



FCC Radio Test Report

FCC ID : TVE-5108TQ56462
Equipment : Secured Wireless Access Point
Brand Name : FORTINET
Model Name : FortiAP 432Gxxxxxx, FAP-432Gxxxxxx,
FORTIAP-432Gxxxxxx (Where "x" can be used
as "A-Z", or "0-9", or "-", or blank for software
changes or marketing purposes only)
Applicant : Fortinet, Inc.
899 Kifer Road, Sunnyvale, CA 94086, USA
Manufacturer : Fortinet, Inc.
899 Kifer Road, Sunnyvale, CA 94086, USA
Standard : 47 CFR FCC Part 15.247

The product was received on Aug. 14, 2023, and testing was started from Nov. 17, 2023 and completed on Apr. 01, 2024. We, SPORTON INTERNATIONAL INC. Hsinhua 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. Hsinhua Laboratory, the test report shall not be reproduced except in full.


Approved by: Jackson Tsai

SPORTON INTERNATIONAL INC. Hsinhua Laboratory

No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)



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History of this test report

Report No.	Version	Description	Issued Date
FR362304AC	01	Initial issue of report	Apr. 29, 2024

Summary of Test Result

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

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and explanations:

None

Reviewed by: Terry Chang

Report Producer: Julie Tseng

1 General Description

1.1 Information

1.1.1 RF General Information

Radio 1

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]

Non-Beamforming_Radio 1

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11b	20	4TX
2.4-2.4835GHz	802.11g	20	4TX
2.4-2.4835GHz	802.11ax HEW20	20	4TX
2.4-2.4835GHz	802.11ax HEW40	40	4TX

Beamforming_Radio 1

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11ax HEW20-BF	20	4TX
2.4-2.4835GHz	802.11ax HEW40-BF	40	4TX

Note:

- ♦ 11b mode uses a combination of DSSS-DBPSK, DQPSK, CCK modulation.
- ♦ 11g, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- ♦ VHT20, VHT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- ♦ HEW20, HEW40 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- ♦ BWch is the nominal channel bandwidth.
- ♦ Evaluated HEW20/HEW40 mode only due to the similar modulation. The power setting of HT20/HT40/VHT20/VHT40 mode are the same or lower than HEW20/HEW40.



1.1.2 Antenna Information

Ant.	Port	Brand	Model Name	Antenna Type	Connector	Support
1	1	SENAO	5718A0729300	Dipole	N-type	2.4G+5G
2	2	SENAO	5718A0729300	Dipole	N-type	2.4G+5G
3	1	SENAO	5718A0729300	Dipole	N-type	2.4G+5G
4	2	SENAO	5718A0729300	Dipole	N-type	2.4G+5G
5	1	SENAO	5718A0727300	Dipole	N-type	2.4G+5G+6G
6	2	SENAO	5718A0727300	Dipole	N-type	2.4G+5G+6G
7	3	SENAO	5718A0727300	Dipole	N-type	2.4G+5G+6G
8	4	SENAO	5718A0727300	Dipole	N-type	2.4G+5G+6G
9	1	SENAO	5718A0618300	Dipole	N-type	BT&Zigbee
10	1	Quectel	7102A0652000	Patch	I-Pex	GPS

Gain (dBi)							Remark		
Ant.	Port	2.4G	5G	6G	BT& Zigbee	GPS			
1	1	4.82	5.89	-	-	-	Radio 1_ 2.4G 4*4	Radio 2_ 5G 4*4	Radio 2 (Low Band) (5G Band1/2) 4*4
2	2	4.76	6.01	-	-	-			
3	3	5.03	6.4	-	-	-			
4	4	4.78	6.14	-	-	-			
5	1	4.26	5.75	5.8	-	-	Radio 3_ 6G 4*4	Radio 3 2.4G/5G/6G 2*2 Scan Radio	Radio 3 (High Band) (5G Band3/4) 4*4
6	2	4.45	5.54	5.95	-	-		-	
7	3	4.81	5.5	5.65	-	-		Radio 3 2.4G/5G/6G 2*2 Scan Radio	
8	4	4.86	5.72	5.8	-	-		-	
9	1	-	-	-	4.71	-	-		
10	1	-	-	-	-	2	-		

Note 1: The EUT has ten antennas.

Note 2: Directional gain information

	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 $N_{ANT} \leq 4$	$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{in}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$
BF	$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{in}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$	$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{in}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$

For 2.4GHz function:

< Radio 1 >

For IEEE 802.11b/g/n/VHT/ax mode (4TX/4RX)

Ant.1 (port 1), Ant.2 (port 2), Ant.3 (port 3), Ant.4 (port 4) could transmit/receive simultaneously.

< Radio 3 > < Scan >

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

Ant.5 (port 1), Ant.7 (port 3) can be used as receiving.

For 5GHz function:

< Radio 2 >

For IEEE 802.11a/n/ac/ax mode (4TX/4RX)

Ant.1 (port 1), Ant.2 (port 2), Ant.3 (port 3), Ant.4 (port 4) could transmit/receive simultaneously.

< Radio 3 > < Scan >

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

Ant.5 (port 1), Ant.7 (port 3) can be used as receiving.

< Radio 2 > < Low Band >

For IEEE 802.11a/n/ac/ax mode (4TX/4RX)

Ant.1 (port 1), Ant.2 (port 2), Ant.3 (port 3), Ant.4 (port 4) could transmit/receive simultaneously.

< Radio 3 > < High Band >

For IEEE 802.11a/n/ac/ax mode (4TX/4RX)

Ant.5 (port 1), Ant.6 (port 2), Ant.7 (port 3), Ant.8 (port 4) could transmit/receive simultaneously.

For 6GHz function:

< Radio 3 >

For IEEE 802.11a/ax mode (4TX/4RX)

Ant.5 (port 1), Ant.6 (port 2), Ant.7 (port 3), Ant.8 (port 4) could transmit/receive simultaneously.

< Radio 3 > < Scan >

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

Ant.5 (port 1), Ant.7 (port 3) can be used as receiving.

For Bluetooth function:

For Bluetooth mode (1TX/1RX)

Only Ant.9 can be used as transmitting/receiving.

For GPS function:

For GPS mode (1RX)

Only Ant.10 can be used as receiving.

1.1.3 EUT Information

Operational Condition			
EUT Power Type	From PoE		
EUT Function	☒ Point-to-multipoint	☐ Point-to-point	
Beamforming Function	☒ With beamforming	☐ Without beamforming	
Resource Unit(802.11ax)	☒ Full RU	☐ Partial RU	
Type of EUT			
☒	Stand-alone		
☐	Combined (EUT where the radio part is fully integrated within another device)		
	Combined Equipment - Brand Name / Model No.:		...
☐	Plug-in radio (EUT intended for a variety of host systems)		
	Host System - Brand Name / Model No.:		...
☐	Other:		

1.1.4 Mode Test Duty Cycle

Non-Beamforming_Radio 1

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11b_Nss1,(1Mbps)_4TX	0.651	1.86	689.062u	3k
802.11g_Nss1,(6Mbps)_4TX	0.959	0.18	1.977m	1k
802.11ax HEW20_Nss1,(MCS0)_4TX	0.949	0.23	5.446m	300
802.11ax HEW40_Nss1,(MCS0)_4TX	0.952	0.21	5.446m	300

Beamforming_Radio 1

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	0.883	0.54	3.442m	300
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	0.929	0.32	3.442m	300

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

1.1.5 Table for Multiple Listing

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

Brand Name	Model Name	Description
FORTINET	FortiAP 432Gxxxxxx, FAP-432Gxxxxxx, FORTIAP-432Gxxxxxx (Where "x" can be used as "A-Z", or "0-9", or "-", or blank for software changes or marketing purposes only)	All the models are identical, the difference model served as marketing strategy.

From the above models, model: FAP-432G was selected as representative model for the test and its data was recorded in this report.

1.2 Testing Applied Standards

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

- ♦ 47 CFR FCC Part 15
- ♦ ANSI C63.10-2013

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

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

1.3 Testing Location Information

Test Lab. : Sporton International Inc. Hsinhua Laboratory				
☒ Hsinhua (TAF: 3785)	ADD: No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)			
	TEL: 886-3-327-3456		FAX: 886-3-327-0973	
Test site Designation No. TW3785 with FCC.				
Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
AC Conduction	CO04-HY	Ivan Chung	21.1~22.3°C / 50~54%	01/Apr/2024
RF Conducted	TH07-HY	Vivi Jiang	22.2~23.6°C / 52~55%	19/Nov/2023~23/Feb/2024
Radiated (Above 1G)	03CH02-HY	Darren Cho	19.5~20.9°C / 50~52%	17/Nov/2023~28/Dec/2023
Radiated (Below 1G)	03CH02-HY	Darren Cho	22.2~23.5°C / 49~51%	28/Dec/2023
Radiated (Beamforming)	03CH02-HY	Darren Cho	20.8~21.4°C / 50~52%	16/Feb/2024
Radiated (Co-location)	03CH02-HY	Daniel Lin	21.7~22.6°C / 51~54%	12/Mar/2024~13/Mar/2024
☐ Wen 33rd.St. (TAF: 3785)	ADD: No.14-1, Ln. 19, Wen 33rd St., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.)			
	TEL: 886-3-318-0787		FAX: 886-3-318-0287	
Test site Designation No. TW0008 with FCC.				

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
AC Power-line Conducted Emissions	4.53 dB	Confidence levels of 95%
Bandwidth	3 MHz	Confidence levels of 95%
Maximum Conducted Output Power	2 dB	Confidence levels of 95%
Power Spectral Density	2 dB	Confidence levels of 95%
Emissions in Non-restricted Frequency Bands	0.14 dB	Confidence levels of 95%
Emissions in Restricted Frequency Bands	4.8 dB	Confidence levels of 95%
Temperature	0.41 °C	Confidence levels of 95%
Humidity	3.4 %	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

Test Software Version	qdart_conn.win.1.0_installer_00099.1
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Non-Beamforming_Radio 1

Mode	Power Setting
802.11b_Nss1,(1Mbps)_4TX	-
2412MHz	22
2417MHz	23.5
2437MHz	23.5
2457MHz	22.5
2462MHz	21.5
802.11g_Nss1,(6Mbps)_4TX	-
2412MHz	22.5
2417MHz	23
2437MHz	23.5
2457MHz	23.5
2462MHz	19.5
802.11ax HEW20_Nss1,(MCS0)_4TX	-
2412MHz	20
2417MHz	24
2437MHz	25
2457MHz	22.5
2462MHz	19
802.11ax HEW40_Nss1,(MCS0)_4TX	-
2422MHz	20
2427MHz	20.5
2437MHz	22
2447MHz	16
2452MHz	17.5

**Beamforming_Radio 1**

Mode	Power Setting
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-
2412MHz	20
2437MHz	20
2462MHz	20
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-
2422MHz	20
2437MHz	20
2452MHz	20

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	CTX
1	PoE mode ; WIFI R1 2.4G TX

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

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emissions in Restricted Frequency Bands
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	CTX
1	PoE mode
Operating Mode > 1GHz	CTX
Orthogonal Planes of EUT	Y Plane
	



The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Test Condition	Radiated measurement
Operating Mode	CTX
1	Radio 1:2.4G + Radio 2:5G full + BT
2	Radio 1:2.4G + Radio 2:5G Low band(Band1/2) + Radio 3: 5G High band(Band3/4) + BT
3	Radio 1:2.4G + Radio 2:5G full + Zigbee
4	Radio 1:2.4G + Radio 2:5G Low band(Band1/2) + Radio 3: 5G High band(Band3/4) + Zigbee
Refer to Sporton Test Report No.: FA362304 for Co-location RF Exposure Evaluation and Appendix G for Radiated Emission Co-location.	

2.3 Accessories

Accessories				
PoE Adapter	Brand Name	Senao Inc.	Model Name	PIN060-54PR
	Power Rating	I/P: 100 - 240 Vac, 1.5 A, 50-60 Hz, O/P: 54 Vdc, 1.11 A		
AC CORD	Brand Name	I-SHENG	Model Name	AC CORD 600mm
	Signal Line	0.5 meter, shielded cable, w/o ferrite core		
BRACKET POLE MOUNT	Brand Name	CUN SHENG	Model Name	BRACKET POLE MOUNT LFP
BRACKET WALL MOUNT	Brand Name	Enrack	Model Name	BRACKET WALL MOUNT
Pole Mount Bracket	Brand Name	CUN SHENG	Model Name	6301A2873010
Ground Wire	Brand Name	BO YAO	Model Name	WIRE GEN AWG10 180cm
	Signal Line	1.8 meter, shielded cable, w/o ferrite core		

Reminder: Regarding to more detail and other information, please refer to user manual.

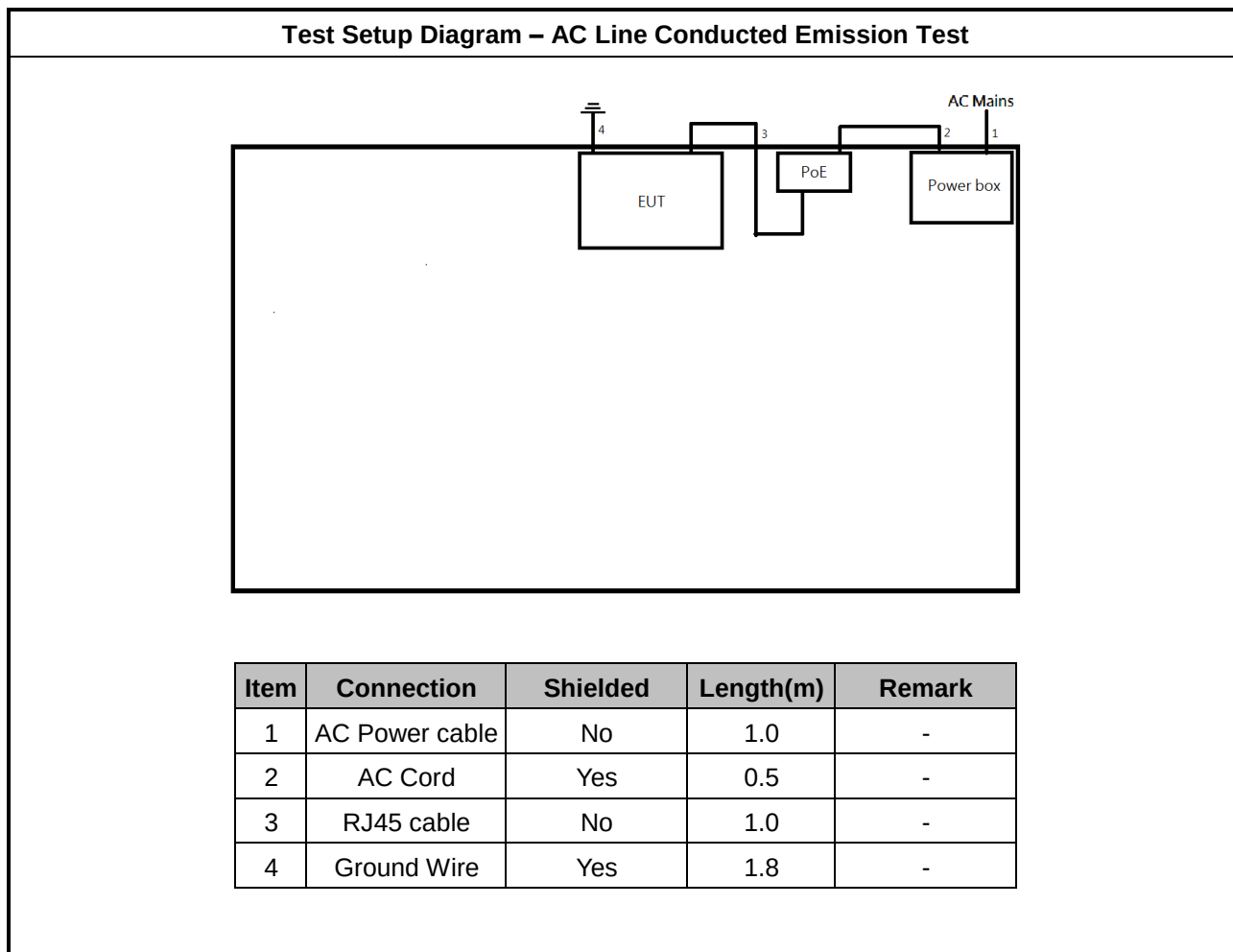
2.4 Support Equipment

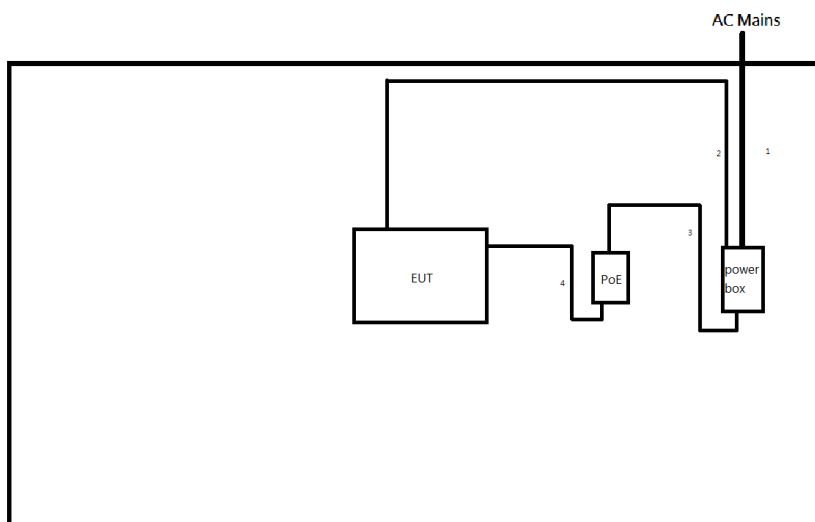
Support Equipment – AC Conduction					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	RJ45 cable	Power Sync	CAT-6E-01	-	-

Support Equipment – Conducted					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Notebook	DELL	E5410	-	-
2	Adapter for NB	DELL	HA65NM130	-	-
3	PoE	Senao Inc.	PIN060-54PR	-	Provided by Customer

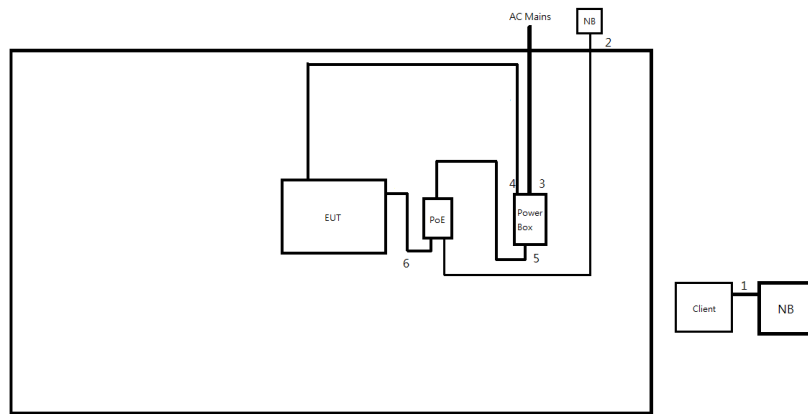
Support Equipment – Radiated					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	RJ45 cable	Power Sync	CAT-6E-01	-	-
2	RJ45 cable	Power Sync	CAT-6E-10	-	-
3	Notebook*2 (Remote)	DELL	E5410	-	-
4	RJ45 cable (Remote)	Power Sync	CAT-6E-01	-	-

2.5 Test Setup Diagram



Test Setup Diagram - Radiated Test_Non-Beamforming


Item	Connection	Shielded	Length(m)	Remark
1	AC Power cable	No	1.8	-
2	Ground Wire	Yes	1.8	-
3	AC Cord	Yes	0.5	-
4	RJ45 cable	No	1.0	-

Test Setup Diagram - Radiated Test_Beamforming


Item	Connection	Shielded	Length(m)	Remark
1	RJ45 cable	No	1.0	-
2	RJ45 cable	No	10.0	-
3	AC Power cable	No	1.8	-
4	Ground Wire	Yes	1.8	-
5	AC Cord	Yes	0.5	-
6	RJ45 cable	No	1.0	-

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

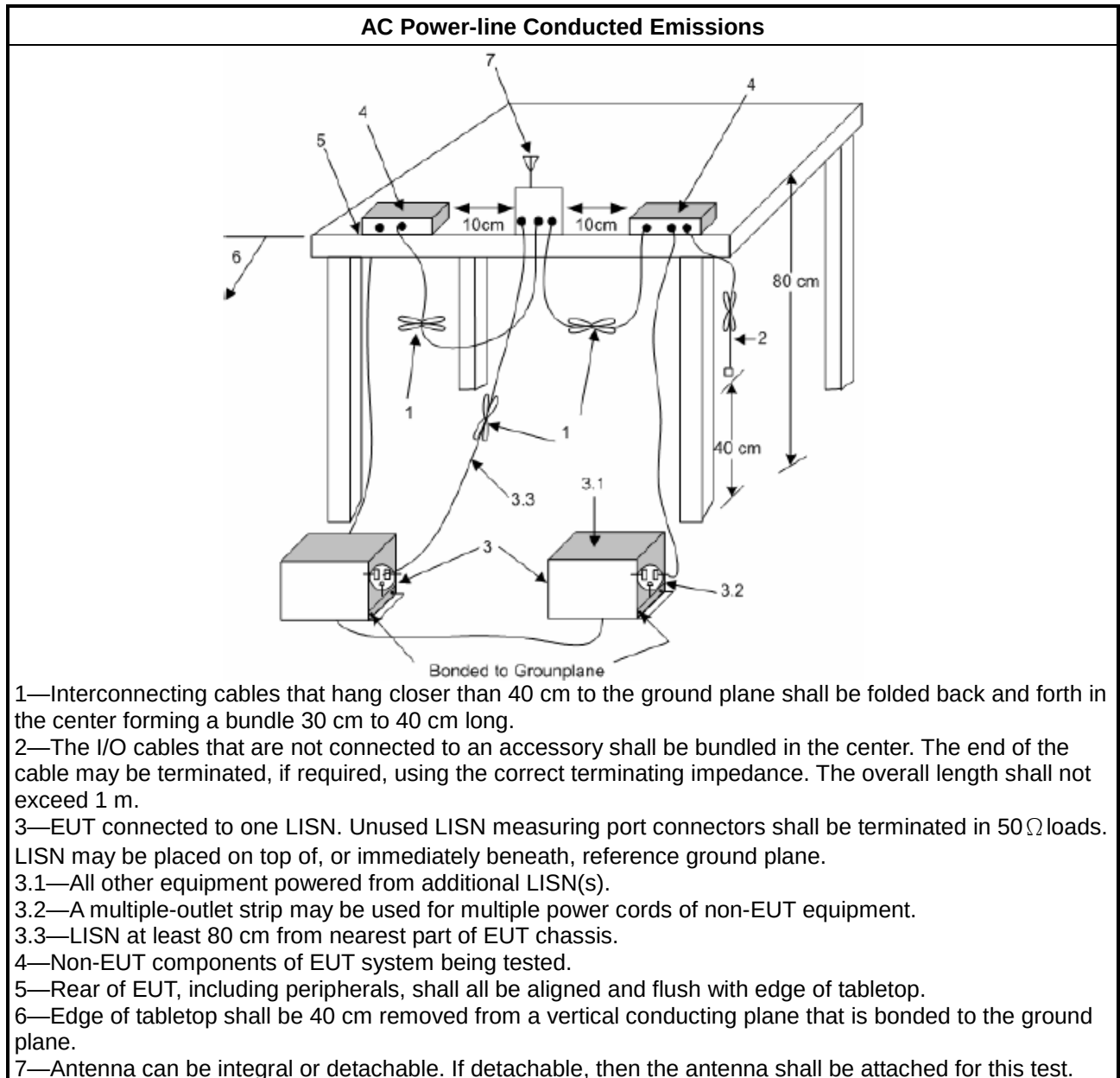
Test Method
☒ Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

3.1.4 Measurement Results Calculation

The measured Level is calculated using:

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

3.1.5 Test Setup



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.

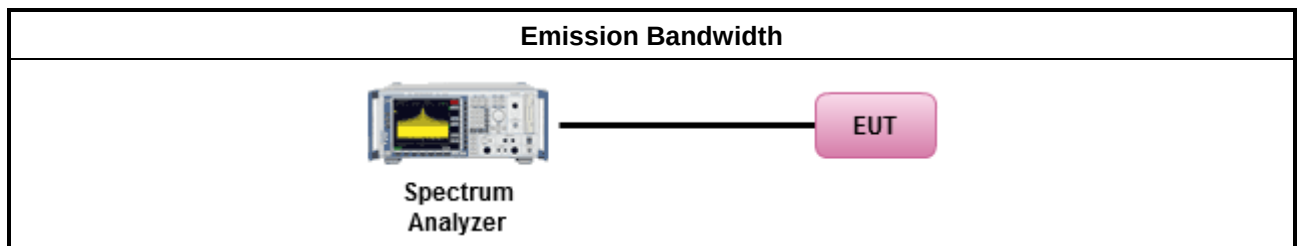
3.2.2 Measuring Instruments

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 KDB 558074. clause 8.2 (11.8 of ANSI C63.10) DTS bandwidth measurement.
☐	Refer as RSS-Gen, clause 6.7 for occupied bandwidth testing.
☐	Refer as ANSI C63.10, clause 6.9.3 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
e.i.r.p. Power Limit:	
	2400-2483.5 MHz Band
	Point-to-multipoint systems (P2M): $P_{eirp} \leq 36$ dBm (4 W)
	Point-to-point systems (P2P): $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX}])$ dBm
	Smart antenna system (SAS)
	- Single beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm
	- Overlap beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm
	- Aggregate power on all beams: $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX} + 8])$ 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.	

