

FCC Radio Test Report

FCC ID : TOR-C460
Equipment : Wireless Access Point
Brand Name : ARISTA
Model Name : C-460
Applicant : Arista Networks, Inc.
5453 Great America Parkway, Santa Clara, CA 95054 USA
Manufacturer : Arista Networks, Inc.
5453 Great America Parkway, Santa Clara, CA 95054 USA
Standard : 47 CFR FCC Part 15.247

The product was received on Sep. 25, 2023, and testing was started from Jan. 22, 2024 and completed on Mar. 06, 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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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: Ryan Hsiao

Report Producer: Amber Chiu

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	Bluetooth Mode	Ch. Frequency (MHz)	Channel Number
2400-2483.5	LE	2402-2480	0-39 [40]

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	BT-LE(125kbps)	1.0	1TX
2.4-2.4835GHz	BT-LE(500kbps)	1.0	1TX
2.4-2.4835GHz	BT-LE(1Mbps)	1.0	1TX
2.4-2.4835GHz	BT-LE(2Mbps)	2.0	1TX

Note:

- Bluetooth LE uses a GFSK (125kbps/500kbps/1Mbps/2Mbps) modulation.
- BWch is the nominal channel bandwidth.

Bluetooth LE 125k/500k/1Mbps uses the same modulation, and 1Mbps was found to be the worst case scenario which was performed full test and recorded in this test report.

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector	Support	Radio
1	WHAYU	C393-510253-A	Dipole	I-Pex	6E	Radio 2
2	WHAYU	C393-510253-A	Dipole	I-Pex	6E	Radio 2
3	WHAYU	C393-510253-A	Dipole	I-Pex	6E	Radio 2
4	WHAYU	C393-510253-A	Dipole	I-Pex	6E	Radio 2
5	WHAYU	C393-510253-A	PIFA	I-Pex	Scan 2.4G+5G+6E	Radio 0
6	WHAYU	C393-510253-A	PIFA	I-Pex	Scan 2.4G+5G+6E	Radio 0
7	WHAYU	C393-510253-A	PIFA	I-Pex	2.4G+5G	Radio 1_2.4G Radio 3_5G
8	WHAYU	C393-510253-A	PIFA	I-Pex	2.4G+5G	Radio 1_2.4G Radio 3_5G
9	WHAYU	C393-510253-A	PIFA	I-Pex	2.4G+5G	Radio 1_2.4G Radio 3_5G
10	WHAYU	C393-510253-A	PIFA	I-Pex	2.4G+5G	Radio 1_2.4G Radio 3_5G
11	WHAYU	C393-510253-A	Dipole	I-Pex	BT	-
12	WHAYU	C393-510253-A	PIFA	I-Pex	GPS	-

Ant.	Port	Gain (dBi)										
		2.4G	UNII-1	UNII-2A	UNII-2C	UNII-3	UNII-5	UNII-6	UNII-7	UNII-8	BT	GPS
1	1	-	-	-	-	-	4.41	4.44	4.06	3.96	-	-
2	2	-	-	-	-	-	5.42	4.8	4.15	4.72	-	-
3	3	-	-	-	-	-	5.35	5.01	5.61	4.45	-	-
4	4	-	-	-	-	-	4.2	3.99	4.51	5.75	-	-
5	1	4.2	6.1				6.4				-	-
6	2	4.3	6.3				6.5				-	-
7	1	2.52	5.01	4.18	4.47	4.79	-	-	-	-	-	-
8	2	2.26	4.71	4.72	4.48	5.01	-	-	-	-	-	-
9	3	2.81	3.56	3.49	5.25	4.23	-	-	-	-	-	-
10	4	2.36	5.14	4.59	4.41	4.31	-	-	-	-	-	-
11	1	-	-	-	-	-	-	-	-	-	4.8	-
12	1	-	-	-	-	-	-	-	-	-	-	2.7

Composite Gain (dBi)										
	2.4G	UNII-1	UNII-2A	UNII-2C	UNII-3	6.175G	6.475G	6.695G	6.995G	
DG [1SS]	5.74	7.95	7.31	8.43	8.69	7.81	7.66	6.82	6.65	
DG [2SS]	2.81	5.14	4.72	5.43	5.69	5.42	5.01	5.61	5.75	
DG [4SS]	2.81	5.14	4.72	5.25	5.01	5.42	5.01	5.61	5.75	

Note 1: The EUT has twelve antennas.

Note 2: The composite gain is derived as KDB 662911 D03 v01 which was used as directional gain. For more detail information, please refer to the Antenna Pattern Report AP392143.

For 2.4GHz function:

For IEEE 802.11 b/g/n/VHT/ax mode (2TX/2RX) < **Radio 0** >

Ant. 5 (port 1) and Ant. 6 (port 2) could receive simultaneously.

For IEEE 802.11 b/g/n/VHT/ax/be mode (4TX/4RX) < **Radio 1** >

Ant. 7 (port 1), Ant. 8 (port 2), Ant. 9 (port 3) and Ant. 10 (port 4) could transmit/receive simultaneously.

For 5GHz function:

For IEEE 802.11 a/n/ac/ax mode(2TX/2RX) < **Radio 0** >

Ant. 5 (port 1) and Ant. 6 (port 2) could receive simultaneously.

For IEEE 802.11 a/n/ac/ax/be mode (4TX/4RX) < **Radio 3** >

Ant. 7 (port 1), Ant. 8 (port 2), Ant. 9 (port 3) and Ant. 10 (port 4) could transmit/receive simultaneously.

For 6GHz function:

For IEEE 802.11axmode (2TX/2RX) < **Radio 0** >

Ant. 5 (port 1) and Ant. 6 (port 2) could receive simultaneously.

For IEEE 802.11 ax/be mode (4TX/4RX) < **Radio 2** >

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

For BT function:

For IEEE 802.15.1 Bluetooth mode (1TX/1RX)

Ant. 11 could transmit/receive.

1.1.3 EUT Information

Operational Condition			
EUT Power Type	From AC Adapter / PoE		
EUT Function	☒ Point-to-multipoint	☐ Point-to-point	
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

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
BT-LE(1Mbps)	1	0	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
BT-LE(2Mbps)	1	0	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)

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

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 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	Wayne Chiu	22.5~23.2°C / 54~ 57%	02/Feb/2024
RF Conducted	TH07-HY	Yuna Lin	22.5~22.8°C / 52~56%	23/Jan/2024
Radiated	03CH02-HY	Daniel Lin	20.2~21.1°C / 57~61%	22/Jan/2024~23/Jan/2024
Radiated (Co-location)	03CH02-HY	Darren Cho	21.8~22.7°C / 56~59%	05/Mar/2024~06/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	Tera Term Version 4.76
-----------------------	------------------------

Mode	Power Setting
BT-LE(1Mbps)	-
2402MHz	100
2440MHz	100
2480MHz	100
BT-LE(2Mbps)	-
2402MHz	100
2440MHz	100
2480MHz	70

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	Adapter Mode
2	PoE Mode

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	Adapter Mode		
2	PoE Mode		
Operating Mode > 1GHz	CTX		
Orthogonal Planes of EUT	X Plane	Y Plane	Z Plane
			
Worst Planes of EUT		V	



The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Operating Mode	CTX
1	Radio 1 + Radio 3 + Radio 2 + Radio 0 (WLAN 2.4GHz) + Bluetooth
2	Radio 1 + Radio 3 + Radio 2 + Radio 0 (WLAN 5GHz) + Bluetooth
3	Radio 1 + Radio 3 + Radio 2 + Radio 0 (WLAN 6GHz) + Bluetooth
Refer to Sporton Test Report No.: FA392143 for Co-location RF Exposure Evaluation and Appendix G for Radiated Emission Co-location.	

