Testing Laboratory 3787

RADIO TEST REPORT

FCC ID	:	XHG-FX20
Equipment	:	AX1800 Router
Brand Name	:	JEXtream
Model Name	:	FX20
Applicant	:	Franklin Technology Inc. 906 JEI Platz, 186, Gasan digital 1-ro, Gumcheon-Gu, Seoul, South Korea, 08502
Manufacturer	:	Franklin Technology Inc. 906 JEI Platz, 186, Gasan digital 1-ro, Gumcheon-Gu, Seoul, South Korea, 08502
Standard	:	47 CFR FCC Part 15.247

The product was received on Apr. 29, 2022, and testing was started from May 02, 2022 and completed on May 11, 2022. We, Sporton International Inc. Hsinchu Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

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

Approved by: Sam Chen

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

Table of Contents

History of this test report **3**

Summary of Test Result **4**

1 General Description **5**

1.1 Information 5
1.2 Applicable Standards 8
1.3 Testing Location Information 8
1.4 Measurement Uncertainty 9

2 Test Configuration of EUT **10**

2.1 Test Channel Mode 10
2.2 The Worst Case Measurement Configuration 11
2.3 EUT Operation during Test 12
2.4 Accessories 13
2.5 Support Equipment 13
2.6 Test Setup Diagram 14

3 Transmitter Test Result **17**

3.1 AC Power-line Conducted Emissions 17
3.2 DTS Bandwidth 19
3.3 Maximum Conducted Output Power 20
3.4 Power Spectral Density 23
3.5 Emissions in Non-restricted Frequency Bands 25
3.6 Emissions in Restricted Frequency Bands 26

4 Test Equipment and Calibration Data **30**

Appendix A. Test Results of AC Power-line Conducted Emissions
Appendix B. Test Results of DTS Bandwidth
Appendix C. Test Results of Maximum Conducted Output Power
Appendix D. Test Results of Power Spectral Density
Appendix E. Test Results of Emissions in Non-restricted Frequency Bands
Appendix F. Test Results of Emissions in Restricted Frequency Bands
Appendix G. Test Results of Radiated Emission Co-location
Appendix H. Test Photos
Photographs of EUT v01

History of this test report

Report No.	Version	Description	Issued Date
FR241329AA	01	Initial issue of report	Jun. 02, 2022

Summary of Test Result

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

Declaration of Conformity:
1. The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers. It's means measurement values may risk exceeding the limit of regulation standards, if measurement uncertainty is include in test results. 2. The measurement uncertainty please refer to report "Measurement Uncertainty".
Comments and Explanations:
The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Sam Chen
Report Producer: Wendy Pan

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), ax (HEW20)	2412-2462	1-11 [11]
2400-2483.5	n (HT40), 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	802.11ax HEW20	20	2TX
2.4-2.4835GHz	802.11n HT40	40	2TX
2.4-2.4835GHz	802.11ax HEW40	40	2TX

Note:
- 11b mode uses a combination of DSSS-DBPSK, DQPSK, CCK modulation.
- 11g, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- 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)		
	WLAN 2.4GHz	WLAN 5GHz					WLAN 2.4GHz	WLAN 5GHz UNII 1	WLAN 5GHz UNII 3
1	2	1	Hutec	HMWD1-B100U	Dipole	I-PEX	4.20	4.02	4.74
2	1	2	Hutec	HMWD1-B100U	Dipole	I-PEX	4.20	4.02	4.74

Note1: The above information was declared by manufacturer.

For 2.4GHz function:

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

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

Port 1 and Port 2 could transmit/receive simultaneously.

Note 2: 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	$Directional Gain = 10 \cdot \log\left[\frac{\sum_{i=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{i,k}\right\}^2}{N_{ANT}}\right]$

Ex.

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

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

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

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

Where ;

2.4G：G1 = 4.2 dBi ; G2 = 4.2 dBi ; DG = 7.21 dBi

5G B1：G1 = 4.02 dBi ; G2 = 4.02 dBi ; DG = 7.03 dBi

5G B4：G1 = 4.74 dBi ; G2 = 4.74 dBi ; DG = 7.75 dBi

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11b	0.99	0.04	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11g	0.93	0.32	1.363m	1k
802.11ax HEW20	0.91	0.41	990u	3k
802.11ax HEW40	0.839	0.76	522.5u	3k

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

1.1.4 EUT Operational Condition

EUT Power Type	From Power Adapter			
Beamforming Function	☐	With beamforming	☒	Without beamforming
Function	☒	Point-to-multipoint	☐	Point-to-point
Test Software Version	Tera Term Version: 4.105			

Note: 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	TH01-CB	Serway Lee	22.8~24.1 / 65~71	May 11, 2022
Radiated below 1GHz and Radiated Co-location	10CH01-CB	Allen Chung	21~22 / 55~56	May 02, 2022
Radiated above 1GHz	03CH02-CB	RJ Huang	24.2-26.1 / 55-58	May 06, 2022 ~ May 09, 2022
AC Conduction	CO01-CB	Joe Chu	20~22 / 60~62	May 02, 2022

1.4 Measurement Uncertainty

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

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	3.4 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	5.0 dB	Confidence levels of 95%
Radiated Emissions below 1GHz	4.9 dB	Confidence levels of 95%
Radiated Emissions 1GHz ~ 40GHz (Co-location)	4.0 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.7 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.2 dB	Confidence levels of 95%
Conducted Emission	2.5 dB	Confidence levels of 95%
Output Power Measurement	1.3 dB	Confidence levels of 95%
Power Density Measurement	2.5 dB	Confidence levels of 95%
Bandwidth Measurement	0.9%	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

Mode	Power Setting
802.11b_Nss1,(1Mbps)_2TX	-
2412MHz	19.5
2437MHz	19.5
2462MHz	19.75
802.11g_Nss1,(6Mbps)_2TX	-
2412MHz	18.5
2417MHz	19.25
2437MHz	19.25
2457MHz	19.25
2462MHz	16.25
802.11ax HEW20_Nss1,(MCS0)_2TX	-
2412MHz	16.75
2417MHz	18
2437MHz	19.75
2457MHz	16.75
2462MHz	12.75
802.11ax HEW40_Nss1,(MCS0)_2TX	-
2422MHz	12.75
2427MHz	16.25
2437MHz	16.5
2447MHz	14
2452MHz	12.75

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

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

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emissions in Restricted Frequency Bands
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	Normal Link
1	EUT in X axis - Normal Link
2	EUT in Y axis - Normal Link
3	EUT in Z axis - Normal Link
For operating mode 2 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX
	The EUT was performed at X axis, Y axis and Z axis position, and the worst case was found as below. So the measurement will follow this same test configuration.
1	EUT 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
	The EUT was performed at X axis, Y axis and Z axis position for Emissions in Restricted Frequency Bands above 1GHz test, and the worst case was found as below. So the measurement will follow this same test configuration.
1	EUT in Y 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
Refer to Sporton Test Report No.: FA241329 for Co-location RF Exposure Evaluation.	

2.3 EUT Operation during Test

For CTX Mode:

The EUT was programmed to be in continuously transmitting mode.

For Normal Link Mode:

During the test, the EUT operation to normal function.

2.4 Accessories

Power	Brand Holder	Model	Rating
Adapter	Shenzhen ACT Industrial Co.,Ltd	APS-M018120150W-G	Input: 100-240V~50/60Hz, 0.6A, Max. Output: 12V, 1.5A
Others			
Stand*1 RJ-45 cable*1: Non-shielded, 1m.			

2.5 Support Equipment

For AC Conduction and Radiated (below 1GHz):

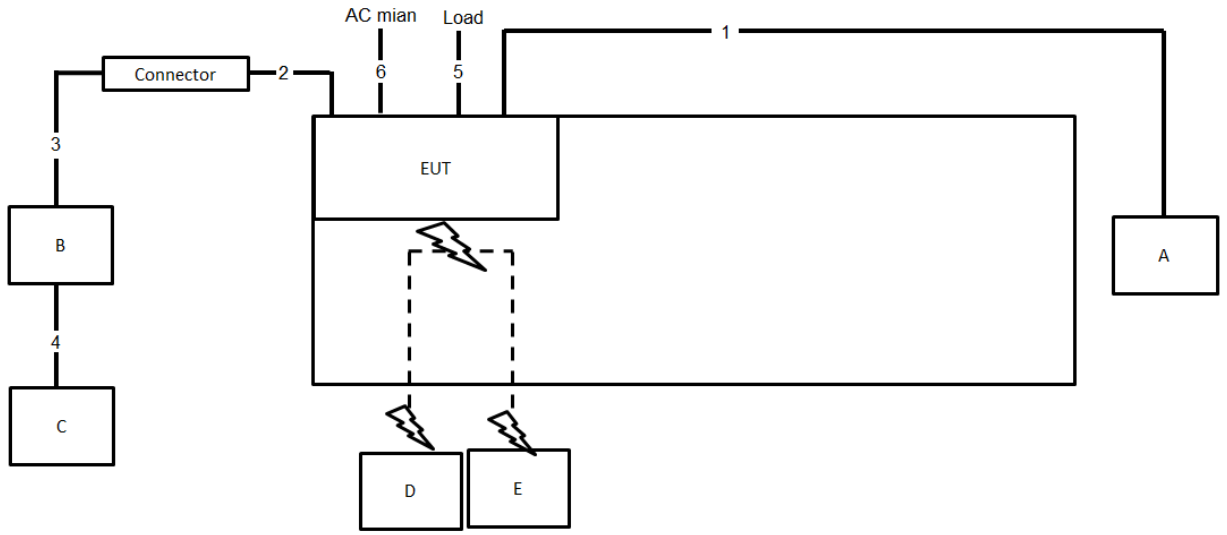
Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	LAN PC	DELL	T3400	N/A
B	AP router(WAN)	TP-LINK	Archer AX10	TE7AX10
C	AP NB	DELL	E6430	N/A
D	2.4G NB	DELL	E6430	N/A
E	5G NB	DELL	E6430	N/A

For Radiated (above 1GHz) and RF Conducted:

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

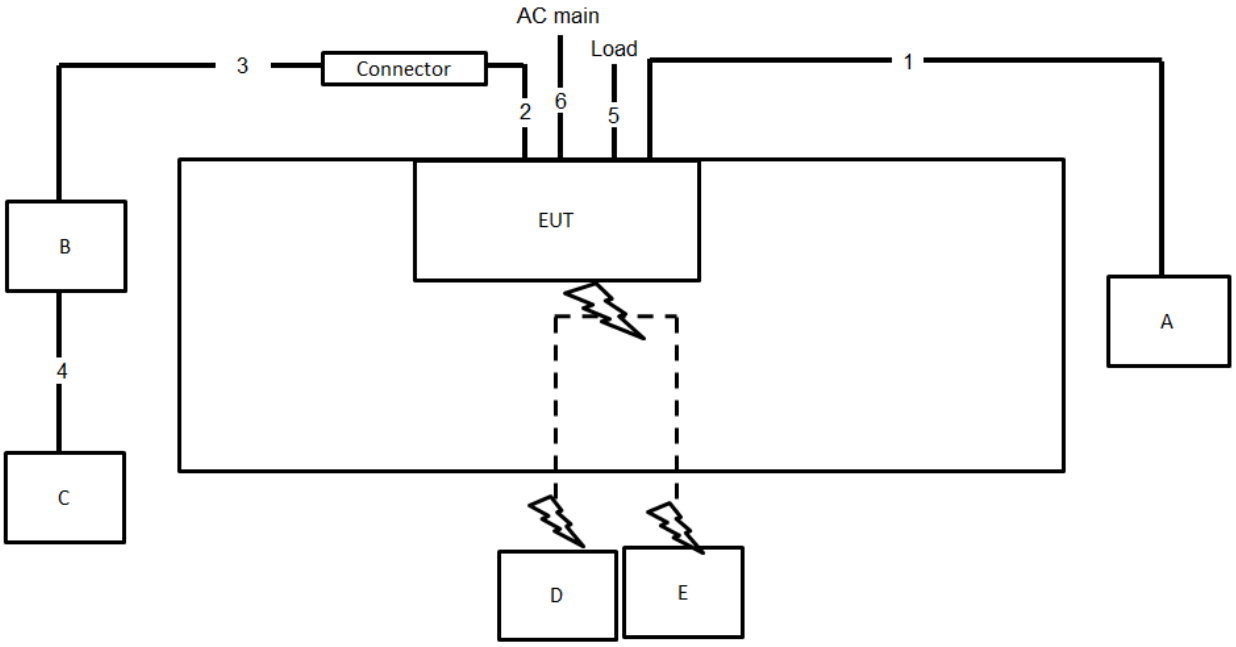
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



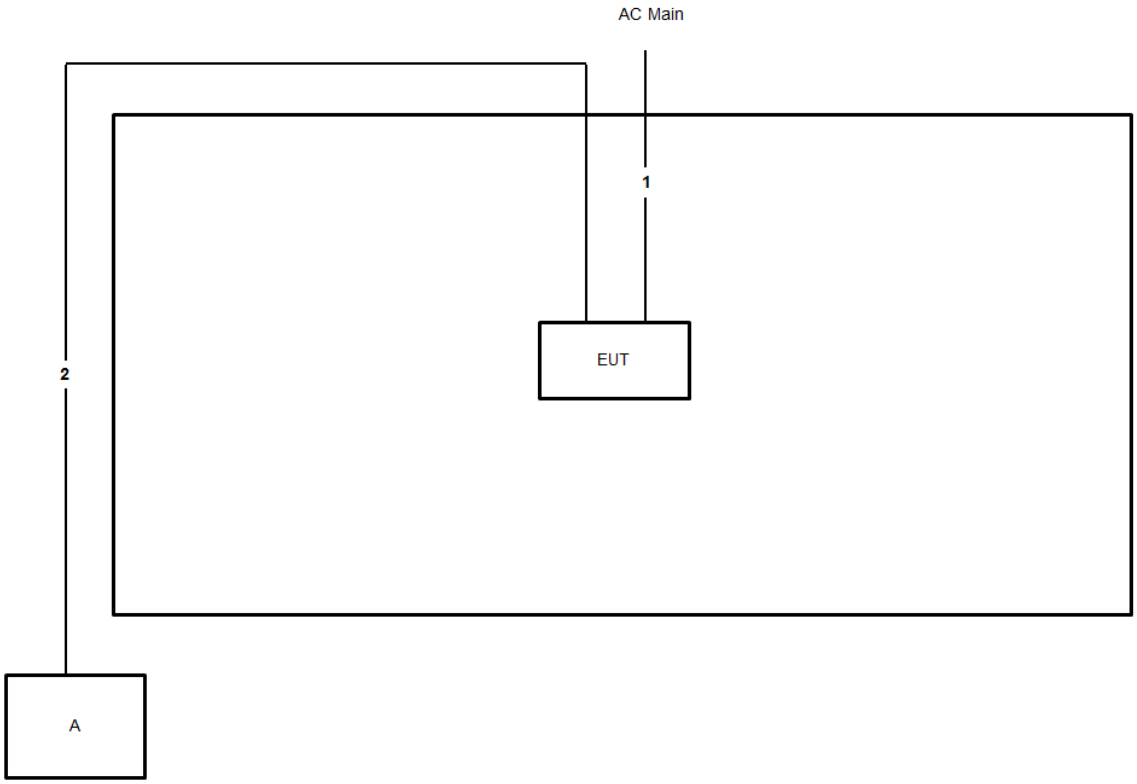
Item	Connection	Shielded	Length
1	RJ-45 cable	No	10m
2	RJ-45 cable	No	1m
3	RJ-45 cable	No	10m
4	RJ-45 cable	No	1.5m
5	RJ-45 cable*3	No	3m
6	Power cable	No	1.5m

Test Setup Diagram - Radiated Test < 1GHz



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

Test Setup Diagram - Radiated Test > 1GHz



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

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

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

3.1.2 Measuring Instruments

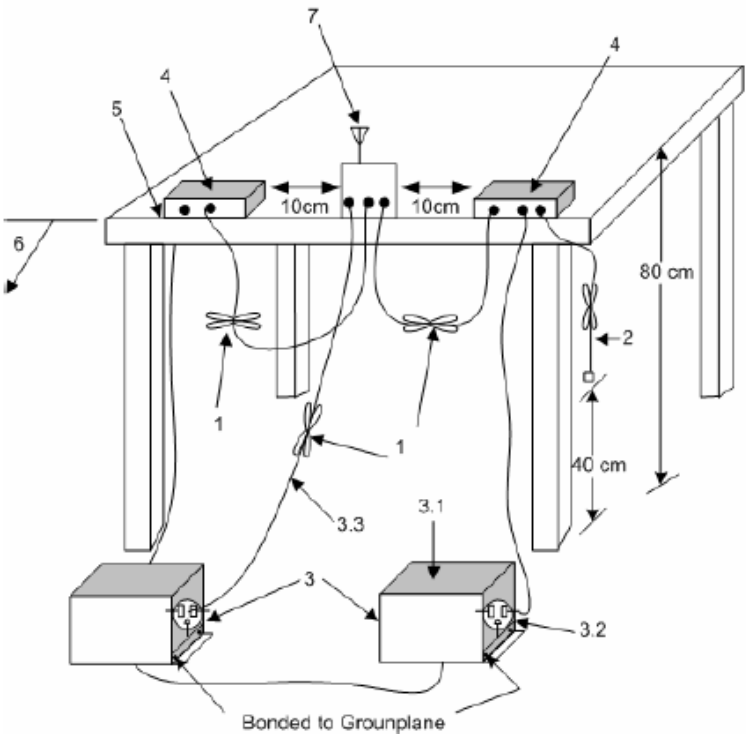
Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

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

3.1.4 Test Setup

AC Power-line Conducted Emissions



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

3.1.5 Measurement Results Calculation

The measured Level is calculated using:

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

b. Margin = -Limit + Level

3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 DTS Bandwidth

3.2.1 6dB Bandwidth Limit

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

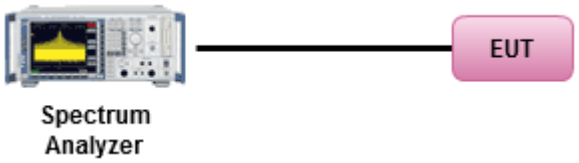
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method	
▪ For the emission bandwidth shall be measured using one of the options below:	
	☒ Refer as FCC KDB 558074, clause 8.2 & C63.10 clause 11.8.1 Option 1 for 6 dB bandwidth measurement.
	☐ Refer as FCC KDB 558074, clause 8.2 & C63.10 clause 11.8.2 Option 2 for 6 dB bandwidth measurement.
	☐ Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.

3.2.4 Test Setup

Emission Bandwidth


3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

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

3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
▪ Maximum Peak Conducted Output Power	
	☐ Refer as FCC KDB 558074, clause 8.3.1.1 & C63.10 clause 11.9.1.1 (RBW ≥ EBW method).
	☐ Refer as FCC KDB 558074, clause 8.3.1.3 & C63.10 clause 11.9.1.3 (peak power meter).
▪ Maximum Conducted Output Power	
	[duty cycle ≥ 98% or external video / power trigger]
	☐ Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.2 Method AVGSA-1.
	☐ Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.3 Method AVGSA-1A. (alternative)
	duty cycle < 98% and average over on/off periods with duty factor
	☐ Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.4 Method AVGSA-2.
	☐ Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.5 Method AVGSA-2A (alternative)
	☐ Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.6 Method AVGSA-3
	☐ Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.7 Method AVGSA-3A (alternative)
	Measurement using a power meter (PM)
	☐ Refer as FCC KDB 558074, clause 8.3.2.3 & C63.10 clause 11.9.2.3.1 Method AVGPM (using an RF average power meter).
	☒ Refer as FCC KDB 558074, clause 8.3.2.3 & C63.10 clause 11.9.2.3.2 Method AVGPM-G (using an gate RF average power meter).
▪ For conducted measurement.	
	▪ If the EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.
	▪ If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \ldots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$

3.3.4 Test Setup

Maximum Conducted Output Power (Power Meter)


3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

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

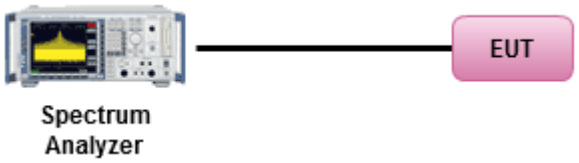
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

Test Method		
▪ Peak power spectral density procedures that the same method as used to determine the conducted output power. If maximum peak conducted output power was measured to demonstrate compliance to the output power limit, then the peak PSD procedure below (Method PKPSD) shall be used. If maximum conducted output power was measured to demonstrate compliance to the output power limit, then one of the average PSD procedures shall be used, as applicable based on the following criteria (the peak PSD procedure is also an acceptable option).		
	☒ Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10 Method Max. PSD.	
▪ For conducted measurement.		
	▪ If The EUT supports multiple transmit chains using options given below:	
		☒ Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.
		☐ Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,
		☐ Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.

3.4.4 Test Setup

Power Spectral Density


3.4.5 Test Result of Power Spectral Density

Refer as Appendix D

3.5 Emissions in Non-restricted Frequency Bands

3.5.1 Emissions in Non-restricted Frequency Bands Limit

Un-restricted Band Emissions Limit	
RF output power procedure	**Limit (dBc)**
Peak output power procedure	20
Average output power procedure	30

Note 1: If the peak output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the peak conducted output power measured within any 100 kHz outside the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum measured in-band peak PSD level.

Note 2: If the average output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the power in any 100 kHz outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum measured in-band average PSD level.

3.5.2 Measuring Instruments

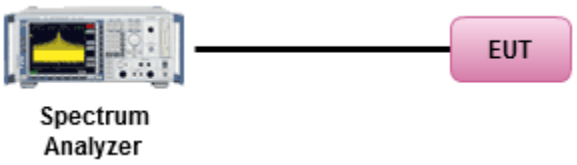
Refer a test equipment and calibration data table in this test report.

3.5.3 Test Procedures

Test Method
▪ Refer as FCC KDB 558074, clause 8.5 for unwanted emissions into non-restricted bands.

3.5.4 Test Setup

Emissions in Non-restricted Frequency Bands



3.5.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix E

3.6 Emissions in Restricted Frequency Bands

3.6.1 Emissions in Restricted Frequency Bands Limit

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

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

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

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

3.6.2 Measuring Instruments

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

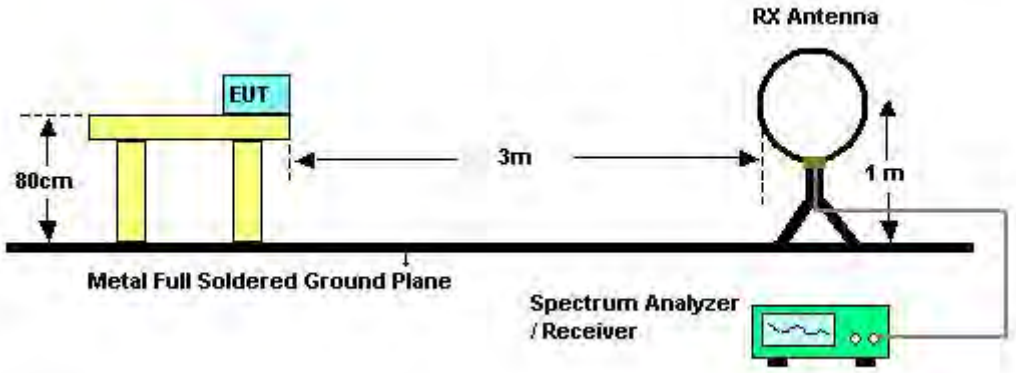
3.6.3 Test Procedures

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

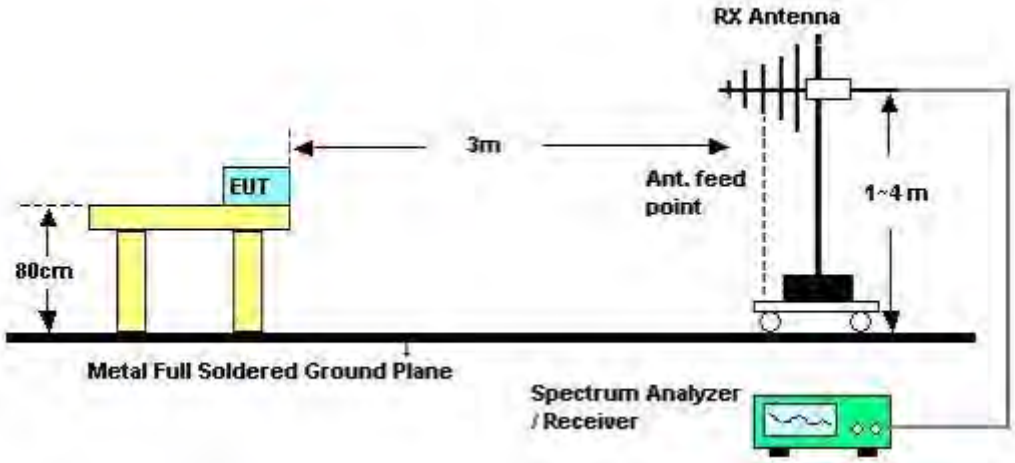
3.6.4 Test Setup

Radiated - Emissions in Restricted Frequency Bands

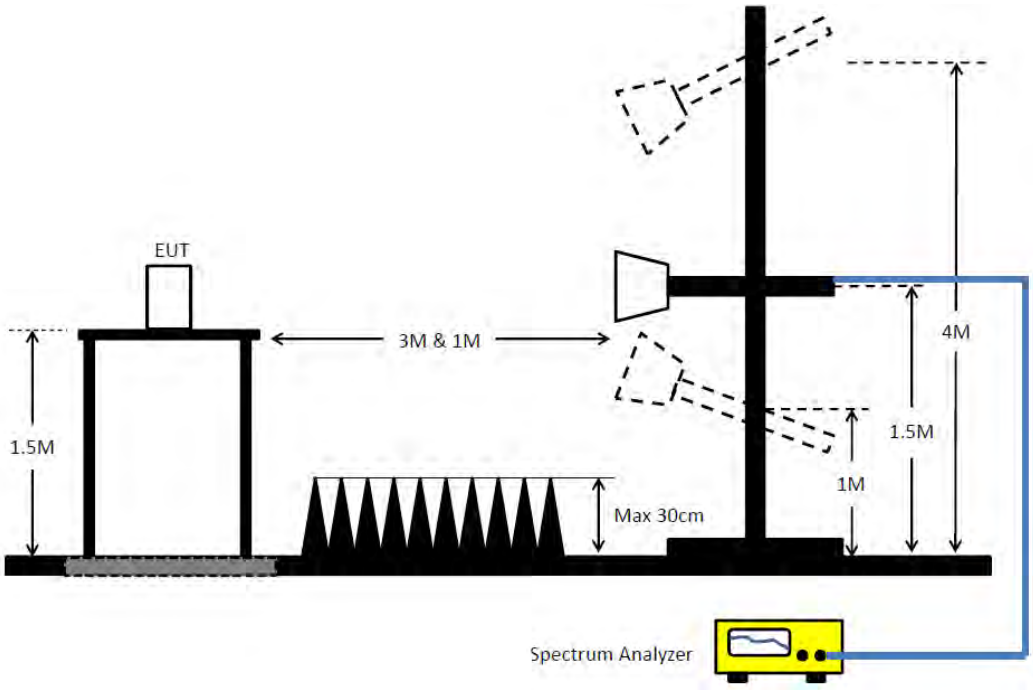
9kHz ~30MHz



30MHz~1GHz



Above 1GHz



3.6.5 Measurement Results Calculation

The measured Level is calculated using:
Corrected Reading: Antenna factor (AF) + Cable loss (CL) + Read level (Raw) - Preamp factor (PA)(if applicable) = Level.

3.6.6 Emissions in Restricted Frequency Bands (Below 30MHz)

There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to KDB414788 Radiated Test Site, and the result came out very similar.
All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.
The radiated emissions were investigated from 9 kHz or the lowest frequency generated within the device, up to the 10th harmonic or 40 GHz, whichever is appropriate.

3.6.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F

4 Test Equipment and Calibration Data

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.4GHz	Feb. 22, 2022	Feb. 21, 2023	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Feb. 09, 2022	Feb. 08, 2023	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Apr. 12, 2022	Apr. 11, 2023	Conduction (CO01-CB)
Pulse Limiter	Rohde&Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Feb. 10, 2022	Feb. 09, 2023	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	May 19, 2021	May 18, 2022	Conduction (CO01-CB)
Loop Antenna	Teseq	HLA 6120	31244	9kHz - 30 MHz	Mar. 18, 2022	Mar. 17, 2023	Radiation (10CH01-CB)
10m Semi Anechoic Chamber NSA	TDK	SAC-10M	10CH01-CB	30MHz~1GHz 10m,3m	Jan. 27, 2022	Jan. 26, 2023	Radiation (10CH01-CB)
10m Semi Anechoic Chamber VSWR	TDK	SAC-10M	10CH01-CB	1GHz ~18GHz 3m	Mar. 11, 2022	Mar. 10, 2023	Radiation (10CH01-CB)
Pre-Amplifier	Agilent	8447D	2944A10783	9kHz ~ 1.3GHz	Mar. 11, 2022	Mar. 10, 2023	Radiation (10CH01-CB)
Pre-Amplifier	Agilent	8447D	2944A10784	9kHz ~ 1.3GHz	Mar. 11, 2022	Mar. 10, 2023	Radiation (10CH01-CB)
Low Cable	Woken	SUCOFLEX 104	low cable-01	25MHz ~ 1GHz	Oct. 19, 2021	Oct. 18, 2022	Radiation (10CH01-CB)
High Cable	Woken	SUCOFLEX 104	low cable-02	25MHz ~ 1GHz	Oct. 19, 2021	Oct. 18, 2022	Radiation (10CH01-CB)
Bilog Antenna with 6dB Attenuator	Chase & EMCI	CBL6111A &N-6-06	1543 &AT-N0609	30MHz ~ 1GHz	Jul. 01, 2021	Jun. 30, 2022	Radiation (10CH01-CB)
EMI Test Receiver	Rohde&Schwarz	ESCI	100186	9kHz ~ 3GHz	Jul. 12, 2021	Jul. 11, 2022	Radiation (10CH01-CB)
Spectrum Analyzer	Rohde&Schwarz	FSV30	101026	9kHz ~ 30GHz	Apr. 22, 2022	Apr. 21, 2023	Radiation (10CH01-CB)
Horn Antenna	ESCO	3117	00081283	1GHz ~ 18GHz	Nov. 25, 2021	Nov. 24, 2022	Radiation (10CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 05, 2021	Aug. 04, 2022	Radiation (10CH01-CB)
Amplifier	Agilent	8449B	3008A02660	1GHz ~ 26.5GHz	May 20, 2021	May 19, 2022	Radiation (10CH01-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 13, 2021	Jul. 12, 2022	Radiation (10CH01-CB)
CABLE	TITAN	T318E	high cable-02	1GHz ~ 18GHz	Mar. 16, 2022	Mar. 15, 2023	Radiation (10CH01-CB)
High Cable	Woken	WCA0929M	40G#5+7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (10CH01-CB)

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 08, 2021	Dec. 07, 2022	Radiation (10CH01-CB)
High Cable	Woken	WCA0929M	40G#7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (10CH01-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (10CH01-CB)
3m Semi Anechoic Chamber VSWR	RIKEN	SAC-3M	03CH02-CB	1GHz ~18GHz	Mar. 26, 2022	Mar. 25, 2023	Radiation (03CH02-CB)
Horn Antenna	EMCO	3115	9610-4976	1GHz ~ 18GHz	Apr. 19, 2022	Apr. 18, 2023	Radiation (03CH02-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 05, 2021	Aug. 04, 2022	Radiation (03CH02-CB)
Pre-Amplifier	Agilent	83017A	MY39501305	1GHz ~ 26.5GHz	Jul. 12, 2021	Jul. 11, 2022	Radiation (03CH02-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 13, 2021	Jul. 12, 2022	Radiation (03CH02-CB)
Spectrum analyzer	R&S	FSU	100015	9kHz~26GHz	Oct. 25, 2021	Oct. 24, 2022	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-18	1GHz ~ 18GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-18+19	1GHz ~ 18GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH02-CB)
High Cable	Woken	WCA0929M	40G#5+7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH02-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 08, 2021	Dec. 07, 2022	Radiation (03CH02-CB)
High Cable	Woken	WCA0929M	40G#7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH02-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH02-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	May 21, 2021	May 20, 2022	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-06	1 GHz – 26.5 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-07	1 GHz –26.5 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-08	1 GHz –26.5 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-09	1 GHz –26.5 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz –26.5 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-30	1 GHz –26.5 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH01-CB)
Switch	SPTCB	SP-SWI	SWI-01	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	SWI-01-P1	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH01-CB)

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	SWI-01-P2	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	SWI-01-P3	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	SWI-01-P4	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	SWI-01-P5	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH01-CB)
Power Sensor	Agilent	E9327A	US40442088	50MHz~18GHz	Feb. 21, 2022	Feb. 20, 2023	Conducted (TH01-CB)
Power Meter	Agilent	E4416A	GB41291199	50MHz~18GHz	Feb. 21, 2022	Feb. 20, 2023	Conducted (TH01-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH01-CB)

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

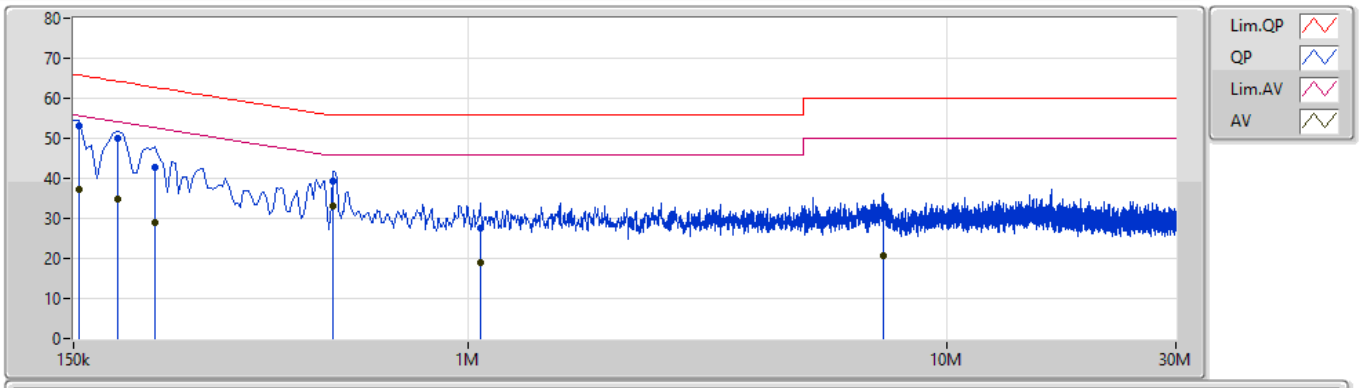
N.C.R. means Non-Calibration required.