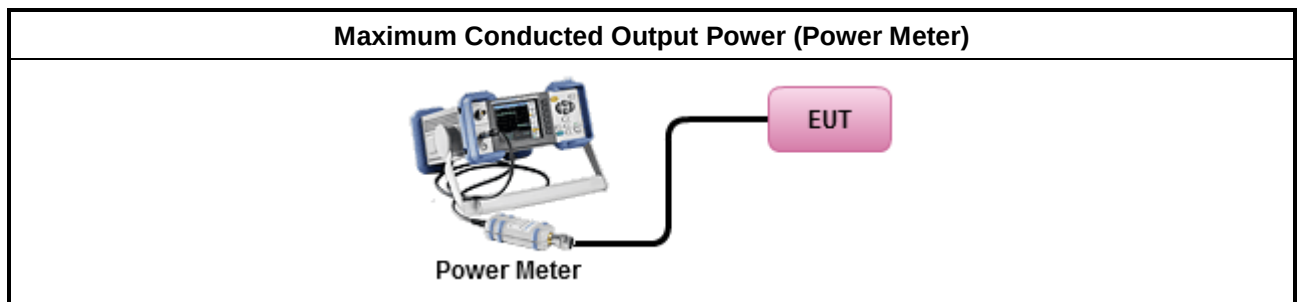
3.3.2 Measuring Instruments

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 KDB 558074, clause 8.3.1.1 (11.9.1.1 of ANSI C63.10) RBW ≥ EBW method.
☐	Refer as KDB 558074, clause 8.3.1.2 (11.9.1.2 of ANSI C63.10) integrated band power method.
☐	Refer as KDB 558074, clause 8.3.1.3 (11.9.1.3 of ANSI C63.10) peak power meter.
Maximum Average Conducted Output Power	
☐	Refer as KDB 558074, clause 8.3.2.2 (11.9.2.2 of ANSI C63.10) using a spectrum analyzer.
☒	Refer as KDB 558074, clause 8.3.2.3 (11.9.2.3 of ANSI C63.10) using a power meter.
For conducted measurement.	
If the EUT supports multiple transmit chains using options given below: Refer as 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

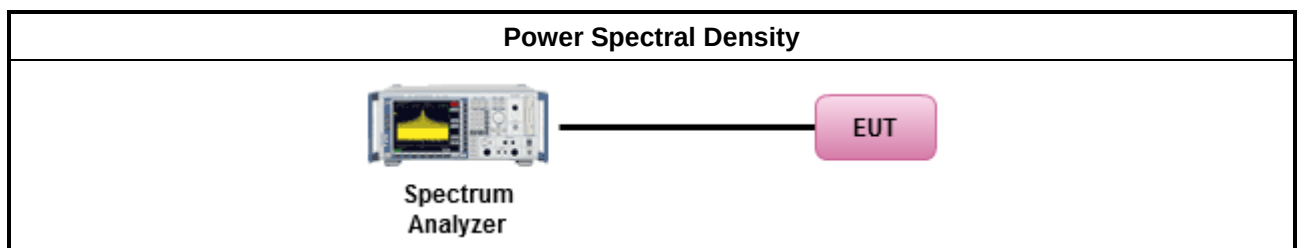
3.4.2 Measuring Instruments

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 KDB 558074, clause 8.4 (11.10 of ANSI C63.10) Max. PSD.
▪	For conducted measurement.
▪	If The EUT supports multiple transmit chains using options given below:
▪	Measure and sum the spectra across the outputs. Refer as 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.

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 (dB)
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 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 level.	

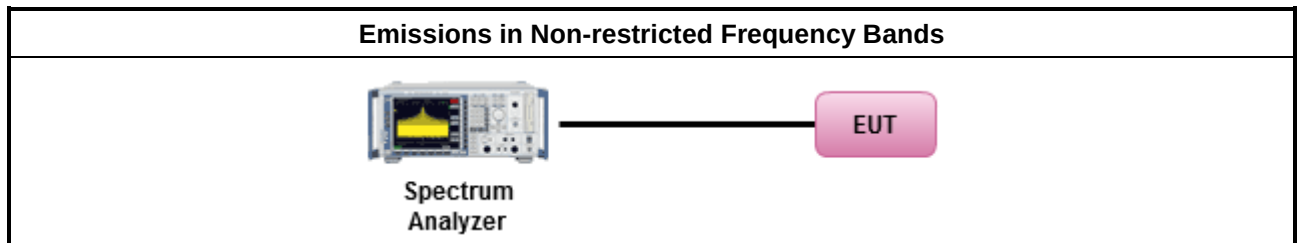
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

Test Method
Refer as KDB 558074, clause 8.5 (11.11 of ANSI C63.10) for non-restricted frequency 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

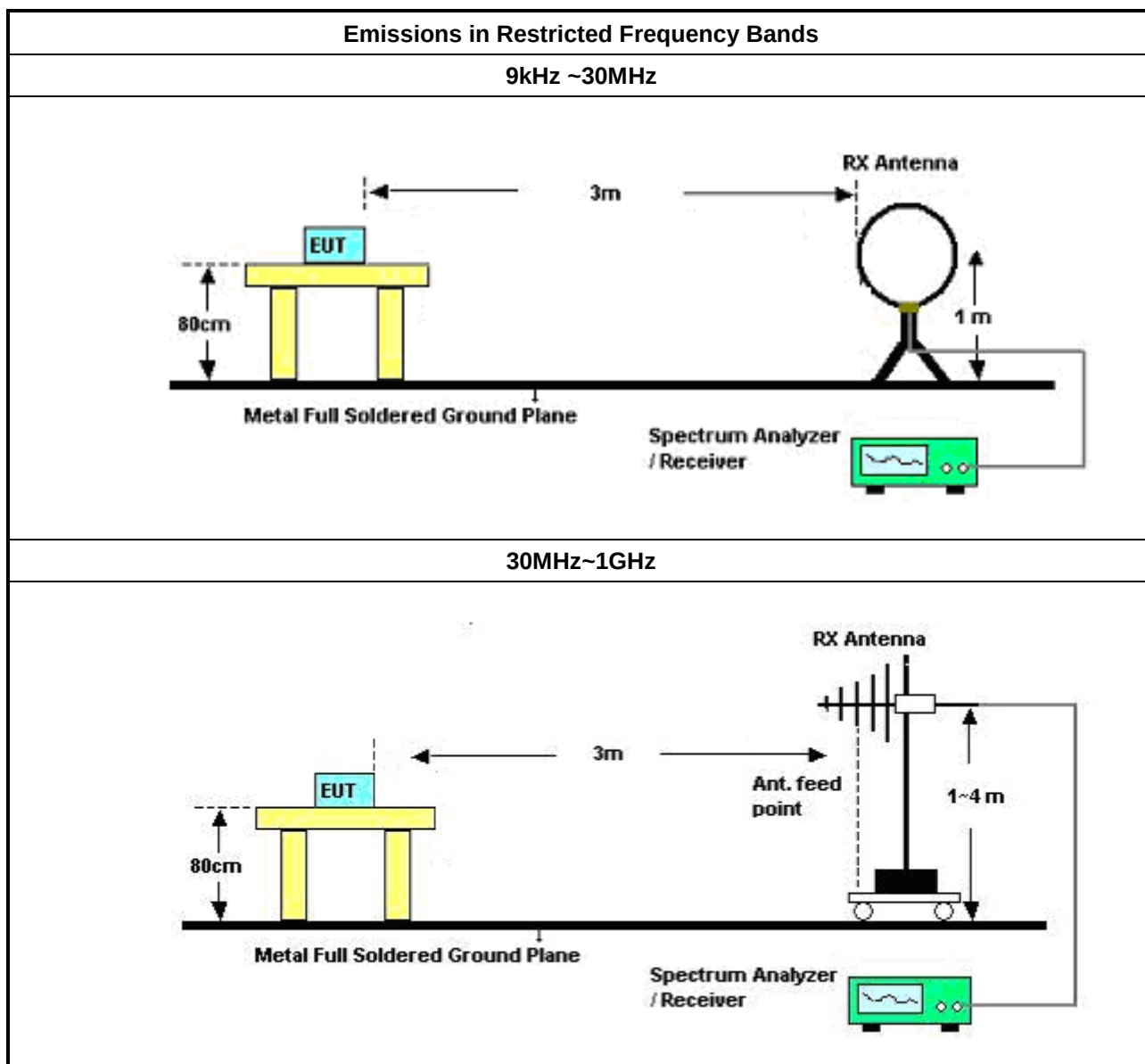
Test Method	
The average emission levels shall be measured in [duty cycle $\geq$ 98 or duty factor].	
Refer as ANSI C63.10, clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.	
For the transmitter unwanted emissions shall be measured using following options below:	
	Refer as KDB 558074, clause 8.6 (11.12 of ANSI C63.10) for restricted frequency bands.
For the transmitter band-edge emissions shall be measured using following options below:	
	Refer as KDB 558074 clause 8.7.1, 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 KDB 558074, clause 8.7.2 (6.10.6 of ANSI C63.10) for marker-delta method for band-edge measurements.
	Refer as KDB 558074, clause 8.7.3 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels.
Use the following spectrum analyzer settings:	
	Set RBW=100 kHz for $f < 1$ GHz; VBW=3 * RBW; Sweep = auto; Detector function = peak; Trace = max hold.
	Set RBW = 1 MHz, VBW= 3MHz for $f \geq 1$ GHz for peak measurement. For average measurement, refer as 1.1.4.
KDB 414788 Open-Field Test Sites and Chamber Correlation Justification.	
	Based on FCC 15.31(f)(2): measurements may be performed at a distance closer than that specified in regulations; however, an attempt should be made to avoid making measurements in the near field.
	Open-field site and chamber correlation testing had been performed and chamber measured test result is the worst case test result.

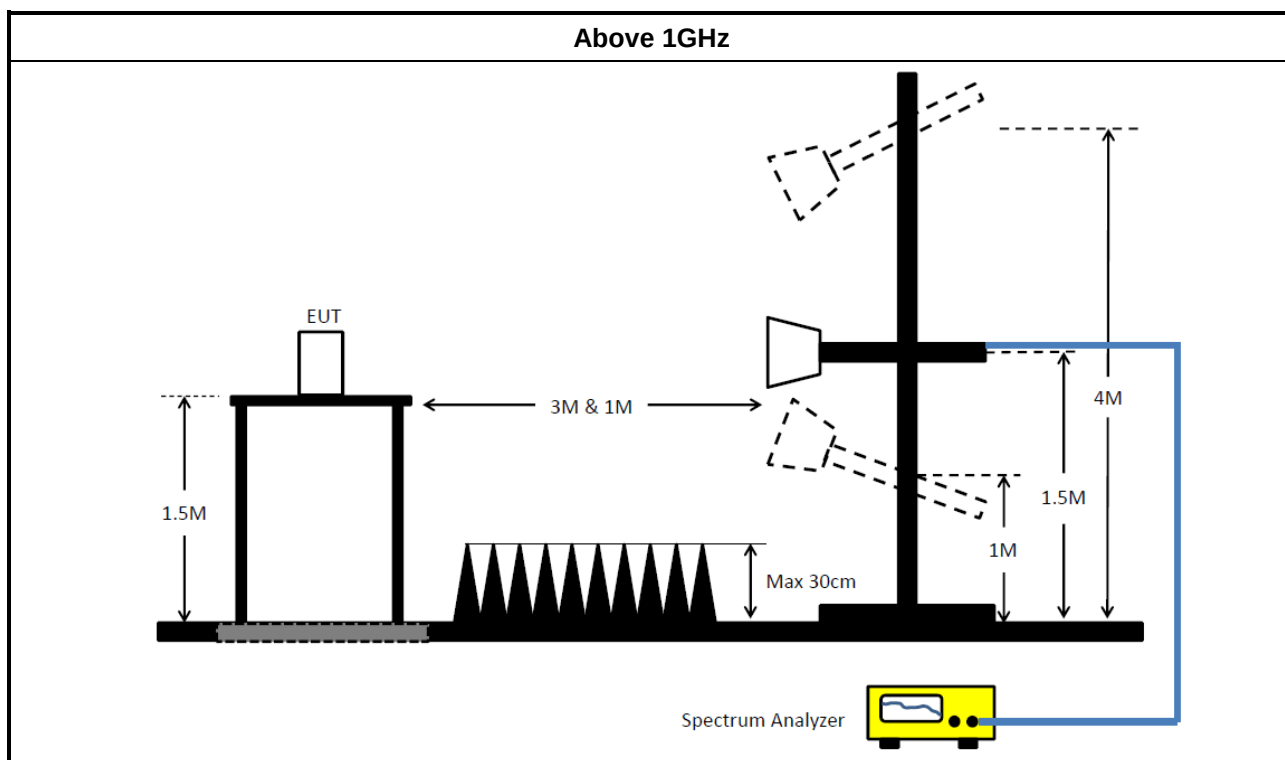
3.6.4 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamplifier Factor)

3.6.5 Test Setup





3.6.6 Test Result of Emissions in Restricted Frequency Bands (Below 30MHz)

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

3.6.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F



4 Test Equipment and Calibration Data

Instrument for AC Conduction

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMI Test Receiver	R&S	ESR	102051	9kHz ~ 3.6GHz	16/May/2023	15/May/2024
Two-Line V-Network	R&S	ENV 216	101295	9kHz ~ 30MHz	05/Feb/2024	04/Feb/2025
RF Cable 5m	TITAN	TITAN	CO04-cable-01	9 kHz~200MHz	27/Feb/2024	26/Feb/2025
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9kHz ~ 30MHz	18/Oct/2023	17/Oct/2024
Software	Sporton	SENSE-EMI	V5.11.3	-	NCR	NCR

NCR: No Calibration Required

Instrument for Conducted Test_Non-Beamforming

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Signal Analyzer	R&S	FSV 40	101515	9kHz~40GHz	14/Feb/2023	13/Feb/2024
SMB100A Signal Generator	R&S	SMB100A	181147	100kHz~40GHz	20/Oct/2023	19/Oct/2024
Power Meter	Anritsu	ML2495A	2105003	300MHz~40GHz	19/Sep/2023	18/Sep/2024
Pulse Sensor	Anritsu	MA2411B	1911254	300MHz~40GHz	19/Sep/2023	18/Sep/2024
SENSE-15247_DTS	Sporton	V5.11.15	N/A	N/A	N/A	N/A

Instrument for Conducted Test_Beamforming

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Signal Analyzer	R&S	FSV 40	101515	9kHz~40GHz	02/Feb/2024	01/Feb/2025
SMB100A Signal Generator	R&S	SMB100A	181147	100kHz~40GHz	20/Oct/2023	19/Oct/2024
Power Meter	Anritsu	ML2495A	1517010	300MHz~40GHz	15/Dec/2023	14/Dec/2024
Pulse Sensor	Anritsu	MA2411B	1339407	300MHz~40GHz	15/Dec/2023	14/Dec/2024
SENSE-15247_DTS	Sporton	V5.11.16	N/A	N/A	N/A	N/A

**Instrument for Radiated Test_Non-Beamforming**

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	30MHz~1GHz 3m	29/Jul/2023	28/Jul/2024
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz~18GHz 3m	28/Jul/2023	27/Jul/2024
EMI Test Receiver	R&S	ESR	102052	9kHz~3.6GHz	26/May/2023	25/May/2024
Signal Analyzer	R&S	FSP 40	100593	9kHz~40GHz	17/Mar/2023	16/Mar/2024
Loop Antenna	TESEQ	HLA 6120	31244	9kHz~30MHz	23/Mar/2023	22/Mar/2024
Bilog Antenna & 5dB Attenuator	SCHAFFNER / MTJ	CBL 6112B / MTJ6102-05	2723/2	30MHz~1GHz	27/Aug/2023	26/Aug/2024
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	02268	1GHz~18GHz	23/Sep/2023	22/Sep/2024
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	01248	18GHz~40GHz	21/Aug/2023	20/Aug/2024
RF Cable	MVE	400LL+SN 200207	03CH02-cable-02	9kHz~30MHz	19/Dec/2023	18/Dec/2024
RF Cable	MVE	400LL+SN 200207	03CH02-cable-02	30MHz~1GHz	19/Dec/2023	18/Dec/2024
RF Cable-R03m	HUBER+SUHNE R	SUCOFLEX104	03CH02-cable-01	1GHz~40GHz	10/Feb/2023	09/Feb/2024
Amplifier	Aglient	8447D	2944A11149	100kHz~1.3GHz	27/Jun/2023	26/Jun/2024
Microwave Preamplifier	Agilent	8449B	3008A02373	1GHz~26.5GHz	24/Oct/2023	23/Oct/2024
Amplifier	EM	EM18G40GA	060874	18GHz ~40GHz	18/Aug/2023	17/Aug/2024
SENSE-15247_DTS	Sporton	V5.11.15	NA	NA	NA	NA

Instrument for Radiated Test_Beamforming

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz~18GHz 3m	28/Jul/2023	27/Jul/2024
Signal Analyzer	R&S	FSP 40	100593	9kHz~40GHz	17/Mar/2023	16/Mar/2024
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	02268	1GHz~18GHz	23/Sep/2023	22/Sep/2024
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	01248	18GHz~40GHz	21/Aug/2023	20/Aug/2024
RF Cable-R03m	HUBER+SUHNE R	SUCOFLEX104	03CH02-cable-01	1GHz~40GHz	15/Feb/2024	14/Feb/2025
Microwave Preamplifier	Agilent	8449B	3008A02373	1GHz~26.5GHz	24/Oct/2023	23/Oct/2024
Microwave Premplifier	EMC INSTRUMENTS	EM18G40GA	060604	18GHz ~ 40GHz	16/Mar/2023	15/Mar/2024
SENSE-15247-DTS	Sporton	V5.11.16	NA	NA	NA	NA

**Instrument for Radiated Test Co-location**

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz~18GHz 3m	28/Jul/2023	27/Jul/2024
Signal Analyzer	R&S	FSP 40	100593	9kHz~40GHz	17/Mar/2023	16/Mar/2024
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	02268	1GHz~18GHz	23/Sep/2023	22/Sep/2024
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	01248	18GHz~40GHz	21/Aug/2023	20/Aug/2024
RF Cable-R03m	HUBER+SUHNER	SUCOFLEX 104	03CH02-cable-01	1GHz~40GHz	15/Feb/2024	14/Feb/2025
Microwave Preamplifier	Agilent	8449B	3008A02373	1GHz~26.5GHz	24/Oct/2023	23/Oct/2024
Microwave Preamplifier	EM	EM18G40GA	060604	18GHz ~40GHz	16/Mar/2023	15/Mar/2024
SENSE-15407_NII	Sporton	V5.11.6	N/A	N/A	N/A	N/A



Conducted Emissions at Powerline_Non-Beamforming_Radio 1 Appendix A

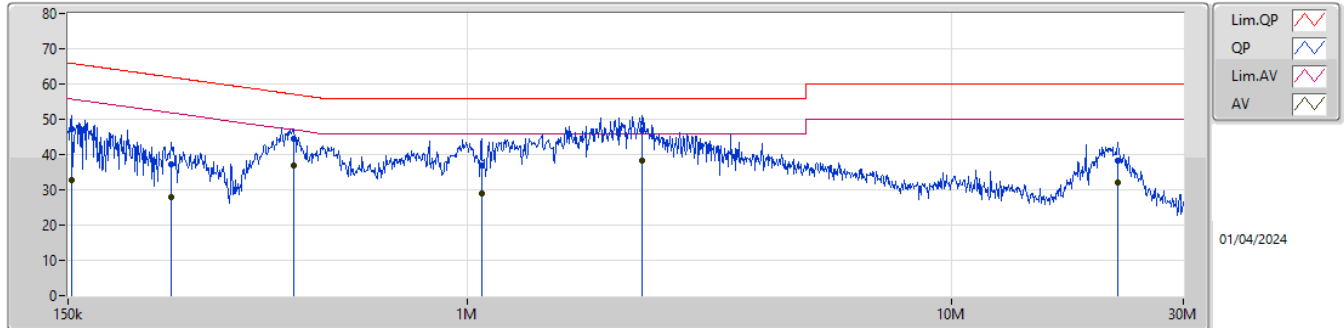
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	2.292M	38.39	46.00	-7.61	Line

Result

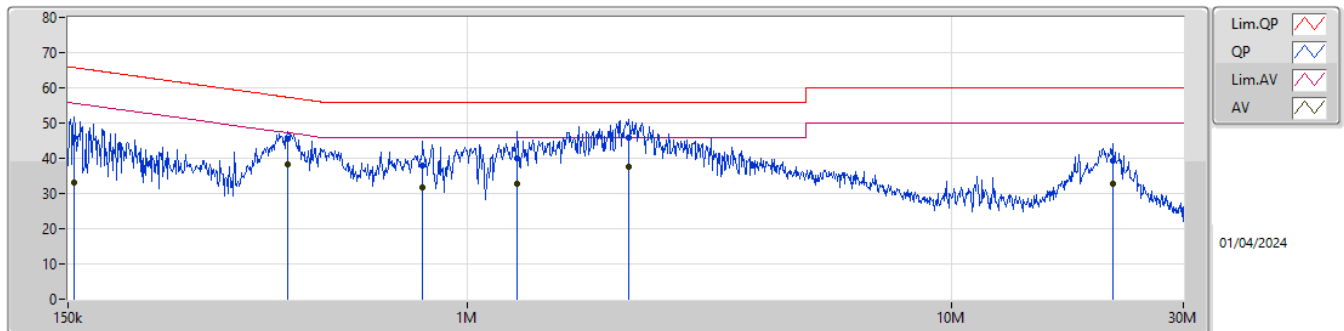
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	153.024k	47.23	65.83	-18.60	Line
Mode 1	Pass	AV	153.024k	32.90	55.83	-22.93	Line
Mode 1	Pass	QP	245.097k	37.31	61.93	-24.62	Line
Mode 1	Pass	AV	245.097k	27.83	51.93	-24.10	Line
Mode 1	Pass	QP	437.246k	44.61	57.11	-12.50	Line
Mode 1	Pass	AV	437.246k	36.89	47.11	-10.22	Line
Mode 1	Pass	QP	1.069M	36.92	56.00	-19.08	Line
Mode 1	Pass	AV	1.069M	28.94	46.00	-17.06	Line
Mode 1	Pass	QP	2.292M	47.03	56.00	-8.97	Line
Mode 1	Pass	AV	2.292M	38.39	46.00	-7.61	Line
Mode 1	Pass	QP	21.953M	38.34	60.00	-21.66	Line
Mode 1	Pass	AV	21.953M	31.93	50.00	-18.07	Line
Mode 1	Pass	QP	154.251k	45.88	65.77	-19.89	Neutral
Mode 1	Pass	AV	154.251k	33.01	55.77	-22.76	Neutral
Mode 1	Pass	QP	426.898k	45.63	57.32	-11.69	Neutral
Mode 1	Pass	AV	426.898k	38.37	47.32	-8.95	Neutral
Mode 1	Pass	QP	808.571k	38.03	56.00	-17.97	Neutral
Mode 1	Pass	AV	808.571k	31.58	46.00	-14.42	Neutral
Mode 1	Pass	QP	1.269M	39.87	56.00	-16.13	Neutral
Mode 1	Pass	AV	1.269M	32.70	46.00	-13.30	Neutral
Mode 1	Pass	QP	2.15M	45.88	56.00	-10.12	Neutral
Mode 1	Pass	AV	2.15M	37.47	46.00	-8.53	Neutral
Mode 1	Pass	QP	21.434M	39.16	60.00	-20.84	Neutral
Mode 1	Pass	AV	21.434M	32.86	50.00	-17.14	Neutral

Conducted Emissions at Powerline_Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)						
QP	153.024k	47.23	65.83	-18.60	19.43	Line	-	27.80	9.61	0.07	9.75						
AV	153.024k	32.90	55.83	-22.93	19.43	Line	-	13.47	9.61	0.07	9.75						
QP	245.097k	37.31	61.93	-24.62	19.41	Line	-	17.90	9.61	0.10	9.70						
AV	245.097k	27.83	51.93	-24.10	19.41	Line	-	8.42	9.61	0.10	9.70						
QP	437.246k	44.61	57.11	-12.50	19.49	Line	-	25.12	9.61	0.12	9.76						
AV	437.246k	36.89	47.11	-10.22	19.49	Line	-	17.40	9.61	0.12	9.76						
QP	1.069M	36.92	56.00	-19.08	19.50	Line	-	17.42	9.61	0.09	9.80						
AV	1.069M	28.94	46.00	-17.06	19.50	Line	-	9.44	9.61	0.09	9.80						
QP	2.292M	47.03	56.00	-8.97	19.52	Line	-	27.51	9.62	0.10	9.80						
AV	2.292M	38.39	46.00	-7.61	19.52	Line	-	18.87	9.62	0.10	9.80						
QP	21.953M	38.34	60.00	-21.66	19.53	Line	-	18.81	9.57	0.12	9.84						
AV	21.953M	31.93	50.00	-18.07	19.53	Line	-	12.40	9.57	0.12	9.84						

