

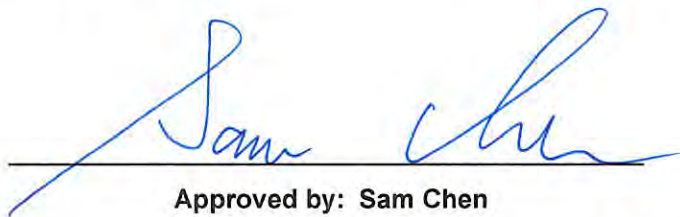


RADIO TEST REPORT

FCC ID : MSQ-RTAX7500
Equipment : Wireless Dual Band WiFi 6 Router
Brand Name : ASUS
Model Name : RT-AX1800S V2, RT-AX3000S
Applicant : ASUSTeK COMPUTER INC.
1F., No. 15, Lide Rd., Beitou, Taipei City 112, Taiwan
Standard : 47 CFR FCC Part 15.247

The product was received on Sep. 28, 2023, and testing was started from Jan. 20, 2024 and completed on Feb. 27, 2024. We, Sporton International Inc. Hsinchu Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

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



Approved by: Sam Chen

Sporton International Inc. Hsinchu Laboratory

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



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TEL : 886-3-656-9065
FAX : 886-3-656-9085
Report Template No.: CB-A10_10 Ver1.3



Summary of Test Result

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

Conformity Assessment Condition:

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

Disclaimer:

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

Reviewed by: Sam Chen**Report Producer: Muse Chan**



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, 1024QAM modulation.
- ♦ HEW20, HEW40 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- ♦ BWch is the nominal channel bandwidth.

**1.1.2 Antenna Information**

Set	Ant.	Port		Brand	Model Name	Antenna Type	Connector	Gain (dBi)
		2.4GHz	5GHz					
1	1	1	N/A	RF Link	U00T01S039N04305	PCB	MHF Plug	Note 1
	2	2	1		U00T01S039N04308		MHF Plug	
	3	N/A	2		U00T01S039N04306		MHF Plug	
	4	N/A	3		U00T01S039N04307		MHF Plug	
2	1	-	N/A		U00T01S016N04814		MHF Plug	
	2	-	-		U00T01S016N04817		MHF Plug	
	3	N/A	-		U00T01S016N04815		MHF Plug	
	4	N/A	-		U00T01S016N04816		MHF Plug	

Note 1:

Set	Ant.	Gain (dBi)				
		WLAN 2.4GHz	WLAN 5GHz			
			UNII 1	UNII 2A	UNII 2C	UNII 3
1 & 2	1	2.57	N/A	N/A	N/A	N/A
	2	2.55	2.54	2.45	2.50	2.57
	3	N/A	2.64	2.64	2.56	2.91
	4	N/A	2.84	2.76	2.94	2.82

Note 2: The above information was declared by manufacturer.

Note 3: The EUTs have two sets of antenna. The differences between set 1 and set 2 are just the length and design of the exterior, so only set 1 was selected to test all the test items.

Note 4: Directional gain information

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

Ex.

Directional Gain (NSS1) formula :

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

$$NSS1(g1,1) = 10^{G1/20} ; NSS1(g1,2) = 10^{G2/20} ; NSS1(g1,3) = 10^{G3/20} ; NSS1(g1,4) = 10^{G4/20}$$

$$g_{j,k} = (NSS1(g1,1) + NSS1(g1,2) + NSS1(g1,3) + NSS1(g1,4))^2$$

$$DG = 10 \log[(NSS1(g1,1) + NSS1(g1,2) + NSS1(g1,3) + NSS1(g1,4))^2 / N_{ANT}] \Rightarrow 10$$

$$\log[(10^{G1/20} + 10^{G2/20} + 10^{G3/20} + 10^{G4/20})^2 / N_{ANT}]$$

Where ;

$$2.4G \ G1 = 2.57 \text{ dBi} ; G2 = 2.55 \text{ dBi} ;$$

$$5G \text{ UNII-1} \ G1 = 2.54 \text{ dBi} ; G2 = 2.64 \text{ dBi} ; G3 = 2.84 \text{ dB}$$

$$5G \text{ UNII-2A} \ G1 = 2.45 \text{ dBi} ; G2 = 2.64 \text{ dBi} ; G3 = 2.76 \text{ dB}$$

$$5G \text{ UNII-2C} \ G1 = 2.50 \text{ dBi} ; G2 = 2.56 \text{ dBi} ; G3 = 2.94 \text{ dB}$$

$$5G \text{ UNII-3} \ G1 = 2.57 \text{ dBi} ; G2 = 2.91 \text{ dBi} ; G3 = 2.82 \text{ dB}$$

$$2.4G \ DG = 5.57 \text{ dBi}$$

$$5G \text{ UNII-1} \ DG = 7.54 \text{ dBi}$$

$$5G \text{ UNII-2A} \ DG = 7.39 \text{ dBi}$$

$$5G \text{ UNII-2C} \ DG = 7.44 \text{ dB}$$

$$5G \text{ UNII-3} \ DG = 7.54 \text{ dBi}$$

Note 5: For 2.4GHz function:

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

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

Port 1 and Port 2 could transmit/receive simultaneously.

For 5GHz function:

For IEEE 802.11 a/n/ac/ax (3TX/3RX):

Port 1~3 can be used as transmitting/receiving antenna.

Port 1~3 could transmit/receive simultaneously.

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11b_Nss 1,(1D)	0.972	0.12	10.525m	100
802.11g_Nss 1,(6D)	0.983	0.07	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
802.11ax HEW20-BF_Nss 1,(M0)	0.924	0.34	3.788m	300
802.11ax HEW40-BF_Nss 1,(M0)	0.861	0.65	1.925m	1k

Note:

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

1.1.4 EUT Operational Condition

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

Note: The above information was declared by manufacturer.

1.1.5 Table for Multiple Listing

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

Model Name	Description
RT-AX1800S V2	All the models are identical, the different model names served as strategy for marketing.
RT-AX3000S	

Note 1: From the above models, model: RT-AX1800S V2 was selected as representative model for the test and its data was recorded in this report.

Note 2: The above information was declared by manufacturer.

1.1.6 Table for EUT Information

EUT	Equipped Antenna
EUT 1	Set 1
EUT 2	Set 2

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

Note 2: The above information was declared by manufacturer.

**1.1.7 Table for EUT Supports Function**

Function	Support Type
AP Router	Master
Bridge	Slave without radar detection
Repeater	Master
Mesh	Master

Note 1: The AP Router (Master) mode was tested and recorded in this test report.

Note 2: The above information was declared by manufacturer.



1.2 Applicable Standards

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

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

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

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

1.3 Testing Location Information

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

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
RF Conducted	TH01-CB	Eason Chen	21.4-23 / 65-70	Jan. 27, 2024~ Feb. 07, 2024
Radiated Below 1G	03CH03-CB	Stim Sung	22.7-23.8 / 56-59	Jan. 20, 2024~ Feb. 26, 2024
	03CH05-CB		21.9-22.4 / 55-58	
Radiated Above 1G	03CH01-CB		21.6-22.7 / 56-59	
Radiated co-location emission	03CH03-CB		22.7-23.8 / 56-59	
AC Conduction	CO01-CB	Peter Wu	22-23 / 58-59	Feb. 27, 2024

1.4 Measurement Uncertainty

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

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	3.4 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.1 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.1 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.2 dB	Confidence levels of 95%
Conducted Emission	3.1 dB	Confidence levels of 95%
Output Power Measurement	0.8 dB	Confidence levels of 95%
Power Density Measurement	3.1 dB	Confidence levels of 95%
Bandwidth Measurement	2.2%	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

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

Note:

- ♦ HEW20 / HEW40 covers HT20 / HT40 / VHT20 / VHT40 due to similar modulation. The power setting for HT20 / HT40 / VHT20 / VHT40 is the same or lower than HEW20 / HEW40.
- ♦ The EUT supports non-beamforming and beamforming modes. After evaluating, the beamforming mode 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 1 + Adapter 1 + RJ-45 cable 1
2	EUT 1 + Adapter 2 + RJ-45 cable 1
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
Test Condition	Conducted measurement at transmit chains
Operating Mode	
1	EUT 1

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emissions in Restricted Frequency Bands
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	CTX
	After evaluating, EUT in Y axis was the worst case from radiated emission above 1GHz, so the measurement will follow this same test configuration.
1	EUT 1 in Y axis + Adapter 1 + RJ-45 cable 1_WLAN 2.4GHz
2	EUT 1 in Y axis + Adapter 2 + RJ-45 cable 1_WLAN 2.4GHz
Mode 1 has been evaluated to be the worst case among Mode 1~2, thus measurement for Mode 3 will follow this same test mode.	
3	EUT 1 in Y axis + Adapter 1 + RJ-45 cable 1_WLAN 5GHz
Mode 3 has been evaluated to be the worst case among Mode 1~3, thus measurement for Mode 4 will follow this same test mode.	
4	EUT 1 in Y axis + Adapter 1 + RJ-45 cable 2_WLAN 5GHz
For operating mode 3 is the worst case and it was record in this test report.	



Operating Mode > 1GHz	CTX
	After evaluating, EUT in Y axis was the worst case, so the measurement will follow this same test configuration.
1	EUT 1 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
	After evaluating, EUT in Y axis was the worst case from radiated emission above 1GHz, so the measurement will follow this same test configuration.
1	EUT 1 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.: FA382313 for Co-location RF Exposure Evaluation.	

2.3 EUT Operation during Test

For CTX Mode:

non-beamforming mode:

The EUT was programmed to be in continuously transmitting mode.

beamforming mode:

For Conducted Mode:

The EUT was programmed to be in continuously transmitting mode.

For Radiated Mode:

During the test, the following programs under Win7 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 [ver 6.1.7601].
3. Executed "Lantest.exe" to link with the remote workstation to transmit and receive packet by Client and transmit duty cycle no less than 98%.

For Normal Link Mode:

During the test, the EUT operation to normal function.



2.4 Accessories

Accessories			
Equipment Name	Brand Name	Model Name	Rating
Adapter 1	Frecom	F18L10-120150SPAU	Input: 100-240V~50/60Hz, 0.6A Output: 12.0V, 1.5A, 18.0W
Adapter 2	AMC	AD-0181200150US-1	Input: 100-240V~50/60Hz,0.6A Output: 12V, 1.5A
Others			
RJ-45 cable 1*1: Black, Non-shielded, 1.5m			
RJ-45 cable 2*1: Blue, Non-shielded, 1m			

2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	WAN NB	DELL	E6430	N/A
B	LAN1 NB	DELL	E6430	N/A
C	LAN4 NB	DELL	E6430	N/A
D	2.4G NB	DELL	E6430	N/A
E	5G NB	DELL	E6430	N/A

For Radiated (below 1GHz) and Radiated (above 1GHz) <Non-beamforming mode>:

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

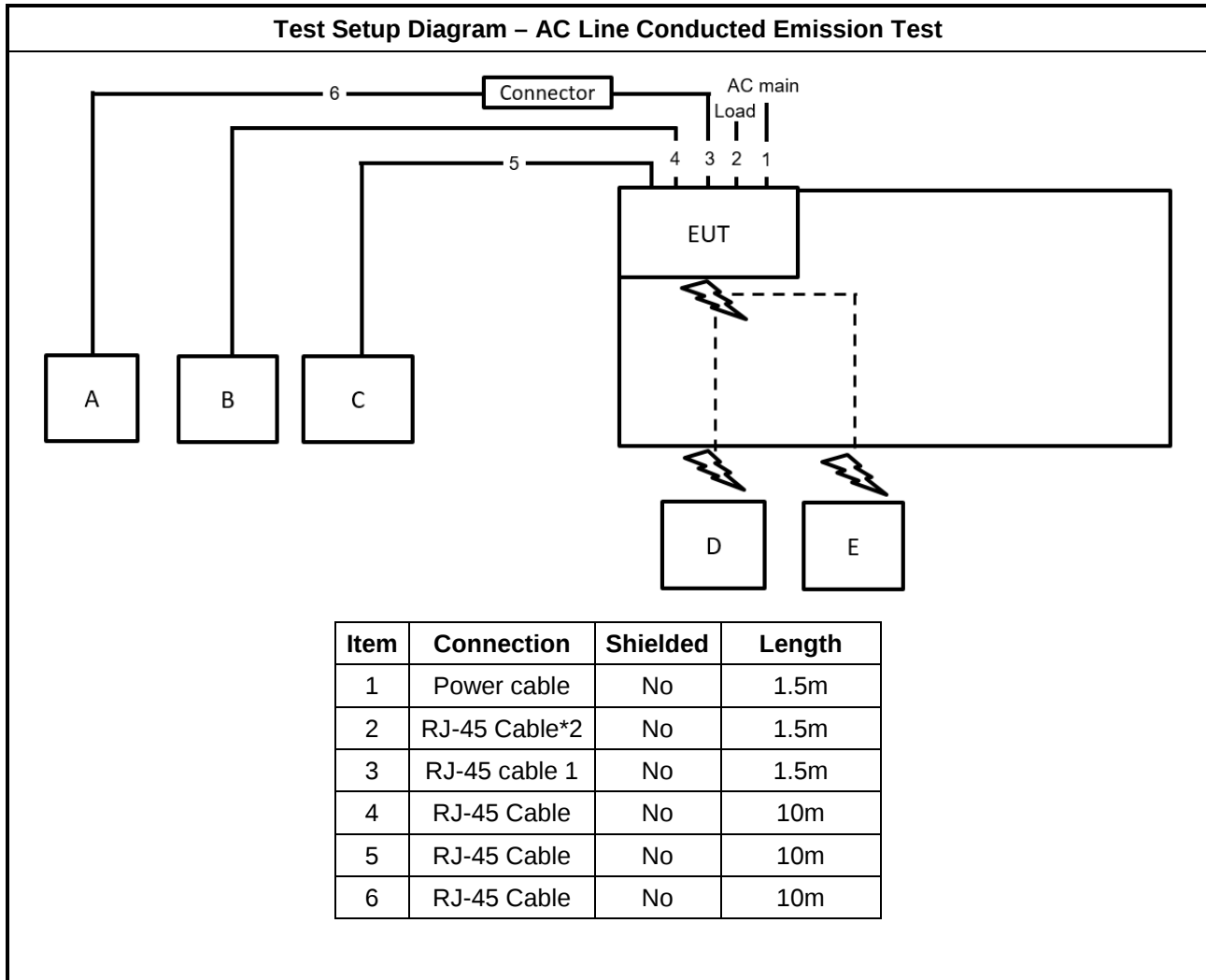
For Radiated (above 1GHz) <Beamforming mode>:

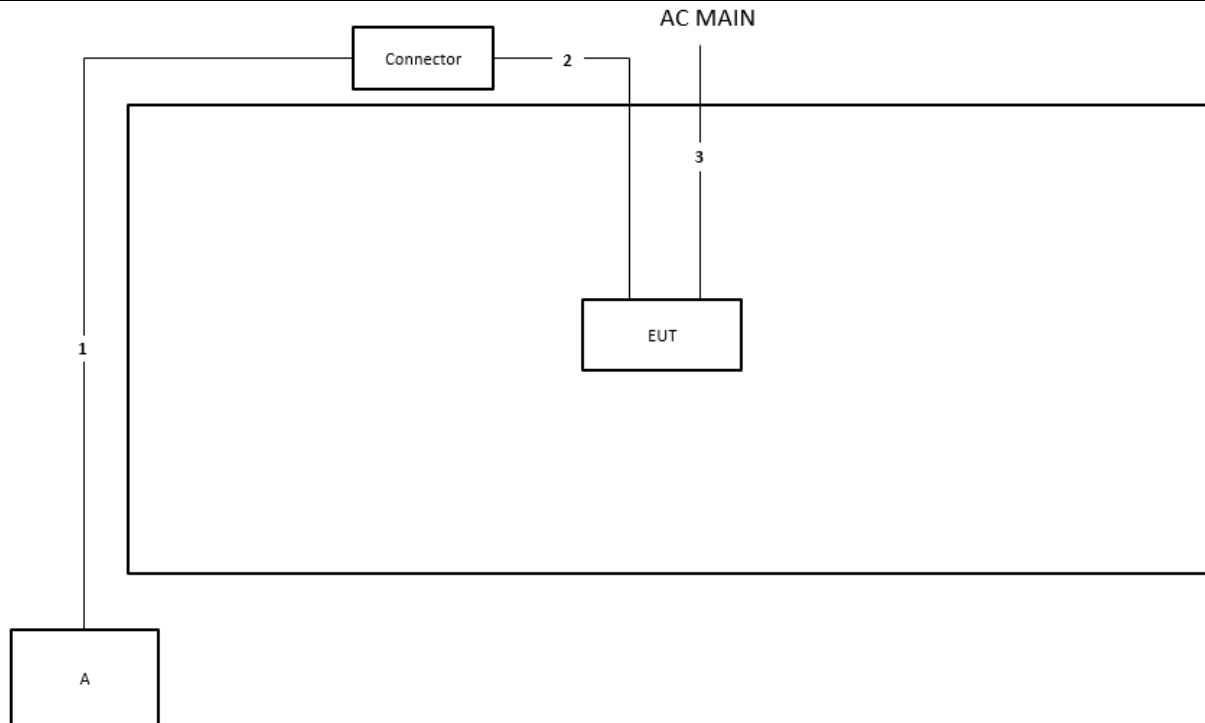
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E4300	N/A
B	Client	ASUS	RT-AX57M	N/A
C	NB	DELL	E4300	N/A

**For RF Conducted:**

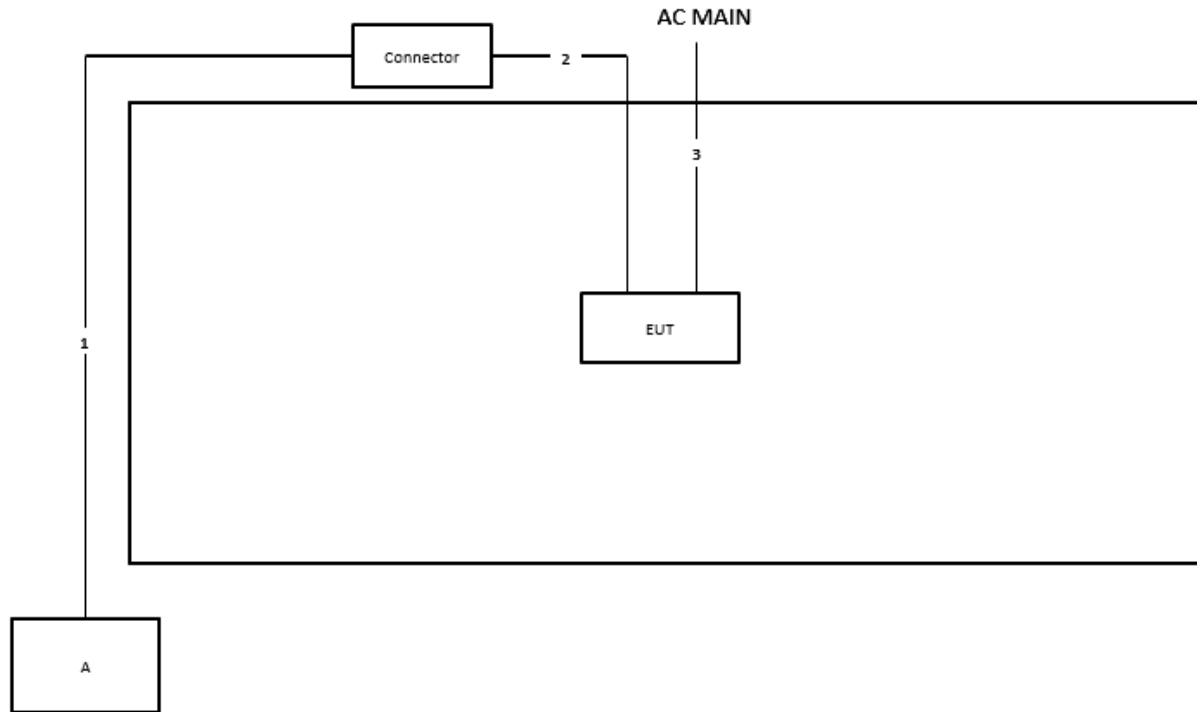
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A
B	Client	ASUS	RT-AX57M	N/A

2.6 Test Setup Diagram

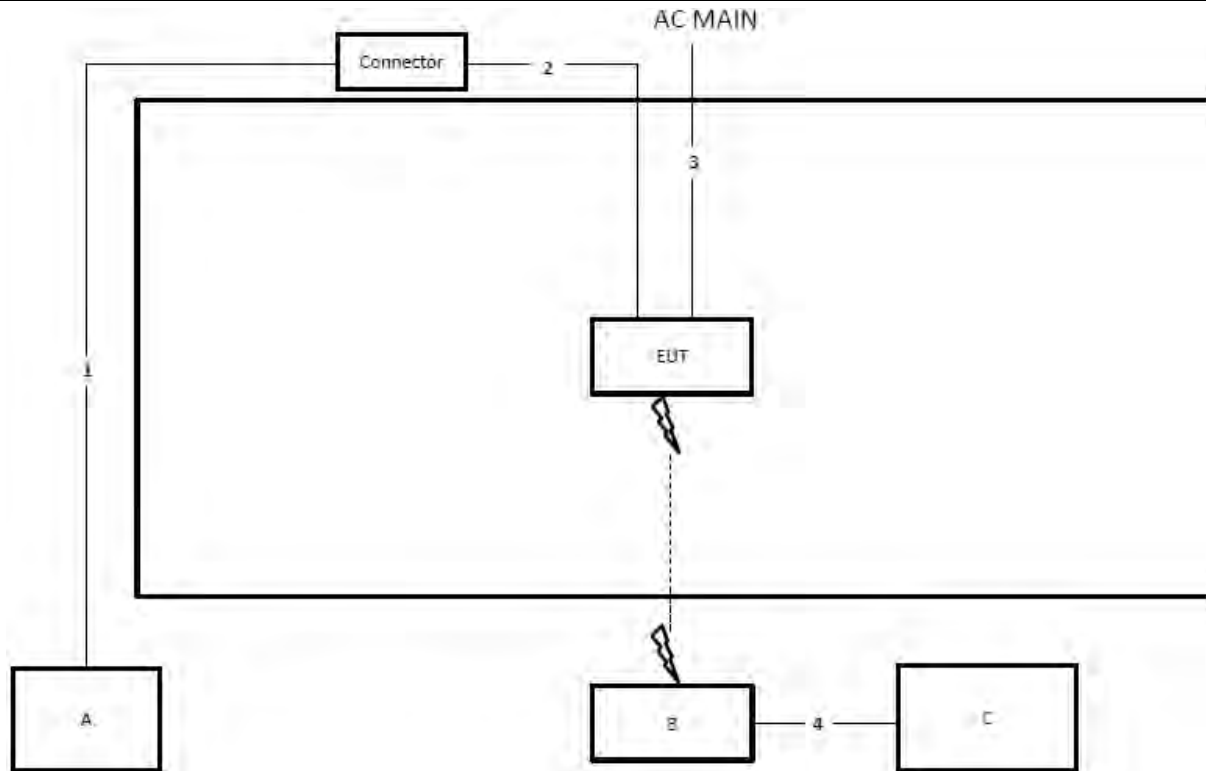


Test Setup Diagram - Radiated Test < 1GHz


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

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


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

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


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

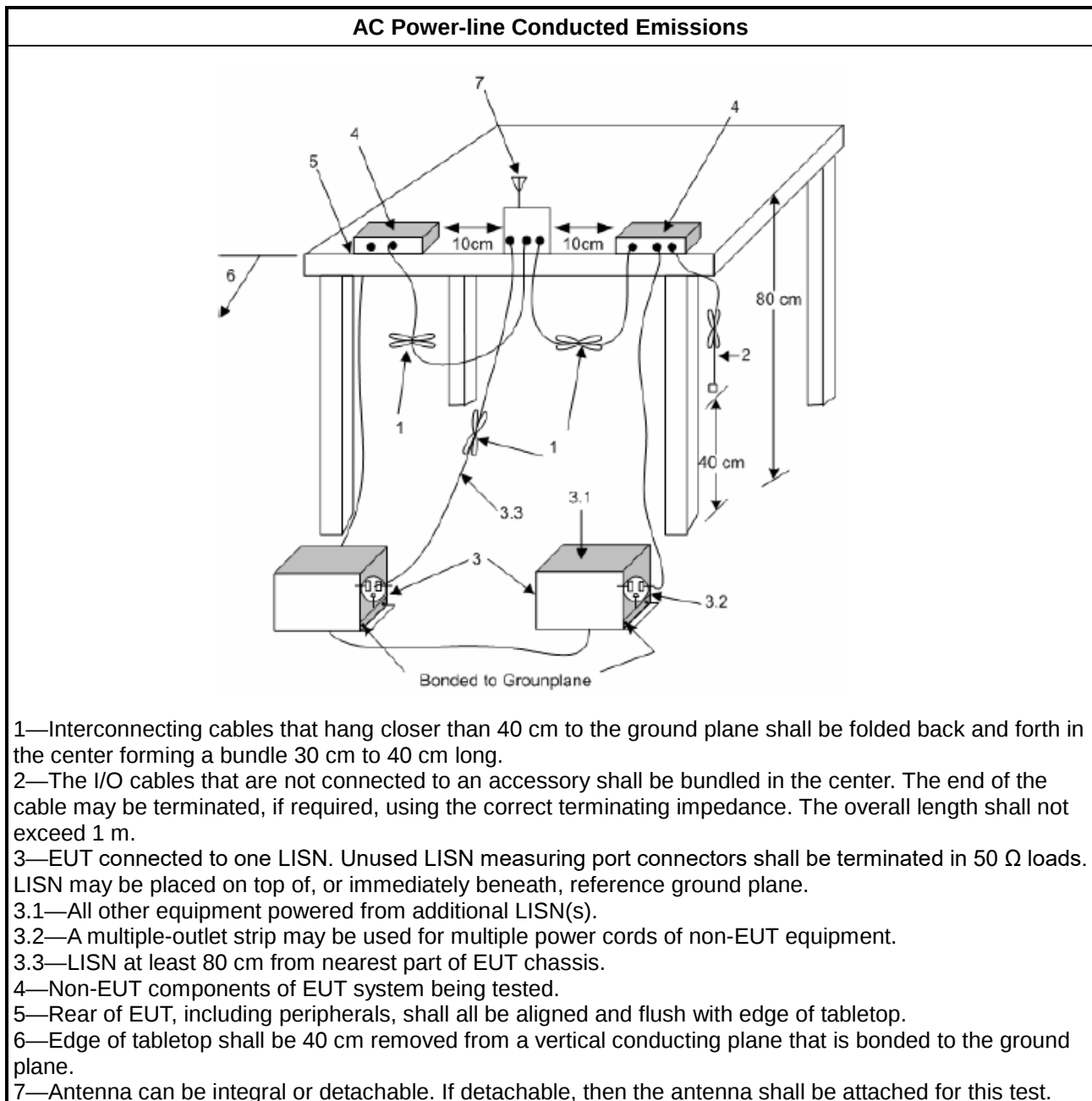
3.1.2 Measuring Instruments

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.

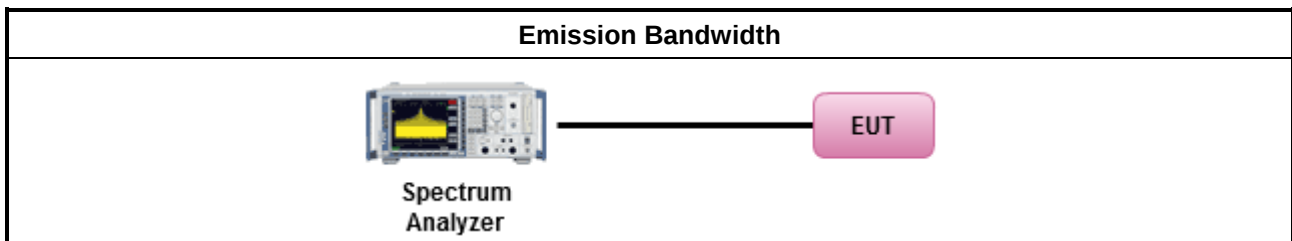
3.2.2 Measuring Instruments

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.	

