



RADIO TEST REPORT

FCC ID : MSQ-RTAX8300
Equipment : AX1800 + AV1300 Dual-band Powerline Mesh WiFi6 Router,
ZenWiFi Hybrid Mesh Wi-Fi System
Brand Name : ASUS
Model Name : XP4, XP4R, XP4 Router
Applicant : ASUSTeK COMPUTER INC.
1F., No. 15, Lide Rd., Beitou, Taipei 112, Taiwan
Manufacturer : ASUSTeK COMPUTER INC.
1F., No. 15, Lide Rd., Beitou, Taipei 112, Taiwan
Standard : 47 CFR FCC Part 15.247

The product was received on Dec. 16, 2020, and testing was started from Dec. 17, 2020 and completed on Mar. 08, 2021. We, Sporton International Inc. Hsinchu Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

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

Approved by: Sam Chen

Sporton International Inc. Hsinchu Laboratory

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



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



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	-
Reference to Sporton Project No.: 042147-01				

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	2
2.4-2.4835GHz	802.11g	20	2
2.4-2.4835GHz	802.11n HT20	20	2
2.4-2.4835GHz	802.11n HT20-BF	20	2
2.4-2.4835GHz	VHT20	20	2
2.4-2.4835GHz	VHT20-BF	20	2
2.4-2.4835GHz	HEW20	20	2
2.4-2.4835GHz	HEW20-BF	20	2
2.4-2.4835GHz	802.11n HT40	40	2
2.4-2.4835GHz	802.11n HT40-BF	40	2
2.4-2.4835GHz	VHT40	40	2
2.4-2.4835GHz	VHT40-BF	40	2
2.4-2.4835GHz	HEW40	40	2
2.4-2.4835GHz	HEW40-BF	40	2

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.	2.4GHz Port	5GHz Port	Bluetooth Port	Brand	P/N	Antenna Type	Connector	Gain (dBi)
1	2	-	-	Xinsheng	8000000031071341	PCB Antenna	I-PEX	Note 1
2	1	-	-	Xinsheng	8000000031081341	PCB Antenna	I-PEX	
3	-	2	-	Xinsheng	8000000031091341	PCB Antenna	I-PEX	
4	-	1	-	Xinsheng	8000000031101341	PCB Antenna	I-PEX	
5	-	-	1	Xinsheng	8000000031071341	PCB Antenna	I-PEX	

Note1:

Ant.	Gain (dBi)		
	WLAN 2.4GHz	WLAN 5GHz	Bluetooth
1	3.25	-	-
2	3.27	-	-
3	-	3.48	-
4	-	3.41	-
5	-	-	3.25

Note 2: 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.

For Bluetooth function (1TX/1RX):

Only Port 1 can be used as transmitting/receiving antenna.



1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11b	0.903	0.44	11.831m	100
802.11g	0.942	0.26	1.98m	1k
802.11ax HEW20-BF	0.975	0.11	9.438m	300
802.11ax HEW40-BF	0.977	0.1	9.473m	300

Note:

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

1.1.4 EUT Operational Condition

EUT Power Type	Internal power supply			
Beamforming Function	☒	With beamforming	☐	Without beamforming
	The product has beamforming function for 11n/VHT/ax in 2.4GHz and 11n/ac/ax in 5GHz.			
Function	☒	Point-to-multipoint	☐	Point-to-point
Test Software Version	For non-beamforming mode: QSPR (Version : 5.0-00195) For beamforming mode: telnet (Version 6.1.7601)			

Note: The above information was declared by manufacturer.

1.1.5 Table for EUT Supports Functions

Function	Support Type
AP Router	Master
Mesh	Master

Note: After evaluating, there is only AP Router was selected to test and record in the report.

1.1.6 Table for Multiple Listing

Equipment Name	Model Name	Description
AX1800 + AV1300 Dual-band Powerline Mesh WiFi6 Router, ZenWiFi Hybrid Mesh Wi-Fi System	XP4, XP4R, XP4 Router	The variation of equipment name/model name is for the strategy of marketing. The circuit of each equipment name/model name is identical.

Note 1: From the above models, model: XP4R was selected as representative model for the test and its data was recorded in this report.

Note 2: The above information was declared by manufacturer.



1.2 Applicable Standards

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

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

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

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

1.3 Testing Location Information

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

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
RF Conducted	TH03-CB	Jeff Wu	22.7~23.2 / 54~57	Jan. 13, 2021~Mar. 05, 2021
Radiated (For below 1GHz test)	03CH01-CB	KJ Chang	21.2~22.8 / 55~57	Dec. 26, 2020~Mar. 08, 2021
Radiated (For above 1GHz test)	03CH03-CB	KJ Chang	20.8~22 / 55~58	Dec. 26, 2020~Mar. 08, 2021
AC Conduction	CO02-CB	Wei Li	23~24 / 57~60	Dec. 17, 2020

1.4 Measurement Uncertainty

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

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	2.0 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	3.8 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.6 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	5.0 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.9 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	0.4%	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

For non beamforming mode

Mode	Power Setting
802.11b_Nss1,(1Mbps)_2TX	-
2412MHz	26
2417MHz	26.5
2437MHz	26.5
2462MHz	26.5
802.11g_Nss1,(6Mbps)_2TX	-
2412MHz	21
2417MHz	25.5
2437MHz	26.5
2457MHz	24.5
2462MHz	20.5

For beamforming mode

Mode	Power Setting
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
2412MHz	25
2437MHz	27
2462MHz	24
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
2422MHz	21
2427MHz	23
2437MHz	25
2447MHz	23
2452MHz	22

Note:

- ♦ Evaluated HEW20/HEW40 mode only, due to similar modulation. The power setting of HT20/HT40/VHT20/VHT40 mode are the same or lower than HEW20/HEW40.
- ♦ There are two modes of EUT for 802.11n/VHT/ax in 2.4GHz and 802.11n/ac/ax in 5GHz. One is beamforming mode, and the other is non-beamforming mode, after evaluating, beamforming mode has been evaluated to be the worst case, so it was selected to test and record in this test report.

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	EUT-AP Router + Power cord

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 + Power cord_2.4GHz
2	EUT + Power cord_5GHz
3	EUT + Power cord_Bluetooth
For operating mode 1 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX
1	EUT + Power cord_2.4GHz

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 + Bluetooth
Refer to Sporton Test Report No.: FA042147 for Co-location RF Exposure Evaluation.	

Note: The EUT can only use Y axis position.



2.3 EUT Operation during Test

For CTX Mode:

non-beamforming mode:

The EUT was programmed to be in continuously transmitting mode.

beamforming mode:

During the test, the following programs under WIN 7 were executed.

The program was executed as follows:

1. During the test, the EUT operation to normal function.
2. Executed command fixed test channel under telnet.
3. Executed "Lantest.exe" to link with the remote workstation to transmit and receive packet by RX Device and transmit duty cycle no less than 98%.

For Normal Link:

During the test, the EUT operation to normal function.

2.4 Accessories

Accessories
Power cord*1, non-shielded, 1.5m
RJ-45 cable*1, non-shielded, 1.5m



2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	LAN1 NB	DELL	E6430	N/A
B	2.4G NB	DELL	E6430	N/A
C	5G NB	DELL	E6430	N/A
D	WAN NB	DELL	E6430	N/A
E	Smart phone	Samsung	Galaxy J2	A3LSMJ200F
F	HDD3.0	Transcend	TS1TSJ25A3K	N/A
G	LAN2 NB	DELL	E6430	N/A

For Radiated (below 1GHz):

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

For Radiated (above 1GHz) and RF Conducted:

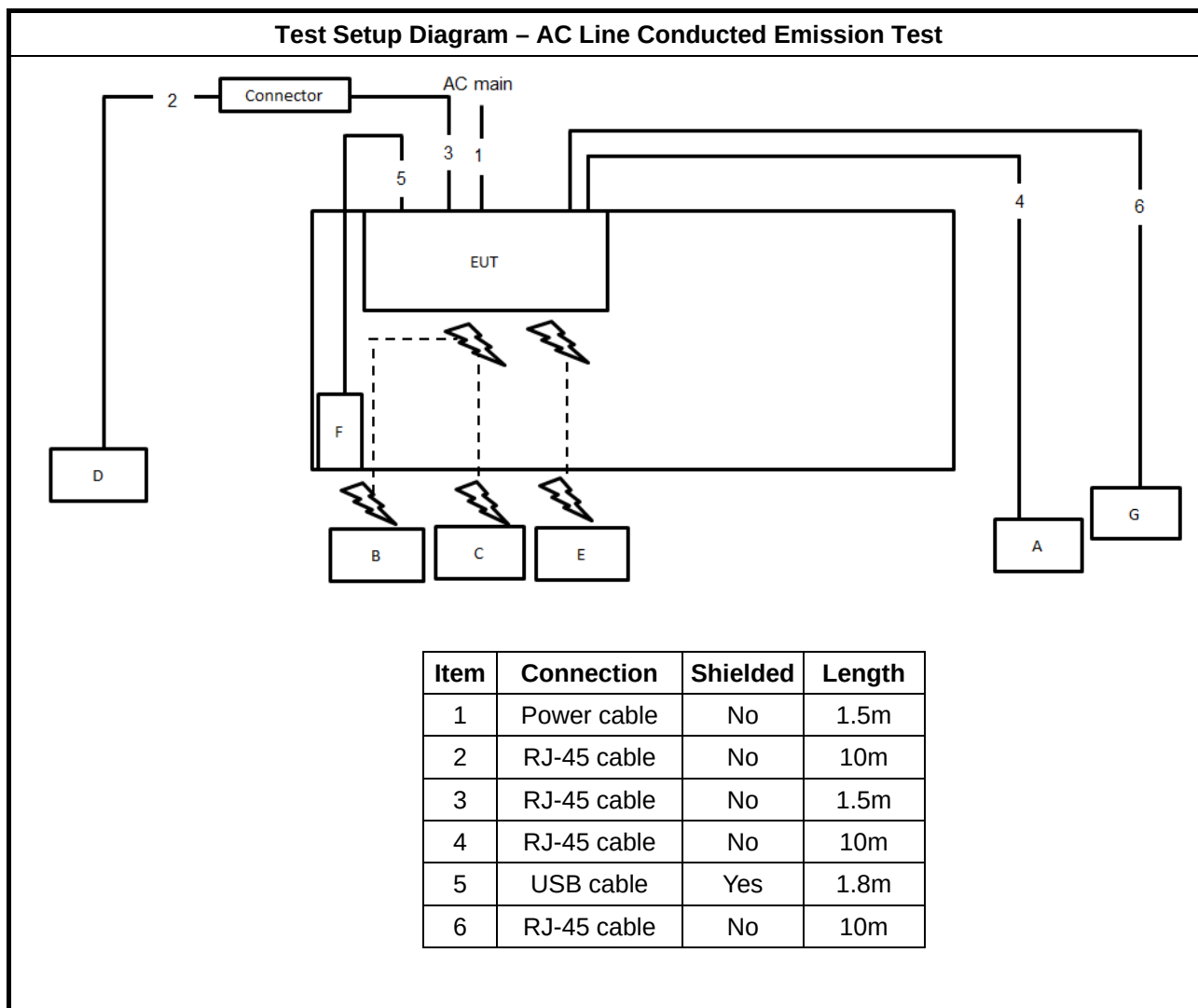
For non beamforming mode

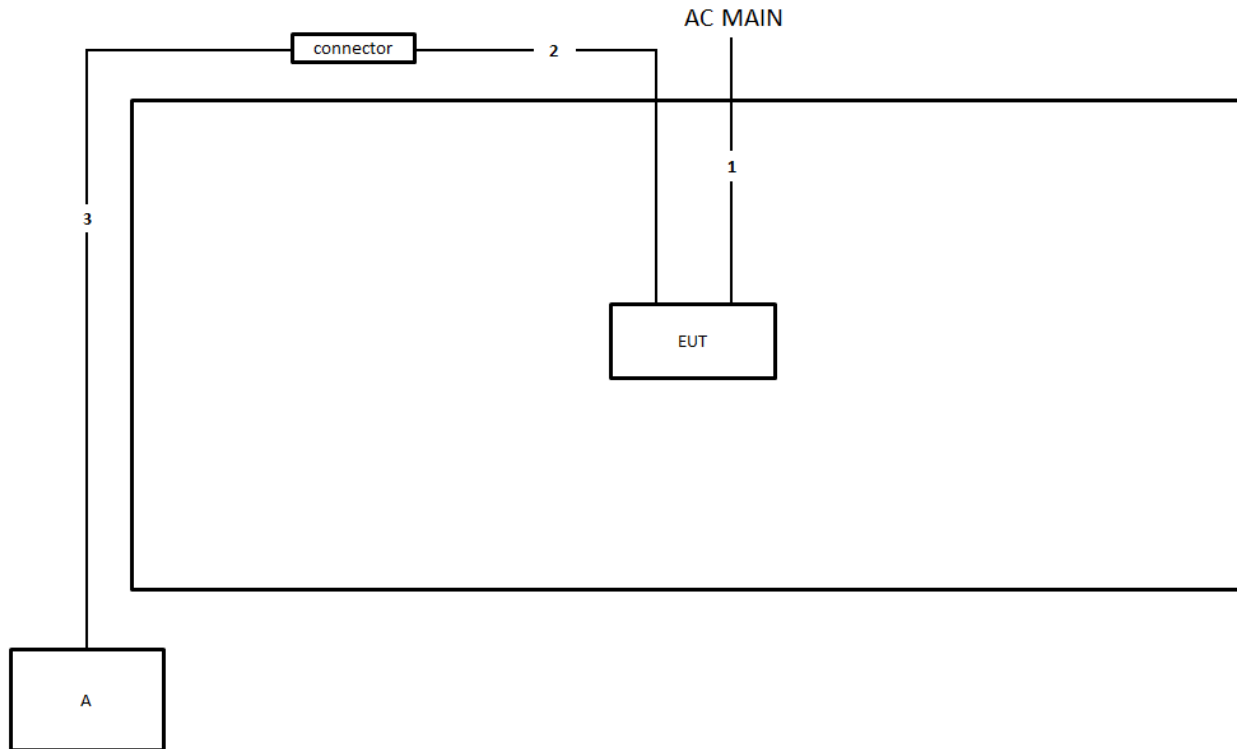
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A

For beamforming mode

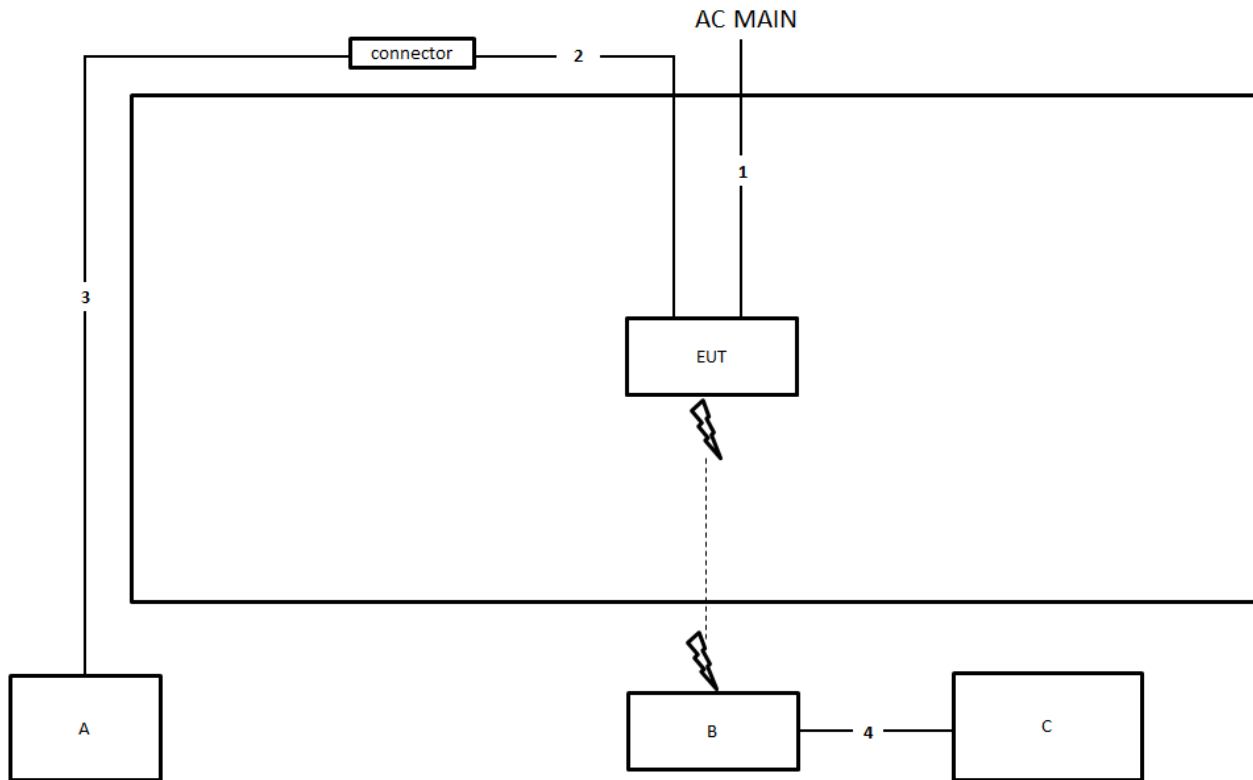
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A
B	RX Device	ASUS	XP4N	MSQ-RTAX8301
C	Notebook	DELL	E4300	N/A

2.6 Test Setup Diagram



Test Setup Diagram - Radiated Test < 1GHz and Radiated Test > 1GHz for non beamforming mode


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

Test Setup Diagram - Radiated Test > 1GHz for beamforming mode


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



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.

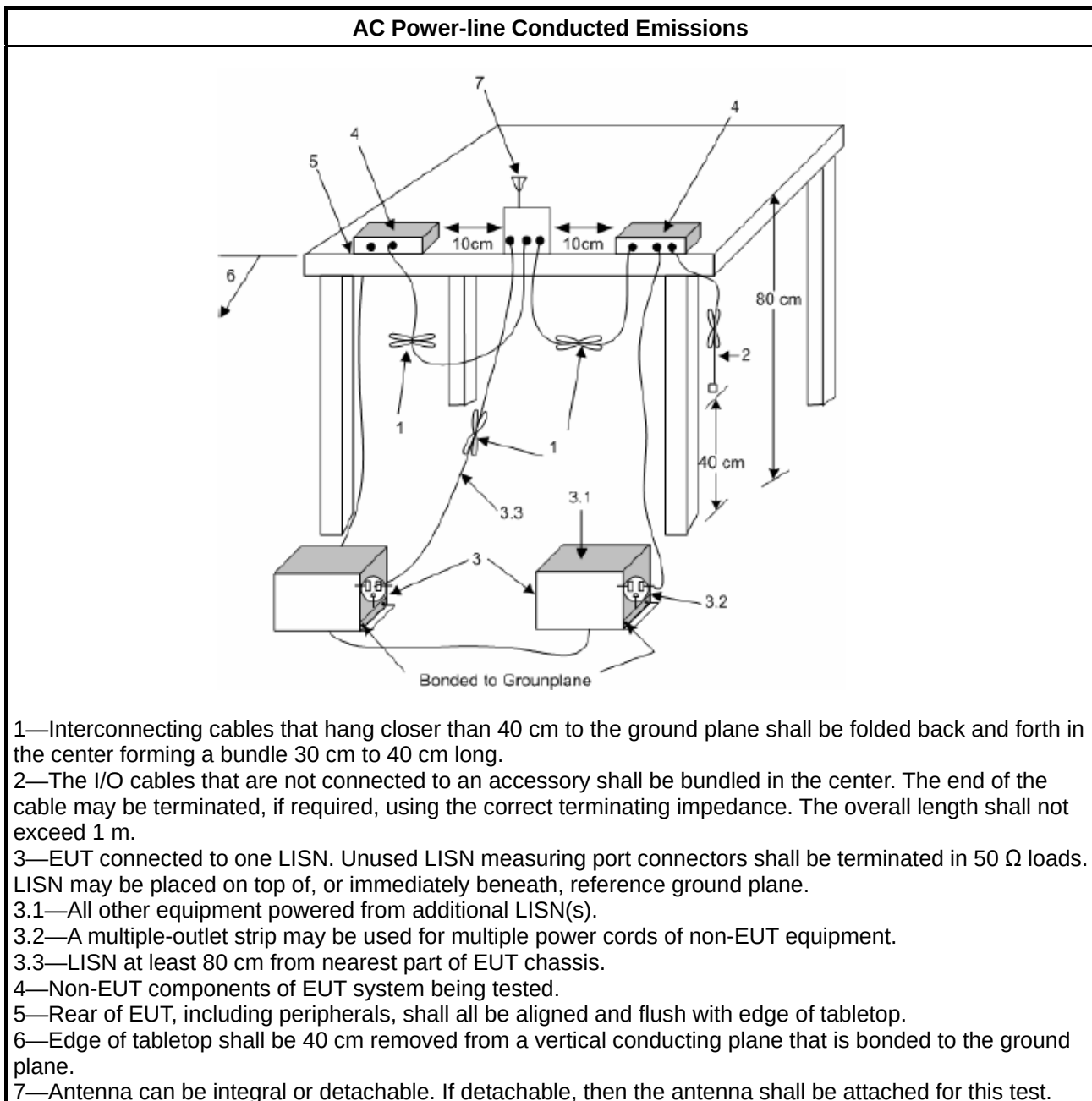
3.1.2 Measuring Instruments

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

3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 DTS Bandwidth

3.2.1 6dB Bandwidth Limit

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

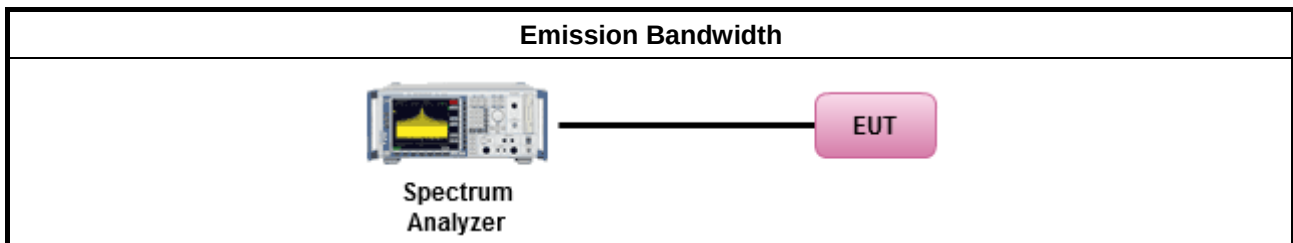
3.2.2 Measuring Instruments

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.	

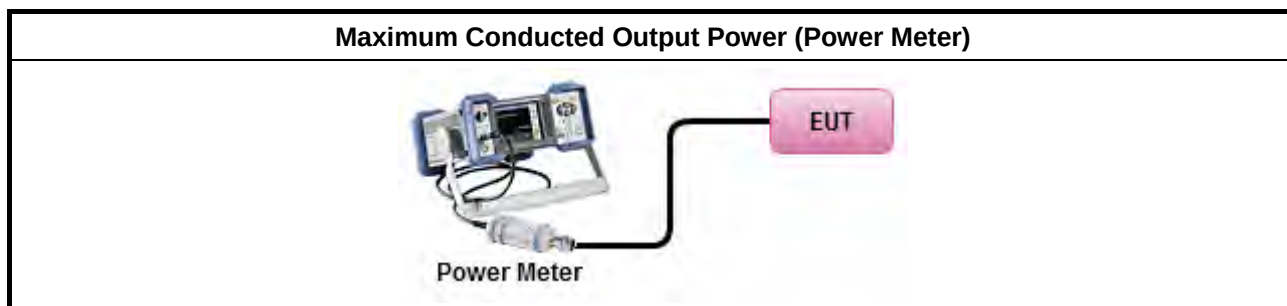
3.3.2 Measuring Instruments

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

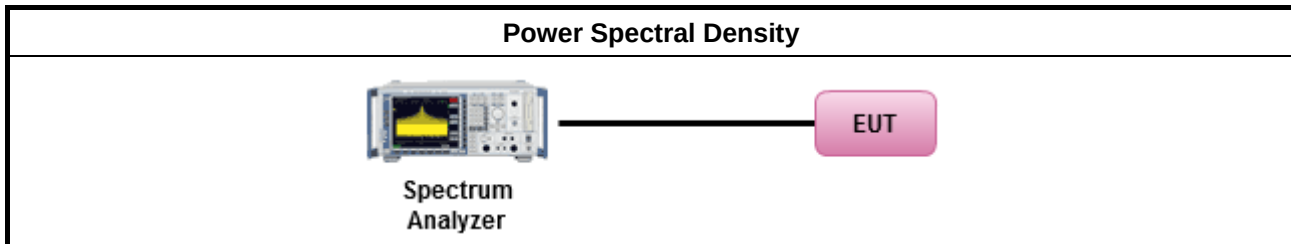
3.4.2 Measuring Instruments

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.	

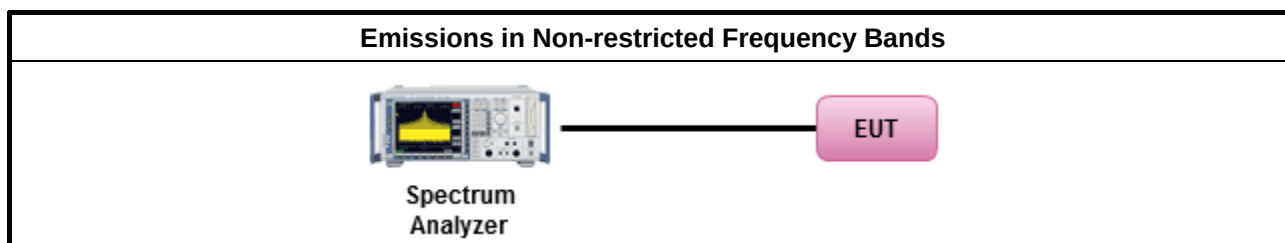
3.5.2 Measuring Instruments

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

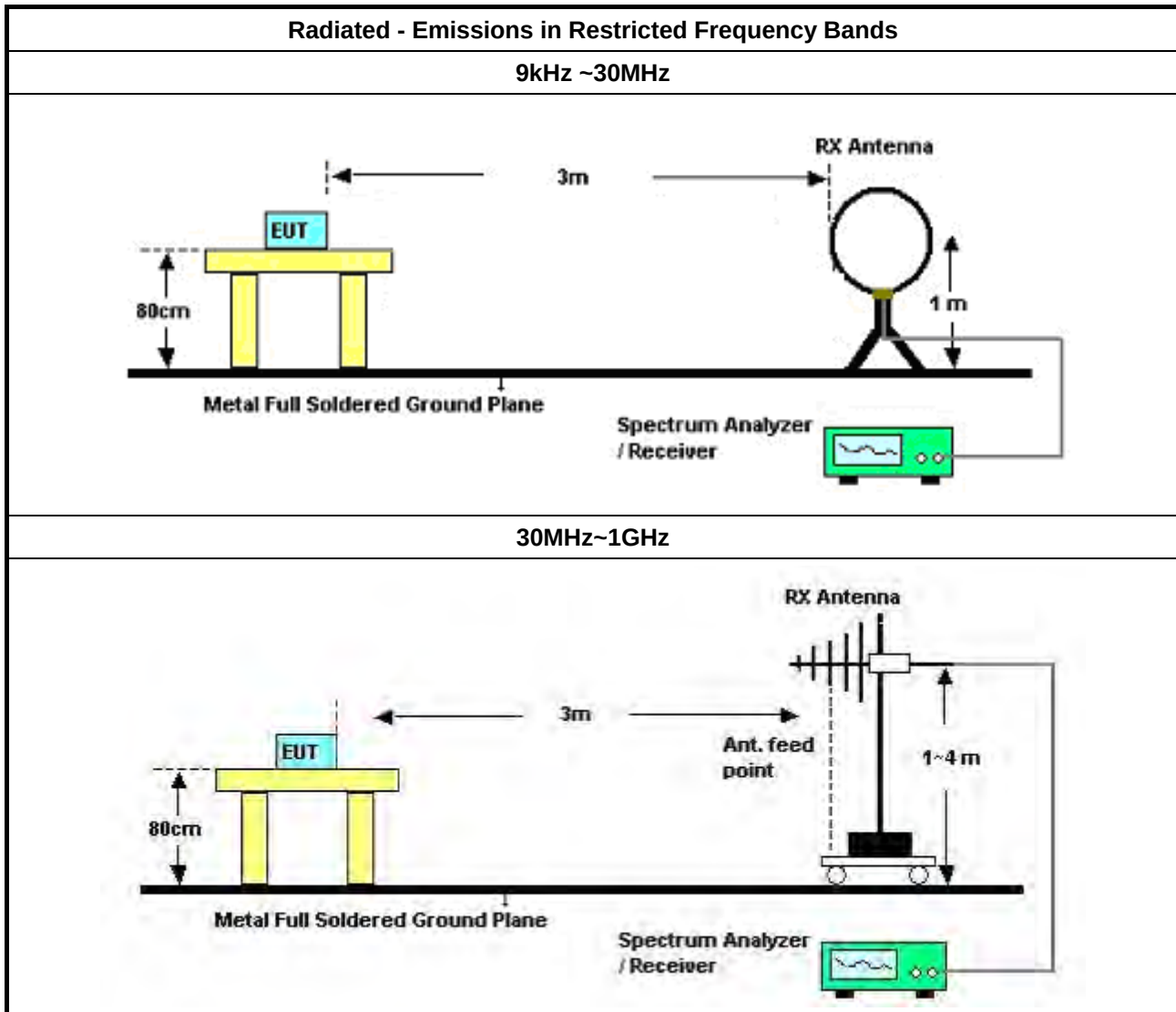
Refer a test equipment and calibration data table in this test report.