2.3 Accessories

Accessories					
Ceiling	Brand Name	ARISTA	Model Name	MNT-AP-15MM	

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

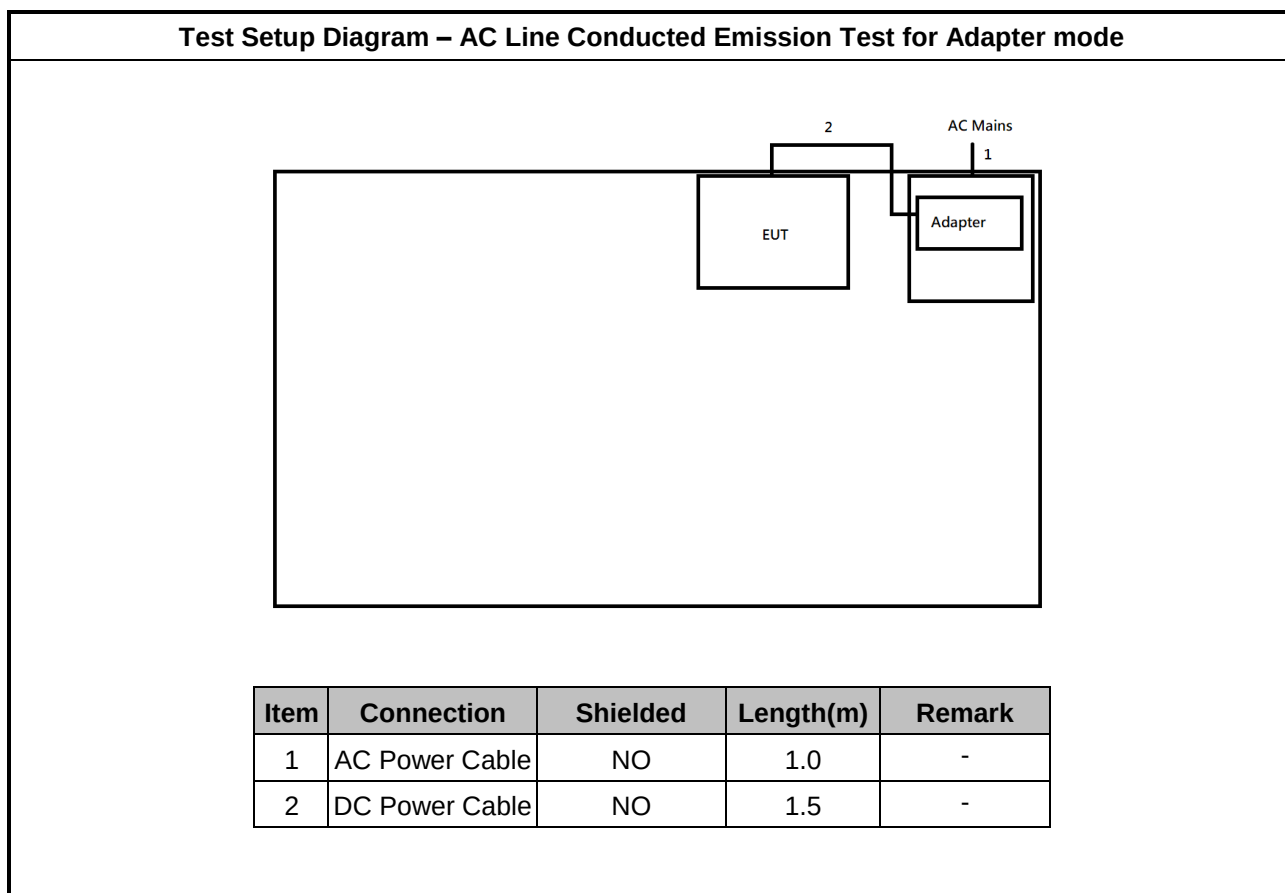
2.4 Support Equipment

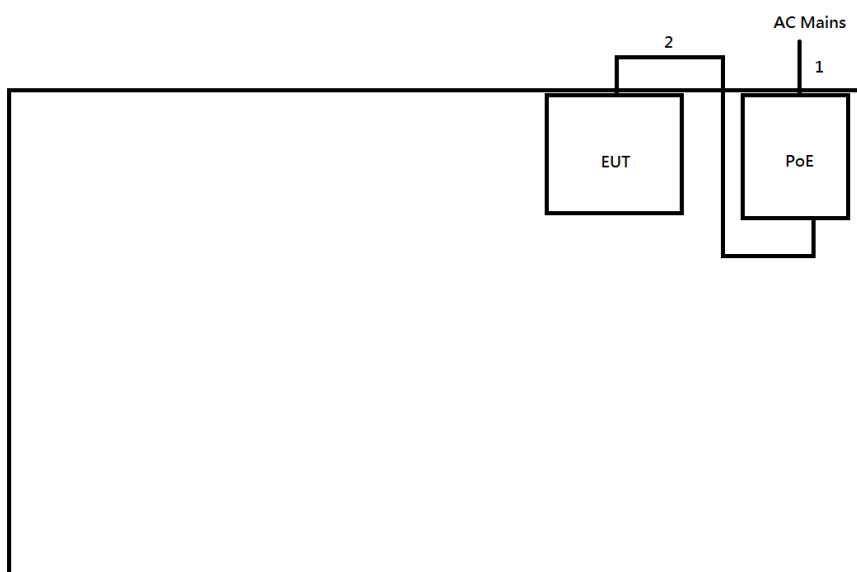
Support Equipment – AC Conduction					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Adapter	ASIAN POWER DEVICES	WA-48B12R	-	Provided by Customer
2	RJ45 Cable	Power sync	CAT-6E-03	-	-
3	PoE	PHIHONG	POE60U-1BT-5	-	-
4	AC Power Cable	Power sync	PW-GPC180-3	-	-

Support Equipment – Conducted					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Notebook	DELL	E5410	-	-
2	Adapter for NB	DELL	HA65NM130	-	-
3	AC Adapter	ASIAN POWER DEVICES	WA-48B12R	-	Provided by Customer

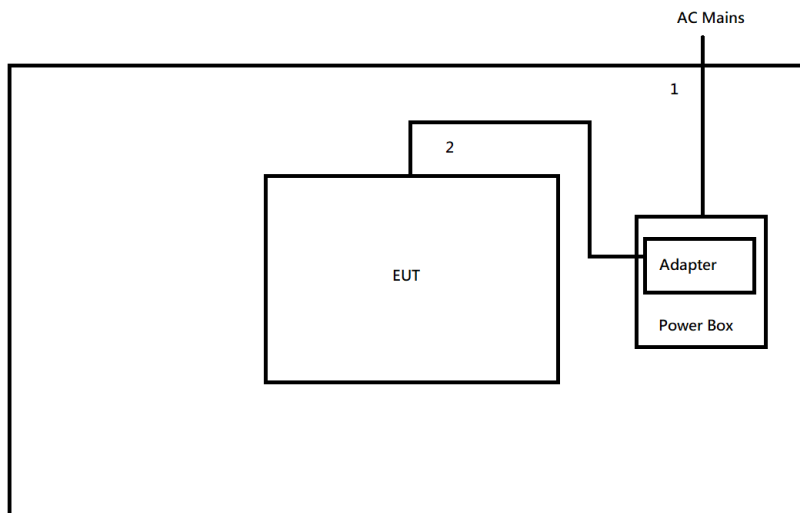
Support Equipment – Radiated					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Adapter	ASIAN POWER DEVICES	WA-48B12R	-	Provided by Customer
2	RJ45 Cable	Power sync	CAT-6E-03	-	-
3	AC Power Cable (Remote)	Power sync	PW-GPC180-3	-	-
4	PoE (Remote)	PHIHONG	POE60U-1BT-5	-	-

2.5 Test Setup Diagram

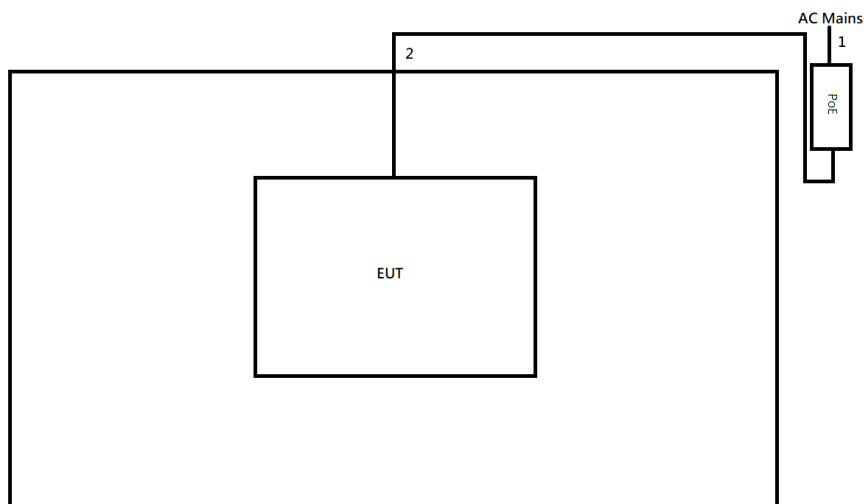


Test Setup Diagram – AC Line Conducted Emission Test for PoE mode


Item	Connection	Shielded	Length(m)	Remark
1	AC Power Cable	NO	1.8	-
2	RJ45 Cable	NO	3.0	-

Test Setup Diagram - Radiated Test for Adapter mode


Item	Connection	Shielded	Length(m)	Remark
1	AC Power Cable	NO	1.8	-
2	DC Power Cable	NO	1.5	-

Test Setup Diagram - Radiated Test for PoE mode


Item	Connection	Shielded	Length(m)	Remark
1	AC Power Cable	NO	1.8	-
2	RJ45 Cable	NO	3.0	-

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

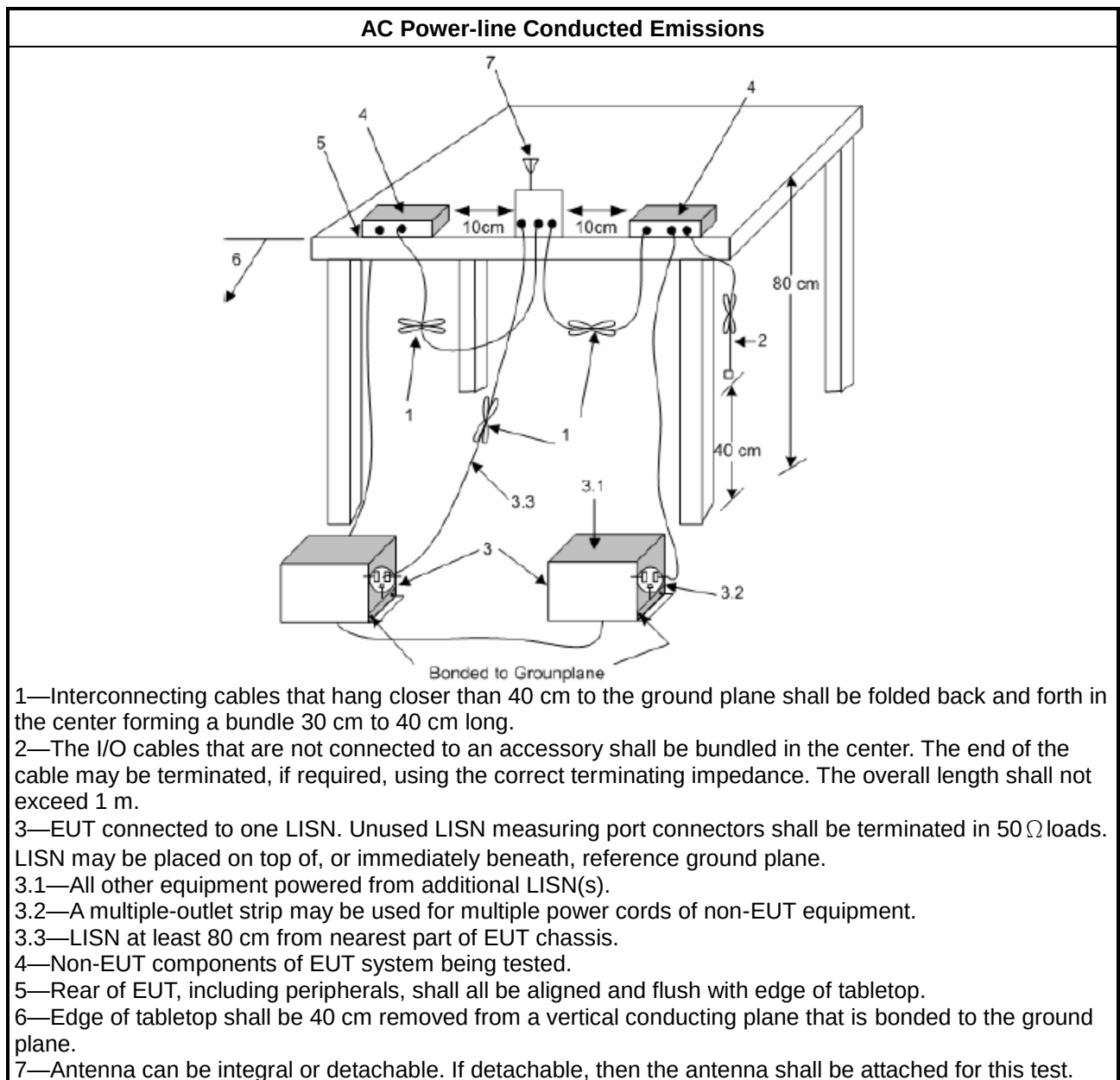
Test Method
Refer as ANSI C63.10-2013, clause 6.2 foray power-line conducted emissions.

