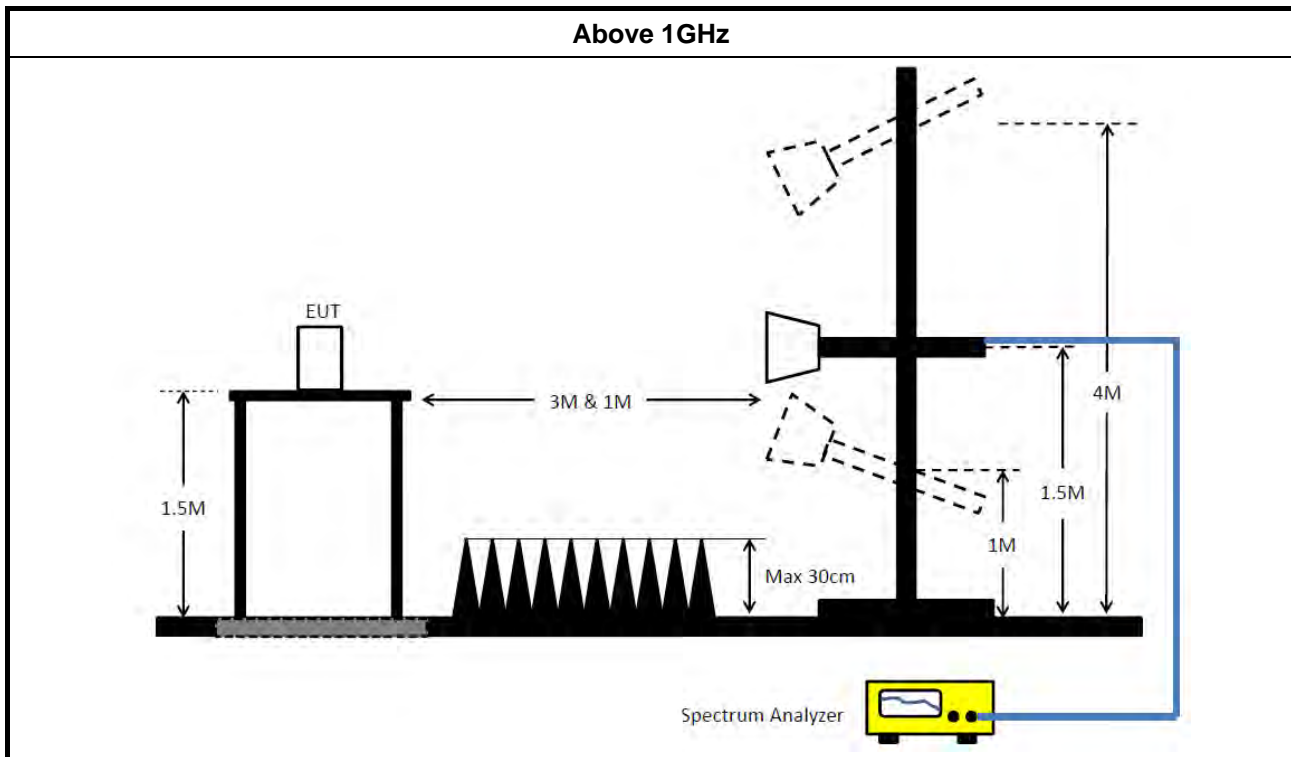


### 3.6.3 Test Procedures

Test Method	
▪ The average emission levels shall be measured in [duty cycle $\geq 98$ or duty factor].	
▪ 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.	
▪ For the transmitter unwanted emissions shall be measured using following options below:	
	▪ Refer as FCC KDB 558074, clause 8.6 for unwanted emissions into restricted bands.
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.1(trace averaging for duty cycle $\geq 98\%$ ).
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.2(trace averaging + duty factor).
	<input checked="" type="checkbox"/> Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.3(Reduced VBW $\geq 1/T$ ).
	<input type="checkbox"/> Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW $\geq 1/T$ , where T is pulse time.
	<input type="checkbox"/> Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.
	<input checked="" type="checkbox"/> Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.4 measurement procedure peak limit.
▪ For the transmitter band-edge emissions shall be measured using following options below:	
	▪ Refer as FCC KDB 558074 clause 8.7 & C63.10 clause 11.13.1, 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.
	▪ Refer as FCC KDB 558074, clause 8.7 (ANSI C63.10, clause 6.10.6) for marker-delta method for band-edge measurements.
	▪ Refer as FCC KDB 558074, clause 8.7 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).
	▪ 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
	▪ For FCC 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.

### 3.6.4 Test Setup





### 3.6.5 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamplifier Factor (if applicable) = Level.

### 3.6.6 Emissions in Restricted Frequency Bands (Below 30MHz)

There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to KDB414788 Radiated Test Site, and the result came out very similar.

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

The radiated emissions were investigated from 9 kHz or the lowest frequency generated within the device, up to the 10 harmonic or 40 GHz, whichever is appropriate.

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

Refer as Appendix F



## 4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.45GHz	Feb. 26, 2020	Feb. 25, 2021	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Dec. 25, 2019	Dec. 24, 2020	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Feb. 25, 2020	Feb. 24, 2021	Conduction (CO01-CB)
Pulse Limiter	Rohde&Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Jan. 31, 2020	Jan. 30, 2021	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	May 20, 2020	May 19, 2021	Conduction (CO01-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Apr. 13, 2020	Apr. 12, 2021	Radiation (03CH01-CB)
Bilog Antenna with 6dB Attenuator	Schaffner & EMCI	CBL6112 & N-6-06	2888 & AT-N0611	30MHz ~ 1GHz	Oct. 12, 2019	Oct. 11, 2020	Radiation (03CH01-CB)
Pre-Amplifier	EMCI	EMC330N	980332	20MHz ~ 3GHz	May 21, 2020	May 20, 2021	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Apr. 16, 2020	Apr. 15, 2021	Radiation (03CH01-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	May 13, 2020	May 12, 2021	Radiation (03CH01-CB)
RF Cable-low	Woken	RG402	Low Cable-16+17	30 MHz ~ 1 GHz	Feb. 01, 2020	Jan. 31, 2021	Radiation (03CH01-CB)
Horn Antenna	ETS • Lindgren	3115	6821	750MHz~18GHz	Jan. 20, 2020	Jan. 19, 2021	Radiation (03CH03-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jun. 27, 2019	Jun. 26, 2020	Radiation (03CH03-CB)
Pre-Amplifier	EMCI	EMC12630SE	980383	1GHz ~ 26.5GHz	Aug. 02, 2019	Aug. 01, 2020	Radiation (03CH03-CB)
Pre-Amplifier	MITEQ	TTA1840-35-H G	1864479	18GHz ~ 40GHz	Jul. 03, 2019	Jul. 02, 2020	Radiation (03CH03-CB)
Spectrum Analyzer	R&S	FSP40	100019	9kHz ~ 40GHz	Jun. 19, 2019	Jun. 18, 2020	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-20+27	1GHz ~ 18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-27	1GHz ~ 18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH03-CB)
Spectrum analyzer	R&S	FSV40	101028	9kHz~40GHz	Nov. 01, 2019	Oct. 31, 2020	Conducted (TH03-CB)



Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Power Sensor	Anritsu	MA2411B	1726195	300MHz~40GHz	Aug. 13, 2019	Aug. 12, 2020	Conducted (TH03-CB)
Power Meter	Anritsu	ML2495A	1035008	300MHz~40GHz	Aug. 13, 2019	Aug. 12, 2020	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-11	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-12	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-13	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-14	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-15	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH03-CB)

Note: Calibration Interval of instruments listed above is one year.

N.C.R. means Non-Calibration required.



## AC Power Port Conducted Emission Result

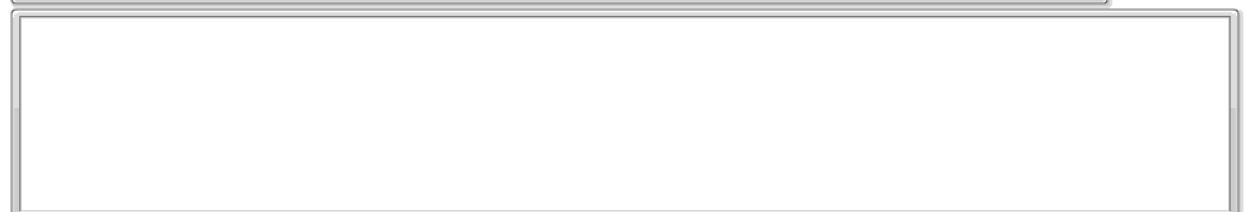
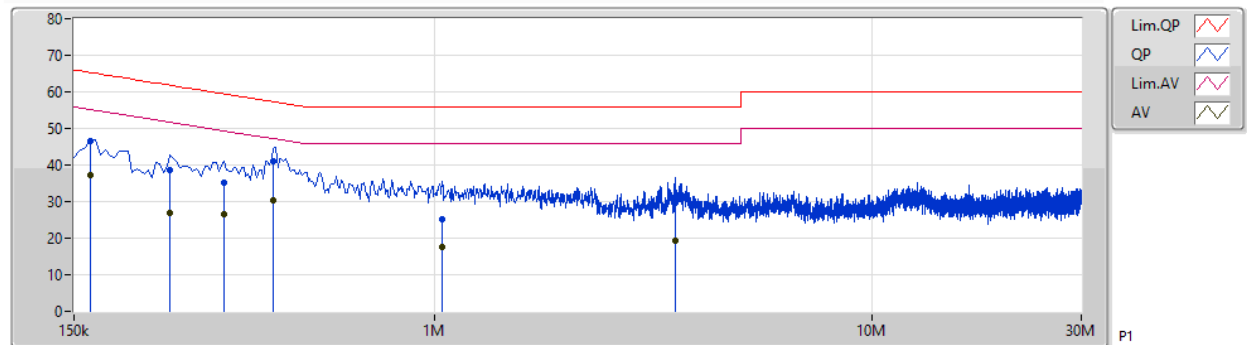
Appendix A

### Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition
Mode 1	Pass	QP	168k	50.14	65.06	-14.92	9.86	Neutral

### Mode 1

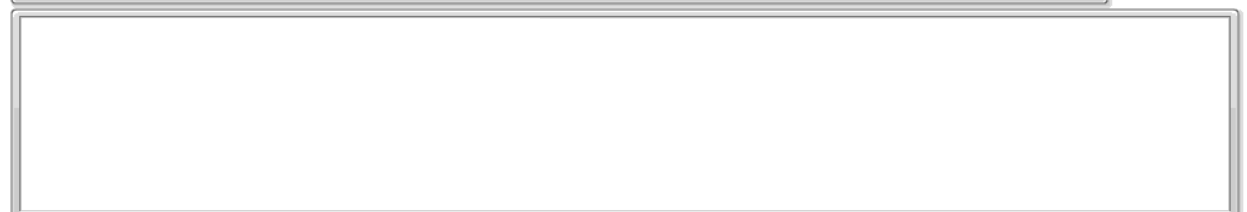
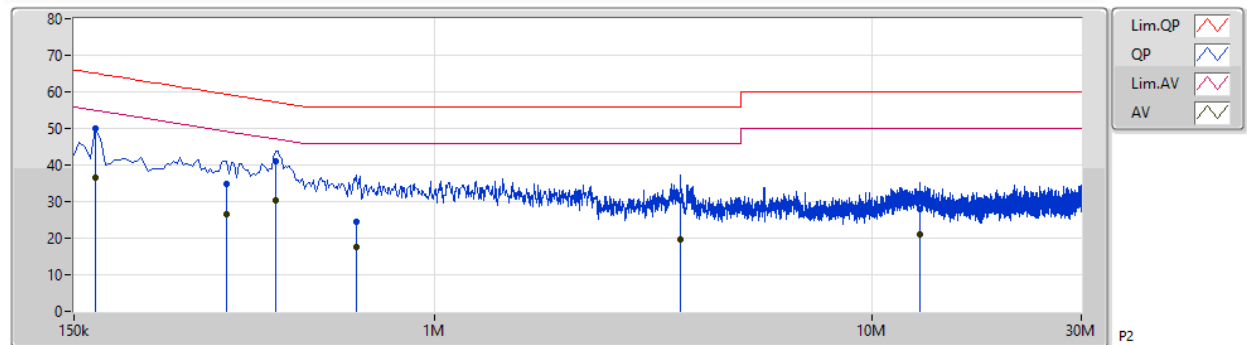
24/06/2020



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	AF (dB)	CL (dB)	AT (dB)			
QP	163.5k	46.66	65.27	-18.61	9.87	Line	-	36.79	0.05	0.03	9.79			
AV	163.5k	37.17	55.27	-18.10	9.87	Line	-	27.30	0.05	0.03	9.79			
QP	249k	38.47	61.79	-23.32	9.87	Line	-	28.60	0.04	0.03	9.80			
AV	249k	26.80	51.79	-24.99	9.87	Line	-	16.93	0.04	0.03	9.80			
QP	330k	35.17	59.44	-24.27	9.87	Line	-	25.30	0.04	0.03	9.80			
AV	330k	26.51	49.44	-22.93	9.87	Line	-	16.64	0.04	0.03	9.80			
QP	429k	41.07	57.28	-16.21	9.88	Line	"Worst"	31.19	0.04	0.03	9.81			
AV	429k	30.50	47.28	-16.78	9.88	Line	-	20.62	0.04	0.03	9.81			
QP	1.041M	25.21	56.00	-30.79	9.91	Line	-	15.30	0.05	0.04	9.82			
AV	1.041M	17.54	46.00	-28.46	9.91	Line	-	7.63	0.05	0.04	9.82			
QP	3.539M	29.76	56.00	-26.24	10.01	Line	-	19.75	0.08	0.12	9.81			
AV	3.539M	19.20	46.00	-26.80	10.01	Line	-	9.19	0.08	0.12	9.81			

### Mode 1

24/06/2020



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	AF (dB)	CL (dB)	AT (dB)			
QP	168k	50.14	65.06	-14.92	9.86	Neutral	"Worst"	40.28	0.04	0.03	9.79			
AV	168k	36.61	55.06	-18.45	9.86	Neutral	-	26.75	0.04	0.03	9.79			
QP	334.5k	34.87	59.35	-24.48	9.87	Neutral	-	25.00	0.04	0.03	9.80			
AV	334.5k	26.41	49.35	-22.94	9.87	Neutral	-	16.54	0.04	0.03	9.80			
QP	433.5k	41.18	57.19	-16.01	9.88	Neutral	-	31.30	0.04	0.03	9.81			
AV	433.5k	30.47	47.19	-16.72	9.88	Neutral	-	20.59	0.04	0.03	9.81			
QP	663k	24.59	56.00	-31.41	9.91	Neutral	-	14.68	0.05	0.04	9.82			
AV	663k	17.67	46.00	-28.33	9.91	Neutral	-	7.76	0.05	0.04	9.82			
QP	3.638M	30.47	56.00	-25.53	10.02	Neutral	-	20.45	0.09	0.12	9.81			
AV	3.638M	19.69	46.00	-26.31	10.02	Neutral	-	9.67	0.09	0.12	9.81			
QP	12.854M	27.84	60.00	-32.16	10.30	Neutral	-	17.54	0.18	0.20	9.92			
AV	12.854M	21.19	50.00	-28.81	10.30	Neutral	-	10.89	0.18	0.20	9.92			



**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX	10.05M	15.217M	15M2G1D	10.025M	14.668M
802.11g_Nss1,(6Mbps)_1TX	16.525M	18.091M	18M1D1D	16.525M	16.592M
802.11n HT20_Nss1,(MCS0)_1TX	17.75M	18.516M	18M5D1D	17.6M	17.716M

**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;

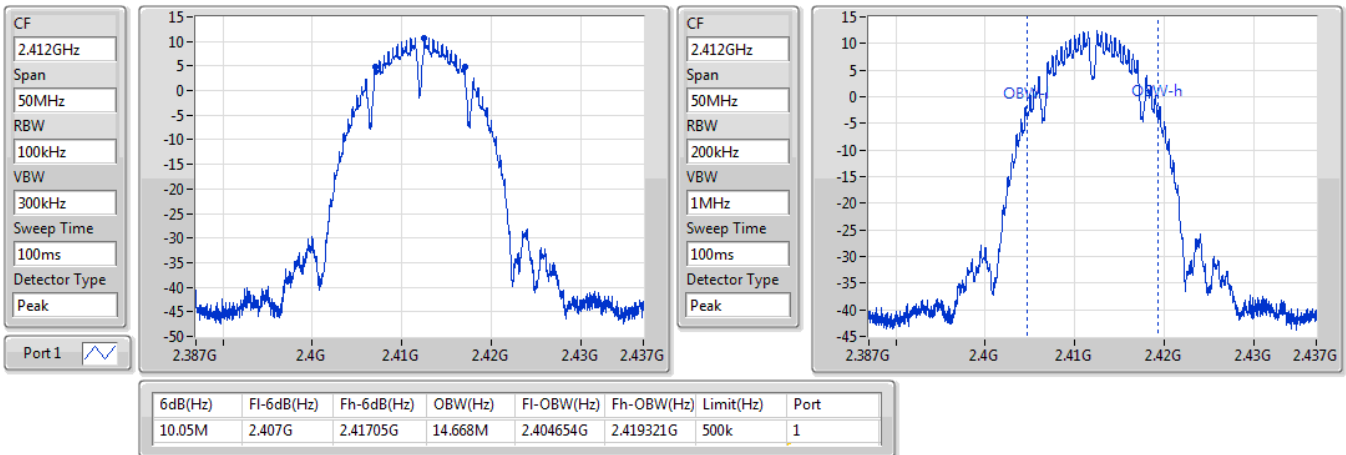
**Result**

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	10.05M	14.668M
2437MHz	Pass	500k	10.05M	15.217M
2462MHz	Pass	500k	10.025M	14.718M
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	16.525M	16.592M
2437MHz	Pass	500k	16.525M	18.091M
2462MHz	Pass	500k	16.525M	16.642M
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-
2412MHz	Pass	500k	17.6M	17.716M
2437MHz	Pass	500k	17.75M	18.516M
2462MHz	Pass	500k	17.6M	17.741M

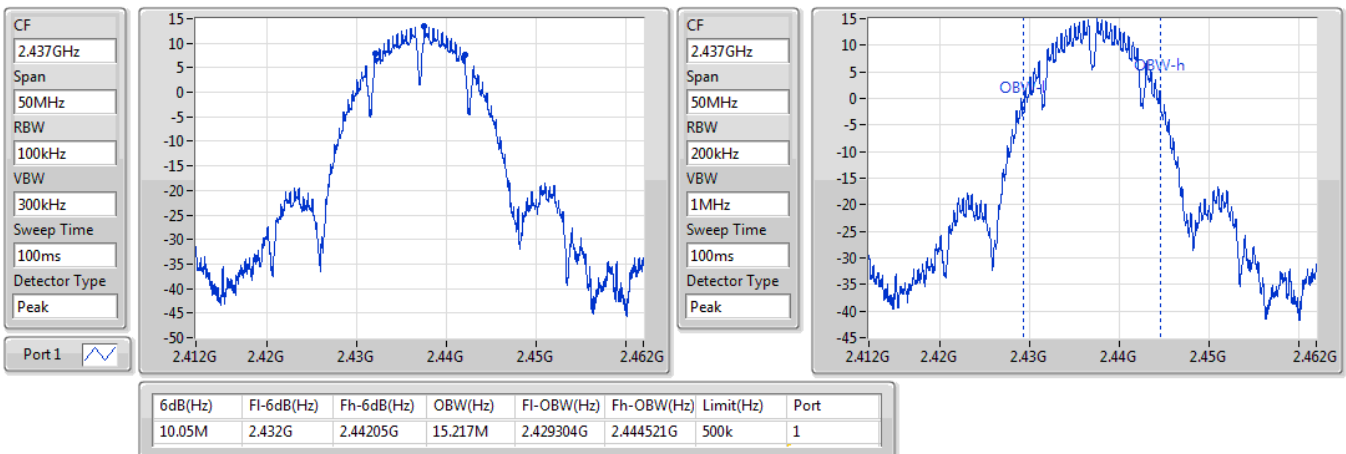
**Port X-N dB** = Port X 6dB down bandwidth; **Port X-OBW** = Port X 99% occupied bandwidth;

