Testing Laboratory 3787

RADIO TEST REPORT

FCC ID	:	M4Y-SP250
Equipment	:	11ax Access Point
Brand Name	:	ZCOM
Model Name	:	SP250, SP250-S5
Applicant	:	Z Com Inc 5F, No.8, HSIN ANN RD., HSINCH SCIENCE PARK, HSINCHU, 300 TAIWAN
Manufacturer	:	Z Com Inc 5F, No.8, HSIN ANN RD., HSINCH SCIENCE PARK, HSINCHU, 300 TAIWAN
Standard	:	47 CFR FCC Part 15.247

The product was received on Jul. 15, 2022, and testing was started from Aug. 12, 2022 and completed on Nov. 17, 2022. 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.)

Table of Contents

History of this test report

Report No.	Version	Description	Issued Date
FR261348AA	01	Initial issue of report	Apr. 11, 2023

Summary of Test Result

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

Declaration of Conformity:
1. The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers. It's means measurement values may risk exceeding the limit of regulation standards, if measurement uncertainty is include in test results. 2. The measurement uncertainty please refer to report "Measurement Uncertainty".
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: Sophia Shiung

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
2400-2483.5	b, g, n (HT20), VHT20, ax (HEW20)	2412-2462	1-11 [11]
2400-2483.5	n (HT40), VHT40, ax (HEW40)	2422-2452	3-9 [7]

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

Note:
- 11b mode uses a combination of DSSS-DBPSK, DQPSK, CCK modulation.
- 11g, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- VHT20, VHT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- HEW20, HEW40 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- BWch is the nominal channel bandwidth.

1.1.2 Antenna Information

For EUT 1

Ant.	Port		Brand	Model Name	Antenna Type	Connector	Gain (dBi)
	WLAN 2.4GHz	WLAN 5GHz					
1	1	-	Bdtron, Inc.	1001A0018	PCB	I-PEX	Note 1
2	2	-	Bdtron, Inc.	1001A0018	PCB	I-PEX	
3	-	1	Bdtron, Inc.	1001A0016	PCB	I-PEX	
4	-	2	Bdtron, Inc.	1001A0016	PCB	I-PEX	

Note 1:

Ant.	Gain (dBi)												
	WLAN 2.4GHz							WLAN 5GHz UNII 1			WLAN 5GHz UNII 3		
	2412	2417	2422	2437	2452	2457	2462	5150	5200	5250	5750	5800	5850
1	3.03	3.19	3.34	3.95	4.87	4.94	5.21	-	-	-	-	-	-
2	5.03	5.08	5.17	5.58	5.96	5.97	5.89	-	-	-	-	-	-
3	-	-	-	-	-	-	-	4.51	4.79	5.02	3.95	2.98	3.41
4	-	-	-	-	-	-	-	4.62	4.53	5.23	5.63	4.77	4.43

For EUT 2

Ant.	Port		Brand	Model Name	Antenna Type	Connector	Gain (dBi)
	WLAN 2.4GHz	WLAN 5GHz					
1	1	-	Bdtron, Inc.	1001A0018	PCB	I-PEX	Note 2
2	2	-	Bdtron, Inc.	1001A0018	PCB	I-PEX	
3	-	1	Master Wave	98P1DUIPF000	PCB	I-PEX	
	-	2				I-PEX	

Note 2:

Ant.	Gain (dBi)												
	WLAN 2.4GHz							WLAN 5GHz UNII 1			WLAN 5GHz UNII 3		
	2412	2417	2422	2437	2452	2457	2462	5150	5200	5250	5750	5800	5850
1	3.03	3.19	3.34	3.95	4.87	4.94	5.21	-	-	-	-	-	-
2	5.03	5.08	5.17	5.58	5.96	5.97	5.89	-	-	-	-	-	-
3 (port 1)	-	-	-	-	-	-	-	7.82	8.20	8.30	8.04	7.63	7.35
3 (port 2)	-	-	-	-	-	-	-	9.01	9.21	9.58	7.59	6.82	6.62

Note 3: The above information was declared by manufacturer.

Note 4: Directional gain information

Type	Maximum Output Power	Power Spectral Density
Non-BF	Directional gain = Max.gain + array gain. For power measurements on IEEE 802.11 devices Array Gain = 0 dB (i.e., no array gain) for N ANT ≤ 4	$DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$
BF	$DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$	$DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$

Ex.

Directional Gain (NSS1) formula : $DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$

NSS1(g1,1) = $10^{G1/20}$; NSS1(g1,2)= $10^{G2/20}$;

gj,k =$(Nss1(g1,1) + Nss1(g1,2))^2$

DG = 10 log[$(Nss1(g1,1) + Nss1(g1,2))^2$ / N_{ANT}] => 10 log[$(10^{G1/20} + 10^{G2/20})^2$ / N_{ANT}]

Where ;

For EUT 1

2.4G 2412 G1= 3.03 dBi ;2.4G 2412 G2= 5.03 dBi ;DG= 7.1dBi
2.4G 2417 G1= 3.19 dBi ;2.4G 2417 G2= 5.08 dBi ;DG= 7.2dBi
2.4G 2422 G1= 3.34 dBi ;2.4G 2422 G2= 5.17 dBi ;DG= 7.31dBi
2.4G 2437 G1= 3.95 dBi ;2.4G 2437 G2= 5.58 dBi ;DG= 7.81dBi
2.4G 2452 G1= 4.87 dBi ;2.4G 2452 G2= 5.96 dBi ;DG= 8.44dBi
2.4G 2457 G1= 4.94 dBi ;2.4G 2457 G2= 5.97 dBi ;DG= 8.48dBi
2.4G 2462 G1= 5.21 dBi ;2.4G 2462 G2= 5.89 dBi ;DG= 8.57dBi
5G 5180 G1= 4.79 dBi ;5G 5180 G2= 4.53 dBi ;DG= 7.67dBi
5G 5200 G1= 4.79 dBi ;5G 5200 G2= 4.53 dBi ;DG= 7.67dBi
5G 5240 G1= 5.02 dBi ;5G 5240 G2= 5.23 dBi ;DG= 8.14dBi
5G 5745 G1= 3.95 dBi ;5G 5745 G2= 5.63 dBi ;DG= 7.84dBi
5G 5785 G1= 2.98 dBi ;5G 5785 G2= 4.77 dBi ;DG= 6.93dBi
5G 5825 G1= 3.41 dBi ;5G 5825 G2= 4.43 dBi ;DG= 6.95dBi
5G 5190 G1= 4.79 dBi ;5G 5190 G2= 4.53 dBi ;DG= 7.67dBi
5G 5230 G1= 5.02 dBi ;5G 5230 G2= 5.23 dBi ;DG= 8.14dBi
5G 5755 G1= 3.95 dBi ;5G 5755 G2= 5.63 dBi ;DG= 7.84dBi
5G 5795 G1= 2.98 dBi ;5G 5795 G2= 4.77 dBi ;DG= 6.93dBi
5G 5210 G1= 4.79 dBi ;5G 5210 G2= 4.53 dBi ;DG= 7.67dBi
5G 5775 G1= 3.95 dBi ;5G 5775 G2= 5.63 dBi ;DG= 7.84dBi

For EUT 2
2.4G 2412 G1= 3.03 dBi ;2.4G 2412 G2= 5.03 dBi ;DG= 7.1dBi
2.4G 2417 G1= 3.19 dBi ;2.4G 2417 G2= 5.08 dBi ;DG= 7.2dBi
2.4G 2422 G1= 3.34 dBi ;2.4G 2422 G2= 5.17 dBi ;DG= 7.31dBi
2.4G 2437 G1= 3.95 dBi ;2.4G 2437 G2= 5.58 dBi ;DG= 7.81dBi
2.4G 2452 G1= 4.87 dBi ;2.4G 2452 G2= 5.96 dBi ;DG= 8.44dBi
2.4G 2457 G1= 4.94 dBi ;2.4G 2457 G2= 5.97 dBi ;DG= 8.48dBi
2.4G 2462 G1= 5.21 dBi ;2.4G 2462 G2= 5.89 dBi ;DG= 8.57dBi
5G 5180 G1= 8.2 dBi ;5G 5180 G2= 9.21 dBi ;DG= 11.73dBi
5G 5200 G1= 8.2 dBi ;5G 5200 G2= 9.21 dBi ;DG= 11.73dBi
5G 5240 G1= 8.3 dBi ;5G 5240 G2= 9.58 dBi ;DG= 11.97dBi
5G 5745 G1= 8.04 dBi ;5G 5745 G2= 7.59 dBi ;DG= 10.83dBi
5G 5785 G1= 7.63 dBi ;5G 5785 G2= 6.82 dBi ;DG= 10.24dBi
5G 5825 G1= 7.63 dBi ;5G 5825 G2= 6.82 dBi ;DG= 10.24dBi
5G 5190 G1= 8.2 dBi ;5G 5190 G2= 9.21 dBi ;DG= 11.73dBi
5G 5230 G1= 8.3 dBi ;5G 5230 G2= 9.58 dBi ;DG= 11.97dBi
5G 5755 G1= 8.04 dBi ;5G 5755 G2= 7.59 dBi ;DG= 10.83dBi
5G 5795 G1= 7.63 dBi ;5G 5795 G2= 6.82 dBi ;DG= 10.24dBi
5G 5210 G1= 8.2 dBi ;5G 5210 G2= 9.21 dBi ;DG= 11.73dBi
5G 5775 G1= 8.04 dBi ;5G 5775 G2= 7.59 dBi ;DG= 10.83dBi

Note 5: **For 2.4GHz function:**
For IEEE 802.11 b/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:
For IEEE 802.11a/n/ac/ax (2TX/2RX):
Port 1 and Port 2 can be used as transmitting/receiving antenna.
Port 1 and Port 2 could transmit/receive simultaneously.

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11b	0.649	1.88	692.5u	3k
802.11g	0.939	0.27	1.98m	1k
802.11ax HEW20	0.959	0.18	5.448m	300
802.11ax HEW40	0.959	0.18	5.448m	300

Note:
- DC is Duty Cycle.
- DCF is Duty Cycle Factor.

1.1.4 EUT Operational Condition

EUT Power Type	From PoE			
Beamforming Function	☐	With beamforming	☒	Without beamforming
Function	☒	Point-to-multipoint	☐	Point-to-point
Support RU	☒	Full RU	☐	Partial RU
Test Software Version	QSPR Version 5.0-00188			

Note: The above information was declared by manufacturer.

1.1.5 Table for Multiple Listing

The difference for each model is show as below:

EUT	Model Name	2.4GHz	5GHz
1	SP250	Equipped with the same antennas.	Equipped with the different antennas.
2	SP250-S5		

Note 1: From the above EUTs, EUT 1 was selected as representative model to test all the test items: EUT 2 was selected to test AC power-line conducted emissions and Radiated Emission below 1GHz.

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 15.247
- ANSI C63.10-2013

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

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

1.3 Testing Location Information

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

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
RF Conducted	TH02-CB	Jay Lo	23.6~24.5 / 58~62	Sep. 22, 2022
Radiated < 1GHz	03CH05-CB	Simmon Cheng	24.4~25.5 / 55~58	Nov. 15, 2022~ Nov. 16, 2022
Radiated > 1GHz	03CH02-CB	Gordon Hung	23.1~24.2 / 55~60	Aug. 12, 2022~ Sep. 16, 2022
AC Conduction	CO01-CB	Tim Chen	24~25 / 58~59	Nov. 17, 2022

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)	3.4 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	3.4 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.6 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	5.2 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.7 dB	Confidence levels of 95%
Conducted Emission	3.2 dB	Confidence levels of 95%
Output Power Measurement	0.8 dB	Confidence levels of 95%
Power Density Measurement	3.2 dB	Confidence levels of 95%
Bandwidth Measurement	2.0 %	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

Mode	Power Setting
802.11b_Nss1,(1Mbps)_2TX	-
2412MHz	23.5
2417MHz	26
2437MHz	26.5
2457MHz	26
2462MHz	24.5
802.11g_Nss1,(6Mbps)_2TX	-
2412MHz	24.5
2437MHz	26
2457MHz	25
2462MHz	21.5
802.11ax HEW20_Nss1,(MCS0)_2TX	-
2412MHz	25
2437MHz	27
2457MHz	25
2462MHz	21.5
802.11ax HEW40_Nss1,(MCS0)_2TX	-
2422MHz	23.5
2437MHz	24
2452MHz	18

Note:
- Evaluated HEW20 / HEW40 mode only, due to similar modulation. The power setting of HT20 / HT40 / VHT20 / VHT40 modes are the same or lower than HEW20 / HEW40.

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 Test Voltage: 120Vac / 60Hz
Operating Mode	Normal Link
1	Normal link: EUT 1 + PoE
2	Normal link: EUT 2 + PoE
For operating, mode 1 is the worst case and it was recorded in this test report.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	DTS Bandwidth Maximum Conducted Output Power Power Spectral Density Emissions in Non-restricted Frequency Bands
Test Condition	Conducted measurement at transmit chains
Operating Mode	CTX
1	EUT 1

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emissions in Restricted Frequency Bands
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	Normal Link
	After evaluating, the worst case was found at Z axis. So the measurement will follow this same test configuration.
1	EUT 1 in Z axis + PoE
2	EUT 2 in Z axis + PoE
For operating, mode 2 is the worst case and it was recorded in this test report.	
Operating Mode > 1GHz	CTX
	After evaluating, the worst case was found at Y axis. So the measurement will follow this same test configuration.
1	EUT 1 in Y axis + PoE_WLAN 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 (Using antenna gain of EUT 2)
Refer to Sporton Test Report No.: FA261348 for Co-location RF Exposure Evaluation.	

Note: The PoE and adapter were for measurement only and would not be marketed. Their information is showed as below:

Equipment	Brand	Model	FCC ID	Remark
PoE	CERIO	FPOE-DXG	N/A	-
AC Adapter	EDAC	EA10681T-480	N/A	for PoE use

2.3 EUT Operation during Test

For CTX Mode:

The EUT was programmed to be in continuously transmitting mode.

For Normal Link:

During the test, the EUT operation to normal function.

2.4 Accessories

Accessories
Waterproof connector*4
Mounting bracket*1 (With screw*4)
Metal band*1
Ground wire*1: Non-shielded, 1m

2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	2.5G LAN1 NB	DELL	E6430	N/A
B	2.4G NB	DELL	E6430	N/A
C	5G NB	DELL	E6430	N/A
D	2.5G WAN NB	DELL	E6430	N/A
E	PoE	CERIO	FPOE-DXG	N/A

For Radiated (below 1GHz):

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	2.5G WAN NB	DELL	E4300	N/A
B	PoE	CERIO	FPOE-DXG	N/A
C	2.5G LAN NB	DELL	E4300	N/A
D	2.4G NB	DELL	E4300	N/A
E	5G NB	DELL	E4300	N/A

For Radiated (above 1GHz):

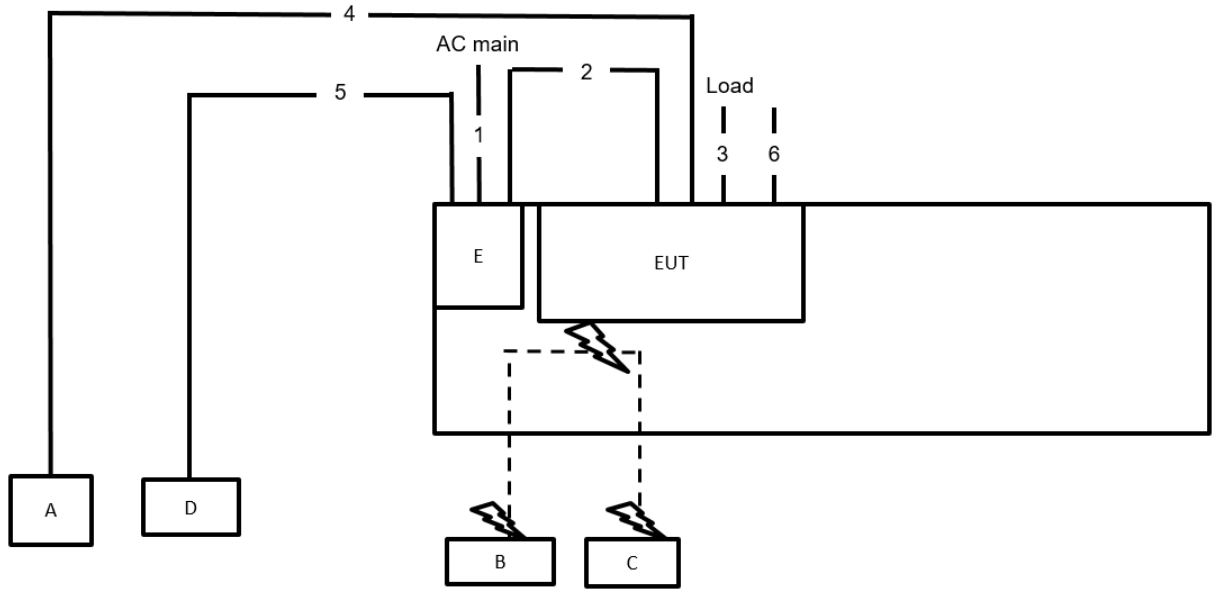
Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	NB	DELL	E4300	N/A
B	PoE	CERIO	FPOE-DXG	N/A

For RF Conducted:

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	NB	DELL	E4300	N/A
B	PoE	CERIO	FPOE-DXG	N/A

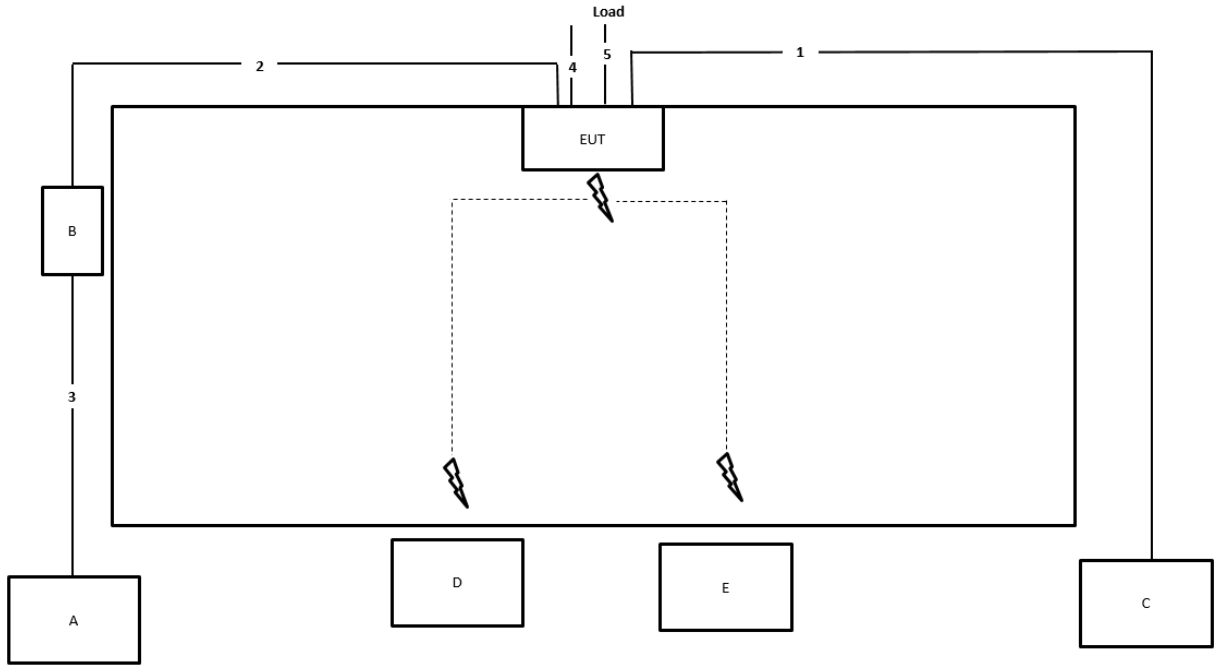
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



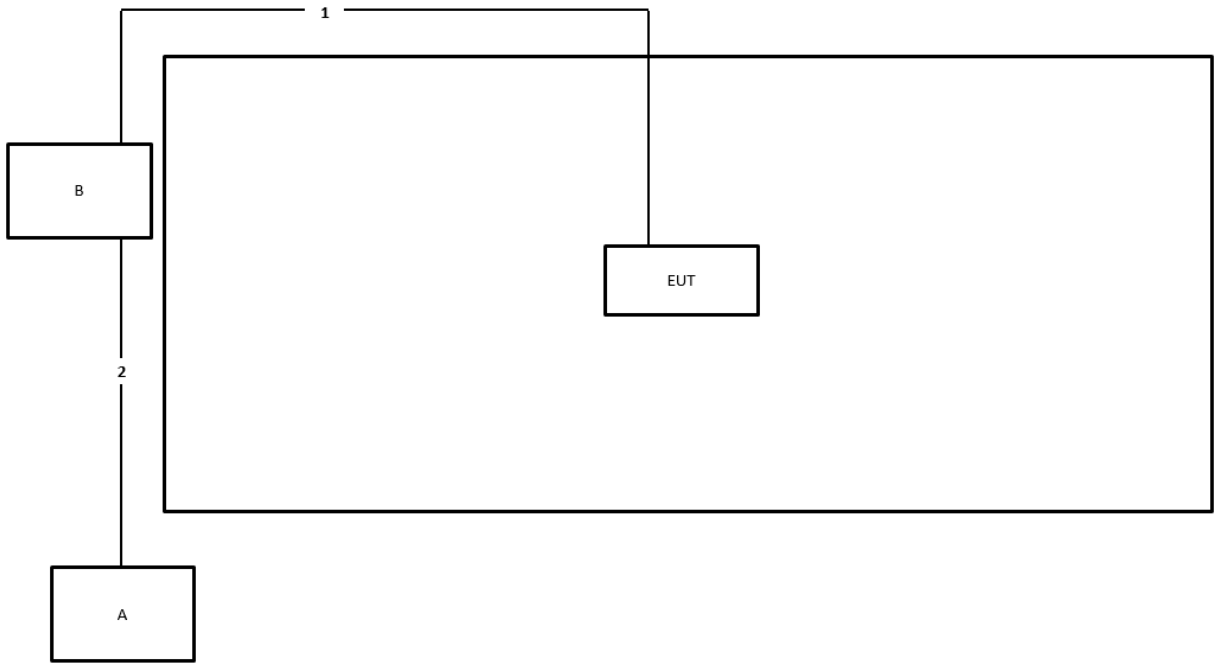
Item	Connection	Shielded	Length
1	Power cable	No	1.1m
2	RJ-45 cable	No	1.5m
3	RJ-45 cable*2	No	1.5m
4	RJ-45 cable	No	10m
5	RJ-45 cable	No	10m
6	Ground wire	No	1m

Test Setup Diagram - Radiated Test < 1GHz



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

Test Setup Diagram - Radiated Test > 1GHz



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

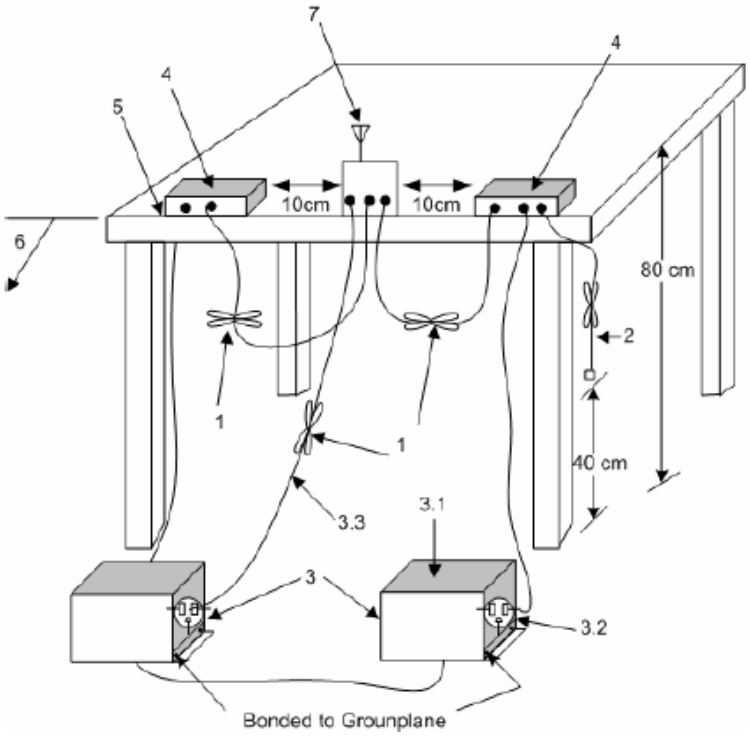
Refer a test equipment and calibration data table in this test report.

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

AC Power-line Conducted Emissions



1—Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 cm to 40 cm long.
2—The I/O cables that are not connected to an accessory shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
3—EUT connected to one LISN. Unused LISN measuring port connectors shall be terminated in 50 Ω loads. LISN may be placed on top of, or immediately beneath, reference ground plane.
3.1—All other equipment powered from additional LISN(s).
3.2—A multiple-outlet strip may be used for multiple power cords of non-EUT equipment.
3.3—LISN at least 80 cm from nearest part of EUT chassis.
4—Non-EUT components of EUT system being tested.
5—Rear of EUT, including peripherals, shall all be aligned and flush with edge of tabletop.
6—Edge of tabletop shall be 40 cm removed from a vertical conducting plane that is bonded to the ground plane.
7—Antenna can be integral or detachable. If detachable, then the antenna shall be attached for this test.

3.1.5 Measurement Results Calculation

The measured Level is calculated using:

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

b. Margin = -Limit + Level

3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 DTS Bandwidth

3.2.1 6dB Bandwidth Limit

6dB Bandwidth Limit
Systems using digital modulation techniques:
▪ 6 dB bandwidth ≥ 500 kHz.

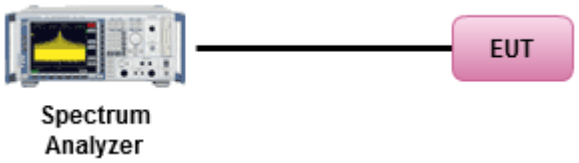
3.2.2 Measuring Instruments

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

Emission Bandwidth


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: $P_{total} = P_1 + P_2 + \ldots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$

3.3.4 Test Setup

Maximum Conducted Output Power (Power Meter)


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

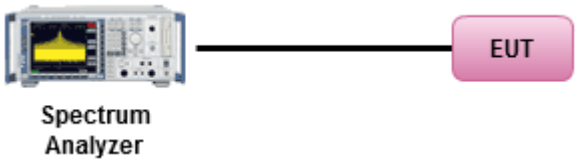
3.4.2 Measuring Instruments

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

Power Spectral Density


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

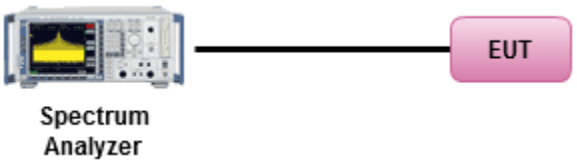
Refer a test equipment and calibration data table in this test report.

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

Emissions in Non-restricted Frequency Bands



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.

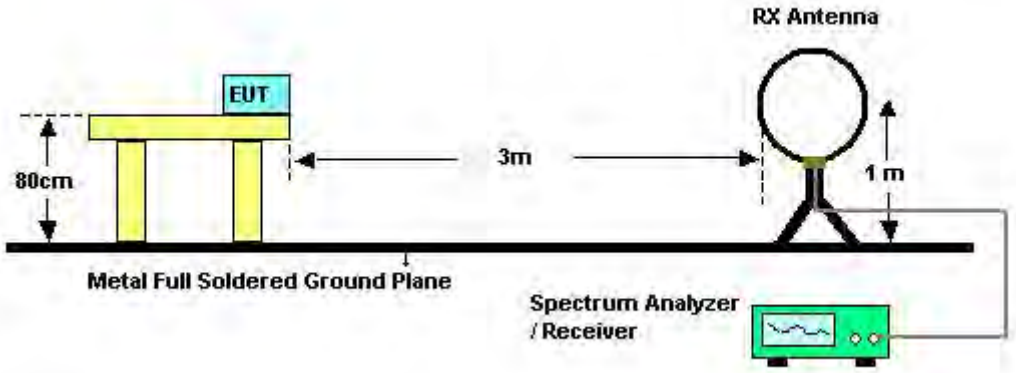
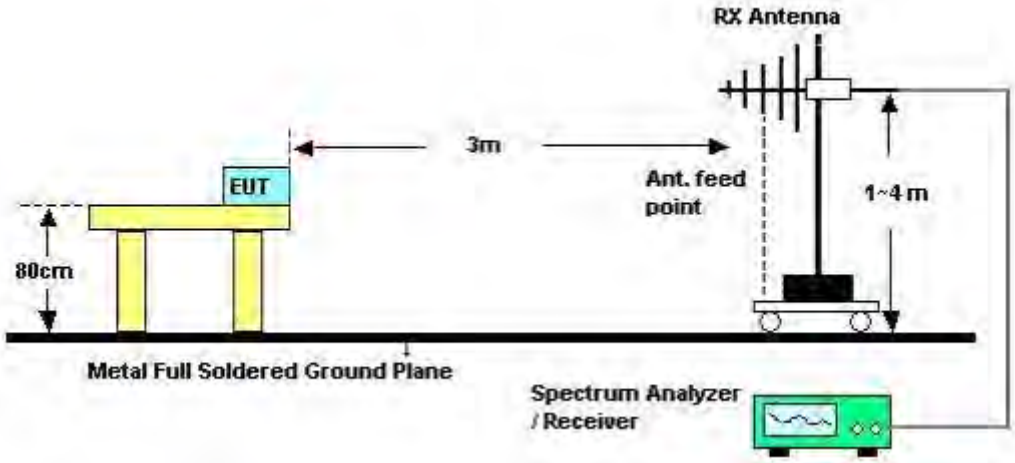
3.6.2 Measuring Instruments

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

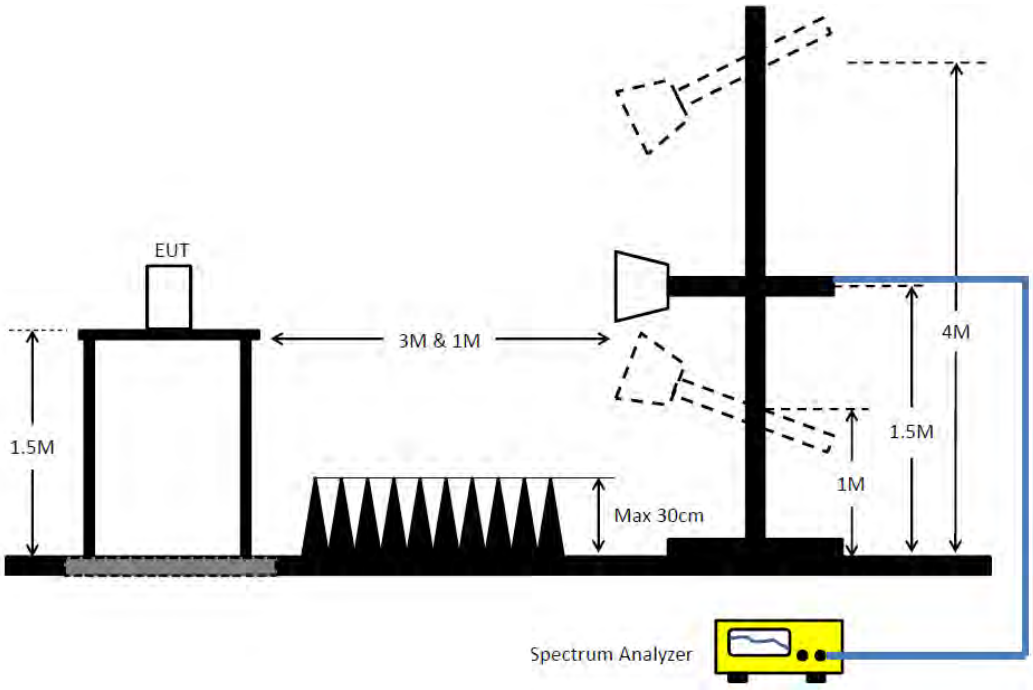
3.6.3 Test Procedures

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 ≥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≥1/T).
		☐	Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW ≥ 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

Radiated - Emissions in Restricted Frequency Bands
9kHz ~30MHz

30MHz~1GHz


Above 1GHz



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
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.4GHz	Feb. 22, 2022	Feb. 21, 2023	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Feb. 09, 2022	Feb. 08, 2023	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Apr. 12, 2022	Apr. 11, 2023	Conduction (CO01-CB)
Pulse Limiter	Rohde& Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Feb. 10, 2022	Feb. 09, 2023	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	Oct. 18, 2022	Oct. 17, 2023	Conduction (CO01-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	May 14, 2022	May 13, 2023	Radiation (03CH05-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH05-CB	30 MHz~1 GHz	Aug. 03, 2022	Aug. 02, 2023	Radiation (03CH05-CB)
Bilog Antenna with 6dB Attenuator	TESEQ & EMCI	CBL 6112D & N-6-06	35236 & AT-N0610	30MHz ~ 2GHz	Mar. 25, 2022	Mar. 24, 2023	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC330N	980331	20MHz ~ 3GHz	Apr. 26, 2022	Apr. 25, 2023	Radiation (03CH05-CB)
Spectrum Analyzer	R&S	FSP40	100304	9kHz ~ 40GHz	Mar. 14, 2022	Mar. 13, 2023	Radiation (03CH05-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	Jun. 17, 2022	Jun. 16, 2023	Radiation (03CH05-CB)
RF Cable-low	Woken	RG402	Low Cable-04+23	30MHz~1GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH05-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH05-CB)
3m Semi Anechoic Chamber VSWR	RIKEN	SAC-3M	03CH02-CB	1GHz ~18GHz	Mar. 26, 2022	Mar. 25, 2023	Radiation (03CH02-CB)
Horn Antenna	EMCO	3115	9610-4976	1GHz ~ 18GHz	Apr. 19, 2022	Apr. 18, 2023	Radiation (03CH02-CB)
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170507	15GHz ~ 40GHz	Jul. 05, 2022	Jul. 04, 2023	Radiation (03CH02-CB)
Pre-Amplifier	Agilent	83017A	MY39501305	1GHz ~ 26.5GHz	Jul. 01, 2022	Jun. 30, 2023	Radiation (03CH02-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 20, 2022	Jul. 19, 2023	Radiation (03CH02-CB)
Spectrum analyzer	R&S	FSU	100015	9kHz~26GHz	Oct. 25, 2021	Oct. 24, 2022	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-18	1GHz ~ 18GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-18+19	1GHz ~ 18GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH02-CB)

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
High Cable	Woken	WCA0929M	40G#5+7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH02-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 08, 2021	Dec. 07, 2022	Radiation (03CH02-CB)
High Cable	Woken	WCA0929M	40G#7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH02-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH02-CB)
Spectrum analyzer	R&S	FSV40	101027	9kHz~40GHz	Aug. 15, 2022	Aug. 14, 2023	Conducted (TH02-CB)
Power Sensor	Anritsu	MA2411B	1126203	300MHz~ 40GHz	Oct. 25, 2021	Oct. 24, 2022	Conducted (TH02-CB)
Power Meter	Anritsu	ML2495A	1210004	300MHz~ 40GHz	Oct. 25, 2021	Oct. 24, 2022	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-01	1 GHz – 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-02	1 GHz – 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-03	1 GHz – 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-04	1 GHz – 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-05	1 GHz – 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH02-CB)
Switch	SPTCB	SP-SWI	SWI-02	1 GHz – 26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	SWI-02-P1	1 GHz – 26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	SWI-02-P2	1 GHz – 26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	SWI-02-P3	1 GHz – 26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	SWI-02-P4	1 GHz – 26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	SWI-02-P5	1 GHz – 26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH02-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH02-CB)

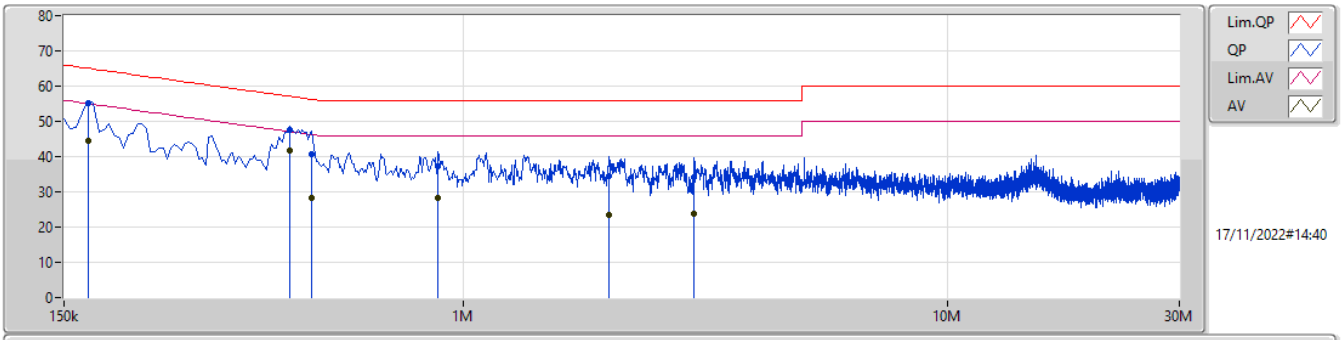
Note: Calibration Interval of instruments listed above is one year.

