



FCC RADIO TEST REPORT

FCC ID : MSQ-RTAXJF00
Equipment : Wireless-AXE11000 Tri-band Gigabit Router,
ROG Rapture Tri-band Gaming Router
Brand Name : ASUS
Model Name : GT-AXE11000
Applicant : ASUSTeK COMPUTER INC.
1F., No. 15, Lide Rd., Beitou, Taipei 112, Taiwan
Manufacturer (1) : ASUSTeK Computer Inc
1F., No. 15, Lide Rd., Beitou, Taipei 112, Taiwan
Manufacturer (2) : Kentec Inc.
No. 5, Tzu-Chiang 1st Rd. Chungli Industrial
Zone, Taoyuan Hsien, Taiwan
Manufacturer (3) : Lukisen Electronic Corp.
3F., No.236, Boai St., Shulin Dist., New Taipei
City 23845, Taiwan
Manufacturer (4) : Lih Rong Electronic Enterprise Co.,Ltd
No. 486, Sec. 1, Wanshou Rd., Guishan Dist.,
Taoyuan City 33350, Taiwan
Standard : 47 CFR FCC Part 15.247

The product was received on Jul. 08, 2020, and testing was started from Jul. 08, 2020 and completed on Jul. 24, 2020. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The 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: Sam Chen

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

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



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History of this test report

TEL : 886-3-656-9065
FAX : 886-3-656-9085
Report Template No.: CB-A10_10 Ver1.2

Page Number : 3 of 30
Issued Date : Jul. 28, 2020
Report Version : 01



Summary of Test Result

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

Declaration of Conformity:

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

Comments and Explanations:

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

Reviewed by: Sam Chen

Report Producer: Viola Huang



1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
2400-2483.5	b, g, n (HT20), VHT20, ax (HEW20)	2412-2462	1-11 [11]
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	4
2.4-2.4835GHz	802.11g	20	4
2.4-2.4835GHz	802.11n HT20	20	4
2.4-2.4835GHz	VHT20	20	4
2.4-2.4835GHz	802.11ax HEW20	20	4
2.4-2.4835GHz	802.11n HT40	40	4
2.4-2.4835GHz	VHT40	40	4
2.4-2.4835GHz	802.11ax HEW40	40	4

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, 1024QAM modulation.
- HEW20, HEW40 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- BWch is the nominal channel bandwidth.

**1.1.2 Antenna Information**

Ant.	Port	Brand	Model Name	Antenna Type	Connector	Gain (dBi)		
						2.4GHz	5GHz B1~B4	5GHz B5~B8
1	1	WHAYU	C660-510515-A	Dipole Antenna	I-PEX MHF	1.99	1.98	-
2	2	WHAYU	C660-510516-A	Dipole Antenna	I-PEX MHF	1.99	1.99	-
3	3	WHAYU	C660-510517-A	Dipole Antenna	I-PEX MHF	1.97	1.97	-
4	4	WHAYU	C660-510518-A	Dipole Antenna	I-PEX MHF	1.98	2.00	-
5	-	WHAYU	C660-510519-A	Dipole Antenna	I-PEX MHF 4L	-	-	1.98
6	-	WHAYU	C660-510520-A	Dipole Antenna	I-PEX MHF 4L	-	-	1.98
7	-	WHAYU	C660-510521-A	Dipole Antenna	I-PEX MHF 4L	-	-	1.97
8	-	WHAYU	C660-510522-A	Dipole Antenna	I-PEX MHF 4L	-	-	1.98

Note1: The EUT has eight antennas, The 6GHz function can't work at this time.

Note2: The above information was declared by manufacturer.

<For 2.4GHz Band>**For IEEE 802.11b/g/n/VHT mode (4TX/4RX)**

Port 1, Port 2, Port 3 and Port 4 can be used as transmitting/receiving antenna.

Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.

<For 5GHz Band>**For IEEE 802.11a/n/ac/ax mode (4TX/4RX)**

Port 1, Port 2, Port 3 and Port 4 can be used as transmitting/receiving antenna.

Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11b	0.985	0.07	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11g	0.966	0.15	1.105m	1k
802.11ax HEW20	0.994	0.03	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW40	0.988	0.05	n/a (DC>=0.98)	n/a (DC>=0.98)

Note:

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

**1.1.4 EUT Operational Condition**

EUT Power Type	From Power Adapter			
Beamforming Function	☐	With beamforming	☒	Without beamforming
Function	☒	Point-to-multipoint	☐	Point-to-point
Test Software Version	M-Tool V3.2.0.2			

Note: The above information was declared by manufacturer.

1.1.5 Table for Multiple Listing

The Equipment names in the following table are all refer to the identical product.

Equipment Name	Brand Name	Model Name	Description
Wireless-AXE11000 Tri-band Gigabit Router	ASUS	GT-AXE11000	For marketing reason the same product will be covered by different equipment name.
ROG Rapture Tri-band Gaming Router			



1.2 Applicable Standards

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

- ♦ 47 CFR FCC Part 15
- ♦ ANSI C63.10-2013

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

- ♦ FCC KDB 558074 D01 v05r02
- ♦ FCC KDB 662911 D01 v02r01
- ♦ FCC KDB 414788 D01 v01r01

1.3 Testing Location Information

Testing Location		
☐	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
☒	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	TH02-CB	Caster Chang	23.4~25.2°C / 53~57%	Jul. 16, 2020
Radiated below 1GHz	03CH05-CB	Stim Sung	27.7~29.6°C / 58~59%	Jul. 23, 2020~Jul. 24, 2020
	03CH06-CB	Stim Sung	24.1~25.6°C / 60~62%	Jul. 23, 2020~Jul. 24, 2020
Radiated above 1GHz and co-location	03CH06-CB	Stim Sung	24.1~25.6°C / 60~62%	Jul. 08, 2020~Jul. 24, 2020
AC Conduction	CO01-CB	GN Hou	21~23°C / 61~63%	Jul. 17, 2020

Test site Designation No. TW0006 with FCC.

Test site registered number IC 4086D with Industry Canada.

1.4 Measurement Uncertainty

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

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	2.0 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.6 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.9 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.6 dB	Confidence levels of 95%
Conducted Emission	2.8 dB	Confidence levels of 95%
Output Power Measurement	1.4 dB	Confidence levels of 95%
Power Density Measurement	2.8 dB	Confidence levels of 95%
Bandwidth Measurement	0.39%	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

Mode	Power Setting
802.11b_Nss1,(1Mbps)_4TX	-
2412MHz	93
2437MHz	93
2462MHz	93
802.11g_Nss1,(6Mbps)_4TX	-
2412MHz	65
2417MHz	72
2437MHz	94
2457MHz	71
2462MHz	62
802.11ax HEW20_Nss1,(MCS0)_4TX	-
2412MHz	72
2417MHz	82
2437MHz	92
2457MHz	83
2462MHz	71
802.11ax HEW40_Nss1,(MCS0)_4TX	-
2422MHz	63
2437MHz	72
2452MHz	61

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.

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	CTX
1	EUT_2.4GHz + Adapter 1
2	EUT_2.4GHz + Adapter 2
3	EUT_2.4GHz + Adapter 3
Mode 1 has been evaluated to be the worst case among Mode 1~3, thus measurement for Mode 4 will follow this same test mode.	
4	EUT_5GHz + Adapter 1
For operating mode 4 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	CTX
1	EUT_2.4GHz + Adapter 1
2	EUT_2.4GHz + Adapter 2
3	EUT_2.4GHz + Adapter 3
Mode 1 has been evaluated to be the worst case among Mode 1~3, thus measurement for Mode 4 will follow this same test mode.	
4	EUT_5GHz + Adapter 1
For operating mode 4 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.: FA070920 for Co-location RF Exposure Evaluation.	

Note: The EUT can only use Z axis position.

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				
Power	Brand Name	Model Name	Rating	Remark
Adapter 1	DELTA	ADP-65DE B	INPUT: 100-240V ~ 1.5A, 50-60Hz OUTPUT: 19.0V, 3.42A, 65.0W	DC power cable Non-shielded, 1.5m
Adapter 2	AcBel	ADD011	INPUT: 100-240V ~ 1.7A, 50-60Hz OUTPUT: 19.5V, 3.33A, 65.0W Max.	DC power cable Non-shielded, 1.5m
Adapter 3	DELTA	ADP-65GD D	INPUT: 100-240V ~ 50-60Hz, 1.5A OUTPUT: 19.0-3.42V, 65.0W	DC power cable Non-shielded, 1.5m
Others				
Power cable*1, Non-Shielded, 0.9m				
RJ-45 cable*1: Shielded, 1.5m				

2.5 Support Equipment

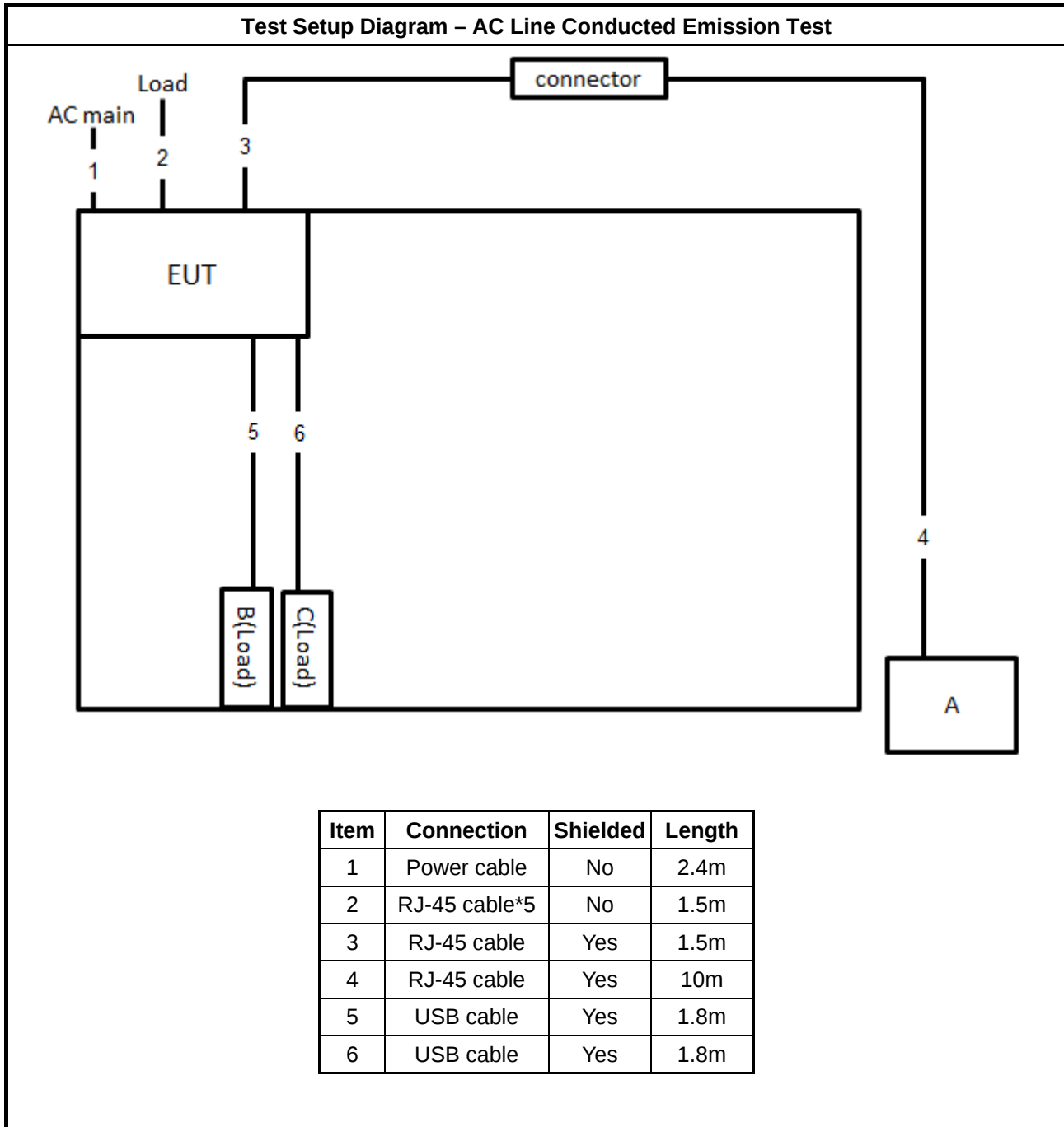
For AC Conduction:

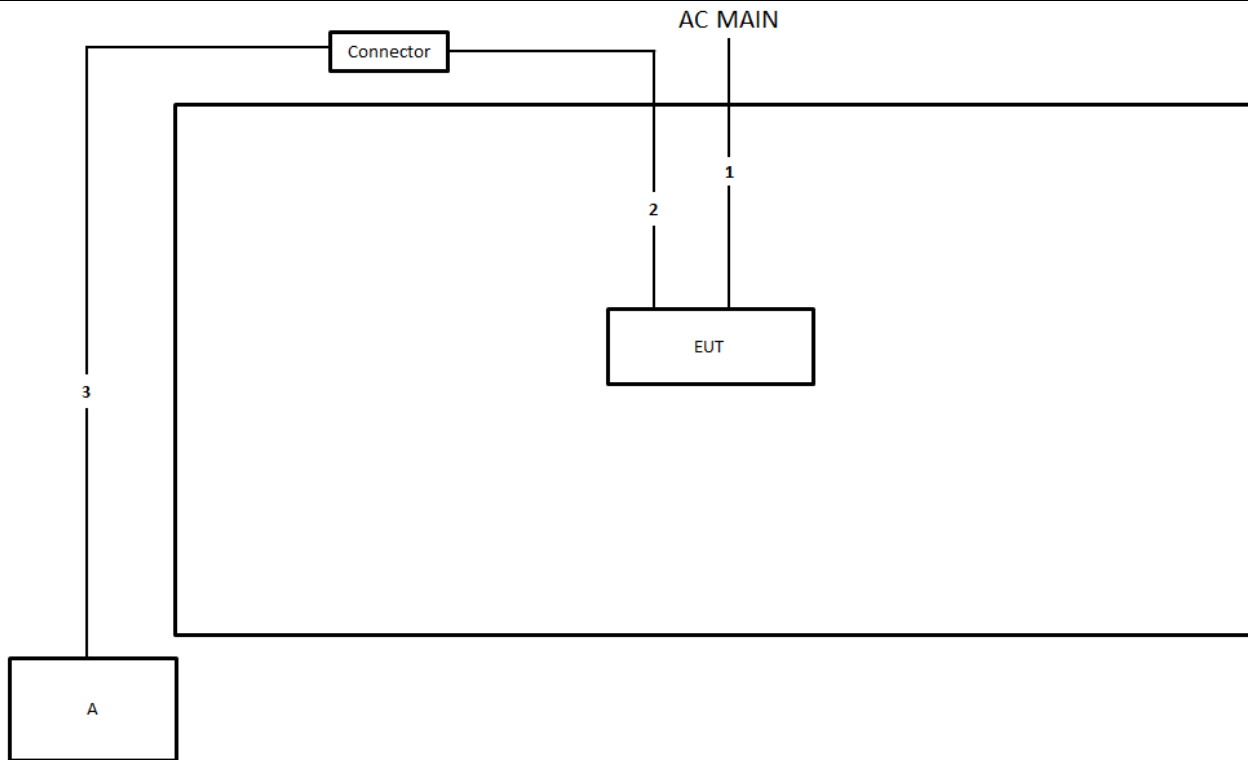
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	LAN NB	DELL	E6430	N/A
B	HDD3.0	Transcend	TS1TSJ25A3K	N/A
C	HDD3.0	Transcend	TS1TSJ25A3K	N/A

For Radiated and RF Conducted:

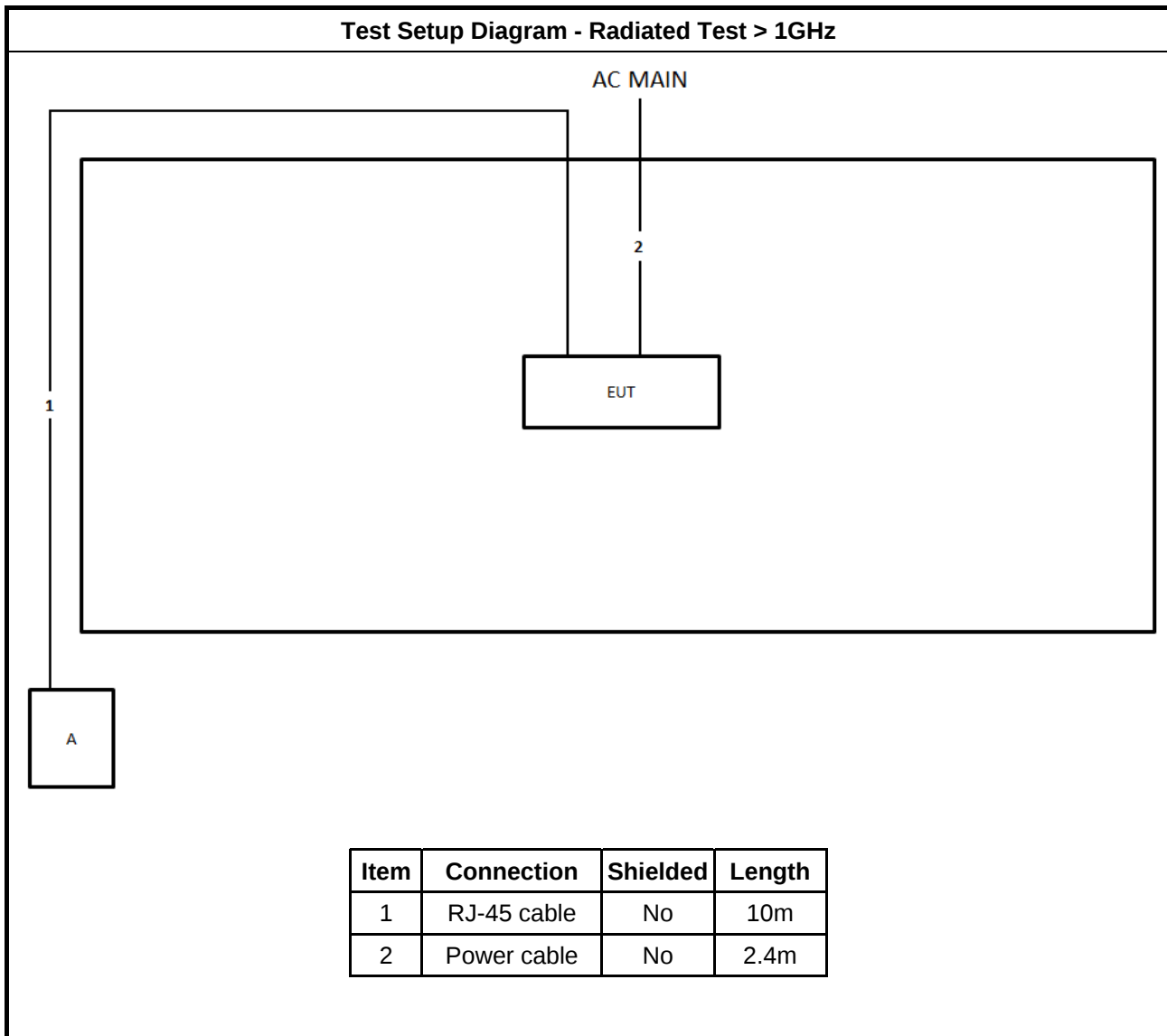
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A

2.6 Test Setup Diagram



Test Setup Diagram - Radiated Test < 1GHz


Item	Connection	Shielded	Length
1	Power cable	No	2.4m
2	RJ-45 cable	Yes	1.5m
3	RJ-45 cable	No	10m

Test Setup Diagram - Radiated Test > 1GHz




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.

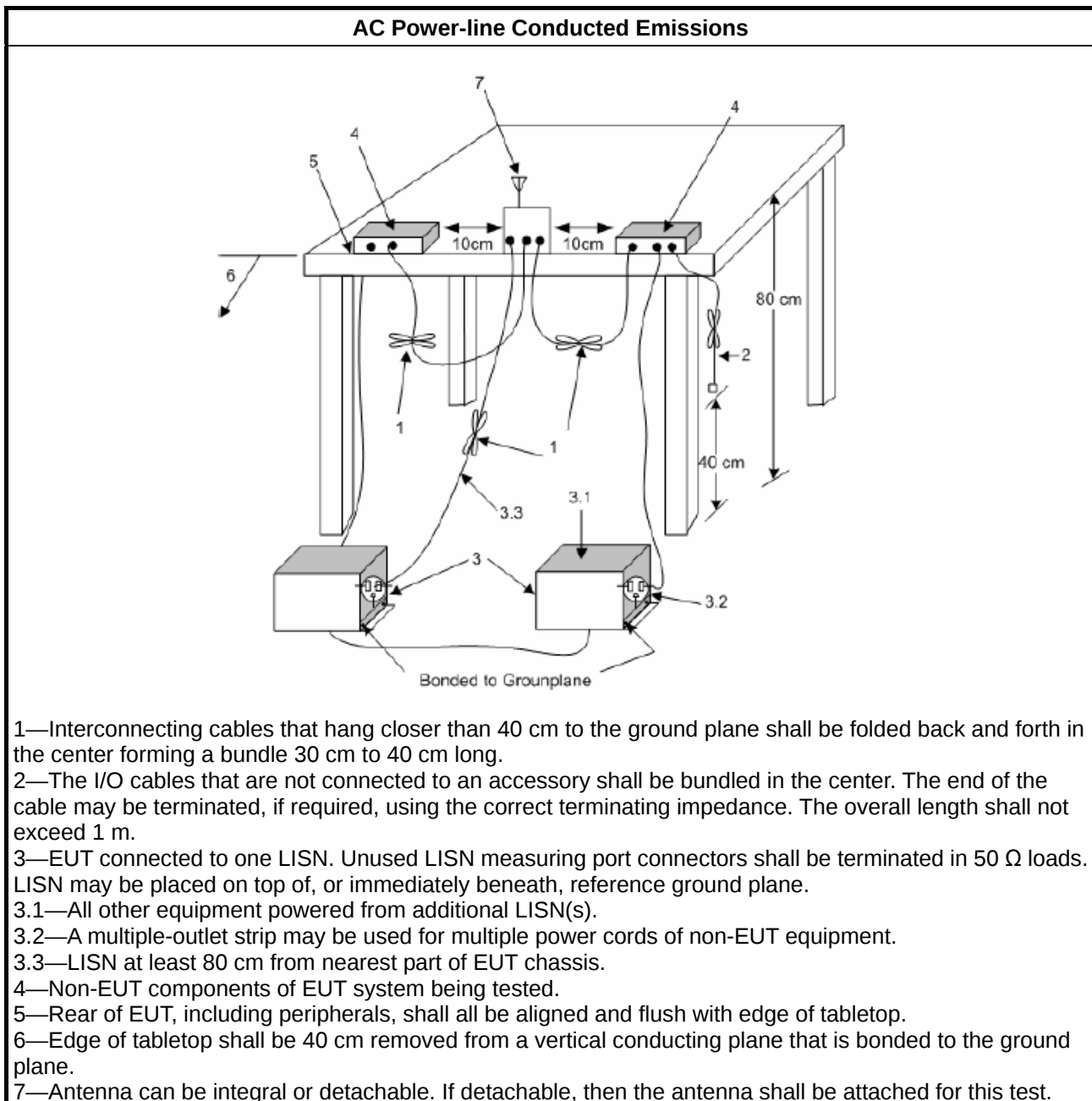
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

Test Method
☒ Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

3.1.4 Test Setup



3.1.5 Measurement Results Calculation

The measured Level is calculated using:

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

3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 DTS Bandwidth

3.2.1 6dB Bandwidth Limit

6dB Bandwidth Limit	
Systems using digital modulation techniques:	
▪	6 dB bandwidth $\geq$ 500 kHz.

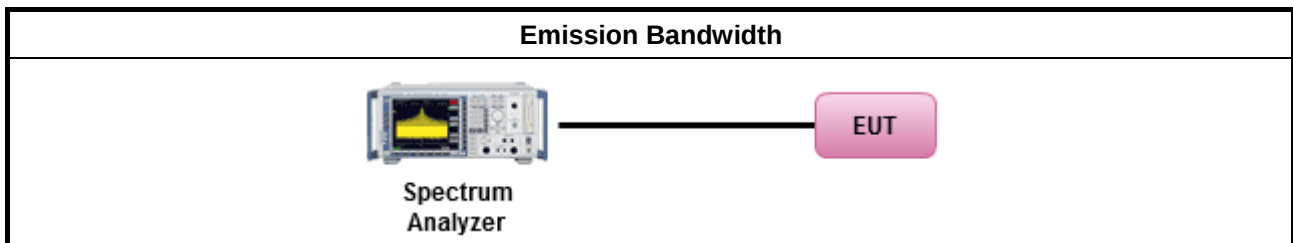
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method	
▪	For the emission bandwidth shall be measured using one of the options below:
☒	Refer as FCC KDB 558074, clause 8.2 & C63.10 clause 11.8.1 Option 1 for 6 dB bandwidth measurement.
☐	Refer as FCC KDB 558074, clause 8.2 & C63.10 clause 11.8.2 Option 2 for 6 dB bandwidth measurement.
☐	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.	

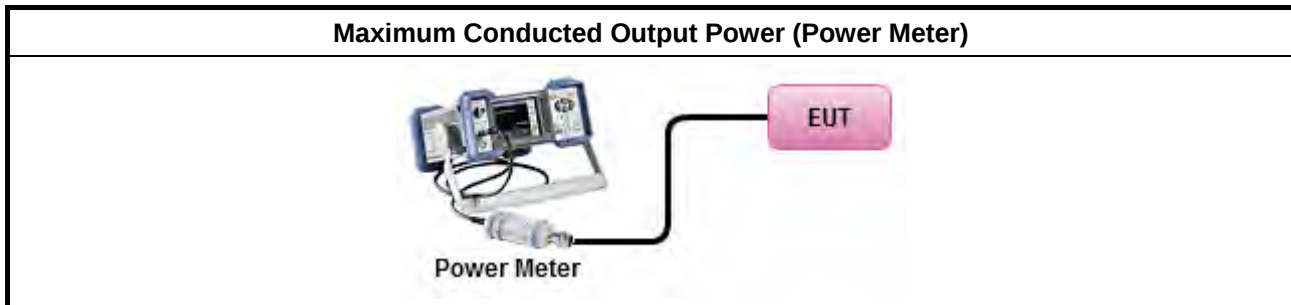
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
Maximum Peak Conducted Output Power	
☐	Refer as FCC KDB 558074, clause 8.3.1.1 & C63.10 clause 11.9.1.1 (RBW ≥ EBW method).
☐	Refer as FCC KDB 558074, clause 8.3.1.3 & C63.10 clause 11.9.1.3 (peak power meter).
Maximum Conducted Output Power	
[duty cycle ≥ 98% or external video / power trigger]	
☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.2 Method AVGSA-1.
☐	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	
☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.4 Method AVGSA-2.
☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.5 Method AVGSA-2A (alternative)
☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.6 Method AVGSA-3
☐	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)	
☐	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).
☒	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).
For conducted measurement.	
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.	
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

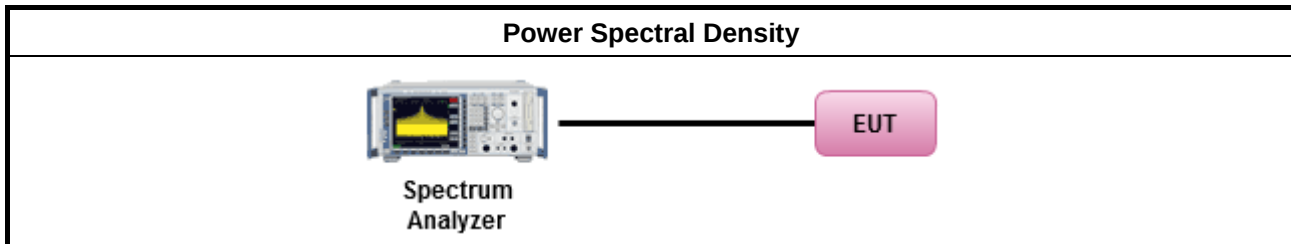
3.4.2 Measuring Instruments

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).	
☒	Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10 Method Max. PSD.
▪ For conducted measurement.	
▪ If The EUT supports multiple transmit chains using options given below:	
☒	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.
☐	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
Note 1: If the peak output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the peak conducted output power measured within any 100 kHz outside the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum measured in-band peak PSD level. Note 2: If the average output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the power in any 100 kHz outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum measured in-band average PSD level.	

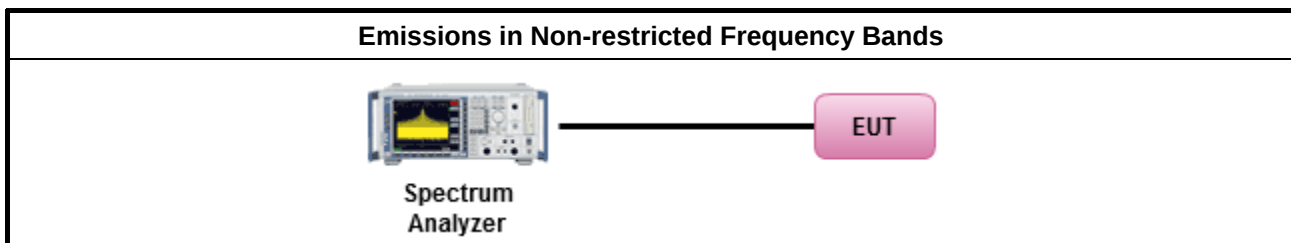
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

Test Method
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

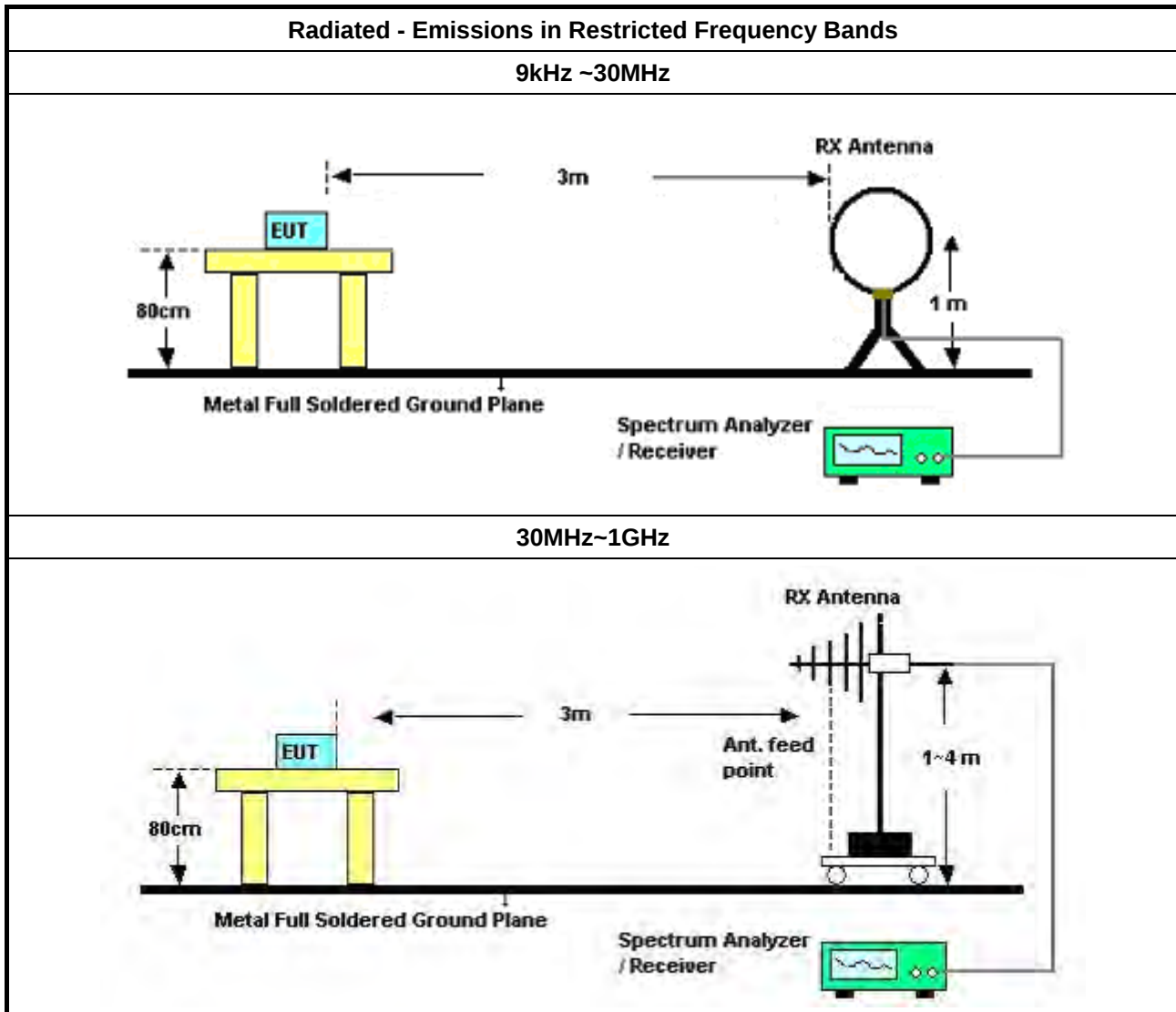
Refer a test equipment and calibration data table in this test report.

