



RADIO TEST REPORT

FCC ID : RAXAIOS7
Equipment : HEOS 7.0 Platform Module
Brand Name : Arcadyan
Model Name : WN9722OAX22-DM (AIOS7.0)
Applicant : Arcadyan Technology Corporation
No.8, Sec.2, Guangfu Rd., Hsinchu, 30071 Taiwan
Manufacturer : Arcadyan Technology Corporation
No.8, Sec.2, Guangfu Rd., Hsinchu, 30071 Taiwan
Standard : 47 CFR FCC Part 15.247

The product was received on Feb. 02, 2023, and testing was started from Feb. 10, 2023 and completed on Mar. 08, 2023. We, Sporton International Inc. Hsinchu Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

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



Approved by: Sam Chen

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



Table of Contents

History of this test report.....3

Summary of Test Result.....4

1 General Description5

1.1 Information.....5

1.2 Applicable Standards9

1.3 Testing Location Information9

1.4 Measurement Uncertainty9

2 Test Configuration of EUT10

2.1 Test Channel Mode10

2.2 The Worst Case Measurement Configuration11

2.3 EUT Operation during Test12

2.4 Accessories12

2.5 Support Equipment.....13

2.6 Test Setup Diagram14

3 Transmitter Test Result17

3.1 AC Power-line Conducted Emissions17

3.2 DTS Bandwidth.....19

3.3 Maximum Conducted Output Power20

3.4 Power Spectral Density23

3.5 Emissions in Non-restricted Frequency Bands25

3.6 Emissions in Restricted Frequency Bands.....26

4 Test Equipment and Calibration Data30

Appendix A. Test Results of AC Power-line Conducted Emissions

Appendix B. Test Results of DTS Bandwidth

Appendix C. Test Results of Maximum Conducted Output Power

Appendix D. Test Results of Power Spectral Density

Appendix E. Test Results of Emissions in Non-restricted Frequency Bands

Appendix F. Test Results of Emissions in Restricted Frequency Bands

Appendix G. Test Photos

Appendix H. Photographs of EUT



History of this test report

Report No.	Version	Description	Issued Date
FR320110AA	01	Initial issue of report	Oct. 19, 2023
FR320110AA	02	Updating Test Result on Appendix F.	Nov. 06, 2023



Summary of Test Result

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

Conformity Assessment Condition:

1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. The measurement uncertainty please refer to each test result in the chapter "Measurement Uncertainty".

Disclaimer:

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

Reviewed by: **Sam Chen**
Report Producer: **Cathy Chiu**



1 General Description

1.1 Information

1.1.1 RF General Information

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

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

Note:

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



1.1.2 Antenna Information

Set	Ant.	Port	Brand	Model Name	Antenna Type	Connector	Gain (dBi)			
							2.4GHz	5GHz	6GHz	Bluetooth
1	1	1	WIESON	ARY196-0383-005-00	Dipole Antenna	I-PEX	-	-	-	2.1
	2	1	WIESON	ARY196-0383-006-00	Dipole Antenna	I-PEX	2.2	2.7	2.8	-
	3	2	WIESON	ARY196-0383-007-00	Dipole Antenna	I-PEX	1.7	1.6	1.7	-
2	1	1	WIESON	ARY196-0383-008-00	Dipole Antenna	I-PEX	-	-	-	1.7
	2	1	WIESON	ARY196-0383-009-00	Dipole Antenna	I-PEX	2.0	2.2	2.3	-
	3	2	WIESON	ARY196-0383-010-00	Dipole Antenna	I-PEX	1.1	1.0	0.9	-

Note1 : The above information was declared by manufacturer.

Note2: The EUT has two sets of antennas and there are three antennas for each set.

Set 1~2 are the same type antenna. Only the highest gain Set 1 antenna was selected to test and record in this report.

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 :

$$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$$

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

$$g_{j,k} = (NSS1(g1,1) + NSS1(g1,2))^2$$

$$DG = 10 \log[(NSS1(g1,1) + NSS1(g1,2))^2 / N_{ANT}] \Rightarrow 10 \log[(10^{G1/20} + 10^{G2/20})^2 / N_{ANT}]$$

Where ;

$$2.4G \quad G1 = 2.2 \text{ dBi} ; G2 = 1.7 \text{ dBi} ; DG = 4.96 \text{ dBi}$$

$$5G \quad G1 = 2.7 \text{ dBi} ; G2 = 1.6 \text{ dBi} ; DG = 5.18 \text{ dBi}$$

$$6G \quad G1 = 2.8 \text{ dBi} ; G2 = 1.7 \text{ dBi} ; DG = 5.28 \text{ dBi}$$

For 2.4GHz function:

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

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

Port 1 and Port 2 could transmit/receive simultaneously.

For 5GHz function:

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

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

Port 1 and Port 2 could transmit/receive simultaneously.

For 6GHz function:

For IEEE 802.11ax (2TX/2RX):

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

Port 1 and Port 2 could transmit/receive simultaneously.

For Bluetooth function (1TX/1RX):

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



1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11b	0.995	0.02	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11g	0.669	1.75	1.395m	1k
802.11ax HEW20	0.982	0.08	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW40	0.721	1.42	1.969m	1k

Note:

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

1.1.4 EUT Operational Condition

EUT Power Type	Form host system			
Beamforming Function	<input type="checkbox"/> With beamforming	<input checked="" type="checkbox"/> Without beamforming		
Function	<input checked="" type="checkbox"/> Point-to-multipoint	<input type="checkbox"/> Point-to-point		
Support RU	<input checked="" type="checkbox"/> Full RU	<input type="checkbox"/> Partial RU		
Test Software Version	DOS [ver 6.1.7601]			

Note: The above information was declared by manufacturer.



1.2 Applicable Standards

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

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

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

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

1.3 Testing Location Information

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

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
RF Conducted	TH02-CB	Mason Chan	21.7~23.4 / 60~63	Feb. 17, 2023~ Feb. 21, 2023
Radiated (Below 1GHz)	03CH05-CB	Chris Li	20.2~21.3 / 56~57	Mar. 04, 2023
Radiated (Above 1GHz)	03CH03-CB	Stim Sung	22.4-23.5 / 55-58	Feb. 10, 2023~ Feb. 17, 2023
AC Conduction	CO01-CB	Dean Chang	22~23 / 50~51	Mar. 08, 2023

1.4 Measurement Uncertainty

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

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	3.4 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	3.4 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.6 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	5.2 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.7 dB	Confidence levels of 95%
Conducted Emission	3.2 dB	Confidence levels of 95%
Output Power Measurement	0.8 dB	Confidence levels of 95%
Power Density Measurement	3.2 dB	Confidence levels of 95%
Bandwidth Measurement	2.0 %	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

Mode	Power Setting
802.11b_Nss1,(1Mbps)_2TX	-
2412MHz	14
2437MHz	15
2462MHz	15
802.11g_Nss1,(6Mbps)_2TX	-
2412MHz	15
2437MHz	15
2462MHz	15
802.11ax HEW20_Nss1,(MCS0)_2TX	-
2412MHz	16
2437MHz	16
2462MHz	16
802.11ax HEW40_Nss1,(MCS0)_2TX	-
2422MHz	14
2437MHz	15
2452MHz	12.5

Note:

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



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 with antenna set 1 + 2.4GHz + Bluetooth
2	EUT with antenna set 1 + 5GHz + Bluetooth
3	EUT with antenna set 1 + 6GHz + Bluetooth
For operating mode 2 is the worst case and it was record in this test report.	

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

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emissions in Restricted Frequency Bands
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	Normal Link
After evaluating, the worst case was found at Y axis, thus the measurement will follow this same test configuration.	
1	EUT at Y axis with antenna set 1 + 2.4GHz + Bluetooth
2	EUT at Y axis with antenna set 1 + 5GHz + Bluetooth
3	EUT at Y axis with antenna set 1 + 6GHz + Bluetooth
For operating mode 1 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX
After evaluating, the worst case was found at X axis, thus the measurement will follow this same test configuration.	
1	EUT at X axis with antenna set 1 + 2.4GHz



The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	WLAN 2.4GHz + Bluetooth
2	WLAN 5GHz + Bluetooth
3	WLAN 6GHz + Bluetooth
Refer to Sporton Test Report No.: FA320110 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

N/A



2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Test Fixture	Arcadyan	N0IDM9922001J	N/A
B	LAN NB	DELL	E6430	N/A
C	BT Test Set	Anritsu	MT8852B	N/A
D	WLAN AP	TP-Link	Archer AX10	N/A
E	WLAN NB	DELL	E6430	N/A
F	Test Fixture	MASIMO HEOS	AIOS7 LPP	N/A

For Radiated (below 1GHz):

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Test Fixture	Arcadyan	N0IDM9922001J	N/A
B	NB	Lenovo	L440	N/A
C	BT Test Set	Anritsu	MT8852B	N/A
D	WLAN AP	LINKSYS	DIVO	N/A
E	NB	DELL	E4300	N/A
F	Test Fixture	MASIMO HEOS	AIOS7 LPP	N/A

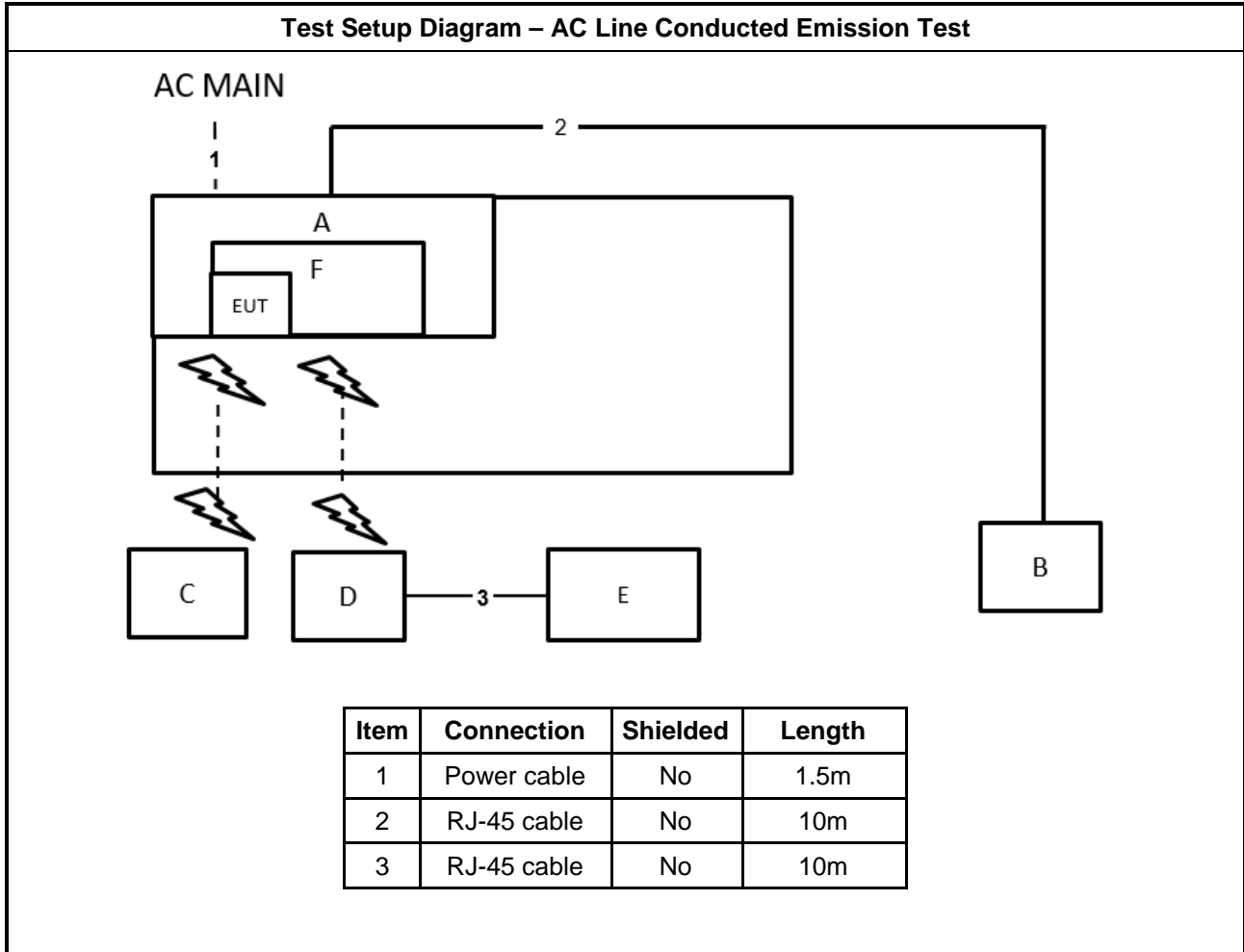
For Radiated (above 1GHz):

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E4300	N/A
B	Test Fixture	Arcadyan	N0IDM9922001J	N/A
C	Test Fixture	MASIMO HEOS	AIOS7 LPP	N/A

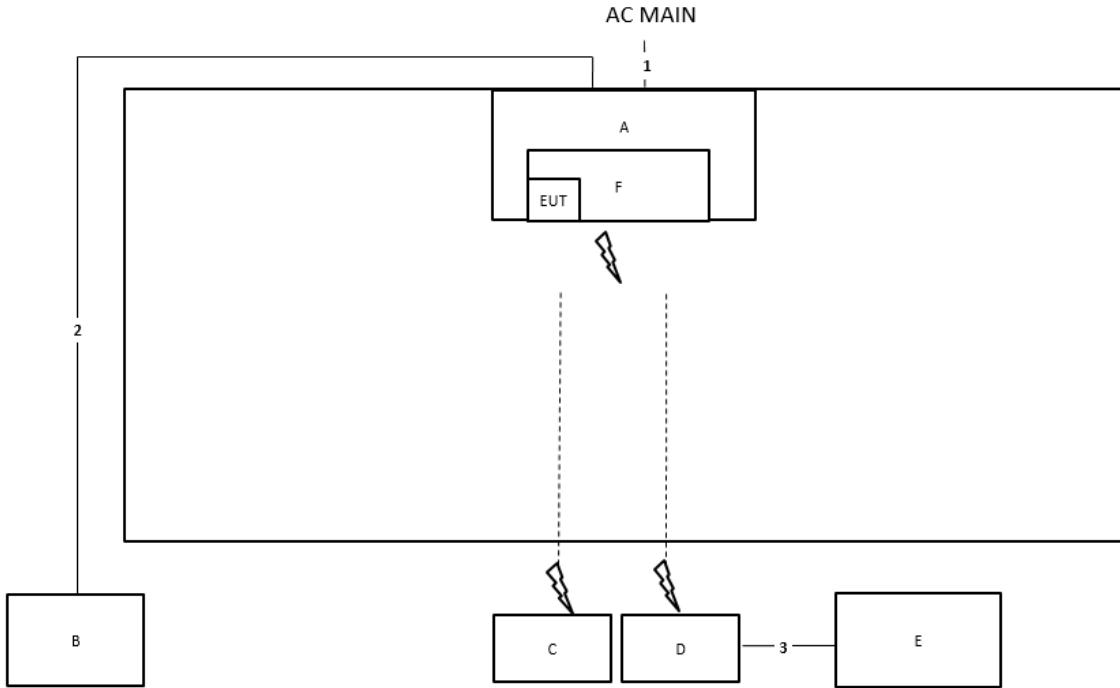
For RF Conducted:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E4300	N/A
B	Test Fixture	MASIMO HEOS	AIOS7 LPP	N/A
C	Test Fixture	Arcadyan	N0IDM9922001J	N/A

2.6 Test Setup Diagram

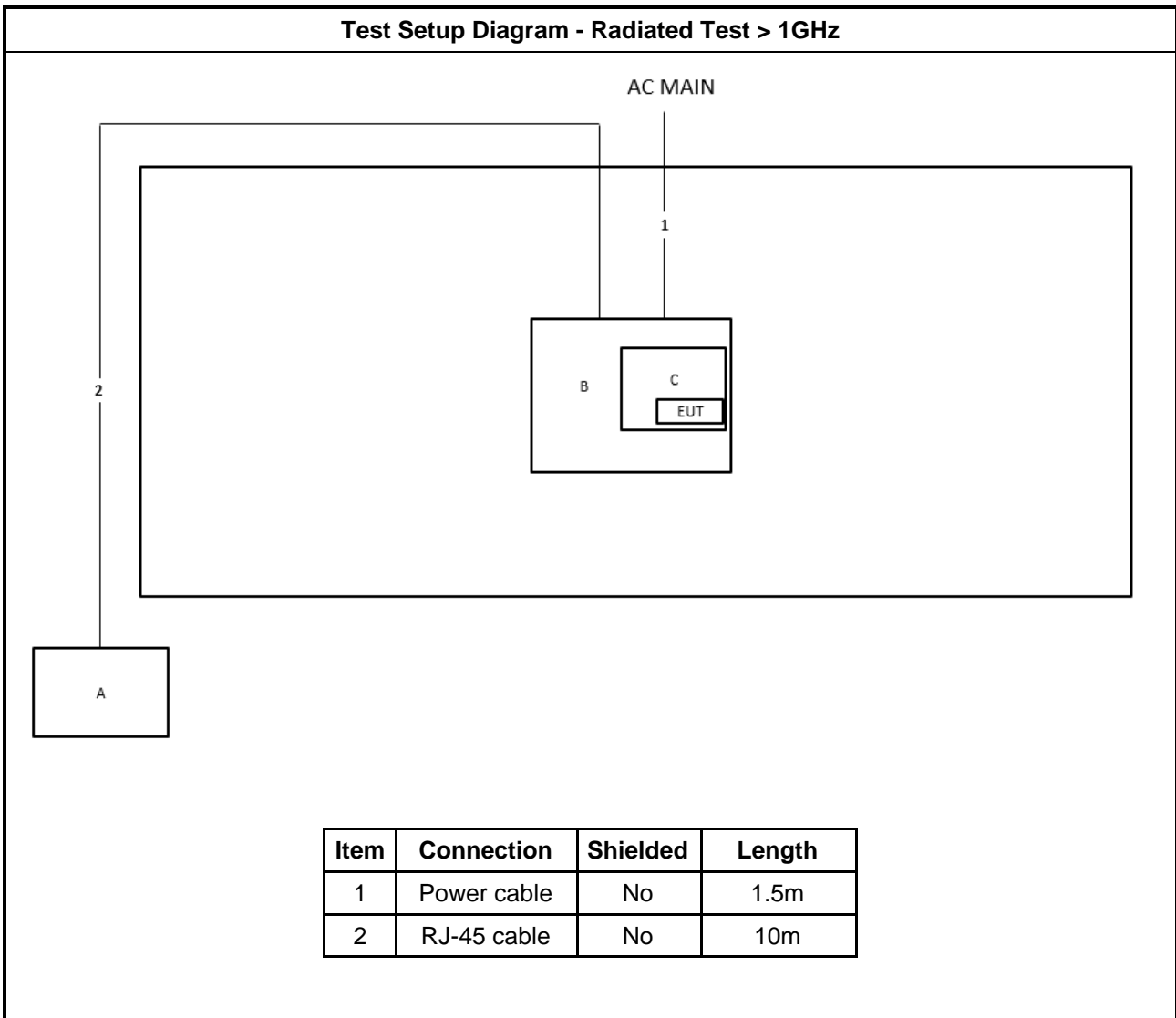


Test Setup Diagram - Radiated Test < 1GHz



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

Test Setup Diagram - Radiated Test > 1GHz





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.

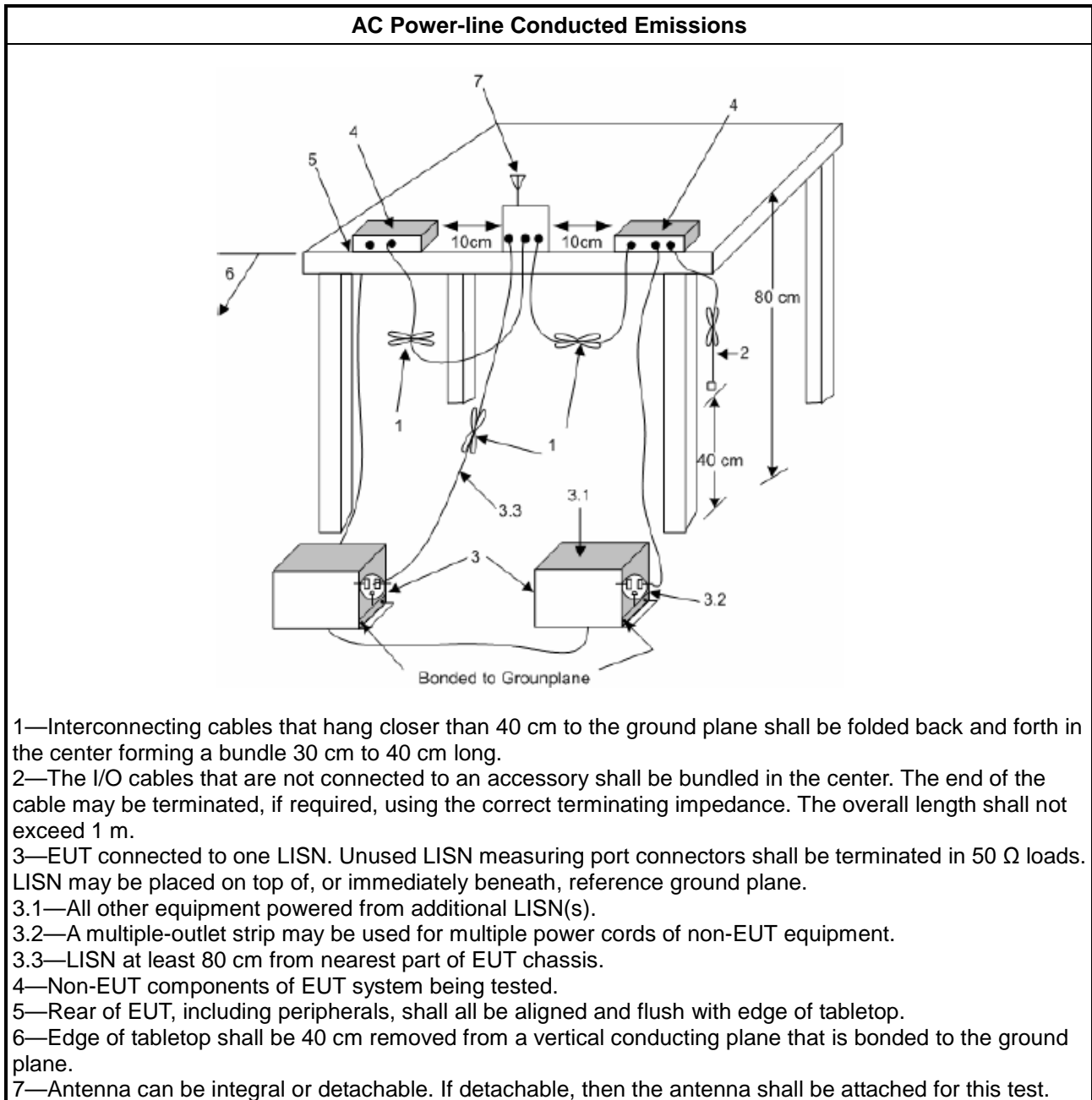
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

Test Method
<input checked="" type="checkbox"/> Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

3.1.4 Test Setup



3.1.5 Measurement Results Calculation

The measured Level is calculated using:

- 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:
<ul style="list-style-type: none"> ▪ 6 dB bandwidth \geq 500 kHz.

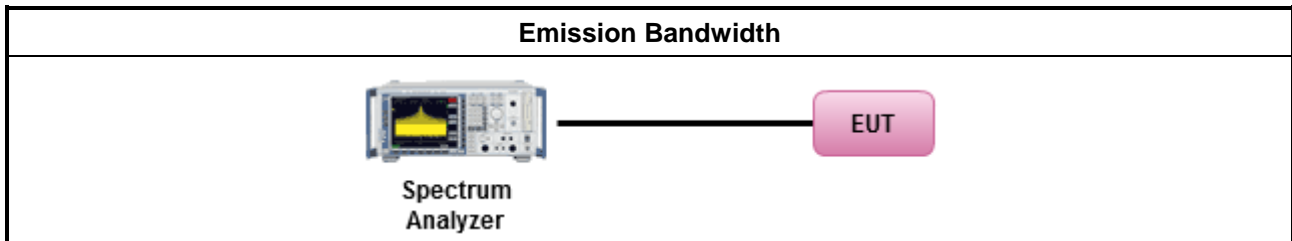
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method
<ul style="list-style-type: none"> ▪ For the emission bandwidth shall be measured using one of the options below:
<input checked="" type="checkbox"/> Refer as FCC KDB 558074, clause 8.2 & C63.10 clause 11.8.1 Option 1 for 6 dB bandwidth measurement.
<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.2 & C63.10 clause 11.8.2 Option 2 for 6 dB bandwidth measurement.
<input type="checkbox"/> Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B



3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit	
	<ul style="list-style-type: none"> ▪ If $G_{TX} \leq 6$ dBi, then $P_{Out} \leq 30$ dBm (1 W)
	<ul style="list-style-type: none"> ▪ Point-to-multipoint systems (P2M): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ dBm
	<ul style="list-style-type: none"> ▪ Point-to-point systems (P2P): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	<ul style="list-style-type: none"> ▪ Smart antenna system (SAS):
	<ul style="list-style-type: none"> - Single beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	<ul style="list-style-type: none"> - Overlap beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	<ul style="list-style-type: none"> - 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.	

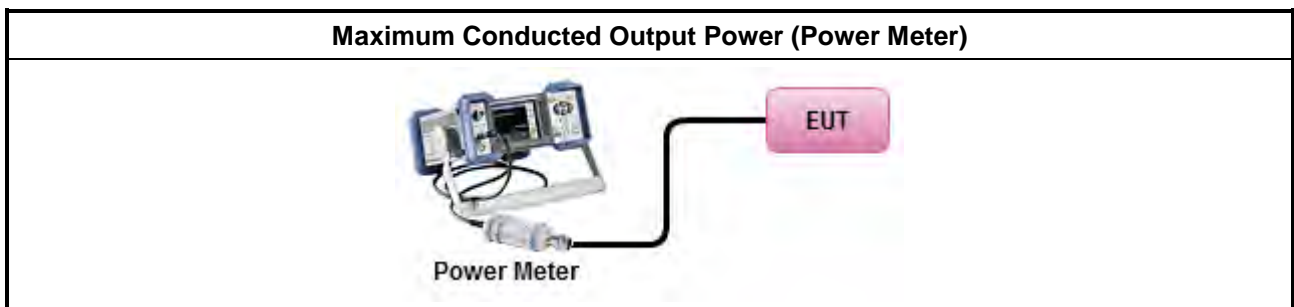
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> ▪ Maximum Peak Conducted Output Power 	
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.3.1.1 & C63.10 clause 11.9.1.1 (RBW ≥ EBW method).
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.3.1.3 & C63.10 clause 11.9.1.3 (peak power meter).
<ul style="list-style-type: none"> ▪ Maximum Conducted Output Power 	
[duty cycle ≥ 98% or external video / power trigger]	
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.2 Method AVGSA-1.
	<input type="checkbox"/> 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	
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.4 Method AVGSA-2.
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.5 Method AVGSA-2A (alternative)
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.6 Method AVGSA-3
	<input type="checkbox"/> 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)	
	<input type="checkbox"/> 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).
	<input checked="" type="checkbox"/> 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).
<ul style="list-style-type: none"> ▪ For conducted measurement. 	
<ul style="list-style-type: none"> ▪ 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. 	
<ul style="list-style-type: none"> ▪ If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$ 	

3.3.4 Test Setup





3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C



3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

Power Spectral Density Limit
<ul style="list-style-type: none"> Power Spectral Density (PSD) \leq 8 dBm/3kHz

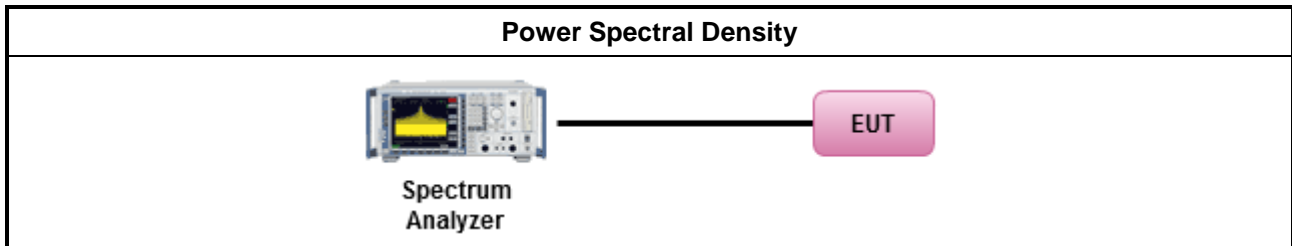
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

Test Method			
<ul style="list-style-type: none"> 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). 			
<input checked="" type="checkbox"/> Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10 Method Max. PSD.			
<ul style="list-style-type: none"> For conducted measurement. <ul style="list-style-type: none"> If The EUT supports multiple transmit chains using options given below: <table border="1"> <tbody> <tr> <td> <input checked="" type="checkbox"/> 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. </td> </tr> <tr> <td> <input type="checkbox"/> 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, </td> </tr> <tr> <td> <input type="checkbox"/> 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. </td> </tr> </tbody> </table> 	<input checked="" type="checkbox"/> 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.	<input type="checkbox"/> 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,	<input type="checkbox"/> 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.
<input checked="" type="checkbox"/> 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.			
<input type="checkbox"/> 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,			
<input type="checkbox"/> Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.			

3.4.4 Test Setup



3.4.5 Test Result of Power Spectral Density

Refer as Appendix D

3.5 Emissions in Non-restricted Frequency Bands

3.5.1 Emissions in Non-restricted Frequency Bands Limit

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

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

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

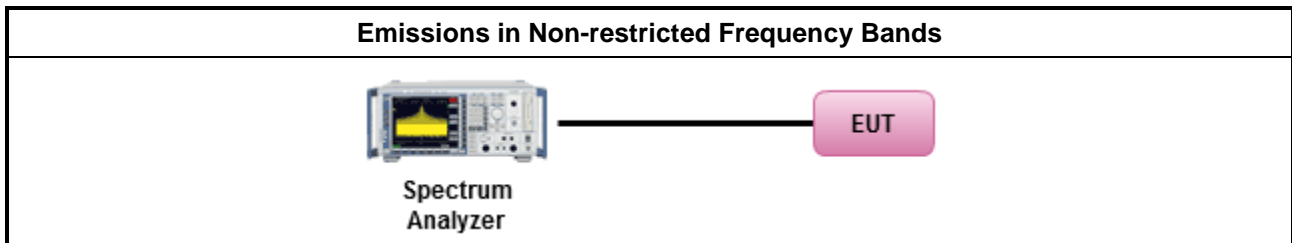
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

Test Method
<ul style="list-style-type: none"> Refer as FCC KDB 558074, clause 8.5 for unwanted emissions into non-restricted bands.

3.5.4 Test Setup



3.5.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix E



3.6 Emissions in Restricted Frequency Bands

3.6.1 Emissions in Restricted Frequency Bands Limit

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

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

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

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

3.6.2 Measuring Instruments

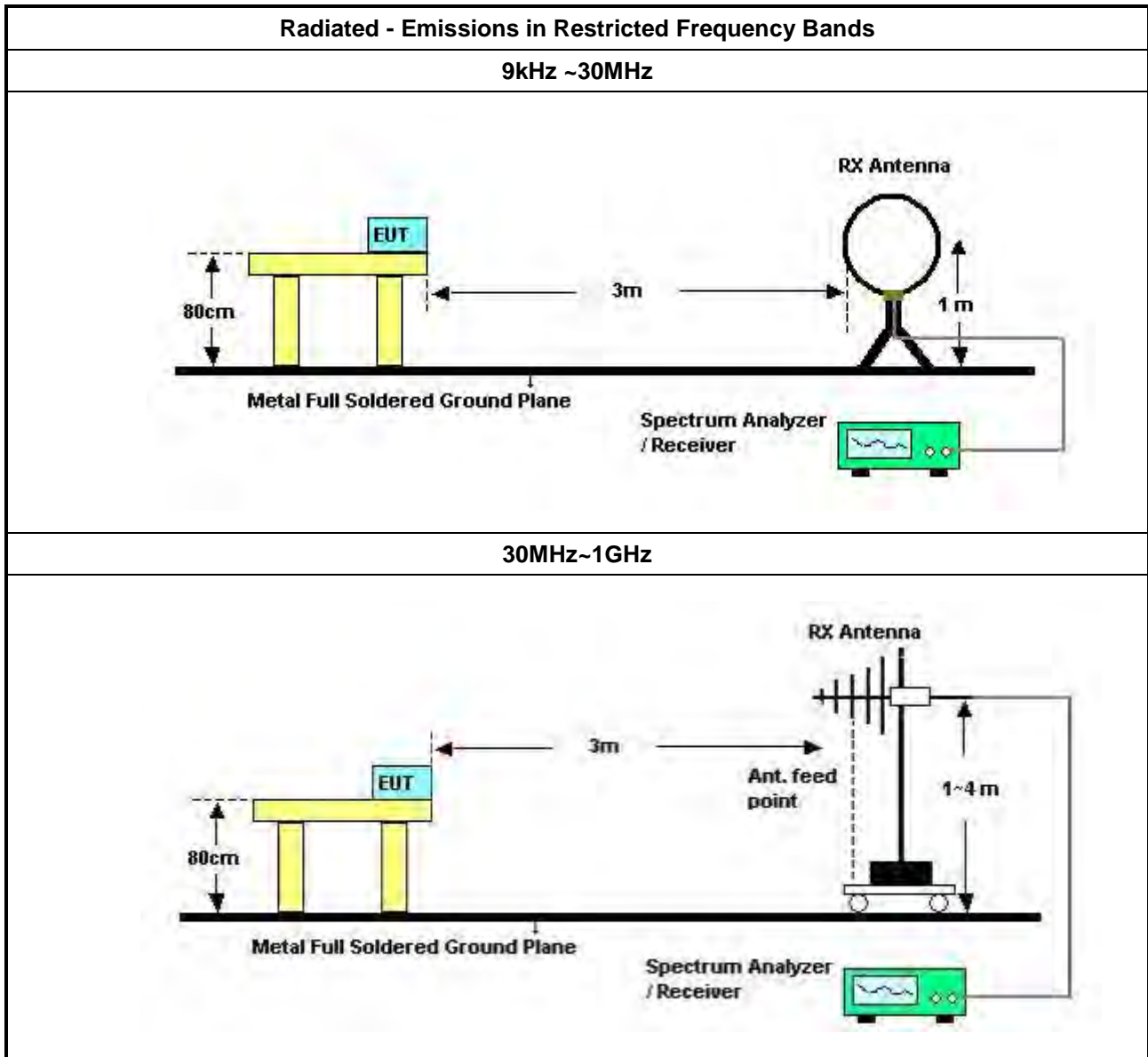
Refer a test equipment and calibration data table in this test report.