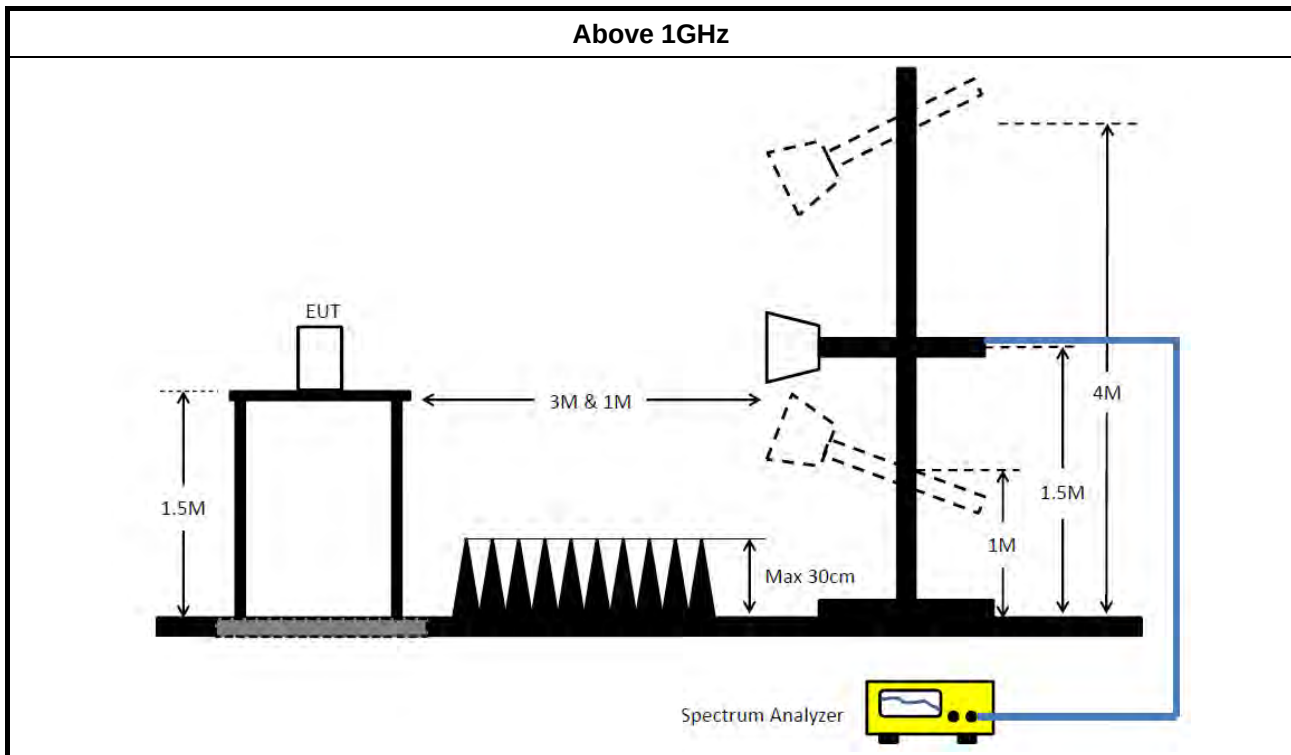


3.6.3 Test Procedures

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 (AF) + Cable loss (CL) + Read level (Raw) - Preamp factor (PA)(if applicable) = Level.

3.6.6 Emissions in Restricted Frequency Bands (Below 30MHz)

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

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

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

3.6.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F



4 Test Equipment and Calibration Data

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
LISN	Schwarzbeck	NSLK 8127	8127650	9kHz ~ 30MHz	Dec. 04, 2020	Dec. 03, 2021	Conduction (CO02-CB)
LISN	Schwarzbeck	NSLK 8127	8127478	9kHz ~ 30MHz	Nov. 20, 2020	Nov. 19, 2021	Conduction (CO02-CB)
EMI Receiver	Agilent	N9038A	MY52260140	9kHz ~ 8.4GHz	Mar. 10, 2020	Mar. 09, 2021	Conduction (CO02-CB)
COND Cable	Woken	Cable	2	0.15MHz ~ 30MHz	Oct. 20, 2020	Oct. 19, 2021	Conduction (CO02-CB)
Pulse Limiter	Schwarzbeck	VTSD 9561F-N	00378	9kHz ~ 30MHz	Mar. 19, 2020	Mar. 18, 2021	Conduction (CO02-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO02-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Apr. 13, 2020	Apr. 12, 2021	Radiation (03CH01-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH01-CB	30 MHz ~ 1 GHz	Jan. 28, 2020	Jan. 27, 2021	Radiation (03CH01-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH01-CB	30 MHz ~ 1 GHz	Jan. 26, 2021	Jan. 25, 2022	Radiation (03CH01-CB)
BILOG ANTENNA with 6dB Attenuator	TESEQ & EMCI	CBL6112D N-6-06	37880 & AT-N0609	20MHz ~ 2GHz	Feb. 28, 2020	Feb. 27, 2021	Radiation (03CH01-CB)
BILOG ANTENNA with 6dB Attenuator	TESEQ & EMCI	CBL6112D N-6-06	37880 & AT-N0609	20MHz ~ 2GHz	Feb. 22, 2021	Feb. 21, 2022	Radiation (03CH01-CB)
Preamplifier	EMCI	EMC330N	980332	20MHz ~ 3GHz	Jul. 03, 2020	Jun. 02, 2021	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Apr. 16, 2020	Apr. 15, 2021	Radiation (03CH01-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	May 13, 2020	May 12, 2021	Radiation (03CH01-CB)
RF Cable-low	Woken	RG402	Low Cable-16+17	30 MHz ~ 1 GHz	Oct. 05, 2020	Oct. 04, 2021	Radiation (03CH01-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH01-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH03-CB	1GHz ~18GHz 3m	May 28, 2020	May 27, 2021	Radiation (03CH03-CB)
Horn Antenna	COM-POWER	AH-118	071028	1GHz ~ 18GHz	Jun. 09, 2020	Jun. 08, 2021	Radiation (03CH03-CB)
Horn Antenna	ETS • Lindgren	3115	6821	750MHz~18GHz	Jan. 26, 2021	Jan. 25, 2022	Radiation (03CH03-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Horn Antenna	COM-POWER	AH-118	071028	1GHz ~ 18GHz	Jun. 09, 2020	Jun. 08, 2021	Radiation (03CH03-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 21, 2020	Jul. 20, 2021	Radiation (03CH03-CB)
Pre-Amplifier	Agilent	8449B	3008A02097	1GHz ~ 26.5GHz	Jul. 03, 2020	Jun. 02, 2021	Radiation (03CH03-CB)
Pre-Amplifier	MITEQ	TTA1840-35-H G	1864479	18GHz ~ 40GHz	Jul. 08, 2020	Jul. 07, 2021	Radiation (03CH03-CB)
Spectrum Analyzer	R&S	FSP40	100019	9kHz ~ 40GHz	Jun. 09, 2020	Jun. 08, 2021	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-20+29	1GHz ~ 18GHz	Oct. 05, 2020	Oct. 04, 2021	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-29	1GHz ~ 18GHz	Oct. 05, 2020	Oct. 04, 2021	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 16, 2020	Jul. 15, 2021	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 16, 2020	Jul. 15, 2021	Radiation (03CH03-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH03-CB)
Spectrum analyzer	R&S	FSV40	101028	9kHz~40GHz	Dec. 31, 2020	Dec. 30, 2021	Conducted (TH03-CB)
Power Sensor	Anritsu	MA2411B	1726195	300MHz~40GHz	Aug. 17, 2020	Aug. 16, 2021	Conducted (TH03-CB)
Power Meter	Anritsu	ML2495A	1035008	300MHz~40GHz	Aug. 17, 2020	Aug. 16, 2021	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-11	1 GHz ~18 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-12	1 GHz ~18 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-13	1 GHz ~18 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-14	1 GHz ~18 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-15	1 GHz ~18 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH03-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH03-CB)

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

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



Conducted Emissions at Powerline

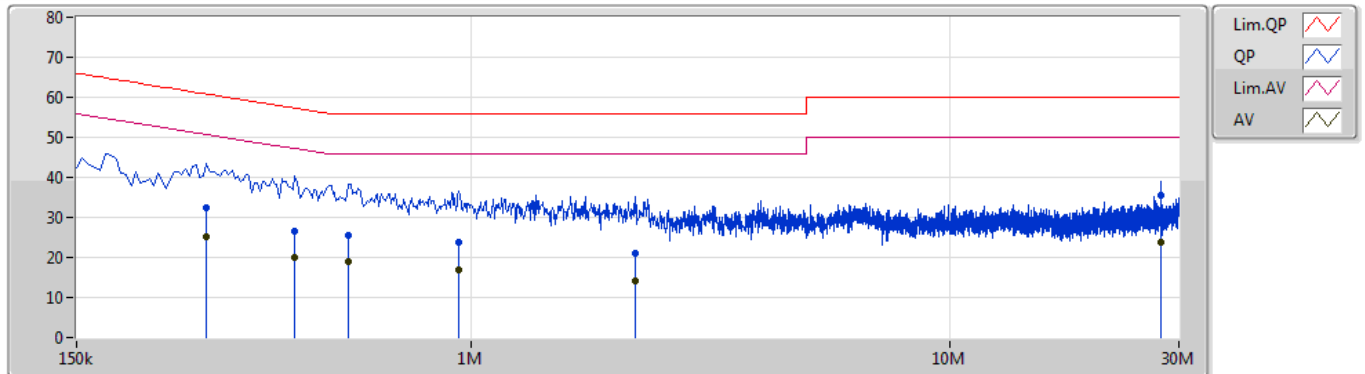
Appendix A

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	4.052M	22.54	46.00	-23.46	Neutral

Mode 1

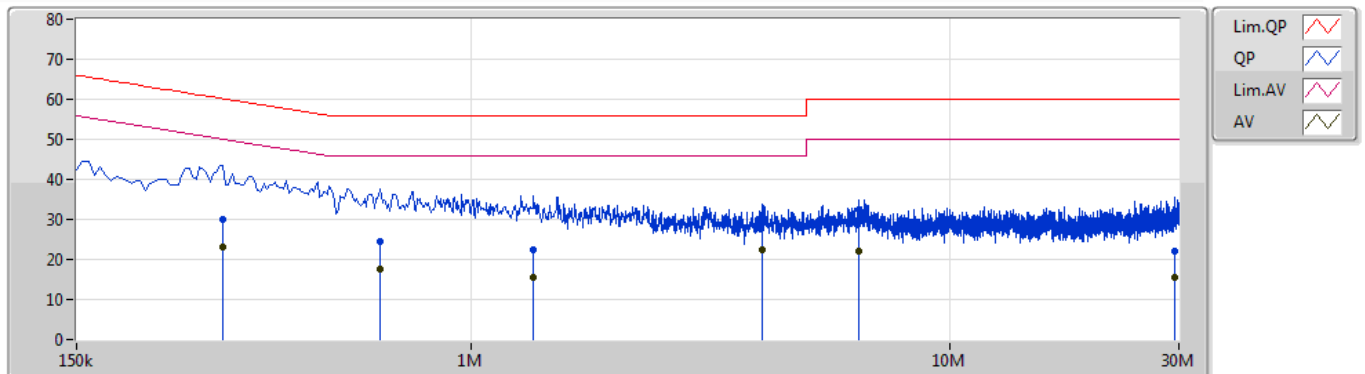
17/12/2020



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	280.5k	32.42	60.80	-28.38	10.24	Line	-	22.18	0.03	0.07	10.14			
AV	280.5k	25.26	50.80	-25.54	10.24	Line	-	15.02	0.03	0.07	10.14			
QP	429k	26.61	57.28	-30.67	10.19	Line	-	16.42	0.03	0.06	10.10			
AV	429k	19.94	47.28	-27.34	10.19	Line	-	9.75	0.03	0.06	10.10			
QP	555k	25.65	56.00	-30.35	10.20	Line	-	15.45	0.03	0.07	10.10			
AV	555k	19.04	46.00	-26.96	10.20	Line	-	8.84	0.03	0.07	10.10			
QP	942k	23.63	56.00	-32.37	10.23	Line	-	13.40	0.04	0.08	10.11			
AV	942k	16.79	46.00	-29.21	10.23	Line	-	6.56	0.04	0.08	10.11			
QP	2.193M	21.01	56.00	-34.99	10.30	Line	-	10.71	0.06	0.11	10.13			
AV	2.193M	13.97	46.00	-32.03	10.30	Line	-	3.67	0.06	0.11	10.13			
QP	27.578M	35.46	60.00	-24.54	10.89	Line	"Worst"	24.57	0.40	0.29	10.20			
AV	27.578M	23.81	50.00	-26.19	10.89	Line	-	12.92	0.40	0.29	10.20			

Mode 1

17/12/2020



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	303k	30.13	60.17	-30.04	10.24	Neutral	-	19.89	0.05	0.06	10.13			
AV	303k	23.20	50.17	-26.97	10.24	Neutral	-	12.96	0.05	0.06	10.13			
QP	645k	24.40	56.00	-31.60	10.24	Neutral	-	14.16	0.06	0.07	10.11			
AV	645k	17.68	46.00	-28.32	10.24	Neutral	-	7.44	0.06	0.07	10.11			
QP	1.347M	22.45	56.00	-33.55	10.28	Neutral	-	12.17	0.07	0.09	10.12			
AV	1.347M	15.52	46.00	-30.48	10.28	Neutral	-	5.24	0.07	0.09	10.12			
QP	4.052M	30.94	56.00	-25.06	10.39	Neutral	-	20.55	0.10	0.14	10.15			
AV	4.052M	22.54	46.00	-23.46	10.39	Neutral	"Worst"	12.15	0.10	0.14	10.15			
QP	6.432M	32.45	60.00	-27.55	10.48	Neutral	-	21.97	0.14	0.18	10.16			
AV	6.432M	22.12	50.00	-27.88	10.48	Neutral	-	11.64	0.14	0.18	10.16			
QP	29.391M	22.23	60.00	-37.77	10.80	Neutral	-	11.43	0.30	0.29	10.21			
AV	29.391M	15.53	50.00	-34.47	10.80	Neutral	-	4.73	0.30	0.29	10.21			

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	7.575M	13.818M	13M8G1D	7.075M	12.919M
802.11g_Nss1,(6Mbps)_2TX	16.3M	16.392M	16M4D1D	15.75M	16.367M

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;

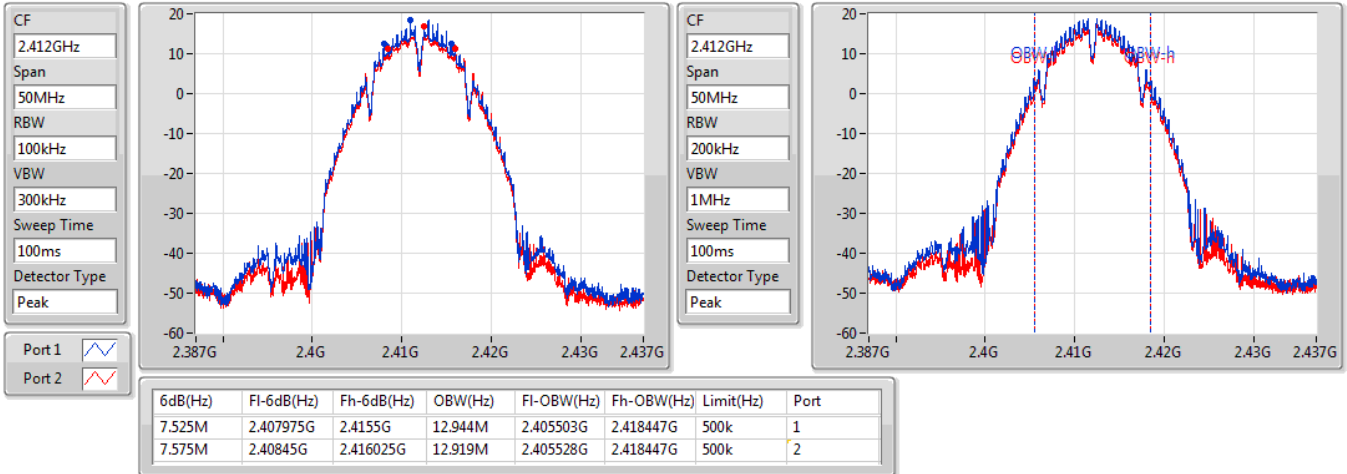
Result

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	7.525M	12.944M	7.575M	12.919M
2437MHz	Pass	500k	7.575M	13.818M	7.075M	13.068M
2462MHz	Pass	500k	7.575M	12.969M	7.075M	12.919M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.3M	16.367M	15.775M	16.367M
2437MHz	Pass	500k	15.875M	16.367M	15.75M	16.392M
2462MHz	Pass	500k	16M	16.367M	16.05M	16.392M

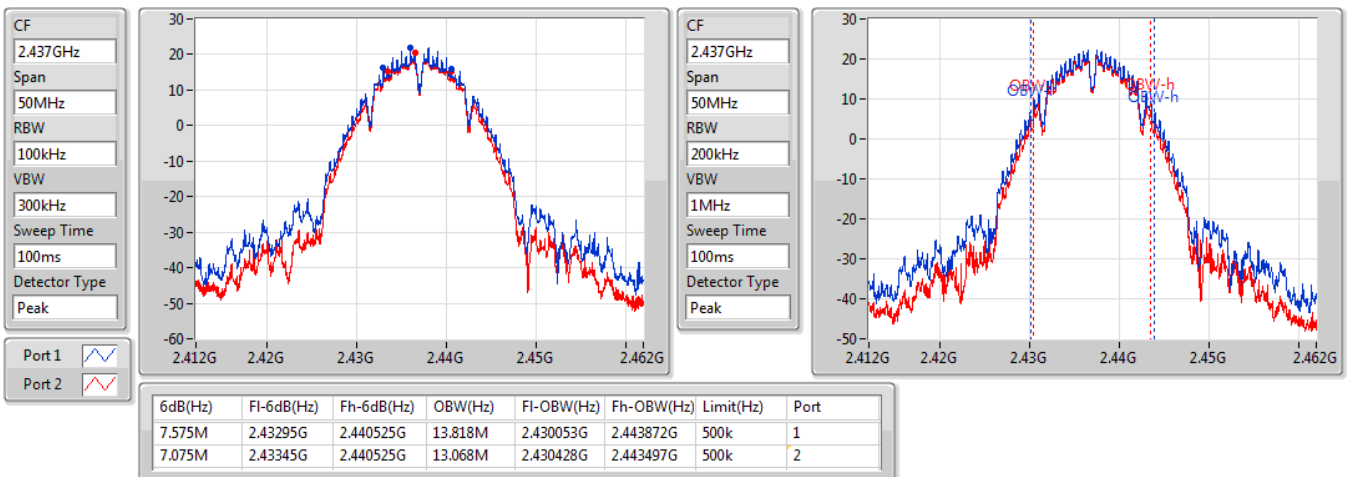
Port X-N dB = Port X 6dB down bandwidth; **Port X-OBW** = Port X 99% occupied bandwidth;

802.11b_Nss1,(1Mbps)_2TX
EBW
2412MHz

13/01/2021


802.11b_Nss1,(1Mbps)_2TX
EBW
2437MHz

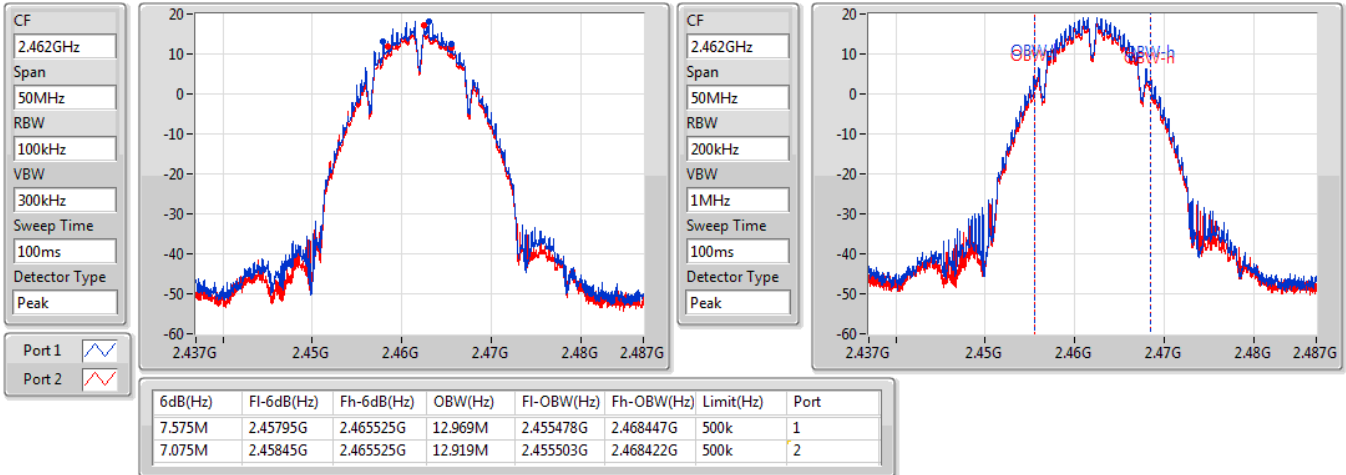
13/01/2021



802.11b_Nss1,(1Mbps)_2TX

EBW
2462MHz

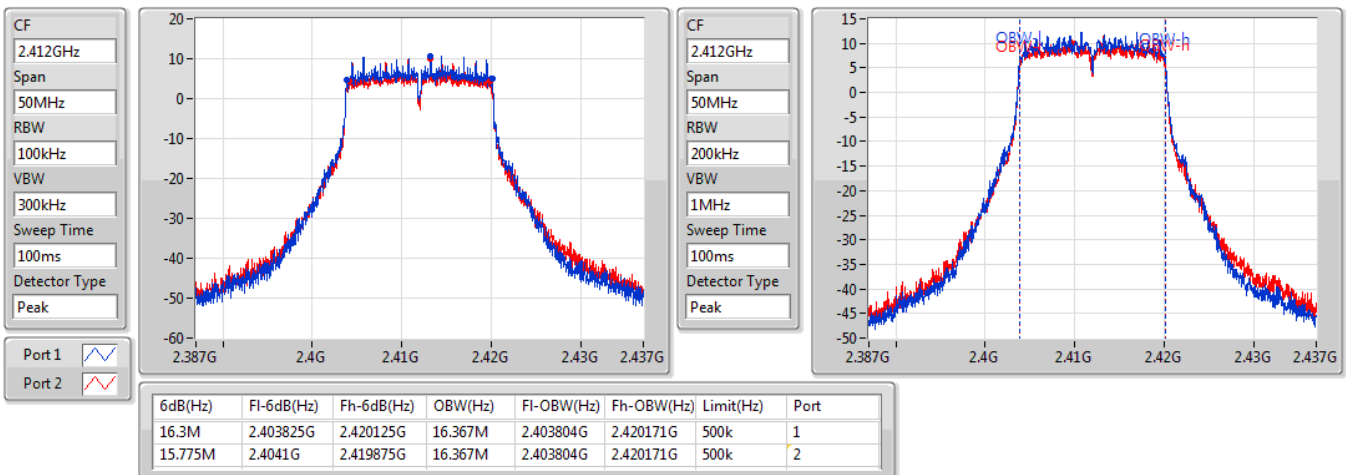
13/01/2021



802.11g_Nss1,(6Mbps)_2TX

EBW
2412MHz

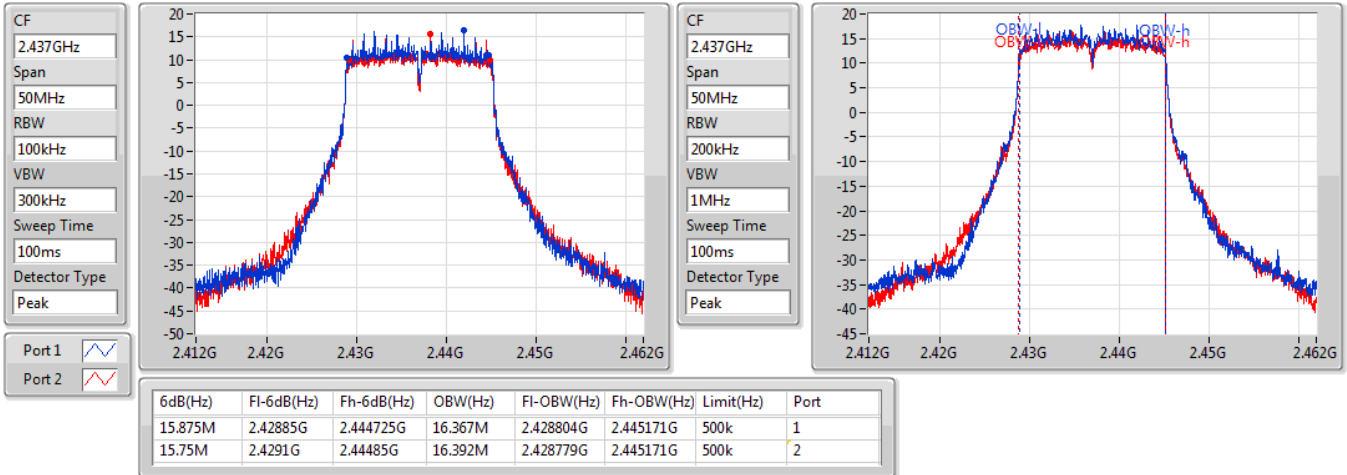
13/01/2021



802.11g_Nss1,(6Mbps)_2TX

2437MHz

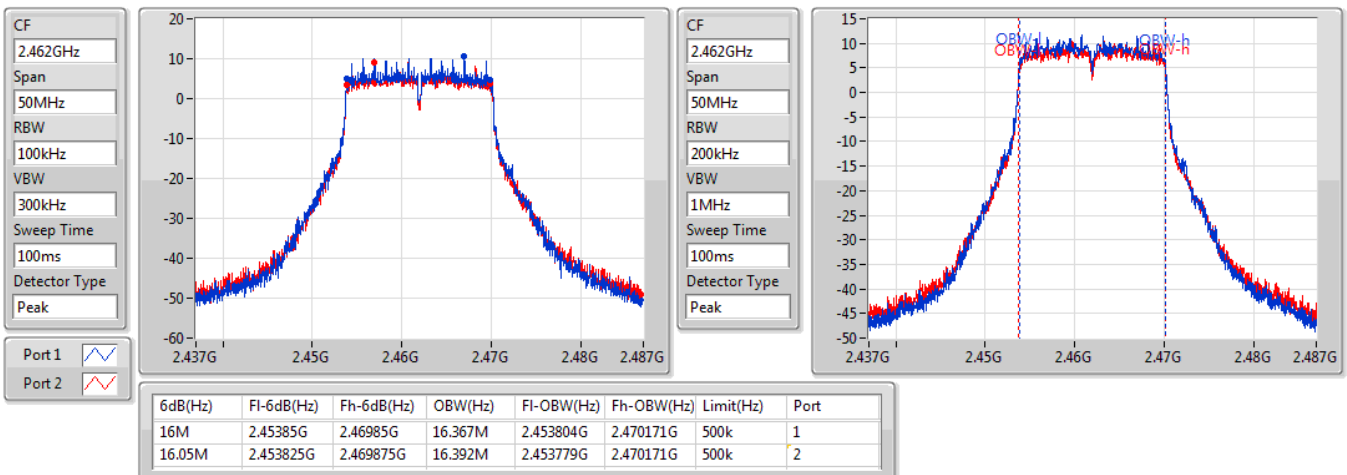
13/01/2021



802.11g_Nss1,(6Mbps)_2TX

2462MHz

13/01/2021



Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	17.85M	18.891M	18M9D1D	16.575M	18.841M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	33.75M	37.731M	37M7D1D	7.05M	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;

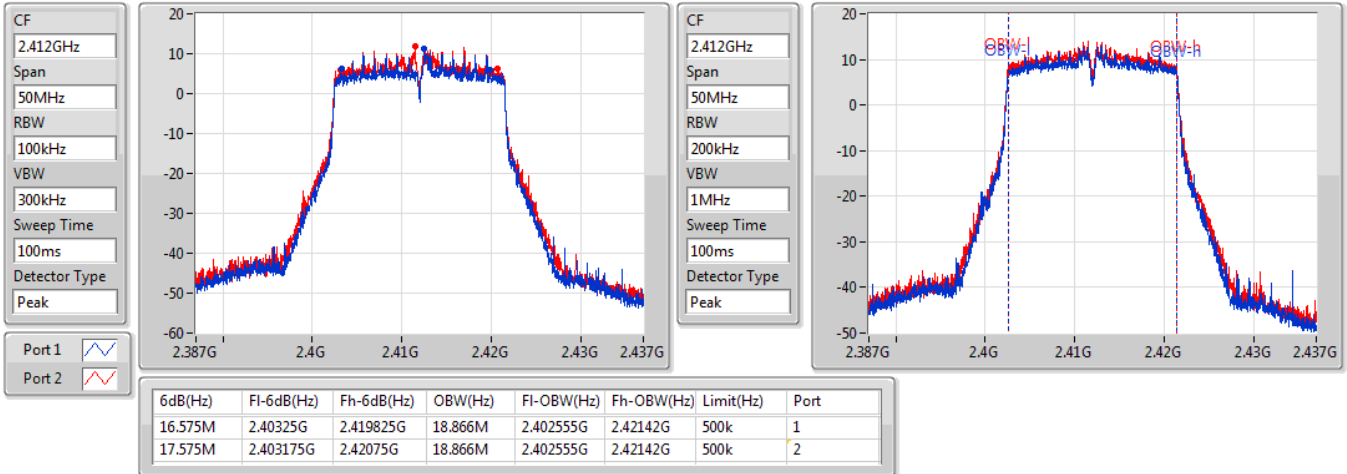
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.575M	18.866M	17.575M	18.866M
2437MHz	Pass	500k	17.5M	18.891M	17.3M	18.866M
2462MHz	Pass	500k	17.85M	18.841M	17.525M	18.866M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	25.75M	37.731M	31.3M	37.731M
2437MHz	Pass	500k	28.75M	37.731M	31.2M	37.681M
2452MHz	Pass	500k	7.05M	37.681M	33.75M	37.731M

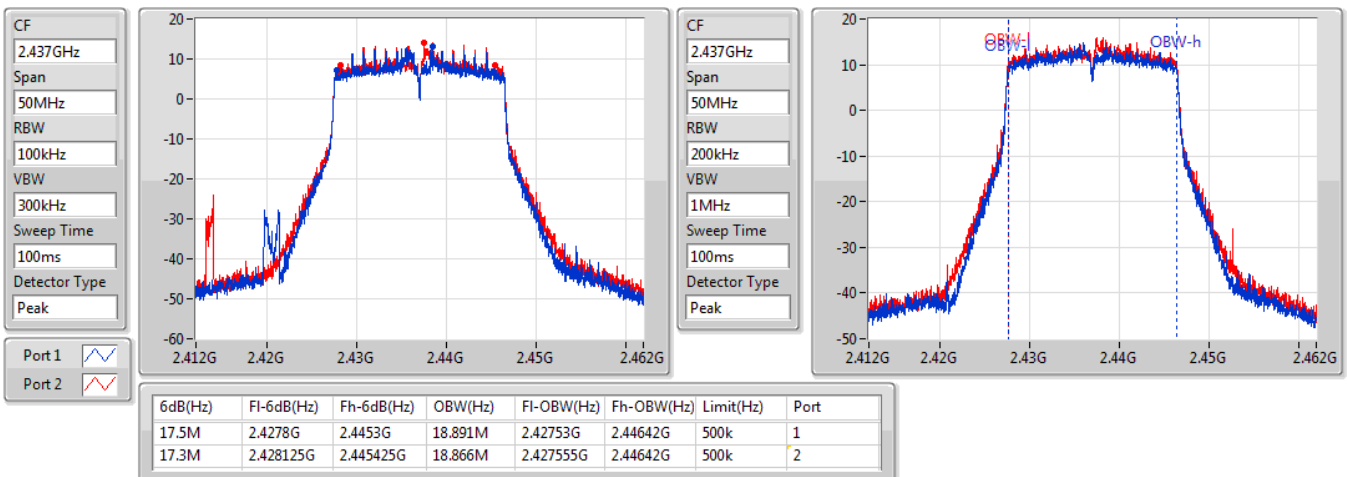
Port X-N dB = Port X 6dB down bandwidth; **Port X-OBW** = Port X 99% occupied bandwidth;