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	528k	36.01	46.00	-9.99	Neutral

Mode 1

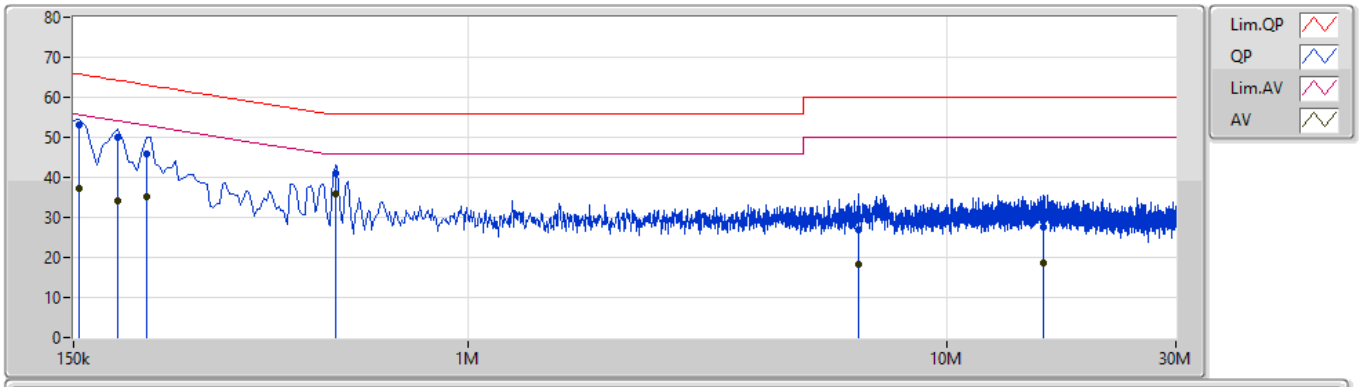
02/05/2022



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	154.5k	53.20	65.75	-12.55	9.97	Line	"Worst"	43.23	0.06	0.02	9.89
AV	154.5k	37.21	55.75	-18.54	9.97	Line	-	27.24	0.06	0.02	9.89
QP	186k	50.03	64.20	-14.17	9.97	Line	-	40.06	0.06	0.02	9.89
AV	186k	34.72	54.20	-19.48	9.97	Line	-	24.75	0.06	0.02	9.89
QP	222k	42.88	62.75	-19.87	9.97	Line	-	32.91	0.06	0.02	9.89
AV	222k	28.84	52.75	-23.91	9.97	Line	-	18.87	0.06	0.02	9.89
QP	523.5k	39.39	56.00	-16.61	9.97	Line	-	29.42	0.06	0.02	9.89
AV	523.5k	32.98	46.00	-13.02	9.97	Line	-	23.01	0.06	0.02	9.89
QP	1.059M	27.62	56.00	-28.38	9.98	Line	-	17.64	0.07	0.02	9.89
AV	1.059M	19.03	46.00	-26.97	9.98	Line	-	9.05	0.07	0.02	9.89
QP	7.341M	30.23	60.00	-29.77	10.16	Line	-	20.07	0.19	0.07	9.90
AV	7.341M	20.60	50.00	-29.40	10.16	Line	-	10.44	0.19	0.07	9.90

Mode 1

02/05/2022



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	154.5k	53.05	65.75	-12.70	9.98	Neutral	-	43.07	0.07	0.02	9.89
AV	154.5k	37.23	55.75	-18.52	9.98	Neutral	-	27.25	0.07	0.02	9.89
QP	186k	49.89	64.20	-14.31	9.98	Neutral	-	39.91	0.07	0.02	9.89
AV	186k	33.98	54.20	-20.22	9.98	Neutral	-	24.00	0.07	0.02	9.89
QP	213k	45.92	63.09	-17.17	9.98	Neutral	-	35.94	0.07	0.02	9.89
AV	213k	35.03	53.09	-18.06	9.98	Neutral	-	25.05	0.07	0.02	9.89
QP	528k	41.04	56.00	-14.96	9.98	Neutral	-	31.06	0.07	0.02	9.89
AV	528k	36.01	46.00	-9.99	9.98	Neutral	"Worst"	26.03	0.07	0.02	9.89
QP	6.531M	27.00	60.00	-33.00	10.16	Neutral	-	16.84	0.19	0.07	9.90
AV	6.531M	18.36	50.00	-31.64	10.16	Neutral	-	8.20	0.19	0.07	9.90
QP	15.828M	27.70	60.00	-32.30	10.33	Neutral	-	17.37	0.28	0.11	9.94
AV	15.828M	18.56	50.00	-31.44	10.33	Neutral	-	8.23	0.28	0.11	9.94

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	11.075M	14.993M	15M0G1D	10.1M	14.868M
802.11g_Nss1,(6Mbps)_2TX	16.3M	16.417M	16M4D1D	16.05M	16.392M
802.11ax HEW20_Nss1,(MCS0)_2TX	18.85M	18.966M	19M0D1D	18.2M	18.866M
802.11ax HEW40_Nss1,(MCS0)_2TX	37.75M	37.981M	38M0D1D	37.6M	37.881M

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

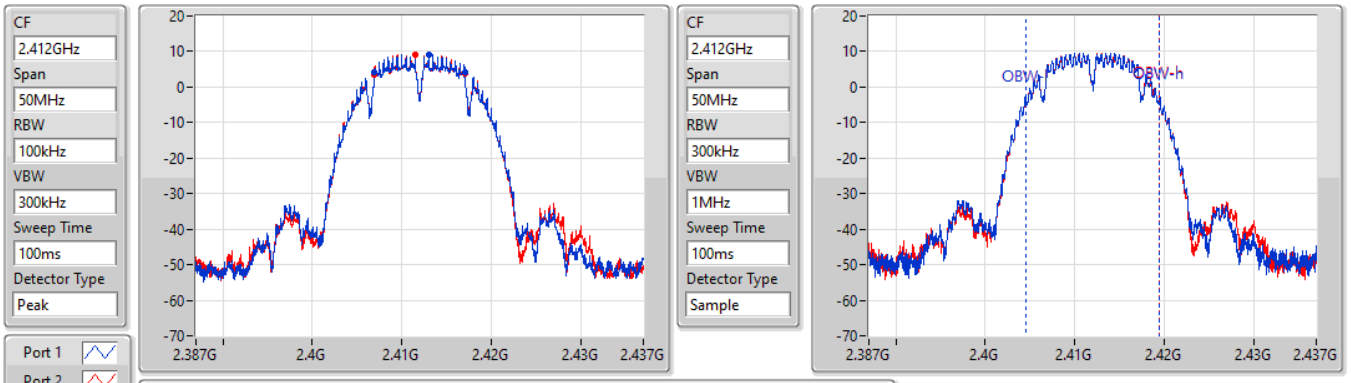
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	10.1M	14.868M	10.1M	14.868M
2437MHz	Pass	500k	11.05M	14.993M	10.1M	14.943M
2462MHz	Pass	500k	11.05M	14.868M	11.075M	14.893M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.05M	16.417M	16.3M	16.417M
2437MHz	Pass	500k	16.3M	16.417M	16.3M	16.417M
2462MHz	Pass	500k	16.3M	16.392M	16.3M	16.417M
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	18.625M	18.916M	18.7M	18.891M
2437MHz	Pass	500k	18.2M	18.941M	18.8M	18.966M
2462MHz	Pass	500k	18.85M	18.891M	18.825M	18.866M
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	37.65M	37.931M	37.6M	37.981M
2437MHz	Pass	500k	37.7M	37.981M	37.75M	37.881M
2452MHz	Pass	500k	37.7M	37.981M	37.7M	37.931M

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

802.11b_Nss1,(1Mbps)_2TX EBW

2412MHz

11/05/2022

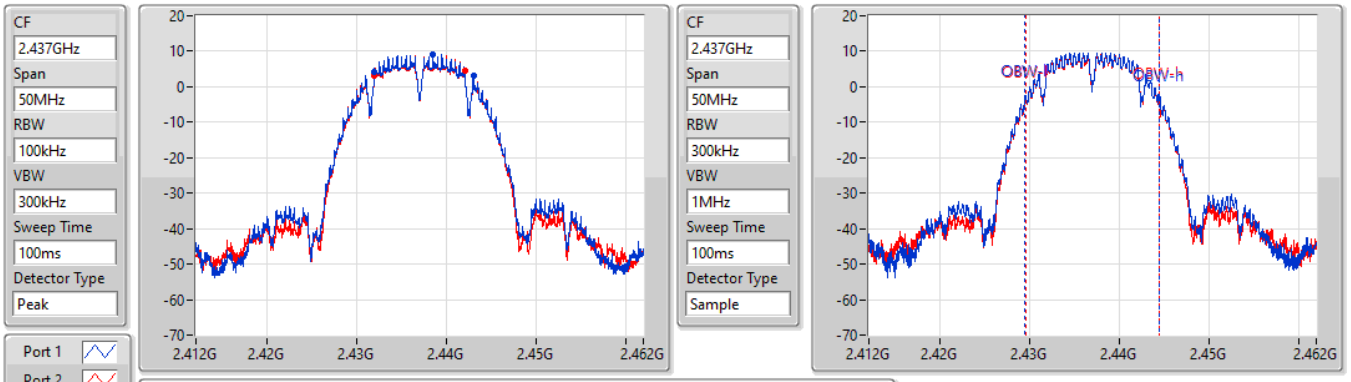


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
10.1M	2.40695G	2.41705G	14.868M	2.404579G	2.419446G	500k	1
10.1M	2.40695G	2.41705G	14.868M	2.404579G	2.419446G	500k	2

802.11b_Nss1,(1Mbps)_2TX EBW

2437MHz

11/05/2022

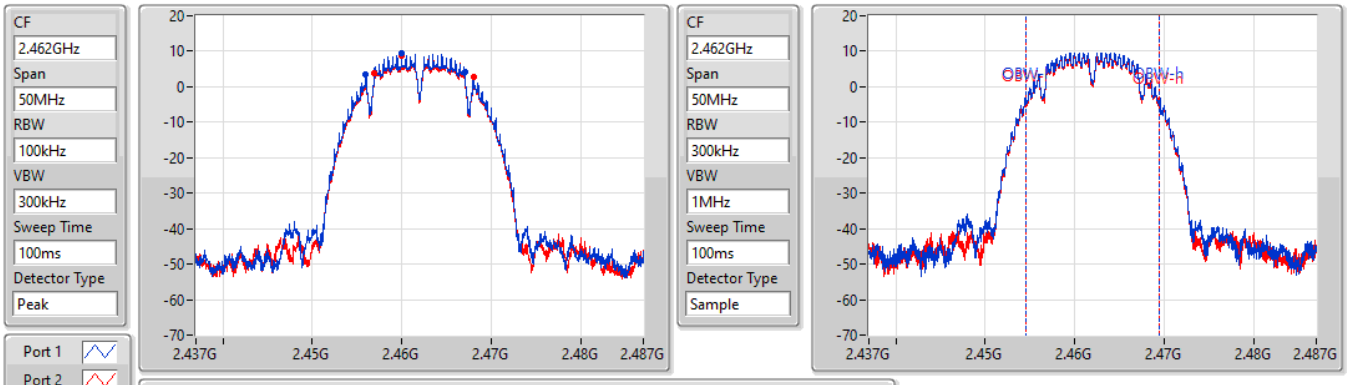


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
11.05M	2.43195G	2.443G	14.993M	2.429479G	2.444471G	500k	1
10.1M	2.431925G	2.442025G	14.943M	2.429504G	2.444446G	500k	2

802.11b_Nss1,(1Mbps)_2TX EBW

2462MHz

11/05/2022

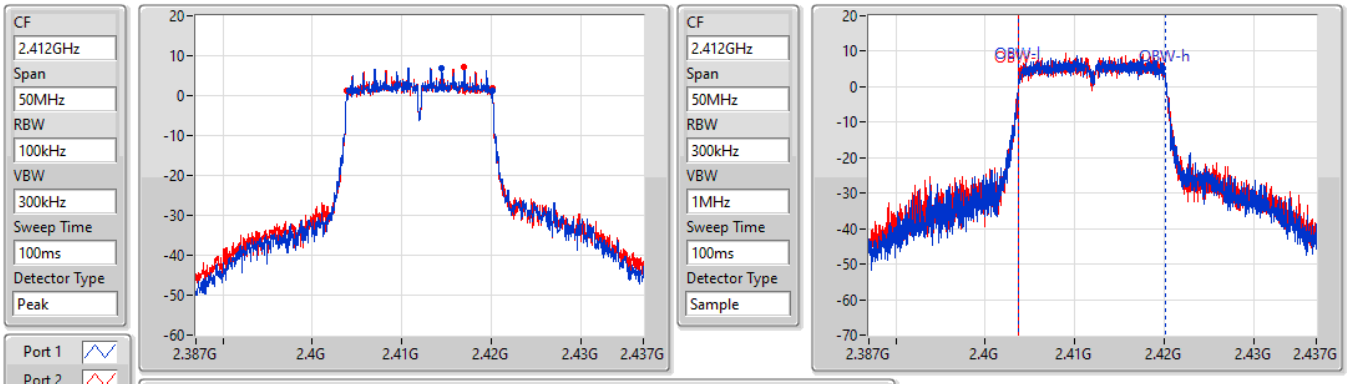


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
11.05M	2.456G	2.46705G	14.868M	2.454554G	2.469421G	500k	1
11.075M	2.45695G	2.468025G	14.893M	2.454554G	2.469446G	500k	2

802.11g_Nss1,(6Mbps)_2TX EBW

2412MHz

11/05/2022



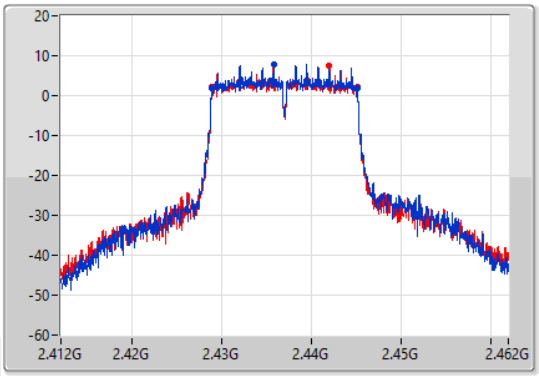
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.05M	2.4041G	2.42015G	16.417M	2.403779G	2.420196G	500k	1
16.3M	2.40385G	2.42015G	16.417M	2.403779G	2.420196G	500k	2

802.11g_Nss1,(6Mbps)_2TX EBW

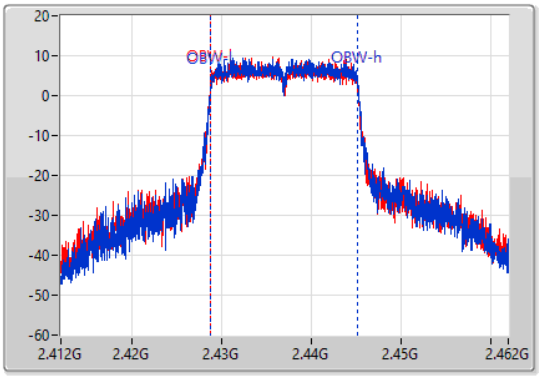
2437MHz

11/05/2022

CF	2.437GHz
Span	50MHz
RBW	100kHz
VBW	300kHz
Sweep Time	100ms
Detector Type	Peak



CF	2.437GHz
Span	50MHz
RBW	300kHz
VBW	1MHz
Sweep Time	100ms
Detector Type	Sample



Port 1
Port 2

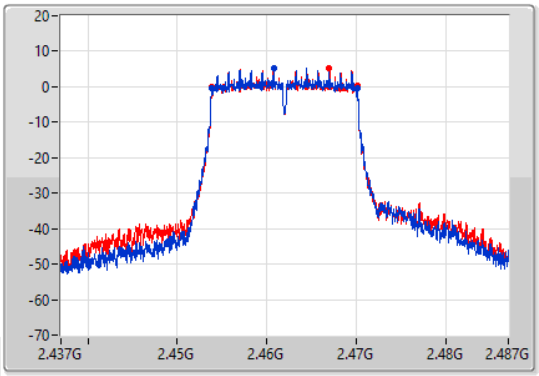
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.3M	2.42885G	2.44515G	16.417M	2.428779G	2.445196G	500k	1
16.3M	2.42885G	2.44515G	16.417M	2.428754G	2.445171G	500k	2

802.11g_Nss1,(6Mbps)_2TX EBW

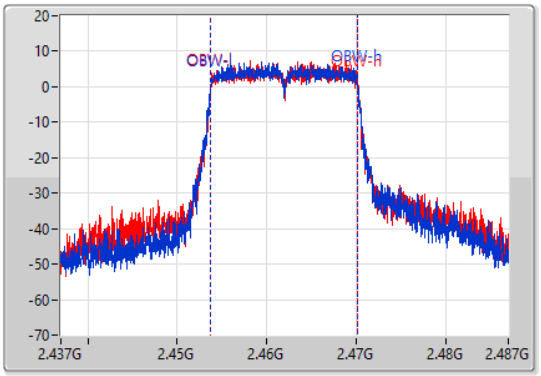
2462MHz

11/05/2022

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



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



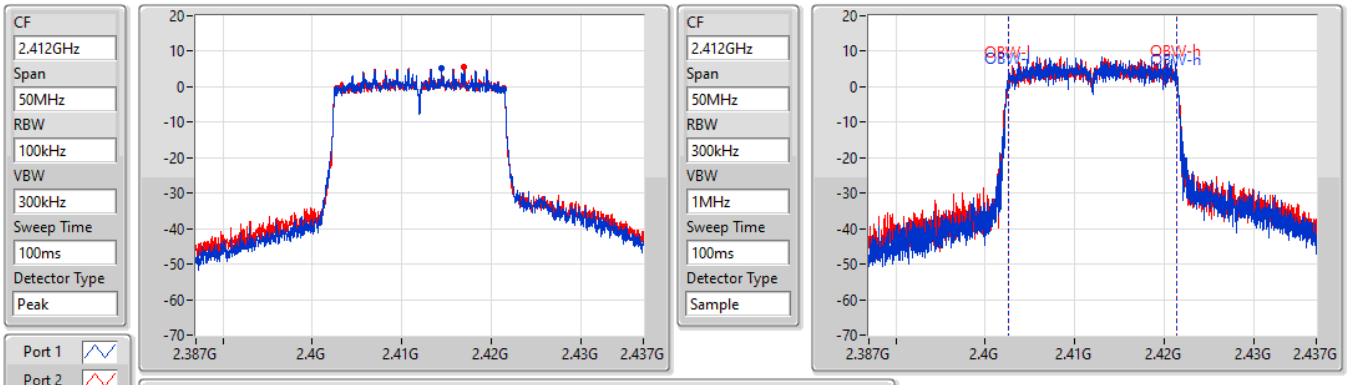
Port 1
Port 2

6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.3M	2.45385G	2.47015G	16.392M	2.453779G	2.470171G	500k	1
16.3M	2.45385G	2.47015G	16.417M	2.453779G	2.470196G	500k	2

802.11ax HEW20_Nss1,(MCS0)_2TX EBW

2412MHz

11/05/2022

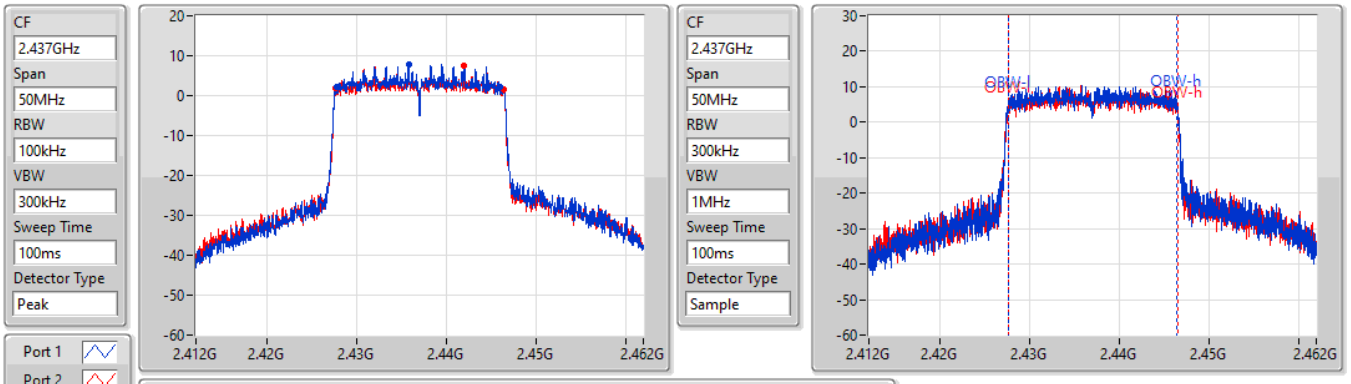


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.625M	2.40275G	2.421375G	18.916M	2.40253G	2.421445G	500k	1
18.7M	2.402725G	2.421425G	18.891M	2.402555G	2.421445G	500k	2

802.11ax HEW20_Nss1,(MCS0)_2TX EBW

2437MHz

11/05/2022

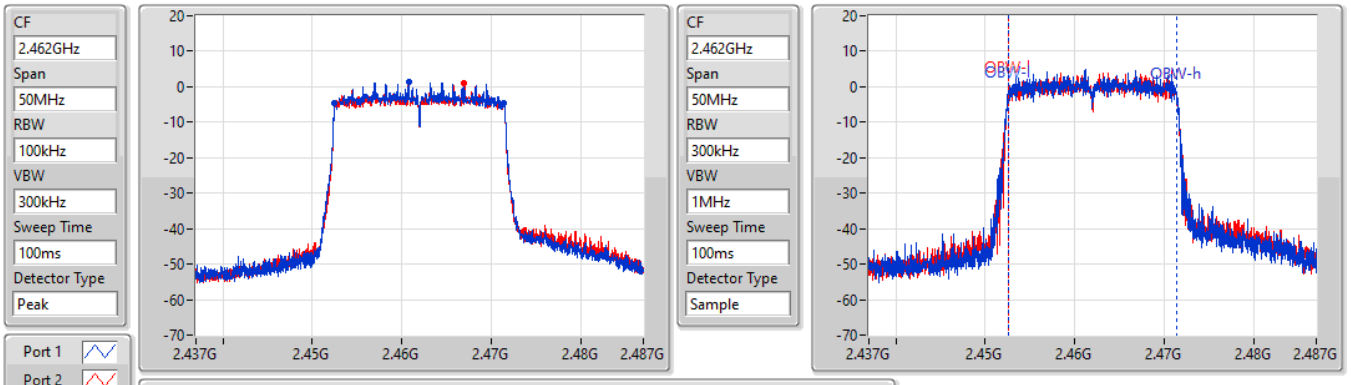


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.2M	2.42775G	2.44595G	18.941M	2.42753G	2.44647G	500k	1
18.8M	2.427625G	2.446425G	18.966M	2.42753G	2.446495G	500k	2

802.11ax HEW20_Nss1,(MCS0)_2TX EBW

2462MHz

11/05/2022

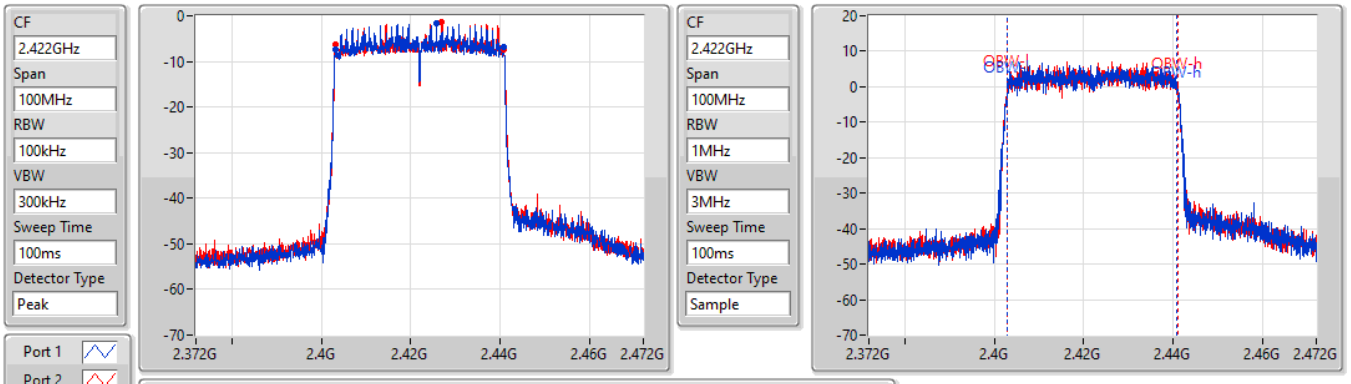


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.85M	2.452525G	2.471375G	18.891M	2.45253G	2.47142G	500k	1
18.825M	2.4526G	2.471425G	18.866M	2.452555G	2.47142G	500k	2

802.11ax HEW40_Nss1,(MCS0)_2TX EBW

2422MHz

11/05/2022

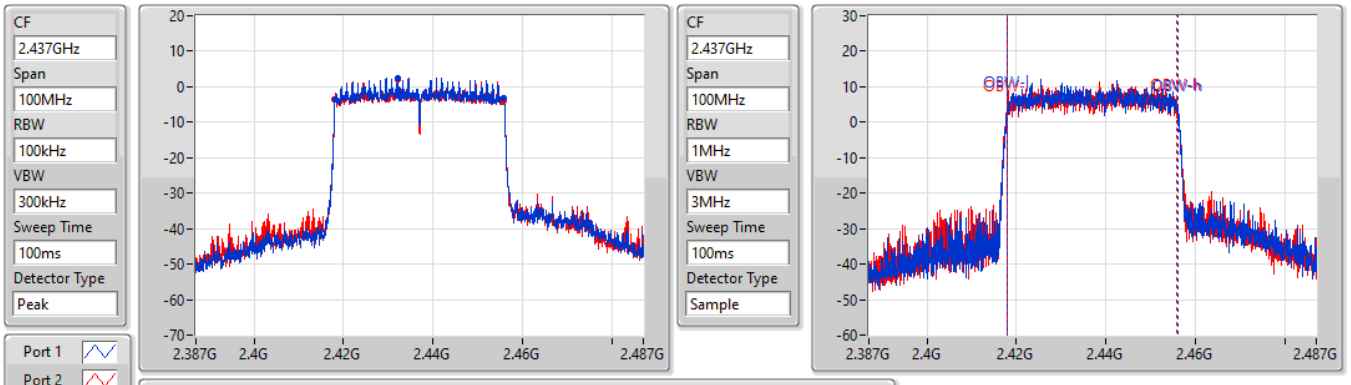


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.65M	2.40315G	2.4408G	37.931M	2.403009G	2.440941G	500k	1
37.6M	2.4031G	2.4407G	37.981M	2.403009G	2.440991G	500k	2

802.11ax HEW40_Nss1,(MCS0)_2TX EBW

2437MHz

11/05/2022

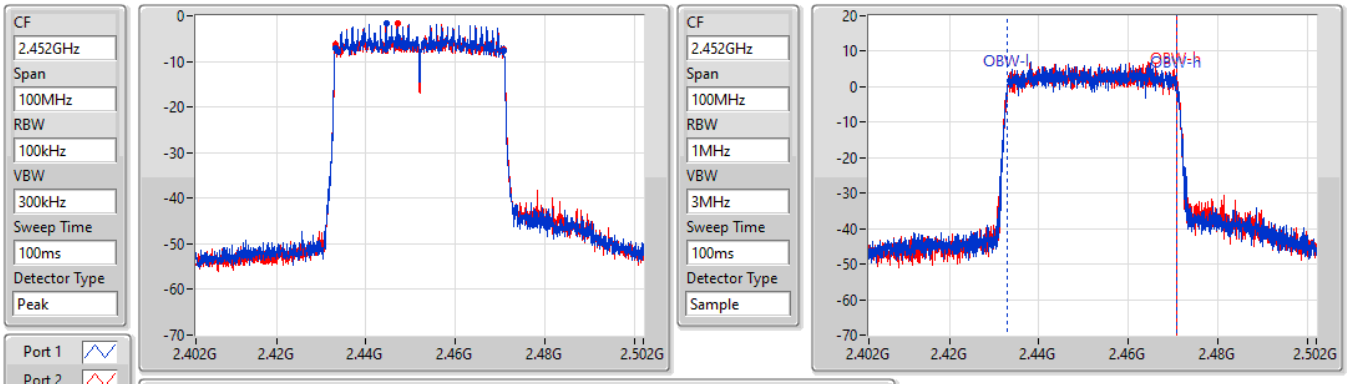


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.7M	2.4181G	2.4558G	37.981M	2.418009G	2.455991G	500k	1
37.75M	2.41805G	2.4558G	37.881M	2.418009G	2.455891G	500k	2

802.11ax HEW40_Nss1,(MCS0)_2TX EBW

2452MHz

11/05/2022



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
37.7M	2.43315G	2.47085G	37.981M	2.43296G	2.470941G	500k	1
37.7M	2.4331G	2.4708G	37.931M	2.433009G	2.470941G	500k	2

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_2TX	22.11	0.16255
802.11g_Nss1,(6Mbps)_2TX	22.06	0.16069
802.11ax HEW20_Nss1,(MCS0)_2TX	22.19	0.16558
802.11ax HEW40_Nss1,(MCS0)_2TX	19.74	0.09419

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.20	19.09	19.03	22.07	30.00
2437MHz	Pass	4.20	19.14	19.05	22.11	30.00
2462MHz	Pass	4.20	19.07	18.73	21.91	30.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.20	18.25	18.31	21.29	30.00
2417MHz	Pass	4.20	19.01	19.04	22.04	30.00
2437MHz	Pass	4.20	19.15	18.95	22.06	30.00
2457MHz	Pass	4.20	18.72	18.61	21.68	30.00
2462MHz	Pass	4.20	16.56	16.42	19.50	30.00
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.20	16.78	16.92	19.86	30.00
2417MHz	Pass	4.20	18.08	18.15	21.13	30.00
2437MHz	Pass	4.20	19.34	19.02	22.19	30.00
2457MHz	Pass	4.20	16.86	16.67	19.78	30.00
2462MHz	Pass	4.20	12.65	12.73	15.70	30.00
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	4.20	12.81	12.94	15.89	30.00
2427MHz	Pass	4.20	16.24	16.47	19.37	30.00
2437MHz	Pass	4.20	16.82	16.63	19.74	30.00
2447MHz	Pass	4.20	14.11	14.05	17.09	30.00
2452MHz	Pass	4.20	12.75	12.58	15.68	30.00

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

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_2TX	-3.20
802.11g_Nss1,(6Mbps)_2TX	-6.95
802.11ax HEW20_Nss1,(MCS0)_2TX	-4.57
802.11ax HEW40_Nss1,(MCS0)_2TX	-10.23

RBW = 3kHz;

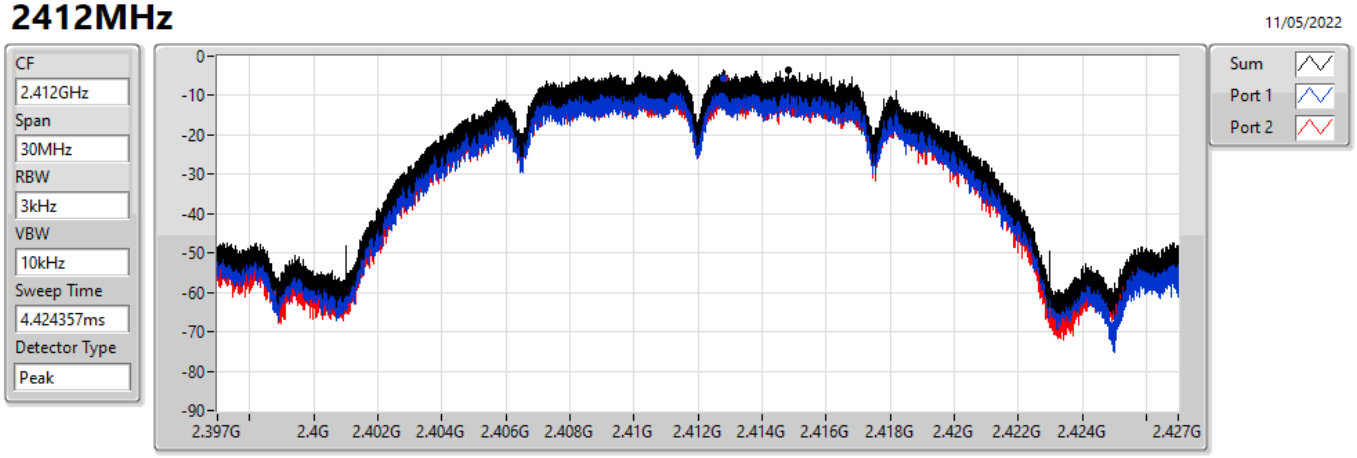
Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	7.21	-5.73	-5.46	-3.35	6.79
2437MHz	Pass	7.21	-5.49	-6.09	-3.20	6.79
2462MHz	Pass	7.21	-5.81	-6.29	-3.47	6.79
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	7.21	-10.38	-9.53	-7.23	6.79
2437MHz	Pass	7.21	-9.43	-9.83	-6.95	6.79
2462MHz	Pass	7.21	-12.05	-12.40	-9.69	6.79
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	7.21	-9.86	-9.64	-6.74	6.79
2437MHz	Pass	7.21	-7.48	-7.36	-4.57	6.79
2462MHz	Pass	7.21	-13.96	-13.89	-10.96	6.79
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	7.21	-16.71	-16.77	-13.96	6.79
2437MHz	Pass	7.21	-13.00	-13.13	-10.23	6.79
2452MHz	Pass	7.21	-17.19	-17.08	-14.12	6.79

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

802.11b_Nss1,(1Mbps)_2TX PSD

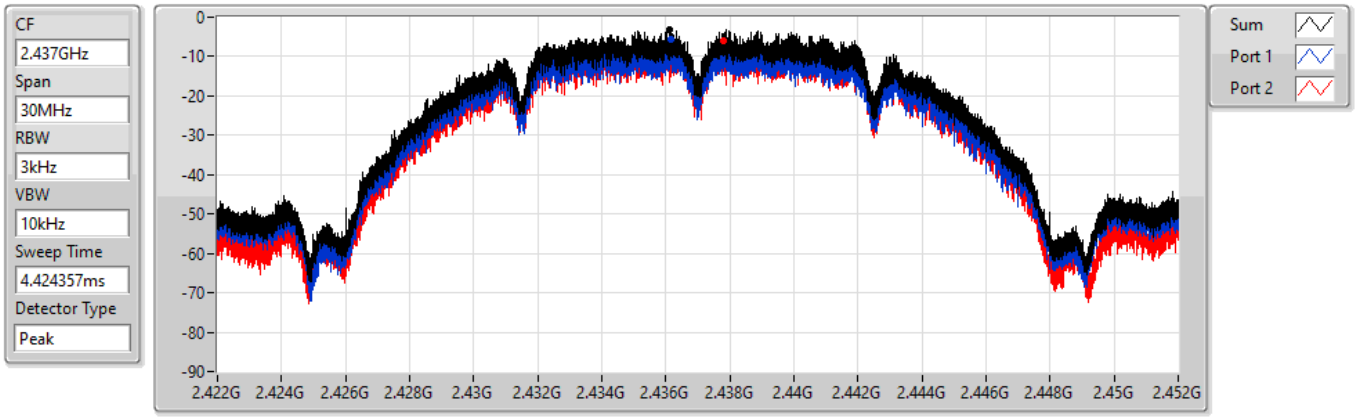
2412MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.35	-3.35	-5.73	-5.46

802.11b_Nss1,(1Mbps)_2TX PSD

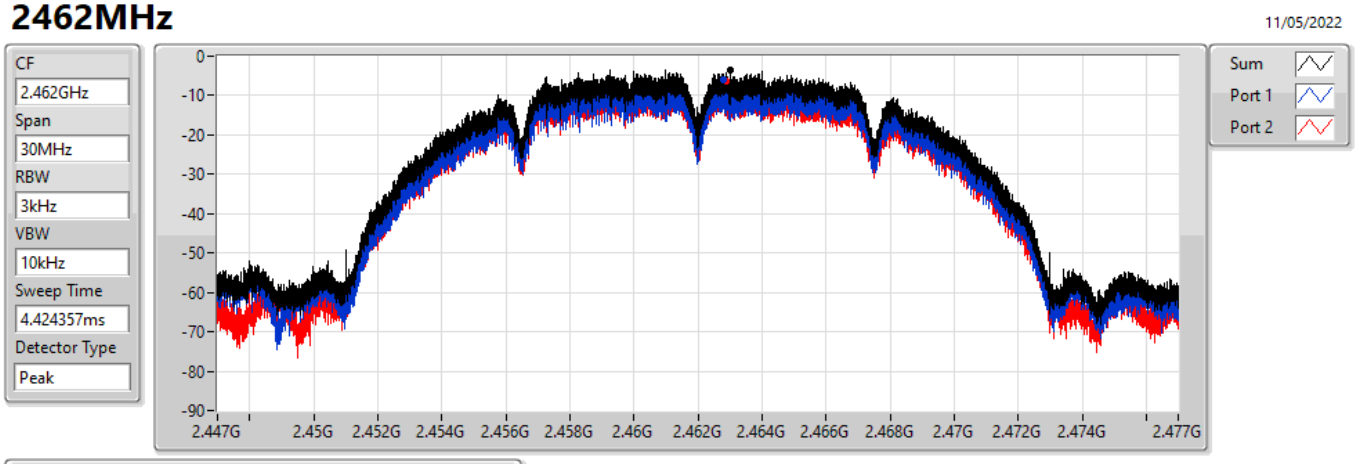
2437MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.20	-3.20	-5.49	-6.09

