



# RADIO TEST REPORT

**FCC ID** : XHG-RG1000  
**Equipment** : Mobile Hotspot  
**Model Name** : RG1000  
**Applicant** : Franklin Technology Inc.  
906 JEI Platz, 186, Gasan digital 1-ro,  
Gumcheon-Gu, Seoul, South Korea, 08502  
**Manufacturer** : Franklin Technology Inc.  
906 JEI Platz, 186, Gasan digital 1-ro,  
Gumcheon-Gu, Seoul, South Korea, 08502  
**Standard** : 47 CFR FCC Part 15.247

The product was received on May 07, 2021, and testing was started from Jun. 09, 2021 and completed on Jul. 19, 2021. We, Sporton International Inc. Hsinchu Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. Hsinchu Laboratory, the test report shall not be reproduced except in full.

Approved by: Sam Chen

**Sporton International Inc. Hsinchu Laboratory**

No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County 302010, Taiwan (R.O.C.)



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**Photographs of EUT v02**



### History of this test report

Report No.	Version	Description	Issued Date
FR131501AA	01	Initial issue of report	Sep. 16, 2021
FR131501AA	02	Update the photographs of EUT	Sep. 16, 2021



### 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: Vicky Huang**



# 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), VHT20, ax (HEW20)	2412-2462	1-11 [11]

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11b	20	2
2.4-2.4835GHz	802.11g	20	2
2.4-2.4835GHz	802.11n HT20	20	2
2.4-2.4835GHz	802.11n VHT20	20	2
2.4-2.4835GHz	802.11ax HEW20	20	2

**Note:**

- ♦ 11b mode uses a combination of DSSS-DBPSK, DQPSK, CCK modulation.
- ♦ 11g, HT20 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- ♦ VHT20 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- ♦ HEW20 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- ♦ BWch is the nominal channel bandwidth.



1.1.2 Antenna Information

Ant.	Port	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	1	Hutec	HIA-ASM0053B-IR	PIFA Antenna	Murata	Note 1
2	2	Hutec	HIA-ASM0053B-IR	PIFA Antenna	Murata	

Note1:

Ant.	Port	Gain (dBi)			Cable loss			True Gain (dBi)		
		2.4GHz	5GHz Band 1	5GHz Band 4	2.4GHz	5GHz Band 1	5GHz Band 4	2.4GHz	5GHz Band 1	5GHz Band 4
1	1	4.131	3.275	3.275	-1.18	-3.54	-3.98	2.951	-0.265	-0.705
2	2	-1.44	4.136	4.136	-1.18	-3.54	-3.98	-2.62	0.596	0.156

Note2: The above information was declared by manufacturer

Note3:

<For 2.4GHz Function>

For IEEE 802.11b/g/n/VHT/ax mode (2TX, 2RX):

Ant. 1(Port 1) and Ant. 2(Port 2) can be used as transmitting/receiving antenna.  
Ant. 1(Port 1) and Ant. 2(Port 2) could transmit/receive simultaneously.

<For 5GHz Function>

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

Ant. 1(Port 1) and Ant. 2(Port 2) can be used as transmitting/receiving antenna.  
Ant. 1(Port 1) and Ant. 2(Port 2) could transmit/receive simultaneously.

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11b	0.981	0.08	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11g	0.988	0.05	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW20	0.996	0.02	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW40	0.996	0.02	n/a (DC>=0.98)	n/a (DC>=0.98)

Note:

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

1.1.4 EUT Operational Condition

EUT Power Type	From battery, Adapter, 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	QCRT V4.0.00189.0		

Note: The above information was declared by manufacturer.



### 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 15.247
- ◆ 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 662911 D01 v02r01
- ◆ FCC KDB 414788 D01 v01r01

### 1.3 Testing Location Information

Testing Location Information	
Test Lab. : Sporton International Inc. Hsinchu Laboratory	
Hsinchu (TAF: 3787)	ADD: No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County 302010, Taiwan (R.O.C.) TEL: 886-3-656-9065 FAX: 886-3-656-9085 Test site Designation No. TW3787 with FCC. Conformity Assessment Body Identifier (CABID) TW3787 with ISED.

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
RF Conducted	TH01-CB	Owen Hsu	23.7-25.2 / 63-64	Jun. 11, 2021~ Jun. 18, 2021
Radiated (below 1GHz)	03CH05-CB	Eason Chen	25.3~27.7 / 64~68	Jun. 09, 2021~ Jul. 17, 2021
Radiated (Co-location)	03CH05-CB	Eason Chen	25.3~27.7 / 64~68	Jun. 09, 2021~ Jul. 17, 2021
Radiated (above 1GHz)	03CH01-CB	Eason Chen	25.9~27 / 64~68	Jun. 09, 2021~ Jul. 17, 2021
AC Conduction	CO02-CB	Ryo Fan	23~24 / 61~62	Jul. 19, 2021



## 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 (9kHz ~ 30MHz)	4.2 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.5 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.7 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.2 dB	Confidence levels of 95%
Conducted Emission	2.5 dB	Confidence levels of 95%
Output Power Measurement	1.3 dB	Confidence levels of 95%
Power Density Measurement	2.5 dB	Confidence levels of 95%
Bandwidth Measurement	0.9%	Confidence levels of 95%





## 2 Test Configuration of EUT

### 2.1 Test Channel Mode

Mode	Power Setting
802.11b_Nss1,(1Mbps)_2TX	-
2412MHz	14
2437MHz	14
2462MHz	14
802.11g_Nss1,(6Mbps)_2TX	-
2412MHz	11
2437MHz	11
2462MHz	11
802.11ax HEW20_Nss1,(MCS0)_2TX	-
2412MHz	10
2437MHz	10.5
2462MHz	10.5

**Note:**

- ♦ Evaluated HEW20 mode only, due to similar modulation. The power setting of HT20/VHT20 mode are the same or lower than HEW20.



## 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 Test Voltage: 120Vac / 60Hz
<b>Operating Mode</b>	CTX
1	EUT-WLAN 2.4GHz-powered by adapter
2	EUT-WLAN 2.4GHz-powered by host system
Mode 2 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-WLAN 5GHz-powered by host system
For operating mode 3 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 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>	CTX
For WLAN 2.4GHz: The EUT was performed at X axis, Y axis and Z axis position for Radiated emission above 1GHz test, and the worst case was found at X axis. So the measurement will follow this same test configuration. For WLAN 5GHz: The EUT was performed at X axis, Y axis and Z axis position for Radiated emission above 1GHz test, and the worst case was found at Z axis. So the measurement will follow this same test configuration.	
1	EUT at X-axis-WLAN 2.4GHz-powered by battery
2	EUT at X-axis-WLAN 2.4GHz-powered by adapter
3	EUT at X-axis-WLAN 2.4GHz-powered by host system
Mode 2 has been evaluated to be the worst case among Mode 1~3, thus measurement for Mode 4 will follow this same test mode.	
4	EUT at Z-axis-WLAN 5GHz-powered by adapter
For operating mode 4 is the worst case and it was record in this test report.	



<b>Operating Mode &gt; 1GHz</b>	CTX
The EUT was performed at X axis, Y axis and Z axis position, and the worst case was found at X axis. So the measurement will follow this same test configuration.	
1	EUT at X-axis

<b>The Worst Case Mode for Following Conformance Tests</b>	
<b>Tests Item</b>	Simultaneous Transmission Analysis - Radiated Emission Co-location
<b>Test Condition</b>	Radiated measurement
<b>Operating Mode</b>	Normal Link
The EUT was performed at X axis, Y axis and Z axis position, and the worst case was found at X axis. So the measurement will follow this same test configuration.	
1	EUT at X-axis-WLAN 2.4GHz+WLAN 5GHz
Refer to Appendix G for Radiated Emission Co-location.	

### 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

<b>Accessories</b>			
<b>Equipment Name</b>	<b>Brand Name</b>	<b>Model Name</b>	<b>Rating</b>
Adapter	Franklin Wireless	APS-KP018W-G	INPUT: 100-240V~50/60Hz, 0.5A Max. OUTPUT: 5V, 3.0A, 9V, 2.0A, 12V, 1.5A
Li-ion battery	Franklin Wireless	ICQ037NA	3.8V, 5000mAh, 19.00Wh
<b>Other</b>			
USB cable*1, Shielded, 1.2m			



## 2.5 Support Equipment

For AC Conduction:

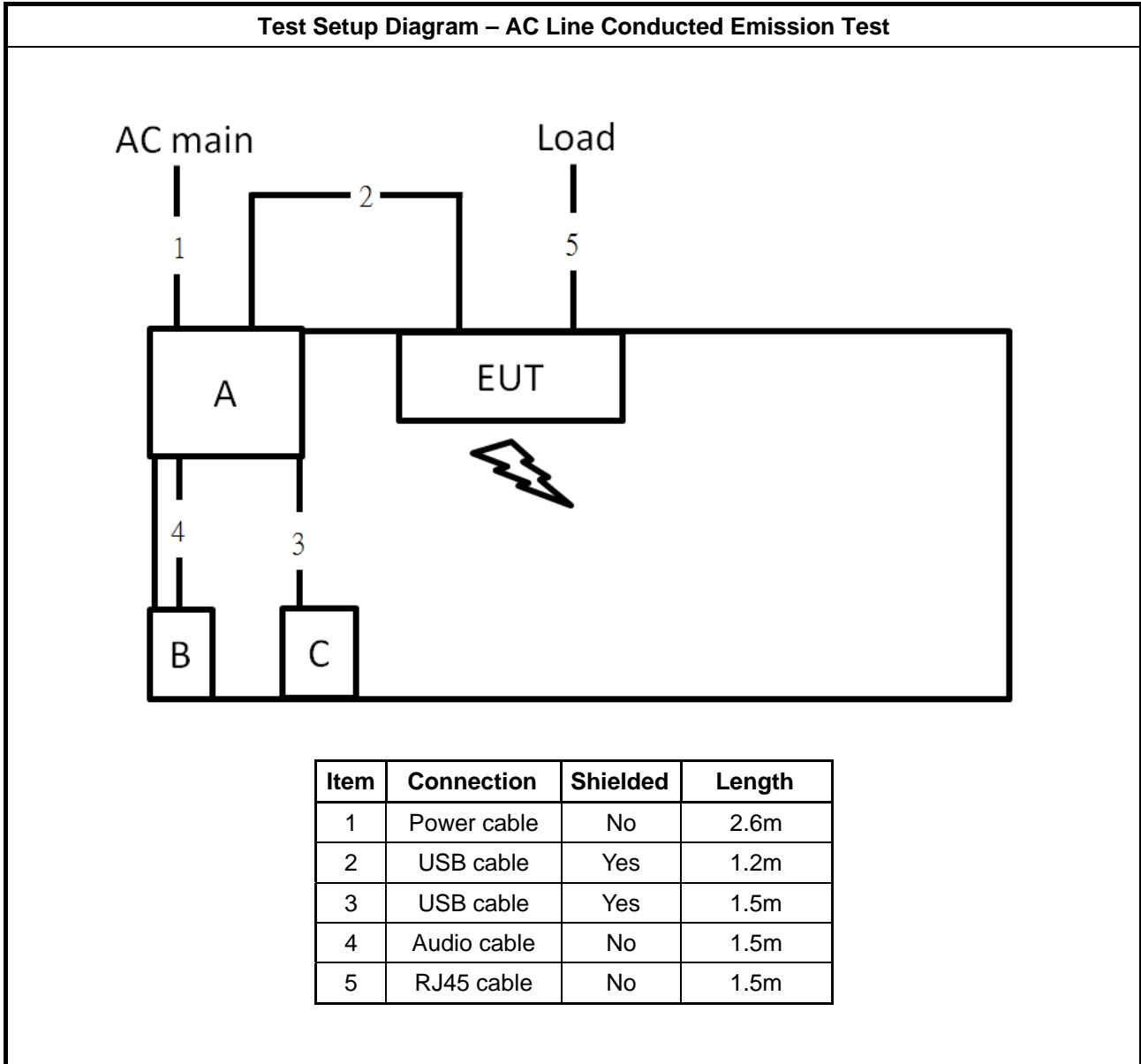
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E6430	N/A
B	Mouse	HP	FM100	N/A
C	Earphone	SHYARO CHI	MIC-04	N/A

For Radiated (below 1GHz): N/A

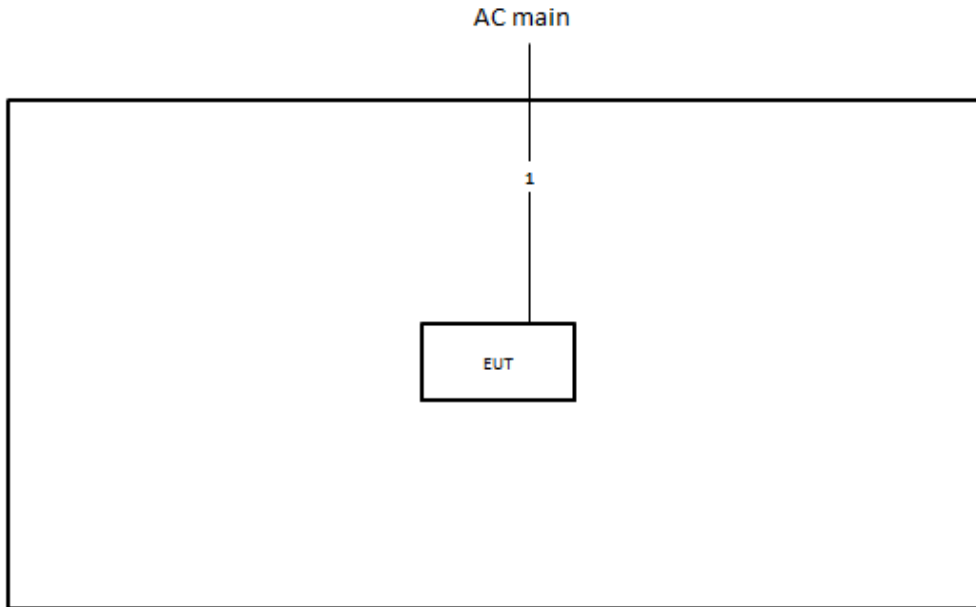
For Radiated (above 1GHz) and RF Conducted:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E4300	N/A

## 2.6 Test Setup Diagram

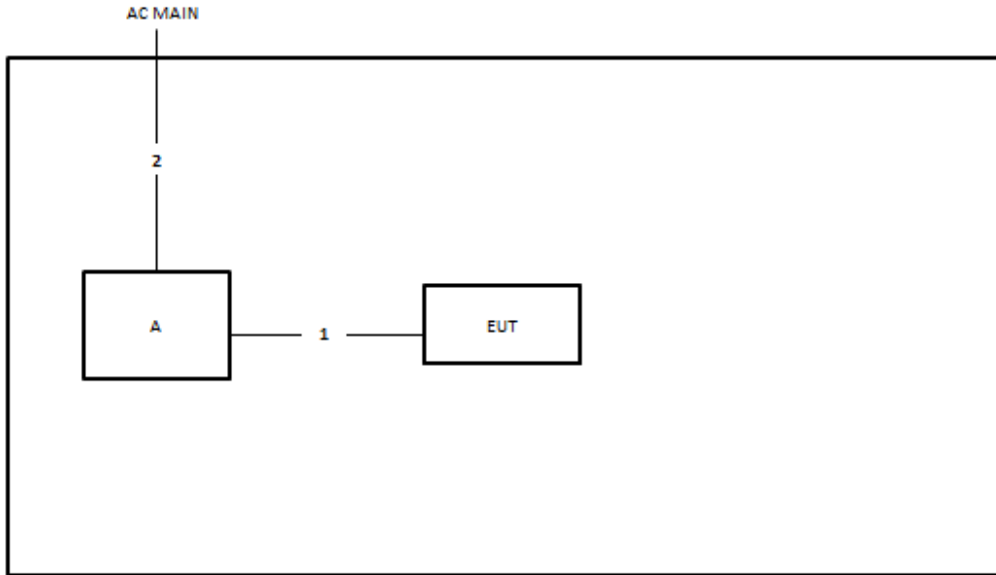


**Test Setup Diagram - Radiated Test < 1GHz**



Item	Connection	Shielded	Length
1	USB cable	Yes	1.2m

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



Item	Connection	Shielded	Length
1	USB cable	Yes	1.2m
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

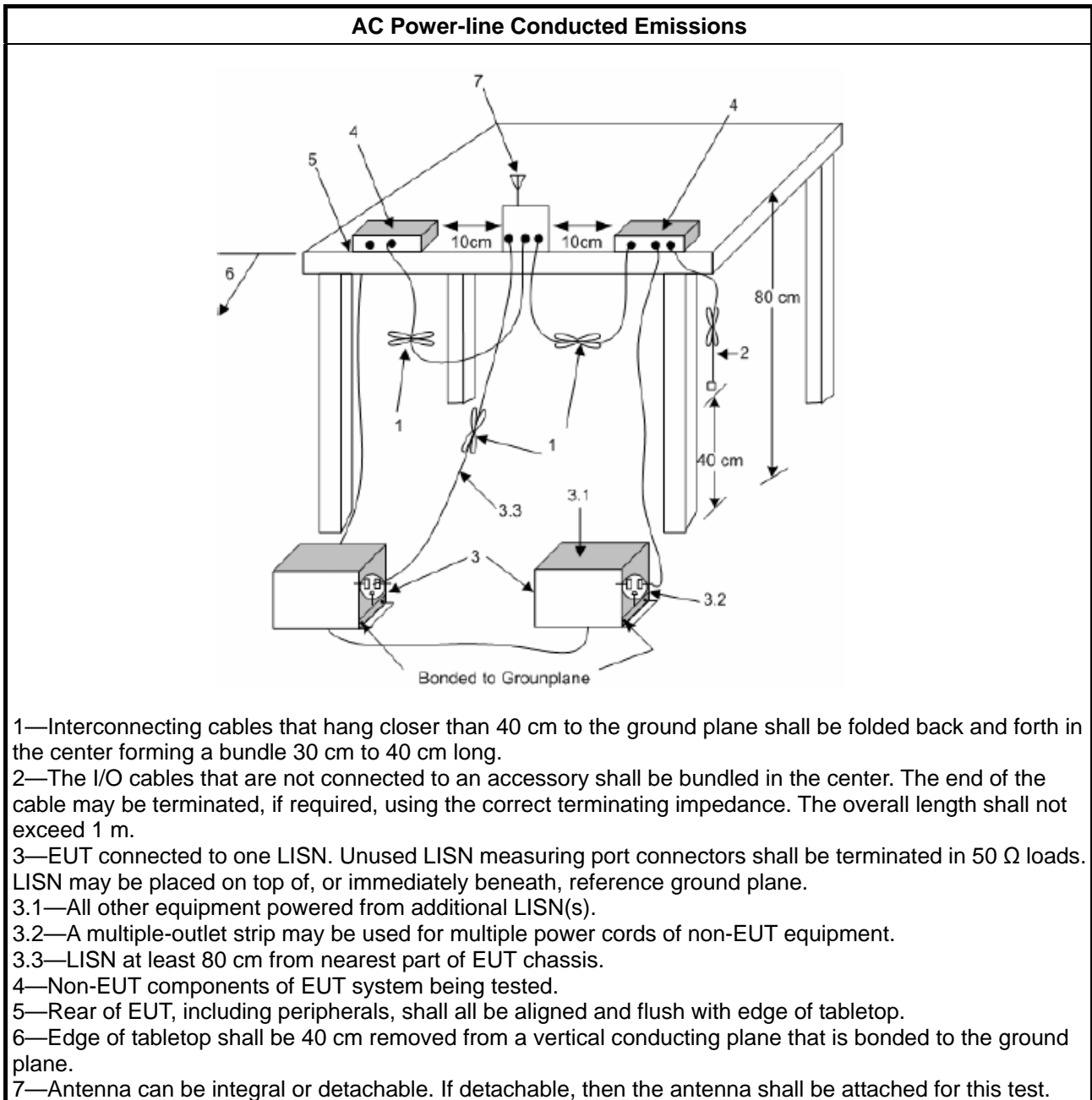
Refer a test equipment and calibration data table in this test report.

##### 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:

- a. Corrected Reading: LISN Factor (LISN) + Attenuator (AT/AUX) + Cable Loss (CL) + Read Level (Raw) = Level
- b. Margin = -Limit + Level

### 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>

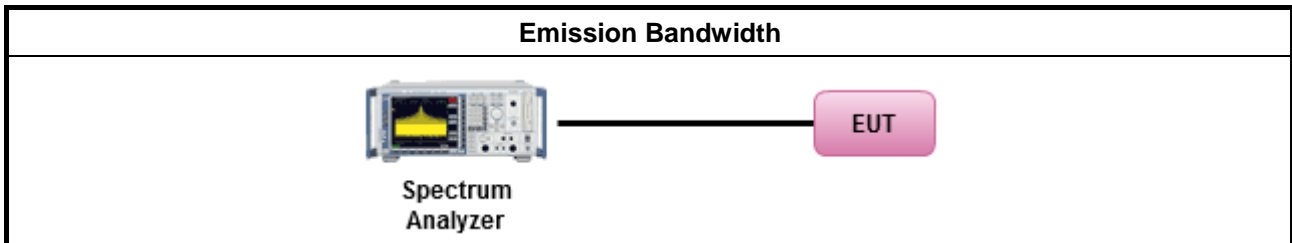
#### 3.2.2 Measuring Instruments

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	
	<ul style="list-style-type: none"><li>▪ If <math>G_{TX} \leq 6</math> dBi, then <math>P_{Out} \leq 30</math> dBm (1 W)</li></ul>
	<ul style="list-style-type: none"><li>▪ Point-to-multipoint systems (P2M): If <math>G_{TX} &gt; 6</math> dBi, then <math>P_{Out} = 30 - (G_{TX} - 6)</math> dBm</li></ul>
	<ul style="list-style-type: none"><li>▪ Point-to-point systems (P2P): If <math>G_{TX} &gt; 6</math> dBi, then <math>P_{Out} = 30 - (G_{TX} - 6)/3</math> dBm</li></ul>
	<ul style="list-style-type: none"><li>▪ Smart antenna system (SAS):</li></ul>
	<ul style="list-style-type: none"><li>- Single beam: If <math>G_{TX} &gt; 6</math> dBi, then <math>P_{Out} = 30 - (G_{TX} - 6)/3</math> dBm</li></ul>
	<ul style="list-style-type: none"><li>- Overlap beam: If <math>G_{TX} &gt; 6</math> dBi, then <math>P_{Out} = 30 - (G_{TX} - 6)/3</math> dBm</li></ul>
	<ul style="list-style-type: none"><li>- Aggregate power on all beams: If <math>G_{TX} &gt; 6</math> dBi, then <math>P_{Out} = 30 - (G_{TX} - 6)/3 + 8</math> dB dBm</li></ul>
$P_{Out}$ = maximum peak conducted output power or maximum conducted output power in dBm, $G_{TX}$ = the maximum transmitting antenna directional gain in dBi.	

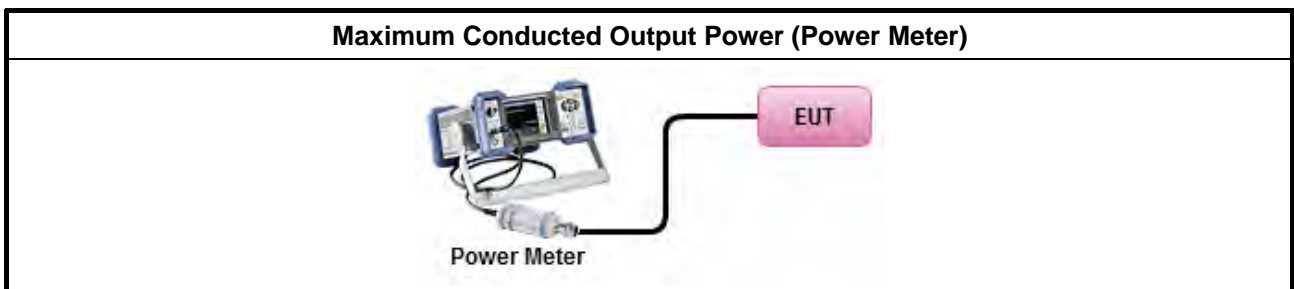
#### 3.3.2 Measuring Instruments

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

**3.3.3 Test Procedures**

<b>Test Method</b>	
<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 Method AVGSA-1.
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.3 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 11.9.2.4 Method AVGSA-2.
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.5 Method AVGSA-2A (alternative)
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.6 Method AVGSA-3
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.7 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
<ul style="list-style-type: none"> <li>Power Spectral Density (PSD) <math>\leq</math> 8 dBm/3kHz</li> </ul>

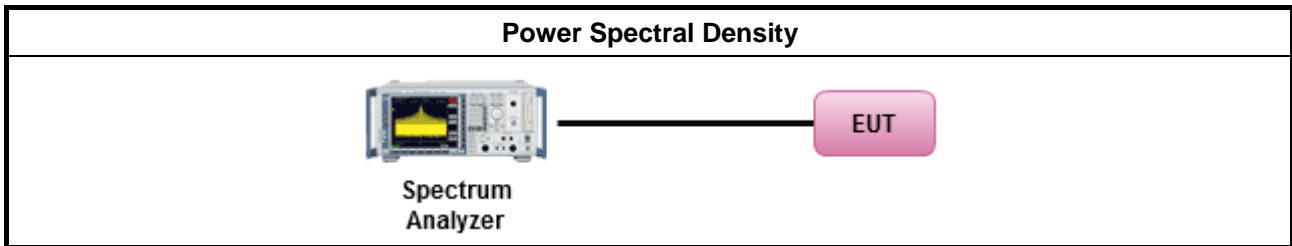
#### 3.4.2 Measuring Instruments

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

#### 3.4.3 Test Procedures

Test Method			
<ul style="list-style-type: none"> <li>Peak power spectral density procedures that the same method as used to determine the conducted output power. If maximum peak conducted output power was measured to demonstrate compliance to the output power limit, then the peak PSD procedure below (Method PKPSD) shall be used. If maximum conducted output power was measured to demonstrate compliance to the output power limit, then one of the average PSD procedures shall be used, as applicable based on the following criteria (the peak PSD procedure is also an acceptable option).</li> </ul>			
<input checked="" type="checkbox"/> Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10 Method Max. PSD.			
<ul style="list-style-type: none"> <li>For conducted measurement.             <ul style="list-style-type: none"> <li>If The EUT supports multiple transmit chains using options given below:                 <table border="1"> <tbody> <tr> <td> <input checked="" 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.                 </td> </tr> <tr> <td> <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,                 </td> </tr> <tr> <td> <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.                 </td> </tr> </tbody> </table> </li> </ul> </li> </ul>	<input checked="" 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.
<input checked="" 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

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

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

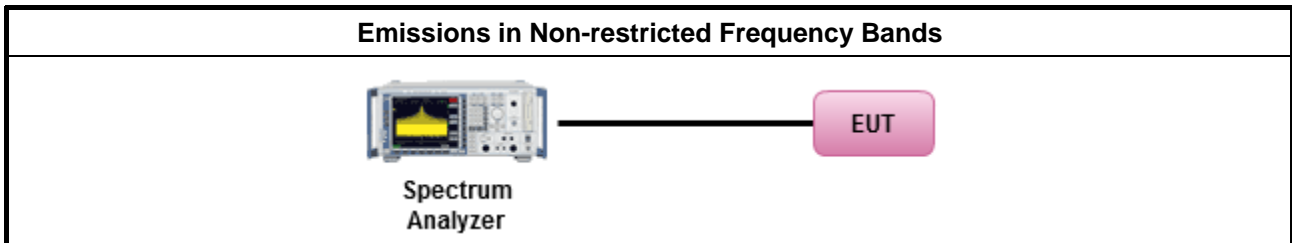
#### 3.5.2 Measuring Instruments

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

#### 3.5.3 Test Procedures

Test Method
<ul style="list-style-type: none"> <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

