



FCC RADIO TEST REPORT

FCC ID : NDD9574791906
Equipment : AX1800 Dual-Band Ceiling Mount PoE AP
Brand Name : EDIMAX
Model Name : EW-7479CAX, CAX1800
Applicant : Edimax Technology Co., Ltd
No.278, Xinhua 1st Rd., Neihu Dist., Taipei City, Taiwan
Manufacturer : Edimax Technology Co., Ltd
No.278, Xinhua 1st Rd., Neihu Dist., Taipei City, Taiwan
Standard : 47 CFR FCC Part 15.247

The product was received on Sep. 12, 2019, and testing was started from Oct. 19, 2019 and completed on Oct. 25, 2019. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

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

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


Approved by: Cliff Chang

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory
No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)



Table of Contents

History of this test report.....	3
Summary of Test Result.....	4
1 General Description	5
1.1 Information.....	5
1.2 Applicable Standards	8
1.3 Testing Location Information	8
1.4 Measurement Uncertainty	8
2 Test Configuration of EUT.....	9
2.1 Test Channel Mode	9
2.2 The Worst Case Measurement Configuration.....	10
2.3 EUT Operation during Test	12
2.4 Accessories	12
2.5 Support Equipment.....	13
2.6 Test Setup Diagram	14
3 Transmitter Test Result	17
3.1 AC Power-line Conducted Emissions	17
3.2 DTS Bandwidth	19
3.3 Maximum Conducted Output Power	20
3.4 Power Spectral Density	23
3.5 Emissions in Non-restricted Frequency Bands	25
3.6 Emissions in Restricted Frequency Bands.....	26
4 Test Equipment and Calibration Data	30
Appendix A. Test Results of AC Power-line Conducted Emissions	
Appendix B. Test Results of DTS Bandwidth	
Appendix C. Test Results of Maximum Conducted Output Power	
Appendix D. Test Results of Power Spectral Density	
Appendix E. Test Results of Emissions in Non-restricted Frequency Bands	
Appendix F. Test Results of Emissions in Restricted Frequency Bands	
Appendix G. Test Results of Radiated Emission Co-location	
Appendix H. Test Photos	
Photographs of EUT v01	



TEL : 886-3-656-9065
FAX : 886-3-656-9085
Report Template No.: CB-A10_10 Ver1.0



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:

1. The test configuration, test mode and test software were written in this test report are declared by the manufacturer.
2. 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: Sandy Chuang



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]
2400-2483.5	n (HT40), VHT40, ax (HEW40)	2422-2452	3-9 [7]

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11b	20	2TX
2.4-2.4835GHz	802.11g	20	2TX
2.4-2.4835GHz	802.11n HT20	20	2TX
2.4-2.4835GHz	802.11n HT20-BF	20	2TX
2.4-2.4835GHz	VHT20	20	2TX
2.4-2.4835GHz	VHT20-BF	20	2TX
2.4-2.4835GHz	802.11ax HEW20	20	2TX
2.4-2.4835GHz	802.11ax HEW20-BF	20	2TX
2.4-2.4835GHz	802.11n HT40	40	2TX
2.4-2.4835GHz	802.11n HT40-BF	40	2TX
2.4-2.4835GHz	VHT40	40	2TX
2.4-2.4835GHz	VHT40-BF	40	2TX
2.4-2.4835GHz	802.11ax HEW40	40	2TX
2.4-2.4835GHz	802.11ax HEW40-BF	40	2TX

Note:

- ♦ 11b mode uses a combination of DSSS-DBPSK, DQPSK, CCK modulation.
- ♦ 11g, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- ♦ VHT20, VHT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- ♦ HEW20, HEW40 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- ♦ BWch is the nominal channel bandwidth.
- ♦ Nss-Min is the minimum number of spatial streams.
- ♦ Nant is the number of outputs. e.g., 2(2,3) means have 2 outputs for port 2 and port 3. 2 means have 2 outputs for port 1 and port 2.
- ♦ The product can only be ceiling mounted.

**1.1.2 Antenna Information**

Ant.	Port		Brand	Model Name	Antenna Type	Connector	Gain (dBi)	
	2.4GHz	5GHz					2.4GHz	5GHz
1	2	1	LYNwave	ALX19P-222AA4-00	PIFA Antenna	I-PEX	2.2	2.9
2	1	2	LYNwave	ALX19P-222AA5-00	PIFA Antenna	I-PEX	2.1	2.6

Note: The above information was declared by manufacturer.

For 2.4GHz function:**IEEE 802.11b/g/n/VHT/ax (2TX/2RX):**

Port 1 and Port 2 can be used as transmitting/receiving antenna.

Port 1 and Port 2 could transmit/receive simultaneously.

For 5GHz function:**IEEE 802.11a/n/ac/ax (2TX/2RX):**

Port 1 and Port 2 can be used as transmitting/receiving antenna.

Port 1 and Port 2 could transmit/receive simultaneously.

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11b	0.612	2.13	666.25u	3k
802.11g	0.949	0.23	1.978m	1k
802.11ax HEW20	0.94	0.27	5.448m	300
802.11ax HEW40	0.952	0.21	5.448m	300

Note:

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

1.1.4 EUT Operational Condition

EUT Power Type	From Power Adapter or PoE			
Beamforming Function	<input checked="" type="checkbox"/>	With beamforming	<input type="checkbox"/>	Without beamforming
	The product has beamforming function for n/VHT/ax in 2.4GHz and n/ac/ax in 5GHz			
Function	<input checked="" type="checkbox"/>	Point-to-multipoint	<input type="checkbox"/>	Point-to-point
Test Software Version	QRCT : v4.0.00074			

Note: The above information was declared by manufacturer.



1.1.5 Table for Multiple Listing

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

Model Name	Description
EW-7479CAX	All the models are identical; different models serve as marketing strategy.
CAX1800	

From the above models, model: CAX1800 was selected as representative model for the test and its data was recorded in this report.



1.2 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ 47 CFR FCC Part 15
- ♦ ANSI C63.10-2013
- ♦ FCC KDB 558074 D01 v05r02
- ♦ FCC KDB 662911 D01 v02r01
- ♦ FCC KDB 414788 D01 v01r01

1.3 Testing Location Information

Testing Location				
<input type="checkbox"/>	HWA YA	ADD : No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)	TEL : 886-3-327-3456	FAX : 886-3-327-0973
<input checked="" type="checkbox"/>	JHUBEI	ADD : No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C.	TEL : 886-3-656-9065	FAX : 886-3-656-9085

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH01-CB	Eddie Weng	24-25.8°C / 57-59%	Oct. 21, 2019~ Oct. 22, 2019
Radiated (Below 1GHz)	03CH06-CB	Paul Chen	23.8-24.4°C / 54-58%	Oct. 23, 2019
Radiated (Above 1GHz)	03CH06-CB	Eason Chen	23.6-25.2°C / 56-58%	Oct. 19, 2019~ Oct. 22, 2019
AC Conduction	CO01-CB	Rick Yeh	25~26°C / 45~47%	Oct. 25, 2019

Test site Designation No. TW0006 with FCC.

Test site registered number IC 4086D with Industry Canada.

1.4 Measurement Uncertainty

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

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	2.0 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	5.1 dB	Confidence levels of 95%
Conducted Emission	2.4 dB	Confidence levels of 95%
Output Power Measurement	1.5 dB	Confidence levels of 95%
Power Density Measurement	2.4 dB	Confidence levels of 95%
Bandwidth Measurement	2%	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

Mode	PowerSetting
802.11b_Nss1,(1Mbps)_2TX	-
2412MHz	19
2437MHz	22
2462MHz	20.5
802.11g_Nss1,(6Mbps)_2TX	-
2412MHz	16
2417MHz	17.5
2437MHz	21.5
2457MHz	17
2462MHz	16.5
VHT20_Nss1,(MCS0)_2TX	-
2412MHz	15
2417MHz	18
2437MHz	20.5
2457MHz	16.5
2462MHz	16.5
VHT40_Nss1,(MCS0)_2TX	-
2422MHz	14
2437MHz	16
2452MHz	15.5
802.11ax HEW20_Nss1,(MCS0)_2TX	-
2412MHz	15
2417MHz	18
2437MHz	20.5
2457MHz	16.5
2462MHz	16.5
802.11ax HEW40_Nss1,(MCS0)_2TX	-
2422MHz	14
2437MHz	16
2452MHz	15.5

Note:

- ♦ VHT20/VHT40 covers HT20/HT40, due to same modulation. The power setting for 802.11n HT20 and HT40 are the same or lower than 802.11ac VHT20 and VHT40.
- ♦ There are two modes of EUT, one is beamforming mode, and the other is Non-beamforming mode for n/VHT/ax in 2.4GHz and n/ac/ax in 5GHz. For Manufacturer requirement: Only Non-beamforming mode was tested and recorded in this report.
- ♦ The power setting will be 3dB lower than non-beamforming for beamforming mode by manufacturer declaration.



2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral
Operating Mode	Normal Link
1	Normal Link: RJ-45 cable (color: yellow) + Adapter 1
2	Normal Link: RJ-45 cable (color: yellow) + Adapter 2
3	Normal Link: RJ-45 cable (color: yellow) + PoE
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	Normal Link: RJ-45 cable (color: gray) + Adapter 2
For operating mode 2 is the worst case and it was record in this test report.	

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



The Worst Case Mode for Following Conformance Tests	
Tests Item	Emissions in Restricted Frequency Bands
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	Normal Link
1	Normal Link: RJ-45 cable (color: yellow) + Adapter 1
2	Normal Link: RJ-45 cable (color: yellow) + Adapter 2
3	Normal Link: RJ-45 cable (color: yellow) + PoE
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	Normal Link: RJ-45 cable (color: gray) + Adapter 2
For operating mode 2 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Radiated Emission Co-location
Test Condition	Radiated measurement
Operating Mode	Normal Link
1	WLAN 2.4GHz+WLAN 5GHz
Refer to Appendix G for Radiated Emission Co-location.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	WLAN 2.4GHz+WLAN 5GHz
Refer to Sporton Test Report No.: FA970322 for Co-location RF Exposure Evaluation.	

Note 1: The EUT can only be used in Z-axis position.

Note 2: The PoE below is for measurement only, would not be marketed.

The PoE information as below: Adapter

Support Unit	Brand	Model Number
PoE	BullotPoE	BPI100-GH



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

Accessories			
Equipment Name	Brand Name	Model Name	Rating
Adapter 1	DVE	DSA-12PF09-12 FUS 120100	Input: 100-240V~50/60Hz 0.5A Output: +12V, 1A
Adapter 2	APD	WB-12G12R	Input: 100-240V~, 50-60Hz 0.3A Max. Output: 12V, 1A
Other			
Plug*1 (use for Adapter 2)			
RJ-45 cable*1: Non-Shielded, 1.8m (color: yellow)			
RJ-45 cable*1: Non-Shielded, 1.0m (color: gray)			
Ceiling Mount Bracket*1			



2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	5G NB	DELL	E6430	N/A
B	LAN NB	DELL	E6430	N/A
C	2.4G NB	DELL	E6430	N/A

For Radiated (below 1GHz):

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

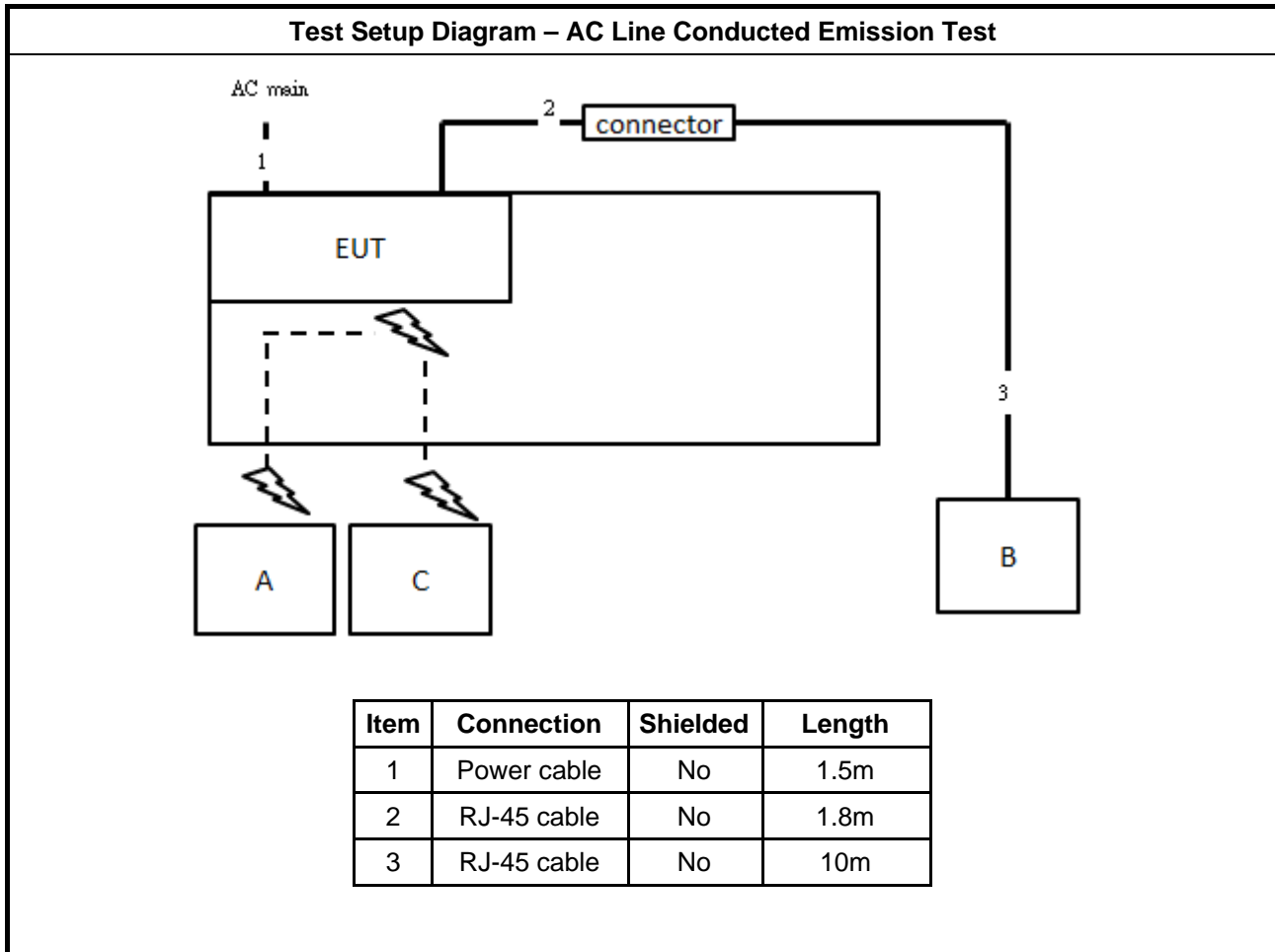
For Radiated (above 1GHz):

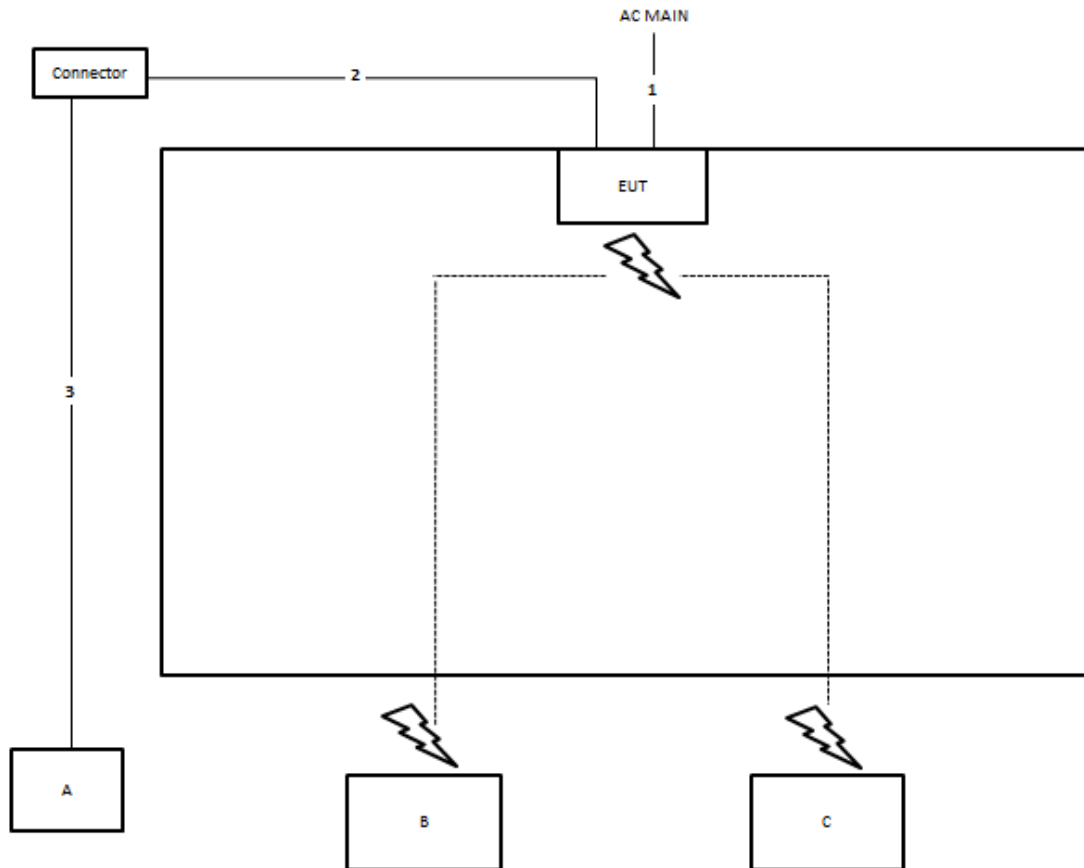
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E4300	N/A

For RF Conducted:

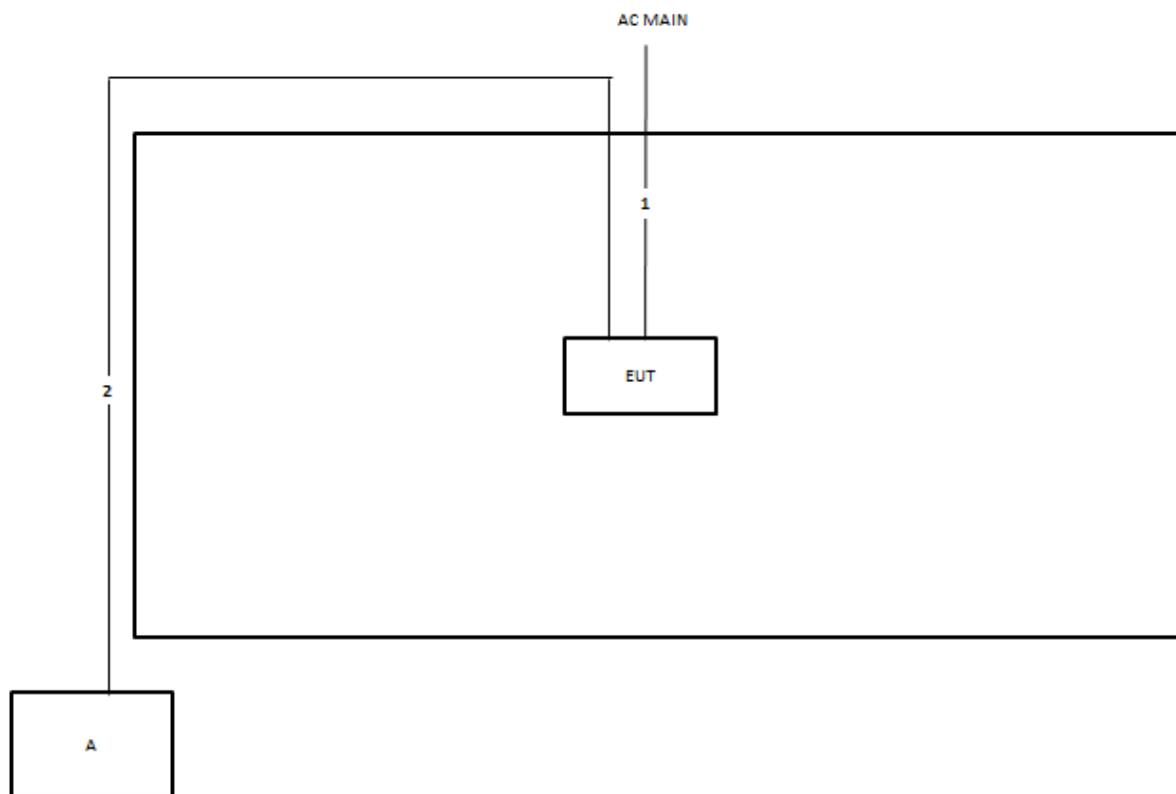
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E4300	N/A

2.6 Test Setup Diagram



Test Setup Diagram - Radiated Test < 1GHz


Item	Connection	Shielded	Length
1	Power cable	No	1.5m
2	RJ-45 cable	No	1.8m
3	RJ-45 cable	No	10m

Test Setup Diagram - Radiated Test > 1GHz


Item	Connection	Shielded	Length
1	Power cable	No	1.5m
2	RJ-45 cable	No	10m



3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

Note 1: * Decreases with the logarithm of the frequency.

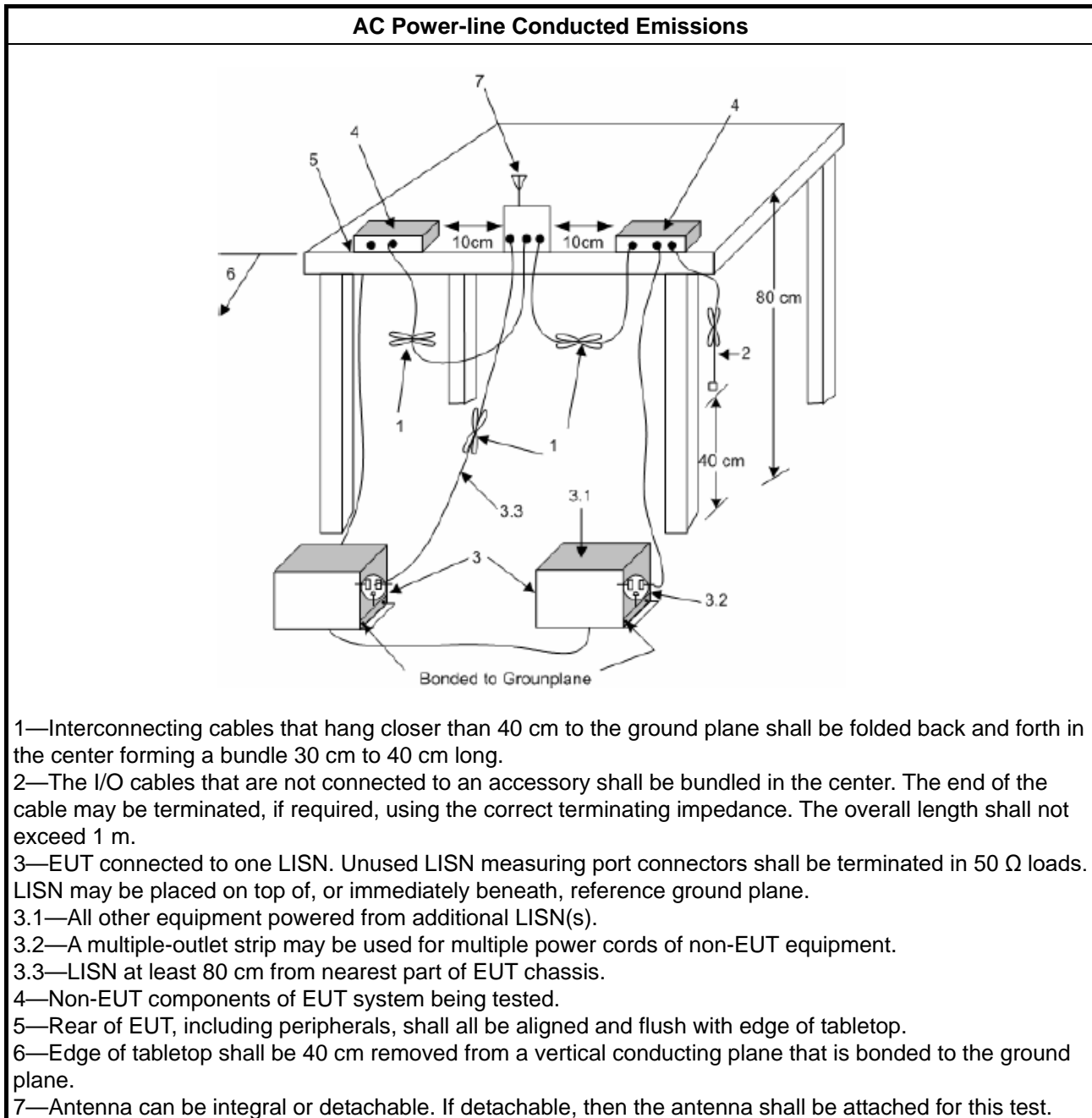
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

Test Method
<input checked="" type="checkbox"/> Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

3.1.4 Test Setup



3.1.5 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 DTS Bandwidth

3.2.1 6dB Bandwidth Limit

6dB Bandwidth Limit
Systems using digital modulation techniques:
<ul style="list-style-type: none"> 6 dB bandwidth \geq 500 kHz.

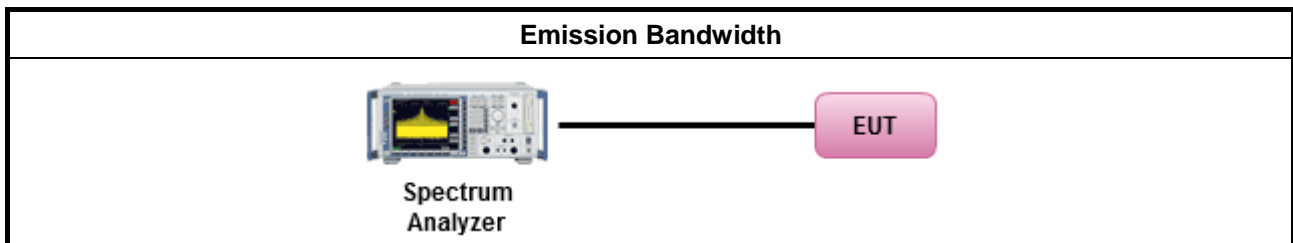
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

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

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit	
	▪ If $G_{TX} \leq 6$ dBi, then $P_{Out} \leq 30$ dBm (1 W)
	▪ Point-to-multipoint systems (P2M): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ dBm
	▪ Point-to-point systems (P2P): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	▪ Smart antenna system (SAS):
	- Single beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	- Overlap beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	- Aggregate power on all beams: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3 + 8$ dB dBm
P_{Out} = maximum peak conducted output power or maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.	

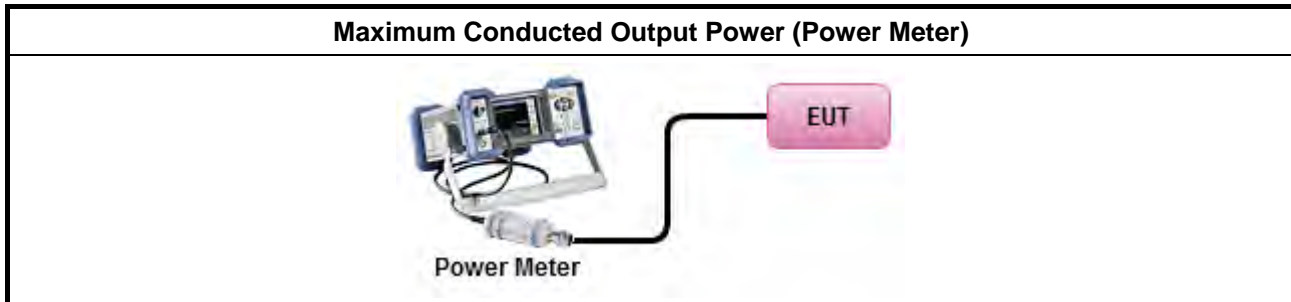
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> Maximum Peak Conducted Output Power 	
<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"> Maximum Conducted Output Power 	
[duty cycle ≥ 98% or external video / power trigger]	
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.2 Method AVGSA-1.
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.3 Method AVGSA-1A. (alternative)
duty cycle < 98% and average over on/off periods with duty factor	
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.4 Method AVGSA-2.
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.5 Method AVGSA-2A (alternative)
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.6 Method AVGSA-3
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.7 Method AVGSA-3A (alternative)
Measurement using a power meter (PM)	
<input checked="" 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 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"> For conducted measurement. 	
<ul style="list-style-type: none"> 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. 	
<ul style="list-style-type: none"> If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$ 	

3.3.4 Test Setup



3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C



3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

Power Spectral Density Limit
▪ Power Spectral Density (PSD) ≤ 8 dBm/3kHz

3.4.2 Measuring Instruments

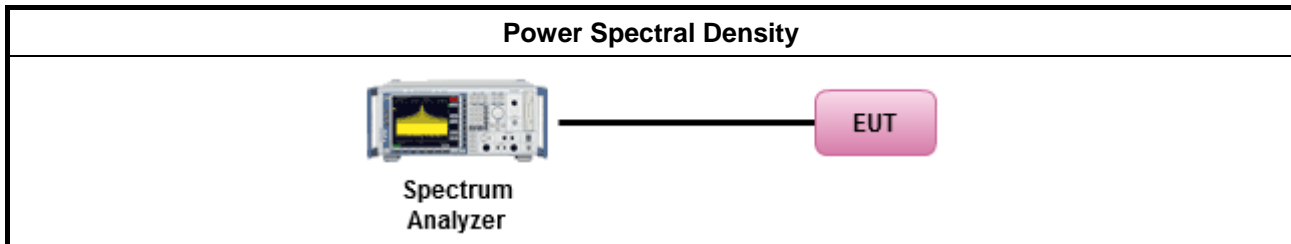
Refer a test equipment and calibration data table in this test report.

3.4.3 Test Procedures

Test Method	
▪ Peak power spectral density procedures that the same method as used to determine the conducted output power. If maximum peak conducted output power was measured to demonstrate compliance to the output power limit, then the peak PSD procedure below (Method PKPSD) shall be used. If maximum conducted output power was measured to demonstrate compliance to the output power limit, then one of the average PSD procedures shall be used, as applicable based on the following criteria (the peak PSD procedure is also an acceptable option).	
<input checked="" type="checkbox"/>	Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10.2 Method PKPSD. [duty cycle $\geq 98\%$ or external video / power trigger]
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10.3 Method AVGPSD-1.
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10.5 Method AVGPSD-2.
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10.7 Method AVGPSD-3.
duty cycle $< 98\%$ and average over on/off periods with duty factor	
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10.4 Method AVGPSD-1A. (alternative).
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10.6 Method AVGPSD-2A. (alternative)
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10.8 Method AVGPSD-3A. (alternative)
▪ For conducted measurement.	
▪ If The EUT supports multiple transmit chains using options given below:	
<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,

- ☐ Option 3: Measure and add $10 \log(N)$ dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with $10 \log(N)$. Or each transmit chains shall be add $10 \log(N)$ to compared with the limit.

3.4.4 Test Setup



3.4.5 Test Result of Power Spectral Density

Refer as Appendix D

3.5 Emissions in Non-restricted Frequency Bands

3.5.1 Emissions in Non-restricted Frequency Bands Limit

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

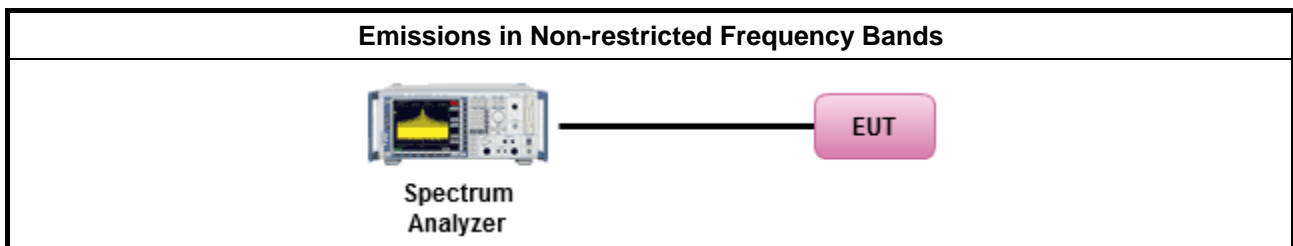
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

Test Method
<ul style="list-style-type: none"> Refer as FCC KDB 558074, clause 8.5 for unwanted emissions into non-restricted bands.

3.5.4 Test Setup



3.5.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix E



3.6 Emissions in Restricted Frequency Bands

3.6.1 Emissions in Restricted Frequency Bands Limit

Restricted Band Emissions Limit			
Frequency Range (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m)	Measure Distance (m)
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300
0.490~1.705	24000/F(kHz)	33.8 - 23	30
1.705~30.0	30	29	30
30~88	100	40	3
88~216	150	43.5	3
216~960	200	46	3
Above 960	500	54	3

Note 1: Test distance for frequencies at or above 30 MHz, measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

Note 2: Test distance for frequencies at below 30 MHz, measurements may be performed at a distance closer than the EUT limit distance; however, an attempt should be made to avoid making measurements in the near field. When performing measurements below 30 MHz at a closer distance than the limit distance, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two or more distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). The test report shall specify the extrapolation method used to determine compliance of the EUT.

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

3.6.2 Measuring Instruments

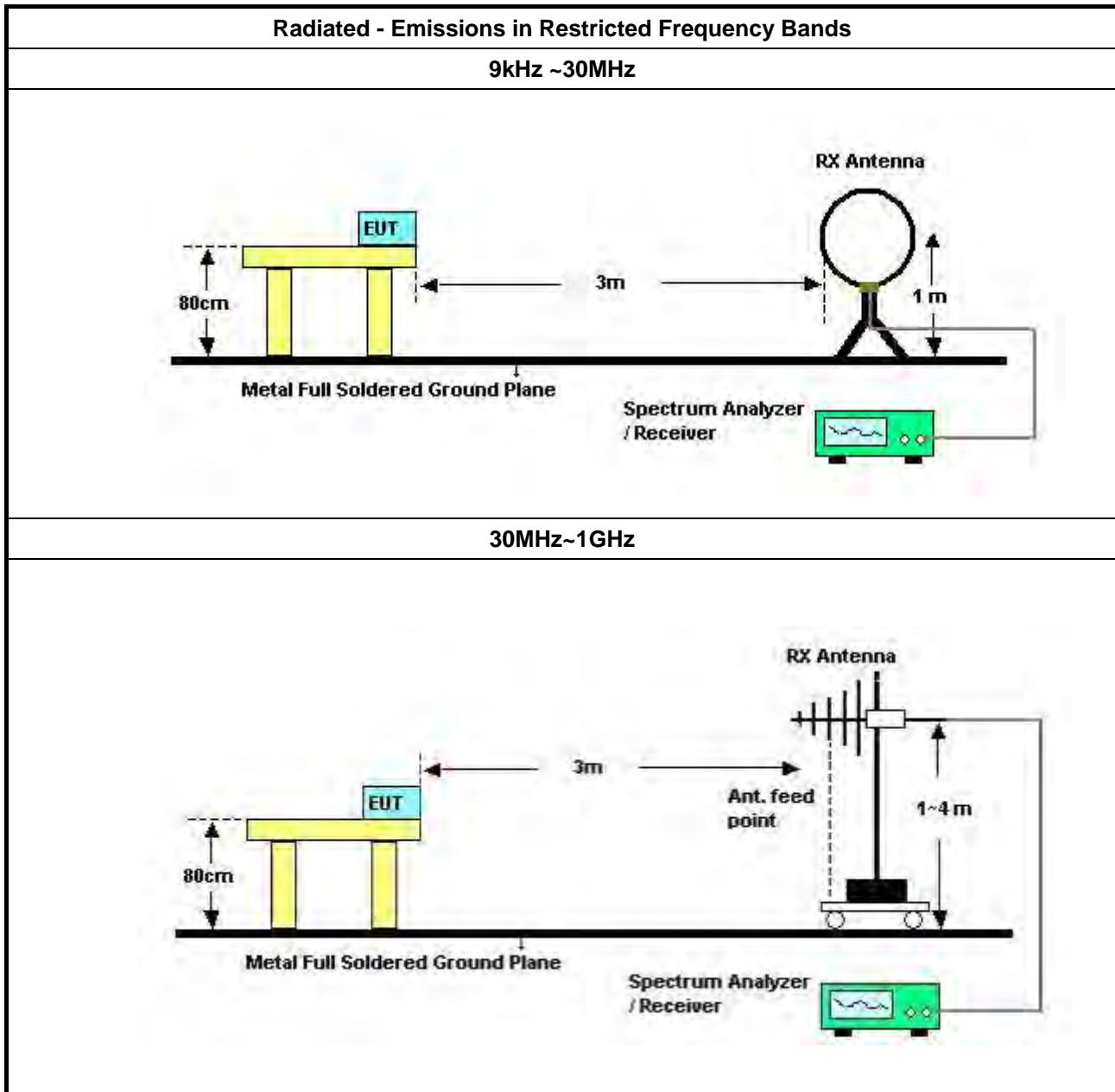
Refer a test equipment and calibration data table in this test report.

