

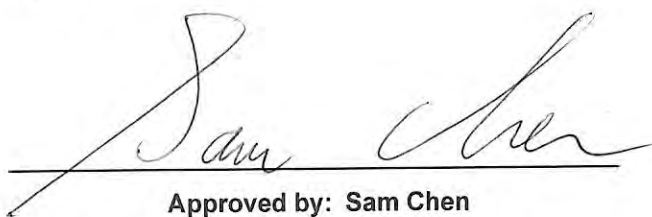


RADIO TEST REPORT

FCC ID : 2ABLKU6HE
Equipment : GigaPro GPR2032H
Brand Name : Calix
Model Name : GPR2032H
Applicant : Calix Inc.
1035 N. McDowell Blvd. Petaluma, CA94954 U.S.A.
Manufacturer : Calix Inc.
1035 N. McDowell Blvd. Petaluma, CA94954 U.S.A.
Standard : 47 CFR FCC Part 15.247

The product was received on Mar. 04, 2022, and testing was started from Mar. 08, 2022 and completed on Jul. 23, 2022. We, Sporton International Inc. Hsinchu Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

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



Approved by: Sam Chen

Sporton International Inc. Hsinchu Laboratory

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



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History of this test report

[illegible]



Summary of Test Result

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

Declaration of Conformity:

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

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Sam Chen**Report Producer: Penny Kao**



1 General Description

1.1 Information

1.1.1 RF General Information

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

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

Note:

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

1.1.2 Antenna Information

Ant.	Port			Brand	Model Name	Antenna Type	Connector	Gain (dBi)	Remark
	WLAN 2.4GHz	WLAN 5GHz	WLAN 6GHz						
1	2	2	-	Galtronics	60-2891-03-2	PCB antenna	I-PEX	Note1	WLAN Ant.
2	1	1	-	Galtronics	60-2914-03-1	PCB antenna	I-PEX		
3	-	-	-	Hong Bo	290-50254	PCB Antenna	I-PEX		
4	-	-	-	Hong Bo	290-50255	PCB Antenna	I-PEX		
5	-	-	-	u-blox	SAM-M8Q	Ceramic Patch Antenna	Antenna on board		GPS Ant.

Note 1:

<Antenna Gain>

Ant.	Port		Antenna Gain (dBi)				
	WLAN 2.4GHz	WLAN 5GHz	WLAN 2.4GHz	WLAN 5GHz			
				UNII 1	UNII 2A	UNII 2C	UNII 3
1	2	2	5.62	1.36	2.03	2.64	1.84
2	1	1	4.97	2.22	2.77	4.1	3.65

< Directional Gain>

Directional Gain (dBi)						
Item	WLAN 2.4GHz	WLAN 5GHz				
		UNII 1	UNII 2A	UNII 2C	UNII 3	
2T1S	6.88	4.15	4.15	5.81	5.74	

Note 2: The above information (except gain) was declared by manufacturer.

The directional gain is measured which follows the procedure of KDB 662911 D03.

Note 3: The EUT has five antennas. The antenna 3 and 4 function doesn't enable at this time.

<WLAN 2.4GHz function>

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

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

Pot 1, Port 2 could transmit/receive simultaneously.

<WLAN 5GHz function>

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

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

Pot 1, Port 2 could transmit/receive simultaneously.

1.1.3 Mode Test Duty Cycle

Non-beamforming mode

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11b	0.956	0.2	12.694m	100
802.11g	0.947	0.24	1.994m	1k

Beamforming mode

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11ax HEW20-BF	0.908	0.42	1.783m	1k
802.11ax HEW40-BF	0.923	0.35	1.783m	1k

Note:

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

1.1.4 EUT Operational Condition

EUT Power Type	From Power Adapter or PoE			
Beamforming Function	☒	With beamforming	☐	Without beamforming
	The product has beamforming function for 11n/VHT/ax in 2.4GHz and 11n/ac/ax in 5GHz.			
Function	☒	Point-to-multipoint	☒	Point-to-point
Test Software Version	Non-beamforming mode: QRCT V4.0.00192.0 Beamforming mode: DOS V6.1.7601			

Note: The above information was declared by manufacturer.

1.1.5 Table for EUT supports functions

Function
AP
Extender

Note 1: After evaluating, AP Mode was selected to test and record in the report.

Note 2: The above information was declared by manufacturer.



1.2 Applicable Standards

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

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

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

- ♦ FCC KDB 558074 D01 v05r02
- ♦ FCC KDB 662911 D03 v01
- ♦ FCC KDB 414788 D01 v01r01

1.3 Testing Location Information

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

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
RF Conducted	TH03-CB	Jay Lo	23.5-23.9 / 58-66	Mar. 09, 2022~ Jul. 08, 2022
Radiated above 1GHz	03CH01-CB	Eason Chen	24.6~26.7 / 64~66	Mar. 08, 2022~ Jul. 12, 2022
	03CH02-CB		25.5~27 / 65~68	
	03CH03-CB		25.8~26.4 / 67~69	
	03CH04-CB		25.4~27 / 65~68	
Radiated Co-location Test	03CH03-CB	Eason Chen	25.8~26.4 / 67~69	Mar. 08, 2022~ Jul. 12, 2022
Radiated below 1GHz	10CH01-CB	Eason Chen	23~24 / 61~62	Jul. 22, 2022~ Jul. 23, 2022
AC Conduction	CO01-CB	Dean Chang	23~24 / 61~62	Jul. 05, 2022~ Jul. 20, 2022



1.4 Measurement Uncertainty

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

Test Date: Before Jun. 01, 2022

Test Items	Uncertainty	Remark
Radiated Emission (1GHz ~ 18GHz)	4.7 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.2 dB	Confidence levels of 95%
Conducted Emission	2.5 dB	Confidence levels of 95%
Output Power Measurement	1.3 dB	Confidence levels of 95%
Power Density Measurement	2.5 dB	Confidence levels of 95%
Bandwidth Measurement	0.9%	Confidence levels of 95%

Test Date: After May 31, 2022

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

Non-beamforming mode

Mode	Power Setting
802.11b_Nss1,(1Mbps)_2TX	-
2412MHz	26
2437MHz	27
2462MHz	26
802.11g_Nss1,(6Mbps)_2TX	-
2412MHz	21
2417MHz	23.5
2437MHz	25.5
2457MHz	24
2462MHz	21.5

Beamforming mode

Mode	Power Setting
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
2412MHz	22
2417MHz	25
2437MHz	28
2457MHz	25
2462MHz	23
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
2422MHz	21
2427MHz	21
2437MHz	25
2447MHz	22
2452MHz	21

Note:

- ♦ Evaluated HEW20/HEW40 mode only due to the similar modulation.
The power setting of HT20/HT40/VHT20/VHT40 mode are the same or lower than HEW20/HEW40.
- ♦ The EUT supports non-beamforming and beamforming modes, after evaluating, the beamforming mode has been evaluated to be the worst case, so it was selected to test.

2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral Test Voltage: 120Vac / 60Hz
Operating Mode	Normal Link
1	EUT + PoE
2	EUT + Adapter
For operating mode 1 is the worst case and it was record in this test report.	

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

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emissions in Restricted Frequency Bands
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	CTX
	The EUT was performed in X axis, Y axis and Z axis. EUT in Y axis has been evaluated to be the worst case for Radiated measurement above 1GHz. Thus, the measurement will follow this same test.
1	EUT in Y axis + WLAN 2.4GHz + Adapter
2	EUT in Y axis + WLAN 2.4GHz + PoE
Mode 2 has been evaluated to be the worst case among Mode 1~2, thus measurement for Mode 3 will follow this same test mode.	
3	EUT in Y axis + WLAN 5GHz + PoE
For operating mode 3 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX
	The EUT was performed at X axis, Y axis and Z axis position, and the worst case as below:
1	EUT in Y axis

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Radiated Emission Co-location
Test Condition	Radiated measurement
Operating Mode	Normal Link
	The EUT was performed in X axis, Y axis and Z axis for Radiated measurement above 1GHz test. The worst case was found in Y axis. Thus, the measurement will follow this same test configuration.
1	EUT in Y axis + WLAN 2.4GHz + WLAN 5GHz
Refer to Appendix G for Radiated Emission Co-location.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	WLAN 2.4GHz + WLAN 5GHz
Refer to Sporton Test Report No.: FA230414 for Co-location RF Exposure Evaluation.	

Note: The PoE below is for measurement only, would not be marketed.

Support Unit	Brand	Model Number
PoE	PROCET	PT-PSE106GBR-10L

2.3 EUT Operation during Test

For CTX Mode:

non-beamforming mode:

The EUT was programmed to be in continuously transmitting mode.

beamforming mode:

During the test, the following programs under WIN 7 were executed.

The program was executed as follows:

1. During the test, the EUT operation to normal function.
2. Executed command fixed test channel under DOS V6.1.7601.
3. Executed "Lantest.exe" to link with the remote workstation to transmit and receive packet by WLAN module and transmit duty cycle no less than 98%.

For Normal Link Mode:

During the test, the EUT operation to normal function.



2.4 Accessories

Accessories				
No.	Equipment Name	Brand Name	Model Name	Rating
1	Adapter	AMIGO	AMS157-1203000F2	Input: 100-240V~50/60Hz, 1A Output: 12V, 3.0A
Others				
Power cord*1: Non-shielded, 1.5m Grounding wire*1: Non-shielded, 0.35m I/O Cover*1				

2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	PoE	PROCET	PT-PSE106GBR-10L	N/A
B	PoE 2.5G LAN PC	DELL	T3400	N/A
C	WAN 2.5G PC	DELL	T3400	N/A
D	2.4G NB	DELL	E6430	N/A
E	5G NB	DELL	E6430	N/A

For Radiated (below 1GHz):

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	PoE	PROCET	PT-PSE106GBR-10L	N/A
B	LAN NB	DELL	E6430	N/A

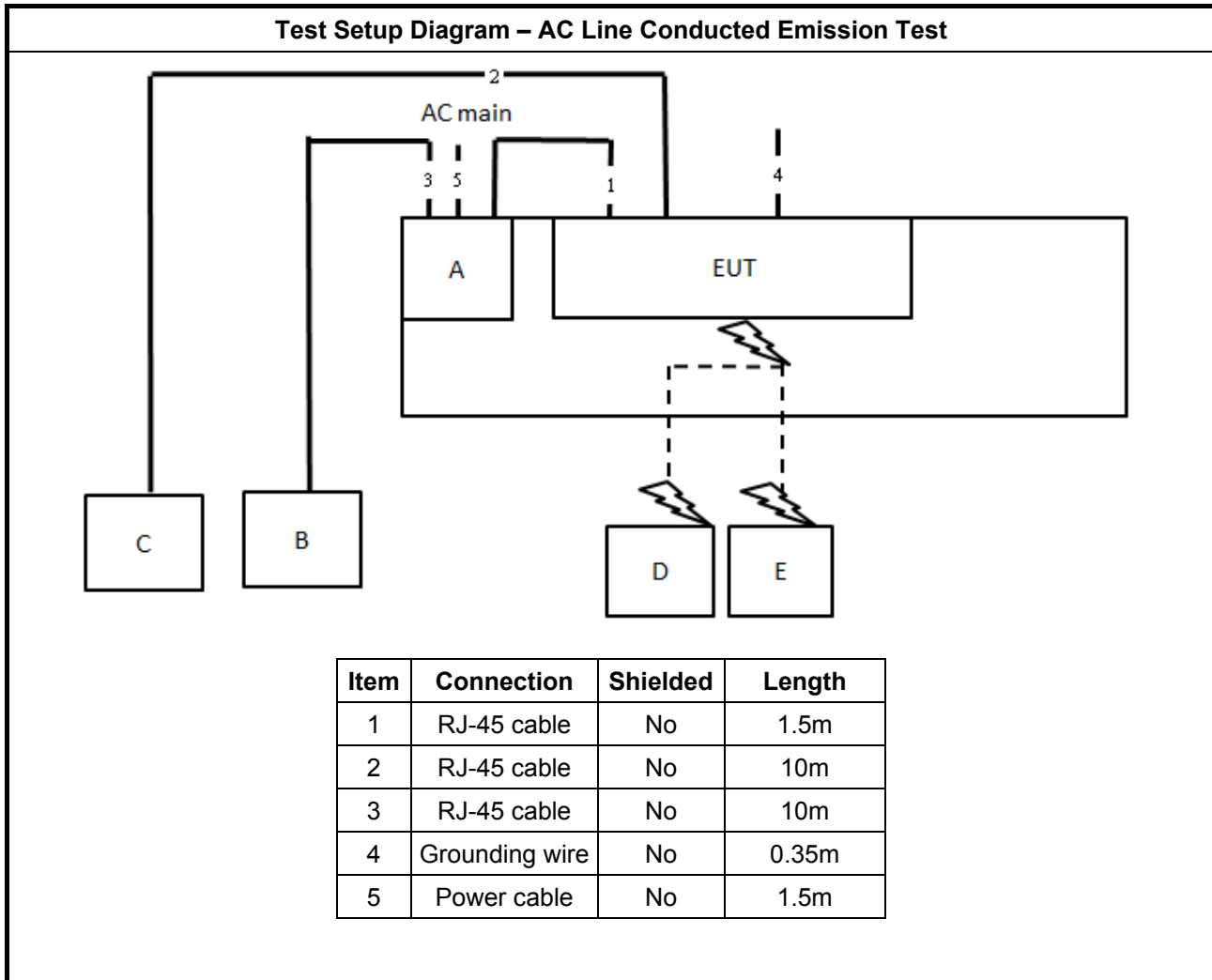
For Radiated (above 1GHz) and RF Conducted: Non-beamforming mode

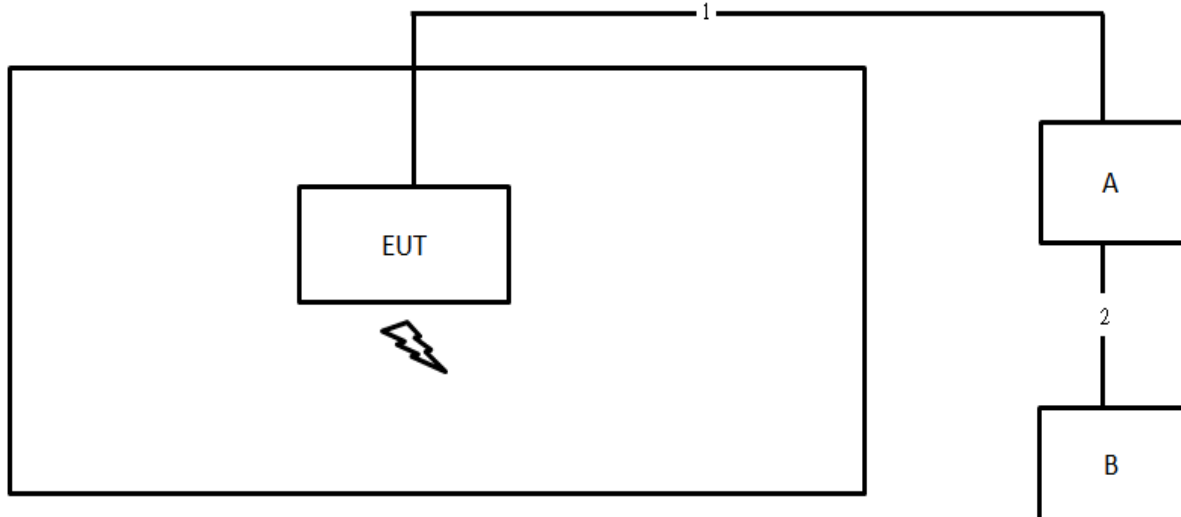
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A

Beamforming mode

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A
B	Notebook	DELL	E4300	N/A
C	WLAN module	Intel	AX210NGW	PD9AX210NG

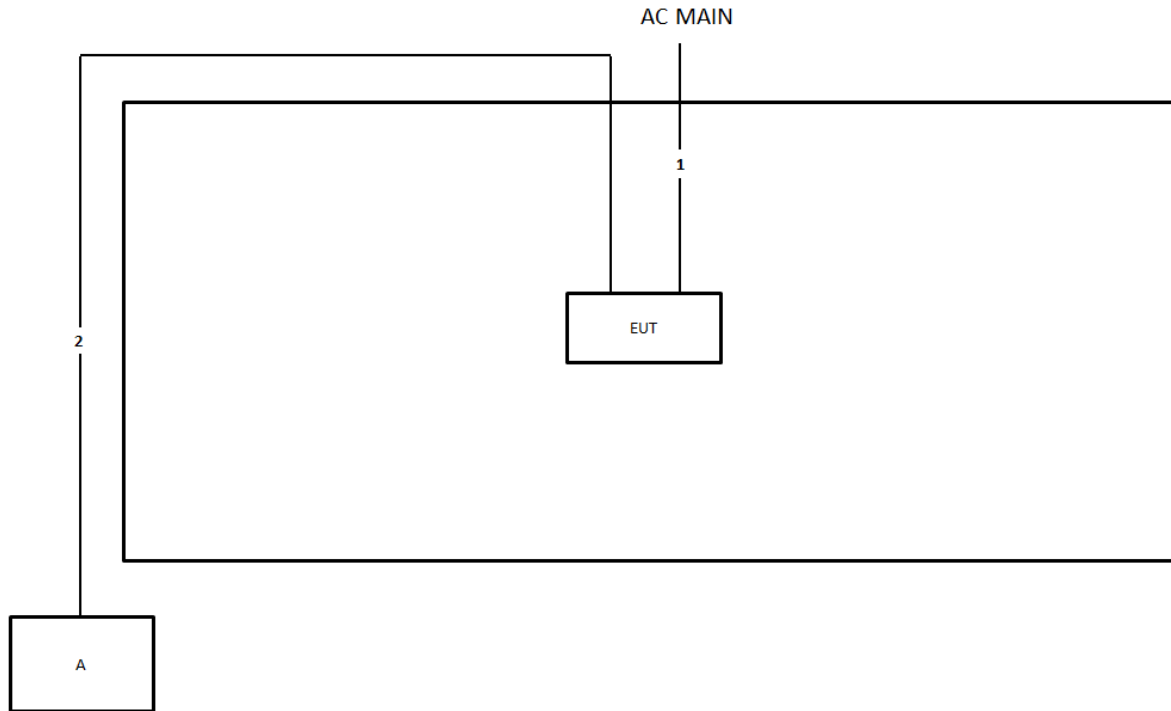
2.6 Test Setup Diagram



Test Setup Diagram - Radiated Test < 1GHz


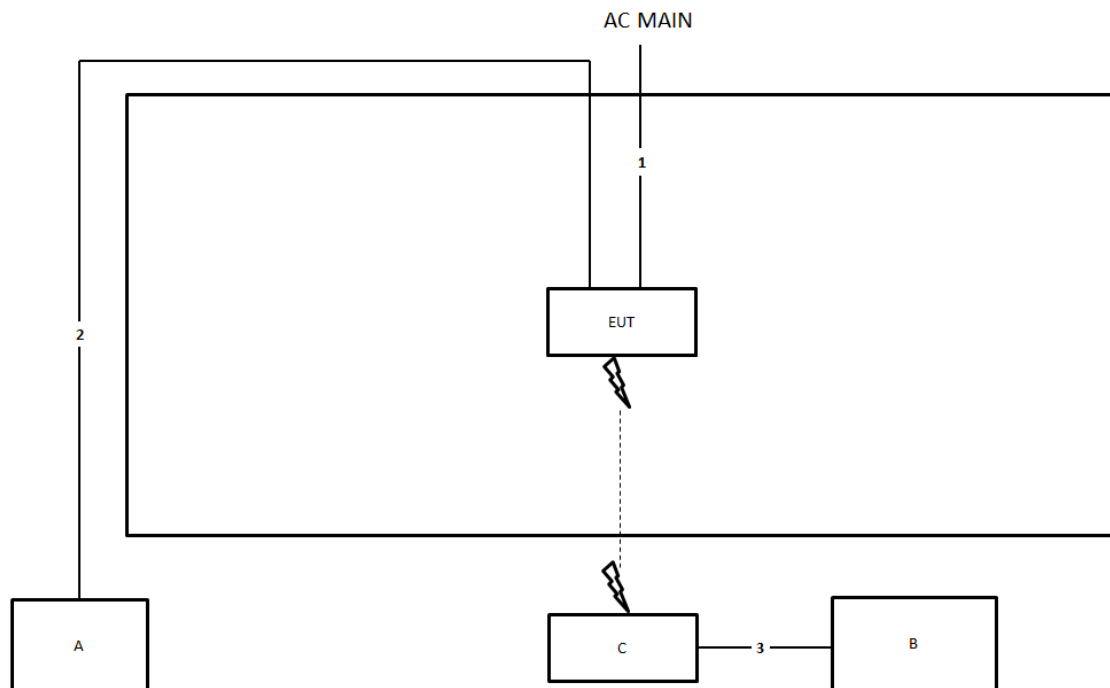
Item	Connection	Shielded	Length
1	RJ-45 cable	No	10m
2	RJ-45 cable	No	1m

**Test Setup Diagram - Radiated Test > 1GHz
Non-beamforming mode**



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

**Test Setup Diagram - Radiated Test > 1GHz
Beamforming mode**



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

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

Note 1: * Decreases with the logarithm of the frequency.

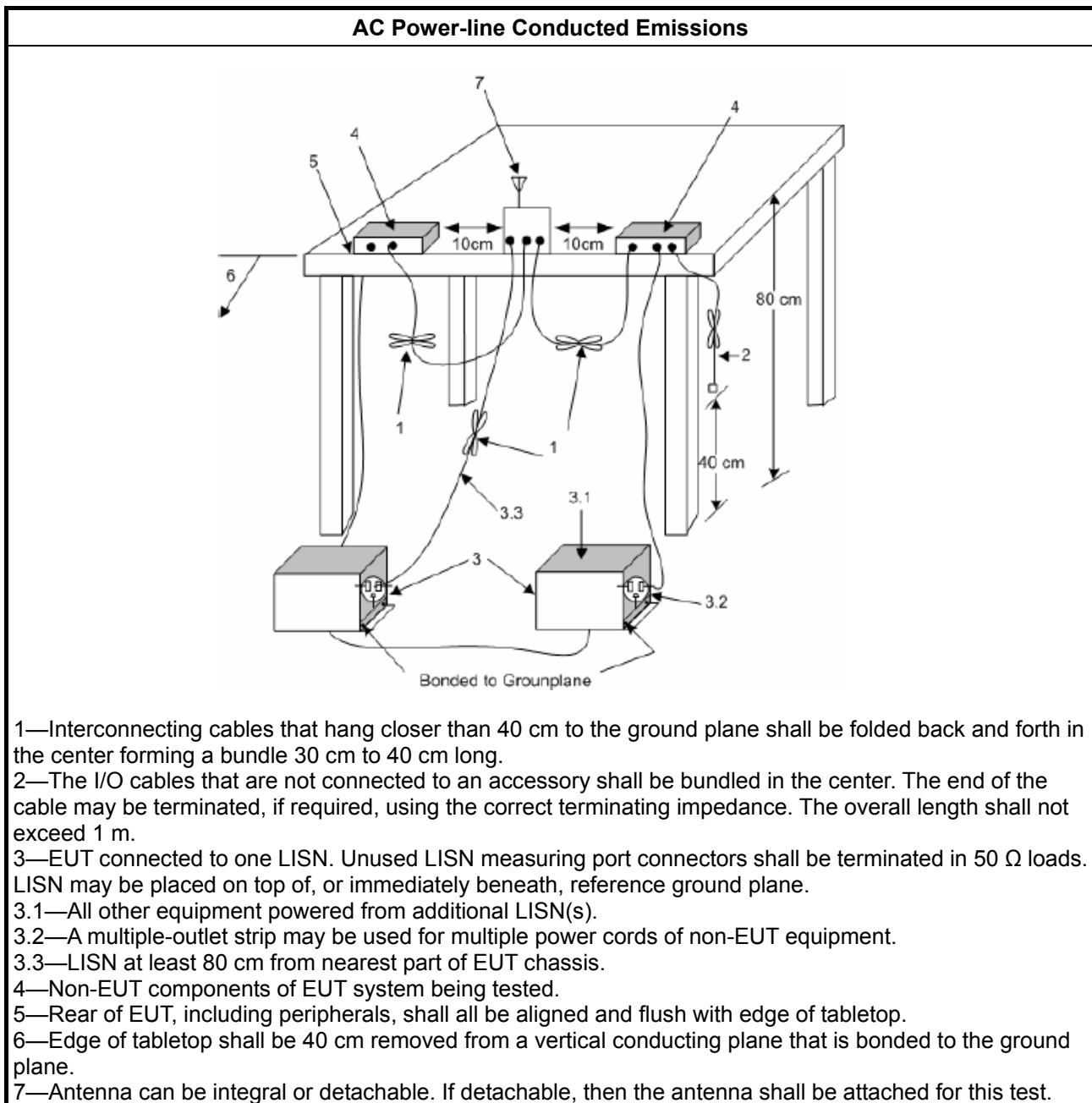
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

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

3.1.4 Test Setup



3.1.5 Measurement Results Calculation

The measured Level is calculated using:

- Corrected Reading: LISN Factor (LISN) + Attenuator (AT/AUX) + Cable Loss (CL) + Read Level (Raw) = Level
- Margin = -Limit + Level

3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 DTS Bandwidth

3.2.1 6dB Bandwidth Limit

6dB Bandwidth Limit
Systems using digital modulation techniques:
6 dB bandwidth $\geq$ 500 kHz.

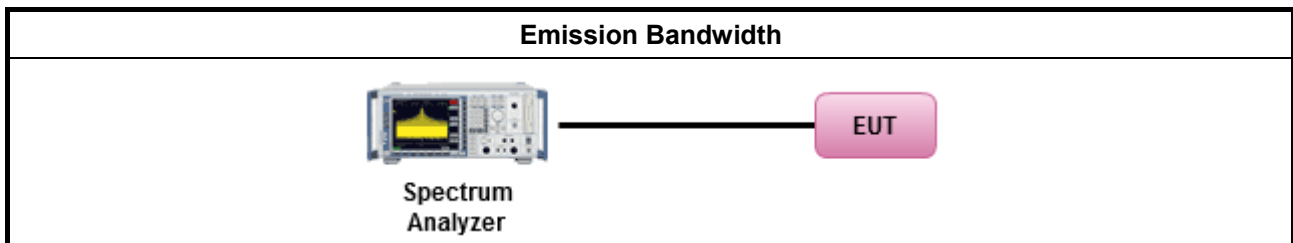
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

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

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

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

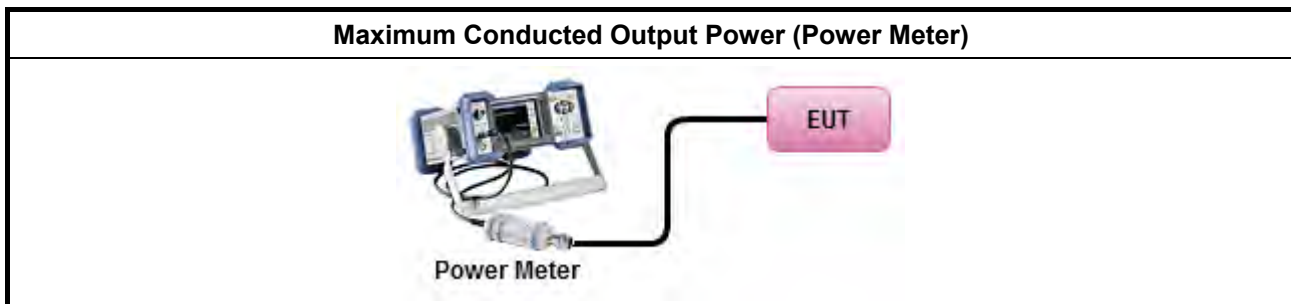
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
Maximum Peak Conducted Output Power	
☐	Refer as FCC KDB 558074, clause 8.3.1.1 & C63.10 clause 11.9.1.1 (RBW ≥ EBW method).
☐	Refer as FCC KDB 558074, clause 8.3.1.3 & C63.10 clause 11.9.1.3 (peak power meter).
Maximum Conducted Output Power	
[duty cycle ≥ 98% or external video / power trigger]	
☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.2 Method AVGSA-1.
☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.3 Method AVGSA-1A. (alternative)
duty cycle < 98% and average over on/off periods with duty factor	
☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.4 Method AVGSA-2.
☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.5 Method AVGSA-2A (alternative)
☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.6 Method AVGSA-3
☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.7 Method AVGSA-3A (alternative)
Measurement using a power meter (PM)	
☐	Refer as FCC KDB 558074, clause 8.3.2.3 & C63.10 clause 11.9.2.3.1 Method AVGPM (using an RF average power meter).
☒	Refer as FCC KDB 558074, clause 8.3.2.3 & C63.10 clause 11.9.2.3.2 Method AVGPM-G (using an gate RF average power meter).
For conducted measurement.	
If the EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.	
If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \dots + P_n$ (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
▪ Power Spectral Density (PSD) ≤ 8 dBm/3kHz

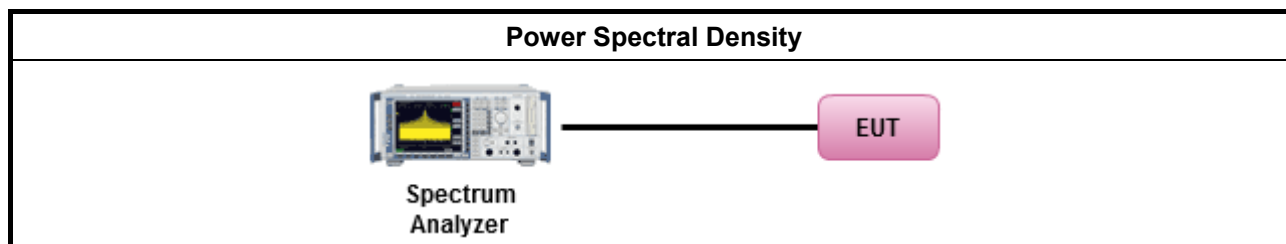
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

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

3.4.4 Test Setup



3.4.5 Test Result of Power Spectral Density

Refer as Appendix D

3.5 Emissions in Non-restricted Frequency Bands

3.5.1 Emissions in Non-restricted Frequency Bands Limit

Un-restricted Band Emissions Limit	
RF output power procedure	Limit (dBc)
Peak output power procedure	20
Average output power procedure	30
Note 1: If the peak output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the peak conducted output power measured within any 100 kHz outside the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum measured in-band peak PSD level. Note 2: If the average output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the power in any 100 kHz outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum measured in-band average PSD level.	

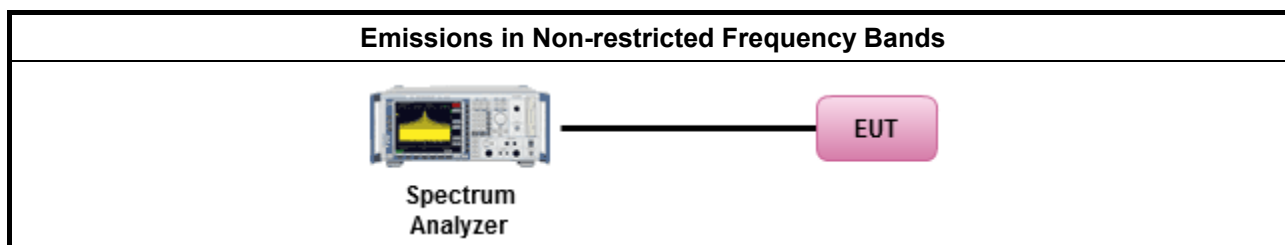
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

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

3.5.4 Test Setup



3.5.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix E

3.6 Emissions in Restricted Frequency Bands

3.6.1 Emissions in Restricted Frequency Bands Limit

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

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

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

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

3.6.2 Measuring Instruments

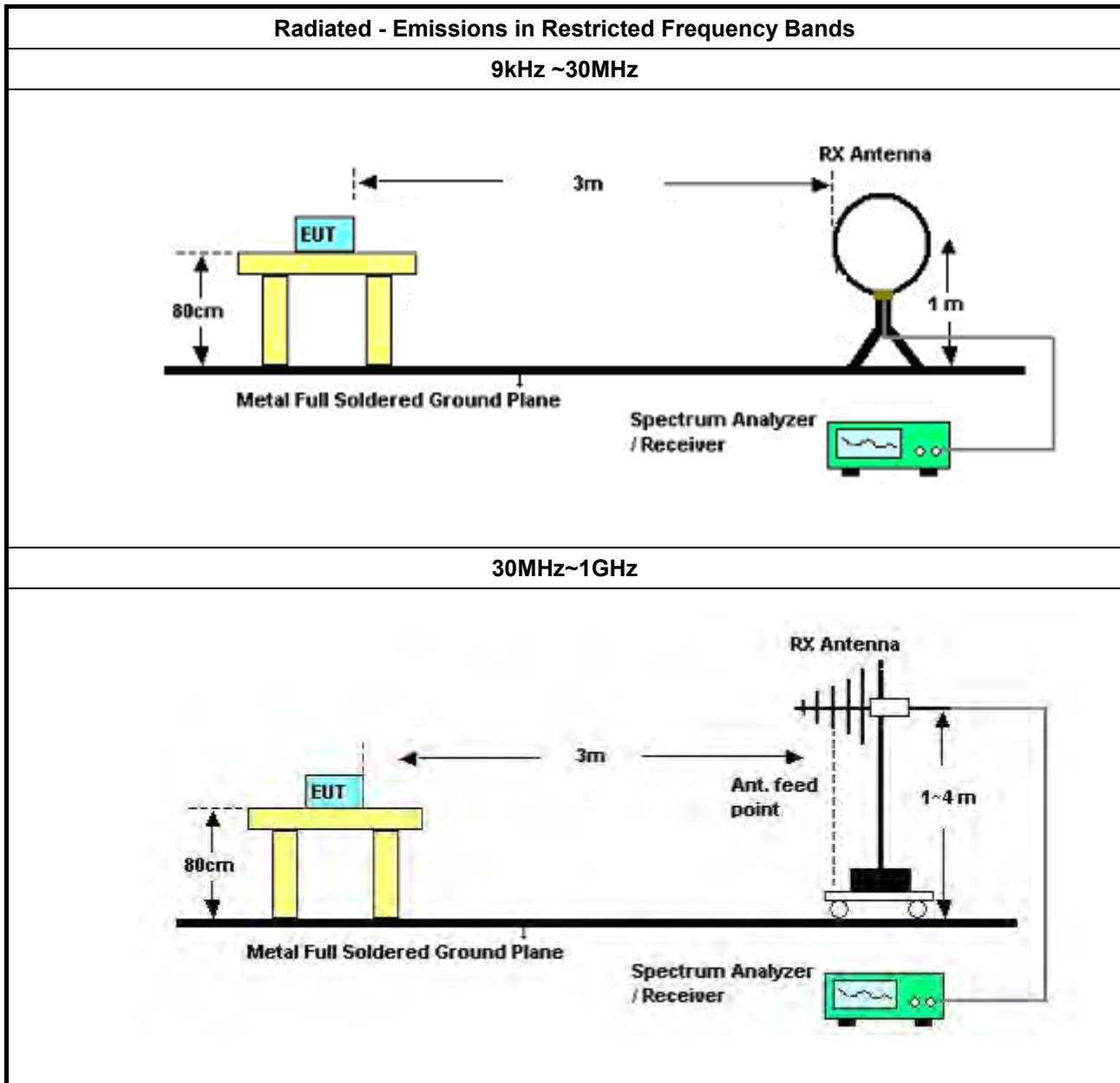
Refer a test equipment and calibration data table in this test report.