802.11ax HEW20-BF_Nss1,(MCS0)_2TX
EBW
2412MHz

14/01/2021

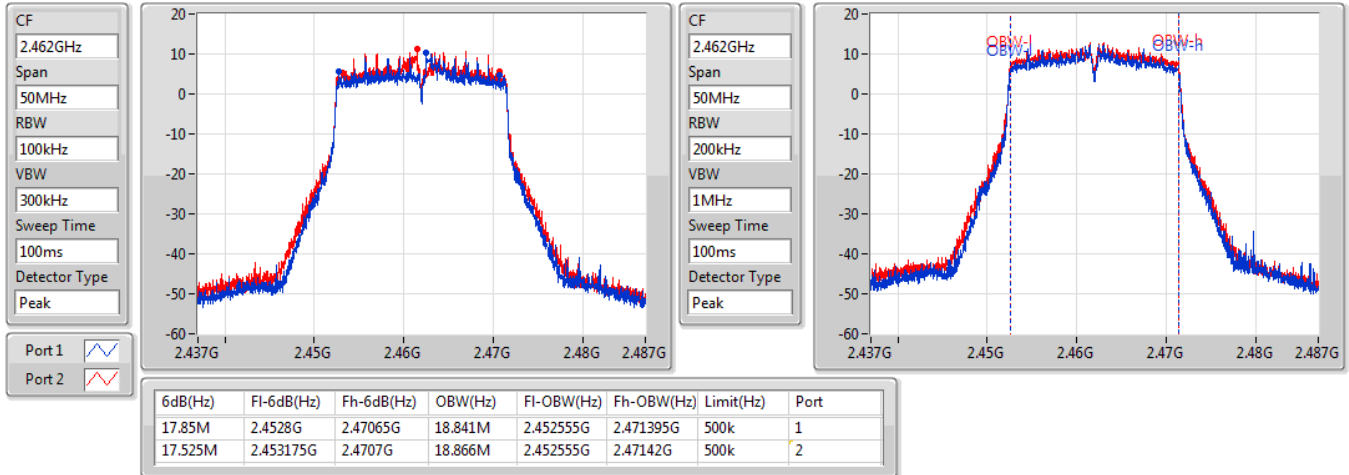

802.11ax HEW20-BF_Nss1,(MCS0)_2TX
EBW
2437MHz

14/01/2021

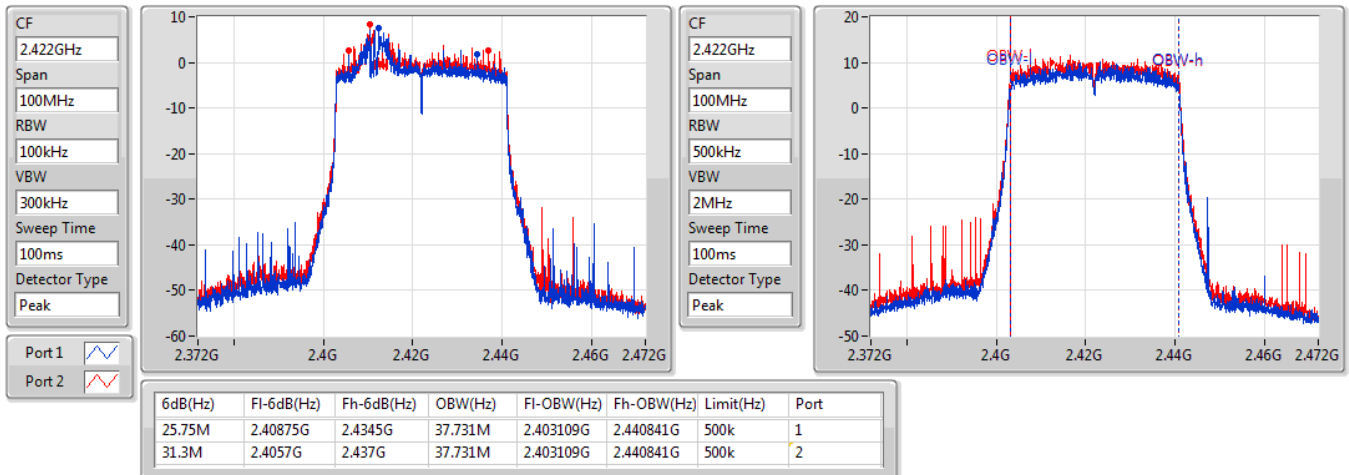


802.11ax HEW20-BF_Nss1,(MCS0)_2TX
EBW
2462MHz

14/01/2021

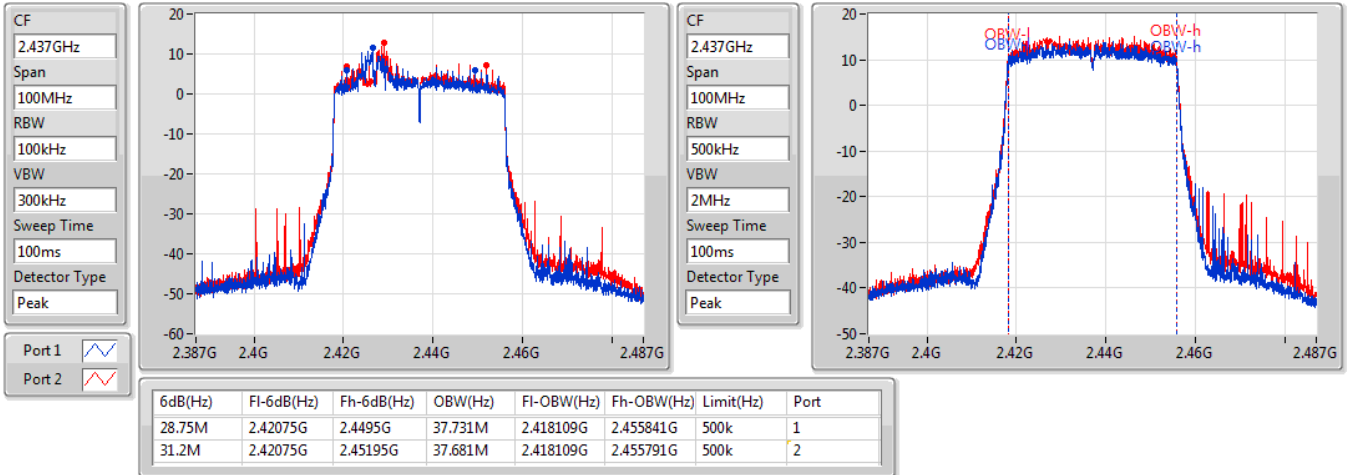

802.11ax HEW40-BF_Nss1,(MCS0)_2TX
EBW
2422MHz

14/01/2021

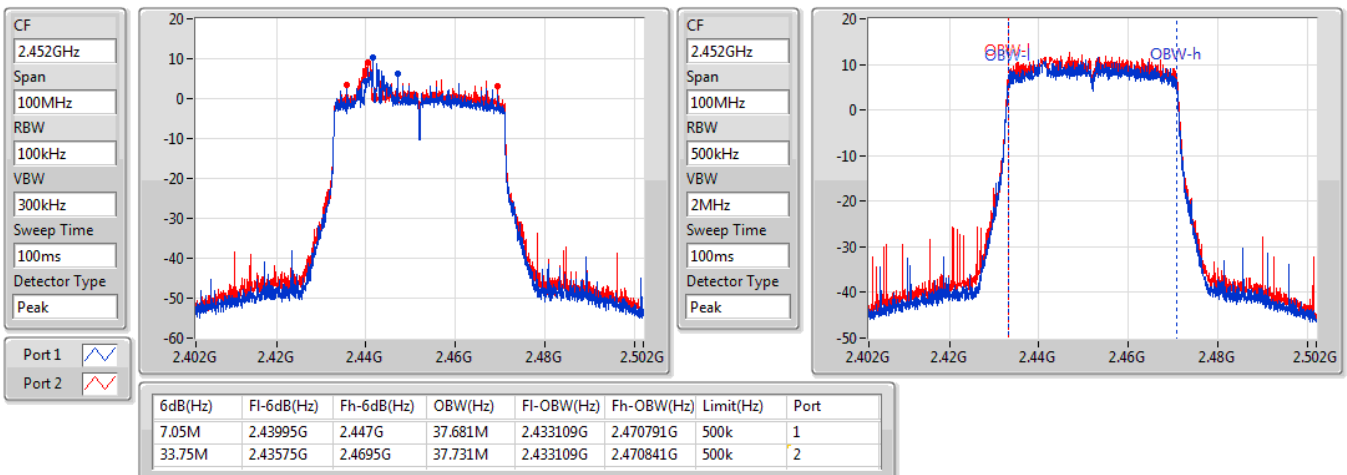


802.11ax HEW40-BF_Nss1,(MCS0)_2TX
EBW
2437MHz

14/01/2021


802.11ax HEW40-BF_Nss1,(MCS0)_2TX
EBW
2452MHz

14/01/2021





Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_2TX	29.82	0.95940
802.11g_Nss1,(6Mbps)_2TX	29.88	0.97275

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	3.27	26.83	25.77	29.34	30.00
2417MHz	Pass	3.27	26.66	26.21	29.45	30.00
2437MHz	Pass	3.27	27.29	26.26	29.82	30.00
2462MHz	Pass	3.27	27.11	26.06	29.63	30.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	3.27	21.92	20.92	24.46	30.00
2417MHz	Pass	3.27	26.23	25.29	28.80	30.00
2437MHz	Pass	3.27	27.31	26.39	29.88	30.00
2457MHz	Pass	3.27	25.19	24.34	27.80	30.00
2462MHz	Pass	3.27	21.24	20.32	23.81	30.00

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



Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	26.59	0.45604
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	25.00	0.31623

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	6.27	20.32	22.14	24.33	29.73
2437MHz	Pass	6.27	23.11	24.01	26.59	29.73
2462MHz	Pass	6.27	20.08	21.17	23.67	29.73
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	6.27	17.33	18.49	20.96	29.73
2427MHz	Pass	6.27	19.38	20.45	22.96	29.73
2437MHz	Pass	6.27	21.47	22.45	25.00	29.73
2447MHz	Pass	6.27	19.27	20.26	22.80	29.73
2452MHz	Pass	6.27	18.25	19.39	21.87	29.73

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

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_2TX	5.21
802.11g_Nss1,(6Mbps)_2TX	0.62

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

Result

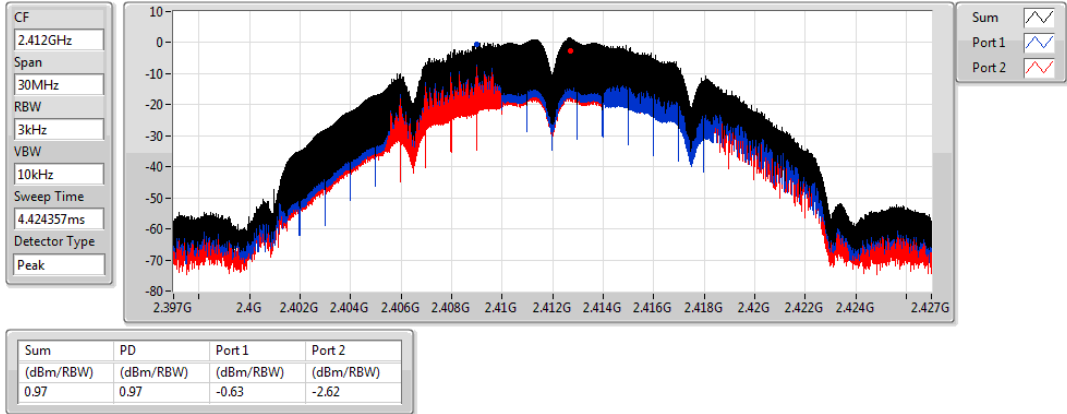
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	6.27	-0.63	-2.62	0.97	7.73
2437MHz	Pass	6.27	-0.98	0.79	2.56	7.73
2462MHz	Pass	6.27	4.38	-1.05	5.21	7.73
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	6.27	-6.44	-7.35	-4.64	7.73
2437MHz	Pass	6.27	-0.78	-2.41	0.62	7.73
2462MHz	Pass	6.27	-7.36	-7.44	-4.81	7.73

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;

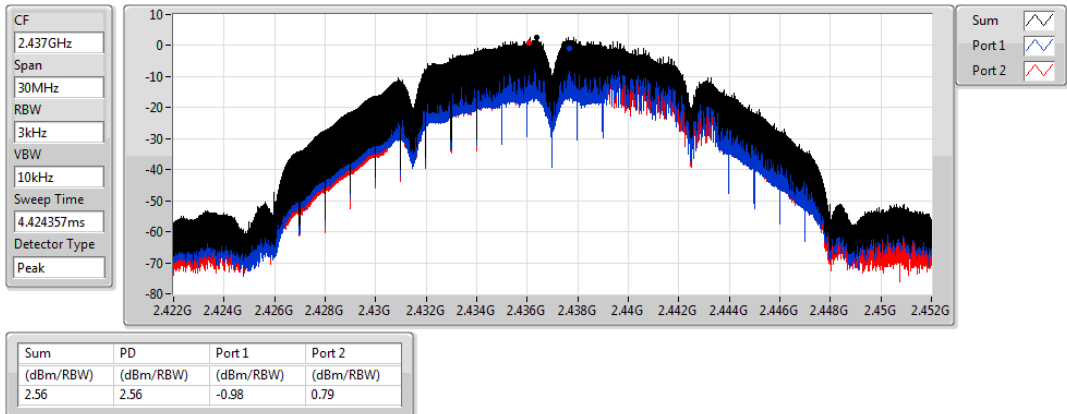
802.11b_Nss1,(1Mbps)_2TX

2412MHz



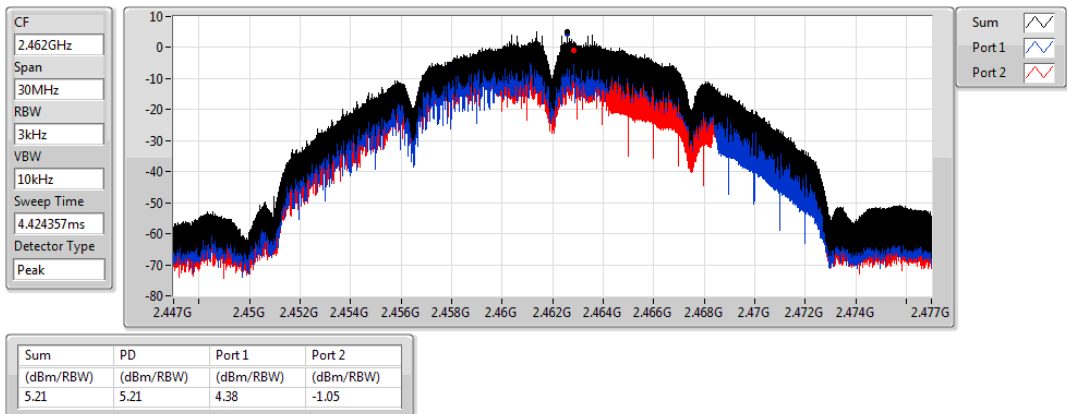
802.11b_Nss1,(1Mbps)_2TX

2437MHz



802.11b_Nss1,(1Mbps)_2TX

2462MHz

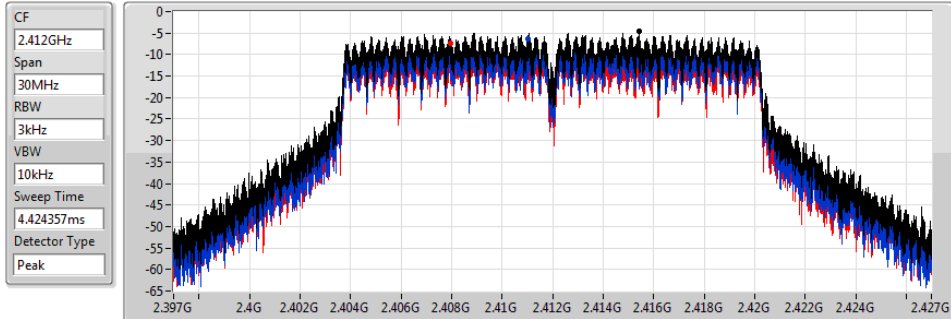


802.11g_Nss1,(6Mbps)_2TX

PSD

2412MHz

13/01/2021



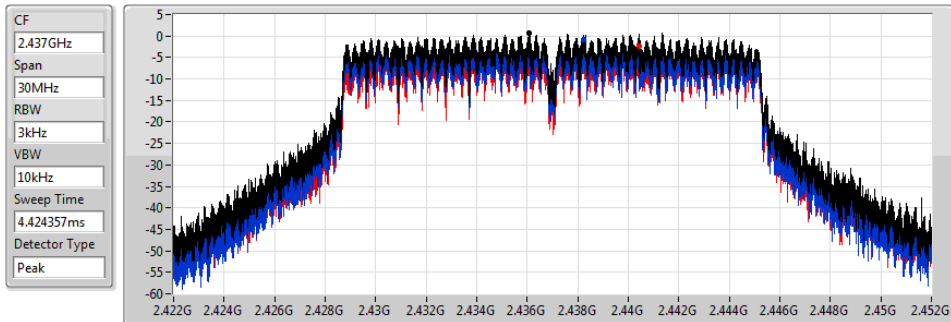
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-4.64	-4.64	-6.44	-7.35

802.11g_Nss1,(6Mbps)_2TX

PSD

2437MHz

13/01/2021



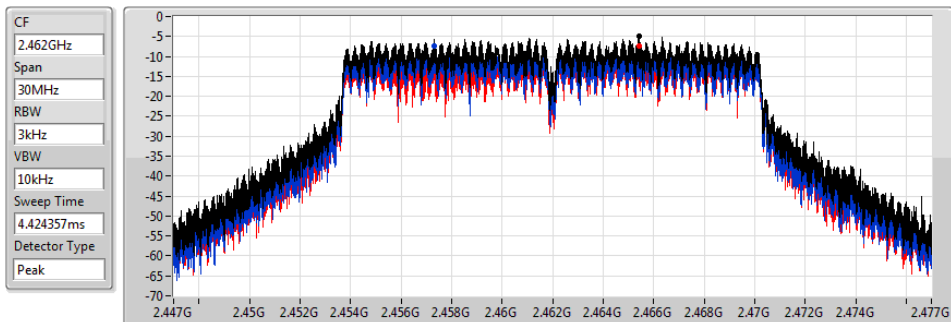
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
0.62	0.62	-0.78	-2.41

802.11g_Nss1,(6Mbps)_2TX

PSD

2462MHz

13/01/2021



Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-4.81	-4.81	-7.36	-7.44

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-0.37
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-2.15

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

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	6.27	-4.25	-4.71	-2.20	7.73
2437MHz	Pass	6.27	-3.11	-1.03	-0.37	7.73
2462MHz	Pass	6.27	-4.88	-5.78	-3.32	7.73
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	6.27	-7.39	-10.89	-7.13	7.73
2437MHz	Pass	6.27	-2.95	-2.46	-2.15	7.73
2452MHz	Pass	6.27	-7.27	-7.90	-6.30	7.73

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

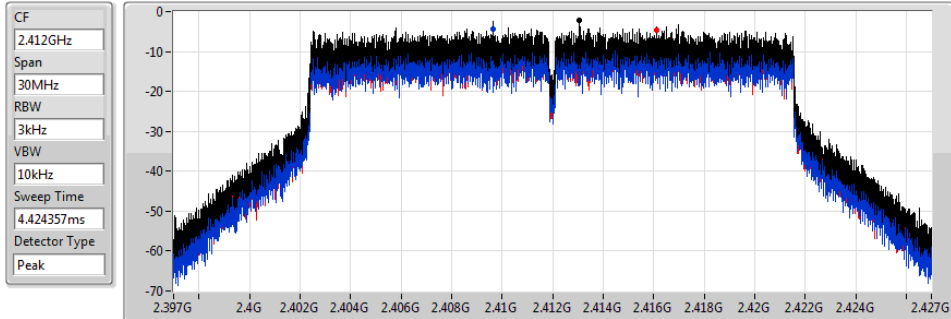
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; **Port X** = Port X power density;

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

PSD

2412MHz

14/01/2021



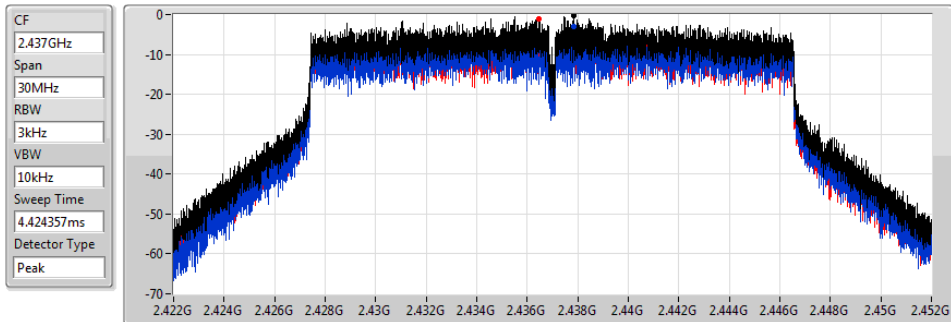
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-2.20	-2.20	-4.25	-4.71

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

PSD

2437MHz

14/01/2021



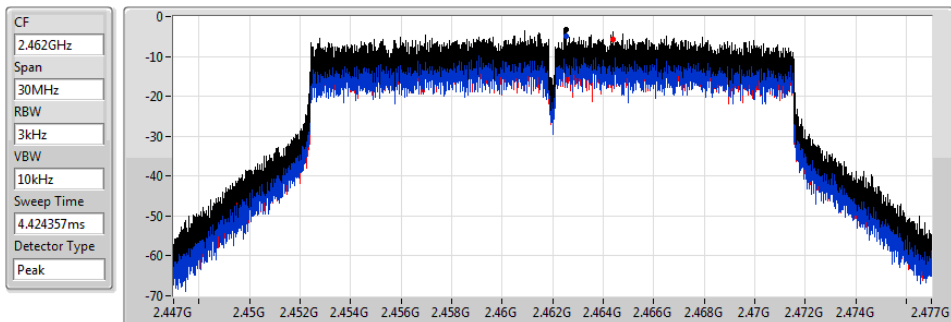
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-0.37	-0.37	-3.11	-1.03

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

PSD

2462MHz

14/01/2021



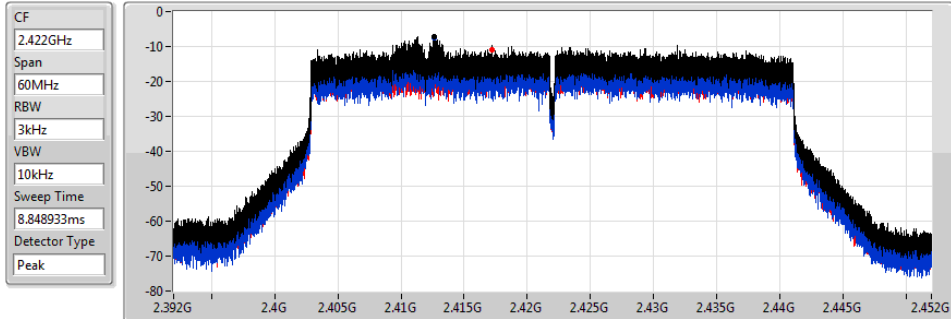
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-3.32	-3.32	-4.88	-5.78

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

PSD

2422MHz

14/01/2021



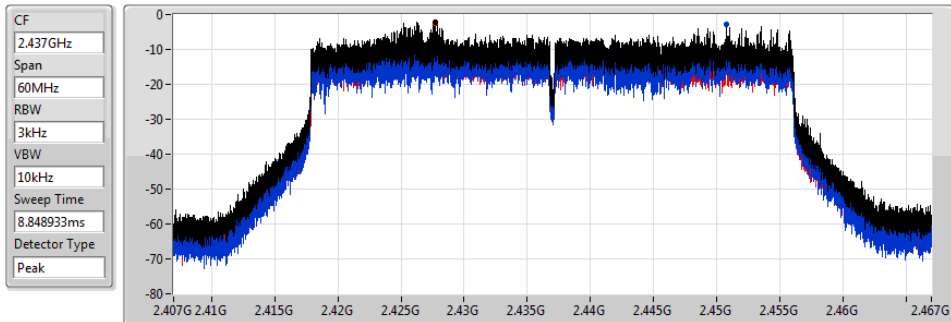
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-7.13	-7.13	-7.39	-10.89

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

PSD

2437MHz

14/01/2021



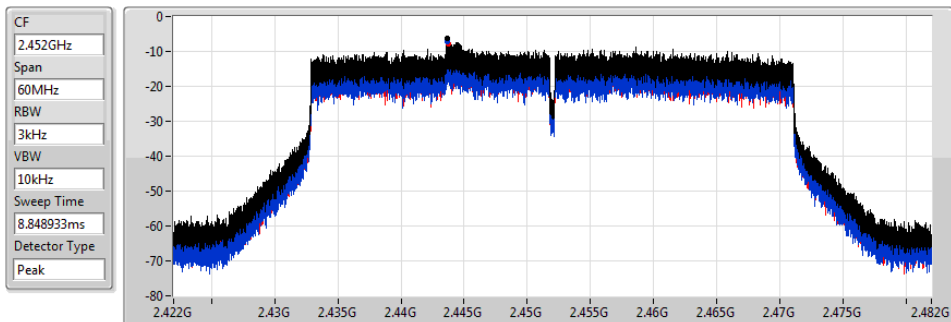
Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-2.15	-2.15	-2.95	-2.46

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

PSD

2452MHz

14/01/2021



Sum	PD	Port 1	Port 2
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-6.30	-6.30	-7.27	-7.90



Summary

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	Pass	2.43749G	17.42	-12.58	2.18117G	-47.32	2.39974G	-35.45	2.4G	-45.58	2.51588G	-45.55	7.23514G	-30.29	1
802.11g_Nss1,(6Mbps)_2TX	Pass	2.44196G	16.55	-13.45	1.88322G	-48.03	2.39988G	-25.46	2.4G	-26.24	2.5005G	-46.27	16.73708G	-40.33	1

Result

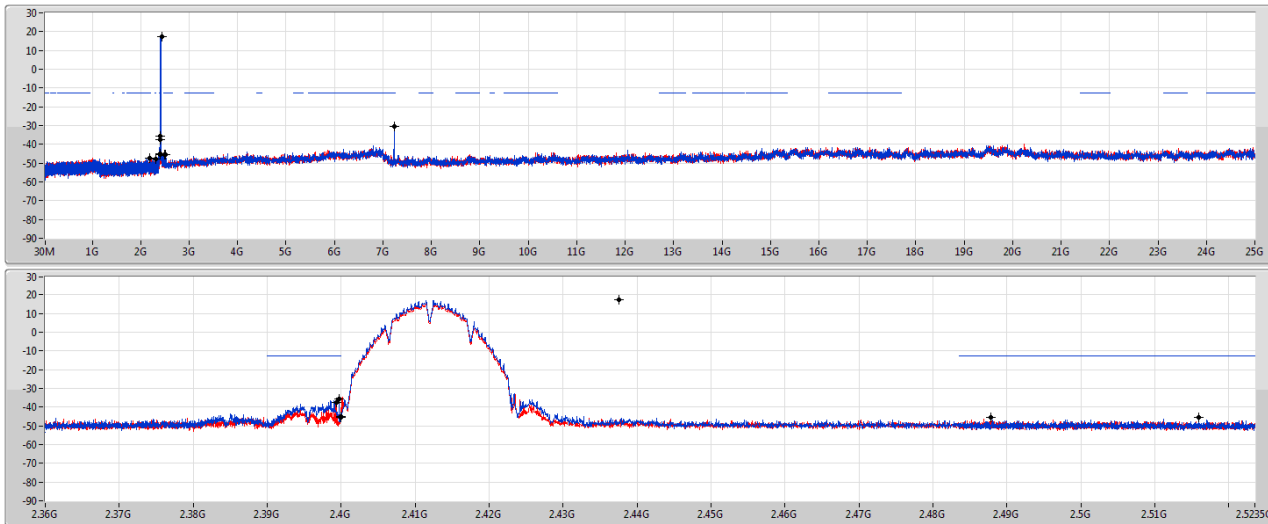
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43749G	17.42	-12.58	2.18117G	-47.32	2.39974G	-35.45	2.4G	-45.58	2.51588G	-45.55	7.23514G	-30.29	1
2412MHz	Pass	2.43749G	17.42	-12.58	2.30874G	-47.70	2.39942G	-37.37	2.4G	-45.11	2.48786G	-45.67	7.23514G	-30.51	2
2437MHz	Pass	2.43749G	17.42	-12.58	1.88643G	-47.23	2.39198G	-46.55	2.4G	-46.18	2.49182G	-46.54	6.54398G	-41.45	1
2437MHz	Pass	2.43749G	17.42	-12.58	2.11681G	-46.86	2.39198G	-46.56	2.4835G	-49.84	2.51774G	-46.40	24.50271G	-41.34	2
2462MHz	Pass	2.43749G	17.42	-12.58	881.62M	-47.20	2.39538G	-45.50	2.4G	-49.12	2.49278G	-45.57	24.48304G	-40.69	1
2462MHz	Pass	2.43749G	17.42	-12.58	358.53M	-47.99	2.39152G	-46.77	2.4835G	-49.41	2.48462G	-45.90	15.24801G	-41.06	2
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.44196G	16.55	-13.45	1.88322G	-48.03	2.39988G	-25.46	2.4G	-26.24	2.5005G	-46.27	16.73708G	-40.33	1
2412MHz	Pass	2.44196G	16.55	-13.45	934.04M	-47.00	2.39974G	-26.29	2.4G	-27.76	2.48582G	-46.10	15.23115G	-40.49	2
2437MHz	Pass	2.44196G	16.55	-13.45	942.78M	-47.99	2.39544G	-44.07	2.4G	-46.19	2.49382G	-45.14	6.6367G	-41.47	1
2437MHz	Pass	2.44196G	16.55	-13.45	537.65M	-47.92	2.3979G	-44.41	2.4G	-45.81	2.51398G	-44.46	21.52176G	-41.24	2
2462MHz	Pass	2.44196G	16.55	-13.45	2.09991G	-48.24	2.39864G	-47.39	2.4835G	-47.12	2.48636G	-44.11	16.24259G	-41.62	1
2462MHz	Pass	2.44196G	16.55	-13.45	899.96M	-46.97	2.397G	-47.15	2.4835G	-45.58	2.48386G	-43.67	17.18099G	-41.09	2