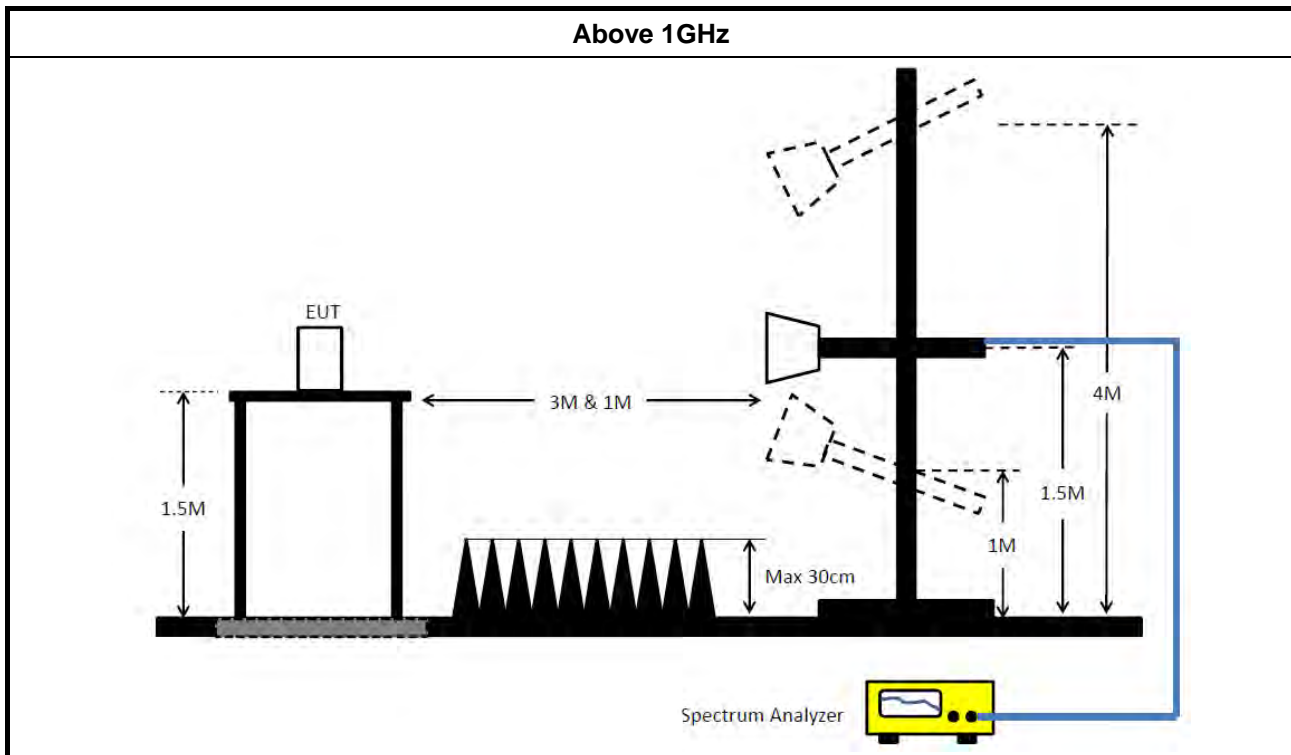


3.6.3 Test Procedures

Test Method	
▪ The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].	
▪ Refer as ANSI C63.10, clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.	
▪ For the transmitter unwanted emissions shall be measured using following options below:	
	▪ Refer as FCC KDB 558074, clause 8.6 for unwanted emissions into restricted bands.
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.1(trace averaging for duty cycle $\geq 98\%$).
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.2(trace averaging + duty factor).
	<input checked="" type="checkbox"/> Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.3(Reduced VBW $\geq 1/T$).
	<input type="checkbox"/> Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW $\geq 1/T$, where T is pulse time.
	<input type="checkbox"/> Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.
	<input checked="" type="checkbox"/> Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.4 measurement procedure peak limit.
▪ For the transmitter band-edge emissions shall be measured using following options below:	
	▪ Refer as FCC KDB 558074 clause 8.7 & C63.10 clause 11.13.1, When the performing peak or average radiated measurements, emissions within 2 MHz of the authorized band edge may be measured using the marker-delta method described below.
	▪ Refer as FCC KDB 558074, clause 8.7 (ANSI C63.10, clause 6.10.6) for marker-delta method for band-edge measurements.
	▪ Refer as FCC KDB 558074, clause 8.7 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).
	▪ For conducted unwanted emissions into restricted bands (absolute emission limits). Devices with multiple transmit chains using options given below: (1) Measure and sum the spectra across the outputs or (2) Measure and add 10 log(N) dB
	▪ For FCC KDB 662911 The methodology described here may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance may be demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred.

3.6.4 Test Setup





3.6.5 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

3.6.6 Emissions in Restricted Frequency Bands (Below 30MHz)

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

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

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

3.6.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F



4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.45GHz	Jan. 28, 2019	Jan. 29, 2020	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Dec. 24, 2018	Dec. 23, 2019	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Jan. 11, 2019	Jan. 10, 2020	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	May 21, 2019	May 20, 2020	Conduction (CO01-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
Bilog Antenna with 6 dB attenuator	TESEQ & EMC	CBL6112D & N-6-06	37878 & AT-N0606	20MHz ~ 2GHz	Aug. 03, 2019	Aug. 02, 2020	Radiation (03CH06-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 29, 2019	Mar. 28, 2020	Radiation (03CH06-CB)
Horn Antenna	SCHWARZBECK	BBHA9120D	9120D-1292	1GHz~18GHz	Jul. 17, 2019	Jul. 16, 2020	Radiation (03CH06-CB)
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170507	15GHz ~ 40GHz	Jun. 12, 2019	Jun. 11, 2020	Radiation (03CH06-CB)
Pre-Amplifier	Agilent	310N	187290	0.1MHz ~ 1GHz	May 07, 2019	May 06, 2020	Radiation (03CH06-CB)
Pre-Amplifier	Agilent	83017A	MY53270064	0.5GHz ~ 26.5GHz	May 08, 2019	May 07, 2020	Radiation (03CH06-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 03, 2019	Jul. 02, 2020	Radiation (03CH06-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Jan. 31, 2019	Jan. 30, 2020	Radiation (03CH01-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	May 15, 2019	May 14, 2020	Radiation (03CH06-CB)
RF Cable-low	HUBER+SUHNER	RG402	Low Cable-05+24	30MHz~1GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH06-CB)
RF Cable-high	HUBER+SUHNER	RG402	High Cable-05	1GHz~18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH06-CB)
RF Cable-high	HUBER+SUHNER	RG402	High Cable-05+24	1GHz~18GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH06-CB)



Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH06-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Feb. 25, 2019	Feb. 24, 2020	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-06	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-07	1 GHz –26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-08	1 GHz –26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-09	1 GHz –26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz –26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-28	1 GHz –26.5 GHz	Nov. 19, 2018	Nov. 18, 2019	Conducted (TH01-CB)
Power Sensor	Agilent	E9327A	US40442088	50MHz~18GHz	Jan. 15, 2019	Jan. 14, 2020	Conducted (TH01-CB)
Power Meter	Agilent	E4416A	GB41291199	50MHz~18GHz	Jan. 15, 2019	Jan. 14, 2020	Conducted (TH01-CB)

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

NCR means Non-Calibration required.



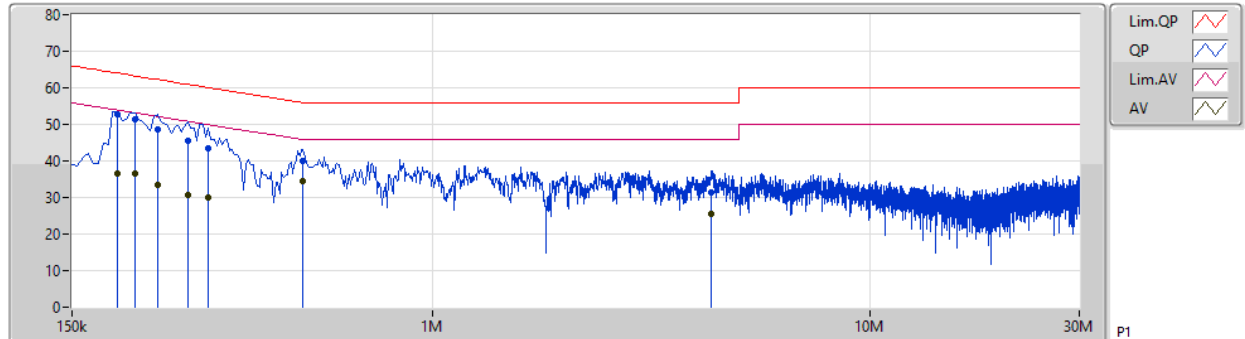
AC Power Port Conducted Emission Result

Appendix A

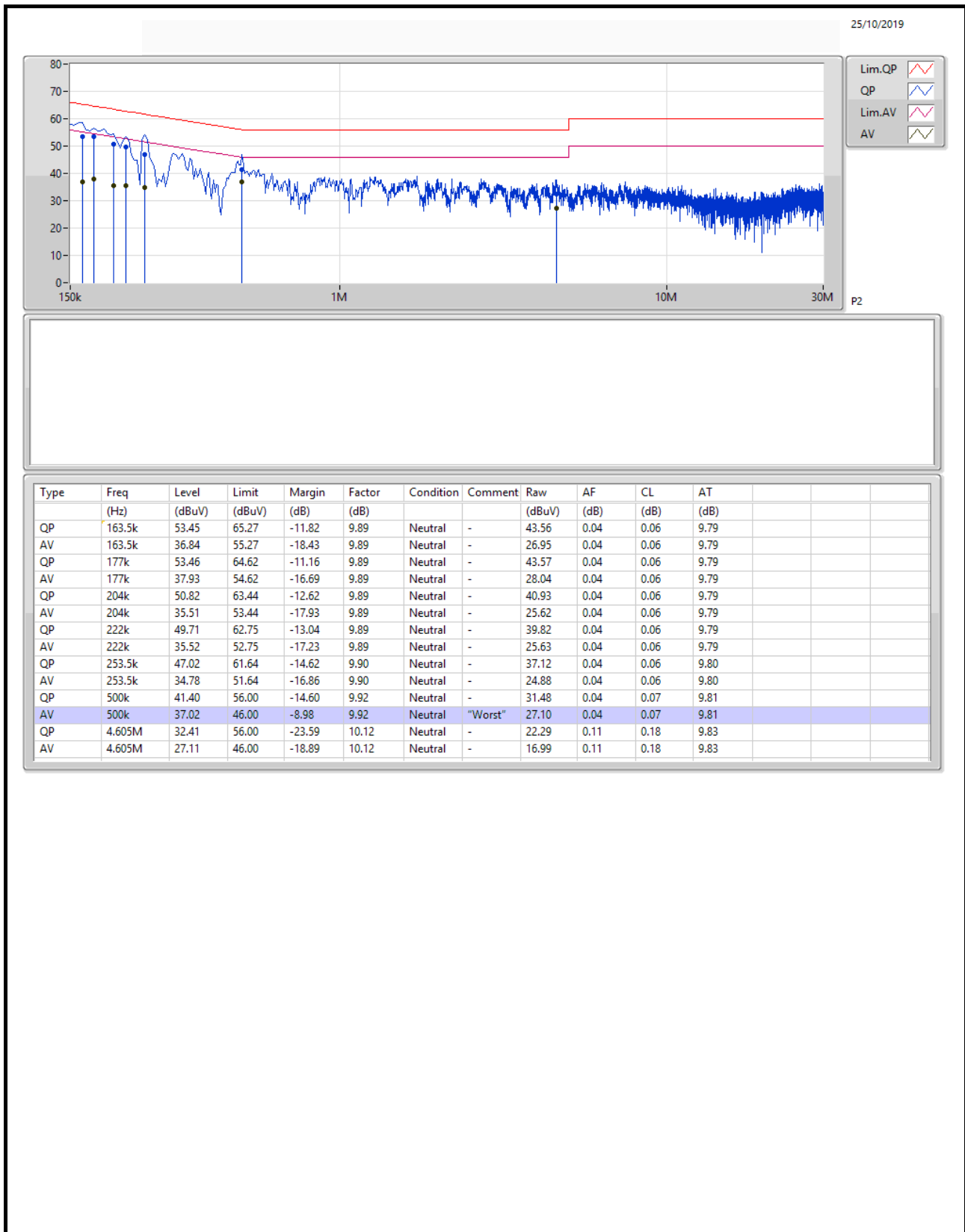
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition
Mode 2	Pass	AV	500k	37.02	46.00	-8.98	9.92	Neutral

25/10/2019



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	AF (dB)	CL (dB)	AT (dB)			
QP	190.5k	52.85	64.01	-11.16	9.91	Line	"Worst"	42.94	0.06	0.06	9.79			
AV	190.5k	36.68	54.01	-17.33	9.91	Line	-	26.77	0.06	0.06	9.79			
QP	208.5k	51.52	63.27	-11.75	9.91	Line	-	41.61	0.06	0.06	9.79			
AV	208.5k	36.68	53.27	-16.59	9.91	Line	-	26.77	0.06	0.06	9.79			
QP	235.5k	48.51	62.25	-13.74	9.91	Line	-	38.60	0.06	0.06	9.79			
AV	235.5k	33.40	52.25	-18.85	9.91	Line	-	23.49	0.06	0.06	9.79			
QP	276k	45.61	60.93	-15.32	9.92	Line	-	35.69	0.06	0.06	9.80			
AV	276k	30.77	50.93	-20.16	9.92	Line	-	20.85	0.06	0.06	9.80			
QP	307.5k	43.51	60.03	-16.52	9.92	Line	-	33.59	0.06	0.06	9.80			
AV	307.5k	29.86	50.03	-20.17	9.92	Line	-	19.94	0.06	0.06	9.80			
QP	505.5k	39.92	56.00	-16.08	9.94	Line	-	29.98	0.06	0.07	9.81			
AV	505.5k	34.36	46.00	-11.64	9.94	Line	-	24.42	0.06	0.07	9.81			
QP	4.34M	31.35	56.00	-24.65	10.13	Line	-	21.22	0.13	0.18	9.82			
AV	4.34M	25.36	46.00	-20.64	10.13	Line	-	15.23	0.13	0.18	9.82			



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	8.575M	15.567M	15M6G1D	7.975M	13.018M
802.11g_Nss1,(6Mbps)_2TX	16.3M	21.839M	21M8D1D	16M	16.392M
VHT20_Nss1,(MCS0)_2TX	17.55M	18.091M	18M1D1D	17.15M	17.566M
VHT40_Nss1,(MCS0)_2TX	36.3M	36.132M	36M1D1D	35.05M	36.032M
802.11ax HEW20_Nss1,(MCS0)_2TX	18.95M	19.19M	19M2D1D	18.4M	18.891M
802.11ax HEW40_Nss1,(MCS0)_2TX	37.95M	37.781M	37M8D1D	37.05M	37.681M

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;

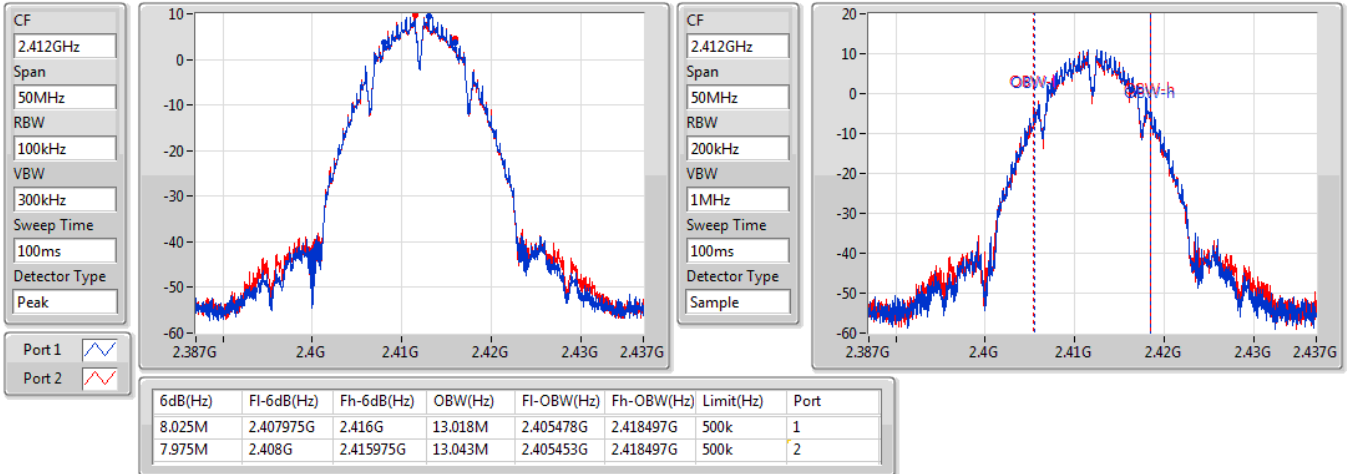
Result

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	8.025M	13.018M	7.975M	13.043M
2437MHz	Pass	500k	7.975M	15.367M	8.575M	15.567M
2462MHz	Pass	500k	8.05M	13.168M	8M	13.368M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.3M	16.392M	16.3M	16.392M
2437MHz	Pass	500k	16.275M	21.839M	16M	21.364M
2462MHz	Pass	500k	16.275M	16.392M	16.3M	16.392M
VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	17.275M	17.566M	17.25M	17.591M
2437MHz	Pass	500k	17.525M	17.966M	17.55M	18.091M
2462MHz	Pass	500k	17.15M	17.566M	17.525M	17.591M
VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	35.45M	36.032M	35.05M	36.082M
2437MHz	Pass	500k	35.9M	36.132M	36.3M	36.132M
2452MHz	Pass	500k	36.3M	36.132M	36.1M	36.082M
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	18.775M	18.891M	18.8M	18.891M
2437MHz	Pass	500k	18.4M	19.19M	18.75M	19.19M
2462MHz	Pass	500k	18.625M	18.916M	18.95M	18.941M
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	37.95M	37.731M	37.8M	37.681M
2437MHz	Pass	500k	37.8M	37.681M	37.05M	37.781M
2452MHz	Pass	500k	37.35M	37.731M	37.85M	37.681M

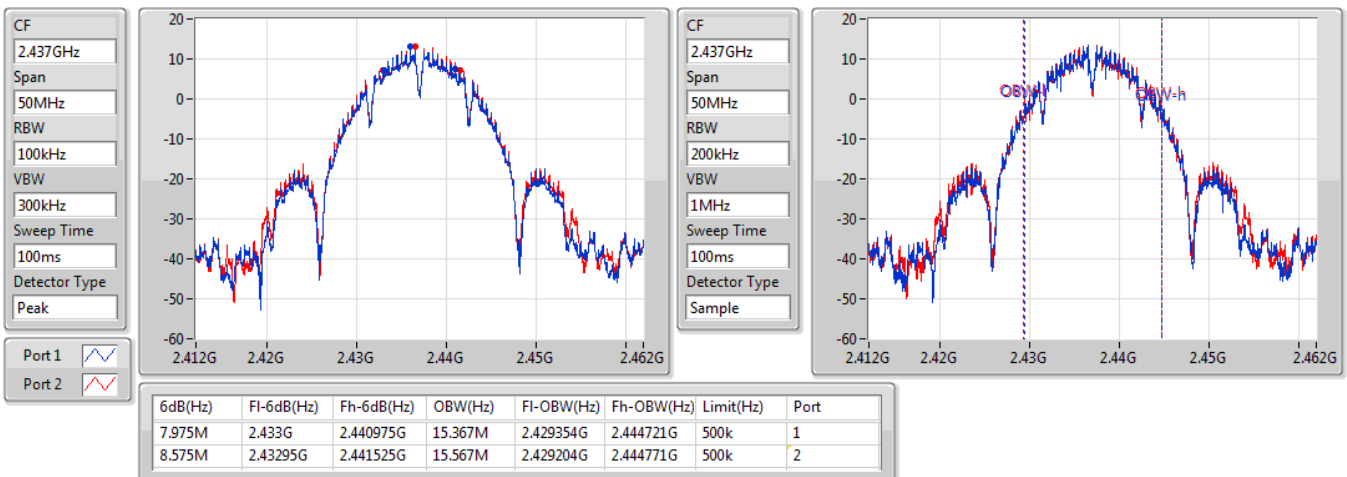
Port X-N dB = Port X 6dB down bandwidth; **Port X-OBW** = Port X 99% occupied bandwidth;

802.11b_Nss1,(1Mbps)_2TX
EBW
2412MHz

22/10/2019


802.11b_Nss1,(1Mbps)_2TX
EBW
2437MHz

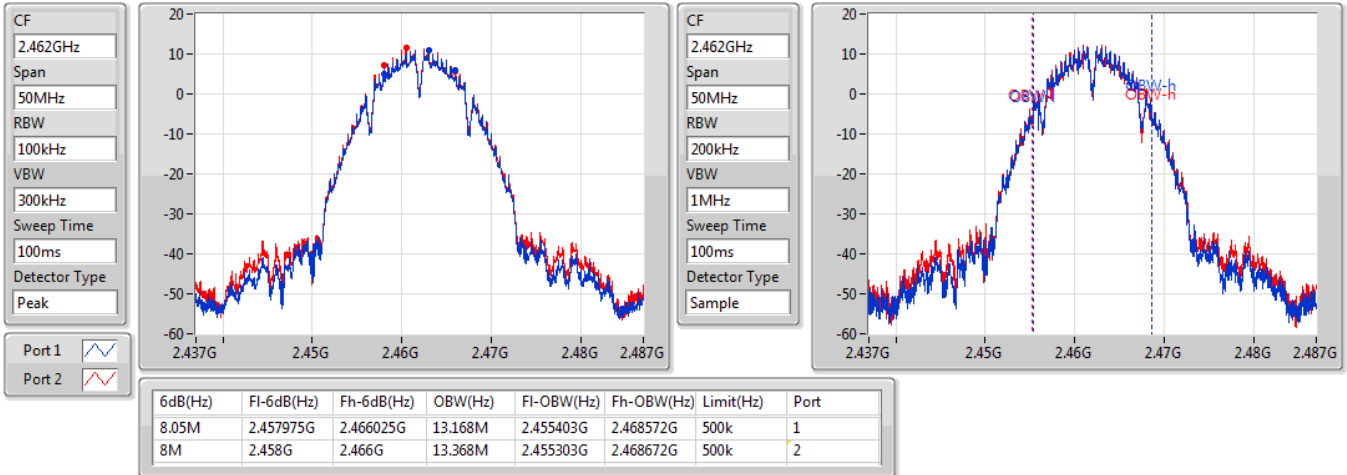
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802.11b_Nss1,(1Mbps)_2TX

EBW
2462MHz

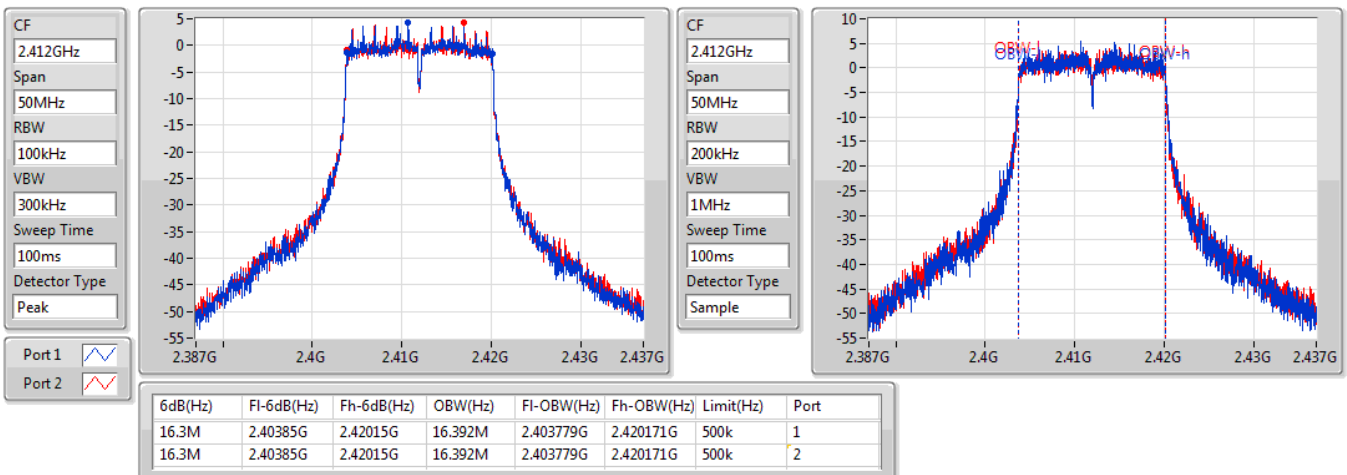
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802.11g_Nss1,(6Mbps)_2TX