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.

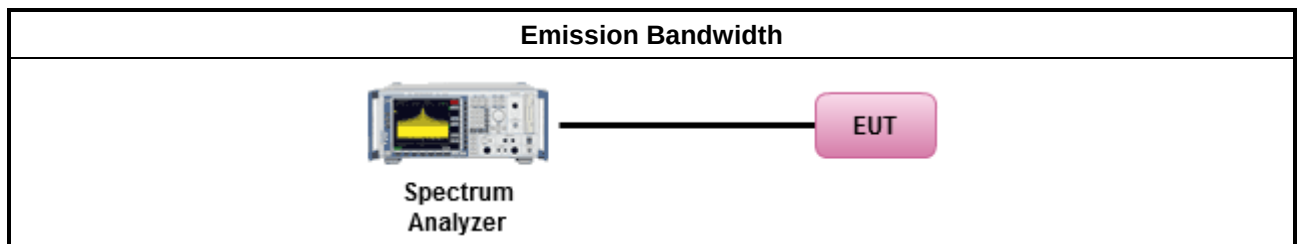
3.2.2 Measuring Instruments

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.	

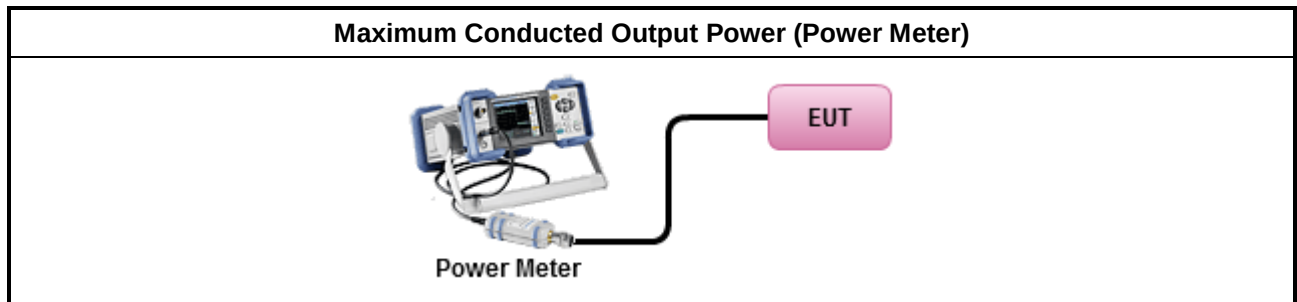
3.3.2 Measuring Instruments

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

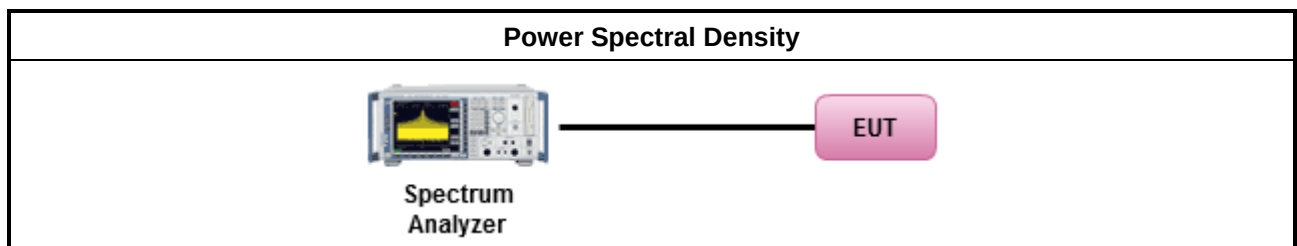
3.4.2 Measuring Instruments

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.	

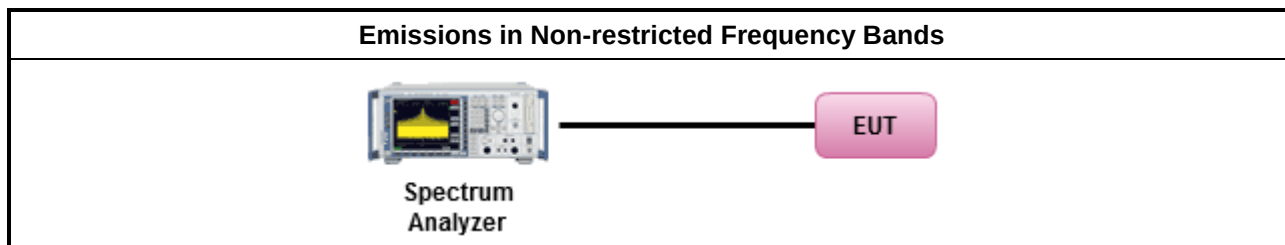
3.5.2 Measuring Instruments

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

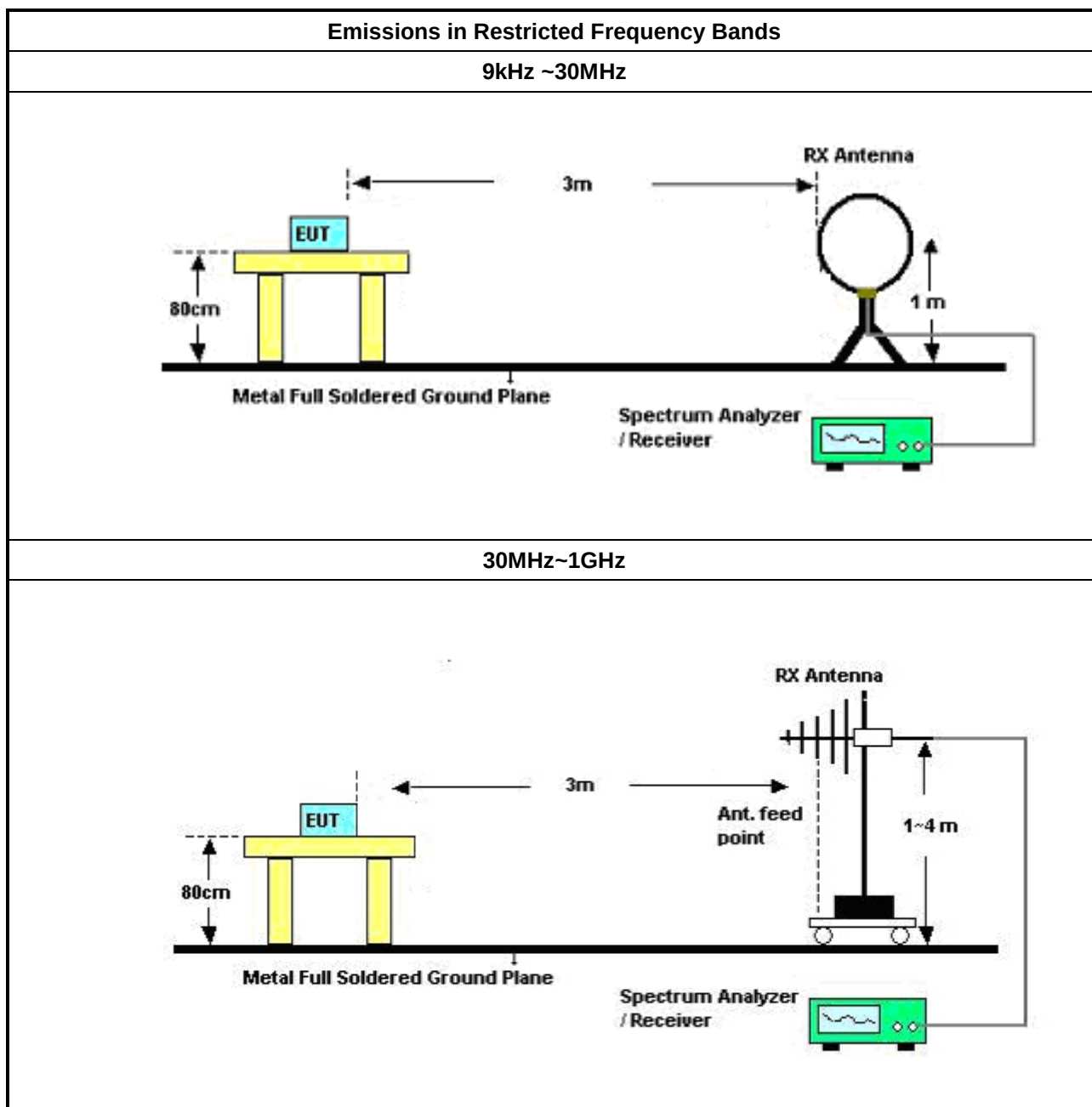
Test Method	
The average emission levels shall be measured in [duty cycle $\geq$ 98 or duty factor].	
Refer as ANSI C63.10, clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.	
For the transmitter unwanted 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.