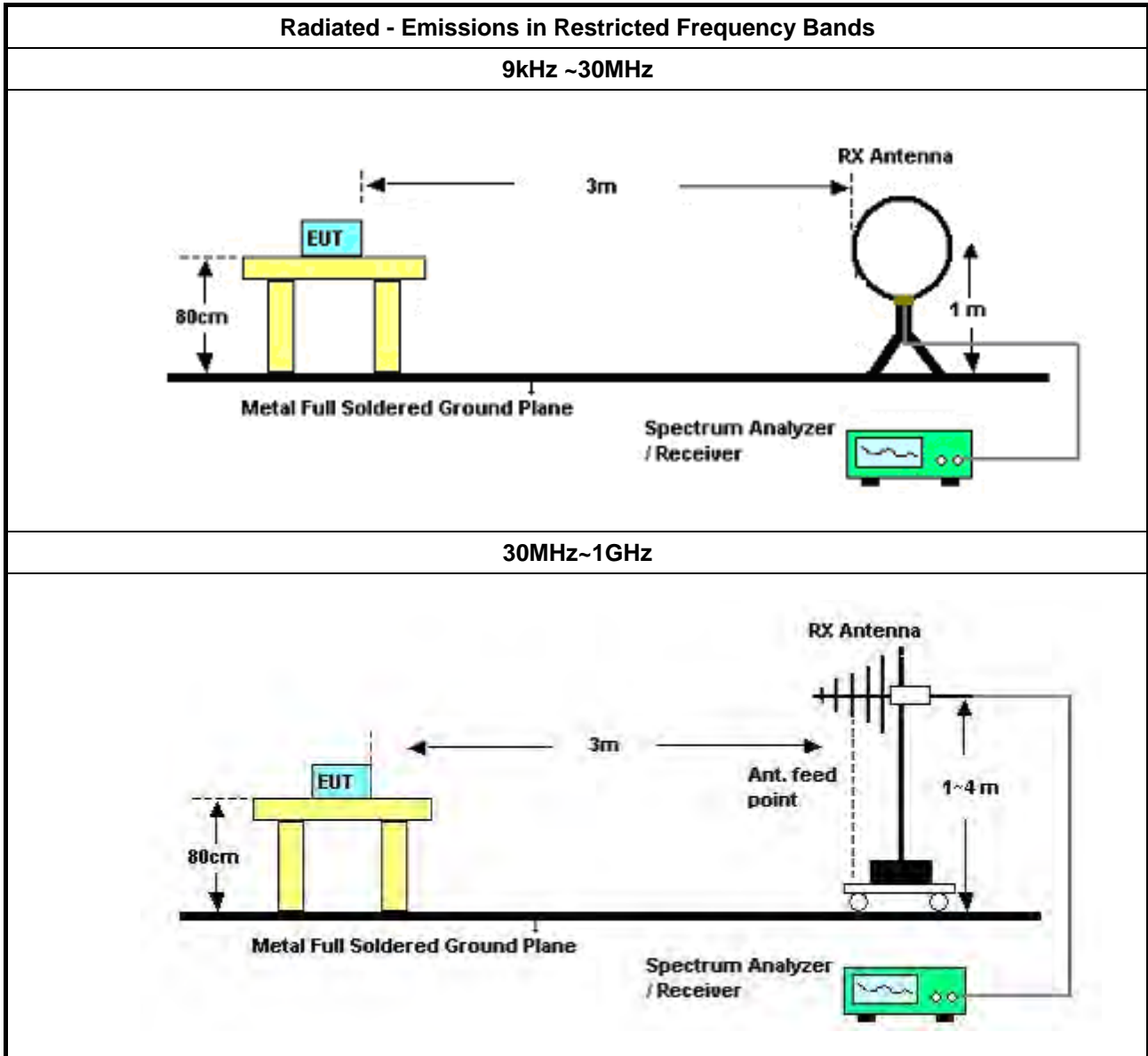
Refer a test equipment and calibration data table in this test report.

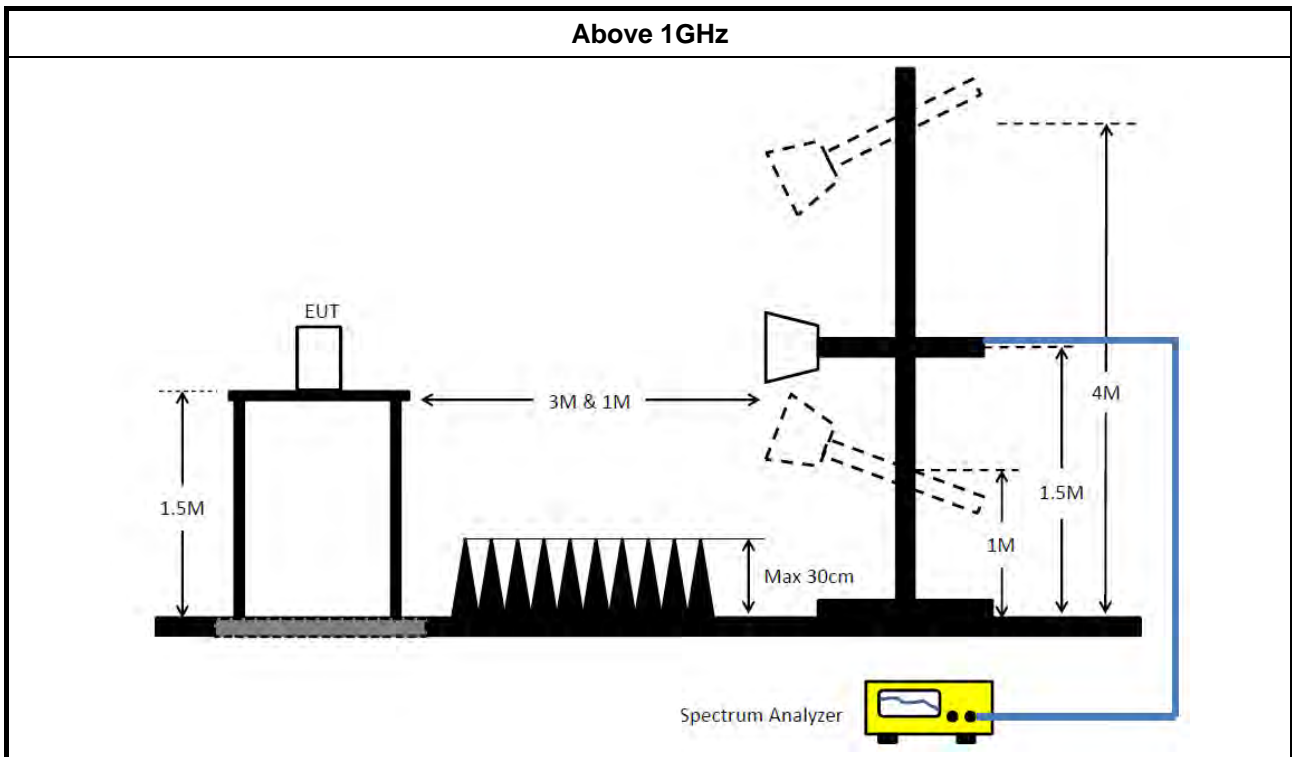


**3.6.3 Test Procedures**

<b>Test Method</b>	
<ul style="list-style-type: none"> <li>▪ The average emission levels shall be measured in [duty cycle <math>\geq</math> 98 or duty factor].</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Refer as ANSI C63.10, clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.</li> </ul>	
<ul style="list-style-type: none"> <li>▪ For the transmitter unwanted emissions shall be measured using following options below:</li> </ul>	
	<ul style="list-style-type: none"> <li>▪ Refer as FCC KDB 558074, clause 8.6 for unwanted emissions into restricted bands.</li> </ul>
	<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.
<ul style="list-style-type: none"> <li>▪ For the transmitter band-edge emissions shall be measured using following options below:</li> </ul>	
	<ul style="list-style-type: none"> <li>▪ Refer as FCC KDB 558074 clause 8.7 &amp; 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.</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Refer as FCC KDB 558074, clause 8.7 (ANSI C63.10, clause 6.10.6) for marker-delta method for band-edge measurements.</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Refer as FCC KDB 558074, clause 8.7 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).</li> </ul>
	<ul style="list-style-type: none"> <li>▪ For conducted unwanted emissions into restricted bands (absolute emission limits). Devices with multiple transmit chains using options given below: (1) Measure and sum the spectra across the outputs or (2) Measure and add 10 log(N) dB</li> </ul>
	<ul style="list-style-type: none"> <li>▪ For 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.</li> </ul>

**3.6.4 Test Setup**





### 3.6.5 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Antenna factor (AF) + Cable loss (CL) + Read level (Raw) - Preamp factor (PA)(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 10th 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	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
LISN	Schwarzbeck	NSLK 8127	8127650	9kHz ~ 30MHz	Dec. 04, 2020	Dec. 03, 2021	Conduction (CO02-CB)
LISN	Schwarzbeck	NSLK 8127	8127478	9kHz ~ 30MHz	Nov. 20, 2020	Nov. 19, 2021	Conduction (CO02-CB)
EMI Receiver	Agilent	N9038A	MY52260140	9kHz ~ 8.4GHz	May 05, 2021	May 04, 2022	Conduction (CO02-CB)
COND Cable	Woken	Cable	2	0.15MHz ~ 30MHz	Oct. 20, 2020	Oct. 19, 2021	Conduction (CO02-CB)
Pulse Limiter	Schwarzbeck	VTSD 9561F-N	00378	9kHz ~ 30MHz	Mar. 18, 2021	Mar. 17, 2022	Conduction (CO02-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO02-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH05-CB	30 MHz ~ 1 GHz	Aug. 10, 2020	Aug. 09, 2021	Radiation (03CH05-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH05-CB	1GHz ~18GHz 3m	Nov. 08, 2020	Nov. 07, 2021	Radiation (03CH05-CB)
Bilog Antenna with 6dB Attenuator	TESEQ & EMCI	CBL 6112D & N-6-06	35236 & AT-N0610	30MHz ~ 2GHz	Mar. 26, 2021	Mar. 25, 2022	Radiation (03CH05-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Apr. 14, 2021	Apr. 13, 2022	Radiation (03CH05-CB)
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA 9120 D-1291	1GHz~18GHz	Sep. 05, 2020	Sep. 04, 2021	Radiation (03CH05-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA917025 2	15GHz ~ 40GHz	Jul. 21, 2020	Jul. 20, 2021	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC330N	980331	20MHz ~ 3GHz	Apr. 27, 2021	Apr. 26, 2022	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC12630SE	980287	1GHz – 26.5GHz	Jul. 03, 2020	Jul. 02, 2021	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC12630SE	980287	1GHz – 26.5GHz	Jul. 02, 2021	Jul. 01, 2022	Radiation (03CH05-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 08, 2020	Jul. 07, 2021	Radiation (03CH05-CB)
Amplifier	-	-	TF-130N-R1	18GHz ~ 40GHz	Jun.15, 2021	Jun. 14, 2022	Radiation (03CH05-CB)
Spectrum Analyzer	R&S	FSP40	100304	9kHz ~ 40GHz	Nov. 10, 2020	Nov. 09, 2021	Radiation (03CH05-CB)
EMI Test Receiver	R&S	ESR7	102171	9kHz ~ 26GHz	Jul. 01, 2020	Jun. 30, 2021	Radiation (03CH05-CB)



EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	Jun. 21, 2021	Jun. 20, 2022	Radiation (03CH05-CB)
RF Cable-low	Woken	RG402	Low Cable-04+23	30MHz~1GHz	Oct. 05, 2020	Oct. 04, 2021	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-28	1GHz~18GHz	Oct. 05, 2020	Oct. 04, 2021	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-04+28	1GHz~18GHz	Oct. 05, 2020	Oct. 04, 2021	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 16, 2020	Jul. 15, 2021	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 16, 2020	Jul. 15, 2021	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH05-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH05-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH01-CB	1GHz ~18GHz 3m	May 07, 2021	May 06, 2022	Radiation (03CH01-CB)
Horn Antenna	ETS-LINDGR EN	3115	00075790	750MHz ~ 18GHz	Nov. 06, 2020	Nov. 05, 2021	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA917025 2	15GHz ~ 40GHz	Jul. 21, 2020	Jul. 20, 2021	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02121	1GHz ~ 26.5GHz	May 20, 2021	May 19, 2022	Radiation (03CH01-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 08, 2020	Jul. 07, 2021	Radiation (03CH01-CB)
Amplifier	-	-	TF-130N-R1	18GHz ~ 40GHz	Jun.15, 2021	Jun. 14, 2022	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	May 03, 2021	May 02, 2022	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-16+17	1 GHz ~ 18 GHz	Oct. 05, 2020	Oct. 04, 2021	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 16, 2020	Jul. 15, 2021	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 16, 2020	Jul. 15, 2021	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH01-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH01-CB)



Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	May 21, 2021	May 20, 2021	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-06	1 GHz – 26.5 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-07	1 GHz – 26.5 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-08	1 GHz – 26.5 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-09	1 GHz – 26.5 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz – 26.5 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-30	1 GHz – 26.5 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH01-CB)
Cable	Woken	RG402	low Cable-30	9 kHz –1 GHz	Apr. 06, 2021	Apr. 05, 2022	Conducted (TH01-CB)
Power Sensor	Agilent	E9327A	US40442088	50MHz~18GHz	Feb. 23, 2021	Feb. 22, 2022	Conducted (TH01-CB)
Power Meter	Agilent	E4416A	GB41291199	50MHz~18GHz	Feb. 23, 2021	Feb. 22, 2022	Conducted (TH01-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH01-CB)

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

NCR means Non-Calibration required.

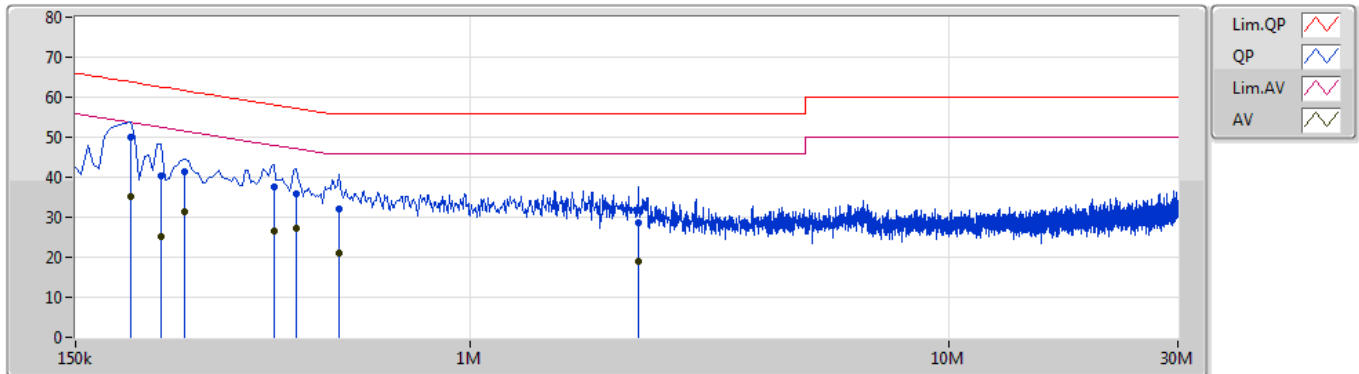


**Summary**

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 3	Pass	QP	195k	50.18	63.82	-13.64	Line

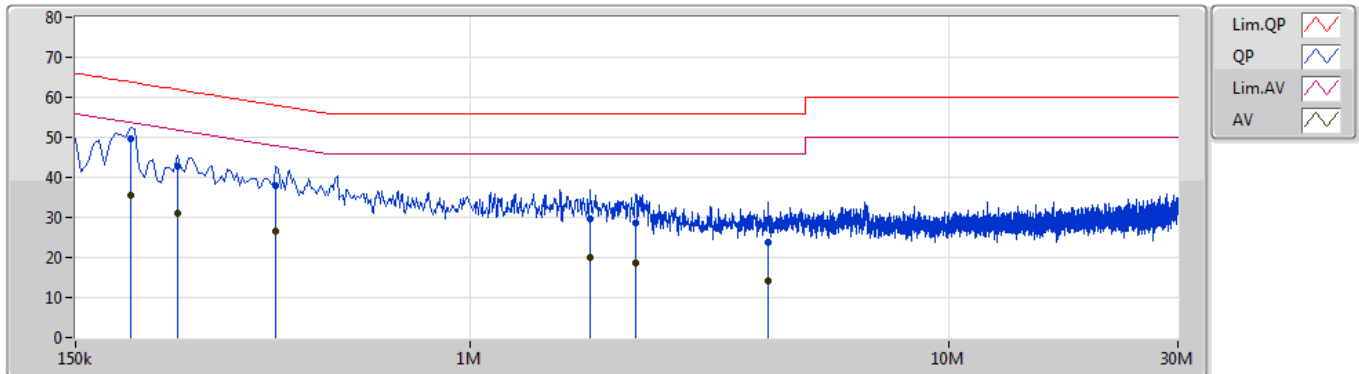


19/07/2021



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	195k	50.07	63.82	-13.75	10.30	Line	"Worst"	39.77	0.07	0.07	10.16
AV	195k	35.18	53.82	-18.64	10.30	Line	-	24.88	0.07	0.07	10.16
QP	226.5k	40.31	62.58	-22.27	10.29	Line	-	30.02	0.07	0.07	10.15
AV	226.5k	25.04	52.58	-27.54	10.29	Line	-	14.75	0.07	0.07	10.15
QP	253.5k	41.33	61.64	-20.31	10.28	Line	-	31.05	0.07	0.07	10.14
AV	253.5k	31.41	51.64	-20.23	10.28	Line	-	21.13	0.07	0.07	10.14
QP	388.5k	37.63	58.10	-20.47	10.25	Line	-	27.38	0.08	0.06	10.11
AV	388.5k	26.42	48.10	-21.68	10.25	Line	-	16.17	0.08	0.06	10.11
QP	433.5k	35.73	57.19	-21.46	10.25	Line	-	25.48	0.08	0.06	10.11
AV	433.5k	27.14	47.19	-20.05	10.25	Line	-	16.89	0.08	0.06	10.11
QP	532.5k	32.02	56.00	-23.98	10.26	Line	-	21.76	0.08	0.07	10.11
AV	532.5k	20.97	46.00	-25.03	10.26	Line	-	10.71	0.08	0.07	10.11
QP	2.247M	28.74	56.00	-27.26	10.35	Line	-	18.39	0.12	0.11	10.12
AV	2.247M	18.95	46.00	-27.05	10.35	Line	-	8.60	0.12	0.11	10.12

19/07/2021



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	195k	49.53	63.82	-14.29	10.29	Neutral	"Worst"	39.24	0.06	0.07	10.16
AV	195k	35.54	53.82	-18.28	10.29	Neutral	-	25.25	0.06	0.07	10.16
QP	244.5k	42.73	61.95	-19.22	10.28	Neutral	-	32.45	0.06	0.07	10.15
AV	244.5k	30.92	51.95	-21.03	10.28	Neutral	-	20.64	0.06	0.07	10.15
QP	393k	37.79	58.01	-20.22	10.23	Neutral	-	27.56	0.06	0.06	10.11
AV	393k	26.41	48.01	-21.60	10.23	Neutral	-	16.18	0.06	0.06	10.11
QP	1.779M	29.75	56.00	-26.25	10.31	Neutral	-	19.44	0.09	0.10	10.12
AV	1.779M	20.00	46.00	-26.00	10.31	Neutral	-	9.69	0.09	0.10	10.12
QP	2.22M	28.54	56.00	-27.46	10.33	Neutral	-	18.21	0.09	0.11	10.13
AV	2.22M	18.68	46.00	-27.32	10.33	Neutral	-	8.35	0.09	0.11	10.13
QP	4.178M	23.66	56.00	-32.34	10.36	Neutral	-	13.30	0.12	0.14	10.10
AV	4.178M	14.12	46.00	-31.88	10.36	Neutral	-	3.76	0.12	0.14	10.10



Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	8.075M	12.944M	12M9G1D	8.05M	12.844M
802.11g_Nss1,(6Mbps)_2TX	16.325M	16.317M	16M3D1D	15.9M	16.292M
802.11ax HEW20_Nss1,(MCS0)_2TX	18.475M	18.866M	18M9D1D	17.65M	18.816M

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

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

**Result**

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	8.05M	12.919M	8.075M	12.844M
2437MHz	Pass	500k	8.075M	12.919M	8.075M	12.944M
2462MHz	Pass	500k	8.05M	12.844M	8.075M	12.869M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	15.9M	16.317M	15.925M	16.317M
2437MHz	Pass	500k	16.275M	16.317M	16.325M	16.317M
2462MHz	Pass	500k	16.025M	16.317M	16.275M	16.292M
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	17.725M	18.841M	17.65M	18.841M
2437MHz	Pass	500k	18.05M	18.866M	18.475M	18.866M
2462MHz	Pass	500k	17.8M	18.841M	18.075M	18.816M

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

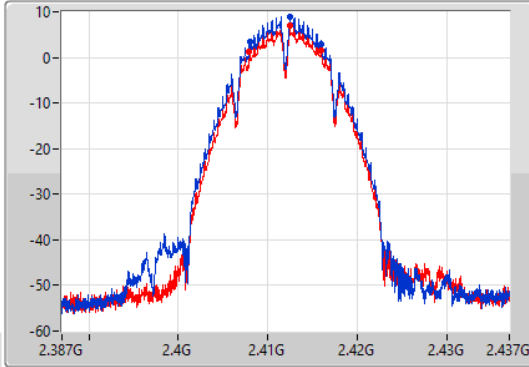
### 802.11b\_Nss1,(1Mbps)\_2TX

EBW

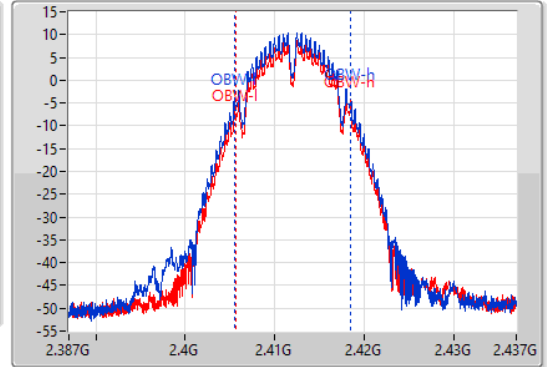
2412MHz

18/06/2021

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



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



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
8.05M	2.407975G	2.416025G	12.919M	2.405553G	2.418472G	500k	1
8.075M	2.40795G	2.416025G	12.844M	2.405653G	2.418497G	500k	2

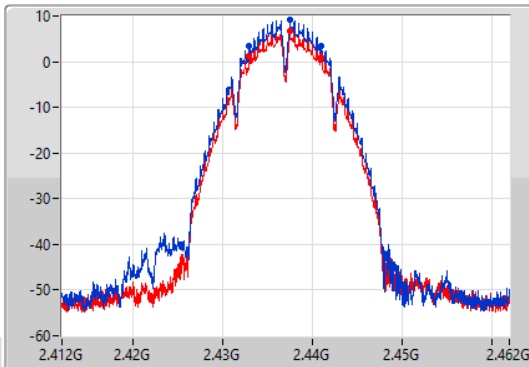
### 802.11b\_Nss1,(1Mbps)\_2TX

EBW

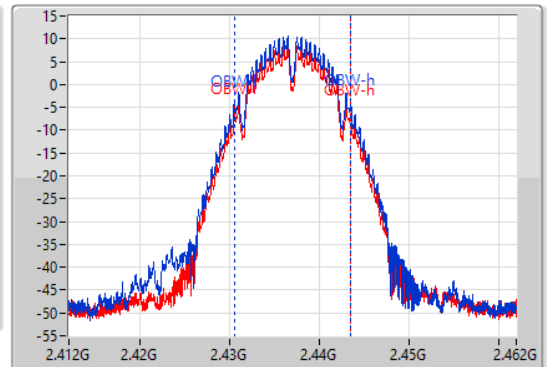
2437MHz

18/06/2021

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



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



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
8.075M	2.43295G	2.441025G	12.919M	2.430528G	2.443447G	500k	1
8.075M	2.43295G	2.441025G	12.944M	2.430503G	2.443447G	500k	2

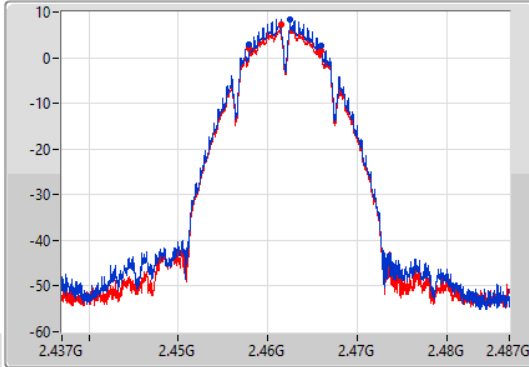
### 802.11b\_Nss1,(1Mbps)\_2TX

EBW

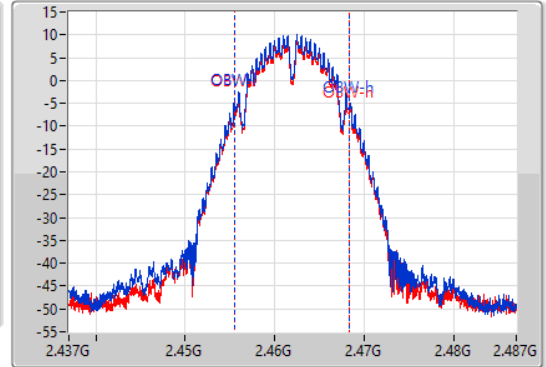
2462MHz

18/06/2021

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



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



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
8.05M	2.45795G	2.466G	12.844M	2.455528G	2.468372G	500k	1
8.075M	2.45795G	2.466025G	12.869M	2.455503G	2.468372G	500k	2

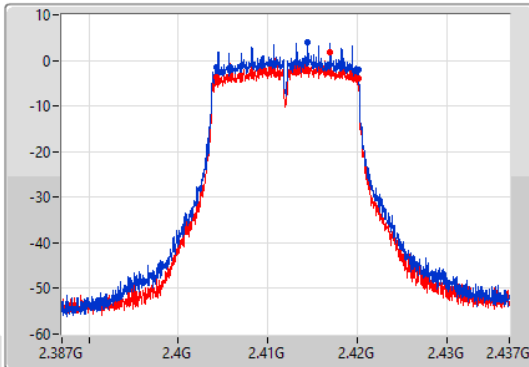
### 802.11g\_Nss1,(6Mbps)\_2TX

EBW

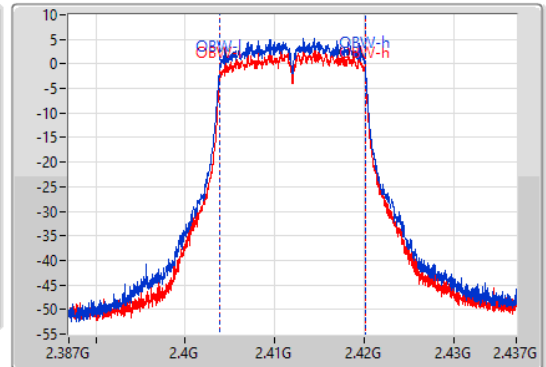
2412MHz

18/06/2021

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



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



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.9M	2.404225G	2.420125G	16.317M	2.403829G	2.420146G	500k	1
15.925M	2.404225G	2.42015G	16.317M	2.403854G	2.420171G	500k	2