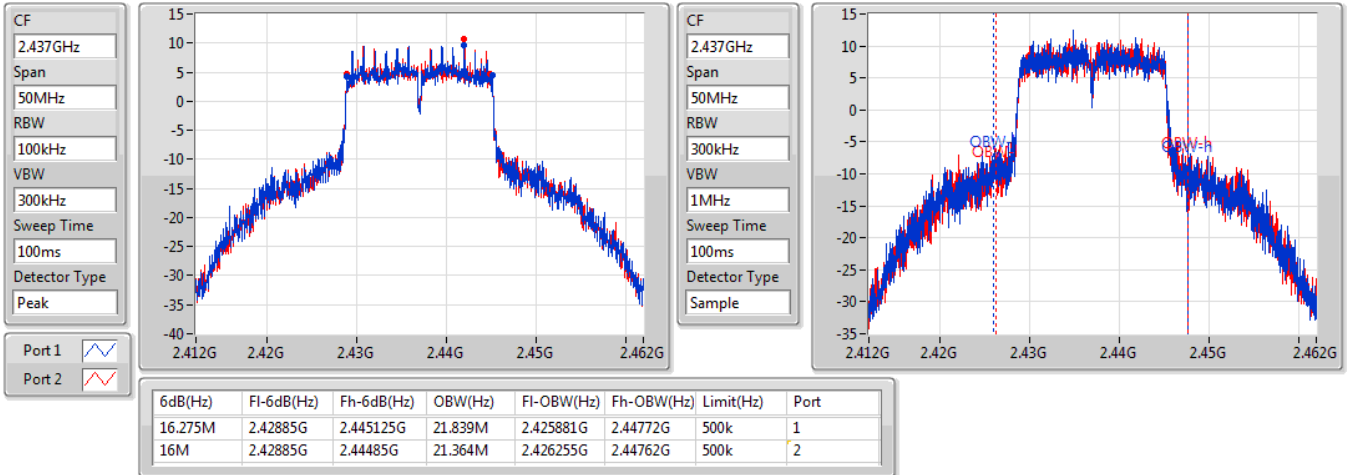
EBW
2412MHz

22/10/2019

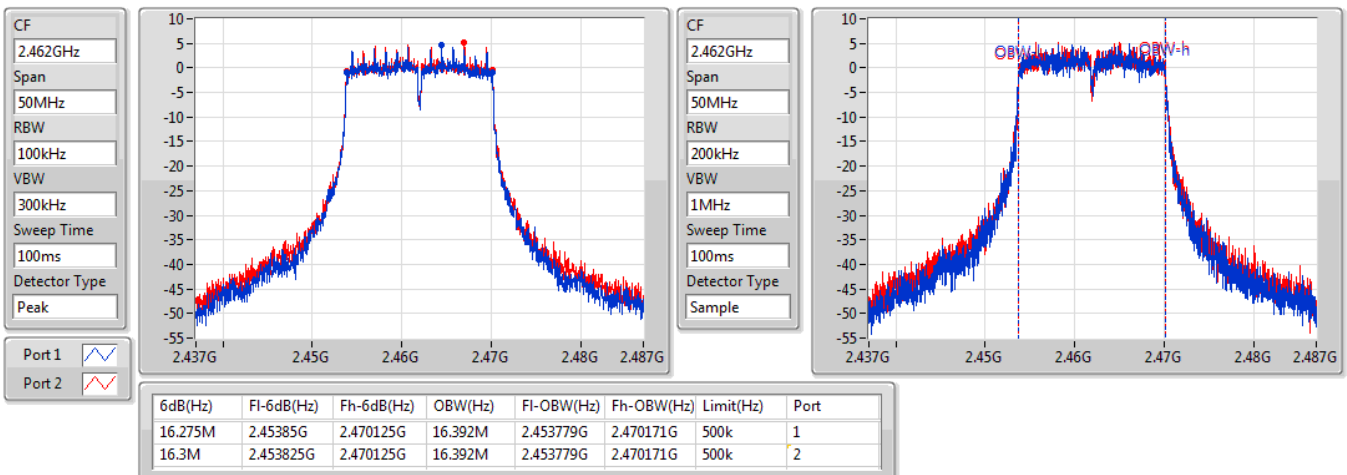


802.11g_Nss1,(6Mbps)_2TX
EBW
2437MHz

22/10/2019

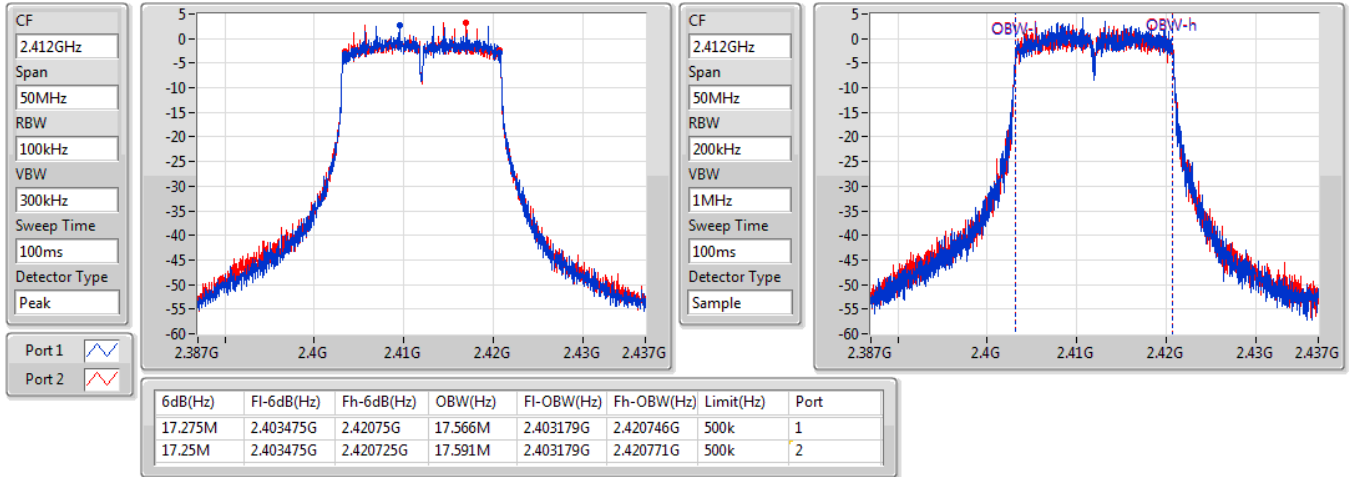

802.11g_Nss1,(6Mbps)_2TX
EBW
2462MHz

22/10/2019

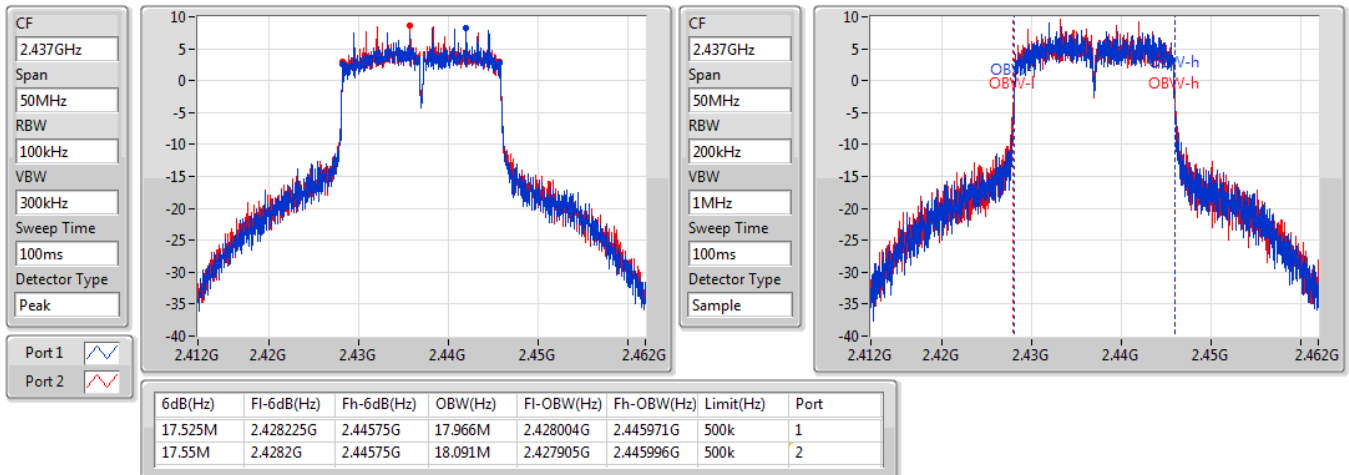


VHT20_Nss1,(MCS0)_2TX
EBW
2412MHz

22/10/2019

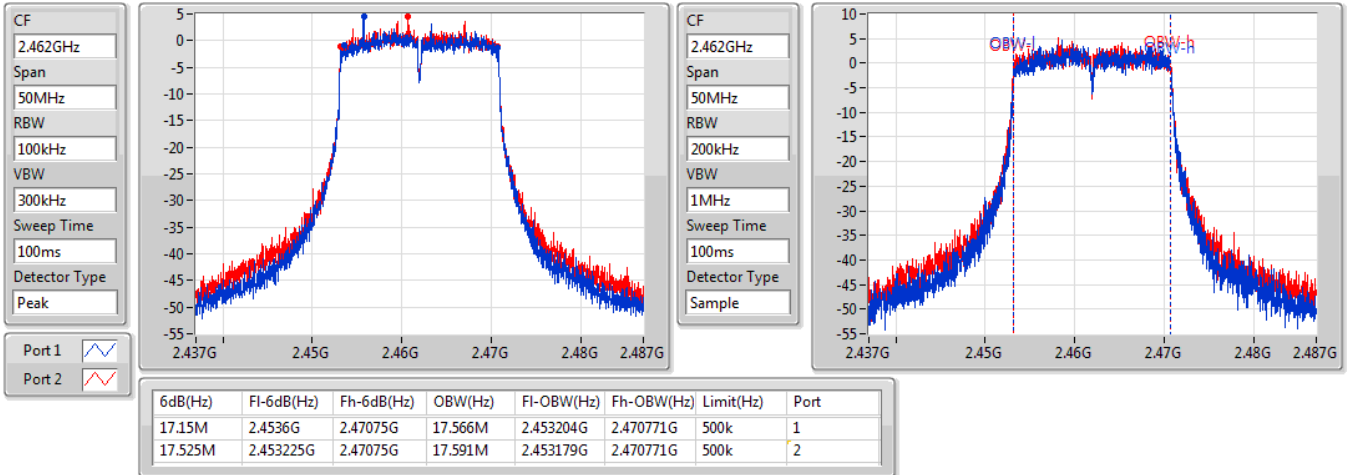

VHT20_Nss1,(MCS0)_2TX
EBW
2437MHz

22/10/2019

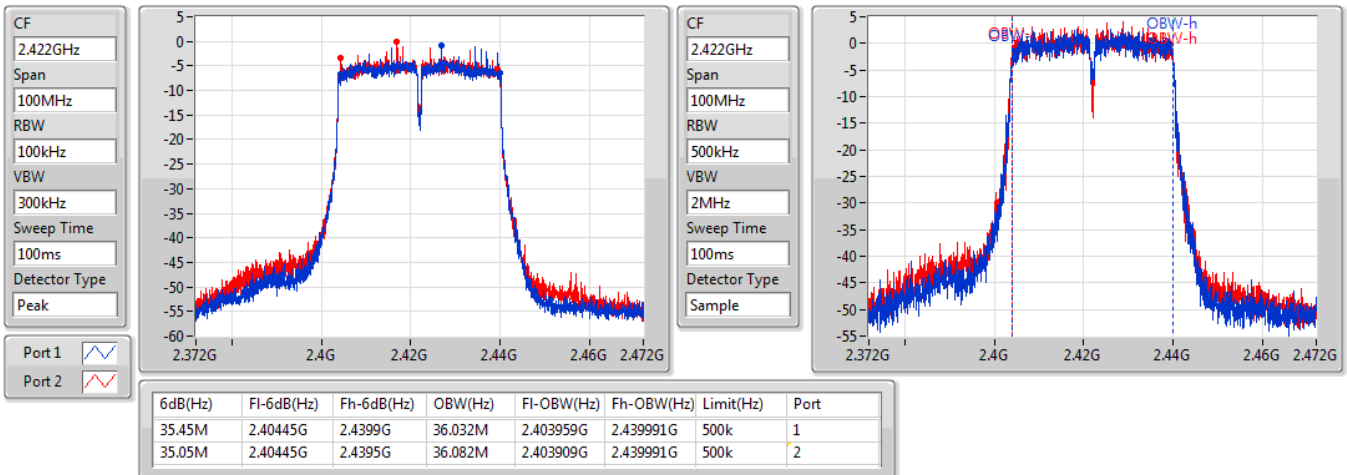


VHT20_Nss1,(MCS0)_2TX
EBW
2462MHz

22/10/2019

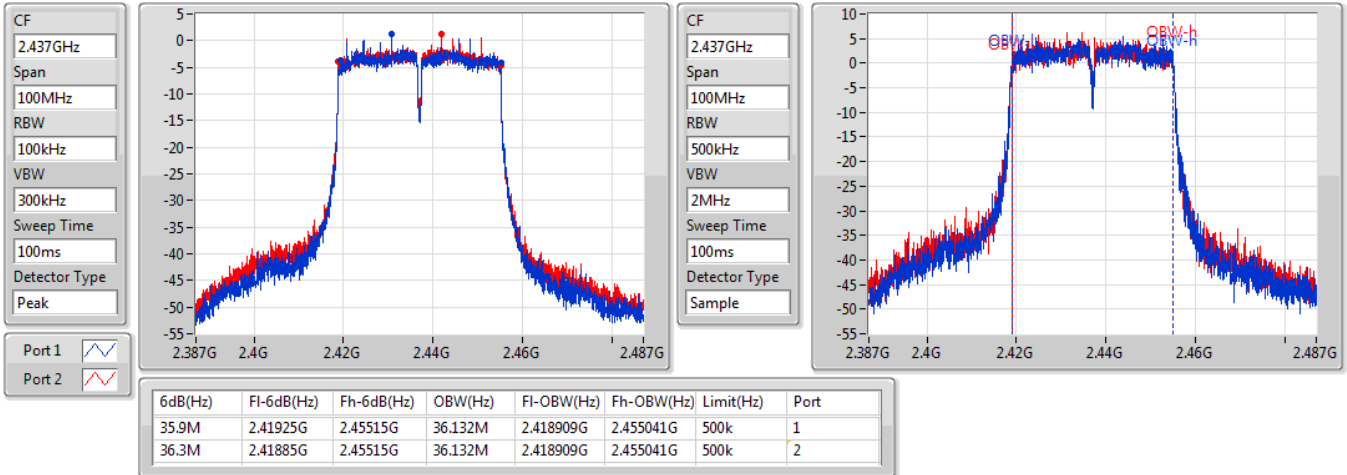

VHT40_Nss1,(MCS0)_2TX
EBW
2422MHz

22/10/2019

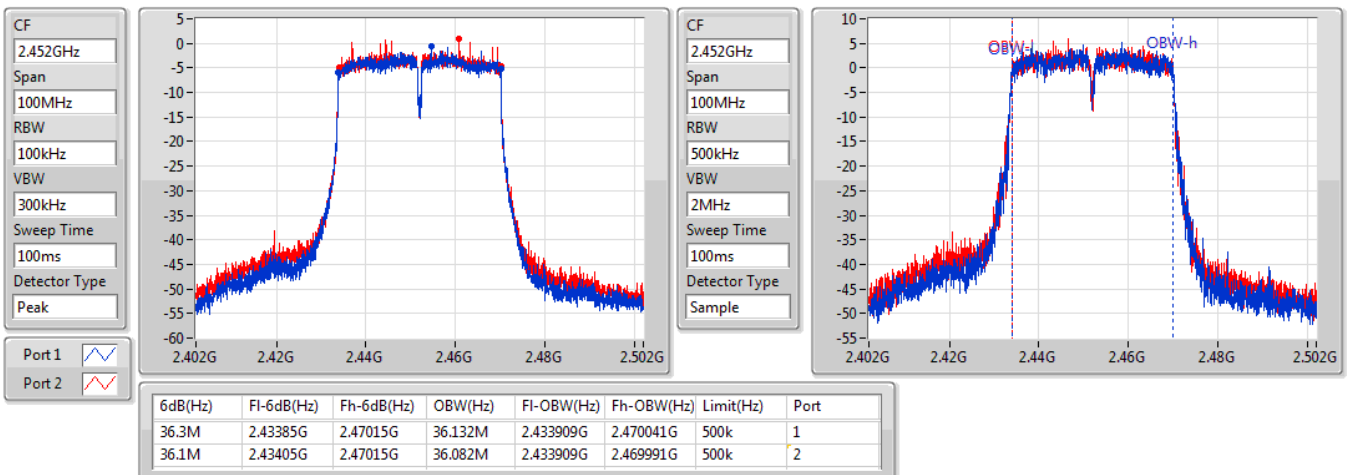


VHT40_Nss1,(MCS0)_2TX
EBW
2437MHz

22/10/2019

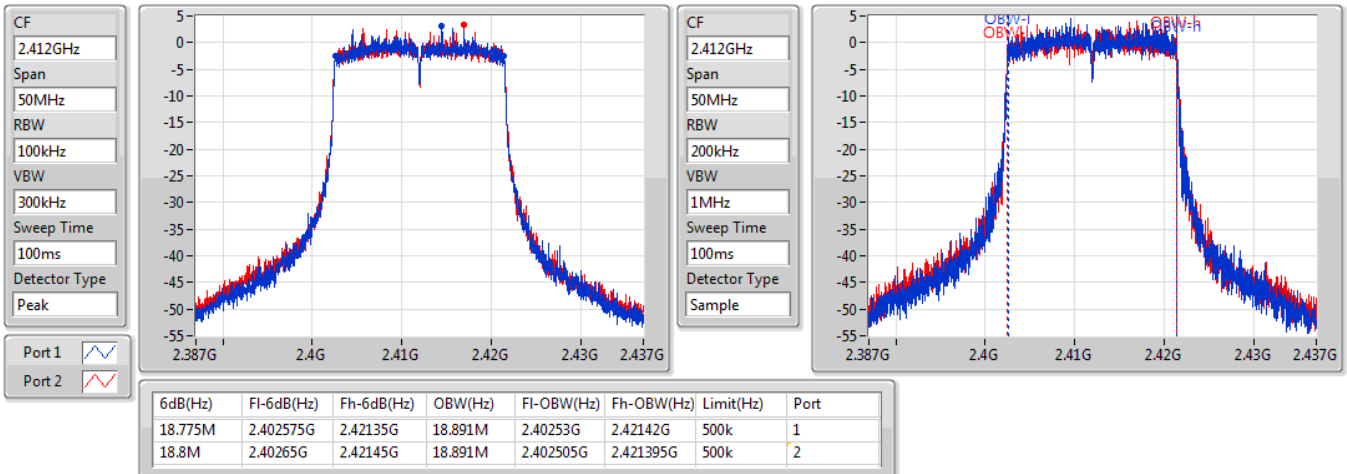

VHT40_Nss1,(MCS0)_2TX
EBW
2452MHz

22/10/2019

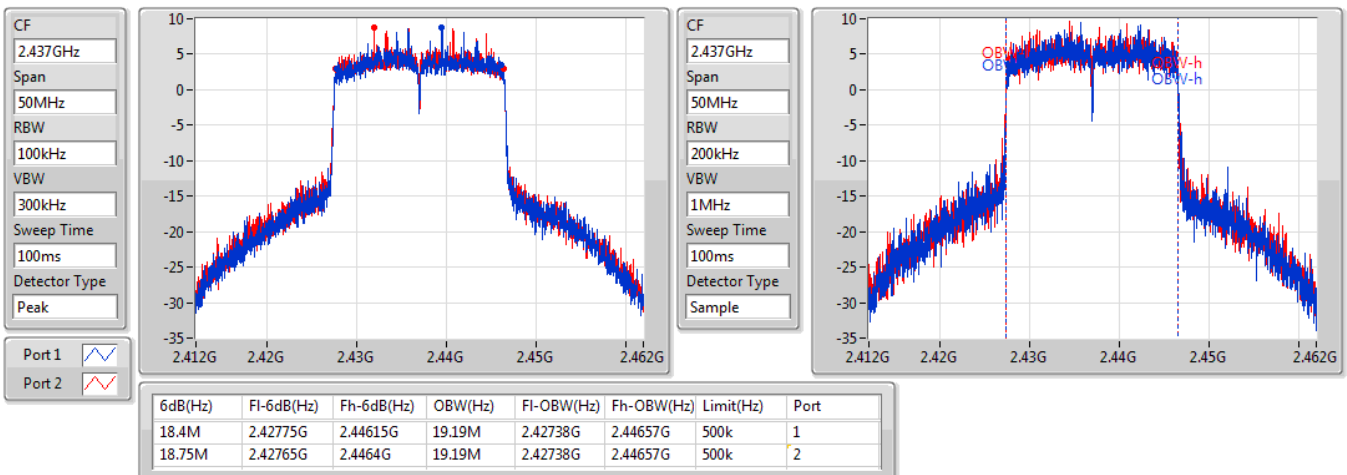


802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
2412MHz

22/10/2019

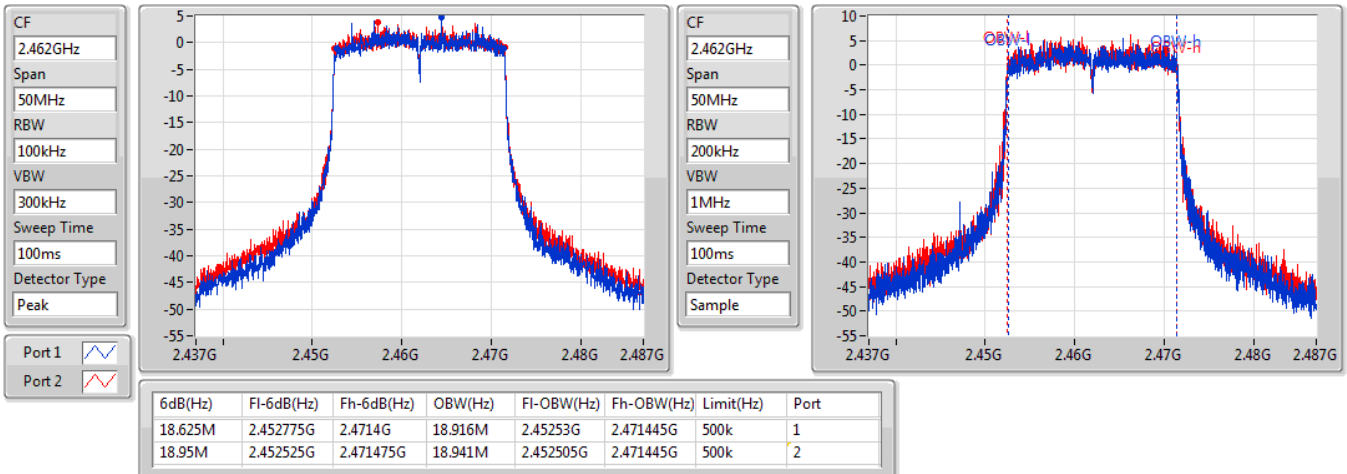

802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
2437MHz

22/10/2019

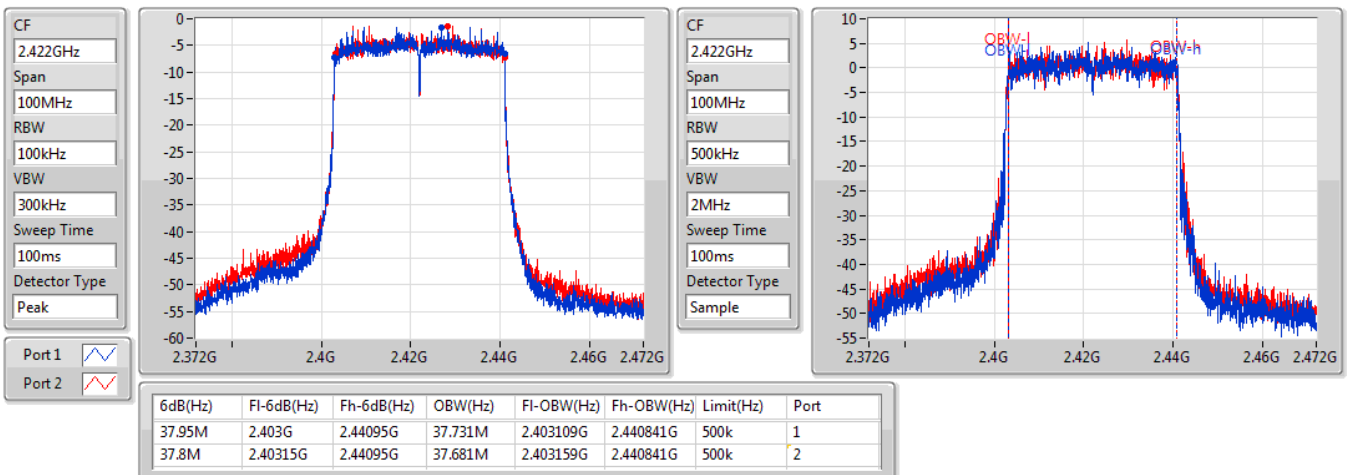


802.11ax HEW20_Nss1,(MCS0)_2TX
EBW
2462MHz

22/10/2019

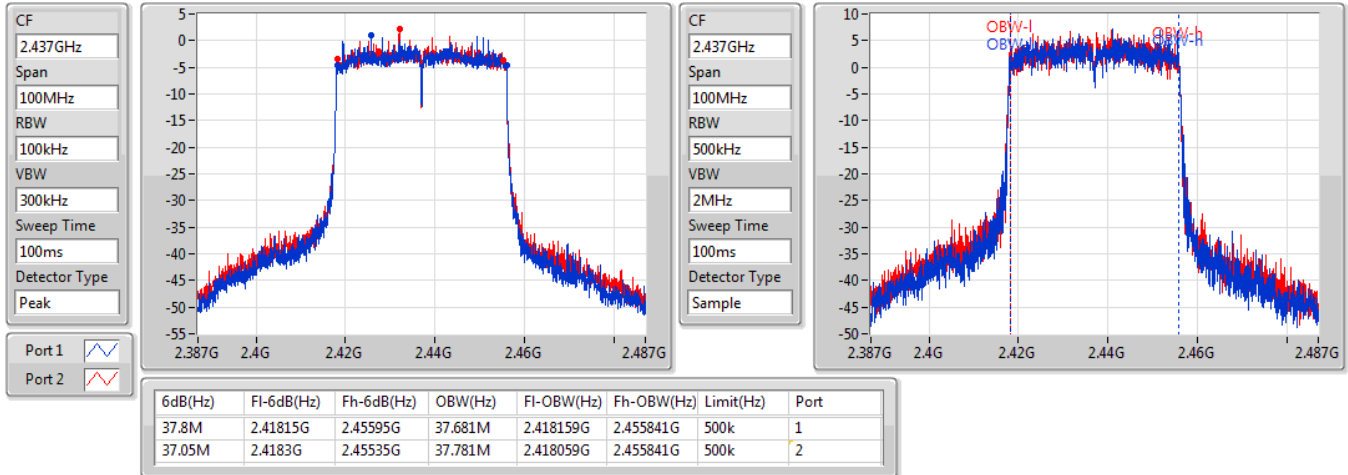

802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
2422MHz

22/10/2019

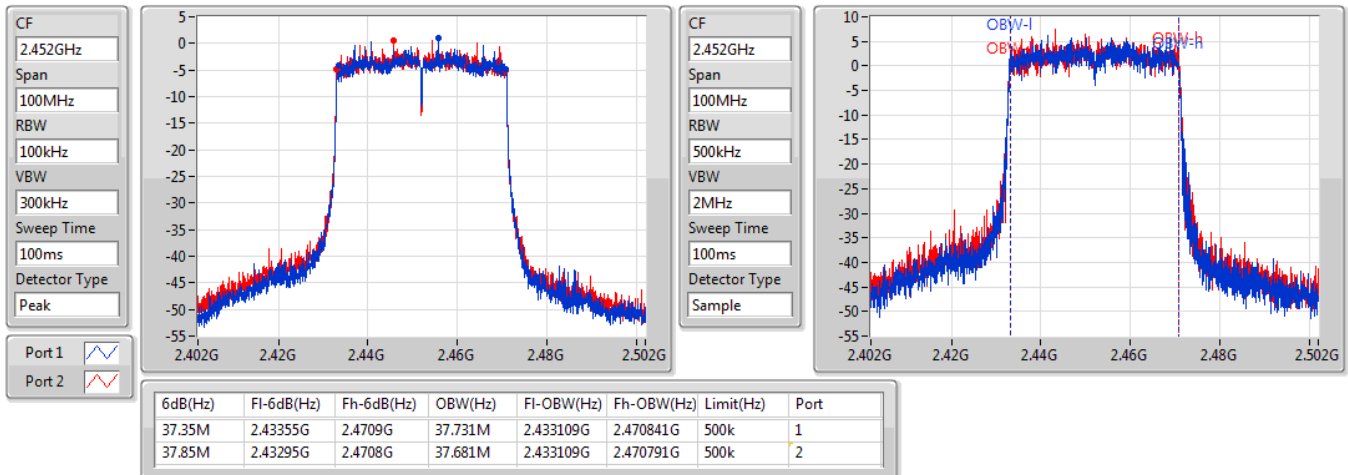


802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
2437MHz

22/10/2019


802.11ax HEW40_Nss1,(MCS0)_2TX
EBW
2452MHz

22/10/2019





Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_2TX	25.73	0.37411
802.11g_Nss1,(6Mbps)_2TX	24.52	0.28314
VHT20_Nss1,(MCS0)_2TX	23.39	0.21827
VHT40_Nss1,(MCS0)_2TX	19.58	0.09078
802.11ax HEW20_Nss1,(MCS0)_2TX	23.69	0.23388
802.11ax HEW40_Nss1,(MCS0)_2TX	19.72	0.09376

**Result**

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	2.20	19.58	19.60	22.60	30.00
2437MHz	Pass	2.20	22.62	22.82	25.73	30.00
2462MHz	Pass	2.20	20.92	21.20	24.07	30.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	2.20	16.41	16.53	19.48	30.00
2417MHz	Pass	2.20	17.84	17.80	20.83	30.00
2437MHz	Pass	2.20	21.44	21.58	24.52	30.00
2457MHz	Pass	2.20	17.29	17.52	20.42	30.00
2462MHz	Pass	2.20	16.77	17.10	19.95	30.00
VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	2.20	15.48	15.33	18.42	30.00
2417MHz	Pass	2.20	18.22	18.29	21.27	30.00
2437MHz	Pass	2.20	20.21	20.54	23.39	30.00
2457MHz	Pass	2.20	16.74	17.00	19.88	30.00
2462MHz	Pass	2.20	16.67	17.01	19.85	30.00
VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	2.20	14.52	14.86	17.70	30.00
2437MHz	Pass	2.20	16.45	16.68	19.58	30.00
2452MHz	Pass	2.20	16.11	16.31	19.22	30.00
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	2.20	15.71	15.60	18.67	30.00
2417MHz	Pass	2.20	18.43	18.46	21.46	30.00
2437MHz	Pass	2.20	20.55	20.81	23.69	30.00
2457MHz	Pass	2.20	17.01	17.20	20.12	30.00
2462MHz	Pass	2.20	16.95	17.42	20.20	30.00
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	2.20	14.73	14.85	17.80	30.00
2437MHz	Pass	2.20	16.68	16.74	19.72	30.00
2452MHz	Pass	2.20	16.30	16.49	19.41	30.00

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

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_2TX	0.25
802.11g_Nss1,(6Mbps)_2TX	-4.19
VHT20_Nss1,(MCS0)_2TX	-4.16
VHT40_Nss1,(MCS0)_2TX	-10.16
802.11ax HEW20_Nss1,(MCS0)_2TX	-5.27
802.11ax HEW40_Nss1,(MCS0)_2TX	-11.15

RBW=3 kHz.

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	5.16	-3.13	-5.20	-2.35	8.00
2437MHz	Pass	5.16	-1.88	-1.81	0.25	8.00
2462MHz	Pass	5.16	-2.72	-2.72	-0.81	8.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	5.16	-10.86	-12.03	-9.61	8.00
2437MHz	Pass	5.16	-5.07	-5.80	-4.19	8.00
2462MHz	Pass	5.16	-12.33	-10.91	-9.56	8.00
VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	5.16	-11.90	-11.70	-9.56	8.00
2437MHz	Pass	5.16	-5.43	-6.02	-4.16	8.00
2462MHz	Pass	5.16	-10.91	-9.91	-8.15	8.00
VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	5.16	-14.67	-14.11	-12.64	8.00
2437MHz	Pass	5.16	-12.24	-12.77	-10.49	8.00
2452MHz	Pass	5.16	-12.52	-12.51	-10.16	8.00
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	5.16	-12.25	-11.26	-10.09	8.00
2437MHz	Pass	5.16	-7.36	-7.46	-5.27	8.00
2462MHz	Pass	5.16	-11.10	-10.56	-8.39	8.00
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	5.16	-15.05	-15.50	-13.84	8.00
2437MHz	Pass	5.16	-11.96	-12.75	-11.15	8.00
2452MHz	Pass	5.16	-13.57	-12.45	-11.55	8.00

DG = Directional Gain; RBW=3 kHz;

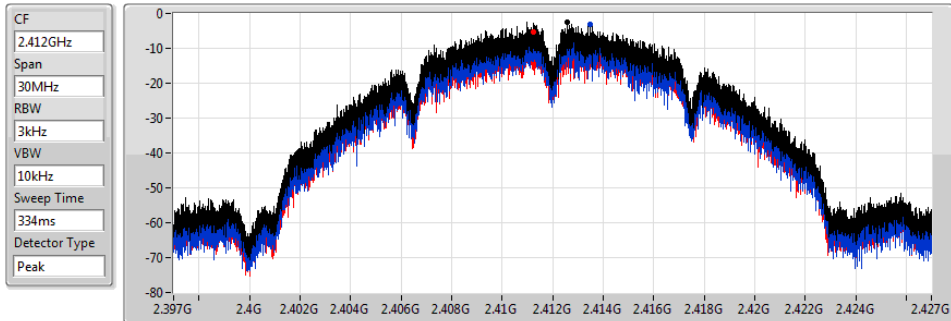
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

802.11b_Nss1,(1Mbps)_2TX

PSD

2412MHz

22/10/2019



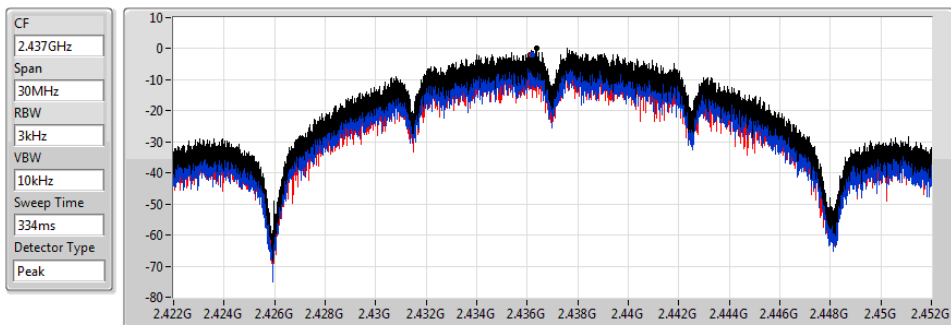
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-2.35	-2.35	-3.13	-5.20

802.11b_Nss1,(1Mbps)_2TX

PSD

2437MHz

22/10/2019



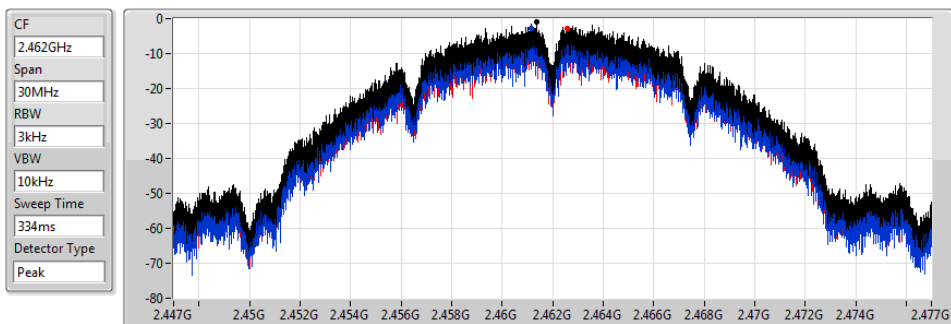
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
0.25	0.25	-1.88	-1.81

802.11b_Nss1,(1Mbps)_2TX

PSD

2462MHz

22/10/2019



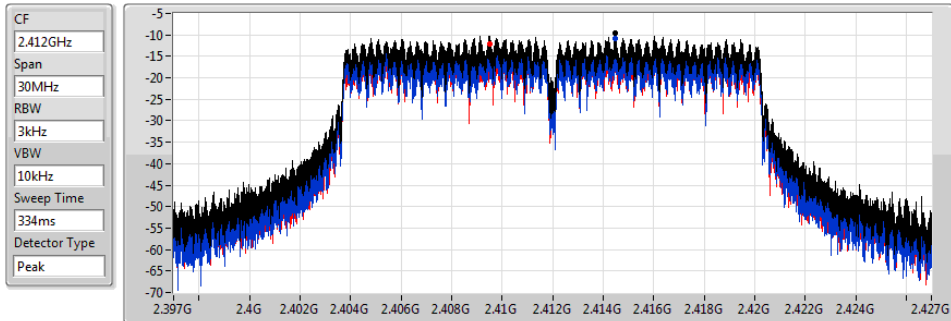
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-0.81	-0.81	-2.72	-2.72

802.11g_Nss1,(6Mbps)_2TX

PSD

2412MHz

22/10/2019



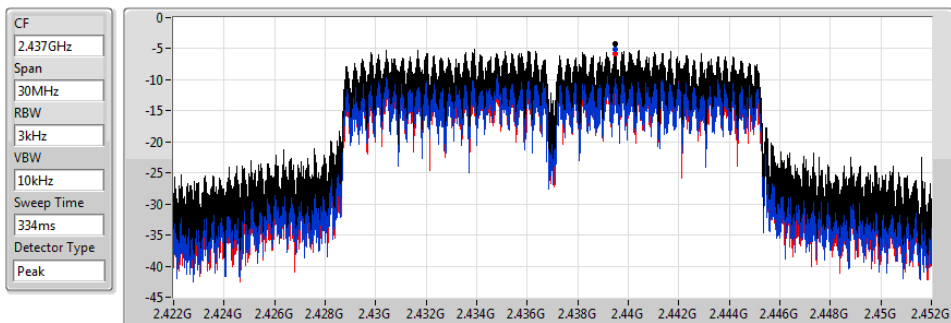
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-9.61	-9.61	-10.86	-12.03

802.11g_Nss1,(6Mbps)_2TX

PSD

2437MHz

22/10/2019



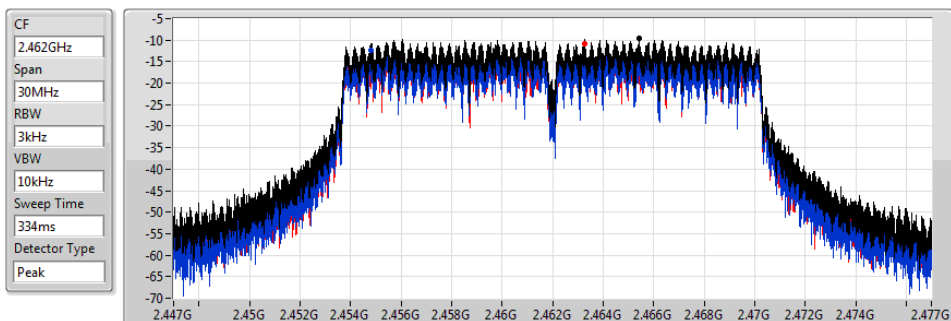
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-4.19	-4.19	-5.07	-5.80

802.11g_Nss1,(6Mbps)_2TX

PSD

2462MHz

22/10/2019



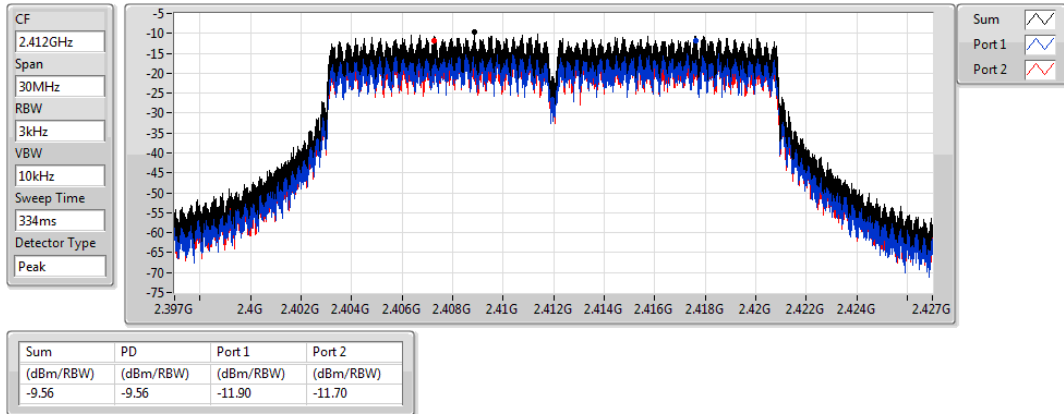
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-9.56	-9.56	-12.33	-10.91

VHT20_Nss1,(MCS0)_2TX

PSD

2412MHz

22/10/2019

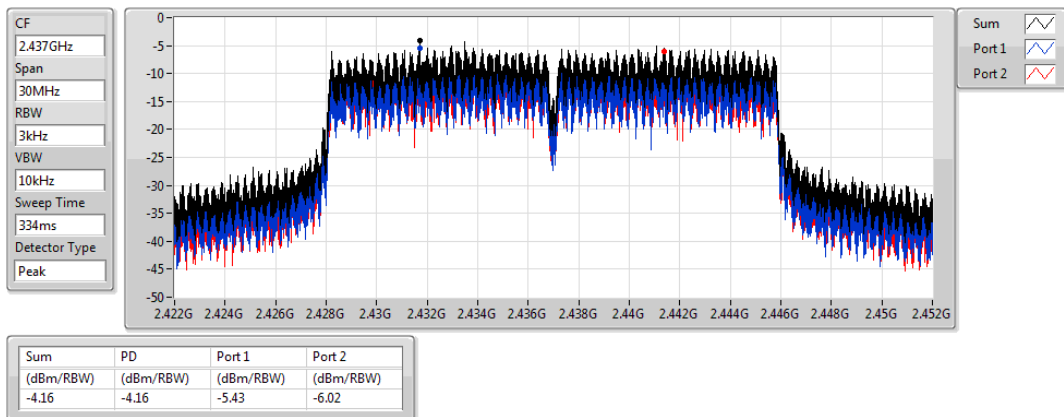


VHT20_Nss1,(MCS0)_2TX

PSD

2437MHz

22/10/2019

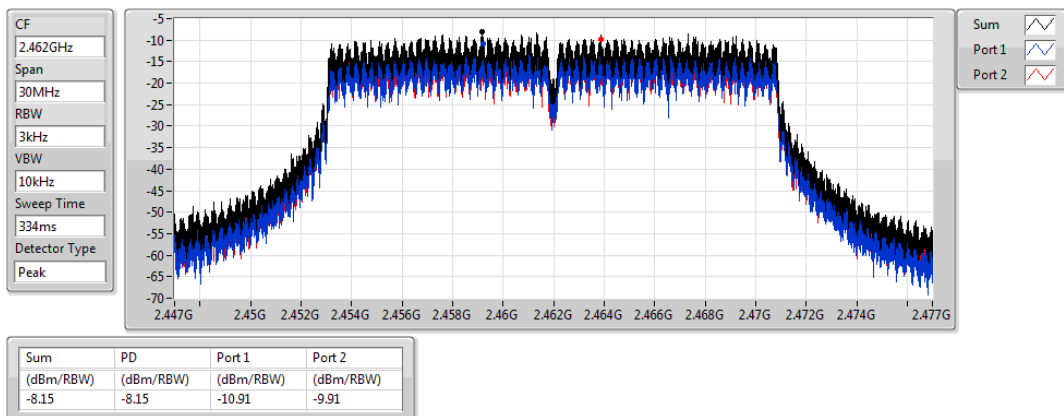


VHT20_Nss1,(MCS0)_2TX

PSD

2462MHz

22/10/2019

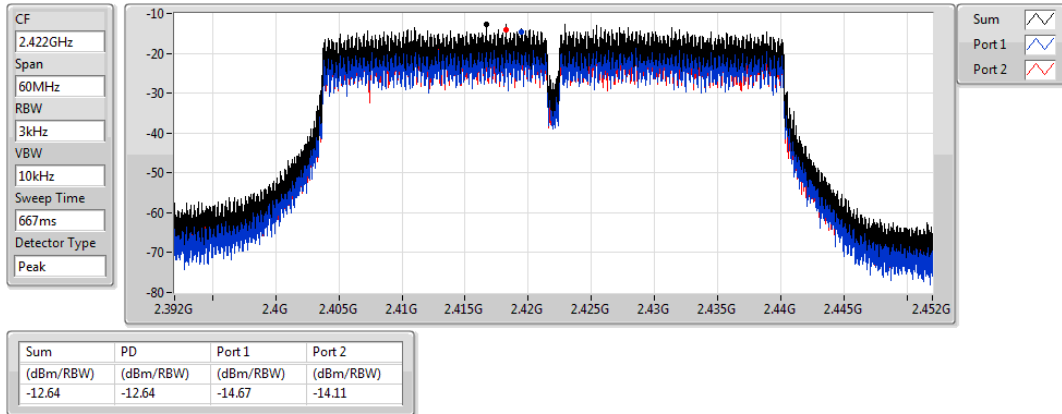


VHT40_Nss1,(MCS0)_2TX

PSD

2422MHz

22/10/2019

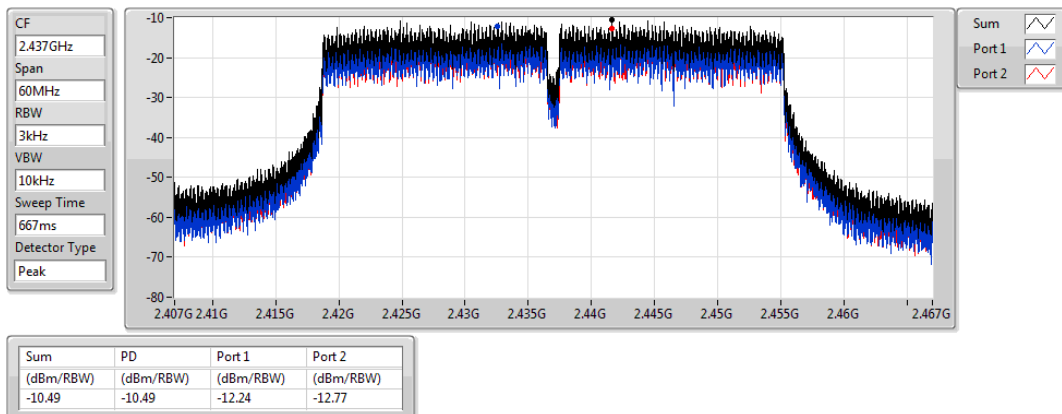


VHT40_Nss1,(MCS0)_2TX

PSD

2437MHz

22/10/2019

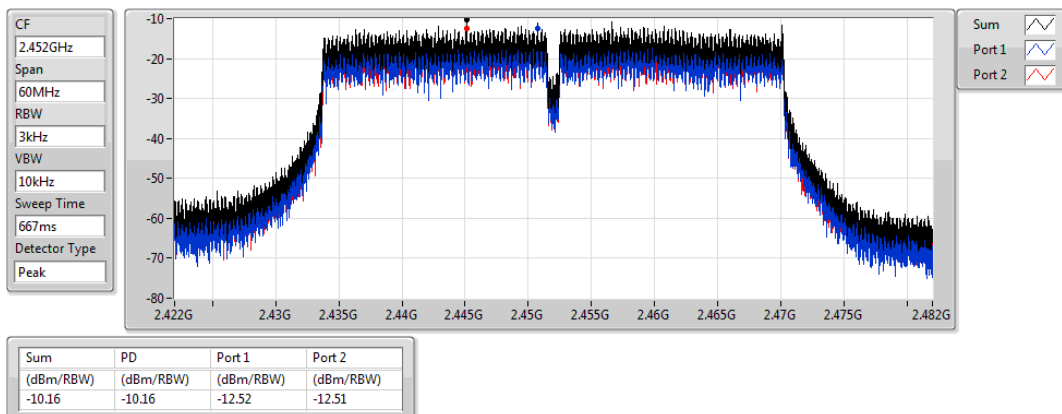


VHT40_Nss1,(MCS0)_2TX

PSD

2452MHz

22/10/2019

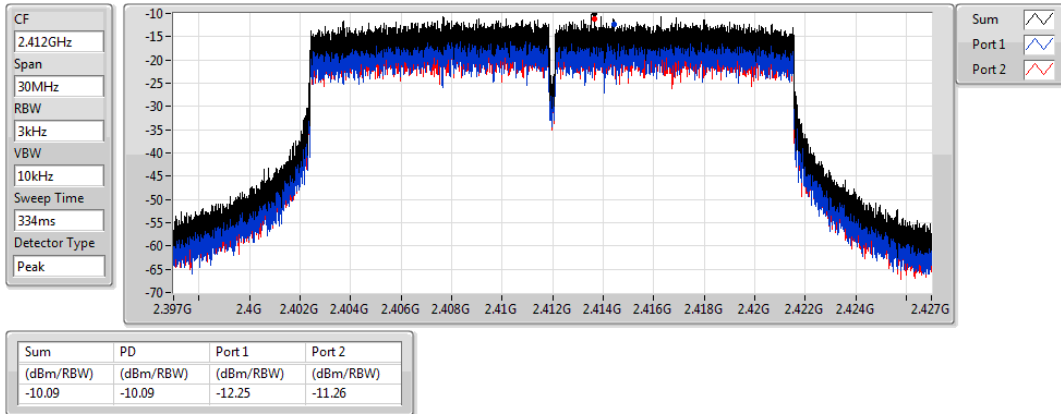


802.11ax HEW20_Nss1,(MCS0)_2TX

PSD

2412MHz

22/10/2019

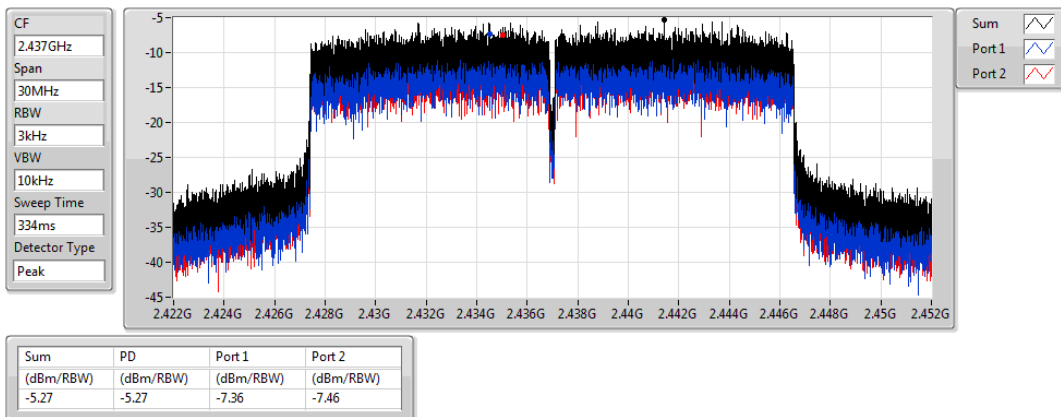


802.11ax HEW20_Nss1,(MCS0)_2TX

PSD

2437MHz

22/10/2019

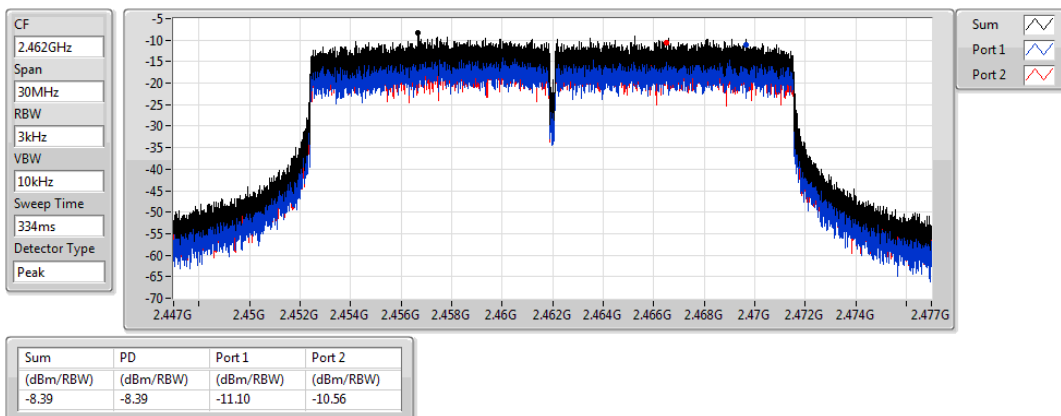


802.11ax HEW20_Nss1,(MCS0)_2TX

PSD

2462MHz

22/10/2019

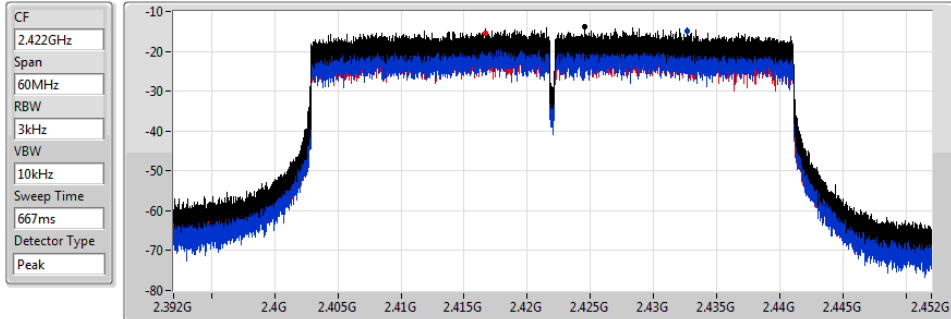


802.11ax HEW40_Nss1,(MCS0)_2TX

PSD

2422MHz

22/10/2019



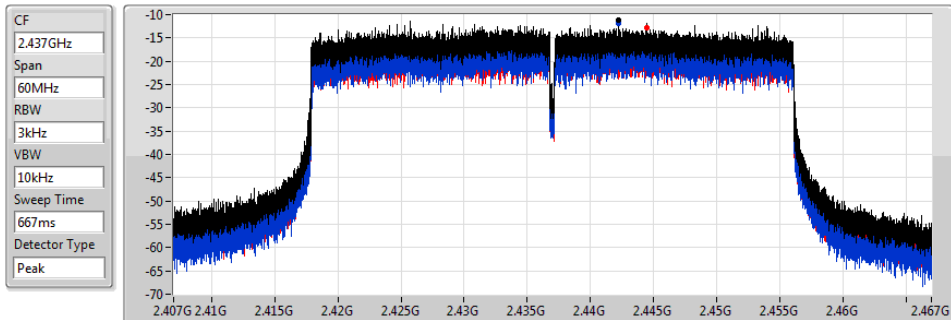
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-13.84	-13.84	-15.05	-15.50