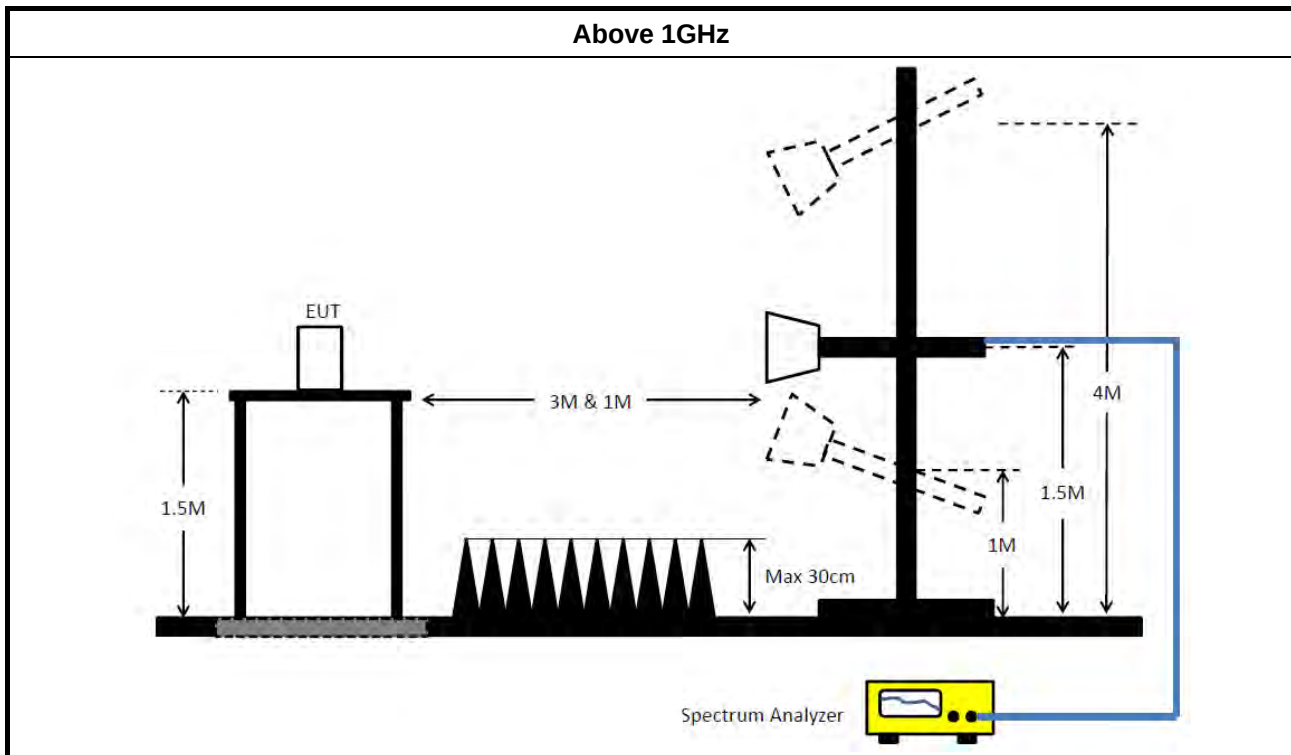


3.6.3 Test Procedures

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.
	☐ Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.1(trace averaging for duty cycle $\geq 98\%$).
	☐ Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.2(trace averaging + duty factor).
	☒ Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.3(Reduced VBW $\geq 1/T$).
	☐ Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW $\geq 1/T$, where T is pulse time.
	☐ Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.
	☒ 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 (if applicable) = Level.

3.6.6 Emissions in Restricted Frequency Bands (Below 30MHz)

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

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

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

3.6.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F



4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.45GHz	Feb. 26, 2020	Feb. 25, 2021	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Dec. 25, 2019	Dec. 24, 2020	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Feb. 25, 2020	Feb. 24, 2021	Conduction (CO01-CB)
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Jan. 31, 2020	Jan. 30, 2021	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	May 20, 2020	May 19, 2021	Conduction (CO01-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Apr. 13, 2020	Apr. 12, 2021	Radiation (03CH05-CB)
Bilog Antenna with 6dB Attenuator	TESEQ & EMCI	CBL 6112D & N-6-06	35236 & AT-N0610	30MHz ~ 2GHz	Mar. 27, 2020	Mar. 26, 2021	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC330N	980331	20MHz ~ 3GHz	Apr. 28, 2020	Apr. 27, 2021	Radiation (03CH05-CB)
Spectrum Analyzer	R&S	FSP40	100304	9kHz ~ 40GHz	Aug. 15, 2019	Aug. 14, 2020	Radiation (03CH05-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	May 13, 2020	May 12, 2021	Radiation (03CH05-CB)
RF Cable-low	Woken	RG402	LOW Cable-04+23	30MHz~1GHz	Oct. 07, 2019	Oct. 06, 2020	Radiation (03CH05-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Apr. 13, 2020	Apr. 12, 2021	Radiation (03CH06-CB)
Bilog Antenna with 6 dB attenuator	TESEQ & EMCI	CBL6112D & N-6-06	37878 & AT-N0606	20MHz ~ 2GHz	Aug. 03, 2019	Aug. 02, 2020	Radiation (03CH06-CB)
Horn Antenna	SCHWARZBECK	BBHA9120D	9120D-1292	1GHz~18GHz	Jul. 17, 2019	Jul. 16, 2020	Radiation (03CH06-CB)
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA 9120D-1291	1GHz~18GHz	Oct. 05, 2019	Oct. 04, 2020	Radiation (03CH06-CB)
Horn Antenna	COM-POWER	AH-118	071028	1GHz ~ 18GHz	Jun. 09, 2020	Jun. 08, 2021	Radiation (03CH06-CB)
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170507	15GHz ~ 40GHz	Jun. 11, 2020	Jun. 10, 2021	Radiation (03CH06-CB)
Pre-Amplifier	EMCI	EMC330N	980391	20MHz ~ 3GHz	May 21, 2020	May 20, 2021	Radiation (03CH06-CB)
Pre-Amplifier	Agilent	83017A	MY53270064	0.5GHz ~ 26.5GHz	May 07, 2020	May 06, 2021	Radiation (03CH06-CB)



Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Amplifier	-	-	TF-130N-R1	18GHz ~ 40GHz	Jun. 19, 2020	Jun. 18, 2021	Radiation (03CH06-CB)
Spectrum analyzer	R&S	FSP40	100080	9kHz~40GHz	Oct. 21, 2019	Oct. 20, 2020	Radiation (03CH06-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	May 13, 2020	May 12, 2021	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)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 16, 2020	Jul. 15, 2021	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 16, 2020	Jul. 15, 2021	Radiation (03CH06-CB)
Signal Analyzer	R&S	FSV40	101904	9kHz ~ 40GHz	May 12, 2020	May 11, 2021	Conducted (TH02-CB)
Power Sensor	Anritsu	MA2411B	1126203	300MHz~40GHz	Sep. 11, 2019	Sep. 10, 2020	Conducted (TH02-CB)
Power Meter	Anritsu	ML2495A	1210004	300MHz~40GHz	Sep. 11, 2019	Sep. 10, 2020	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-01	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-02	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-3	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-04	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-05	1 GHz – 26.5 GHz	Oct. 07, 2019	Oct. 06, 2020	Conducted (TH02-CB)

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

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



Conducted Emissions at Power line

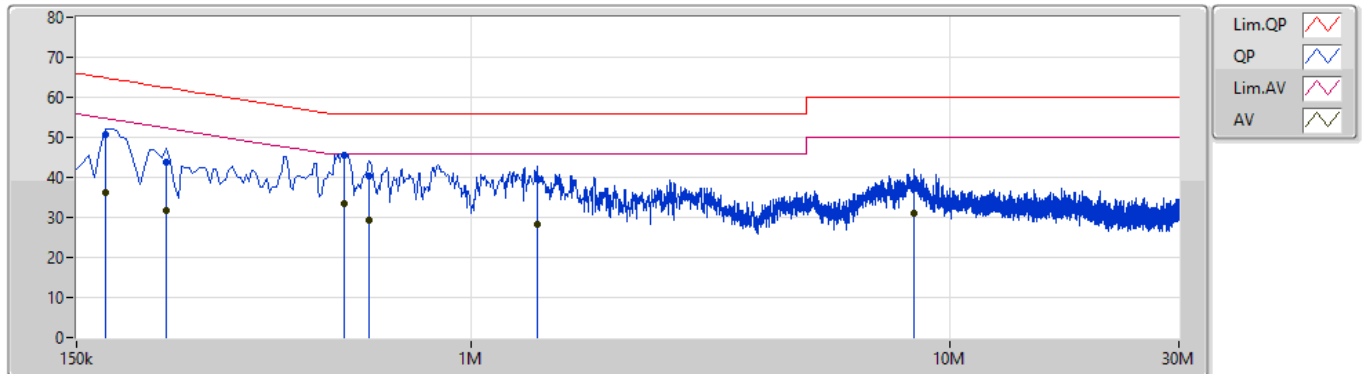
Appendix A

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 4	Pass	QP	541.5k	45.53	56.00	-10.47	Line

Mode 4

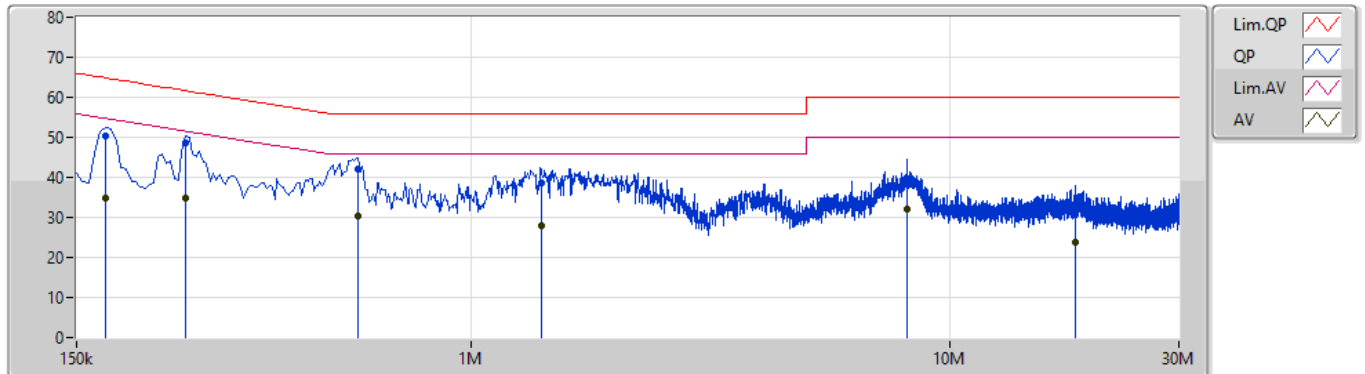
17/07/2020



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	AF (dB)	CL (dB)	AT (dB)			
QP	172.5k	50.71	64.83	-14.12	9.87	Line	-	40.84	0.05	0.03	9.79			
AV	172.5k	36.36	54.83	-18.47	9.87	Line	-	26.49	0.05	0.03	9.79			
QP	231k	43.95	62.41	-18.46	9.86	Line	-	34.09	0.04	0.03	9.79			
AV	231k	31.68	52.41	-20.73	9.86	Line	-	21.82	0.04	0.03	9.79			
QP	541.5k	45.53	56.00	-10.47	9.88	Line	"Worst"	35.65	0.04	0.03	9.81			
AV	541.5k	33.53	46.00	-12.47	9.88	Line	-	23.65	0.04	0.03	9.81			
QP	613.5k	40.40	56.00	-15.60	9.88	Line	-	30.52	0.04	0.03	9.81			
AV	613.5k	29.18	46.00	-16.82	9.88	Line	-	19.30	0.04	0.03	9.81			
QP	1.374M	39.66	56.00	-16.34	9.92	Line	-	29.74	0.05	0.05	9.82			
AV	1.374M	28.26	46.00	-17.74	9.92	Line	-	18.34	0.05	0.05	9.82			
QP	8.412M	37.16	60.00	-22.84	10.20	Line	-	26.96	0.15	0.15	9.90			
AV	8.412M	31.16	50.00	-18.84	10.20	Line	-	20.96	0.15	0.15	9.90			

Mode 4

17/07/2020



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	AF (dB)	CL (dB)	AT (dB)			
QP	172.5k	50.25	64.83	-14.58	9.86	Neutral	-	40.39	0.04	0.03	9.79			
AV	172.5k	34.70	54.83	-20.13	9.86	Neutral	-	24.84	0.04	0.03	9.79			
QP	253.5k	48.53	61.64	-13.11	9.87	Neutral	"Worst"	38.66	0.04	0.03	9.80			
AV	253.5k	34.82	51.64	-16.82	9.87	Neutral	-	24.95	0.04	0.03	9.80			
QP	582k	41.91	56.00	-14.09	9.89	Neutral	-	32.02	0.05	0.03	9.81			
AV	582k	30.33	46.00	-15.67	9.89	Neutral	-	20.44	0.05	0.03	9.81			
QP	1.397M	38.52	56.00	-17.48	9.93	Neutral	-	28.59	0.06	0.05	9.82			
AV	1.397M	27.78	46.00	-18.22	9.93	Neutral	-	17.85	0.06	0.05	9.82			
QP	8.133M	38.33	60.00	-21.67	10.20	Neutral	-	28.13	0.15	0.15	9.90			
AV	8.133M	32.01	50.00	-17.99	10.20	Neutral	-	21.81	0.15	0.15	9.90			
QP	18.191M	30.66	60.00	-29.34	10.47	Neutral	-	20.19	0.20	0.30	9.97			
AV	18.191M	23.89	50.00	-26.11	10.47	Neutral	-	13.42	0.20	0.30	9.97			

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)_4TX	7.05M	10.32M	10M3G1D	6.525M	10.22M
802.11g_Nss1,(6Mbps)_4TX	16.35M	16.867M	16M9D1D	16.325M	16.692M
802.11ax HEW20_Nss1,(MCS0)_4TX	19.075M	19.165M	19M2D1D	18.9M	19.04M
802.11ax HEW40_Nss1,(MCS0)_4TX	37.65M	37.531M	37M5D1D	37.05M	37.431M

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

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

Result

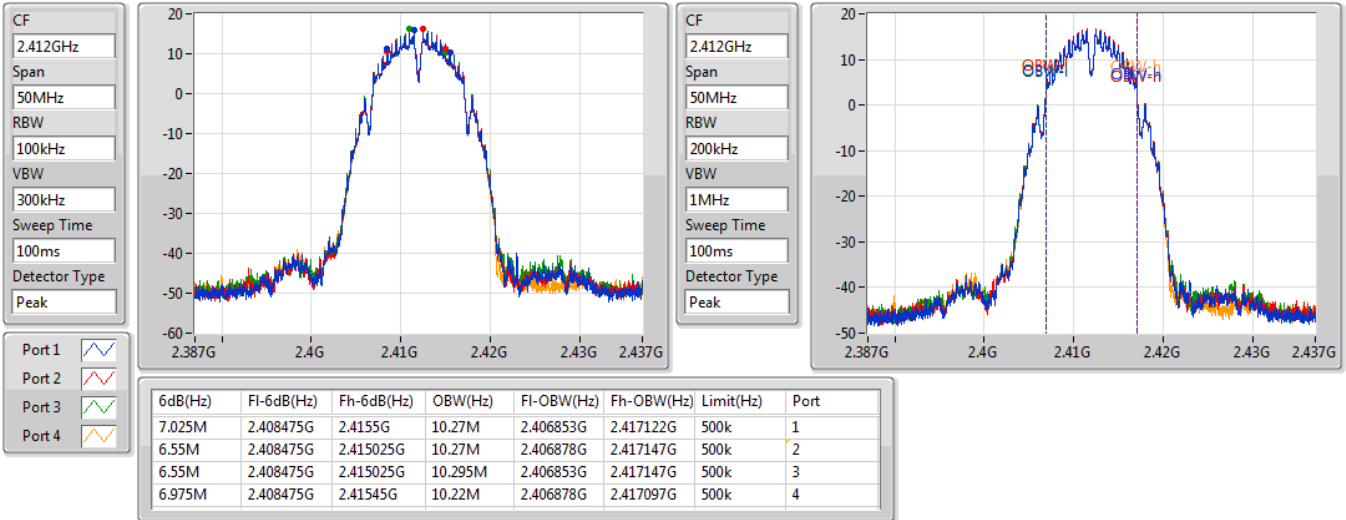
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11b_Nss1,(1Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	7.025M	10.27M	6.55M	10.27M	6.55M	10.295M	6.975M	10.22M
2437MHz	Pass	500k	6.525M	10.27M	6.55M	10.27M	7M	10.295M	7.025M	10.22M
2462MHz	Pass	500k	7.025M	10.27M	7.025M	10.27M	7.05M	10.32M	7.05M	10.22M
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	16.325M	16.692M	16.325M	16.867M	16.35M	16.767M	16.35M	16.692M
2437MHz	Pass	500k	16.325M	16.717M	16.325M	16.867M	16.325M	16.817M	16.35M	16.767M
2462MHz	Pass	500k	16.325M	16.717M	16.325M	16.842M	16.35M	16.792M	16.325M	16.717M
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	19.025M	19.065M	18.975M	19.09M	18.975M	19.04M	18.95M	19.04M
2437MHz	Pass	500k	19M	19.065M	18.95M	19.165M	19M	19.065M	18.9M	19.115M
2462MHz	Pass	500k	19.025M	19.04M	18.975M	19.115M	19.075M	19.04M	18.95M	19.09M
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	500k	37.65M	37.481M	37.05M	37.481M	37.3M	37.481M	37.5M	37.531M
2437MHz	Pass	500k	37.6M	37.481M	37.35M	37.481M	37.25M	37.531M	37.4M	37.531M
2452MHz	Pass	500k	37.5M	37.481M	37.5M	37.431M	37.2M	37.531M	37.5M	37.531M

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

802.11b_Nss1,(1Mbps)_4TX

EBW
2412MHz

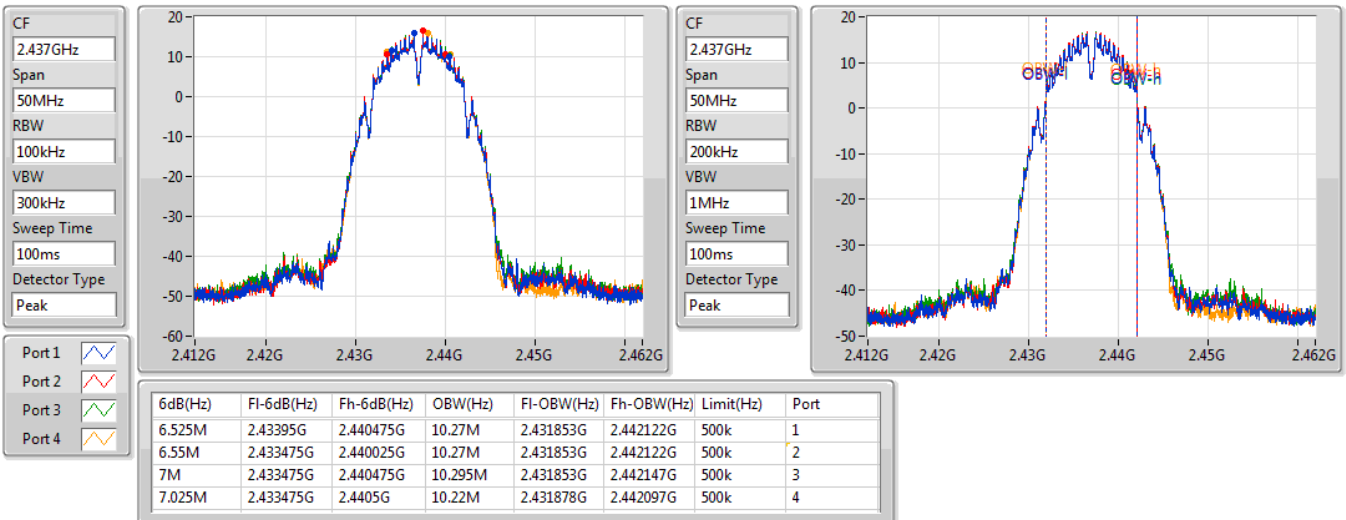
16/07/2020



802.11b_Nss1,(1Mbps)_4TX

EBW
2437MHz

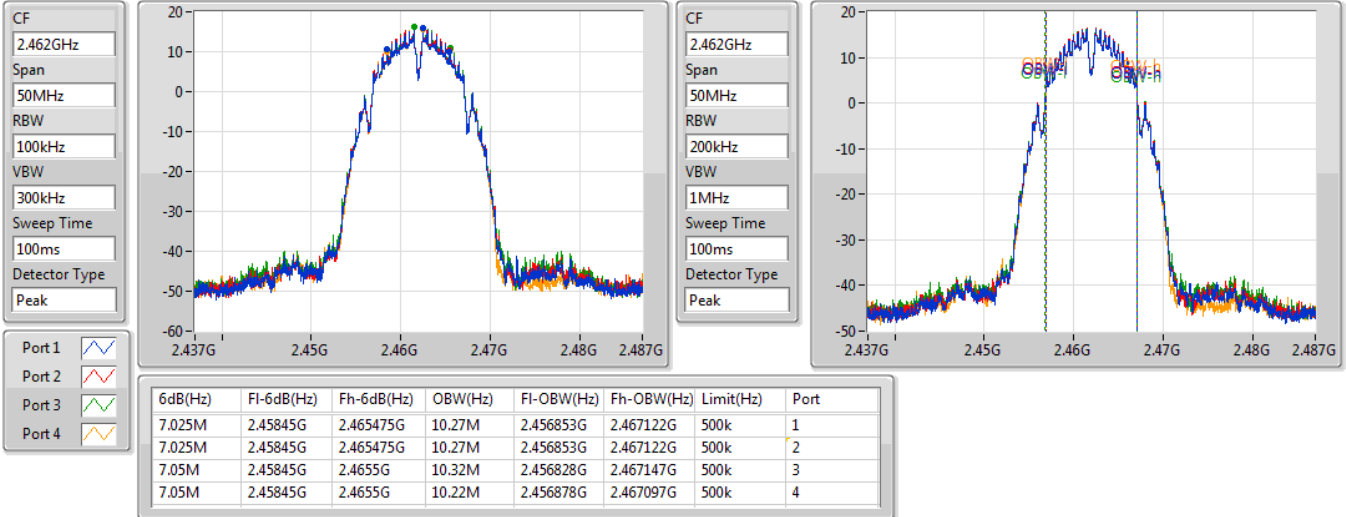
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802.11b_Nss1,(1Mbps)_4TX

EBW
2462MHz

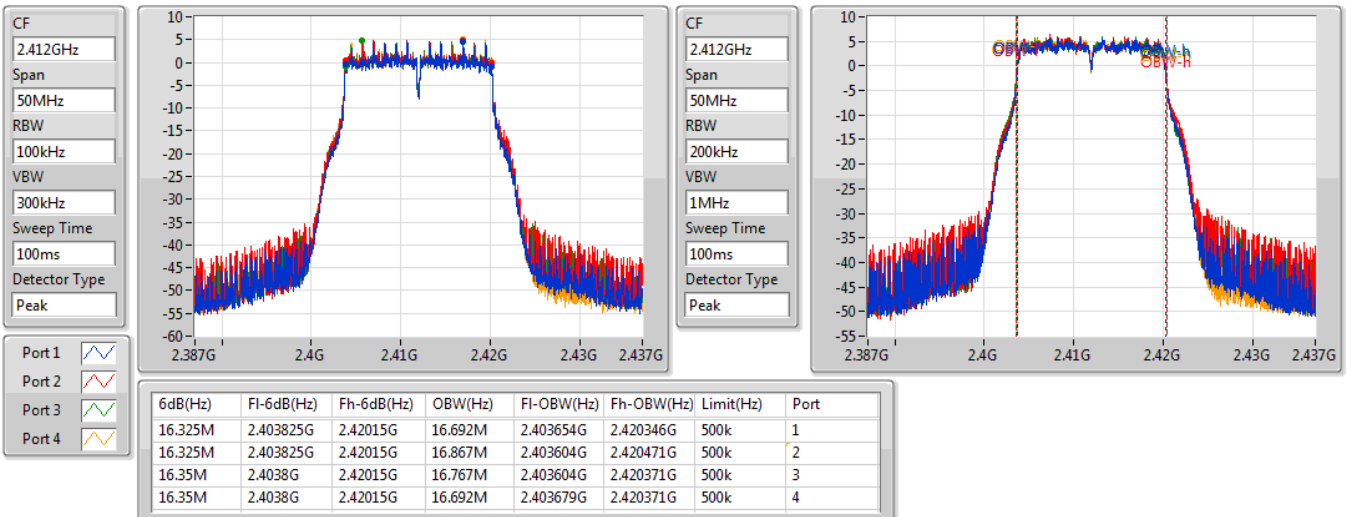
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802.11g_Nss1,(6Mbps)_4TX

EBW
2412MHz

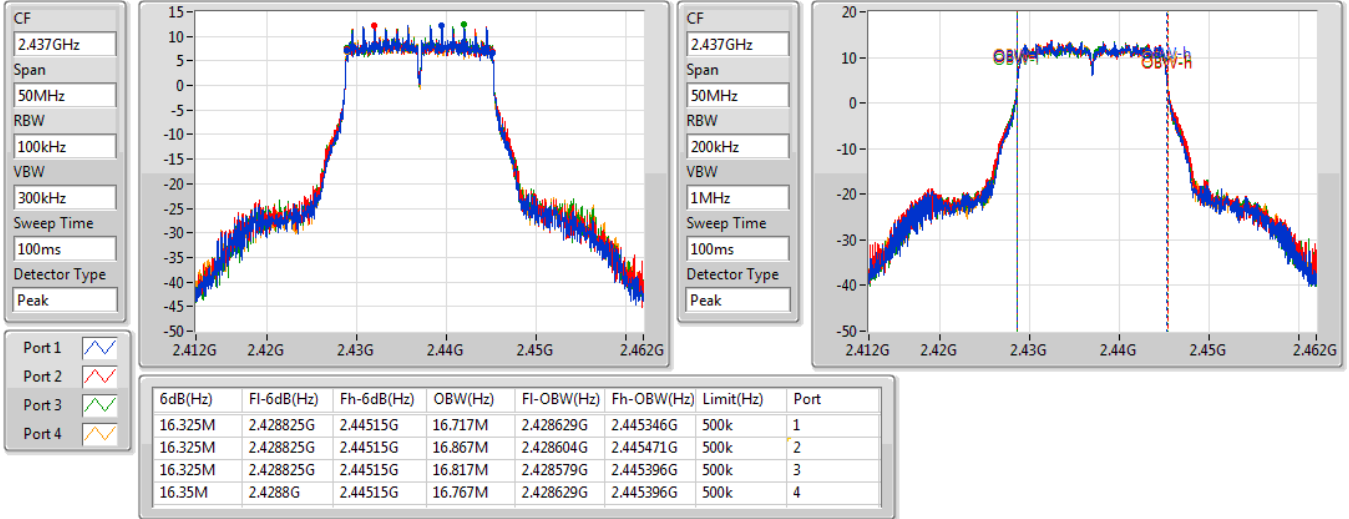
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802.11g_Nss1,(6Mbps)_4TX

2437MHz

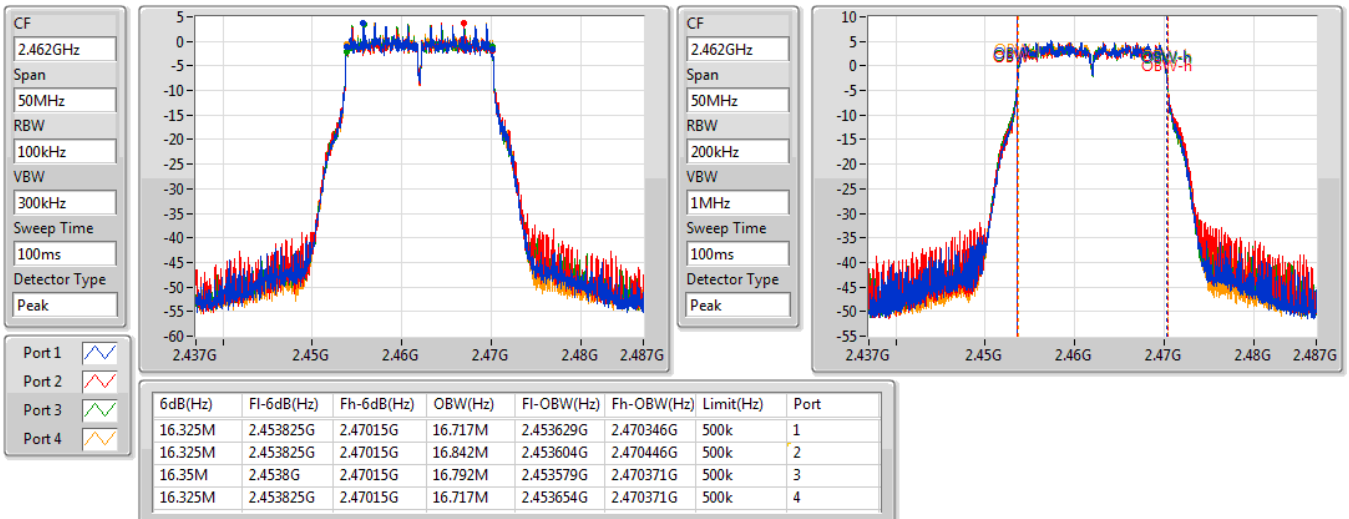
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802.11g_Nss1,(6Mbps)_4TX