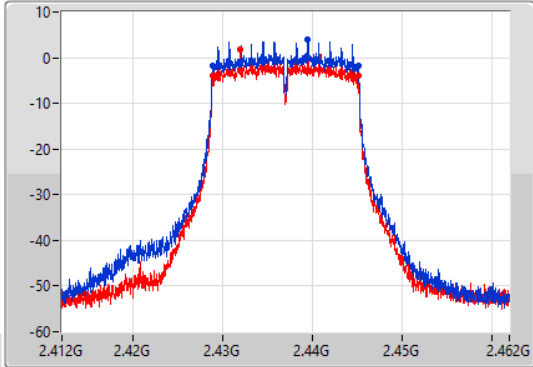
### 802.11g\_Nss1,(6Mbps)\_2TX

EBW

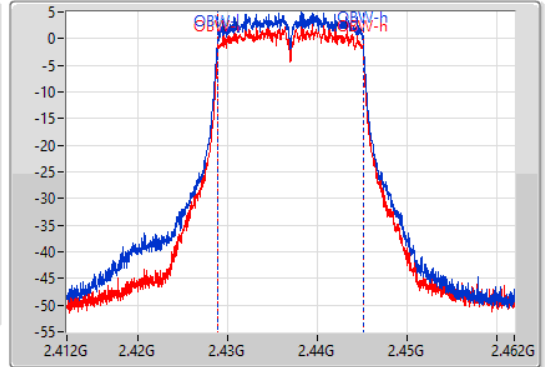
2437MHz

18/06/2021

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



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



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.275M	2.42885G	2.445125G	16.317M	2.428804G	2.445121G	500k	1
16.325M	2.428825G	2.44515G	16.317M	2.428829G	2.445146G	500k	2

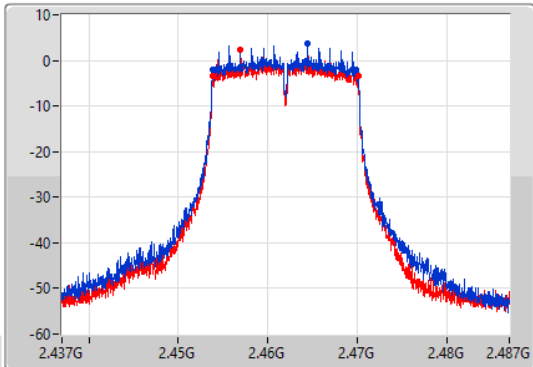
### 802.11g\_Nss1,(6Mbps)\_2TX

EBW

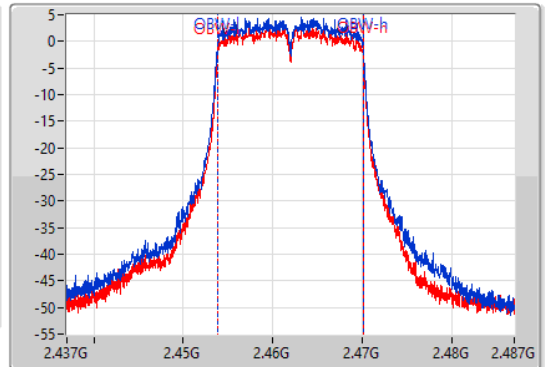
2462MHz

18/06/2021

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



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



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.025M	2.45385G	2.469875G	16.317M	2.453804G	2.470121G	500k	1
16.275M	2.453825G	2.4701G	16.292M	2.453829G	2.470121G	500k	2

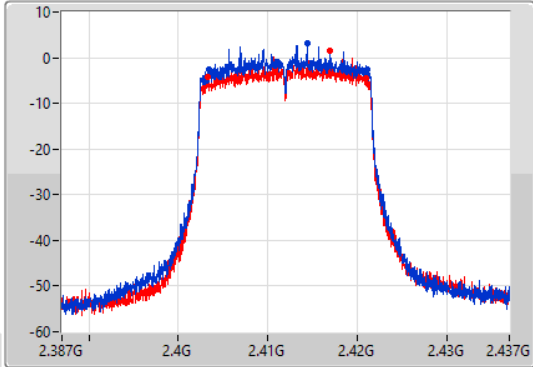
802.11ax HEW20\_Nss1,(MCS0)\_2TX

EBW

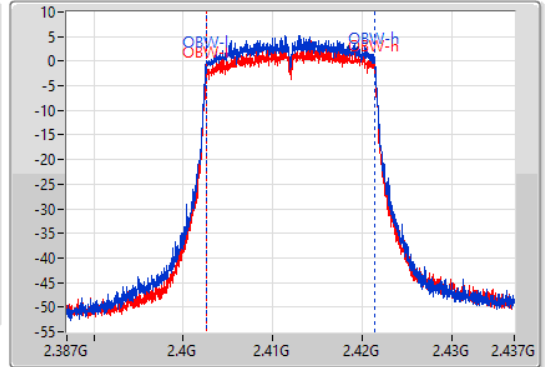
2412MHz

18/06/2021

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



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



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.725M	2.403425G	2.42115G	18.841M	2.40258G	2.42142G	500k	1
17.65M	2.40335G	2.421G	18.841M	2.40258G	2.42142G	500k	2

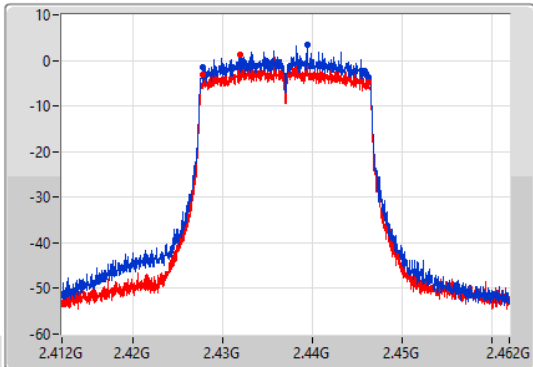
802.11ax HEW20\_Nss1,(MCS0)\_2TX

EBW

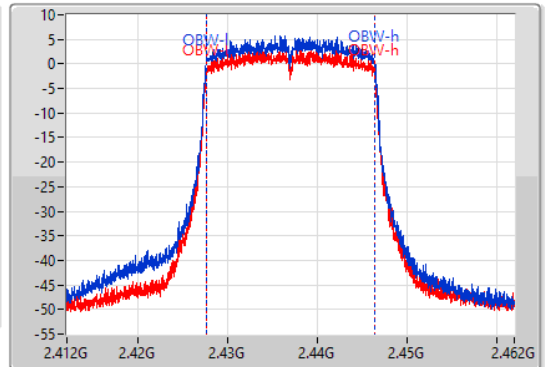
2437MHz

18/06/2021

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



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



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.05M	2.4278G	2.44585G	18.866M	2.427555G	2.44642G	500k	1
18.475M	2.4278G	2.446275G	18.866M	2.427555G	2.44642G	500k	2

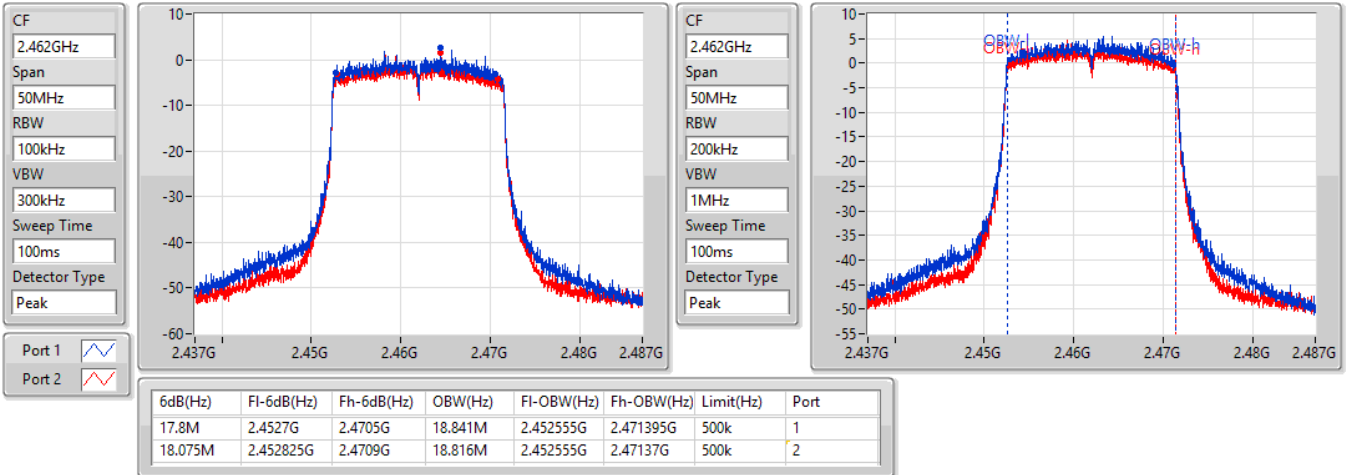


802.11ax HEW20\_Nss1,(MCS0)\_2TX

EBW

2462MHz

18/06/2021





**Summary**

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_2TX	19.63	0.09183
802.11g_Nss1,(6Mbps)_2TX	16.47	0.04436
802.11ax HEW20_Nss1,(MCS0)_2TX	15.82	0.03819



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	2.951	17.40	15.68	19.63	30.00
2437MHz	Pass	2.951	17.41	15.21	19.46	30.00
2462MHz	Pass	2.951	16.80	15.76	19.32	30.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	2.951	14.27	12.47	16.47	30.00
2437MHz	Pass	2.951	14.29	12.12	16.35	30.00
2462MHz	Pass	2.951	13.72	12.53	16.18	30.00
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	2.951	13.25	11.46	15.46	30.00
2437MHz	Pass	2.951	13.77	11.57	15.82	30.00
2462MHz	Pass	2.951	13.08	11.98	15.58	30.00

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



Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_2TX	-3.93
802.11g_Nss1,(6Mbps)_2TX	-10.57
802.11ax HEW20_Nss1,(MCS0)_2TX	-10.63

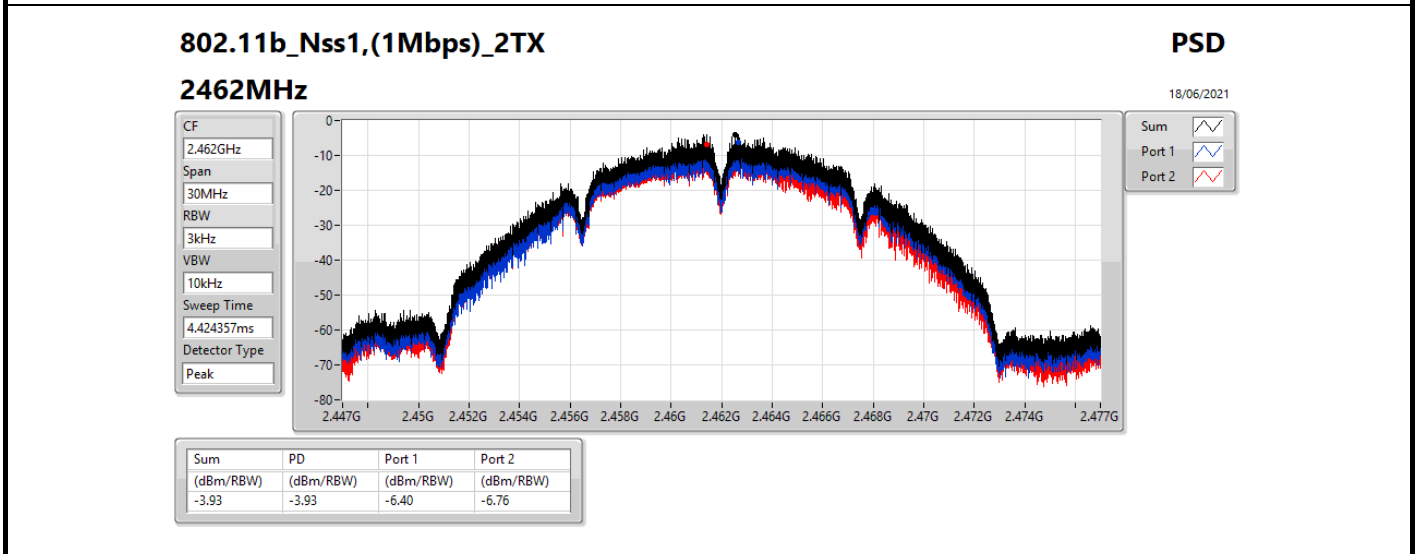
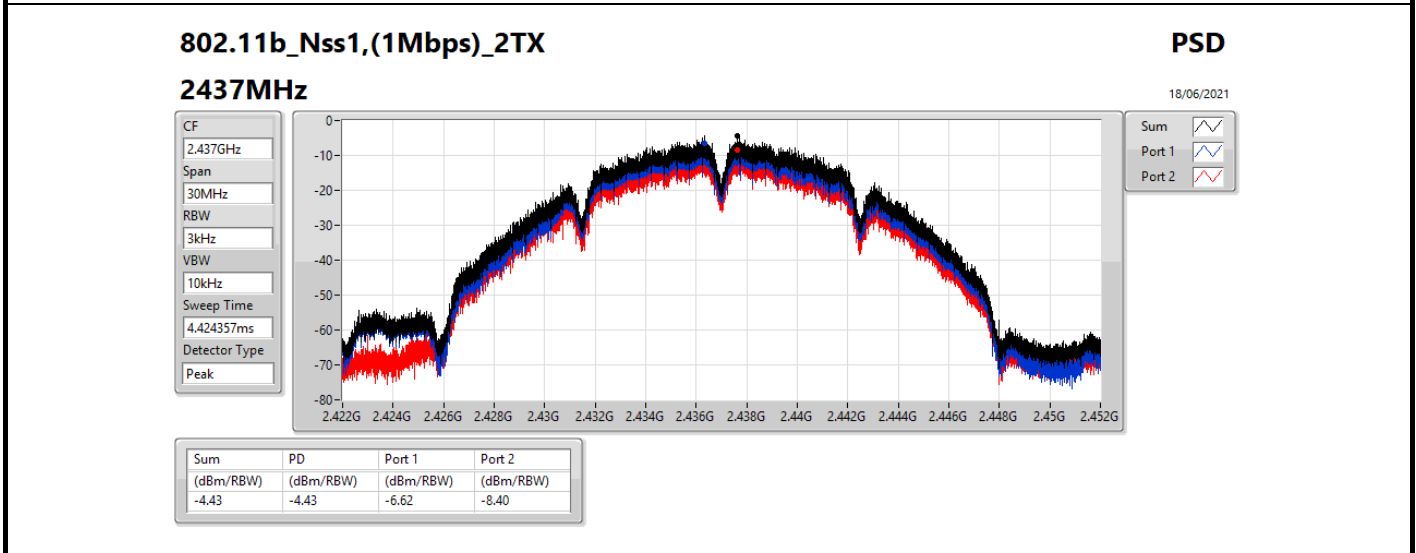
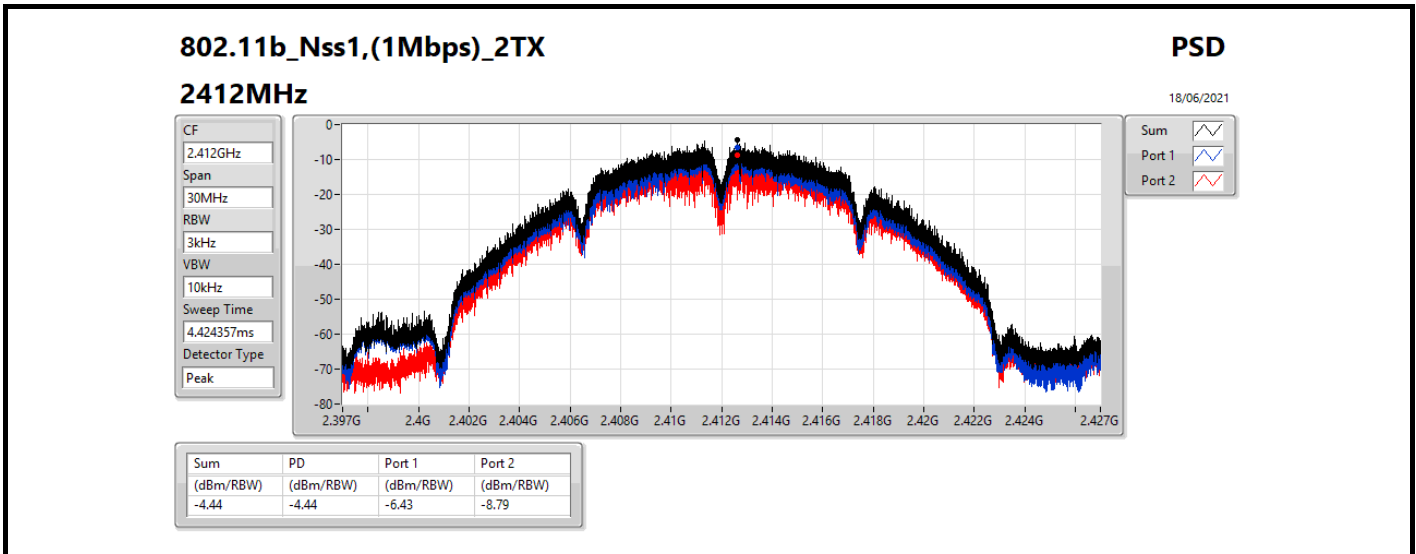
RBW = 500 kHz for 5.725-5.85GHz band / 1MHz for other band;

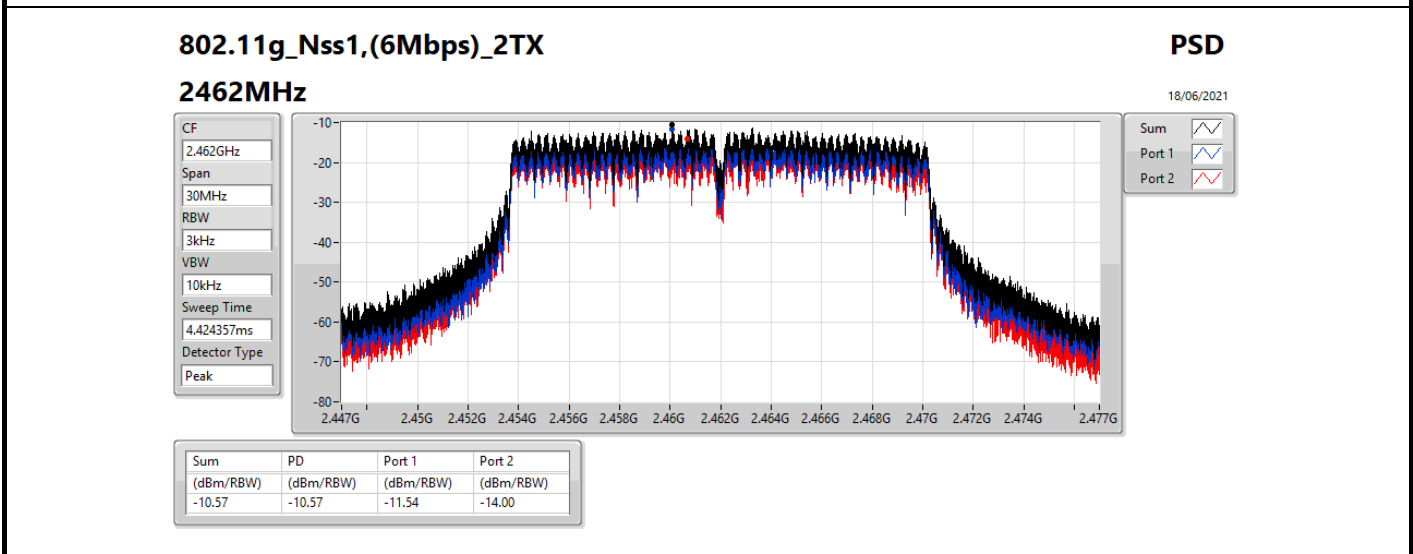
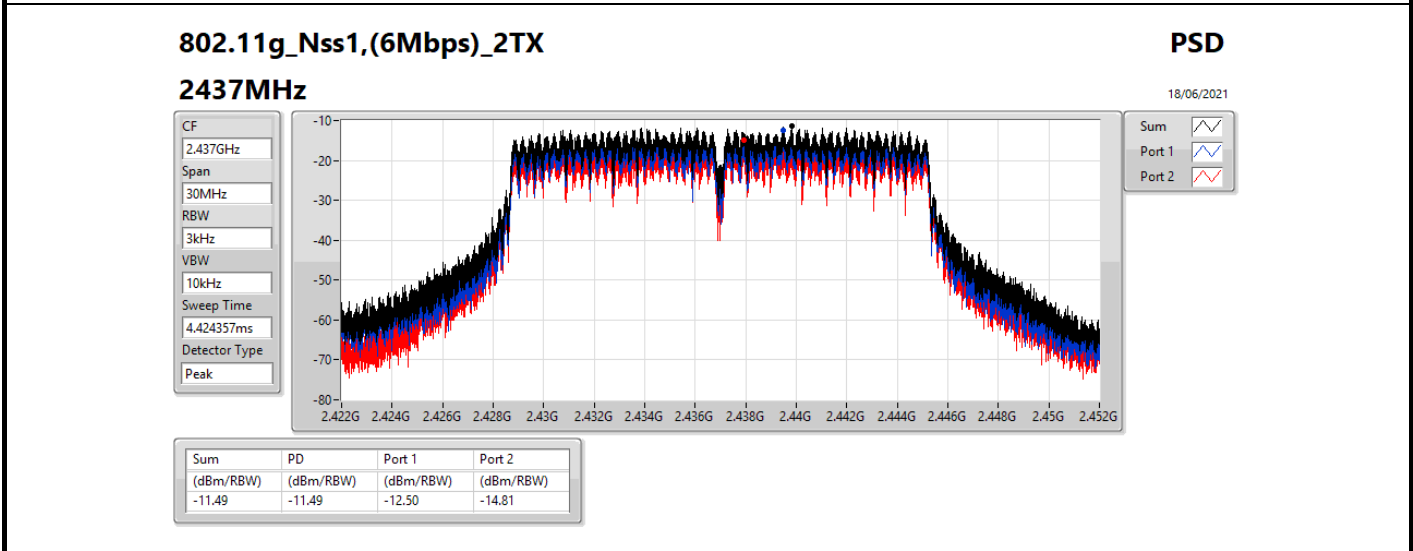
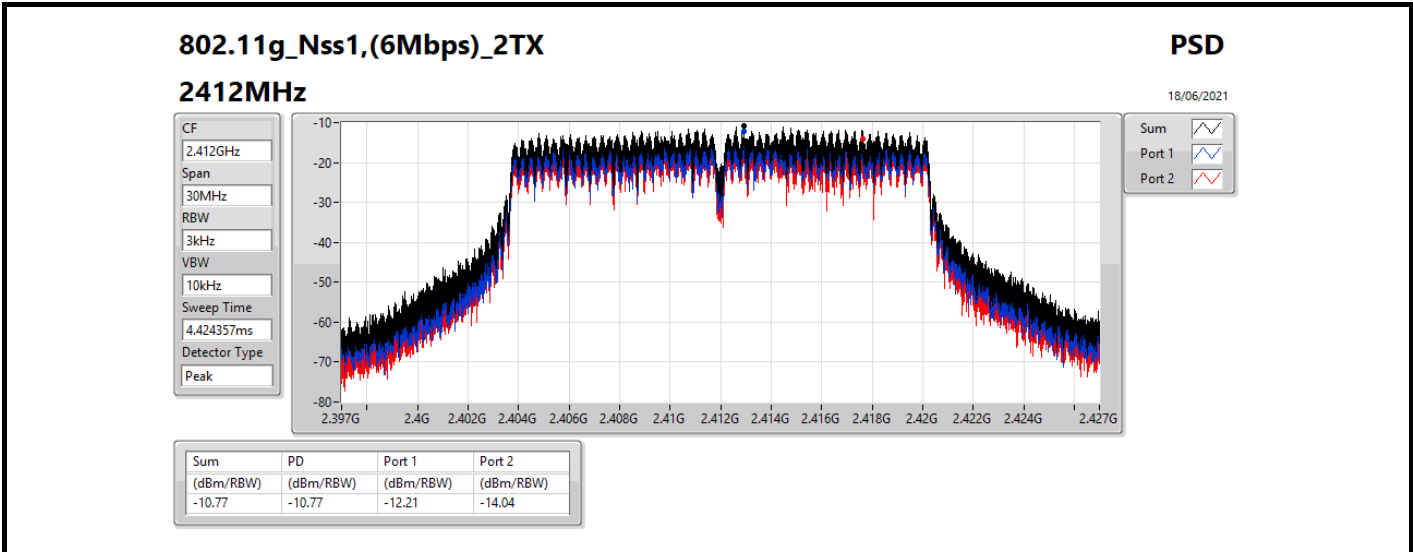
**Result**

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	3.615	-6.43	-8.79	-4.44	8.00
2437MHz	Pass	3.615	-6.62	-8.40	-4.43	8.00
2462MHz	Pass	3.615	-6.40	-6.76	-3.93	8.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	3.615	-12.21	-14.04	-10.77	8.00
2437MHz	Pass	3.615	-12.50	-14.81	-11.49	8.00
2462MHz	Pass	3.615	-11.54	-14.00	-10.57	8.00
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	3.615	-11.63	-13.22	-10.63	8.00
2437MHz	Pass	3.615	-12.25	-14.19	-11.36	8.00
2462MHz	Pass	3.615	-12.15	-13.72	-10.67	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;



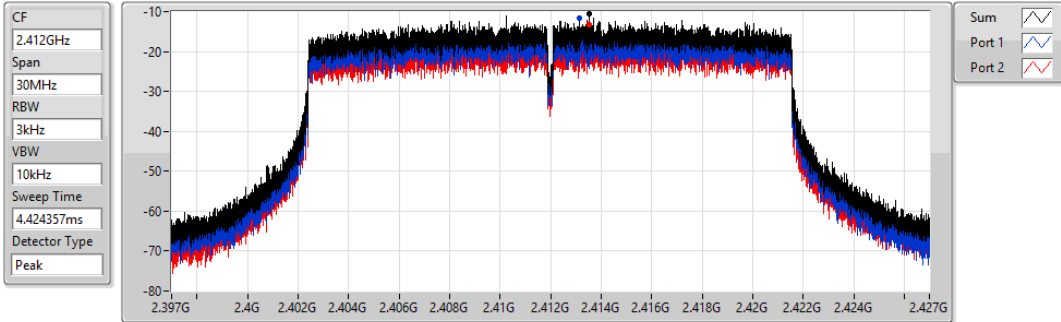


802.11ax HEW20\_Nss1,(MCS0)\_2TX

PSD

2412MHz

18/06/2021



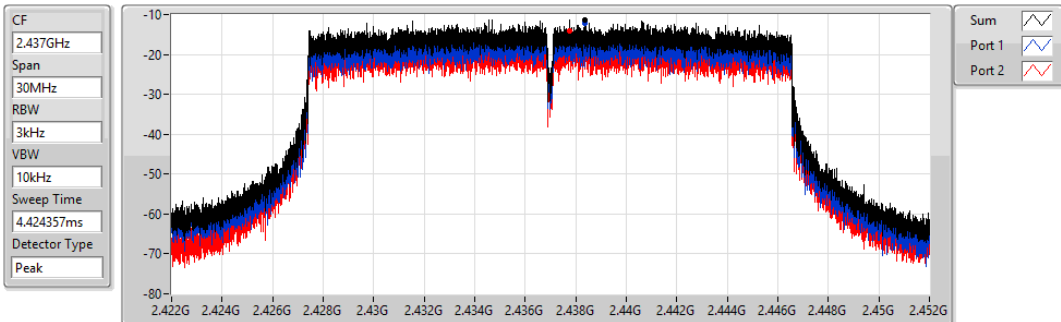
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-10.63	-10.63	-11.63	-13.22