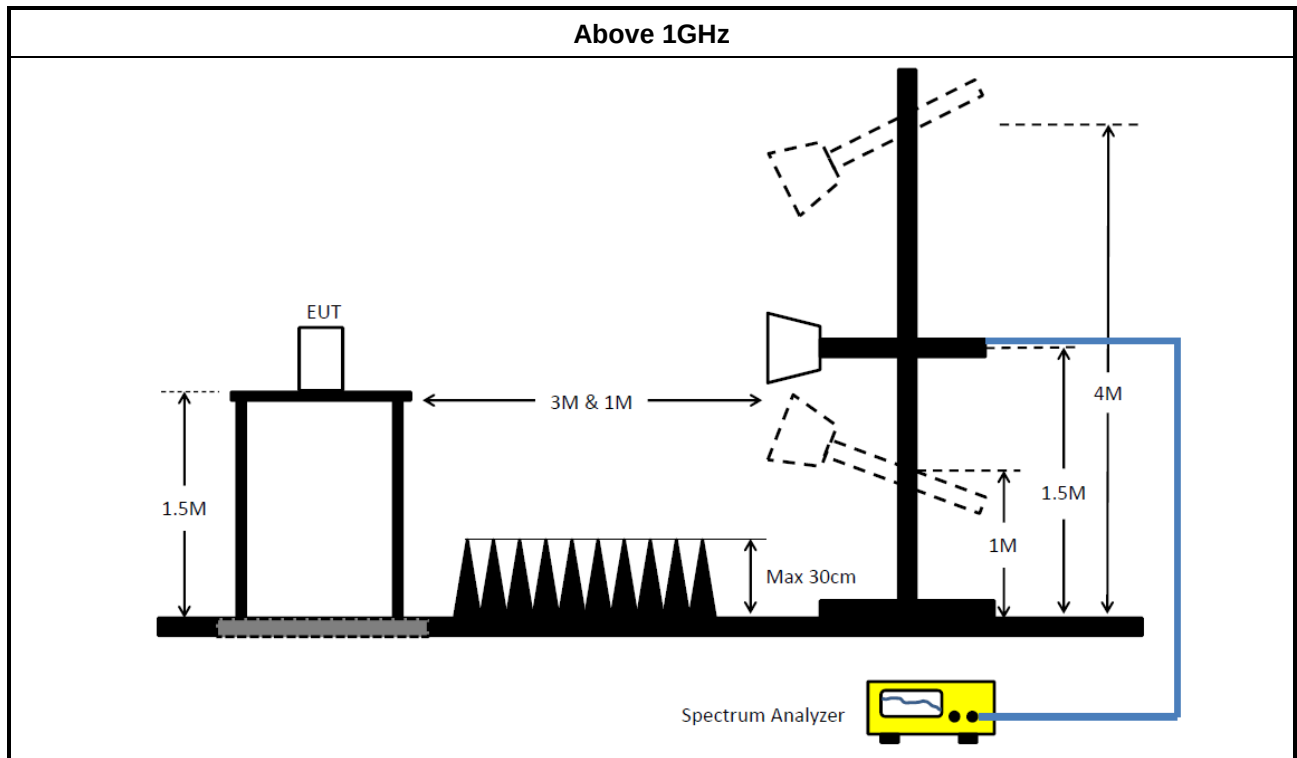
3.6.4 Measurement Results Calculation

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	SCHWARZBECK	NNB 41	04/10153	9kHz ~ 30MHz	24/Jan/2024	23/Jan/2025
RF Cable 5m	TITAN	TITAN	CO04-cable-01	9 kHz~200MHz	28/Feb/2023	27/Feb/2024
Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9kHz ~ 30MHz	18/Oct/2023	17/Oct/2024
SENSE-EMI	Sporton	V5.11.3	N/A	N/A	N/A	N/A

Instrument for Conducted Test

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	1517010	300MHz~40GHz	15/Dec/2023	14/Dec/2024
Pulse Sensor	Anritsu	MA2411B	1339407	300MHz~40GHz	15/Dec/2023	14/Dec/2024
SENSE-15247_FS	Sporton	V5.11.16	N/A	N/A	N/A	N/A

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 Prempplier	EMC INSTRUMENTS	EM18G40GA	060604	18GHz ~ 40GHz	16/Mar/2023	15/Mar/2024
SENSE-EMI	Sporton	V5.11.6	NA	NA	NA	NA

**Instrument for Radiated Test**

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+ SUHNER	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	EMC INSTRUMENTS	EM18G40GA	060604	18GHz ~40GHz	16/Mar/2023	15/Mar/2024
SENSE-15247_FS	Sporton	V5.11.16	N/A	N/A	N/A	N/A



Conducted Emissions at Powerline

Appendix A

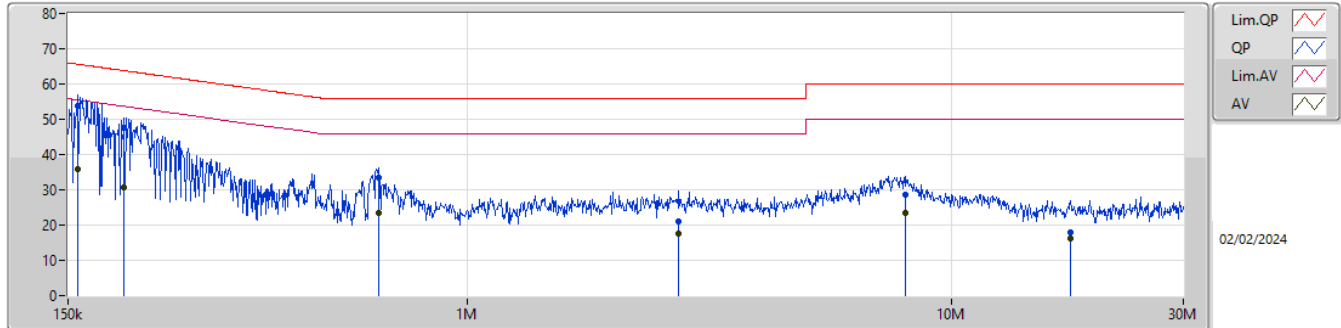
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	156.734k	53.93	65.64	-11.71	Line
Mode 2	Pass	AV	28.006M	35.56	50.00	-14.44	Line

Result

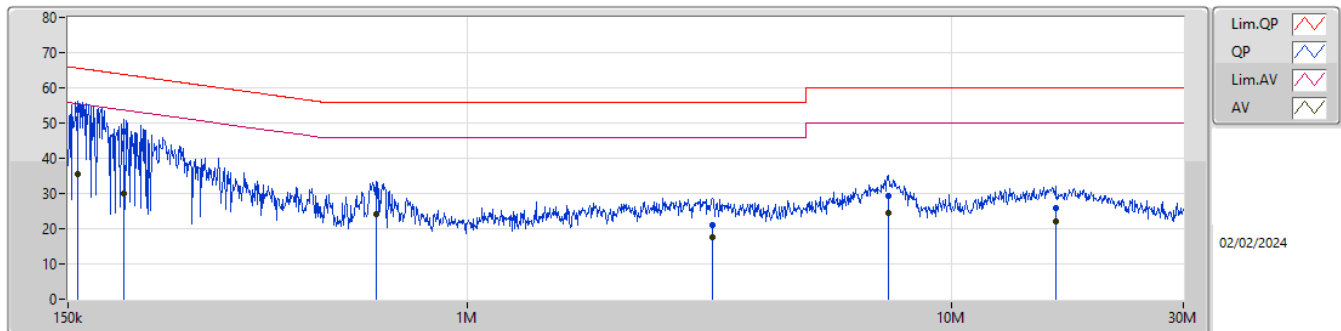
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition	Comments
Mode 1	Pass	QP	156.734k	53.93	65.64	-11.71	Line	-
Mode 1	Pass	AV	156.734k	35.93	55.64	-19.71	Line	-
Mode 1	Pass	QP	195.997k	47.42	63.78	-16.36	Line	-
Mode 1	Pass	AV	195.997k	30.71	53.78	-23.07	Line	-
Mode 1	Pass	QP	654.382k	33.34	56.00	-22.66	Line	-
Mode 1	Pass	AV	654.382k	23.60	46.00	-22.40	Line	-
Mode 1	Pass	QP	2.732M	21.08	56.00	-34.92	Line	-
Mode 1	Pass	AV	2.732M	17.66	46.00	-28.34	Line	-
Mode 1	Pass	QP	8.028M	28.54	60.00	-31.46	Line	-
Mode 1	Pass	AV	8.028M	23.38	50.00	-26.62	Line	-
Mode 1	Pass	QP	17.555M	17.84	60.00	-42.16	Line	-
Mode 1	Pass	AV	17.555M	16.04	50.00	-33.96	Line	-
Mode 1	Pass	QP	157.361k	53.88	65.60	-11.72	Neutral	-
Mode 1	Pass	AV	157.361k	35.68	55.60	-19.92	Neutral	-
Mode 1	Pass	QP	195.997k	47.50	63.78	-16.28	Neutral	-
Mode 1	Pass	AV	195.997k	29.90	53.78	-23.88	Neutral	-
Mode 1	Pass	QP	649.178k	31.03	56.00	-24.97	Neutral	-
Mode 1	Pass	AV	649.178k	23.98	46.00	-22.02	Neutral	-
Mode 1	Pass	QP	3.205M	21.13	56.00	-34.87	Neutral	-
Mode 1	Pass	AV	3.205M	17.75	46.00	-28.25	Neutral	-
Mode 1	Pass	QP	7.382M	29.43	60.00	-30.57	Neutral	-
Mode 1	Pass	AV	7.382M	24.45	50.00	-25.55	Neutral	-
Mode 1	Pass	QP	16.338M	25.73	60.00	-34.27	Neutral	-
Mode 1	Pass	AV	16.338M	22.22	50.00	-27.78	Neutral	-
Mode 2	Pass	QP	161.82k	46.15	65.37	-19.22	Line	-
Mode 2	Pass	AV	161.82k	29.64	55.37	-25.73	Line	-
Mode 2	Pass	QP	213.989k	40.34	63.06	-22.72	Line	-
Mode 2	Pass	AV	213.989k	26.01	53.06	-27.05	Line	-
Mode 2	Pass	QP	587.518k	20.01	56.00	-35.99	Line	-
Mode 2	Pass	AV	587.518k	16.64	46.00	-29.36	Line	-
Mode 2	Pass	QP	2.983M	17.83	56.00	-38.17	Line	-
Mode 2	Pass	AV	2.983M	15.26	46.00	-30.74	Line	-
Mode 2	Pass	QP	14.669M	33.94	60.00	-26.06	Line	-
Mode 2	Pass	AV	14.669M	29.62	50.00	-20.38	Line	-
Mode 2	Pass	QP	28.006M	41.09	60.00	-18.91	Line	-
Mode 2	Pass	AV	28.006M	35.56	50.00	-14.44	Line	-
Mode 2	Pass	QP	160.533k	46.36	65.43	-19.07	Neutral	-
Mode 2	Pass	AV	160.533k	30.33	55.43	-25.10	Neutral	-
Mode 2	Pass	QP	206.437k	40.35	63.34	-22.99	Neutral	-
Mode 2	Pass	AV	206.437k	24.97	53.34	-28.37	Neutral	-
Mode 2	Pass	QP	587.518k	22.02	56.00	-33.98	Neutral	-
Mode 2	Pass	AV	587.518k	17.85	46.00	-28.15	Neutral	-
Mode 2	Pass	QP	3.257M	17.40	56.00	-38.60	Neutral	-
Mode 2	Pass	AV	3.257M	15.59	46.00	-30.41	Neutral	-
Mode 2	Pass	QP	14.208M	35.12	60.00	-24.88	Neutral	-
Mode 2	Pass	AV	14.208M	30.74	50.00	-19.26	Neutral	-
Mode 2	Pass	QP	28.231M	39.38	60.00	-20.62	Neutral	-
Mode 2	Pass	AV	28.231M	34.33	50.00	-15.67	Neutral	-