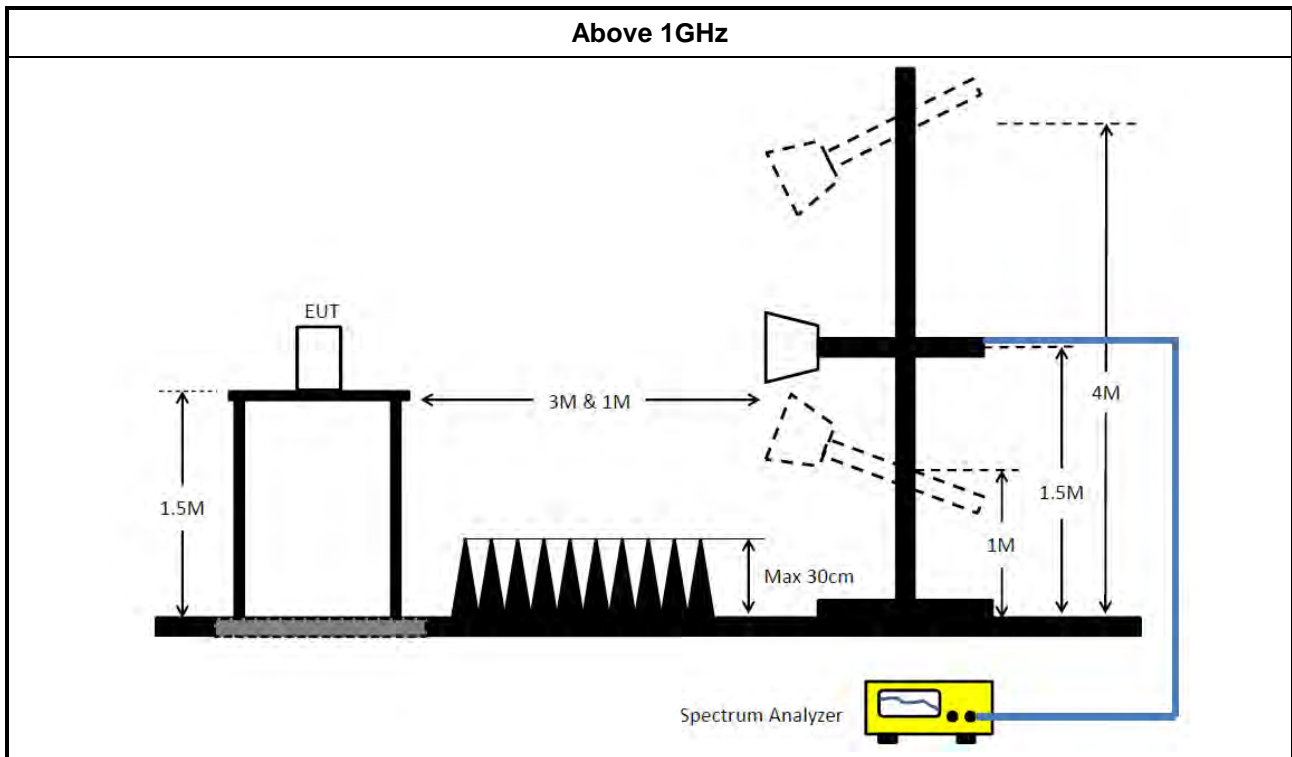


3.6.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> ▪ The average emission levels shall be measured in [duty cycle \geq 98 or duty factor]. 	
<ul style="list-style-type: none"> ▪ 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. 	
<ul style="list-style-type: none"> ▪ For the transmitter unwanted emissions shall be measured using following options below: 	
	<ul style="list-style-type: none"> ▪ Refer as FCC KDB 558074, clause 8.6 for unwanted emissions into restricted bands.
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.1(trace averaging for duty cycle \geq 98%).
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.2(trace averaging + duty factor).
	<input checked="" type="checkbox"/> Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.3(Reduced VBW \geq 1/T).
	<input type="checkbox"/> Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW \geq 1/T, where T is pulse time.
	<input type="checkbox"/> Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.
	<input checked="" type="checkbox"/> Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.4 measurement procedure peak limit.
<ul style="list-style-type: none"> ▪ For the transmitter band-edge emissions shall be measured using following options below: 	
	<ul style="list-style-type: none"> ▪ 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.
	<ul style="list-style-type: none"> ▪ Refer as FCC KDB 558074, clause 8.7 (ANSI C63.10, clause 6.10.6) for marker-delta method for band-edge measurements.
	<ul style="list-style-type: none"> ▪ 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).
	<ul style="list-style-type: none"> ▪ 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
	<ul style="list-style-type: none"> ▪ For FCC KDB 662911 The methodology described here may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance may be demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred.

3.6.4 Test Setup





3.6.5 Measurement Results Calculation

The measured Level is calculated using:

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

3.6.6 Emissions in Restricted Frequency Bands (Below 30MHz)

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

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

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

3.6.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F



4 Test Equipment and Calibration Data

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.4GHz	Feb. 20, 2023	Feb. 19, 2024	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-5 0-16-2	04083	150kHz ~ 100MHz	Feb. 16, 2023	Feb. 15, 2024	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Apr. 12, 2022	Apr. 11, 2023	Conduction (CO01-CB)
Pulse Limiter	Rohde&Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Feb. 09, 2023	Feb. 08, 2024	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	Oct. 18, 2022	Oct. 17, 2023	Conduction (CO01-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	May 14, 2022	May 13, 2023	Radiation (03CH05-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH05-CB	30 MHz ~ 1 GHz	Aug. 03, 2022	Aug. 02, 2023	Radiation (03CH05-CB)
Bilog Antenna with 6dB Attenuator	TESEQ & EMCI	CBL 6112D & N-6-06	35236 & AT-N0610	30MHz ~ 2GHz	Mar. 25, 2022	Mar. 24, 2023	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC330N	980331	20MHz ~ 3GHz	Apr. 26, 2022	Apr. 25, 2023	Radiation (03CH05-CB)
Spectrum Analyzer	R&S	FSP40	100304	9kHz ~ 40GHz	Mar. 14, 2022	Mar. 13, 2023	Radiation (03CH05-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	Jun. 17, 2022	Jun. 16, 2023	Radiation (03CH05-CB)
RF Cable-low	Woken	RG402	Low Cable-04+23	30MHz~1GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH05-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH05-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH03-CB	1GHz ~18GHz 3m	May 05, 2022	May 04, 2023	Radiation (03CH03-CB)
Horn Antenna	ETS-Lindgren	3115	6821	750MHz~18GHz	Feb. 03, 2023	Feb. 02, 2024	Radiation (03CH03-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 22, 2022	Aug. 21, 2023	Radiation (03CH03-CB)
Pre-Amplifier	Agilent	8449B	3008A02097	1GHz ~ 26.5GHz	Jul. 01, 2022	Jun. 30, 2023	Radiation (03CH03-CB)
Pre-Amplifier	SGH	SGH184	20221107-3	18GHz ~ 40GHz	Nov. 16, 2022	Nov. 15, 2023	Radiation (03CH03-CB)
Spectrum Analyzer	R&S	FSP40	100019	9kHz ~ 40GHz	Jun. 10, 2022	Jun. 09, 2023	Radiation (03CH03-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-20+29	1GHz ~ 18GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-29	1GHz ~ 18GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH03-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH03-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH03-CB)
High Cable	Woken	WCA0929M	40G#6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH03-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH03-CB)
Spectrum analyzer	R&S	FSV40	101027	9kHz~40GHz	Aug. 15, 2022	Aug. 14, 2023	Conducted (TH02-CB)
Power Sensor	Anritsu	MA2411B	1126203	300MHz~40GHz	Oct. 17, 2022	Oct. 16, 2023	Conducted (TH02-CB)
Power Meter	Anritsu	ML2495A	1210004	300MHz~40GHz	Oct. 17, 2022	Oct. 16, 2023	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-01	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-02	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-03	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-04	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-05	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH02-CB)
Switch	SPTCB	SP-SWI	SWI-02	1 GHz ~26.5 GHz	Oct. 04, 2022	Oct. 03, 2023	Conducted (TH02-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH02-CB)

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

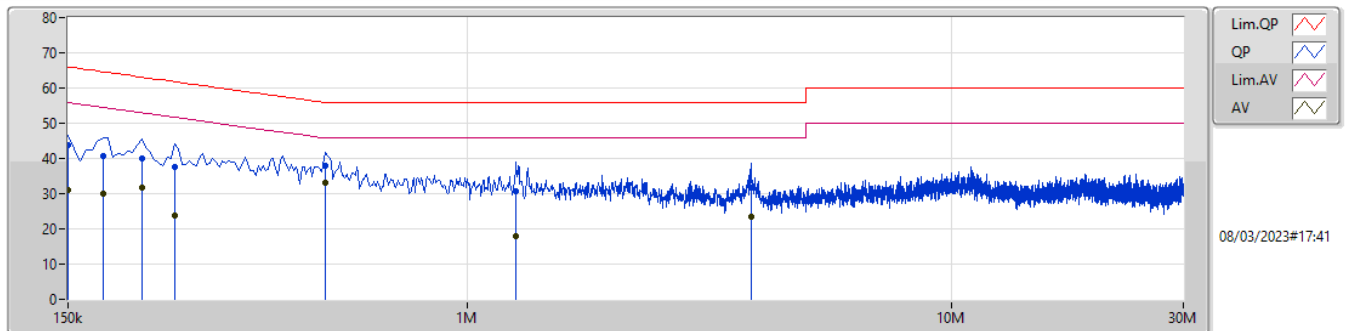
NCR means Non-Calibration required.



Summary

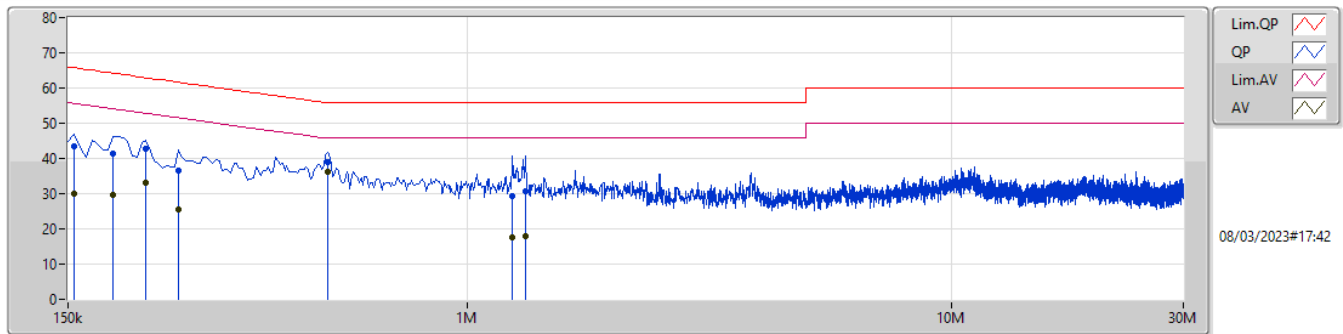
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 2	Pass	AV	514.5k	36.10	46.00	-9.90	Neutral

Mode 2



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	150k	43.75	66.00	-22.25	9.97	Line	-	33.78	0.06	0.04	9.87
AV	150k	31.01	56.00	-24.99	9.97	Line	-	21.04	0.06	0.04	9.87
QP	177k	40.69	64.62	-23.93	9.97	Line	-	30.72	0.06	0.04	9.87
AV	177k	30.01	54.62	-24.61	9.97	Line	-	20.04	0.06	0.04	9.87
QP	213k	40.13	63.09	-22.96	9.96	Line	-	30.17	0.06	0.04	9.86
AV	213k	31.85	53.09	-21.24	9.96	Line	-	21.89	0.06	0.04	9.86
QP	249k	37.57	61.79	-24.22	9.98	Line	-	27.59	0.06	0.05	9.87
AV	249k	23.87	51.79	-27.92	9.98	Line	-	13.89	0.06	0.05	9.87
QP	510k	38.05	56.00	-17.95	10.01	Line	-	28.04	0.06	0.05	9.90
AV	510k	32.95	46.00	-13.05	10.01	Line	"Worst"	22.94	0.06	0.05	9.90
QP	1.262M	30.54	56.00	-25.46	10.04	Line	-	20.50	0.08	0.06	9.90
AV	1.262M	17.93	46.00	-28.07	10.04	Line	-	7.89	0.08	0.06	9.90
QP	3.854M	31.76	56.00	-24.24	10.13	Line	-	21.63	0.12	0.10	9.91
AV	3.854M	23.42	46.00	-22.58	10.13	Line	-	13.29	0.12	0.10	9.91

Mode 2



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	154.5k	43.42	65.75	-22.33	9.98	Neutral	-	33.44	0.07	0.04	9.87
AV	154.5k	30.13	55.75	-25.62	9.98	Neutral	-	20.15	0.07	0.04	9.87
QP	186k	41.28	64.20	-22.92	9.97	Neutral	-	31.31	0.07	0.04	9.86
AV	186k	29.79	54.20	-24.41	9.97	Neutral	-	19.82	0.07	0.04	9.86
QP	217.5k	42.83	62.92	-20.09	9.97	Neutral	-	32.86	0.07	0.04	9.86
AV	217.5k	33.18	52.92	-19.74	9.97	Neutral	-	23.21	0.07	0.04	9.86
QP	253.5k	36.61	61.64	-25.03	9.99	Neutral	-	26.62	0.07	0.05	9.87
AV	253.5k	25.54	51.64	-26.10	9.99	Neutral	-	15.55	0.07	0.05	9.87
QP	514.5k	38.95	56.00	-17.05	10.02	Neutral	-	28.93	0.07	0.05	9.90
AV	514.5k	36.10	46.00	-9.90	10.02	Neutral	"Worst"	26.08	0.07	0.05	9.90
QP	1.239M	29.48	56.00	-26.52	10.05	Neutral	-	19.43	0.09	0.06	9.90
AV	1.239M	17.66	46.00	-28.34	10.05	Neutral	-	7.61	0.09	0.06	9.90
QP	1.316M	30.52	56.00	-25.48	10.05	Neutral	-	20.47	0.09	0.06	9.90
AV	1.316M	17.76	46.00	-28.24	10.05	Neutral	-	7.71	0.09	0.06	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	8.075M	12.506M	12M5G1D	8.05M	12.316M
802.11g_Nss1,(6Mbps)_2TX	16.275M	16.65M	16M6D1D	15M	16.317M
802.11ax HEW20_Nss1,(MCS0)_2TX	18.55M	18.897M	18M9D1D	18M	18.801M
802.11ax HEW40_Nss1,(MCS0)_2TX	37.6M	37.687M	37M7D1D	36.85M	37.604M

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

Result

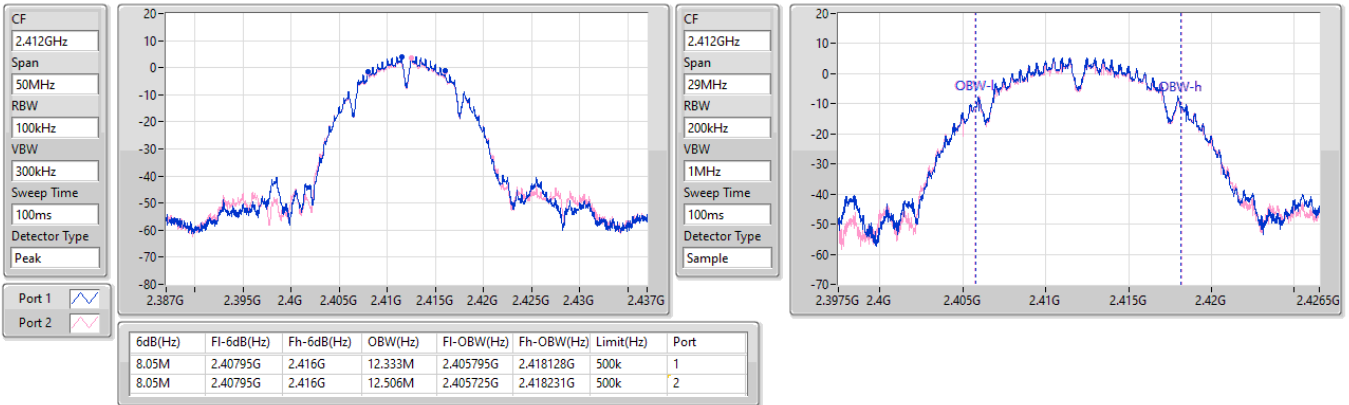
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	8.05M	12.333M	8.05M	12.506M
2437MHz	Pass	500k	8.05M	12.34M	8.075M	12.399M
2462MHz	Pass	500k	8.05M	12.316M	8.075M	12.357M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	15.1M	16.317M	15M	16.368M
2437MHz	Pass	500k	16.275M	16.529M	15.425M	16.629M
2462MHz	Pass	500k	15.875M	16.569M	15.75M	16.65M
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	18.375M	18.804M	18.4M	18.801M
2437MHz	Pass	500k	18M	18.877M	18.275M	18.88M
2462MHz	Pass	500k	18.55M	18.897M	18.5M	18.881M
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	36.9M	37.623M	37.25M	37.647M
2437MHz	Pass	500k	36.85M	37.609M	37M	37.687M
2452MHz	Pass	500k	37.5M	37.604M	37.6M	37.613M

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

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX
2412MHz

EBW

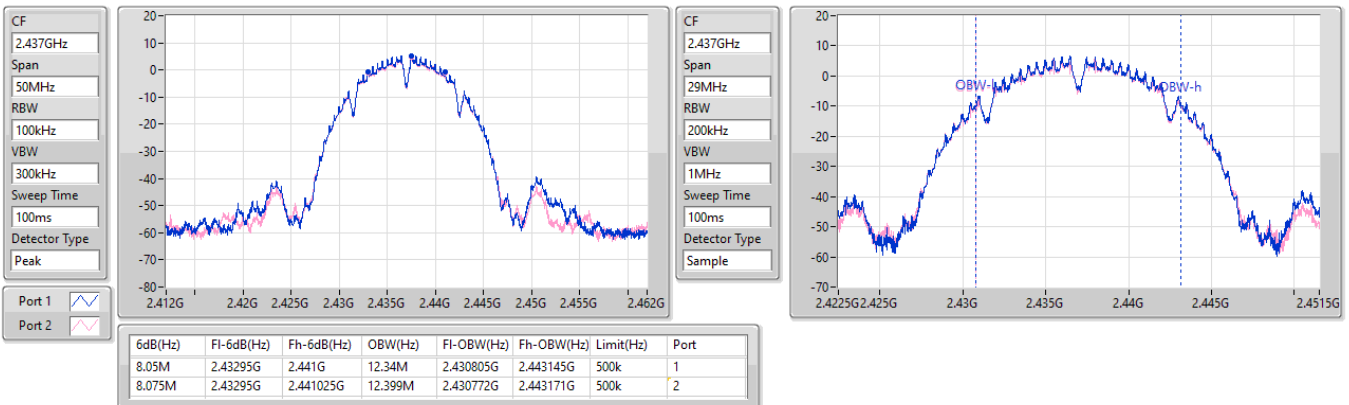
17/02/2023



2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX
2437MHz

EBW

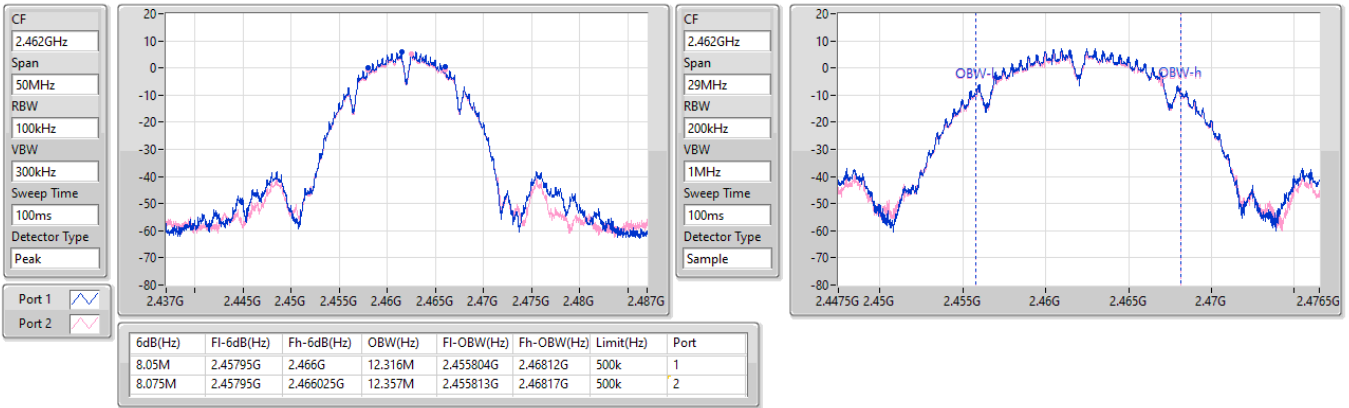
17/02/2023



2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX
2462MHz

EBW

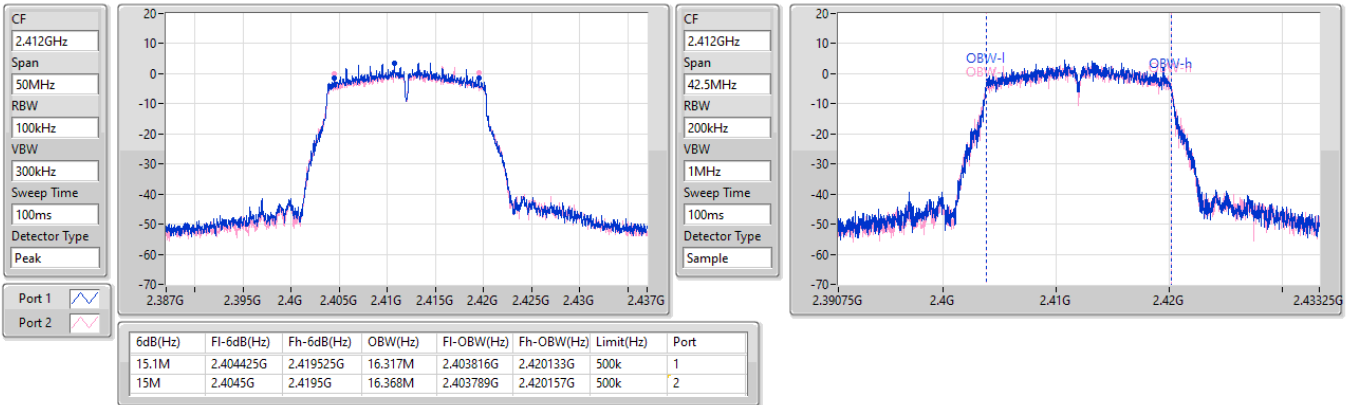
17/02/2023



2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX
2412MHz

EBW

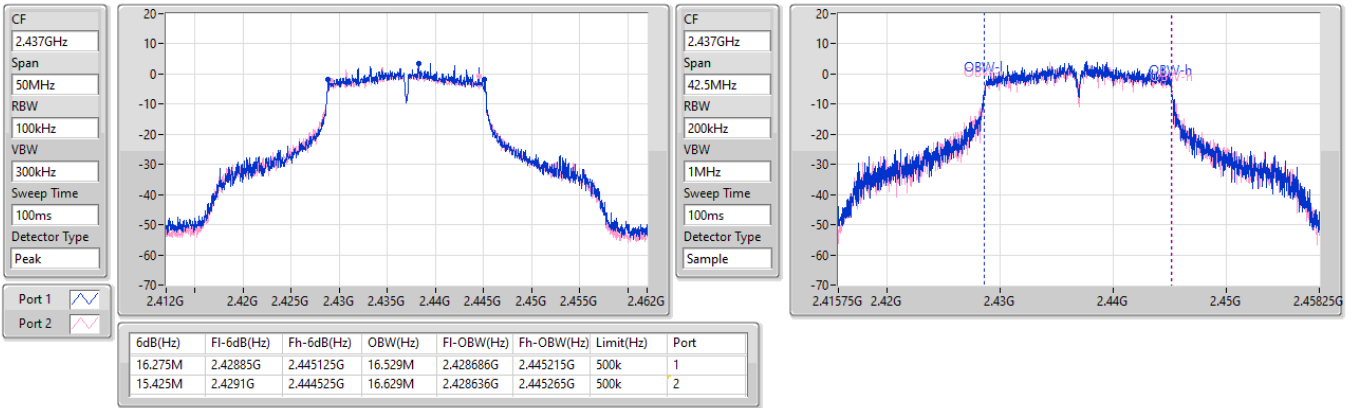
17/02/2023



2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX
2437MHz

EBW

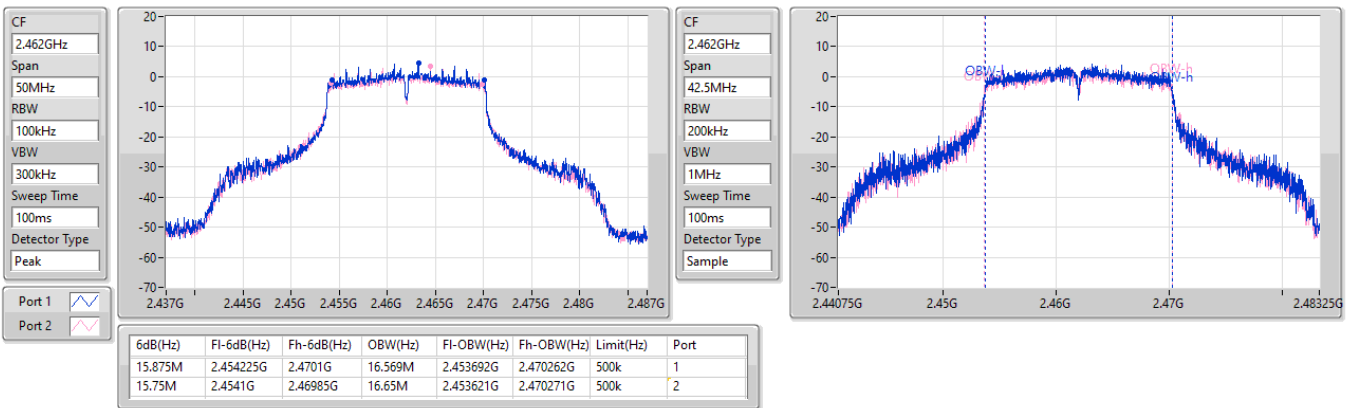
17/02/2023



2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX
2462MHz

EBW

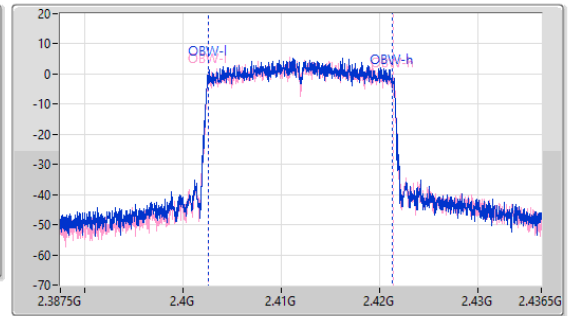
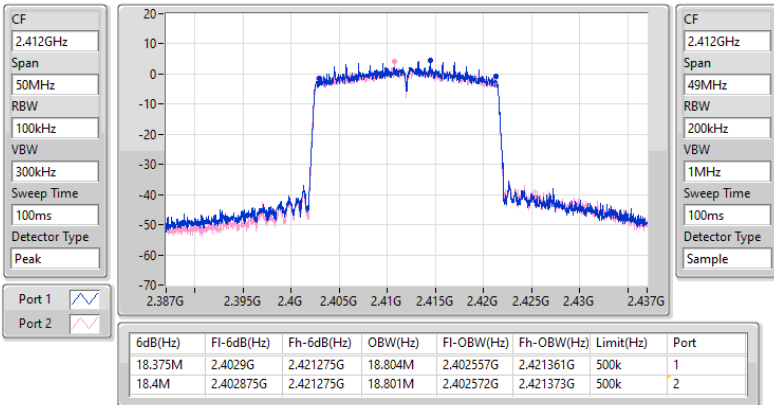
17/02/2023



2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_2TX
2412MHz

EBW

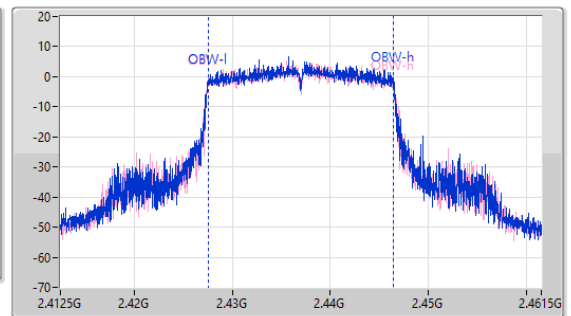
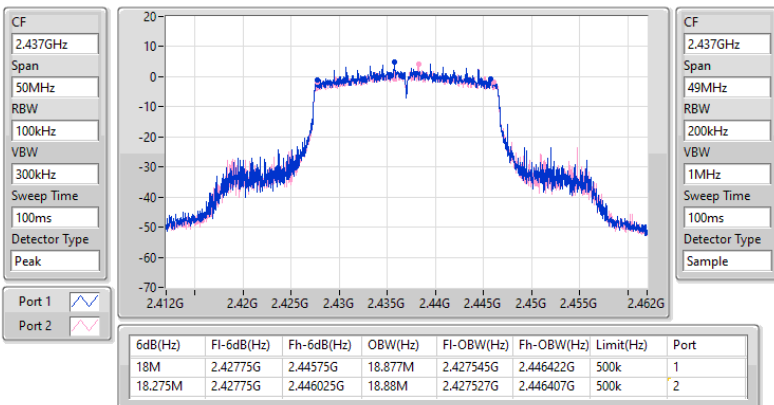
17/02/2023



2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_2TX
2437MHz

EBW

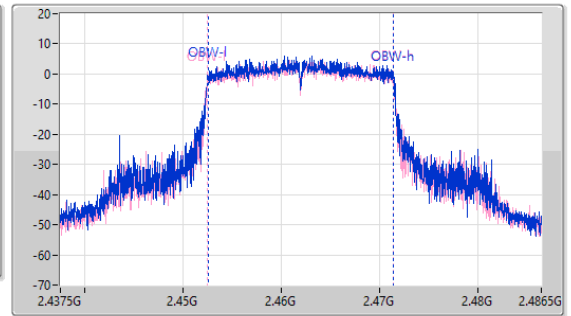
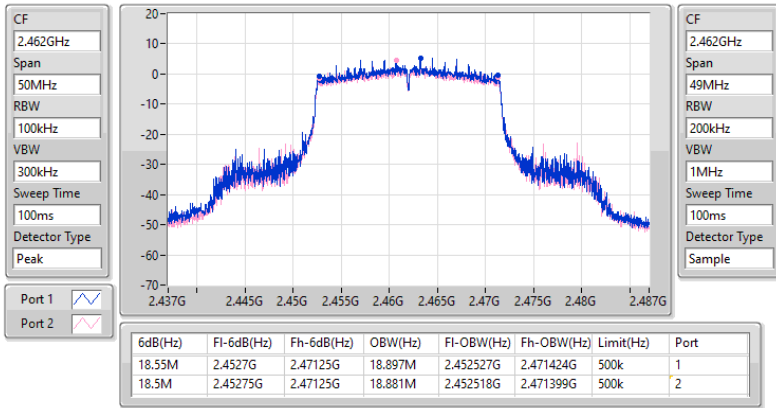
17/02/2023



2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_2TX
2462MHz

EBW

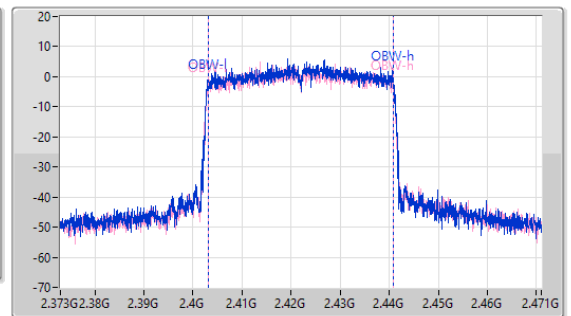
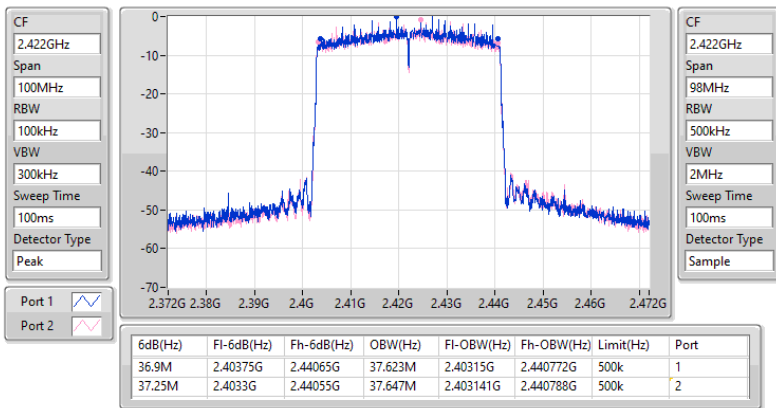
17/02/2023