**802.11b\_Nss1,(1Mbps)\_1TX**
**EBW**
**2412MHz**

27/05/2020


**802.11b\_Nss1,(1Mbps)\_1TX**
**EBW**
**2437MHz**

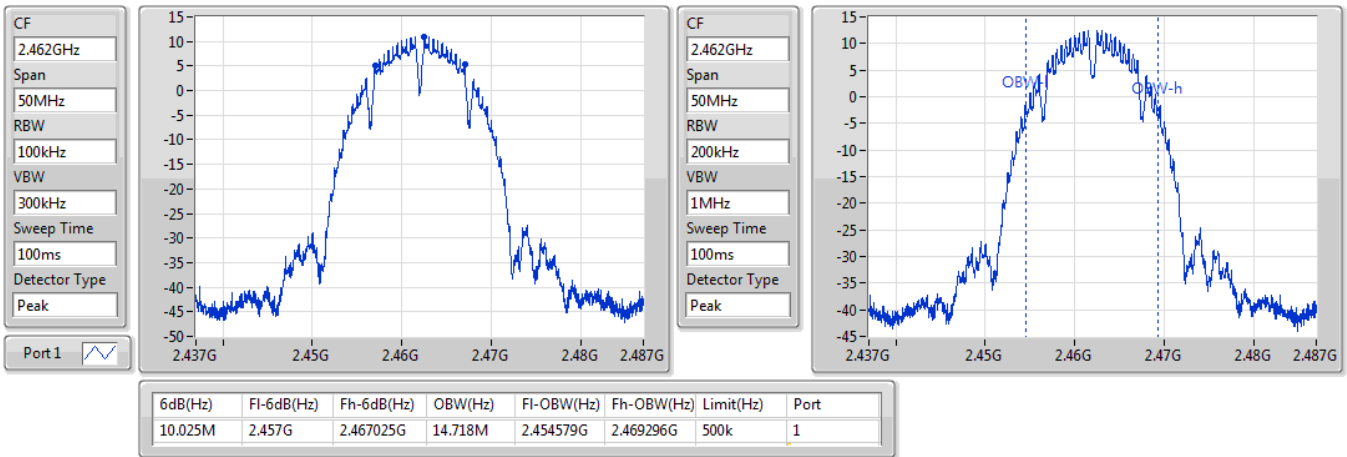
27/05/2020



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

**EBW**
**2462MHz**

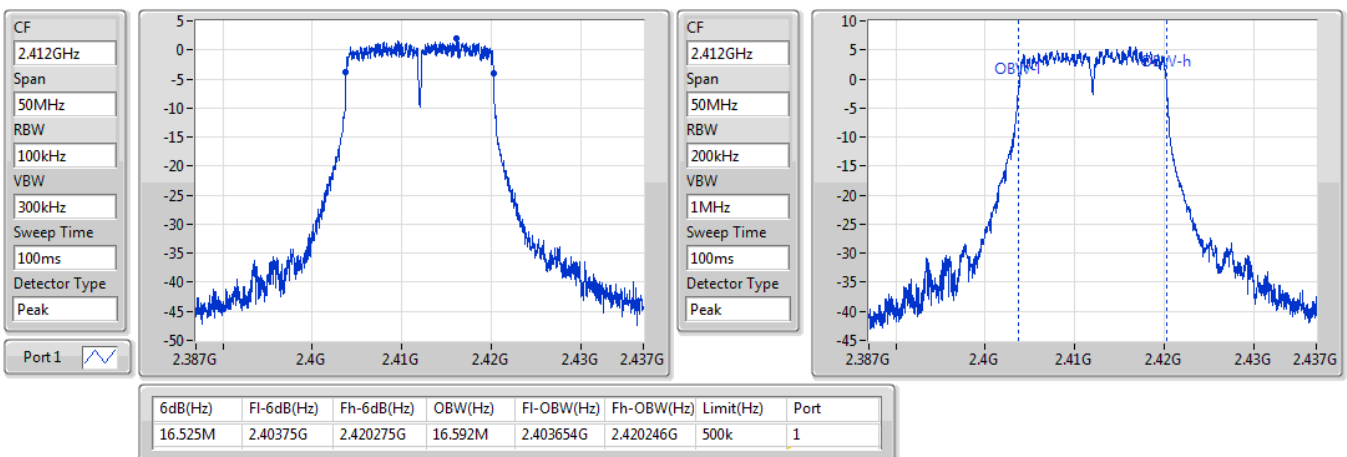
27/05/2020



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

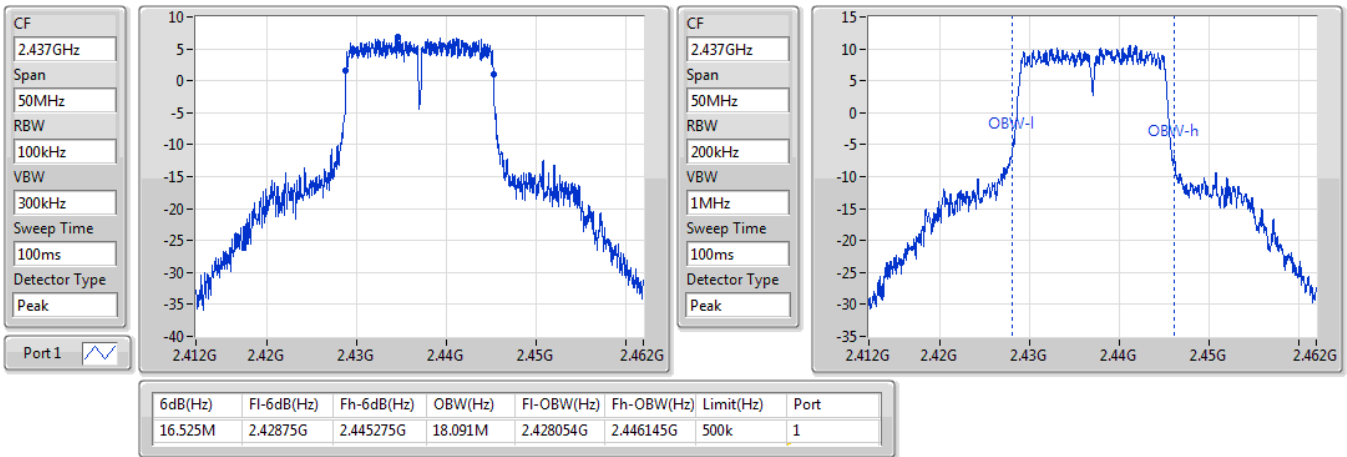
**EBW**
**2412MHz**

27/05/2020

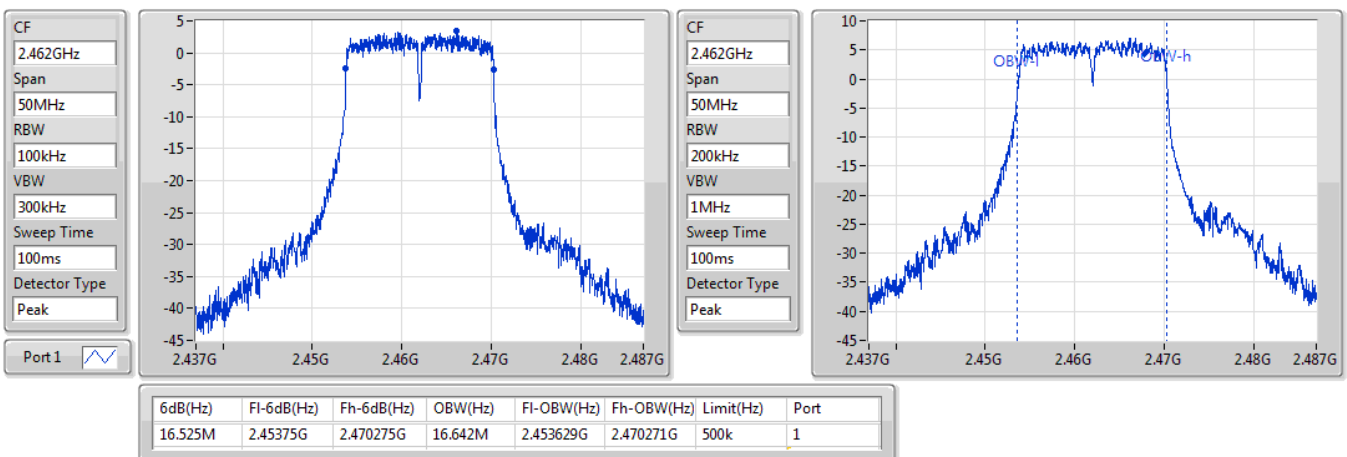


**802.11g\_Nss1,(6Mbps)\_1TX**
**EBW**
**2437MHz**

27/05/2020

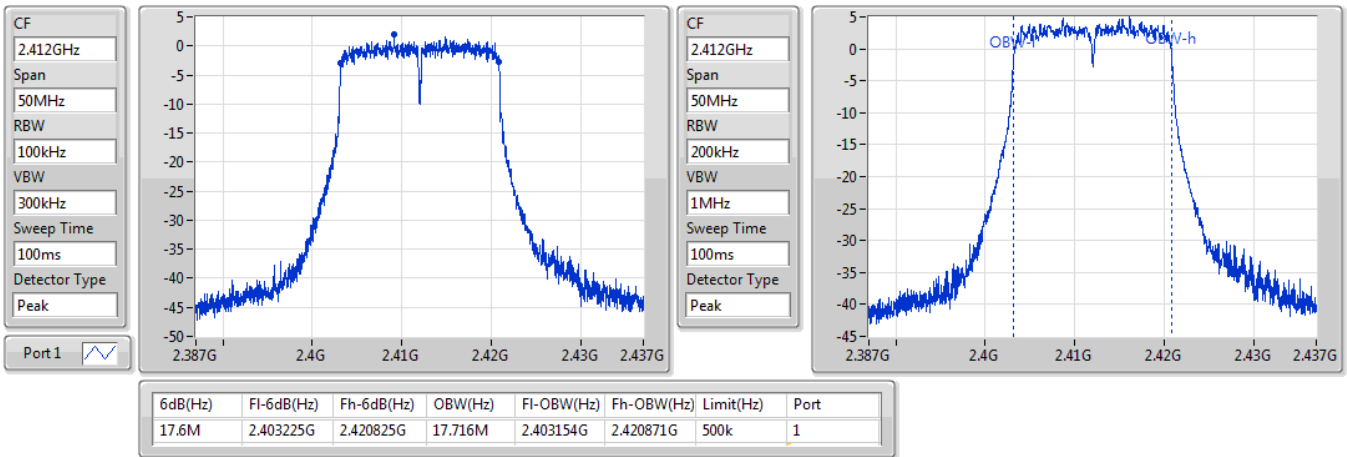

**802.11g\_Nss1,(6Mbps)\_1TX**
**EBW**
**2462MHz**

27/05/2020

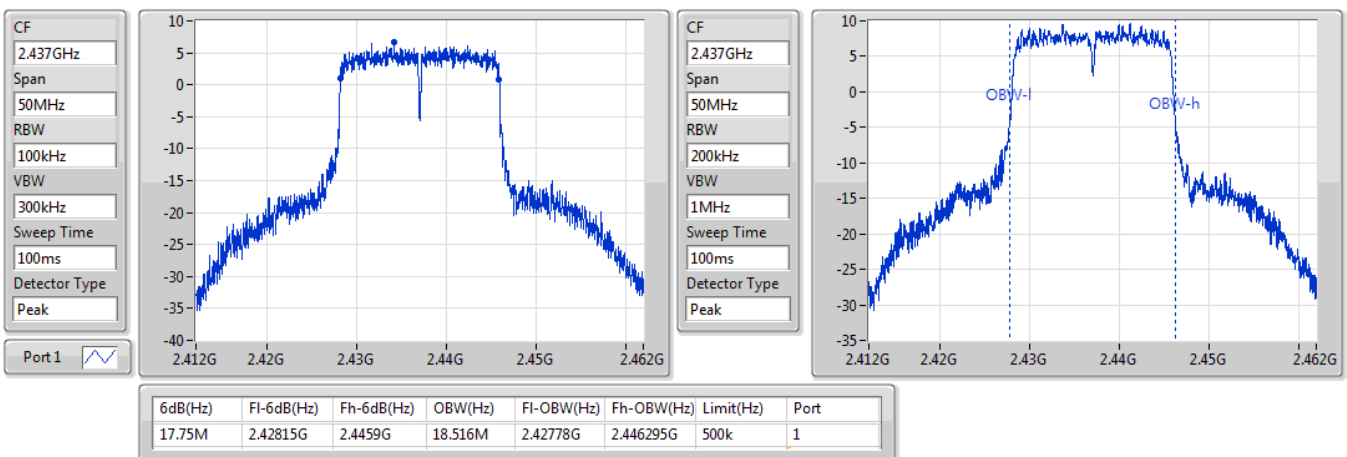


**802.11n HT20\_Nss1,(MCS0)\_1TX**
**EBW**
**2412MHz**

27/05/2020


**802.11n HT20\_Nss1,(MCS0)\_1TX**
**EBW**
**2437MHz**

27/05/2020

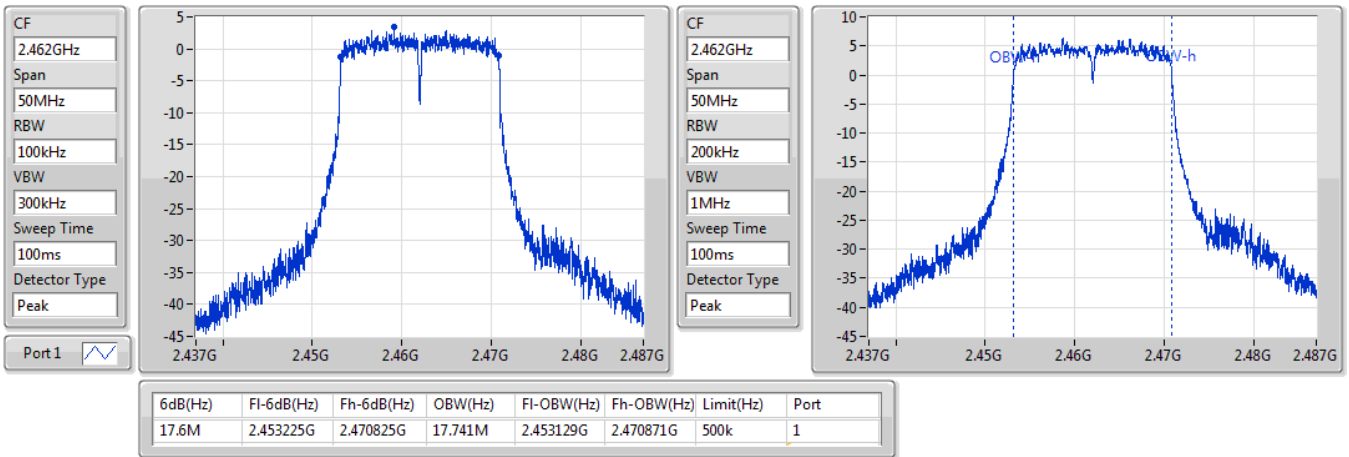


## 802.11n HT20\_Nss1,(MCS0)\_1TX

EBW

2462MHz

27/05/2020





## Average Power

## Appendix C

### Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_1TX	24.01	0.25177
802.11g_Nss1,(6Mbps)_1TX	21.60	0.14454
802.11n HT20_Nss1,(MCS0)_1TX	21.04	0.12706

**Result**

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	2.10	21.13	21.13	30.00
2417MHz	Pass	2.10	21.69	21.69	30.00
2437MHz	Pass	2.10	24.01	24.01	30.00
2457MHz	Pass	2.10	21.04	21.04	30.00
2462MHz	Pass	2.10	20.93	20.93	30.00
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	2.10	17.44	17.44	30.00
2417MHz	Pass	2.10	17.75	17.75	30.00
2437MHz	Pass	2.10	21.60	21.60	30.00
2457MHz	Pass	2.10	18.88	18.88	30.00
2462MHz	Pass	2.10	18.00	18.00	30.00
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-
2412MHz	Pass	2.10	17.38	17.38	30.00
2417MHz	Pass	2.10	17.48	17.48	30.00
2437MHz	Pass	2.10	21.04	21.04	30.00
2457MHz	Pass	2.10	18.91	18.91	30.00
2462MHz	Pass	2.10	17.61	17.61	30.00

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



**Summary**

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_1TX	-7.20
802.11g_Nss1,(6Mbps)_1TX	-7.66
802.11n HT20_Nss1,(MCS0)_1TX	-8.47

**RBW** = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;

**Result**

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	2.10	-9.77	-9.77	8.00
2437MHz	Pass	2.10	-7.20	-7.20	8.00
2462MHz	Pass	2.10	-9.60	-9.60	8.00
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	2.10	-13.08	-13.08	8.00
2437MHz	Pass	2.10	-7.66	-7.66	8.00
2462MHz	Pass	2.10	-11.34	-11.34	8.00
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-
2412MHz	Pass	2.10	-13.40	-13.40	8.00
2437MHz	Pass	2.10	-8.47	-8.47	8.00
2462MHz	Pass	2.10	-11.80	-11.80	8.00

**DG** = Directional Gain; **RBW** = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;

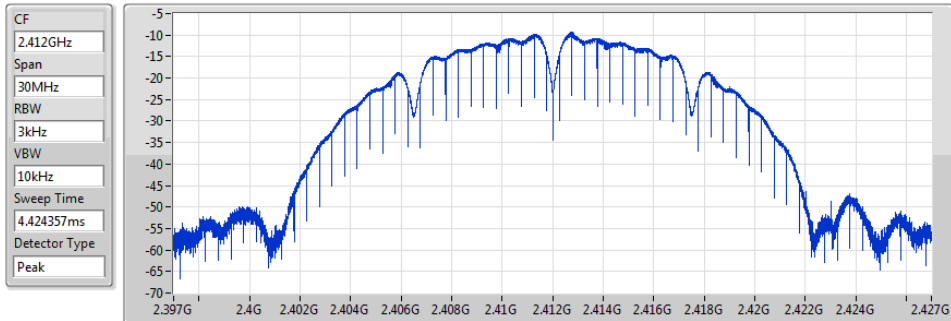
**PD** = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

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

PSD

2412MHz

27/05/2020



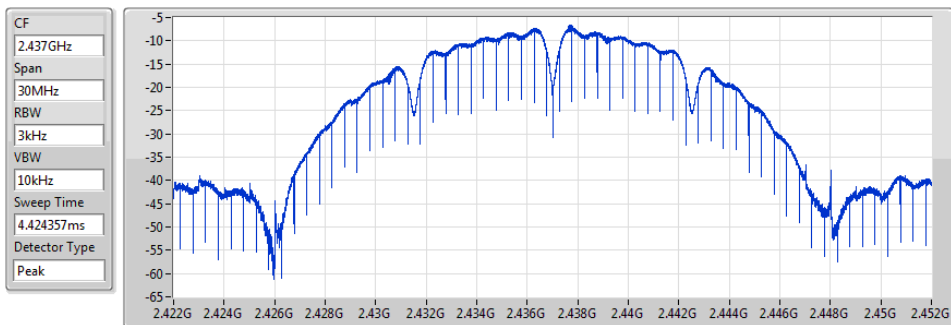
Sum	PD	Port 1
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
-9.77	-9.77	-9.77

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

PSD

2437MHz

27/05/2020



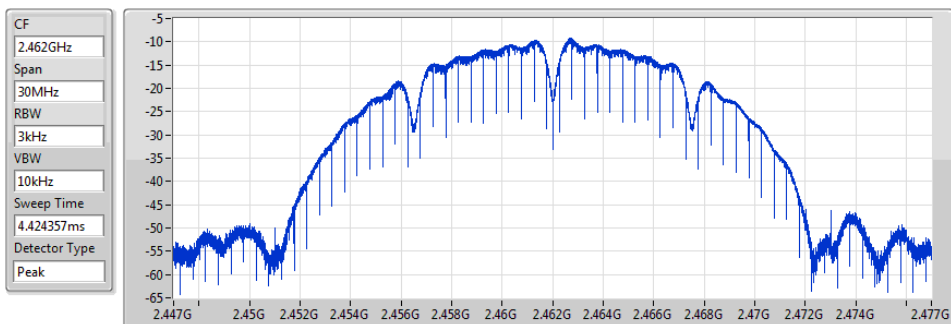
Sum	PD	Port 1
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
-7.20	-7.20	-7.20

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

PSD

2462MHz

27/05/2020



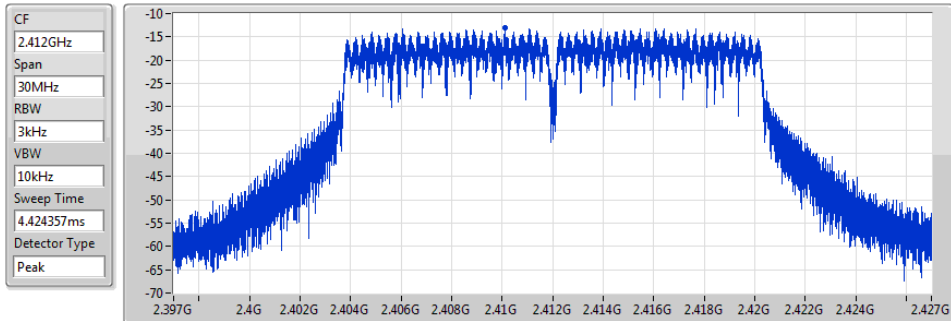
Sum	PD	Port 1
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
-9.60	-9.60	-9.60

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

PSD

2412MHz

27/05/2020



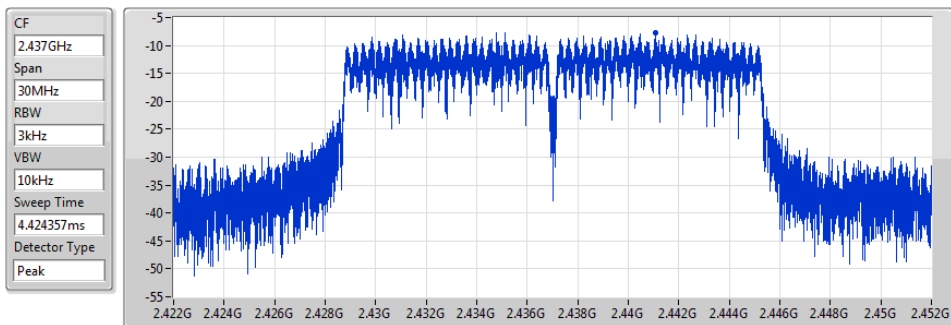
Sum	PD	Port 1
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
-13.08	-13.08	-13.08

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

PSD

2437MHz

27/05/2020



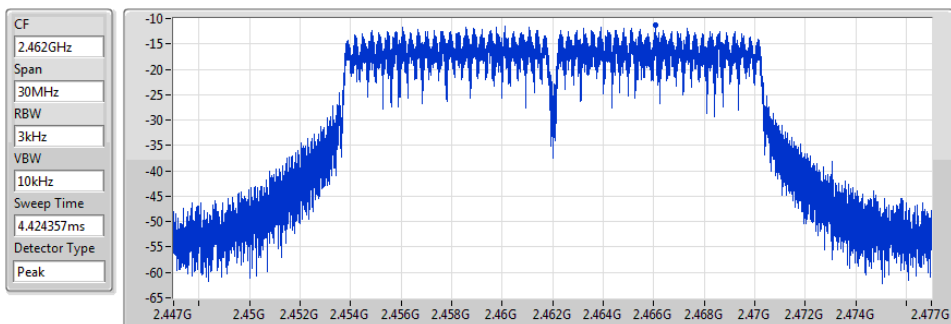
Sum	PD	Port 1
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
-7.66	-7.66	-7.66

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

PSD

2462MHz

27/05/2020



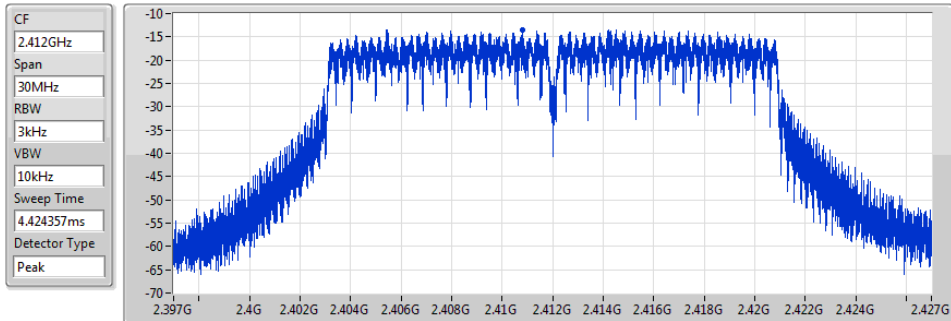
Sum	PD	Port 1
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
-11.34	-11.34	-11.34

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

PSD

2412MHz

27/05/2020



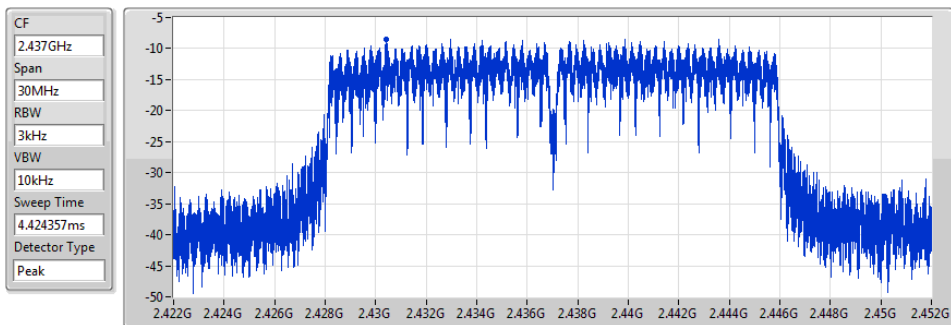
Sum	PD	Port 1
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-13.40	-13.40	-13.40

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

PSD

2437MHz

27/05/2020



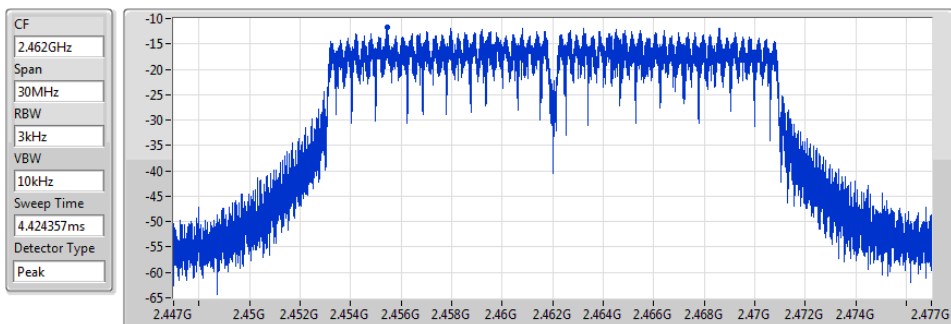
Sum	PD	Port 1
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-8.47	-8.47	-8.47

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

PSD

2462MHz

27/05/2020



Sum	PD	Port 1
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-11.80	-11.80	-11.80

**Summary**

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX	Pass	2.43753G	13.42	-16.58	2.30233G	-53.40	2.39952G	-30.37	2.4G	-30.51	2.49102G	-46.99	17.12761G	-48.29	1
802.11g_Nss1,(6Mbps)_1TX	Pass	2.43453G	6.91	-23.09	2.12904G	-54.59	2.3999G	-32.00	2.4G	-32.93	2.4939G	-50.13	16.78484G	-47.08	1
802.11n HT20_Nss1,(MCS0)_1TX	Pass	2.43415G	6.35	-23.65	236.5M	-53.86	2.3999G	-31.11	2.4G	-33.72	2.49438G	-49.05	16.43364G	-47.52	1

**Result**

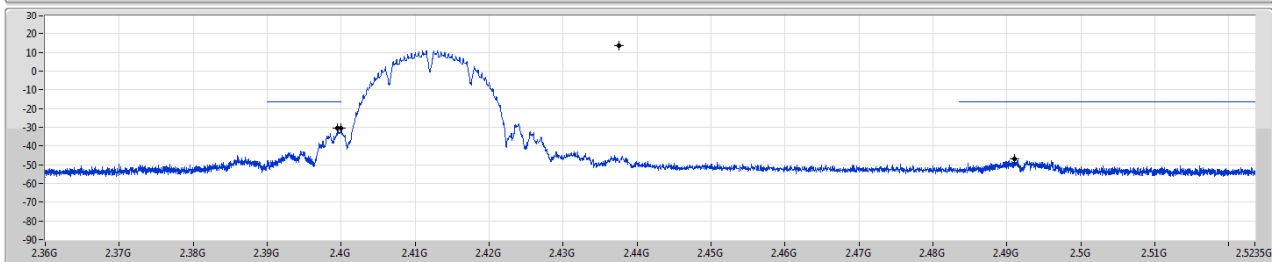
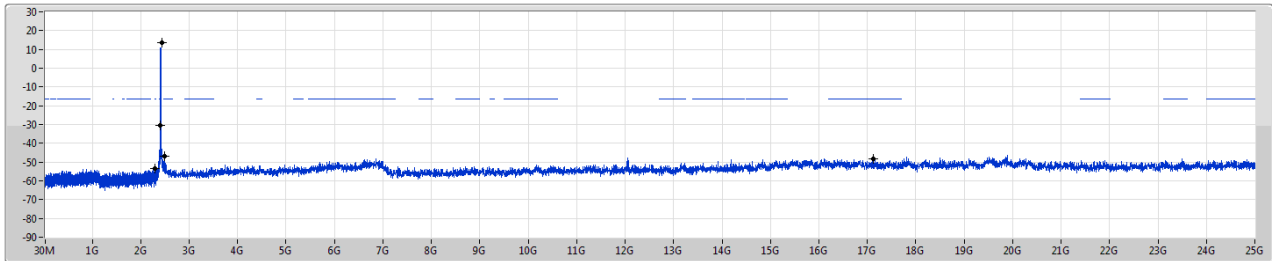
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43753G	13.42	-16.58	2.30233G	-53.40	2.39952G	-30.37	2.4G	-30.51	2.49102G	-46.99	17.12761G	-48.29	1
2437MHz	Pass	2.43753G	13.42	-16.58	2.17797G	-54.67	2.39902G	-46.17	2.4G	-47.79	2.51612G	-47.81	6.75189G	-48.54	1
2462MHz	Pass	2.43753G	13.42	-16.58	2.0938G	-54.04	2.393G	-51.68	2.4835G	-47.15	2.488G	-44.28	6.83899G	-47.67	1
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43453G	6.91	-23.09	2.12904G	-54.59	2.3999G	-32.00	2.4G	-32.93	2.4939G	-50.13	16.78484G	-47.08	1
2437MHz	Pass	2.43453G	6.91	-23.09	839.09M	-54.17	2.3983G	-39.05	2.4G	-43.93	2.4839G	-42.13	24.40999G	-46.61	1
2462MHz	Pass	2.43453G	6.91	-23.09	902.59M	-54.07	2.39816G	-51.88	2.4835G	-39.59	2.48502G	-37.19	6.99913G	-47.68	1
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43415G	6.35	-23.65	236.5M	-53.86	2.3999G	-31.11	2.4G	-33.72	2.49438G	-49.05	16.43364G	-47.52	1
2437MHz	Pass	2.43415G	6.35	-23.65	1.83196G	-54.19	2.3992G	-39.57	2.4G	-43.63	2.48392G	-42.49	6.67884G	-47.25	1
2462MHz	Pass	2.43415G	6.35	-23.65	2.30787G	-53.63	2.39758G	-52.19	2.4835G	-37.31	2.4836G	-37.44	21.8561G	-47.66	1