Conducted Emissions at Powerline_Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)						
QP	154.251k	45.88	65.77	-19.89	19.44	Neutral	-	26.44	9.62	0.07	9.75						
AV	154.251k	33.01	55.77	-22.76	19.44	Neutral	-	13.57	9.62	0.07	9.75						
QP	426.898k	45.63	57.32	-11.69	19.49	Neutral	-	26.14	9.61	0.12	9.76						
AV	426.898k	38.37	47.32	-8.95	19.49	Neutral	-	18.88	9.61	0.12	9.76						
QP	808.571k	38.03	56.00	-17.97	19.50	Neutral	-	18.53	9.61	0.10	9.79						
AV	808.571k	31.58	46.00	-14.42	19.50	Neutral	-	12.08	9.61	0.10	9.79						
QP	1.269M	39.87	56.00	-16.13	19.51	Neutral	-	20.36	9.61	0.10	9.80						
AV	1.269M	32.70	46.00	-13.30	19.51	Neutral	-	13.19	9.61	0.10	9.80						
QP	2.15M	45.88	56.00	-10.12	19.53	Neutral	-	26.35	9.62	0.11	9.80						
AV	2.15M	37.47	46.00	-8.53	19.53	Neutral	-	17.94	9.62	0.11	9.80						
QP	21.434M	39.16	60.00	-20.84	19.65	Neutral	-	19.51	9.69	0.12	9.84						
AV	21.434M	32.86	50.00	-17.14	19.65	Neutral	-	13.21	9.69	0.12	9.84						

**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)_4TX	7.95M	12.984M	13M0G1D	6.325M	12.624M
802.11g_Nss1,(6Mbps)_4TX	16.35M	16.492M	16M5D1D	14.65M	16.294M
802.11ax HEW20_Nss1,(MCS0)_4TX	19.1M	19.015M	19M0D1D	15.6M	18.716M
802.11ax HEW40_Nss1,(MCS0)_4TX	38.2M	37.881M	37M9D1D	29.35M	37.531M

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)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11b_Nss1,(1Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	6.325M	12.624M	7.65M	12.699M	7.4M	12.624M	7.075M	12.624M
2437MHz	Pass	500k	7.275M	12.879M	6.575M	12.714M	6.7M	12.759M	7.1M	12.789M
2462MHz	Pass	500k	7.075M	12.954M	6.675M	12.894M	7.95M	12.984M	7.725M	12.909M
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	16.3M	16.338M	16.275M	16.338M	16.3M	16.404M	15.35M	16.492M
2437MHz	Pass	500k	16.35M	16.36M	16.35M	16.36M	14.65M	16.294M	16.35M	16.36M
2462MHz	Pass	500k	16.35M	16.382M	16.35M	16.404M	16.325M	16.382M	16.35M	16.448M
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	18.7M	19.015M	18.75M	18.941M	15.6M	18.716M	18.7M	18.841M
2437MHz	Pass	500k	19.025M	19.015M	19M	18.916M	18.8M	18.966M	19.025M	18.916M
2462MHz	Pass	500k	19.1M	18.891M	18.325M	18.816M	19.05M	18.966M	19.025M	18.841M
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	500k	37.2M	37.681M	38.2M	37.831M	38.1M	37.831M	37.95M	37.681M
2437MHz	Pass	500k	37.8M	37.631M	36.65M	37.681M	36.6M	37.681M	37.95M	37.781M
2452MHz	Pass	500k	29.35M	37.681M	38M	37.881M	38.15M	37.831M	37.9M	37.531M

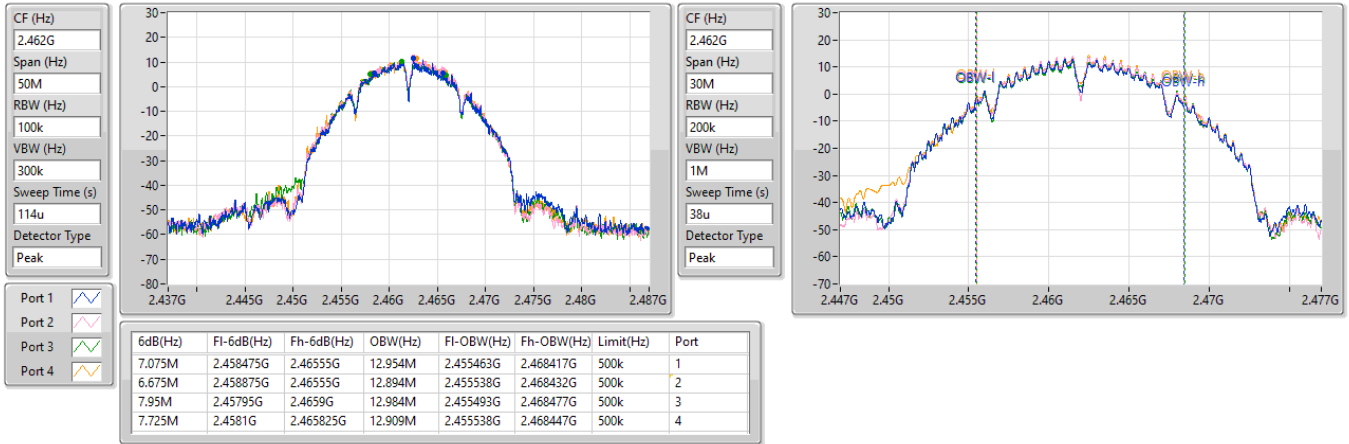
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_4TX

EBW

2462MHz

19/11/2023

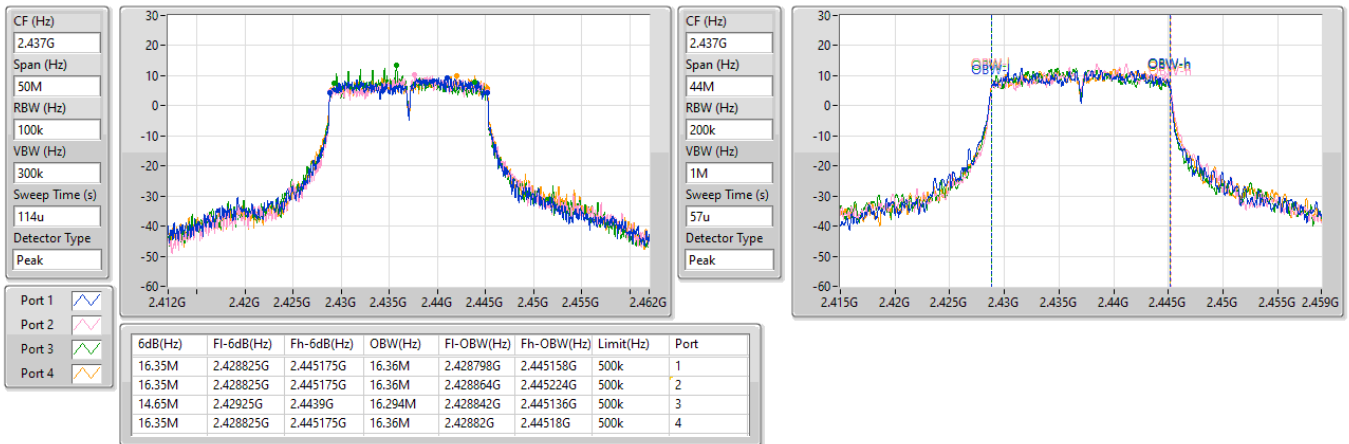


2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_4TX

EBW

2437MHz

02/01/2024

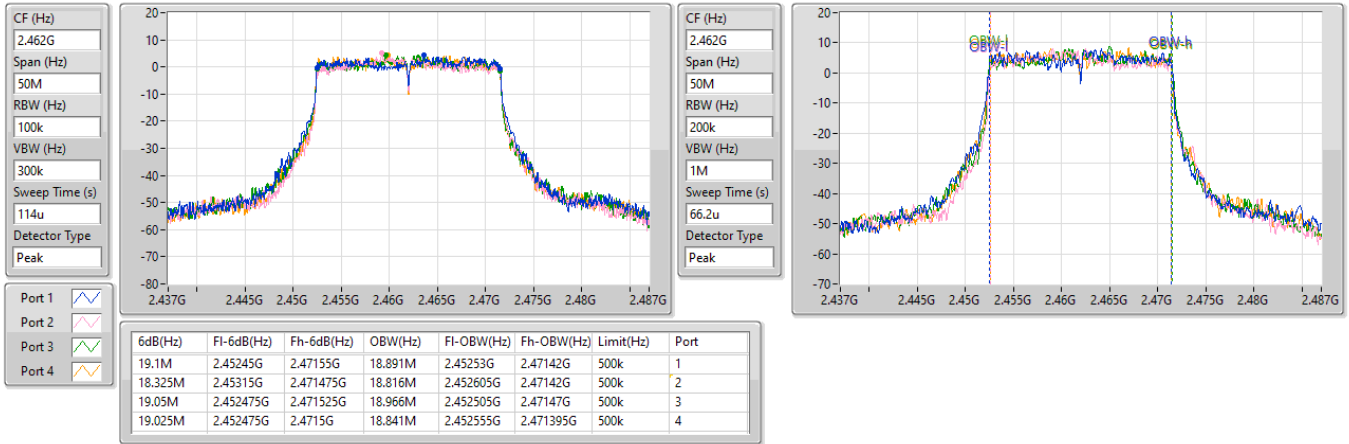


2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_4TX

EBW

2462MHz

19/11/2023

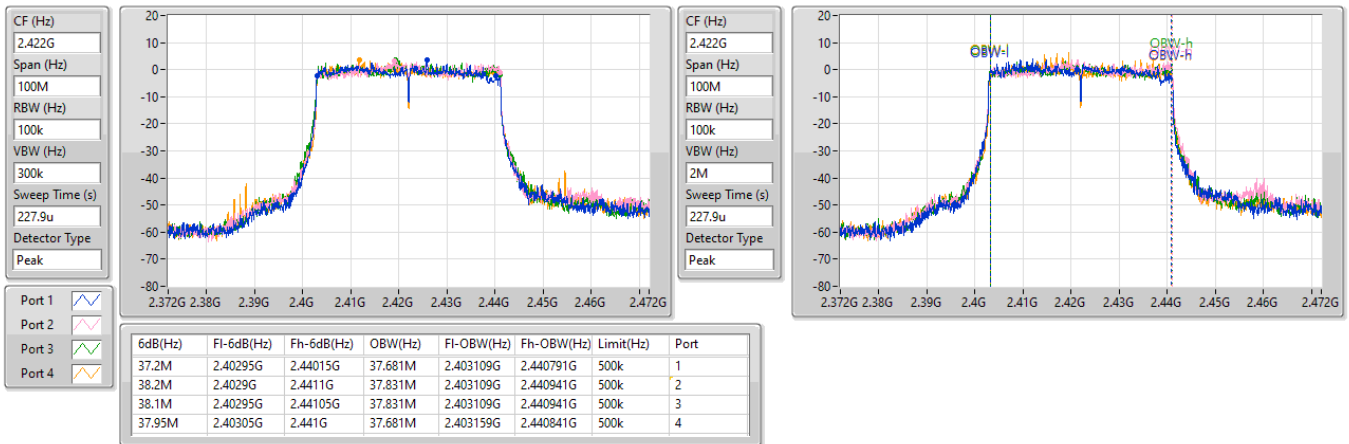


2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_4TX

EBW

2422MHz

19/11/2023



**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	19.05M	18.991M	19MOD1D	17.3M	18.816M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	38.2M	38.131M	38M1D1D	11.15M	37.531M

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)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	18.925M	18.916M	19.05M	18.866M	18.175M	18.816M	17.3M	18.916M
2437MHz	Pass	500k	18.45M	18.816M	19.025M	18.966M	18.4M	18.891M	19.05M	18.991M
2462MHz	Pass	500k	19M	18.916M	19.05M	18.991M	18.775M	18.991M	19M	18.891M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	500k	38.2M	38.131M	37.9M	37.781M	37.95M	37.681M	28.1M	37.631M
2437MHz	Pass	500k	37.9M	37.531M	35.05M	37.781M	37.9M	37.731M	33.45M	37.681M
2452MHz	Pass	500k	15.75M	37.631M	11.15M	37.581M	30.1M	37.681M	30.85M	37.581M

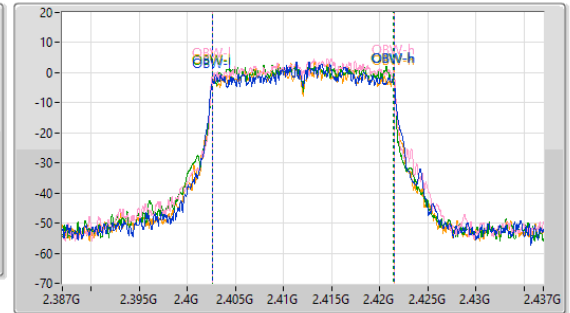
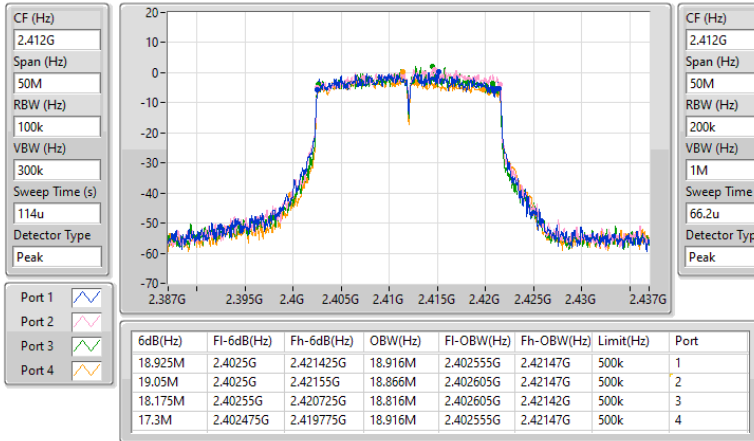
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_4TX

EBW

2412MHz

23/02/2024

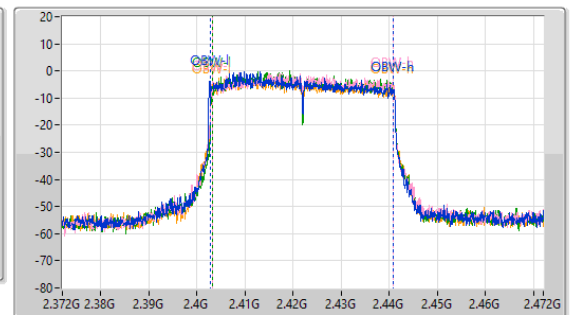
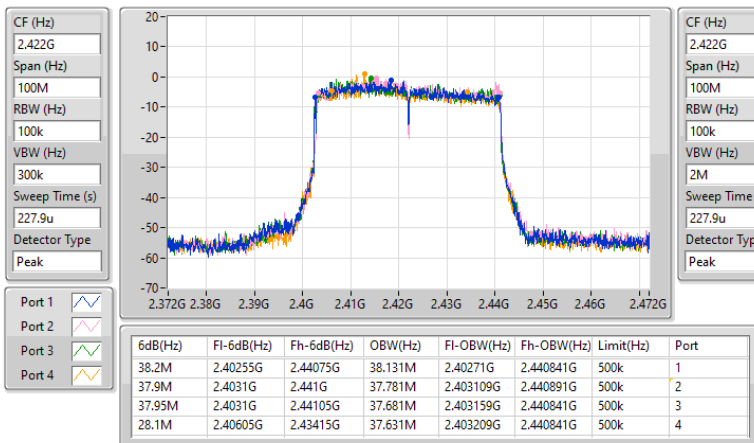


2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_4TX

EBW

2422MHz

23/02/2024





Average Power_Non-Beamforming_Radio 1

Appendix C.1

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_4TX	29.54	0.89950
802.11g_Nss1,(6Mbps)_4TX	29.65	0.92257
802.11ax HEW20_Nss1,(MCS0)_4TX	29.98	0.99541
802.11ax HEW40_Nss1,(MCS0)_4TX	27.19	0.52360



Average Power_Non-Beamforming_Radio 1

Appendix C.1

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	5.03	21.45	21.27	21.36	20.75	27.24	30.00
2417MHz	Pass	5.03	23.11	23.92	23.20	23.81	29.54	30.00
2437MHz	Pass	5.03	22.62	22.83	22.35	23.28	28.80	30.00
2457MHz	Pass	5.03	22.23	22.95	22.26	23.00	28.65	30.00
2462MHz	Pass	5.03	20.50	21.03	20.45	21.41	26.89	30.00
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	5.03	22.36	22.60	22.43	22.44	28.48	30.00
2417MHz	Pass	5.03	22.88	22.93	22.87	22.87	28.91	30.00
2437MHz	Pass	5.03	23.57	23.63	23.61	23.71	29.65	30.00
2457MHz	Pass	5.03	23.33	23.77	23.45	23.37	29.51	30.00
2462MHz	Pass	5.03	19.75	20.07	19.93	19.77	25.91	30.00
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	5.03	19.48	19.14	18.98	19.46	25.29	30.00
2417MHz	Pass	5.03	23.70	23.99	23.81	23.82	29.85	30.00
2437MHz	Pass	5.03	24.15	23.73	24.02	23.94	29.98	30.00
2457MHz	Pass	5.03	22.67	22.67	22.65	22.48	28.64	30.00
2462MHz	Pass	5.03	18.69	18.30	18.74	18.60	24.61	30.00
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2422MHz	Pass	5.03	19.62	19.82	19.69	19.48	25.67	30.00
2427MHz	Pass	5.03	20.87	21.13	21.18	20.67	26.99	30.00
2437MHz	Pass	5.03	21.42	20.95	20.55	21.68	27.19	30.00
2447MHz	Pass	5.03	16.53	16.69	16.78	16.26	22.59	30.00
2452MHz	Pass	5.03	17.28	17.19	17.35	16.98	23.22	30.00

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



Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	21.02	0.12647
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	21.67	0.14689



Average Power_Beamforming_Radio 1

Appendix C.2

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	10.87	14.98	15.69	15.01	14.18	21.02	25.13
2437MHz	Pass	10.87	14.69	15.79	14.49	14.01	20.82	25.13
2462MHz	Pass	10.87	14.30	15.17	14.51	13.49	20.43	25.13
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2422MHz	Pass	10.87	15.51	16.36	15.82	14.75	21.67	25.13
2437MHz	Pass	10.87	15.29	15.42	15.42	14.53	21.20	25.13
2452MHz	Pass	10.87	14.97	16.05	14.92	14.21	21.11	25.13

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



Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_4TX	2.50
802.11g_Nss1,(6Mbps)_4TX	1.33
802.11ax HEW20_Nss1,(MCS0)_4TX	1.44
802.11ax HEW40_Nss1,(MCS0)_4TX	-3.59

RBW = 3kHz;



Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	10.87	-1.64	-1.12	-3.38	-2.04	2.50	3.13
2437MHz	Pass	10.87	-8.28	-3.01	-6.65	-3.51	0.43	3.13
2462MHz	Pass	10.87	-8.72	-7.93	-7.02	-7.14	-2.00	3.13
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	10.87	-4.70	-2.64	-4.40	-5.16	0.17	3.13
2437MHz	Pass	10.87	-3.90	-2.16	-3.56	-3.98	1.33	3.13
2462MHz	Pass	10.87	-7.28	-4.40	-6.82	-7.98	-2.01	3.13
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	10.87	-6.66	-6.61	-7.37	-7.26	-3.49	3.13
2437MHz	Pass	10.87	-1.41	-2.15	-1.55	-1.46	1.44	3.13
2462MHz	Pass	10.87	-7.70	-6.90	-6.48	-7.84	-3.56	3.13
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2422MHz	Pass	10.87	-8.14	-8.20	-8.65	-9.30	-4.96	3.13
2437MHz	Pass	10.87	-6.84	-7.01	-5.47	-5.74	-3.59	3.13
2452MHz	Pass	10.87	-9.84	-9.75	-11.52	-11.77	-6.75	3.13

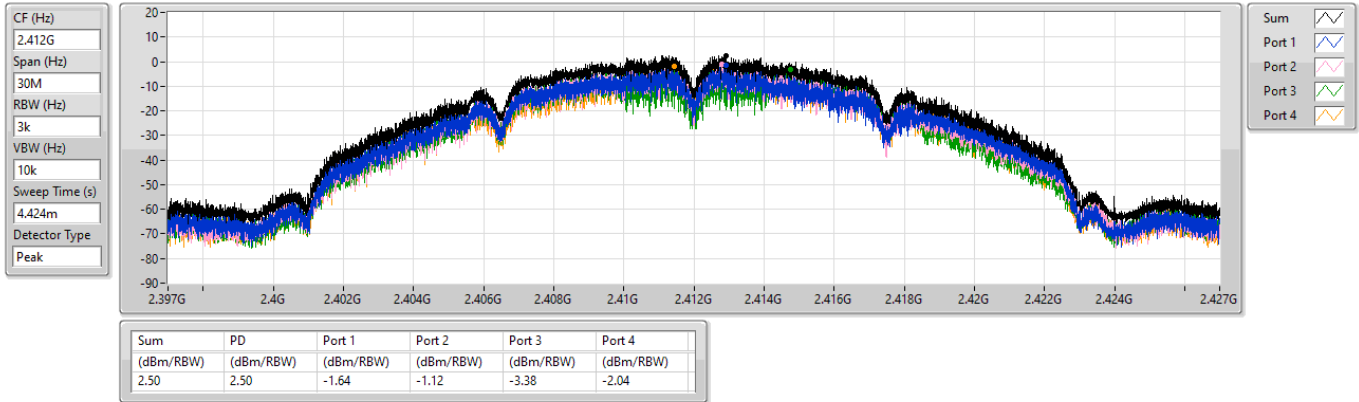
DG = Directional Gain; RBW = 3kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_4TX

PSD

2412MHz

19/11/2023

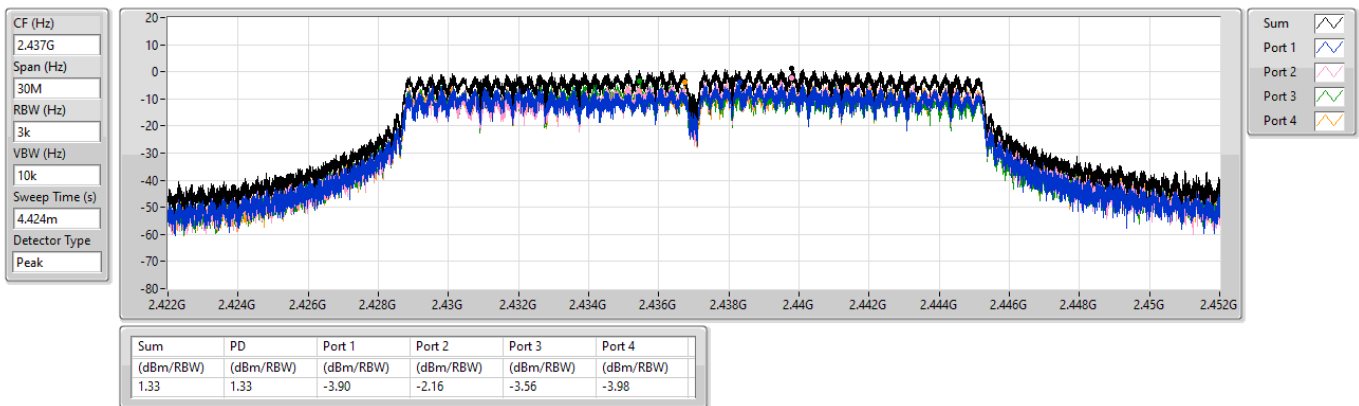


2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_4TX

PSD

2437MHz

02/01/2024

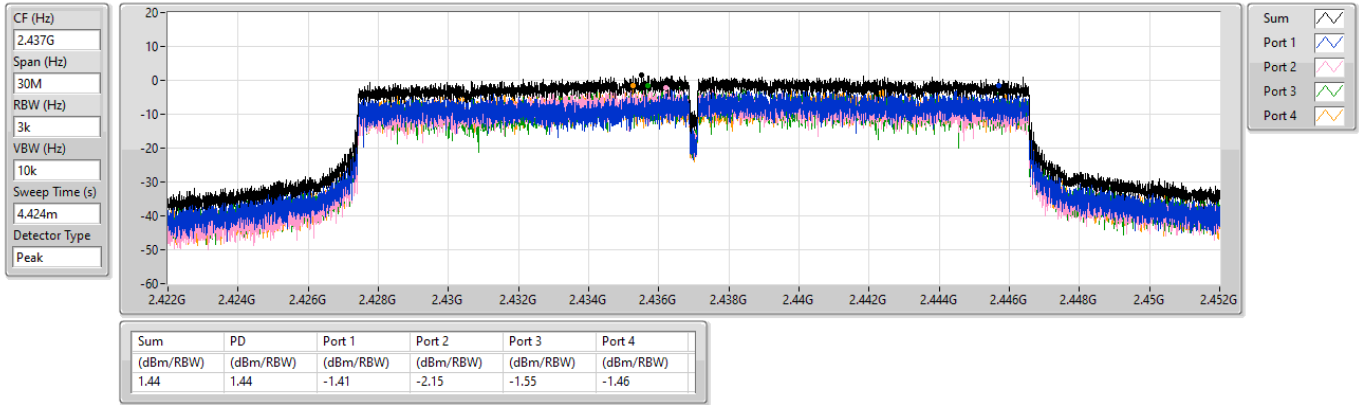


2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_4TX

PSD

2437MHz

19/11/2023

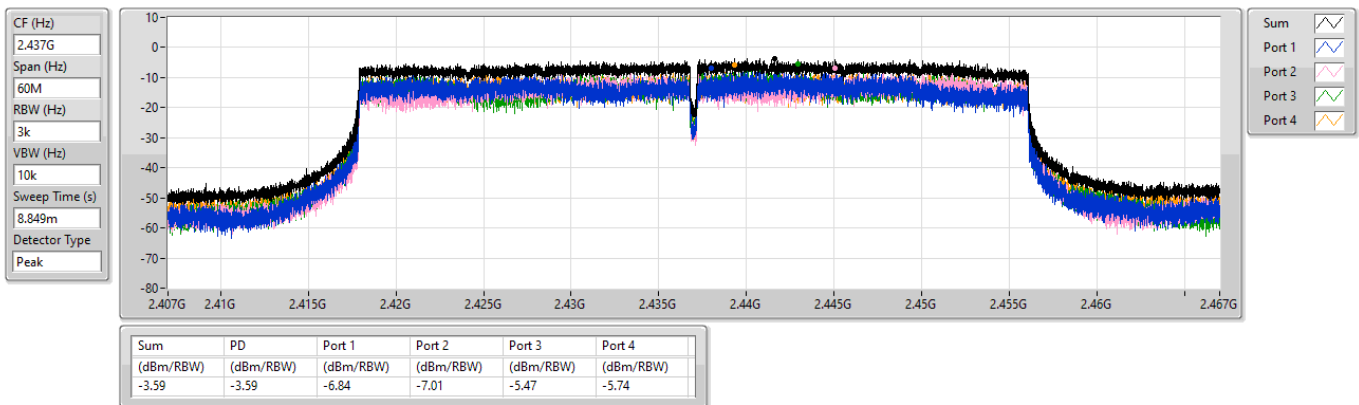


2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_4TX

PSD

2437MHz

19/11/2023





Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-7.36
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-7.95