2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_2TX
2422MHz

EBW

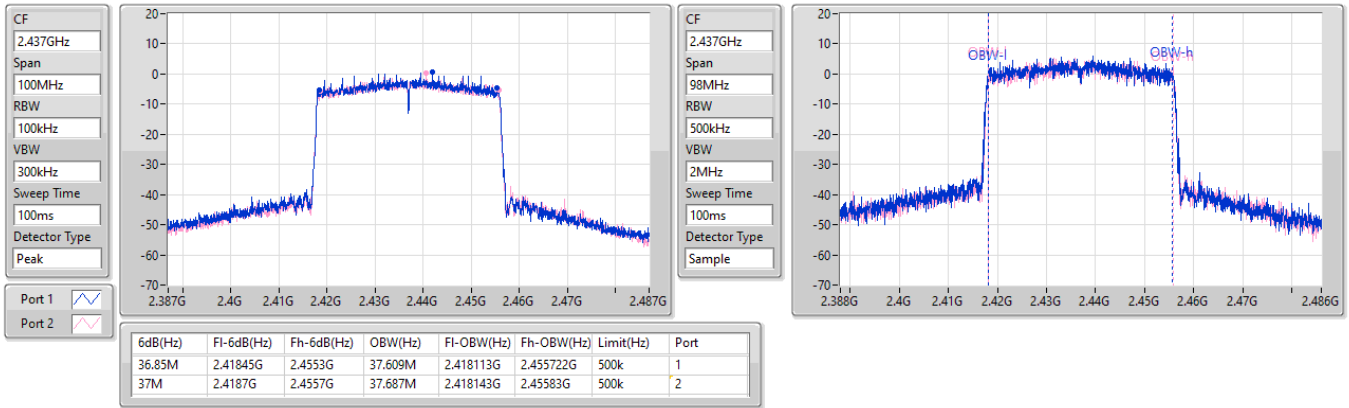
17/02/2023



2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_2TX
2437MHz

EBW

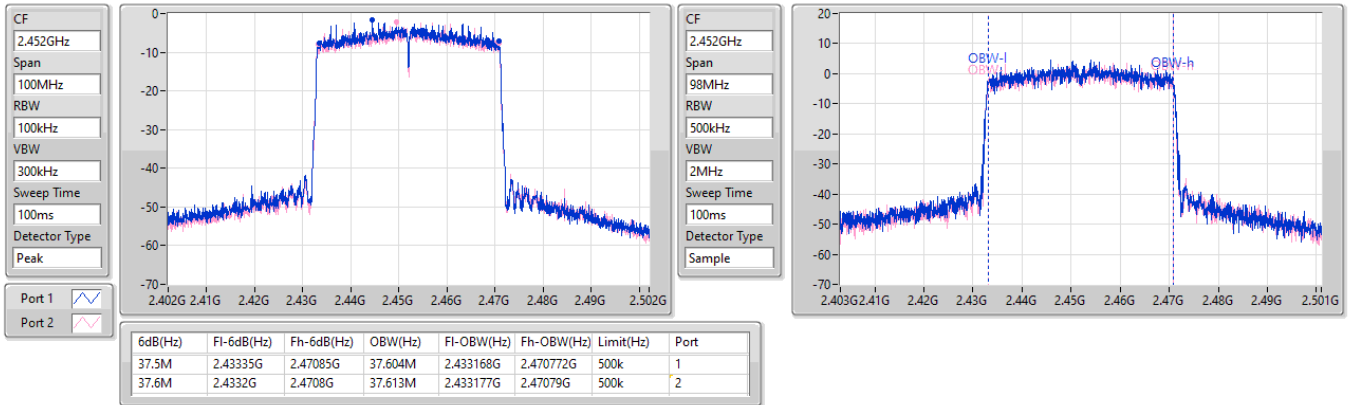
17/02/2023



2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_2TX
2452MHz

EBW

17/02/2023





Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_2TX	18.31	0.06776
802.11g_Nss1,(6Mbps)_2TX	18.36	0.06855
802.11ax HEW20_Nss1,(MCS0)_2TX	19.50	0.08913
802.11ax HEW40_Nss1,(MCS0)_2TX	18.36	0.06855



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	2.20	13.81	13.84	16.84	30.00
2437MHz	Pass	2.20	15.12	14.68	17.92	30.00
2462MHz	Pass	2.20	15.59	14.99	18.31	30.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	2.20	15.40	14.91	18.17	30.00
2437MHz	Pass	2.20	15.27	14.75	18.03	30.00
2462MHz	Pass	2.20	15.68	14.99	18.36	30.00
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	2.20	16.47	16.02	19.26	30.00
2437MHz	Pass	2.20	16.43	15.88	19.17	30.00
2462MHz	Pass	2.20	16.82	16.13	19.50	30.00
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	2.20	14.70	14.14	17.44	30.00
2437MHz	Pass	2.20	15.61	15.08	18.36	30.00
2452MHz	Pass	2.20	13.78	12.93	16.39	30.00

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



Summary

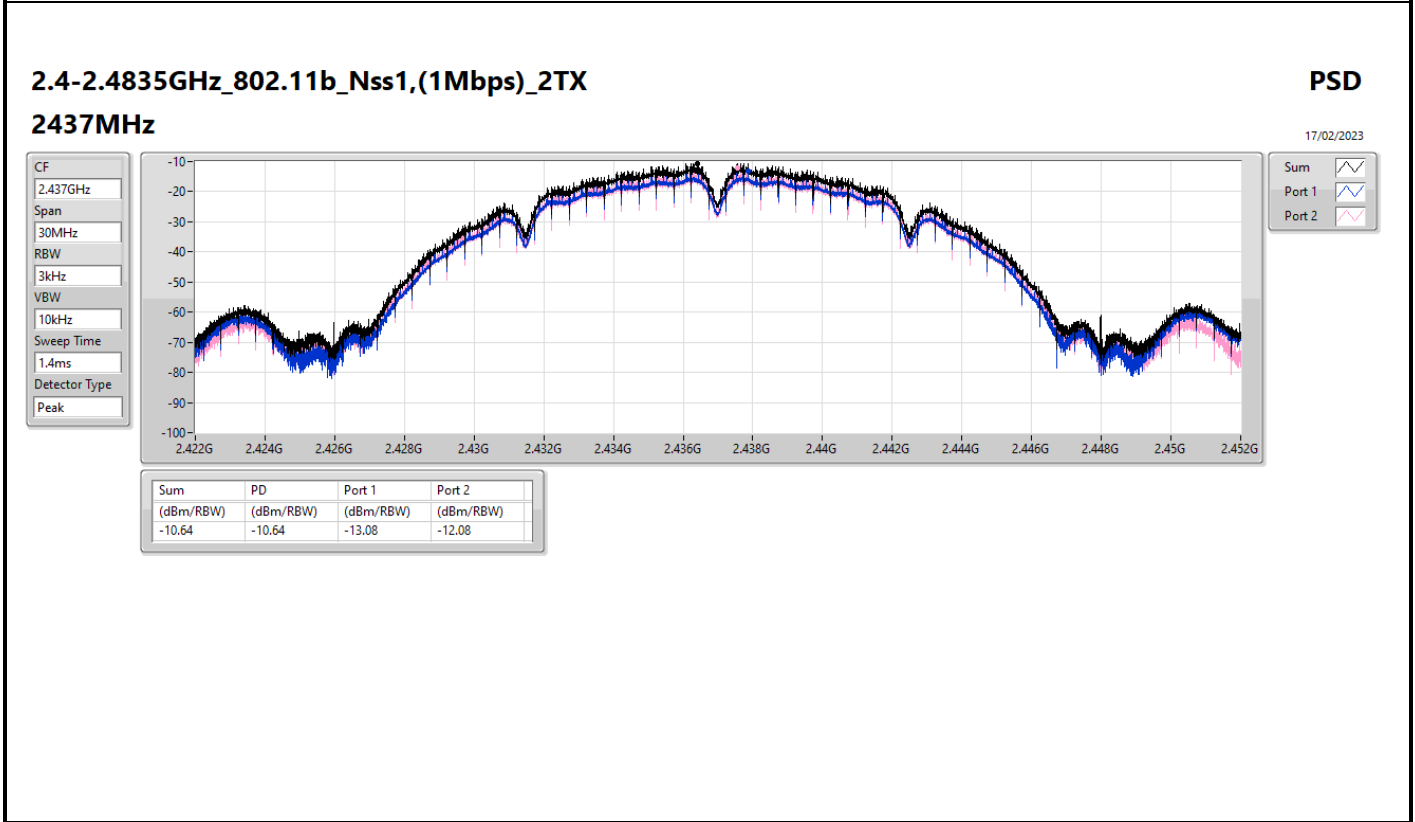
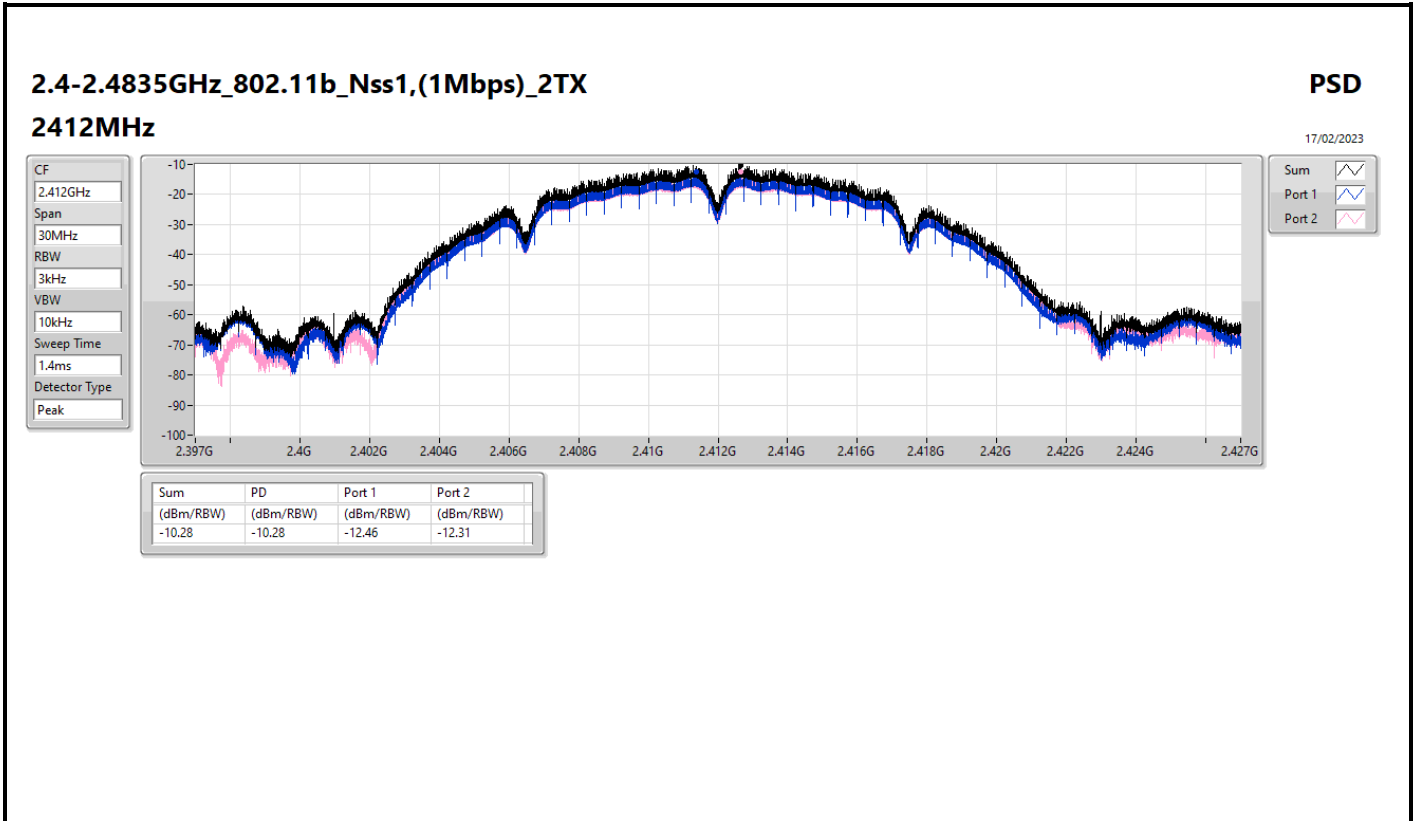
Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_2TX	-8.11
802.11g_Nss1,(6Mbps)_2TX	-10.32
802.11ax HEW20_Nss1,(MCS0)_2TX	-8.71
802.11ax HEW40_Nss1,(MCS0)_2TX	-13.80

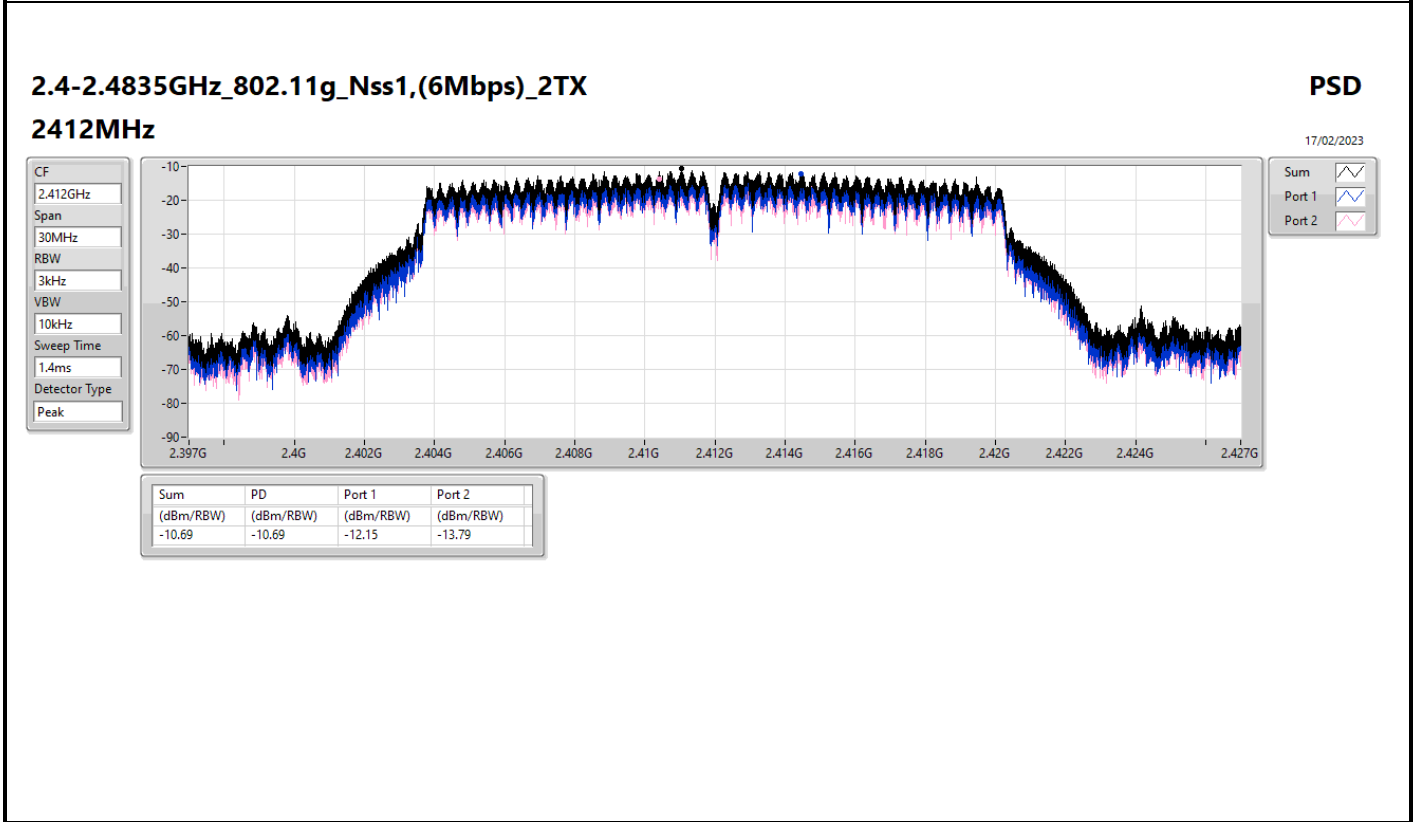
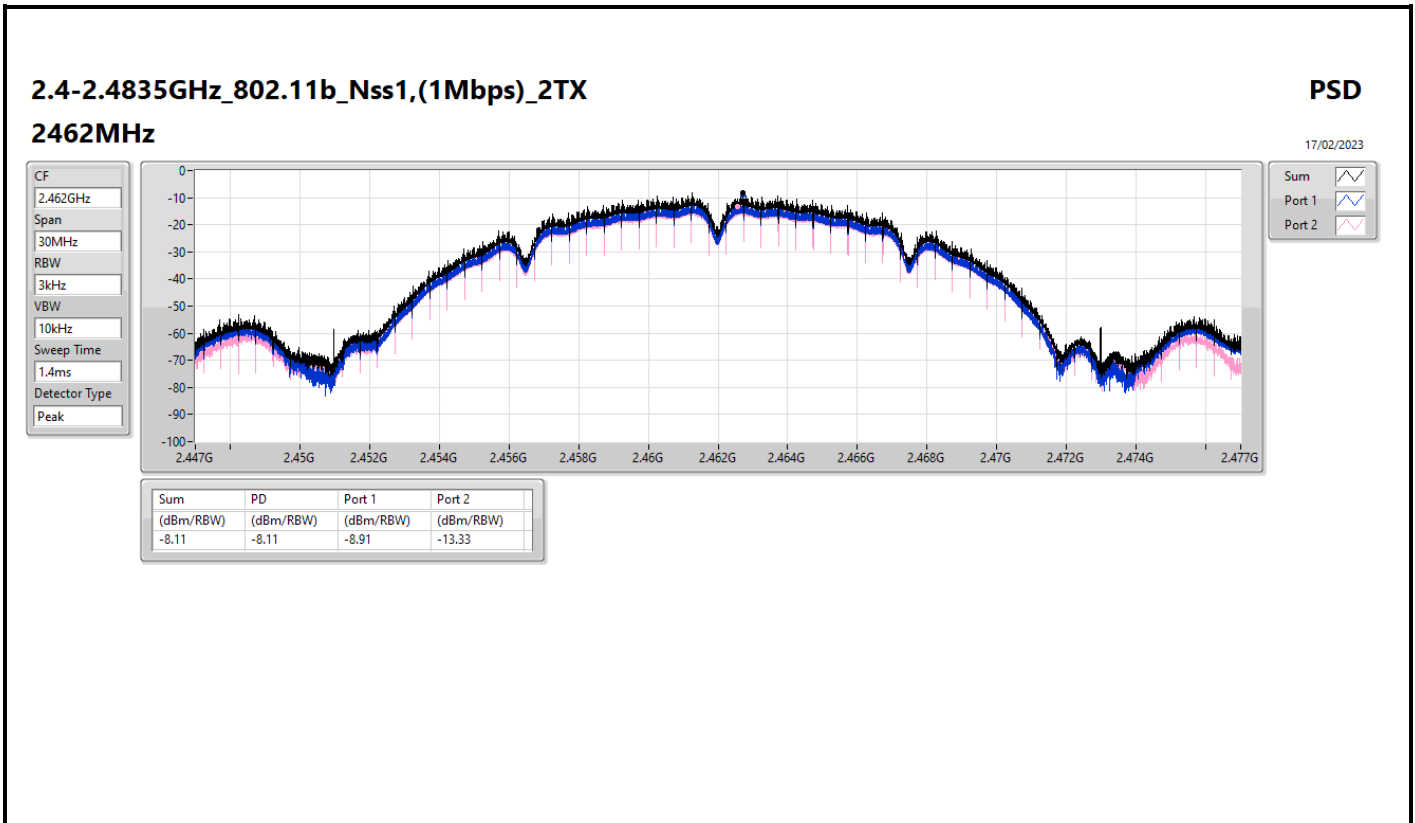
RBW = 3kHz;

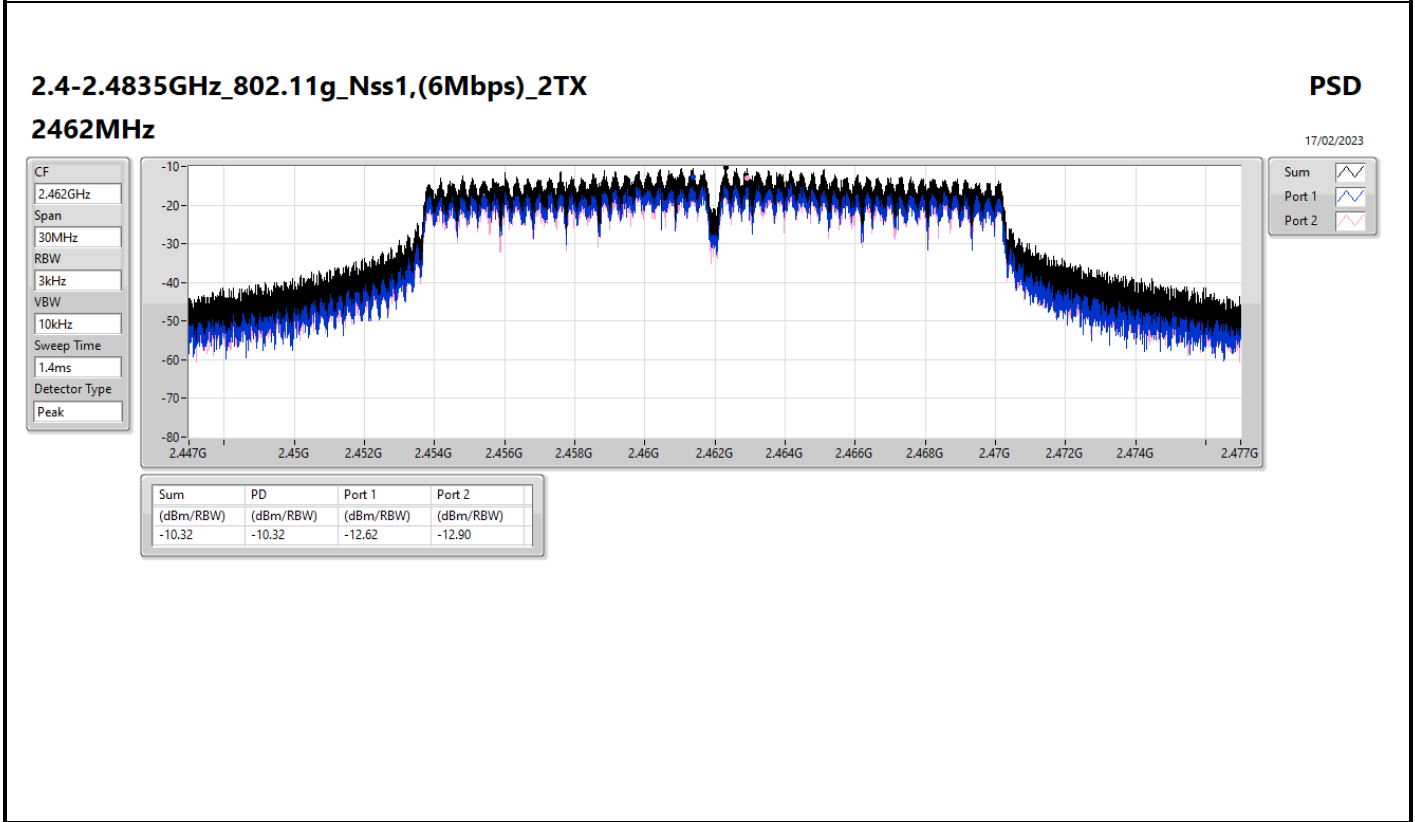
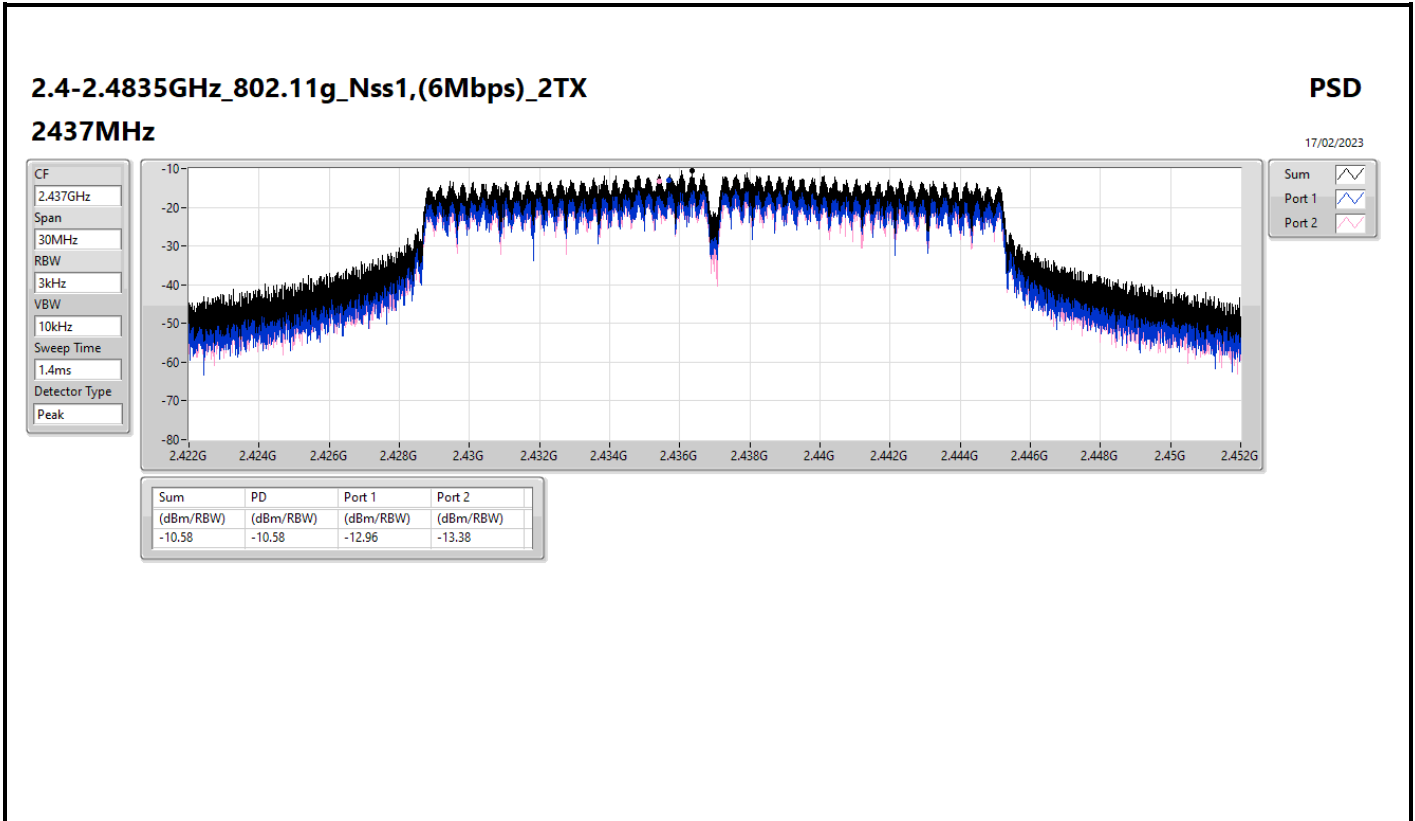
Result

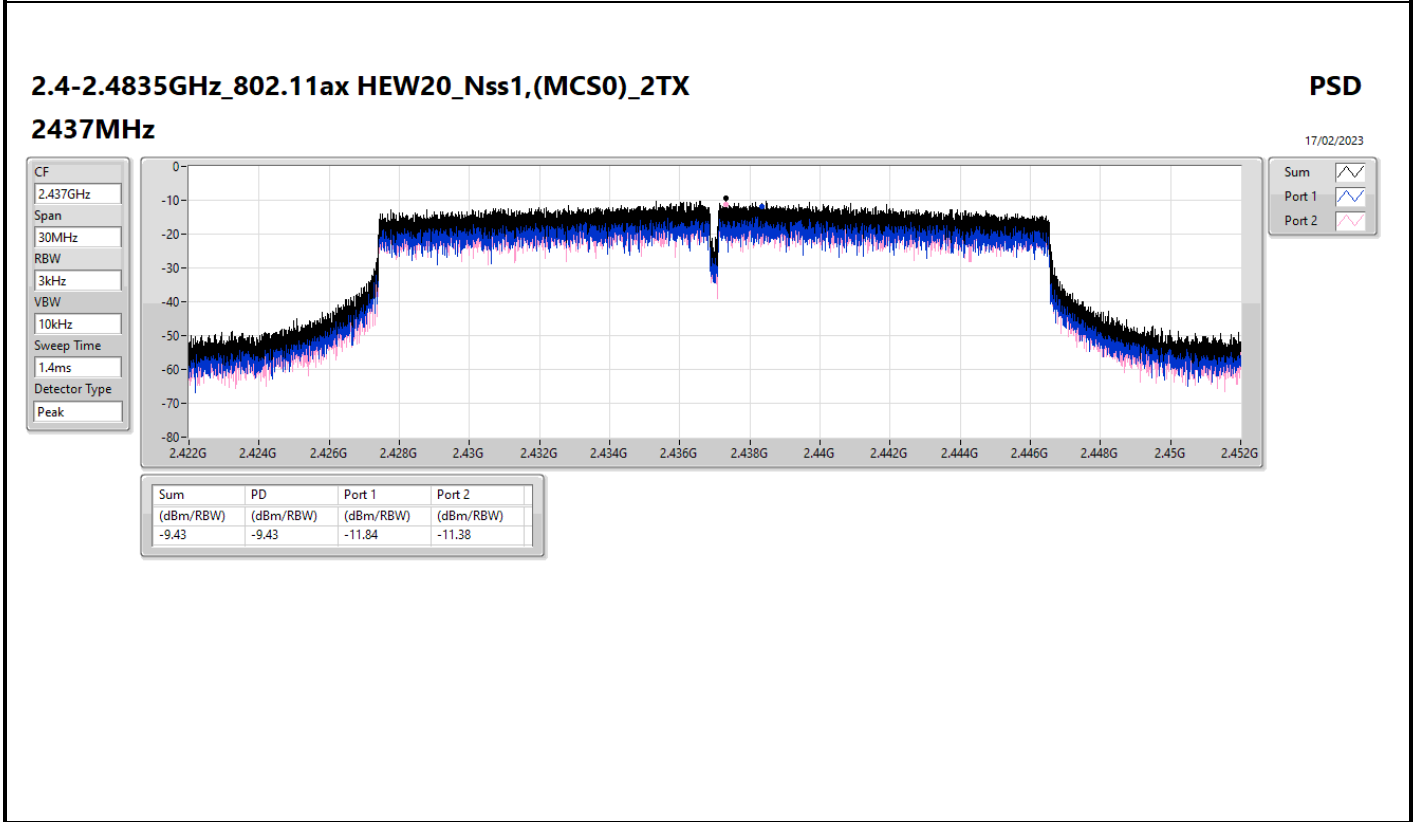
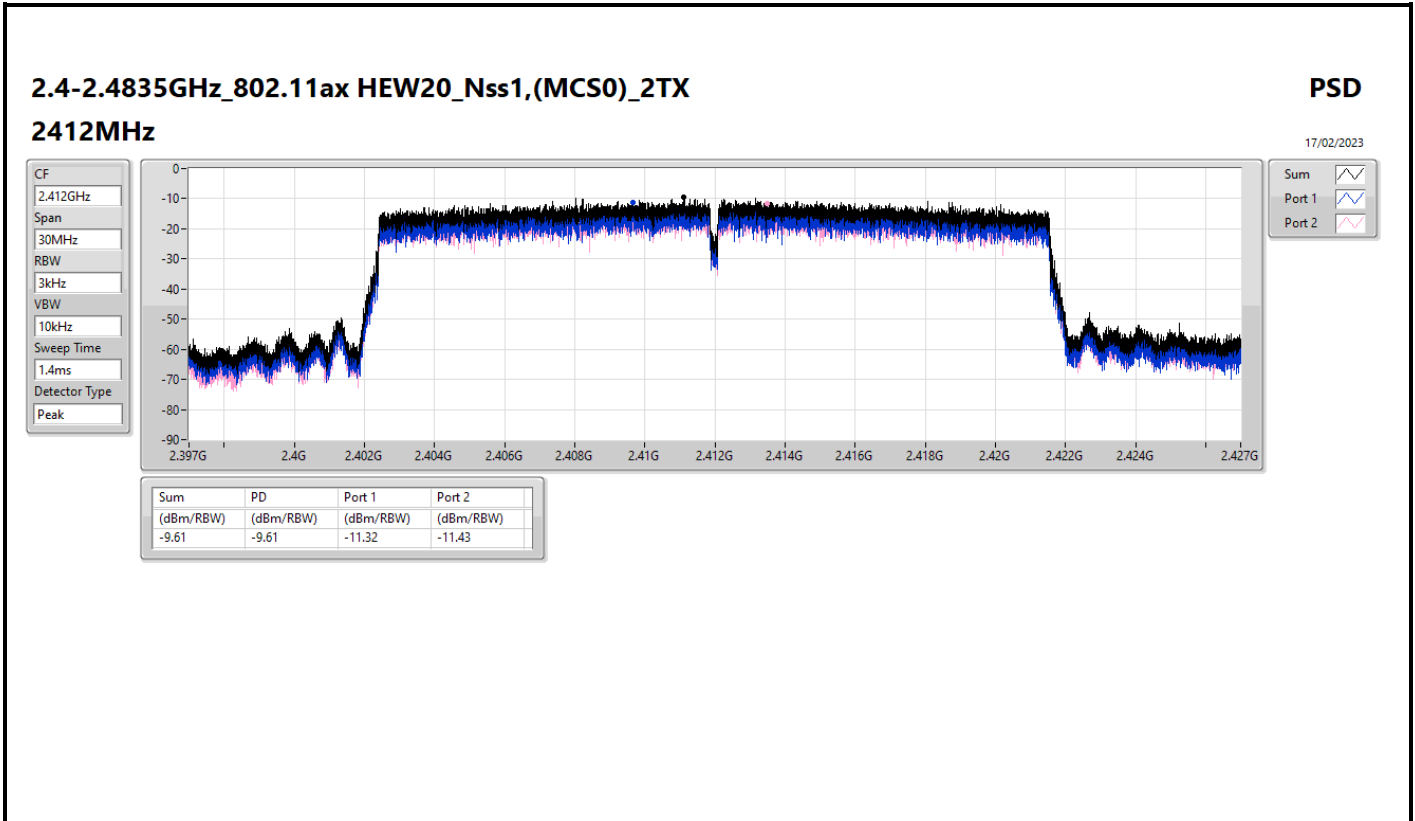
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.96	-12.46	-12.31	-10.28	8.00
2437MHz	Pass	4.96	-13.08	-12.08	-10.64	8.00
2462MHz	Pass	4.96	-8.91	-13.33	-8.11	8.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.96	-12.15	-13.79	-10.69	8.00
2437MHz	Pass	4.96	-12.96	-13.38	-10.58	8.00
2462MHz	Pass	4.96	-12.62	-12.90	-10.32	8.00
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.96	-11.32	-11.43	-9.61	8.00
2437MHz	Pass	4.96	-11.84	-11.38	-9.43	8.00
2462MHz	Pass	4.96	-11.25	-11.32	-8.71	8.00
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	4.96	-16.20	-16.71	-14.61	8.00
2437MHz	Pass	4.96	-15.45	-15.91	-13.80	8.00
2452MHz	Pass	4.96	-17.48	-18.28	-15.99	8.00