802.11b_Nss1,(1Mbps)_2TX

2412MHz

CSE NdB

13/01/2021



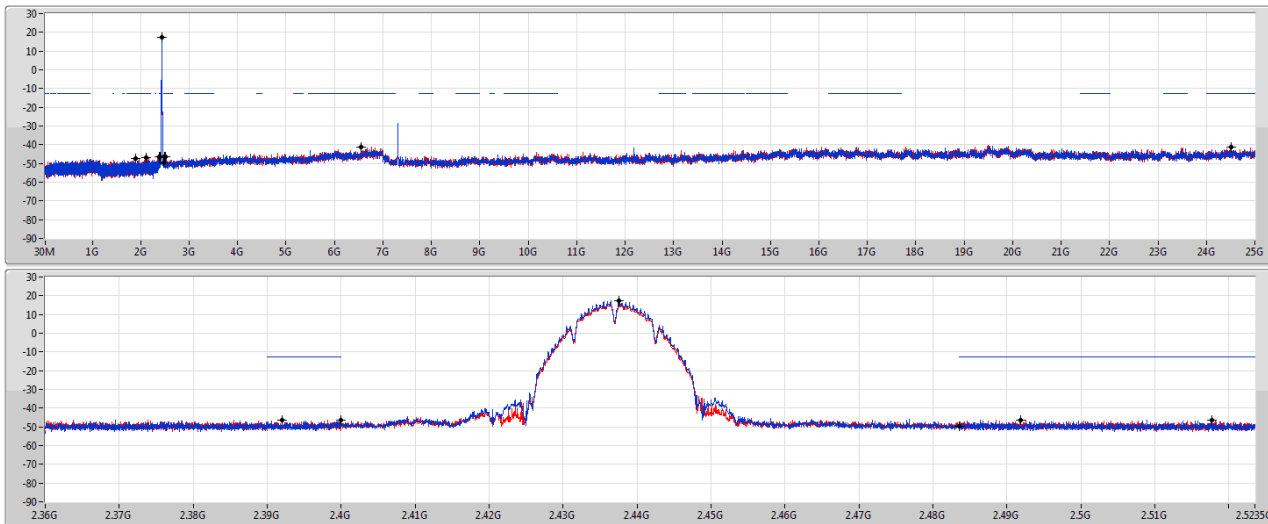
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43749G	17.42	-12.58	2.18117G	-47.32	2.39974G	-35.45	2.4G	-45.58	2.51588G	-45.55	7.23514G	-30.29	1
2.43749G	17.42	-12.58	2.30874G	-47.70	2.39942G	-37.37	2.4G	-45.11	2.48786G	-45.67	7.23514G	-30.51	2

802.11b_Nss1,(1Mbps)_2TX

2437MHz

CSE NdB

13/01/2021



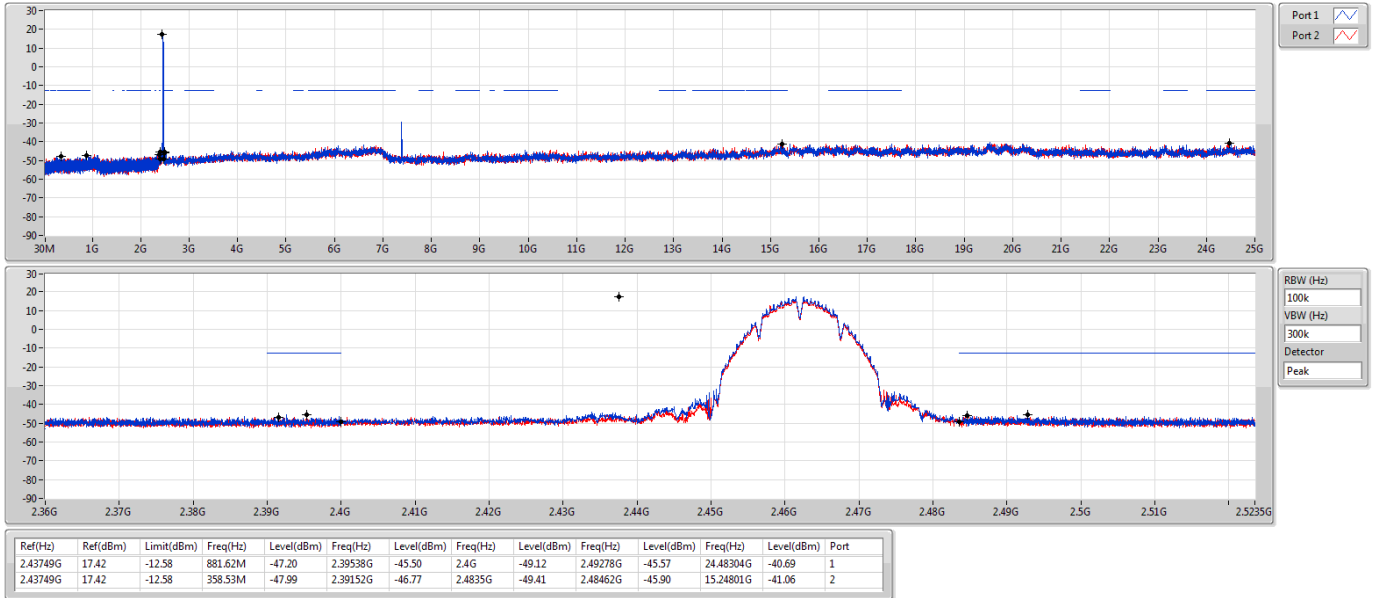
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43749G	17.42	-12.58	1.88643G	-47.23	2.39198G	-46.55	2.4G	-46.18	2.49182G	-46.54	6.54398G	-41.45	1
2.43749G	17.42	-12.58	2.11681G	-46.86	2.39198G	-46.56	2.4835G	-49.84	2.51774G	-46.40	24.50271G	-41.34	2

802.11b_Nss1,(1Mbps)_2TX

2462MHz

CSE NdB

13/01/2021

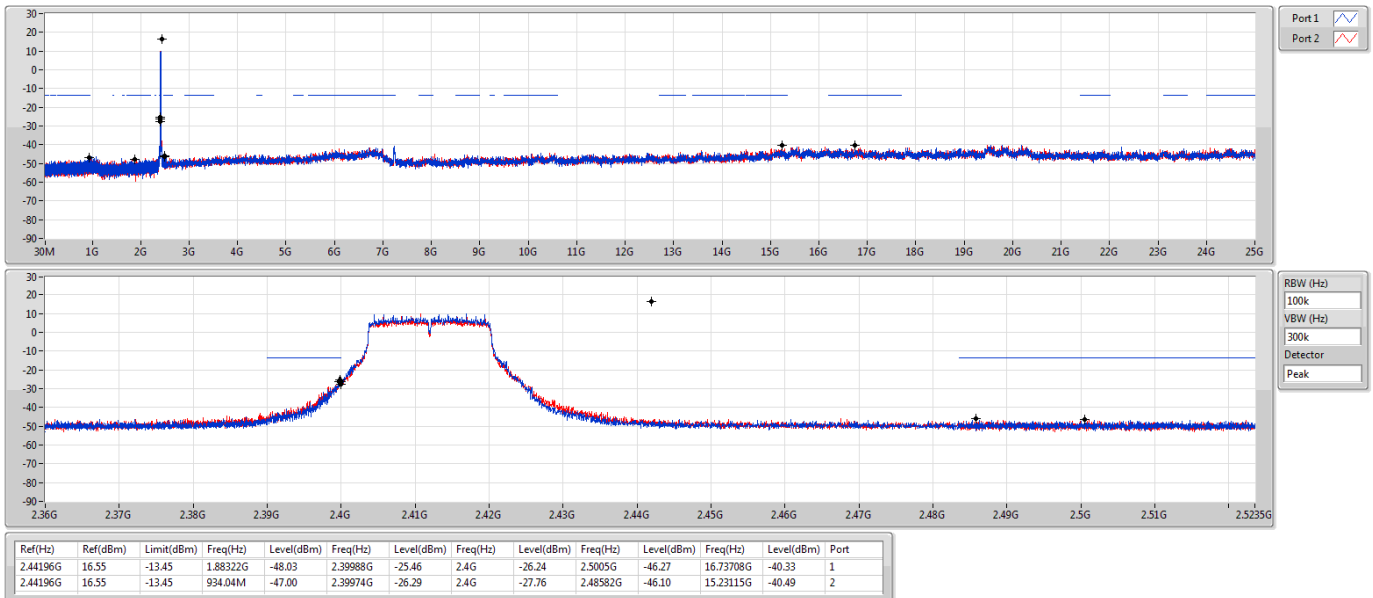


802.11g_Nss1,(6Mbps)_2TX

2412MHz

CSE NdB

13/01/2021

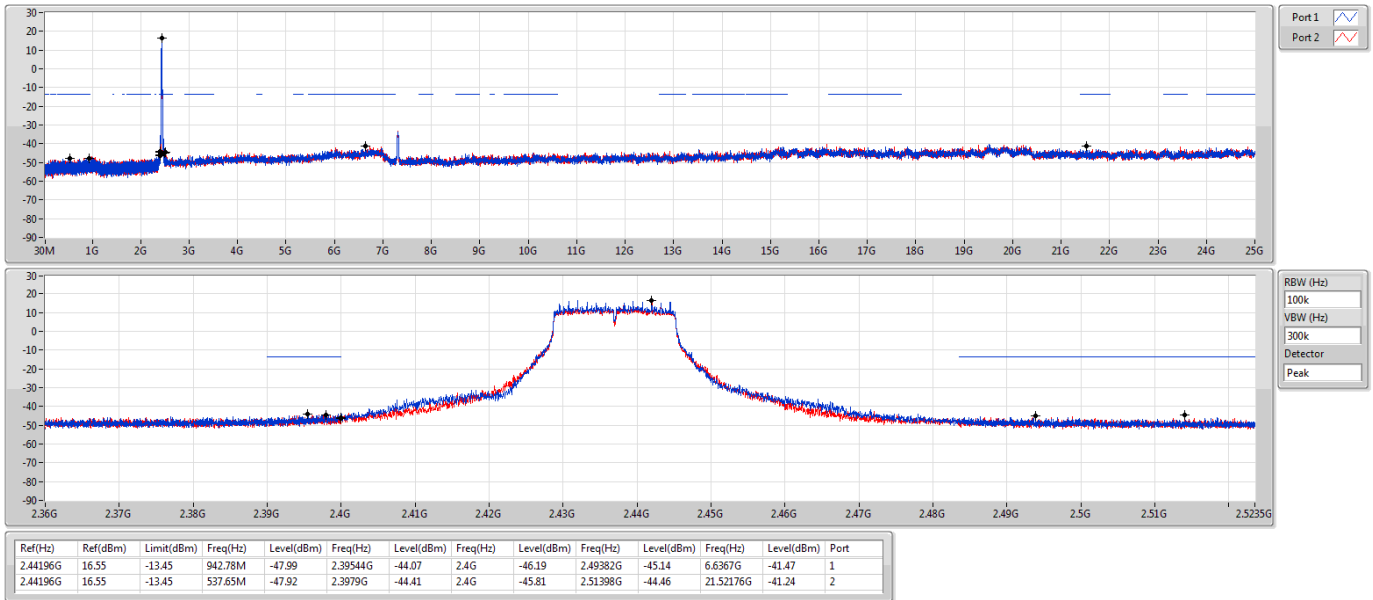


802.11g_Nss1,(6Mbps)_2TX

2437MHz

CSE NdB

13/01/2021

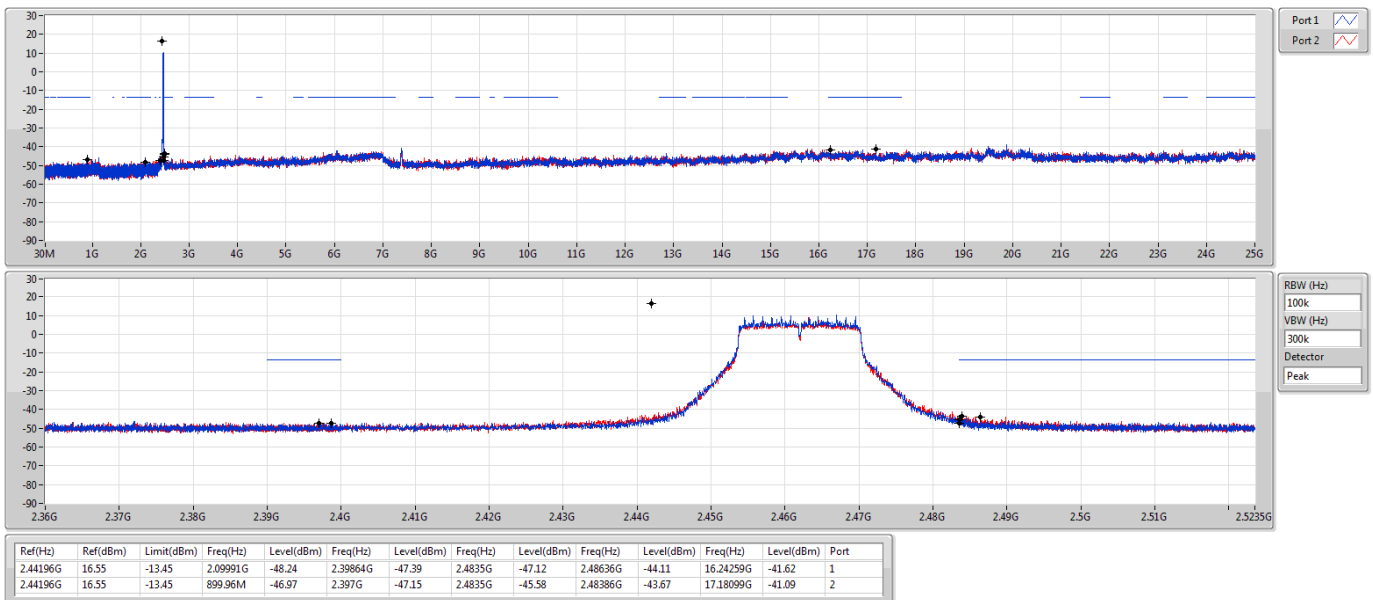


802.11g_Nss1,(6Mbps)_2TX

2462MHz

CSE NdB

13/01/2021





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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	Pass	2.43549G	13.85	-16.15	1.76672G	-48.72	2.4G	-19.74	2.4G	-22.45	2.51714G	-46.77	7.22952G	-39.13	2
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	Pass	2.42801G	12.50	-17.50	2.08384G	-48.74	2.4G	-29.27	2.4G	-44.78	2.4869G	-40.53	24.4447G	-42.20	2

Result

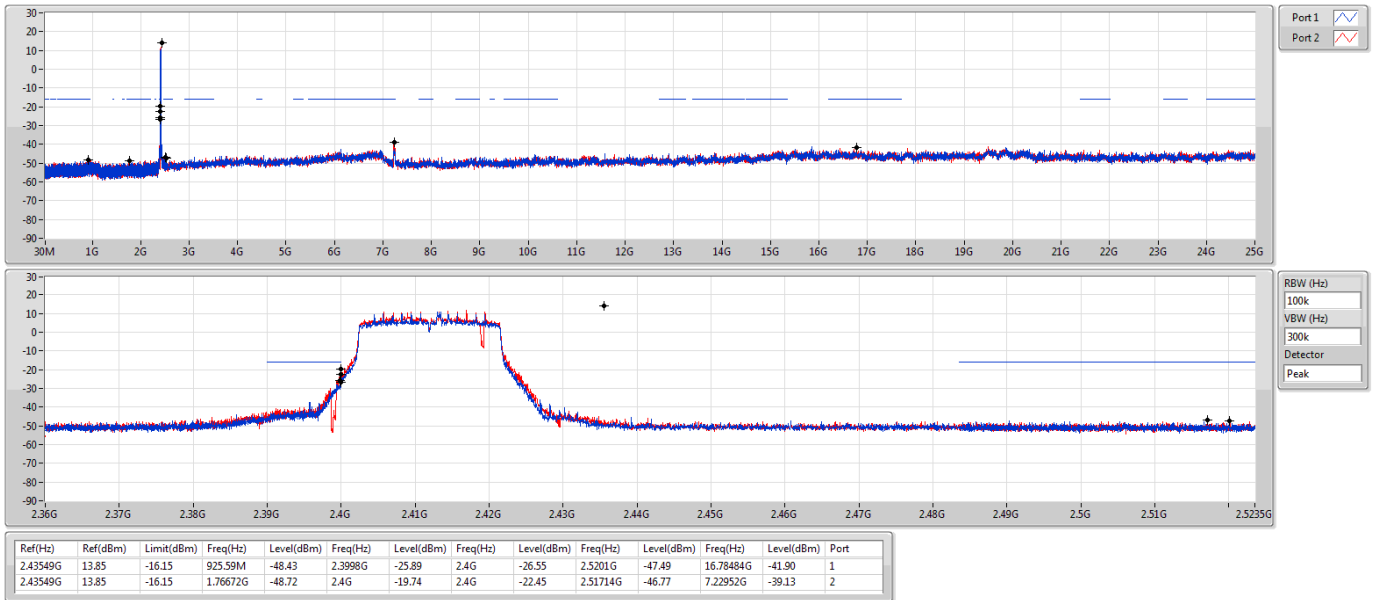
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11ax HEW20-BF_Nss1.(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43549G	13.85	-16.15	925.59M	-48.43	2.3998G	-25.89	2.4G	-26.55	2.5201G	-47.49	16.78484G	-41.90	1
2412MHz	Pass	2.43549G	13.85	-16.15	1.76672G	-48.72	2.4G	-19.74	2.4G	-22.45	2.51714G	-46.77	7.22952G	-39.13	2
2437MHz	Pass	2.43549G	13.85	-16.15	32.04M	-45.05	2.3965G	-46.47	2.4835G	-49.28	2.48628G	-46.88	24.48866G	-42.61	1
2437MHz	Pass	2.43549G	13.85	-16.15	32.04M	-45.73	2.39902G	-46.91	2.4G	-48.02	2.50318G	-46.29	16.42241G	-41.86	2
2462MHz	Pass	2.43549G	13.85	-16.15	951.81M	-48.78	2.39984G	-47.64	2.4835G	-48.26	2.48422G	-46.10	24.34537G	-42.46	1
2462MHz	Pass	2.43549G	13.85	-16.15	751.72M	-47.66	2.39562G	-47.58	2.4835G	-48.18	2.48408G	-45.26	16.20888G	-42.46	2
802.11ax HEW40-BF_Nss1.(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.42801G	12.50	-17.50	1.89349G	-48.99	2.39976G	-32.53	2.4G	-34.09	2.5013G	-45.70	16.26659G	-42.11	1
2422MHz	Pass	2.42801G	12.50	-17.50	742.76M	-48.53	2.4G	-31.81	2.4G	-32.13	2.4849G	-47.24	6.90496G	-41.64	2
2437MHz	Pass	2.42801G	12.50	-17.50	2.16399G	-48.14	2.39948G	-41.73	2.4G	-47.15	2.48502G	-46.18	16.73495G	-42.11	1
2437MHz	Pass	2.42801G	12.50	-17.50	2.08384G	-48.74	2.4G	-29.27	2.4G	-44.78	2.4869G	-40.53	24.4447G	-42.20	2
2452MHz	Pass	2.42801G	12.50	-17.50	675.49M	-48.25	2.39872G	-45.36	2.4835G	-48.56	2.48446G	-41.02	21.81402G	-42.62	1
2452MHz	Pass	2.42801G	12.50	-17.50	2.07783G	-49.30	2.39376G	-41.76	2.4835G	-45.76	2.48942G	-37.70	24.70272G	-42.30	2

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

CSE NdB

2412MHz

14/01/2021

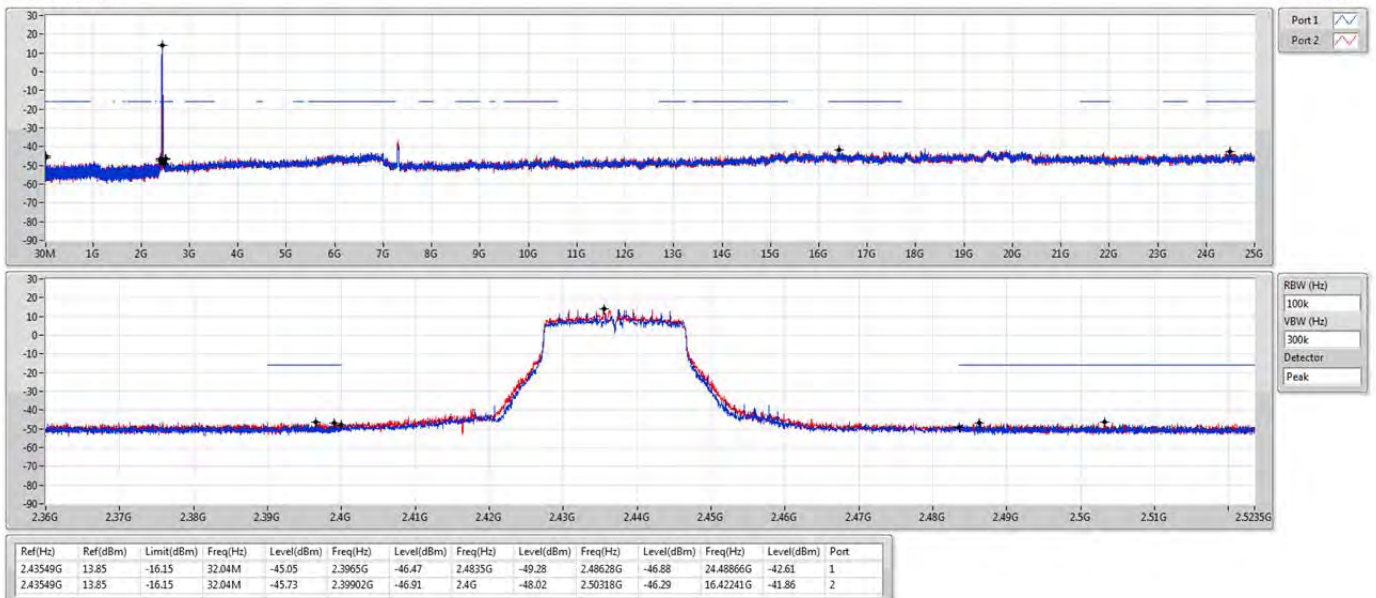


802.11ax HEW20-BF_Nss1,(MCS0)_2TX

CSE NdB

2437MHz

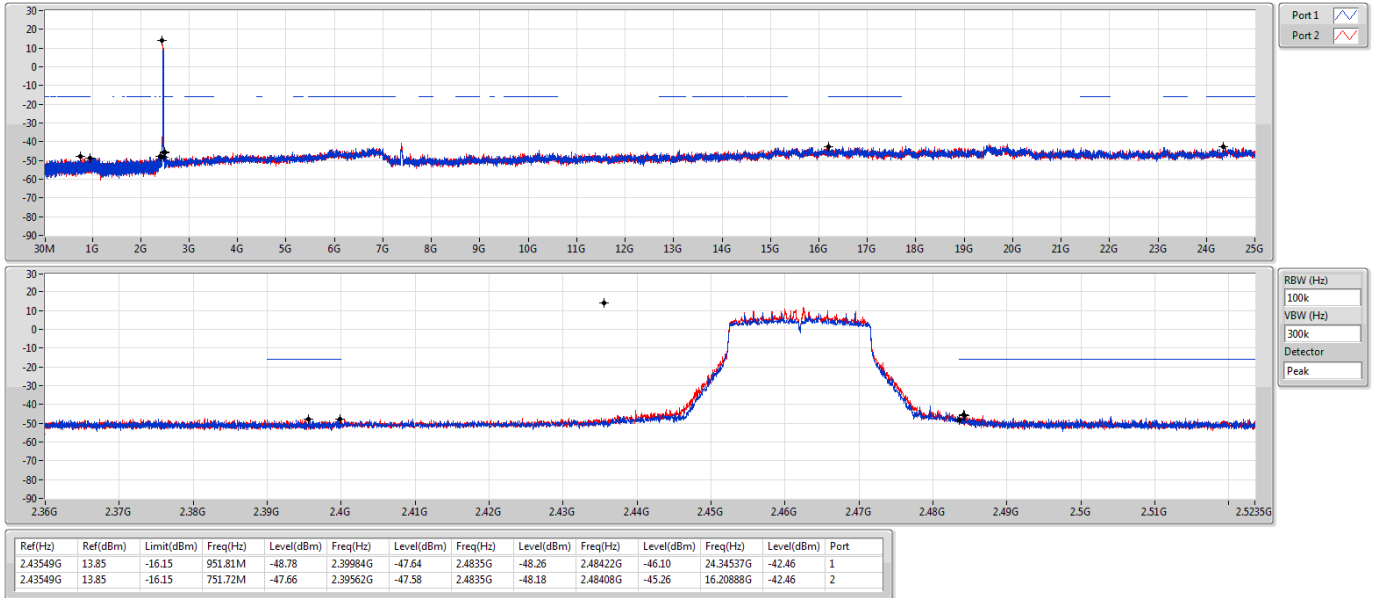
14/01/2021



802.11ax HEW20-BF_Nss1,(MCS0)_2TX

CSE NdB

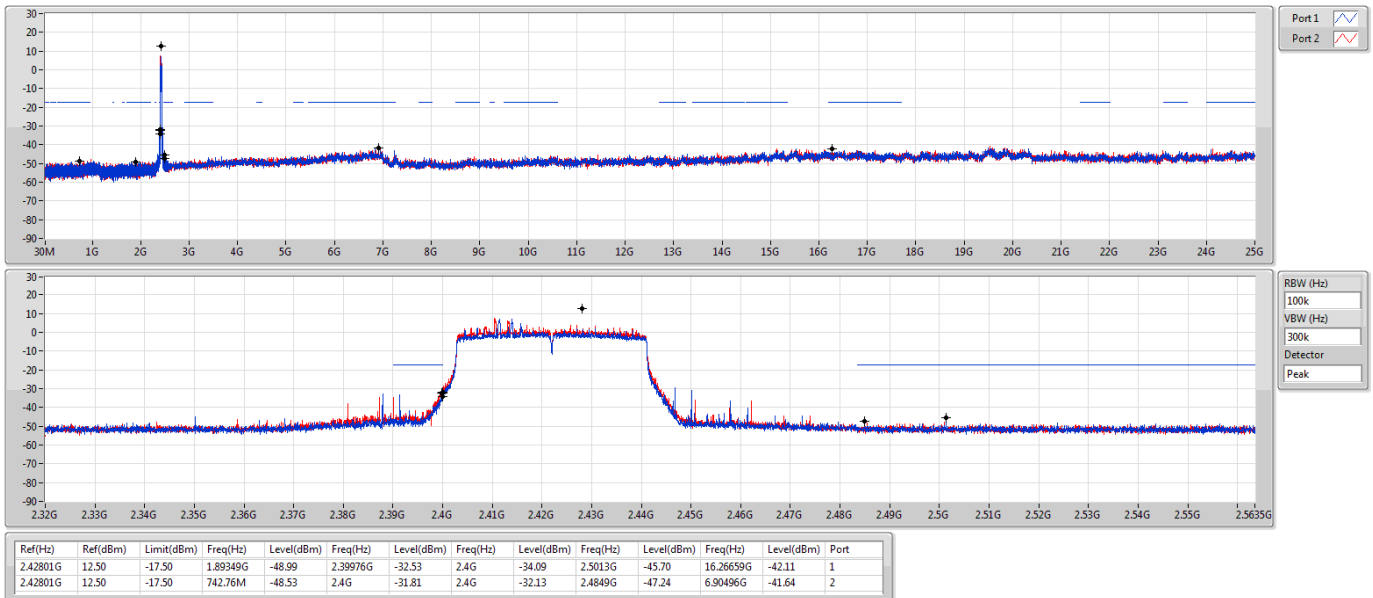
2462MHz



802.11ax HEW40-BF_Nss1,(MCS0)_2TX

CSE NdB

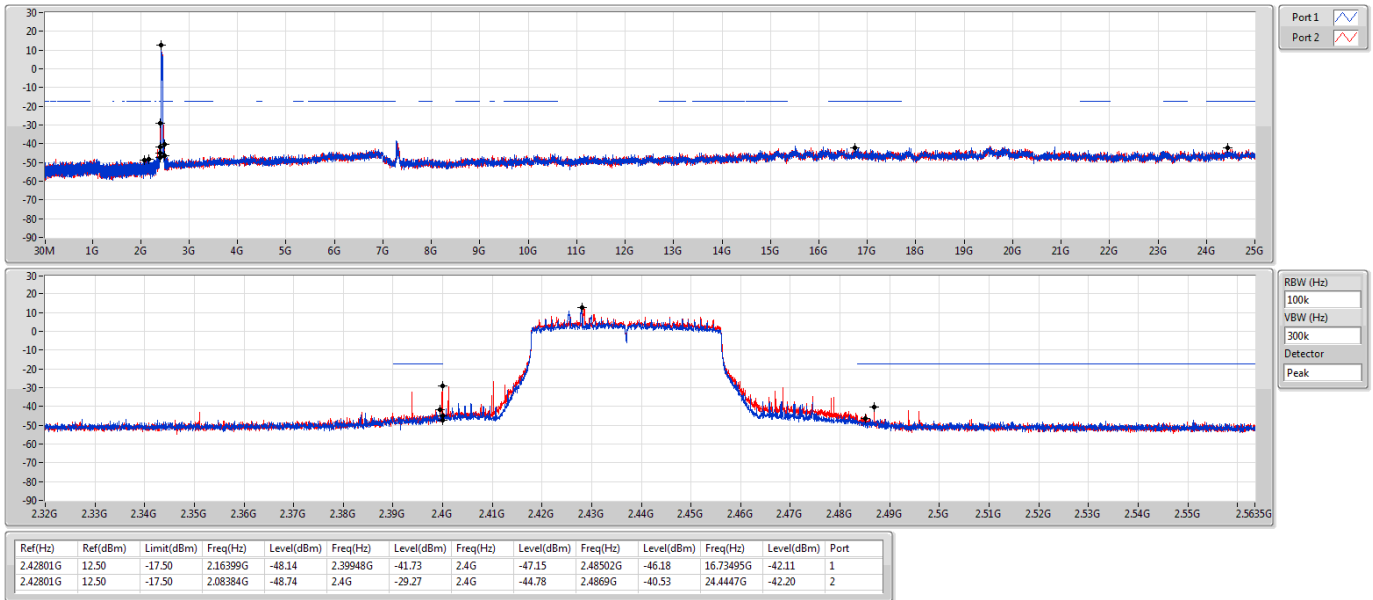
2422MHz



802.11ax HEW40-BF_Nss1,(MCS0)_2TX

2437MHz

CSE NdB



802.11ax HEW40-BF_Nss1,(MCS0)_2TX

2452MHz

CSE NdB





Radiated Emissions below 1GHz

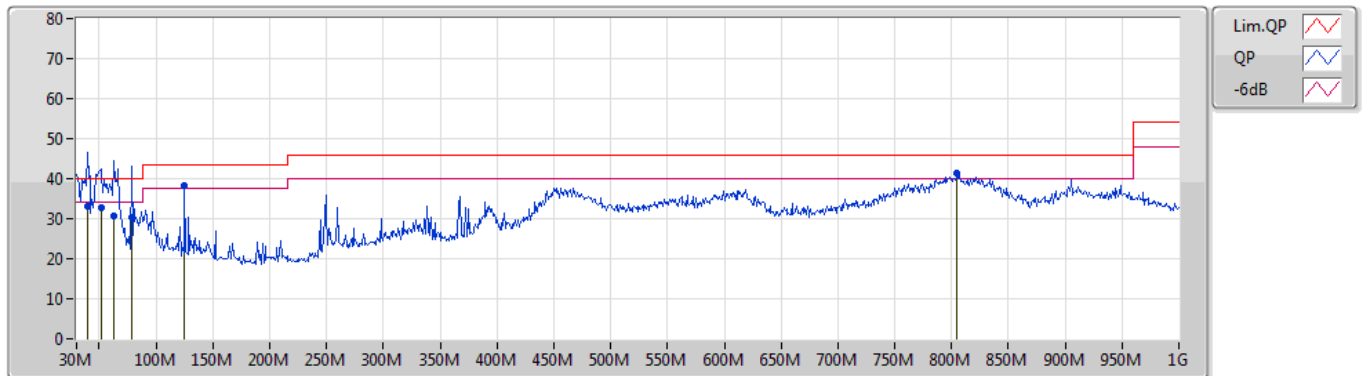
Appendix F.1

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	QP	30M	35.98	40.00	-4.02	Horizontal