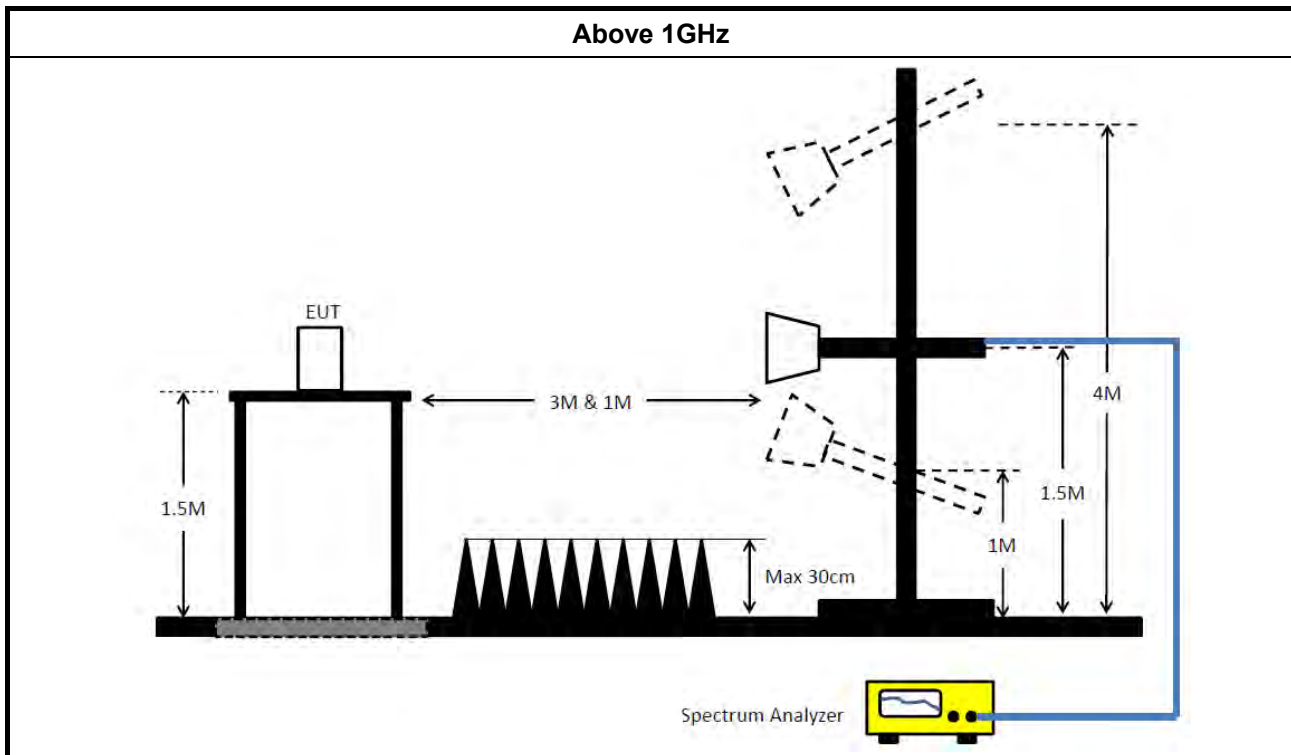


3.6.3 Test Procedures

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

3.6.4 Test Setup





3.6.5 Measurement Results Calculation

The measured Level is calculated using:

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

3.6.6 Emissions in Restricted Frequency Bands (Below 30MHz)

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

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

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

3.6.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F



4 Test Equipment and Calibration Data

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.4GHz	Feb. 22, 2022	Feb. 21, 2023	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Feb. 09, 2022	Feb. 08, 2023	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Apr. 12, 2022	Apr. 11, 2023	Conduction (CO01-CB)
Pulse Limiter	Rohde&Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Feb. 10, 2022	Feb. 09, 2023	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	May 18, 2022	May 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 (10CH01-CB)
10m Semi Anechoic Chamber NSA	TDK	SAC-10M	10CH01-CB	30MHz~1GHz 10m,3m	Jan. 27, 2022	Jan. 26, 2023	Radiation (10CH01-CB)
Amplifier	Agilent	8447D	2944A10783	9kHz ~ 1.3GHz	Mar. 11, 2022	Mar. 10, 2023	Radiation (10CH01-CB)
Amplifier	Agilent	8447D	2944A10784	9kHz ~ 1.3GHz	Mar. 11, 2022	Mar. 10, 2023	Radiation (10CH01-CB)
Low Cable	Woken	SUCOFLEX 104	low cable-01	25MHz ~ 1GHz	Oct. 19, 2021	Oct. 18, 2022	Radiation (10CH01-CB)
Low Cable	Woken	SUCOFLEX 104	low cable-02	25MHz ~ 1GHz	Oct. 19, 2021	Oct. 18, 2022	Radiation (10CH01-CB)
Bilog Antenna with 6dB Attenuator	Chase & EMCI	CBL6111A &N-6-06	1543 &AT-N0609	30MHz ~ 1GHz	Jun. 25, 2022	Jun. 24, 2023	Radiation (10CH01-CB)
Amplifier	EM	EM101	060703	10MHz ~ 1GHz	Oct. 20, 2021	Oct. 19, 2022	Radiation (10CH01-CB)
Low Cable	TITAN	T318E	low cable-03	30MHz ~ 1GHz	Jun. 17, 2022	Jun. 16, 2023	Radiation (10CH01-CB)
EMI Test Receiver	Rohde&Schwarz	ESCI	100186	9kHz ~ 3GHz	Jul. 11, 2022	Jul. 10, 2023	Radiation (10CH01-CB)
Spectrum Analyzer	Rohde&Schwarz	FSV30	101026	9kHz ~ 30GHz	Apr. 22, 2022	Apr. 21, 2023	Radiation (10CH01-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (10CH01-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH01-CB	1GHz ~18GHz 3m	May 07, 2021	May 06, 2022	Radiation (03CH01-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH01-CB	1GHz ~18GHz 3m	May 06, 2022	May 05, 2023	Radiation (03CH01-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Horn Antenna	ETS-LINDGREN	3115	00075790	750MHz ~ 18GHz	Nov. 06, 2021	Nov. 05, 2022	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 05, 2021	Aug. 04, 2022	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02121	1GHz ~ 26.5GHz	May 20, 2021	May 19, 2022	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02121	1GHz ~ 26.5GHz	May 19, 2022	May 18, 2023	Radiation (03CH01-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 13, 2021	Jul. 12, 2022	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	May 03, 2021	May 02, 2022	Radiation (03CH01-CB)
Signal Analyzer	R&S	FSV40	101904	9kHz ~ 40GHz	Apr. 26, 2022	Apr. 25, 2023	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-16	1 GHz ~ 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-16+17	1 GHz ~ 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH01-CB)
High Cable	Woken	WCA0929M	40G#5+7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH01-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 08, 2021	Dec. 07, 2022	Radiation (03CH01-CB)
High Cable	Woken	WCA0929M	40G#7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH01-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH01-CB)
3m Semi Anechoic Chamber (NSA)	RIKEN	SAC-3M	03CH02-CB	30 MHz ~ 1 GHz	Mar. 27, 2021	Mar. 26, 2022	Radiation (03CH02-CB)
3m Semi Anechoic Chamber VSWR	RIKEN	SAC-3M	03CH02-CB	1GHz ~18GHz	Mar. 26, 2022	Mar. 25, 2023	Radiation (03CH02-CB)
Horn Antenna	EMCO	3115	9610-4976	1GHz ~ 18GHz	May 04, 2021	May 03, 2022	Radiation (03CH02-CB)
Horn Antenna	EMCO	3115	9610-4976	1GHz ~ 18GHz	Apr. 19, 2022	Apr. 18, 2023	Radiation (03CH02-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 05, 2021	Aug. 04, 2022	Radiation (03CH02-CB)
Pre-Amplifier	Agilent	83017A	MY39501305	1GHz ~ 26.5GHz	Jul. 12, 2021	Jul. 11, 2022	Radiation (03CH02-CB)
Pre-Amplifier	Agilent	83017A	MY39501305	1GHz ~ 26.5GHz	Jul. 01, 2022	Jun. 30, 2023	Radiation (03CH02-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 13, 2021	Jul. 12, 2022	Radiation (03CH02-CB)
Spectrum analyzer	R&S	FSU	100015	9kHz~26GHz	Oct. 25, 2021	Oct. 24, 2022	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-18	1GHz ~ 18GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH02-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-18+19	1GHz ~ 18GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH02-CB)
High Cable	Woken	WCA0929M	40G#5+7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH02-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 08, 2021	Dec. 07, 2022	Radiation (03CH02-CB)
High Cable	Woken	WCA0929M	40G#7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH02-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH02-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH03-CB	1GHz ~18GHz 3m	May 06, 2021	May 05, 2022	Radiation (03CH03-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	Jan. 26, 2021	Jan. 25, 2022	Radiation (03CH03-CB)
Horn Antenna	ETS • Lindgren	3115	6821	750MHz~18GHz	Jan. 21, 2022	Jan. 20, 2023	Radiation (03CH03-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 05, 2021	Aug. 04, 2022	Radiation (03CH03-CB)
Pre-Amplifier	Agilent	8449B	3008A02097	1GHz ~ 26.5GHz	Jul. 02, 2021	Jul. 01, 2022	Radiation (03CH03-CB)
Pre-Amplifier	Agilent	8449B	3008A02097	1GHz ~ 26.5GHz	Jul. 01, 2022	Jun. 30, 2023	Radiation (03CH03-CB)
Pre-Amplifier	MITEQ	TTA1840-35-H G	1864479	18GHz ~ 40GHz	Jul. 13, 2021	Jul. 12, 2022	Radiation (03CH03-CB)
Spectrum Analyzer	R&S	FSP40	100019	9kHz ~ 40GHz	Jun. 04, 2021	Jun. 03, 2022	Radiation (03CH03-CB)
Signal Analyzer	R&S	FSV40	101904	9kHz ~ 40GHz	Apr. 26, 2022	Apr. 25, 2023	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-20+29	1GHz ~ 18GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-29	1GHz ~ 18GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH03-CB)
High Cable	Woken	WCA0929M	40G#5+7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH03-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 08, 2021	Dec. 07, 2022	Radiation (03CH03-CB)
High Cable	Woken	WCA0929M	40G#7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH03-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH03-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH04-CB	1GHz ~18GHz 3m	Feb. 24, 2022	Feb. 23, 2023	Radiation (03CH04-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Horn Antenna	ETS • Lindgren	3115	00143147	750MHz~18GHz	Oct. 25, 2021	Oct. 24, 2022	Radiation (03CH04-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 05, 2021	Aug. 04, 2022	Radiation (03CH04-CB)
Pre-Amplifier	Agilent	83017A	MY53270063	0.5GHz ~ 26.5GHz	Jul. 12, 2021	Jul. 11, 2022	Radiation (03CH04-CB)
Pre-Amplifier	Agilent	83017A	MY53270063	0.5GHz ~ 26.5GHz	Jul. 01, 2022	Jun. 30, 2023	Radiation (03CH04-CB)
Pre-Amplifier	MITEQ	TTA1840-35-H G	1864479	18GHz ~ 40GHz	Jul. 13, 2021	Jul. 12, 2022	Radiation (03CH04-CB)
Signal Analyzer	R&S	FSV40	101904	9kHz ~ 40GHz	Apr. 15, 2021	Apr. 14, 2022	Radiation (03CH04-CB)
Spectrum Analyzer	R&S	FSP40	100142	9kHz~40GHz	Mar. 28, 2022	Mar. 27, 2023	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-21	1GHz - 18GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-21+67	1GHz - 18GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH04-CB)
High Cable	Woken	WCA0929M	40G#5+7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH04-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 08, 2021	Dec. 07, 2022	Radiation (03CH04-CB)
High Cable	Woken	WCA0929M	40G#7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH04-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH04-CB)
Spectrum analyzer	R&S	FSV40	101028	9kHz~40GHz	Jan. 07, 2022	Jan. 06, 2023	Conducted (TH03-CB)
Power Sensor	Anritsu	MA2411B	1726195	300MHz~40GHz	Aug. 22, 2021	Aug. 21, 2022	Conducted (TH03-CB)
Power Meter	Anritsu	ML2495A	1035008	300MHz~40GHz	Aug. 22, 2021	Aug. 21, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-11	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-12	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-13	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-14	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-15	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
Switch	SPTCB	SP-SWI	SWI-03	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	SWI-03-P1	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	SWI-03-P2	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH03-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	SWI-03-P3	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	SWI-03-P4	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH03-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH03-CB)

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

NCR means Non-Calibration required.



Conducted Emissions at Powerline

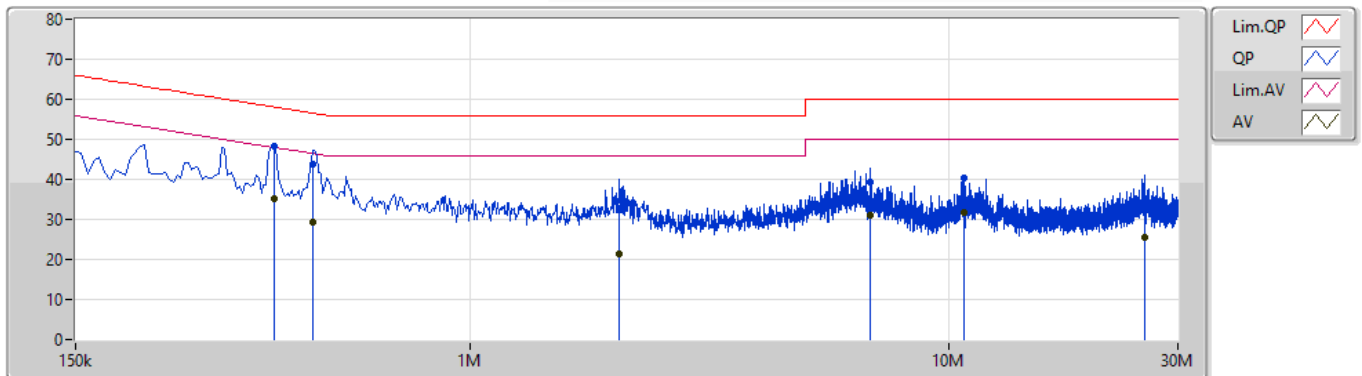
Appendix A

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	217.5k	55.79	62.92	-7.13	Neutral

Mode 1

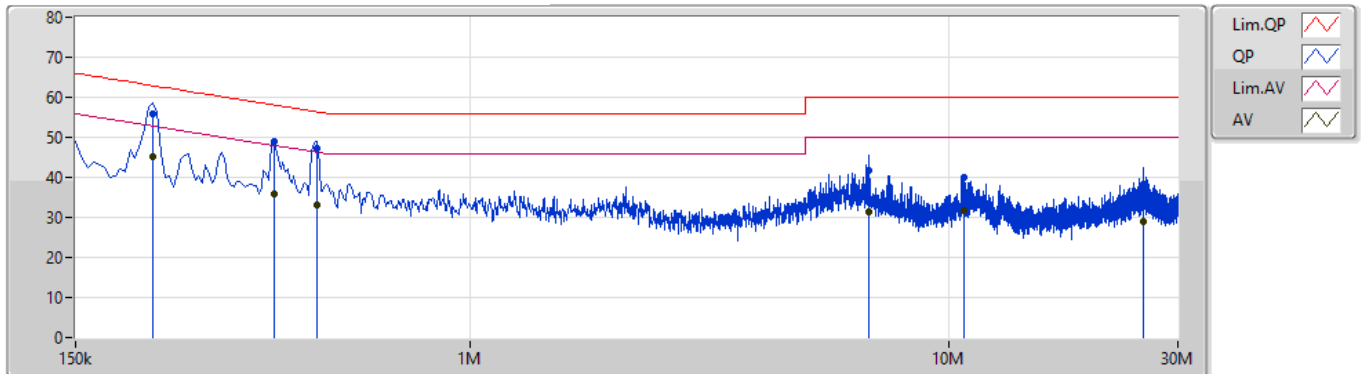
05/07/2022



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	388.5k	48.34	58.10	-9.76	10.01	Line	"Worst"	38.33	0.06	0.06	9.89			
AV	388.5k	35.33	48.10	-12.77	10.01	Line	-	25.32	0.06	0.06	9.89			
QP	469.5k	43.69	56.52	-12.83	10.01	Line	-	33.68	0.06	0.06	9.89			
AV	469.5k	29.20	46.52	-17.32	10.01	Line	-	19.19	0.06	0.06	9.89			
QP	2.049M	32.59	56.00	-23.41	10.07	Line	-	22.52	0.09	0.09	9.89			
AV	2.049M	21.35	46.00	-24.65	10.07	Line	-	11.28	0.09	0.09	9.89			
QP	6.833M	39.40	60.00	-20.60	10.22	Line	-	29.18	0.18	0.14	9.90			
AV	6.833M	31.08	50.00	-18.92	10.22	Line	-	20.86	0.18	0.14	9.90			
QP	10.748M	40.21	60.00	-19.79	10.31	Line	-	29.90	0.23	0.16	9.92			
AV	10.748M	31.63	50.00	-18.37	10.31	Line	-	21.32	0.23	0.16	9.92			
QP	25.512M	33.19	60.00	-26.81	10.63	Line	-	22.56	0.36	0.29	9.98			
AV	25.512M	25.50	50.00	-24.50	10.63	Line	-	14.87	0.36	0.29	9.98			

Mode 1

05/07/2022



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	217.5k	55.79	62.92	-7.13	10.00	Neutral	"Worst"	45.79	0.07	0.04	9.89			
AV	217.5k	45.19	52.92	-7.73	10.00	Neutral	-	35.19	0.07	0.04	9.89			
QP	388.5k	48.82	58.10	-9.28	10.02	Neutral	-	38.80	0.07	0.06	9.89			
AV	388.5k	35.98	48.10	-12.12	10.02	Neutral	-	25.96	0.07	0.06	9.89			
QP	478.5k	47.17	56.36	-9.19	10.02	Neutral	-	37.15	0.07	0.06	9.89			
AV	478.5k	33.16	46.36	-13.20	10.02	Neutral	-	23.14	0.07	0.06	9.89			
QP	6.783M	41.72	60.00	-18.28	10.22	Neutral	-	31.50	0.19	0.13	9.90			
AV	6.783M	31.55	50.00	-18.45	10.22	Neutral	-	21.33	0.19	0.13	9.90			
QP	10.748M	40.03	60.00	-19.97	10.33	Neutral	-	29.70	0.25	0.16	9.92			
AV	10.748M	31.67	50.00	-18.33	10.33	Neutral	-	21.34	0.25	0.16	9.92			
QP	25.364M	38.41	60.00	-21.59	10.56	Neutral	-	27.85	0.31	0.28	9.97			
AV	25.364M	28.90	50.00	-21.10	10.56	Neutral	-	18.34	0.31	0.28	9.97			

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	7.6M	13.618M	13M6G1D	7.05M	13.068M
802.11g_Nss1,(6Mbps)_2TX	16.025M	16.592M	16M6D1D	15.525M	16.417M

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

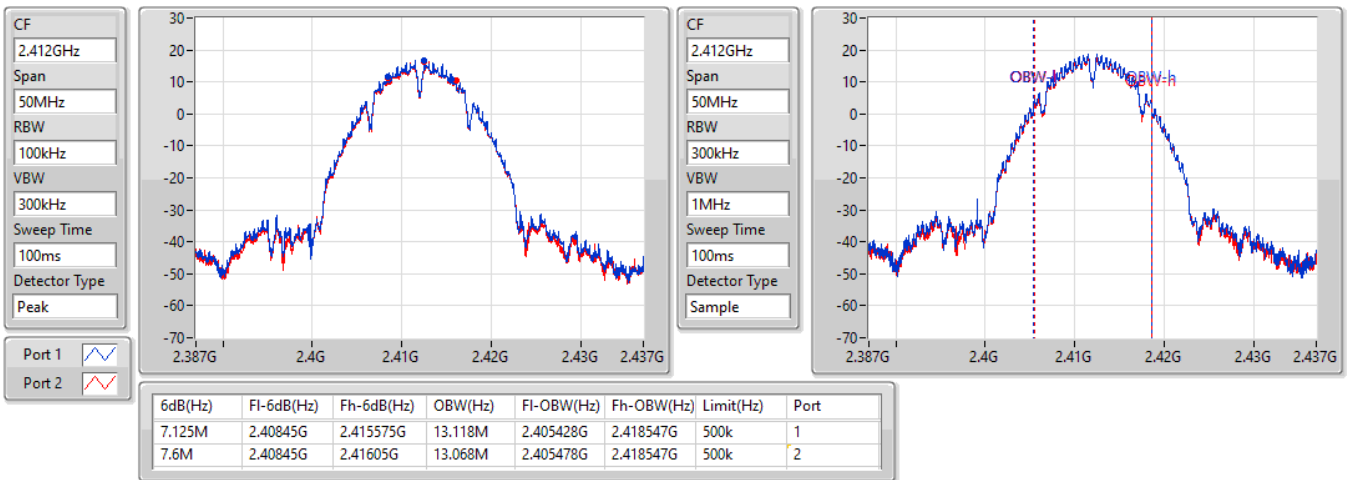
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	7.125M	13.118M	7.6M	13.068M
2437MHz	Pass	500k	7.55M	13.618M	7.1M	13.368M
2462MHz	Pass	500k	7.05M	13.143M	7.3M	13.118M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	15.525M	16.467M	15.6M	16.492M
2437MHz	Pass	500k	15.775M	16.592M	16.025M	16.542M
2462MHz	Pass	500k	15.675M	16.442M	16M	16.417M

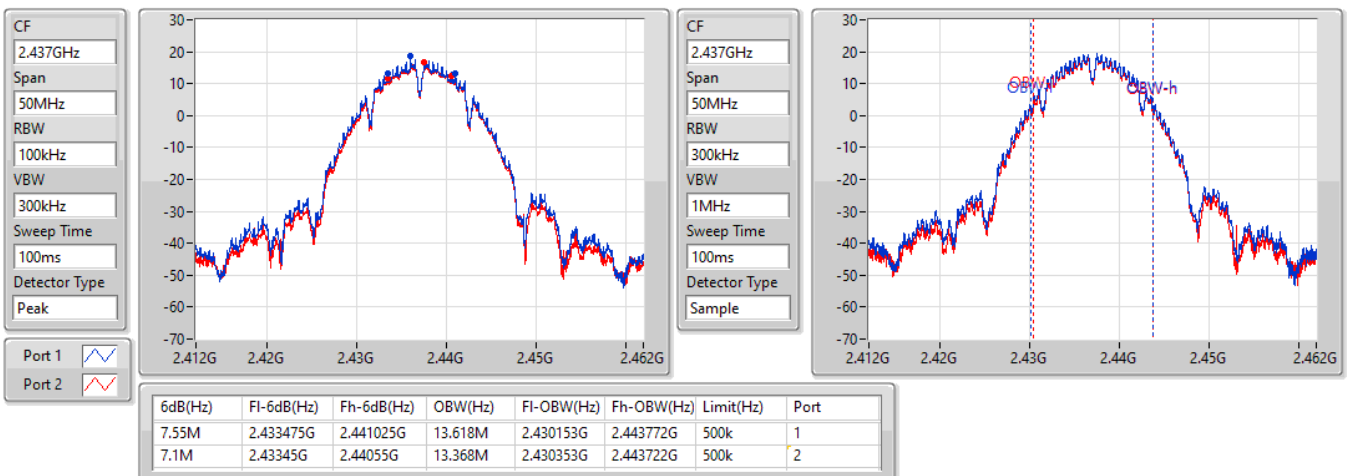
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

802.11b_Nss1,(1Mbps)_2TX
EBW
2412MHz

15/03/2022


802.11b_Nss1,(1Mbps)_2TX
EBW
2437MHz

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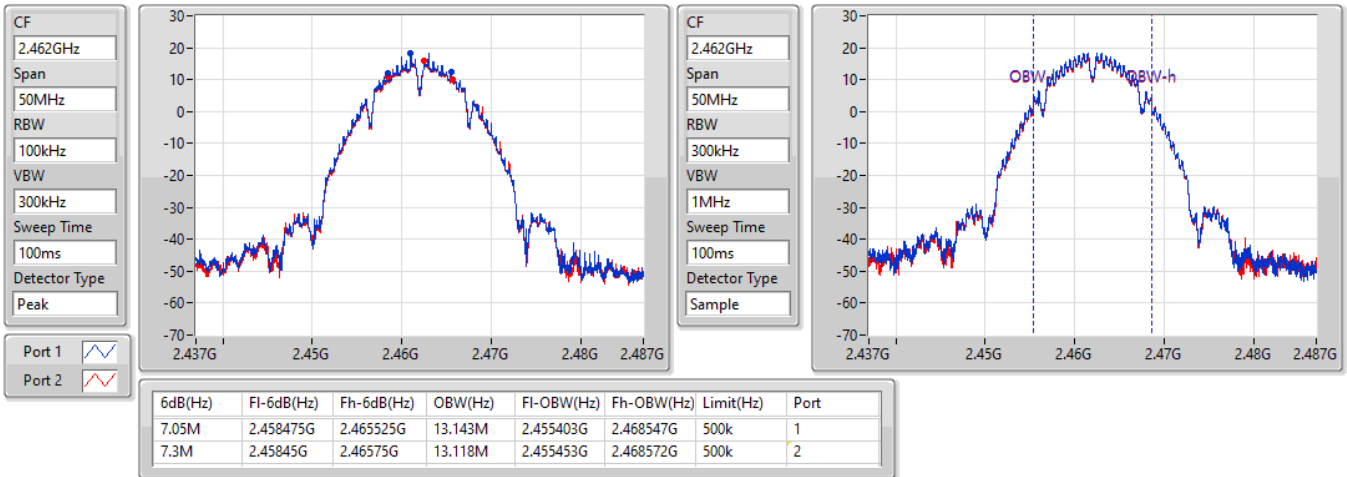


802.11b_Nss1,(1Mbps)_2TX

EBW

2462MHz

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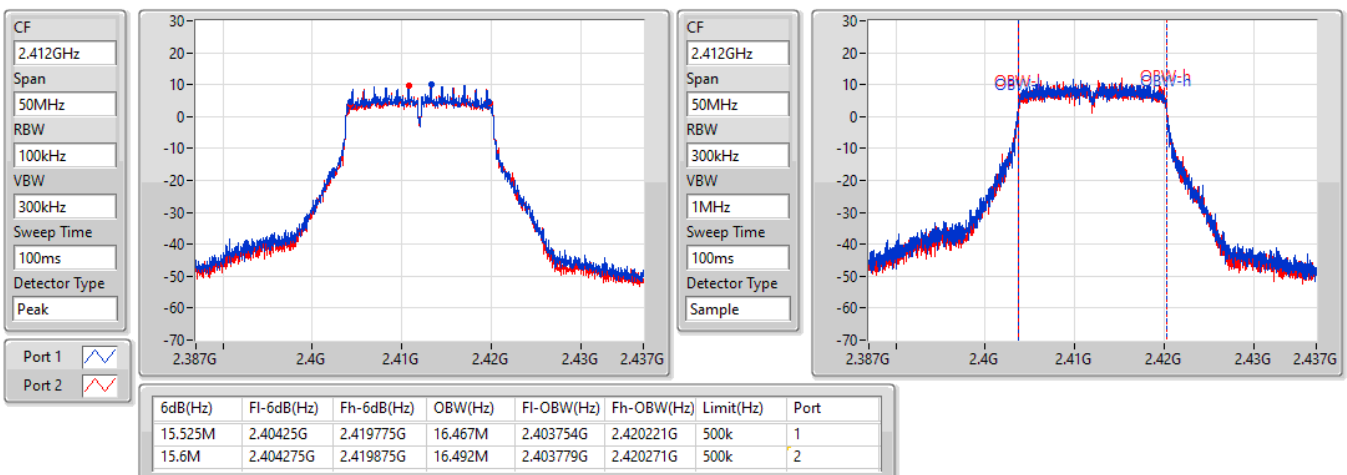


802.11g_Nss1,(6Mbps)_2TX

EBW

2412MHz

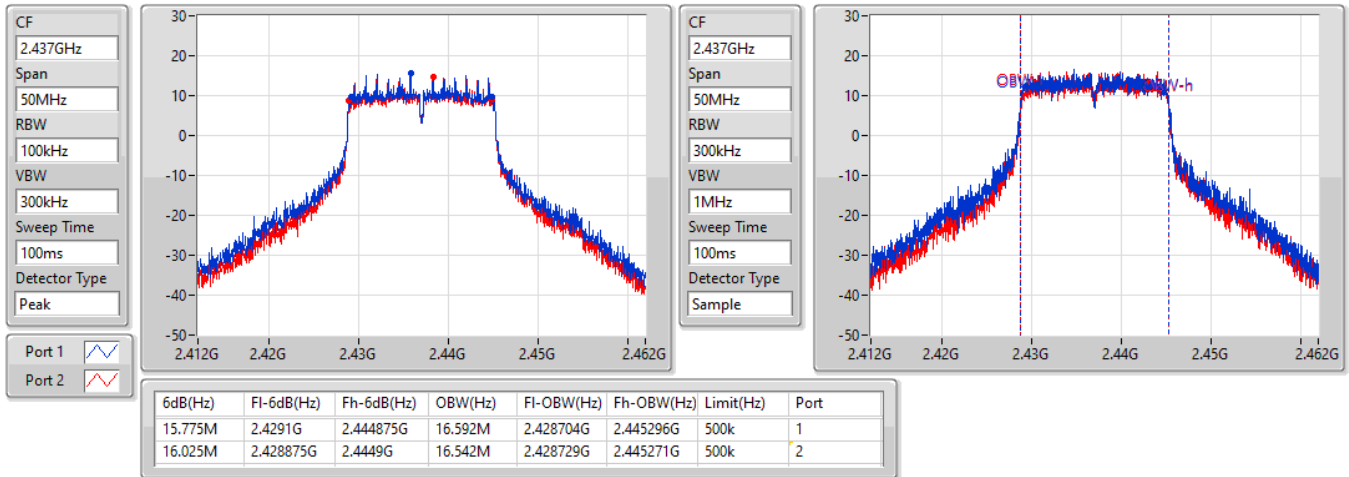
15/03/2022



802.11g_Nss1,(6Mbps)_2TX

2437MHz

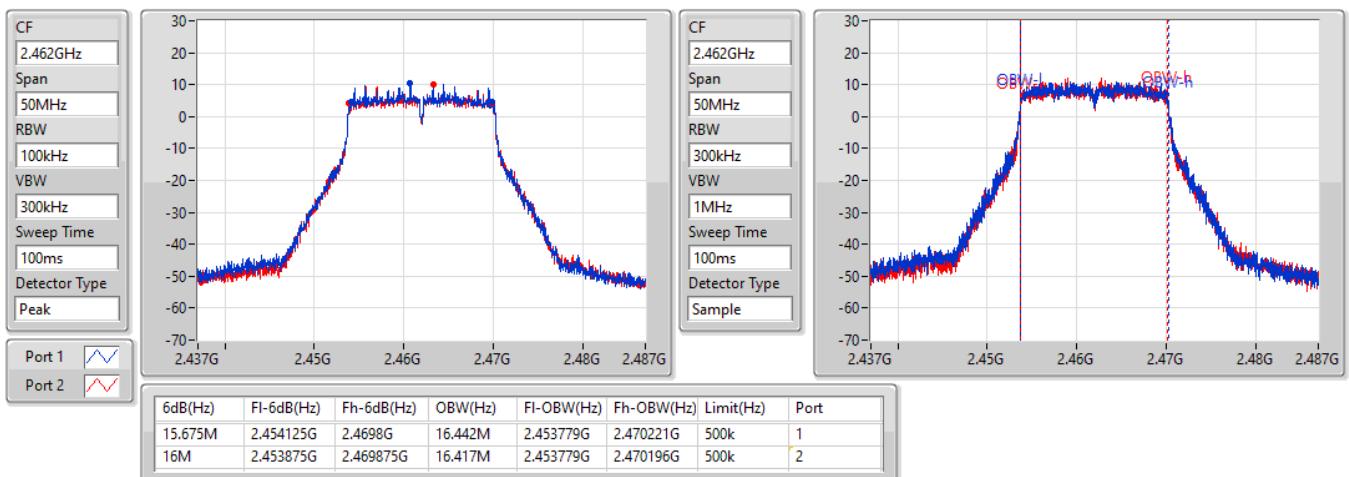
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802.11g_Nss1,(6Mbps)_2TX

2462MHz

15/03/2022



Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	17.825M	18.941M	18M9D1D	15.075M	18.841M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	32.55M	37.981M	38M0D1D	26.25M	37.731M

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

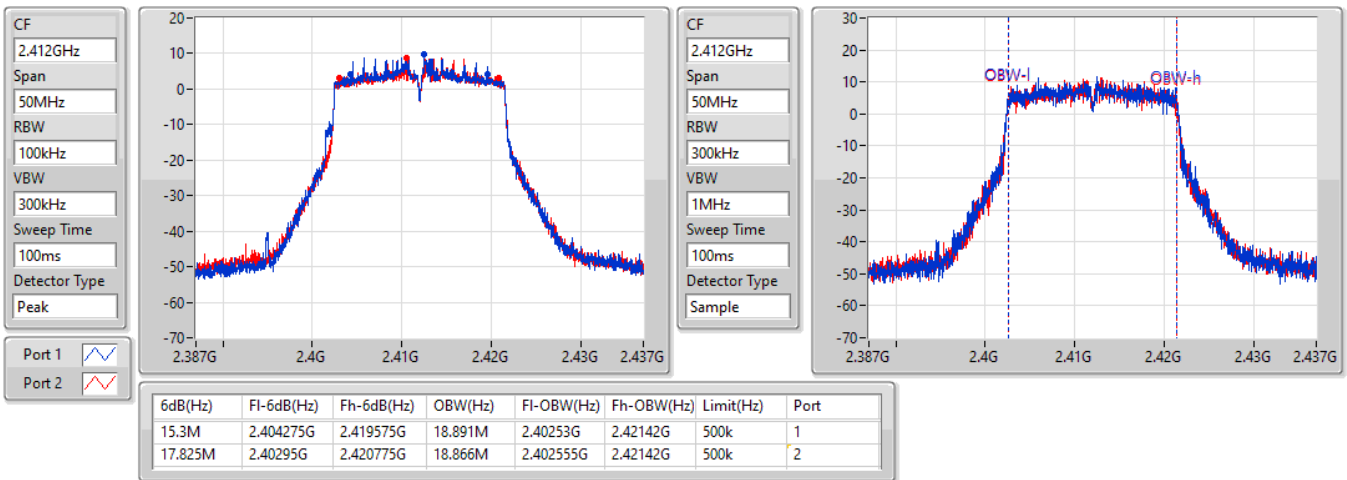
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	15.3M	18.891M	17.825M	18.866M
2437MHz	Pass	500k	15.075M	18.866M	17.1M	18.841M
2462MHz	Pass	500k	15.425M	18.866M	17.45M	18.941M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	32.5M	37.881M	30.05M	37.831M
2437MHz	Pass	500k	32.55M	37.781M	32.55M	37.981M
2452MHz	Pass	500k	26.25M	37.731M	30.35M	37.881M

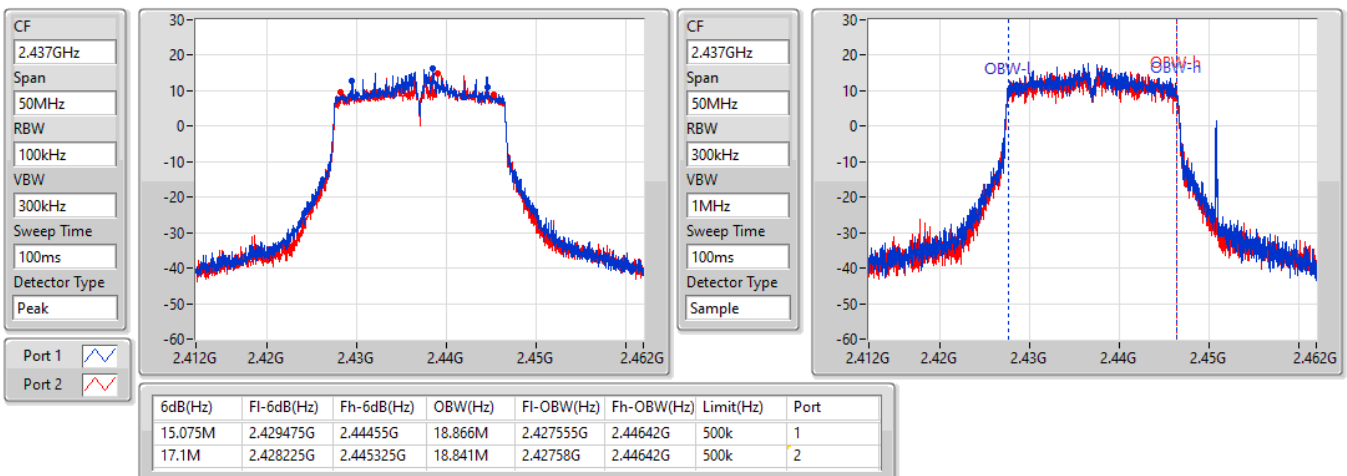
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

