Testing Laboratory 3787

RADIO TEST REPORT

FCC ID	:	LDKCG1132477
Equipment	:	Cisco Catalyst Wireless Gateway CG113-4GW6 Cisco Catalyst Wireless Gateway CG113-W6
Brand Name	:	CISCO
Model Name	:	CG113-4GW6B,CG113-W6B
Applicant	:	Cisco Systems Inc 125 West Tasman Drive San Jose California United States 95134-1706
Manufacturer	:	Cisco Systems Inc 125 West Tasman Drive San Jose California United States 95134-1706
Standard	:	47 CFR FCC Part 15.247

The product was received on Oct. 04, 2021, and testing was started from Dec. 09, 2021 and completed on Apr. 17, 2022. We, Sporton International Inc. Hsinchu Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

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

Approved by: Sam Chen

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

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History of this test report

Report No.	Version	Description	Issued Date
FR1O0407AA	01	Initial issue of report	Aug. 24, 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: Sandy Chuang

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
2400-2483.5	b, g, n (HT20), VHT20, ax (HEW20)	2412-2462	1-11 [11]

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

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

1.1.2 Antenna Information

<WLAN antenna gain>

Ant.	Port		Brand	Model Name	Antenna Type	Connector	Gain (dBi)				
	2.4 GHz	5 GHz					2.4 GHz	5GHz			
								UNII 1	UNII 2A	UNII 2C	UNII 3
1	1	1	CISCO	N/A	Printed PCB	I-PEX	3.99	4.21	4.23	4.03	4.94
2	2	2	CISCO	N/A	Printed PCB	I-PEX	2.57	4.53	3.92	4.02	4.79

<WWAN antenna gain>

Ant.	Port	Brand	Model Name	Antenna Type	Connector	WCDMA Gain (dBi)		
						Band 2	Band 4	Band 5
1~2	1~2	CISCO	N/A	Printed PCB	I-PEX	4.1	4.1	2.1

Ant.	Port	Brand	Model Name	Antenna Type	Connector	LTE Gain (dBi)
1~2	1~2	CISCO	N/A	Printed PCB	I-PEX	Note 1

Note 1

LTE Gain (dBi)						
Band 2	Band 4	Band 5	Band 7	Band 12	Band 13	Band 14
4.1	4.1	2.1	4.1	2.1	2.1	2.1

LTE Gain (dBi)						
Band 25	Band 26	Band 41	Band 43	Band 48	Band 66	Band 71
4.1	2.1	4.1	3.6	3.6	4.1	2.1

Note 2: The above information was declared by manufacturer.

<For 2.4GHz function>

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

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

Pot 1 and Port 2 could transmit/receive simultaneously.

<For 5GHz function>

For IEEE 802.11a/n/ac/ax (2TX/2RX):

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

Pot 1 and Port 2 could transmit/receive simultaneously.

For WWAN function (1TX/2RX):

Only Port 1 can be use as transmitting antenna

Port 1 and Port 2 could receive simultaneously.

Note 3: Directional gain information

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

Ex.

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

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

j,k =(Nss1(g1,1) + Nss1(g1,2))^2

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

Where ;

G1 = Ant 1 Gain ; G2 = Ant 2 Gain

2.4GHz DG = 6.32 dBi

5 GHz U-NII-1 DG = 7.38 dBi

5 GHz U-NII-2A DG = 7.09 dBi

5 GHz U-NII-2C DG = 7.04 dBi

5 GHz U-NII-3 DG = 7.88 dBi

1.1.3 Table of WWAN module

Brand Name	Model Name	Function	FCC ID
SIERRA WIRELESS	EM7411	WCDMA Band: 2/4/5 LTE Band: 2/4/5/7/12/13/14/25/26/41/43/48/66/71 LTE CA Band: CA_5B,CA_7C,CA_41C	N7NEM74B

Note: This device cotains transmiter module FCC ID: N7NEM74B.

1.1.4 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11b	1	0	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11g	0.986	0.06	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW20	0.978	0.1	1.489m	1k

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

1.1.5 EUT Operational Condition

EUT Power Type	From Power Adapter			
Beamforming Function	☒	With beamforming	☐	Without beamforming
	The product has beamforming function for n/VHT/ax in 2.4GHz, n/ac/ax in 5GHz.			
Function	☒	Point-to-multipoint	☐	Point-to-point
Test Software Version	Tera Term V4.75(SVN#5014)			

Note: The above information was declared by manufacturer.

1.1.6 Table for Multiple Listing

EUT	Equipment Name	Model Name	Sku
1	Cisco Catalyst Wireless Gateway CG113-4GW6	CG113-4GW6B	LTE+ Wi-Fi sku
2	Cisco Catalyst Wireless Gateway CG113-W6	CG113-W6B	Wi-Fi sku

Note 1: From the above models, model: CG113-4GW6B (EUT 1) was selected as representative model for the test and its data was recorded in this report.

Note 2: The above information was declared by manufacturer.

1.2 Applicable Standards

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

- 47 CFR FCC Part 15.247
- ANSI C63.10-2013

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

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

1.3 Testing Location Information

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

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
RF Conducted	TH03-CB	Owen Hsu	19.4~20.9 / 53~57	Dec. 14, 2021~ Apr. 17, 2022
Radiated <Below 1GHz and Co-location>	03CH05-CB	Eason Chen	23.5-24.6 / 55-59	Jan. 04, 2022
Radiated <Above 1GHz>	03CH02-CB	Kevin Huang	24.2-26.1 / 55-58	Dec. 09, 2021~ Dec. 11, 2021
AC Conduction	CO01-CB	Peter Wu	20~21 / 58~60	Jan. 03, 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)	4.2 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.5 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

<Non-beamforming mode>

Mode	Power Setting
802.11b_Nss1,(1Mbps)_2TX	-
2412MHz	87
2437MHz	94
2462MHz	83
802.11g_Nss1,(6Mbps)_2TX	-
2412MHz	65
2417MHz	76
2437MHz	87
2457MHz	74
2462MHz	64
802.11ax HEW20_Nss1,(MCS0)_2TX	-
2412MHz	62
2417MHz	70
2437MHz	83
2457MHz	70
2462MHz	57

<Beamforming mode>

Mode	Power Setting
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
2412MHz	62
2417MHz	70
2437MHz	83
2457MHz	70
2462MHz	57

Note:

- Evaluated HEW20 mode only. Due to similar modulation, the power setting of HT20/VHT20 mode are the same or lower than HEW20.
- The EUT supports non-beamforming and beamforming modes, after evaluating, the non-beamforming mode has been evaluated to be the worst case, so it was selected to test. The beamforming mode evaluates the output power only.

2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral Test Voltage: 120Vac / 60Hz
Operating Mode	Normal Link
1	EUT 1 + SIM 0 port + WCDMA Band 2 Link
2	EUT 1 + SIM 1 port + WCDMA Band 2 Link
Mode 2 has been evaluated to be the worst case among Mode 1~2, thus measurement for Mode 3 will follow this same test mode.	
3	EUT 1 + SIM 1 port + LTE Band 2 Link
For operating mode 2 is the worst case and it was record in this test report.	

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

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emissions in Restricted Frequency Bands
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	Normal Link
1	EUT 1 in Z axis + SIM 0 Port + WCDMA Band 2 Link
2	EUT 1 in Y axis + SIM 0 Port + WCDMA Band 2 Link
3	EUT 1 in X axis + SIM 0 Port + WCDMA Band 2 Link
Mode 1 has been evaluated to be the worst case among Mode 1~3, thus measurement for Mode 4 will follow this same test mode.	
4	EUT 1 in Z axis + SIM 1 Port + WCDMA Band 2 Link
Mode 1 has been evaluated to be the worst case among Mode 1~4, thus measurement for Mode 5 will follow this same test mode.	
5	EUT 1 in Z axis + SIM 0 Port + LTE Band 2 Link
For operating mode 1 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 as below:	
1	EUT 1 (Bandedge at Z axis / Harmonic at X 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. EUT X axis has been evaluated to be the worst case at Unwanted Emissions <Above 1GHz>; thus, the measurement will follow this same test configuration	
1	EUT 1 in X 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 + WWAN WCDMA
2	WLAN 2.4GHz + WLAN 5GHz + WWAN LTE
Refer to Sporton Test Report No.: FA1O0407 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

Accessories			
Equipment Name	**Brand Name**	**Model Name**	**Rating**
Adapter	DELTA	ADH-36DW B (CG113-4G-PWR-US)	INPUT: 100-240V~0.8A, 50-60Hz OUTPUT: 5.0V, 3.0A, 15.0W / 9.0V, 3.0A 3.0A / 15.0V, 2.4A, 36.0W

2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	2.5G WAN PC	DELL	T3400	N/A
B	LAN NB	DELL	E6430	N/A
C	2.4G NB	DELL	E6430	N/A
D	5G NB	DELL	E6430	N/A
E	Base station	Anritsu	MT8820C	N/A
F	SIM card	Anritsu	SIM01	N/A

For Radiated (below 1GHz):

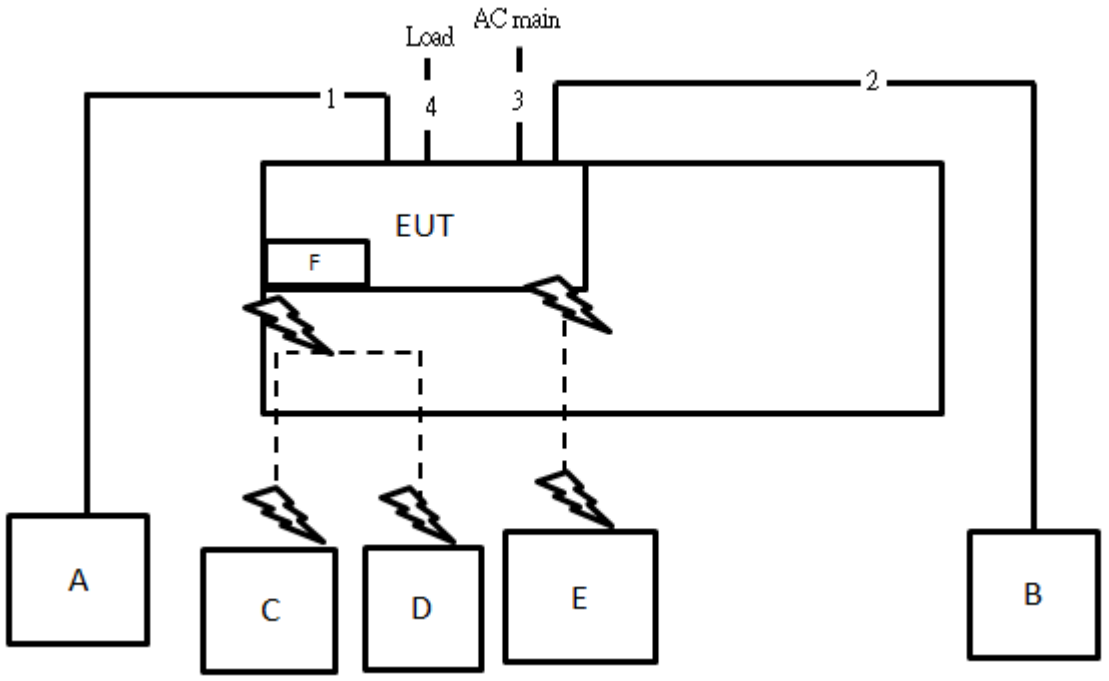
Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	LAN NB	DELL	E4300	N/A
B	WAN NB	DELL	E4300	N/A
C	2.4G WiFi NB	DELL	E4300	N/A
D	5G WiFi NB	DELL	E4300	N/A
E	SIM Card	Anritsu	SIM01	N/A
F	LTE base station	Anritsu	MT8820C	N/A

For Radiated (above 1GHz) and RF Conducted:

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

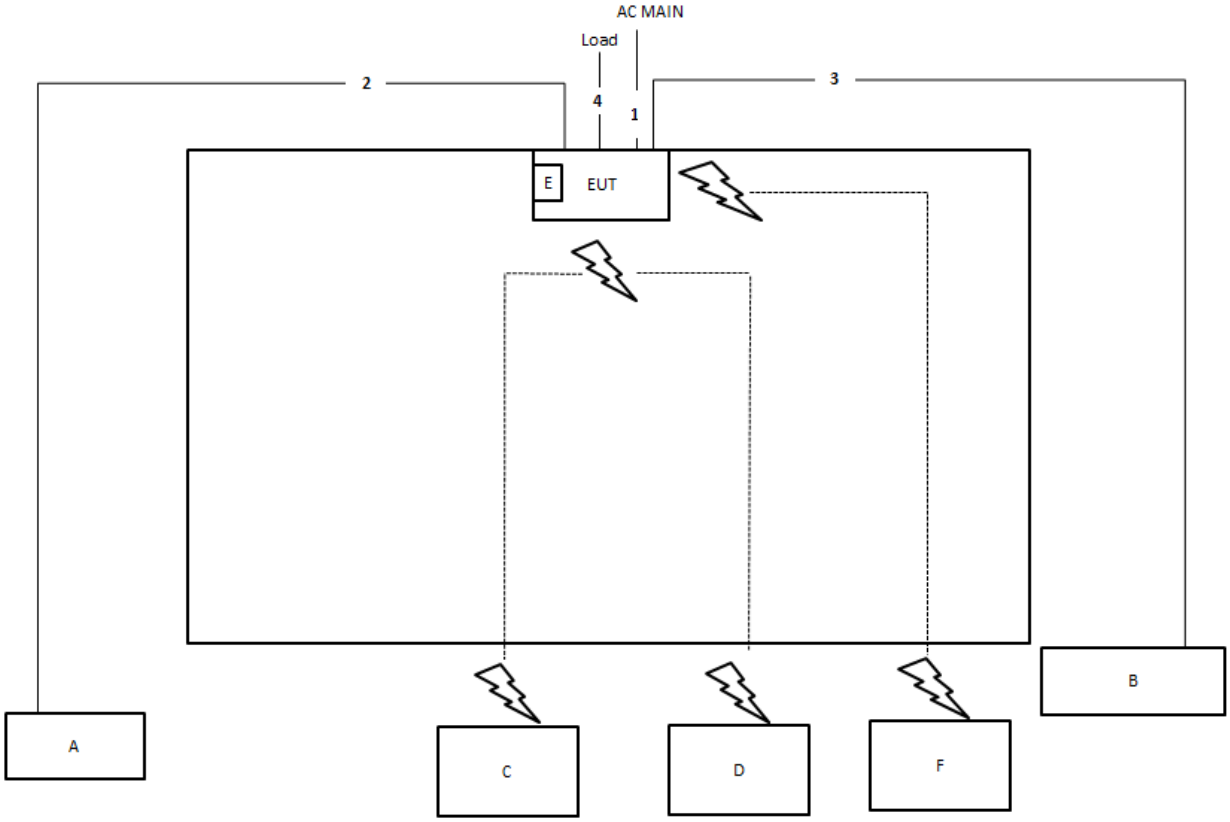
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



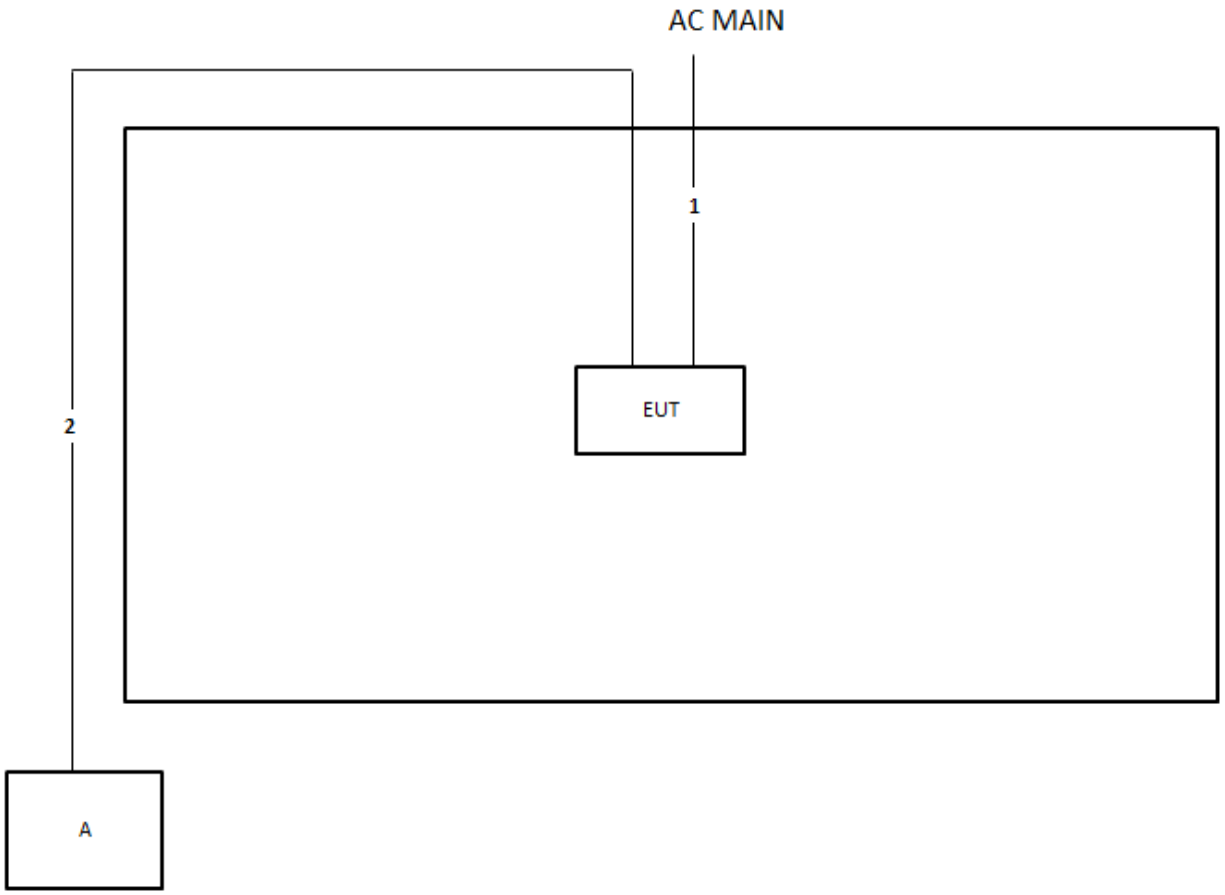
Item	Connection	Shielded	Length
1	RJ-45 cable	No	10m
2	RJ-45 cable	No	10m
3	Power cable	No	1.8m
4	RJ-45 cable	No	1.5m

Test Setup Diagram - Radiated Test < 1GHz



Item	Connection	Shielded	Length
1	Power cable	No	1.8m
2	RJ-45 cable	No	10m
3	RJ-45 cable	No	10m
4	RJ-45 cable	No	1.5m

Test Setup Diagram - Radiated Test > 1GHz



Item	Connection	Shielded	Length
1	Power cable	No	1.8m
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

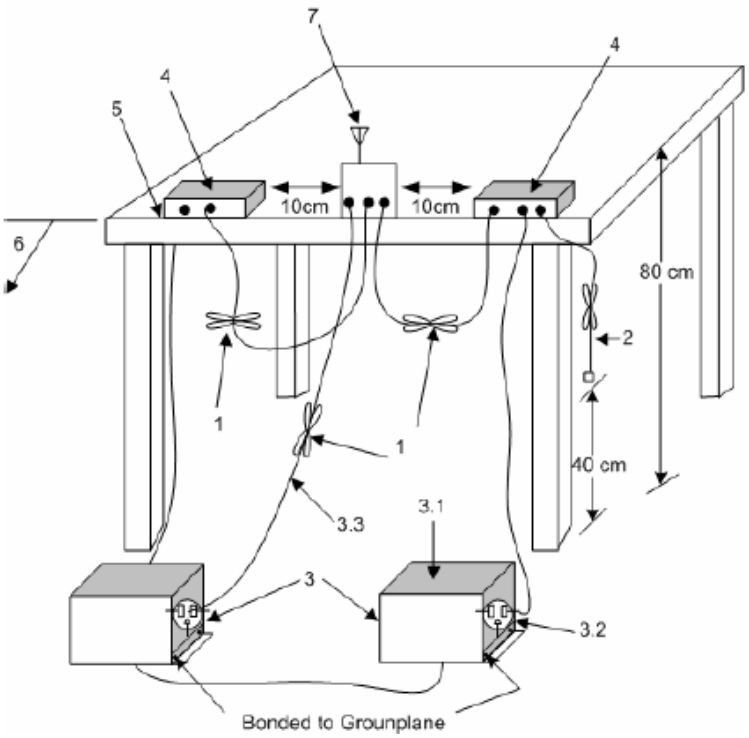
Refer a test equipment and calibration data table in this test report.

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.

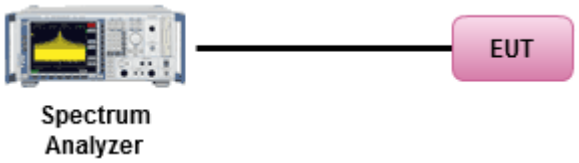
3.2.2 Measuring Instruments

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

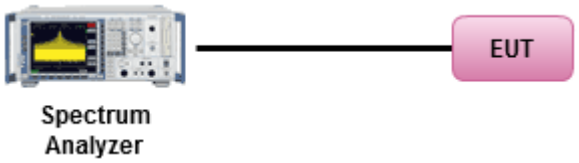
3.4.2 Measuring Instruments

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.	

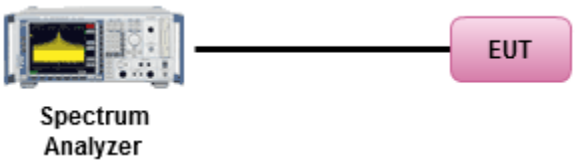
3.5.2 Measuring Instruments

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.

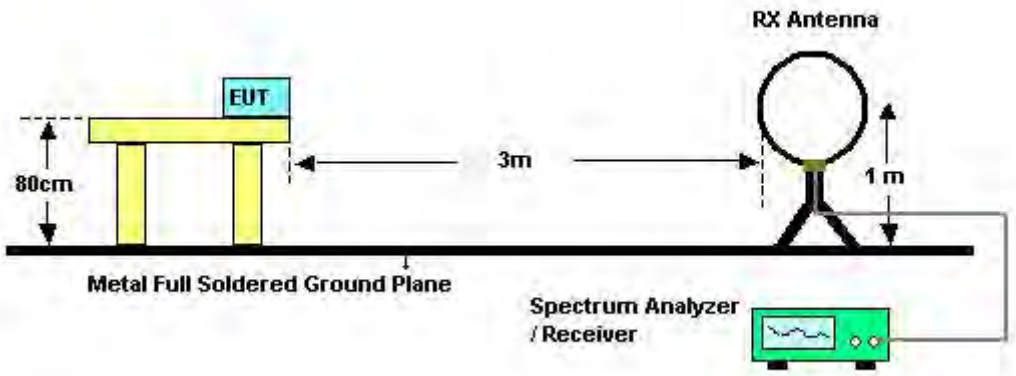
3.6.3 Test Procedures

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.