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









2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

2462MHz

PSD

17/02/2023

CF
2.462GHz

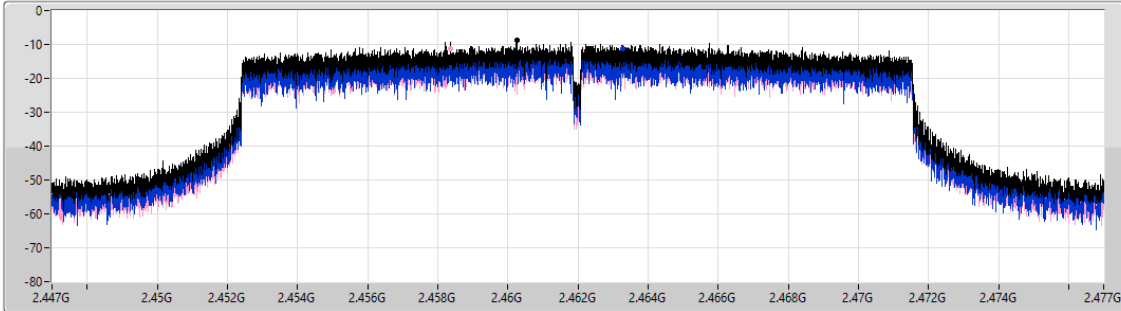
Span
30MHz


RBW
3kHz


VBW
10kHz


Sweep Time
1.4ms

Detector Type
Peak



Sum 

Port 1 

Port 2 

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.71	-8.71	-11.25	-11.32

2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

2422MHz

PSD

17/02/2023

CF
2.422GHz

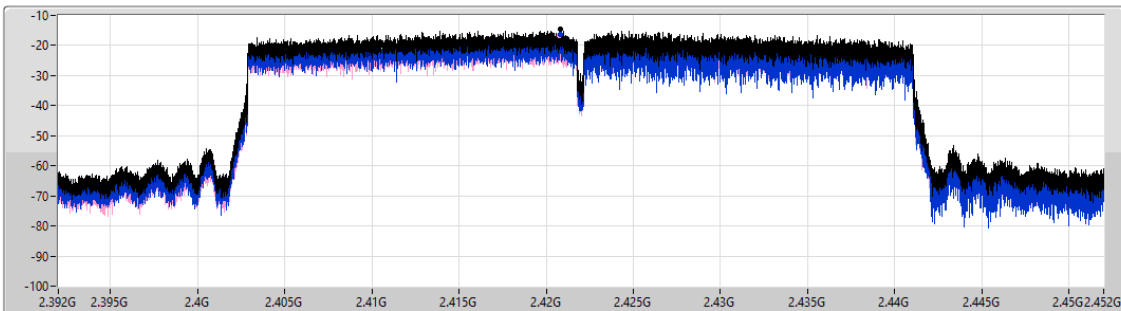
Span
60MHz


RBW
3kHz


VBW
10kHz


Sweep Time
2.79ms

Detector Type
Peak

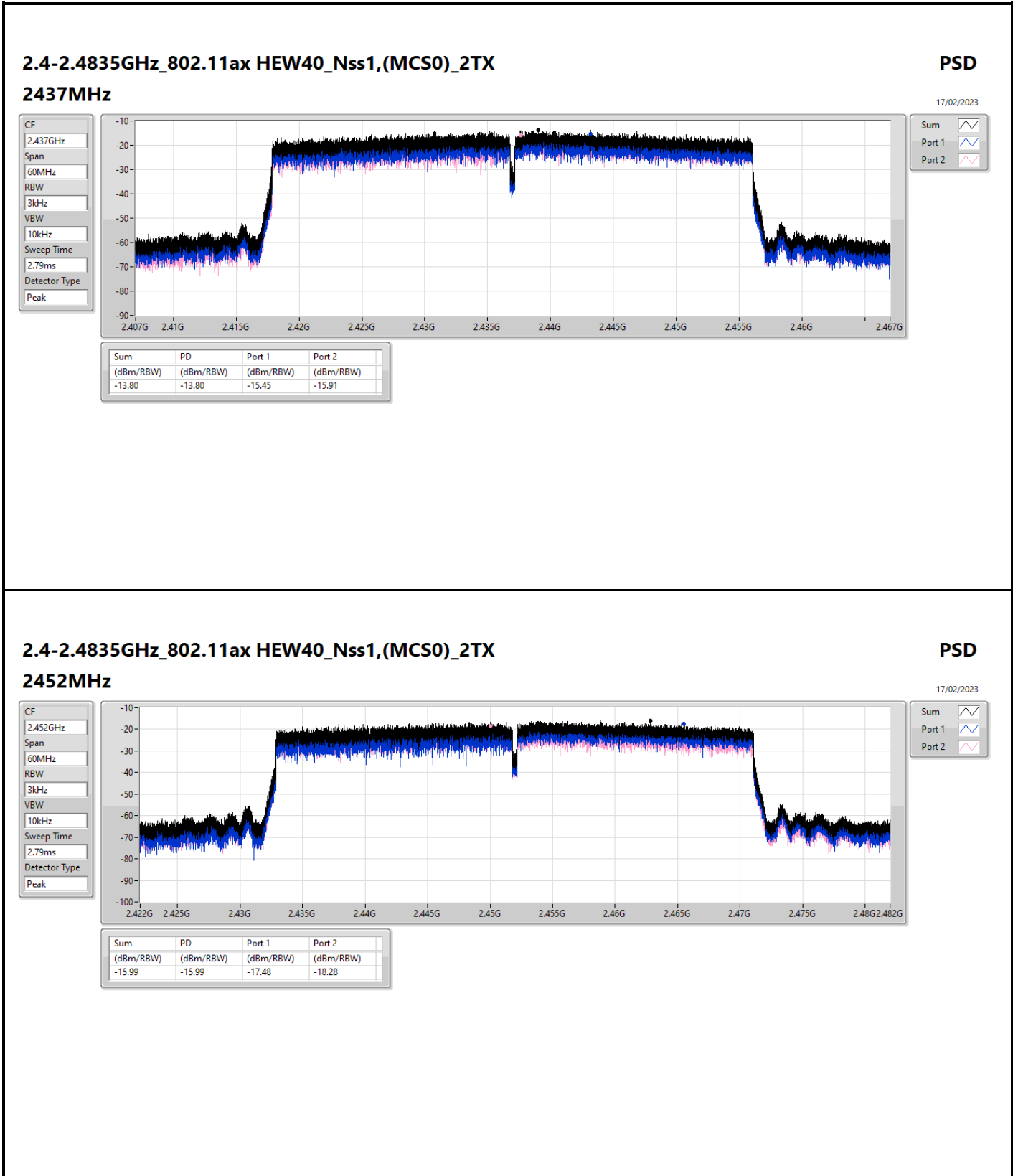


Sum 

Port 1 

Port 2 

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-14.61	-14.61	-16.20	-16.71





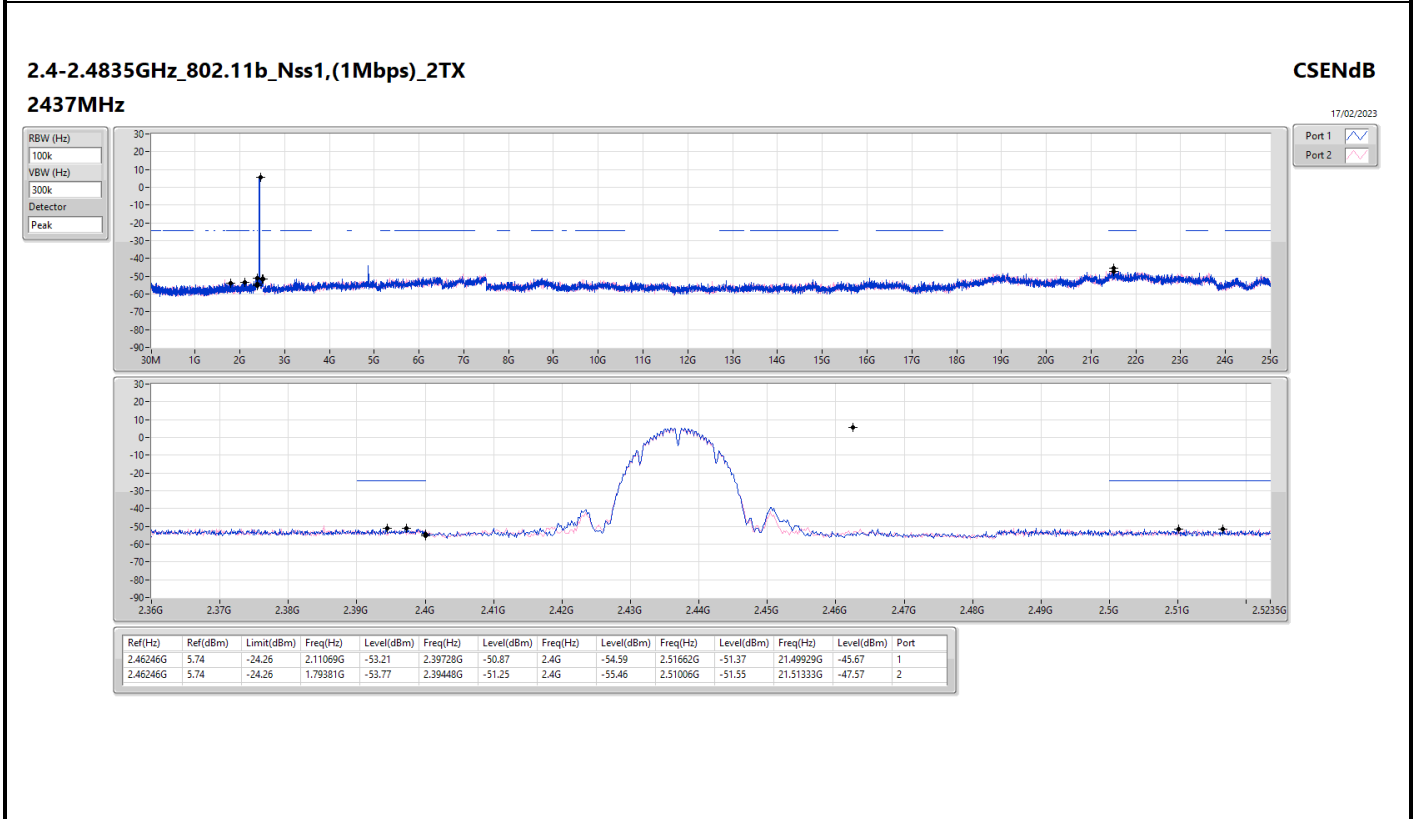
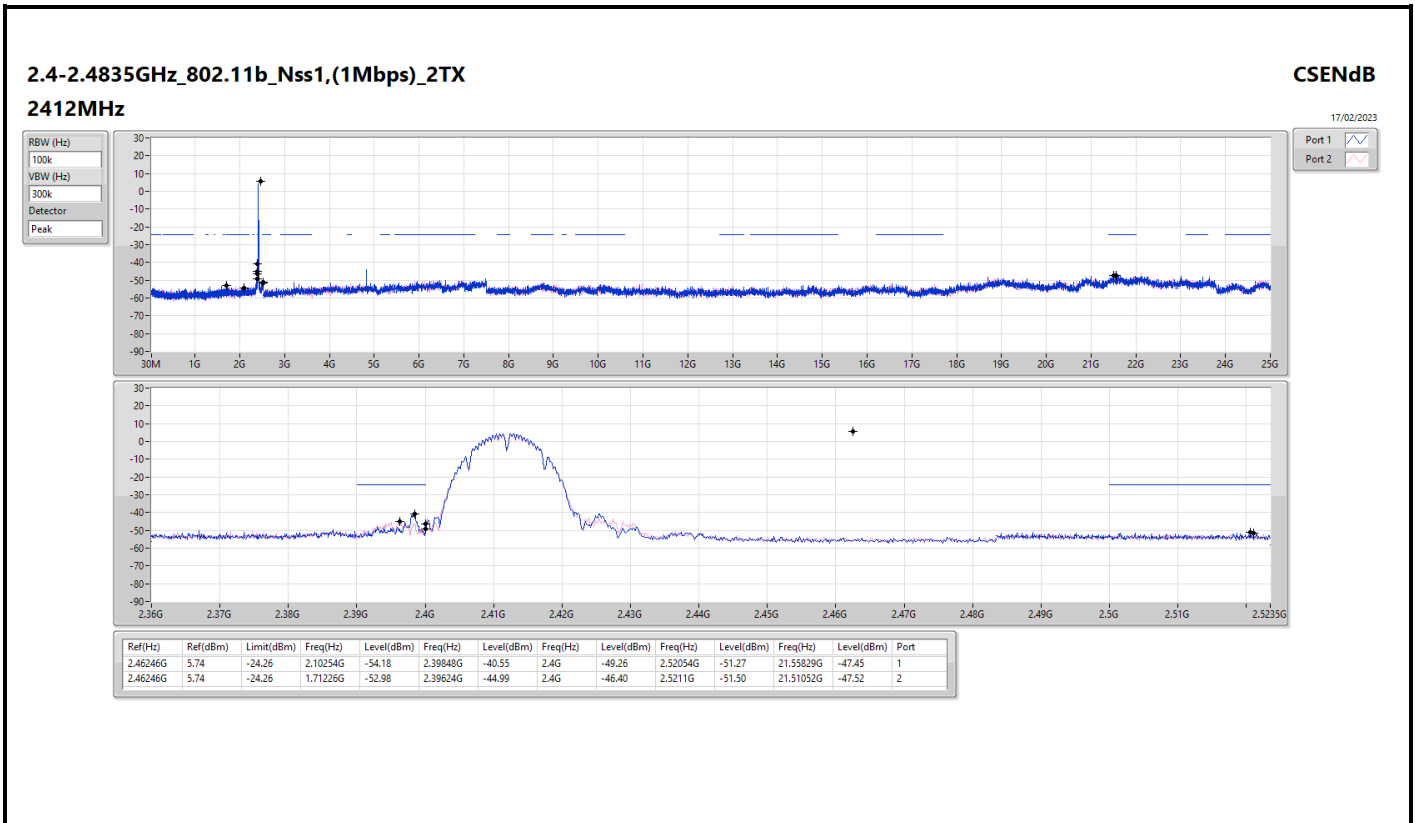
Summary

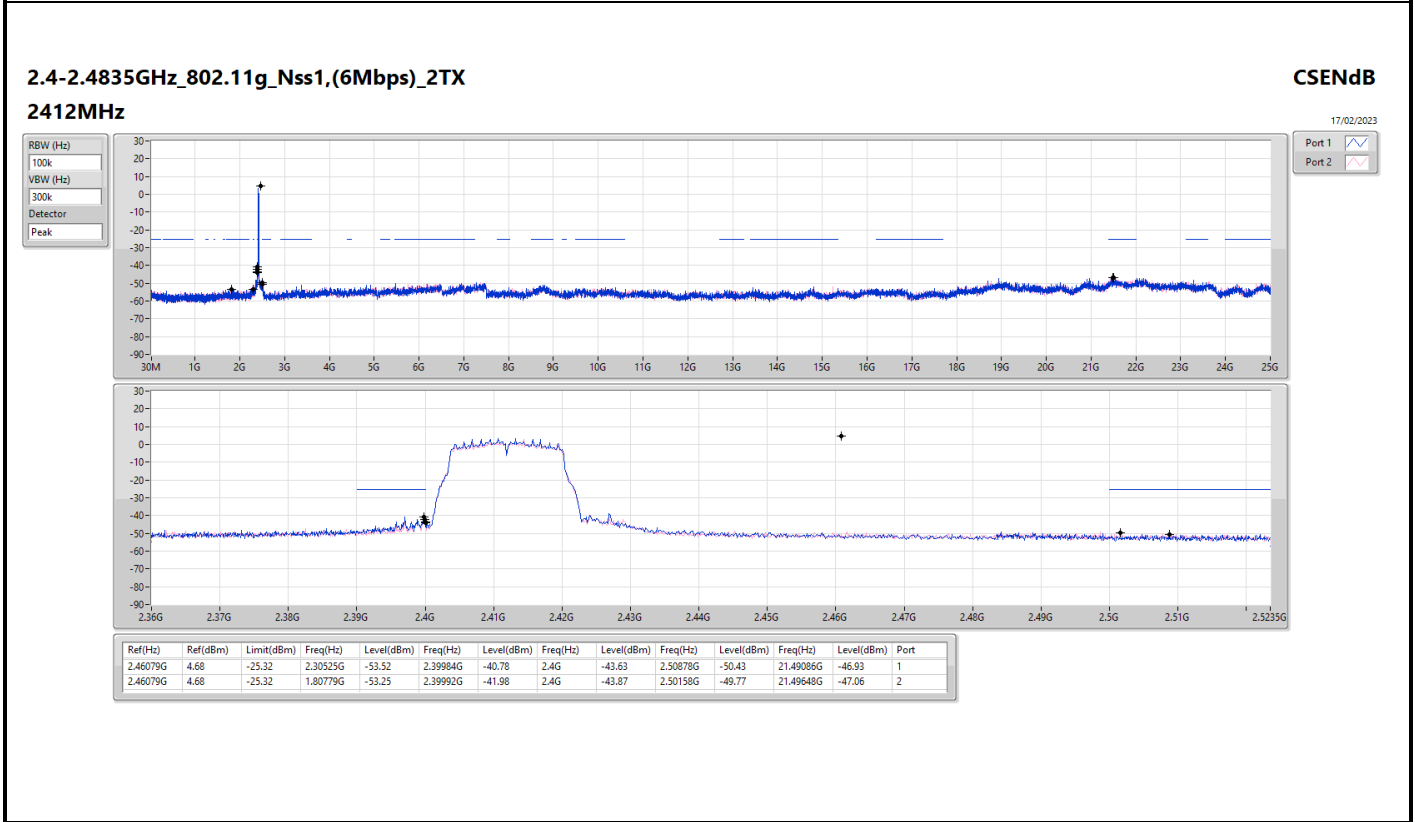
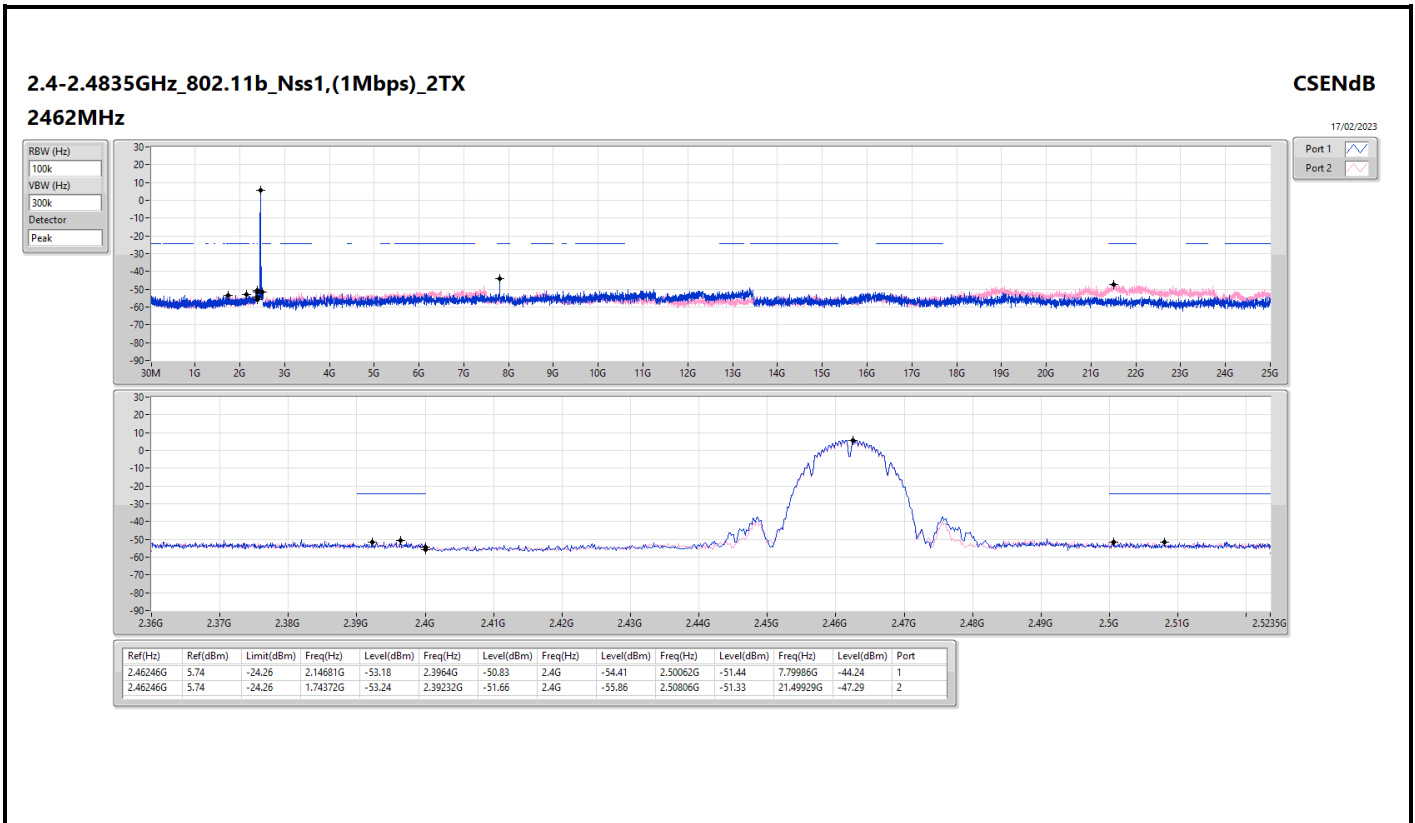
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	Pass	2.46246G	5.74	-24.26	2.10254G	-54.18	2.39848G	-40.55	2.4G	-49.26	2.52054G	-51.27	21.55829G	-47.45	1
802.11g_Nss1,(6Mbps)_2TX	Pass	2.46079G	4.68	-25.32	2.30525G	-53.52	2.39984G	-40.78	2.4G	-43.63	2.50878G	-50.43	21.49086G	-46.93	1
802.11ax HEW20_Nss1,(MCS0)_2TX	Pass	2.46329G	5.35	-24.65	1.90798G	-53.45	2.4G	-40.12	2.4G	-40.79	2.50366G	-49.24	21.54705G	-47.12	1
802.11ax HEW40_Nss1,(MCS0)_2TX	Pass	2.4319G	1.01	-28.99	2.30054G	-52.89	2.39952G	-42.72	2.4G	-45.96	2.50366G	-51.33	21.52234G	-47.22	1

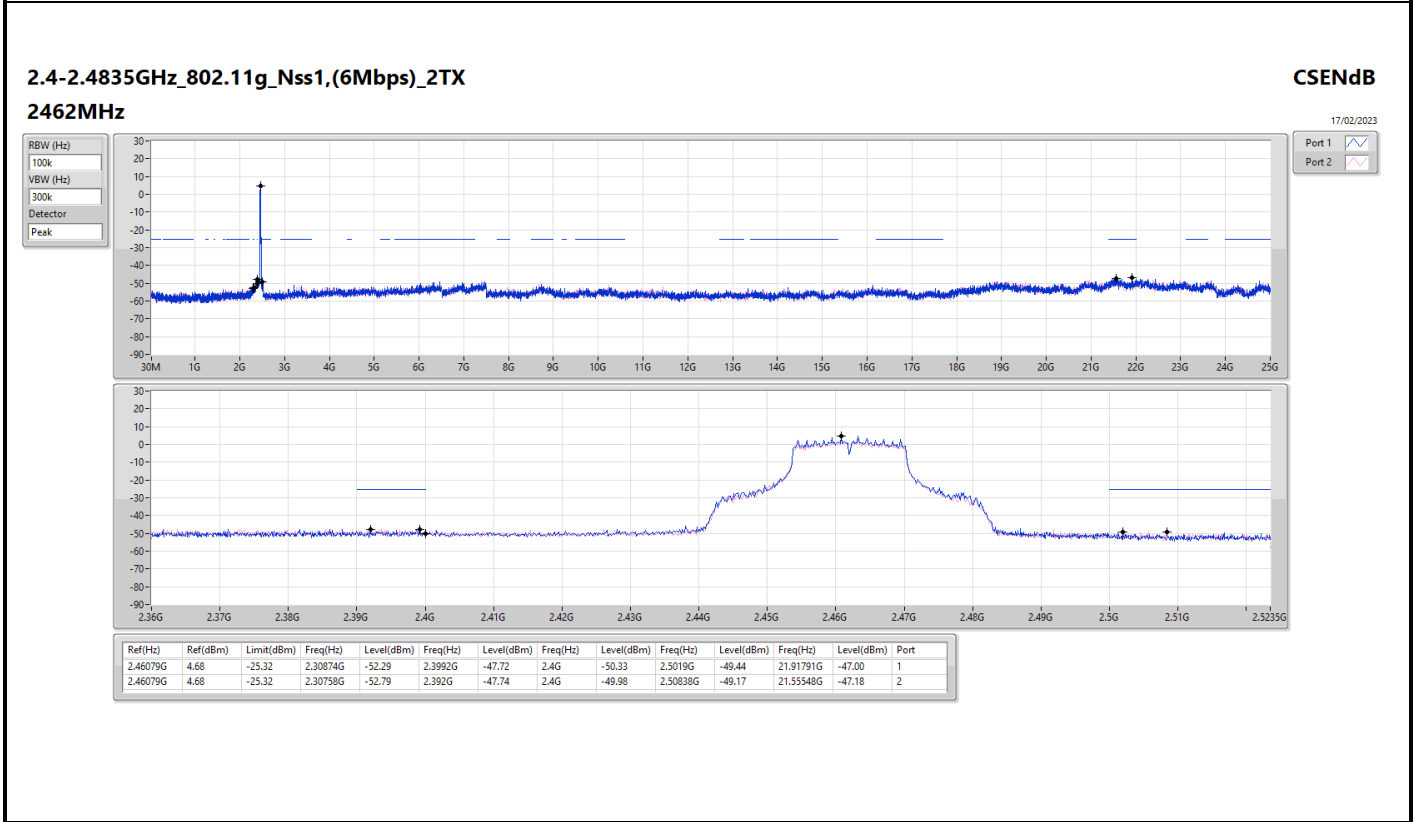
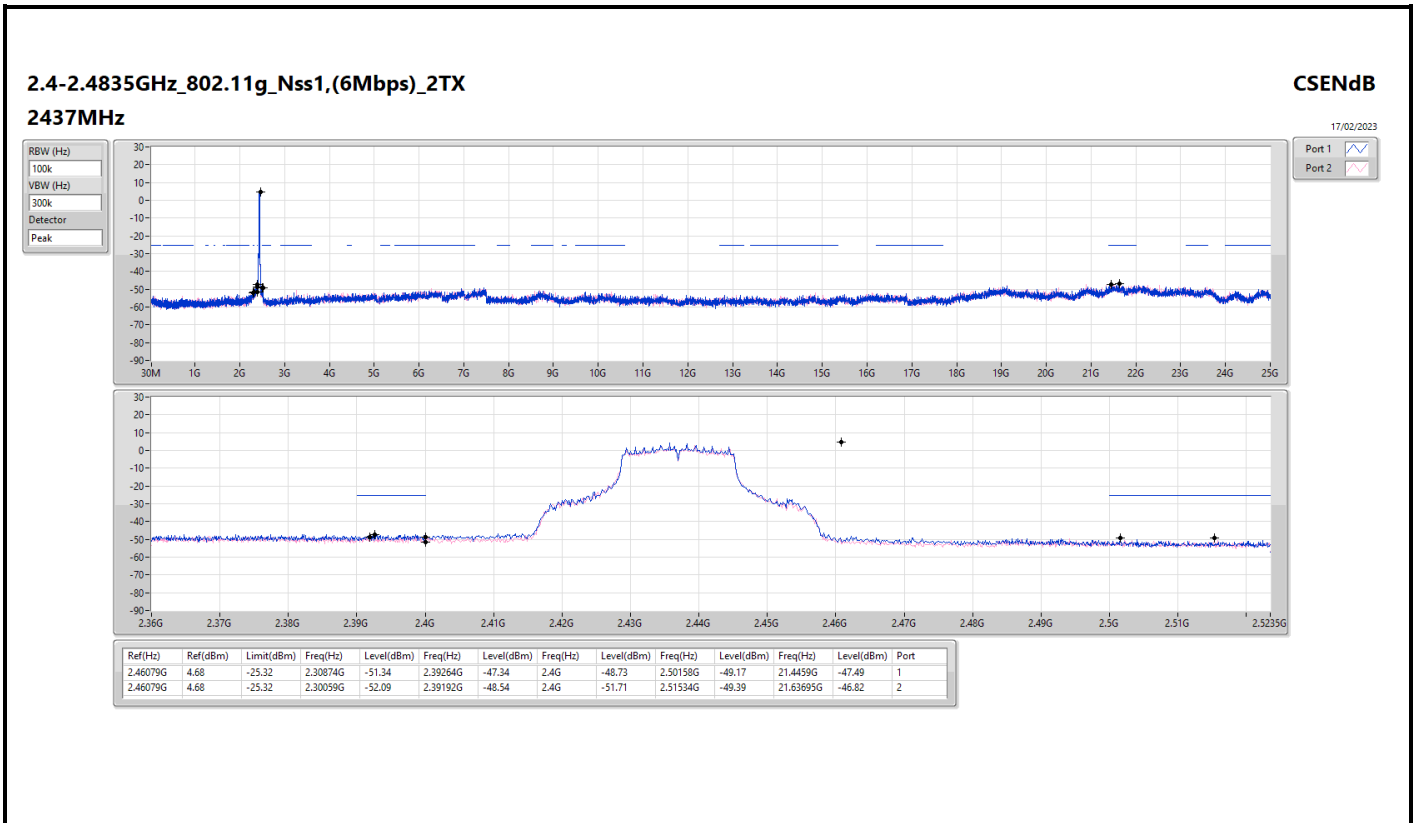