Conducted Emissions at Powerline_Mode 1



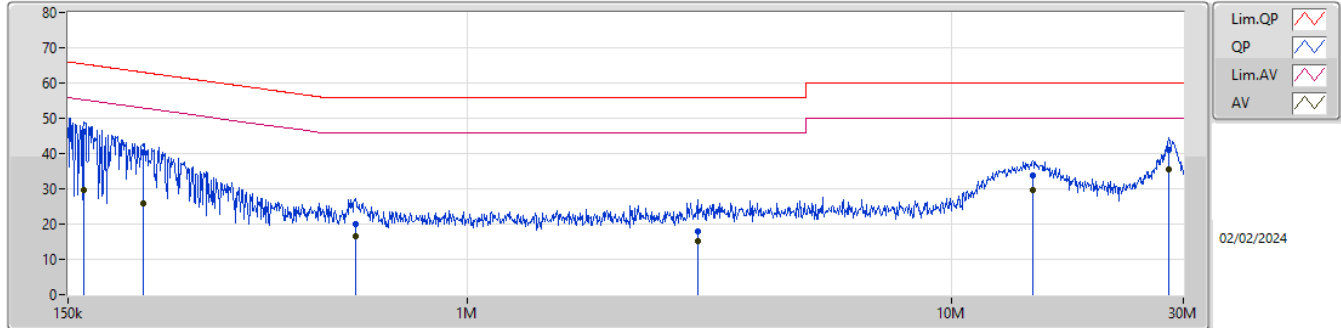
Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)						
QP	156.734k	53.93	65.64	-11.71	20.03	Line	-	33.90	10.25	0.03	9.75						
AV	156.734k	35.93	55.64	-19.71	20.03	Line	-	15.90	10.25	0.03	9.75						
QP	195.997k	47.42	63.78	-16.36	19.97	Line	-	27.45	10.25	0.03	9.69						
AV	195.997k	30.71	53.78	-23.07	19.97	Line	-	10.74	10.25	0.03	9.69						
QP	654.382k	33.34	56.00	-22.66	20.11	Line	-	13.23	10.28	0.05	9.78						
AV	654.382k	23.60	46.00	-22.40	20.11	Line	-	3.49	10.28	0.05	9.78						
QP	2.732M	21.08	56.00	-34.92	20.22	Line	-	0.86	10.32	0.10	9.80						
AV	2.732M	17.66	46.00	-28.34	20.22	Line	-	-2.56	10.32	0.10	9.80						
QP	8.028M	28.54	60.00	-31.46	20.38	Line	-	8.16	10.42	0.17	9.79						
AV	8.028M	23.38	50.00	-26.62	20.38	Line	-	3.00	10.42	0.17	9.79						
QP	17.555M	17.84	60.00	-42.16	20.65	Line	-	-2.81	10.56	0.26	9.83						
AV	17.555M	16.04	50.00	-33.96	20.65	Line	-	-4.61	10.56	0.26	9.83						

Conducted Emissions at Powerline_Mode 1



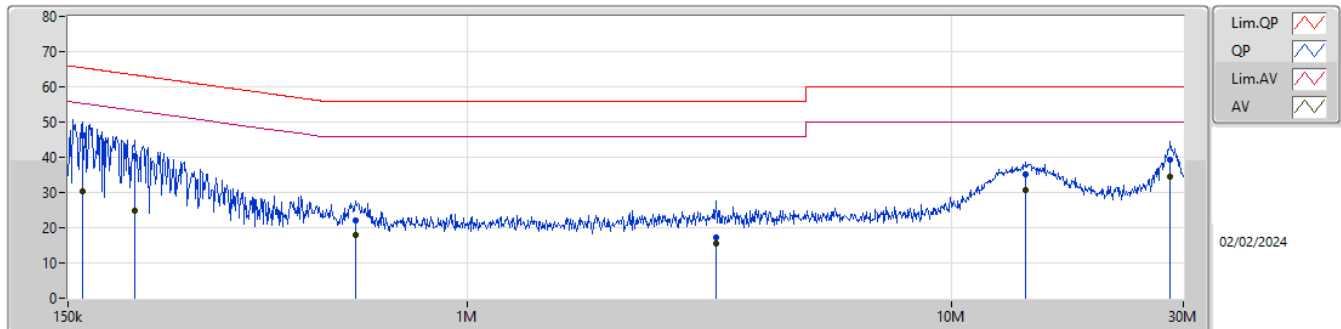
Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)						
QP	157.361k	53.88	65.60	-11.72	19.92	Neutral	-	33.96	10.14	0.03	9.75						
AV	157.361k	35.68	55.60	-19.92	19.92	Neutral	-	15.76	10.14	0.03	9.75						
QP	195.997k	47.50	63.78	-16.28	19.86	Neutral	-	27.64	10.14	0.03	9.69						
AV	195.997k	29.90	53.78	-23.88	19.86	Neutral	-	10.04	10.14	0.03	9.69						
QP	649.178k	31.03	56.00	-24.97	19.99	Neutral	-	11.04	10.16	0.05	9.78						
AV	649.178k	23.98	46.00	-22.02	19.99	Neutral	-	3.99	10.16	0.05	9.78						
QP	3.205M	21.13	56.00	-34.87	20.10	Neutral	-	1.03	10.20	0.11	9.79						
AV	3.205M	17.75	46.00	-28.25	20.10	Neutral	-	-2.35	10.20	0.11	9.79						
QP	7.382M	29.43	60.00	-30.57	20.23	Neutral	-	9.20	10.28	0.16	9.79						
AV	7.382M	24.45	50.00	-25.55	20.23	Neutral	-	4.22	10.28	0.16	9.79						
QP	16.338M	25.73	60.00	-34.27	20.52	Neutral	-	5.21	10.44	0.25	9.83						
AV	16.338M	22.22	50.00	-27.78	20.52	Neutral	-	1.70	10.44	0.25	9.83						

Conducted Emissions at Powerline_Mode 2



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)						
QP	161.82k	46.15	65.37	-19.22	20.02	Line	-	26.13	10.25	0.03	9.74						
AV	161.82k	29.64	55.37	-25.73	20.02	Line	-	9.62	10.25	0.03	9.74						
QP	213.989k	40.34	63.06	-22.72	19.97	Line	-	20.37	10.25	0.03	9.69						
AV	213.989k	26.01	53.06	-27.05	19.97	Line	-	6.04	10.25	0.03	9.69						
QP	587.518k	20.01	56.00	-35.99	20.09	Line	-	-0.08	10.27	0.04	9.78						
AV	587.518k	16.64	46.00	-29.36	20.09	Line	-	-3.45	10.27	0.04	9.78						
QP	2.983M	17.83	56.00	-38.17	20.23	Line	-	-2.40	10.33	0.11	9.79						
AV	2.983M	15.26	46.00	-30.74	20.23	Line	-	-4.97	10.33	0.11	9.79						
QP	14.669M	33.94	60.00	-26.06	20.59	Line	-	13.35	10.52	0.24	9.83						
AV	14.669M	29.62	50.00	-20.38	20.59	Line	-	9.03	10.52	0.24	9.83						
QP	28.006M	41.09	60.00	-18.91	20.86	Line	-	20.23	10.75	0.33	9.78						
AV	28.006M	35.56	50.00	-14.44	20.86	Line	-	14.70	10.75	0.33	9.78						

Conducted Emissions at Powerline_Mode 2



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)						
QP	160.533k	46.36	65.43	-19.07	19.91	Neutral	-	26.45	10.14	0.03	9.74						
AV	160.533k	30.33	55.43	-25.10	19.91	Neutral	-	10.42	10.14	0.03	9.74						
QP	206.437k	40.35	63.34	-22.99	19.85	Neutral	-	20.50	10.14	0.03	9.68						
AV	206.437k	24.97	53.34	-28.37	19.85	Neutral	-	5.12	10.14	0.03	9.68						
QP	587.518k	22.02	56.00	-33.98	19.97	Neutral	-	2.05	10.15	0.04	9.78						
AV	587.518k	17.85	46.00	-28.15	19.97	Neutral	-	-2.12	10.15	0.04	9.78						
QP	3.257M	17.40	56.00	-38.60	20.11	Neutral	-	-2.71	10.20	0.12	9.79						
AV	3.257M	15.59	46.00	-30.41	20.11	Neutral	-	-4.52	10.20	0.12	9.79						
QP	14.208M	35.12	60.00	-24.88	20.46	Neutral	-	14.66	10.41	0.23	9.82						
AV	14.208M	30.74	50.00	-19.26	20.46	Neutral	-	10.28	10.41	0.23	9.82						
QP	28.231M	39.38	60.00	-20.62	20.81	Neutral	-	18.57	10.70	0.33	9.78						
AV	28.231M	34.33	50.00	-15.67	20.81	Neutral	-	13.52	10.70	0.33	9.78						