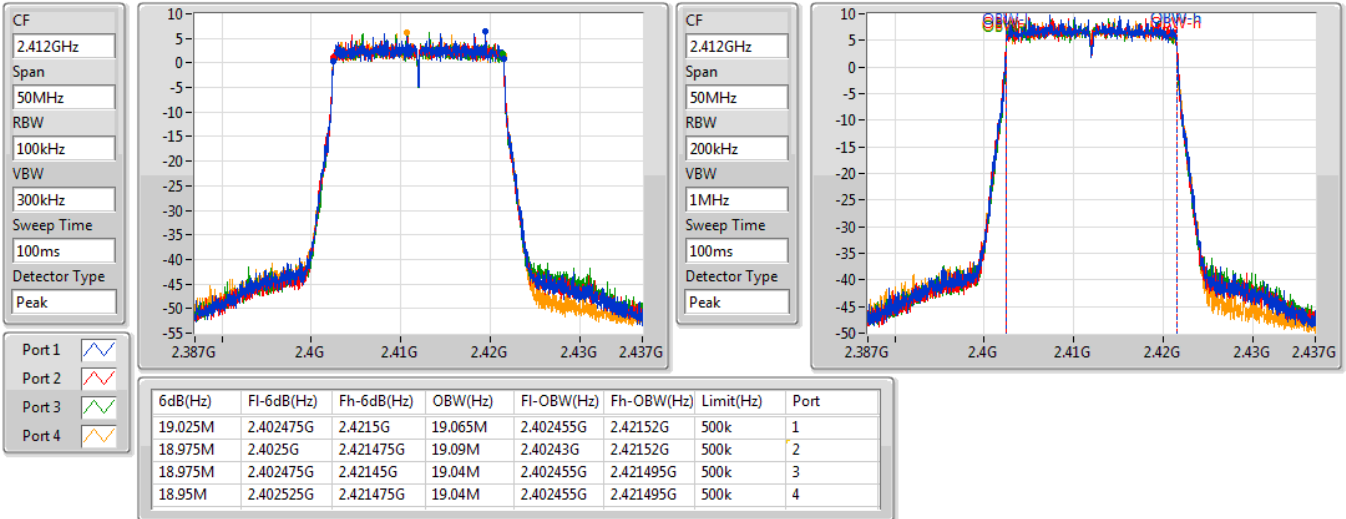
2462MHz

16/07/2020

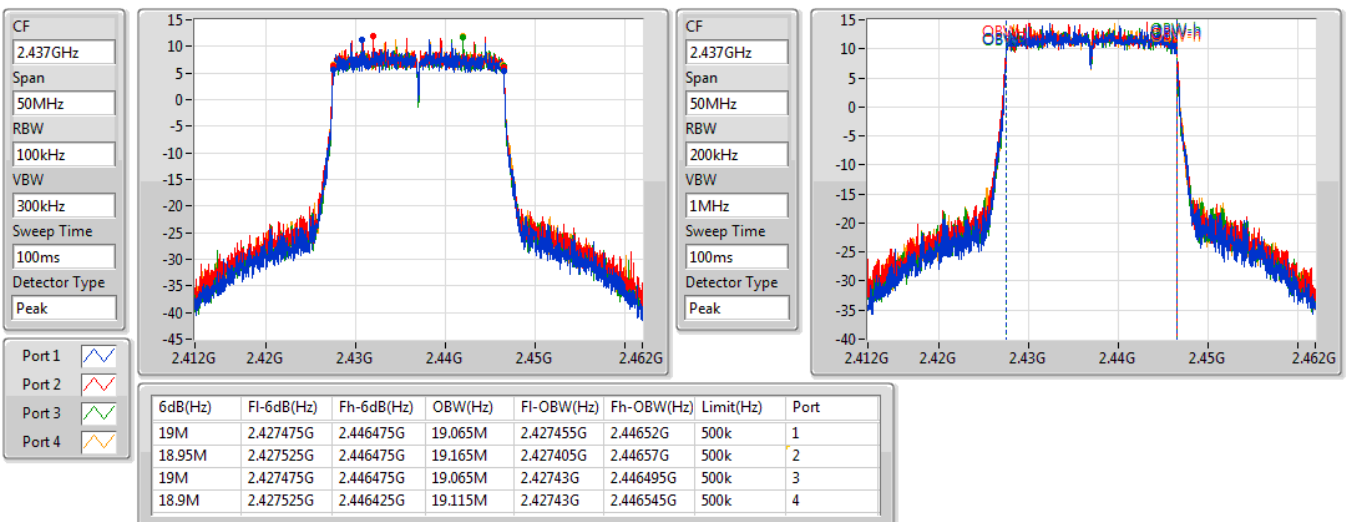


802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
2412MHz

16/07/2020


802.11ax HEW20_Nss1,(MCS0)_4TX
EBW
2437MHz

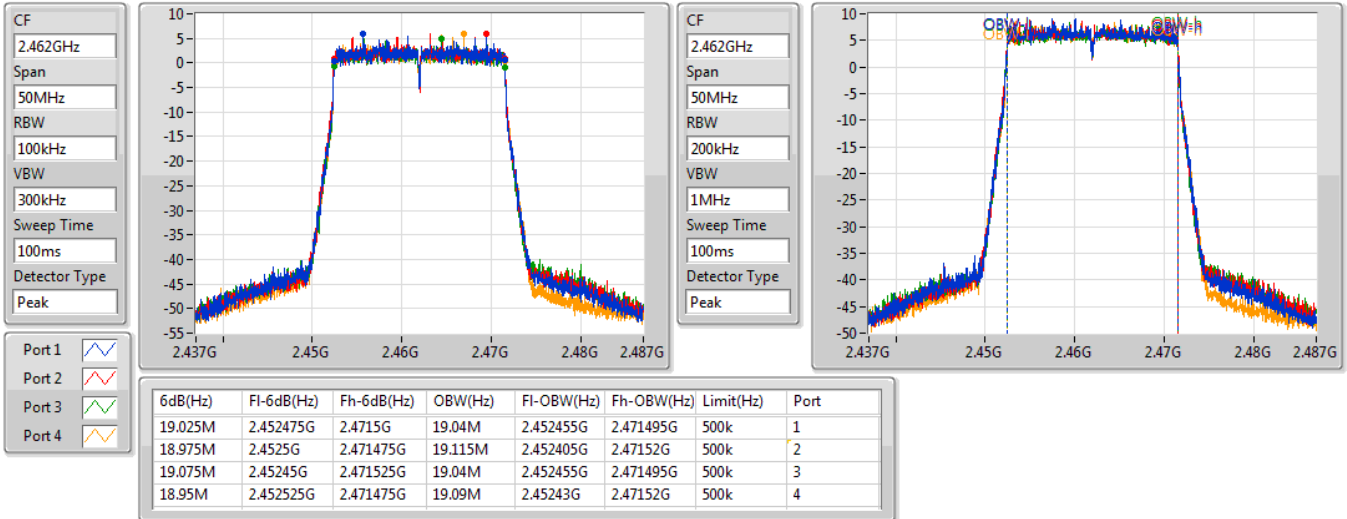
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802.11ax HEW20_Nss1,(MCS0)_4TX

EBW
2462MHz

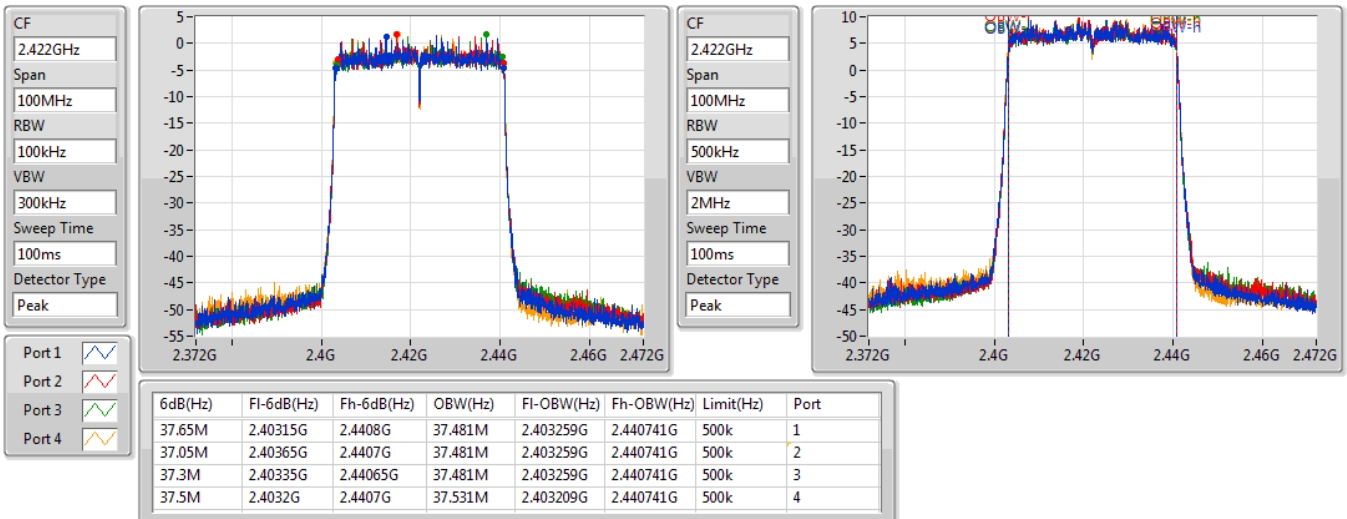
16/07/2020



802.11ax HEW40_Nss1,(MCS0)_4TX

EBW
2422MHz

16/07/2020

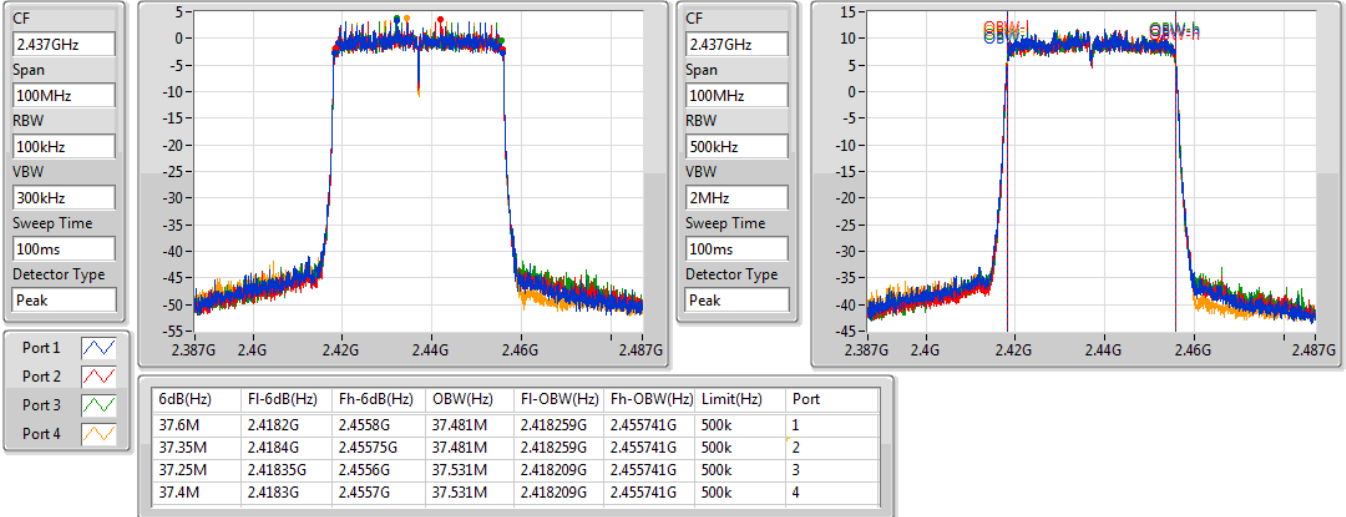


802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

2437MHz

16/07/2020

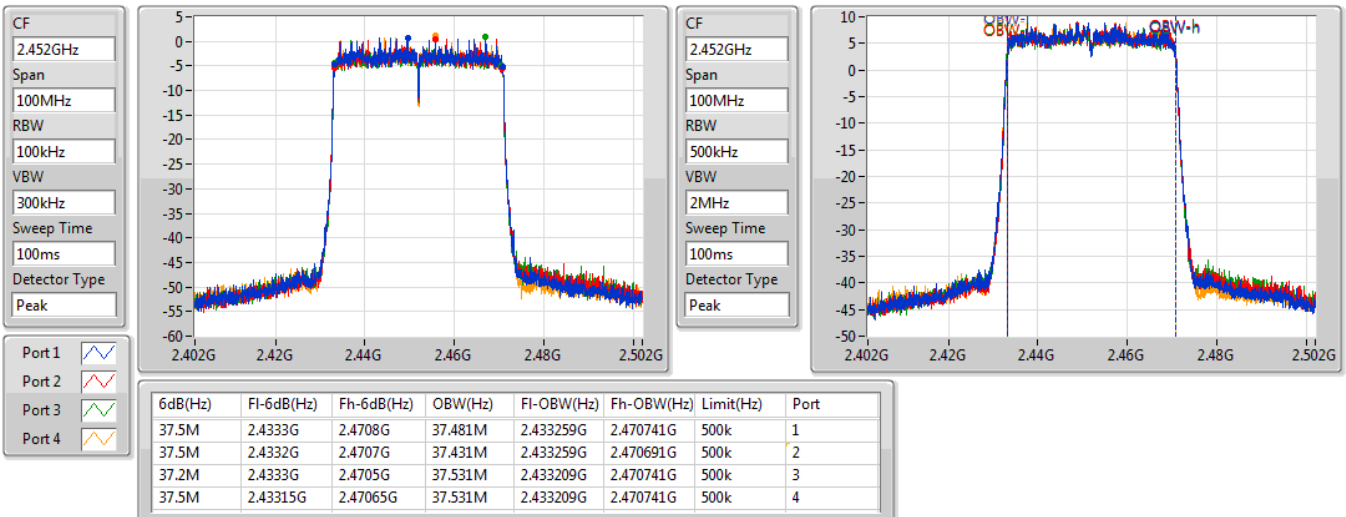


802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

2452MHz

16/07/2020





Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_4TX	29.94	0.98628
802.11g_Nss1,(6Mbps)_4TX	29.94	0.98628
802.11ax HEW20_Nss1,(MCS0)_4TX	29.78	0.95060
802.11ax HEW40_Nss1,(MCS0)_4TX	24.73	0.29717

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	1.99	23.79	23.87	24.00	23.85	29.90	30.00
2437MHz	Pass	1.99	23.71	24.18	23.91	23.85	29.94	30.00
2462MHz	Pass	1.99	23.63	23.84	23.62	23.94	29.78	30.00
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	1.99	16.49	16.64	16.81	16.82	22.71	30.00
2417MHz	Pass	1.99	18.37	18.64	18.44	18.59	24.53	30.00
2437MHz	Pass	1.99	23.84	23.91	23.95	23.96	29.94	30.00
2457MHz	Pass	1.99	17.22	17.40	17.52	17.36	23.40	30.00
2462MHz	Pass	1.99	15.56	15.47	15.61	15.69	21.60	30.00
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	1.99	18.50	18.84	18.70	18.81	24.74	30.00
2417MHz	Pass	1.99	20.95	21.32	21.37	21.18	27.23	30.00
2437MHz	Pass	1.99	23.56	24.05	23.63	23.77	29.78	30.00
2457MHz	Pass	1.99	21.16	21.34	21.21	21.20	27.25	30.00
2462MHz	Pass	1.99	17.55	18.29	17.98	18.12	24.01	30.00
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2422MHz	Pass	1.99	16.69	16.70	16.62	16.62	22.68	30.00
2437MHz	Pass	1.99	18.75	18.68	18.69	18.70	24.73	30.00
2452MHz	Pass	1.99	15.84	15.99	15.88	16.03	21.96	30.00

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

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_4TX	5.56
802.11g_Nss1,(6Mbps)_4TX	3.59
802.11ax HEW20_Nss1,(MCS0)_4TX	1.36
802.11ax HEW40_Nss1,(MCS0)_4TX	-4.59

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

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	1.13	0.91	1.73	3.50	5.33	6.00
2437MHz	Pass	8.00	0.80	1.60	1.24	0.73	5.56	6.00
2462MHz	Pass	8.00	0.78	1.55	0.90	0.65	5.08	6.00
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	-9.80	-9.49	-9.58	-9.52	-3.76	6.00
2437MHz	Pass	8.00	-1.96	-2.30	-2.26	-2.33	3.59	6.00
2462MHz	Pass	8.00	-10.66	-10.77	-10.93	-10.70	-4.91	6.00
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	8.00	-8.41	-7.52	-7.68	-8.04	-2.21	6.00
2437MHz	Pass	8.00	-3.39	-3.17	-3.23	-3.16	1.36	6.00
2462MHz	Pass	8.00	-8.47	-8.18	-8.55	-8.97	-3.76	6.00
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2422MHz	Pass	8.00	-13.05	-13.30	-11.30	-10.56	-6.46	6.00
2437MHz	Pass	8.00	-9.46	-10.52	-9.76	-9.25	-4.59	6.00
2452MHz	Pass	8.00	-13.99	-12.64	-12.90	-11.28	-6.72	6.00

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

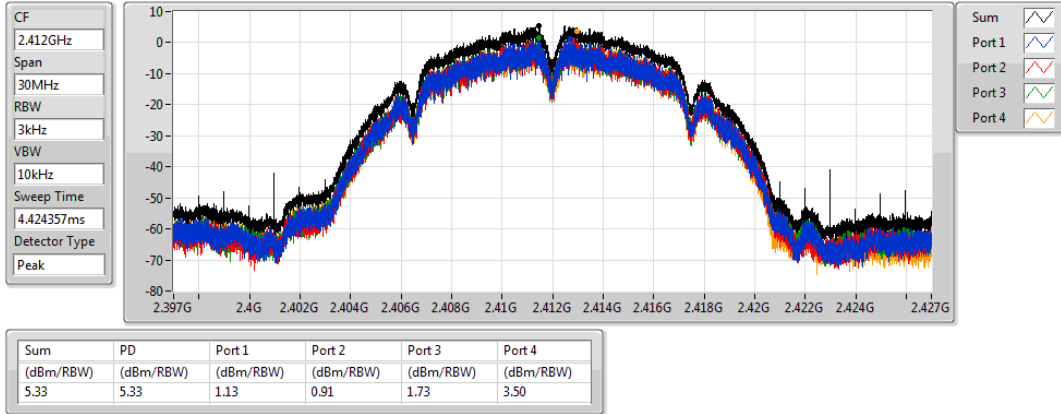
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