802.11b_Nss1,(1Mbps)_2TX PSD

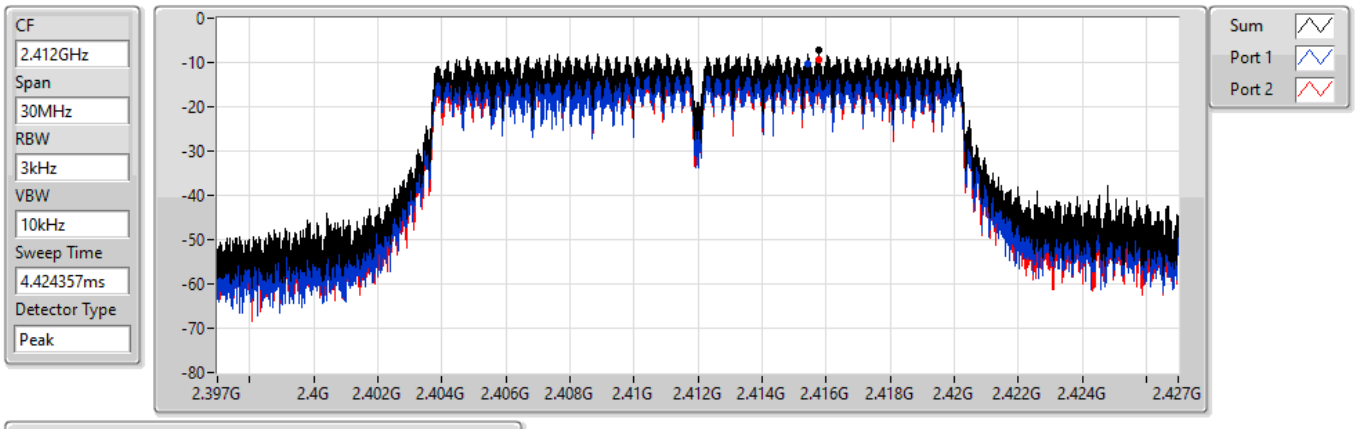
2462MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.47	-3.47	-5.81	-6.29

802.11g_Nss1,(6Mbps)_2TX PSD

2412MHz

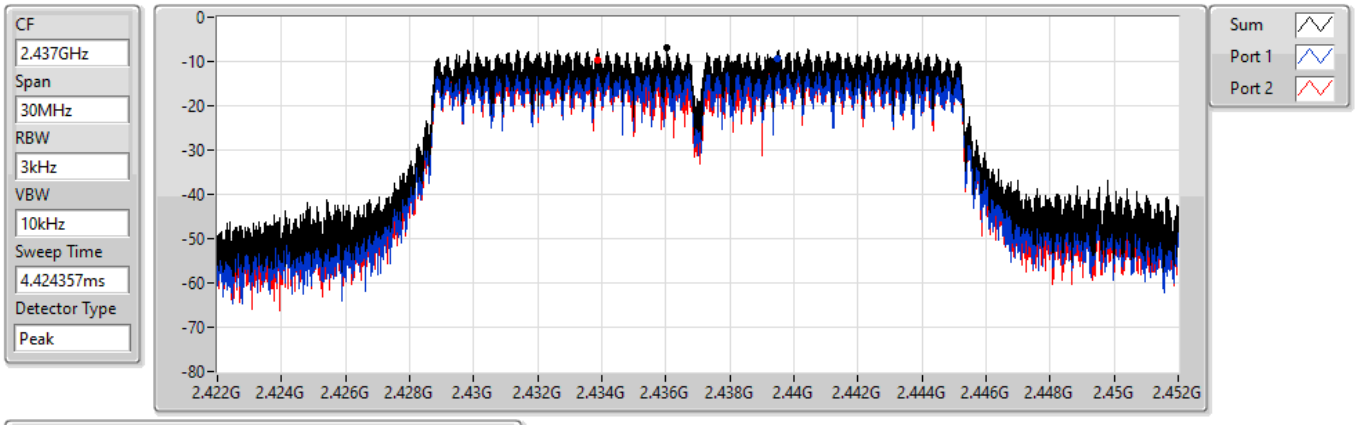


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.23	-7.23	-10.38	-9.53

802.11g_Nss1,(6Mbps)_2TX PSD

2437MHz

11/05/2022

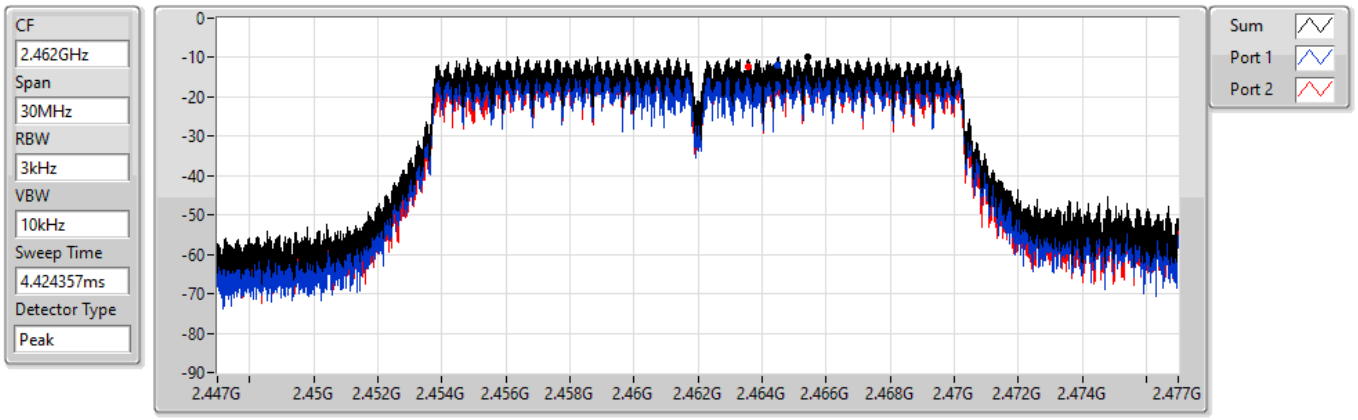


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.95	-6.95	-9.43	-9.83

802.11g_Nss1,(6Mbps)_2TX PSD

2462MHz

11/05/2022

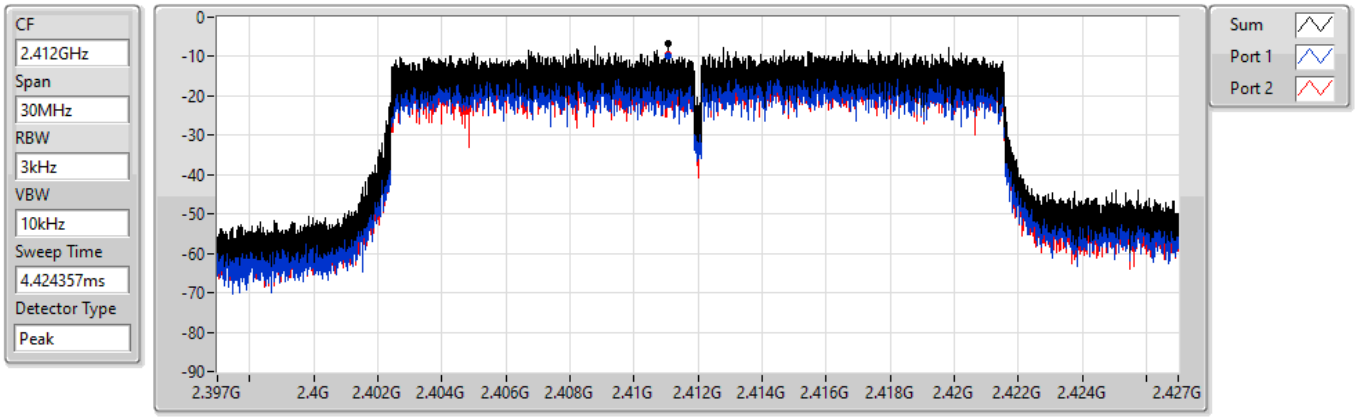


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-9.69	-9.69	-12.05	-12.40

802.11ax HEW20_Nss1,(MCS0)_2TX PSD

2412MHz

11/05/2022

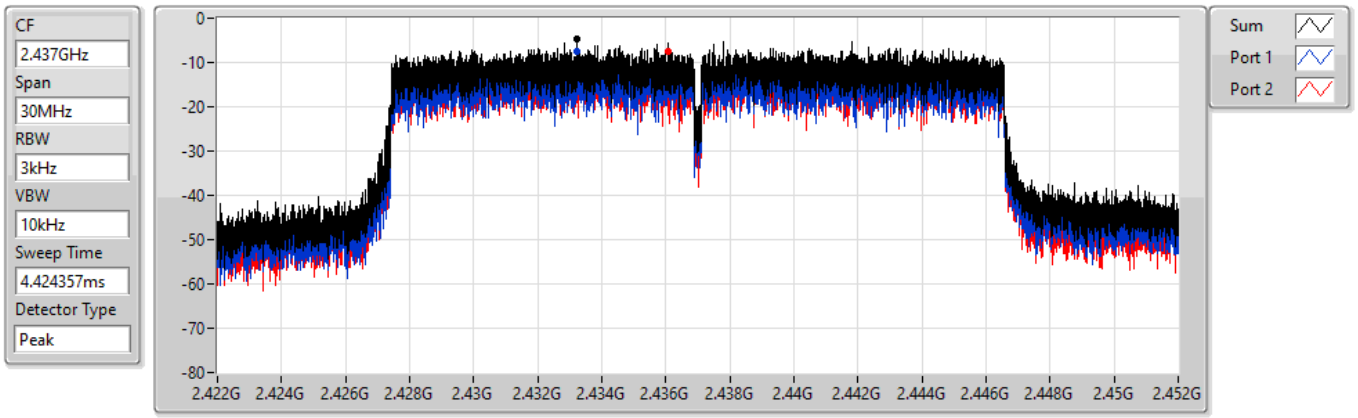


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.74	-6.74	-9.86	-9.64

802.11ax HEW20_Nss1,(MCS0)_2TX PSD

2437MHz

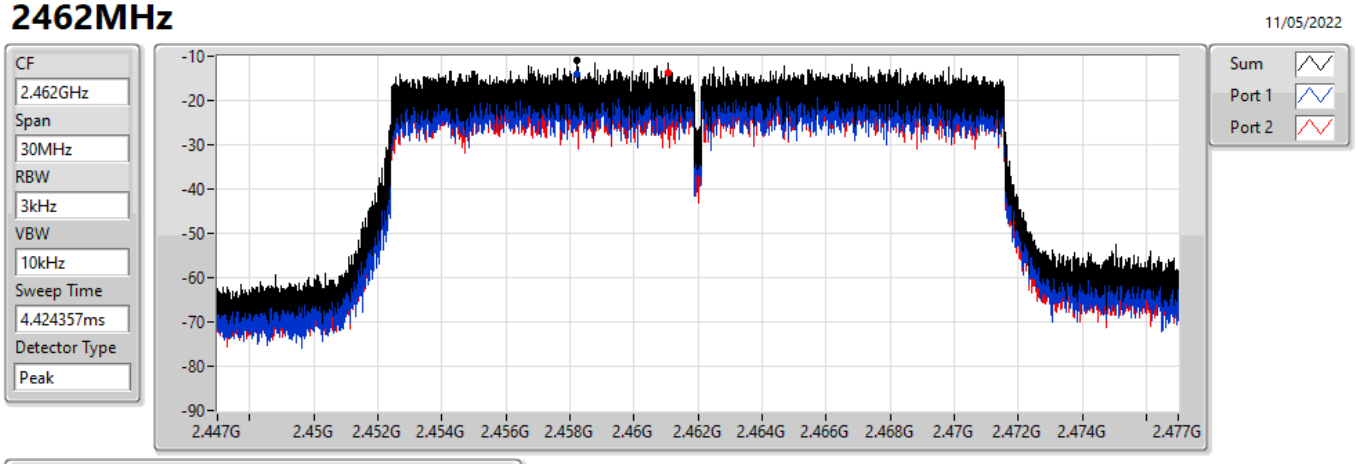
11/05/2022



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.57	-4.57	-7.48	-7.36

802.11ax HEW20_Nss1,(MCS0)_2TX PSD

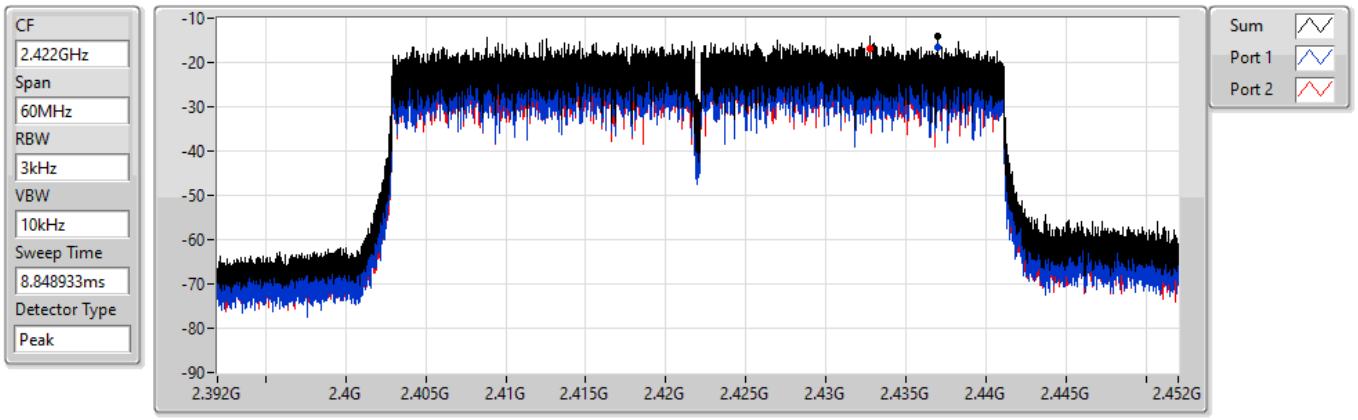
2462MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-10.96	-10.96	-13.96	-13.89

802.11ax HEW40_Nss1,(MCS0)_2TX PSD

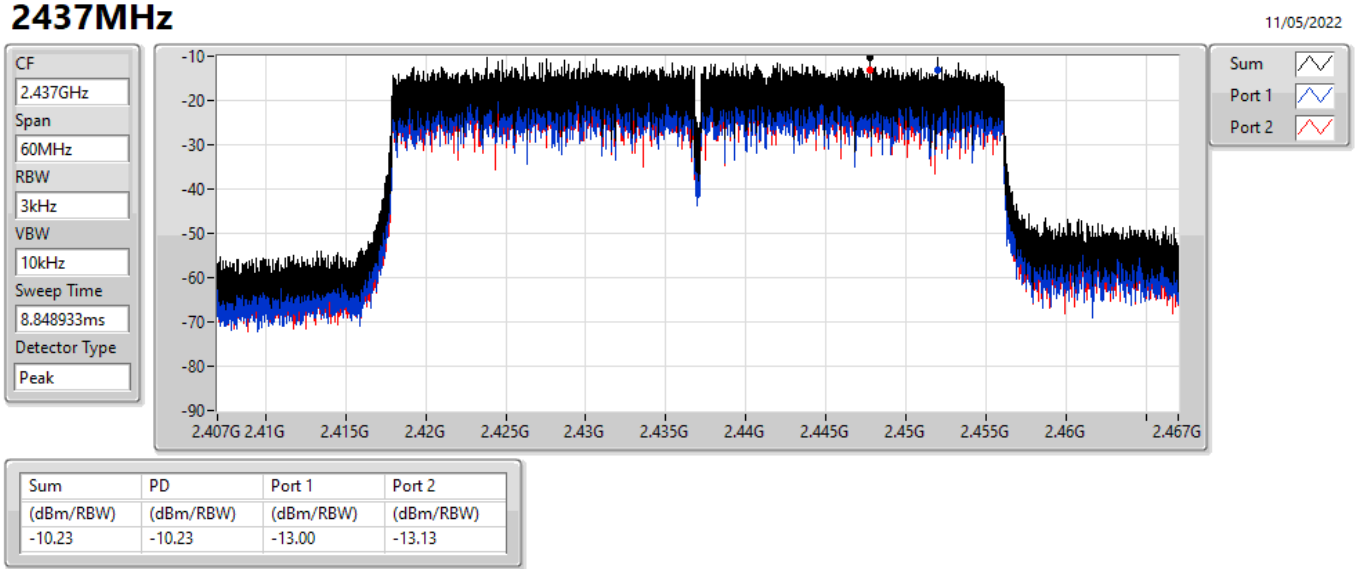
2422MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-13.96	-13.96	-16.71	-16.77

802.11ax HEW40_Nss1,(MCS0)_2TX PSD

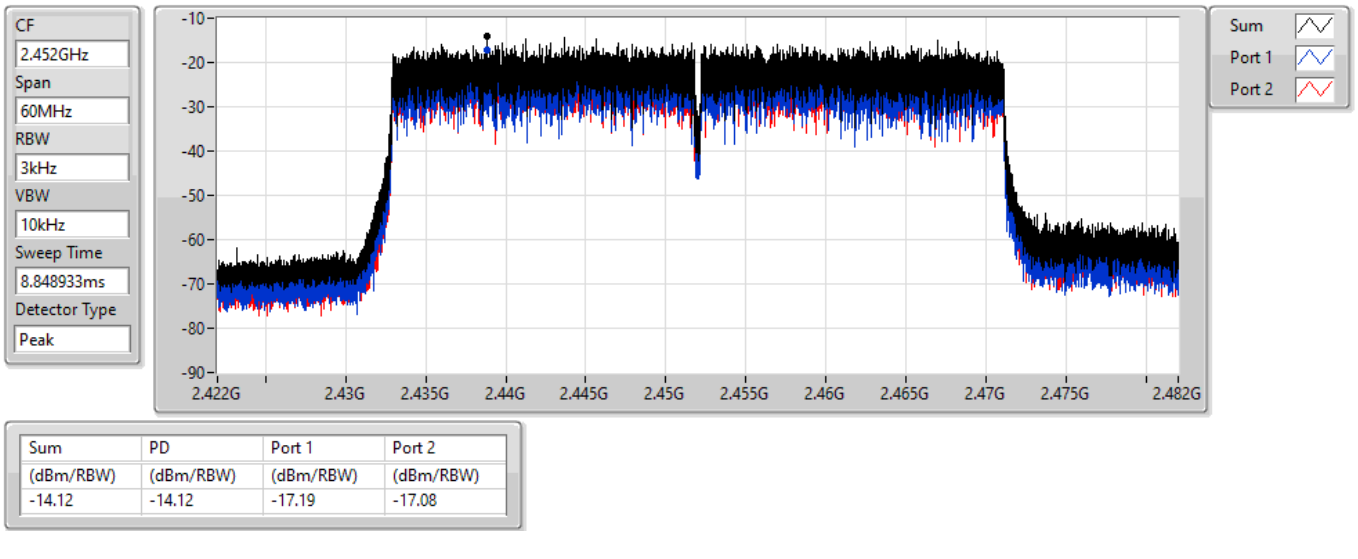
2437MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-10.23	-10.23	-13.00	-13.13

802.11ax HEW40_Nss1,(MCS0)_2TX PSD

2452MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-14.12	-14.12	-17.19	-17.08

Summary

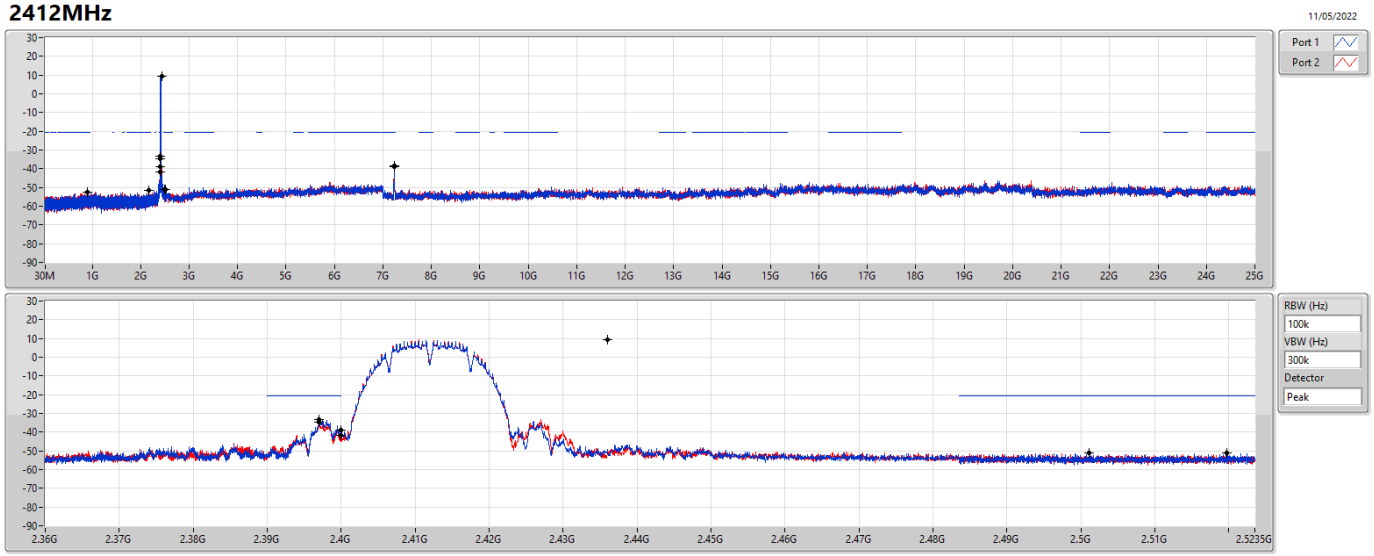
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	Pass	2.43599G	9.21	-20.79	2.16719G	-51.78	2.39704G	-33.06	2.4G	-38.80	2.51974G	-51.11	7.23514G	-39.08	1
802.11g_Nss1,(6Mbps)_2TX	Pass	2.4395G	7.84	-22.16	920.64M	-51.68	2.39986G	-29.87	2.4G	-31.24	2.4872G	-50.92	7.23795G	-40.38	2
802.11ax HEW20_Nss1,(MCS0)_2TX	Pass	2.4395G	7.80	-22.20	622.4M	-52.64	2.3994G	-33.73	2.4G	-35.75	2.486G	-50.13	7.24357G	-40.67	2
802.11ax HEW40_Nss1,(MCS0)_2TX	Pass	2.42948G	2.45	-27.55	939.42M	-52.96	2.39948G	-38.45	2.4835G	-39.15	2.4835G	-38.95	6.02153G	-47.65	2

Result

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43599G	9.21	-20.79	2.16719G	-51.78	2.39704G	-33.06	2.4G	-38.80	2.51974G	-51.11	7.23514G	-39.08	1
2412MHz	Pass	2.43599G	9.21	-20.79	905.21M	-52.35	2.397G	-34.61	2.4G	-41.65	2.50106G	-51.22	7.23514G	-38.42	2
2437MHz	Pass	2.43599G	9.21	-20.79	766.57M	-53.16	2.3994G	-49.91	2.4G	-51.94	2.4863G	-50.69	15.20306G	-47.53	1
2437MHz	Pass	2.43599G	9.21	-20.79	1.94235G	-52.49	2.39888G	-49.45	2.4G	-49.99	2.48462G	-50.47	5.86969G	-47.27	2
2462MHz	Pass	2.43599G	9.21	-20.79	2.19282G	-52.01	2.39696G	-51.33	2.4835G	-48.03	2.48848G	-44.27	17.6558G	-47.59	1
2462MHz	Pass	2.43599G	9.21	-20.79	2.30758G	-52.42	2.39708G	-51.23	2.4835G	-50.48	2.48874G	-45.66	5.89498G	-47.88	2
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.4395G	7.84	-22.16	799.19M	-52.50	2.39976G	-31.18	2.4G	-33.12	2.49662G	-51.05	7.23233G	-40.49	1
2412MHz	Pass	2.4395G	7.84	-22.16	920.64M	-51.68	2.39986G	-29.87	2.4G	-31.24	2.4872G	-50.92	7.23795G	-40.38	2
2437MHz	Pass	2.4395G	7.84	-22.16	2.17185G	-53.03	2.39692G	-50.07	2.4G	-52.79	2.49652G	-49.82	16.38026G	-47.38	1
2437MHz	Pass	2.4395G	7.84	-22.16	87.09M	-53.24	2.39704G	-50.00	2.4G	-51.55	2.48588G	-50.06	17.65299G	-47.94	2
2462MHz	Pass	2.4395G	7.84	-22.16	2.18001G	-52.70	2.39858G	-51.39	2.4835G	-46.12	2.48358G	-43.42	6.65918G	-46.97	1
2462MHz	Pass	2.4395G	7.84	-22.16	841.71M	-52.85	2.39886G	-51.58	2.4835G	-43.99	2.48404G	-39.98	17.64457G	-47.47	2
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.4395G	7.80	-22.20	2.19865G	-52.64	2.39884G	-36.51	2.4G	-40.61	2.51896G	-50.19	7.23514G	-43.89	1
2412MHz	Pass	2.4395G	7.80	-22.20	622.4M	-52.64	2.3994G	-33.73	2.4G	-35.75	2.486G	-50.13	7.24357G	-40.67	2
2437MHz	Pass	2.4395G	7.80	-22.20	1.94322G	-52.22	2.39904G	-49.26	2.4G	-52.02	2.485G	-50.32	17.69514G	-47.50	1
2437MHz	Pass	2.4395G	7.80	-22.20	826.86M	-52.97	2.39772G	-47.00	2.4G	-48.65	2.48386G	-49.73	6.23212G	-47.62	2
2462MHz	Pass	2.4395G	7.80	-22.20	1.94322G	-53.15	2.39754G	-51.52	2.4835G	-46.56	2.48504G	-47.55	6.49622G	-47.49	1
2462MHz	Pass	2.4395G	7.80	-22.20	898.8M	-52.24	2.39048G	-52.41	2.4835G	-46.83	2.4838G	-45.86	5.83316G	-47.29	2
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.42948G	2.45	-27.55	927.68M	-53.40	2.39764G	-48.25	2.4G	-50.88	2.5223G	-51.19	16.45169G	-47.98	1
2422MHz	Pass	2.42948G	2.45	-27.55	2.17315G	-52.86	2.39956G	-45.15	2.4G	-49.53	2.49062G	-49.75	16.59473G	-46.88	2
2437MHz	Pass	2.42948G	2.45	-27.55	2.30941G	-52.97	2.39452G	-42.01	2.4835G	-41.22	2.4867G	-42.03	16.44328G	-47.30	1
2437MHz	Pass	2.42948G	2.45	-27.55	939.42M	-52.96	2.39948G	-38.45	2.4835G	-39.15	2.4835G	-38.95	6.02153G	-47.65	2
2452MHz	Pass	2.42948G	2.45	-27.55	2.09873G	-53.05	2.39132G	-50.84	2.4835G	-46.62	2.48446G	-42.74	14.65116G	-47.98	1
2452MHz	Pass	2.42948G	2.45	-27.55	1.64445G	-51.09	2.39104G	-51.70	2.4835G	-46.03	2.48574G	-42.61	5.78594G	-47.82	2

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

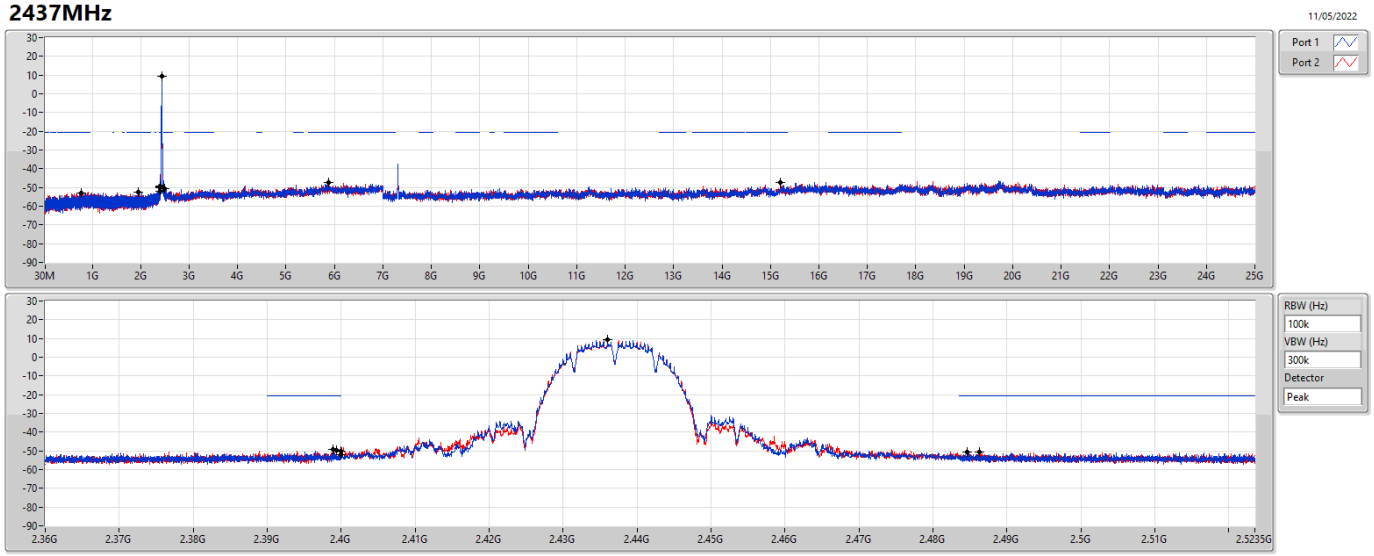
2412MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43599G	9.21	-20.79	2.16719G	-51.78	2.39704G	-33.06	2.4G	-38.80	2.51974G	-51.11	7.23514G	-39.08	1
2.43599G	9.21	-20.79	905.21M	-52.35	2.397G	-34.61	2.4G	-41.65	2.50106G	-51.22	7.23514G	-38.42	2

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

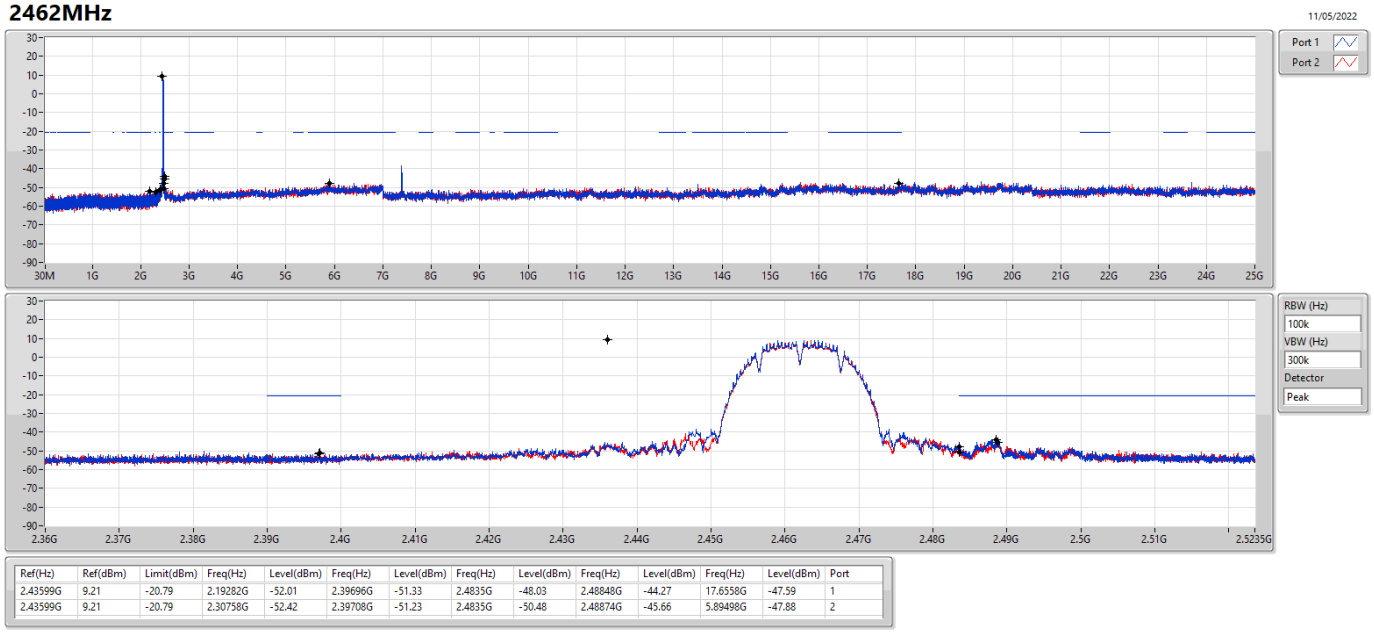
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43599G	9.21	-20.79	766.57M	-53.16	2.3994G	-49.91	2.4G	-51.94	2.4863G	-50.69	15.20306G	-47.53	1
2.43599G	9.21	-20.79	1.94235G	-52.49	2.39888G	-49.45	2.4G	-49.99	2.48462G	-50.47	5.86969G	-47.27	2

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

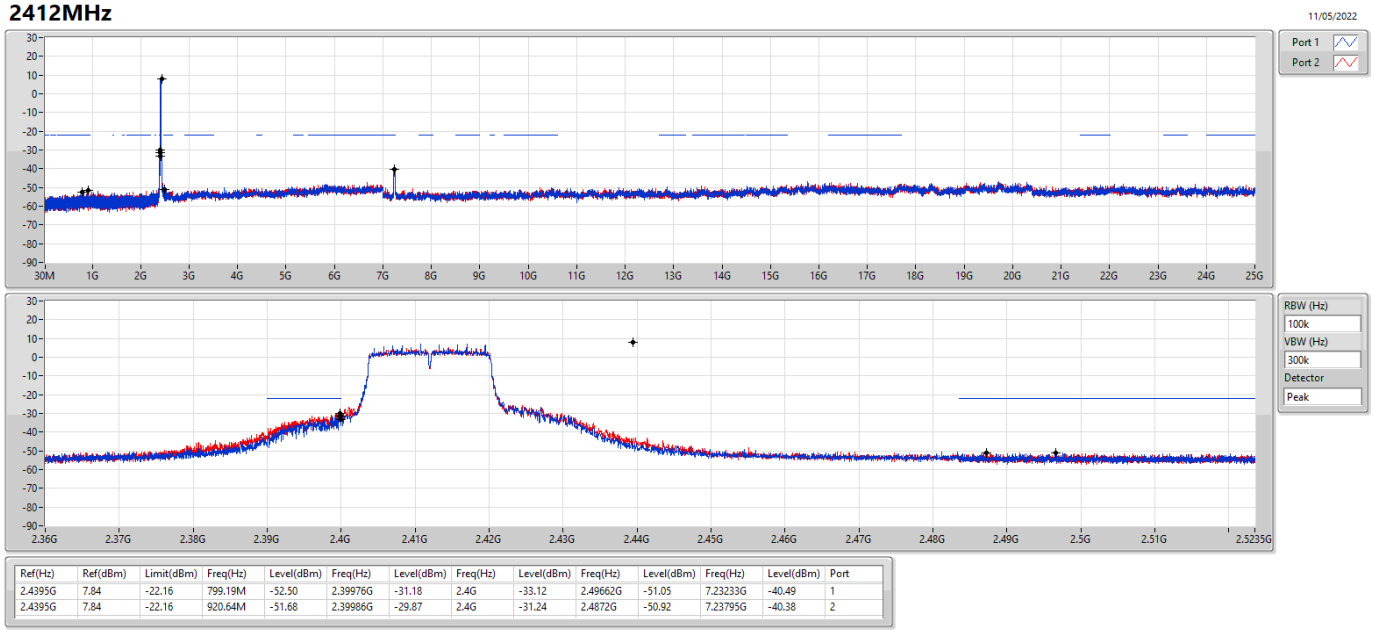
2462MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43599G	9.21	-20.79	2.19282G	-52.01	2.39696G	-51.33	2.4835G	-48.03	2.48848G	-44.27	17.6558G	-47.59	1
2.43599G	9.21	-20.79	2.30758G	-52.42	2.39708G	-51.23	2.4835G	-50.48	2.48874G	-45.66	5.89498G	-47.88	2