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

2412MHz

CSE NdB

27/05/2020



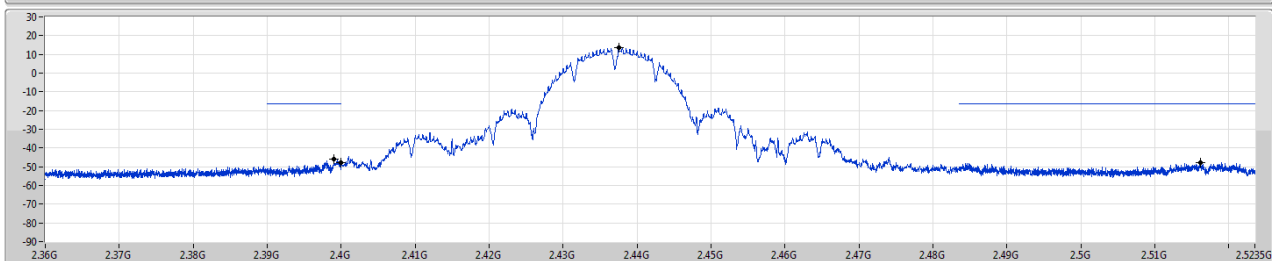
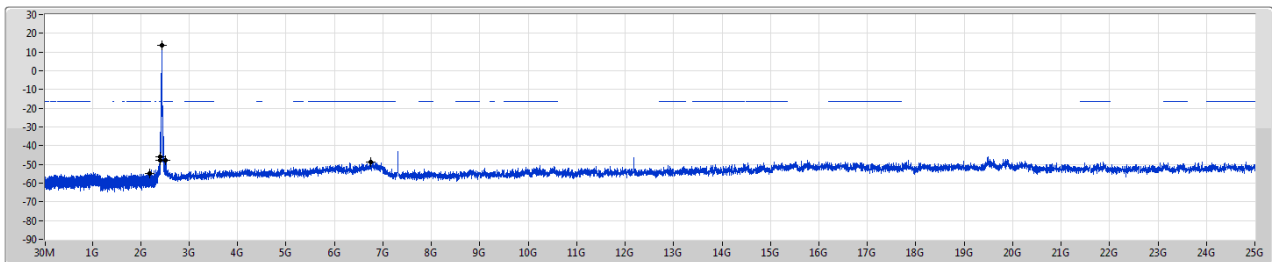
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43753G	13.42	-16.58	2.30233G	-53.40	2.39952G	-30.37	2.4G	-30.51	2.49102G	-46.99	17.12761G	-48.29	1

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

2437MHz

CSE NdB

27/05/2020



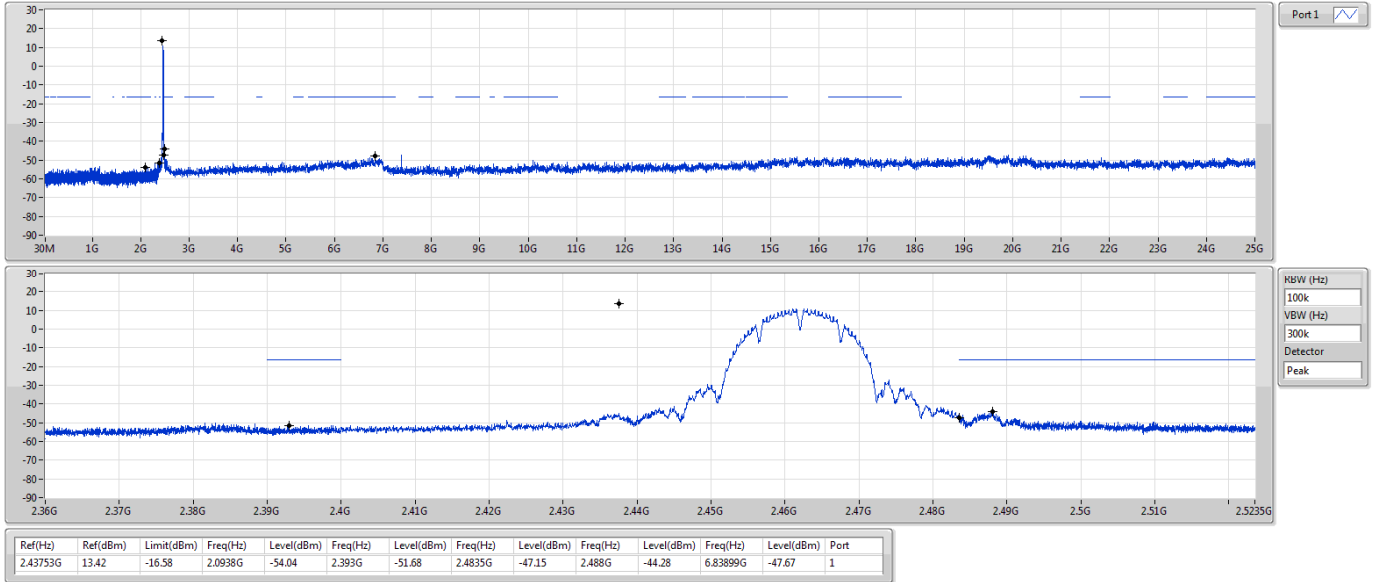
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43753G	13.42	-16.58	2.17797G	-54.67	2.39902G	-46.17	2.4G	-47.79	2.51612G	-47.81	6.75189G	-48.54	1

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

2462MHz

CSE NdB

27/05/2020

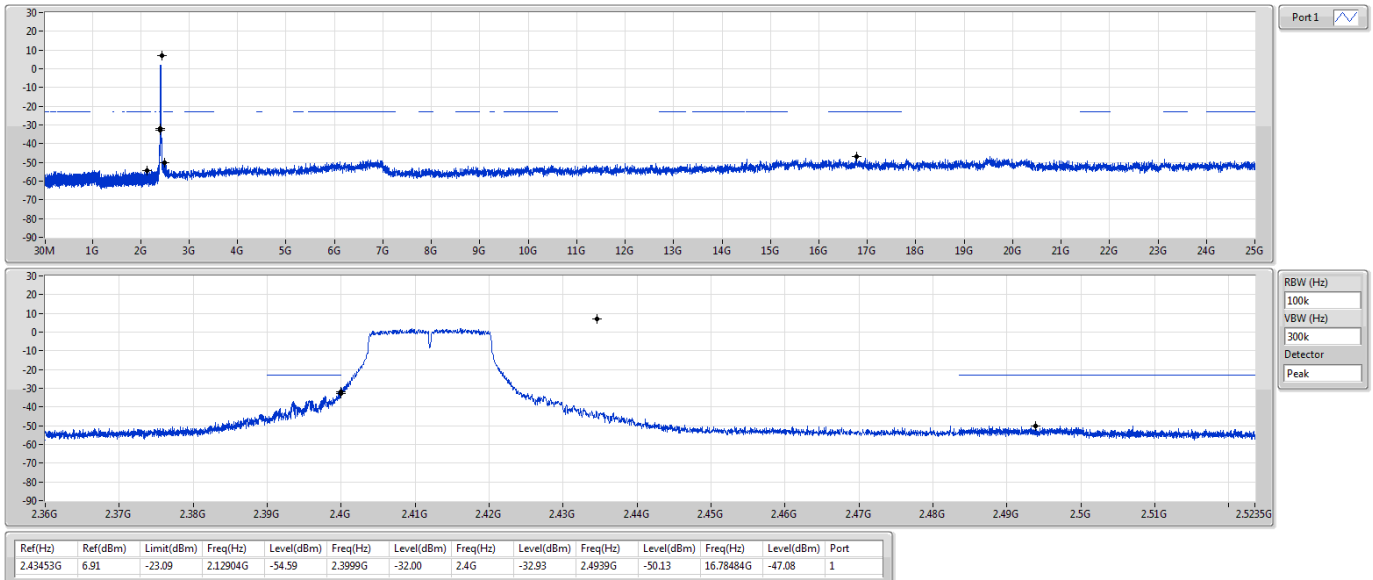


## 802.11g\_Nss1,(6Mbps)\_1TX

2412MHz

CSE NdB

27/05/2020

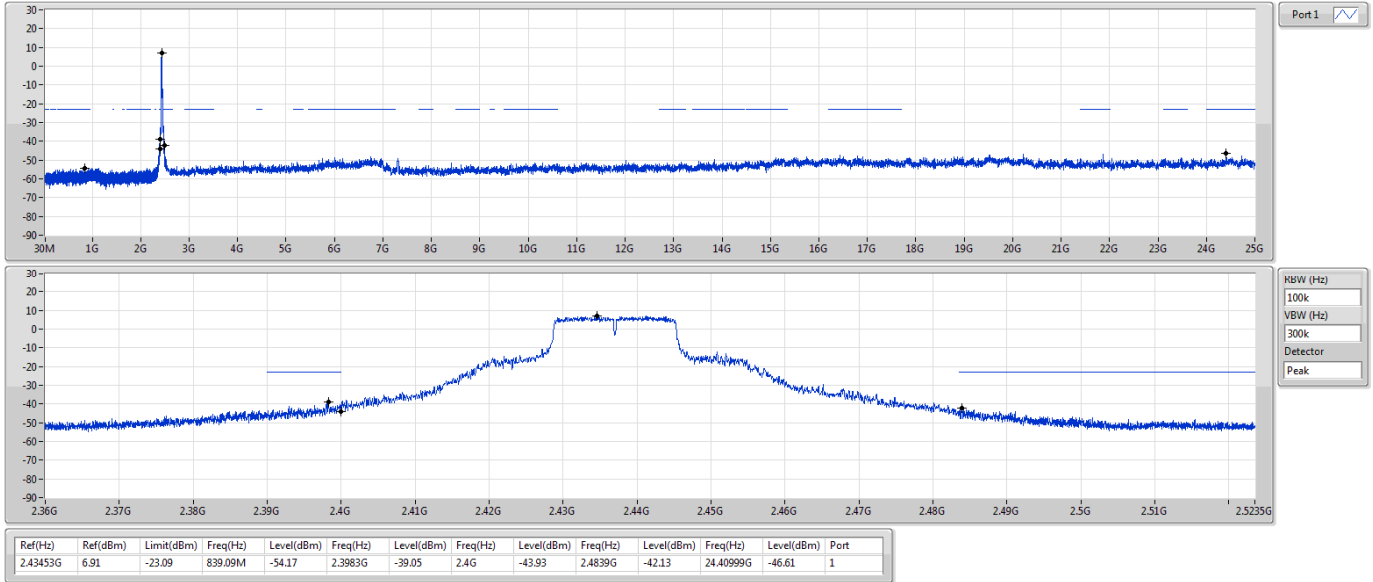


## 802.11g\_Nss1,(6Mbps)\_1TX

2437MHz

CSE NdB

27/05/2020

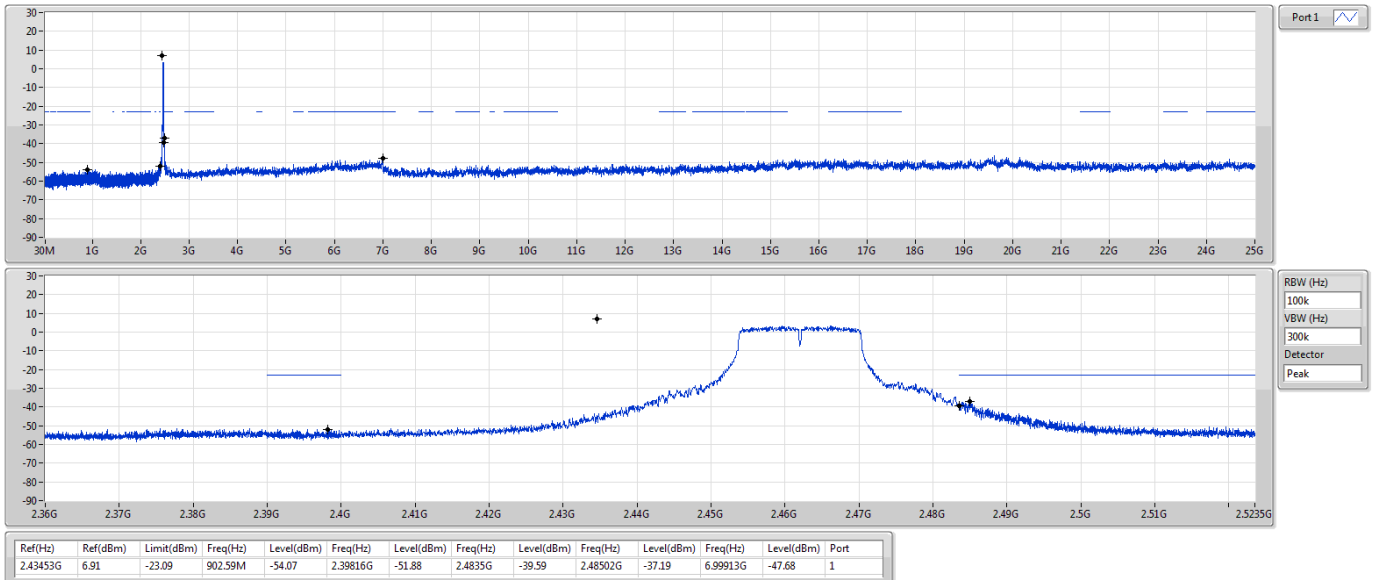


## 802.11g\_Nss1,(6Mbps)\_1TX

2462MHz

CSE NdB

27/05/2020



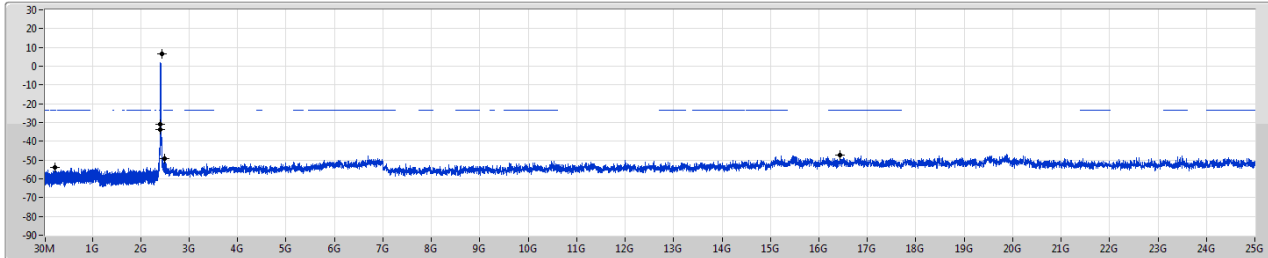


802.11n HT20\_Nss1,(MCS0)\_1TX

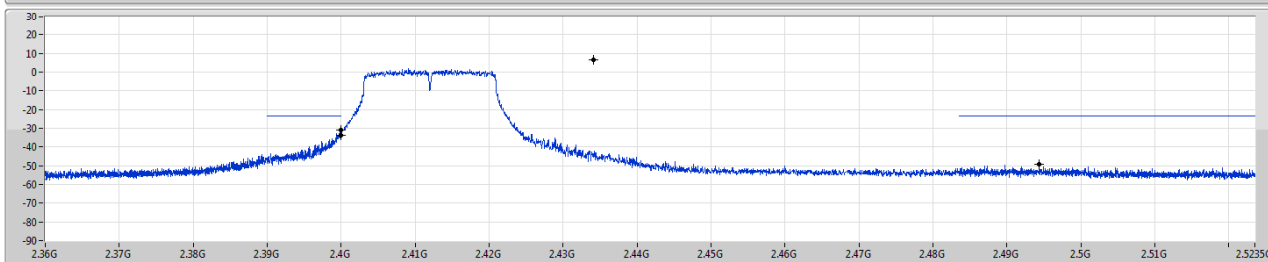
CSE NdB

2412MHz

27/05/2020



Port 1



RBW (Hz)  
100k  
VBW (Hz)  
300k  
Detector  
Peak

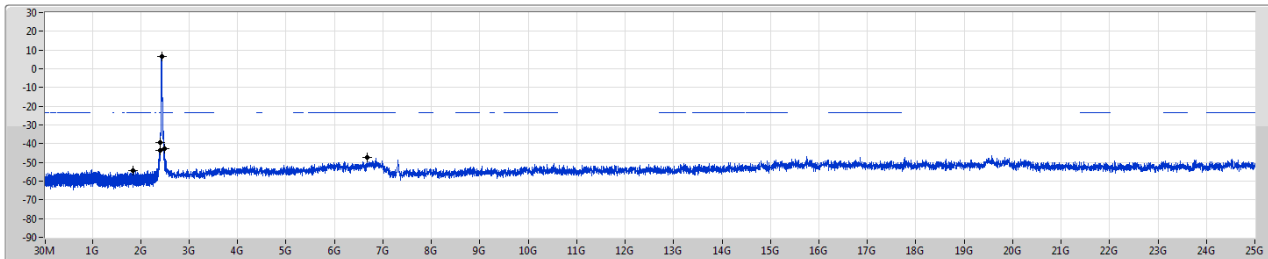
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43415G	6.35	-23.65	236.5M	-53.86	2.3999G	-31.11	2.4G	-33.72	2.49438G	-49.05	16.43364G	-47.52	1

802.11n HT20\_Nss1,(MCS0)\_1TX

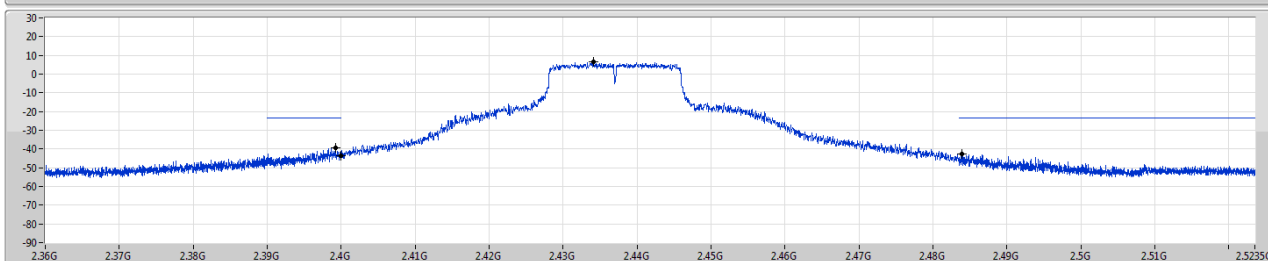
CSE NdB

2437MHz

27/05/2020



Port 1



RBW (Hz)  
100k  
VBW (Hz)  
300k  
Detector  
Peak

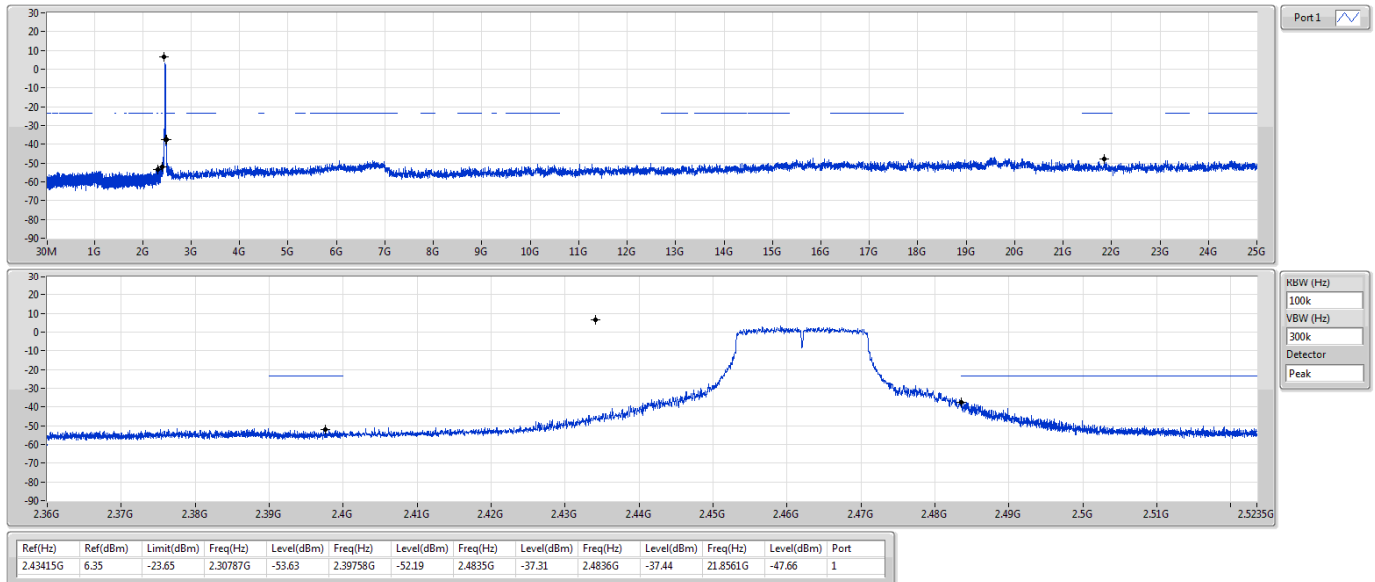
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43415G	6.35	-23.65	1.83196G	-54.19	2.3992G	-39.57	2.4G	-43.63	2.48392G	-42.49	6.67884G	-47.25	1

802.11n HT20\_Nss1,(MCS0)\_1TX

CSE NdB

2462MHz

27/05/2020





## ***Radiated Emissions below 1GHz***

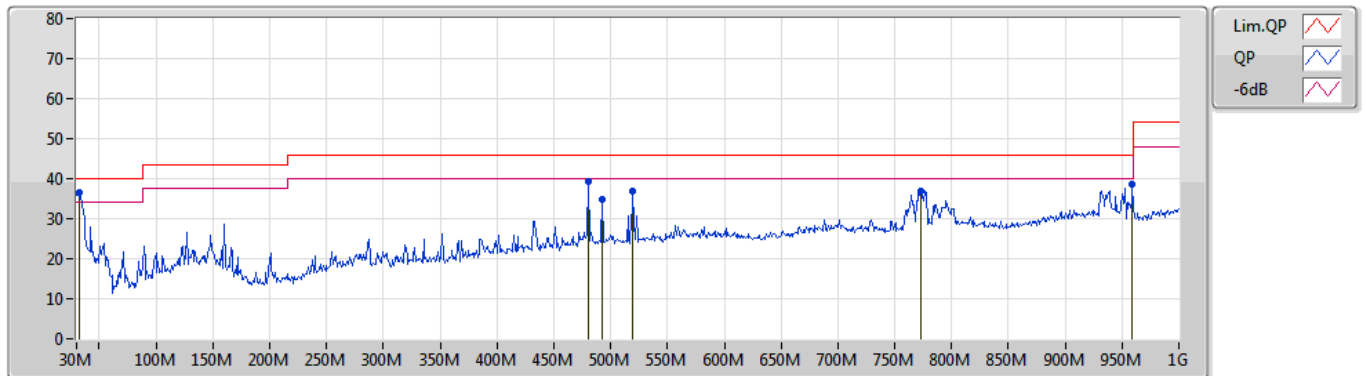
## ***Appendix F.1***

### **Summary**

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	PK	520.82M	42.82	46.00	-3.18	Horizontal

### Mode 1

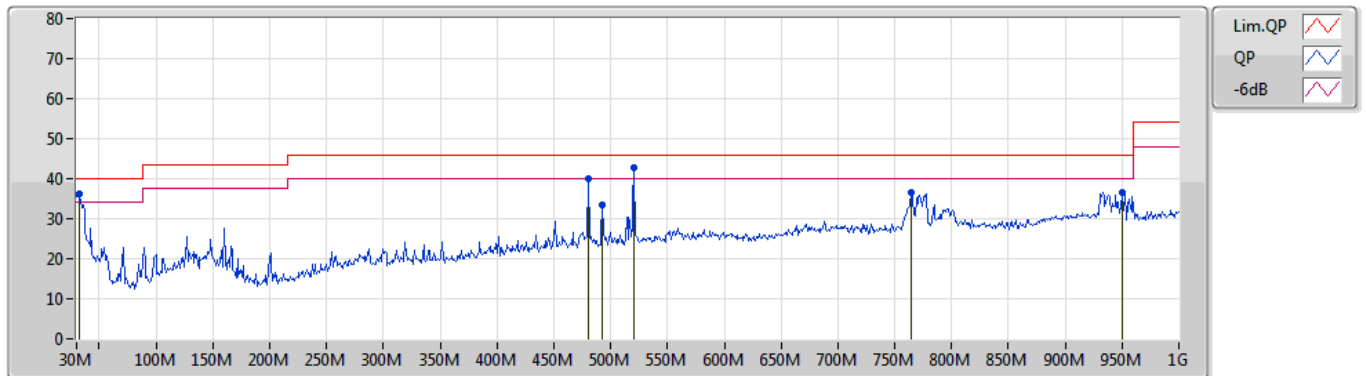
19/06/2020



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
PK	32.91M	36.63	40.00	-3.37	-9.23	3	Vertical	225	1.00	"Worst"	45.86	22.49	0.70	32.42
PK	480.08M	39.23	46.00	-6.77	-6.35	3	Vertical	161	1.00	-	45.58	23.25	2.56	32.16
PK	492.69M	34.84	46.00	-11.16	-6.16	3	Vertical	37	1.50	-	41.00	23.42	2.59	32.17
PK	519.85M	36.97	46.00	-9.03	-5.71	3	Vertical	18	1.00	-	42.68	23.97	2.64	32.32
PK	773.02M	37.00	46.00	-9.00	-3.02	3	Vertical	95	1.00	-	40.02	25.86	3.30	32.18
PK	959.26M	38.64	46.00	-7.36	-0.53	3	Vertical	142	1.00	-	39.17	26.97	3.80	31.30

### Mode 1

19/06/2020



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
PK	31.94M	36.04	40.00	-3.96	-8.67	3	Horizontal	360	1.50	-	44.71	23.03	0.70	32.40
PK	480.08M	39.96	46.00	-6.04	-6.35	3	Horizontal	144	1.50	-	46.31	23.25	2.56	32.16
PK	492.69M	33.45	46.00	-12.55	-6.16	3	Horizontal	86	1.00	-	39.61	23.42	2.59	32.17
PK	520.82M	42.82	46.00	-3.18	-5.69	3	Horizontal	1	1.50	"Worst"	48.51	23.99	2.64	32.32
PK	764.29M	36.72	46.00	-9.28	-3.01	3	Horizontal	84	1.00	-	39.73	25.83	3.30	32.14
PK	950.53M	36.53	46.00	-9.47	-0.69	3	Horizontal	324	2.00	-	37.22	26.91	3.80	31.40