RBW = 3kHz;



Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	10.87	-11.66	-10.46	-11.51	-12.82	-7.36	3.13
2437MHz	Pass	10.87	-11.41	-9.64	-12.27	-13.00	-7.65	3.13
2462MHz	Pass	10.87	-13.46	-10.15	-10.92	-10.92	-7.96	3.13
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2422MHz	Pass	10.87	-12.72	-9.91	-10.52	-11.27	-7.95	3.13
2437MHz	Pass	10.87	-11.50	-12.82	-14.03	-15.16	-10.26	3.13
2452MHz	Pass	10.87	-14.02	-12.43	-13.25	-14.60	-9.43	3.13

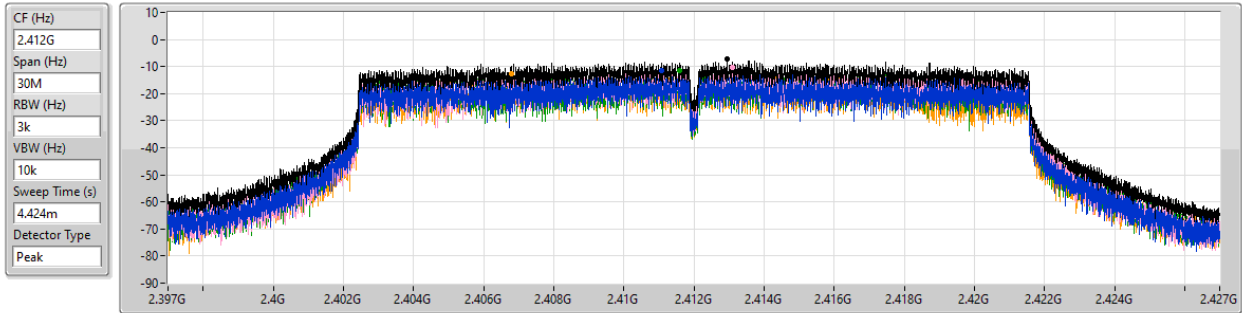
DG = Directional Gain; RBW = 3kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_4TX

PSD

2412MHz

23/02/2024



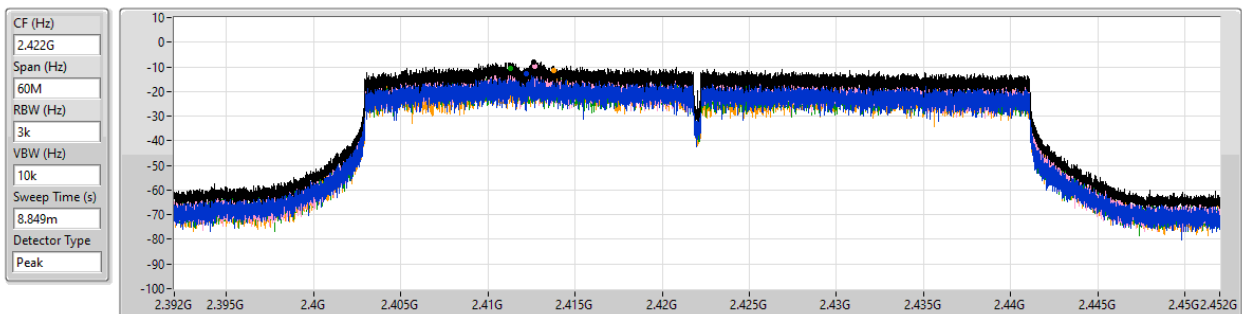
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
-7.36	-7.36	-11.66	-10.46	-11.51	-12.82

2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_4TX

PSD

2422MHz

23/02/2024



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)	(dBm/100kHz)
-7.95	-7.95	-12.72	-9.91	-10.52	-11.27

**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)_4TX	Pass	2.43791G	15.56	-14.44	1.99419G	-55.62	2.39976G	-38.46	2.4G	-37.34	2.51486G	-53.81	15.23115G	-41.38	2
802.11g_Nss1,(6Mbps)_4TX	Pass	2.43941G	13.55	-16.45	2.14098G	-54.65	2.4G	-27.73	2.4G	-26.40	2.5035G	-52.51	16.57131G	-42.64	4
802.11ax HEW20_Nss1,(MCS0)_4TX	Pass	2.43574G	14.73	-15.27	2.07341G	-55.32	2.39968G	-30.45	2.4G	-30.60	2.50766G	-53.88	21.6791G	-41.74	4
802.11ax HEW40_Nss1,(MCS0)_4TX	Pass	2.44075G	8.84	-21.16	31.15M	-50.06	2.4G	-31.88	2.4G	-31.53	2.5635G	-53.93	17.63241G	-40.79	3

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)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43791G	15.56	-14.44	2.12118G	-55.75	2.39992G	-38.48	2.4G	-39.36	2.51542G	-53.42	17.60804G	-41.22	1
2412MHz	Pass	2.43791G	15.56	-14.44	1.99419G	-55.62	2.39976G	-38.46	2.4G	-37.34	2.51486G	-53.81	15.23115G	-41.38	2
2412MHz	Pass	2.43791G	15.56	-14.44	1.98604G	-55.90	2.39984G	-39.95	2.4G	-39.69	2.51198G	-53.66	16.60784G	-42.19	3
2412MHz	Pass	2.43791G	15.56	-14.44	2.01167G	-55.85	2.4G	-39.39	2.4G	-38.93	2.50942G	-53.53	16.28474G	-41.78	4
2437MHz	Pass	2.43791G	15.56	-14.44	2.30758G	-55.99	2.39944G	-50.78	2.4G	-52.42	2.51006G	-53.48	14.62148G	-37.26	1
2437MHz	Pass	2.43791G	15.56	-14.44	2.12933G	-54.54	2.39648G	-51.85	2.4G	-51.35	2.51094G	-54.00	14.62148G	-35.81	2
2437MHz	Pass	2.43791G	15.56	-14.44	1.91264G	-56.09	2.4G	-51.71	2.4G	-51.90	2.52062G	-53.40	14.62148G	-37.46	3
2437MHz	Pass	2.43791G	15.56	-14.44	2.30874G	-56.12	2.39992G	-51.40	2.4G	-52.00	2.51662G	-53.88	14.62148G	-37.29	4
2462MHz	Pass	2.43791G	15.56	-14.44	2.14797G	-55.27	2.4G	-51.90	2.4G	-52.98	2.51326G	-52.80	14.77319G	-38.87	1
2462MHz	Pass	2.43791G	15.56	-14.44	1.98623G	-56.37	2.4G	-52.78	2.4G	-54.83	2.50606G	-53.83	14.77319G	-37.38	2
2462MHz	Pass	2.43791G	15.56	-14.44	1.83575G	-56.18	2.3968G	-53.34	2.4G	-54.05	2.51406G	-53.84	14.77319G	-40.16	3
2462MHz	Pass	2.43791G	15.56	-14.44	2.30408G	-55.08	2.39584G	-51.89	2.4G	-53.33	2.51518G	-53.15	14.77319G	-37.57	4
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43941G	13.55	-16.45	1.97672G	-55.39	2.39968G	-29.76	2.4G	-29.43	2.50662G	-52.97	23.16817G	-42.53	1
2412MHz	Pass	2.43941G	13.55	-16.45	2.10953G	-54.50	2.39984G	-28.25	2.4G	-28.16	2.5115G	-52.00	14.79567G	-42.31	2
2412MHz	Pass	2.43941G	13.55	-16.45	2.10137G	-54.37	2.39992G	-28.09	2.4G	-27.12	2.50078G	-53.10	23.21874G	-42.11	3
2412MHz	Pass	2.43941G	13.55	-16.45	2.14098G	-54.65	2.4G	-27.73	2.4G	-26.40	2.5035G	-52.51	16.57131G	-42.64	4
2437MHz	Pass	2.43941G	13.55	-16.45	2.15846G	-55.02	2.39984G	-47.96	2.4G	-47.58	2.51782G	-52.52	23.56431G	-42.69	1
2437MHz	Pass	2.43941G	13.55	-16.45	2.1305G	-53.86	2.39952G	-48.04	2.4G	-50.09	2.51278G	-52.92	13.52856G	-42.89	2
2437MHz	Pass	2.43941G	13.55	-16.45	2.16312G	-55.00	2.39584G	-48.81	2.4G	-49.72	2.50662G	-52.59	24.35099G	-42.35	3
2437MHz	Pass	2.43941G	13.55	-16.45	2.18059G	-55.16	2.398G	-47.61	2.4G	-47.28	2.5131G	-51.54	23.49688G	-42.81	4
2462MHz	Pass	2.43941G	13.55	-16.45	2.16545G	-55.30	2.39512G	-51.86	2.4G	-52.32	2.51454G	-52.59	17.56871G	-41.72	1
2462MHz	Pass	2.43941G	13.55	-16.45	2.11652G	-54.63	2.4G	-50.96	2.4G	-52.25	2.51542G	-52.27	14.9811G	-42.80	2
2462MHz	Pass	2.43941G	13.55	-16.45	2.15496G	-55.12	2.4G	-51.41	2.4G	-53.23	2.50118G	-52.60	23.33674G	-42.48	3
2462MHz	Pass	2.43941G	13.55	-16.45	1.80313G	-55.33	2.39992G	-51.86	2.4G	-53.09	2.51198G	-52.43	23.24121G	-43.10	4
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43574G	14.73	-15.27	2.00934G	-55.15	2.4G	-31.71	2.4G	-30.52	2.50102G	-53.85	16.5376G	-41.78	1
2412MHz	Pass	2.43574G	14.73	-15.27	955.01M	-56.29	2.39984G	-31.74	2.4G	-30.48	2.50822G	-53.56	16.22012G	-42.14	2
2412MHz	Pass	2.43574G	14.73	-15.27	1.77517G	-55.61	2.4G	-33.21	2.4G	-32.10	2.50358G	-53.29	23.31145G	-41.36	3
2412MHz	Pass	2.43574G	14.73	-15.27	2.07341G	-55.32	2.39968G	-30.45	2.4G	-30.60	2.50766G	-53.88	21.6791G	-41.74	4
2437MHz	Pass	2.43574G	14.73	-15.27	2.11768G	-55.06	2.39824G	-39.71	2.4G	-39.73	2.51046G	-53.80	16.54603G	-41.60	1
2437MHz	Pass	2.43574G	14.73	-15.27	2.30525G	-55.17	2.3976G	-42.79	2.4G	-43.14	2.50974G	-54.24	17.66704G	-42.05	2
2437MHz	Pass	2.43574G	14.73	-15.27	2.14681G	-55.64	2.39928G	-43.98	2.4G	-44.39	2.50486G	-53.12	17.55185G	-42.13	3
2437MHz	Pass	2.43574G	14.73	-15.27	897.93M	-55.33	2.39904G	-42.96	2.4G	-42.12	2.52278G	-54.23	24.63195G	-41.58	4
2462MHz	Pass	2.43574G	14.73	-15.27	2.15613G	-55.38	2.39672G	-52.04	2.4G	-51.88	2.50814G	-54.03	21.67067G	-41.72	1
2462MHz	Pass	2.43574G	14.73	-15.27	2.30641G	-55.07	2.39408G	-52.46	2.4G	-52.90	2.51502G	-53.81	16.9506G	-41.97	2
2462MHz	Pass	2.43574G	14.73	-15.27	860.65M	-55.28	2.39472G	-52.82	2.4G	-54.18	2.51454G	-53.47	24.57295G	-41.56	3
2462MHz	Pass	2.43574G	14.73	-15.27	2.14681G	-54.91	2.39744G	-52.62	2.4G	-54.20	2.5131G	-53.93	21.69595G	-41.42	4
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.44075G	8.84	-21.16	31.15M	-50.37	2.39984G	-35.10	2.4G	-33.52	2.50558G	-53.91	16.39841G	-42.49	1
2422MHz	Pass	2.44075G	8.84	-21.16	31.15M	-48.42	2.4G	-33.76	2.4G	-32.19	2.50366G	-54.13	15.18403G	-42.05	2
2422MHz	Pass	2.44075G	8.84	-21.16	31.15M	-50.06	2.4G	-31.88	2.4G	-31.53	2.5635G	-53.93	17.63241G	-40.79	3
2422MHz	Pass	2.44075G	8.84	-21.16	31.15M	-49.54	2.39984G	-34.08	2.4G	-33.88	2.50286G	-53.58	15.21488G	-41.54	4
2437MHz	Pass	2.44075G	8.84	-21.16	31.15M	-47.19	2.39984G	-36.67	2.4G	-37.61	2.5347G	-54.19	16.2105G	-41.50	1
2437MHz	Pass	2.44075G	8.84	-21.16	30M	-50.15	2.39936G	-38.89	2.4G	-40.15	2.53774G	-53.61	17.26502G	-41.97	2
2437MHz	Pass	2.44075G	8.84	-21.16	31.15M	-47.76	2.39984G	-36.85	2.4G	-38.35	2.53262G	-53.09	16.20209G	-41.47	3
2437MHz	Pass	2.44075G	8.84	-21.16	33.44M	-48.06	2.39952G	-35.07	2.4G	-36.62	2.51358G	-54.40	24.64663G	-41.16	4
2452MHz	Pass	2.44075G	8.84	-21.16	31.15M	-53.19	2.39952G	-50.75	2.4G	-51.16	2.54894G	-53.60	16.23013G	-41.75	1
2452MHz	Pass	2.44075G	8.84	-21.16	30M	-52.16	2.4G	-49.99	2.4G	-50.29	2.50414G	-54.21	23.29202G	-41.32	2
2452MHz	Pass	2.44075G	8.84	-21.16	30M	-53.18	2.39968G	-51.73	2.4G	-48.77	2.54222G	-54.14	16.93969G	-41.20	3
2452MHz	Pass	2.44075G	8.84	-21.16	30M	-53.93	2.39728G	-48.72	2.4G	-52.87	2.55342G	-53.49	17.60156G	-41.37	4

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_4TX

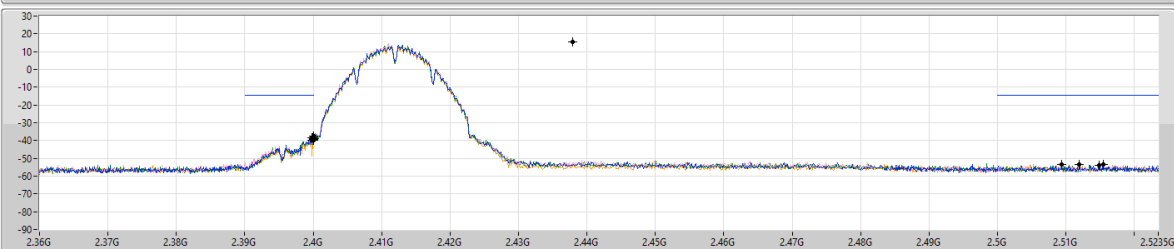
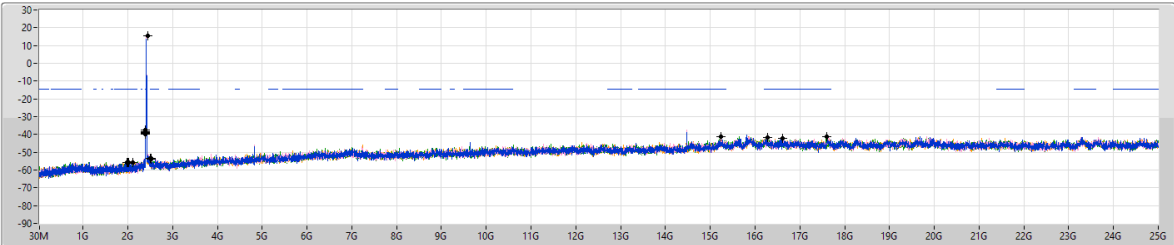
CSEndB

2412MHz

19/11/2023

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

Port 1
Port 2
Port 3
Port 4



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
2.43791G	15.56	-14.44	2.12118G	-55.75	2.39992G	-38.48	2.4G	-39.36	2.51542G	-53.42	17.60804G	-41.22	1
2.43791G	15.56	-14.44	1.99419G	-55.62	2.39976G	-38.46	2.4G	-37.34	2.51486G	-53.81	15.23115G	-41.38	2
2.43791G	15.56	-14.44	1.98604G	-55.90	2.39984G	-39.95	2.4G	-39.69	2.51198G	-53.66	16.60784G	-42.19	3
2.43791G	15.56	-14.44	2.01167G	-55.85	2.4G	-39.39	2.4G	-38.93	2.50942G	-53.53	16.28474G	-41.78	4

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_4TX

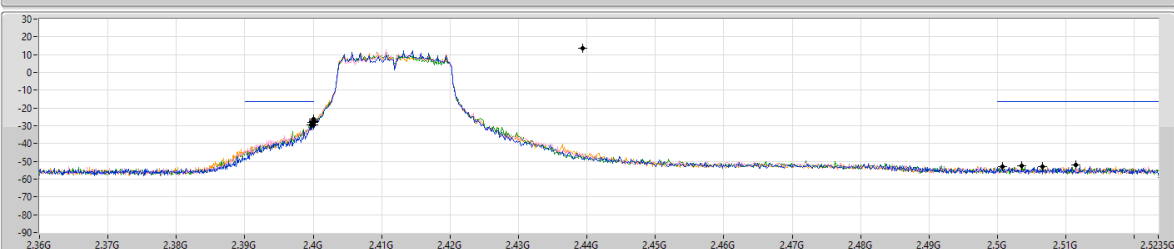
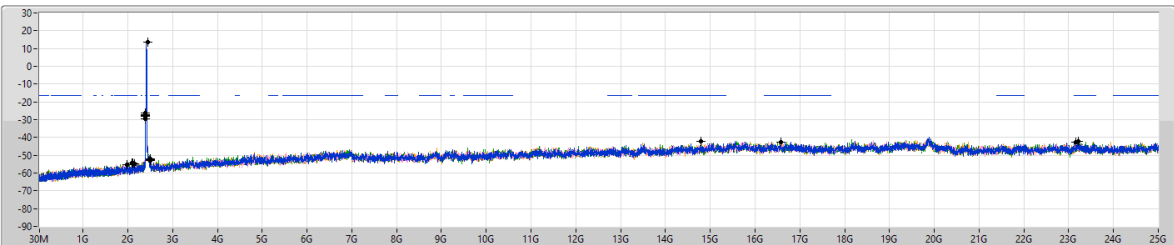
CSEndB

2412MHz

02/01/2024

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

Port 1
Port 2
Port 3
Port 4



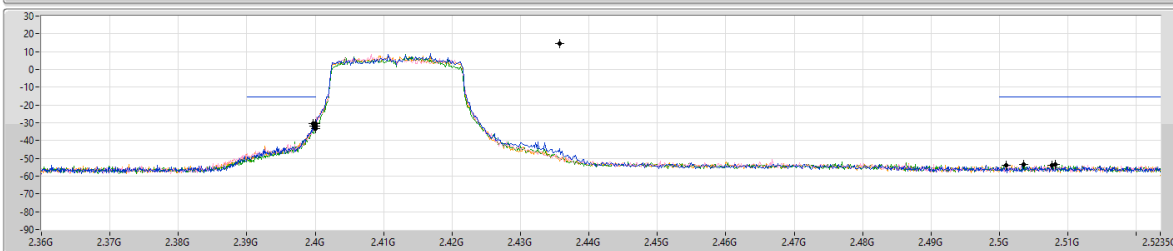
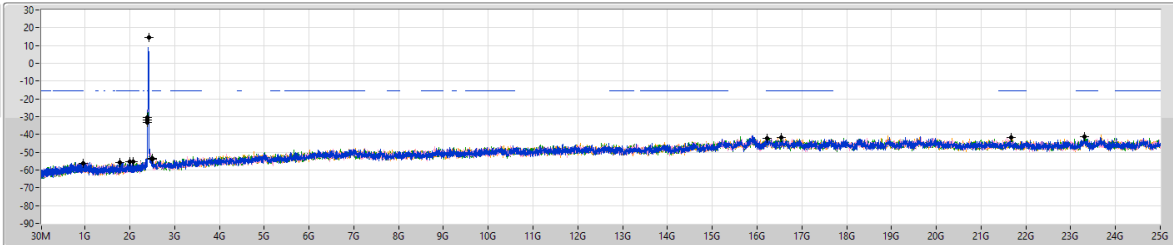
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43941G	13.55	-16.45	1.97872G	-55.39	2.39968G	-29.76	2.4G	-29.43	2.50662G	-52.97	23.16817G	-42.53	1
2.43941G	13.55	-16.45	2.10953G	-54.50	2.39984G	-28.25	2.4G	-28.16	2.5115G	-52.00	14.79567G	-42.31	2
2.43941G	13.55	-16.45	2.10137G	-54.37	2.39992G	-28.09	2.4G	-27.12	2.50078G	-53.10	23.21874G	-42.11	3
2.43941G	13.55	-16.45	2.14098G	-54.65	2.4G	-27.73	2.4G	-26.40	2.5035G	-52.51	16.57131G	-42.64	4

2.4-2.4835GHz_802.11ax_HEW20_Nss1,(MCS0)_4TX

CSNdB

2412MHz

19/11/2023

RBW (Hz)
100k
VBW (Hz)
300k
Detector
PeakPort 1
Port 2
Port 3
Port 4

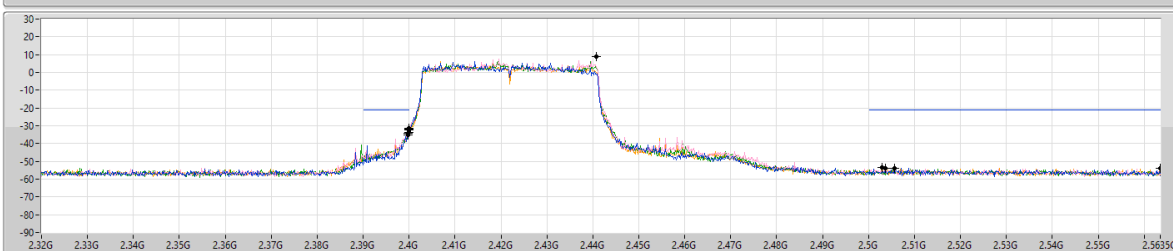
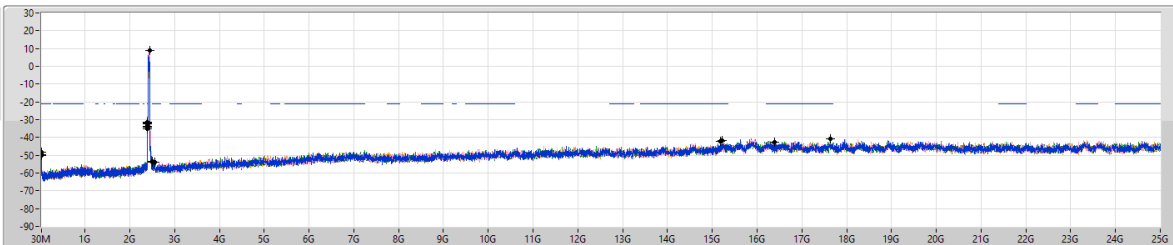
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43574G	14.73	-15.27	2.00934G	-55.15	2.4G	-31.71	2.4G	-30.52	2.50102G	-53.85	16.5376G	-41.78	1
2.43574G	14.73	-15.27	955.01M	-56.29	2.39984G	-31.74	2.4G	-30.48	2.50822G	-53.56	16.22012G	-42.14	2
2.43574G	14.73	-15.27	1.77517G	-55.61	2.4G	-33.21	2.4G	-32.10	2.50398G	-53.29	23.31145G	-41.36	3
2.43574G	14.73	-15.27	2.07341G	-55.32	2.39968G	-30.45	2.4G	-30.60	2.50766G	-53.88	21.6791G	-41.74	4