802.11ax HEW40_Nss1,(MCS0)_2TX

PSD

2437MHz

22/10/2019



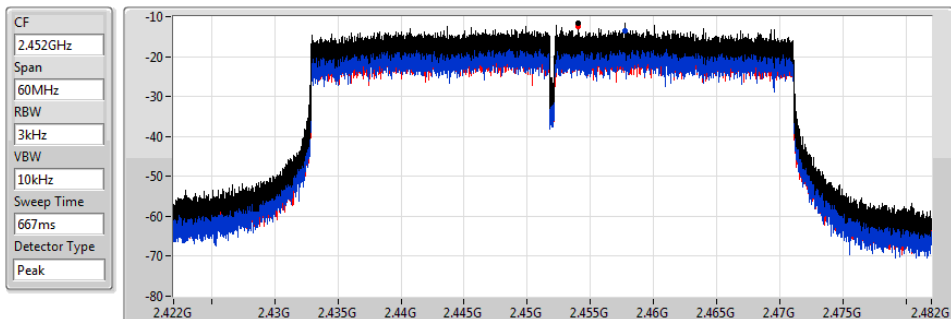
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-11.15	-11.15	-11.96	-12.75

802.11ax HEW40_Nss1,(MCS0)_2TX

PSD

2452MHz

22/10/2019



Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-11.55	-11.55	-13.57	-12.45

**Summary**

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	Pass	2.43799G	12.94	-17.06	694.92M	-53.75	2.39932G	-39.21	2.49202G	-52.35	16.50107G	-46.26	2
802.11g_Nss1,(6Mbps)_2TX	Pass	2.442G	10.77	-19.23	827.15M	-54.08	2.39978G	-31.61	2.50332G	-51.46	24.87357G	-45.16	2
VHT20_Nss1,(MCS0)_2TX	Pass	2.43198G	8.86	-21.14	768.61M	-54.22	2.39986G	-33.19	2.4883G	-52.63	17.48442G	-45.12	1
VHT40_Nss1,(MCS0)_2TX	Pass	2.43194G	1.98	-28.02	937.41M	-54.03	2.39948G	-38.70	2.4839G	-47.87	16.92286G	-46.46	1
802.11ax HEW20_Nss1,(MCS0)_2TX	Pass	2.43198G	8.51	-21.49	814.05M	-53.22	2.39982G	-31.61	2.51674G	-51.56	24.58138G	-45.13	2
802.11ax HEW40_Nss1,(MCS0)_2TX	Pass	2.43449G	1.79	-28.21	837.51M	-53.97	2.39992G	-36.87	2.48538G	-51.97	16.46572G	-45.46	2

Result

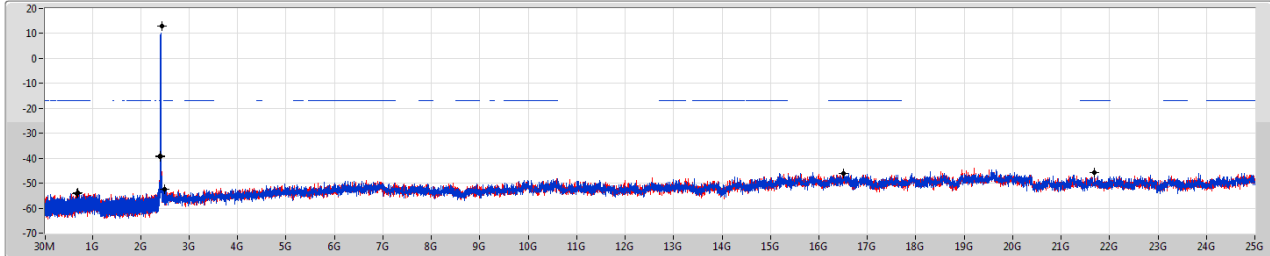
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43799G	12.94	-17.06	689.39M	-54.13	2.39936G	-39.54	2.49598G	-52.34	21.68191G	-45.81	1
2412MHz	Pass	2.43799G	12.94	-17.06	694.92M	-53.75	2.39932G	-39.21	2.49202G	-52.35	16.50107G	-46.26	2
2437MHz	Pass	2.43799G	12.94	-17.06	2.01866G	-54.00	2.397G	-45.45	2.48552G	-49.48	9.74689G	-40.76	1
2437MHz	Pass	2.43799G	12.94	-17.06	800.36M	-54.34	2.397G	-43.81	2.48598G	-49.18	9.74689G	-41.70	2
2462MHz	Pass	2.43799G	12.94	-17.06	897.34M	-54.10	2.39312G	-53.23	2.48848G	-49.73	24.92976G	-45.51	1
2462MHz	Pass	2.43799G	12.94	-17.06	831.23M	-53.85	2.39214G	-53.15	2.48648G	-46.97	24.81738G	-45.68	2
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.442G	10.77	-19.23	546.39M	-53.41	2.39998G	-32.51	2.51848G	-51.45	14.78724G	-46.17	1
2412MHz	Pass	2.442G	10.77	-19.23	827.15M	-54.08	2.39978G	-31.61	2.50332G	-51.46	24.87357G	-45.16	2
2437MHz	Pass	2.442G	10.77	-19.23	810.84M	-53.50	2.397G	-36.46	2.48362G	-41.16	16.51231G	-45.89	1
2437MHz	Pass	2.442G	10.77	-19.23	2.30175G	-54.04	2.39698G	-37.41	2.48418G	-42.32	16.54884G	-45.03	2
2462MHz	Pass	2.442G	10.77	-19.23	840.26M	-54.04	2.39774G	-53.07	2.48508G	-42.75	24.84547G	-45.78	1
2462MHz	Pass	2.442G	10.77	-19.23	2.30816G	-54.26	2.39386G	-52.68	2.48574G	-41.48	24.34537G	-45.70	2
VHT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43198G	8.86	-21.14	768.61M	-54.22	2.39986G	-33.19	2.4883G	-52.63	17.48442G	-45.12	1
2412MHz	Pass	2.43198G	8.86	-21.14	873.17M	-53.67	2.39982G	-34.55	2.50992G	-52.92	16.51231G	-45.91	2
2437MHz	Pass	2.43198G	8.86	-21.14	810.55M	-53.50	2.39976G	-40.10	2.4836G	-45.60	16.52636G	-45.35	1
2437MHz	Pass	2.43198G	8.86	-21.14	786.09M	-53.77	2.3995G	-39.47	2.48448G	-47.06	16.39993G	-46.33	2
2462MHz	Pass	2.43198G	8.86	-21.14	889.19M	-54.43	2.39984G	-52.61	2.48634G	-44.93	24.941G	-45.38	1
2462MHz	Pass	2.43198G	8.86	-21.14	891.23M	-53.96	2.39902G	-52.70	2.48536G	-42.69	16.52074G	-45.36	2
VHT40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.43194G	1.98	-28.02	704.12M	-53.93	2.39988G	-39.42	2.4873G	-51.84	24.75881G	-45.72	1
2422MHz	Pass	2.43194G	1.98	-28.02	1.95618G	-54.00	2.39976G	-38.97	2.48486G	-52.84	24.71113G	-45.66	2
2437MHz	Pass	2.43194G	1.98	-28.02	937.41M	-54.03	2.39948G	-38.70	2.4839G	-47.87	16.92286G	-46.46	1
2437MHz	Pass	2.43194G	1.98	-28.02	737.61M	-53.12	2.39988G	-40.21	2.4895G	-46.75	16.5807G	-46.16	2
2452MHz	Pass	2.43194G	1.98	-28.02	821.2M	-54.30	2.3998G	-51.29	2.4885G	-47.19	24.80088G	-45.71	1
2452MHz	Pass	2.43194G	1.98	-28.02	2.30082G	-53.43	2.3986G	-49.62	2.48354G	-46.64	24.84575G	-46.19	2
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43198G	8.51	-21.49	793.37M	-53.81	2.39978G	-34.08	2.51616G	-52.27	16.52355G	-45.83	1
2412MHz	Pass	2.43198G	8.51	-21.49	814.05M	-53.22	2.39982G	-31.61	2.51674G	-51.56	24.58138G	-45.13	2
2437MHz	Pass	2.43198G	8.51	-21.49	659.39M	-52.70	2.39996G	-38.56	2.48466G	-42.83	16.55726G	-45.20	1
2437MHz	Pass	2.43198G	8.51	-21.49	838.22M	-53.59	2.39968G	-38.19	2.48426G	-44.54	16.90846G	-45.44	2
2462MHz	Pass	2.43198G	8.51	-21.49	869.97M	-53.57	2.39796G	-52.78	2.48436G	-43.97	16.56288G	-44.92	1
2462MHz	Pass	2.43198G	8.51	-21.49	942.2M	-53.74	2.39038G	-52.58	2.48394G	-41.03	24.91009G	-45.64	2
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.43449G	1.79	-28.21	742.76M	-53.93	2.39984G	-38.68	2.56282G	-52.01	16.32549G	-44.90	1
2422MHz	Pass	2.43449G	1.79	-28.21	837.51M	-53.97	2.39992G	-36.87	2.48538G	-51.97	16.46572G	-45.46	2
2437MHz	Pass	2.43449G	1.79	-28.21	1.89778G	-53.79	2.39844G	-39.66	2.48946G	-46.02	16.55827G	-45.98	1
2437MHz	Pass	2.43449G	1.79	-28.21	2.30054G	-53.00	2.3986G	-38.20	2.48418G	-43.71	16.52742G	-45.73	2
2452MHz	Pass	2.43449G	1.79	-28.21	1.81878G	-54.24	2.39808G	-50.35	2.4847G	-41.61	16.58912G	-44.78	1
2452MHz	Pass	2.43449G	1.79	-28.21	954.59M	-53.58	2.396G	-49.97	2.48466G	-42.01	16.49376G	-45.83	2

802.11b_Nss1,(1Mbps)_2TX

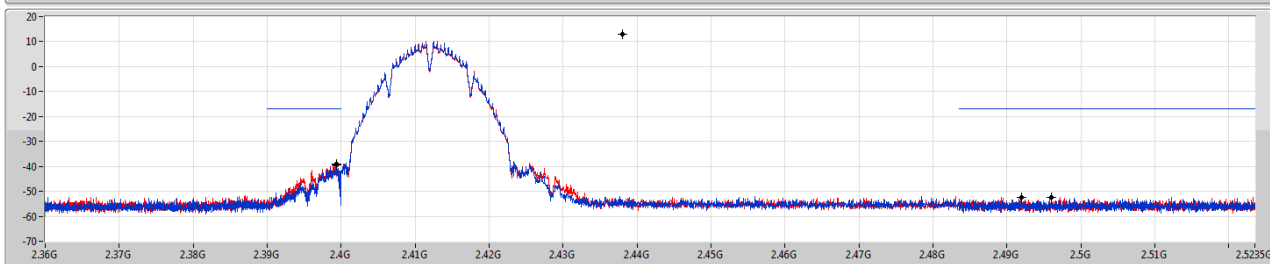
2412MHz

CSE NdB

22/10/2019



Port 1
Port 2



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

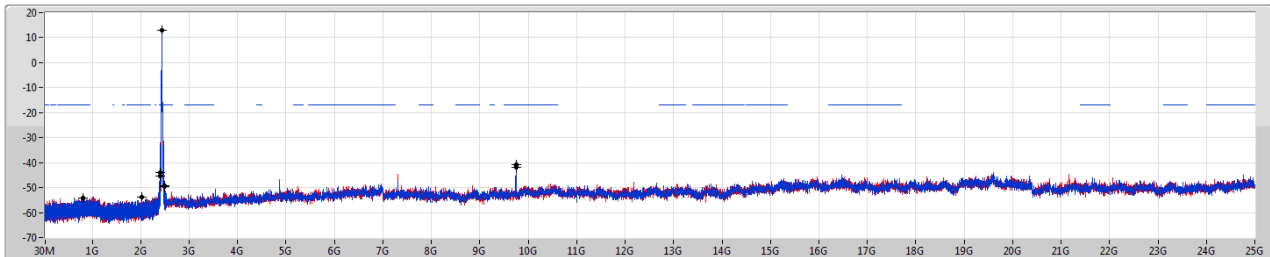
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43799G	12.94	-17.06	689.39M	-54.13	2.39936G	-39.54	2.49598G	-52.34	21.68191G	-45.81	1
2.43799G	12.94	-17.06	694.92M	-53.75	2.39932G	-39.21	2.49202G	-52.35	16.50107G	-46.26	2

802.11b_Nss1,(1Mbps)_2TX

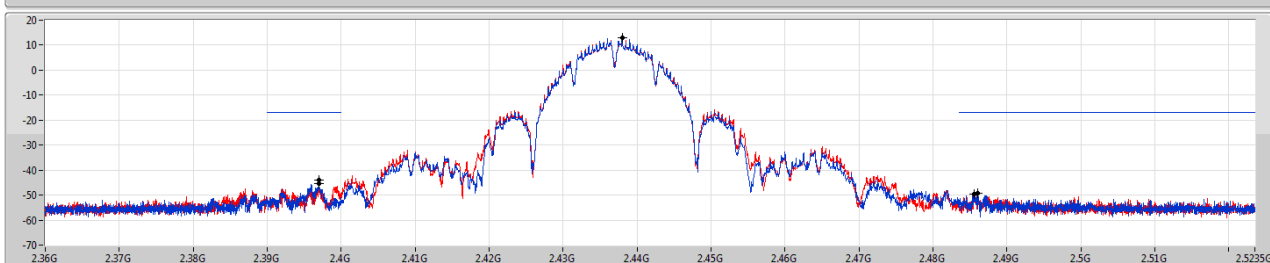
2437MHz

CSE NdB

22/10/2019



Port 1
Port 2



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

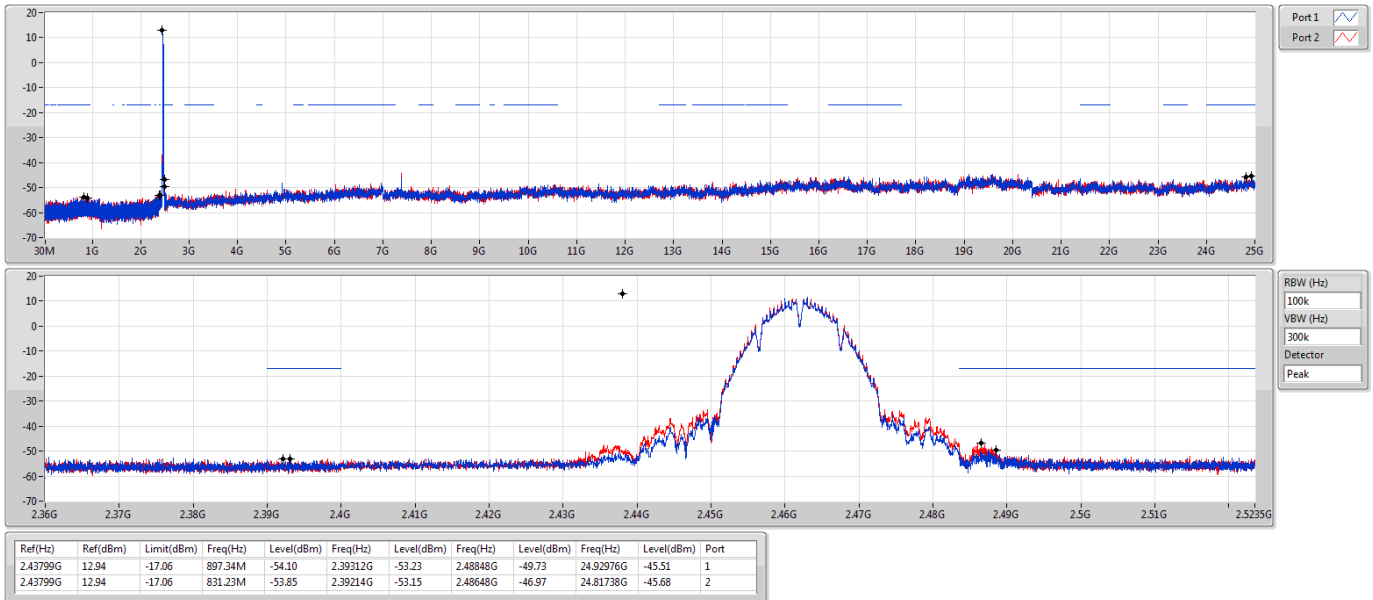
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43799G	12.94	-17.06	2.01866G	-54.00	2.397G	-45.45	2.48552G	-49.48	9.74689G	-40.76	1
2.43799G	12.94	-17.06	800.36M	-54.34	2.397G	-43.81	2.48598G	-49.18	9.74689G	-41.70	2