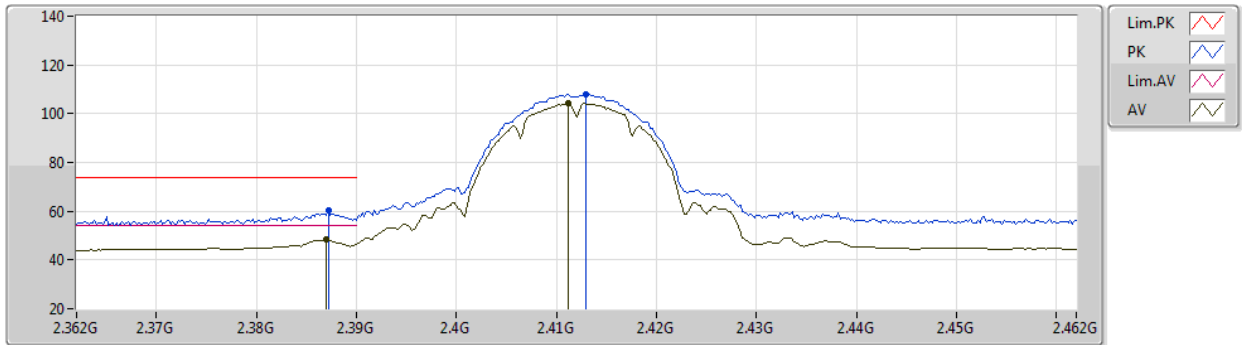
**Summary**

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
802.11g_Nss1,(6Mbps)_1TX	Pass	AV	2.3898G	52.95	54.00	-1.05	3	Horizontal	25	1.18	-

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

27/05/2020

## 2412MHz\_TX



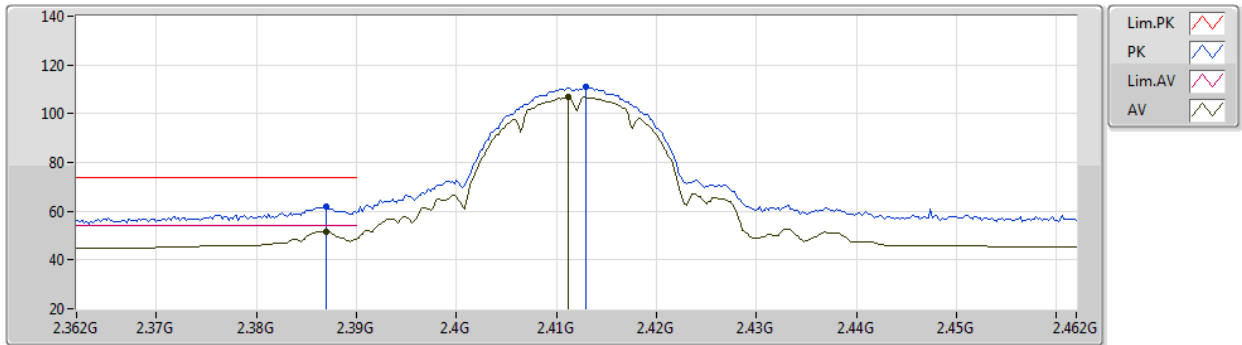
EUT Z\_1TX  
Setting 116  
03-A-L-3  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3872G	60.35	74.00	-13.65	28.35	3	Vertical	121	2.90	-	28.27	3.73	-
AV	2.387G	48.33	54.00	-5.67	16.33	3	Vertical	121	2.90	-	28.27	3.73	-
PK	2.413G	108.17	Inf	-Inf	76.08	3	Vertical	121	2.90	-	28.34	3.75	-
AV	2.4112G	104.09	Inf	-Inf	72.01	3	Vertical	121	2.90	-	28.33	3.75	-

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

27/05/2020

## 2412MHz\_TX



EUT Z\_1TX  
Setting 116  
03-A-L-3  
2nd source

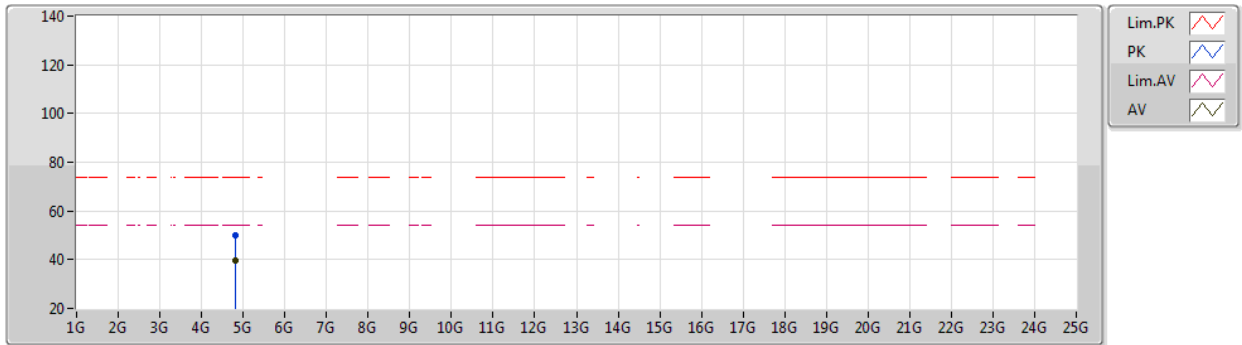
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.387G	61.87	74.00	-12.13	29.87	3	Horizontal	322	1.00	-	28.27	3.73	-
AV	2.387G	51.76	54.00	-2.24	19.76	3	Horizontal	322	1.00	-	28.27	3.73	-
PK	2.413G	110.82	Inf	-Inf	78.73	3	Horizontal	322	1.00	-	28.34	3.75	-
AV	2.4112G	106.71	Inf	-Inf	74.63	3	Horizontal	322	1.00	-	28.33	3.75	-



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

27/05/2020

## 2412MHz\_TX



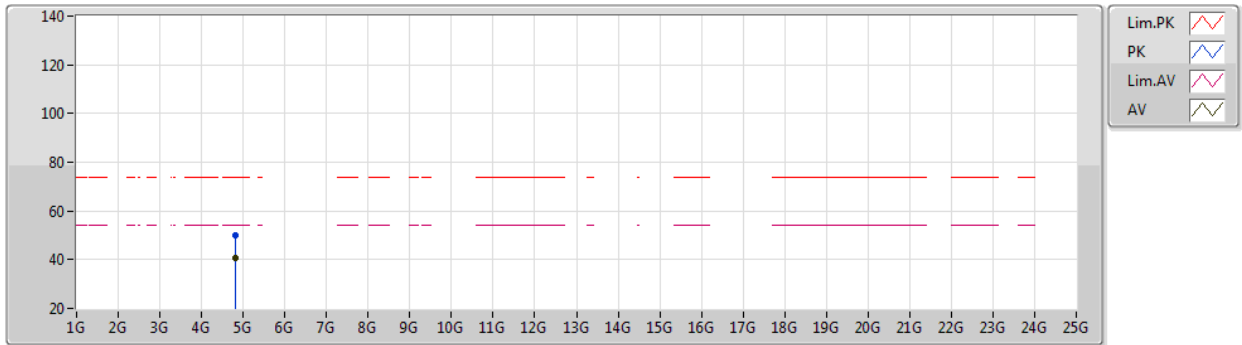
EUT Z\_1TX  
Setting 116  
03-A-B-2  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.82394G	49.87	74.00	-24.13	44.57	3	Vertical	51	1.80	-	33.55	6.57	34.82
AV	4.82402G	39.80	54.00	-14.20	34.50	3	Vertical	51	1.80	-	33.55	6.57	34.82

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

27/05/2020

## 2412MHz\_TX



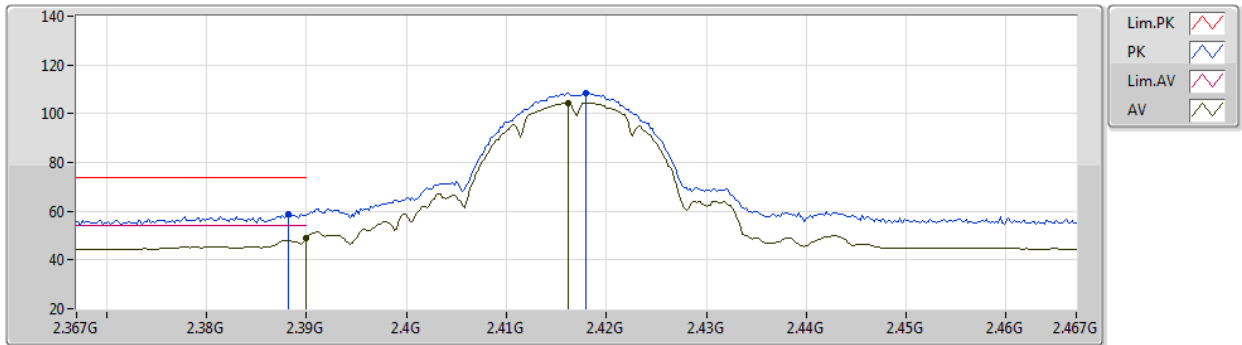
EUT Z\_1TX  
Setting 116  
03-A-L-3  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.82406G	50.05	74.00	-23.95	44.75	3	Horizontal	28	2.82	-	33.55	6.57	34.82
AV	4.82404G	40.71	54.00	-13.29	35.41	3	Horizontal	28	2.82	-	33.55	6.57	34.82

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

27/05/2020

## 2417MHz\_TX



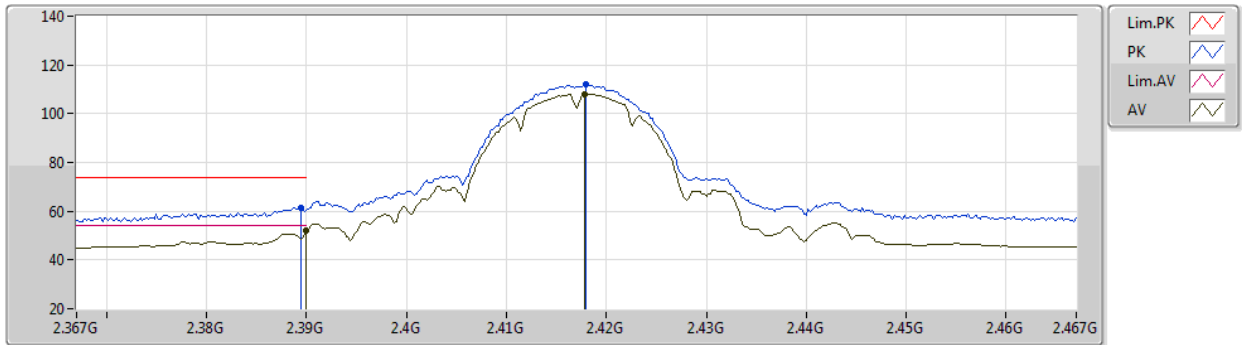
EUT Z\_1TX  
Setting 118  
03-A-L-3  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3882G	58.80	74.00	-15.20	26.79	3	Vertical	121	2.91	-	28.28	3.73	-
AV	2.39G	49.06	54.00	-4.94	17.05	3	Vertical	121	2.91	-	28.28	3.73	-
PK	2.418G	108.65	Inf	-Inf	76.55	3	Vertical	121	2.91	-	28.35	3.75	-
AV	2.4162G	104.56	Inf	-Inf	72.46	3	Vertical	121	2.91	-	28.35	3.75	-

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

27/05/2020

## 2417MHz\_TX



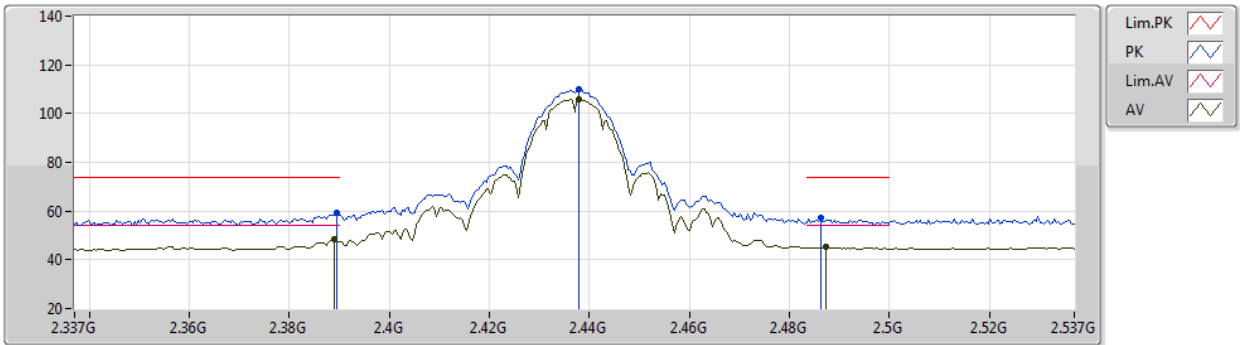
EUT Z\_1TX  
Setting 118  
03-A-L-3  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3894G	61.24	74.00	-12.76	29.23	3	Horizontal	322	1.00	-	28.28	3.73	-
AV	2.39G	52.04	54.00	-1.96	20.03	3	Horizontal	322	1.00	-	28.28	3.73	-
PK	2.418G	112.11	Inf	-Inf	80.01	3	Horizontal	322	1.00	-	28.35	3.75	-
AV	2.4178G	107.97	Inf	-Inf	75.87	3	Horizontal	322	1.00	-	28.35	3.75	-

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

27/05/2020

## 2437MHz\_TX



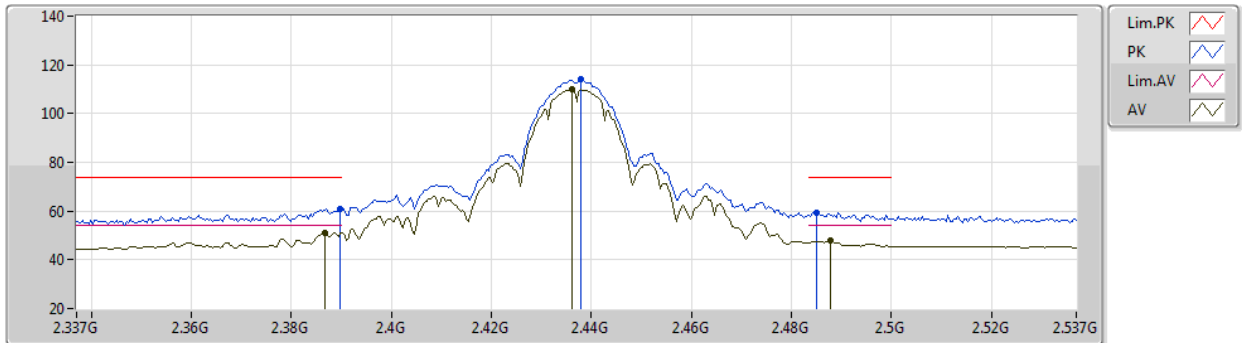
EUT Z\_1TX  
Setting 127  
03-A-L-3  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3894G	59.49	74.00	-14.51	27.48	3	Vertical	133	2.85	-	28.28	3.73	-
AV	2.389G	48.47	54.00	-5.53	16.46	3	Vertical	133	2.85	-	28.28	3.73	-
PK	2.4378G	109.80	Inf	-Inf	77.63	3	Vertical	133	2.85	-	28.41	3.76	-
AV	2.4378G	105.79	Inf	-Inf	73.62	3	Vertical	133	2.85	-	28.41	3.76	-
PK	2.4862G	57.07	74.00	-16.93	24.72	3	Vertical	133	2.85	-	28.56	3.79	-
AV	2.4874G	45.11	54.00	-8.89	12.76	3	Vertical	133	2.85	-	28.56	3.79	-

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

27/05/2020

## 2437MHz\_TX



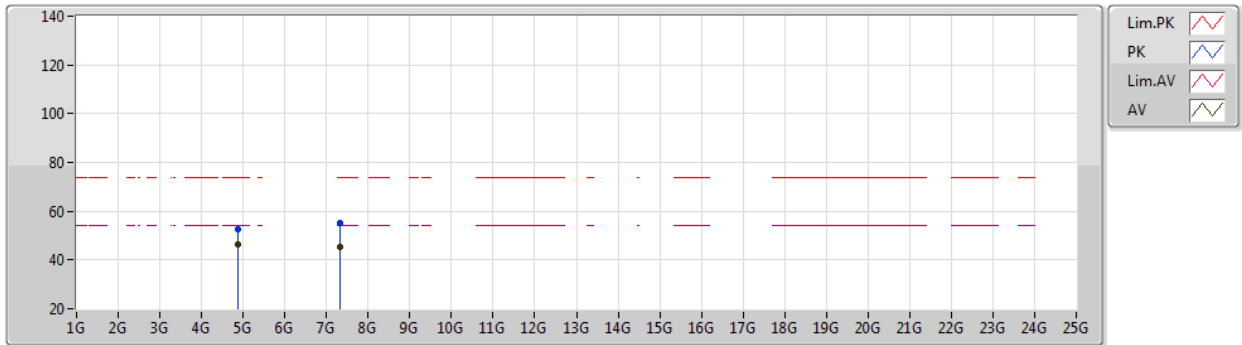
EUT Z\_1TX  
Setting 127  
03-A-L-3  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3898G	60.96	74.00	-13.04	28.95	3	Horizontal	30	1.02	-	28.28	3.73	-
AV	2.3866G	50.97	54.00	-3.03	18.97	3	Horizontal	30	1.02	-	28.27	3.73	-
PK	2.4378G	113.89	Inf	-Inf	81.72	3	Horizontal	30	1.02	-	28.41	3.76	-
AV	2.4362G	109.83	Inf	-Inf	77.66	3	Horizontal	30	1.02	-	28.41	3.76	-
PK	2.485G	59.48	74.00	-14.52	27.13	3	Horizontal	30	1.02	-	28.56	3.79	-
AV	2.4878G	47.81	54.00	-6.19	15.46	3	Horizontal	30	1.02	-	28.56	3.79	-

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

27/05/2020

## 2437MHz\_TX



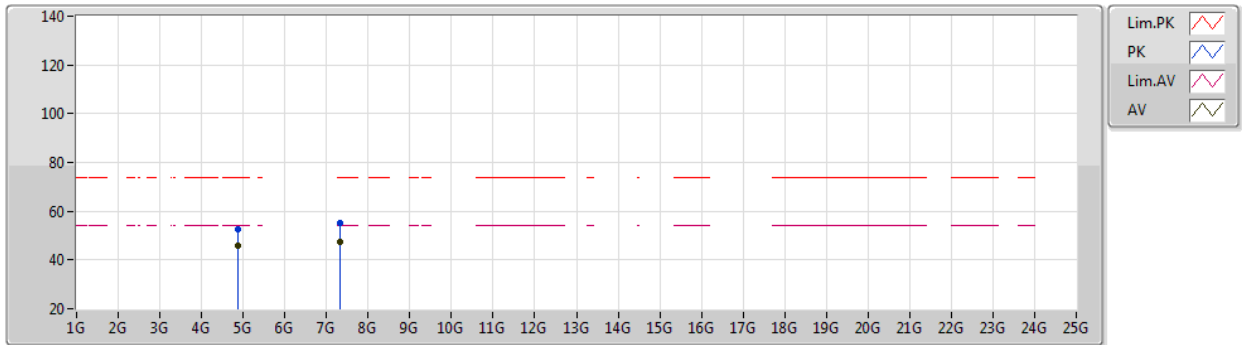
EUT Z\_1TX  
Setting 127  
03-A-B-2  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.87408G	52.69	74.00	-21.31	47.24	3	Vertical	42	1.01	-	33.65	6.58	34.78
AV	4.87402G	46.46	54.00	-7.54	41.01	3	Vertical	42	1.01	-	33.65	6.58	34.78
PK	7.31198G	55.12	74.00	-18.88	45.50	3	Vertical	264	2.75	-	36.81	7.87	35.06
AV	7.31176G	45.23	54.00	-8.77	35.61	3	Vertical	264	2.75	-	36.81	7.87	35.06

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

27/05/2020

## 2437MHz\_TX



EUT Z\_1TX  
Setting 127  
03-A-B-2  
2nd source

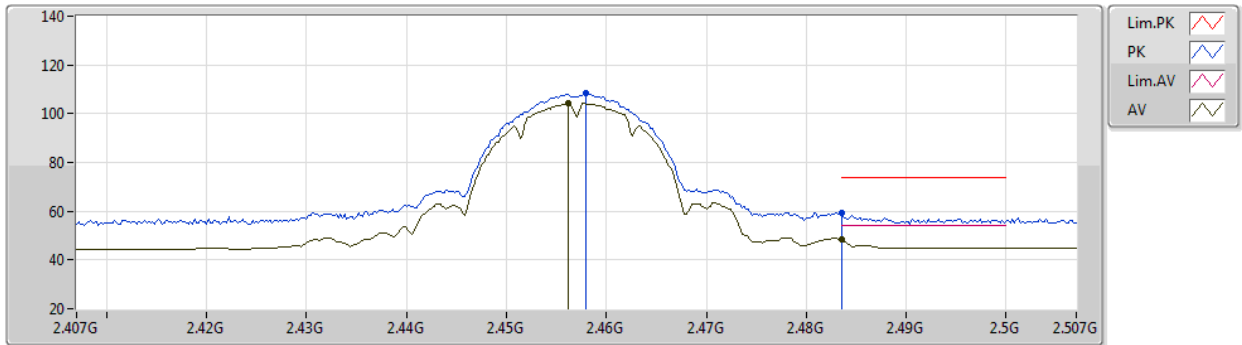
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.87396G	52.36	74.00	-21.64	46.91	3	Horizontal	42	1.23	-	33.65	6.58	34.78
AV	4.87402G	45.85	54.00	-8.15	40.40	3	Horizontal	42	1.23	-	33.65	6.58	34.78
PK	7.31162G	55.43	74.00	-18.57	45.81	3	Horizontal	91	1.04	-	36.81	7.87	35.06
AV	7.3118G	47.38	54.00	-6.62	37.76	3	Horizontal	91	1.04	-	36.81	7.87	35.06



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

27/05/2020

## 2457MHz\_TX



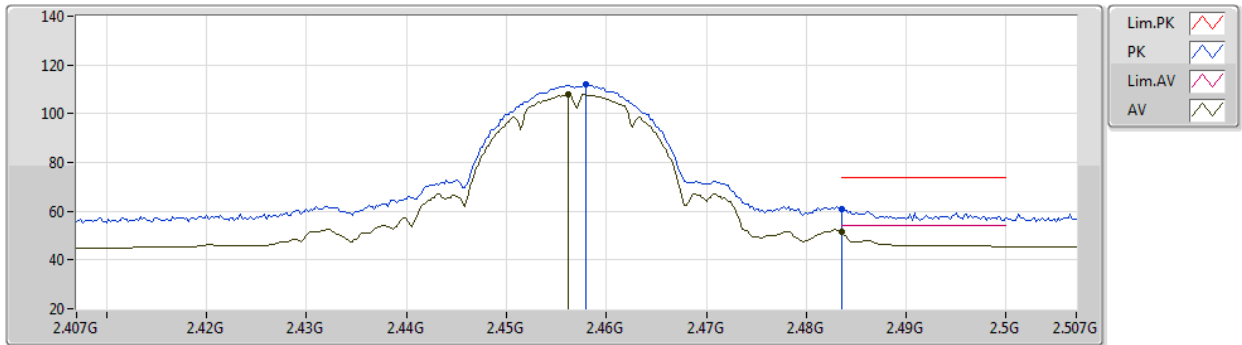
EUT Z\_1TX  
Setting 115  
03-A-L-3  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.458G	108.23	Inf	-Inf	75.99	3	Vertical	137	2.79	-	28.47	3.77	-
AV	2.4562G	104.13	Inf	-Inf	71.89	3	Vertical	137	2.79	-	28.47	3.77	-
PK	2.4835G	59.06	74.00	-14.94	26.72	3	Vertical	137	2.79	-	28.55	3.79	-
AV	2.4835G	48.37	54.00	-5.63	16.03	3	Vertical	137	2.79	-	28.55	3.79	-

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

27/05/2020

## 2457MHz\_TX



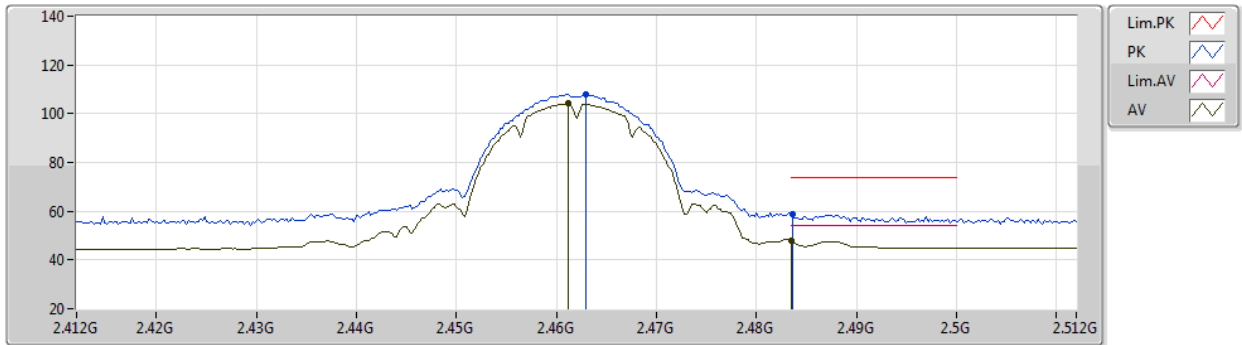
EUT Z\_1TX  
Setting 115  
03-A-L-3  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.458G	111.93	Inf	-Inf	79.69	3	Horizontal	26	1.16	-	28.47	3.77	-
AV	2.4562G	107.87	Inf	-Inf	75.63	3	Horizontal	26	1.16	-	28.47	3.77	-
PK	2.4835G	60.62	74.00	-13.38	28.28	3	Horizontal	26	1.16	-	28.55	3.79	-
AV	2.4835G	51.72	54.00	-2.28	19.38	3	Horizontal	26	1.16	-	28.55	3.79	-