802.11ax HEW20\_Nss1,(MCS0)\_2TX

PSD

2437MHz

18/06/2021



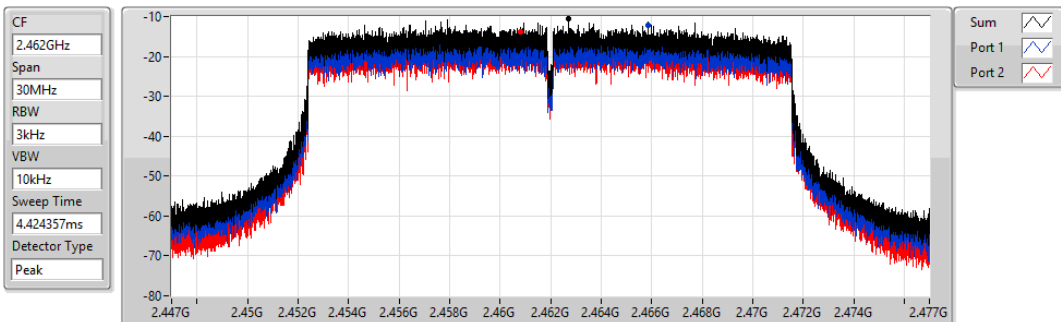
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-11.36	-11.36	-12.25	-14.19

802.11ax HEW20\_Nss1,(MCS0)\_2TX

PSD

2462MHz

18/06/2021



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-10.67	-10.67	-12.15	-13.72



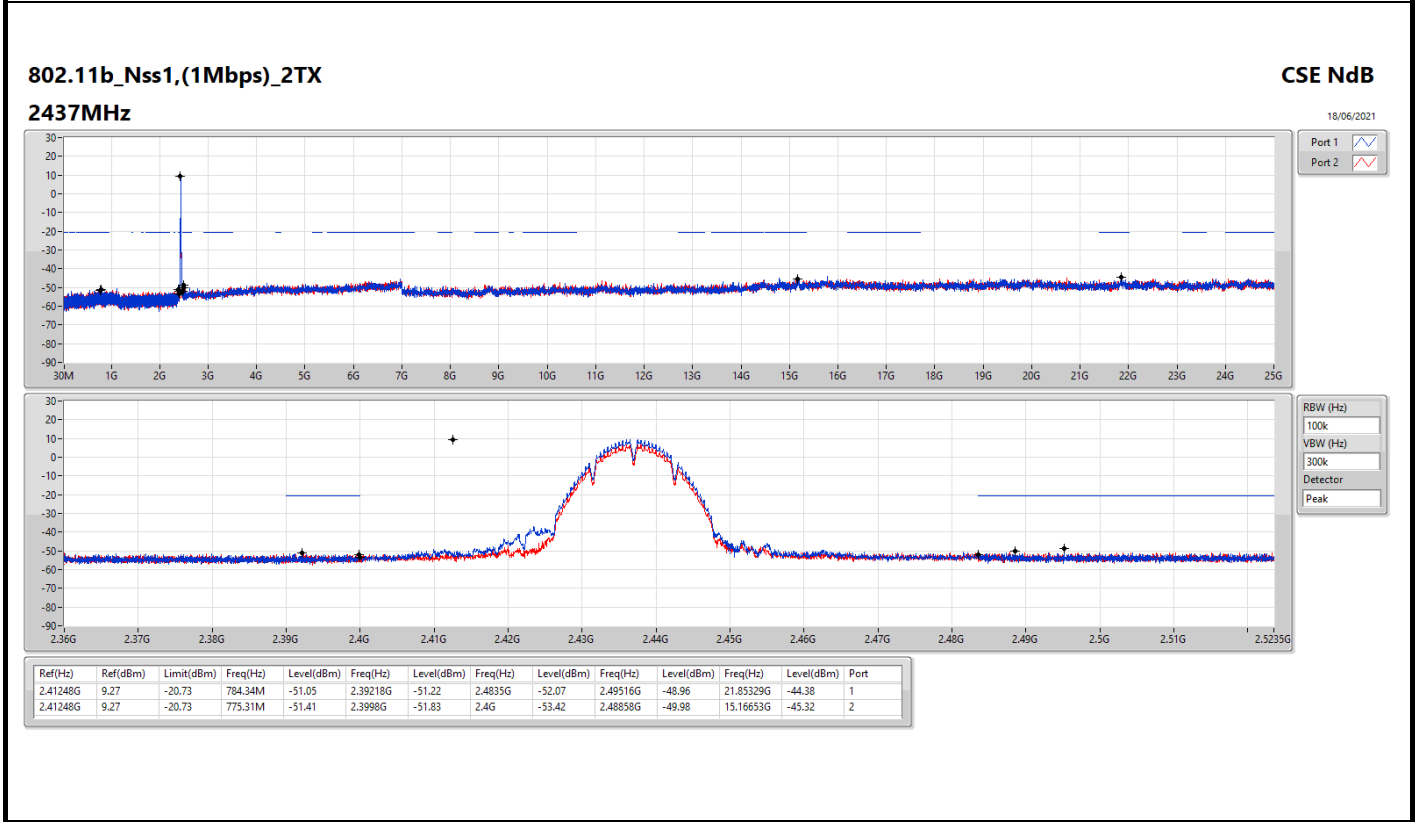
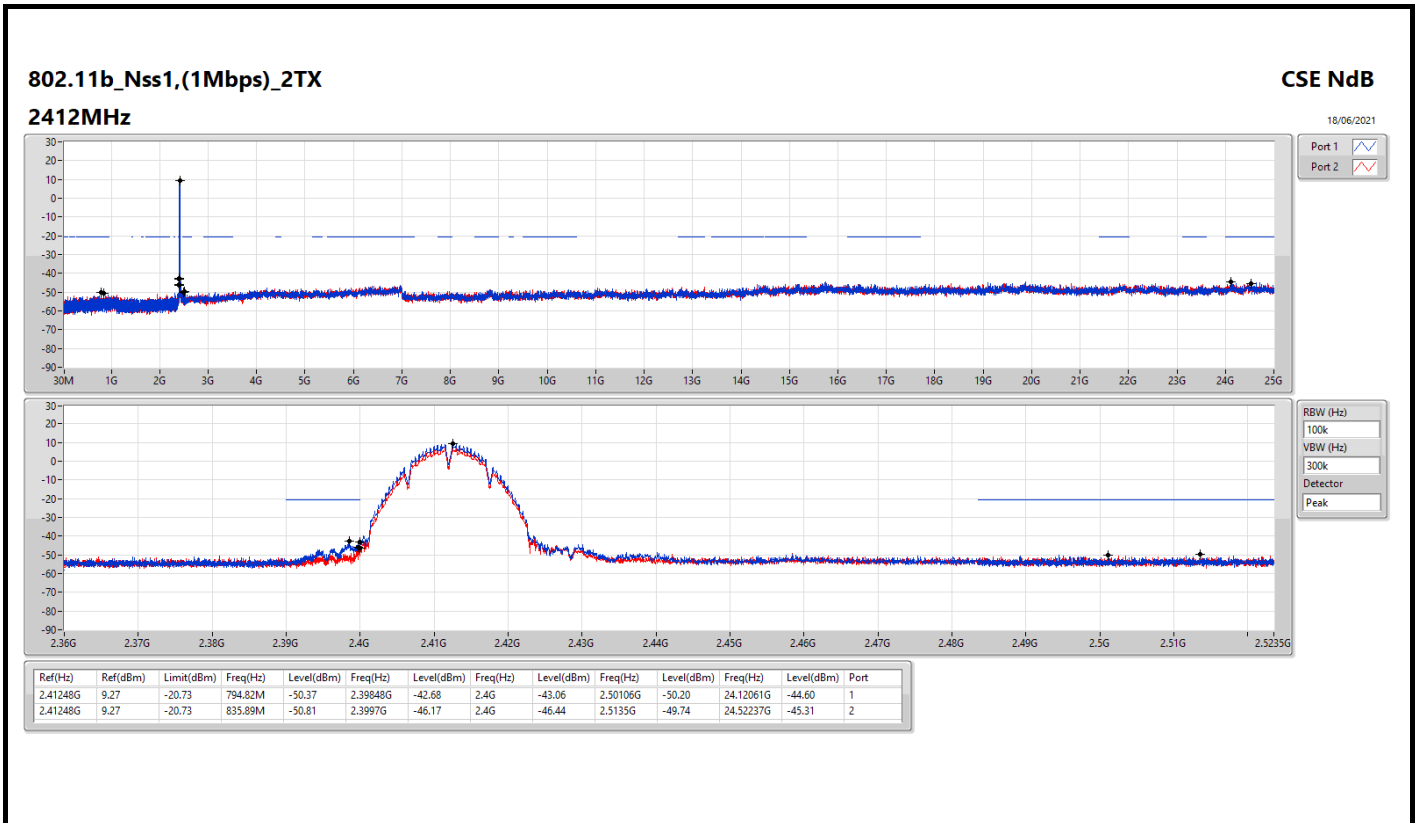


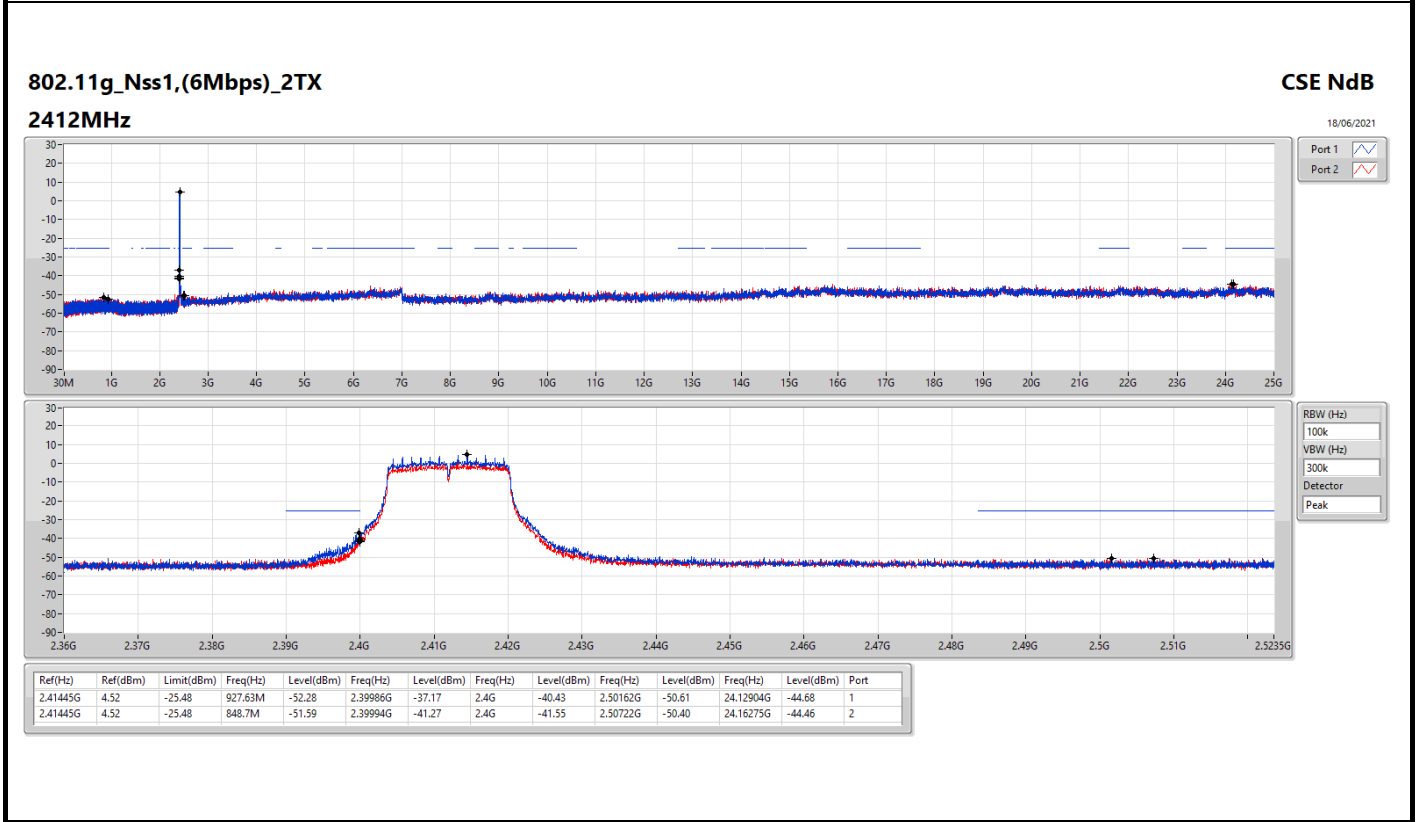
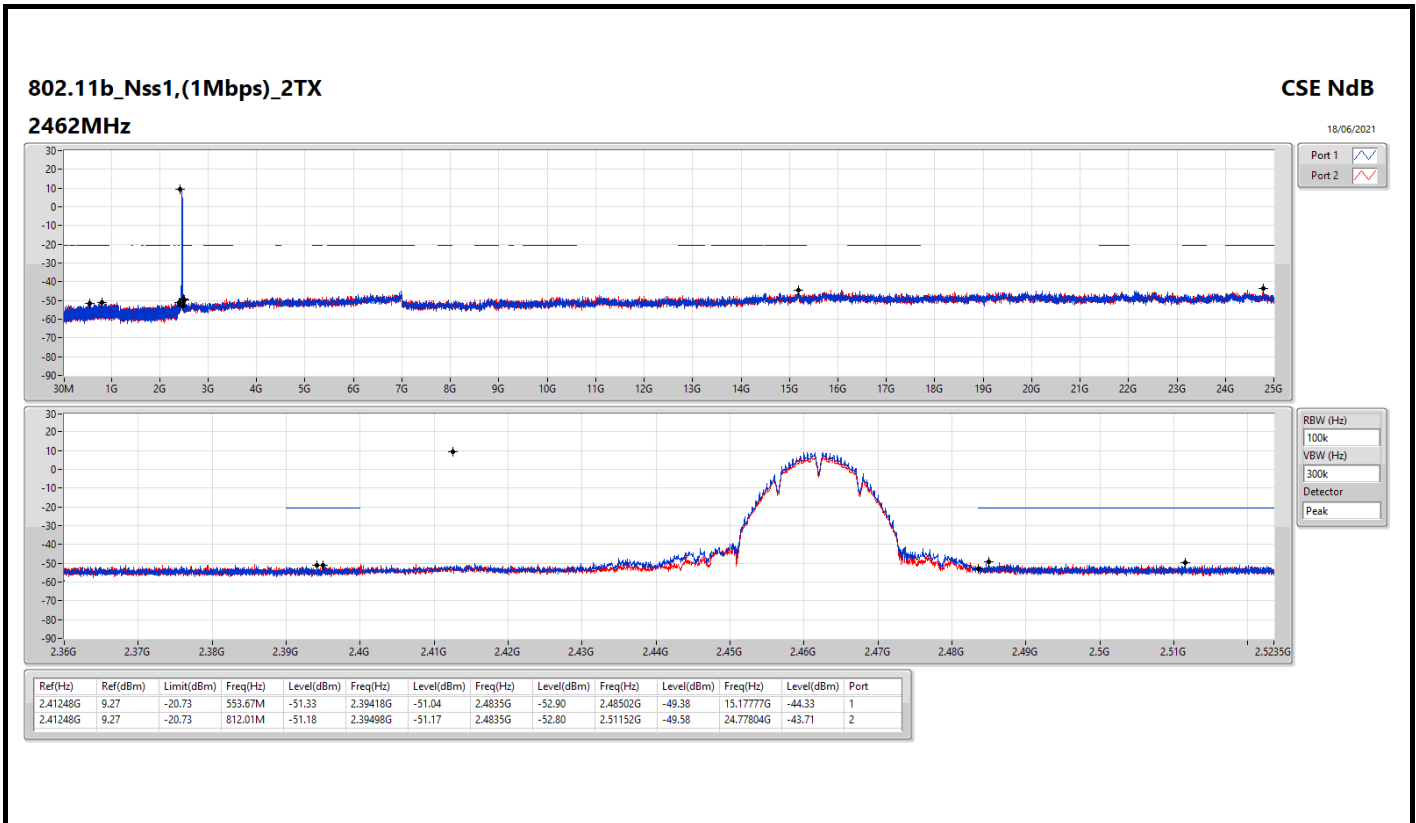
Summary

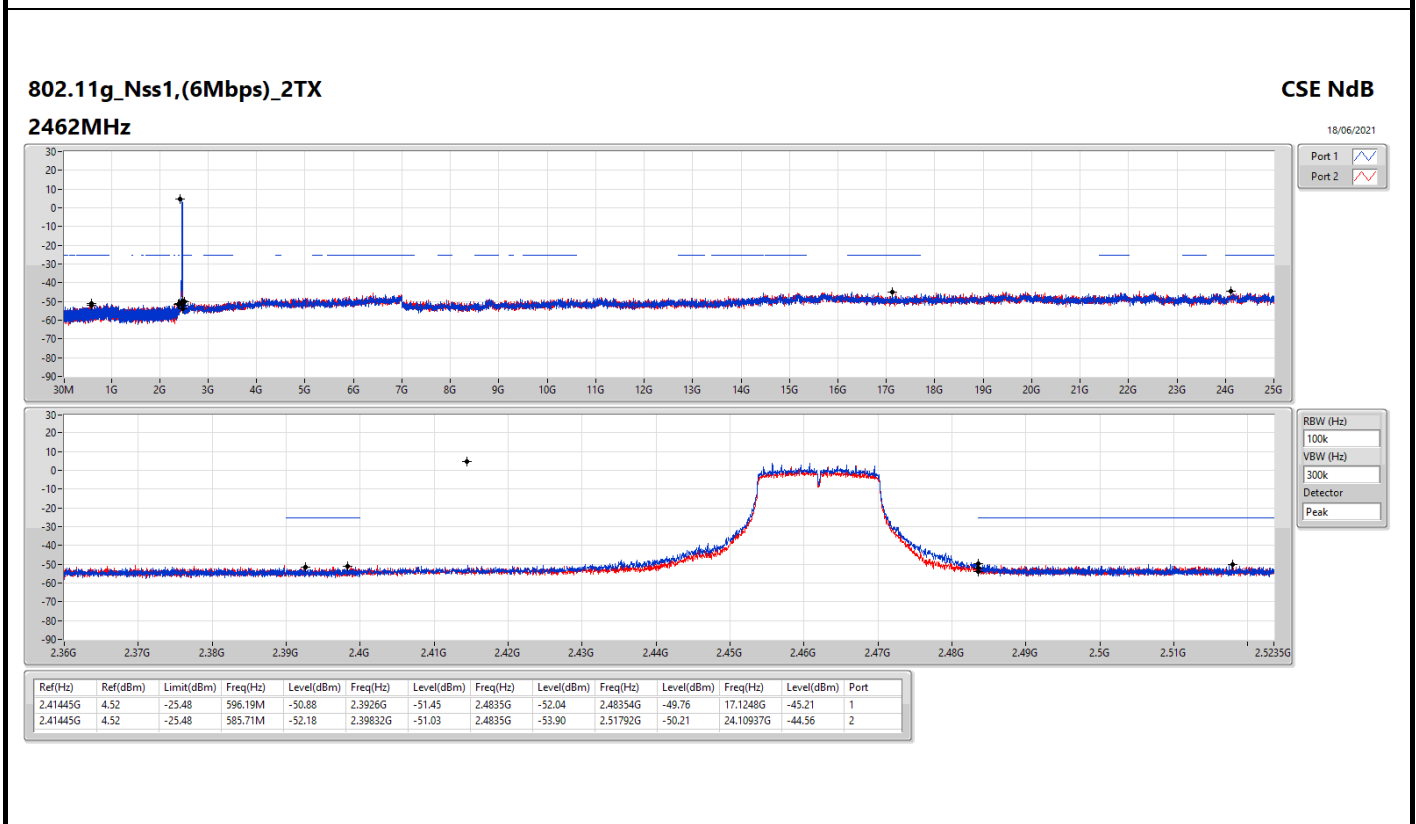
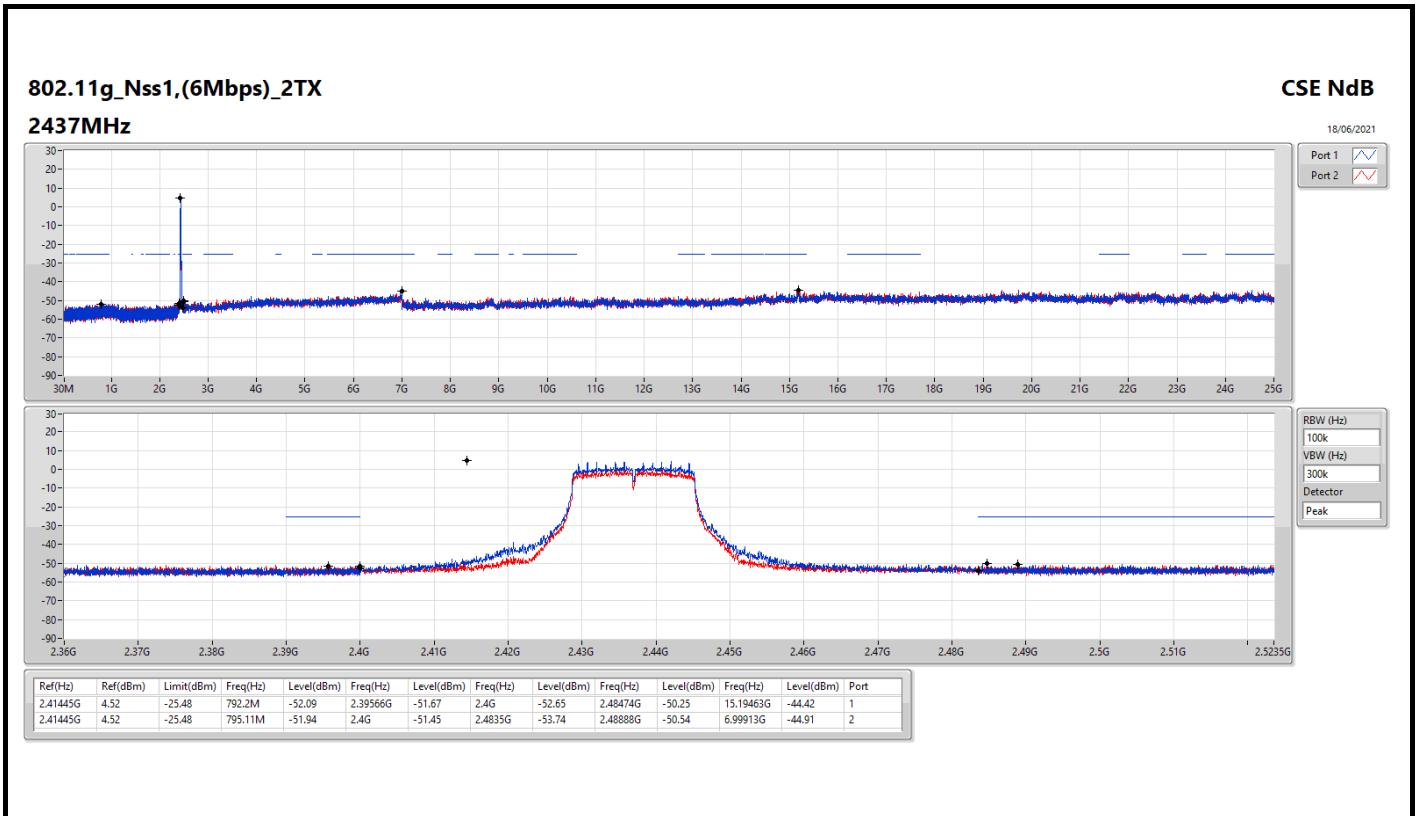
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	Pass	2.41248G	9.27	-20.73	794.82M	-50.37	2.39848G	-42.68	2.4G	-43.06	2.50106G	-50.20	24.12061G	-44.60	1
802.11g_Nss1,(6Mbps)_2TX	Pass	2.41445G	4.52	-25.48	927.63M	-52.28	2.39986G	-37.17	2.4G	-40.43	2.50162G	-50.61	24.12904G	-44.68	1
802.11ax HEW20_Nss1,(MCS0)_2TX	Pass	2.44196G	3.21	-26.79	702.79M	-51.84	2.4G	-39.97	2.4G	-40.17	2.49372G	-50.17	16.4786G	-45.01	1