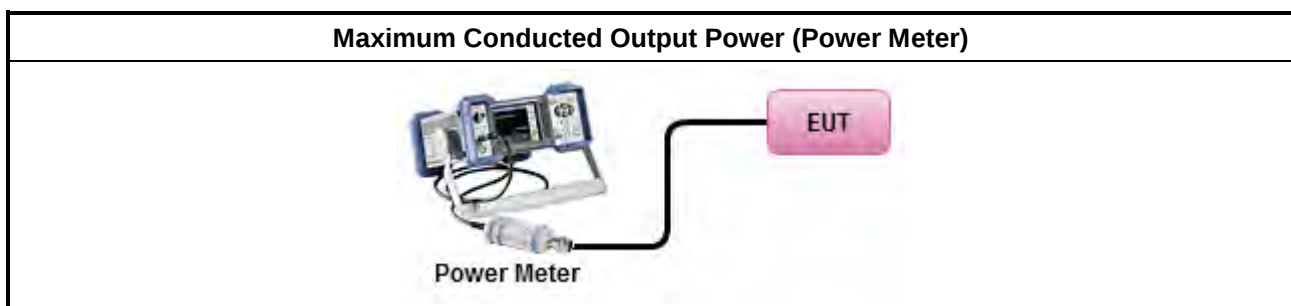
3.3.2 Measuring Instruments

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

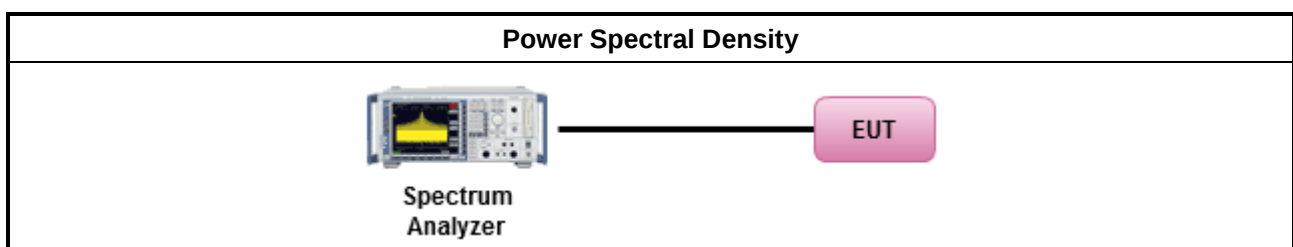
3.4.2 Measuring Instruments

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.	

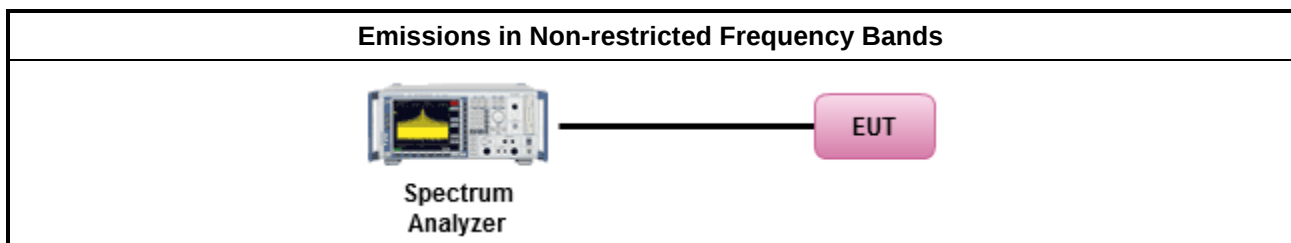
3.5.2 Measuring Instruments

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

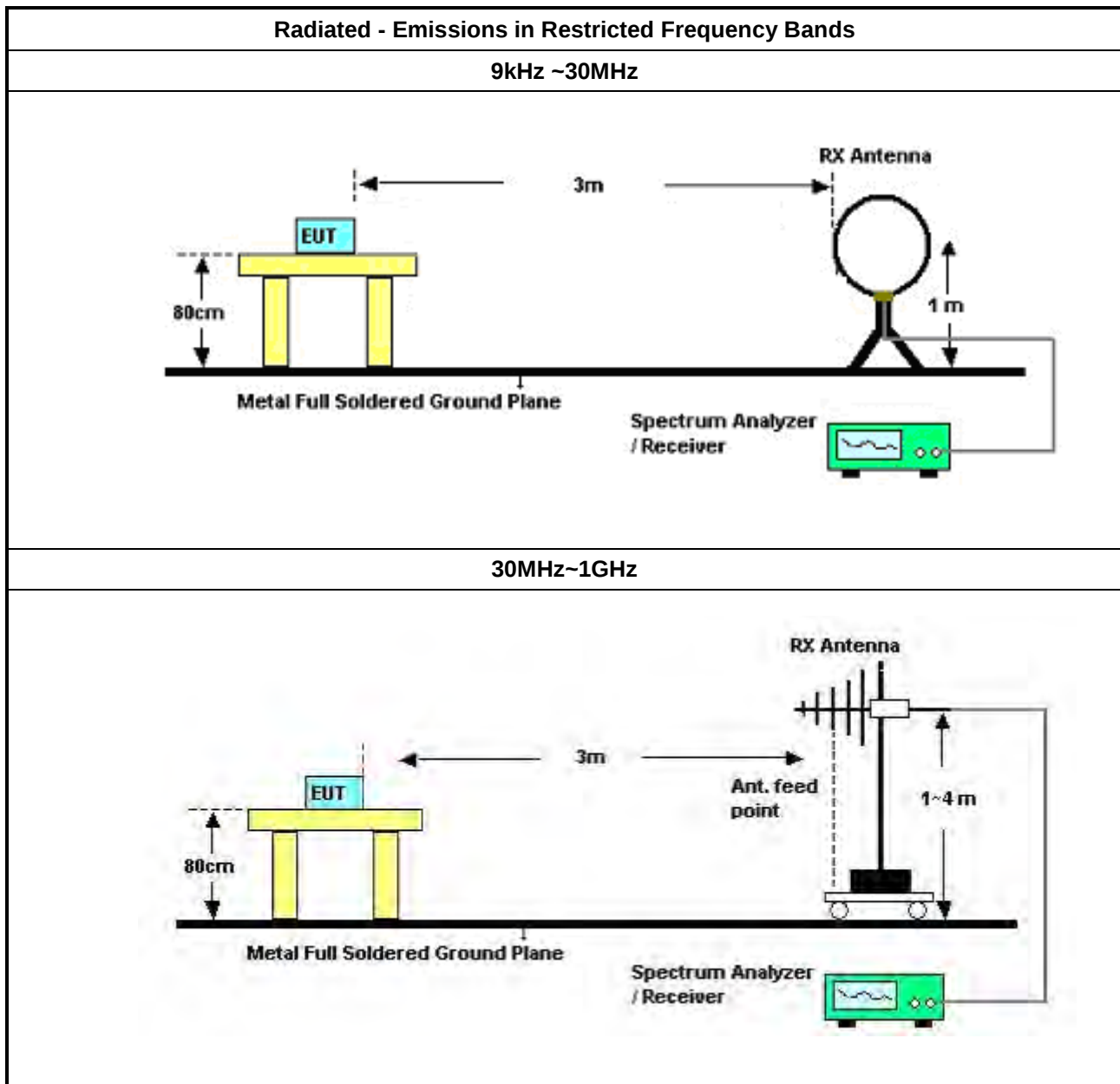
Refer a test equipment and calibration data table in this test report.

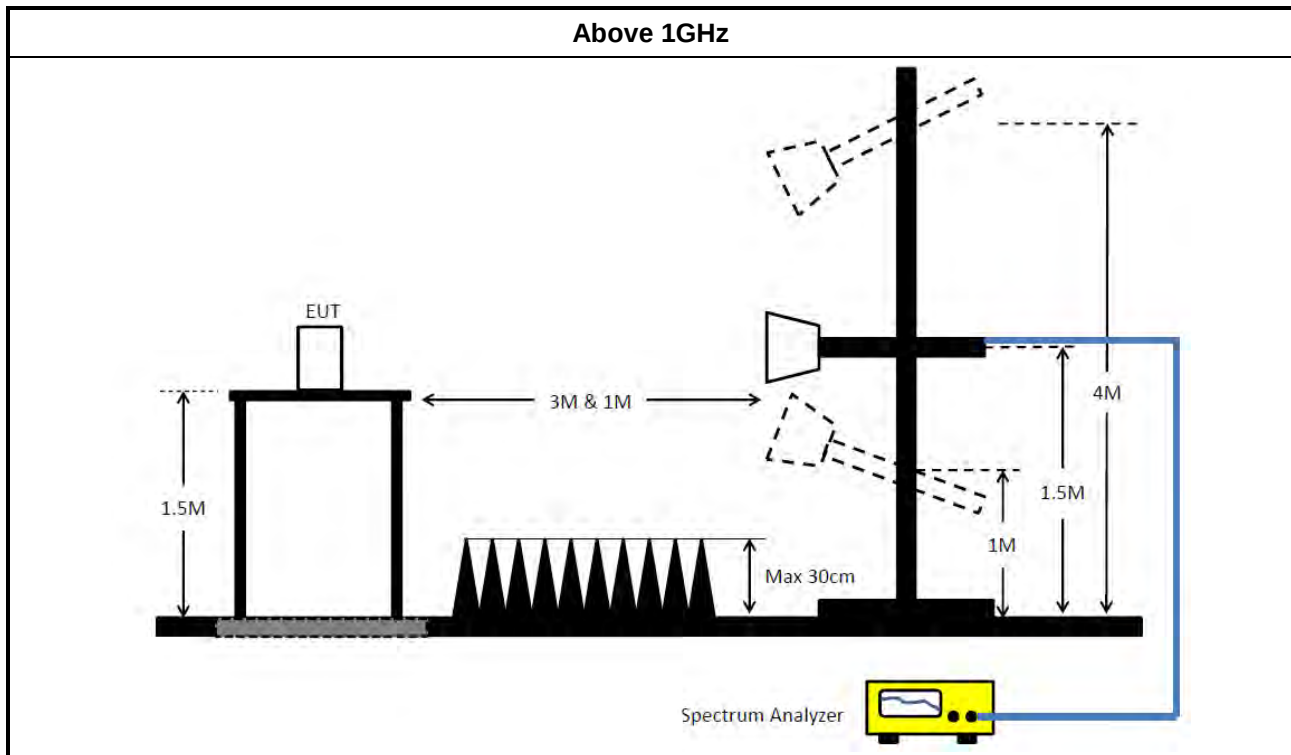


3.6.3 Test Procedures

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	MY52260140	9kHz ~ 8.4GHz	May 18, 2023	May 17, 2024	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Feb. 19, 2024	Feb. 18, 2025	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Apr. 27, 2023	Apr. 26, 2024	Conduction (CO01-CB)
Pulse Limiter	Rohde&Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Feb. 08, 2024	Feb. 07, 2025	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	Oct. 17, 2023	Oct. 16, 2024	Conduction (CO01-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
Loop Antenna	Teseq	HLA 6121	65417	9kHz - 30 MHz	Oct. 13, 2023	Oct. 12, 2024	Radiation (03CH03-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH03-CB	30 MHz ~ 1 GHz	Jan. 18, 2024	Jan. 17, 2025	Radiation (03CH03-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH03-CB	1GHz ~18GHz 3m	May 04, 2023	May 03, 2024	Radiation (03CH03-CB)
Bilog Antenna with 6dB Attenuator	Schaffner & EMC	CBL6112B&N-6-06	2888&AT-N0605	30MHz ~ 1GHz	Jan. 18, 2024	Jan. 17, 2025	Radiation (03CH03-CB)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1370	1GHz~18GHz	Jun. 30, 2023	Jun. 29, 2024	Radiation (03CH03-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Sep. 04, 2023	Sep. 03, 2024	Radiation (03CH03-CB)
Pre-Amplifier	Agilent	8447D	2944A10259	9kHz ~ 1.3GHz	Jan. 08, 2024	Jan. 07, 2025	Radiation (03CH03-CB)
Pre-Amplifier	Agilent	8449B	3008A02097	1GHz ~ 26.5GHz	Jun. 30, 2023	Jun. 29, 2024	Radiation (03CH03-CB)
Pre-Amplifier	SGH	SGH184	20221107-3	18GHz ~ 40GHz	Nov. 24, 2023	Nov. 23, 2024	Radiation (03CH03-CB)
Spectrum Analyzer	R&S	FSP40	100019	9kHz ~ 40GHz	Jun. 12, 2023	Jun. 11, 2024	Radiation (03CH03-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	Jun. 13, 2023	Jun. 12, 2024	Radiation (03CH03-CB)
RF Cable-low	Woken	RG402	Low Cable-02+29	30MHz ~ 1GHz	Nov. 07, 2023	Nov. 06, 2024	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-20+29	1GHz ~ 18GHz	Nov. 07, 2023	Nov. 06, 2024	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-29	1GHz ~ 18GHz	Nov. 07, 2023	Nov. 06, 2024	Radiation (03CH03-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Jan. 11, 2024	Jan. 10, 2025	Radiation (03CH03-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH03-CB)
Loop Antenna	Teseq	HLA 6121	65417	9kHz - 30 MHz	Oct. 13, 2023	Oct. 12, 2024	Radiation (03CH05-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH05-CB	30 MHz ~ 1 GHz	Aug. 02, 2023	Aug. 01, 2024	Radiation (03CH05-CB)
Bilog Antenna with 6dB Attenuator	TESEQ & EMCI	CBL 6112D & N-6-06	35236 & AT-N0610	30MHz ~ 2GHz	Mar. 24, 2023	Mar. 23, 2024	Radiation (03CH05-CB)
Amplifier	EMCI	EMC330N	980331	20MHz ~ 3GHz	May 03, 2023	May 02, 2024	Radiation (03CH05-CB)
Spectrum Analyzer	R&S	FSP40	100304	9kHz ~ 40GHz	Apr. 18, 2023	Apr. 17, 2024	Radiation (03CH05-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	Jun. 13, 2023	Jun. 12, 2024	Radiation (03CH05-CB)
RF Cable-low	Woken	RG402	Low Cable-04+23	30MHz~1GHz	Dec. 06, 2023	Dec. 05, 2024	Radiation (03CH05-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH05-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH01-CB	1GHz ~18GHz 3m	May 05, 2023	May 04, 2024	Radiation (03CH01-CB)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120D-01816	1GHz~18GHz	Dec. 20, 2023	Dec. 19, 2024	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Sep. 04, 2023	Sep. 03, 2024	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02121	1GHz ~ 26.5GHz	May 18, 2023	May 17, 2024	Radiation (03CH01-CB)
Pre-Amplifier	SGH	SGH184	20221107-3	18GHz ~ 40GHz	Nov. 24, 2023	Nov. 23, 2024	Radiation (03CH01-CB)
Signal Analyzer	R&S	FSV3044	101437	10kHz ~ 44GHz	Nov. 28, 2023	Nov. 27, 2024	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-16	1 GHz ~ 18 GHz	Nov. 06, 2023	Nov. 05, 2024	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-16+17	1 GHz ~ 18 GHz	Nov. 06, 2023	Nov. 05, 2024	Radiation (03CH01-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Jan. 11, 2024	Jan. 10, 2025	Radiation (03CH01-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	May 29, 2023	May 28, 2024	Conducted (TH01-CB)
Switch	SPTCB	SP-SWI	SWI-01	1~26.5 GHz	Oct. 03, 2023	Oct. 02, 2024	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-06	1 GHz – 18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-07	1 GHz – 18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH01-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-08	1 GHz – 18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-09	1 GHz – 18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz – 18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-30	1 GHz – 18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH01-CB)
Power Sensor	Anritsu	MA2411B	1339408	300MHz~40GHz	Sep. 12, 2023	Sep. 11, 2024	Conducted (TH01-CB)
Power Meter	Anritsu	ML2495A	1517009	300MHz~40GHz	Sep. 12, 2023	Sep. 11, 2024	Conducted (TH01-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH01-CB)

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

NCR means Non-Calibration required.



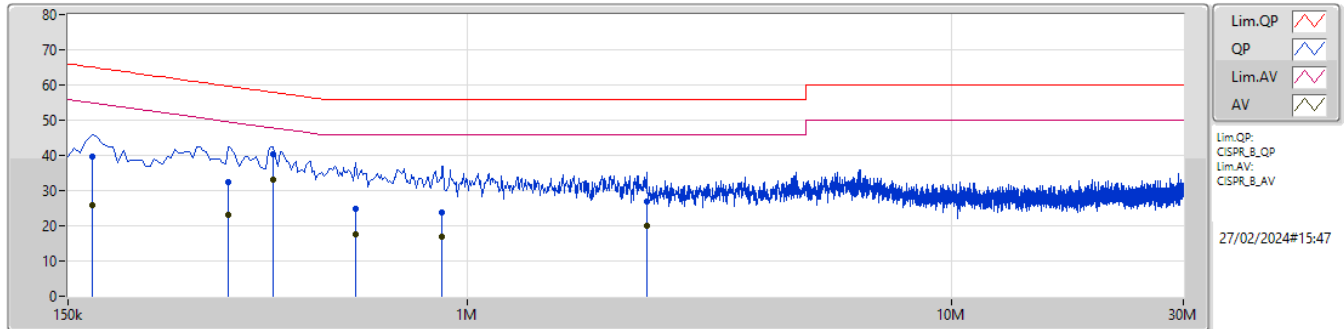
Conducted Emissions at Powerline

Appendix A

Summary

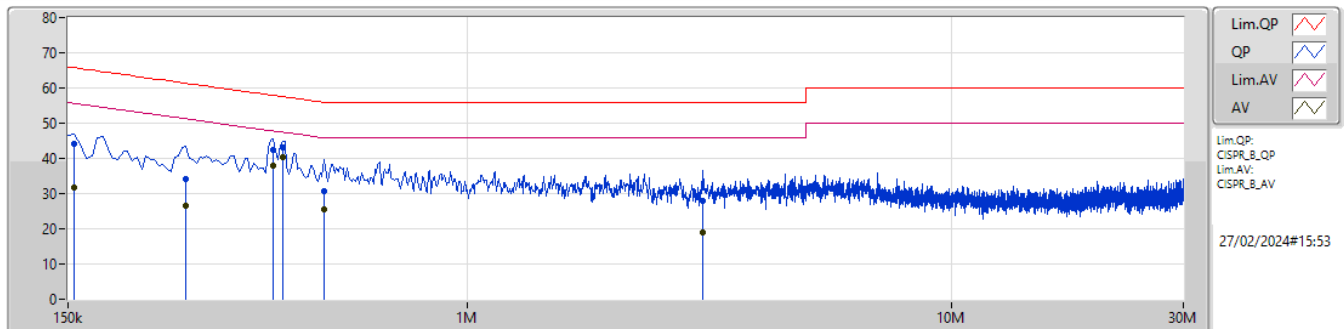
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	415.5k	40.23	47.53	-7.30	Neutral

Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)						
QP	168k	39.54	65.06	-25.52	9.97	Line	-	29.57	0.09	0.02	9.86						
AV	168k	25.92	55.06	-29.14	9.97	Line	-	15.95	0.09	0.02	9.86						
QP	321k	32.51	59.67	-27.16	9.99	Line	-	22.52	0.09	0.02	9.88						
AV	321k	23.10	49.67	-26.57	9.99	Line	-	13.11	0.09	0.02	9.88						
QP	397.5k	40.28	57.91	-17.63	10.00	Line	-	30.28	0.09	0.02	9.89						
AV	397.5k	33.09	47.91	-14.82	10.00	Line	"Worst"	23.09	0.09	0.02	9.89						
QP	586.5k	24.80	56.00	-31.20	10.02	Line	-	14.78	0.10	0.02	9.90						
AV	586.5k	17.57	46.00	-28.43	10.02	Line	-	7.55	0.10	0.02	9.90						
QP	888k	23.96	56.00	-32.04	10.03	Line	-	13.93	0.11	0.01	9.91						
AV	888k	16.89	46.00	-29.11	10.03	Line	-	6.86	0.11	0.01	9.91						
QP	2.346M	26.85	56.00	-29.15	10.13	Line	-	16.72	0.15	0.09	9.89						
AV	2.346M	20.00	46.00	-26.00	10.13	Line	-	9.87	0.15	0.09	9.89						

Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)						
QP	154.5k	44.21	65.75	-21.54	9.95	Neutral	-	34.26	0.07	0.02	9.86						
AV	154.5k	31.82	55.75	-23.93	9.95	Neutral	-	21.87	0.07	0.02	9.86						
QP	262.5k	33.97	61.35	-27.38	9.96	Neutral	-	24.01	0.07	0.02	9.87						
AV	262.5k	26.47	51.35	-24.88	9.96	Neutral	-	16.51	0.07	0.02	9.87						
QP	397.5k	42.48	57.91	-15.43	9.98	Neutral	-	32.50	0.07	0.02	9.89						
AV	397.5k	37.86	47.91	-10.05	9.98	Neutral	-	27.88	0.07	0.02	9.89						
QP	415.5k	43.13	57.53	-14.40	9.98	Neutral	-	33.15	0.07	0.02	9.89						
AV	415.5k	40.23	47.53	-7.30	9.98	Neutral	"Worst"	30.25	0.07	0.02	9.89						
QP	505.5k	30.70	56.00	-25.30	9.99	Neutral	-	20.71	0.07	0.02	9.90						
AV	505.5k	25.45	46.00	-20.55	9.99	Neutral	-	15.46	0.07	0.02	9.90						
QP	3.053M	27.98	56.00	-28.02	10.13	Neutral	-	17.85	0.12	0.11	9.90						
AV	3.053M	19.13	46.00	-26.87	10.13	Neutral	-	9.00	0.12	0.11	9.90						

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	7.925M	13.018M	13M0G1D	6.8M	12.493M
802.11g_Nss1,(6Mbps)_2TX	16.35M	21.878M	21M9D1D	15.45M	16.34M
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	18.875M	19.054M	19M1D1D	13.4M	18.773M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	37.7M	37.764M	37M8D1D	32.8M	37.488M

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

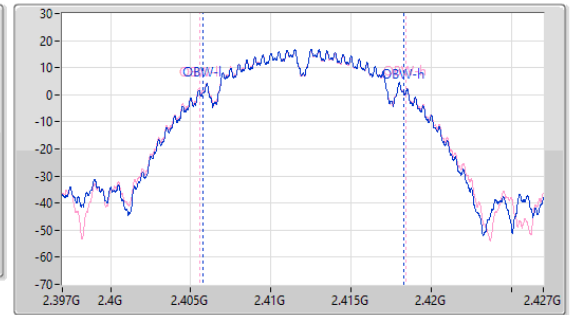
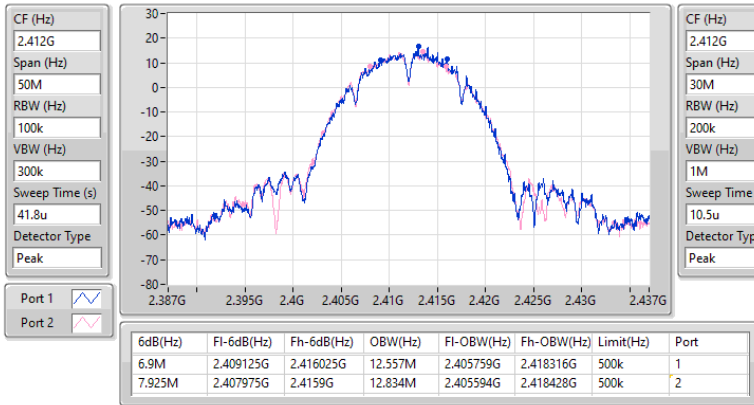
Result

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	6.9M	12.557M	7.925M	12.834M
2437MHz	Pass	500k	7.825M	13.018M	7.8M	12.955M
2462MHz	Pass	500k	7.55M	12.61M	6.8M	12.493M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.3M	16.578M	15.45M	16.474M
2437MHz	Pass	500k	16.35M	19.654M	16.325M	21.878M
2462MHz	Pass	500k	16.325M	16.566M	16.275M	16.34M
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	18.35M	18.839M	18.875M	18.885M
2437MHz	Pass	500k	13.4M	18.928M	18.875M	19.054M
2462MHz	Pass	500k	17.75M	18.773M	15.575M	18.924M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	500k	37.65M	37.764M	37.7M	37.605M
2437MHz	Pass	500k	33.55M	37.488M	32.8M	37.65M
2452MHz	Pass	500k	36.9M	37.635M	37.65M	37.606M

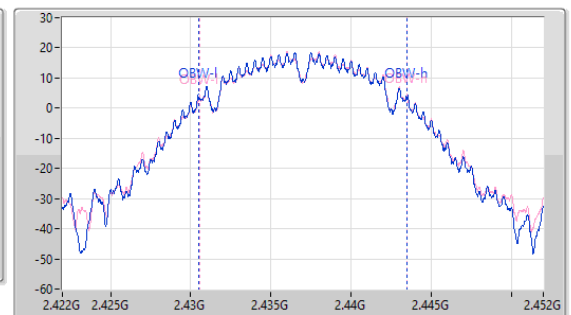
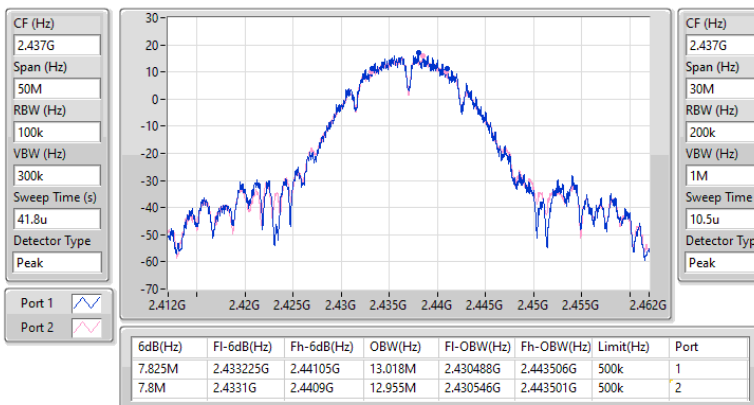
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