802.11ax HEW20-BF_Nss1,(MCS0)_2TX
EBW
2412MHz

15/03/2022

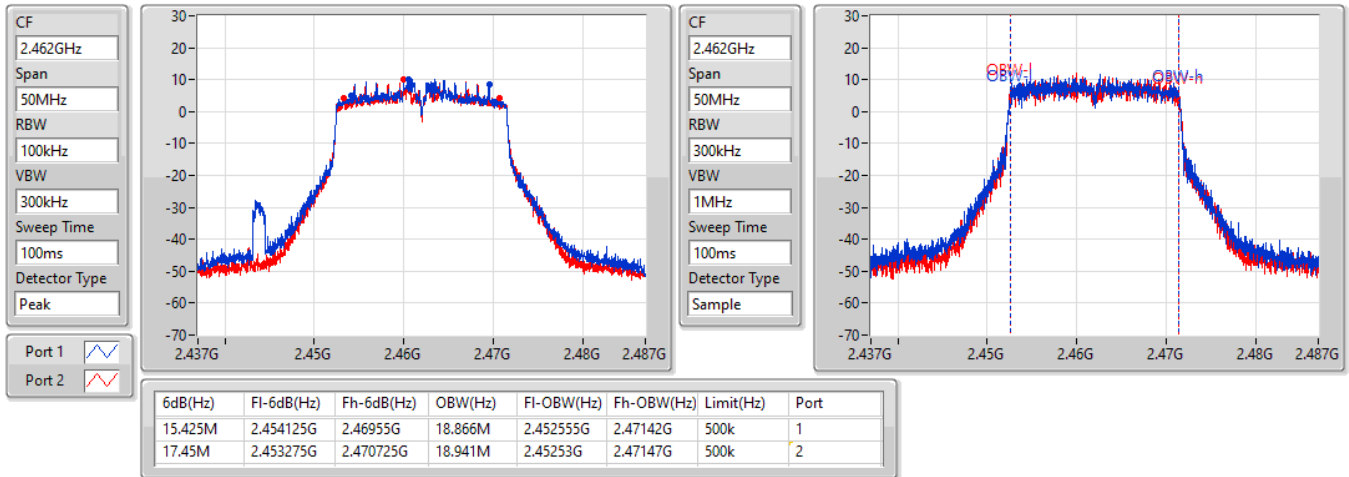

802.11ax HEW20-BF_Nss1,(MCS0)_2TX
EBW
2437MHz

15/03/2022

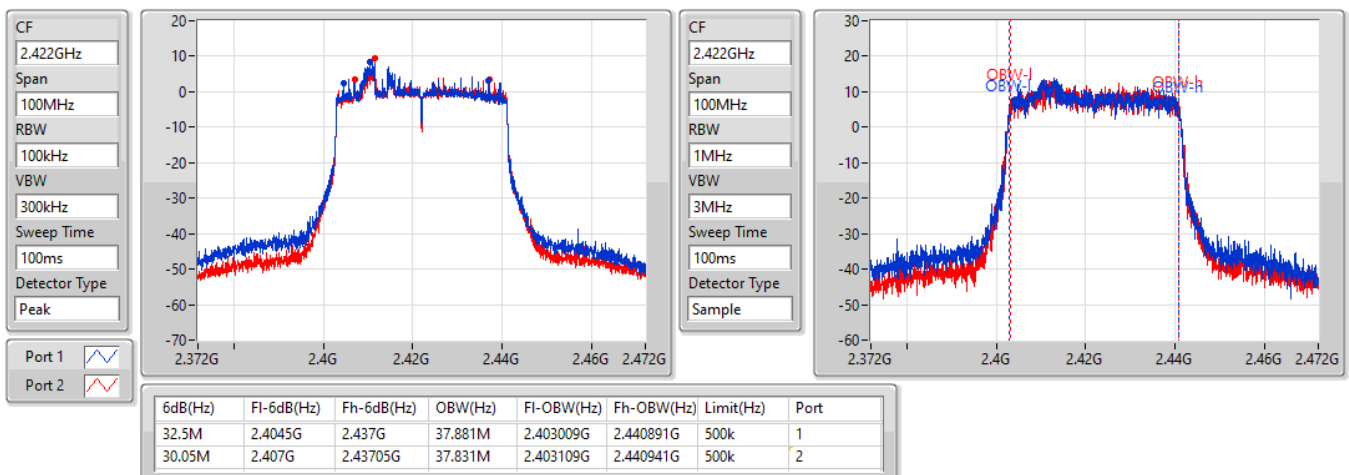


802.11ax HEW20-BF_Nss1,(MCS0)_2TX
EBW
2462MHz

15/03/2022

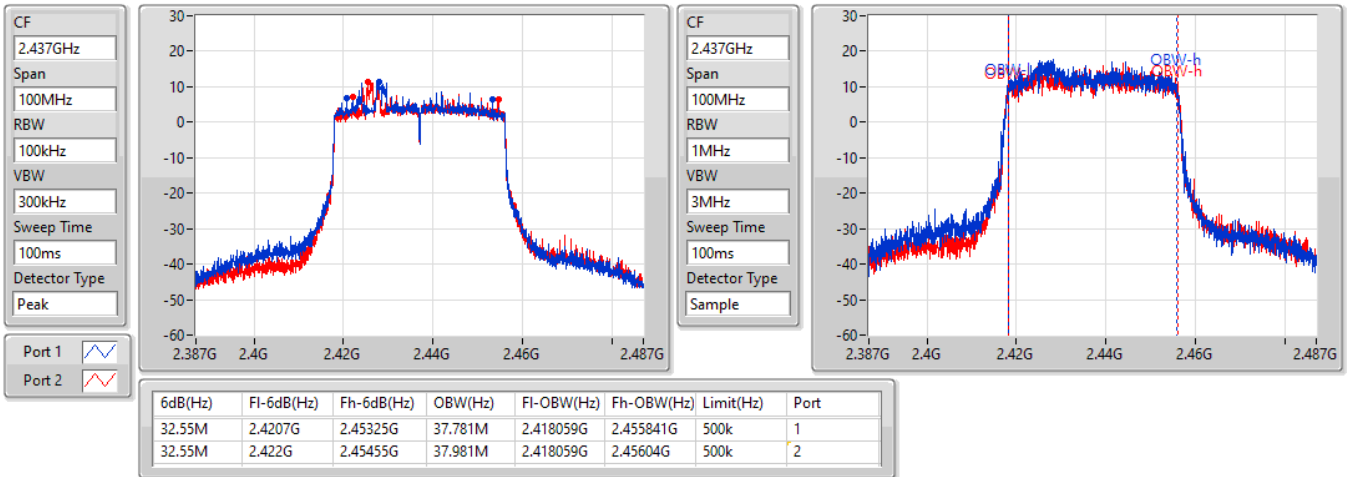

802.11ax HEW40-BF_Nss1,(MCS0)_2TX
EBW
2422MHz

15/03/2022

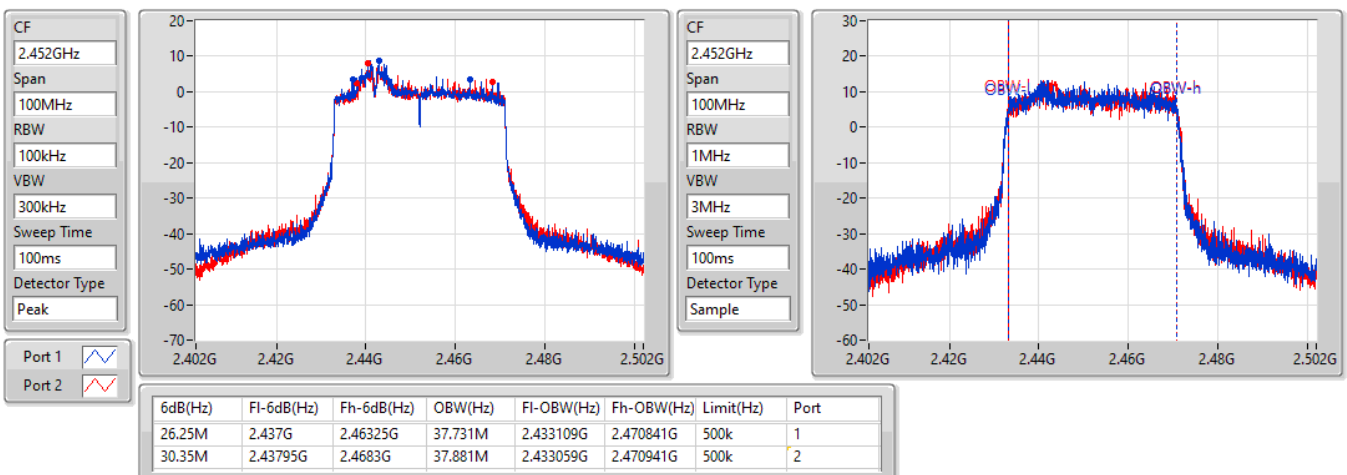


802.11ax HEW40-BF_Nss1,(MCS0)_2TX
EBW
2437MHz

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802.11ax HEW40-BF_Nss1,(MCS0)_2TX
EBW
2452MHz

15/03/2022





Average Power

Appendix C.1

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_2TX	29.92	0.98175
802.11g_Nss1,(6Mbps)_2TX	28.56	0.71779

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	5.62	26.40	26.00	29.21	30.00
2417MHz						
2437MHz	Pass	5.62	27.17	26.63	29.92	30.00
2457MHz						
2462MHz	Pass	5.62	26.26	25.87	29.08	30.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	5.62	22.13	21.53	24.85	30.00
2417MHz	Pass	5.62	23.84	23.48	26.67	30.00
2437MHz	Pass	5.62	25.83	25.24	28.56	30.00
2457MHz	Pass	5.62	24.99	24.16	27.61	30.00
2462MHz	Pass	5.62	22.51	21.83	25.19	30.00

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



Average Power

Appendix C.2

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	27.76	0.59704
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	25.18	0.32961

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	6.88	19.12	19.33	22.24	30.00
2417MHz	Pass	6.88	22.16	21.82	25.00	30.00
2437MHz	Pass	6.88	24.84	24.65	27.76	30.00
2457MHz	Pass	6.88	22.01	21.72	24.88	30.00
2462MHz	Pass	6.88	20.06	19.71	22.90	30.00
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	6.88	18.39	18.21	21.31	30.00
2427MHz	Pass	6.88	18.51	18.11	21.32	30.00
2437MHz	Pass	6.88	22.37	21.97	25.18	30.00
2447MHz	Pass	6.88	19.37	19.07	22.23	30.00
2452MHz	Pass	6.88	18.38	18.22	21.31	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	4.79
802.11g_Nss1,(6Mbps)_2TX	-0.20

RBW = 3kHz;

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	6.88	-1.47	-1.55	1.50	8.00
2417MHz						
2437MHz	Pass	6.88	4.04	-0.85	4.79	8.00
2457MHz						
2462MHz	Pass	6.88	-1.81	3.54	3.59	8.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	6.88	-7.46	-6.84	-4.52	8.00
2417MHz						
2437MHz	Pass	6.88	-2.09	-2.28	-0.20	8.00
2457MHz						
2462MHz	Pass	6.88	-5.88	-7.22	-4.35	8.00

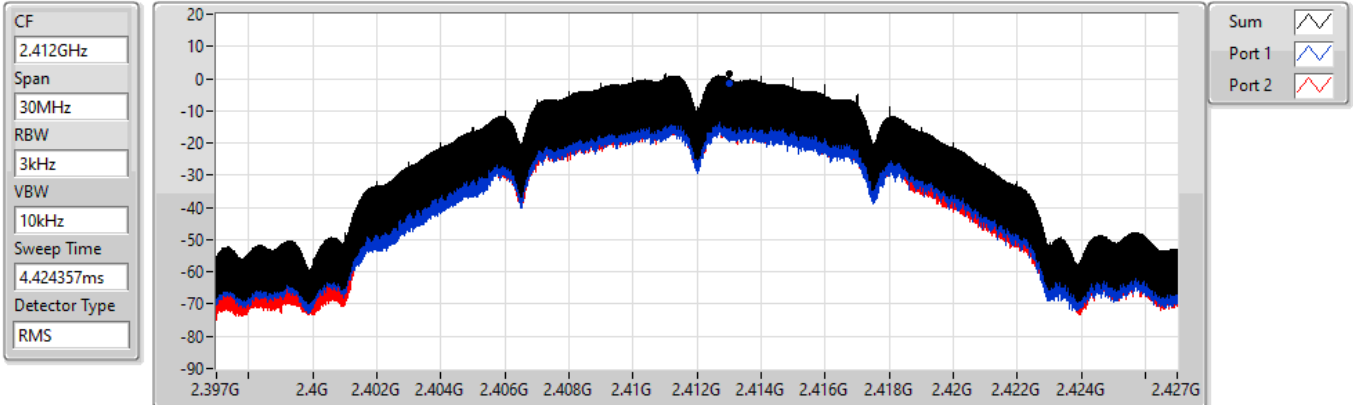
DG = Directional Gain; RBW = 3kHz;
 PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

802.11b_Nss1,(1Mbps)_2TX

PSD

2412MHz

15/03/2022

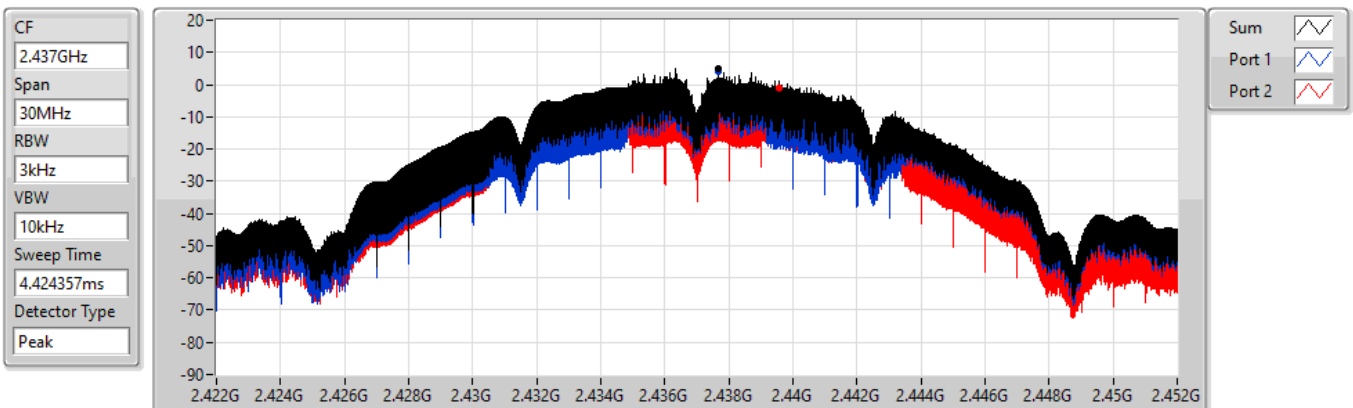


802.11b_Nss1,(1Mbps)_2TX

PSD

2437MHz

15/03/2022

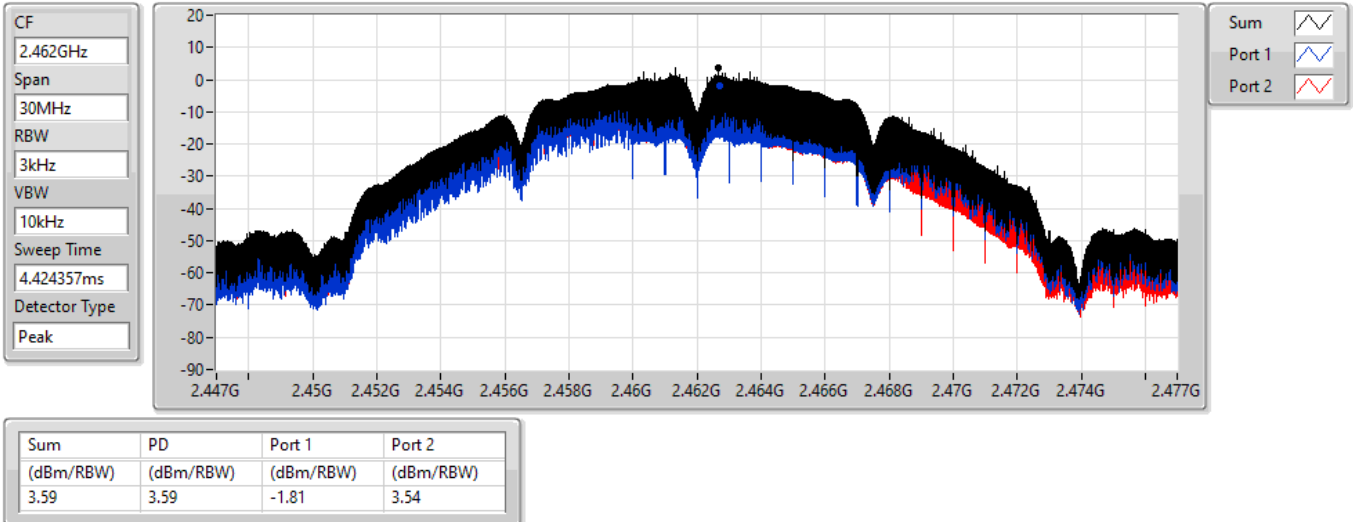


802.11b_Nss1,(1Mbps)_2TX

2462MHz

PSD

15/03/2022

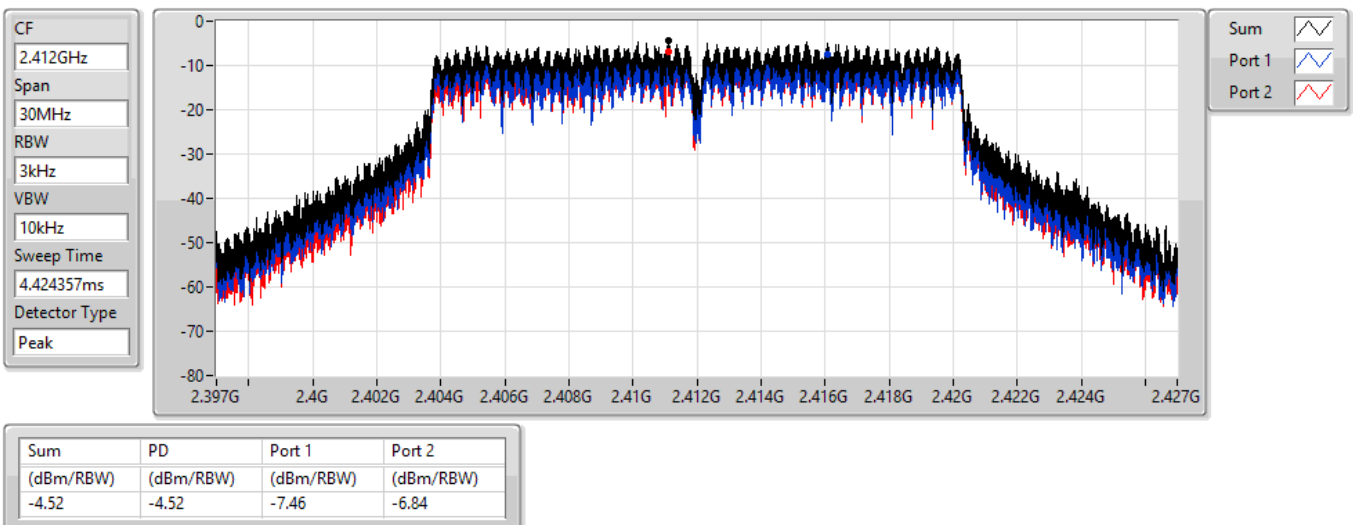


802.11g_Nss1,(6Mbps)_2TX

2412MHz

PSD

18/03/2022

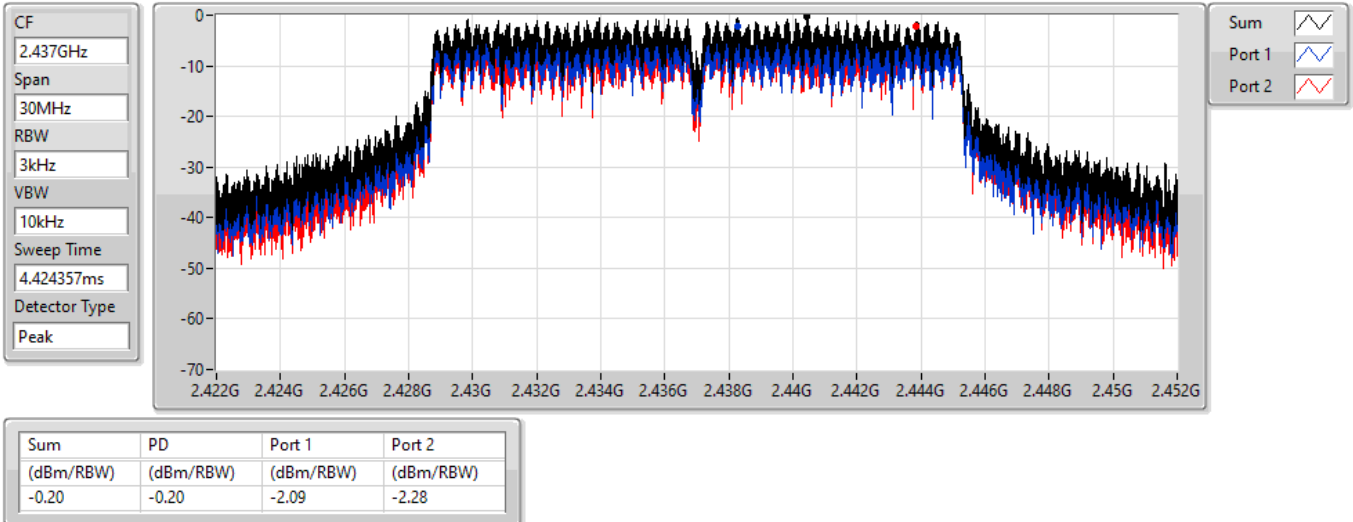


802.11g_Nss1,(6Mbps)_2TX

2437MHz

PSD

15/03/2022

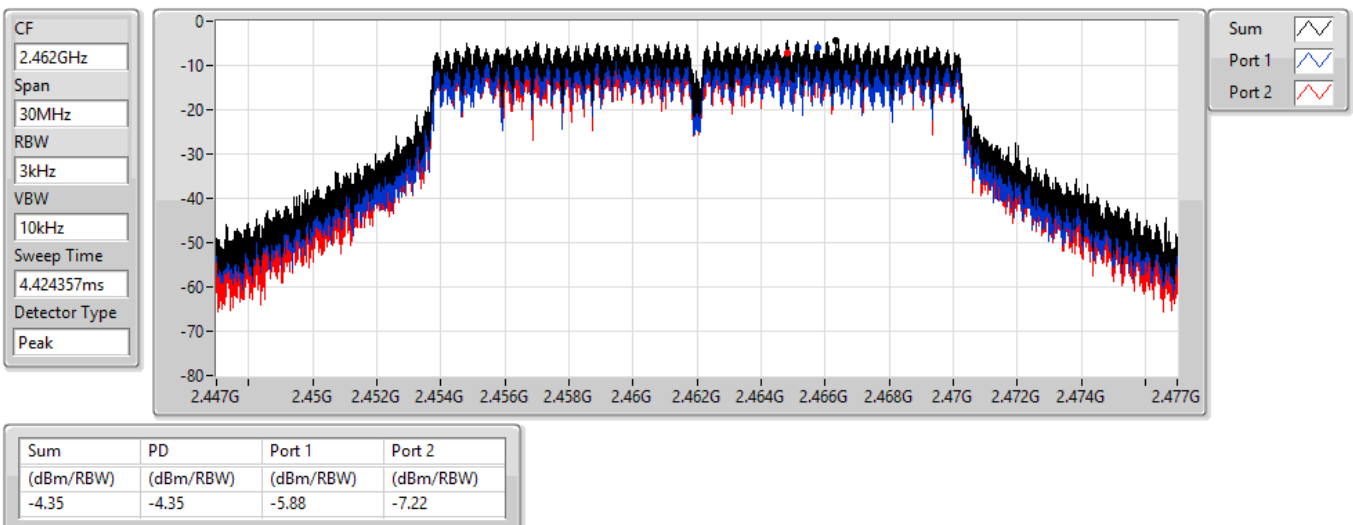


802.11g_Nss1,(6Mbps)_2TX

2462MHz

PSD

18/03/2022



Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	0.07
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-5.21

RBW = 3kHz;

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	6.88	-7.90	-5.14	-4.62	8.00
2437MHz	Pass	6.88	-0.33	-3.03	0.07	8.00
2462MHz	Pass	6.88	-3.23	-6.72	-3.02	8.00
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	6.88	-6.66	-7.35	-6.12	8.00
2437MHz	Pass	6.88	-7.47	-7.52	-5.24	8.00
2452MHz	Pass	6.88	-5.57	-10.25	-5.21	8.00

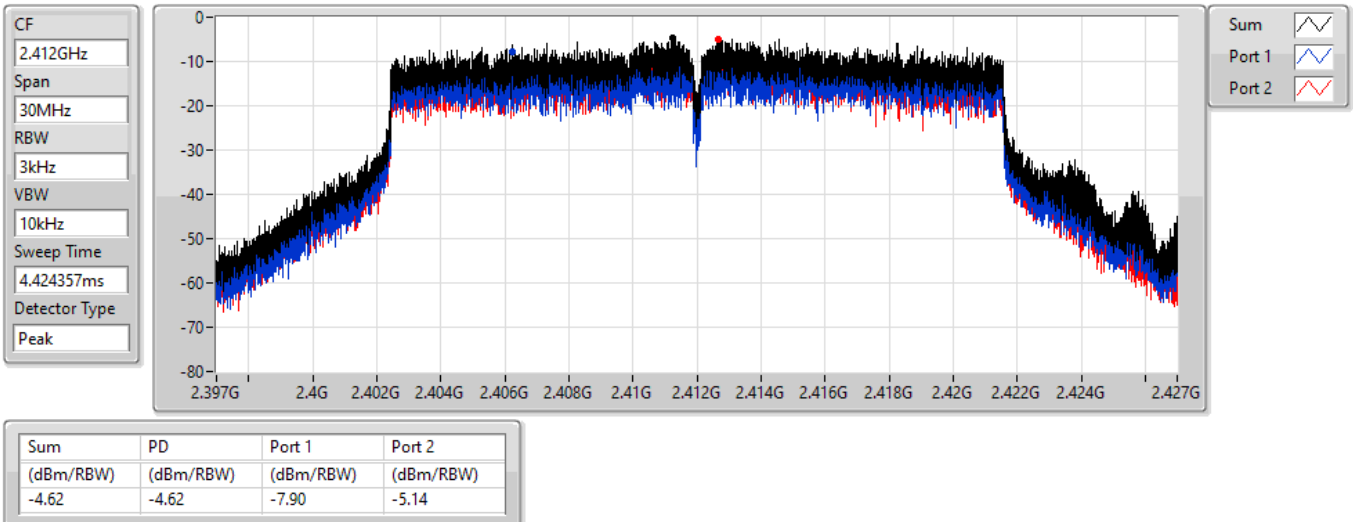
DG = Directional Gain; RBW = 3kHz;
 PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

PSD

2412MHz

15/03/2022

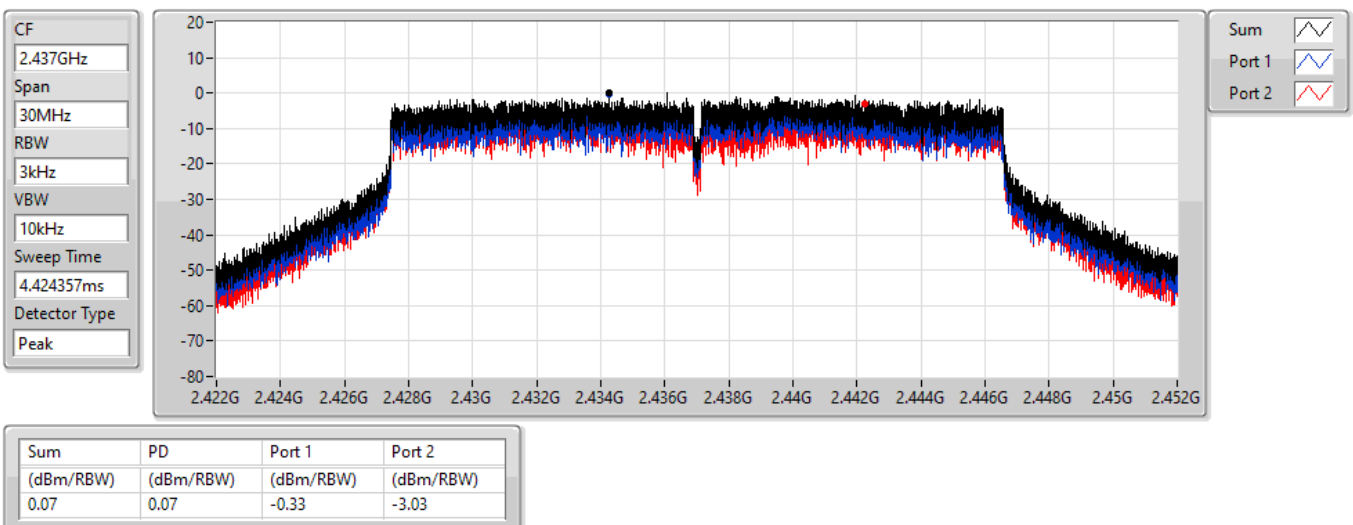


802.11ax HEW20-BF_Nss1,(MCS0)_2TX

PSD

2437MHz

15/03/2022

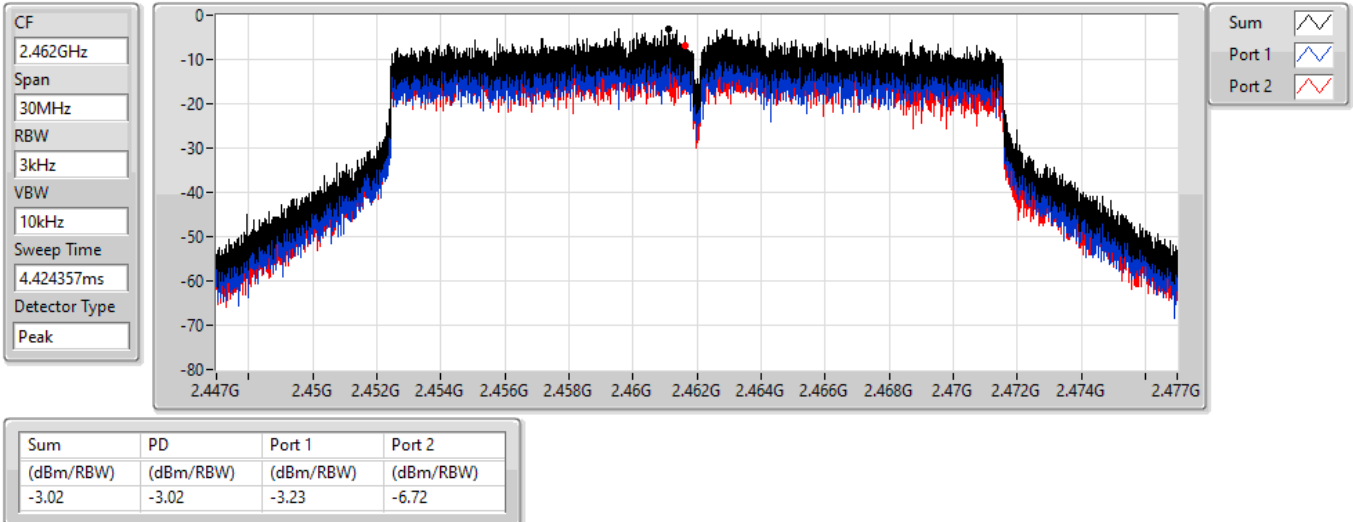


802.11ax HEW20-BF_Nss1,(MCS0)_2TX

PSD

2462MHz

15/03/2022

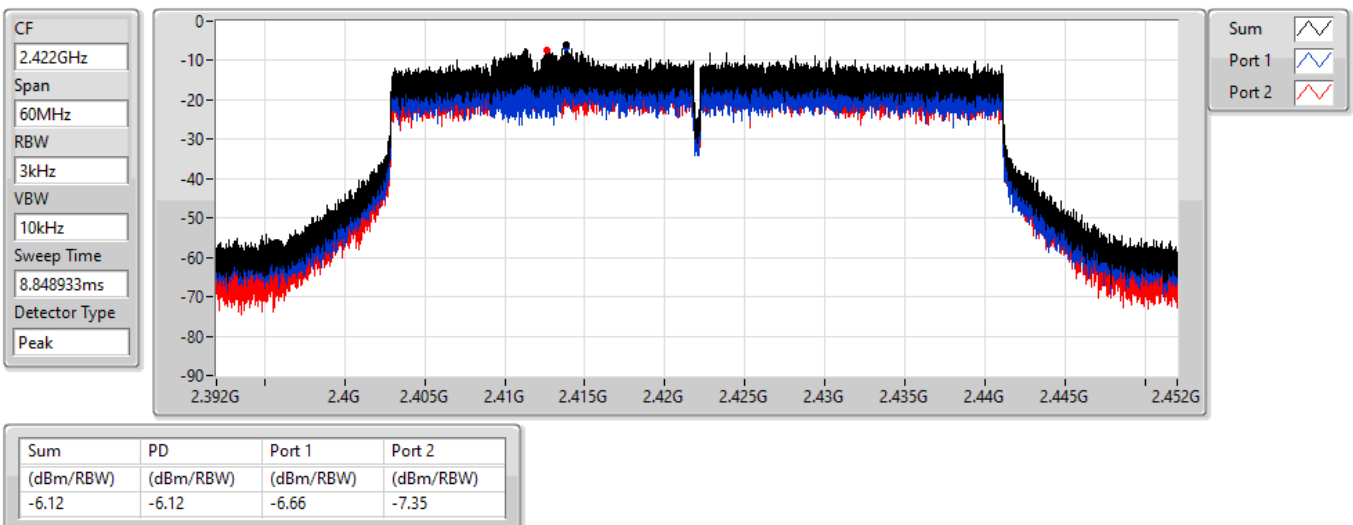


802.11ax HEW40-BF_Nss1,(MCS0)_2TX

PSD

2422MHz

15/03/2022

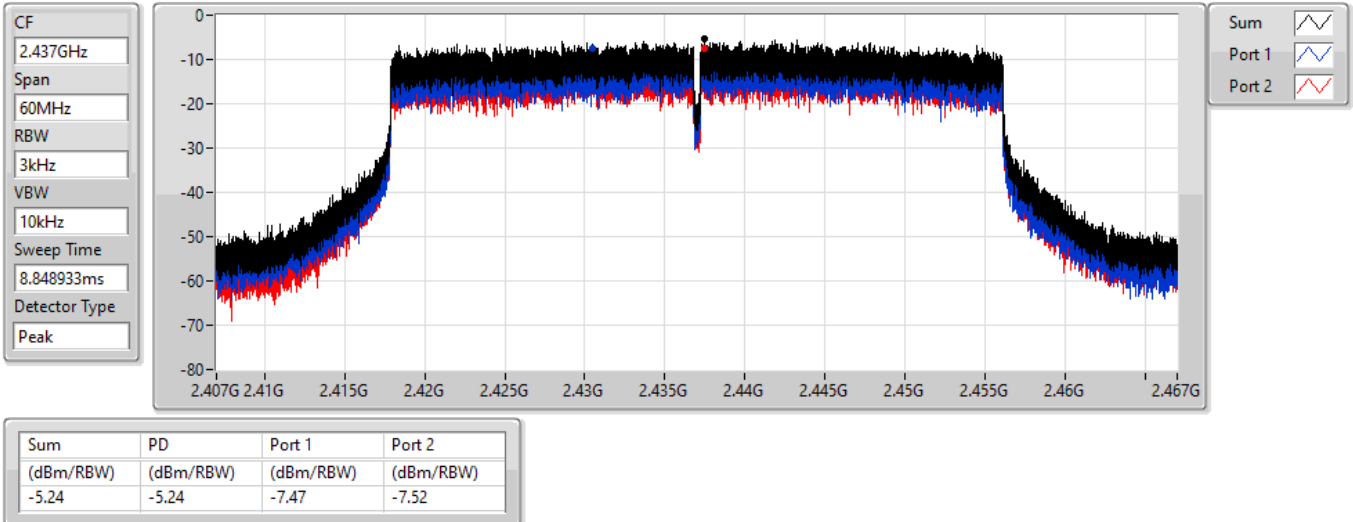


802.11ax HEW40-BF_Nss1,(MCS0)_2TX

PSD

2437MHz

15/03/2022

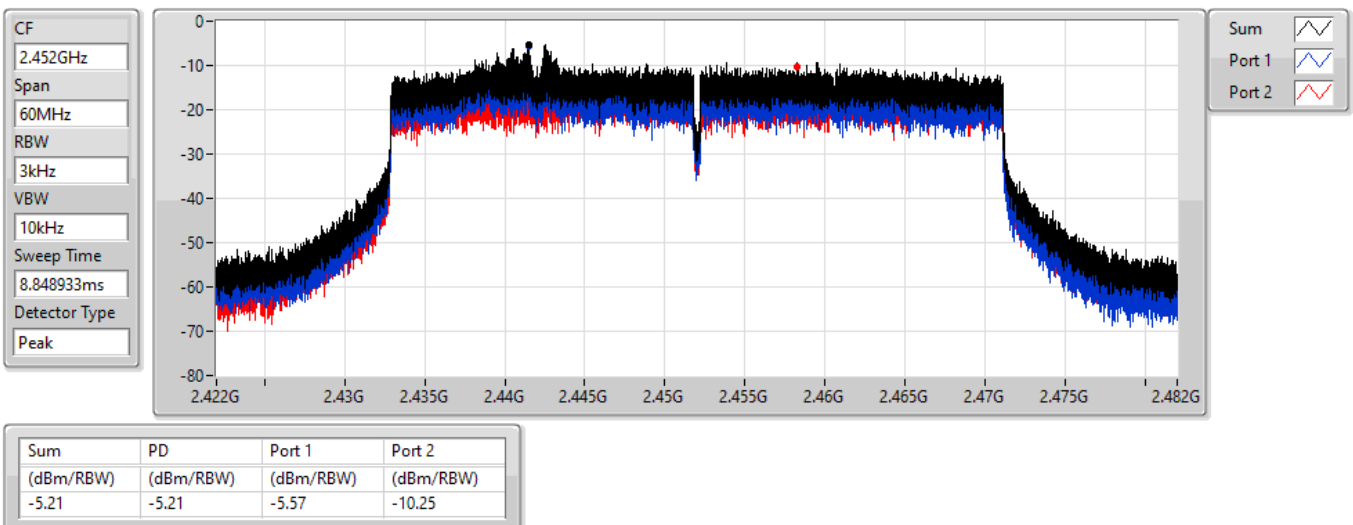


802.11ax HEW40-BF_Nss1,(MCS0)_2TX

PSD

2452MHz

15/03/2022





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	2.43749G	17.41	-12.59	2.30059G	-48.31	2.39452G	-33.26	2.4G	-40.13	2.49596G	-46.69	6.9008G	-42.30	1
802.11g_Nss1,(6Mbps)_2TX	Pass	2.442G	15.19	-14.81	2.30495G	-47.32	2.3999G	-29.14	2.4G	-29.23	2.51444G	-47.09	6.4007G	-42.94	1