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

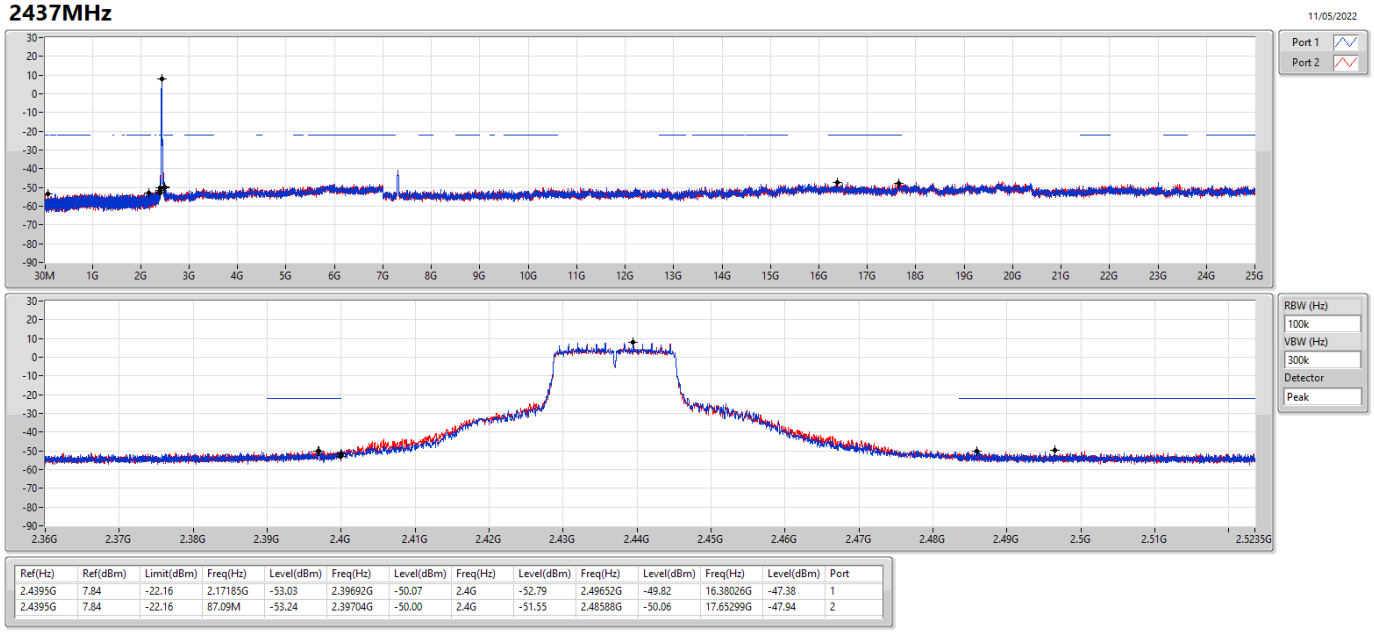
2412MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.4395G	7.84	-22.16	799.19M	-52.50	2.39976G	-31.18	2.4G	-33.12	2.49662G	-51.05	7.23233G	-40.49	1
2.4395G	7.84	-22.16	920.64M	-51.68	2.39986G	-29.87	2.4G	-31.24	2.4872G	-50.92	7.23795G	-40.38	2

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

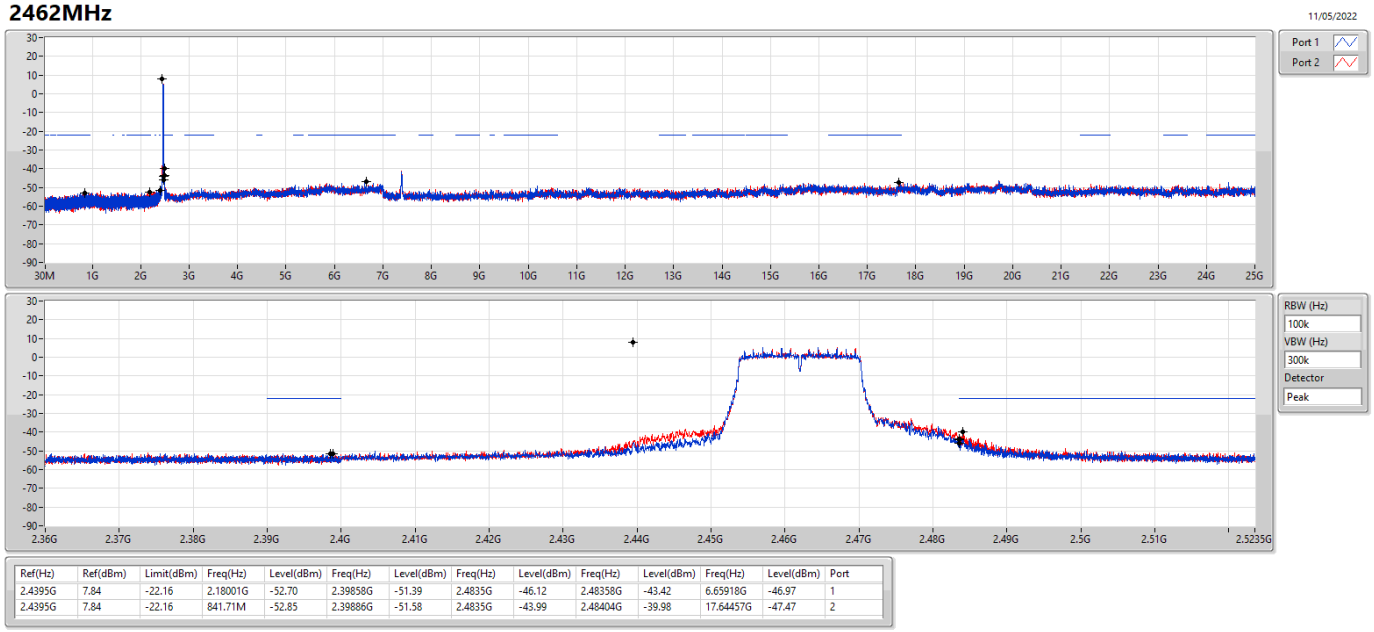
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.4395G	7.84	-22.16	2.17185G	-53.03	2.39692G	-50.07	2.4G	-52.79	2.49652G	-49.82	16.38026G	-47.38	1
2.4395G	7.84	-22.16	87.09M	-53.24	2.39704G	-50.00	2.4G	-51.55	2.48588G	-50.06	17.65299G	-47.94	2

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

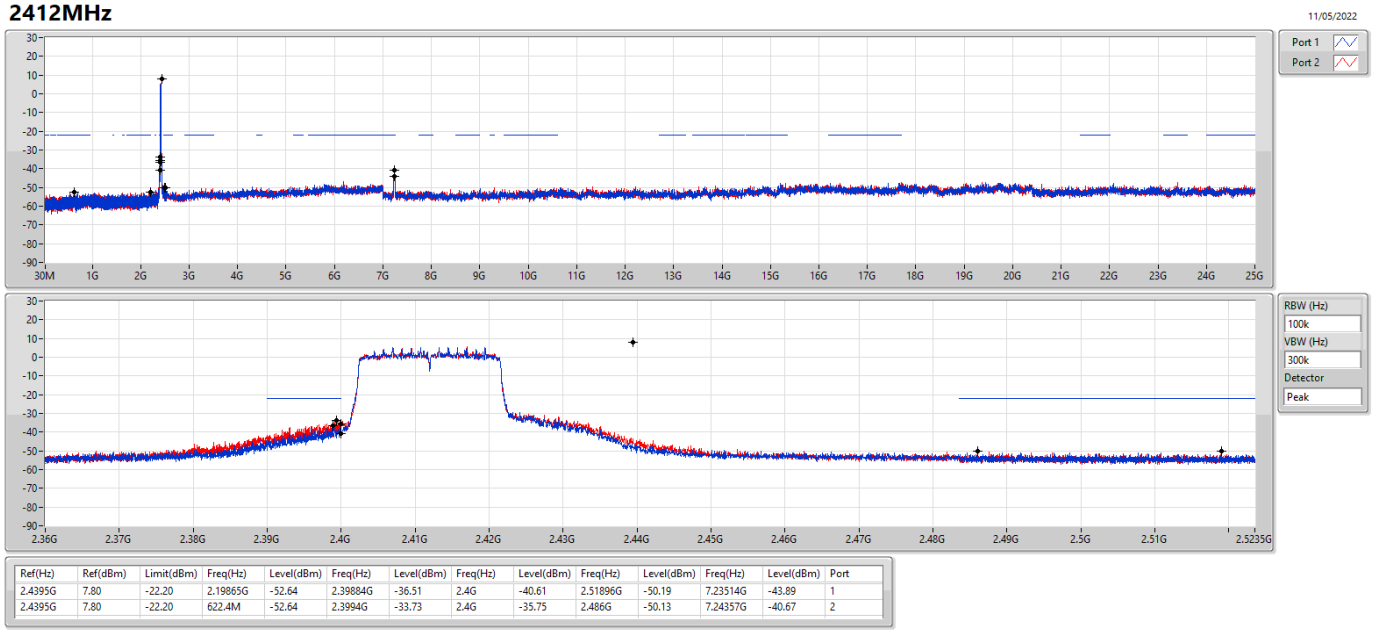
2462MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.4395G	7.84	-22.16	2.18001G	-52.70	2.39858G	-51.39	2.4835G	-46.12	2.48358G	-43.42	6.65918G	-46.97	1
2.4395G	7.84	-22.16	841.71M	-52.85	2.39886G	-51.58	2.4835G	-43.99	2.48404G	-39.98	17.64457G	-47.47	2

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

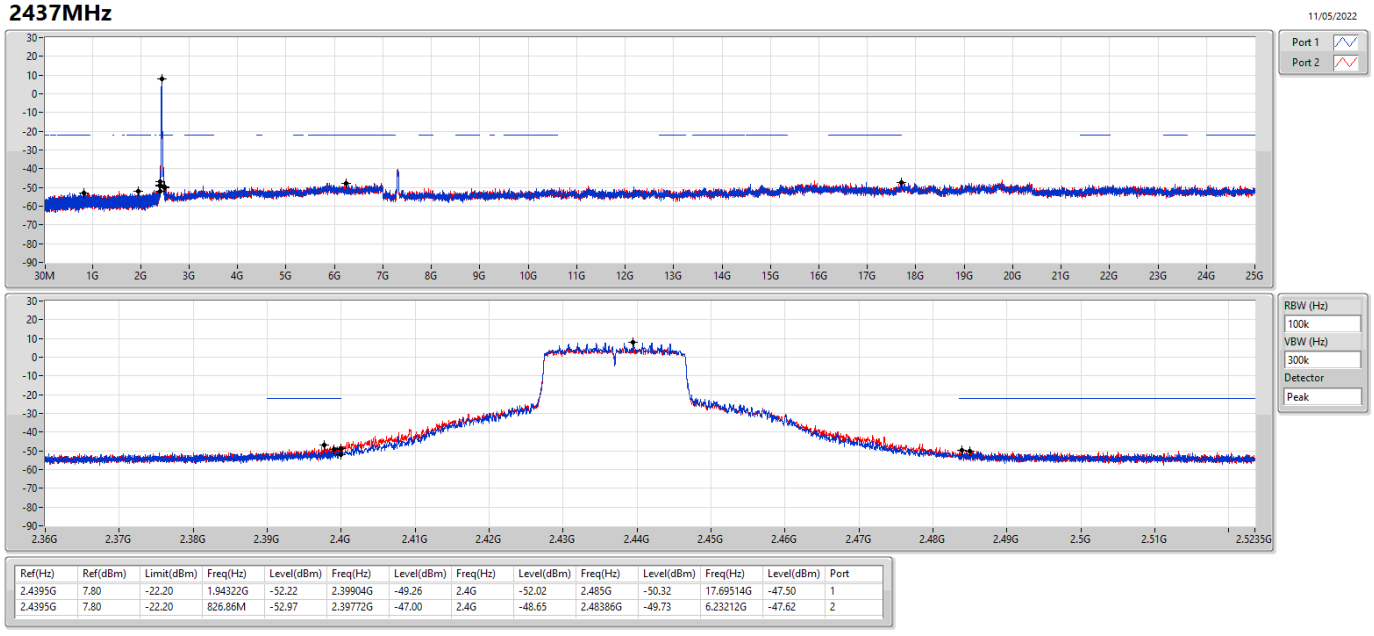
2412MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.4395G	7.80	-22.20	2.19865G	-52.64	2.39884G	-36.51	2.4G	-40.61	2.51896G	-50.19	7.23514G	-43.89	1
2.4395G	7.80	-22.20	622.4M	-52.64	2.3994G	-33.73	2.4G	-35.75	2.486G	-50.13	7.24357G	-40.67	2

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

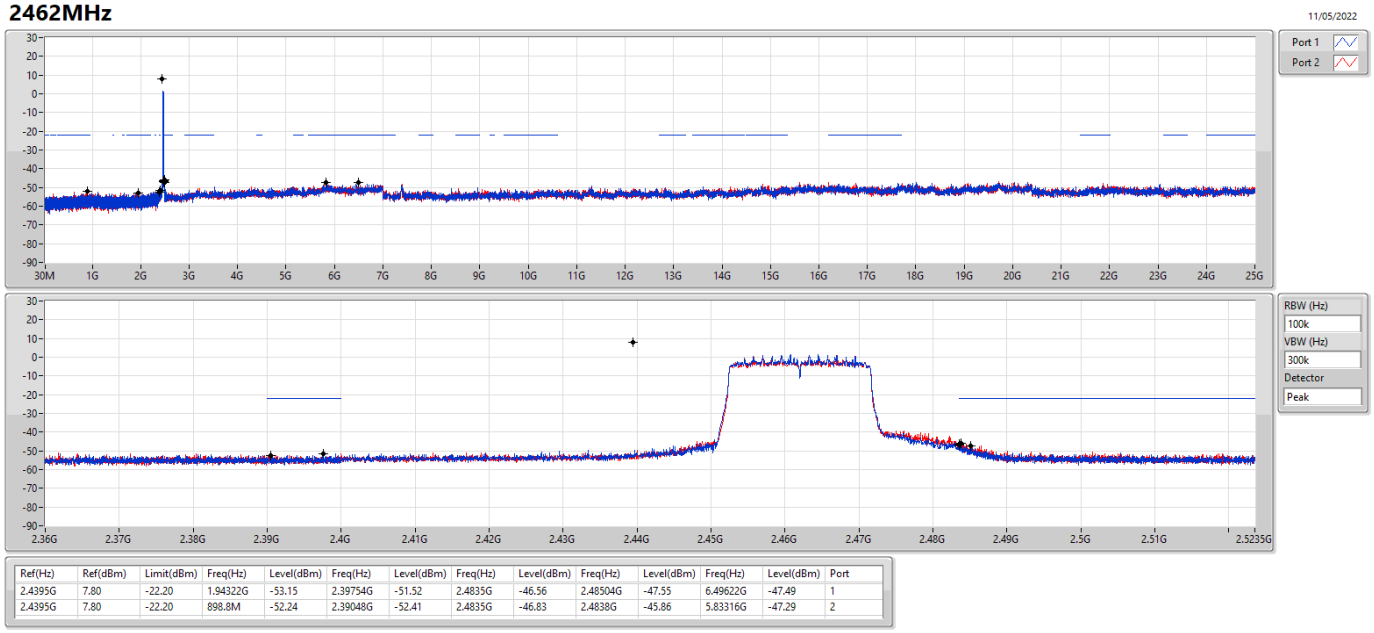
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.4395G	7.80	-22.20	1.94322G	-52.22	2.39904G	-49.26	2.4G	-52.02	2.485G	-50.32	17.69514G	-47.50	1
2.4395G	7.80	-22.20	826.86M	-52.97	2.39772G	-47.00	2.4G	-48.65	2.48386G	-49.73	6.23212G	-47.62	2

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

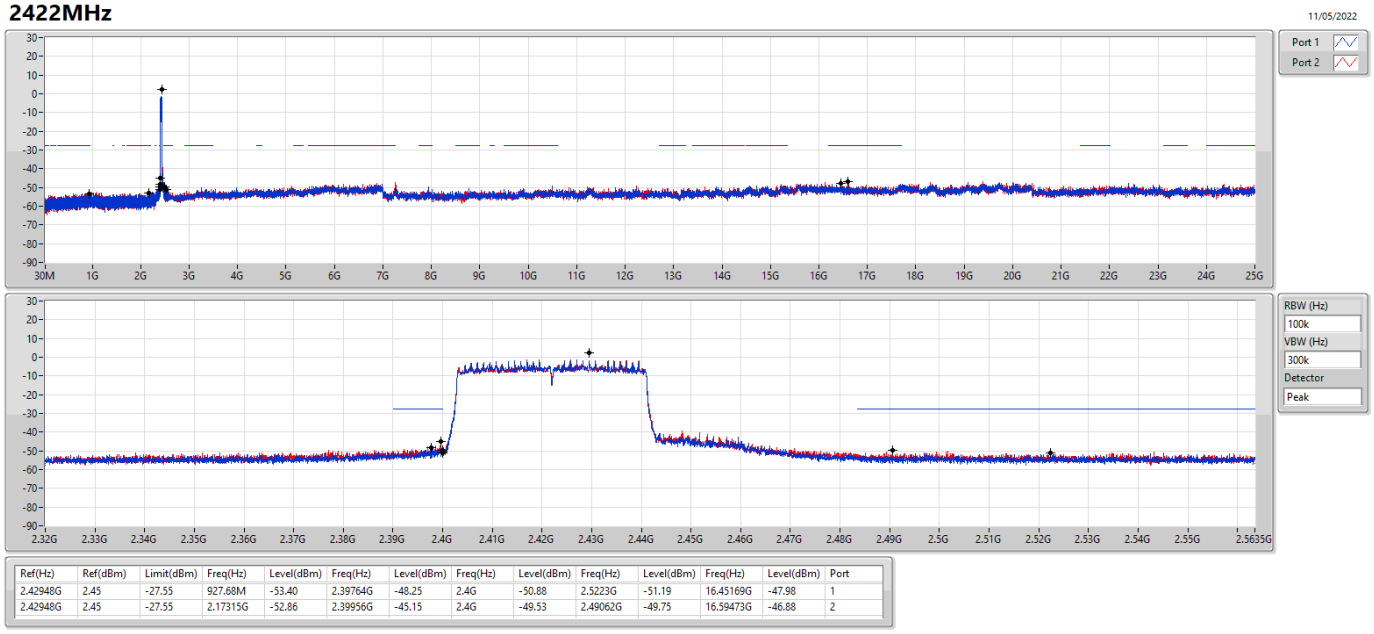
2462MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.4395G	7.80	-22.20	1.94322G	-53.15	2.39754G	-51.52	2.4835G	-46.56	2.48504G	-47.55	6.49622G	-47.49	1
2.4395G	7.80	-22.20	898.8M	-52.24	2.39048G	-52.41	2.4835G	-46.83	2.4838G	-45.86	5.83316G	-47.29	2

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

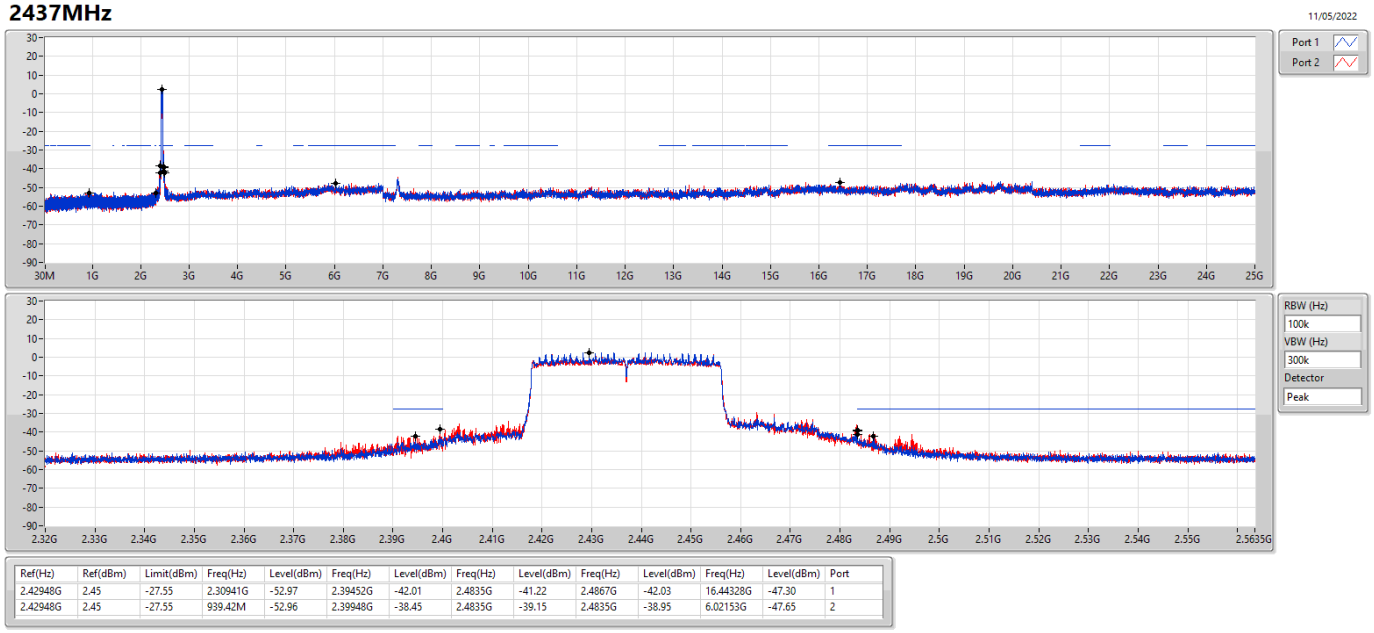
2422MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.42948G	2.45	-27.55	927.68M	-53.40	2.39764G	-48.25	2.4G	-50.88	2.5223G	-51.19	16.45169G	-47.98	1
2.42948G	2.45	-27.55	2.17315G	-52.86	2.39956G	-45.15	2.4G	-49.53	2.49062G	-49.75	16.59473G	-46.88	2

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

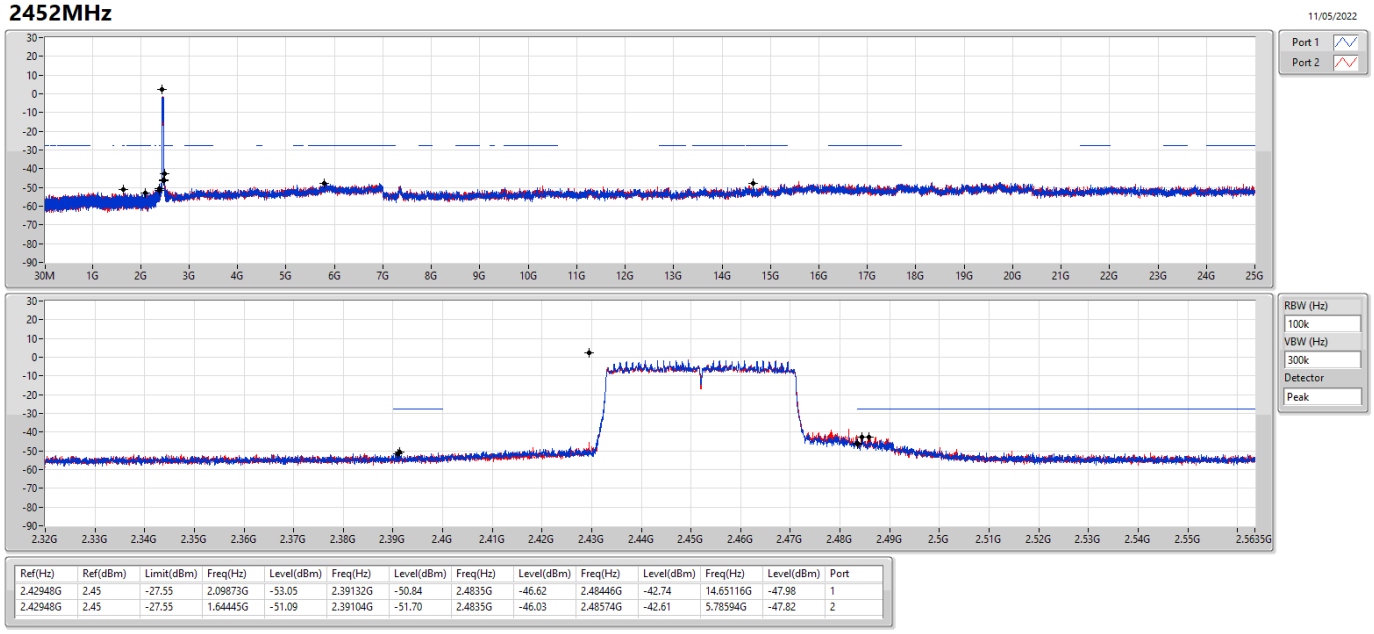
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.42948G	2.45	-27.55	2.30941G	-52.97	2.39452G	-42.01	2.4835G	-41.22	2.4867G	-42.03	16.44328G	-47.30	1
2.42948G	2.45	-27.55	939.42M	-52.96	2.39948G	-38.45	2.4835G	-39.15	2.4835G	-38.95	6.02153G	-47.65	2

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

2452MHz



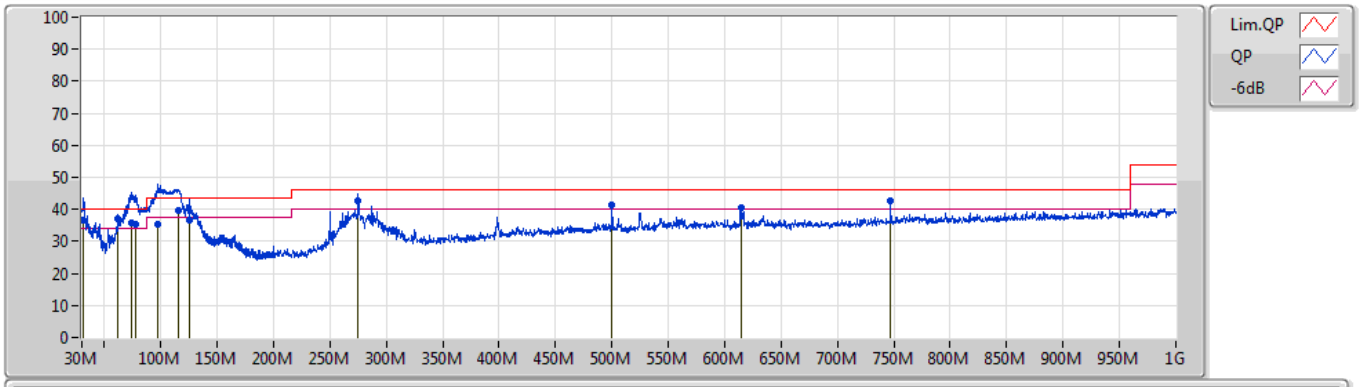
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.42948G	2.45	-27.55	2.09873G	-53.05	2.39132G	-50.84	2.4835G	-46.62	2.48446G	-42.74	14.65116G	-47.98	1
2.42948G	2.45	-27.55	1.64445G	-51.09	2.39104G	-51.70	2.4835G	-46.03	2.48574G	-42.61	5.78594G	-47.82	2

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 2	Pass	QP	62.3M	36.96	40.00	-3.04	Vertical

Mode 2

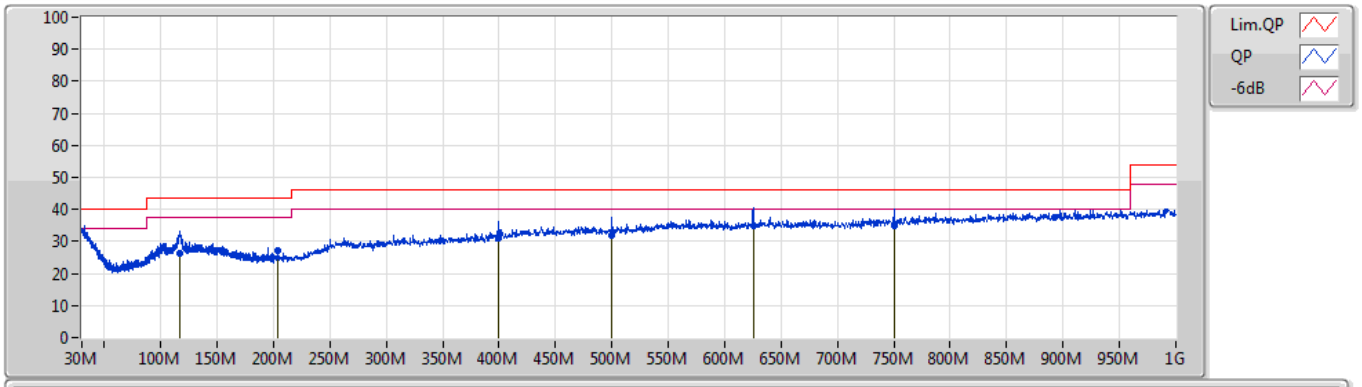
02/05/2022



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)
QP	31.62M	36.70	40.00	-3.30	-3.60	3	Vertical	342	1.00	-	40.30	23.60	0.69	27.89
QP	62.3M	36.96	40.00	-3.04	-14.85	3	Vertical	342	1.00	"Worst"	51.81	12.01	0.97	27.83
QP	73.86M	35.59	40.00	-4.41	-14.07	3	Vertical	230	1.00	-	49.66	12.65	1.06	27.78
QP	77.69M	35.43	40.00	-4.57	-13.72	3	Vertical	266	1.00	-	49.15	13.02	1.09	27.83
QP	96.98M	35.45	43.50	-8.05	-10.94	3	Vertical	108	2.00	-	46.39	15.66	1.22	27.82
PK	115.94M	39.51	43.50	-3.99	-9.02	3	Vertical	42	1.00	-	48.53	17.31	1.34	27.67
PK	125.03M	36.83	43.50	-6.67	-8.57	3	Vertical	293	3.00	-	45.40	17.64	1.40	27.61
QP	275.2M	42.50	46.00	-3.50	-5.60	3	Vertical	42	1.00	-	48.10	18.62	2.13	26.35
PK	500M	41.36	46.00	-4.64	-1.70	3	Vertical	2	1.00	-	43.06	23.26	2.94	27.90
PK	614.4M	40.60	46.00	-5.40	-0.02	3	Vertical	355	1.00	-	40.62	24.49	3.29	27.80
PK	746.8M	42.86	46.00	-3.14	1.49	3	Vertical	29	1.00	-	41.37	25.41	3.67	27.59

Mode 2

02/05/2022



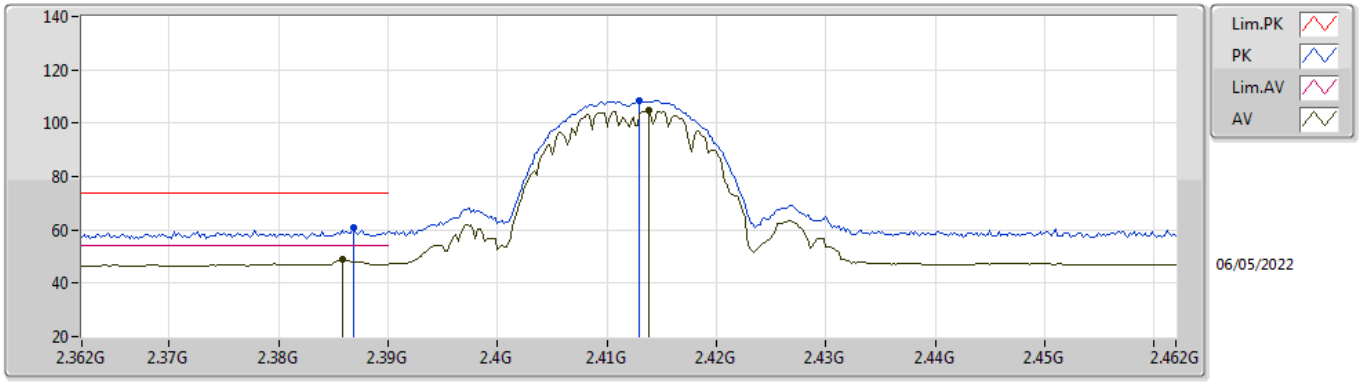
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	116.7M	26.41	43.50	-17.09	-15.75	3	Horizontal	121	1.00	-	42.16	10.57	1.35	27.67
PK	203.6M	27.34	43.50	-16.16	-8.81	3	Horizontal	77	1.00	-	36.15	15.94	1.81	26.56
PK	400M	31.02	46.00	-14.98	-8.49	3	Horizontal	353	1.00	-	39.51	16.23	2.62	27.34
PK	500M	31.69	46.00	-14.31	-7.44	3	Horizontal	147	1.00	-	39.13	17.52	2.94	27.90
PK	625.2M	35.02	46.00	-10.98	-5.39	3	Horizontal	360	1.00	"Worst"	40.41	19.05	3.34	27.78
PK	750M	34.90	46.00	-11.10	-3.52	3	Horizontal	200	1.00	-	38.42	20.39	3.68	27.59

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	-	-	-	-	-	-	-	-	-	-	-
802.11g_Nss1,(6Mbps)_2TX	Pass	AV	2.39G	53.97	54.00	-0.03	3	Horizontal	104	1.70	-