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

27/01/2024

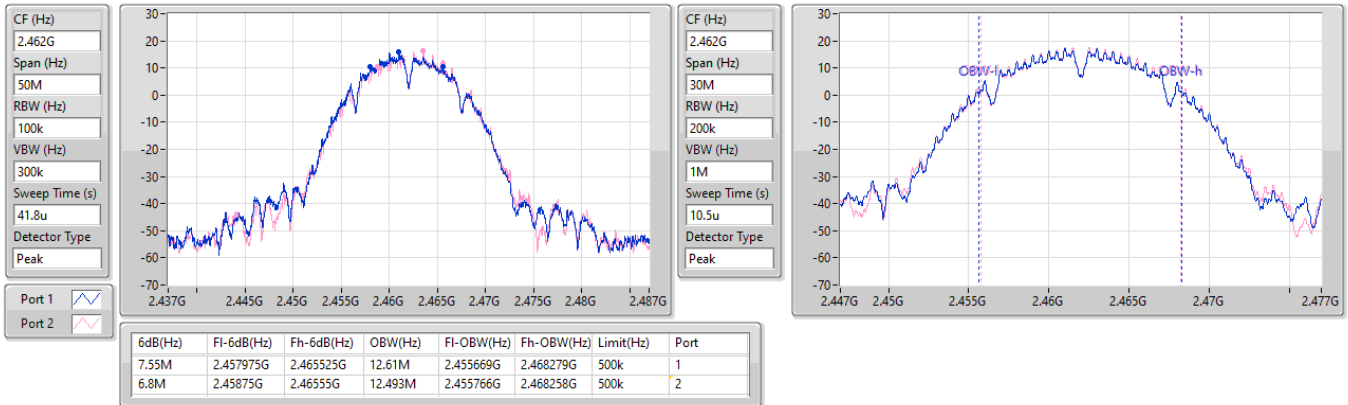

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX
EBW
2437MHz

27/01/2024

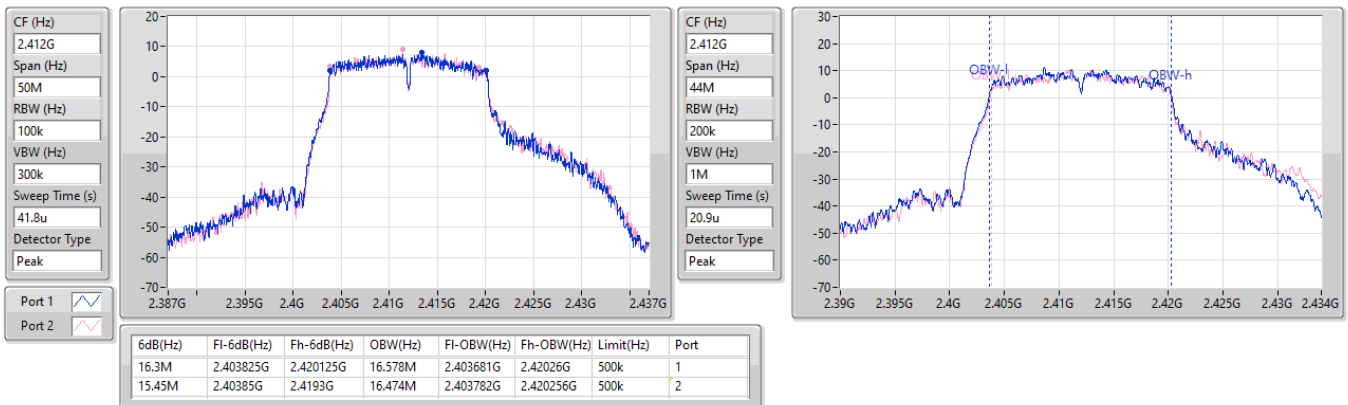


2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX
EBW
2462MHz

27/01/2024


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

27/01/2024

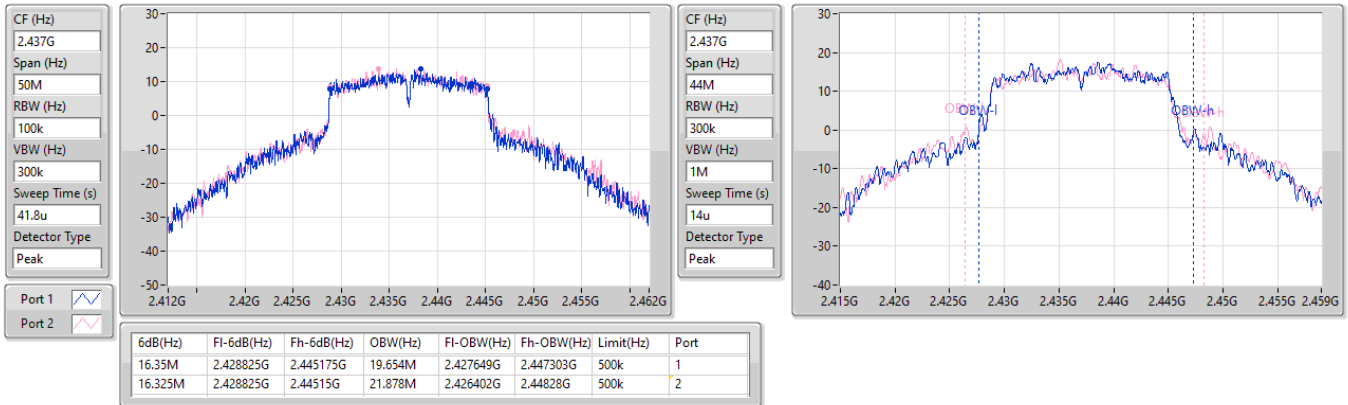


2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX

EBW

2437MHz

27/01/2024

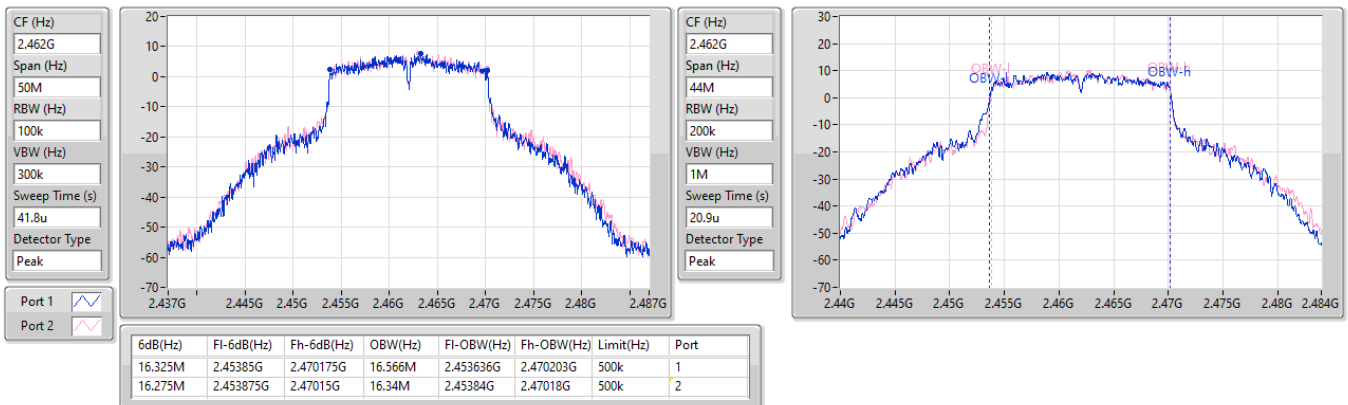


2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX

EBW

2462MHz

27/01/2024

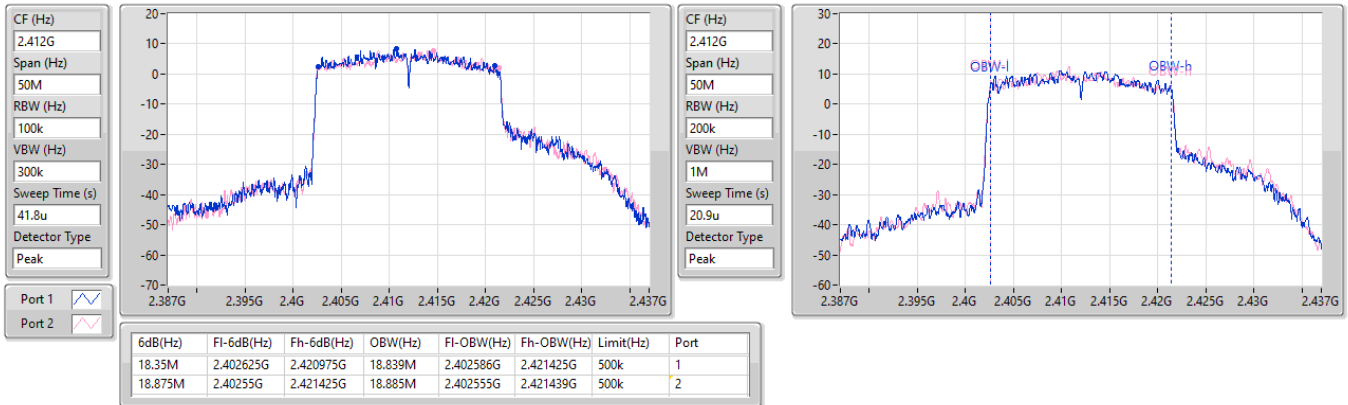


2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

2412MHz

27/01/2024

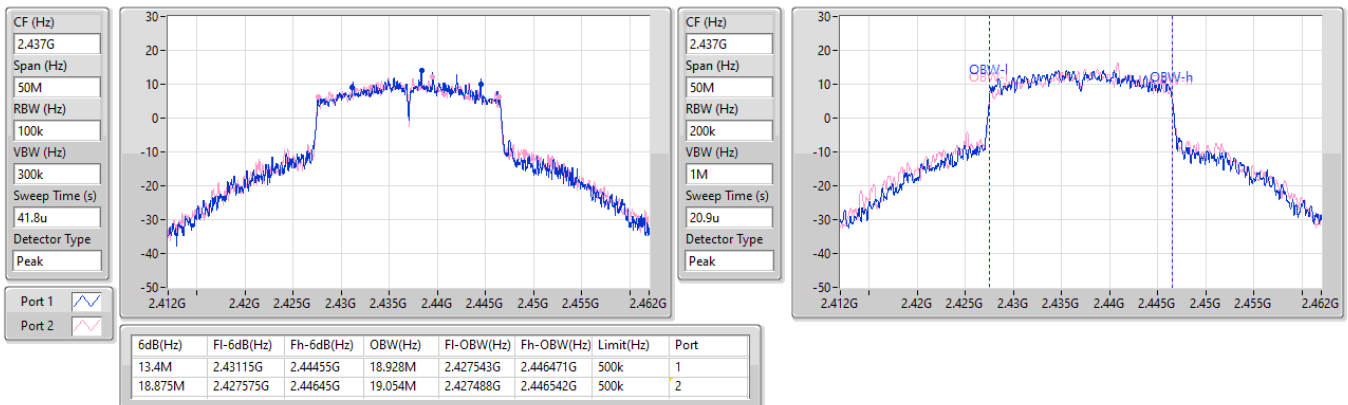


2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

EBW

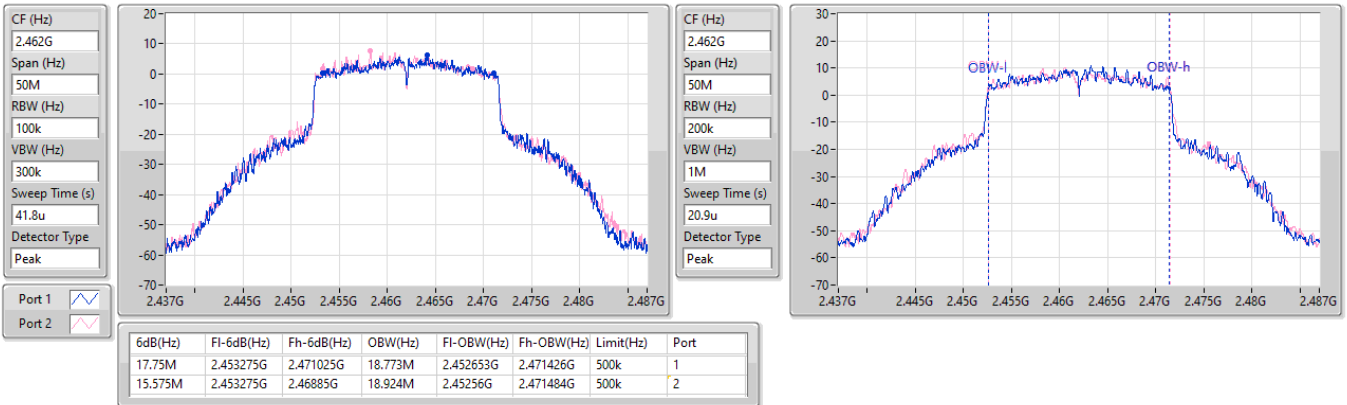
2437MHz

27/01/2024

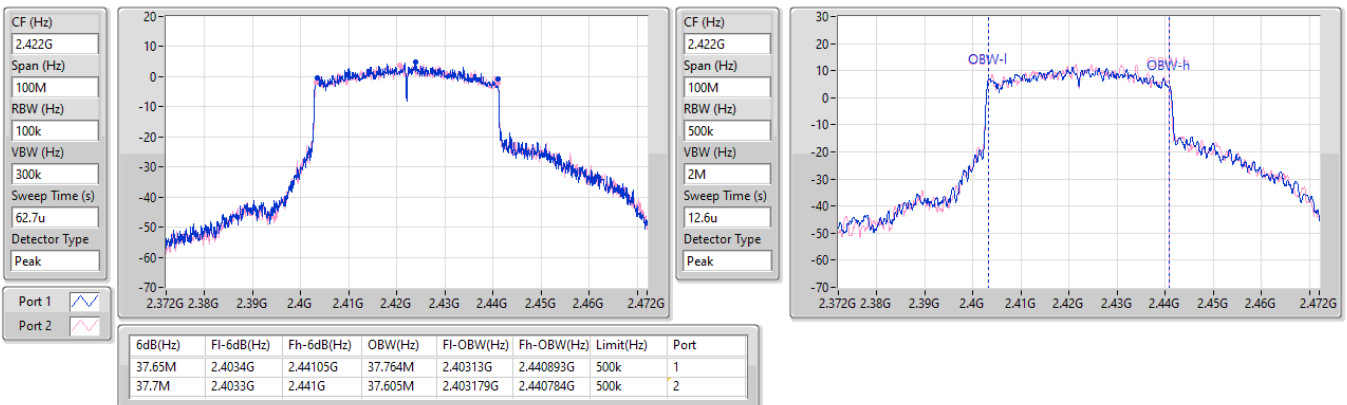


2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX
EBW
2462MHz

27/01/2024

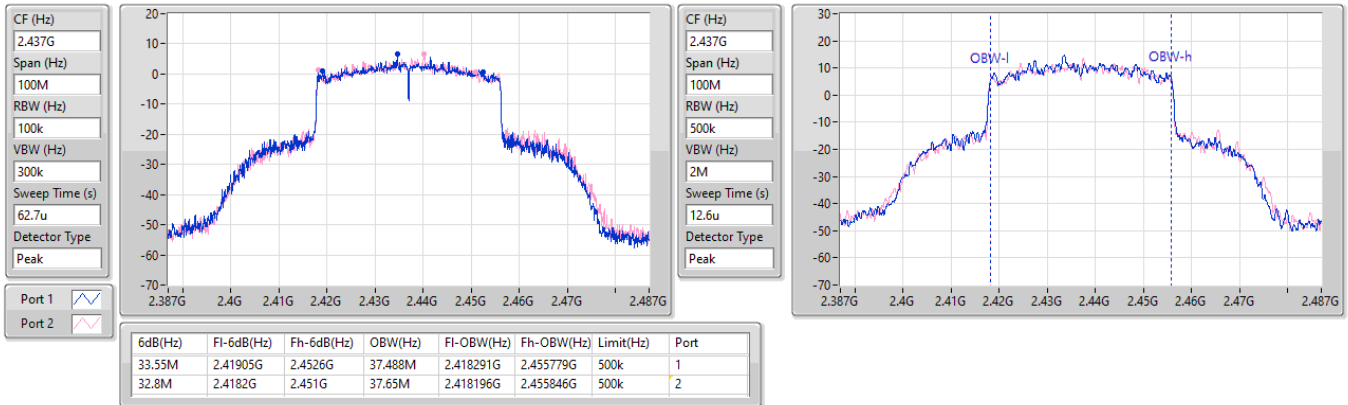

2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX
EBW
2422MHz

27/01/2024

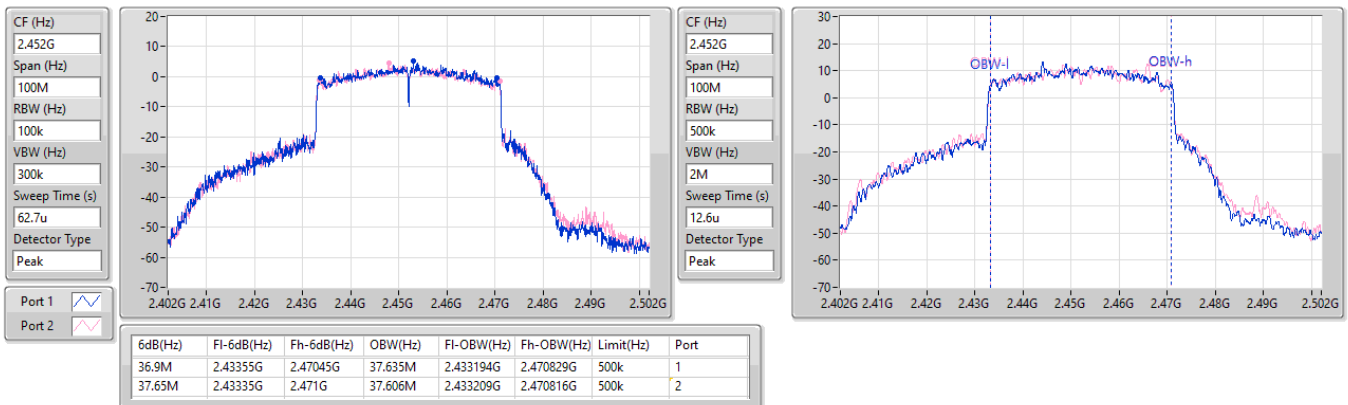


2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX
EBW
2437MHz

27/01/2024


2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX
EBW
2452MHz

27/01/2024





Average Power

Appendix C

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_2TX	29.68	0.92897
802.11g_Nss1,(6Mbps)_2TX	29.98	0.99541
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	28.50	0.70795
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	24.93	0.31117

**Result**

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	2.57	25.21	25.10	28.17	30.00
2417MHz	Pass	2.57	26.35	26.28	29.33	30.00
2437MHz	Pass	2.57	26.63	26.71	29.68	30.00
2457MHz	Pass	2.57	26.42	26.56	29.50	30.00
2462MHz	Pass	2.57	25.49	25.51	28.51	30.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	2.57	21.41	21.42	24.43	30.00
2417MHz	Pass	2.57	23.55	23.57	26.57	30.00
2437MHz	Pass	2.57	26.90	27.03	29.98	30.00
2457MHz	Pass	2.57	23.36	23.56	26.47	30.00
2462MHz	Pass	2.57	21.21	21.26	24.25	30.00
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	5.57	22.30	22.13	25.23	30.00
2417MHz	Pass	5.57	23.27	23.27	26.28	30.00
2437MHz	Pass	5.57	25.43	25.55	28.50	30.00
2457MHz	Pass	5.57	22.87	23.06	25.98	30.00
2462MHz	Pass	5.57	20.24	20.33	23.30	30.00
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	5.57	21.06	21.05	24.07	30.00
2437MHz	Pass	5.57	21.90	21.94	24.93	30.00
2452MHz	Pass	5.57	21.26	21.22	24.25	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	4.85
802.11g_Nss1,(6Mbps)_2TX	3.37
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	0.79
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-5.09

RBW = 3kHz;

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	5.57	1.68	0.67	2.86	8.00
2437MHz	Pass	5.57	2.29	3.72	4.85	8.00
2462MHz	Pass	5.57	1.37	1.87	3.40	8.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	5.57	-4.36	-3.91	-2.03	8.00
2437MHz	Pass	5.57	1.68	2.24	3.37	8.00
2462MHz	Pass	5.57	-4.49	-3.66	-1.61	8.00
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	5.57	-3.81	-4.26	-3.02	8.00
2437MHz	Pass	5.57	-1.40	-1.93	0.79	8.00
2462MHz	Pass	5.57	-5.81	-6.63	-4.77	8.00
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2422MHz	Pass	5.57	-8.95	-8.13	-6.74	8.00
2437MHz	Pass	5.57	-7.93	-7.62	-5.09	8.00
2452MHz	Pass	5.57	-8.69	-8.24	-6.72	8.00

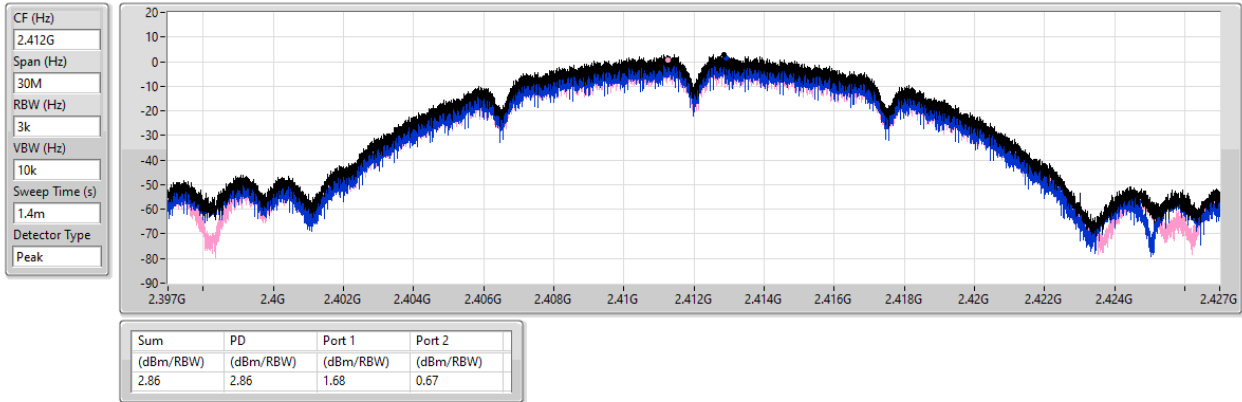
DG = Directional Gain; RBW = 3kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