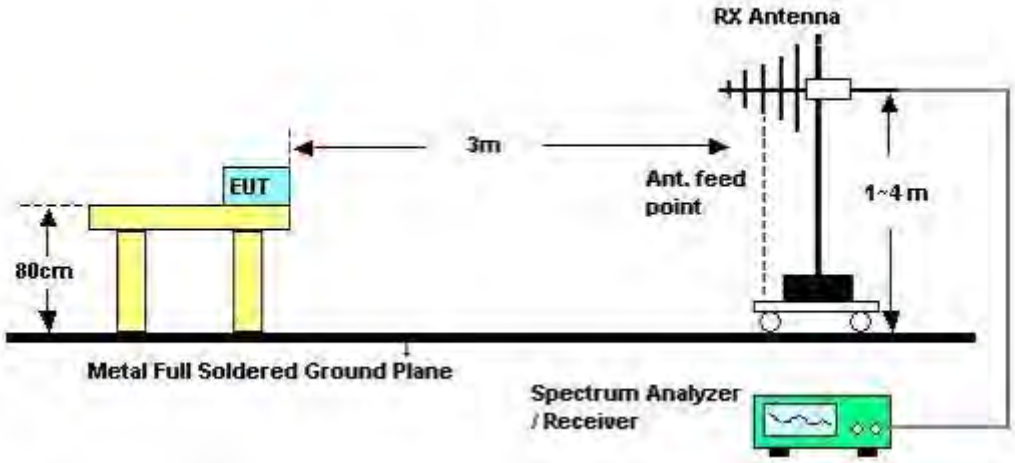
3.6.4 Test Setup

Radiated - Emissions in Restricted Frequency Bands

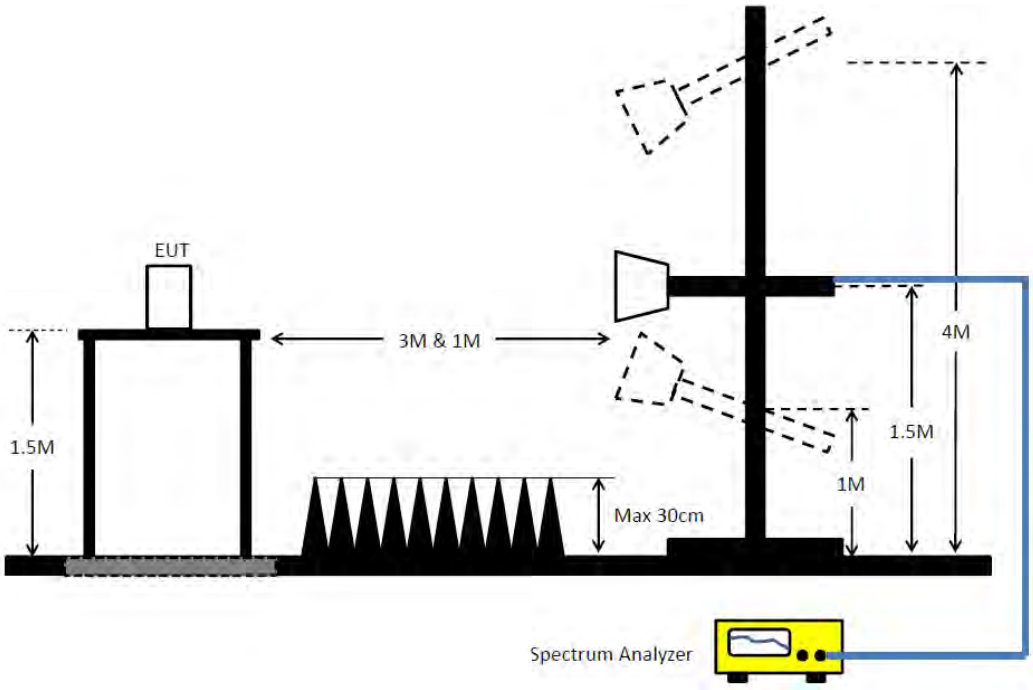
9kHz ~30MHz



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	Mar. 03, 2021	Mar. 02, 2022	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Jan. 06, 2021	Jan. 05, 2022	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Mar. 07, 2021	Mar. 06, 2022	Conduction (CO01-CB)
Pulse Limiter	Rohde&Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Jan. 30, 2021	Jan. 29, 2022	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	May 19, 2021	May 18, 2022	Conduction (CO01-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Apr. 14, 2021	Apr. 13, 2022	Radiation (03CH05-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH05-CB	30 MHz ~ 1 GHz	Aug. 09, 2021	Aug. 08, 2022	Radiation (03CH05-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH05-CB	1GHz ~18GHz 3m	Nov. 07, 2021	Nov. 06, 2022	Radiation (03CH05-CB)
Bilog Antenna with 6dB Attenuator	TESEQ & EMCI	CBL 6112D & N-6-06	35236 & AT-N0610	30MHz ~ 2GHz	Mar. 26, 2021	Mar. 25, 2022	Radiation (03CH05-CB)
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA 9120 D-1291	1GHz~18GHz	Oct. 14, 2021	Oct. 13, 2022	Radiation (03CH05-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 05, 2021	Aug. 04, 2022	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC330N	980331	20MHz ~ 3GHz	Apr. 27, 2021	Apr. 26, 2022	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC12630SE	980287	1GHz – 26.5GHz	Jul. 02, 2021	Jul. 01, 2022	Radiation (03CH05-CB)
Pre-Amplifier	MITEQ	TTA1840-35-H G	1864479	18GHz ~ 40GHz	Jul. 13, 2021	Jul. 12, 2022	Radiation (03CH05-CB)
Signal Analyzer	R&S	FSV40	101903	9kHz ~ 40GHz	Mar. 22, 2021	Mar. 21, 2022	Radiation (03CH05-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	Jun. 21, 2021	Jun. 20, 2022	Radiation (03CH05-CB)
RF Cable-low	Woken	RG402	Low Cable-04+23	30MHz~1GHz	Oct. 13, 2021	Oct. 12, 2022	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-28	1GHz~18GHz	Oct. 13, 2021	Oct. 12, 2022	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-04+28	1GHz~18GHz	Oct. 13, 2021	Oct. 12, 2022	Radiation (03CH05-CB)
High Cable	Woken	WCA0929M	40G#5+7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH05-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 08, 2021	Dec. 07, 2022	Radiation (03CH05-CB)
High Cable	Woken	WCA0929M	40G#7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH05-CB)

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH05-CB)
3m Semi Anechoic Chamber VSWR	RIKEN	SAC-3M	03CH02-CB	1GHz ~18GHz 3m	Mar. 27, 2021	Mar. 26, 2022	Radiation (03CH02-CB)
Horn Antenna	EMCO	3115	9610-4976	1GHz ~ 18GHz	May 04, 2021	May 03, 2022	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-H G	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	RG402	40G#4	1GHz ~ 40 GHz	Dec. 08, 2021	Dec. 07, 2022	Radiation (03CH02-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 08, 2021	Dec. 07, 2022	Radiation (03CH02-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH02-CB)
Signal Analyzer	R&S	FSV40	101904	9kHz ~ 40GHz	Apr. 15, 2021	Apr. 14, 2022	Conducted (TH03-CB)
Spectrum analyzer	R&S	FSV40	101028	9kHz~40GHz	Jan. 07, 2022	Jan. 06, 2023	Conducted (TH03-CB)
Power Sensor	Anritsu	MA2411B	1726195	300MHz~40GHz	Aug. 22, 2021	Aug. 21, 2022	Conducted (TH03-CB)
Power Meter	Anritsu	ML2495A	1035008	300MHz~40GHz	Aug. 22, 2021	Aug. 21, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-11	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-12	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-13	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-14	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-15	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
Switch	SPTCB	SP-SWI	SWI-03	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	SWI-03-P1	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	SWI-03-P2	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH03-CB)

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	SWI-03-P3	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	SWI-03-P4	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	SWI-03-P5	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH03-CB)

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

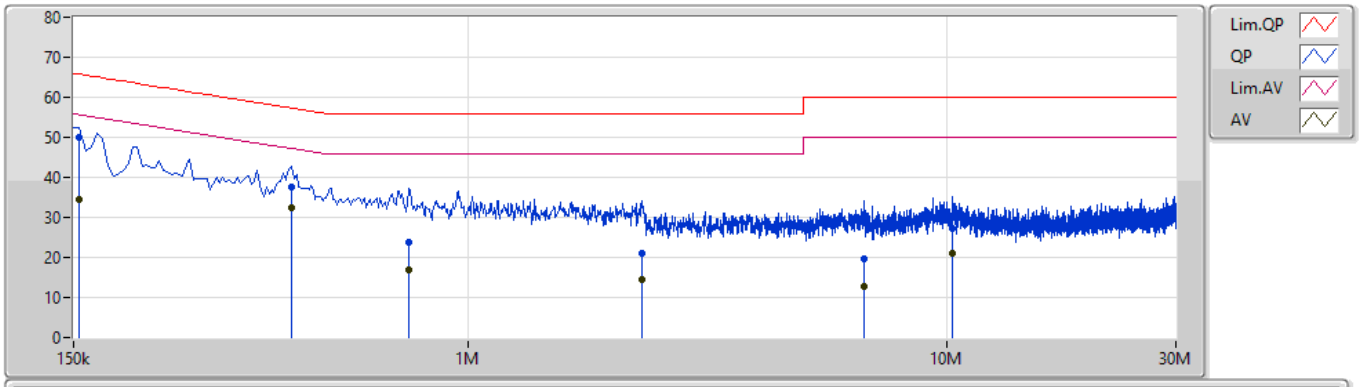
NCR means Non-Calibration required.

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 2	Pass	AV	429k	32.53	47.28	-14.75	Line

Mode 2

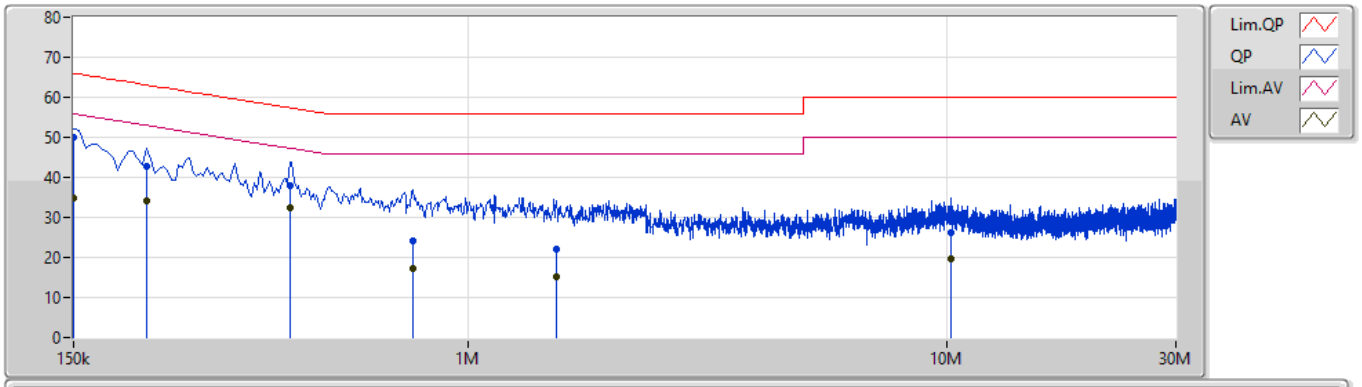
06/01/2022



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	154.5k	49.85	65.75	-15.90	9.89	Line	-	39.96	0.04	0.04	9.81
AV	154.5k	34.39	55.75	-21.36	9.89	Line	-	24.50	0.04	0.04	9.81
QP	429k	37.43	57.28	-19.85	9.90	Line	-	27.53	0.04	0.04	9.82
AV	429k	32.53	47.28	-14.75	9.90	Line	"Worst"	22.63	0.04	0.04	9.82
QP	753k	23.84	56.00	-32.16	9.92	Line	-	13.92	0.05	0.04	9.83
AV	753k	17.05	46.00	-28.95	9.92	Line	-	7.13	0.05	0.04	9.83
QP	2.31M	21.03	56.00	-34.97	10.01	Line	-	11.02	0.10	0.08	9.83
AV	2.31M	14.36	46.00	-31.64	10.01	Line	-	4.35	0.10	0.08	9.83
QP	6.698M	19.53	60.00	-40.47	10.21	Line	-	9.32	0.18	0.14	9.89
AV	6.698M	12.83	50.00	-37.17	10.21	Line	-	2.62	0.18	0.14	9.89
QP	10.244M	27.37	60.00	-32.63	10.28	Line	-	17.09	0.22	0.16	9.90
AV	10.244M	21.15	50.00	-28.85	10.28	Line	-	10.87	0.22	0.16	9.90

Mode 2

06/01/2022



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	150k	49.93	66.00	-16.07	9.88	Neutral	-	40.05	0.03	0.04	9.81
AV	150k	34.87	56.00	-21.13	9.88	Neutral	-	24.99	0.03	0.04	9.81
QP	213k	42.66	63.09	-20.43	9.88	Neutral	-	32.78	0.03	0.04	9.81
AV	213k	34.11	53.09	-18.98	9.88	Neutral	-	24.23	0.03	0.04	9.81
QP	424.5k	38.02	57.36	-19.34	9.89	Neutral	-	28.13	0.03	0.04	9.82
AV	424.5k	32.51	47.36	-14.85	9.89	Neutral	"Worst"	22.62	0.03	0.04	9.82
QP	766.5k	24.27	56.00	-31.73	9.91	Neutral	-	14.36	0.04	0.04	9.83
AV	766.5k	17.37	46.00	-28.63	9.91	Neutral	-	7.46	0.04	0.04	9.83
QP	1.532M	21.90	56.00	-34.10	9.94	Neutral	-	11.96	0.06	0.06	9.82
AV	1.532M	15.01	46.00	-30.99	9.94	Neutral	-	5.07	0.06	0.06	9.82
QP	10.154M	26.34	60.00	-33.66	10.26	Neutral	-	16.08	0.20	0.16	9.90
AV	10.154M	19.51	50.00	-30.49	10.26	Neutral	-	9.25	0.20	0.16	9.90

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	8.5M	15.217M	15M2G1D	6.55M	10.37M
802.11g_Nss1,(6Mbps)_2TX	16.35M	21.764M	21M8D1D	16.3M	16.692M
802.11ax HEW20_Nss1,(MCS0)_2TX	18.975M	19.34M	19M3D1D	18.475M	18.991M

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

Result

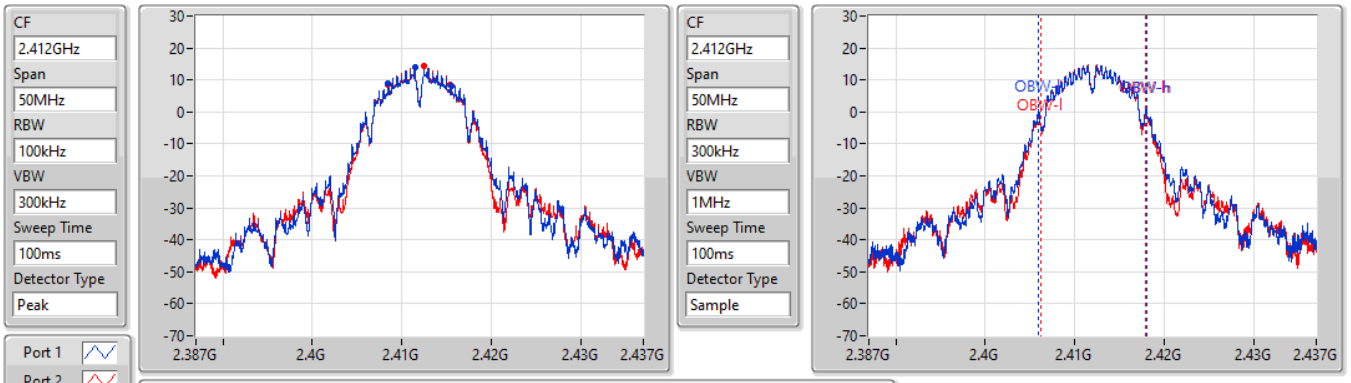
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	7.075M	12.069M	7M	11.669M
2437MHz	Pass	500k	8.5M	15.217M	7.525M	14.243M
2462MHz	Pass	500k	6.55M	11.069M	7.525M	10.37M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.325M	16.792M	16.3M	16.692M
2437MHz	Pass	500k	16.35M	21.764M	16.325M	19.14M
2462MHz	Pass	500k	16.325M	16.817M	16.35M	16.767M
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	18.9M	18.991M	18.475M	18.991M
2437MHz	Pass	500k	18.875M	19.34M	18.925M	19.265M
2462MHz	Pass	500k	18.975M	19.04M	18.95M	19.015M

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

802.11b_Nss1,(1Mbps)_2TX EBW

2412MHz

14/12/2021

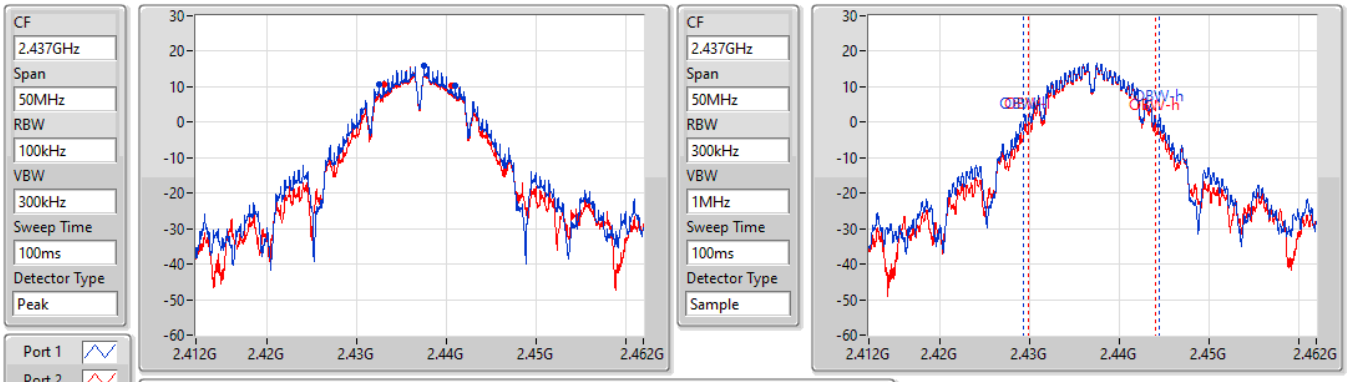


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.075M	2.40845G	2.415525G	12.069M	2.406003G	2.418072G	500k	1
7M	2.40845G	2.41545G	11.669M	2.406228G	2.417897G	500k	2

802.11b_Nss1,(1Mbps)_2TX EBW

2437MHz

14/12/2021

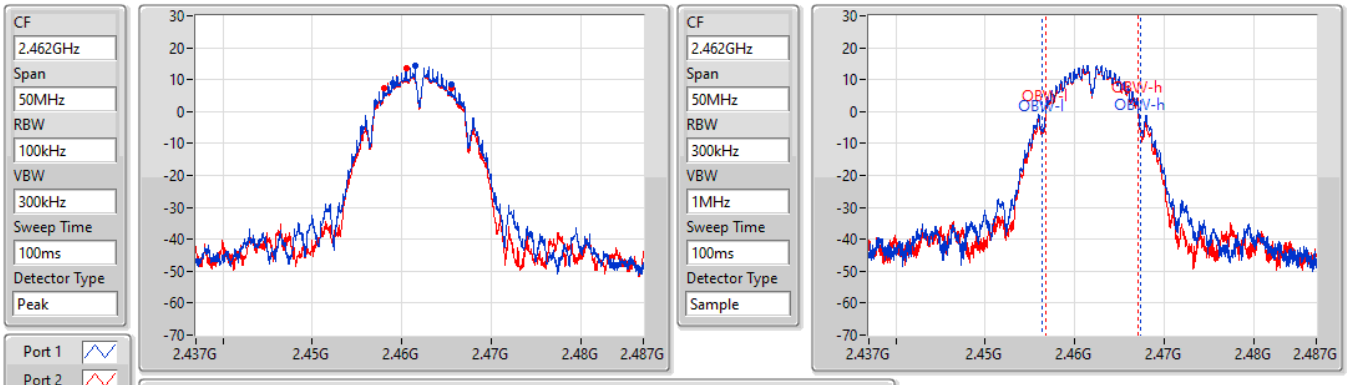


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
8.5M	2.432475G	2.440975G	15.217M	2.429279G	2.444496G	500k	1
7.525M	2.432975G	2.4405G	14.243M	2.429854G	2.444096G	500k	2

802.11b_Nss1,(1Mbps)_2TX EBW

2462MHz

14/12/2021

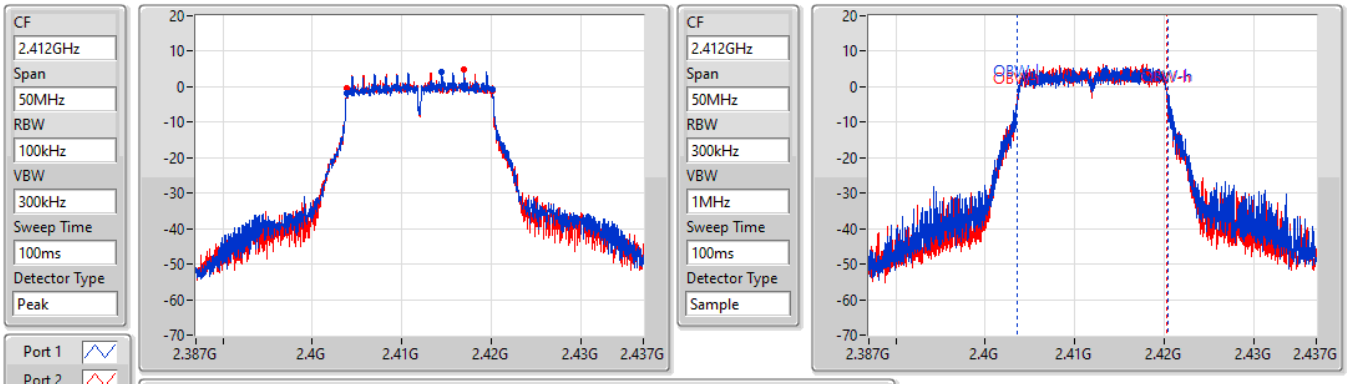


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
6.55M	2.45895G	2.4655G	11.069M	2.456353G	2.467422G	500k	1
7.525M	2.458G	2.465525G	10.37M	2.456728G	2.467097G	500k	2

802.11g_Nss1,(6Mbps)_2TX EBW

2412MHz

14/12/2021

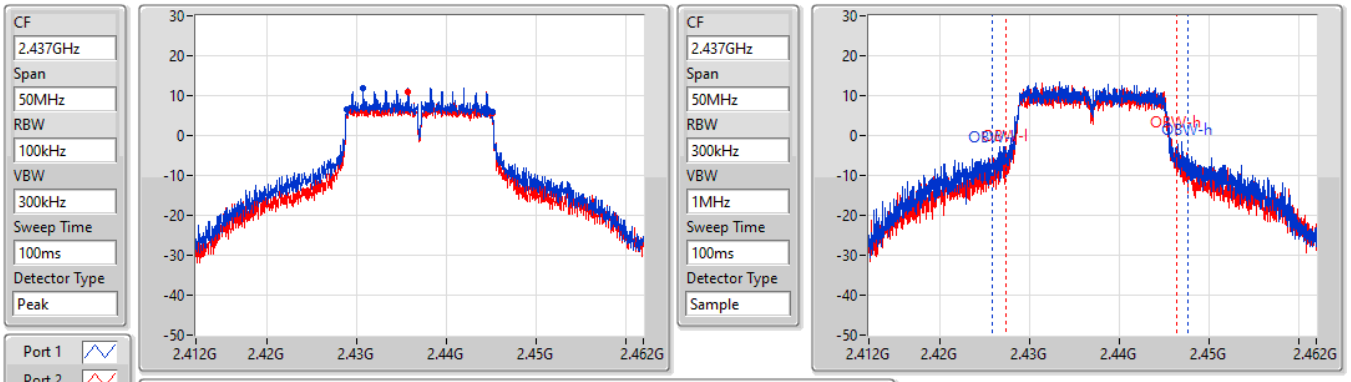


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	2.403825G	2.42015G	16.792M	2.403629G	2.420421G	500k	1
16.3M	2.40385G	2.42015G	16.692M	2.403629G	2.420321G	500k	2

802.11g_Nss1,(6Mbps)_2TX EBW

2437MHz

14/12/2021

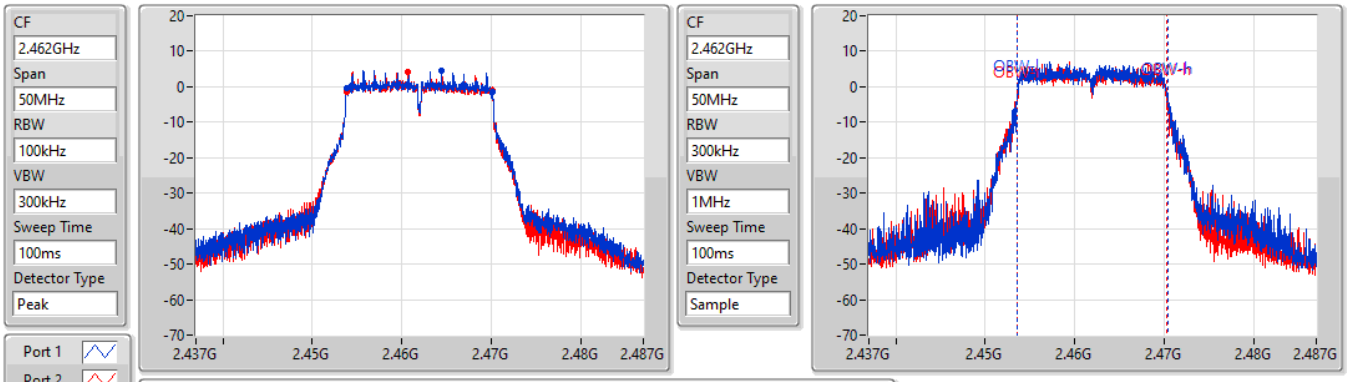


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.35M	2.4288G	2.44515G	21.764M	2.425831G	2.447595G	500k	1
16.325M	2.428825G	2.44515G	19.14M	2.427305G	2.446445G	500k	2

802.11g_Nss1,(6Mbps)_2TX EBW

2462MHz

14/12/2021

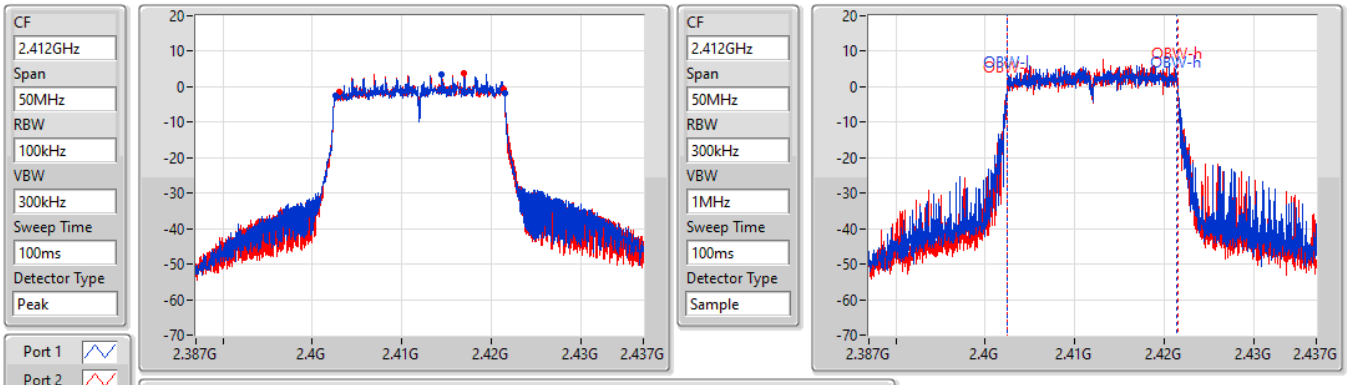


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	2.453825G	2.47015G	16.817M	2.453579G	2.470396G	500k	1
16.35M	2.4538G	2.47015G	16.767M	2.453554G	2.470321G	500k	2

802.11ax HEW20_Nss1,(MCS0)_2TX EBW

2412MHz

14/12/2021

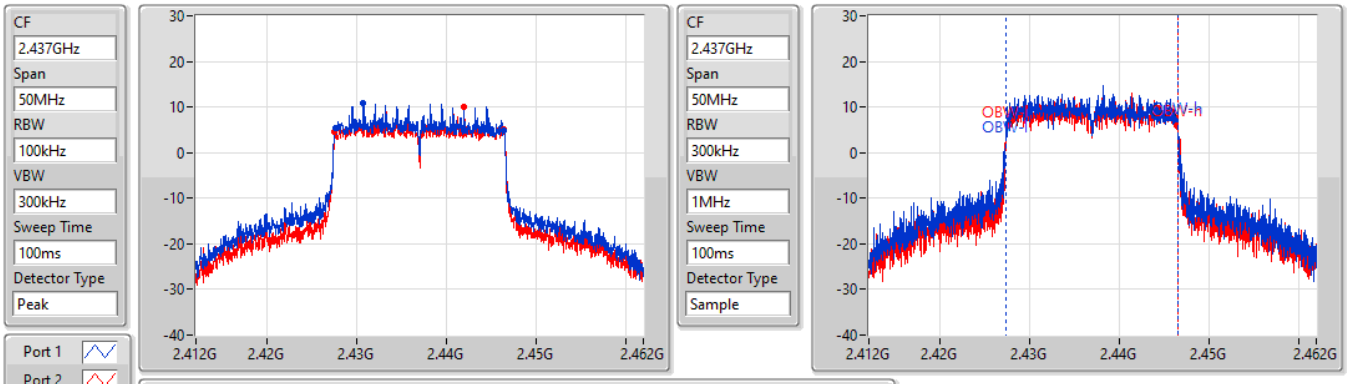


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.9M	2.402575G	2.421475G	18.991M	2.40248G	2.42147G	500k	1
18.475M	2.402975G	2.42145G	18.991M	2.402505G	2.421495G	500k	2