Mode 1

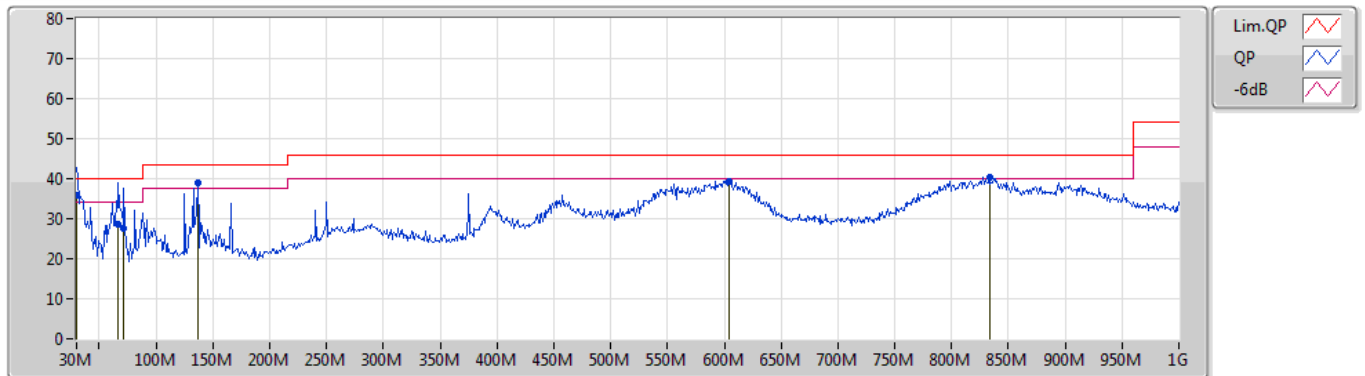
08/03/2021



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)
QP	39.7M	33.18	40.00	-6.82	-8.92	3	Vertical	119	1.25	-	42.10	19.27	0.29	28.48
QP	51.34M	32.71	40.00	-7.29	-14.49	3	Vertical	322	1.25	-	47.20	13.60	0.40	28.49
QP	62.98M	30.72	40.00	-9.28	-15.98	3	Vertical	111	1.25	-	46.70	12.00	0.50	28.48
QP	78.5M	30.34	40.00	-9.66	-15.26	3	Vertical	346	1.25	-	45.60	12.62	0.60	28.48
PK	125.06M	38.32	43.50	-5.18	-9.56	3	Vertical	175	1.00	-	47.88	17.83	0.95	28.34
PK	805.03M	41.34	46.00	-4.66	-0.68	3	Vertical	111	1.25	"Worst"	42.02	25.15	3.22	29.05

Mode 1

08/03/2021



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	30M	35.98	40.00	-4.02	-4.62	3	Horizontal	109	1.00	"Worst"	40.60	23.67	0.20	28.49
QP	66.86M	28.52	40.00	-11.48	-15.98	3	Horizontal	199	3.00	-	44.50	11.96	0.54	28.48
QP	71.71M	27.50	40.00	-12.50	-15.70	3	Horizontal	84	3.00	-	43.20	12.18	0.60	28.48
PK	136.7M	38.96	43.50	-4.54	-10.02	3	Horizontal	231	2.00	-	48.98	17.21	1.07	28.30
PK	604.24M	39.47	46.00	-6.53	-2.59	3	Horizontal	360	1.50	-	42.06	24.01	2.72	29.32
PK	833.16M	40.47	46.00	-5.53	-0.14	3	Horizontal	225	1.00	-	40.61	25.50	3.33	28.97



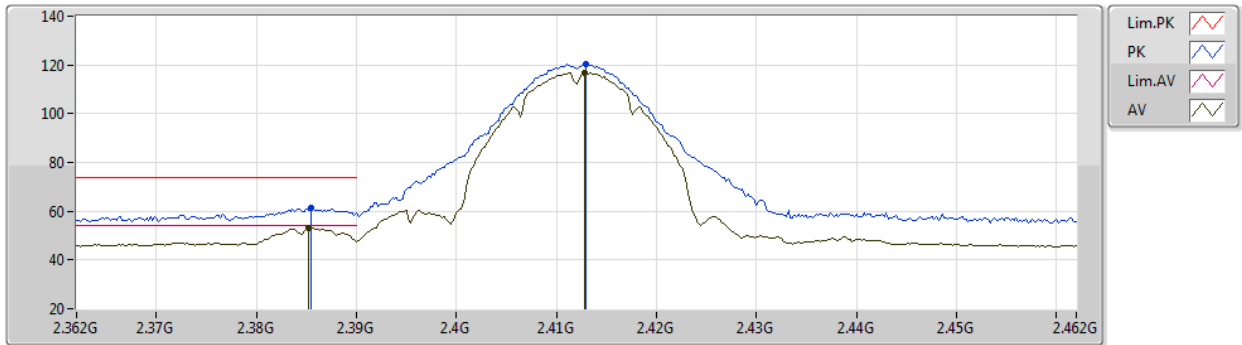
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	Pass	AV	2.3852G	52.98	54.00	-1.02	3	Vertical	86	1.70	-

802.11b_Nss1,(1Mbps)_2TX

28/12/2020

2412MHz_TX



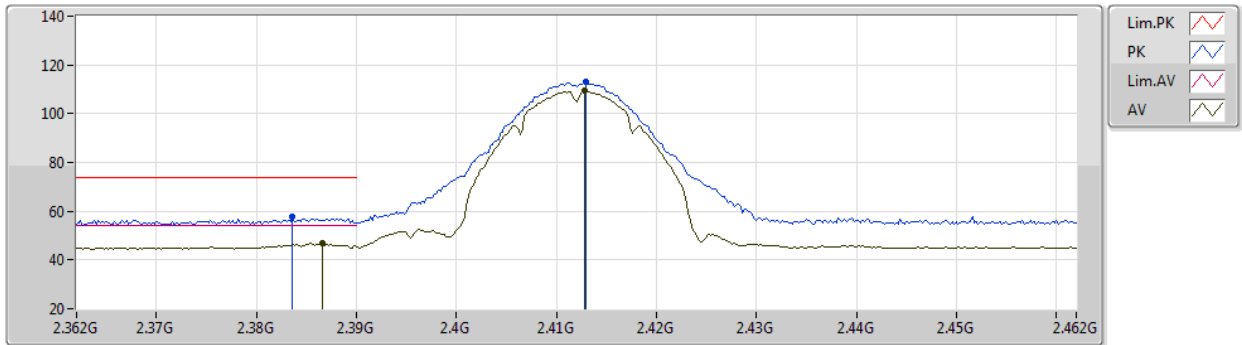
EUT Y_2TX
Setting 26
03-C-C-4

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	61.35	74.00	-12.65	29.76	3	Vertical	86	1.70	-	28.10	3.49	-
AV	2.3852G	52.98	54.00	-1.02	21.39	3	Vertical	86	1.70	-	28.10	3.49	-
PK	2.413G	120.51	Inf	-Inf	88.87	3	Vertical	86	1.70	-	28.13	3.51	-
AV	2.4128G	116.77	Inf	-Inf	85.13	3	Vertical	86	1.70	-	28.13	3.51	-

802.11b_Nss1,(1Mbps)_2TX

28/12/2020

2412MHz_TX



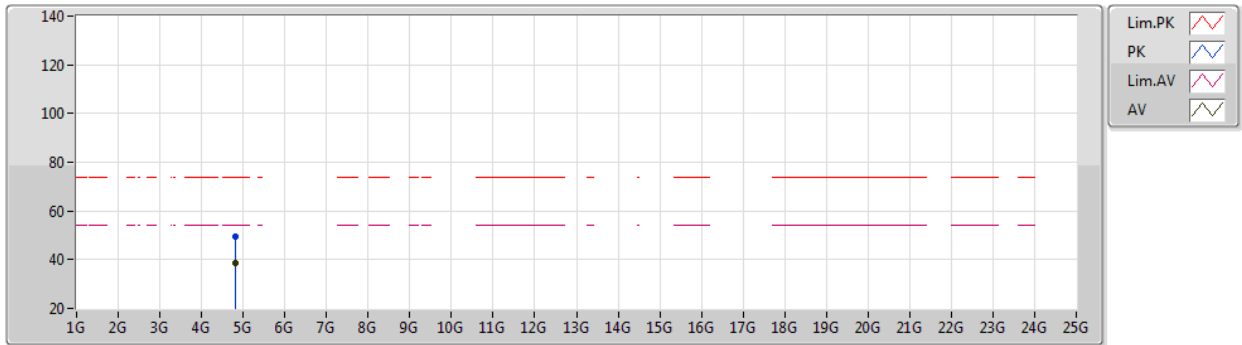
EUT Y_2TX
Setting 26
03-C-C-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3836G	57.56	74.00	-16.44	25.98	3	Horizontal	222	1.80	-	28.10	3.48	-
AV	2.3866G	46.88	54.00	-7.12	15.29	3	Horizontal	222	1.80	-	28.10	3.49	-
PK	2.413G	112.94	Inf	-Inf	81.30	3	Horizontal	222	1.80	-	28.13	3.51	-
AV	2.4128G	109.28	Inf	-Inf	77.64	3	Horizontal	222	1.80	-	28.13	3.51	-

802.11b_Nss1,(1Mbps)_2TX

28/12/2020

2412MHz_TX



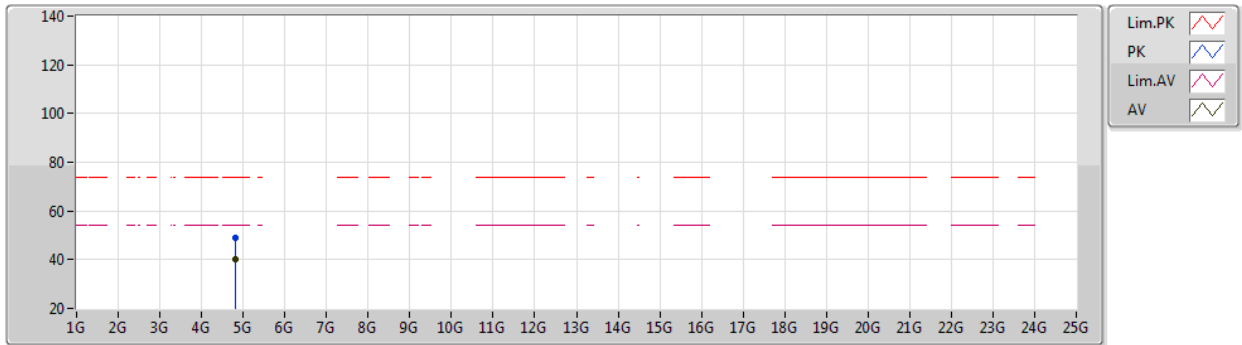
EUT Y_2TX
Setting 26
03-C-C-4

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	4.82386G	49.30	74.00	-24.70	45.06	3	Vertical	249	1.71	-	33.30	6.24	35.30
AV	4.82404G	38.38	54.00	-15.62	34.14	3	Vertical	249	1.71	-	33.30	6.24	35.30

802.11b_Nss1,(1Mbps)_2TX

28/12/2020

2412MHz_TX



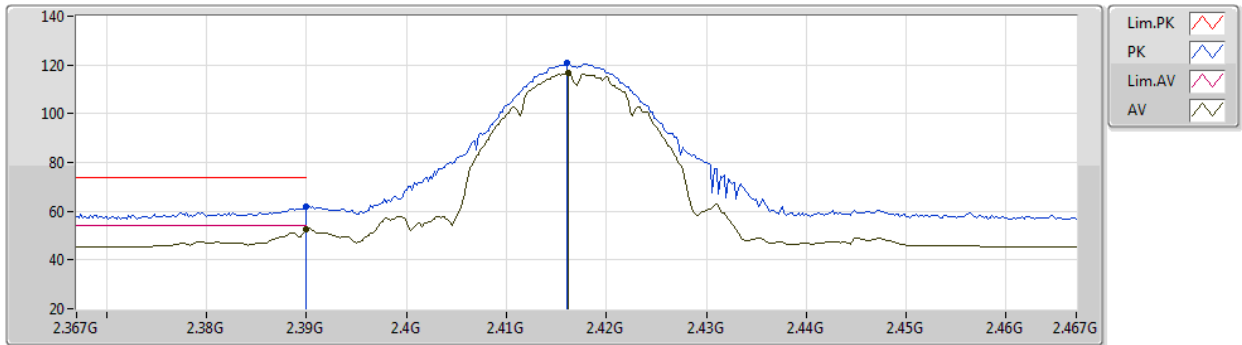
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Setting 26
03-C-C-4

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	4.82361G	48.73	74.00	-25.27	44.50	3	Horizontal	115	2.35	-	33.29	6.24	35.30
AV	4.82391G	40.38	54.00	-13.62	36.14	3	Horizontal	115	2.35	-	33.30	6.24	35.30

802.11b_Nss1,(1Mbps)_2TX

29/12/2020

2417MHz_TX



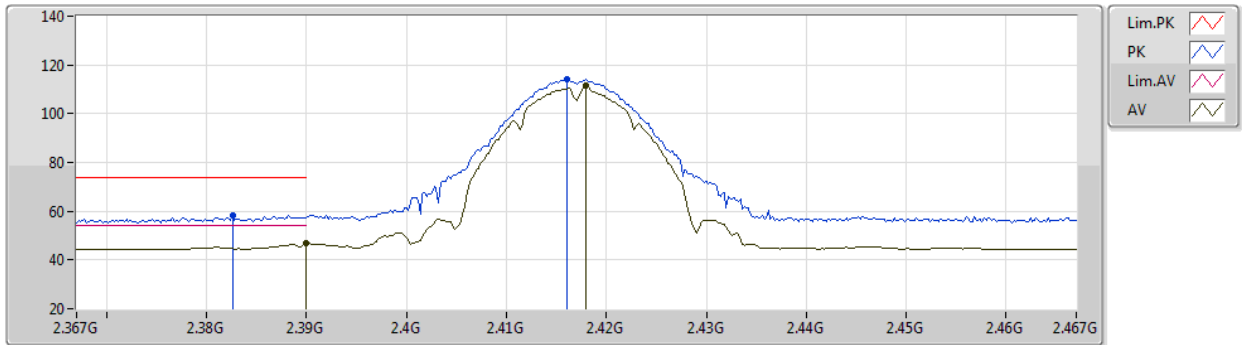
EUT Y_2TX
Setting 26.5
03-C-K-4

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	61.65	74.00	-12.35	30.06	3	Vertical	101	1.79	-	28.10	3.49	-
AV	2.39G	52.63	54.00	-1.37	21.04	3	Vertical	101	1.79	-	28.10	3.49	-
PK	2.416G	120.67	Inf	-Inf	89.02	3	Vertical	101	1.79	-	28.13	3.52	-
AV	2.4162G	116.65	Inf	-Inf	85.00	3	Vertical	101	1.79	-	28.13	3.52	-

802.11b_Nss1,(1Mbps)_2TX

29/12/2020

2417MHz_TX



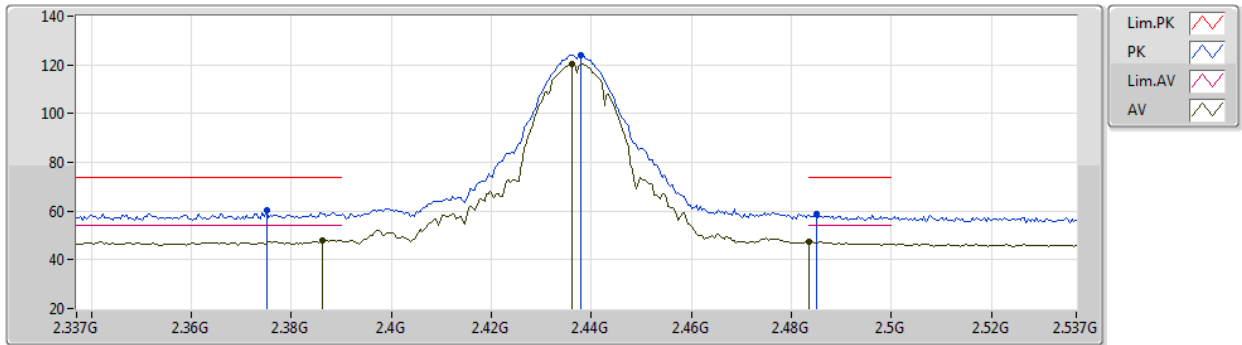
EUT Y_2TX
Setting 26.5
03-C-K-4

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	2.3826G	58.29	74.00	-15.71	26.71	3	Horizontal	222	1.80	-	28.10	3.48	-
AV	2.39G	46.68	54.00	-7.32	15.09	3	Horizontal	222	1.80	-	28.10	3.49	-
PK	2.416G	114.24	Inf	-Inf	82.59	3	Horizontal	222	1.80	-	28.13	3.52	-
AV	2.418G	111.38	Inf	-Inf	79.72	3	Horizontal	222	1.80	-	28.14	3.52	-

802.11b_Nss1,(1Mbps)_2TX

28/12/2020

2437MHz_TX



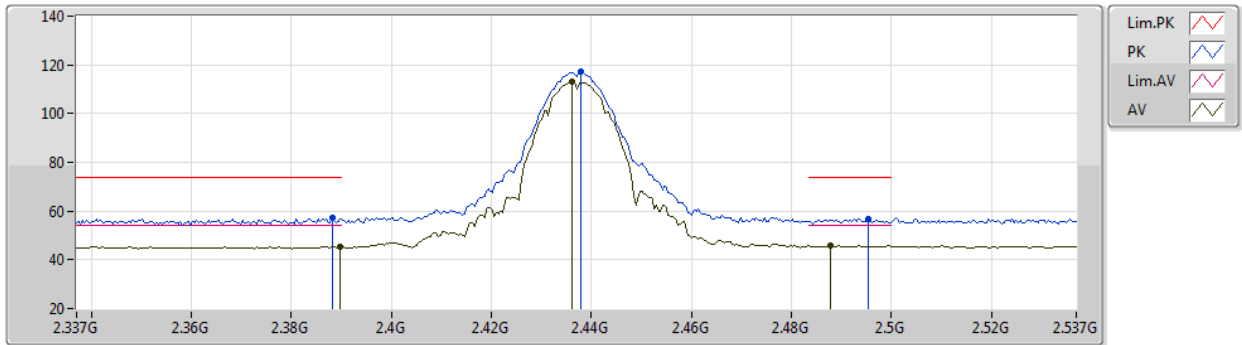
EUT Y_2TX
Setting 30
03-C-C-4

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	2.375G	60.15	74.00	-13.85	28.57	3	Vertical	90	1.80	-	28.10	3.48	-
AV	2.3862G	47.97	54.00	-6.03	16.38	3	Vertical	90	1.80	-	28.10	3.49	-
PK	2.4378G	124.12	Inf	-Inf	92.40	3	Vertical	90	1.80	-	28.18	3.54	-
AV	2.4362G	120.48	Inf	-Inf	88.77	3	Vertical	90	1.80	-	28.17	3.54	-
PK	2.485G	58.60	74.00	-15.40	26.60	3	Vertical	90	1.80	-	28.41	3.59	-
AV	2.4835G	47.65	54.00	-6.35	15.67	3	Vertical	90	1.80	-	28.40	3.58	-

802.11b_Nss1,(1Mbps)_2TX

28/12/2020

2437MHz_TX



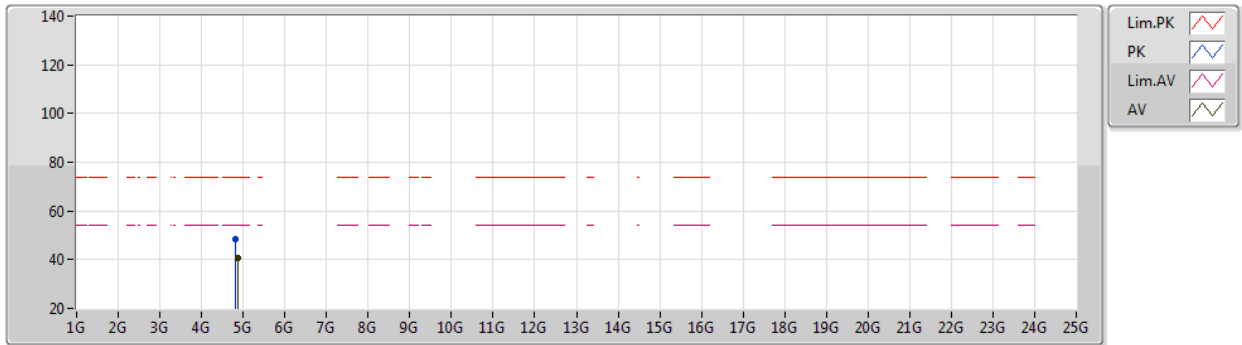
EUT Y_2TX
Setting 30
03-C-C-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3882G	57.01	74.00	-16.99	25.42	3	Horizontal	154	1.80	-	28.10	3.49	-
AV	2.3898G	45.43	54.00	-8.57	13.84	3	Horizontal	154	1.80	-	28.10	3.49	-
PK	2.4378G	116.99	Inf	-Inf	85.27	3	Horizontal	154	1.80	-	28.18	3.54	-
AV	2.4362G	113.34	Inf	-Inf	81.63	3	Horizontal	154	1.80	-	28.17	3.54	-
PK	2.4954G	56.78	74.00	-17.22	24.71	3	Horizontal	154	1.80	-	28.47	3.60	-
AV	2.4878G	45.76	54.00	-8.24	13.74	3	Horizontal	154	1.80	-	28.43	3.59	-

802.11b_Nss1,(1Mbps)_2TX

28/12/2020

2437MHz_TX



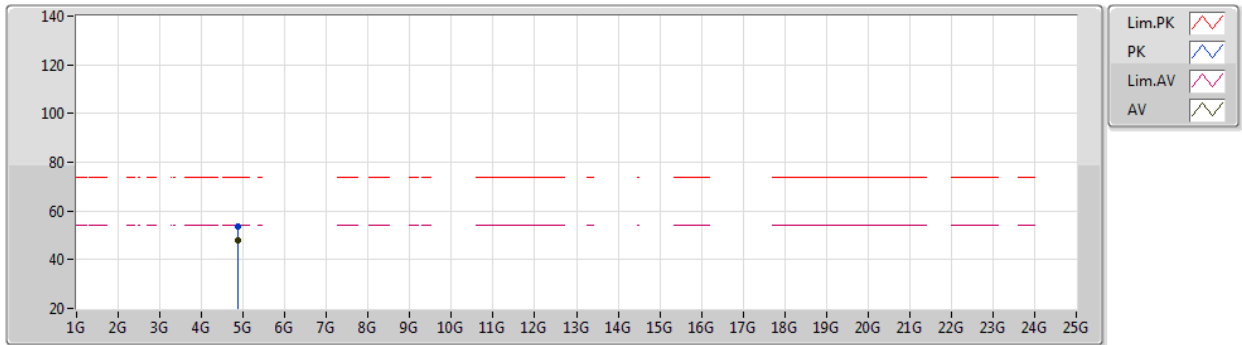
EUT Y_2TX
Setting 30
03-C-C-4

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	4.8164G	48.47	74.00	-25.53	44.28	3	Vertical	15	1.29	-	33.27	6.22	35.30
AV	4.874G	40.89	54.00	-13.11	36.44	3	Vertical	15	1.29	-	33.50	6.31	35.36

802.11b_Nss1,(1Mbps)_2TX

28/12/2020

2437MHz_TX



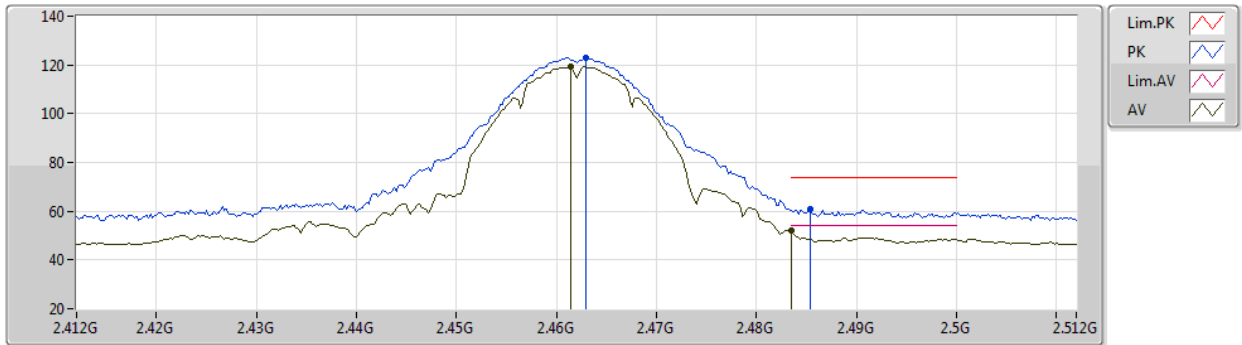
EUT Y_2TX
Setting 30
03-C-C-4

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	4.8792G	53.82	74.00	-20.18	49.34	3	Horizontal	45	2.59	-	33.52	6.32	35.36
AV	4.874G	47.95	54.00	-6.05	43.50	3	Horizontal	45	2.59	-	33.50	6.31	35.36

802.11b_Nss1,(1Mbps)_2TX

28/12/2020

2462MHz_TX



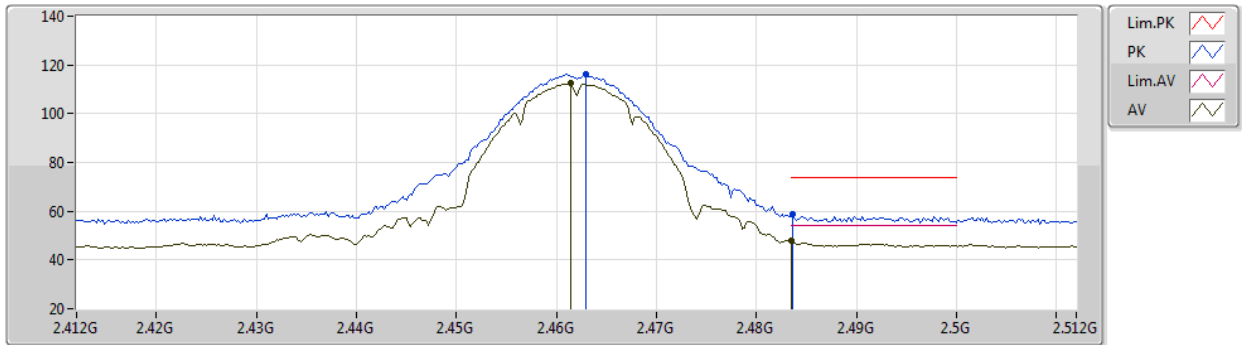
EUT Y_2TX
Setting 29
03-C-C-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.463G	122.96	Inf	-Inf	91.12	3	Vertical	285	2.20	-	28.28	3.56	-
AV	2.4614G	119.42	Inf	-Inf	87.59	3	Vertical	285	2.20	-	28.27	3.56	-
PK	2.4854G	61.09	74.00	-12.91	29.09	3	Vertical	285	2.20	-	28.41	3.59	-
AV	2.4835G	52.26	54.00	-1.74	20.28	3	Vertical	285	2.20	-	28.40	3.58	-

802.11b_Nss1,(1Mbps)_2TX

28/12/2020

2462MHz_TX



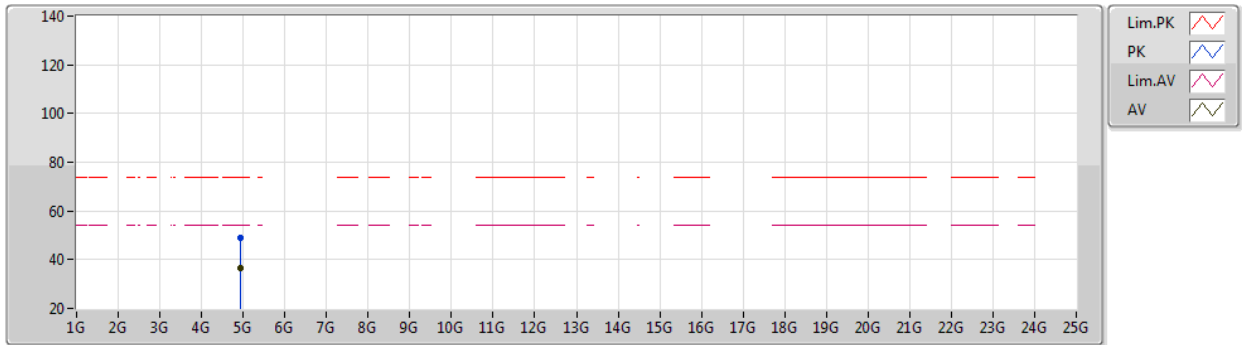
EUT Y_2TX
Setting 29
03-C-C-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.463G	116.03	Inf	-Inf	84.19	3	Horizontal	150	1.80	-	28.28	3.56	-
AV	2.4614G	112.35	Inf	-Inf	80.52	3	Horizontal	150	1.80	-	28.27	3.56	-
PK	2.4836G	58.75	74.00	-15.25	26.77	3	Horizontal	150	1.80	-	28.40	3.58	-
AV	2.4835G	47.89	54.00	-6.11	15.91	3	Horizontal	150	1.80	-	28.40	3.58	-