2.4-2.4835GHz_802.11ax_HEW40_Nss1,(MCS0)_4TX

CSNdB

2422MHz

19/11/2023

RBW (Hz)
100k
VBW (Hz)
300k
Detector
PeakPort 1
Port 2
Port 3
Port 4

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	8.84	-21.16	31.15M	-50.37	2.39984G	-35.10	2.4G	-33.52	2.50598G	-53.91	16.39841G	-42.49	1
2.44075G	8.84	-21.16	31.15M	-48.42	2.4G	-33.76	2.4G	-32.19	2.50366G	-54.13	15.18403G	-42.05	2
2.44075G	8.84	-21.16	31.15M	-50.06	2.4G	-31.88	2.4G	-31.53	2.5635G	-53.93	17.63241G	-40.79	3
2.44075G	8.84	-21.16	31.15M	-49.54	2.39984G	-34.08	2.4G	-33.88	2.50286G	-53.58	15.21488G	-41.54	4



Summary

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	Pass	2.41253G	4.46	-25.54	2.16312G	-51.87	2.39992G	-35.09	2.4G	-35.20	2.51662G	-49.36	15.27891G	-38.84	2
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	Pass	2.41253G	5.36	-24.64	1.96849G	-51.27	2.3976G	-41.31	2.4G	-33.68	2.53006G	-49.97	15.2906G	-37.92	2

Result

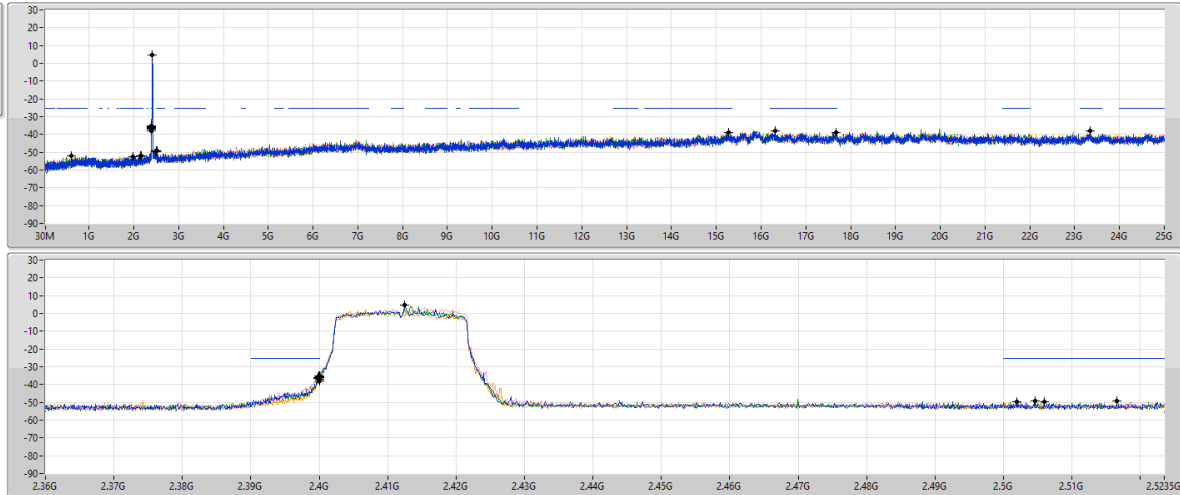
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.41253G	4.46	-25.54	2.15496G	-51.99	2.39976G	-36.55	2.4G	-36.25	2.50462G	-49.28	17.66704G	-38.96	1
2412MHz	Pass	2.41253G	4.46	-25.54	2.16312G	-51.87	2.39992G	-35.09	2.4G	-35.20	2.51662G	-49.36	15.27891G	-38.84	2
2412MHz	Pass	2.41253G	4.46	-25.54	607.84M	-52.23	2.39984G	-35.96	2.4G	-35.61	2.50198G	-49.46	16.31002G	-38.15	3
2412MHz	Pass	2.41253G	4.46	-25.54	1.97672G	-52.61	2.4G	-36.96	2.4G	-38.01	2.50598G	-49.82	23.33674G	-37.84	4
2437MHz	Pass	2.41253G	4.46	-25.54	2.30525G	-51.70	2.39208G	-50.84	2.4G	-50.80	2.50966G	-49.68	23.26931G	-38.64	1
2437MHz	Pass	2.41253G	4.46	-25.54	2.30292G	-51.85	2.39904G	-50.59	2.4G	-51.22	2.50622G	-49.88	16.22855G	-38.15	2
2437MHz	Pass	2.41253G	4.46	-25.54	723.18M	-52.07	2.39944G	-49.74	2.4G	-51.65	2.52166G	-50.02	16.29036G	-38.21	3
2437MHz	Pass	2.41253G	4.46	-25.54	920.06M	-52.11	2.3956G	-50.28	2.4G	-53.07	2.50566G	-49.86	16.38307G	-37.93	4
2462MHz	Pass	2.41253G	4.46	-25.54	923.56M	-52.42	2.39056G	-50.09	2.4G	-52.42	2.51918G	-50.04	17.61647G	-38.67	1
2462MHz	Pass	2.41253G	4.46	-25.54	2.19807G	-52.07	2.39152G	-49.12	2.4G	-52.31	2.5235G	-49.55	16.25664G	-38.63	2
2462MHz	Pass	2.41253G	4.46	-25.54	2.30408G	-52.00	2.39768G	-49.25	2.4G	-51.16	2.5151G	-49.64	17.64737G	-38.72	3
2462MHz	Pass	2.41253G	4.46	-25.54	2.12467G	-52.44	2.3948G	-49.55	2.4G	-52.32	2.50206G	-50.20	16.21731G	-38.28	4
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.41253G	5.36	-24.64	659.75M	-51.63	2.39952G	-40.07	2.4G	-38.13	2.50494G	-50.02	16.23855G	-38.42	1
2422MHz	Pass	2.41253G	5.36	-24.64	1.96849G	-51.27	2.3976G	-41.31	2.4G	-33.68	2.53006G	-49.97	15.2906G	-37.92	2
2422MHz	Pass	2.41253G	5.36	-24.64	1.2895G	-52.39	2.4G	-38.35	2.4G	-39.87	2.5507G	-49.72	21.63733G	-37.41	3
2422MHz	Pass	2.41253G	5.36	-24.64	1.97078G	-51.91	2.4G	-40.57	2.4G	-37.08	2.53038G	-50.11	16.29744G	-37.47	4
2437MHz	Pass	2.41253G	5.36	-24.64	1.91467G	-52.08	2.39968G	-47.80	2.4G	-47.39	2.53342G	-49.92	17.04626G	-38.77	1
2437MHz	Pass	2.41253G	5.36	-24.64	2.02688G	-51.61	2.39984G	-46.35	2.4G	-48.46	2.53886G	-50.23	16.84433G	-38.52	2
2437MHz	Pass	2.41253G	5.36	-24.64	2.14596G	-51.67	2.39968G	-45.04	2.4G	-47.38	2.50014G	-50.19	16.56107G	-38.69	3
2437MHz	Pass	2.41253G	5.36	-24.64	856.69M	-52.12	2.39616G	-49.14	2.4G	-49.68	2.54446G	-49.81	15.285G	-38.05	4
2452MHz	Pass	2.41253G	5.36	-24.64	2.13337G	-51.41	2.39424G	-50.59	2.4G	-50.34	2.53166G	-50.16	16.93688G	-38.73	1
2452MHz	Pass	2.41253G	5.36	-24.64	2.1494G	-51.99	2.39936G	-50.35	2.4G	-51.57	2.54078G	-50.57	16.31988G	-37.35	2
2452MHz	Pass	2.41253G	5.36	-24.64	2.30512G	-51.92	2.39392G	-50.54	2.4G	-50.26	2.50062G	-50.22	16.92847G	-38.58	3
2452MHz	Pass	2.41253G	5.36	-24.64	1.63186G	-52.36	2.39056G	-50.95	2.4G	-52.36	2.5171G	-49.94	21.60648G	-38.46	4

2.4-2.4835GHz_802.11ax HEW20-BF_Nss1,(MCS0)_4TX

CSEndB

2412MHz

23/02/2024

RBW (Hz)
100k
VBW (Hz)
300k
Detector
PeakPort 1
Port 2
Port 3
Port 4

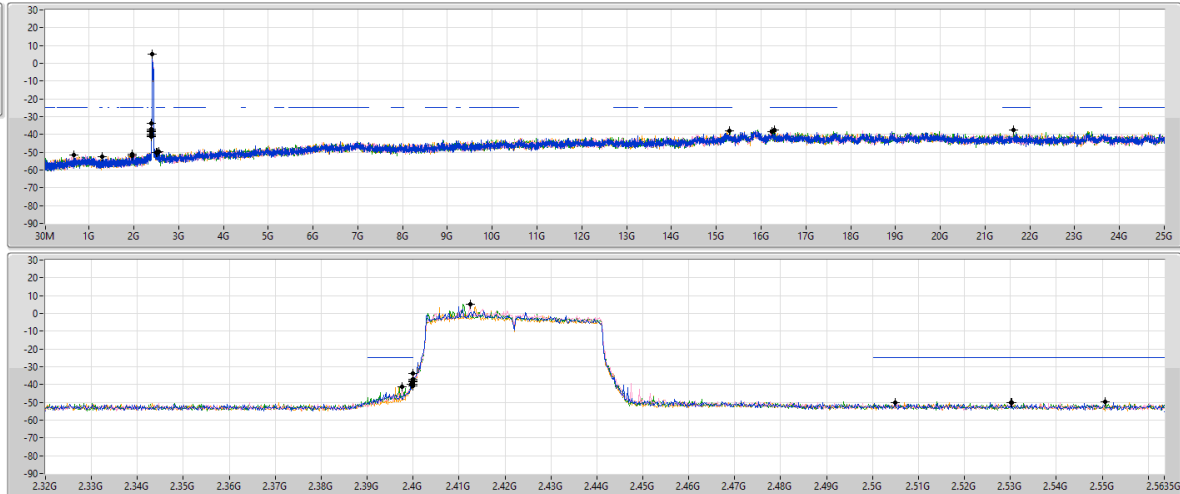
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.41253G	4.46	-25.54	2.15496G	-51.99	2.39976G	-36.55	2.4G	-36.25	2.50462G	-49.28	17.66704G	-38.96	1
2.41253G	4.46	-25.54	2.16312G	-51.87	2.39992G	-35.09	2.4G	-35.20	2.51662G	-49.36	15.27891G	-38.84	2
2.41253G	4.46	-25.54	607.84M	-52.23	2.39984G	-35.96	2.4G	-35.61	2.50198G	-49.46	16.31002G	-38.15	3
2.41253G	4.46	-25.54	1.97672G	-52.61	2.4G	-36.96	2.4G	-38.01	2.50598G	-49.82	23.33674G	-37.84	4

2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_4TX

CSEndB

2422MHz

23/02/2024

RBW (Hz)
100k
VBW (Hz)
300k
Detector
PeakPort 1
Port 2
Port 3
Port 4

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
2.41253G	5.36	-24.64	659.75M	-51.63	2.39952G	-40.07	2.4G	-38.13	2.50494G	-50.02	16.23855G	-38.42	1
2.41253G	5.36	-24.64	1.96849G	-51.27	2.3976G	-41.31	2.4G	-33.68	2.53006G	-49.97	15.2906G	-37.92	2
2.41253G	5.36	-24.64	1.2895G	-52.39	2.4G	-38.35	2.4G	-39.87	2.5507G	-49.72	21.63733G	-37.41	3
2.41253G	5.36	-24.64	1.97078G	-51.91	2.4G	-40.57	2.4G	-37.08	2.53038G	-50.11	16.29744G	-37.47	4



Summary

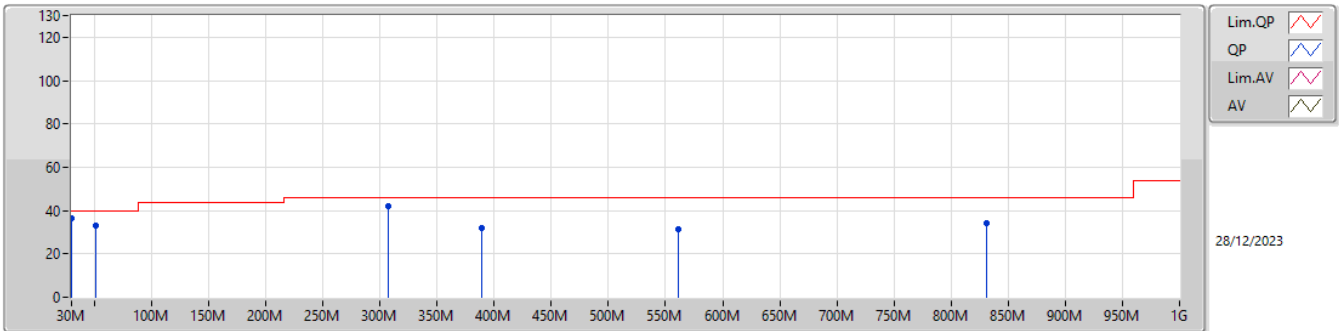
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-
802.11g_Nss1,(6Mbps)_4TX	Pass	PK	30M	36.57	40.00	-3.43	3	Vertical	360	1.00

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
2437MHz	Pass	PK	30M	36.57	40.00	-3.43	3	Vertical	360	1.00
2437MHz	Pass	PK	51.34M	33.34	40.00	-6.66	3	Vertical	360	1.00
2437MHz	Pass	PK	307.42M	41.78	46.00	-4.22	3	Vertical	360	1.00
2437MHz	Pass	PK	388.9M	31.71	46.00	-14.29	3	Vertical	360	1.00
2437MHz	Pass	PK	561.56M	31.65	46.00	-14.35	3	Vertical	360	1.00
2437MHz	Pass	PK	831.22M	34.01	46.00	-11.99	3	Vertical	360	1.00
2437MHz	Pass	PK	30M	34.92	40.00	-5.08	3	Horizontal	0	1.00
2437MHz	Pass	PK	171.62M	24.75	43.50	-18.75	3	Horizontal	0	1.00
2437MHz	Pass	PK	305.48M	39.15	46.00	-6.85	3	Horizontal	0	1.00
2437MHz	Pass	PK	439.34M	32.62	46.00	-13.38	3	Horizontal	0	1.00
2437MHz	Pass	PK	547.98M	31.13	46.00	-14.87	3	Horizontal	0	1.00
2437MHz	Pass	PK	840.92M	36.36	46.00	-9.64	3	Horizontal	0	1.00

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_4TX

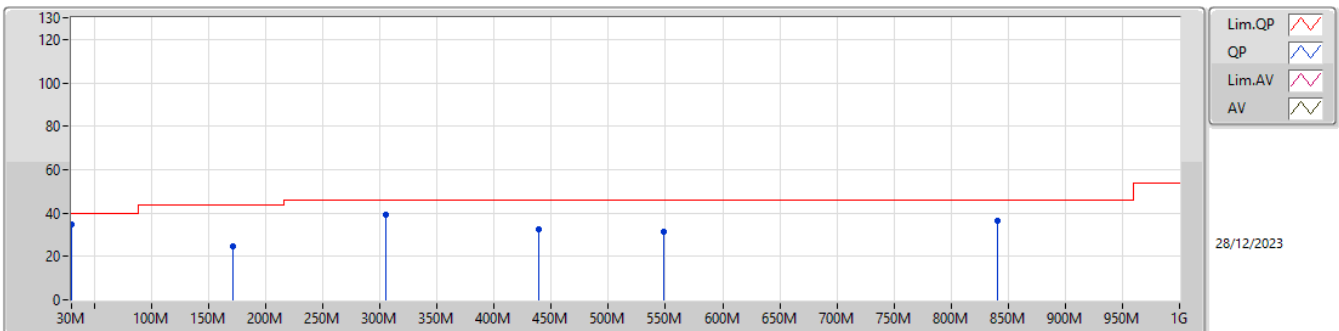
2437MHz_PoE



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Raw	AF	CL	PA				
(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(dB)	(m)		(°)	(m)	(dBuV)	(dB)	(dB)	(dB)				
PK	30M	36.57	40.00	-3.43	-3.19	3	Vertical	360	1.00	39.76	22.98	1.23	27.40				
PK	51.34M	33.34	40.00	-6.66	-12.28	3	Vertical	360	1.00	45.62	13.15	1.55	26.98				
PK	307.42M	41.78	46.00	-4.22	-5.13	3	Vertical	360	1.00	46.91	18.51	3.69	27.33				
PK	388.9M	31.71	46.00	-14.29	-3.28	3	Vertical	360	1.00	34.99	20.42	4.15	27.85				
PK	561.56M	31.65	46.00	-14.35	0.61	3	Vertical	360	1.00	31.04	23.98	5.28	28.65				
PK	831.22M	34.01	46.00	-11.99	3.61	3	Vertical	360	1.00	30.40	25.12	6.62	28.13				

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_4TX

2437MHz_PoE



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Raw	AF	CL	PA				
(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(dB)	(m)		(°)	(m)	(dBuV)	(dB)	(dB)	(dB)				
PK	30M	34.92	40.00	-5.08	-3.19	3	Horizontal	0	1.00	38.11	22.98	1.23	27.40				
PK	171.62M	24.75	43.50	-18.75	-10.17	3	Horizontal	0	1.00	34.92	14.81	2.63	27.61				
PK	305.48M	39.15	46.00	-6.85	-5.17	3	Horizontal	0	1.00	44.32	18.46	3.68	27.31				
PK	439.34M	32.62	46.00	-13.38	-1.98	3	Horizontal	0	1.00	34.60	21.75	4.51	28.24				
PK	547.98M	31.13	46.00	-14.87	0.36	3	Horizontal	0	1.00	30.77	23.93	5.12	28.69				
PK	840.92M	36.36	46.00	-9.64	3.83	3	Horizontal	0	1.00	32.53	25.24	6.66	28.07				

**Summary**

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_4TX	Pass	AV	4.924G	52.96	54.00	-1.04	3	Vertical	332	1.96
802.11g_Nss1,(6Mbps)_4TX	Pass	AV	2.4835G	53.74	54.00	-0.26	3	Vertical	13	2.24
802.11ax HEW20_Nss1,(MCS0)_4TX	Pass	AV	2.39G	53.55	54.00	-0.45	3	Vertical	173	2.39
802.11ax HEW40_Nss1,(MCS0)_4TX	Pass	AV	2.4835G	53.73	54.00	-0.27	3	Vertical	177	2.33

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
802.11b_Nss1,(1Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.3892G	46.44	54.00	-7.56	3	Vertical	29	2.33
2412MHz	Pass	AV	2.4128G	118.09	Inf	-Inf	3	Vertical	29	2.33
2412MHz	Pass	PK	2.3848G	58.05	74.00	-15.95	3	Vertical	29	2.33
2412MHz	Pass	PK	2.4128G	120.56	Inf	-Inf	3	Vertical	29	2.33
2412MHz	Pass	AV	4.824G	52.67	54.00	-1.33	3	Vertical	0	2.58
2412MHz	Pass	PK	4.824G	54.86	74.00	-19.14	3	Vertical	0	2.58
2412MHz	Pass	AV	4.824G	51.25	54.00	-2.75	3	Horizontal	73	1.46
2412MHz	Pass	PK	4.824G	53.33	74.00	-20.67	3	Horizontal	73	1.46
2417MHz	Pass	AV	2.39G	52.04	54.00	-1.96	3	Vertical	337	1.92
2417MHz	Pass	AV	2.4178G	122.99	Inf	-Inf	3	Vertical	337	1.92
2417MHz	Pass	PK	2.3898G	60.37	74.00	-13.63	3	Vertical	337	1.92
2417MHz	Pass	PK	2.418G	126.78	Inf	-Inf	3	Vertical	337	1.92
2417MHz	Pass	AV	4.83395G	52.52	54.00	-1.48	3	Vertical	355	1.57
2417MHz	Pass	PK	4.83401G	54.45	74.00	-19.55	3	Vertical	355	1.57
2417MHz	Pass	AV	4.83399G	49.13	54.00	-4.87	3	Horizontal	56	2.56
2417MHz	Pass	PK	4.834G	51.75	74.00	-22.25	3	Horizontal	56	2.56
2437MHz	Pass	AV	2.3898G	46.57	54.00	-7.43	3	Vertical	360	1.76
2437MHz	Pass	AV	2.4378G	122.75	Inf	-Inf	3	Vertical	360	1.76
2437MHz	Pass	AV	2.4862G	47.71	54.00	-6.29	3	Vertical	360	1.76
2437MHz	Pass	PK	2.389G	57.98	74.00	-16.02	3	Vertical	360	1.76
2437MHz	Pass	PK	2.4378G	125.38	Inf	-Inf	3	Vertical	360	1.76
2437MHz	Pass	PK	2.4878G	59.01	74.00	-14.99	3	Vertical	360	1.76
2437MHz	Pass	AV	4.87392G	52.40	54.00	-1.60	3	Vertical	6	1.53
2437MHz	Pass	PK	4.874G	54.51	74.00	-19.49	3	Vertical	6	1.53
2437MHz	Pass	AV	4.87396G	51.97	54.00	-2.03	3	Horizontal	66	1.42
2437MHz	Pass	PK	4.874G	53.99	74.00	-20.01	3	Horizontal	66	1.42
2457MHz	Pass	AV	2.4562G	122.77	Inf	-Inf	3	Vertical	158	2.09
2457MHz	Pass	AV	2.4836G	49.29	54.00	-4.71	3	Vertical	158	2.09
2457MHz	Pass	PK	2.458G	126.34	Inf	-Inf	3	Vertical	158	2.09
2457MHz	Pass	PK	2.4835G	60.34	74.00	-13.66	3	Vertical	158	2.09
2457MHz	Pass	AV	4.91397G	52.47	54.00	-1.53	3	Vertical	352	1.58
2457MHz	Pass	PK	4.91395G	54.53	74.00	-19.47	3	Vertical	352	1.58
2457MHz	Pass	AV	4.91398G	49.73	54.00	-4.27	3	Horizontal	353	1.48
2457MHz	Pass	PK	4.91403G	52.11	74.00	-21.89	3	Horizontal	353	1.48
2462MHz	Pass	AV	2.4612G	121.72	Inf	-Inf	3	Vertical	15	2.25
2462MHz	Pass	AV	2.4838G	48.20	54.00	-5.80	3	Vertical	15	2.25
2462MHz	Pass	PK	2.4612G	124.12	Inf	-Inf	3	Vertical	15	2.25
2462MHz	Pass	PK	2.4835G	60.48	74.00	-13.52	3	Vertical	15	2.25
2462MHz	Pass	AV	4.924G	52.96	54.00	-1.04	3	Vertical	332	1.96
2462MHz	Pass	PK	4.92396G	54.87	74.00	-19.13	3	Vertical	332	1.96
2462MHz	Pass	AV	4.924G	50.45	54.00	-3.55	3	Horizontal	61	1.43
2462MHz	Pass	PK	4.92396G	52.88	74.00	-21.12	3	Horizontal	61	1.43
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.39G	53.45	54.00	-0.55	3	Vertical	156	2.30
2412MHz	Pass	AV	2.4134G	116.28	Inf	-Inf	3	Vertical	156	2.30
2412MHz	Pass	PK	2.39G	70.17	74.00	-3.83	3	Vertical	156	2.30
2412MHz	Pass	PK	2.4138G	126.10	Inf	-Inf	3	Vertical	156	2.30
2412MHz	Pass	AV	4.82422G	41.31	54.00	-12.69	3	Vertical	353	1.47
2412MHz	Pass	PK	4.825G	55.40	74.00	-18.60	3	Vertical	353	1.47
2412MHz	Pass	AV	4.82205G	36.67	54.00	-17.33	3	Horizontal	58	2.59
2412MHz	Pass	PK	4.82225G	50.10	74.00	-23.90	3	Horizontal	58	2.59
2417MHz	Pass	AV	2.39G	52.81	54.00	-1.19	3	Vertical	161	2.30
2417MHz	Pass	AV	2.418G	117.33	Inf	-Inf	3	Vertical	161	2.30
2417MHz	Pass	PK	2.3898G	69.24	74.00	-4.76	3	Vertical	161	2.30
2417MHz	Pass	PK	2.4188G	126.49	Inf	-Inf	3	Vertical	161	2.30
2437MHz	Pass	AV	2.3898G	46.02	54.00	-7.98	3	Vertical	146	1.01
2437MHz	Pass	AV	2.4394G	109.94	Inf	-Inf	3	Vertical	146	1.01
2437MHz	Pass	AV	2.4835G	46.28	54.00	-7.72	3	Vertical	146	1.01
2437MHz	Pass	PK	2.3894G	56.61	74.00	-17.39	3	Vertical	146	1.01
2437MHz	Pass	PK	2.4398G	119.84	Inf	-Inf	3	Vertical	146	1.01