Result

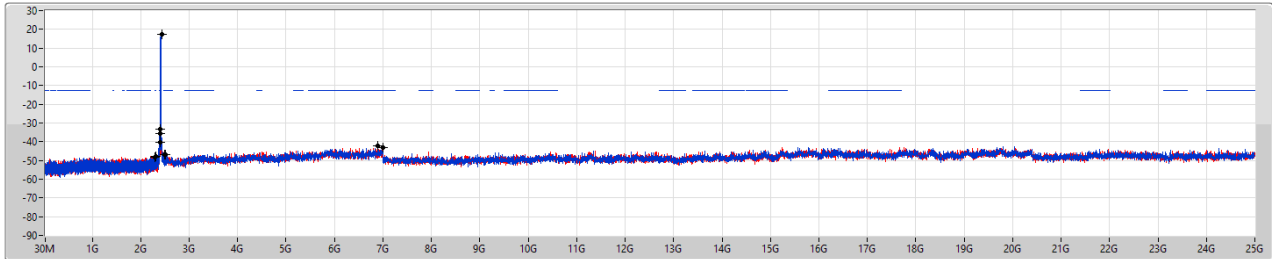
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43749G	17.41	-12.59	2.30059G	-48.31	2.39452G	-33.26	2.4G	-40.13	2.49596G	-46.69	6.9008G	-42.30	1
2412MHz	Pass	2.43749G	17.41	-12.59	2.30554G	-47.75	2.39452G	-33.42	2.4G	-35.56	2.51908G	-46.81	6.99632G	-43.18	2
2437MHz	Pass	2.43749G	17.41	-12.59	2.19195G	-46.64	2.39768G	-42.90	2.4G	-46.11	2.51108G	-46.20	16.45331G	-42.48	1
2437MHz	Pass	2.43749G	17.41	-12.59	952.39M	-48.03	2.39932G	-43.82	2.4G	-44.60	2.49756G	-46.36	5.90059G	-43.12	2
2462MHz	Pass	2.43749G	17.41	-12.59	1.75595G	-48.45	2.39152G	-46.05	2.4835G	-45.58	2.491G	-44.63	17.65861G	-42.21	1
2462MHz	Pass	2.43749G	17.41	-12.59	936.08M	-48.78	2.3997G	-47.50	2.4835G	-46.21	2.49126G	-43.75	5.80226G	-42.60	2
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.442G	15.19	-14.81	2.30495G	-47.32	2.3999G	-29.14	2.4G	-29.23	2.51444G	-47.09	6.4007G	-42.94	1
2412MHz	Pass	2.442G	15.19	-14.81	2.0903G	-48.64	2.4G	-29.86	2.4G	-29.25	2.49214G	-46.12	16.41117G	-43.10	2
2437MHz	Pass	2.442G	15.19	-14.81	910.74M	-47.87	2.3997G	-44.23	2.4G	-46.48	2.49596G	-45.82	5.85564G	-43.18	1
2437MHz	Pass	2.442G	15.19	-14.81	2.19253G	-48.10	2.39986G	-44.78	2.4835G	-47.33	2.48896G	-45.67	5.86969G	-43.27	2
2462MHz	Pass	2.442G	15.19	-14.81	2.19981G	-48.26	2.39974G	-47.17	2.4835G	-49.06	2.518G	-46.20	16.47579G	-42.28	1
2462MHz	Pass	2.442G	15.19	-14.81	2.00992G	-47.70	2.39004G	-45.71	2.4835G	-47.22	2.48386G	-45.76	6.94013G	-43.01	2

802.11b_Nss1,(1Mbps)_2TX

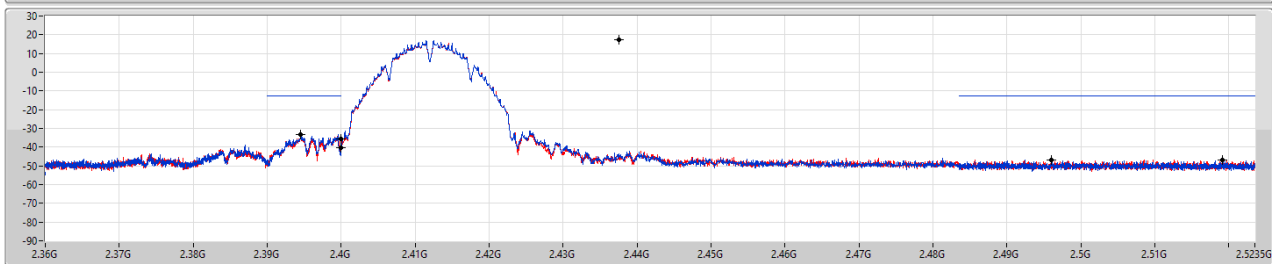
2412MHz

CSEndB

15/03/2022



Port 1
Port 2



RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

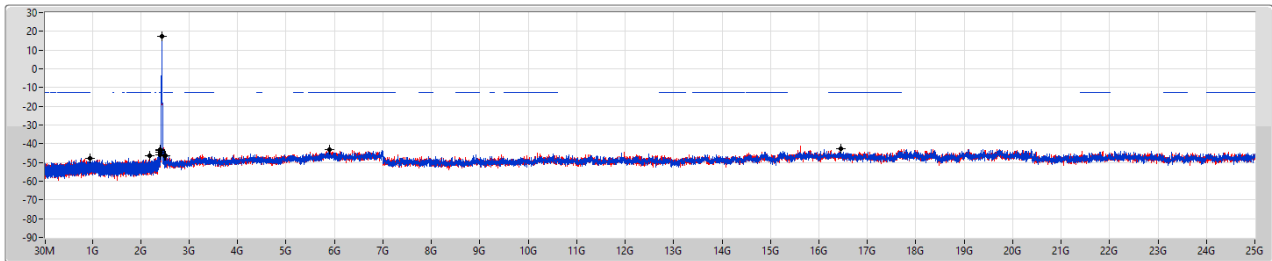
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43749G	17.41	-12.99	2.30059G	-48.31	2.39452G	-33.26	2.4G	-40.13	2.49596G	-46.69	6.9008G	-42.30	1
2.43749G	17.41	-12.99	2.30554G	-47.75	2.39452G	-33.42	2.4G	-35.56	2.51908G	-46.81	6.99632G	-43.18	2

802.11b_Nss1,(1Mbps)_2TX

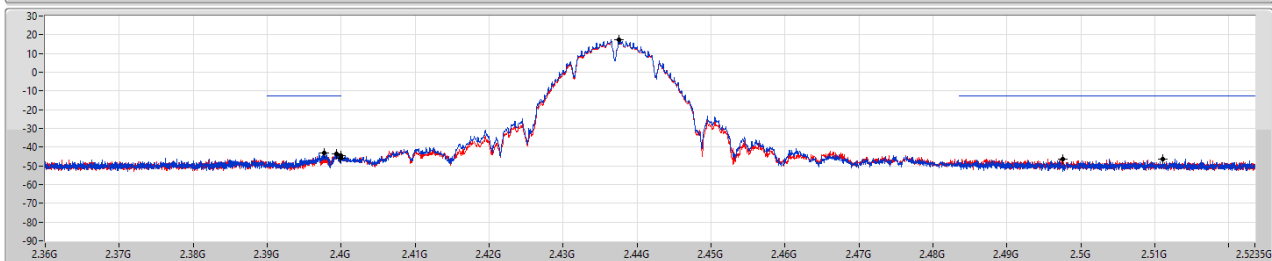
2437MHz

CSEndB

15/03/2022



Port 1
Port 2



RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

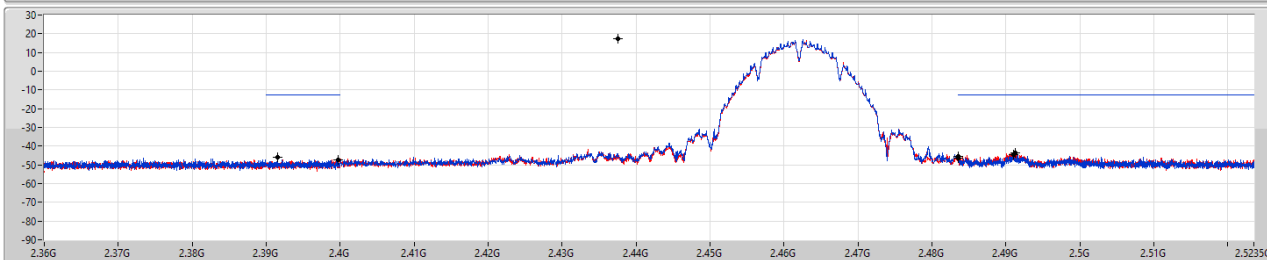
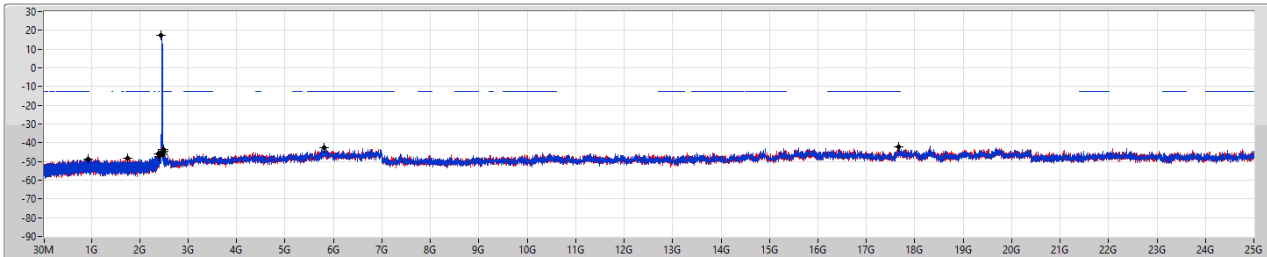
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43749G	17.41	-12.99	2.19195G	-46.64	2.39768G	-42.90	2.4G	-46.11	2.51108G	-46.20	16.45331G	-42.48	1
2.43749G	17.41	-12.99	952.39M	-48.03	2.39932G	-43.82	2.4G	-44.60	2.49756G	-46.36	5.90059G	-43.12	2

802.11b_Nss1,(1Mbps)_2TX

2462MHz

CSEndB

15/03/2022



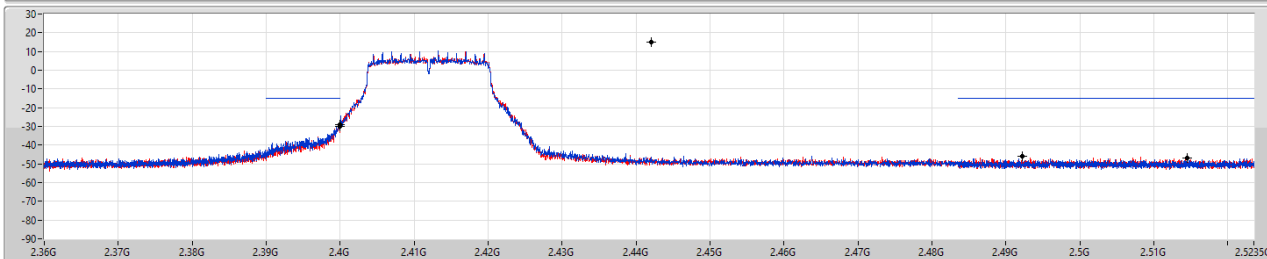
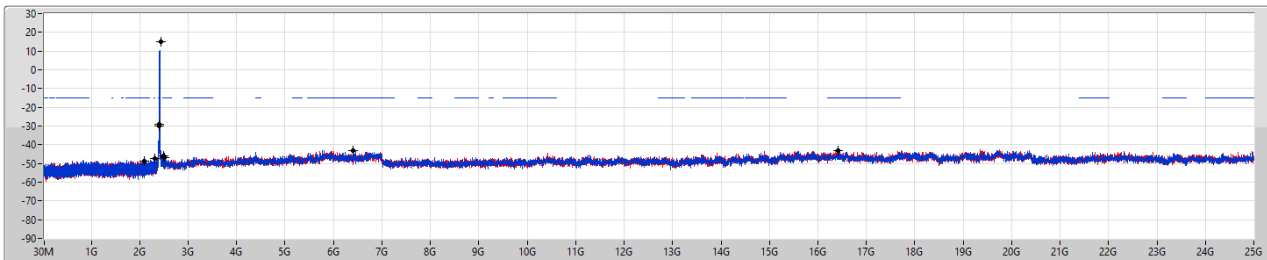
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43749G	17.41	-12.59	1.75595G	-48.45	2.39152G	-46.05	2.4835G	-45.58	2.491G	-44.63	17.65861G	-42.21	1
2.43749G	17.41	-12.59	936.08M	-48.78	2.3997G	-47.50	2.4835G	-46.21	2.49126G	-43.75	5.80226G	-42.60	2

802.11g_Nss1,(6Mbps)_2TX

2412MHz

CSEndB

15/03/2022



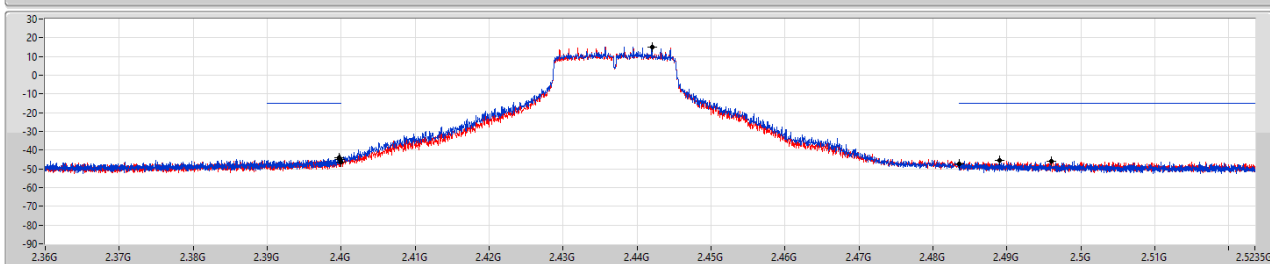
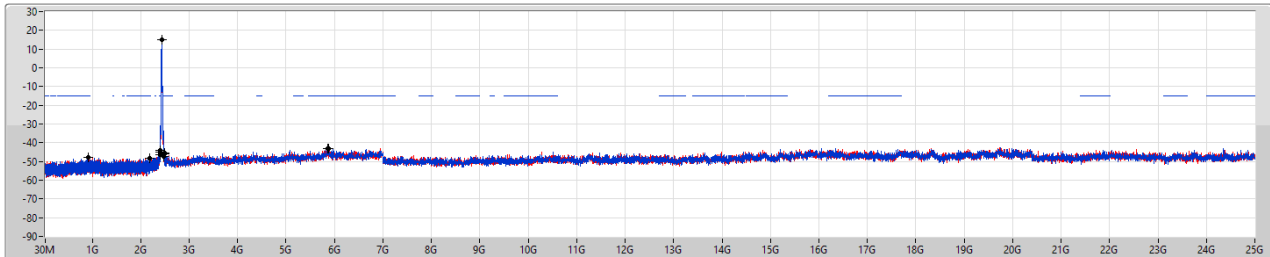
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.442G	15.19	-14.81	2.30495G	-47.32	2.3999G	-29.14	2.4G	-29.23	2.51444G	-47.09	6.4007G	-42.94	1
2.442G	15.19	-14.81	2.0903G	-48.64	2.4G	-29.86	2.4G	-29.25	2.49214G	-46.12	16.41117G	-43.10	2

802.11g_Nss1,(6Mbps)_2TX

2437MHz

CSEndB

15/03/2022



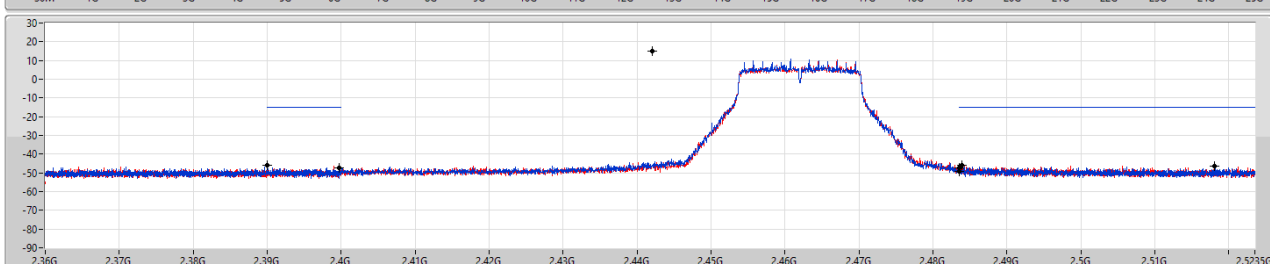
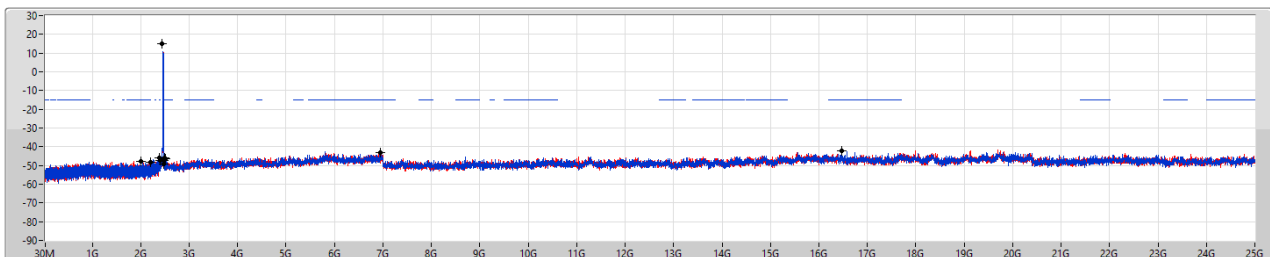
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.442G	15.19	-14.81	910.74M	-47.87	2.3997G	-44.23	2.4G	-46.48	2.49596G	-45.82	5.85564G	-43.18	1
2.442G	15.19	-14.81	2.19253G	-48.10	2.39986G	-44.78	2.4835G	-47.33	2.48896G	-45.67	5.86909G	-43.27	2

802.11g_Nss1,(6Mbps)_2TX

2462MHz

CSEndB

15/03/2022



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
2.442G	15.19	-14.81	2.19981G	-48.26	2.39974G	-47.17	2.4835G	-49.06	2.518G	-46.20	16.47579G	-42.28	1
2.442G	15.19	-14.81	2.00992G	-47.70	2.39004G	-45.71	2.4835G	-47.22	2.48386G	-45.76	6.94013G	-43.01	2

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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	Pass	2.43649G	15.47	-14.53	1.81245G	-48.44	2.39468G	-15.39	2.4G	-46.70	2.48362G	-15.58	17.63895G	-42.81	2
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	Pass	2.42601G	13.20	-16.80	758.79M	-48.28	2.39996G	-30.50	2.4G	-28.61	2.48558G	-46.38	17.63802G	-42.54	1

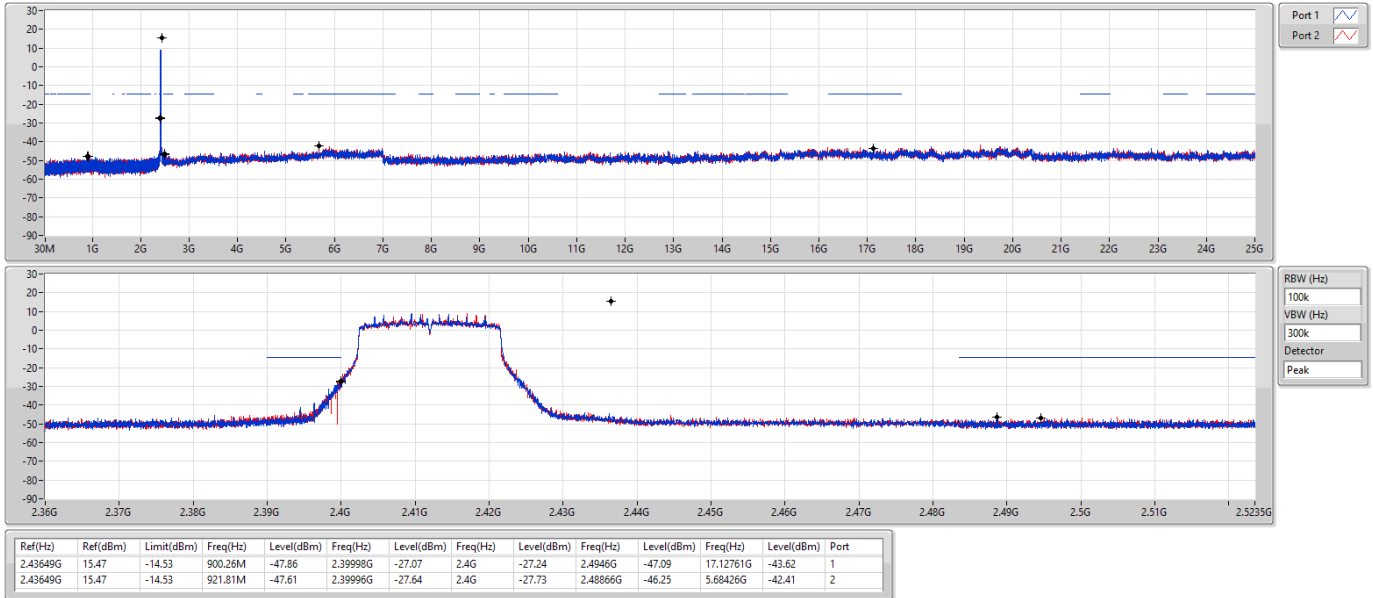
Result

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
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43649G	15.47	-14.53	900.26M	-47.86	2.39998G	-27.07	2.4G	-27.24	2.4946G	-47.09	17.12761G	-43.62	1
2412MHz	Pass	2.43649G	15.47	-14.53	921.81M	-47.61	2.39996G	-27.64	2.4G	-27.73	2.48866G	-46.25	5.68426G	-42.41	2
2437MHz	Pass	2.43649G	15.47	-14.53	1.85789G	-48.24	2.39858G	-43.32	2.4G	-44.86	2.49924G	-44.87	6.89799G	-43.03	1
2437MHz	Pass	2.43649G	15.47	-14.53	1.81245G	-48.44	2.39468G	-15.39	2.4G	-46.70	2.48362G	-15.58	17.63895G	-42.81	2
2462MHz	Pass	2.43649G	15.47	-14.53	858.61M	-48.45	2.39108G	-47.01	2.4835G	-45.73	2.4844G	-44.53	17.69233G	-43.07	1
2462MHz	Pass	2.43649G	15.47	-14.53	1.99594G	-48.24	2.39428G	-47.36	2.4835G	-47.84	2.48352G	-45.13	15.23958G	-42.63	2
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.42601G	13.20	-16.80	758.79M	-48.28	2.39996G	-30.50	2.4G	-28.61	2.48558G	-46.38	17.63802G	-42.54	1
2422MHz	Pass	2.42601G	13.20	-16.80	30.86M	-44.72	2.39988G	-32.85	2.4G	-32.58	2.49066G	-46.81	5.97385G	-43.11	2
2437MHz	Pass	2.42601G	13.20	-16.80	30M	-45.14	2.39944G	-35.76	2.4G	-39.14	2.4857G	-41.81	6.15054G	-42.87	1
2437MHz	Pass	2.42601G	13.20	-16.80	31.15M	-43.97	2.39824G	-37.56	2.4G	-41.28	2.48378G	-40.43	5.79997G	-43.19	2
2452MHz	Pass	2.42601G	13.20	-16.80	1.77927G	-47.77	2.39452G	-44.40	2.4835G	-40.91	2.48698G	-38.88	6.78717G	-42.24	1
2452MHz	Pass	2.42601G	13.20	-16.80	2.04692G	-48.81	2.39572G	-46.97	2.4835G	-39.29	2.48702G	-38.81	17.64924G	-41.93	2

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

CSENdB

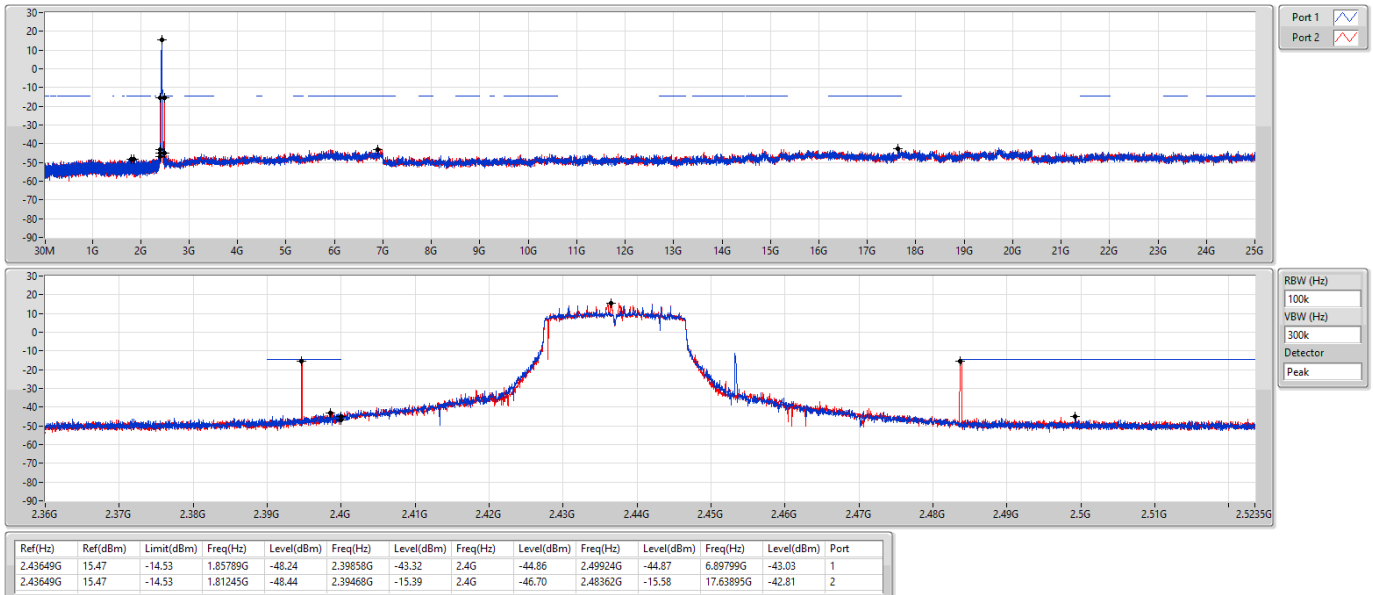
2412MHz



802.11ax HEW20-BF_Nss1,(MCS0)_2TX

CSENdB

2437MHz

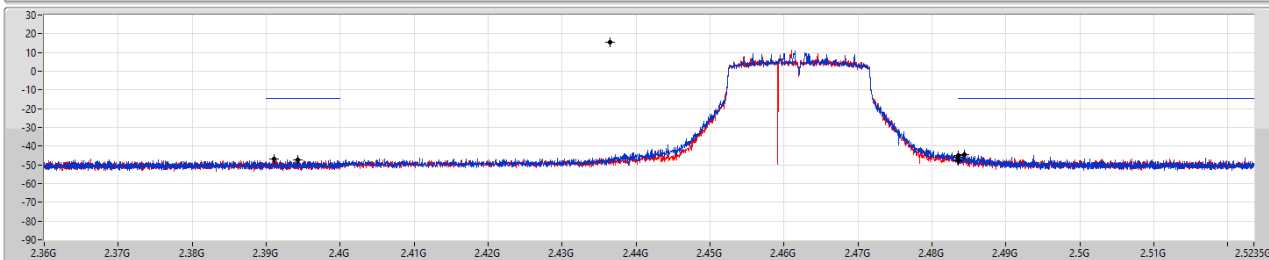
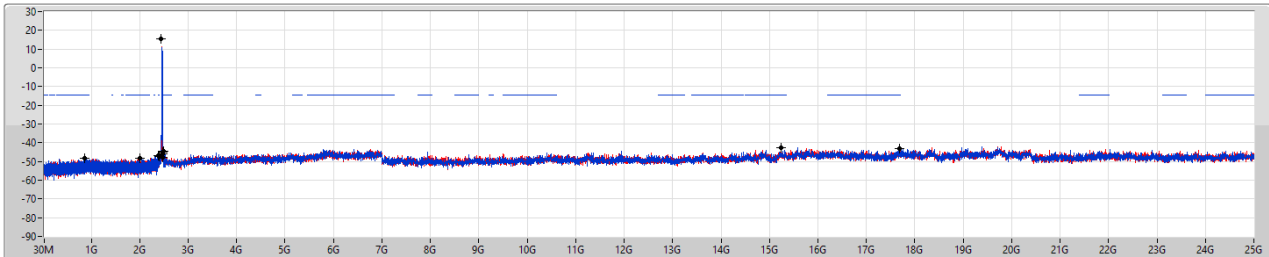


802.11ax HEW20-BF_Nss1,(MCS0)_2TX

2462MHz

CSENdB

15/03/2022



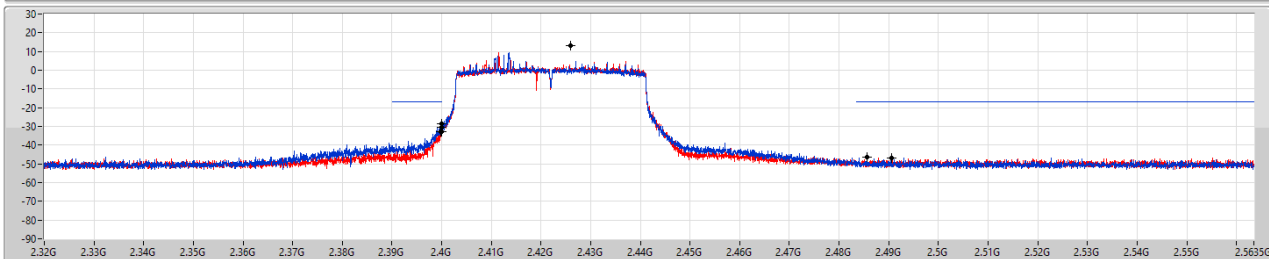
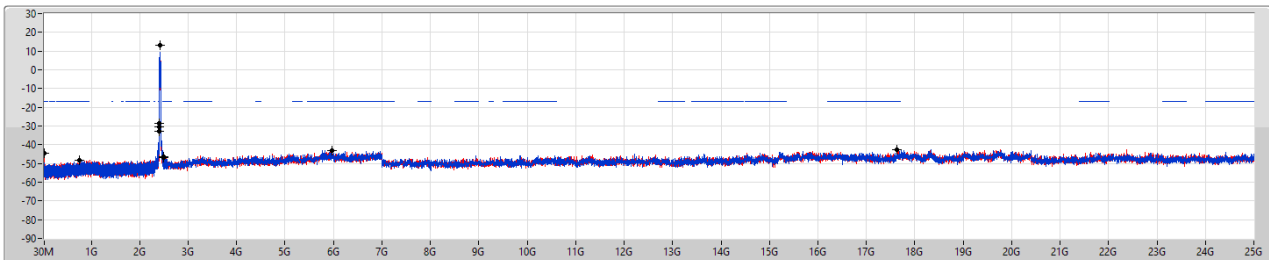
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43649G	15.47	-14.53	858.61M	-48.45	2.39108G	-47.01	2.4835G	-45.73	2.4844G	-44.53	17.69233G	-43.07	1
2.43649G	15.47	-14.53	1.99594G	-48.24	2.39428G	-47.36	2.4835G	-47.84	2.48352G	-45.13	15.23958G	-42.63	2

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

2422MHz

CSENdB

15/03/2022



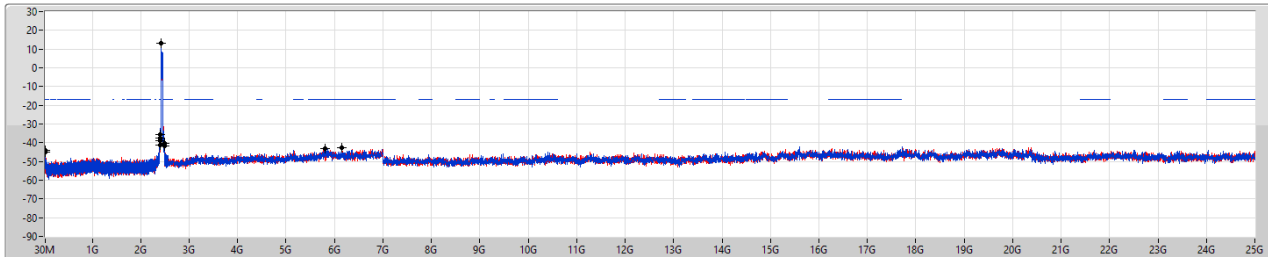
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.42601G	13.20	-16.80	758.79M	-48.28	2.39996G	-30.50	2.4G	-28.61	2.48558G	-46.38	17.63802G	-42.54	1
2.42601G	13.20	-16.80	30.88M	-44.72	2.39988G	-32.85	2.4G	-32.58	2.49066G	-46.81	5.97385G	-43.11	2

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

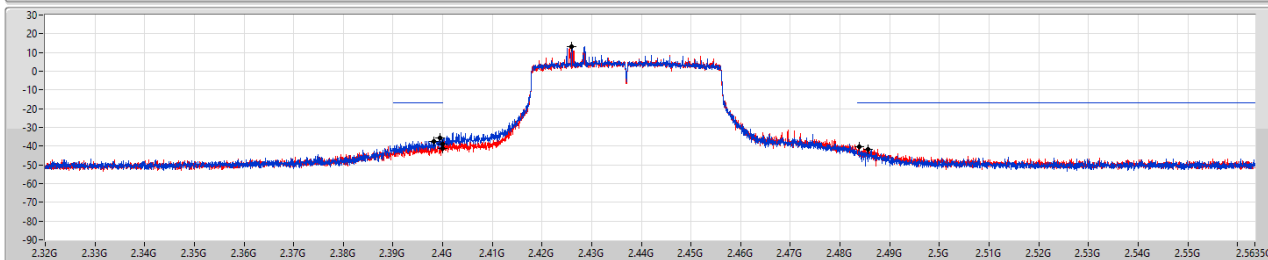
CSENdB

2437MHz

15/03/2022



Port 1
Port 2



RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

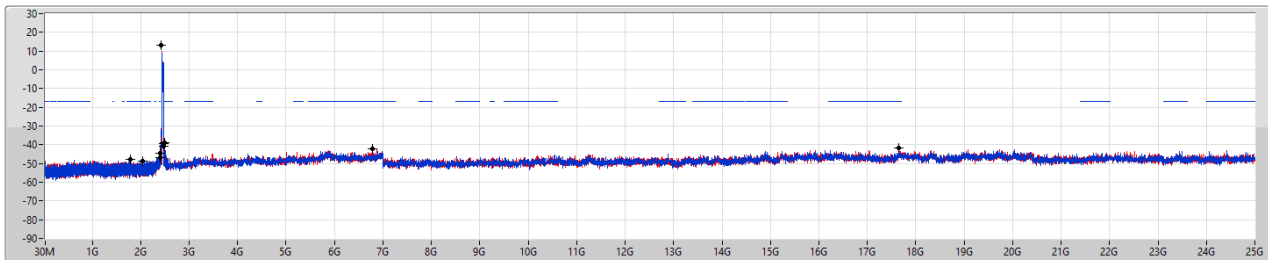
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.42601G	13.20	-16.80	30M	-45.14	2.39944G	-35.76	2.4G	-39.14	2.4857G	-41.81	6.15054G	-42.87	1
2.42601G	13.20	-16.80	31.15M	-43.97	2.39824G	-37.56	2.4G	-41.28	2.48378G	-40.43	5.79997G	-43.19	2