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

PSD

2412MHz

27/01/2024

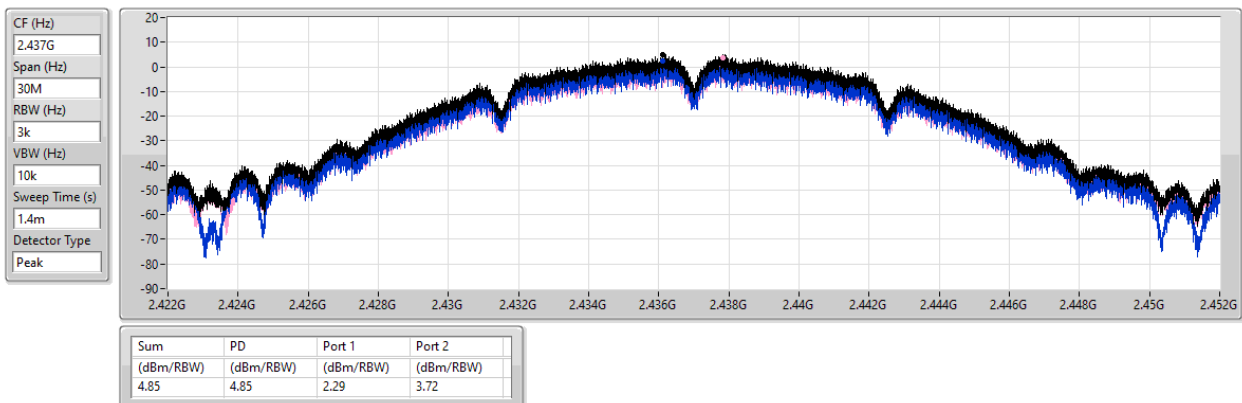


2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX

PSD

2437MHz

27/01/2024

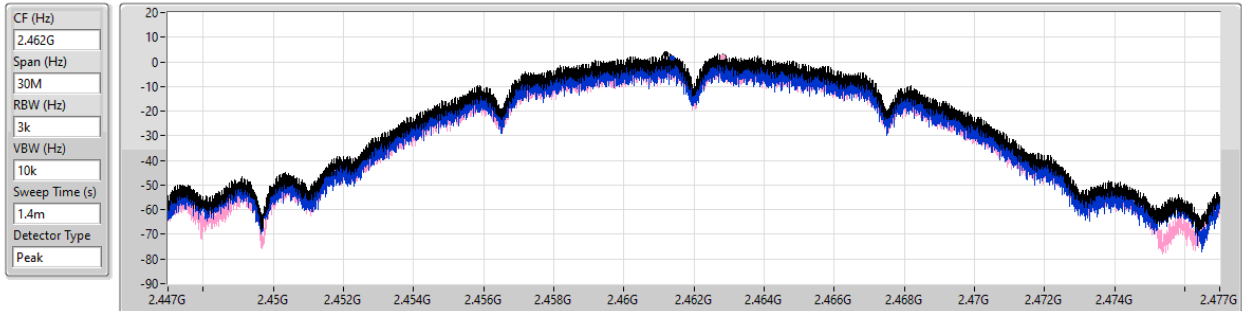


2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX

PSD

2462MHz

27/01/2024

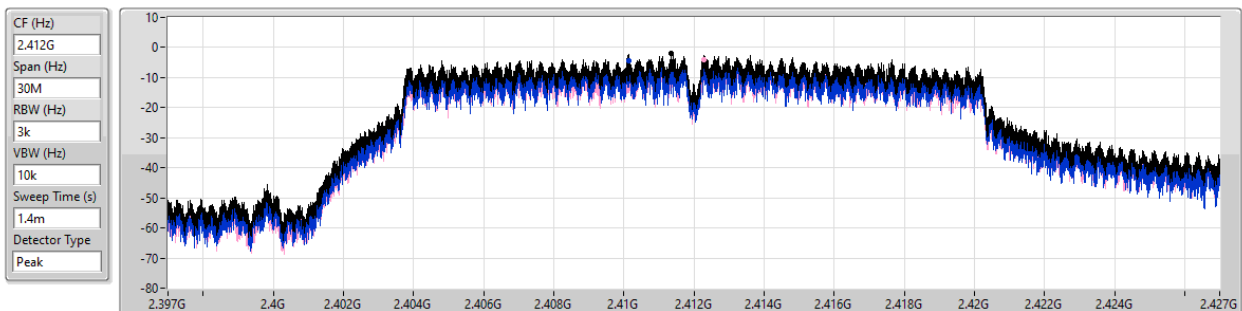


2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX

PSD

2412MHz

27/01/2024

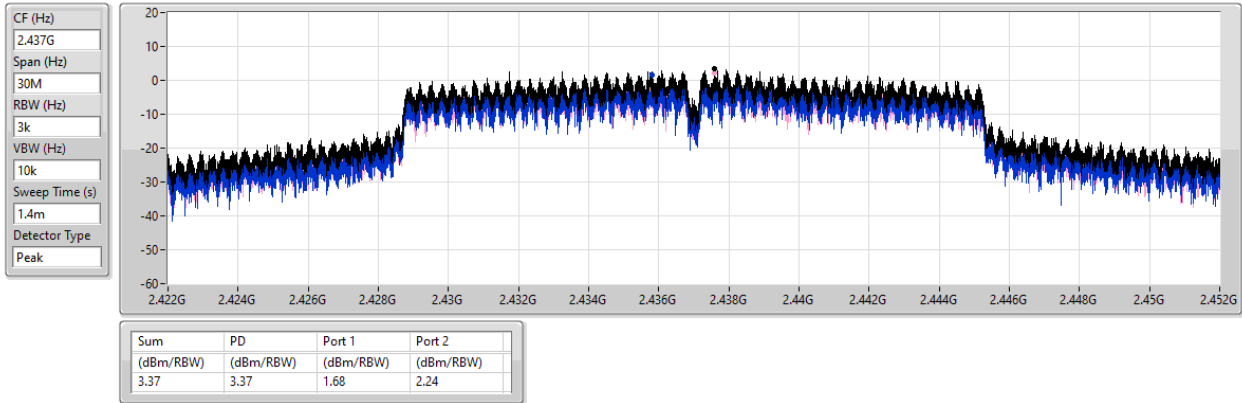


2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX

PSD

2437MHz

27/01/2024

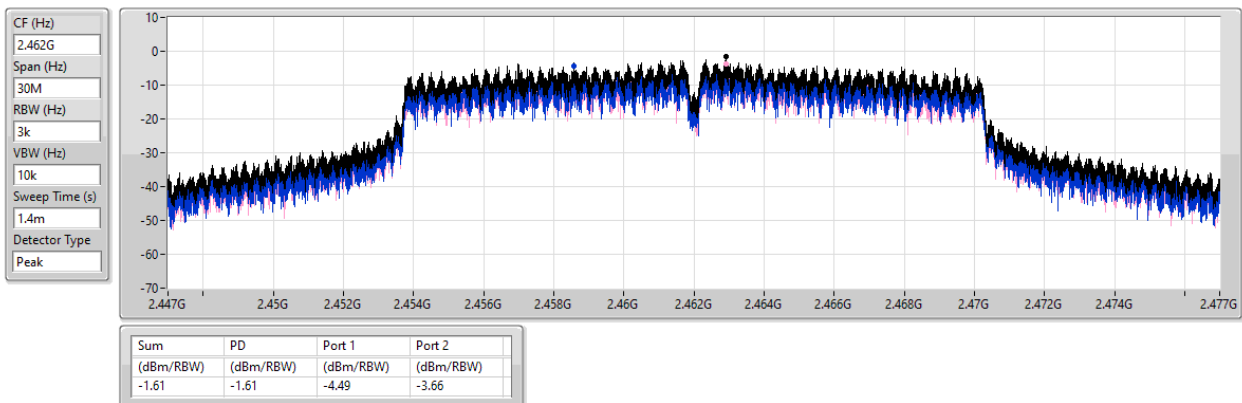


2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX

PSD

2462MHz

27/01/2024

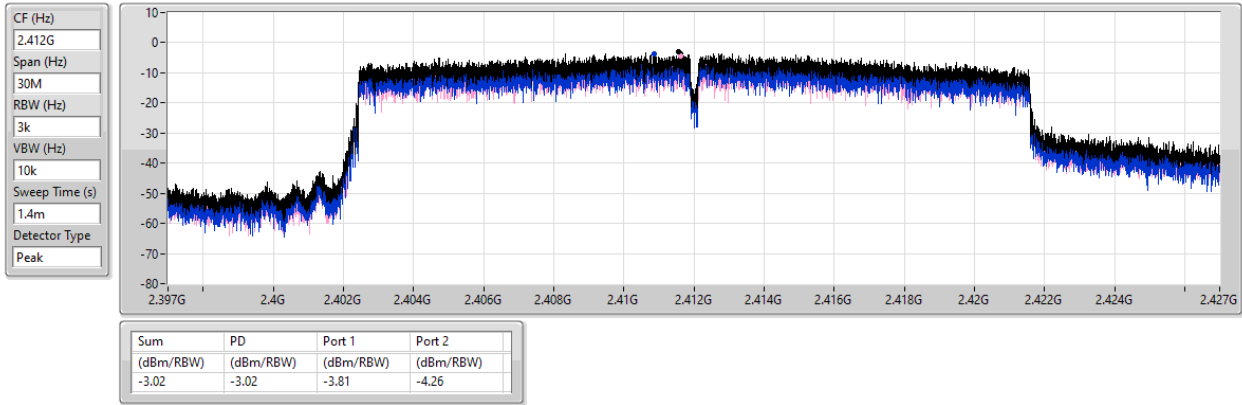


2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

PSD

2412MHz

27/01/2024

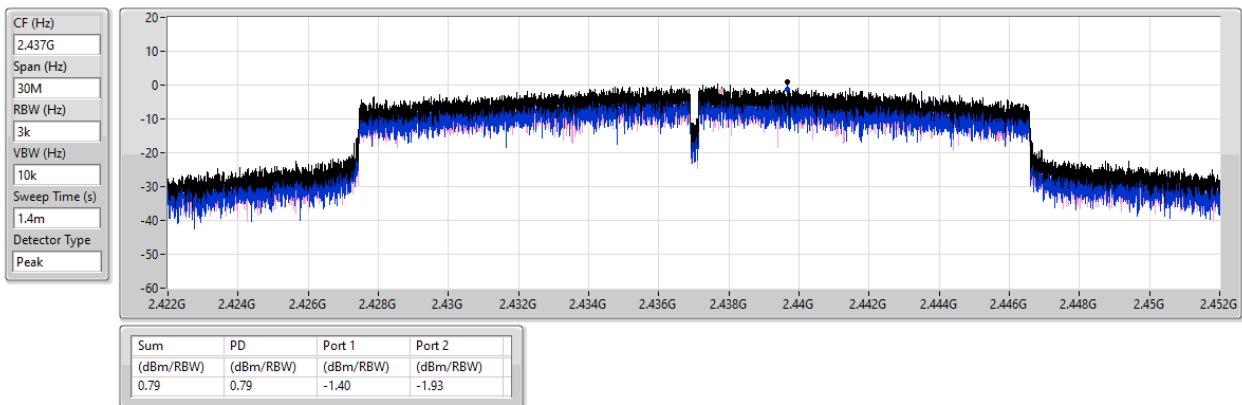


2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

PSD

2437MHz

27/01/2024

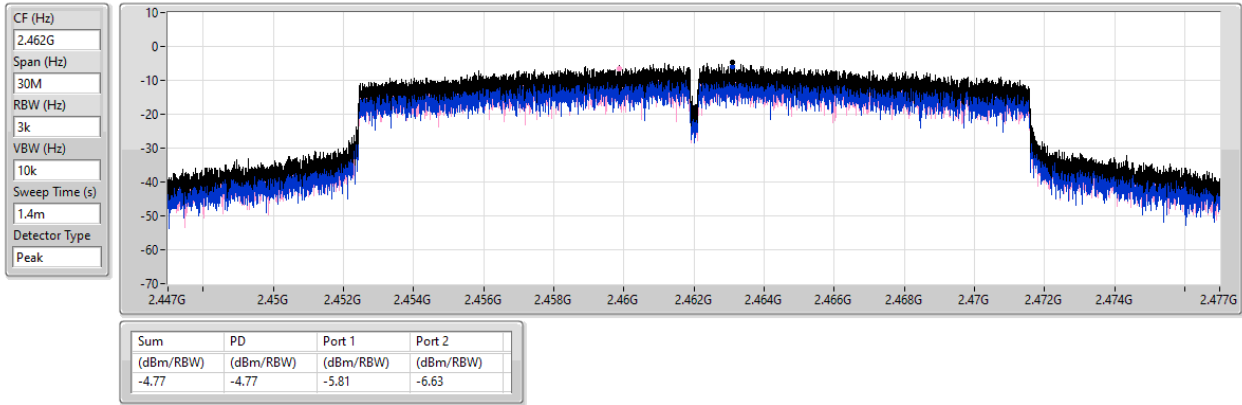


2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_2TX

PSD

2462MHz

27/01/2024

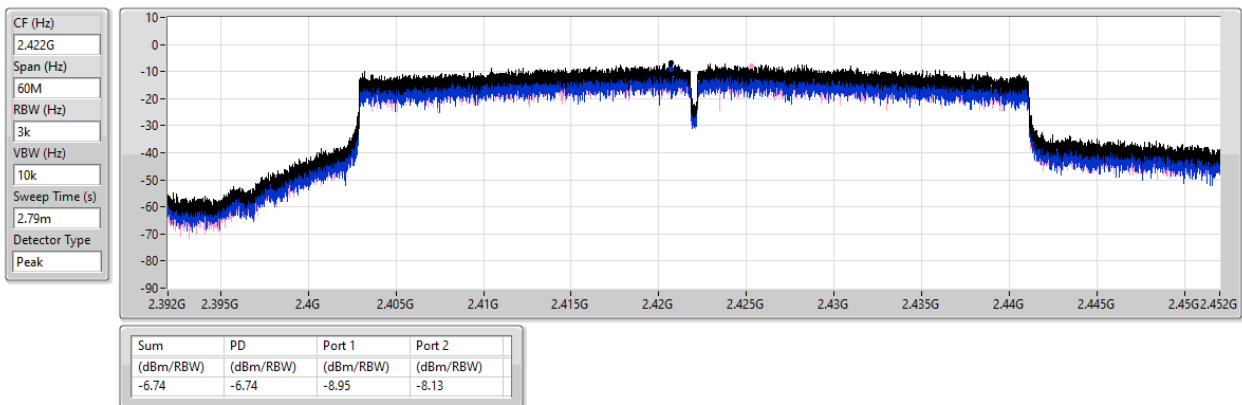


2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX

PSD

2422MHz

27/01/2024

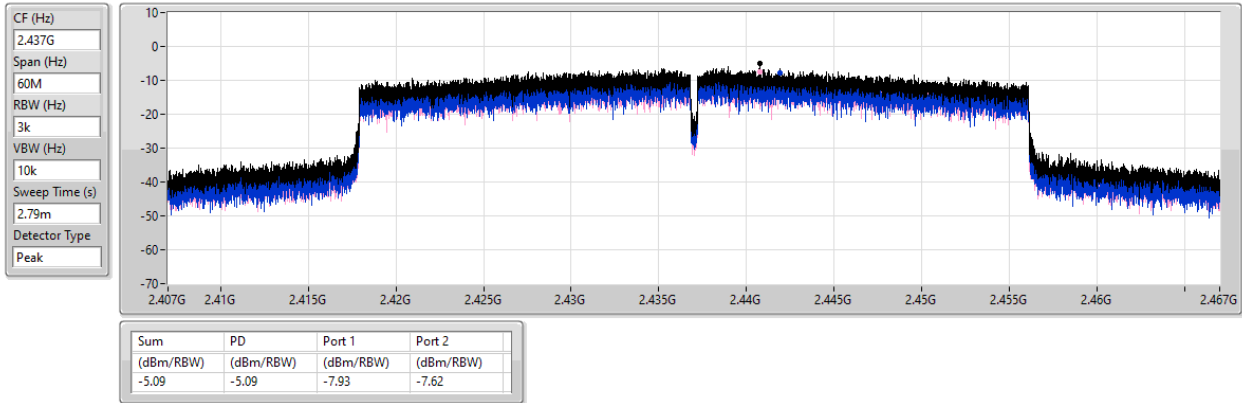


2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX

PSD

2437MHz

27/01/2024

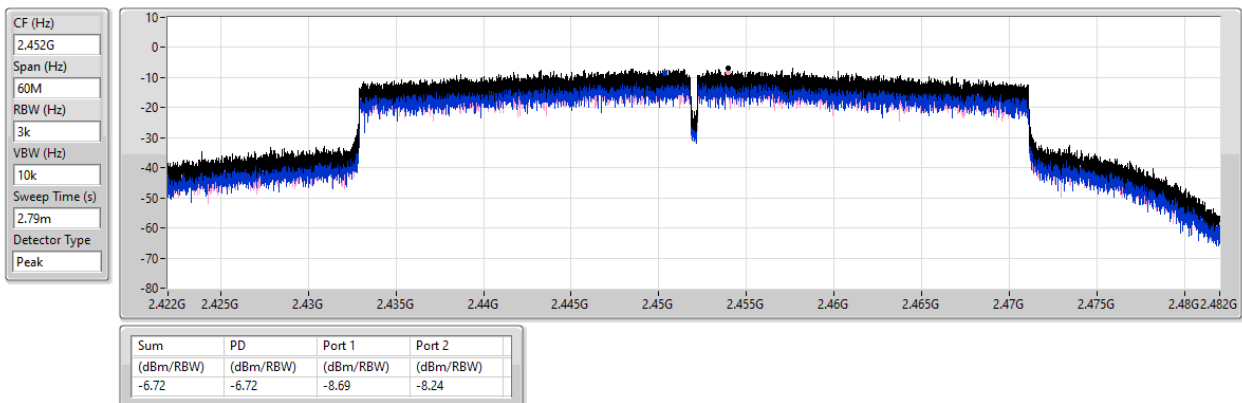


2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_2TX

PSD

2452MHz

27/01/2024





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	2.43758G	17.95	-12.05	2.30758G	-52.14	2.39904G	-31.87	2.4G	-36.11	2.51558G	-51.47	7.23795G	-30.52	1
802.11g_Nss1,(6Mbps)_2TX	Pass	2.43824G	16.79	-13.21	196.6M	-53.56	2.39984G	-33.96	2.4G	-36.28	2.51774G	-51.74	7.22952G	-36.02	1
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	Pass	2.43824G	15.36	-14.64	2.18758G	-53.20	2.39672G	-31.19	2.4G	-35.06	2.50966G	-51.88	7.23233G	-37.87	2
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	Pass	2.44075G	8.93	-21.07	2.19405G	-53.17	2.39952G	-28.03	2.4G	-27.51	2.50174G	-51.47	7.24712G	-43.10	2

Result

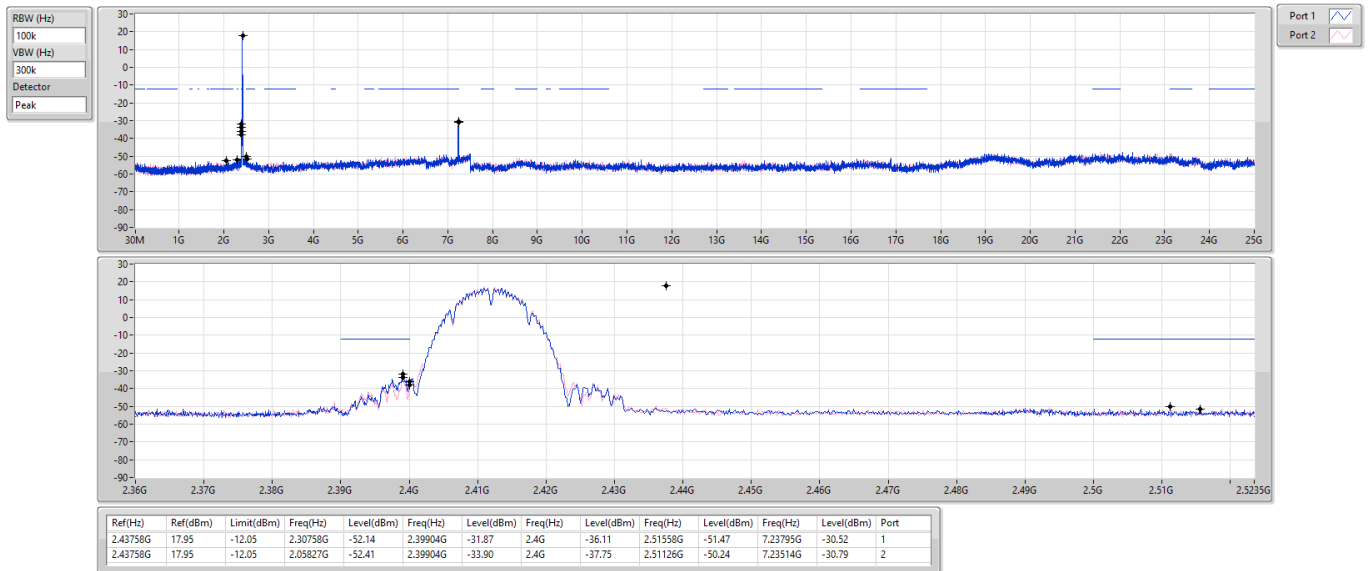
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43758G	17.95	-12.05	2.30758G	-52.14	2.39904G	-31.87	2.4G	-36.11	2.51558G	-51.47	7.23795G	-30.52	1
2412MHz	Pass	2.43758G	17.95	-12.05	2.05827G	-52.41	2.39904G	-33.90	2.4G	-37.75	2.51126G	-50.24	7.23514G	-30.79	2
2437MHz	Pass	2.43758G	17.95	-12.05	2.19923G	-52.37	2.39752G	-50.42	2.4G	-53.69	2.5163G	-51.54	21.94882G	-47.88	1
2437MHz	Pass	2.43758G	17.95	-12.05	2.17593G	-53.56	2.39552G	-51.02	2.4G	-53.04	2.51606G	-51.54	21.887G	-48.47	2
2462MHz	Pass	2.43758G	17.95	-12.05	2.12467G	-53.07	2.39472G	-53.16	2.4G	-53.70	2.50918G	-52.11	21.68753G	-48.01	1
2462MHz	Pass	2.43758G	17.95	-12.05	2.30292G	-51.85	2.39416G	-52.92	2.4G	-54.28	2.50902G	-51.41	21.99939G	-48.44	2
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43824G	16.79	-13.21	196.6M	-53.56	2.39984G	-33.96	2.4G	-36.28	2.51774G	-51.74	7.22952G	-36.02	1
2412MHz	Pass	2.43824G	16.79	-13.21	1.95691G	-53.23	2.39992G	-35.04	2.4G	-36.74	2.50614G	-51.57	7.23233G	-37.53	2
2437MHz	Pass	2.43824G	16.79	-13.21	2.08972G	-52.07	2.39944G	-34.69	2.4G	-34.42	2.50262G	-46.23	6.94294G	-47.40	1
2437MHz	Pass	2.43824G	16.79	-13.21	2.08972G	-52.93	2.39992G	-35.01	2.4G	-35.75	2.50262G	-45.00	21.49929G	-48.55	2
2462MHz	Pass	2.43824G	16.79	-13.21	2.12351G	-53.26	2.39456G	-52.96	2.4G	-54.11	2.50198G	-51.16	21.90386G	-48.73	1
2462MHz	Pass	2.43824G	16.79	-13.21	2.18875G	-52.04	2.39992G	-52.66	2.4G	-53.92	2.50438G	-51.95	21.96005G	-48.69	2
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43824G	15.36	-14.64	2.17127G	-53.31	2.39696G	-33.10	2.4G	-36.11	2.5071G	-51.41	7.23514G	-38.12	1
2412MHz	Pass	2.43824G	15.36	-14.64	2.18758G	-53.20	2.39672G	-31.19	2.4G	-35.06	2.50966G	-51.88	7.23233G	-37.87	2
2437MHz	Pass	2.43824G	15.36	-14.64	2.11302G	-53.06	2.39984G	-38.47	2.4G	-40.72	2.51582G	-49.90	21.57233G	-47.78	1
2437MHz	Pass	2.43824G	15.36	-14.64	1.95575G	-53.34	2.4G	-39.51	2.4G	-38.02	2.50022G	-50.55	21.76619G	-48.75	2
2462MHz	Pass	2.43824G	15.36	-14.64	2.14331G	-52.14	2.39912G	-52.45	2.4G	-54.78	2.52206G	-51.57	21.58638G	-48.46	1
2462MHz	Pass	2.43824G	15.36	-14.64	1.74022G	-53.12	2.39688G	-53.30	2.4G	-55.53	2.50134G	-50.89	21.52738G	-48.36	2
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.44075G	8.93	-21.07	2.06238G	-53.01	2.4G	-28.59	2.4G	-27.70	2.52942G	-50.32	7.24992G	-42.11	1
2422MHz	Pass	2.44075G	8.93	-21.07	2.19405G	-53.17	2.39952G	-28.03	2.4G	-27.51	2.50174G	-51.47	7.24712G	-43.10	2
2437MHz	Pass	2.44075G	8.93	-21.07	43.74M	-53.64	2.4G	-34.85	2.4G	-34.54	2.5019G	-51.63	21.99912G	-47.87	1
2437MHz	Pass	2.44075G	8.93	-21.07	2.01429G	-53.07	2.39984G	-35.10	2.4G	-35.44	2.50094G	-51.01	21.61209G	-49.01	2
2452MHz	Pass	2.44075G	8.93	-21.07	1.76697G	-53.69	2.39584G	-51.18	2.4G	-50.71	2.50446G	-51.07	21.63172G	-48.58	1
2452MHz	Pass	2.44075G	8.93	-21.07	1.93986G	-53.55	2.39744G	-51.40	2.4G	-51.80	2.51214G	-50.41	21.65135G	-49.02	2

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

CSEndB

2412MHz

27/01/2024

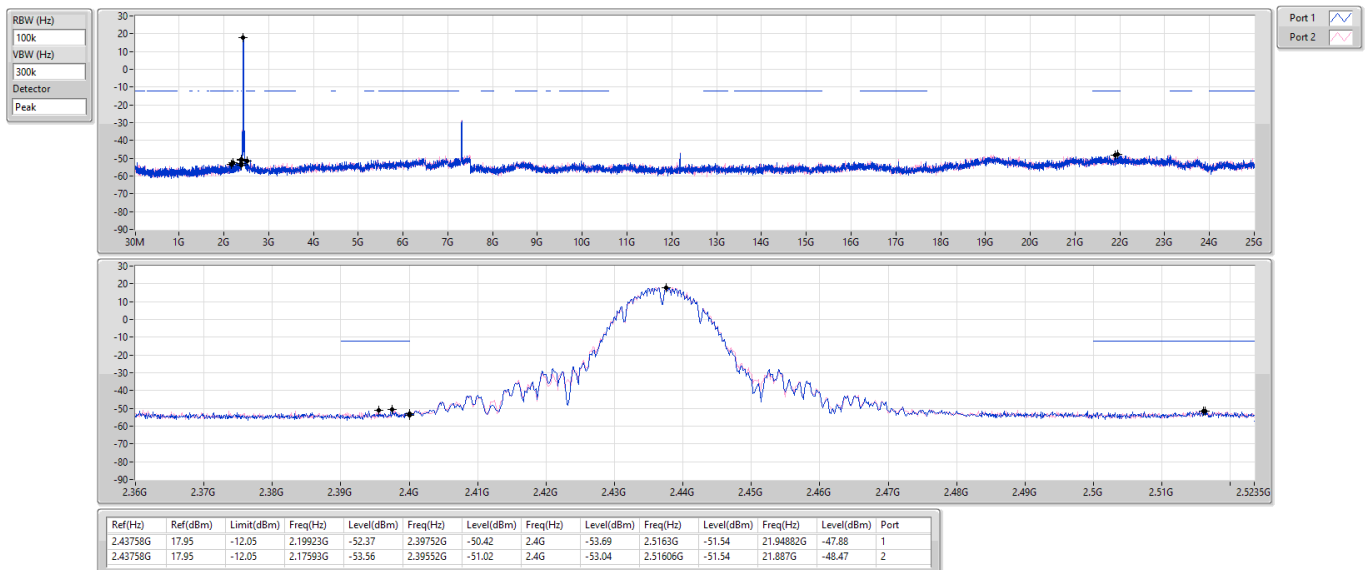


2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX

CSEndB

2437MHz

27/01/2024

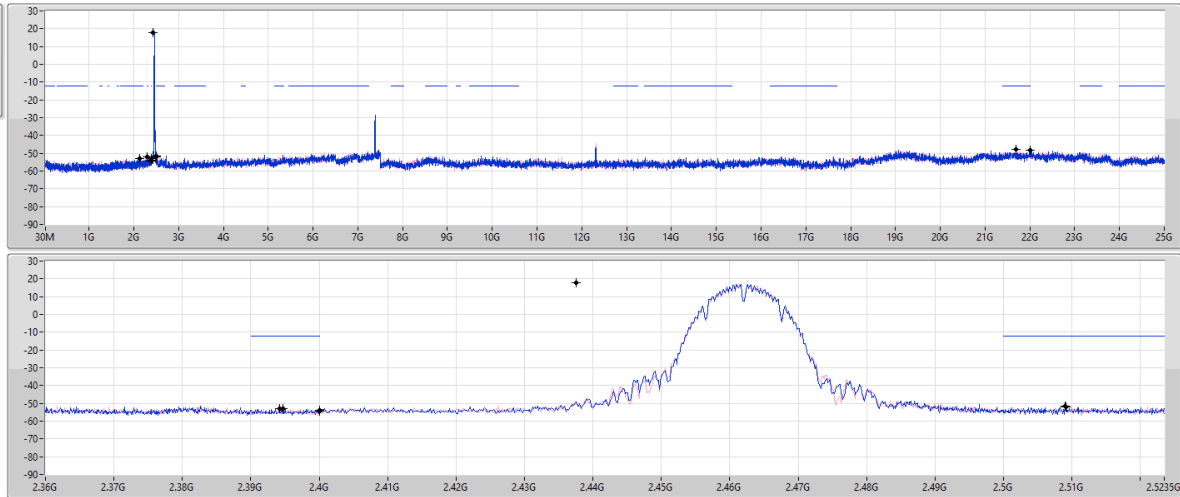


2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX

CSEndB

2462MHz

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



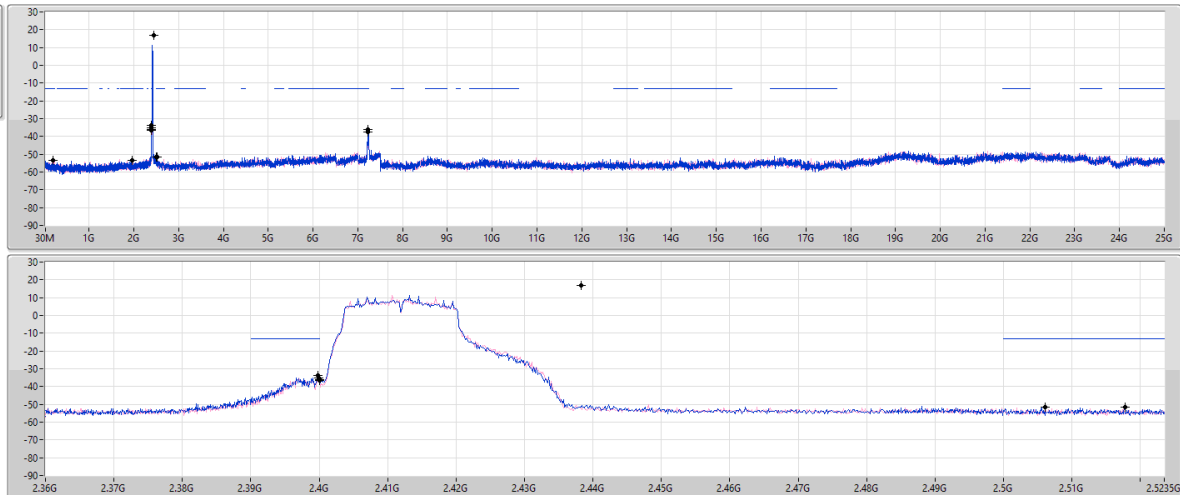
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43758G	17.95	-12.05	2.12467G	-53.07	2.39472G	-53.16	2.4G	-53.70	2.50918G	-52.11	2.168753G	-48.01	1
2.43758G	17.95	-12.05	2.30292G	-51.85	2.39416G	-52.92	2.4G	-54.28	2.50902G	-51.41	2.199939G	-48.44	2

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

CSEndB

2412MHz

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



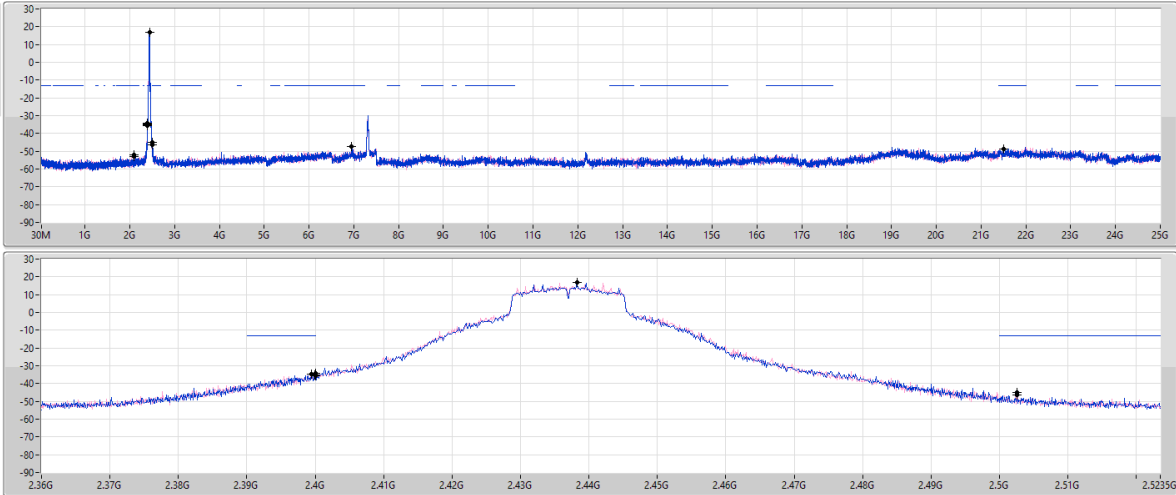
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2.43824G	16.79	-13.21	196.6M	-53.56	2.39984G	-33.96	2.4G	-36.28	2.51774G	-51.74	7.22952G	-36.02	1
2.43824G	16.79	-13.21	1.95691G	-53.23	2.39992G	-35.04	2.4G	-36.74	2.50614G	-51.57	7.23233G	-37.53	2