802.11b_Nss1,(1Mbps)_2TX

28/12/2020

2462MHz_TX



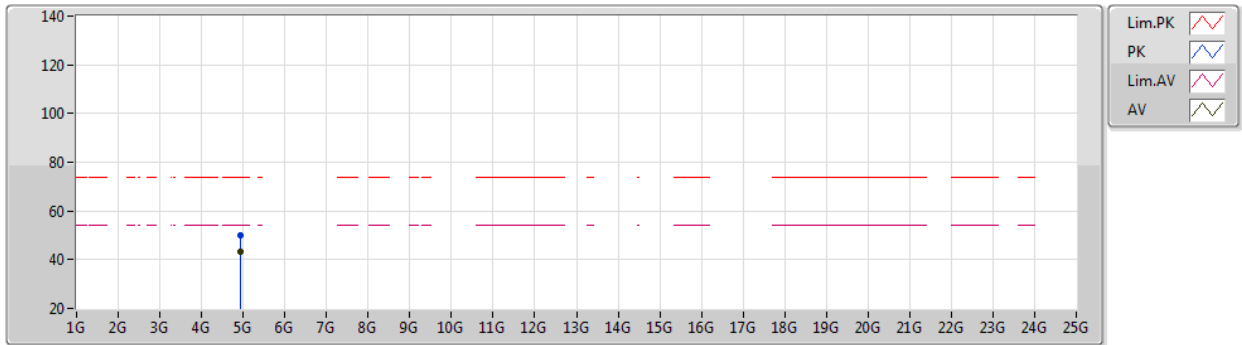
EUT Y_2TX
Setting 29
03-C-C-4

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	4.92343G	48.90	74.00	-25.10	44.41	3	Vertical	159	2.00	-	33.51	6.39	35.41
AV	4.92636G	36.56	54.00	-17.44	32.09	3	Vertical	159	2.00	-	33.49	6.39	35.41

802.11b_Nss1,(1Mbps)_2TX

28/12/2020

2462MHz_TX



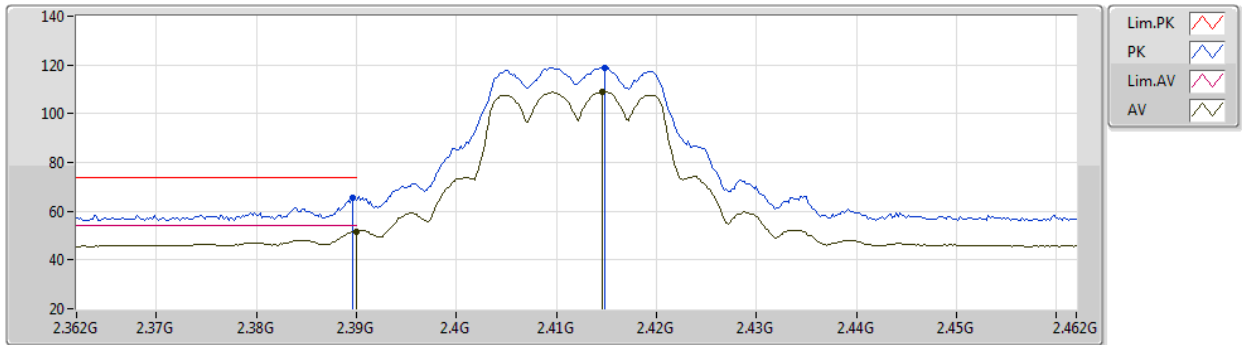
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Setting 29
03-C-C-4

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	4.92419G	50.25	74.00	-23.75	45.77	3	Horizontal	142	2.49	-	33.50	6.39	35.41
AV	4.92391G	43.17	54.00	-10.83	38.69	3	Horizontal	142	2.49	-	33.50	6.39	35.41

802.11g_Nss1,(6Mbps)_2TX

29/12/2020

2412MHz_TX



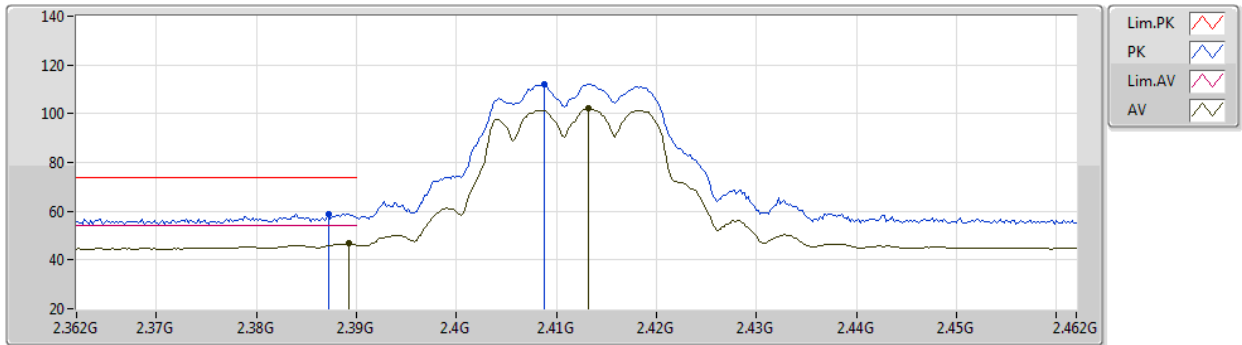
EUT Y_2TX
Setting 21
03-C-K-4

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	65.30	74.00	-8.70	33.71	3	Vertical	51	1.86	-	28.10	3.49	-
AV	2.39G	51.81	54.00	-2.19	20.22	3	Vertical	51	1.86	-	28.10	3.49	-
PK	2.4148G	118.87	Inf	-Inf	87.23	3	Vertical	51	1.86	-	28.13	3.51	-
AV	2.4146G	109.18	Inf	-Inf	77.54	3	Vertical	51	1.86	-	28.13	3.51	-

802.11g_Nss1,(6Mbps)_2TX

29/12/2020

2412MHz_TX



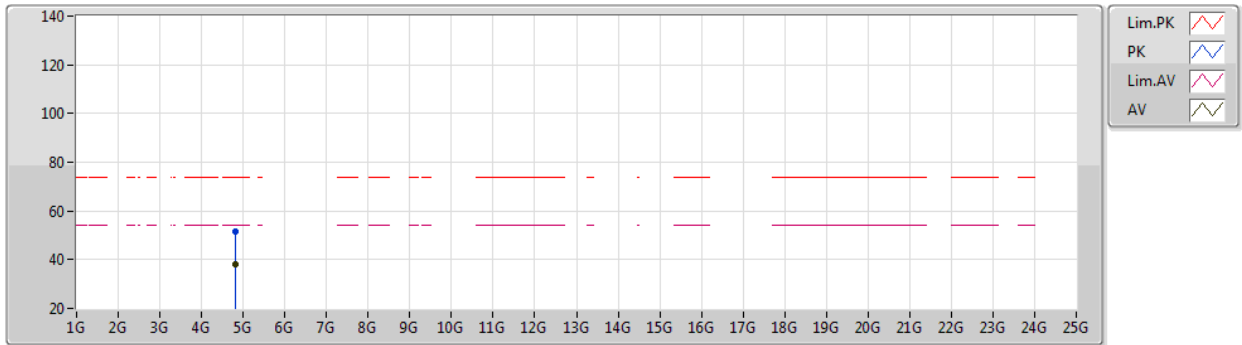
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Setting 21
03-C-K-4

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	58.94	74.00	-15.06	27.35	3	Horizontal	223	1.77	-	28.10	3.49	-
AV	2.3892G	46.85	54.00	-7.15	15.26	3	Horizontal	223	1.77	-	28.10	3.49	-
PK	2.4088G	111.96	Inf	-Inf	80.33	3	Horizontal	223	1.77	-	28.12	3.51	-
AV	2.4132G	102.01	Inf	-Inf	70.37	3	Horizontal	223	1.77	-	28.13	3.51	-

802.11g_Nss1,(6Mbps)_2TX

29/12/2020

2412MHz_TX



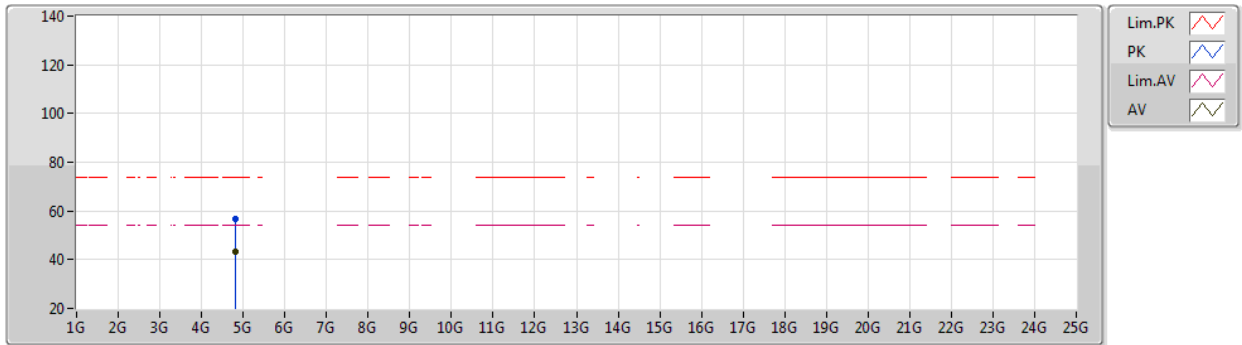
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Setting 21
03-C-K-4

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	4.8252G	51.43	74.00	-22.57	47.19	3	Vertical	322	2.88	-	33.30	6.24	35.30
AV	4.8244G	37.87	54.00	-16.13	33.63	3	Vertical	322	2.88	-	33.30	6.24	35.30

802.11g_Nss1,(6Mbps)_2TX

29/12/2020

2412MHz_TX



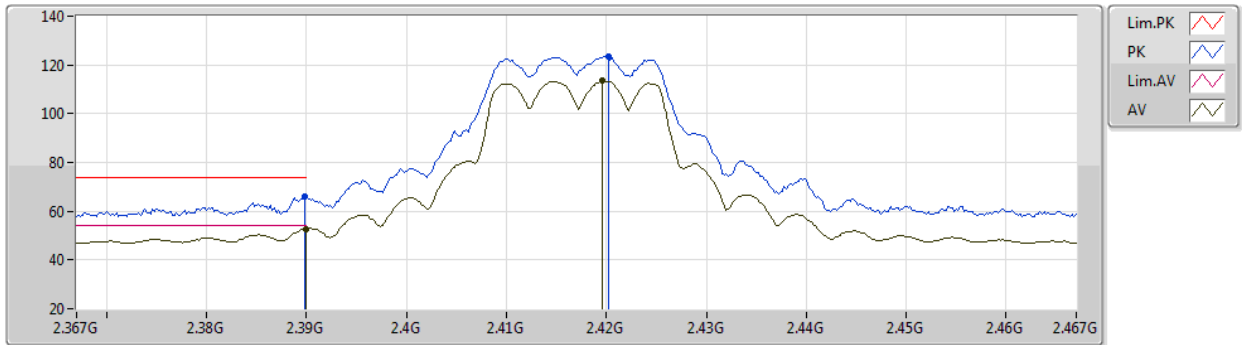
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Setting 21
03-C-K-4

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	4.82376G	56.56	74.00	-17.44	52.32	3	Horizontal	33	1.78	-	33.30	6.24	35.30
AV	4.82388G	43.09	54.00	-10.91	38.85	3	Horizontal	33	1.78	-	33.30	6.24	35.30

802.11g_Nss1,(6Mbps)_2TX

29/12/2020

2417MHz_TX



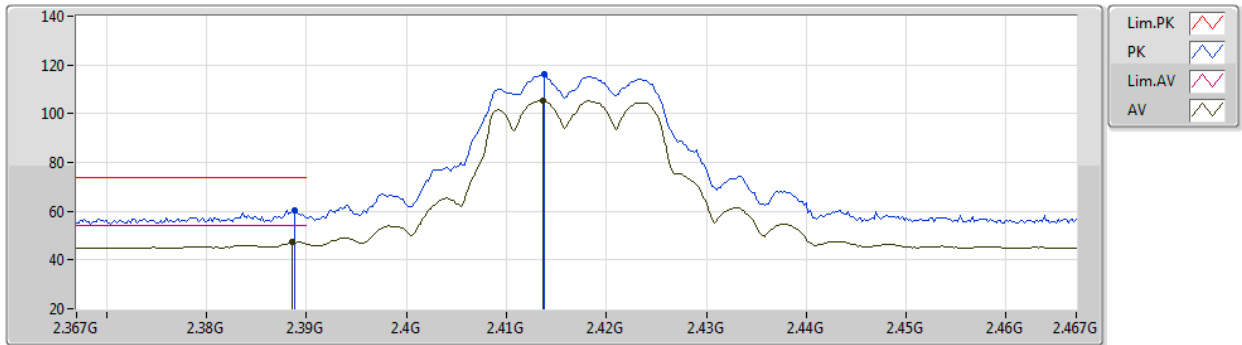
EUT Y_2TX
Setting 25.5
03-C-K-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3898G	66.05	74.00	-7.95	34.46	3	Vertical	55	2.09	-	28.10	3.49	-
AV	2.39G	52.83	54.00	-1.17	21.24	3	Vertical	55	2.09	-	28.10	3.49	-
PK	2.4202G	123.42	Inf	-Inf	91.76	3	Vertical	55	2.09	-	28.14	3.52	-
AV	2.4196G	113.59	Inf	-Inf	81.93	3	Vertical	55	2.09	-	28.14	3.52	-

802.11g_Nss1,(6Mbps)_2TX

29/12/2020

2417MHz_TX



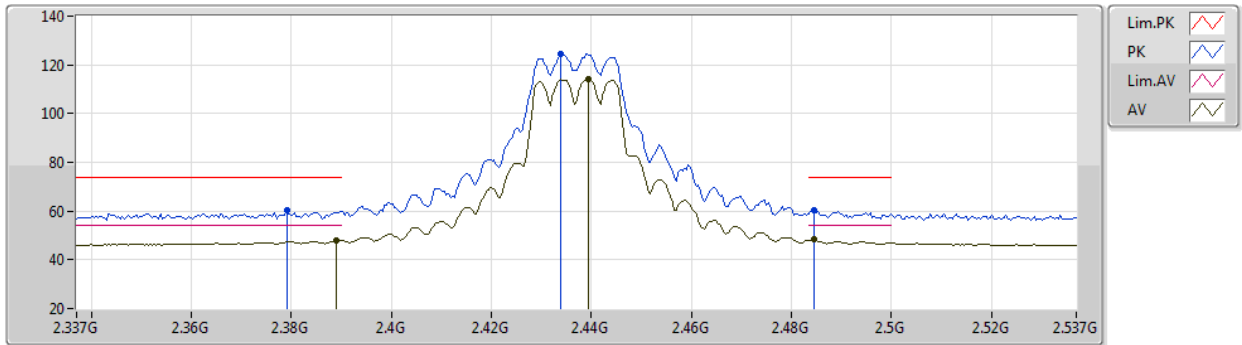
EUT Y_2TX
Setting 25.5
03-C-K-4

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	2.3888G	60.46	74.00	-13.54	28.87	3	Horizontal	223	1.77	-	28.10	3.49	-
AV	2.3886G	47.22	54.00	-6.78	15.63	3	Horizontal	223	1.77	-	28.10	3.49	-
PK	2.4138G	116.13	Inf	-Inf	84.49	3	Horizontal	223	1.77	-	28.13	3.51	-
AV	2.4136G	105.29	Inf	-Inf	73.65	3	Horizontal	223	1.77	-	28.13	3.51	-

802.11g_Nss1,(6Mbps)_2TX

29/12/2020

2437MHz_TX



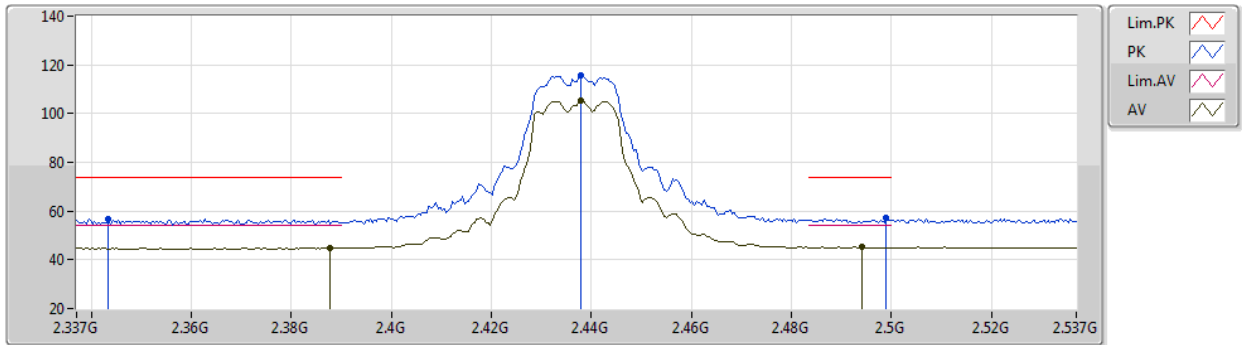
EUT Y_2TX
Setting 30
03-C-K-4

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	2.379G	60.31	74.00	-13.69	28.73	3	Vertical	46	2.32	-	28.10	3.48	-
AV	2.389G	48.13	54.00	-5.87	16.54	3	Vertical	46	2.32	-	28.10	3.49	-
PK	2.4338G	124.29	Inf	-Inf	92.59	3	Vertical	46	2.32	-	28.17	3.53	-
AV	2.4394G	114.39	Inf	-Inf	82.67	3	Vertical	46	2.32	-	28.18	3.54	-
PK	2.4846G	60.37	74.00	-13.63	28.38	3	Vertical	46	2.32	-	28.41	3.58	-
AV	2.4846G	48.24	54.00	-5.76	16.25	3	Vertical	46	2.32	-	28.41	3.58	-

802.11g_Nss1,(6Mbps)_2TX

29/12/2020

2437MHz_TX



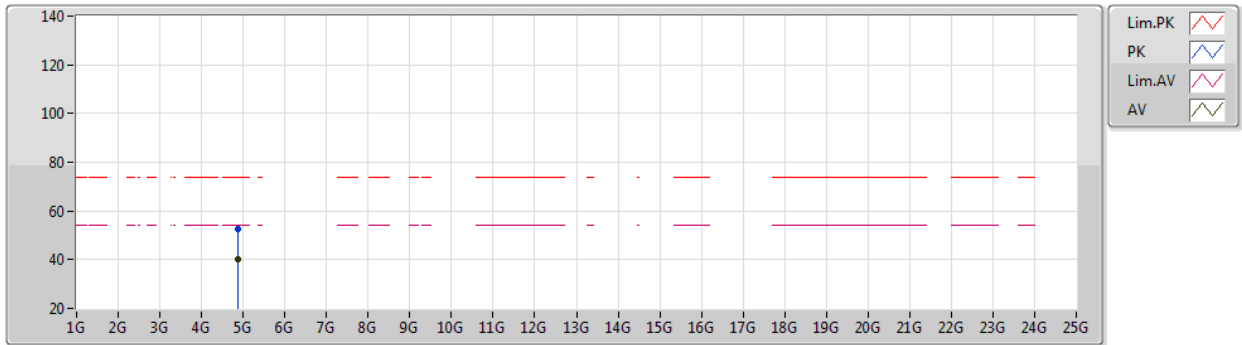
EUT Y_2TX
Setting 30
03-C-K-4

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	2.3434G	56.61	74.00	-17.39	25.10	3	Horizontal	153	1.84	-	28.07	3.44	-
AV	2.3878G	44.95	54.00	-9.05	13.36	3	Horizontal	153	1.84	-	28.10	3.49	-
PK	2.4378G	115.47	Inf	-Inf	83.75	3	Horizontal	153	1.84	-	28.18	3.54	-
AV	2.4378G	105.22	Inf	-Inf	73.50	3	Horizontal	153	1.84	-	28.18	3.54	-
PK	2.499G	57.42	74.00	-16.58	25.33	3	Horizontal	153	1.84	-	28.49	3.60	-
AV	2.4942G	45.15	54.00	-8.85	13.09	3	Horizontal	153	1.84	-	28.47	3.59	-

802.11g_Nss1,(6Mbps)_2TX

29/12/2020

2437MHz_TX



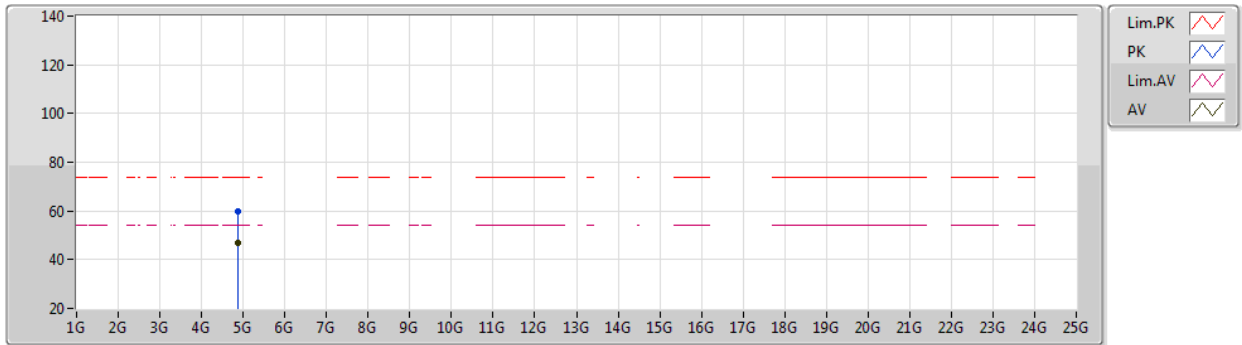
EUT Y_2TX
Setting 30
03-C-K-4

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	4.8794G	52.74	74.00	-21.26	48.26	3	Vertical	338	2.99	-	33.52	6.32	35.36
AV	4.87424G	40.13	54.00	-13.87	35.68	3	Vertical	338	2.99	-	33.50	6.31	35.36

802.11g_Nss1,(6Mbps)_2TX

29/12/2020

2437MHz_TX



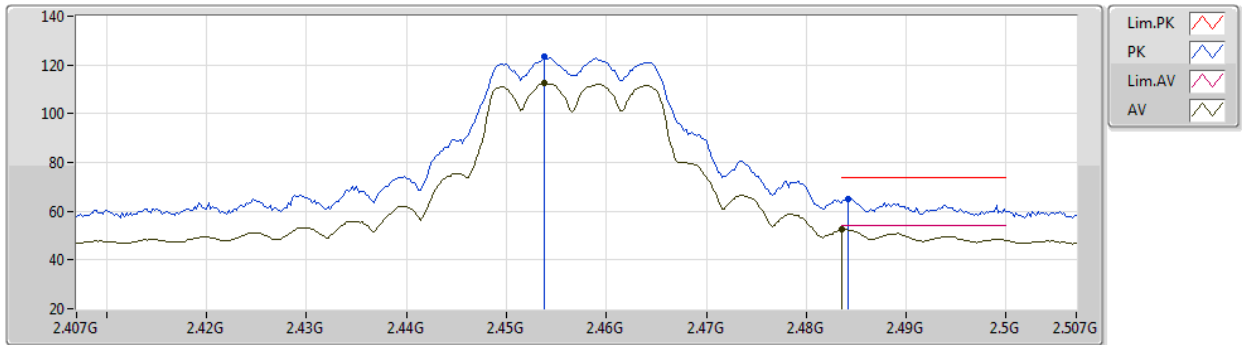
EUT Y_2TX
Setting 30
03-C-K-4

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	4.87436G	59.85	74.00	-14.15	55.40	3	Horizontal	29	1.69	-	33.50	6.31	35.36
AV	4.87388G	47.04	54.00	-6.96	42.59	3	Horizontal	29	1.69	-	33.50	6.31	35.36

802.11g_Nss1,(6Mbps)_2TX

29/12/2020

2457MHz_TX



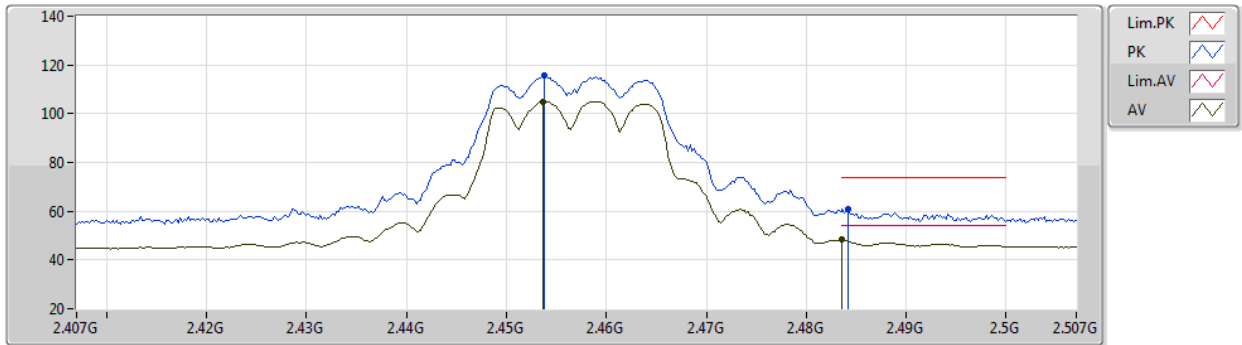
EUT Y_2TX
Setting 24.5
03-C-K-4

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	2.4538G	123.32	Inf	-Inf	91.55	3	Vertical	42	2.30	-	28.22	3.55	-
AV	2.4538G	112.61	Inf	-Inf	80.84	3	Vertical	42	2.30	-	28.22	3.55	-
PK	2.4842G	64.93	74.00	-9.07	32.94	3	Vertical	42	2.30	-	28.41	3.58	-
AV	2.4836G	52.54	54.00	-1.46	20.56	3	Vertical	42	2.30	-	28.40	3.58	-

802.11g_Nss1,(6Mbps)_2TX

29/12/2020

2457MHz_TX



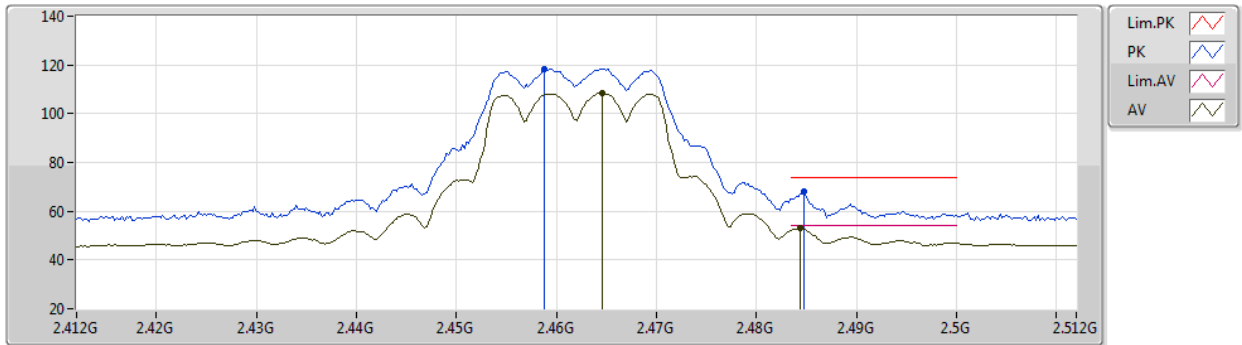
EUT Y_2TX
Setting 24.5
03-C-K-4

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	2.4538G	115.86	Inf	-Inf	84.09	3	Horizontal	225	1.63	-	28.22	3.55	-
AV	2.4536G	104.95	Inf	-Inf	73.18	3	Horizontal	225	1.63	-	28.22	3.55	-
PK	2.4842G	61.07	74.00	-12.93	29.08	3	Horizontal	225	1.63	-	28.41	3.58	-
AV	2.4835G	48.19	54.00	-5.81	16.21	3	Horizontal	225	1.63	-	28.40	3.58	-

802.11g_Nss1,(6Mbps)_2TX

29/12/2020

2462MHz_TX



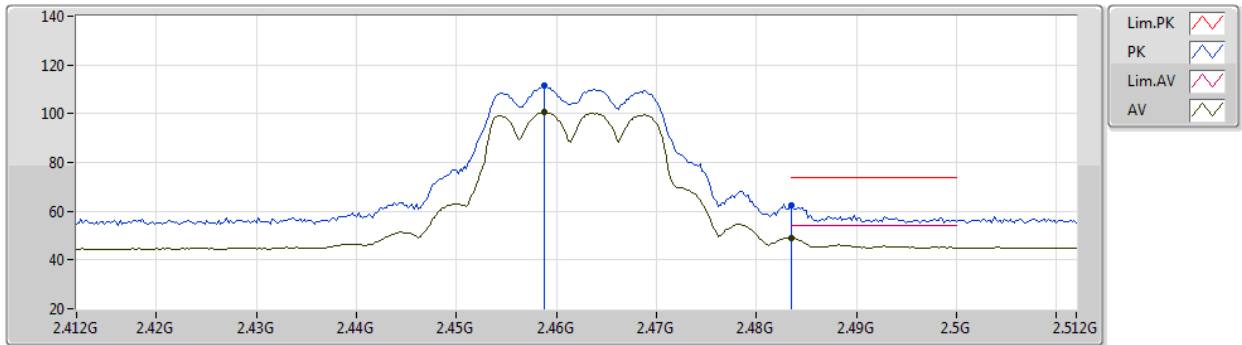
EUT Y_2TX
Setting 20.5
03-C-K-4

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	2.4588G	118.28	Inf	-Inf	86.47	3	Vertical	50	2.27	-	28.25	3.56	-
AV	2.4646G	108.41	Inf	-Inf	76.56	3	Vertical	50	2.27	-	28.29	3.56	-
PK	2.4848G	68.03	74.00	-5.97	36.04	3	Vertical	50	2.27	-	28.41	3.58	-
AV	2.4844G	52.96	54.00	-1.04	20.97	3	Vertical	50	2.27	-	28.41	3.58	-