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

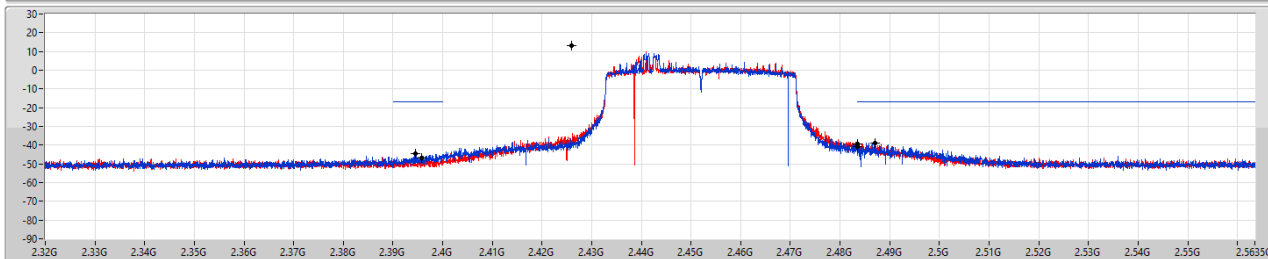
CSENdB

2452MHz

15/03/2022



Port 1
Port 2



RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

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
2.42601G	13.20	-16.80	1.77927G	-47.77	2.39452G	-44.40	2.4835G	-40.91	2.48698G	-38.88	6.78717G	-42.24	1
2.42601G	13.20	-16.80	2.04892G	-48.81	2.39572G	-46.97	2.4835G	-39.29	2.48702G	-38.81	17.64924G	-41.93	2



Radiated Emissions below 1GHz

Appendix F.1

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 3	Pass	QP	48.43M	38.52	40.00	-1.48	Vertical

Mode 3

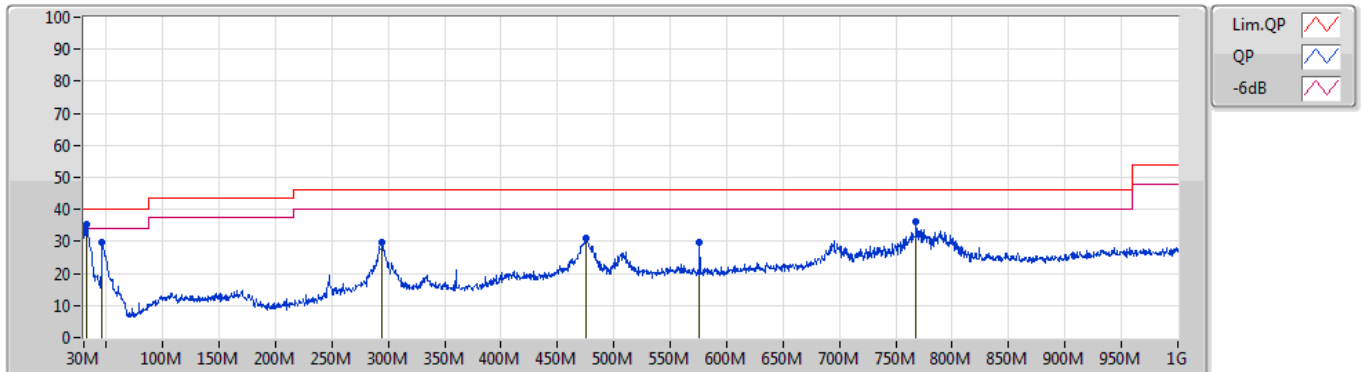
23/07/2022



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
QP	35.82M	38.49	40.00	-1.51	-31.46	3	Vertical	36	2.00	-	69.95	21.83	0.80	54.09
QP	48.43M	38.52	40.00	-1.48	-37.59	3	Vertical	57	2.00	"Worst"	76.11	15.63	0.87	54.09
PK	99.36M	31.99	43.50	-11.51	-36.79	3	Vertical	136	100	-	68.78	15.94	1.29	54.02
PK	476.2M	33.83	46.00	-12.17	-27.34	3	Vertical	235	3.00	-	61.17	23.52	2.85	53.71
PK	550.89M	22.01	46.00	-23.99	-24.25	3	Vertical	46	4.00	-	46.26	26.33	3.00	53.58
PK	576.11M	36.23	46.00	-9.77	-24.75	3	Vertical	86	1.00	-	60.98	25.70	3.05	53.50

Mode 3

23/07/2022



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	32.43M	35.44	40.00	-4.56	-30.04	3	Horizontal	25	2.00	"Worst"	65.48	23.32	0.75	54.11
PK	46.49M	29.76	40.00	-10.24	-36.75	3	Horizontal	126	1.00	-	66.51	16.50	0.83	54.08
PK	294.33M	29.80	46.00	-16.20	-32.70	3	Horizontal	24	4.00	-	62.50	19.19	2.18	54.07
PK	475.23M	31.20	46.00	-14.80	-27.35	3	Horizontal	268	3.00	-	58.55	23.51	2.85	53.71
PK	576.11M	29.67	46.00	-16.33	-24.75	3	Horizontal	53	1.00	-	54.42	25.70	3.05	53.50
PK	768.17M	36.02	46.00	-9.98	-20.96	3	Horizontal	75	1.00	-	56.98	28.15	3.57	52.68

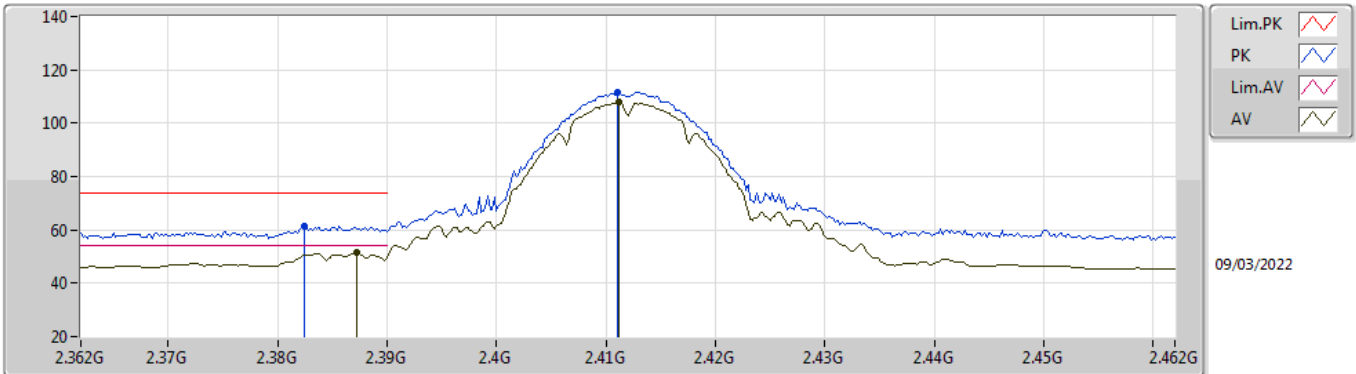


Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
802.11g_Nss1.(6Mbps)_2TX	Pass	AV	2.3874G	52.95	54.00	-1.05	3	Vertical	312	1.90	-

802.11b_Nss1,(1Mbps)_2TX

2412MHz_TX

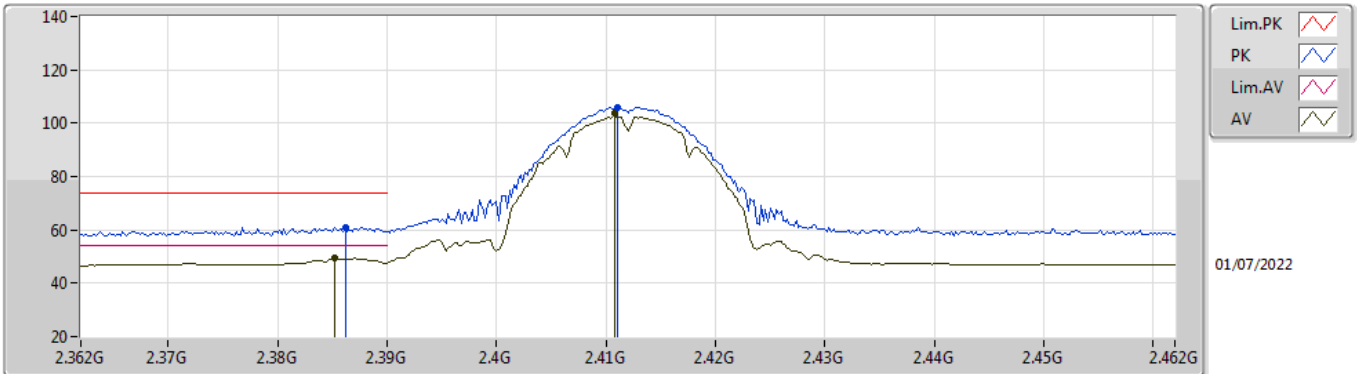


EUT Y_2TX
Setting 26
03-C-K-4

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	2.3824G	61.27	74.00	-12.73	28.66	3	Vertical	47	3.00	-	28.23	4.38	-
AV	2.3872G	51.46	54.00	-2.54	18.82	3	Vertical	47	3.00	-	28.25	4.39	-
PK	2.411G	111.66	Inf	-Inf	78.95	3	Vertical	47	3.00	-	28.30	4.41	-
AV	2.4112G	107.81	Inf	-Inf	75.10	3	Vertical	47	3.00	-	28.30	4.41	-

802.11b_Nss1,(1Mbps)_2TX

2412MHz_TX

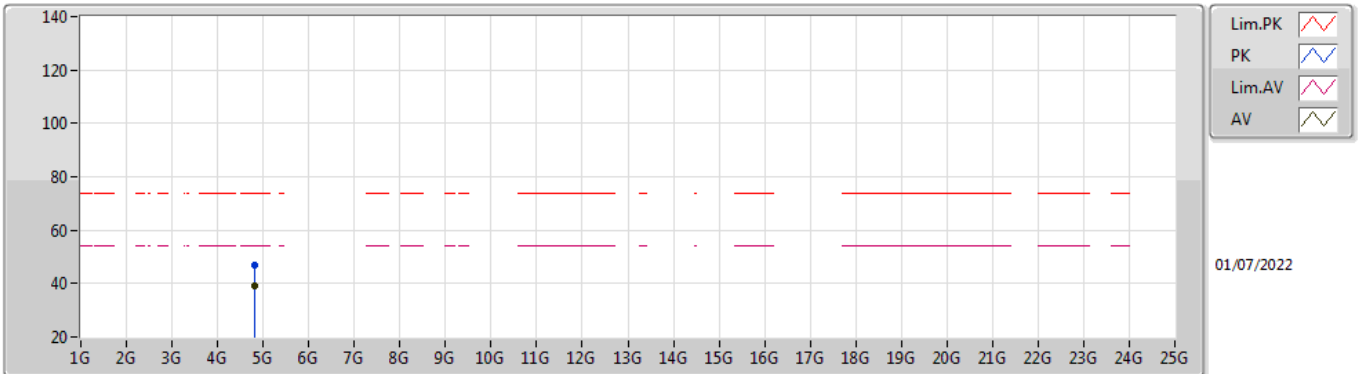


EUT Y_2TX
Setting 26
02-B-C-6

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	2.3862G	61.12	74.00	-12.88	29.96	3	Horizontal	21	1.09	-	28.37	2.79	-
AV	2.3852G	49.36	54.00	-4.64	18.20	3	Horizontal	21	1.09	-	28.37	2.79	-
PK	2.411G	106.10	Inf	-Inf	74.89	3	Horizontal	21	1.09	-	28.40	2.81	-
AV	2.4108G	103.67	Inf	-Inf	72.46	3	Horizontal	21	1.09	-	28.40	2.81	-

802.11b_Nss1,(1Mbps)_2TX

2412MHz_TX

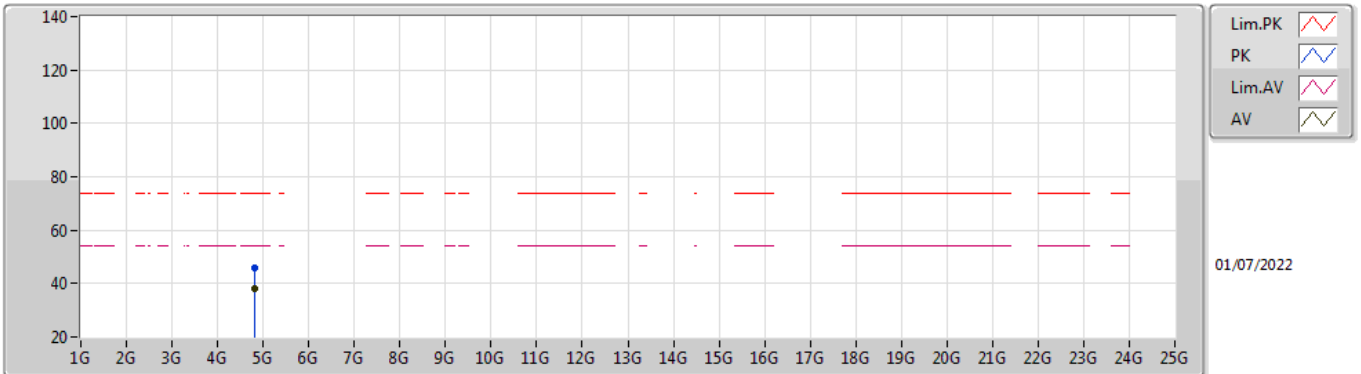


EUT Y_2TX
Setting 26
02-B-C-6

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	4.82406G	46.99	74.00	-27.01	41.17	3	Vertical	350	1.97	-	32.94	5.10	32.22	
AV	4.824G	38.92	54.00	-15.08	33.10	3	Vertical	350	1.97	-	32.94	5.10	32.22	

802.11b_Nss1,(1Mbps)_2TX

2412MHz_TX

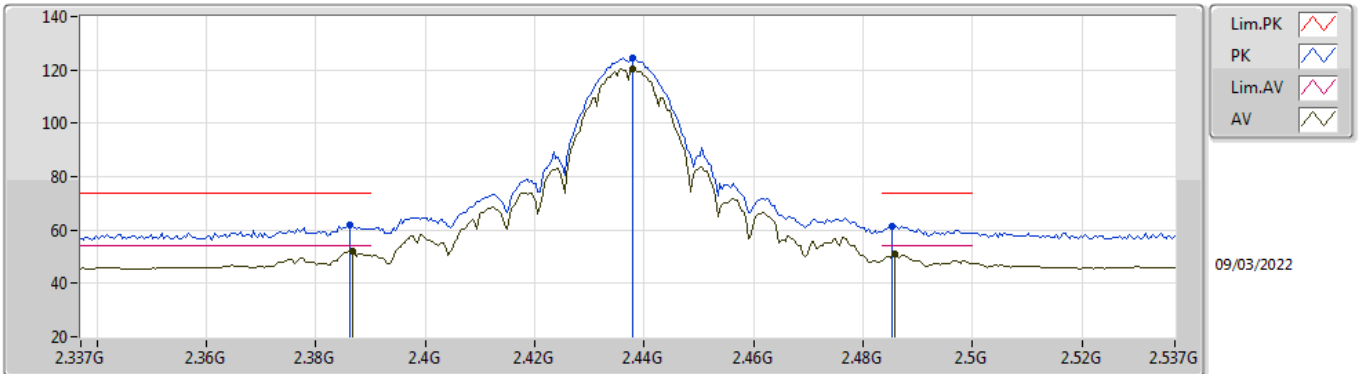


EUT Y_2TX
Setting 26
02-B-C-6

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	4.82394G	46.02	74.00	-27.98	40.20	3	Horizontal	360	1.80	-	32.94	5.10	32.22	
AV	4.824G	37.94	54.00	-16.06	32.12	3	Horizontal	360	1.80	-	32.94	5.10	32.22	

802.11b_Nss1,(1Mbps)_2TX

2437MHz_TX

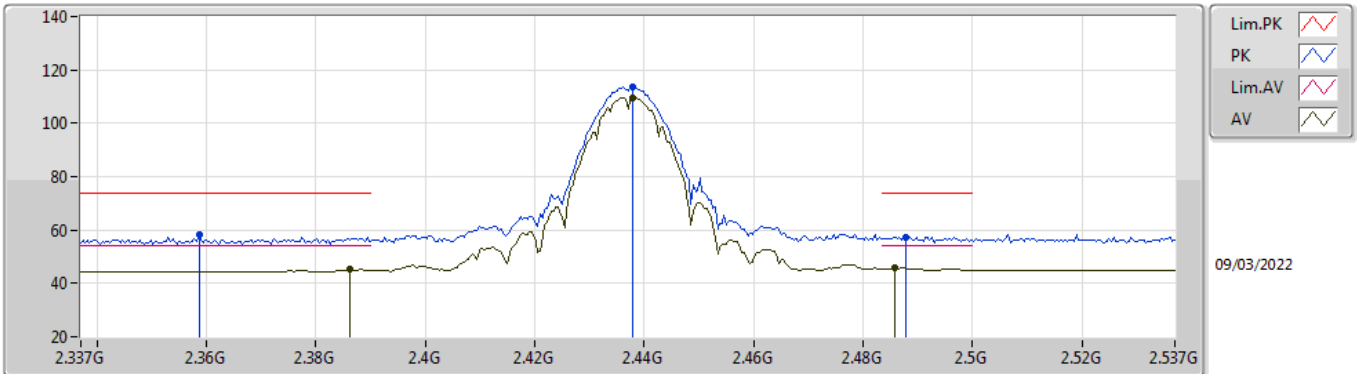


EUT_Y_2TX
Setting 27
03-C-K-4

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	2.3862G	61.79	74.00	-12.21	29.16	3	Vertical	310	1.78	-	28.24	4.39	-
AV	2.3866G	52.03	54.00	-1.97	19.39	3	Vertical	310	1.78	-	28.25	4.39	-
PK	2.4378G	124.42	Inf	-Inf	91.70	3	Vertical	310	1.78	-	28.30	4.42	-
AV	2.4378G	120.39	Inf	-Inf	87.67	3	Vertical	310	1.78	-	28.30	4.42	-
PK	2.4854G	61.38	74.00	-12.62	28.50	3	Vertical	310	1.78	-	28.44	4.44	-
AV	2.4858G	51.28	54.00	-2.72	18.40	3	Vertical	310	1.78	-	28.44	4.44	-

802.11b_Nss1,(1Mbps)_2TX

2437MHz_TX

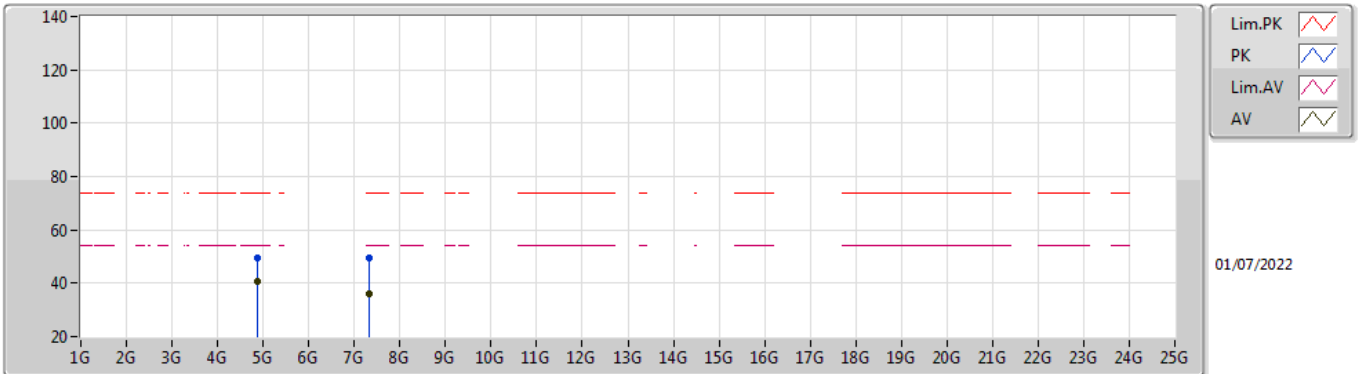


EUT_Y_2TX
Setting 27
03-C-K-4

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	2.3586G	58.08	74.00	-15.92	25.59	3	Horizontal	44	1.80	-	28.13	4.36	-
AV	2.3862G	45.32	54.00	-8.68	12.69	3	Horizontal	44	1.80	-	28.24	4.39	-
PK	2.4378G	113.84	Inf	-Inf	81.12	3	Horizontal	44	1.80	-	28.30	4.42	-
AV	2.4378G	109.71	Inf	-Inf	76.99	3	Horizontal	44	1.80	-	28.30	4.42	-
PK	2.4878G	57.42	74.00	-16.58	24.53	3	Horizontal	44	1.80	-	28.45	4.44	-
AV	2.4858G	45.97	54.00	-8.03	13.09	3	Horizontal	44	1.80	-	28.44	4.44	-

802.11b_Nss1,(1Mbps)_2TX

2437MHz_TX

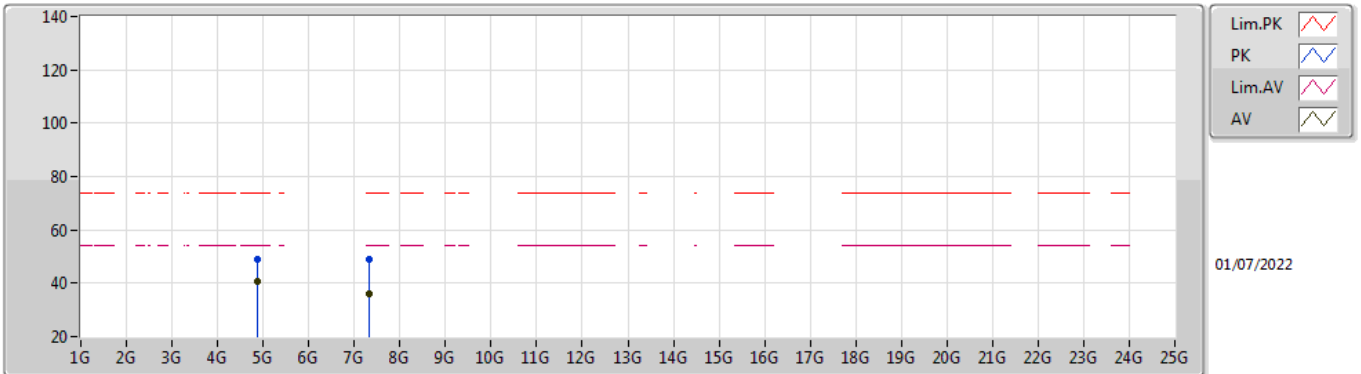


EUT_V_2TX
Setting 27
03-C-K-4

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	4.87394G	49.71	74.00	-24.29	44.45	3	Vertical	2	2.04	-	33.60	7.06	35.40
AV	4.874G	40.60	54.00	-13.40	35.34	3	Vertical	2	2.04	-	33.60	7.06	35.40
PK	7.32072G	49.32	74.00	-24.68	39.39	3	Vertical	132	2.01	-	36.94	8.56	35.57
AV	7.32054G	35.85	54.00	-18.15	25.92	3	Vertical	132	2.01	-	36.94	8.56	35.57

802.11b_Nss1,(1Mbps)_2TX

2437MHz_TX

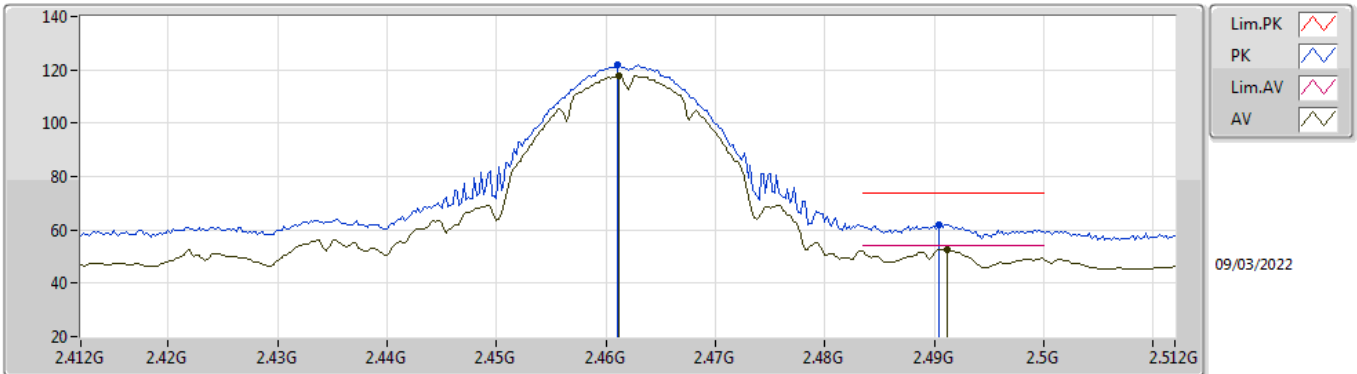


EUT_V_2TX
Setting 27
03-C-K-4

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	4.87418G	49.17	74.00	-24.83	43.91	3	Horizontal	0	2.07	-	33.60	7.06	35.40
AV	4.87394G	40.59	54.00	-13.41	35.33	3	Horizontal	0	2.07	-	33.60	7.06	35.40
PK	7.32456G	49.21	74.00	-24.79	39.26	3	Horizontal	65	1.87	-	36.95	8.57	35.57
AV	7.32528G	35.80	54.00	-18.20	25.84	3	Horizontal	65	1.87	-	36.95	8.58	35.57

802.11b_Nss1,(1Mbps)_2TX

2462MHz_TX

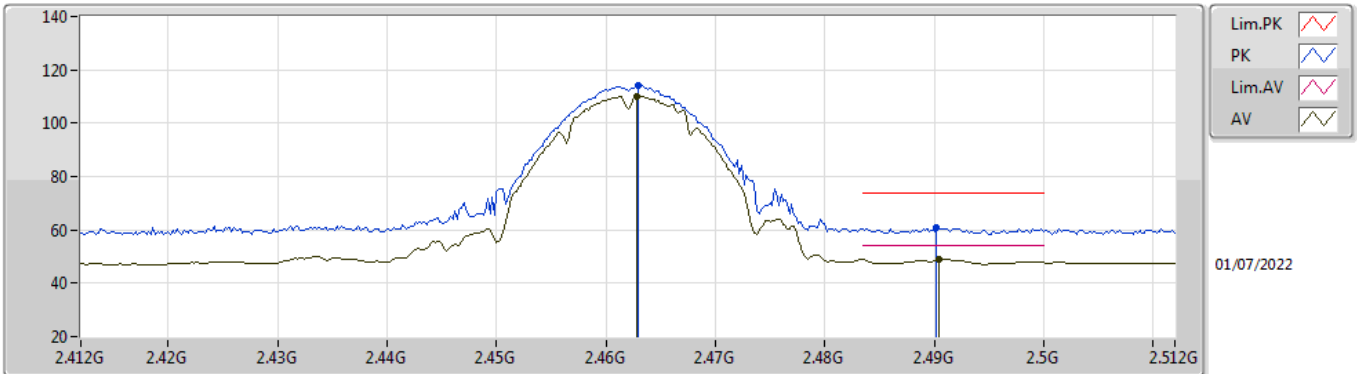


EUT_V_2TX
Setting 26
03-C-K-4

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	2.461G	121.67	Inf	-Inf	88.90	3	Vertical	37	1.13	-	28.34	4.43	-	
AV	2.4612G	117.77	Inf	-Inf	85.00	3	Vertical	37	1.13	-	28.34	4.43	-	
PK	2.4904G	62.12	74.00	-11.88	29.21	3	Vertical	37	1.13	-	28.46	4.45	-	
AV	2.4912G	52.70	54.00	-1.30	19.79	3	Vertical	37	1.13	-	28.46	4.45	-	

802.11b_Nss1,(1Mbps)_2TX

2462MHz_TX

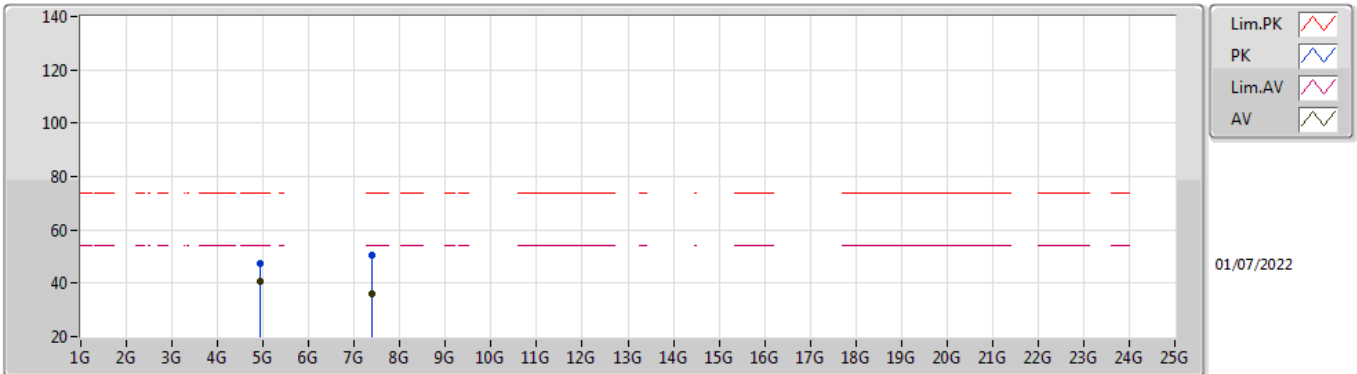


EUT V_2TX
Setting 26
02-B-C-6

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	114.15	Inf	-Inf	82.84	3	Horizontal	360	2.55	-	28.45	2.86	-
AV	2.4628G	110.19	Inf	-Inf	78.88	3	Horizontal	360	2.55	-	28.45	2.86	-
PK	2.4902G	60.77	74.00	-13.23	29.32	3	Horizontal	360	2.55	-	28.56	2.89	-
AV	2.4904G	49.01	54.00	-4.99	17.56	3	Horizontal	360	2.55	-	28.56	2.89	-

802.11b_Nss1,(1Mbps)_2TX

2462MHz_TX

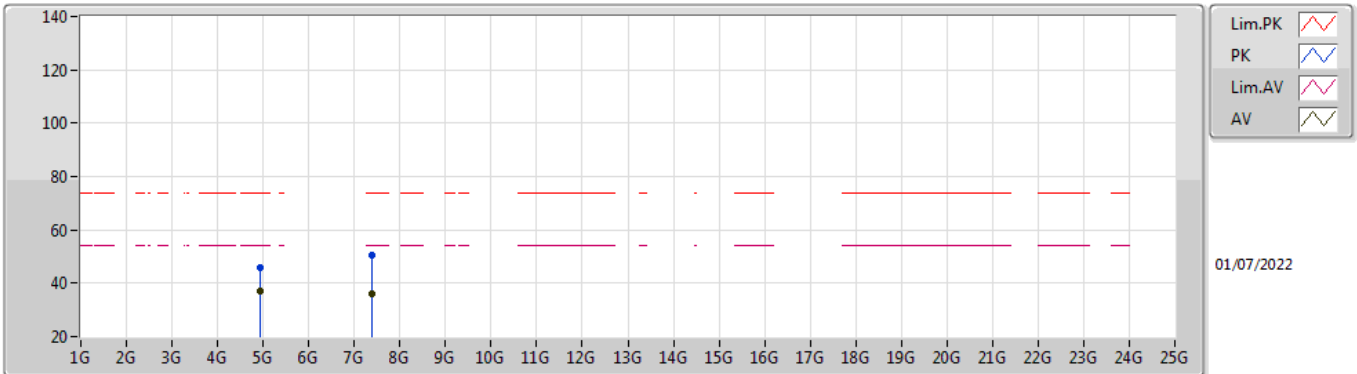


EUT Y_2TX
Setting 26
02-B-C-6

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	4.92394G	47.65	74.00	-26.35	41.49	3	Vertical	11	1.80	-	33.25	5.10	32.19
AV	4.92406G	40.70	54.00	-13.30	34.54	3	Vertical	11	1.80	-	33.25	5.10	32.19
PK	7.38282G	50.75	74.00	-23.25	41.01	3	Vertical	185	2.52	-	36.50	6.19	32.95
AV	7.37832G	36.07	54.00	-17.93	26.32	3	Vertical	185	2.52	-	36.50	6.19	32.94

802.11b_Nss1,(1Mbps)_2TX

2462MHz_TX

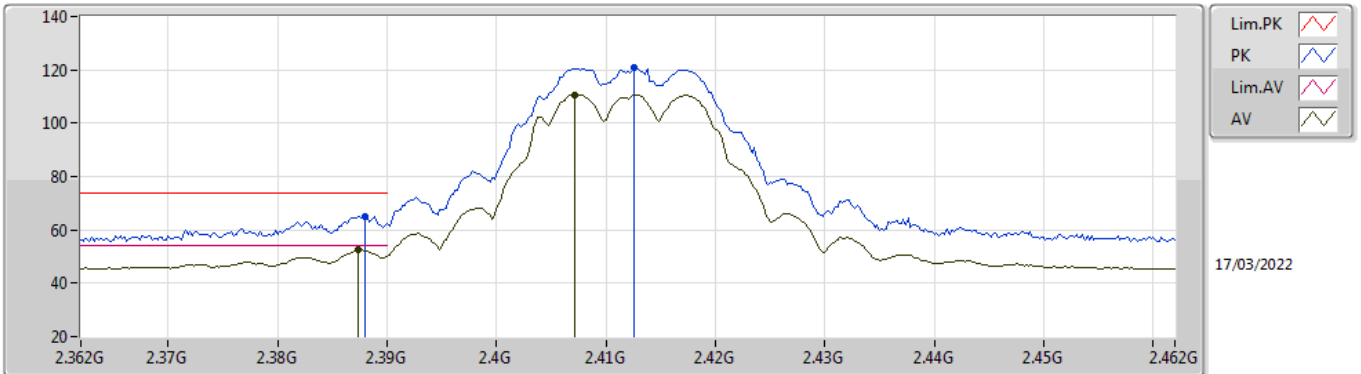


EUT_V_2TX
Setting 26
02-B-C-6

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	46.12	74.00	-27.88	39.96	3	Horizontal	4	1.80	-	33.25	5.10	32.19
AV	4.924G	37.19	54.00	-16.81	31.03	3	Horizontal	4	1.80	-	33.25	5.10	32.19
PK	7.38672G	50.44	74.00	-23.56	40.70	3	Horizontal	109	2.36	-	36.50	6.19	32.95
AV	7.38432G	36.06	54.00	-17.94	26.32	3	Horizontal	109	2.36	-	36.50	6.19	32.95

802.11g_Nss1,(6Mbps)_2TX

2412MHz_TX

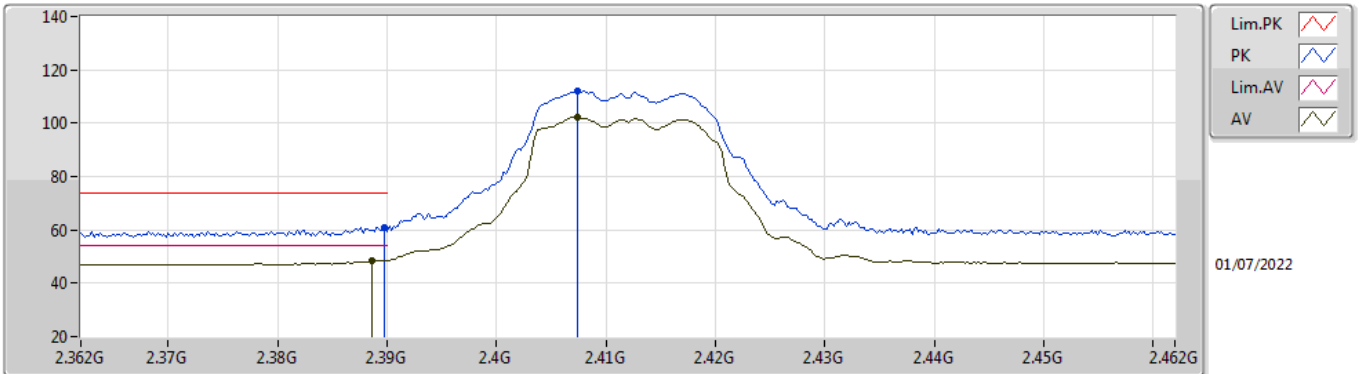


EUT_Y_2TX
Setting 21
01-A-G-2

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	65.08	74.00	-8.92	33.73	3	Vertical	308	1.91	-	27.55	3.80	-
AV	2.3874G	52.55	54.00	-1.45	21.20	3	Vertical	308	1.91	-	27.55	3.80	-
PK	2.4126G	120.61	Inf	-Inf	89.23	3	Vertical	308	1.91	-	27.57	3.81	-
AV	2.4072G	110.76	Inf	-Inf	79.37	3	Vertical	308	1.91	-	27.59	3.80	-