RSE TX above 1GHz_Non-Beamforming_Radio 1

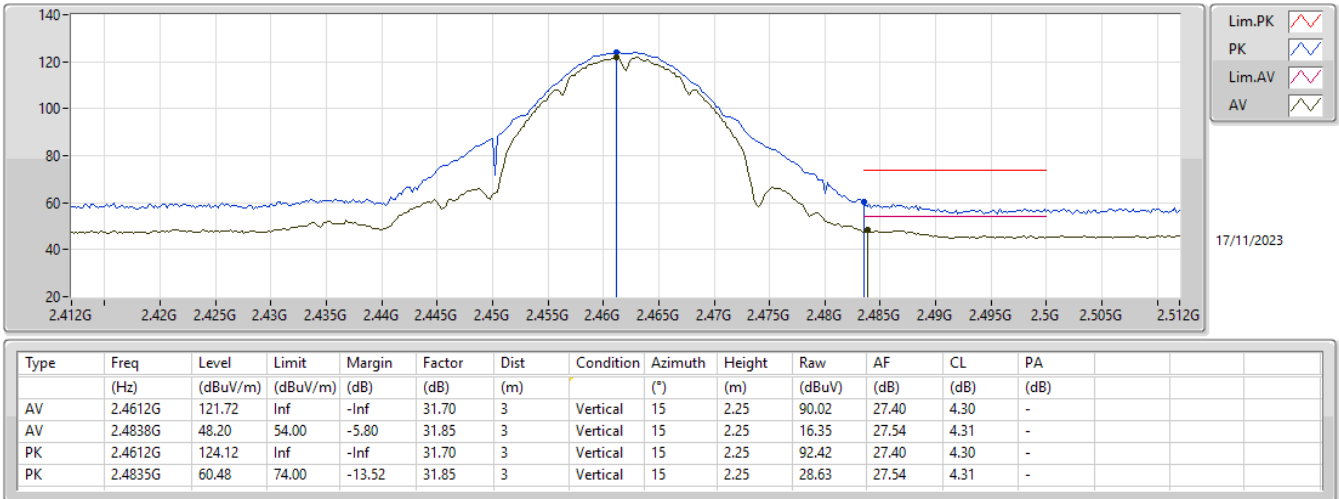
Appendix F.2

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
2437MHz	Pass	PK	2.4835G	58.15	74.00	-15.85	3	Vertical	146	1.01
2437MHz	Pass	AV	4.8742G	43.13	54.00	-10.87	3	Vertical	354	1.40
2437MHz	Pass	PK	4.87512G	57.06	74.00	-16.94	3	Vertical	354	1.40
2437MHz	Pass	AV	4.87412G	36.22	54.00	-17.78	3	Horizontal	60	1.54
2437MHz	Pass	PK	4.8748G	49.00	74.00	-25.00	3	Horizontal	60	1.54
2457MHz	Pass	AV	2.455G	118.16	Inf	-Inf	3	Vertical	328	1.82
2457MHz	Pass	AV	2.4835G	53.24	54.00	-0.76	3	Vertical	328	1.82
2457MHz	Pass	PK	2.4546G	127.77	Inf	-Inf	3	Vertical	328	1.82
2457MHz	Pass	PK	2.4835G	70.90	74.00	-3.10	3	Vertical	328	1.82
2462MHz	Pass	AV	2.464G	113.93	Inf	-Inf	3	Vertical	13	2.24
2462MHz	Pass	AV	2.4835G	53.74	54.00	-0.26	3	Vertical	13	2.24
2462MHz	Pass	PK	2.4648G	123.74	Inf	-Inf	3	Vertical	13	2.24
2462MHz	Pass	PK	2.484G	67.31	74.00	-6.69	3	Vertical	13	2.24
2462MHz	Pass	AV	4.92412G	36.41	54.00	-17.59	3	Vertical	349	1.55
2462MHz	Pass	PK	4.9246G	48.85	74.00	-25.15	3	Vertical	349	1.55
2462MHz	Pass	AV	4.92396G	35.05	54.00	-18.95	3	Horizontal	352	2.14
2462MHz	Pass	PK	4.92404G	43.49	74.00	-30.51	3	Horizontal	352	2.14
802.11ax HEW20_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.39G	53.55	54.00	-0.45	3	Vertical	173	2.39
2412MHz	Pass	AV	2.4092G	112.19	Inf	-Inf	3	Vertical	173	2.39
2412MHz	Pass	PK	2.39G	67.76	74.00	-6.24	3	Vertical	173	2.39
2412MHz	Pass	PK	2.4098G	125.36	Inf	-Inf	3	Vertical	173	2.39
2412MHz	Pass	AV	4.82208G	36.42	54.00	-17.58	3	Vertical	350	2.48
2412MHz	Pass	PK	4.82216G	51.85	74.00	-22.15	3	Vertical	350	2.48
2412MHz	Pass	AV	4.82384G	35.53	54.00	-18.47	3	Horizontal	60	1.54
2412MHz	Pass	PK	4.82368G	50.11	74.00	-23.89	3	Horizontal	60	1.54
2417MHz	Pass	AV	2.3894G	49.57	54.00	-4.43	3	Vertical	68	1.47
2417MHz	Pass	AV	2.4144G	102.07	Inf	-Inf	3	Vertical	68	1.47
2417MHz	Pass	PK	2.389G	64.15	74.00	-9.85	3	Vertical	68	1.47
2417MHz	Pass	PK	2.4148G	115.43	Inf	-Inf	3	Vertical	68	1.47
2437MHz	Pass	AV	2.3898G	49.79	54.00	-4.21	3	Vertical	184	2.06
2437MHz	Pass	AV	2.4342G	117.70	Inf	-Inf	3	Vertical	184	2.06
2437MHz	Pass	AV	2.4835G	51.25	54.00	-2.75	3	Vertical	184	2.06
2437MHz	Pass	PK	2.3898G	63.65	74.00	-10.35	3	Vertical	184	2.06
2437MHz	Pass	PK	2.4346G	130.54	Inf	-Inf	3	Vertical	184	2.06
2437MHz	Pass	PK	2.4835G	66.00	74.00	-8.00	3	Vertical	184	2.06
2437MHz	Pass	AV	4.88138G	41.36	54.00	-12.64	3	Vertical	12	1.94
2437MHz	Pass	PK	4.88084G	57.63	74.00	-16.37	3	Vertical	12	1.94
2437MHz	Pass	AV	4.87376G	40.55	54.00	-13.45	3	Horizontal	73	1.42
2437MHz	Pass	PK	4.87424G	55.47	74.00	-18.53	3	Horizontal	73	1.42
2457MHz	Pass	AV	2.4552G	116.78	Inf	-Inf	3	Vertical	339	1.99
2457MHz	Pass	AV	2.4835G	52.92	54.00	-1.08	3	Vertical	339	1.99
2457MHz	Pass	PK	2.4546G	129.65	Inf	-Inf	3	Vertical	339	1.99
2457MHz	Pass	PK	2.4835G	72.74	74.00	-1.26	3	Vertical	339	1.99
2462MHz	Pass	AV	2.4608G	111.42	Inf	-Inf	3	Vertical	175	2.34
2462MHz	Pass	AV	2.4835G	53.46	54.00	-0.54	3	Vertical	175	2.34
2462MHz	Pass	PK	2.4614G	124.68	Inf	-Inf	3	Vertical	175	2.34
2462MHz	Pass	PK	2.4835G	68.57	74.00	-5.43	3	Vertical	175	2.34
2462MHz	Pass	AV	4.93184G	33.68	54.00	-20.32	3	Vertical	7	1.95
2462MHz	Pass	PK	4.93136G	49.64	74.00	-24.36	3	Vertical	7	1.95
2462MHz	Pass	AV	4.92384G	32.46	54.00	-21.54	3	Horizontal	64	1.49
2462MHz	Pass	PK	4.92488G	47.56	74.00	-26.44	3	Horizontal	64	1.49
802.11ax HEW40_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	AV	2.39G	53.01	54.00	-0.99	3	Vertical	357	2.06
2422MHz	Pass	AV	2.418G	110.23	Inf	-Inf	3	Vertical	357	2.06
2422MHz	Pass	AV	2.484G	49.72	54.00	-4.28	3	Vertical	357	2.06
2422MHz	Pass	PK	2.39G	69.65	74.00	-4.35	3	Vertical	357	2.06
2422MHz	Pass	PK	2.4176G	122.73	Inf	-Inf	3	Vertical	357	2.06
2422MHz	Pass	PK	2.484G	62.51	74.00	-11.49	3	Vertical	357	2.06
2422MHz	Pass	AV	4.844G	33.33	54.00	-20.67	3	Vertical	5	1.61
2422MHz	Pass	PK	4.83304G	46.05	74.00	-27.95	3	Vertical	5	1.61
2422MHz	Pass	AV	4.844G	33.34	54.00	-20.66	3	Horizontal	38	1.50

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
2422MHz	Pass	PK	4.82568G	45.51	74.00	-28.49	3	Horizontal	38	1.50
2427MHz	Pass	AV	2.3898G	53.40	54.00	-0.60	3	Vertical	171	2.11
2427MHz	Pass	AV	2.423G	111.52	Inf	-Inf	3	Vertical	171	2.11
2427MHz	Pass	AV	2.4835G	49.52	54.00	-4.48	3	Vertical	171	2.11
2427MHz	Pass	PK	2.3898G	66.67	74.00	-7.33	3	Vertical	171	2.11
2427MHz	Pass	PK	2.4238G	124.77	Inf	-Inf	3	Vertical	171	2.11
2427MHz	Pass	PK	2.4846G	68.87	74.00	-5.13	3	Vertical	171	2.11
2437MHz	Pass	AV	2.3898G	52.60	54.00	-1.40	3	Vertical	177	2.33
2437MHz	Pass	AV	2.433G	111.14	Inf	-Inf	3	Vertical	177	2.33
2437MHz	Pass	AV	2.4835G	53.73	54.00	-0.27	3	Vertical	177	2.33
2437MHz	Pass	PK	2.3886G	67.47	74.00	-6.53	3	Vertical	177	2.33
2437MHz	Pass	PK	2.4318G	123.69	Inf	-Inf	3	Vertical	177	2.33
2437MHz	Pass	PK	2.4874G	70.64	74.00	-3.36	3	Vertical	177	2.33
2437MHz	Pass	AV	4.88216G	34.54	54.00	-19.46	3	Vertical	8	1.72
2437MHz	Pass	PK	4.8812G	48.85	74.00	-25.15	3	Vertical	8	1.72
2437MHz	Pass	AV	4.87392G	34.13	54.00	-19.87	3	Horizontal	72	1.44
2437MHz	Pass	PK	4.87296G	48.19	74.00	-25.81	3	Horizontal	72	1.44
2447MHz	Pass	AV	2.3898G	44.07	54.00	-9.93	3	Vertical	345	2.44
2447MHz	Pass	AV	2.445G	107.81	Inf	-Inf	3	Vertical	345	2.44
2447MHz	Pass	AV	2.485G	53.25	54.00	-0.75	3	Vertical	345	2.44
2447MHz	Pass	PK	2.389G	55.52	74.00	-18.48	3	Vertical	345	2.44
2447MHz	Pass	PK	2.4458G	120.35	Inf	-Inf	3	Vertical	345	2.44
2447MHz	Pass	PK	2.4835G	66.41	74.00	-7.59	3	Vertical	345	2.44
2452MHz	Pass	AV	2.3896G	48.71	54.00	-5.29	3	Vertical	340	2.11
2452MHz	Pass	AV	2.4496G	109.37	Inf	-Inf	3	Vertical	340	2.11
2452MHz	Pass	AV	2.488G	53.50	54.00	-0.50	3	Vertical	340	2.11
2452MHz	Pass	PK	2.3884G	62.01	74.00	-11.99	3	Vertical	340	2.11
2452MHz	Pass	PK	2.4492G	121.17	Inf	-Inf	3	Vertical	340	2.11
2452MHz	Pass	PK	2.488G	66.91	74.00	-7.09	3	Vertical	340	2.11
2452MHz	Pass	AV	4.90392G	30.88	54.00	-23.12	3	Vertical	12	1.50
2452MHz	Pass	PK	4.90376G	42.70	74.00	-31.30	3	Vertical	12	1.50
2452MHz	Pass	AV	4.904G	32.78	54.00	-21.22	3	Horizontal	20	2.36
2452MHz	Pass	PK	4.90408G	42.84	74.00	-31.16	3	Horizontal	20	2.36

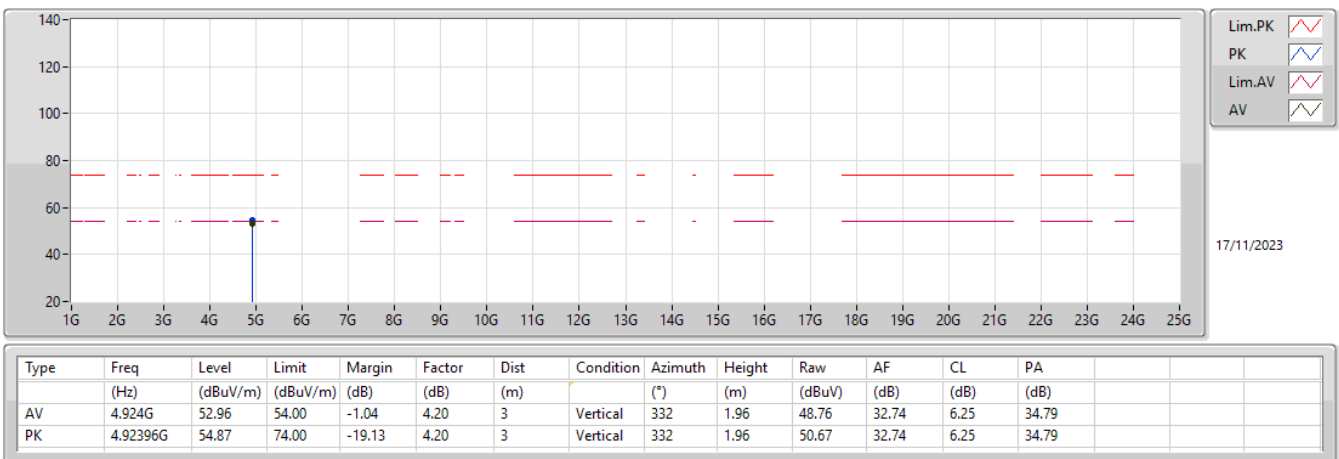
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2462MHz_TX



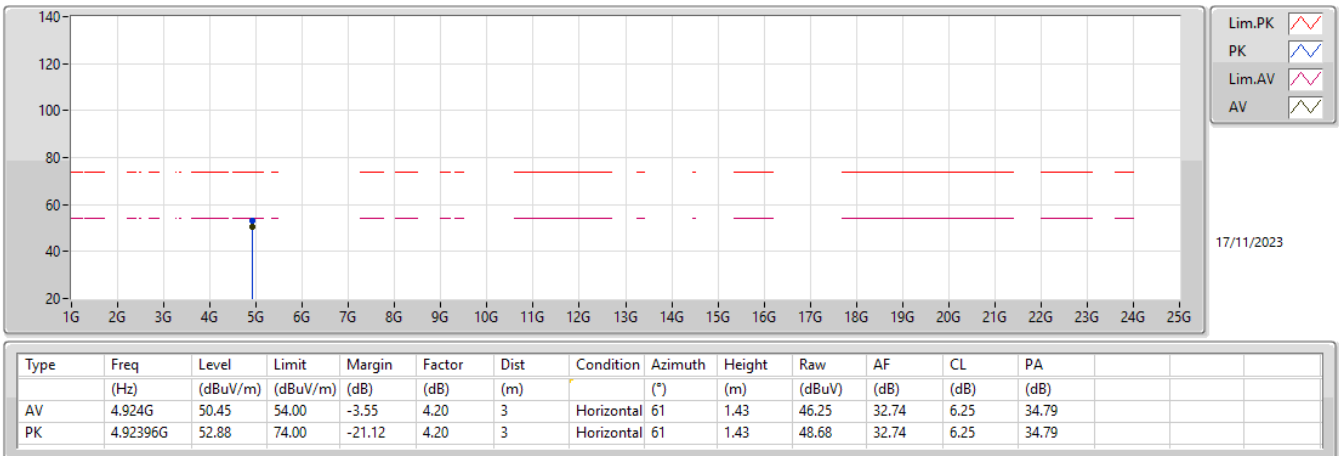
2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_4TX

2462MHz_TX



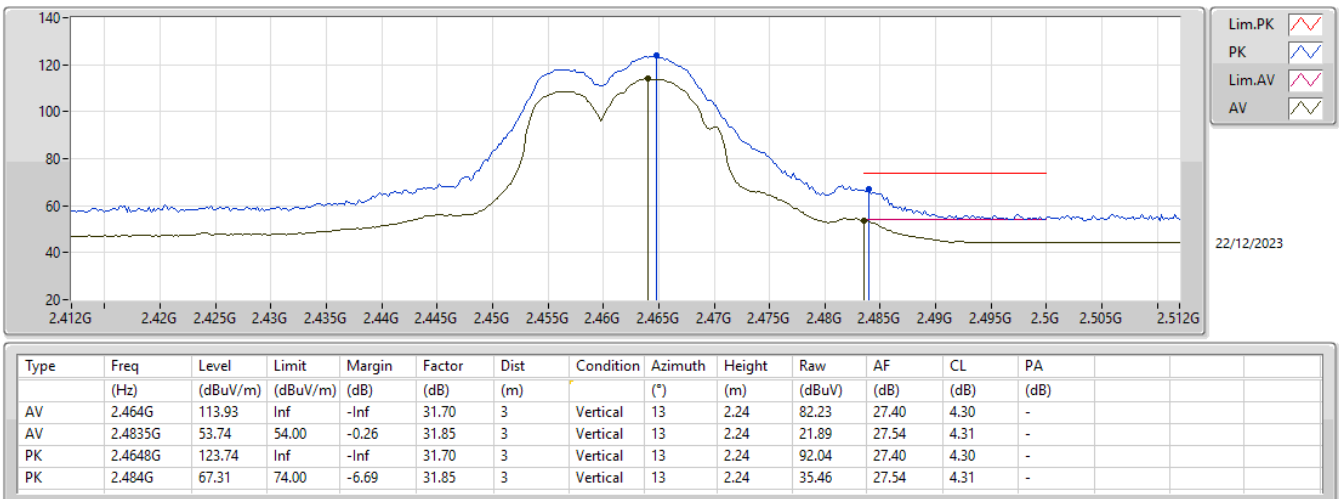
2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_4TX

2462MHz_TX



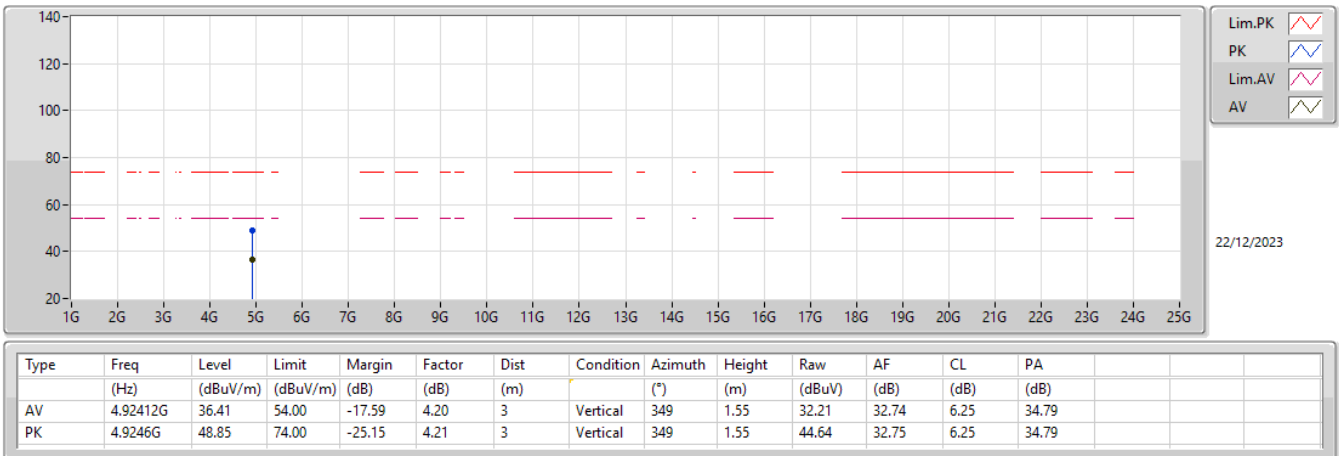
2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_4TX

2462MHz_TX



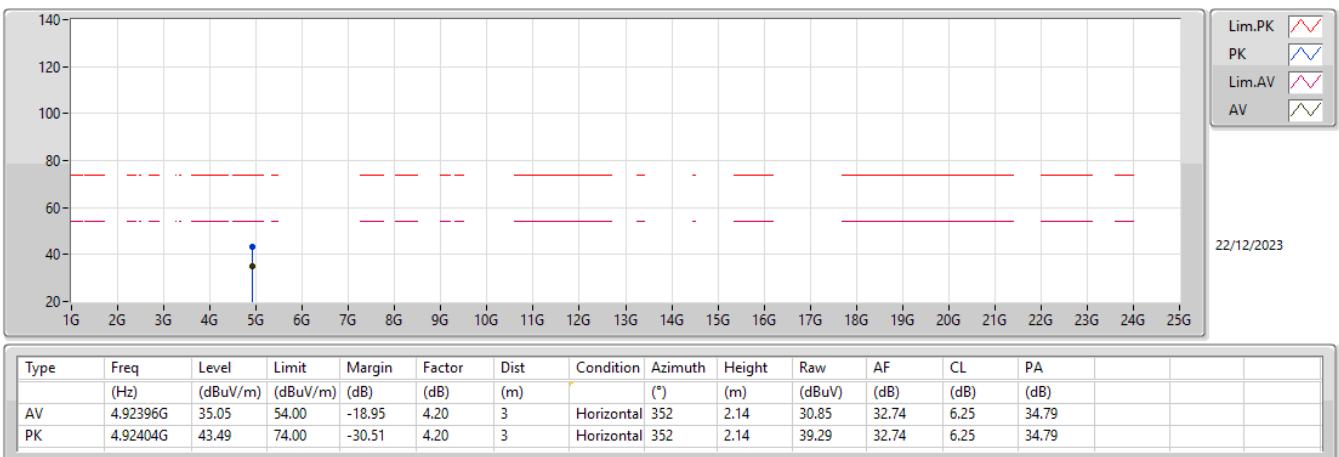
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2462MHz_TX



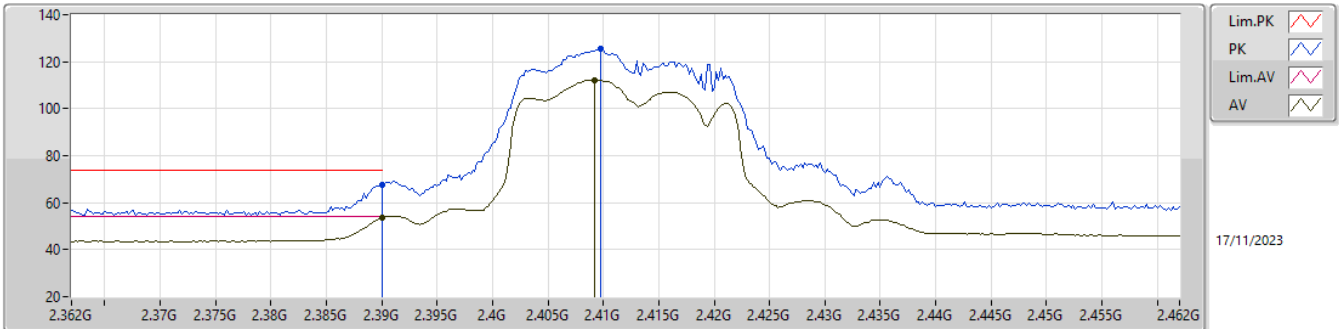
2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_4TX

2462MHz_TX



2.4-2.4835GHz_802.11ax_HEW20_Nss1,(MCS0)_4TX

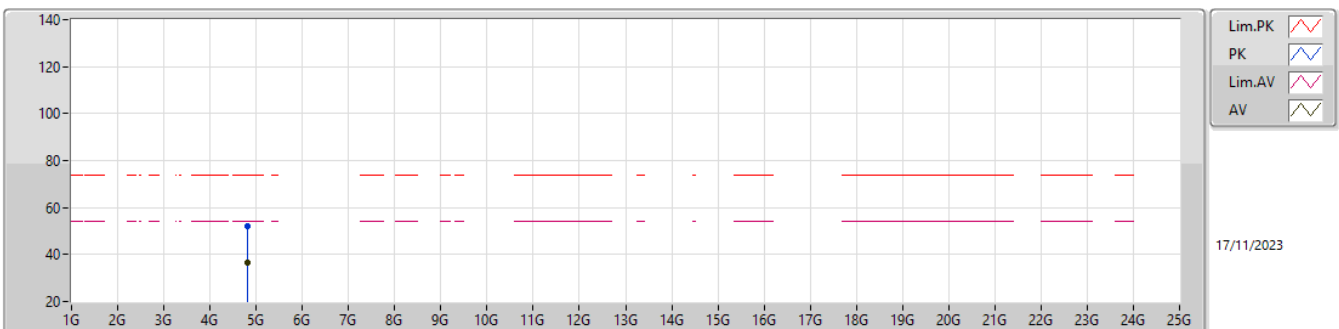
2412MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.39G	53.55	54.00	-0.45	31.55	3	Vertical	173	2.39	22.00	27.30	4.25	-
AV	2.4092G	112.19	Inf	-Inf	31.67	3	Vertical	173	2.39	80.52	27.40	4.27	-
PK	2.39G	67.76	74.00	-6.24	31.55	3	Vertical	173	2.39	36.21	27.30	4.25	-
PK	2.4098G	125.36	Inf	-Inf	31.67	3	Vertical	173	2.39	93.69	27.40	4.27	-