802.11b_Nss1,(1Mbps)_2TX

2412MHz_TX

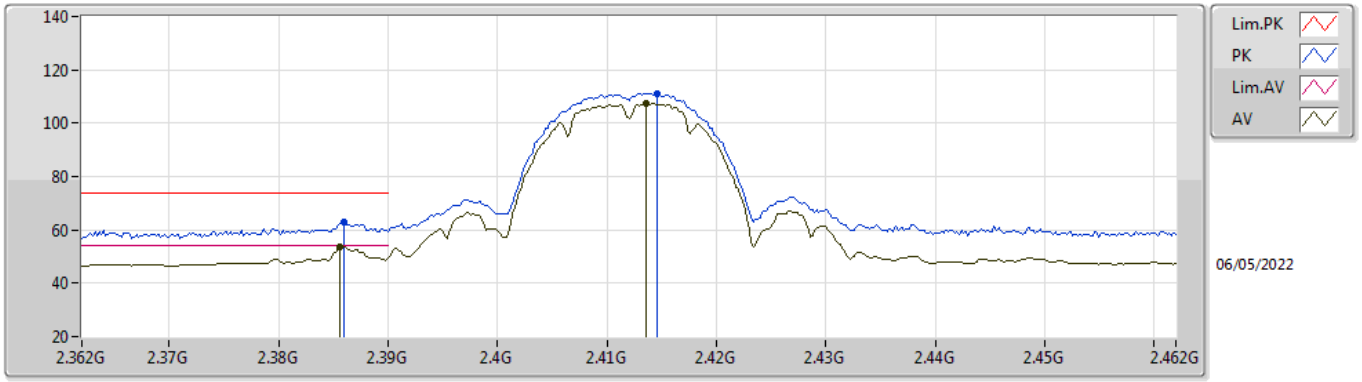


EUT Z_2TX
Setting 20.25
02-B-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3868G	60.68	74.00	-13.32	29.52	3	Vertical	274	2.86	-	28.37	2.79	-
AV	2.3858G	48.79	54.00	-5.21	17.63	3	Vertical	274	2.86	-	28.37	2.79	-
PK	2.413G	108.57	Inf	-Inf	77.36	3	Vertical	274	2.86	-	28.40	2.81	-
AV	2.4138G	104.74	Inf	-Inf	73.53	3	Vertical	274	2.86	-	28.40	2.81	-

802.11b_Nss1,(1Mbps)_2TX

2412MHz_TX

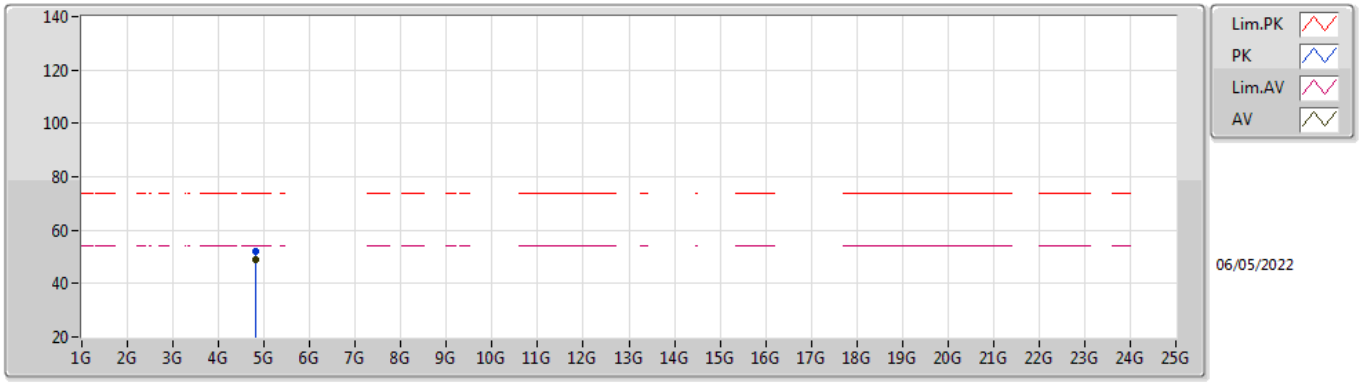


EUT Z_2TX
Setting 20.25
02-B-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.386G	62.81	74.00	-11.19	31.65	3	Horizontal	338	2.90	-	28.37	2.79	-
AV	2.3856G	53.57	54.00	-0.43	22.41	3	Horizontal	338	2.90	-	28.37	2.79	-
PK	2.4146G	111.24	Inf	-Inf	80.03	3	Horizontal	338	2.90	-	28.40	2.81	-
AV	2.4136G	107.45	Inf	-Inf	76.24	3	Horizontal	338	2.90	-	28.40	2.81	-

802.11b_Nss1,(1Mbps)_2TX

2412MHz_TX

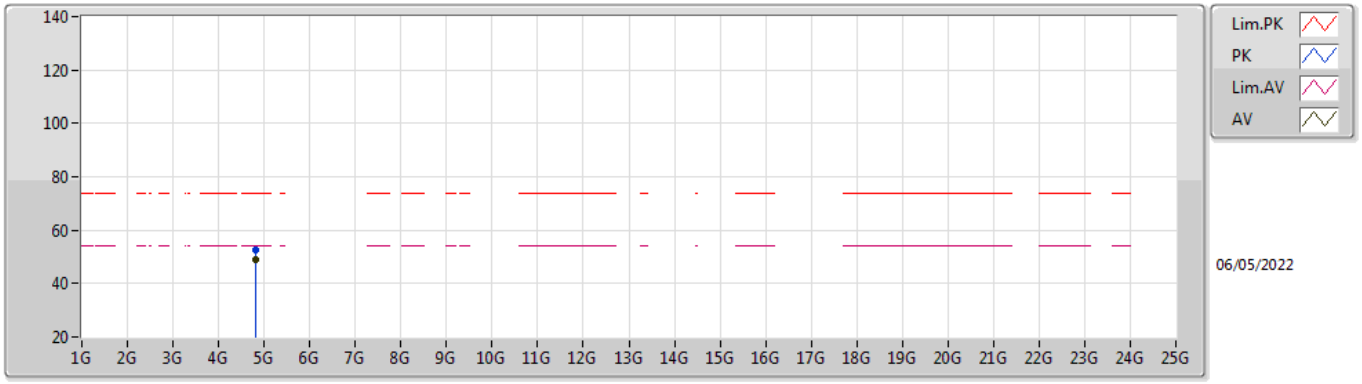


EUT Z_2TX
Setting 20.25
02-B-R-5

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	4.82402G	52.11	74.00	-21.89	46.29	3	Vertical	228	2.95	-	32.94	5.10	32.22
AV	4.82404G	49.17	54.00	-4.83	43.35	3	Vertical	228	2.95	-	32.94	5.10	32.22

802.11b_Nss1,(1Mbps)_2TX

2412MHz_TX

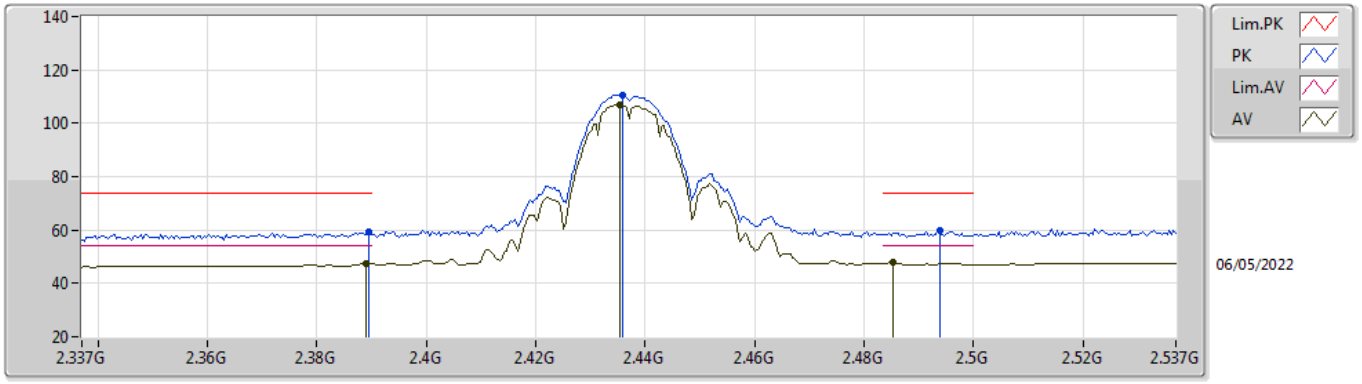


EUT Z_2TX
Setting 20.25
02-B-R-5

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	4.824G	52.40	74.00	-21.60	46.58	3	Horizontal	247	2.06	-	32.94	5.10	32.22
AV	4.82398G	49.18	54.00	-4.82	43.36	3	Horizontal	247	2.06	-	32.94	5.10	32.22

802.11b_Nss1,(1Mbps)_2TX

2437MHz_TX

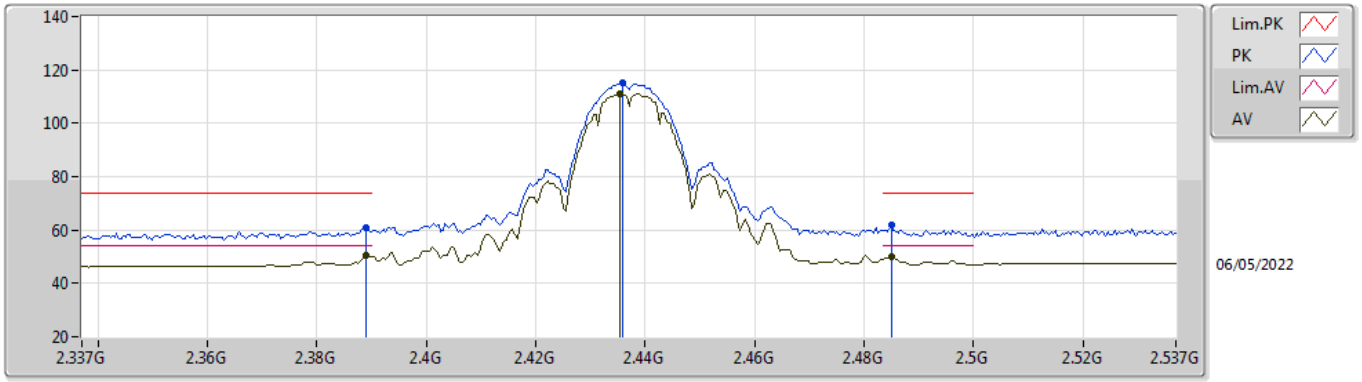


EUT Z_2TX
Setting 23
02-B-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3894G	59.21	74.00	-14.79	28.04	3	Vertical	278	2.80	-	28.38	2.79	-
AV	2.389G	47.66	54.00	-6.34	16.49	3	Vertical	278	2.80	-	28.38	2.79	-
PK	2.4358G	110.69	Inf	-Inf	79.45	3	Vertical	278	2.80	-	28.40	2.84	-
AV	2.4354G	107.11	Inf	-Inf	75.87	3	Vertical	278	2.80	-	28.40	2.84	-
PK	2.4938G	59.59	74.00	-14.41	28.12	3	Vertical	278	2.80	-	28.58	2.89	-
AV	2.4854G	47.87	54.00	-6.13	16.44	3	Vertical	278	2.80	-	28.54	2.89	-

802.11b_Nss1,(1Mbps)_2TX

2437MHz_TX

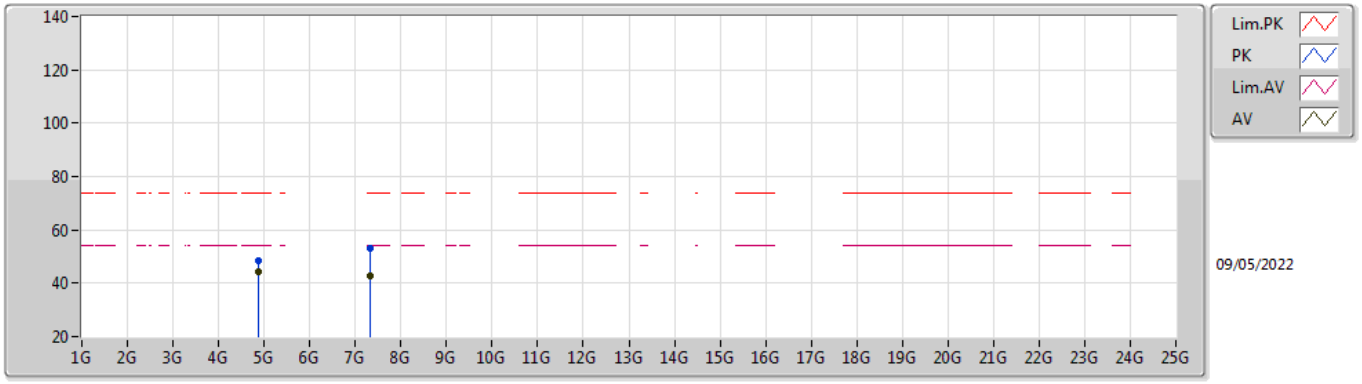


EUT Z_2TX
Setting 23
02-B-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.389G	60.81	74.00	-13.19	29.64	3	Horizontal	341	2.56	-	28.38	2.79	-
AV	2.389G	50.41	54.00	-3.59	19.24	3	Horizontal	341	2.56	-	28.38	2.79	-
PK	2.4358G	115.02	Inf	-Inf	83.78	3	Horizontal	341	2.56	-	28.40	2.84	-
AV	2.4354G	111.14	Inf	-Inf	79.90	3	Horizontal	341	2.56	-	28.40	2.84	-
PK	2.485G	61.93	74.00	-12.07	30.50	3	Horizontal	341	2.56	-	28.54	2.89	-
AV	2.485G	50.10	54.00	-3.90	18.67	3	Horizontal	341	2.56	-	28.54	2.89	-

802.11b_Nss1,(1Mbps)_2TX

2437MHz_TX

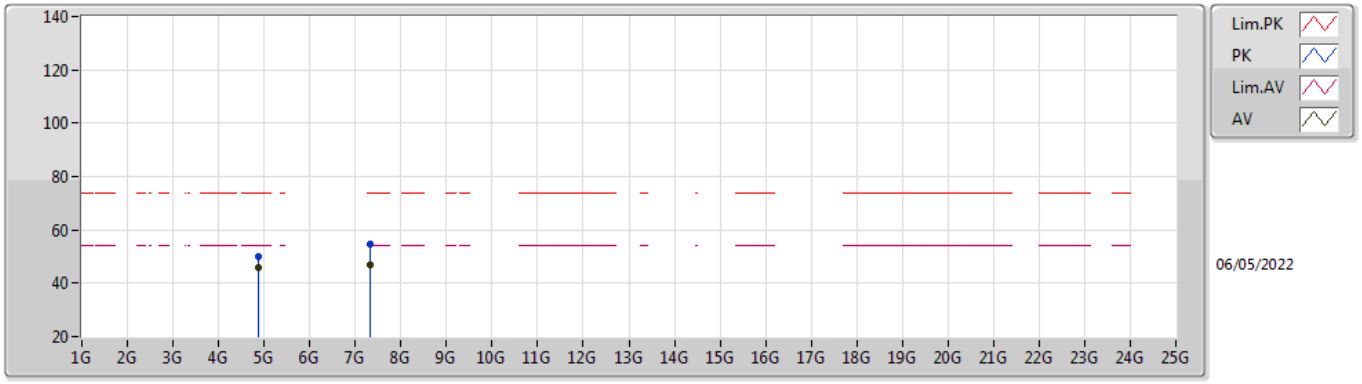


EUT Z_2TX
Setting 23
02-B-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.874G	48.63	74.00	-25.37	42.59	3	Vertical	219	2.92	-	33.15	5.10	32.21
AV	4.874G	44.13	54.00	-9.87	38.09	3	Vertical	219	2.92	-	33.15	5.10	32.21
PK	7.31302G	52.86	74.00	-21.14	43.09	3	Vertical	145	2.10	-	36.43	6.16	32.82
AV	7.31372G	42.93	54.00	-11.07	33.17	3	Vertical	145	2.10	-	36.43	6.16	32.83

802.11b_Nss1,(1Mbps)_2TX

2437MHz_TX

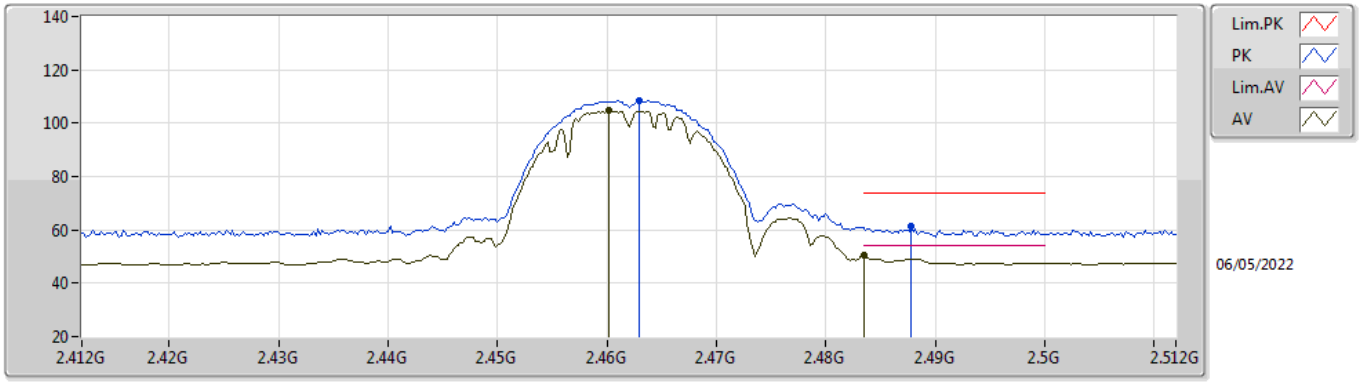


EUT Z_2TX
Setting 23
02-B-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.874G	49.75	74.00	-24.25	43.71	3	Horizontal	246	2.00	-	33.15	5.10	32.21
AV	4.874G	46.11	54.00	-7.89	40.07	3	Horizontal	246	2.00	-	33.15	5.10	32.21
PK	7.31454G	54.42	74.00	-19.58	44.66	3	Horizontal	276	2.12	-	36.43	6.16	32.83
AV	7.31376G	46.75	54.00	-7.25	36.99	3	Horizontal	276	2.12	-	36.43	6.16	32.83

802.11b_Nss1,(1Mbps)_2TX

2462MHz_TX

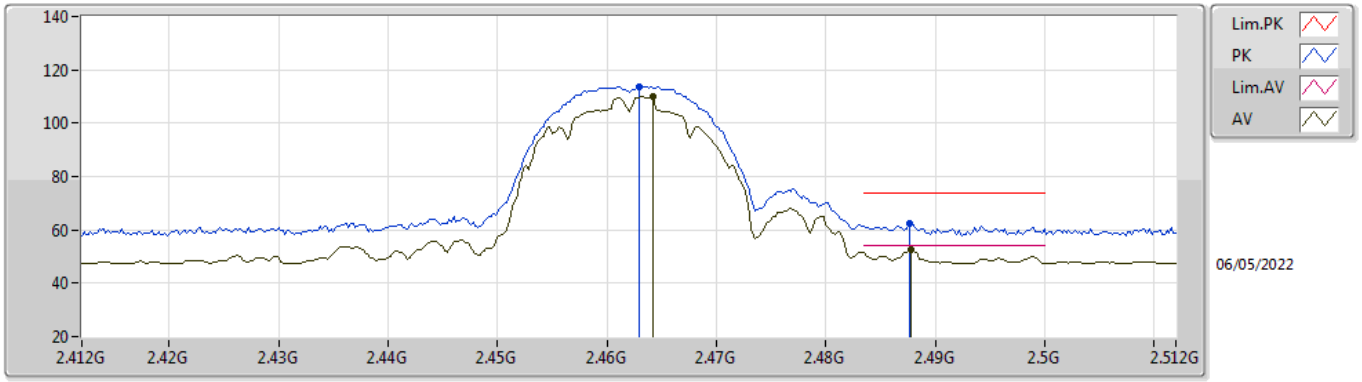


EUT Z_2TX
Setting 20.75
02-B-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.463G	108.23	Inf	-Inf	76.92	3	Vertical	287	2.74	-	28.45	2.86	-
AV	2.4602G	104.60	Inf	-Inf	73.30	3	Vertical	287	2.74	-	28.44	2.86	-
PK	2.4878G	61.34	74.00	-12.66	29.90	3	Vertical	287	2.74	-	28.55	2.89	-
AV	2.4835G	50.52	54.00	-3.48	19.11	3	Vertical	287	2.74	-	28.53	2.88	-

802.11b_Nss1,(1Mbps)_2TX

2462MHz_TX

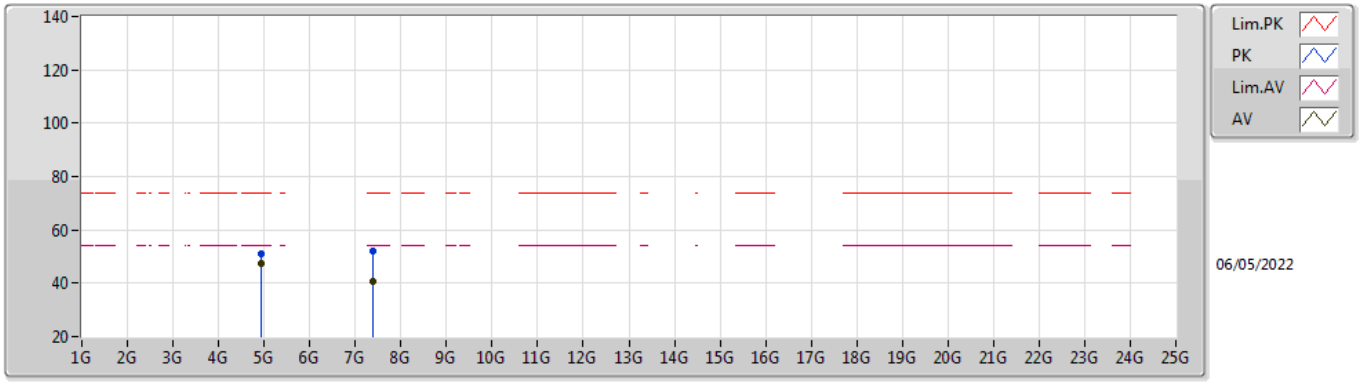


EUT Z_2TX
Setting 20.75
02-B-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.463G	113.69	Inf	-Inf	82.38	3	Horizontal	343	2.52	-	28.45	2.86	-
AV	2.4642G	109.91	Inf	-Inf	78.59	3	Horizontal	343	2.52	-	28.46	2.86	-
PK	2.4876G	62.28	74.00	-11.72	30.84	3	Horizontal	343	2.52	-	28.55	2.89	-
AV	2.4878G	52.44	54.00	-1.56	21.00	3	Horizontal	343	2.52	-	28.55	2.89	-

802.11b_Nss1,(1Mbps)_2TX

2462MHz_TX

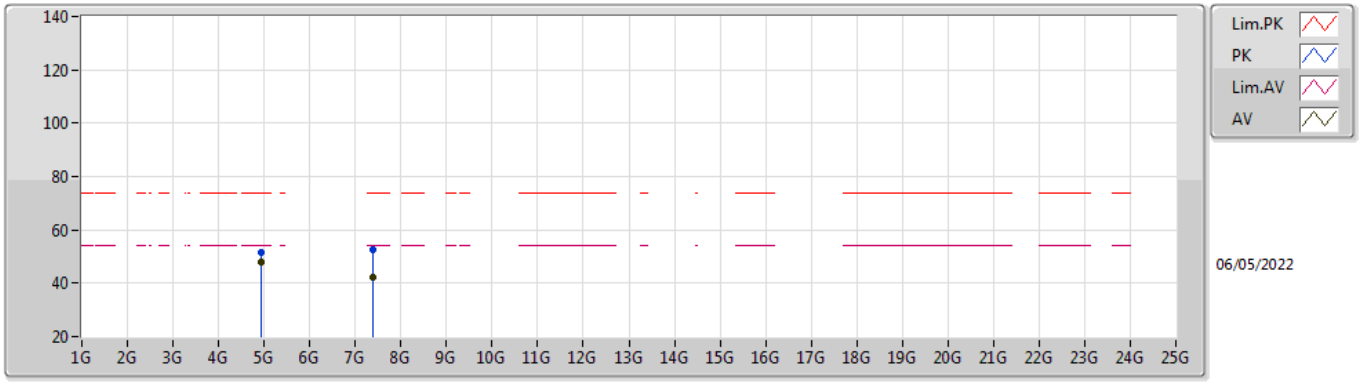


EUT Z_2TX
Setting 20.75
02-B-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.92412G	51.02	74.00	-22.98	44.86	3	Vertical	229	3.00	-	33.25	5.10	32.19
AV	4.924G	47.54	54.00	-6.46	41.38	3	Vertical	229	3.00	-	33.25	5.10	32.19
PK	7.38816G	52.11	74.00	-21.89	42.38	3	Vertical	125	2.13	-	36.50	6.19	32.96
AV	7.38522G	40.60	54.00	-13.40	30.86	3	Vertical	125	2.13	-	36.50	6.19	32.95

802.11b_Nss1,(1Mbps)_2TX

2462MHz_TX

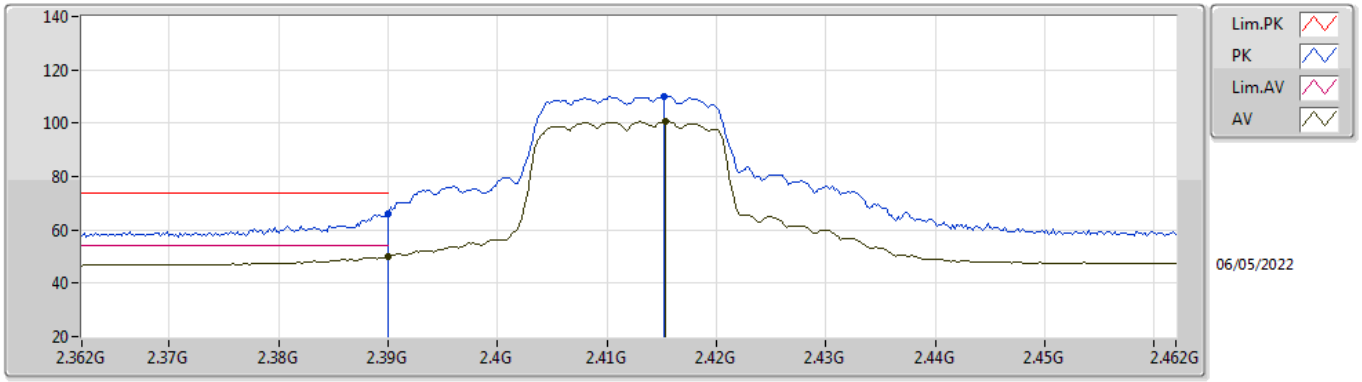


EUT Z_2TX
Setting 20.75
02-B-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.92406G	51.61	74.00	-22.39	45.45	3	Horizontal	248	2.42	-	33.25	5.10	32.19
AV	4.924G	47.97	54.00	-6.03	41.81	3	Horizontal	248	2.42	-	33.25	5.10	32.19
PK	7.38552G	52.57	74.00	-21.43	42.83	3	Horizontal	274	2.10	-	36.50	6.19	32.95
AV	7.38522G	42.23	54.00	-11.77	32.49	3	Horizontal	274	2.10	-	36.50	6.19	32.95

802.11g_Nss1,(6Mbps)_2TX

2412MHz_TX

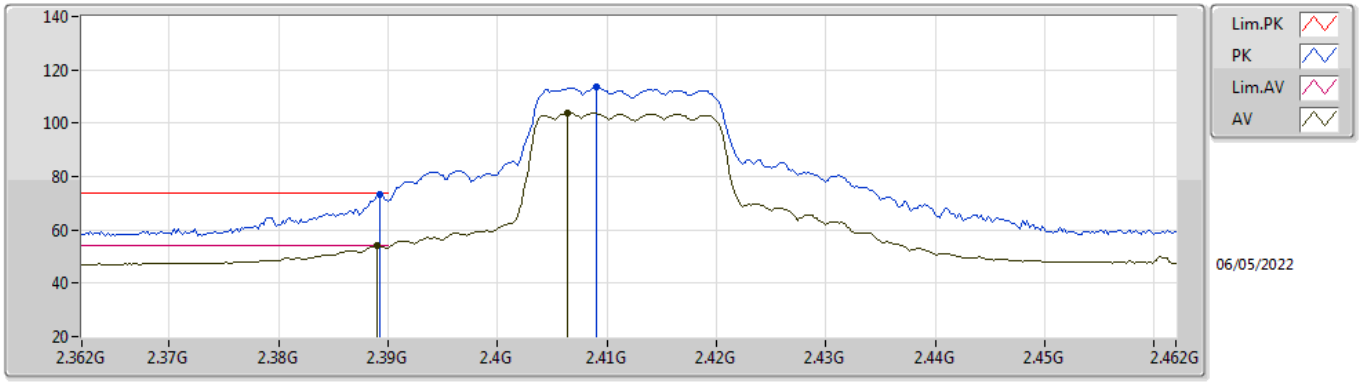


EUT Z_2TX
Setting 18.5
02-B-R-5

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	2.39G	66.18	74.00	-7.82	35.01	3	Vertical	282	2.86	-	28.38	2.79	-
AV	2.39G	49.89	54.00	-4.11	18.72	3	Vertical	282	2.86	-	28.38	2.79	-
PK	2.4152G	110.12	Inf	-Inf	78.90	3	Vertical	282	2.86	-	28.40	2.82	-
AV	2.4154G	100.59	Inf	-Inf	69.37	3	Vertical	282	2.86	-	28.40	2.82	-

802.11g_Nss1,(6Mbps)_2TX

2412MHz_TX

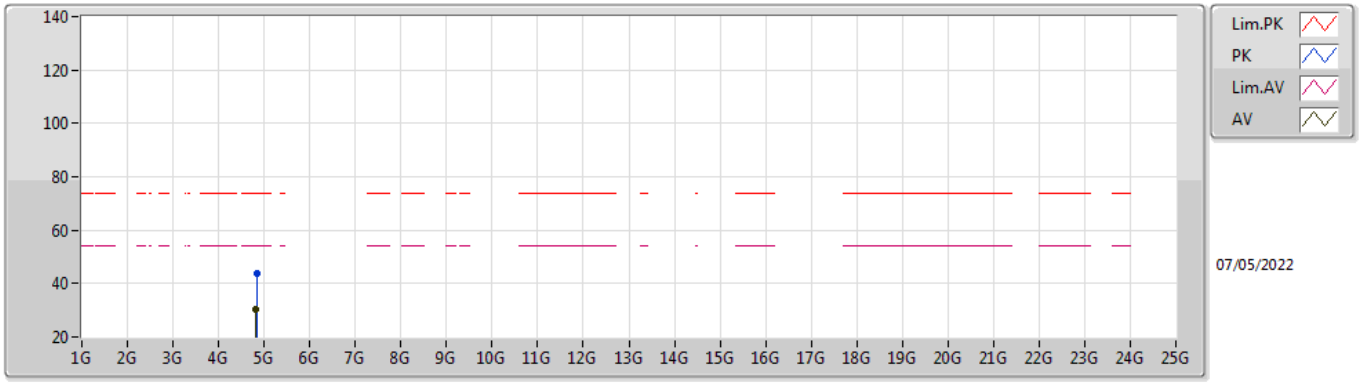


EUT Z_2TX
Setting 18.5
02-B-R-5

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	2.3892G	73.10	74.00	-0.90	41.93	3	Horizontal	114	2.63	-	28.38	2.79	-
AV	2.389G	53.95	54.00	-0.05	22.78	3	Horizontal	114	2.63	-	28.38	2.79	-
PK	2.409G	113.75	Inf	-Inf	82.54	3	Horizontal	114	2.63	-	28.40	2.81	-
AV	2.4064G	103.91	Inf	-Inf	72.70	3	Horizontal	114	2.63	-	28.40	2.81	-

802.11g_Nss1,(6Mbps)_2TX

2412MHz_TX

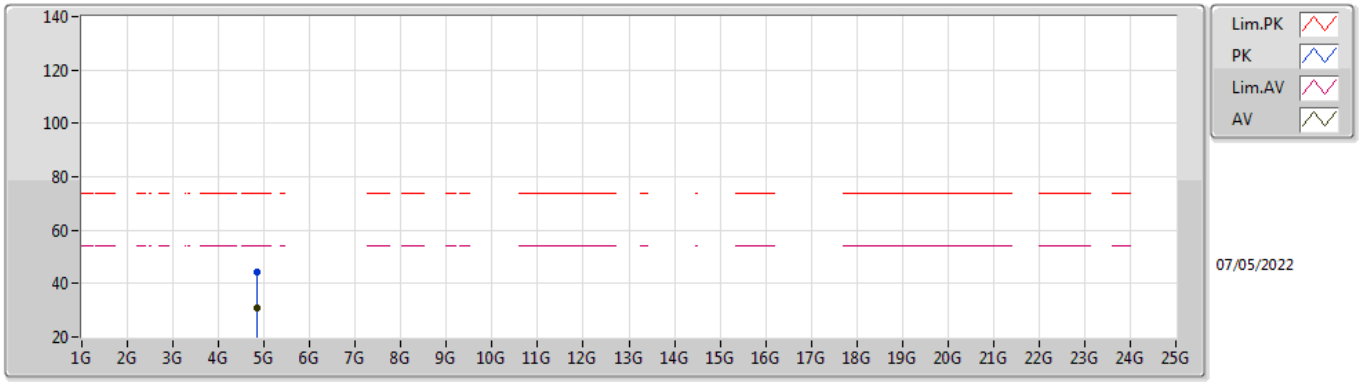


EUT Z_2TX
Setting 18.5
02-B-R-5

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	4.8357G	43.67	74.00	-30.33	37.78	3	Vertical	71	1.72	-	33.01	5.10	32.22
AV	4.824G	30.59	54.00	-23.41	24.77	3	Vertical	71	1.72	-	32.94	5.10	32.22

802.11g_Nss1,(6Mbps)_2TX

2412MHz_TX

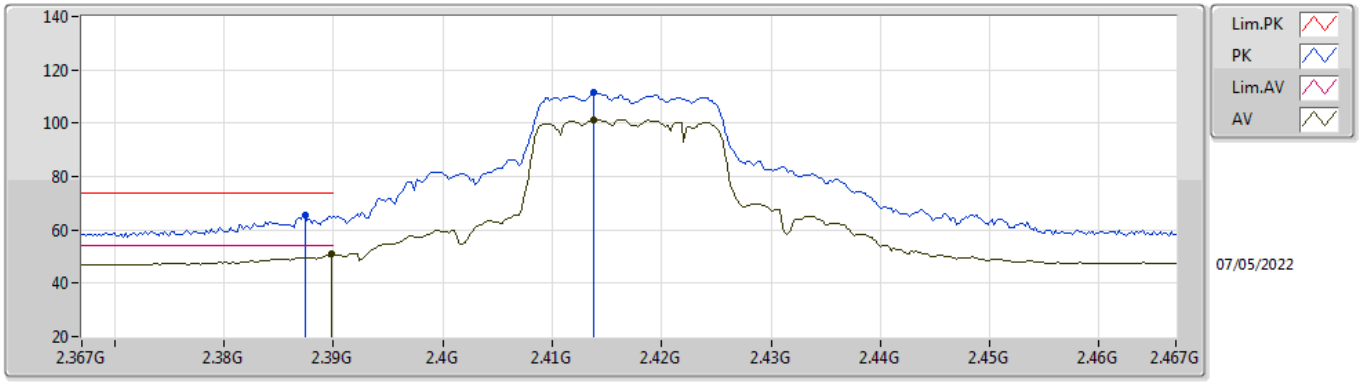


EUT Z_2TX
Setting 18.5
02-B-R-5

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	4.836G	44.06	74.00	-29.94	38.16	3	Horizontal	253	2.01	-	33.02	5.10	32.22
AV	4.83486G	30.69	54.00	-23.31	24.80	3	Horizontal	253	2.01	-	33.01	5.10	32.22

