Testing Laboratory
3787

RADIO TEST REPORT

FCC ID	:	2AYRA-08449
Equipment	:	Linksys Velop Micro-Mesh 6
Brand Name	:	Linksys
Model Name	:	LN1200 v2, LN1210 v2, LN1215 v2
Applicant	:	Linksys USA, Inc. 121 Theory, Irvine, CA. 92617, USA
Standard	:	47 CFR FCC Part 15.247

The product was received on Jan. 02, 2024, and testing was started from Jan. 02, 2024 and completed on Feb. 22, 2024. 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
FR3D2301AA	01	Initial issue of report	Mar. 27, 2024

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	-

Conformity Assessment Condition:
1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account. 2. The measurement uncertainty please refer to each test result in the chapter "Measurement Uncertainty".
Disclaimer:
The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

Reviewed by: Sam Chen
Report Producer: Cathy Chiu

1 General Description

1.1 Information

1.1.1 RF General Information

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

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

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

1.1.2 Antenna Information

Ant.	Port			Brand	Model Name	Antenna Type	Connector	Gain (dBi)
	2.4GHz	5GHz	Bluetooth					
1	1	1	-	GALTRONICS	02102140-08042C	PCB Antenna	U.FL	Note1
2	2	-	-	GALTRONICS	02036073-07315	Embedded Antenna	N/A	
3	-	2	-	GALTRONICS	02102142-08042C	PCB Antenna	U.FL	
4	-	-	1	GALTRONICS	02036073-07315	Embedded Antenna	N/A	

Note1:

Ant.	Antenna Gain (dBi)						
	WLAN 2.4GHz	WLAN 5GHz UNII 1	WLAN 5GHz UNII 2A	WLAN 5GHz UNII 2C	WLAN 5GHz UNII 3	WLAN 5GHz UNII 4	Bluetooth
1	1.91	2.88	2.97	3.29	3.29	3.29	-
2	2.50	-	-	-	-	-	-
3	-	3.63	3.63	3.12	3.44	3.44	-
4	-	-	-	-	-	-	3.53

Note 2: The above information was declared by manufacturer.

Note 3: 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)= $10^{G2/20}$; NSS1(g1,2)= $10^{G3/20}$; NSS1(g1,2)= $10^{G4/20}$

gj,k =(Nss1(g1,1) + Nss1(g1,2) + Nss1(g1,3) + Nss1(g1,4))^2

DG = 10 log[(Nss1(g1,1) + Nss1(g1,2) + Nss1(g1,3) + Nss1(g1,4))^2 / N_{ANT}] => 10 log[($10^{G1/20}$ + $10^{G2/20}$ + $10^{G3/20}$ + $10^{G4/20}$)^2 / N_{ANT}]

Where ;

2.4G G1= 1.91 dBi ;G2= 2.50 dBi ;

5G UNII-1 G1 = 2.88 dBi; G2 = 3.63 dBi;

5G UNII-2A G1 = 2.97 dBi; G2 = 3.63 dBi;

5G UNII-2C G1 = 3.29 dBi; G2 = 3.12 dBi;

5G UNII-3 G1 = 3.29 dBi; G2 = 3.44 dBi;

5G UNII-4 G1 = 3.29 dBi; G2 = 3.44 dBi;

2.4G DG = 5.22 dBi

5G UNII-1 DG = 6.27 dBi

5G UNII-2A DG = 6.32 dBi

5G UNII-2C DG = 6.22 dB

5G UNII-3 DG = 6.38 dBi

5G UNII-4 DG = 6.38 dBi

<For 2.4GHz function>

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

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

Port 1 and Port 2 could transmit/receive simultaneously.

<For 5GHz function>

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.

<For Bluetooth function> (1TX/1RX):

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

Port 1 could transmit/receive simultaneously.

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11b_Nss 1,(1D)	0.981	0.08	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11g_Nss 1,(6D)	0.99	0.04	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW20-BF_Nss 1,(M0)	0.931	0.31	3.472m	300
802.11ax HEW40-BF_Nss 1,(M0)	0.96	0.18	3.473m	300

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

1.1.4 EUT Operational Condition

EUT Power Type	From Power Adapter			
Beamforming Function	☒	With beamforming	☐	Without beamforming
	The product has beamforming function for n/VHT/ax in 2.4GHz and n/ac/ax in 5GHz.			
Function	☒	Point-to-multipoint	☐	Point-to-point
Support RU	☒	Full RU	☐	Partial RU
Test Software Version	For Non-beamforming mode: QRCT V4.0.00192.0 For Beamforming mode: DOS[6.1.7601]			

Note: The above information was declared by manufacturer.

1.1.5 Table for Multiple Listing

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

Model Name	Description
LN1200 v2	For retail
LN1210 v2	For e-commerce
LN1215 v2	For Warehouse

Note 1: From the above models, model: LN1200 v2 was selected as representative model for the test and its data was recorded in this report.

Note 2: The above information was declared by manufacturer.

1.1.6 Table for EUT Information

EUT	Description
EUT 1	With Conductive Fabric
EUT 2	Without Conductive Fabric

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

Note 2: The above information was declared by manufacturer.

1.1.7 Table for EUT Supports Function

Function
AP
Mesh

Note 1: For above table list, only AP mode was tested and recorded in this test.

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	TH03-CB	Owen Hsu	21.5~22.9 / 65~68	Jan. 11, 2024~ Jan. 29, 2024
Radiated (Below 1GHz)	03CH04-CB	Mark Hsu	22.7-23.8 / 56-59	Feb. 21, 2024
Radiated (Above 1GHz)	03CH01-CB	Mark Hsu	21.6-22.7 / 56-59	Jan. 02, 2024~ Jan. 27, 2024
	03CH03-CB	Mark Hsu	21.4-22.5 / 55-58	Jan. 02, 2024~ Jan. 27, 2024
	03CH05-CB	Mark Hsu	21.9-22.4 / 55-58	Jan. 02, 2024~ Jan. 27, 2024
Radiated (Co-location)	03CH04-CB	Mark Hsu	22.7-23.8 / 56-59	Feb. 22, 2024
AC Conduction	CO01-CB	Summer Li	22~23 / 50~51	Jan. 23, 2024

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)	3.7 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.1 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.1 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.2 dB	Confidence levels of 95%
Conducted Emission	3.1 dB	Confidence levels of 95%
Output Power Measurement	0.8 dB	Confidence levels of 95%
Power Density Measurement	3.1 dB	Confidence levels of 95%
Bandwidth Measurement	2.2%	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

Mode
802.11b_Nss1,(1Mbps)_2TX
2412MHz
2417MHz
2437MHz
2457MHz
2462MHz
802.11g_Nss1,(6Mbps)_2TX
2412MHz
2417MHz
2437MHz
2457MHz
2462MHz
802.11ax HEW20-BF_Nss1,(MCS0)_2TX
2412MHz
2417MHz
2437MHz
2457MHz
2462MHz
802.11ax HEW40-BF_Nss1,(MCS0)_2TX
2422MHz
2437MHz
2452MHz

Note:
- Evaluated HEW20/HEW40 mode only due to the similar modulation. The power setting of HT20/HT40/ VHT20/VHT40 mode are the same or lower than HEW20/HEW40.
- The EUT supports non-beamforming and beamforming mode, only beamforming mode has been selected to test.

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	EUT 1 + Adapter 1
2	EUT 1 + Adapter 2
3	EUT 1 + Adapter 3 + US Plug
For operating mode 2 is the worst case and it was record in this test report.	

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

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emissions in Restricted Frequency Bands
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	CTX
After evaluating, and the worst case was found at Z axis, so it was selected to perform test and its test result was written in the report.	
1	EUT 1 in Z axis + WLAN 2.4GHz + Adapter 1
2	EUT 1 in Z axis + WLAN 2.4GHz + Adapter 2
3	EUT 1 in Z axis + WLAN 2.4GHz + Adapter 3 + US Plug
Mode 1 has been evaluated to be the worst case among Mode 1~3, thus measurement for Mode 4 ~ 5 will follow this same test mode.	
4	EUT 1 in Z axis + WLAN 5GHz + Adapter 1
5	EUT 1 in Z axis + Bluetooth + Adapter 1
For operating mode 4 is the worst case and it was record in this test report.	

Operating Mode > 1GHz	CTX
After evaluating, and the worst case was found at Z axis, so it was selected to perform test and its test result was written in the report.	
1	EUT 1 in Z axis

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Radiated Emission Co-location
Test Condition	Radiated measurement
Operating Mode	Normal Link
After evaluating, the worst case was found at Z axis from Radiated Emission test Above 1GHz, so the measurement will follow this same test configuration.	
1	EUT 1 in Z axis_WLAN 2.4GHz + WLAN 5GHz
Refer to Appendix G for Radiated Emission Co-location.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	WLAN 2.4GHz + WLAN 5GHz + Bluetooth
Refer to Sporton Test Report No.: FA3D2301 for Co-location RF Exposure Evaluation.	

2.3 EUT Operation during Test

For CTX Mode:

non-beamforming mode:

The EUT was programmed to be in continuously transmitting mode.

beamforming mode:

During the test, the following programs under WIN 7 were executed.
The program was executed as follows:
1. During the test, the EUT operation to normal function.
2. Executed command fixed test channel under DOS.
3. Executed "Lantest.exe" to link with the remote workstation to transmit and receive packet by Client and transmit duty cycle no less than 98%.

For Normal Link Mode:

During the test, the EUT operation to normal function.

2.4 Accessories

Accessories			
Equipment Name	**Brand Name**	**Model Name**	**Rating**
Adapter 1	Ktec	KSA-18W-050300VU	INPUT: 100-240V~50/60Hz, 0.5A OUTPUT: 5.0V, 3.0A
Adapter 2	MOSO	MSA-C3000IC5.0-18P-US	INPUT: 100-240V~50/60Hz, 0.7A max. OUTPUT: 5.0V, 3A
Adapter 3	Ktec	KSA-18W-050300D5	INPUT: 100-240V ~ 50/60Hz, 0.5A OUTPUT: 5.0V, 3.0A
Other			
US Plug*1 (Equip with Adapter 3 use only)			

2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	2.4G NB	DELL	E6220	N/A
B	5G NB	DELL	E6220	N/A
C	Smart phone	Samsung	Galaxy J2	N/A

For Radiated (below 1GHz), Radiated (above 1GHz) / Non-beamforming mode and RF Conducted / Non-beamforming mode:

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

For Radiated (above 1GHz) / Beamforming mode:

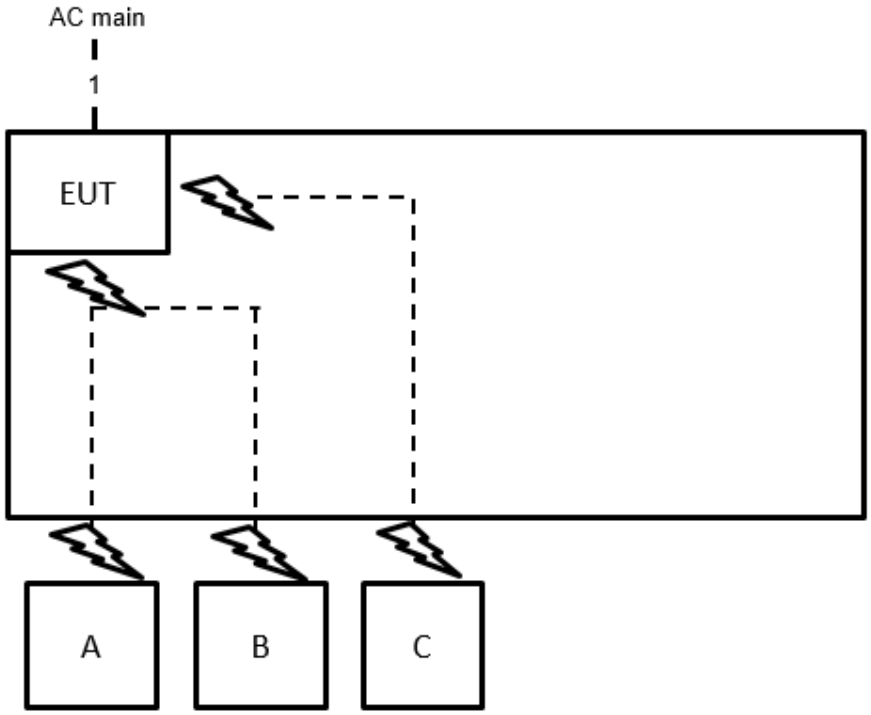
Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	Notebook	DELL	E4300	N/A
B	Notebook	DELL	E4301	N/A
C	Client	Linksys	LN1200 v2	N/A

For RF Conducted / Beamforming mode:

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	Notebook	DELL	E4300	N/A
B	Notebook	DELL	E4300	N/A
C	Client	Linksys	LN1200 v2	N/A

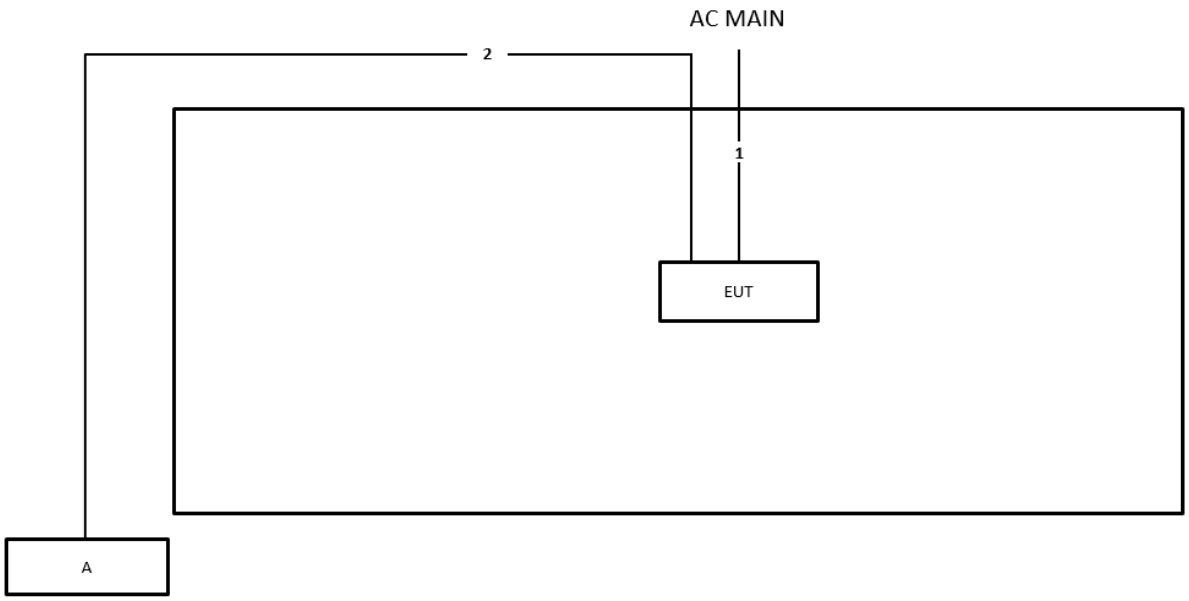
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



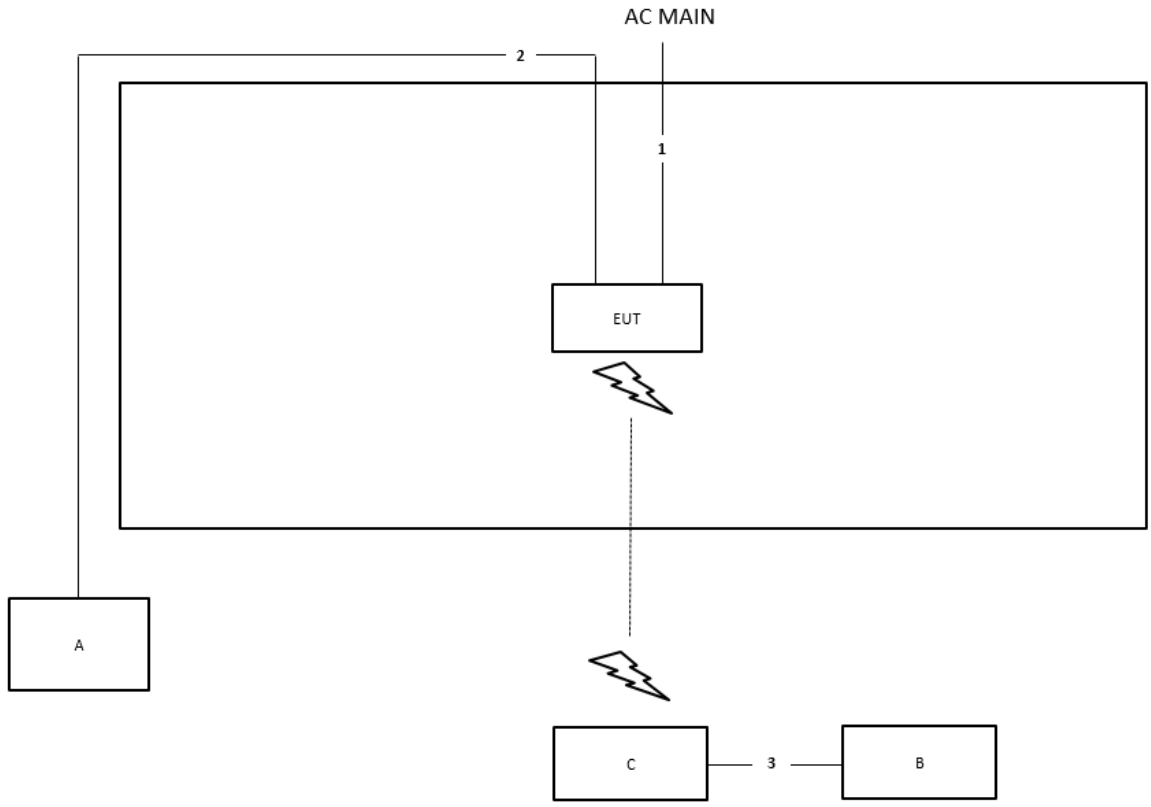
Item	Connection	Shielded	Length
1	Power cable	No	1.6m

Test Setup Diagram - Radiated Test < 1GHz and Radiated Test > 1GHz / For Non-beamforming mode



Item	Connection	Shielded	Length
1	Power cable	No	1.6m
2	RJ-45 cable	No	10m

Test Setup Diagram - Radiated Test > 1GHz / For Beamforming mode



Item	Connection	Shielded	Length
1	Power cable	No	1.6m
2	RJ-45 cable	No	10m
3	RJ-45 cable	No	10m

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		
Frequency Emission (MHz)	**Quasi-Peak**	**Average**
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50
Note 1: * Decreases with the logarithm of the frequency.		

3.1.2 Measuring Instruments

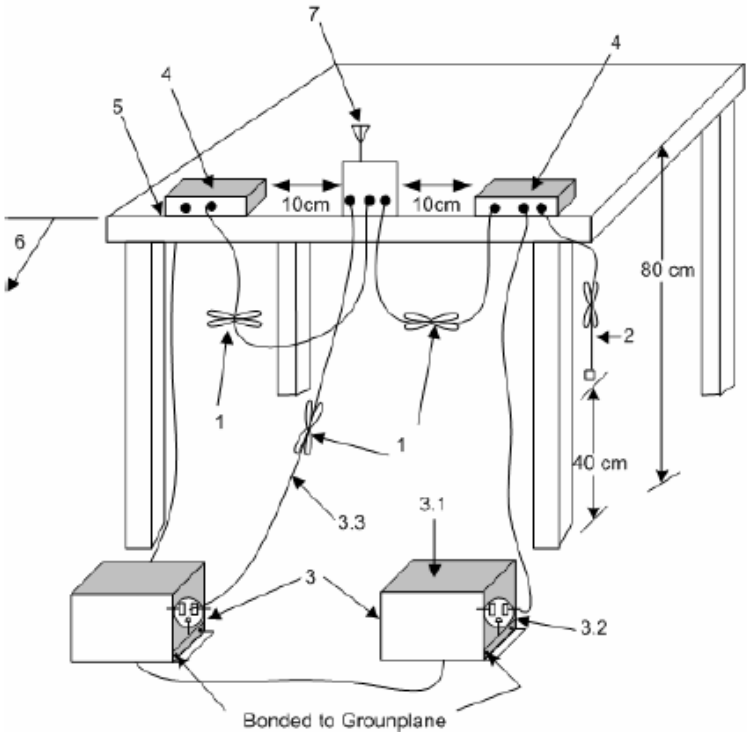
Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

Test Method
☒ 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.

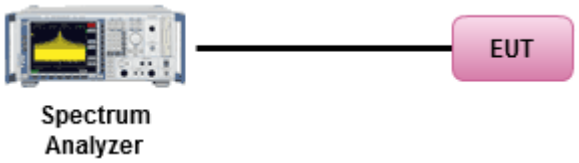
3.2.2 Measuring Instruments

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

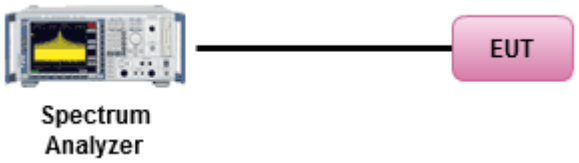
3.4.2 Measuring Instruments

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

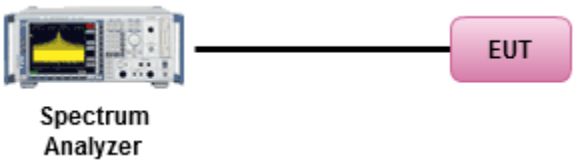
Refer a test equipment and calibration data table in this test report.

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.

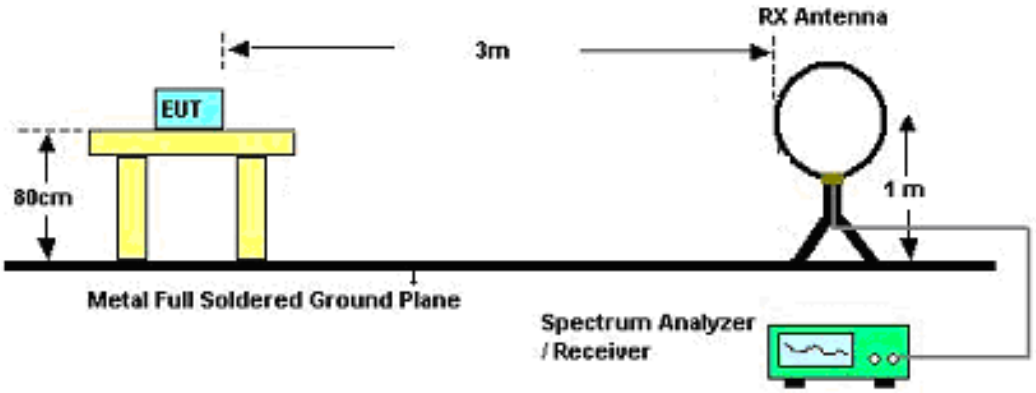
3.6.3 Test Procedures

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.		

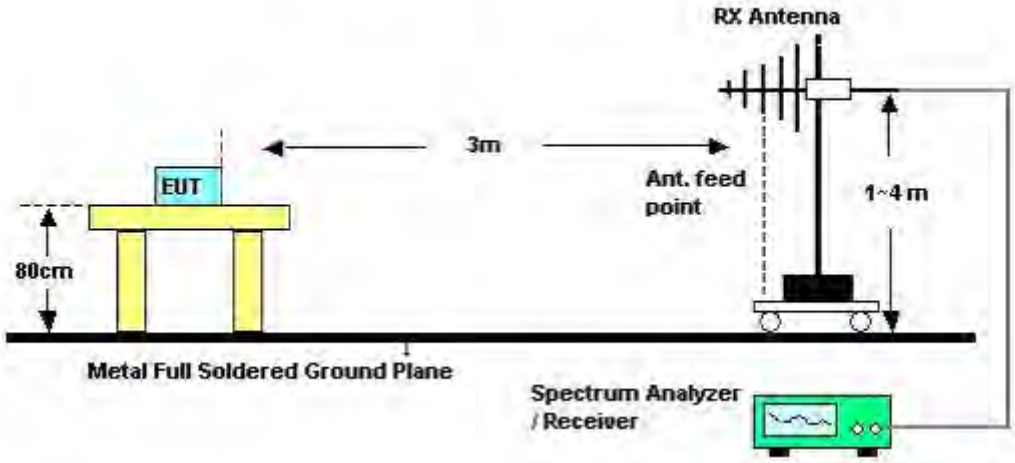
3.6.4 Test Setup

Radiated - Emissions in Restricted Frequency Bands

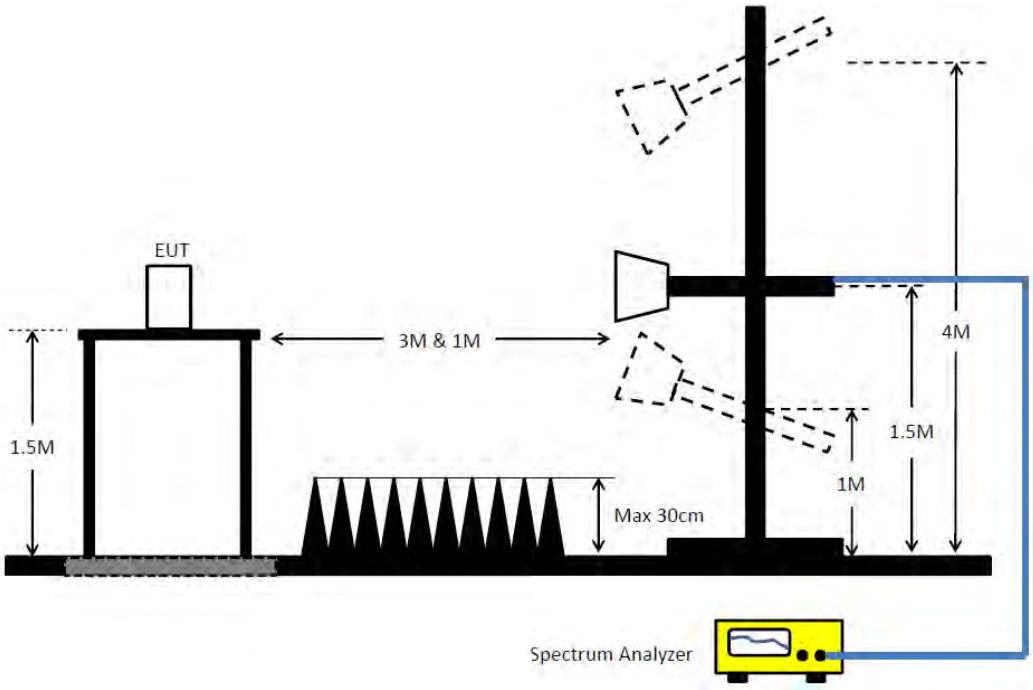
9kHz ~30MHz



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. 20, 2023	Feb. 19, 2024	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Feb. 16, 2023	Feb. 15, 2024	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Apr. 27, 2023	Apr. 26, 2024	Conduction (CO01-CB)
Pulse Limiter	Rohde&Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Feb. 09, 2023	Feb. 08, 2024	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	Oct. 17, 2023	Oct. 16, 2024	Conduction (CO01-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
Loop Antenna	Teseq	HLA 6121	65417	9kHz - 30 MHz	Oct. 13, 2023	Oct. 12, 2024	Radiation (03CH04-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH04-CB	30 MHz ~ 1 GHz	Aug. 01, 2023	Jul. 31, 2024	Radiation (03CH04-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH04-CB	1GHz ~18GHz 3m	Feb. 23, 2023	Feb. 22, 2024	Radiation (03CH04-CB)
BILOG ANTENNA with 6 dB attenuator	Schaffner & EMCI	CBL6112B & N-6-06	22021&AT-N0607	30MHz ~ 1GHz	Oct. 07, 2023	Oct. 06, 2024	Radiation (03CH04-CB)
Horn Antenna	ETS・Lindgren	3115	00143147	750MHz~18GHz	Oct. 04, 2023	Oct. 03, 2024	Radiation (03CH04-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Sep. 04, 2023	Sep. 03, 2024	Radiation (03CH04-CB)
Pre-Amplifier	EMCI	EMC330N	980391	20MHz ~ 3GHz	May 23, 2023	May 22, 2024	Radiation (03CH04-CB)
Pre-Amplifier	Agilent	83017A	MY53270063	0.5GHz ~ 26.5GHz	Jun. 30, 2023	Jun. 29, 2024	Radiation (03CH04-CB)
Pre-Amplifier	SGH	SGH184	20221107-3	18GHz ~ 40GHz	Nov. 24, 2023	Nov. 23, 2024	Radiation (03CH04-CB)
Spectrum Analyzer	R&S	FSP40	100142	9kHz~40GHz	Mar. 21, 2023	Mar. 20, 2024	Radiation (03CH04-CB
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	Jun. 13, 2023	Jun. 12, 2024	Radiation (03CH04-CB)
RF Cable-low	Woken	RG402	Low Cable-03+67	30MHz – 1GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-21	1GHz - 18GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-21+67	1GHz - 18GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH04-CB)

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Jan. 11, 2024	Jan. 10, 2025	Radiation (03CH04-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH04-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH01-CB	1GHz ~18GHz 3m	May 05, 2023	May 04, 2024	Radiation (03CH01-CB)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120D-01816	1GHz~18GHz	Dec. 20, 2023	Dec. 19, 2024	Radiation (05CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Sep. 04, 2023	Sep. 03, 2024	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02121	1GHz ~ 26.5GHz	May 18, 2023	May 17, 2024	Radiation (03CH01-CB)
Signal Analyzer	R&S	FSV3044	101437	10kHz ~ 44GHz	Nov. 28, 2023	Nov. 27, 2024	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-16	1 GHz ~ 18 GHz	Nov. 06, 2023	Nov. 05, 2024	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-16+17	1 GHz ~ 18 GHz	Nov. 06, 2023	Nov. 05, 2024	Radiation (03CH01-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Dec. 06, 2023	Dec. 05, 2024	Radiation (03CH01-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH01-CB)
High Cable	Woken	WCA0929M	40G#6	1GHz ~ 40 GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH01-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH01-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH03-CB	1GHz ~18GHz 3m	May 04, 2023	May 03, 2024	Radiation (03CH03-CB)
Horn Antenna	ETS・Lindgren	3115	6821	750MHz~18GHz	Feb. 03, 2023	Feb. 02, 2024	Radiation (03CH03-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Sep. 04, 2023	Sep. 03, 2024	Radiation (03CH03-CB)
Pre-Amplifier	Agilent	8449B	3008A02097	1GHz ~ 26.5GHz	Jun. 30, 2023	Jun. 29, 2024	Radiation (03CH03-CB)
Spectrum Analyzer	R&S	FSP40	100019	9kHz ~ 40GHz	Jun. 12, 2023	Jun. 11, 2024	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-20+29	1GHz ~ 18GHz	Nov. 07, 2023	Nov. 06, 2024	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-29	1GHz ~ 18GHz	Nov. 07, 2023	Nov. 06, 2024	Radiation (03CH03-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Dec. 06, 2023	Dec. 05, 2024	Radiation (03CH03-CB)

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH03-CB)
High Cable	Woken	WCA0929M	40G#6	1GHz ~ 40 GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH03-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH03-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH05-CB	1GHz ~18GHz 3m	Sep. 29, 2023	Sep. 28, 2024	Radiation (03CH05-CB)
Horn Antenna	SCHWARZBECK	BBHA9120 D	BBHA 9120 D-1291	1GHz~18GHz	Jun. 08, 2023	Jun. 07, 2024	Radiation (03CH05-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Sep. 04, 2023	Sep. 03, 2024	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC12630 SE	980287	1GHz – 26.5GHz	Jun. 30, 2023	Jun. 29, 2024	Radiation (03CH05-CB)
Spectrum Analyzer	R&S	FSP40	100304	9kHz ~ 40GHz	Apr. 18, 2023	Apr. 17, 2024	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-28	1GHz~18GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-04+28	1GHz~18GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH05-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Dec. 06, 2023	Dec. 05, 2024	Radiation (03CH05-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH05-CB)
High Cable	Woken	WCA0929M	40G#6	1GHz ~ 40 GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH05-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH05-CB)
Spectrum analyzer	R&S	FSV40	101028	9kHz~40GHz	Dec. 22, 2023	Dec. 21, 2024	Conducted (TH03-CB)
Power Sensor	Anritsu	MA2411B	1726195	300MHz~40GHz	Sep. 04, 2023	Sep. 03, 2024	Conducted (TH03-CB)
Power Meter	Anritsu	ML2495A	1035008	300MHz~40GHz	Sep. 04, 2023	Sep. 03, 2024	Conducted (TH03-CB)
RF Cable	Woken	RG402	High Cable-11	30MHz –18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH03-CB)
RF Cable	Woken	RG402	High Cable-12	30MHz –18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH03-CB)
RF Cable	Woken	RG402	High Cable-13	30MHz –18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-14	1 GHz –18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-15	1 GHz –18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH03-CB)

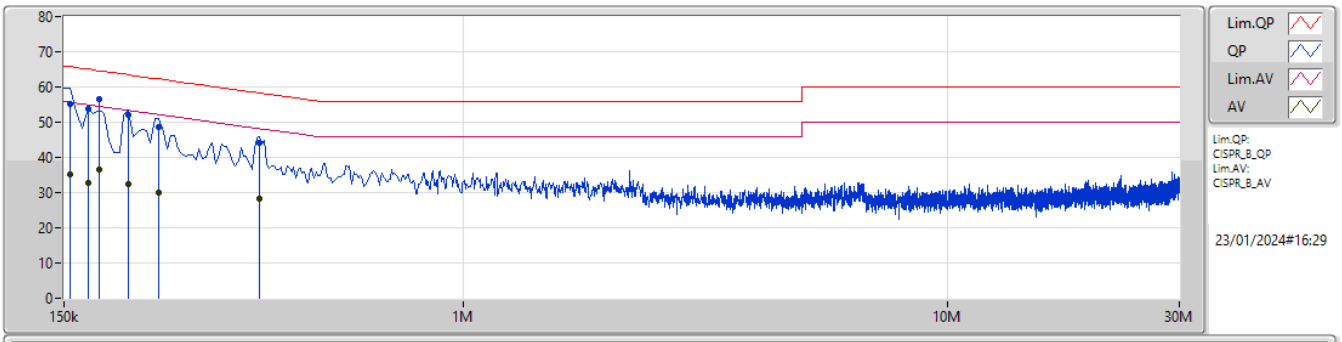
Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Switch	SPTCB	SP-SWI	SWI-03	1 ~26.5 GHz	Oct. 03, 2023	Oct. 02, 2024	Conducted (TH03-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH03-CB)

Note: Calibration Interval of instruments listed above is one year.
NCR means Non-Calibration required.