**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
BT-LE(1Mbps)	748.75k	1.042M	1M04F1D	716.25k	1.039M
BT-LE(2Mbps)	1.365M	2.124M	2M12F1D	1.195M	2.104M

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)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	500k	716.25k	1.042M
2440MHz	Pass	500k	746.25k	1.041M
2480MHz	Pass	500k	748.75k	1.039M
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	500k	1.203M	2.104M
2440MHz	Pass	500k	1.195M	2.111M
2480MHz	Pass	500k	1.365M	2.124M

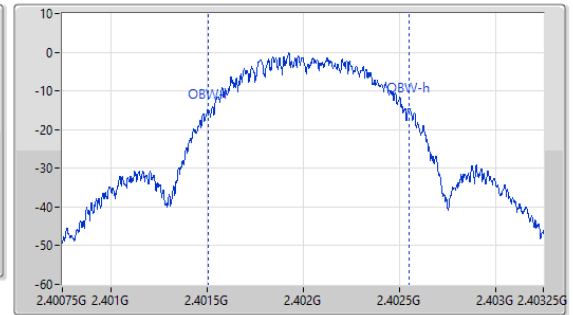
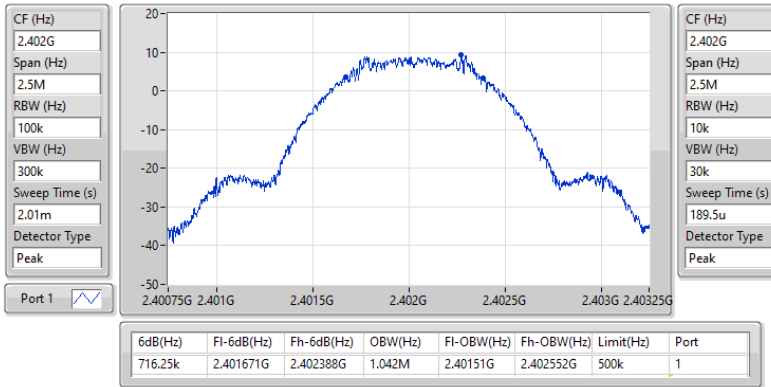
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

2.4-2.4835GHz_BT-LE(1Mbps)

EBW-DTS

2402MHz

23/01/2024

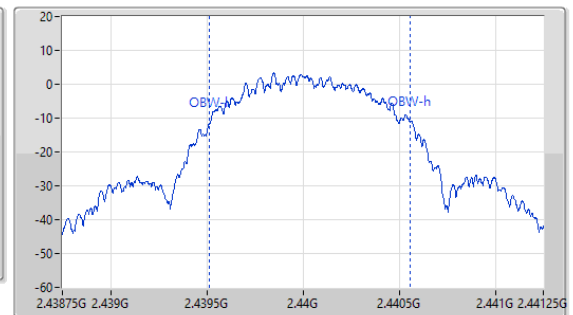
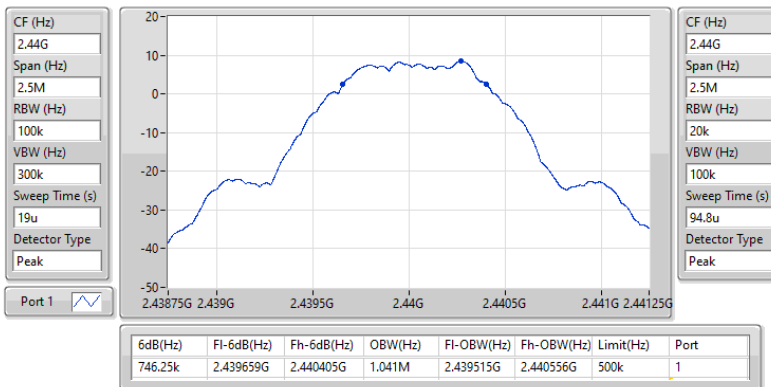


2.4-2.4835GHz_BT-LE(1Mbps)

EBW-DTS

2440MHz

23/01/2024

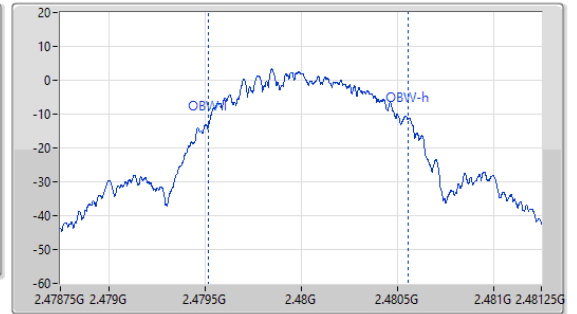
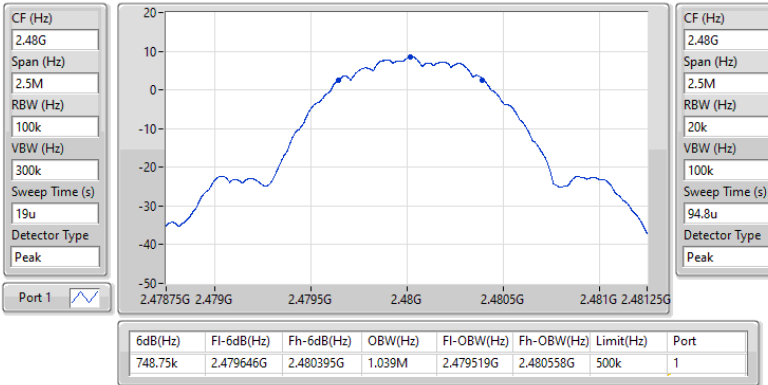


2.4-2.4835GHz_BT-LE(1Mbps)

EBW-DTS

2480MHz

23/01/2024

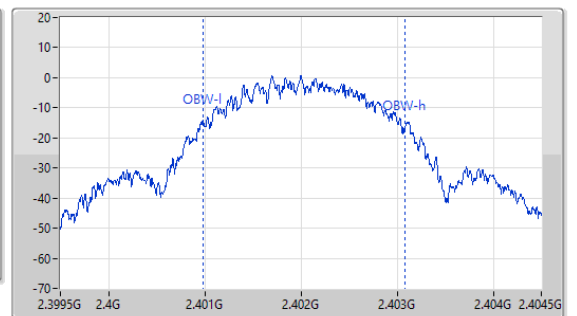
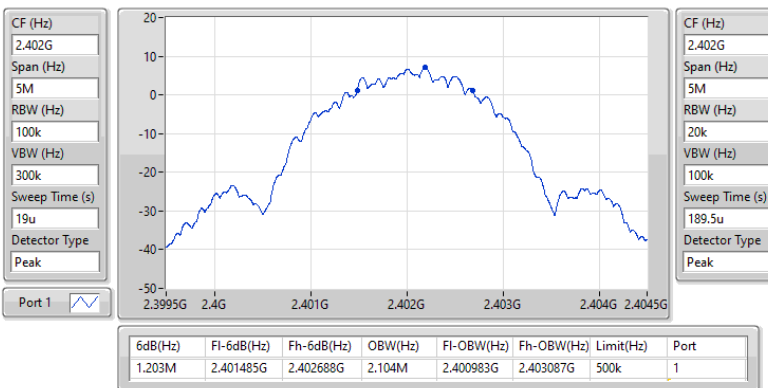


2.4-2.4835GHz_BT-LE(2Mbps)

EBW-DTS

2402MHz

23/01/2024

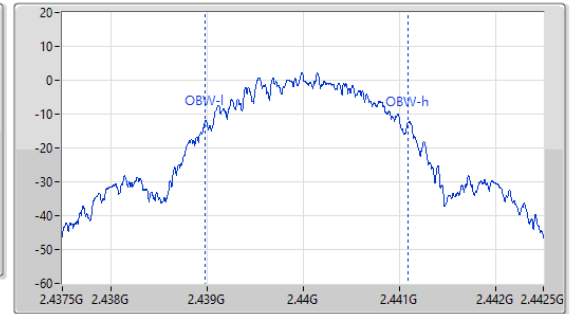
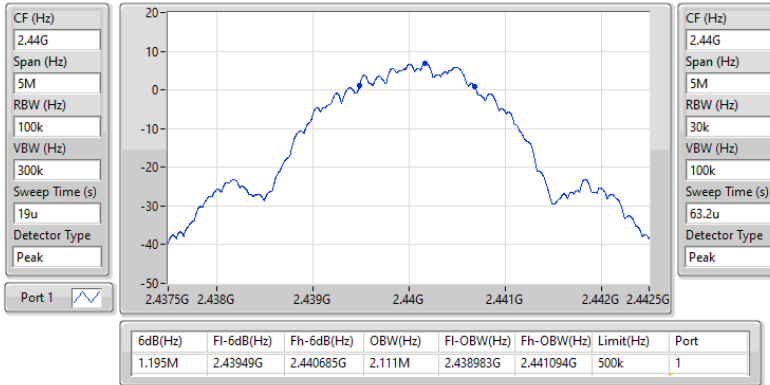


2.4-2.4835GHz_BT-LE(2Mbps)

EBW-DTS

2440MHz

23/01/2024

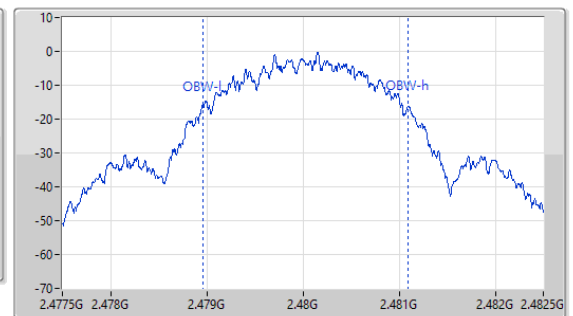
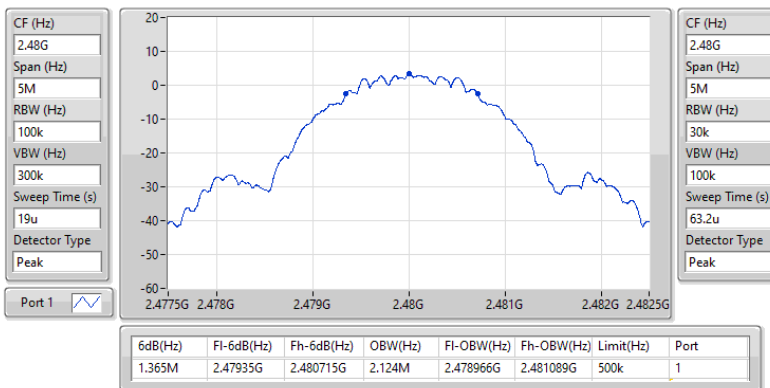