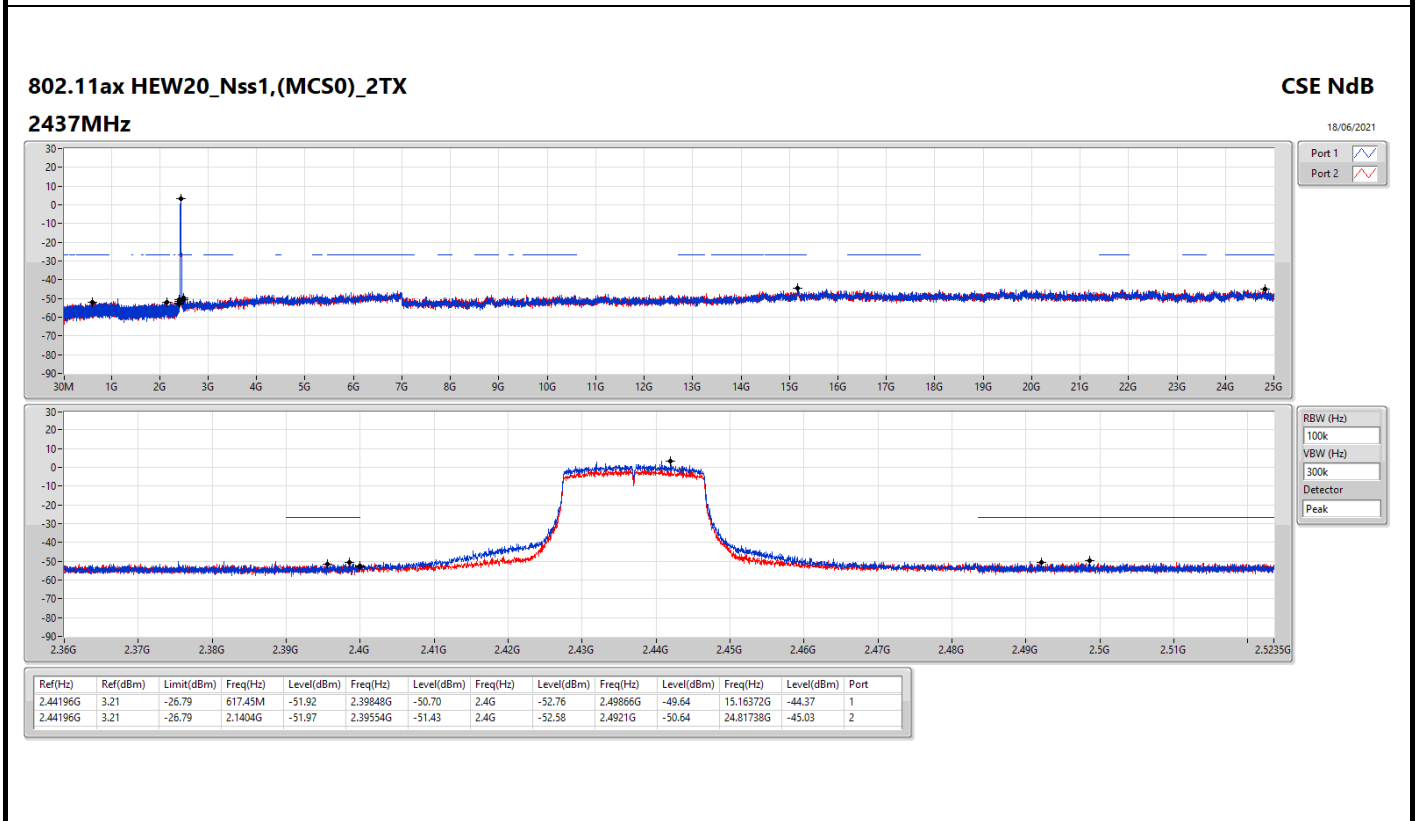
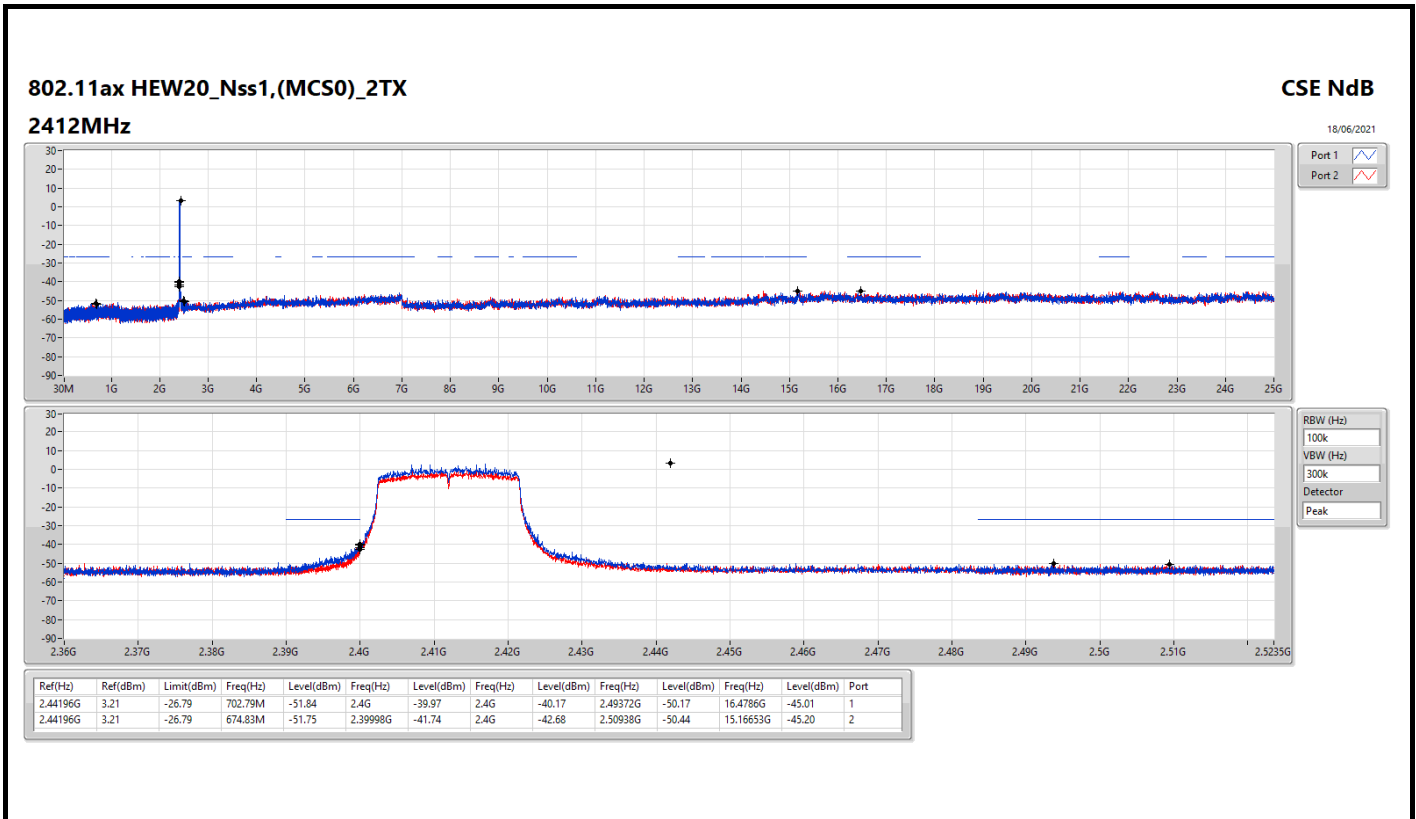
Result

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.41248G	9.27	-20.73	794.82M	-50.37	2.39848G	-42.68	2.4G	-43.06	2.50106G	-50.20	24.12061G	-44.60	1
2412MHz	Pass	2.41248G	9.27	-20.73	835.89M	-50.81	2.3997G	-46.17	2.4G	-46.44	2.5135G	-49.74	24.52237G	-45.31	2
2437MHz	Pass	2.41248G	9.27	-20.73	784.34M	-51.05	2.39218G	-51.22	2.4835G	-52.07	2.49516G	-48.96	21.85329G	-44.38	1
2437MHz	Pass	2.41248G	9.27	-20.73	775.31M	-51.41	2.3998G	-51.83	2.4G	-53.42	2.48858G	-49.98	15.16653G	-45.32	2
2462MHz	Pass	2.41248G	9.27	-20.73	553.67M	-51.33	2.39418G	-51.04	2.4835G	-52.90	2.48502G	-49.38	15.17777G	-44.33	1
2462MHz	Pass	2.41248G	9.27	-20.73	812.01M	-51.18	2.39498G	-51.17	2.4835G	-52.80	2.51152G	-49.58	24.77804G	-43.71	2
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.41445G	4.52	-25.48	927.63M	-52.28	2.39986G	-37.17	2.4G	-40.43	2.50162G	-50.61	24.12904G	-44.68	1
2412MHz	Pass	2.41445G	4.52	-25.48	848.7M	-51.59	2.39994G	-41.27	2.4G	-41.55	2.50722G	-50.40	24.16275G	-44.46	2
2437MHz	Pass	2.41445G	4.52	-25.48	792.2M	-52.09	2.39566G	-51.67	2.4G	-52.65	2.48474G	-50.25	15.19463G	-44.42	1
2437MHz	Pass	2.41445G	4.52	-25.48	795.11M	-51.94	2.4G	-51.45	2.4835G	-53.74	2.48888G	-50.54	6.99913G	-44.91	2
2462MHz	Pass	2.41445G	4.52	-25.48	596.19M	-50.88	2.3926G	-51.45	2.4835G	-52.04	2.48354G	-49.76	17.1248G	-45.21	1
2462MHz	Pass	2.41445G	4.52	-25.48	585.71M	-52.18	2.39832G	-51.03	2.4835G	-53.90	2.51792G	-50.21	24.10937G	-44.56	2
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.44196G	3.21	-26.79	702.79M	-51.84	2.4G	-39.97	2.4G	-40.17	2.49372G	-50.17	16.4786G	-45.01	1
2412MHz	Pass	2.44196G	3.21	-26.79	674.83M	-51.75	2.39998G	-41.74	2.4G	-42.68	2.50938G	-50.44	15.16653G	-45.20	2
2437MHz	Pass	2.44196G	3.21	-26.79	617.45M	-51.92	2.39848G	-50.70	2.4G	-52.76	2.49866G	-49.64	15.16372G	-44.37	1
2437MHz	Pass	2.44196G	3.21	-26.79	2.1404G	-51.97	2.39554G	-51.43	2.4G	-52.58	2.4921G	-50.64	24.81738G	-45.03	2
2462MHz	Pass	2.44196G	3.21	-26.79	863.85M	-52.51	2.3907G	-51.13	2.4835G	-49.72	2.48498G	-47.97	15.20025G	-44.77	1
2462MHz	Pass	2.44196G	3.21	-26.79	944.82M	-51.10	2.3997G	-51.23	2.4835G	-51.29	2.49726G	-50.38	15.1862G	-45.61	2





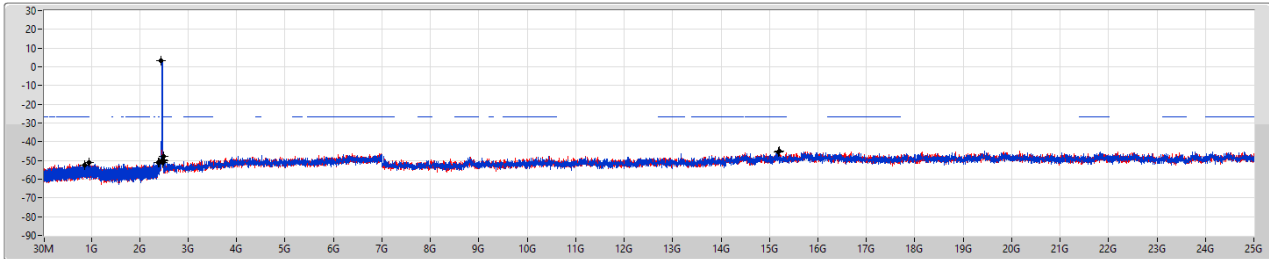




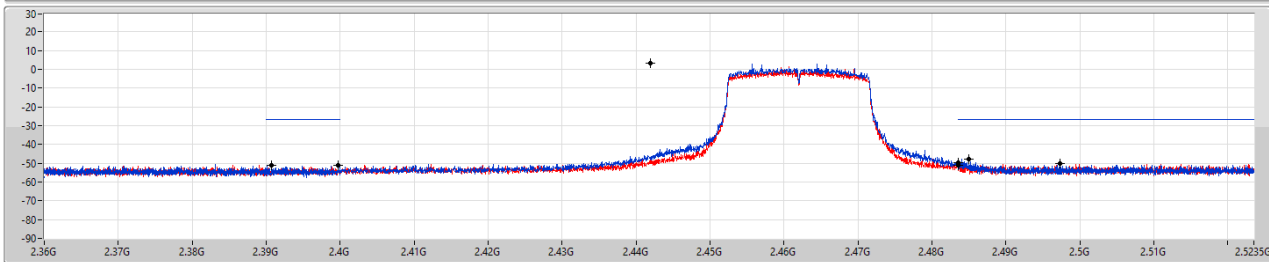
802.11ax HEW20\_Nss1,(MCS0)\_2TX  
2462MHz

CSE NdB

18/06/2021



Port 1   
Port 2 



RBW (Hz)   
VBW (Hz)   
Detector

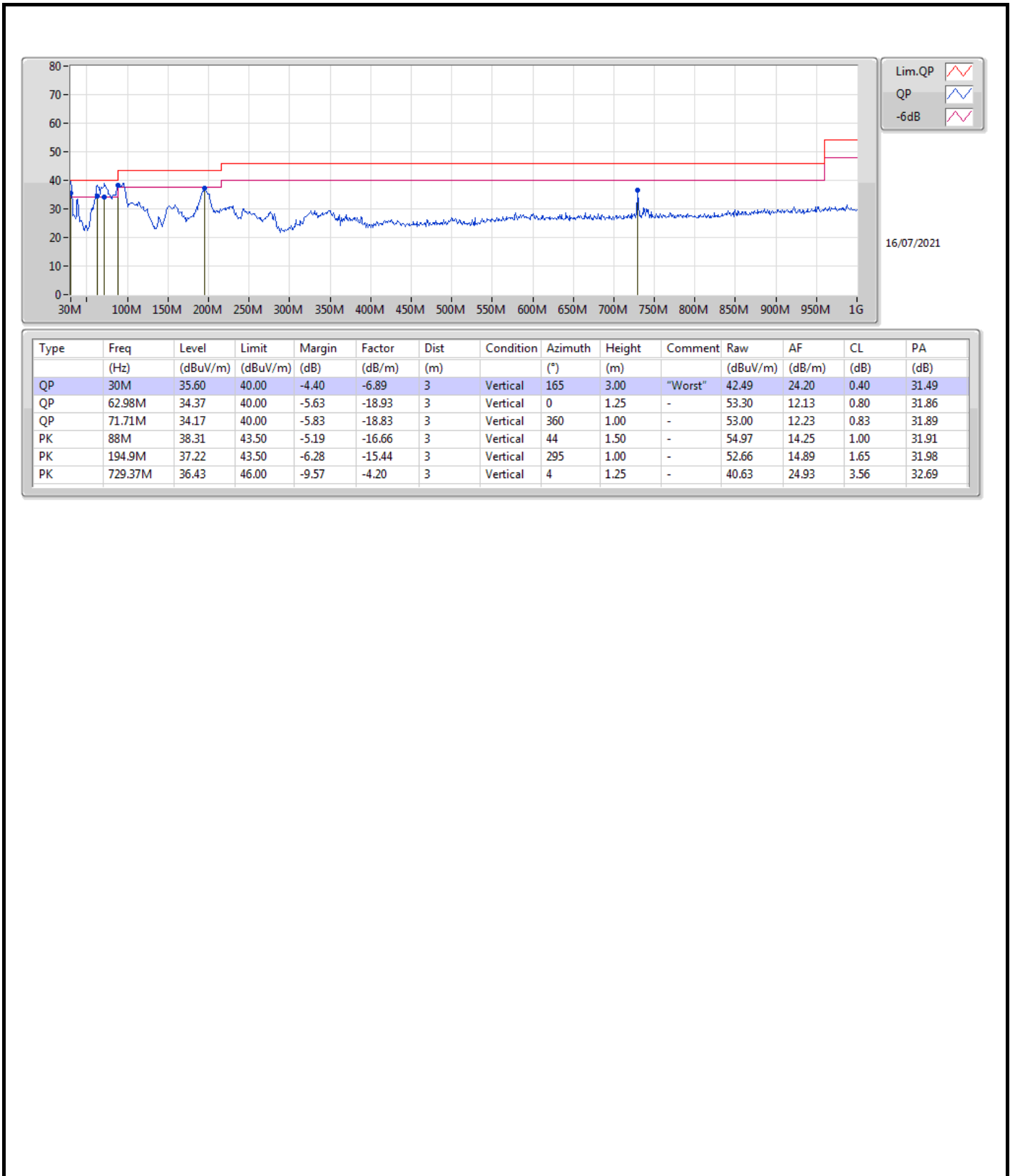
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.44196G	3.21	-26.79	863.85M	-52.51	2.3907G	-51.13	2.4835G	-49.72	2.48498G	-47.97	15.20025G	-44.77	1
2.44196G	3.21	-26.79	944.82M	-51.10	2.3997G	-51.23	2.4835G	-51.29	2.49726G	-50.38	15.1862G	-45.61	2

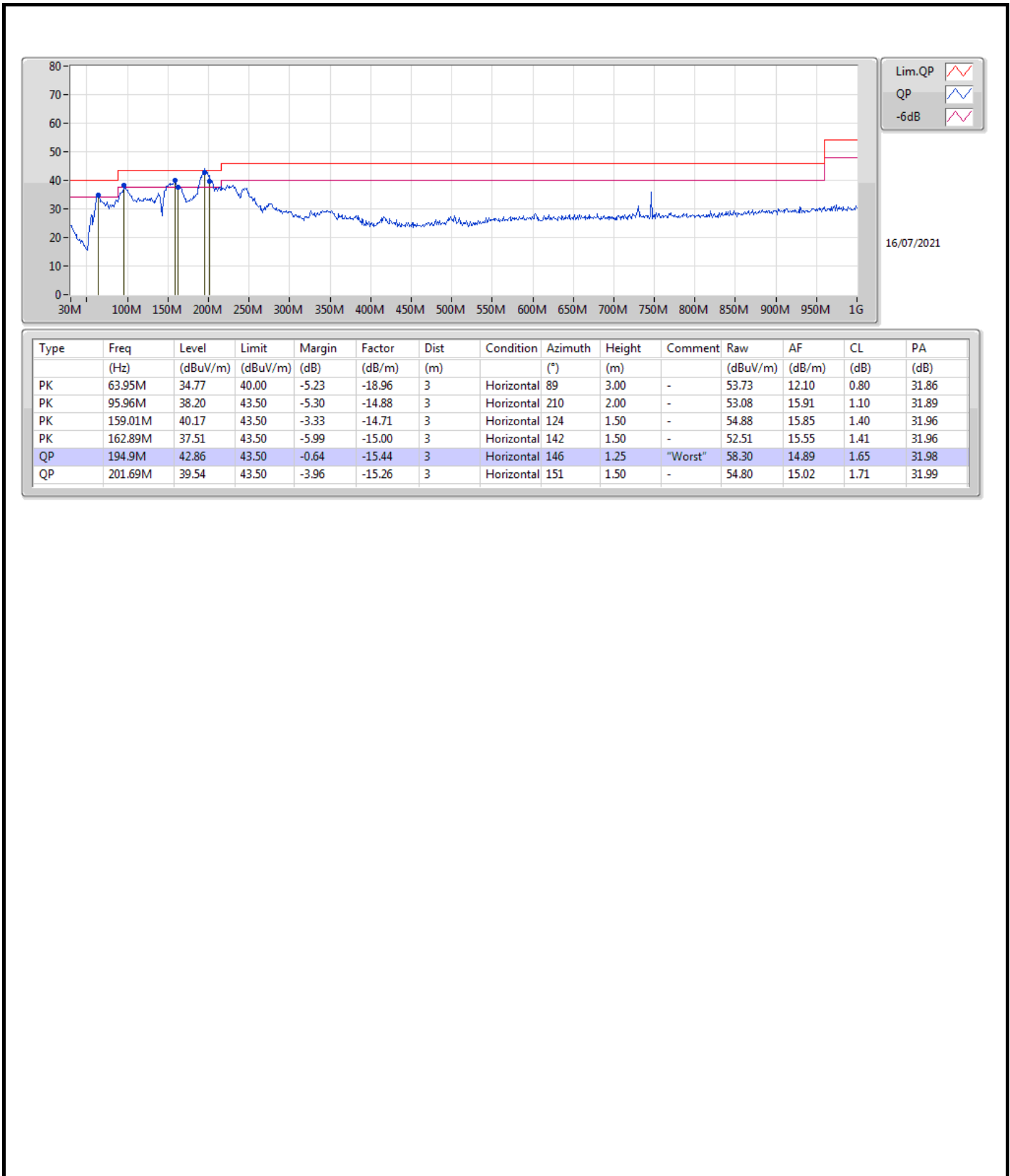


**Summary**

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 4	Pass	QP	194.9M	42.86	43.50	-0.64	Horizontal









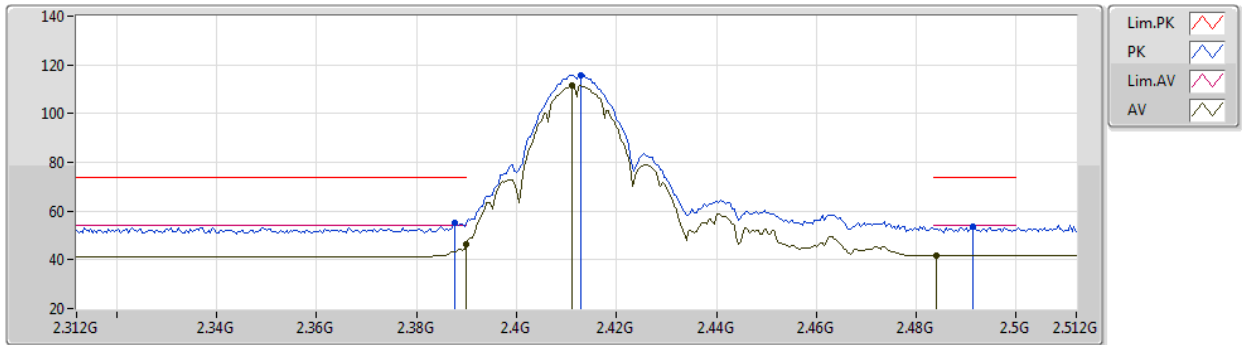
Summary

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)_2TX	Pass	AV	2.39G	53.97	54.00	-0.03	3	Vertical	65	2.33	-

802.11b\_Nss1,(1Mbps)\_2TX

09/06/2021

2412MHz\_TX



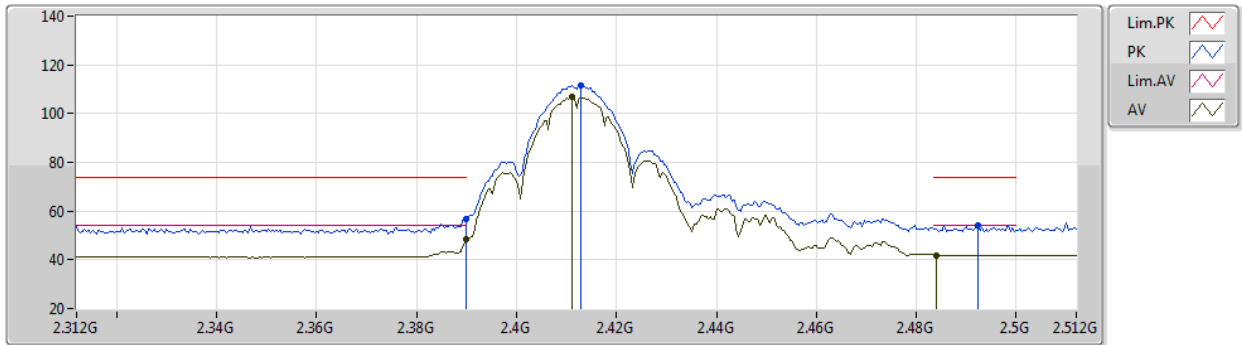
EUT X\_2TX  
Setting 19.5  
01-A-S-5

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	2.3876G	55.24	74.00	-18.76	25.67	3	Vertical	88	1.68	-	27.38	2.19	-
AV	2.39G	46.28	54.00	-7.72	16.71	3	Vertical	88	1.68	-	27.38	2.19	-
PK	2.4128G	115.91	Inf	-Inf	86.27	3	Vertical	88	1.68	-	27.43	2.21	-
AV	2.4112G	111.52	Inf	-Inf	81.89	3	Vertical	88	1.68	-	27.42	2.21	-
PK	2.4912G	53.48	74.00	-20.52	23.44	3	Vertical	88	1.68	-	27.75	2.29	-
AV	2.484G	41.74	54.00	-12.26	11.76	3	Vertical	88	1.68	-	27.70	2.28	-

802.11b\_Nss1,(1Mbps)\_2TX

09/06/2021

2412MHz\_TX



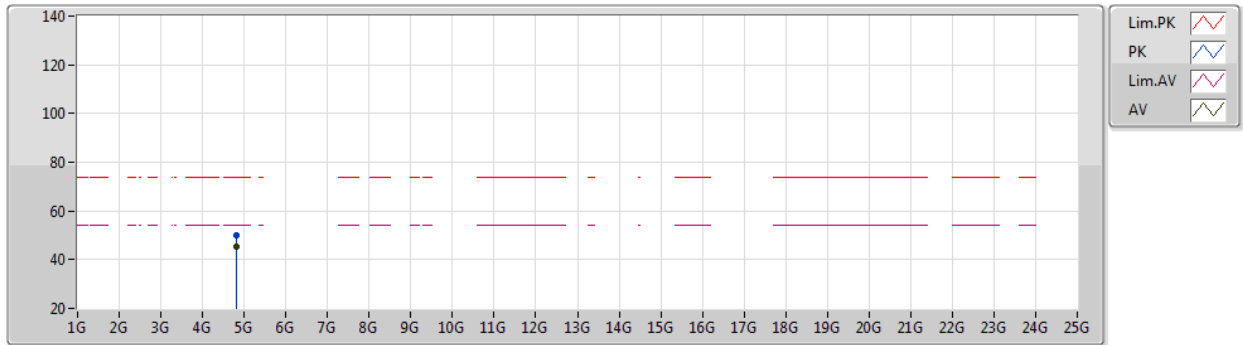
EUT X\_2TX  
Setting 19.5  
01-A-S-5

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	56.74	74.00	-17.26	27.17	3	Horizontal	192	1.01	-	27.38	2.19	-
AV	2.39G	48.31	54.00	-5.69	18.74	3	Horizontal	192	1.01	-	27.38	2.19	-
PK	2.4128G	111.53	Inf	-Inf	81.89	3	Horizontal	192	1.01	-	27.43	2.21	-
AV	2.4112G	106.69	Inf	-Inf	77.06	3	Horizontal	192	1.01	-	27.42	2.21	-
PK	2.4924G	54.26	74.00	-19.74	24.22	3	Horizontal	192	1.01	-	27.75	2.29	-
AV	2.484G	41.82	54.00	-12.18	11.84	3	Horizontal	192	1.01	-	27.70	2.28	-

802.11b\_Nss1,(1Mbps)\_2TX

09/06/2021

2412MHz\_TX



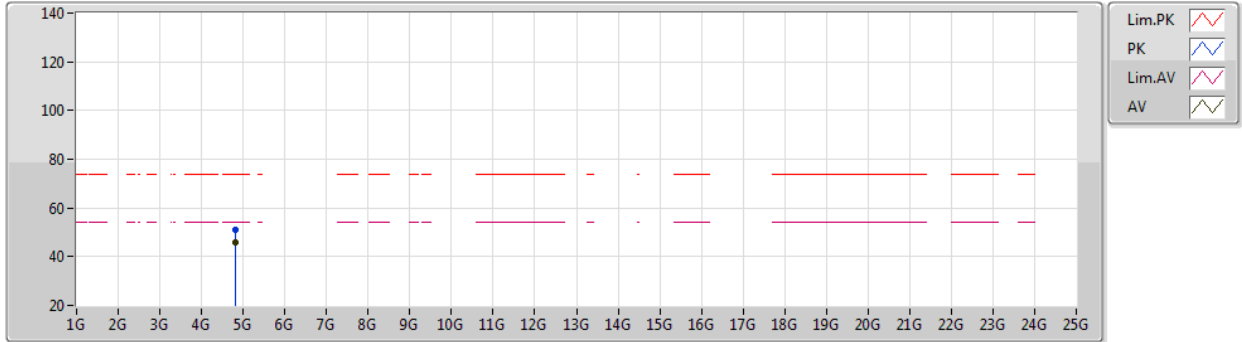
EUT X\_2TX  
Setting 19.5  
01-A-5-5

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	4.8239G	50.18	74.00	-23.82	45.91	3	Vertical	326	2.43	-	32.24	5.01	32.98
AV	4.82396G	45.52	54.00	-8.48	41.25	3	Vertical	326	2.43	-	32.24	5.01	32.98