802.11g_Nss1,(6Mbps)_2TX

2417MHz_TX

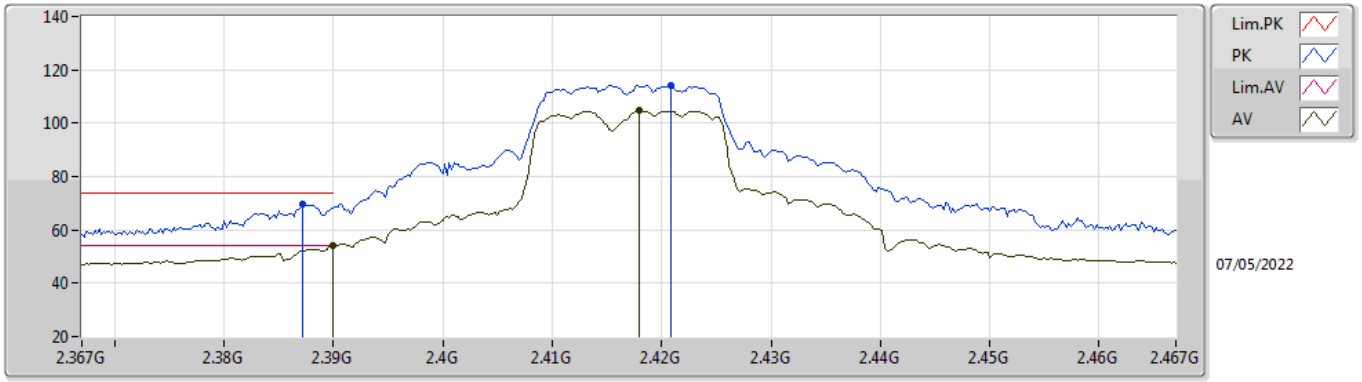


EUT Z_2TX
Setting 20.5
02-B-R-5

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	2.3874G	65.77	74.00	-8.23	34.61	3	Vertical	284	2.88	-	28.37	2.79	-
AV	2.3898G	50.81	54.00	-3.19	19.64	3	Vertical	284	2.88	-	28.38	2.79	-
PK	2.4138G	111.55	Inf	-Inf	80.34	3	Vertical	284	2.88	-	28.40	2.81	-
AV	2.4138G	101.40	Inf	-Inf	70.19	3	Vertical	284	2.88	-	28.40	2.81	-

802.11g_Nss1,(6Mbps)_2TX

2417MHz_TX

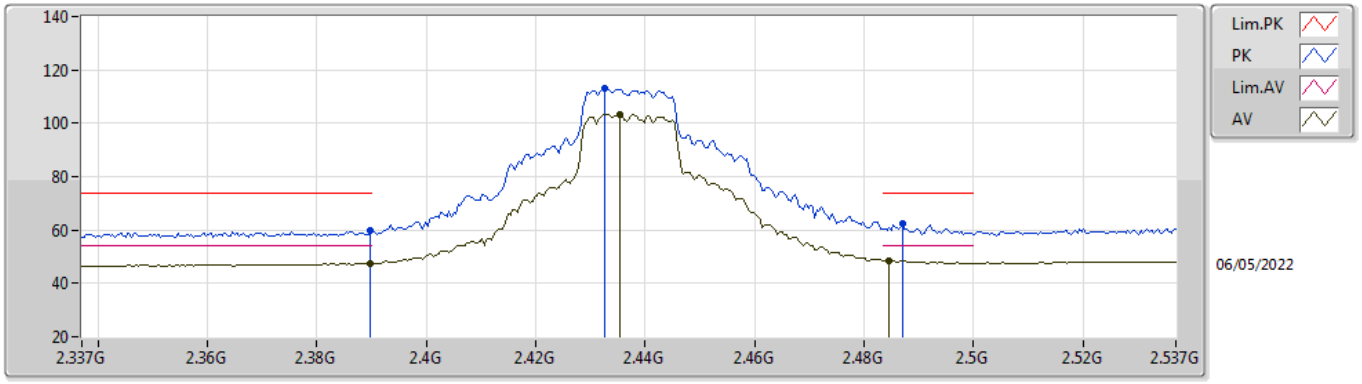


EUT Z_2TX
Setting 20.5
02-B-R-5

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	2.3872G	69.83	74.00	-4.17	38.67	3	Horizontal	104	1.70	-	28.37	2.79	-
AV	2.39G	53.97	54.00	-0.03	22.80	3	Horizontal	104	1.70	-	28.38	2.79	-
PK	2.4208G	114.03	Inf	-Inf	82.81	3	Horizontal	104	1.70	-	28.40	2.82	-
AV	2.418G	104.63	Inf	-Inf	73.41	3	Horizontal	104	1.70	-	28.40	2.82	-

802.11g_Nss1,(6Mbps)_2TX

2437MHz_TX

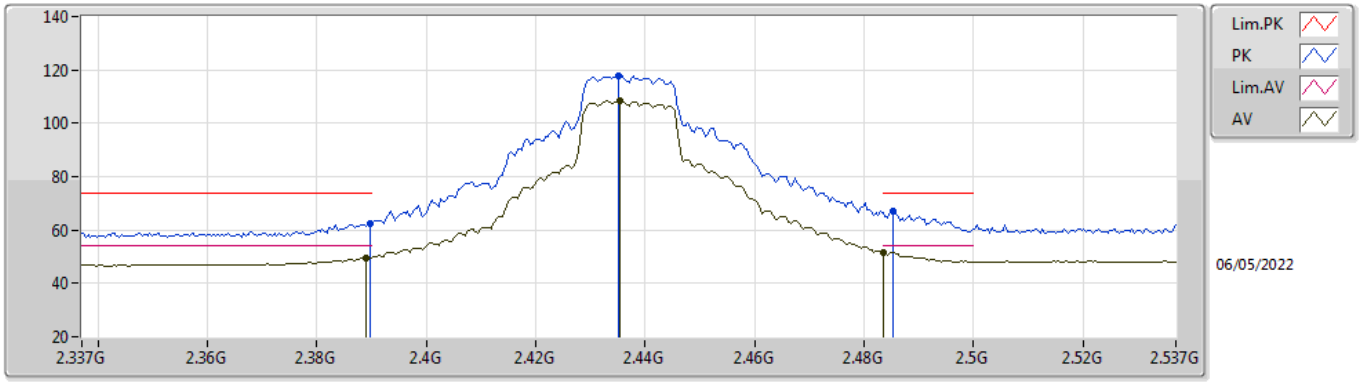


EUT Z_2TX
Setting 23
02-B-R-5

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	59.93	74.00	-14.07	28.76	3	Vertical	281	2.80	-	28.38	2.79	-
AV	2.3898G	47.50	54.00	-6.50	16.33	3	Vertical	281	2.80	-	28.38	2.79	-
PK	2.4326G	112.99	Inf	-Inf	81.76	3	Vertical	281	2.80	-	28.40	2.83	-
AV	2.4354G	103.53	Inf	-Inf	72.29	3	Vertical	281	2.80	-	28.40	2.84	-
PK	2.487G	62.35	74.00	-11.65	30.91	3	Vertical	281	2.80	-	28.55	2.89	-
AV	2.4846G	48.57	54.00	-5.43	17.15	3	Vertical	281	2.80	-	28.54	2.88	-

802.11g_Nss1,(6Mbps)_2TX

2437MHz_TX

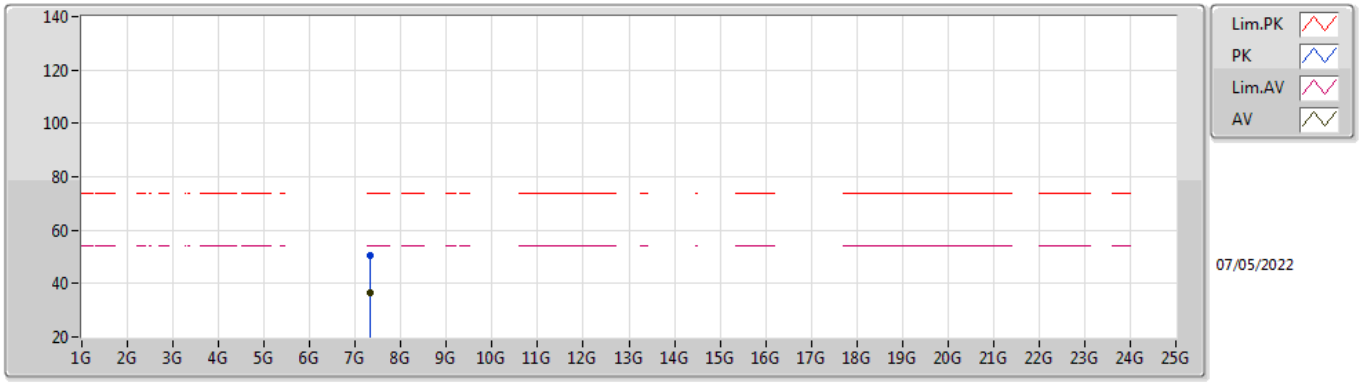


EUT Z_2TX
Setting 23
02-B-R-5

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	62.45	74.00	-11.55	31.28	3	Horizontal	115	2.56	-	28.38	2.79	-
AV	2.389G	49.46	54.00	-4.54	18.29	3	Horizontal	115	2.56	-	28.38	2.79	-
PK	2.435G	117.99	Inf	-Inf	86.76	3	Horizontal	115	2.56	-	28.40	2.83	-
AV	2.4354G	108.56	Inf	-Inf	77.32	3	Horizontal	115	2.56	-	28.40	2.84	-
PK	2.4854G	67.05	74.00	-6.95	35.62	3	Horizontal	115	2.56	-	28.54	2.89	-
AV	2.4835G	51.78	54.00	-2.22	20.37	3	Horizontal	115	2.56	-	28.53	2.88	-

802.11g_Nss1,(6Mbps)_2TX

2437MHz_TX

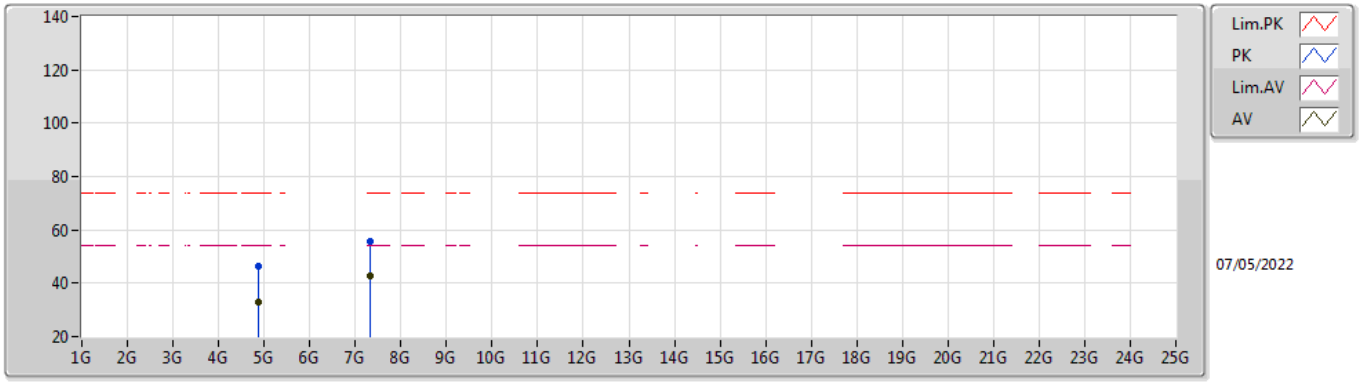


EUT Z_2TX
Setting 23
02-B-R-5

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	7.31652G	50.63	74.00	-23.37	40.87	3	Vertical	193	1.80	-	36.43	6.16	32.83
AV	7.31958G	36.76	54.00	-17.24	27.00	3	Vertical	193	1.80	-	36.44	6.16	32.84

802.11g_Nss1,(6Mbps)_2TX

2437MHz_TX

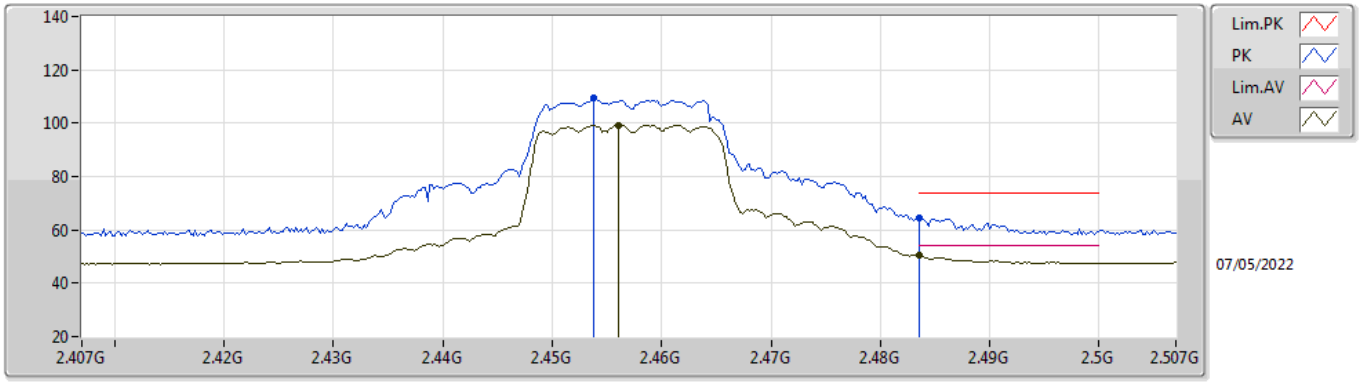


EUT Z_2TX
Setting 23
02-B-R-5

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	4.86626G	46.48	74.00	-27.52	40.46	3	Horizontal	249	2.48	-	33.13	5.10	32.21
AV	4.87532G	32.84	54.00	-21.16	26.79	3	Horizontal	249	2.48	-	33.15	5.10	32.20
PK	7.31646G	55.57	74.00	-18.43	45.81	3	Horizontal	276	1.80	-	36.43	6.16	32.83
AV	7.3167G	42.56	54.00	-11.44	32.80	3	Horizontal	276	1.80	-	36.43	6.16	32.83

802.11g_Nss1,(6Mbps)_2TX

2457MHz_TX

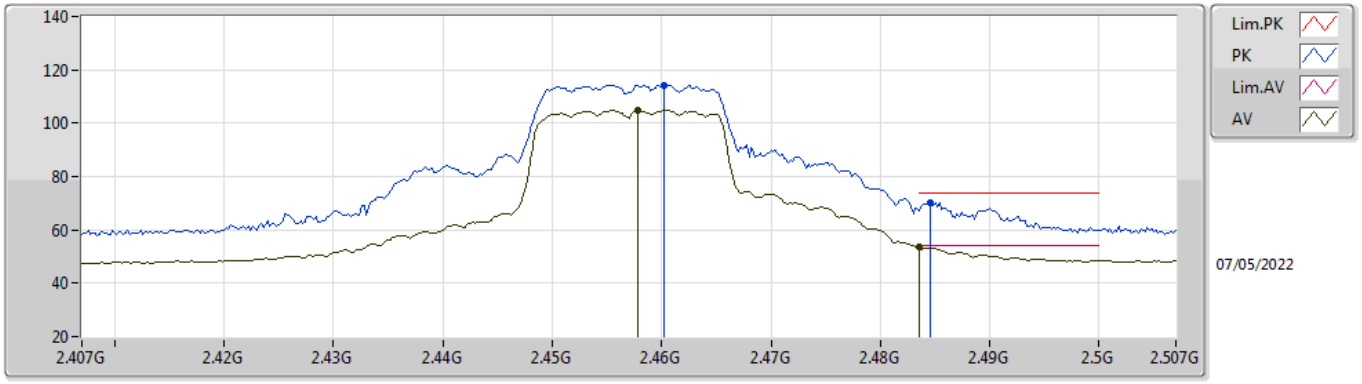


EUT Z_2TX
Setting 19.25
02-B-R-5

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	2.4538G	109.41	Inf	-Inf	78.14	3	Vertical	286	2.73	-	28.42	2.85	-
AV	2.456G	99.38	Inf	-Inf	68.10	3	Vertical	286	2.73	-	28.42	2.86	-
PK	2.4836G	64.72	74.00	-9.28	33.31	3	Vertical	286	2.73	-	28.53	2.88	-
AV	2.4835G	50.51	54.00	-3.49	19.10	3	Vertical	286	2.73	-	28.53	2.88	-

802.11g_Nss1,(6Mbps)_2TX

2457MHz_TX

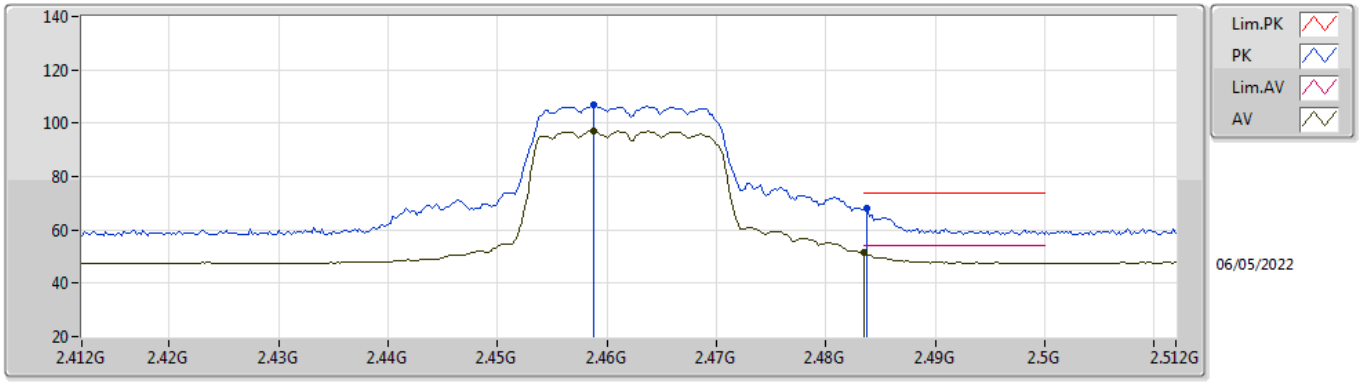


EUT Z_2TX
Setting 19.25
02-B-R-5

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	2.4602G	114.27	Inf	-Inf	82.97	3	Horizontal	114	2.51	-	28.44	2.86	-
AV	2.4578G	104.67	Inf	-Inf	73.38	3	Horizontal	114	2.51	-	28.43	2.86	-
PK	2.4846G	70.30	74.00	-3.70	38.88	3	Horizontal	114	2.51	-	28.54	2.88	-
AV	2.4835G	53.47	54.00	-0.53	22.06	3	Horizontal	114	2.51	-	28.53	2.88	-

802.11g_Nss1,(6Mbps)_2TX

2462MHz_TX

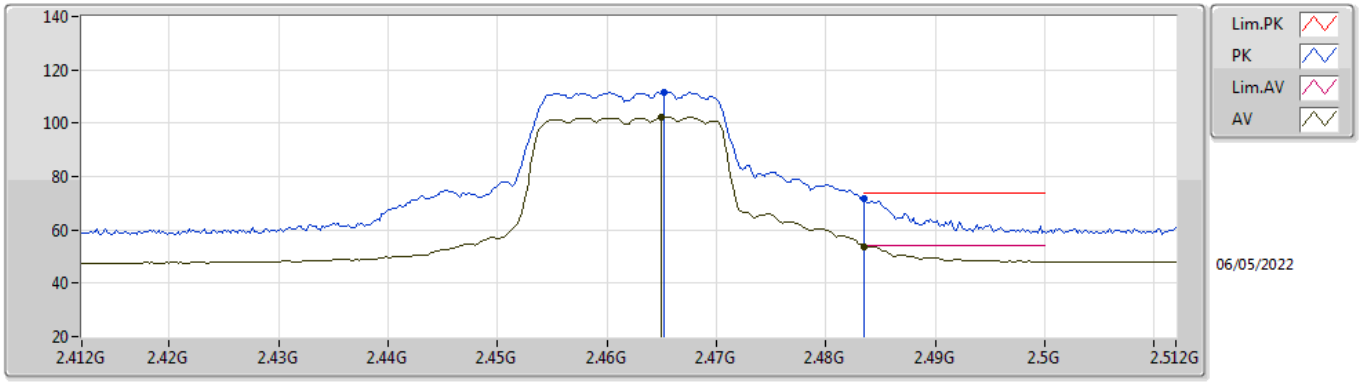


EUT Z_2TX
Setting 16.25
02-B-R-5

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	2.4588G	107.04	Inf	-Inf	75.74	3	Vertical	287	2.75	-	28.44	2.86	-
AV	2.4588G	97.14	Inf	-Inf	65.84	3	Vertical	287	2.75	-	28.44	2.86	-
PK	2.4838G	67.88	74.00	-6.12	36.46	3	Vertical	287	2.75	-	28.54	2.88	-
AV	2.4835G	51.34	54.00	-2.66	19.93	3	Vertical	287	2.75	-	28.53	2.88	-

802.11g_Nss1,(6Mbps)_2TX

2462MHz_TX

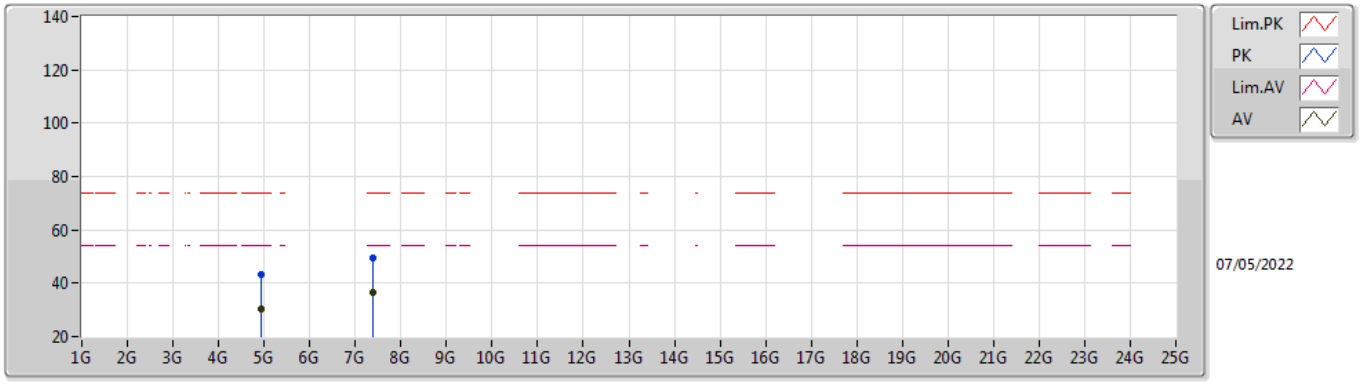


EUT Z_2TX
Setting 16.25
02-B-R-5

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	2.4652G	111.62	Inf	-Inf	80.29	3	Horizontal	116	2.52	-	28.46	2.87	-
AV	2.465G	102.37	Inf	-Inf	71.05	3	Horizontal	116	2.52	-	28.46	2.86	-
PK	2.4835G	71.63	74.00	-2.37	40.22	3	Horizontal	116	2.52	-	28.53	2.88	-
AV	2.4835G	53.84	54.00	-0.16	22.43	3	Horizontal	116	2.52	-	28.53	2.88	-

802.11g_Nss1,(6Mbps)_2TX

2462MHz_TX

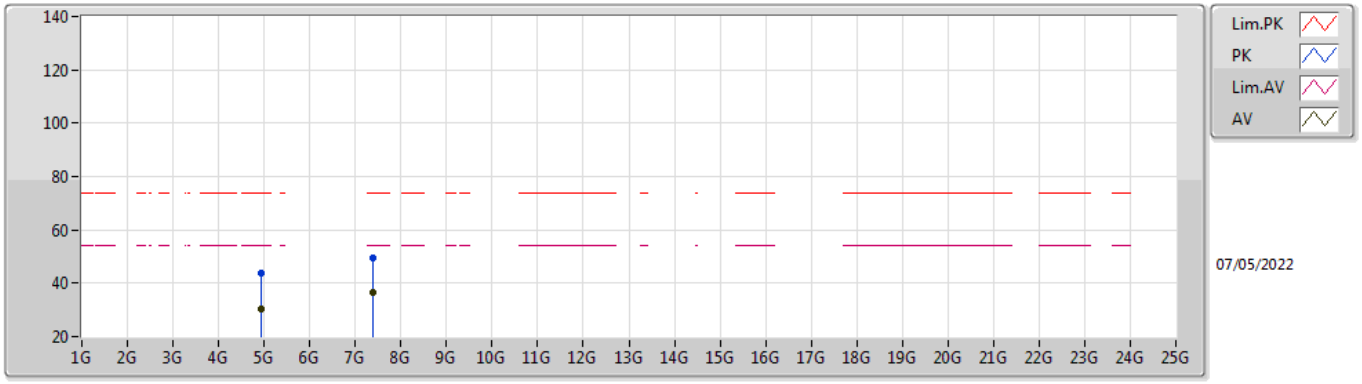


EUT Z_2TX
Setting 16.25
02-B-R-5

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	4.93438G	43.42	74.00	-30.58	37.23	3	Vertical	236	1.59	-	33.27	5.10	32.18
AV	4.93828G	30.47	54.00	-23.53	24.27	3	Vertical	236	1.59	-	33.28	5.10	32.18
PK	7.40016G	49.43	74.00	-24.57	39.71	3	Vertical	175	1.04	-	36.50	6.20	32.98
AV	7.37364G	36.65	54.00	-17.35	26.89	3	Vertical	175	1.04	-	36.50	6.19	32.93

802.11g_Nss1,(6Mbps)_2TX

2462MHz_TX

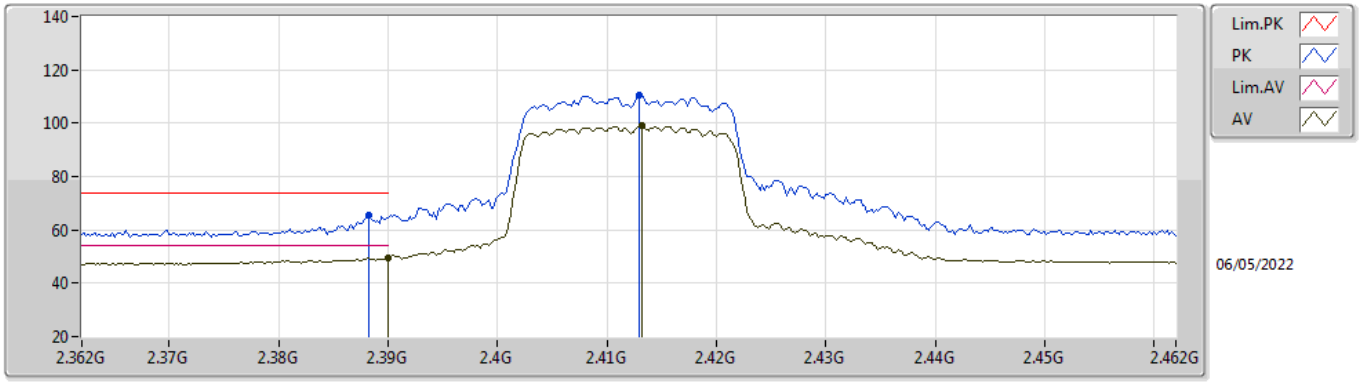


EUT Z_2TX
Setting 16.25
02-B-R-5

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	4.93666G	43.90	74.00	-30.10	37.71	3	Horizontal	167	1.04	-	33.27	5.10	32.18
AV	4.92448G	30.59	54.00	-23.41	24.43	3	Horizontal	167	1.04	-	33.25	5.10	32.19
PK	7.3713G	49.59	74.00	-24.41	39.83	3	Horizontal	267	2.13	-	36.50	6.19	32.93
AV	7.37232G	36.46	54.00	-17.54	26.70	3	Horizontal	267	2.13	-	36.50	6.19	32.93

802.11ax HEW20_Nss1,(MCS0)_2TX

2412MHz_TX

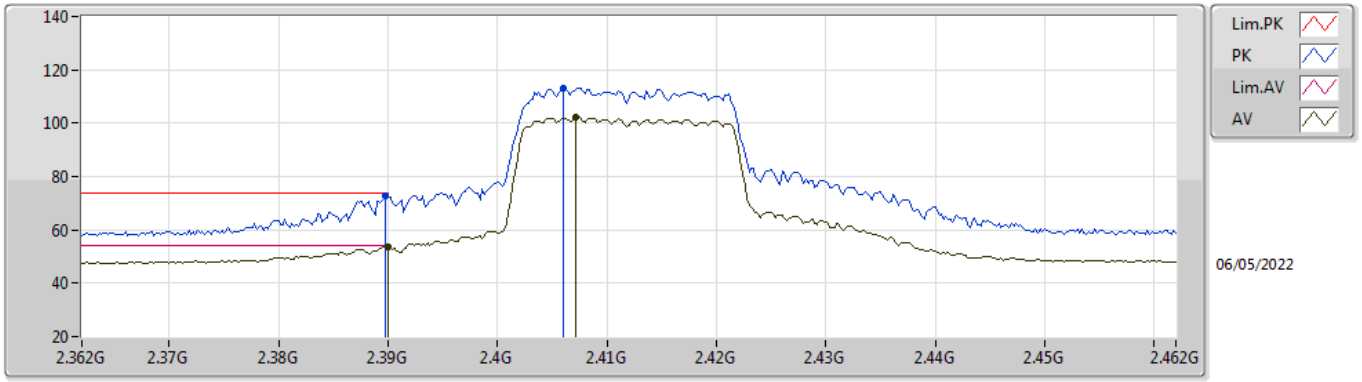


EUT Z_2TX
Setting 16.75
02-B-R-5

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	2.3882G	65.42	74.00	-8.58	34.25	3	Vertical	283	2.85	-	28.38	2.79	-
AV	2.39G	49.39	54.00	-4.61	18.22	3	Vertical	283	2.85	-	28.38	2.79	-
PK	2.413G	110.46	Inf	-Inf	79.25	3	Vertical	283	2.85	-	28.40	2.81	-
AV	2.4132G	98.90	Inf	-Inf	67.69	3	Vertical	283	2.85	-	28.40	2.81	-

802.11ax HEW20_Nss1,(MCS0)_2TX

2412MHz_TX

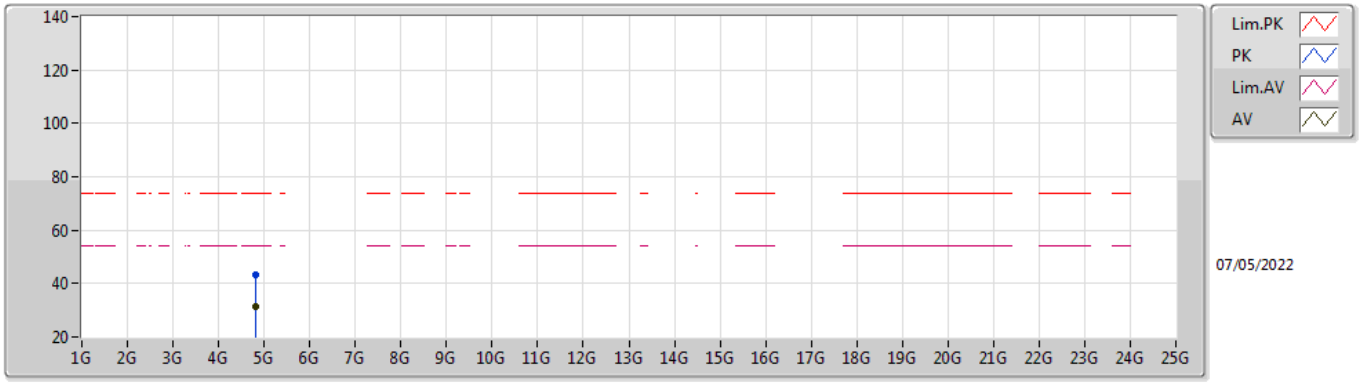


EUT Z_2TX
Setting 16.75
02-B-R-5

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	72.60	74.00	-1.40	41.43	3	Horizontal	114	2.64	-	28.38	2.79	-
AV	2.39G	53.71	54.00	-0.29	22.54	3	Horizontal	114	2.64	-	28.38	2.79	-
PK	2.406G	113.29	Inf	-Inf	82.08	3	Horizontal	114	2.64	-	28.40	2.81	-
AV	2.4072G	102.07	Inf	-Inf	70.86	3	Horizontal	114	2.64	-	28.40	2.81	-

802.11ax HEW20_Nss1,(MCS0)_2TX

2412MHz_TX

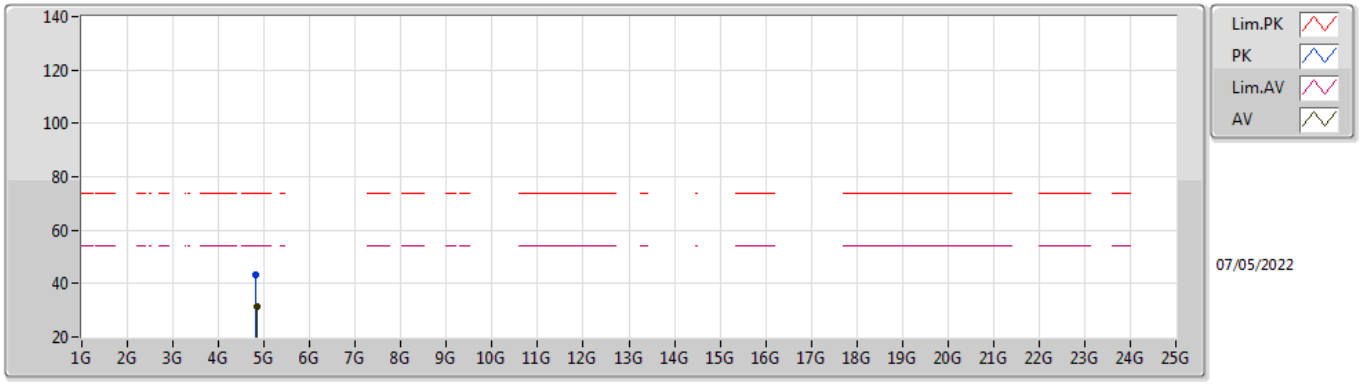


EUT Z_2TX
Setting 16.75
02-B-R-5

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	4.82604G	43.32	74.00	-30.68	37.48	3	Vertical	93	1.63	-	32.96	5.10	32.22
AV	4.82448G	31.35	54.00	-22.65	25.52	3	Vertical	93	1.63	-	32.95	5.10	32.22

802.11ax HEW20_Nss1,(MCS0)_2TX

2412MHz_TX

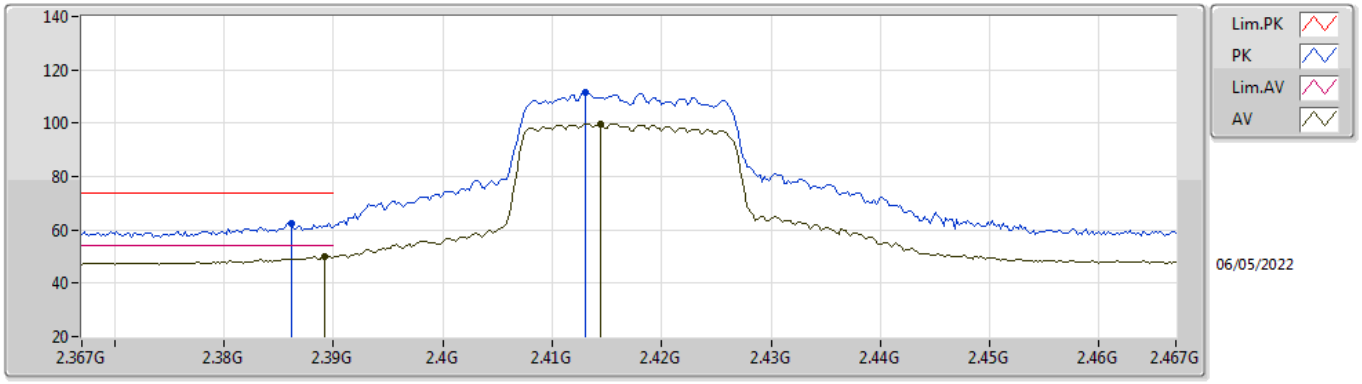


EUT Z_2TX
Setting 16.75
02-B-R-5

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	4.81482G	43.27	74.00	-30.73	37.51	3	Horizontal	37	1.69	-	32.89	5.10	32.23
AV	4.83762G	31.35	54.00	-22.65	25.44	3	Horizontal	37	1.69	-	33.03	5.10	32.22