802.11ax HEW20_Nss1,(MCS0)_2TX EBW

2437MHz

14/12/2021

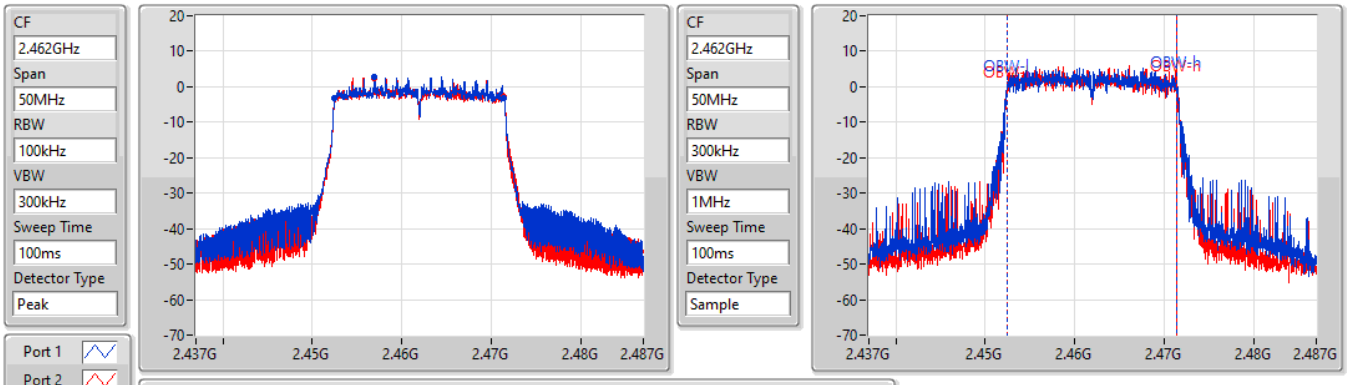


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.875M	2.42755G	2.446425G	19.34M	2.427255G	2.446595G	500k	1
18.925M	2.427525G	2.44645G	19.265M	2.427305G	2.44657G	500k	2

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

2462MHz

14/12/2021



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.975M	2.452475G	2.47145G	19.04M	2.45243G	2.47147G	500k	1
18.95M	2.4525G	2.47145G	19.015M	2.45243G	2.471445G	500k	2

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_2TX	27.26	0.53211
802.11g_Nss1,(6Mbps)_2TX	25.59	0.36224
802.11ax HEW20_Nss1,(MCS0)_2TX	24.72	0.29648

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	3.99	21.98	22.34	25.17	30.00
2437MHz	Pass	3.99	24.48	24.01	27.26	30.00
2462MHz	Pass	3.99	21.75	21.34	24.56	30.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	3.99	15.76	15.73	18.76	30.00
2417MHz	Pass	3.99	18.76	18.53	21.66	30.00
2437MHz	Pass	3.99	22.93	22.19	25.59	30.00
2457MHz	Pass	3.99	18.52	18.14	21.34	30.00
2462MHz	Pass	3.99	16.1	15.85	18.99	30.00
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	3.99	15.3	15.52	18.42	30.00
2417MHz	Pass	3.99	17.26	17.63	20.46	30.00
2437MHz	Pass	3.99	22.08	21.3	24.72	30.00
2457MHz	Pass	3.99	17.77	17.31	20.56	30.00
2462MHz	Pass	3.99	14.56	14.37	17.48	30.00

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

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	24.72	0.29648

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	6.32	15.3	15.52	18.42	29.68
2417MHz	Pass	6.32	17.26	17.63	20.46	29.68
2437MHz	Pass	6.32	22.08	21.3	24.72	29.68
2457MHz	Pass	6.32	17.77	17.31	20.56	29.68
2462MHz	Pass	6.32	14.56	14.37	17.48	29.68

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

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_2TX	4.30
802.11g_Nss1,(6Mbps)_2TX	-0.78
802.11ax HEW20_Nss1,(MCS0)_2TX	-0.62

RBW = 3kHz;

Result

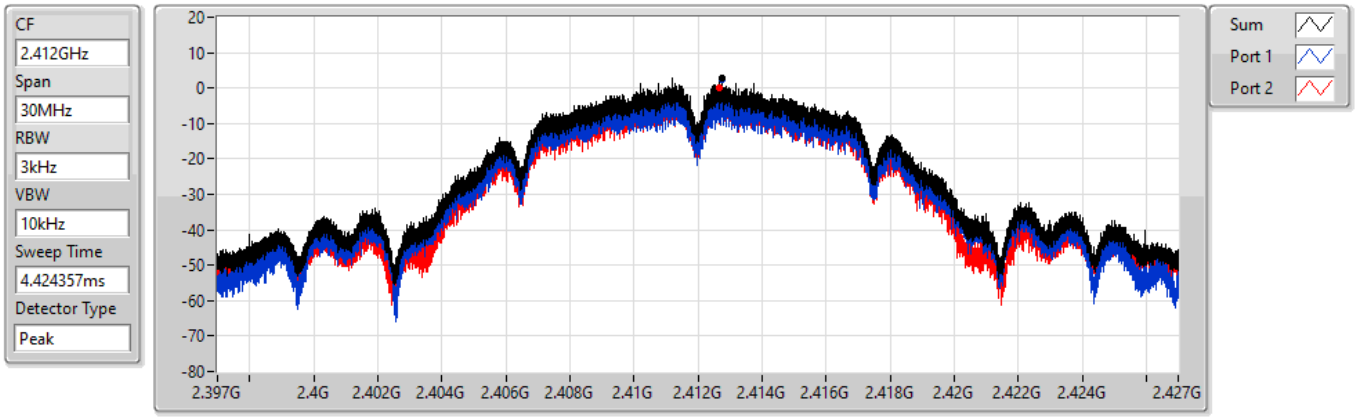
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	6.32	2.50	0.22	2.99	7.68
2437MHz	Pass	6.32	1.78	1.42	4.30	7.68
2462MHz	Pass	6.32	0.12	-1.30	1.93	7.68
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	6.32	-10.49	-8.94	-7.05	7.68
2437MHz	Pass	6.32	-3.31	-3.97	-0.78	7.68
2462MHz	Pass	6.32	-9.89	-10.27	-7.48	7.68
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	6.32	-10.53	-9.98	-7.24	7.68
2437MHz	Pass	6.32	-3.16	-4.16	-0.62	7.68
2462MHz	Pass	6.32	-10.43	-11.80	-8.05	7.68

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

14/12/2021

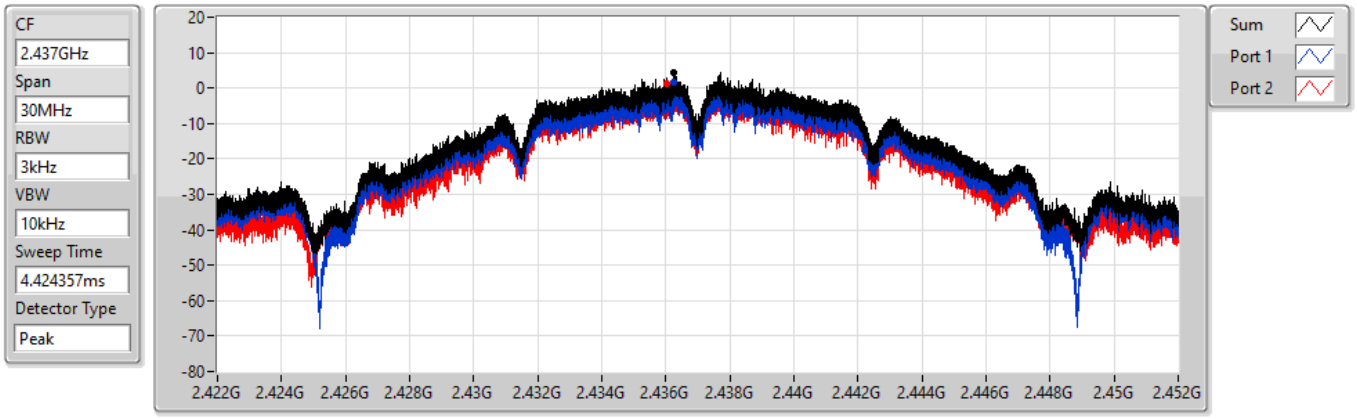


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.99	2.99	2.50	0.22

802.11b_Nss1,(1Mbps)_2TX PSD

2437MHz

14/12/2021

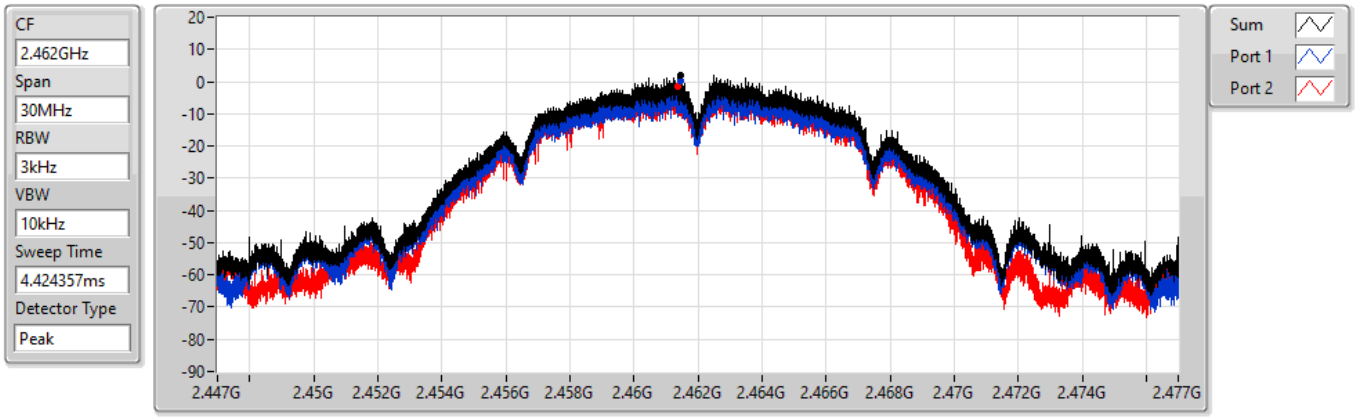


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.30	4.30	1.78	1.42

802.11b_Nss1,(1Mbps)_2TX PSD

2462MHz

14/12/2021

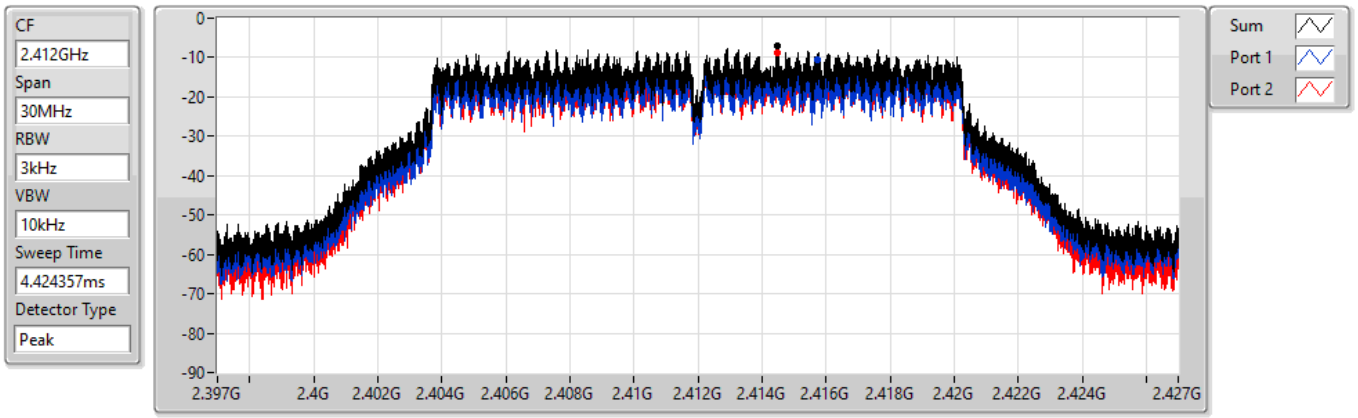


Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.93	1.93	0.12	-1.30

802.11g_Nss1,(6Mbps)_2TX PSD

2412MHz

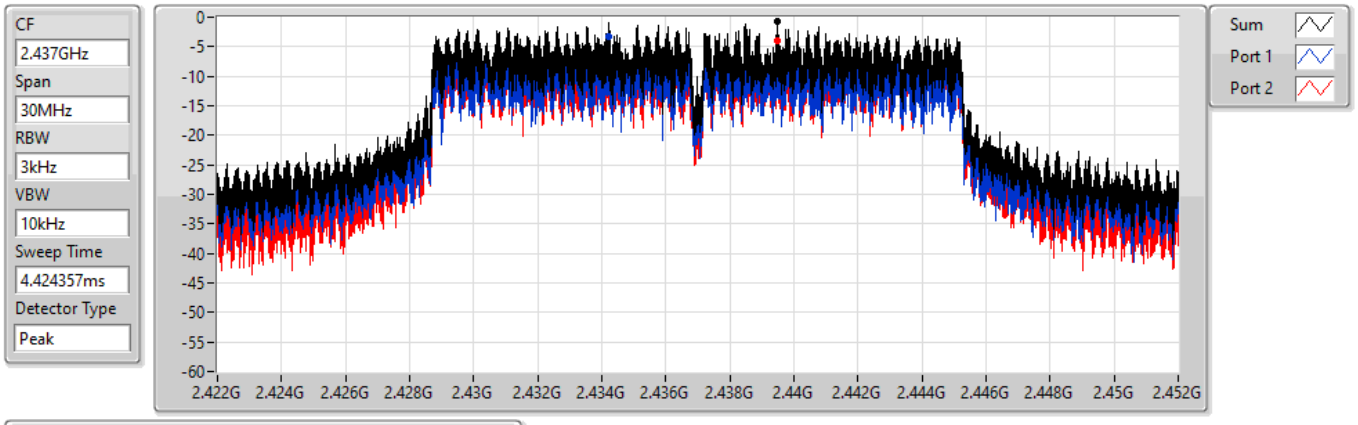
14/12/2021



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.05	-7.05	-10.49	-8.94

802.11g_Nss1,(6Mbps)_2TX PSD

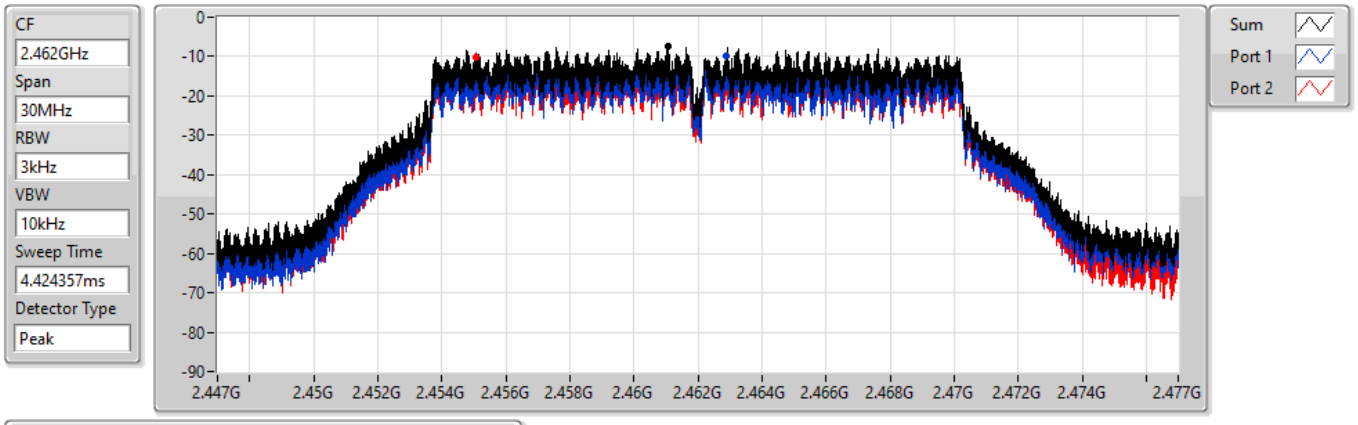
2437MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.78	-0.78	-3.31	-3.97

802.11g_Nss1,(6Mbps)_2TX PSD

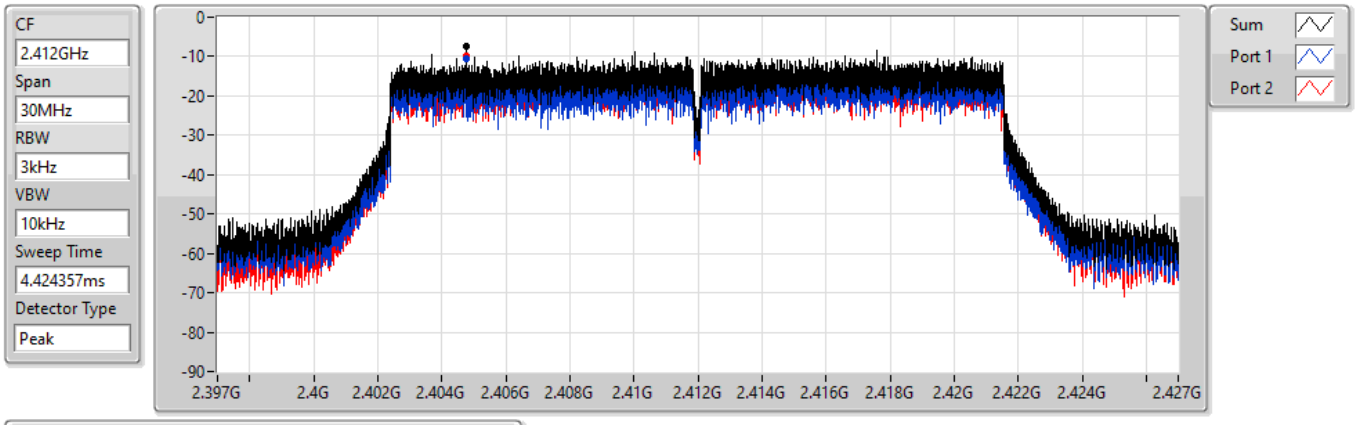
2462MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.48	-7.48	-9.89	-10.27

802.11ax HEW20_Nss1,(MCS0)_2TX PSD

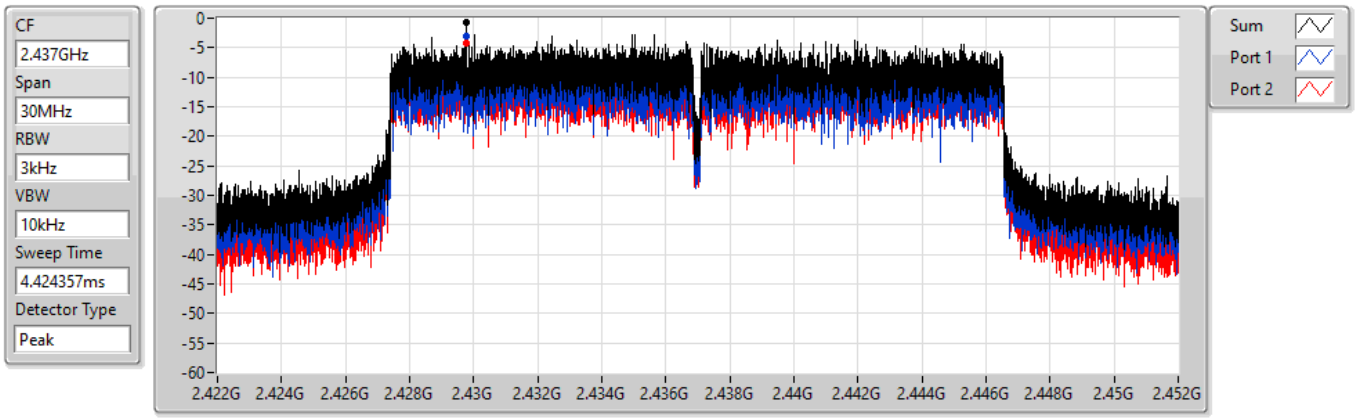
2412MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.24	-7.24	-10.53	-9.98

802.11ax HEW20_Nss1,(MCS0)_2TX PSD

2437MHz



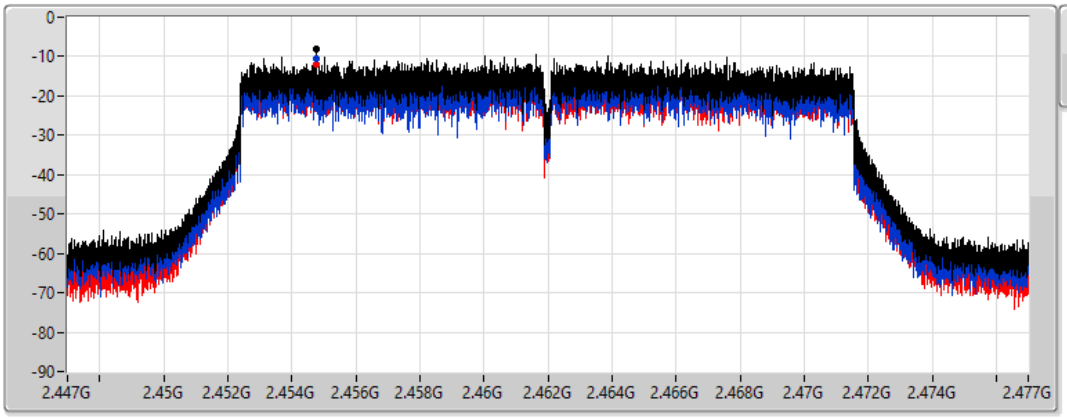
Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.62	-0.62	-3.16	-4.16

802.11ax HEW20_Nss1,(MCS0)_2TX PSD

2462MHz

14/12/2021

CF	2.462GHz
Span	30MHz
RBW	3kHz
VBW	10kHz
Sweep Time	4.424357ms
Detector Type	Peak



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.05	-8.05	-10.43	-11.80

Summary

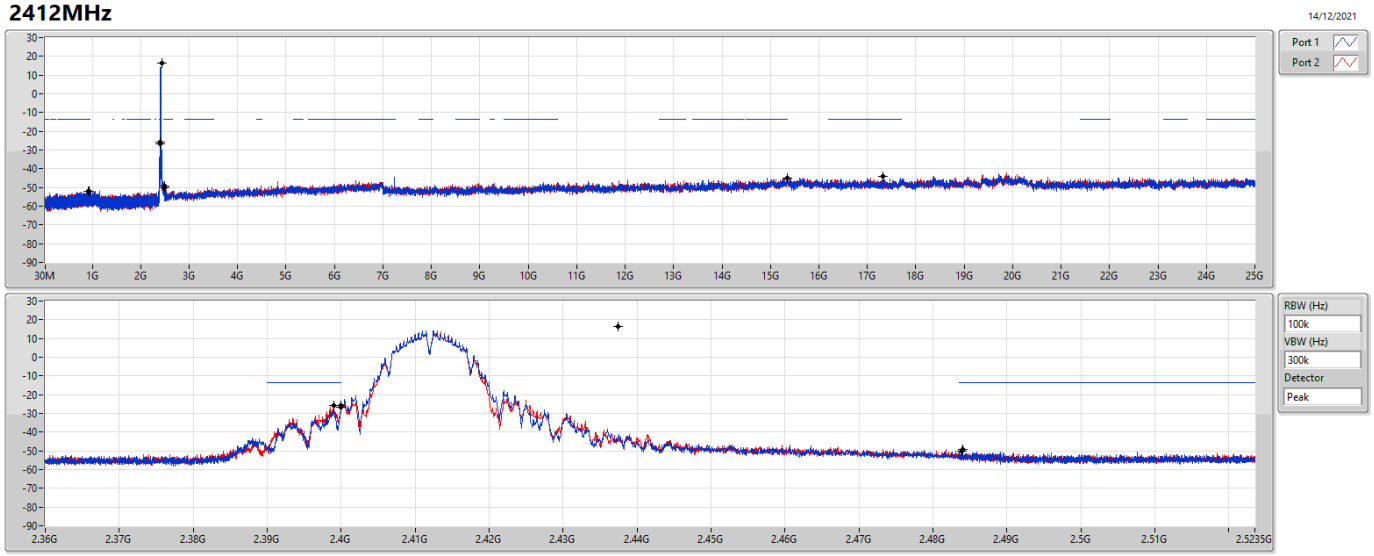
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	Pass	2.43745G	16.41	-13.59	914.24M	-52.16	2.399G	-25.55	2.4G	-26.55	2.48388G	-50.29	15.34915G	-45.09	2
802.11g_Nss1,(6Mbps)_2TX	Pass	2.43824G	11.97	-18.03	1.72595G	-52.27	2.39986G	-32.44	2.4G	-34.27	2.48474G	-50.88	24.15432G	-43.96	1
802.11ax HEW20_Nss1,(MCS0)_2TX	Pass	2.43073G	10.85	-19.15	341.93M	-52.63	2.39988G	-31.65	2.4G	-32.10	2.48818G	-50.09	24.91009G	-43.31	1

Result

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43745G	16.41	-13.59	939.87M	-52.10	2.39996G	-25.56	2.4G	-25.57	2.48396G	-49.14	17.32147G	-44.16	1
2412MHz	Pass	2.43745G	16.41	-13.59	914.24M	-52.16	2.399G	-25.55	2.4G	-26.55	2.48388G	-50.29	15.34915G	-45.09	2
2437MHz	Pass	2.43745G	16.41	-13.59	1.87682G	-51.23	2.39948G	-33.02	2.4835G	-39.40	2.4835G	-38.86	24.83424G	-44.60	1
2437MHz	Pass	2.43745G	16.41	-13.59	604.93M	-52.59	2.39948G	-35.47	2.4G	-40.60	2.48538G	-45.08	17.67547G	-44.15	2
2462MHz	Pass	2.43745G	16.41	-13.59	830.65M	-51.83	2.39776G	-49.37	2.4835G	-48.02	2.48458G	-44.31	15.05977G	-44.78	1
2462MHz	Pass	2.43745G	16.41	-13.59	854.53M	-52.20	2.39462G	-49.17	2.4835G	-45.51	2.48402G	-41.65	24.78647G	-43.70	2
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43824G	11.97	-18.03	1.72595G	-52.27	2.39986G	-32.44	2.4G	-34.27	2.48474G	-50.88	24.15432G	-43.96	1
2412MHz	Pass	2.43824G	11.97	-18.03	2.1171G	-51.92	2.39952G	-33.10	2.4G	-36.01	2.5077G	-50.84	24.84828G	-44.05	2
2437MHz	Pass	2.43824G	11.97	-18.03	887.44M	-51.94	2.39852G	-34.85	2.4G	-39.11	2.4851G	-39.01	15.25925G	-43.19	1
2437MHz	Pass	2.43824G	11.97	-18.03	1.97002G	-52.69	2.39954G	-37.41	2.4G	-39.03	2.4845G	-35.74	24.47742G	-44.13	2
2462MHz	Pass	2.43824G	11.97	-18.03	494.84M	-52.10	2.3907G	-50.85	2.4835G	-48.50	2.48368G	-43.21	24.91571G	-44.32	1
2462MHz	Pass	2.43824G	11.97	-18.03	842.01M	-52.21	2.39736G	-50.69	2.4835G	-45.58	2.48386G	-44.84	24.92133G	-44.54	2
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43073G	10.85	-19.15	341.93M	-52.63	2.39988G	-31.65	2.4G	-32.10	2.48818G	-50.09	24.91009G	-43.31	1
2412MHz	Pass	2.43073G	10.85	-19.15	920.93M	-51.80	2.39964G	-32.32	2.4G	-34.00	2.492G	-51.13	17.6558G	-43.77	2
2437MHz	Pass	2.43073G	10.85	-19.15	151.45M	-51.85	2.39992G	-38.08	2.4G	-37.61	2.48354G	-39.58	24.18804G	-44.32	1
2437MHz	Pass	2.43073G	10.85	-19.15	855.4M	-51.73	2.39988G	-37.07	2.4G	-39.52	2.48416G	-39.34	24.09532G	-44.53	2
2462MHz	Pass	2.43073G	10.85	-19.15	748.51M	-51.91	2.39148G	-51.08	2.4835G	-40.67	2.48384G	-40.02	23.51936G	-43.65	1
2462MHz	Pass	2.43073G	10.85	-19.15	851.33M	-51.43	2.39592G	-51.65	2.4835G	-41.31	2.48372G	-40.89	15.0401G	-44.88	2