Summary

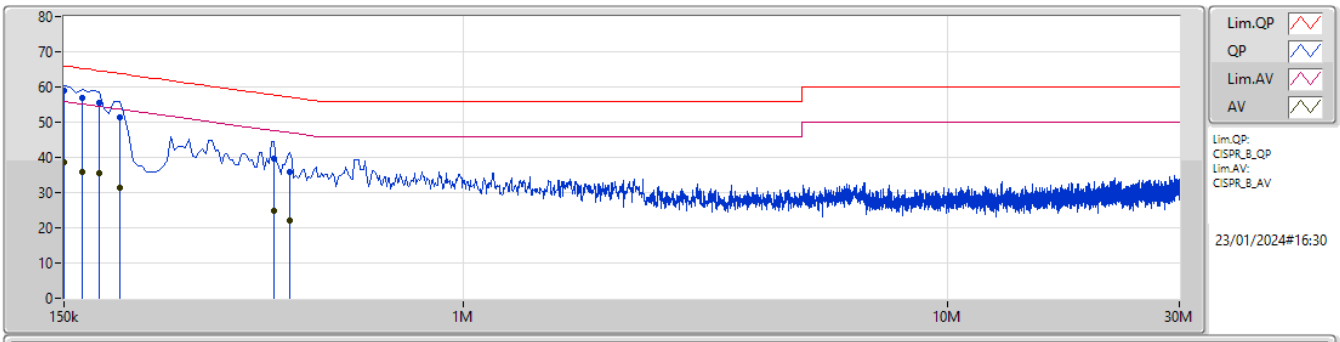
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 2	Pass	QP	150k	59.04	66.00	-6.96	Neutral

Mode 2



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	154.5k	55.34	65.75	-10.41	9.98	Line	-	45.36	0.09	0.02	9.87
AV	154.5k	35.07	55.75	-20.68	9.98	Line	-	25.09	0.09	0.02	9.87
QP	168k	53.88	65.06	-11.18	9.98	Line	-	43.90	0.09	0.02	9.87
AV	168k	32.77	55.06	-22.29	9.98	Line	-	22.79	0.09	0.02	9.87
QP	177k	56.48	64.62	-8.14	9.97	Line	"Worst"	46.51	0.08	0.02	9.87
AV	177k	36.40	54.62	-18.22	9.97	Line	-	26.43	0.08	0.02	9.87
QP	204k	52.03	63.44	-11.41	9.96	Line	-	42.07	0.08	0.02	9.86
AV	204k	32.38	53.44	-21.06	9.96	Line	-	22.42	0.08	0.02	9.86
QP	235.5k	48.72	62.25	-13.53	9.97	Line	-	38.75	0.08	0.02	9.87
AV	235.5k	30.12	52.25	-22.13	9.97	Line	-	20.15	0.08	0.02	9.87
QP	379.5k	44.28	58.29	-14.01	10.01	Line	-	34.27	0.09	0.02	9.90
AV	379.5k	28.37	48.29	-19.92	10.01	Line	-	18.36	0.09	0.02	9.90

Mode 2



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	150k	59.04	66.00	-6.96	9.96	Neutral	"Worst"	49.08	0.07	0.02	9.87
AV	150k	38.53	56.00	-17.47	9.96	Neutral	-	28.57	0.07	0.02	9.87
QP	163.5k	57.02	65.27	-8.25	9.96	Neutral	-	47.06	0.07	0.02	9.87
AV	163.5k	35.72	55.27	-19.55	9.96	Neutral	-	25.76	0.07	0.02	9.87
QP	177k	55.36	64.62	-9.26	9.96	Neutral	-	45.40	0.07	0.02	9.87
AV	177k	35.48	54.62	-19.14	9.96	Neutral	-	25.52	0.07	0.02	9.87
QP	195k	51.29	63.82	-12.53	9.95	Neutral	-	41.34	0.07	0.02	9.86
AV	195k	31.22	53.82	-22.60	9.95	Neutral	-	21.27	0.07	0.02	9.86
QP	406.5k	39.74	57.72	-17.98	9.99	Neutral	-	29.75	0.07	0.02	9.90
AV	406.5k	24.89	47.72	-22.83	9.99	Neutral	-	14.90	0.07	0.02	9.90
QP	438k	35.85	57.11	-21.26	9.99	Neutral	-	25.86	0.07	0.02	9.90
AV	438k	22.16	47.11	-24.95	9.99	Neutral	-	12.17	0.07	0.02	9.90

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	9.075M	13.758M	13M8G1D	7.7M	12.966M
802.11g_Nss1,(6Mbps)_2TX	16.3M	16.396M	16M4D1D	10.975M	16.23M
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	18.65M	18.883M	18M9D1D	11.3M	18.74M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	35.6M	37.655M	37M7D1D	20.05M	37.208M

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

Result

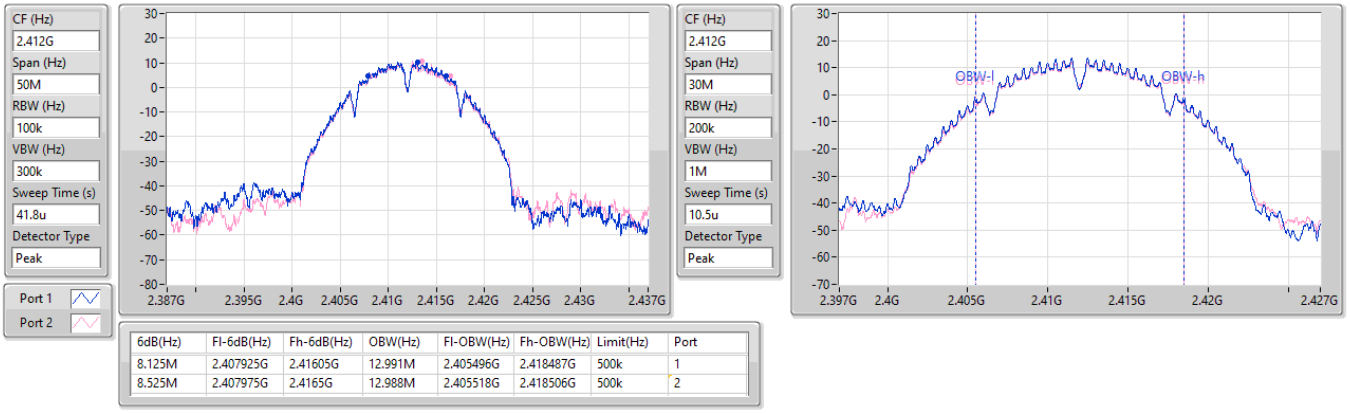
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	8.125M	12.991M	8.525M	12.988M
2437MHz	Pass	500k	8.5M	13.137M	9.075M	13.758M
2462MHz	Pass	500k	7.925M	13.011M	7.7M	12.966M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.3M	16.23M	15.3M	16.267M
2437MHz	Pass	500k	15.65M	16.364M	15.65M	16.396M
2462MHz	Pass	500k	10.975M	16.248M	15.425M	16.28M
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	11.3M	18.801M	14.75M	18.74M
2437MHz	Pass	500k	17M	18.883M	17.825M	18.846M
2462MHz	Pass	500k	17.725M	18.768M	18.65M	18.849M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	35.6M	37.508M	32.4M	37.469M
2437MHz	Pass	500k	31.3M	37.441M	27.8M	37.466M
2452MHz	Pass	500k	32.95M	37.208M	20.05M	37.655M

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

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX **EBW**

2412MHz

11/01/2024

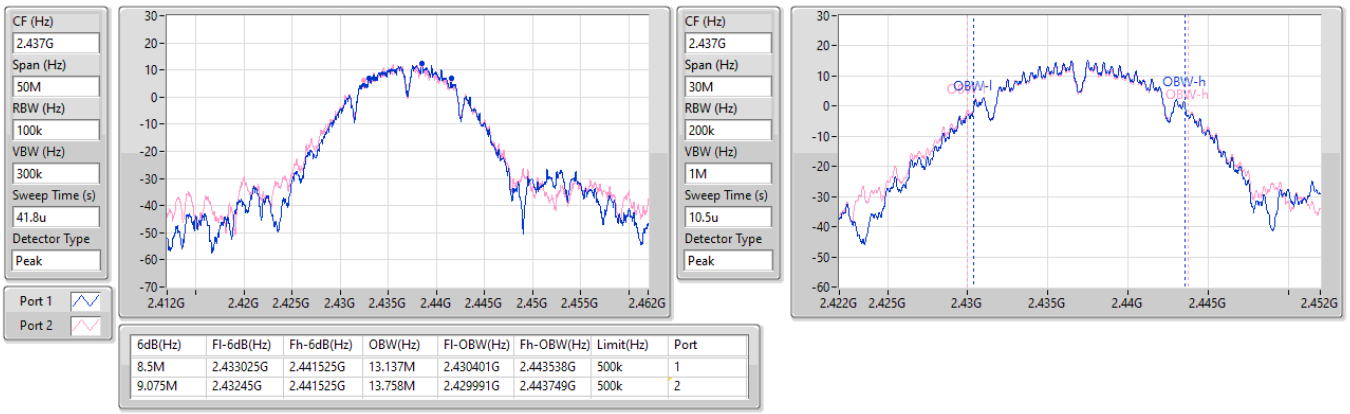


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
8.125M	2.407925G	2.41605G	12.991M	2.405496G	2.418487G	500k	1
8.525M	2.407975G	2.4165G	12.988M	2.405518G	2.418506G	500k	2

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX **EBW**

2437MHz

11/01/2024

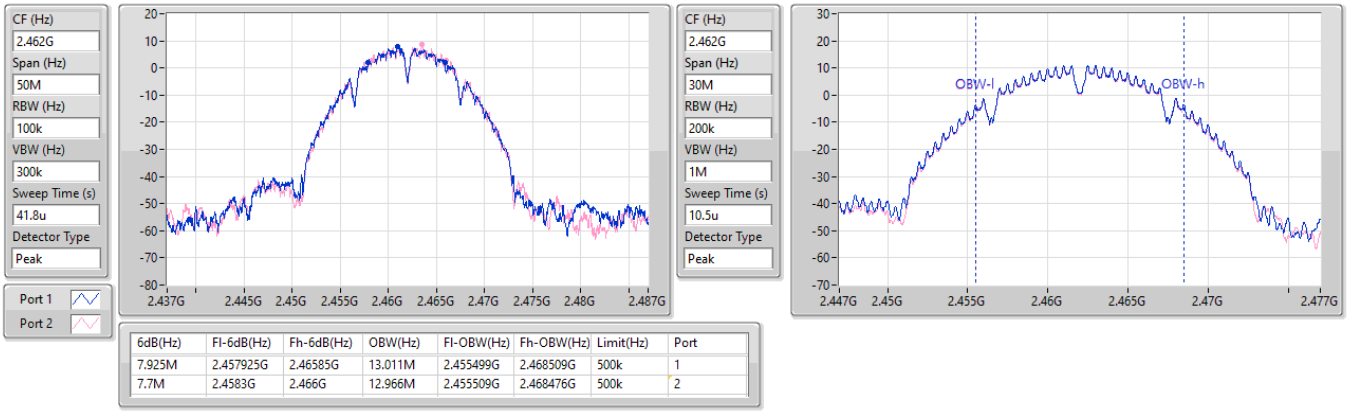


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
8.5M	2.433025G	2.441525G	13.137M	2.430401G	2.443538G	500k	1
9.075M	2.43245G	2.441525G	13.758M	2.429991G	2.443749G	500k	2

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX **EBW**

2462MHz

11/01/2024

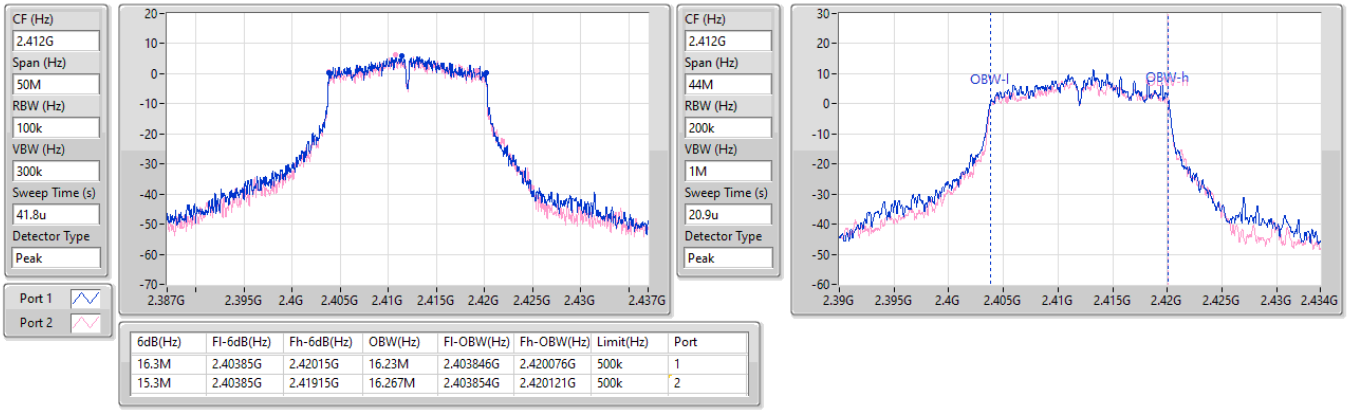


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.925M	2.457925G	2.46585G	13.011M	2.455499G	2.468509G	500k	1
7.7M	2.4583G	2.466G	12.966M	2.455509G	2.468476G	500k	2

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX **EBW**

2412MHz

11/01/2024

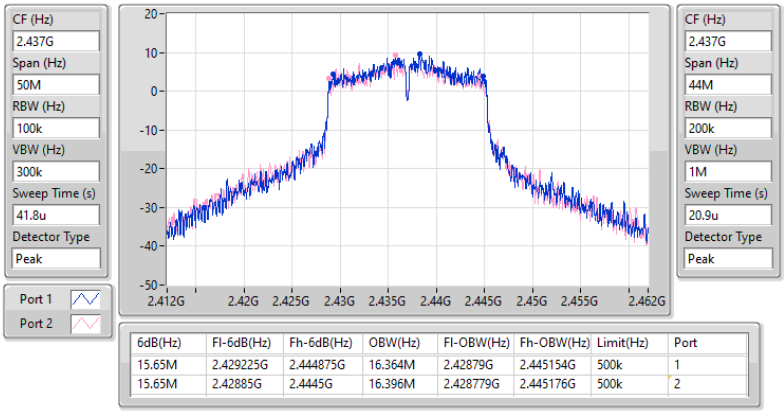


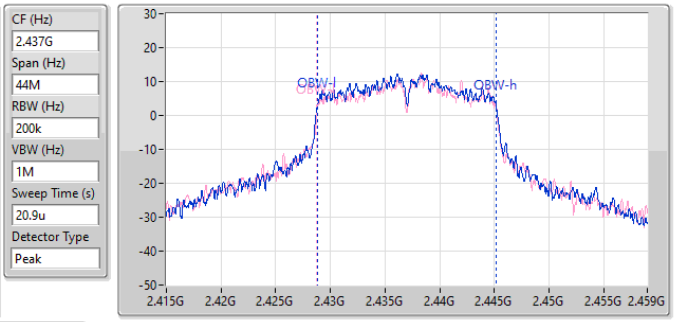
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.3M	2.40385G	2.42015G	16.23M	2.403846G	2.420076G	500k	1
15.3M	2.40385G	2.41915G	16.267M	2.403854G	2.420121G	500k	2

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX **EBW**

2437MHz

11/01/2024



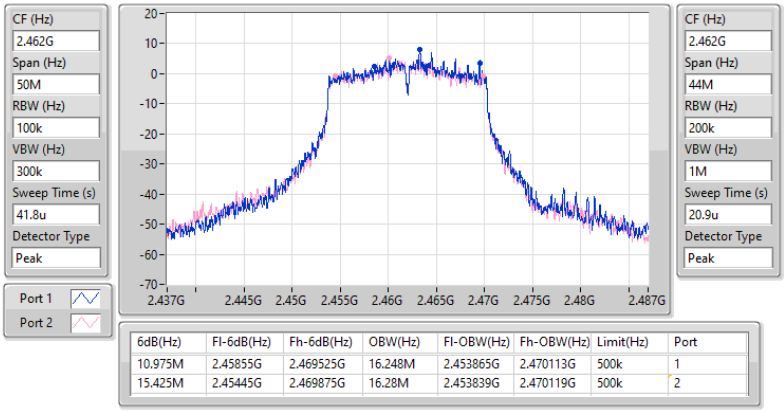


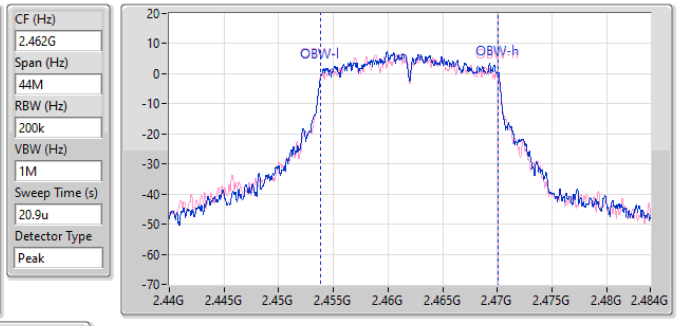
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.65M	2.429225G	2.444875G	16.364M	2.42879G	2.445154G	500k	1
15.65M	2.42885G	2.4445G	16.396M	2.428779G	2.445176G	500k	2

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX **EBW**

2462MHz

11/01/2024



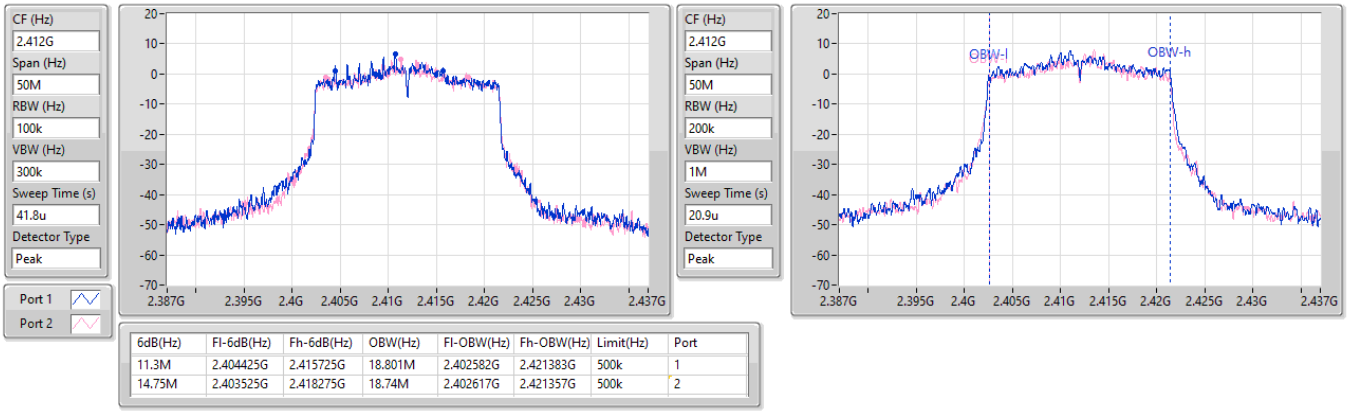


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
10.975M	2.45855G	2.469525G	16.248M	2.453865G	2.470113G	500k	1
15.425M	2.45445G	2.469875G	16.28M	2.453839G	2.470119G	500k	2

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX **EBW**

2412MHz

11/01/2024

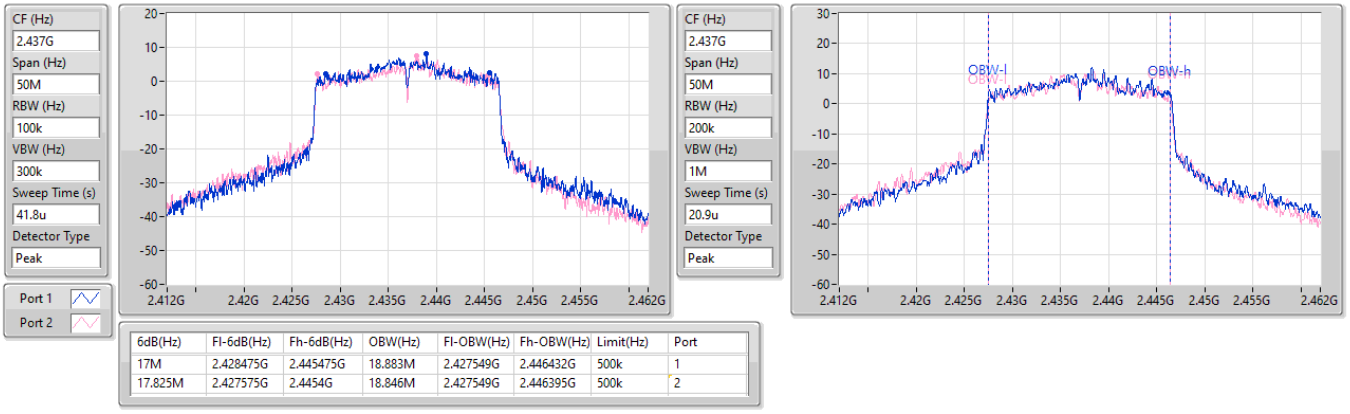


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
11.3M	2.404425G	2.415725G	18.801M	2.402582G	2.421383G	500k	1
14.75M	2.403525G	2.418275G	18.74M	2.402617G	2.421357G	500k	2

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX **EBW**

2437MHz

11/01/2024

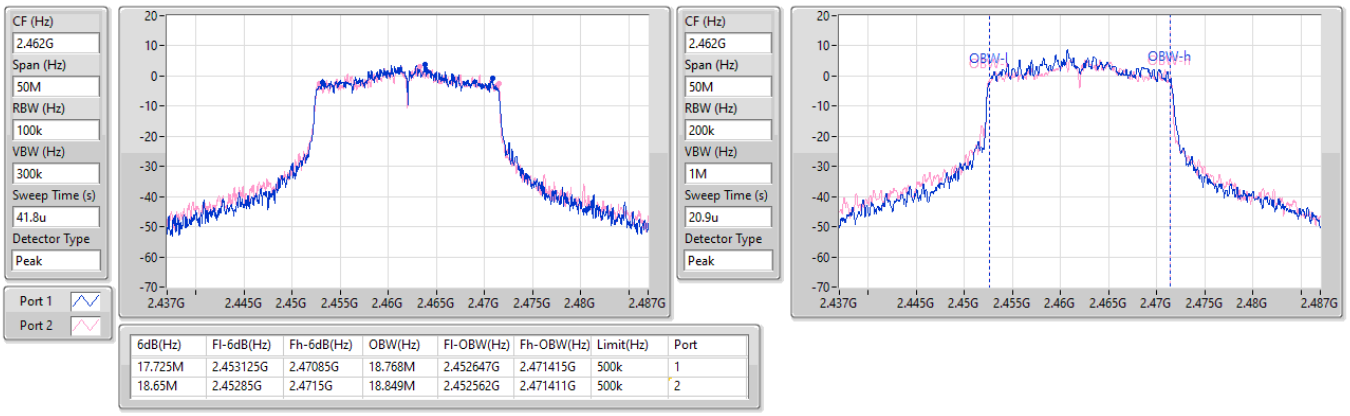


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17M	2.428475G	2.445475G	18.883M	2.427549G	2.446432G	500k	1
17.825M	2.427575G	2.4454G	18.846M	2.427549G	2.446395G	500k	2

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX **EBW**

2462MHz

11/01/2024

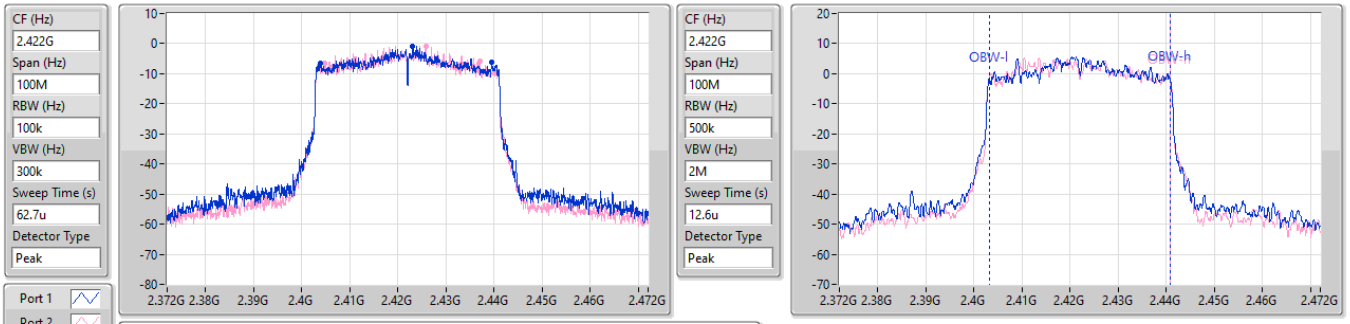


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.725M	2.453125G	2.47085G	18.768M	2.452647G	2.471415G	500k	1
18.65M	2.45285G	2.4715G	18.849M	2.452562G	2.471411G	500k	2

2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX **EBW**

2422MHz

11/01/2024

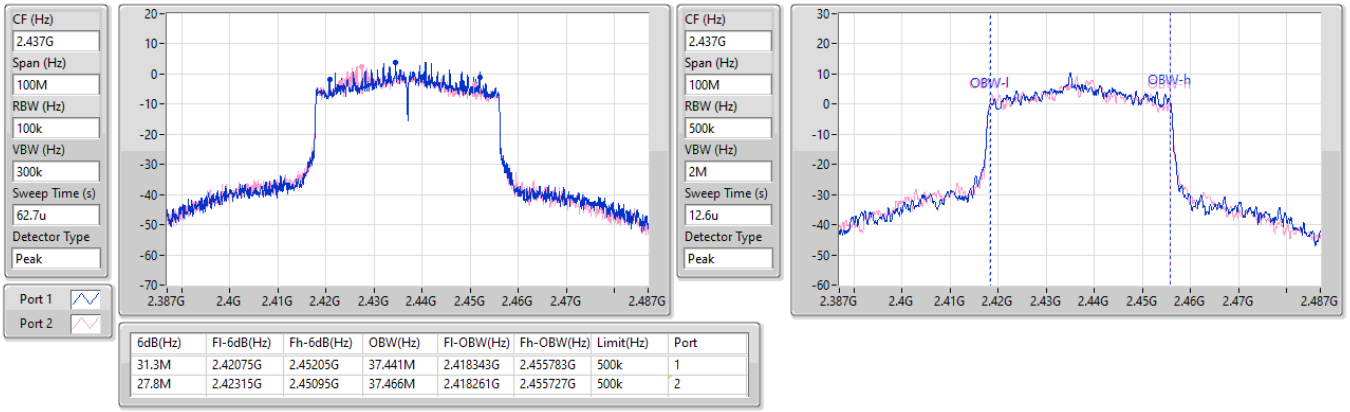


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.6M	2.40395G	2.43955G	37.508M	2.403213G	2.440721G	500k	1
32.4M	2.40465G	2.43705G	37.469M	2.403233G	2.440702G	500k	2

2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX **EBW**

2437MHz

11/01/2024

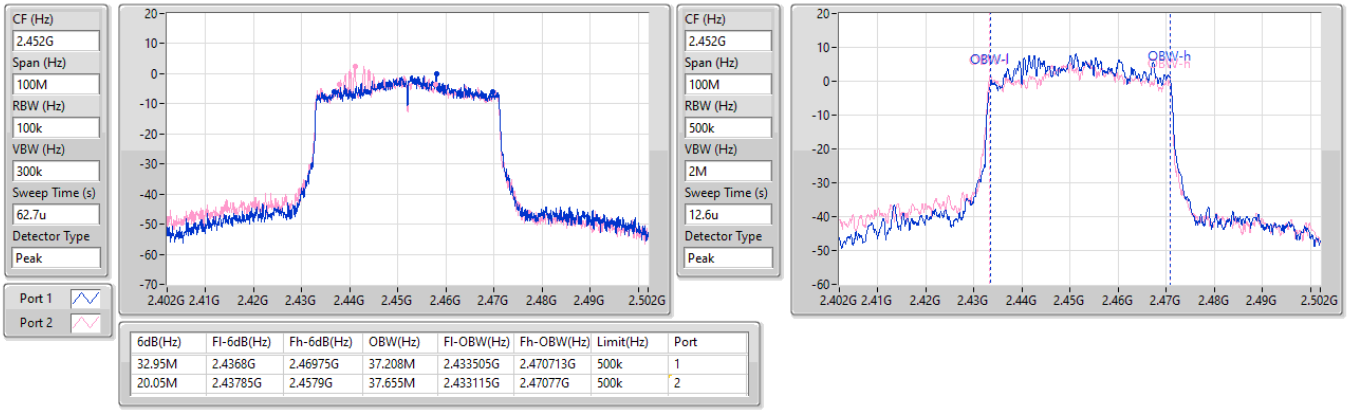


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
31.3M	2.42075G	2.45205G	37.441M	2.418343G	2.455783G	500k	1
27.8M	2.42315G	2.45095G	37.466M	2.418261G	2.455727G	500k	2

2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX **EBW**

2452MHz

11/01/2024



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
32.95M	2.4368G	2.46975G	37.208M	2.433505G	2.470713G	500k	1
20.05M	2.43785G	2.4579G	37.655M	2.433115G	2.47077G	500k	2

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_2TX	25.79	0.37931
802.11g_Nss1,(6Mbps)_2TX	24.44	0.27797
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	22.67	0.18493
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	19.15	0.08222

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	2.50	21.37	20.77	24.09	30.00
2437MHz	Pass	2.50	23.07	22.46	25.79	30.00
2457MHz	Pass	2.50	20.20	19.84	23.03	30.00
2462MHz	Pass	2.50	19.31	18.82	22.08	30.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	2.50	19.04	18.32	21.71	30.00
2417MHz	Pass	2.50	19.98	19.25	22.64	30.00
2437MHz	Pass	2.50	21.87	20.95	24.44	30.00
2457MHz	Pass	2.50	18.91	18.43	21.69	30.00
2462MHz	Pass	2.50	17.50	17.01	20.27	30.00
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	5.22	16.49	16.01	19.27	30.00
2417MHz	Pass	5.22	16.50	16.03	19.28	30.00
2437MHz	Pass	5.22	20.02	19.26	22.67	30.00
2457MHz	Pass	5.22	17.11	16.89	20.01	30.00
2462MHz	Pass	5.22	16.42	16.02	19.23	30.00
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	5.22	14.32	13.85	17.10	30.00
2437MHz	Pass	5.22	16.32	15.95	19.15	30.00
2452MHz	Pass	5.22	15.29	14.97	18.14	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	-1.57
802.11g_Nss1,(6Mbps)_2TX	-1.99
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-3.45
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-10.81