2.4-2.4835GHz_802.11ax_HEW20_Nss1,(MCS0)_4TX

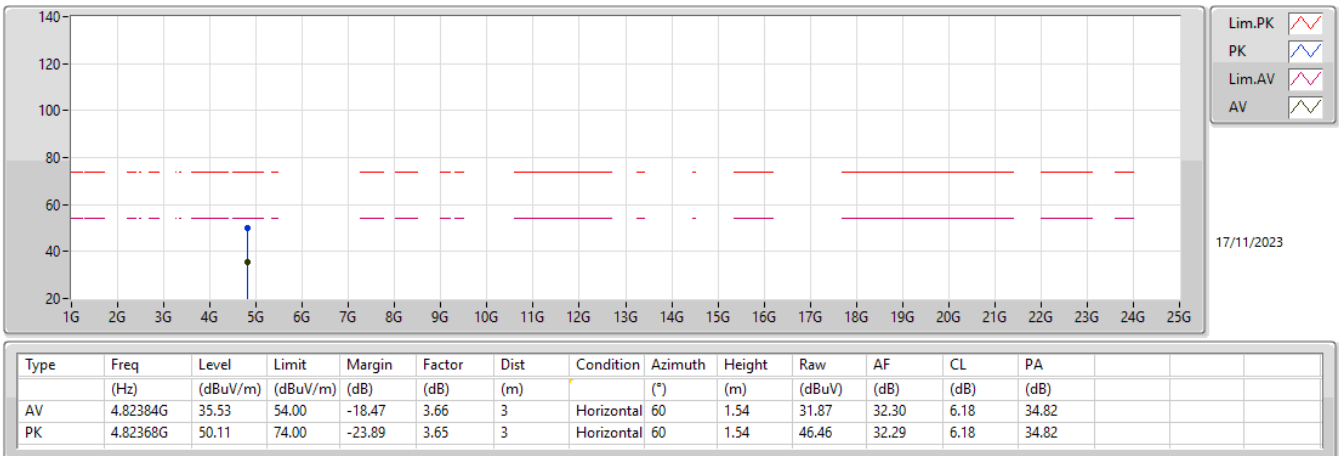
2412MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.82208G	36.42	54.00	-17.58	3.65	3	Vertical	350	2.48	32.77	32.29	6.18	34.82
PK	4.82216G	51.85	74.00	-22.15	3.65	3	Vertical	350	2.48	48.20	32.29	6.18	34.82

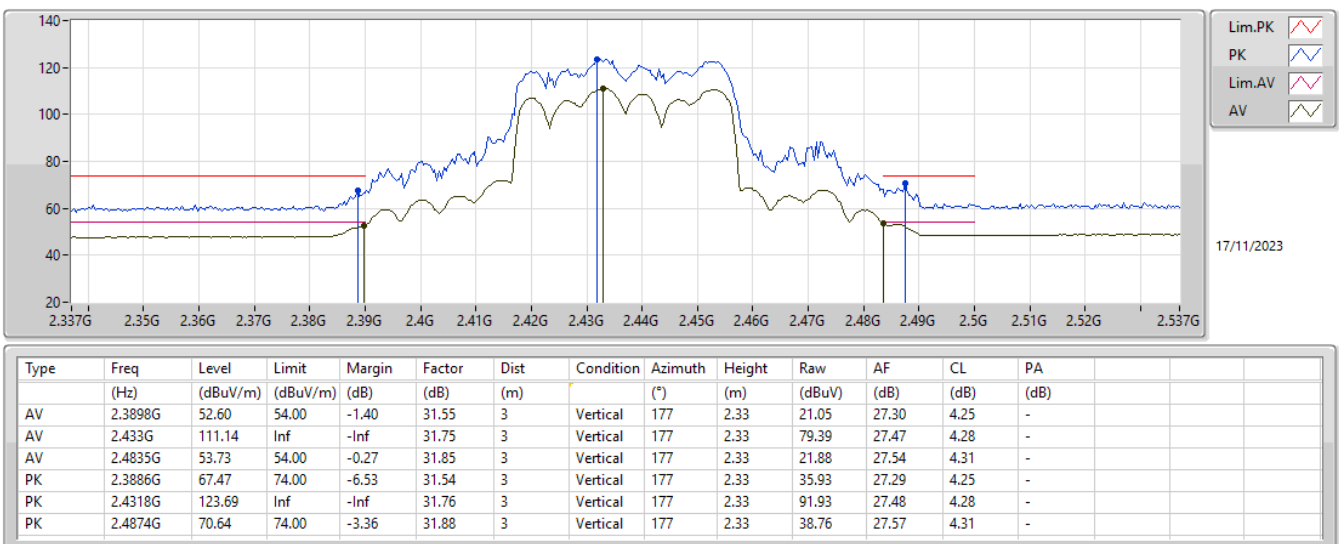
2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_4TX

2412MHz_TX



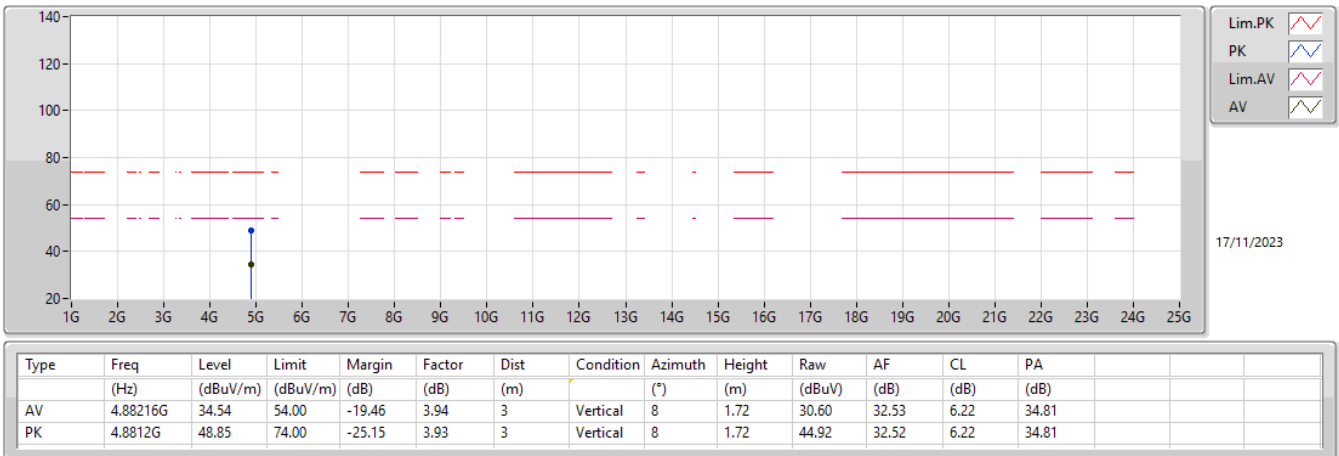
2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_4TX

2437MHz_TX



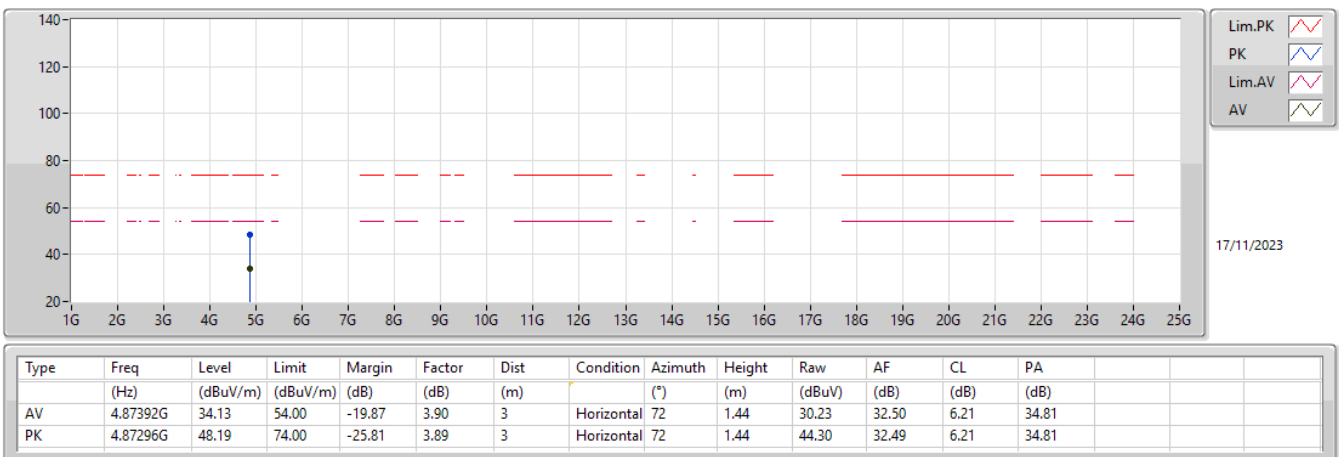
2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_4TX

2437MHz_TX



2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_4TX

2437MHz_TX





Summary

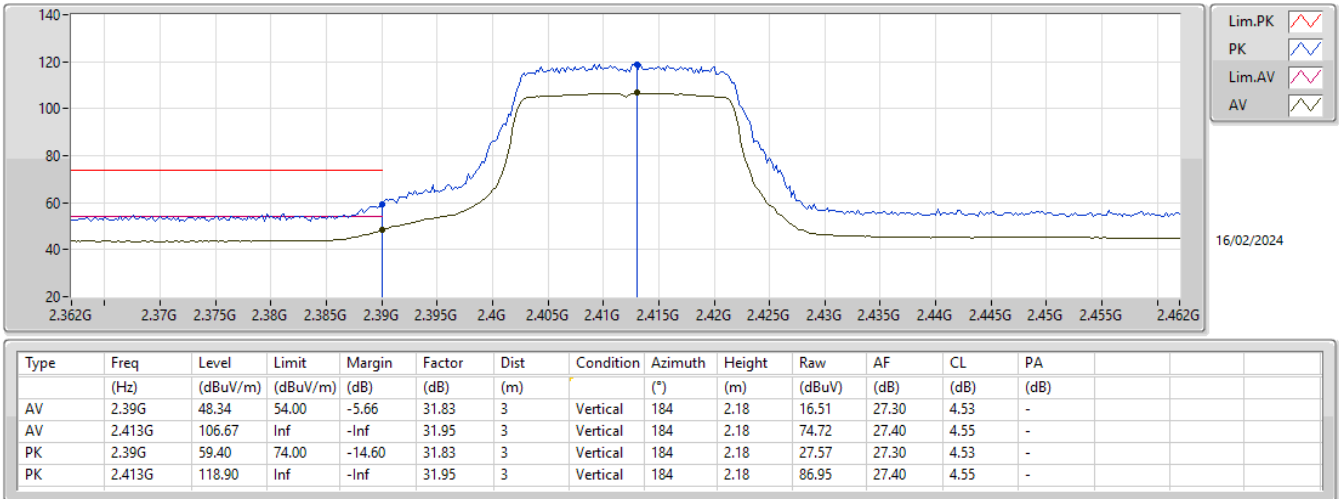
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	Pass	AV	2.39G	48.34	54.00	-5.66	3	Vertical	184	2.18
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	Pass	AV	2.4835G	50.98	54.00	-3.02	3	Vertical	350	2.09

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.39G	48.34	54.00	-5.66	3	Vertical	184	2.18
2412MHz	Pass	AV	2.413G	106.67	Inf	-Inf	3	Vertical	184	2.18
2412MHz	Pass	PK	2.39G	59.40	74.00	-14.60	3	Vertical	184	2.18
2412MHz	Pass	PK	2.413G	118.90	Inf	-Inf	3	Vertical	184	2.18
2412MHz	Pass	AV	4.82404G	27.62	54.00	-26.38	3	Vertical	5	2.36
2412MHz	Pass	PK	4.82421G	39.81	74.00	-34.19	3	Vertical	5	2.36
2412MHz	Pass	AV	4.82398G	29.30	54.00	-24.70	3	Horizontal	27	1.49
2412MHz	Pass	PK	4.82392G	40.59	74.00	-33.41	3	Horizontal	27	1.49
2437MHz	Pass	AV	2.3894G	43.90	54.00	-10.10	3	Vertical	185	1.92
2437MHz	Pass	AV	2.4422G	107.43	Inf	-Inf	3	Vertical	185	1.92
2437MHz	Pass	AV	2.485G	44.96	54.00	-9.04	3	Vertical	185	1.92
2437MHz	Pass	PK	2.3858G	56.25	74.00	-17.75	3	Vertical	185	1.92
2437MHz	Pass	PK	2.441G	120.69	Inf	-Inf	3	Vertical	185	1.92
2437MHz	Pass	PK	2.485G	57.09	74.00	-16.91	3	Vertical	185	1.92
2437MHz	Pass	AV	4.87454G	26.73	54.00	-27.27	3	Vertical	359	1.50
2437MHz	Pass	PK	4.87576G	41.17	74.00	-32.83	3	Vertical	359	1.50
2437MHz	Pass	AV	4.87404G	30.71	54.00	-23.29	3	Horizontal	20	1.50
2437MHz	Pass	PK	4.8741G	41.77	74.00	-32.23	3	Horizontal	20	1.50
2462MHz	Pass	AV	2.4582G	107.64	Inf	-Inf	3	Vertical	177	2.11
2462MHz	Pass	AV	2.4838G	47.36	54.00	-6.64	3	Vertical	177	2.11
2462MHz	Pass	PK	2.4568G	120.81	Inf	-Inf	3	Vertical	177	2.11
2462MHz	Pass	PK	2.4844G	60.16	74.00	-13.84	3	Vertical	177	2.11
2462MHz	Pass	AV	4.92385G	27.62	54.00	-26.38	3	Vertical	262	1.50
2462MHz	Pass	PK	4.92228G	41.00	74.00	-33.00	3	Vertical	262	1.50
2462MHz	Pass	AV	4.924G	32.78	54.00	-21.22	3	Horizontal	356	1.46
2462MHz	Pass	PK	4.92403G	42.42	74.00	-31.58	3	Horizontal	356	1.46
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	AV	2.39G	49.58	54.00	-4.42	3	Vertical	186	1.95
2422MHz	Pass	AV	2.4196G	104.54	Inf	-Inf	3	Vertical	186	1.95
2422MHz	Pass	AV	2.4835G	44.88	54.00	-9.12	3	Vertical	186	1.95
2422MHz	Pass	PK	2.3896G	61.74	74.00	-12.26	3	Vertical	186	1.95
2422MHz	Pass	PK	2.4288G	116.70	Inf	-Inf	3	Vertical	186	1.95
2422MHz	Pass	PK	2.4856G	56.41	74.00	-17.59	3	Vertical	186	1.95
2422MHz	Pass	AV	4.84399G	29.13	54.00	-24.87	3	Vertical	349	2.12
2422MHz	Pass	PK	4.84407G	41.99	74.00	-32.01	3	Vertical	349	2.12
2422MHz	Pass	AV	4.84399G	29.25	54.00	-24.75	3	Horizontal	18	1.49
2422MHz	Pass	PK	4.84418G	41.09	74.00	-32.91	3	Horizontal	18	1.49
2437MHz	Pass	AV	2.3898G	45.85	54.00	-8.15	3	Vertical	171	1.93
2437MHz	Pass	AV	2.443G	104.73	Inf	-Inf	3	Vertical	171	1.93
2437MHz	Pass	AV	2.4835G	46.41	54.00	-7.59	3	Vertical	171	1.93
2437MHz	Pass	PK	2.3898G	57.57	74.00	-16.43	3	Vertical	171	1.93
2437MHz	Pass	PK	2.439G	117.96	Inf	-Inf	3	Vertical	171	1.93
2437MHz	Pass	PK	2.4835G	58.68	74.00	-15.32	3	Vertical	171	1.93
2437MHz	Pass	AV	4.874G	29.05	54.00	-24.95	3	Vertical	11	2.14
2437MHz	Pass	PK	4.87193G	41.32	74.00	-32.68	3	Vertical	11	2.14
2437MHz	Pass	AV	4.874G	31.88	54.00	-22.12	3	Horizontal	359	1.46
2437MHz	Pass	PK	4.87396G	42.02	74.00	-31.98	3	Horizontal	359	1.46
2452MHz	Pass	AV	2.3896G	44.39	54.00	-9.61	3	Vertical	350	2.09
2452MHz	Pass	AV	2.4456G	105.14	Inf	-Inf	3	Vertical	350	2.09
2452MHz	Pass	AV	2.4835G	50.98	54.00	-3.02	3	Vertical	350	2.09
2452MHz	Pass	PK	2.3736G	55.79	74.00	-18.21	3	Vertical	350	2.09
2452MHz	Pass	PK	2.4476G	118.23	Inf	-Inf	3	Vertical	350	2.09
2452MHz	Pass	PK	2.4835G	63.64	74.00	-10.36	3	Vertical	350	2.09
2452MHz	Pass	AV	4.904G	28.85	54.00	-25.15	3	Vertical	17	1.32
2452MHz	Pass	PK	4.904G	40.67	74.00	-33.33	3	Vertical	17	1.32
2452MHz	Pass	AV	4.904G	32.83	54.00	-21.17	3	Horizontal	0	1.50
2452MHz	Pass	PK	4.90392G	41.93	74.00	-32.07	3	Horizontal	0	1.50

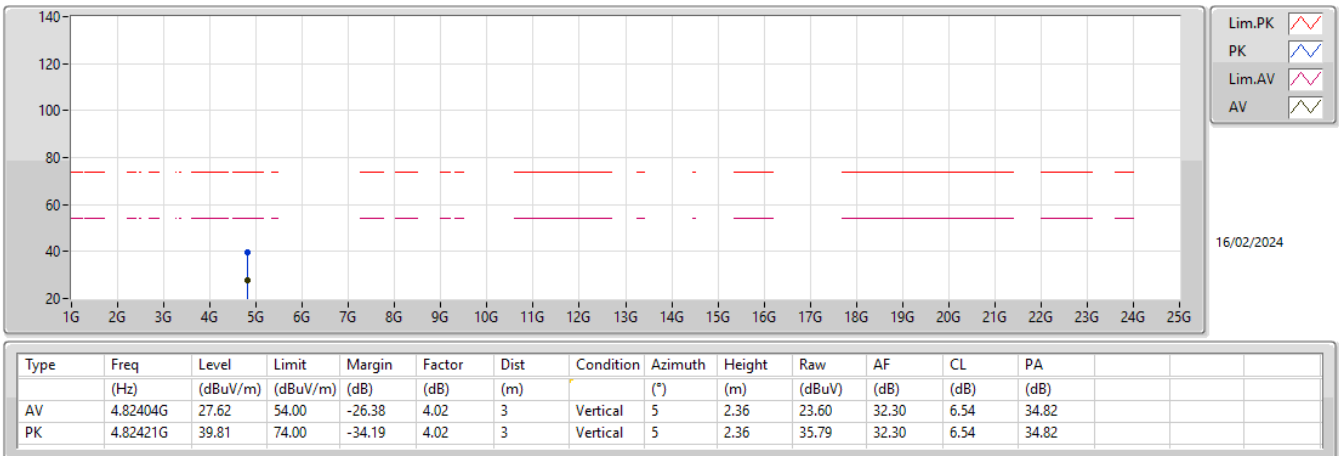
2.4-2.4835GHz_802.11ax_HEW20-BF_Nss1,(MCS0)_4TX

2412MHz_TX



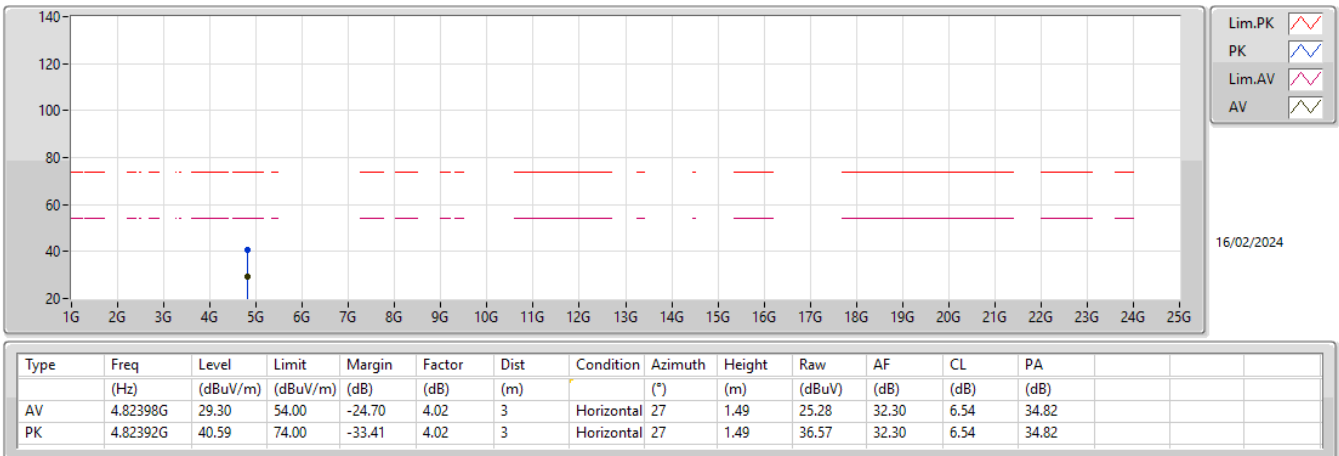
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2412MHz_TX



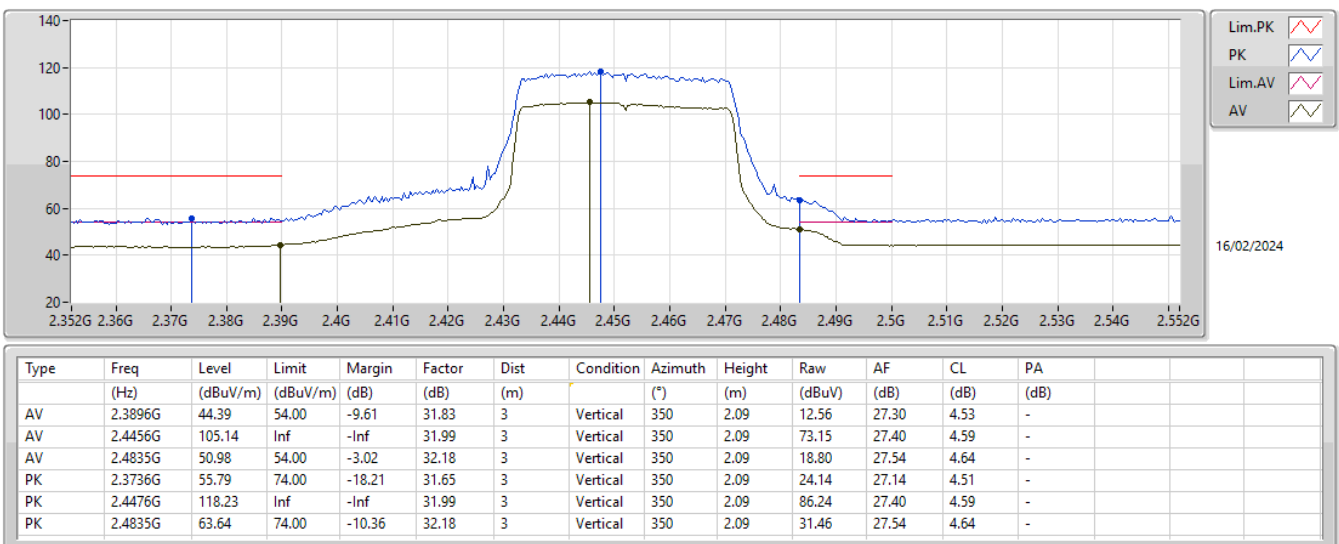
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2412MHz_TX



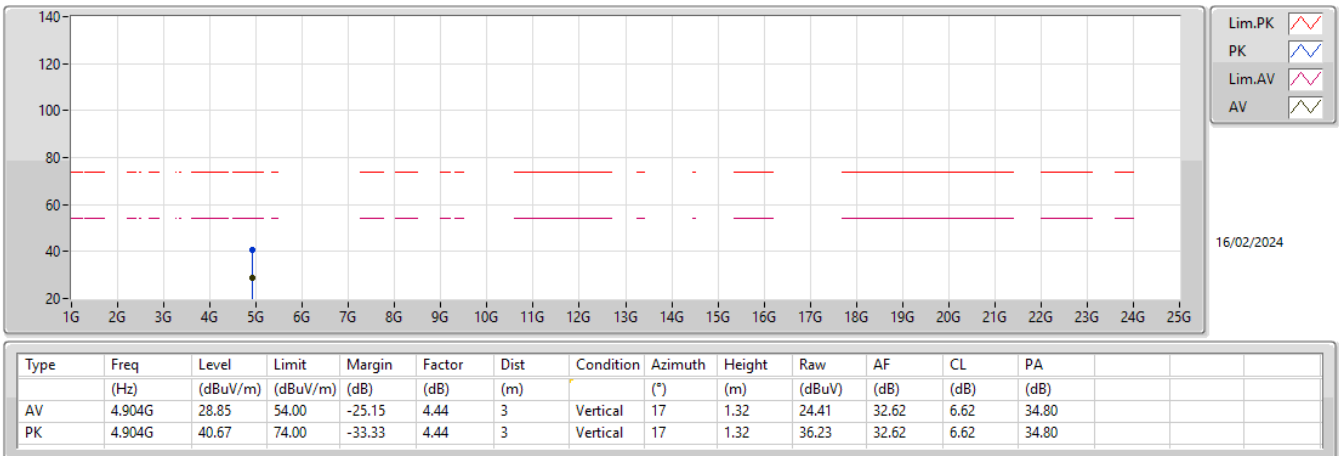
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2452MHz_TX