2.4-2.4835GHz_BT-LE(2Mbps)

EBW-DTS

2480MHz

23/01/2024





Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
BT-LE(1Mbps)	9.85	0.00966
BT-LE(2Mbps)	9.83	0.00962



Result

Mode	Result	DG (dBi)	Total Power (dBm)	Power Limit (dBm)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	4.80	9.85	30.00
2440MHz	Pass	4.80	9.83	30.00
2480MHz	Pass	4.80	9.74	30.00
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	4.80	9.83	30.00
2440MHz	Pass	4.80	9.82	30.00
2480MHz	Pass	4.80	7.23	30.00

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



Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
BT-LE(1Mbps)	-7.53
BT-LE(2Mbps)	-7.40

RBW = 3kHz;



Result

Mode	Result	DG (dBi)	PD (dBm/RBW)	PD Limit (dBm/RBW)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	4.80	-7.59	8.00
2440MHz	Pass	4.80	-7.53	8.00
2480MHz	Pass	4.80	-7.81	8.00
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	4.80	-7.40	8.00
2440MHz	Pass	4.80	-7.41	8.00
2480MHz	Pass	4.80	-10.12	8.00

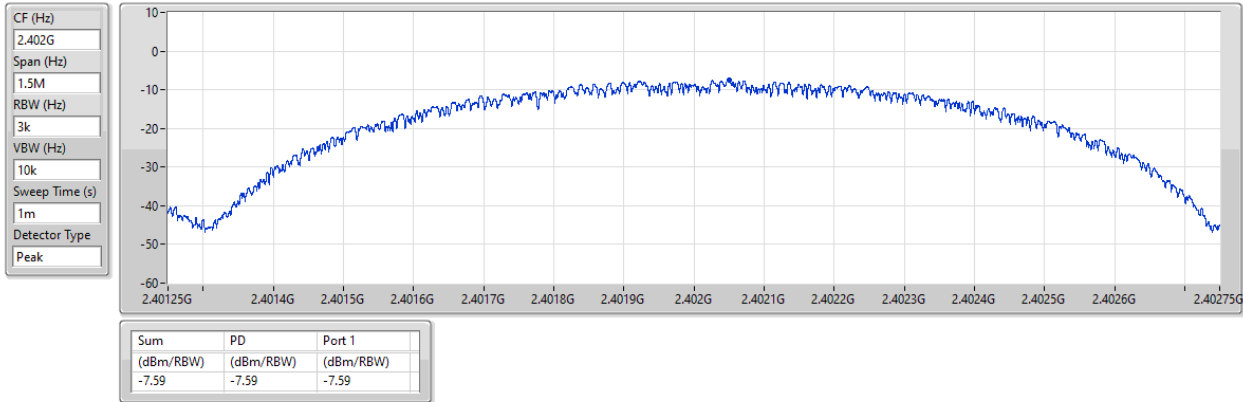
DG = Directional Gain; RBW = 3kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

2.4-2.4835GHz_BT-LE(1Mbps)

PSD

2402MHz

23/01/2024

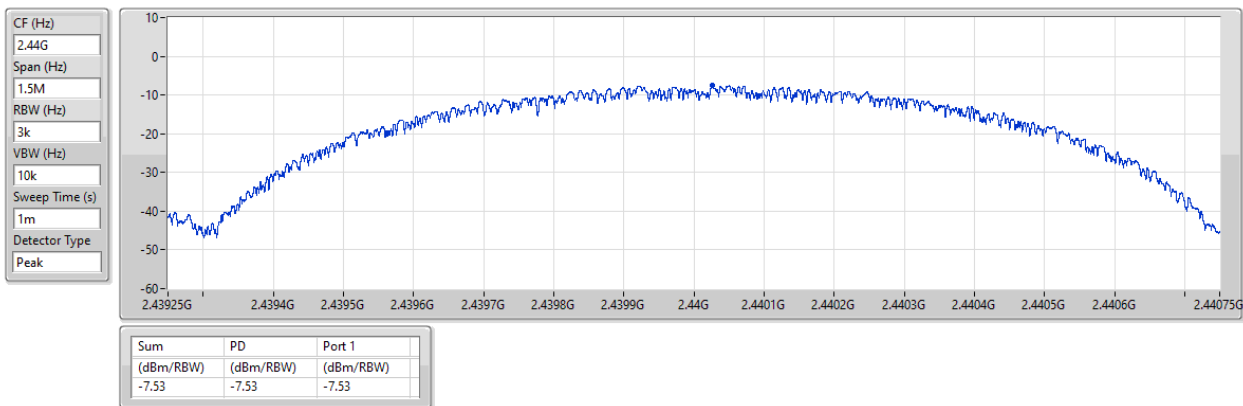


2.4-2.4835GHz_BT-LE(1Mbps)

PSD

2440MHz

23/01/2024



2.4-2.4835GHz_BT-LE(1Mbps)

PSD

2480MHz

23/01/2024

CF (Hz)
2.48G

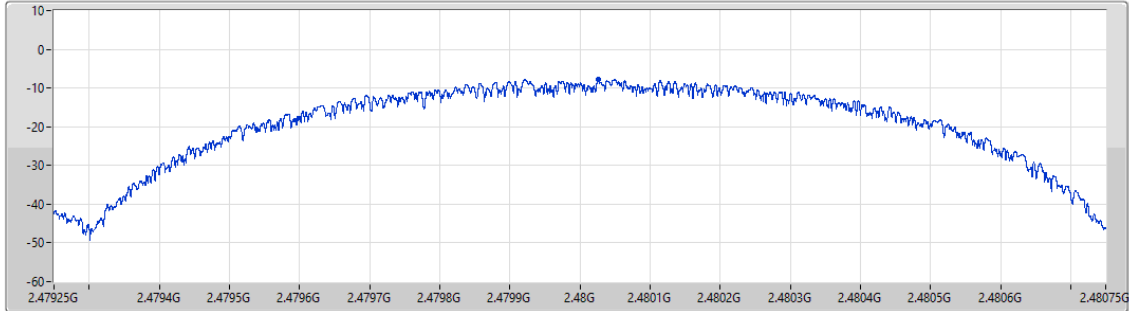
Span (Hz)
1.5M

RBW (Hz)
3k

VBW (Hz)
10k

Sweep Time (s)
1m

Detector Type
Peak



Port 1

Sum	PD	Port 1
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-7.81	-7.81	-7.81

2.4-2.4835GHz_BT-LE(2Mbps)

PSD

2402MHz

23/01/2024

CF (Hz)
2.402G

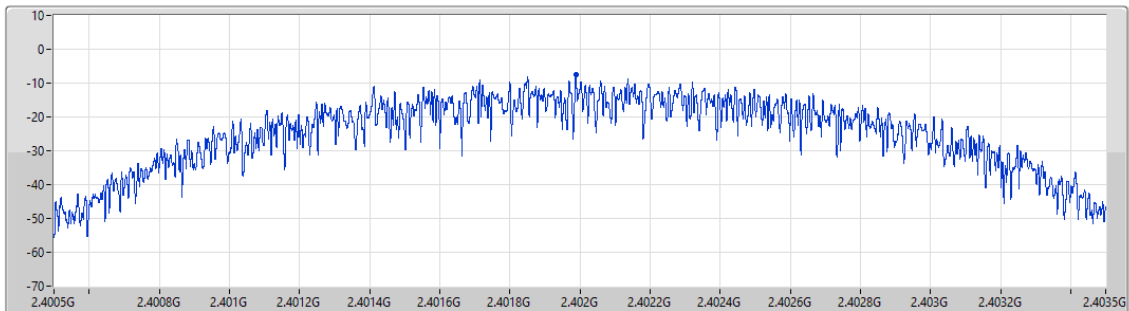
Span (Hz)
3M

RBW (Hz)
3k

VBW (Hz)
10k

Sweep Time (s)
1m

Detector Type
Peak



Port 1

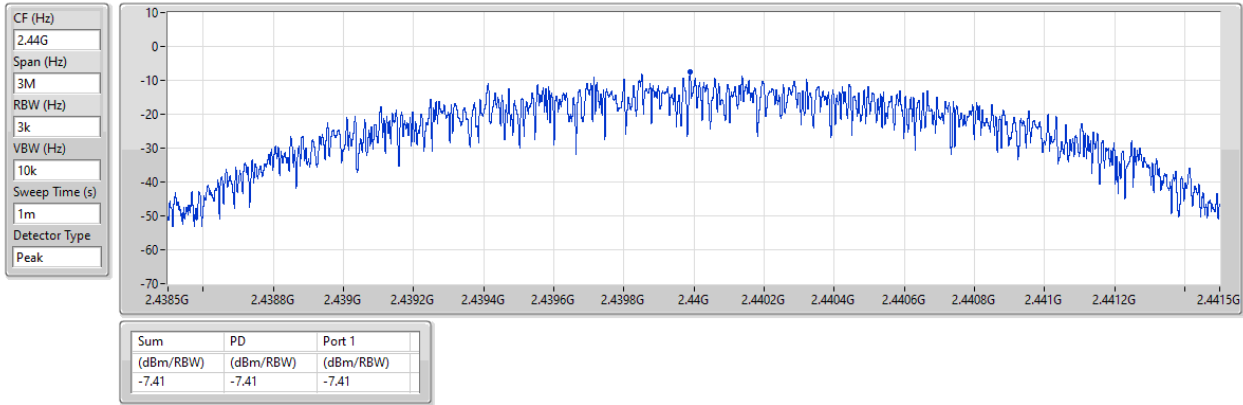
Sum	PD	Port 1
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-7.40	-7.40	-7.40