RBW = 3kHz;

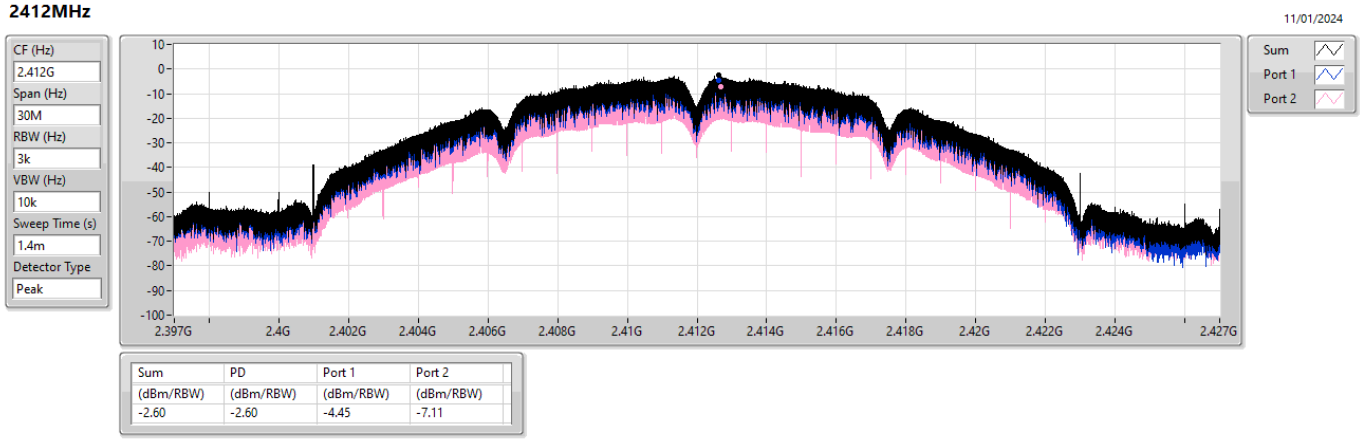
Result

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	5.22	-4.45	-7.11	-2.60	8.00
2437MHz	Pass	5.22	-4.91	-4.10	-1.57	8.00
2462MHz	Pass	5.22	-6.81	-9.58	-5.34	8.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	5.22	-7.01	-6.96	-5.15	8.00
2437MHz	Pass	5.22	-3.45	-6.52	-1.99	8.00
2462MHz	Pass	5.22	-8.02	-9.54	-6.38	8.00
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	5.22	-9.39	-9.78	-7.65	8.00
2437MHz	Pass	5.22	-4.07	-6.19	-3.45	8.00
2462MHz	Pass	5.22	-8.49	-8.37	-5.85	8.00
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	5.22	-14.37	-14.49	-12.64	8.00
2437MHz	Pass	5.22	-11.80	-12.07	-10.81	8.00
2452MHz	Pass	5.22	-12.72	-13.43	-11.27	8.00

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;

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX **PSD**

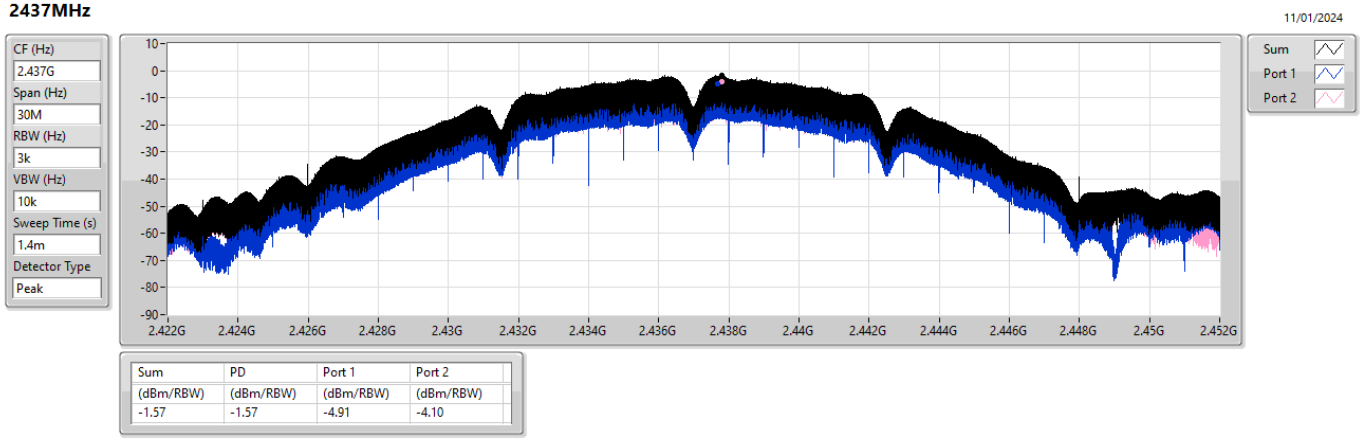
2412MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.60	-2.60	-4.45	-7.11

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX **PSD**

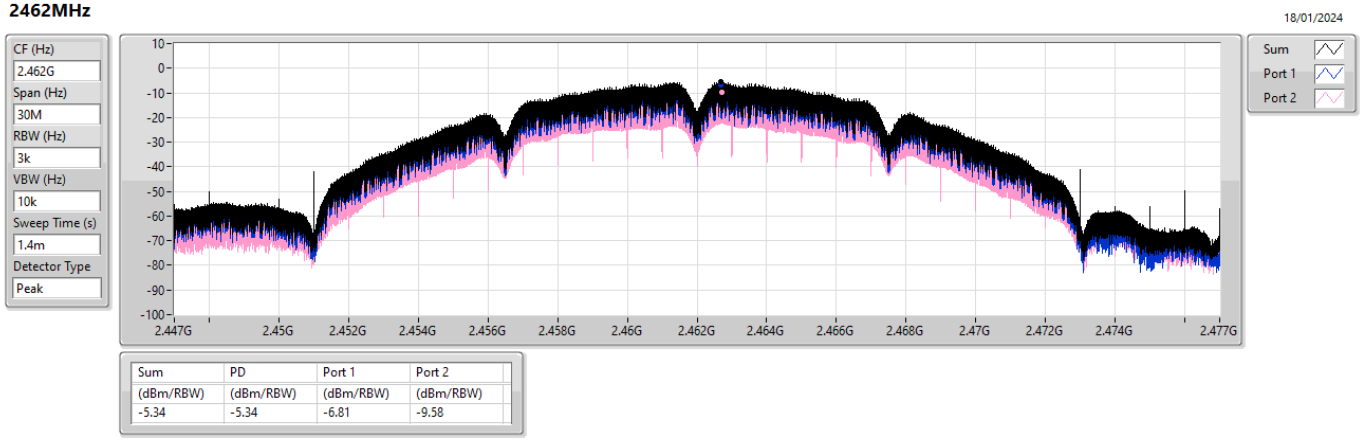
2437MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.57	-1.57	-4.91	-4.10

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX **PSD**

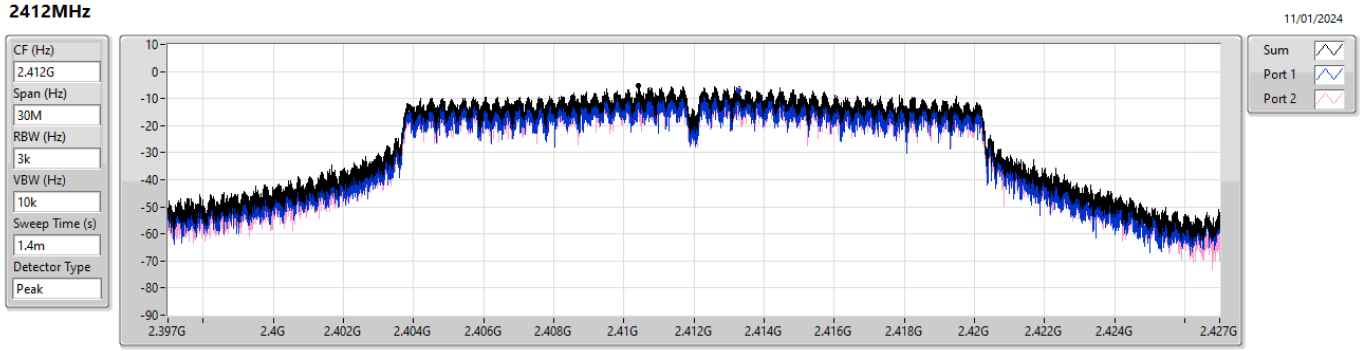
2462MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-5.34	-5.34	-6.81	-9.58

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX **PSD**

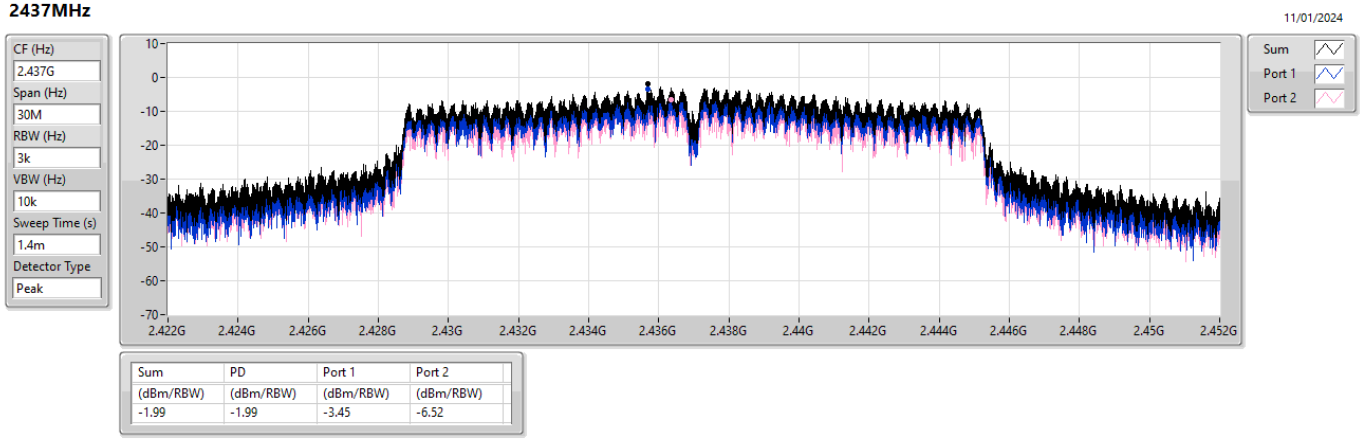
2412MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-5.15	-5.15	-7.01	-6.96

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX **PSD**

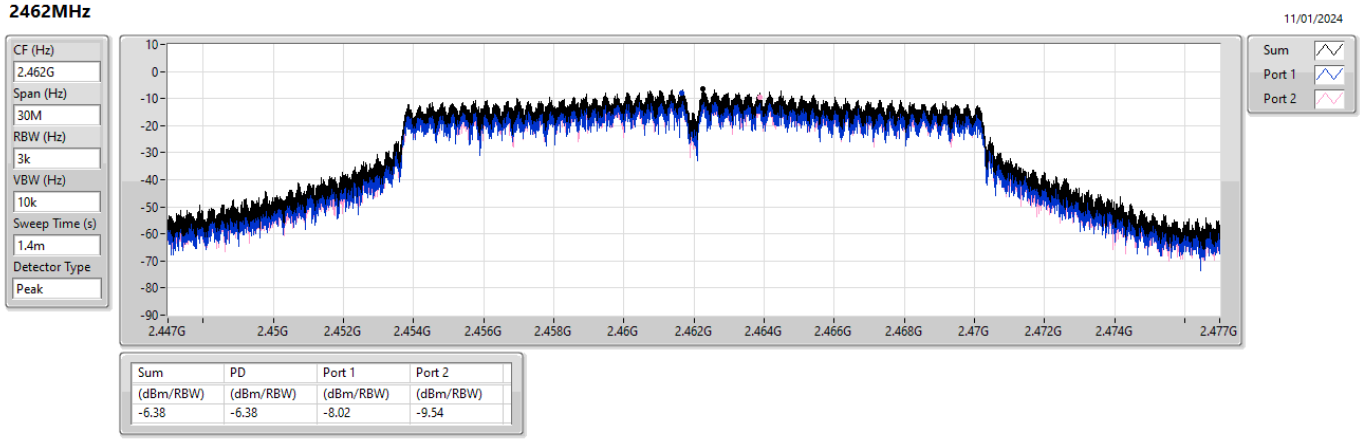
2437MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.99	-1.99	-3.45	-6.52

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX **PSD**

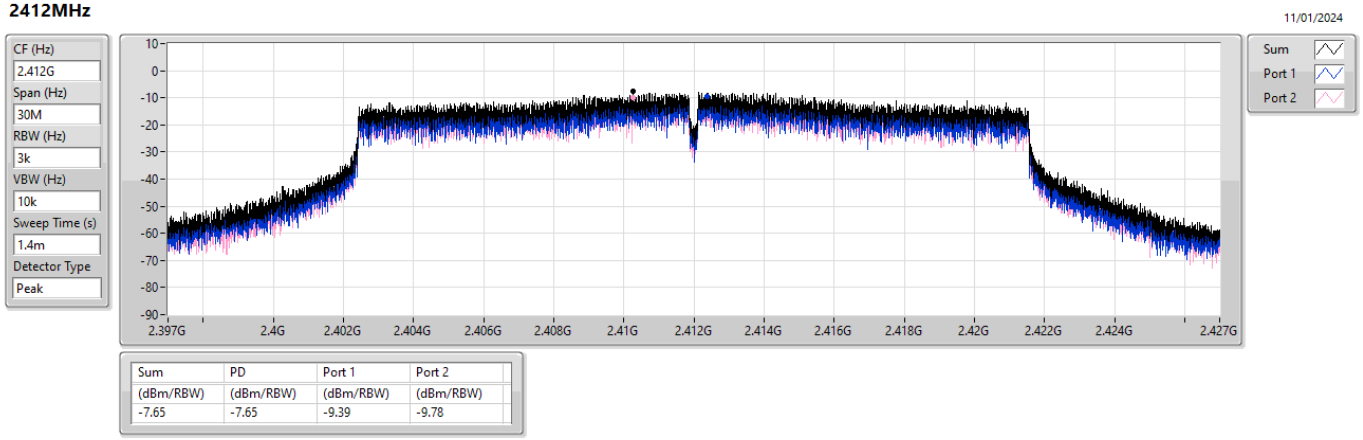
2462MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.38	-6.38	-8.02	-9.54

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX **PSD**

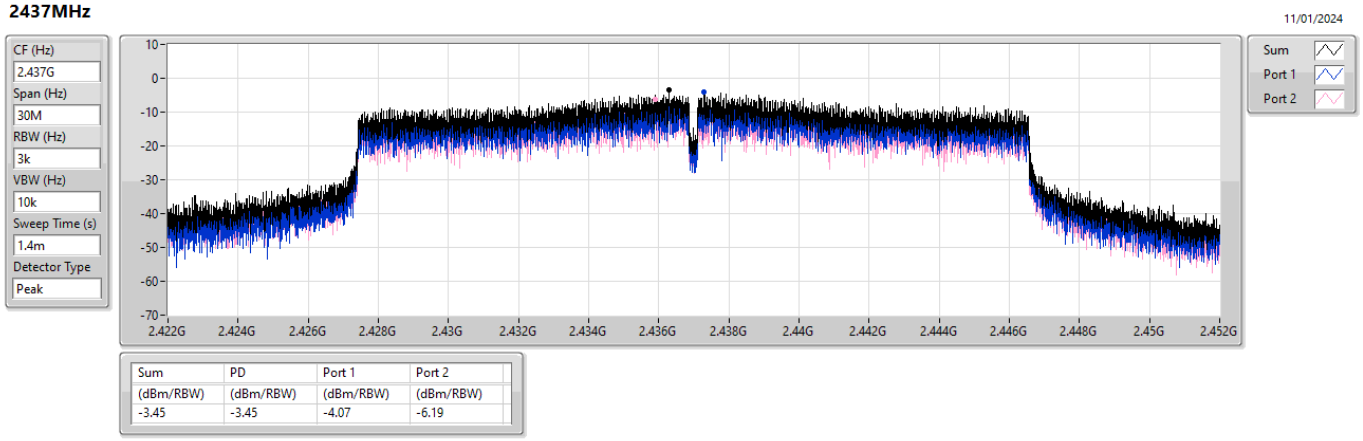
2412MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.65	-7.65	-9.39	-9.78

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX **PSD**

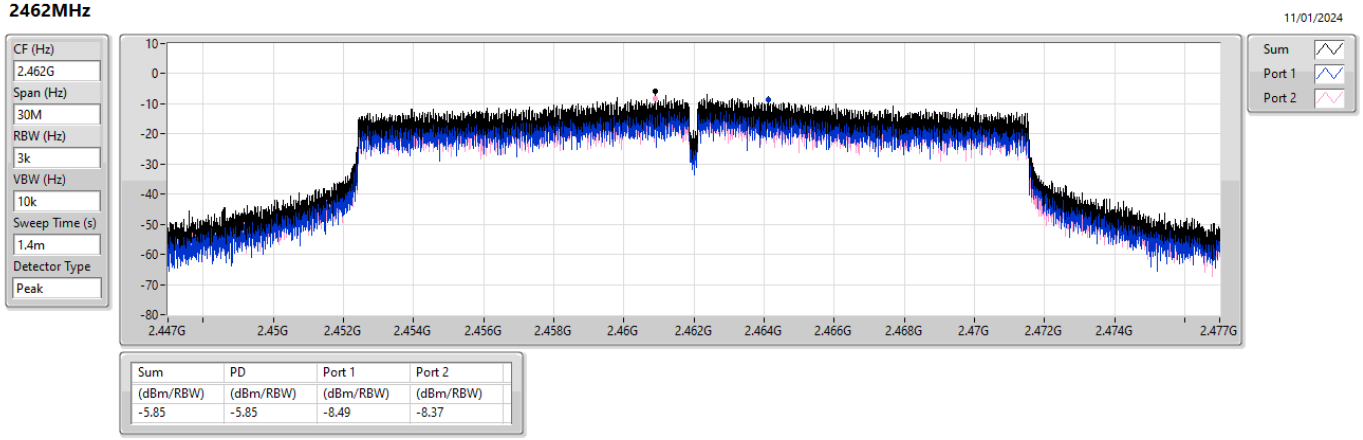
2437MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.45	-3.45	-4.07	-6.19

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX **PSD**

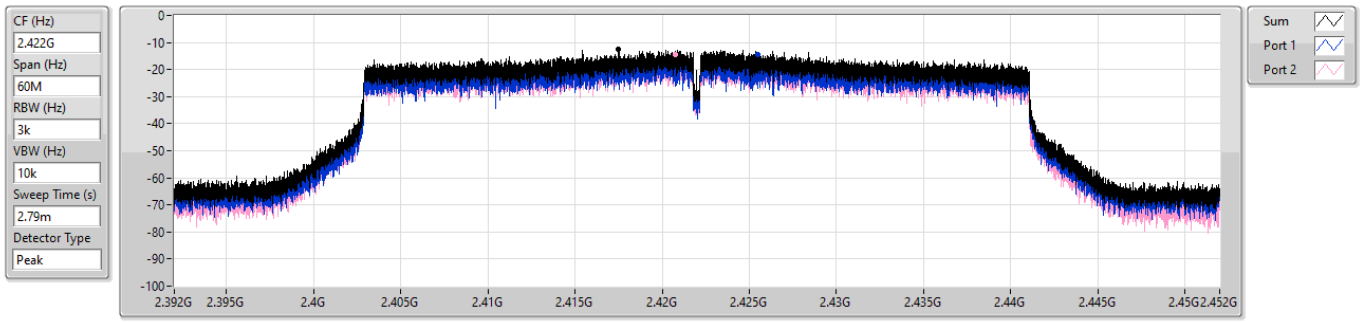
2462MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-5.85	-5.85	-8.49	-8.37

2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX **PSD**

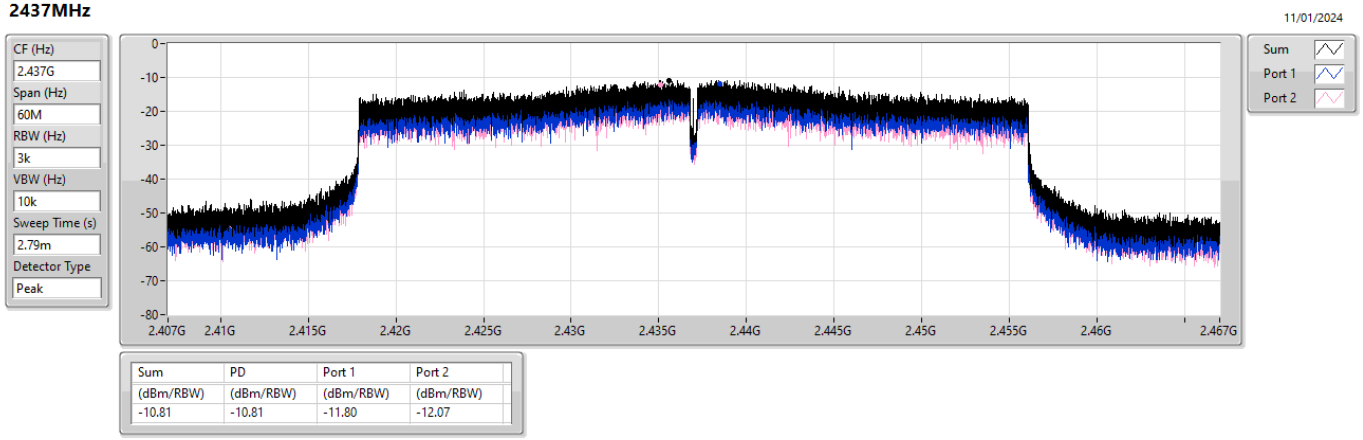
2422MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-12.64	-12.64	-14.37	-14.49

2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX **PSD**

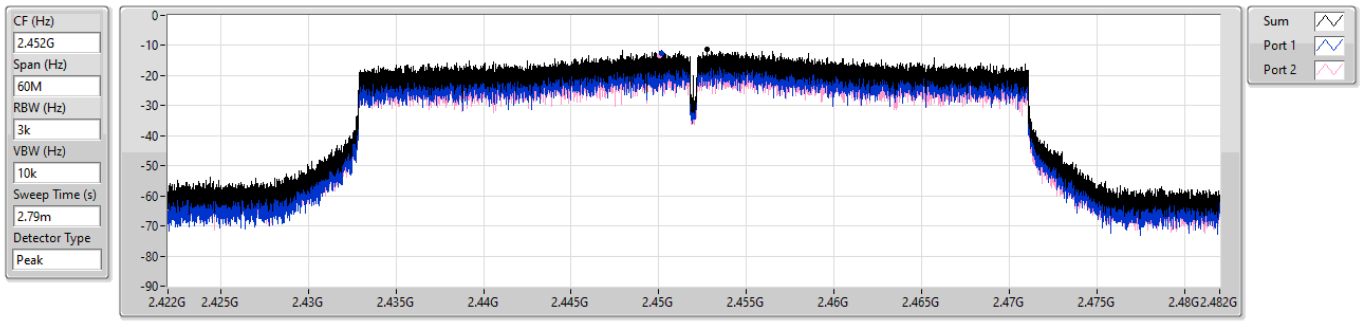
2437MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-10.81	-10.81	-11.80	-12.07

2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX **PSD**

2452MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-11.27	-11.27	-12.72	-13.43

Summary

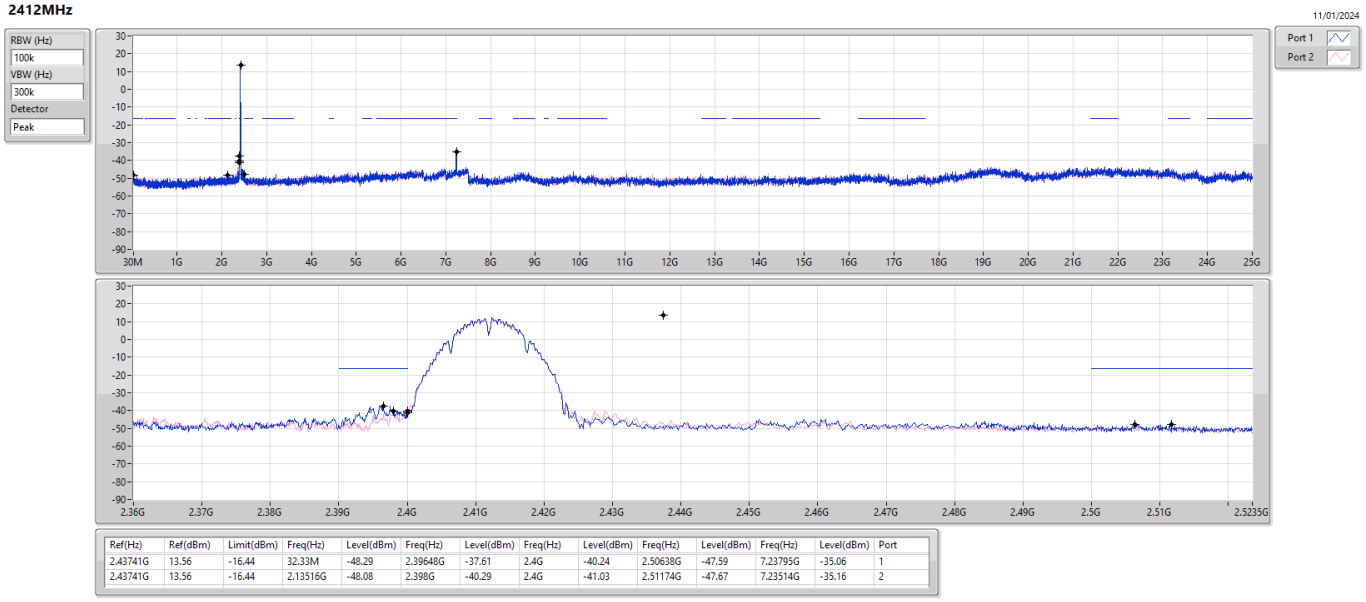
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	Pass	2.43741G	13.56	-16.44	32.33M	-48.29	2.39648G	-37.61	2.4G	-40.24	2.50638G	-47.59	7.23795G	-35.06	1
802.11g_Nss1,(6Mbps)_2TX	Pass	2.43574G	12.83	-17.17	46.31M	-48.89	2.39976G	-27.91	2.4G	-27.61	2.50822G	-48.03	7.23795G	-37.91	1
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	Pass	2.43574G	11.07	-18.93	33.5M	-48.54	2.4G	-30.89	2.4G	-30.65	2.5075G	-48.20	7.23514G	-42.31	1
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	Pass	2.42589G	7.80	-22.20	2.12077G	-48.24	2.39968G	-34.83	2.4G	-35.94	2.5499G	-45.51	21.99912G	-44.50	1

Result

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43741G	13.56	-16.44	32.33M	-48.29	2.39648G	-37.61	2.4G	-40.24	2.50638G	-47.59	7.23795G	-35.06	1
2412MHz	Pass	2.43741G	13.56	-16.44	2.13516G	-48.08	2.398G	-40.29	2.4G	-41.03	2.51174G	-47.67	7.23514G	-35.16	2
2437MHz	Pass	2.43741G	13.56	-16.44	2.13865G	-48.23	2.39704G	-45.56	2.4G	-46.77	2.50702G	-43.60	21.79429G	-42.94	1
2437MHz	Pass	2.43741G	13.56	-16.44	2.0373G	-48.45	2.39952G	-37.76	2.4G	-44.86	2.51334G	-46.11	21.59762G	-44.20	2
2462MHz	Pass	2.43741G	13.56	-16.44	32.33M	-48.46	2.39104G	-47.53	2.4G	-49.23	2.50006G	-47.05	21.43186G	-43.36	1
2462MHz	Pass	2.43741G	13.56	-16.44	1.98138G	-47.35	2.39744G	-48.72	2.4G	-49.74	2.50246G	-46.35	21.65662G	-43.54	2
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43574G	12.83	-17.17	46.31M	-48.89	2.39976G	-27.91	2.4G	-27.61	2.50822G	-48.03	7.23795G	-37.91	1
2412MHz	Pass	2.43574G	12.83	-17.17	2.13865G	-48.04	2.39992G	-29.38	2.4G	-29.48	2.51542G	-48.43	7.22952G	-40.71	2
2437MHz	Pass	2.43574G	12.83	-17.17	2.05128G	-48.98	2.39928G	-38.25	2.4G	-39.72	2.5095G	-45.60	21.99096G	-43.49	1
2437MHz	Pass	2.43574G	12.83	-17.17	1.76935G	-47.96	2.39984G	-39.57	2.4G	-41.22	2.51174G	-47.53	21.62291G	-43.26	2
2462MHz	Pass	2.43574G	12.83	-17.17	1.76469G	-48.26	2.3992G	-47.91	2.4G	-49.12	2.5039G	-46.71	21.51895G	-42.13	1
2462MHz	Pass	2.43574G	12.83	-17.17	1.85672G	-48.06	2.39584G	-48.41	2.4G	-49.79	2.50022G	-47.71	21.63414G	-44.14	2
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43574G	11.07	-18.93	33.5M	-48.54	2.4G	-30.89	2.4G	-30.65	2.5075G	-48.20	7.23514G	-42.31	1
2412MHz	Pass	2.43574G	11.07	-18.93	2.19108G	-48.28	2.4G	-31.57	2.4G	-31.18	2.51846G	-48.50	21.47962G	-43.10	2
2437MHz	Pass	2.43574G	11.07	-18.93	1.91031G	-48.56	2.3984G	-43.09	2.4G	-46.18	2.51766G	-47.76	21.96286G	-43.43	1
2437MHz	Pass	2.43574G	11.07	-18.93	64.95M	-48.75	2.39992G	-44.85	2.4G	-44.94	2.50006G	-47.46	6.94856G	-43.53	2
2462MHz	Pass	2.43574G	11.07	-18.93	1.72391G	-47.72	2.39888G	-48.69	2.4G	-50.76	2.50326G	-47.60	21.5049G	-43.06	1
2462MHz	Pass	2.43574G	11.07	-18.93	2.18059G	-48.12	2.39104G	-48.71	2.4G	-49.99	2.50086G	-48.05	21.98815G	-43.65	2
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.42589G	7.80	-22.20	65.5M	-49.06	2.39968G	-37.11	2.4G	-38.22	2.54334G	-48.80	21.46625G	-44.03	1
2422MHz	Pass	2.42589G	7.80	-22.20	33.44M	-47.99	2.4G	-39.50	2.4G	-37.88	2.52366G	-47.96	21.51954G	-43.92	2
2437MHz	Pass	2.42589G	7.80	-22.20	2.12077G	-48.24	2.39968G	-34.83	2.4G	-35.94	2.5499G	-45.51	21.99912G	-44.50	1
2437MHz	Pass	2.42589G	7.80	-22.20	31.15M	-45.69	2.39856G	-36.54	2.4G	-36.11	2.50814G	-48.45	6.44782G	-43.97	2
2452MHz	Pass	2.42589G	7.80	-22.20	1.71773G	-47.44	2.39968G	-48.28	2.4G	-50.21	2.5019G	-46.53	21.68501G	-42.50	1
2452MHz	Pass	2.42589G	7.80	-22.20	30M	-47.83	2.39872G	-45.64	2.4G	-47.10	2.50574G	-45.38	21.69062G	-43.40	2