802.11b\_Nss1,(1Mbps)\_2TX

09/06/2021

2412MHz\_TX



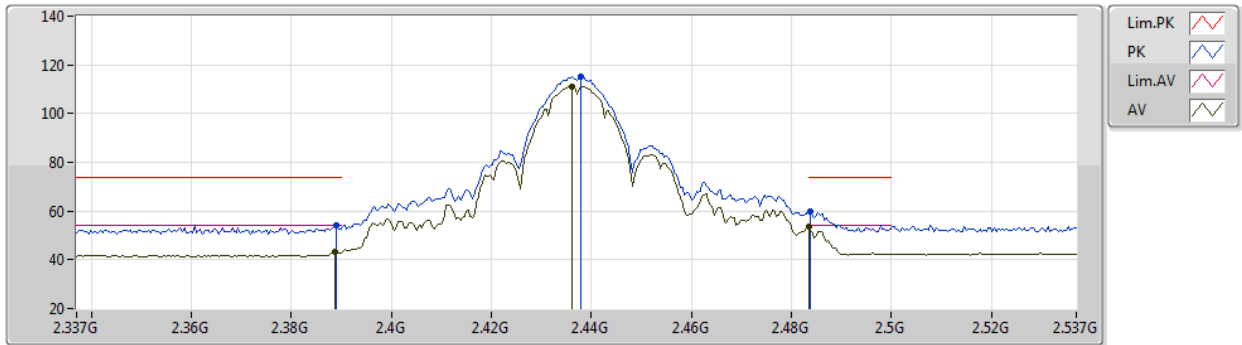
EUT X\_2TX  
Setting 19.5  
01-A-5-5

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	4.82404G	51.14	74.00	-22.86	46.87	3	Horizontal	306	1.29	-	32.24	5.01	32.98
AV	4.82398G	45.77	54.00	-8.23	41.50	3	Horizontal	306	1.29	-	32.24	5.01	32.98

802.11b\_Nss1,(1Mbps)\_2TX

09/06/2021

2437MHz\_TX



EUT X\_2TX  
Setting 19.5  
01-A-S-5

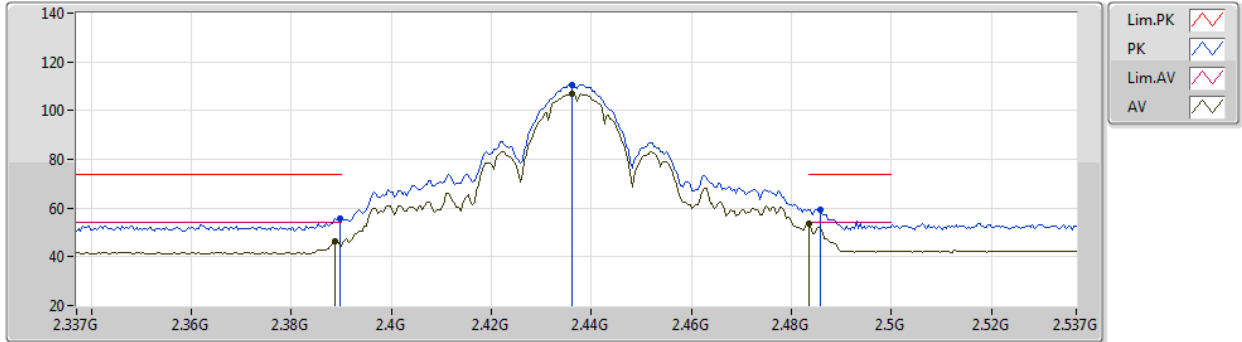
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.389G	54.09	74.00	-19.91	24.52	3	Vertical	87	1.63	-	27.38	2.19	-
AV	2.3886G	43.10	54.00	-10.90	13.53	3	Vertical	87	1.63	-	27.38	2.19	-
PK	2.4378G	114.98	Inf	-Inf	85.26	3	Vertical	87	1.63	-	27.48	2.24	-
AV	2.4362G	111.27	Inf	-Inf	81.56	3	Vertical	87	1.63	-	27.47	2.24	-
PK	2.4838G	60.04	74.00	-13.96	30.06	3	Vertical	87	1.63	-	27.70	2.28	-
AV	2.4835G	53.73	54.00	-0.27	23.75	3	Vertical	87	1.63	-	27.70	2.28	-



802.11b\_Nss1,(1Mbps)\_2TX

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2437MHz\_TX



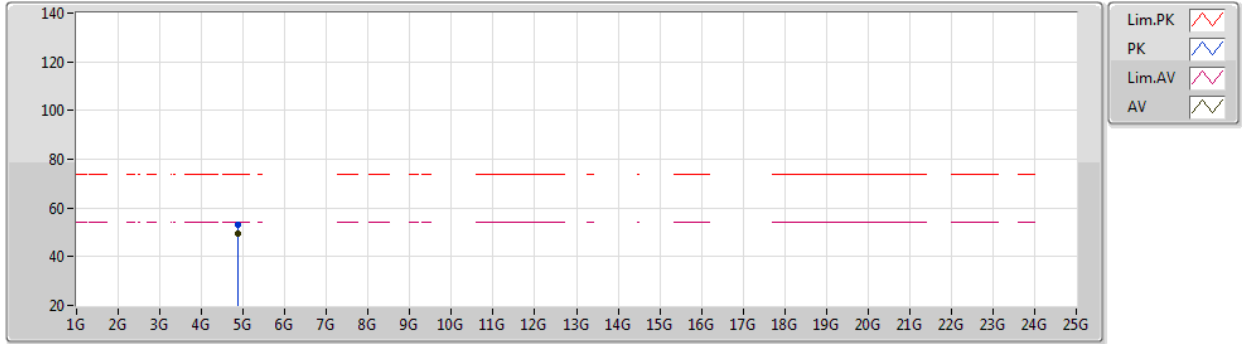
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Setting 19.5  
01-A-S-5

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	55.82	74.00	-18.18	26.25	3	Horizontal	42	2.59	-	27.38	2.19	-
AV	2.3886G	46.49	54.00	-7.51	16.92	3	Horizontal	42	2.59	-	27.38	2.19	-
PK	2.4362G	110.66	Inf	-Inf	80.95	3	Horizontal	42	2.59	-	27.47	2.24	-
AV	2.4362G	106.94	Inf	-Inf	77.23	3	Horizontal	42	2.59	-	27.47	2.24	-
PK	2.4858G	59.45	74.00	-14.55	29.45	3	Horizontal	42	2.59	-	27.71	2.29	-
AV	2.4835G	53.56	54.00	-0.44	23.58	3	Horizontal	42	2.59	-	27.70	2.28	-

802.11b\_Nss1,(1Mbps)\_2TX

09/06/2021

2437MHz\_TX



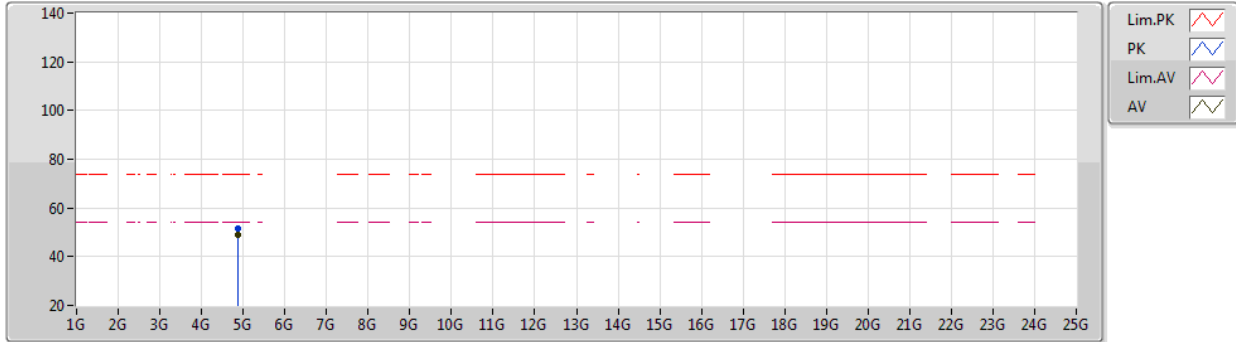
EUT X\_2TX  
Setting 19.5  
01-A-K-3

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	4.87388G	53.15	74.00	-20.85	48.64	3	Vertical	355	2.30	-	32.45	5.04	32.98
AV	4.87398G	49.47	54.00	-4.53	44.96	3	Vertical	355	2.30	-	32.45	5.04	32.98

802.11b\_Nss1,(1Mbps)\_2TX

09/06/2021

2437MHz\_TX



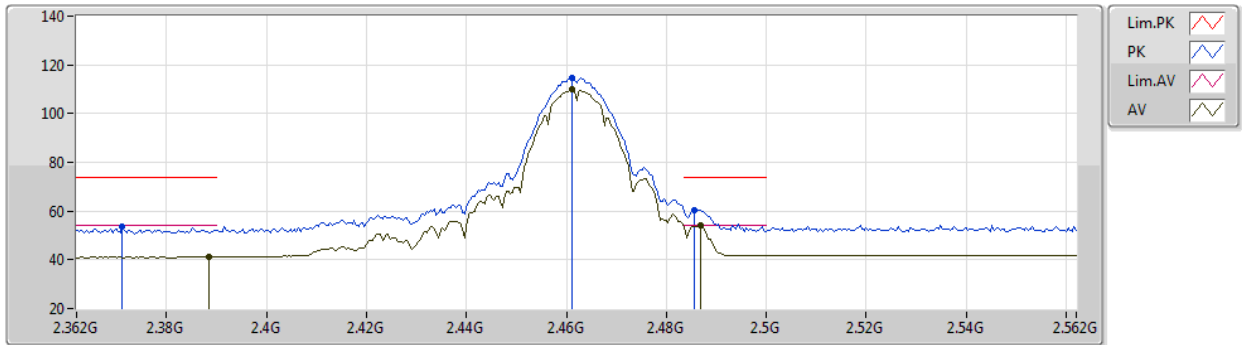
EUT X\_2TX  
Setting 19.5  
01-A-K-3

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	4.87392G	51.77	74.00	-22.23	47.26	3	Horizontal	257	2.27	-	32.45	5.04	32.98
AV	4.87392G	48.72	54.00	-5.28	44.21	3	Horizontal	257	2.27	-	32.45	5.04	32.98

802.11b\_Nss1,(1Mbps)\_2TX

09/06/2021

2462MHz\_TX



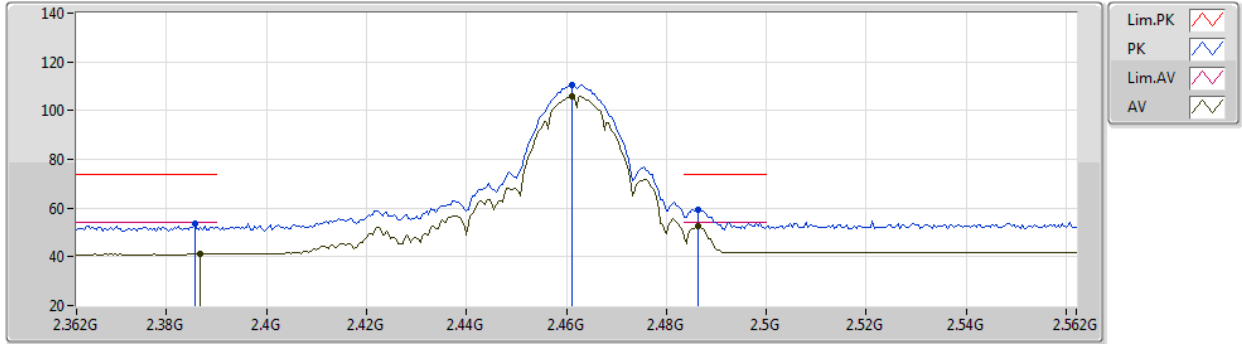
EUT X\_2TX  
Setting 18.5  
01-A-S-5

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	2.3712G	53.67	74.00	-20.33	24.16	3	Vertical	88	1.57	-	27.34	2.17	-
AV	2.3884G	41.05	54.00	-12.95	11.48	3	Vertical	88	1.57	-	27.38	2.19	-
PK	2.4612G	114.54	Inf	-Inf	84.71	3	Vertical	88	1.57	-	27.57	2.26	-
AV	2.4612G	109.79	Inf	-Inf	79.96	3	Vertical	88	1.57	-	27.57	2.26	-
PK	2.4856G	60.52	74.00	-13.48	30.52	3	Vertical	88	1.57	-	27.71	2.29	-
AV	2.4868G	53.96	54.00	-0.04	23.95	3	Vertical	88	1.57	-	27.72	2.29	-

802.11b\_Nss1,(1Mbps)\_2TX

09/06/2021

2462MHz\_TX



EUT X\_2TX  
Setting 18.5  
01-A-S-5

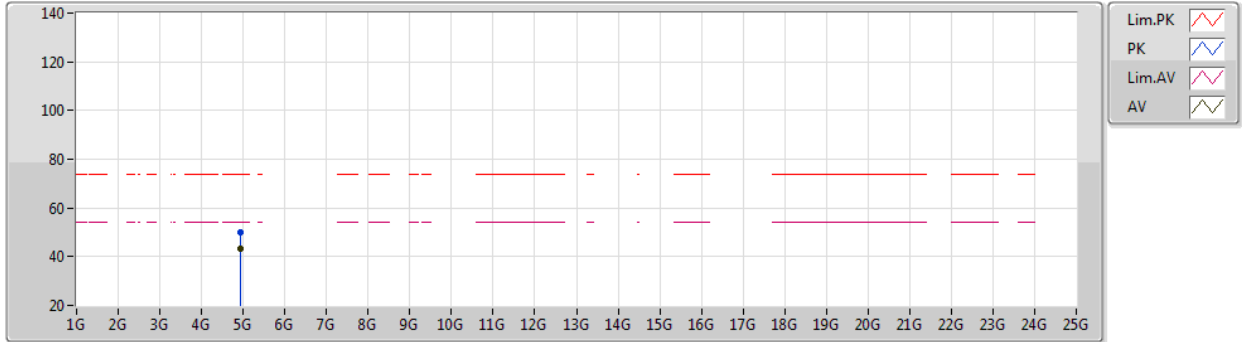
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3856G	53.52	74.00	-20.48	23.96	3	Horizontal	200	1.23	-	27.37	2.19	-
AV	2.3868G	41.02	54.00	-12.98	11.46	3	Horizontal	200	1.23	-	27.37	2.19	-
PK	2.4612G	110.55	Inf	-Inf	80.72	3	Horizontal	200	1.23	-	27.57	2.26	-
AV	2.4612G	105.91	Inf	-Inf	76.08	3	Horizontal	200	1.23	-	27.57	2.26	-
PK	2.4864G	59.54	74.00	-14.46	29.53	3	Horizontal	200	1.23	-	27.72	2.29	-
AV	2.4864G	52.36	54.00	-1.64	22.35	3	Horizontal	200	1.23	-	27.72	2.29	-



802.11b\_Nss1,(1Mbps)\_2TX

09/06/2021

2462MHz\_TX



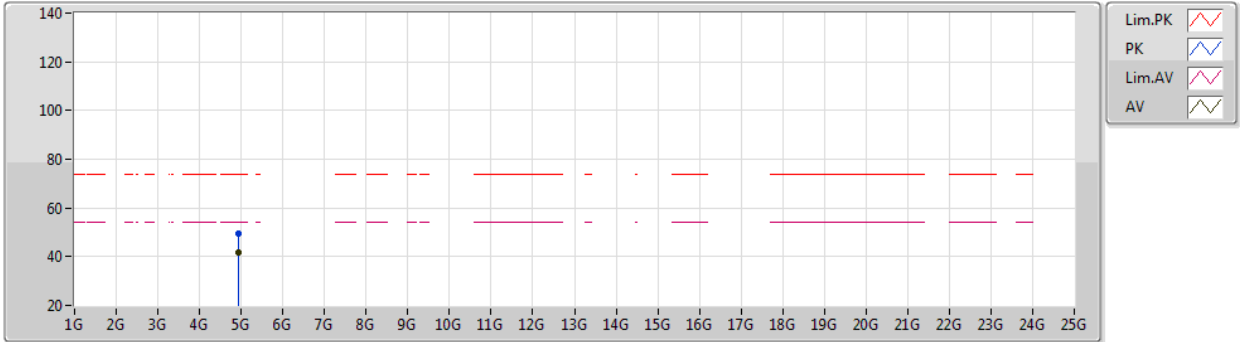
EUT X\_2TX  
Setting 18.5  
01-A-S-5

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	4.92392G	50.12	74.00	-23.88	45.39	3	Vertical	191	1.79	-	32.64	5.06	32.97
AV	4.924G	43.26	54.00	-10.74	38.53	3	Vertical	191	1.79	-	32.64	5.06	32.97

802.11b\_Nss1,(1Mbps)\_2TX

09/06/2021

2462MHz\_TX



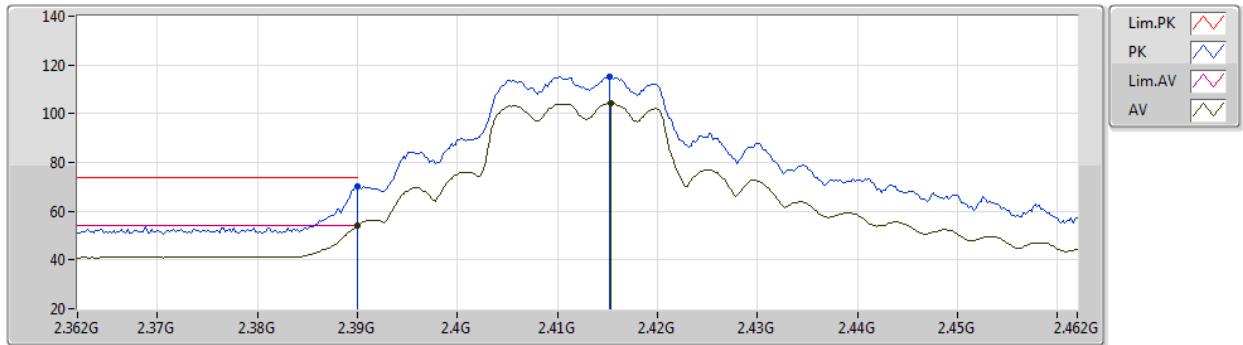
EUT X\_2TX  
Setting 18.5  
01-A-S-5

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	4.92404G	49.68	74.00	-24.32	44.95	3	Horizontal	164	2.50	-	32.64	5.06	32.97
AV	4.92392G	41.80	54.00	-12.20	37.07	3	Horizontal	164	2.50	-	32.64	5.06	32.97

802.11g\_Nss1,(6Mbps)\_2TX

09/06/2021

2412MHz\_TX



EUT X\_2TX  
Setting 18  
01-A-S-5

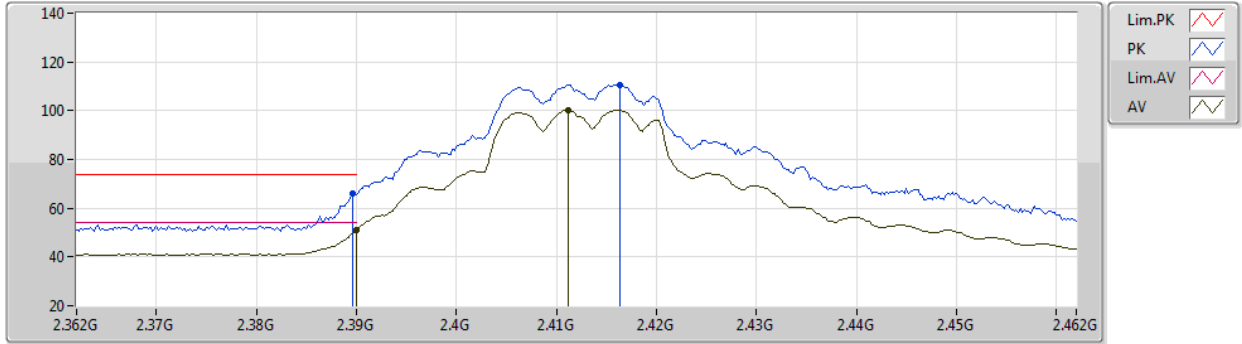
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.39G	70.14	74.00	-3.86	40.57	3	Vertical	65	2.33	-	27.38	2.19	-
AV	2.39G	53.97	54.00	-0.03	24.40	3	Vertical	65	2.33	-	27.38	2.19	-
PK	2.4152G	115.42	Inf	-Inf	85.77	3	Vertical	65	2.33	-	27.43	2.22	-
AV	2.4154G	104.34	Inf	-Inf	74.69	3	Vertical	65	2.33	-	27.43	2.22	-



802.11g\_Nss1,(6Mbps)\_2TX

09/06/2021

2412MHz\_TX



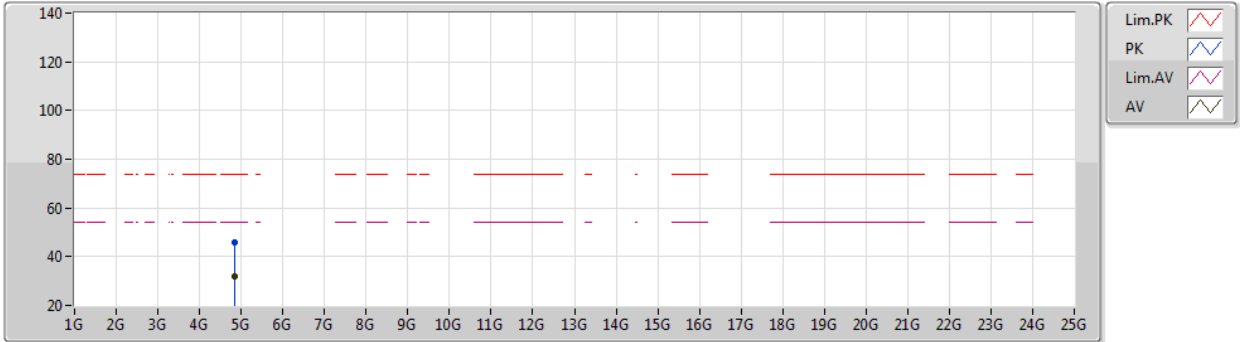
EUT X\_2TX  
Setting 18  
01-A-S-5

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	66.10	74.00	-7.90	36.53	3	Horizontal	206	1.00	-	27.38	2.19	-
AV	2.39G	50.90	54.00	-3.10	21.33	3	Horizontal	206	1.00	-	27.38	2.19	-
PK	2.4164G	110.69	Inf	-Inf	81.04	3	Horizontal	206	1.00	-	27.43	2.22	-
AV	2.4112G	100.31	Inf	-Inf	70.68	3	Horizontal	206	1.00	-	27.42	2.21	-

802.11g\_Nss1,(6Mbps)\_2TX

09/06/2021

2412MHz\_TX



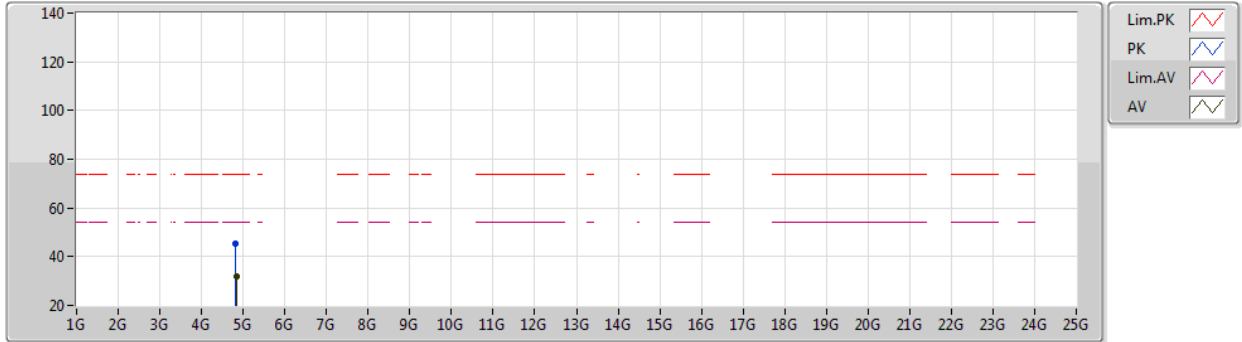
EUT X\_2TX  
Setting 18  
01-A-5-5

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	4.83396G	45.79	74.00	-28.21	41.45	3	Vertical	276	2.39	-	32.30	5.02	32.98
AV	4.82924G	31.73	54.00	-22.27	27.42	3	Vertical	276	2.39	-	32.28	5.01	32.98

802.11g\_Nss1,(6Mbps)\_2TX

09/06/2021

2412MHz\_TX



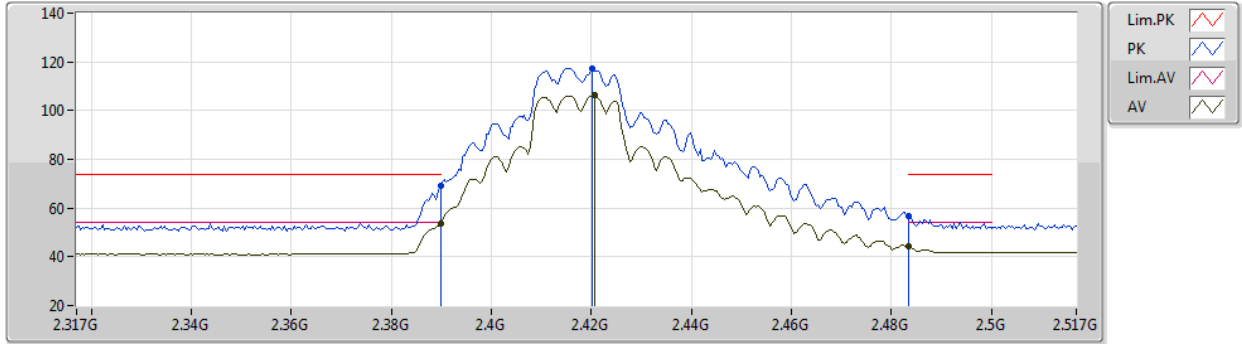
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Setting 18  
01-A-5-5

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	4.816G	45.35	74.00	-28.65	41.13	3	Horizontal	79	1.30	-	32.20	5.01	32.99
AV	4.83064G	31.82	54.00	-22.18	27.50	3	Horizontal	79	1.30	-	32.28	5.02	32.98

802.11g\_Nss1,(6Mbps)\_2TX

09/06/2021

2417MHz\_TX



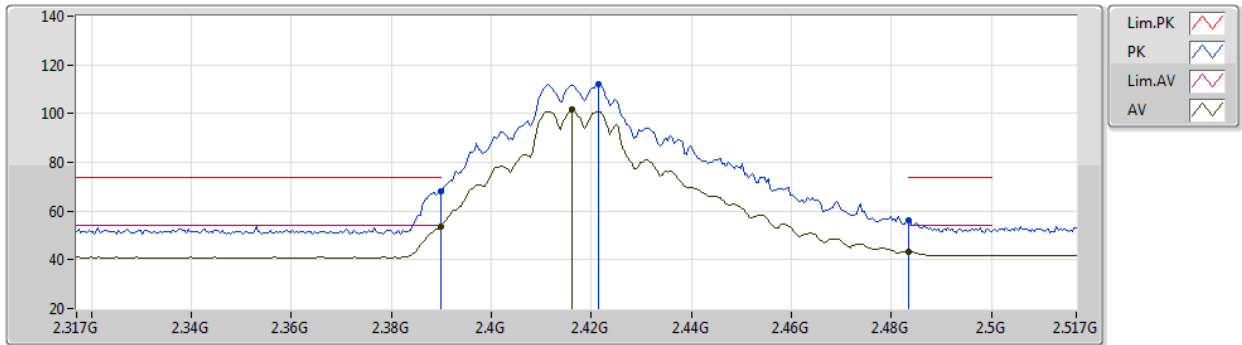
EUT\_X\_2TX  
Setting 20.5  
01-A-S-5

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	69.23	74.00	-4.77	39.66	3	Vertical	63	2.34	-	27.38	2.19	-
AV	2.3898G	53.70	54.00	-0.30	24.13	3	Vertical	63	2.34	-	27.38	2.19	-
PK	2.4202G	117.16	Inf	-Inf	87.50	3	Vertical	63	2.34	-	27.44	2.22	-
AV	2.4206G	106.20	Inf	-Inf	76.54	3	Vertical	63	2.34	-	27.44	2.22	-
PK	2.4835G	56.89	74.00	-17.11	26.91	3	Vertical	63	2.34	-	27.70	2.28	-
AV	2.4835G	44.15	54.00	-9.85	14.17	3	Vertical	63	2.34	-	27.70	2.28	-