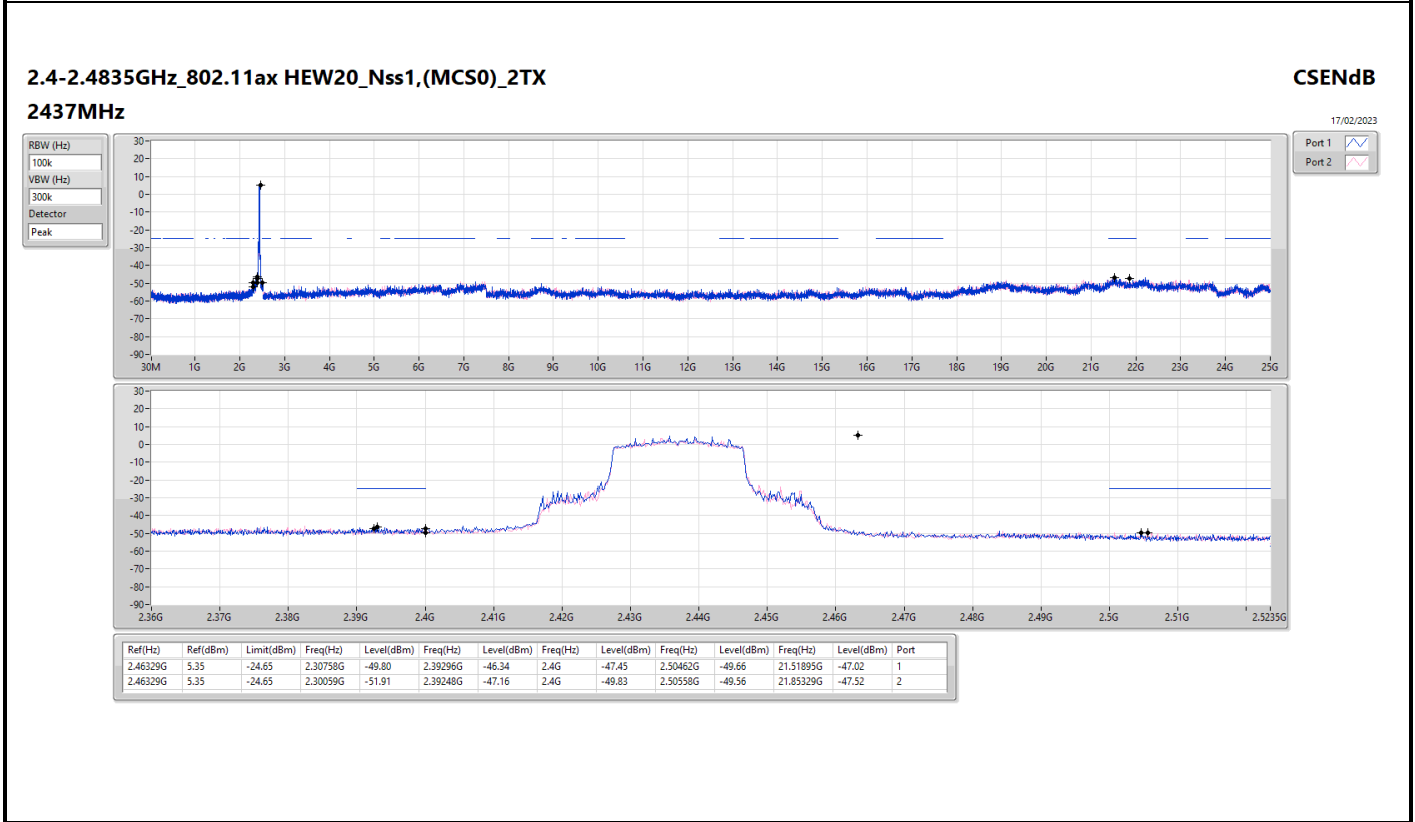
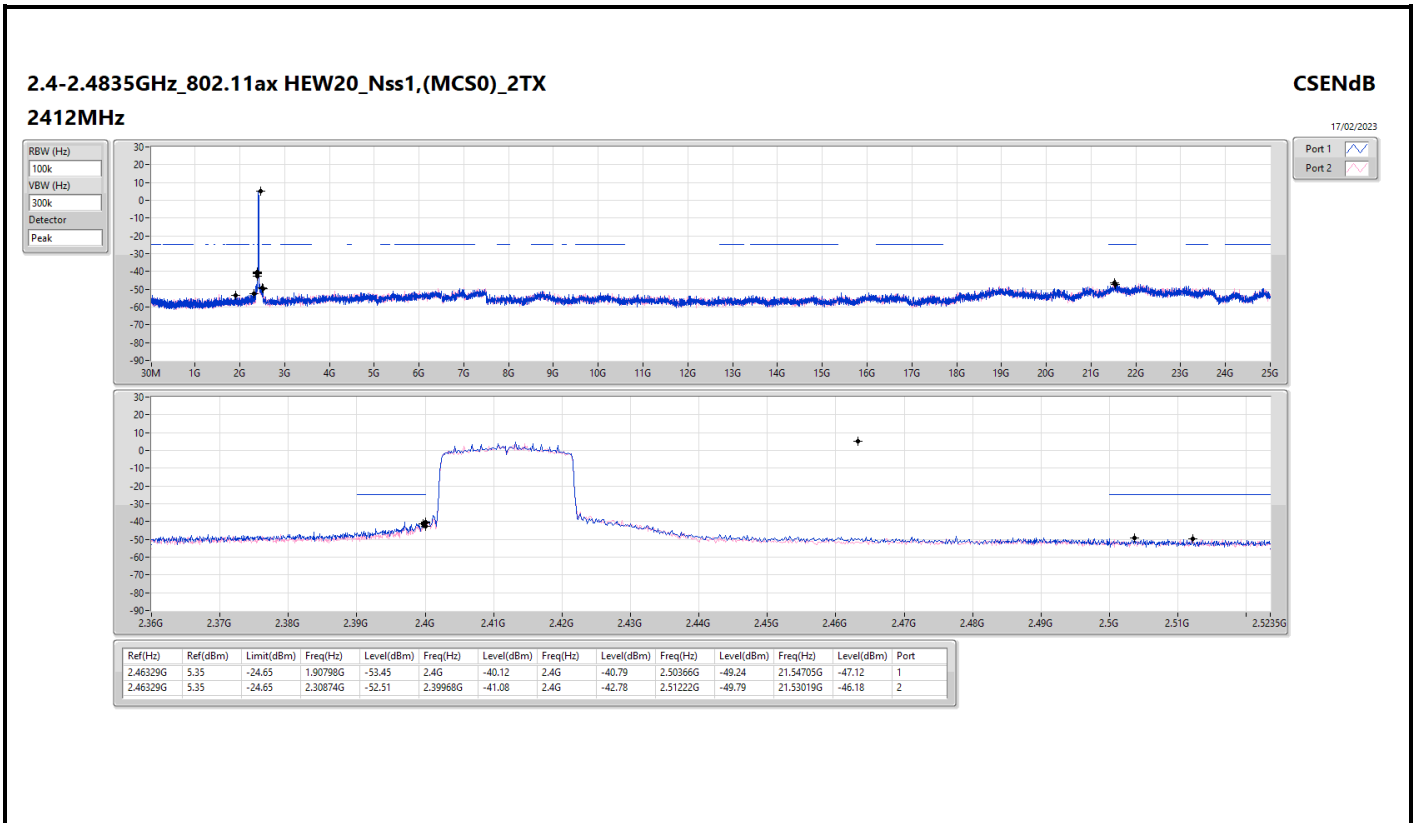
Result

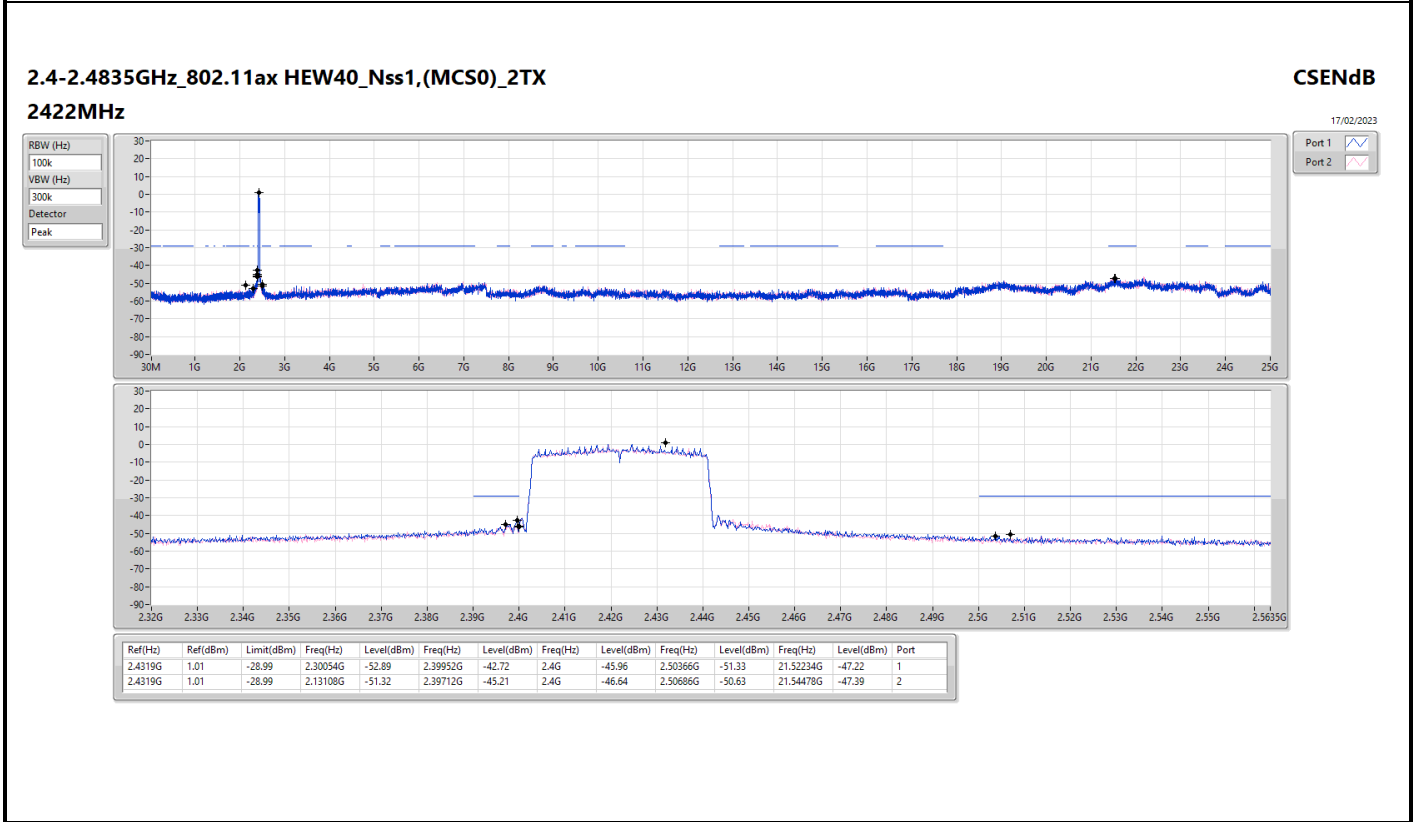
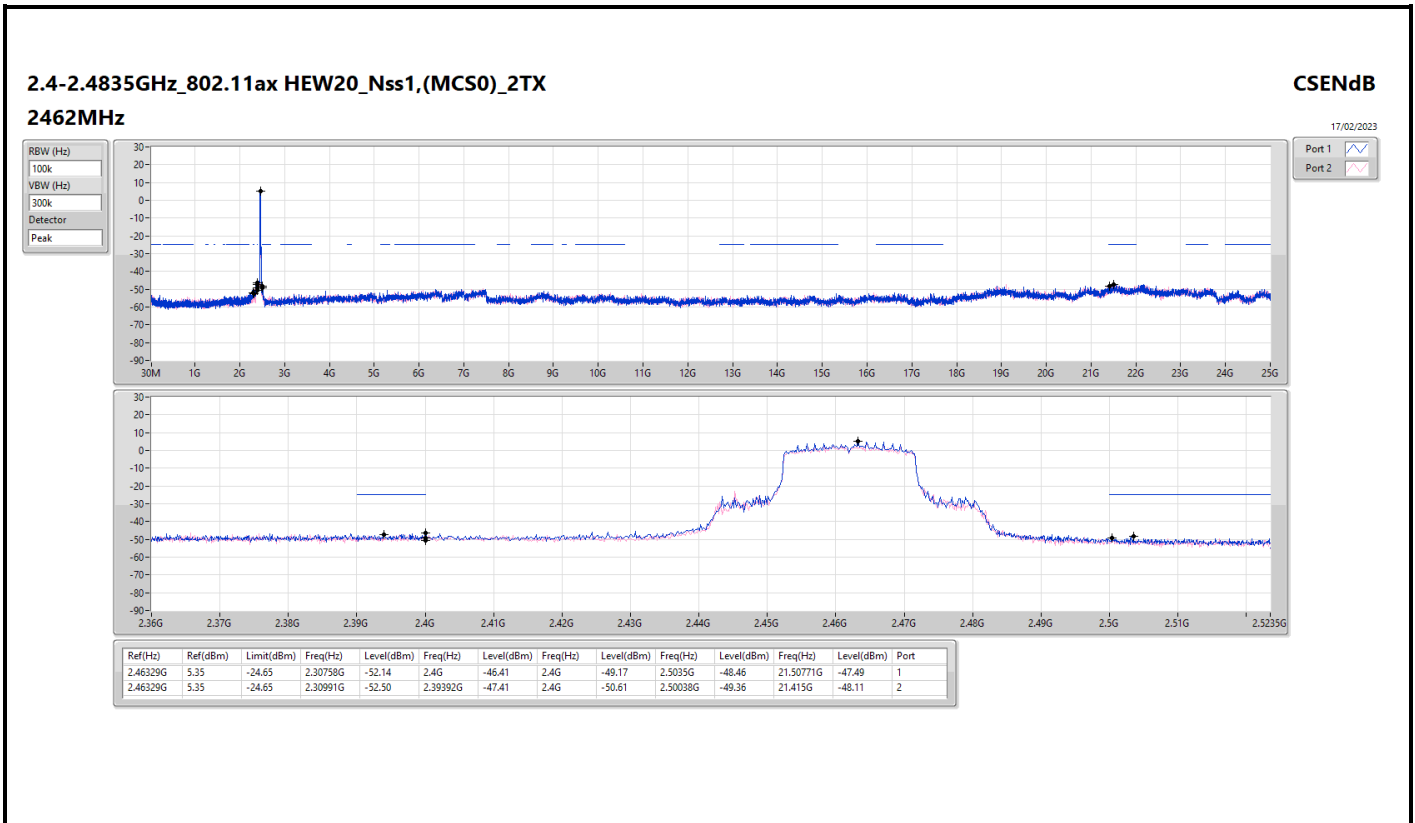
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.46246G	5.74	-24.26	2.10254G	-54.18	2.39848G	-40.55	2.4G	-49.26	2.52054G	-51.27	21.55829G	-47.45	1
2412MHz	Pass	2.46246G	5.74	-24.26	1.71226G	-52.98	2.39624G	-44.99	2.4G	-46.40	2.5211G	-51.50	21.51052G	-47.52	2
2437MHz	Pass	2.46246G	5.74	-24.26	2.11069G	-53.21	2.39728G	-50.87	2.4G	-54.59	2.51662G	-51.37	21.49929G	-45.67	1
2437MHz	Pass	2.46246G	5.74	-24.26	1.79381G	-53.77	2.39448G	-51.25	2.4G	-55.46	2.51006G	-51.55	21.51333G	-47.57	2
2462MHz	Pass	2.46246G	5.74	-24.26	2.14681G	-53.18	2.3964G	-50.83	2.4G	-54.41	2.50062G	-51.44	7.79986G	-44.24	1
2462MHz	Pass	2.46246G	5.74	-24.26	1.74372G	-53.24	2.39232G	-51.66	2.4G	-55.86	2.50806G	-51.33	21.49929G	-47.29	2
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.46079G	4.68	-25.32	2.30525G	-53.52	2.39984G	-40.78	2.4G	-43.63	2.50878G	-50.43	21.49086G	-46.93	1
2412MHz	Pass	2.46079G	4.68	-25.32	1.80779G	-53.25	2.39929G	-41.98	2.4G	-43.87	2.50158G	-49.77	21.49648G	-47.06	2
2437MHz	Pass	2.46079G	4.68	-25.32	2.30874G	-51.34	2.39264G	-47.34	2.4G	-48.73	2.50158G	-49.17	21.4459G	-47.49	1
2437MHz	Pass	2.46079G	4.68	-25.32	2.30059G	-52.09	2.39192G	-48.54	2.4G	-51.71	2.51534G	-49.39	21.63695G	-46.82	2
2462MHz	Pass	2.46079G	4.68	-25.32	2.30874G	-52.29	2.3992G	-47.72	2.4G	-50.33	2.5019G	-49.44	21.91791G	-47.00	1
2462MHz	Pass	2.46079G	4.68	-25.32	2.30758G	-52.79	2.392G	-47.74	2.4G	-49.98	2.50838G	-49.17	21.55548G	-47.18	2
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.46329G	5.35	-24.65	1.90798G	-53.45	2.4G	-40.12	2.4G	-40.79	2.50366G	-49.24	21.54705G	-47.12	1
2412MHz	Pass	2.46329G	5.35	-24.65	2.30874G	-52.51	2.39968G	-41.08	2.4G	-42.78	2.51222G	-49.79	21.53019G	-46.18	2
2437MHz	Pass	2.46329G	5.35	-24.65	2.30758G	-49.80	2.39296G	-46.34	2.4G	-47.45	2.50462G	-49.66	21.51895G	-47.02	1
2437MHz	Pass	2.46329G	5.35	-24.65	2.30059G	-51.91	2.39248G	-47.16	2.4G	-49.83	2.50558G	-49.56	21.85329G	-47.52	2
2462MHz	Pass	2.46329G	5.35	-24.65	2.30758G	-52.14	2.4G	-46.41	2.4G	-49.17	2.5035G	-48.46	21.50771G	-47.49	1
2462MHz	Pass	2.46329G	5.35	-24.65	2.30991G	-52.50	2.39392G	-47.41	2.4G	-50.61	2.50038G	-49.36	21.415G	-48.11	2
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.4319G	1.01	-28.99	2.30054G	-52.89	2.39952G	-42.72	2.4G	-45.96	2.50366G	-51.33	21.52234G	-47.22	1
2422MHz	Pass	2.4319G	1.01	-28.99	2.13108G	-51.32	2.39712G	-45.21	2.4G	-46.64	2.50686G	-50.63	21.54478G	-47.39	2
2437MHz	Pass	2.4319G	1.01	-28.99	2.30168G	-51.70	2.39984G	-44.32	2.4G	-46.59	2.50014G	-51.49	21.45223G	-47.73	1
2437MHz	Pass	2.4319G	1.01	-28.99	2.3097G	-52.39	2.39744G	-45.51	2.4G	-45.21	2.5003G	-51.97	21.42979G	-45.99	2
2452MHz	Pass	2.4319G	1.01	-28.99	2.30283G	-53.17	2.39712G	-49.19	2.4G	-48.74	2.50078G	-51.23	21.49149G	-47.40	1
2452MHz	Pass	2.4319G	1.01	-28.99	1.99482G	-53.43	2.39408G	-50.38	2.4G	-52.02	2.56142G	-52.25	21.97388G	-46.94	2

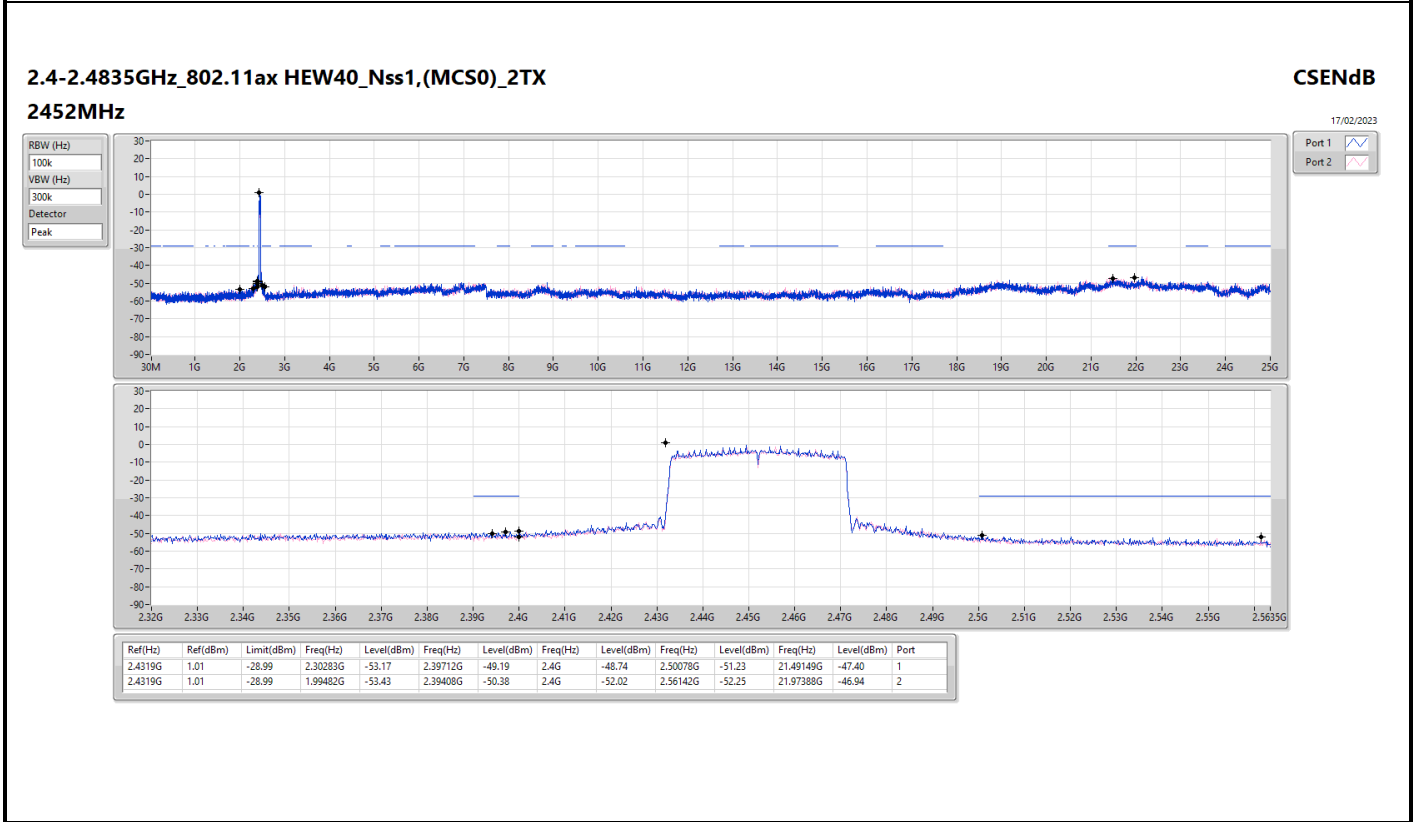
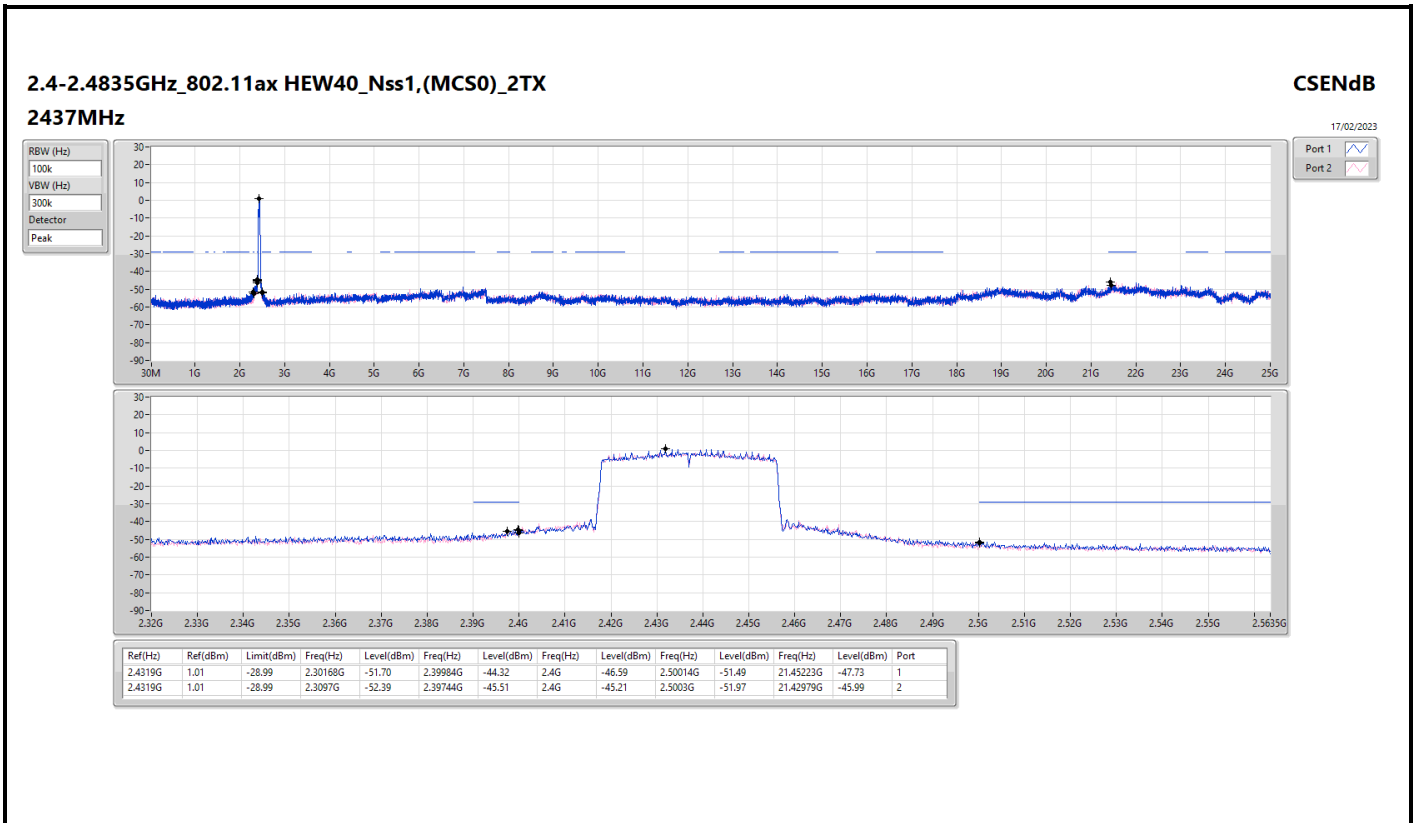










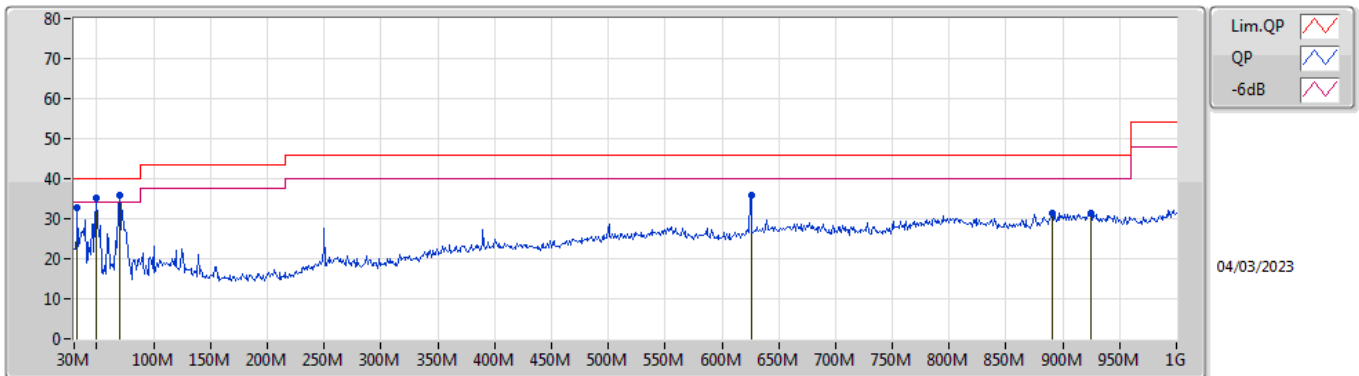




Summary

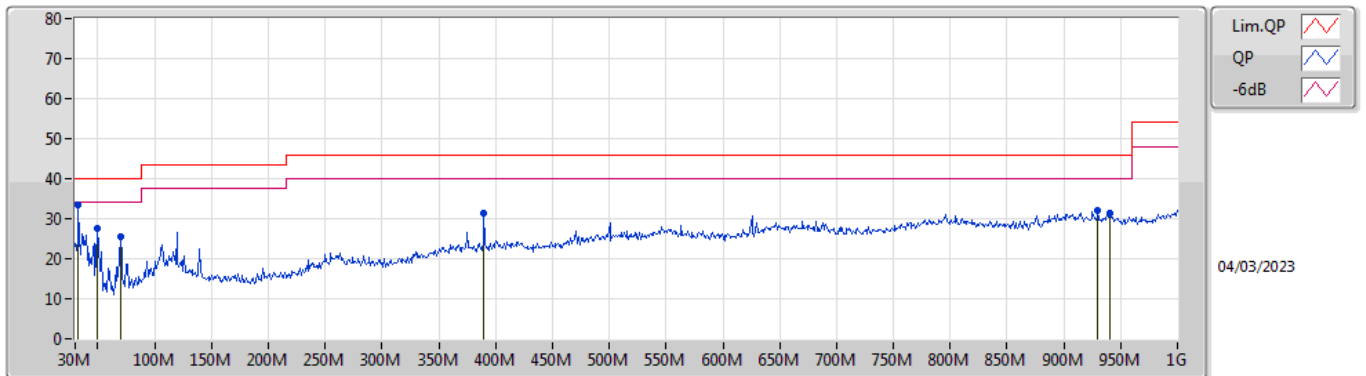
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	PK	69.77M	35.69	40.00	-4.31	Vertical

Mode 1



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)
PK	32.91M	32.93	40.00	-7.07	-8.17	3	Vertical	340	1.50	-	41.10	22.41	1.05	31.63
PK	49.4M	35.03	40.00	-4.97	-16.33	3	Vertical	261	1.50	-	51.36	14.28	1.25	31.86
PK	69.77M	35.69	40.00	-4.31	-18.34	3	Vertical	357	1.25	"Worst"	54.03	12.18	1.45	31.97
PK	625.58M	35.90	46.00	-10.10	-3.47	3	Vertical	282	1.00	-	39.37	24.53	4.52	32.52
PK	890.39M	31.25	46.00	-14.75	-0.73	3	Vertical	86	1.00	-	31.98	26.14	5.62	32.49
PK	925.31M	31.21	46.00	-14.79	-0.63	3	Vertical	86	1.00	-	31.84	26.17	5.68	32.48

Mode 1



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)
PK	32.91M	33.54	40.00	-6.46	-8.17	3	Horizontal	159	1.00	"Worst"	41.71	22.41	1.05	31.63
PK	49.4M	27.56	40.00	-12.44	-16.33	3	Horizontal	291	1.00	-	43.89	14.28	1.25	31.86
PK	69.77M	25.42	40.00	-14.58	-18.34	3	Horizontal	0	1.25	-	43.76	12.18	1.45	31.97
PK	389.87M	31.50	46.00	-14.50	-7.50	3	Horizontal	145	1.00	-	39.00	21.16	3.50	32.16
PK	930M	31.97	46.00	-14.03	-0.55	3	Horizontal	238	1.50	-	32.52	26.25	5.68	32.48
PK	940.83M	31.28	46.00	-14.72	-0.41	3	Horizontal	176	1.00	-	31.69	26.38	5.69	32.48

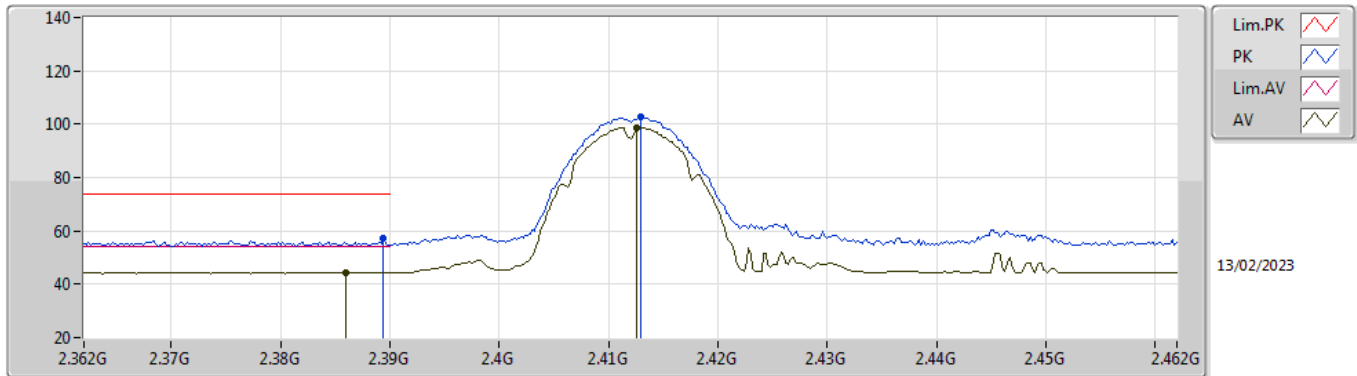


Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
802.11ax HEW40_Nss1,(MCS0)_2TX	Pass	AV	2.3884G	52.88	54.00	-1.12	3	Horizontal	322	2.77	-

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

2412MHz_TX

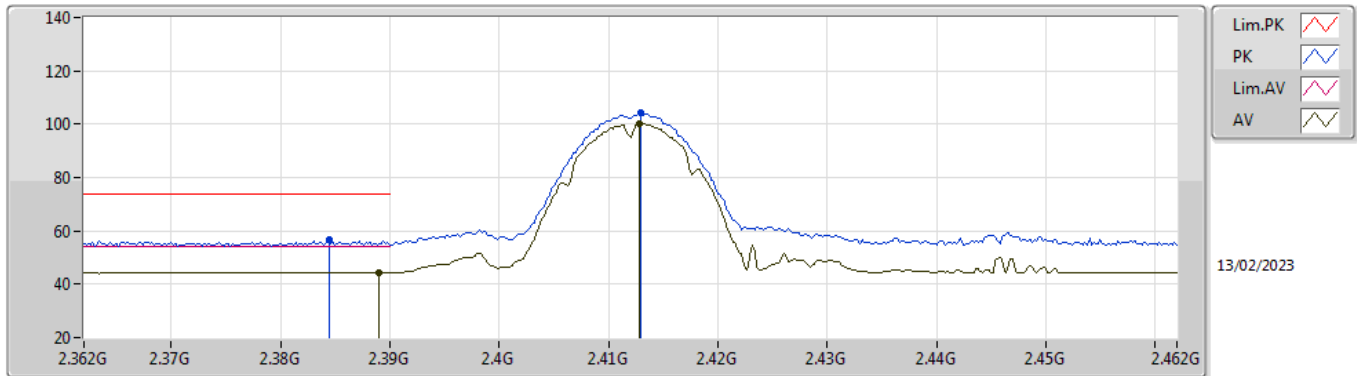


EUT_X_2TX
 Setting 14
 03-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3894G	57.04	74.00	-16.96	24.85	3	Vertical	69	2.79	-	28.20	3.99	-
AV	2.386G	44.20	54.00	-9.80	12.01	3	Vertical	69	2.79	-	28.20	3.99	-
PK	2.413G	102.85	Inf	-Inf	70.64	3	Vertical	69	2.79	-	28.20	4.01	-
AV	2.4126G	98.83	Inf	-Inf	66.62	3	Vertical	69	2.79	-	28.20	4.01	-

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

2412MHz_TX

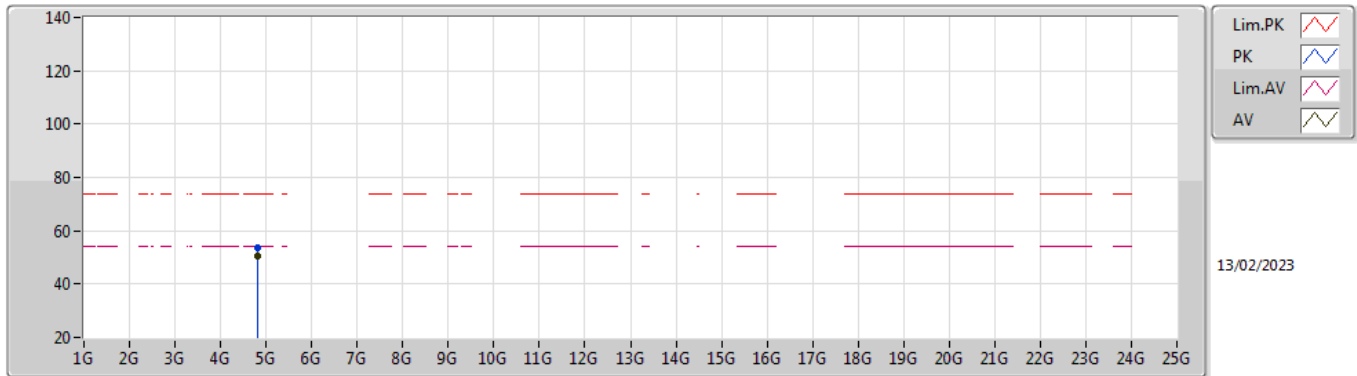


EUT_X_2TX
 Setting 14
 03-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3844G	56.75	74.00	-17.25	24.57	3	Horizontal	17	2.00	-	28.20	3.98	-
AV	2.389G	44.41	54.00	-9.59	12.22	3	Horizontal	17	2.00	-	28.20	3.99	-
PK	2.413G	104.21	Inf	-Inf	72.00	3	Horizontal	17	2.00	-	28.20	4.01	-
AV	2.4128G	100.01	Inf	-Inf	67.80	3	Horizontal	17	2.00	-	28.20	4.01	-