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX CSENdB

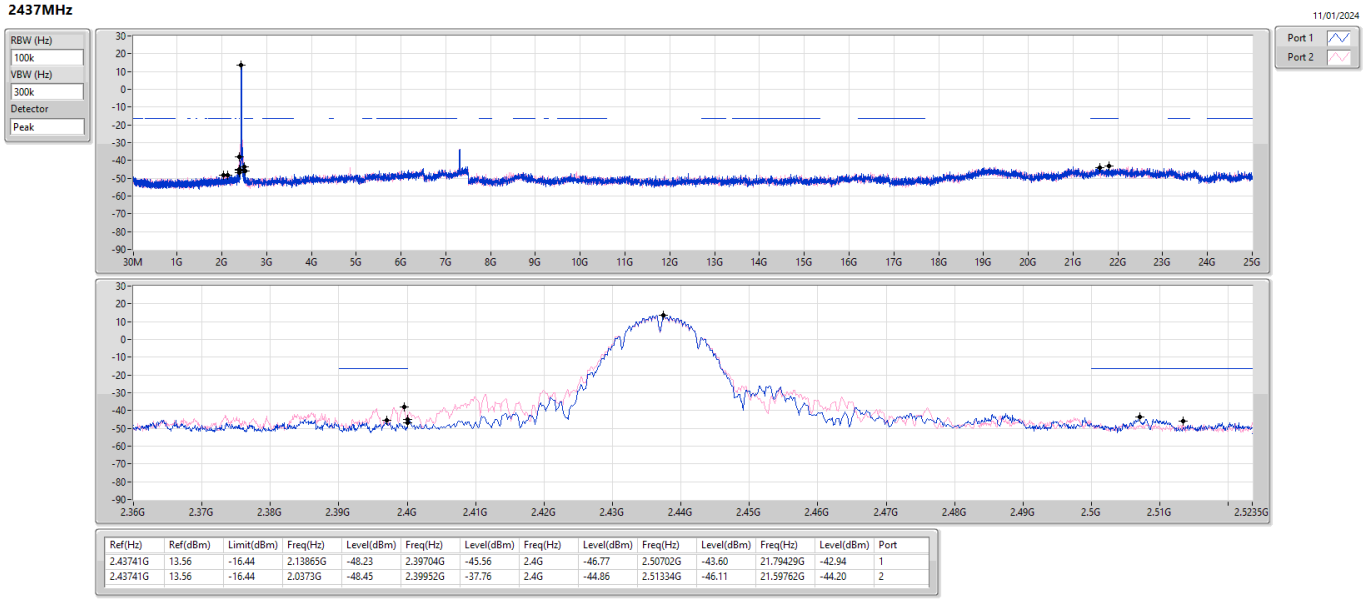
2412MHz



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
2.43741G	13.56	-16.44	32.33M	-48.29	2.39648G	-37.61	2.4G	-40.24	2.50638G	-47.59	7.23795G	-35.06	1
2.43741G	13.56	-16.44	2.13516G	-48.08	2.398G	-40.29	2.4G	-41.03	2.51174G	-47.67	7.23514G	-35.16	2

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX CSENdB

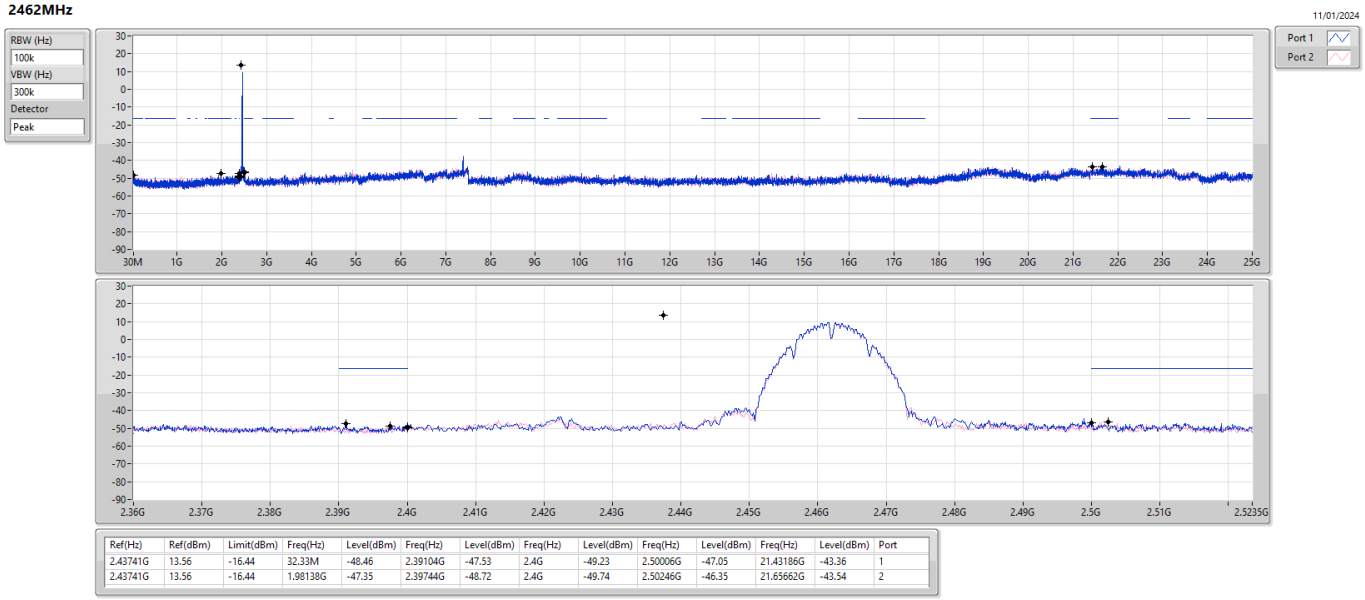
2437MHz



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
2.43741G	13.56	-16.44	2.13865G	-48.23	2.39704G	-45.56	2.4G	-46.77	2.50702G	-43.60	21.79429G	-42.94	1
2.43741G	13.56	-16.44	2.0373G	-48.45	2.39952G	-37.76	2.4G	-44.86	2.51334G	-46.11	21.59762G	-44.20	2

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX CSENdB

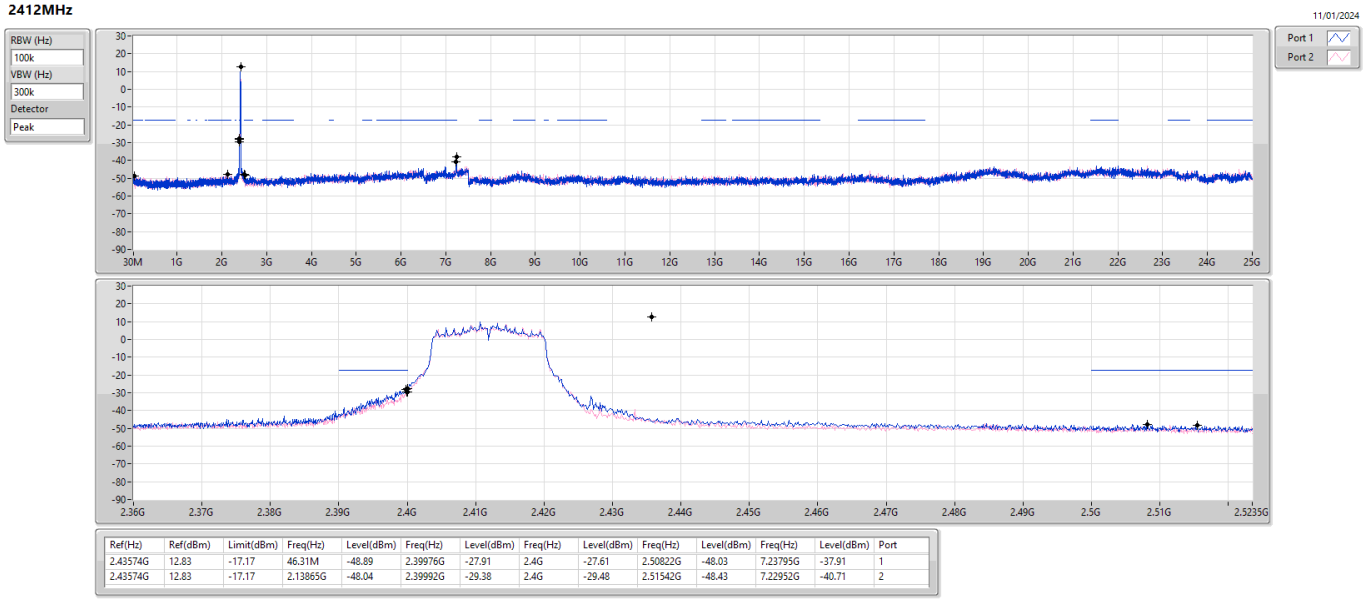
2462MHz



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
2.43741G	13.56	-16.44	32.33M	-48.46	2.39104G	-47.53	2.4G	-49.23	2.50006G	-47.05	21.43186G	-43.36	1
2.43741G	13.56	-16.44	1.98138G	-47.35	2.39744G	-48.72	2.4G	-49.74	2.50246G	-46.35	21.65662G	-43.54	2

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX CSENdB

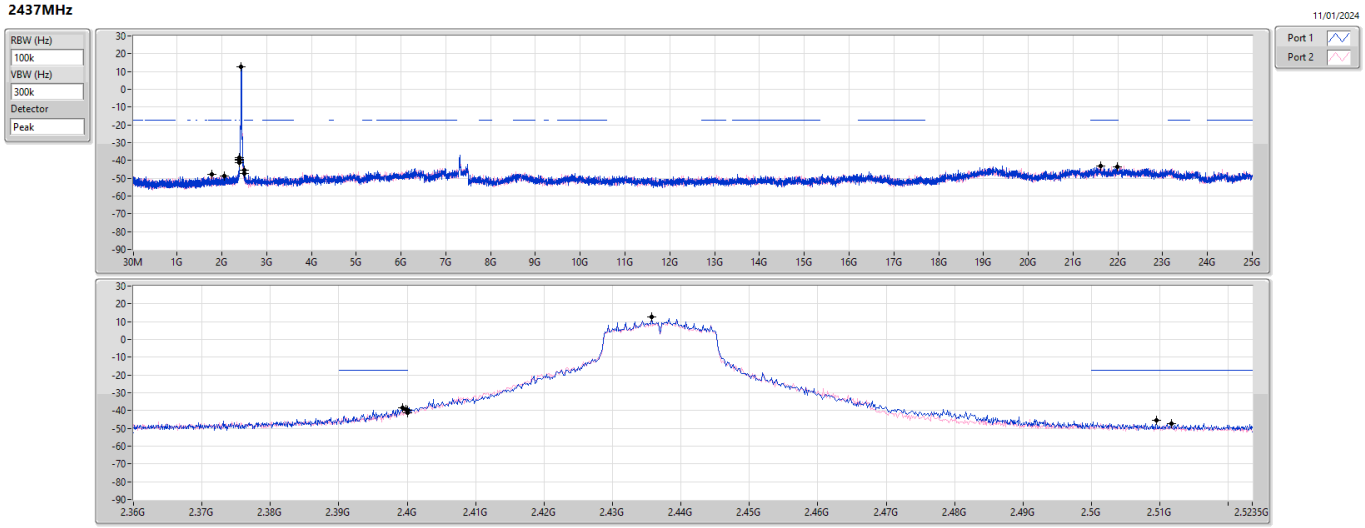
2412MHz



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
2.43574G	12.83	-17.17	46.31M	-48.89	2.39976G	-27.91	2.4G	-27.61	2.50822G	-48.03	7.23795G	-37.91	1
2.43574G	12.83	-17.17	2.13865G	-48.04	2.39992G	-29.38	2.4G	-29.48	2.51542G	-48.43	7.22952G	-40.71	2

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX CSENdB

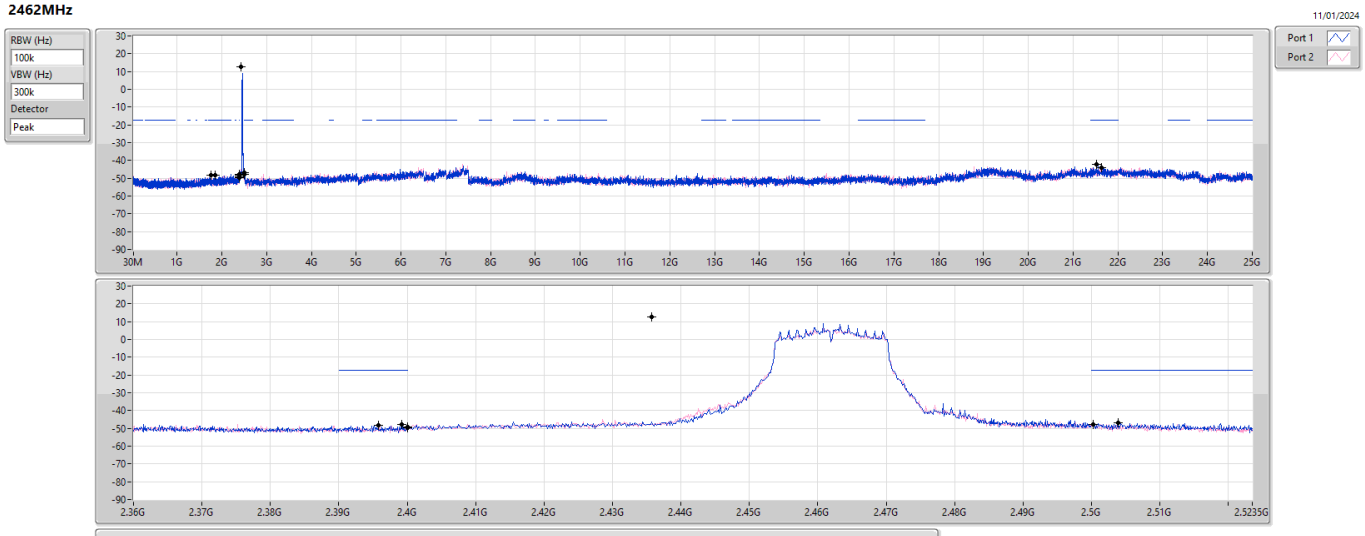
2437MHz



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
2.43574G	12.83	-17.17	2.05128G	-48.98	2.39928G	-38.25	2.4G	-39.72	2.5095G	-45.60	21.99096G	-43.49	1
2.43574G	12.83	-17.17	1.76935G	-47.96	2.39984G	-39.57	2.4G	-41.22	2.51174G	-47.53	21.62291G	-43.26	2

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX CSENdB

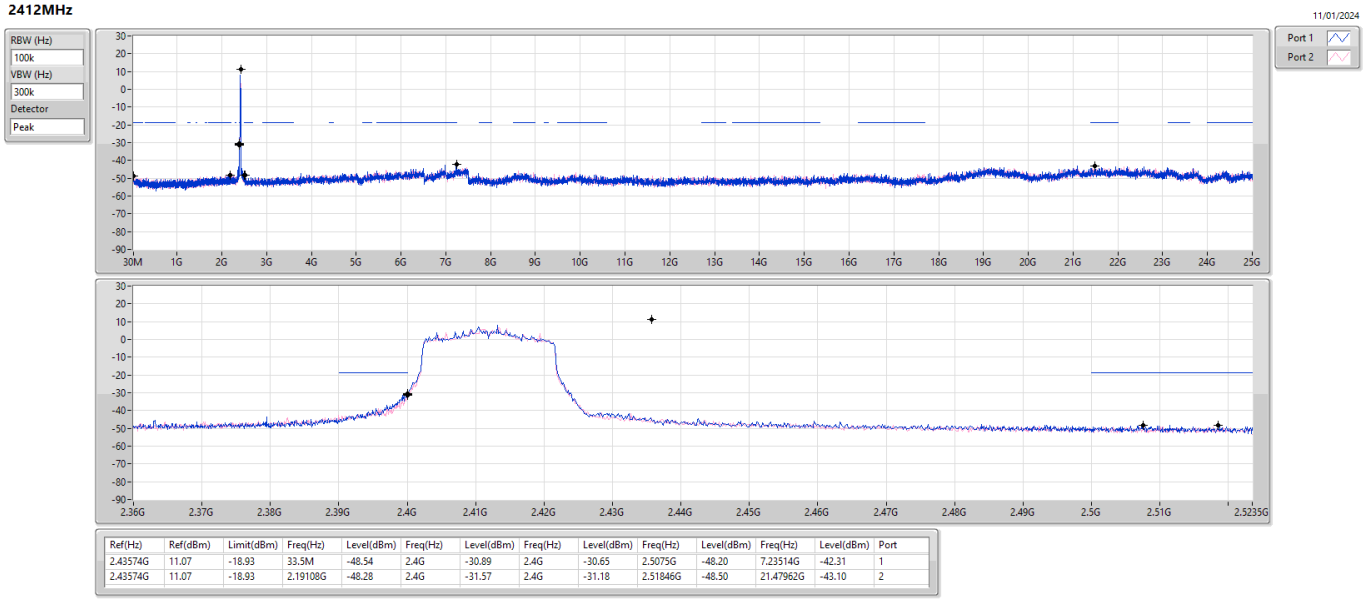
2462MHz



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
2.43574G	12.83	-17.17	1.76469G	-48.26	2.3992G	-47.91	2.4G	-49.12	2.5039G	-46.71	21.51895G	-42.13	1
2.43574G	12.83	-17.17	1.85672G	-48.06	2.39584G	-48.41	2.4G	-49.79	2.50022G	-47.71	21.63414G	-44.14	2

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX CSENdB

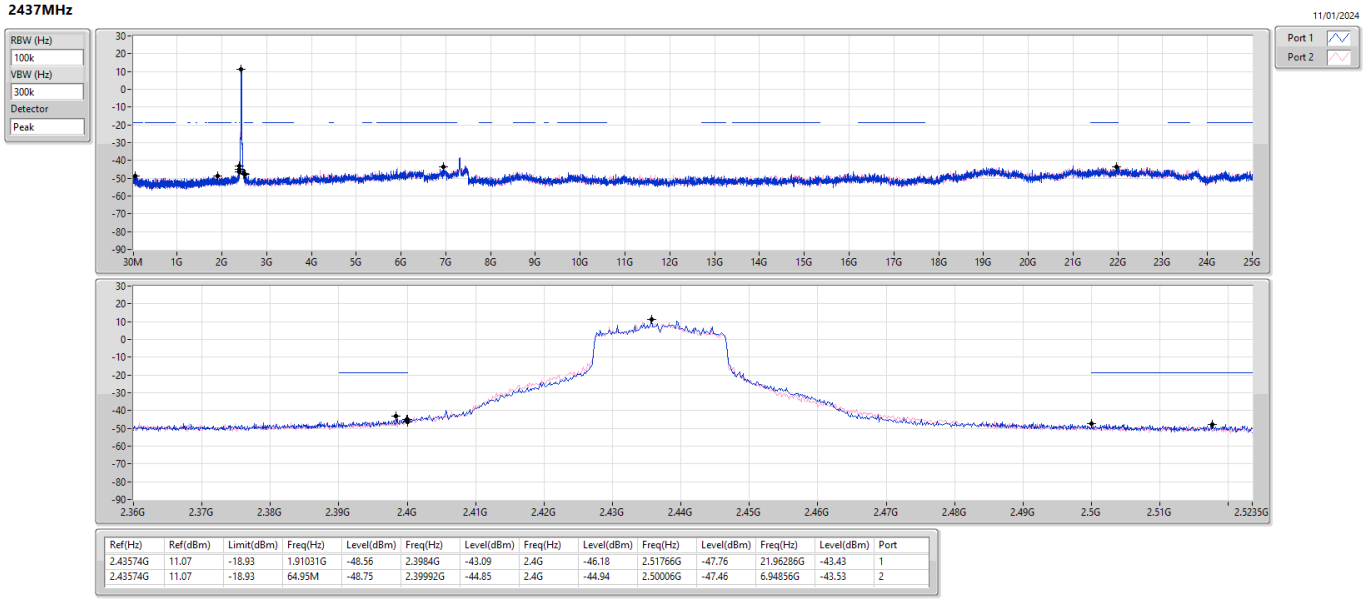
2412MHz



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
2.43574G	11.07	-18.93	33.5M	-48.54	2.4G	-30.89	2.4G	-30.65	2.5075G	-48.20	7.23514G	-42.31	1
2.43574G	11.07	-18.93	2.19108G	-48.28	2.4G	-31.57	2.4G	-31.18	2.51846G	-48.50	21.47962G	-43.10	2

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX CSENdB

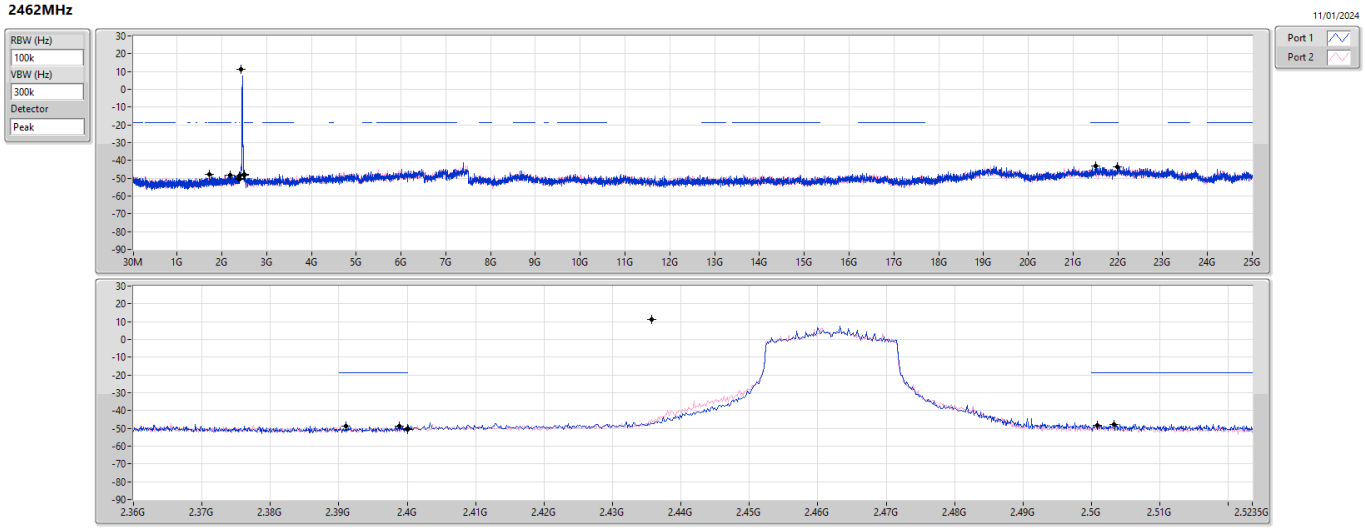
2437MHz



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
2.43574G	11.07	-18.93	1.91031G	-48.56	2.3984G	-43.09	2.4G	-46.18	2.51766G	-47.76	21.96286G	-43.43	1
2.43574G	11.07	-18.93	64.95M	-48.75	2.39992G	-44.85	2.4G	-44.94	2.50006G	-47.46	6.94856G	-43.53	2

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX CSENdB

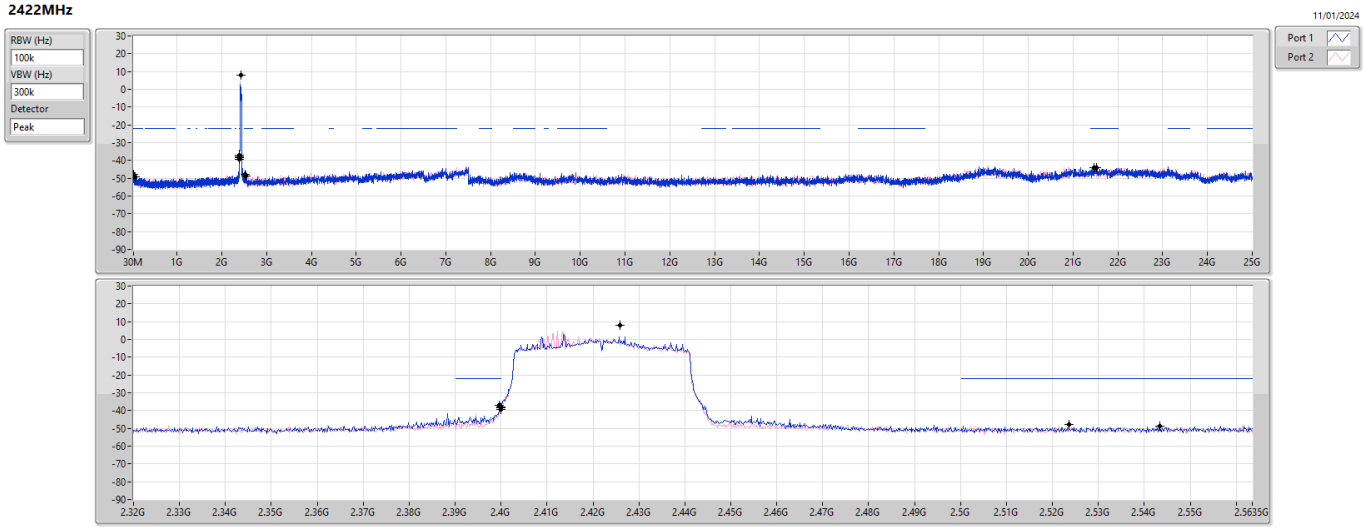
2462MHz



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
2.43574G	11.07	-18.93	1.72391G	-47.72	2.39888G	-48.69	2.4G	-50.76	2.50326G	-47.60	21.5049G	-43.06	1
2.43574G	11.07	-18.93	2.18059G	-48.12	2.39104G	-48.71	2.4G	-49.99	2.50086G	-48.05	21.98815G	-43.65	2

2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX CSENdB

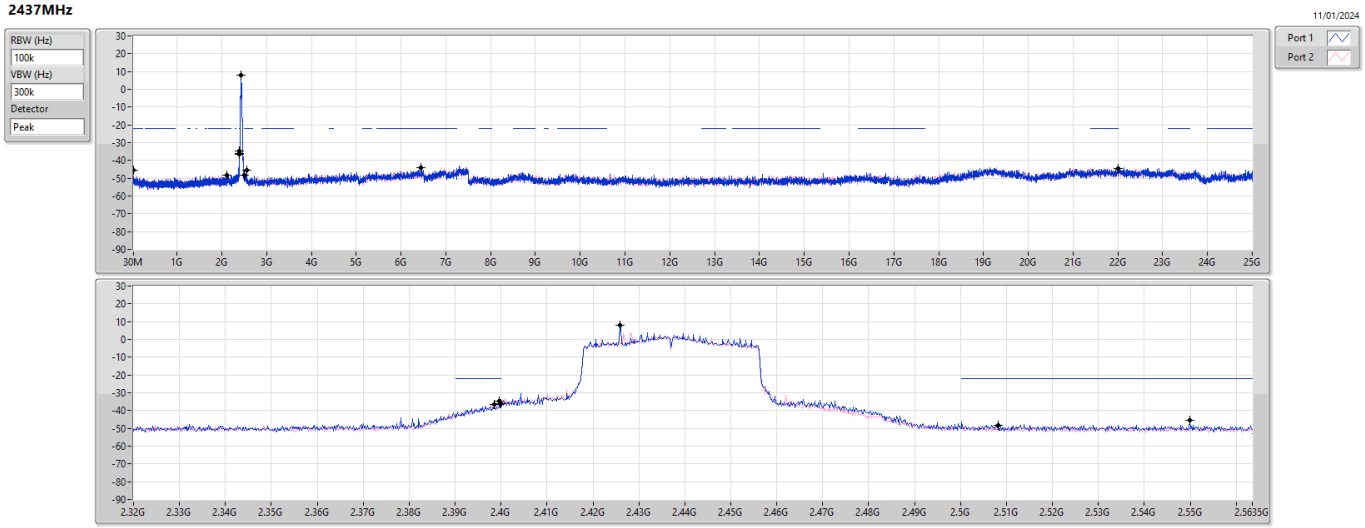
2422MHz



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
2.42589G	7.80	-22.20	65.5M	-49.06	2.39968G	-37.11	2.4G	-38.22	2.54334G	-48.80	21.46625G	-44.03	1
2.42589G	7.80	-22.20	33.44M	-47.99	2.4G	-39.50	2.4G	-37.88	2.52366G	-47.96	21.51954G	-43.92	2

2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX CSENdB

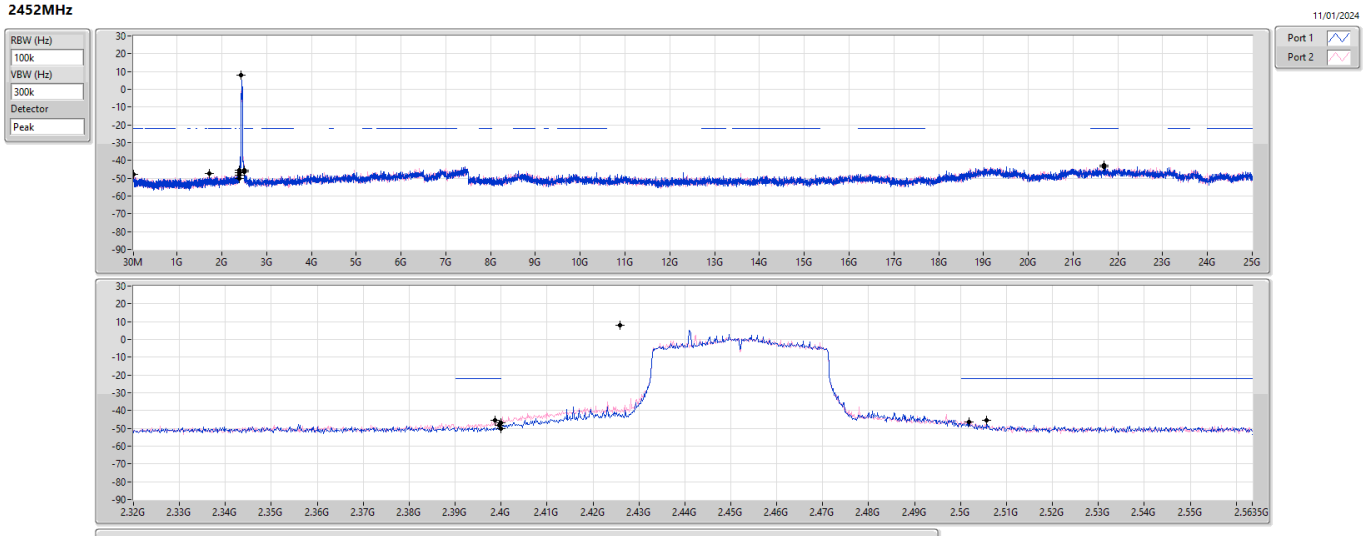
2437MHz



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
2.42589G	7.80	-22.20	2.12077G	-48.24	2.39968G	-34.83	2.4G	-35.94	2.5499G	-45.51	21.99912G	-44.50	1
2.42589G	7.80	-22.20	31.15M	-45.69	2.39856G	-36.54	2.4G	-36.11	2.50814G	-48.45	6.44782G	-43.97	2

2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX CSENdB

2452MHz

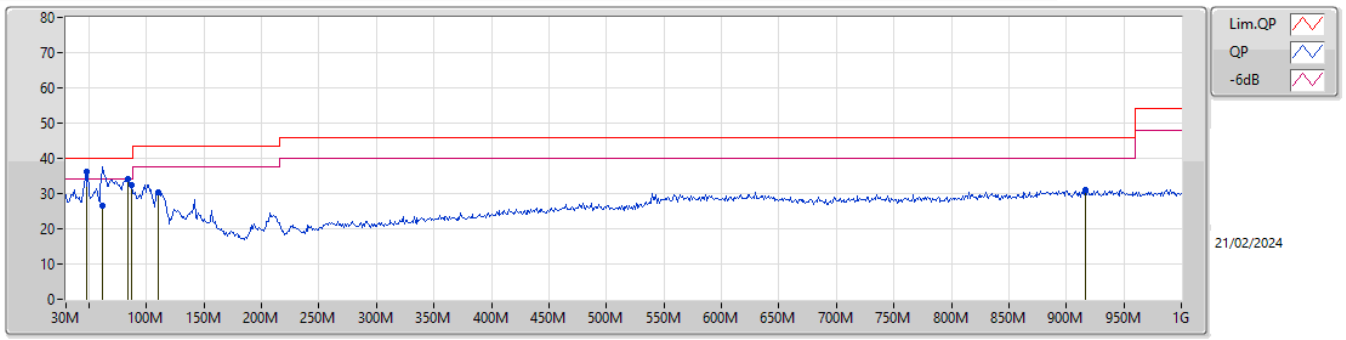


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.42589G	7.80	-22.20	1.71773G	-47.44	2.39968G	-48.28	2.4G	-50.21	2.5019G	-46.53	21.68501G	-42.50	1
2.42589G	7.80	-22.20	30M	-47.83	2.39872G	-45.64	2.4G	-47.10	2.50574G	-45.38	21.69062G	-43.40	2