802.11b_Nss1,(1Mbps)_2TX

2462MHz

CSE NdB

22/10/2019

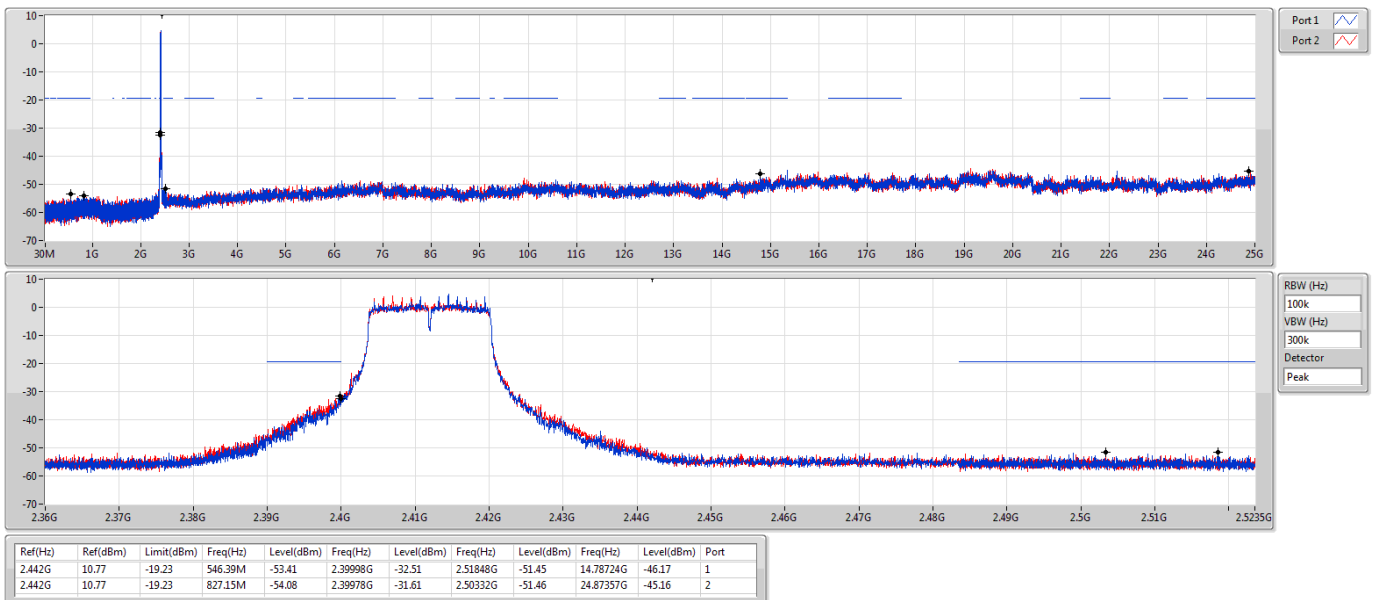


802.11g_Nss1,(6Mbps)_2TX

2412MHz

CSE NdB

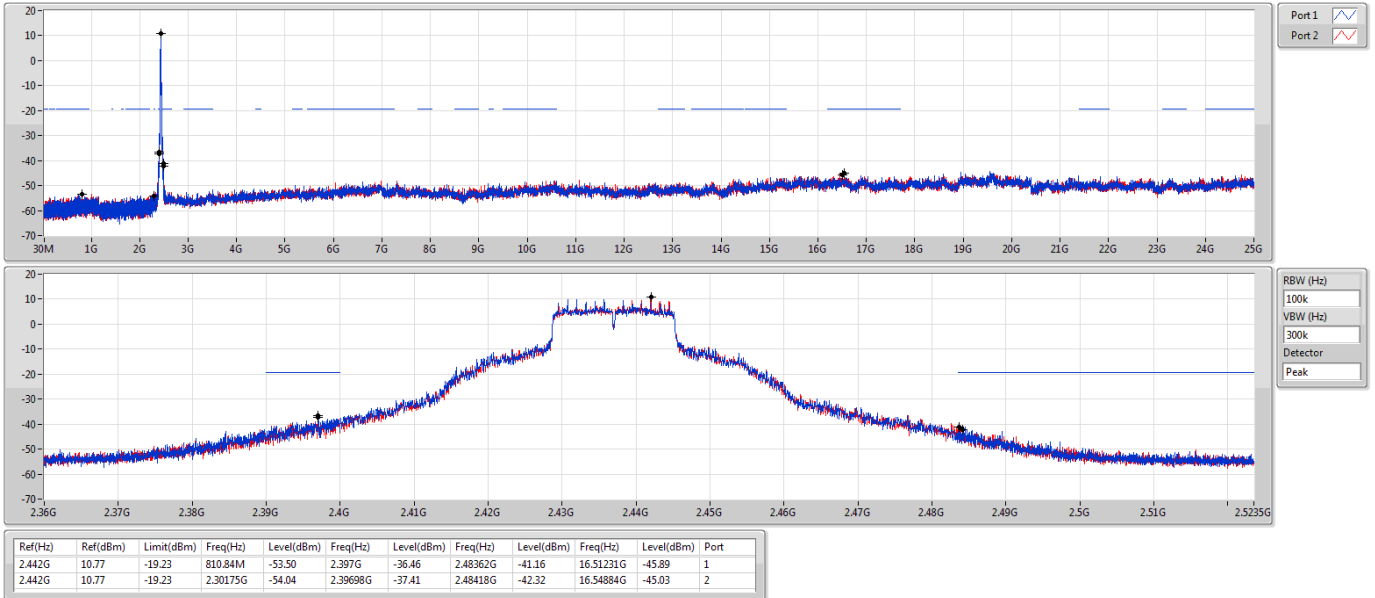
22/10/2019



802.11g_Nss1,(6Mbps)_2TX

CSE NdB

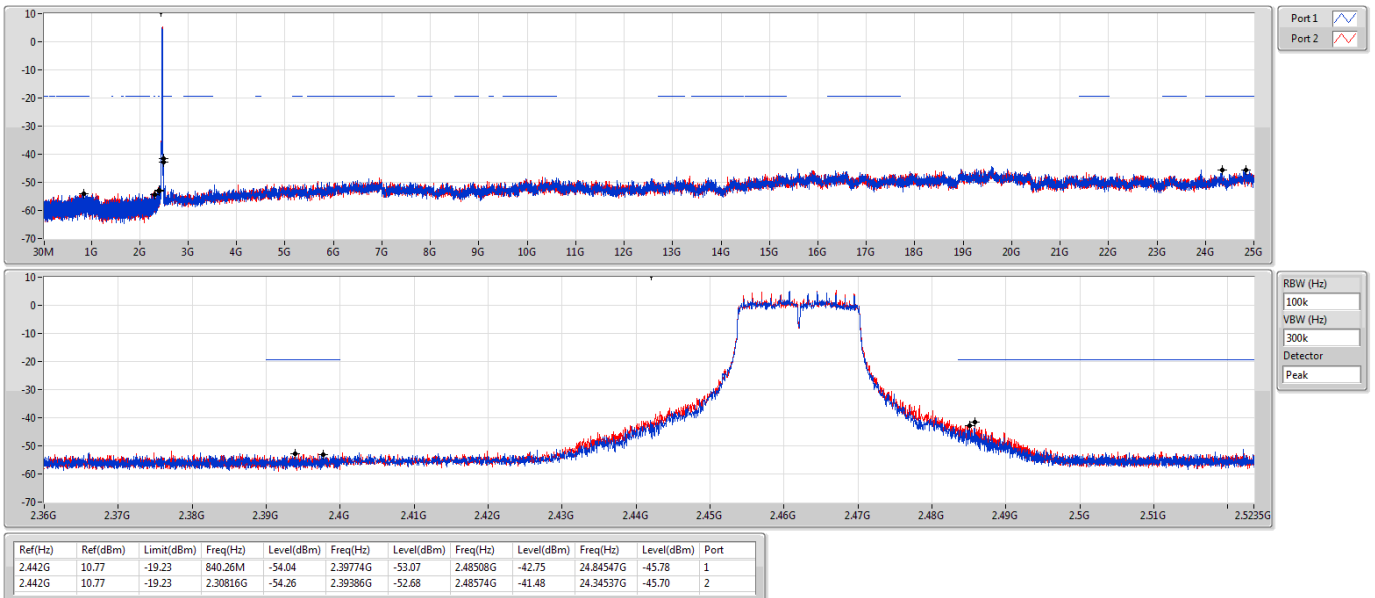
2437MHz



802.11g_Nss1,(6Mbps)_2TX

CSE NdB

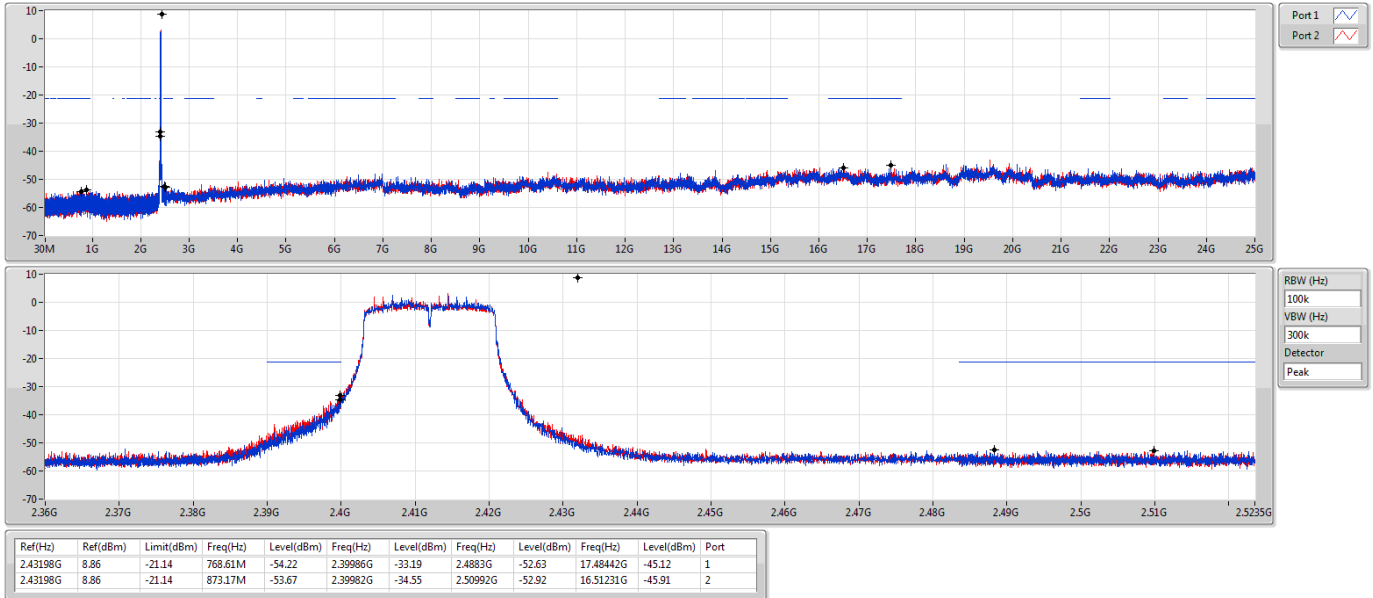
2462MHz



VHT20_Nss1,(MCS0)_2TX

CSE NdB

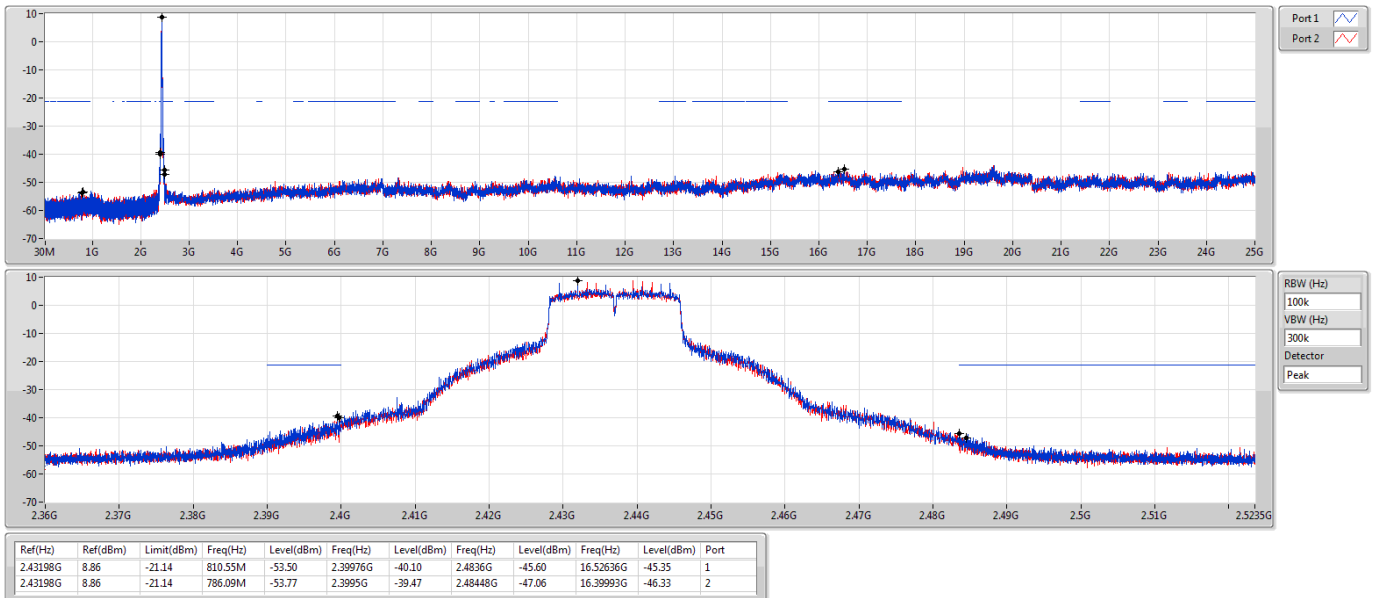
2412MHz



VHT20_Nss1,(MCS0)_2TX

CSE NdB

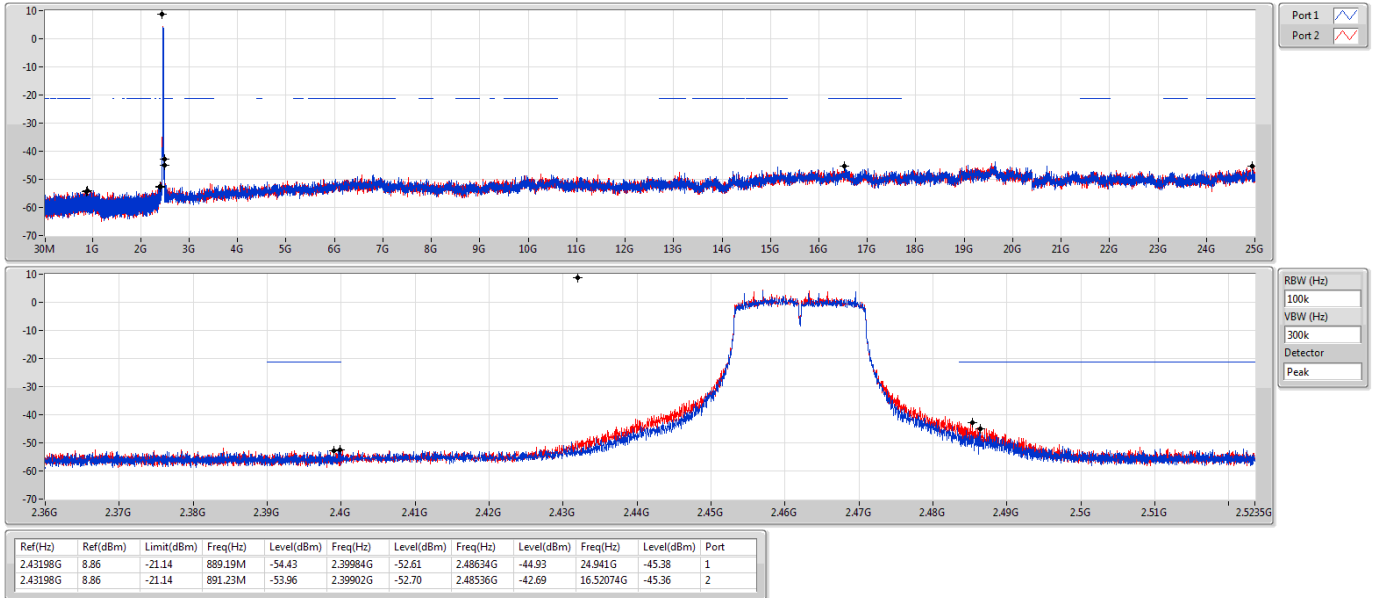
2437MHz



VHT20_Nss1,(MCS0)_2TX

CSE NdB

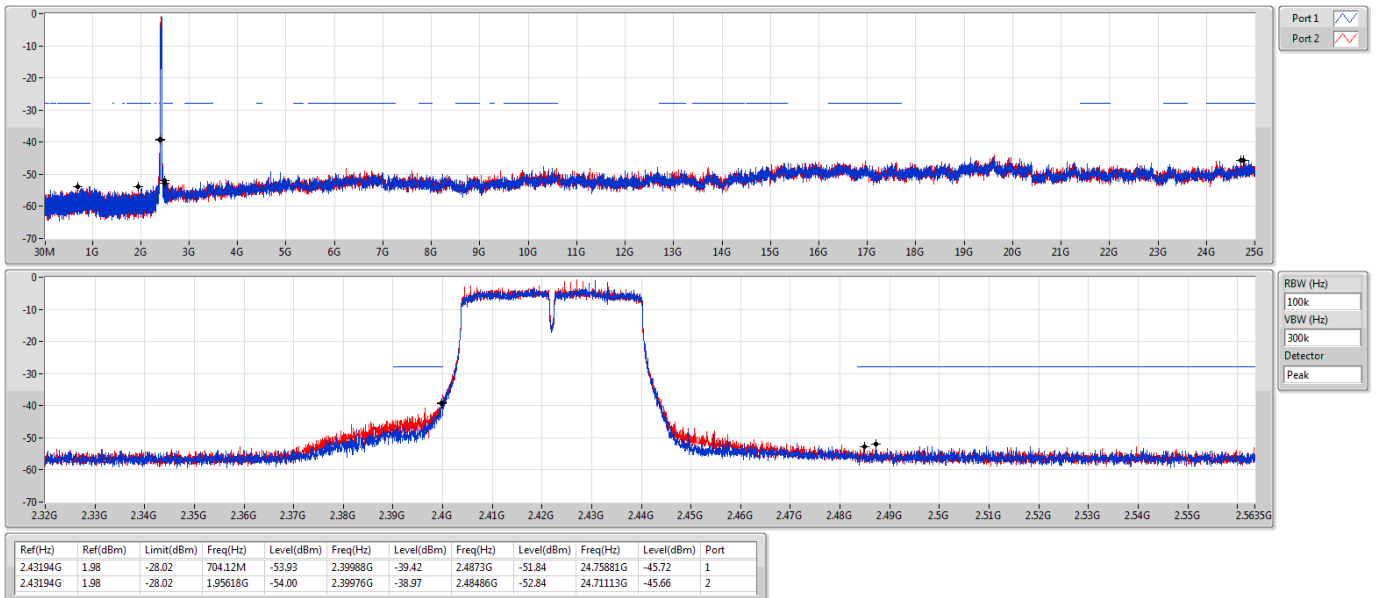
2462MHz



VHT40_Nss1,(MCS0)_2TX

CSE NdB

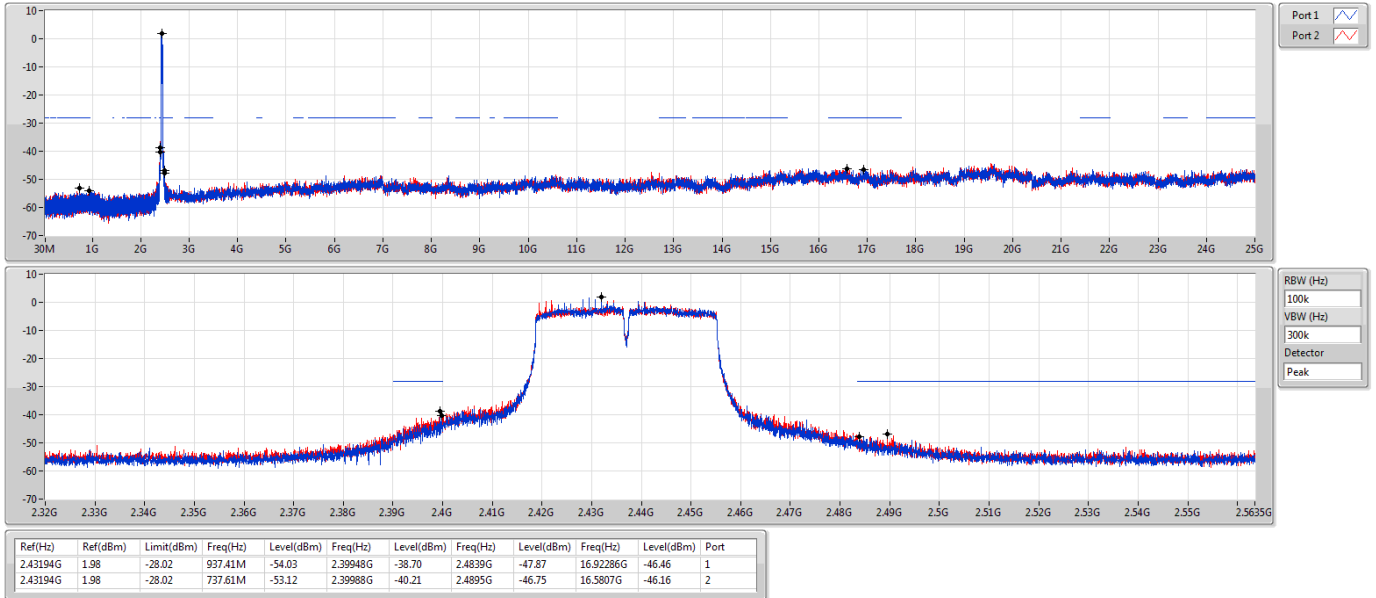
2422MHz



VHT40_Nss1,(MCS0)_2TX

CSE NdB

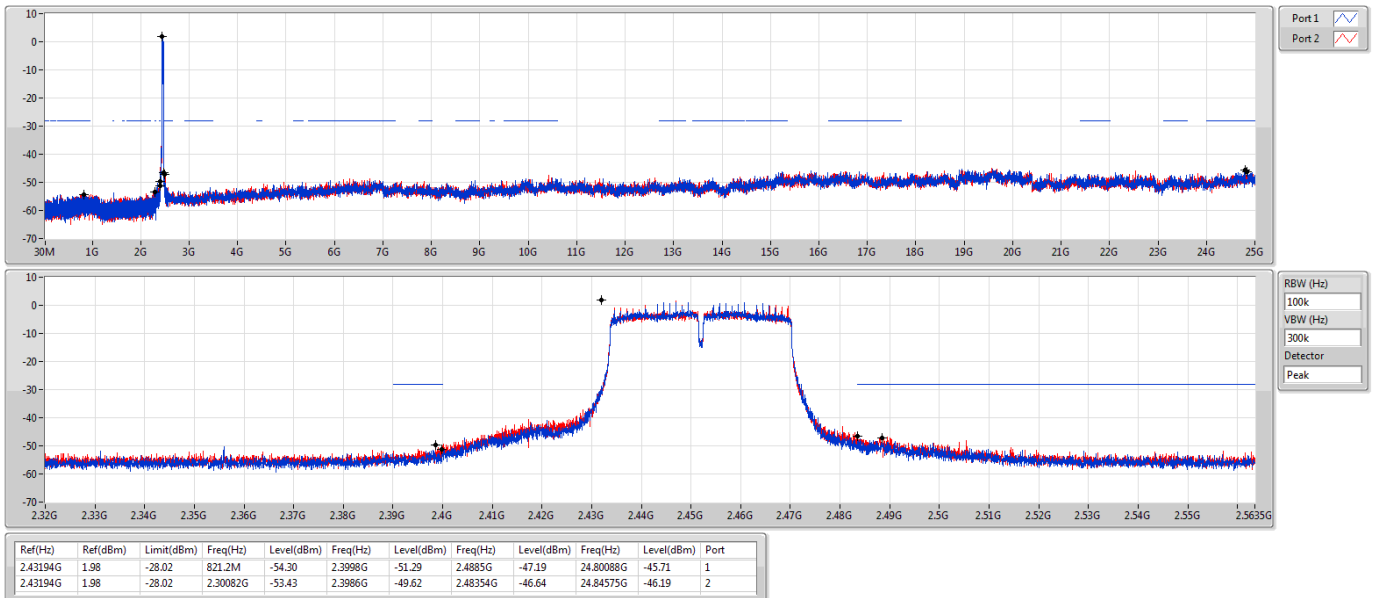
2437MHz



VHT40_Nss1,(MCS0)_2TX

CSE NdB

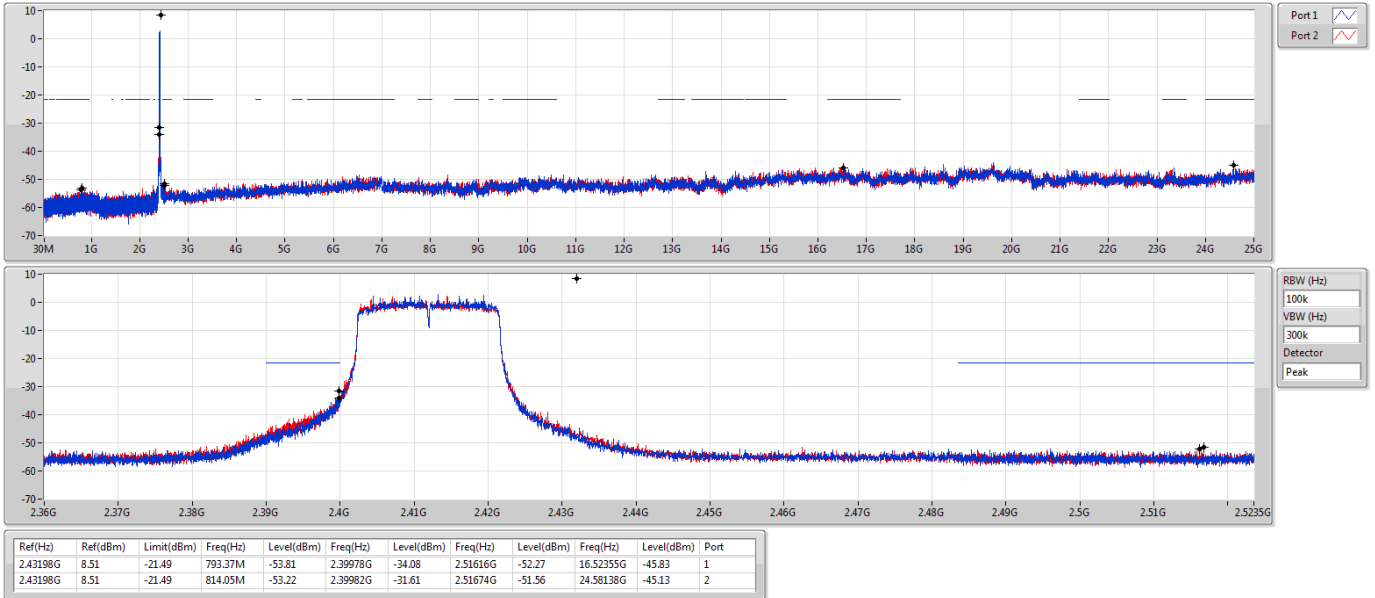
2452MHz



802.11ax HEW20_Nss1,(MCS0)_2TX

CSE NdB

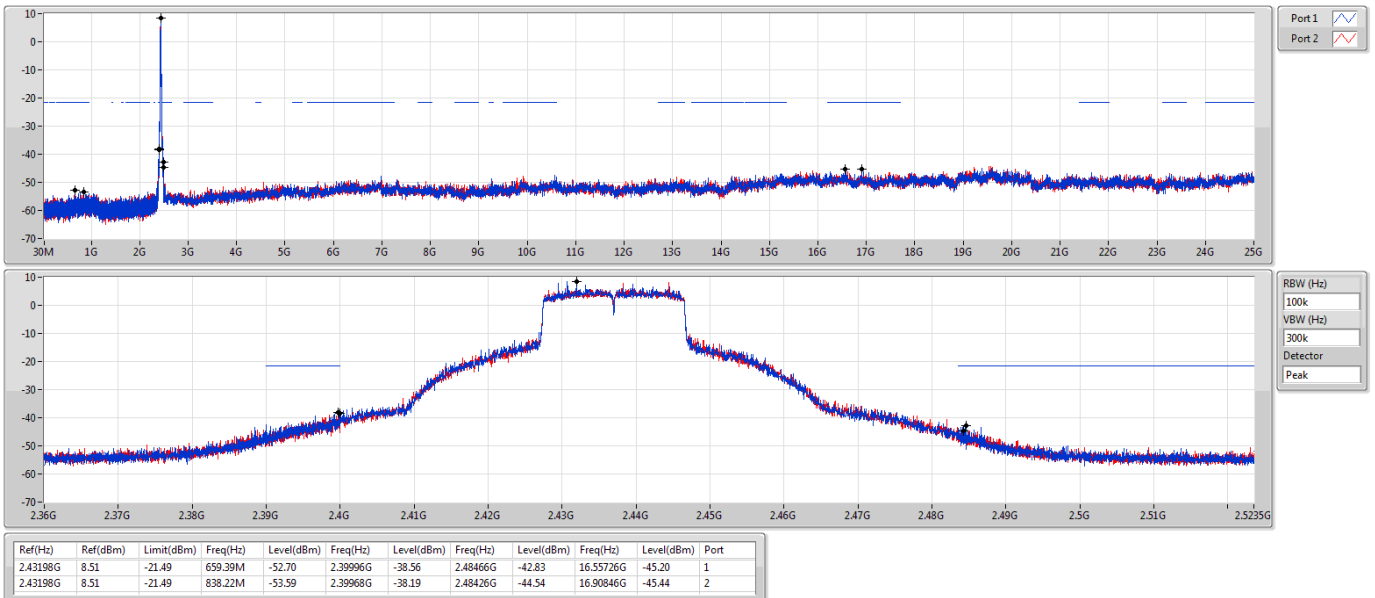
2412MHz



802.11ax HEW20_Nss1,(MCS0)_2TX

CSE NdB

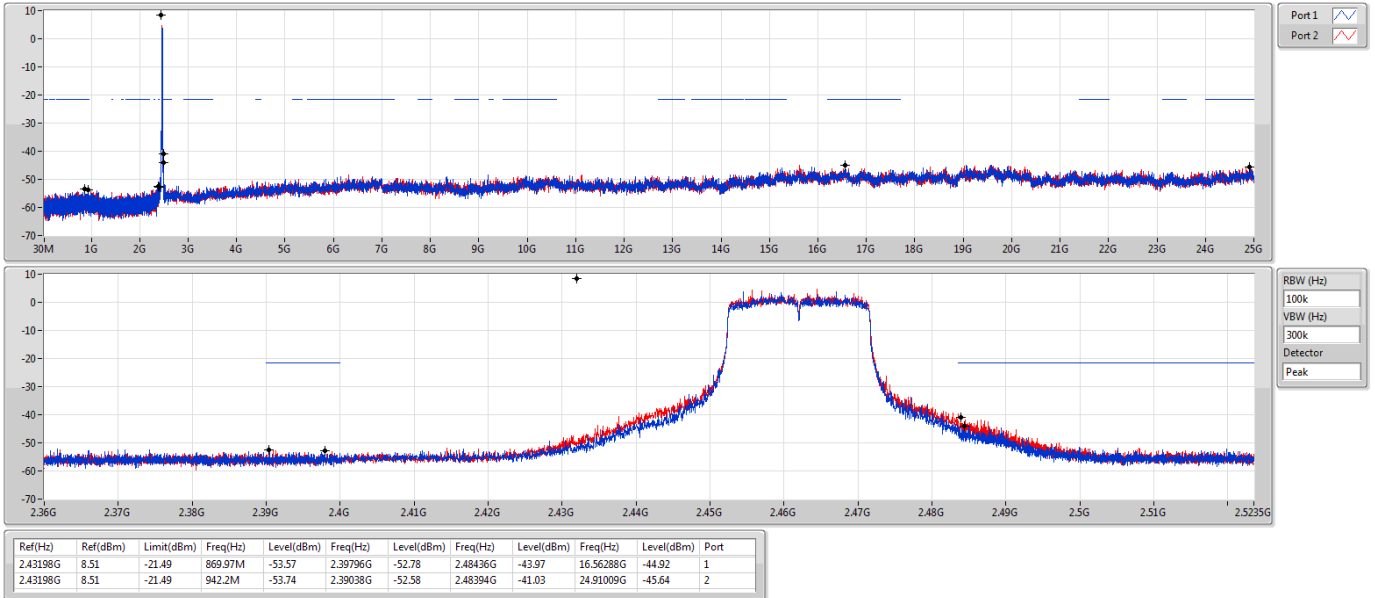
2437MHz



802.11ax HEW20_Nss1,(MCS0)_2TX

CSE NdB

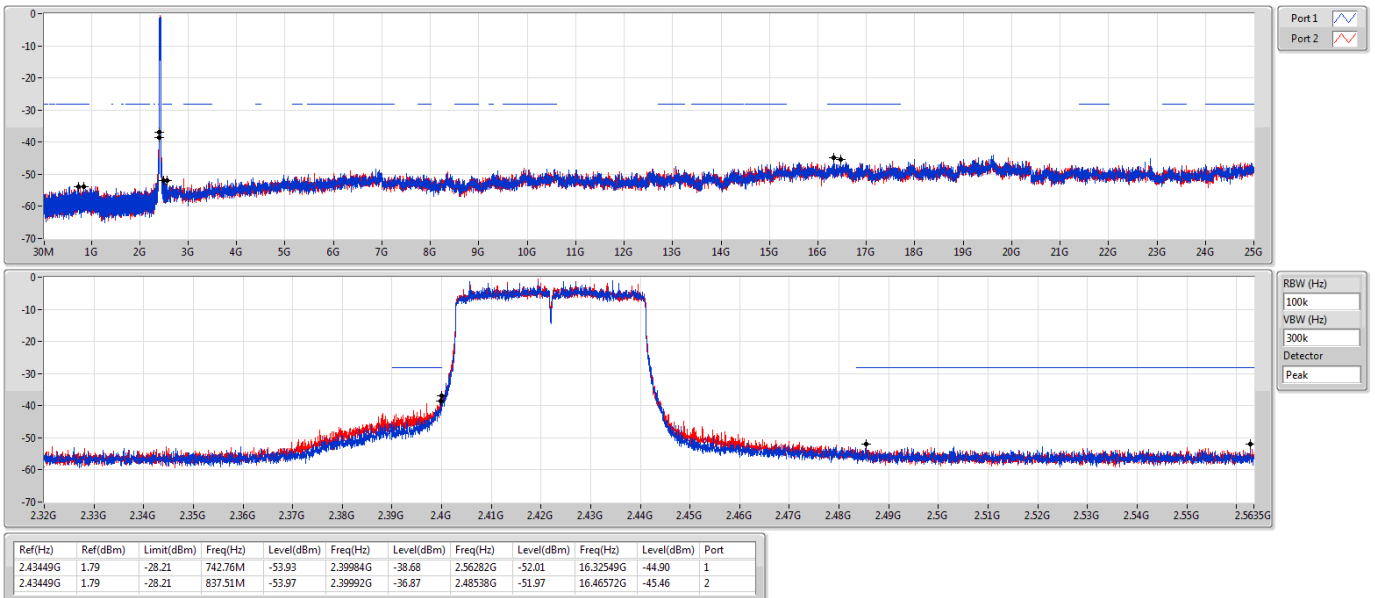
2462MHz



802.11ax HEW40_Nss1,(MCS0)_2TX

CSE NdB

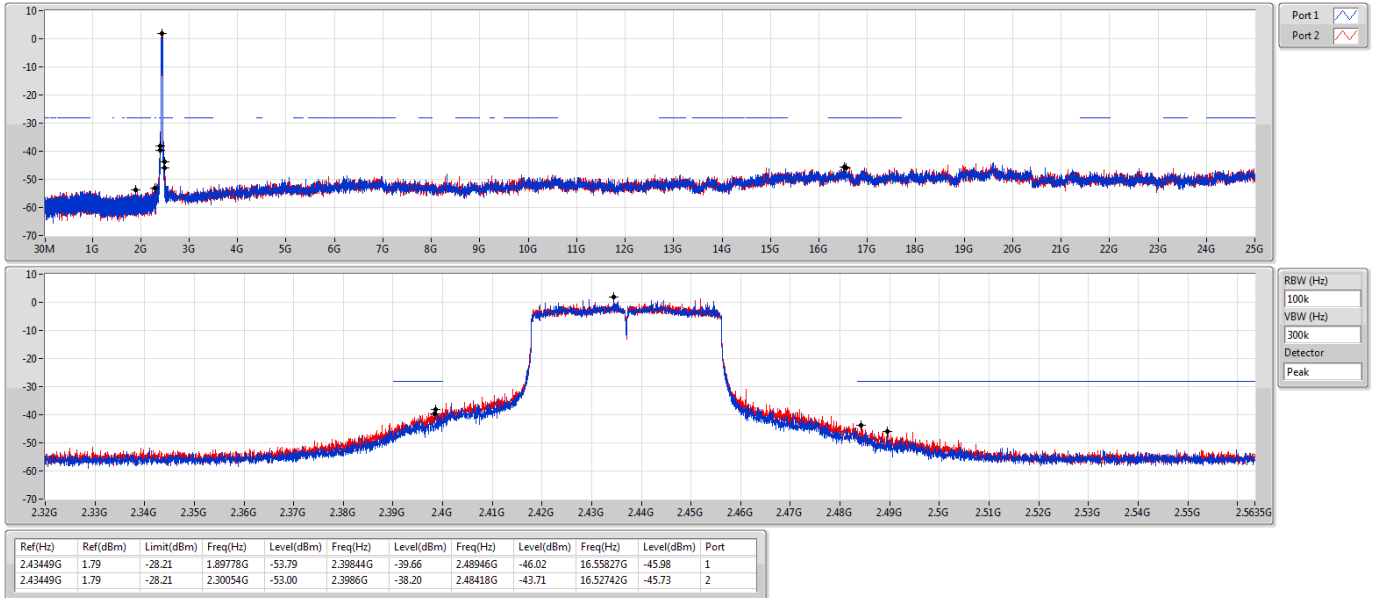
2422MHz



802.11ax HEW40_Nss1,(MCS0)_2TX

CSE NdB

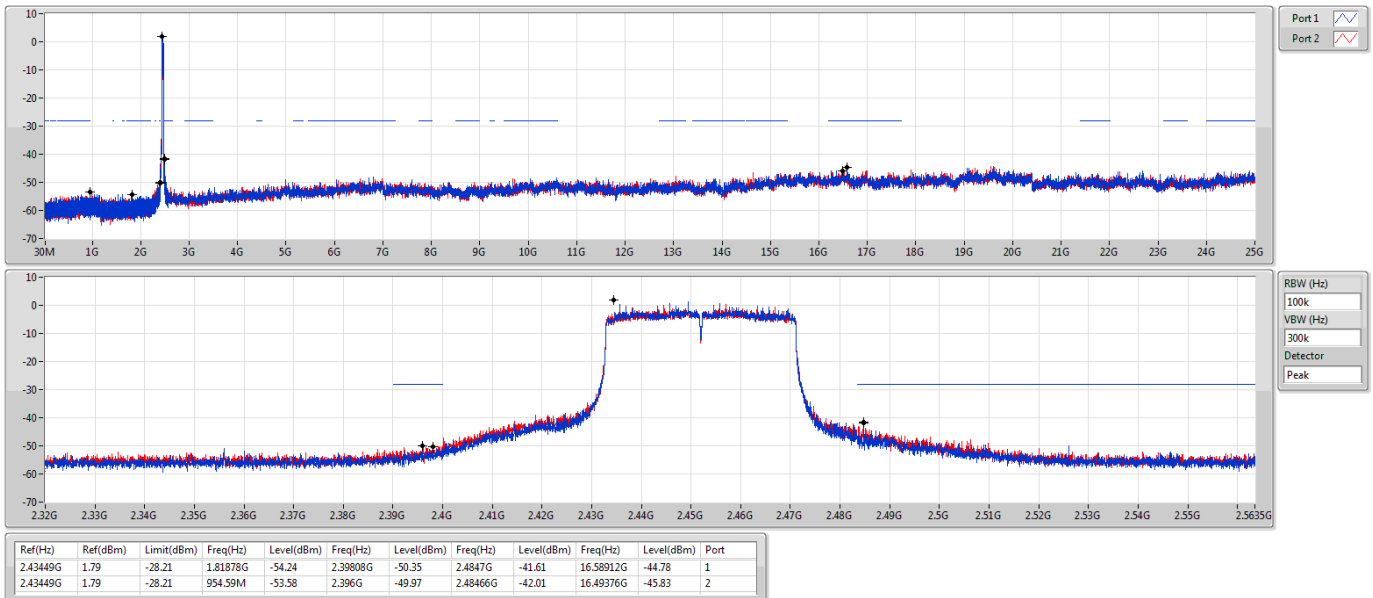
2437MHz

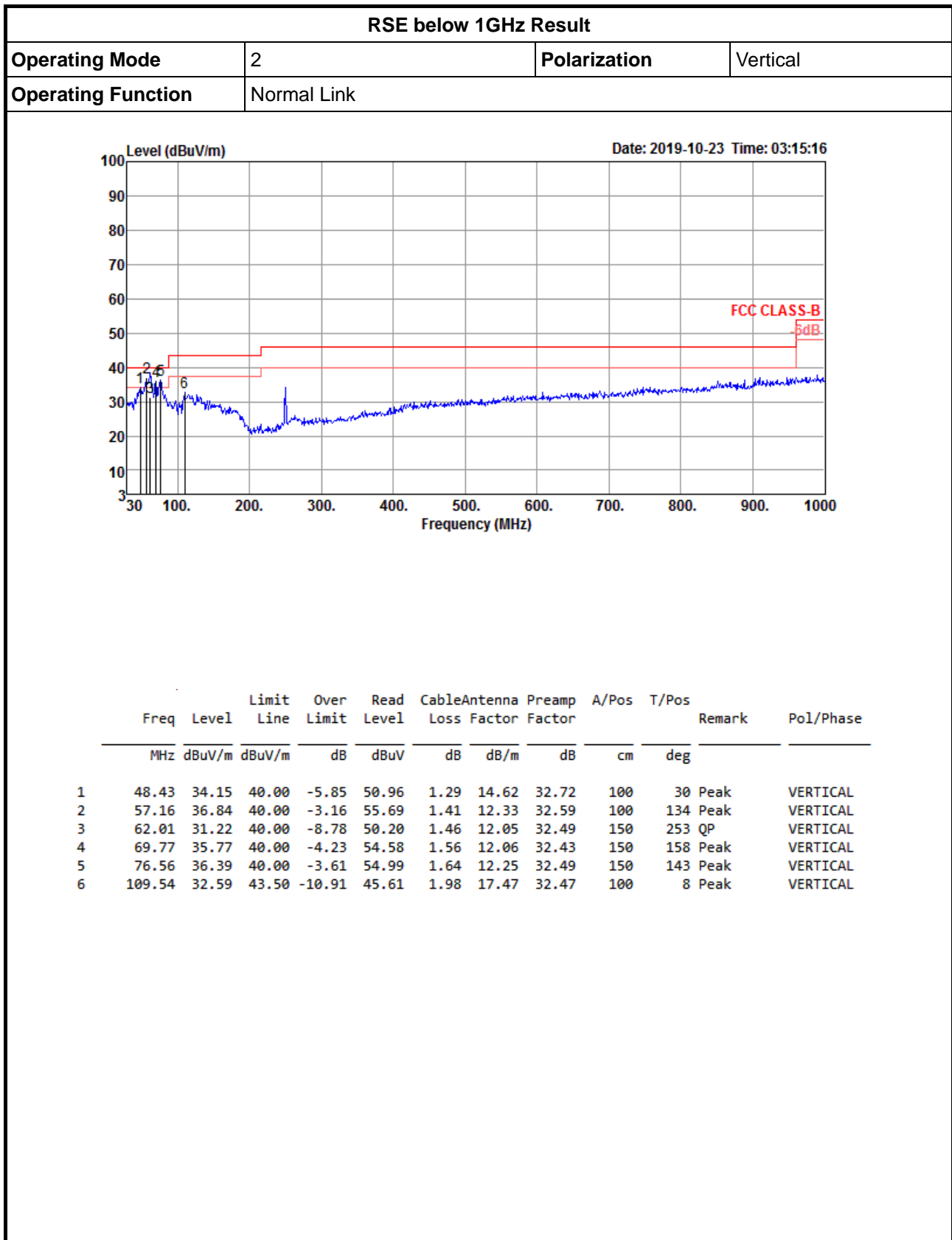


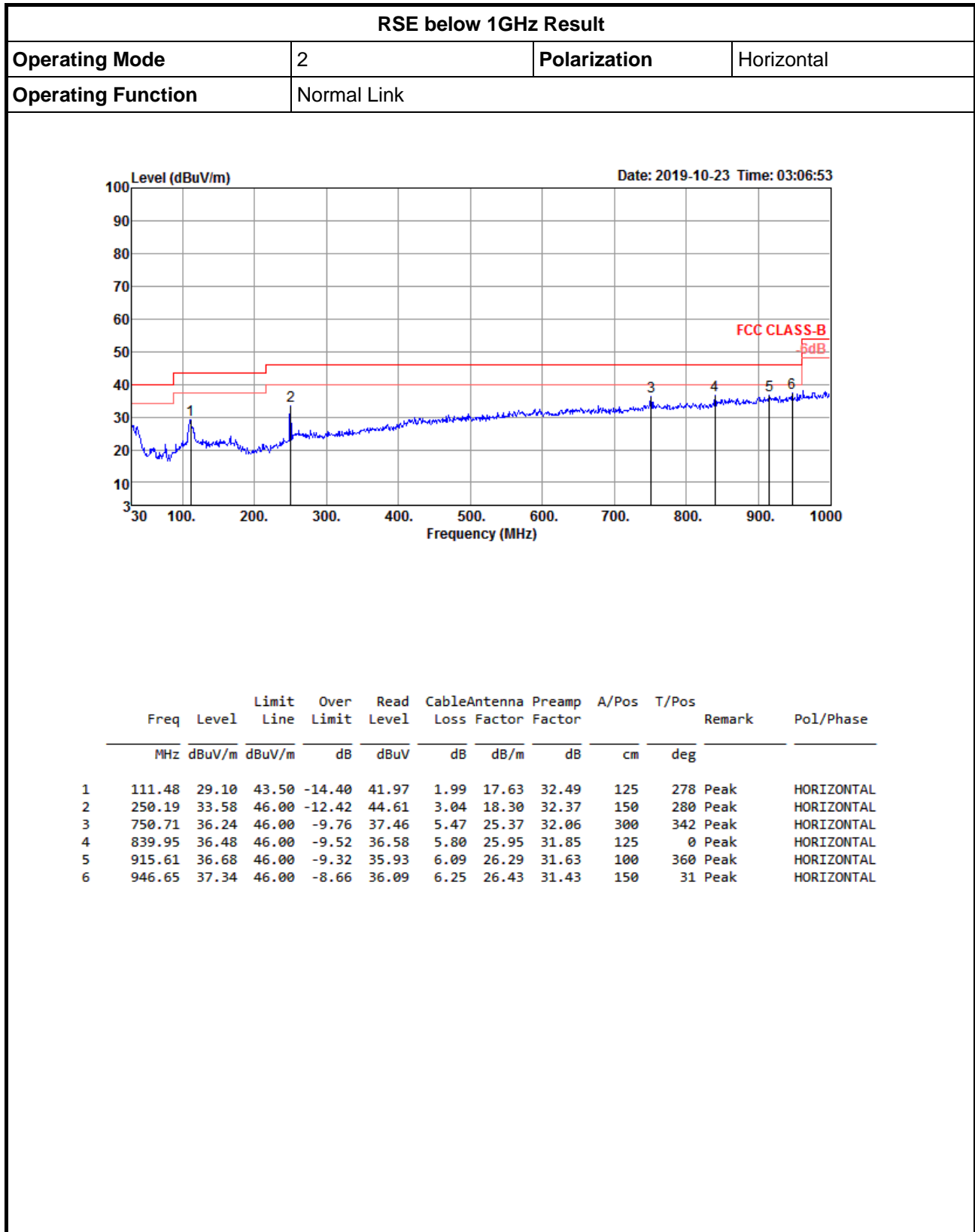
802.11ax HEW40_Nss1,(MCS0)_2TX

CSE NdB

2452MHz









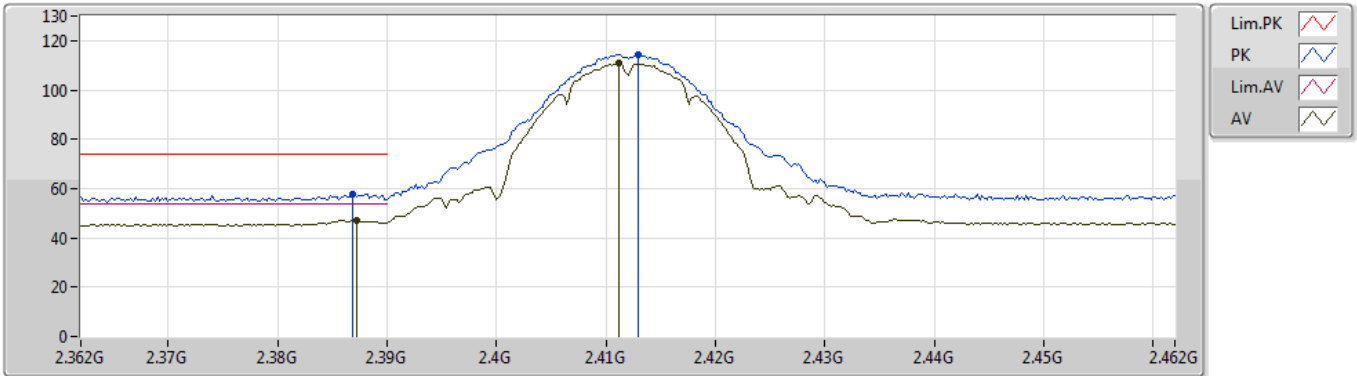
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_2TX	Pass	AV	2.3854G	53.90	54.00	-0.10	31.92	3	Vertical	90	1.24	-

802.11b_Nss1,(1Mbps)_2TX

19/10/2019

2412MHz_TX



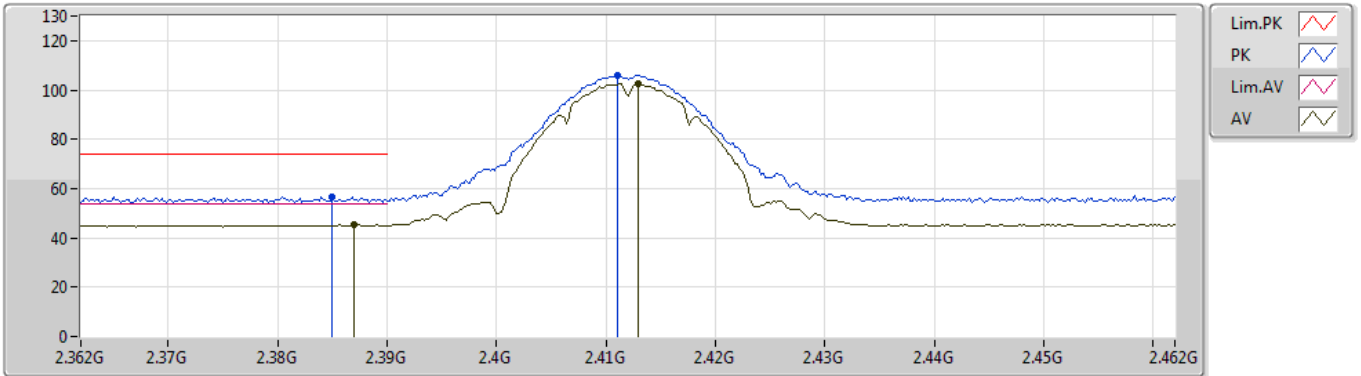
EUT_Z_2TX
Setting 19
03-C-5
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	2.3868G	57.62	74.00	-16.38	31.92	3	Vertical	281	1.71	-	25.70
AV	2.3872G	47.27	54.00	-6.73	31.92	3	Vertical	281	1.71	-	15.35
PK	2.413G	114.45	Inf	-Inf	32.01	3	Vertical	281	1.71	-	82.44
AV	2.4112G	110.79	Inf	-Inf	32.00	3	Vertical	281	1.71	-	78.79

802.11b_Nss1,(1Mbps)_2TX

19/10/2019

2412MHz_TX



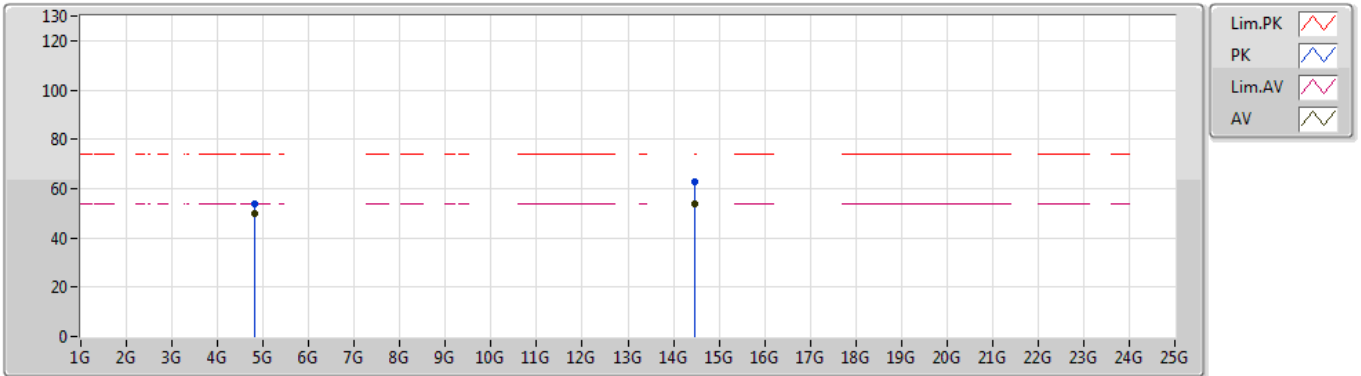
EUT_Z_2TX
Setting 19
03-C-5
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.385G	56.53	74.00	-17.47	31.92	3	Horizontal	14	1.65	-	24.61			
AV	2.387G	45.60	54.00	-8.40	31.92	3	Horizontal	14	1.65	-	13.68			
PK	2.411G	106.06	Inf	-Inf	32.00	3	Horizontal	14	1.65	-	74.06			
AV	2.413G	102.72	Inf	-Inf	32.01	3	Horizontal	14	1.65	-	70.71			

802.11b_Nss1,(1Mbps)_2TX

19/10/2019

2412MHz_TX



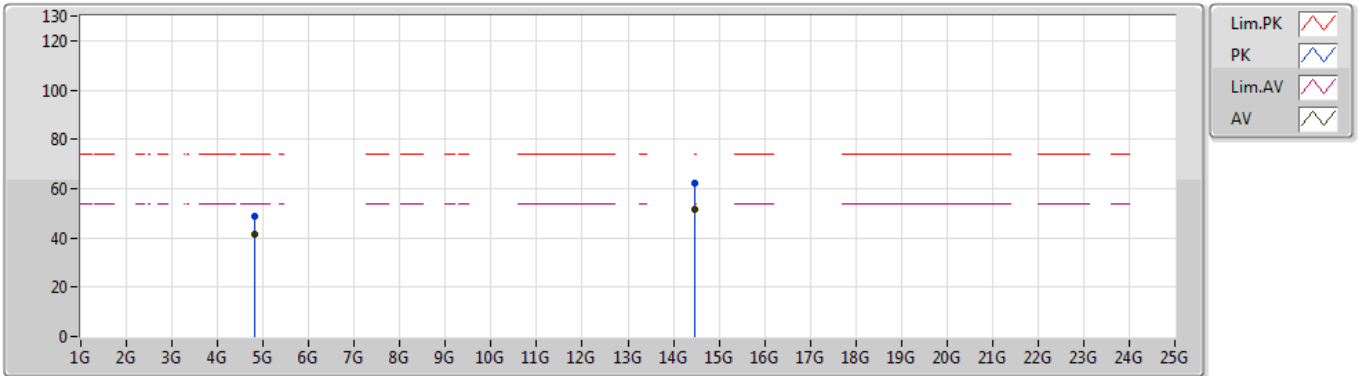
EUT_Z_2TX
Setting 19
03-C-5
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.82395G	53.83	74.00	-20.17	4.71	3	Vertical	277	1.20	-	49.12			
AV	4.82393G	50.02	54.00	-3.98	4.71	3	Vertical	277	1.20	-	45.31			
PK	14.47187G	62.72	74.00	-11.28	16.99	3	Vertical	102	1.24	-	45.73			
AV	14.47187G	53.58	54.00	-0.42	16.99	3	Vertical	102	1.24	-	36.59			

802.11b_Nss1,(1Mbps)_2TX

19/10/2019

2412MHz_TX



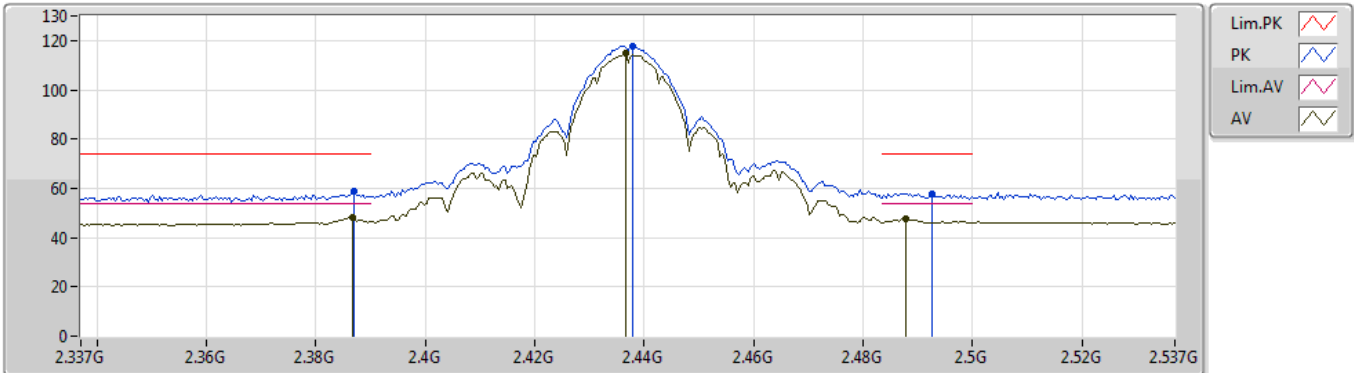
EUT_Z_2TX
Setting 19
03-C-5
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.82397G	48.92	74.00	-25.08	4.71	3	Horizontal	160	1.59	-	44.21			
AV	4.82398G	41.40	54.00	-12.60	4.71	3	Horizontal	160	1.59	-	36.69			
PK	14.47201G	62.17	74.00	-11.83	16.99	3	Horizontal	78	1.26	-	45.18			
AV	14.4719G	51.52	54.00	-2.48	16.99	3	Horizontal	78	1.26	-	34.53			

802.11b_Nss1,(1Mbps)_2TX

19/10/2019

2437MHz_TX



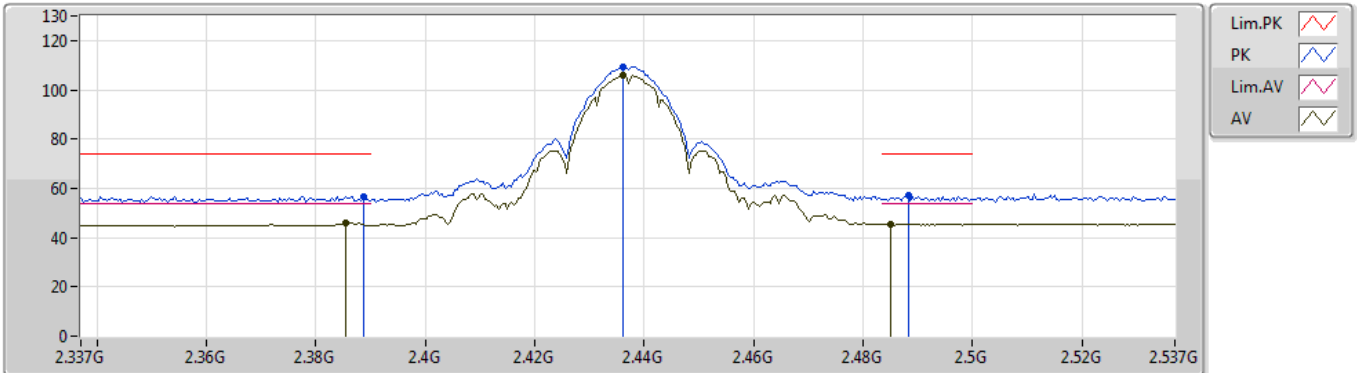
EUT_Z_2TX
Setting 22
03-C-5
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	2.387G	58.61	74.00	-15.39	31.92	3	Vertical	280	1.70	-	26.69
AV	2.3866G	48.15	54.00	-5.85	31.92	3	Vertical	280	1.70	-	16.23
PK	2.4378G	117.87	Inf	-Inf	32.09	3	Vertical	280	1.70	-	85.78
AV	2.4366G	114.61	Inf	-Inf	32.09	3	Vertical	280	1.70	-	82.52
PK	2.4926G	57.99	74.00	-16.01	32.29	3	Vertical	280	1.70	-	25.70
AV	2.4878G	47.70	54.00	-6.30	32.26	3	Vertical	280	1.70	-	15.44