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

2412MHz_TX

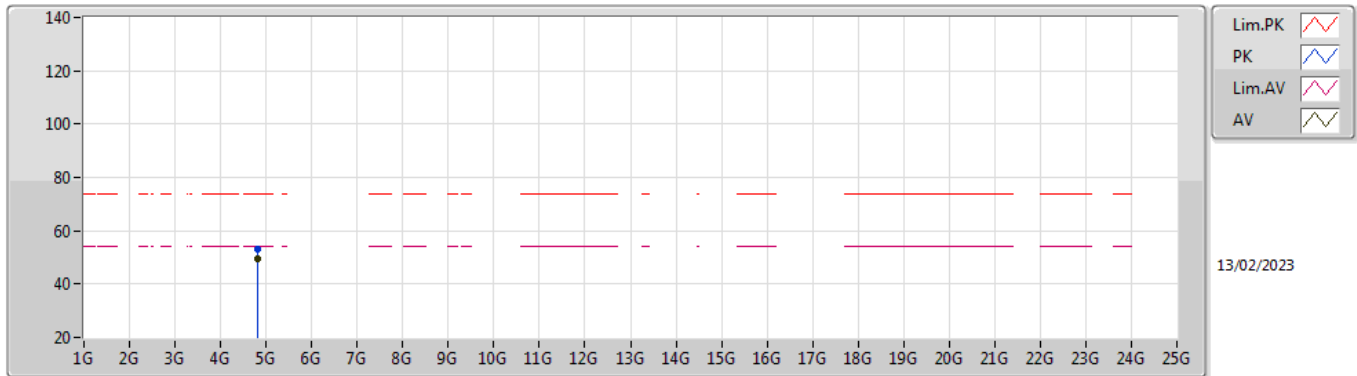


EUT X_2TX
 Setting 14
 03-F-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.824G	53.79	74.00	-20.21	48.78	3	Vertical	31	1.98	-	33.40	6.51	34.90
AV	4.82394G	50.54	54.00	-3.46	45.53	3	Vertical	31	1.98	-	33.40	6.51	34.90

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

2412MHz_TX

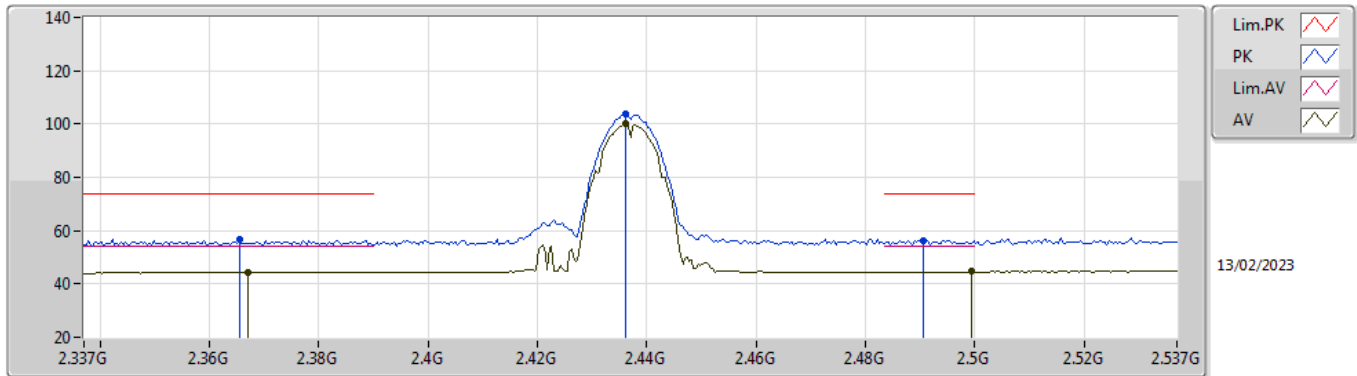


EUT X_2TX
 Setting 14
 03-F-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.824G	53.08	74.00	-20.92	48.07	3	Horizontal	314	1.02	-	33.40	6.51	34.90
AV	4.82394G	49.60	54.00	-4.40	44.59	3	Horizontal	314	1.02	-	33.40	6.51	34.90

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

2437MHz_TX

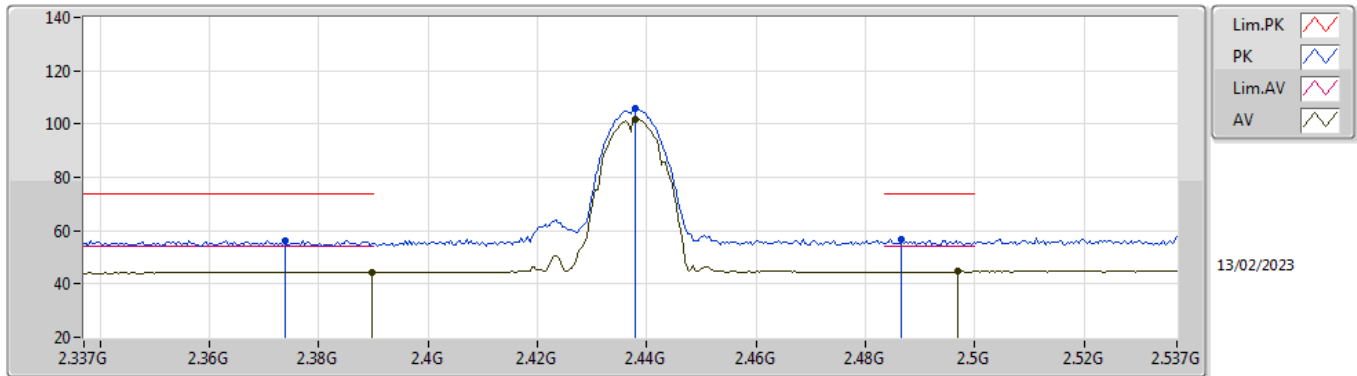


EUT X_2TX
 Setting 15
 03-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3654G	56.87	74.00	-17.13	24.70	3	Vertical	20	3.00	-	28.20	3.97	-
AV	2.367G	44.25	54.00	-9.75	12.08	3	Vertical	20	3.00	-	28.20	3.97	-
PK	2.4362G	103.71	Inf	-Inf	71.47	3	Vertical	20	3.00	-	28.20	4.04	-
AV	2.4362G	99.96	Inf	-Inf	67.72	3	Vertical	20	3.00	-	28.20	4.04	-
PK	2.4906G	56.40	74.00	-17.60	23.87	3	Vertical	20	3.00	-	28.44	4.09	-
AV	2.4994G	44.58	54.00	-9.42	11.98	3	Vertical	20	3.00	-	28.50	4.10	-

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

2437MHz_TX

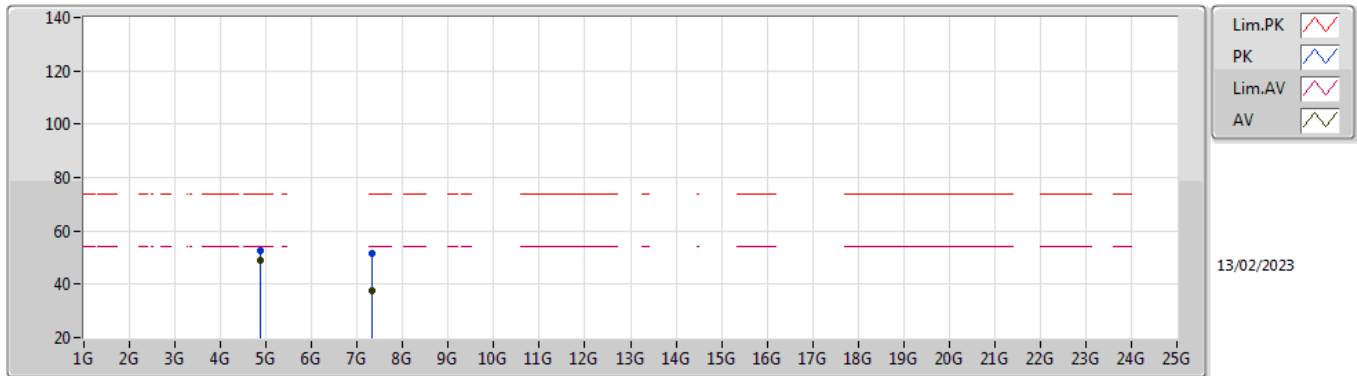


EUT X_2TX
 Setting 15
 03-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3738G	56.45	74.00	-17.55	24.28	3	Horizontal	21	2.45	-	28.20	3.97	-
AV	2.3898G	44.23	54.00	-9.77	12.04	3	Horizontal	21	2.45	-	28.20	3.99	-
PK	2.4378G	106.04	Inf	-Inf	73.80	3	Horizontal	21	2.45	-	28.20	4.04	-
AV	2.4378G	101.79	Inf	-Inf	69.55	3	Horizontal	21	2.45	-	28.20	4.04	-
PK	2.4866G	56.71	74.00	-17.29	24.20	3	Horizontal	21	2.45	-	28.42	4.09	-
AV	2.497G	44.58	54.00	-9.42	12.00	3	Horizontal	21	2.45	-	28.48	4.10	-

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

2437MHz_TX

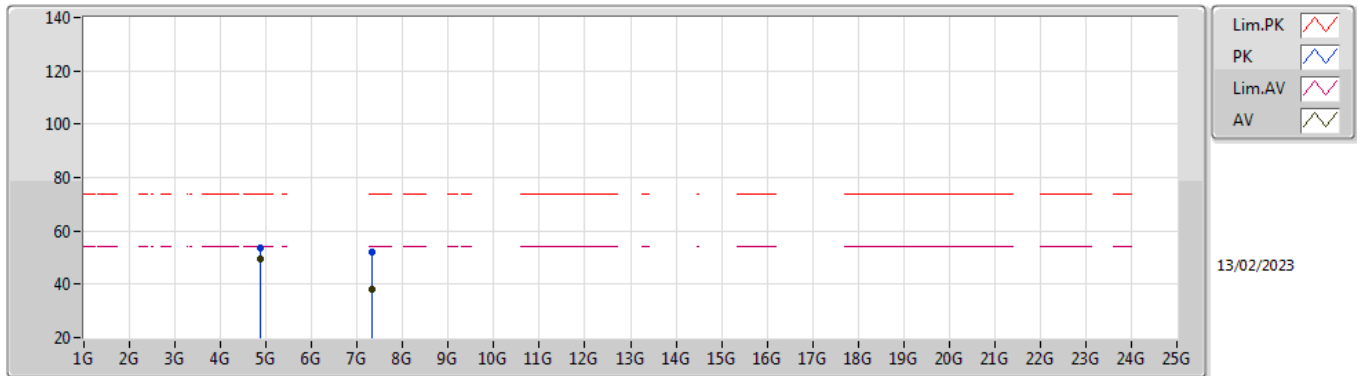


EUT X_2TX
 Setting 15
 03-F-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.87396G	52.69	74.00	-21.31	47.51	3	Vertical	32	2.06	-	33.54	6.54	34.90
AV	4.87392G	49.06	54.00	-4.94	43.88	3	Vertical	32	2.06	-	33.54	6.54	34.90
PK	7.31128G	51.57	74.00	-22.43	41.19	3	Vertical	93	2.32	-	36.82	8.70	35.14
AV	7.31656G	37.74	54.00	-16.26	27.36	3	Vertical	93	2.32	-	36.83	8.70	35.15

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

2437MHz_TX

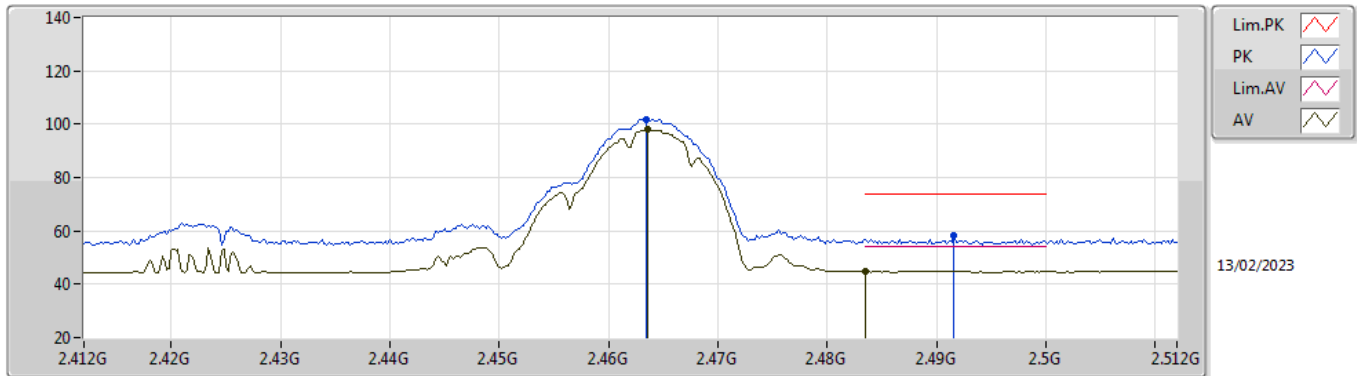


EUT X_2TX
 Setting 15
 03-F-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.87392G	53.46	74.00	-20.54	48.28	3	Horizontal	312	1.00	-	33.54	6.54	34.90
AV	4.87396G	49.74	54.00	-4.26	44.56	3	Horizontal	312	1.00	-	33.54	6.54	34.90
PK	7.31872G	51.93	74.00	-22.07	41.54	3	Horizontal	113	1.30	-	36.84	8.70	35.15
AV	7.31224G	37.85	54.00	-16.15	27.47	3	Horizontal	113	1.30	-	36.82	8.70	35.14

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

2462MHz_TX

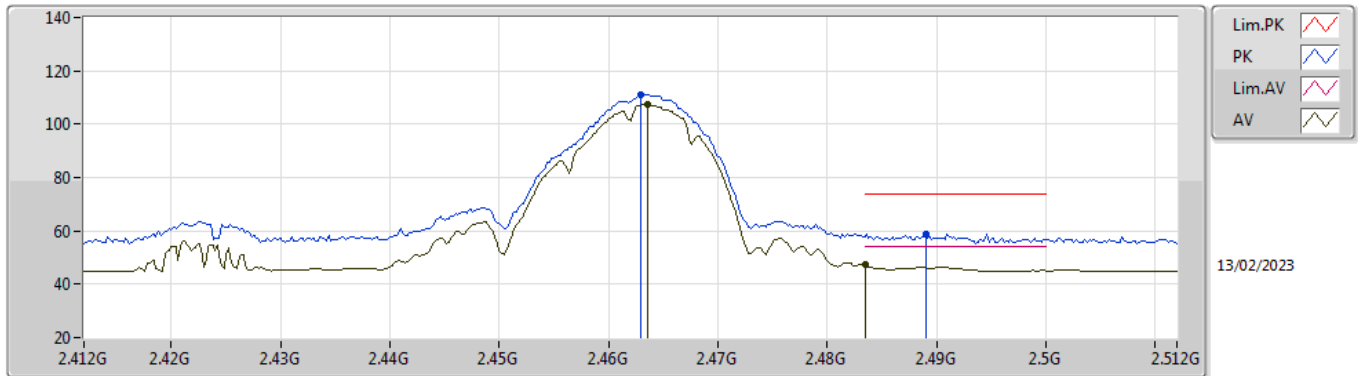


EUT_X_2TX
 Setting 15
 03-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.4634G	101.63	Inf	-Inf	69.29	3	Vertical	64	1.72	-	28.28	4.06	-
AV	2.4636G	98.12	Inf	-Inf	65.78	3	Vertical	64	1.72	-	28.28	4.06	-
PK	2.4916G	58.05	74.00	-15.95	25.51	3	Vertical	64	1.72	-	28.45	4.09	-
AV	2.4835G	44.73	54.00	-9.27	12.25	3	Vertical	64	1.72	-	28.40	4.08	-

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

2462MHz_TX

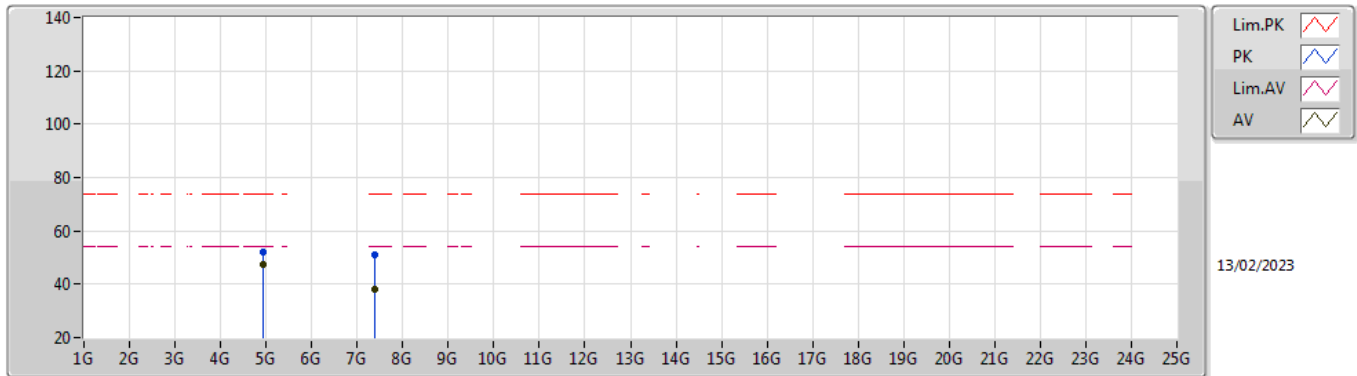


EUT_X_2TX
 Setting 15
 03-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.463G	111.13	Inf	-Inf	78.79	3	Horizontal	326	3.00	-	28.28	4.06	-
AV	2.4636G	107.39	Inf	-Inf	75.05	3	Horizontal	326	3.00	-	28.28	4.06	-
PK	2.489G	58.71	74.00	-15.29	26.19	3	Horizontal	326	3.00	-	28.43	4.09	-
AV	2.4835G	47.30	54.00	-6.70	14.82	3	Horizontal	326	3.00	-	28.40	4.08	-

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

2462MHz_TX

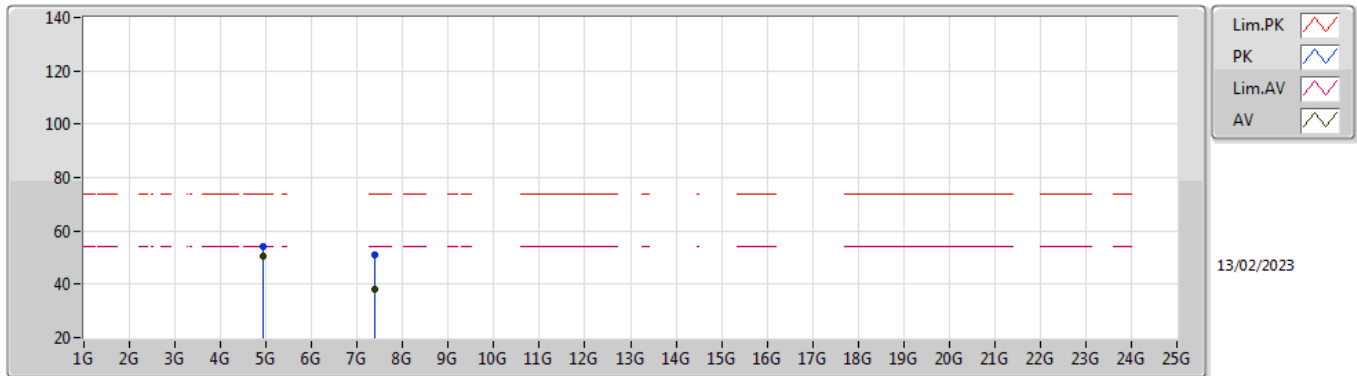


EUT_X_2TX
 Setting 15
 03-F-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.924G	51.86	74.00	-22.14	46.54	3	Vertical	348	1.79	-	33.65	6.56	34.89
AV	4.92392G	47.27	54.00	-6.73	41.95	3	Vertical	348	1.79	-	33.65	6.56	34.89
PK	7.38208G	51.20	74.00	-22.80	40.78	3	Vertical	192	2.56	-	36.90	8.70	35.18
AV	7.37984G	37.88	54.00	-16.12	27.45	3	Vertical	192	2.56	-	36.90	8.70	35.17

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

2462MHz_TX

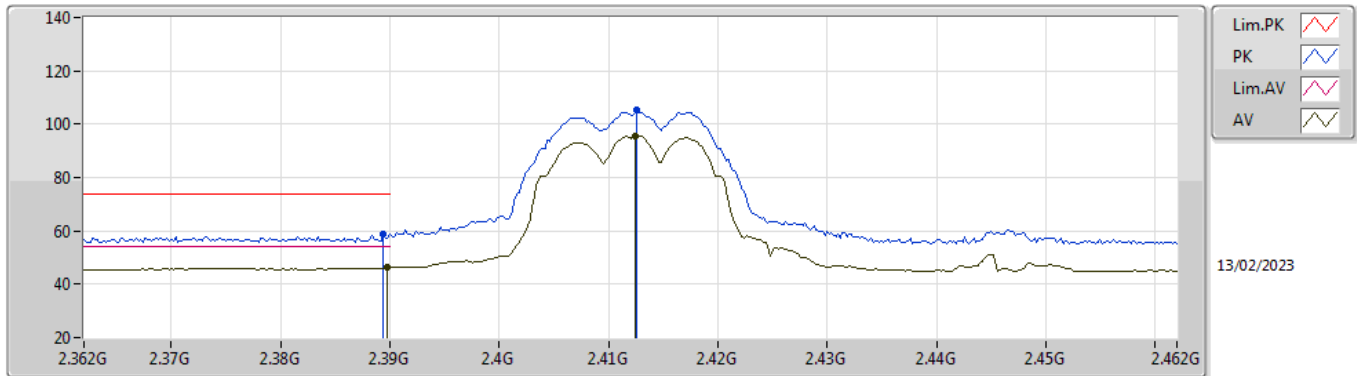


EUT_X_2TX
 Setting 15
 03-F-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.92404G	54.20	74.00	-19.80	48.88	3	Horizontal	312	1.00	-	33.65	6.56	34.89
AV	4.92396G	50.46	54.00	-3.54	45.14	3	Horizontal	312	1.00	-	33.65	6.56	34.89
PK	7.3776G	51.27	74.00	-22.73	40.84	3	Horizontal	235	2.09	-	36.90	8.70	35.17
AV	7.37916G	37.85	54.00	-16.15	27.42	3	Horizontal	235	2.09	-	36.90	8.70	35.17

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

2412MHz_TX

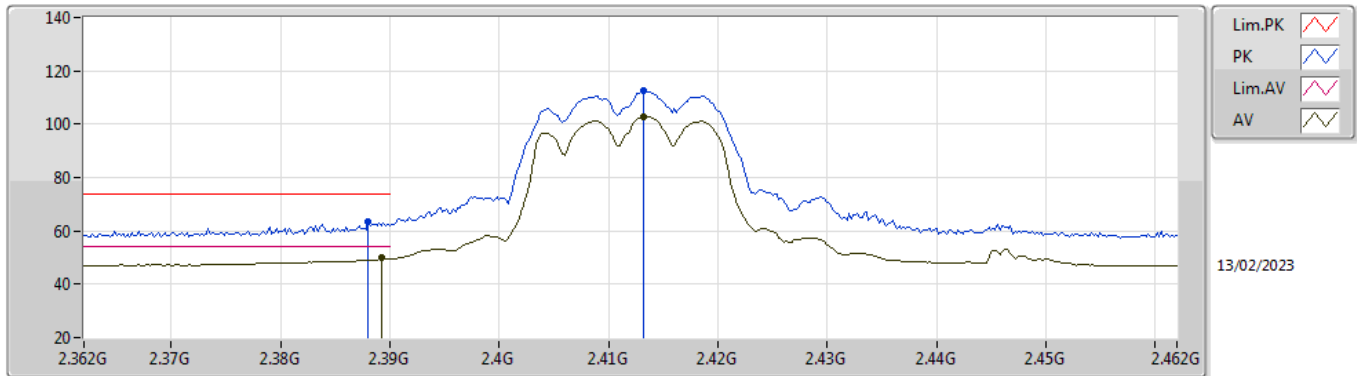


EUT_X_2TX
 Setting 15
 03-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3894G	58.57	74.00	-15.43	26.38	3	Vertical	50	2.57	-	28.20	3.99	-
AV	2.3898G	46.32	54.00	-7.68	14.13	3	Vertical	50	2.57	-	28.20	3.99	-
PK	2.4126G	105.38	Inf	-Inf	73.17	3	Vertical	50	2.57	-	28.20	4.01	-
AV	2.4124G	95.69	Inf	-Inf	63.48	3	Vertical	50	2.57	-	28.20	4.01	-

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

2412MHz_TX

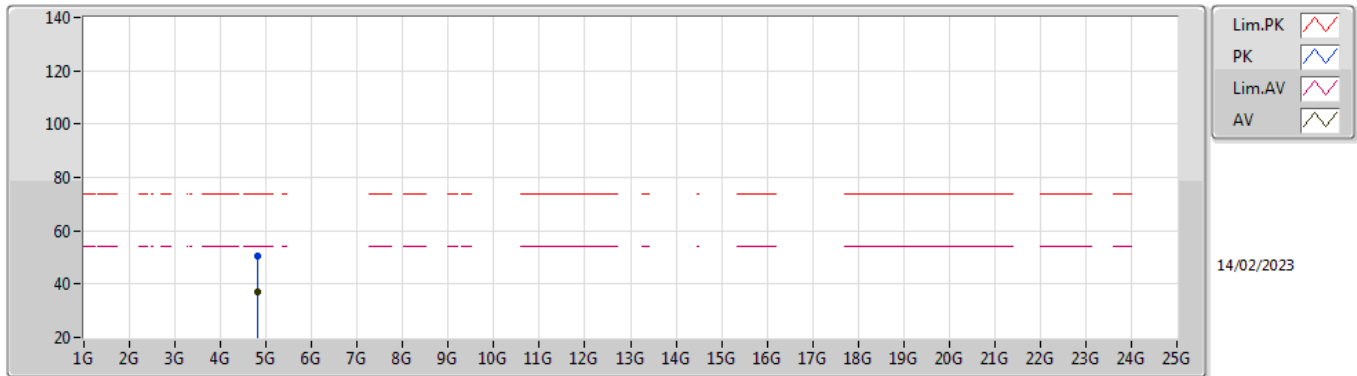


EUT_X_2TX
Setting 15
03-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.388G	63.24	74.00	-10.76	31.05	3	Horizontal	323	2.74	-	28.20	3.99	-
AV	2.3892G	49.77	54.00	-4.23	17.58	3	Horizontal	323	2.74	-	28.20	3.99	-
PK	2.4132G	112.51	Inf	-Inf	80.30	3	Horizontal	323	2.74	-	28.20	4.01	-
AV	2.4132G	103.01	Inf	-Inf	70.80	3	Horizontal	323	2.74	-	28.20	4.01	-

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

2412MHz_TX

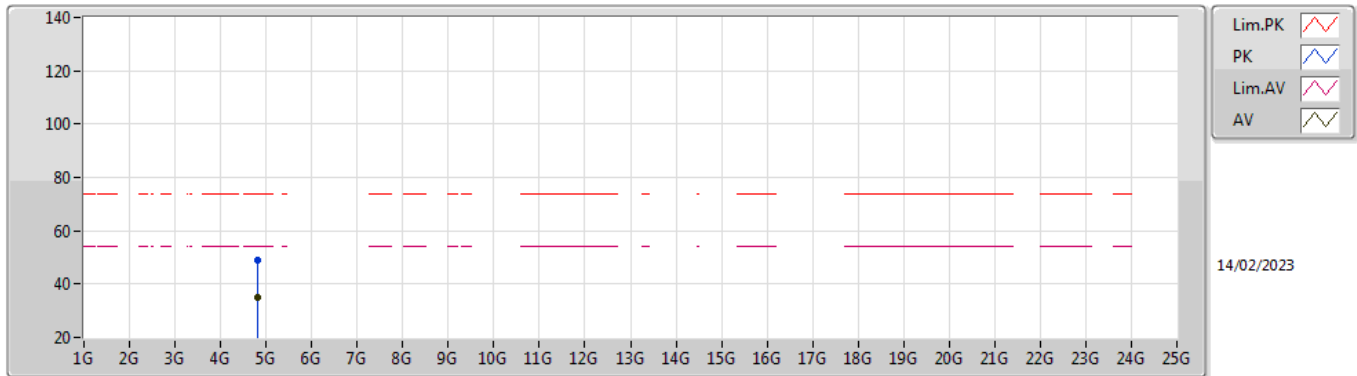


EUT X_2TX
 Setting 15
 03-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.8256G	50.39	74.00	-23.61	45.38	3	Vertical	57	1.03	-	33.40	6.51	34.90
AV	4.82508G	36.92	54.00	-17.08	31.91	3	Vertical	57	1.03	-	33.40	6.51	34.90

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

2412MHz_TX

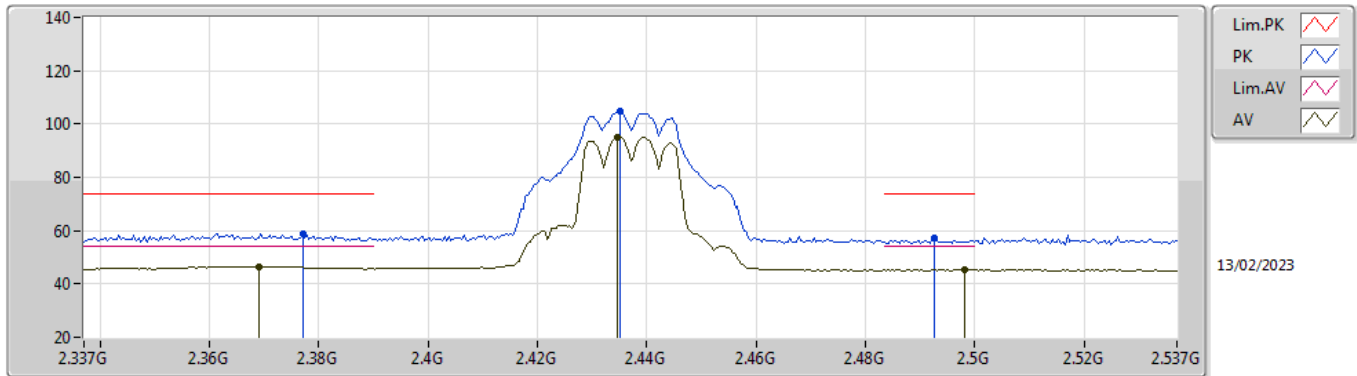


EUT X_2TX
 Setting 15
 03-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.82708G	49.01	74.00	-24.99	44.00	3	Horizontal	296	1.80	-	33.40	6.51	34.90
AV	4.8228G	34.81	54.00	-19.19	29.80	3	Horizontal	296	1.80	-	33.40	6.51	34.90

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

2437MHz_TX

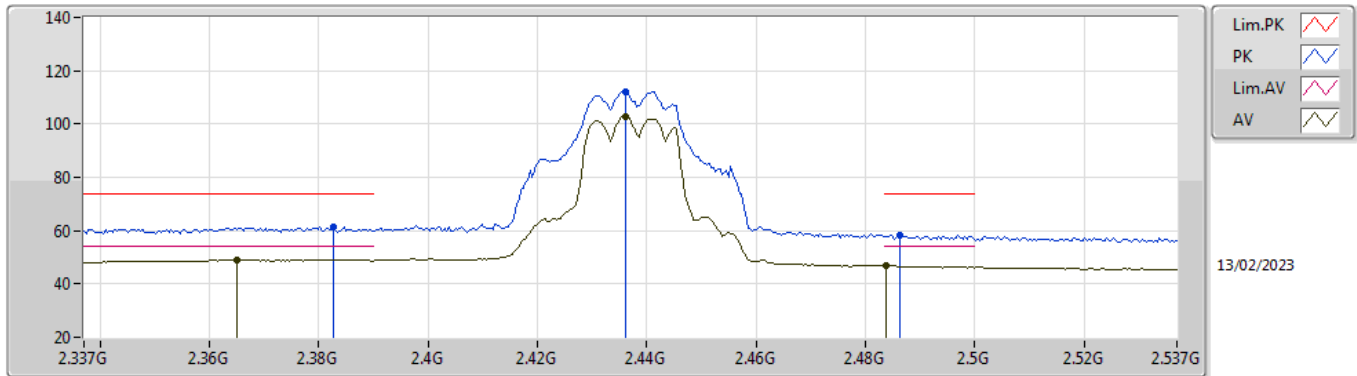


EUT X_2TX
 Setting 15
 03-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.377G	58.75	74.00	-15.25	26.57	3	Vertical	23	3.00	-	28.20	3.98	-
AV	2.369G	46.53	54.00	-7.47	14.36	3	Vertical	23	3.00	-	28.20	3.97	-
PK	2.435G	104.80	Inf	-Inf	72.56	3	Vertical	23	3.00	-	28.20	4.04	-
AV	2.4346G	95.15	Inf	-Inf	62.92	3	Vertical	23	3.00	-	28.20	4.03	-
PK	2.4926G	57.14	74.00	-16.86	24.59	3	Vertical	23	3.00	-	28.46	4.09	-
AV	2.4982G	45.28	54.00	-8.72	12.69	3	Vertical	23	3.00	-	28.49	4.10	-