Summary

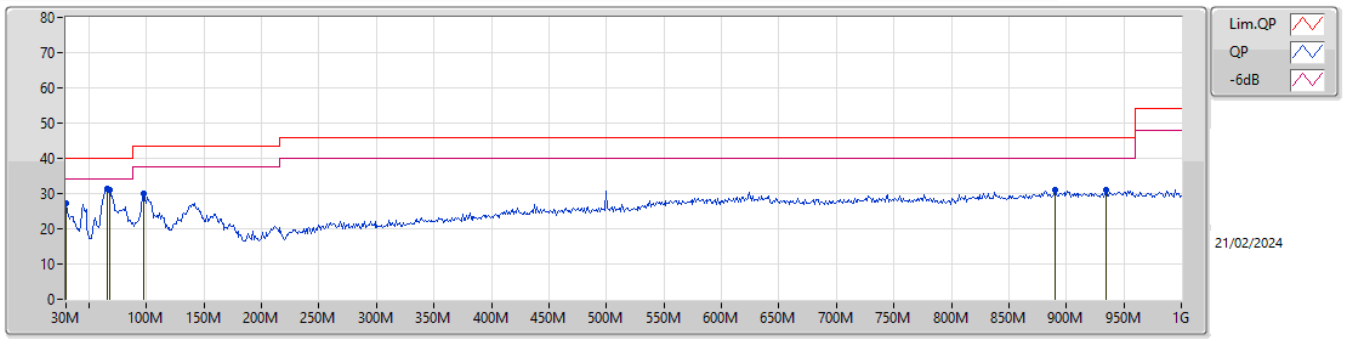
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 4	Pass	PK	47.46M	36.29	40.00	-3.71	Vertical

Mode 4



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	47.46M	36.29	40.00	-3.71	-16.16	3	Vertical	0	3.00	-	52.45	14.86	0.50	31.52
QP	62.01M	26.70	40.00	-13.30	-18.62	3	Vertical	0	3.00	"Worst"	45.32	12.53	0.60	31.75
PK	84.32M	34.01	40.00	-5.99	-17.04	3	Vertical	228	1.25	-	51.05	13.91	0.76	31.71
PK	87.23M	32.58	40.00	-7.42	-16.29	3	Vertical	284	1.00	-	48.87	14.62	0.78	31.69
PK	110.51M	30.30	43.50	-13.20	-12.60	3	Vertical	170	1.00	-	42.90	18.11	0.88	31.59
PK	916.58M	31.03	46.00	-14.97	-2.31	3	Vertical	0	3.00	-	33.34	26.79	3.12	32.22

Mode 4



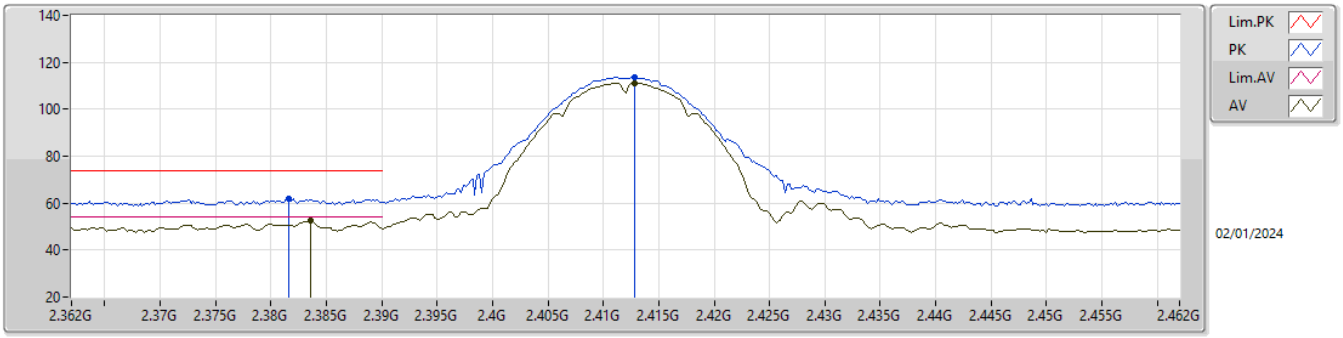
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	30M	27.16	40.00	-12.84	-7.26	3	Horizontal	360	1.00	-	34.42	23.56	0.33	31.15
PK	65.89M	31.23	40.00	-8.77	-18.78	3	Horizontal	0	2.00	"Worst"	50.01	12.34	0.63	31.75
PK	67.83M	30.93	40.00	-9.07	-18.72	3	Horizontal	0	2.00	-	49.65	12.38	0.64	31.74
PK	97.9M	29.86	43.50	-13.64	-14.01	3	Horizontal	285	2.00	-	43.87	16.75	0.81	31.57
PK	890.39M	30.99	46.00	-15.01	-2.57	3	Horizontal	41	1.00	-	33.56	26.61	3.04	32.22
PK	935.01M	30.89	46.00	-15.11	-2.45	3	Horizontal	144	1.50	-	33.34	26.64	3.17	32.26

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-BF_Nss1,(MCS0)_2TX	Pass	AV	2.4835G	52.86	54.00	-1.14	3	Vertical	71	1.80	-

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX

2412MHz_TX

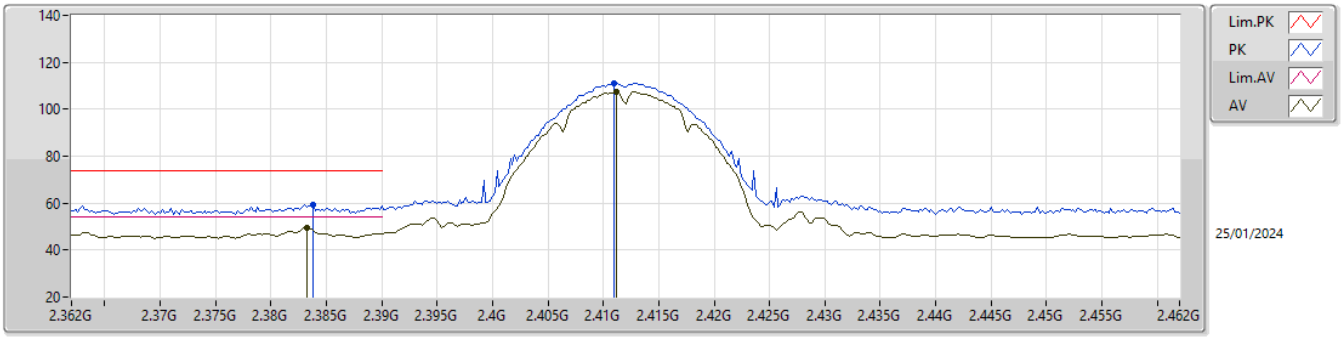


EUT Z_2TX
Setting 21
03-R-M-2

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	2.3816G	61.96	74.00	-12.04	30.09	3	Vertical	50	1.59	-	28.30	3.57	-
AV	2.3836G	52.63	54.00	-1.37	20.76	3	Vertical	50	1.59	-	28.30	3.57	-
PK	2.4128G	113.67	Inf	-Inf	81.85	3	Vertical	50	1.59	-	28.23	3.59	-
AV	2.4128G	111.29	Inf	-Inf	79.47	3	Vertical	50	1.59	-	28.23	3.59	-

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX

2412MHz_TX

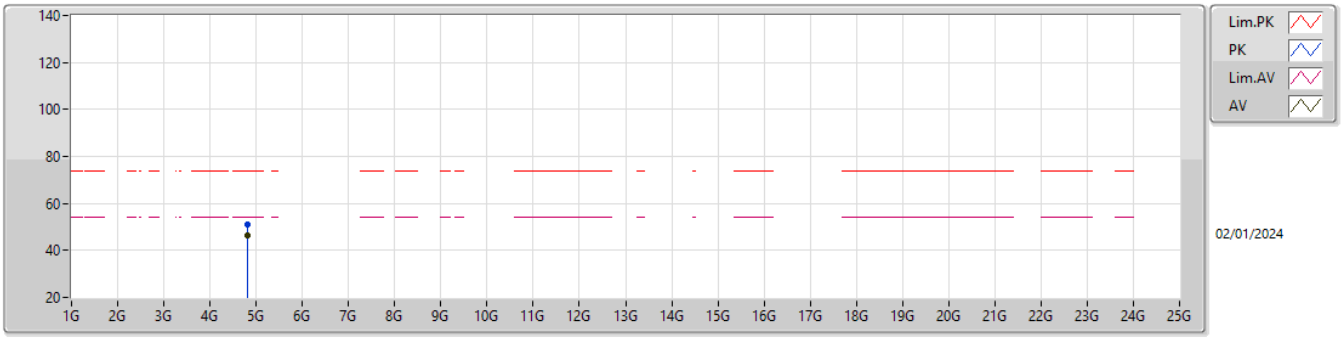


EUT Z_2TX
Setting 21
05-C-S-5

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	59.33	74.00	-14.67	26.71	3	Horizontal	254	2.89	-	27.34	5.28	-
AV	2.3832G	49.48	54.00	-4.52	16.87	3	Horizontal	254	2.89	-	27.33	5.28	-
PK	2.411G	111.19	Inf	-Inf	78.35	3	Horizontal	254	2.89	-	27.51	5.33	-
AV	2.4112G	107.33	Inf	-Inf	74.49	3	Horizontal	254	2.89	-	27.51	5.33	-

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX

2412MHz_TX

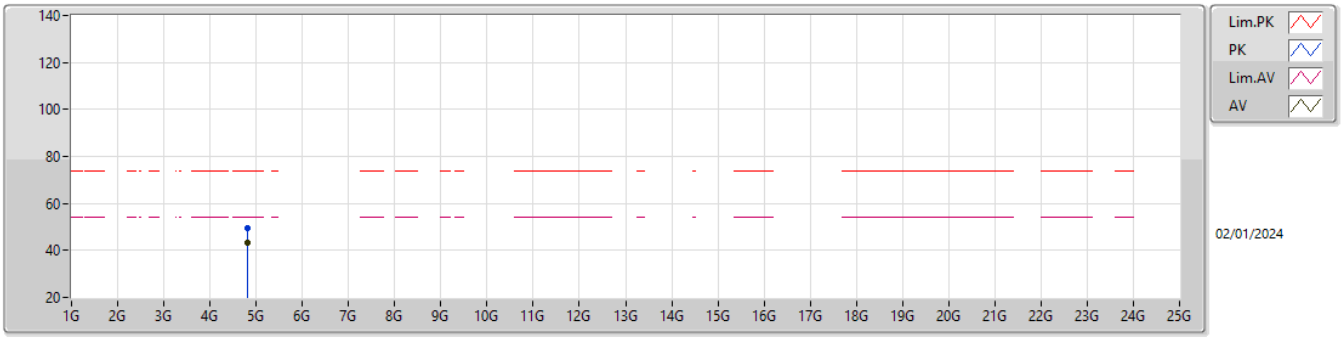


EUT Z_2TX
Setting 25
03-R-M-2

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	51.09	74.00	-22.91	46.37	3	Vertical	342	2.29	-	33.40	6.01	34.69
AV	4.82396G	46.62	54.00	-7.38	41.90	3	Vertical	342	2.29	-	33.40	6.01	34.69

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX

2412MHz_TX

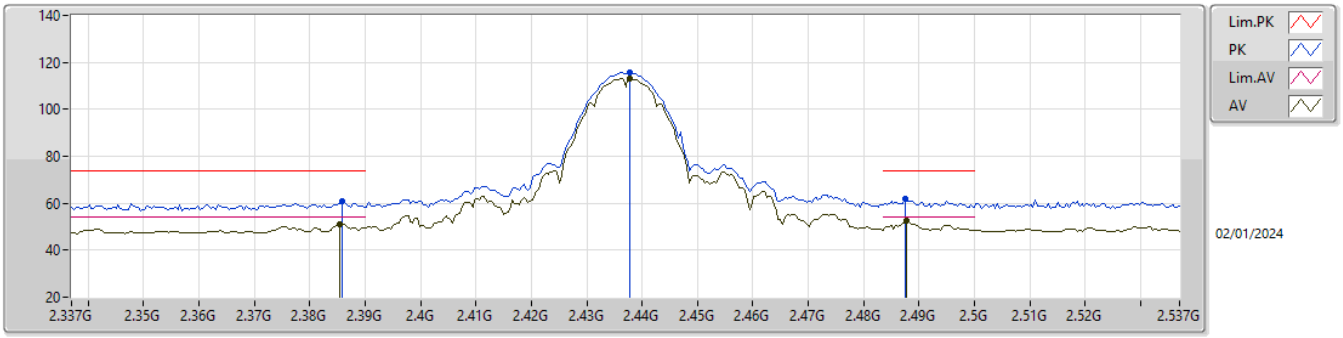


EUT Z_2TX
Setting 25
03-R-M-2

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	49.33	74.00	-24.67	44.61	3	Horizontal	229	2.47	-	33.40	6.01	34.69
AV	4.82396G	43.09	54.00	-10.91	38.37	3	Horizontal	229	2.47	-	33.40	6.01	34.69

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX

2437MHz_TX

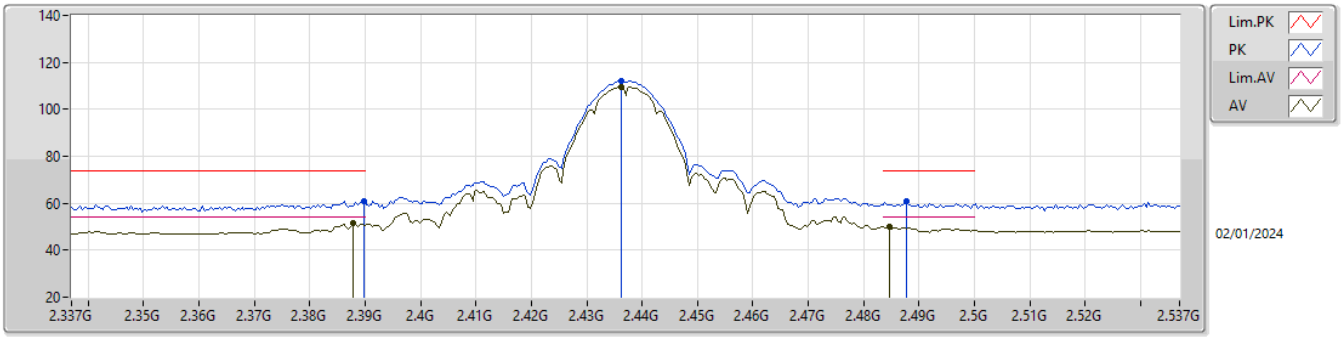


EUT Z_2TX
Setting 23
03-R-M-2

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	60.87	74.00	-13.13	29.00	3	Vertical	325	2.58	-	28.30	3.57	-
AV	2.3854G	51.24	54.00	-2.76	19.37	3	Vertical	325	2.58	-	28.30	3.57	-
PK	2.4378G	115.52	Inf	-Inf	83.67	3	Vertical	325	2.58	-	28.24	3.61	-
AV	2.4378G	113.12	Inf	-Inf	81.27	3	Vertical	325	2.58	-	28.24	3.61	-
PK	2.4874G	61.72	74.00	-12.28	29.67	3	Vertical	325	2.58	-	28.40	3.65	-
AV	2.4878G	52.33	54.00	-1.67	20.28	3	Vertical	325	2.58	-	28.40	3.65	-

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX

2437MHz_TX

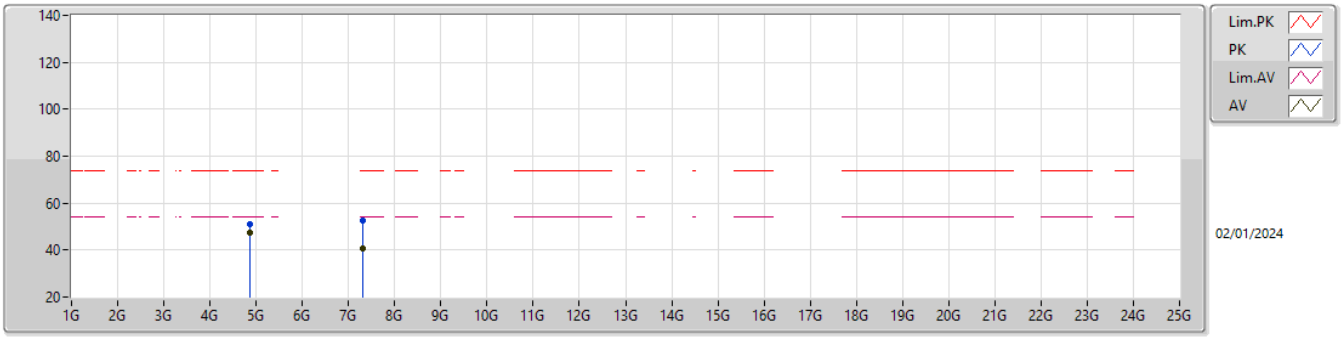


EUT Z_2TX
Setting 23
03-R-M-2

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	61.07	74.00	-12.93	29.20	3	Horizontal	160	1.79	-	28.30	3.57	-
AV	2.3878G	51.80	54.00	-2.20	19.93	3	Horizontal	160	1.79	-	28.30	3.57	-
PK	2.4362G	112.01	Inf	-Inf	80.12	3	Horizontal	160	1.79	-	28.28	3.61	-
AV	2.4362G	109.57	Inf	-Inf	77.68	3	Horizontal	160	1.79	-	28.28	3.61	-
PK	2.4878G	60.86	74.00	-13.14	28.81	3	Horizontal	160	1.79	-	28.40	3.65	-
AV	2.4846G	50.16	54.00	-3.84	18.12	3	Horizontal	160	1.79	-	28.40	3.64	-

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX

2437MHz_TX

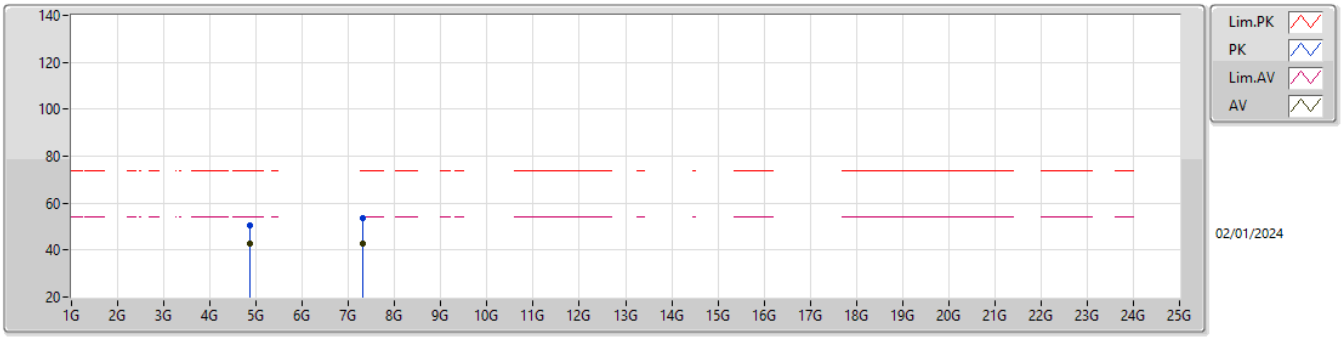


EUT Z_2TX
Setting 25
03-R-M-2

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	4.874G	51.11	74.00	-22.89	46.22	3	Vertical	350	1.39	-	33.54	6.08	34.73
AV	4.87397G	47.57	54.00	-6.43	42.68	3	Vertical	339	2.13	-	33.54	6.08	34.73
PK	7.31364G	52.78	74.00	-21.22	43.67	3	Vertical	296	1.50	-	36.83	7.66	35.38
AV	7.30932G	40.50	54.00	-13.50	31.40	3	Vertical	296	1.50	-	36.82	7.66	35.38

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX

2437MHz_TX

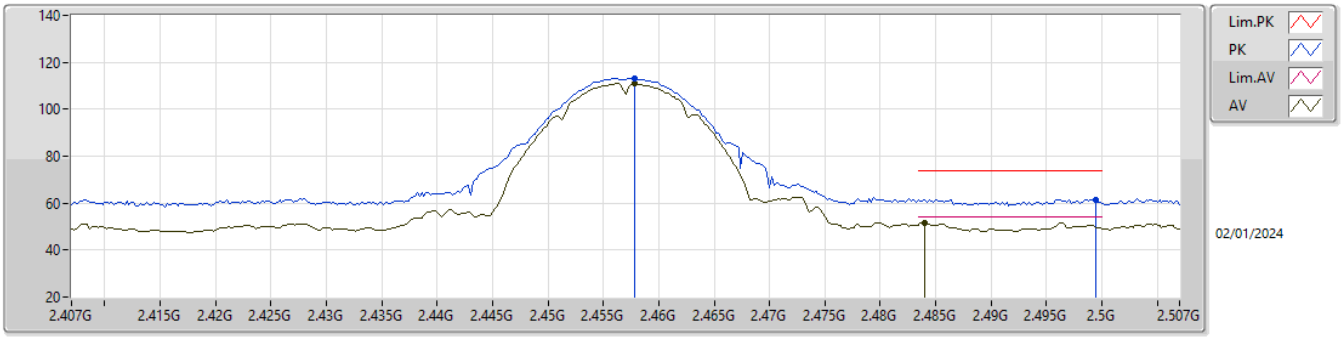


EUT Z_2TX
Setting 25
03-R-M-2

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	4.87399G	50.26	74.00	-23.74	45.37	3	Horizontal	256	2.44	-	33.54	6.08	34.73
AV	4.87395G	42.62	54.00	-11.38	37.73	3	Horizontal	256	2.44	-	33.54	6.08	34.73
PK	7.30902G	53.80	74.00	-20.20	44.70	3	Horizontal	25	2.17	-	36.82	7.66	35.38
AV	7.31004G	42.78	54.00	-11.22	33.68	3	Horizontal	25	2.17	-	36.82	7.66	35.38

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX

2457MHz_TX

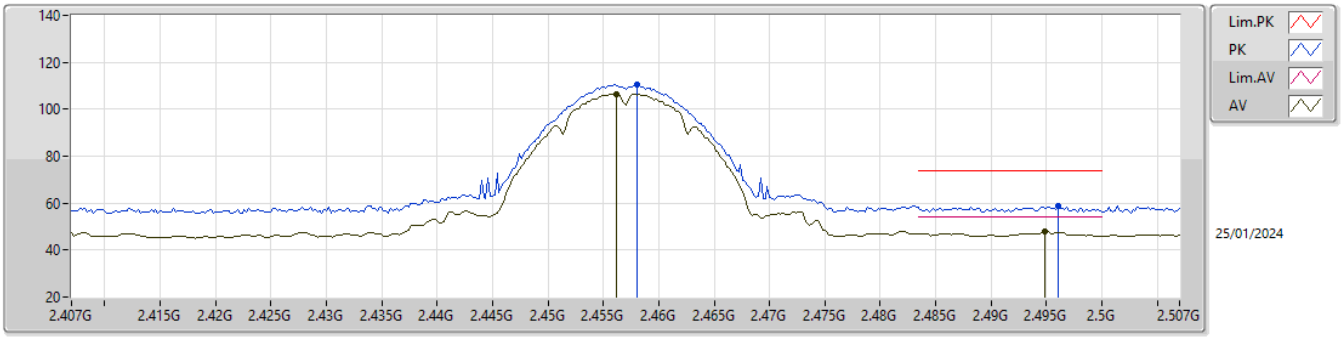


EUT Z_2TX
Setting 20
03-R-M-2

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	2.4578G	113.34	Inf	-Inf	81.36	3	Vertical	222	1.00	-	28.36	3.62	-
AV	2.4578G	110.92	Inf	-Inf	78.94	3	Vertical	222	1.00	-	28.36	3.62	-
PK	2.4994G	61.57	74.00	-12.43	29.43	3	Vertical	222	1.00	-	28.49	3.65	-
AV	2.484G	51.78	54.00	-2.22	19.74	3	Vertical	222	1.00	-	28.40	3.64	-

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX

2457MHz_TX

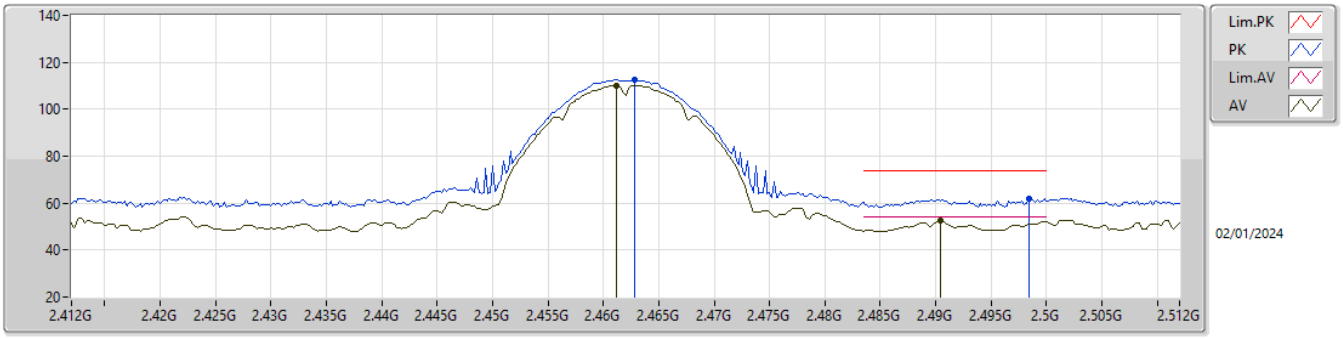


EUT Z_2TX
Setting 20
05-C-S-5

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	2.458G	110.46	Inf	-Inf	77.25	3	Horizontal	242	2.79	-	27.78	5.43	-
AV	2.4562G	106.61	Inf	-Inf	73.42	3	Horizontal	242	2.79	-	27.76	5.43	-
PK	2.496G	58.62	74.00	-15.38	25.20	3	Horizontal	242	2.79	-	27.90	5.52	-
AV	2.4948G	48.09	54.00	-5.91	14.67	3	Horizontal	242	2.79	-	27.90	5.52	-

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX

2462MHz_TX

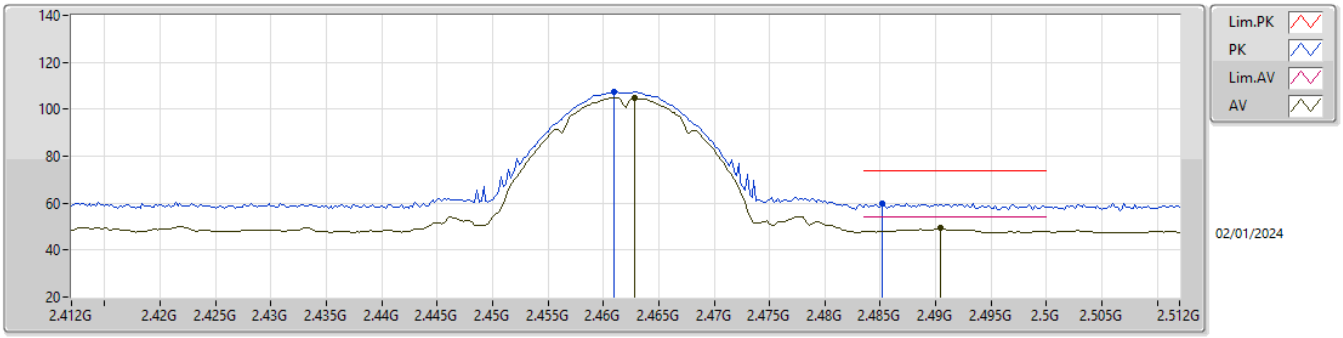


EUT Z_2TX
Setting 19
01-P-A-4

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	2.4628G	112.61	Inf	-Inf	80.59	3	Vertical	224	1.00	-	27.40	4.62	-
AV	2.4612G	110.20	Inf	-Inf	78.18	3	Vertical	224	1.00	-	27.40	4.62	-
PK	2.4984G	61.85	74.00	-12.15	29.76	3	Vertical	224	1.00	-	27.50	4.59	-
AV	2.4904G	52.64	54.00	-1.36	20.55	3	Vertical	224	1.00	-	27.50	4.59	-

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX

2462MHz_TX

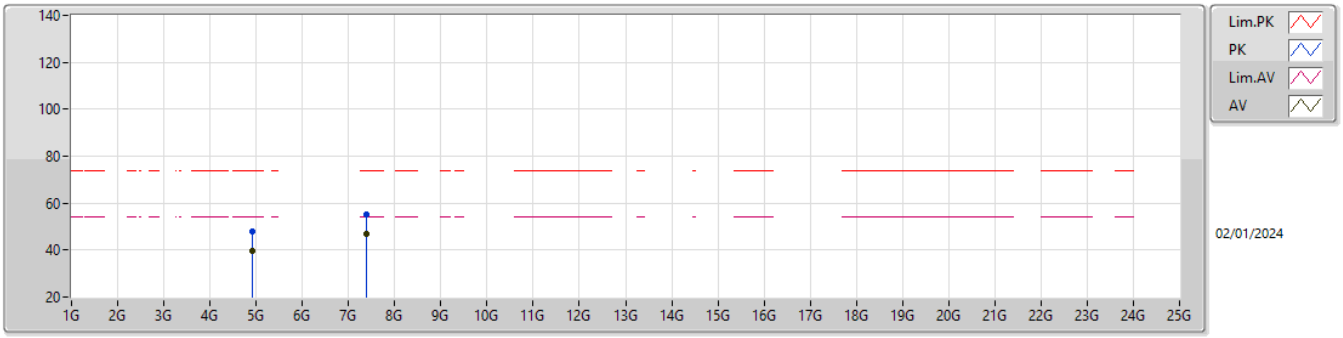


EUT Z_2TX
Setting 19
01-P-A-4

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	2.461G	107.34	Inf	-Inf	75.32	3	Horizontal	232	2.96	-	27.40	4.62	-
AV	2.4628G	104.86	Inf	-Inf	72.84	3	Horizontal	232	2.96	-	27.40	4.62	-
PK	2.4852G	59.80	74.00	-14.20	27.70	3	Horizontal	232	2.96	-	27.50	4.60	-
AV	2.4904G	49.38	54.00	-4.62	17.29	3	Horizontal	232	2.96	-	27.50	4.59	-

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX

2462MHz_TX

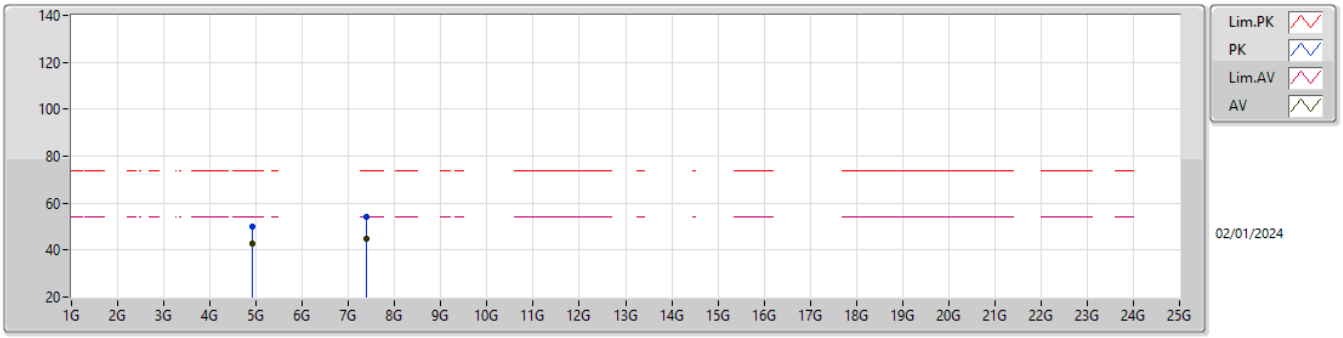


EUT Z_2TX
Setting 25
03-R-M-2

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	4.92388G	48.09	74.00	-25.91	43.05	3	Vertical	192	1.80	-	33.65	6.16	34.77
AV	4.92392G	39.89	54.00	-14.11	34.85	3	Vertical	192	1.80	-	33.65	6.16	34.77
PK	7.38424G	54.92	74.00	-19.08	45.69	3	Vertical	137	2.22	-	36.90	7.67	35.34
AV	7.38676G	47.01	54.00	-6.99	37.78	3	Vertical	137	2.22	-	36.90	7.67	35.34