802.11b_Nss1,(1Mbps)_2TX

19/10/2019

2437MHz_TX



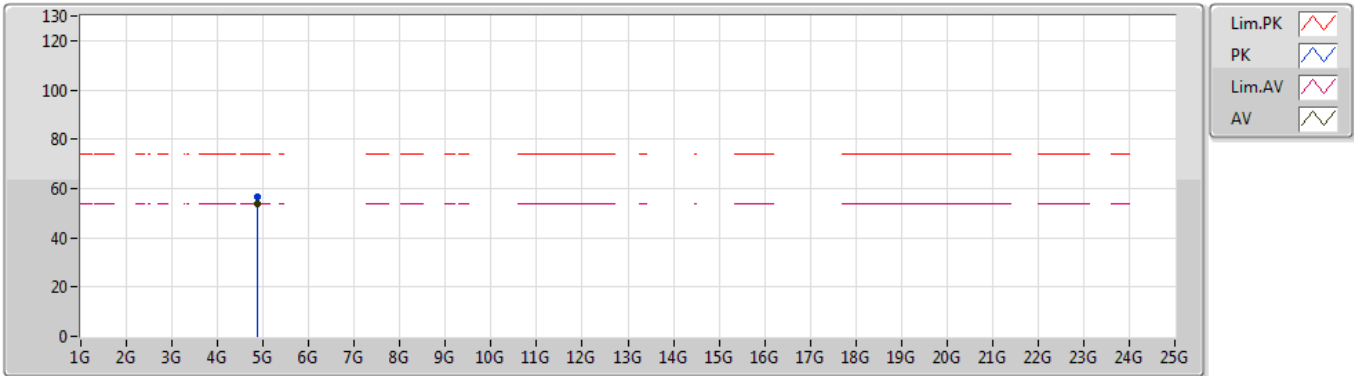
EUT_Z_2TX
Setting 22
03-C-5
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.3886G	56.85	74.00	-17.15	31.93	3	Horizontal	13	1.85	-	24.92			
AV	2.3854G	45.94	54.00	-8.06	31.92	3	Horizontal	13	1.85	-	14.02			
PK	2.4362G	109.49	Inf	-Inf	32.09	3	Horizontal	13	1.85	-	77.40			
AV	2.4362G	106.05	Inf	-Inf	32.09	3	Horizontal	13	1.85	-	73.96			
PK	2.4882G	57.04	74.00	-16.96	32.26	3	Horizontal	13	1.85	-	24.78			
AV	2.485G	45.55	54.00	-8.45	32.26	3	Horizontal	13	1.85	-	13.29			

802.11b_Nss1,(1Mbps)_2TX

19/10/2019

2437MHz_TX



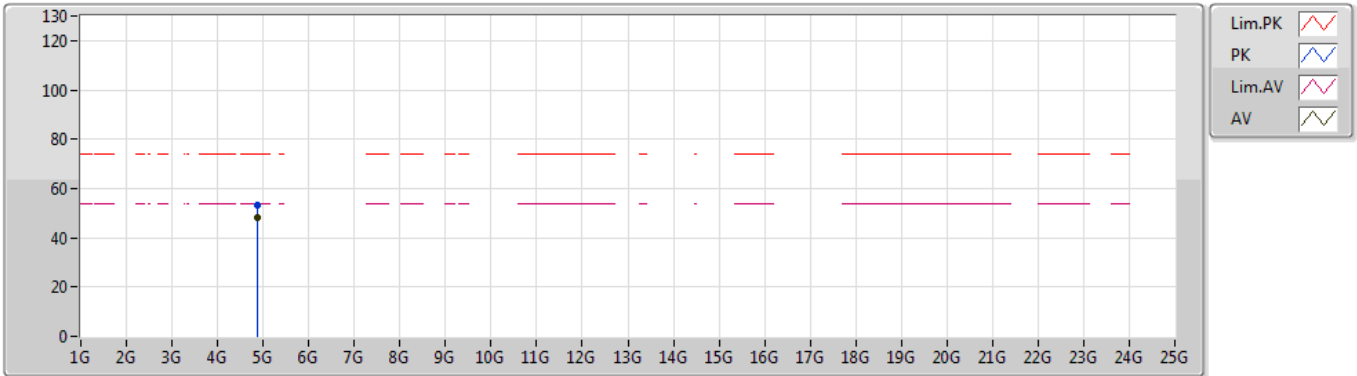
EUT_Z_2TX
Setting 22
03-C-5
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.87408G	56.68	74.00	-17.32	4.80	3	Vertical	277	1.31	-	51.88			
AV	4.87396G	53.53	54.00	-0.47	4.80	3	Vertical	277	1.31	-	48.73			

802.11b_Nss1,(1Mbps)_2TX

19/10/2019

2437MHz_TX



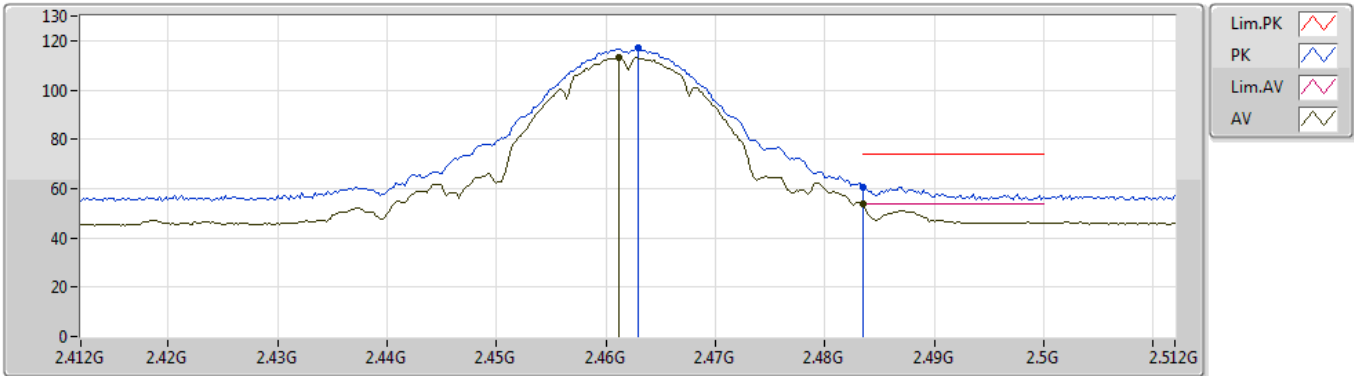
EUT_Z_2TX
Setting 22
03-C-5
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.87396G	52.96	74.00	-21.04	4.80	3	Horizontal	111	1.54	-	48.16			
AV	4.87395G	48.18	54.00	-5.82	4.80	3	Horizontal	111	1.54	-	43.38			

802.11b_Nss1,(1Mbps)_2TX

19/10/2019

2462MHz_TX



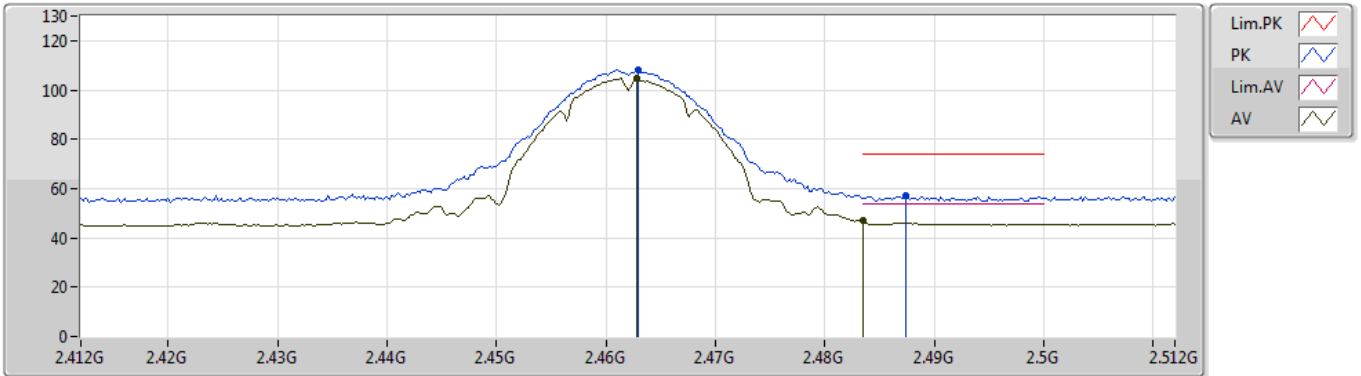
EUT_Z_2TX
Setting 20.5
03-C-5
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.463G	116.86	Inf	-Inf	32.18	3	Vertical	9	1.89	-	84.68			
AV	2.4612G	113.26	Inf	-Inf	32.17	3	Vertical	9	1.89	-	81.09			
PK	2.4835G	60.70	74.00	-13.30	32.25	3	Vertical	9	1.89	-	28.45			
AV	2.4835G	53.82	54.00	-0.18	32.25	3	Vertical	9	1.89	-	21.57			

802.11b_Nss1,(1Mbps)_2TX

19/10/2019

2462MHz_TX



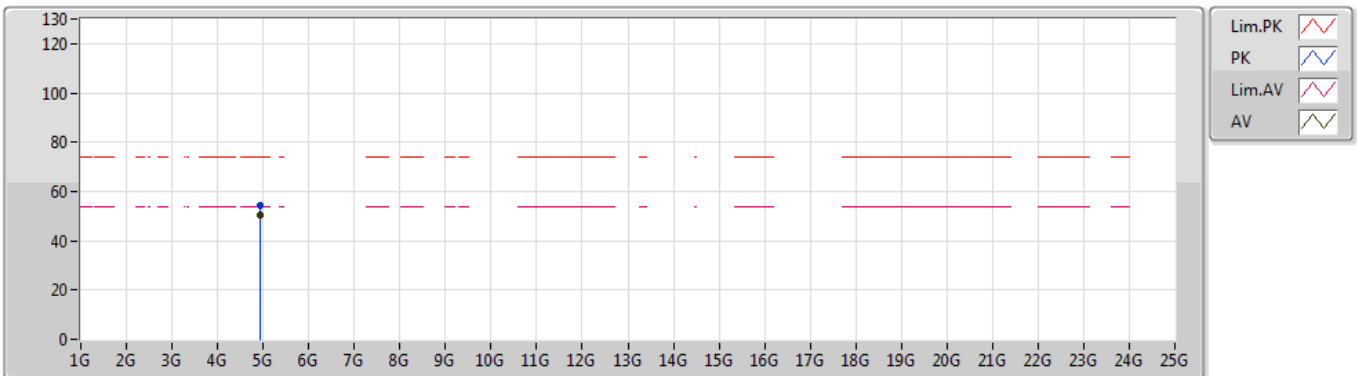
EUT Z_2TX
Setting 20.5
03-C-5
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	2.463G	107.93	Inf	-Inf	32.18	3	Horizontal	0	1.84	-	75.75
AV	2.4628G	104.58	Inf	-Inf	32.18	3	Horizontal	0	1.84	-	72.40
PK	2.4874G	57.19	74.00	-16.81	32.26	3	Horizontal	0	1.84	-	24.93
AV	2.4835G	46.90	54.00	-7.10	32.25	3	Horizontal	0	1.84	-	14.65

802.11b_Nss1,(1Mbps)_2TX

19/10/2019

2462MHz_TX



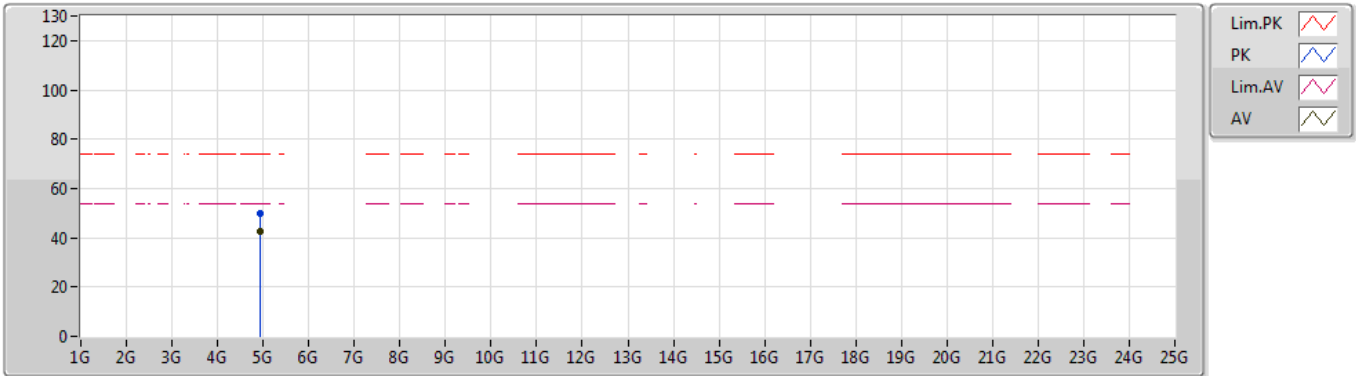
EUT_Z_2TX
Setting 20.5
03-C-5
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.9239G	54.20	74.00	-19.80	4.90	3	Vertical	276	1.20	-	49.30			
AV	4.92395G	50.44	54.00	-3.56	4.90	3	Vertical	276	1.20	-	45.54			

802.11b_Nss1,(1Mbps)_2TX

19/10/2019

2462MHz_TX



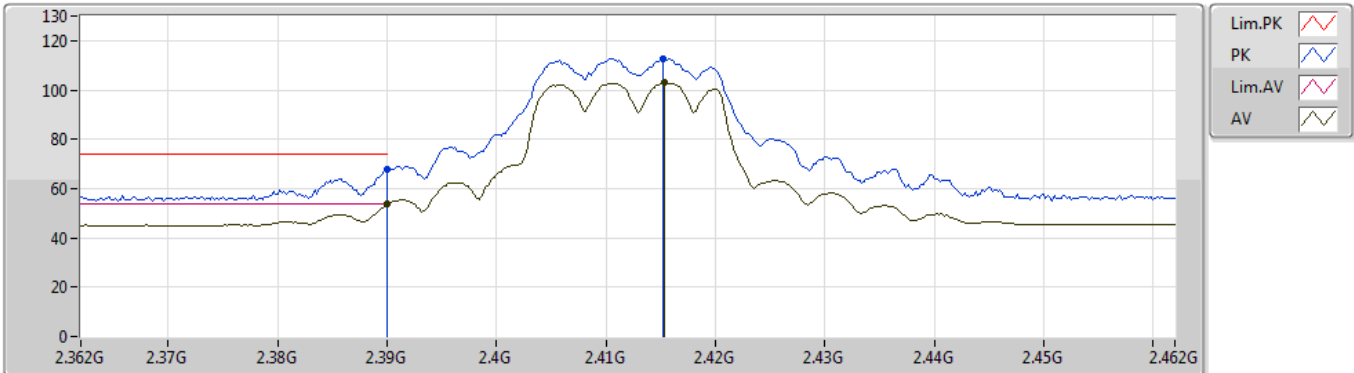
EUT_Z_2TX
Setting 20.5
03-C-5
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.92409G	49.67	74.00	-24.33	4.90	3	Horizontal	110	1.49	-	44.77			
AV	4.92396G	42.85	54.00	-11.15	4.90	3	Horizontal	110	1.49	-	37.95			

802.11g_Nss1,(6Mbps)_2TX

19/10/2019

2412MHz_TX



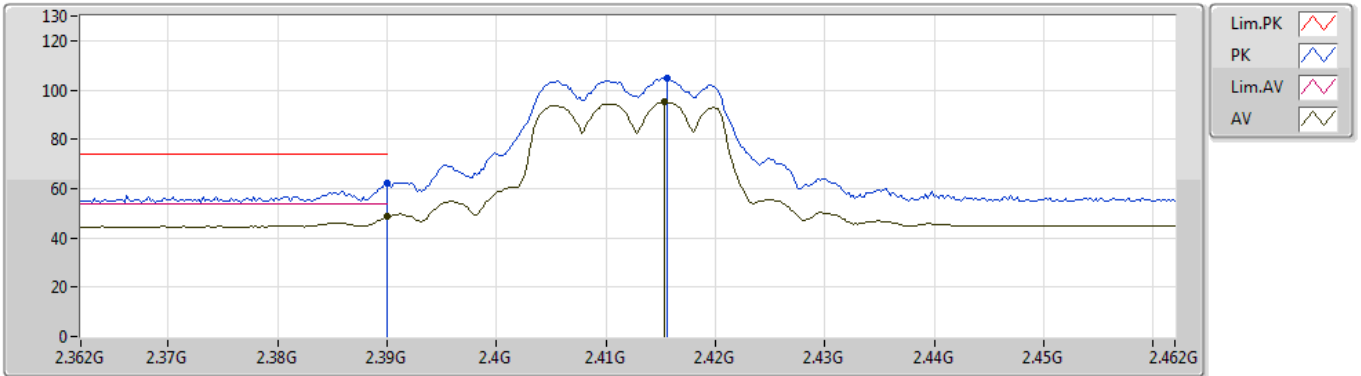
EUT_Z_2TX
Setting 16
03-C-5
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.39G	67.95	74.00	-6.05	31.93	3	Vertical	77	1.70	-	36.02			
AV	2.39G	53.64	54.00	-0.36	31.93	3	Vertical	77	1.70	-	21.71			
PK	2.4152G	112.46	Inf	-Inf	32.02	3	Vertical	77	1.70	-	80.44			
AV	2.4154G	103.16	Inf	-Inf	32.02	3	Vertical	77	1.70	-	71.14			

802.11g_Nss1,(6Mbps)_2TX

19/10/2019

2412MHz_TX



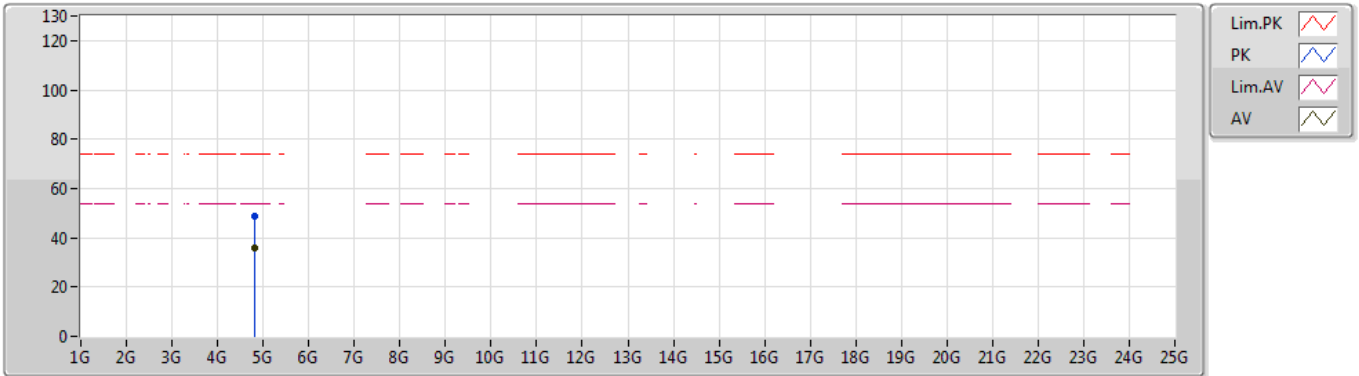
EUT_Z_2TX
Setting 16
03-C-5
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.39G	62.03	74.00	-11.97	31.93	3	Horizontal	2	2.16	-	30.10			
AV	2.39G	48.56	54.00	-5.44	31.93	3	Horizontal	2	2.16	-	16.63			
PK	2.4156G	104.71	Inf	-Inf	32.02	3	Horizontal	2	2.16	-	72.69			
AV	2.4154G	95.24	Inf	-Inf	32.02	3	Horizontal	2	2.16	-	63.22			

802.11g_Nss1,(6Mbps)_2TX

19/10/2019

2412MHz_TX



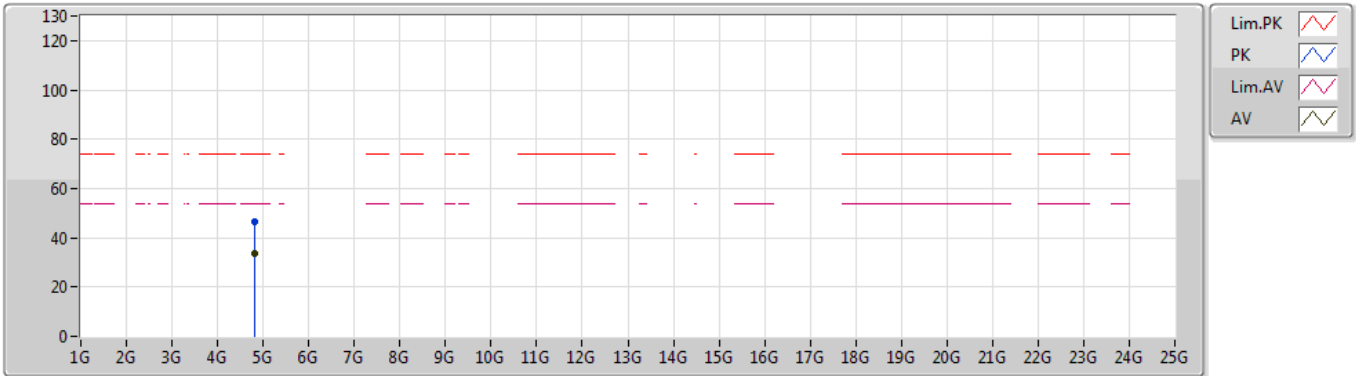
EUT Z_2TX
Setting 16
03-C-5
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.82178G	48.78	74.00	-25.22	4.70	3	Vertical	247	1.48	-	44.08			
AV	4.82208G	35.83	54.00	-18.17	4.70	3	Vertical	247	1.48	-	31.13			

802.11g_Nss1,(6Mbps)_2TX

19/10/2019

2412MHz_TX



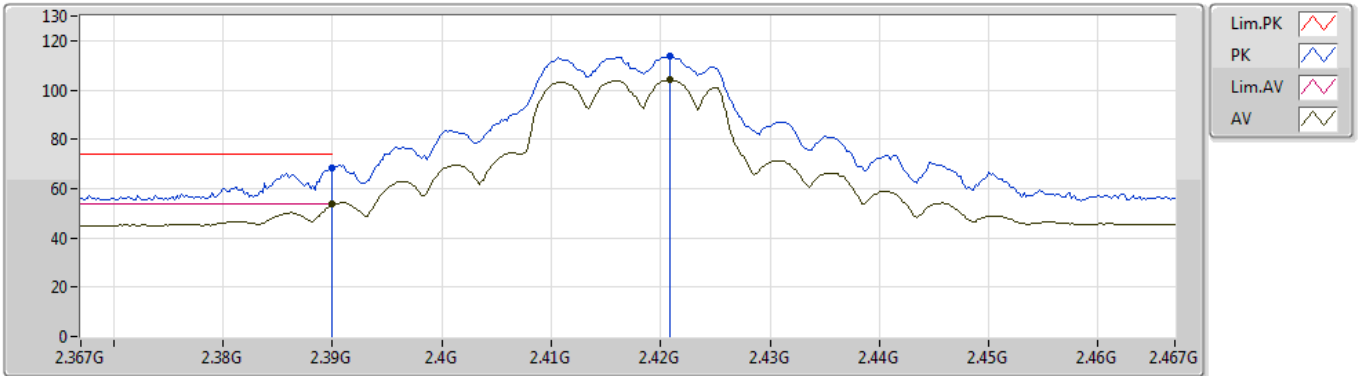
EUT_Z_2TX
Setting 16
03-C-5
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.82226G	46.52	74.00	-27.48	4.70	3	Horizontal	286	1.55	-	41.82			
AV	4.82214G	33.75	54.00	-20.25	4.70	3	Horizontal	286	1.55	-	29.05			

802.11g_Nss1,(6Mbps)_2TX

19/10/2019

2417MHz_TX



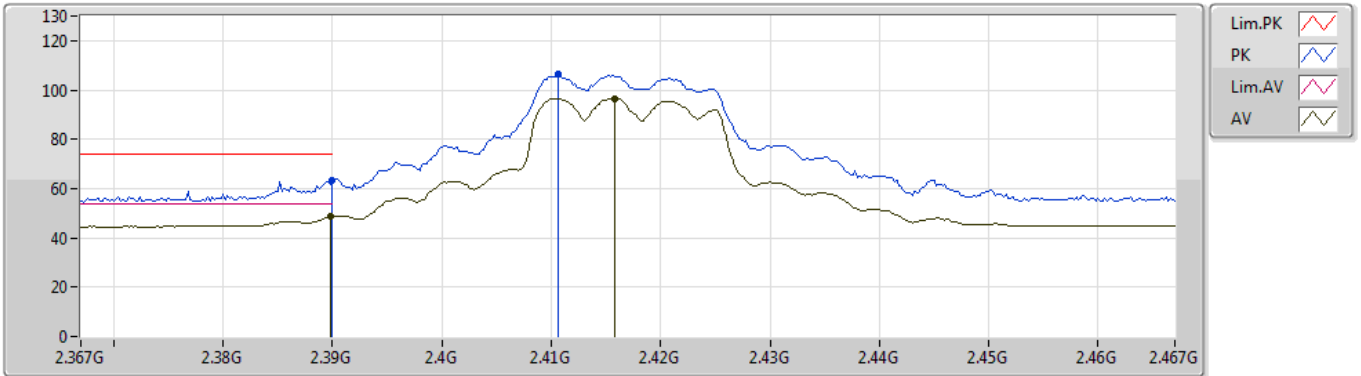
EUT_Z_2TX
Setting 17.5
03-C-5
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.39G	68.46	74.00	-5.54	31.93	3	Vertical	91	1.30	-	36.53			
AV	2.39G	53.52	54.00	-0.48	31.93	3	Vertical	91	1.30	-	21.59			
PK	2.4208G	113.50	Inf	-Inf	32.03	3	Vertical	91	1.30	-	81.47			
AV	2.4208G	103.98	Inf	-Inf	32.03	3	Vertical	91	1.30	-	71.95			

802.11g_Nss1,(6Mbps)_2TX

19/10/2019

2417MHz_TX



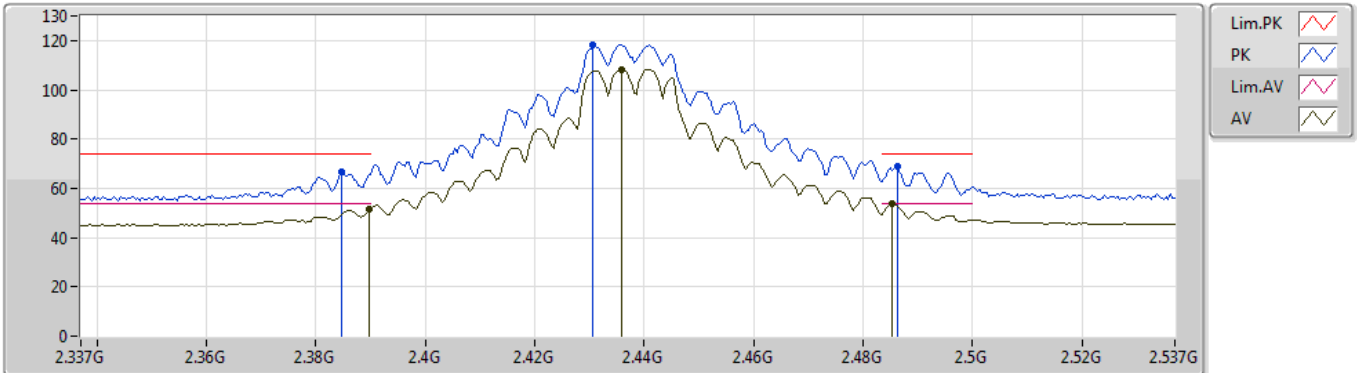
EUT_Z_2TX
Setting 17.5
03-C-5
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.39G	63.05	74.00	-10.95	31.93	3	Horizontal	320	2.09	-	31.12			
AV	2.3898G	48.56	54.00	-5.44	31.93	3	Horizontal	320	2.09	-	16.63			
PK	2.4106G	106.23	Inf	-Inf	32.00	3	Horizontal	320	2.09	-	74.23			
AV	2.4158G	96.41	Inf	-Inf	32.02	3	Horizontal	320	2.09	-	64.39			

802.11g_Nss1,(6Mbps)_2TX

19/10/2019

2437MHz_TX



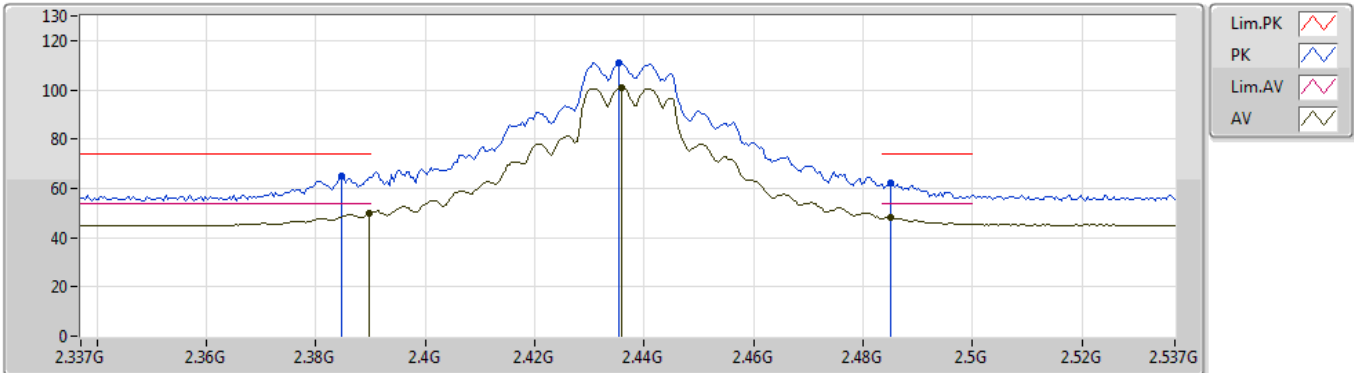
EUT Z_2TX
Setting 21.5
03-C-5
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	2.3846G	66.95	74.00	-7.05	31.92	3	Vertical	88	1.85	-	35.03
AV	2.3898G	51.80	54.00	-2.20	31.93	3	Vertical	88	1.85	-	19.87
PK	2.4306G	118.21	Inf	-Inf	32.07	3	Vertical	88	1.85	-	86.14
AV	2.4358G	108.35	Inf	-Inf	32.09	3	Vertical	88	1.85	-	76.26
PK	2.4862G	68.66	74.00	-5.34	32.26	3	Vertical	88	1.85	-	36.40
AV	2.4854G	53.55	54.00	-0.45	32.26	3	Vertical	88	1.85	-	21.29

802.11g_Nss1,(6Mbps)_2TX

19/10/2019

2437MHz_TX



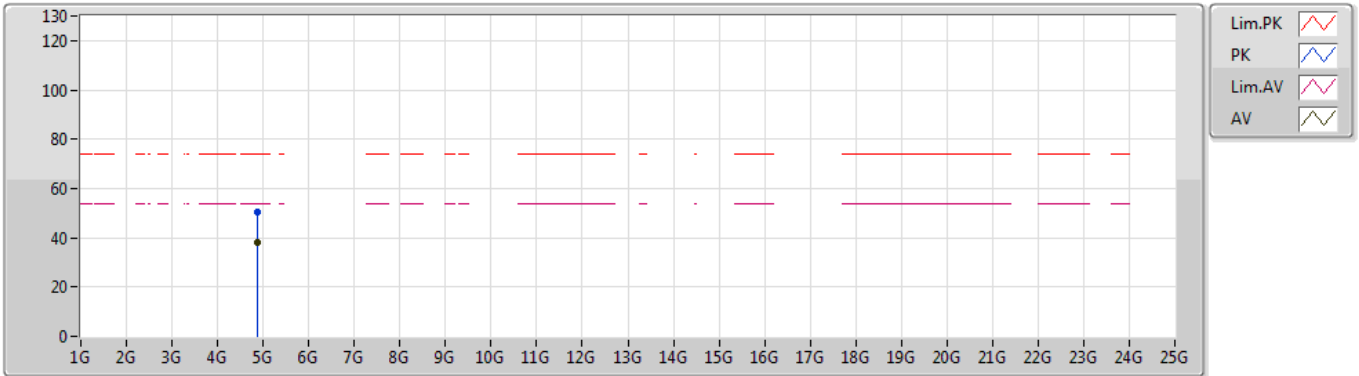
EUT Z_2TX
Setting 21.5
03-C-5
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	2.3846G	64.97	74.00	-9.03	31.92	3	Horizontal	322	2.37	-	33.05
AV	2.3898G	50.12	54.00	-3.88	31.93	3	Horizontal	322	2.37	-	18.19
PK	2.4354G	110.83	Inf	-Inf	32.09	3	Horizontal	322	2.37	-	78.74
AV	2.4358G	101.03	Inf	-Inf	32.09	3	Horizontal	322	2.37	-	68.94
PK	2.485G	62.34	74.00	-11.66	32.26	3	Horizontal	322	2.37	-	30.08
AV	2.485G	48.19	54.00	-5.81	32.26	3	Horizontal	322	2.37	-	15.93

802.11g_Nss1,(6Mbps)_2TX

19/10/2019

2437MHz_TX



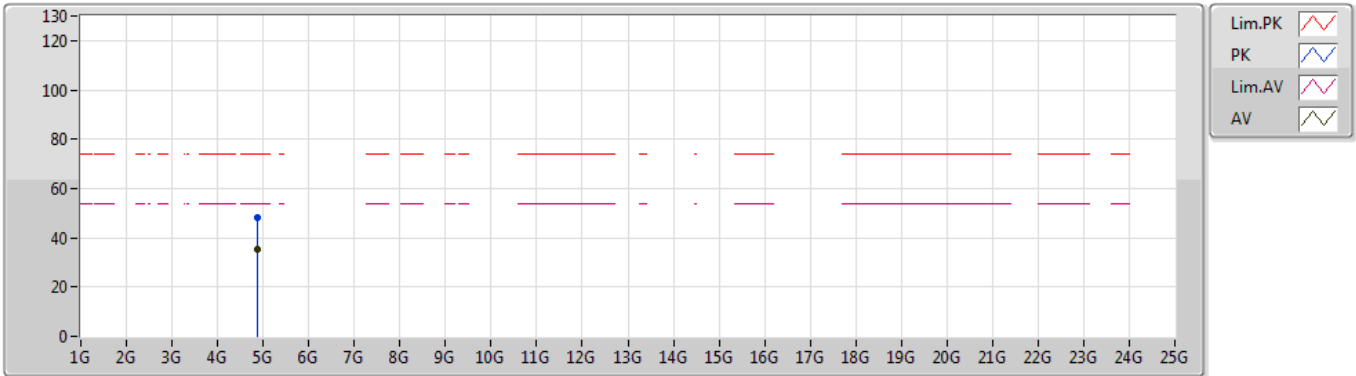
EUT Z_2TX
Setting 21.5
03-C-5
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.86848G	50.39	74.00	-23.61	4.79	3	Vertical	276	1.03	-	45.60			
AV	4.87388G	38.00	54.00	-16.00	4.80	3	Vertical	276	1.03	-	33.20			

802.11g_Nss1,(6Mbps)_2TX

19/10/2019

2437MHz_TX



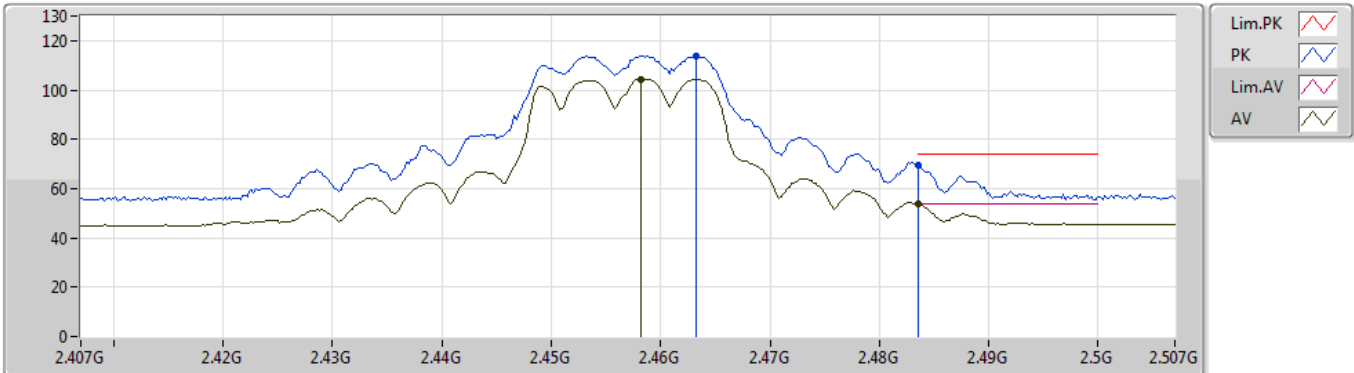
EUT Z_2TX
Setting 21.5
03-C-5
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.86764G	48.10	74.00	-25.90	4.79	3	Horizontal	109	1.51	-	43.31			
AV	4.87388G	35.23	54.00	-18.77	4.80	3	Horizontal	109	1.51	-	30.43			