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

CSEndB

2437MHz

27/01/2024

RBW (Hz)
100k
VBW (Hz)
300k
Detector
PeakPort 1
Port 2

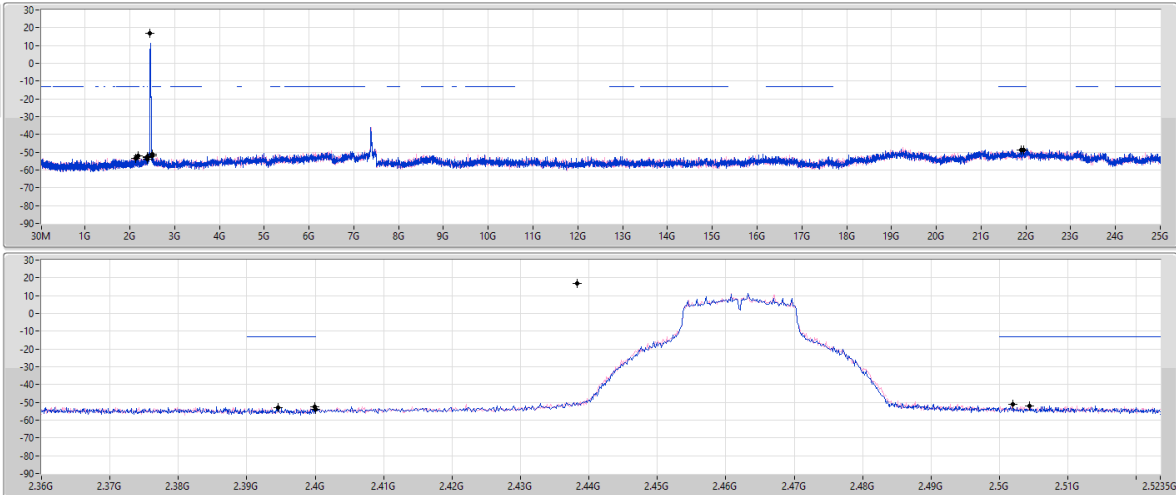
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2.43824G	16.79	-13.21	2.08972G	-52.07	2.39944G	-34.69	2.4G	-34.42	2.50262G	-46.23	6.94294G	-47.40	1
2.43824G	16.79	-13.21	2.08972G	-52.93	2.39992G	-35.01	2.4G	-35.75	2.50262G	-45.00	21.49929G	-48.55	2

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

CSEndB

2462MHz

27/01/2024

RBW (Hz)
100k
VBW (Hz)
300k
Detector
PeakPort 1
Port 2

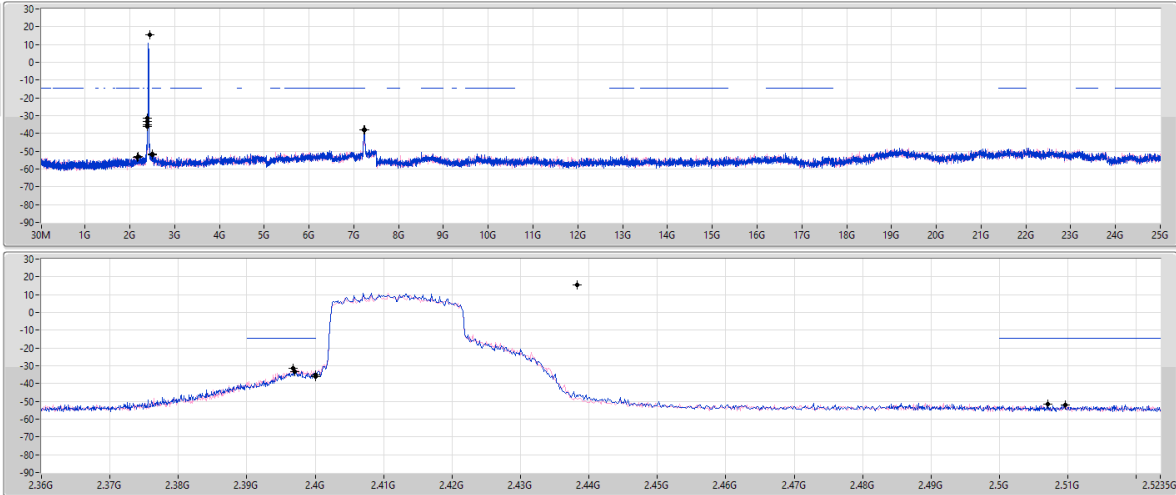
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2.43824G	16.79	-13.21	2.12351G	-53.26	2.39456G	-52.96	2.4G	-54.11	2.50198G	-51.16	21.90386G	-48.73	1
2.43824G	16.79	-13.21	2.18875G	-52.04	2.39992G	-52.66	2.4G	-53.92	2.50438G	-51.95	21.96005G	-48.69	2

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

CSEndB

2412MHz

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



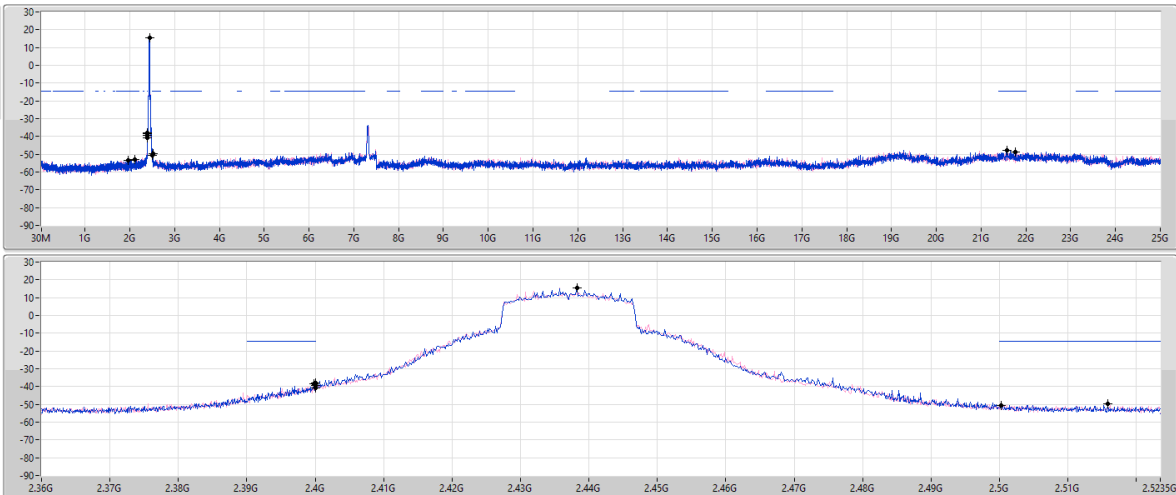
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43824G	15.36	-14.64	2.17127G	-53.31	2.39696G	-33.10	2.4G	-36.11	2.5071G	-51.41	7.23514G	-38.12	1
2.43824G	15.36	-14.64	2.18758G	-53.20	2.39672G	-31.19	2.4G	-35.06	2.50966G	-51.88	7.23233G	-37.87	2

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

CSEndB

2437MHz

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



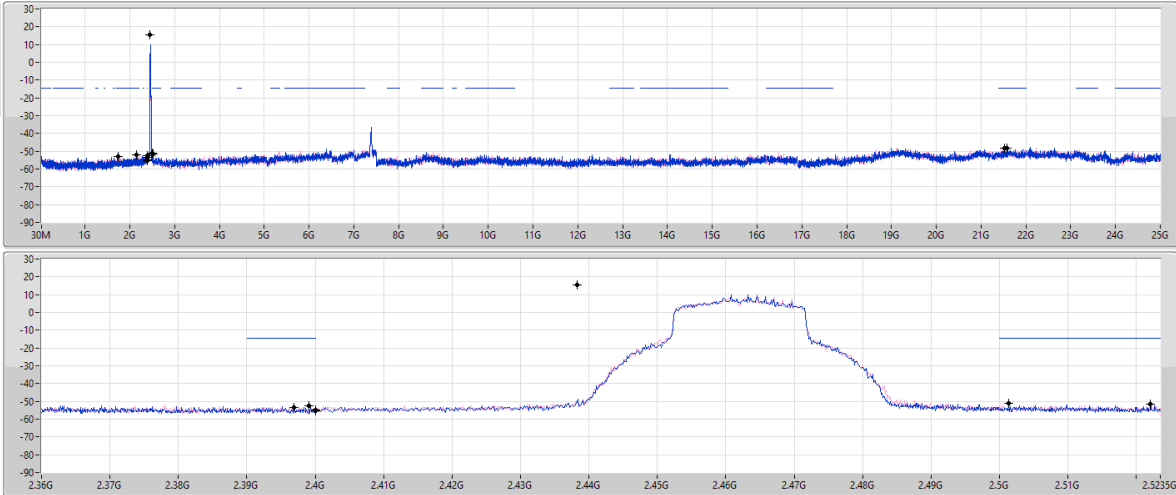
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2.43824G	15.36	-14.64	2.11302G	-53.06	2.39984G	-38.47	2.4G	-40.72	2.51582G	-49.90	21.57233G	-47.78	1
2.43824G	15.36	-14.64	1.95575G	-53.34	2.4G	-39.51	2.4G	-38.02	2.50022G	-50.55	21.76619G	-48.75	2

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

CSEndB

2462MHz

27/01/2024

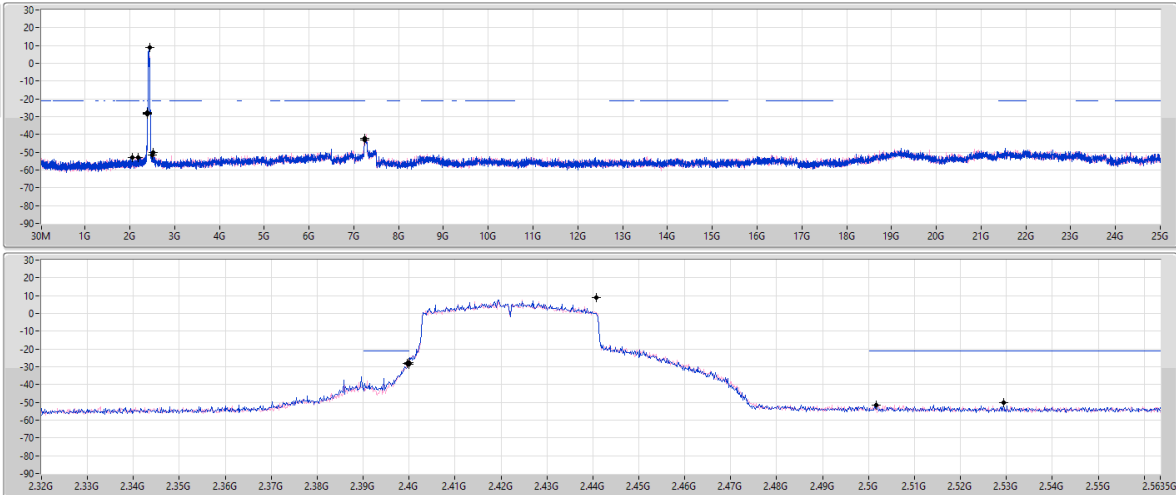
RBW (Hz)
100k
VBW (Hz)
300k
Detector
PeakPort 1
Port 2

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

CSEndB

2422MHz

27/01/2024

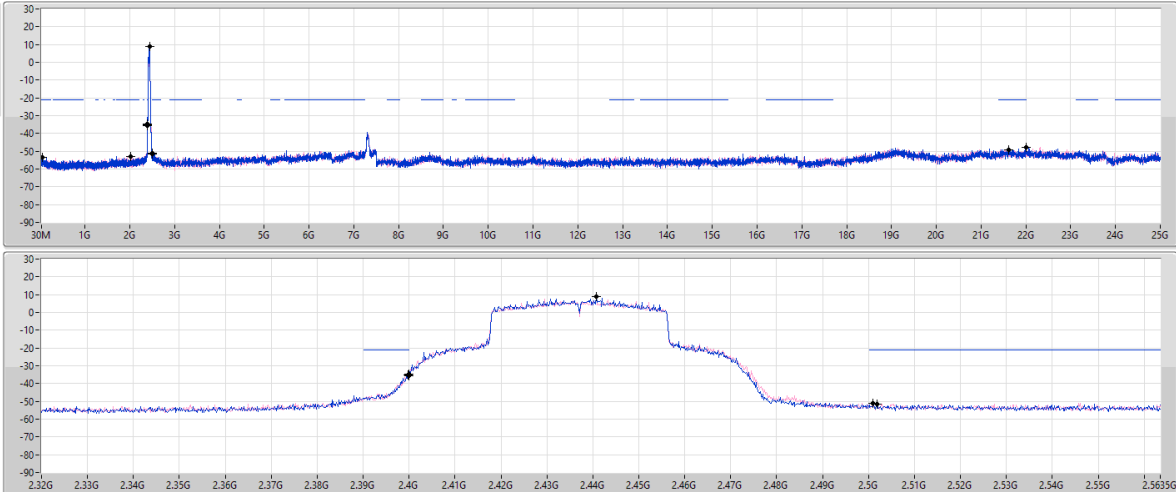
RBW (Hz)
100k
VBW (Hz)
300k
Detector
PeakPort 1
Port 2

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

CSEndB

2437MHz

27/01/2024

RBW (Hz)
100k
VBW (Hz)
300k
Detector
PeakPort 1
Port 2

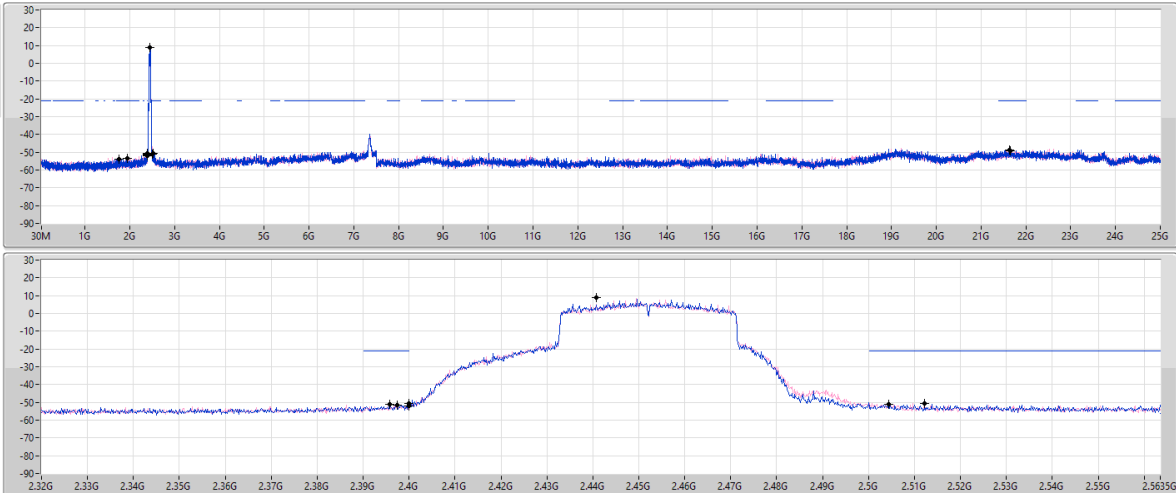
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.44075G	8.93	-21.07	43.74M	-53.64	2.4G	-34.85	2.4G	-34.54	2.5019G	-51.63	21.99912G	-47.87	1
2.44075G	8.93	-21.07	2.01429G	-53.07	2.39984G	-35.10	2.4G	-35.44	2.50094G	-51.01	21.61209G	-49.01	2

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

CSEndB

2452MHz

27/01/2024

RBW (Hz)
100k
VBW (Hz)
300k
Detector
PeakPort 1
Port 2

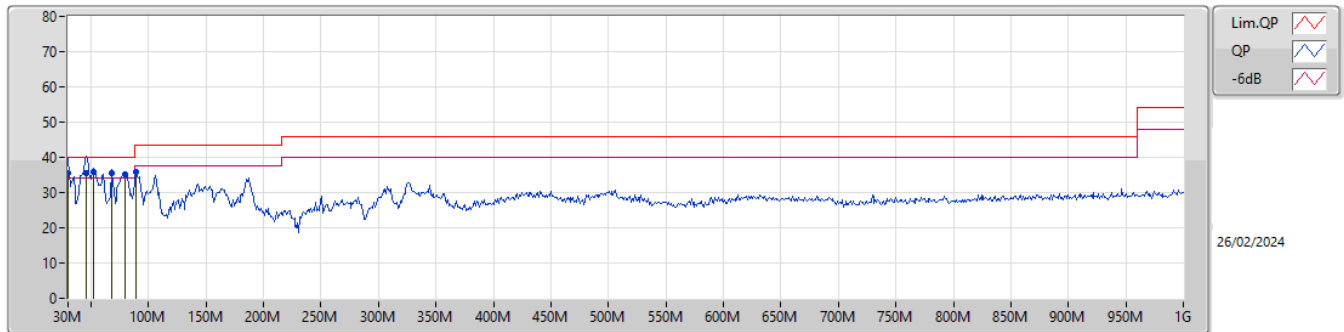
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.44075G	8.93	-21.07	1.76697G	-53.69	2.39584G	-51.18	2.4G	-50.71	2.50446G	-51.07	21.63172G	-48.58	1
2.44075G	8.93	-21.07	1.93986G	-53.55	2.39744G	-51.40	2.4G	-51.80	2.51214G	-50.41	21.63135G	-49.02	2



Summary

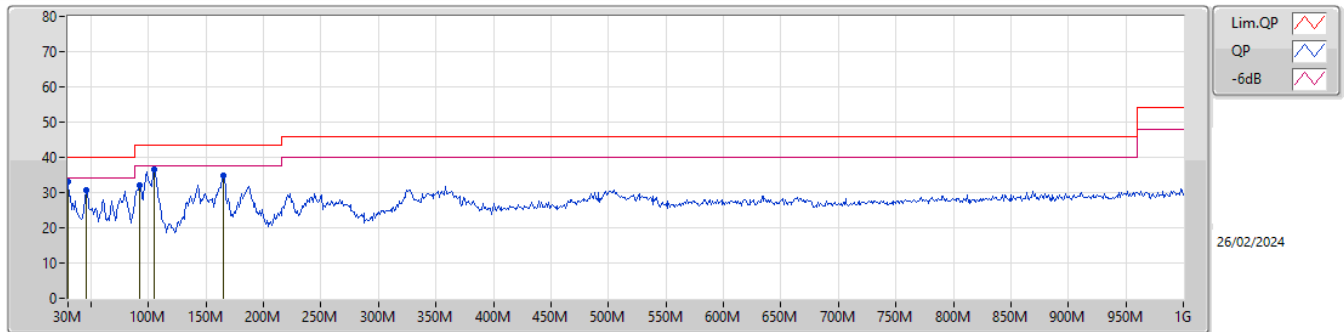
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 3	Pass	QP	52.31M	35.78	40.00	-4.22	Vertical

Mode 3



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)		
QP	30M	35.59	40.00	-4.41	-3.23	3	Vertical	360	1.25	-	38.82	23.86	0.61	27.70		
QP	45.52M	35.36	40.00	-4.64	-10.88	3	Vertical	331	1.00	-	46.24	16.13	0.78	27.79		
QP	52.31M	35.78	40.00	-4.22	-13.48	3	Vertical	324	1.00	"Worst"	49.26	13.45	0.83	27.76		
QP	67.83M	35.64	40.00	-4.36	-14.30	3	Vertical	120	2.00	-	49.94	12.25	0.98	27.53		
PK	79.47M	35.29	40.00	-4.71	-13.67	3	Vertical	196	2.00	-	48.96	13.18	1.00	27.85		
PK	89.17M	36.00	43.50	-7.50	-11.55	3	Vertical	156	1.50	-	47.55	15.01	1.06	27.62		

Mode 3



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	30M	33.24	40.00	-6.76	-3.23	3	Horizontal	160	1.00	"Worst"	36.47	23.86	0.61	27.70		
PK	45.52M	30.54	40.00	-9.46	-10.88	3	Horizontal	275	3.00	-	41.42	16.13	0.78	27.79		
PK	92.08M	32.11	43.50	-11.39	-10.88	3	Horizontal	240	2.00	-	42.99	15.63	1.05	27.56		
PK	92.08M	32.11	43.50	-11.39	-10.88	3	Horizontal	240	2.00	-	42.99	15.63	1.05	27.56		
PK	104.69M	36.47	43.50	-7.03	-9.02	3	Horizontal	106	3.00	-	45.49	17.43	1.15	27.60		
PK	164.83M	34.91	43.50	-8.59	-10.22	3	Horizontal	250	1.50	-	45.13	15.89	1.42	27.53		

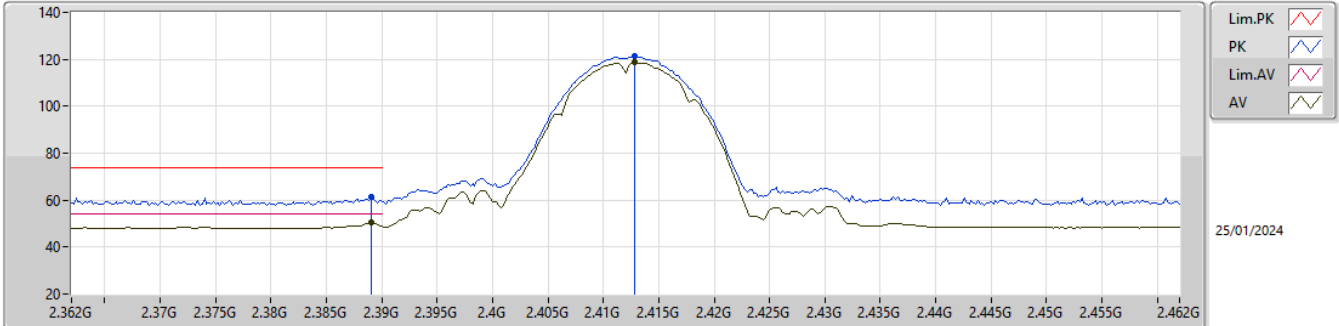


Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	Pass	AV	2.484G	52.93	54.00	-1.07	3	Vertical	219	2.95	-

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

2412MHz_TX

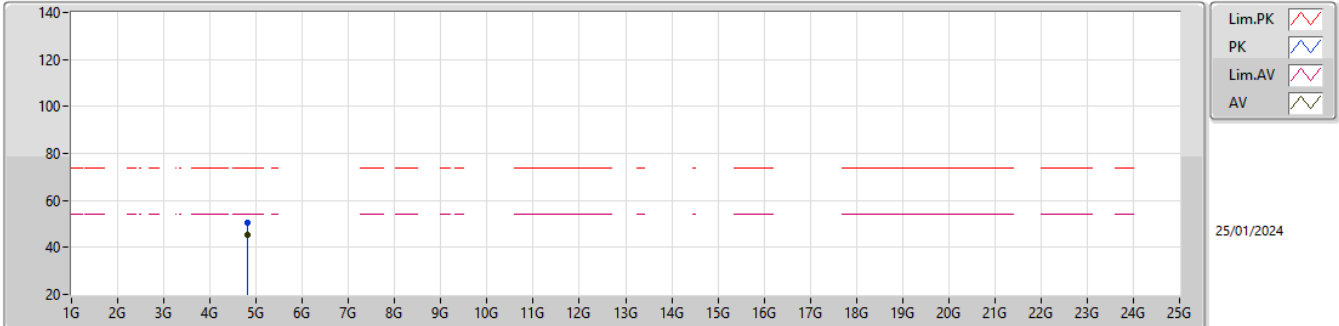


EUT_Y_2TX
Setting 43
01-H-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)				
PK	2.389G	61.34	74.00	-12.66	28.99	3	Vertical	155	1.80	-	27.70	4.65	-				
AV	2.389G	50.28	54.00	-3.72	17.93	3	Vertical	155	1.80	-	27.70	4.65	-				
PK	2.4128G	121.16	Inf	-Inf	88.87	3	Vertical	155	1.80	-	27.63	4.66	-				
AV	2.4128G	118.72	Inf	-Inf	86.43	3	Vertical	155	1.80	-	27.63	4.66	-				

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

2412MHz_TX

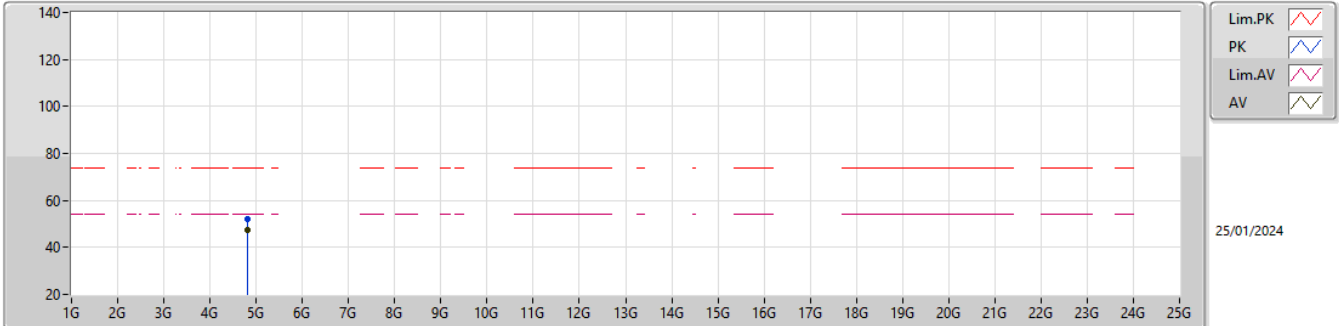


EUT_Y_2TX
Setting 52
01-H-R-7

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	4.8242G	50.75	74.00	-23.25	45.49	3	Vertical	206	1.80	-	31.30	6.93	32.97			
AV	4.82398G	45.49	54.00	-8.51	40.23	3	Vertical	206	1.80	-	31.30	6.93	32.97			

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

2412MHz_TX

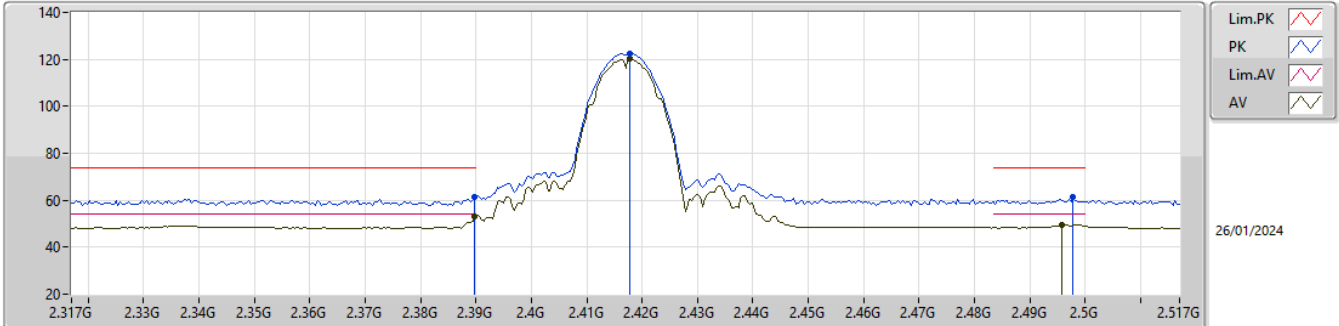


EUT_Y_2TX
Setting 52
01-H-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.82394G	52.19	74.00	-21.81	46.93	3	Horizontal	320	3.00	-	31.30	6.93	32.97			
AV	4.82398G	47.25	54.00	-6.75	41.99	3	Horizontal	320	3.00	-	31.30	6.93	32.97			