NCR means Non-Calibration required.

Summary

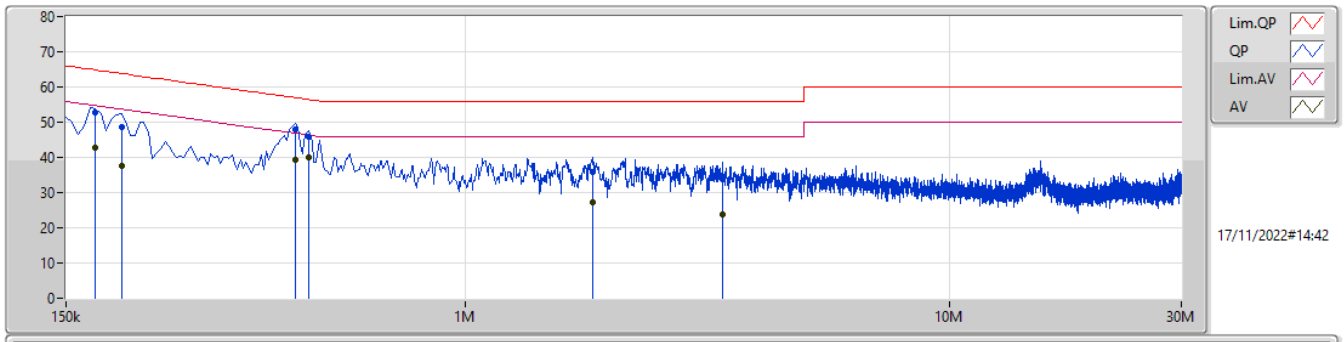
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	438k	41.68	47.11	-5.43	Line

Mode 1



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	168k	55.06	65.06	-10.00	9.99	Line	-	45.07	0.06	0.04	9.89
AV	168k	44.38	55.06	-10.68	9.99	Line	-	34.39	0.06	0.04	9.89
QP	438k	47.69	57.11	-9.42	10.01	Line	-	37.68	0.06	0.06	9.89
AV	438k	41.68	47.11	-5.43	10.01	Line	"Worst"	31.67	0.06	0.06	9.89
QP	487.5k	40.79	56.21	-15.42	10.01	Line	-	30.78	0.06	0.06	9.89
AV	487.5k	28.41	46.21	-17.80	10.01	Line	-	18.40	0.06	0.06	9.89
QP	888k	37.17	56.00	-18.83	10.00	Line	-	27.17	0.07	0.04	9.89
AV	888k	28.13	46.00	-17.87	10.00	Line	-	18.13	0.07	0.04	9.89
QP	1.995M	34.49	56.00	-21.51	10.07	Line	-	24.42	0.09	0.09	9.89
AV	1.995M	23.38	46.00	-22.62	10.07	Line	-	13.31	0.09	0.09	9.89
QP	2.99M	34.06	56.00	-21.94	10.10	Line	-	23.96	0.11	0.10	9.89
AV	2.99M	23.70	46.00	-22.30	10.10	Line	-	13.60	0.11	0.10	9.89

Mode 1



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	172.5k	52.91	64.83	-11.92	10.00	Neutral	-	42.91	0.07	0.04	9.89
AV	172.5k	42.77	54.83	-12.06	10.00	Neutral	-	32.77	0.07	0.04	9.89
QP	195k	48.45	63.82	-15.37	10.00	Neutral	-	38.45	0.07	0.04	9.89
AV	195k	37.47	53.82	-16.35	10.00	Neutral	-	27.47	0.07	0.04	9.89
QP	447k	47.86	56.94	-9.08	10.02	Neutral	-	37.84	0.07	0.06	9.89
AV	447k	39.22	46.94	-7.72	10.02	Neutral	-	29.20	0.07	0.06	9.89
QP	474k	46.02	56.44	-10.42	10.02	Neutral	-	36.00	0.07	0.06	9.89
AV	474k	40.13	46.44	-6.31	10.02	Neutral	"Worst"	30.11	0.07	0.06	9.89
QP	1.829M	35.95	56.00	-20.05	10.07	Neutral	-	25.88	0.10	0.08	9.89
AV	1.829M	27.24	46.00	-18.76	10.07	Neutral	-	17.17	0.10	0.08	9.89
QP	3.395M	33.68	56.00	-22.32	10.11	Neutral	-	23.57	0.12	0.10	9.89
AV	3.395M	23.72	46.00	-22.28	10.11	Neutral	-	13.61	0.12	0.10	9.89

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	8.075M	13.014M	13M0G1D	7.075M	12.918M
802.11g_Nss1,(6Mbps)_2TX	16.275M	16.473M	16M5D1D	15.275M	16.442M
802.11ax HEW20_Nss1,(MCS0)_2TX	18.55M	18.951M	19M0D1D	17.55M	18.899M
802.11ax HEW40_Nss1,(MCS0)_2TX	37.75M	37.942M	37M9D1D	36.6M	37.789M

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

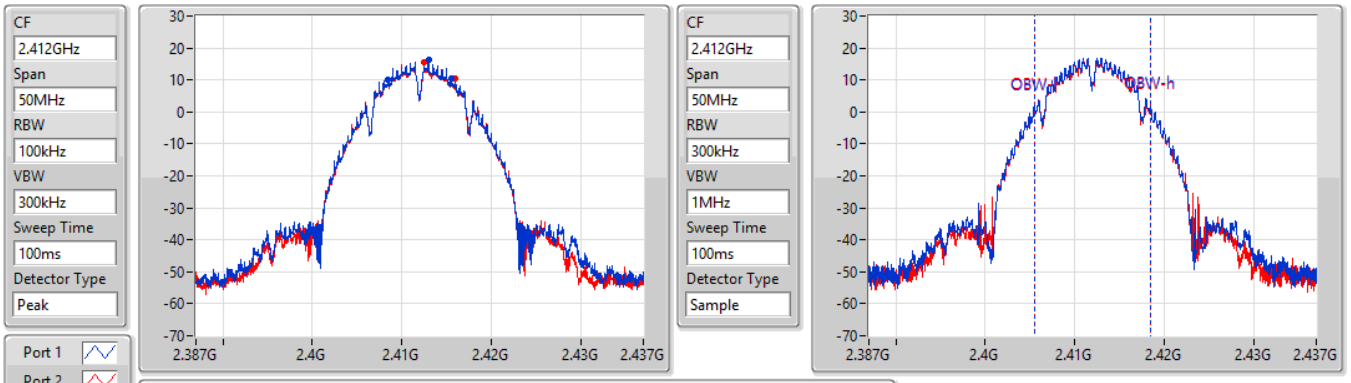
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	7.075M	12.918M	7.55M	12.967M
2437MHz	Pass	500k	8.075M	12.951M	8.025M	12.948M
2462MHz	Pass	500k	7.525M	12.943M	8.025M	13.014M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	15.675M	16.463M	15.4M	16.463M
2437MHz	Pass	500k	16.025M	16.464M	15.275M	16.442M
2462MHz	Pass	500k	16M	16.471M	16.275M	16.473M
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	17.875M	18.899M	18.4M	18.927M
2437MHz	Pass	500k	17.625M	18.935M	17.85M	18.905M
2462MHz	Pass	500k	17.55M	18.951M	18.55M	18.945M
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	37.75M	37.789M	36.6M	37.874M
2437MHz	Pass	500k	37.35M	37.862M	37.35M	37.873M
2452MHz	Pass	500k	37.35M	37.906M	36.9M	37.942M

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

802.11b_Nss1,(1Mbps)_2TX EBW

2412MHz

22/09/2022

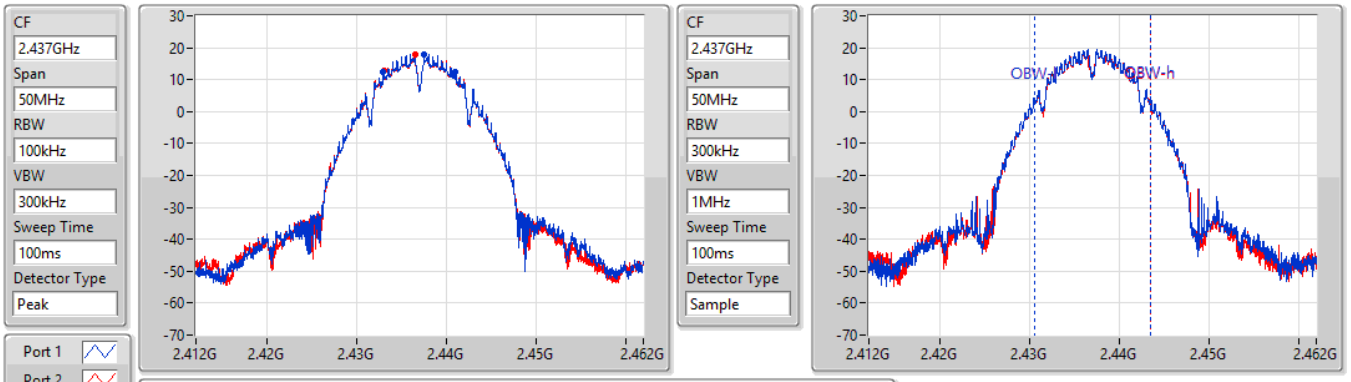


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.075M	2.40845G	2.415525G	12.918M	2.405555G	2.418473G	500k	1
7.55M	2.40845G	2.416G	12.967M	2.405531G	2.418498G	500k	2

802.11b_Nss1,(1Mbps)_2TX EBW

2437MHz

22/09/2022

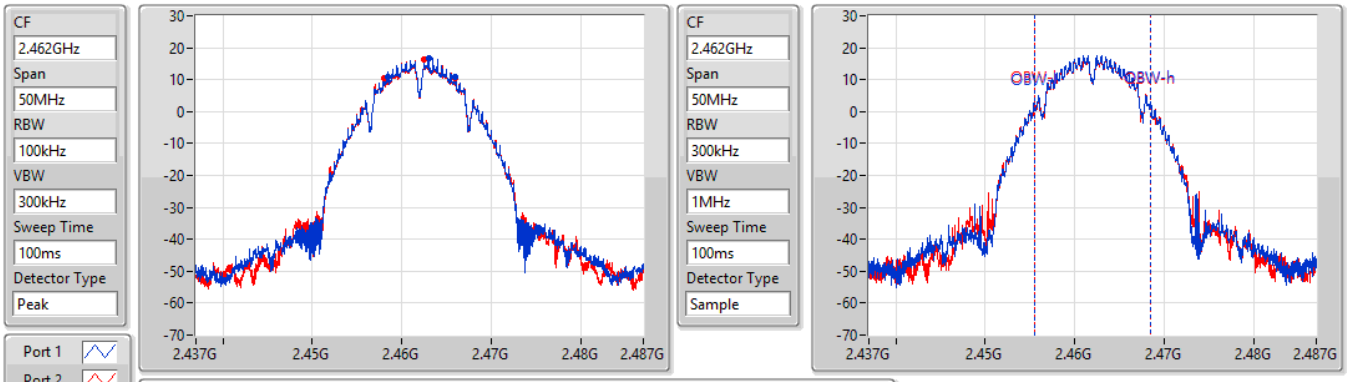


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
8.075M	2.43295G	2.441025G	12.951M	2.430527G	2.443478G	500k	1
8.025M	2.432975G	2.441G	12.948M	2.430537G	2.443485G	500k	2

802.11b_Nss1,(1Mbps)_2TX EBW

2462MHz

22/09/2022

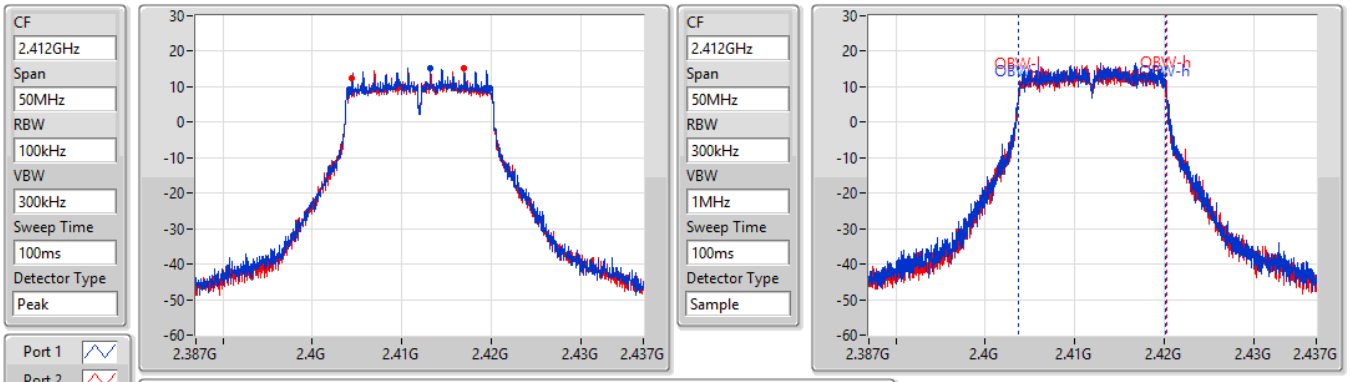


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.525M	2.45845G	2.465975G	12.943M	2.455527G	2.468469G	500k	1
8.025M	2.458G	2.466025G	13.014M	2.455489G	2.468504G	500k	2

802.11g_Nss1,(6Mbps)_2TX EBW

2412MHz

22/09/2022

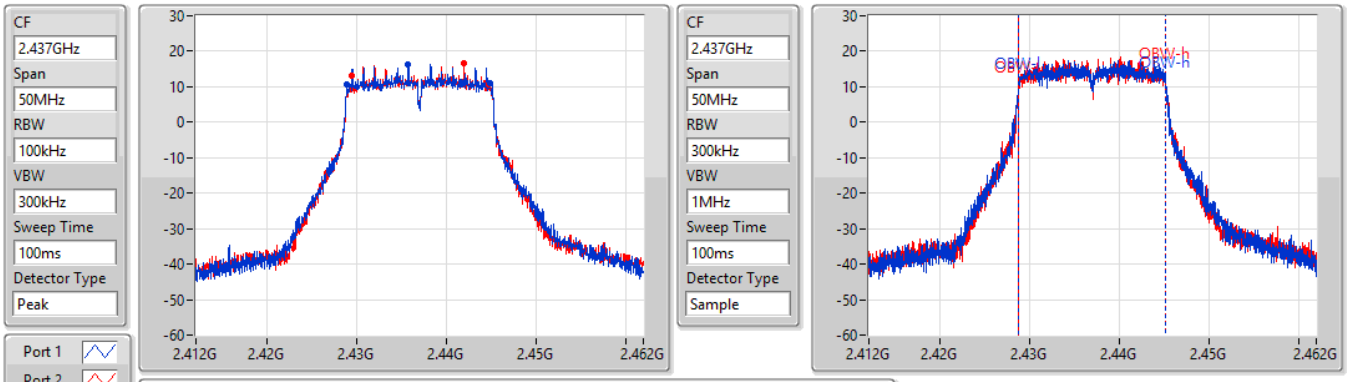


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.675M	2.4042G	2.419875G	16.463M	2.403753G	2.420215G	500k	1
15.4M	2.40445G	2.41985G	16.463M	2.403774G	2.420237G	500k	2

802.11g_Nss1,(6Mbps)_2TX EBW

2437MHz

22/09/2022

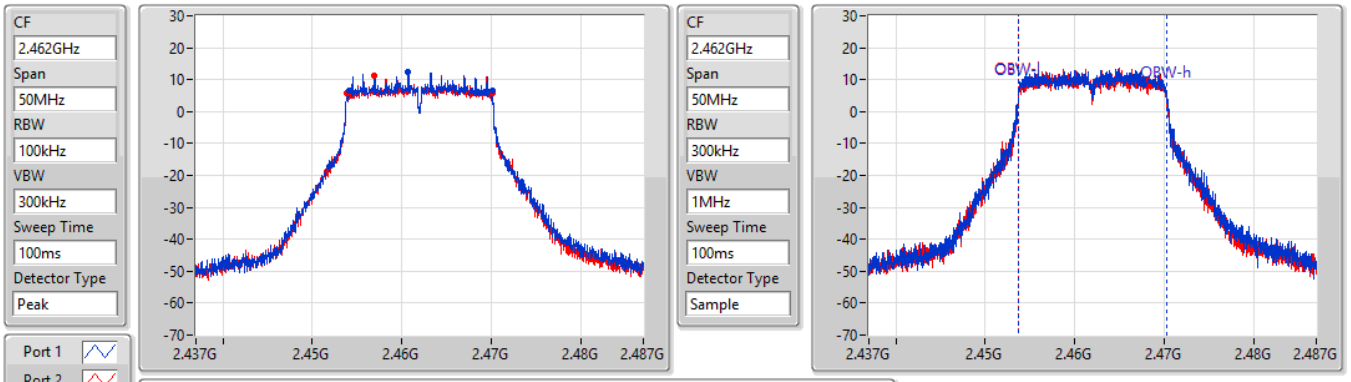


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.025M	2.42885G	2.444875G	16.464M	2.428752G	2.445216G	500k	1
15.275M	2.42945G	2.444725G	16.442M	2.428765G	2.445207G	500k	2

802.11g_Nss1,(6Mbps)_2TX EBW

2462MHz

22/09/2022

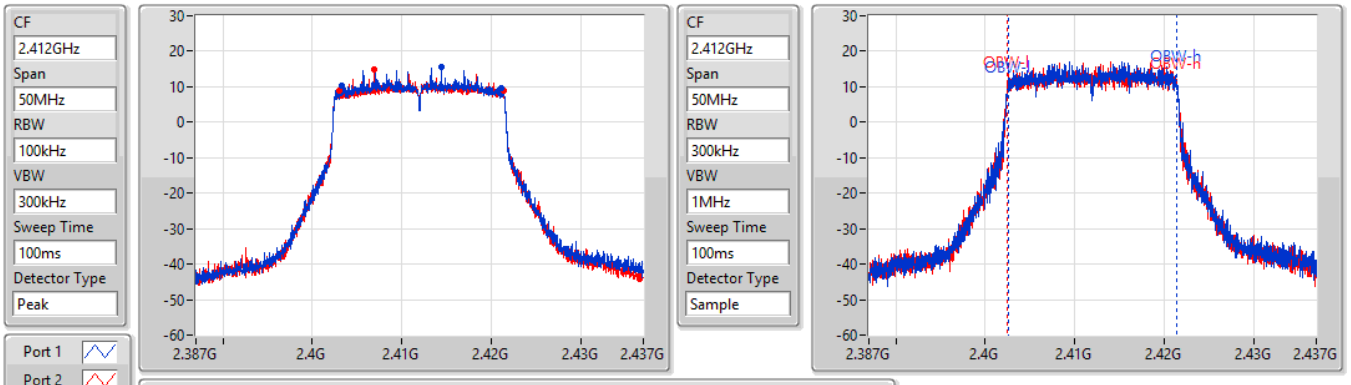


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16M	2.4541G	2.4701G	16.471M	2.453768G	2.47024G	500k	1
16.275M	2.45385G	2.470125G	16.473M	2.453766G	2.470239G	500k	2

802.11ax HEW20_Nss1,(MCS0)_2TX EBW

2412MHz

22/09/2022

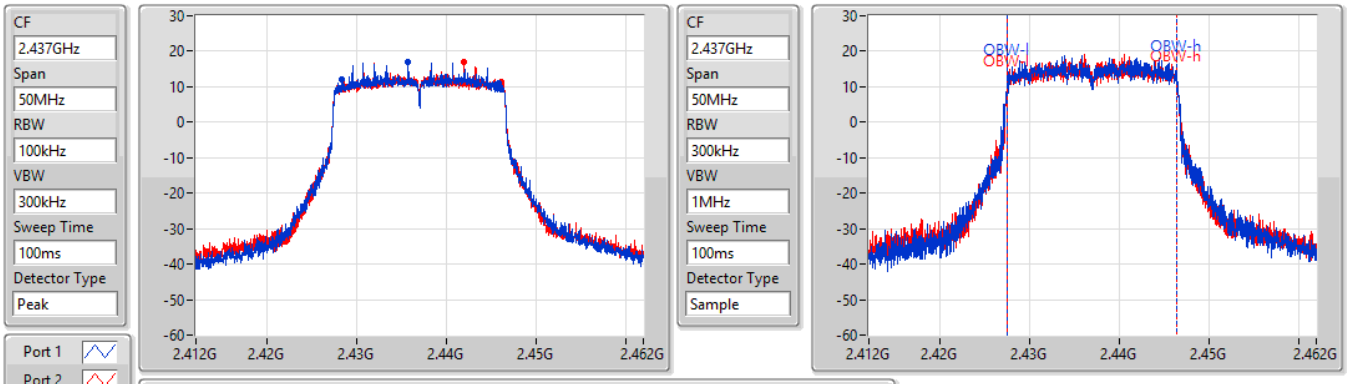


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.875M	2.40325G	2.421125G	18.899M	2.402543G	2.421442G	500k	1
18.4M	2.40295G	2.42135G	18.927M	2.402521G	2.421448G	500k	2

802.11ax HEW20_Nss1,(MCS0)_2TX EBW

2437MHz

22/09/2022



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.625M	2.42825G	2.445875G	18.935M	2.427512G	2.446447G	500k	1
17.85M	2.42825G	2.4461G	18.905M	2.427523G	2.446429G	500k	2

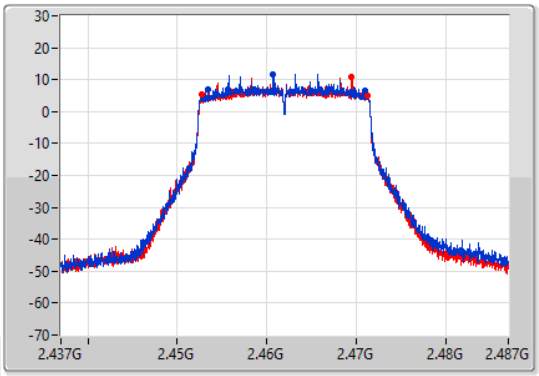
802.11ax HEW20_Nss1,(MCS0)_2TX EBW

2462MHz

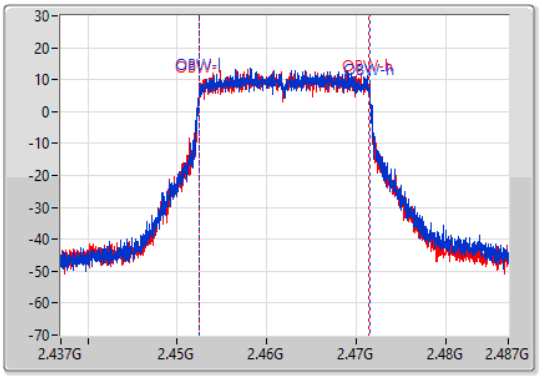
22/09/2022

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

Port 1
Port 2



CF	2.462GHz
Span	50MHz
RBW	300kHz
VBW	1MHz
Sweep Time	100ms
Detector Type	Sample



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.55M	2.4535G	2.47105G	18.951M	2.452521G	2.471472G	500k	1
18.55M	2.45275G	2.4713G	18.945M	2.452521G	2.471466G	500k	2

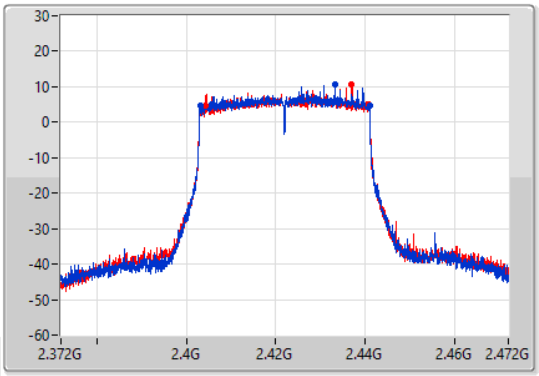
802.11ax HEW40_Nss1,(MCS0)_2TX EBW

2422MHz

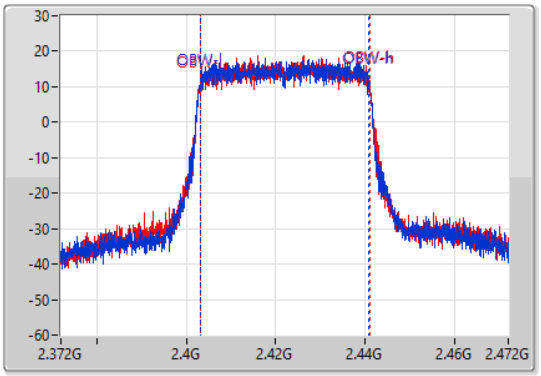
22/09/2022

CF	2.422GHz
Span	100MHz
RBW	100kHz
VBW	300kHz
Sweep Time	100ms
Detector Type	Peak

Port 1
Port 2



CF	2.422GHz
Span	100MHz
RBW	1MHz
VBW	3MHz
Sweep Time	100ms
Detector Type	Sample

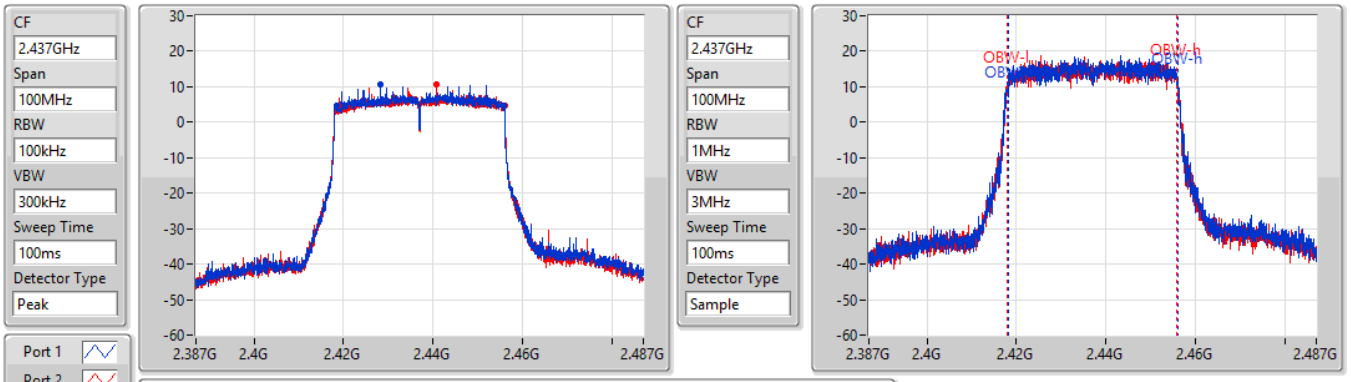


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.75M	2.4032G	2.44095G	37.789M	2.403096G	2.440885G	500k	1
36.6M	2.4043G	2.4409G	37.874M	2.403081G	2.440955G	500k	2

802.11ax HEW40_Nss1,(MCS0)_2TX EBW

2437MHz

22/09/2022

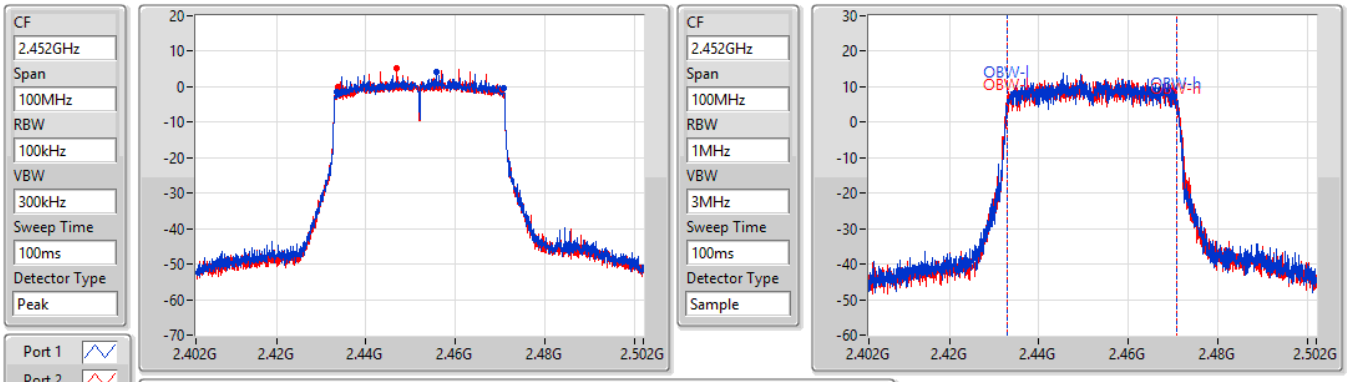


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.35M	2.41845G	2.4558G	37.862M	2.418093G	2.455955G	500k	1
37.35M	2.4187G	2.45605G	37.873M	2.41802G	2.455893G	500k	2

802.11ax HEW40_Nss1,(MCS0)_2TX EBW

2452MHz

22/09/2022



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.35M	2.4335G	2.47085G	37.906M	2.433013G	2.470919G	500k	1
36.9M	2.43365G	2.47055G	37.942M	2.432987G	2.470929G	500k	2

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_2TX	29.96	0.99083
802.11g_Nss1,(6Mbps)_2TX	29.62	0.91622
802.11ax HEW20_Nss1,(MCS0)_2TX	29.82	0.95940
802.11ax HEW40_Nss1,(MCS0)_2TX	27.56	0.57016

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	5.03	24.51	24.28	27.41	30.00
2417MHz	Pass	5.08	26.59	26.55	29.58	30.00
2437MHz	Pass	5.58	26.97	26.92	29.96	30.00
2457MHz	Pass	5.97	26.69	26.32	29.52	30.00
2462MHz	Pass	5.89	24.61	24.93	27.78	30.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	5.03	25.58	25.24	28.42	30.00
2437MHz	Pass	5.58	26.65	26.57	29.62	30.00
2457MHz	Pass	5.97	25.79	25.49	28.65	30.00
2462MHz	Pass	5.89	22.35	22.11	25.24	30.00
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	5.03	25.33	25.28	28.32	30.00
2437MHz	Pass	5.58	26.88	26.74	29.82	30.00
2457MHz	Pass	5.97	25.24	24.91	28.09	30.00
2462MHz	Pass	5.89	21.97	21.53	24.77	30.00
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	5.17	24.38	24.10	27.25	30.00
2437MHz	Pass	5.58	24.69	24.41	27.56	30.00
2452MHz	Pass	5.96	18.78	18.53	21.67	30.00

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

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_2TX	3.72
802.11g_Nss1,(6Mbps)_2TX	1.17
802.11ax HEW20_Nss1,(MCS0)_2TX	1.06
802.11ax HEW40_Nss1,(MCS0)_2TX	-3.63

RBW = 3kHz;