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX

2462MHz_TX

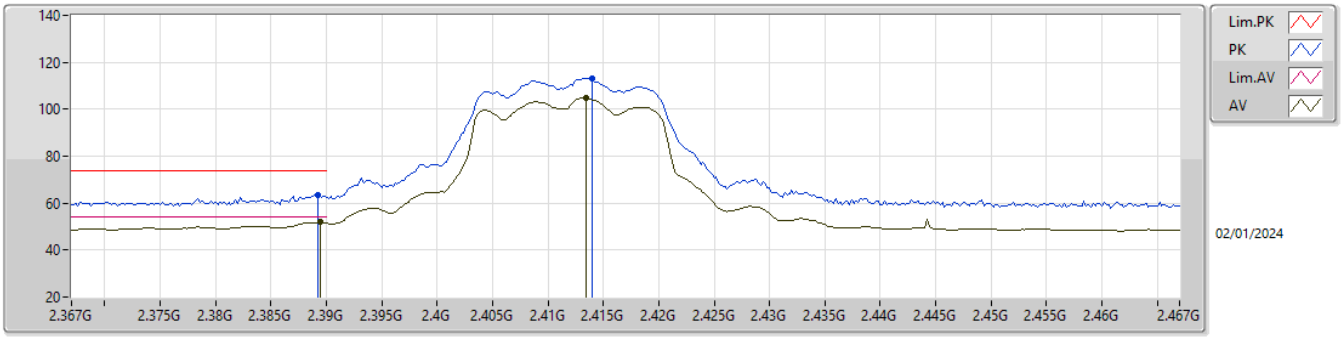


EUT Z_2TX
Setting 25
03-R-M-2

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	4.92392G	49.94	74.00	-24.06	44.90	3	Horizontal	257	2.08	-	33.65	6.16	34.77
AV	4.92396G	42.56	54.00	-11.44	37.52	3	Horizontal	257	2.08	-	33.65	6.16	34.77
PK	7.3872G	54.34	74.00	-19.66	45.11	3	Horizontal	203	1.80	-	36.90	7.67	35.34
AV	7.38672G	44.77	54.00	-9.23	35.54	3	Horizontal	203	1.80	-	36.90	7.67	35.34

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX

2412MHz_TX

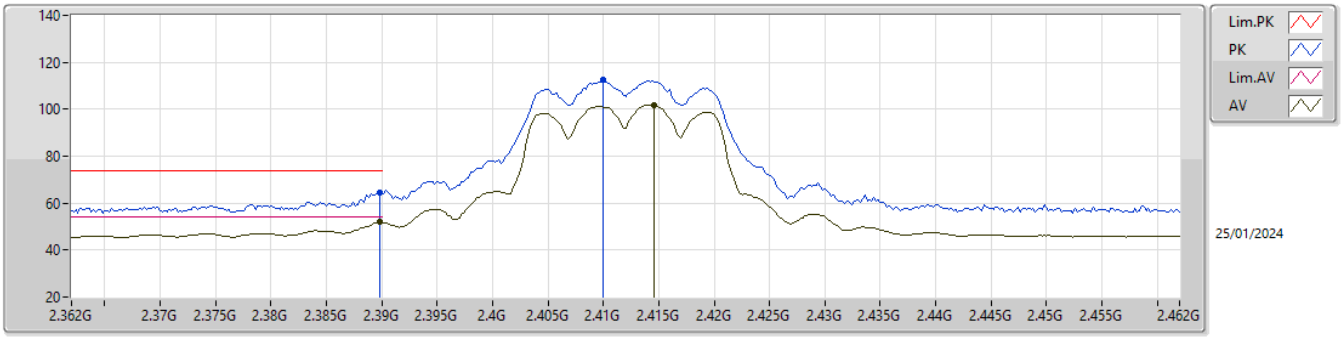


EUT Z_2TX
Setting 18.5
03-R-M-2

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	2.3892G	63.67	74.00	-10.33	31.80	3	Vertical	11	1.67	-	28.30	3.57	-
AV	2.3894G	51.98	54.00	-2.02	20.11	3	Vertical	11	1.67	-	28.30	3.57	-
PK	2.414G	113.17	Inf	-Inf	81.34	3	Vertical	11	1.67	-	28.24	3.59	-
AV	2.4134G	104.67	Inf	-Inf	72.85	3	Vertical	11	1.67	-	28.23	3.59	-

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX

2412MHz_TX

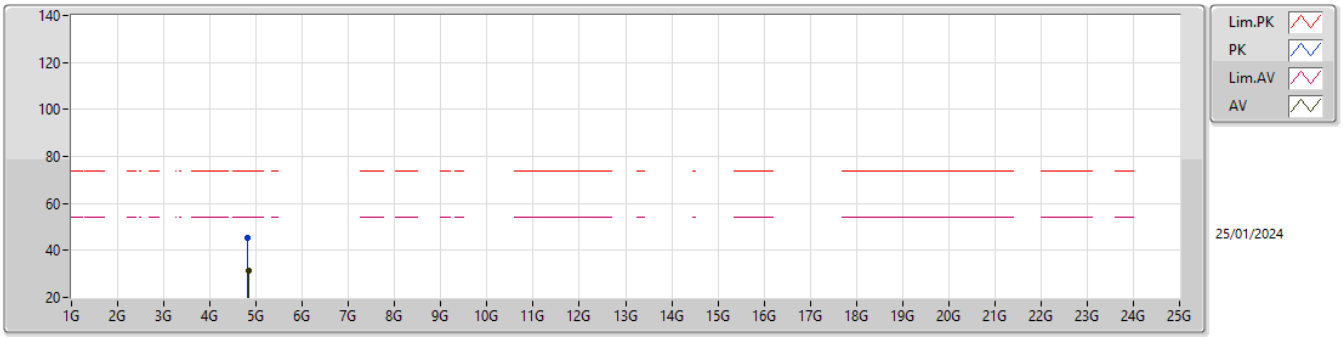


EUT Z_2TX
Setting 18.5
05-C-S-5

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	64.74	74.00	-9.26	32.05	3	Horizontal	173	2.86	-	27.40	5.29	-
AV	2.3898G	51.87	54.00	-2.13	19.18	3	Horizontal	173	2.86	-	27.40	5.29	-
PK	2.41G	112.41	Inf	-Inf	79.59	3	Horizontal	173	2.86	-	27.50	5.32	-
AV	2.4146G	101.59	Inf	-Inf	68.71	3	Horizontal	173	2.86	-	27.55	5.33	-

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX

2412MHz_TX

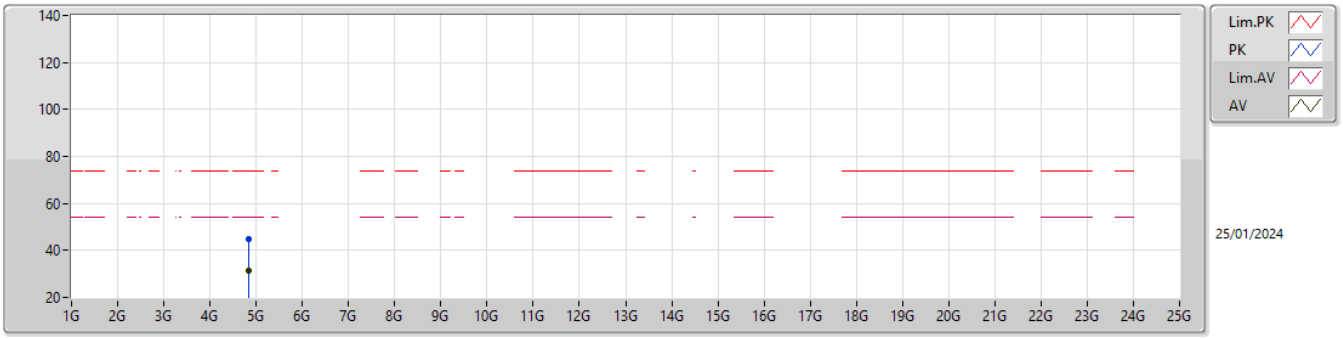


EUT Z_2TX
Setting 18.5
05-C-S-5

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	4.81832G	45.20	74.00	-28.80	41.15	3	Vertical	241	1.71	-	32.51	7.15	35.61
AV	4.82564G	31.31	54.00	-22.69	27.21	3	Vertical	241	1.71	-	32.55	7.16	35.61

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX

2412MHz_TX

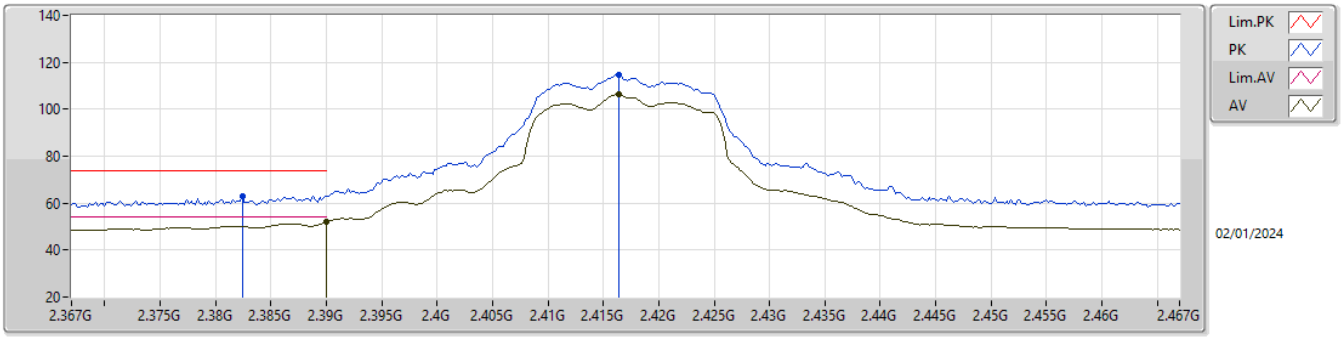


EUT Z_2TX
Setting 18.5
05-C-S-5

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	4.82908G	45.08	74.00	-28.92	40.95	3	Horizontal	214	1.02	-	32.57	7.16	35.60
AV	4.82924G	31.40	54.00	-22.60	27.26	3	Horizontal	214	1.02	-	32.58	7.16	35.60

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX

2417MHz_TX

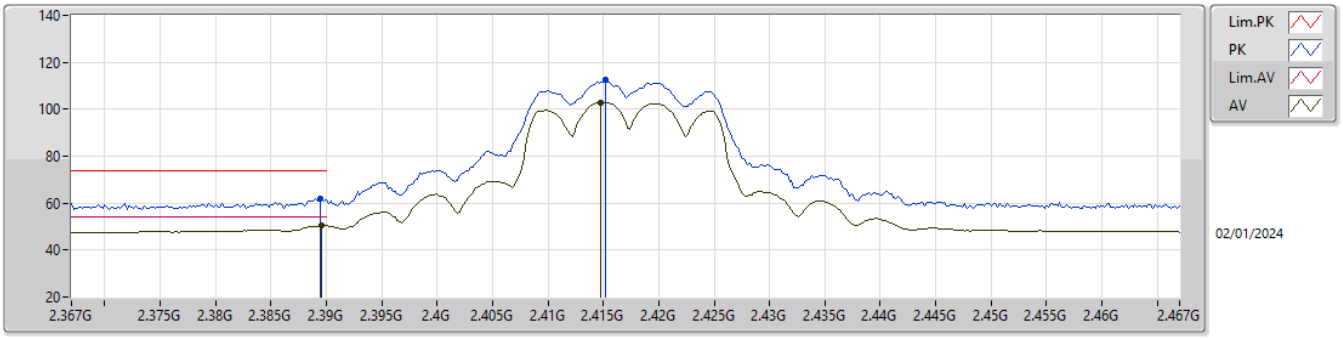


EUT Z_2TX
Setting 19.5
03-R-M-2

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	2.3824G	63.14	74.00	-10.86	31.27	3	Vertical	18	2.49	-	28.30	3.57	-
AV	2.39G	51.98	54.00	-2.02	20.11	3	Vertical	18	2.49	-	28.30	3.57	-
PK	2.4164G	114.56	Inf	-Inf	82.71	3	Vertical	18	2.49	-	28.26	3.59	-
AV	2.4164G	106.21	Inf	-Inf	74.36	3	Vertical	18	2.49	-	28.26	3.59	-

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX

2417MHz_TX

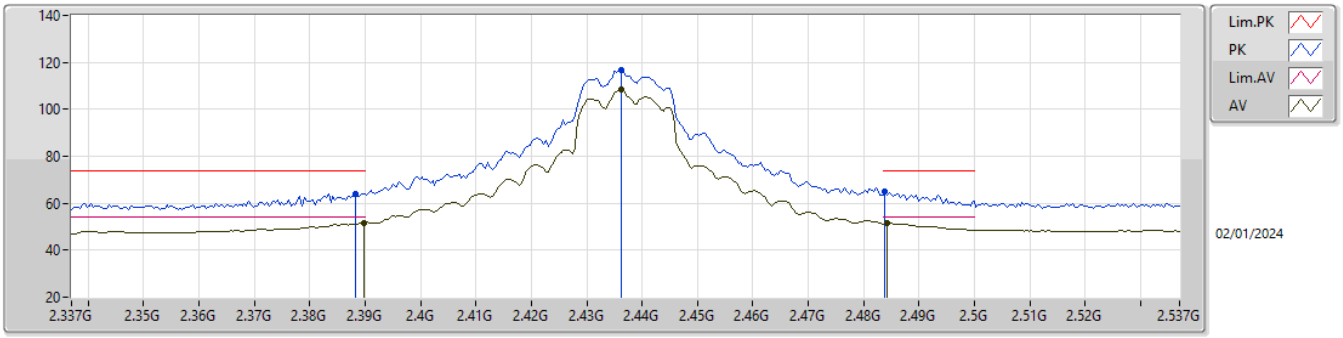


EUT Z_2TX
Setting 19.5
03-R-M-2

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	2.3894G	61.77	74.00	-12.23	29.90	3	Horizontal	164	2.81	-	28.30	3.57	-
AV	2.3896G	50.47	54.00	-3.53	18.60	3	Horizontal	164	2.81	-	28.30	3.57	-
PK	2.4152G	112.41	Inf	-Inf	80.57	3	Horizontal	164	2.81	-	28.25	3.59	-
AV	2.4148G	102.89	Inf	-Inf	71.05	3	Horizontal	164	2.81	-	28.25	3.59	-

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX

2437MHz_TX

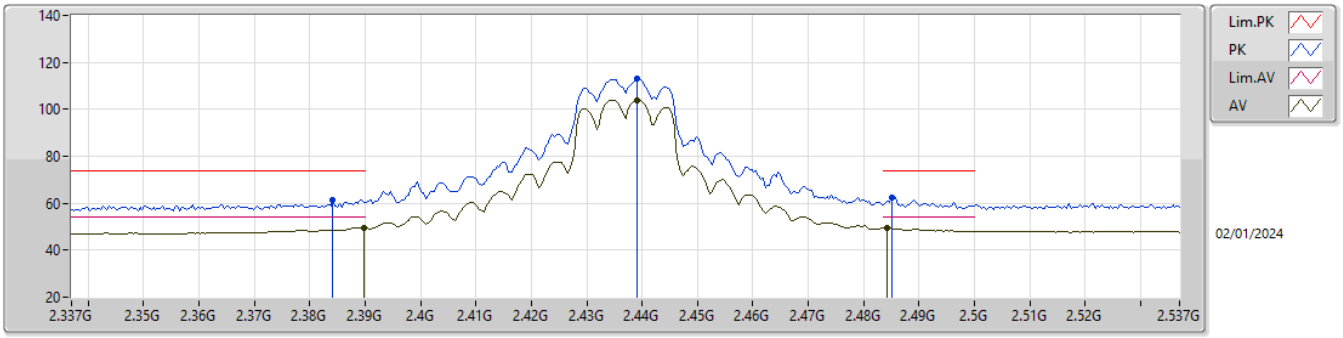


EUT Z_2TX
Setting 21.5
03-R-M-2

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	2.3882G	64.15	74.00	-9.85	32.28	3	Vertical	6	1.80	-	28.30	3.57	-
AV	2.3898G	51.63	54.00	-2.37	19.76	3	Vertical	6	1.80	-	28.30	3.57	-
PK	2.4362G	116.51	Inf	-Inf	84.62	3	Vertical	6	1.80	-	28.28	3.61	-
AV	2.4362G	108.33	Inf	-Inf	76.44	3	Vertical	6	1.80	-	28.28	3.61	-
PK	2.4838G	64.95	74.00	-9.05	32.91	3	Vertical	6	1.80	-	28.40	3.64	-
AV	2.4842G	51.41	54.00	-2.59	19.37	3	Vertical	6	1.80	-	28.40	3.64	-

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX

2437MHz_TX

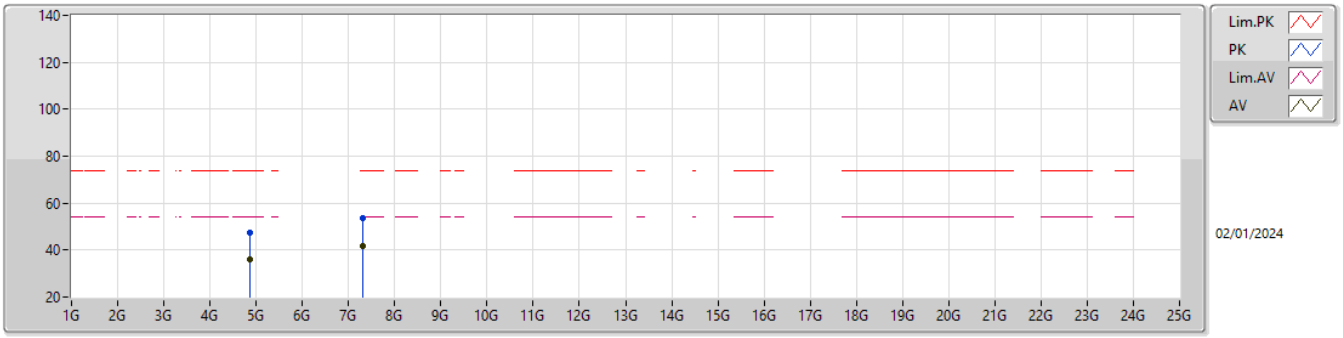


EUT Z_2TX
Setting 21.5
03-R-M-2

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	2.3842G	61.47	74.00	-12.53	29.60	3	Horizontal	155	1.38	-	28.30	3.57	-
AV	2.3898G	49.60	54.00	-4.40	17.73	3	Horizontal	155	1.38	-	28.30	3.57	-
PK	2.439G	113.11	Inf	-Inf	81.28	3	Horizontal	155	1.38	-	28.22	3.61	-
AV	2.439G	103.97	Inf	-Inf	72.14	3	Horizontal	155	1.38	-	28.22	3.61	-
PK	2.485G	62.17	74.00	-11.83	30.13	3	Horizontal	155	1.38	-	28.40	3.64	-
AV	2.4842G	49.71	54.00	-4.29	17.67	3	Horizontal	155	1.38	-	28.40	3.64	-

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX

2437MHz_TX

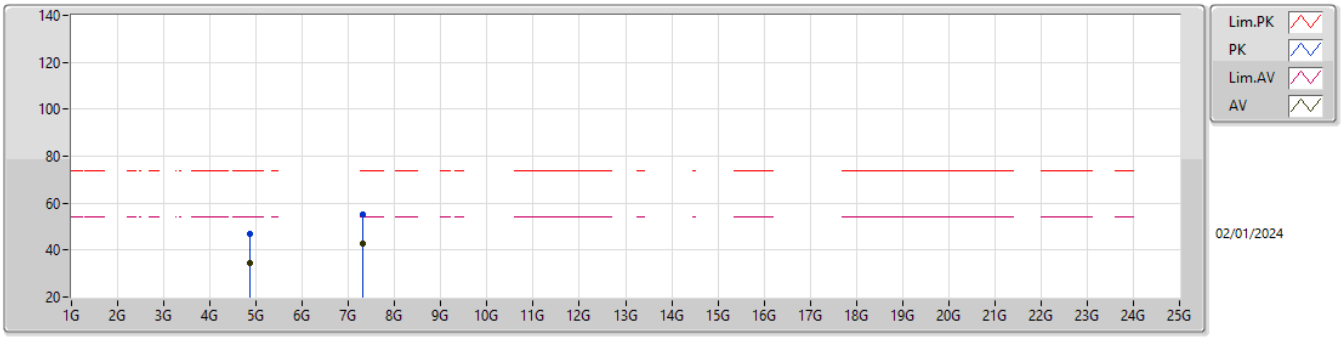


EUT Z_2TX
Setting 25
03-R-M-2

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	4.8696G	47.48	74.00	-26.52	42.62	3	Vertical	351	1.71	-	33.52	6.07	34.73
AV	4.874G	35.99	54.00	-18.01	31.10	3	Vertical	351	1.71	-	33.54	6.08	34.73
PK	7.3063G	53.58	74.00	-20.42	44.49	3	Vertical	217	1.97	-	36.81	7.66	35.38
AV	7.3112G	41.67	54.00	-12.33	32.57	3	Vertical	217	1.97	-	36.82	7.66	35.38

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX

2437MHz_TX

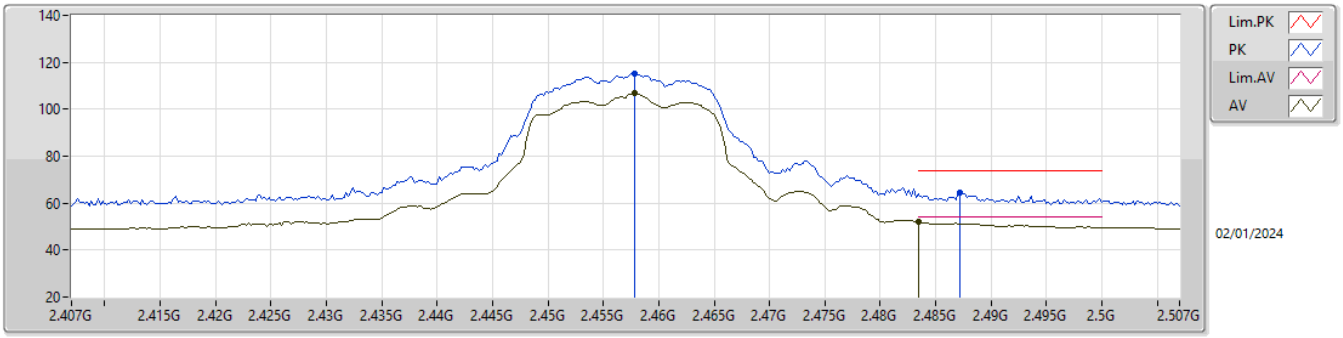


EUT Z_2TX
Setting 25
03-R-M-2

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	4.8695G	46.94	74.00	-27.06	42.08	3	Horizontal	261	2.50	-	33.52	6.07	34.73
AV	4.8721G	34.71	54.00	-19.29	29.83	3	Horizontal	261	2.50	-	33.53	6.08	34.73
PK	7.3111G	55.18	74.00	-18.82	46.08	3	Horizontal	20	1.00	-	36.82	7.66	35.38
AV	7.3114G	42.72	54.00	-11.28	33.62	3	Horizontal	20	1.00	-	36.82	7.66	35.38

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX

2457MHz_TX

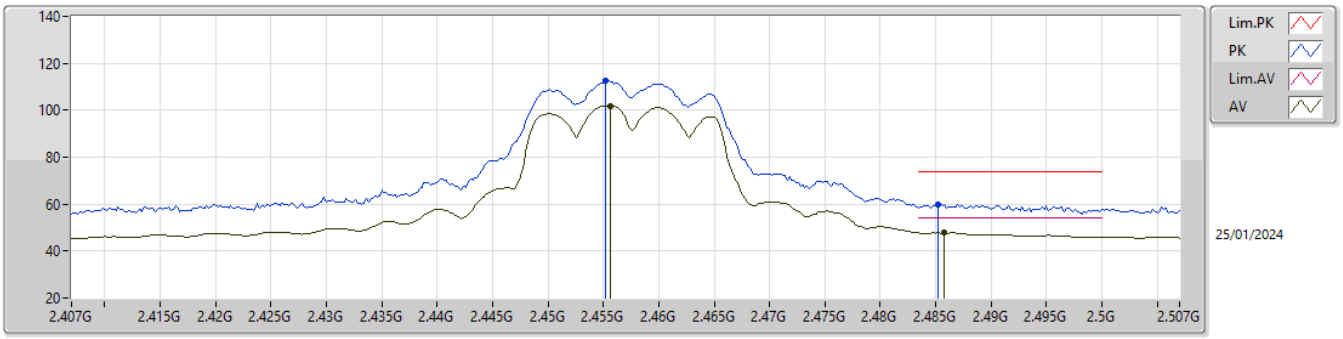


EUT Z_2TX
Setting 18.5
03-R-M-2

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	2.4578G	115.18	Inf	-Inf	83.20	3	Vertical	262	1.00	-	28.36	3.62	-
AV	2.4578G	106.66	Inf	-Inf	74.68	3	Vertical	262	1.00	-	28.36	3.62	-
PK	2.4872G	64.47	74.00	-9.53	32.42	3	Vertical	262	1.00	-	28.40	3.65	-
AV	2.4835G	52.15	54.00	-1.85	20.11	3	Vertical	262	1.00	-	28.40	3.64	-

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX

2457MHz_TX

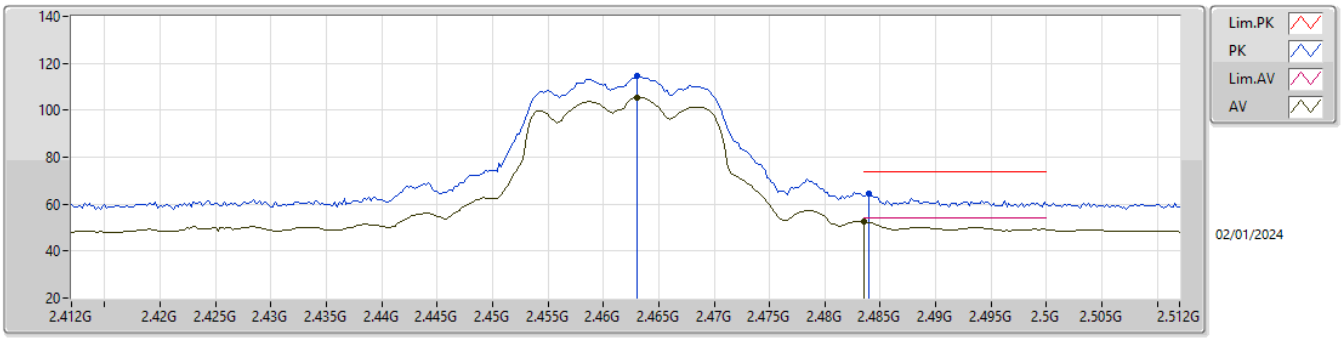


EUT Z_2TX
Setting 18.5
05-C-S-5

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	2.4552G	112.64	Inf	-Inf	80.11	3	Horizontal	146	2.51	-	27.75	4.78	-
AV	2.4556G	101.89	Inf	-Inf	69.35	3	Horizontal	146	2.51	-	27.76	4.78	-
PK	2.4852G	60.08	74.00	-13.92	27.36	3	Horizontal	146	2.51	-	27.90	4.82	-
AV	2.4858G	47.76	54.00	-6.24	15.04	3	Horizontal	146	2.51	-	27.90	4.82	-

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX

2462MHz_TX

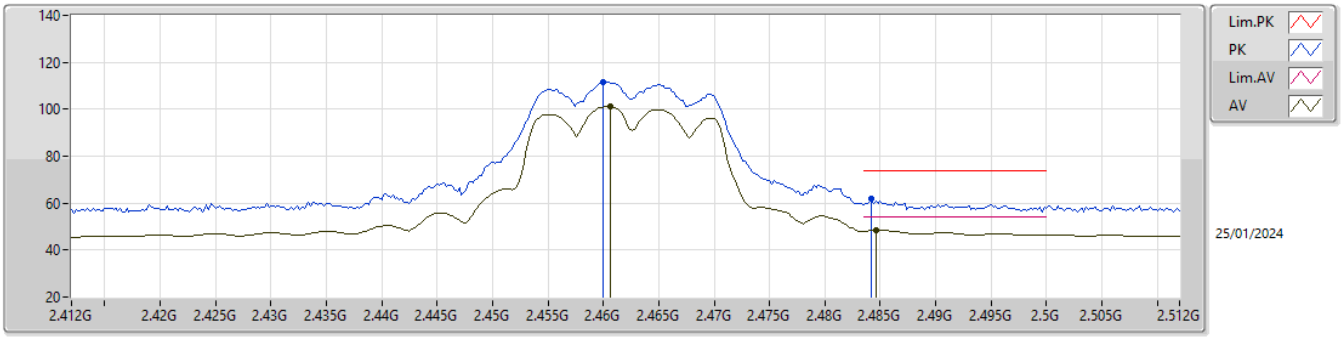


EUT Z_2TX
Setting 17
03-R-M-2

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	114.44	Inf	-Inf	82.38	3	Vertical	285	1.00	-	28.43	3.63	-
AV	2.463G	105.46	Inf	-Inf	73.40	3	Vertical	285	1.00	-	28.43	3.63	-
PK	2.484G	64.28	74.00	-9.72	32.24	3	Vertical	285	1.00	-	28.40	3.64	-
AV	2.4835G	52.83	54.00	-1.17	20.79	3	Vertical	285	1.00	-	28.40	3.64	-

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX

2462MHz_TX

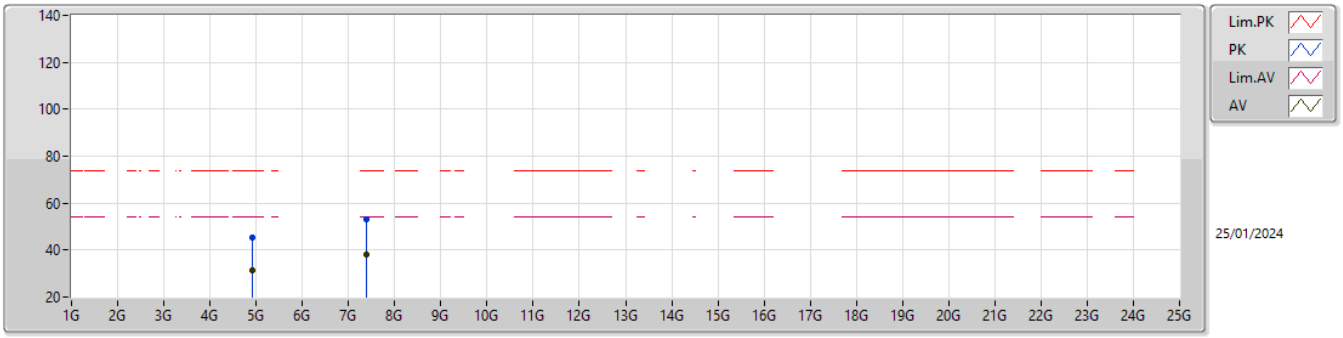


EUT Z_2TX
Setting 17
05-C-S-5

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	2.46G	111.73	Inf	-Inf	78.49	3	Horizontal	147	2.51	-	27.80	5.44	-
AV	2.4606G	101.03	Inf	-Inf	67.79	3	Horizontal	147	2.51	-	27.80	5.44	-
PK	2.4842G	61.76	74.00	-12.24	28.37	3	Horizontal	147	2.51	-	27.90	5.49	-
AV	2.4846G	48.50	54.00	-5.50	15.11	3	Horizontal	147	2.51	-	27.90	5.49	-

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX

2462MHz_TX

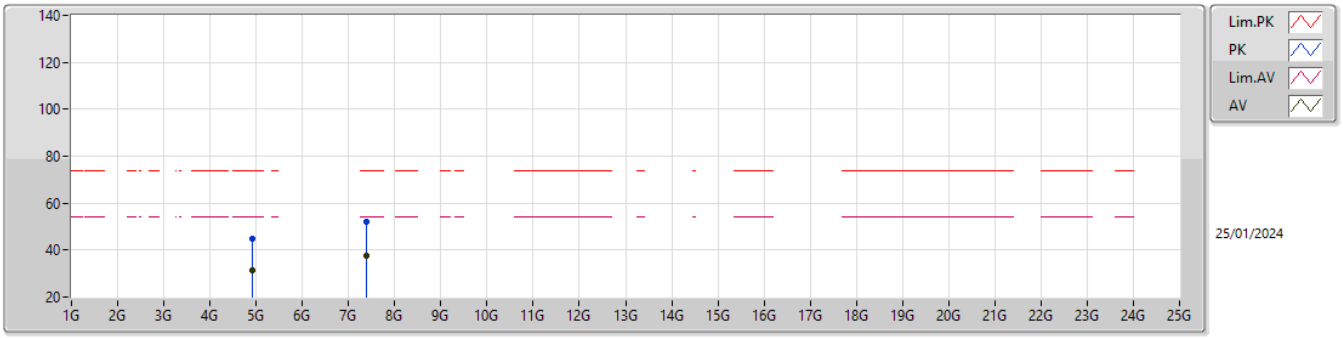


EUT Z_2TX
Setting 17
05-C-S-5

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	4.92884G	45.57	74.00	-28.43	41.11	3	Vertical	138	2.30	-	32.82	7.22	35.58
AV	4.92484G	31.50	54.00	-22.50	27.07	3	Vertical	138	2.30	-	32.80	7.21	35.58
PK	7.39016G	52.99	74.00	-21.01	42.36	3	Vertical	117	2.83	-	36.62	8.64	34.63
AV	7.3804G	37.87	54.00	-16.13	27.25	3	Vertical	117	2.83	-	36.64	8.63	34.65