802.11b_Nss1,(1Mbps)_4TX

PSD

2412MHz

16/07/2020

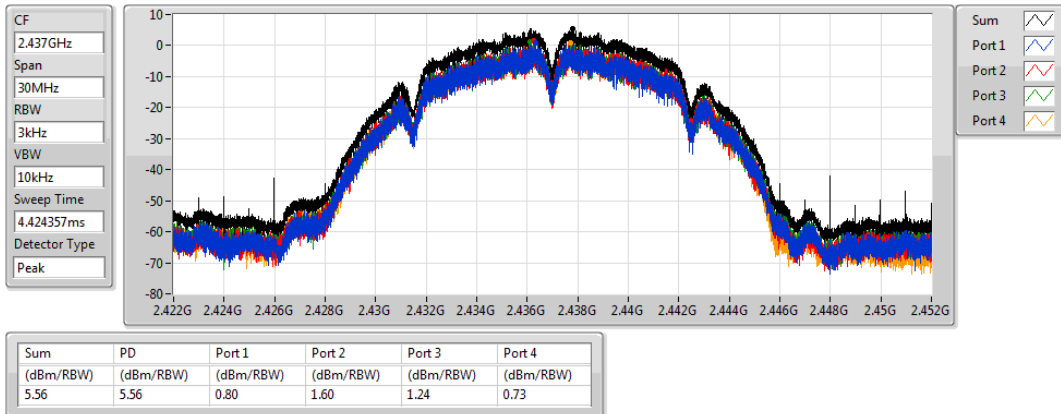


802.11b_Nss1,(1Mbps)_4TX

PSD

2437MHz

16/07/2020

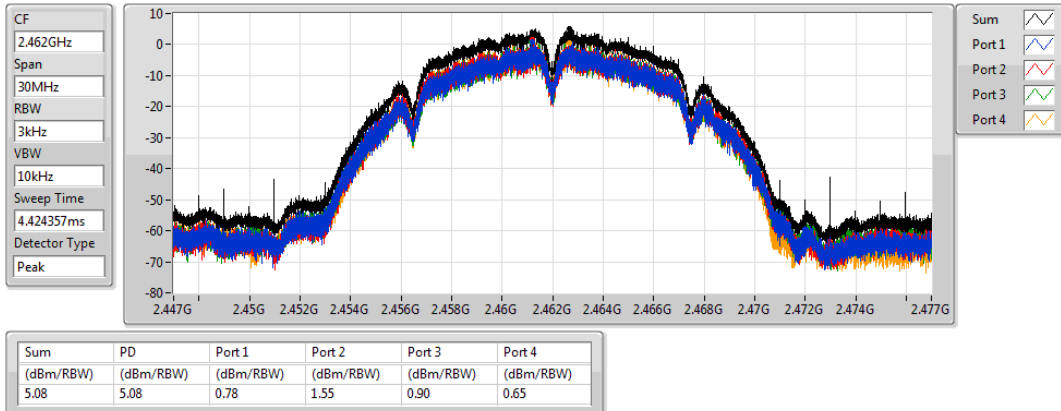


802.11b_Nss1,(1Mbps)_4TX

PSD

2462MHz

16/07/2020

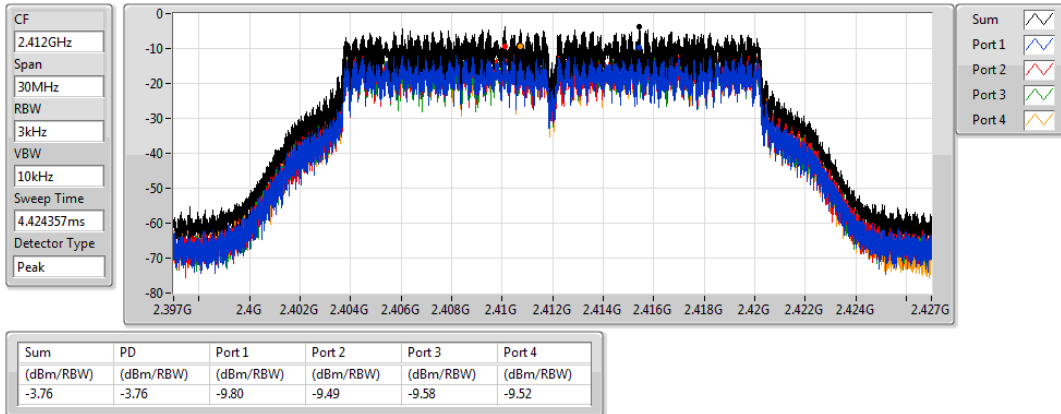


802.11g_Nss1,(6Mbps)_4TX

PSD

2412MHz

16/07/2020

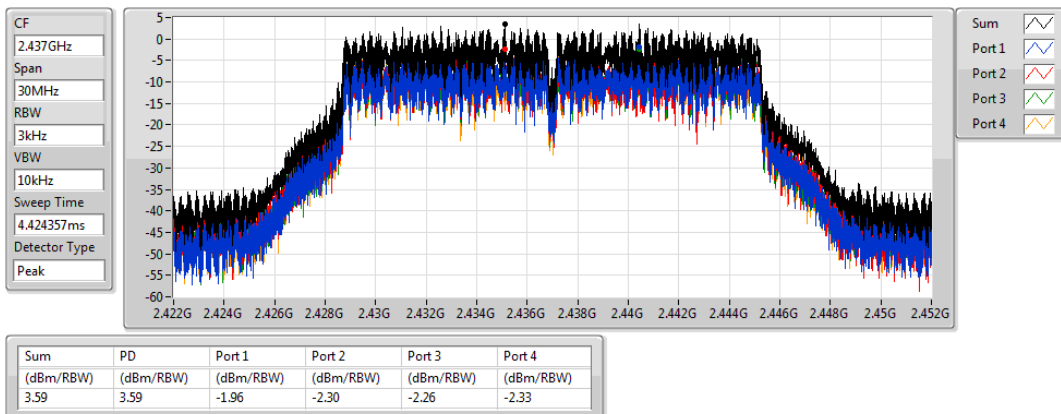


802.11g_Nss1,(6Mbps)_4TX

PSD

2437MHz

16/07/2020

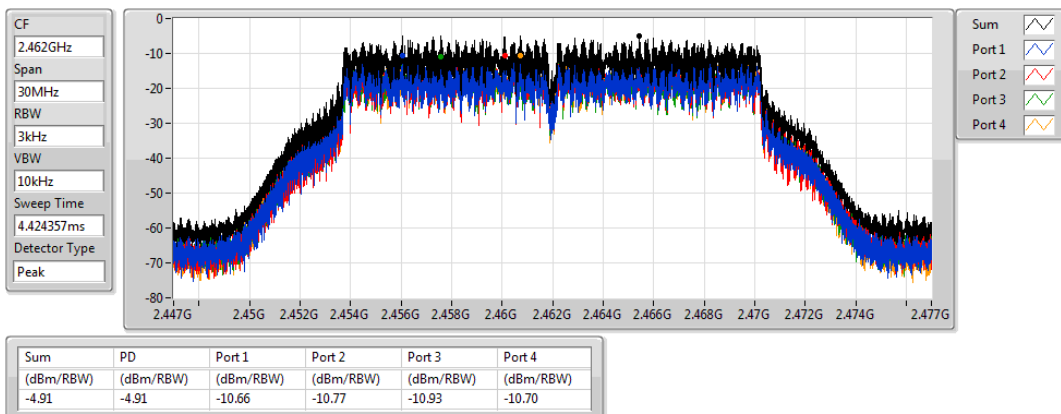


802.11g_Nss1,(6Mbps)_4TX

PSD

2462MHz

16/07/2020

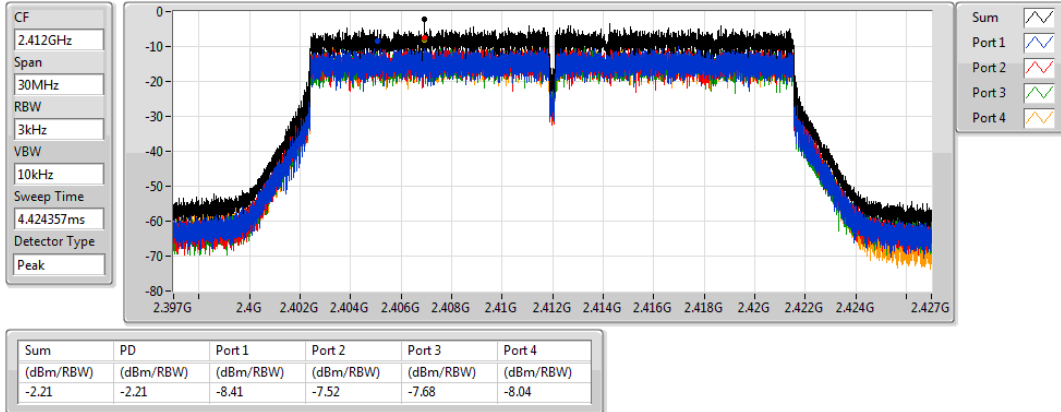


802.11ax HEW20_Nss1,(MCS0)_4TX

PSD

2412MHz

16/07/2020

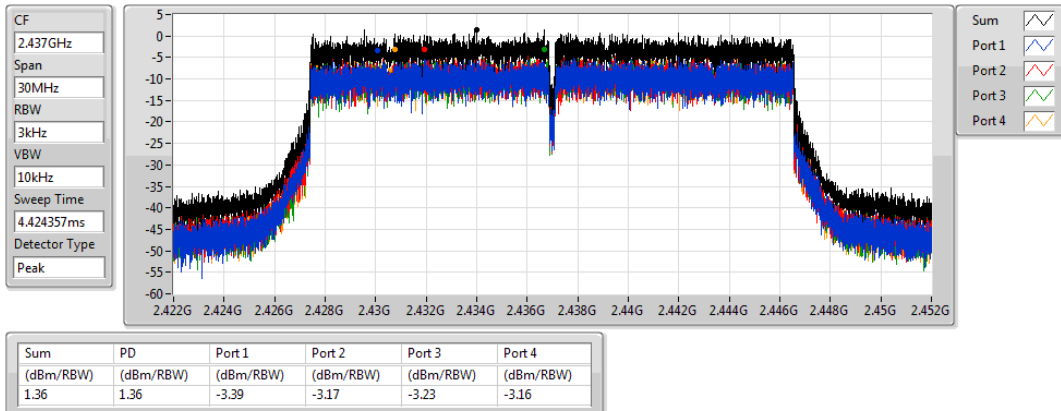


802.11ax HEW20_Nss1,(MCS0)_4TX

PSD

2437MHz

16/07/2020

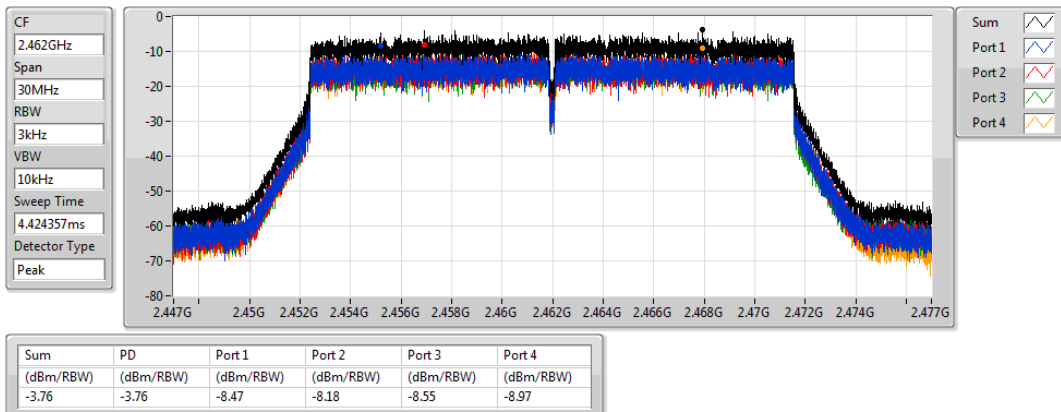


802.11ax HEW20_Nss1,(MCS0)_4TX

PSD

2462MHz

16/07/2020

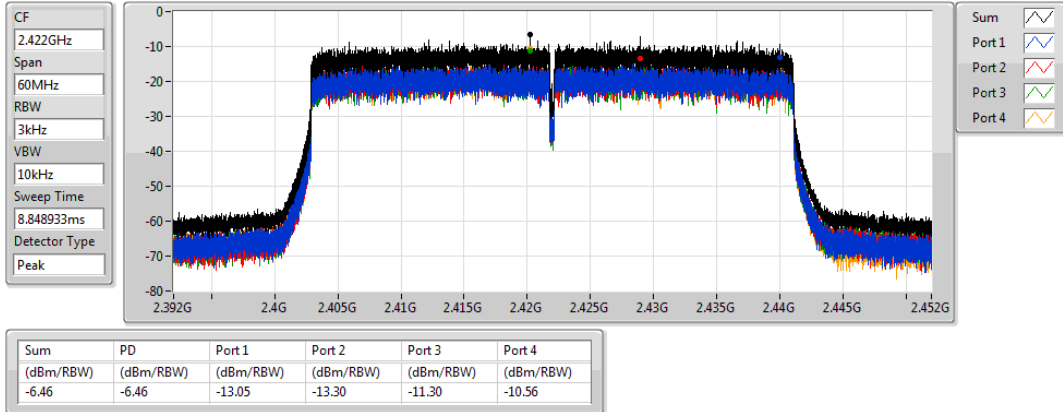


802.11ax HEW40_Nss1,(MCS0)_4TX

PSD

2422MHz

16/07/2020

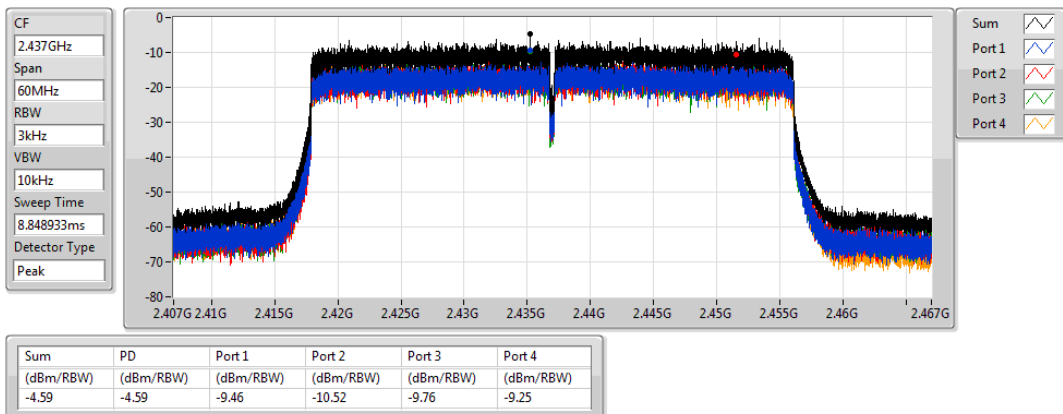


802.11ax HEW40_Nss1,(MCS0)_4TX

PSD

2437MHz

16/07/2020

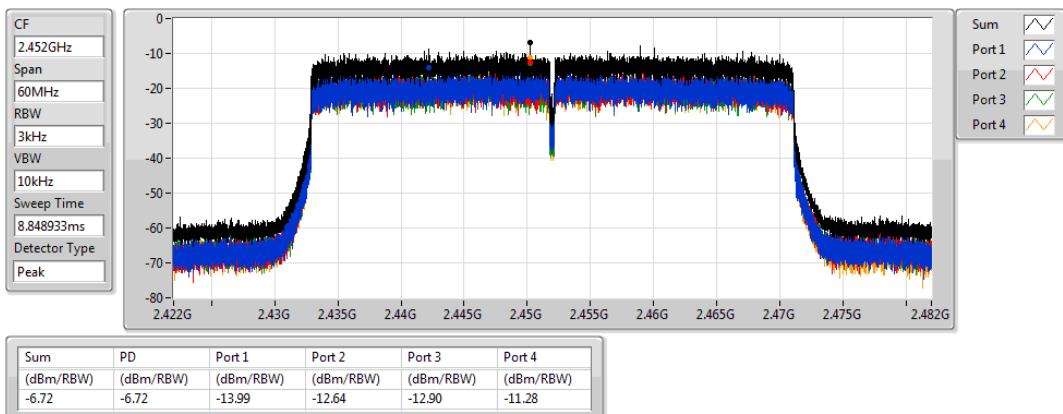


802.11ax HEW40_Nss1,(MCS0)_4TX

PSD

2452MHz

16/07/2020





Summary

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_4TX	Pass	2.43799G	16.08	-13.92	2.01021G	-49.89	2.39848G	-40.12	2.4G	-43.46	2.49564G	-49.14	17.68109G	-44.90	3
802.11g_Nss1,(6Mbps)_4TX	Pass	2.44196G	12.58	-17.42	1.8075G	-53.73	2.39946G	-36.23	2.4G	-39.77	2.50192G	-51.64	23.45193G	-45.20	2
802.11ax HEW20_Nss1,(MCS0)_4TX	Pass	2.44446G	11.55	-18.45	2.09758G	-53.15	2.4G	-38.98	2.4G	-36.85	2.52128G	-51.22	17.0096G	-45.08	2
802.11ax HEW40_Nss1,(MCS0)_4TX	Pass	2.43194G	4.07	-25.93	2.30311G	-53.39	2.3986G	-43.98	2.4G	-45.85	2.4837G	-47.60	21.97949G	-45.28	4

Result

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11b_Nss1,(1Mbps)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43799G	16.08	-13.92	2.01021G	-51.93	2.39798G	-40.99	2.4G	-44.60	2.49008G	-50.01	15.04291G	-45.30	1
2412MHz	Pass	2.43799G	16.08	-13.92	2.30262G	-52.33	2.39696G	-40.43	2.4G	-47.35	2.50044G	-49.15	23.45193G	-45.18	2
2412MHz	Pass	2.43799G	16.08	-13.92	2.01021G	-49.89	2.39848G	-40.12	2.4G	-43.46	2.49564G	-49.14	17.68109G	-44.90	3
2412MHz	Pass	2.43799G	16.08	-13.92	2.13982G	-51.26	2.39848G	-40.77	2.4G	-46.03	2.48756G	-49.96	17.6839G	-45.24	4
2437MHz	Pass	2.43799G	16.08	-13.92	2.03089G	-50.06	2.39958G	-47.93	2.4G	-50.60	2.48834G	-48.51	24.10656G	-44.94	1
2437MHz	Pass	2.43799G	16.08	-13.92	2.12904G	-52.78	2.3929G	-48.44	2.4G	-50.18	2.50148G	-47.96	23.45193G	-45.60	2
2437MHz	Pass	2.43799G	16.08	-13.92	2.03089G	-50.67	2.39682G	-48.00	2.4835G	-49.36	2.4842G	-47.94	24.89324G	-45.22	3
2437MHz	Pass	2.43799G	16.08	-13.92	2.03089G	-51.86	2.39872G	-46.75	2.4G	-49.70	2.4849G	-48.66	23.44069G	-45.33	4
2462MHz	Pass	2.43799G	16.08	-13.92	2.05186G	-49.96	2.39674G	-49.86	2.4835G	-49.69	2.49506G	-47.19	15.03448G	-45.98	1
2462MHz	Pass	2.43799G	16.08	-13.92	2.05186G	-50.77	2.39774G	-49.89	2.4835G	-50.61	2.48606G	-45.65	23.4126G	-45.78	2
2462MHz	Pass	2.43799G	16.08	-13.92	2.05186G	-49.78	2.39138G	-49.46	2.4835G	-49.89	2.48646G	-46.44	15.05134G	-45.14	3
2462MHz	Pass	2.43799G	16.08	-13.92	2.05186G	-51.51	2.39118G	-48.78	2.4835G	-49.39	2.48372G	-45.83	17.00679G	-44.80	4
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.44196G	12.58	-17.42	919.19M	-52.87	2.39948G	-38.17	2.4G	-42.11	2.5126G	-51.87	15.07943G	-44.75	1
2412MHz	Pass	2.44196G	12.58	-17.42	1.8075G	-53.73	2.39946G	-36.23	2.4G	-39.77	2.50192G	-51.64	23.45193G	-45.20	2
2412MHz	Pass	2.44196G	12.58	-17.42	2.03089G	-53.75	2.39998G	-39.87	2.4G	-40.77	2.49336G	-51.82	23.48846G	-45.76	3
2412MHz	Pass	2.44196G	12.58	-17.42	522.21M	-52.02	2.39998G	-40.86	2.4G	-40.97	2.48898G	-51.74	24.82581G	-45.29	4
2437MHz	Pass	2.44196G	12.58	-17.42	2.03089G	-50.22	2.39612G	-44.50	2.4G	-47.90	2.4935G	-47.66	24.33975G	-44.22	1
2437MHz	Pass	2.44196G	12.58	-17.42	2.03089G	-52.92	2.39488G	-43.00	2.4G	-45.77	2.48452G	-45.78	15.23677G	-45.69	2
2437MHz	Pass	2.44196G	12.58	-17.42	2.30262G	-51.84	2.39664G	-43.24	2.4G	-49.68	2.48386G	-44.34	17.69233G	-44.75	3
2437MHz	Pass	2.44196G	12.58	-17.42	2.03089G	-51.34	2.39946G	-45.09	2.4G	-48.72	2.48406G	-47.35	15.03448G	-45.77	4
2462MHz	Pass	2.44196G	12.58	-17.42	307.56M	-53.66	2.39132G	-52.55	2.4835G	-53.11	2.48354G	-47.16	16.26507G	-45.41	1
2462MHz	Pass	2.44196G	12.58	-17.42	2.12962G	-53.58	2.39008G	-52.41	2.4835G	-48.75	2.48496G	-44.93	17.67266G	-45.78	2
2462MHz	Pass	2.44196G	12.58	-17.42	2.10341G	-52.65	2.39666G	-52.05	2.4835G	-46.13	2.48432G	-46.13	24.82019G	-45.52	3
2462MHz	Pass	2.44196G	12.58	-17.42	2.30204G	-53.19	2.39722G	-50.50	2.4835G	-52.34	2.4846G	-49.28	23.50531G	-45.76	4
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.44446G	11.55	-18.45	959.38M	-53.61	2.39998G	-38.11	2.4G	-38.87	2.48378G	-51.16	15.07382G	-45.73	1
2412MHz	Pass	2.44446G	11.55	-18.45	2.09758G	-53.15	2.4G	-38.98	2.4G	-36.85	2.52128G	-51.22	17.0096G	-45.08	2
2412MHz	Pass	2.44446G	11.55	-18.45	2.13749G	-53.08	2.4G	-39.62	2.4G	-37.94	2.49484G	-50.06	24.86514G	-43.43	3
2412MHz	Pass	2.44446G	11.55	-18.45	901.13M	-52.69	2.39998G	-37.91	2.4G	-39.25	2.50454G	-51.13	15.04291G	-44.85	4
2437MHz	Pass	2.44446G	11.55	-18.45	2.03089G	-50.59	2.39924G	-44.24	2.4G	-47.40	2.48916G	-47.99	24.83705G	-45.25	1
2437MHz	Pass	2.44446G	11.55	-18.45	2.03089G	-51.47	2.39702G	-45.53	2.4G	-47.14	2.48366G	-47.26	23.43507G	-45.87	2
2437MHz	Pass	2.44446G	11.55	-18.45	2.03089G	-51.72	2.39692G	-45.86	2.4G	-47.06	2.48584G	-46.27	15.05696G	-44.42	3
2437MHz	Pass	2.44446G	11.55	-18.45	2.03089G	-50.24	2.39982G	-44.41	2.4G	-47.62	2.49944G	-47.13	24.84266G	-44.94	4
2462MHz	Pass	2.44446G	11.55	-18.45	2.127G	-52.96	2.39564G	-51.75	2.4835G	-49.04	2.48468G	-46.88	24.5308G	-45.36	1
2462MHz	Pass	2.44446G	11.55	-18.45	2.15554G	-54.04	2.39922G	-51.86	2.4835G	-46.98	2.4853G	-47.11	24.17961G	-44.63	2
2462MHz	Pass	2.44446G	11.55	-18.45	858.9M	-53.23	2.39588G	-51.76	2.4835G	-49.15	2.4838G	-46.49	17.69795G	-44.56	3
2462MHz	Pass	2.44446G	11.55	-18.45	2.05157G	-53.74	2.39268G	-51.07	2.4835G	-51.57	2.49246G	-48.52	17.69514G	-45.31	4
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.43194G	4.07	-25.93	687.23M	-52.71	2.3986G	-45.70	2.4G	-47.31	2.54082G	-51.71	24.84575G	-45.47	1
2422MHz	Pass	2.43194G	4.07	-25.93	857.26M	-53.10	2.39688G	-46.57	2.4G	-48.47	2.51386G	-51.05	15.05502G	-44.84	2
2422MHz	Pass	2.43194G	4.07	-25.93	1.79674G	-52.00	2.39956G	-46.25	2.4G	-47.43	2.49466G	-51.12	23.44627G	-45.60	3
2422MHz	Pass	2.43194G	4.07	-25.93	2.30569G	-53.17	2.3996G	-45.74	2.4G	-47.60	2.49222G	-50.90	23.47712G	-44.83	4
2437MHz	Pass	2.43194G	4.07	-25.93	2.30597G	-53.16	2.3966G	-44.58	2.4G	-48.12	2.48834G	-47.89	23.50517G	-45.54	1
2437MHz	Pass	2.43194G	4.07	-25.93	946.86M	-52.96	2.39732G	-44.94	2.4G	-47.46	2.48546G	-47.67	15.04941G	-45.58	2
2437MHz	Pass	2.43194G	4.07	-25.93	2.30884G	-52.70	2.39956G	-44.73	2.4G	-46.80	2.4881G	-47.80	17.69411G	-44.94	3
2437MHz	Pass	2.43194G	4.07	-25.93	2.30311G	-53.39	2.3986G	-43.98	2.4G	-45.85	2.4837G	-47.60	21.97949G	-45.28	4



CSE(Non-restricted Band)

Appendix E

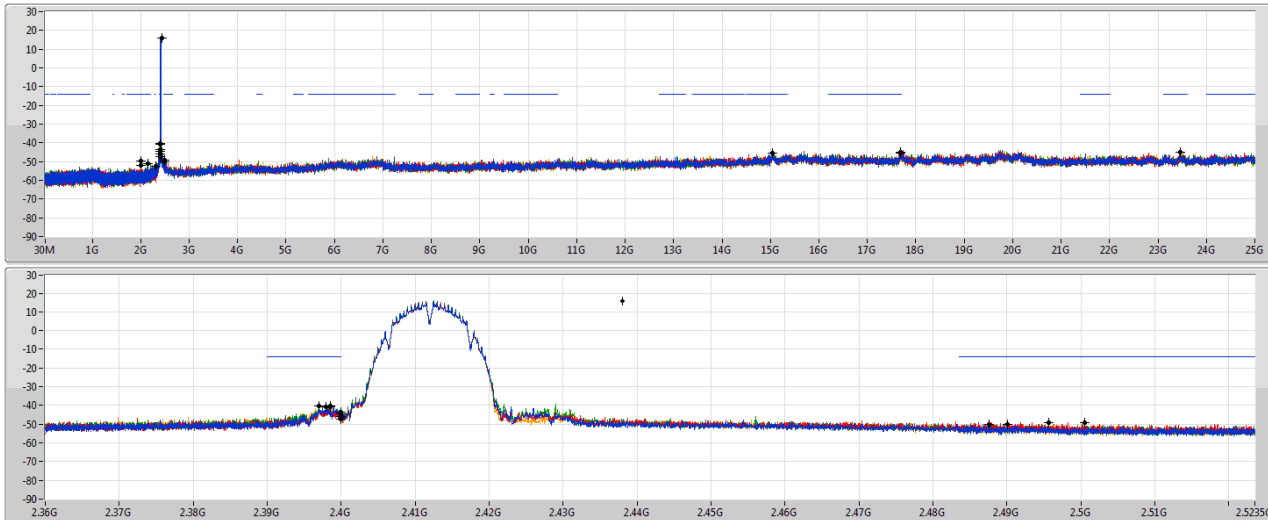
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2452MHz	Pass	2.43194G	4.07	-25.93	886.17M	-52.98	2.39096G	-51.85	2.4835G	-50.38	2.48438G	-47.14	14.71006G	-45.95	1
2452MHz	Pass	2.43194G	4.07	-25.93	945.71M	-53.73	2.39748G	-51.63	2.4835G	-49.98	2.48942G	-46.29	23.43505G	-44.68	2
2452MHz	Pass	2.43194G	4.07	-25.93	2.30683G	-53.33	2.39828G	-51.73	2.4835G	-48.66	2.48366G	-46.58	21.49149G	-45.77	3
2452MHz	Pass	2.43194G	4.07	-25.93	950.87M	-53.52	2.3956G	-50.67	2.4835G	-49.93	2.48446G	-46.80	24.91025G	-45.24	4

802.11b_Nss1,(1Mbps)_4TX

CSE NdB

2412MHz

16/07/2020



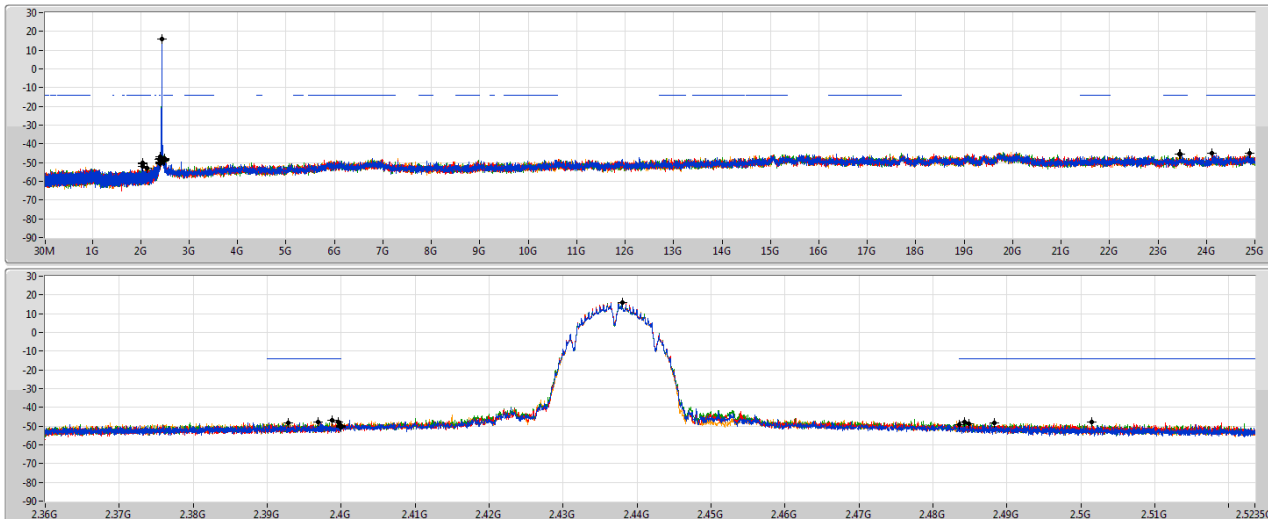
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43799G	16.08	-13.92	2.01021G	-51.93	2.39798G	-40.99	2.4G	-44.60	2.49008G	-50.01	15.04291G	-45.30	1
2.43799G	16.08	-13.92	2.30262G	-52.33	2.39696G	-40.43	2.4G	-47.35	2.50044G	-49.15	23.45193G	-45.18	2
2.43799G	16.08	-13.92	2.01021G	-49.89	2.39848G	-40.12	2.4G	-43.46	2.49564G	-49.14	17.68109G	-44.90	3
2.43799G	16.08	-13.92	2.13982G	-51.26	2.39848G	-40.77	2.4G	-46.03	2.48756G	-49.96	17.6839G	-45.24	4

802.11b_Nss1,(1Mbps)_4TX

CSE NdB

2437MHz

16/07/2020

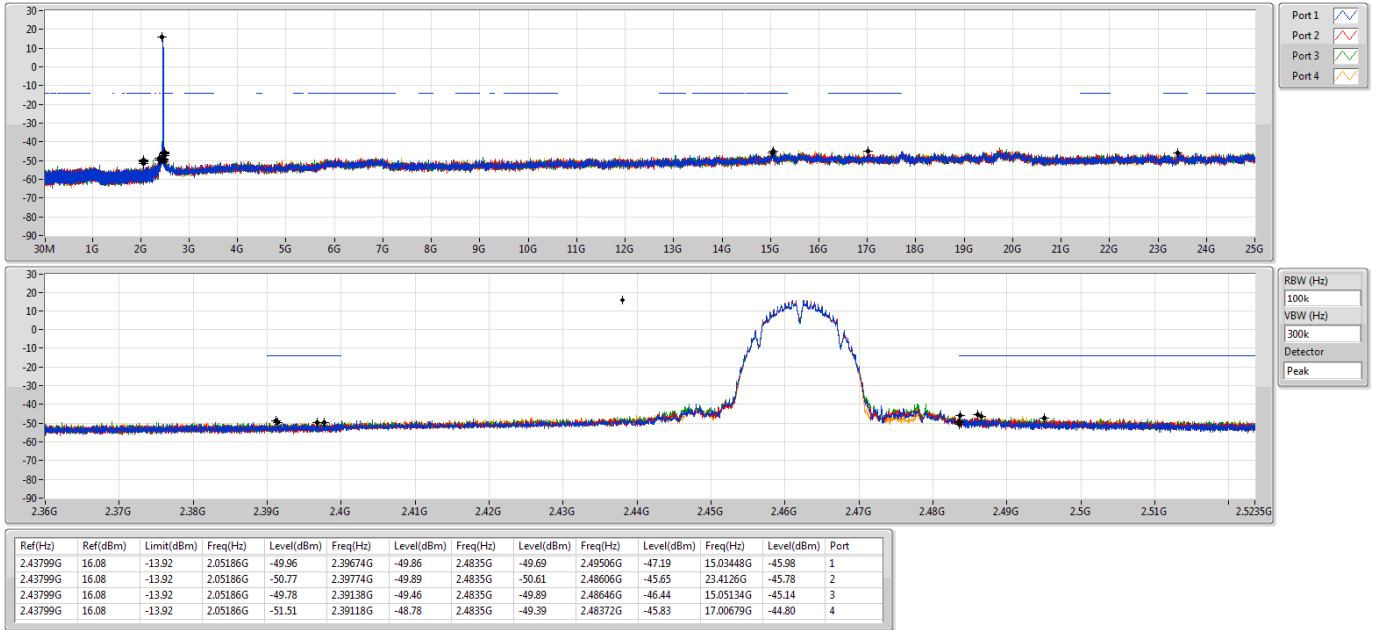


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43799G	16.08	-13.92	2.03089G	-50.06	2.39958G	-47.93	2.4G	-50.60	2.48834G	-48.51	24.10656G	-44.94	1
2.43799G	16.08	-13.92	2.12904G	-52.78	2.3929G	-48.44	2.4G	-50.18	2.50148G	-47.96	23.45193G	-45.60	2
2.43799G	16.08	-13.92	2.03089G	-50.67	2.39682G	-48.00	2.4835G	-49.36	2.4842G	-47.94	24.89324G	-45.22	3
2.43799G	16.08	-13.92	2.03089G	-51.86	2.39872G	-46.75	2.4G	-49.70	2.4849G	-48.66	23.44069G	-45.33	4