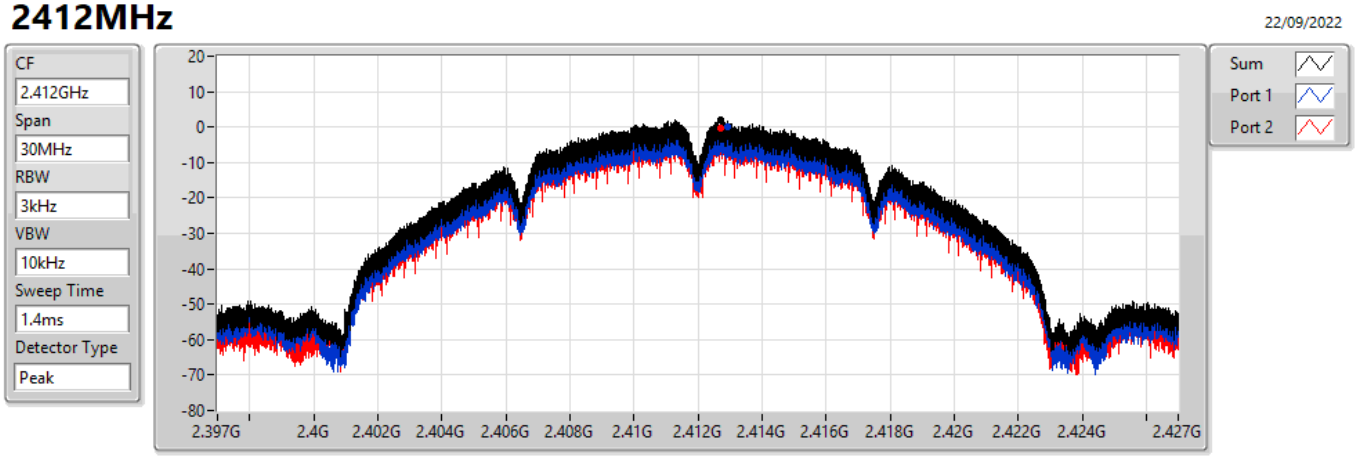
Result

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	7.10	0.11	-0.20	1.96	6.90
2437MHz	Pass	7.81	-1.14	-1.39	1.67	6.19
2462MHz	Pass	8.57	1.04	2.20	3.72	5.43
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	7.10	-0.75	-2.68	0.18	6.90
2437MHz	Pass	7.81	-1.12	-0.41	1.17	6.19
2462MHz	Pass	8.57	-5.15	-3.88	-1.89	5.43
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	7.10	-1.95	-2.63	0.20	6.90
2437MHz	Pass	7.81	-0.25	-0.83	1.06	6.19
2462MHz	Pass	8.57	-5.55	-5.85	-3.75	5.43
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	7.31	-5.51	-5.90	-3.70	6.69
2437MHz	Pass	7.81	-5.31	-6.01	-3.63	6.19
2452MHz	Pass	8.44	-11.37	-11.43	-9.41	5.56

DG = Directional Gain; RBW = 3kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

802.11b_Nss1,(1Mbps)_2TX PSD

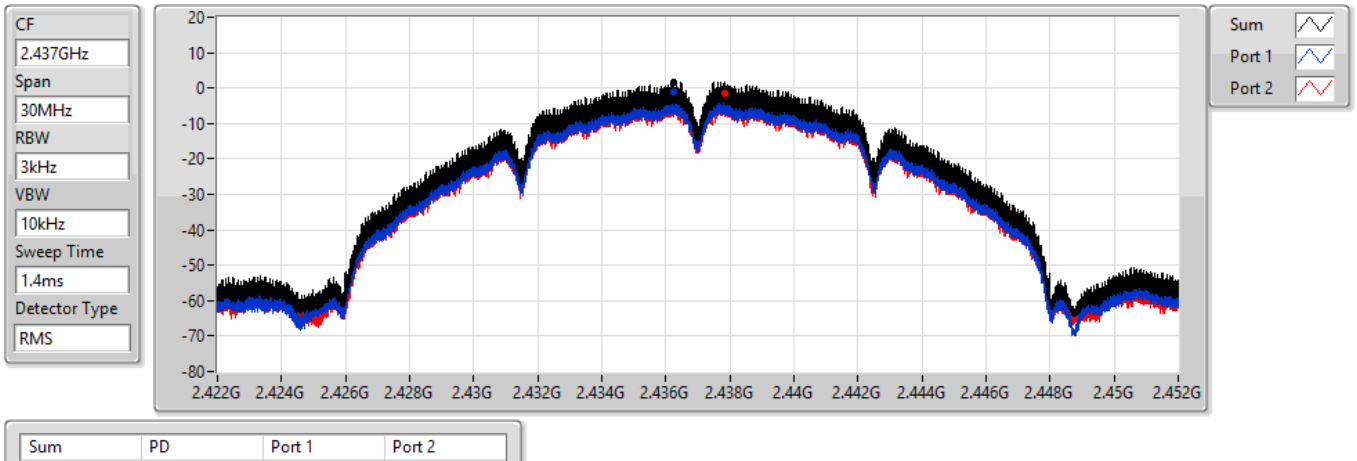
2412MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.96	1.96	0.11	-0.20

802.11b_Nss1,(1Mbps)_2TX PSD

2437MHz

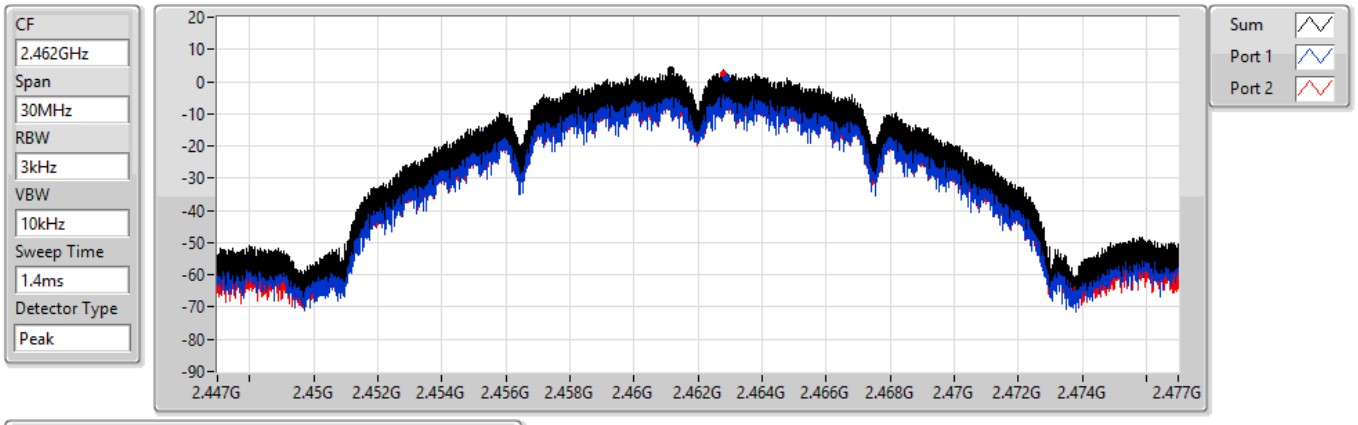


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.67	1.67	-1.14	-1.39

802.11b_Nss1,(1Mbps)_2TX PSD

2462MHz

22/09/2022

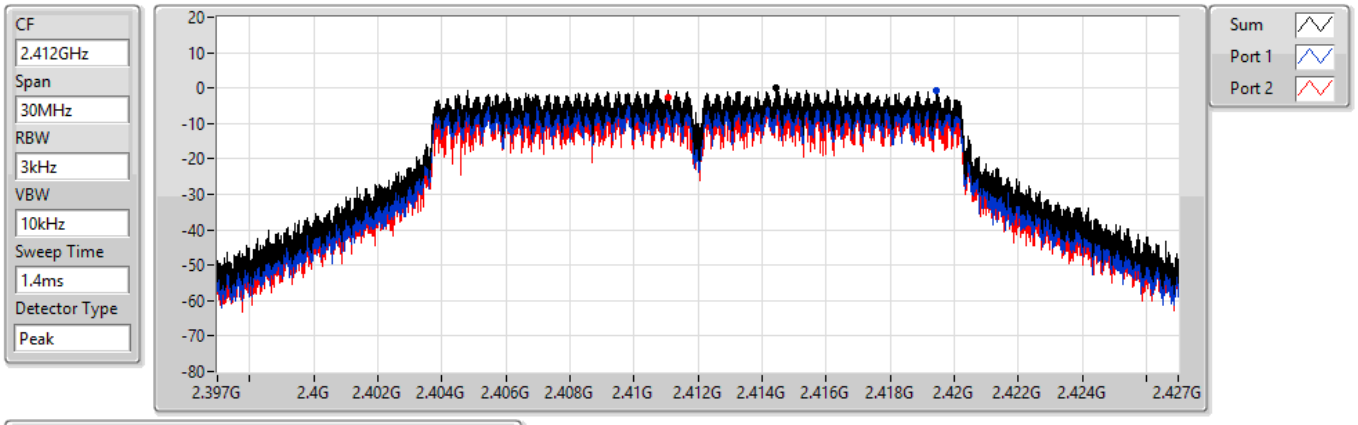


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.72	3.72	1.04	2.20

802.11g_Nss1,(6Mbps)_2TX PSD

2412MHz

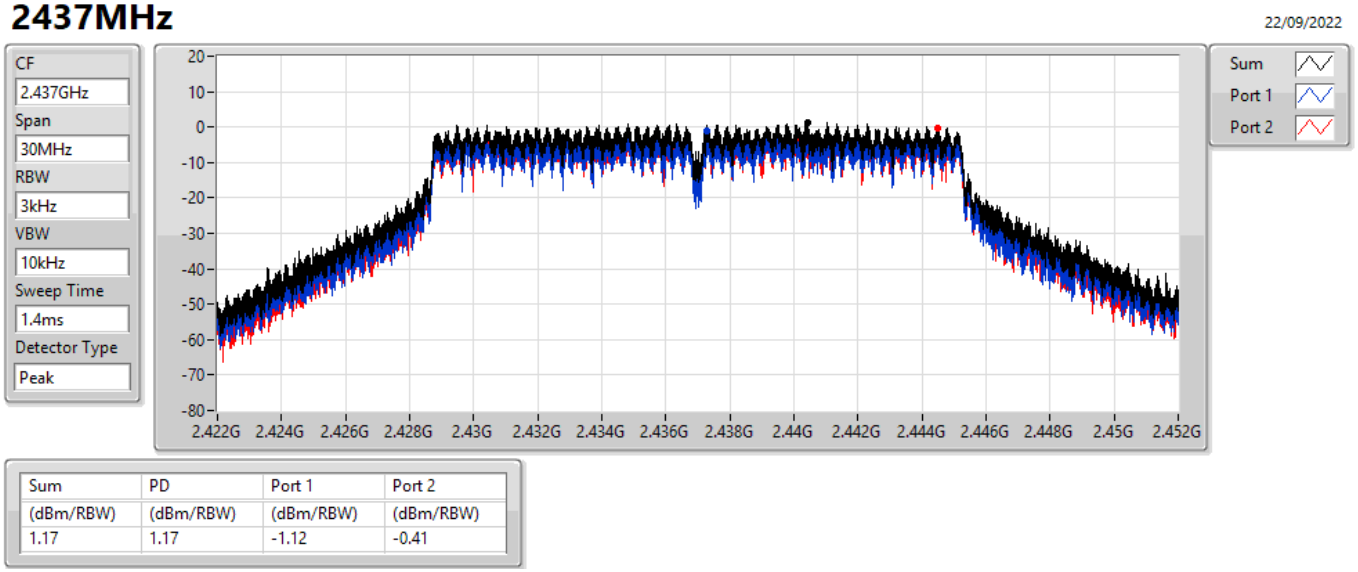
22/09/2022



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.18	0.18	-0.75	-2.68

802.11g_Nss1,(6Mbps)_2TX PSD

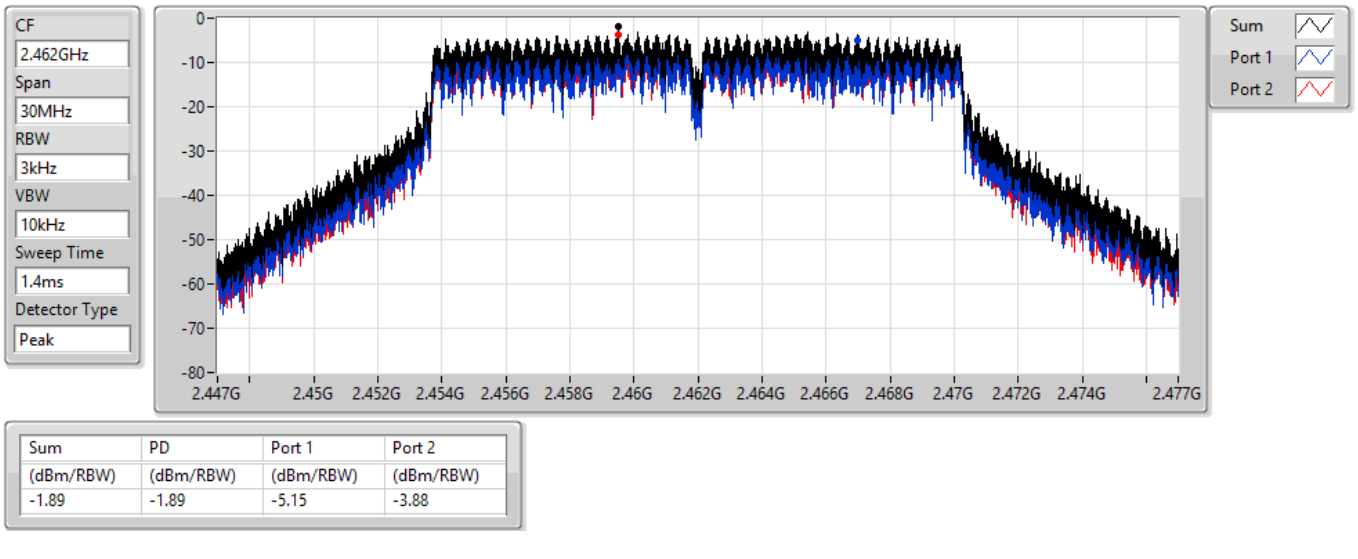
2437MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.17	1.17	-1.12	-0.41

802.11g_Nss1,(6Mbps)_2TX PSD

2462MHz

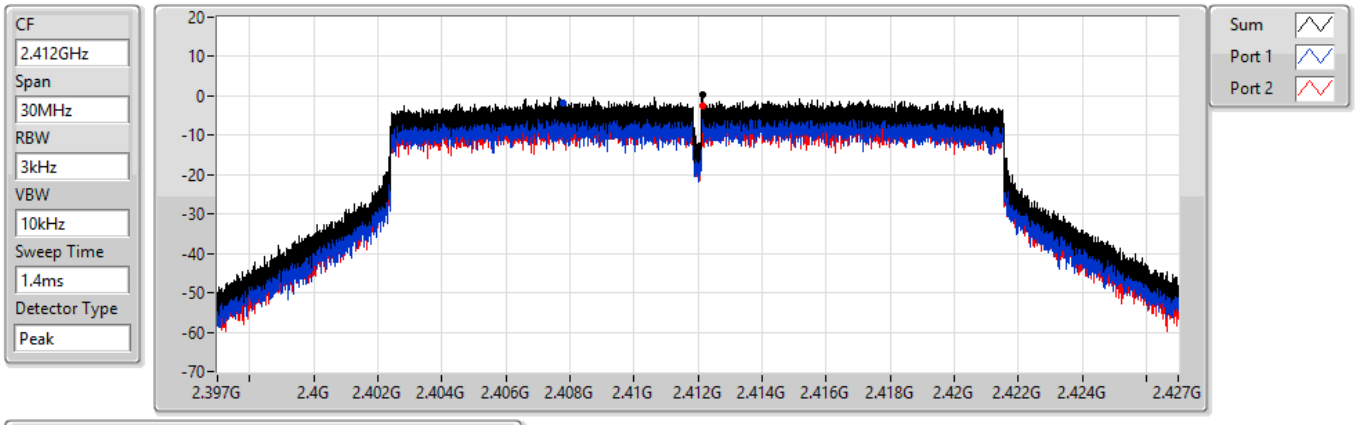


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.89	-1.89	-5.15	-3.88

802.11ax HEW20_Nss1,(MCS0)_2TX PSD

2412MHz

22/09/2022

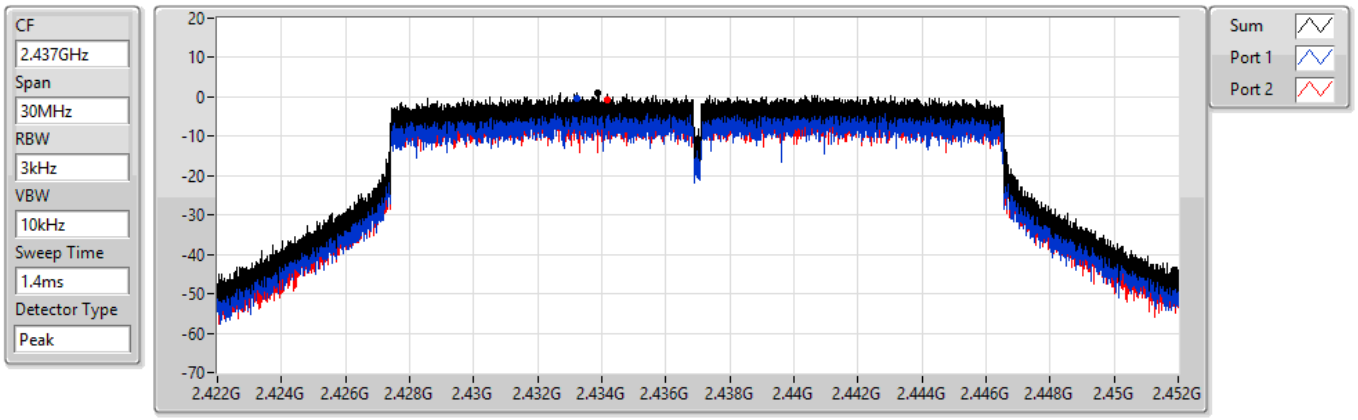


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.20	0.20	-1.95	-2.63

802.11ax HEW20_Nss1,(MCS0)_2TX PSD

2437MHz

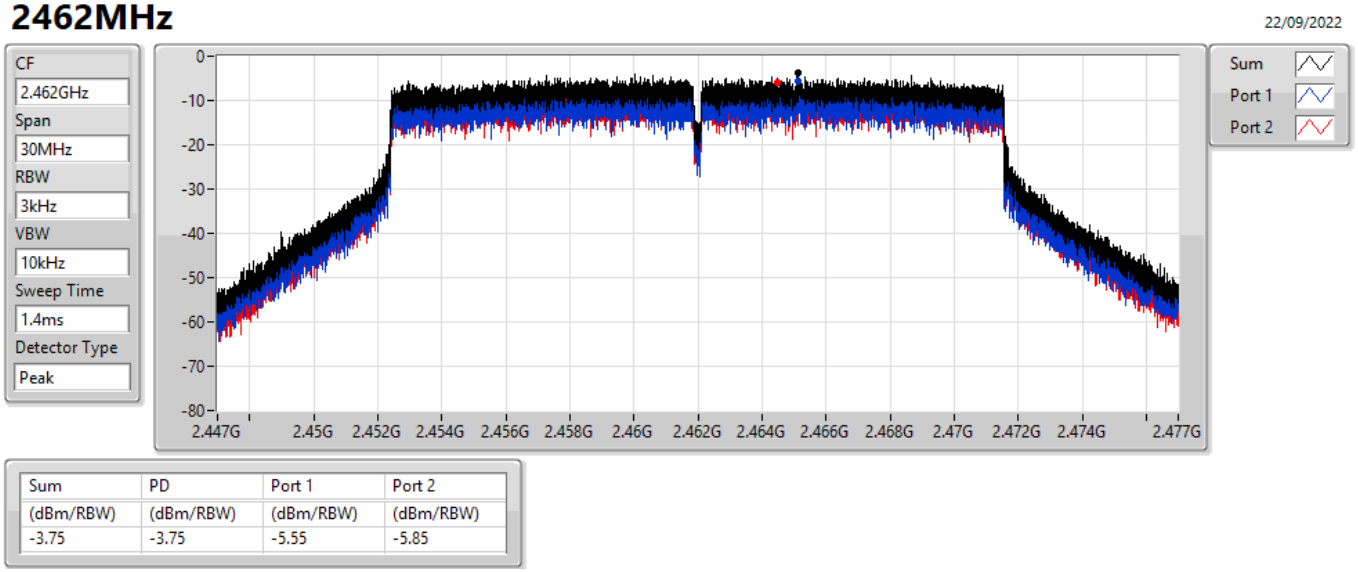
22/09/2022



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.06	1.06	-0.25	-0.83

802.11ax HEW20_Nss1,(MCS0)_2TX PSD

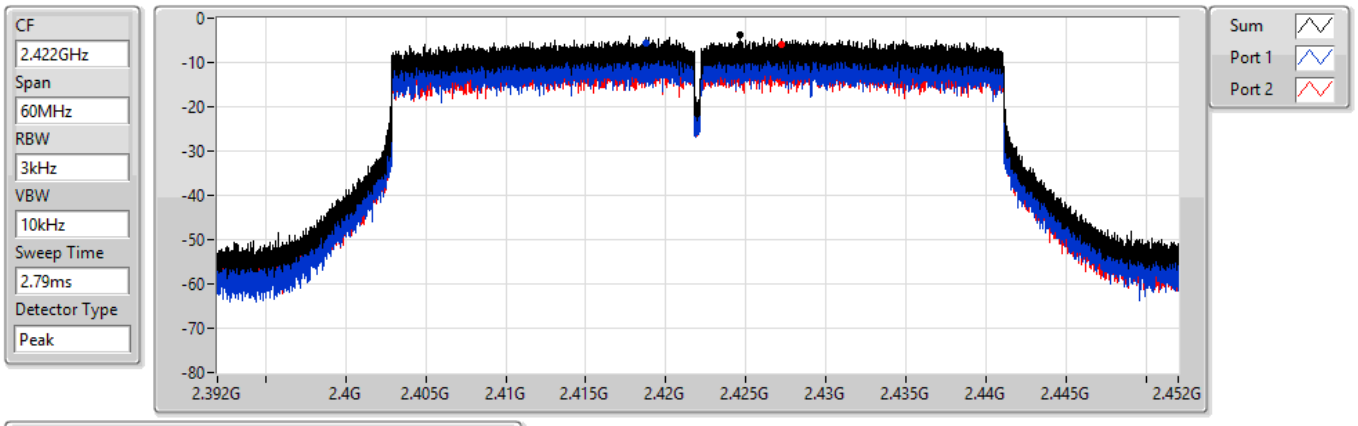
2462MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.75	-3.75	-5.55	-5.85

802.11ax HEW40_Nss1,(MCS0)_2TX PSD

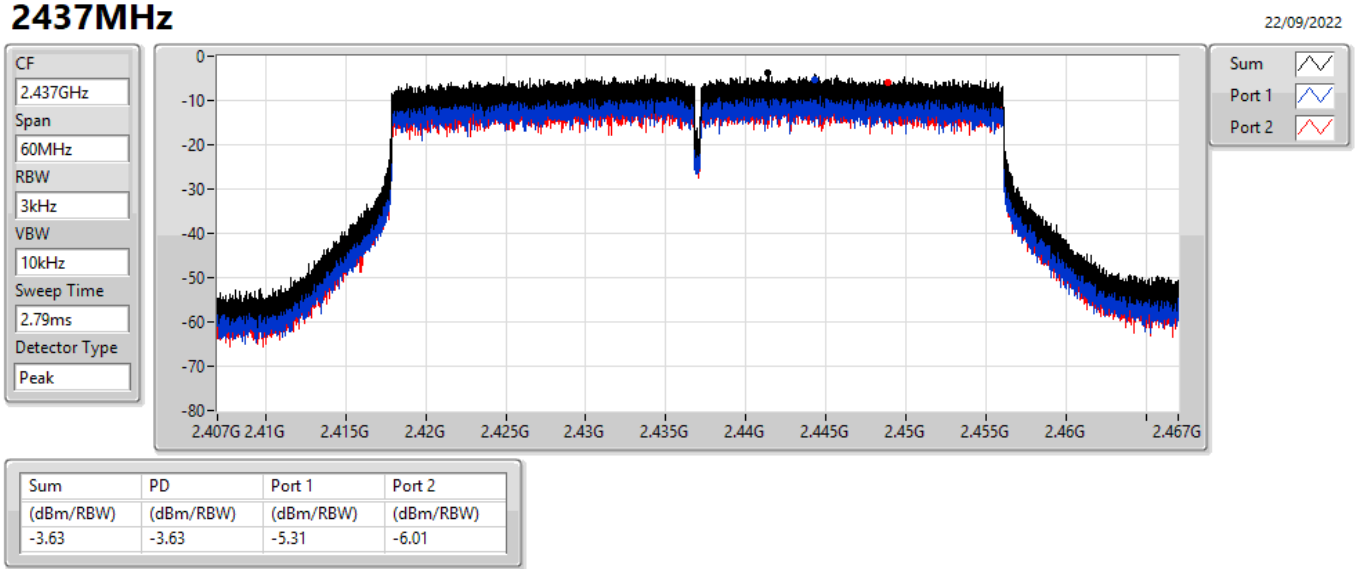
2422MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.70	-3.70	-5.51	-5.90

802.11ax HEW40_Nss1,(MCS0)_2TX PSD

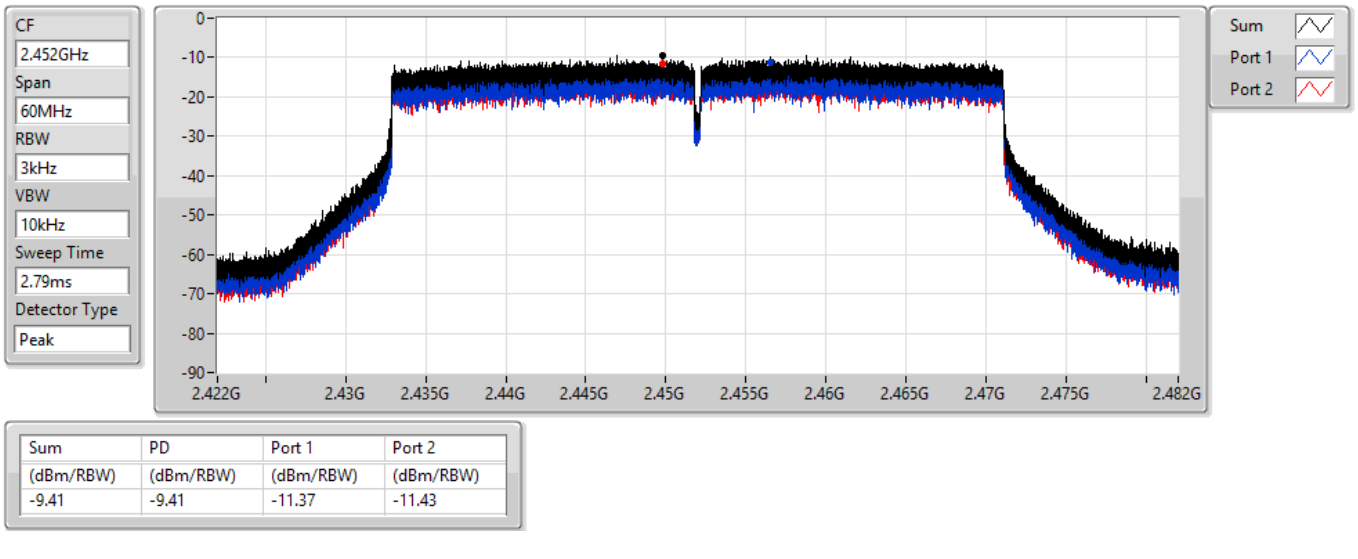
2437MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.63	-3.63	-5.31	-6.01

802.11ax HEW40_Nss1,(MCS0)_2TX PSD

2452MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-9.41	-9.41	-11.37	-11.43

Summary

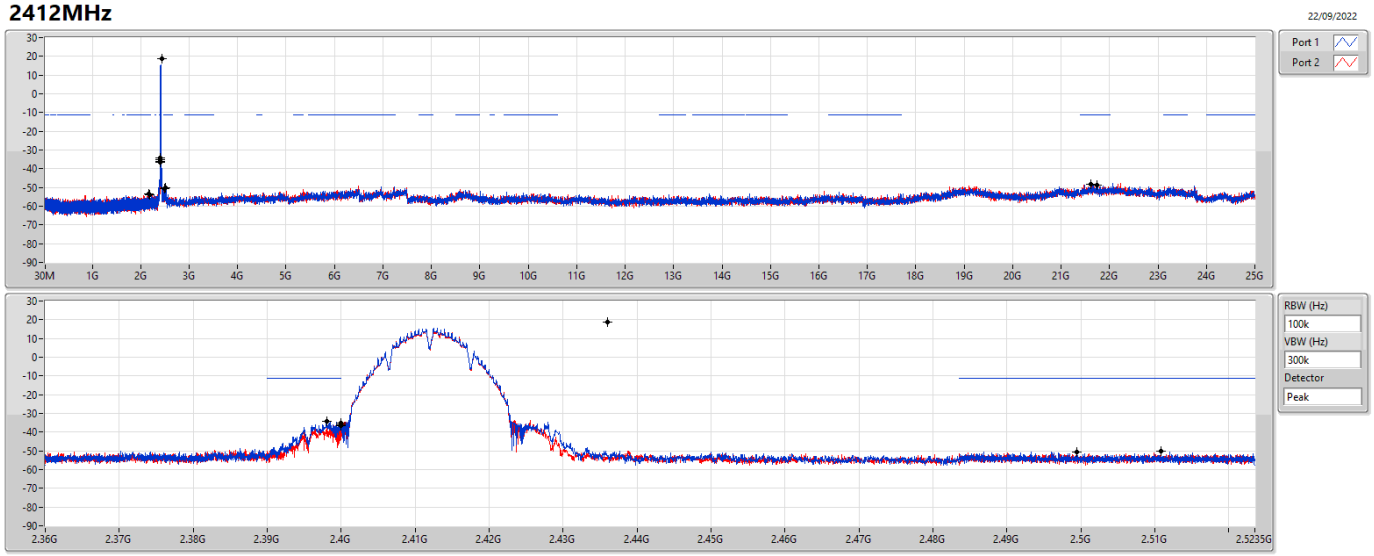
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	Pass	2.43599G	18.57	-11.43	2.16428G	-53.63	2.398G	-34.33	2.4G	-36.53	2.51082G	-50.26	21.73529G	-48.64	1
802.11g_Nss1,(6Mbps)_2TX	Pass	2.43824G	16.47	-13.53	2.30961G	-52.27	2.3999G	-22.56	2.4G	-21.97	2.49602G	-48.40	21.52738G	-48.00	1
802.11ax HEW20_Nss1,(MCS0)_2TX	Pass	2.4395G	16.77	-13.23	2.15991G	-53.57	2.39964G	-18.67	2.4G	-20.58	2.50878G	-47.75	23.24683G	-48.98	1
802.11ax HEW40_Nss1,(MCS0)_2TX	Pass	2.42826G	10.23	-19.77	2.3054G	-52.63	2.4G	-25.77	2.4G	-24.37	2.48694G	-46.66	21.92059G	-48.96	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
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43599G	18.57	-11.43	2.16428G	-53.63	2.398G	-34.33	2.4G	-36.53	2.51082G	-50.26	21.73529G	-48.64	1
2412MHz	Pass	2.43599G	18.57	-11.43	2.18642G	-53.89	2.39992G	-35.15	2.4G	-35.99	2.49946G	-50.59	21.61448G	-48.33	2
2437MHz	Pass	2.43599G	18.57	-11.43	2.15787G	-53.65	2.39528G	-49.25	2.4G	-51.54	2.48642G	-48.66	13.0425G	-49.70	1
2437MHz	Pass	2.43599G	18.57	-11.43	2.19282G	-53.85	2.39958G	-48.49	2.4G	-51.22	2.49952G	-48.92	23.33955G	-48.83	2
2462MHz	Pass	2.43599G	18.57	-11.43	878.41M	-54.66	2.39718G	-49.45	2.4835G	-51.62	2.487G	-44.36	21.83924G	-48.21	1
2462MHz	Pass	2.43599G	18.57	-11.43	2.10778G	-53.71	2.39176G	-51.93	2.4835G	-50.49	2.489G	-46.60	21.64819G	-48.81	2
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43824G	16.47	-13.53	2.30961G	-52.27	2.3999G	-22.56	2.4G	-21.97	2.49602G	-48.40	21.52738G	-48.00	1
2412MHz	Pass	2.43824G	16.47	-13.53	2.19457G	-52.21	2.39982G	-23.71	2.4G	-23.42	2.49106G	-48.16	21.90667G	-48.98	2
2437MHz	Pass	2.43824G	16.47	-13.53	2.16836G	-53.54	2.3942G	-46.02	2.4G	-48.45	2.49596G	-45.97	21.72405G	-48.50	1
2437MHz	Pass	2.43824G	16.47	-13.53	2.16661G	-52.25	2.39696G	-45.42	2.4G	-48.54	2.48702G	-46.87	23.2665G	-48.76	2
2462MHz	Pass	2.43824G	16.47	-13.53	2.19224G	-54.42	2.39894G	-50.79	2.4835G	-44.79	2.4841G	-43.48	23.44631G	-48.47	1
2462MHz	Pass	2.43824G	16.47	-13.53	2.30379G	-53.36	2.3924G	-50.89	2.4835G	-46.82	2.4841G	-45.29	21.63695G	-48.79	2
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.4395G	16.77	-13.23	2.15991G	-53.57	2.39964G	-18.67	2.4G	-20.58	2.50878G	-47.75	23.24683G	-48.98	1
2412MHz	Pass	2.4395G	16.77	-13.23	2.19661G	-54.13	2.4G	-20.90	2.4G	-21.20	2.48674G	-48.01	21.60043G	-49.03	2
2437MHz	Pass	2.4395G	16.77	-13.23	2.30699G	-52.93	2.39872G	-44.75	2.4G	-46.06	2.48506G	-46.71	21.61448G	-48.76	1
2437MHz	Pass	2.4395G	16.77	-13.23	2.18787G	-54.10	2.39994G	-42.29	2.4G	-45.14	2.48748G	-46.44	21.69595G	-48.69	2
2462MHz	Pass	2.4395G	16.77	-13.23	2.30612G	-53.77	2.39406G	-51.16	2.4835G	-44.35	2.48474G	-42.04	21.69034G	-49.14	1
2462MHz	Pass	2.4395G	16.77	-13.23	2.0271G	-53.99	2.39614G	-50.98	2.4835G	-48.05	2.48406G	-44.81	23.31145G	-48.78	2
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.42826G	10.23	-19.77	2.30454G	-53.38	2.39972G	-26.35	2.4G	-27.99	2.49214G	-45.60	21.64013G	-48.00	1
2422MHz	Pass	2.42826G	10.23	-19.77	2.3054G	-52.63	2.4G	-25.77	2.4G	-24.37	2.48694G	-46.66	21.92059G	-48.96	2
2437MHz	Pass	2.42826G	10.23	-19.77	2.30855G	-53.32	2.39584G	-39.21	2.4835G	-40.87	2.48498G	-38.25	21.61209G	-48.03	1
2437MHz	Pass	2.42826G	10.23	-19.77	2.30426G	-53.16	2.39532G	-39.21	2.4835G	-40.59	2.48366G	-39.33	21.41577G	-48.57	2
2452MHz	Pass	2.42826G	10.23	-19.77	2.05264G	-54.92	2.3994G	-50.84	2.4835G	-44.38	2.4895G	-40.55	21.41296G	-47.48	1
2452MHz	Pass	2.42826G	10.23	-19.77	2.19147G	-54.98	2.39832G	-50.65	2.4835G	-44.80	2.48574G	-39.95	21.63453G	-48.02	2