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

2417MHz_TX

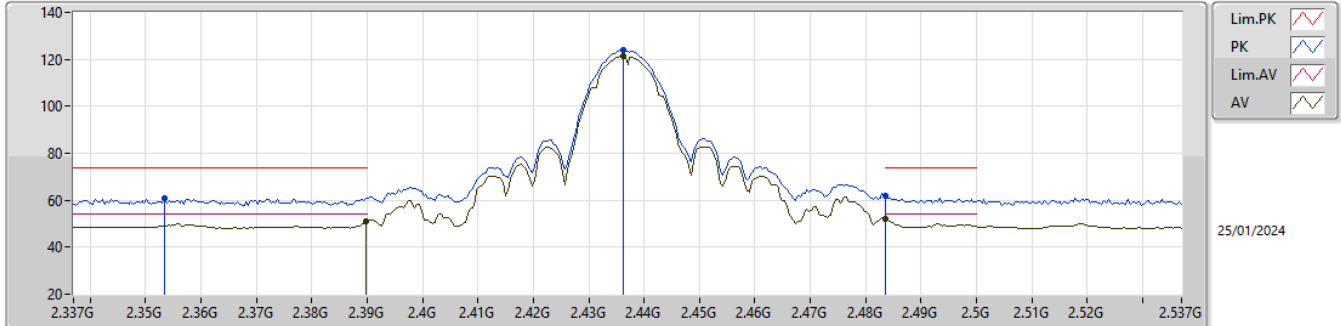


EUT Y_2TX
Setting 45
01-H-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.3898G	61.23	74.00	-12.77	28.87	3	Vertical	157	1.80	-	27.70	4.66	-			
AV	2.3898G	52.89	54.00	-1.11	20.53	3	Vertical	157	1.80	-	27.70	4.66	-			
PK	2.4178G	122.53	Inf	-Inf	90.20	3	Vertical	157	1.80	-	27.68	4.65	-			
AV	2.4178G	120.09	Inf	-Inf	87.76	3	Vertical	157	1.80	-	27.68	4.65	-			
PK	2.4978G	61.28	74.00	-12.72	29.19	3	Vertical	157	1.80	-	27.50	4.59	-			
AV	2.4958G	49.34	54.00	-4.66	17.25	3	Vertical	157	1.80	-	27.50	4.59	-			

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

2437MHz_TX

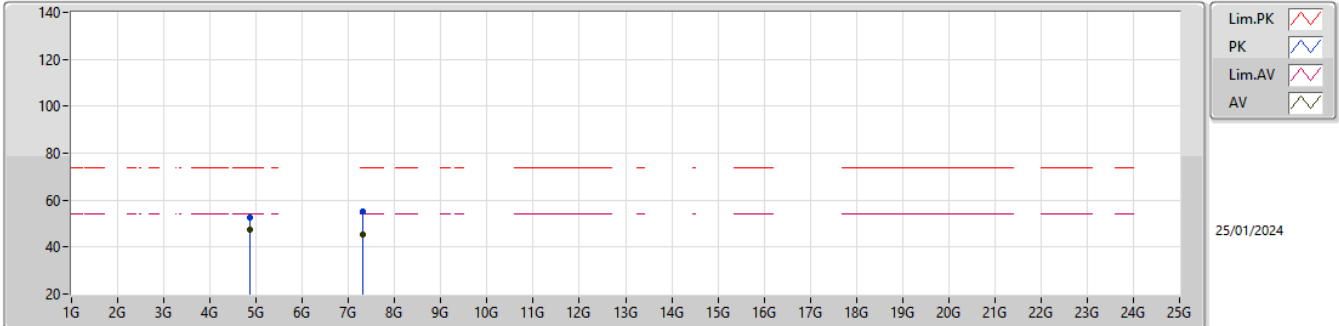


EUT_Y_2TX
Setting 49
01-H-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.3534G	60.93	74.00	-13.07	28.36	3	Vertical	159	1.80	-	27.97	4.60	-			
AV	2.3898G	51.10	54.00	-2.90	18.74	3	Vertical	159	1.80	-	27.70	4.66	-			
PK	2.4362G	123.85	Inf	-Inf	91.67	3	Vertical	159	1.80	-	27.54	4.64	-			
AV	2.4362G	121.50	Inf	-Inf	89.32	3	Vertical	159	1.80	-	27.54	4.64	-			
PK	2.4835G	61.71	74.00	-12.29	29.61	3	Vertical	159	1.80	-	27.50	4.60	-			
AV	2.4835G	52.26	54.00	-1.74	20.16	3	Vertical	159	1.80	-	27.50	4.60	-			

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

2437MHz_TX

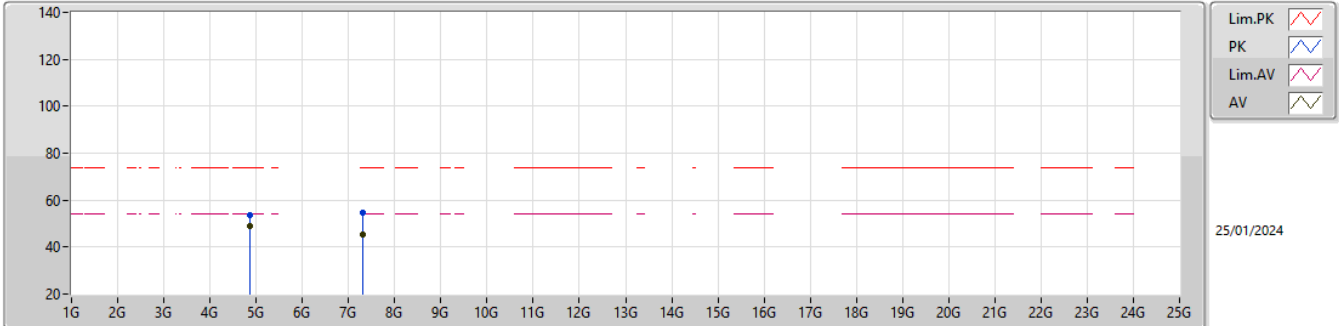


EUT_Y_2TX
Setting 52
01-H-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)				
PK	4.87392G	52.40	74.00	-21.60	47.08	3	Vertical	203	1.80	-	31.30	6.98	32.96				
AV	4.87398G	47.48	54.00	-6.52	42.16	3	Vertical	203	1.80	-	31.30	6.98	32.96				
PK	7.31224G	55.12	74.00	-18.88	43.35	3	Vertical	347	1.03	-	36.25	8.62	33.10				
AV	7.31172G	45.59	54.00	-8.41	33.82	3	Vertical	347	1.03	-	36.25	8.62	33.10				

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

2437MHz_TX

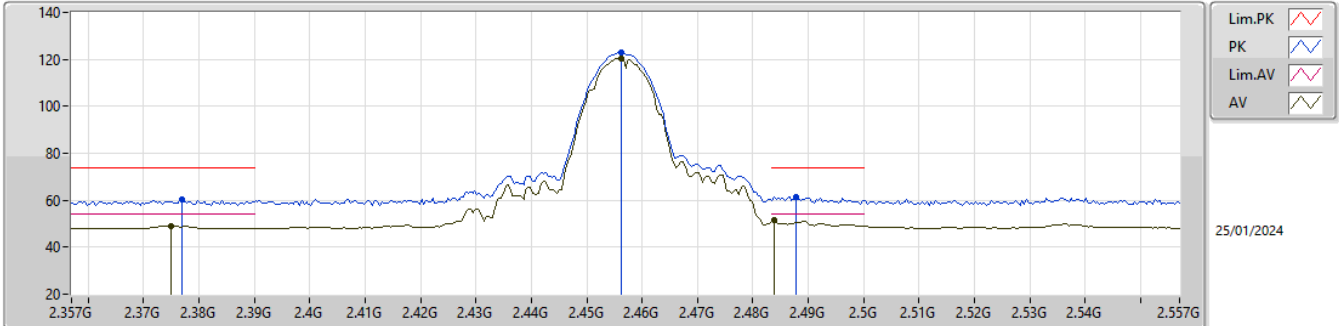


EUT_Y_2TX
Setting 52
01-H-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.87394G	53.44	74.00	-20.56	48.12	3	Horizontal	326	3.00	-	31.30	6.98	32.96			
AV	4.87396G	48.88	54.00	-5.12	43.56	3	Horizontal	326	3.00	-	31.30	6.98	32.96			
PK	7.31184G	54.74	74.00	-19.26	42.97	3	Horizontal	9	3.00	-	36.25	8.62	33.10			
AV	7.31012G	45.29	54.00	-8.71	33.51	3	Horizontal	9	3.00	-	36.26	8.62	33.10			

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

2457MHz_TX

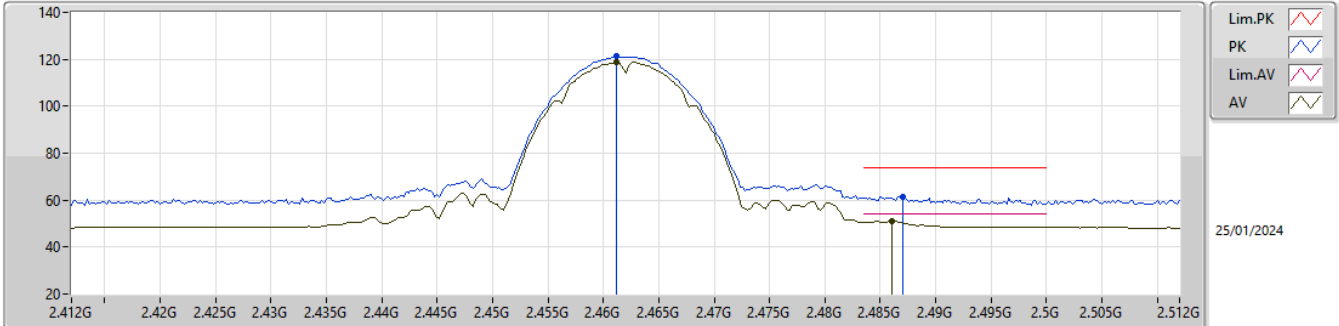


EUT_Y_2TX
Setting 46
01-H-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.377G	60.50	74.00	-13.50	28.13	3	Vertical	166	1.00	-	27.73	4.64	-			
AV	2.375G	49.20	54.00	-4.80	16.82	3	Vertical	166	1.00	-	27.75	4.63	-			
PK	2.4562G	122.94	Inf	-Inf	90.88	3	Vertical	166	1.00	-	27.44	4.62	-			
AV	2.4562G	120.56	Inf	-Inf	88.50	3	Vertical	166	1.00	-	27.44	4.62	-			
PK	2.4878G	61.46	74.00	-12.54	29.36	3	Vertical	166	1.00	-	27.50	4.60	-			
AV	2.4838G	51.53	54.00	-2.47	19.43	3	Vertical	166	1.00	-	27.50	4.60	-			

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

2462MHz_TX

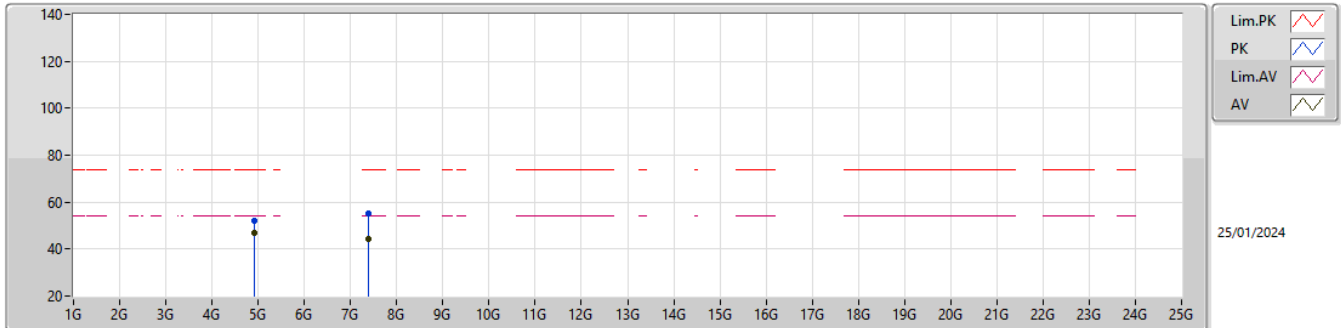


EUT_Y_2TX
Setting 44
01-H-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)				
PK	2.4612G	121.14	Inf	-Inf	89.12	3	Vertical	160	1.80	-	27.40	4.62	-				
AV	2.4612G	118.76	Inf	-Inf	86.74	3	Vertical	160	1.80	-	27.40	4.62	-				
PK	2.487G	61.46	74.00	-12.54	29.36	3	Vertical	160	1.80	-	27.50	4.60	-				
AV	2.486G	51.14	54.00	-2.86	19.04	3	Vertical	160	1.80	-	27.50	4.60	-				

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

2462MHz_TX

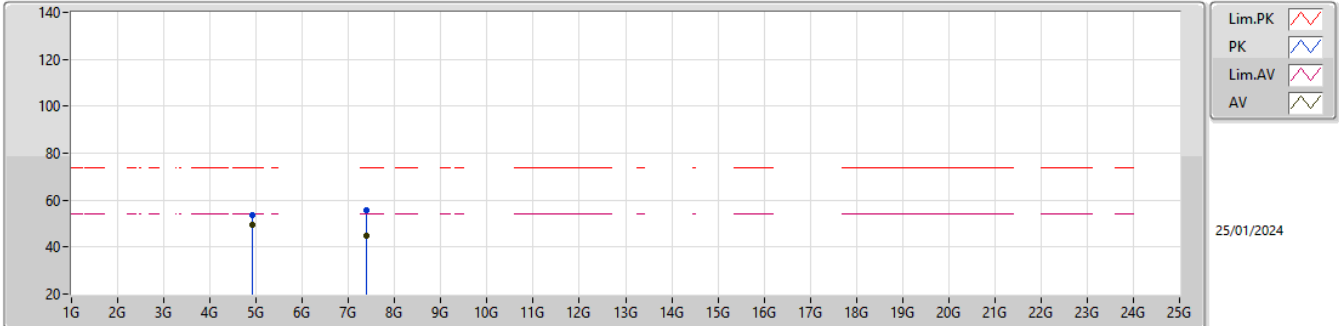


EUT_Y_2TX
Setting 52
01-H-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.92388G	52.13	74.00	-21.87	46.65	3	Vertical	204	1.80	-	31.40	7.03	32.95			
AV	4.92394G	46.93	54.00	-7.07	41.45	3	Vertical	204	1.80	-	31.40	7.03	32.95			
PK	7.3867G	55.24	74.00	-18.76	43.56	3	Vertical	347	1.02	-	36.10	8.71	33.13			
AV	7.38676G	44.48	54.00	-9.52	32.80	3	Vertical	347	1.02	-	36.10	8.71	33.13			

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

2462MHz_TX

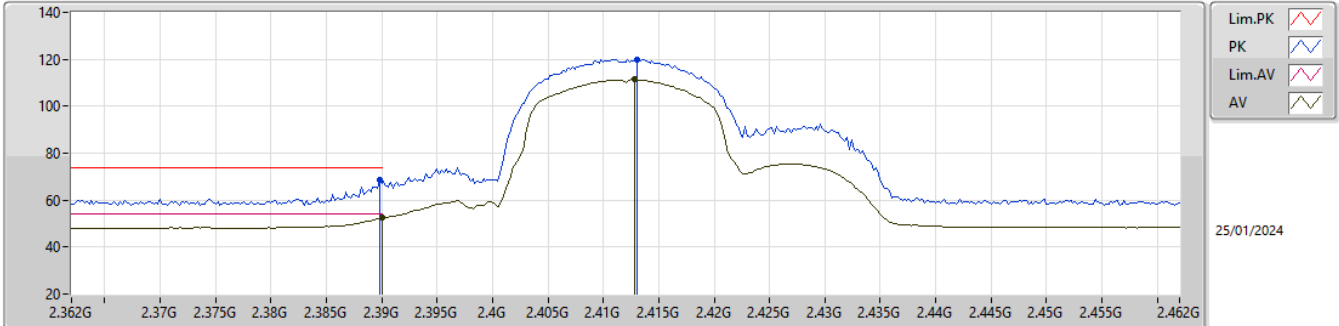


EUT_Y_2TX
Setting 52
01-H-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.92406G	53.85	74.00	-20.15	48.37	3	Horizontal	337	2.97	-	31.40	7.03	32.95			
AV	4.924G	49.73	54.00	-4.27	44.25	3	Horizontal	337	2.97	-	31.40	7.03	32.95			
PK	7.38692G	55.44	74.00	-18.56	43.76	3	Horizontal	20	2.97	-	36.10	8.71	33.13			
AV	7.3852G	44.79	54.00	-9.21	33.11	3	Horizontal	20	2.97	-	36.10	8.71	33.13			

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

2412MHz_TX

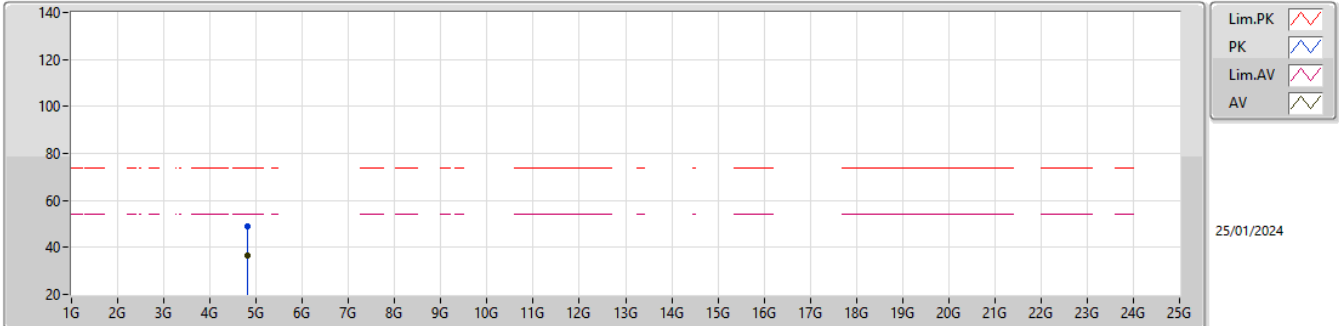


EUT_Y_2TX
Setting 38
01-H-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)				
PK	2.3898G	68.61	74.00	-5.39	36.25	3	Vertical	158	1.80	-	27.70	4.66	-				
AV	2.39G	52.36	54.00	-1.64	20.00	3	Vertical	158	1.80	-	27.70	4.66	-				
PK	2.413G	120.08	Inf	-Inf	87.79	3	Vertical	158	1.80	-	27.63	4.66	-				
AV	2.4128G	111.38	Inf	-Inf	79.09	3	Vertical	158	1.80	-	27.63	4.66	-				

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

2412MHz_TX

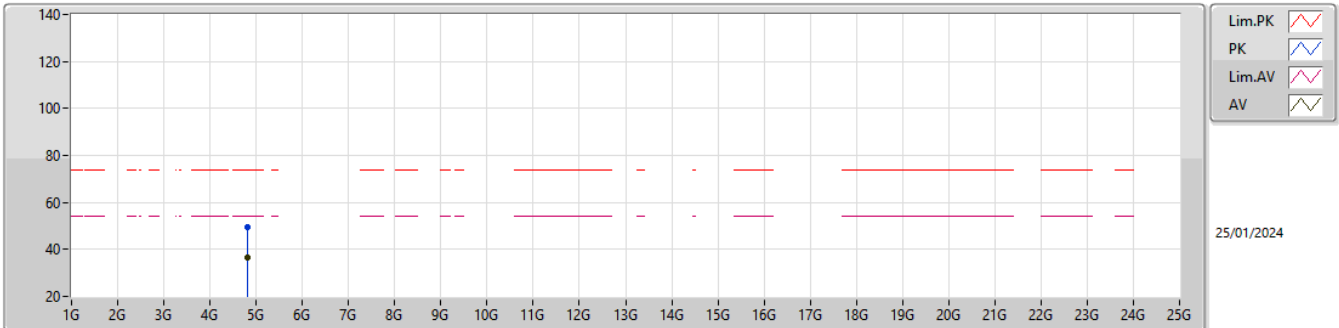


EUT_Y_2TX
Setting 52
01-H-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.82028G	48.92	74.00	-25.08	43.66	3	Vertical	205	1.80	-	31.30	6.93	32.97			
AV	4.81992G	36.56	54.00	-17.44	31.30	3	Vertical	205	1.80	-	31.30	6.93	32.97			

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

2412MHz_TX

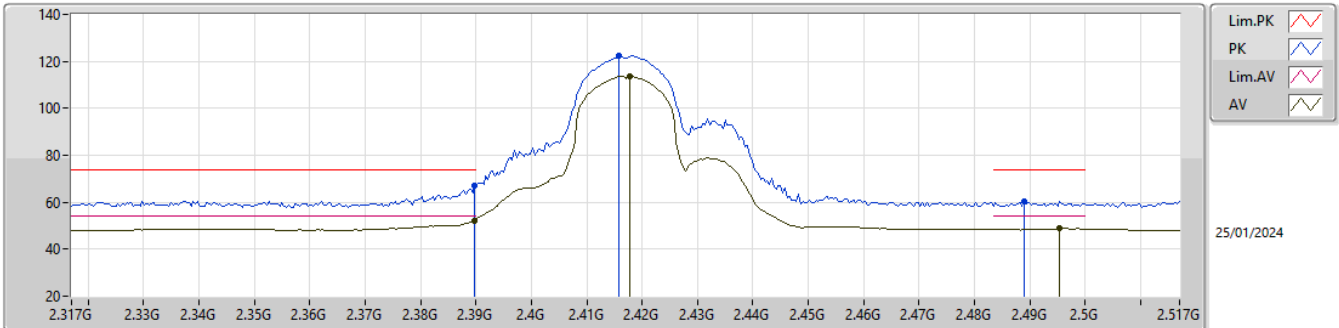


EUT_Y_2TX
Setting 52
01-H-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.82154G	49.29	74.00	-24.71	44.03	3	Horizontal	319	3.00	-	31.30	6.93	32.97			
AV	4.82472G	36.67	54.00	-17.33	31.41	3	Horizontal	319	3.00	-	31.30	6.93	32.97			

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

2417MHz_TX

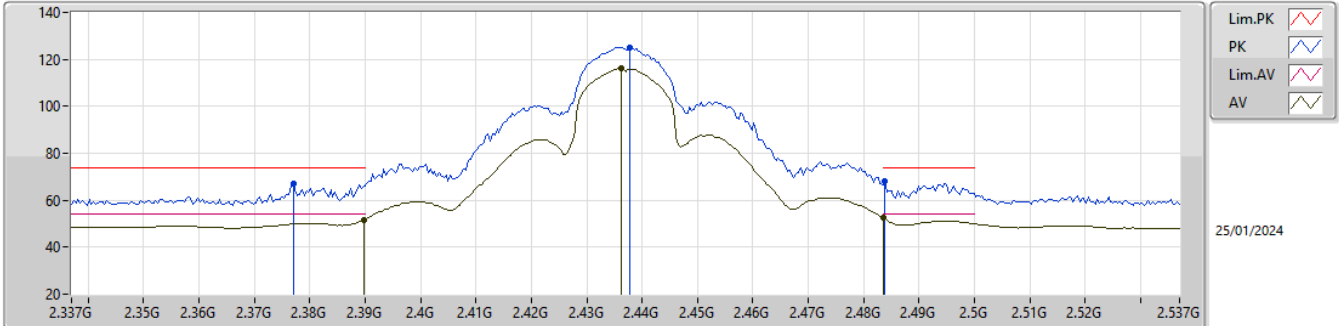


EUT Y_2TX
Setting 42
01-H-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.3898G	67.28	74.00	-6.72	34.92	3	Vertical	158	1.80	-	27.70	4.66	-			
AV	2.3898G	52.19	54.00	-1.81	19.83	3	Vertical	158	1.80	-	27.70	4.66	-			
PK	2.4158G	122.31	Inf	-Inf	89.99	3	Vertical	158	1.80	-	27.66	4.66	-			
AV	2.4178G	113.74	Inf	-Inf	81.41	3	Vertical	158	1.80	-	27.68	4.65	-			
PK	2.489G	60.56	74.00	-13.44	28.47	3	Vertical	158	1.80	-	27.50	4.59	-			
AV	2.4954G	48.85	54.00	-5.15	16.76	3	Vertical	158	1.80	-	27.50	4.59	-			

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

2437MHz_TX

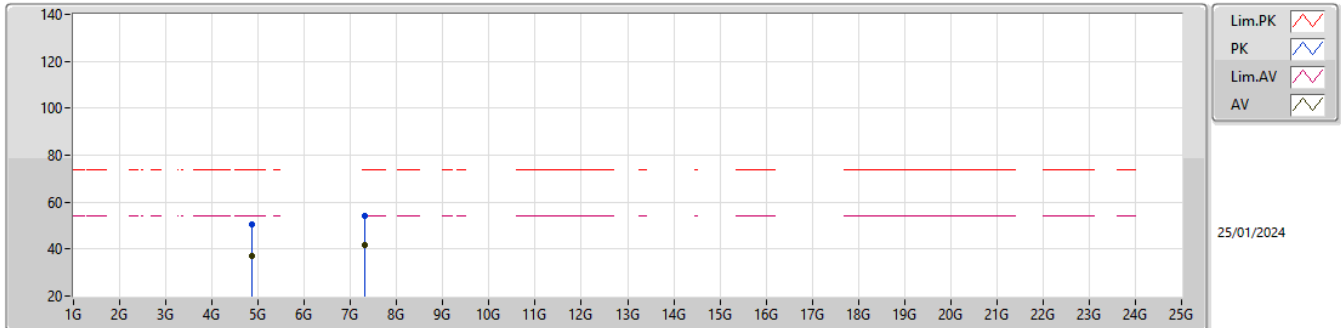


EUT_Y_2TX
Setting 48
01-H-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.377G	66.87	74.00	-7.13	34.50	3	Vertical	156	1.80	-	27.73	4.64	-			
AV	2.3898G	51.67	54.00	-2.33	19.31	3	Vertical	156	1.80	-	27.70	4.66	-			
PK	2.4378G	125.06	Inf	-Inf	92.90	3	Vertical	156	1.80	-	27.52	4.64	-			
AV	2.4362G	116.15	Inf	-Inf	83.97	3	Vertical	156	1.80	-	27.54	4.64	-			
PK	2.4838G	68.32	74.00	-5.68	36.22	3	Vertical	156	1.80	-	27.50	4.60	-			
AV	2.4835G	52.60	54.00	-1.40	20.50	3	Vertical	156	1.80	-	27.50	4.60	-			