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

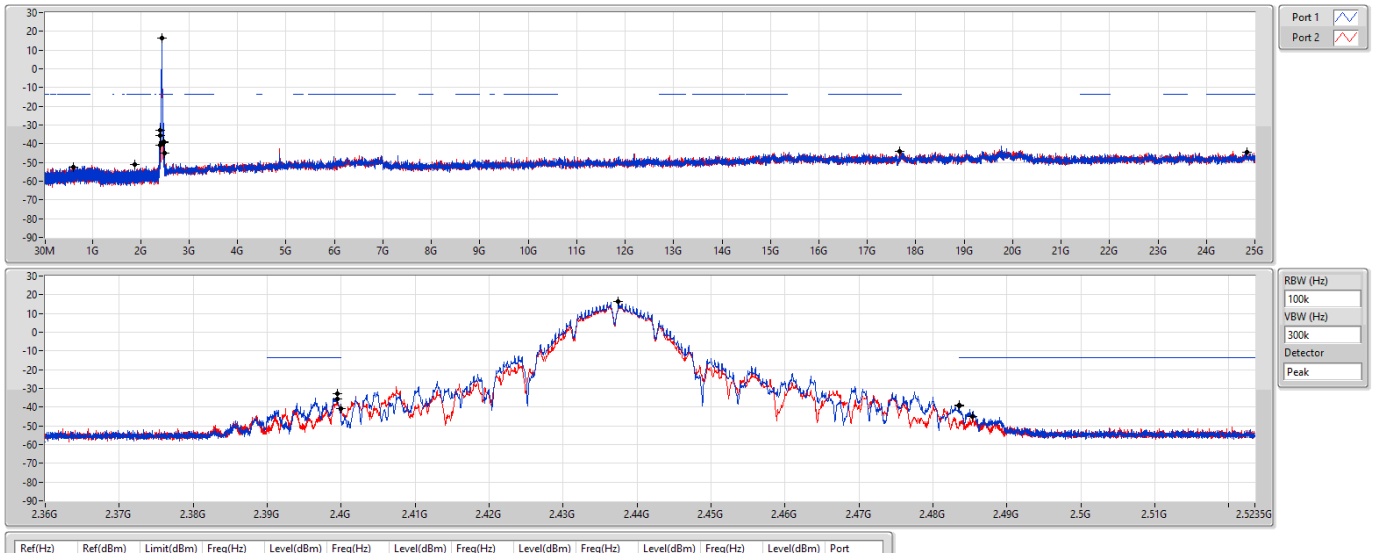
2412MHz



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
2.43745G	16.41	-13.59	939.87M	-52.10	2.39996G	-25.56	2.4G	-25.57	2.48396G	-49.14	17.32147G	-44.16	1
2.43745G	16.41	-13.59	914.24M	-52.16	2.399G	-25.55	2.4G	-26.55	2.48388G	-50.29	15.34915G	-45.09	2

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

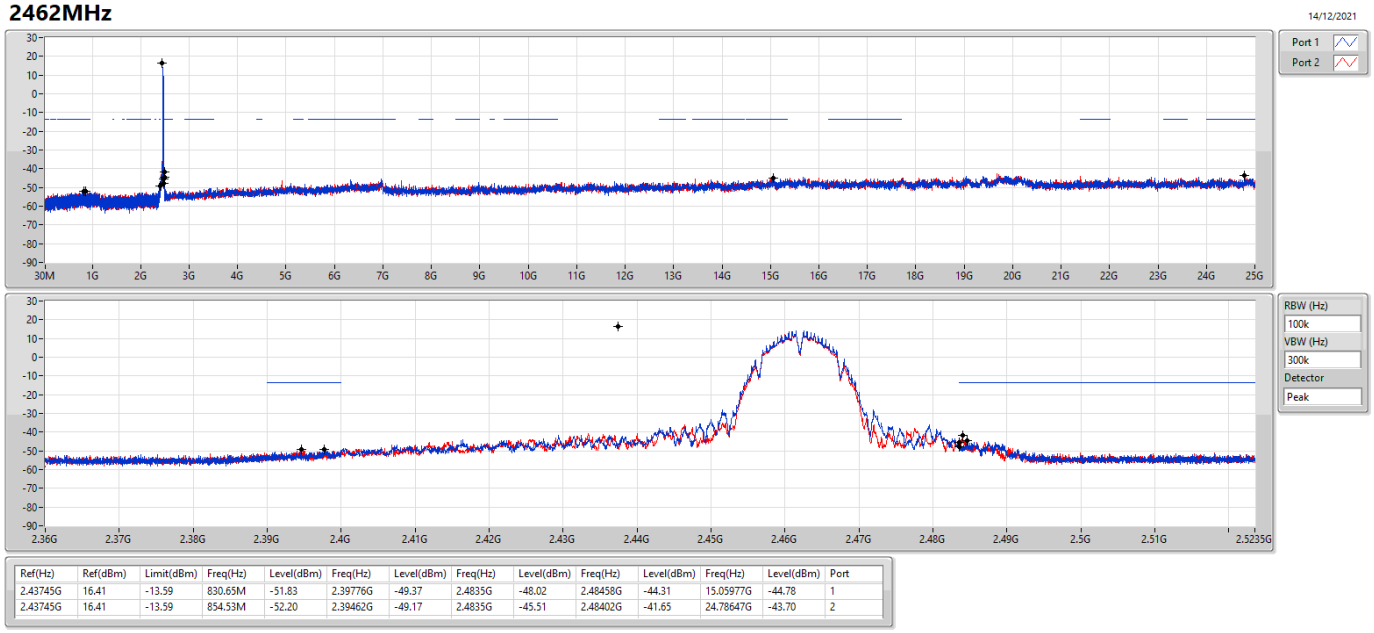
2437MHz



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
2.43745G	16.41	-13.59	1.87682G	-51.23	2.39948G	-33.02	2.4835G	-39.40	2.4835G	-38.86	24.83424G	-44.60	1
2.43745G	16.41	-13.59	604.93M	-52.59	2.39948G	-35.47	2.4G	-40.60	2.48538G	-45.08	17.67547G	-44.15	2

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

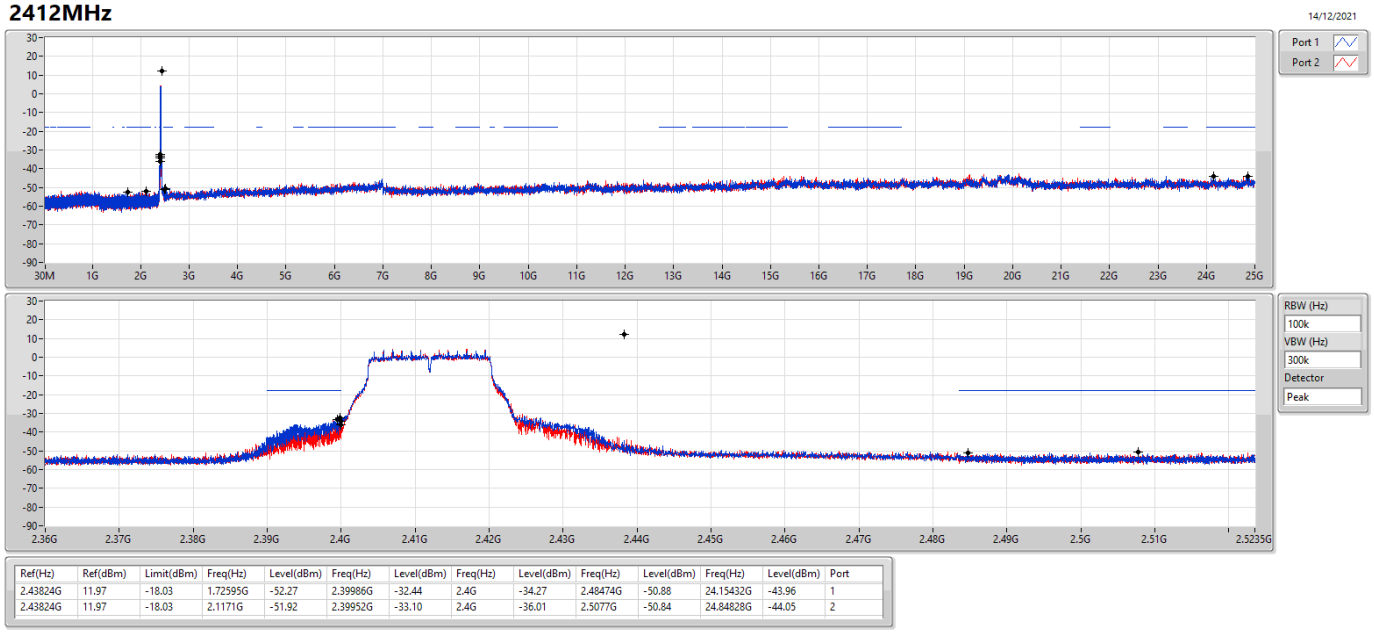
2462MHz



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
2.43745G	16.41	-13.59	830.65M	-51.83	2.39776G	-49.37	2.4835G	-48.02	2.48458G	-44.31	15.05977G	-44.78	1
2.43745G	16.41	-13.59	854.53M	-52.20	2.39462G	-49.17	2.4835G	-45.51	2.48402G	-41.65	24.78647G	-43.70	2

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

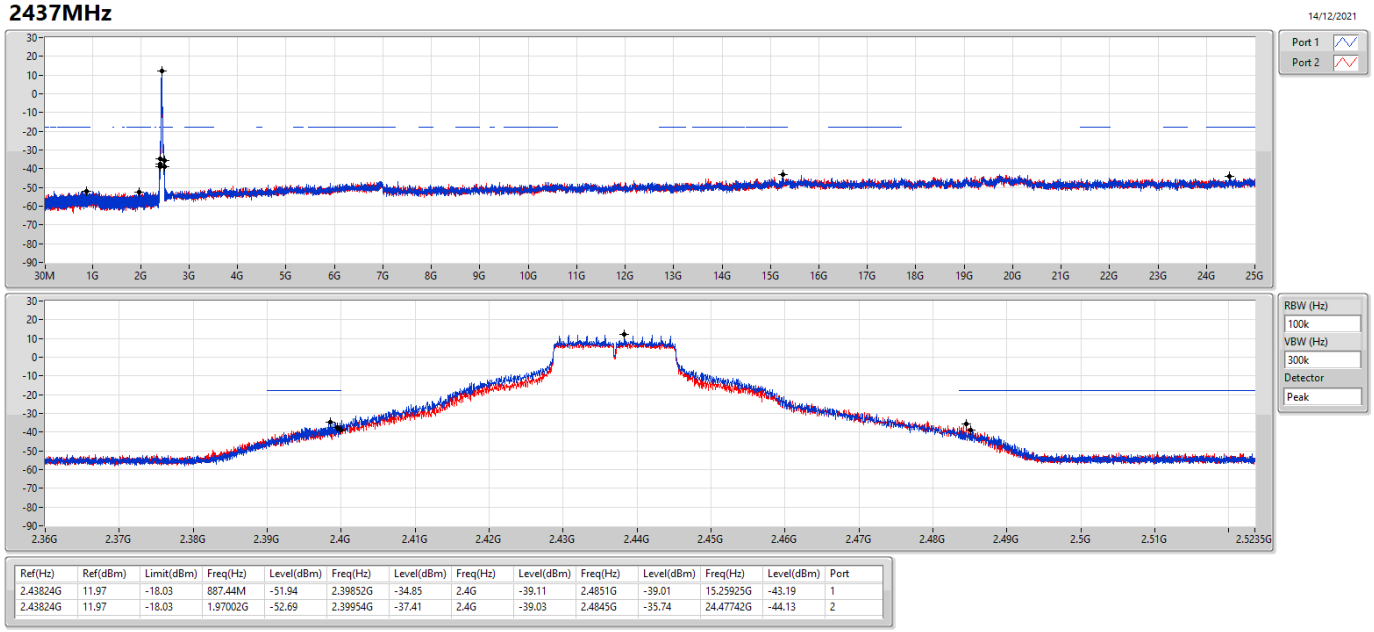
2412MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43824G	11.97	-18.03	1.72595G	-52.27	2.39986G	-32.44	2.4G	-34.27	2.48474G	-50.88	24.15432G	-43.96	1
2.43824G	11.97	-18.03	2.1171G	-51.92	2.39952G	-33.10	2.4G	-36.01	2.5077G	-50.84	24.84828G	-44.05	2

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

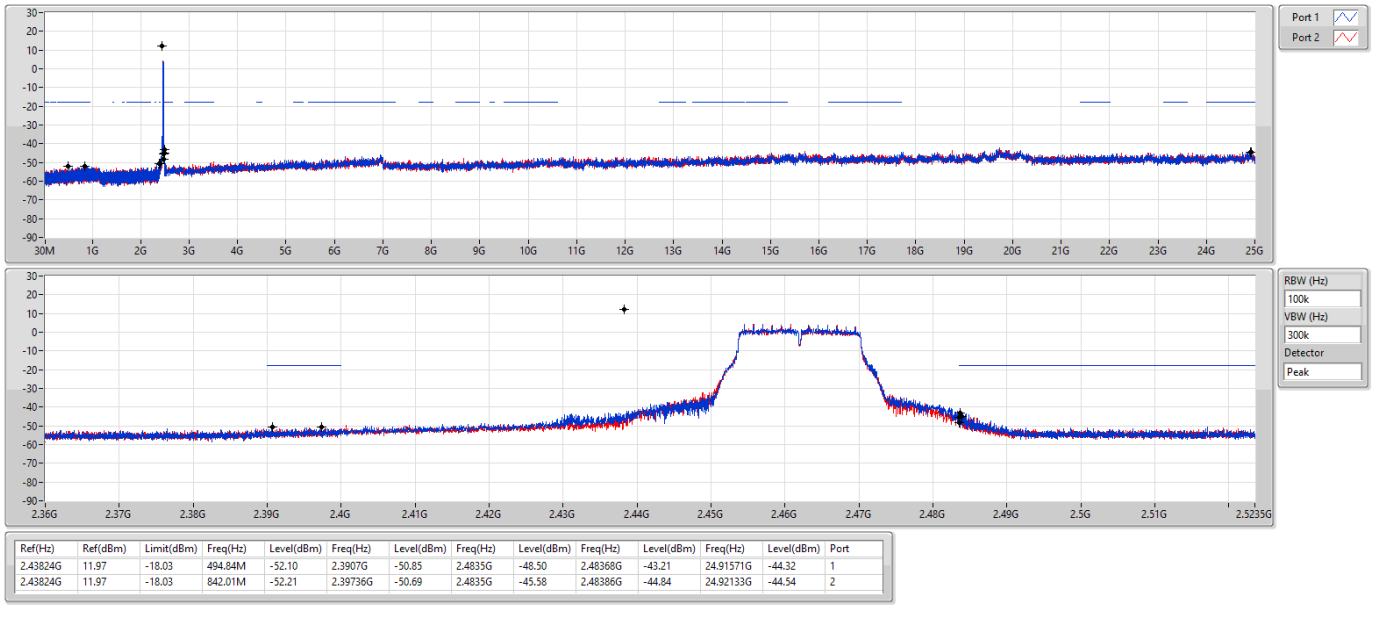
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43824G	11.97	-18.03	887.44M	-51.94	2.39852G	-34.85	2.4G	-39.11	2.4851G	-39.01	15.25925G	-43.19	1
2.43824G	11.97	-18.03	1.97002G	-52.69	2.39954G	-37.41	2.4G	-39.03	2.4845G	-35.74	24.47742G	-44.13	2

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

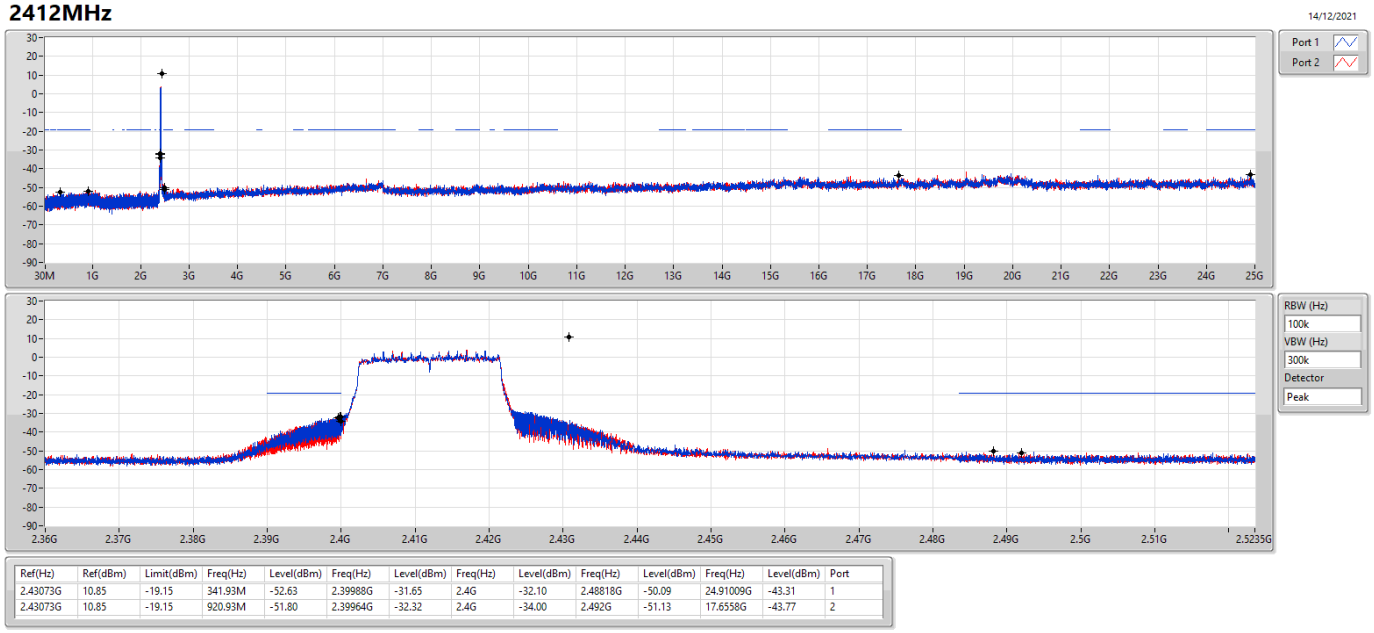
2462MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43824G	11.97	-18.03	494.84M	-52.10	2.3907G	-50.85	2.4835G	-48.50	2.48368G	-43.21	24.91571G	-44.32	1
2.43824G	11.97	-18.03	842.01M	-52.21	2.39736G	-50.69	2.4835G	-45.58	2.48386G	-44.84	24.92133G	-44.54	2

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

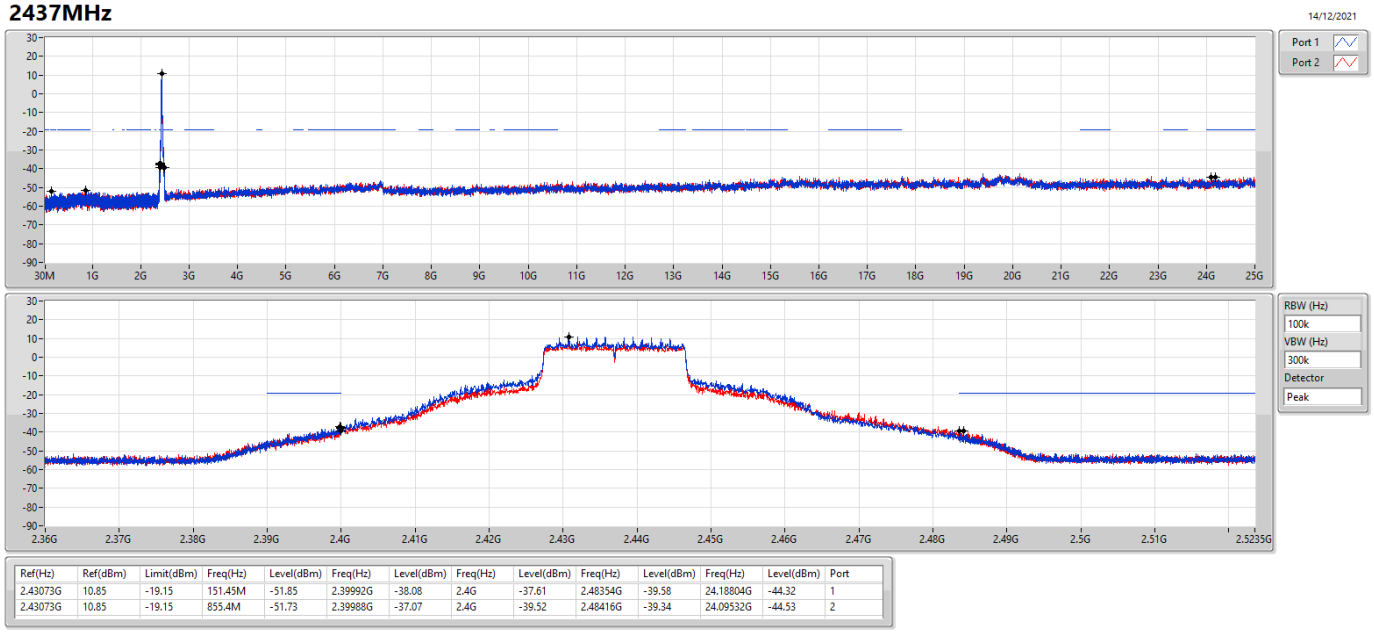
2412MHz



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
2.43073G	10.85	-19.15	341.93M	-52.63	2.39988G	-31.65	2.4G	-32.10	2.48818G	-50.09	24.91009G	-43.31	1
2.43073G	10.85	-19.15	920.93M	-51.80	2.39964G	-32.32	2.4G	-34.00	2.492G	-51.13	17.6558G	-43.77	2

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

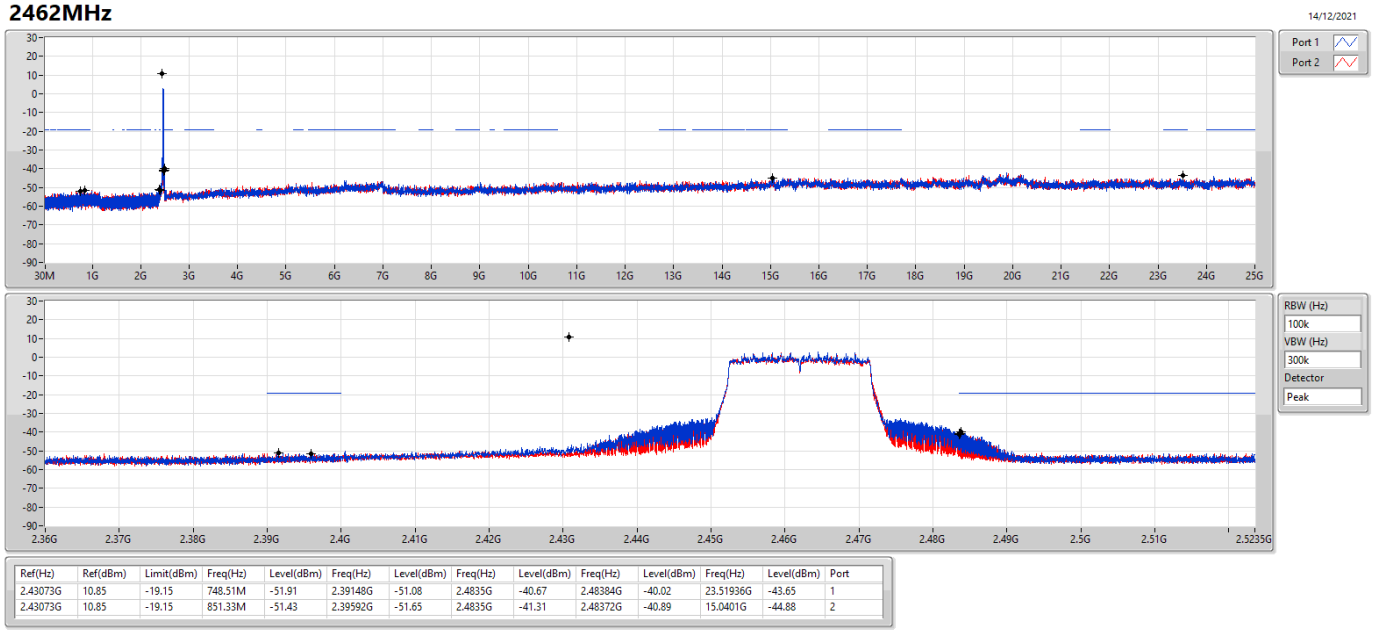
2437MHz



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
2.43073G	10.85	-19.15	151.45M	-51.85	2.39992G	-38.08	2.4G	-37.61	2.48354G	-39.58	24.18804G	-44.32	1
2.43073G	10.85	-19.15	855.4M	-51.73	2.39988G	-37.07	2.4G	-39.52	2.48416G	-39.34	24.09532G	-44.53	2