802.11ax HEW20_Nss1,(MCS0)_2TX

2417MHz_TX

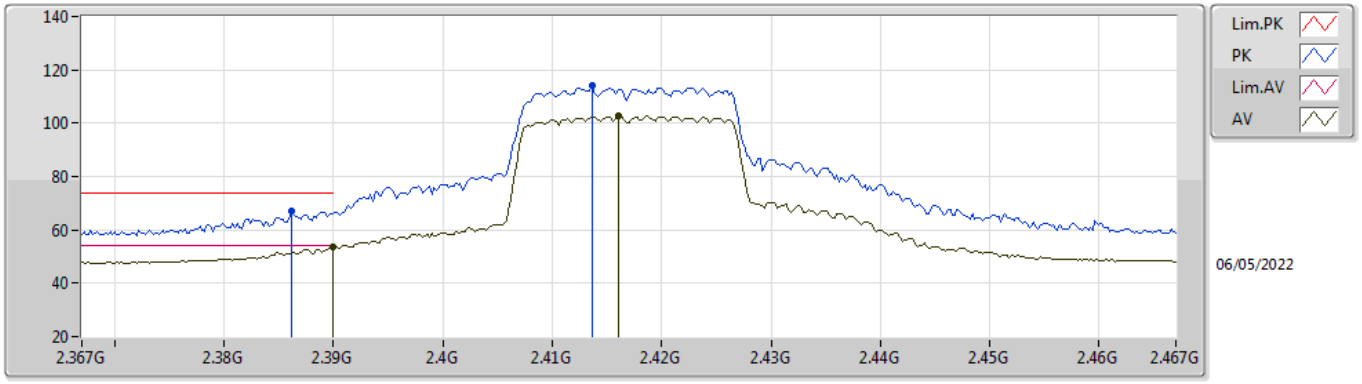


EUT Z_2TX
Setting 18
02-B-R-5

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	2.3862G	62.58	74.00	-11.42	31.42	3	Vertical	286	2.86	-	28.37	2.79	-
AV	2.3892G	49.92	54.00	-4.08	18.75	3	Vertical	286	2.86	-	28.38	2.79	-
PK	2.413G	111.39	Inf	-Inf	80.18	3	Vertical	286	2.86	-	28.40	2.81	-
AV	2.4144G	99.68	Inf	-Inf	68.47	3	Vertical	286	2.86	-	28.40	2.81	-

802.11ax HEW20_Nss1,(MCS0)_2TX

2417MHz_TX

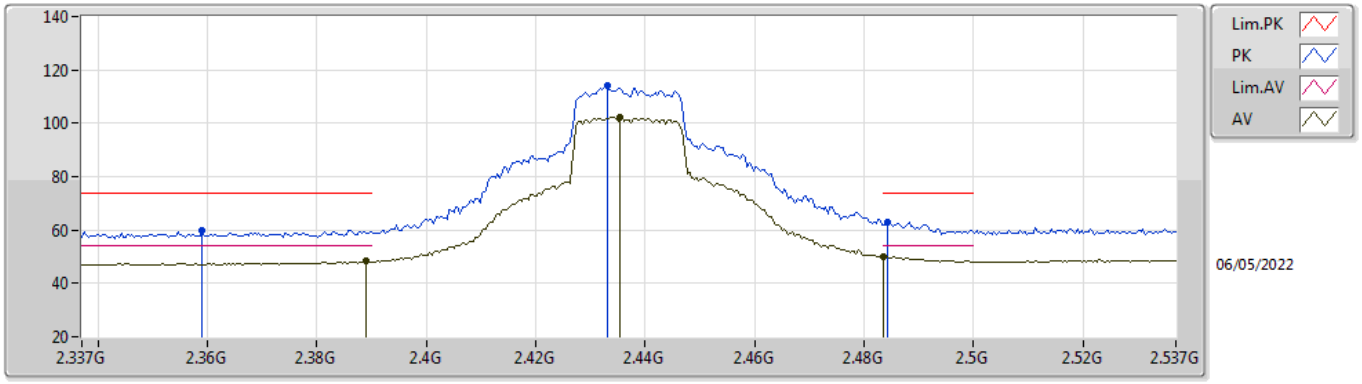


EUT Z_2TX
Setting 18
02-B-R-5

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	2.3862G	66.85	74.00	-7.15	35.69	3	Horizontal	103	1.71	-	28.37	2.79	-
AV	2.39G	53.77	54.00	-0.23	22.60	3	Horizontal	103	1.71	-	28.38	2.79	-
PK	2.4136G	113.93	Inf	-Inf	82.72	3	Horizontal	103	1.71	-	28.40	2.81	-
AV	2.416G	102.54	Inf	-Inf	71.32	3	Horizontal	103	1.71	-	28.40	2.82	-

802.11ax HEW20_Nss1,(MCS0)_2TX

2437MHz_TX

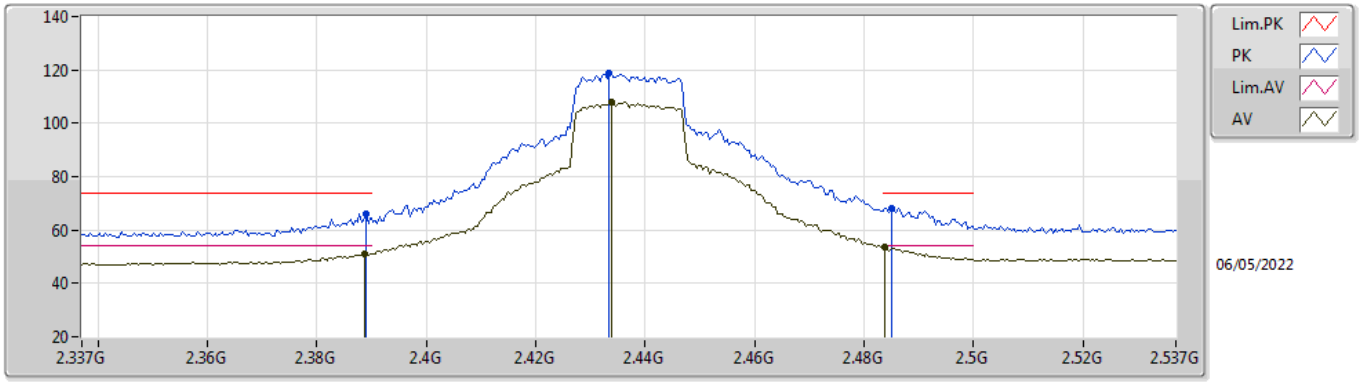


EUT Z_2TX
Setting 22.5
02-B-R-5

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	2.359G	59.95	74.00	-14.05	28.85	3	Vertical	282	2.79	-	28.32	2.78	-
AV	2.389G	48.19	54.00	-5.81	17.02	3	Vertical	282	2.79	-	28.38	2.79	-
PK	2.433G	114.09	Inf	-Inf	82.86	3	Vertical	282	2.79	-	28.40	2.83	-
AV	2.4354G	102.35	Inf	-Inf	71.11	3	Vertical	282	2.79	-	28.40	2.84	-
PK	2.4842G	62.98	74.00	-11.02	31.56	3	Vertical	282	2.79	-	28.54	2.88	-
AV	2.4835G	49.96	54.00	-4.04	18.55	3	Vertical	282	2.79	-	28.53	2.88	-

802.11ax HEW20_Nss1,(MCS0)_2TX

2437MHz_TX

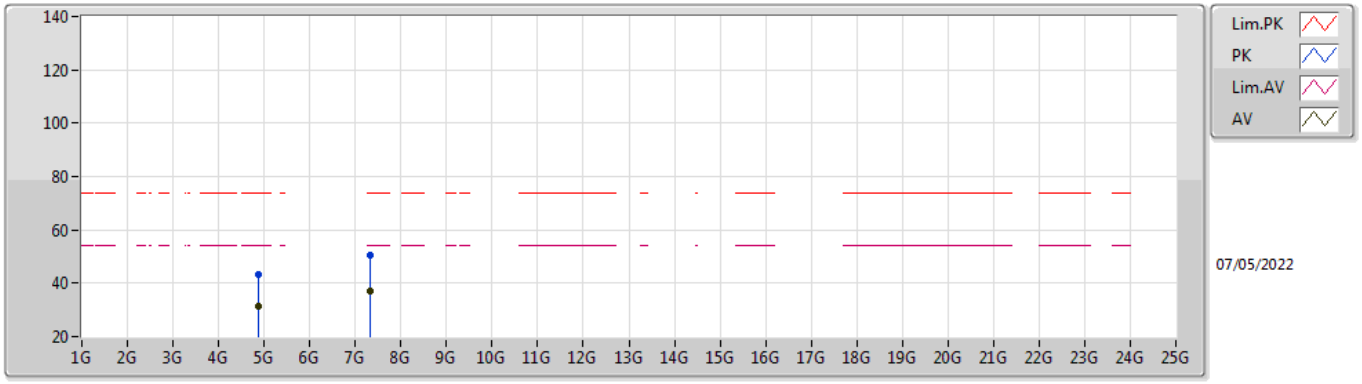


EUT Z_2TX
Setting 22.5
02-B-R-5

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	2.389G	66.24	74.00	-7.76	35.07	3	Horizontal	112	2.57	-	28.38	2.79	-
AV	2.3886G	51.15	54.00	-2.85	19.98	3	Horizontal	112	2.57	-	28.38	2.79	-
PK	2.4334G	118.82	Inf	-Inf	87.59	3	Horizontal	112	2.57	-	28.40	2.83	-
AV	2.4338G	107.99	Inf	-Inf	76.76	3	Horizontal	112	2.57	-	28.40	2.83	-
PK	2.485G	68.27	74.00	-5.73	36.84	3	Horizontal	112	2.57	-	28.54	2.89	-
AV	2.4838G	53.59	54.00	-0.41	22.17	3	Horizontal	112	2.57	-	28.54	2.88	-

802.11ax HEW20_Nss1,(MCS0)_2TX

2437MHz_TX

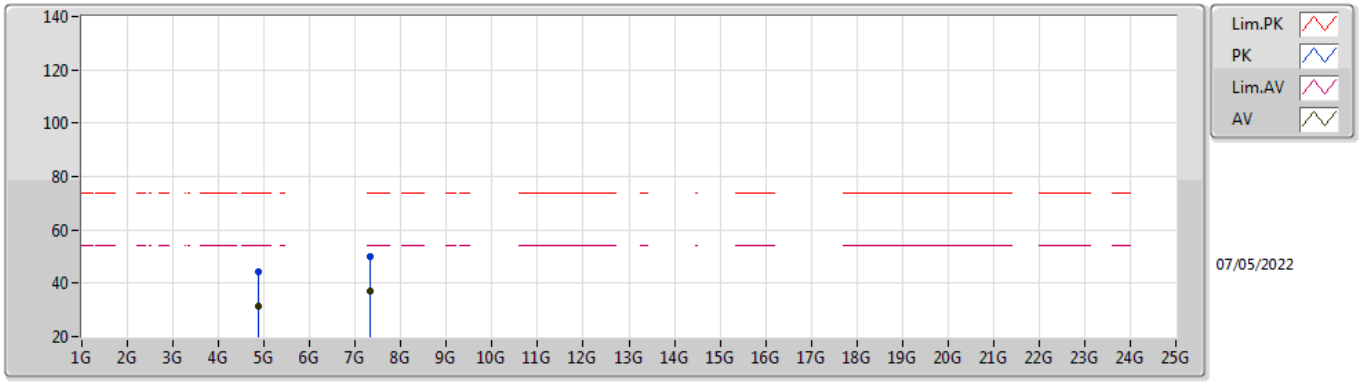


EUT Z_2TX
Setting 22.5
02-B-R-5

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	4.86452G	43.28	74.00	-30.72	37.26	3	Vertical	282	1.27	-	33.13	5.10	32.21
AV	4.87502G	31.24	54.00	-22.76	25.19	3	Vertical	282	1.27	-	33.15	5.10	32.20
PK	7.32144G	50.42	74.00	-23.58	40.66	3	Vertical	77	1.14	-	36.44	6.16	32.84
AV	7.32486G	36.89	54.00	-17.11	27.13	3	Vertical	77	1.14	-	36.45	6.16	32.85

802.11ax HEW20_Nss1,(MCS0)_2TX

2437MHz_TX

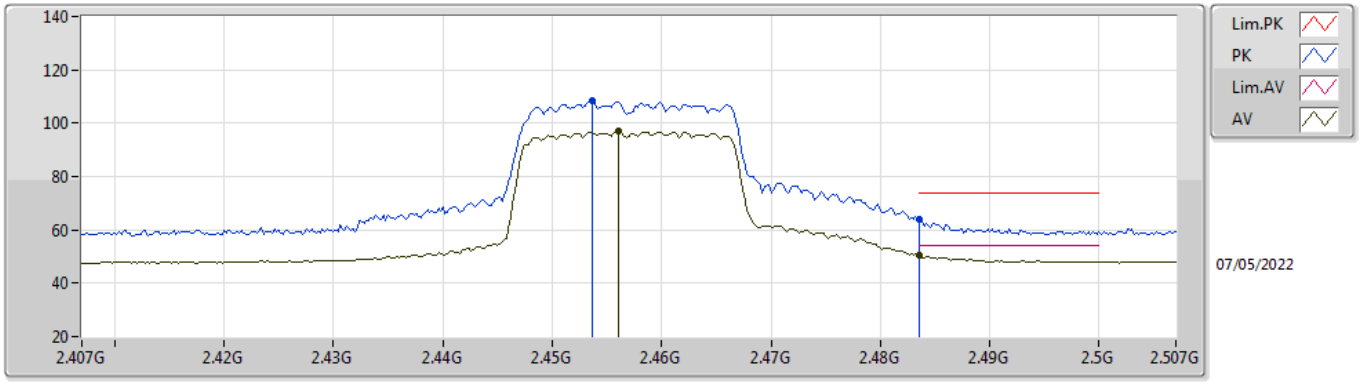


EUT Z_2TX
Setting 22.5
02-B-R-5

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	4.88528G	44.14	74.00	-29.86	38.07	3	Horizontal	67	1.14	-	33.17	5.10	32.20
AV	4.8644G	31.32	54.00	-22.68	25.30	3	Horizontal	67	1.14	-	33.13	5.10	32.21
PK	7.32354G	49.96	74.00	-24.04	40.19	3	Horizontal	77	2.93	-	36.45	6.16	32.84
AV	7.32414G	37.19	54.00	-16.81	27.42	3	Horizontal	77	2.93	-	36.45	6.16	32.84

802.11ax HEW20_Nss1,(MCS0)_2TX

2457MHz_TX

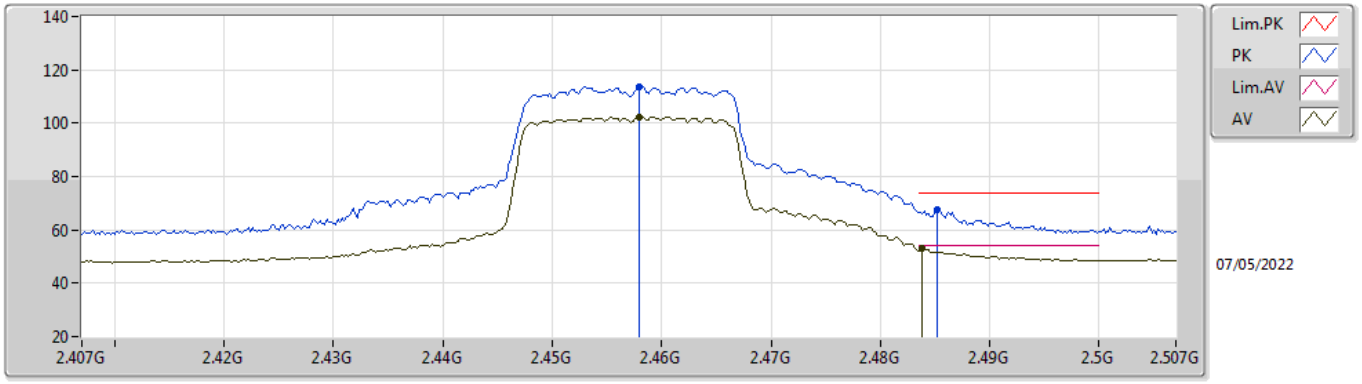


EUT Z_2TX
Setting 16.75
02-B-R-5

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	2.4536G	108.43	Inf	-Inf	77.17	3	Vertical	285	2.75	-	28.41	2.85	-
AV	2.456G	97.03	Inf	-Inf	65.75	3	Vertical	285	2.75	-	28.42	2.86	-
PK	2.4836G	64.10	74.00	-9.90	32.69	3	Vertical	285	2.75	-	28.53	2.88	-
AV	2.4835G	50.74	54.00	-3.26	19.33	3	Vertical	285	2.75	-	28.53	2.88	-

802.11ax HEW20_Nss1,(MCS0)_2TX

2457MHz_TX

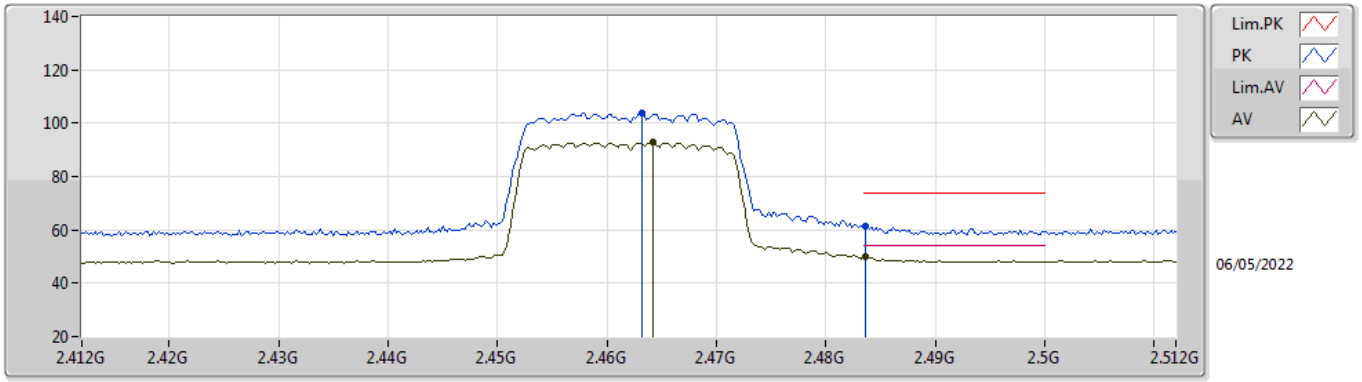


EUT Z_2TX
Setting 16.75
02-B-R-5

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	113.78	Inf	-Inf	82.49	3	Horizontal	115	2.50	-	28.43	2.86	-
AV	2.458G	102.20	Inf	-Inf	70.91	3	Horizontal	115	2.50	-	28.43	2.86	-
PK	2.4852G	67.71	74.00	-6.29	36.28	3	Horizontal	115	2.50	-	28.54	2.89	-
AV	2.4838G	52.94	54.00	-1.06	21.52	3	Horizontal	115	2.50	-	28.54	2.88	-

802.11ax HEW20_Nss1,(MCS0)_2TX

2462MHz_TX

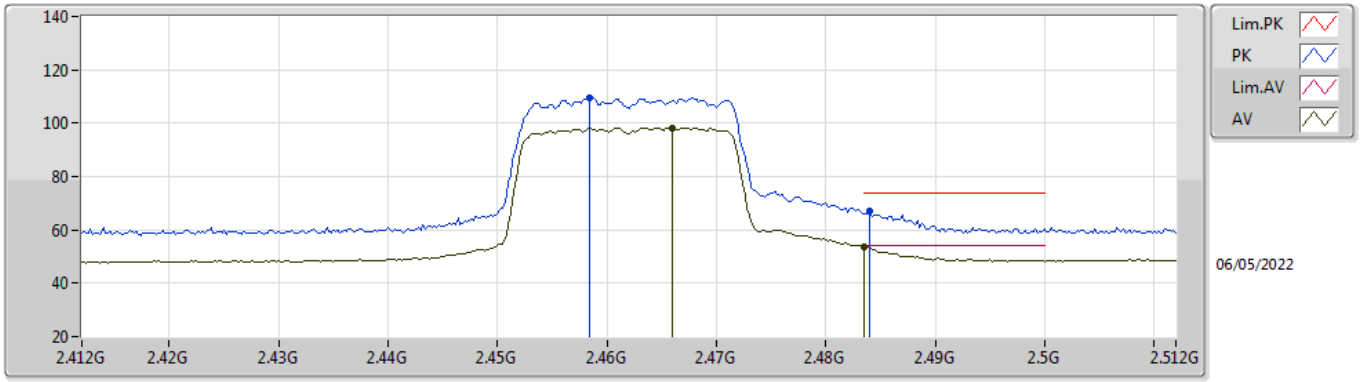


EUT Z_2TX
Setting 12.75
02-B-R-5

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	2.4632G	104.01	Inf	-Inf	72.70	3	Vertical	284	2.75	-	28.45	2.86	-
AV	2.4642G	92.82	Inf	-Inf	61.50	3	Vertical	284	2.75	-	28.46	2.86	-
PK	2.4836G	61.57	74.00	-12.43	30.16	3	Vertical	284	2.75	-	28.53	2.88	-
AV	2.4836G	49.90	54.00	-4.10	18.49	3	Vertical	284	2.75	-	28.53	2.88	-

802.11ax HEW20_Nss1,(MCS0)_2TX

2462MHz_TX

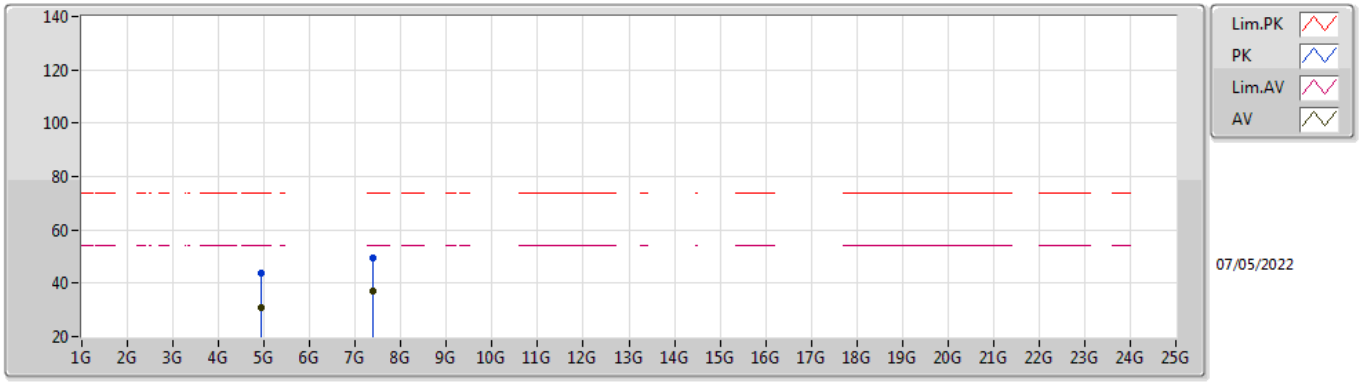


EUT Z_2TX
Setting 12.75
02-B-R-5

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	2.4584G	109.71	Inf	-Inf	78.42	3	Horizontal	350	2.50	-	28.43	2.86	-
AV	2.466G	98.32	Inf	-Inf	66.99	3	Horizontal	350	2.50	-	28.46	2.87	-
PK	2.484G	66.82	74.00	-7.18	35.40	3	Horizontal	350	2.50	-	28.54	2.88	-
AV	2.4835G	53.63	54.00	-0.37	22.22	3	Horizontal	350	2.50	-	28.53	2.88	-

802.11ax HEW20_Nss1,(MCS0)_2TX

2462MHz_TX

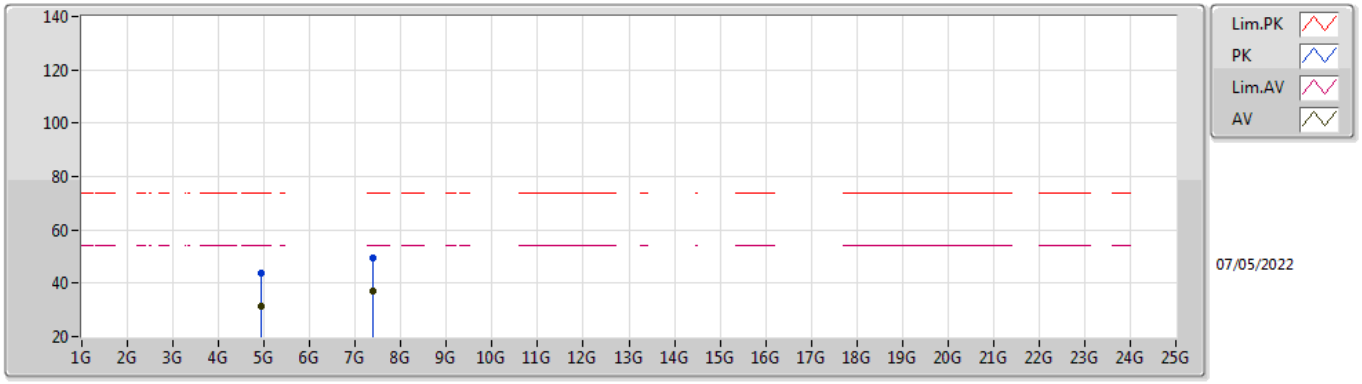


EUT Z_2TX
Setting 12.75
02-B-R-5

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	4.93522G	43.78	74.00	-30.22	37.59	3	Vertical	170	2.99	-	33.27	5.10	32.18
AV	4.92712G	31.07	54.00	-22.93	24.91	3	Vertical	170	2.99	-	33.25	5.10	32.19
PK	7.3941G	49.68	74.00	-24.32	39.95	3	Vertical	76	2.65	-	36.50	6.20	32.97
AV	7.39356G	37.07	54.00	-16.93	27.33	3	Vertical	76	2.65	-	36.50	6.20	32.96

802.11ax HEW20_Nss1,(MCS0)_2TX

2462MHz_TX

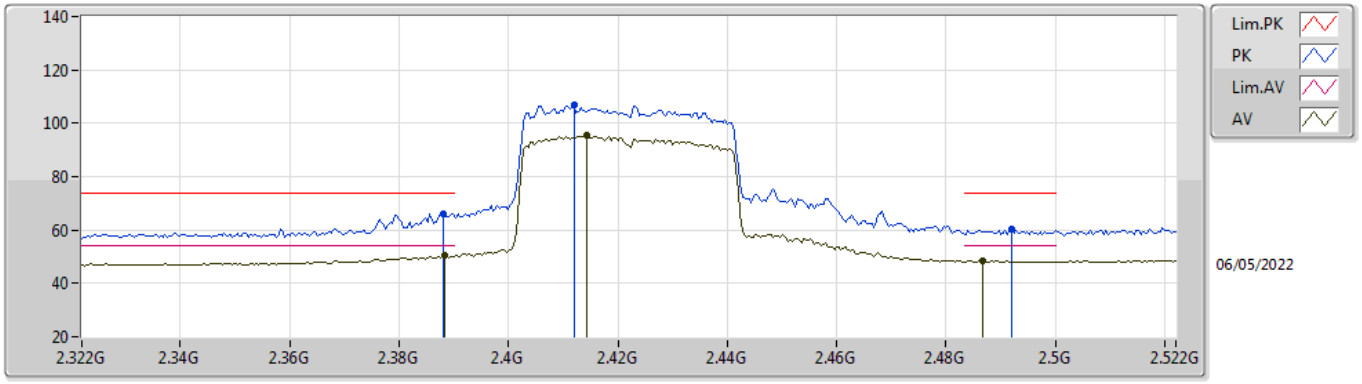


EUT Z_2TX
Setting 12.75
02-B-R-5

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	4.92934G	43.57	74.00	-30.43	37.40	3	Horizontal	198	2.58	-	33.26	5.10	32.19
AV	4.92766G	31.19	54.00	-22.81	25.02	3	Horizontal	198	2.58	-	33.26	5.10	32.19
PK	7.39836G	49.38	74.00	-24.62	39.65	3	Horizontal	14	2.50	-	36.50	6.20	32.97
AV	7.37286G	37.11	54.00	-16.89	27.35	3	Horizontal	14	2.50	-	36.50	6.19	32.93

802.11ax HEW40_Nss1,(MCS0)_2TX

2422MHz_TX

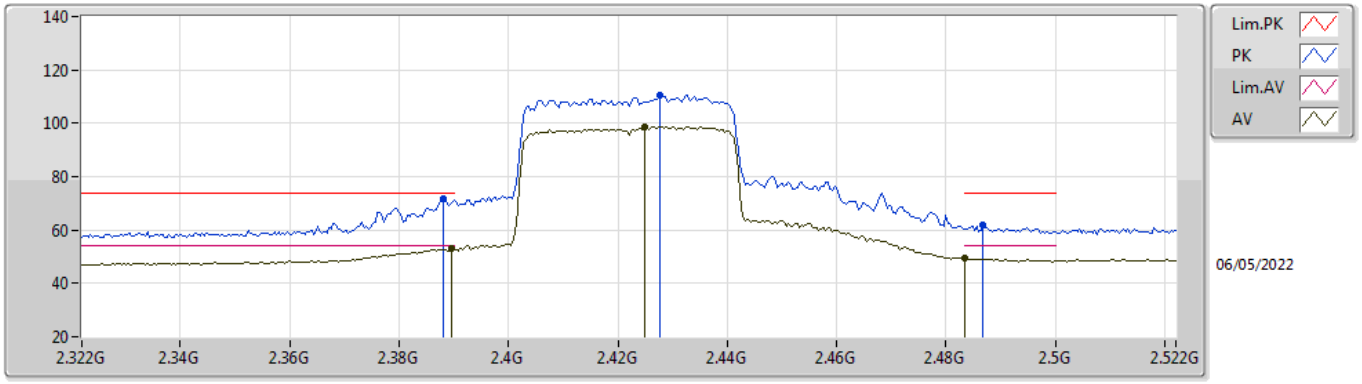


EUT Z_2TX
Setting 12.75
02-B-R-5

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	2.388G	66.28	74.00	-7.72	35.11	3	Vertical	282	2.86	-	28.38	2.79	-
AV	2.3884G	50.38	54.00	-3.62	19.21	3	Vertical	282	2.86	-	28.38	2.79	-
PK	2.412G	106.76	Inf	-Inf	75.55	3	Vertical	282	2.86	-	28.40	2.81	-
AV	2.4144G	95.36	Inf	-Inf	64.15	3	Vertical	282	2.86	-	28.40	2.81	-
PK	2.492G	60.38	74.00	-13.62	28.92	3	Vertical	282	2.86	-	28.57	2.89	-
AV	2.4868G	48.50	54.00	-5.50	17.06	3	Vertical	282	2.86	-	28.55	2.89	-

802.11ax HEW40_Nss1,(MCS0)_2TX

2422MHz_TX

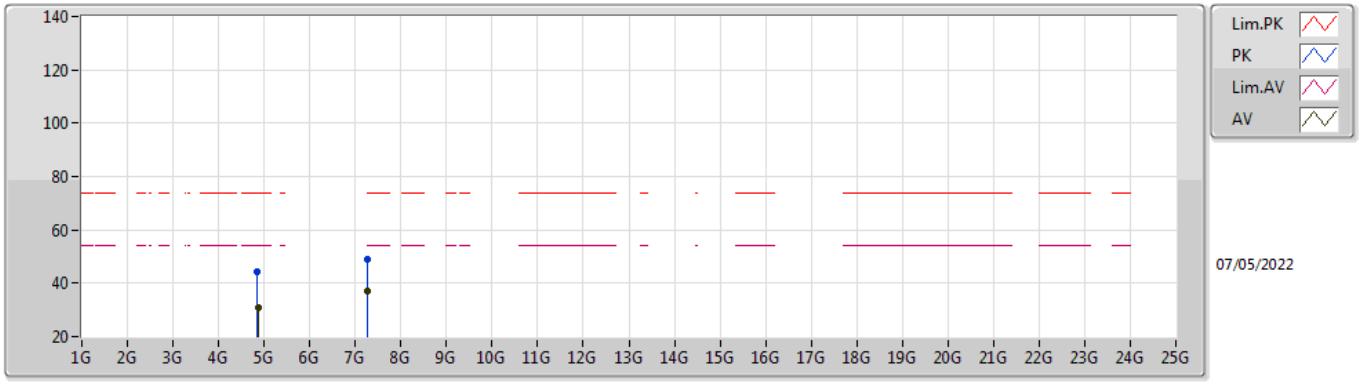


EUT Z_2TX
Setting 12.75
02-B-R-5

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	2.388G	71.78	74.00	-2.22	40.61	3	Horizontal	100	2.54	-	28.38	2.79	-
AV	2.3896G	52.97	54.00	-1.03	21.80	3	Horizontal	100	2.54	-	28.38	2.79	-
PK	2.4276G	110.62	Inf	-Inf	79.39	3	Horizontal	100	2.54	-	28.40	2.83	-
AV	2.4248G	98.66	Inf	-Inf	67.44	3	Horizontal	100	2.54	-	28.40	2.82	-
PK	2.4868G	61.70	74.00	-12.30	30.26	3	Horizontal	100	2.54	-	28.55	2.89	-
AV	2.4835G	49.27	54.00	-4.73	17.86	3	Horizontal	100	2.54	-	28.53	2.88	-

802.11ax HEW40_Nss1,(MCS0)_2TX

2422MHz_TX

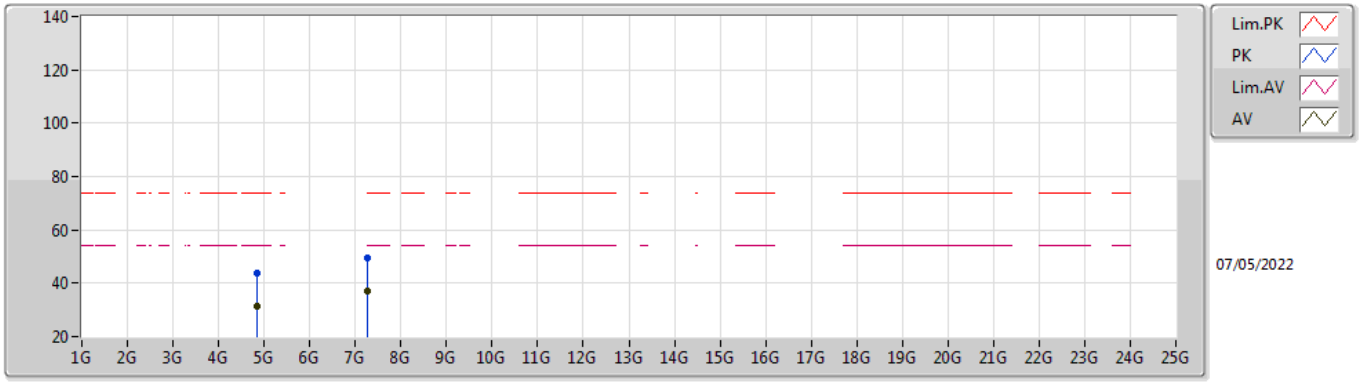


EUT Z_2TX
Setting 12.75
02-B-R-5

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	4.85684G	44.22	74.00	-29.78	38.22	3	Vertical	218	2.44	-	33.11	5.10	32.21
AV	4.85894G	31.09	54.00	-22.91	25.08	3	Vertical	218	2.44	-	33.12	5.10	32.21
PK	7.27266G	48.99	74.00	-25.01	39.31	3	Vertical	57	1.54	-	36.29	6.14	32.75
AV	7.26174G	36.90	54.00	-17.10	27.26	3	Vertical	57	1.54	-	36.25	6.13	32.74