802.11g\_Nss1,(6Mbps)\_2TX

09/06/2021

2417MHz\_TX



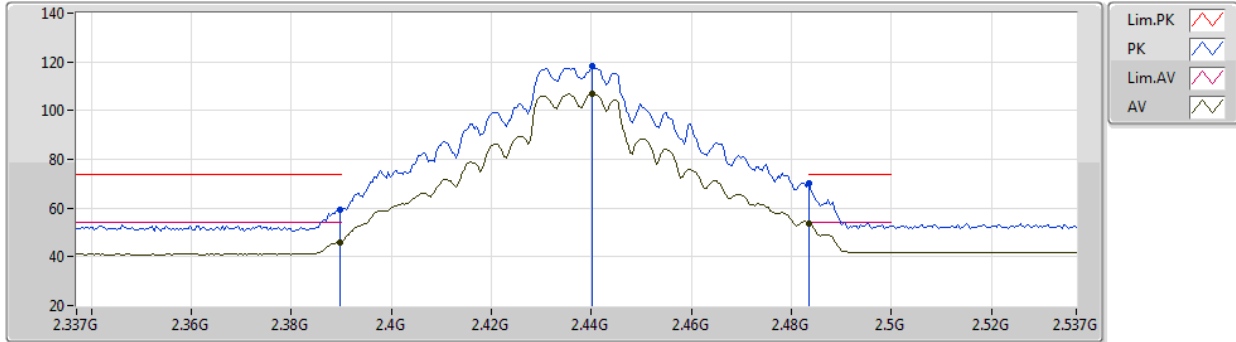
EUT X\_2TX  
Setting 20.5  
01-A-S-5

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	68.15	74.00	-5.85	38.58	3	Horizontal	202	1.21	-	27.38	2.19	-
AV	2.3898G	53.65	54.00	-0.35	24.08	3	Horizontal	202	1.21	-	27.38	2.19	-
PK	2.4214G	112.05	Inf	-Inf	82.39	3	Horizontal	202	1.21	-	27.44	2.22	-
AV	2.4162G	101.50	Inf	-Inf	71.85	3	Horizontal	202	1.21	-	27.43	2.22	-
PK	2.4835G	56.08	74.00	-17.92	26.10	3	Horizontal	202	1.21	-	27.70	2.28	-
AV	2.4835G	43.21	54.00	-10.79	13.23	3	Horizontal	202	1.21	-	27.70	2.28	-

802.11g\_Nss1,(6Mbps)\_2TX

09/06/2021

2437MHz\_TX



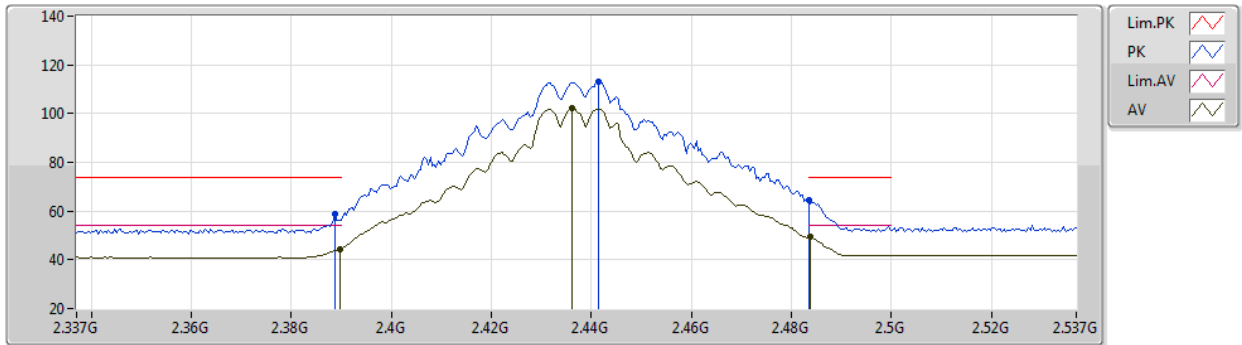
EUT X\_2TX  
Setting 22  
01-A-S-5

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	59.22	74.00	-14.78	29.65	3	Vertical	64	2.53	-	27.38	2.19	-
AV	2.3898G	46.03	54.00	-7.97	16.46	3	Vertical	64	2.53	-	27.38	2.19	-
PK	2.4402G	118.21	Inf	-Inf	88.49	3	Vertical	64	2.53	-	27.48	2.24	-
AV	2.4402G	107.12	Inf	-Inf	77.40	3	Vertical	64	2.53	-	27.48	2.24	-
PK	2.4835G	70.37	74.00	-3.63	40.39	3	Vertical	64	2.53	-	27.70	2.28	-
AV	2.4835G	53.62	54.00	-0.38	23.64	3	Vertical	64	2.53	-	27.70	2.28	-

802.11g\_Nss1,(6Mbps)\_2TX

09/06/2021

2437MHz\_TX



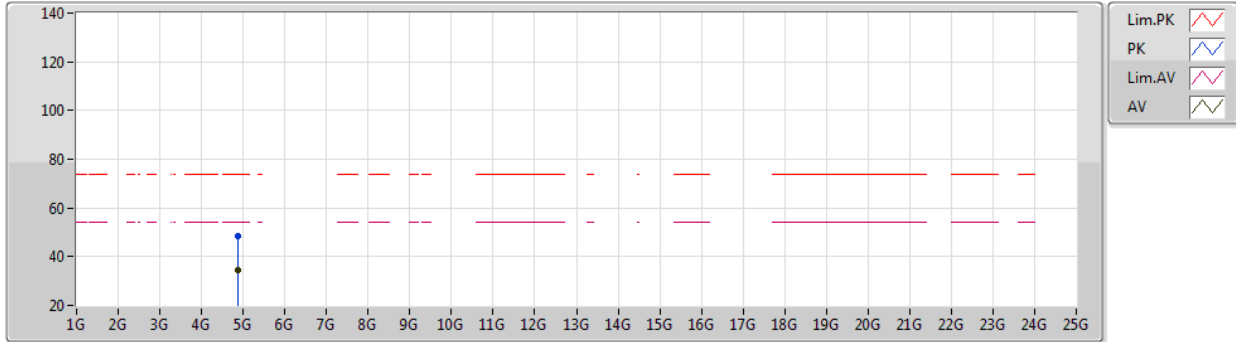
EUT X\_2TX  
Setting 22  
01-A-S-5

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	2.3886G	58.79	74.00	-15.21	29.22	3	Horizontal	202	1.06	-	27.38	2.19	-
AV	2.3898G	44.48	54.00	-9.52	14.91	3	Horizontal	202	1.06	-	27.38	2.19	-
PK	2.4414G	113.32	Inf	-Inf	83.60	3	Horizontal	202	1.06	-	27.48	2.24	-
AV	2.4362G	102.45	Inf	-Inf	72.74	3	Horizontal	202	1.06	-	27.47	2.24	-
PK	2.4835G	64.59	74.00	-9.41	34.61	3	Horizontal	202	1.06	-	27.70	2.28	-
AV	2.4838G	49.41	54.00	-4.59	19.43	3	Horizontal	202	1.06	-	27.70	2.28	-

802.11g\_Nss1,(6Mbps)\_2TX

09/06/2021

2437MHz\_TX



EUT X\_2TX  
Setting 22  
01-A-5-5

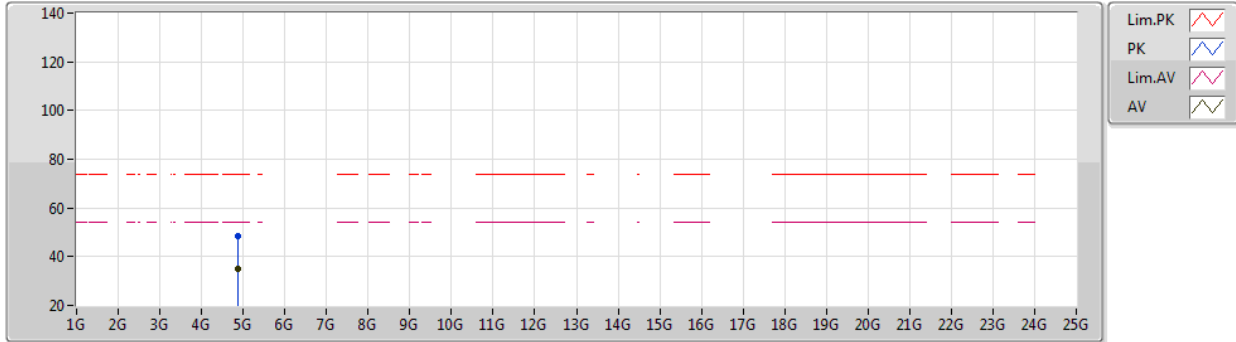
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.86784G	48.57	74.00	-25.43	44.08	3	Vertical	192	1.85	-	32.44	5.03	32.98
AV	4.87188G	34.71	54.00	-19.29	30.21	3	Vertical	192	1.85	-	32.44	5.04	32.98



802.11g\_Nss1,(6Mbps)\_2TX

09/06/2021

2437MHz\_TX



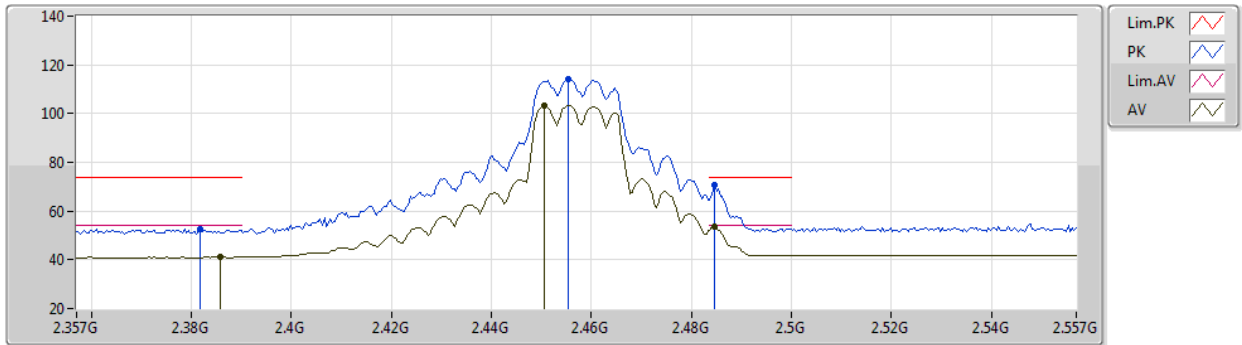
EUT X\_2TX  
Setting 22  
01-A-5-5

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	4.86892G	48.69	74.00	-25.31	44.20	3	Horizontal	76	2.44	-	32.44	5.03	32.98
AV	4.8736G	34.78	54.00	-19.22	30.27	3	Horizontal	76	2.44	-	32.45	5.04	32.98

802.11g\_Nss1,(6Mbps)\_2TX

09/06/2021

2457MHz\_TX



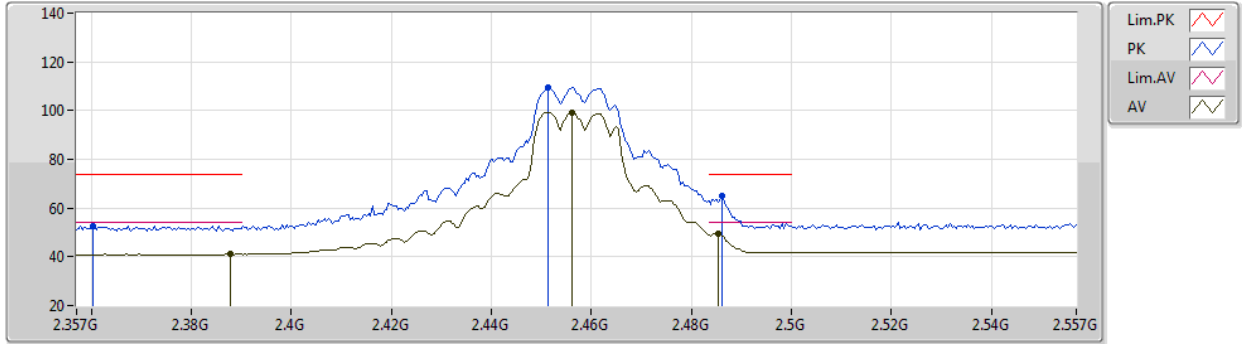
EUT X\_2TX  
Setting 17.5  
01-A-S-5

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	2.3818G	52.77	74.00	-21.23	23.23	3	Vertical	64	2.30	-	27.36	2.18	-
AV	2.3858G	40.99	54.00	-13.01	11.43	3	Vertical	64	2.30	-	27.37	2.19	-
PK	2.4554G	113.95	Inf	-Inf	84.16	3	Vertical	64	2.30	-	27.53	2.26	-
AV	2.4506G	103.40	Inf	-Inf	73.65	3	Vertical	64	2.30	-	27.50	2.25	-
PK	2.4846G	70.76	74.00	-3.24	40.77	3	Vertical	64	2.30	-	27.71	2.28	-
AV	2.4846G	53.58	54.00	-0.42	23.59	3	Vertical	64	2.30	-	27.71	2.28	-

802.11g\_Nss1,(6Mbps)\_2TX

09/06/2021

2457MHz\_TX



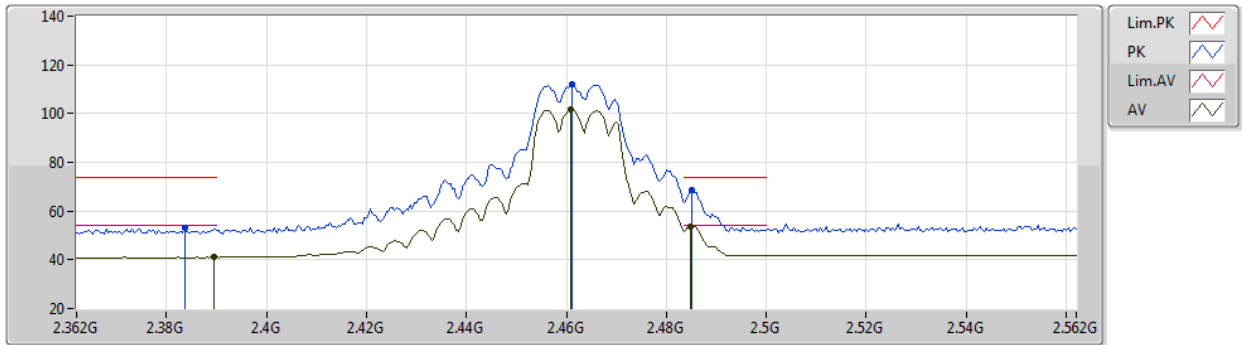
EUT X\_2TX  
Setting 17.5  
01-A-S-5

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	2.3602G	52.77	74.00	-21.23	23.29	3	Horizontal	204	1.00	-	27.32	2.16	-
AV	2.3878G	41.01	54.00	-12.99	11.44	3	Horizontal	204	1.00	-	27.38	2.19	-
PK	2.4514G	109.62	Inf	-Inf	79.86	3	Horizontal	204	1.00	-	27.51	2.25	-
AV	2.4562G	99.37	Inf	-Inf	69.57	3	Horizontal	204	1.00	-	27.54	2.26	-
PK	2.4862G	64.78	74.00	-9.22	34.77	3	Horizontal	204	1.00	-	27.72	2.29	-
AV	2.4854G	49.50	54.00	-4.50	19.50	3	Horizontal	204	1.00	-	27.71	2.29	-

802.11g\_Nss1,(6Mbps)\_2TX

09/06/2021

2462MHz\_TX



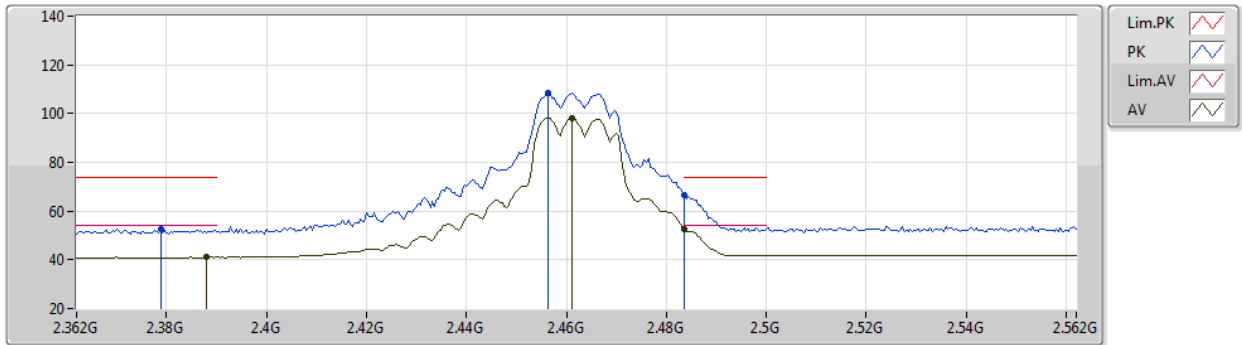
EUT X\_2TX  
Setting 16.5  
01-A-S-5

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	2.3836G	52.91	74.00	-21.09	23.36	3	Vertical	63	1.78	-	27.37	2.18	-
AV	2.3896G	41.05	54.00	-12.95	11.48	3	Vertical	63	1.78	-	27.38	2.19	-
PK	2.4612G	112.00	Inf	-Inf	82.17	3	Vertical	63	1.78	-	27.57	2.26	-
AV	2.4608G	101.60	Inf	-Inf	71.78	3	Vertical	63	1.78	-	27.56	2.26	-
PK	2.4852G	68.81	74.00	-5.19	38.81	3	Vertical	63	1.78	-	27.71	2.29	-
AV	2.4848G	53.85	54.00	-0.15	23.86	3	Vertical	63	1.78	-	27.71	2.28	-

802.11g\_Nss1,(6Mbps)\_2TX

09/06/2021

2462MHz\_TX



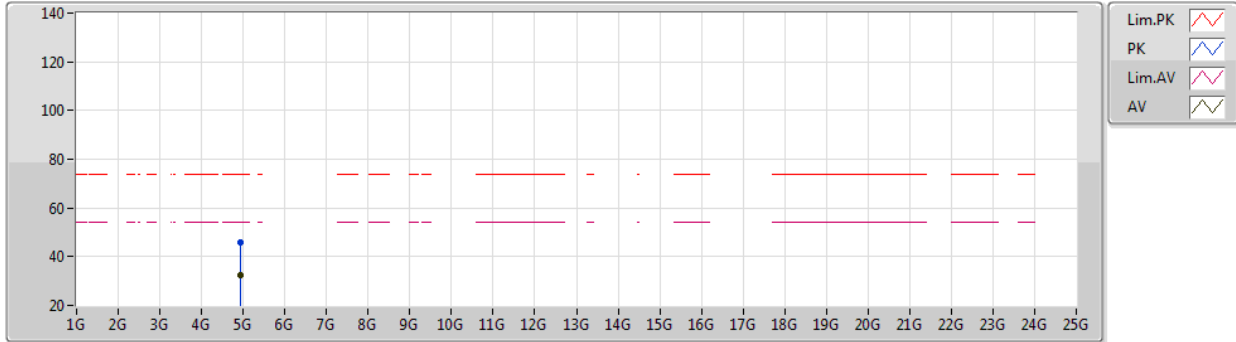
EUT X\_2TX  
Setting 16.5  
01-A-S-5

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	2.3788G	52.81	74.00	-21.19	23.27	3	Horizontal	205	1.01	-	27.36	2.18	-
AV	2.388G	41.02	54.00	-12.98	11.45	3	Horizontal	205	1.01	-	27.38	2.19	-
PK	2.4564G	108.50	Inf	-Inf	78.70	3	Horizontal	205	1.01	-	27.54	2.26	-
AV	2.4612G	98.33	Inf	-Inf	68.50	3	Horizontal	205	1.01	-	27.57	2.26	-
PK	2.4835G	66.51	74.00	-7.49	36.53	3	Horizontal	205	1.01	-	27.70	2.28	-
AV	2.4835G	52.34	54.00	-1.66	22.36	3	Horizontal	205	1.01	-	27.70	2.28	-

802.11g\_Nss1,(6Mbps)\_2TX

09/06/2021

2462MHz\_TX



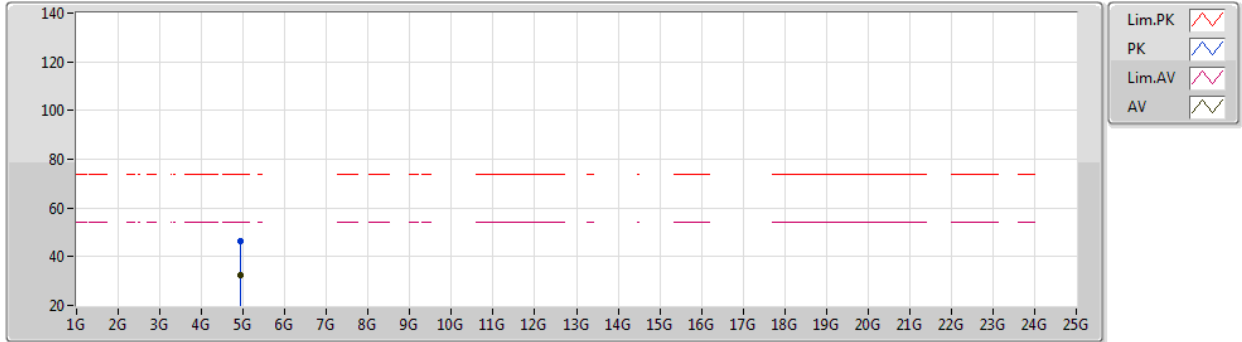
EUT X\_2TX  
Setting 16.5  
01-A-S-5

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	4.93248G	46.04	74.00	-27.96	41.25	3	Vertical	33	1.62	-	32.69	5.07	32.97
AV	4.93348G	32.49	54.00	-21.51	27.69	3	Vertical	33	1.62	-	32.70	5.07	32.97

802.11g\_Nss1,(6Mbps)\_2TX

09/06/2021

2462MHz\_TX



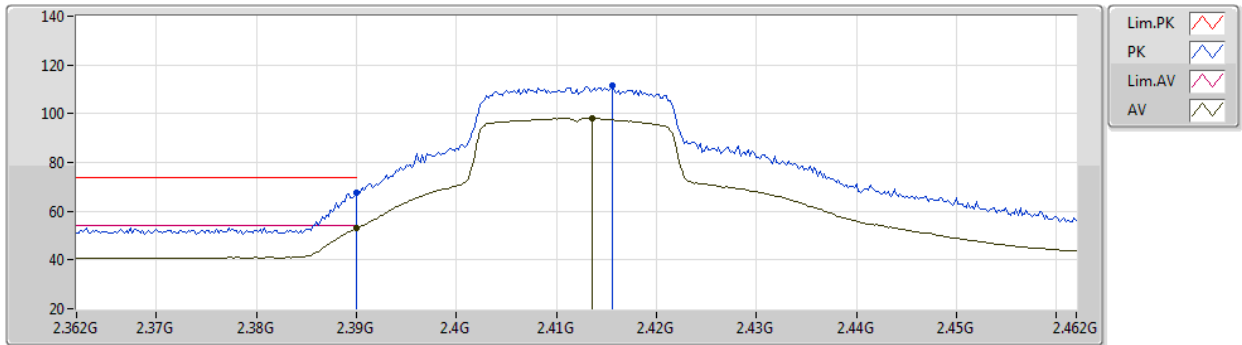
EUT X\_2TX  
Setting 16.5  
01-A-S-5

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	4.93156G	46.58	74.00	-27.42	41.79	3	Horizontal	70	2.36	-	32.69	5.07	32.97
AV	4.93188G	32.47	54.00	-21.53	27.68	3	Horizontal	70	2.36	-	32.69	5.07	32.97

802.11ax HEW20\_Nss1,(MCS0)\_2TX

09/06/2021

2412MHz\_TX



EUT X\_2TX  
Setting 17  
01-A-E-2

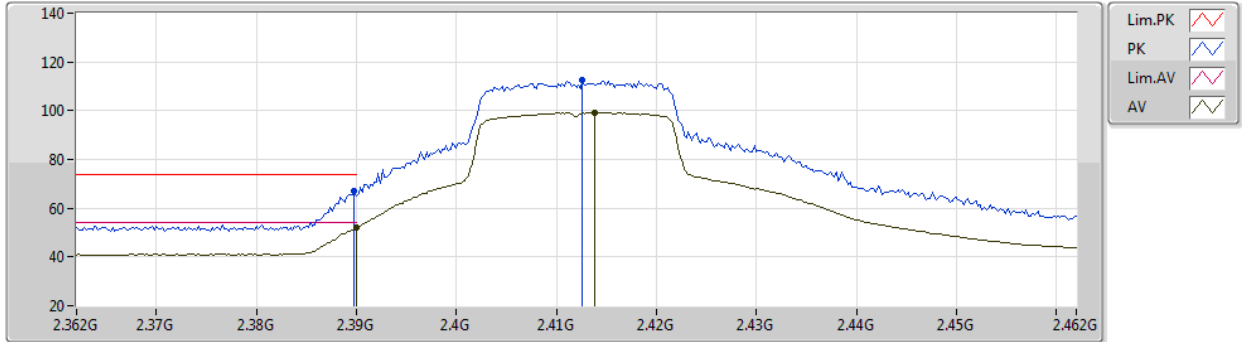
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.39G	67.39	74.00	-6.61	37.82	3	Vertical	232	1.56	-	27.38	2.19	-
AV	2.39G	52.97	54.00	-1.03	23.40	3	Vertical	232	1.56	-	27.38	2.19	-
PK	2.4136G	111.51	Inf	-Inf	81.86	3	Vertical	232	1.56	-	27.43	2.22	-
AV	2.4136G	98.13	Inf	-Inf	68.49	3	Vertical	232	1.56	-	27.43	2.21	-



802.11ax HEW20\_Nss1,(MCS0)\_2TX

09/06/2021

2412MHz\_TX



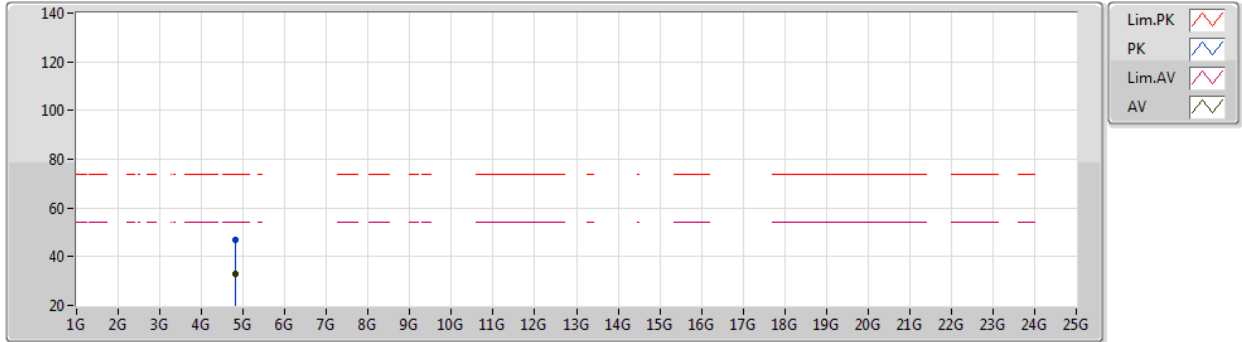
EUT X\_2TX  
Setting 17  
01-A-E-2

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	66.92	74.00	-7.08	37.35	3	Horizontal	236	1.17	-	27.38	2.19	-
AV	2.39G	52.01	54.00	-1.99	22.44	3	Horizontal	236	1.17	-	27.38	2.19	-
PK	2.4126G	112.51	Inf	-Inf	82.87	3	Horizontal	236	1.17	-	27.43	2.21	-
AV	2.4138G	99.14	Inf	-Inf	69.50	3	Horizontal	236	1.17	-	27.43	2.21	-