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

2437MHz_TX

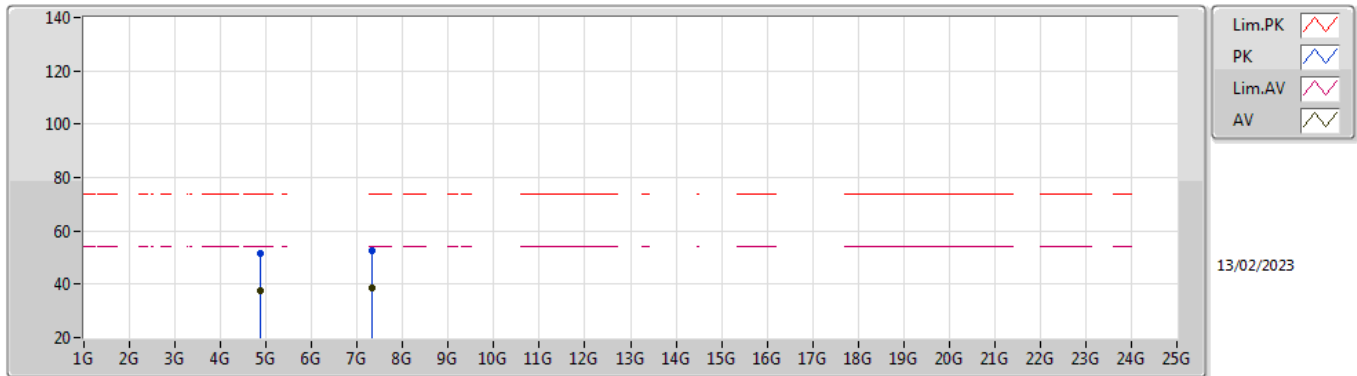


EUT X_2TX
 Setting 15
 03-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3826G	61.46	74.00	-12.54	29.28	3	Horizontal	323	2.74	-	28.20	3.98	-
AV	2.365G	49.16	54.00	-4.84	17.00	3	Horizontal	323	2.74	-	28.20	3.96	-
PK	2.4362G	112.28	Inf	-Inf	80.04	3	Horizontal	323	2.74	-	28.20	4.04	-
AV	2.4362G	103.01	Inf	-Inf	70.77	3	Horizontal	323	2.74	-	28.20	4.04	-
PK	2.4862G	58.48	74.00	-15.52	25.97	3	Horizontal	323	2.74	-	28.42	4.09	-
AV	2.4838G	46.88	54.00	-7.12	14.40	3	Horizontal	323	2.74	-	28.40	4.08	-

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

2437MHz_TX

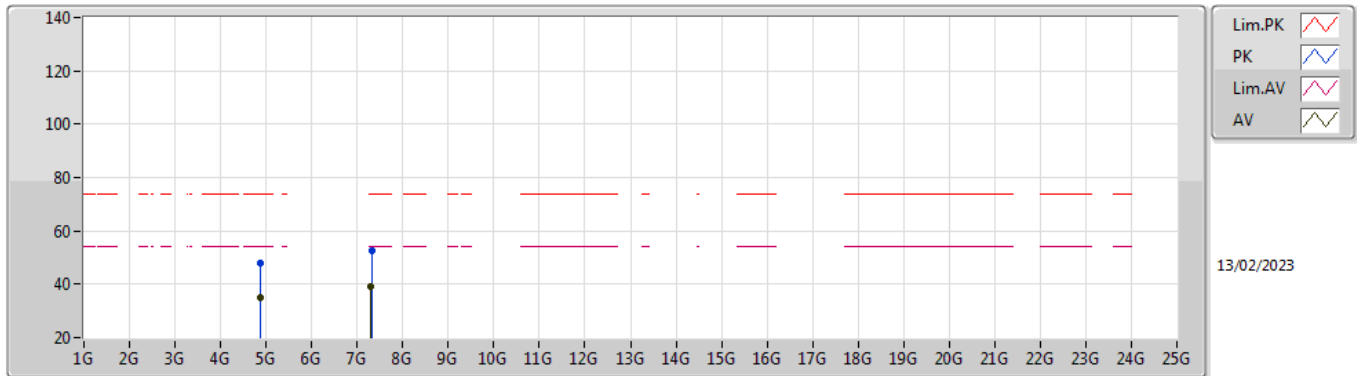


EUT X_2TX
 Setting 15
 03-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.86924G	51.32	74.00	-22.68	46.17	3	Vertical	58	1.00	-	33.52	6.53	34.90
AV	4.87416G	37.63	54.00	-16.37	32.45	3	Vertical	58	1.00	-	33.54	6.54	34.90
PK	7.31424G	52.37	74.00	-21.63	41.98	3	Vertical	147	1.52	-	36.83	8.70	35.14
AV	7.3202G	38.82	54.00	-15.18	28.43	3	Vertical	147	1.52	-	36.84	8.70	35.15

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

2437MHz_TX

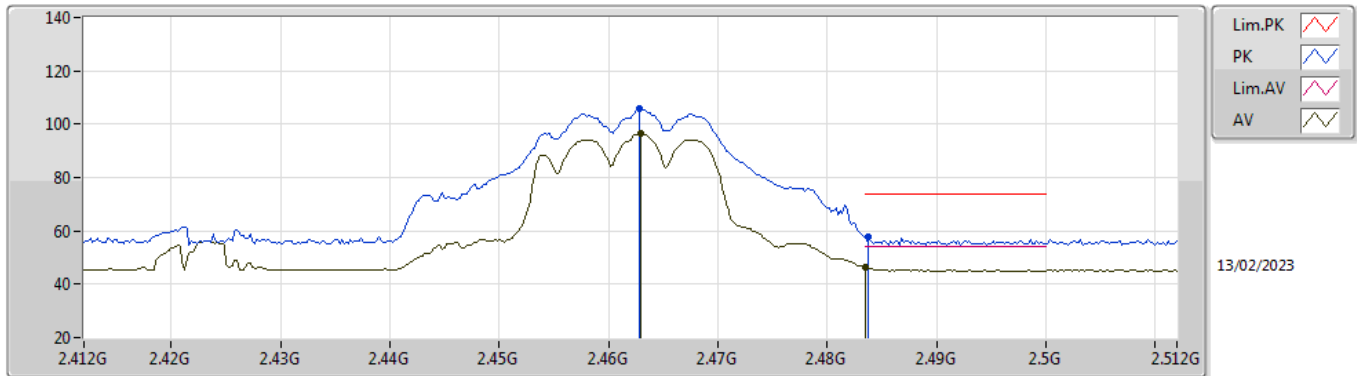


EUT_X_2TX
Setting 15
03-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.87144G	47.85	74.00	-26.15	42.68	3	Horizontal	297	2.04	-	33.53	6.54	34.90
AV	4.87636G	34.93	54.00	-19.07	29.72	3	Horizontal	297	2.04	-	33.56	6.54	34.89
PK	7.312G	52.37	74.00	-21.63	41.99	3	Horizontal	37	2.50	-	36.82	8.70	35.14
AV	7.30944G	38.97	54.00	-15.03	28.59	3	Horizontal	37	2.50	-	36.82	8.70	35.14

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

2462MHz_TX

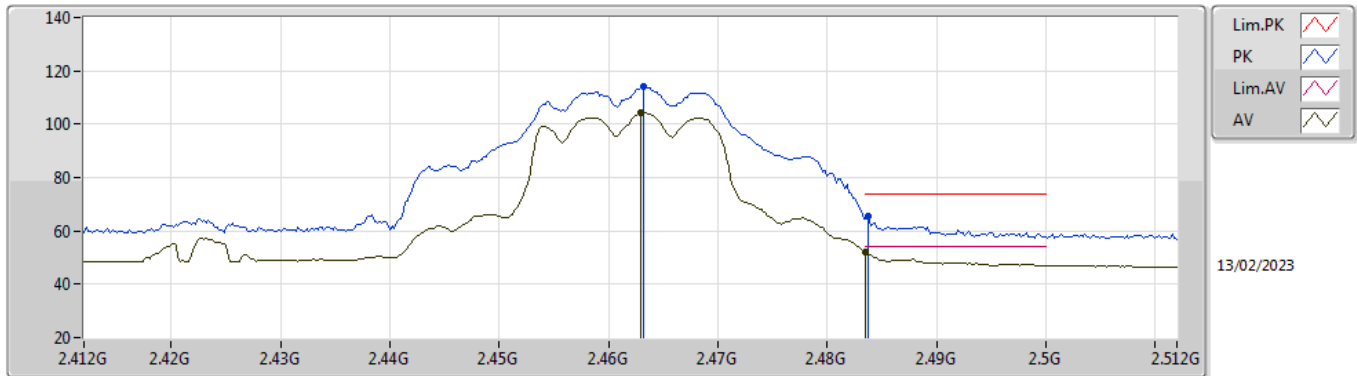


EUT_X_2TX
 Setting 15
 03-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.4628G	105.70	Inf	-Inf	73.36	3	Vertical	69	1.83	-	28.28	4.06	-
AV	2.463G	96.35	Inf	-Inf	64.01	3	Vertical	69	1.83	-	28.28	4.06	-
PK	2.4838G	57.94	74.00	-16.06	25.46	3	Vertical	69	1.83	-	28.40	4.08	-
AV	2.4835G	46.35	54.00	-7.65	13.87	3	Vertical	69	1.83	-	28.40	4.08	-

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

2462MHz_TX

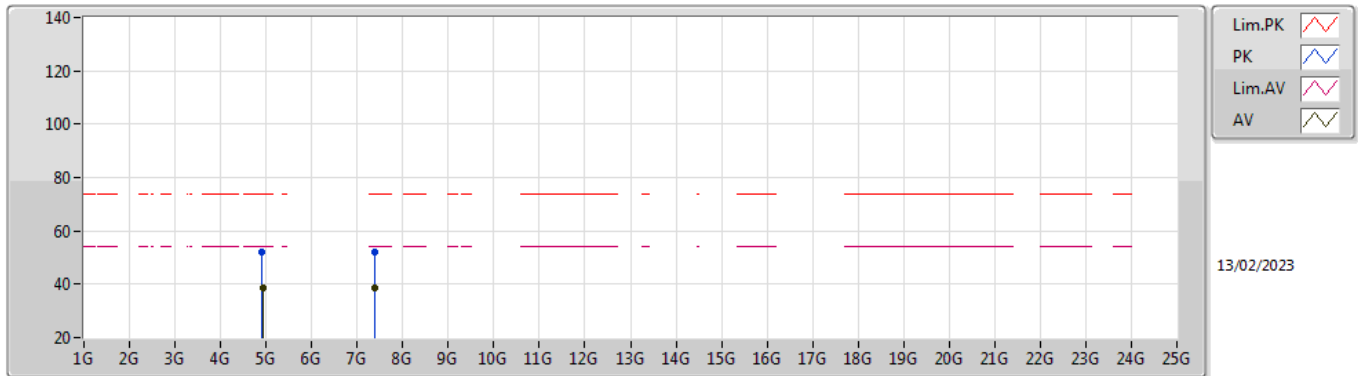


EUT_X_2TX
Setting 15
03-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.4632G	113.97	Inf	-Inf	81.63	3	Horizontal	327	2.97	-	28.28	4.06	-
AV	2.463G	104.36	Inf	-Inf	72.02	3	Horizontal	327	2.97	-	28.28	4.06	-
PK	2.4838G	65.43	74.00	-8.57	32.95	3	Horizontal	327	2.97	-	28.40	4.08	-
AV	2.4835G	52.16	54.00	-1.84	19.68	3	Horizontal	327	2.97	-	28.40	4.08	-

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

2462MHz_TX

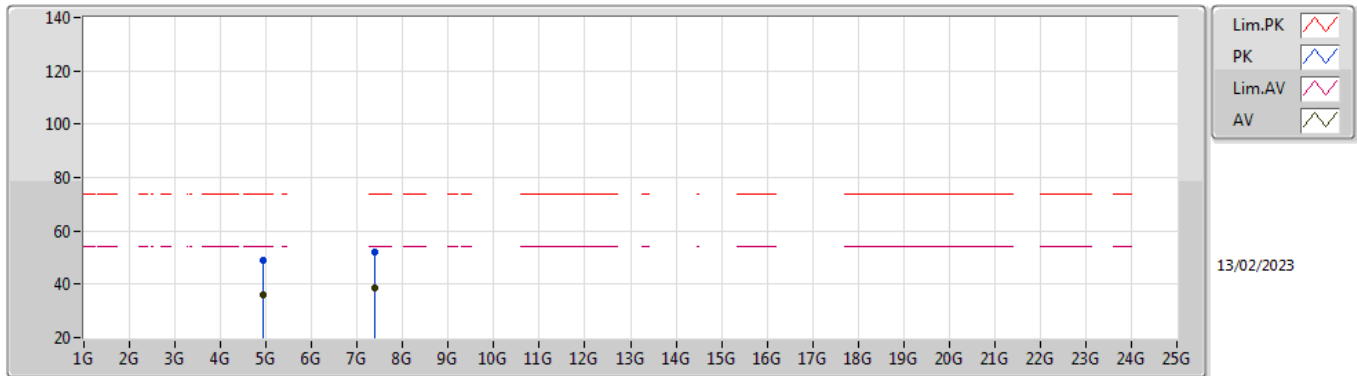


EUT_X_2TX
 Setting 15
 03-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.9192G	51.87	74.00	-22.13	46.54	3	Vertical	55	1.09	-	33.66	6.56	34.89
AV	4.92376G	38.44	54.00	-15.56	33.12	3	Vertical	55	1.09	-	33.65	6.56	34.89
PK	7.3826G	52.04	74.00	-21.96	41.62	3	Vertical	134	1.86	-	36.90	8.70	35.18
AV	7.3842G	38.87	54.00	-15.13	28.45	3	Vertical	134	1.86	-	36.90	8.70	35.18

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

2462MHz_TX

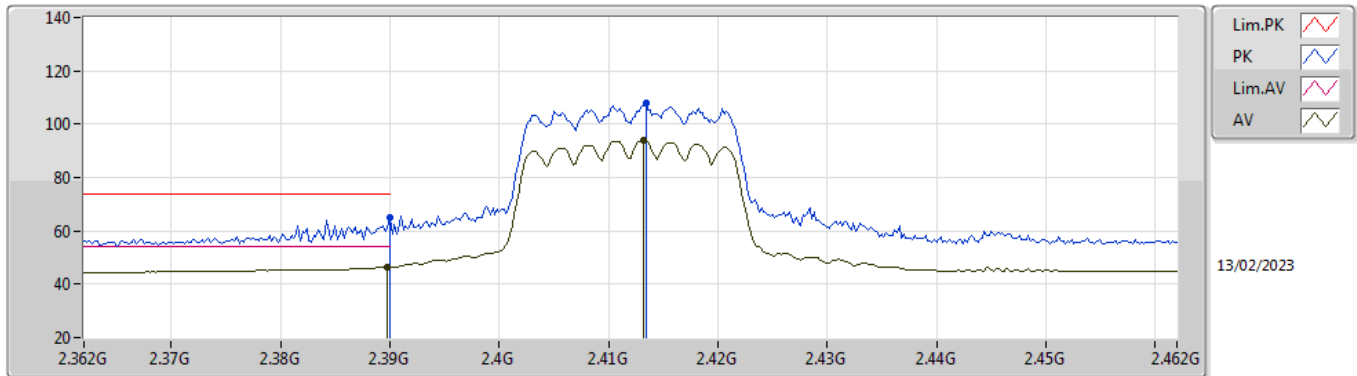


EUT_X_2TX
 Setting 15
 03-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.92148G	48.75	74.00	-25.25	43.42	3	Horizontal	297	1.80	-	33.66	6.56	34.89
AV	4.92628G	36.17	54.00	-17.83	30.85	3	Horizontal	297	1.80	-	33.65	6.56	34.89
PK	7.3876G	51.82	74.00	-22.18	41.40	3	Horizontal	341	2.98	-	36.90	8.70	35.18
AV	7.38212G	38.80	54.00	-15.20	28.38	3	Horizontal	341	2.98	-	36.90	8.70	35.18

2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

2412MHz_TX

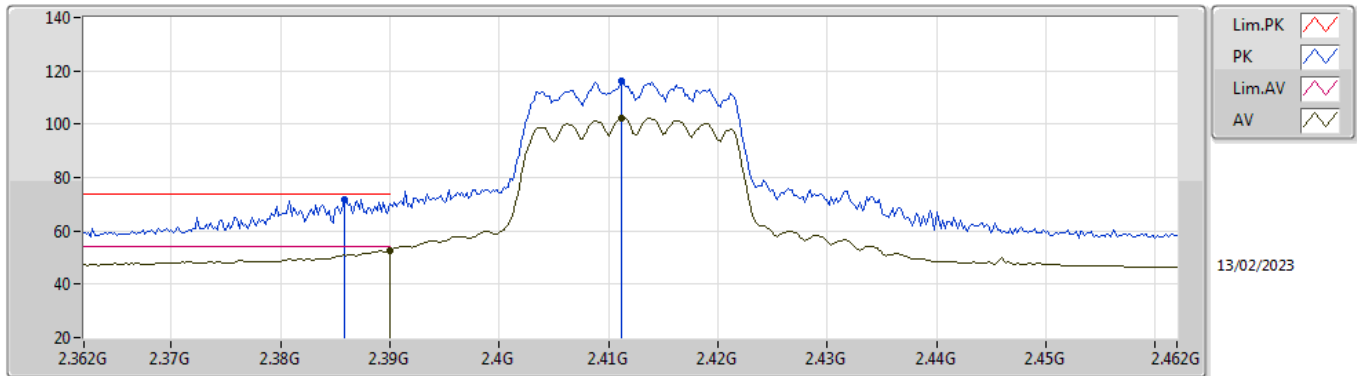


EUT X_2TX
Setting 16
03-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.39G	64.78	74.00	-9.22	32.59	3	Vertical	68	2.82	-	28.20	3.99	-
AV	2.3898G	46.52	54.00	-7.48	14.33	3	Vertical	68	2.82	-	28.20	3.99	-
PK	2.4134G	107.75	Inf	-Inf	75.54	3	Vertical	68	2.82	-	28.20	4.01	-
AV	2.4132G	93.98	Inf	-Inf	61.77	3	Vertical	68	2.82	-	28.20	4.01	-

2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

2412MHz_TX

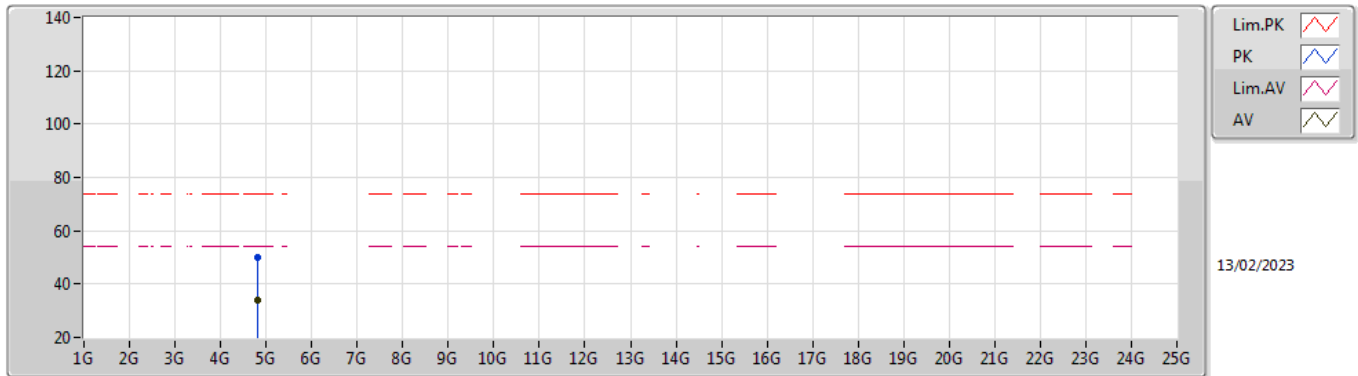


EUT_X_2TX
 Setting 16
 03-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3858G	71.69	74.00	-2.31	39.50	3	Horizontal	332	2.83	-	28.20	3.99	-
AV	2.39G	52.59	54.00	-1.41	20.40	3	Horizontal	332	2.83	-	28.20	3.99	-
PK	2.4112G	115.98	Inf	-Inf	83.77	3	Horizontal	332	2.83	-	28.20	4.01	-
AV	2.4112G	102.38	Inf	-Inf	70.17	3	Horizontal	332	2.83	-	28.20	4.01	-

2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

2412MHz_TX

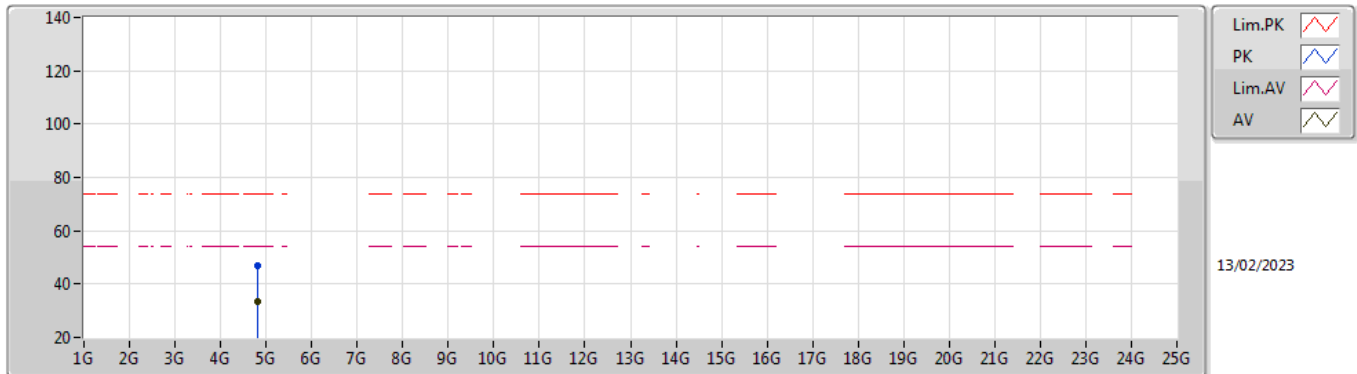


EUT X_2TX
 Setting 16
 03-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.82464G	50.07	74.00	-23.93	45.06	3	Vertical	57	1.00	-	33.40	6.51	34.90
AV	4.82468G	34.06	54.00	-19.94	29.05	3	Vertical	57	1.00	-	33.40	6.51	34.90

2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

2412MHz_TX

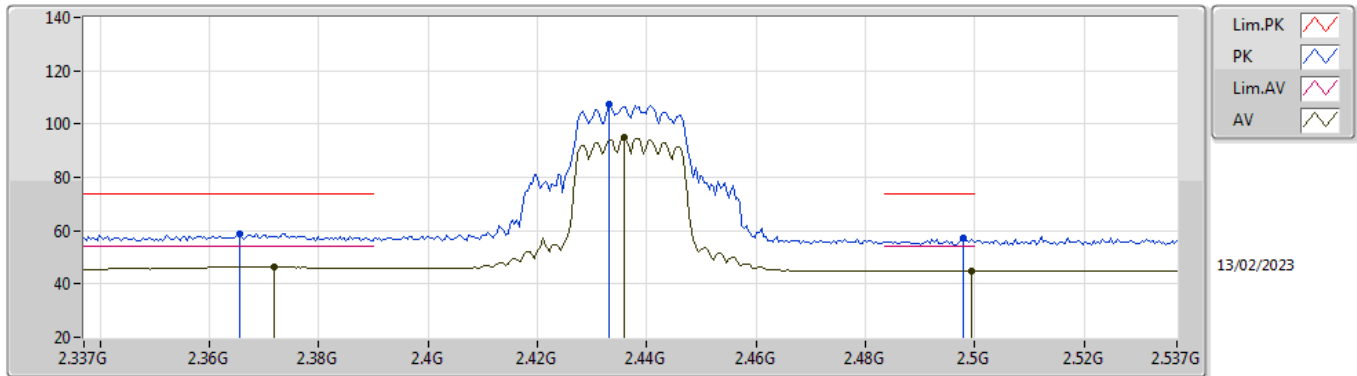


EUT X_2TX
 Setting 16
 03-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.82104G	47.15	74.00	-26.85	42.14	3	Horizontal	295	1.80	-	33.40	6.51	34.90
AV	4.82372G	33.19	54.00	-20.81	28.18	3	Horizontal	295	1.80	-	33.40	6.51	34.90

2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

2437MHz_TX

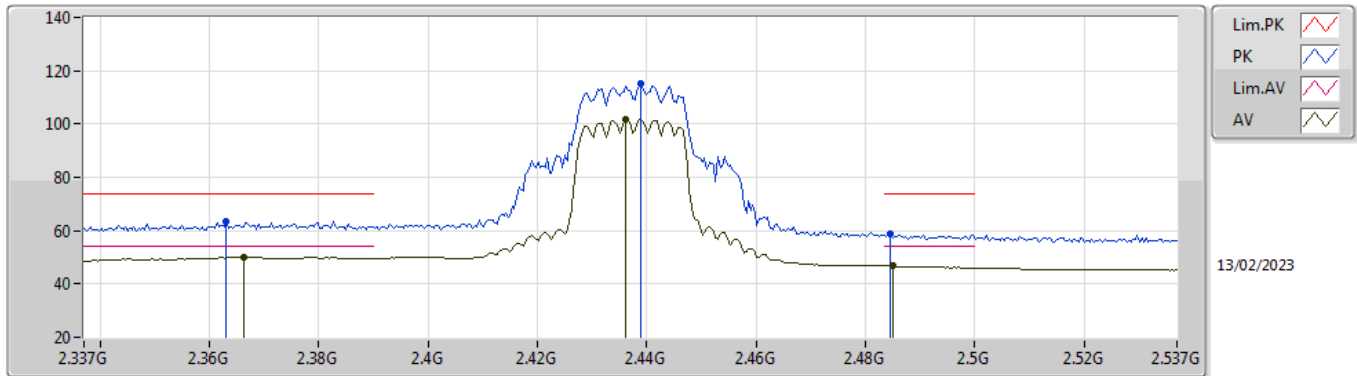


EUT X_2TX
 Setting 16
 03-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3654G	58.70	74.00	-15.30	26.53	3	Vertical	20	2.98	-	28.20	3.97	-
AV	2.3718G	46.40	54.00	-7.60	14.23	3	Vertical	20	2.98	-	28.20	3.97	-
PK	2.433G	107.32	Inf	-Inf	75.09	3	Vertical	20	2.98	-	28.20	4.03	-
AV	2.4358G	94.89	Inf	-Inf	62.65	3	Vertical	20	2.98	-	28.20	4.04	-
PK	2.4978G	57.08	74.00	-16.92	24.49	3	Vertical	20	2.98	-	28.49	4.10	-
AV	2.4994G	44.86	54.00	-9.14	12.26	3	Vertical	20	2.98	-	28.50	4.10	-

2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

2437MHz_TX

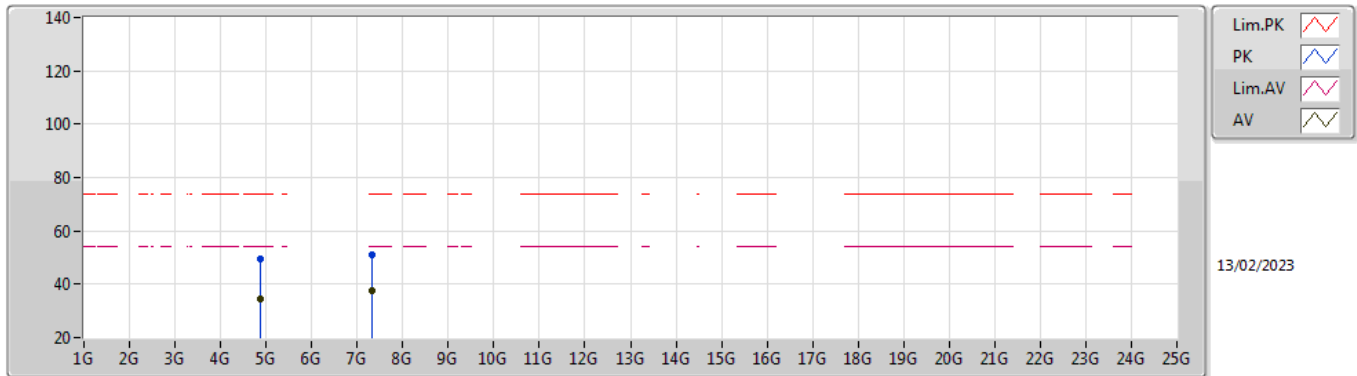


EUT X_2TX
 Setting 16
 03-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.363G	63.59	74.00	-10.41	31.43	3	Horizontal	326	2.74	-	28.20	3.96	-
AV	2.3662G	49.97	54.00	-4.03	17.80	3	Horizontal	326	2.74	-	28.20	3.97	-
PK	2.439G	114.96	Inf	-Inf	82.72	3	Horizontal	326	2.74	-	28.20	4.04	-
AV	2.4362G	101.88	Inf	-Inf	69.64	3	Horizontal	326	2.74	-	28.20	4.04	-
PK	2.4846G	58.65	74.00	-15.35	26.16	3	Horizontal	326	2.74	-	28.41	4.08	-
AV	2.485G	46.77	54.00	-7.23	14.28	3	Horizontal	326	2.74	-	28.41	4.08	-

2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

2437MHz_TX

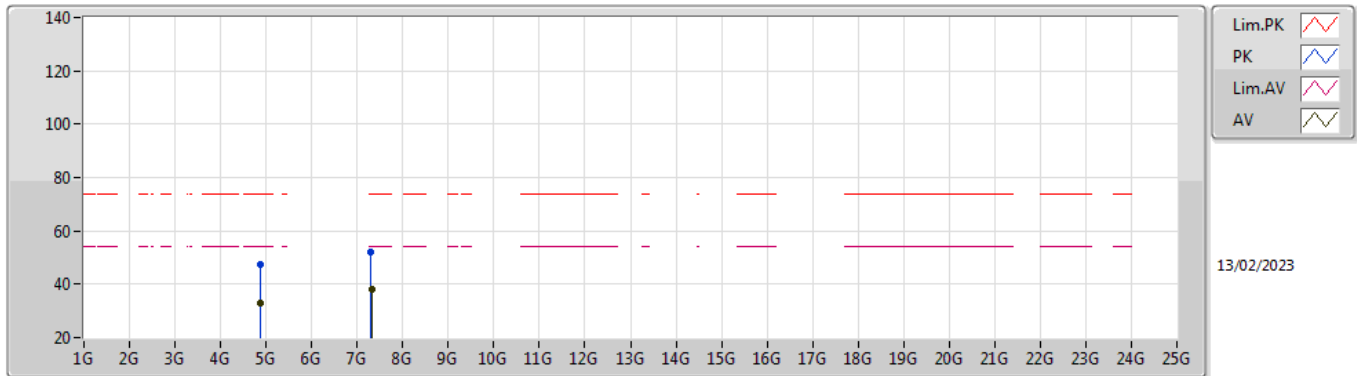


EUT_X_2TX
 Setting 16
 03-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.8716G	49.33	74.00	-24.67	44.16	3	Vertical	55	1.00	-	33.53	6.54	34.90
AV	4.87404G	34.52	54.00	-19.48	29.34	3	Vertical	55	1.00	-	33.54	6.54	34.90
PK	7.31964G	51.19	74.00	-22.81	40.80	3	Vertical	301	2.42	-	36.84	8.70	35.15
AV	7.31476G	37.75	54.00	-16.25	27.36	3	Vertical	301	2.42	-	36.83	8.70	35.14

2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

2437MHz_TX

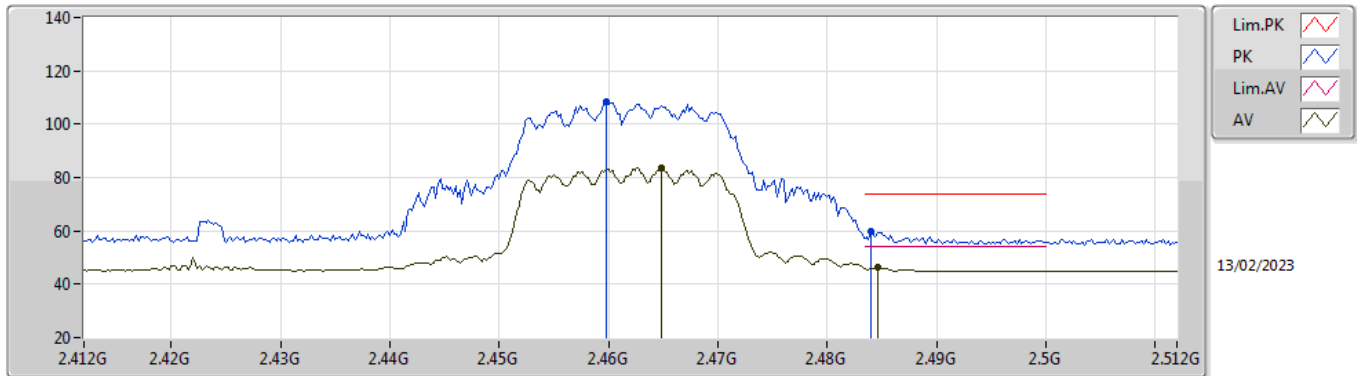


EUT_X_2TX
 Setting 16
 03-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.87572G	47.58	74.00	-26.42	42.38	3	Horizontal	296	1.84	-	33.55	6.54	34.89
AV	4.87552G	33.06	54.00	-20.94	27.86	3	Horizontal	296	1.84	-	33.55	6.54	34.89
PK	7.3098G	52.23	74.00	-21.77	41.85	3	Horizontal	44	1.53	-	36.82	8.70	35.14
AV	7.31436G	37.85	54.00	-16.15	27.46	3	Horizontal	44	1.53	-	36.83	8.70	35.14