802.11ax HEW40_Nss1,(MCS0)_2TX

2422MHz_TX

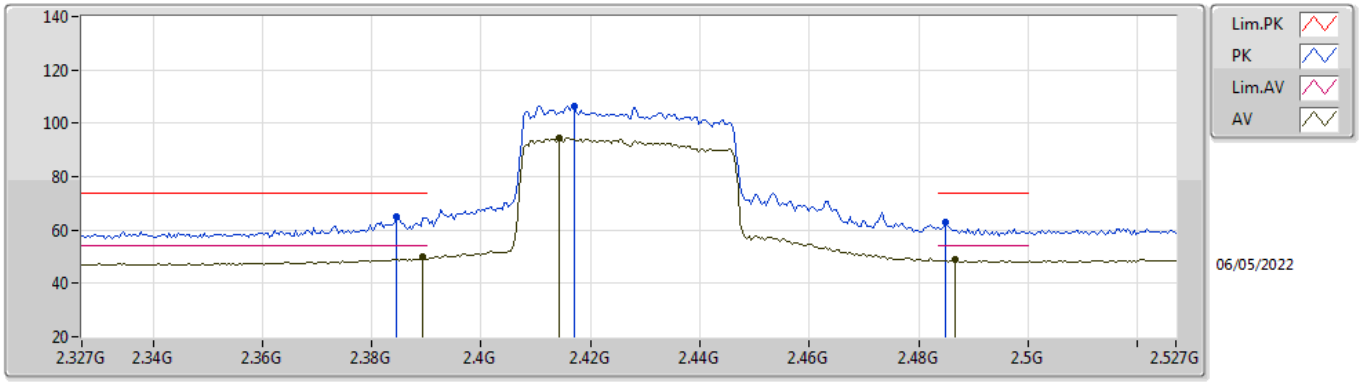


EUT Z_2TX
Setting 12.75
02-B-R-5

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	4.83002G	43.55	74.00	-30.45	37.69	3	Horizontal	287	1.16	-	32.98	5.10	32.22
AV	4.85498G	31.49	54.00	-22.51	25.49	3	Horizontal	287	1.16	-	33.11	5.10	32.21
PK	7.26048G	49.62	74.00	-24.38	39.98	3	Horizontal	181	1.25	-	36.24	6.13	32.73
AV	7.26174G	37.25	54.00	-16.75	27.61	3	Horizontal	181	1.25	-	36.25	6.13	32.74

802.11ax HEW40_Nss1,(MCS0)_2TX

2427MHz_TX

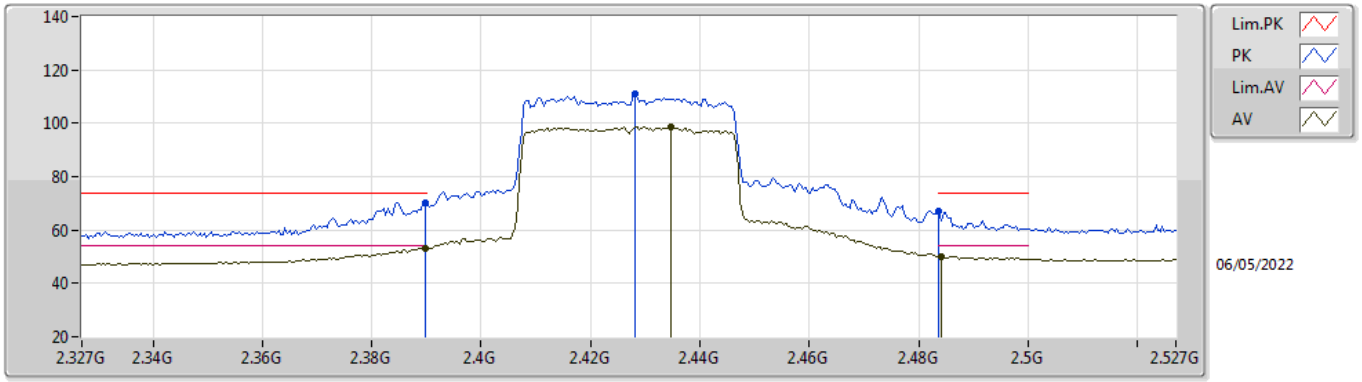


EUT Z_2TX
Setting 16.25
02-B-R-5

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	2.3846G	64.81	74.00	-9.19	33.65	3	Vertical	284	2.87	-	28.37	2.79	-
AV	2.3894G	50.13	54.00	-3.87	18.96	3	Vertical	284	2.87	-	28.38	2.79	-
PK	2.417G	106.31	Inf	-Inf	75.09	3	Vertical	284	2.87	-	28.40	2.82	-
AV	2.4142G	94.56	Inf	-Inf	63.35	3	Vertical	284	2.87	-	28.40	2.81	-
PK	2.485G	62.76	74.00	-11.24	31.33	3	Vertical	284	2.87	-	28.54	2.89	-
AV	2.4866G	48.71	54.00	-5.29	17.27	3	Vertical	284	2.87	-	28.55	2.89	-

802.11ax HEW40_Nss1,(MCS0)_2TX

2427MHz_TX

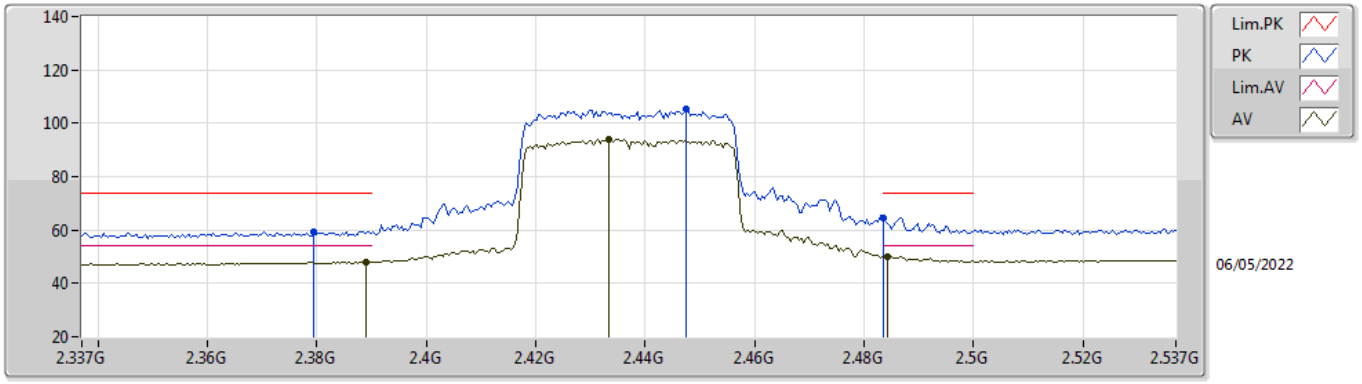


EUT Z_2TX
Setting 16.25
02-B-R-5

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	70.39	74.00	-3.61	39.22	3	Horizontal	343	2.34	-	28.38	2.79	-
AV	2.3898G	53.27	54.00	-0.73	22.10	3	Horizontal	343	2.34	-	28.38	2.79	-
PK	2.4282G	111.24	Inf	-Inf	80.01	3	Horizontal	343	2.34	-	28.40	2.83	-
AV	2.4346G	98.68	Inf	-Inf	67.45	3	Horizontal	343	2.34	-	28.40	2.83	-
PK	2.4835G	66.91	74.00	-7.09	35.50	3	Horizontal	343	2.34	-	28.53	2.88	-
AV	2.4842G	50.08	54.00	-3.92	18.66	3	Horizontal	343	2.34	-	28.54	2.88	-

802.11ax HEW40_Nss1,(MCS0)_2TX

2437MHz_TX

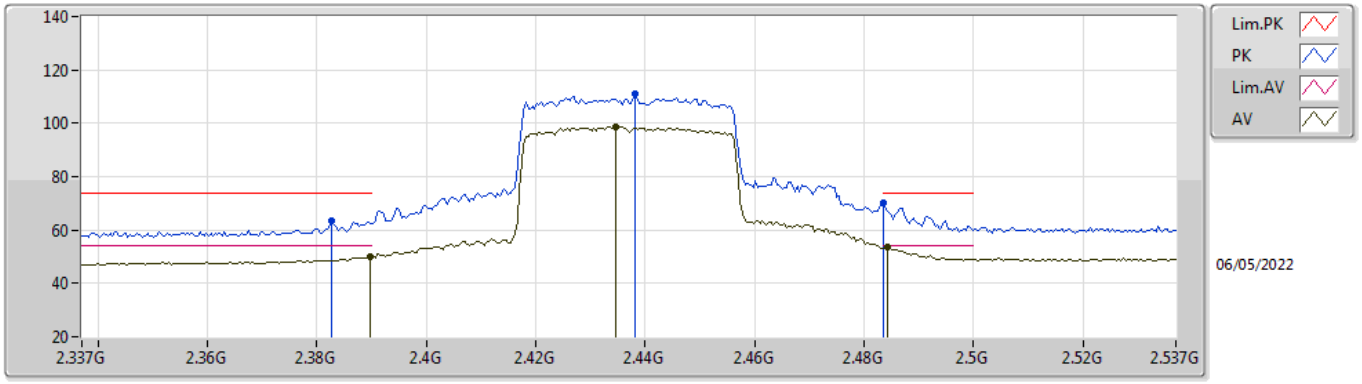


EUT Z_2TX
Setting 16.5
02-B-R-5

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	2.3794G	59.52	74.00	-14.48	28.37	3	Vertical	282	2.80	-	28.36	2.79	-
AV	2.389G	48.05	54.00	-5.95	16.88	3	Vertical	282	2.80	-	28.38	2.79	-
PK	2.4474G	105.52	Inf	-Inf	74.27	3	Vertical	282	2.80	-	28.40	2.85	-
AV	2.4334G	93.96	Inf	-Inf	62.73	3	Vertical	282	2.80	-	28.40	2.83	-
PK	2.4835G	64.66	74.00	-9.34	33.25	3	Vertical	282	2.80	-	28.53	2.88	-
AV	2.4842G	50.22	54.00	-3.78	18.80	3	Vertical	282	2.80	-	28.54	2.88	-

802.11ax HEW40_Nss1,(MCS0)_2TX

2437MHz_TX

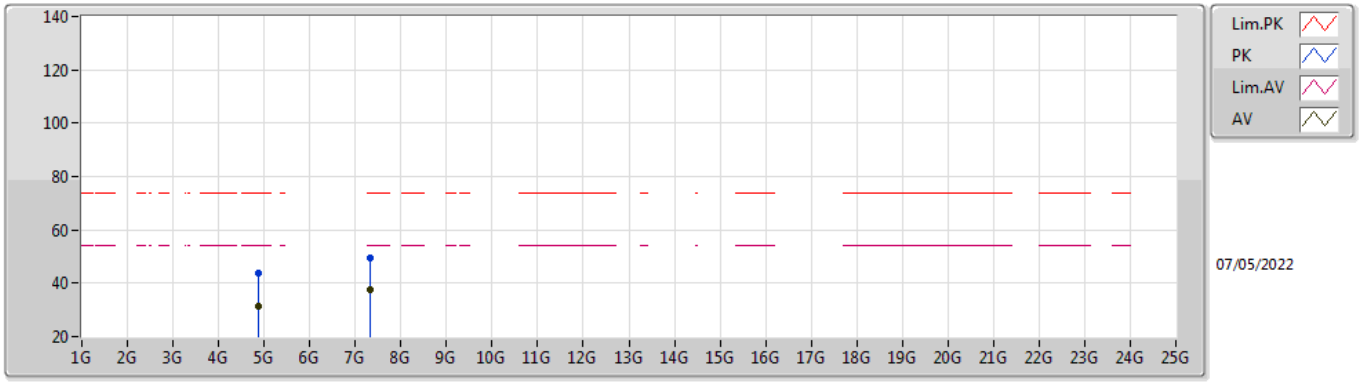


EUT Z_2TX
Setting 16.5
02-B-R-5

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	2.3826G	63.58	74.00	-10.42	32.42	3	Horizontal	97	2.56	-	28.37	2.79	-
AV	2.3898G	49.84	54.00	-4.16	18.67	3	Horizontal	97	2.56	-	28.38	2.79	-
PK	2.4382G	111.17	Inf	-Inf	79.93	3	Horizontal	97	2.56	-	28.40	2.84	-
AV	2.4346G	98.85	Inf	-Inf	67.62	3	Horizontal	97	2.56	-	28.40	2.83	-
PK	2.4835G	70.12	74.00	-3.88	38.71	3	Horizontal	97	2.56	-	28.53	2.88	-
AV	2.4842G	53.85	54.00	-0.15	22.43	3	Horizontal	97	2.56	-	28.54	2.88	-

802.11ax HEW40_Nss1,(MCS0)_2TX

2437MHz_TX

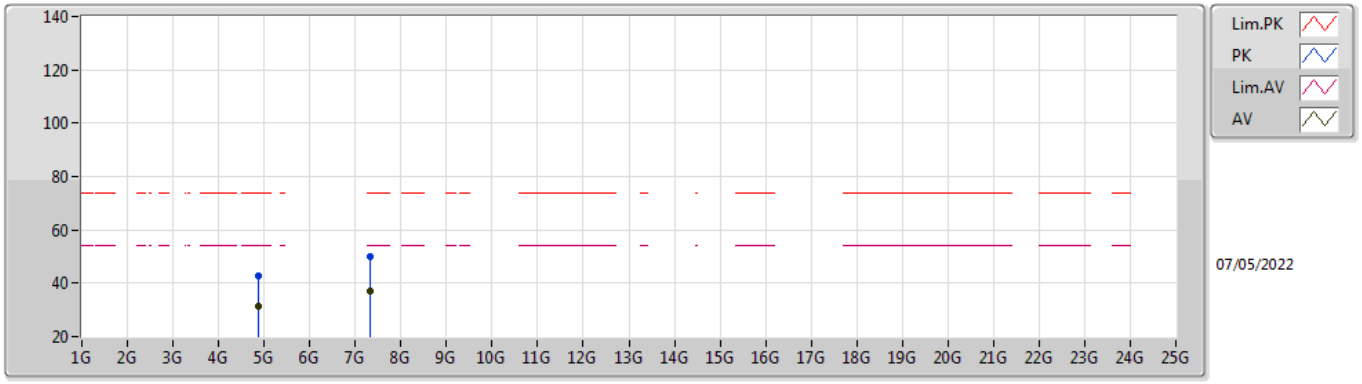


EUT Z_2TX
Setting 16.5
02-B-R-5

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	4.86722G	43.55	74.00	-30.45	37.53	3	Vertical	5	2.20	-	33.13	5.10	32.21
AV	4.88624G	31.49	54.00	-22.51	25.42	3	Vertical	5	2.20	-	33.17	5.10	32.20
PK	7.31814G	49.70	74.00	-24.30	39.93	3	Vertical	312	1.98	-	36.44	6.16	32.83
AV	7.32222G	37.40	54.00	-16.60	27.64	3	Vertical	312	1.98	-	36.44	6.16	32.84

802.11ax HEW40_Nss1,(MCS0)_2TX

2437MHz_TX

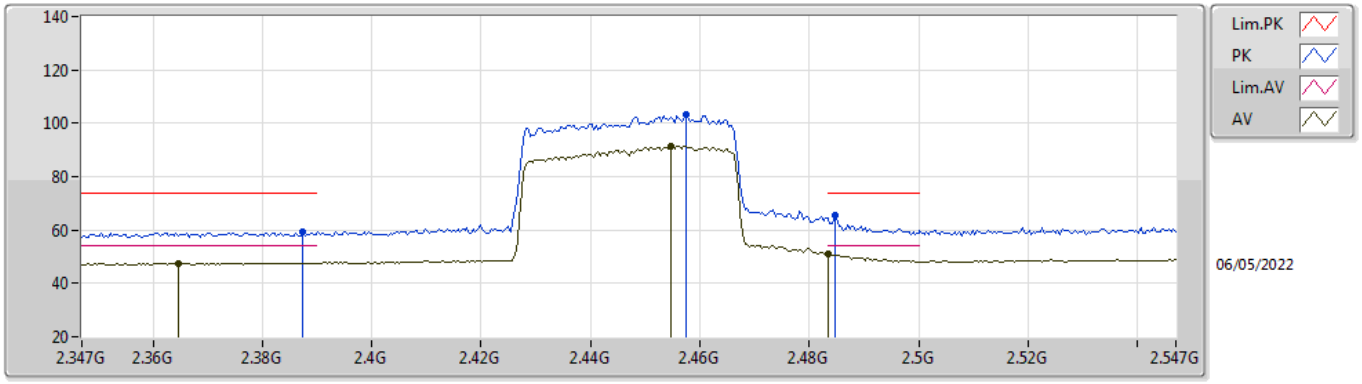


EUT Z_2TX
Setting 16.5
02-B-R-5

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	4.87214G	42.97	74.00	-31.03	36.94	3	Horizontal	9	2.49	-	33.14	5.10	32.21
AV	4.86824G	31.22	54.00	-22.78	25.19	3	Horizontal	9	2.49	-	33.14	5.10	32.21
PK	7.31592G	49.91	74.00	-24.09	40.15	3	Horizontal	77	2.84	-	36.43	6.16	32.83
AV	7.31238G	37.02	54.00	-16.98	27.26	3	Horizontal	77	2.84	-	36.42	6.16	32.82

802.11ax HEW40_Nss1,(MCS0)_2TX

2447MHz_TX

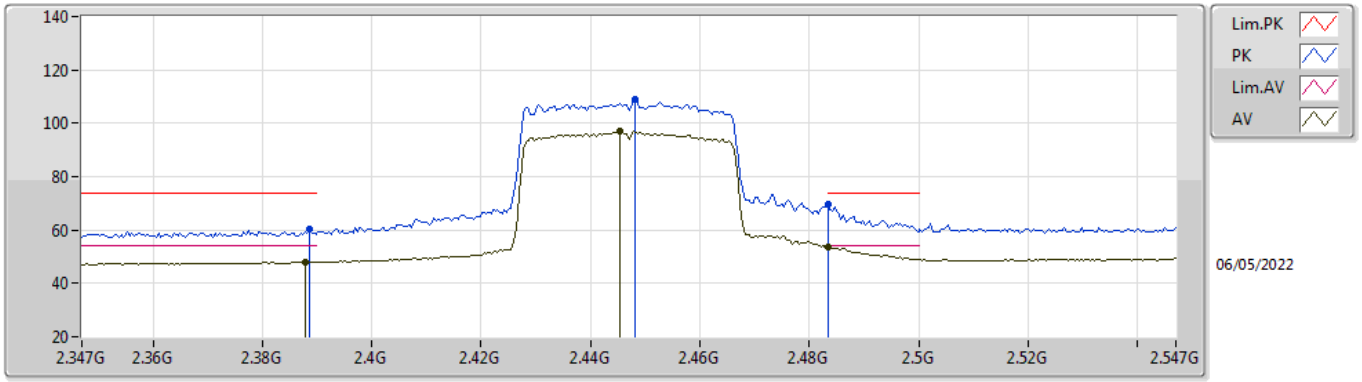


EUT Z_2TX
Setting 14
02-B-R-5

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	2.3874G	59.11	74.00	-14.89	27.95	3	Vertical	286	2.74	-	28.37	2.79	-
AV	2.3646G	47.61	54.00	-6.39	16.50	3	Vertical	286	2.74	-	28.33	2.78	-
PK	2.4574G	103.03	Inf	-Inf	71.74	3	Vertical	286	2.74	-	28.43	2.86	-
AV	2.4546G	91.54	Inf	-Inf	60.27	3	Vertical	286	2.74	-	28.42	2.85	-
PK	2.4846G	65.55	74.00	-8.45	34.13	3	Vertical	286	2.74	-	28.54	2.88	-
AV	2.4835G	51.29	54.00	-2.71	19.88	3	Vertical	286	2.74	-	28.53	2.88	-

802.11ax HEW40_Nss1,(MCS0)_2TX

2447MHz_TX

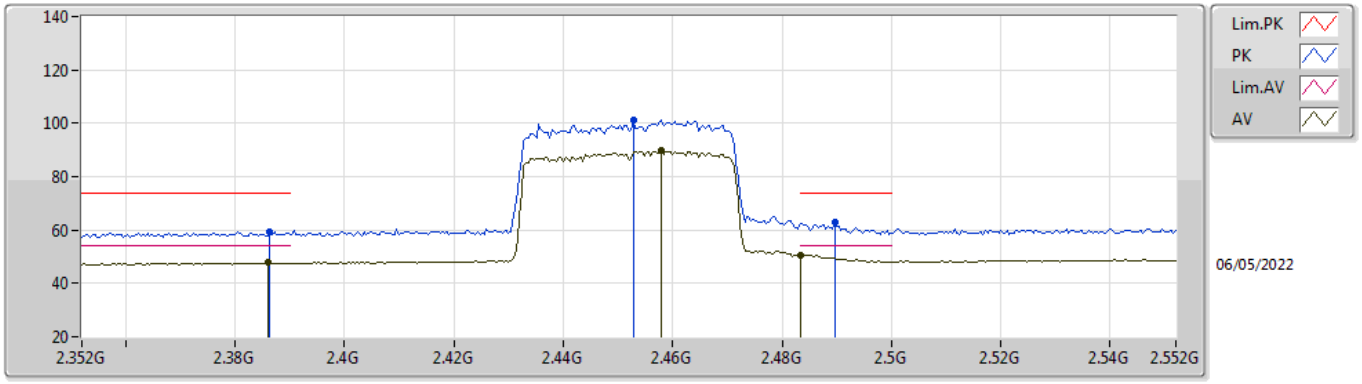


EUT Z_2TX
Setting 14
02-B-R-5

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	2.3886G	60.48	74.00	-13.52	29.31	3	Horizontal	345	2.85	-	28.38	2.79	-
AV	2.3878G	48.05	54.00	-5.95	16.88	3	Horizontal	345	2.85	-	28.38	2.79	-
PK	2.4482G	108.94	Inf	-Inf	77.69	3	Horizontal	345	2.85	-	28.40	2.85	-
AV	2.4454G	97.05	Inf	-Inf	65.80	3	Horizontal	345	2.85	-	28.40	2.85	-
PK	2.4835G	69.82	74.00	-4.18	38.41	3	Horizontal	345	2.85	-	28.53	2.88	-
AV	2.4835G	53.72	54.00	-0.28	22.31	3	Horizontal	345	2.85	-	28.53	2.88	-

802.11ax HEW40_Nss1,(MCS0)_2TX

2452MHz_TX

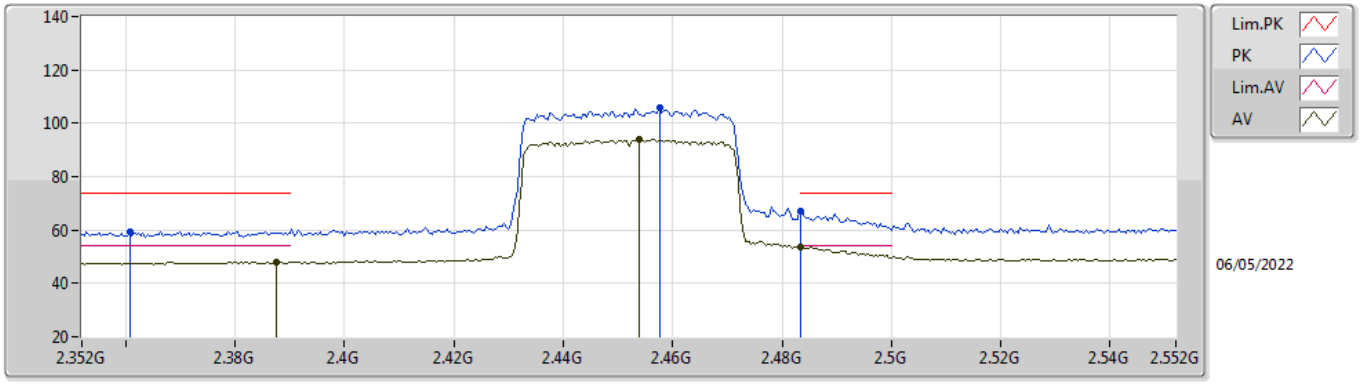


EUT Z_2TX
Setting 12.75
02-B-R-5

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	2.3864G	59.47	74.00	-14.53	28.31	3	Vertical	284	2.76	-	28.37	2.79	-
AV	2.386G	47.68	54.00	-6.32	16.52	3	Vertical	284	2.76	-	28.37	2.79	-
PK	2.4528G	101.36	Inf	-Inf	70.10	3	Vertical	284	2.76	-	28.41	2.85	-
AV	2.458G	89.61	Inf	-Inf	58.32	3	Vertical	284	2.76	-	28.43	2.86	-
PK	2.4896G	62.71	74.00	-11.29	31.26	3	Vertical	284	2.76	-	28.56	2.89	-
AV	2.4835G	50.53	54.00	-3.47	19.12	3	Vertical	284	2.76	-	28.53	2.88	-

802.11ax HEW40_Nss1,(MCS0)_2TX

2452MHz_TX

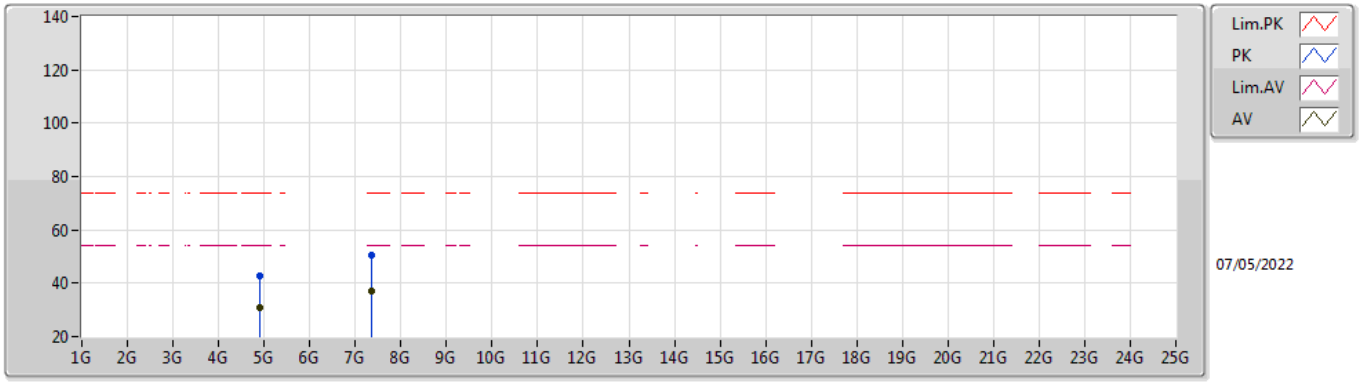


EUT Z_2TX
Setting 12.75
02-B-R-5

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	2.3608G	59.48	74.00	-14.52	28.38	3	Horizontal	107	3.00	-	28.32	2.78	-
AV	2.3876G	47.84	54.00	-6.16	16.67	3	Horizontal	107	3.00	-	28.38	2.79	-
PK	2.4576G	105.62	Inf	-Inf	74.33	3	Horizontal	107	3.00	-	28.43	2.86	-
AV	2.454G	94.05	Inf	-Inf	62.78	3	Horizontal	107	3.00	-	28.42	2.85	-
PK	2.4835G	66.96	74.00	-7.04	35.55	3	Horizontal	107	3.00	-	28.53	2.88	-
AV	2.4835G	53.78	54.00	-0.22	22.37	3	Horizontal	107	3.00	-	28.53	2.88	-

802.11ax HEW40_Nss1,(MCS0)_2TX

2452MHz_TX

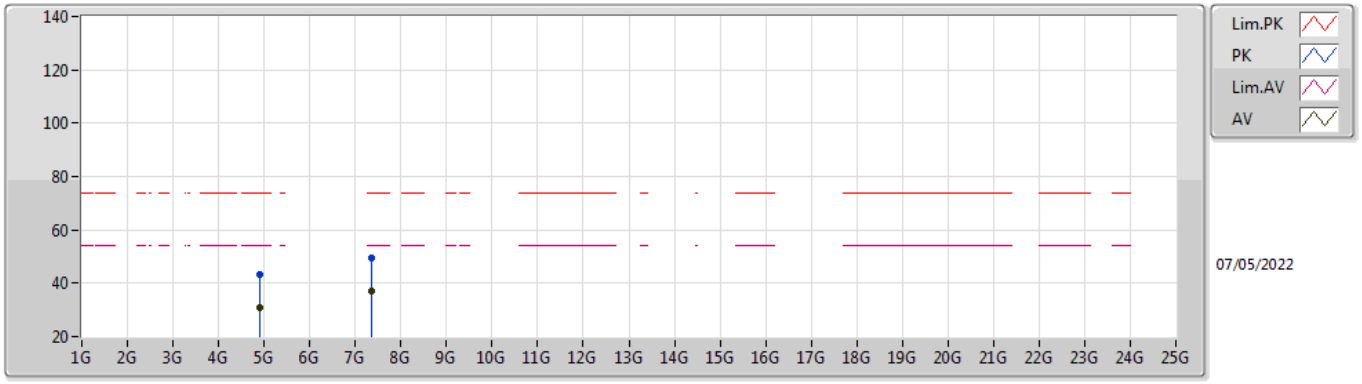


EUT Z_2TX
Setting 12.75
02-B-R-5

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	4.91156G	42.78	74.00	-31.22	36.65	3	Vertical	32	1.54	-	33.22	5.10	32.19
AV	4.89266G	30.85	54.00	-23.15	24.76	3	Vertical	32	1.54	-	33.19	5.10	32.20
PK	7.35828G	50.56	74.00	-23.44	40.78	3	Vertical	328	2.43	-	36.50	6.18	32.90
AV	7.3443G	37.26	54.00	-16.74	27.48	3	Vertical	328	2.43	-	36.49	6.17	32.88

802.11ax HEW40_Nss1,(MCS0)_2TX

2452MHz_TX



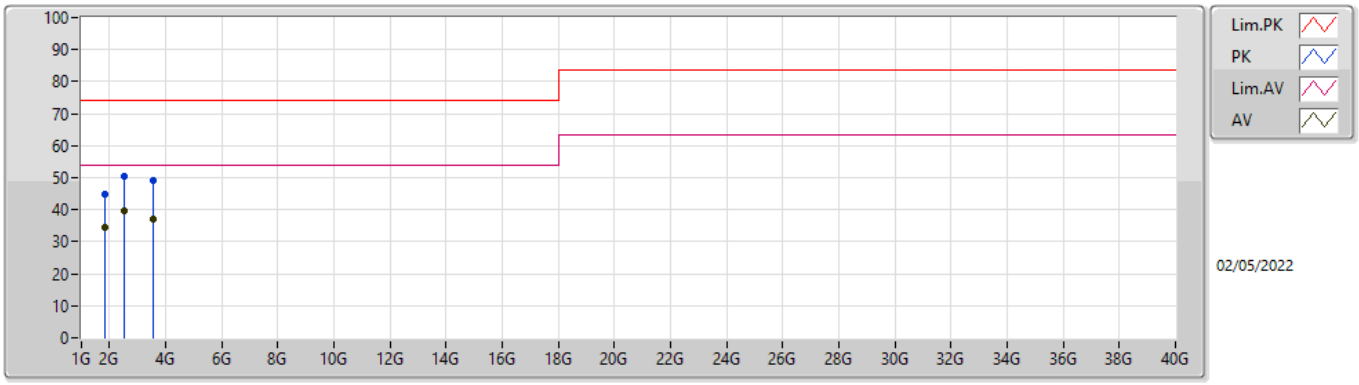
EUT Z_2TX
Setting 12.75
02-B-R-5

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	4.90202G	43.48	74.00	-30.52	37.38	3	Horizontal	105	2.29	-	33.20	5.10	32.20
AV	4.91204G	30.91	54.00	-23.09	24.78	3	Horizontal	105	2.29	-	33.22	5.10	32.19
PK	7.35276G	49.58	74.00	-24.42	39.79	3	Horizontal	32	2.87	-	36.50	6.18	32.89
AV	7.34166G	37.06	54.00	-16.94	27.28	3	Horizontal	32	2.87	-	36.48	6.17	32.87

Summary

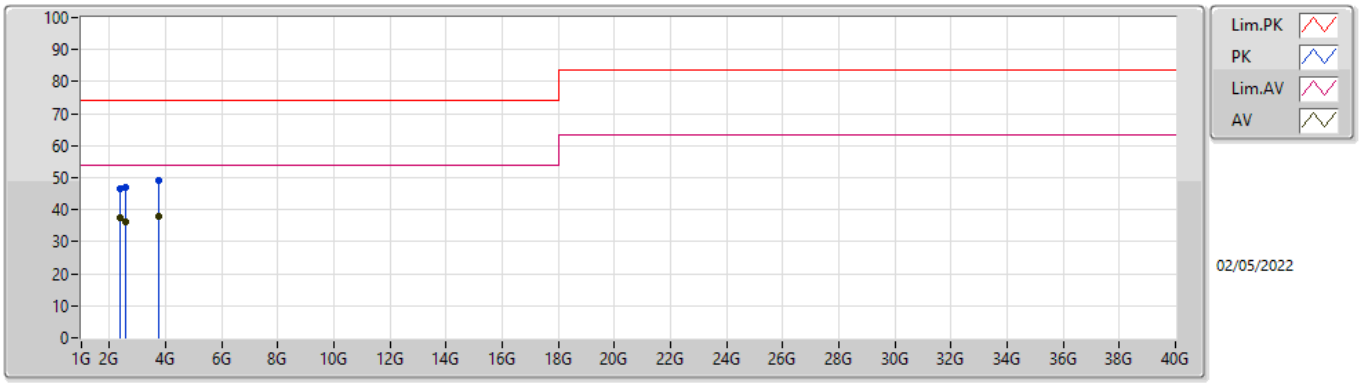
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	AV	2.5215G	39.73	54.00	-14.27	Vertical

Mode 1



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	1.8245G	44.86	74.00	-29.14	0.69	3	Vertical	170	3.00	-	44.17	30.60	6.04	35.95
AV	1.8245G	34.44	54.00	-19.56	0.69	3	Vertical	170	3.00	-	33.75	30.60	6.04	35.95
PK	2.5215G	50.40	74.00	-23.60	3.84	3	Vertical	300	1.00	-	46.56	32.60	7.44	36.20
AV	2.5215G	39.73	54.00	-14.27	3.84	3	Vertical	300	1.00	"Worst"	35.89	32.60	7.44	36.20
PK	3.55G	48.99	74.00	-25.01	6.71	3	Vertical	249	1.00	-	42.28	32.80	9.93	36.02
AV	3.55G	36.98	54.00	-17.02	6.71	3	Vertical	249	1.00	-	30.27	32.80	9.93	36.02

Mode 1



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	2.3855G	46.65	74.00	-27.35	3.29	3	Horizontal	305	1.00	-	43.36	32.25	7.16	36.12
AV	2.3855G	37.66	54.00	-16.34	3.29	3	Horizontal	305	1.00	-	34.37	32.25	7.16	36.12
PK	2.564G	46.82	74.00	-27.18	3.95	3	Horizontal	41	3.00	-	42.87	32.63	7.53	36.21
AV	2.564G	36.14	54.00	-17.86	3.95	3	Horizontal	41	3.00	-	32.19	32.63	7.53	36.21
PK	3.754G	49.01	74.00	-24.99	7.83	3	Horizontal	151	2.00	-	41.18	33.51	10.30	35.98
AV	3.754G	37.94	54.00	-16.06	7.83	3	Horizontal	151	2.00	"Worst"	30.11	33.51	10.30	35.98