802.11ax HEW20\_Nss1,(MCS0)\_2TX

09/06/2021

2412MHz\_TX



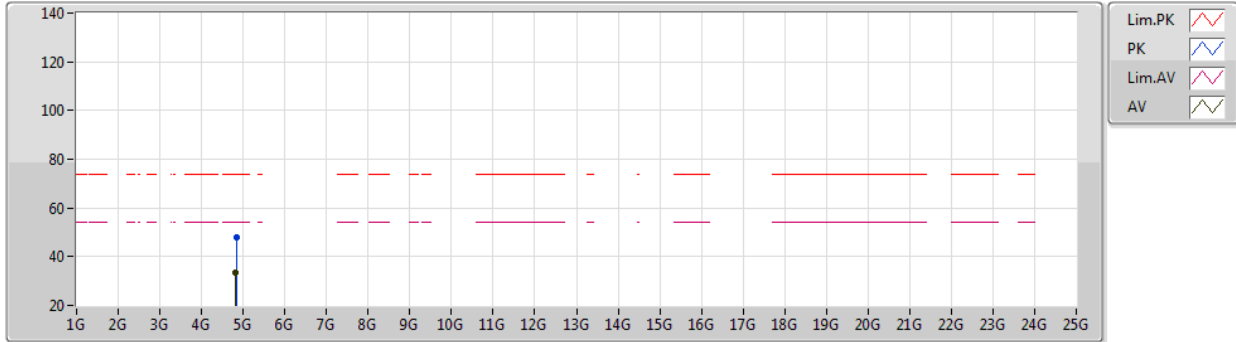
EUT X\_2TX  
Setting 17  
01-A-K-5

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	4.82208G	47.01	74.00	-26.99	42.75	3	Vertical	72	1.80	-	32.23	5.01	32.98
AV	4.82304G	32.76	54.00	-21.24	28.49	3	Vertical	72	1.80	-	32.24	5.01	32.98

802.11ax HEW20\_Nss1,(MCS0)\_2TX

09/06/2021

2412MHz\_TX



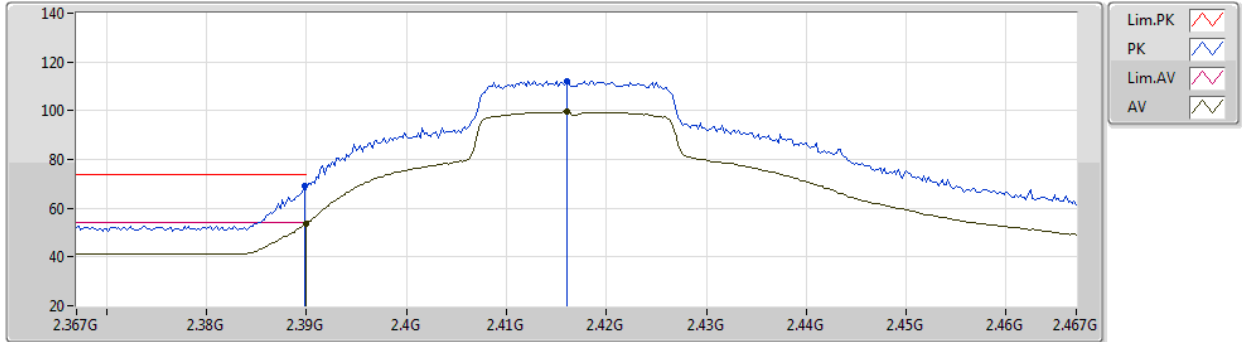
EUT X\_2TX  
Setting 17  
01-A-K-5

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	4.83092G	48.07	74.00	-25.93	43.74	3	Horizontal	126	2.11	-	32.29	5.02	32.98
AV	4.82332G	33.53	54.00	-20.47	29.26	3	Horizontal	126	2.11	-	32.24	5.01	32.98

802.11ax HEW20\_Nss1,(MCS0)\_2TX

09/06/2021

2417MHz\_TX



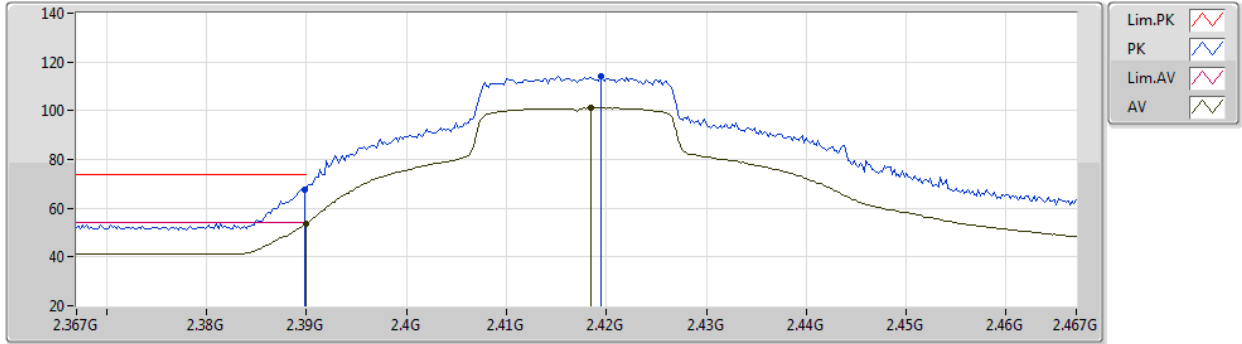
EUT X\_2TX  
Setting 19.5  
01-A-E-2

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	69.34	74.00	-4.66	39.77	3	Vertical	233	1.61	-	27.38	2.19	-
AV	2.39G	53.80	54.00	-0.20	24.23	3	Vertical	233	1.61	-	27.38	2.19	-
PK	2.416G	112.29	Inf	-Inf	82.64	3	Vertical	233	1.61	-	27.43	2.22	-
AV	2.416G	99.47	Inf	-Inf	69.82	3	Vertical	233	1.61	-	27.43	2.22	-

802.11ax HEW20\_Nss1,(MCS0)\_2TX

09/06/2021

2417MHz\_TX



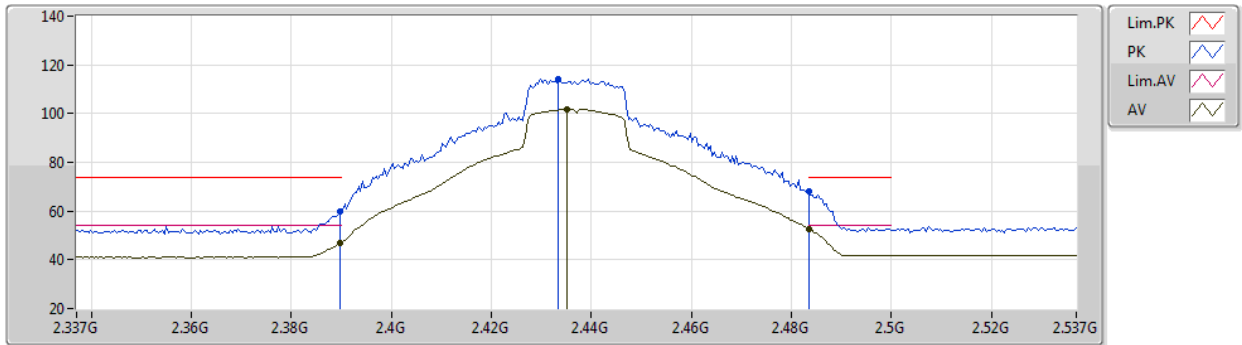
EUT X\_2TX  
Setting 19.5  
01-A-E-2

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	67.81	74.00	-6.19	38.24	3	Horizontal	237	1.18	-	27.38	2.19	-
AV	2.39G	53.61	54.00	-0.39	24.04	3	Horizontal	237	1.18	-	27.38	2.19	-
PK	2.4194G	114.08	Inf	-Inf	84.42	3	Horizontal	237	1.18	-	27.44	2.22	-
AV	2.4184G	101.18	Inf	-Inf	71.52	3	Horizontal	237	1.18	-	27.44	2.22	-

802.11ax HEW20\_Nss1,(MCS0)\_2TX

09/06/2021

2437MHz\_TX



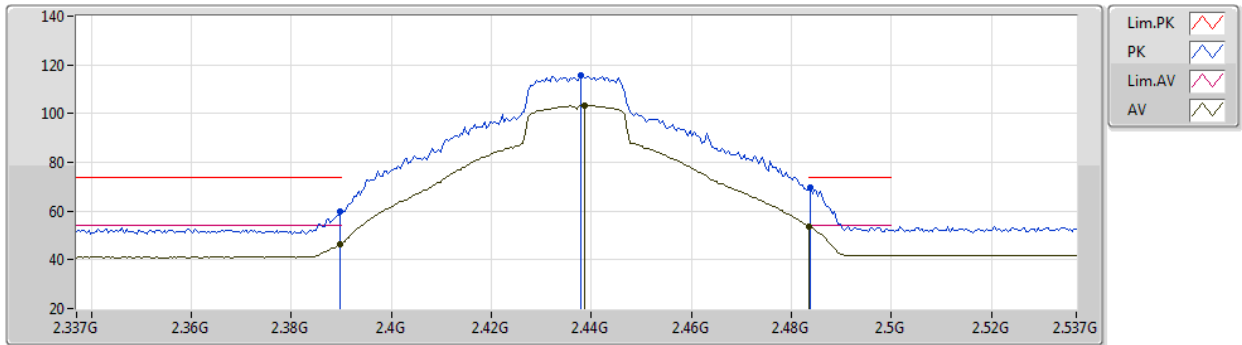
EUT X\_2TX  
Setting 22  
01-A-E-2

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	59.86	74.00	-14.14	30.29	3	Vertical	233	1.48	-	27.38	2.19	-
AV	2.3898G	46.72	54.00	-7.28	17.15	3	Vertical	233	1.48	-	27.38	2.19	-
PK	2.4334G	114.20	Inf	-Inf	84.50	3	Vertical	233	1.48	-	27.47	2.23	-
AV	2.435G	101.58	Inf	-Inf	71.87	3	Vertical	233	1.48	-	27.47	2.24	-
PK	2.4835G	68.25	74.00	-5.75	38.27	3	Vertical	233	1.48	-	27.70	2.28	-
AV	2.4835G	52.74	54.00	-1.26	22.76	3	Vertical	233	1.48	-	27.70	2.28	-

802.11ax HEW20\_Nss1,(MCS0)\_2TX

09/06/2021

2437MHz\_TX



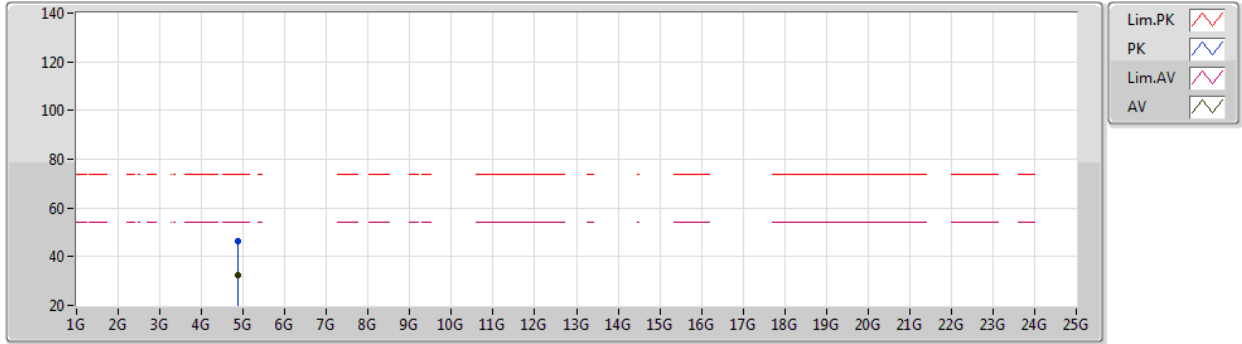
EUT X\_2TX  
Setting 22  
01-A-E-2

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	59.71	74.00	-14.29	30.14	3	Horizontal	236	1.09	-	27.38	2.19	-
AV	2.3898G	46.27	54.00	-7.73	16.70	3	Horizontal	236	1.09	-	27.38	2.19	-
PK	2.4378G	115.64	Inf	-Inf	85.92	3	Horizontal	236	1.09	-	27.48	2.24	-
AV	2.4386G	103.34	Inf	-Inf	73.62	3	Horizontal	236	1.09	-	27.48	2.24	-
PK	2.4838G	69.62	74.00	-4.38	39.64	3	Horizontal	236	1.09	-	27.70	2.28	-
AV	2.4835G	53.85	54.00	-0.15	23.87	3	Horizontal	236	1.09	-	27.70	2.28	-

802.11ax HEW20\_Nss1,(MCS0)\_2TX

09/06/2021

2437MHz\_TX



EUT X\_2TX  
Setting 22  
01-A-K-5

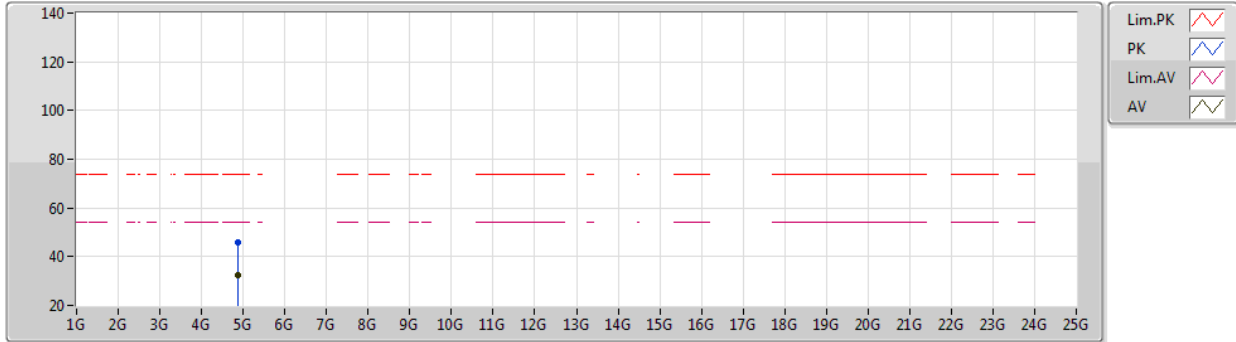
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.87364G	46.49	74.00	-27.51	41.98	3	Vertical	228	2.13	-	32.45	5.04	32.98
AV	4.87336G	32.40	54.00	-21.60	27.89	3	Vertical	228	2.13	-	32.45	5.04	32.98



802.11ax HEW20\_Nss1,(MCS0)\_2TX

09/06/2021

2437MHz\_TX



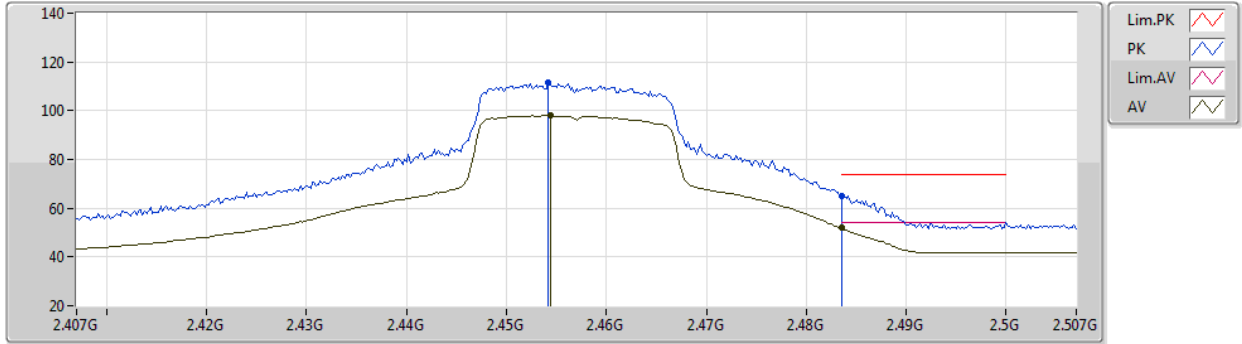
EUT X\_2TX  
Setting 22  
01-A-K-5

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	4.8732G	46.11	74.00	-27.89	41.60	3	Horizontal	191	1.80	-	32.45	5.04	32.98
AV	4.8746G	32.29	54.00	-21.71	27.78	3	Horizontal	191	1.80	-	32.45	5.04	32.98

802.11ax HEW20\_Nss1,(MCS0)\_2TX

09/06/2021

2457MHz\_TX



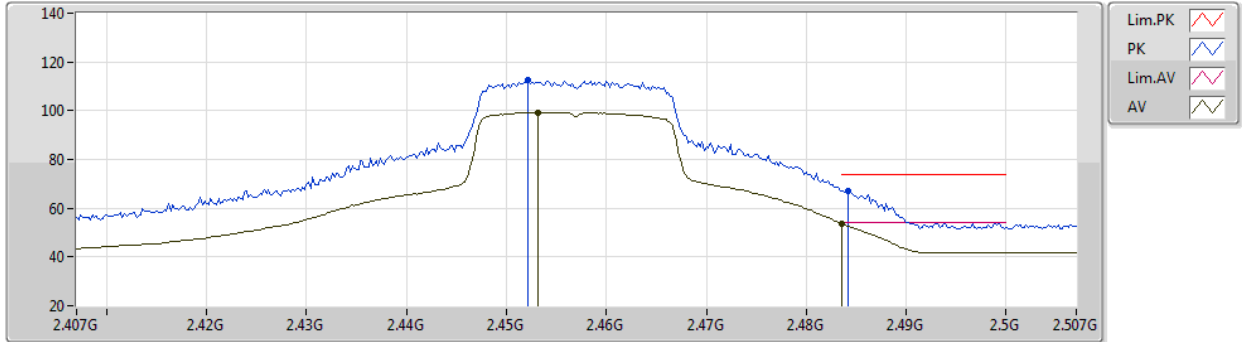
EUT X\_2TX  
Setting 17  
01-A-E-2

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	111.55	Inf	-Inf	81.77	3	Vertical	233	1.40	-	27.53	2.25	-
AV	2.4544G	97.92	Inf	-Inf	68.14	3	Vertical	233	1.40	-	27.53	2.25	-
PK	2.4836G	65.23	74.00	-8.77	35.25	3	Vertical	233	1.40	-	27.70	2.28	-
AV	2.4835G	51.84	54.00	-2.16	21.86	3	Vertical	233	1.40	-	27.70	2.28	-

802.11ax HEW20\_Nss1,(MCS0)\_2TX

09/06/2021

2457MHz\_TX



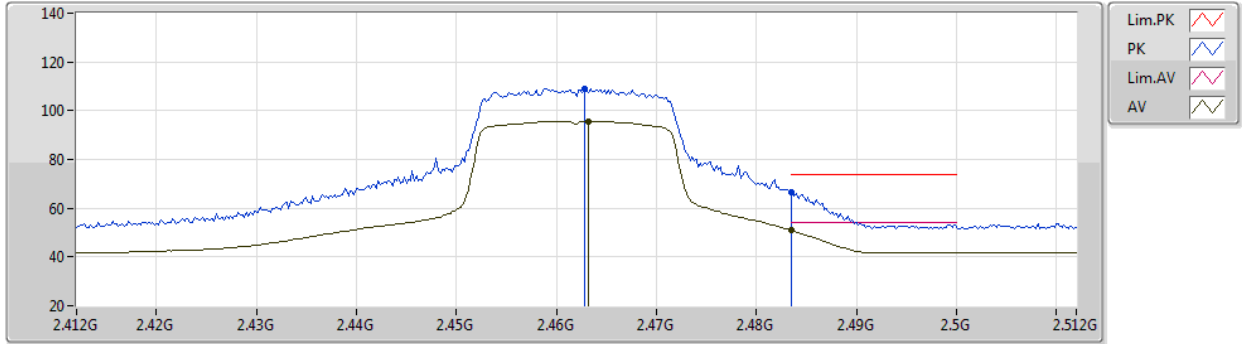
EUT X\_2TX  
Setting 17  
01-A-E-2

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	2.4522G	112.35	Inf	-Inf	82.59	3	Horizontal	235	1.34	-	27.51	2.25	-
AV	2.4532G	99.32	Inf	-Inf	69.55	3	Horizontal	235	1.34	-	27.52	2.25	-
PK	2.4842G	67.29	74.00	-6.71	37.30	3	Horizontal	235	1.34	-	27.71	2.28	-
AV	2.4835G	53.68	54.00	-0.32	23.70	3	Horizontal	235	1.34	-	27.70	2.28	-

802.11ax HEW20\_Nss1,(MCS0)\_2TX

09/06/2021

2462MHz\_TX



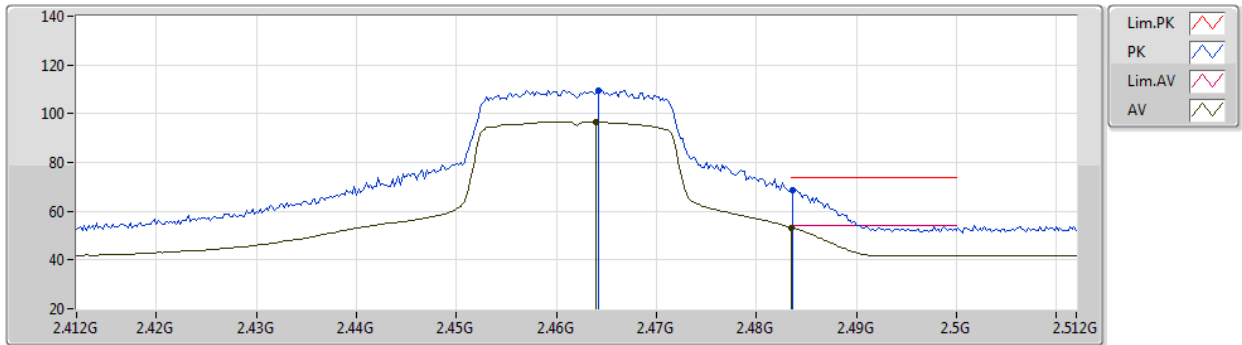
EUT X\_2TX  
Setting 14  
01-A-E-2

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	2.4628G	108.92	Inf	-Inf	79.08	3	Vertical	236	1.05	-	27.58	2.26	-
AV	2.4632G	95.75	Inf	-Inf	65.91	3	Vertical	236	1.05	-	27.58	2.26	-
PK	2.4835G	66.65	74.00	-7.35	36.67	3	Vertical	236	1.05	-	27.70	2.28	-
AV	2.4835G	51.02	54.00	-2.98	21.04	3	Vertical	236	1.05	-	27.70	2.28	-

802.11ax HEW20\_Nss1,(MCS0)\_2TX

09/06/2021

2462MHz\_TX



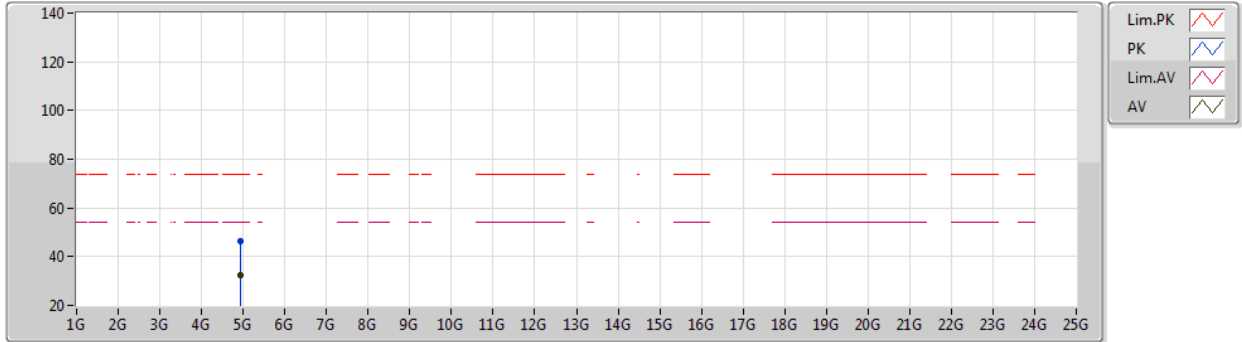
EUT X\_2TX  
Setting 14  
01-A-E-2

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	2.4642G	109.58	Inf	-Inf	79.73	3	Horizontal	233	1.20	-	27.59	2.26	-
AV	2.464G	96.79	Inf	-Inf	66.95	3	Horizontal	233	1.20	-	27.58	2.26	-
PK	2.4836G	68.54	74.00	-5.46	38.56	3	Horizontal	233	1.20	-	27.70	2.28	-
AV	2.4835G	53.36	54.00	-0.64	23.38	3	Horizontal	233	1.20	-	27.70	2.28	-

802.11ax HEW20\_Nss1,(MCS0)\_2TX

09/06/2021

2462MHz\_TX



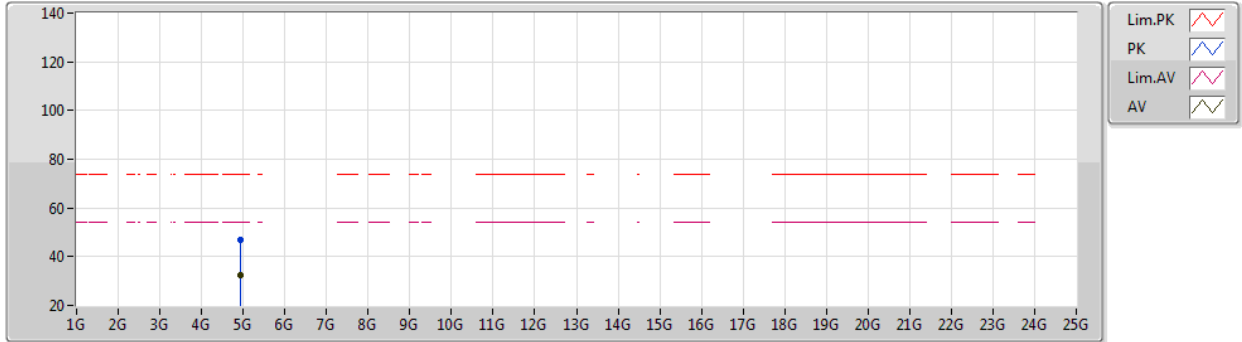
EUT X\_2TX  
Setting 14  
01-A-K-5

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	4.93284G	46.30	74.00	-27.70	41.50	3	Vertical	296	1.80	-	32.70	5.07	32.97
AV	4.93116G	32.54	54.00	-21.46	27.75	3	Vertical	296	1.80	-	32.69	5.07	32.97

802.11ax HEW20\_Nss1,(MCS0)\_2TX

09/06/2021

2462MHz\_TX



EUT X\_2TX  
Setting 14  
01-A-K-5

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	4.92896G	46.76	74.00	-27.24	42.00	3	Horizontal	28	1.80	-	32.67	5.06	32.97
AV	4.9314G	32.66	54.00	-21.34	27.87	3	Horizontal	28	1.80	-	32.69	5.07	32.97



**Summary**

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	AV	1.16598G	22.32	54.00	-31.68	Vertical