802.11b_Nss1,(1Mbps)_4TX

CSE NdB

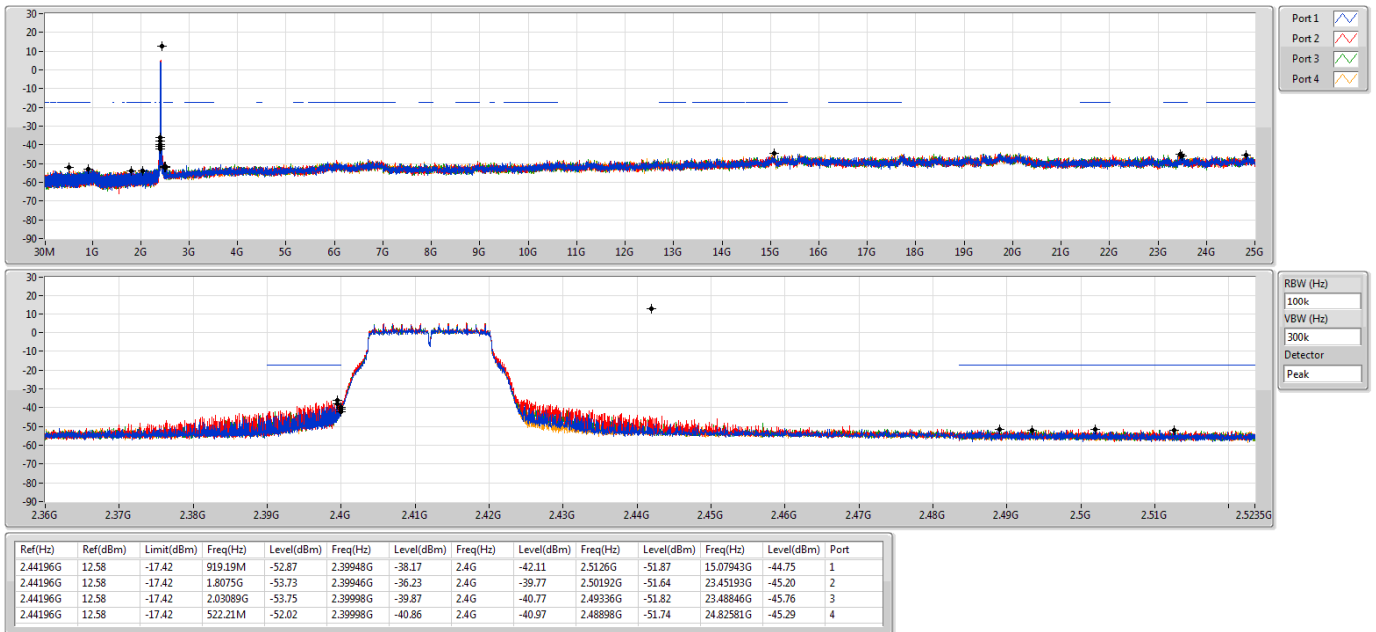
2462MHz



802.11g_Nss1,(6Mbps)_4TX

CSE NdB

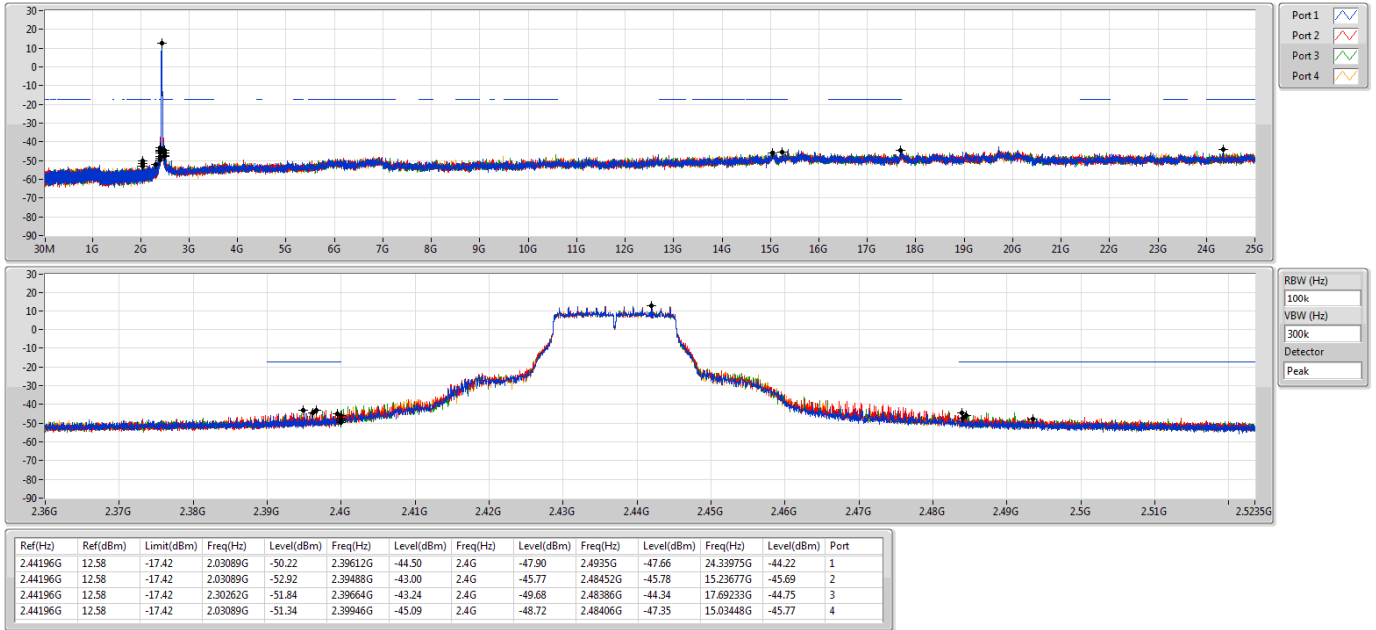
2412MHz



802.11g_Nss1,(6Mbps)_4TX

CSE NdB

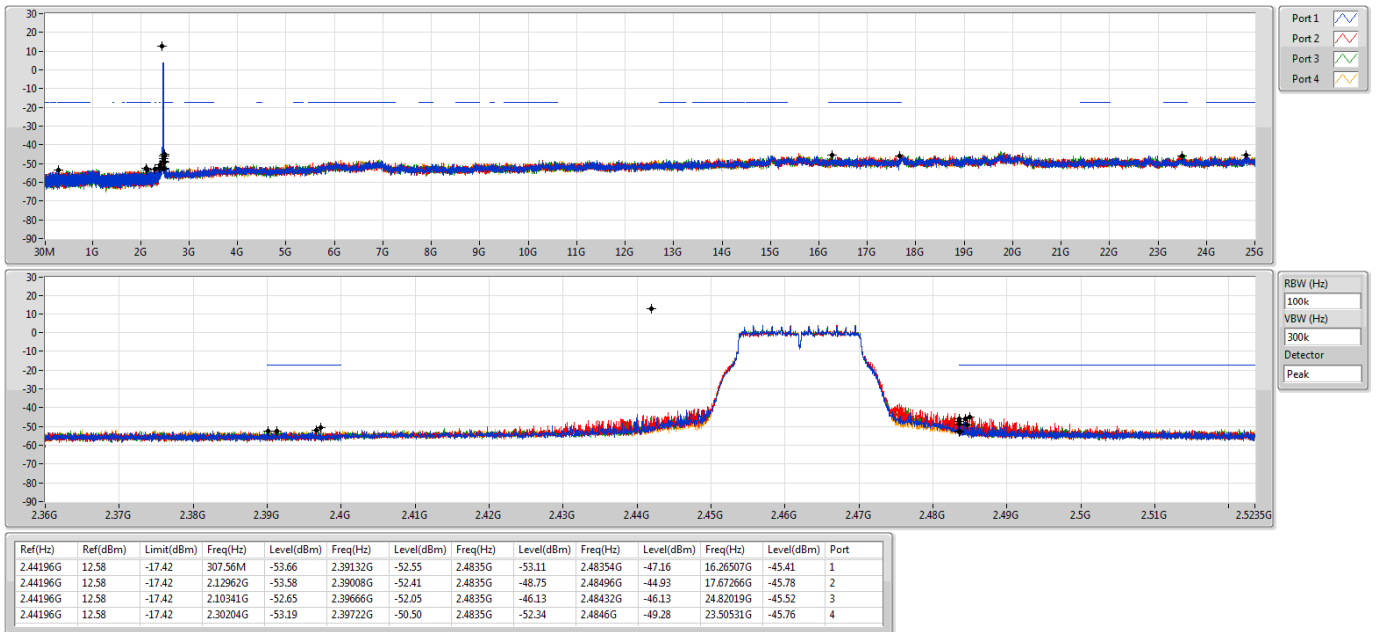
2437MHz



802.11g_Nss1,(6Mbps)_4TX

CSE NdB

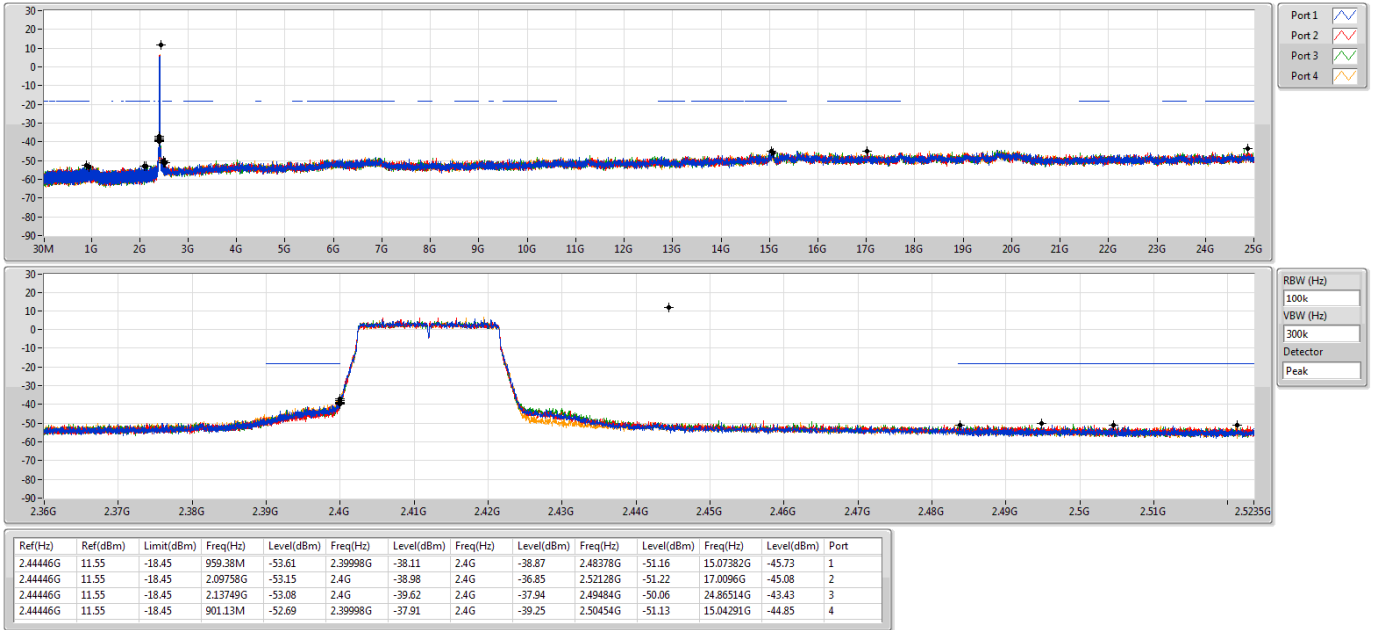
2462MHz



802.11ax HEW20_Nss1,(MCS0)_4TX

CSE NdB

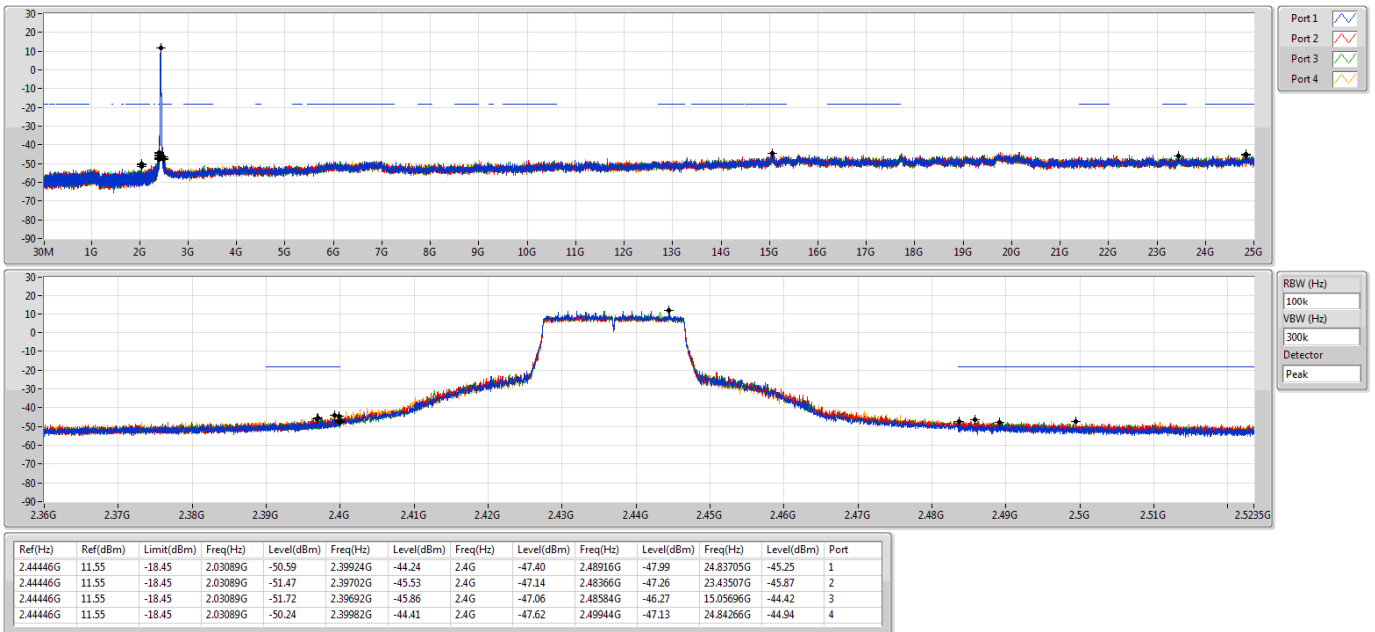
2412MHz



802.11ax HEW20_Nss1,(MCS0)_4TX

CSE NdB

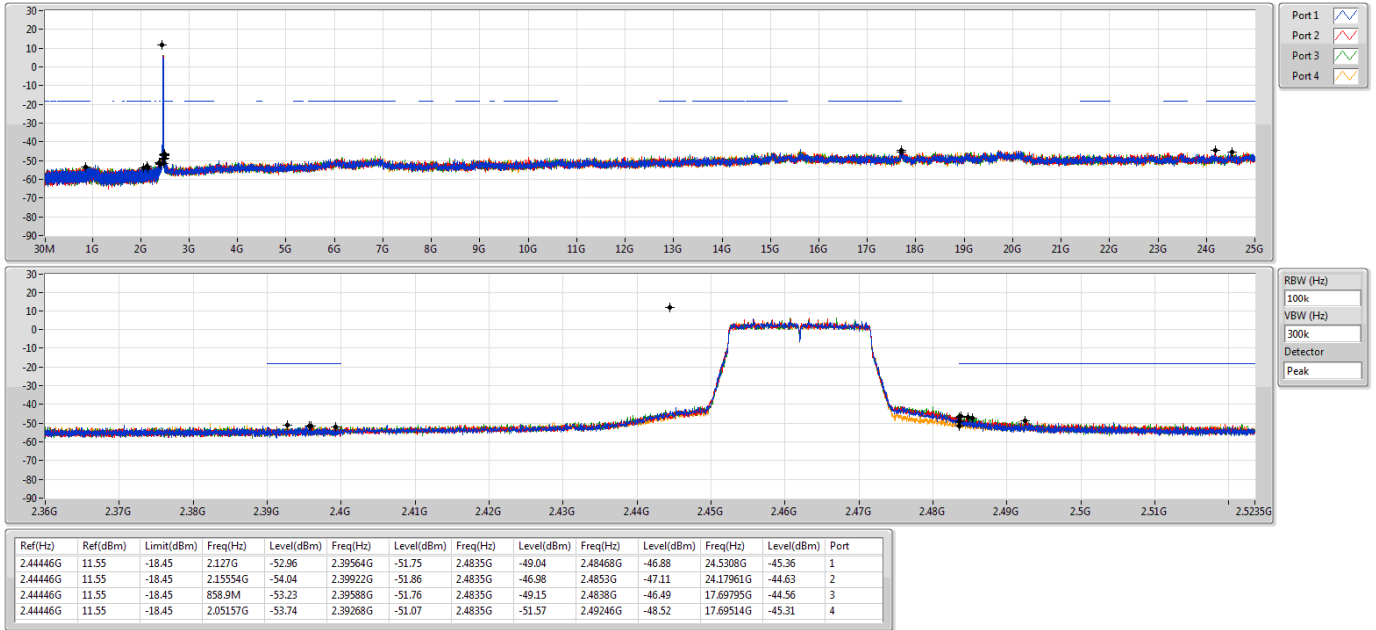
2437MHz



802.11ax HEW20_Nss1,(MCS0)_4TX

CSE NdB

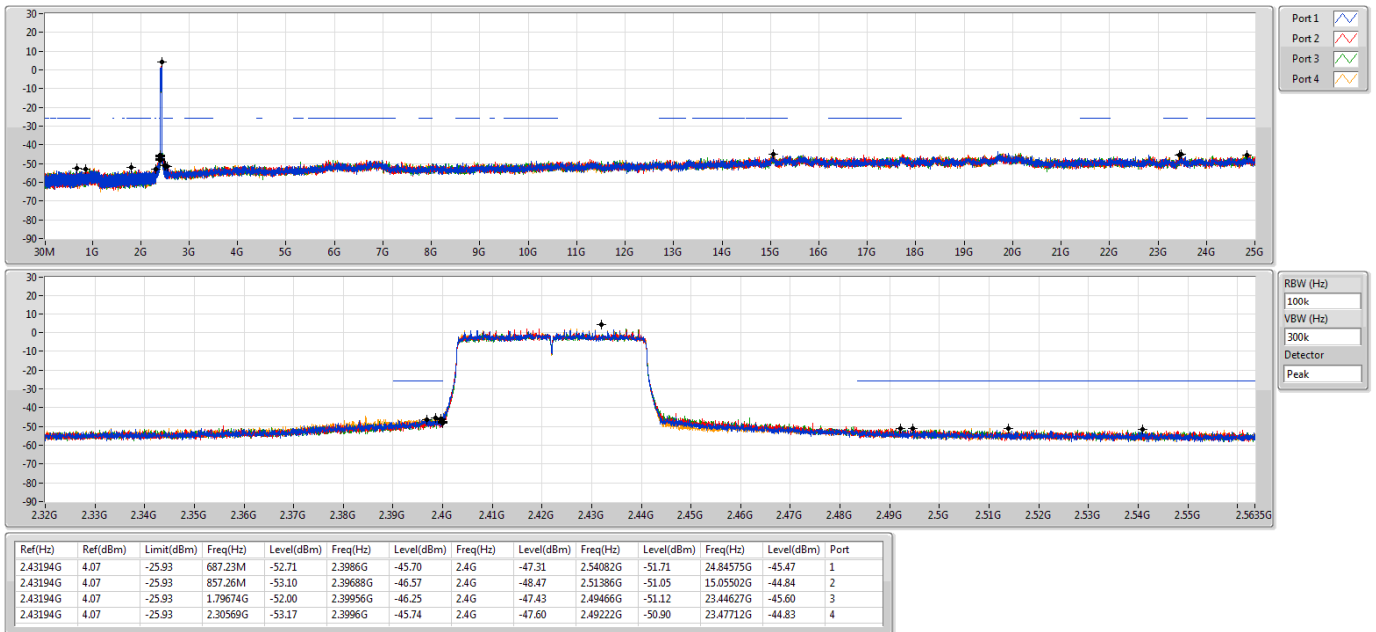
2462MHz



802.11ax HEW40_Nss1,(MCS0)_4TX

CSE NdB

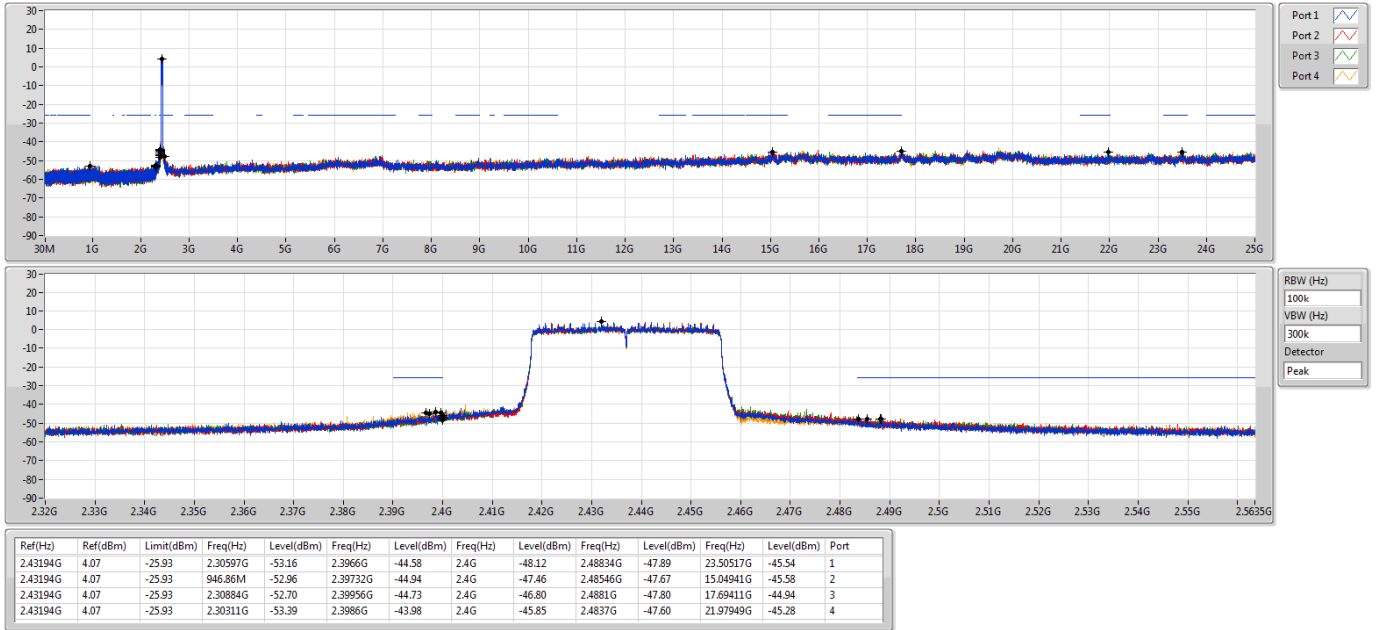
2422MHz



802.11ax HEW40_Nss1,(MCS0)_4TX

CSE NdB

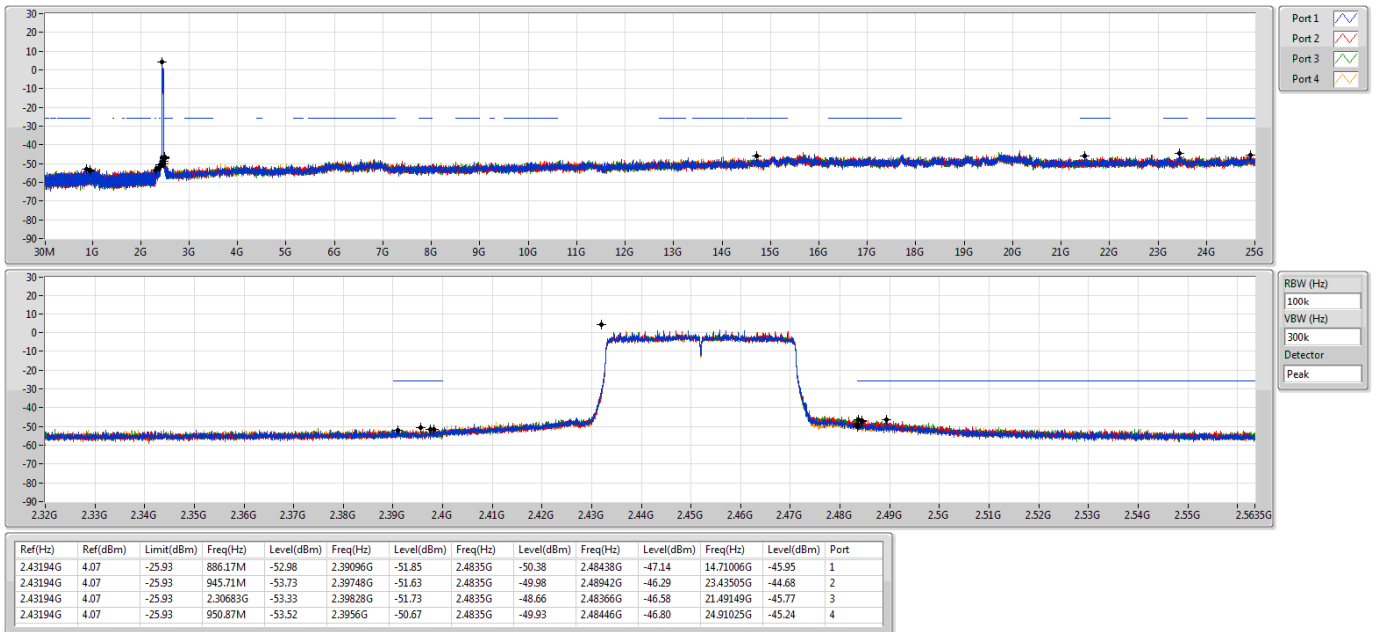
2437MHz



802.11ax HEW40_Nss1,(MCS0)_4TX

CSE NdB

2452MHz





Radiated Emissions below 1GHz

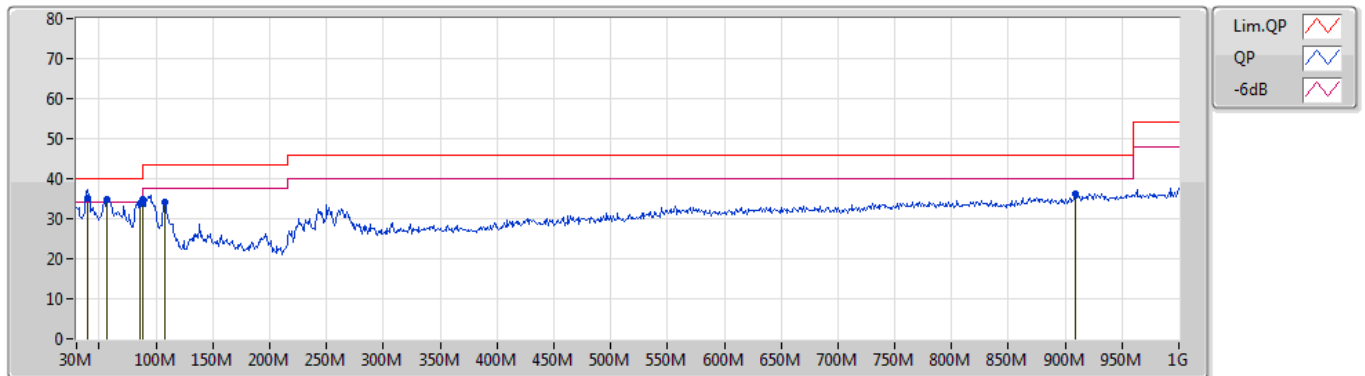
Appendix F.1

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 4	Pass	QP	39.7M	35.27	40.00	-4.73	Vertical

Mode 4

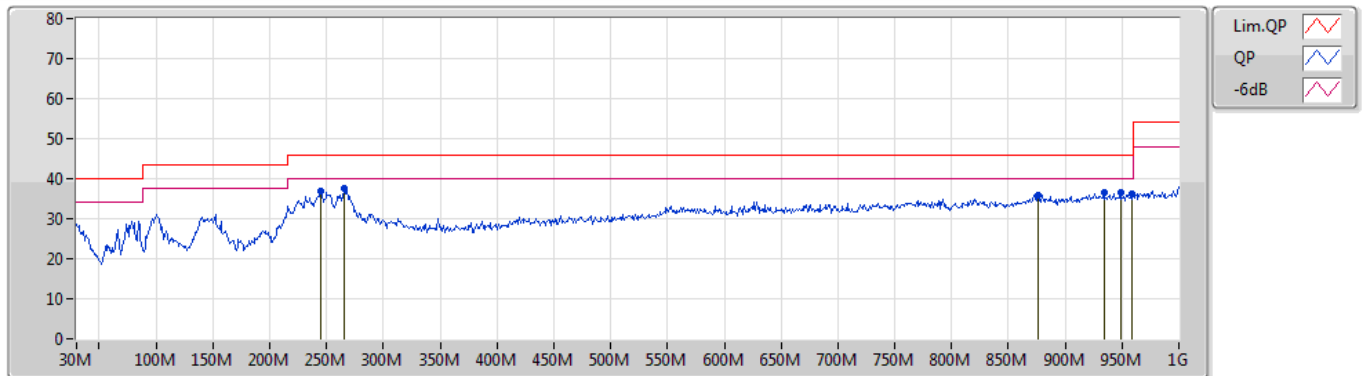
23/07/2020



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)
QP	39.7M	35.27	40.00	-4.73	-10.73	3	Vertical	180	1.00	"Worst"	46.00	19.12	1.60	31.45
PK	57.16M	34.95	40.00	-5.05	-17.69	3	Vertical	62	1.00	-	52.64	12.37	1.54	31.60
PK	86.26M	33.91	40.00	-6.09	-15.86	3	Vertical	182	1.50	-	49.77	13.94	1.93	31.73
PK	88M	34.71	43.50	-8.79	-15.47	3	Vertical	137	1.25	-	50.18	14.27	1.96	31.70
PK	107.6M	34.06	43.50	-9.44	-12.20	3	Vertical	197	1.00	-	46.26	17.33	2.18	31.71
PK	908.82M	36.27	46.00	-9.73	0.77	3	Vertical	200	1.50	-	35.50	26.68	6.60	32.51

Mode 4

23/07/2020



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
PK	244.37M	36.79	46.00	-9.21	-10.82	3	Horizontal	105	1.00	-	47.61	17.80	3.17	31.79
PK	265.71M	37.54	46.00	-8.46	-9.11	3	Horizontal	66	1.25	"Worst"	46.65	19.36	3.33	31.80
PK	875.84M	35.94	46.00	-10.06	0.22	3	Horizontal	152	1.00	-	35.72	26.36	6.36	32.50
PK	934.04M	36.55	46.00	-9.45	0.66	3	Horizontal	355	1.25	-	35.89	26.58	6.60	32.52
PK	948.59M	36.48	46.00	-9.52	0.83	3	Horizontal	0	1.25	-	35.65	26.77	6.60	32.54
PK	959.26M	36.06	46.00	-9.94	0.98	3	Horizontal	182	1.50	-	35.08	26.92	6.60	32.54



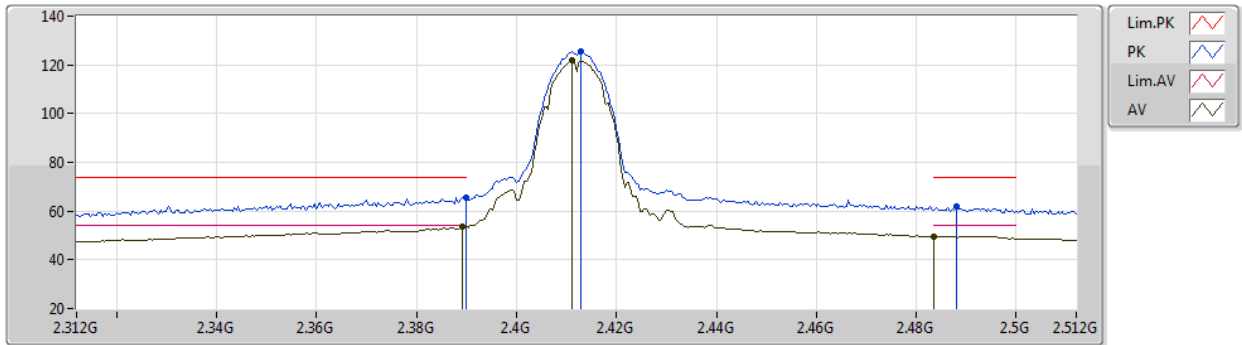
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
802.11ax HEW20_Nss1.(MCS0)_4TX	Pass	AV	2.39G	53.93	54.00	-0.07	3	Vertical	107	1.83	-

802.11b_Nss1,(1Mbps)_4TX

10/07/2020

2412MHz_TX



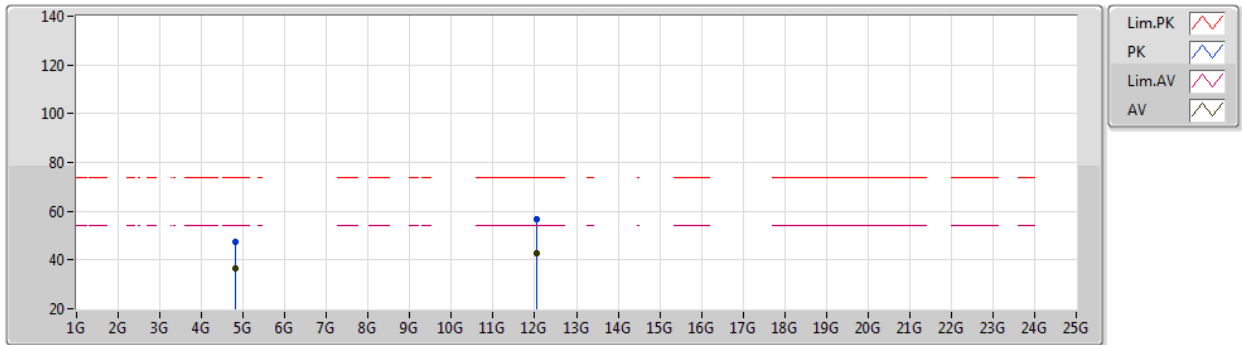
EUT_Z_4TX
Setting 101
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.39G	65.63	74.00	-8.37	34.00	3	Vertical	346	1.68	-	27.63	4.00	-
AV	2.3892G	53.74	54.00	-0.26	22.12	3	Vertical	346	1.68	-	27.63	3.99	-
PK	2.4128G	125.49	Inf	-Inf	93.92	3	Vertical	346	1.68	-	27.56	4.01	-
AV	2.4112G	121.80	Inf	-Inf	90.22	3	Vertical	346	1.68	-	27.57	4.01	-
PK	2.488G	61.65	74.00	-12.35	30.27	3	Vertical	346	1.68	-	27.34	4.04	-
AV	2.4835G	49.67	54.00	-4.33	18.28	3	Vertical	346	1.68	-	27.35	4.04	-

802.11b_Nss1,(1Mbps)_4TX

10/07/2020

2412MHz_TX



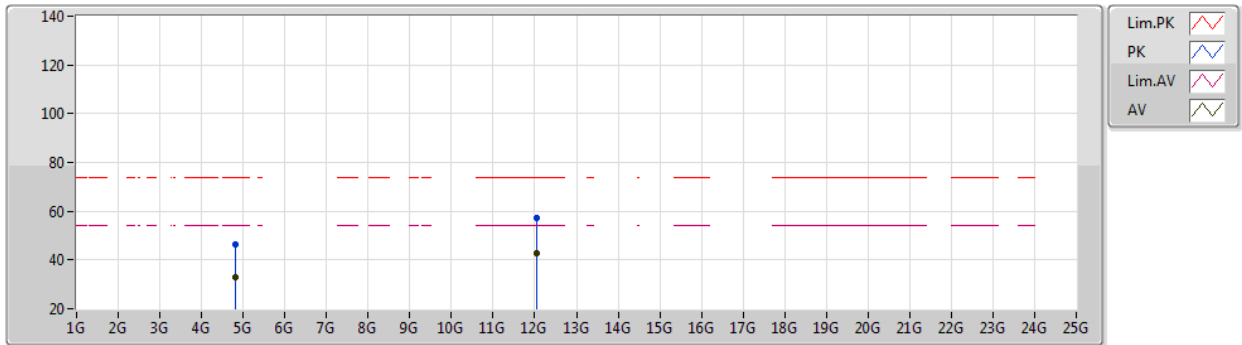
EUT_Z_4TX
Setting 101
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.82392G	47.21	74.00	-26.79	42.59	3	Vertical	305	1.13	-	31.02	5.33	31.73
AV	4.82392G	36.72	54.00	-17.28	32.10	3	Vertical	305	1.13	-	31.02	5.33	31.73
PK	12.05548G	56.64	74.00	-17.36	43.56	3	Vertical	275	1.86	-	38.93	8.32	34.17
AV	12.05352G	42.60	54.00	-11.40	29.52	3	Vertical	275	1.86	-	38.93	8.32	34.17

802.11b_Nss1,(1Mbps)_4TX

10/07/2020

2412MHz_TX



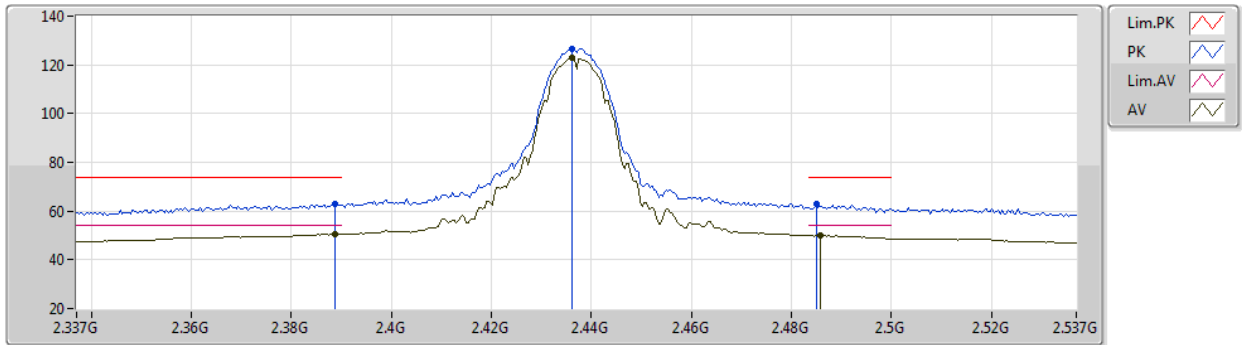
EUT_Z_4TX
Setting 101
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.821G	46.58	74.00	-27.42	41.96	3	Horizontal	316	2.24	-	31.02	5.33	31.73
AV	4.82396G	32.96	54.00	-21.04	28.34	3	Horizontal	316	2.24	-	31.02	5.33	31.73
PK	12.05764G	57.11	74.00	-16.89	44.03	3	Horizontal	277	2.93	-	38.93	8.32	34.17
AV	12.05376G	42.51	54.00	-11.49	29.43	3	Horizontal	277	2.93	-	38.93	8.32	34.17