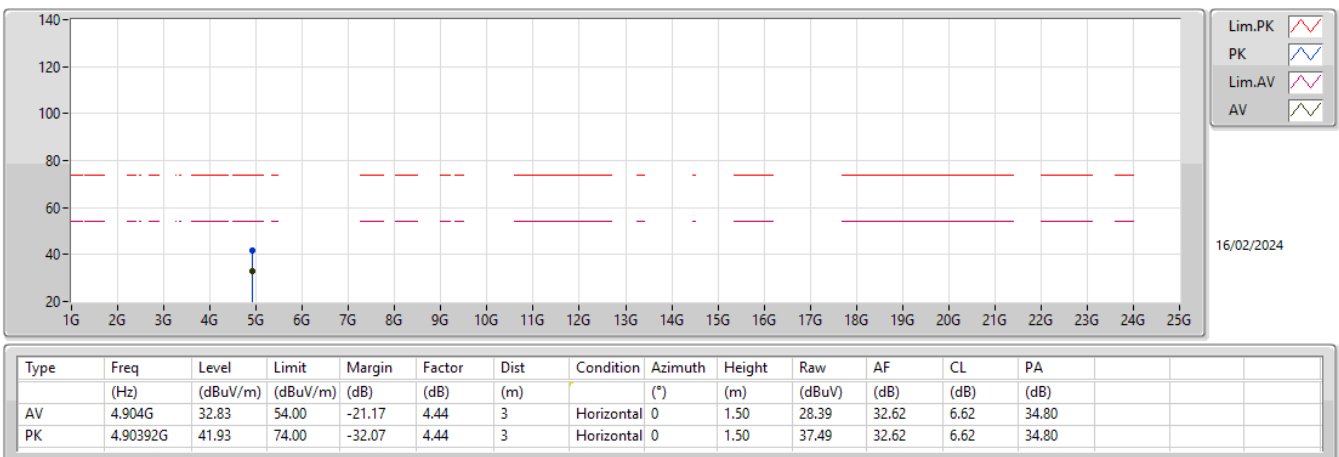
2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_4TX

2452MHz_TX



2.4-2.4835GHz_802.11ax HEW40-BF_Nss1,(MCS0)_4TX

2452MHz_TX



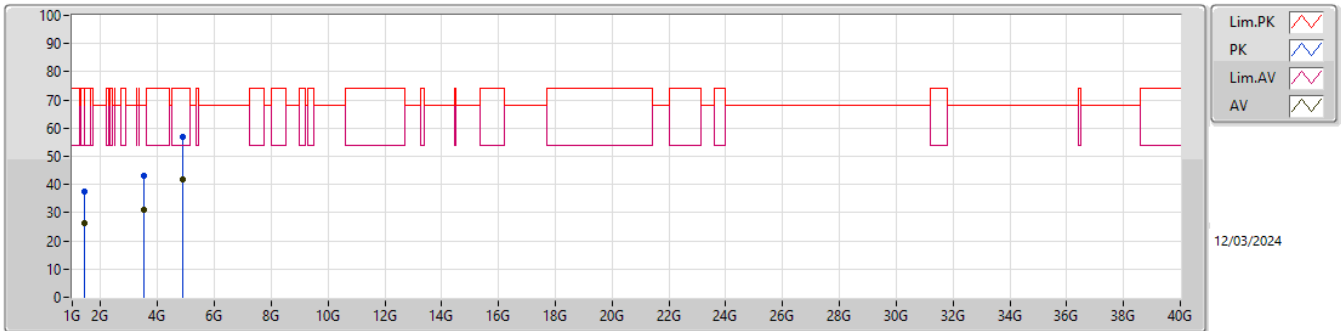
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	AV	4.87394G	41.82	54.00	-12.18	Vertical
Mode 2	Pass	AV	4.874G	42.01	54.00	-11.99	Vertical
Mode 3	Pass	AV	7.31014G	42.93	54.00	-11.07	Vertical
Mode 4	Pass	AV	4.87397G	43.09	54.00	-10.91	Vertical

Result

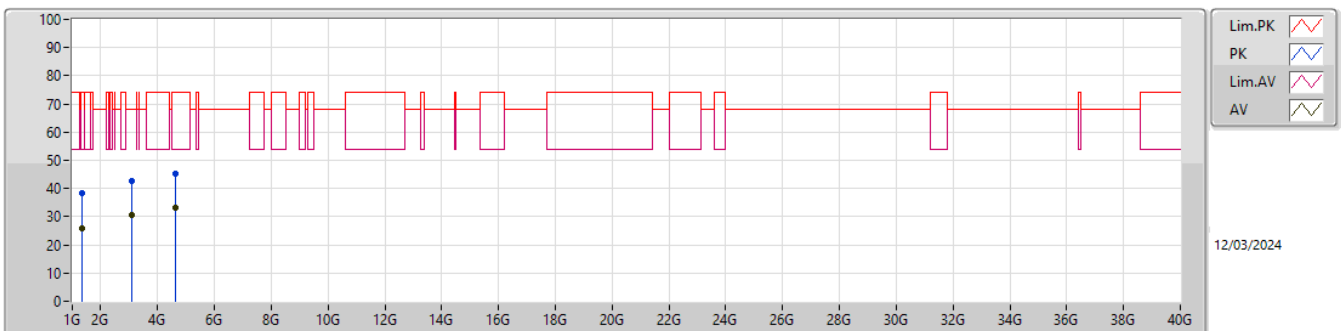
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
Mode 1	Pass	AV	1.41266G	26.31	54.00	-27.69	3	Vertical	95	2.64
Mode 1	Pass	AV	3.53248G	30.86	68.20	-37.34	3	Vertical	358	2.00
Mode 1	Pass	AV	4.87394G	41.82	54.00	-12.18	3	Vertical	0	2.17
Mode 1	Pass	PK	1.41422G	37.45	74.00	-36.55	3	Vertical	95	2.64
Mode 1	Pass	PK	3.53281G	42.94	68.20	-25.26	3	Vertical	358	2.00
Mode 1	Pass	PK	4.874G	56.99	74.00	-17.01	3	Vertical	0	2.17
Mode 1	Pass	AV	1.32744G	25.99	54.00	-28.01	3	Horizontal	15	1.10
Mode 1	Pass	AV	3.09788G	30.81	68.20	-37.39	3	Horizontal	14	2.35
Mode 1	Pass	AV	4.61682G	33.16	54.00	-20.84	3	Horizontal	180	2.81
Mode 1	Pass	PK	1.3327G	38.45	74.00	-35.55	3	Horizontal	15	1.10
Mode 1	Pass	PK	3.0972G	42.77	68.20	-25.43	3	Horizontal	14	2.35
Mode 1	Pass	PK	4.6167G	45.09	74.00	-28.91	3	Horizontal	180	2.81
Mode 2	Pass	AV	1.24004G	26.17	68.20	-42.03	3	Vertical	201	2.19
Mode 2	Pass	AV	2.75358G	30.47	54.00	-23.53	3	Vertical	54	1.46
Mode 2	Pass	AV	4.874G	42.01	54.00	-11.99	3	Vertical	359	2.17
Mode 2	Pass	PK	1.24211G	37.86	68.20	-30.34	3	Vertical	201	2.19
Mode 2	Pass	PK	2.76174G	42.14	74.00	-31.86	3	Vertical	54	1.46
Mode 2	Pass	PK	4.874G	57.43	74.00	-16.57	3	Vertical	359	2.17
Mode 2	Pass	AV	1.32693G	25.99	54.00	-28.01	3	Horizontal	223	2.88
Mode 2	Pass	AV	3.21567G	30.74	68.20	-37.46	3	Horizontal	320	1.21
Mode 2	Pass	AV	4.99585G	35.36	54.00	-18.64	3	Horizontal	71	2.10
Mode 2	Pass	PK	1.3324G	38.60	74.00	-35.40	3	Horizontal	223	2.88
Mode 2	Pass	PK	3.22681G	42.15	68.20	-26.05	3	Horizontal	320	1.21
Mode 2	Pass	PK	5.00032G	46.78	74.00	-27.22	3	Horizontal	71	2.10
Mode 3	Pass	AV	1.59743G	26.59	54.00	-27.41	3	Vertical	36	2.86
Mode 3	Pass	AV	4.87388G	41.63	54.00	-12.37	3	Vertical	159	2.05
Mode 3	Pass	AV	7.31014G	42.93	54.00	-11.07	3	Vertical	312	1.60
Mode 3	Pass	PK	1.59767G	48.54	74.00	-25.46	3	Vertical	36	2.86
Mode 3	Pass	PK	4.874G	54.82	74.00	-19.18	3	Vertical	159	2.05
Mode 3	Pass	PK	7.30972G	58.51	74.00	-15.49	3	Vertical	312	1.60
Mode 3	Pass	AV	1.59469G	26.14	54.00	-27.86	3	Horizontal	168	2.59
Mode 3	Pass	AV	4.9392G	34.94	54.00	-19.06	3	Horizontal	54	1.07
Mode 3	Pass	AV	7.30913G	41.62	54.00	-12.38	3	Horizontal	14	1.48
Mode 3	Pass	PK	1.59673G	46.14	74.00	-27.86	3	Horizontal	168	2.59
Mode 3	Pass	PK	4.94097G	46.78	74.00	-27.22	3	Horizontal	54	1.07
Mode 3	Pass	PK	7.31134G	57.38	74.00	-16.62	3	Horizontal	14	1.48
Mode 4	Pass	AV	1.1981G	25.50	54.00	-28.50	3	Vertical	72	2.18
Mode 4	Pass	AV	3.59547G	30.43	68.20	-37.77	3	Vertical	305	1.50
Mode 4	Pass	AV	4.87397G	43.09	54.00	-10.91	3	Vertical	0	2.06
Mode 4	Pass	PK	1.19827G	39.22	74.00	-34.78	3	Vertical	72	2.18
Mode 4	Pass	PK	3.59459G	43.19	68.20	-25.01	3	Vertical	305	1.50
Mode 4	Pass	PK	4.87405G	58.46	74.00	-15.54	3	Vertical	0	2.06
Mode 4	Pass	AV	1.03488G	26.98	54.00	-27.02	3	Horizontal	48	1.50
Mode 4	Pass	AV	2.11151G	26.94	68.20	-41.26	3	Horizontal	222	1.50
Mode 4	Pass	AV	4.87407G	34.78	54.00	-19.22	3	Horizontal	308	1.36
Mode 4	Pass	PK	1.04446G	40.54	74.00	-33.46	3	Horizontal	48	1.50
Mode 4	Pass	PK	2.11147G	39.70	68.20	-28.50	3	Horizontal	222	1.50
Mode 4	Pass	PK	4.87423G	47.55	74.00	-26.45	3	Horizontal	308	1.36

Radiated Emissions above 1GHz_Mode 1



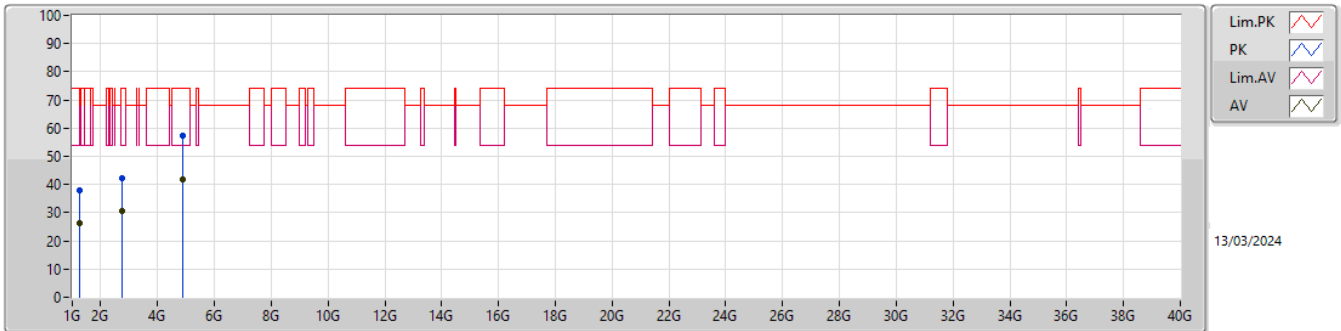
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)
AV	1.41266G	26.31	54.00	-27.69	-5.88	3	Vertical	95	2.64	32.19	25.80	3.43	35.11
AV	3.53248G	30.86	68.20	-37.34	-0.01	3	Vertical	358	2.00	30.87	29.30	5.67	34.98
AV	4.87394G	41.82	54.00	-12.18	4.28	3	Vertical	0	2.17	37.54	32.50	6.59	34.81
PK	1.41422G	37.45	74.00	-36.55	-5.88	3	Vertical	95	2.64	43.33	25.80	3.43	35.11
PK	3.53281G	42.94	68.20	-25.26	-0.01	3	Vertical	358	2.00	42.95	29.30	5.67	34.98
PK	4.874G	56.99	74.00	-17.01	4.28	3	Vertical	0	2.17	52.71	32.50	6.59	34.81

Radiated Emissions above 1GHz_Mode 1



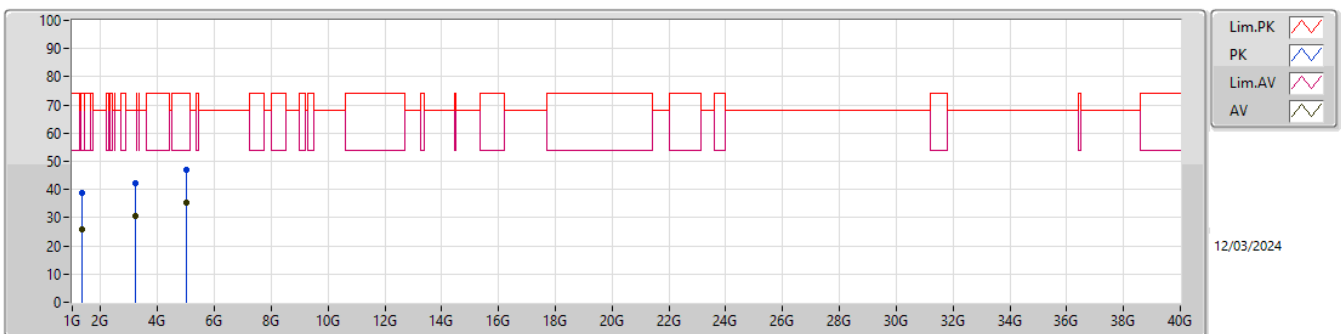
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)
AV	1.32744G	25.99	54.00	-28.01	-6.11	3	Horizontal	15	1.10	32.10	25.83	3.32	35.26
AV	3.09788G	30.81	68.20	-37.39	-0.28	3	Horizontal	14	2.35	31.09	29.50	5.25	35.03
AV	4.61682G	33.16	54.00	-20.84	3.04	3	Horizontal	180	2.81	30.12	31.53	6.39	34.88
PK	1.3327G	38.45	74.00	-35.55	-6.16	3	Horizontal	15	1.10	44.61	25.77	3.32	35.25
PK	3.0972G	42.77	68.20	-25.43	-0.29	3	Horizontal	14	2.35	43.06	29.49	5.25	35.03
PK	4.6167G	45.09	74.00	-28.91	3.07	3	Horizontal	180	2.81	42.02	31.55	6.40	34.88

Radiated Emissions above 1GHz_Mode 2



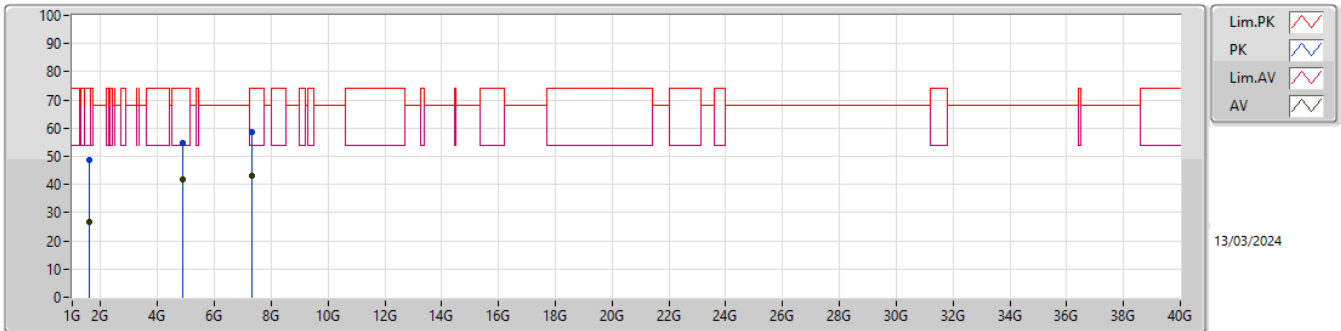
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)				
AV	1.24004G	26.17	68.20	-42.03	-6.60	3	Vertical	201	2.19	32.77	25.60	3.20	35.40				
AV	2.75358G	30.47	54.00	-23.53	-1.84	3	Vertical	54	1.46	32.31	28.24	4.93	35.01				
AV	4.874G	42.01	54.00	-11.99	4.28	3	Vertical	359	2.17	37.73	32.50	6.59	34.81				
PK	1.24211G	37.86	68.20	-30.34	-6.60	3	Vertical	201	2.19	44.46	25.60	3.20	35.40				
PK	2.76174G	42.14	74.00	-31.86	-1.77	3	Vertical	54	1.46	43.91	28.30	4.94	35.01				
PK	4.874G	57.43	74.00	-16.57	4.28	3	Vertical	359	2.17	53.15	32.50	6.59	34.81				

Radiated Emissions above 1GHz_Mode 2



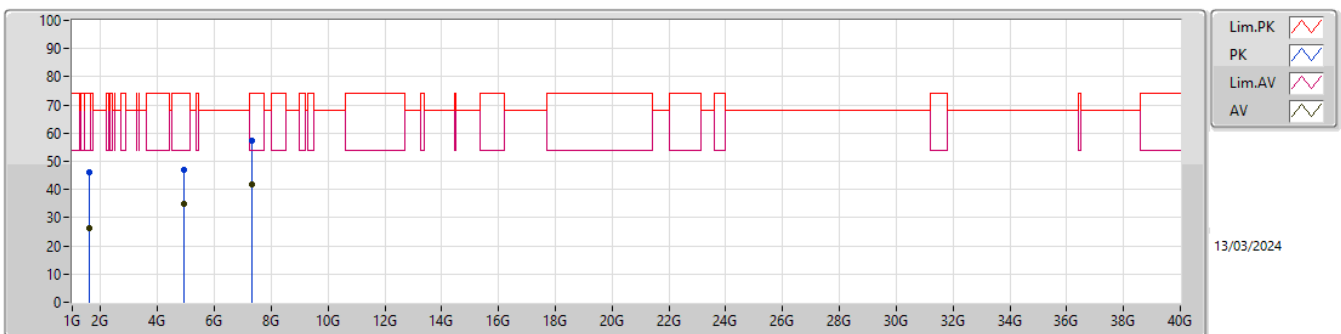
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)				
AV	1.32693G	25.99	54.00	-28.01	-6.11	3	Horizontal	223	2.88	32.10	25.83	3.32	35.26				
AV	3.21567G	30.74	68.20	-37.46	-0.03	3	Horizontal	320	1.21	30.77	29.64	5.35	35.02				
AV	4.99585G	35.36	54.00	-18.64	5.03	3	Horizontal	71	2.10	30.33	33.08	6.72	34.77				
PK	1.3324G	38.60	74.00	-35.40	-6.15	3	Horizontal	223	2.88	44.75	25.78	3.32	35.25				
PK	3.22681G	42.15	68.20	-26.05	-0.07	3	Horizontal	320	1.21	42.22	29.59	5.36	35.02				
PK	5.00032G	46.78	74.00	-27.22	5.05	3	Horizontal	71	2.10	41.73	33.10	6.72	34.77				

Radiated Emissions above 1GHz_Mode 3



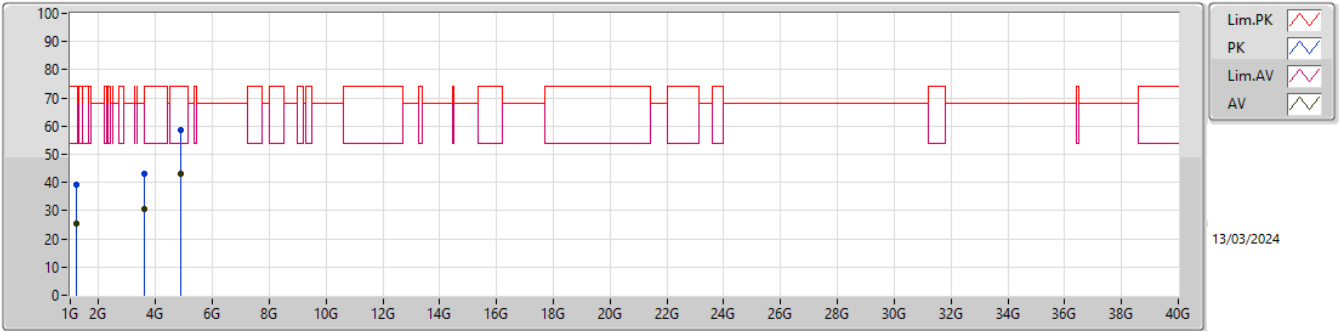
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)				
AV	1.59743G	26.59	54.00	-27.41	-5.94	3	Vertical	36	2.86	32.53	25.33	3.67	34.94				
AV	4.87388G	41.63	54.00	-12.37	4.28	3	Vertical	159	2.05	37.35	32.50	6.59	34.81				
AV	7.31014G	42.93	54.00	-11.07	10.03	3	Vertical	312	1.60	32.90	36.66	8.29	34.92				
PK	1.59767G	48.54	74.00	-25.46	-5.95	3	Vertical	36	2.86	54.49	25.32	3.67	34.94				
PK	4.874G	54.82	74.00	-19.18	4.28	3	Vertical	159	2.05	50.54	32.50	6.59	34.81				
PK	7.30972G	58.51	74.00	-15.49	10.03	3	Vertical	312	1.60	48.48	36.66	8.29	34.92				

Radiated Emissions above 1GHz_Mode 3



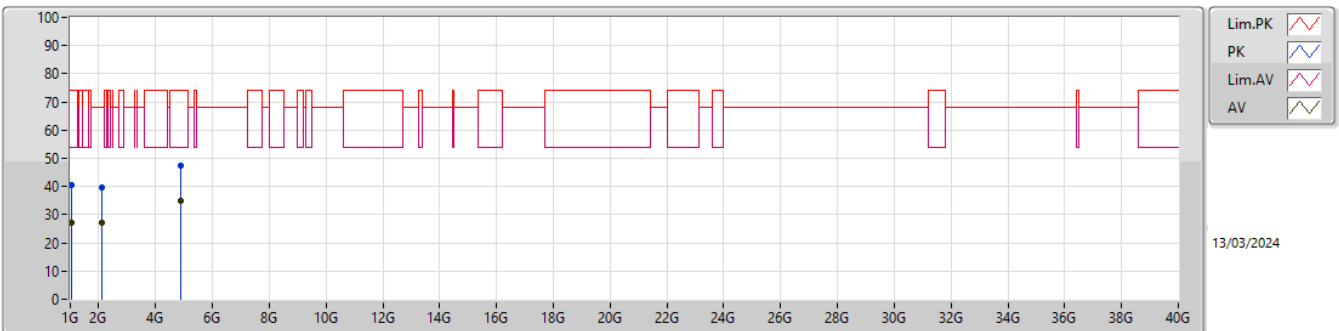
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)				
AV	1.59469G	26.14	54.00	-27.86	-5.93	3	Horizontal	168	2.59	32.07	25.35	3.66	34.94				
AV	4.9392G	34.94	54.00	-19.06	4.71	3	Horizontal	54	1.07	30.23	32.84	6.66	34.79				
AV	7.30913G	41.62	54.00	-12.38	10.03	3	Horizontal	14	1.48	31.59	36.66	8.29	34.92				
PK	1.59673G	46.14	74.00	-27.86	-5.94	3	Horizontal	168	2.59	52.08	25.33	3.67	34.94				
PK	4.94097G	46.78	74.00	-27.22	4.72	3	Horizontal	54	1.07	42.06	32.85	6.66	34.79				
PK	7.31134G	57.38	74.00	-16.62	10.02	3	Horizontal	14	1.48	47.36	36.65	8.29	34.92				

Radiated Emissions above 1GHz_Mode 4



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)				
AV	1.1981G	25.50	54.00	-28.50	-6.48	3	Vertical	72	2.18	31.98	25.84	3.15	35.47				
AV	3.59547G	30.43	68.20	-37.77	0.24	3	Vertical	305	1.50	30.19	29.48	5.72	34.96				
AV	4.87397G	43.09	54.00	-10.91	4.28	3	Vertical	0	2.06	38.81	32.50	6.59	34.81				
PK	1.19827G	39.22	74.00	-34.78	-6.49	3	Vertical	72	2.18	45.71	25.83	3.15	35.47				
PK	3.59459G	43.19	68.20	-25.01	0.24	3	Vertical	305	1.50	42.95	29.48	5.72	34.96				
PK	4.87405G	58.46	74.00	-15.54	4.28	3	Vertical	0	2.06	54.18	32.50	6.59	34.81				

Radiated Emissions above 1GHz_Mode 4



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)				
AV	1.03488G	26.98	54.00	-27.02	-7.97	3	Horizontal	48	1.50	34.95	24.85	2.92	35.74				
AV	2.11151G	26.94	68.20	-41.26	-3.20	3	Horizontal	222	1.50	30.14	27.42	4.24	34.86				
AV	4.87407G	34.78	54.00	-19.22	4.28	3	Horizontal	308	1.36	30.50	32.50	6.59	34.81				
PK	1.04446G	40.54	74.00	-33.46	-8.04	3	Horizontal	48	1.50	48.58	24.76	2.93	35.73				
PK	2.11147G	39.70	68.20	-28.50	-3.21	3	Horizontal	222	1.50	42.91	27.41	4.24	34.86				
PK	4.87423G	47.55	74.00	-26.45	4.28	3	Horizontal	308	1.36	43.27	32.50	6.59	34.81				