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

2462MHz

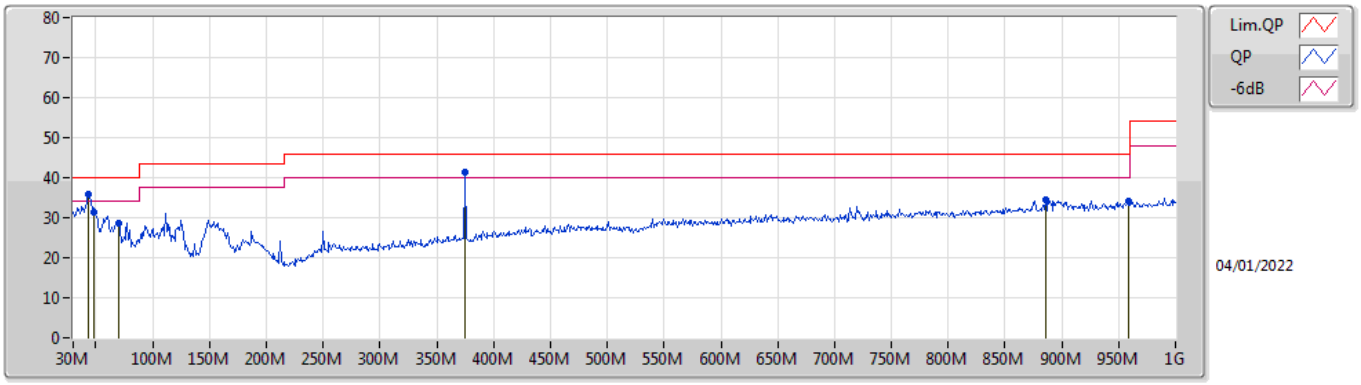


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43073G	10.85	-19.15	748.51M	-51.91	2.39148G	-51.08	2.4835G	-40.67	2.48384G	-40.02	23.51936G	-43.65	1
2.43073G	10.85	-19.15	851.33M	-51.43	2.39592G	-51.65	2.4835G	-41.31	2.48372G	-40.89	15.0401G	-44.88	2

Summary

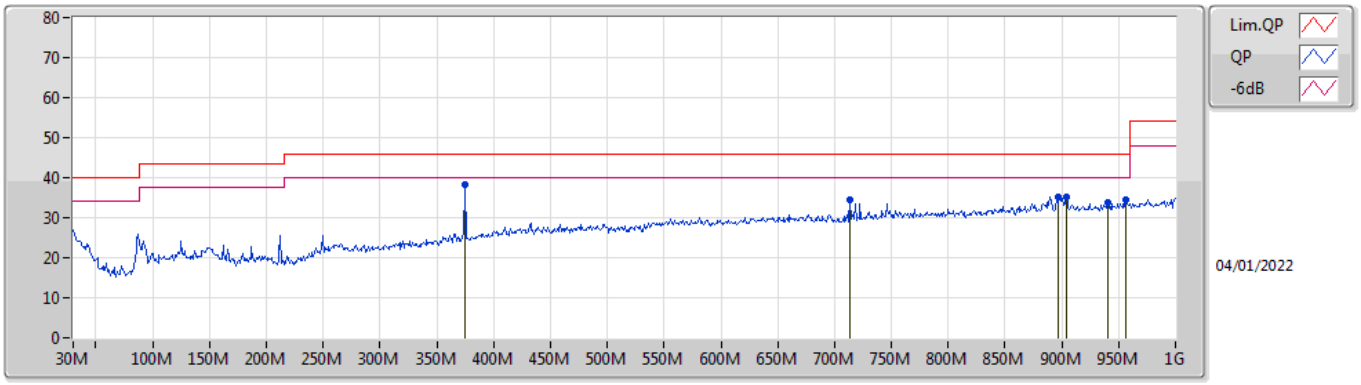
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	PK	43.58M	35.99	40.00	-4.01	Vertical

Mode 1



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
PK	43.58M	35.99	40.00	-4.01	-13.98	3	Vertical	299	1.00	"Worst"	49.97	16.75	0.97	31.70
PK	48.43M	31.28	40.00	-8.72	-16.15	3	Vertical	195	1.00	-	47.43	14.53	1.07	31.75
PK	69.77M	28.49	40.00	-11.51	-18.32	3	Vertical	99	2.00	-	46.81	12.27	1.30	31.89
PK	375.32M	41.22	46.00	-4.78	-8.28	3	Vertical	161	1.25	"	49.50	20.77	3.10	32.15
PK	885.54M	34.47	46.00	-11.53	-1.22	3	Vertical	7	1.25	-	35.69	26.19	5.24	32.65
PK	958.29M	34.24	46.00	-11.76	-0.40	3	Vertical	360	1.50	-	34.64	26.57	5.60	32.57

Mode 1



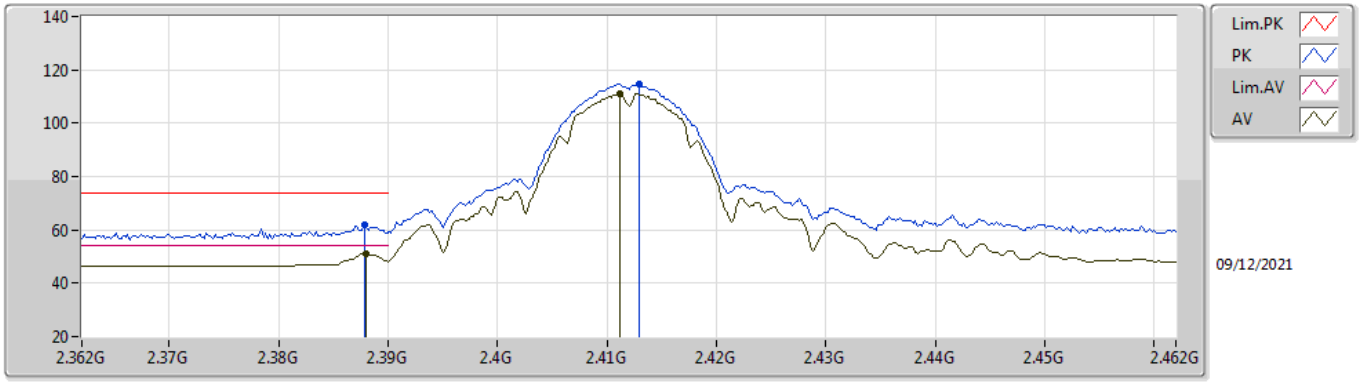
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
PK	375.32M	38.11	46.00	-7.89	-8.28	3	Horizontal	252	1.00	"Worst"	46.39	20.77	3.10	32.15
PK	713.85M	34.41	46.00	-11.59	-3.51	3	Horizontal	360	2.00	-	37.92	24.60	4.56	32.67
PK	897.18M	35.14	46.00	-10.86	-1.14	3	Horizontal	275	3.00	-	36.28	26.23	5.29	32.66
PK	903.97M	35.17	46.00	-10.83	-1.14	3	Horizontal	248	2.00	-	36.31	26.19	5.32	32.65
PK	940.83M	33.65	46.00	-12.35	-0.70	3	Horizontal	53	1.50	-	34.35	26.35	5.54	32.59
PK	956.35M	34.46	46.00	-11.54	-0.41	3	Horizontal	293	1.25	-	34.87	26.56	5.60	32.57

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_2TX	Pass	AV	2.39G	53.87	54.00	-0.13	3	Horizontal	169	1.94	-

802.11b_Nss1,(1Mbps)_2TX

2412MHz_TX

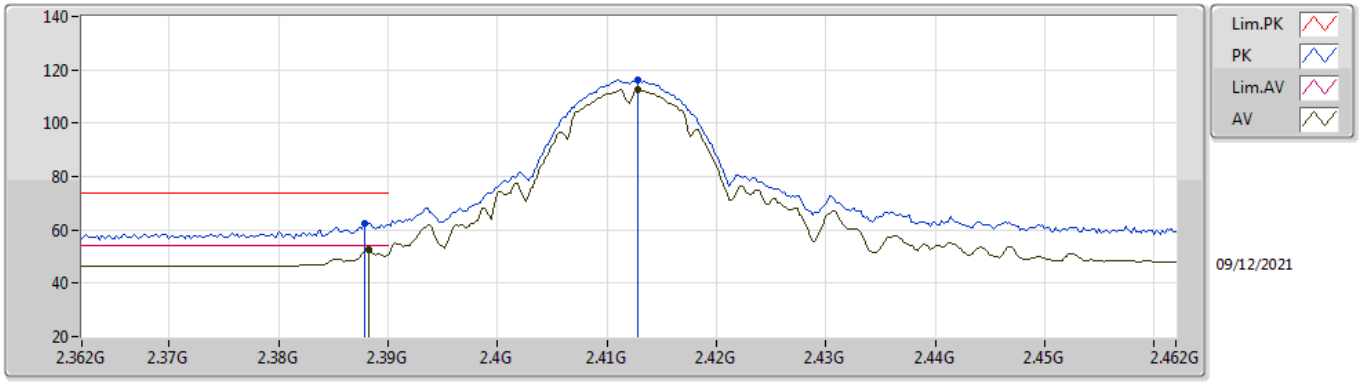


EUT Z_2TX
Setting 87
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3878G	61.92	74.00	-12.08	30.75	3	Vertical	56	1.75	-	28.38	2.79	-
AV	2.388G	51.03	54.00	-2.97	19.86	3	Vertical	56	1.75	-	28.38	2.79	-
PK	2.413G	114.65	Inf	-Inf	83.44	3	Vertical	56	1.75	-	28.40	2.81	-
AV	2.4112G	110.93	Inf	-Inf	79.72	3	Vertical	56	1.75	-	28.40	2.81	-

802.11b_Nss1,(1Mbps)_2TX

2412MHz_TX

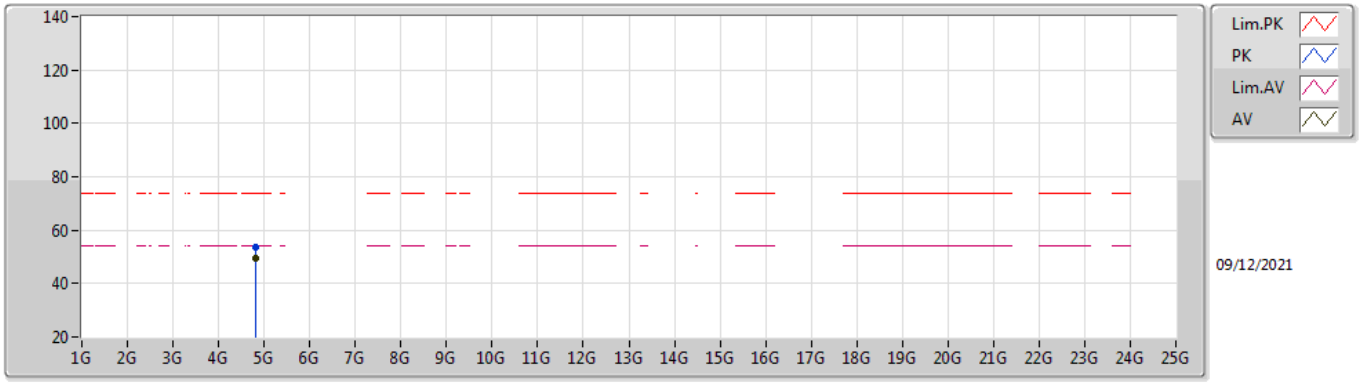


EUT Z_2TX
Setting 87
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3878G	62.37	74.00	-11.63	31.20	3	Horizontal	1	2.11	-	28.38	2.79	-
AV	2.3882G	52.40	54.00	-1.60	21.23	3	Horizontal	1	2.11	-	28.38	2.79	-
PK	2.4128G	116.37	Inf	-Inf	85.16	3	Horizontal	1	2.11	-	28.40	2.81	-
AV	2.4128G	112.53	Inf	-Inf	81.32	3	Horizontal	1	2.11	-	28.40	2.81	-

802.11b_Nss1,(1Mbps)_2TX

2412MHz_TX

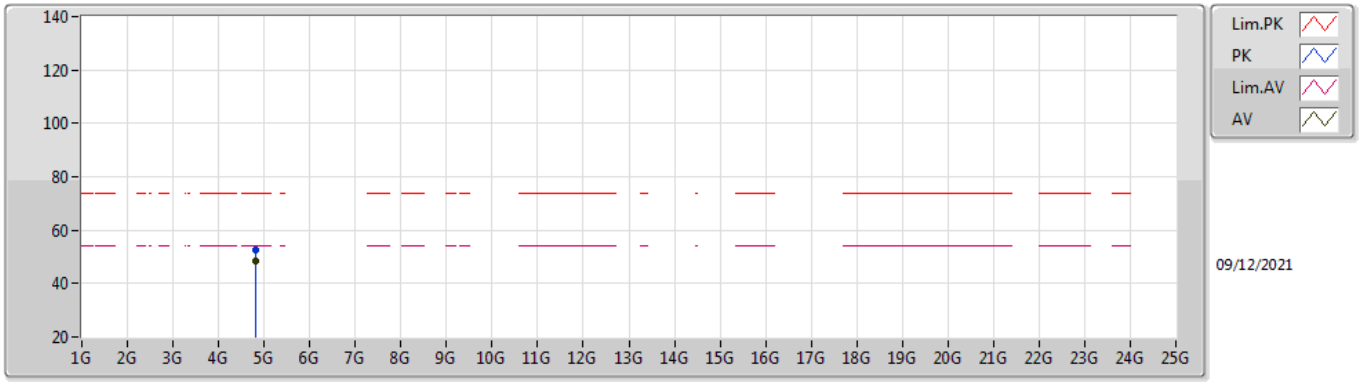


EUT X_2TX
Setting 87
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.82394G	53.80	74.00	-20.20	48.12	3	Vertical	288	2.81	-	32.80	5.10	32.22
AV	4.8239G	49.27	54.00	-4.73	43.59	3	Vertical	288	2.81	-	32.80	5.10	32.22

802.11b_Nss1,(1Mbps)_2TX

2412MHz_TX

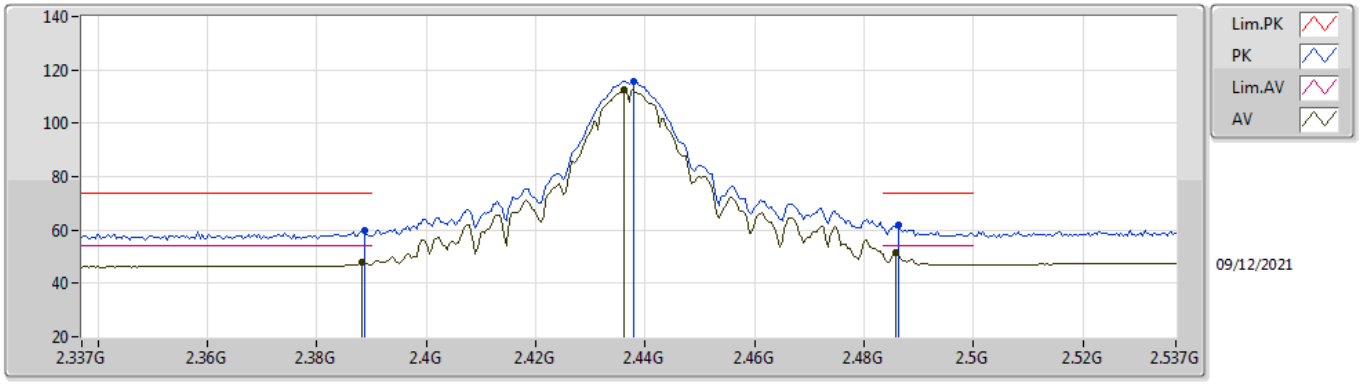


EUT X_2TX
Setting 87
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.82394G	52.55	74.00	-21.45	46.87	3	Horizontal	298	2.21	-	32.80	5.10	32.22
AV	4.82392G	48.50	54.00	-5.50	42.82	3	Horizontal	298	2.21	-	32.80	5.10	32.22

802.11b_Nss1,(1Mbps)_2TX

2437MHz_TX

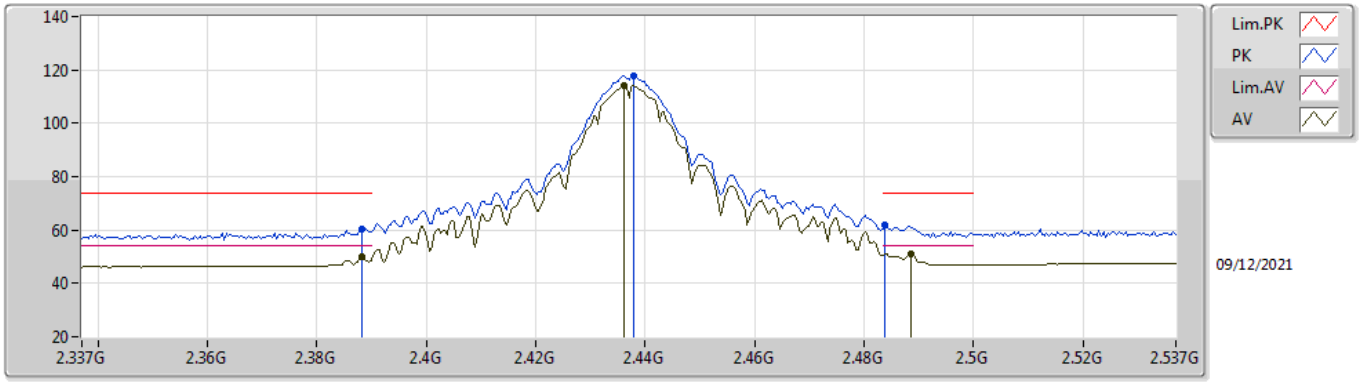


EUT Z_2TX
Setting 94
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3886G	59.97	74.00	-14.03	28.80	3	Vertical	74	1.88	-	28.38	2.79	-
AV	2.3882G	47.95	54.00	-6.05	16.78	3	Vertical	74	1.88	-	28.38	2.79	-
PK	2.4378G	115.94	Inf	-Inf	84.70	3	Vertical	74	1.88	-	28.40	2.84	-
AV	2.4362G	112.48	Inf	-Inf	81.24	3	Vertical	74	1.88	-	28.40	2.84	-
PK	2.4862G	61.89	74.00	-12.11	30.46	3	Vertical	74	1.88	-	28.54	2.89	-
AV	2.4858G	51.54	54.00	-2.46	20.11	3	Vertical	74	1.88	-	28.54	2.89	-

802.11b_Nss1,(1Mbps)_2TX

2437MHz_TX

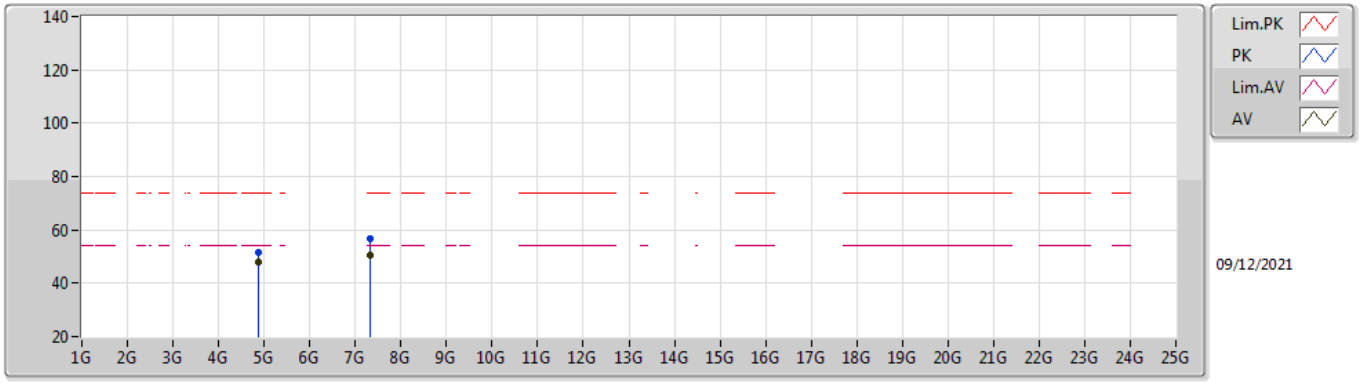


EUT Z_2TX
Setting 94
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3882G	60.48	74.00	-13.52	29.31	3	Horizontal	8	2.31	-	28.38	2.79	-
AV	2.3882G	49.95	54.00	-4.05	18.78	3	Horizontal	8	2.31	-	28.38	2.79	-
PK	2.4378G	117.86	Inf	-Inf	86.62	3	Horizontal	8	2.31	-	28.40	2.84	-
AV	2.4362G	114.23	Inf	-Inf	82.99	3	Horizontal	8	2.31	-	28.40	2.84	-
PK	2.4838G	61.79	74.00	-12.21	30.37	3	Horizontal	8	2.31	-	28.54	2.88	-
AV	2.4886G	51.28	54.00	-2.72	19.84	3	Horizontal	8	2.31	-	28.55	2.89	-

802.11b_Nss1,(1Mbps)_2TX

2437MHz_TX

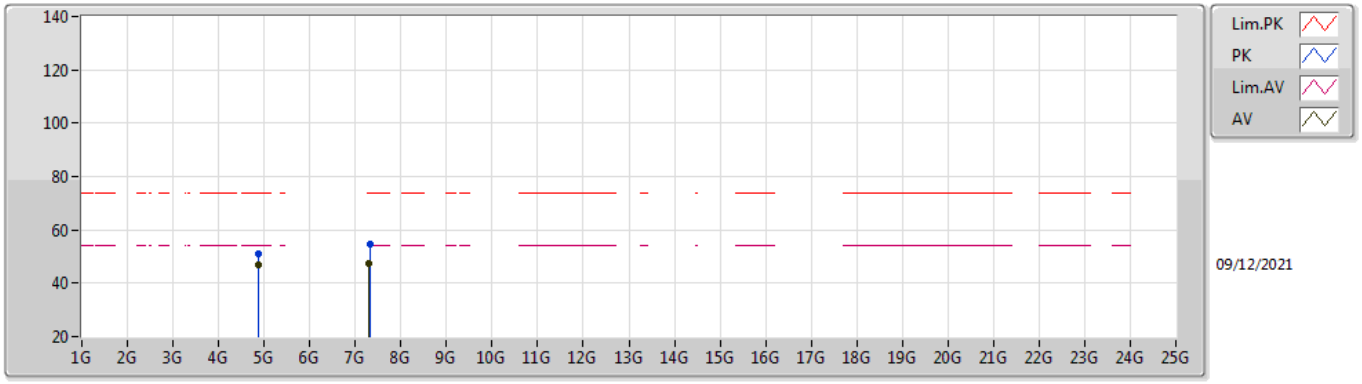


EUT X_2TX
Setting 94
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.87403G	51.44	74.00	-22.56	45.60	3	Vertical	163	1.69	-	32.95	5.10	32.21
AV	4.87395G	47.74	54.00	-6.26	41.90	3	Vertical	163	1.69	-	32.95	5.10	32.21
PK	7.31178G	56.88	74.00	-17.12	47.12	3	Vertical	270	1.72	-	36.42	6.16	32.82
AV	7.31168G	50.52	54.00	-3.48	40.76	3	Vertical	270	1.72	-	36.42	6.16	32.82

802.11b_Nss1,(1Mbps)_2TX

2437MHz_TX

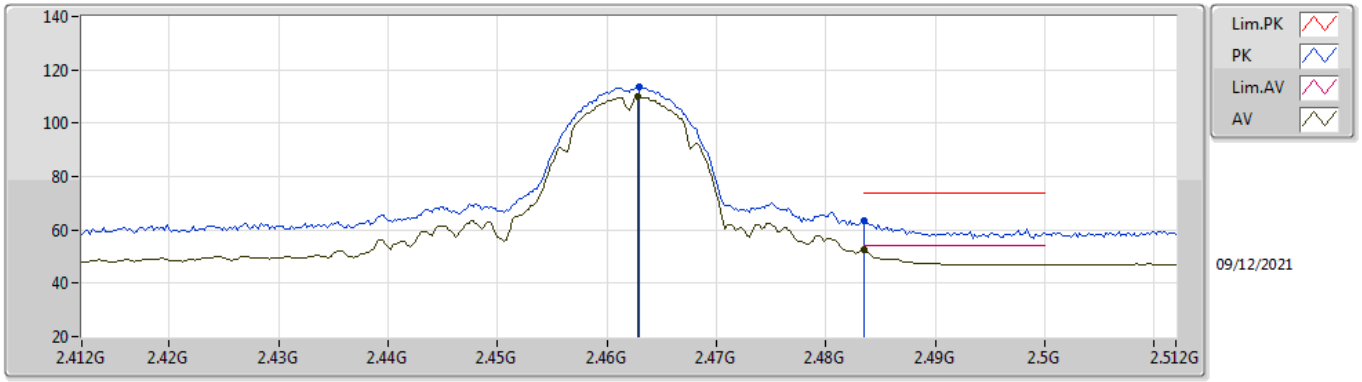


EUT X_2TX
Setting 94
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.87401G	51.15	74.00	-22.85	45.31	3	Horizontal	226	2.03	-	32.95	5.10	32.21
AV	4.87397G	46.77	54.00	-7.23	40.93	3	Horizontal	226	2.03	-	32.95	5.10	32.21
PK	7.312G	54.89	74.00	-19.11	45.13	3	Horizontal	225	2.16	-	36.42	6.16	32.82
AV	7.31016G	47.30	54.00	-6.70	37.54	3	Horizontal	225	2.16	-	36.42	6.16	32.82

802.11b_Nss1,(1Mbps)_2TX

2462MHz_TX

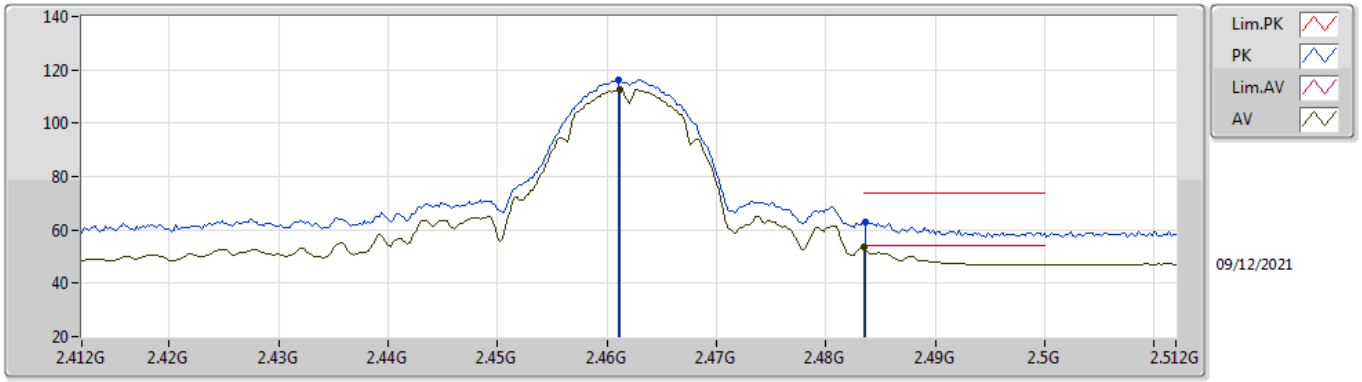


EUT Z_2TX
Setting 83
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.463G	113.69	Inf	-Inf	82.38	3	Vertical	74	1.88	-	28.45	2.86	-
AV	2.4628G	109.86	Inf	-Inf	78.55	3	Vertical	74	1.88	-	28.45	2.86	-
PK	2.4835G	63.47	74.00	-10.53	32.06	3	Vertical	74	1.88	-	28.53	2.88	-
AV	2.4835G	52.48	54.00	-1.52	21.07	3	Vertical	74	1.88	-	28.53	2.88	-