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX

2462MHz_TX

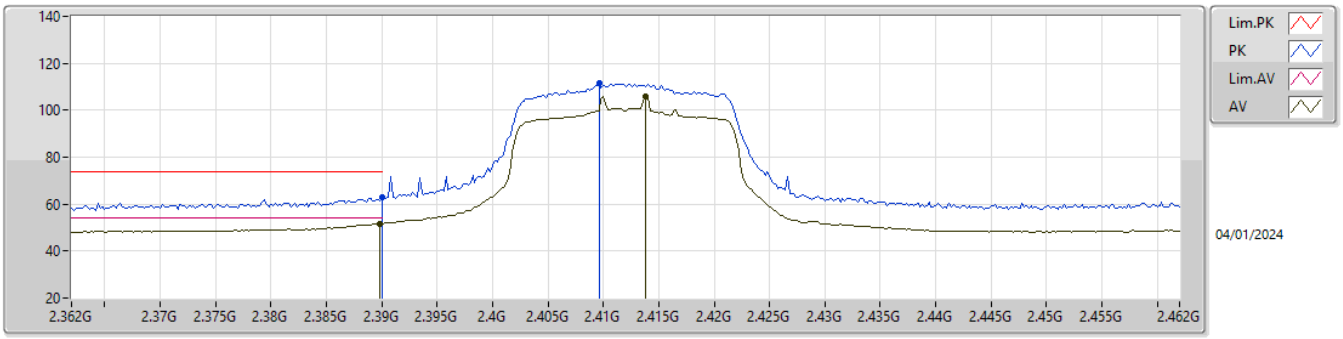


EUT Z_2TX
Setting 17
05-C-S-5

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	4.91676G	45.00	74.00	-29.00	40.60	3	Horizontal	181	2.64	-	32.77	7.21	35.58
AV	4.92628G	31.51	54.00	-22.49	27.06	3	Horizontal	181	2.64	-	32.81	7.22	35.58
PK	7.382G	51.99	74.00	-22.01	41.36	3	Horizontal	136	2.17	-	36.64	8.63	34.64
AV	7.38092G	37.84	54.00	-16.16	27.22	3	Horizontal	136	2.17	-	36.64	8.63	34.65

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

2412MHz_TX

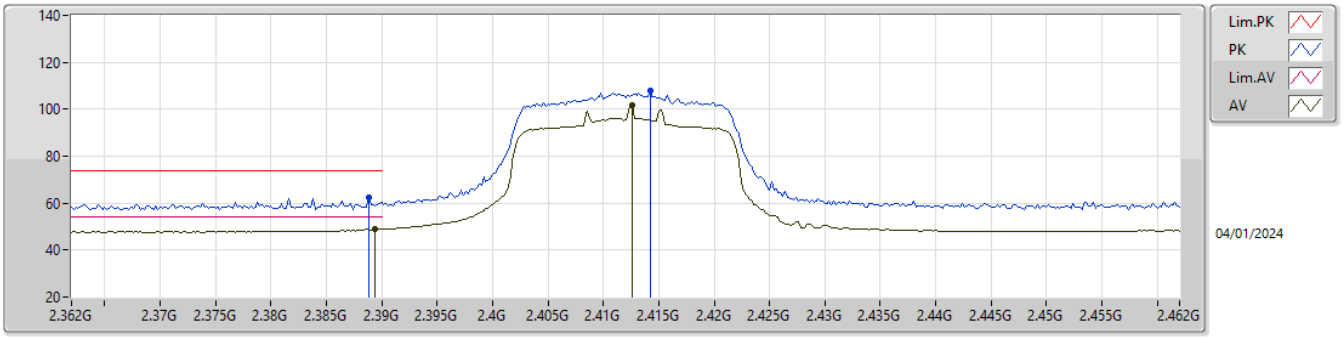


EUT Z_2TX
Setting 19
03-R-M-2

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	62.78	74.00	-11.22	30.91	3	Vertical	54	1.05	-	28.30	3.57	-
AV	2.3898G	51.62	54.00	-2.38	19.75	3	Vertical	54	1.05	-	28.30	3.57	-
PK	2.4096G	111.66	Inf	-Inf	79.87	3	Vertical	54	1.05	-	28.20	3.59	-
AV	2.4138G	105.95	Inf	-Inf	74.12	3	Vertical	54	1.05	-	28.24	3.59	-

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

2412MHz_TX

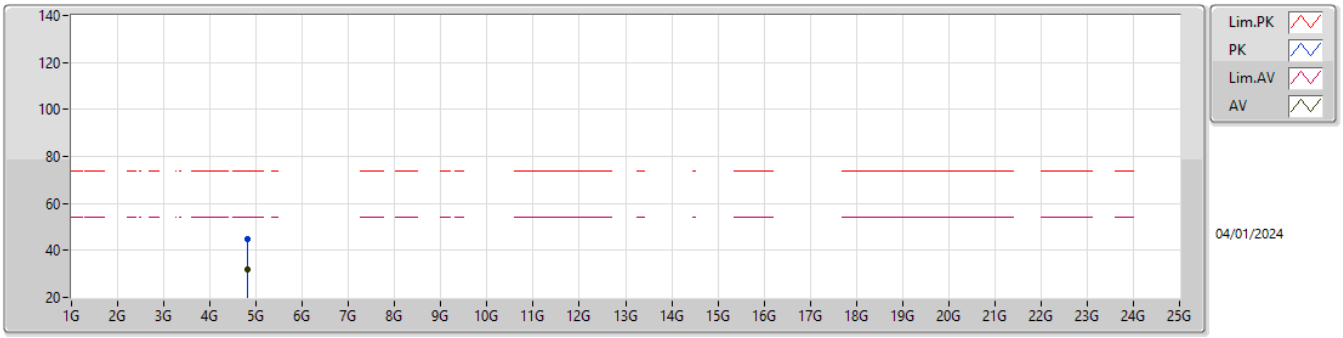


EUT Z_2TX
Setting 19
03-R-M-2

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	62.67	74.00	-11.33	30.80	3	Horizontal	230	2.78	-	28.30	3.57	-
AV	2.3894G	48.99	54.00	-5.01	17.12	3	Horizontal	230	2.78	-	28.30	3.57	-
PK	2.4142G	107.93	Inf	-Inf	76.10	3	Horizontal	230	2.78	-	28.24	3.59	-
AV	2.4126G	101.87	Inf	-Inf	70.05	3	Horizontal	230	2.78	-	28.23	3.59	-

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

2412MHz_TX

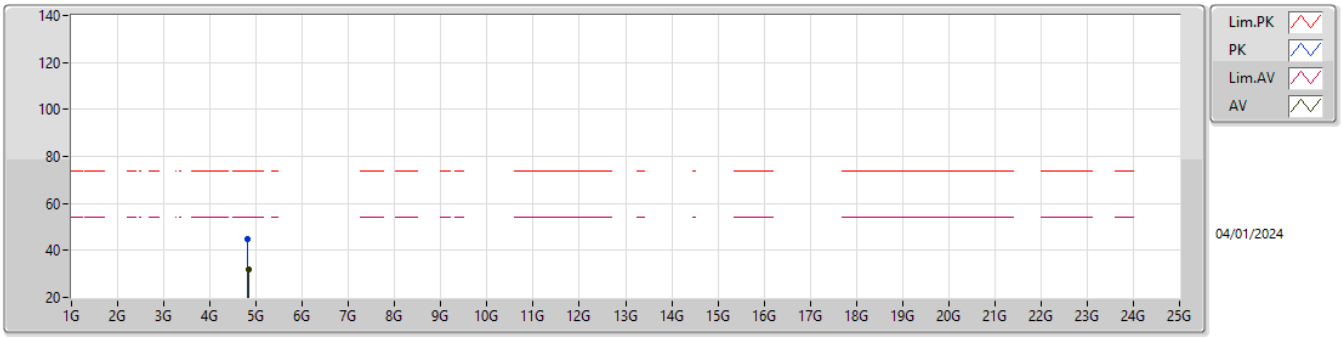


EUT Z_2TX
Setting 19
05-E-G-4

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	4.82408G	44.92	74.00	-29.08	40.84	3	Vertical	305	2.96	-	32.54	7.15	35.61
AV	4.82364G	31.67	54.00	-22.33	27.59	3	Vertical	305	2.96	-	32.54	7.15	35.61

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

2412MHz_TX

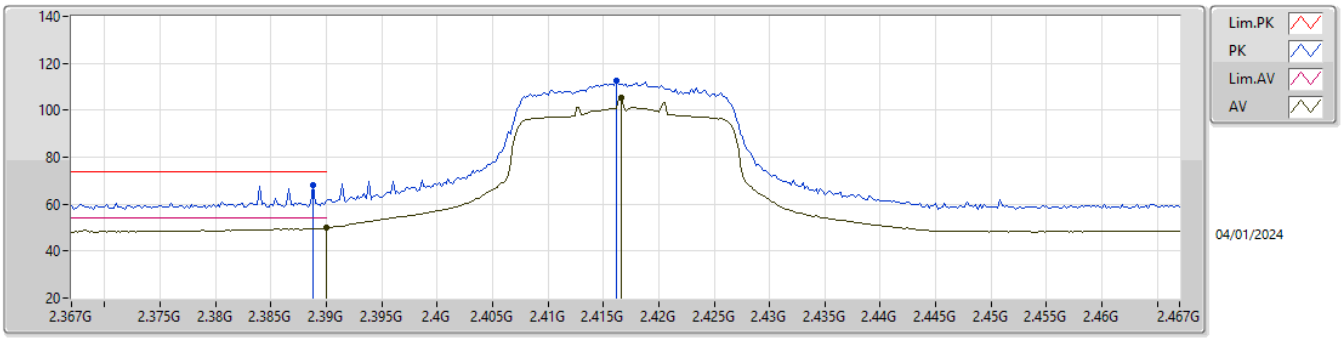


EUT Z_2TX
Setting 19
05-E-G-4

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	4.81964G	44.99	74.00	-29.01	40.93	3	Horizontal	5	2.27	-	32.52	7.15	35.61
AV	4.82608G	31.71	54.00	-22.29	27.60	3	Horizontal	5	2.27	-	32.56	7.16	35.61

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

2417MHz_TX

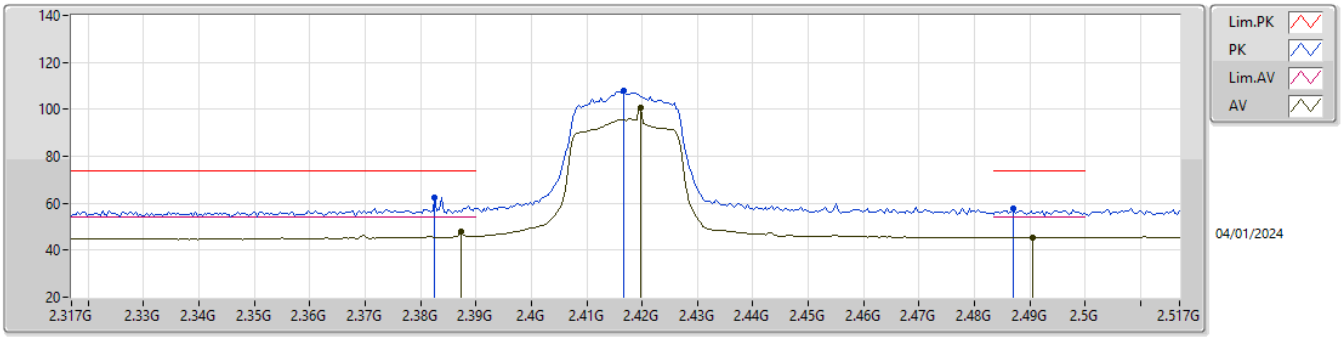


EUT Z_2TX
Setting 19
03-R-M-2

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	68.04	74.00	-5.96	36.17	3	Vertical	50	1.00	-	28.30	3.57	-
AV	2.39G	49.96	54.00	-4.04	18.09	3	Vertical	50	1.00	-	28.30	3.57	-
PK	2.4162G	112.53	Inf	-Inf	80.68	3	Vertical	50	1.00	-	28.26	3.59	-
AV	2.4166G	105.43	Inf	-Inf	73.57	3	Vertical	50	1.00	-	28.27	3.59	-

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

2417MHz_TX

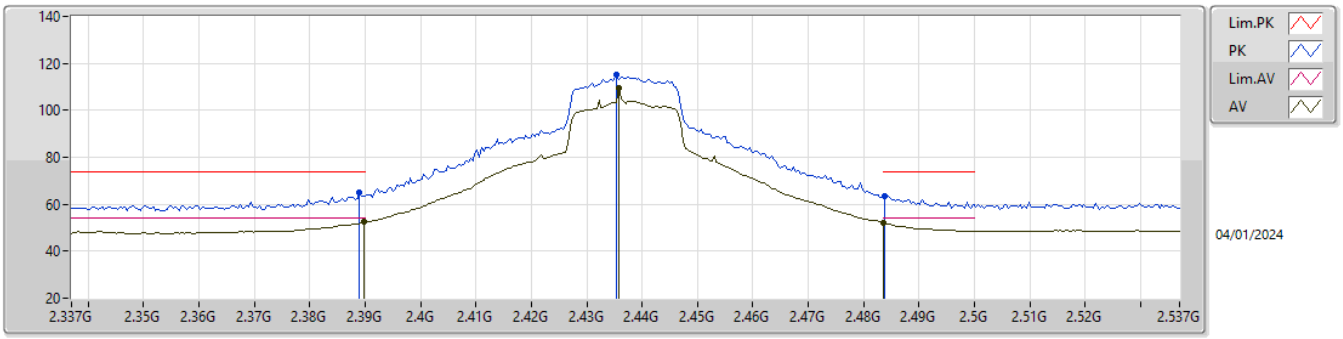


EUT Z_2TX
Setting 19
05-E-G-4

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	2.3826G	62.57	74.00	-11.43	29.96	3	Horizontal	239	2.49	-	27.33	5.28	-
AV	2.3874G	47.91	54.00	-6.09	15.26	3	Horizontal	239	2.49	-	27.37	5.28	-
PK	2.4166G	107.83	Inf	-Inf	74.92	3	Horizontal	239	2.49	-	27.57	5.34	-
AV	2.4198G	100.64	Inf	-Inf	67.69	3	Horizontal	239	2.49	-	27.60	5.35	-
PK	2.487G	57.51	74.00	-16.49	24.11	3	Horizontal	239	2.49	-	27.90	5.50	-
AV	2.4906G	45.51	54.00	-8.49	12.10	3	Horizontal	239	2.49	-	27.90	5.51	-

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

2437MHz_TX

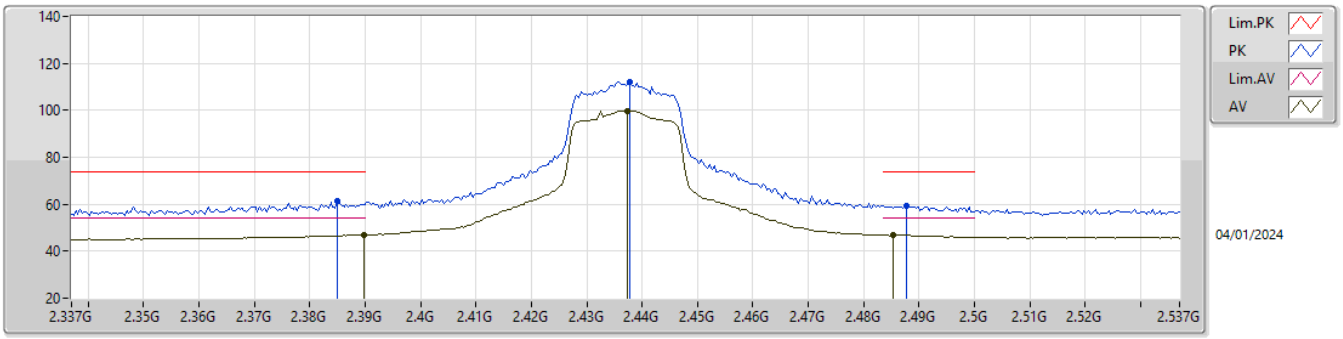


EUT Z_2TX
Setting 23
03-R-M-2

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	65.09	74.00	-8.91	33.22	3	Vertical	37	1.39	-	28.30	3.57	-
AV	2.3898G	52.34	54.00	-1.66	20.47	3	Vertical	37	1.39	-	28.30	3.57	-
PK	2.4354G	115.09	Inf	-Inf	83.19	3	Vertical	37	1.39	-	28.29	3.61	-
AV	2.4358G	109.25	Inf	-Inf	77.36	3	Vertical	37	1.39	-	28.28	3.61	-
PK	2.4838G	63.23	74.00	-10.77	31.19	3	Vertical	37	1.39	-	28.40	3.64	-
AV	2.4835G	51.96	54.00	-2.04	19.92	3	Vertical	37	1.39	-	28.40	3.64	-

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

2437MHz_TX

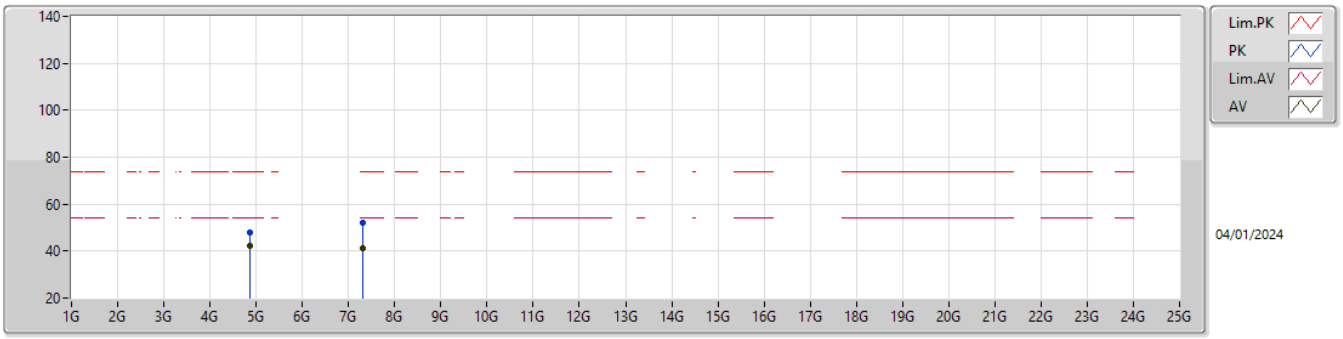


EUT Z_2TX
Setting 23
05-E-G-4

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	2.385G	61.33	74.00	-12.67	28.70	3	Horizontal	238	2.29	-	27.35	5.28	-
AV	2.3898G	47.09	54.00	-6.91	14.40	3	Horizontal	238	2.29	-	27.40	5.29	-
PK	2.4378G	112.29	Inf	-Inf	79.20	3	Horizontal	238	2.29	-	27.70	5.39	-
AV	2.4374G	99.81	Inf	-Inf	66.72	3	Horizontal	238	2.29	-	27.70	5.39	-
PK	2.4878G	59.40	74.00	-14.60	26.00	3	Horizontal	238	2.29	-	27.90	5.50	-
AV	2.4854G	46.90	54.00	-7.10	13.50	3	Horizontal	238	2.29	-	27.90	5.50	-

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

2437MHz_TX

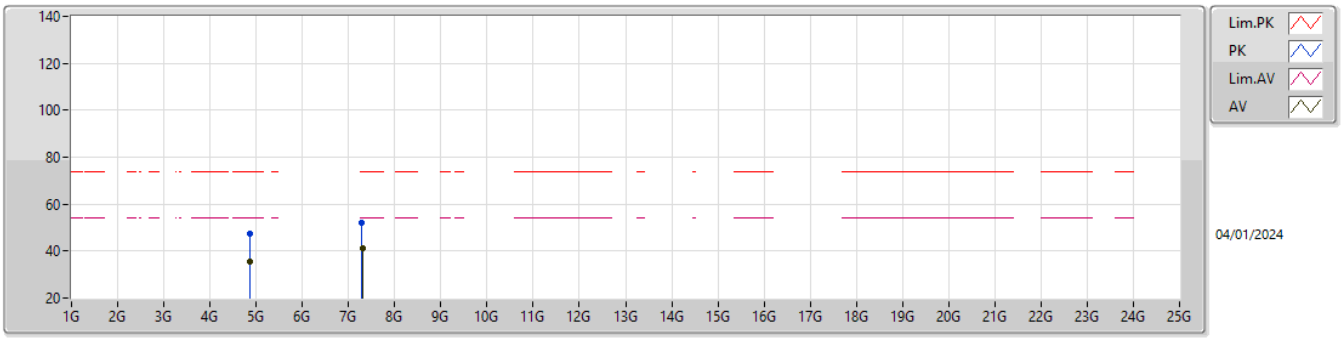


EUT Z_2TX
Setting 23
03-R-M-2

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	4.87611G	48.01	74.00	-25.99	43.10	3	Vertical	338	1.80	-	33.56	6.08	34.73
AV	4.874G	42.14	54.00	-11.86	37.25	3	Vertical	338	1.80	-	33.54	6.08	34.73
PK	7.29708G	51.84	74.00	-22.16	42.78	3	Vertical	222	1.80	-	36.79	7.66	35.39
AV	7.3118G	41.02	54.00	-12.98	31.92	3	Vertical	222	1.80	-	36.82	7.66	35.38

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

2437MHz_TX

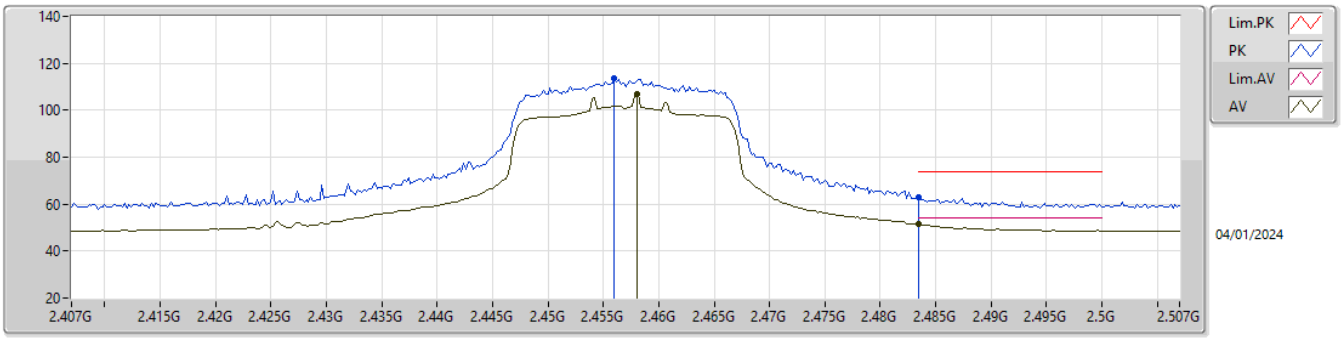


EUT Z_2TX
Setting 23
03-R-M-2

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	4.8744G	47.39	74.00	-26.61	42.49	3	Horizontal	256	2.76	-	33.55	6.08	34.73
AV	4.8735G	35.57	54.00	-18.43	30.68	3	Horizontal	256	2.76	-	33.54	6.08	34.73
PK	7.27388G	52.19	74.00	-21.81	43.23	3	Horizontal	338	1.88	-	36.70	7.66	35.40
AV	7.3126G	41.39	54.00	-12.61	32.28	3	Horizontal	338	1.88	-	36.83	7.66	35.38

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

2457MHz_TX

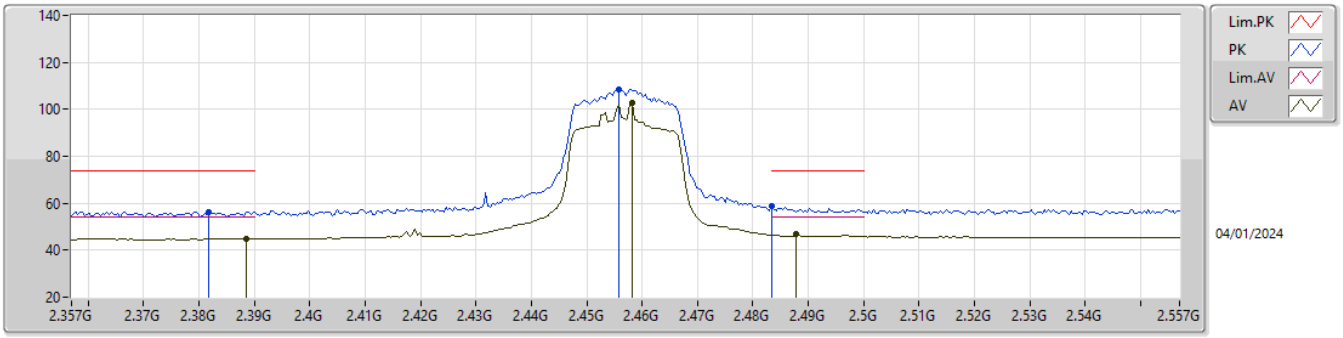


EUT Z_2TX
Setting 20
03-R-M-2

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	2.456G	113.41	Inf	-Inf	81.47	3	Vertical	238	1.30	-	28.32	3.62	-
AV	2.458G	106.93	Inf	-Inf	74.95	3	Vertical	238	1.30	-	28.36	3.62	-
PK	2.4835G	62.70	74.00	-11.30	30.66	3	Vertical	238	1.30	-	28.40	3.64	-
AV	2.4835G	51.57	54.00	-2.43	19.53	3	Vertical	238	1.30	-	28.40	3.64	-

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

2457MHz_TX

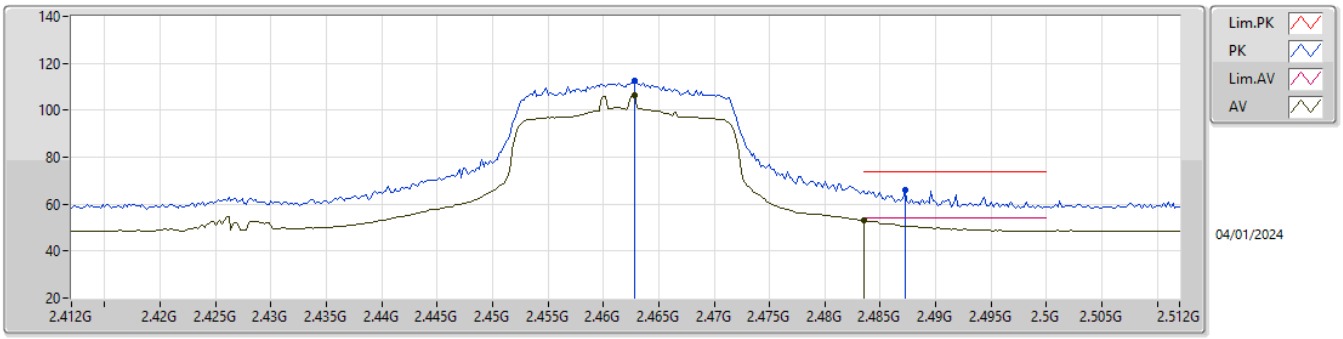


EUT Z_2TX
Setting 20
05-E-G-4

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	2.3818G	56.34	74.00	-17.66	23.74	3	Horizontal	114	2.06	-	27.32	5.28	-
AV	2.3886G	44.82	54.00	-9.18	12.14	3	Horizontal	114	2.06	-	27.39	5.29	-
PK	2.4558G	108.41	Inf	-Inf	75.22	3	Horizontal	114	2.06	-	27.76	5.43	-
AV	2.4582G	102.76	Inf	-Inf	69.55	3	Horizontal	114	2.06	-	27.78	5.43	-
PK	2.4835G	59.02	74.00	-14.98	25.63	3	Horizontal	114	2.06	-	27.90	5.49	-
AV	2.4878G	46.79	54.00	-7.21	13.39	3	Horizontal	114	2.06	-	27.90	5.50	-

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

2462MHz_TX

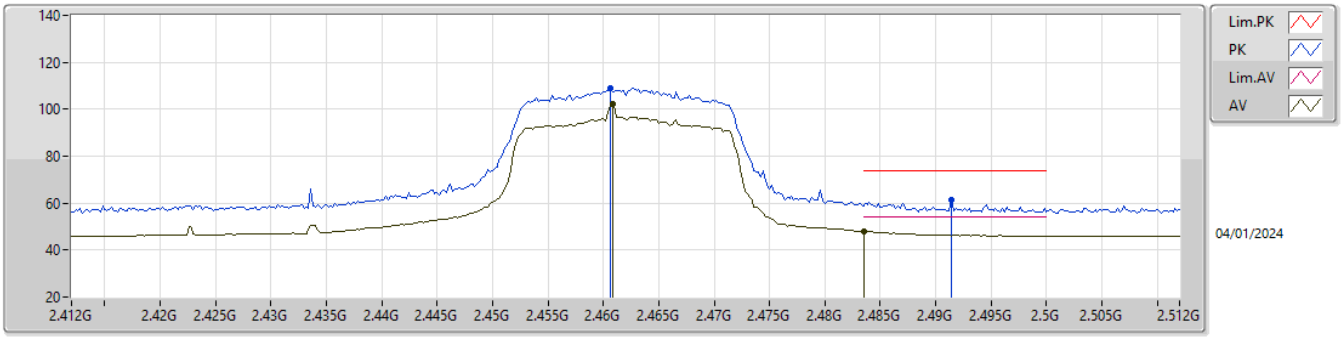


EUT Z_2TX
Setting 19
03-R-M-2

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	2.4628G	112.56	Inf	-Inf	80.50	3	Vertical	71	1.80	-	28.43	3.63	-
AV	2.4628G	106.63	Inf	-Inf	74.57	3	Vertical	71	1.80	-	28.43	3.63	-
PK	2.4872G	65.80	74.00	-8.20	33.75	3	Vertical	71	1.80	-	28.40	3.65	-
AV	2.4835G	52.86	54.00	-1.14	20.82	3	Vertical	71	1.80	-	28.40	3.64	-

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

2462MHz_TX

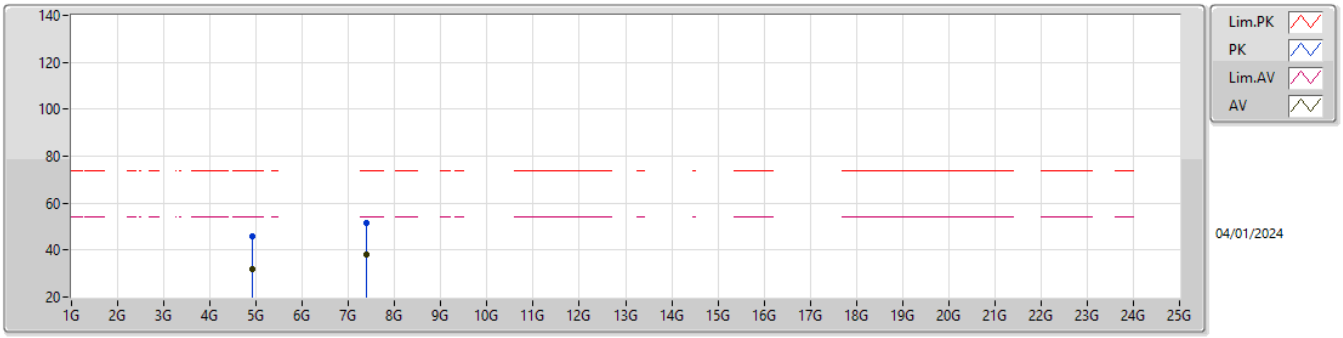


EUT Z_2TX
Setting 19
05-E-G-4

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	2.4606G	109.17	Inf	-Inf	75.93	3	Horizontal	123	2.91	-	27.80	5.44	-
AV	2.4608G	102.19	Inf	-Inf	68.95	3	Horizontal	123	2.91	-	27.80	5.44	-
PK	2.4914G	61.43	74.00	-12.57	28.02	3	Horizontal	123	2.91	-	27.90	5.51	-
AV	2.4835G	48.07	54.00	-5.93	14.68	3	Horizontal	123	2.91	-	27.90	5.49	-