802.11b_Nss1,(1Mbps)_4TX

10/07/2020

2437MHz_TX



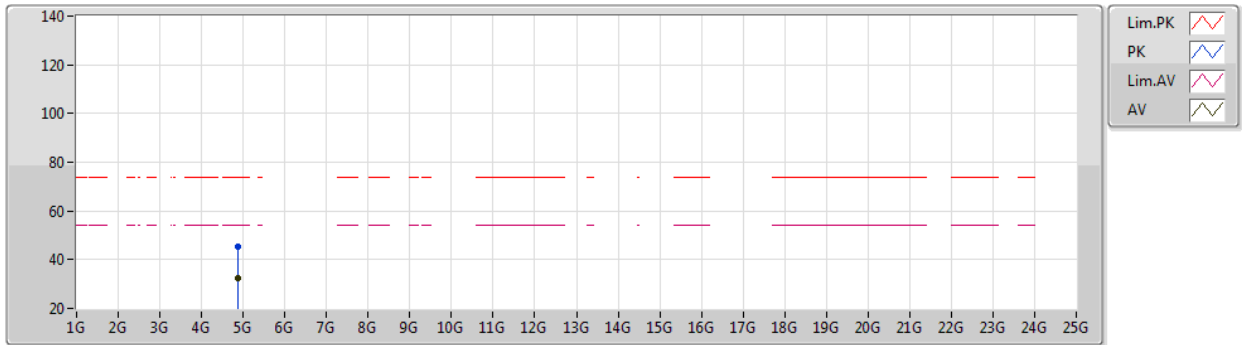
EUT_Z_4TX
Setting 104
06-F-O-1

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3886G	62.92	74.00	-11.08	31.30	3	Vertical	236	2.54	-	27.63	3.99	-
AV	2.3886G	50.50	54.00	-3.50	18.88	3	Vertical	236	2.54	-	27.63	3.99	-
PK	2.4362G	126.79	Inf	-Inf	95.28	3	Vertical	236	2.54	-	27.49	4.02	-
AV	2.4362G	122.97	Inf	-Inf	91.46	3	Vertical	236	2.54	-	27.49	4.02	-
PK	2.485G	62.96	74.00	-11.04	31.58	3	Vertical	236	2.54	-	27.34	4.04	-
AV	2.4858G	49.96	54.00	-4.04	18.58	3	Vertical	236	2.54	-	27.34	4.04	-

802.11b_Nss1,(1Mbps)_4TX

10/07/2020

2437MHz_TX



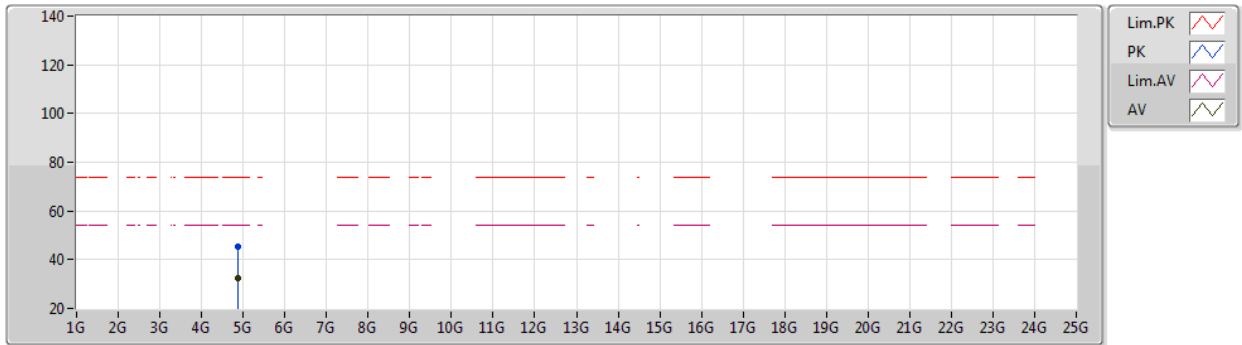
EUT_Z_4TX
Setting 104
06-F-O-1

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.8735G	45.44	74.00	-28.56	40.64	3	Vertical	320	1.72	-	31.07	5.40	31.67
AV	4.8739G	32.33	54.00	-21.67	27.53	3	Vertical	320	1.72	-	31.07	5.40	31.67

802.11b_Nss1,(1Mbps)_4TX

10/07/2020

2437MHz_TX



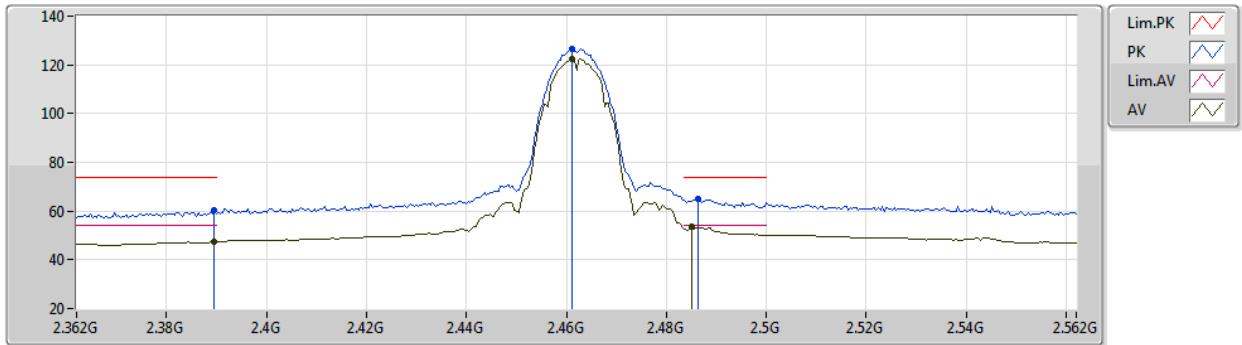
EUT_Z_4TX
Setting 104
06-F-O-1

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.8739G	45.38	74.00	-28.62	40.58	3	Horizontal	75	1.96	-	31.07	5.40	31.67
AV	4.87392G	32.16	54.00	-21.84	27.36	3	Horizontal	75	1.96	-	31.07	5.40	31.67

802.11b_Nss1,(1Mbps)_4TX

10/07/2020

2462MHz_TX



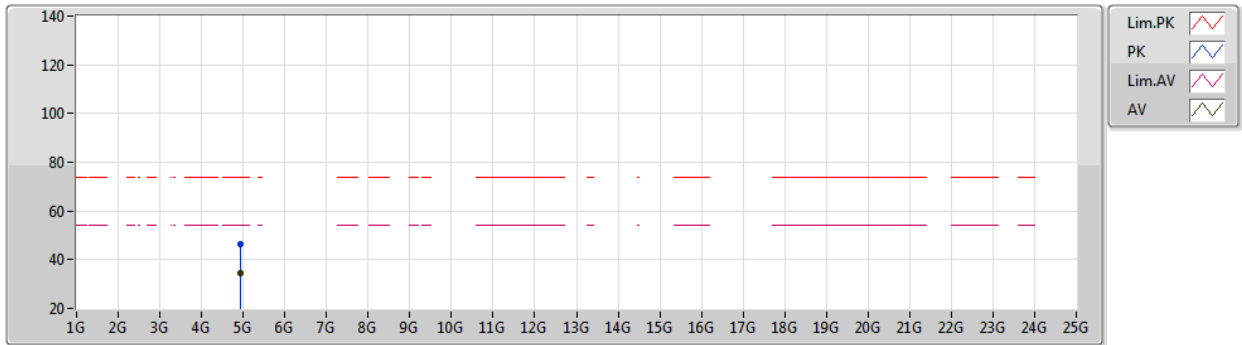
EUT Y_4TX
Setting 97
04-E-P-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3896G	60.35	74.00	-13.65	29.99	3	Vertical	31	1.33	-	27.51	2.85	-
AV	2.3896G	47.31	54.00	-6.69	16.95	3	Vertical	31	1.33	-	27.51	2.85	-
PK	2.4612G	126.44	Inf	-Inf	95.80	3	Vertical	31	1.33	-	27.74	2.90	-
AV	2.4612G	122.56	Inf	-Inf	91.92	3	Vertical	31	1.33	-	27.74	2.90	-
PK	2.4864G	64.85	74.00	-9.15	34.09	3	Vertical	31	1.33	-	27.85	2.91	-
AV	2.4852G	53.53	54.00	-0.47	22.78	3	Vertical	31	1.33	-	27.84	2.91	-

802.11b_Nss1,(1Mbps)_4TX

10/07/2020

2462MHz_TX



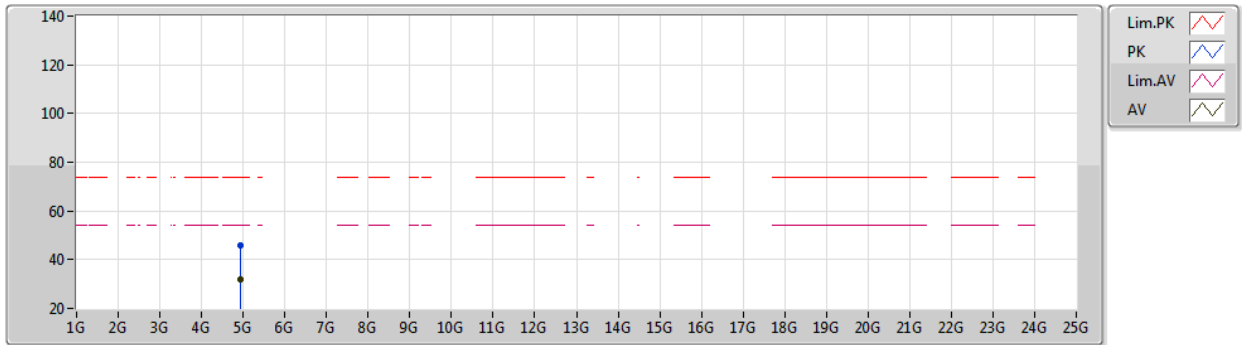
EUT_Z_4TX
Setting 97
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.92406G	46.21	74.00	-27.79	41.14	3	Vertical	7	1.19	-	31.20	5.48	31.61
AV	4.924G	34.59	54.00	-19.41	29.52	3	Vertical	7	1.19	-	31.20	5.48	31.61

802.11b_Nss1,(1Mbps)_4TX

10/07/2020

2462MHz_TX



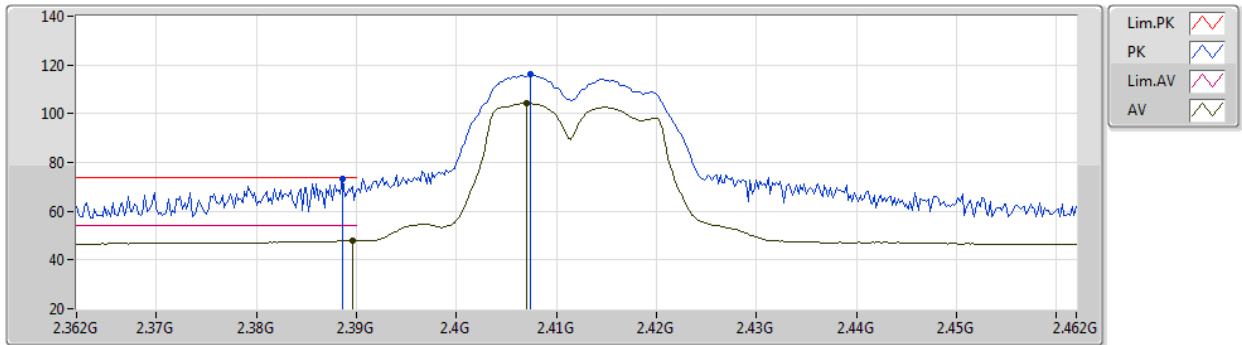
EUT_Z_4TX
Setting 97
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.9236G	45.61	74.00	-28.39	40.55	3	Horizontal	304	1.92	-	31.19	5.48	31.61
AV	4.92396G	31.88	54.00	-22.12	26.81	3	Horizontal	304	1.92	-	31.20	5.48	31.61

802.11g_Nss1,(6Mbps)_4TX

10/07/2020

2412MHz_TX



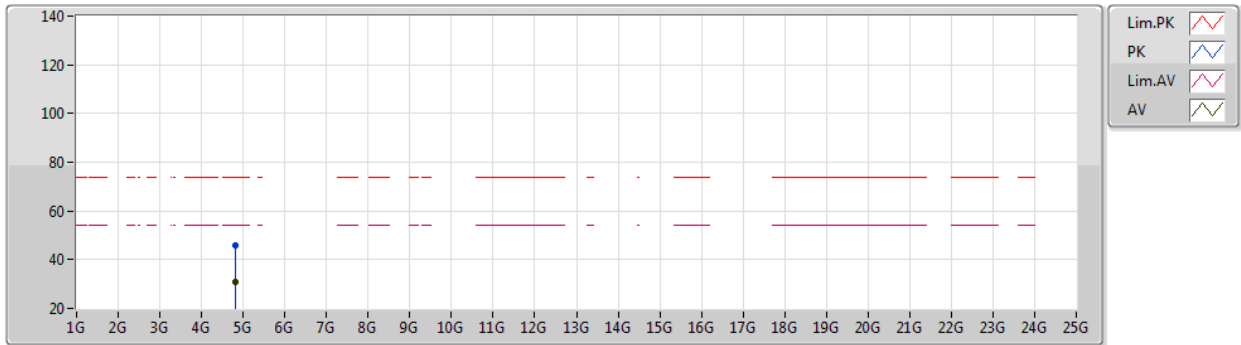
EUT_Z_4TX
Setting 65
06-F-O-1

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3886G	73.14	74.00	-0.86	41.52	3	Vertical	111	1.80	-	27.63	3.99	-
AV	2.3896G	47.89	54.00	-6.11	16.27	3	Vertical	111	1.80	-	27.63	3.99	-
PK	2.4074G	116.14	Inf	-Inf	84.56	3	Vertical	111	1.80	-	27.58	4.00	-
AV	2.407G	104.51	Inf	-Inf	72.93	3	Vertical	111	1.80	-	27.58	4.00	-

802.11g_Nss1,(6Mbps)_4TX

10/07/2020

2412MHz_TX



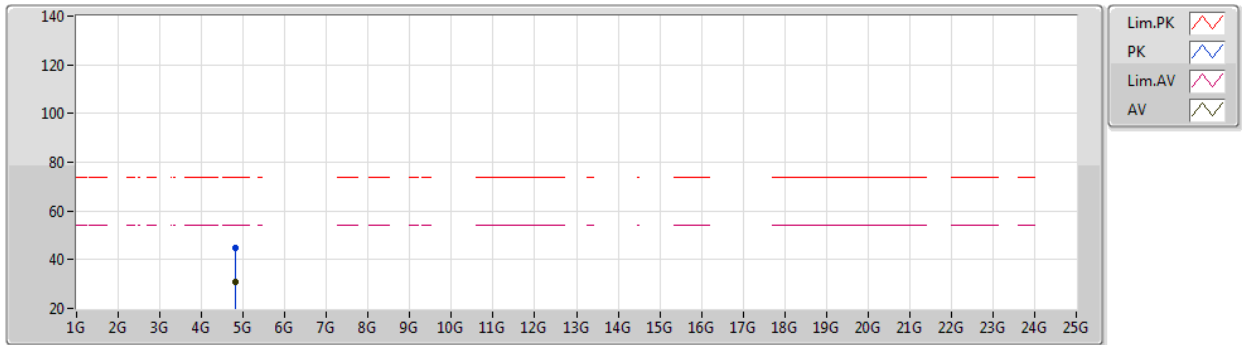
EUT_Z_4TX
Setting 65
06-F-O-1

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.82196G	45.65	74.00	-28.35	41.03	3	Vertical	226	2.02	-	31.02	5.33	31.73
AV	4.82582G	31.11	54.00	-22.89	26.47	3	Vertical	226	2.02	-	31.03	5.34	31.73

802.11g_Nss1,(6Mbps)_4TX

10/07/2020

2412MHz_TX



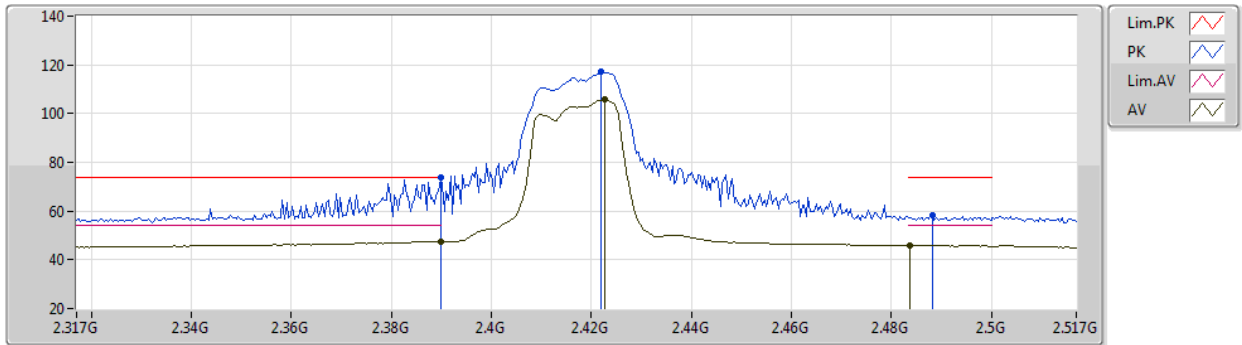
EUT_Z_4TX
Setting 65
06-F-O-1

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.82378G	44.64	74.00	-29.36	40.02	3	Horizontal	21	2.18	-	31.02	5.33	31.73
AV	4.8281G	31.11	54.00	-22.89	26.47	3	Horizontal	21	2.18	-	31.03	5.34	31.73

802.11g_Nss1,(6Mbps)_4TX

10/07/2020

2417MHz_TX



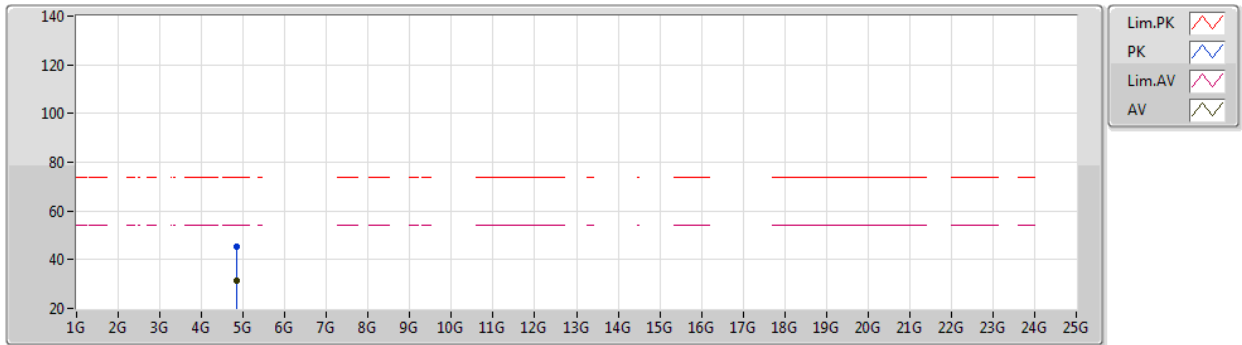
EUT_Z_4TX
Setting 72
06-F-O-1

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3898G	73.55	74.00	-0.45	41.93	3	Vertical	143	2.14	-	27.63	3.99	-
AV	2.3898G	47.59	54.00	-6.41	15.97	3	Vertical	143	2.14	-	27.63	3.99	-
PK	2.4218G	117.09	Inf	-Inf	85.55	3	Vertical	143	2.14	-	27.53	4.01	-
AV	2.4226G	105.74	Inf	-Inf	74.20	3	Vertical	143	2.14	-	27.53	4.01	-
PK	2.4882G	58.04	74.00	-15.96	26.66	3	Vertical	143	2.14	-	27.34	4.04	-
AV	2.4838G	45.80	54.00	-8.20	14.41	3	Vertical	143	2.14	-	27.35	4.04	-

802.11g_Nss1,(6Mbps)_4TX

10/07/2020

2417MHz_TX



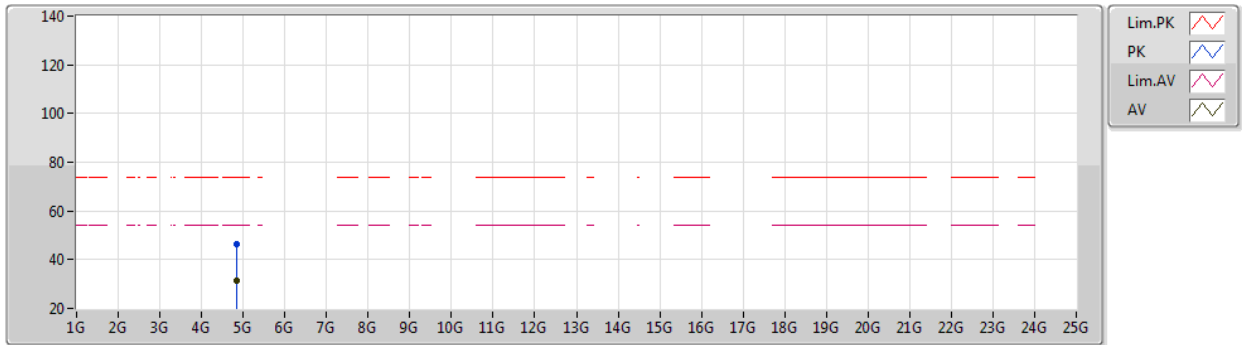
EUT_Z_4TX
Setting 72
02-C-K-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.83264G	45.18	74.00	-28.82	38.21	3	Vertical	232	1.19	-	32.93	5.82	31.78
AV	4.83634G	31.46	54.00	-22.54	24.47	3	Vertical	232	1.19	-	32.95	5.82	31.78

802.11g_Nss1,(6Mbps)_4TX

10/07/2020

2417MHz_TX



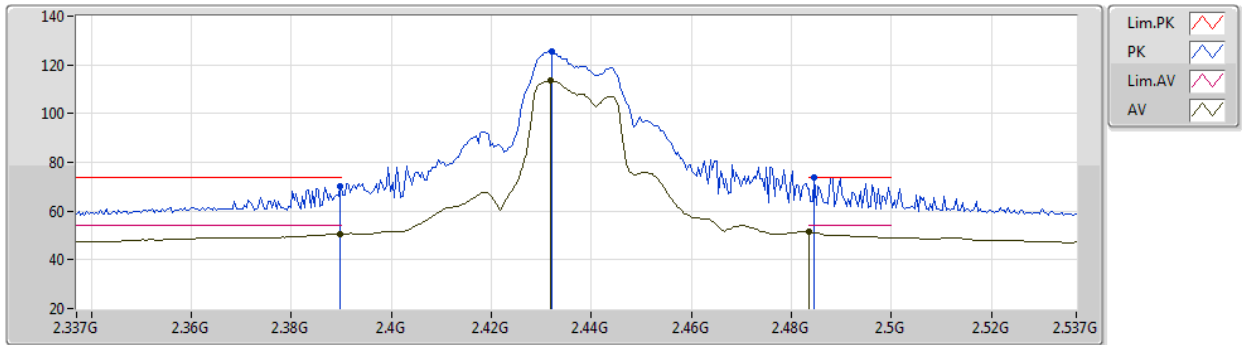
EUT_Z_4TX
Setting 72
02-C-K-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.83204G	46.13	74.00	-27.87	39.16	3	Horizontal	168	2.94	-	32.93	5.82	31.78
AV	4.83188G	31.58	54.00	-22.42	24.61	3	Horizontal	168	2.94	-	32.93	5.82	31.78

802.11g_Nss1,(6Mbps)_4TX

10/07/2020

2437MHz_TX



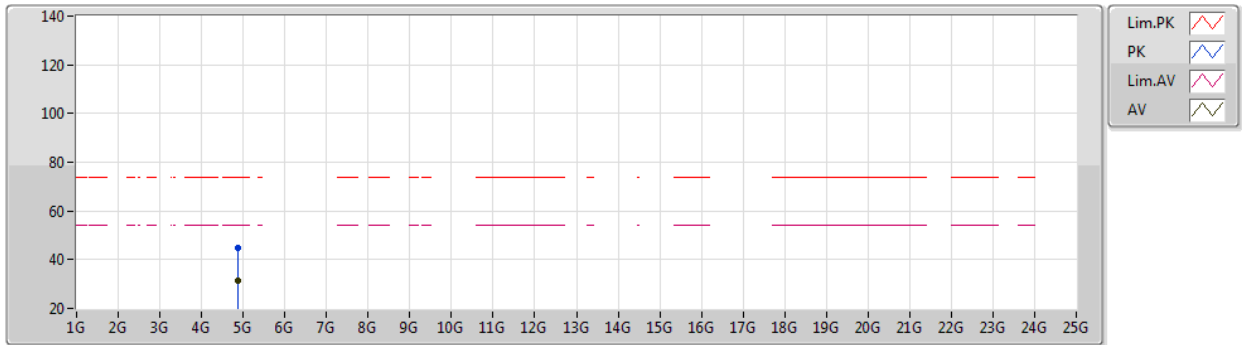
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Setting 96
06-F-O-1

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3898G	69.94	74.00	-4.06	38.32	3	Vertical	93	1.88	-	27.63	3.99	-
AV	2.3898G	50.48	54.00	-3.52	18.86	3	Vertical	93	1.88	-	27.63	3.99	-
PK	2.4322G	125.53	Inf	-Inf	94.01	3	Vertical	93	1.88	-	27.50	4.02	-
AV	2.4318G	113.79	Inf	-Inf	82.27	3	Vertical	93	1.88	-	27.50	4.02	-
PK	2.4846G	73.86	74.00	-0.14	42.47	3	Vertical	93	1.88	-	27.35	4.04	-
AV	2.4835G	51.46	54.00	-2.54	20.07	3	Vertical	93	1.88	-	27.35	4.04	-

802.11g_Nss1,(6Mbps)_4TX

10/07/2020

2437MHz_TX



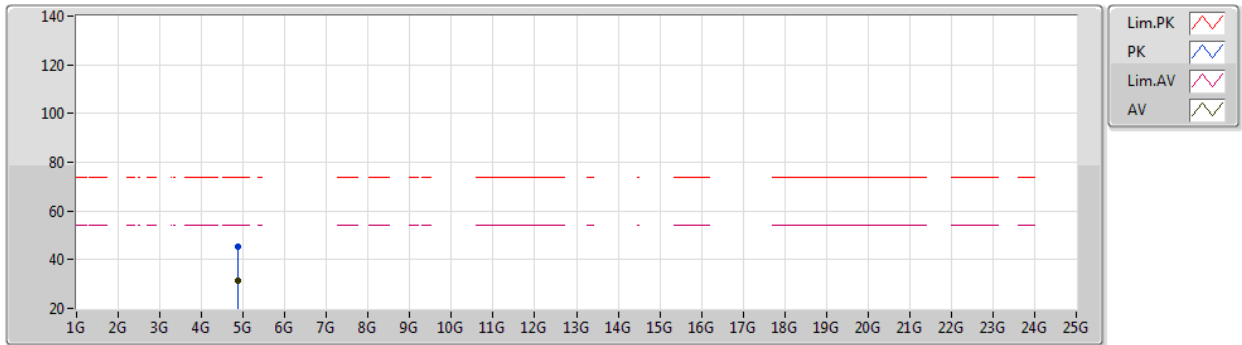
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Setting 96
06-F-O-1

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.87084G	45.01	74.00	-28.99	40.21	3	Vertical	329	1.66	-	31.07	5.40	31.67
AV	4.87896G	31.40	54.00	-22.60	26.58	3	Vertical	329	1.66	-	31.08	5.41	31.67

802.11g_Nss1,(6Mbps)_4TX

10/07/2020

2437MHz_TX



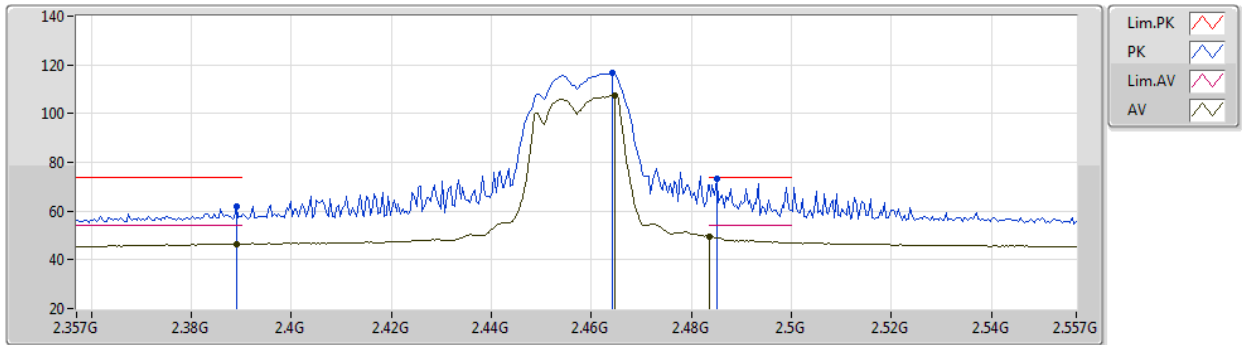
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Setting 96
06-F-O-1

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.86954G	45.38	74.00	-28.62	40.59	3	Horizontal	68	2.97	-	31.07	5.40	31.68
AV	4.87728G	31.50	54.00	-22.50	26.68	3	Horizontal	68	2.97	-	31.08	5.41	31.67

802.11g_Nss1,(6Mbps)_4TX

10/07/2020

2457MHz_TX



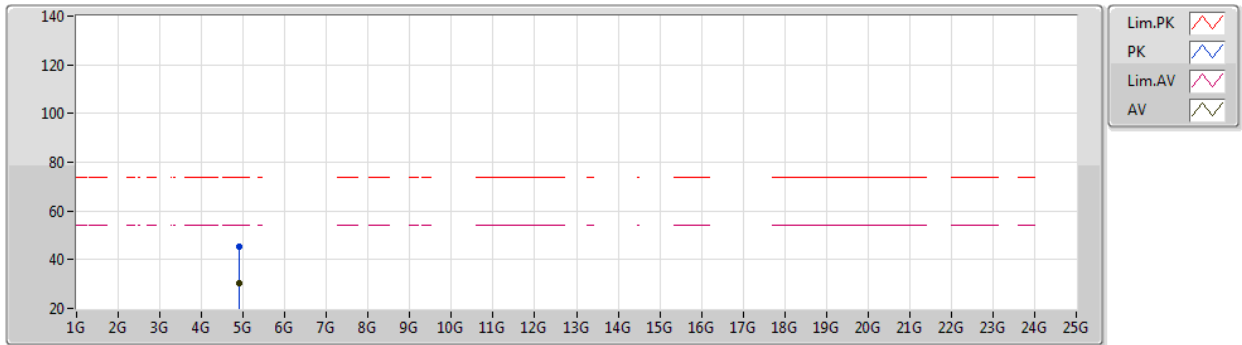
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Setting 71
06-F-O-1

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.389G	62.09	74.00	-11.91	30.47	3	Vertical	27	2.02	-	27.63	3.99	-
AV	2.389G	46.47	54.00	-7.53	14.85	3	Vertical	27	2.02	-	27.63	3.99	-
PK	2.4642G	116.91	Inf	-Inf	85.47	3	Vertical	27	2.02	-	27.41	4.03	-
AV	2.4646G	107.63	Inf	-Inf	76.19	3	Vertical	27	2.02	-	27.41	4.03	-
PK	2.485G	73.52	74.00	-0.48	42.14	3	Vertical	27	2.02	-	27.34	4.04	-
AV	2.4835G	49.72	54.00	-4.28	18.33	3	Vertical	27	2.02	-	27.35	4.04	-