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

27/05/2020

## 2462MHz\_TX



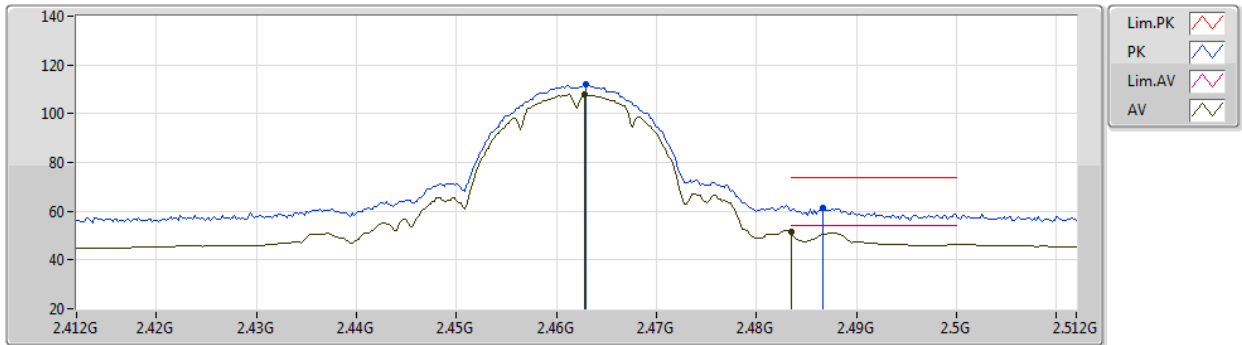
EUT Z\_1TX  
Setting 114  
03-A-L-3  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.463G	107.96	Inf	-Inf	75.69	3	Vertical	138	2.79	-	28.49	3.78	-
AV	2.4612G	104.12	Inf	-Inf	71.86	3	Vertical	138	2.79	-	28.48	3.78	-
PK	2.4836G	58.85	74.00	-15.15	26.51	3	Vertical	138	2.79	-	28.55	3.79	-
AV	2.4835G	48.00	54.00	-6.00	15.66	3	Vertical	138	2.79	-	28.55	3.79	-

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

27/05/2020

## 2462MHz\_TX



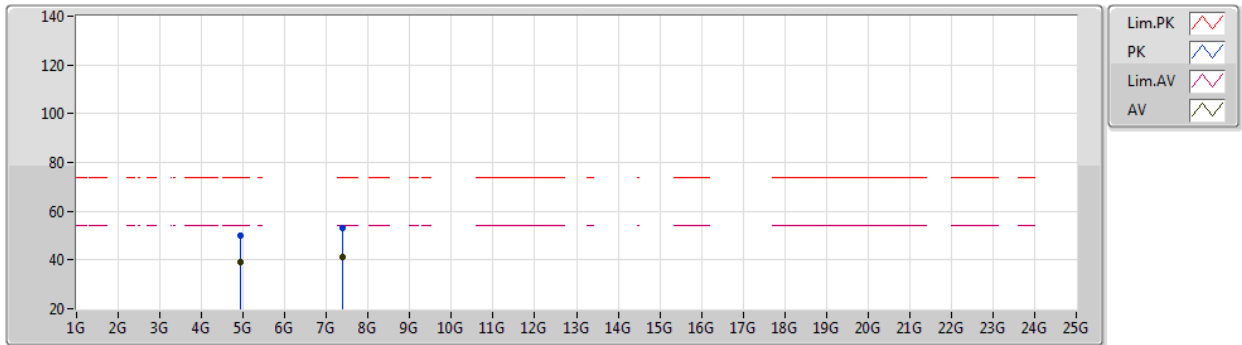
EUT Z\_1TX  
Setting 114  
03-A-L-3  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.463G	111.82	Inf	-Inf	79.55	3	Horizontal	28	1.00	-	28.49	3.78	-
AV	2.4628G	107.72	Inf	-Inf	75.45	3	Horizontal	28	1.00	-	28.49	3.78	-
PK	2.4866G	61.14	74.00	-12.86	28.79	3	Horizontal	28	1.00	-	28.56	3.79	-
AV	2.4835G	51.37	54.00	-2.63	19.03	3	Horizontal	28	1.00	-	28.55	3.79	-

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

27/05/2020

## 2462MHz\_TX



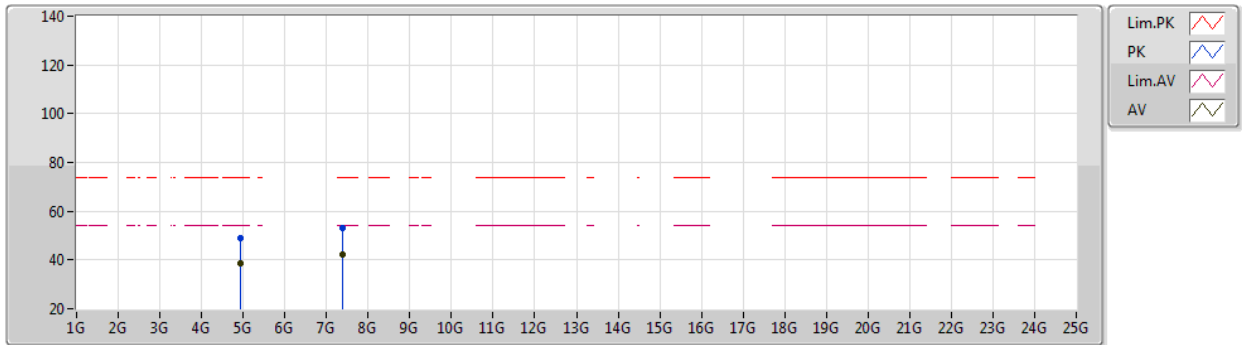
EUT Z\_1TX  
Setting 114  
03-A-L-3  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.92401G	50.19	74.00	-23.81	44.58	3	Vertical	241	2.86	-	33.75	6.60	34.74
AV	4.92401G	39.10	54.00	-14.90	33.49	3	Vertical	241	2.86	-	33.75	6.60	34.74
PK	7.38672G	53.12	74.00	-20.88	43.39	3	Vertical	259	2.78	-	36.89	7.89	35.05
AV	7.38684G	41.44	54.00	-12.56	31.71	3	Vertical	259	2.78	-	36.89	7.89	35.05

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

27/05/2020

## 2462MHz\_TX



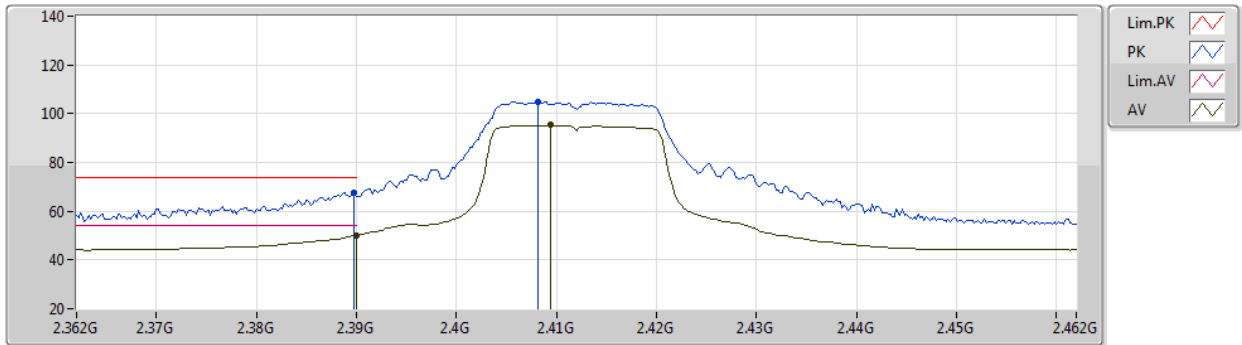
EUT Z\_1TX  
Setting 114  
03-A-L-3  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.92436G	49.15	74.00	-24.85	43.54	3	Horizontal	286	1.00	-	33.75	6.60	34.74
AV	4.92402G	38.57	54.00	-15.43	32.96	3	Horizontal	286	1.00	-	33.75	6.60	34.74
PK	7.38708G	53.20	74.00	-20.80	43.47	3	Horizontal	67	1.01	-	36.89	7.89	35.05
AV	7.38676G	42.02	54.00	-11.98	32.29	3	Horizontal	67	1.01	-	36.89	7.89	35.05

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

27/05/2020

## 2412MHz\_TX



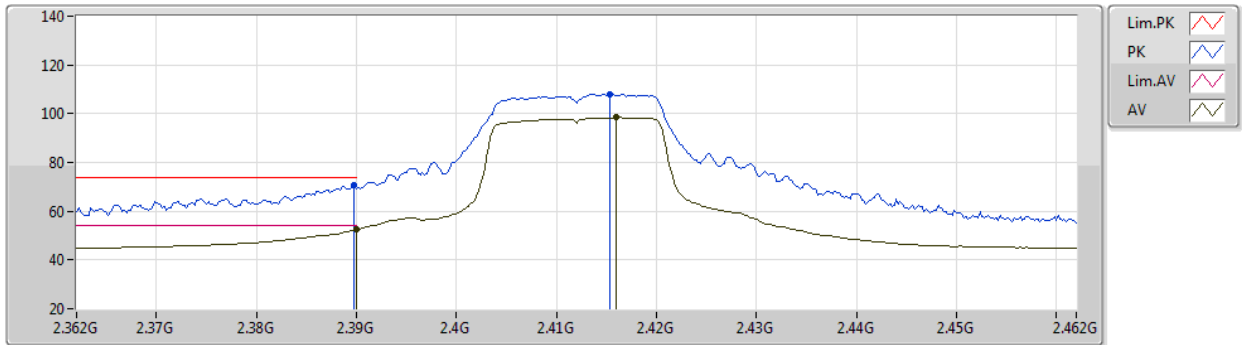
EUT Z\_1TX  
Setting 94  
03-A-S-5  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3898G	67.73	74.00	-6.27	35.72	3	Vertical	204	2.95	-	28.28	3.73	-
AV	2.39G	50.00	54.00	-4.00	17.99	3	Vertical	204	2.95	-	28.28	3.73	-
PK	2.4082G	104.85	Inf	-Inf	72.79	3	Vertical	204	2.95	-	28.32	3.74	-
AV	2.4094G	95.28	Inf	-Inf	63.20	3	Vertical	204	2.95	-	28.33	3.75	-

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

27/05/2020

## 2412MHz\_TX



EUT Z\_1TX  
Setting 94  
03-A-S-5  
2nd source

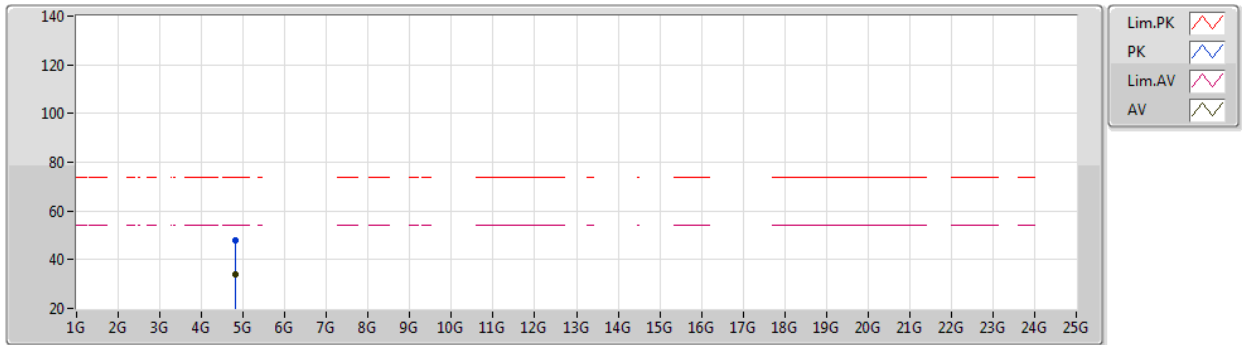
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3898G	70.66	74.00	-3.34	38.65	3	Horizontal	188	1.24	-	28.28	3.73	-
AV	2.39G	52.78	54.00	-1.22	20.77	3	Horizontal	188	1.24	-	28.28	3.73	-
PK	2.4154G	108.02	Inf	-Inf	75.92	3	Horizontal	188	1.24	-	28.35	3.75	-
AV	2.416G	98.41	Inf	-Inf	66.31	3	Horizontal	188	1.24	-	28.35	3.75	-



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

27/05/2020

## 2412MHz\_TX



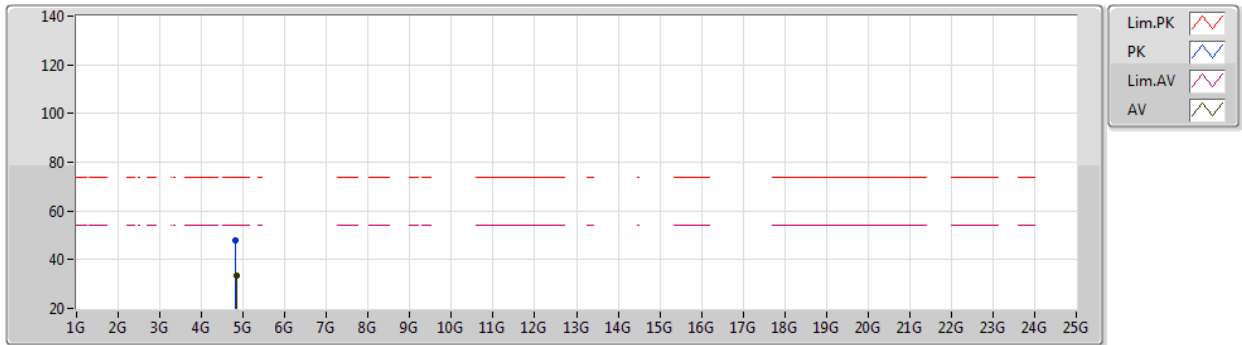
EUT Z\_1TX  
Setting 94  
03-A-S-5  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.8238G	47.84	74.00	-26.16	42.54	3	Vertical	281	1.00	-	33.55	6.57	34.82
AV	4.8268G	33.80	54.00	-20.20	28.50	3	Vertical	281	1.00	-	33.55	6.57	34.82

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

27/05/2020

## 2412MHz\_TX



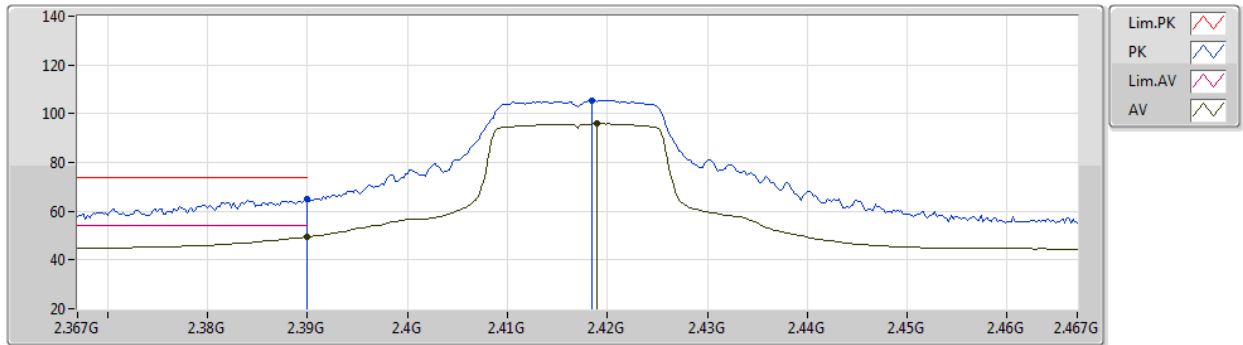
EUT Z\_1TX  
Setting 94  
03-A-S-5  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.8178G	47.92	74.00	-26.08	42.64	3	Horizontal	175	1.80	-	33.54	6.57	34.83
AV	4.83388G	33.61	54.00	-20.39	28.28	3	Horizontal	175	1.80	-	33.57	6.57	34.81

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

27/05/2020

## 2417MHz\_TX



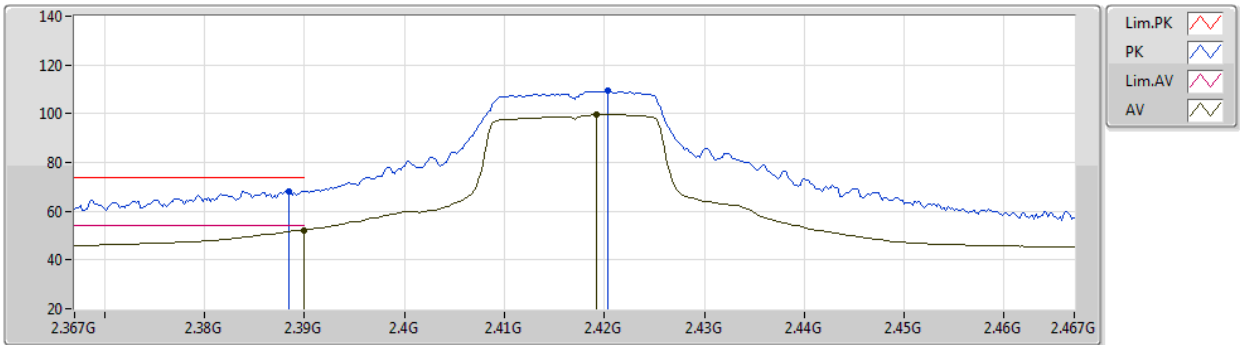
EUT Z\_1TX  
Setting 100  
03-A-L-3  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.39G	64.92	74.00	-9.08	32.91	3	Vertical	121	2.91	-	28.28	3.73	-
AV	2.39G	49.43	54.00	-4.57	17.42	3	Vertical	121	2.91	-	28.28	3.73	-
PK	2.4184G	105.60	Inf	-Inf	73.49	3	Vertical	121	2.91	-	28.36	3.75	-
AV	2.419G	95.99	Inf	-Inf	63.88	3	Vertical	121	2.91	-	28.36	3.75	-

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

27/05/2020

## 2417MHz\_TX



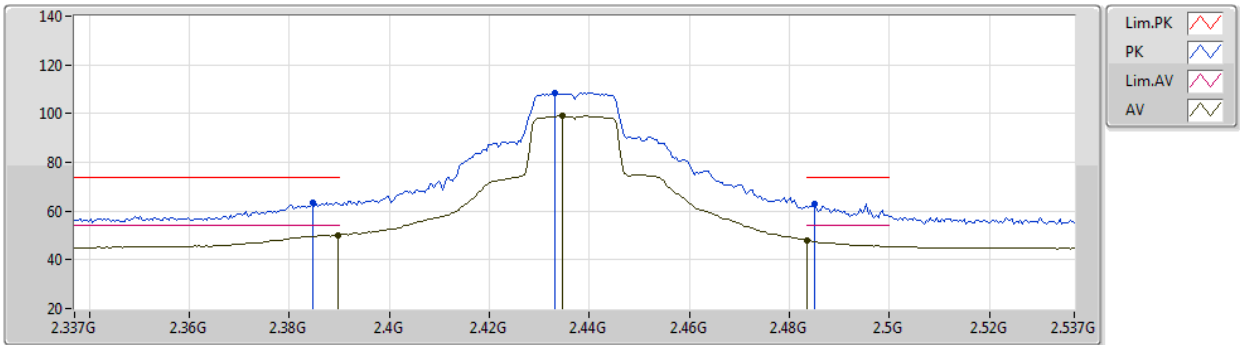
EUT Z\_1TX  
Setting 100  
03-A-L-3  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3884G	68.28	74.00	-5.72	36.27	3	Horizontal	321	1.00	-	28.28	3.73	-
AV	2.39G	52.16	54.00	-1.84	20.15	3	Horizontal	321	1.00	-	28.28	3.73	-
PK	2.4204G	109.24	Inf	-Inf	77.13	3	Horizontal	321	1.00	-	28.36	3.75	-
AV	2.4192G	99.59	Inf	-Inf	67.48	3	Horizontal	321	1.00	-	28.36	3.75	-

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

27/05/2020

## 2437MHz\_TX



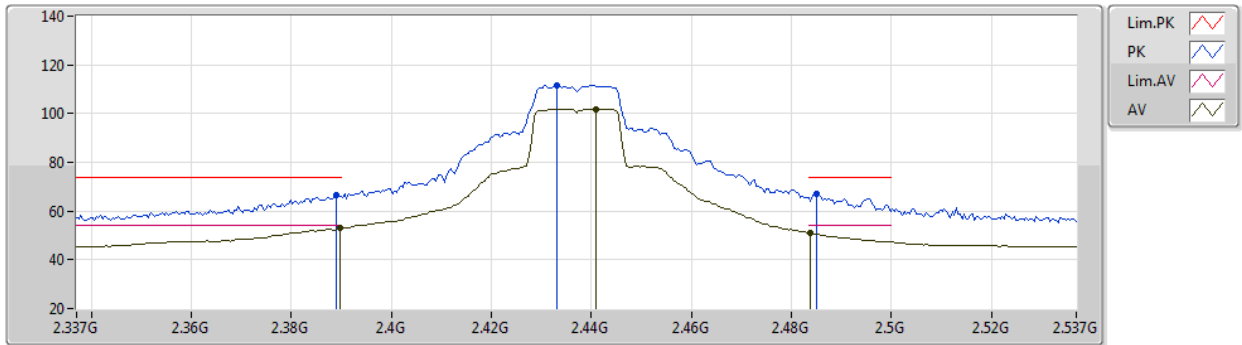
EUT Z\_1TX  
Setting 115  
03-A-L-3  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3846G	63.40	74.00	-10.60	31.40	3	Vertical	135	2.83	-	28.27	3.73	-
AV	2.3898G	50.25	54.00	-3.75	18.24	3	Vertical	135	2.83	-	28.28	3.73	-
PK	2.433G	108.51	Inf	-Inf	76.35	3	Vertical	135	2.83	-	28.40	3.76	-
AV	2.4346G	99.04	Inf	-Inf	66.88	3	Vertical	135	2.83	-	28.40	3.76	-
PK	2.485G	62.88	74.00	-11.12	30.53	3	Vertical	135	2.83	-	28.56	3.79	-
AV	2.4835G	47.89	54.00	-6.11	15.55	3	Vertical	135	2.83	-	28.55	3.79	-

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

27/05/2020

## 2437MHz\_TX



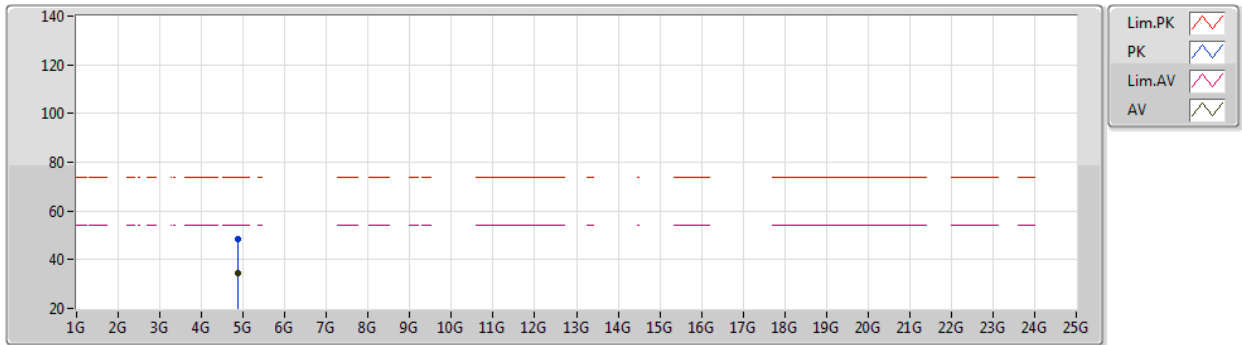
EUT Z\_1TX  
Setting 115  
03-A-L-3  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.389G	66.71	74.00	-7.29	34.70	3	Horizontal	25	1.18	-	28.28	3.73	-
AV	2.3898G	52.95	54.00	-1.05	20.94	3	Horizontal	25	1.18	-	28.28	3.73	-
PK	2.433G	111.57	Inf	-Inf	79.41	3	Horizontal	25	1.18	-	28.40	3.76	-
AV	2.441G	101.86	Inf	-Inf	69.68	3	Horizontal	25	1.18	-	28.42	3.76	-
PK	2.485G	67.26	74.00	-6.74	34.91	3	Horizontal	25	1.18	-	28.56	3.79	-
AV	2.4838G	50.96	54.00	-3.04	18.62	3	Horizontal	25	1.18	-	28.55	3.79	-

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

27/05/2020

## 2437MHz\_TX



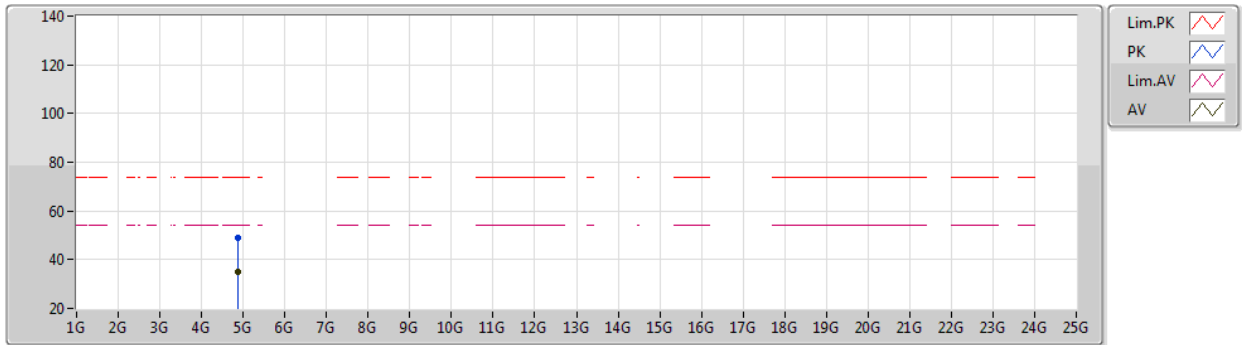
EUT Z\_1TX  
Setting 115  
03-A-B-2  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.87742G	48.41	74.00	-25.59	42.96	3	Vertical	187	1.46	-	33.65	6.58	34.78
AV	4.87456G	34.65	54.00	-19.35	29.20	3	Vertical	187	1.46	-	33.65	6.58	34.78