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

2462MHz_TX

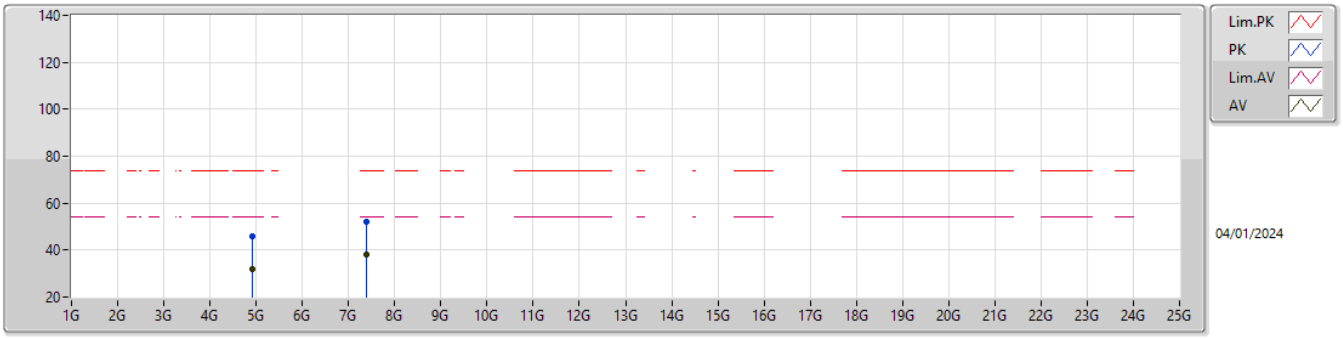


EUT Z_2TX
Setting 19
05-E-G-4

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	4.90924G	45.81	74.00	-28.19	41.44	3	Vertical	265	1.93	-	32.74	7.21	35.58
AV	4.92628G	31.89	54.00	-22.11	27.44	3	Vertical	265	1.93	-	32.81	7.22	35.58
PK	7.3869G	51.73	74.00	-22.27	41.11	3	Vertical	349	2.65	-	36.63	8.63	34.64
AV	7.37472G	38.23	54.00	-15.77	27.61	3	Vertical	349	2.65	-	36.65	8.63	34.66

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

2462MHz_TX

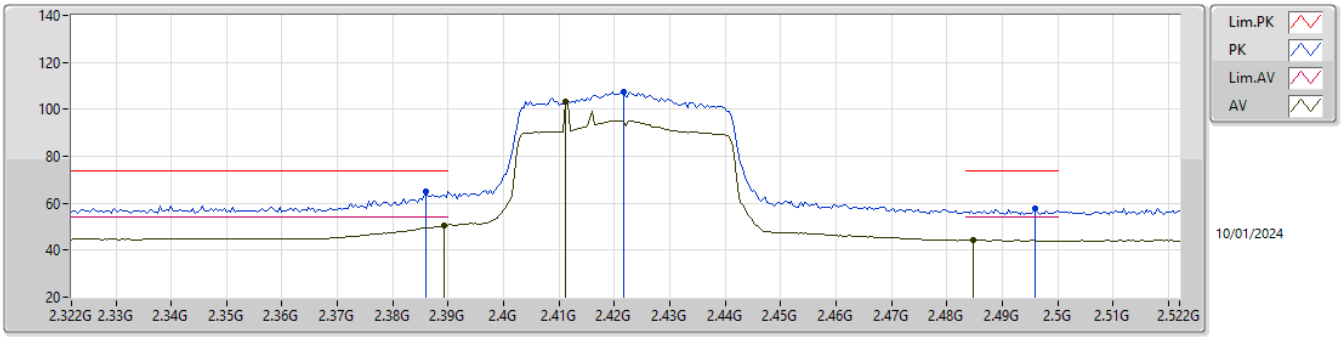


EUT Z_2TX
Setting 19
05-E-G-4

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	4.92868G	45.92	74.00	-28.08	41.47	3	Horizontal	284	1.96	-	32.81	7.22	35.58
AV	4.90984G	31.95	54.00	-22.05	27.58	3	Horizontal	284	1.96	-	32.74	7.21	35.58
PK	7.39986G	52.06	74.00	-21.94	41.43	3	Horizontal	311	2.74	-	36.60	8.64	34.61
AV	7.38384G	38.23	54.00	-15.77	27.61	3	Horizontal	311	2.74	-	36.63	8.63	34.64

2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX

2422MHz_TX

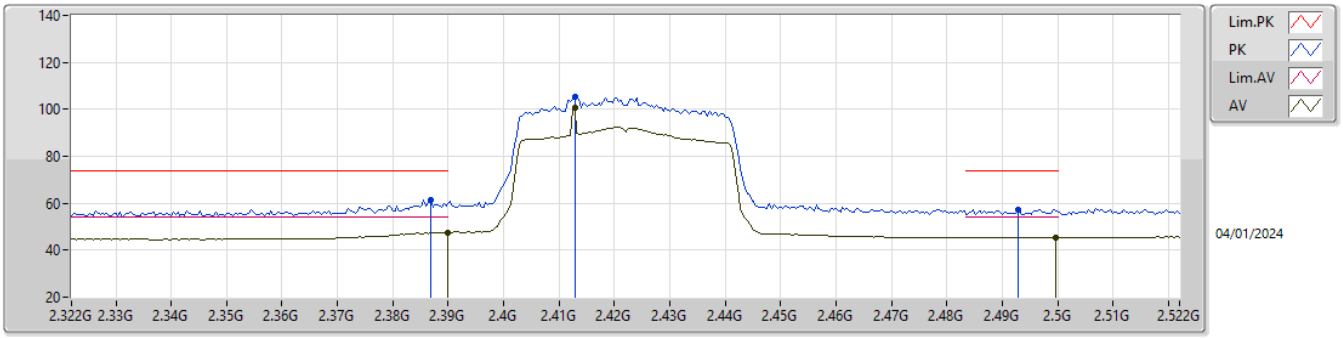


EUT Z_2TX
Setting 17
01-U-Y-1

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	65.25	74.00	-8.75	32.90	3	Vertical	225	1.00	-	27.70	4.65	-
AV	2.3892G	50.34	54.00	-3.66	17.99	3	Vertical	225	1.00	-	27.70	4.65	-
PK	2.4216G	107.30	Inf	-Inf	74.97	3	Vertical	225	1.00	-	27.68	4.65	-
AV	2.4112G	103.49	Inf	-Inf	71.22	3	Vertical	225	1.00	-	27.61	4.66	-
PK	2.496G	57.54	74.00	-16.46	25.45	3	Vertical	225	1.00	-	27.50	4.59	-
AV	2.4848G	44.34	54.00	-9.66	12.24	3	Vertical	225	1.00	-	27.50	4.60	-

2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX

2422MHz_TX

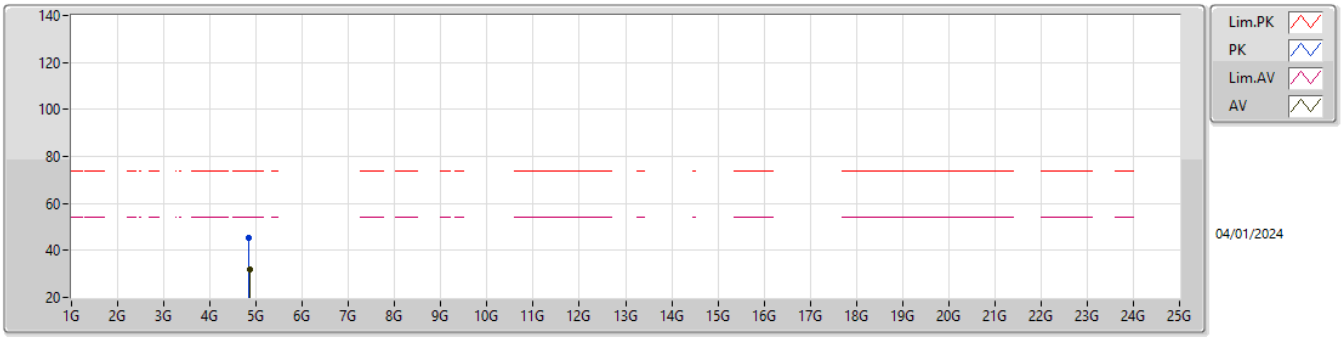


EUT Z_2TX
Setting 17
05-E-G-4

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	2.3868G	61.33	74.00	-12.67	28.68	3	Horizontal	124	3.00	-	27.37	5.28	-
AV	2.39G	47.50	54.00	-6.50	14.81	3	Horizontal	124	3.00	-	27.40	5.29	-
PK	2.4128G	105.10	Inf	-Inf	72.24	3	Horizontal	124	3.00	-	27.53	5.33	-
AV	2.4128G	100.91	Inf	-Inf	68.05	3	Horizontal	124	3.00	-	27.53	5.33	-
PK	2.4928G	57.32	74.00	-16.68	23.91	3	Horizontal	124	3.00	-	27.90	5.51	-
AV	2.4996G	45.55	54.00	-8.45	12.12	3	Horizontal	124	3.00	-	27.90	5.53	-

2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX

2422MHz_TX

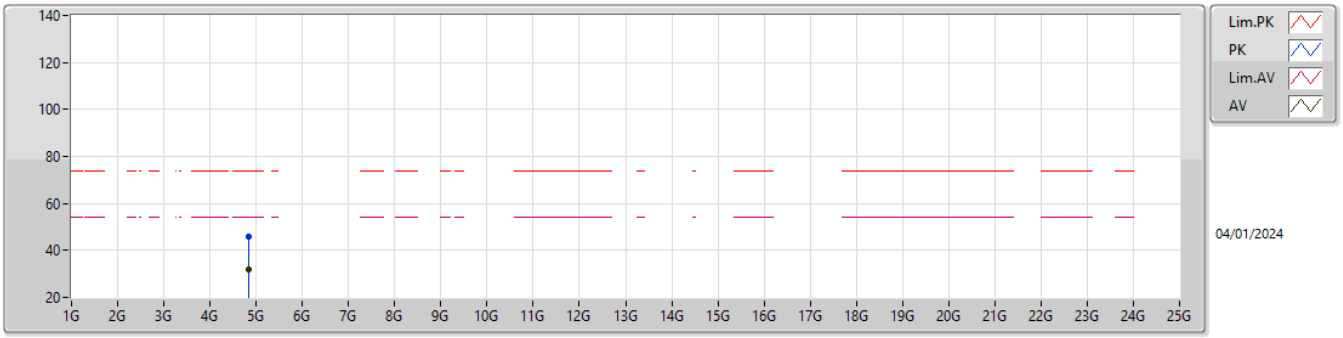


EUT Z_2TX
Setting 17
05-E-G-4

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	4.83578G	45.21	74.00	-28.79	41.04	3	Vertical	151	1.80	-	32.61	7.16	35.60
AV	4.85252G	31.82	54.00	-22.18	27.55	3	Vertical	151	1.80	-	32.70	7.17	35.60

2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX

2422MHz_TX

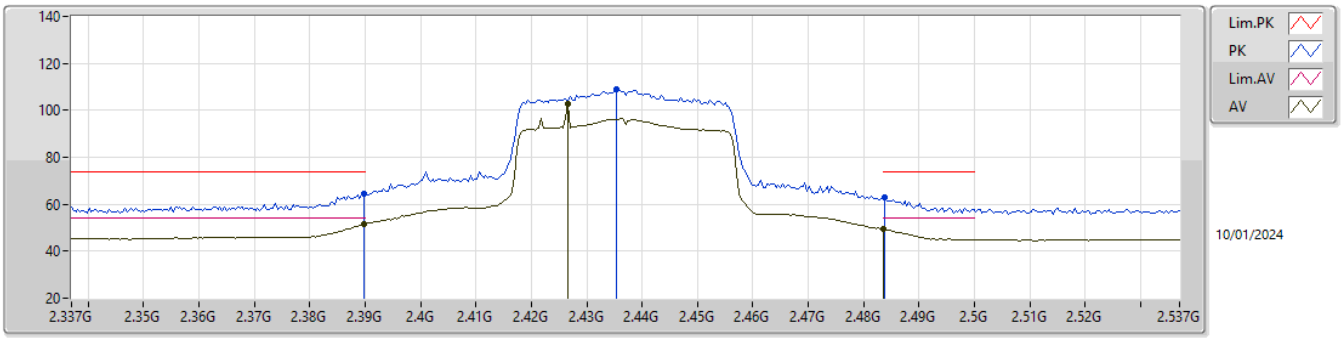


EUT Z_2TX
Setting 17
05-E-G-4

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	4.8296G	45.79	74.00	-28.21	41.65	3	Horizontal	11	2.13	-	32.58	7.16	35.60
AV	4.85006G	31.92	54.00	-22.08	27.65	3	Horizontal	11	2.13	-	32.70	7.17	35.60

2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX

2437MHz_TX

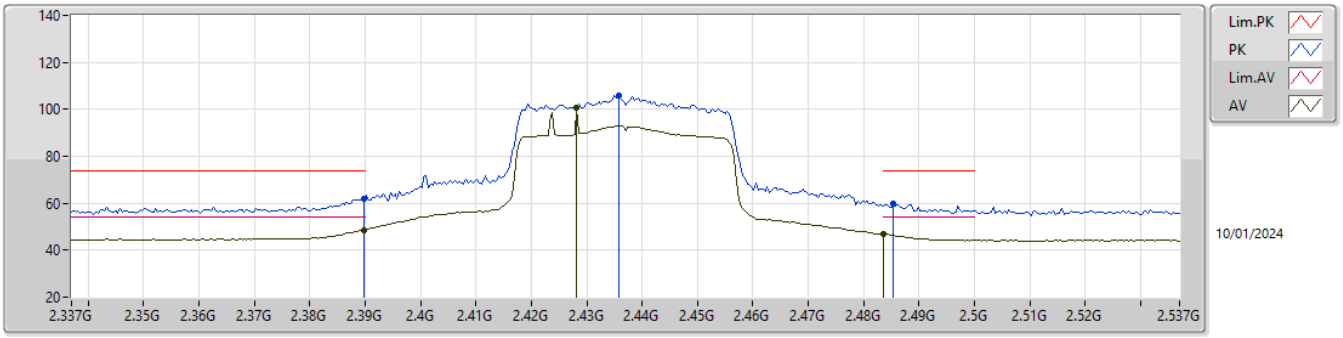


EUT Z_2TX
Setting 19
01-U-Y-1

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	64.37	74.00	-9.63	32.01	3	Vertical	32	1.08	-	27.70	4.66	-
AV	2.3898G	51.42	54.00	-2.58	19.06	3	Vertical	32	1.08	-	27.70	4.66	-
PK	2.4354G	108.90	Inf	-Inf	76.71	3	Vertical	32	1.08	-	27.55	4.64	-
AV	2.4266G	102.89	Inf	-Inf	70.61	3	Vertical	32	1.08	-	27.63	4.65	-
PK	2.4838G	62.68	74.00	-11.32	30.58	3	Vertical	32	1.08	-	27.50	4.60	-
AV	2.4835G	49.28	54.00	-4.72	17.18	3	Vertical	32	1.08	-	27.50	4.60	-

2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX

2437MHz_TX

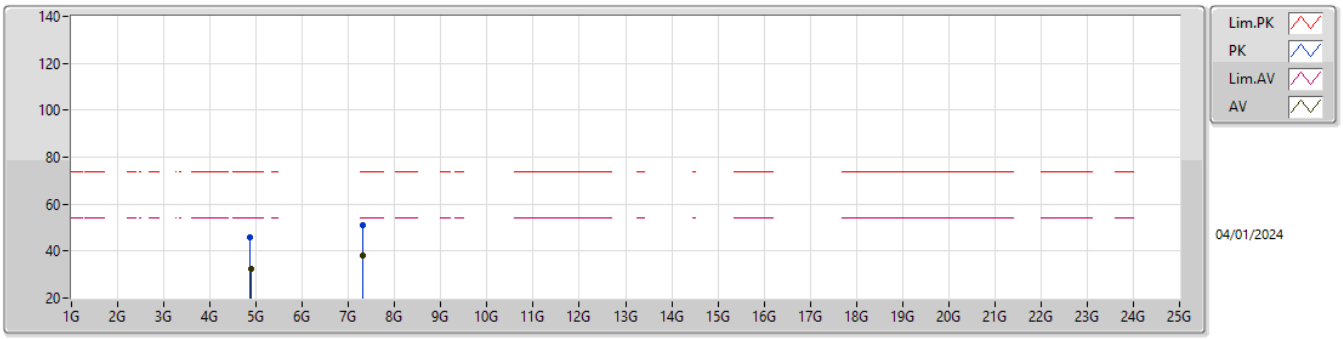


EUT Z_2TX
Setting 19
01-U-Y-1

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	61.71	74.00	-12.29	29.35	3	Horizontal	118	2.82	-	27.70	4.66	-
AV	2.3898G	48.57	54.00	-5.43	16.21	3	Horizontal	118	2.82	-	27.70	4.66	-
PK	2.4358G	105.91	Inf	-Inf	73.73	3	Horizontal	118	2.82	-	27.54	4.64	-
AV	2.4282G	100.75	Inf	-Inf	68.48	3	Horizontal	118	2.82	-	27.62	4.65	-
PK	2.4854G	59.65	74.00	-14.35	27.55	3	Horizontal	118	2.82	-	27.50	4.60	-
AV	2.4835G	46.77	54.00	-7.23	14.67	3	Horizontal	118	2.82	-	27.50	4.60	-

2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX

2437MHz_TX

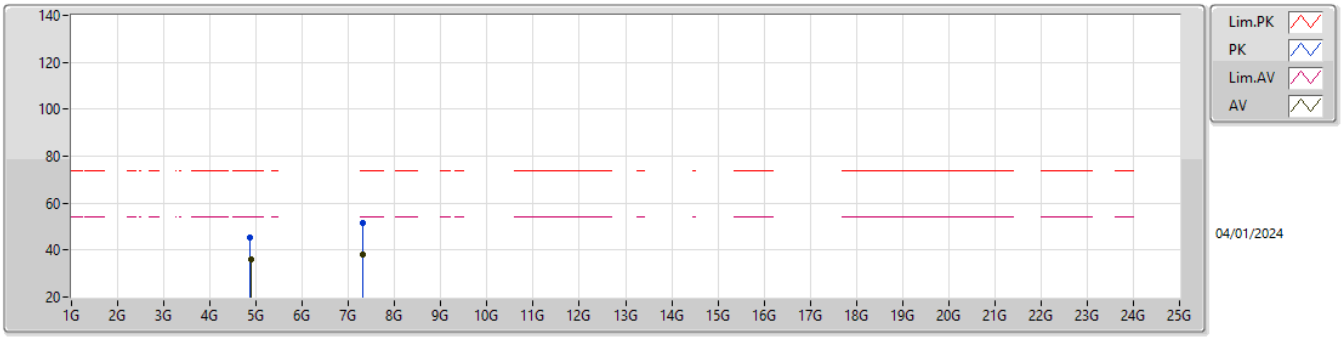


EUT Z_2TX
Setting 19
05-E-G-4

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	4.87148G	45.98	74.00	-28.02	41.69	3	Vertical	159	1.87	-	32.70	7.18	35.59
AV	4.8869G	32.54	54.00	-21.46	28.24	3	Vertical	159	1.87	-	32.70	7.19	35.59
PK	7.31028G	50.97	74.00	-23.03	40.29	3	Vertical	168	1.98	-	36.86	8.60	34.78
AV	7.29768G	38.17	54.00	-15.83	27.46	3	Vertical	168	1.98	-	36.91	8.60	34.80

2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX

2437MHz_TX

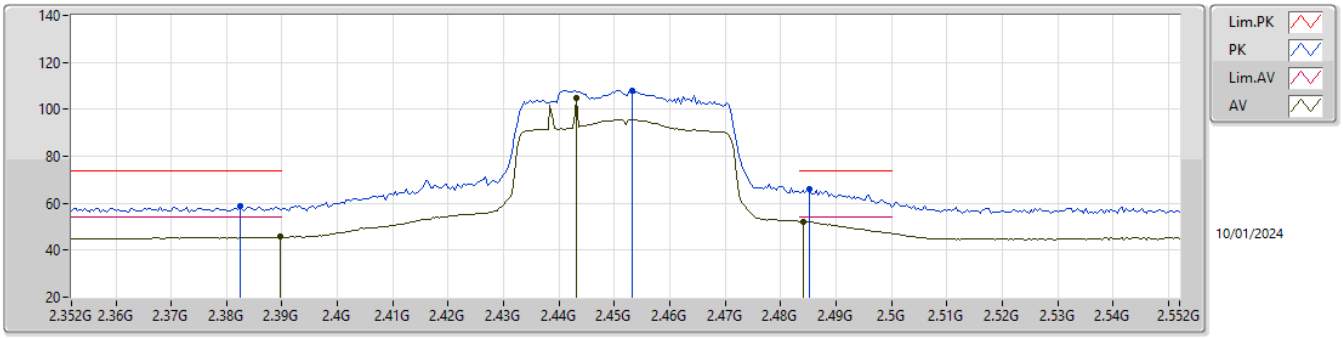


EUT Z_2TX
Setting 19
05-E-G-4

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	4.861776G	45.30	74.00	-28.70	41.02	3	Horizontal	174	2.81	-	32.70	7.18	35.60
AV	4.88384G	35.80	54.00	-18.20	31.50	3	Horizontal	174	2.81	-	32.70	7.19	35.59
PK	7.29852G	51.43	74.00	-22.57	40.72	3	Horizontal	66	2.59	-	36.91	8.60	34.80
AV	7.29804G	38.23	54.00	-15.77	27.52	3	Horizontal	66	2.59	-	36.91	8.60	34.80

2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX

2452MHz_TX

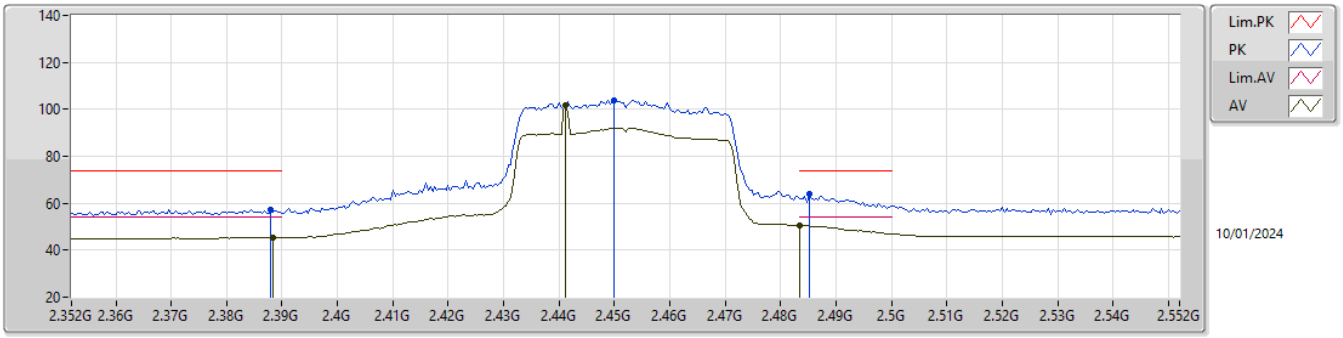


EUT Z_2TX
Setting 18
01-U-Y-1

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	2.3824G	58.65	74.00	-15.35	26.31	3	Vertical	41	1.15	-	27.70	4.64	-
AV	2.3896G	45.66	54.00	-8.34	13.31	3	Vertical	41	1.15	-	27.70	4.65	-
PK	2.4532G	108.15	Inf	-Inf	76.06	3	Vertical	41	1.15	-	27.47	4.62	-
AV	2.4432G	104.77	Inf	-Inf	72.64	3	Vertical	41	1.15	-	27.50	4.63	-
PK	2.4852G	66.15	74.00	-7.85	34.05	3	Vertical	41	1.15	-	27.50	4.60	-
AV	2.484G	52.26	54.00	-1.74	20.16	3	Vertical	41	1.15	-	27.50	4.60	-

2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX

2452MHz_TX

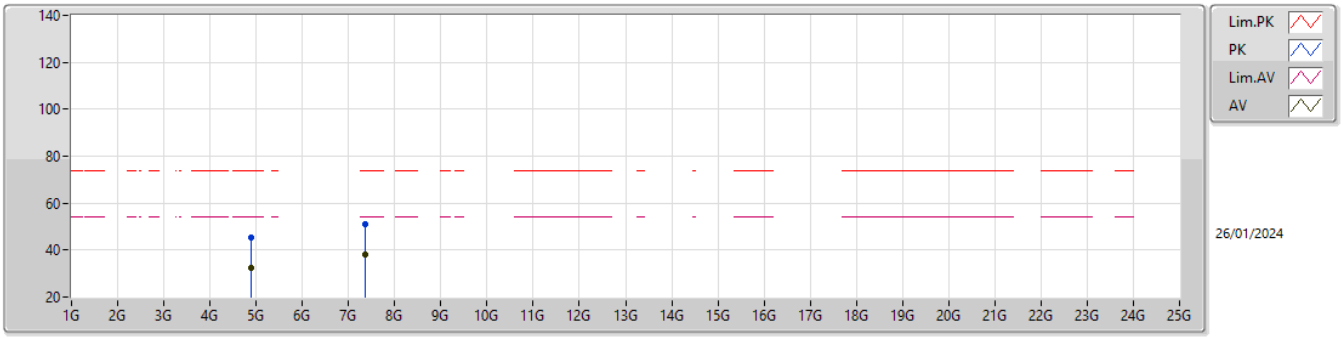


EUT Z_2TX
Setting 18
05-E-G-4

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	57.37	74.00	-16.63	24.71	3	Horizontal	124	2.96	-	27.38	5.28	-
AV	2.3884G	45.40	54.00	-8.60	12.74	3	Horizontal	124	2.96	-	27.38	5.28	-
PK	2.45G	104.05	Inf	-Inf	70.93	3	Horizontal	124	2.96	-	27.70	5.42	-
AV	2.4412G	101.94	Inf	-Inf	68.85	3	Horizontal	124	2.96	-	27.70	5.39	-
PK	2.4852G	63.75	74.00	-10.25	30.35	3	Horizontal	124	2.96	-	27.90	5.50	-
AV	2.4835G	50.50	54.00	-3.50	17.11	3	Horizontal	124	2.96	-	27.90	5.49	-

2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX

2452MHz_TX

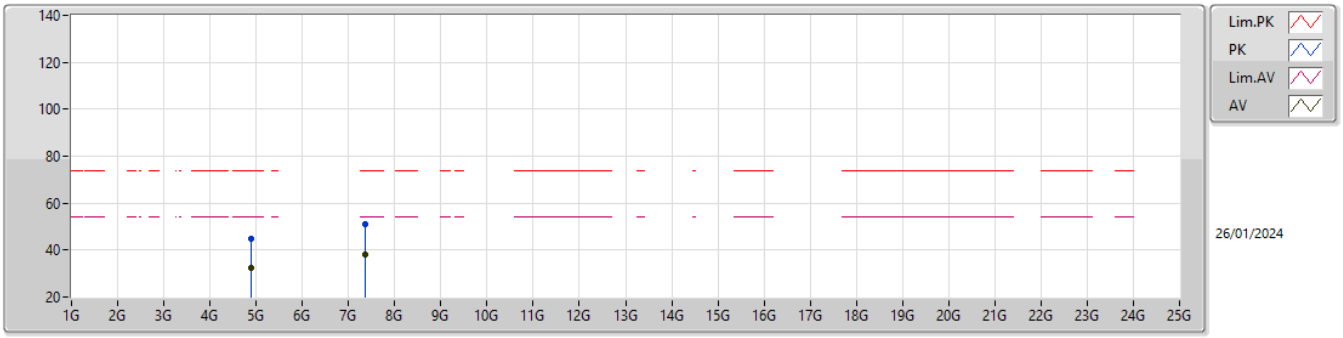


EUT Z_2TX
Setting 18
05-E-G-4

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	4.89806G	45.25	74.00	-28.75	40.94	3	Vertical	159	2.36	-	32.70	7.20	35.59
AV	4.8996G	32.22	54.00	-21.78	27.91	3	Vertical	159	2.36	-	32.70	7.20	35.59
PK	7.35432G	50.97	74.00	-23.03	40.36	3	Vertical	286	2.80	-	36.69	8.62	34.70
AV	7.3592G	38.22	54.00	-15.78	27.61	3	Vertical	286	2.80	-	36.68	8.62	34.69

2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX

2452MHz_TX



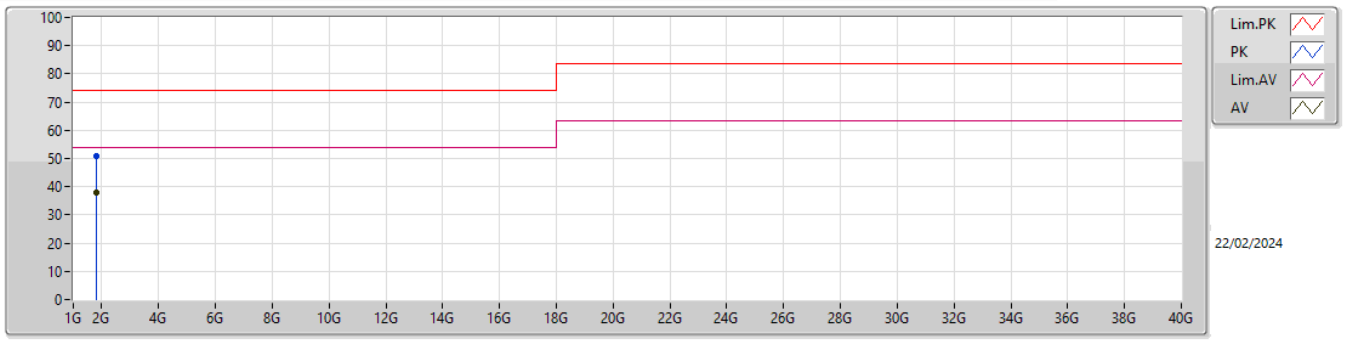
EUT Z_2TX
Setting 18
05-E-G-4

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	4.891116G	45.05	74.00	-28.95	40.75	3	Horizontal	32	2.71	-	32.70	7.19	35.59
AV	4.89296G	32.30	54.00	-21.70	27.99	3	Horizontal	32	2.71	-	32.70	7.20	35.59
PK	7.35882G	51.10	74.00	-22.90	40.49	3	Horizontal	217	1.71	-	36.68	8.62	34.69
AV	7.35082G	38.24	54.00	-15.76	27.62	3	Horizontal	217	1.71	-	36.70	8.62	34.70

Summary

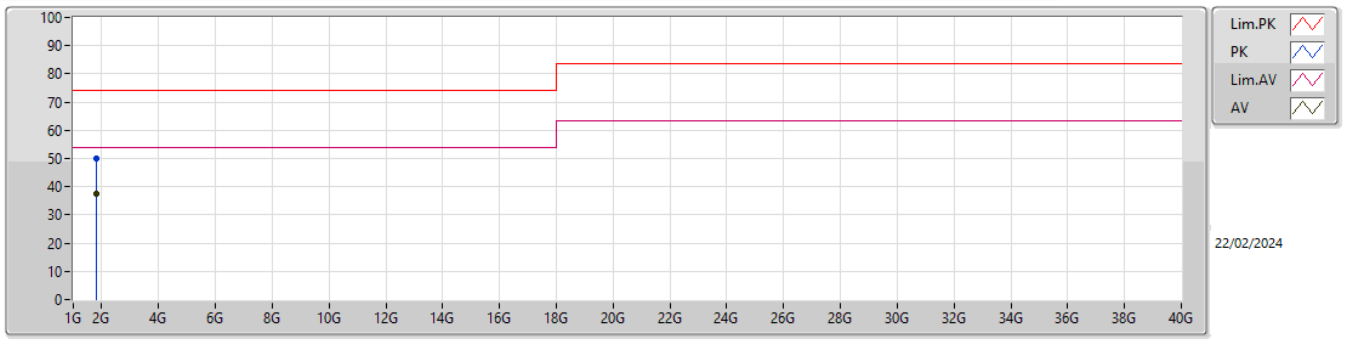
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	AV	1.81727G	38.13	54.00	-15.87	Vertical

Mode 1



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
PK	1.817019G	50.66	74.00	-23.34	-6.68	3	Vertical	92	1.67	-	57.34	25.57	3.43	35.68
AV	1.81727G	38.13	54.00	-15.87	-6.68	3	Vertical	92	1.67	-	44.81	25.57	3.43	35.68

Mode 1



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA		
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)		
PK	1.82546G	50.19	74.00	-23.81	-6.58	3	Horizontal	251	1.57	-	56.77	25.65	3.44	35.67		
AV	1.82447G	37.44	54.00	-16.56	-6.59	3	Horizontal	251	1.57	-	44.03	25.64	3.44	35.67		