802.11b_Nss1,(1Mbps)_2TX **CSENdB**

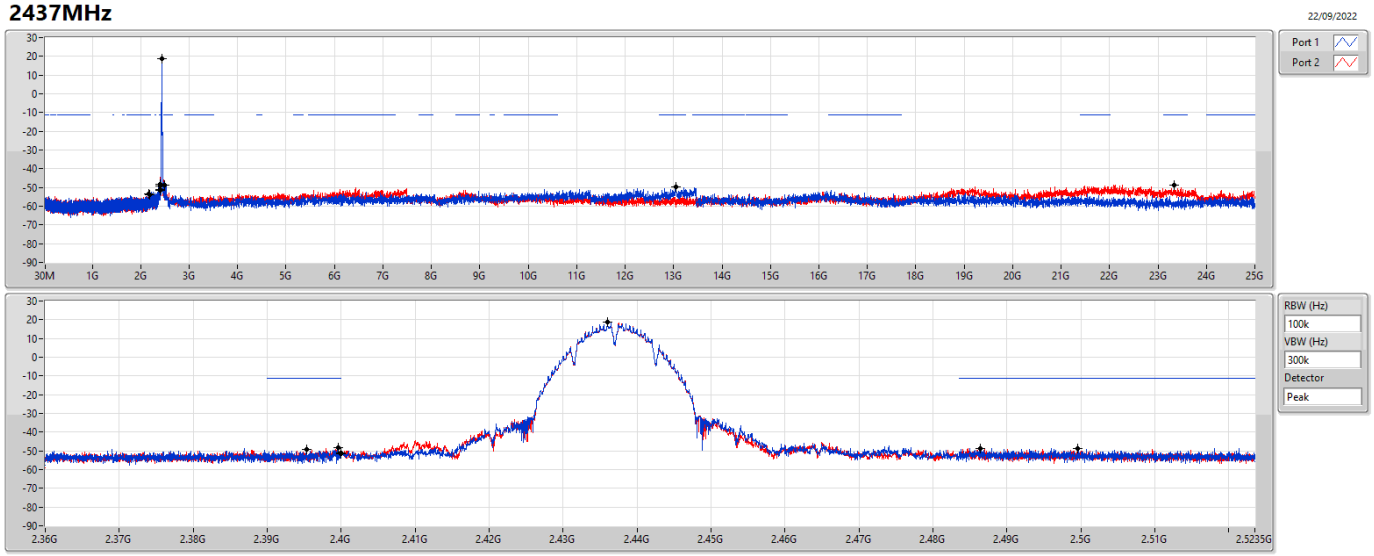
2412MHz



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
2.43599G	18.57	-11.43	2.16428G	-53.63	2.398G	-34.33	2.4G	-36.53	2.51082G	-50.26	21.73529G	-48.64	1
2.43599G	18.57	-11.43	2.18642G	-53.89	2.39992G	-35.15	2.4G	-35.99	2.49946G	-50.59	21.61448G	-48.33	2

802.11b_Nss1,(1Mbps)_2TX **CSENdB**

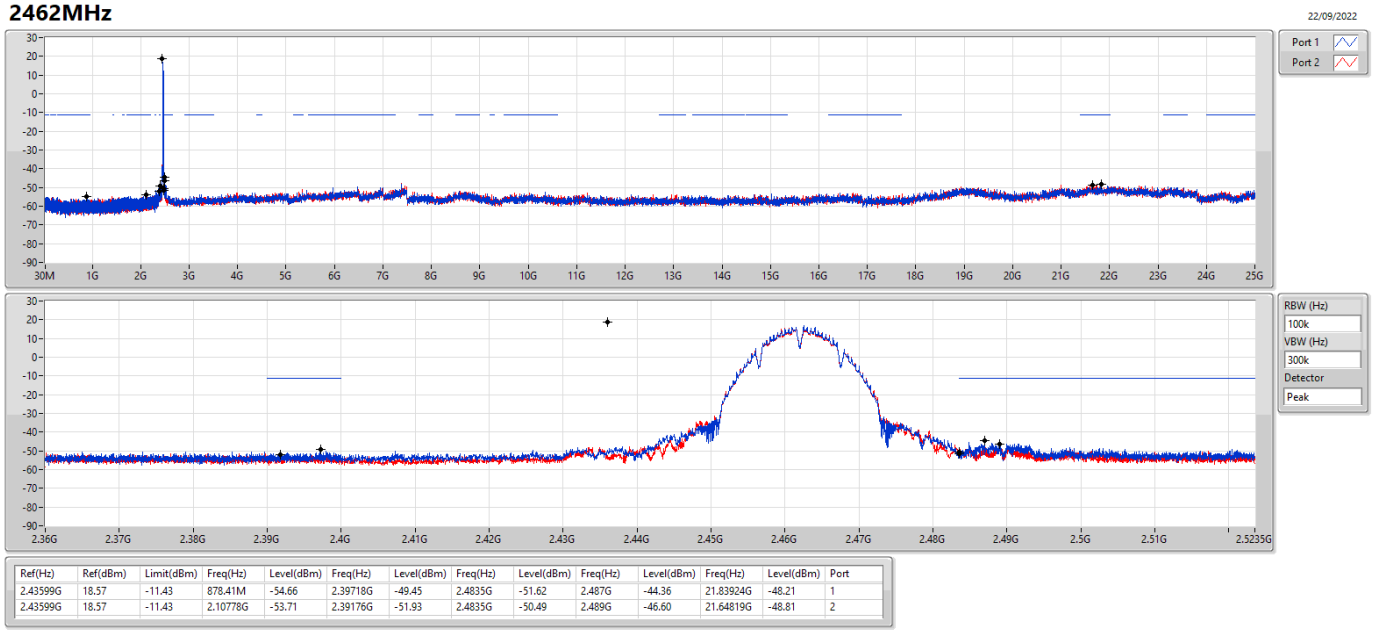
2437MHz



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
2.43599G	18.57	-11.43	2.15787G	-53.65	2.39528G	-49.25	2.4G	-51.54	2.48642G	-48.66	13.0425G	-49.70	1
2.43599G	18.57	-11.43	2.19282G	-53.85	2.39958G	-48.49	2.4G	-51.22	2.49952G	-48.92	23.33955G	-48.83	2

802.11b_Nss1,(1Mbps)_2TX **CSENdB**

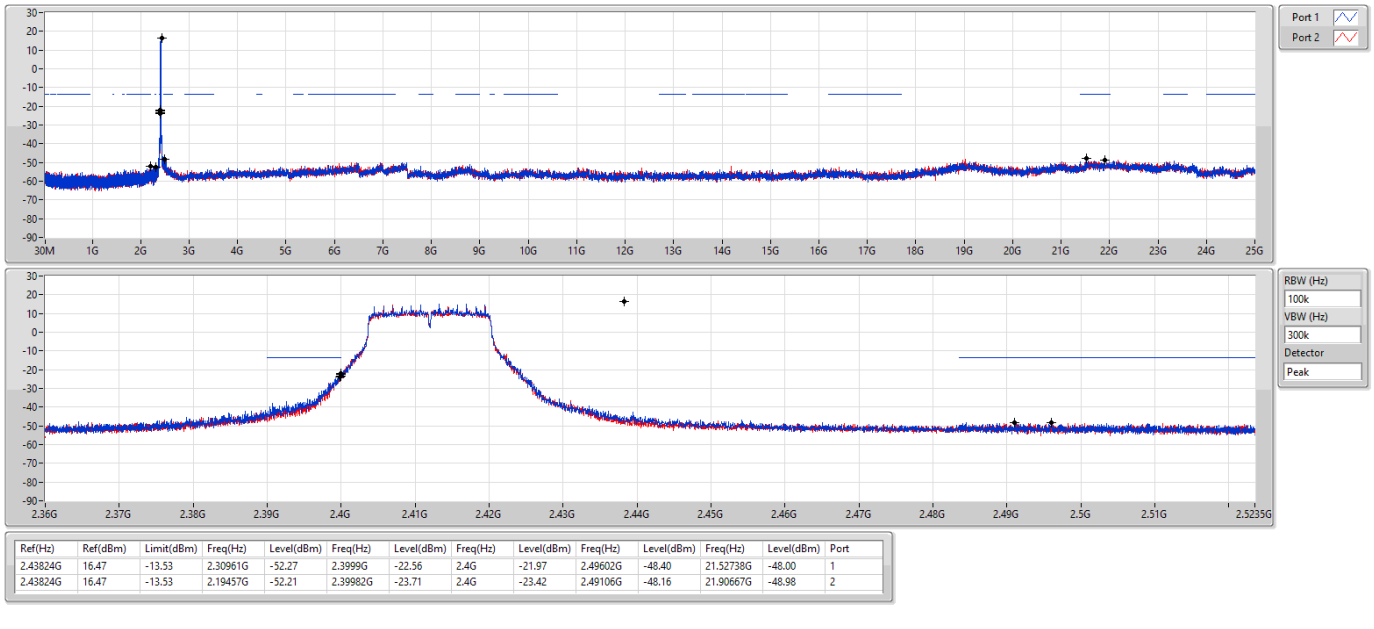
2462MHz



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
2.43599G	18.57	-11.43	878.41M	-54.66	2.39718G	-49.45	2.4835G	-51.62	2.487G	-44.36	21.83924G	-48.21	1
2.43599G	18.57	-11.43	2.10778G	-53.71	2.39176G	-51.93	2.4835G	-50.49	2.489G	-46.60	21.64819G	-48.81	2

802.11g_Nss1,(6Mbps)_2TX **CSENdB**

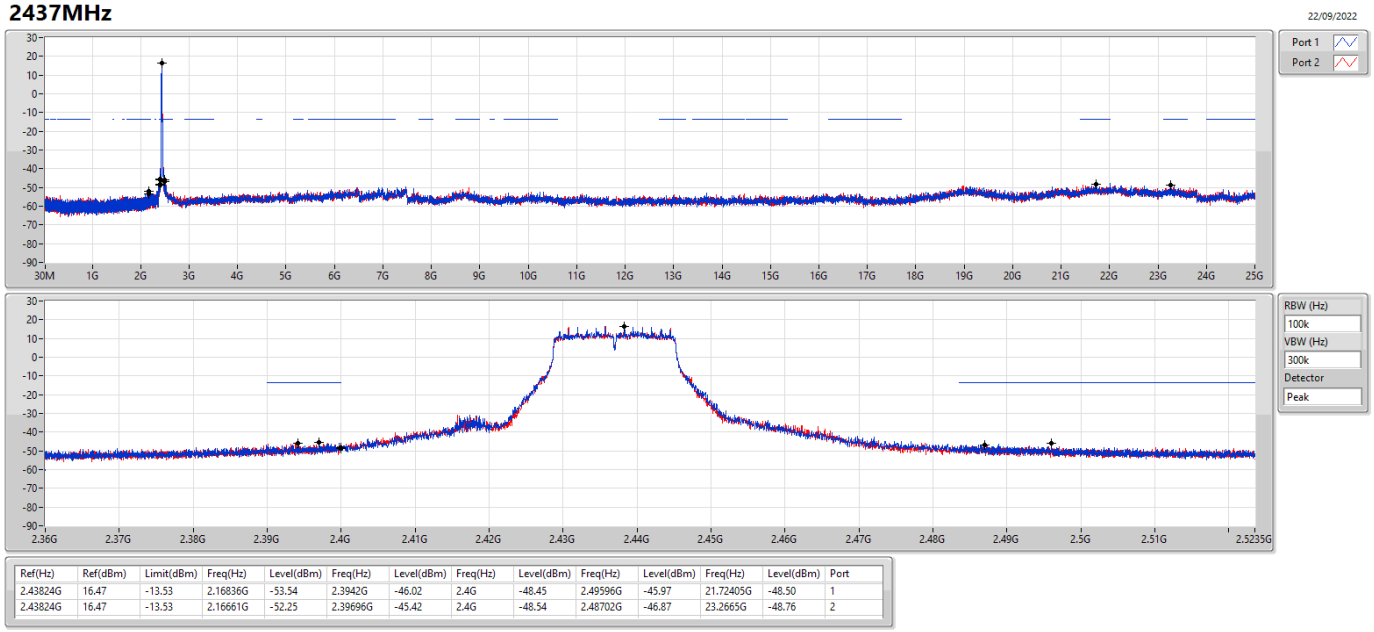
2412MHz



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
2.43824G	16.47	-13.53	2.30961G	-52.27	2.3999G	-22.56	2.4G	-21.97	2.49602G	-48.40	21.52738G	-48.00	1
2.43824G	16.47	-13.53	2.19457G	-52.21	2.39982G	-23.71	2.4G	-23.42	2.49106G	-48.16	21.90667G	-48.98	2

802.11g_Nss1,(6Mbps)_2TX **CSENdB**

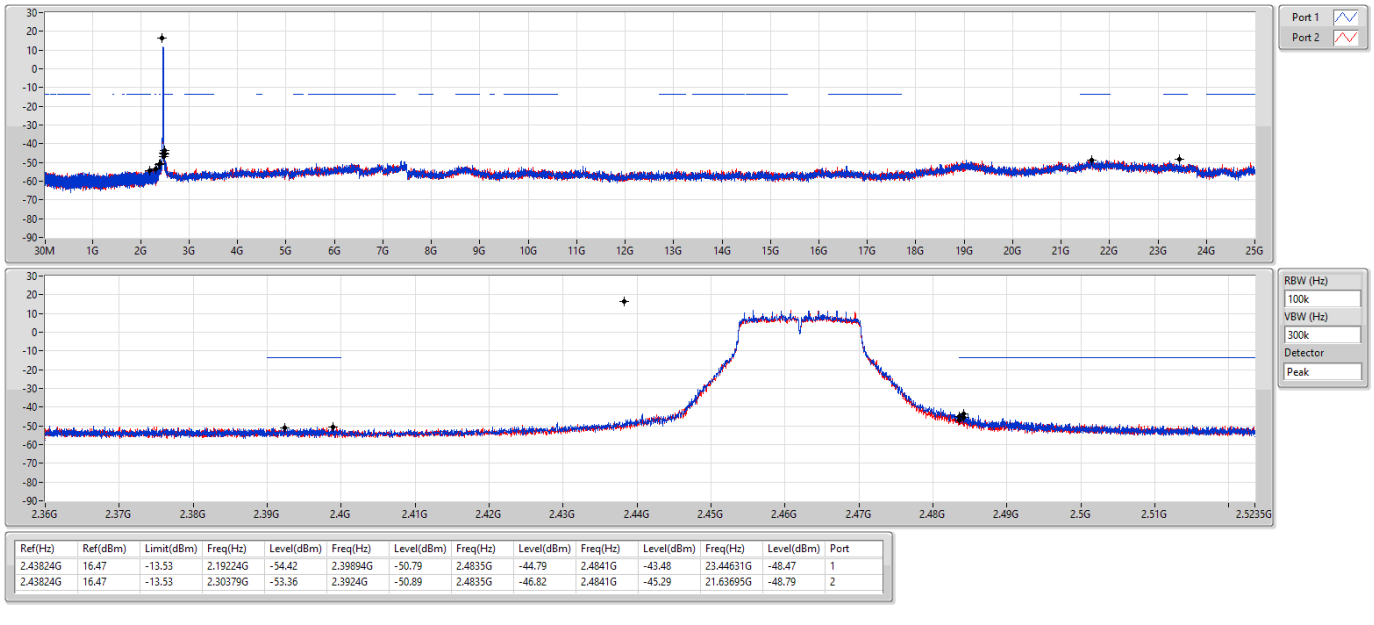
2437MHz



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
2.43824G	16.47	-13.53	2.16836G	-53.54	2.3942G	-46.02	2.4G	-48.45	2.49596G	-45.97	21.72405G	-48.50	1
2.43824G	16.47	-13.53	2.16661G	-52.25	2.39696G	-45.42	2.4G	-48.54	2.48702G	-46.87	23.2665G	-48.76	2

802.11g_Nss1,(6Mbps)_2TX **CSENdB**

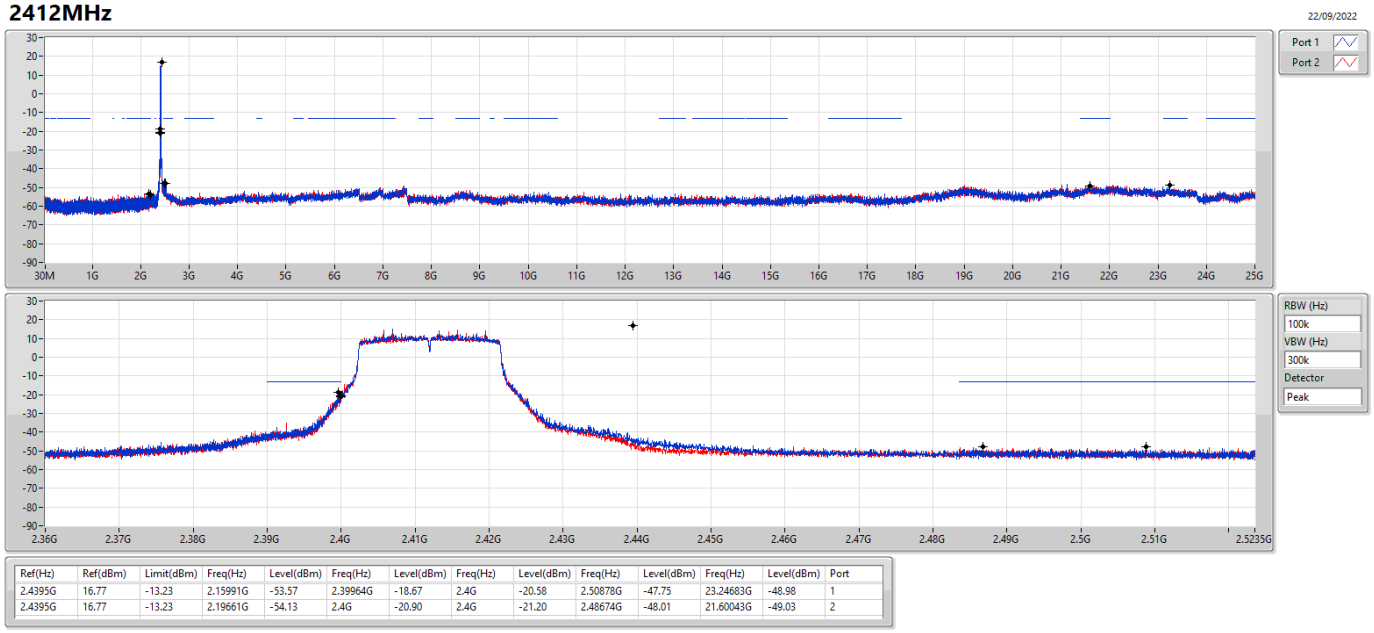
2462MHz



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
2.43824G	16.47	-13.53	2.19224G	-54.42	2.39894G	-50.79	2.4835G	-44.79	2.4841G	-43.48	23.44631G	-48.47	1
2.43824G	16.47	-13.53	2.30379G	-53.36	2.3924G	-50.89	2.4835G	-46.82	2.4841G	-45.29	21.63695G	-48.79	2

802.11ax HEW20_Nss1,(MCS0)_2TX **CSENdB**

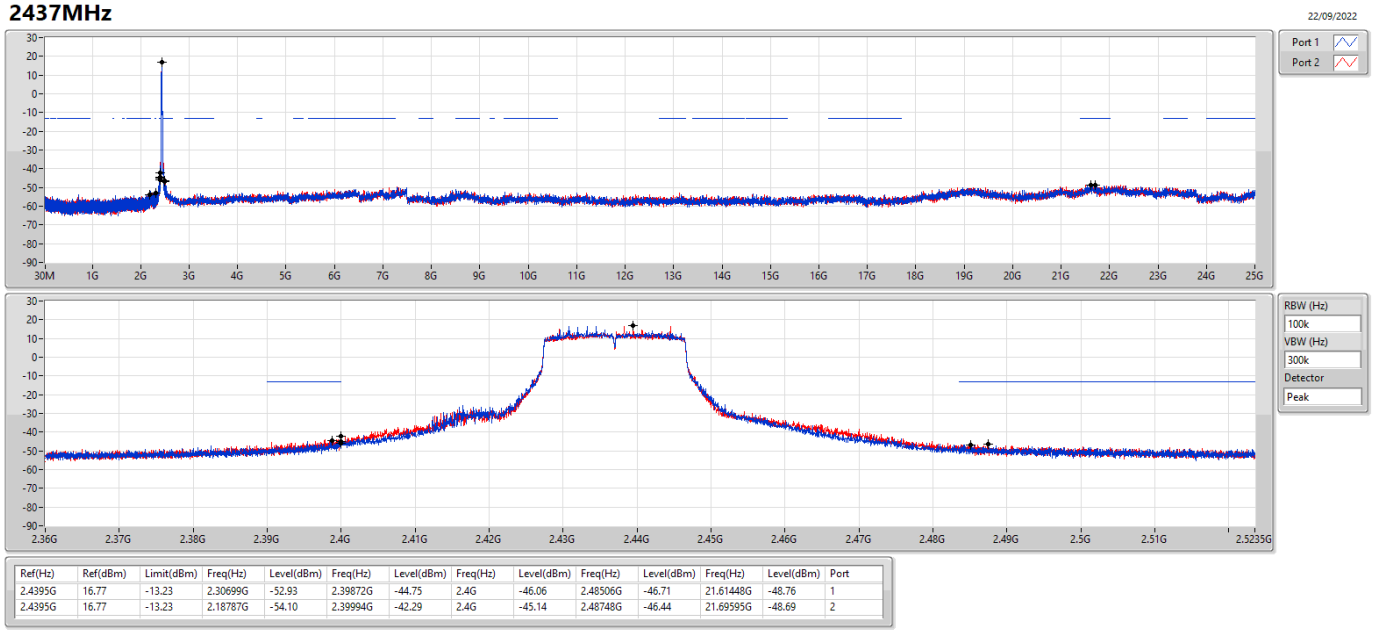
2412MHz



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
2.4395G	16.77	-13.23	2.15991G	-53.57	2.39964G	-18.67	2.4G	-20.58	2.50878G	-47.75	23.24683G	-48.98	1
2.4395G	16.77	-13.23	2.19661G	-54.13	2.4G	-20.90	2.4G	-21.20	2.48674G	-48.01	21.60043G	-49.03	2

802.11ax HEW20_Nss1,(MCS0)_2TX **CSENdB**

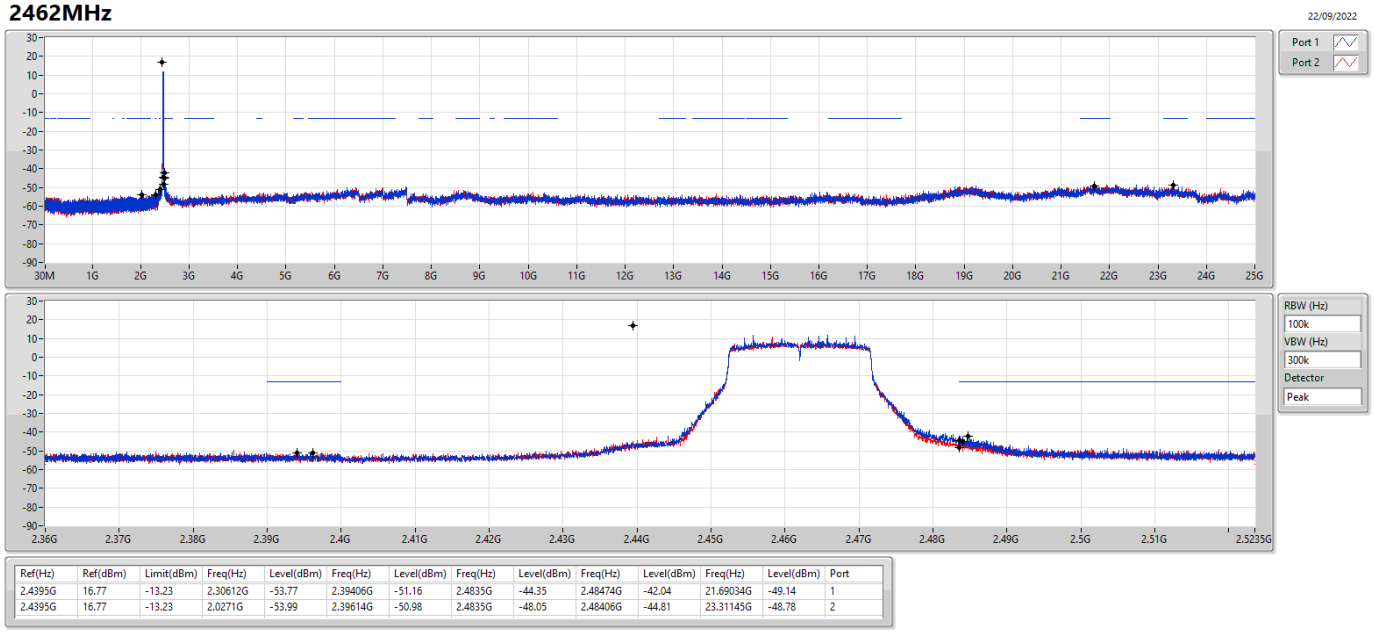
2437MHz



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
2.4395G	16.77	-13.23	2.30699G	-52.93	2.39872G	-44.75	2.4G	-46.06	2.48506G	-46.71	21.61448G	-48.76	1
2.4395G	16.77	-13.23	2.18787G	-54.10	2.39994G	-42.29	2.4G	-45.14	2.48748G	-46.44	21.69595G	-48.69	2

802.11ax HEW20_Nss1,(MCS0)_2TX **CSENdB**

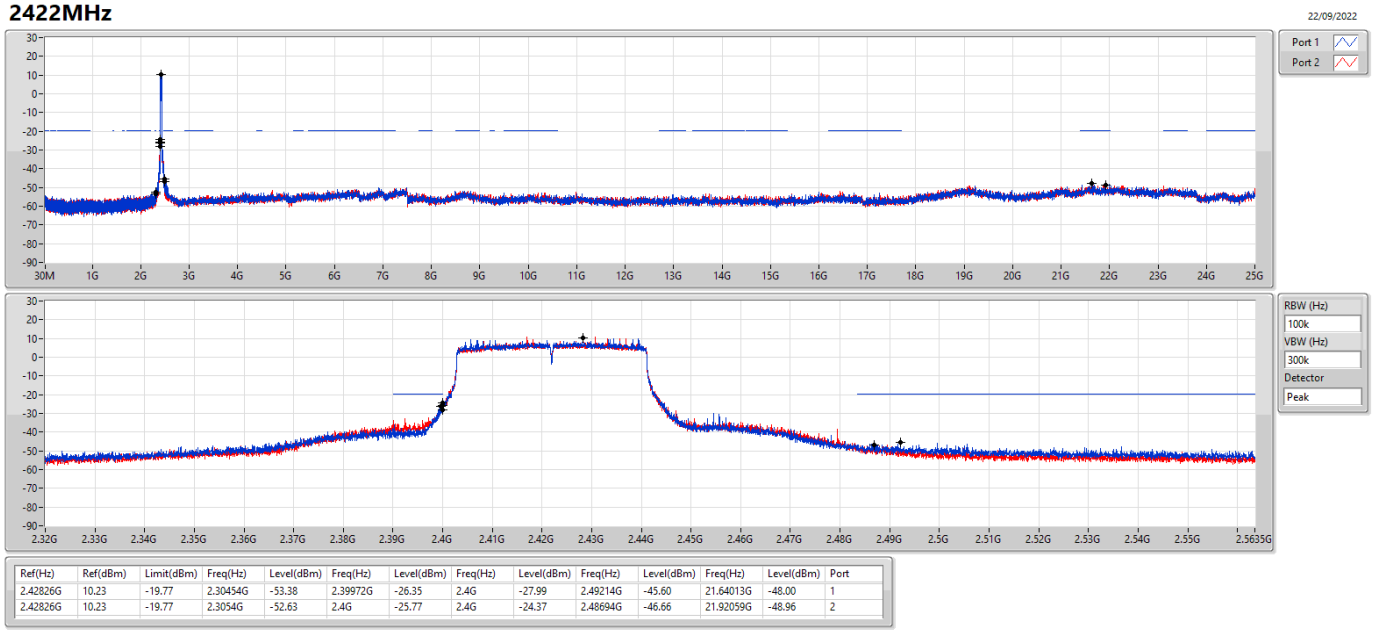
2462MHz



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
2.4395G	16.77	-13.23	2.30612G	-53.77	2.39406G	-51.16	2.4835G	-44.35	2.48474G	-42.04	21.69034G	-49.14	1
2.4395G	16.77	-13.23	2.0271G	-53.99	2.39614G	-50.98	2.4835G	-48.05	2.48406G	-44.81	23.31145G	-48.78	2

802.11ax HEW40_Nss1,(MCS0)_2TX **CSENdB**

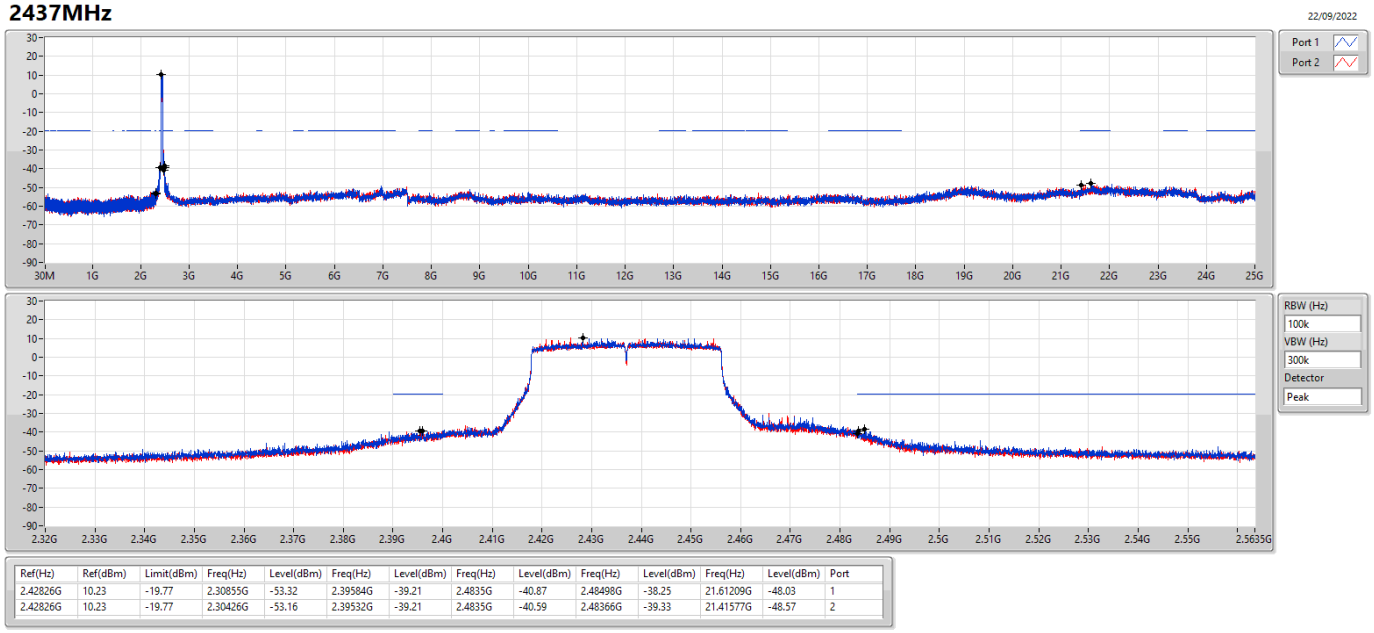
2422MHz



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
2.42826G	10.23	-19.77	2.30454G	-53.38	2.39972G	-26.35	2.4G	-27.99	2.49214G	-45.60	21.64013G	-48.00	1
2.42826G	10.23	-19.77	2.3054G	-52.63	2.4G	-25.77	2.4G	-24.37	2.48694G	-46.66	21.92059G	-48.96	2

802.11ax HEW40_Nss1,(MCS0)_2TX **CSENdB**

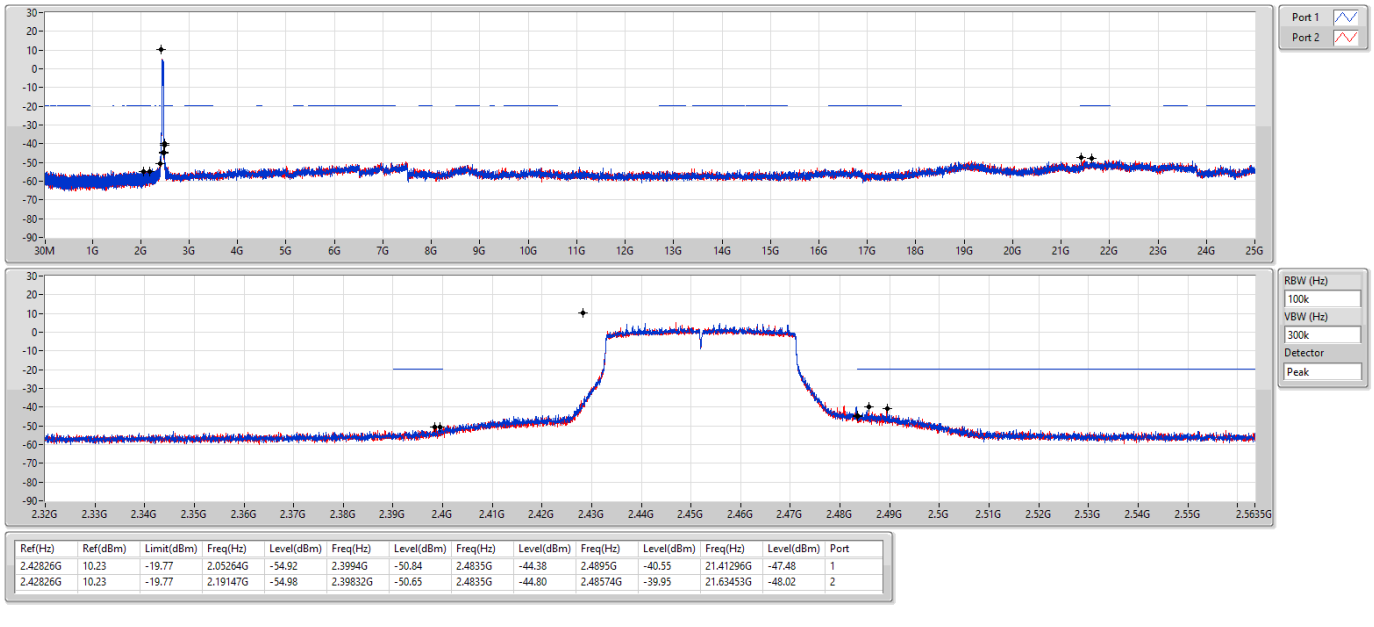
2437MHz



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
2.42826G	10.23	-19.77	2.30855G	-53.32	2.39584G	-39.21	2.4835G	-40.87	2.48498G	-38.25	21.61209G	-48.03	1
2.42826G	10.23	-19.77	2.30426G	-53.16	2.39532G	-39.21	2.4835G	-40.59	2.48366G	-39.33	21.41577G	-48.57	2