802.11g_Nss1,(6Mbps)_2TX

2412MHz_TX

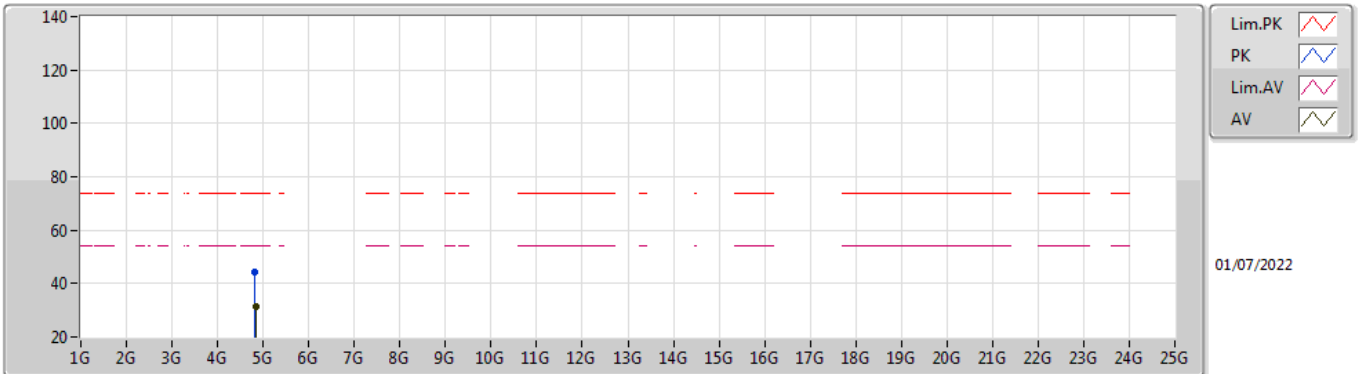


EUT_V_2TX
Setting 21
02-B-C-6

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	61.06	74.00	-12.94	29.89	3	Horizontal	355	2.15	-	28.38	2.79	-
AV	2.3886G	48.55	54.00	-5.45	17.38	3	Horizontal	355	2.15	-	28.38	2.79	-
PK	2.4074G	111.97	Inf	-Inf	80.76	3	Horizontal	355	2.15	-	28.40	2.81	-
AV	2.4074G	102.21	Inf	-Inf	71.00	3	Horizontal	355	2.15	-	28.40	2.81	-

802.11g_Nss1,(6Mbps)_2TX

2412MHz_TX

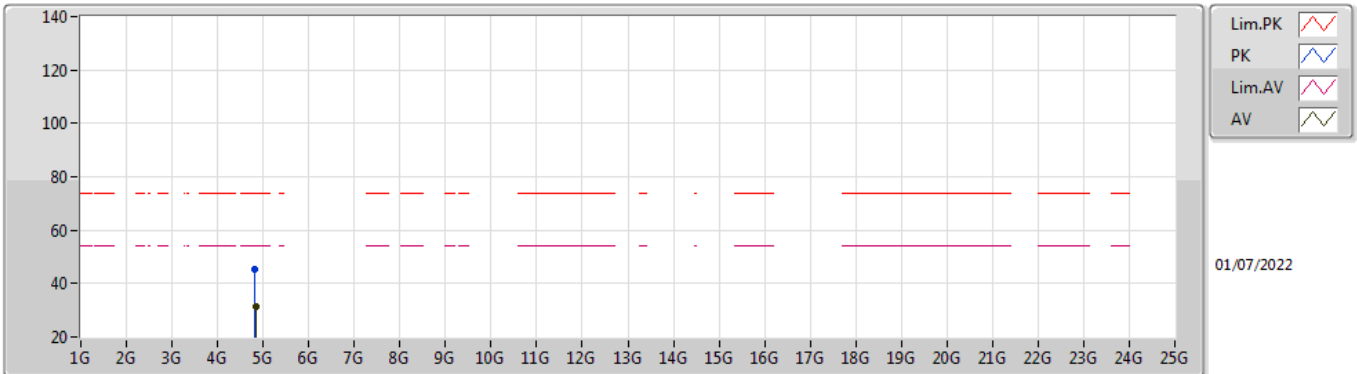


EUT Y_2TX
Setting 21
02-B-C-6

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	4.8144G	44.23	74.00	-29.77	38.47	3	Vertical	241	2.73	-	32.89	5.10	32.23
AV	4.83462G	31.21	54.00	-22.79	25.32	3	Vertical	241	2.73	-	33.01	5.10	32.22

802.11g_Nss1,(6Mbps)_2TX

2412MHz_TX

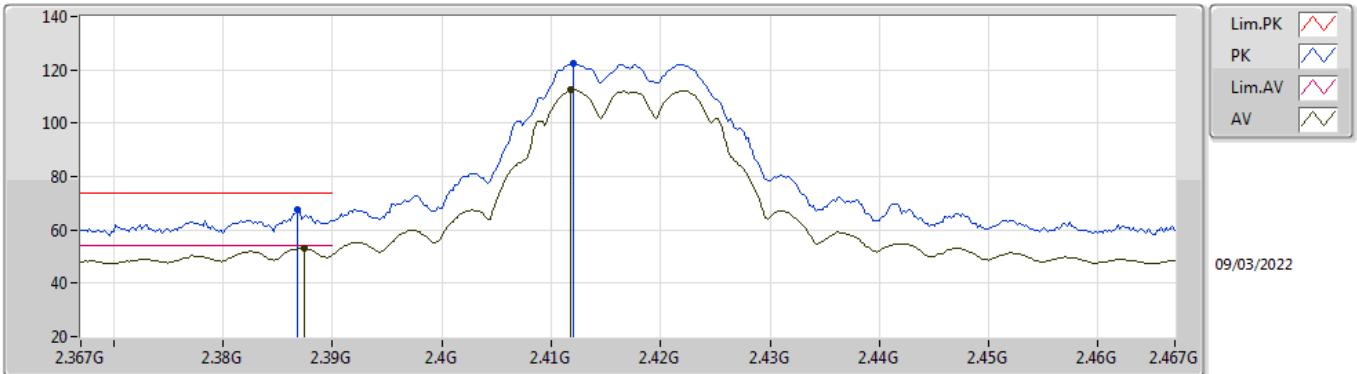


EUT Y_2TX
Setting 21
02-B-C-6

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	4.82286G	45.24	74.00	-28.76	39.42	3	Horizontal	240	2.91	-	32.94	5.10	32.22
AV	4.83402G	31.20	54.00	-22.80	25.32	3	Horizontal	240	2.91	-	33.00	5.10	32.22

802.11g_Nss1,(6Mbps)_2TX

2417MHz_TX

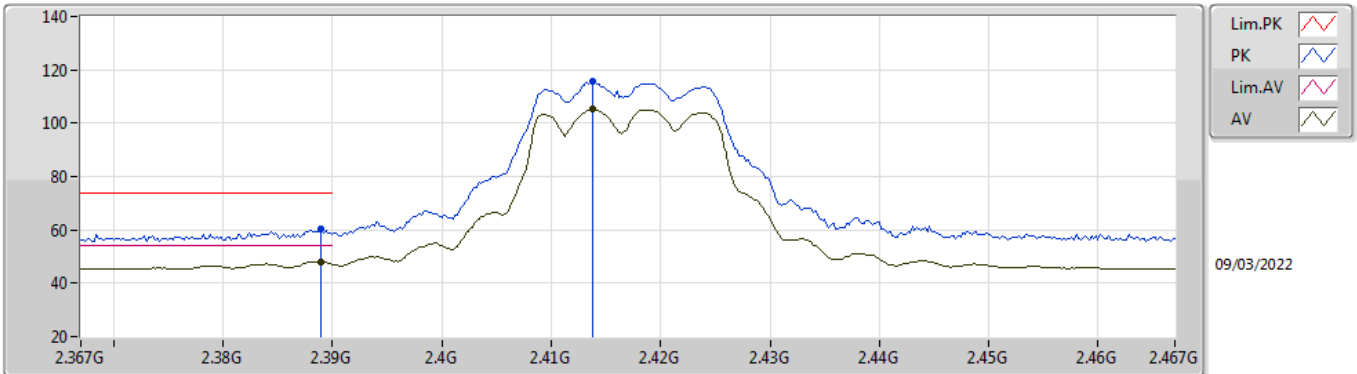


EUT Y_2TX
Setting 23.5
03-C-K-4

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	2.3868G	67.38	74.00	-6.62	34.74	3	Vertical	312	1.90	-	28.25	4.39	-
AV	2.3874G	52.95	54.00	-1.05	20.31	3	Vertical	312	1.90	-	28.25	4.39	-
PK	2.412G	122.42	Inf	-Inf	89.71	3	Vertical	312	1.90	-	28.30	4.41	-
AV	2.4118G	112.49	Inf	-Inf	79.78	3	Vertical	312	1.90	-	28.30	4.41	-

802.11g_Nss1,(6Mbps)_2TX

2417MHz_TX

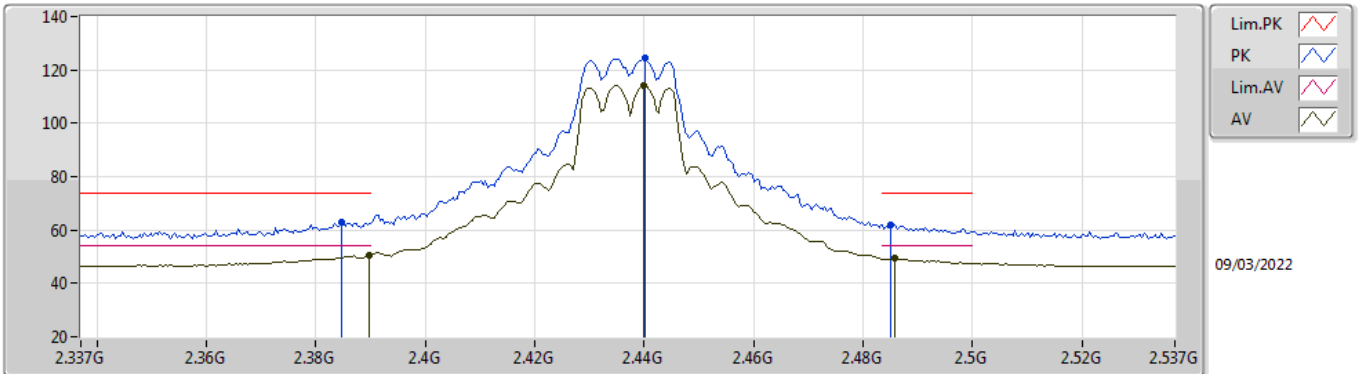


EUT V_2TX
Setting 23.5
03-C-K-4

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	2.389G	60.40	74.00	-13.60	27.75	3	Horizontal	34	1.06	-	28.26	4.39	-
AV	2.389G	48.11	54.00	-5.89	15.46	3	Horizontal	34	1.06	-	28.26	4.39	-
PK	2.4138G	115.75	Inf	-Inf	83.04	3	Horizontal	34	1.06	-	28.30	4.41	-
AV	2.4138G	105.23	Inf	-Inf	72.52	3	Horizontal	34	1.06	-	28.30	4.41	-

802.11g_Nss1,(6Mbps)_2TX

2437MHz_TX

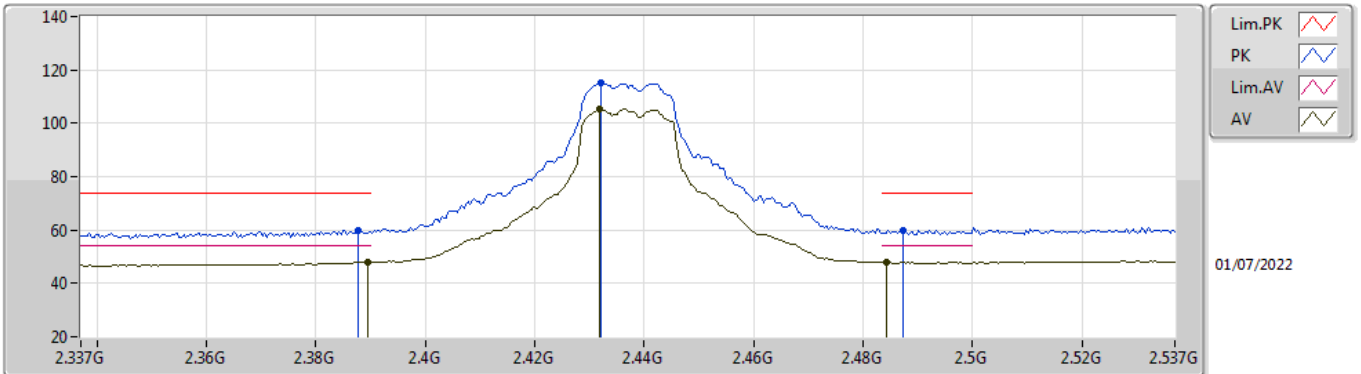


EUT V_2TX
Setting 25.5
03-C-K-4

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	2.3846G	63.14	74.00	-10.86	30.52	3	Vertical	303	1.84	-	28.24	4.38	-
AV	2.3898G	50.66	54.00	-3.34	18.01	3	Vertical	303	1.84	-	28.26	4.39	-
PK	2.4402G	124.29	Inf	-Inf	91.57	3	Vertical	303	1.84	-	28.30	4.42	-
AV	2.4398G	114.10	Inf	-Inf	81.38	3	Vertical	303	1.84	-	28.30	4.42	-
PK	2.485G	62.01	74.00	-11.99	29.13	3	Vertical	303	1.84	-	28.44	4.44	-
AV	2.4858G	49.44	54.00	-4.56	16.56	3	Vertical	303	1.84	-	28.44	4.44	-

802.11g_Nss1,(6Mbps)_2TX

2437MHz_TX

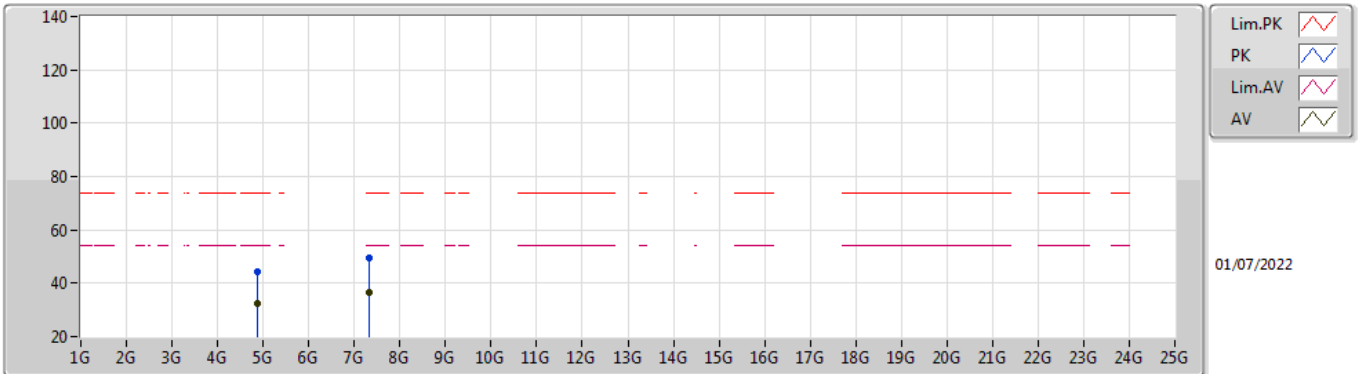


EUT Y_2TX
Setting 25.5
02-B-C-6

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	2.3878G	59.66	74.00	-14.34	28.49	3	Horizontal	351	1.92	-	28.38	2.79	-
AV	2.3894G	47.86	54.00	-6.14	16.69	3	Horizontal	351	1.92	-	28.38	2.79	-
PK	2.4322G	114.94	Inf	-Inf	83.71	3	Horizontal	351	1.92	-	28.40	2.83	-
AV	2.4318G	105.36	Inf	-Inf	74.13	3	Horizontal	351	1.92	-	28.40	2.83	-
PK	2.4874G	59.88	74.00	-14.12	28.44	3	Horizontal	351	1.92	-	28.55	2.89	-
AV	2.4842G	47.90	54.00	-6.10	16.48	3	Horizontal	351	1.92	-	28.54	2.88	-

802.11g_Nss1,(6Mbps)_2TX

2437MHz_TX

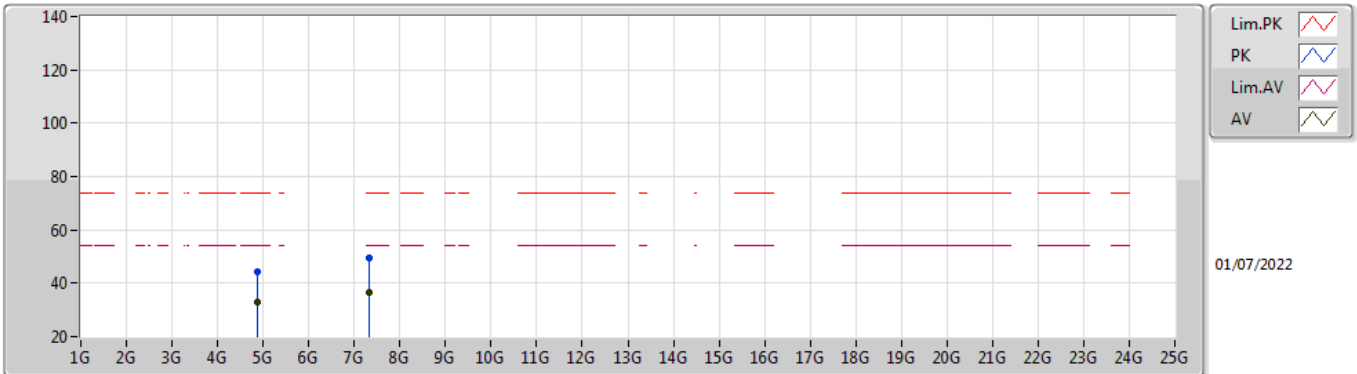


EUT Y_2TX
Setting 25.5
02-B-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA	
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)	
PK	4.87424G	44.56	74.00	-29.44	38.52	3	Vertical	139	2.31	-	33.15	5.10	32.21	
AV	4.874G	32.60	54.00	-21.40	26.56	3	Vertical	139	2.31	-	33.15	5.10	32.21	
PK	7.32156G	49.70	74.00	-24.30	39.94	3	Vertical	294	2.61	-	36.44	6.16	32.84	
AV	7.32444G	36.56	54.00	-17.44	26.79	3	Vertical	294	2.61	-	36.45	6.16	32.84	

802.11g_Nss1,(6Mbps)_2TX

2437MHz_TX

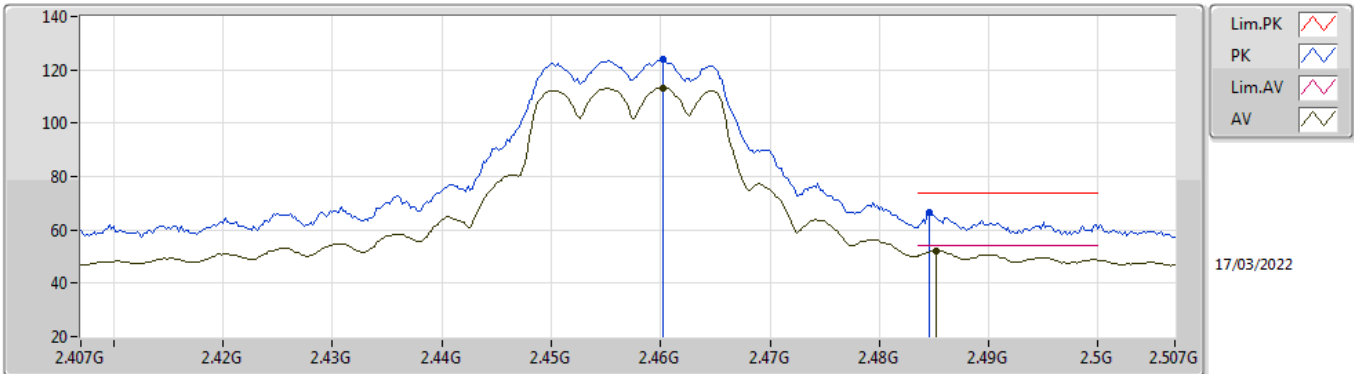


EUT V_2TX
Setting 25.5
02-B-C-6

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	4.8599G	44.30	74.00	-29.70	38.29	3	Horizontal	86	2.52	-	33.12	5.10	32.21	
AV	4.87388G	32.79	54.00	-21.21	26.75	3	Horizontal	86	2.52	-	33.15	5.10	32.21	
PK	7.31118G	49.64	74.00	-24.36	39.88	3	Horizontal	351	2.40	-	36.42	6.16	32.82	
AV	7.32276G	36.48	54.00	-17.52	26.71	3	Horizontal	351	2.40	-	36.45	6.16	32.84	

802.11g_Nss1,(6Mbps)_2TX

2457MHz_TX

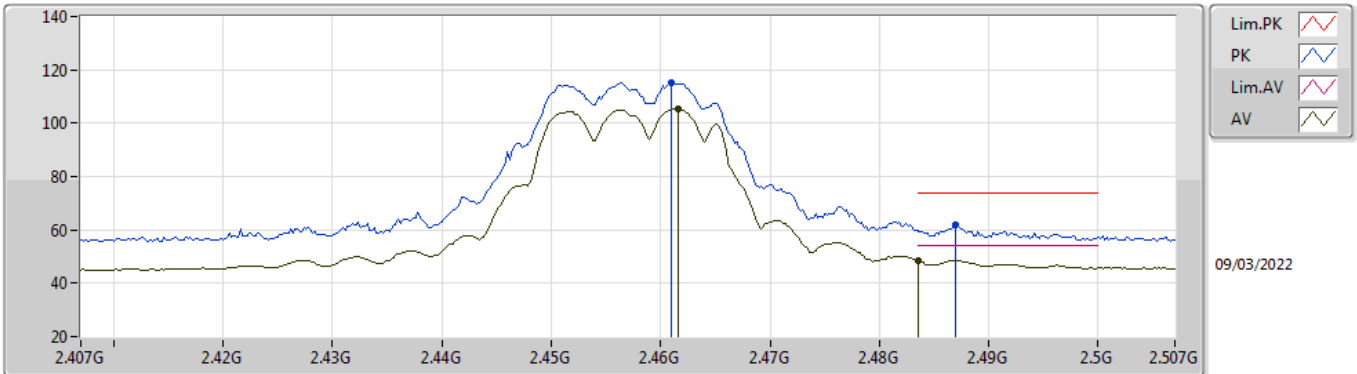


EUT Y_2TX
Setting 24
01-A-G-2

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	2.4602G	123.82	Inf	-Inf	92.43	3	Vertical	301	1.80	-	27.56	3.83	-
AV	2.4602G	113.35	Inf	-Inf	81.96	3	Vertical	301	1.80	-	27.56	3.83	-
PK	2.4846G	66.67	74.00	-7.33	35.12	3	Vertical	301	1.80	-	27.71	3.84	-
AV	2.4852G	52.13	54.00	-1.87	20.58	3	Vertical	301	1.80	-	27.71	3.84	-

802.11g_Nss1,(6Mbps)_2TX

2457MHz_TX

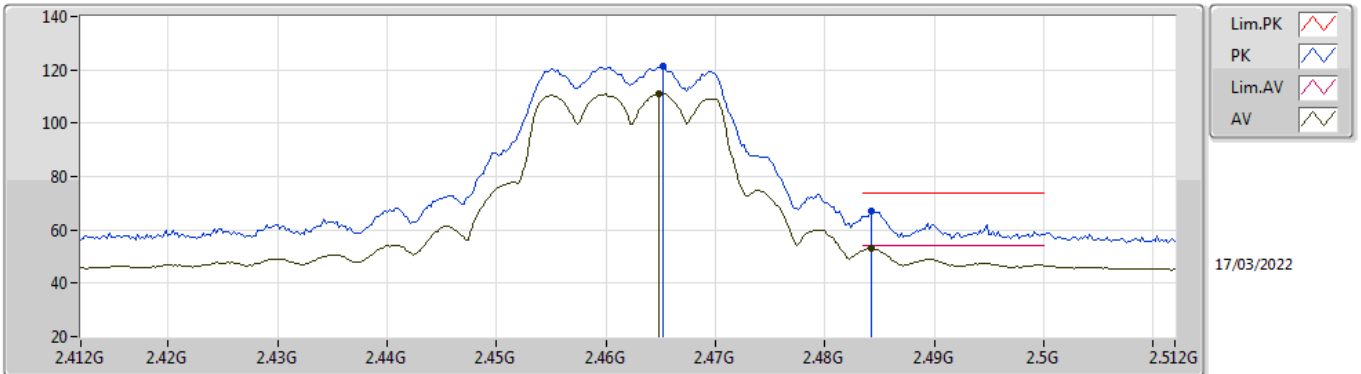


EUT V_2TX
Setting 23.5
03-C-K-4

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	2.461G	115.03	Inf	-Inf	82.26	3	Horizontal	32	2.24	-	28.34	4.43	-	
AV	2.461G	105.22	Inf	-Inf	72.44	3	Horizontal	32	2.24	-	28.35	4.43	-	
PK	2.487G	61.98	74.00	-12.02	29.09	3	Horizontal	32	2.24	-	28.45	4.44	-	
AV	2.4835G	48.56	54.00	-5.44	15.69	3	Horizontal	32	2.24	-	28.43	4.44	-	

802.11g_Nss1,(6Mbps)_2TX

2462MHz_TX

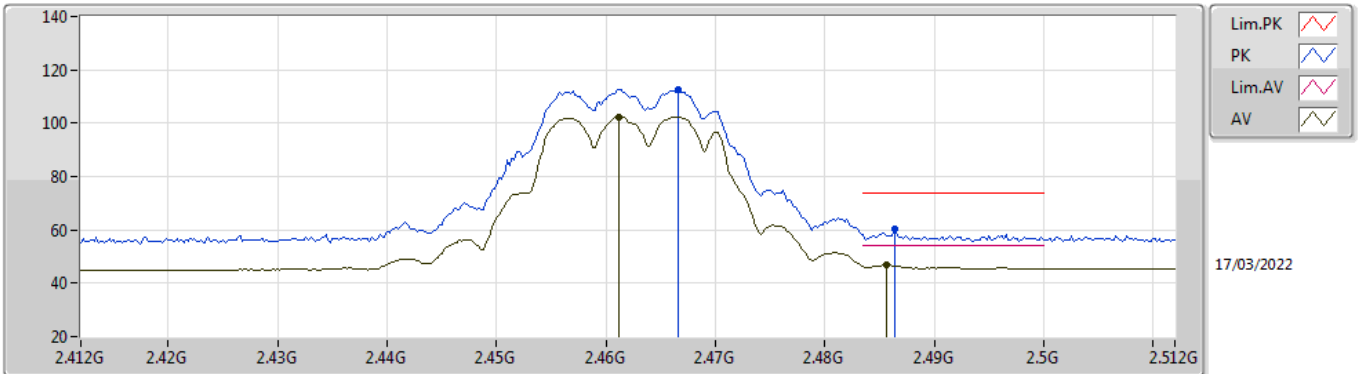


EUT V_2TX
Setting 21.5
01-A-G-2

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	2.4652G	121.28	Inf	-Inf	89.86	3	Vertical	306	1.80	-	27.59	3.83	-
AV	2.4648G	111.05	Inf	-Inf	79.63	3	Vertical	306	1.80	-	27.59	3.83	-
PK	2.4842G	66.90	74.00	-7.10	35.35	3	Vertical	306	1.80	-	27.71	3.84	-
AV	2.4842G	52.94	54.00	-1.06	21.39	3	Vertical	306	1.80	-	27.71	3.84	-

802.11g_Nss1,(6Mbps)_2TX

2462MHz_TX

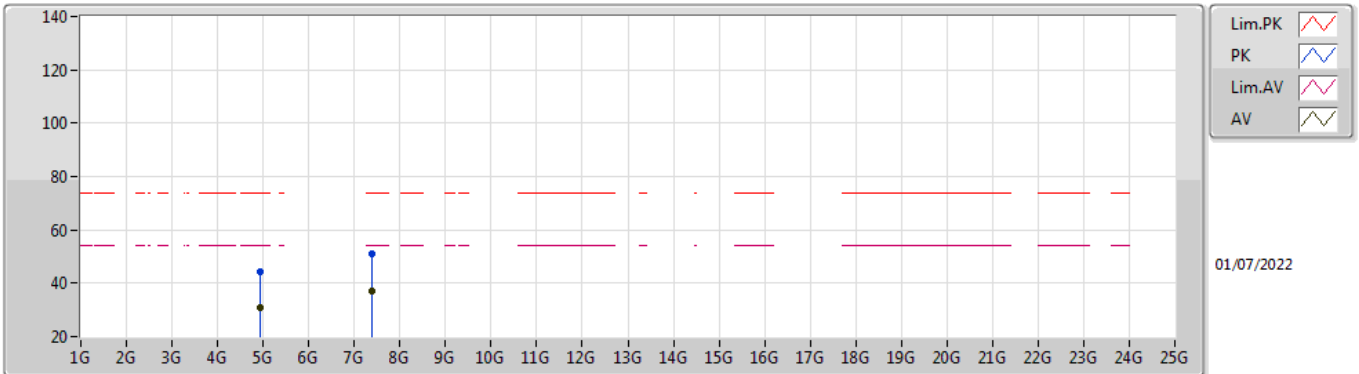


EUT V_2TX
Setting 21.5
03-C-K-4

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	2.4666G	112.50	Inf	-Inf	79.70	3	Horizontal	34	2.22	-	28.37	4.43	-	
AV	2.4612G	102.49	Inf	-Inf	69.72	3	Horizontal	34	2.22	-	28.34	4.43	-	
PK	2.4864G	60.51	74.00	-13.49	27.62	3	Horizontal	34	2.22	-	28.45	4.44	-	
AV	2.4856G	46.77	54.00	-7.23	13.89	3	Horizontal	34	2.22	-	28.44	4.44	-	

802.11g_Nss1,(6Mbps)_2TX

2462MHz_TX

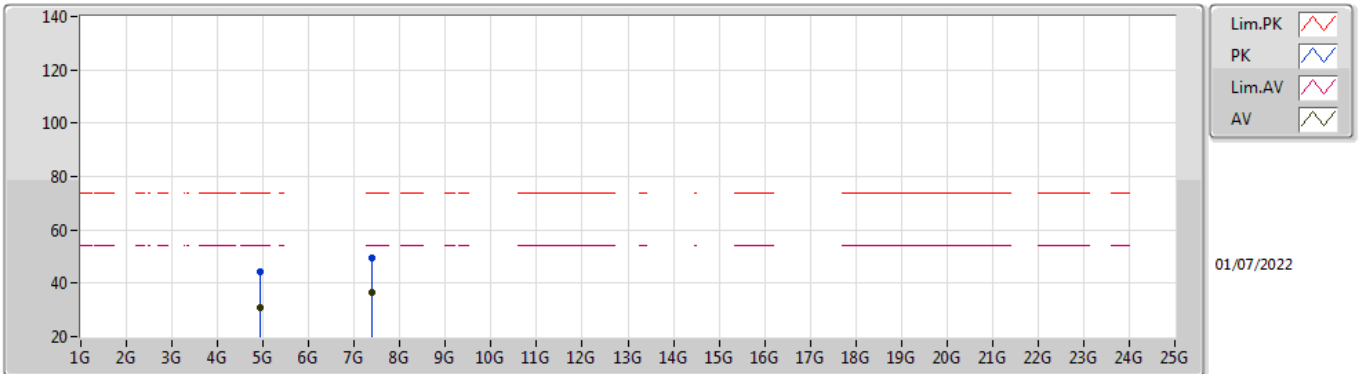


EUT Y_2TX
Setting 21.5
02-B-C-6

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	4.92646G	44.18	74.00	-29.82	38.02	3	Vertical	185	1.19	-	33.25	5.10	32.19
AV	4.93048G	31.00	54.00	-23.00	24.83	3	Vertical	185	1.19	-	33.26	5.10	32.19
PK	7.38258G	50.84	74.00	-23.16	41.10	3	Vertical	141	2.70	-	36.50	6.19	32.95
AV	7.37262G	36.86	54.00	-17.14	27.10	3	Vertical	141	2.70	-	36.50	6.19	32.93

802.11g_Nss1,(6Mbps)_2TX

2462MHz_TX



EUT_V_2TX
Setting 21.5
02-B-C-6

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	4.92748G	44.43	74.00	-29.57	38.27	3	Horizontal	139	2.75	-	33.25	5.10	32.19
AV	4.92718G	30.99	54.00	-23.01	24.83	3	Horizontal	139	2.75	-	33.25	5.10	32.19
PK	7.3914G	49.69	74.00	-24.31	39.95	3	Horizontal	233	1.53	-	36.50	6.20	32.96
AV	7.37352G	36.61	54.00	-17.39	26.85	3	Horizontal	233	1.53	-	36.50	6.19	32.93

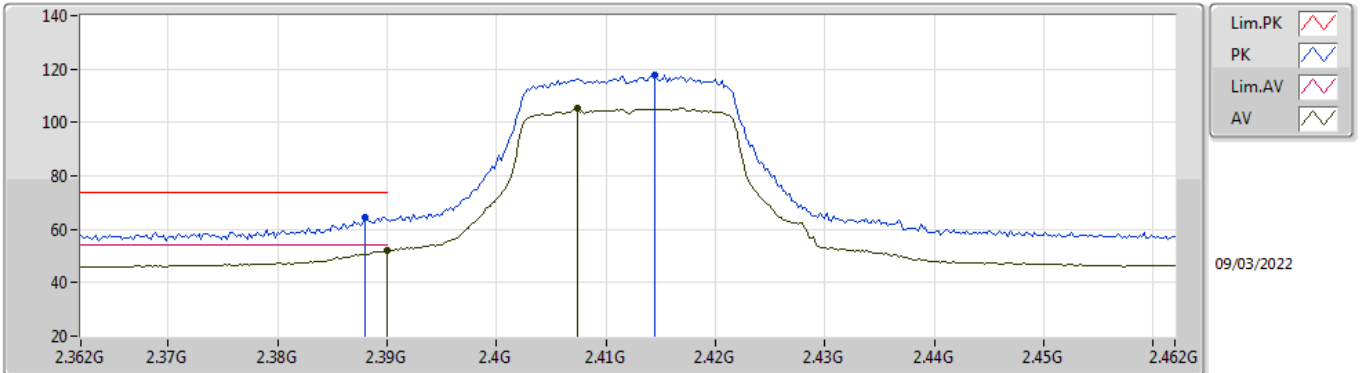


Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	Pass	AV	2.4836G	52.99	54.00	-1.01	3	Vertical	36	2.74	-

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

2412MHz_TX

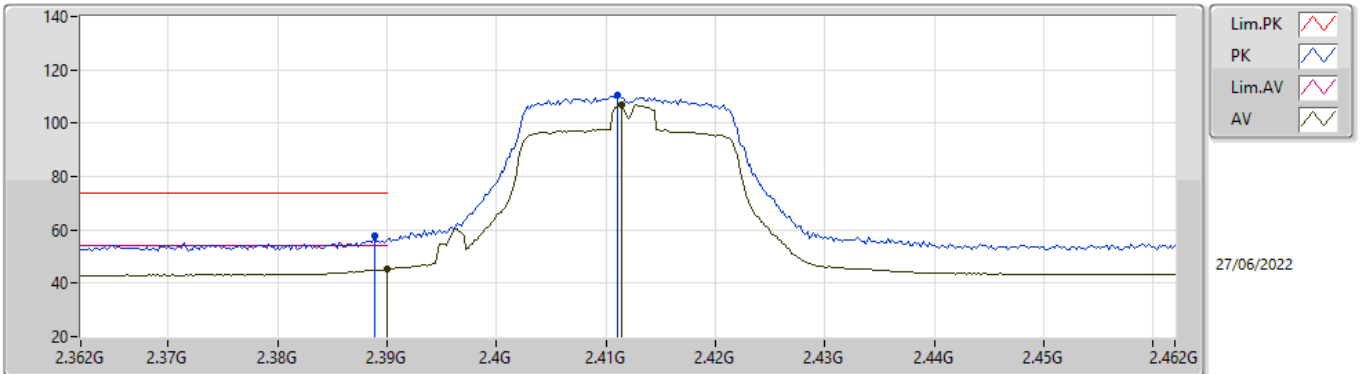


EUT_V_2TX
Setting 22
03-C-K-4

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	64.59	74.00	-9.41	31.95	3	Vertical	314	1.68	-	28.25	4.39	-
AV	2.39G	51.98	54.00	-2.02	19.33	3	Vertical	314	1.68	-	28.26	4.39	-
PK	2.4144G	117.72	Inf	-Inf	85.01	3	Vertical	314	1.68	-	28.30	4.41	-
AV	2.4074G	105.60	Inf	-Inf	72.90	3	Vertical	314	1.68	-	28.30	4.40	-