2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

2462MHz_TX

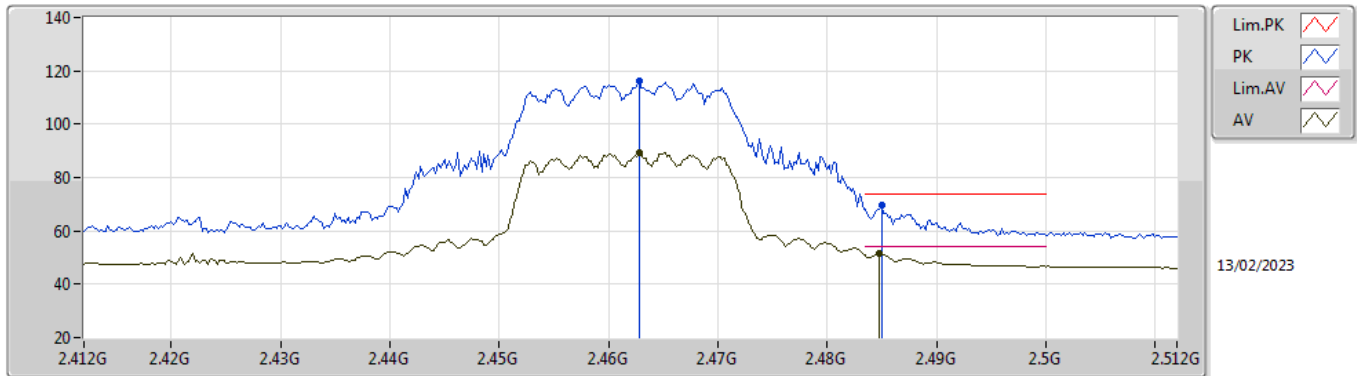


EUT_X_2TX
 Setting 16
 03-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.4598G	108.34	Inf	-Inf	76.02	3	Vertical	68	1.83	-	28.26	4.06	-
AV	2.4648G	83.38	Inf	-Inf	51.03	3	Vertical	68	1.83	-	28.29	4.06	-
PK	2.484G	59.64	74.00	-14.36	27.16	3	Vertical	68	1.83	-	28.40	4.08	-
AV	2.4846G	46.16	54.00	-7.84	13.67	3	Vertical	68	1.83	-	28.41	4.08	-

2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

2462MHz_TX

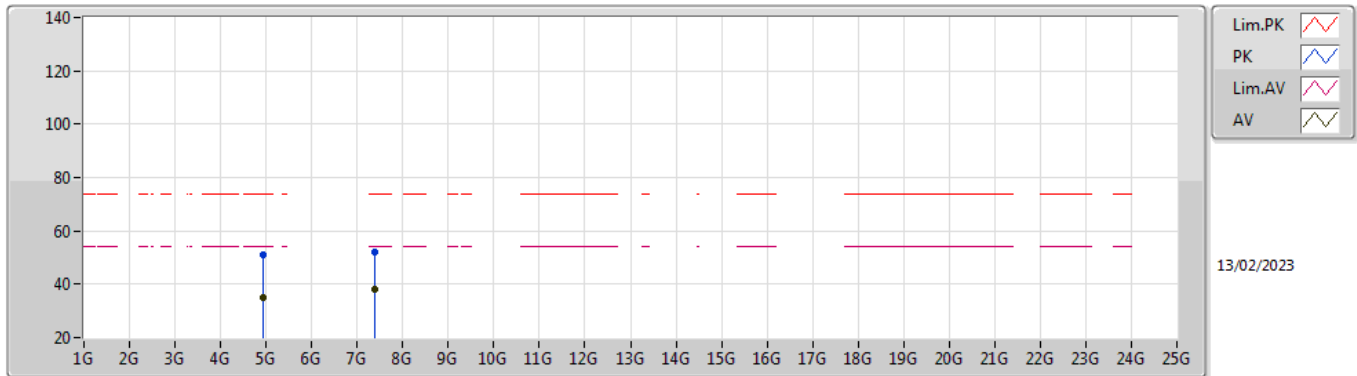


EUT_X_2TX
 Setting 16
 03-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.4628G	115.97	Inf	-Inf	83.63	3	Horizontal	326	2.95	-	28.28	4.06	-
AV	2.4628G	89.29	Inf	-Inf	56.95	3	Horizontal	326	2.95	-	28.28	4.06	-
PK	2.485G	69.71	74.00	-4.29	37.22	3	Horizontal	326	2.95	-	28.41	4.08	-
AV	2.4848G	51.35	54.00	-2.65	18.86	3	Horizontal	326	2.95	-	28.41	4.08	-

2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

2462MHz_TX

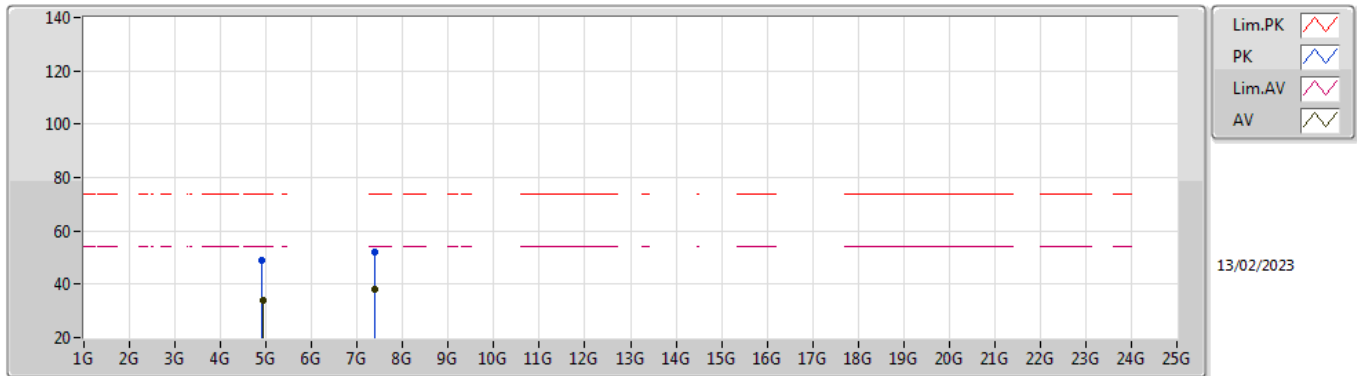


EUT_X_2TX
 Setting 16
 03-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.92136G	51.29	74.00	-22.71	45.96	3	Vertical	59	1.09	-	33.66	6.56	34.89
AV	4.92132G	35.20	54.00	-18.80	29.87	3	Vertical	59	1.09	-	33.66	6.56	34.89
PK	7.3846G	52.22	74.00	-21.78	41.80	3	Vertical	275	1.35	-	36.90	8.70	35.18
AV	7.38152G	37.90	54.00	-16.10	27.48	3	Vertical	275	1.35	-	36.90	8.70	35.18

2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

2462MHz_TX

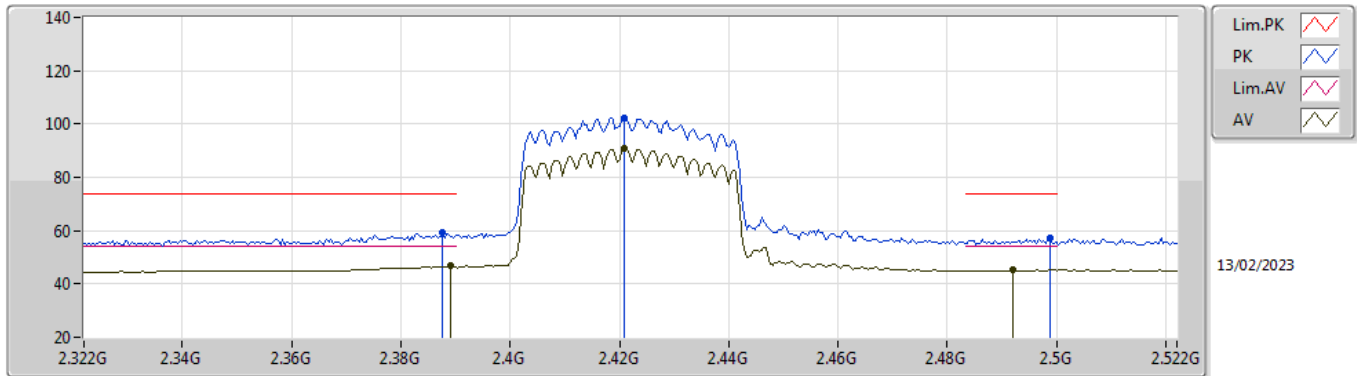


EUT_X_2TX
 Setting 16
 03-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.9176G	49.20	74.00	-24.80	43.87	3	Horizontal	296	1.97	-	33.66	6.56	34.89
AV	4.92528G	33.96	54.00	-20.04	28.64	3	Horizontal	296	1.97	-	33.65	6.56	34.89
PK	7.3934G	51.87	74.00	-22.13	41.45	3	Horizontal	326	1.08	-	36.90	8.70	35.18
AV	7.38132G	37.93	54.00	-16.07	27.51	3	Horizontal	326	1.08	-	36.90	8.70	35.18

2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

2422MHz_TX

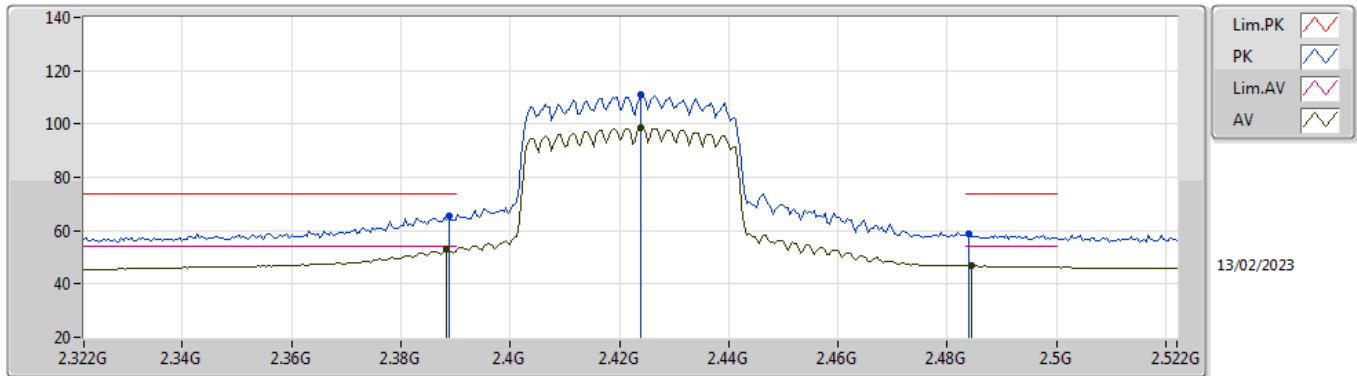


EUT X_2TX
 Setting 14
 03-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3876G	59.11	74.00	-14.89	26.92	3	Vertical	64	2.10	-	28.20	3.99	-
AV	2.3892G	46.66	54.00	-7.34	14.47	3	Vertical	64	2.10	-	28.20	3.99	-
PK	2.4208G	102.28	Inf	-Inf	70.06	3	Vertical	64	2.10	-	28.20	4.02	-
AV	2.4208G	91.02	Inf	-Inf	58.80	3	Vertical	64	2.10	-	28.20	4.02	-
PK	2.4988G	57.16	74.00	-16.84	24.57	3	Vertical	64	2.10	-	28.49	4.10	-
AV	2.492G	45.27	54.00	-8.73	12.73	3	Vertical	64	2.10	-	28.45	4.09	-

2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

2422MHz_TX

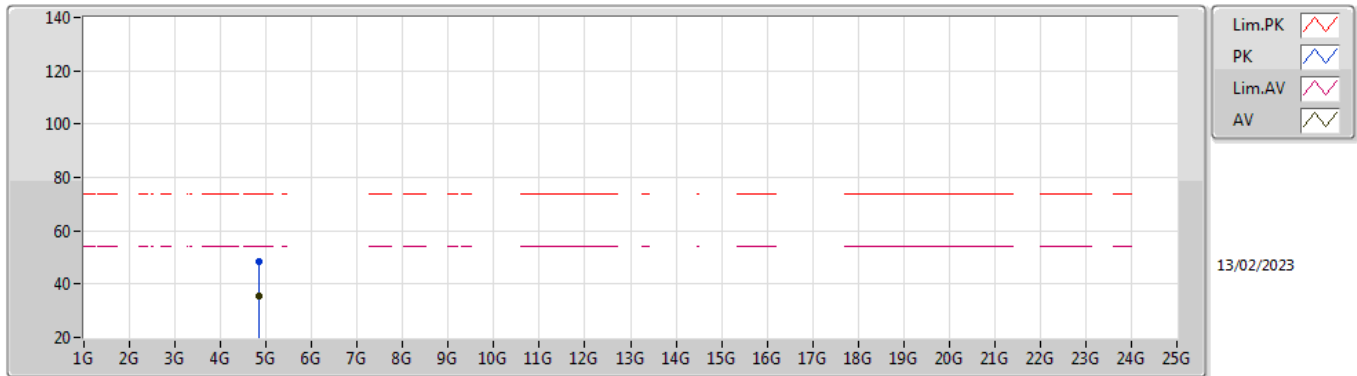


EUT X_2TX
 Setting 14
 03-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3888G	65.54	74.00	-8.46	33.35	3	Horizontal	322	2.77	-	28.20	3.99	-
AV	2.3884G	52.88	54.00	-1.12	20.69	3	Horizontal	322	2.77	-	28.20	3.99	-
PK	2.424G	111.07	Inf	-Inf	78.85	3	Horizontal	322	2.77	-	28.20	4.02	-
AV	2.424G	98.59	Inf	-Inf	66.37	3	Horizontal	322	2.77	-	28.20	4.02	-
PK	2.484G	58.87	74.00	-15.13	26.39	3	Horizontal	322	2.77	-	28.40	4.08	-
AV	2.4844G	46.96	54.00	-7.04	14.47	3	Horizontal	322	2.77	-	28.41	4.08	-

2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

2422MHz_TX

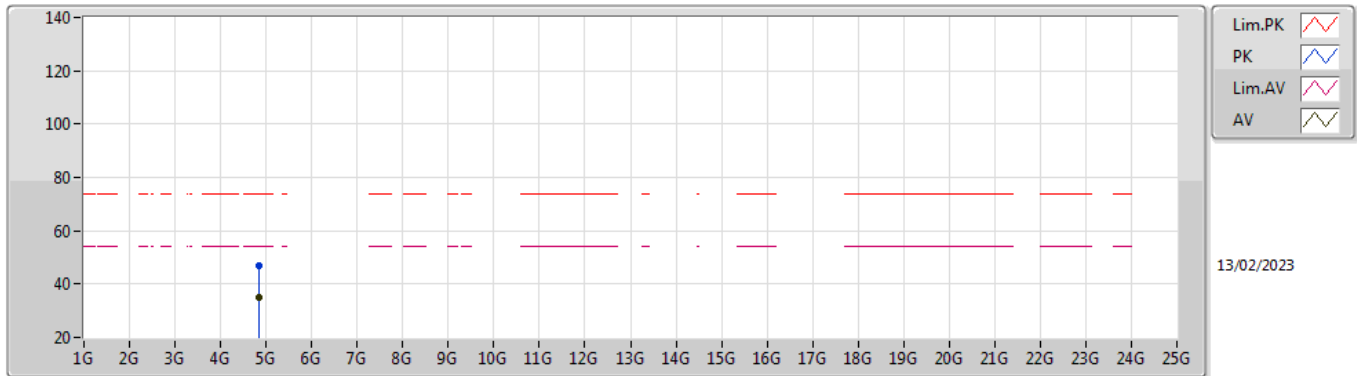


EUT X_2TX
 Setting 14
 03-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.84244G	48.45	74.00	-25.55	43.43	3	Vertical	57	1.18	-	33.40	6.52	34.90
AV	4.84936G	35.49	54.00	-18.51	30.47	3	Vertical	57	1.18	-	33.40	6.52	34.90

2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

2422MHz_TX

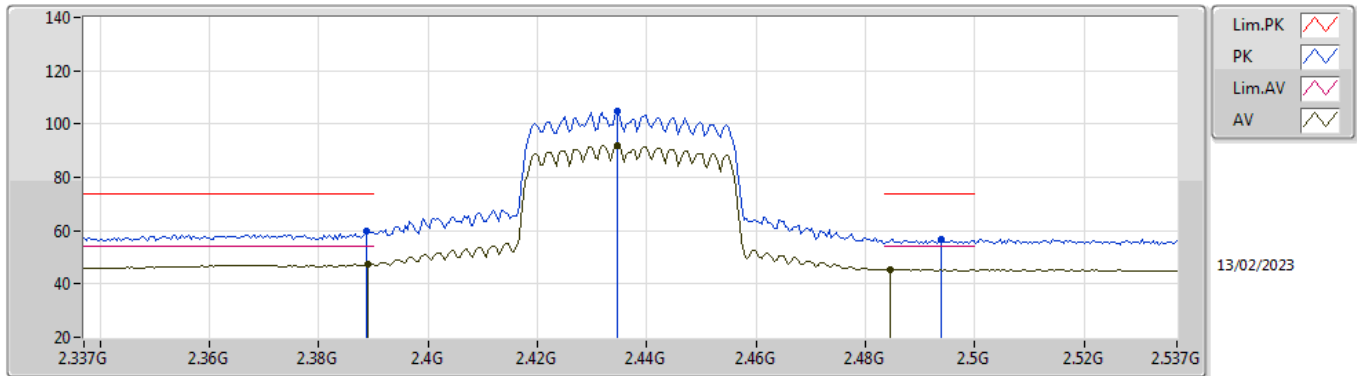


EUT X_2TX
 Setting 14
 03-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.842G	47.12	74.00	-26.88	42.10	3	Horizontal	313	1.00	-	33.40	6.52	34.90
AV	4.8468G	34.77	54.00	-19.23	29.75	3	Horizontal	313	1.00	-	33.40	6.52	34.90

2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

2437MHz_TX

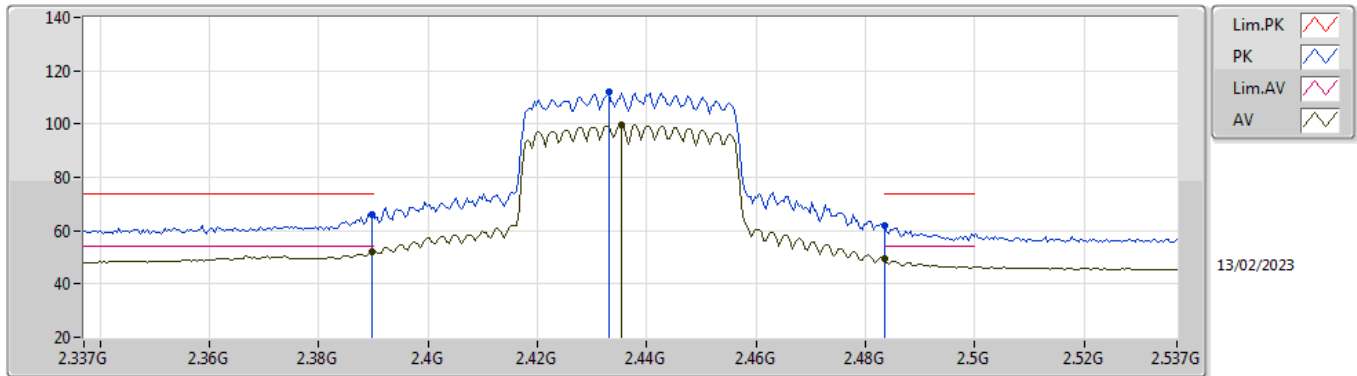


EUT X_2TX
 Setting 15
 03-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3886G	59.86	74.00	-14.14	27.67	3	Vertical	23	2.97	-	28.20	3.99	-
AV	2.389G	47.45	54.00	-6.55	15.26	3	Vertical	23	2.97	-	28.20	3.99	-
PK	2.4346G	104.74	Inf	-Inf	72.51	3	Vertical	23	2.97	-	28.20	4.03	-
AV	2.4346G	92.15	Inf	-Inf	59.92	3	Vertical	23	2.97	-	28.20	4.03	-
PK	2.4938G	56.74	74.00	-17.26	24.19	3	Vertical	23	2.97	-	28.46	4.09	-
AV	2.4846G	45.36	54.00	-8.64	12.87	3	Vertical	23	2.97	-	28.41	4.08	-

2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

2437MHz_TX

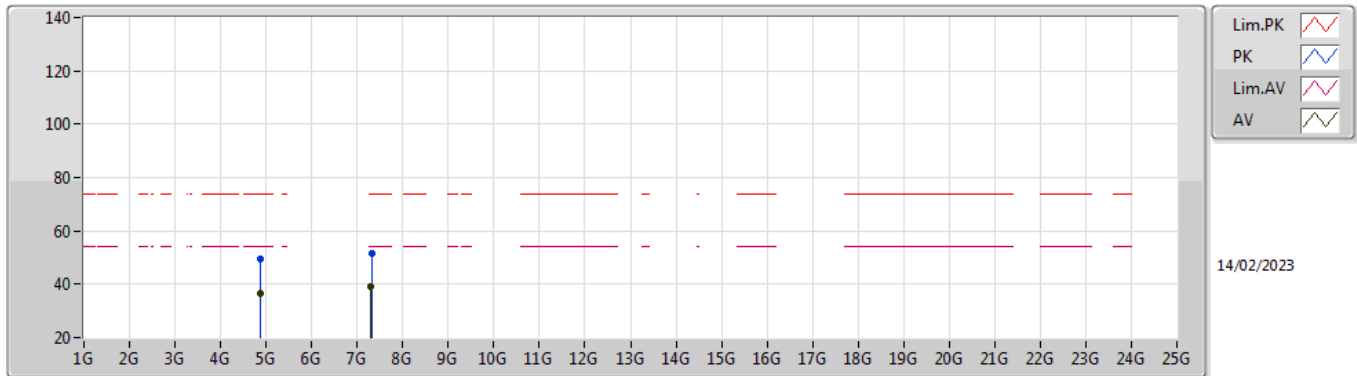


EUT X_2TX
 Setting 15
 03-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3898G	66.01	74.00	-7.99	33.82	3	Horizontal	326	2.77	-	28.20	3.99	-
AV	2.3898G	52.19	54.00	-1.81	20.00	3	Horizontal	326	2.77	-	28.20	3.99	-
PK	2.433G	112.23	Inf	-Inf	80.00	3	Horizontal	326	2.77	-	28.20	4.03	-
AV	2.4354G	99.54	Inf	-Inf	67.30	3	Horizontal	326	2.77	-	28.20	4.04	-
PK	2.4835G	61.74	74.00	-12.26	29.26	3	Horizontal	326	2.77	-	28.40	4.08	-
AV	2.4835G	49.26	54.00	-4.74	16.78	3	Horizontal	326	2.77	-	28.40	4.08	-

2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

2437MHz_TX

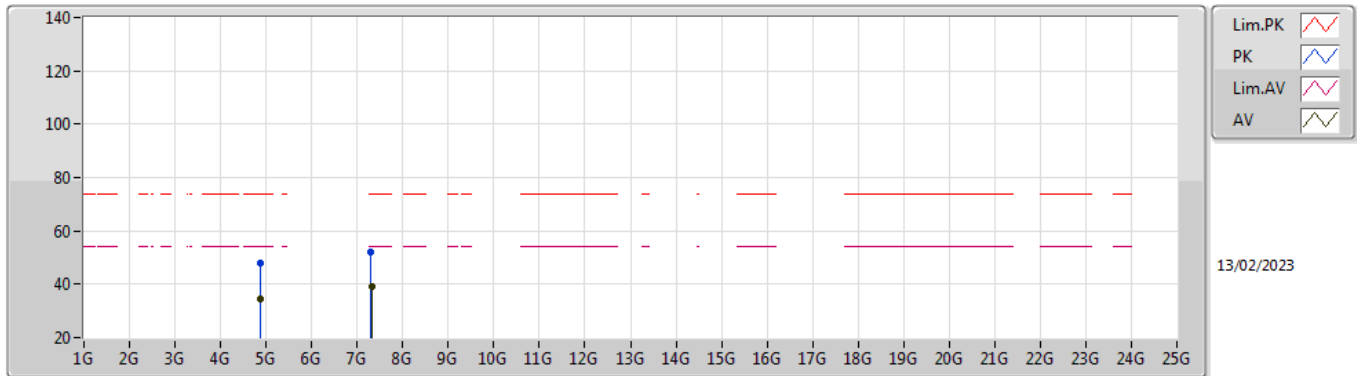


EUT X_2TX
 Setting 15
 03-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.87136G	49.33	74.00	-24.67	44.16	3	Vertical	57	1.02	-	33.53	6.54	34.90
AV	4.87408G	36.41	54.00	-17.59	31.23	3	Vertical	57	1.02	-	33.54	6.54	34.90
PK	7.31636G	51.48	74.00	-22.52	41.10	3	Vertical	61	1.21	-	36.83	8.70	35.15
AV	7.30692G	39.16	54.00	-14.84	28.79	3	Vertical	61	1.21	-	36.81	8.70	35.14

2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

2437MHz_TX

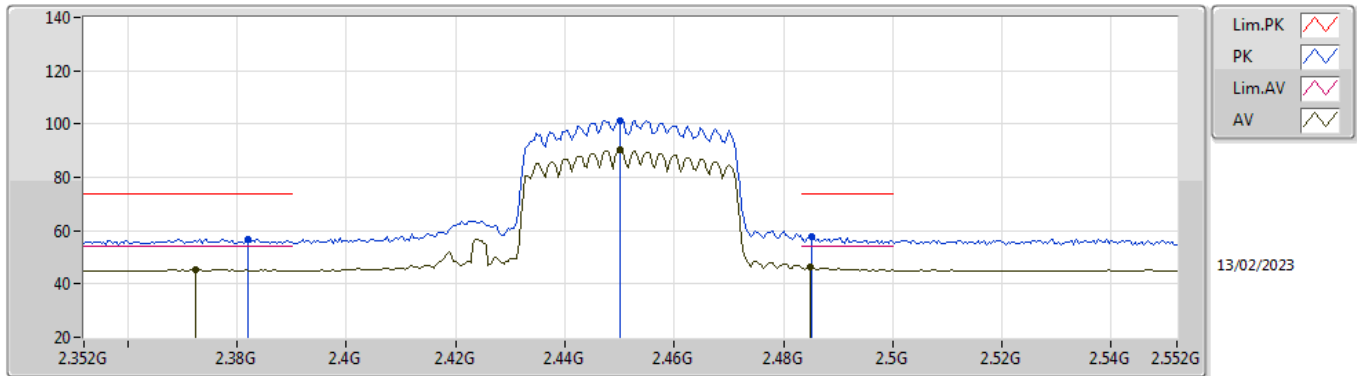


EUT_X_2TX
 Setting 15
 03-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.87808G	47.76	74.00	-26.24	42.54	3	Horizontal	297	1.76	-	33.57	6.54	34.89
AV	4.87584G	34.33	54.00	-19.67	29.12	3	Horizontal	297	1.76	-	33.56	6.54	34.89
PK	7.30304G	52.23	74.00	-21.77	41.86	3	Horizontal	224	2.65	-	36.81	8.70	35.14
AV	7.31528G	39.08	54.00	-14.92	28.70	3	Horizontal	224	2.65	-	36.83	8.70	35.15

2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

2452MHz_TX

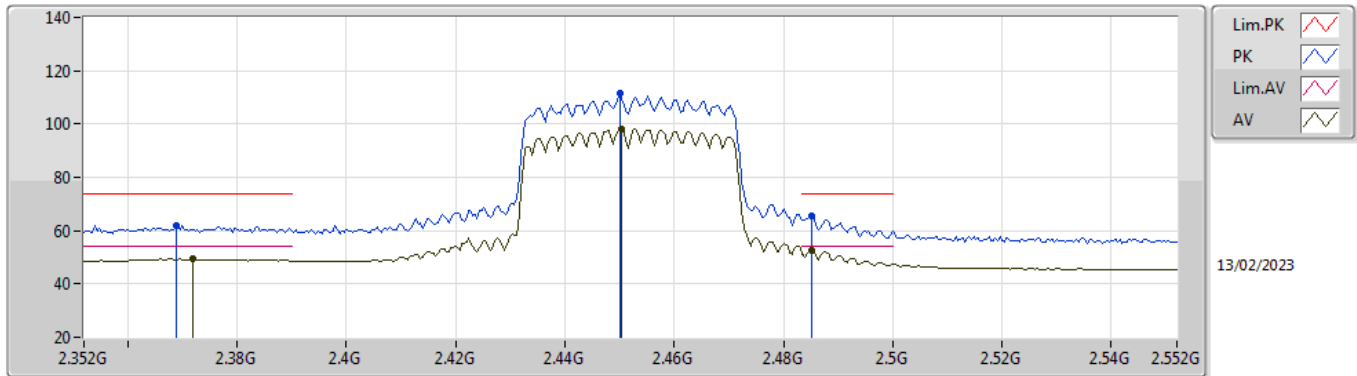


EUT X_2TX
 Setting 12.5
 03-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.382G	56.61	74.00	-17.39	24.43	3	Vertical	63	1.50	-	28.20	3.98	-
AV	2.3724G	45.30	54.00	-8.70	13.13	3	Vertical	63	1.50	-	28.20	3.97	-
PK	2.45G	101.38	Inf	-Inf	69.13	3	Vertical	63	1.50	-	28.20	4.05	-
AV	2.45G	90.10	Inf	-Inf	57.85	3	Vertical	63	1.50	-	28.20	4.05	-
PK	2.4852G	57.57	74.00	-16.43	25.07	3	Vertical	63	1.50	-	28.41	4.09	-
AV	2.4848G	46.39	54.00	-7.61	13.90	3	Vertical	63	1.50	-	28.41	4.08	-

2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

2452MHz_TX

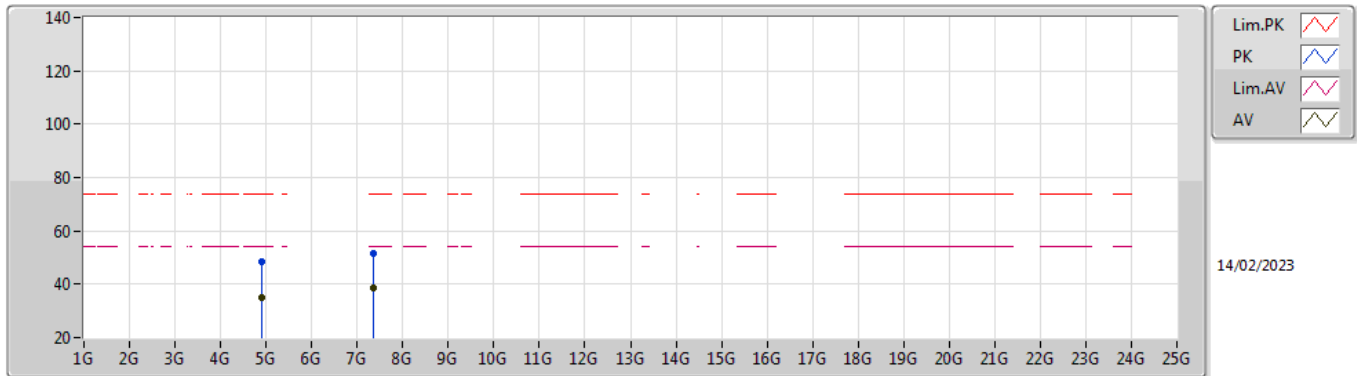


EUT X_2TX
 Setting 12.5
 03-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3688G	61.78	74.00	-12.22	29.61	3	Horizontal	326	3.00	-	28.20	3.97	-
AV	2.372G	49.41	54.00	-4.59	17.24	3	Horizontal	326	3.00	-	28.20	3.97	-
PK	2.45G	111.77	Inf	-Inf	79.52	3	Horizontal	326	3.00	-	28.20	4.05	-
AV	2.4504G	98.01	Inf	-Inf	65.76	3	Horizontal	326	3.00	-	28.20	4.05	-
PK	2.4852G	65.64	74.00	-8.36	33.14	3	Horizontal	326	3.00	-	28.41	4.09	-
AV	2.4852G	52.84	54.00	-1.16	20.34	3	Horizontal	326	3.00	-	28.41	4.09	-

2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

2452MHz_TX

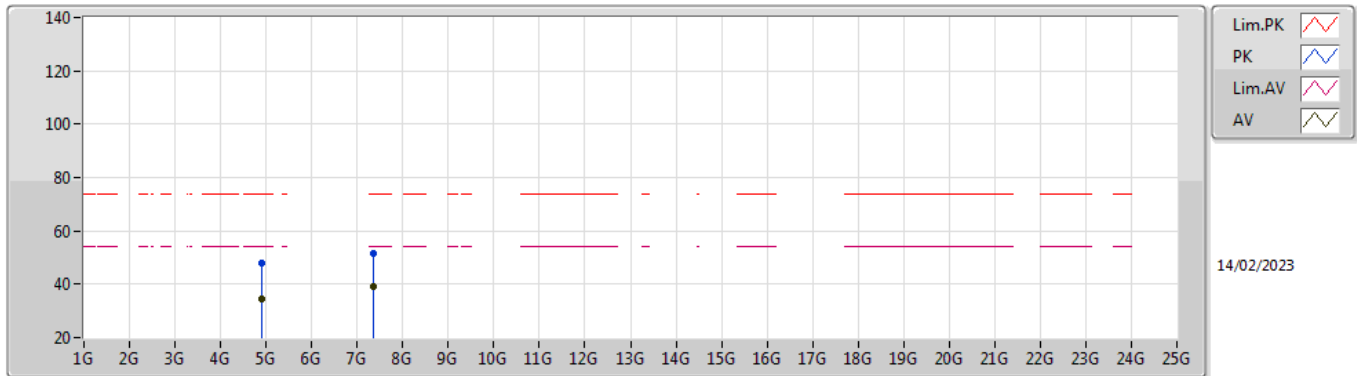


EUT_X_2TX
 Setting 12.5
 03-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.90896G	48.33	74.00	-25.67	42.99	3	Vertical	54	1.06	-	33.68	6.55	34.89
AV	4.90392G	35.18	54.00	-18.82	29.83	3	Vertical	54	1.06	-	33.69	6.55	34.89
PK	7.35904G	51.50	74.00	-22.50	41.07	3	Vertical	297	2.99	-	36.90	8.70	35.17
AV	7.36556G	38.82	54.00	-15.18	28.39	3	Vertical	297	2.99	-	36.90	8.70	35.17

2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

2452MHz_TX



EUT_X_2TX
 Setting 12.5
 03-F-W-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.90904G	47.83	74.00	-26.17	42.49	3	Horizontal	315	1.00	-	33.68	6.55	34.89
AV	4.89932G	34.36	54.00	-19.64	29.00	3	Horizontal	315	1.00	-	33.70	6.55	34.89
PK	7.34836G	51.58	74.00	-22.42	41.14	3	Horizontal	119	1.31	-	36.90	8.70	35.16
AV	7.36372G	38.94	54.00	-15.06	28.51	3	Horizontal	119	1.31	-	36.90	8.70	35.17