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

27/05/2020

## 2437MHz\_TX



EUT Z\_1TX  
Setting 115  
03-A-B-2  
2nd source

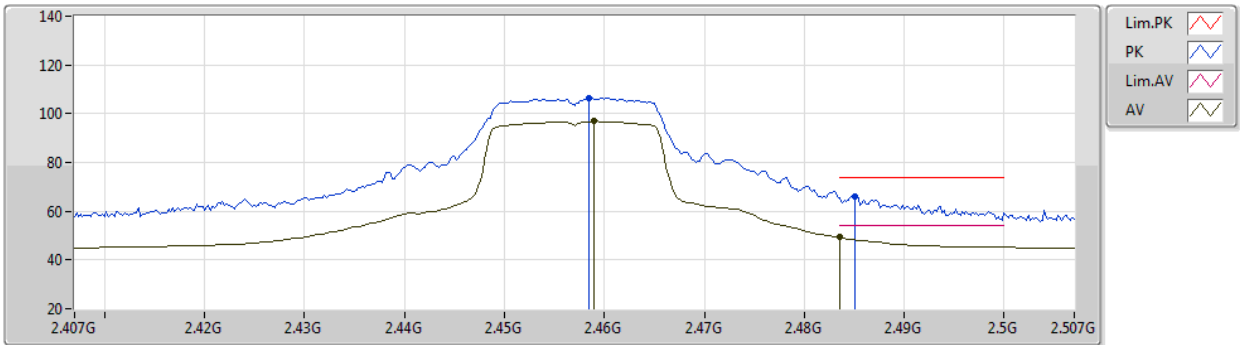
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.87488G	48.97	74.00	-25.03	43.52	3	Horizontal	49	1.04	-	33.65	6.58	34.78
AV	4.87422G	35.14	54.00	-18.86	29.69	3	Horizontal	49	1.04	-	33.65	6.58	34.78



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

27/05/2020

## 2457MHz\_TX



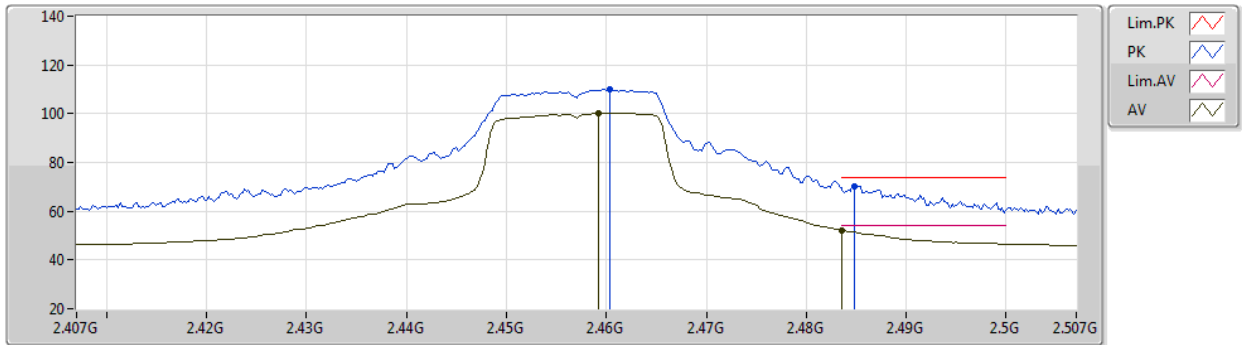
EUT Z\_1TX  
Setting 102  
03-A-L-3  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.4584G	106.36	Inf	-Inf	74.10	3	Vertical	138	2.79	-	28.48	3.78	-
AV	2.459G	96.83	Inf	-Inf	64.57	3	Vertical	138	2.79	-	28.48	3.78	-
PK	2.485G	66.23	74.00	-7.77	33.88	3	Vertical	138	2.79	-	28.56	3.79	-
AV	2.4835G	49.24	54.00	-4.76	16.90	3	Vertical	138	2.79	-	28.55	3.79	-

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

27/05/2020

## 2457MHz\_TX



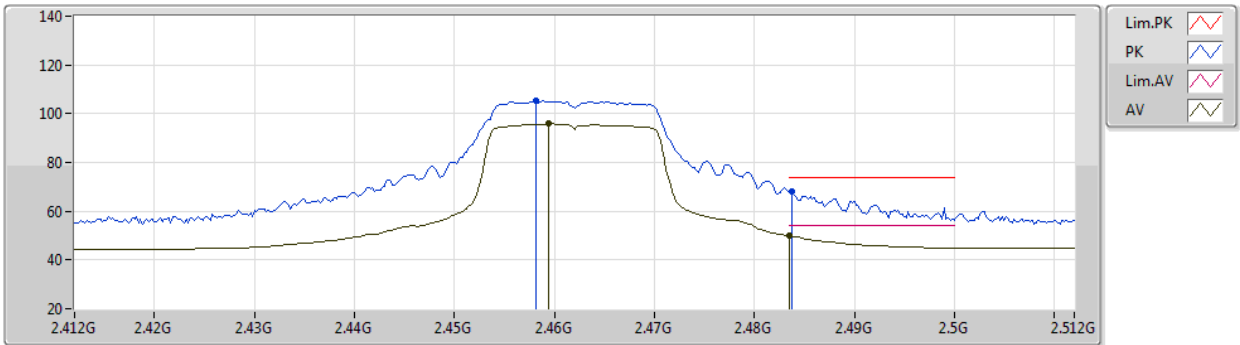
EUT Z\_1TX  
Setting 102  
03-A-L-3  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.4604G	109.93	Inf	-Inf	77.67	3	Horizontal	29	1.00	-	28.48	3.78	-
AV	2.4592G	100.20	Inf	-Inf	67.94	3	Horizontal	29	1.00	-	28.48	3.78	-
PK	2.4848G	70.35	74.00	-3.65	38.01	3	Horizontal	29	1.00	-	28.55	3.79	-
AV	2.4835G	52.31	54.00	-1.69	19.97	3	Horizontal	29	1.00	-	28.55	3.79	-

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

27/05/2020

## 2462MHz\_TX



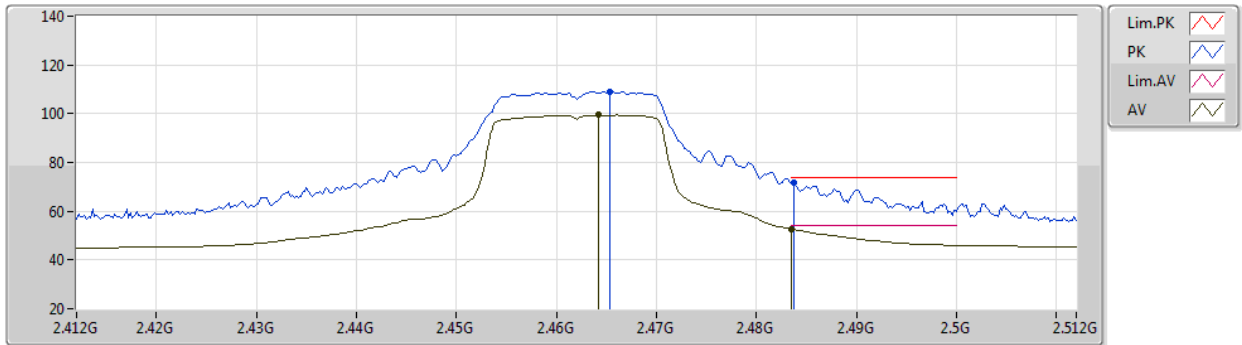
EUT Z\_1TX  
Setting 98  
03-A-L-3  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.4582G	105.26	Inf	-Inf	73.02	3	Vertical	137	2.79	-	28.47	3.77	-
AV	2.4594G	95.85	Inf	-Inf	63.59	3	Vertical	137	2.79	-	28.48	3.78	-
PK	2.4838G	68.01	74.00	-5.99	35.67	3	Vertical	137	2.79	-	28.55	3.79	-
AV	2.4835G	49.83	54.00	-4.17	17.49	3	Vertical	137	2.79	-	28.55	3.79	-

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

27/05/2020

## 2462MHz\_TX



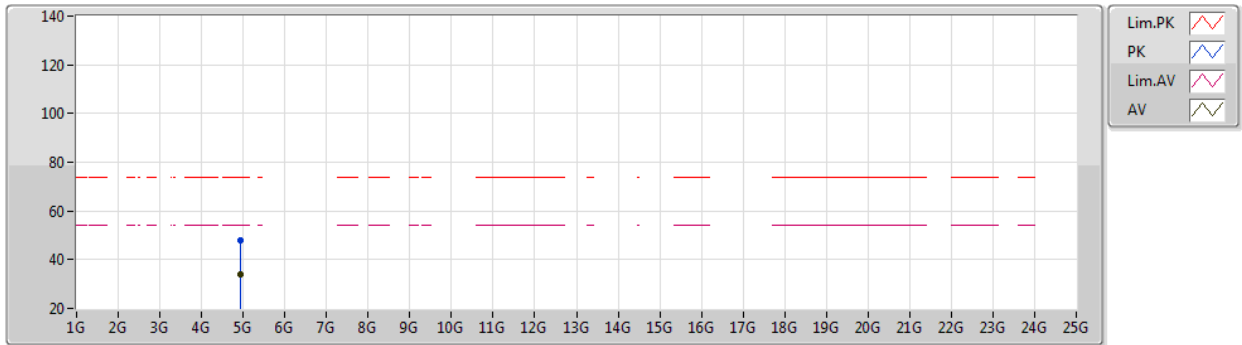
EUT Z\_1TX  
Setting 98  
03-A-L-3  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	24654G	109.09	Inf	-Inf	76.81	3	Horizontal	28	1.01	-	28.50	3.78	-
AV	24642G	99.43	Inf	-Inf	67.16	3	Horizontal	28	1.01	-	28.49	3.78	-
PK	24838G	71.78	74.00	-2.22	39.44	3	Horizontal	28	1.01	-	28.55	3.79	-
AV	24835G	52.74	54.00	-1.26	20.40	3	Horizontal	28	1.01	-	28.55	3.79	-

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

27/05/2020

## 2462MHz\_TX



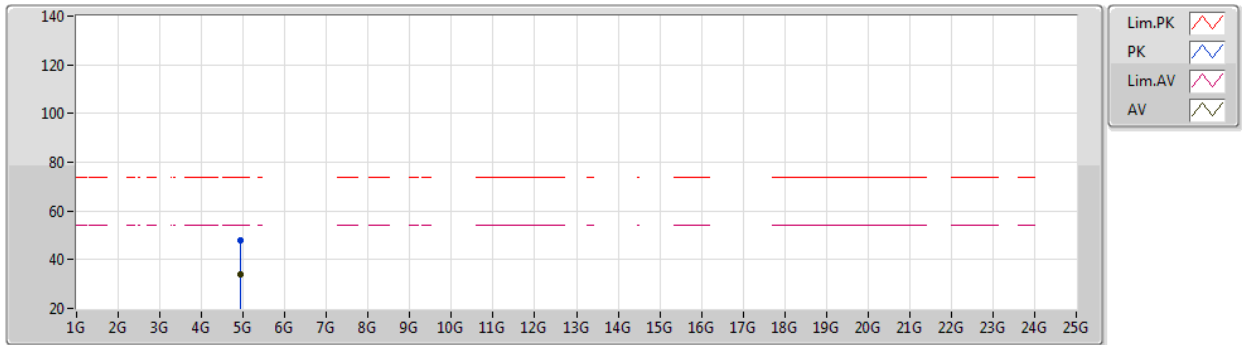
EUT Z\_1TX  
Setting 98  
03-A-B-2  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.92718G	47.76	74.00	-26.24	42.15	3	Vertical	226	2.48	-	33.75	6.60	34.74
AV	4.92404G	33.89	54.00	-20.11	28.28	3	Vertical	226	2.48	-	33.75	6.60	34.74

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

27/05/2020

## 2462MHz\_TX



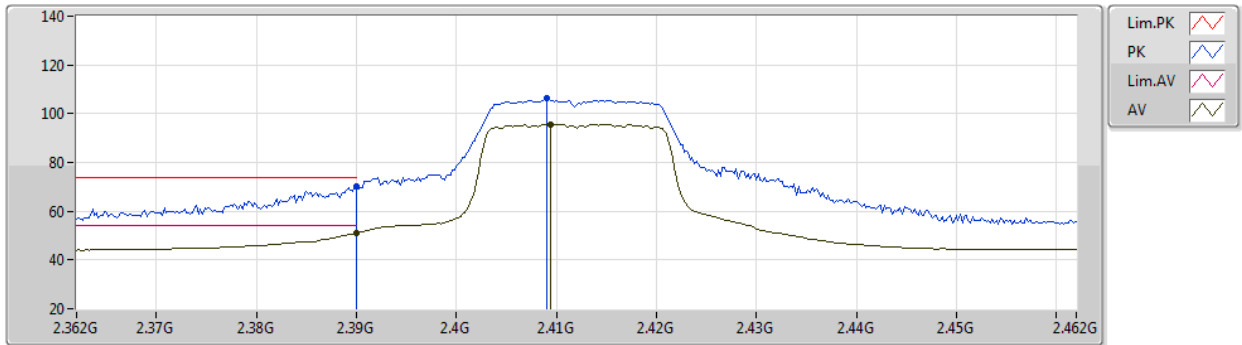
EUT Z\_1TX  
Setting 98  
03-A-B-2  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.92362G	48.04	74.00	-25.96	42.43	3	Horizontal	273	1.09	-	33.75	6.60	34.74
AV	4.9246G	33.90	54.00	-20.10	28.29	3	Horizontal	273	1.09	-	33.75	6.60	34.74

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

27/05/2020

## 2412MHz\_TX



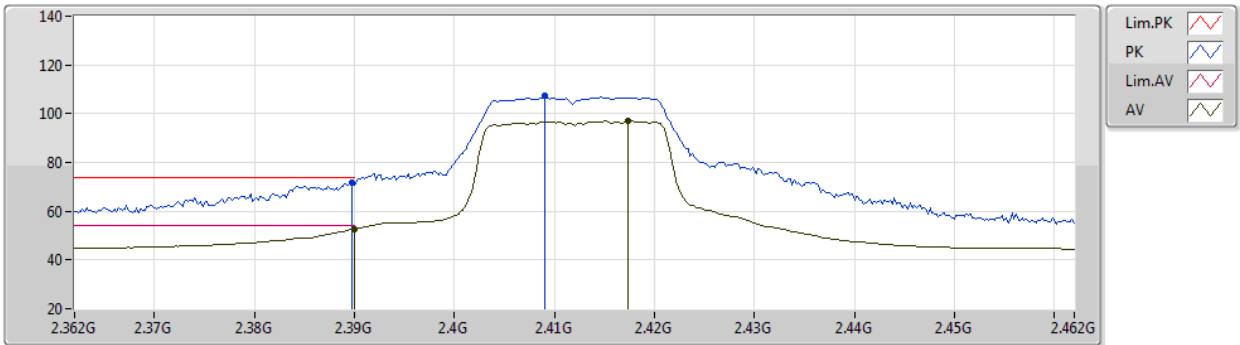
EUT Z\_1TX  
Setting 94  
03-A-L-2  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.39G	70.24	74.00	-3.76	38.23	3	Vertical	321	2.91	-	28.28	3.73	-
AV	2.39G	51.10	54.00	-2.90	19.09	3	Vertical	321	2.91	-	28.28	3.73	-
PK	2.409G	106.28	Inf	-Inf	74.20	3	Vertical	321	2.91	-	28.33	3.75	-
AV	2.4094G	95.55	Inf	-Inf	63.47	3	Vertical	321	2.91	-	28.33	3.75	-

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

27/05/2020

## 2412MHz\_TX



EUT Z\_1TX  
Setting 94  
03-A-L-2  
2nd source

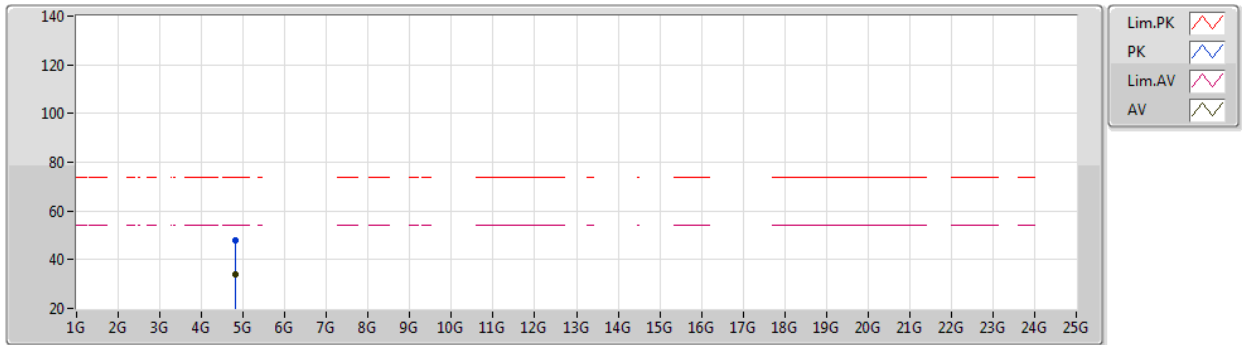
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3898G	71.64	74.00	-2.36	39.63	3	Horizontal	46	1.00	-	28.28	3.73	-
AV	2.39G	52.78	54.00	-1.22	20.77	3	Horizontal	46	1.00	-	28.28	3.73	-
PK	2.409G	107.24	Inf	-Inf	75.16	3	Horizontal	46	1.00	-	28.33	3.75	-
AV	2.4174G	96.94	Inf	-Inf	64.84	3	Horizontal	46	1.00	-	28.35	3.75	-



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

27/05/2020

## 2412MHz\_TX



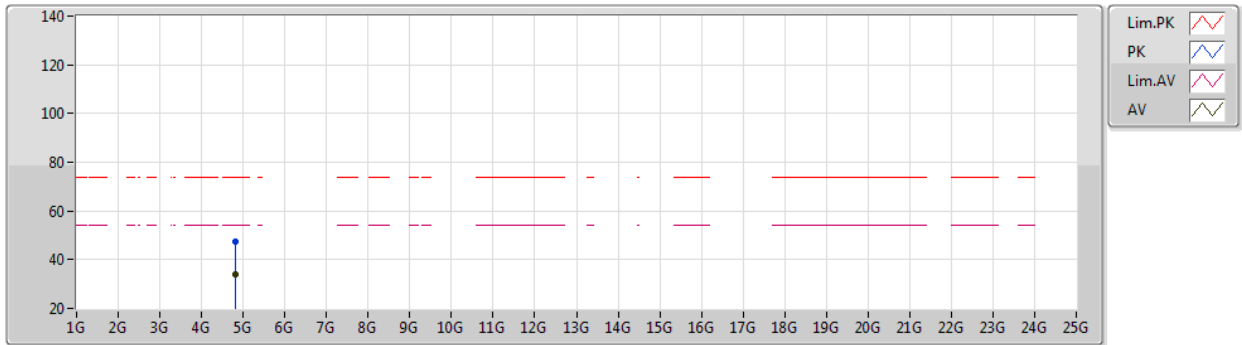
EUT Z\_1TX  
Setting 94  
03-A-L-2  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.82334G	47.93	74.00	-26.07	42.63	3	Vertical	0	2.25	-	33.55	6.57	34.82
AV	4.8257G	33.73	54.00	-20.27	28.43	3	Vertical	0	2.25	-	33.55	6.57	34.82

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

27/05/2020

## 2412MHz\_TX



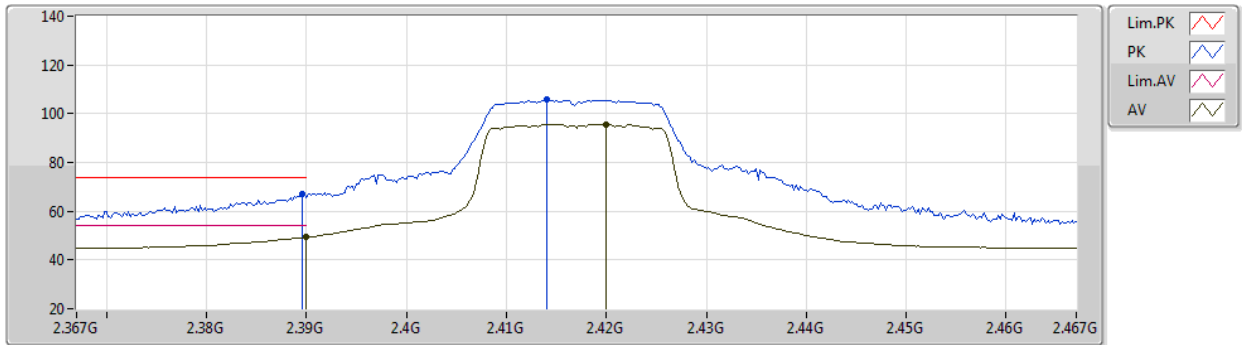
EUT Z\_1TX  
Setting 94  
03-A-L-2  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.82498G	47.23	74.00	-26.77	41.93	3	Horizontal	348	1.80	-	33.55	6.57	34.82
AV	4.82422G	33.77	54.00	-20.23	28.47	3	Horizontal	348	1.80	-	33.55	6.57	34.82

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

27/05/2020

## 2417MHz\_TX



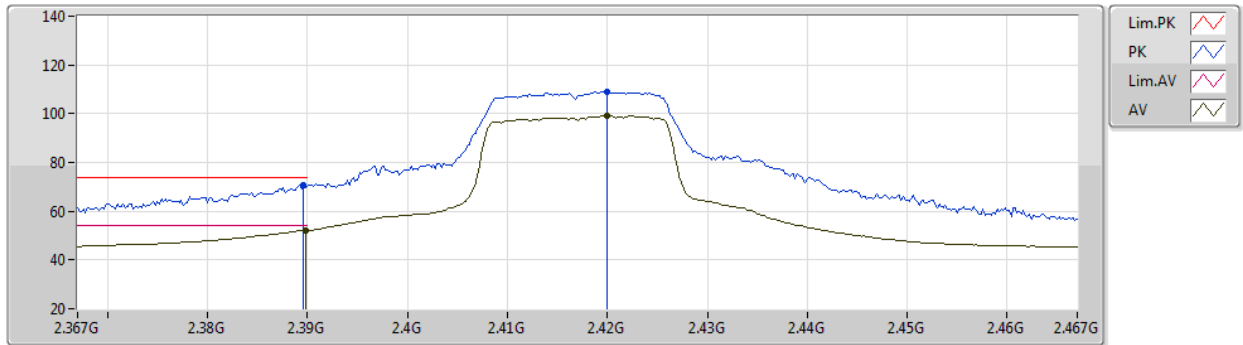
EUT Z\_1TX  
Setting 99  
03-A-L-3  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3896G	67.21	74.00	-6.79	35.20	3	Vertical	135	2.90	-	28.28	3.73	-
AV	2.39G	49.29	54.00	-4.71	17.28	3	Vertical	135	2.90	-	28.28	3.73	-
PK	2.414G	106.12	Inf	-Inf	74.03	3	Vertical	135	2.90	-	28.34	3.75	-
AV	2.42G	95.76	Inf	-Inf	63.65	3	Vertical	135	2.90	-	28.36	3.75	-

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

27/05/2020

## 2417MHz\_TX



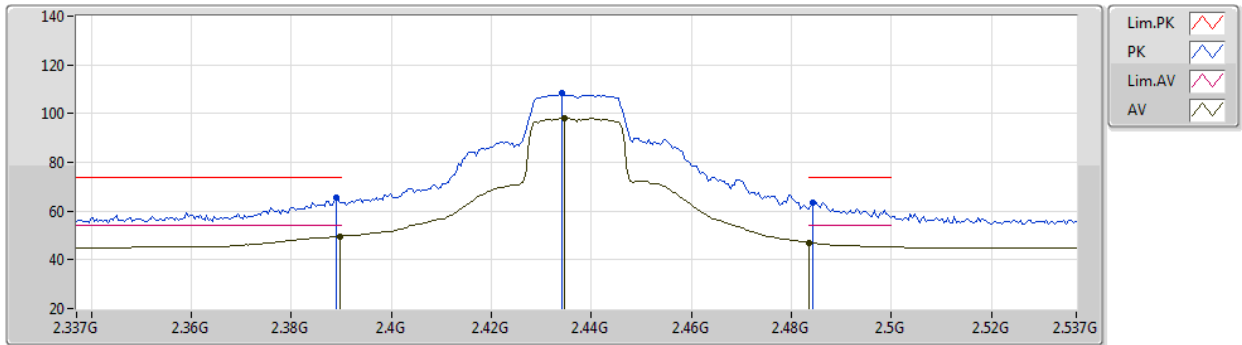
EUT Z\_1TX  
Setting 99  
03-A-L-3  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3896G	70.87	74.00	-3.13	38.86	3	Horizontal	320	1.00	-	28.28	3.73	-
AV	2.3898G	52.20	54.00	-1.80	20.19	3	Horizontal	320	1.00	-	28.28	3.73	-
PK	2.42G	108.99	Inf	-Inf	76.88	3	Horizontal	320	1.00	-	28.36	3.75	-
AV	2.42G	99.23	Inf	-Inf	67.12	3	Horizontal	320	1.00	-	28.36	3.75	-