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

2412MHz_TX

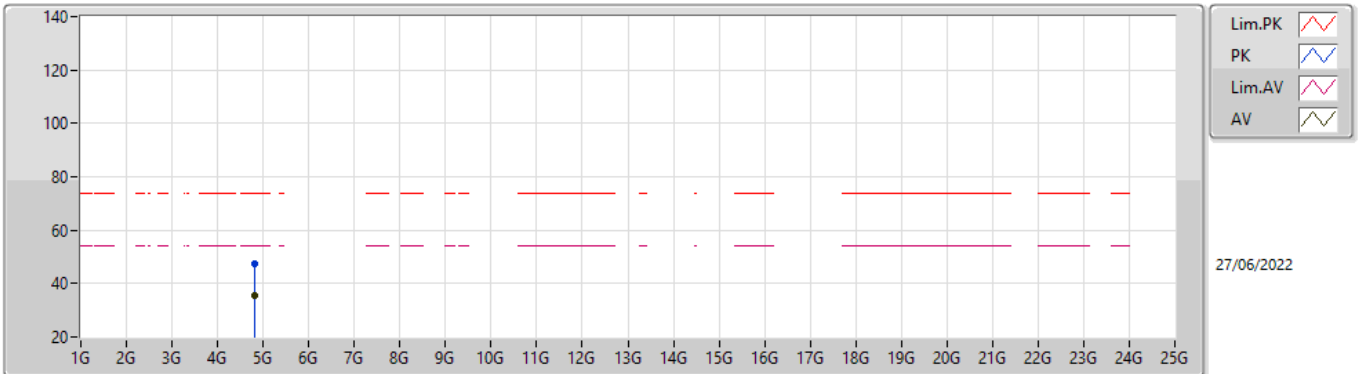


EUT_Y_2TX
Setting 22
04-E-G-4

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	57.52	74.00	-16.48	27.25	3	Horizontal	302	1.22	-	27.48	2.79	-
AV	2.39G	45.11	54.00	-8.89	14.84	3	Horizontal	302	1.22	-	27.48	2.79	-
PK	2.411G	110.54	Inf	-Inf	80.21	3	Horizontal	302	1.22	-	27.52	2.81	-
AV	2.4114G	106.86	Inf	-Inf	76.53	3	Horizontal	302	1.22	-	27.52	2.81	-

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

2412MHz_TX

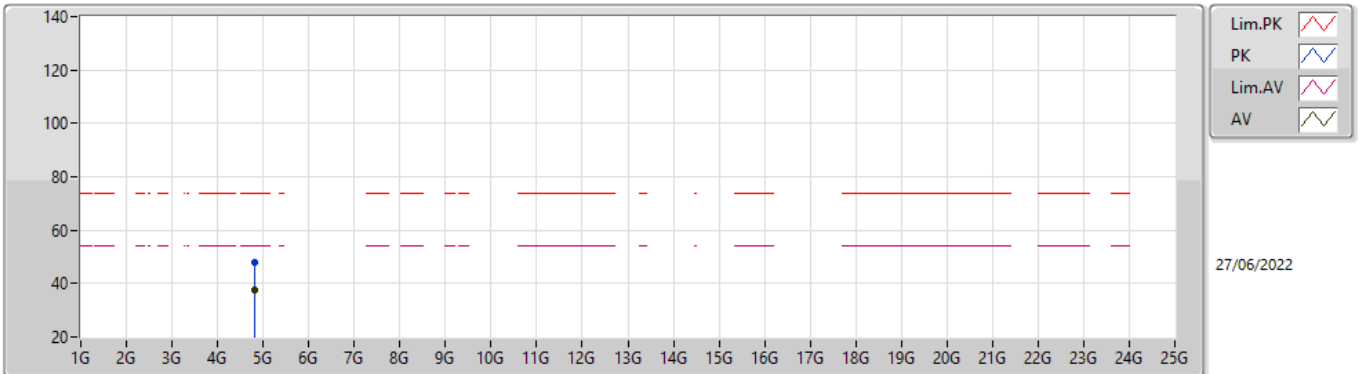


EUT Y_2TX
Setting 22
04-E-G-4

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	4.82269G	47.65	74.00	-26.35	43.40	3	Vertical	129	1.80	-	32.69	4.81	33.25
AV	4.82479G	35.61	54.00	-18.39	31.35	3	Vertical	129	1.80	-	32.70	4.81	33.25

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

2412MHz_TX

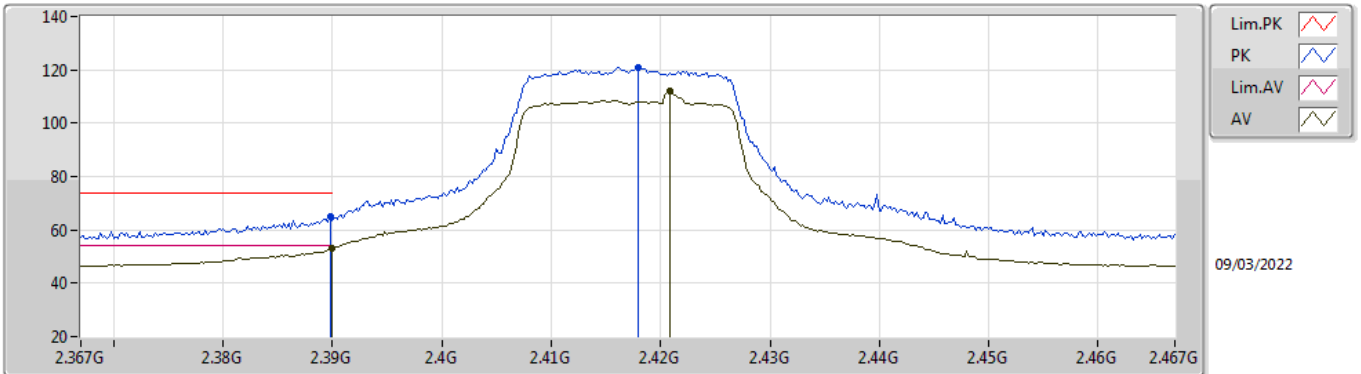


EUT Y_2TX
Setting 22
04-E-G-4

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	4.82374G	48.00	74.00	-26.00	43.75	3	Horizontal	332	1.80	-	32.69	4.81	33.25
AV	4.824G	37.58	54.00	-16.42	33.32	3	Horizontal	332	1.80	-	32.70	4.81	33.25

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

2417MHz_TX

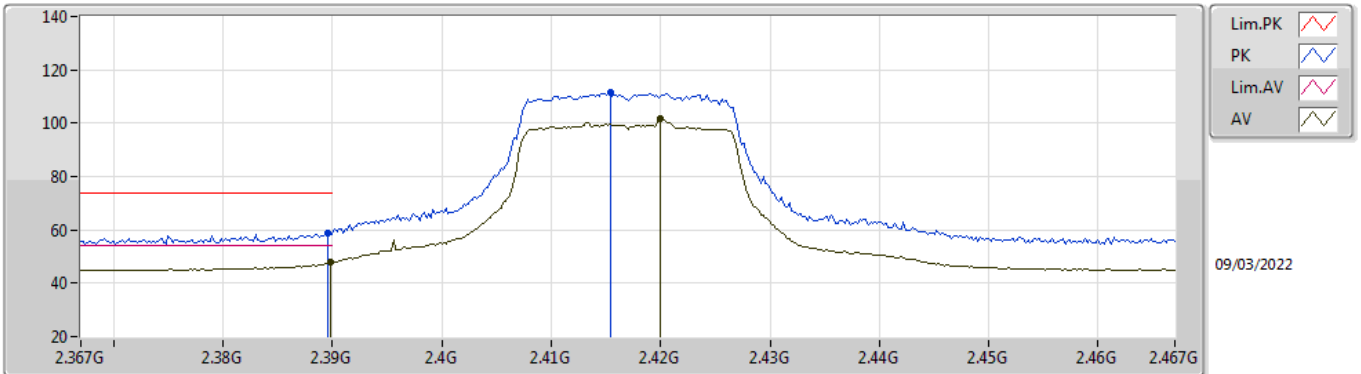


EUT Y_2TX
Setting 25
03-C-K-4

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	65.01	74.00	-8.99	32.36	3	Vertical	311	1.80	-	28.26	4.39	-
AV	2.39G	52.87	54.00	-1.13	20.22	3	Vertical	311	1.80	-	28.26	4.39	-
PK	2.418G	120.92	Inf	-Inf	88.21	3	Vertical	311	1.80	-	28.30	4.41	-
AV	2.4208G	112.08	Inf	-Inf	79.37	3	Vertical	311	1.80	-	28.30	4.41	-

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

2417MHz_TX

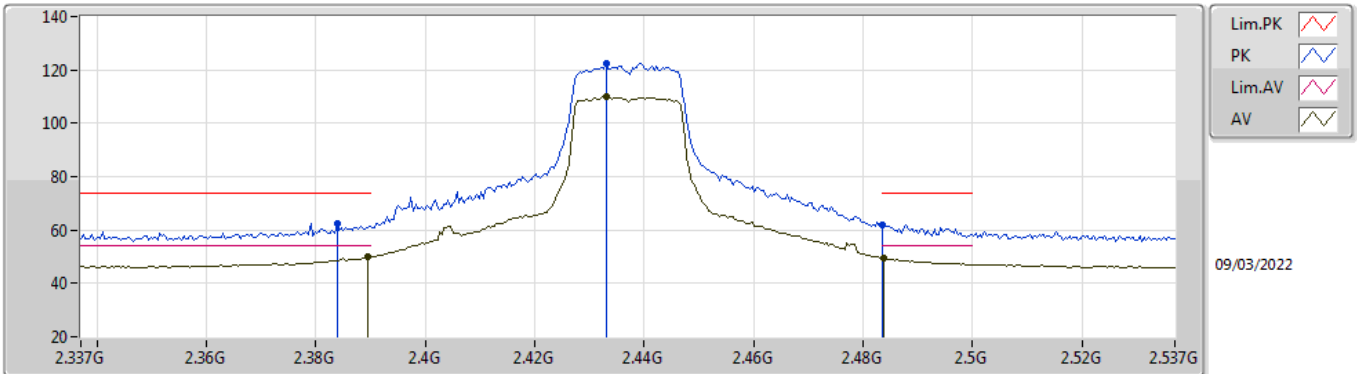


EUT_V_2TX
Setting 25
03-C-K-4

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	2.3896G	58.85	74.00	-15.15	26.20	3	Horizontal	344	1.80	-	28.26	4.39	-
AV	2.3898G	47.69	54.00	-6.31	15.04	3	Horizontal	344	1.80	-	28.26	4.39	-
PK	2.4154G	111.53	Inf	-Inf	78.82	3	Horizontal	344	1.80	-	28.30	4.41	-
AV	2.42G	101.61	Inf	-Inf	68.90	3	Horizontal	344	1.80	-	28.30	4.41	-

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

2437MHz_TX

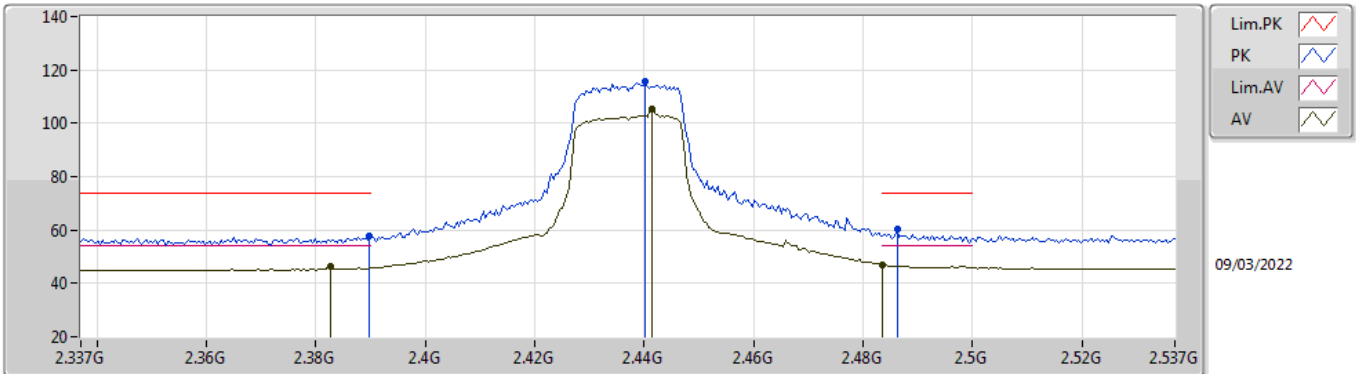


EUT_V_2TX
Setting 28
03-C-K-4

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	2.3838G	62.33	74.00	-11.67	29.71	3	Vertical	318.7	1.75	-	28.24	4.38	-
AV	2.3894G	49.97	54.00	-4.03	17.32	3	Vertical	318.7	1.75	-	28.26	4.39	-
PK	2.433G	122.23	Inf	-Inf	89.51	3	Vertical	318.7	1.75	-	28.30	4.42	-
AV	2.433G	109.84	Inf	-Inf	77.12	3	Vertical	318.7	1.75	-	28.30	4.42	-
PK	2.4835G	61.78	74.00	-12.22	28.91	3	Vertical	318.7	1.75	-	28.43	4.44	-
AV	2.4838G	49.62	54.00	-4.38	16.74	3	Vertical	318.7	1.75	-	28.44	4.44	-

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

2437MHz_TX

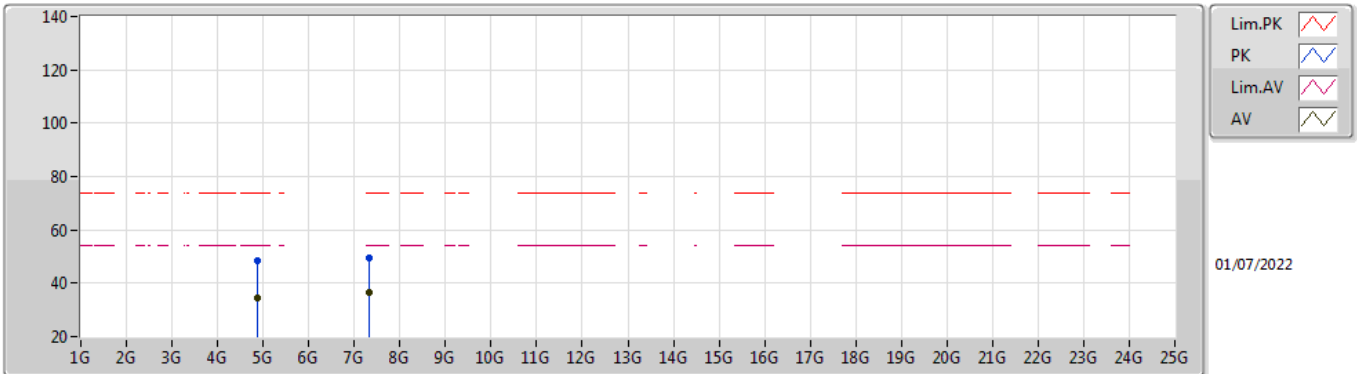


EUT_V_2TX
Setting 28
03-C-K-4

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	57.59	74.00	-16.41	24.94	3	Horizontal	32	1.98	-	28.26	4.39	-
AV	2.3826G	46.38	54.00	-7.62	13.77	3	Horizontal	32	1.98	-	28.23	4.38	-
PK	2.4402G	115.91	Inf	-Inf	83.19	3	Horizontal	32	1.98	-	28.30	4.42	-
AV	2.4414G	105.24	Inf	-Inf	72.52	3	Horizontal	32	1.98	-	28.30	4.42	-
PK	2.4862G	60.25	74.00	-13.75	27.37	3	Horizontal	32	1.98	-	28.44	4.44	-
AV	2.4835G	46.94	54.00	-7.06	14.07	3	Horizontal	32	1.98	-	28.43	4.44	-

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

2437MHz_TX

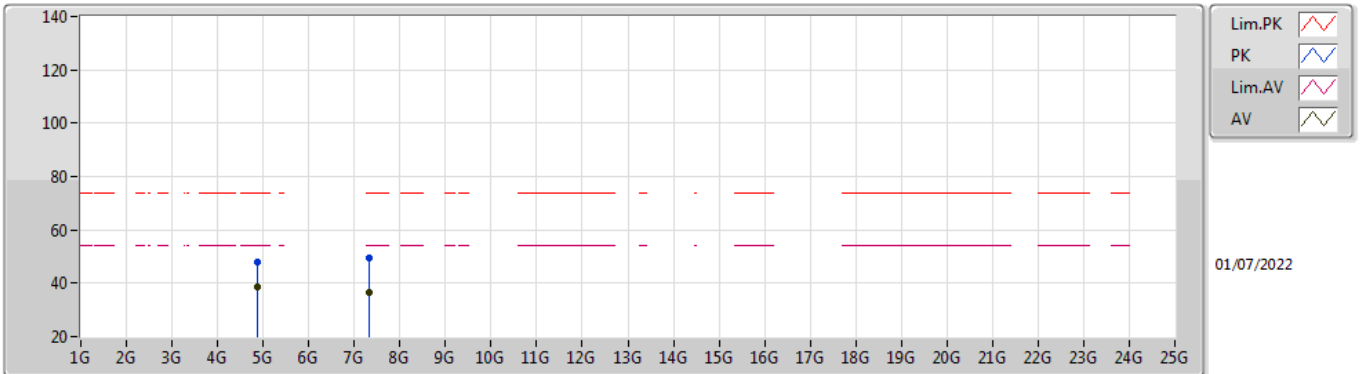


EUT V_2TX
Setting 28
03-C-K-4

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	4.87402G	48.23	74.00	-25.77	42.97	3	Vertical	355	1.80	-	33.60	7.06	35.40
AV	4.87424G	34.45	54.00	-19.55	29.19	3	Vertical	355	1.80	-	33.60	7.06	35.40
PK	7.32162G	49.47	74.00	-24.53	39.54	3	Vertical	174	2.62	-	36.94	8.56	35.57
AV	7.32294G	36.53	54.00	-17.47	26.58	3	Vertical	174	2.62	-	36.95	8.57	35.57

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

2437MHz_TX

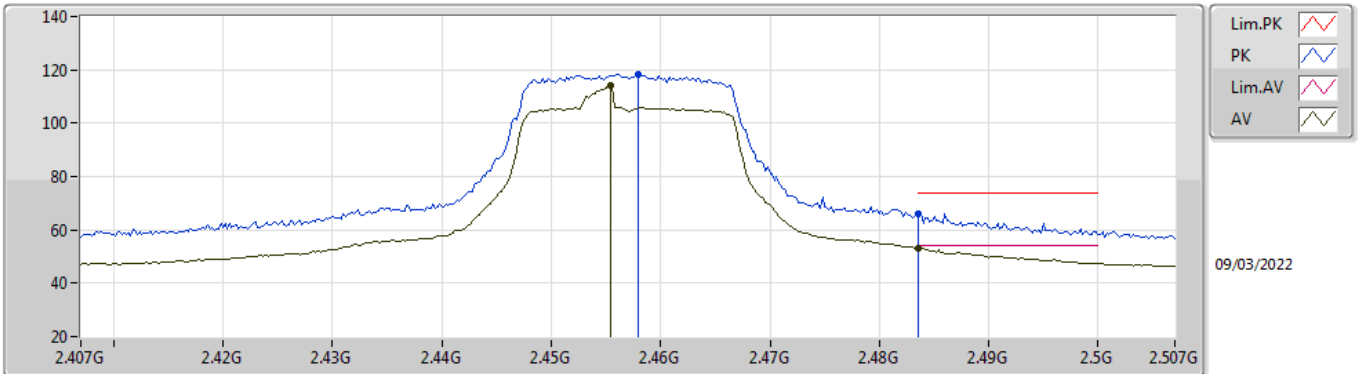


EUT_V_2TX
Setting 28
03-C-K-4

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	4.87398G	47.74	74.00	-26.26	42.48	3	Horizontal	0	2.20	-	33.60	7.06	35.40
AV	4.87404G	38.60	54.00	-15.40	33.34	3	Horizontal	0	2.20	-	33.60	7.06	35.40
PK	7.3194G	49.61	74.00	-24.39	39.68	3	Horizontal	83	2.69	-	36.94	8.56	35.57
AV	7.32216G	36.45	54.00	-17.55	26.51	3	Horizontal	83	2.69	-	36.94	8.57	35.57

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

2457MHz_TX

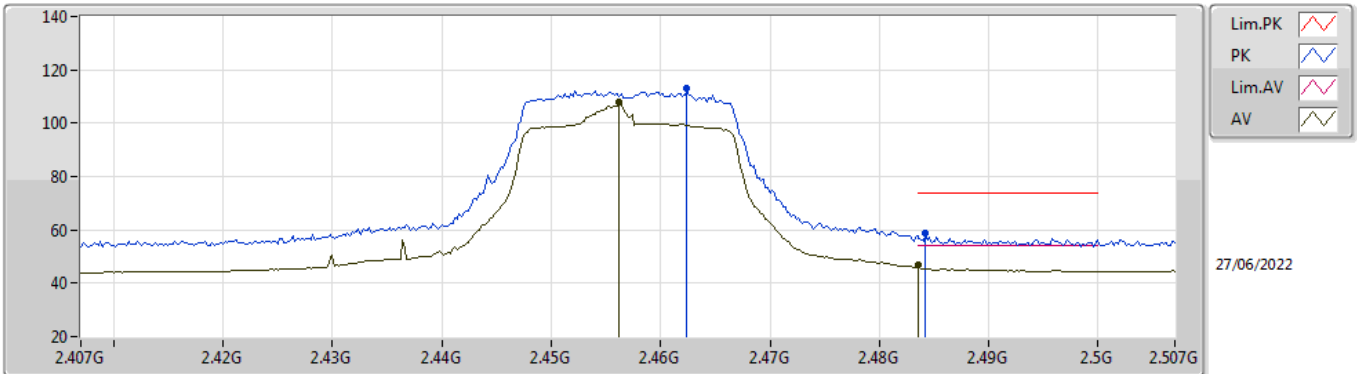


EUT_V_2TX
Setting 25
03-C-K-4

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	2.458G	118.31	Inf	-Inf	85.55	3	Vertical	36	2.74	-	28.33	4.43	-	
AV	2.4554G	113.93	Inf	-Inf	81.18	3	Vertical	36	2.74	-	28.32	4.43	-	
PK	2.4835G	66.21	74.00	-7.79	33.34	3	Vertical	36	2.74	-	28.43	4.44	-	
AV	2.4836G	52.99	54.00	-1.01	20.12	3	Vertical	36	2.74	-	28.43	4.44	-	

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

2457MHz_TX

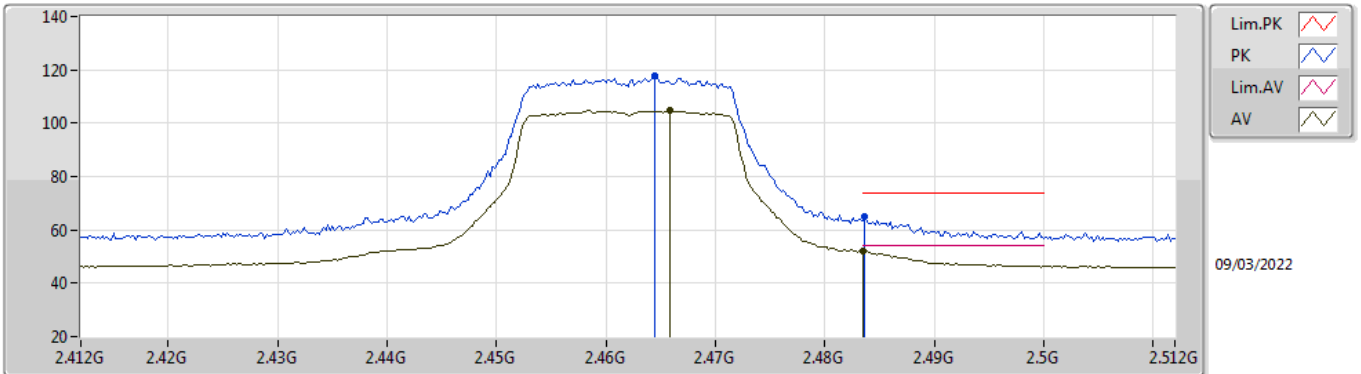


EUT_V_2TX
Setting 25
04-E-G-4

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	2.4624G	113.09	Inf	-Inf	82.59	3	Horizontal	350	1.80	-	27.67	2.83	-
AV	2.4562G	107.74	Inf	-Inf	77.27	3	Horizontal	350	1.80	-	27.64	2.83	-
PK	2.4842G	58.84	74.00	-15.16	28.19	3	Horizontal	350	1.80	-	27.81	2.84	-
AV	2.4836G	46.81	54.00	-7.19	16.17	3	Horizontal	350	1.80	-	27.80	2.84	-

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

2462MHz_TX

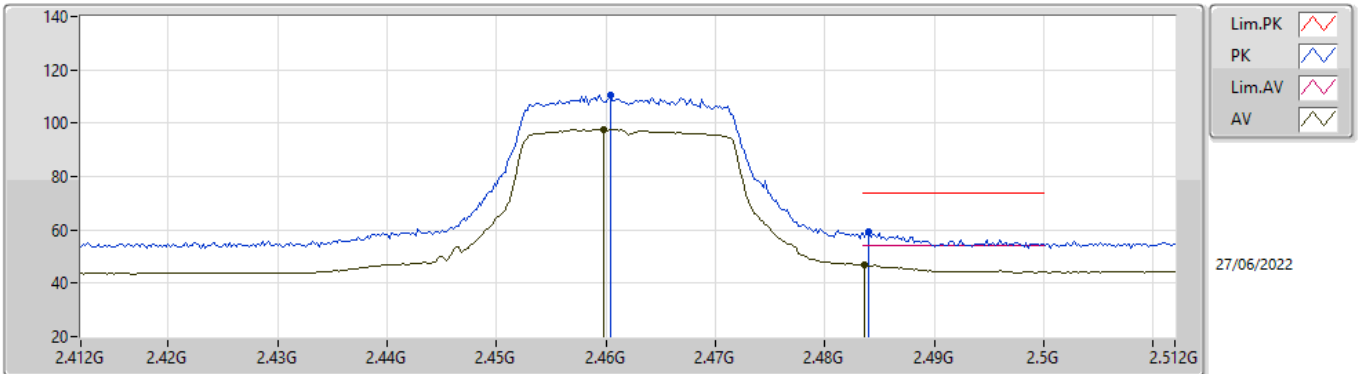


EUT_V_2TX
Setting 23
03-C-K-4

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	2.4644G	117.56	Inf	-Inf	84.77	3	Vertical	313.1	2.08	-	28.36	4.43	-	
AV	2.4658G	104.68	Inf	-Inf	71.89	3	Vertical	313.1	2.08	-	28.36	4.43	-	
PK	2.4836G	64.79	74.00	-9.21	31.92	3	Vertical	313.1	2.08	-	28.43	4.44	-	
AV	2.4835G	51.95	54.00	-2.05	19.08	3	Vertical	313.1	2.08	-	28.43	4.44	-	

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

2462MHz_TX

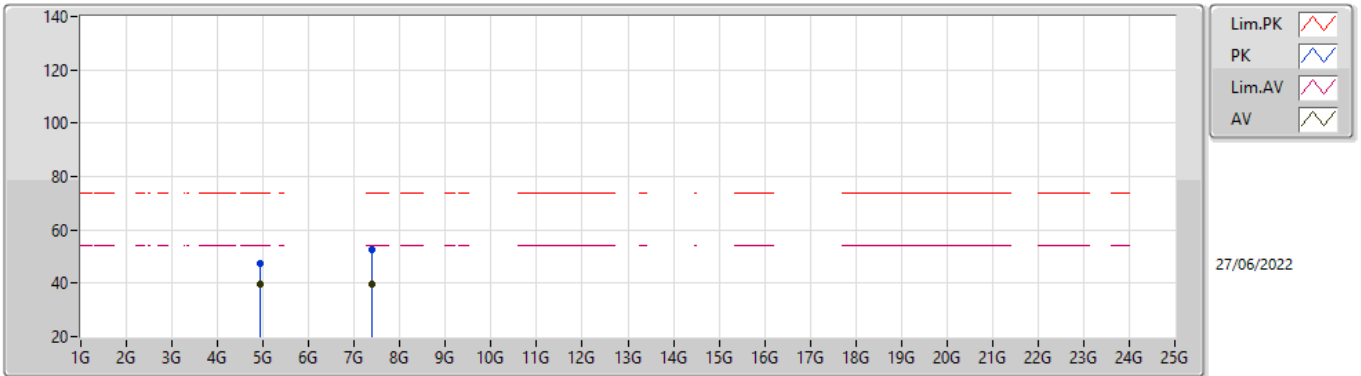


EUT Y_2TX
Setting 23
04-E-G-4

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	2.4604G	110.70	Inf	-Inf	80.21	3	Horizontal	351	1.73	-	27.66	2.83	-
AV	2.4598G	97.63	Inf	-Inf	67.14	3	Horizontal	351	1.73	-	27.66	2.83	-
PK	2.484G	59.16	74.00	-14.84	28.52	3	Horizontal	351	1.73	-	27.80	2.84	-
AV	2.4836G	46.79	54.00	-7.21	16.15	3	Horizontal	351	1.73	-	27.80	2.84	-

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

2462MHz_TX

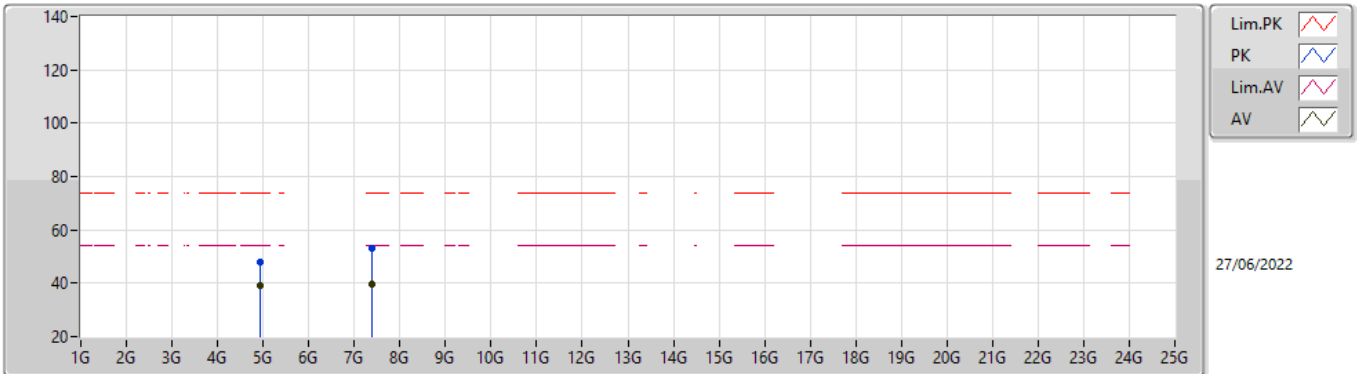


EUT_Y_2TX
Setting 23
04-E-G-4

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	4.92424G	47.40	74.00	-26.60	42.69	3	Vertical	3	2.14	-	33.05	4.86	33.20
AV	4.92402G	39.47	54.00	-14.53	34.76	3	Vertical	3	2.14	-	33.05	4.86	33.20
PK	7.38354G	52.84	74.00	-21.16	42.87	3	Vertical	201	2.89	-	37.63	6.09	33.75
AV	7.38418G	39.57	54.00	-14.43	29.59	3	Vertical	201	2.89	-	37.64	6.09	33.75

802.11ax HEW20-BF_Nss1,(MCS0)_2TX

2462MHz_TX

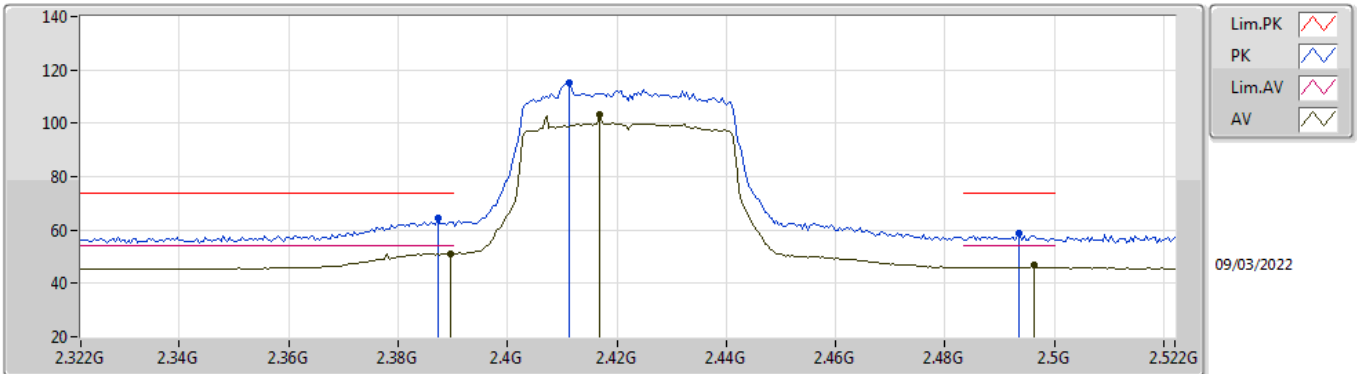


EUT_Y_2TX
Setting 23
04-E-G-4

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	4.924G	47.74	74.00	-26.26	43.03	3	Horizontal	343	2.30	-	33.05	4.86	33.20
AV	4.92404G	39.04	54.00	-14.96	34.33	3	Horizontal	343	2.30	-	33.05	4.86	33.20
PK	7.39094G	52.96	74.00	-21.04	42.96	3	Horizontal	175	2.07	-	37.66	6.10	33.76
AV	7.3906G	39.48	54.00	-14.52	29.48	3	Horizontal	175	2.07	-	37.66	6.10	33.76

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

2422MHz_TX

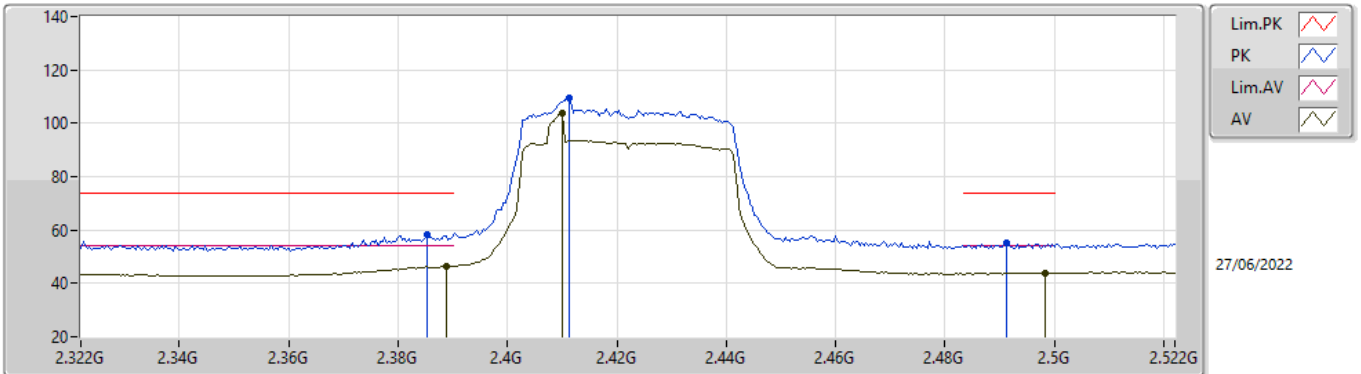


EUT Y_2TX
Setting 21
03-C-K-4

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	2.3872G	64.24	74.00	-9.76	31.60	3	Vertical	49	2.90	-	28.25	4.39	-
AV	2.3896G	51.13	54.00	-2.87	18.48	3	Vertical	49	2.90	-	28.26	4.39	-
PK	2.4112G	115.13	Inf	-Inf	82.42	3	Vertical	49	2.90	-	28.30	4.41	-
AV	2.4168G	103.25	Inf	-Inf	70.54	3	Vertical	49	2.90	-	28.30	4.41	-
PK	2.4936G	58.90	74.00	-15.10	25.98	3	Vertical	49	2.90	-	28.47	4.45	-
AV	2.4964G	46.77	54.00	-7.23	13.83	3	Vertical	49	2.90	-	28.49	4.45	-

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

2422MHz_TX

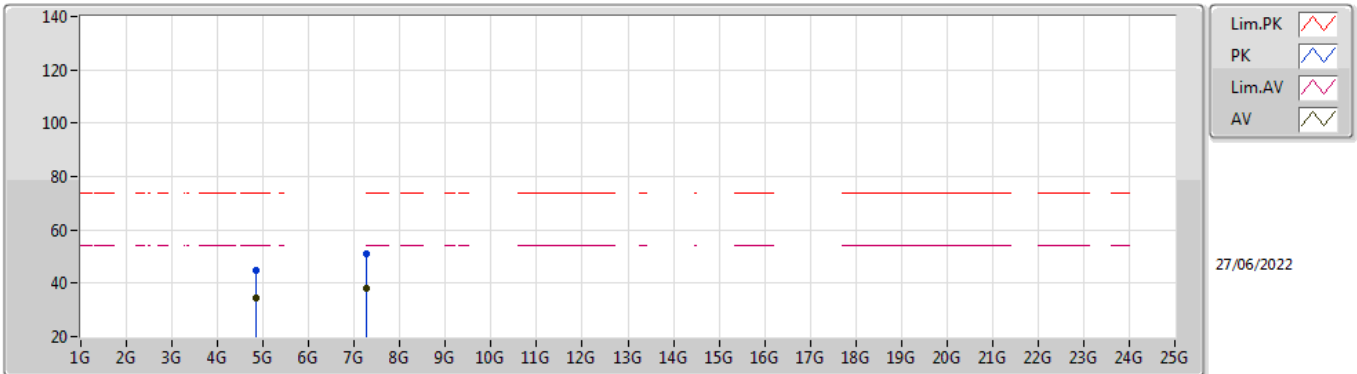


EUT_Y_2TX
Setting 21
04-E-G-4

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	2.3852G	58.37	74.00	-15.63	28.11	3	Horizontal	305	1.20	-	27.47	2.79	-
AV	2.3888G	46.47	54.00	-7.53	16.20	3	Horizontal	305	1.20	-	27.48	2.79	-
PK	2.4112G	109.41	Inf	-Inf	79.08	3	Horizontal	305	1.20	-	27.52	2.81	-
AV	2.41G	103.96	Inf	-Inf	73.64	3	Horizontal	305	1.20	-	27.52	2.80	-
PK	2.4912G	54.96	74.00	-19.04	24.26	3	Horizontal	305	1.20	-	27.85	2.85	-
AV	2.4984G	44.00	54.00	-10.00	13.26	3	Horizontal	305	1.20	-	27.89	2.85	-