802.11g_Nss1,(6Mbps)_2TX

29/12/2020

2462MHz_TX



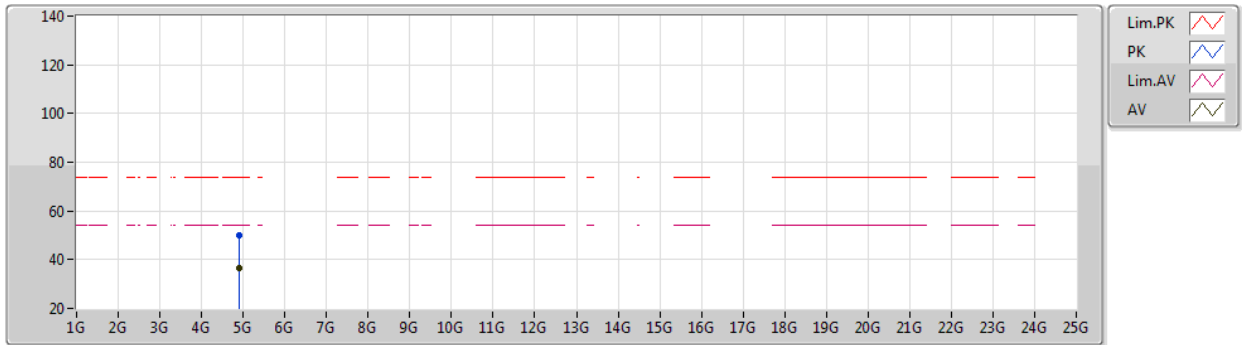
EUT Y_2TX
Setting 20.5
03-C-K-4

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	2.4588G	111.39	Inf	-Inf	79.58	3	Horizontal	226	1.61	-	28.25	3.56	-
AV	2.4588G	100.82	Inf	-Inf	69.01	3	Horizontal	226	1.61	-	28.25	3.56	-
PK	2.4835G	62.20	74.00	-11.80	30.22	3	Horizontal	226	1.61	-	28.40	3.58	-
AV	2.4835G	49.07	54.00	-4.93	17.09	3	Horizontal	226	1.61	-	28.40	3.58	-

802.11g_Nss1,(6Mbps)_2TX

29/12/2020

2462MHz_TX



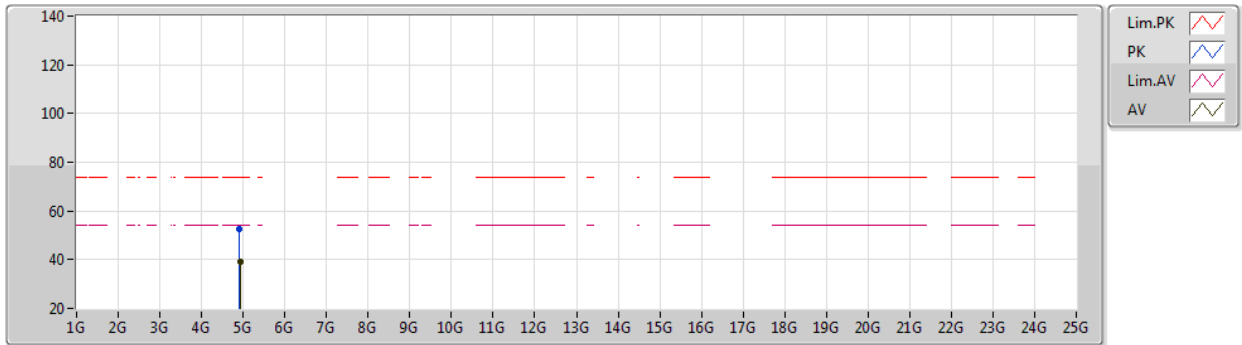
EUT Y_2TX
Setting 20.5
03-C-K-4

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	4.89424G	49.75	74.00	-24.25	45.21	3	Vertical	264	1.87	-	33.58	6.34	35.38
AV	4.89592G	36.51	54.00	-17.49	31.97	3	Vertical	264	1.87	-	33.58	6.34	35.38

802.11g_Nss1,(6Mbps)_2TX

29/12/2020

2462MHz_TX



EUT Y_2TX
Setting 20.5
03-C-K-4

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	4.91848G	52.66	74.00	-21.34	48.15	3	Horizontal	26	1.79	-	33.53	6.38	35.40
AV	4.92376G	38.94	54.00	-15.06	34.46	3	Horizontal	26	1.79	-	33.50	6.39	35.41



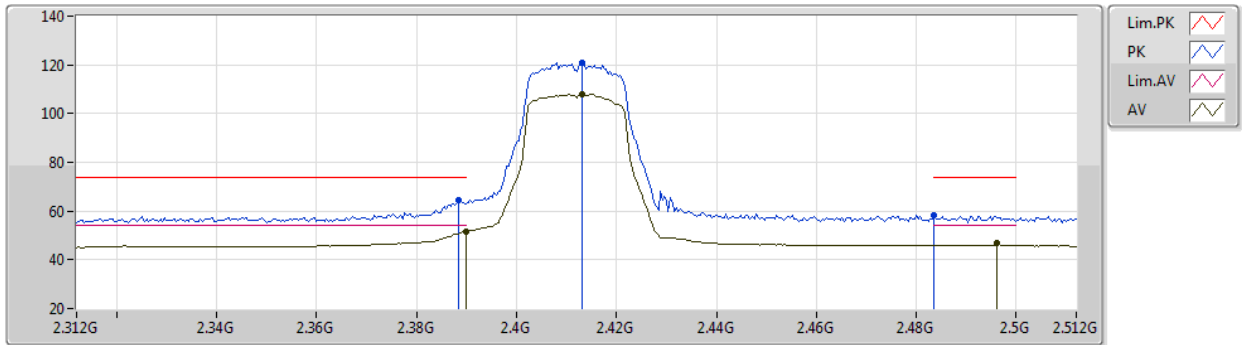
Summary

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 HEW40-BF_Nss1,(MCS0)_2TX	Pass	AV	2.3894G	52.85	54.00	-1.15	3	Vertical	52	2.20	-

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

31/12/2020

2412MHz_TX



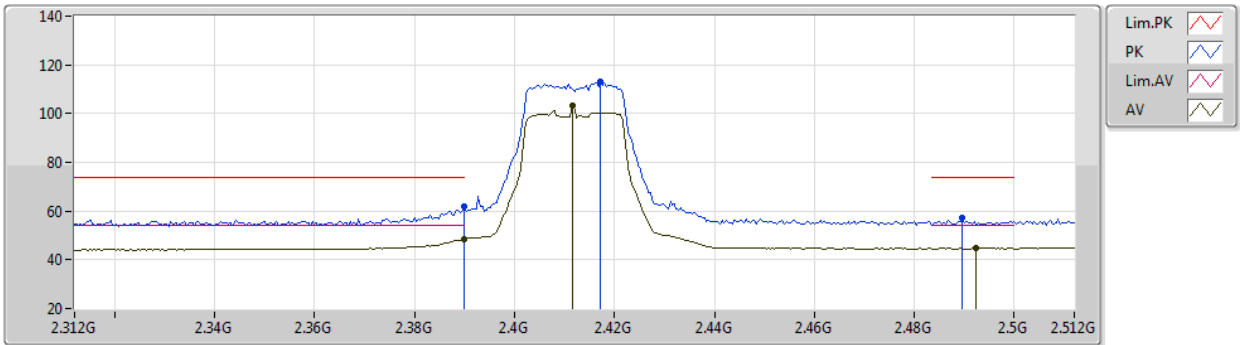
EUT Y_2TX
Setting 25
03-F-B-2

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	2.3884G	64.29	74.00	-9.71	32.70	3	Vertical	50	1.88	-	28.10	3.49	-
AV	2.39G	51.45	54.00	-2.55	19.86	3	Vertical	50	1.88	-	28.10	3.49	-
PK	2.4132G	121.09	Inf	-Inf	89.45	3	Vertical	50	1.88	-	28.13	3.51	-
AV	2.4132G	108.00	Inf	-Inf	76.36	3	Vertical	50	1.88	-	28.13	3.51	-
PK	2.4835G	58.20	74.00	-15.80	26.22	3	Vertical	50	1.88	-	28.40	3.58	-
AV	2.496G	46.64	54.00	-7.36	14.56	3	Vertical	50	1.88	-	28.48	3.60	-

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

31/12/2020

2412MHz_TX



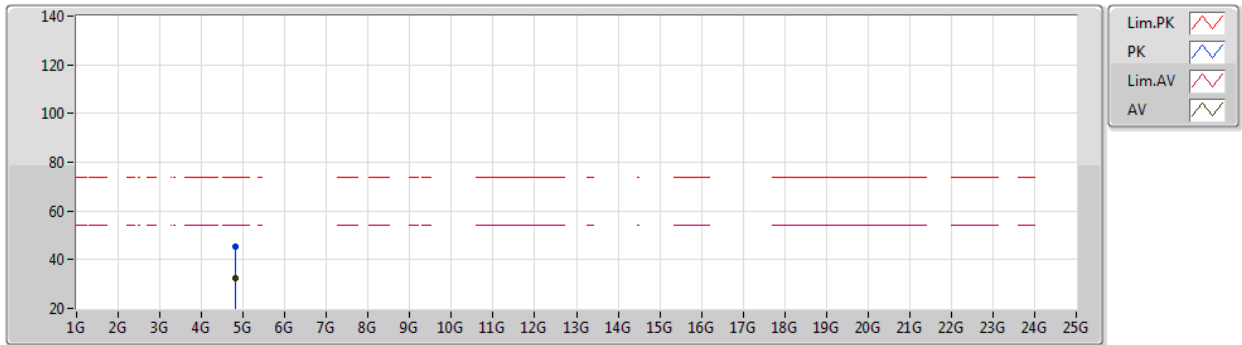
EUT Y_2TX
Setting 25
03-F-B-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.39G	61.70	74.00	-12.30	30.11	3	Horizontal	152	1.89	-	28.10	3.49	-
AV	2.39G	48.50	54.00	-5.50	16.91	3	Horizontal	152	1.89	-	28.10	3.49	-
PK	2.4172G	113.36	Inf	-Inf	81.71	3	Horizontal	152	1.89	-	28.13	3.52	-
AV	2.4116G	103.44	Inf	-Inf	71.81	3	Horizontal	152	1.89	-	28.12	3.51	-
PK	2.4896G	57.01	74.00	-16.99	24.98	3	Horizontal	152	1.89	-	28.44	3.59	-
AV	2.4924G	44.71	54.00	-9.29	12.67	3	Horizontal	152	1.89	-	28.45	3.59	-

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

31/12/2020

2412MHz_TX



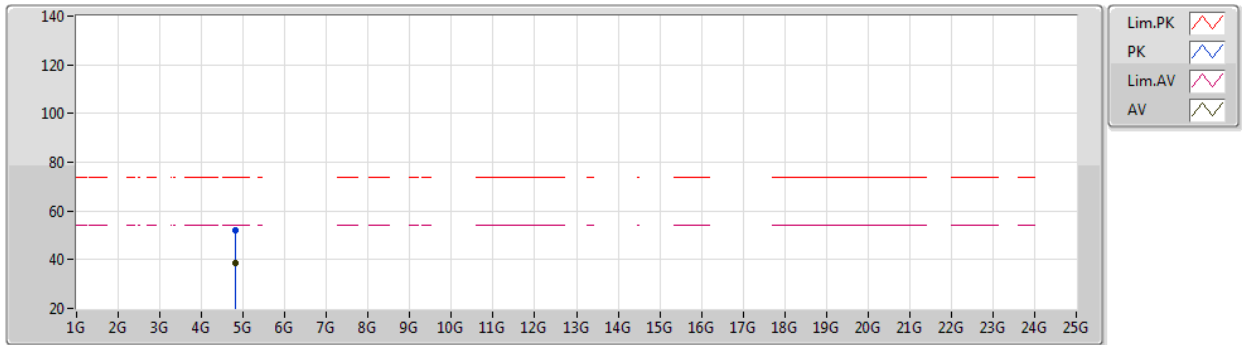
EUT Y_2TX
Setting 25
03-F-B-2

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	4.82634G	45.55	74.00	-28.45	41.31	3	Vertical	220	2.19	-	33.31	6.24	35.31
AV	4.82634G	32.51	54.00	-21.49	28.27	3	Vertical	220	2.19	-	33.31	6.24	35.31

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

31/12/2020

2412MHz_TX



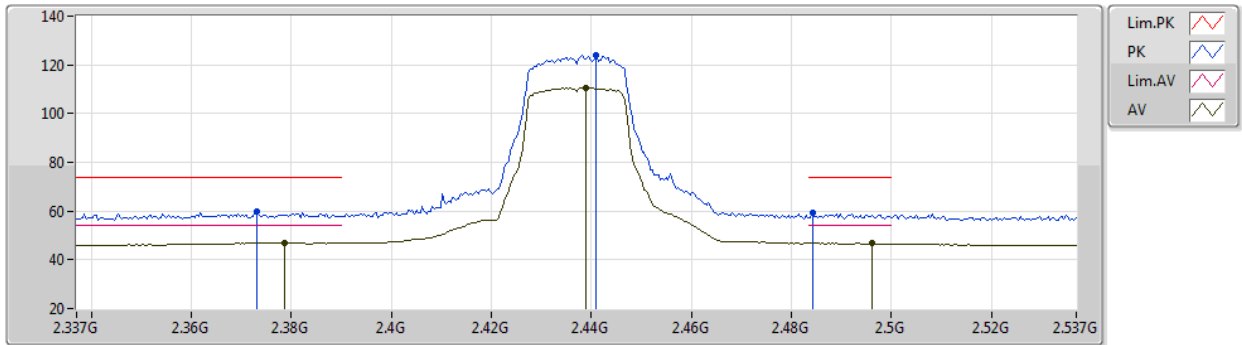
EUT Y_2TX
Setting 25
03-F-B-2

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	4.82242G	52.21	74.00	-21.79	47.99	3	Horizontal	42	1.61	-	33.29	6.23	35.30
AV	4.82316G	38.46	54.00	-15.54	34.24	3	Horizontal	42	1.61	-	33.29	6.23	35.30

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

31/12/2020

2437MHz_TX



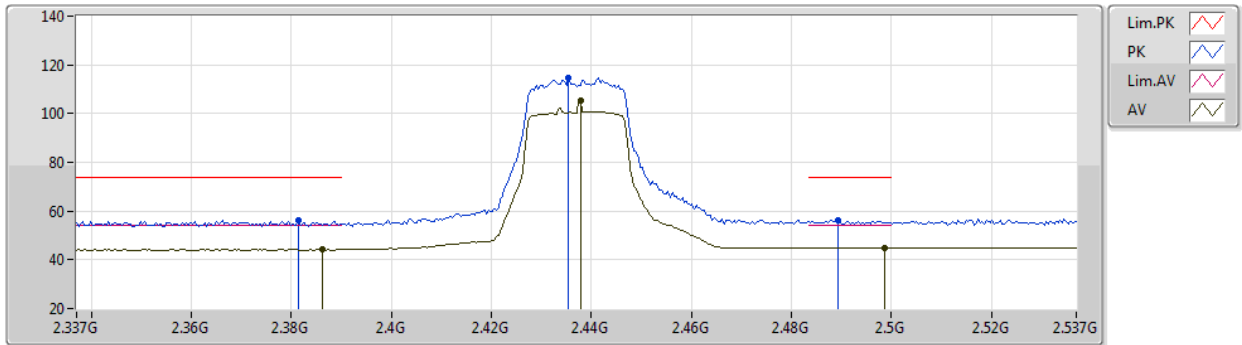
EUT Y_2TX
Setting 27
03-F-B-2

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	2.373G	60.06	74.00	-13.94	28.49	3	Vertical	56	2.15	-	28.10	3.47	-
AV	2.3786G	47.00	54.00	-7.00	15.42	3	Vertical	56	2.15	-	28.10	3.48	-
PK	2.441G	124.10	Inf	-Inf	92.38	3	Vertical	56	2.15	-	28.18	3.54	-
AV	2.439G	110.56	Inf	-Inf	78.84	3	Vertical	56	2.15	-	28.18	3.54	-
PK	2.4842G	59.14	74.00	-14.86	27.15	3	Vertical	56	2.15	-	28.41	3.58	-
AV	2.4962G	47.10	54.00	-6.90	15.02	3	Vertical	56	2.15	-	28.48	3.60	-

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

31/12/2020

2437MHz_TX

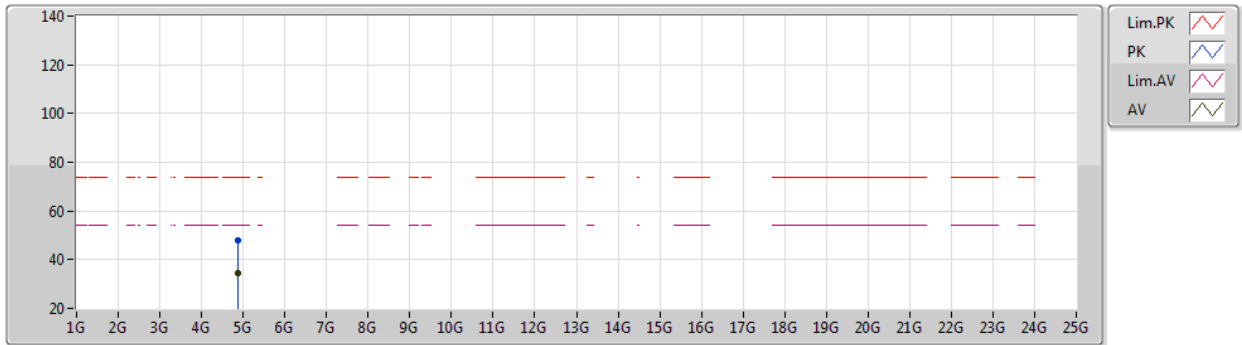

EUT Y_2TX
Setting 27
03-F-B-2

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	2.3814G	56.30	74.00	-17.70	24.72	3	Horizontal	330	2.18	-	28.10	3.48	-
AV	2.3862G	44.24	54.00	-9.76	12.65	3	Horizontal	330	2.18	-	28.10	3.49	-
PK	2.4354G	114.71	Inf	-Inf	83.00	3	Horizontal	330	2.18	-	28.17	3.54	-
AV	2.4378G	105.40	Inf	-Inf	73.68	3	Horizontal	330	2.18	-	28.18	3.54	-
PK	2.4894G	56.36	74.00	-17.64	24.33	3	Horizontal	330	2.18	-	28.44	3.59	-
AV	2.4986G	44.84	54.00	-9.16	12.75	3	Horizontal	330	2.18	-	28.49	3.60	-

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

31/12/2020

2437MHz_TX



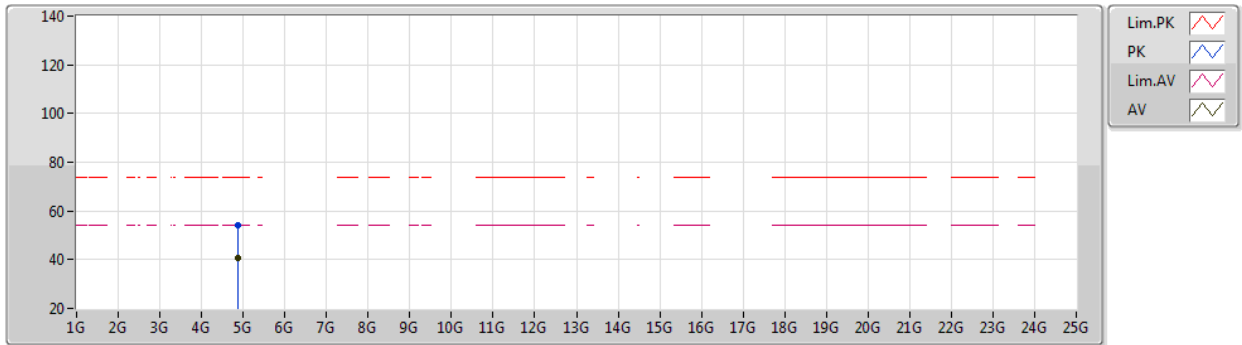
EUT Y_2TX
Setting 27
03-F-B-2

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	4.87016G	47.87	74.00	-26.13	43.43	3	Vertical	0	1.39	-	33.48	6.31	35.35
AV	4.86934G	34.45	54.00	-19.55	30.02	3	Vertical	0	1.39	-	33.48	6.30	35.35

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

31/12/2020

2437MHz_TX



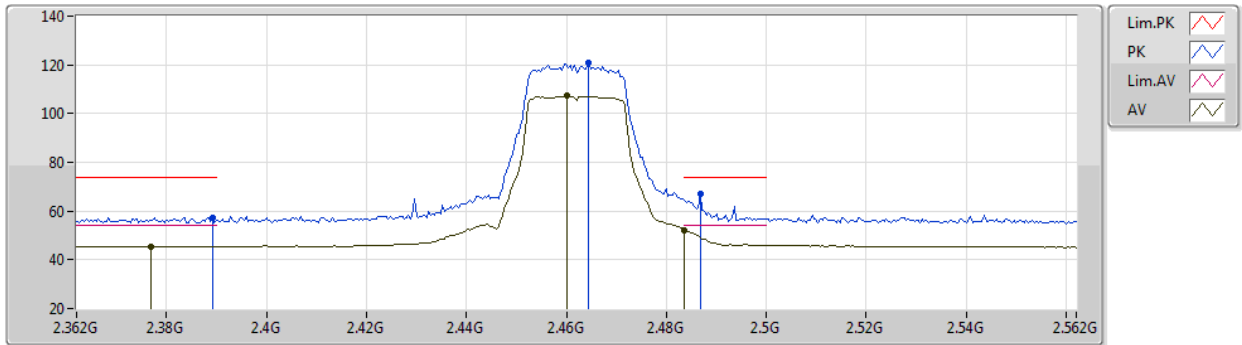
EUT Y_2TX
Setting 27
03-F-B-2

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	4.87836G	54.28	74.00	-19.72	49.81	3	Horizontal	39	1.59	-	33.51	6.32	35.36
AV	4.878G	40.56	54.00	-13.44	36.09	3	Horizontal	39	1.59	-	33.51	6.32	35.36

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

30/12/2020

2462MHz_TX



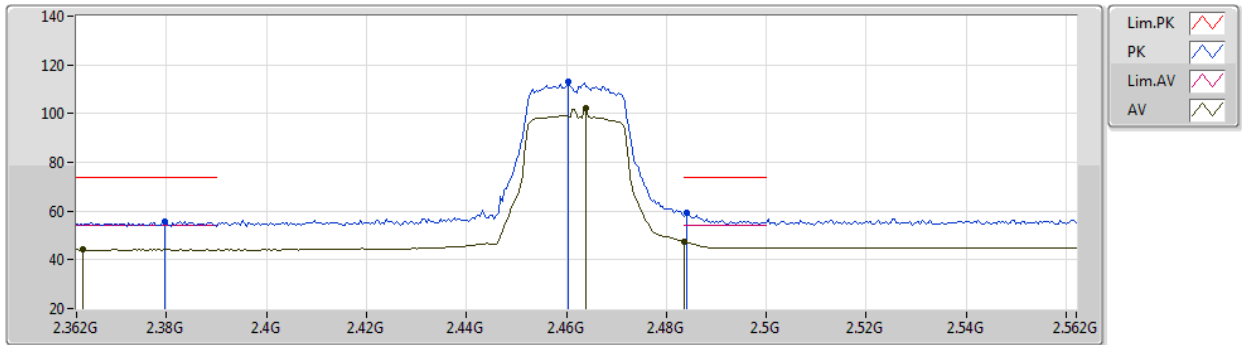
EUT Y_2TX
Setting 24
03-F-B-2

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	2.3892G	57.45	74.00	-16.55	25.86	3	Vertical	47	2.33	-	28.10	3.49	-
AV	2.3768G	45.45	54.00	-8.55	13.87	3	Vertical	47	2.33	-	28.10	3.48	-
PK	2.4644G	120.63	Inf	-Inf	88.78	3	Vertical	47	2.33	-	28.29	3.56	-
AV	2.46G	107.16	Inf	-Inf	75.34	3	Vertical	47	2.33	-	28.26	3.56	-
PK	2.4868G	67.17	74.00	-6.83	35.16	3	Vertical	47	2.33	-	28.42	3.59	-
AV	2.4835G	52.24	54.00	-1.76	20.26	3	Vertical	47	2.33	-	28.40	3.58	-

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

30/12/2020

2462MHz_TX

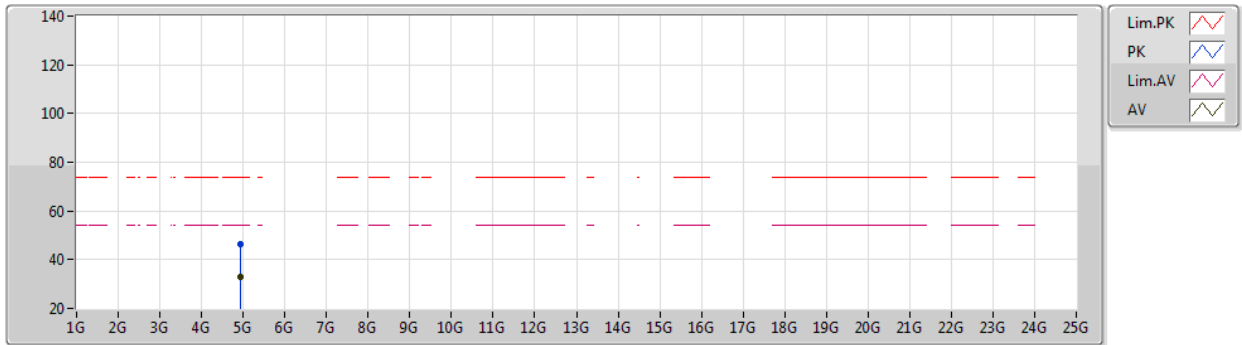

EUT Y_2TX
Setting 24
03-F-B-2

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	2.3796G	55.69	74.00	-18.31	24.11	3	Horizontal	330	2.45	-	28.10	3.48	-
AV	2.3632G	44.13	54.00	-9.87	12.57	3	Horizontal	330	2.45	-	28.10	3.46	-
PK	2.4604G	113.22	Inf	-Inf	81.40	3	Horizontal	330	2.45	-	28.26	3.56	-
AV	2.464G	102.50	Inf	-Inf	70.66	3	Horizontal	330	2.45	-	28.28	3.56	-
PK	2.484G	59.35	74.00	-14.65	27.37	3	Horizontal	330	2.45	-	28.40	3.58	-
AV	2.4835G	47.45	54.00	-6.55	15.47	3	Horizontal	330	2.45	-	28.40	3.58	-

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

30/12/2020

2462MHz_TX



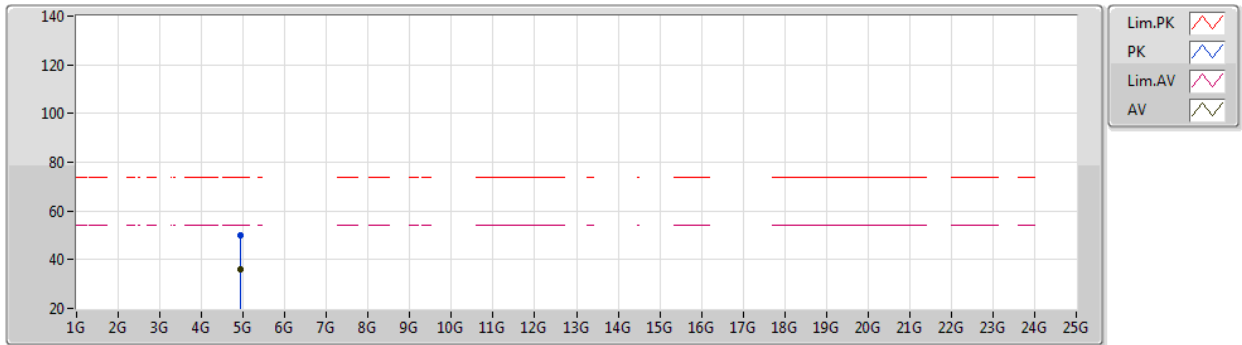
EUT Y_2TX
Setting 24
03-F-B-2

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	4.92612G	46.43	74.00	-27.57	41.95	3	Vertical	1	1.53	-	33.50	6.39	35.41
AV	4.92884G	33.13	54.00	-20.87	28.67	3	Vertical	1	1.53	-	33.48	6.39	35.41

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

30/12/2020

2462MHz_TX



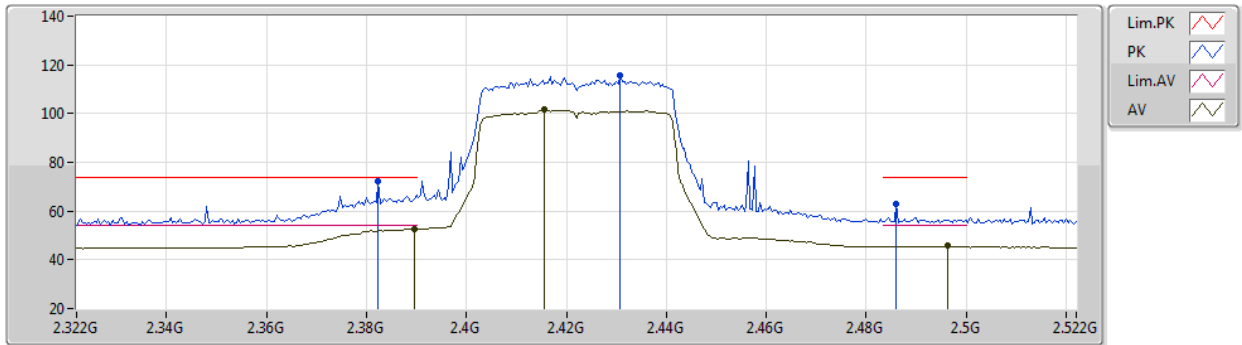
EUT Y_2TX
Setting 24
03-F-B-2

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	4.92758G	50.14	74.00	-23.86	45.67	3	Horizontal	39	1.80	-	33.49	6.39	35.41
AV	4.92262G	36.01	54.00	-17.99	31.53	3	Horizontal	39	1.80	-	33.51	6.38	35.41