802.11b_Nss1,(1Mbps)_2TX

2462MHz_TX

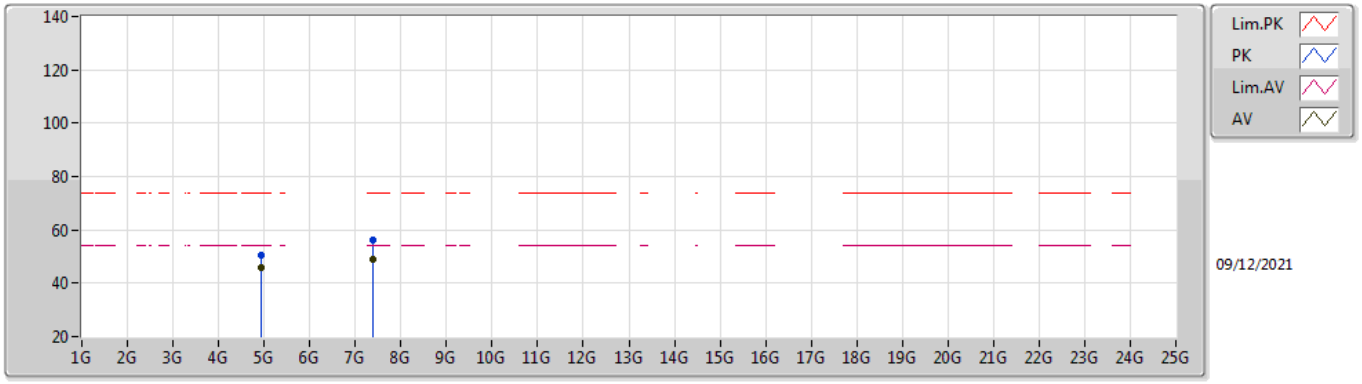


EUT Z_2TX
Setting 83
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.461G	116.25	Inf	-Inf	84.95	3	Horizontal	7	2.25	-	28.44	2.86	-
AV	2.4612G	112.66	Inf	-Inf	81.36	3	Horizontal	7	2.25	-	28.44	2.86	-
PK	2.4836G	63.03	74.00	-10.97	31.62	3	Horizontal	7	2.25	-	28.53	2.88	-
AV	2.4835G	53.45	54.00	-0.55	22.04	3	Horizontal	7	2.25	-	28.53	2.88	-

802.11b_Nss1,(1Mbps)_2TX

2462MHz_TX

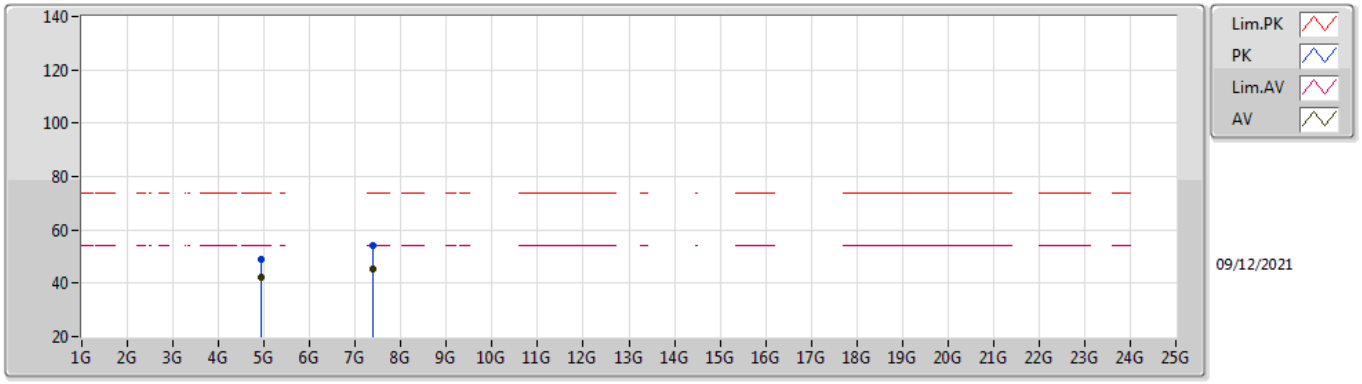


EUT X_2TX
Setting 83
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.92388G	50.56	74.00	-23.44	44.51	3	Vertical	269	2.96	-	33.14	5.10	32.19
AV	4.92394G	45.83	54.00	-8.17	39.78	3	Vertical	269	2.96	-	33.14	5.10	32.19
PK	7.38688G	56.12	74.00	-17.88	46.31	3	Vertical	216	2.18	-	36.57	6.19	32.95
AV	7.3852G	49.17	54.00	-4.83	39.36	3	Vertical	216	2.18	-	36.57	6.19	32.95

802.11b_Nss1,(1Mbps)_2TX

2462MHz_TX

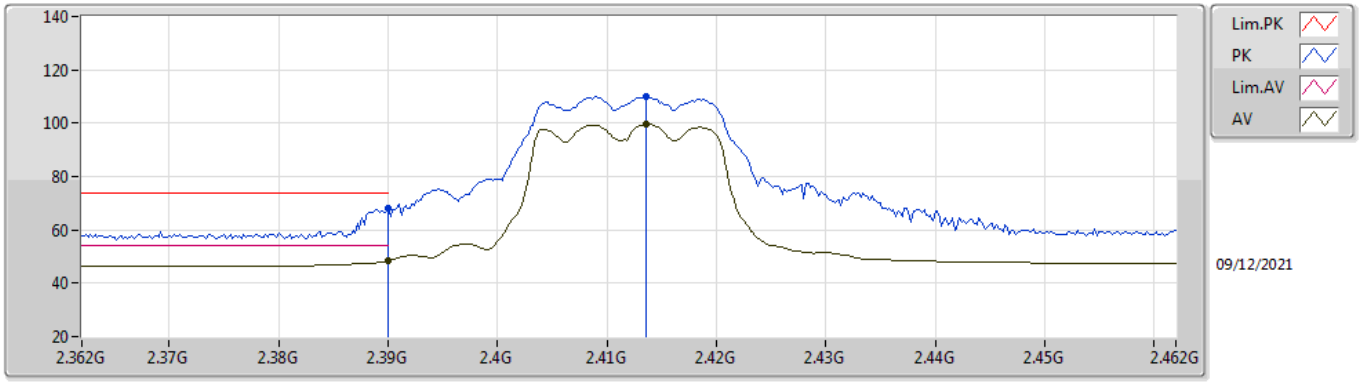


EUT X_2TX
Setting 83
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.924G	49.08	74.00	-24.92	43.03	3	Horizontal	162	1.19	-	33.14	5.10	32.19
AV	4.92394G	42.39	54.00	-11.61	36.34	3	Horizontal	162	1.19	-	33.14	5.10	32.19
PK	7.38624G	54.16	74.00	-19.84	44.35	3	Horizontal	211	2.32	-	36.57	6.19	32.95
AV	7.3852G	45.30	54.00	-8.70	35.49	3	Horizontal	211	2.32	-	36.57	6.19	32.95

802.11g_Nss1,(6Mbps)_2TX

2412MHz_TX

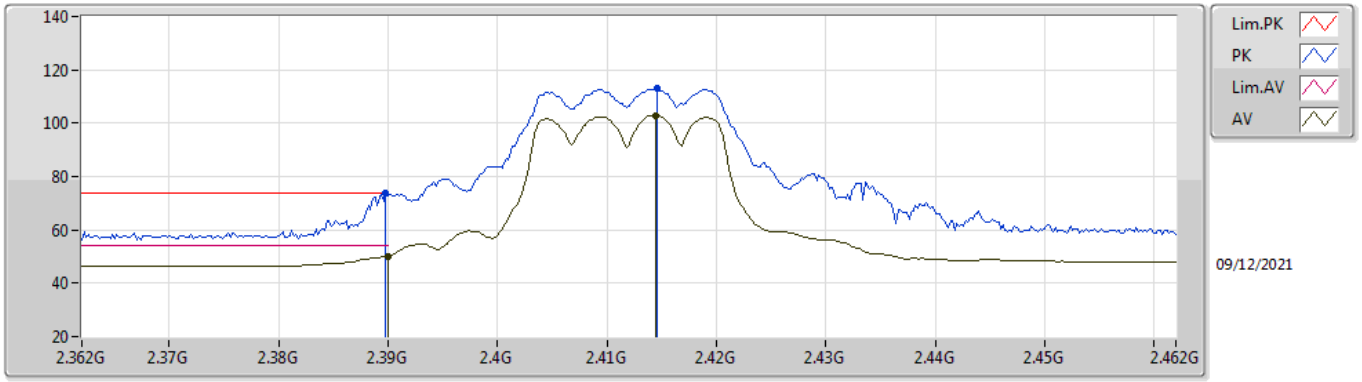


EUT Z_2TX
Setting 65
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.39G	67.95	74.00	-6.05	36.78	3	Vertical	116	1.79	-	28.38	2.79	-
AV	2.39G	48.25	54.00	-5.75	17.08	3	Vertical	116	1.79	-	28.38	2.79	-
PK	2.4136G	110.04	Inf	-Inf	78.83	3	Vertical	116	1.79	-	28.40	2.81	-
AV	2.4136G	99.51	Inf	-Inf	68.30	3	Vertical	116	1.79	-	28.40	2.81	-

802.11g_Nss1,(6Mbps)_2TX

2412MHz_TX

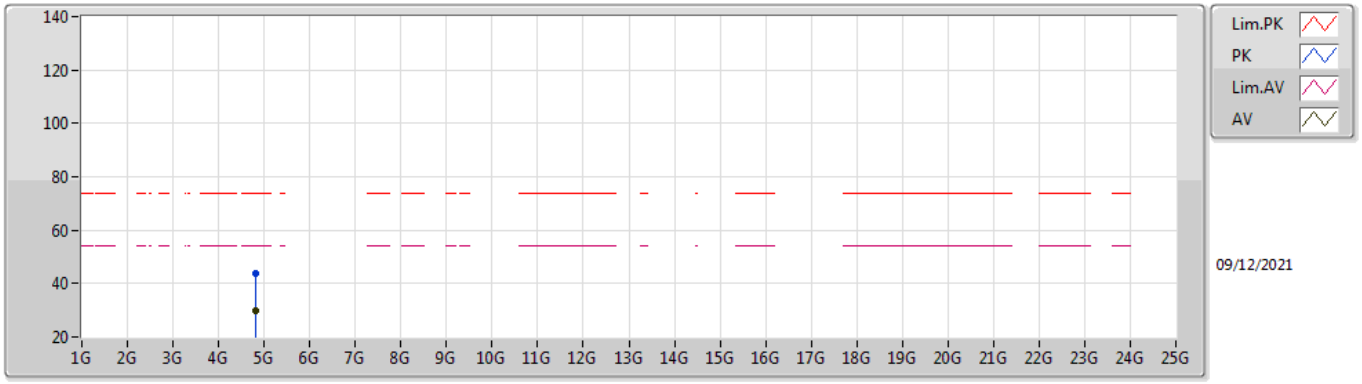


EUT Z_2TX
Setting 65
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3898G	73.58	74.00	-0.42	42.41	3	Horizontal	171	1.94	-	28.38	2.79	-
AV	2.39G	50.01	54.00	-3.99	18.84	3	Horizontal	171	1.94	-	28.38	2.79	-
PK	2.4146G	112.97	Inf	-Inf	81.76	3	Horizontal	171	1.94	-	28.40	2.81	-
AV	2.4144G	103.01	Inf	-Inf	71.80	3	Horizontal	171	1.94	-	28.40	2.81	-

802.11g_Nss1,(6Mbps)_2TX

2412MHz_TX

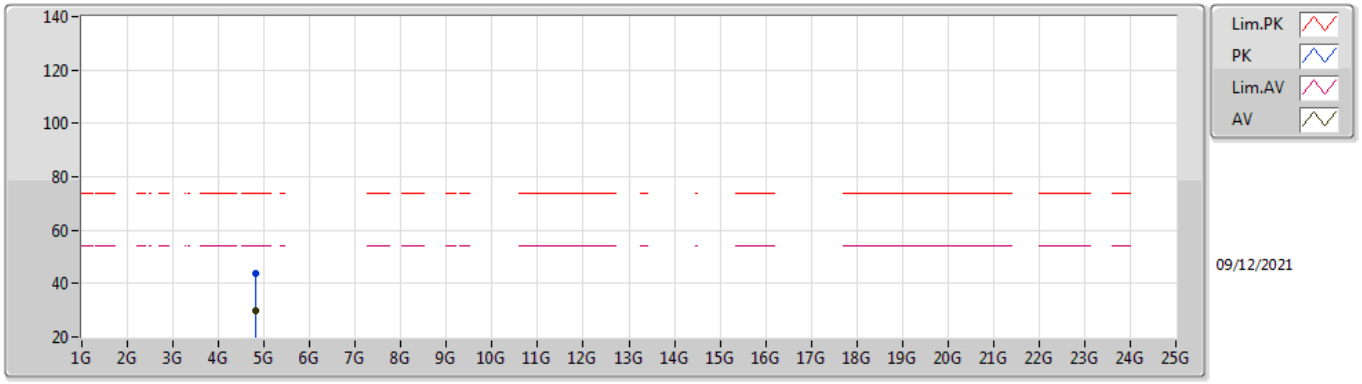


EUT X_2TX
Setting 65
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.82134G	43.73	74.00	-30.27	38.06	3	Vertical	283	2.75	-	32.79	5.10	32.22
AV	4.82432G	29.64	54.00	-24.36	23.96	3	Vertical	283	2.75	-	32.80	5.10	32.22

802.11g_Nss1,(6Mbps)_2TX

2412MHz_TX

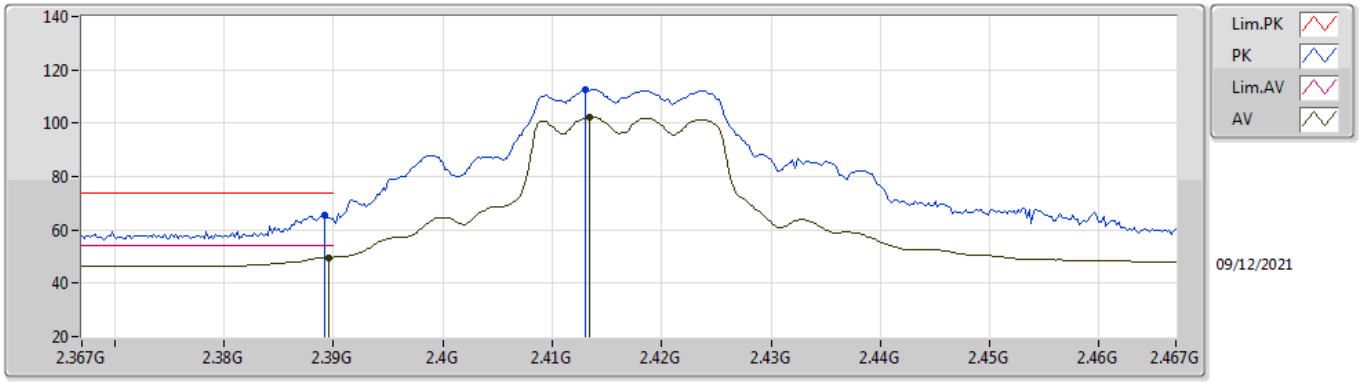


EUT X_2TX
Setting 65
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.82648G	43.75	74.00	-30.25	38.06	3	Horizontal	332	2.27	-	32.81	5.10	32.22
AV	4.82424G	29.63	54.00	-24.37	23.95	3	Horizontal	332	2.27	-	32.80	5.10	32.22

802.11g_Nss1,(6Mbps)_2TX

2417MHz_TX

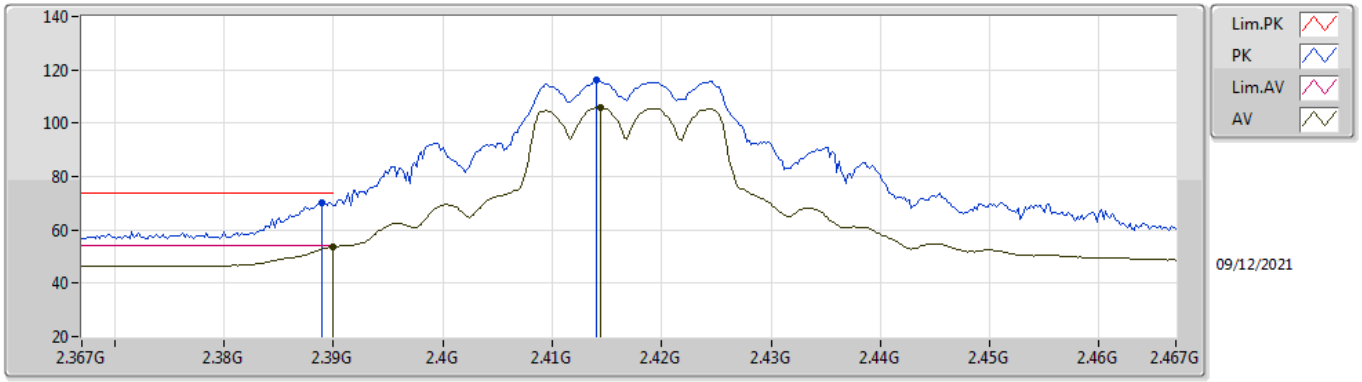


EUT Z_2TX
Setting 76
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3892G	65.39	74.00	-8.61	34.22	3	Vertical	116	1.79	-	28.38	2.79	-
AV	2.3896G	49.74	54.00	-4.26	18.57	3	Vertical	116	1.79	-	28.38	2.79	-
PK	2.413G	112.82	Inf	-Inf	81.61	3	Vertical	116	1.79	-	28.40	2.81	-
AV	2.4134G	102.28	Inf	-Inf	71.07	3	Vertical	116	1.79	-	28.40	2.81	-

802.11g_Nss1,(6Mbps)_2TX

2417MHz_TX

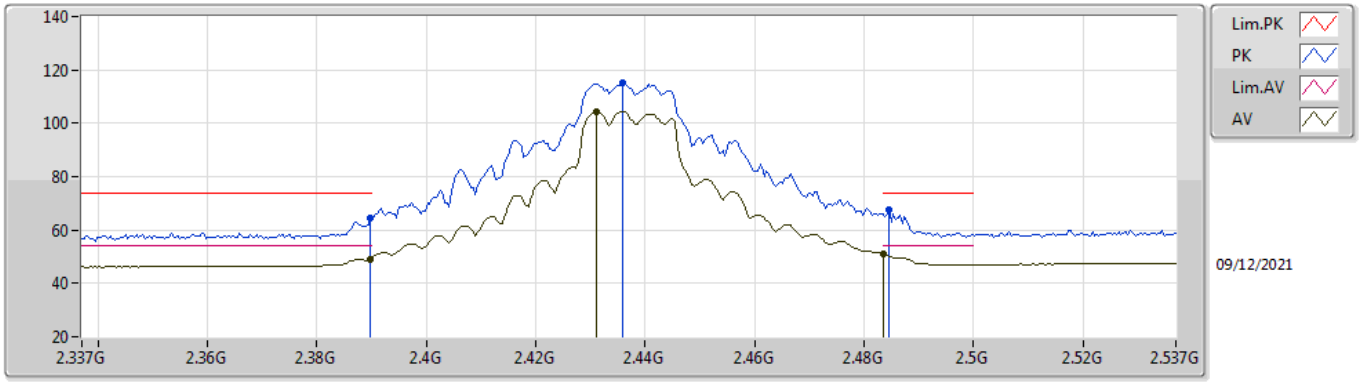


EUT Z_2TX
Setting 76
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.389G	70.14	74.00	-3.86	38.97	3	Horizontal	170	1.94	-	28.38	2.79	-
AV	2.39G	53.80	54.00	-0.20	22.63	3	Horizontal	170	1.94	-	28.38	2.79	-
PK	2.414G	116.13	Inf	-Inf	84.92	3	Horizontal	170	1.94	-	28.40	2.81	-
AV	2.4144G	105.83	Inf	-Inf	74.62	3	Horizontal	170	1.94	-	28.40	2.81	-

802.11g_Nss1,(6Mbps)_2TX

2437MHz_TX

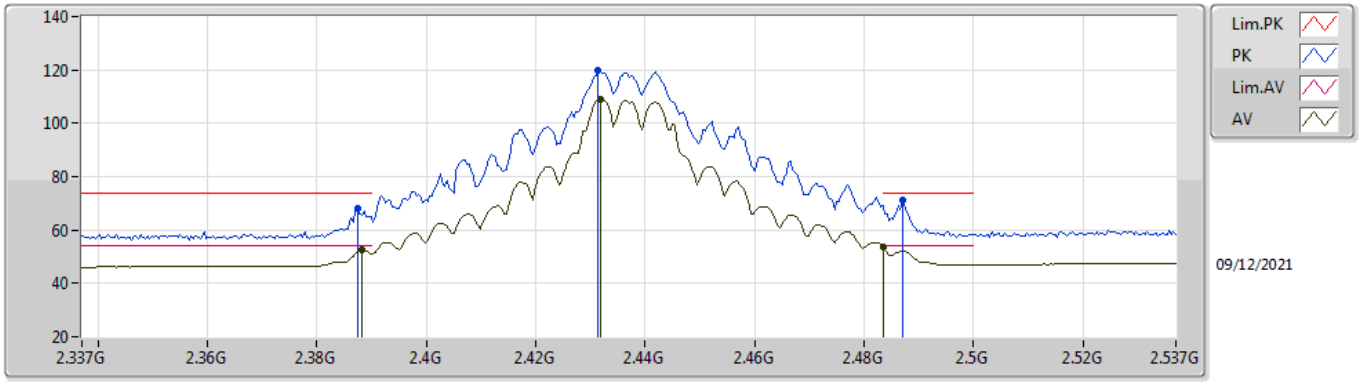


EUT Z_2TX
Setting 87
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3898G	64.28	74.00	-9.72	33.11	3	Vertical	118	1.79	-	28.38	2.79	-
AV	2.3898G	49.15	54.00	-4.85	17.98	3	Vertical	118	1.79	-	28.38	2.79	-
PK	2.4358G	115.26	Inf	-Inf	84.02	3	Vertical	118	1.79	-	28.40	2.84	-
AV	2.431G	104.53	Inf	-Inf	73.30	3	Vertical	118	1.79	-	28.40	2.83	-
PK	2.4846G	67.71	74.00	-6.29	36.29	3	Vertical	118	1.79	-	28.54	2.88	-
AV	2.4835G	50.87	54.00	-3.13	19.46	3	Vertical	118	1.79	-	28.53	2.88	-

802.11g_Nss1,(6Mbps)_2TX

2437MHz_TX

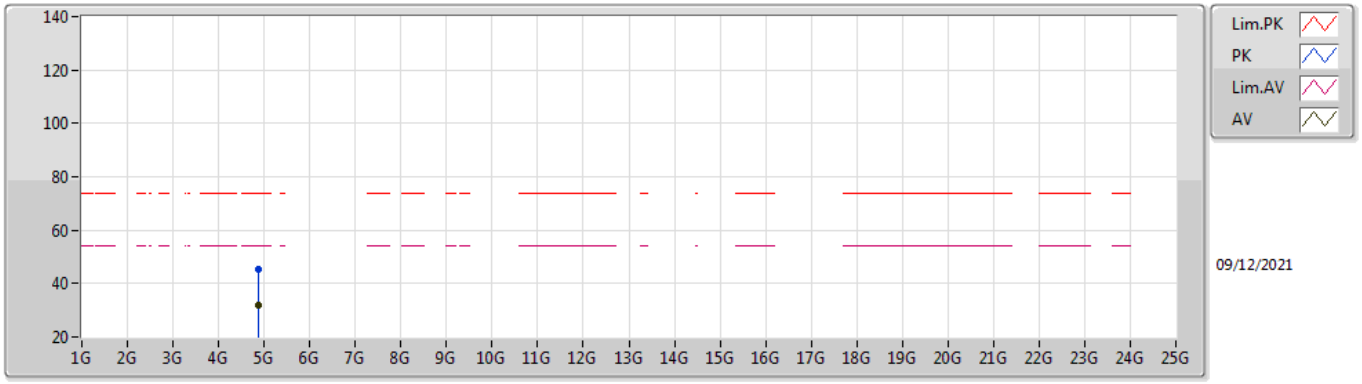


EUT Z_2TX
Setting 87
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3874G	67.87	74.00	-6.13	36.71	3	Horizontal	162	2.13	-	28.37	2.79	-
AV	2.3882G	52.44	54.00	-1.56	21.27	3	Horizontal	162	2.13	-	28.38	2.79	-
PK	2.4314G	119.82	Inf	-Inf	88.59	3	Horizontal	162	2.13	-	28.40	2.83	-
AV	2.4318G	109.13	Inf	-Inf	77.90	3	Horizontal	162	2.13	-	28.40	2.83	-
PK	2.487G	71.31	74.00	-2.69	39.87	3	Horizontal	162	2.13	-	28.55	2.89	-
AV	2.4835G	53.66	54.00	-0.34	22.25	3	Horizontal	162	2.13	-	28.53	2.88	-

802.11g_Nss1,(6Mbps)_2TX

2437MHz_TX

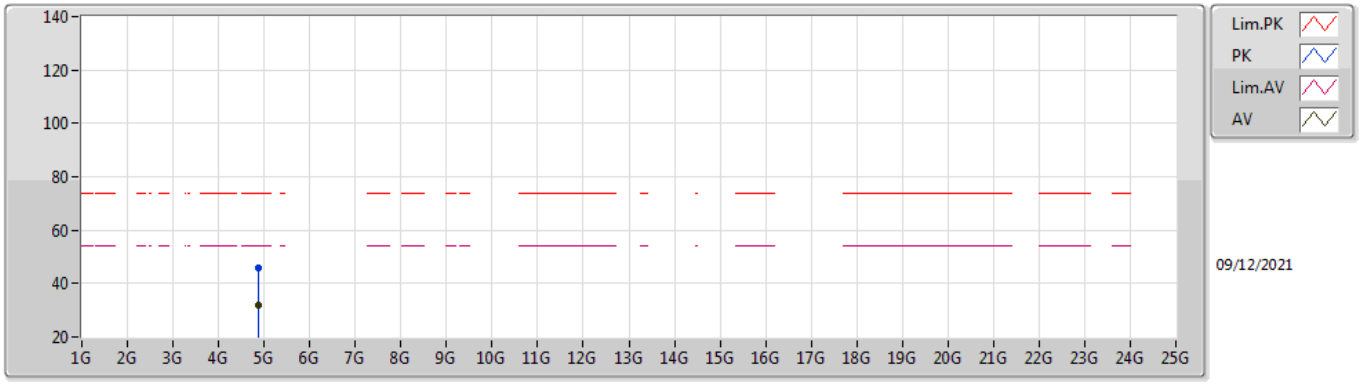


EUT X_2TX
Setting 87
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.8731G	45.45	74.00	-28.55	39.61	3	Vertical	218	2.25	-	32.95	5.10	32.21
AV	4.87356G	31.79	54.00	-22.21	25.95	3	Vertical	218	2.25	-	32.95	5.10	32.21