802.11g_Nss1,(6Mbps)_4TX

10/07/2020

2457MHz_TX



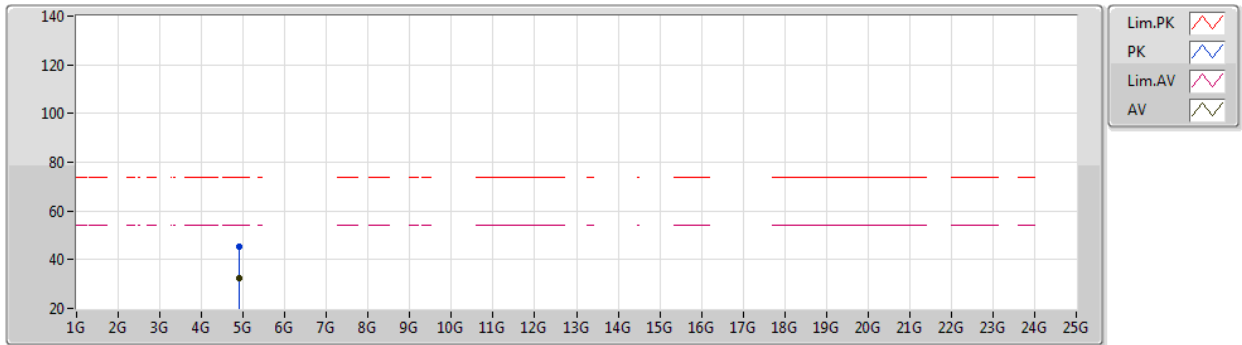
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Setting 71
02-C-K-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.91118G	45.48	74.00	-28.52	38.22	3	Vertical	123	2.14	-	33.21	5.86	31.81
AV	4.90958G	30.25	54.00	-23.75	23.00	3	Vertical	123	2.14	-	33.21	5.85	31.81

802.11g_Nss1,(6Mbps)_4TX

10/07/2020

2457MHz_TX



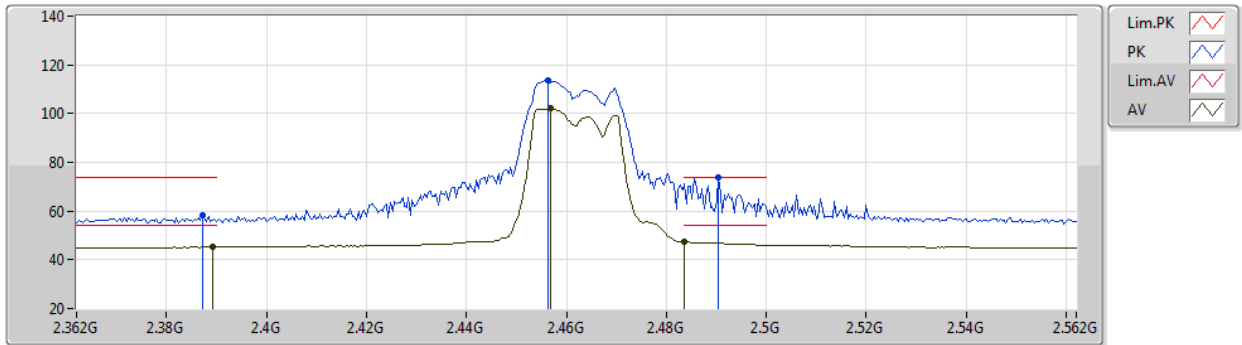
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Setting 71
02-C-K-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.9126G	45.30	74.00	-28.70	38.04	3	Horizontal	359	2.39	-	33.21	5.86	31.81
AV	4.9108G	32.64	54.00	-21.36	25.38	3	Horizontal	359	2.39	-	33.21	5.86	31.81

802.11g_Nss1,(6Mbps)_4TX

10/07/2020

2462MHz_TX



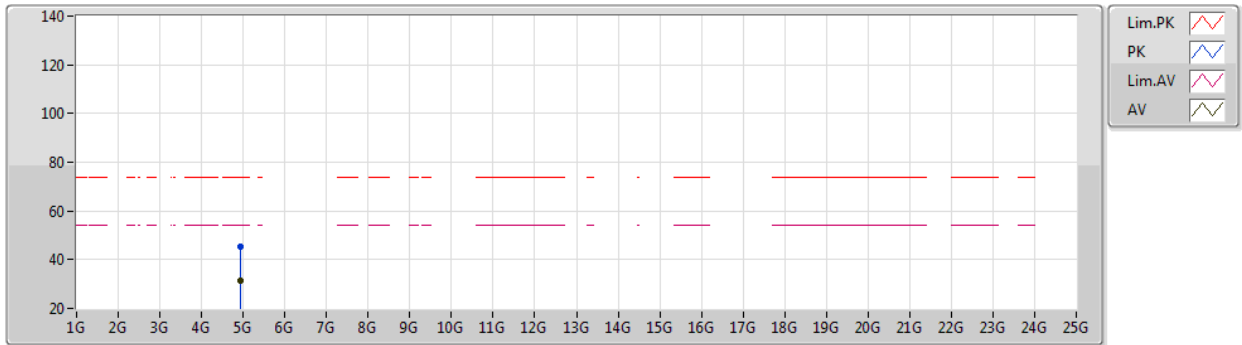
EUT_Z_4TX
Setting 62
06-F-O-1

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3872G	58.04	74.00	-15.96	26.41	3	Vertical	142	1.80	-	27.64	3.99	-
AV	2.3892G	45.18	54.00	-8.82	13.56	3	Vertical	142	1.80	-	27.63	3.99	-
PK	2.4564G	113.51	Inf	-Inf	82.05	3	Vertical	142	1.80	-	27.43	4.03	-
AV	2.4568G	102.12	Inf	-Inf	70.66	3	Vertical	142	1.80	-	27.43	4.03	-
PK	2.4904G	73.58	74.00	-0.42	42.20	3	Vertical	142	1.80	-	27.33	4.05	-
AV	2.4835G	47.30	54.00	-6.70	15.91	3	Vertical	142	1.80	-	27.35	4.04	-

802.11g_Nss1,(6Mbps)_4TX

10/07/2020

2462MHz_TX



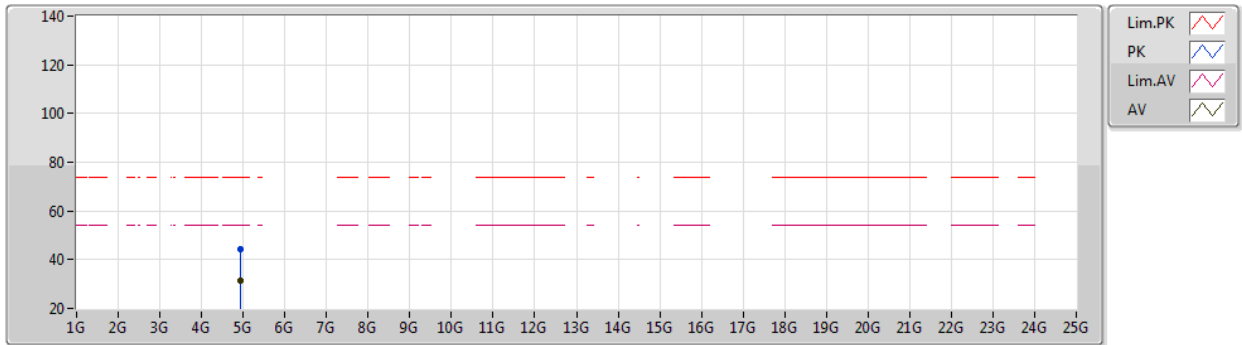
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Setting 62
06-F-O-1

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.92466G	45.36	74.00	-28.64	40.29	3	Vertical	30	2.38	-	31.20	5.48	31.61
AV	4.92122G	31.42	54.00	-22.58	26.39	3	Vertical	30	2.38	-	31.18	5.47	31.62

802.11g_Nss1,(6Mbps)_4TX

10/07/2020

2462MHz_TX



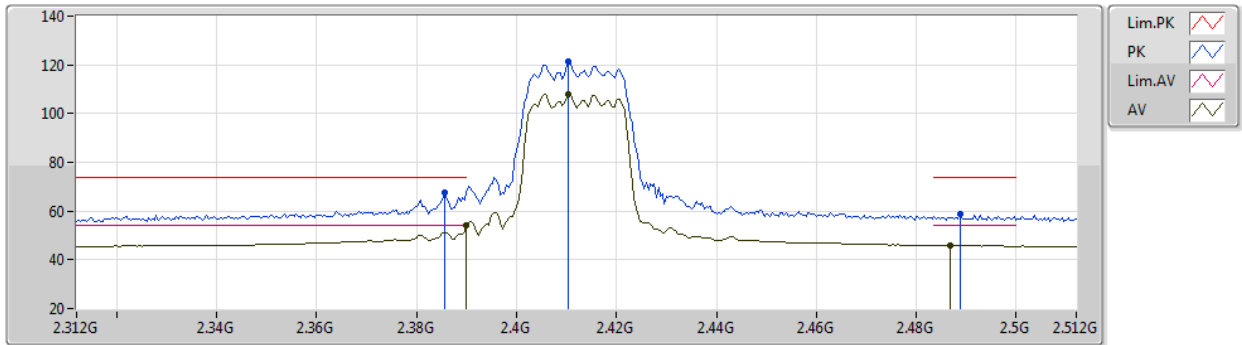
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Setting 62
06-F-O-1

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.92324G	44.51	74.00	-29.49	39.45	3	Horizontal	168	1.85	-	31.19	5.48	31.61
AV	4.92784G	31.27	54.00	-22.73	26.19	3	Horizontal	168	1.85	-	31.21	5.48	31.61

802.11ax HEW20_Nss1,(MCS0)_4TX

10/07/2020

2412MHz_TX



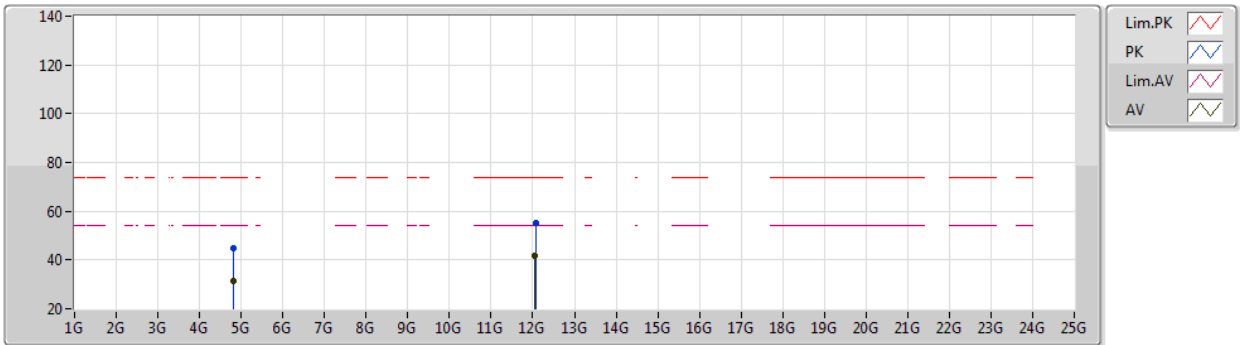
EUT Z_4TX
Setting 72
06-F-O-1

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3856G	67.72	74.00	-6.28	36.09	3	Vertical	107	1.83	-	27.64	3.99	-
AV	2.39G	53.93	54.00	-0.07	22.30	3	Vertical	107	1.83	-	27.63	4.00	-
PK	2.4104G	121.37	Inf	-Inf	89.79	3	Vertical	107	1.83	-	27.57	4.01	-
AV	2.4104G	107.92	Inf	-Inf	76.34	3	Vertical	107	1.83	-	27.57	4.01	-
PK	2.4888G	58.61	74.00	-15.39	27.24	3	Vertical	107	1.83	-	27.33	4.04	-
AV	2.4868G	46.02	54.00	-7.98	14.64	3	Vertical	107	1.83	-	27.34	4.04	-

802.11ax HEW20_Nss1,(MCS0)_4TX

10/07/2020

2412MHz_TX



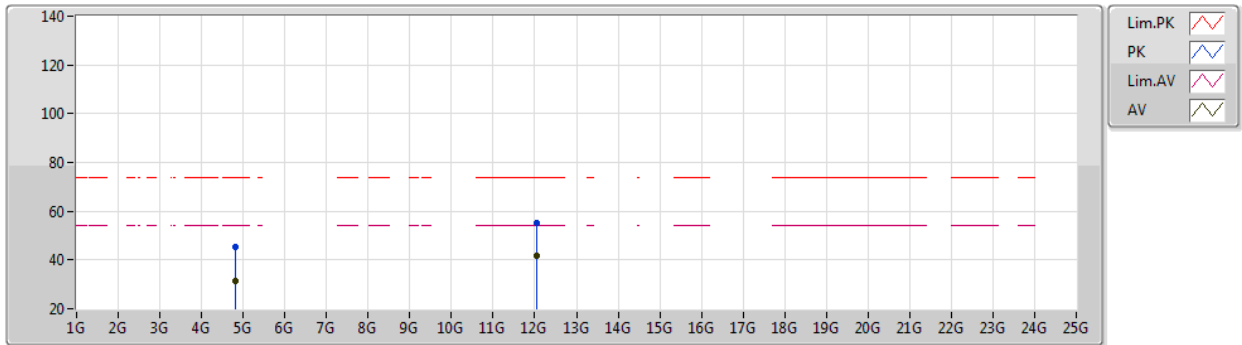
EUT_Z_4TX
Setting 72
06-F-O-1

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.82318G	44.80	74.00	-29.20	40.18	3	Vertical	146	2.44	-	31.02	5.33	31.73
AV	4.82536G	31.33	54.00	-22.67	26.69	3	Vertical	146	2.44	-	31.03	5.34	31.73
PK	12.06408G	55.43	74.00	-18.57	42.34	3	Vertical	347	1.26	-	38.94	8.32	34.17
AV	12.0617G	41.81	54.00	-12.19	28.72	3	Vertical	347	1.26	-	38.94	8.32	34.17

802.11ax HEW20_Nss1,(MCS0)_4TX

10/07/2020

2412MHz_TX



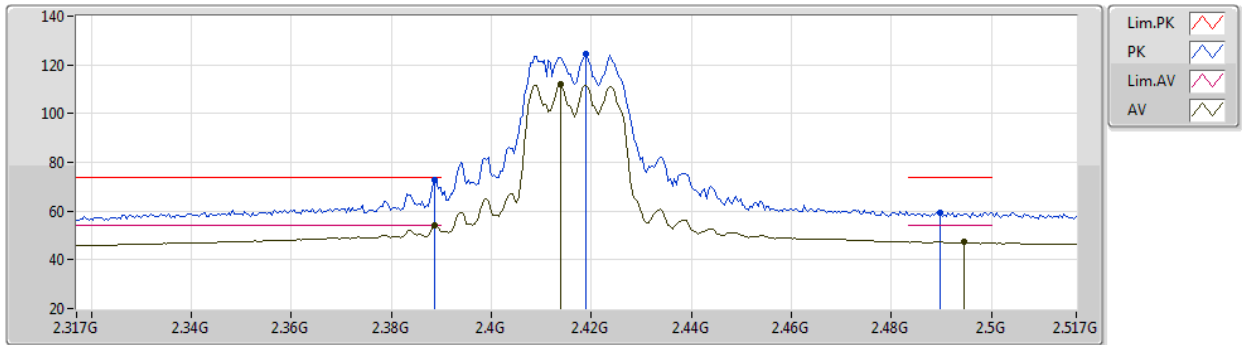
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Setting 72
06-F-O-1

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.82488G	45.14	74.00	-28.86	40.52	3	Horizontal	356	2.76	-	31.02	5.33	31.73
AV	4.82628G	31.28	54.00	-22.72	26.64	3	Horizontal	356	2.76	-	31.03	5.34	31.73
PK	12.05758G	55.22	74.00	-18.78	42.14	3	Horizontal	227	2.16	-	38.93	8.32	34.17
AV	12.0559G	41.73	54.00	-12.27	28.65	3	Horizontal	227	2.16	-	38.93	8.32	34.17

802.11ax HEW20_Nss1,(MCS0)_4TX

2417MHz_TX

10/07/2020



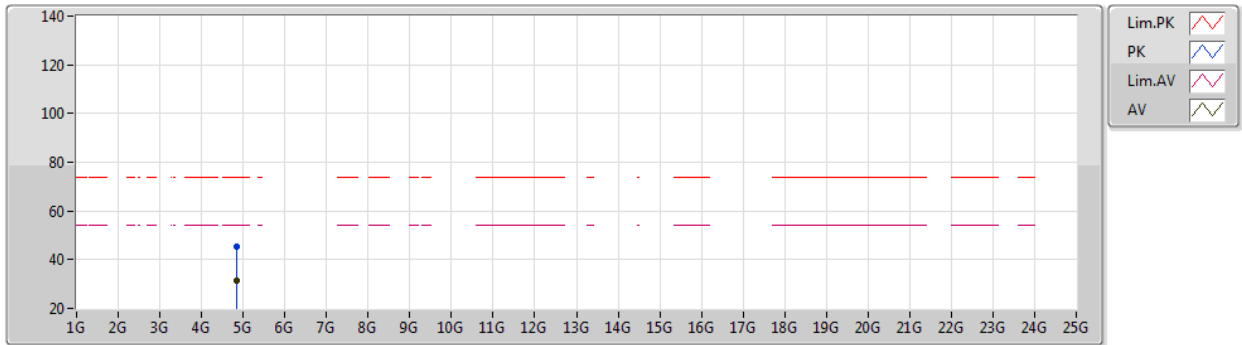
EUT Z_4TX
Setting 82
06-F-O-1

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3886G	72.56	74.00	-1.44	40.94	3	Vertical	69	1.79	-	27.63	3.99	-
AV	2.3886G	53.93	54.00	-0.07	22.31	3	Vertical	69	1.79	-	27.63	3.99	-
PK	2.419G	124.39	Inf	-Inf	92.84	3	Vertical	69	1.79	-	27.54	4.01	-
AV	2.4138G	112.02	Inf	-Inf	80.45	3	Vertical	69	1.79	-	27.56	4.01	-
PK	2.4898G	59.47	74.00	-14.53	28.10	3	Vertical	69	1.79	-	27.33	4.04	-
AV	2.4946G	47.32	54.00	-6.68	15.95	3	Vertical	69	1.79	-	27.32	4.05	-

802.11ax HEW20_Nss1,(MCS0)_4TX

10/07/2020

2417MHz_TX



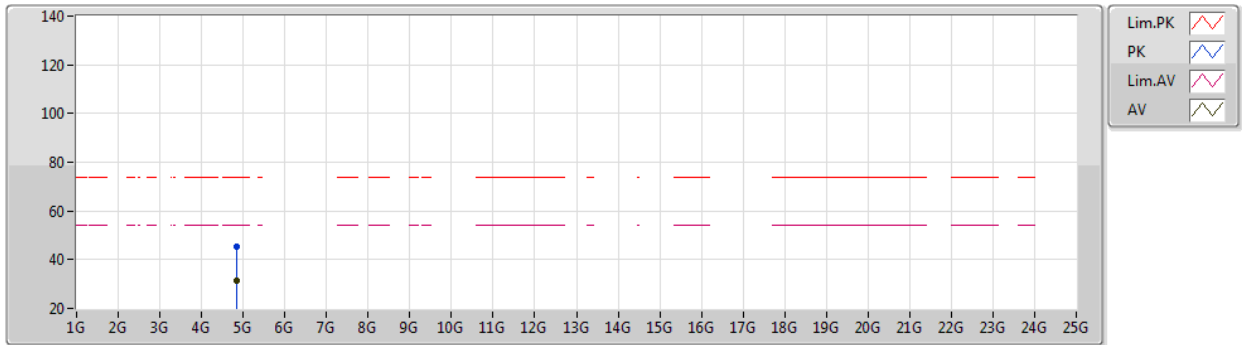
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Setting 82
02-C-K-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.82914G	45.40	74.00	-28.60	38.45	3	Vertical	355	2.09	-	32.92	5.81	31.78
AV	4.8343G	31.40	54.00	-22.60	24.42	3	Vertical	355	2.09	-	32.94	5.82	31.78

802.11ax HEW20_Nss1,(MCS0)_4TX

10/07/2020

2417MHz_TX



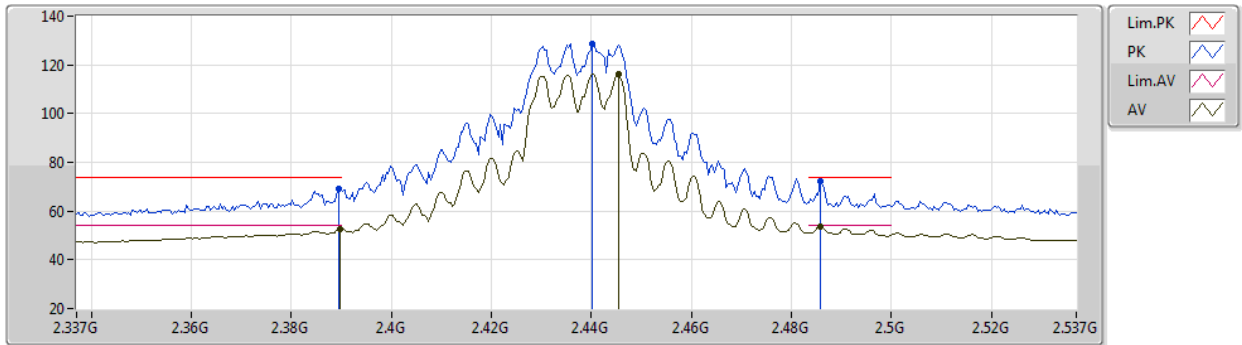
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Setting 82
02-C-K-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.83346G	45.20	74.00	-28.80	38.23	3	Horizontal	180	2.29	-	32.93	5.82	31.78
AV	4.83238G	31.50	54.00	-22.50	24.53	3	Horizontal	180	2.29	-	32.93	5.82	31.78

802.11ax HEW20_Nss1,(MCS0)_4TX

10/07/2020

2437MHz_TX



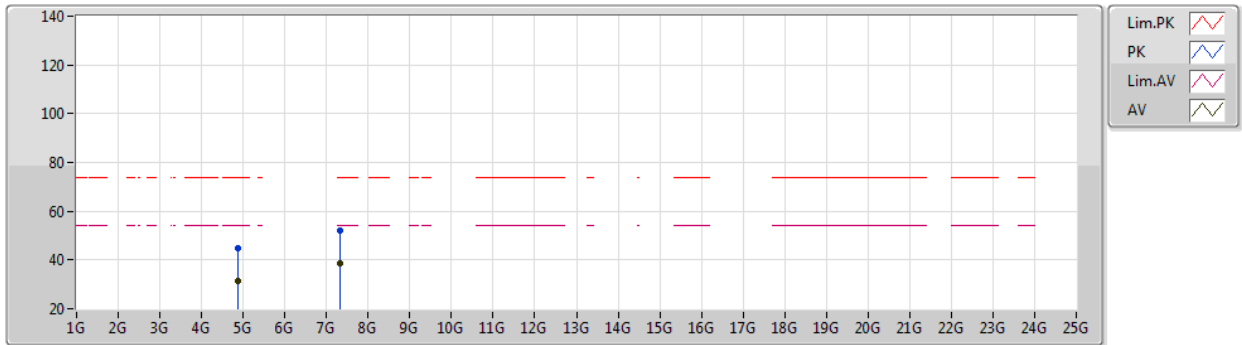
EUT_Z_4TX
Setting 100
06-F-O-1

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3894G	69.37	74.00	-4.63	37.75	3	Vertical	60	1.86	-	27.63	3.99	-
AV	2.3898G	52.65	54.00	-1.35	21.03	3	Vertical	60	1.86	-	27.63	3.99	-
PK	2.4402G	128.79	Inf	-Inf	97.29	3	Vertical	60	1.86	-	27.48	4.02	-
AV	2.4454G	116.10	Inf	-Inf	84.62	3	Vertical	60	1.86	-	27.46	4.02	-
PK	2.4858G	72.07	74.00	-1.93	40.69	3	Vertical	60	1.86	-	27.34	4.04	-
AV	2.4858G	53.64	54.00	-0.36	22.26	3	Vertical	60	1.86	-	27.34	4.04	-

802.11ax HEW20_Nss1,(MCS0)_4TX

10/07/2020

2437MHz_TX



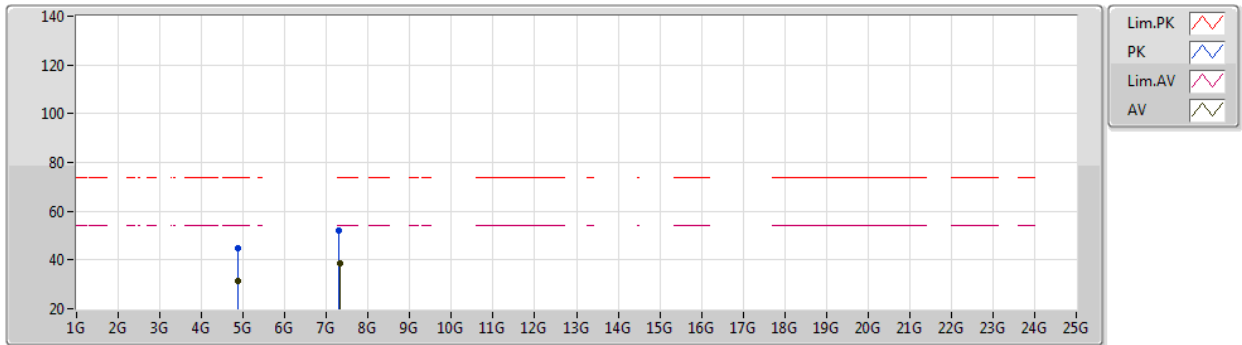
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Setting 100
06-F-O-1

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.87882G	44.92	74.00	-29.08	40.10	3	Vertical	240	1.01	-	31.08	5.41	31.67
AV	4.87676G	31.51	54.00	-22.49	26.69	3	Vertical	240	1.01	-	31.08	5.41	31.67
PK	7.31226G	52.24	74.00	-21.76	42.04	3	Vertical	4	1.58	-	36.40	6.96	33.16
AV	7.31108G	38.41	54.00	-15.59	28.21	3	Vertical	4	1.58	-	36.40	6.96	33.16

802.11ax HEW20_Nss1,(MCS0)_4TX

10/07/2020

2437MHz_TX



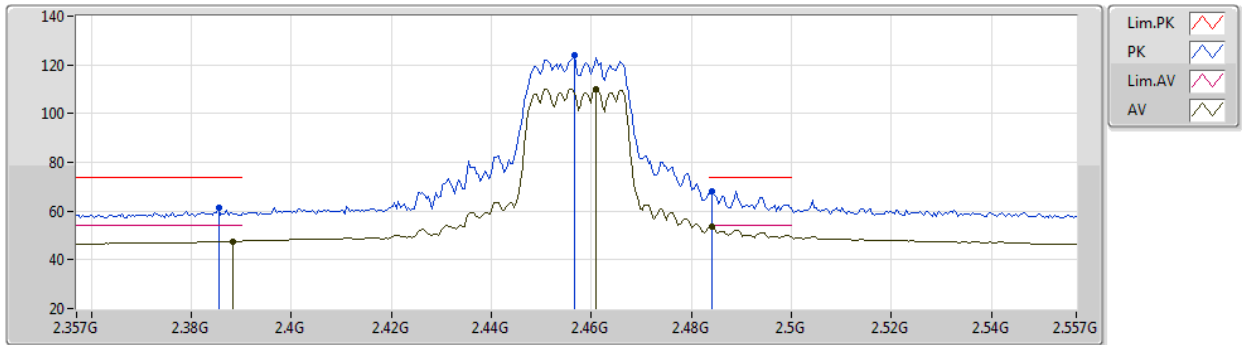
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Setting 100
06-F-O-1

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.87484G	44.82	74.00	-29.18	40.02	3	Horizontal	272	2.62	-	31.07	5.40	31.67
AV	4.87752G	31.46	54.00	-22.54	26.64	3	Horizontal	272	2.62	-	31.08	5.41	31.67
PK	7.30728G	51.97	74.00	-22.03	41.78	3	Horizontal	101	1.60	-	36.40	6.95	33.16
AV	7.31092G	38.51	54.00	-15.49	28.31	3	Horizontal	101	1.60	-	36.40	6.96	33.16

802.11ax HEW20_Nss1,(MCS0)_4TX

10/07/2020

2457MHz_TX



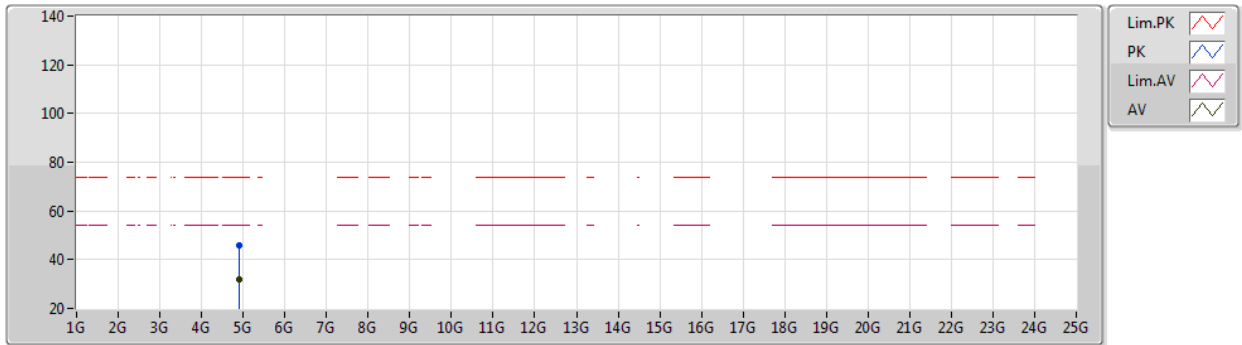
EUT Z_4TX
Setting 83
06-F-O-1

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3854G	61.19	74.00	-12.81	29.56	3	Vertical	115	1.89	-	27.64	3.99	-
AV	2.3882G	47.60	54.00	-6.40	15.97	3	Vertical	115	1.89	-	27.64	3.99	-
PK	2.4566G	123.83	Inf	-Inf	92.37	3	Vertical	115	1.89	-	27.43	4.03	-
AV	2.461G	110.11	Inf	-Inf	78.66	3	Vertical	115	1.89	-	27.42	4.03	-
PK	2.4842G	68.28	74.00	-5.72	36.89	3	Vertical	115	1.89	-	27.35	4.04	-
AV	2.4842G	53.60	54.00	-0.40	22.21	3	Vertical	115	1.89	-	27.35	4.04	-