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

27/05/2020

## 2437MHz\_TX



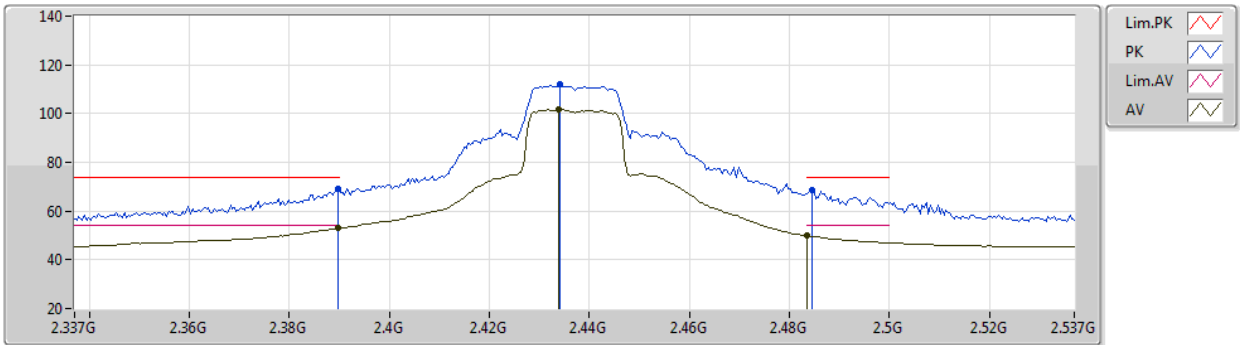
EUT Z\_1TX  
Setting 112  
03-A-L-3  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.389G	65.53	74.00	-8.47	33.52	3	Vertical	135	2.84	-	28.28	3.73	-
AV	2.3898G	49.63	54.00	-4.37	17.62	3	Vertical	135	2.84	-	28.28	3.73	-
PK	2.4342G	108.20	Inf	-Inf	76.04	3	Vertical	135	2.84	-	28.40	3.76	-
AV	2.4346G	97.97	Inf	-Inf	65.81	3	Vertical	135	2.84	-	28.40	3.76	-
PK	2.4842G	63.59	74.00	-10.41	31.25	3	Vertical	135	2.84	-	28.55	3.79	-
AV	2.4835G	46.94	54.00	-7.06	14.60	3	Vertical	135	2.84	-	28.55	3.79	-

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

27/05/2020

## 2437MHz\_TX



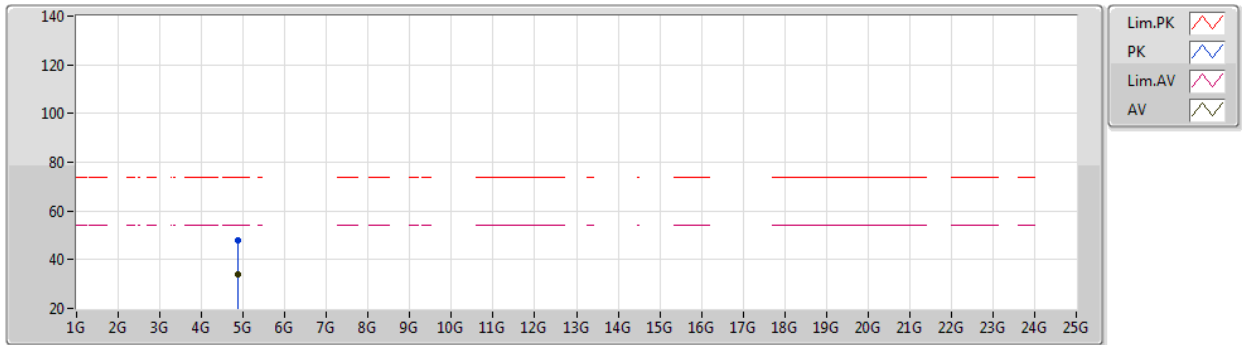
EUT Z\_1TX  
Setting 112  
03-A-L-3  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3898G	69.26	74.00	-4.74	37.25	3	Horizontal	30	1.00	-	28.28	3.73	-
AV	2.3898G	52.95	54.00	-1.05	20.94	3	Horizontal	30	1.00	-	28.28	3.73	-
PK	2.4342G	112.06	Inf	-Inf	79.90	3	Horizontal	30	1.00	-	28.40	3.76	-
AV	2.4338G	101.64	Inf	-Inf	69.48	3	Horizontal	30	1.00	-	28.40	3.76	-
PK	2.4846G	68.55	74.00	-5.45	36.21	3	Horizontal	30	1.00	-	28.55	3.79	-
AV	2.4835G	49.97	54.00	-4.03	17.63	3	Horizontal	30	1.00	-	28.55	3.79	-

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

27/05/2020

## 2437MHz\_TX



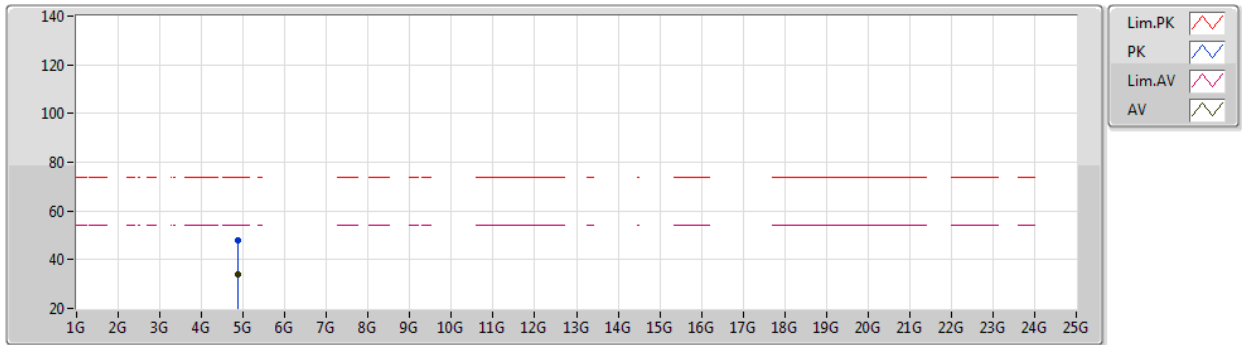
EUT Z\_1TX  
Setting 112  
03-A-B-2  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.87802G	48.13	74.00	-25.87	42.67	3	Vertical	80	1.56	-	33.66	6.58	34.78
AV	4.87494G	34.21	54.00	-19.79	28.76	3	Vertical	80	1.56	-	33.65	6.58	34.78

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

27/05/2020

## 2437MHz\_TX



EUT Z\_1TX  
Setting 112  
03-A-B-2  
2nd source

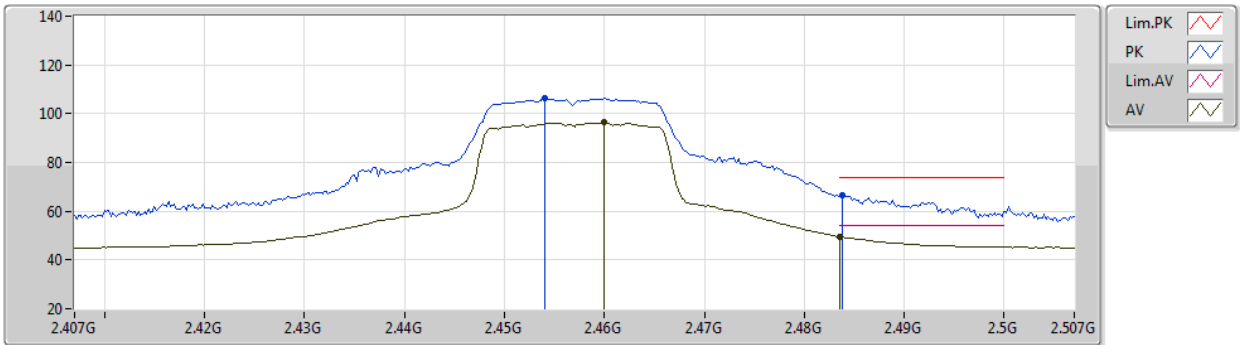
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.8767G	47.84	74.00	-26.16	42.39	3	Horizontal	175	1.54	-	33.65	6.58	34.78
AV	4.8756G	34.22	54.00	-19.78	28.77	3	Horizontal	175	1.54	-	33.65	6.58	34.78



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

27/05/2020

## 2457MHz\_TX



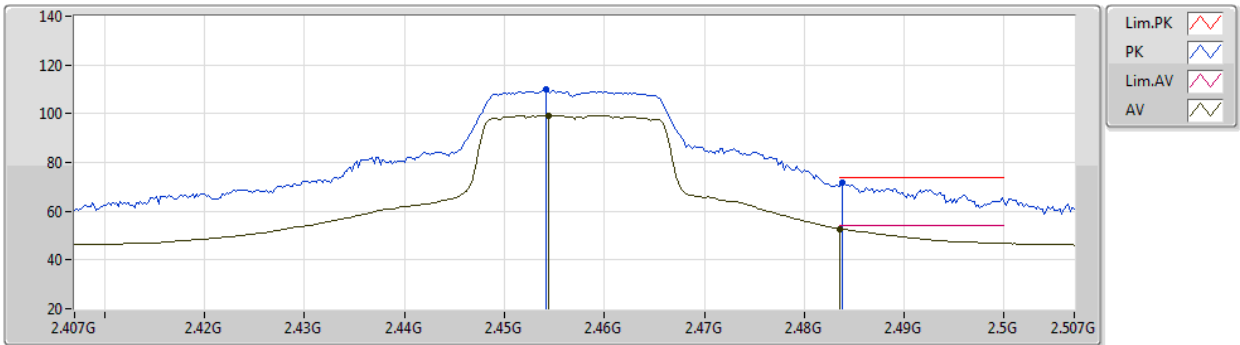
EUT Z\_1TX  
Setting 102  
03-A-L-3  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.454G	106.48	Inf	-Inf	74.25	3	Vertical	138	2.79	-	28.46	3.77	-
AV	2.46G	96.36	Inf	-Inf	64.10	3	Vertical	138	2.79	-	28.48	3.78	-
PK	2.4838G	66.68	74.00	-7.32	34.34	3	Vertical	138	2.79	-	28.55	3.79	-
AV	2.4835G	49.54	54.00	-4.46	17.20	3	Vertical	138	2.79	-	28.55	3.79	-

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

27/05/2020

## 2457MHz\_TX



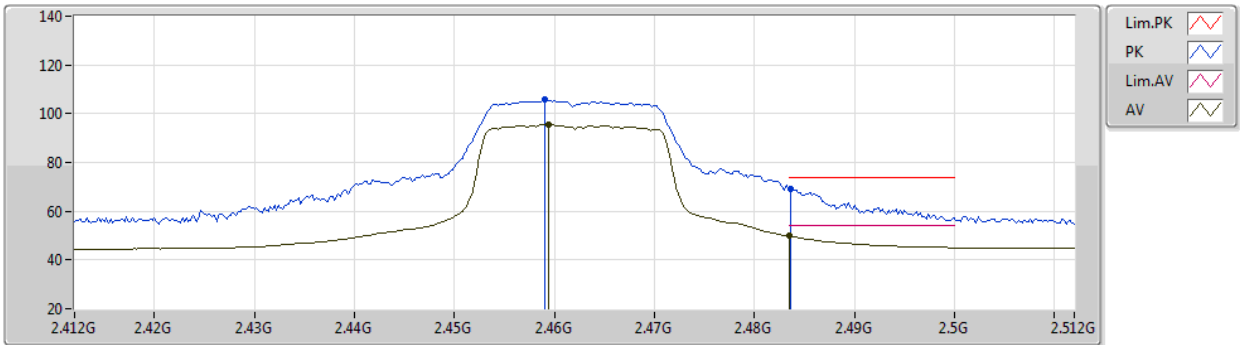
EUT Z\_1TX  
Setting 102  
03-A-L-3  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.4542G	109.91	Inf	-Inf	77.68	3	Horizontal	318	1.00	-	28.46	3.77	-
AV	2.4544G	99.36	Inf	-Inf	67.13	3	Horizontal	318	1.00	-	28.46	3.77	-
PK	2.4838G	71.67	74.00	-2.33	39.33	3	Horizontal	318	1.00	-	28.55	3.79	-
AV	2.4835G	52.76	54.00	-1.24	20.42	3	Horizontal	318	1.00	-	28.55	3.79	-

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

27/05/2020

## 2462MHz\_TX



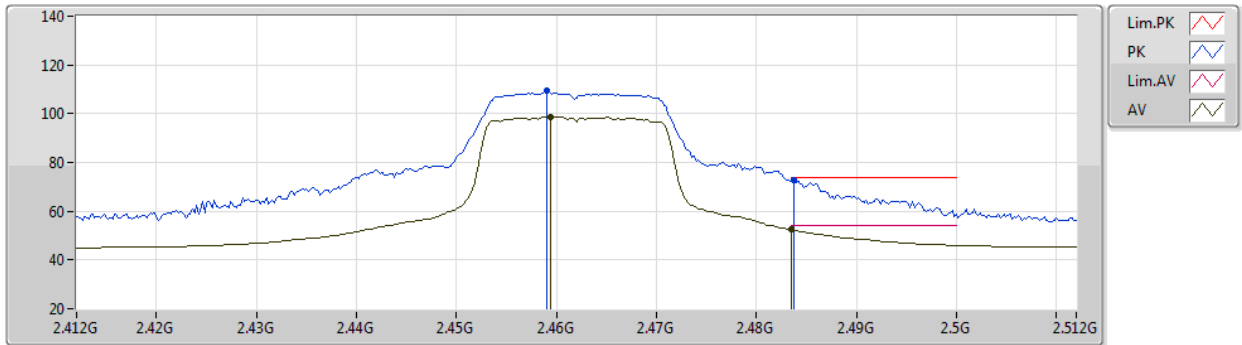
EUT Z\_1TX  
Setting 97  
03-A-L-3  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.459G	106.08	Inf	-Inf	73.82	3	Vertical	137	2.79	-	28.48	3.78	-
AV	2.4594G	95.38	Inf	-Inf	63.12	3	Vertical	137	2.79	-	28.48	3.78	-
PK	2.4836G	69.15	74.00	-4.85	36.81	3	Vertical	137	2.79	-	28.55	3.79	-
AV	2.4835G	49.81	54.00	-4.19	17.47	3	Vertical	137	2.79	-	28.55	3.79	-

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

27/05/2020

## 2462MHz\_TX



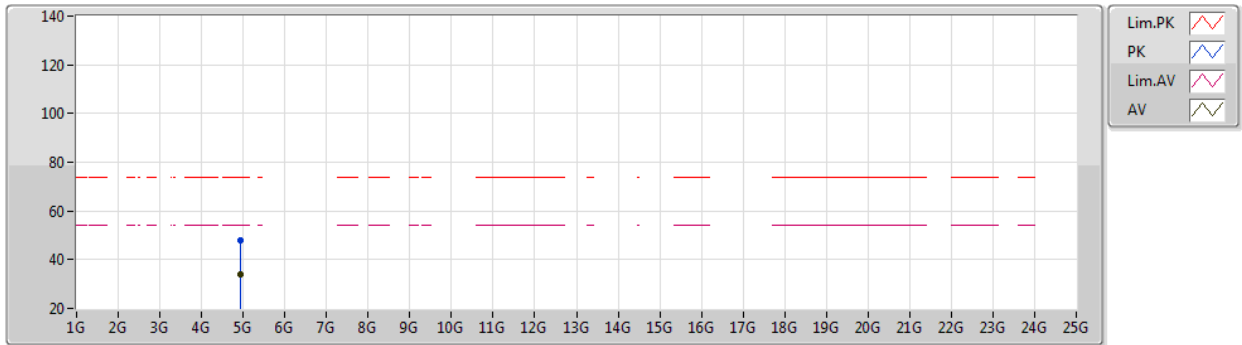
EUT Z\_1TX  
Setting 97  
03-A-L-3  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.459G	109.27	Inf	-Inf	77.01	3	Horizontal	26	1.18	-	28.48	3.78	-
AV	2.4594G	98.61	Inf	-Inf	66.35	3	Horizontal	26	1.18	-	28.48	3.78	-
PK	2.4838G	72.74	74.00	-1.26	40.40	3	Horizontal	26	1.18	-	28.55	3.79	-
AV	2.4835G	52.35	54.00	-1.65	20.01	3	Horizontal	26	1.18	-	28.55	3.79	-

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

27/05/2020

## 2462MHz\_TX



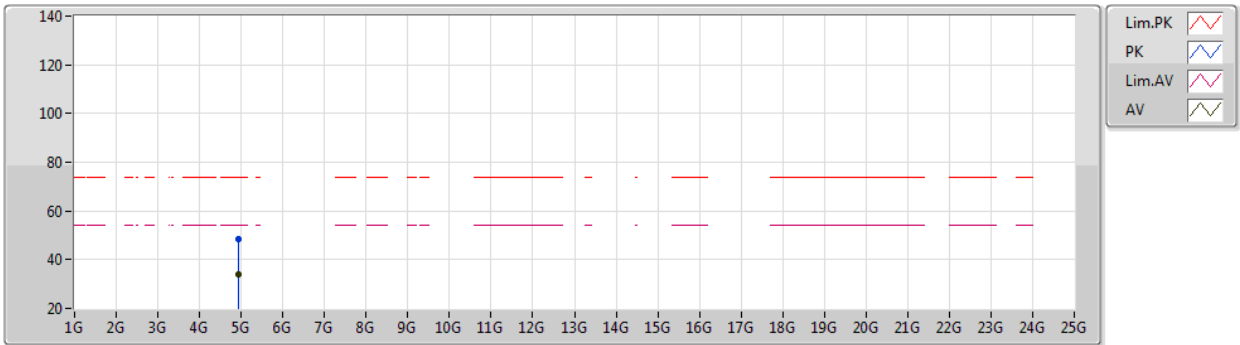
EUT Z\_1TX  
Setting 97  
03-A-B-2  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.92478G	48.11	74.00	-25.89	42.50	3	Vertical	114	2.90	-	33.75	6.60	34.74
AV	4.92398G	34.11	54.00	-19.89	28.50	3	Vertical	114	2.90	-	33.75	6.60	34.74

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

27/05/2020

## 2462MHz\_TX



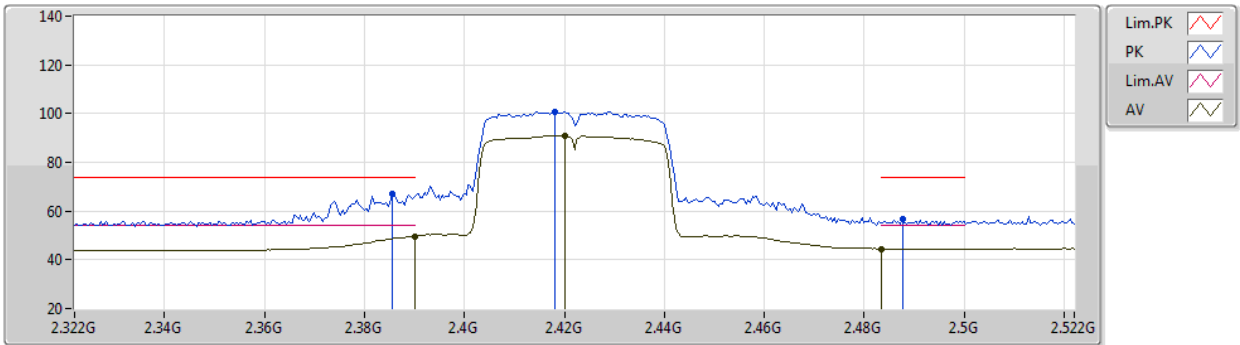
EUT Z\_1TX  
Setting 97  
03-A-B-2  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.92244G	48.58	74.00	-25.42	42.98	3	Horizontal	328	2.41	-	33.74	6.60	34.74
AV	4.92466G	34.16	54.00	-19.84	28.55	3	Horizontal	328	2.41	-	33.75	6.60	34.74

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

27/05/2020

## 2422MHz\_TX



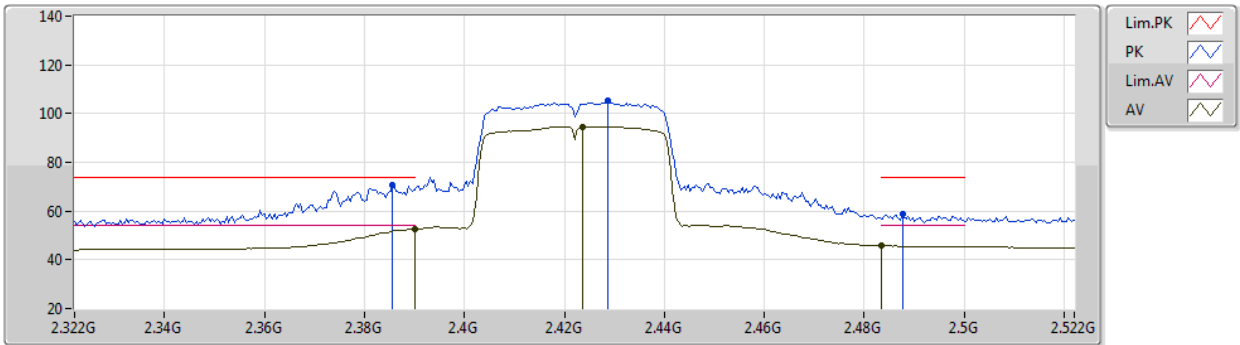
EUT Z\_1TX  
Setting 92  
03-A-L-3  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3856G	67.08	74.00	-6.92	35.08	3	Vertical	131	2.91	-	28.27	3.73	-
AV	2.39G	49.65	54.00	-4.35	17.64	3	Vertical	131	2.91	-	28.28	3.73	-
PK	2.418G	100.74	Inf	-Inf	68.64	3	Vertical	131	2.91	-	28.35	3.75	-
AV	2.42G	90.89	Inf	-Inf	58.78	3	Vertical	131	2.91	-	28.36	3.75	-
PK	2.4876G	56.75	74.00	-17.25	24.40	3	Vertical	131	2.91	-	28.56	3.79	-
AV	2.4835G	44.51	54.00	-9.49	12.17	3	Vertical	131	2.91	-	28.55	3.79	-

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

27/05/2020

## 2422MHz\_TX



EUT Z\_1TX  
Setting 92  
03-A-L-3  
2nd source

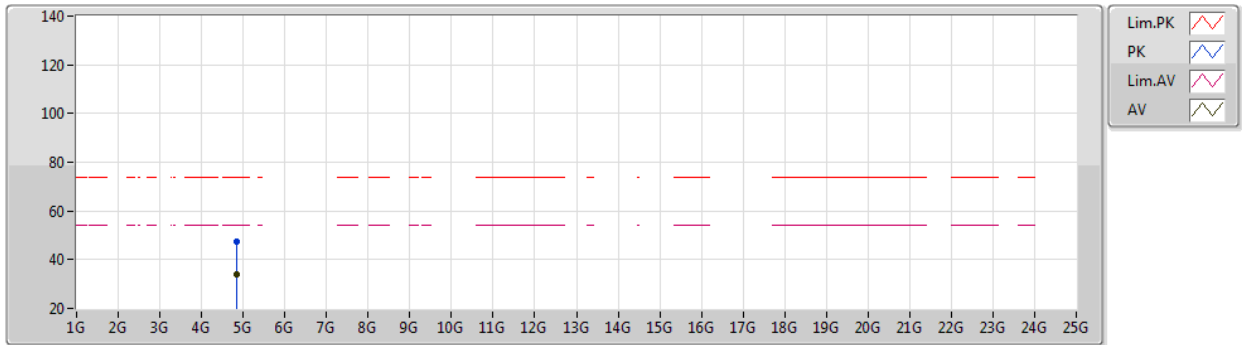
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3856G	70.62	74.00	-3.38	38.62	3	Horizontal	320	1.00	-	28.27	3.73	-
AV	2.39G	52.52	54.00	-1.48	20.51	3	Horizontal	320	1.00	-	28.28	3.73	-
PK	2.4288G	105.22	Inf	-Inf	73.07	3	Horizontal	320	1.00	-	28.39	3.76	-
AV	2.4236G	94.73	Inf	-Inf	62.61	3	Horizontal	320	1.00	-	28.37	3.75	-
PK	2.4876G	58.59	74.00	-15.41	26.24	3	Horizontal	320	1.00	-	28.56	3.79	-
AV	2.4835G	45.71	54.00	-8.29	13.37	3	Horizontal	320	1.00	-	28.55	3.79	-



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

27/05/2020

## 2422MHz\_TX



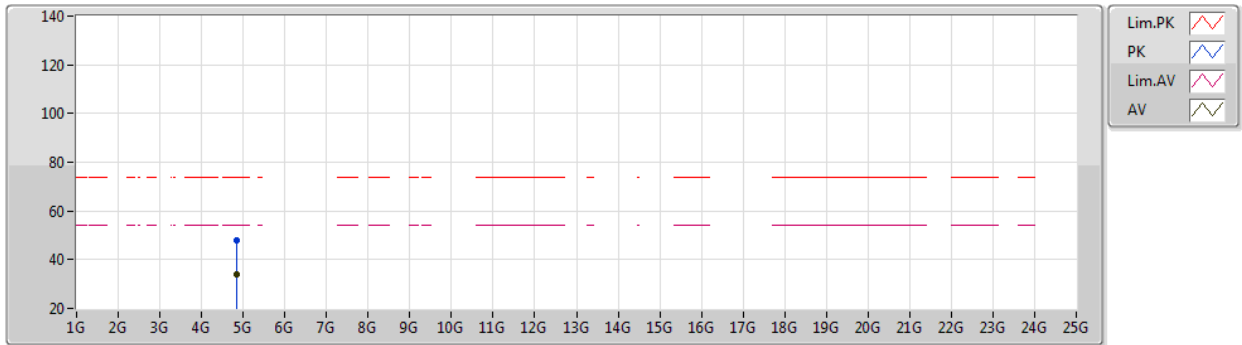
EUT Z\_1TX  
Setting 92  
03-A-B-2  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.8452G	47.42	74.00	-26.58	42.06	3	Vertical	290	2.02	-	33.59	6.57	34.80
AV	4.84456G	33.94	54.00	-20.06	28.58	3	Vertical	290	2.02	-	33.59	6.57	34.80