802.11ax HEW40_Nss1,(MCS0)_2TX **CSENdB**

2452MHz

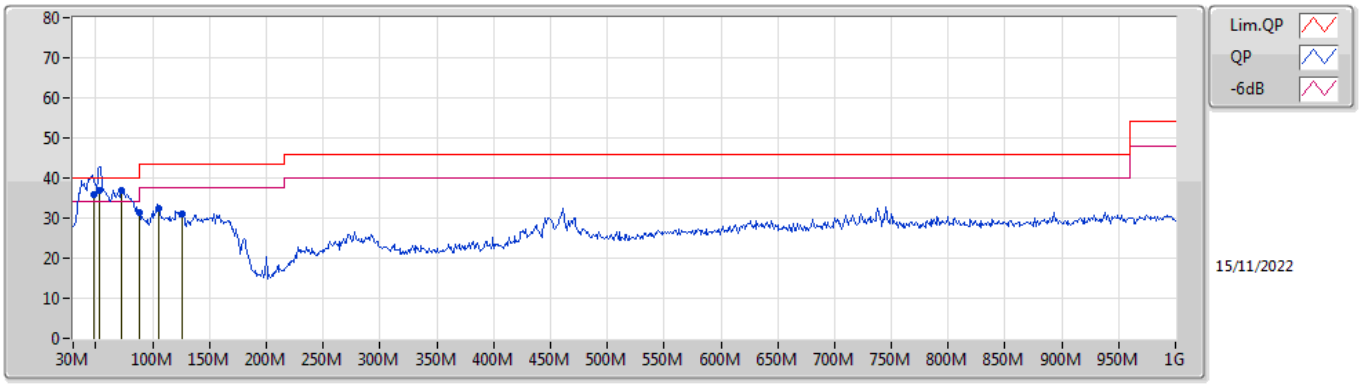


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.42826G	10.23	-19.77	2.05264G	-54.92	2.3994G	-50.84	2.4835G	-44.38	2.4895G	-40.55	21.41296G	-47.48	1
2.42826G	10.23	-19.77	2.19147G	-54.98	2.39832G	-50.65	2.4835G	-44.80	2.48574G	-39.95	21.63453G	-48.02	2

Summary

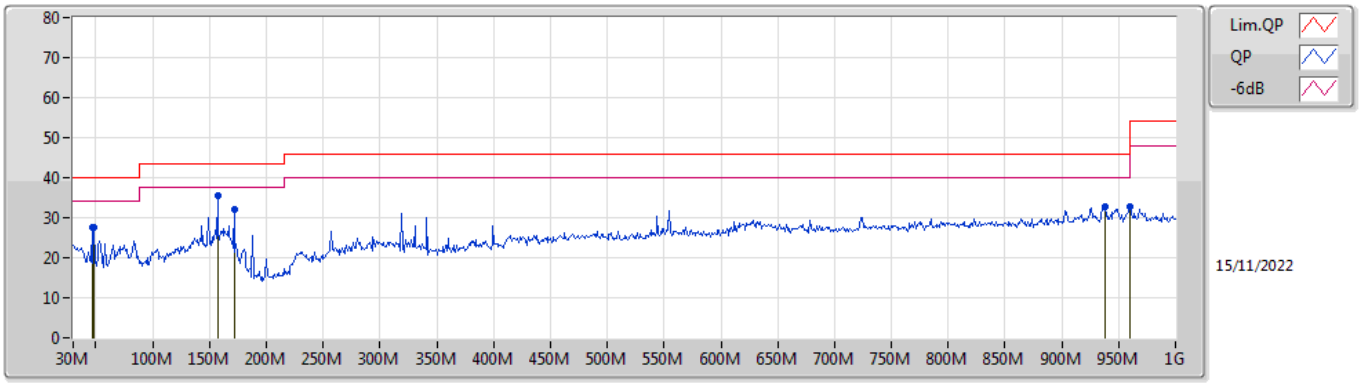
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 2	Pass	QP	53.19M	36.99	40.00	-3.01	Vertical

Mode 2



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
QP	47.95M	35.94	40.00	-4.06	-16.46	3	Vertical	345	1.00	-	52.40	14.74	0.65	31.85
QP	53.19M	36.99	40.00	-3.01	-18.21	3	Vertical	54	1.00	"Worst"	55.20	12.97	0.70	31.88
PK	72.68M	36.84	40.00	-3.16	-18.92	3	Vertical	206	1.50	-	55.76	12.17	0.88	31.97
PK	88M	31.39	43.50	-12.11	-16.80	3	Vertical	65	1.25	-	48.19	14.15	1.00	31.95
PK	104.69M	32.41	43.50	-11.09	-13.59	3	Vertical	0	3.00	-	46.00	17.25	1.13	31.97
PK	126.03M	31.04	43.50	-12.46	-12.88	3	Vertical	157	1.00	-	43.92	17.82	1.29	31.99

Mode 2



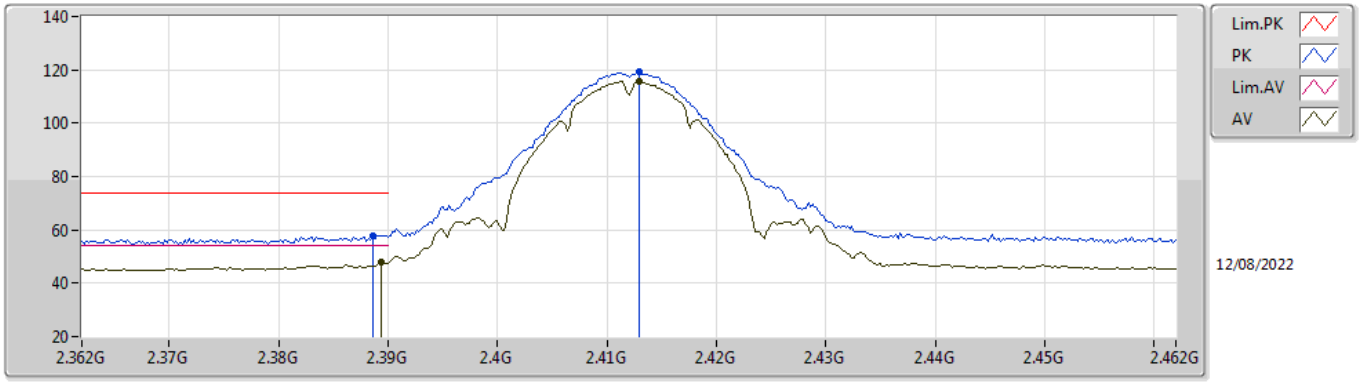
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
PK	46.49M	27.51	40.00	-12.49	-15.88	3	Horizontal	0	2.00	-	43.39	15.33	0.63	31.84
PK	48.43M	27.65	40.00	-12.35	-16.61	3	Horizontal	272	2.00	-	44.26	14.59	0.65	31.85
PK	157.07M	35.50	43.50	-8.00	-14.56	3	Horizontal	72	1.00	"Worst"	50.06	15.93	1.50	31.99
PK	171.62M	31.94	43.50	-11.56	-15.03	3	Horizontal	85	1.00	-	46.97	15.38	1.58	31.99
PK	937.92M	32.79	46.00	-13.21	-1.85	3	Horizontal	285	1.00	-	34.64	26.35	4.28	32.48
PK	960M	32.59	46.00	-13.41	-1.49	3	Horizontal	285	1.00	-	34.08	26.63	4.33	32.45

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_2TX	Pass	AV	2.4835G	53.99	54.00	-0.01	3	Vertical	179	1.74	-

802.11b_Nss1,(1Mbps)_2TX

2412MHz_TX

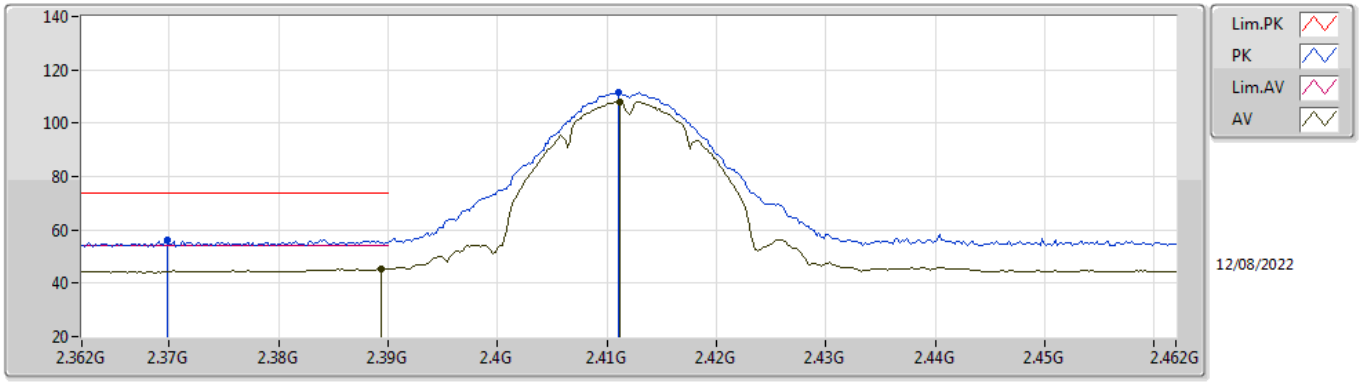


EUT Y_2TX
Setting 23.5
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3886G	57.97	74.00	-16.03	26.80	3	Vertical	28	2.56	-	28.38	2.79	-
AV	2.3894G	47.77	54.00	-6.23	16.60	3	Vertical	28	2.56	-	28.38	2.79	-
PK	2.413G	119.18	Inf	-Inf	87.97	3	Vertical	28	2.56	-	28.40	2.81	-
AV	2.413G	115.56	Inf	-Inf	84.35	3	Vertical	28	2.56	-	28.40	2.81	-

802.11b_Nss1,(1Mbps)_2TX

2412MHz_TX

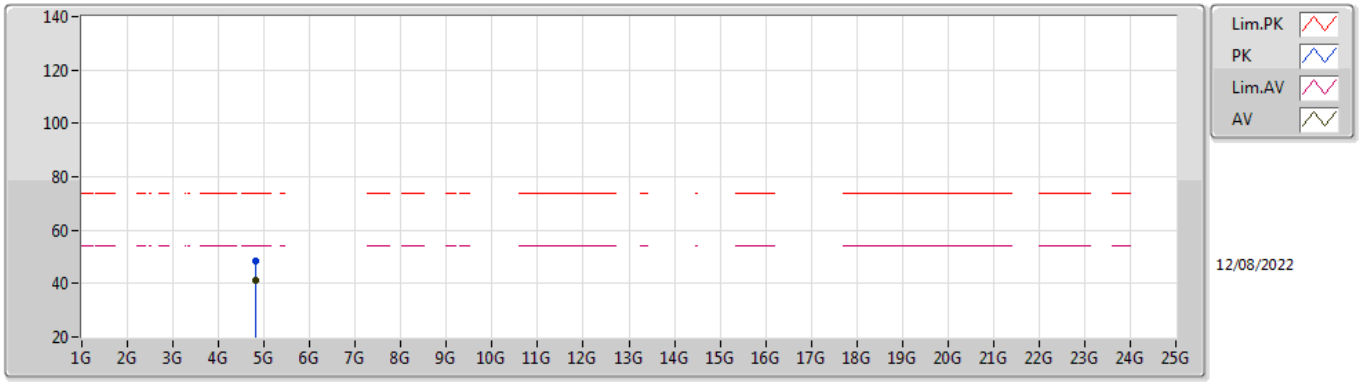


EUT Y_2TX
Setting 23.5
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3698G	56.18	74.00	-17.82	25.06	3	Horizontal	138	2.49	-	28.34	2.78	-
AV	2.3894G	45.44	54.00	-8.56	14.27	3	Horizontal	138	2.49	-	28.38	2.79	-
PK	2.411G	111.72	Inf	-Inf	80.51	3	Horizontal	138	2.49	-	28.40	2.81	-
AV	2.4112G	108.15	Inf	-Inf	76.94	3	Horizontal	138	2.49	-	28.40	2.81	-

802.11b_Nss1,(1Mbps)_2TX

2412MHz_TX

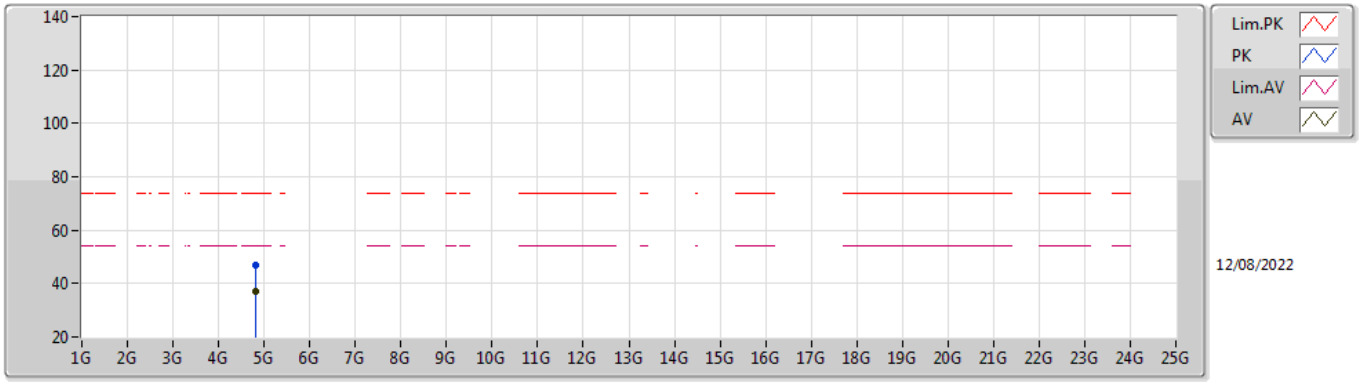


EUT Y_2TX
Setting 23.5
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.82388G	48.45	74.00	-25.55	41.21	3	Vertical	157	2.89	-	32.94	5.10	30.80
AV	4.824G	41.23	54.00	-12.77	33.99	3	Vertical	157	2.89	-	32.94	5.10	30.80

802.11b_Nss1,(1Mbps)_2TX

2412MHz_TX

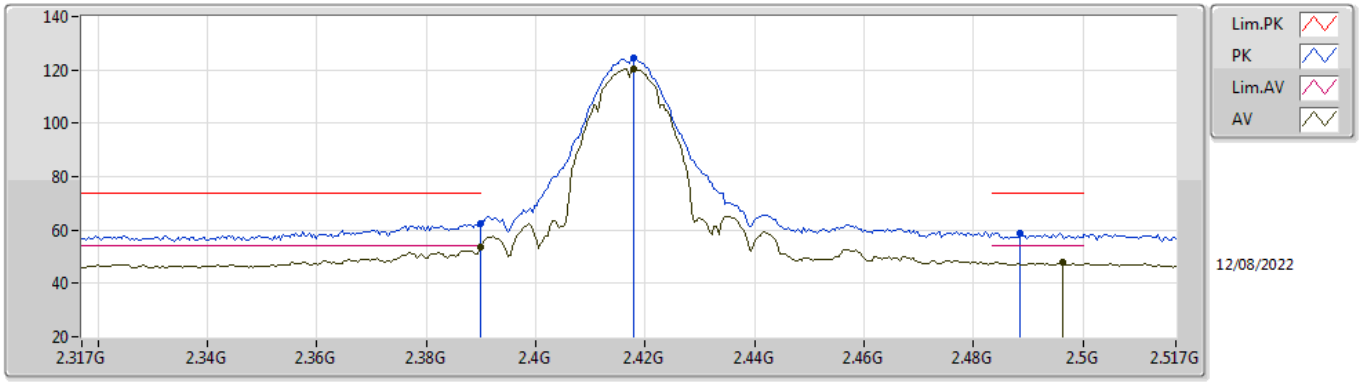


EUT Y_2TX
Setting 23.5
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.82412G	46.98	74.00	-27.02	39.74	3	Horizontal	222	2.07	-	32.94	5.10	30.80
AV	4.82388G	37.32	54.00	-16.68	30.08	3	Horizontal	222	2.07	-	32.94	5.10	30.80

802.11b_Nss1,(1Mbps)_2TX

2417MHz_TX

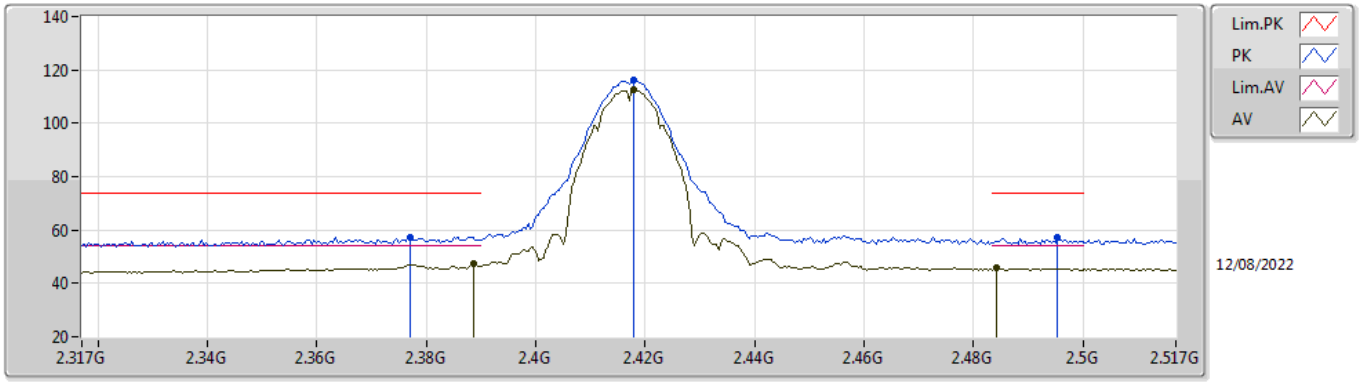


EUT Y_2TX
Setting 28.5
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3898G	62.45	74.00	-11.55	31.28	3	Vertical	27	1.90	-	28.38	2.79	-
AV	2.3898G	53.76	54.00	-0.24	22.59	3	Vertical	27	1.90	-	28.38	2.79	-
PK	2.4178G	124.29	Inf	-Inf	93.07	3	Vertical	27	1.90	-	28.40	2.82	-
AV	2.4178G	120.45	Inf	-Inf	89.23	3	Vertical	27	1.90	-	28.40	2.82	-
PK	2.4886G	58.99	74.00	-15.01	27.55	3	Vertical	27	1.90	-	28.55	2.89	-
AV	2.4962G	48.00	54.00	-6.00	16.52	3	Vertical	27	1.90	-	28.58	2.90	-

802.11b_Nss1,(1Mbps)_2TX

2417MHz_TX

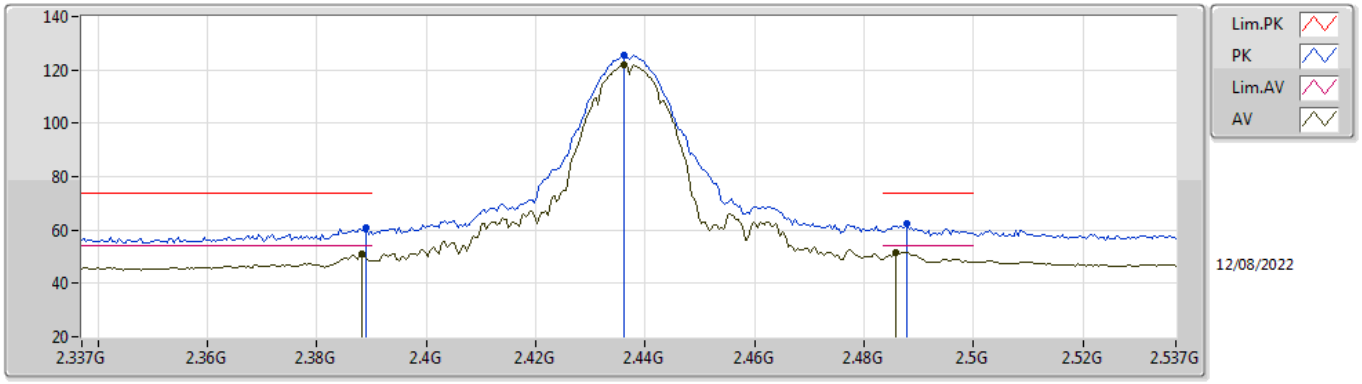


EUT Y_2TX
Setting 28.5
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.377G	57.42	74.00	-16.58	26.28	3	Horizontal	144	2.52	-	28.35	2.79	-
AV	2.3886G	47.52	54.00	-6.48	16.35	3	Horizontal	144	2.52	-	28.38	2.79	-
PK	2.4178G	116.34	Inf	-Inf	85.12	3	Horizontal	144	2.52	-	28.40	2.82	-
AV	2.4178G	112.51	Inf	-Inf	81.29	3	Horizontal	144	2.52	-	28.40	2.82	-
PK	2.4954G	57.07	74.00	-16.93	25.59	3	Horizontal	144	2.52	-	28.58	2.90	-
AV	2.4842G	45.62	54.00	-8.38	14.20	3	Horizontal	144	2.52	-	28.54	2.88	-

802.11b_Nss1,(1Mbps)_2TX

2437MHz_TX

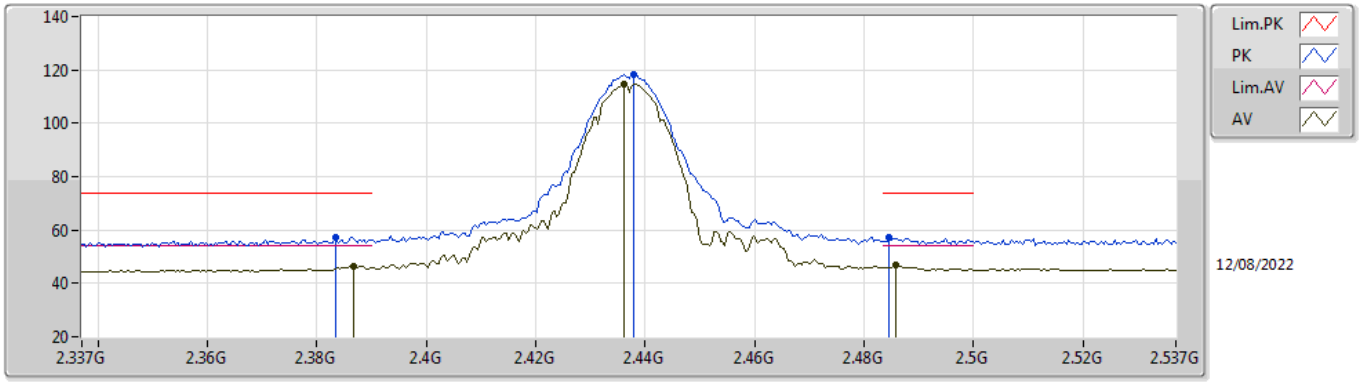


EUT Y_2TX
Setting 29.5
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.389G	60.81	74.00	-13.19	29.64	3	Vertical	190	1.58	-	28.38	2.79	-
AV	2.3882G	51.23	54.00	-2.77	20.06	3	Vertical	190	1.58	-	28.38	2.79	-
PK	2.4362G	125.47	Inf	-Inf	94.23	3	Vertical	190	1.58	-	28.40	2.84	-
AV	2.4362G	122.08	Inf	-Inf	90.84	3	Vertical	190	1.58	-	28.40	2.84	-
PK	2.4878G	62.41	74.00	-11.59	30.97	3	Vertical	190	1.58	-	28.55	2.89	-
AV	2.4858G	51.78	54.00	-2.22	20.35	3	Vertical	190	1.58	-	28.54	2.89	-

802.11b_Nss1,(1Mbps)_2TX

2437MHz_TX

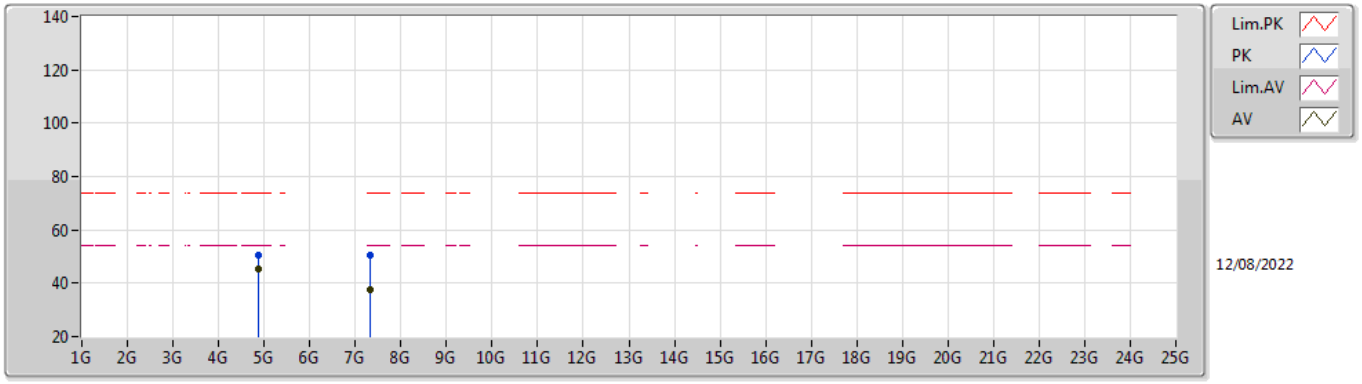


EUT Y_2TX
Setting 29.5
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3834G	57.27	74.00	-16.73	26.11	3	Horizontal	145	2.47	-	28.37	2.79	-
AV	2.3866G	46.56	54.00	-7.44	15.40	3	Horizontal	145	2.47	-	28.37	2.79	-
PK	2.4378G	118.32	Inf	-Inf	87.08	3	Horizontal	145	2.47	-	28.40	2.84	-
AV	2.4362G	114.77	Inf	-Inf	83.53	3	Horizontal	145	2.47	-	28.40	2.84	-
PK	2.4846G	57.04	74.00	-16.96	25.62	3	Horizontal	145	2.47	-	28.54	2.88	-
AV	2.4858G	46.78	54.00	-7.22	15.35	3	Horizontal	145	2.47	-	28.54	2.89	-

802.11b_Nss1,(1Mbps)_2TX

2437MHz_TX

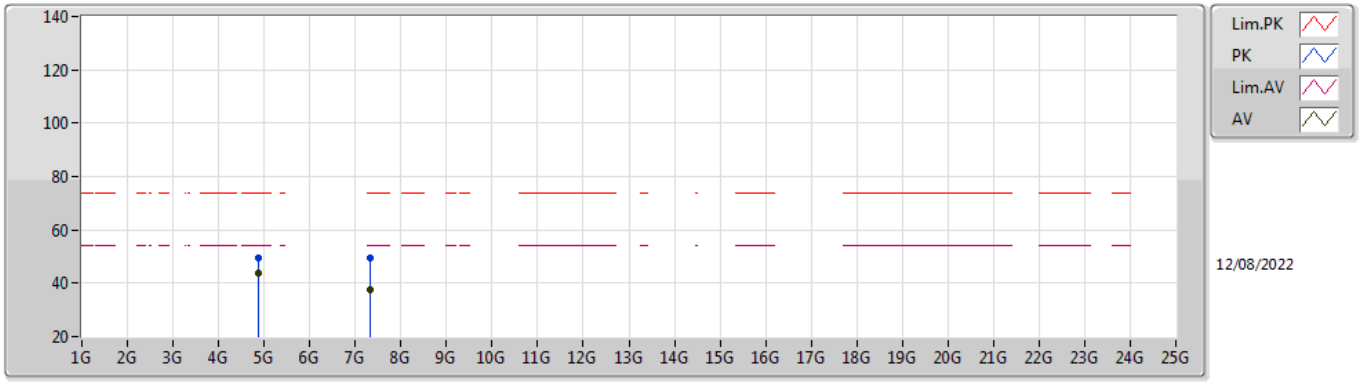


EUT Y_2TX
Setting 29.5
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.87394G	50.45	74.00	-23.55	42.98	3	Vertical	164	2.43	-	33.15	5.10	30.78
AV	4.874G	45.16	54.00	-8.84	37.69	3	Vertical	164	2.43	-	33.15	5.10	30.78
PK	7.31496G	50.39	74.00	-23.61	39.72	3	Vertical	0	2.46	-	36.43	6.16	31.92
AV	7.32444G	37.80	54.00	-16.20	27.12	3	Vertical	0	2.46	-	36.45	6.16	31.93

802.11b_Nss1,(1Mbps)_2TX

2437MHz_TX

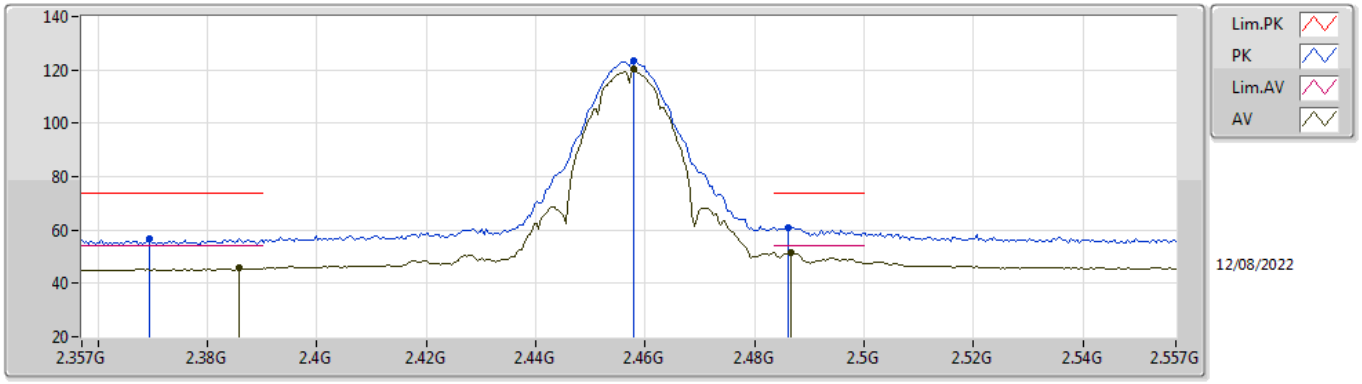


EUT Y_2TX
Setting 29.5
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.87388G	49.68	74.00	-24.32	42.21	3	Horizontal	192	1.82	-	33.15	5.10	30.78
AV	4.87394G	43.83	54.00	-10.17	36.36	3	Horizontal	192	1.82	-	33.15	5.10	30.78
PK	7.31334G	49.49	74.00	-24.51	38.82	3	Horizontal	308	2.25	-	36.43	6.16	31.92
AV	7.3179G	37.34	54.00	-16.66	26.66	3	Horizontal	308	2.25	-	36.44	6.16	31.92

802.11b_Nss1,(1Mbps)_2TX

2457MHz_TX

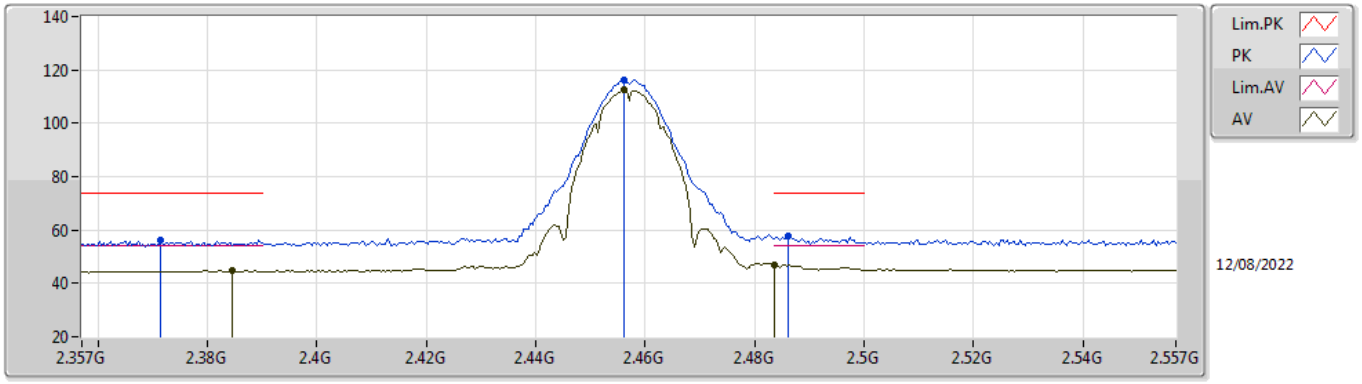


EUT Y_2TX
Setting 26
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3694G	56.88	74.00	-17.12	25.76	3	Vertical	345	1.43	-	28.34	2.78	-
AV	2.3858G	45.63	54.00	-8.37	14.47	3	Vertical	345	1.43	-	28.37	2.79	-
PK	2.4578G	123.22	Inf	-Inf	91.93	3	Vertical	345	1.43	-	28.43	2.86	-
AV	2.4578G	120.21	Inf	-Inf	88.92	3	Vertical	345	1.43	-	28.43	2.86	-
PK	2.4862G	60.81	74.00	-13.19	29.38	3	Vertical	345	1.43	-	28.54	2.89	-
AV	2.4866G	51.48	54.00	-2.52	20.04	3	Vertical	345	1.43	-	28.55	2.89	-