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

30/12/2020

2422MHz_TX

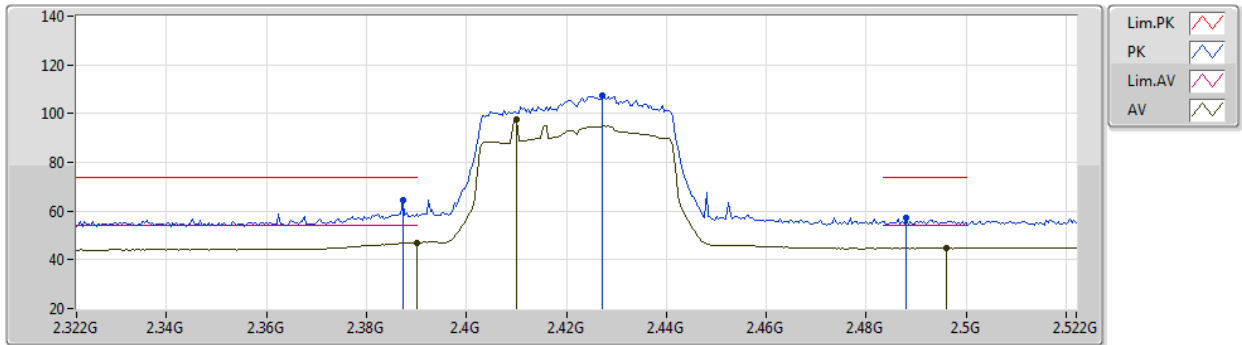

EUT Y_2TX
Setting 21
03-F-B-2

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	2.3824G	72.27	74.00	-1.73	40.69	3	Vertical	51	2.20	-	28.10	3.48	-
AV	2.3896G	52.69	54.00	-1.31	21.10	3	Vertical	51	2.20	-	28.10	3.49	-
PK	2.4308G	115.62	Inf	-Inf	83.93	3	Vertical	51	2.20	-	28.16	3.53	-
AV	2.4156G	101.67	Inf	-Inf	70.02	3	Vertical	51	2.20	-	28.13	3.52	-
PK	2.486G	62.95	74.00	-11.05	30.94	3	Vertical	51	2.20	-	28.42	3.59	-
AV	2.4964G	45.61	54.00	-8.39	13.53	3	Vertical	51	2.20	-	28.48	3.60	-

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

30/12/2020

2422MHz_TX

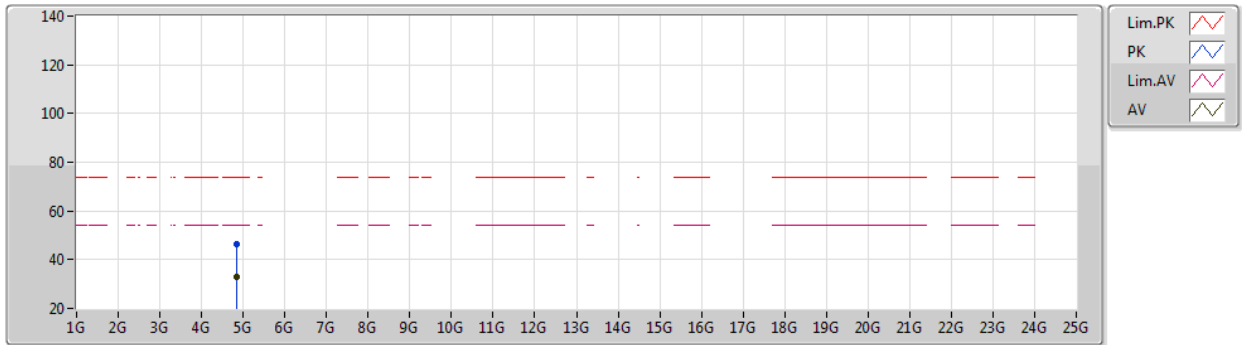

EUT Y_2TX
Setting 21
03-F-B-2

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	2.3872G	64.32	74.00	-9.68	32.73	3	Horizontal	146	1.56	-	28.10	3.49	-
AV	2.39G	47.07	54.00	-6.93	15.48	3	Horizontal	146	1.56	-	28.10	3.49	-
PK	2.4272G	107.57	Inf	-Inf	75.89	3	Horizontal	146	1.56	-	28.15	3.53	-
AV	2.41G	97.61	Inf	-Inf	65.98	3	Horizontal	146	1.56	-	28.12	3.51	-
PK	2.488G	57.22	74.00	-16.78	25.20	3	Horizontal	146	1.56	-	28.43	3.59	-
AV	2.496G	44.74	54.00	-9.26	12.66	3	Horizontal	146	1.56	-	28.48	3.60	-

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

30/12/2020

2422MHz_TX



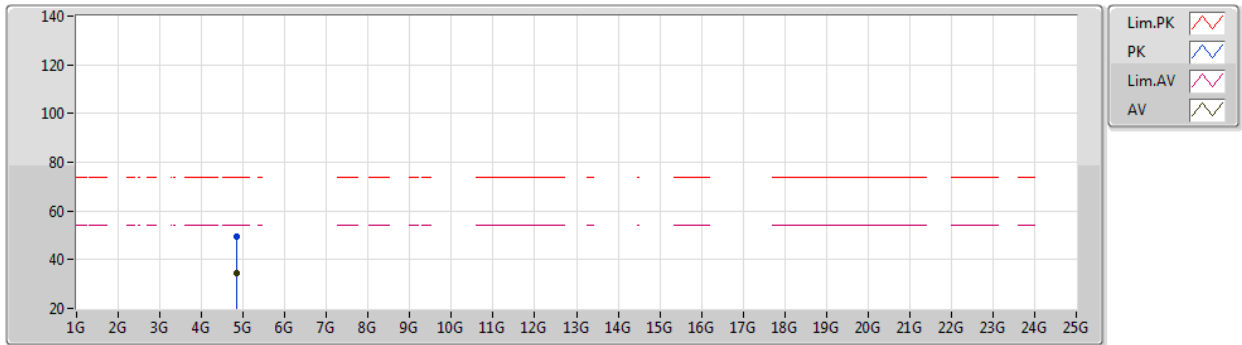
EUT Y_2TX
Setting 21
03-F-B-2

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	4.84384G	46.57	74.00	-27.43	42.24	3	Vertical	360	2.10	-	33.38	6.27	35.32
AV	4.8441G	33.09	54.00	-20.91	28.76	3	Vertical	360	2.10	-	33.38	6.27	35.32

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

30/12/2020

2422MHz_TX



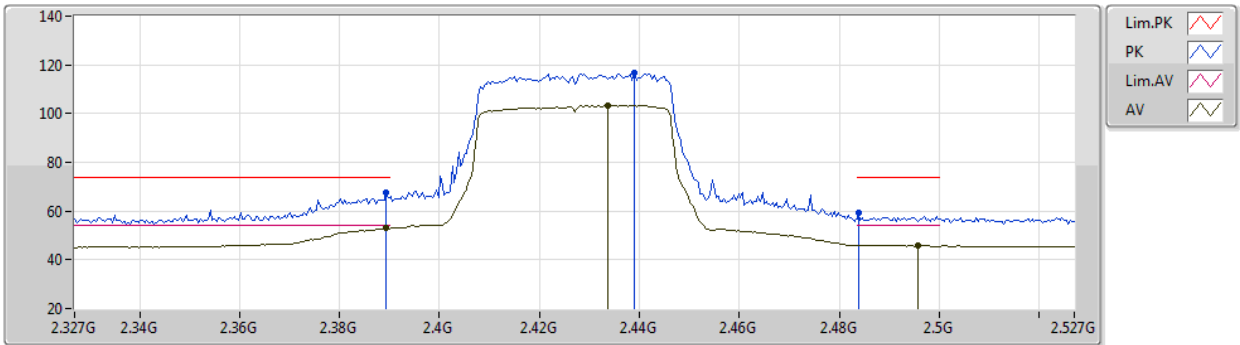
EUT Y_2TX
Setting 21
03-F-B-2

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	4.8442G	49.34	74.00	-24.66	45.01	3	Horizontal	360	1.50	-	33.38	6.27	35.32
AV	4.84404G	34.48	54.00	-19.52	30.15	3	Horizontal	360	1.50	-	33.38	6.27	35.32

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

30/12/2020

2427MHz_TX



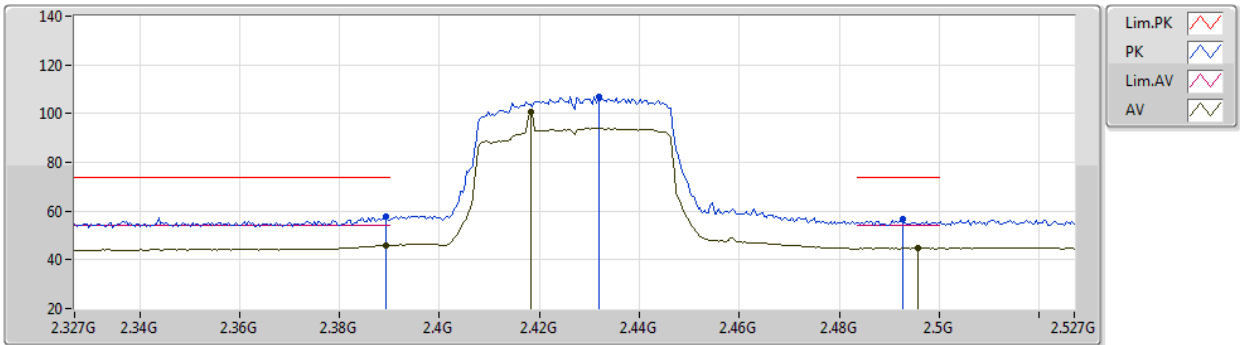
EUT Y_2TX
Setting 23
03-F-B-2

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	2.3894G	67.56	74.00	-6.44	35.97	3	Vertical	52	2.20	-	28.10	3.49	-
AV	2.3894G	52.85	54.00	-1.15	21.26	3	Vertical	52	2.20	-	28.10	3.49	-
PK	2.439G	116.57	Inf	-Inf	84.85	3	Vertical	52	2.20	-	28.18	3.54	-
AV	2.4338G	103.38	Inf	-Inf	71.68	3	Vertical	52	2.20	-	28.17	3.53	-
PK	2.4838G	59.26	74.00	-14.74	27.28	3	Vertical	52	2.20	-	28.40	3.58	-
AV	2.4958G	46.05	54.00	-7.95	13.98	3	Vertical	52	2.20	-	28.47	3.60	-

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

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2427MHz_TX



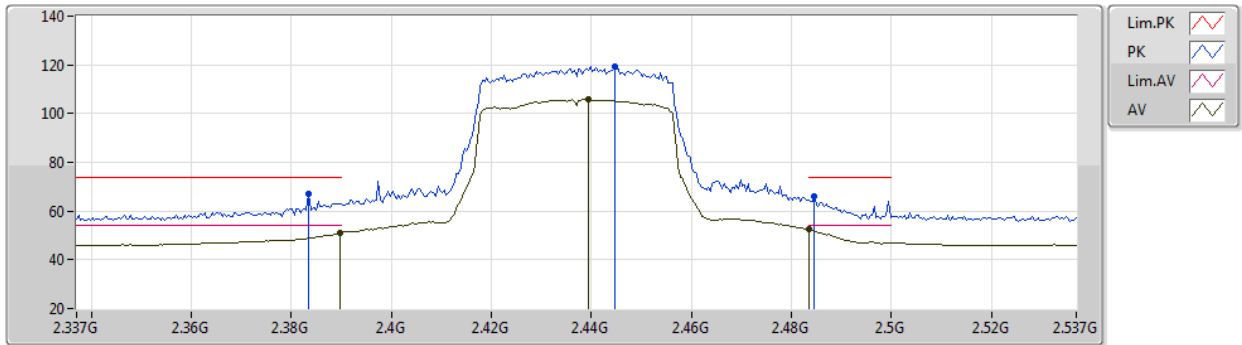
EUT Y_2TX
Setting 23
03-F-B-2

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	2.3894G	57.69	74.00	-16.31	26.10	3	Horizontal	327	1.86	-	28.10	3.49	-
AV	2.3894G	45.91	54.00	-8.09	14.32	3	Horizontal	327	1.86	-	28.10	3.49	-
PK	2.4318G	107.04	Inf	-Inf	75.35	3	Horizontal	327	1.86	-	28.16	3.53	-
AV	2.4182G	100.68	Inf	-Inf	69.02	3	Horizontal	327	1.86	-	28.14	3.52	-
PK	2.4926G	56.67	74.00	-17.33	24.62	3	Horizontal	327	1.86	-	28.46	3.59	-
AV	2.4958G	44.70	54.00	-9.30	12.63	3	Horizontal	327	1.86	-	28.47	3.60	-

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

30/12/2020

2437MHz_TX



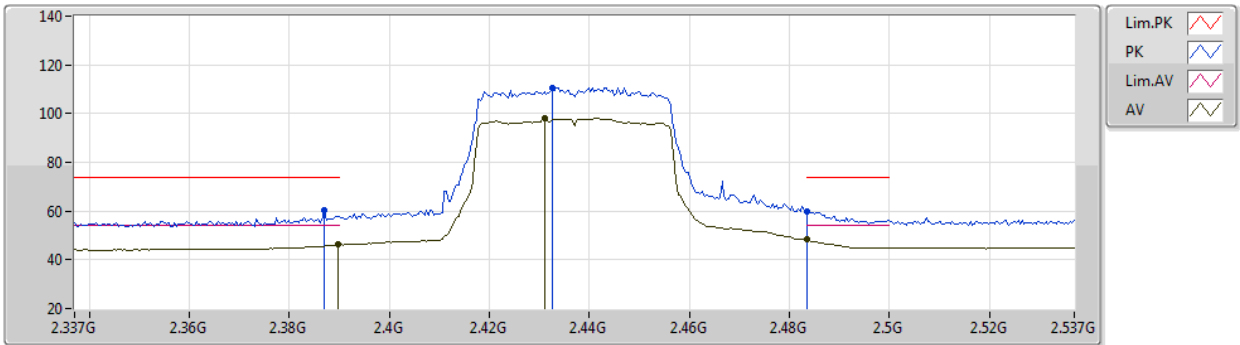
EUT Y_2TX
Setting 25
03-F-B-2

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	2.3834G	67.02	74.00	-6.98	35.44	3	Vertical	55	2.12	-	28.10	3.48	-
AV	2.3898G	50.99	54.00	-3.01	19.40	3	Vertical	55	2.12	-	28.10	3.49	-
PK	2.4446G	119.50	Inf	-Inf	87.77	3	Vertical	55	2.12	-	28.19	3.54	-
AV	2.4394G	105.97	Inf	-Inf	74.25	3	Vertical	55	2.12	-	28.18	3.54	-
PK	2.4846G	66.09	74.00	-7.91	34.10	3	Vertical	55	2.12	-	28.41	3.58	-
AV	2.4835G	52.43	54.00	-1.57	20.45	3	Vertical	55	2.12	-	28.40	3.58	-

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

30/12/2020

2437MHz_TX

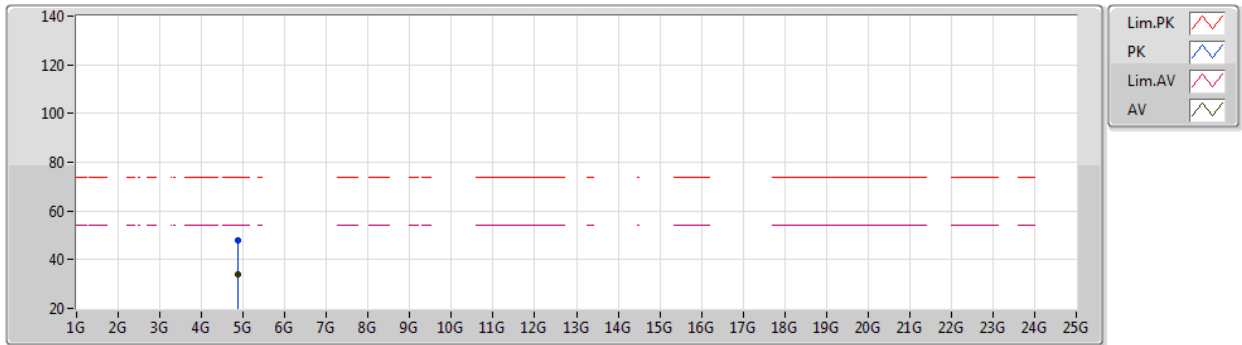

EUT Y_2TX
Setting 25
03-F-B-2

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	2.387G	60.32	74.00	-13.68	28.73	3	Horizontal	333	1.63	-	28.10	3.49	-
AV	2.3898G	46.24	54.00	-7.76	14.65	3	Horizontal	333	1.63	-	28.10	3.49	-
PK	2.4326G	110.76	Inf	-Inf	79.06	3	Horizontal	333	1.63	-	28.17	3.53	-
AV	2.431G	98.11	Inf	-Inf	66.42	3	Horizontal	333	1.63	-	28.16	3.53	-
PK	2.4835G	59.58	74.00	-14.42	27.60	3	Horizontal	333	1.63	-	28.40	3.58	-
AV	2.4835G	48.25	54.00	-5.75	16.27	3	Horizontal	333	1.63	-	28.40	3.58	-

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

30/12/2020

2437MHz_TX



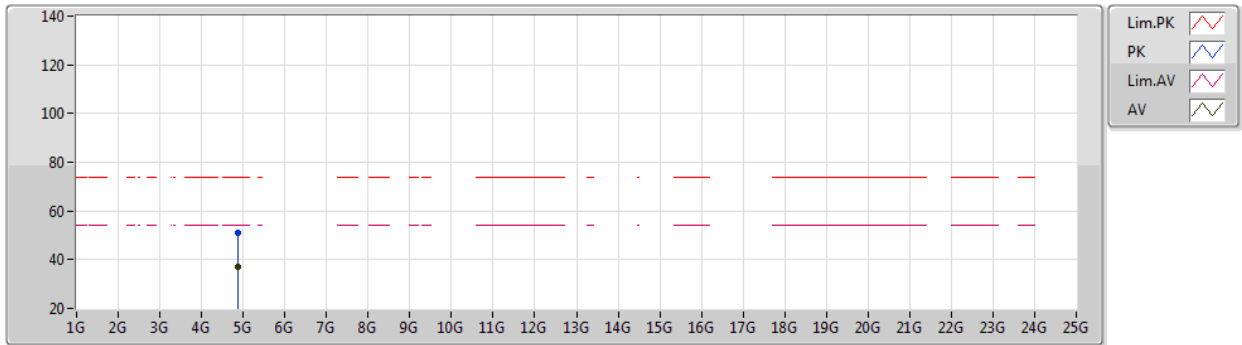
EUT Y_2TX
Setting 25
03-F-B-2

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	4.87652G	48.03	74.00	-25.97	43.57	3	Vertical	344	1.57	-	33.51	6.31	35.36
AV	4.87834G	33.86	54.00	-20.14	29.39	3	Vertical	344	1.57	-	33.51	6.32	35.36

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

30/12/2020

2437MHz_TX



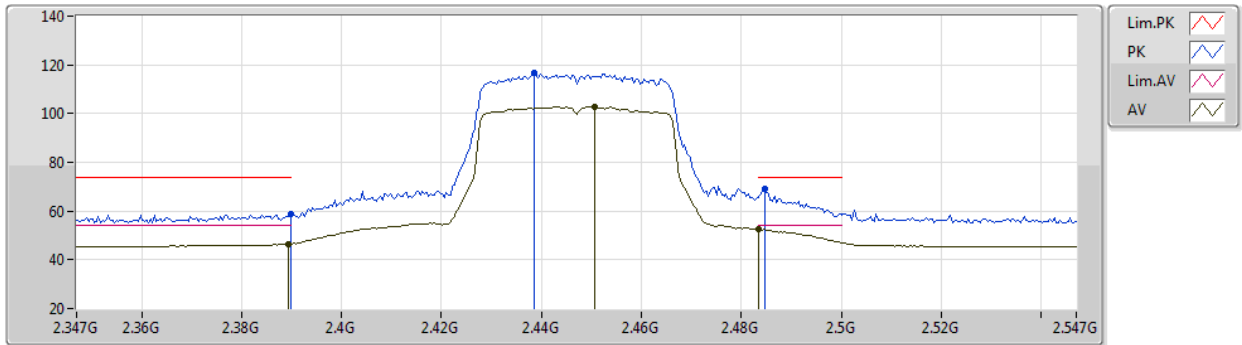
EUT Y_2TX
Setting 25
03-F-B-2

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	4.87168G	50.78	74.00	-23.22	46.33	3	Horizontal	37	1.60	-	33.49	6.31	35.35
AV	4.8786G	37.18	54.00	-16.82	32.71	3	Horizontal	37	1.60	-	33.51	6.32	35.36

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

30/12/2020

2447MHz_TX



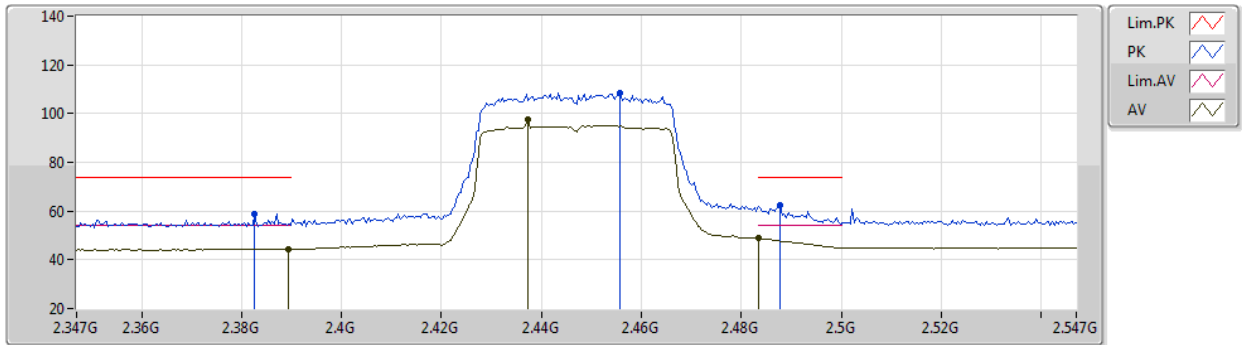
EUT Y_2TX
Setting 23
03-F-B-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3898G	58.96	74.00	-15.04	27.37	3	Vertical	51	2.29	-	28.10	3.49	-
AV	2.3894G	46.48	54.00	-7.52	14.89	3	Vertical	51	2.29	-	28.10	3.49	-
PK	2.4386G	116.63	Inf	-Inf	84.91	3	Vertical	51	2.29	-	28.18	3.54	-
AV	2.4506G	102.79	Inf	-Inf	71.04	3	Vertical	51	2.29	-	28.20	3.55	-
PK	2.4846G	69.07	74.00	-4.93	37.08	3	Vertical	51	2.29	-	28.41	3.58	-
AV	2.4835G	52.77	54.00	-1.23	20.79	3	Vertical	51	2.29	-	28.40	3.58	-

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

30/12/2020

2447MHz_TX

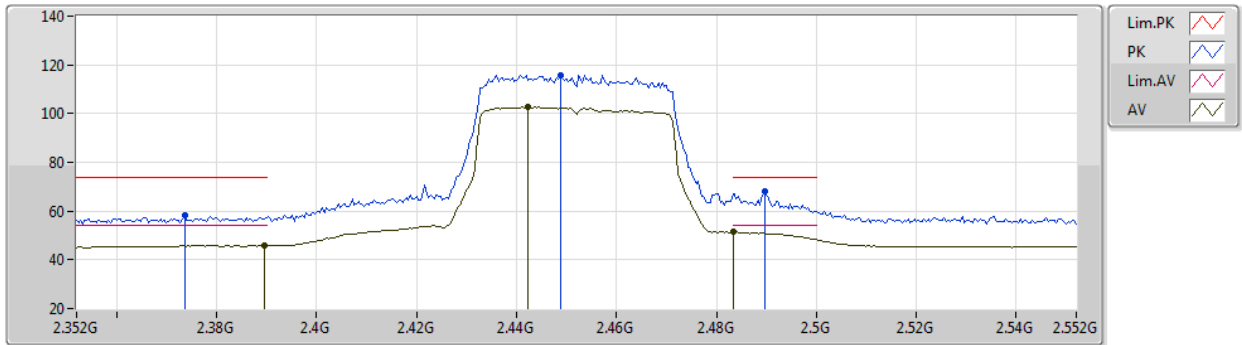

EUT Y_2TX
Setting 23
03-F-B-2

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	2.3826G	58.91	74.00	-15.09	27.33	3	Horizontal	335	1.82	-	28.10	3.48	-
AV	2.3894G	44.42	54.00	-9.58	12.83	3	Horizontal	335	1.82	-	28.10	3.49	-
PK	2.4558G	108.41	Inf	-Inf	76.62	3	Horizontal	335	1.82	-	28.23	3.56	-
AV	2.4374G	97.73	Inf	-Inf	66.02	3	Horizontal	335	1.82	-	28.17	3.54	-
PK	2.4878G	62.46	74.00	-11.54	30.44	3	Horizontal	335	1.82	-	28.43	3.59	-
AV	2.4835G	48.80	54.00	-5.20	16.82	3	Horizontal	335	1.82	-	28.40	3.58	-

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

30/12/2020

2452MHz_TX

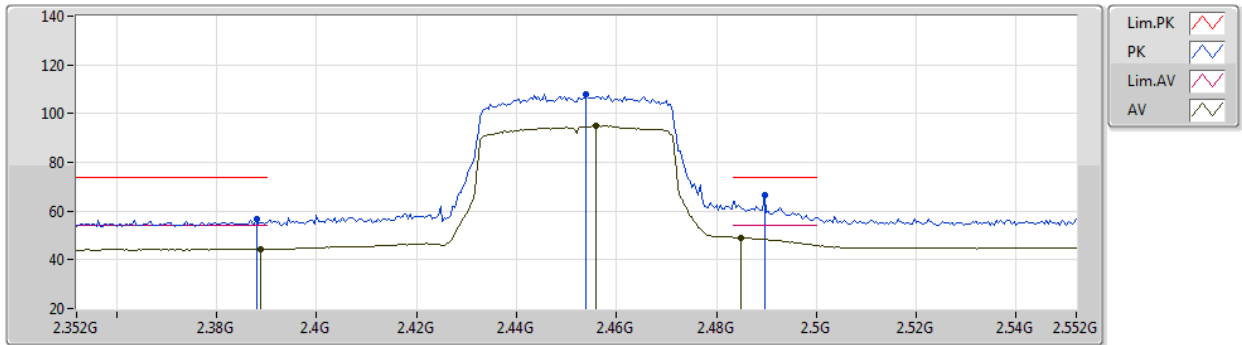

EUT Y_2TX
Setting 22
03-F-B-2

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	2.3736G	58.31	74.00	-15.69	26.74	3	Vertical	52	2.10	-	28.10	3.47	-
AV	2.3896G	45.82	54.00	-8.18	14.23	3	Vertical	52	2.10	-	28.10	3.49	-
PK	2.4488G	115.83	Inf	-Inf	84.08	3	Vertical	52	2.10	-	28.20	3.55	-
AV	2.4424G	102.59	Inf	-Inf	70.87	3	Vertical	52	2.10	-	28.18	3.54	-
PK	2.4896G	68.05	74.00	-5.95	36.02	3	Vertical	52	2.10	-	28.44	3.59	-
AV	2.4835G	51.48	54.00	-2.52	19.50	3	Vertical	52	2.10	-	28.40	3.58	-

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

30/12/2020

2452MHz_TX



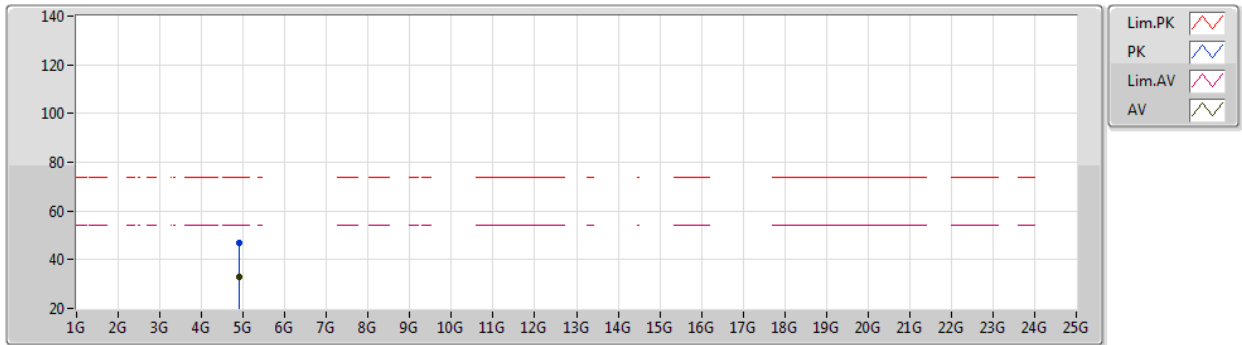
EUT Y_2TX
Setting 22
03-F-B-2

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	2.388G	56.75	74.00	-17.25	25.16	3	Horizontal	332	2.05	-	28.10	3.49	-
AV	2.3888G	44.49	54.00	-9.51	12.90	3	Horizontal	332	2.05	-	28.10	3.49	-
PK	2.454G	108.08	Inf	-Inf	76.31	3	Horizontal	332	2.05	-	28.22	3.55	-
AV	2.456G	95.09	Inf	-Inf	63.29	3	Horizontal	332	2.05	-	28.24	3.56	-
PK	2.4896G	66.32	74.00	-7.68	34.29	3	Horizontal	332	2.05	-	28.44	3.59	-
AV	2.4848G	49.21	54.00	-4.79	17.22	3	Horizontal	332	2.05	-	28.41	3.58	-

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

30/12/2020

2452MHz_TX



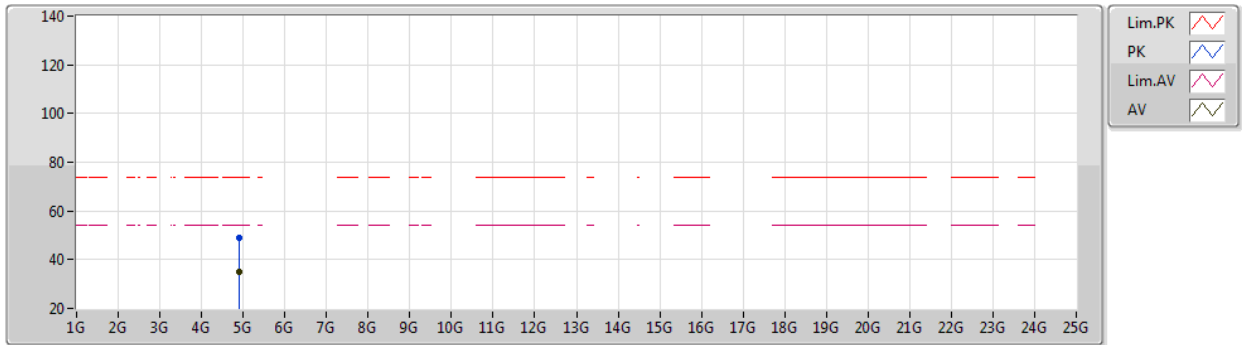
EUT Y_2TX
Setting 22
03-F-B-2

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	4.9018G	46.75	74.00	-27.25	42.20	3	Vertical	343	1.80	-	33.59	6.35	35.39
AV	4.9005G	33.13	54.00	-20.87	28.56	3	Vertical	343	1.80	-	33.60	6.35	35.38

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

30/12/2020

2452MHz_TX



EUT Y_2TX
Setting 22
03-F-B-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	4.89982G	49.20	74.00	-24.80	44.63	3	Horizontal	43	2.40	-	33.60	6.35	35.38
AV	4.899G	35.01	54.00	-18.99	30.44	3	Horizontal	43	2.40	-	33.60	6.35	35.38