802.11ax HEW20_Nss1,(MCS0)_4TX

10/07/2020

2457MHz_TX



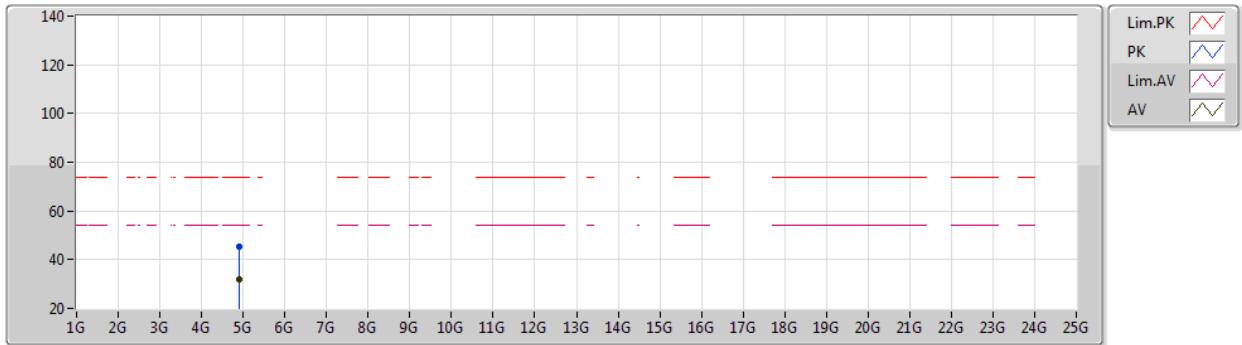
EUT_Z_4TX
Setting 83
02-C-K-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.91312G	45.64	74.00	-28.36	38.38	3	Vertical	148	2.63	-	33.21	5.86	31.81
AV	4.91836G	31.77	54.00	-22.23	24.51	3	Vertical	148	2.63	-	33.22	5.86	31.82

802.11ax HEW20_Nss1,(MCS0)_4TX

10/07/2020

2457MHz_TX



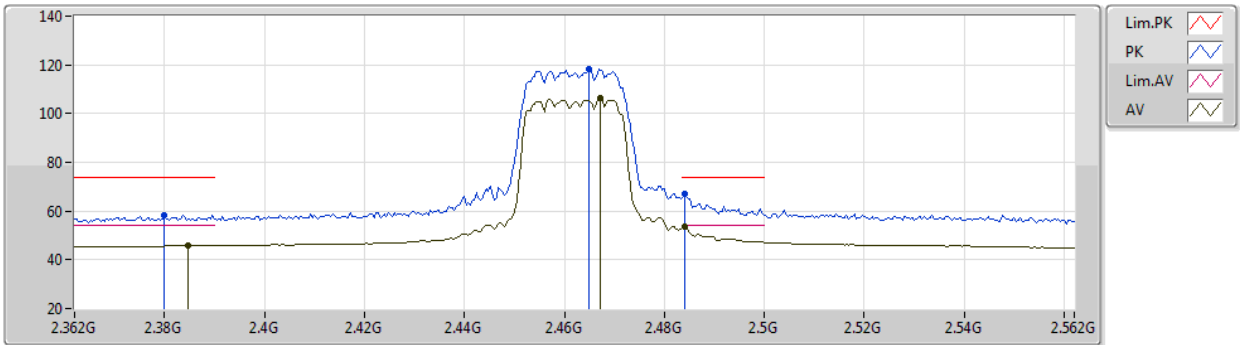
EUT_Z_4TX
Setting 83
02-C-K-3

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.91486G	45.48	74.00	-28.52	38.22	3	Horizontal	151	1.43	-	33.21	5.86	31.81
AV	4.91546G	31.80	54.00	-22.20	24.53	3	Horizontal	151	1.43	-	33.22	5.86	31.81

802.11ax HEW20_Nss1,(MCS0)_4TX

10/07/2020

2462MHz_TX



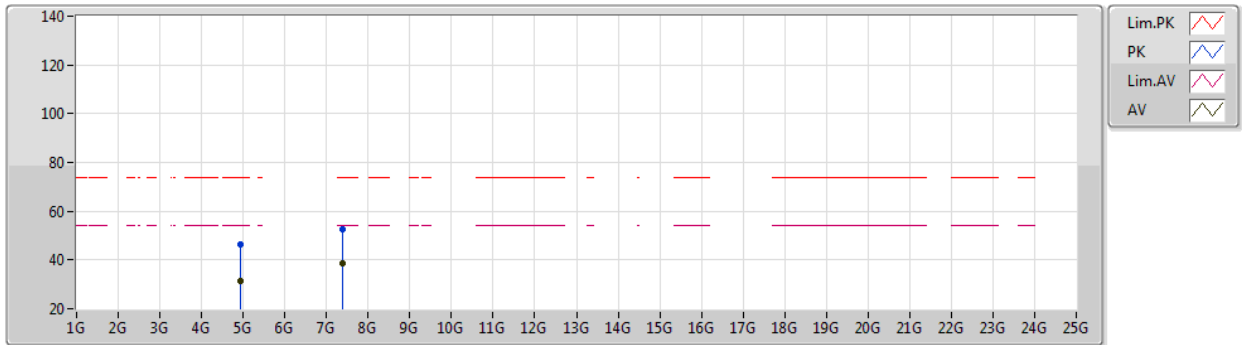
EUT_Z_4TX
Setting 71
06-F-O-1

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.38G	58.50	74.00	-15.50	26.85	3	Vertical	26	1.98	-	27.66	3.99	-
AV	2.3848G	45.80	54.00	-8.20	14.16	3	Vertical	26	1.98	-	27.65	3.99	-
PK	2.4648G	118.25	Inf	-Inf	86.81	3	Vertical	26	1.98	-	27.41	4.03	-
AV	2.4672G	106.20	Inf	-Inf	74.77	3	Vertical	26	1.98	-	27.40	4.03	-
PK	2.484G	67.00	74.00	-7.00	35.61	3	Vertical	26	1.98	-	27.35	4.04	-
AV	2.484G	53.58	54.00	-0.42	22.19	3	Vertical	26	1.98	-	27.35	4.04	-

802.11ax HEW20_Nss1,(MCS0)_4TX

10/07/2020

2462MHz_TX



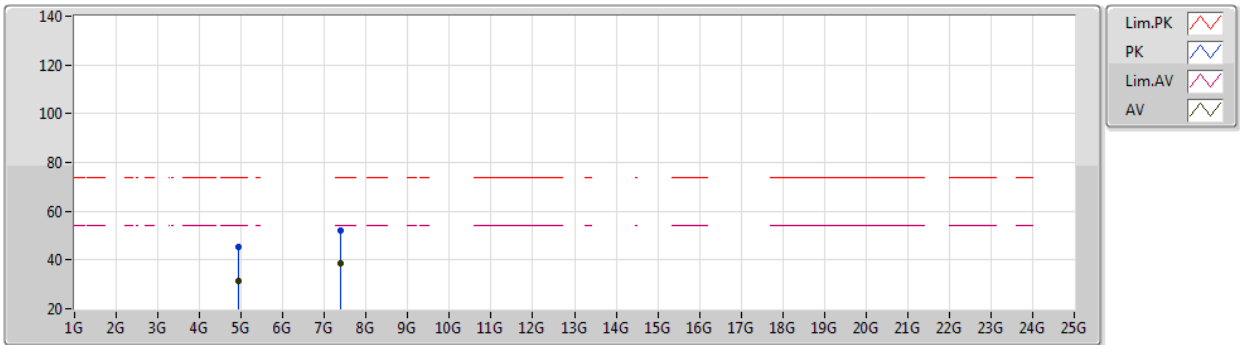
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Setting 71
06-F-O-1

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.91942G	46.35	74.00	-27.65	41.32	3	Vertical	63	2.31	-	31.18	5.47	31.62
AV	4.91964G	31.32	54.00	-22.68	26.29	3	Vertical	63	2.31	-	31.18	5.47	31.62
PK	7.38354G	52.44	74.00	-21.56	42.24	3	Vertical	72	1.00	-	36.40	6.99	33.19
AV	7.3814G	38.62	54.00	-15.38	28.42	3	Vertical	72	1.00	-	36.40	6.99	33.19

802.11ax HEW20_Nss1,(MCS0)_4TX

10/07/2020

2462MHz_TX



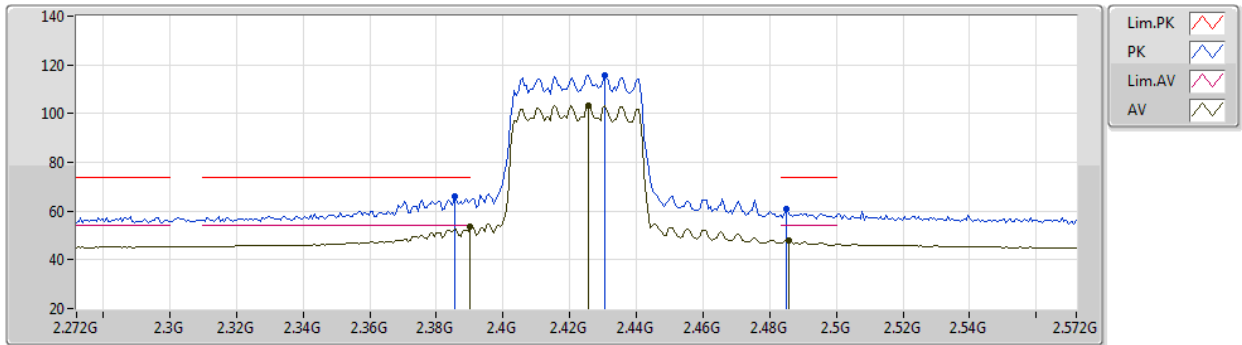
EUT_Z_4TX
Setting 71
06-F-O-1

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)	
PK	4.92666G	45.24	74.00	-28.76	40.16	3	Horizontal	182	1.40	-	31.21	5.48	31.61	
AV	4.92392G	31.43	54.00	-22.57	26.36	3	Horizontal	182	1.40	-	31.20	5.48	31.61	
PK	7.38488G	52.26	74.00	-21.74	42.06	3	Horizontal	340	2.24	-	36.40	6.99	33.19	
AV	7.38434G	38.67	54.00	-15.33	28.47	3	Horizontal	340	2.24	-	36.40	6.99	33.19	

802.11ax HEW40_Nss1,(MCS0)_4TX

10/07/2020

2422MHz_TX



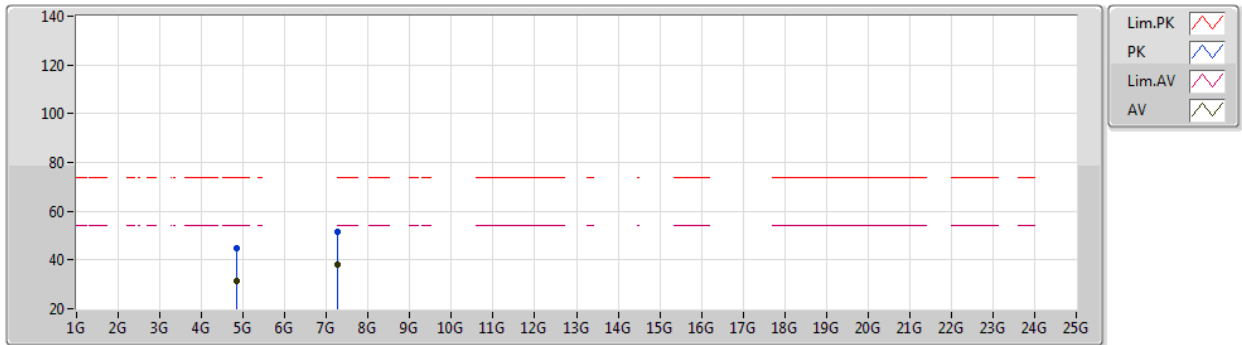
EUT_Z_4TX
Setting 63
06-F-O-1

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3854G	65.79	74.00	-8.21	34.16	3	Vertical	70	1.51	-	27.64	3.99	-
AV	2.39G	53.53	54.00	-0.47	21.91	3	Vertical	70	1.51	-	27.63	3.99	-
PK	2.4304G	115.60	Inf	-Inf	84.07	3	Vertical	70	1.51	-	27.51	4.02	-
AV	2.4256G	103.09	Inf	-Inf	71.56	3	Vertical	70	1.51	-	27.52	4.01	-
PK	2.485G	60.97	74.00	-13.03	29.59	3	Vertical	70	1.51	-	27.34	4.04	-
AV	2.4856G	47.90	54.00	-6.10	16.52	3	Vertical	70	1.51	-	27.34	4.04	-

802.11ax HEW40_Nss1,(MCS0)_4TX

10/07/2020

2422MHz_TX



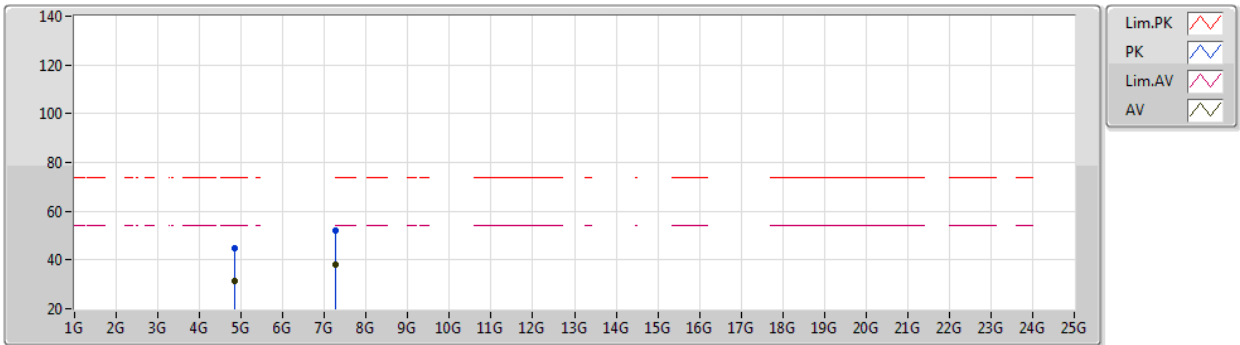
EUT_Z_4TX
Setting 63
06-F-O-1

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.84646G	44.85	74.00	-29.15	40.13	3	Vertical	119	1.73	-	31.05	5.37	31.70
AV	4.84506G	31.29	54.00	-22.71	26.59	3	Vertical	119	1.73	-	31.05	5.36	31.71
PK	7.26444G	51.37	74.00	-22.63	41.18	3	Vertical	156	2.26	-	36.40	6.93	33.14
AV	7.26252G	37.85	54.00	-16.15	27.66	3	Vertical	156	2.26	-	36.40	6.93	33.14

802.11ax HEW40_Nss1,(MCS0)_4TX

10/07/2020

2422MHz_TX



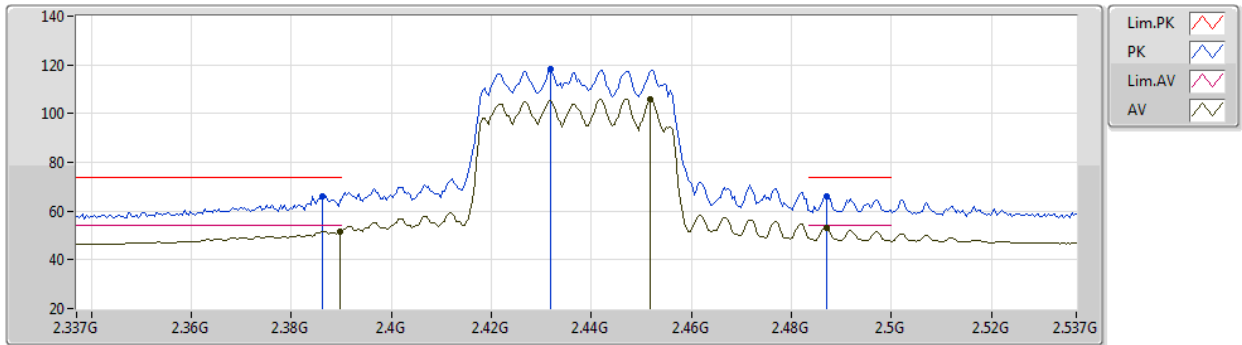
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Setting 63
06-F-O-1

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.84788G	44.82	74.00	-29.18	40.10	3	Horizontal	67	2.04	-	31.05	5.37	31.70
AV	4.84738G	31.21	54.00	-22.79	26.49	3	Horizontal	67	2.04	-	31.05	5.37	31.70
PK	7.26574G	52.06	74.00	-21.94	41.87	3	Horizontal	86	2.80	-	36.40	6.93	33.14
AV	7.2611G	37.90	54.00	-16.10	27.71	3	Horizontal	86	2.80	-	36.40	6.93	33.14

802.11ax HEW40_Nss1,(MCS0)_4TX

10/07/2020

2437MHz_TX



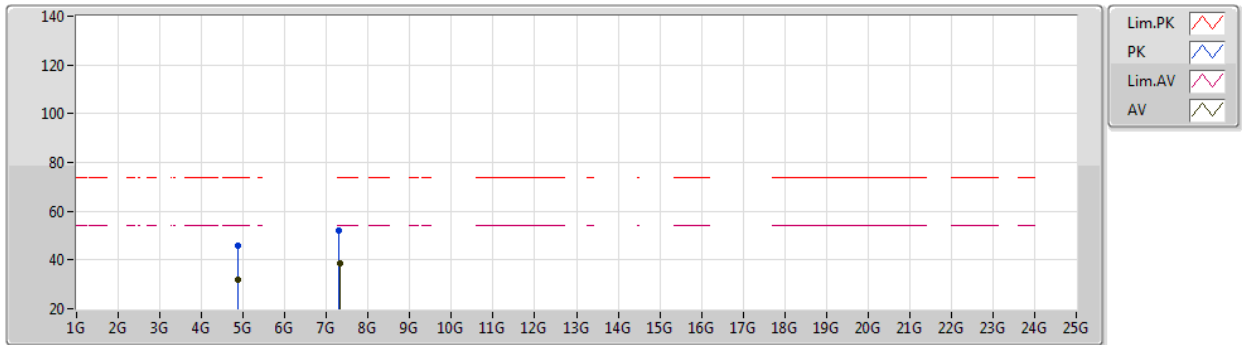
EUT_Z_4TX
Setting 72
06-F-O-1

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3862G	66.22	74.00	-7.78	34.59	3	Vertical	110	1.80	-	27.64	3.99	-
AV	2.3898G	51.81	54.00	-2.19	20.19	3	Vertical	110	1.80	-	27.63	3.99	-
PK	2.4318G	118.37	Inf	-Inf	86.85	3	Vertical	110	1.80	-	27.50	4.02	-
AV	2.4518G	105.79	Inf	-Inf	74.32	3	Vertical	110	1.80	-	27.44	4.03	-
PK	2.487G	66.20	74.00	-7.80	34.82	3	Vertical	110	1.80	-	27.34	4.04	-
AV	2.487G	53.36	54.00	-0.64	21.98	3	Vertical	110	1.80	-	27.34	4.04	-

802.11ax HEW40_Nss1,(MCS0)_4TX

10/07/2020

2437MHz_TX



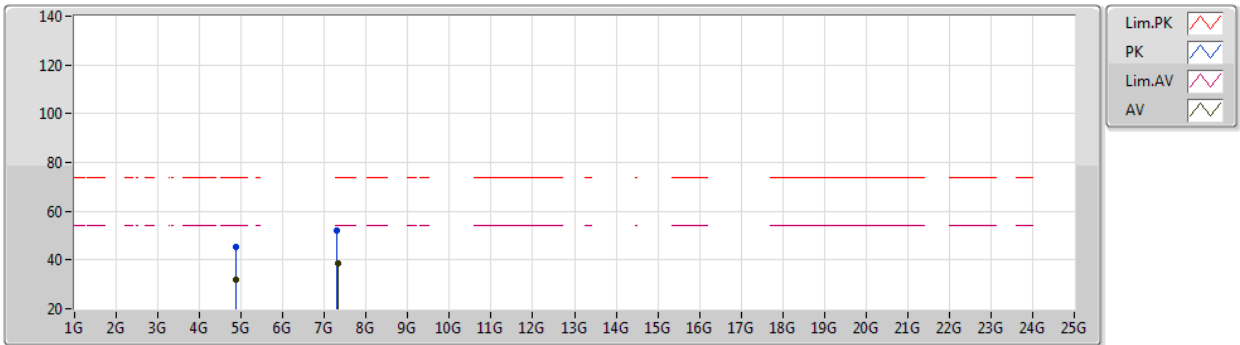
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Setting 72
06-F-O-1

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.87896G	45.77	74.00	-28.23	40.95	3	Vertical	247	2.08	-	31.08	5.41	31.67
AV	4.87744G	31.98	54.00	-22.02	27.16	3	Vertical	247	2.08	-	31.08	5.41	31.67
PK	7.3096G	52.03	74.00	-21.97	41.84	3	Vertical	313	2.56	-	36.40	6.95	33.16
AV	7.31456G	38.82	54.00	-15.18	28.63	3	Vertical	313	2.56	-	36.40	6.96	33.17

802.11ax HEW40_Nss1,(MCS0)_4TX

10/07/2020

2437MHz_TX



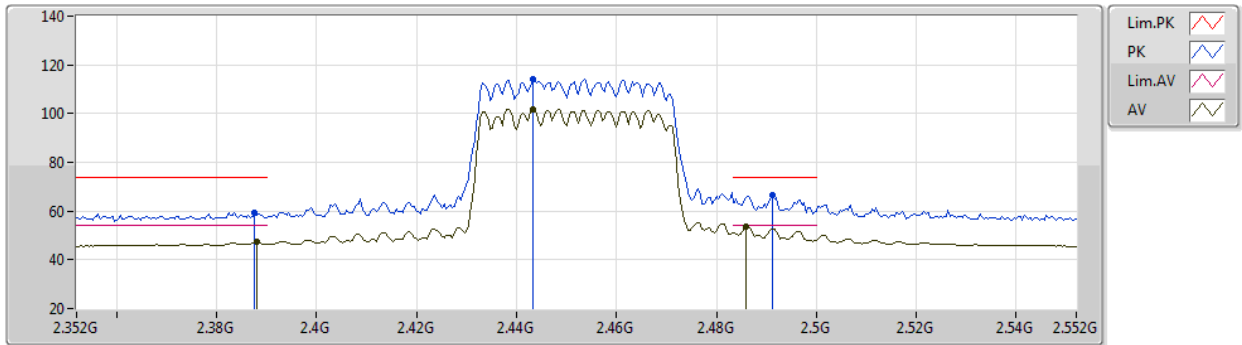
EUT_Z_4TX
Setting 72
06-F-O-1

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.87206G	45.17	74.00	-28.83	40.37	3	Horizontal	44	1.55	-	31.07	5.40	31.67
AV	4.87508G	31.79	54.00	-22.21	26.97	3	Horizontal	44	1.55	-	31.08	5.41	31.67
PK	7.30994G	51.93	74.00	-22.07	41.74	3	Horizontal	201	1.27	-	36.40	6.95	33.16
AV	7.31144G	38.70	54.00	-15.30	28.50	3	Horizontal	201	1.27	-	36.40	6.96	33.16

802.11ax HEW40_Nss1,(MCS0)_4TX

10/07/2020

2452MHz_TX



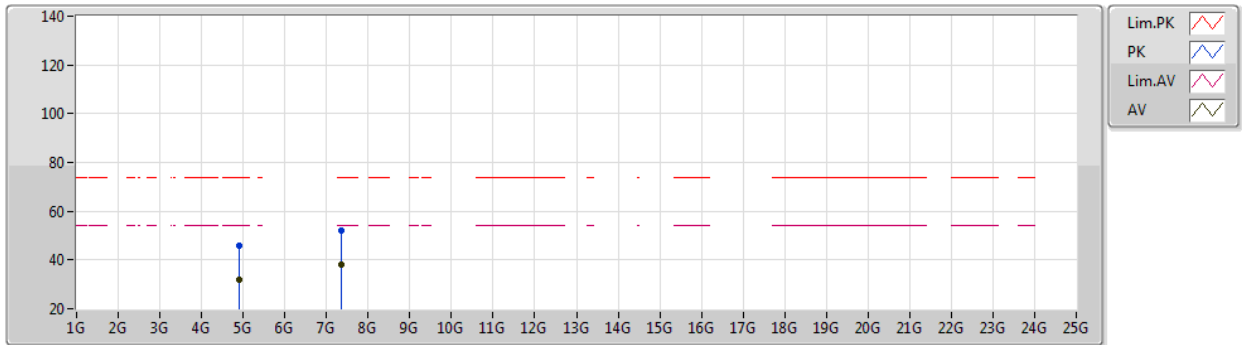
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Setting 61
06-F-O-1

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3876G	59.36	74.00	-14.64	27.73	3	Vertical	115	1.88	-	27.64	3.99	-
AV	2.388G	47.18	54.00	-6.82	15.55	3	Vertical	115	1.88	-	27.64	3.99	-
PK	2.4432G	114.31	Inf	-Inf	82.82	3	Vertical	115	1.88	-	27.47	4.02	-
AV	2.4432G	101.77	Inf	-Inf	70.28	3	Vertical	115	1.88	-	27.47	4.02	-
PK	2.4912G	66.35	74.00	-7.65	34.97	3	Vertical	115	1.88	-	27.33	4.05	-
AV	2.486G	53.61	54.00	-0.39	22.23	3	Vertical	115	1.88	-	27.34	4.04	-

802.11ax HEW40_Nss1,(MCS0)_4TX

10/07/2020

2452MHz_TX



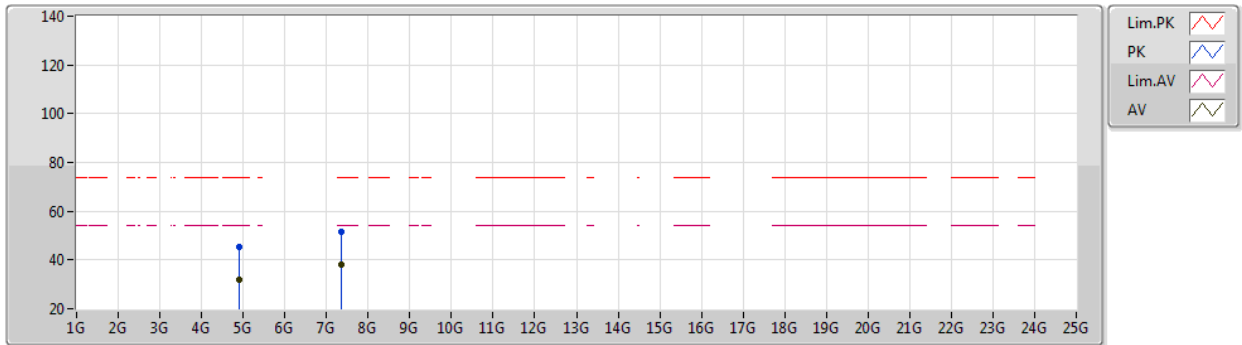
EUT_Z_4TX
Setting 61
06-F-O-1

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.90096G	45.95	74.00	-28.05	41.05	3	Vertical	276	1.03	-	31.10	5.44	31.64
AV	4.89928G	31.69	54.00	-22.31	26.79	3	Vertical	276	1.03	-	31.10	5.44	31.64
PK	7.35208G	52.12	74.00	-21.88	41.92	3	Vertical	144	2.98	-	36.40	6.98	33.18
AV	7.3596G	38.34	54.00	-15.66	28.14	3	Vertical	144	2.98	-	36.40	6.98	33.18

802.11ax HEW40_Nss1,(MCS0)_4TX

10/07/2020

2452MHz_TX



EUT_Z_4TX
Setting 61
06-F-O-1

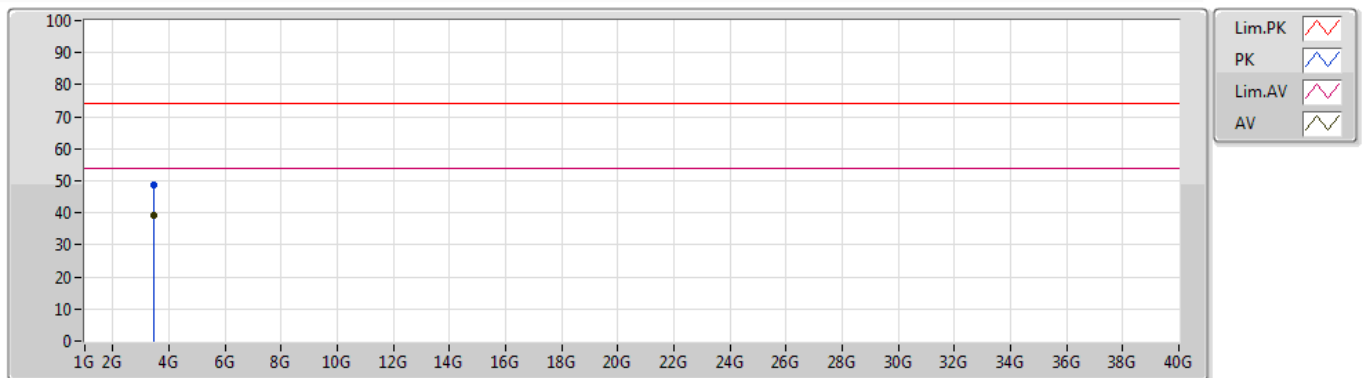
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.90766G	45.45	74.00	-28.55	40.50	3	Horizontal	112	1.39	-	31.13	5.45	31.63
AV	4.9045G	31.76	54.00	-22.24	26.83	3	Horizontal	112	1.39	-	31.12	5.45	31.64
PK	7.3599G	51.70	74.00	-22.30	41.50	3	Horizontal	278	1.14	-	36.40	6.98	33.18
AV	7.36004G	38.33	54.00	-15.67	28.13	3	Horizontal	278	1.14	-	36.40	6.98	33.18



Summary

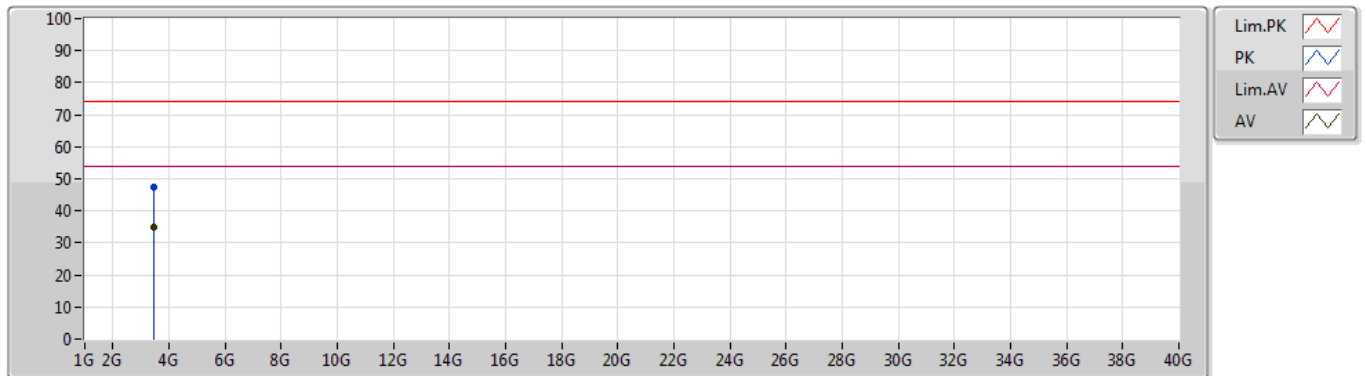
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	AV	3.46665G	39.29	54.00	-14.71	Vertical

Mode 1



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	3.46657G	48.61	74.00	-25.39	2.16	3	Vertical	0	0.00	-	46.45	30.27	4.73	32.84
AV	3.46665G	39.29	54.00	-14.71	2.16	3	Vertical	0	0.00	"Worst"	37.13	30.27	4.73	32.84

Mode 1



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	3.46671G	47.51	74.00	-26.49	2.16	3	Horizontal	0	0.00	-	45.35	30.27	4.73	32.84
AV	3.46658G	34.99	54.00	-19.01	2.16	3	Horizontal	0	0.00	"Worst"	32.83	30.27	4.73	32.84