802.11g_Nss1,(6Mbps)_2TX

19/10/2019

2457MHz_TX



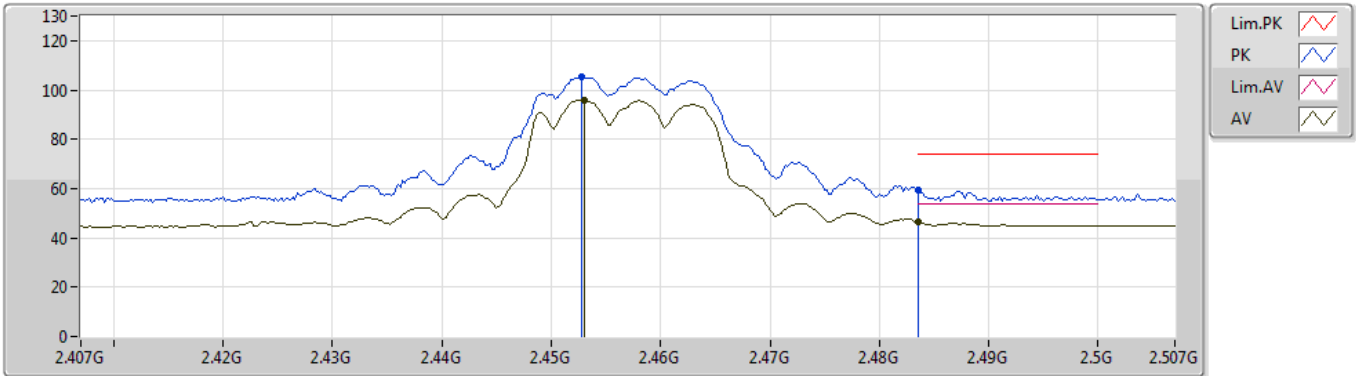
EUT_Z_2TX
Setting 17
03-C-5
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.4632G	113.72	Inf	-Inf	32.18	3	Vertical	87	1.43	-	81.54			
AV	2.4582G	104.48	Inf	-Inf	32.16	3	Vertical	87	1.43	-	72.32			
PK	2.4835G	69.52	74.00	-4.48	32.25	3	Vertical	87	1.43	-	37.27			
AV	2.4835G	53.60	54.00	-0.40	32.25	3	Vertical	87	1.43	-	21.35			

802.11g_Nss1,(6Mbps)_2TX

19/10/2019

2457MHz_TX



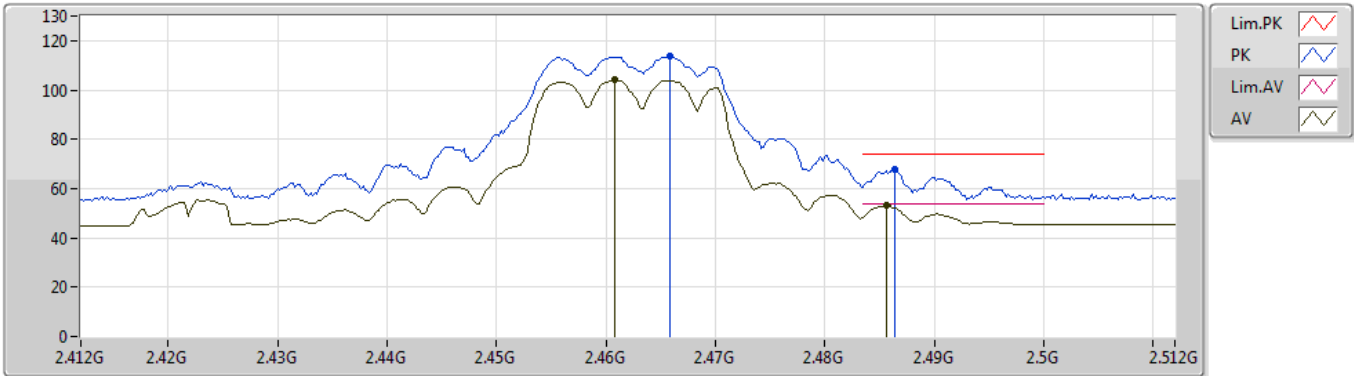
EUT_Z_2TX
Setting 17
03-C-5
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.4528G	105.46	Inf	-Inf	32.15	3	Horizontal	3	2.06	-	73.31			
AV	2.453G	95.76	Inf	-Inf	32.15	3	Horizontal	3	2.06	-	63.61			
PK	2.4835G	59.41	74.00	-14.59	32.25	3	Horizontal	3	2.06	-	27.16			
AV	2.4835G	46.41	54.00	-7.59	32.25	3	Horizontal	3	2.06	-	14.16			

802.11g_Nss1,(6Mbps)_2TX

19/10/2019

2462MHz_TX



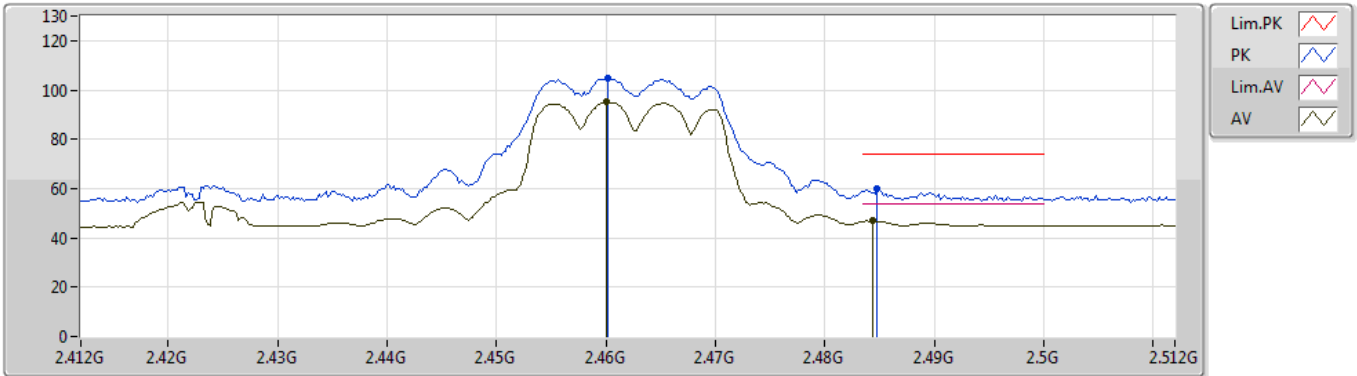
EUT_Z_2TX
Setting 16.5
03-C-5
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	2.4658G	113.58	Inf	-Inf	32.19	3	Vertical	87	1.46	-	81.39
AV	2.4608G	104.08	Inf	-Inf	32.17	3	Vertical	87	1.46	-	71.91
PK	2.4864G	67.55	74.00	-6.45	32.26	3	Vertical	87	1.46	-	35.29
AV	2.4856G	53.11	54.00	-0.89	32.26	3	Vertical	87	1.46	-	20.85

802.11g_Nss1,(6Mbps)_2TX

19/10/2019

2462MHz_TX



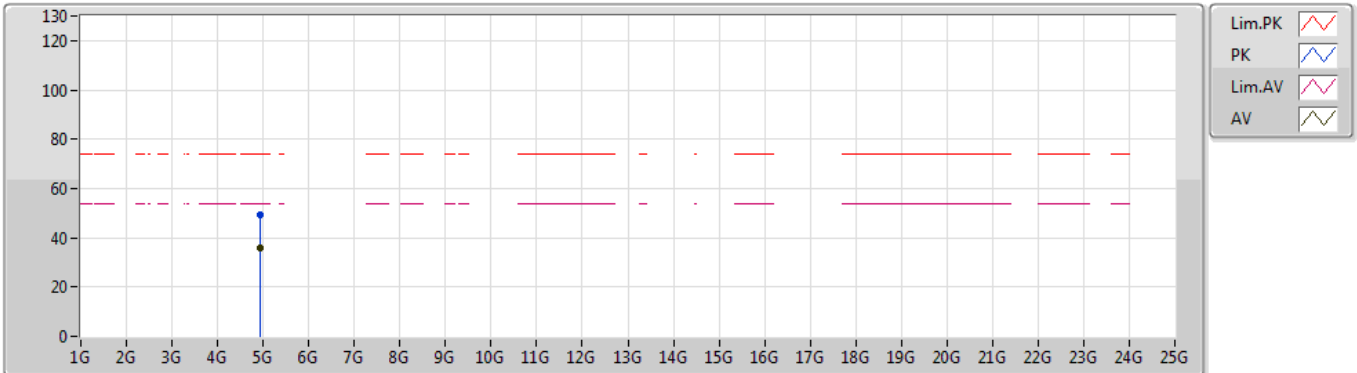
EUT Z_2TX
Setting 16.5
03-C-5
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	2.4602G	104.59	Inf	-Inf	32.17	3	Horizontal	0	1.81	-	72.42
AV	2.46G	94.99	Inf	-Inf	32.17	3	Horizontal	0	1.81	-	62.82
PK	2.4848G	59.82	74.00	-14.18	32.25	3	Horizontal	0	1.81	-	27.57
AV	2.4844G	47.10	54.00	-6.90	32.25	3	Horizontal	0	1.81	-	14.85

802.11g_Nss1,(6Mbps)_2TX

19/10/2019

2462MHz_TX



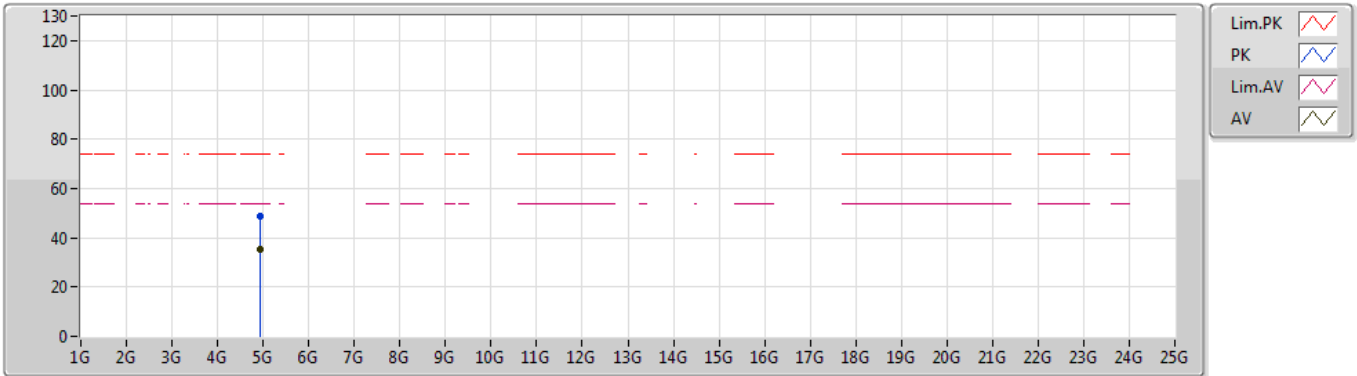
EUT_Z_2TX
Setting 16.5
03-C-5
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.9274G	49.14	74.00	-24.86	4.89	3	Vertical	277	1.28	-	44.25			
AV	4.9238G	36.07	54.00	-17.93	4.90	3	Vertical	277	1.28	-	31.17			

802.11g_Nss1,(6Mbps)_2TX

19/10/2019

2462MHz_TX



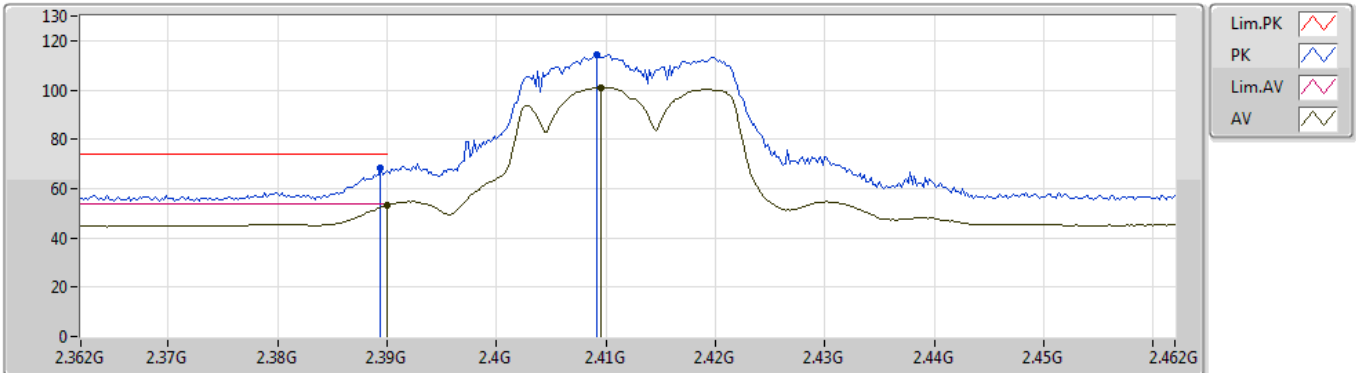
EUT_Z_2TX
Setting 16.5
03-C-5
FSP

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.92706G	48.77	74.00	-25.23	4.89	3	Horizontal	140	1.92	-	43.88			
AV	4.92196G	35.19	54.00	-18.81	4.89	3	Horizontal	140	1.92	-	30.30			

802.11ax HEW20_Nss1,(MCS0)_2TX

22/10/2019

2412MHz_TX



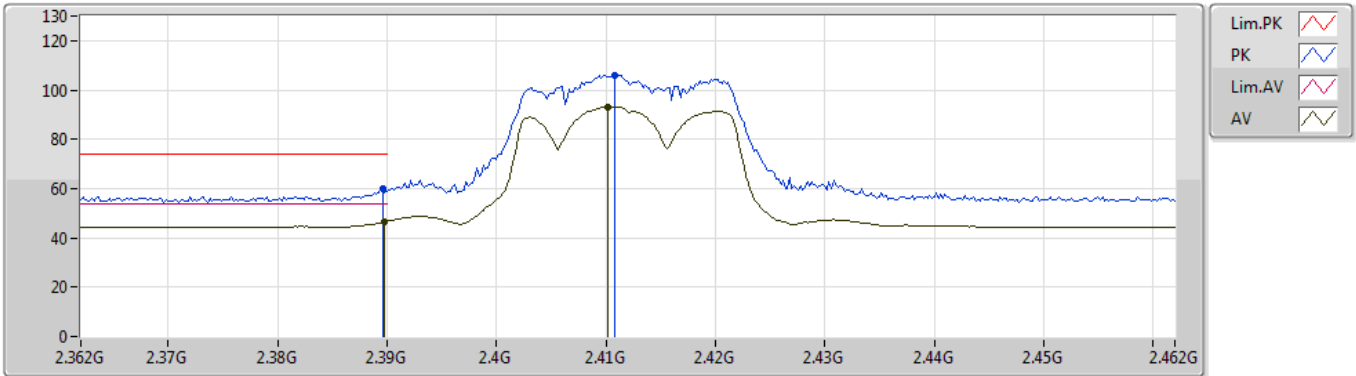
EUT_Z_2TX
Setting 15
03-P-2
FSP(100019)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	2.3894G	68.23	74.00	-5.77	31.93	3	Vertical	88	1.50	-	36.30
AV	2.39G	53.09	54.00	-0.91	31.93	3	Vertical	88	1.50	-	21.16
PK	2.4092G	114.47	Inf	-Inf	31.99	3	Vertical	88	1.50	-	82.48
AV	2.4096G	101.12	Inf	-Inf	31.99	3	Vertical	88	1.50	-	69.13

802.11ax HEW20_Nss1,(MCS0)_2TX

22/10/2019

2412MHz_TX



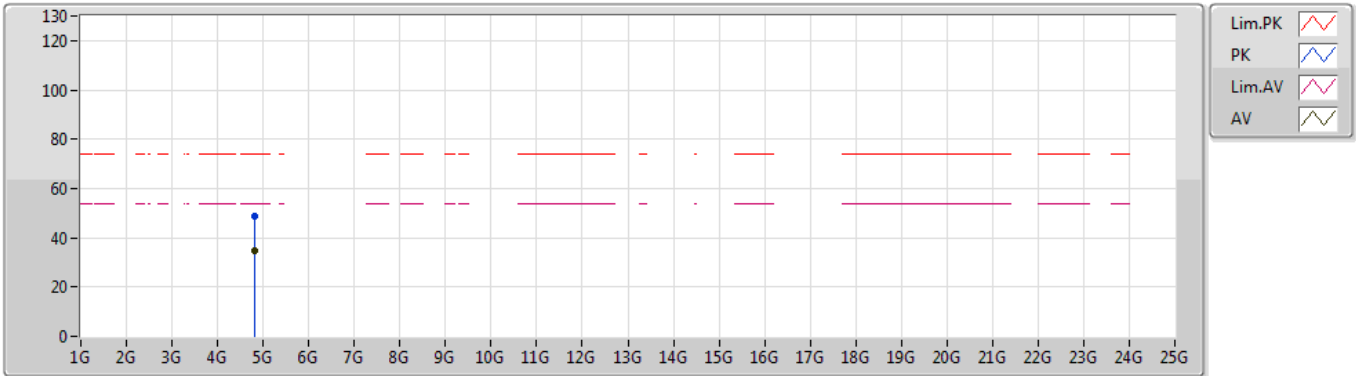
EUT_Z_2TX
Setting 15
03-P-2
FSP(100019)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	2.3896G	60.19	74.00	-13.81	31.93	3	Horizontal	13	1.32	-	28.26			
AV	2.3898G	46.61	54.00	-7.39	31.93	3	Horizontal	13	1.32	-	14.68			
PK	2.4108G	106.00	Inf	-Inf	32.00	3	Horizontal	13	1.32	-	74.00			
AV	2.4102G	93.27	Inf	-Inf	32.00	3	Horizontal	13	1.32	-	61.27			

802.11ax HEW20_Nss1,(MCS0)_2TX

22/10/2019

2412MHz_TX



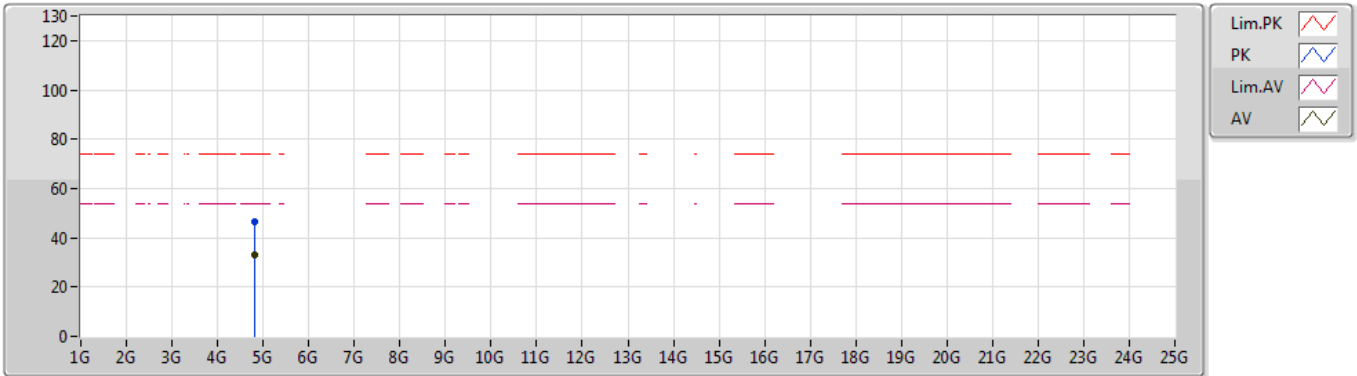
EUT Z_2TX
Setting 15
03-P-2
FSP(100019)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.82292G	48.47	74.00	-25.53	4.71	3	Vertical	249	1.37	-	43.76			
AV	4.82188G	34.75	54.00	-19.25	4.70	3	Vertical	249	1.37	-	30.05			

802.11ax HEW20_Nss1,(MCS0)_2TX

22/10/2019

2412MHz_TX



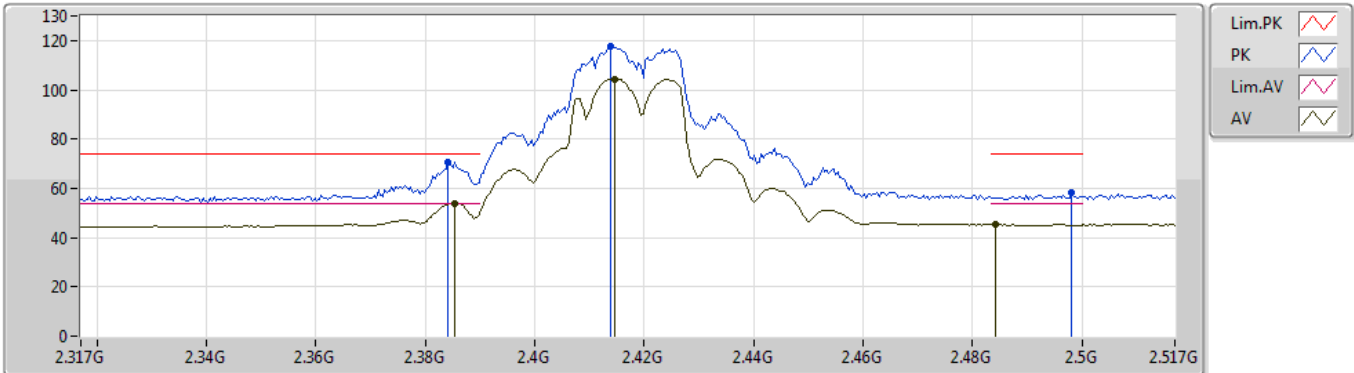
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Setting 15
03-P-2
FSP(100019)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.8113G	46.49	74.00	-27.51	4.68	3	Horizontal	106	1.49	-	41.81			
AV	4.8209G	33.34	54.00	-20.66	4.70	3	Horizontal	106	1.49	-	28.64			

802.11ax HEW20_Nss1,(MCS0)_2TX

22/10/2019

2417MHz_TX



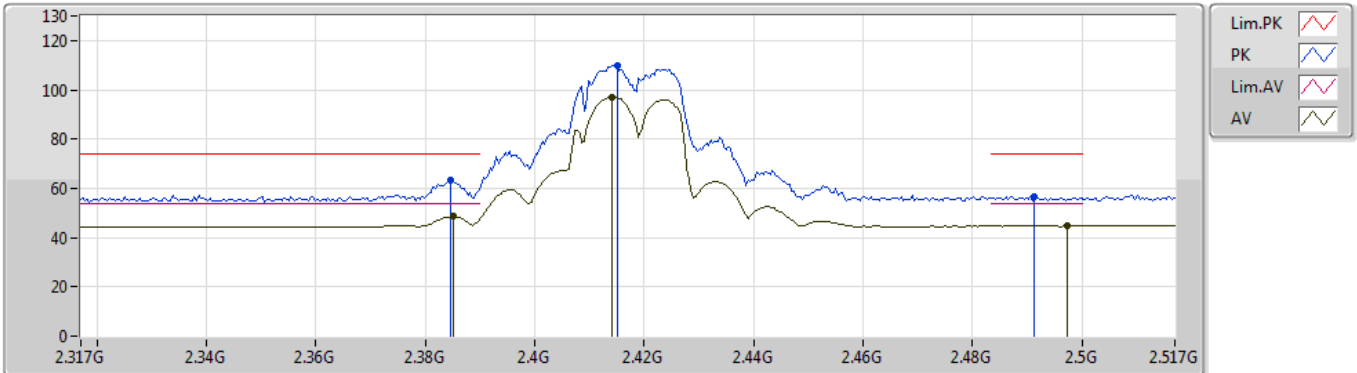
EUT_Z_2TX
Setting 18
03-P-2
FSP(100019)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	2.3842G	70.88	74.00	-3.12	31.92	3	Vertical	90	1.24	-	38.96
AV	2.3854G	53.90	54.00	-0.10	31.92	3	Vertical	90	1.24	-	21.98
PK	2.4138G	117.54	Inf	-Inf	32.01	3	Vertical	90	1.24	-	85.53
AV	2.4146G	104.43	Inf	-Inf	32.01	3	Vertical	90	1.24	-	72.42
PK	2.4982G	58.02	74.00	-15.98	32.30	3	Vertical	90	1.24	-	25.72
AV	2.4842G	45.22	54.00	-8.78	32.25	3	Vertical	90	1.24	-	12.97

802.11ax HEW20_Nss1,(MCS0)_2TX

22/10/2019

2417MHz_TX



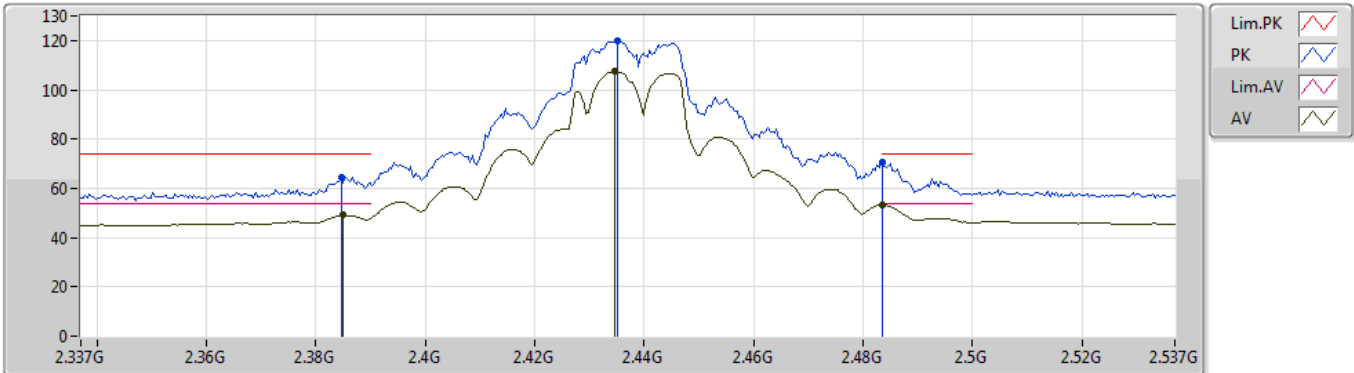
EUT_Z_2TX
Setting 18
03-P-2
FSP(100019)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	2.3846G	63.13	74.00	-10.87	31.92	3	Horizontal	3	2.16	-	31.21
AV	2.385G	48.48	54.00	-5.52	31.92	3	Horizontal	3	2.16	-	16.56
PK	2.415G	109.73	Inf	-Inf	32.01	3	Horizontal	3	2.16	-	77.72
AV	2.4142G	97.10	Inf	-Inf	32.01	3	Horizontal	3	2.16	-	65.09
PK	2.4914G	56.59	74.00	-17.41	32.28	3	Horizontal	3	2.16	-	24.31
AV	2.4974G	44.73	54.00	-9.27	32.30	3	Horizontal	3	2.16	-	12.43

802.11ax HEW20_Nss1,(MCS0)_2TX

22/10/2019

2437MHz_TX



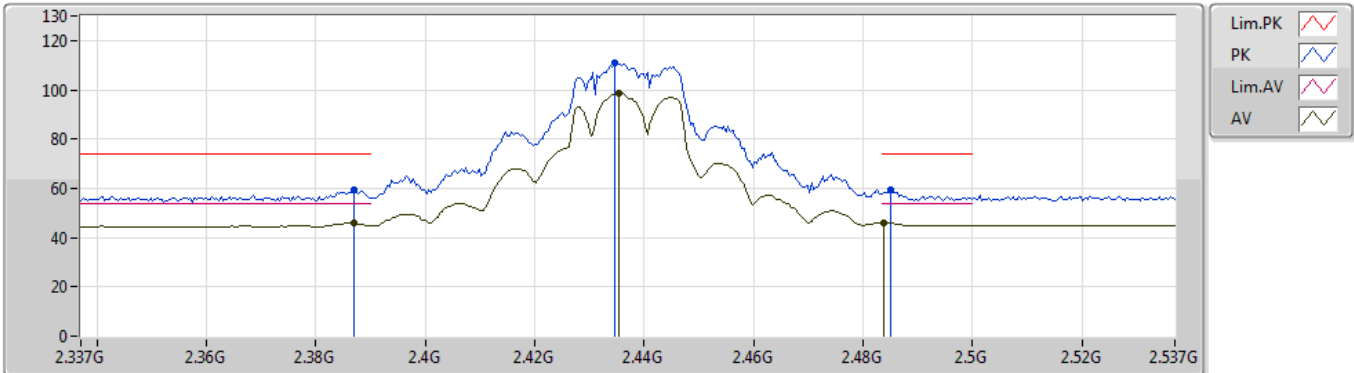
EUT Z_2TX
Setting 20.5
03-P-2
FSP(100019)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	2.3846G	64.61	74.00	-9.39	31.92	3	Vertical	89	1.20	-	32.69
AV	2.385G	49.24	54.00	-4.76	31.92	3	Vertical	89	1.20	-	17.32
PK	2.435G	119.99	Inf	-Inf	32.09	3	Vertical	89	1.20	-	87.90
AV	2.4346G	107.38	Inf	-Inf	32.08	3	Vertical	89	1.20	-	75.30
PK	2.4835G	70.34	74.00	-3.66	32.25	3	Vertical	89	1.20	-	38.09
AV	2.4835G	53.43	54.00	-0.57	32.25	3	Vertical	89	1.20	-	21.18

802.11ax HEW20_Nss1,(MCS0)_2TX

22/10/2019

2437MHz_TX



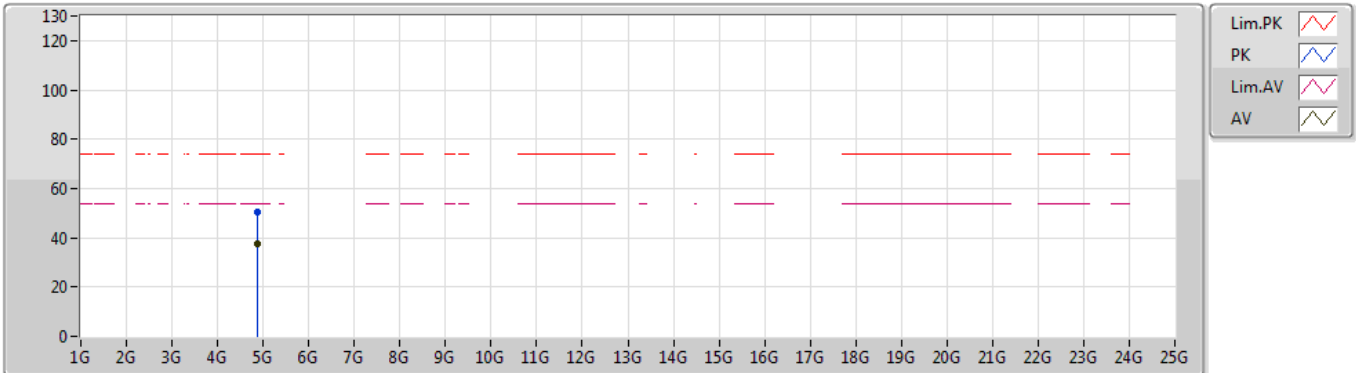
EUT_Z_2TX
Setting 20.5
03-P-2
FSP(100019)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	2.387G	59.50	74.00	-14.50	31.92	3	Horizontal	11	1.85	-	27.58
AV	2.387G	45.76	54.00	-8.24	31.92	3	Horizontal	11	1.85	-	13.84
PK	2.4346G	110.82	Inf	-Inf	32.08	3	Horizontal	11	1.85	-	78.74
AV	2.4354G	98.69	Inf	-Inf	32.09	3	Horizontal	11	1.85	-	66.60
PK	2.485G	59.47	74.00	-14.53	32.26	3	Horizontal	11	1.85	-	27.21
AV	2.4838G	46.07	54.00	-7.93	32.25	3	Horizontal	11	1.85	-	13.82

802.11ax HEW20_Nss1,(MCS0)_2TX

22/10/2019

2437MHz_TX



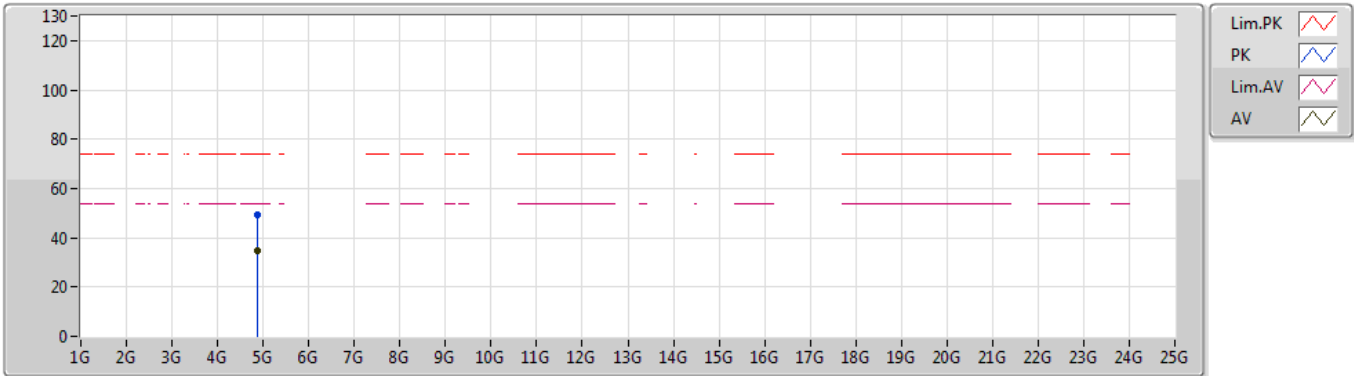
EUT Z_2TX
Setting 20.5
03-P-2
FSP(100019)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.8826G	50.62	74.00	-23.38	4.82	3	Vertical	277	1.09	-	45.80			
AV	4.8732G	37.52	54.00	-16.48	4.80	3	Vertical	277	1.09	-	32.72			

802.11ax HEW20_Nss1,(MCS0)_2TX

22/10/2019

2437MHz_TX



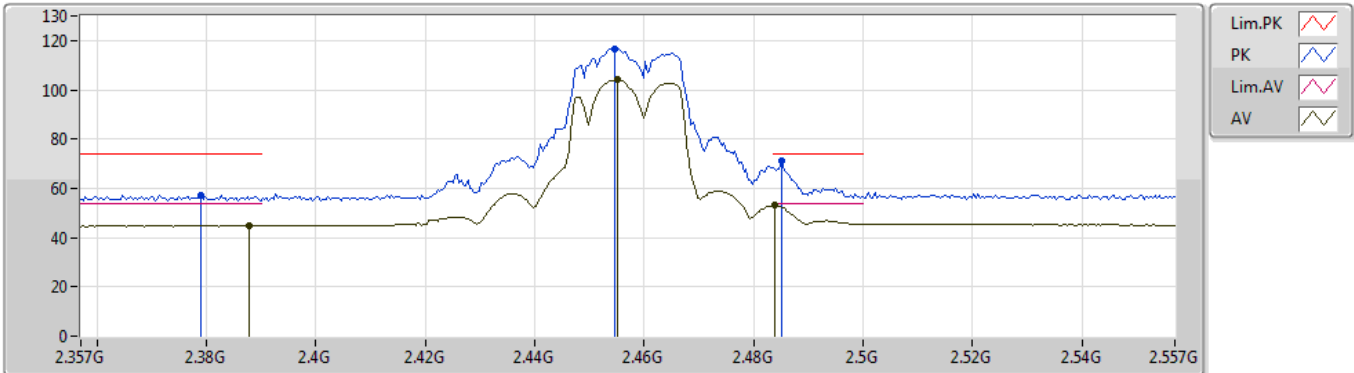
EUT_Z_2TX
Setting 20.5
03-P-2
FSP(100019)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.8713G	49.33	74.00	-24.67	4.79	3	Horizontal	110	1.50	-	44.54			
AV	4.8714G	34.80	54.00	-19.20	4.79	3	Horizontal	110	1.50	-	30.01			

802.11ax HEW20_Nss1,(MCS0)_2TX

22/10/2019

2457MHz_TX



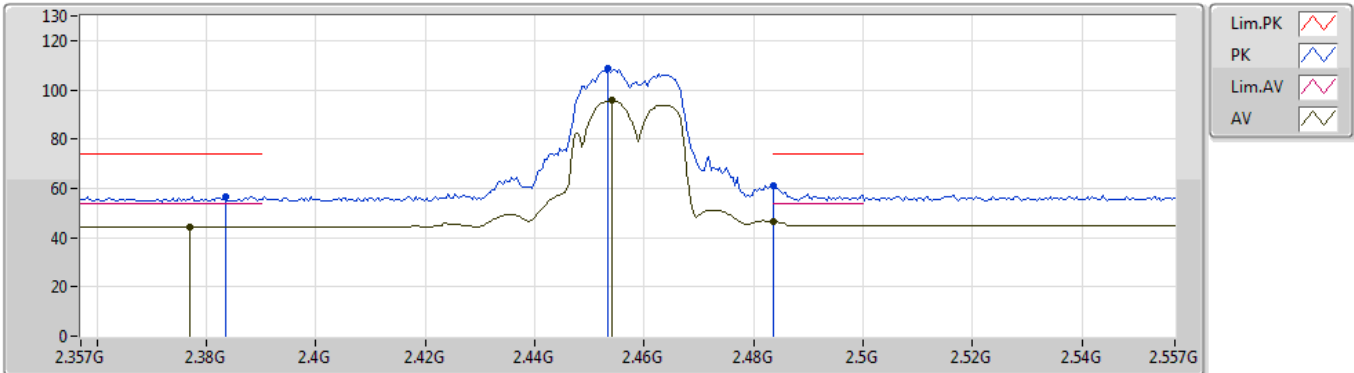
EUT Z_2TX
Setting 16.5
03-P-2
FSP(100019)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	2.379G	56.99	74.00	-17.01	31.90	3	Vertical	90	1.08	-	25.09
AV	2.3878G	44.79	54.00	-9.21	31.93	3	Vertical	90	1.08	-	12.86
PK	2.4546G	116.72	Inf	-Inf	32.15	3	Vertical	90	1.08	-	84.57
AV	2.455G	103.99	Inf	-Inf	32.15	3	Vertical	90	1.08	-	71.84
PK	2.485G	71.00	74.00	-3.00	32.26	3	Vertical	90	1.08	-	38.74
AV	2.4838G	53.05	54.00	-0.95	32.25	3	Vertical	90	1.08	-	20.80

802.11ax HEW20_Nss1,(MCS0)_2TX

22/10/2019

2457MHz_TX



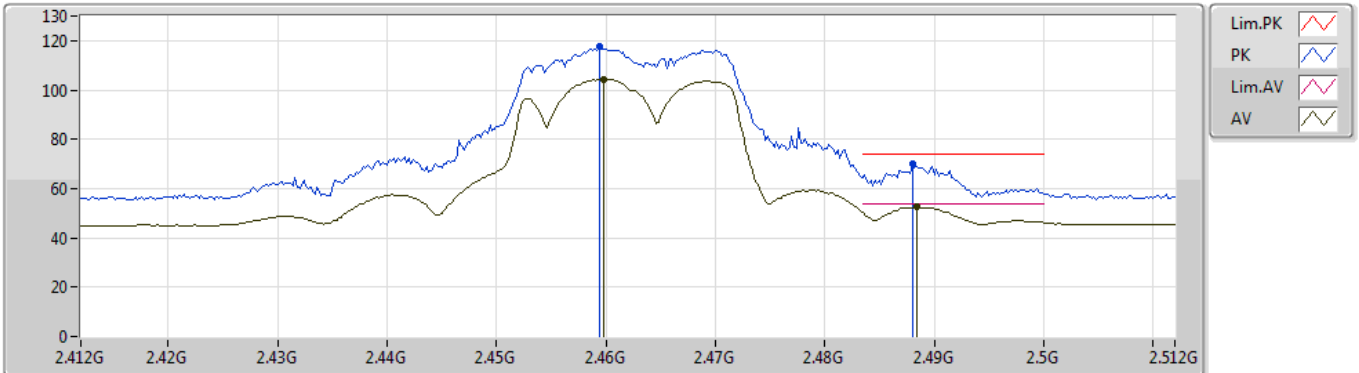
EUT Z_2TX
Setting 16.5
03-P-2
FSP(100019)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	2.3834G	56.64	74.00	-17.36	31.92	3	Horizontal	5	2.06	-	24.72
AV	2.377G	44.32	54.00	-9.68	31.89	3	Horizontal	5	2.06	-	12.43
PK	2.4534G	108.63	Inf	-Inf	32.15	3	Horizontal	5	2.06	-	76.48
AV	2.4542G	95.67	Inf	-Inf	32.15	3	Horizontal	5	2.06	-	63.52
PK	2.4835G	61.18	74.00	-12.82	32.25	3	Horizontal	5	2.06	-	28.93
AV	2.4835G	46.65	54.00	-7.35	32.25	3	Horizontal	5	2.06	-	14.40