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

27/05/2020

## 2422MHz\_TX



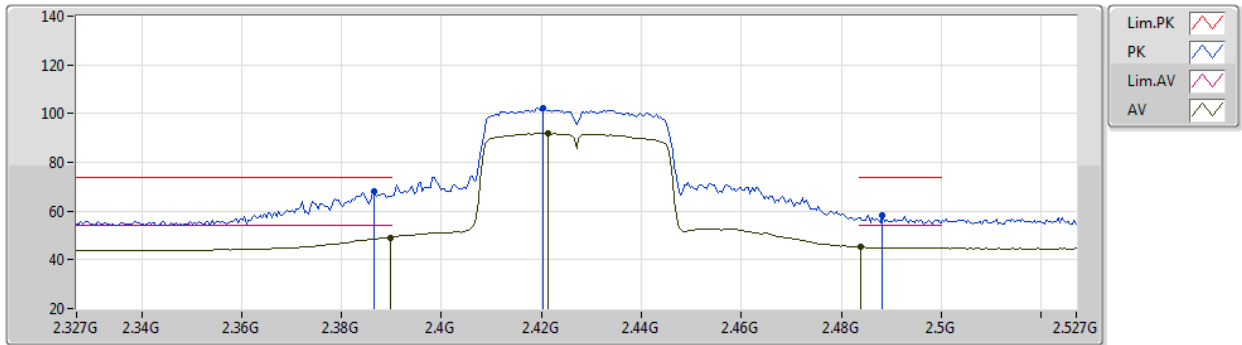
EUT Z\_1TX  
Setting 92  
03-A-B-2  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.84052G	47.76	74.00	-26.24	42.42	3	Horizontal	94	1.28	-	33.58	6.57	34.81
AV	4.8449G	33.97	54.00	-20.03	28.61	3	Horizontal	94	1.28	-	33.59	6.57	34.80

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

27/05/2020

## 2427MHz\_TX



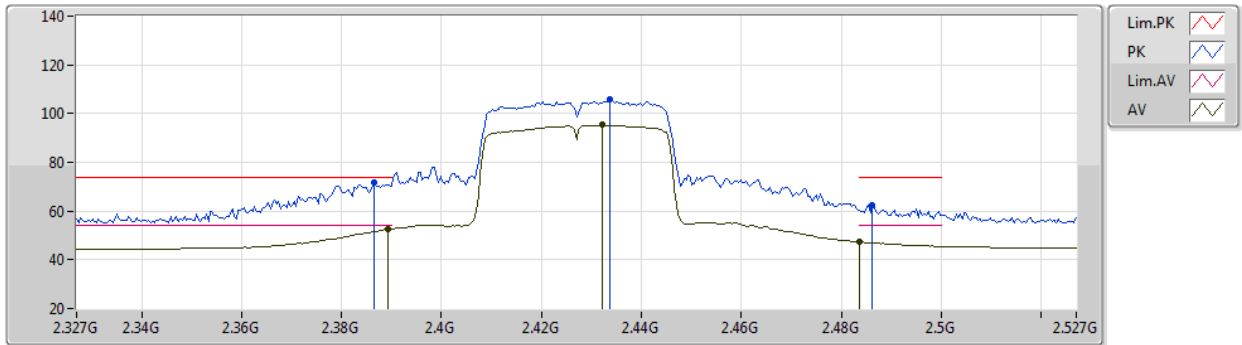
EUT Z\_1TX  
Setting 97  
03-A-L-3  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3866G	68.23	74.00	-5.77	36.23	3	Vertical	135	2.90	-	28.27	3.73	-
AV	2.3898G	49.22	54.00	-4.78	17.21	3	Vertical	135	2.90	-	28.28	3.73	-
PK	2.4202G	102.38	Inf	-Inf	70.27	3	Vertical	135	2.90	-	28.36	3.75	-
AV	2.4214G	91.78	Inf	-Inf	59.67	3	Vertical	135	2.90	-	28.36	3.75	-
PK	2.4882G	58.28	74.00	-15.72	25.93	3	Vertical	135	2.90	-	28.56	3.79	-
AV	2.4838G	45.20	54.00	-8.80	12.86	3	Vertical	135	2.90	-	28.55	3.79	-

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

27/05/2020

## 2427MHz\_TX



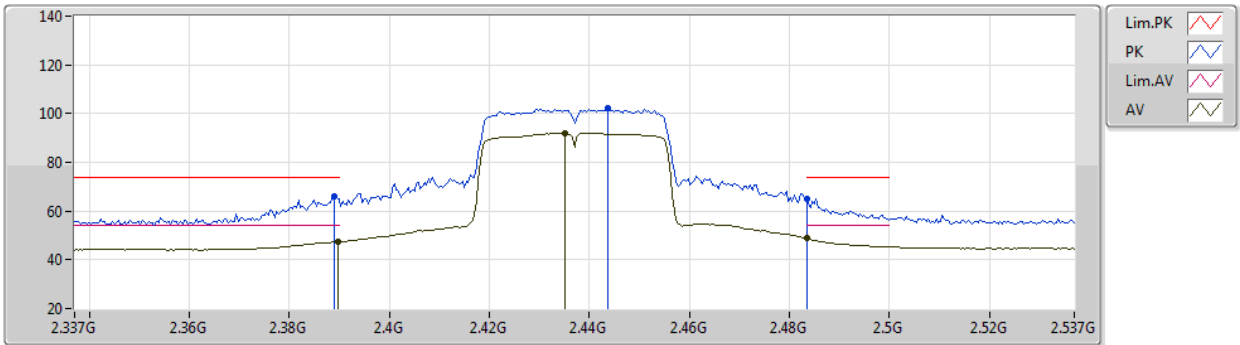
EUT Z\_1TX  
Setting 97  
03-A-L-3  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3866G	71.72	74.00	-2.28	39.72	3	Horizontal	325	1.26	-	28.27	3.73	-
AV	2.3894G	52.53	54.00	-1.47	20.52	3	Horizontal	325	1.26	-	28.28	3.73	-
PK	2.4338G	105.99	Inf	-Inf	73.83	3	Horizontal	325	1.26	-	28.40	3.76	-
AV	2.4322G	95.27	Inf	-Inf	63.11	3	Horizontal	325	1.26	-	28.40	3.76	-
PK	2.4862G	62.53	74.00	-11.47	30.18	3	Horizontal	325	1.26	-	28.56	3.79	-
AV	2.4835G	47.30	54.00	-6.70	14.96	3	Horizontal	325	1.26	-	28.55	3.79	-

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

27/05/2020

## 2437MHz\_TX



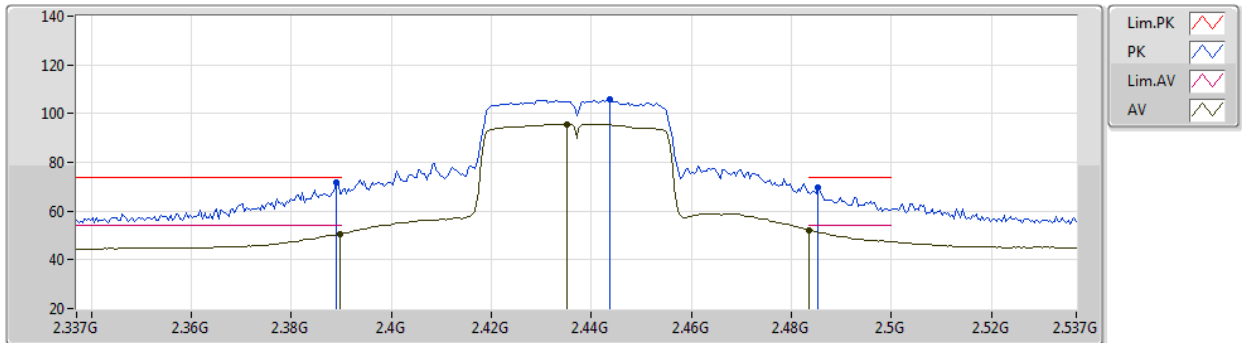
EUT Z\_1TX  
Setting 99  
03-A-L-3  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.389G	66.25	74.00	-7.75	34.24	3	Vertical	133	2.83	-	28.28	3.73	-
AV	2.3898G	47.24	54.00	-6.76	15.23	3	Vertical	133	2.83	-	28.28	3.73	-
PK	2.4438G	102.42	Inf	-Inf	70.22	3	Vertical	133	2.83	-	28.43	3.77	-
AV	2.435G	91.93	Inf	-Inf	59.76	3	Vertical	133	2.83	-	28.41	3.76	-
PK	2.4835G	65.20	74.00	-8.80	32.86	3	Vertical	133	2.83	-	28.55	3.79	-
AV	2.4835G	48.79	54.00	-5.21	16.45	3	Vertical	133	2.83	-	28.55	3.79	-

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

27/05/2020

## 2437MHz\_TX



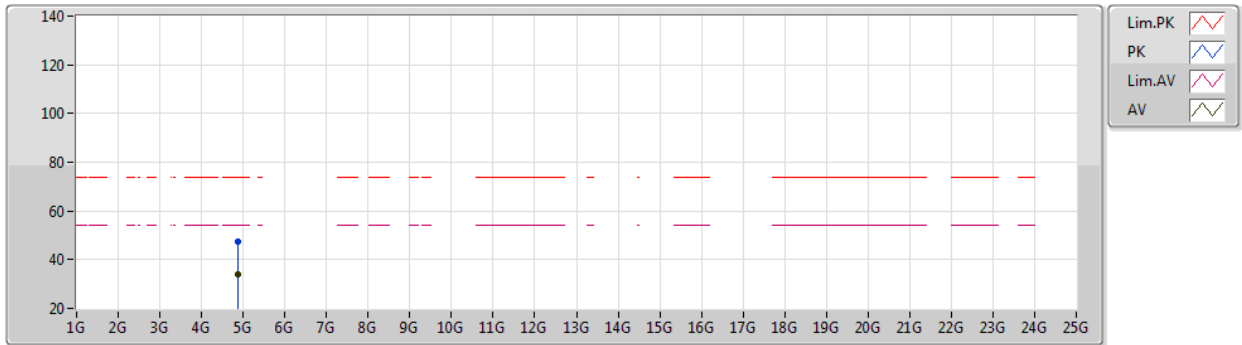
EUT Z\_1TX  
Setting 99  
03-A-L-3  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.389G	71.89	74.00	-2.11	39.88	3	Horizontal	31	1.03	-	28.28	3.73	-
AV	2.3898G	50.56	54.00	-3.44	18.55	3	Horizontal	31	1.03	-	28.28	3.73	-
PK	2.4438G	106.05	Inf	-Inf	73.85	3	Horizontal	31	1.03	-	28.43	3.77	-
AV	2.435G	95.76	Inf	-Inf	63.59	3	Horizontal	31	1.03	-	28.41	3.76	-
PK	2.4854G	69.58	74.00	-4.42	37.23	3	Horizontal	31	1.03	-	28.56	3.79	-
AV	2.4835G	52.32	54.00	-1.68	19.98	3	Horizontal	31	1.03	-	28.55	3.79	-

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

27/05/2020

## 2437MHz\_TX



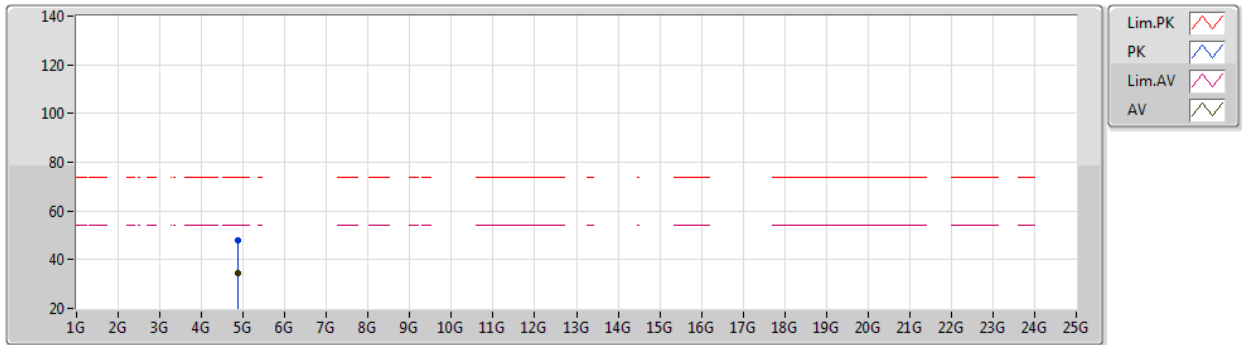
EUT Z\_1TX  
Setting 99  
03-A-B-2  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.87538G	47.55	74.00	-26.45	42.10	3	Vertical	358	2.37	-	33.65	6.58	34.78
AV	4.87628G	34.18	54.00	-19.82	28.73	3	Vertical	358	2.37	-	33.65	6.58	34.78

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

27/05/2020

## 2437MHz\_TX



EUT Z\_1TX  
Setting 99  
03-A-B-2  
2nd source

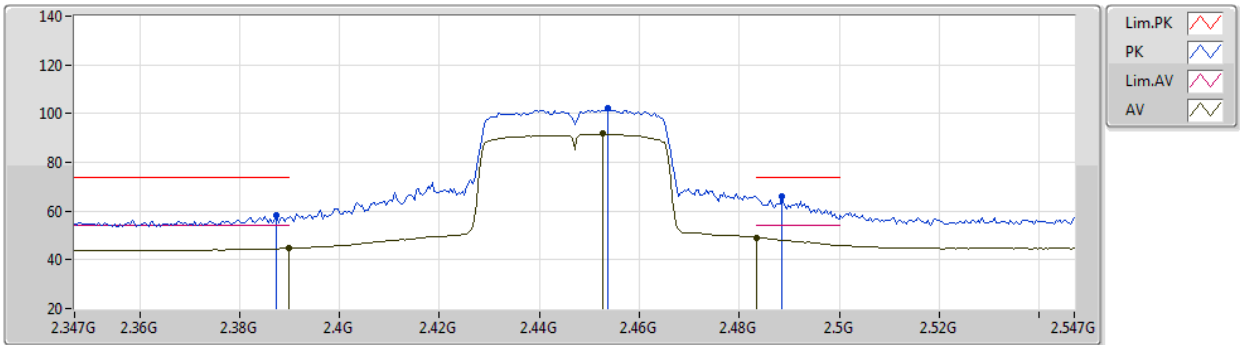
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.87116G	48.06	74.00	-25.94	42.62	3	Horizontal	278	2.72	-	33.64	6.58	34.78
AV	4.87466G	34.26	54.00	-19.74	28.81	3	Horizontal	278	2.72	-	33.65	6.58	34.78



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

27/05/2020

## 2447MHz\_TX



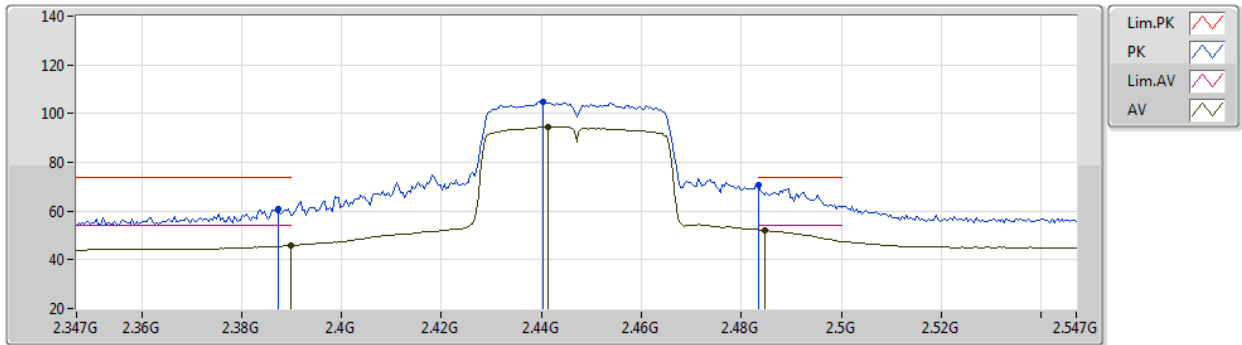
EUT Z\_1TX  
Setting 95  
03-A-L-3  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3874G	58.23	74.00	-15.77	26.23	3	Vertical	138	2.85	-	28.27	3.73	-
AV	2.3898G	44.75	54.00	-9.25	12.74	3	Vertical	138	2.85	-	28.28	3.73	-
PK	2.4538G	102.32	Inf	-Inf	70.09	3	Vertical	138	2.85	-	28.46	3.77	-
AV	2.4526G	91.64	Inf	-Inf	59.41	3	Vertical	138	2.85	-	28.46	3.77	-
PK	2.4886G	65.92	74.00	-8.08	33.56	3	Vertical	138	2.85	-	28.57	3.79	-
AV	2.4835G	49.06	54.00	-4.94	16.72	3	Vertical	138	2.85	-	28.55	3.79	-

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

27/05/2020

## 2447MHz\_TX



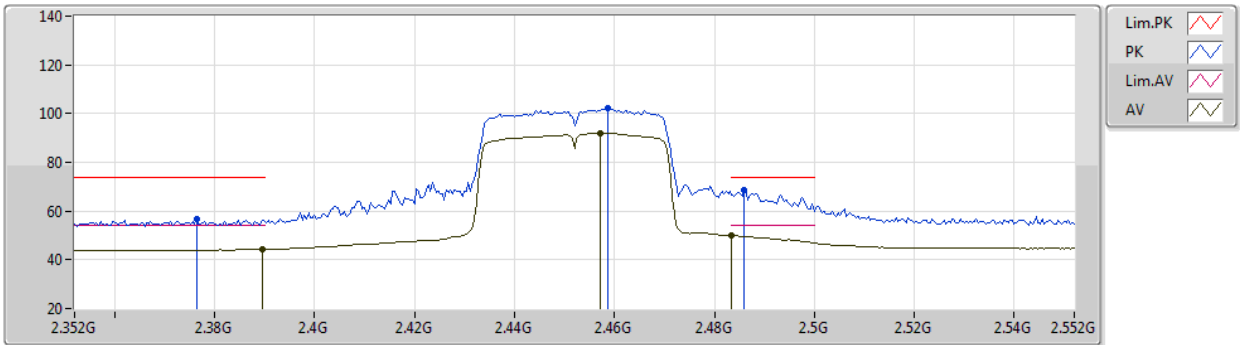
EUT Z\_1TX  
Setting 95  
03-A-L-3  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3874G	60.73	74.00	-13.27	28.73	3	Horizontal	322	1.42	-	28.27	3.73	-
AV	2.3898G	45.87	54.00	-8.13	13.86	3	Horizontal	322	1.42	-	28.28	3.73	-
PK	2.4402G	104.72	Inf	-Inf	72.54	3	Horizontal	322	1.42	-	28.42	3.76	-
AV	2.4414G	94.64	Inf	-Inf	62.46	3	Horizontal	322	1.42	-	28.42	3.76	-
PK	2.4835G	70.52	74.00	-3.48	38.18	3	Horizontal	322	1.42	-	28.55	3.79	-
AV	2.4846G	52.32	54.00	-1.68	19.98	3	Horizontal	322	1.42	-	28.55	3.79	-

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

27/05/2020

## 2452MHz\_TX



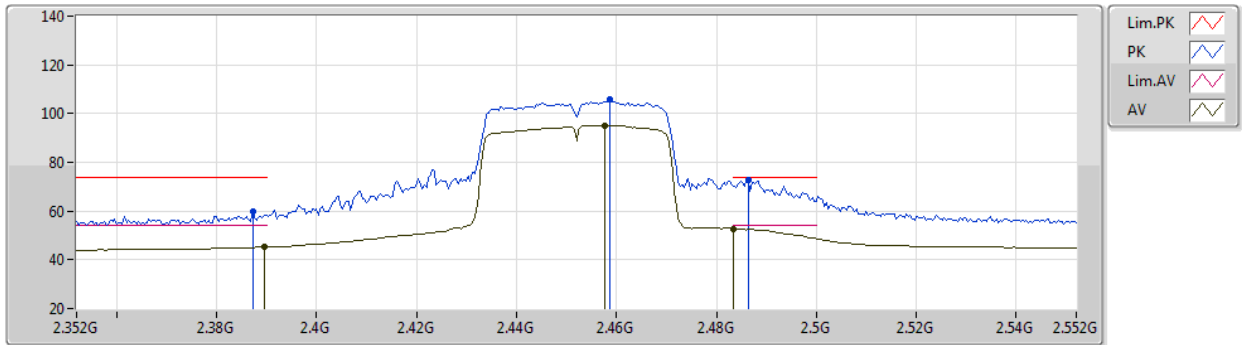
EUT Z\_1TX  
Setting 96  
03-A-L-3  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3764G	56.52	74.00	-17.48	24.54	3	Vertical	137	2.78	-	28.25	3.73	-
AV	2.3896G	44.30	54.00	-9.70	12.29	3	Vertical	137	2.78	-	28.28	3.73	-
PK	2.4588G	102.43	Inf	-Inf	70.17	3	Vertical	137	2.78	-	28.48	3.78	-
AV	2.4572G	91.97	Inf	-Inf	59.73	3	Vertical	137	2.78	-	28.47	3.77	-
PK	2.486G	68.44	74.00	-5.56	36.09	3	Vertical	137	2.78	-	28.56	3.79	-
AV	2.4835G	50.06	54.00	-3.94	17.72	3	Vertical	137	2.78	-	28.55	3.79	-

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

27/05/2020

## 2452MHz\_TX



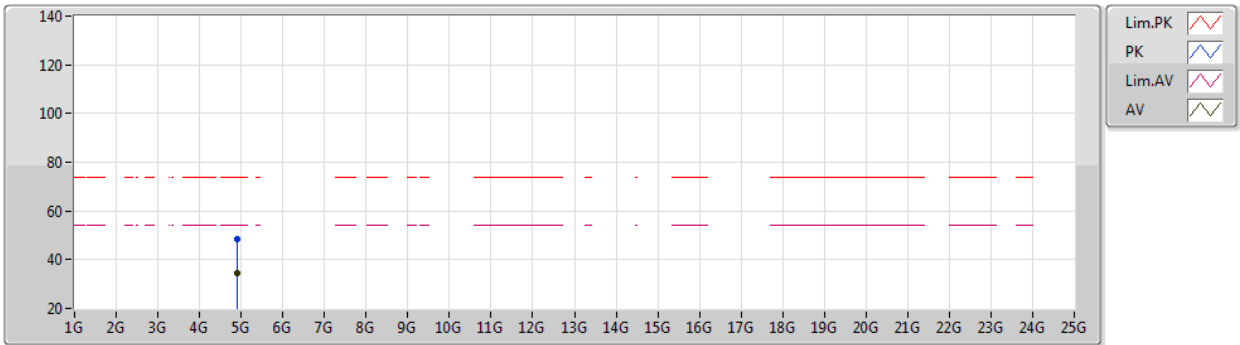
EUT Z\_1TX  
Setting 96  
03-A-L-3  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3872G	59.62	74.00	-14.38	27.62	3	Horizontal	27	1.14	-	28.27	3.73	-
AV	2.3896G	45.22	54.00	-8.78	13.21	3	Horizontal	27	1.14	-	28.28	3.73	-
PK	2.4588G	105.74	Inf	-Inf	73.48	3	Horizontal	27	1.14	-	28.48	3.78	-
AV	2.4576G	95.15	Inf	-Inf	62.91	3	Horizontal	27	1.14	-	28.47	3.77	-
PK	2.4864G	72.77	74.00	-1.23	40.42	3	Horizontal	27	1.14	-	28.56	3.79	-
AV	2.4835G	52.82	54.00	-1.18	20.48	3	Horizontal	27	1.14	-	28.55	3.79	-

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

27/05/2020

## 2452MHz\_TX



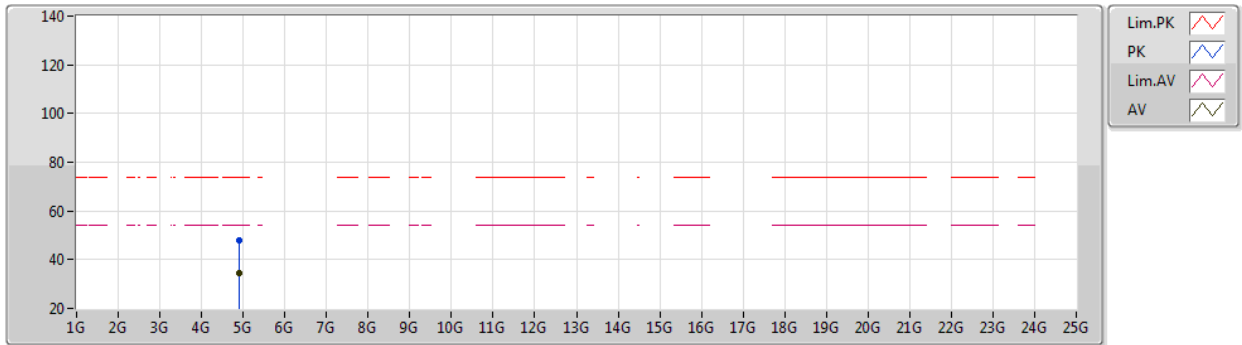
EUT Z\_1TX  
Setting 96  
03-A-B-2  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.90414G	48.21	74.00	-25.79	42.67	3	Vertical	247	2.08	-	33.71	6.59	34.76
AV	4.90342G	34.28	54.00	-19.72	28.74	3	Vertical	247	2.08	-	33.71	6.59	34.76

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

27/05/2020

## 2452MHz\_TX



EUT Z\_1TX  
Setting 96  
03-A-B-2  
2nd source

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.90456G	48.00	74.00	-26.00	42.46	3	Horizontal	54	2.77	-	33.71	6.59	34.76
AV	4.90356G	34.25	54.00	-19.75	28.71	3	Horizontal	54	2.77	-	33.71	6.59	34.76