802.11b_Nss1,(1Mbps)_2TX

2457MHz_TX

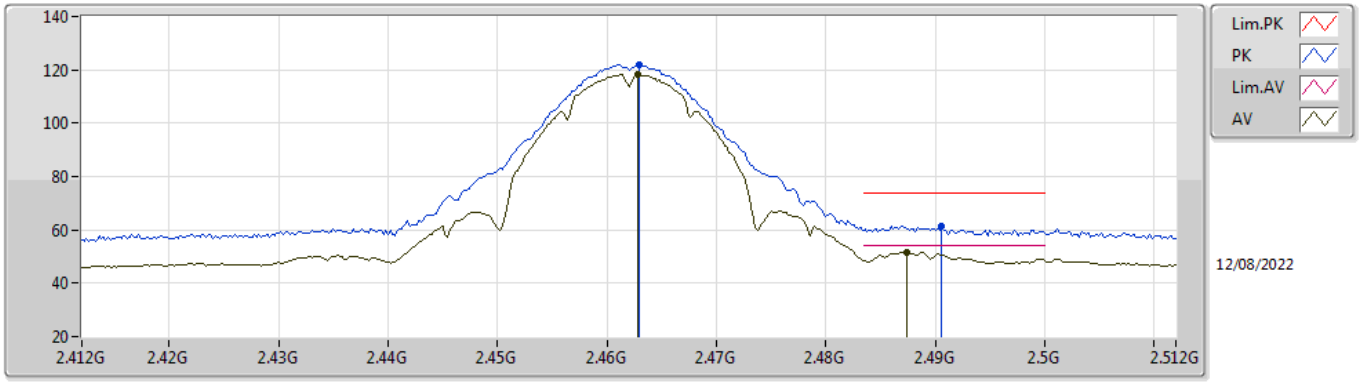


EUT Y_2TX
Setting 26
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3714G	56.39	74.00	-17.61	25.26	3	Horizontal	150	2.65	-	28.34	2.79	-
AV	2.3846G	44.75	54.00	-9.25	13.59	3	Horizontal	150	2.65	-	28.37	2.79	-
PK	2.4562G	116.18	Inf	-Inf	84.90	3	Horizontal	150	2.65	-	28.42	2.86	-
AV	2.4562G	112.48	Inf	-Inf	81.20	3	Horizontal	150	2.65	-	28.42	2.86	-
PK	2.4862G	57.75	74.00	-16.25	26.32	3	Horizontal	150	2.65	-	28.54	2.89	-
AV	2.4835G	46.87	54.00	-7.13	15.46	3	Horizontal	150	2.65	-	28.53	2.88	-

802.11b_Nss1,(1Mbps)_2TX

2462MHz_TX

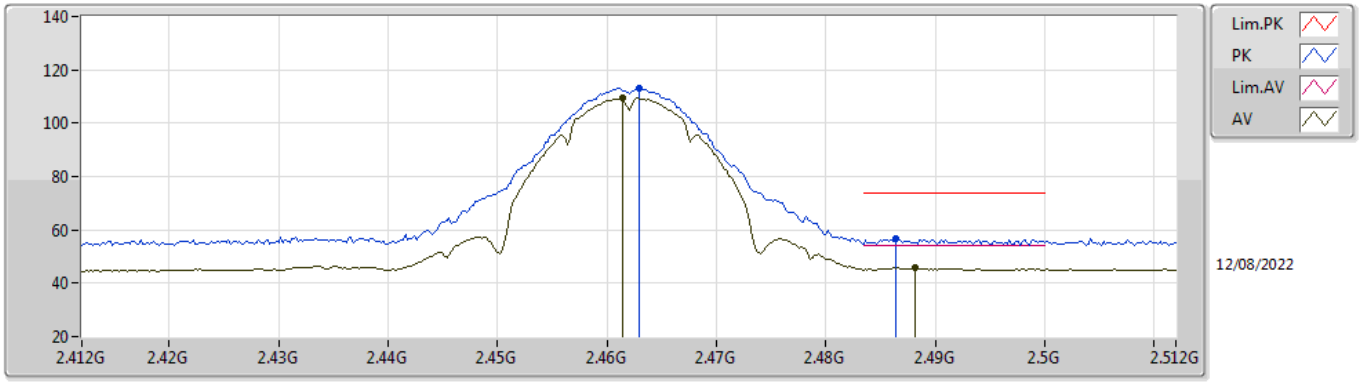


EUT Y_2TX
Setting 24.5
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.463G	122.01	Inf	-Inf	90.70	3	Vertical	349	1.61	-	28.45	2.86	-
AV	2.4628G	118.37	Inf	-Inf	87.06	3	Vertical	349	1.61	-	28.45	2.86	-
PK	2.4906G	61.37	74.00	-12.63	29.92	3	Vertical	349	1.61	-	28.56	2.89	-
AV	2.4874G	51.55	54.00	-2.45	20.11	3	Vertical	349	1.61	-	28.55	2.89	-

802.11b_Nss1,(1Mbps)_2TX

2462MHz_TX

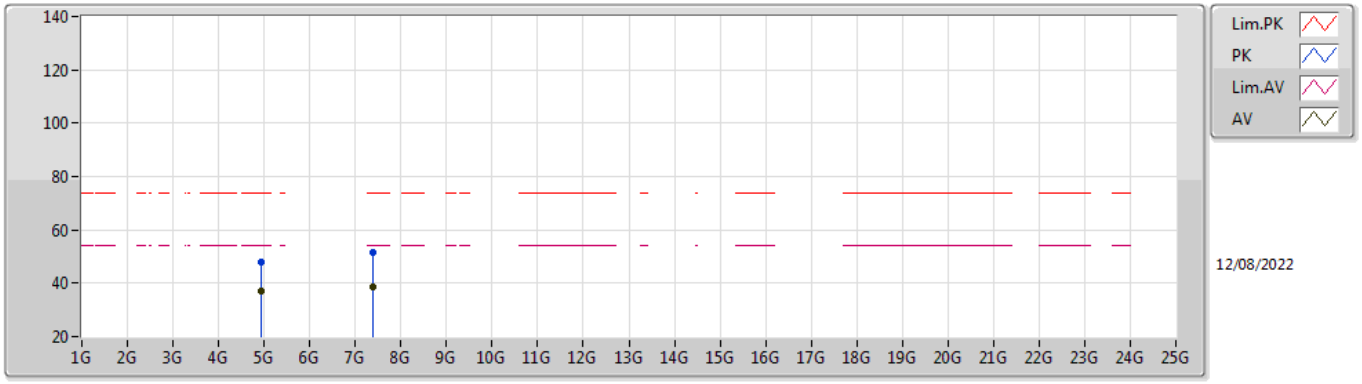


EUT Y_2TX
Setting 24.5
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.463G	113.15	Inf	-Inf	81.84	3	Horizontal	150	2.42	-	28.45	2.86	-
AV	2.4614G	109.60	Inf	-Inf	78.29	3	Horizontal	150	2.42	-	28.45	2.86	-
PK	2.4864G	56.86	74.00	-17.14	25.42	3	Horizontal	150	2.42	-	28.55	2.89	-
AV	2.4882G	45.70	54.00	-8.30	14.26	3	Horizontal	150	2.42	-	28.55	2.89	-

802.11b_Nss1,(1Mbps)_2TX

2462MHz_TX

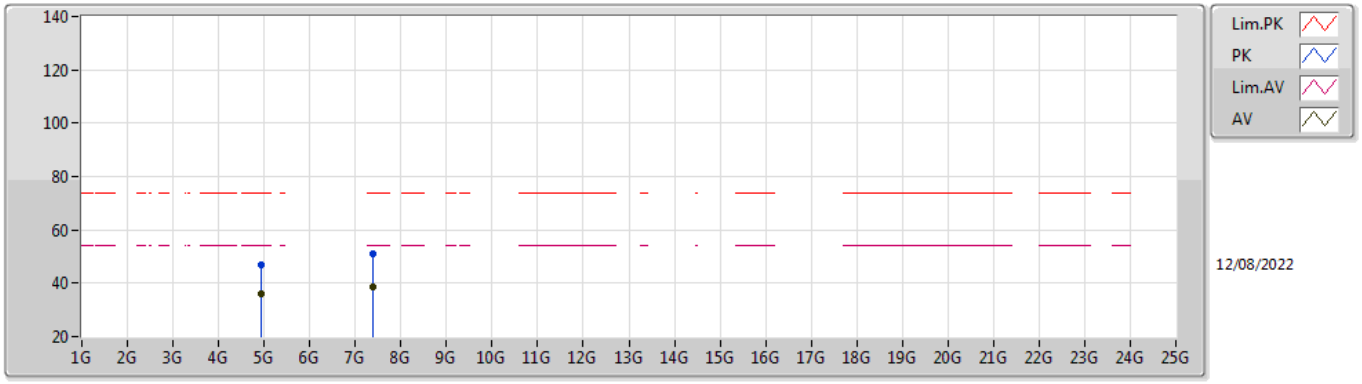


EUT Y_2TX
Setting 24.5
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.92394G	47.87	74.00	-26.13	40.28	3	Vertical	189	1.80	-	33.25	5.10	30.76
AV	4.92388G	37.30	54.00	-16.70	29.71	3	Vertical	189	1.80	-	33.25	5.10	30.76
PK	7.37928G	51.47	74.00	-22.53	40.74	3	Vertical	232	1.79	-	36.50	6.19	31.96
AV	7.39524G	38.40	54.00	-15.60	27.67	3	Vertical	232	1.79	-	36.50	6.20	31.97

802.11b_Nss1,(1Mbps)_2TX

2462MHz_TX

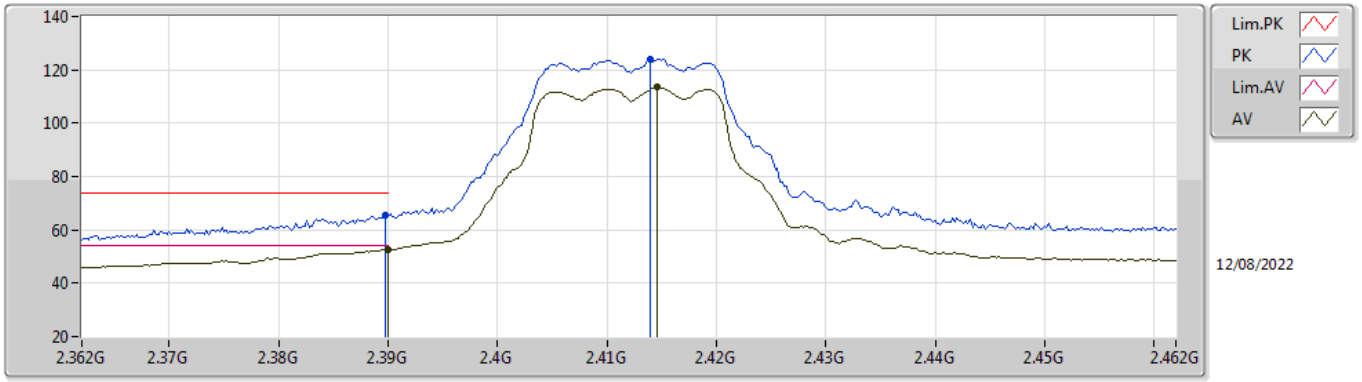


EUT Y_2TX
Setting 24.5
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.924G	46.86	74.00	-27.14	39.27	3	Horizontal	186	1.88	-	33.25	5.10	30.76
AV	4.924G	36.02	54.00	-17.98	28.43	3	Horizontal	186	1.88	-	33.25	5.10	30.76
PK	7.38282G	50.97	74.00	-23.03	40.24	3	Horizontal	170	1.50	-	36.50	6.19	31.96
AV	7.39212G	38.71	54.00	-15.29	27.98	3	Horizontal	170	1.50	-	36.50	6.20	31.97

802.11g_Nss1,(6Mbps)_2TX

2412MHz_TX

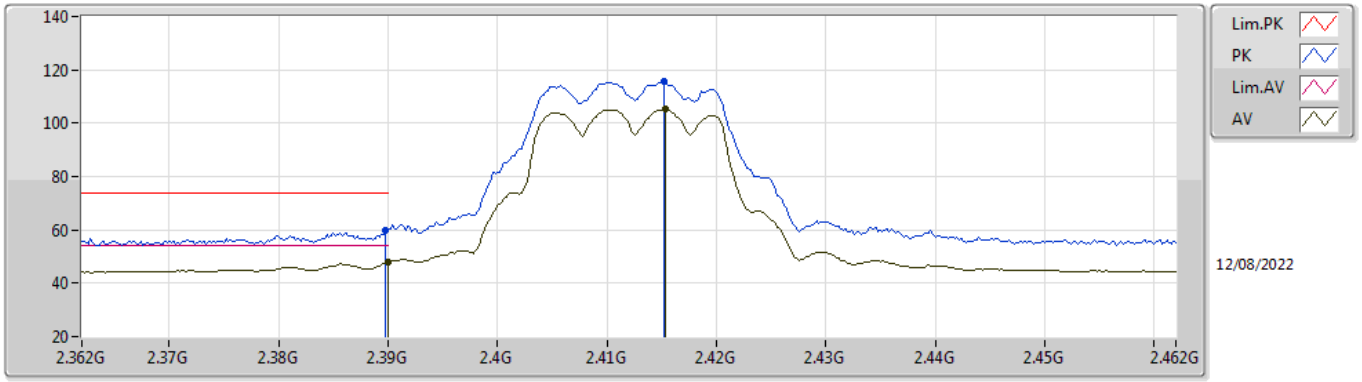


EUT Y_2TX
Setting 24.5
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3898G	65.26	74.00	-8.74	34.09	3	Vertical	162	1.51	-	28.38	2.79	-
AV	2.39G	52.57	54.00	-1.43	21.40	3	Vertical	162	1.51	-	28.38	2.79	-
PK	2.414G	123.79	Inf	-Inf	92.58	3	Vertical	162	1.51	-	28.40	2.81	-
AV	2.4146G	113.42	Inf	-Inf	82.21	3	Vertical	162	1.51	-	28.40	2.81	-

802.11g_Nss1,(6Mbps)_2TX

2412MHz_TX

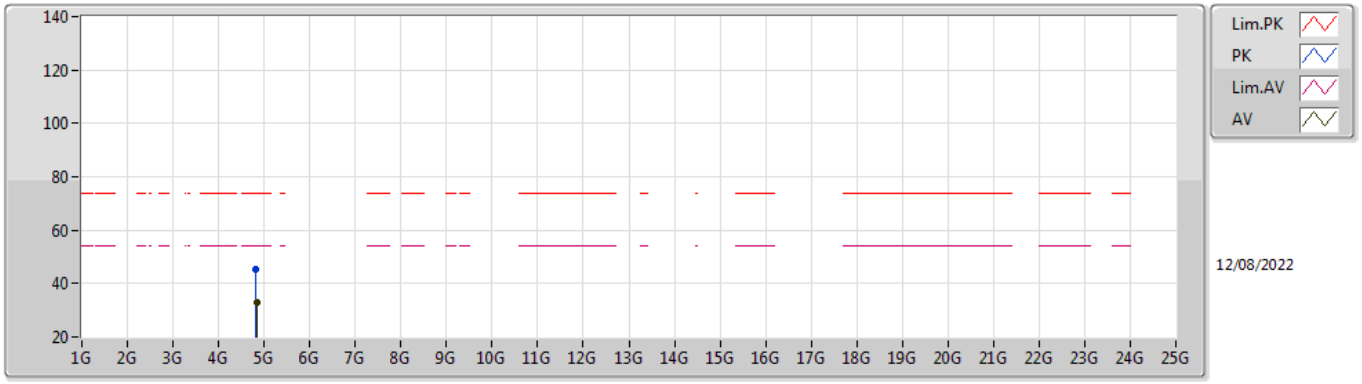


EUT Y_2TX
Setting 24.5
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3898G	59.84	74.00	-14.16	28.67	3	Horizontal	121	2.35	-	28.38	2.79	-
AV	2.39G	47.89	54.00	-6.11	16.72	3	Horizontal	121	2.35	-	28.38	2.79	-
PK	2.4152G	115.49	Inf	-Inf	84.27	3	Horizontal	121	2.35	-	28.40	2.82	-
AV	2.4154G	105.16	Inf	-Inf	73.94	3	Horizontal	121	2.35	-	28.40	2.82	-

802.11g_Nss1,(6Mbps)_2TX

2412MHz_TX

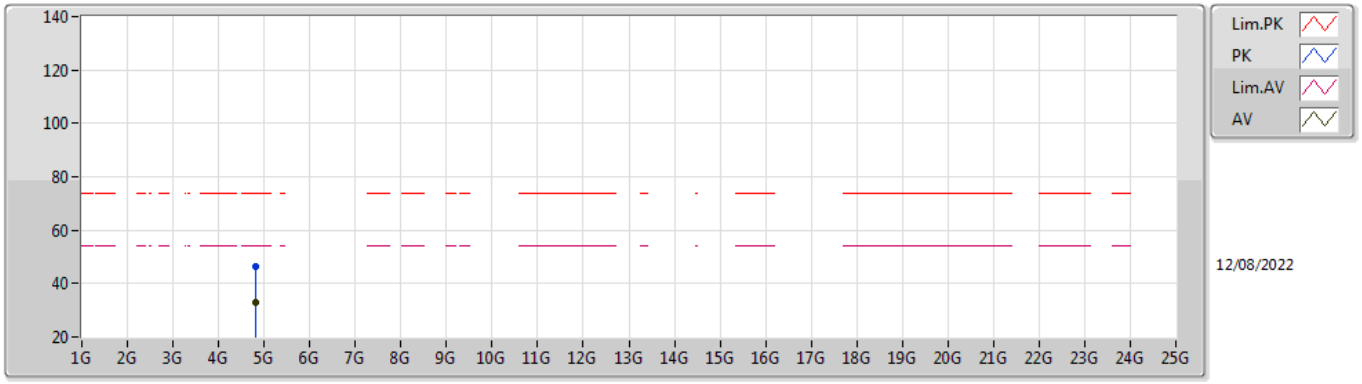


EUT Y_2TX
Setting 24.5
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.81554G	45.36	74.00	-28.64	38.18	3	Vertical	351	2.37	-	32.89	5.10	30.81
AV	4.83312G	32.86	54.00	-21.14	25.56	3	Vertical	351	2.37	-	33.00	5.10	30.80

802.11g_Nss1,(6Mbps)_2TX

2412MHz_TX

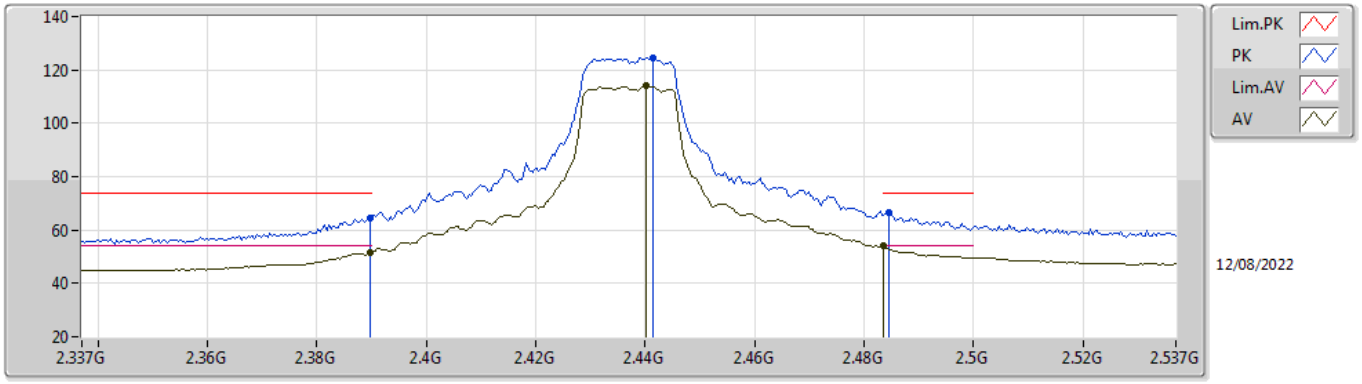


EUT Y_2TX
Setting 24.5
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.82274G	46.24	74.00	-27.76	39.00	3	Horizontal	280	1.95	-	32.94	5.10	30.80
AV	4.8105G	32.87	54.00	-21.13	25.72	3	Horizontal	280	1.95	-	32.86	5.10	30.81

802.11g_Nss1,(6Mbps)_2TX

2437MHz_TX

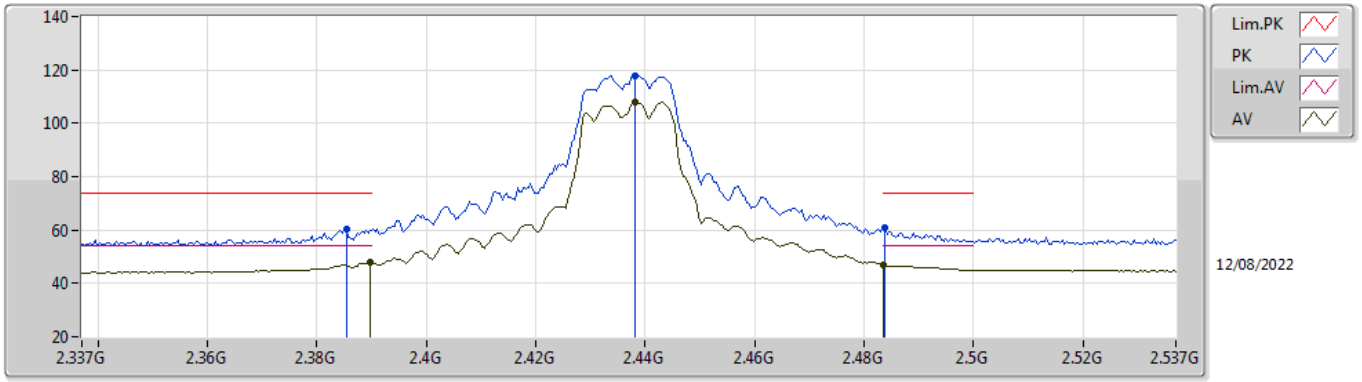


EUT Y_2TX
Setting 27
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3898G	64.49	74.00	-9.51	33.32	3	Vertical	180	1.58	-	28.38	2.79	-
AV	2.3898G	51.35	54.00	-2.65	20.18	3	Vertical	180	1.58	-	28.38	2.79	-
PK	2.4414G	124.43	Inf	-Inf	93.19	3	Vertical	180	1.58	-	28.40	2.84	-
AV	2.4402G	114.00	Inf	-Inf	82.76	3	Vertical	180	1.58	-	28.40	2.84	-
PK	2.4846G	66.43	74.00	-7.57	35.01	3	Vertical	180	1.58	-	28.54	2.88	-
AV	2.4835G	53.97	54.00	-0.03	22.56	3	Vertical	180	1.58	-	28.53	2.88	-

802.11g_Nss1,(6Mbps)_2TX

2437MHz_TX

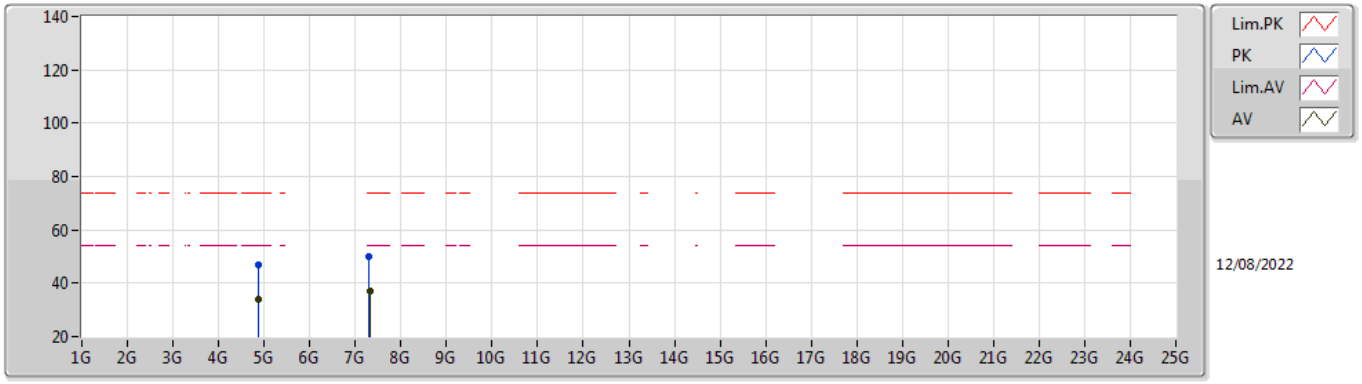


EUT Y_2TX
Setting 27
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3854G	60.36	74.00	-13.64	29.20	3	Horizontal	152	2.68	-	28.37	2.79	-
AV	2.3898G	47.73	54.00	-6.27	16.56	3	Horizontal	152	2.68	-	28.38	2.79	-
PK	2.4382G	117.95	Inf	-Inf	86.71	3	Horizontal	152	2.68	-	28.40	2.84	-
AV	2.4382G	107.82	Inf	-Inf	76.58	3	Horizontal	152	2.68	-	28.40	2.84	-
PK	2.4838G	60.79	74.00	-13.21	29.37	3	Horizontal	152	2.68	-	28.54	2.88	-
AV	2.4835G	47.15	54.00	-6.85	15.74	3	Horizontal	152	2.68	-	28.53	2.88	-

802.11g_Nss1,(6Mbps)_2TX

2437MHz_TX

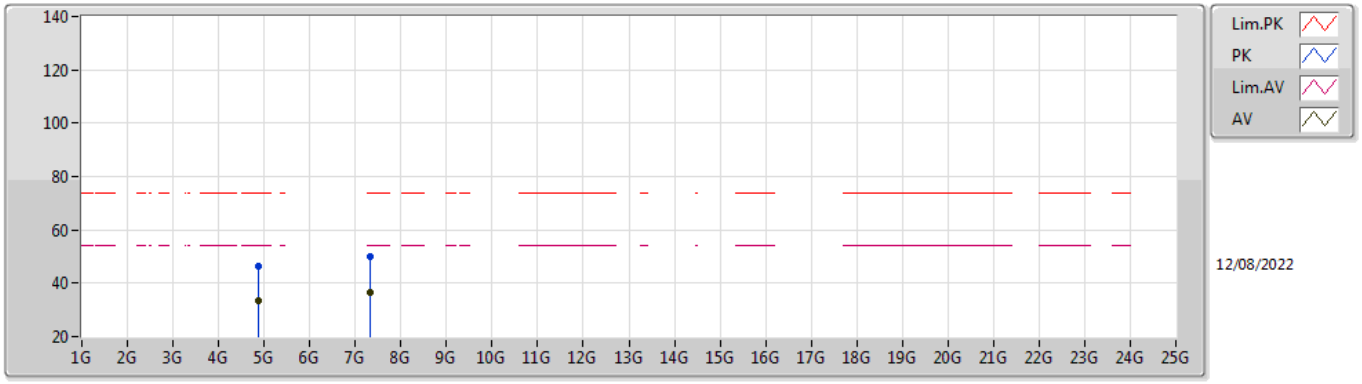


EUT Y_2TX
Setting 27
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.87376G	46.64	74.00	-27.36	39.17	3	Vertical	201	1.80	-	33.15	5.10	30.78
AV	4.87388G	34.07	54.00	-19.93	26.60	3	Vertical	201	1.80	-	33.15	5.10	30.78
PK	7.30464G	50.21	74.00	-23.79	39.57	3	Vertical	2	1.79	-	36.41	6.15	31.92
AV	7.32456G	37.06	54.00	-16.94	26.38	3	Vertical	2	1.79	-	36.45	6.16	31.93

802.11g_Nss1,(6Mbps)_2TX

2437MHz_TX

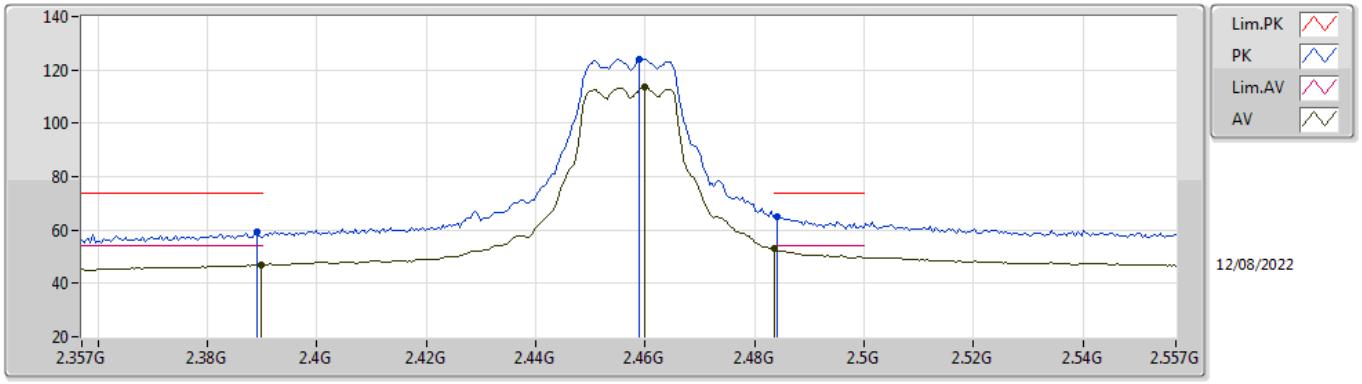


EUT Y_2TX
Setting 27
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.88414G	46.42	74.00	-27.58	38.93	3	Horizontal	300	1.54	-	33.17	5.10	30.78
AV	4.874G	33.49	54.00	-20.51	26.02	3	Horizontal	300	1.54	-	33.15	5.10	30.78
PK	7.31538G	49.86	74.00	-24.14	39.19	3	Horizontal	152	1.22	-	36.43	6.16	31.92
AV	7.31424G	36.74	54.00	-17.26	26.07	3	Horizontal	152	1.22	-	36.43	6.16	31.92

802.11g_Nss1,(6Mbps)_2TX

2457MHz_TX

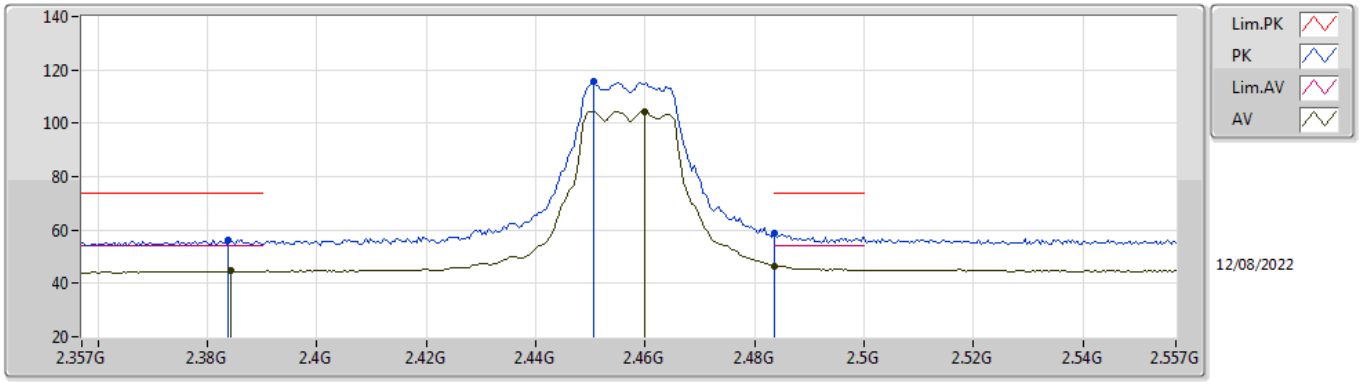


EUT Y_2TX
Setting 25
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.389G	59.43	74.00	-14.57	28.26	3	Vertical	183	1.80	-	28.38	2.79	-
AV	2.3898G	47.03	54.00	-6.97	15.86	3	Vertical	183	1.80	-	28.38	2.79	-
PK	2.459G	124.18	Inf	-Inf	92.88	3	Vertical	183	1.80	-	28.44	2.86	-
AV	2.4598G	113.68	Inf	-Inf	82.38	3	Vertical	183	1.80	-	28.44	2.86	-
PK	2.4842G	65.16	74.00	-8.84	33.74	3	Vertical	183	1.80	-	28.54	2.88	-
AV	2.4835G	52.87	54.00	-1.13	21.46	3	Vertical	183	1.80	-	28.53	2.88	-

802.11g_Nss1,(6Mbps)_2TX

2457MHz_TX

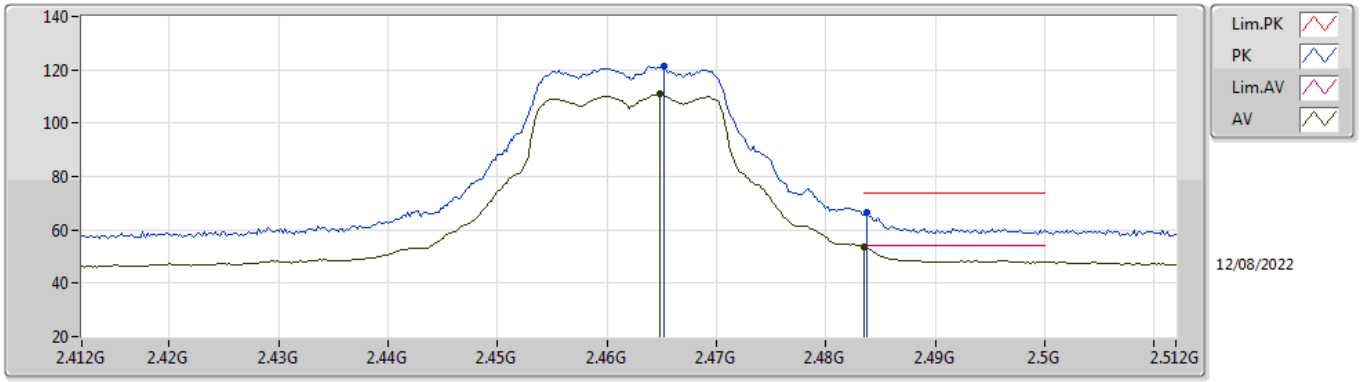


EUT Y_2TX
Setting 25
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3838G	56.42	74.00	-17.58	25.26	3	Horizontal	137	2.36	-	28.37	2.79	-
AV	2.3842G	44.64	54.00	-9.36	13.48	3	Horizontal	137	2.36	-	28.37	2.79	-
PK	2.4506G	115.44	Inf	-Inf	84.19	3	Horizontal	137	2.36	-	28.40	2.85	-
AV	2.4598G	104.40	Inf	-Inf	73.10	3	Horizontal	137	2.36	-	28.44	2.86	-
PK	2.4835G	58.69	74.00	-15.31	27.28	3	Horizontal	137	2.36	-	28.53	2.88	-
AV	2.4835G	46.42	54.00	-7.58	15.01	3	Horizontal	137	2.36	-	28.53	2.88	-