802.11ax HEW20_Nss1,(MCS0)_2TX

22/10/2019

2462MHz_TX



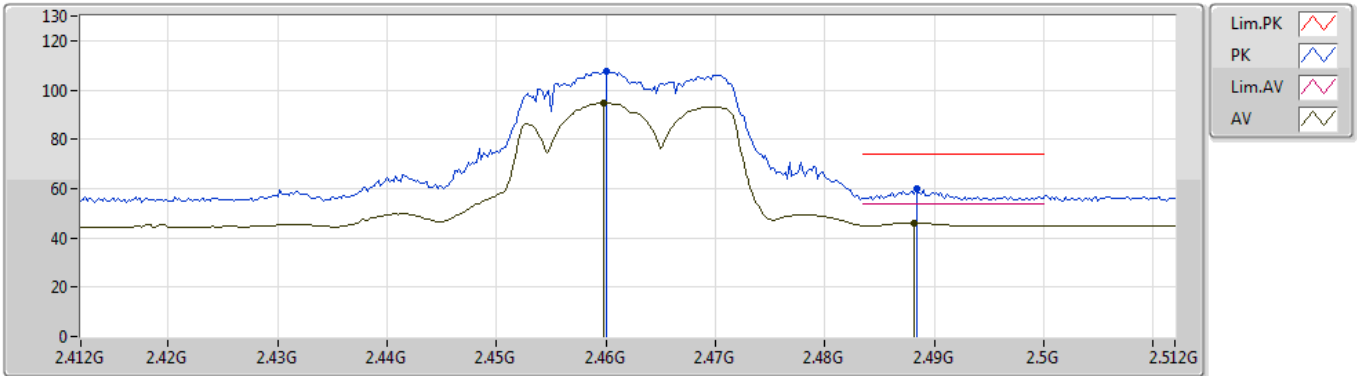
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Setting 16.5
03-P-2
FSP(100019)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	2.4594G	117.55	Inf	-Inf	32.17	3	Vertical	88	1.44	-	85.38
AV	2.4598G	104.36	Inf	-Inf	32.17	3	Vertical	88	1.44	-	72.19
PK	2.488G	70.01	74.00	-3.99	32.26	3	Vertical	88	1.44	-	37.75
AV	2.4884G	52.54	54.00	-1.46	32.27	3	Vertical	88	1.44	-	20.27

802.11ax HEW20_Nss1,(MCS0)_2TX

22/10/2019

2462MHz_TX



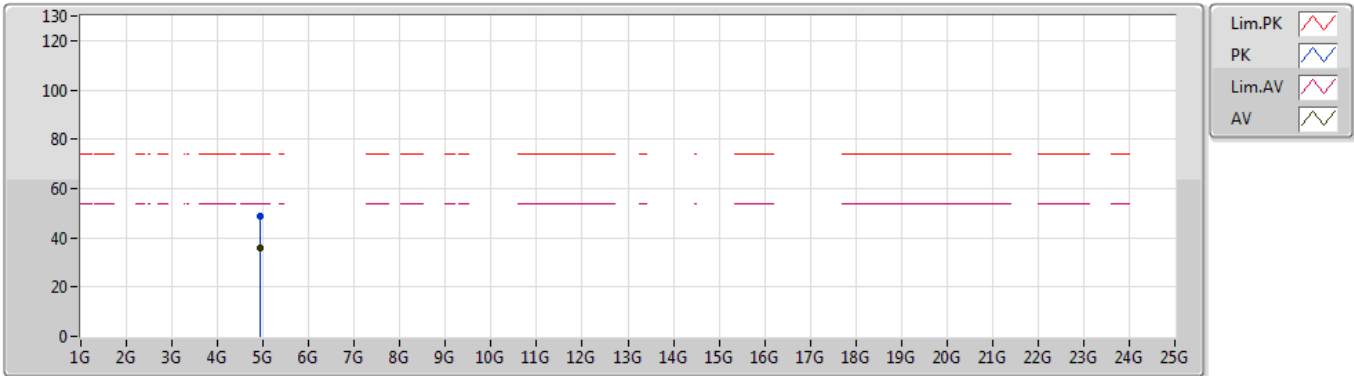
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Setting 16.5
03-P-2
FSP(100019)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	2.46G	107.38	Inf	-Inf	32.17	3	Horizontal	10	1.81	-	75.21
AV	2.4598G	94.66	Inf	-Inf	32.17	3	Horizontal	10	1.81	-	62.49
PK	2.4884G	60.12	74.00	-13.88	32.27	3	Horizontal	10	1.81	-	27.85
AV	2.4882G	45.96	54.00	-8.04	32.26	3	Horizontal	10	1.81	-	13.70

802.11ax HEW20_Nss1,(MCS0)_2TX

22/10/2019

2462MHz_TX



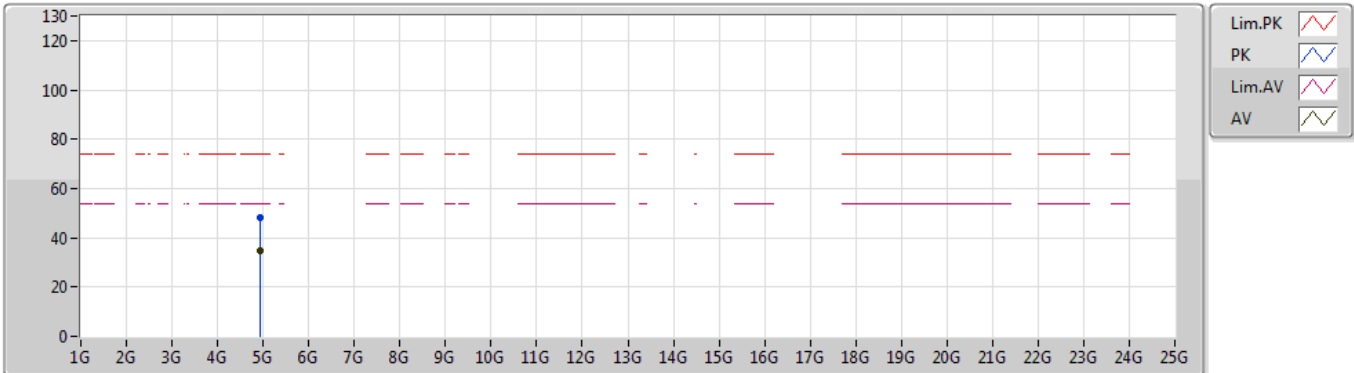
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Setting 16.5
03-P-2
FSP(100019)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.931G	49.02	74.00	-24.98	4.90	3	Vertical	279	1.05	-	44.12			
AV	4.9225G	35.70	54.00	-18.30	4.90	3	Vertical	279	1.05	-	30.80			

802.11ax HEW20_Nss1,(MCS0)_2TX

22/10/2019

2462MHz_TX



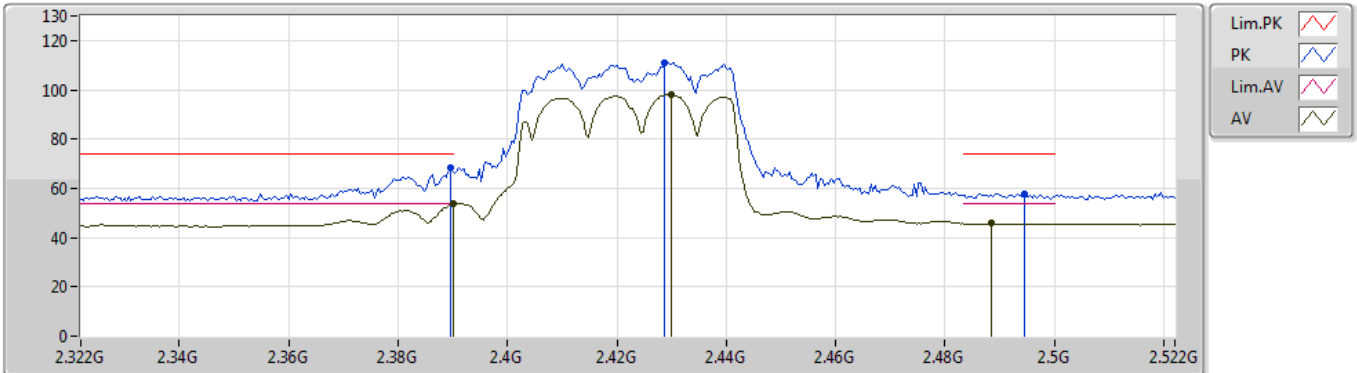
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Setting 16.5
03-P-2
FSP(100019)

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PK	4.9206G	48.21	74.00	-25.79	4.89	3	Horizontal	135	1.92	-	43.32			
AV	4.9199G	34.57	54.00	-19.43	4.89	3	Horizontal	135	1.92	-	29.68			

802.11ax HEW40_Nss1,(MCS0)_2TX

22/10/2019

2422MHz_TX



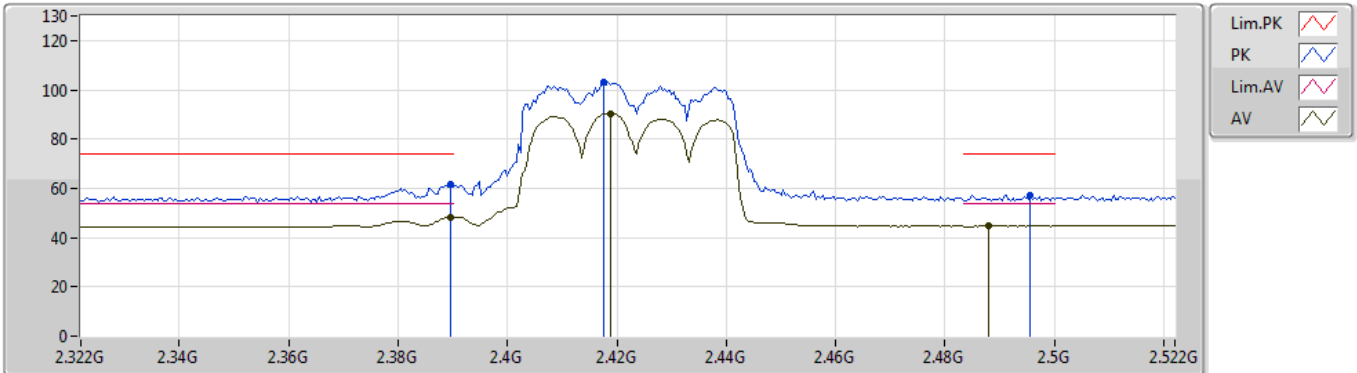
EUT_Z_2TX
Setting 14
03-P-2
FSP(100019)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	2.3896G	68.25	74.00	-5.75	31.93	3	Vertical	89	1.41	-	36.32
AV	2.39G	53.53	54.00	-0.47	31.93	3	Vertical	89	1.41	-	21.60
PK	2.4288G	111.07	Inf	-Inf	32.06	3	Vertical	89	1.41	-	79.01
AV	2.43G	98.21	Inf	-Inf	32.07	3	Vertical	89	1.41	-	66.14
PK	2.4944G	57.91	74.00	-16.09	32.29	3	Vertical	89	1.41	-	25.62
AV	2.4884G	45.69	54.00	-8.31	32.27	3	Vertical	89	1.41	-	13.42

802.11ax HEW40_Nss1,(MCS0)_2TX

22/10/2019

2422MHz_TX



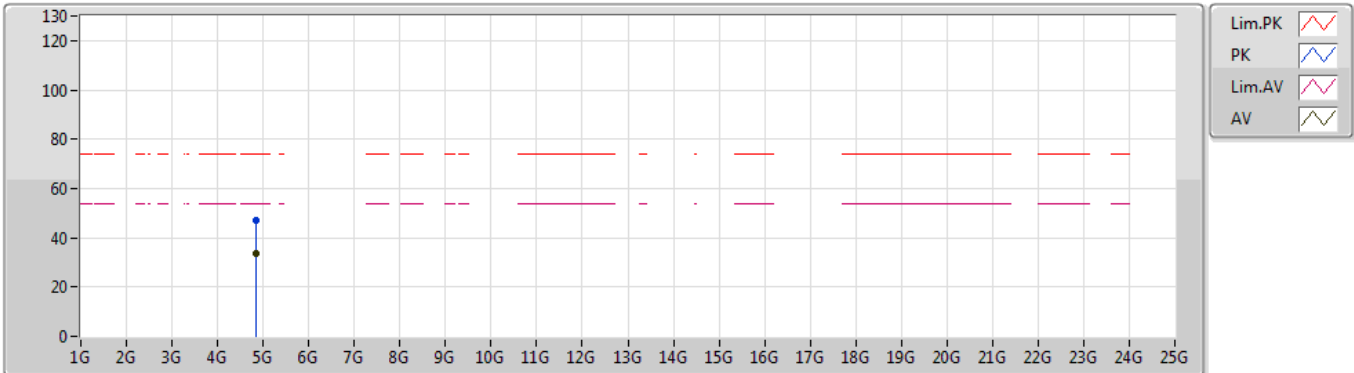
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Setting 14
03-P-2
FSP(100019)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	2.3896G	61.76	74.00	-12.24	31.93	3	Horizontal	1	2.15	-	29.83
AV	2.3896G	48.37	54.00	-5.63	31.93	3	Horizontal	1	2.15	-	16.44
PK	2.4176G	103.24	Inf	-Inf	32.02	3	Horizontal	1	2.15	-	71.22
AV	2.4188G	90.30	Inf	-Inf	32.03	3	Horizontal	1	2.15	-	58.27
PK	2.4956G	56.98	74.00	-17.02	32.30	3	Horizontal	1	2.15	-	24.68
AV	2.488G	44.81	54.00	-9.19	32.26	3	Horizontal	1	2.15	-	12.55

802.11ax HEW40_Nss1,(MCS0)_2TX

22/10/2019

2422MHz_TX



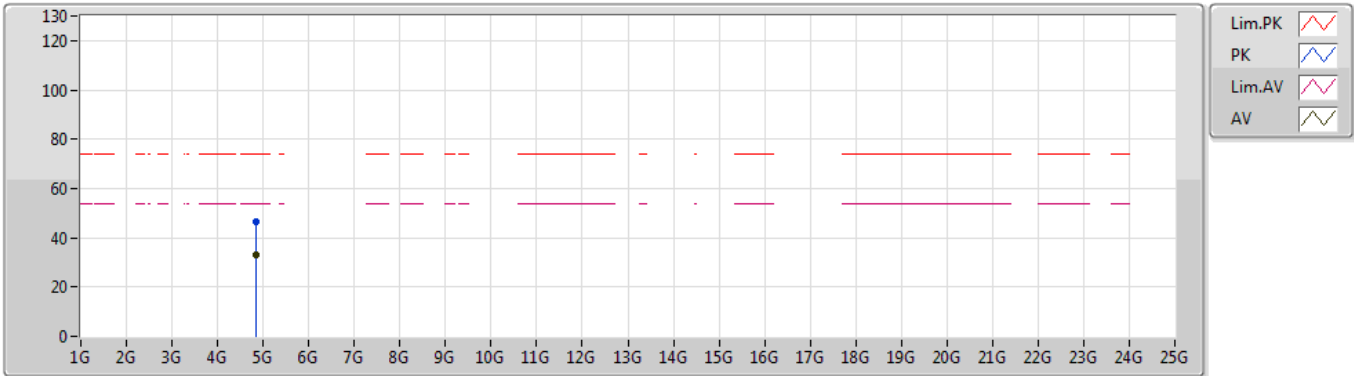
EUT Z_2TX
Setting 14
03-P-2
FSP(100019)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.84388G	47.33	74.00	-26.67	4.75	3	Vertical	248	1.26	-	42.58			
AV	4.84144G	33.79	54.00	-20.21	4.74	3	Vertical	248	1.26	-	29.05			

802.11ax HEW40_Nss1,(MCS0)_2TX

22/10/2019

2422MHz_TX



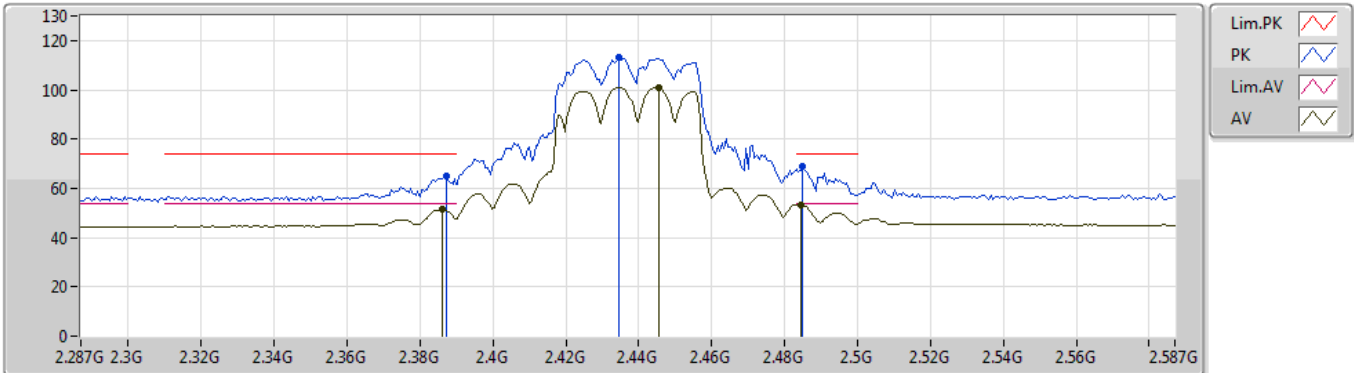
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Setting 14
03-P-2
FSP(100019)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.84396G	46.47	74.00	-27.53	4.75	3	Horizontal	111	2.85	-	41.72			
AV	4.84392G	33.19	54.00	-20.81	4.75	3	Horizontal	111	2.85	-	28.44			

802.11ax HEW40_Nss1,(MCS0)_2TX

22/10/2019

2437MHz_TX



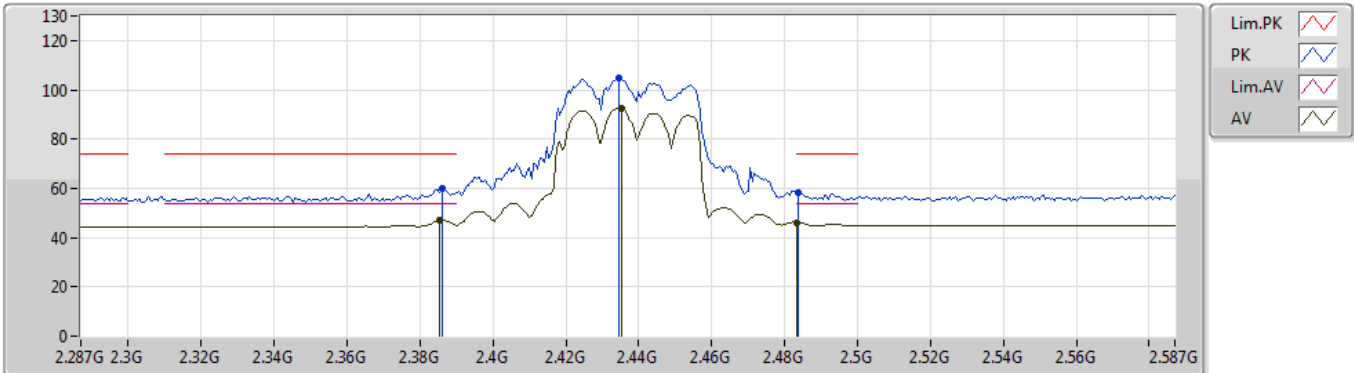
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Setting 16
03-P-2
FSP(100019)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	2.3872G	65.04	74.00	-8.96	31.92	3	Vertical	90	1.23	-	33.12
AV	2.386G	51.50	54.00	-2.50	31.92	3	Vertical	90	1.23	-	19.58
PK	2.4346G	112.97	Inf	-Inf	32.08	3	Vertical	90	1.23	-	80.89
AV	2.4454G	100.78	Inf	-Inf	32.12	3	Vertical	90	1.23	-	68.66
PK	2.485G	68.80	74.00	-5.20	32.26	3	Vertical	90	1.23	-	36.54
AV	2.4844G	53.51	54.00	-0.49	32.25	3	Vertical	90	1.23	-	21.26

802.11ax HEW40_Nss1,(MCS0)_2TX

22/10/2019

2437MHz_TX



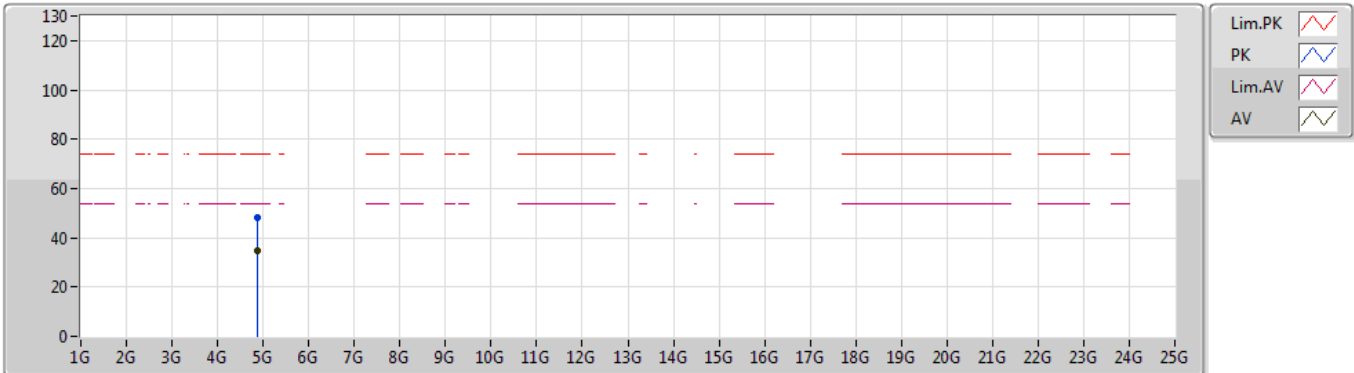
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Setting 16
03-P-2
FSP(100019)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	2.386G	59.72	74.00	-14.28	31.92	3	Horizontal	6	1.83	-	27.80
AV	2.3854G	47.08	54.00	-6.92	31.92	3	Horizontal	6	1.83	-	15.16
PK	2.4346G	104.58	Inf	-Inf	32.08	3	Horizontal	6	1.83	-	72.50
AV	2.4352G	92.52	Inf	-Inf	32.09	3	Horizontal	6	1.83	-	60.43
PK	2.4838G	58.27	74.00	-15.73	32.25	3	Horizontal	6	1.83	-	26.02
AV	2.4835G	46.12	54.00	-7.88	32.25	3	Horizontal	6	1.83	-	13.87

802.11ax HEW40_Nss1,(MCS0)_2TX

22/10/2019

2437MHz_TX



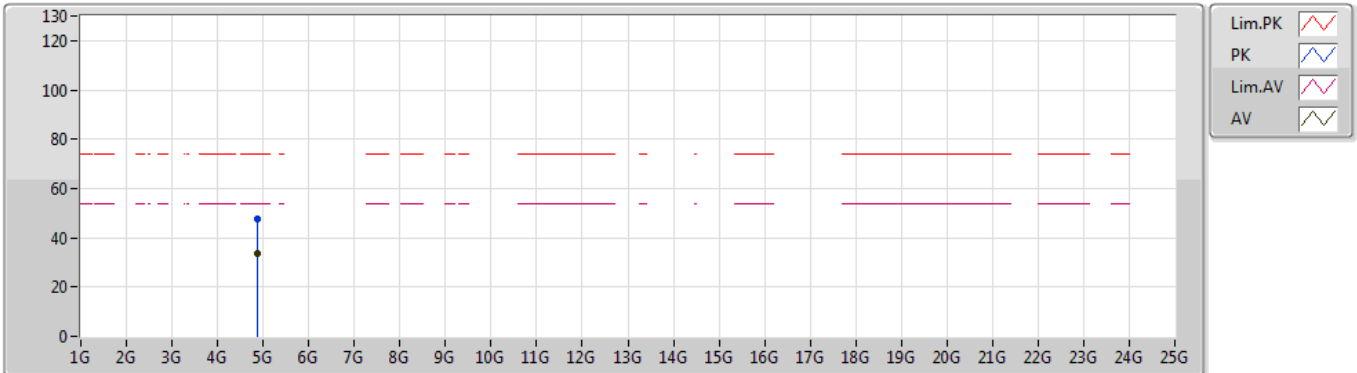
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Setting 16
03-P-2
FSP(100019)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.87184G	48.24	74.00	-25.76	4.79	3	Vertical	249	1.29	-	43.45			
AV	4.87194G	34.53	54.00	-19.47	4.79	3	Vertical	249	1.29	-	29.74			

802.11ax HEW40_Nss1,(MCS0)_2TX

22/10/2019

2437MHz_TX



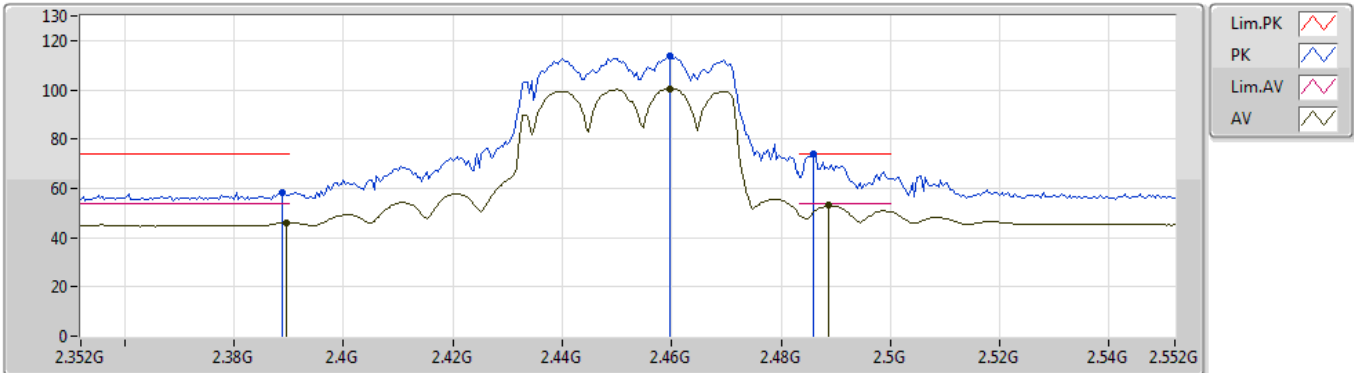
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Setting 16
03-P-2
FSP(100019)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.87226G	47.49	74.00	-26.51	4.79	3	Horizontal	105	1.40	-	42.70			
AV	4.87394G	33.56	54.00	-20.44	4.80	3	Horizontal	105	1.40	-	28.76			

802.11ax HEW40_Nss1,(MCS0)_2TX

22/10/2019

2452MHz_TX



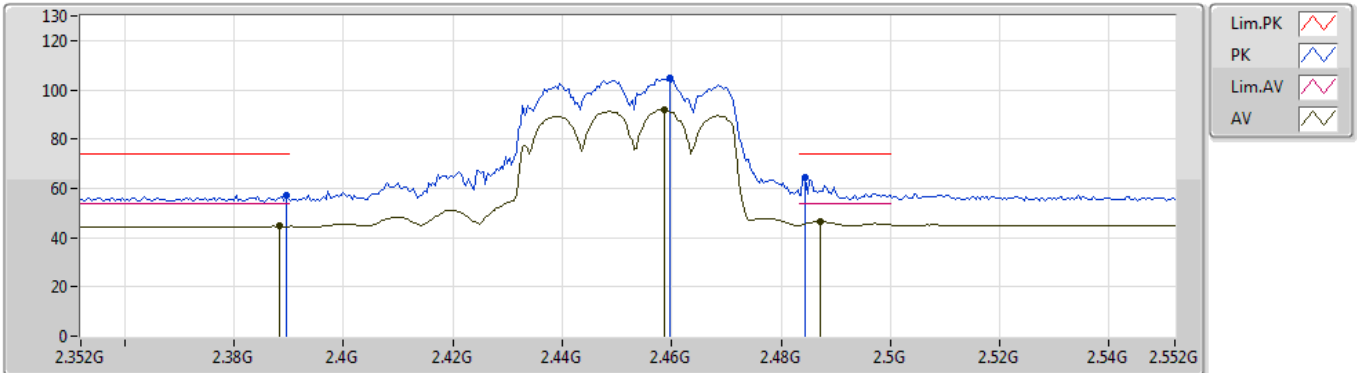
EUT Z_2TX
Setting 15.5
03-P-2
FSP(100019)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	2.3888G	58.43	74.00	-15.57	31.93	3	Vertical	89	1.44	-	26.50
AV	2.3896G	45.88	54.00	-8.12	31.93	3	Vertical	89	1.44	-	13.95
PK	2.4596G	113.75	Inf	-Inf	32.17	3	Vertical	89	1.44	-	81.58
AV	2.4596G	100.43	Inf	-Inf	32.17	3	Vertical	89	1.44	-	68.26
PK	2.486G	73.81	74.00	-0.19	32.26	3	Vertical	89	1.44	-	41.55
AV	2.4888G	52.97	54.00	-1.03	32.27	3	Vertical	89	1.44	-	20.70

802.11ax HEW40_Nss1,(MCS0)_2TX

22/10/2019

2452MHz_TX



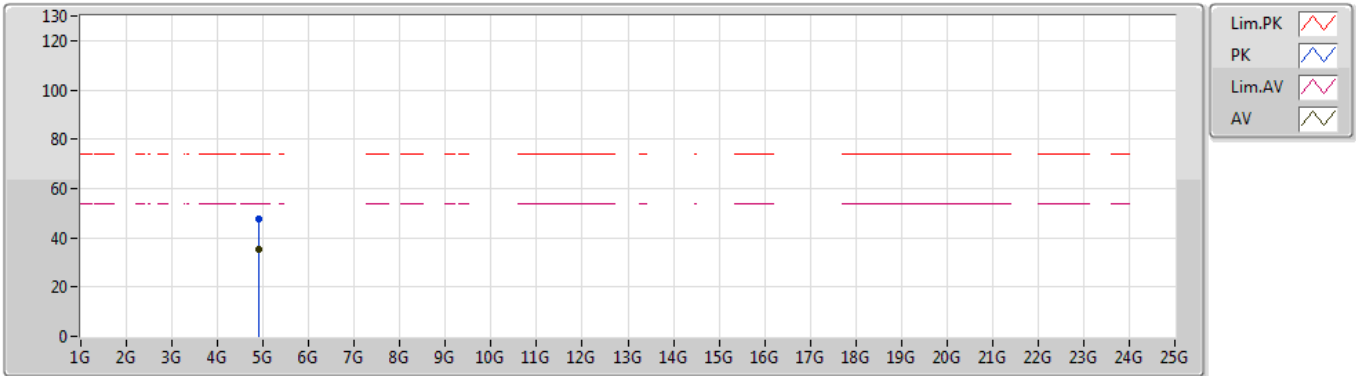
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Setting 15.5
03-P-2
FSP(100019)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)
PK	2.3896G	57.43	74.00	-16.57	31.93	3	Horizontal	3	2.07	-	25.50
AV	2.3884G	44.60	54.00	-9.40	31.93	3	Horizontal	3	2.07	-	12.67
PK	2.4596G	104.51	Inf	-Inf	32.17	3	Horizontal	3	2.07	-	72.34
AV	2.4588G	91.97	Inf	-Inf	32.17	3	Horizontal	3	2.07	-	59.80
PK	2.4844G	64.44	74.00	-9.56	32.25	3	Horizontal	3	2.07	-	32.19
AV	2.4872G	46.46	54.00	-7.54	32.26	3	Horizontal	3	2.07	-	14.20

802.11ax HEW40_Nss1,(MCS0)_2TX

22/10/2019

2452MHz_TX



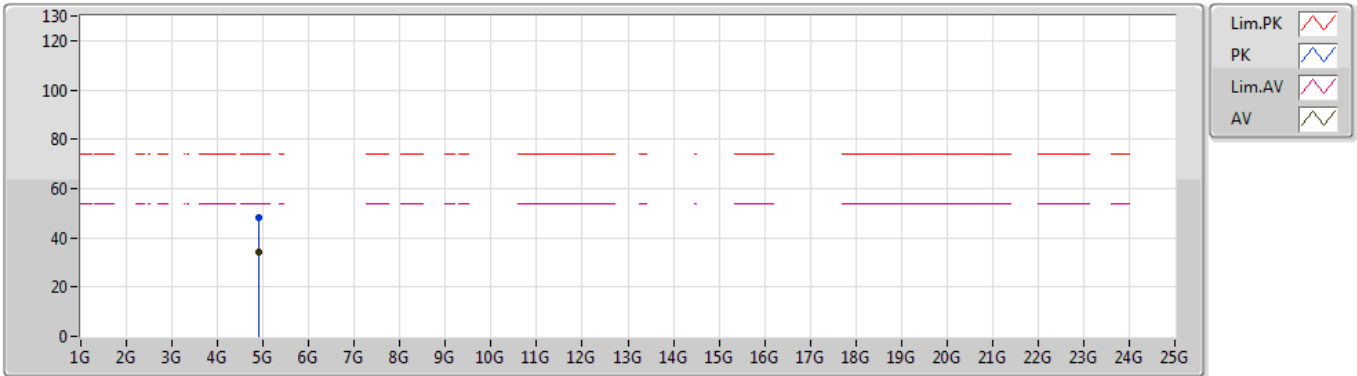
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Setting 15.5
03-P-2
FSP(100019)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.90378G	47.46	74.00	-26.54	4.86	3	Vertical	10	1.02	-	42.60			
AV	4.90394G	35.09	54.00	-18.91	4.86	3	Vertical	10	1.02	-	30.23			

802.11ax HEW40_Nss1,(MCS0)_2TX

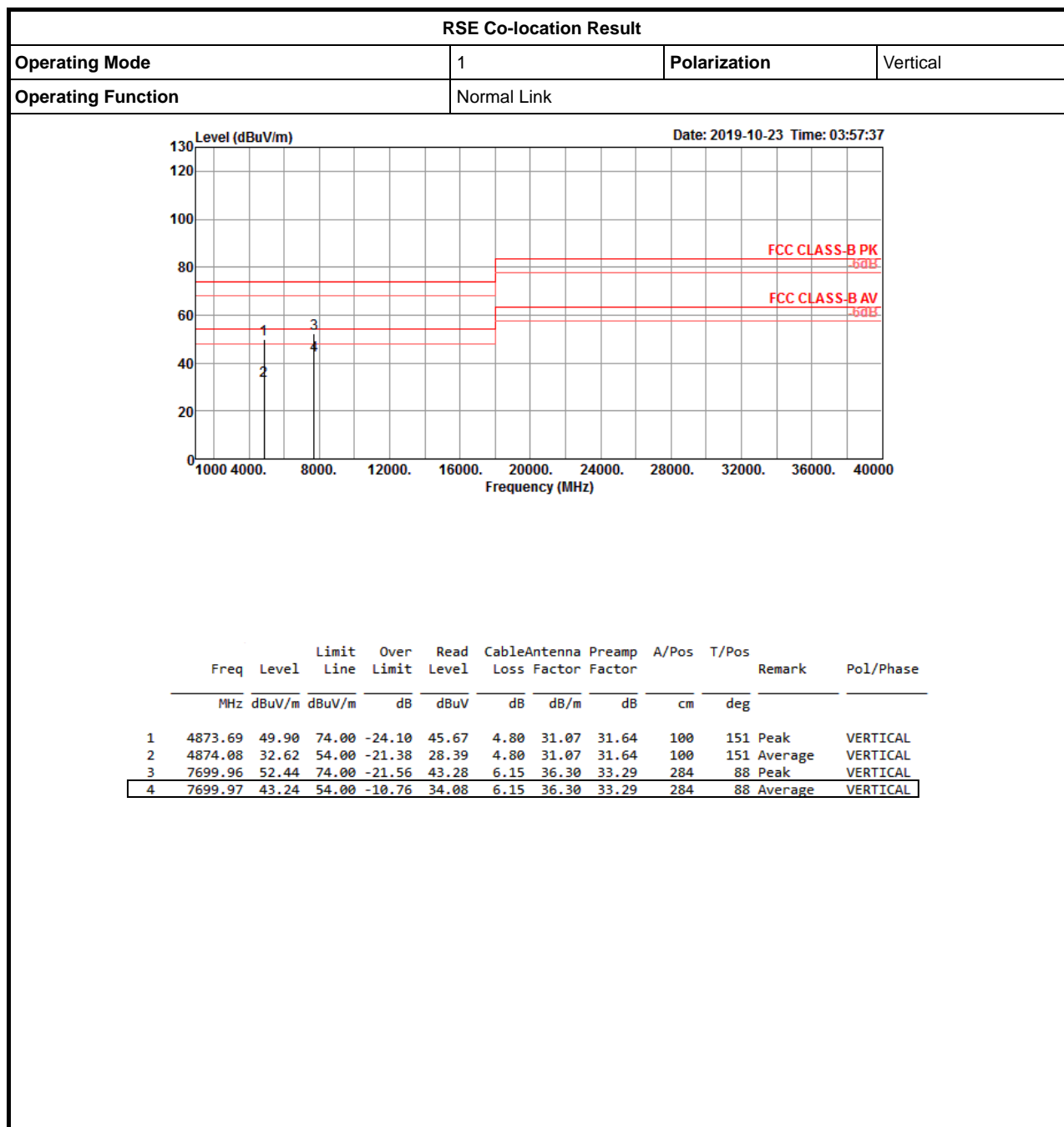
22/10/2019

2452MHz_TX



EUT Z_2TX
Setting 15.5
03-P-2
FSP(100019)

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)			
PK	4.90354G	47.92	74.00	-26.08	4.86	3	Horizontal	110	1.50	-	43.06			
AV	4.90414G	34.01	54.00	-19.99	4.86	3	Horizontal	110	1.50	-	29.15			





RSE Co-location Result

Appendix G