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

2422MHz_TX

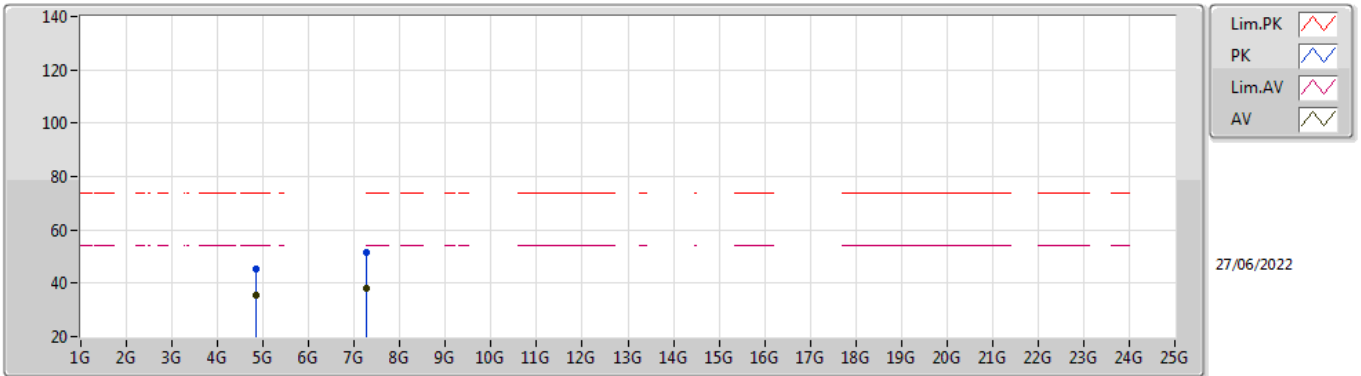


EUT_V_2TX
Setting 21
04-E-G-4

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	4.84404G	44.90	74.00	-29.10	40.54	3	Vertical	334	2.38	-	32.78	4.82	33.24
AV	4.84406G	34.60	54.00	-19.40	30.24	3	Vertical	334	2.38	-	32.78	4.82	33.24
PK	7.26132G	51.25	74.00	-22.75	41.40	3	Vertical	132	1.40	-	37.42	6.03	33.60
AV	7.26234G	38.27	54.00	-15.73	28.42	3	Vertical	132	1.40	-	37.42	6.03	33.60

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

2422MHz_TX

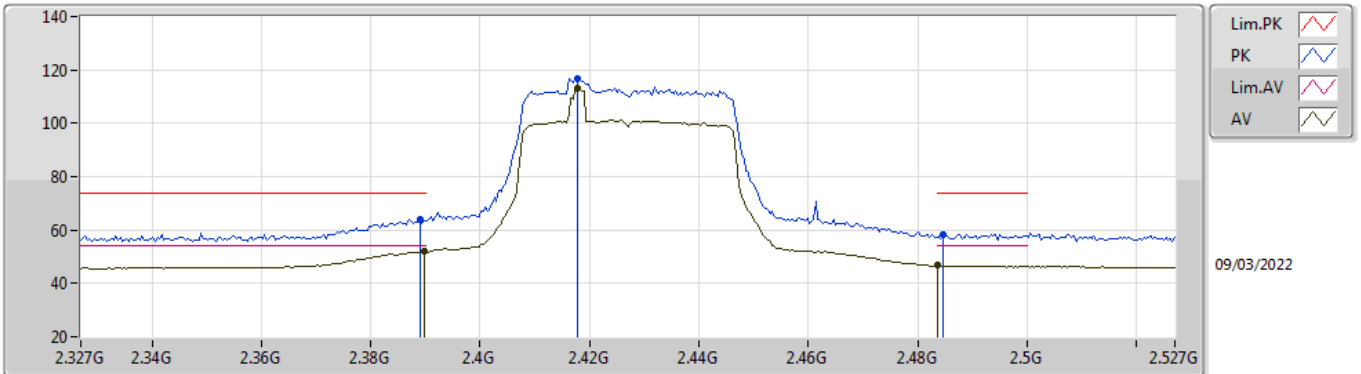


EUT_V_2TX
Setting 21
04-E-G-4

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	4.84416G	45.37	74.00	-28.63	41.01	3	Horizontal	331	2.13	-	32.78	4.82	33.24
AV	4.84404G	35.59	54.00	-18.41	31.23	3	Horizontal	331	2.13	-	32.78	4.82	33.24
PK	7.26458G	51.58	74.00	-22.42	41.73	3	Horizontal	57	2.97	-	37.43	6.03	33.61
AV	7.26892G	38.31	54.00	-15.69	28.45	3	Horizontal	57	2.97	-	37.44	6.03	33.61

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

2427MHz_TX

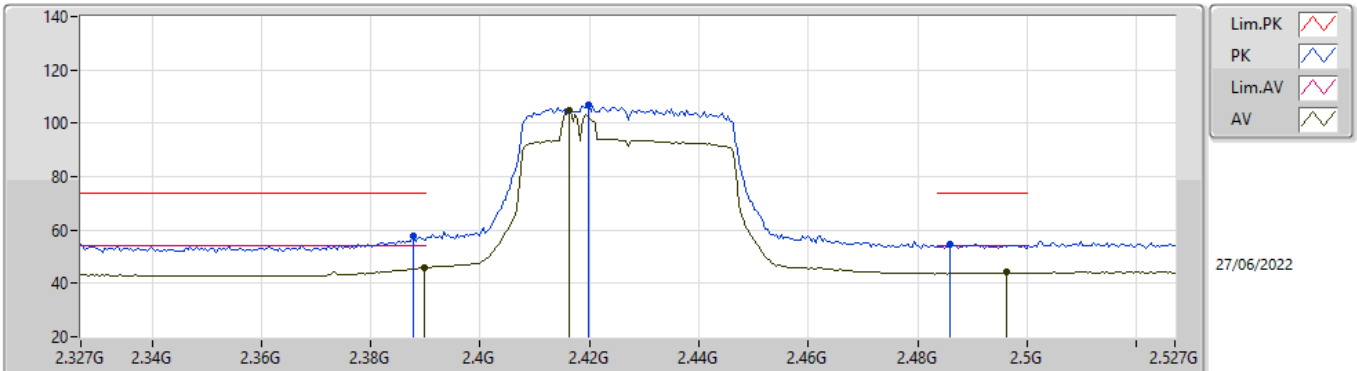


EUT_Y_2TX
Setting 21
03-C-K-4

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	2.389G	64.16	74.00	-9.84	31.51	3	Vertical	313	1.80	-	28.26	4.39	-
AV	2.3898G	52.00	54.00	-2.00	19.35	3	Vertical	313	1.80	-	28.26	4.39	-
PK	2.4178G	116.67	Inf	-Inf	83.96	3	Vertical	313	1.80	-	28.30	4.41	-
AV	2.4178G	112.92	Inf	-Inf	80.21	3	Vertical	313	1.80	-	28.30	4.41	-
PK	2.4846G	58.51	74.00	-15.49	25.63	3	Vertical	313	1.80	-	28.44	4.44	-
AV	2.4835G	46.65	54.00	-7.35	13.78	3	Vertical	313	1.80	-	28.43	4.44	-

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

2427MHz_TX

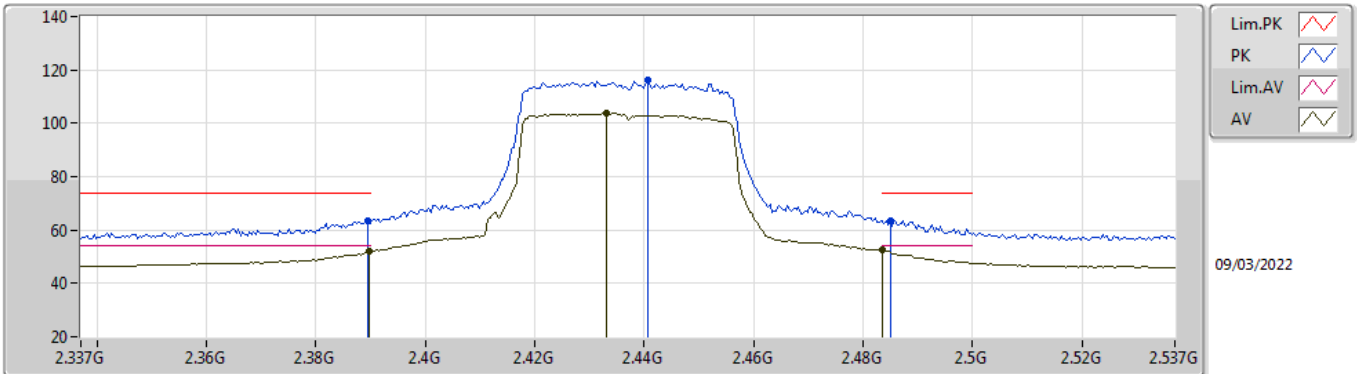


EUT_Y_2TX
Setting 21
04-E-G-4

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	2.3878G	57.54	74.00	-16.46	27.27	3	Horizontal	347	1.86	-	27.48	2.79	-
AV	2.3898G	45.94	54.00	-8.06	15.67	3	Horizontal	347	1.86	-	27.48	2.79	-
PK	2.4198G	106.94	Inf	-Inf	76.59	3	Horizontal	347	1.86	-	27.54	2.81	-
AV	2.4162G	104.67	Inf	-Inf	74.33	3	Horizontal	347	1.86	-	27.53	2.81	-
PK	2.4858G	54.56	74.00	-19.44	23.91	3	Horizontal	347	1.86	-	27.81	2.84	-
AV	2.4962G	44.23	54.00	-9.77	13.50	3	Horizontal	347	1.86	-	27.88	2.85	-

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

2437MHz_TX

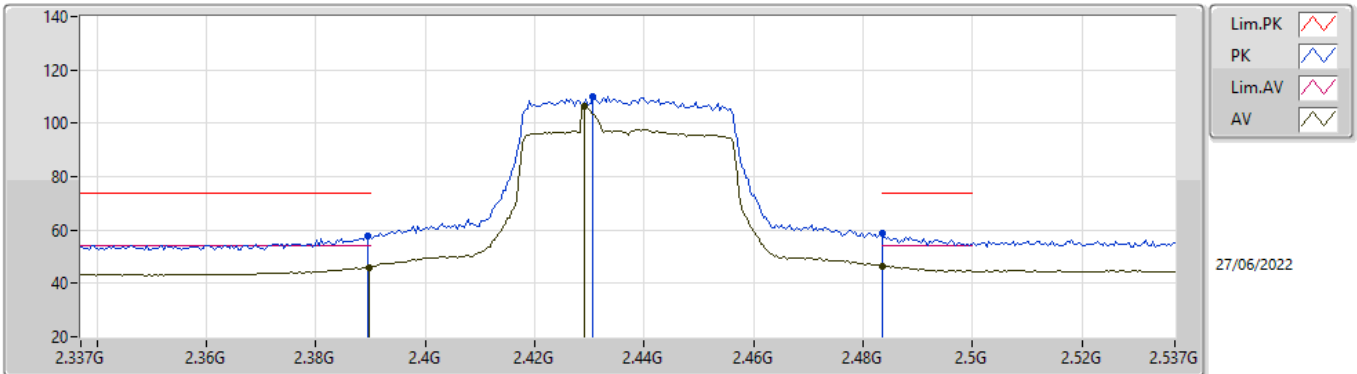


EUT_Y_2TX
Setting 25
03-C-K-4

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	63.31	74.00	-10.69	30.66	3	Vertical	49	3.00	-	28.26	4.39	-
AV	2.3898G	51.84	54.00	-2.16	19.19	3	Vertical	49	3.00	-	28.26	4.39	-
PK	2.4406G	116.16	Inf	-Inf	83.44	3	Vertical	49	3.00	-	28.30	4.42	-
AV	2.433G	103.71	Inf	-Inf	70.99	3	Vertical	49	3.00	-	28.30	4.42	-
PK	2.485G	63.69	74.00	-10.31	30.81	3	Vertical	49	3.00	-	28.44	4.44	-
AV	2.4835G	52.46	54.00	-1.54	19.59	3	Vertical	49	3.00	-	28.43	4.44	-

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

2437MHz_TX

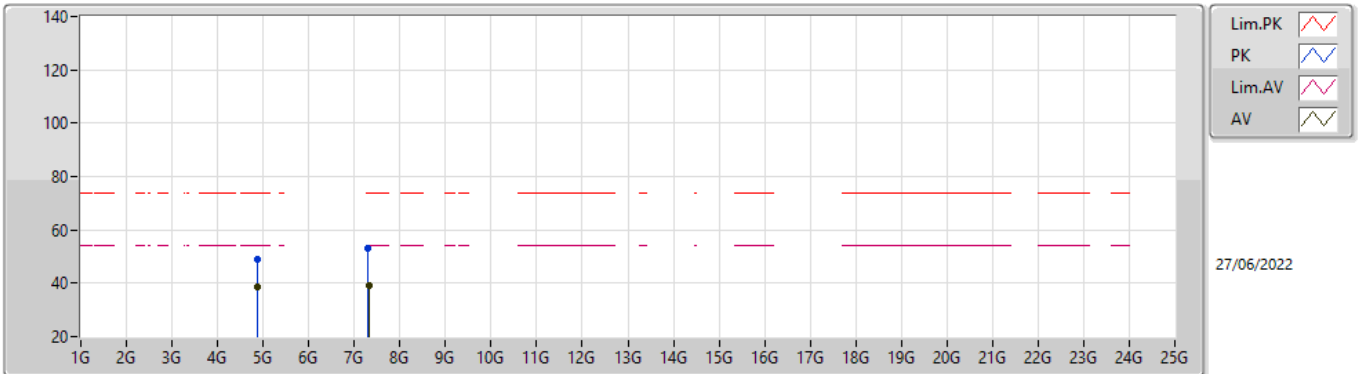


EUT_Y_2TX
Setting 25
04-E-G-4

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	57.86	74.00	-16.14	27.59	3	Horizontal	352	1.80	-	27.48	2.79	-
AV	2.3898G	46.02	54.00	-7.98	15.75	3	Horizontal	352	1.80	-	27.48	2.79	-
PK	2.4306G	109.93	Inf	-Inf	79.55	3	Horizontal	352	1.80	-	27.56	2.82	-
AV	2.429G	106.41	Inf	-Inf	76.04	3	Horizontal	352	1.80	-	27.56	2.81	-
PK	2.4835G	58.94	74.00	-15.06	28.30	3	Horizontal	352	1.80	-	27.80	2.84	-
AV	2.4835G	46.60	54.00	-7.40	15.96	3	Horizontal	352	1.80	-	27.80	2.84	-

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

2437MHz_TX

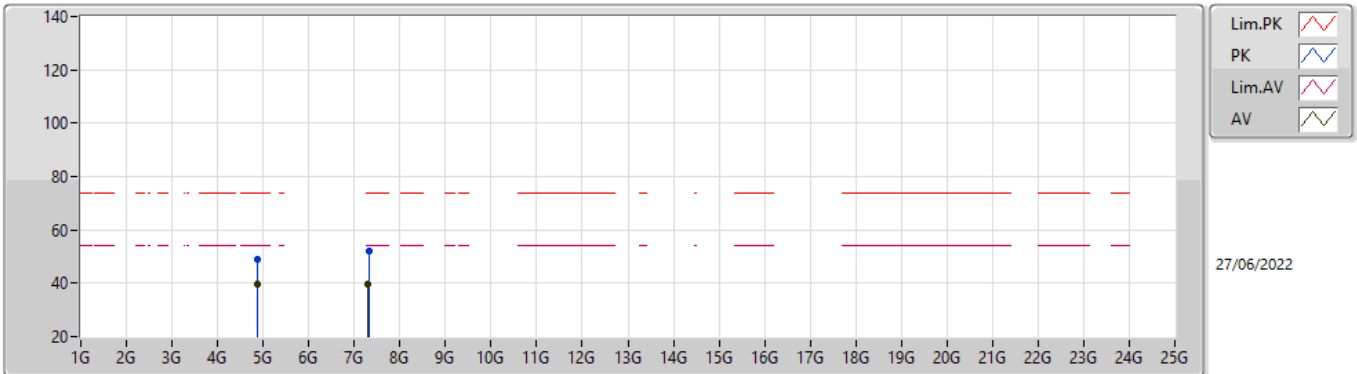


EUT_Y_2TX
Setting 25
04-E-G-4

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	4.87432G	48.79	74.00	-25.21	44.28	3	Vertical	337	2.26	-	32.90	4.84	33.23
AV	4.87402G	38.39	54.00	-15.61	33.88	3	Vertical	337	2.26	-	32.90	4.84	33.23
PK	7.30758G	52.91	74.00	-21.09	43.02	3	Vertical	135	2.12	-	37.50	6.05	33.66
AV	7.31352G	39.37	54.00	-14.63	29.48	3	Vertical	135	2.12	-	37.50	6.06	33.67

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

2437MHz_TX

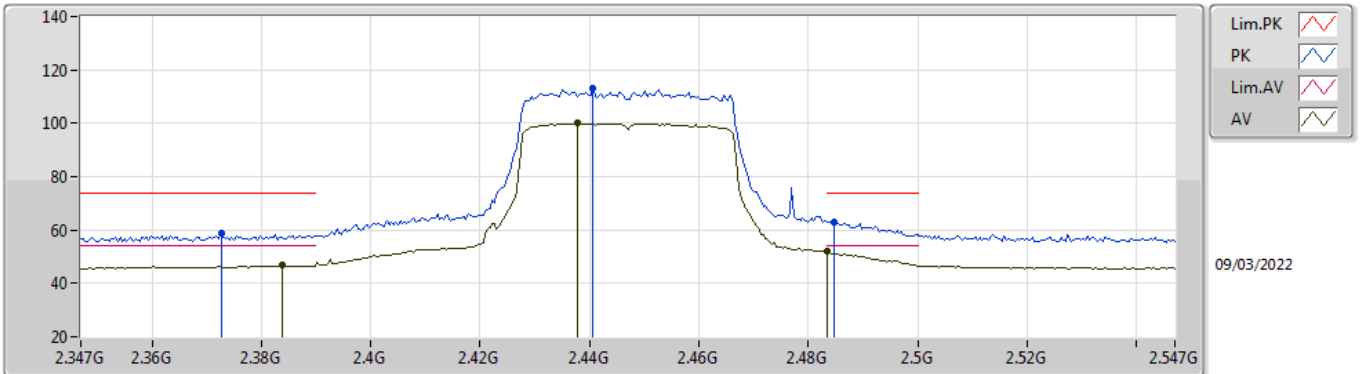


EUT_Y_2TX
Setting 25
04-E-G-4

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	4.87384G	48.77	74.00	-25.23	44.26	3	Horizontal	332	2.09	-	32.90	4.84	33.23
AV	4.874G	39.57	54.00	-14.43	35.06	3	Horizontal	332	2.09	-	32.90	4.84	33.23
PK	7.3129G	52.20	74.00	-21.80	42.31	3	Horizontal	248	1.86	-	37.50	6.06	33.67
AV	7.30932G	39.63	54.00	-14.37	29.74	3	Horizontal	248	1.86	-	37.50	6.05	33.66

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

2447MHz_TX

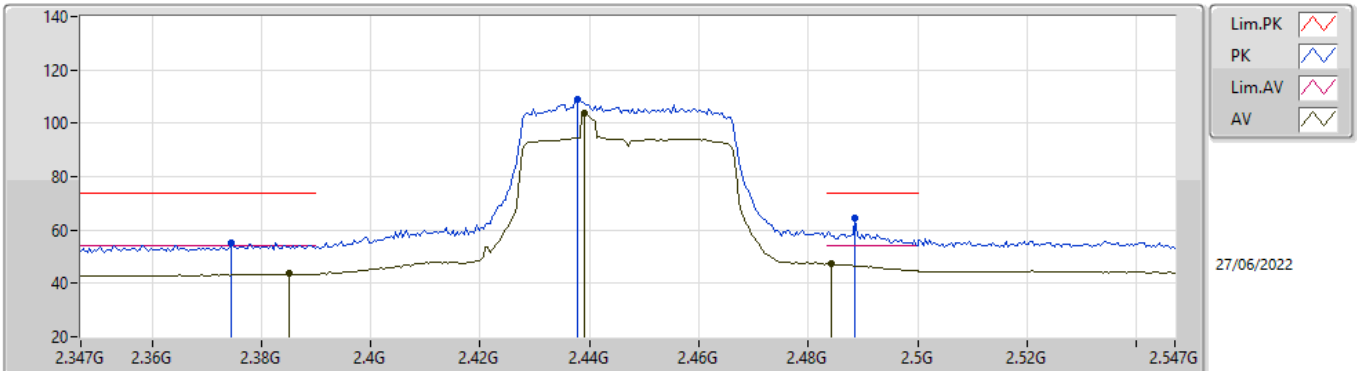


EUT_V_2TX
Setting 22
03-C-K-4

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	2.3726G	58.92	74.00	-15.08	26.36	3	Vertical	42	2.65	-	28.19	4.37	-
AV	2.3838G	46.64	54.00	-7.36	14.02	3	Vertical	42	2.65	-	28.24	4.38	-
PK	2.4406G	113.12	Inf	-Inf	80.40	3	Vertical	42	2.65	-	28.30	4.42	-
AV	2.4378G	99.95	Inf	-Inf	67.23	3	Vertical	42	2.65	-	28.30	4.42	-
PK	2.4846G	63.09	74.00	-10.91	30.21	3	Vertical	42	2.65	-	28.44	4.44	-
AV	2.4835G	51.91	54.00	-2.09	19.04	3	Vertical	42	2.65	-	28.43	4.44	-

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

2447MHz_TX

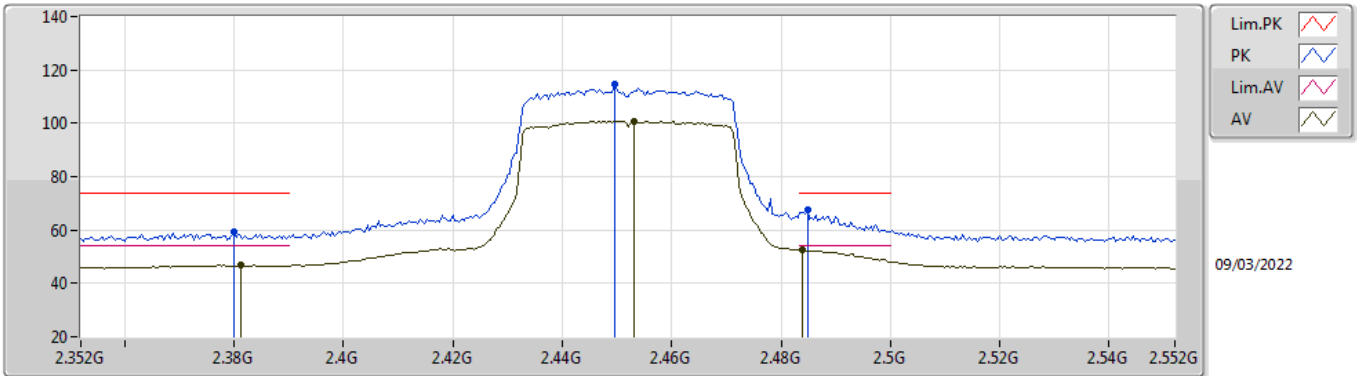


EUT Y_2TX
Setting 22
04-E-G-4

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	2.3746G	54.99	74.00	-19.01	24.75	3	Horizontal	347	1.78	-	27.45	2.79	-
AV	2.385G	43.56	54.00	-10.44	13.30	3	Horizontal	347	1.78	-	27.47	2.79	-
PK	2.4378G	108.82	Inf	-Inf	78.42	3	Horizontal	347	1.78	-	27.58	2.82	-
AV	2.439G	103.91	Inf	-Inf	73.51	3	Horizontal	347	1.78	-	27.58	2.82	-
PK	2.4886G	64.36	74.00	-9.64	33.69	3	Horizontal	347	1.78	-	27.83	2.84	-
AV	2.4842G	47.18	54.00	-6.82	16.53	3	Horizontal	347	1.78	-	27.81	2.84	-

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

2452MHz_TX

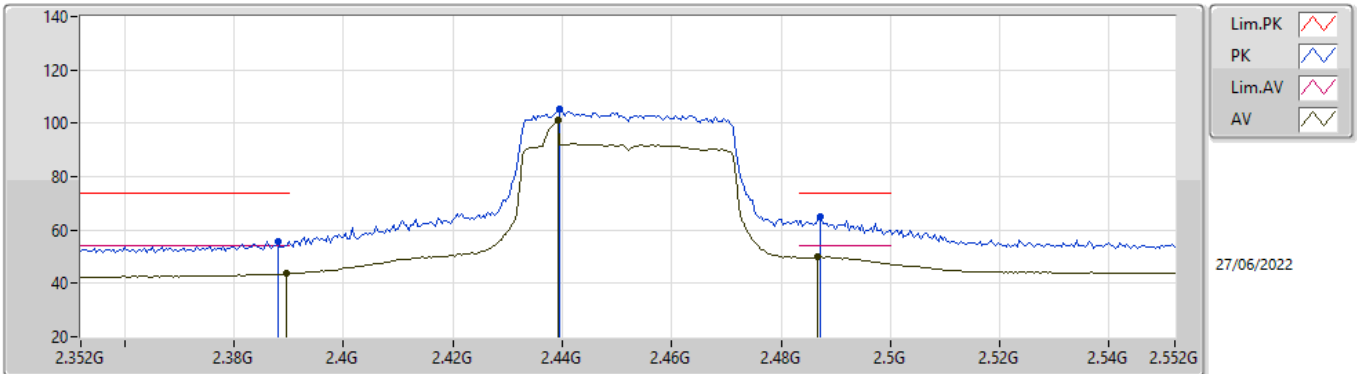


EUT Y_2TX
Setting 21
03-C-K-4

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	2.38G	59.13	74.00	-14.87	26.53	3	Vertical	314.4	1.91	-	28.22	4.38	-
AV	2.3812G	46.90	54.00	-7.10	14.30	3	Vertical	314.4	1.91	-	28.22	4.38	-
PK	2.4496G	114.52	Inf	-Inf	81.80	3	Vertical	314.4	1.91	-	28.30	4.42	-
AV	2.4532G	100.90	Inf	-Inf	68.16	3	Vertical	314.4	1.91	-	28.31	4.43	-
PK	2.4848G	67.47	74.00	-6.53	34.59	3	Vertical	314.4	1.91	-	28.44	4.44	-
AV	2.484G	52.51	54.00	-1.49	19.63	3	Vertical	314.4	1.91	-	28.44	4.44	-

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

2452MHz_TX

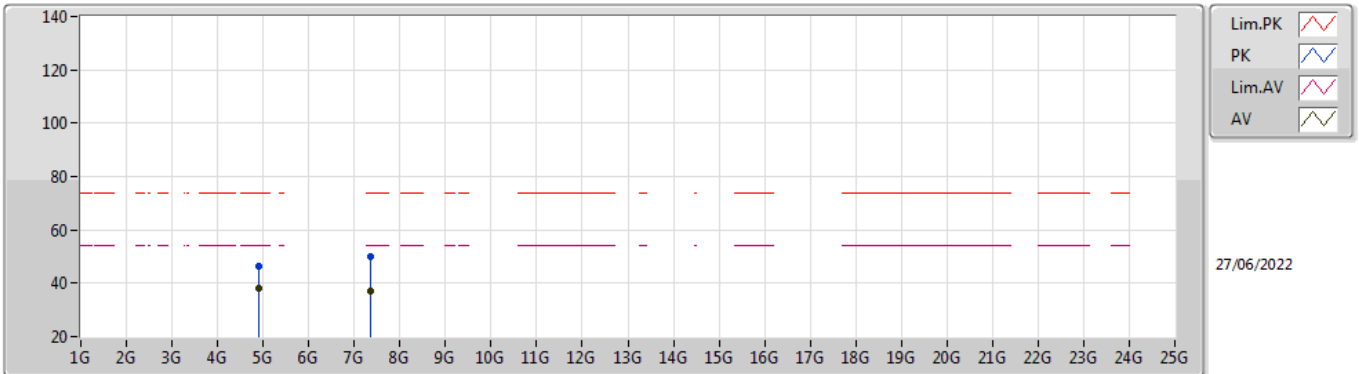


EUT Y_2TX
Setting 21
04-E-G-4

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	55.93	74.00	-18.07	25.66	3	Horizontal	336	1.80	-	27.48	2.79	-
AV	2.3896G	43.57	54.00	-10.43	13.30	3	Horizontal	336	1.80	-	27.48	2.79	-
PK	2.4396G	105.38	Inf	-Inf	74.98	3	Horizontal	336	1.80	-	27.58	2.82	-
AV	2.4392G	101.12	Inf	-Inf	70.72	3	Horizontal	336	1.80	-	27.58	2.82	-
PK	2.4872G	64.85	74.00	-9.15	34.19	3	Horizontal	336	1.80	-	27.82	2.84	-
AV	2.4868G	50.15	54.00	-3.85	19.49	3	Horizontal	336	1.80	-	27.82	2.84	-

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

2452MHz_TX

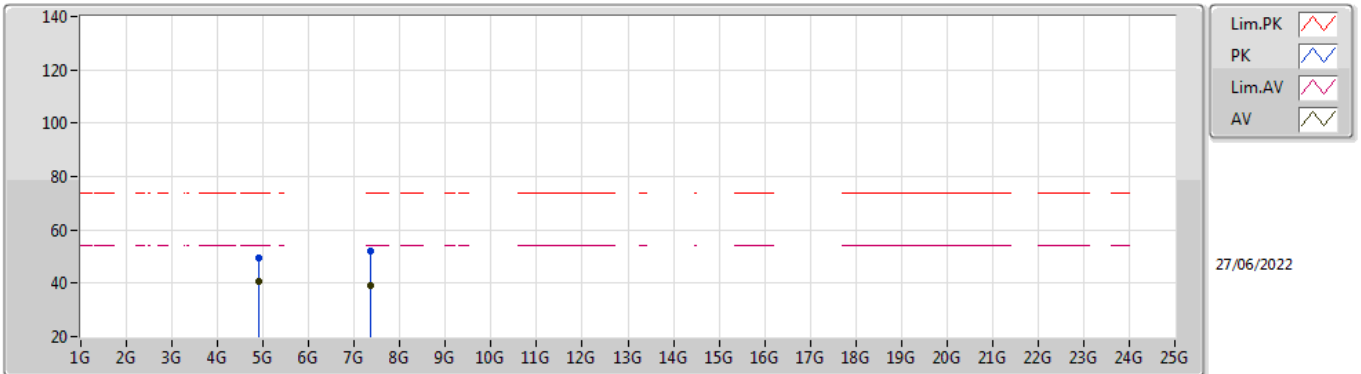


EUT_V_2TX
Setting 21
04-E-G-4

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	4.90416G	46.56	74.00	-27.44	41.91	3	Vertical	329	2.30	-	33.01	4.85	33.21
AV	4.90408G	37.92	54.00	-16.08	33.27	3	Vertical	329	2.30	-	33.01	4.85	33.21
PK	7.36028G	50.15	74.00	-23.85	40.25	3	Vertical	160	1.51	-	37.54	6.08	33.72
AV	7.35962G	37.27	54.00	-16.73	27.37	3	Vertical	160	1.51	-	37.54	6.08	33.72

802.11ax HEW40-BF_Nss1,(MCS0)_2TX

2452MHz_TX



EUT_V_2TX
Setting 21
04-E-G-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	4.90416G	49.74	74.00	-24.26	45.09	3	Horizontal	333	2.06	-	33.01	4.85	33.21
AV	4.90408G	40.59	54.00	-13.41	35.94	3	Horizontal	333	2.06	-	33.01	4.85	33.21
PK	7.35996G	52.04	74.00	-21.96	42.14	3	Horizontal	280	1.69	-	37.54	6.08	33.72
AV	7.35808G	38.92	54.00	-15.08	29.03	3	Horizontal	280	1.69	-	37.53	6.08	33.72



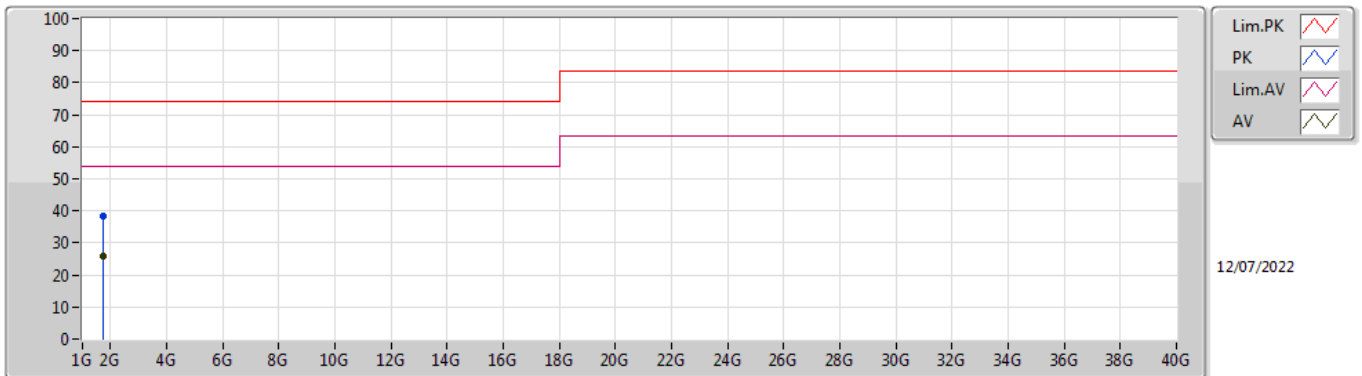
Radiated Emissions above 1GHz_Co-location

Appendix G

Summary

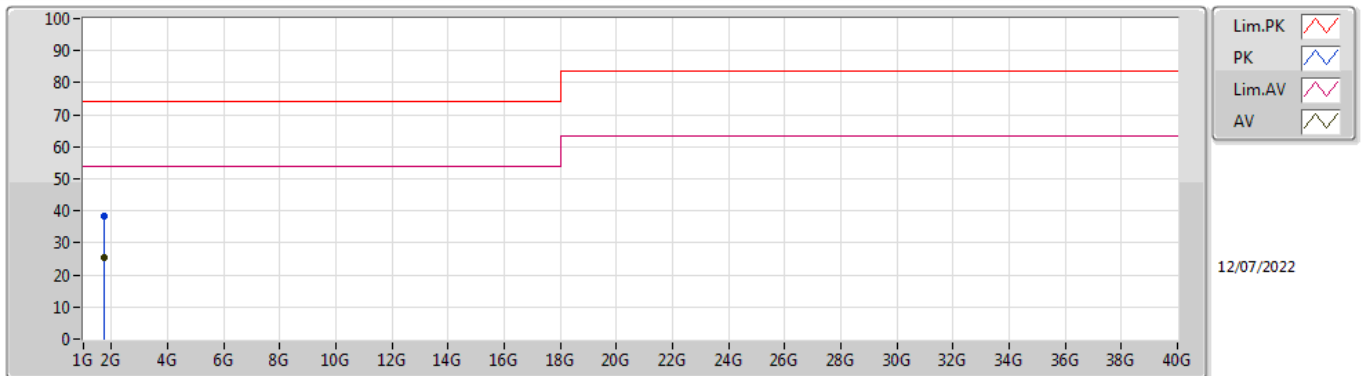
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	AV	1.7609G	25.85	54.00	-28.15	Vertical

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	1.75778G	38.50	74.00	-35.50	-3.68	3	Vertical	255	1.25	-	42.18	26.52	4.40	34.60
AV	1.7609G	25.85	54.00	-28.15	-3.68	3	Vertical	255	1.25	"Worst"	29.53	26.52	4.40	34.60

Mode 1



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
PK	1.7582G	38.41	74.00	-35.59	-3.68	3	Horizontal	111	1.12	-	42.09	26.52	4.40	34.60
AV	1.7614G	25.62	54.00	-28.38	-3.68	3	Horizontal	111	1.12	"Worst"	29.30	26.52	4.40	34.60