802.11g_Nss1,(6Mbps)_2TX

2462MHz_TX

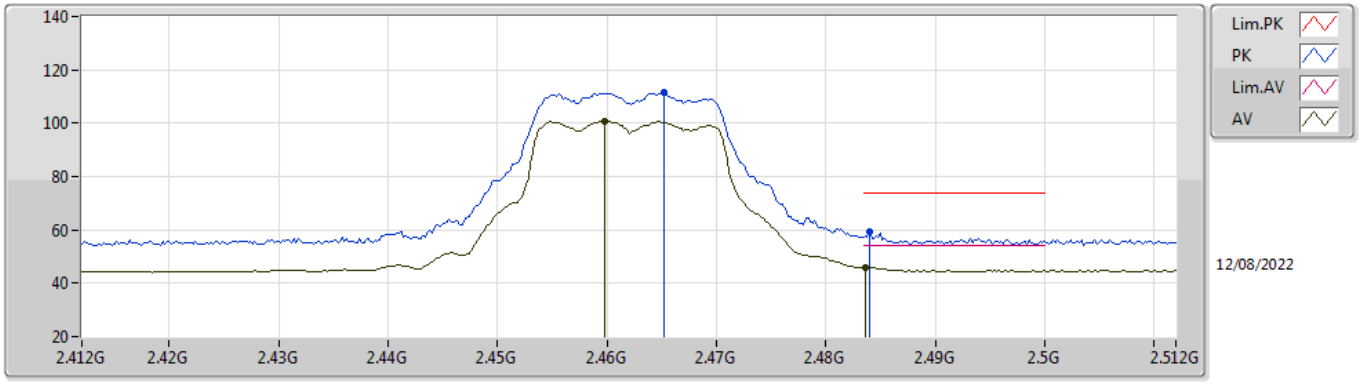


EUT Y_2TX
Setting 21.5
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.4652G	121.14	Inf	-Inf	89.81	3	Vertical	179	1.69	-	28.46	2.87	-
AV	2.4648G	110.84	Inf	-Inf	79.52	3	Vertical	179	1.69	-	28.46	2.86	-
PK	2.4838G	66.65	74.00	-7.35	35.23	3	Vertical	179	1.69	-	28.54	2.88	-
AV	2.4835G	53.70	54.00	-0.30	22.29	3	Vertical	179	1.69	-	28.53	2.88	-

802.11g_Nss1,(6Mbps)_2TX

2462MHz_TX

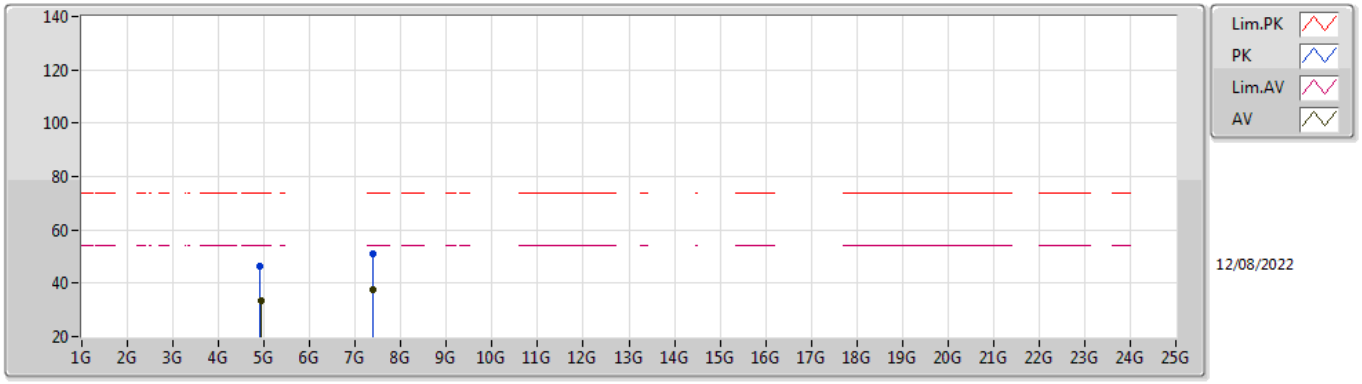


EUT Y_2TX
Setting 21.5
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.4652G	111.66	Inf	-Inf	80.33	3	Horizontal	134	2.31	-	28.46	2.87	-
AV	2.4598G	100.73	Inf	-Inf	69.43	3	Horizontal	134	2.31	-	28.44	2.86	-
PK	2.484G	59.31	74.00	-14.69	27.89	3	Horizontal	134	2.31	-	28.54	2.88	-
AV	2.4836G	46.00	54.00	-8.00	14.59	3	Horizontal	134	2.31	-	28.53	2.88	-

802.11g_Nss1,(6Mbps)_2TX

2462MHz_TX

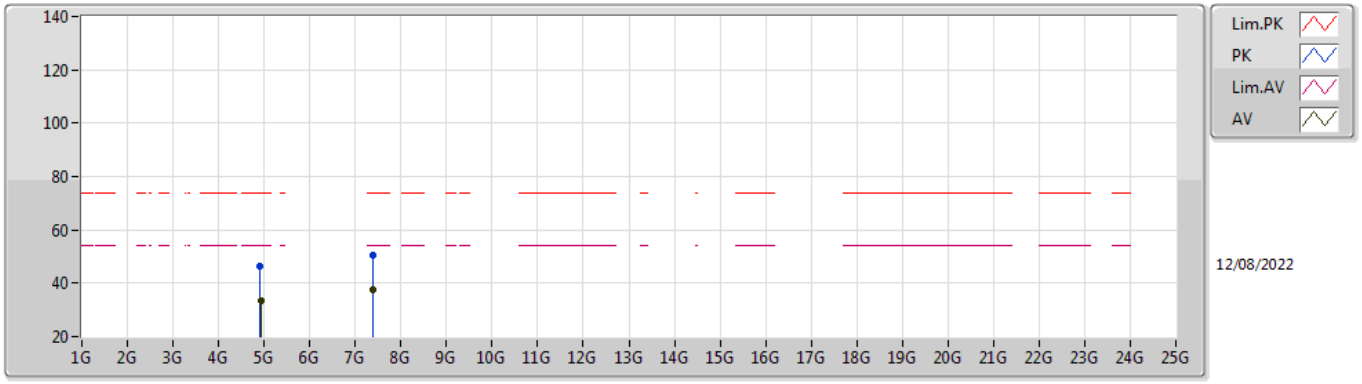


EUT Y_2TX
Setting 21.5
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.91182G	46.22	74.00	-27.78	38.67	3	Vertical	267	2.42	-	33.22	5.10	30.77
AV	4.92592G	33.22	54.00	-20.78	25.63	3	Vertical	267	2.42	-	33.25	5.10	30.76
PK	7.38384G	51.19	74.00	-22.81	40.46	3	Vertical	268	1.04	-	36.50	6.19	31.96
AV	7.3821G	37.35	54.00	-16.65	26.62	3	Vertical	268	1.04	-	36.50	6.19	31.96

802.11g_Nss1,(6Mbps)_2TX

2462MHz_TX

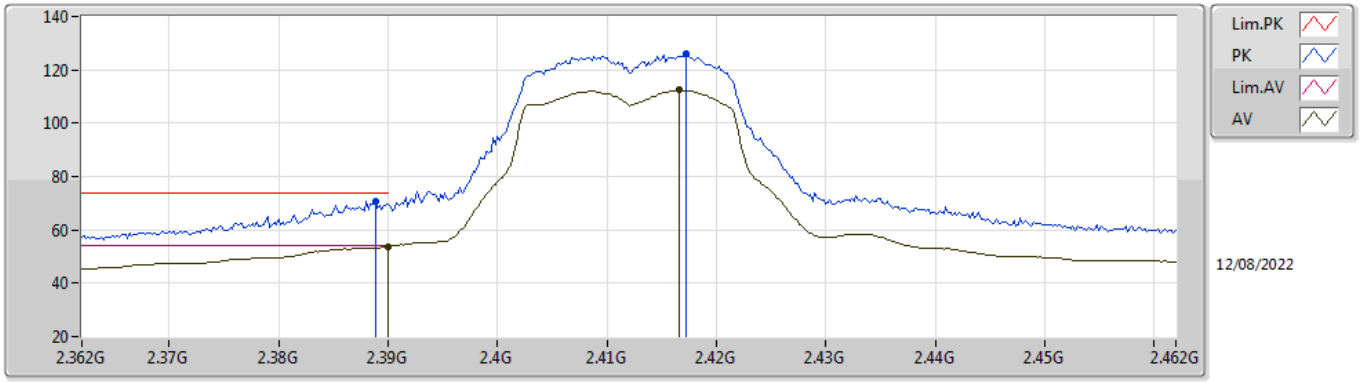


EUT Y_2TX
Setting 21.5
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.91386G	46.37	74.00	-27.63	38.81	3	Horizontal	100	2.87	-	33.23	5.10	30.77
AV	4.93864G	33.39	54.00	-20.61	25.77	3	Horizontal	100	2.87	-	33.28	5.10	30.76
PK	7.38708G	50.45	74.00	-23.55	39.72	3	Horizontal	295	1.93	-	36.50	6.19	31.96
AV	7.39446G	37.52	54.00	-16.48	26.79	3	Horizontal	295	1.93	-	36.50	6.20	31.97

802.11ax HEW20_Nss1,(MCS0)_2TX

2412MHz_TX

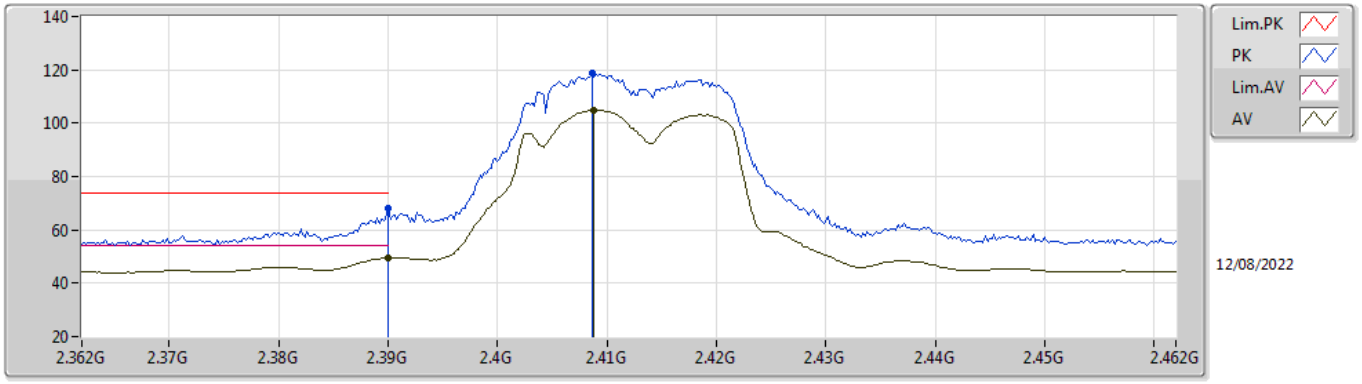


EUT Y_2TX
Setting 25
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3888G	70.63	74.00	-3.37	39.46	3	Vertical	162	1.52	-	28.38	2.79	-
AV	2.39G	53.71	54.00	-0.29	22.54	3	Vertical	162	1.52	-	28.38	2.79	-
PK	2.4172G	125.79	Inf	-Inf	94.57	3	Vertical	162	1.52	-	28.40	2.82	-
AV	2.4166G	112.36	Inf	-Inf	81.14	3	Vertical	162	1.52	-	28.40	2.82	-

802.11ax HEW20_Nss1,(MCS0)_2TX

2412MHz_TX

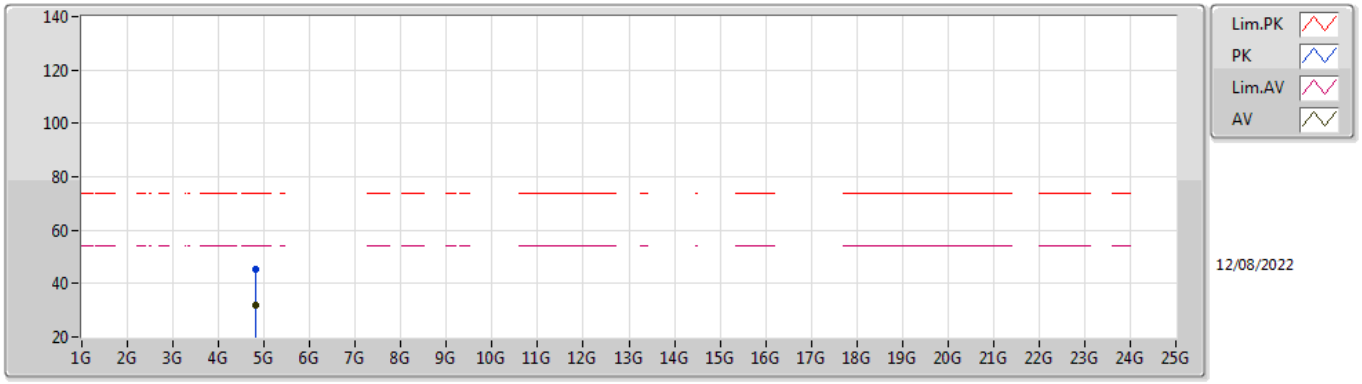


EUT Y_2TX
Setting 25
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.39G	67.96	74.00	-6.04	36.79	3	Horizontal	126	2.85	-	28.38	2.79	-
AV	2.39G	49.48	54.00	-4.52	18.31	3	Horizontal	126	2.85	-	28.38	2.79	-
PK	2.4086G	118.72	Inf	-Inf	87.51	3	Horizontal	126	2.85	-	28.40	2.81	-
AV	2.4088G	104.93	Inf	-Inf	73.72	3	Horizontal	126	2.85	-	28.40	2.81	-

802.11ax HEW20_Nss1,(MCS0)_2TX

2412MHz_TX

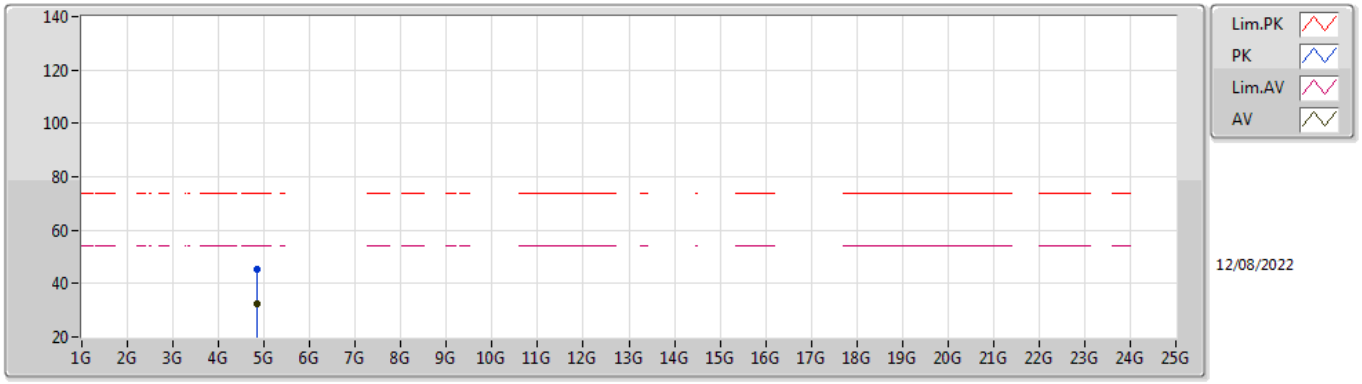


EUT Y_2TX
Setting 25
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.82676G	45.32	74.00	-28.68	38.06	3	Vertical	49	2.38	-	32.96	5.10	30.80
AV	4.81218G	32.08	54.00	-21.92	24.92	3	Vertical	49	2.38	-	32.87	5.10	30.81

802.11ax HEW20_Nss1,(MCS0)_2TX

2412MHz_TX

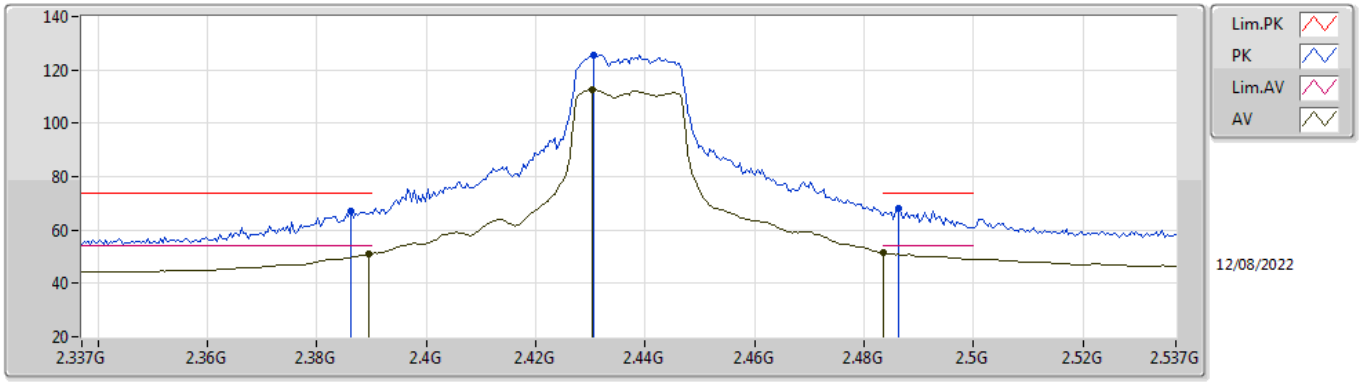


EUT Y_2TX
Setting 25
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.83534G	45.47	74.00	-28.53	38.16	3	Horizontal	144	1.82	-	33.01	5.10	30.80
AV	4.83612G	32.18	54.00	-21.82	24.86	3	Horizontal	144	1.82	-	33.02	5.10	30.80

802.11ax HEW20_Nss1,(MCS0)_2TX

2437MHz_TX

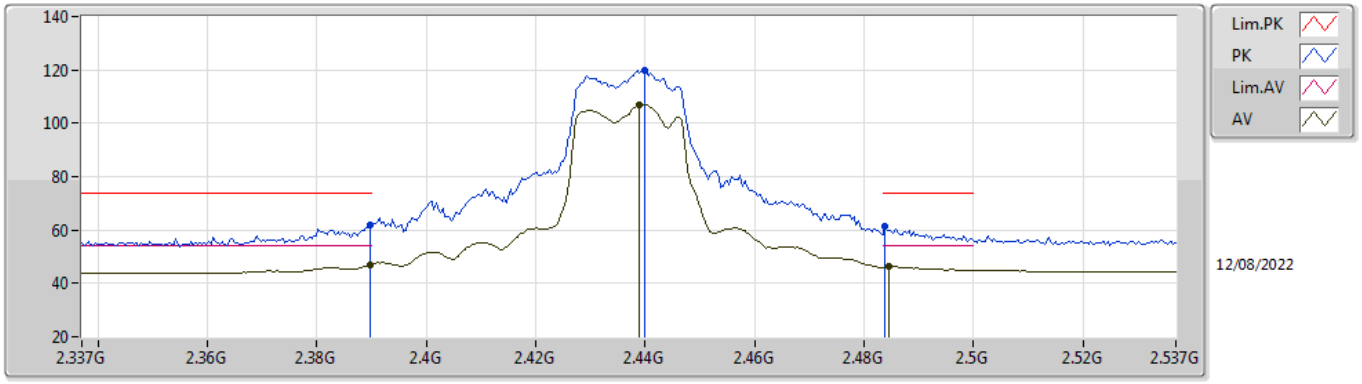


EUT Y_2TX
Setting 27
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3862G	67.12	74.00	-6.88	35.96	3	Vertical	170	1.78	-	28.37	2.79	-
AV	2.3894G	51.13	54.00	-2.87	19.96	3	Vertical	170	1.78	-	28.38	2.79	-
PK	2.4306G	125.70	Inf	-Inf	94.47	3	Vertical	170	1.78	-	28.40	2.83	-
AV	2.4302G	112.62	Inf	-Inf	81.39	3	Vertical	170	1.78	-	28.40	2.83	-
PK	2.4862G	68.08	74.00	-5.92	36.65	3	Vertical	170	1.78	-	28.54	2.89	-
AV	2.4835G	51.30	54.00	-2.70	19.89	3	Vertical	170	1.78	-	28.53	2.88	-

802.11ax HEW20_Nss1,(MCS0)_2TX

2437MHz_TX

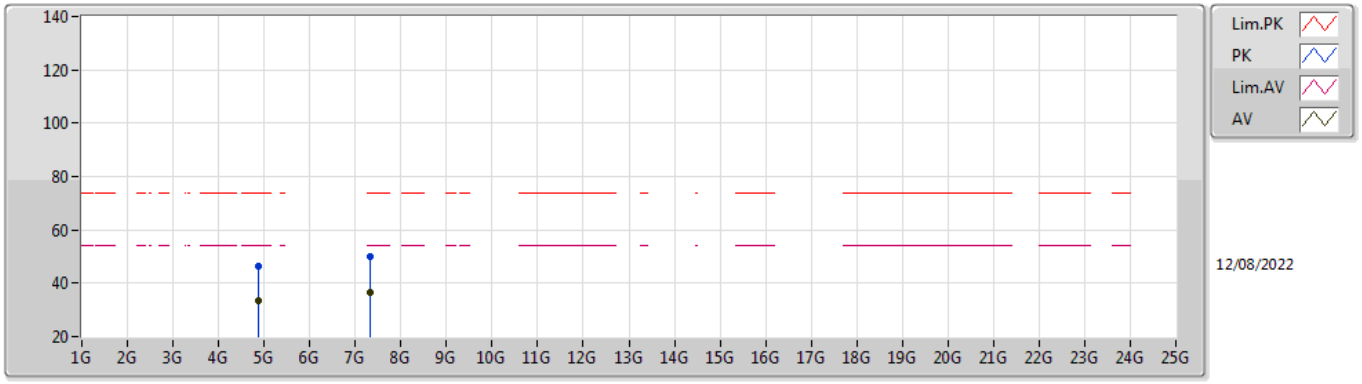


EUT Y_2TX
Setting 27
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3898G	61.64	74.00	-12.36	30.47	3	Horizontal	151	2.67	-	28.38	2.79	-
AV	2.3898G	47.06	54.00	-6.94	15.89	3	Horizontal	151	2.67	-	28.38	2.79	-
PK	2.4398G	120.01	Inf	-Inf	88.77	3	Horizontal	151	2.67	-	28.40	2.84	-
AV	2.439G	106.91	Inf	-Inf	75.67	3	Horizontal	151	2.67	-	28.40	2.84	-
PK	2.4838G	61.49	74.00	-12.51	30.07	3	Horizontal	151	2.67	-	28.54	2.88	-
AV	2.4846G	46.24	54.00	-7.76	14.82	3	Horizontal	151	2.67	-	28.54	2.88	-

802.11ax HEW20_Nss1,(MCS0)_2TX

2437MHz_TX

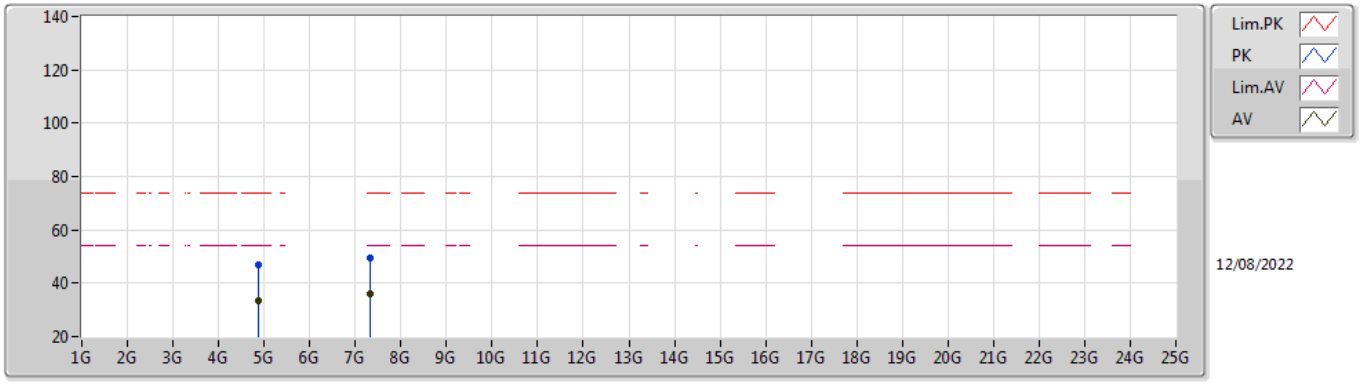


EUT Y_2TX
Setting 27
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.87376G	46.60	74.00	-27.40	39.13	3	Vertical	199	1.80	-	33.15	5.10	30.78
AV	4.87388G	33.49	54.00	-20.51	26.02	3	Vertical	199	1.80	-	33.15	5.10	30.78
PK	7.31478G	49.85	74.00	-24.15	39.18	3	Vertical	216	1.79	-	36.43	6.16	31.92
AV	7.31958G	36.51	54.00	-17.49	25.84	3	Vertical	216	1.79	-	36.44	6.16	31.93

802.11ax HEW20_Nss1,(MCS0)_2TX

2437MHz_TX

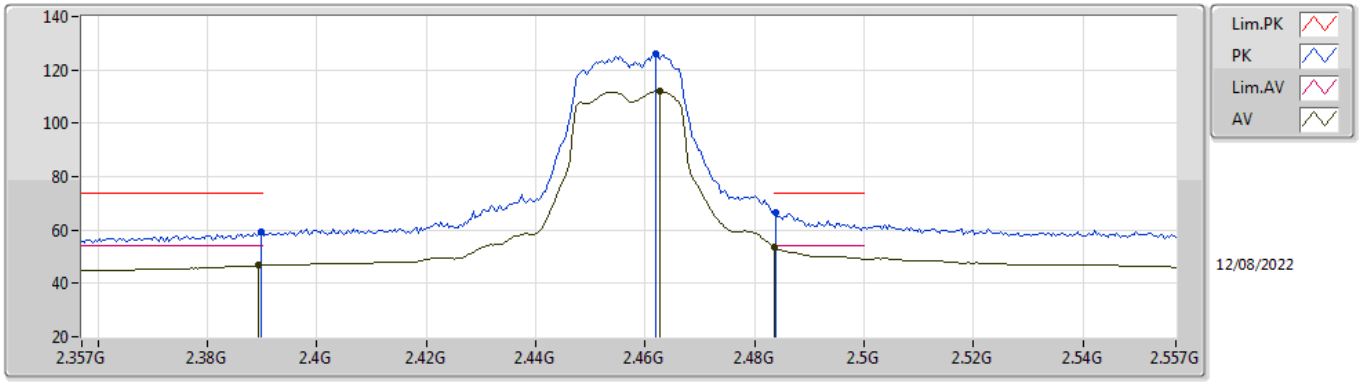


EUT Y_2TX
Setting 27
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.87538G	46.64	74.00	-27.36	39.17	3	Horizontal	147	1.63	-	33.15	5.10	30.78
AV	4.87394G	33.42	54.00	-20.58	25.95	3	Horizontal	147	1.63	-	33.15	5.10	30.78
PK	7.31286G	49.58	74.00	-24.42	38.91	3	Horizontal	253	1.02	-	36.43	6.16	31.92
AV	7.32234G	36.29	54.00	-17.71	25.62	3	Horizontal	253	1.02	-	36.44	6.16	31.93

802.11ax HEW20_Nss1,(MCS0)_2TX

2457MHz_TX

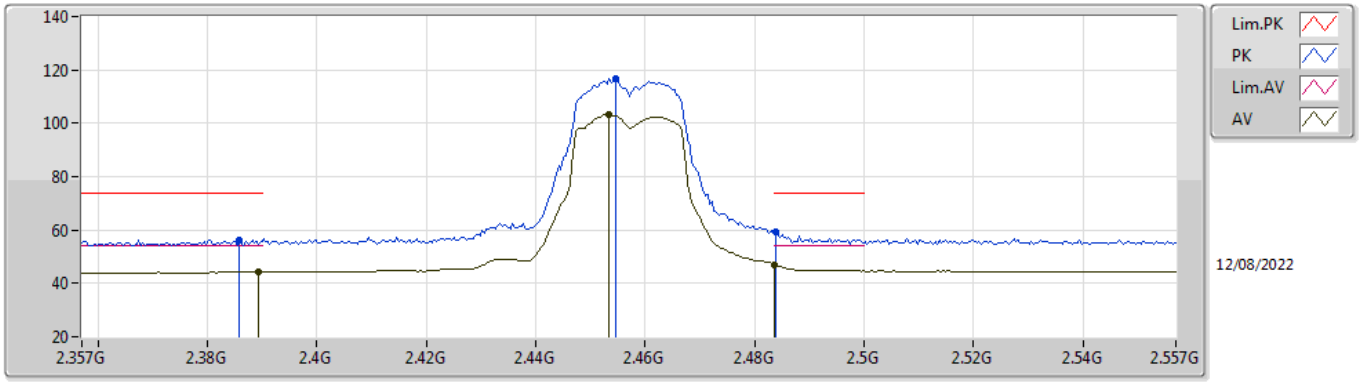


EUT Y_2TX
Setting 25
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3898G	59.17	74.00	-14.83	28.00	3	Vertical	180	1.72	-	28.38	2.79	-
AV	2.3894G	46.75	54.00	-7.25	15.58	3	Vertical	180	1.72	-	28.38	2.79	-
PK	2.4618G	125.85	Inf	-Inf	94.54	3	Vertical	180	1.72	-	28.45	2.86	-
AV	2.4626G	112.17	Inf	-Inf	80.86	3	Vertical	180	1.72	-	28.45	2.86	-
PK	2.4838G	66.56	74.00	-7.44	35.14	3	Vertical	180	1.72	-	28.54	2.88	-
AV	2.4835G	53.62	54.00	-0.38	22.21	3	Vertical	180	1.72	-	28.53	2.88	-

802.11ax HEW20_Nss1,(MCS0)_2TX

2457MHz_TX

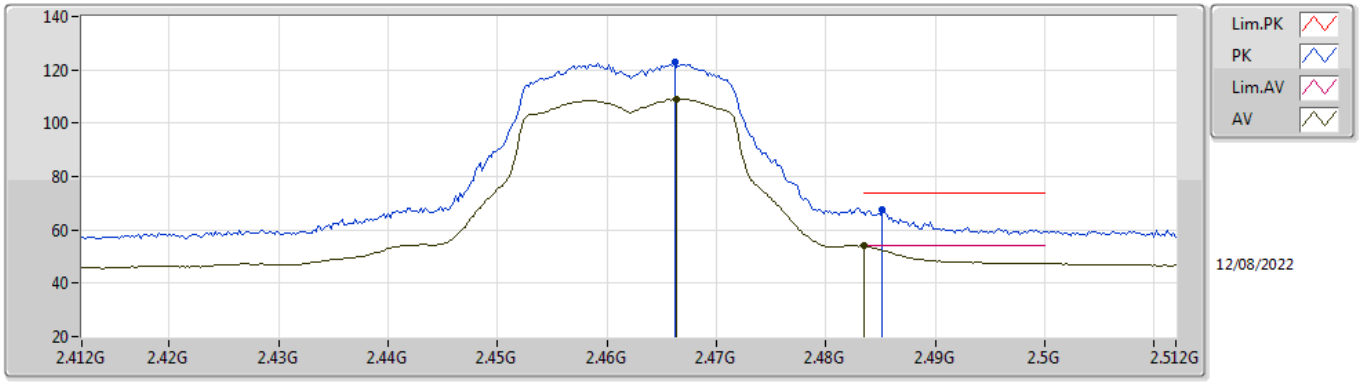


EUT Y_2TX
Setting 25
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3858G	56.22	74.00	-17.78	25.06	3	Horizontal	135	2.36	-	28.37	2.79	-
AV	2.3894G	44.22	54.00	-9.78	13.05	3	Horizontal	135	2.36	-	28.38	2.79	-
PK	2.4546G	116.70	Inf	-Inf	85.43	3	Horizontal	135	2.36	-	28.42	2.85	-
AV	2.4534G	103.27	Inf	-Inf	72.01	3	Horizontal	135	2.36	-	28.41	2.85	-
PK	2.4838G	59.35	74.00	-14.65	27.93	3	Horizontal	135	2.36	-	28.54	2.88	-
AV	2.4835G	47.03	54.00	-6.97	15.62	3	Horizontal	135	2.36	-	28.53	2.88	-

802.11ax HEW20_Nss1,(MCS0)_2TX

2462MHz_TX

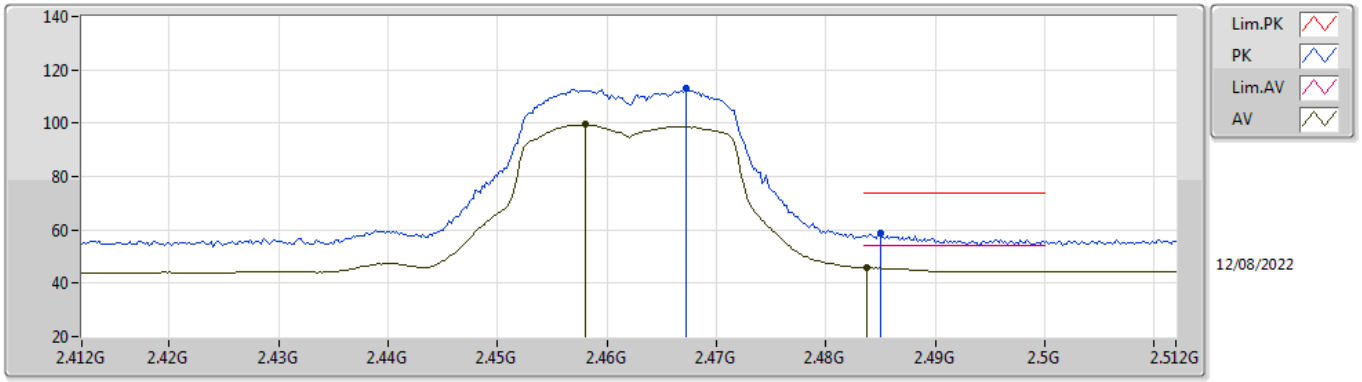


EUT Y_2TX
Setting 21.5
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.4662G	122.81	Inf	-Inf	91.48	3	Vertical	179	1.74	-	28.46	2.87	-
AV	2.4664G	109.04	Inf	-Inf	77.70	3	Vertical	179	1.74	-	28.47	2.87	-
PK	2.4852G	67.69	74.00	-6.31	36.26	3	Vertical	179	1.74	-	28.54	2.89	-
AV	2.4835G	53.99	54.00	-0.01	22.58	3	Vertical	179	1.74	-	28.53	2.88	-