802.11g_Nss1,(6Mbps)_2TX

2437MHz_TX

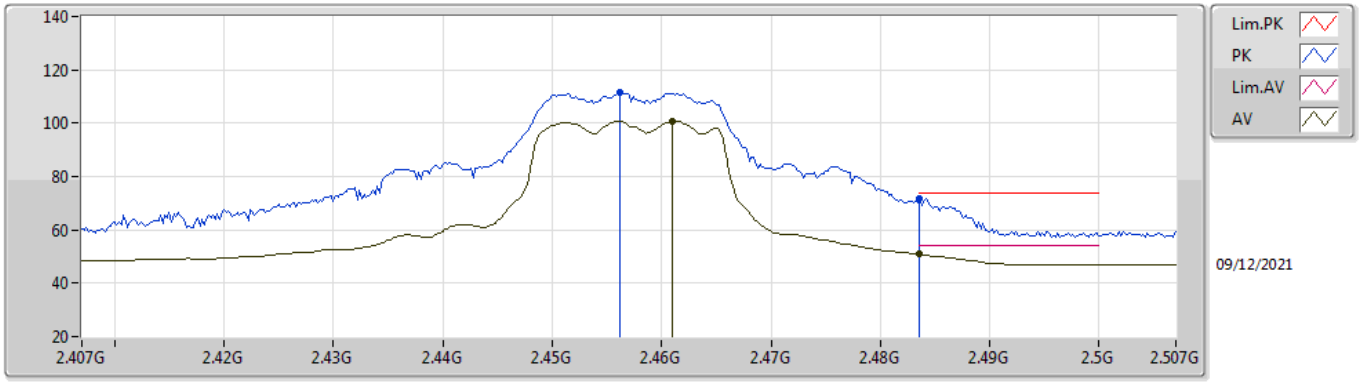


EUT X_2TX
Setting 87
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.8787G	45.91	74.00	-28.09	40.05	3	Horizontal	238	1.06	-	32.96	5.10	32.20
AV	4.87338G	31.80	54.00	-22.20	25.96	3	Horizontal	238	1.06	-	32.95	5.10	32.21

802.11g_Nss1,(6Mbps)_2TX

2457MHz_TX

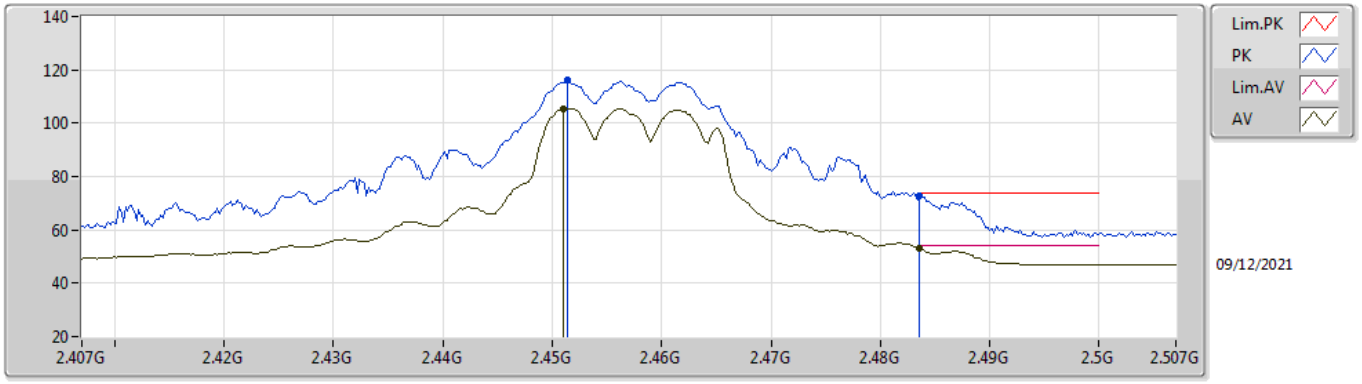


EUT Z_2TX
Setting 74
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.4562G	111.44	Inf	-Inf	80.16	3	Vertical	116	1.79	-	28.42	2.86	-
AV	2.461G	100.69	Inf	-Inf	69.39	3	Vertical	116	1.79	-	28.44	2.86	-
PK	2.4836G	71.91	74.00	-2.09	40.50	3	Vertical	116	1.79	-	28.53	2.88	-
AV	2.4835G	50.99	54.00	-3.01	19.58	3	Vertical	116	1.79	-	28.53	2.88	-

802.11g_Nss1,(6Mbps)_2TX

2457MHz_TX

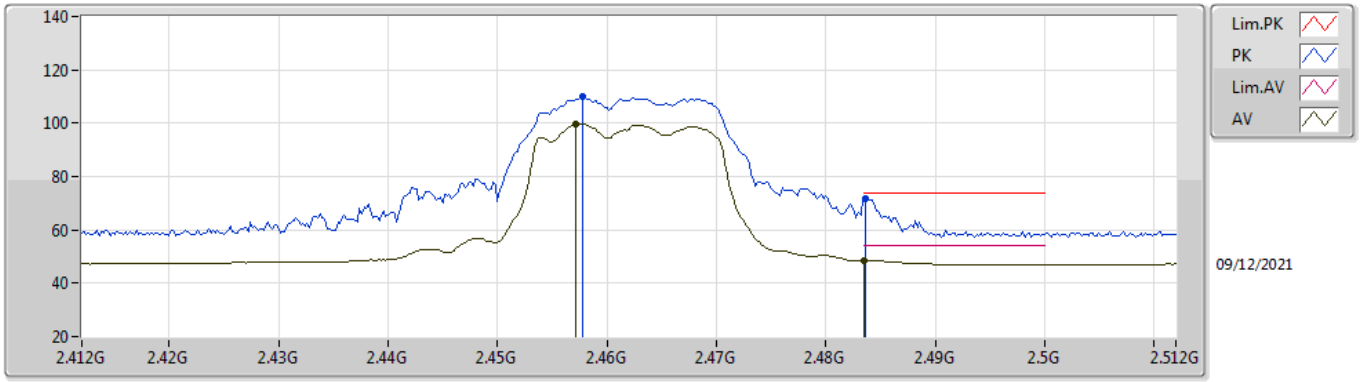


EUT Z_2TX
Setting 74
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.4514G	116.03	Inf	-Inf	84.77	3	Horizontal	173	1.90	-	28.41	2.85	-
AV	2.451G	105.42	Inf	-Inf	74.17	3	Horizontal	173	1.90	-	28.40	2.85	-
PK	2.4836G	72.82	74.00	-1.18	41.41	3	Horizontal	173	1.90	-	28.53	2.88	-
AV	2.4835G	53.32	54.00	-0.68	21.91	3	Horizontal	173	1.90	-	28.53	2.88	-

802.11g_Nss1,(6Mbps)_2TX

2462MHz_TX

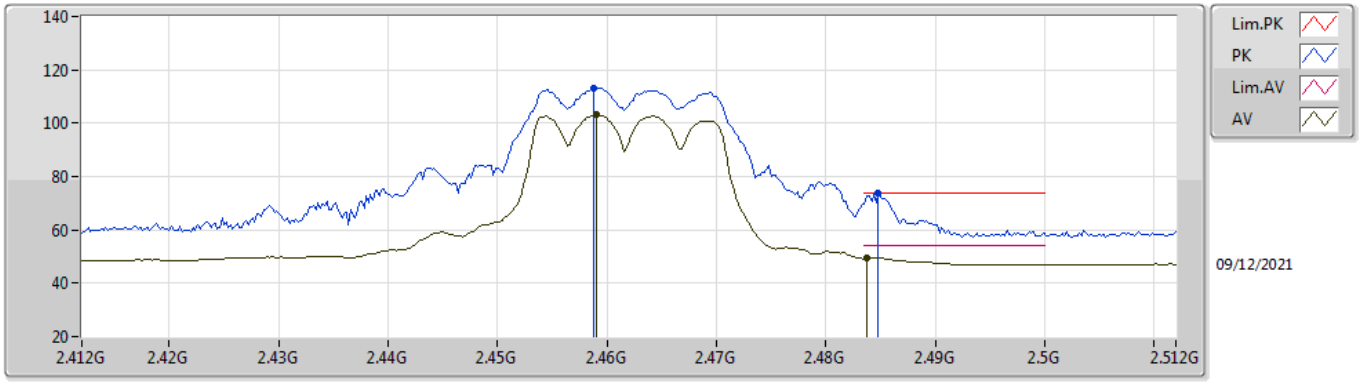


EUT Z_2TX
Setting 64
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.4578G	110.01	Inf	-Inf	78.72	3	Vertical	43	1.79	-	28.43	2.86	-
AV	2.4572G	99.69	Inf	-Inf	68.40	3	Vertical	43	1.79	-	28.43	2.86	-
PK	2.4836G	71.91	74.00	-2.09	40.50	3	Vertical	43	1.79	-	28.53	2.88	-
AV	2.4835G	48.67	54.00	-5.33	17.26	3	Vertical	43	1.79	-	28.53	2.88	-

802.11g_Nss1,(6Mbps)_2TX

2462MHz_TX

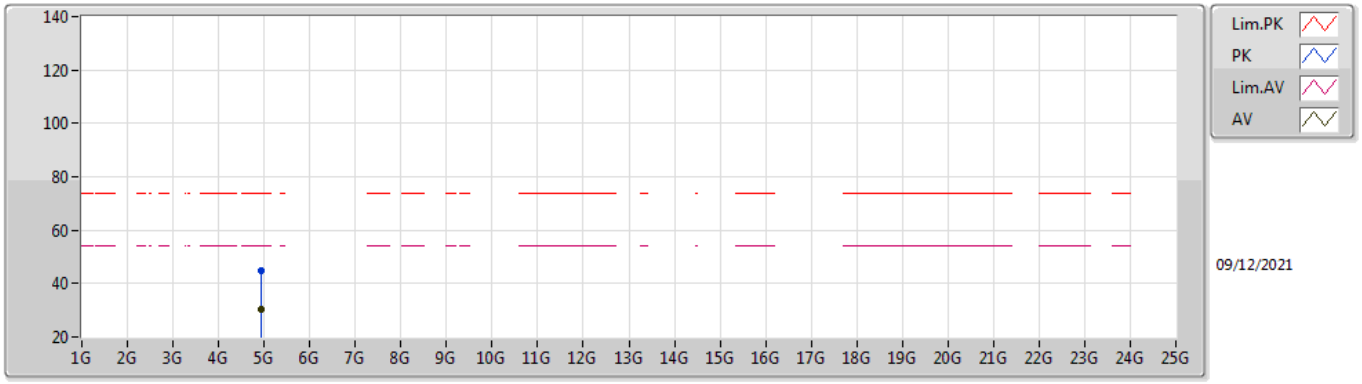


EUT Z_2TX
Setting 64
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.4588G	113.36	Inf	-Inf	82.06	3	Horizontal	172	1.92	-	28.44	2.86	-
AV	2.459G	103.02	Inf	-Inf	71.72	3	Horizontal	172	1.92	-	28.44	2.86	-
PK	2.4848G	73.59	74.00	-0.41	42.17	3	Horizontal	172	1.92	-	28.54	2.88	-
AV	2.4838G	49.45	54.00	-4.55	18.03	3	Horizontal	172	1.92	-	28.54	2.88	-

802.11g_Nss1,(6Mbps)_2TX

2462MHz_TX

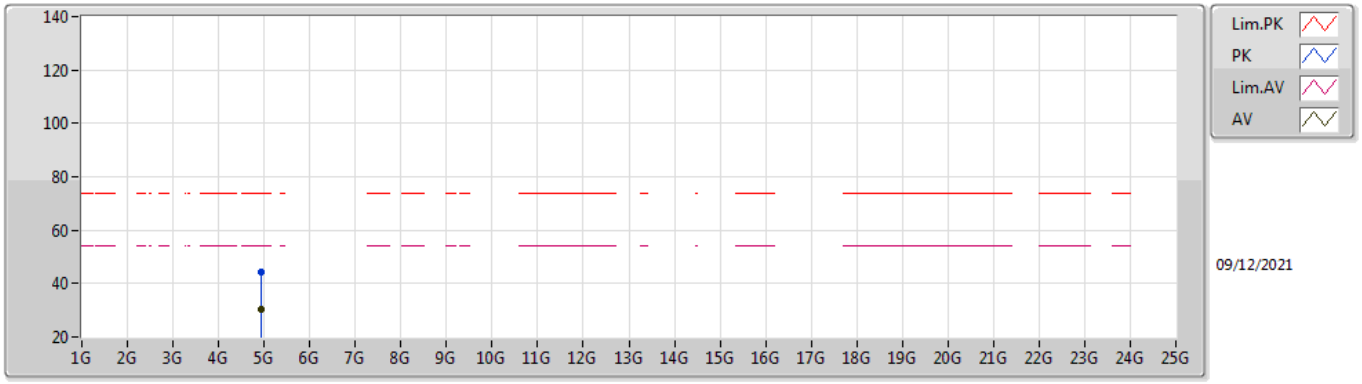


EUT X_2TX
Setting 64
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.92802G	44.91	74.00	-29.09	38.83	3	Vertical	311	2.19	-	33.17	5.10	32.19
AV	4.92474G	30.42	54.00	-23.58	24.36	3	Vertical	311	2.19	-	33.15	5.10	32.19

802.11g_Nss1,(6Mbps)_2TX

2462MHz_TX

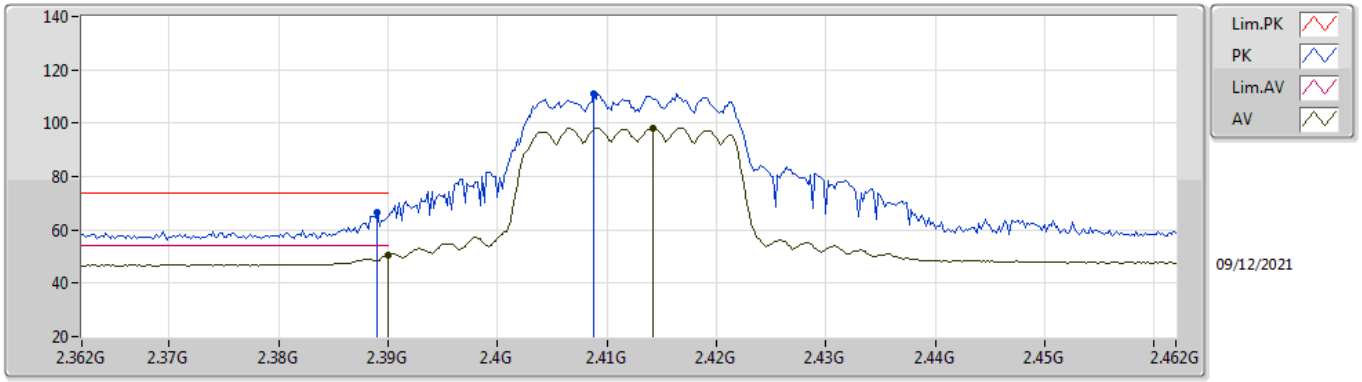


EUT X_2TX
Setting 64
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.92834G	44.17	74.00	-29.83	38.09	3	Horizontal	248	1.90	-	33.17	5.10	32.19
AV	4.9249G	30.39	54.00	-23.61	24.33	3	Horizontal	248	1.90	-	33.15	5.10	32.19

802.11ax HEW20_Nss1,(MCS0)_2TX

2412MHz_TX

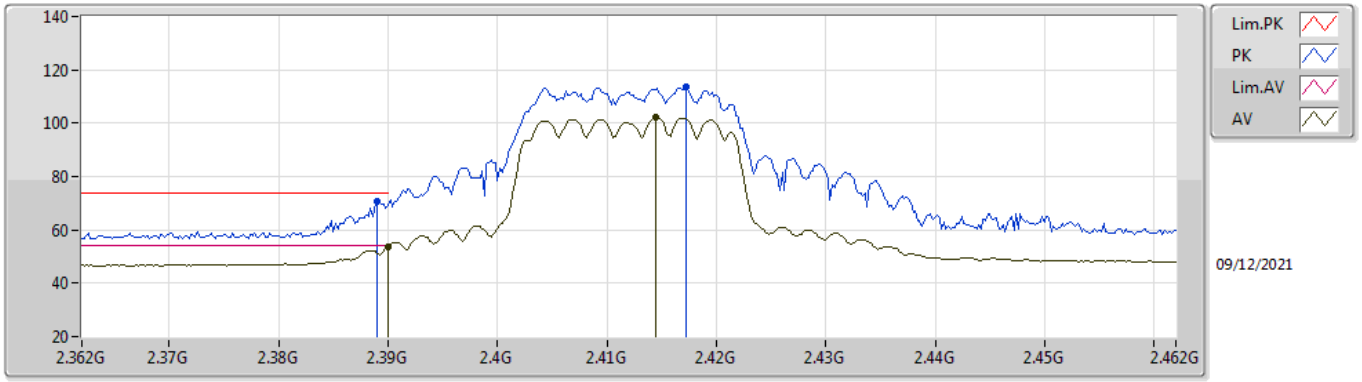


EUT Z_2TX
Setting 62
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.389G	66.43	74.00	-7.57	35.26	3	Vertical	115	1.79	-	28.38	2.79	-
AV	2.39G	50.72	54.00	-3.28	19.55	3	Vertical	115	1.79	-	28.38	2.79	-
PK	2.4088G	111.16	Inf	-Inf	79.95	3	Vertical	115	1.79	-	28.40	2.81	-
AV	2.4142G	98.31	Inf	-Inf	67.10	3	Vertical	115	1.79	-	28.40	2.81	-

802.11ax HEW20_Nss1,(MCS0)_2TX

2412MHz_TX

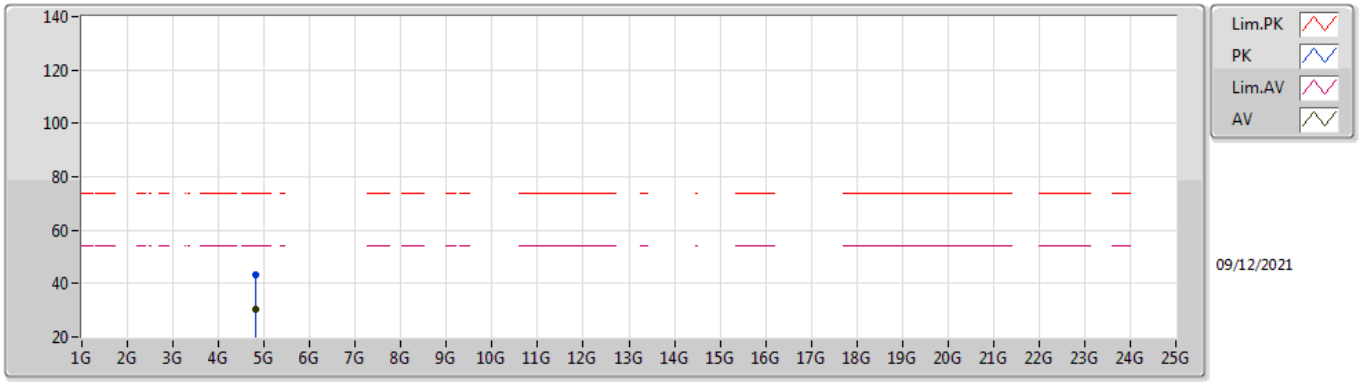


EUT Z_2TX
Setting 62
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.389G	70.80	74.00	-3.20	39.63	3	Horizontal	169	1.94	-	28.38	2.79	-
AV	2.39G	53.87	54.00	-0.13	22.70	3	Horizontal	169	1.94	-	28.38	2.79	-
PK	2.4172G	113.46	Inf	-Inf	82.24	3	Horizontal	169	1.94	-	28.40	2.82	-
AV	2.4144G	102.10	Inf	-Inf	70.89	3	Horizontal	169	1.94	-	28.40	2.81	-

802.11ax HEW20_Nss1,(MCS0)_2TX

2412MHz_TX

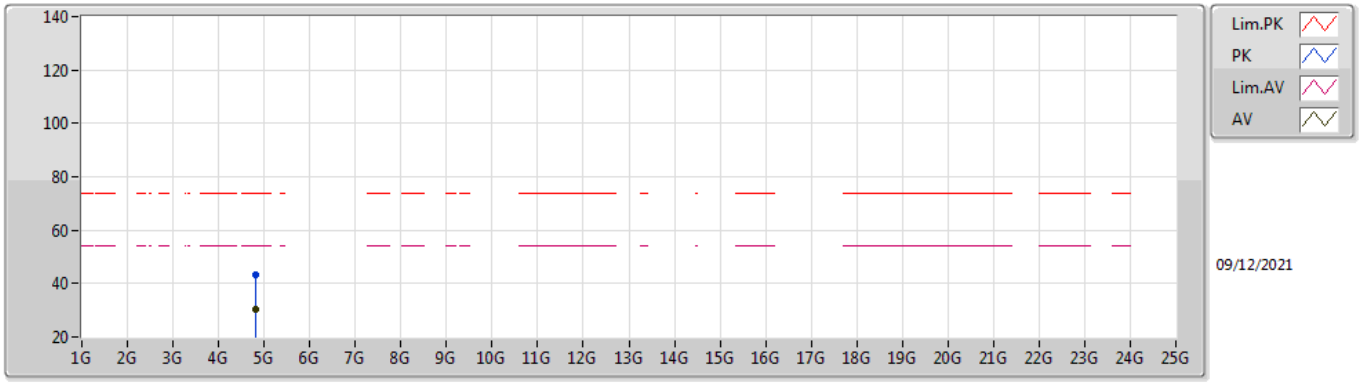


EUT X_2TX
Setting 62
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.82214G	43.21	74.00	-30.79	37.54	3	Vertical	117	2.30	-	32.79	5.10	32.22
AV	4.8275G	30.33	54.00	-23.67	24.64	3	Vertical	117	2.30	-	32.81	5.10	32.22

802.11ax HEW20_Nss1,(MCS0)_2TX

2412MHz_TX

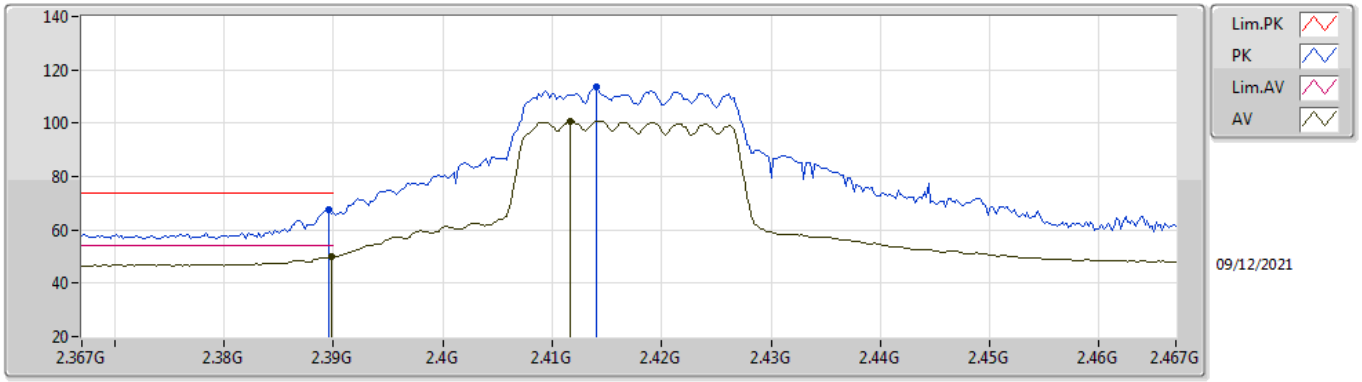


EUT X_2TX
Setting 62
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.82074G	43.28	74.00	-30.72	37.62	3	Horizontal	161	1.23	-	32.78	5.10	32.22
AV	4.82372G	30.22	54.00	-23.78	24.55	3	Horizontal	161	1.23	-	32.79	5.10	32.22

802.11ax HEW20_Nss1,(MCS0)_2TX

2417MHz_TX

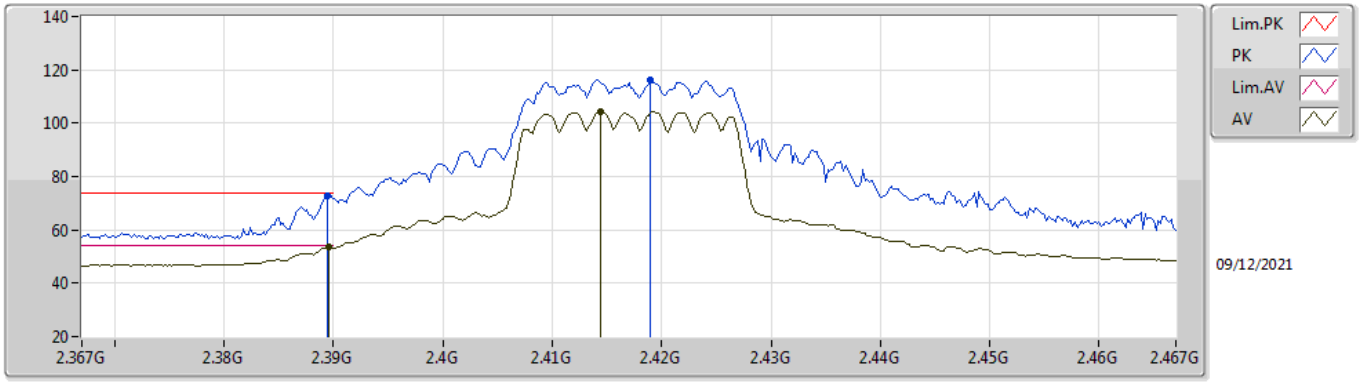


EUT Z_2TX
Setting 70
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3896G	67.49	74.00	-6.51	36.32	3	Vertical	114	1.88	-	28.38	2.79	-
AV	2.3898G	49.81	54.00	-4.19	18.64	3	Vertical	114	1.88	-	28.38	2.79	-
PK	2.414G	113.66	Inf	-Inf	82.45	3	Vertical	114	1.88	-	28.40	2.81	-
AV	2.4116G	100.84	Inf	-Inf	69.63	3	Vertical	114	1.88	-	28.40	2.81	-