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

2437MHz_TX

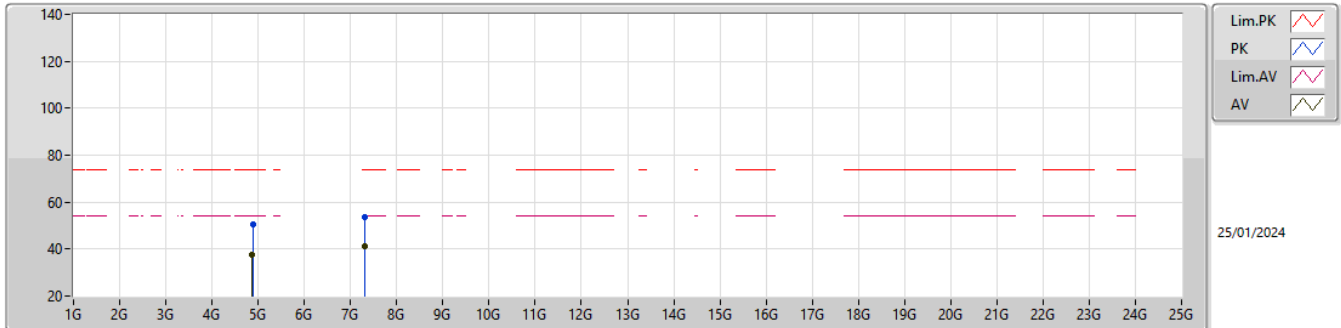


EUT_Y_2TX
Setting 52
01-H-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.87178G	50.38	74.00	-23.62	45.06	3	Vertical	202	1.80	-	31.30	6.98	32.96			
AV	4.8713G	37.14	54.00	-16.86	31.82	3	Vertical	202	1.80	-	31.30	6.98	32.96			
PK	7.3029G	54.16	74.00	-19.84	42.36	3	Vertical	0	1.00	-	36.29	8.61	33.10			
AV	7.30494G	41.65	54.00	-12.35	29.85	3	Vertical	0	1.00	-	36.28	8.62	33.10			

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

2437MHz_TX

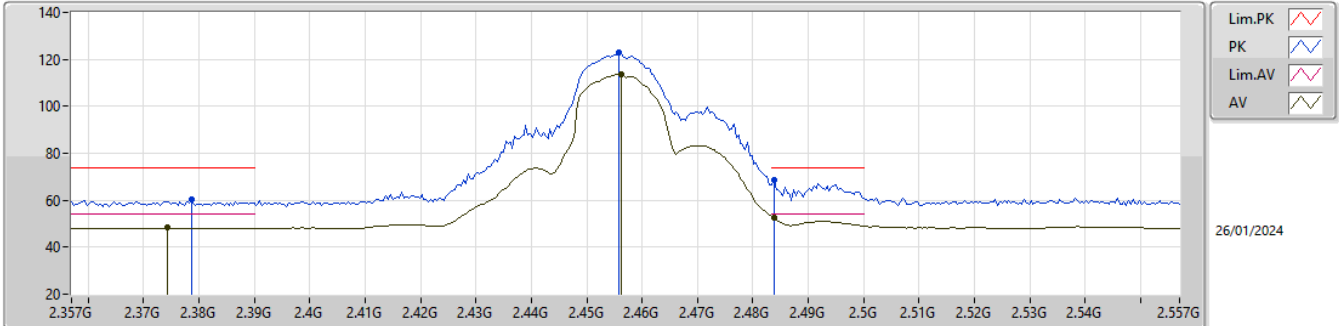


EUT Y_2TX
Setting 52
01-H-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.87838G	50.66	74.00	-23.34	45.33	3	Horizontal	316	3.00	-	31.30	6.99	32.96			
AV	4.87502G	37.41	54.00	-16.59	32.08	3	Horizontal	316	3.00	-	31.30	6.99	32.96			
PK	7.31016G	53.60	74.00	-20.40	41.82	3	Horizontal	144	2.94	-	36.26	8.62	33.10			
AV	7.30758G	41.38	54.00	-12.62	29.59	3	Horizontal	144	2.94	-	36.27	8.62	33.10			

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

2457MHz_TX

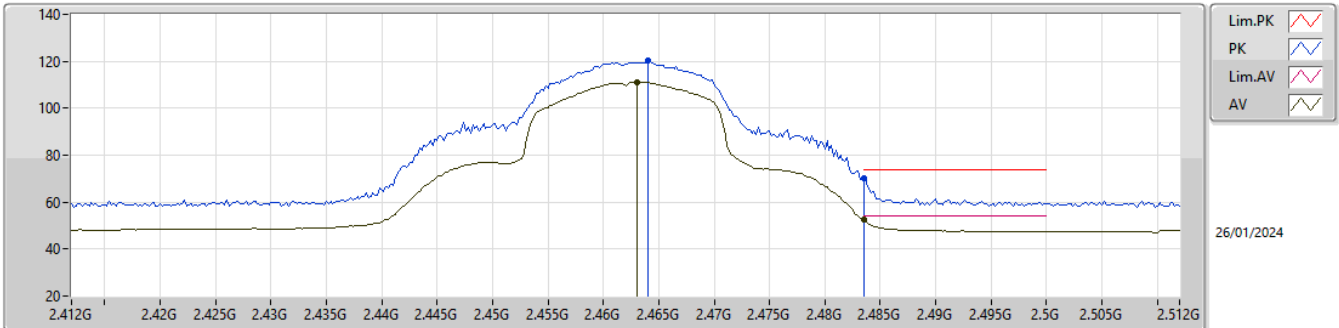


EUT Y_2TX
Setting 42
01-H-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.3786G	60.34	74.00	-13.66	27.99	3	Vertical	214	1.80	-	27.71	4.64	-			
AV	2.3742G	48.19	54.00	-5.81	15.80	3	Vertical	214	1.80	-	27.76	4.63	-			
PK	2.4558G	122.75	Inf	-Inf	90.69	3	Vertical	214	1.80	-	27.44	4.62	-			
AV	2.4562G	113.56	Inf	-Inf	81.50	3	Vertical	214	1.80	-	27.44	4.62	-			
PK	2.4838G	68.43	74.00	-5.57	36.33	3	Vertical	214	1.80	-	27.50	4.60	-			
AV	2.4838G	52.82	54.00	-1.18	20.72	3	Vertical	214	1.80	-	27.50	4.60	-			

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

2462MHz_TX

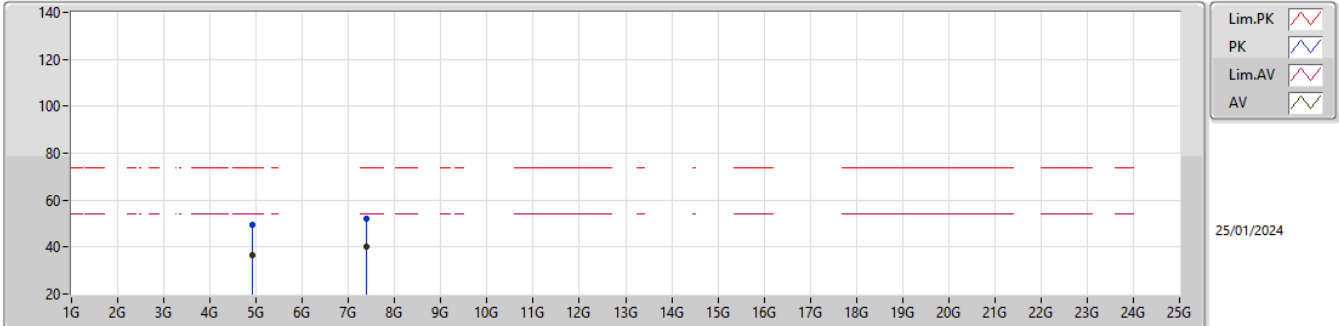


EUT_Y_2TX
Setting 38
01-H-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.463G	111.22	Inf	-Inf	88.44	3	Vertical	161	1.80	-	27.40	4.62	-			
AV	2.463G	70.28	74.00	-3.72	38.18	3	Vertical	161	1.80	-	27.50	4.60	-			
PK	2.4835G	52.55	54.00	-1.45	20.45	3	Vertical	161	1.80	-	27.50	4.60	-			

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

2462MHz_TX

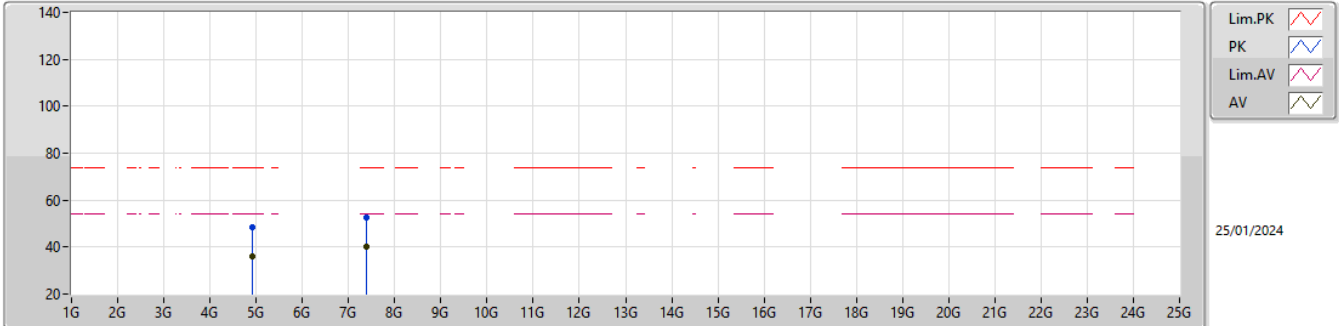


EUT Y_2TX
Setting 52
01-H-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)				
PK	4.92256G	49.55	74.00	-24.45	44.08	3	Vertical	201	1.80	-	31.39	7.03	32.95				
AV	4.9231G	36.68	54.00	-17.32	31.21	3	Vertical	201	1.80	-	31.39	7.03	32.95				
PK	7.37952G	52.27	74.00	-21.73	40.58	3	Vertical	360	1.03	-	36.10	8.71	33.12				
AV	7.38144G	40.16	54.00	-13.84	28.47	3	Vertical	360	1.03	-	36.10	8.71	33.12				

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

2462MHz_TX

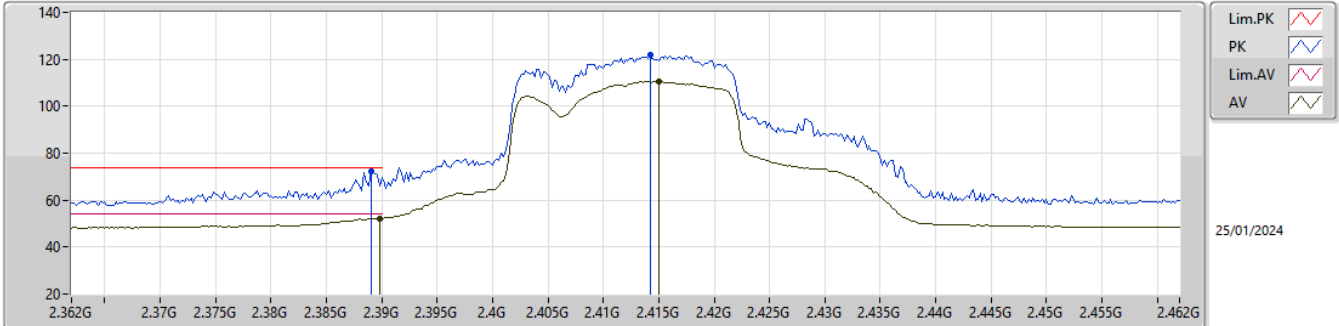


EUT_Y_2TX
Setting 52
01-H-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.92538G	48.56	74.00	-25.44	43.07	3	Horizontal	122	1.64	-	31.40	7.04	32.95			
AV	4.92526G	36.10	54.00	-17.90	30.61	3	Horizontal	122	1.64	-	31.40	7.04	32.95			
PK	7.3833G	52.37	74.00	-21.63	40.68	3	Horizontal	209	2.17	-	36.10	8.71	33.12			
AV	7.38258G	40.35	54.00	-13.65	28.66	3	Horizontal	209	2.17	-	36.10	8.71	33.12			

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

2412MHz_TX

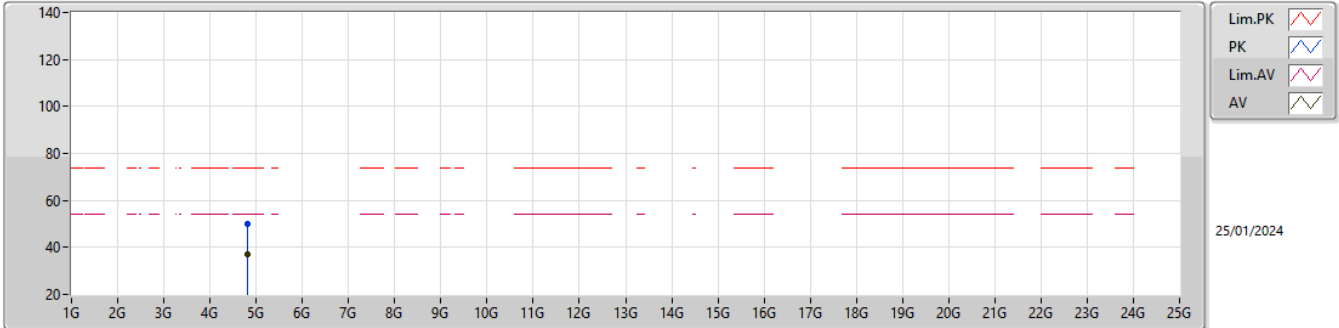


EUT_Y_2TX
Setting 39
01-H-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.389G	72.00	74.00	-2.00	39.65	3	Vertical	30	1.01	-	27.70	4.65	-			
AV	2.3898G	52.19	54.00	-1.81	19.83	3	Vertical	30	1.01	-	27.70	4.66	-			
PK	2.4142G	121.64	Inf	-Inf	89.34	3	Vertical	30	1.01	-	27.64	4.66	-			
AV	2.415G	110.38	Inf	-Inf	78.07	3	Vertical	30	1.01	-	27.65	4.66	-			

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

2412MHz_TX

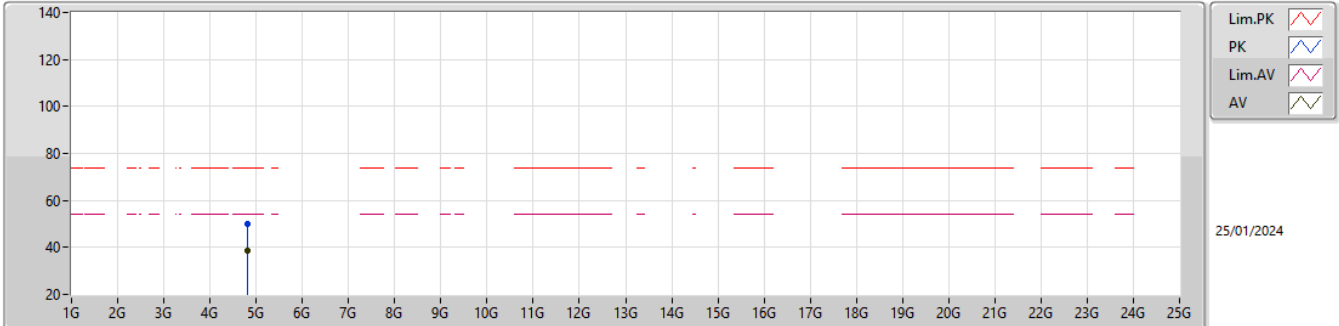


EUT_Y_2TX
Setting 52
01-H-R-7

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	4.81014G	49.95	74.00	-24.05	44.70	3	Vertical	199.2	1.71	-	31.30	6.92	32.97			
AV	4.8099G	37.30	54.00	-16.70	32.05	3	Vertical	199.2	1.71	-	31.30	6.92	32.97			

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

2412MHz_TX

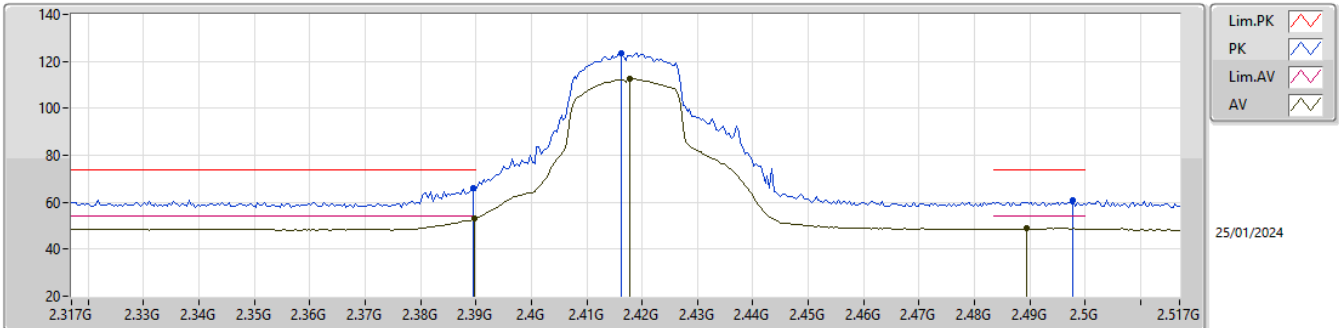


EUT_Y_2TX
Setting 52
01-H-R-7

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	4.80978G	50.17	74.00	-23.83	44.92	3	Horizontal	105	2.54	-	31.30	6.92	32.97				
AV	4.80924G	38.66	54.00	-15.34	33.41	3	Horizontal	105	2.54	-	31.30	6.92	32.97				

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

2417MHz_TX

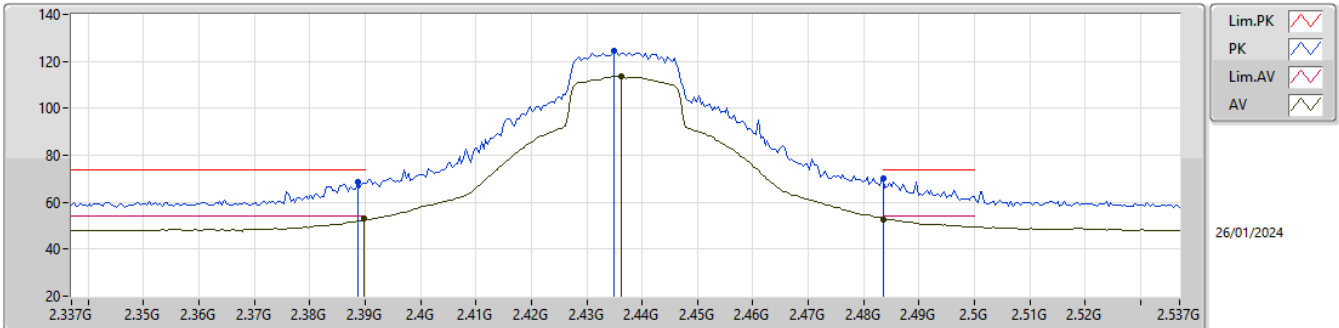


EUT Y_2TX
Setting 41
01-H-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)				
PK	2.3894G	65.92	74.00	-8.08	33.57	3	Vertical	25.8	1.00	-	27.70	4.65	-				
AV	2.3898G	52.85	54.00	-1.15	20.49	3	Vertical	25.8	1.00	-	27.70	4.66	-				
PK	2.4162G	123.35	Inf	-Inf	91.03	3	Vertical	25.8	1.00	-	27.66	4.66	-				
AV	2.4178G	112.55	Inf	-Inf	80.22	3	Vertical	25.8	1.00	-	27.68	4.65	-				
PK	2.4978G	60.78	74.00	-13.22	28.69	3	Vertical	25.8	1.00	-	27.50	4.59	-				
AV	2.4894G	48.88	54.00	-5.12	16.79	3	Vertical	25.8	1.00	-	27.50	4.59	-				

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

2437MHz_TX

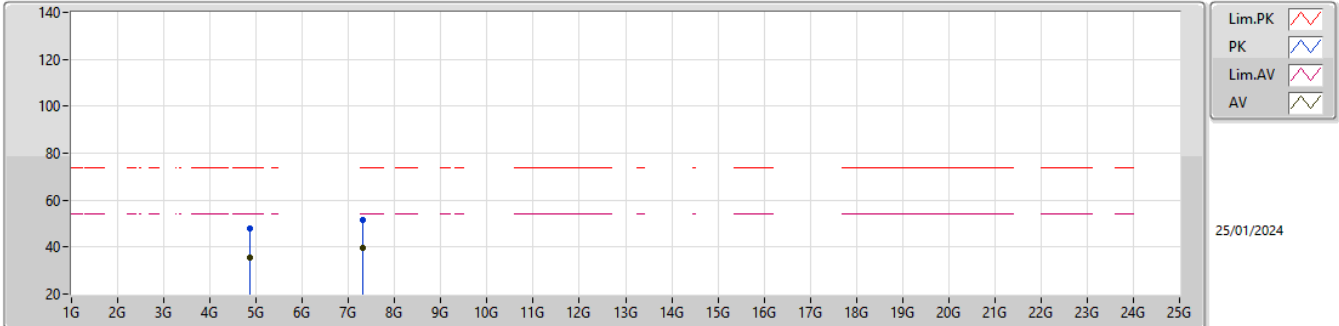


EUT_Y_2TX
Setting 45
01-H-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.3886G	68.62	74.00	-5.38	36.27	3	Vertical	53.2	1.80	-	27.70	4.65	-			
AV	2.3898G	52.85	54.00	-1.15	20.49	3	Vertical	53.2	1.80	-	27.70	4.66	-			
PK	2.435G	124.43	Inf	-Inf	92.24	3	Vertical	53.2	1.80	-	27.55	4.64	-			
AV	2.4362G	113.60	Inf	-Inf	81.42	3	Vertical	53.2	1.80	-	27.54	4.64	-			
PK	2.4835G	70.43	74.00	-3.57	38.33	3	Vertical	53.2	1.80	-	27.50	4.60	-			
AV	2.4835G	52.35	54.00	-1.65	20.25	3	Vertical	53.2	1.80	-	27.50	4.60	-			

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

2437MHz_TX

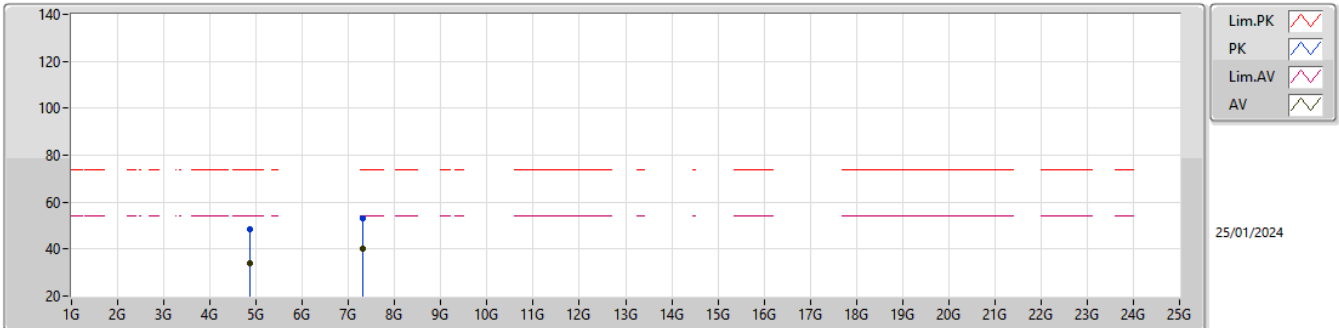


EUT_Y_2TX
Setting 52
01-H-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.87472G	47.70	74.00	-26.30	42.38	3	Vertical	37	2.47	-	31.30	6.98	32.96			
AV	4.87508G	35.54	54.00	-18.46	30.21	3	Vertical	37	2.47	-	31.30	6.99	32.96			
PK	7.31352G	51.71	74.00	-22.29	39.93	3	Vertical	89	2.15	-	36.25	8.63	33.10			
AV	7.29894G	39.73	54.00	-14.27	27.92	3	Vertical	89	2.15	-	36.30	8.61	33.10			

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

2437MHz_TX

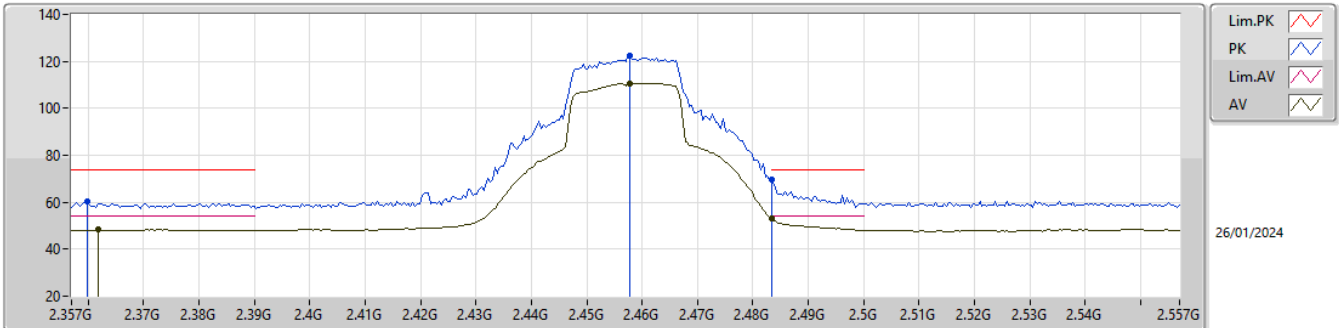


EUT_Y_2TX
Setting 52
01-H-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.8752G	48.61	74.00	-25.39	43.28	3	Horizontal	314	3.00	-	31.30	6.99	32.96			
AV	4.87274G	34.12	54.00	-19.88	28.80	3	Horizontal	314	3.00	-	31.30	6.98	32.96			
PK	7.3008G	52.91	74.00	-21.09	41.10	3	Horizontal	222	2.54	-	36.30	8.61	33.10			
AV	7.30284G	40.07	54.00	-13.93	28.27	3	Horizontal	222	2.54	-	36.29	8.61	33.10			

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

2457MHz_TX

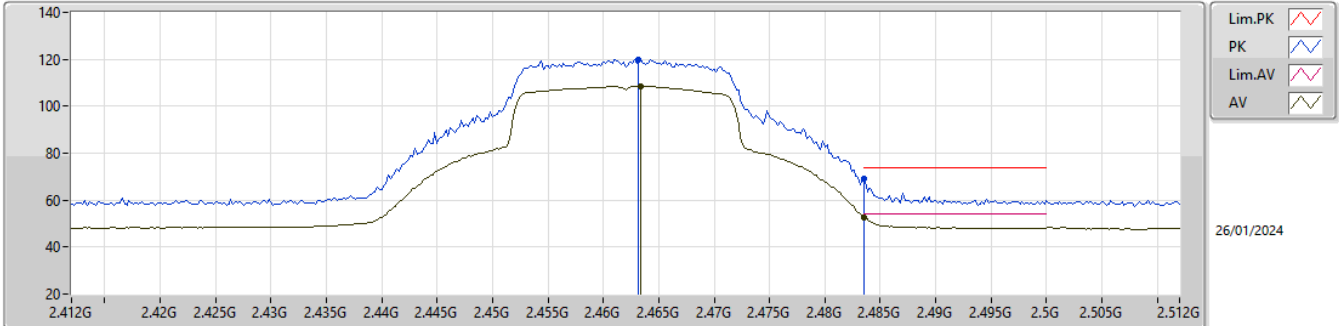


EUT_Y_2TX
Setting 41
01-H-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.3598G	60.17	74.00	-13.83	27.66	3	Vertical	35	1.00	-	27.90	4.61	-			
AV	2.3618G	48.34	54.00	-5.66	15.85	3	Vertical	35	1.00	-	27.88	4.61	-			
PK	2.4578G	122.55	Inf	-Inf	90.51	3	Vertical	35	1.00	-	27.42	4.62	-			
AV	2.4578G	110.69	Inf	-Inf	78.65	3	Vertical	35	1.00	-	27.42	4.62	-			
PK	2.4835G	69.42	74.00	-4.58	37.32	3	Vertical	35	1.00	-	27.50	4.60	-			
AV	2.4835G	52.90	54.00	-1.10	20.80	3	Vertical	35	1.00	-	27.50	4.60	-			