802.11ax HEW20_Nss1,(MCS0)_2TX

2462MHz_TX

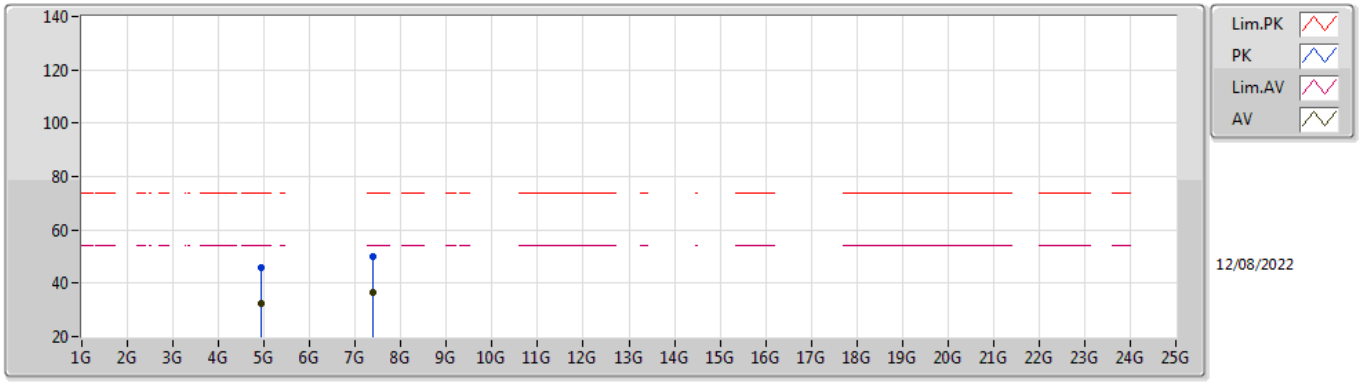


EUT Y_2TX
Setting 21.5
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.4672G	112.87	Inf	-Inf	81.53	3	Horizontal	135	2.33	-	28.47	2.87	-
AV	2.458G	99.40	Inf	-Inf	68.11	3	Horizontal	135	2.33	-	28.43	2.86	-
PK	2.485G	58.79	74.00	-15.21	27.36	3	Horizontal	135	2.33	-	28.54	2.89	-
AV	2.4838G	45.82	54.00	-8.18	14.40	3	Horizontal	135	2.33	-	28.54	2.88	-

802.11ax HEW20_Nss1,(MCS0)_2TX

2462MHz_TX

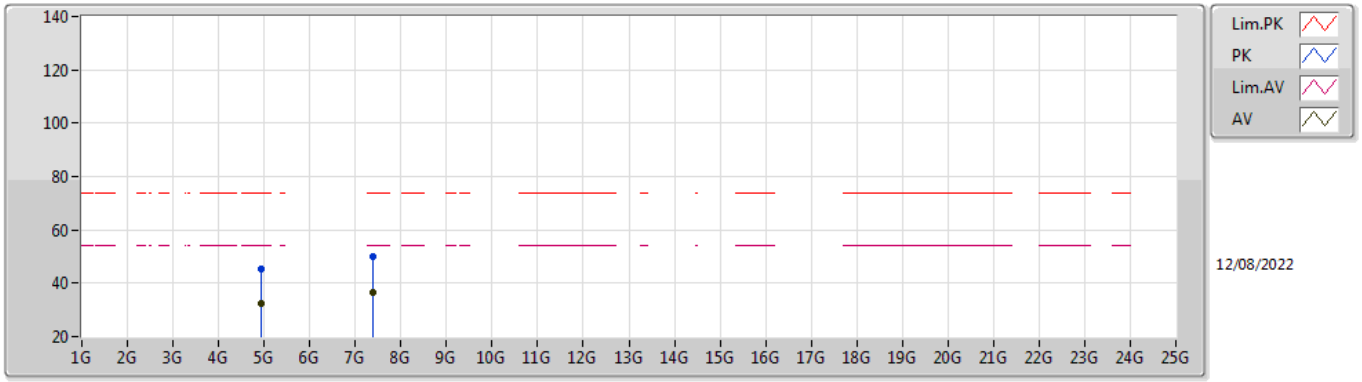


EUT Y_2TX
Setting 21.5
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.93756G	45.68	74.00	-28.32	38.06	3	Vertical	121	1.21	-	33.28	5.10	30.76
AV	4.93672G	32.42	54.00	-21.58	24.81	3	Vertical	121	1.21	-	33.27	5.10	30.76
PK	7.38366G	50.17	74.00	-23.83	39.44	3	Vertical	307	1.50	-	36.50	6.19	31.96
AV	7.39332G	36.59	54.00	-17.41	25.86	3	Vertical	307	1.50	-	36.50	6.20	31.97

802.11ax HEW20_Nss1,(MCS0)_2TX

2462MHz_TX

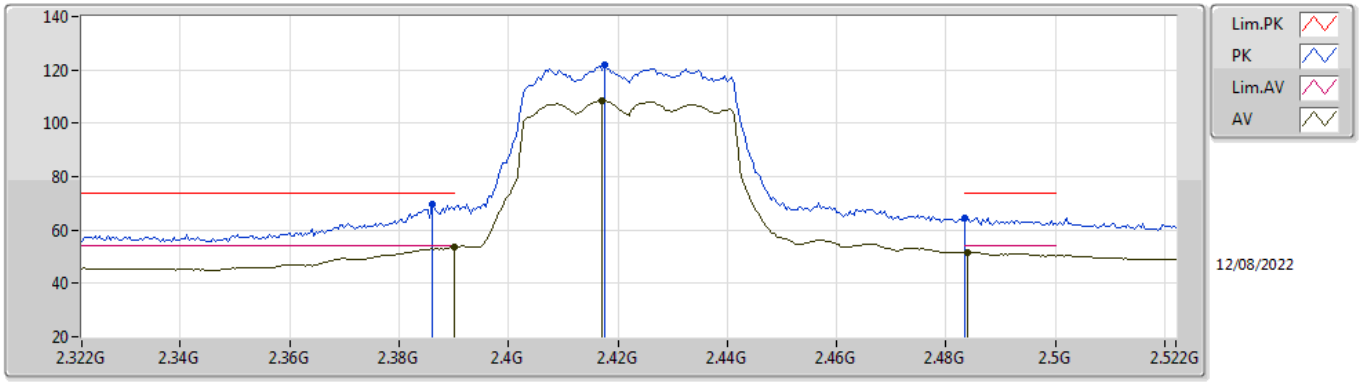


EUT Y_2TX
Setting 21.5
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.92106G	45.56	74.00	-28.44	37.98	3	Horizontal	97	2.40	-	33.24	5.10	30.76
AV	4.93492G	32.44	54.00	-21.56	24.83	3	Horizontal	97	2.40	-	33.27	5.10	30.76
PK	7.39212G	49.93	74.00	-24.07	39.20	3	Horizontal	56	1.57	-	36.50	6.20	31.97
AV	7.38342G	36.57	54.00	-17.43	25.84	3	Horizontal	56	1.57	-	36.50	6.19	31.96

802.11ax HEW40_Nss1,(MCS0)_2TX

2422MHz_TX

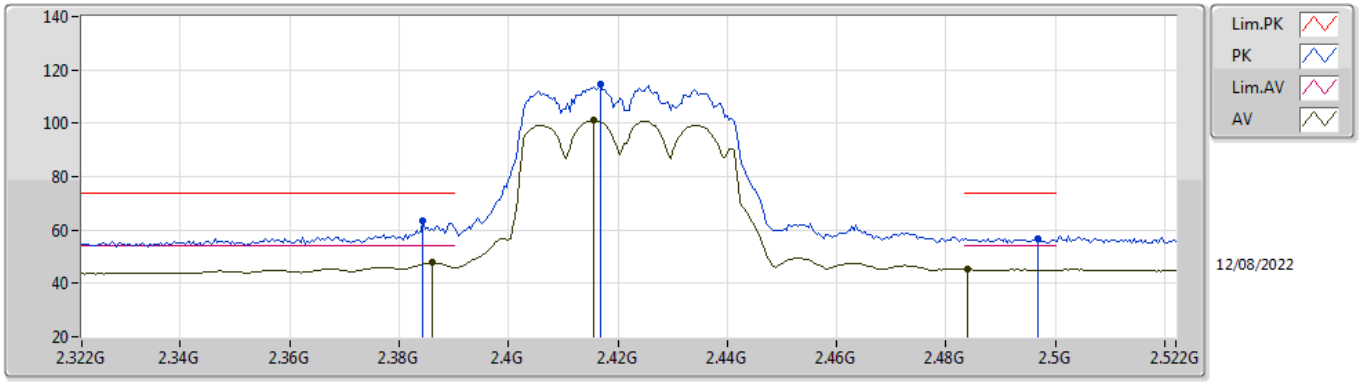


EUT Y_2TX
Setting 23.5
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.386G	69.51	74.00	-4.49	38.35	3	Vertical	168	1.51	-	28.37	2.79	-
AV	2.39G	53.59	54.00	-0.41	22.42	3	Vertical	168	1.51	-	28.38	2.79	-
PK	2.4176G	121.92	Inf	-Inf	90.70	3	Vertical	168	1.51	-	28.40	2.82	-
AV	2.4172G	108.48	Inf	-Inf	77.26	3	Vertical	168	1.51	-	28.40	2.82	-
PK	2.4835G	64.55	74.00	-9.45	33.14	3	Vertical	168	1.51	-	28.53	2.88	-
AV	2.484G	51.76	54.00	-2.24	20.34	3	Vertical	168	1.51	-	28.54	2.88	-

802.11ax HEW40_Nss1,(MCS0)_2TX

2422MHz_TX

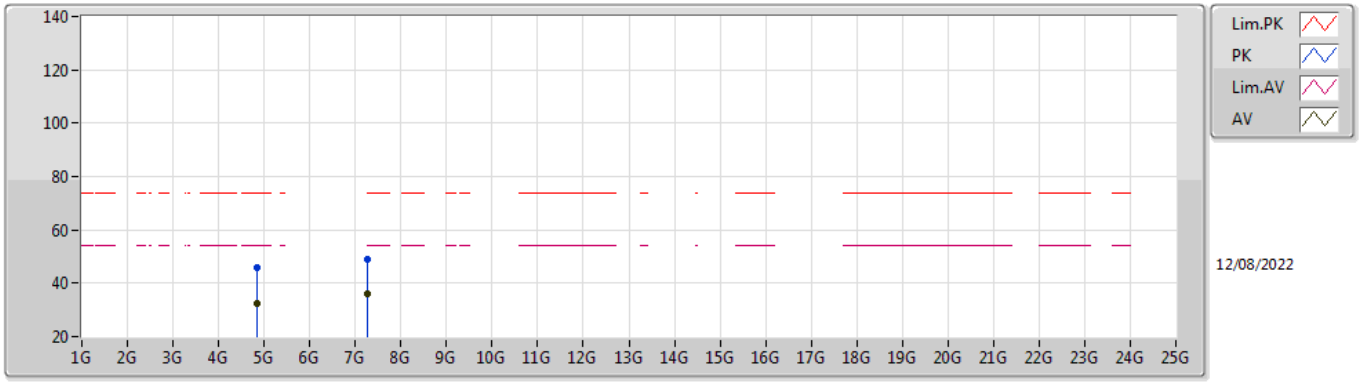


EUT Y_2TX
Setting 23.5
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3844G	63.30	74.00	-10.70	32.14	3	Horizontal	158	2.99	-	28.37	2.79	-
AV	2.386G	47.69	54.00	-6.31	16.53	3	Horizontal	158	2.99	-	28.37	2.79	-
PK	2.4168G	114.58	Inf	-Inf	83.36	3	Horizontal	158	2.99	-	28.40	2.82	-
AV	2.4156G	101.31	Inf	-Inf	70.09	3	Horizontal	158	2.99	-	28.40	2.82	-
PK	2.4968G	56.95	74.00	-17.05	25.46	3	Horizontal	158	2.99	-	28.59	2.90	-
AV	2.484G	45.37	54.00	-8.63	13.95	3	Horizontal	158	2.99	-	28.54	2.88	-

802.11ax HEW40_Nss1,(MCS0)_2TX

2422MHz_TX

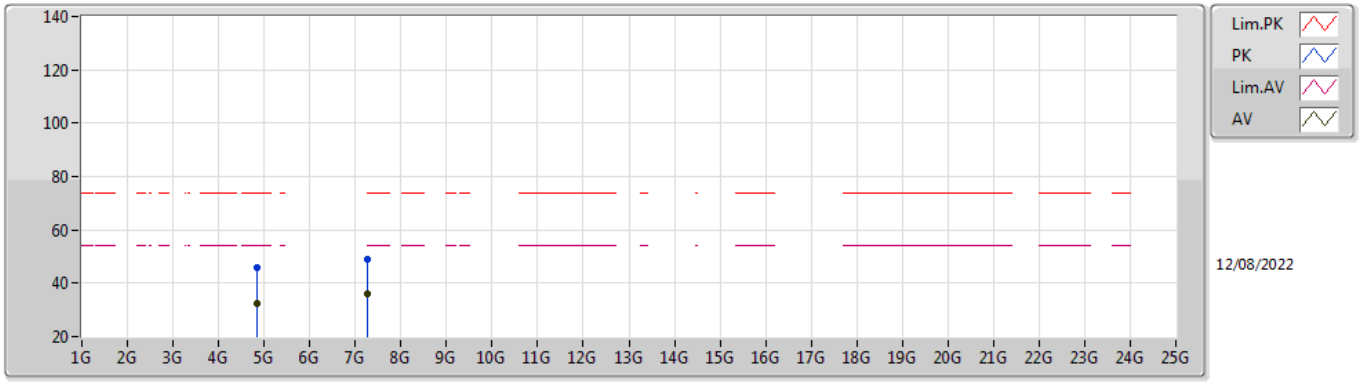


EUT Y_2TX
Setting 23.5
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.8395G	45.67	74.00	-28.33	38.33	3	Vertical	351	1.44	-	33.04	5.10	30.80
AV	4.85402G	32.67	54.00	-21.33	25.25	3	Vertical	351	1.44	-	33.11	5.10	30.79
PK	7.26414G	48.96	74.00	-25.04	38.46	3	Vertical	26	1.05	-	36.26	6.13	31.89
AV	7.2576G	36.04	54.00	-17.96	25.57	3	Vertical	26	1.05	-	36.23	6.13	31.89

802.11ax HEW40_Nss1,(MCS0)_2TX

2422MHz_TX

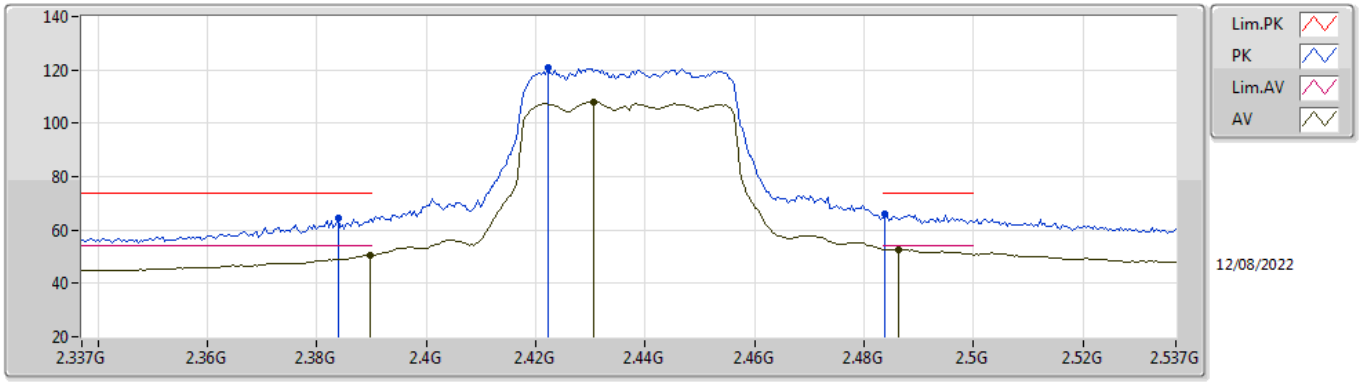


EUT Y_2TX
Setting 23.5
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.84502G	45.97	74.00	-28.03	38.60	3	Horizontal	341	2.96	-	33.07	5.10	30.80
AV	4.84496G	32.61	54.00	-21.39	25.24	3	Horizontal	341	2.96	-	33.07	5.10	30.80
PK	7.2732G	48.99	74.00	-25.01	38.46	3	Horizontal	358	2.28	-	36.29	6.14	31.90
AV	7.25424G	36.00	54.00	-18.00	25.54	3	Horizontal	358	2.28	-	36.22	6.13	31.89

802.11ax HEW40_Nss1,(MCS0)_2TX

2437MHz_TX

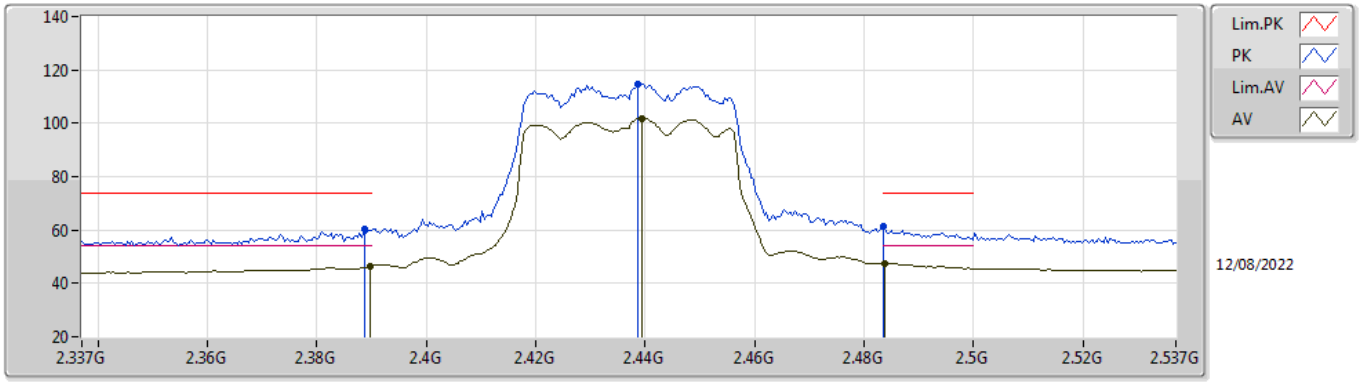


EUT Y_2TX
Setting 24
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3838G	64.71	74.00	-9.29	33.55	3	Vertical	172	1.75	-	28.37	2.79	-
AV	2.3898G	50.60	54.00	-3.40	19.43	3	Vertical	172	1.75	-	28.38	2.79	-
PK	2.4222G	120.95	Inf	-Inf	89.73	3	Vertical	172	1.75	-	28.40	2.82	-
AV	2.4306G	108.04	Inf	-Inf	76.81	3	Vertical	172	1.75	-	28.40	2.83	-
PK	2.4838G	65.93	74.00	-8.07	34.51	3	Vertical	172	1.75	-	28.54	2.88	-
AV	2.4862G	52.71	54.00	-1.29	21.28	3	Vertical	172	1.75	-	28.54	2.89	-

802.11ax HEW40_Nss1,(MCS0)_2TX

2437MHz_TX

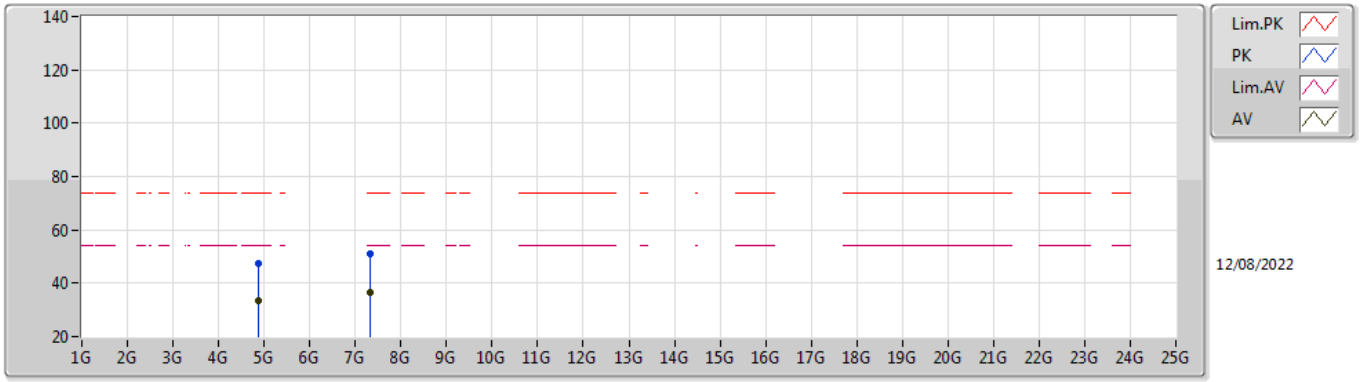


EUT Y_2TX
Setting 24
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3886G	60.50	74.00	-13.50	29.33	3	Horizontal	149	2.66	-	28.38	2.79	-
AV	2.3898G	46.51	54.00	-7.49	15.34	3	Horizontal	149	2.66	-	28.38	2.79	-
PK	2.4386G	114.78	Inf	-Inf	83.54	3	Horizontal	149	2.66	-	28.40	2.84	-
AV	2.4394G	101.75	Inf	-Inf	70.51	3	Horizontal	149	2.66	-	28.40	2.84	-
PK	2.4835G	61.39	74.00	-12.61	29.98	3	Horizontal	149	2.66	-	28.53	2.88	-
AV	2.4838G	47.48	54.00	-6.52	16.06	3	Horizontal	149	2.66	-	28.54	2.88	-

802.11ax HEW40_Nss1,(MCS0)_2TX

2437MHz_TX

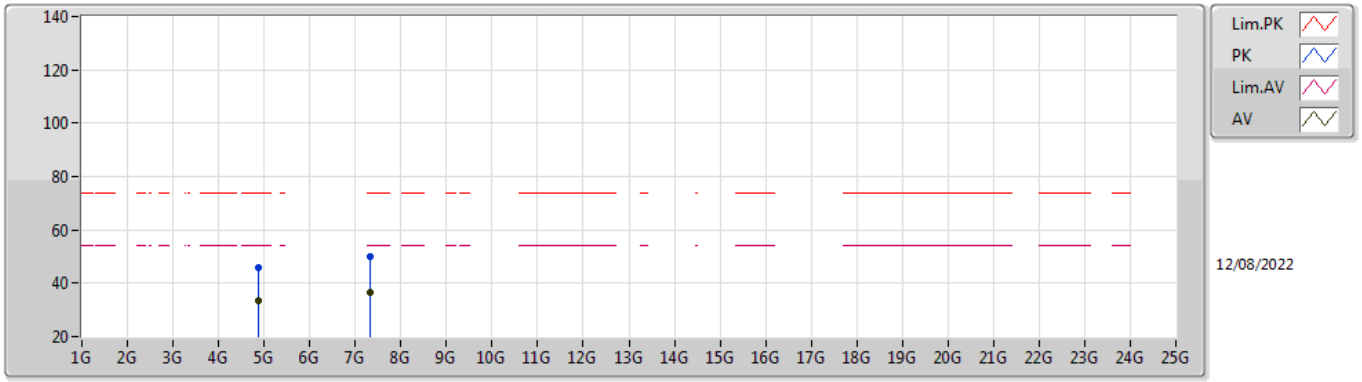


EUT Y_2TX
Setting 24
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.8782G	47.18	74.00	-26.82	39.70	3	Vertical	199	1.80	-	33.16	5.10	30.78
AV	4.87394G	33.67	54.00	-20.33	26.20	3	Vertical	199	1.80	-	33.15	5.10	30.78
PK	7.3221G	50.78	74.00	-23.22	40.11	3	Vertical	303	1.04	-	36.44	6.16	31.93
AV	7.32174G	36.66	54.00	-17.34	25.99	3	Vertical	303	1.04	-	36.44	6.16	31.93

802.11ax HEW40_Nss1,(MCS0)_2TX

2437MHz_TX

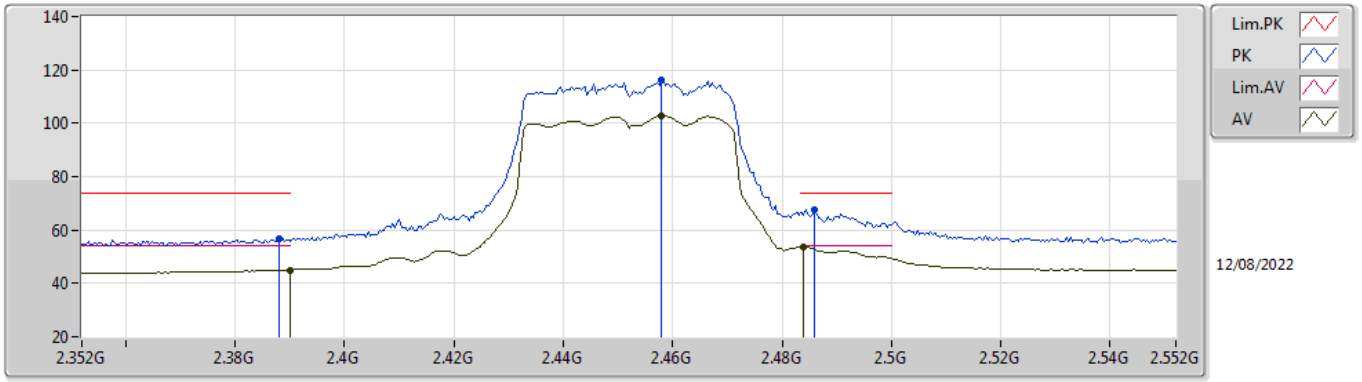


EUT Y_2TX
Setting 24
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.88132G	45.87	74.00	-28.13	38.39	3	Horizontal	325	2.89	-	33.16	5.10	30.78
AV	4.87388G	33.54	54.00	-20.46	26.07	3	Horizontal	325	2.89	-	33.15	5.10	30.78
PK	7.3143G	49.83	74.00	-24.17	39.16	3	Horizontal	47	2.80	-	36.43	6.16	31.92
AV	7.3218G	36.45	54.00	-17.55	25.78	3	Horizontal	47	2.80	-	36.44	6.16	31.93

802.11ax HEW40_Nss1,(MCS0)_2TX

2452MHz_TX

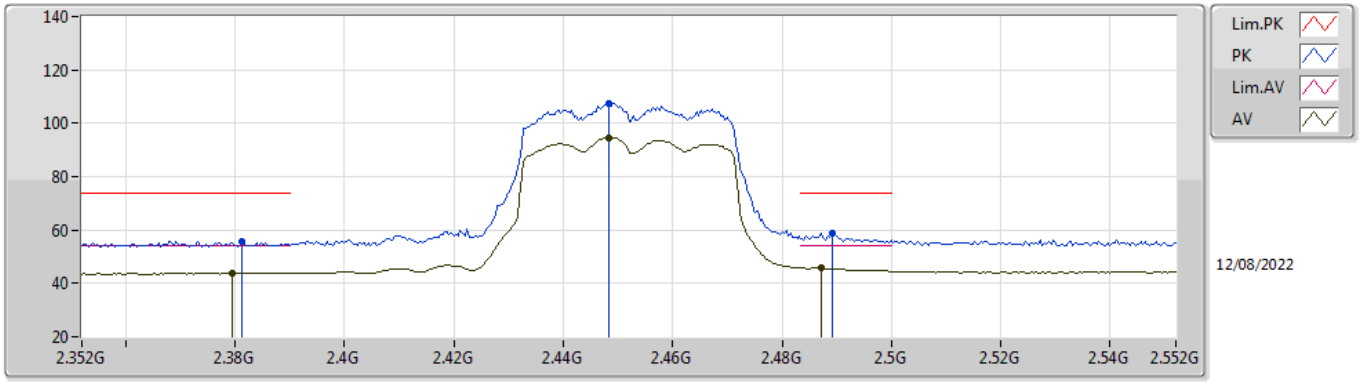


EUT Y_2TX
Setting 18
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.388G	56.91	74.00	-17.09	25.74	3	Vertical	179	1.74	-	28.38	2.79	-
AV	2.39G	45.06	54.00	-8.94	13.89	3	Vertical	179	1.74	-	28.38	2.79	-
PK	2.458G	116.03	Inf	-Inf	84.74	3	Vertical	179	1.74	-	28.43	2.86	-
AV	2.458G	102.73	Inf	-Inf	71.44	3	Vertical	179	1.74	-	28.43	2.86	-
PK	2.486G	67.48	74.00	-6.52	36.05	3	Vertical	179	1.74	-	28.54	2.89	-
AV	2.484G	53.61	54.00	-0.39	22.19	3	Vertical	179	1.74	-	28.54	2.88	-

802.11ax HEW40_Nss1,(MCS0)_2TX

2452MHz_TX

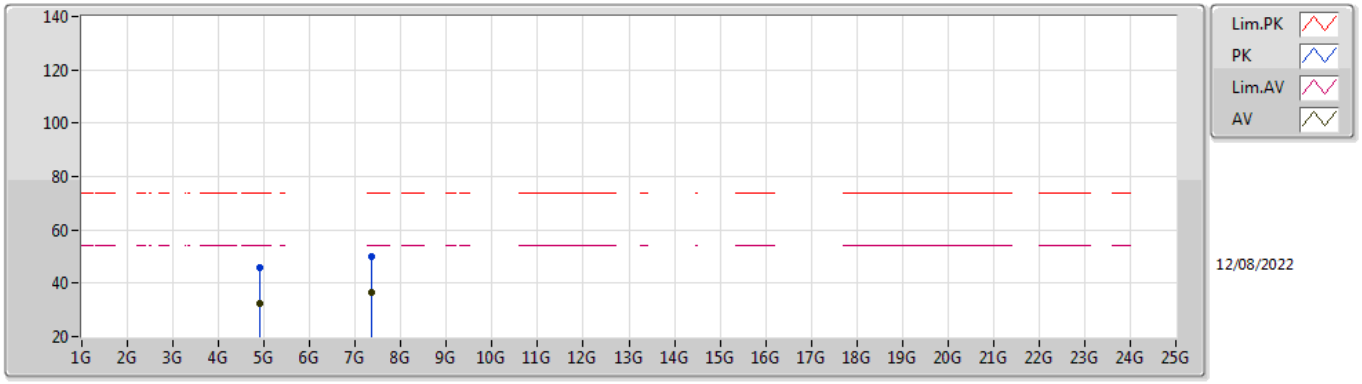


EUT Y_2TX
Setting 18
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3812G	55.75	74.00	-18.25	24.60	3	Horizontal	134	2.36	-	28.36	2.79	-
AV	2.3796G	43.80	54.00	-10.20	12.65	3	Horizontal	134	2.36	-	28.36	2.79	-
PK	2.4484G	107.31	Inf	-Inf	76.06	3	Horizontal	134	2.36	-	28.40	2.85	-
AV	2.4484G	94.65	Inf	-Inf	63.40	3	Horizontal	134	2.36	-	28.40	2.85	-
PK	2.4892G	58.81	74.00	-15.19	27.36	3	Horizontal	134	2.36	-	28.56	2.89	-
AV	2.4872G	45.65	54.00	-8.35	14.21	3	Horizontal	134	2.36	-	28.55	2.89	-

802.11ax HEW40_Nss1,(MCS0)_2TX

2452MHz_TX

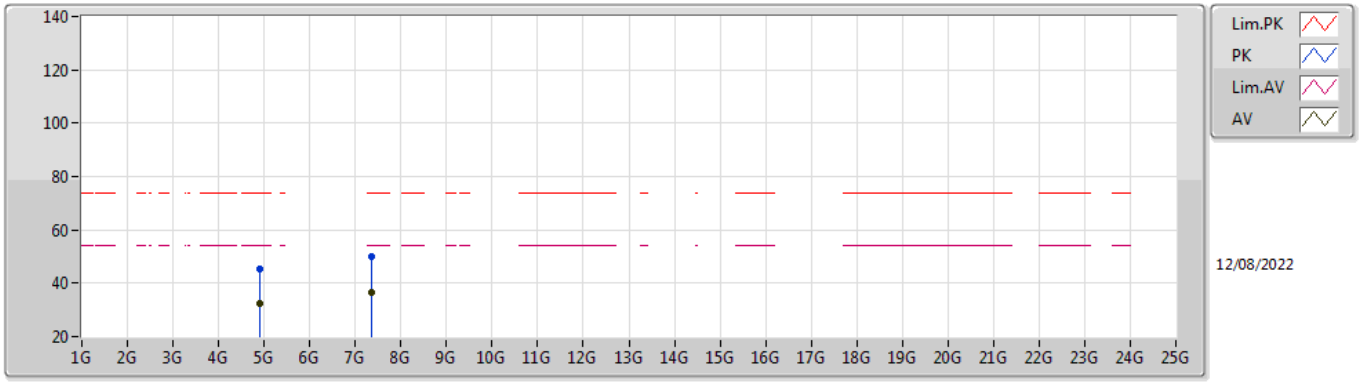


EUT Y_2TX
Setting 18
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.91372G	45.74	74.00	-28.26	38.18	3	Vertical	189	1.44	-	33.23	5.10	30.77
AV	4.89602G	32.48	54.00	-21.52	24.96	3	Vertical	189	1.44	-	33.19	5.10	30.77
PK	7.34646G	50.22	74.00	-23.78	39.50	3	Vertical	37	1.31	-	36.49	6.17	31.94
AV	7.35402G	36.69	54.00	-17.31	25.96	3	Vertical	37	1.31	-	36.50	6.18	31.95

802.11ax HEW40_Nss1,(MCS0)_2TX

2452MHz_TX



EUT Y_2TX
Setting 18
02-F-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.9013G	45.13	74.00	-28.87	37.60	3	Horizontal	256	1.05	-	33.20	5.10	30.77
AV	4.89338G	32.56	54.00	-21.44	25.04	3	Horizontal	256	1.05	-	33.19	5.10	30.77
PK	7.34868G	50.18	74.00	-23.82	39.45	3	Horizontal	312	1.85	-	36.50	6.17	31.94
AV	7.3413G	36.70	54.00	-17.30	25.99	3	Horizontal	312	1.85	-	36.48	6.17	31.94