802.11ax HEW20_Nss1,(MCS0)_2TX

2417MHz_TX

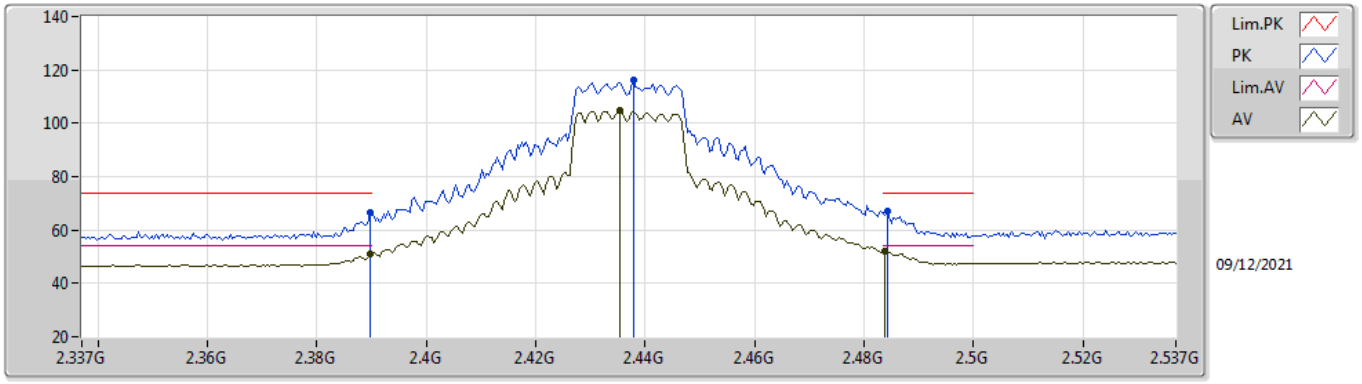


EUT Z_2TX
Setting 70
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3894G	72.86	74.00	-1.14	41.69	3	Horizontal	171	1.95	-	28.38	2.79	-
AV	2.3896G	53.56	54.00	-0.44	22.39	3	Horizontal	171	1.95	-	28.38	2.79	-
PK	2.419G	116.27	Inf	-Inf	85.05	3	Horizontal	171	1.95	-	28.40	2.82	-
AV	2.4144G	104.36	Inf	-Inf	73.15	3	Horizontal	171	1.95	-	28.40	2.81	-

802.11ax HEW20_Nss1,(MCS0)_2TX

2437MHz_TX

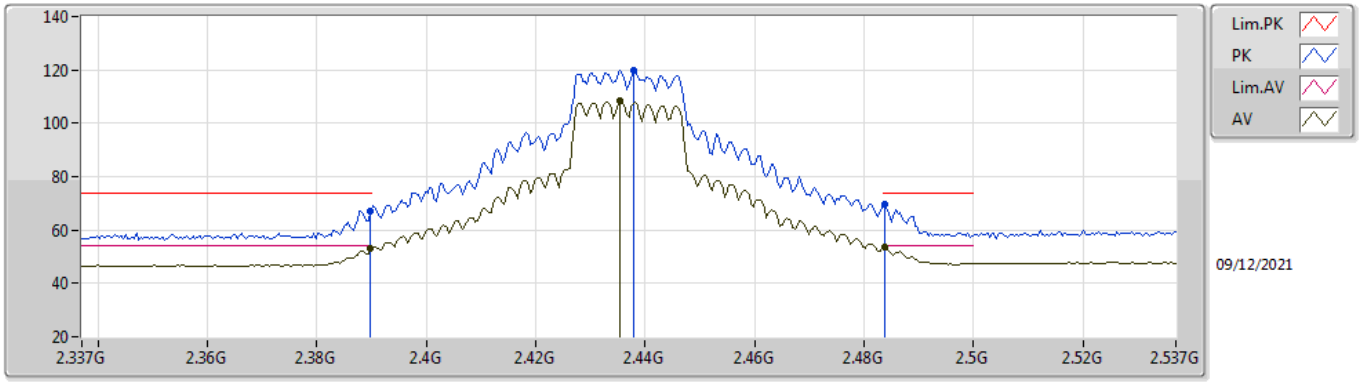


EUT Z_2TX
Setting 83
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3898G	66.36	74.00	-7.64	35.19	3	Vertical	115	1.79	-	28.38	2.79	-
AV	2.3898G	50.94	54.00	-3.06	19.77	3	Vertical	115	1.79	-	28.38	2.79	-
PK	2.4378G	116.23	Inf	-Inf	84.99	3	Vertical	115	1.79	-	28.40	2.84	-
AV	2.4354G	104.70	Inf	-Inf	73.46	3	Vertical	115	1.79	-	28.40	2.84	-
PK	2.4842G	67.14	74.00	-6.86	35.72	3	Vertical	115	1.79	-	28.54	2.88	-
AV	2.4838G	52.17	54.00	-1.83	20.75	3	Vertical	115	1.79	-	28.54	2.88	-

802.11ax HEW20_Nss1,(MCS0)_2TX

2437MHz_TX

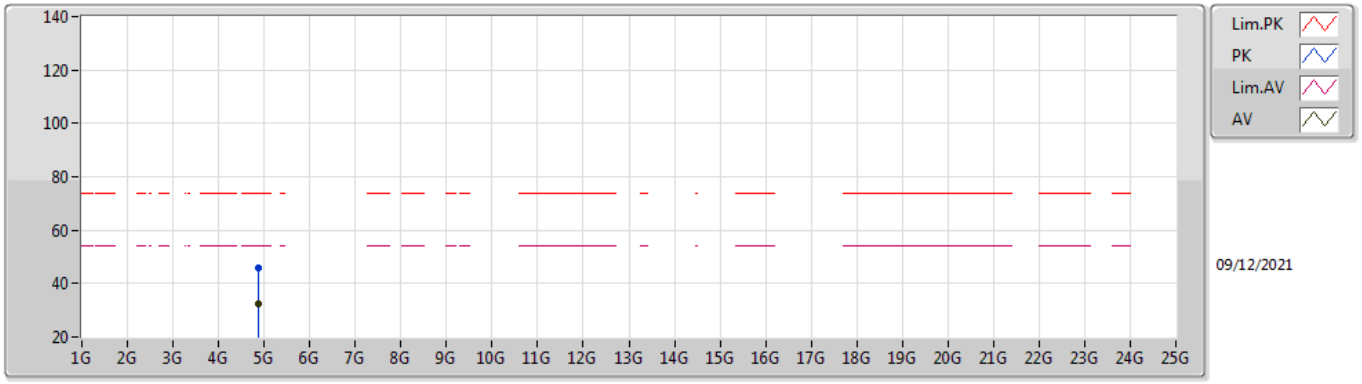


EUT Z_2TX
Setting 83
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3898G	67.18	74.00	-6.82	36.01	3	Horizontal	171	1.98	-	28.38	2.79	-
AV	2.3898G	52.90	54.00	-1.10	21.73	3	Horizontal	171	1.98	-	28.38	2.79	-
PK	2.4378G	119.94	Inf	-Inf	88.70	3	Horizontal	171	1.98	-	28.40	2.84	-
AV	2.4354G	108.23	Inf	-Inf	76.99	3	Horizontal	171	1.98	-	28.40	2.84	-
PK	2.4838G	69.43	74.00	-4.57	38.01	3	Horizontal	171	1.98	-	28.54	2.88	-
AV	2.4838G	53.39	54.00	-0.61	21.97	3	Horizontal	171	1.98	-	28.54	2.88	-

802.11ax HEW20_Nss1,(MCS0)_2TX

2437MHz_TX

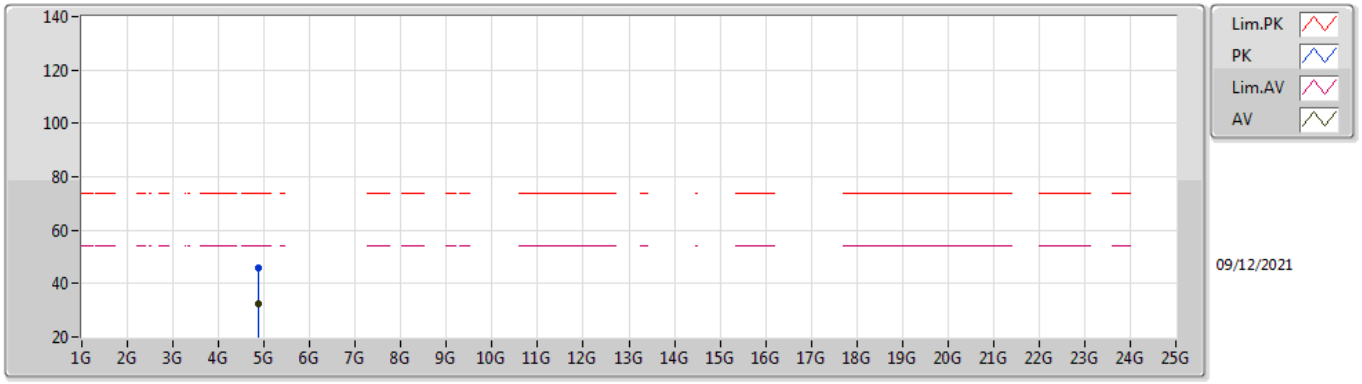


EUT X_2TX
Setting 83
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.87872G	46.05	74.00	-27.95	40.19	3	Vertical	308	2.03	-	32.96	5.10	32.20
AV	4.8739G	32.56	54.00	-21.44	26.72	3	Vertical	308	2.03	-	32.95	5.10	32.21

802.11ax HEW20_Nss1,(MCS0)_2TX

2437MHz_TX

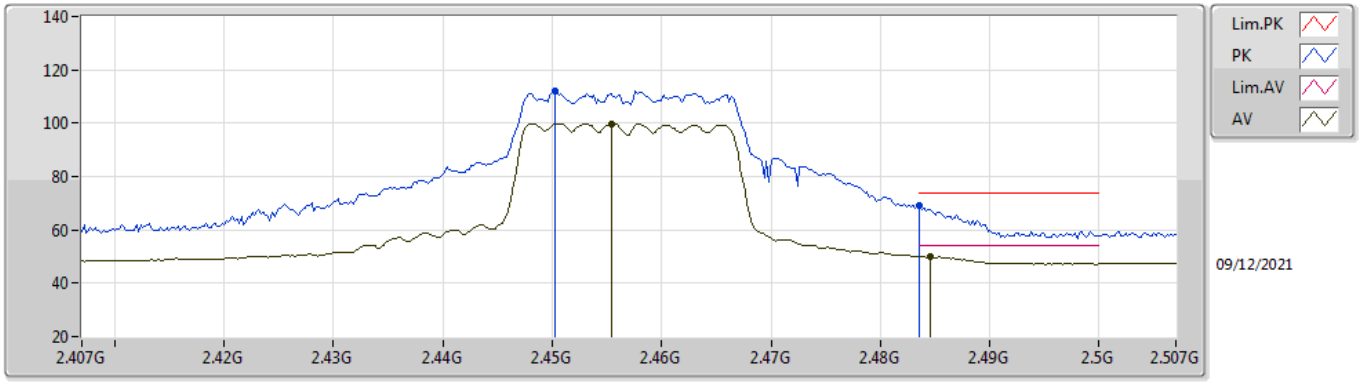


EUT X_2TX
Setting 83
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.87322G	45.95	74.00	-28.05	40.11	3	Horizontal	314	1.04	-	32.95	5.10	32.21
AV	4.8739G	32.33	54.00	-21.67	26.49	3	Horizontal	314	1.04	-	32.95	5.10	32.21

802.11ax HEW20_Nss1,(MCS0)_2TX

2457MHz_TX

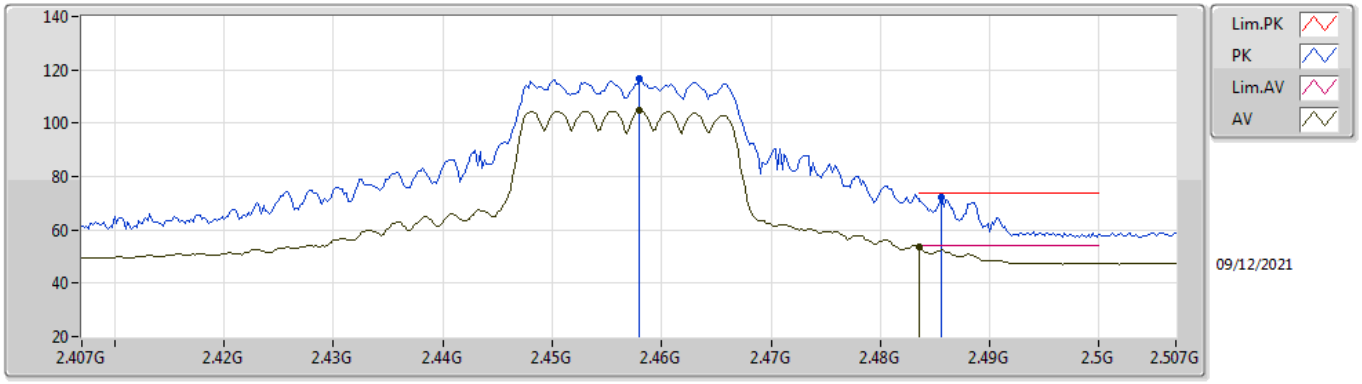


EUT Z_2TX
Setting 70
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.4502G	112.07	Inf	-Inf	80.82	3	Vertical	106	2.06	-	28.40	2.85	-
AV	2.4554G	99.87	Inf	-Inf	68.59	3	Vertical	106	2.06	-	28.42	2.86	-
PK	2.4836G	68.95	74.00	-5.05	37.54	3	Vertical	106	2.06	-	28.53	2.88	-
AV	2.4846G	50.02	54.00	-3.98	18.60	3	Vertical	106	2.06	-	28.54	2.88	-

802.11ax HEW20_Nss1,(MCS0)_2TX

2457MHz_TX

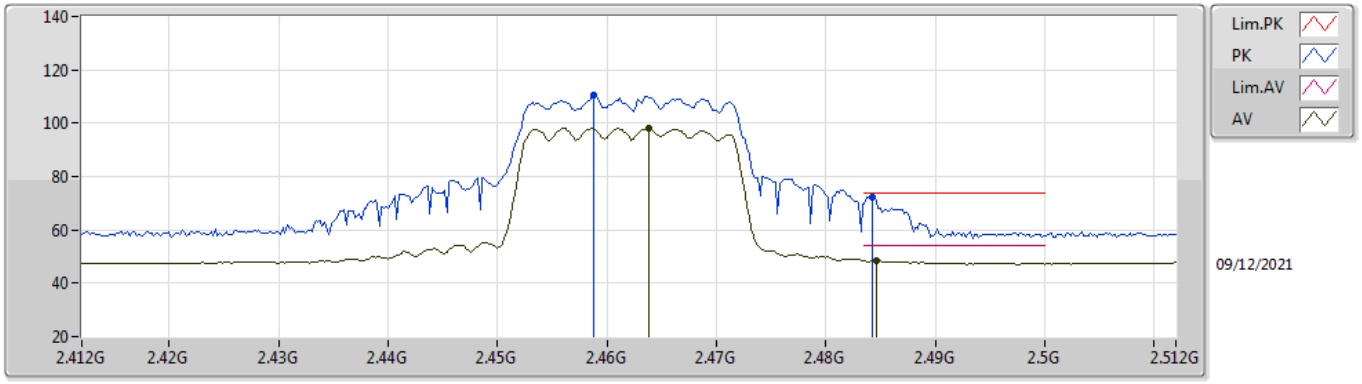


EUT Z_2TX
Setting 70
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.458G	116.67	Inf	-Inf	85.38	3	Horizontal	170	1.91	-	28.43	2.86	-
AV	2.458G	104.67	Inf	-Inf	73.38	3	Horizontal	170	1.91	-	28.43	2.86	-
PK	2.4856G	72.09	74.00	-1.91	40.66	3	Horizontal	170	1.91	-	28.54	2.89	-
AV	2.4835G	53.52	54.00	-0.48	22.11	3	Horizontal	170	1.91	-	28.53	2.88	-

802.11ax HEW20_Nss1,(MCS0)_2TX

2462MHz_TX

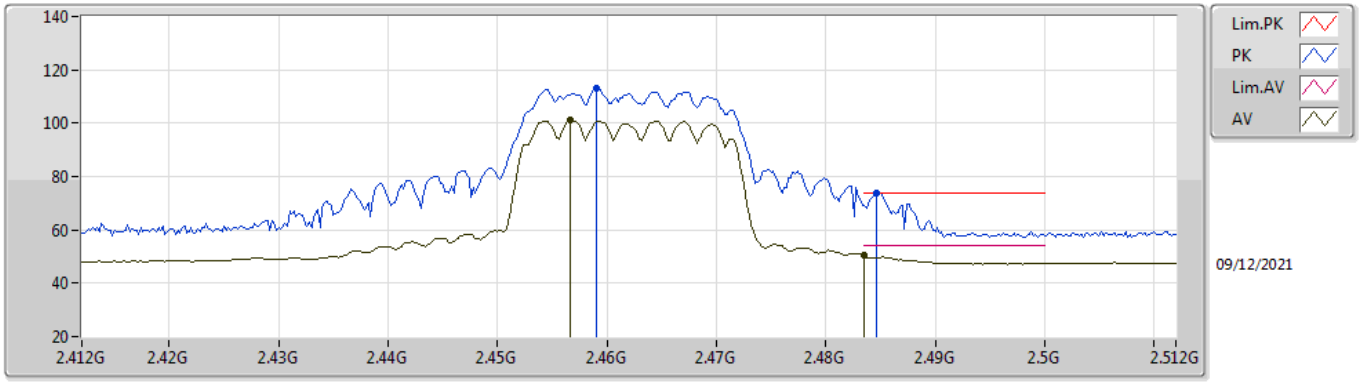


EUT Z_2TX
Setting 57
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.4588G	110.64	Inf	-Inf	79.34	3	Vertical	44	1.80	-	28.44	2.86	-
AV	2.4638G	98.06	Inf	-Inf	66.74	3	Vertical	44	1.80	-	28.46	2.86	-
PK	2.4842G	72.49	74.00	-1.51	41.07	3	Vertical	44	1.80	-	28.54	2.88	-
AV	2.4846G	48.62	54.00	-5.38	17.20	3	Vertical	44	1.80	-	28.54	2.88	-

802.11ax HEW20_Nss1,(MCS0)_2TX

2462MHz_TX

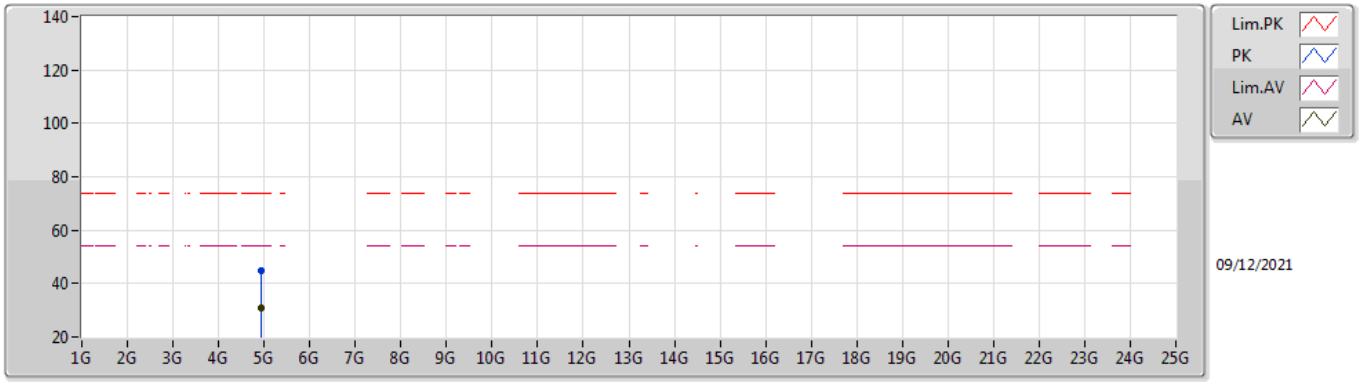


EUT Z_2TX
Setting 57
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.459G	113.28	Inf	-Inf	81.98	3	Horizontal	174	2.11	-	28.44	2.86	-
AV	2.4566G	101.20	Inf	-Inf	69.91	3	Horizontal	174	2.11	-	28.43	2.86	-
PK	2.4846G	73.57	74.00	-0.43	42.15	3	Horizontal	174	2.11	-	28.54	2.88	-
AV	2.4835G	50.42	54.00	-3.58	19.01	3	Horizontal	174	2.11	-	28.53	2.88	-

802.11ax HEW20_Nss1,(MCS0)_2TX

2462MHz_TX

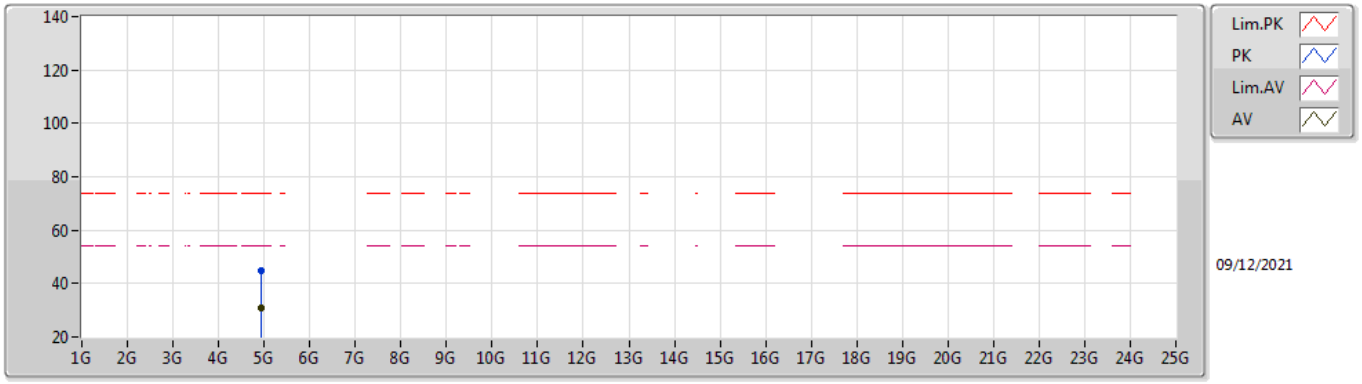


EUT X_2TX
Setting 57
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.92504G	44.59	74.00	-29.41	38.53	3	Vertical	205	1.31	-	33.15	5.10	32.19
AV	4.92518G	31.12	54.00	-22.88	25.06	3	Vertical	205	1.31	-	33.15	5.10	32.19

802.11ax HEW20_Nss1,(MCS0)_2TX

2462MHz_TX



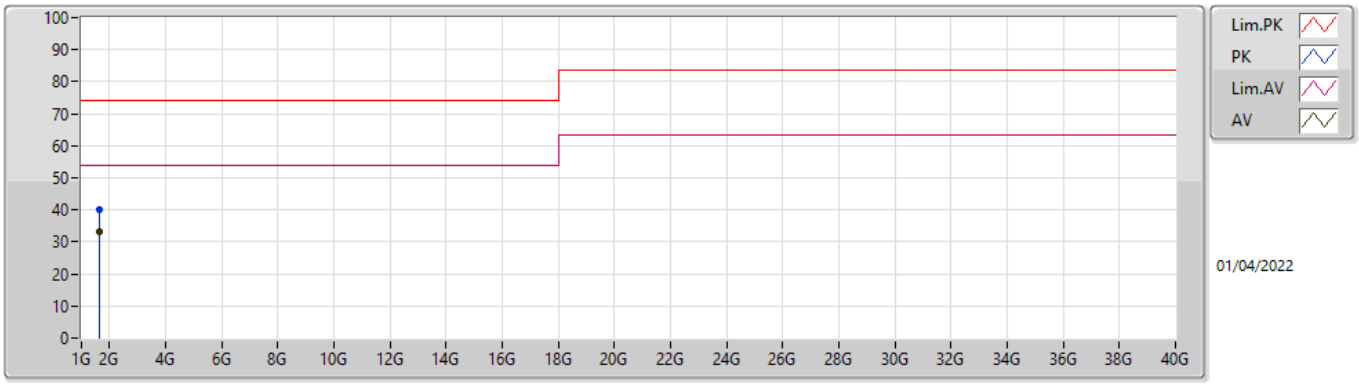
EUT X_2TX
Setting 57
02-B-G-2

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.92466G	44.86	74.00	-29.14	38.80	3	Horizontal	326	2.49	-	33.15	5.10	32.19
AV	4.92366G	30.91	54.00	-23.09	24.86	3	Horizontal	326	2.49	-	33.14	5.10	32.19

Summary

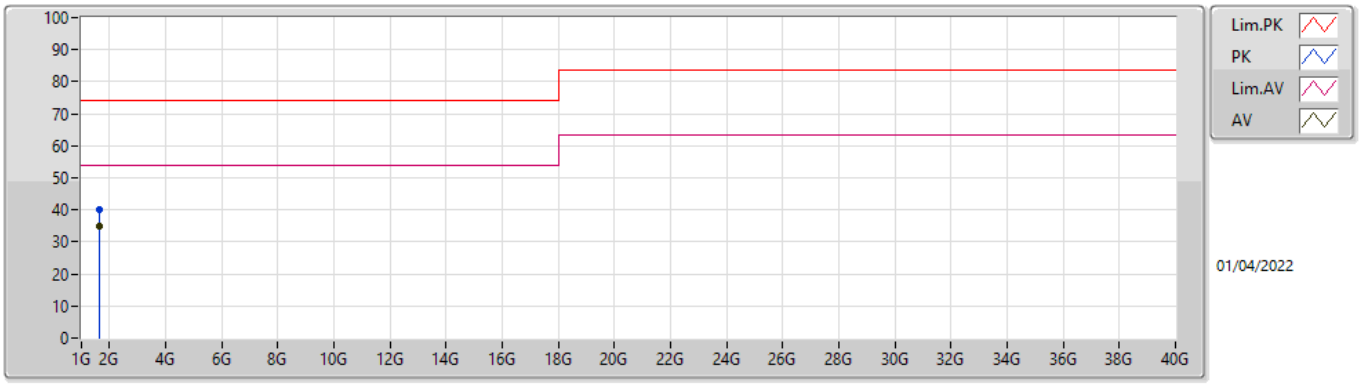
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	AV	1.62495G	34.81	54.00	-19.19	Horizontal

Mode 1



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
PK	1.62523G	39.97	74.00	-34.03	-7.87	3	Vertical	188	1.12	-	47.84	25.45	4.04	37.36
AV	1.6248G	33.22	54.00	-20.78	-7.87	3	Vertical	188	1.12	"Worst"	41.09	25.45	4.04	37.36

Mode 1



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
PK	1.62497G	40.03	74.00	-33.97	-7.87	3	Horizontal	330	1.10	-	47.90	25.45	4.04	37.36
AV	1.62495G	34.81	54.00	-19.19	-7.87	3	Horizontal	330	1.10	"Worst"	42.68	25.45	4.04	37.36