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

2462MHz_TX

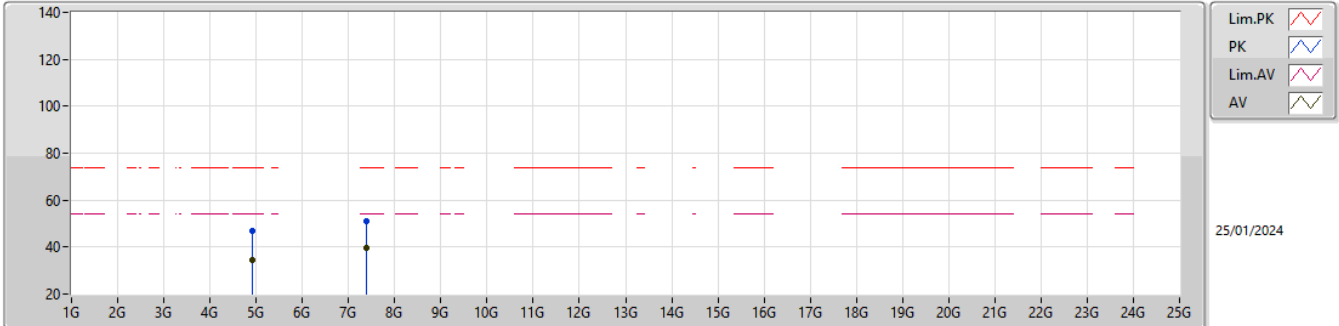


EUT_Y_2TX
Setting 36
01-H-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)				
PK	2.4632G	119.95	Inf	-Inf	87.93	3	Vertical	223.4	2.60	-	27.40	4.62	-				
AV	2.4634G	108.56	Inf	-Inf	76.54	3	Vertical	223.4	2.60	-	27.40	4.62	-				
PK	2.4835G	68.90	74.00	-5.10	36.80	3	Vertical	223.4	2.60	-	27.50	4.60	-				
AV	2.4835G	52.59	54.00	-1.41	20.49	3	Vertical	223.4	2.60	-	27.50	4.60	-				

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

2462MHz_TX

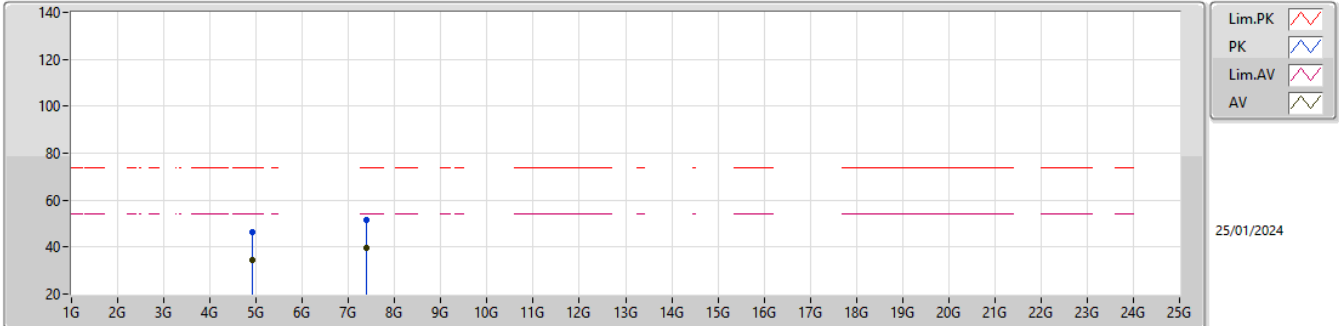


EUT_Y_2TX
Setting 52
01-H-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)				
PK	4.92664G	46.67	74.00	-27.33	41.17	3	Vertical	49	1.98	-	31.41	7.04	32.95				
AV	4.92184G	34.38	54.00	-19.62	28.91	3	Vertical	49	1.98	-	31.39	7.03	32.95				
PK	7.37868G	51.21	74.00	-22.79	39.53	3	Vertical	314	2.45	-	36.10	8.70	33.12				
AV	7.37838G	39.54	54.00	-14.46	27.86	3	Vertical	314	2.45	-	36.10	8.70	33.12				

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

2462MHz_TX

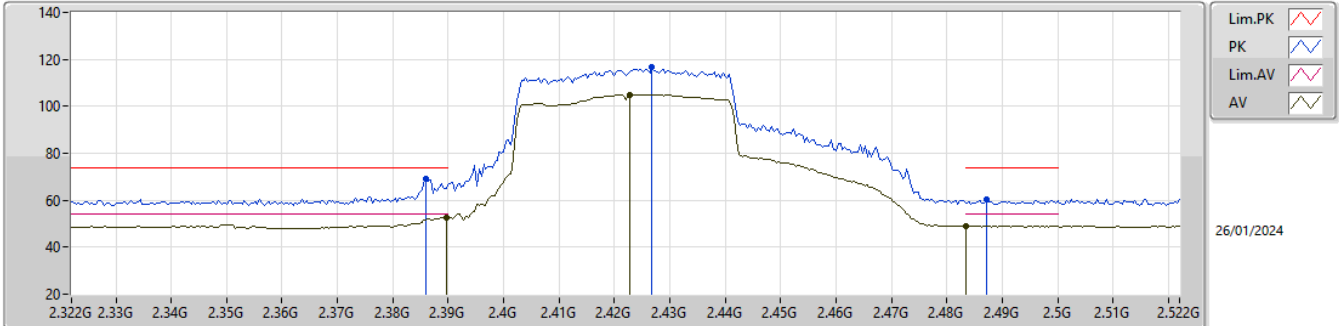


EUT_Y_2TX
Setting 52
01-H-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.92682G	46.57	74.00	-27.43	41.07	3	Horizontal	184	1.37	-	31.41	7.04	32.95			
AV	4.9216G	34.64	54.00	-19.36	29.17	3	Horizontal	184	1.37	-	31.39	7.03	32.95			
PK	7.3836G	51.56	74.00	-22.44	39.88	3	Horizontal	285	2.33	-	36.10	8.71	33.13			
AV	7.38504G	39.56	54.00	-14.44	27.88	3	Horizontal	285	2.33	-	36.10	8.71	33.13			

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

2422MHz_TX

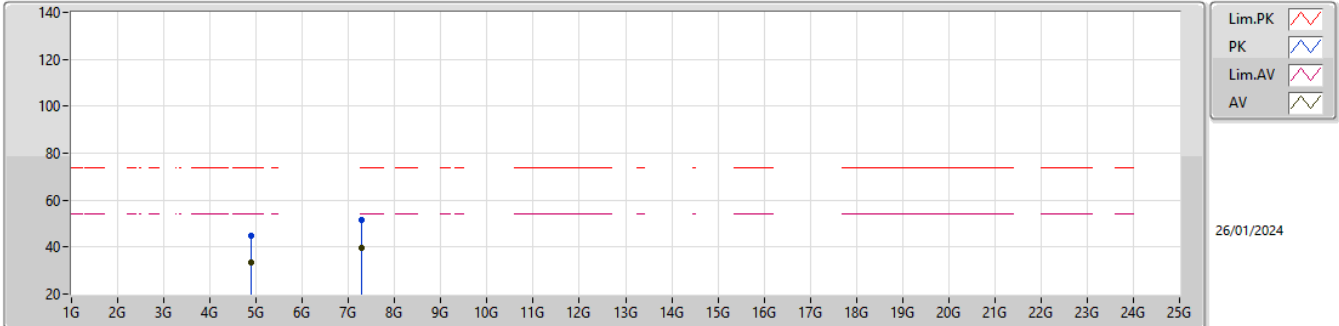


EUT_Y_2TX
Setting 38
01-H-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.386G	69.24	74.00	-4.76	36.89	3	Vertical	156.1	1.80	-	27.70	4.65	-			
AV	2.3896G	52.55	54.00	-1.45	20.20	3	Vertical	156.1	1.80	-	27.70	4.65	-			
PK	2.4268G	116.60	Inf	-Inf	84.32	3	Vertical	156.1	1.80	-	27.63	4.65	-			
AV	2.4228G	104.97	Inf	-Inf	72.65	3	Vertical	156.1	1.80	-	27.67	4.65	-			
PK	2.4872G	60.31	74.00	-13.69	28.21	3	Vertical	156.1	1.80	-	27.50	4.60	-			
AV	2.4835G	49.16	54.00	-4.84	17.06	3	Vertical	156.1	1.80	-	27.50	4.60	-			

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

2422MHz_TX

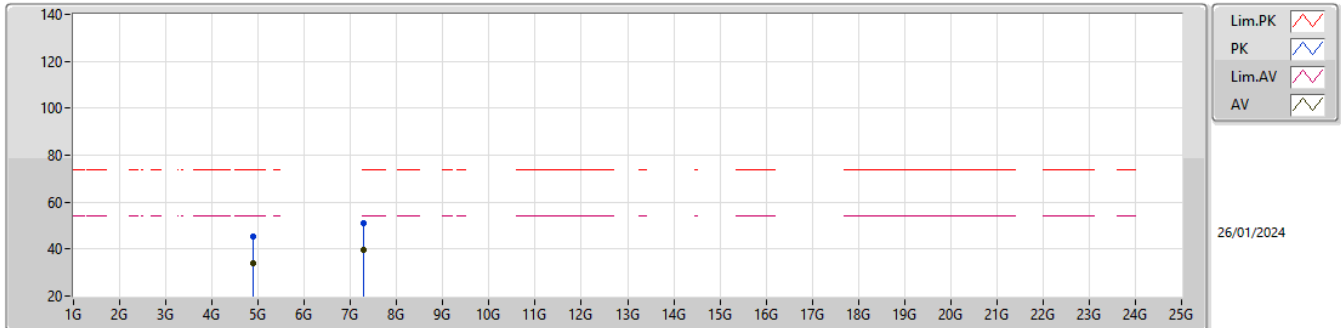


EUT_Y_2TX
Setting 52
01-H-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.8804G	44.68	74.00	-29.32	39.35	3	Vertical	163	2.86	-	31.30	6.99	32.96			
AV	4.8804G	33.41	54.00	-20.59	28.08	3	Vertical	163	2.86	-	31.30	6.99	32.96			
PK	7.27482G	51.62	74.00	-22.38	39.88	3	Vertical	121	2.17	-	36.25	8.58	33.09			
AV	7.27908G	39.85	54.00	-14.15	28.10	3	Vertical	121	2.17	-	36.26	8.58	33.09			

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

2422MHz_TX

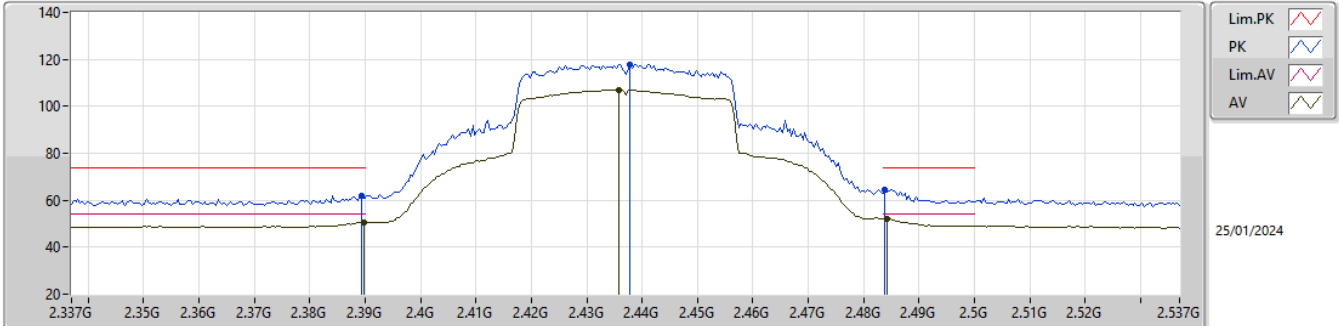


EUT_Y_2TX
Setting 52
01-H-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.8792G	45.33	74.00	-28.67	40.00	3	Horizontal	82	2.73	-	31.30	6.99	32.96			
AV	4.8792G	33.98	54.00	-20.02	28.65	3	Horizontal	82	2.73	-	31.30	6.99	32.96			
PK	7.27284G	50.98	74.00	-23.02	39.24	3	Horizontal	223	2.05	-	36.25	8.58	33.09			
AV	7.27824G	39.84	54.00	-14.16	28.09	3	Horizontal	223	2.05	-	36.26	8.58	33.09			

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

2437MHz_TX

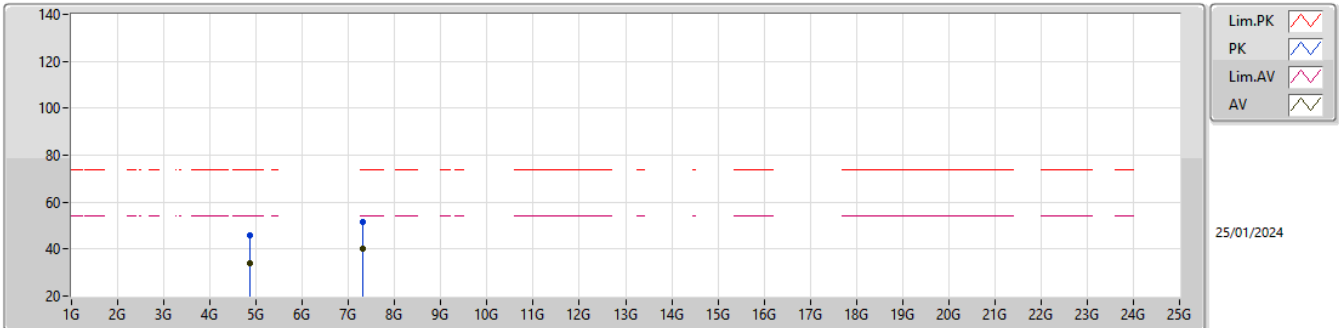


EUT_Y_2TX
Setting 40
01-H-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.3894G	61.85	74.00	-12.15	29.50	3	Vertical	54.7	1.78	-	27.70	4.65	-			
AV	2.3898G	50.51	54.00	-3.49	18.15	3	Vertical	54.7	1.78	-	27.70	4.66	-			
PK	2.4378G	117.98	Inf	-Inf	85.82	3	Vertical	54.7	1.78	-	27.52	4.64	-			
AV	2.4358G	106.95	Inf	-Inf	74.77	3	Vertical	54.7	1.78	-	27.54	4.64	-			
PK	2.4838G	64.60	74.00	-9.40	32.50	3	Vertical	54.7	1.78	-	27.50	4.60	-			
AV	2.4842G	52.08	54.00	-1.92	19.98	3	Vertical	54.7	1.78	-	27.50	4.60	-			

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

2437MHz_TX

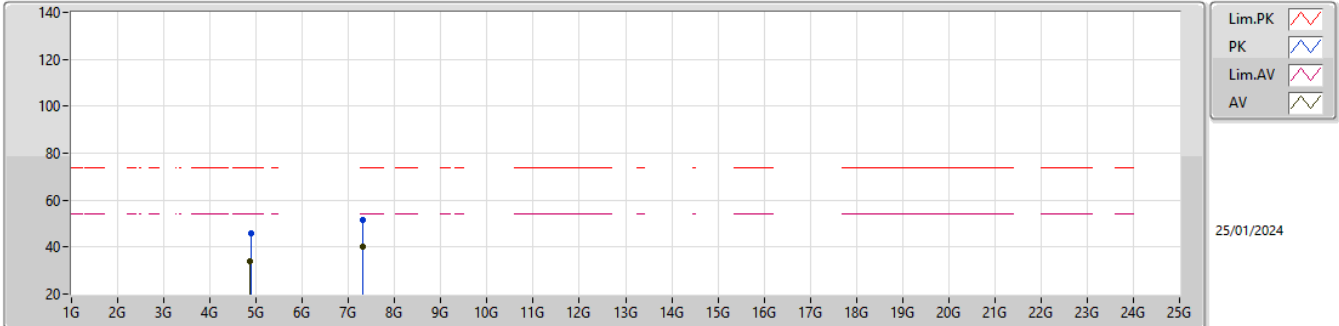


EUT_Y_2TX
Setting 52
01-H-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.86278G	45.94	74.00	-28.06	40.63	3	Vertical	221	1.33	-	31.30	6.97	32.96			
AV	4.86164G	33.97	54.00	-20.03	28.66	3	Vertical	221	1.33	-	31.30	6.97	32.96			
PK	7.30362G	51.46	74.00	-22.54	39.66	3	Vertical	266	1.62	-	36.29	8.61	33.10			
AV	7.30566G	40.27	54.00	-13.73	28.47	3	Vertical	266	1.62	-	36.28	8.62	33.10			

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

2437MHz_TX

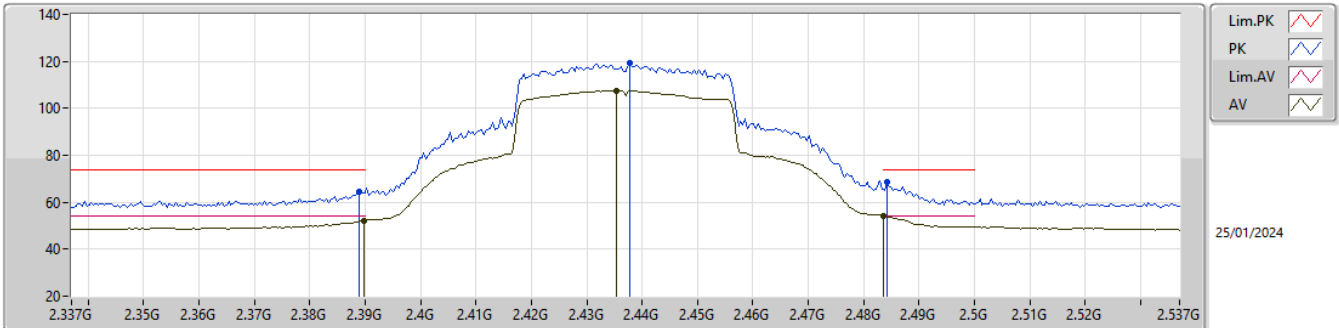


EUT_Y_2TX
Setting 52
01-H-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.88834G	45.67	74.00	-28.33	40.32	3	Horizontal	322	1.90	-	31.30	7.00	32.95			
AV	4.8653G	34.00	54.00	-20.00	28.68	3	Horizontal	322	1.90	-	31.30	6.98	32.96			
PK	7.31814G	51.76	74.00	-22.24	40.01	3	Horizontal	123	2.80	-	36.23	8.63	33.11			
AV	7.3008G	40.32	54.00	-13.68	28.51	3	Horizontal	123	2.80	-	36.30	8.61	33.10			

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

2437MHz_TX

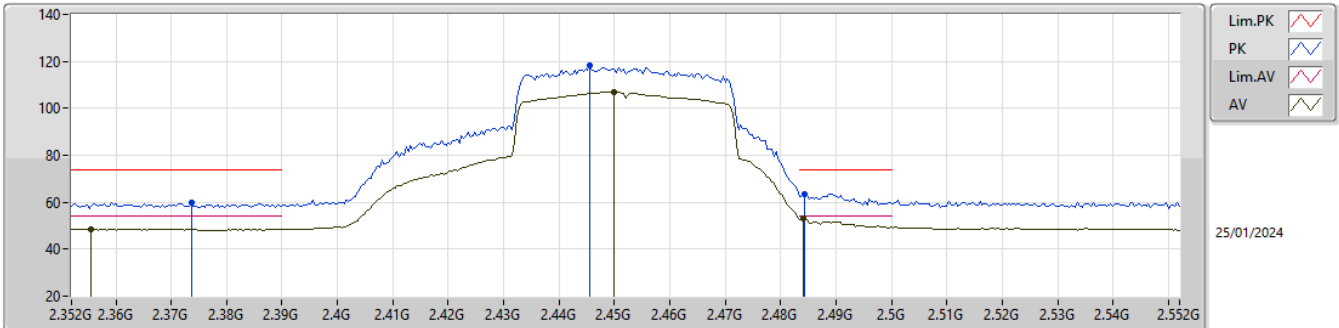


EUT_Y_2TX
Setting 41
01-H-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.389G	64.52	74.00	-9.48	32.17	3	Vertical	54.7	1.78	-	27.70	4.65	-			
AV	2.3898G	52.19	54.00	-1.81	19.83	3	Vertical	54.7	1.78	-	27.70	4.66	-			
PK	2.4378G	119.08	Inf	-Inf	86.92	3	Vertical	54.7	1.78	-	27.52	4.64	-			
AV	2.4354G	107.58	Inf	-Inf	75.39	3	Vertical	54.7	1.78	-	27.55	4.64	-			
PK	2.4842G	68.66	74.00	-5.34	36.56	3	Vertical	54.7	1.78	-	27.50	4.60	-			
AV	2.4835G	54.13	54.00	0.13	22.03	3	Vertical	54.7	1.78	-	27.50	4.60	-			

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

2452MHz_TX

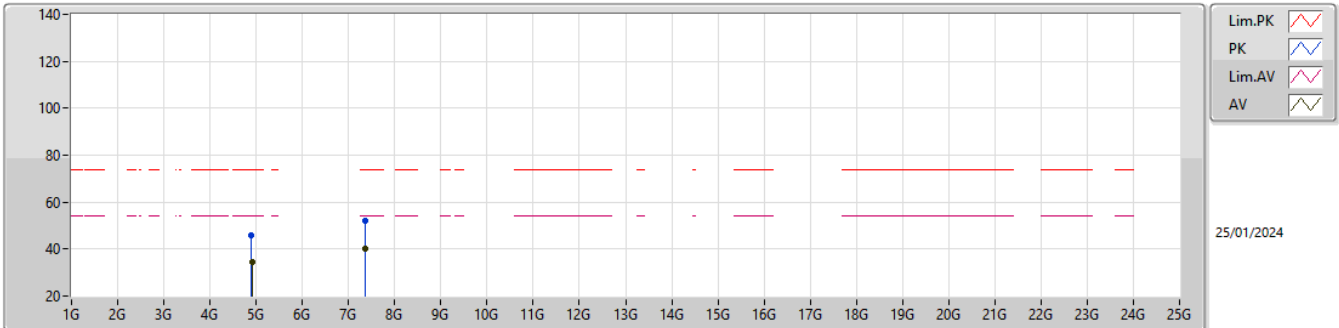


EUT_Y_2TX
Setting 39
01-H-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.3736G	59.99	74.00	-14.01	27.60	3	Vertical	219	2.95	-	27.76	4.63	-			
AV	2.3556G	48.70	54.00	-5.30	16.15	3	Vertical	219	2.95	-	27.94	4.61	-			
PK	2.4456G	118.20	Inf	-Inf	86.07	3	Vertical	219	2.95	-	27.50	4.63	-			
AV	2.45G	106.74	Inf	-Inf	74.61	3	Vertical	219	2.95	-	27.50	4.63	-			
PK	2.4844G	63.68	74.00	-10.32	31.58	3	Vertical	219	2.95	-	27.50	4.60	-			
AV	2.484G	52.93	54.00	-1.07	20.83	3	Vertical	219	2.95	-	27.50	4.60	-			

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

2452MHz_TX

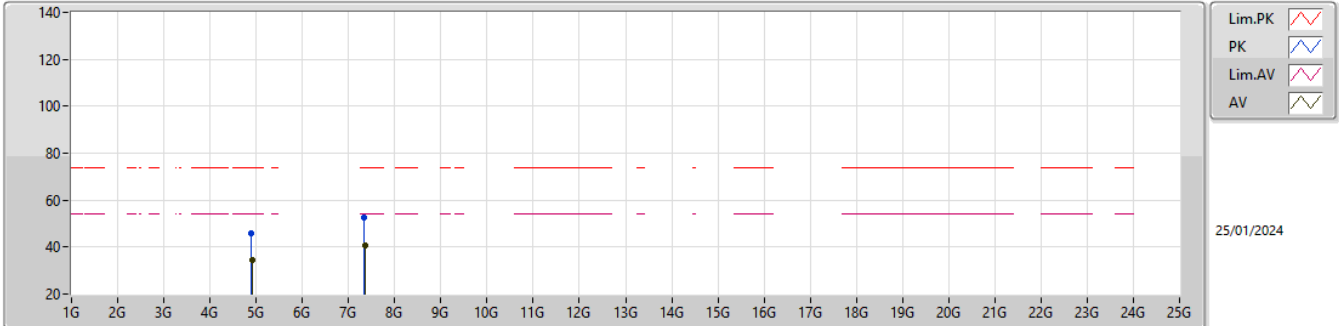


EUT_Y_2TX
Setting 52
01-H-R-7

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.89974G	45.72	74.00	-28.28	40.36	3	Vertical	11	1.77	-	31.30	7.01	32.95			
AV	4.9124G	34.38	54.00	-19.62	28.96	3	Vertical	11	1.77	-	31.35	7.02	32.95			
PK	7.35636G	51.82	74.00	-22.18	40.16	3	Vertical	236	1.88	-	36.10	8.68	33.12			
AV	7.3548G	40.35	54.00	-13.65	28.69	3	Vertical	236	1.88	-	36.10	8.68	33.12			

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

2452MHz_TX



EUT_Y_2TX
Setting 52
01-H-R-7

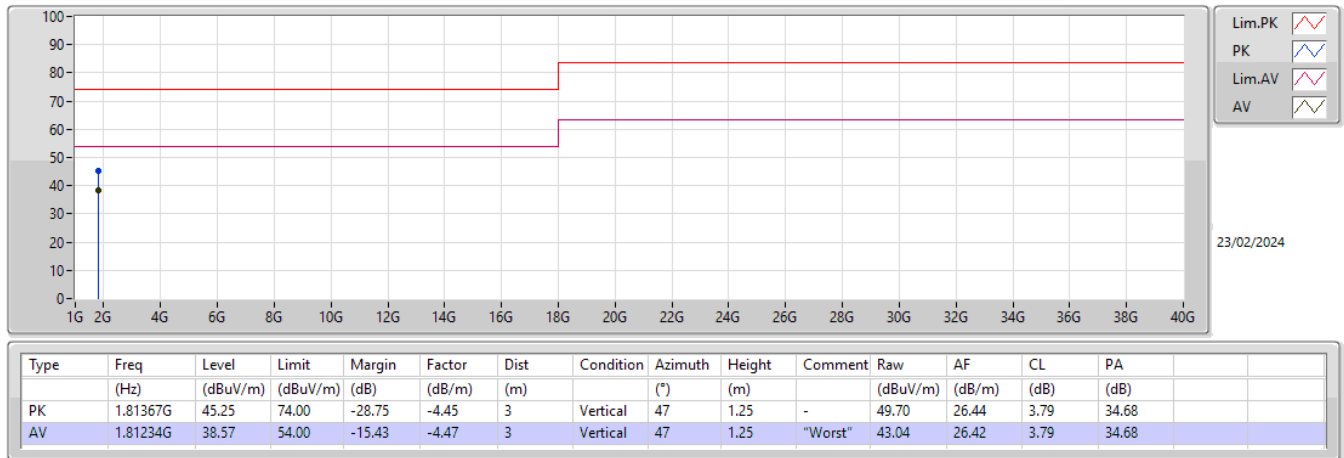
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)				
PK	4.89686G	45.88	74.00	-28.12	40.52	3	Horizontal	338	2.01	-	31.30	7.01	32.95				
AV	4.91192G	34.29	54.00	-19.71	28.87	3	Horizontal	338	2.01	-	31.35	7.02	32.95				
PK	7.3452G	52.53	74.00	-21.47	40.86	3	Horizontal	140	2.79	-	36.12	8.66	33.11				
AV	7.36884G	40.47	54.00	-13.53	28.80	3	Horizontal	140	2.79	-	36.10	8.69	33.12				



Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	AV	1.81234G	38.57	54.00	-15.43	Vertical

Mode 1



Mode 1