2.4-2.4835GHz_BT-LE(2Mbps)

PSD

2440MHz

23/01/2024

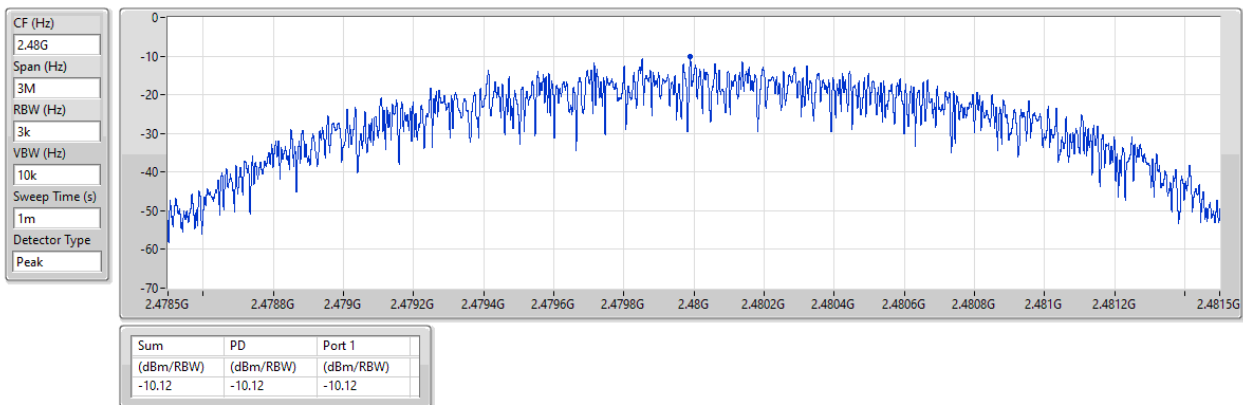


2.4-2.4835GHz_BT-LE(2Mbps)

PSD

2480MHz

23/01/2024



Summary

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BT-LE(1Mbps)	Pass	2.40217G	9.27	-20.73	1.94878G	-54.71	2.39996G	-43.12	2.4G	-43.48	2.5029G	-53.19	17.59584G	-42.81	1
BT-LE(2Mbps)	Pass	2.40217G	6.98	-23.02	2.12503G	-54.70	2.4G	-24.80	2.4G	-23.51	2.5023G	-52.53	16.95469G	-42.41	1

Result

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
BT-LE(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.40217G	9.27	-20.73	1.94878G	-54.71	2.39996G	-43.12	2.4G	-43.48	2.5029G	-53.19	17.59584G	-42.81	1
2440MHz	Pass	2.40217G	9.27	-20.73	2.08978G	-53.50	2.39948G	-52.09	2.4G	-55.70	2.50006G	-53.31	23.21434G	-41.39	1
2480MHz	Pass	2.40217G	9.27	-20.73	2.18848G	-54.78	2.39008G	-53.82	2.4G	-55.29	2.50022G	-52.60	24.87908G	-42.70	1
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.40217G	6.98	-23.02	2.12503G	-54.70	2.4G	-24.80	2.4G	-23.51	2.5023G	-52.53	16.95469G	-42.41	1
2440MHz	Pass	2.40217G	6.98	-23.02	1.85008G	-54.44	2.39088G	-53.20	2.4G	-55.67	2.50142G	-52.36	24.89314G	-42.32	1
2480MHz	Pass	2.40217G	6.98	-23.02	1.95935G	-53.68	2.4G	-53.28	2.4G	-55.79	2.50194G	-52.45	23.51804G	-41.81	1

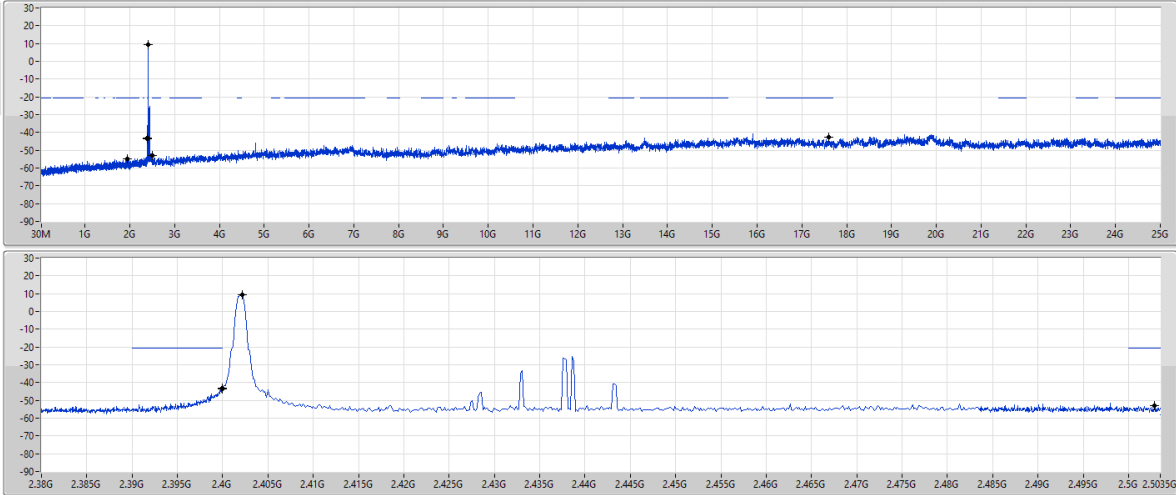
2.4-2.4835GHz_BT-LE(1Mbps)

CSEndB-DTS

2402MHz

23/01/2024

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



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.40217G	9.27	-20.73	1.94878G	-54.71	2.39996G	-43.12	2.4G	-43.48	2.5029G	-53.19	17.59584G	-42.81	1

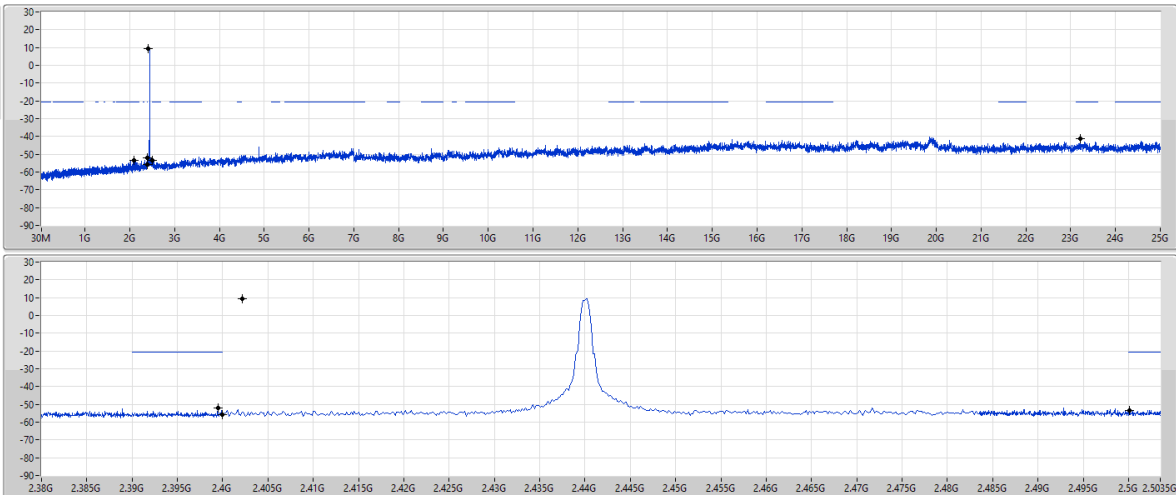
2.4-2.4835GHz_BT-LE(1Mbps)

CSEndB-DTS

2440MHz

23/01/2024

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

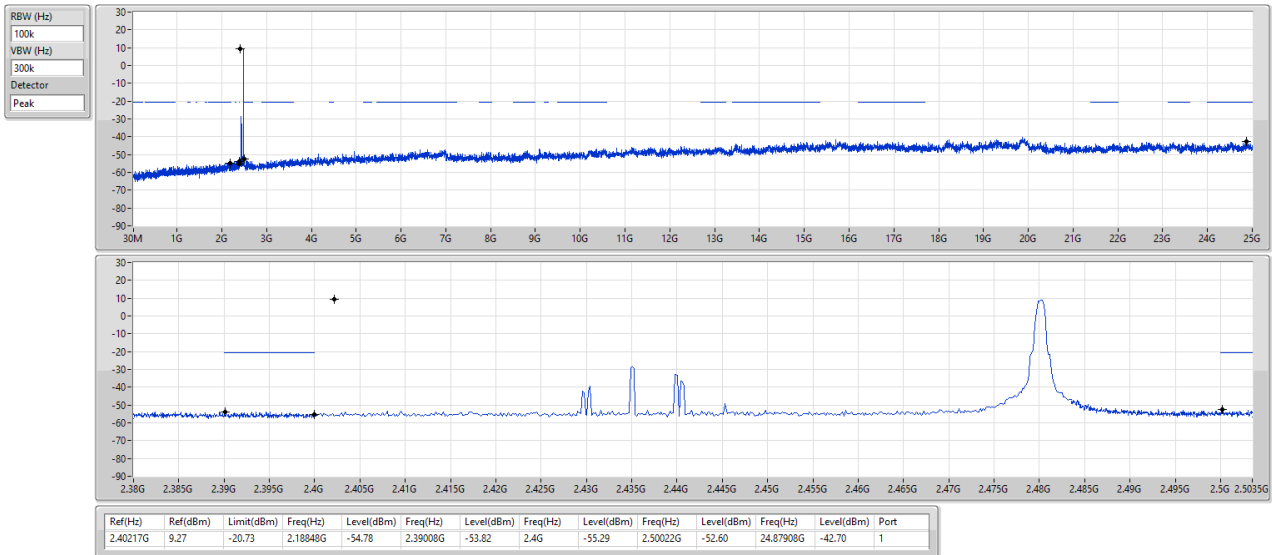


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.40217G	9.27	-20.73	2.08978G	-53.50	2.39948G	-52.09	2.4G	-53.70	2.50006G	-53.31	23.21434G	-41.39	1

2.4-2.4835GHz_BT-LE(1Mbps)

CSEndB-DTS

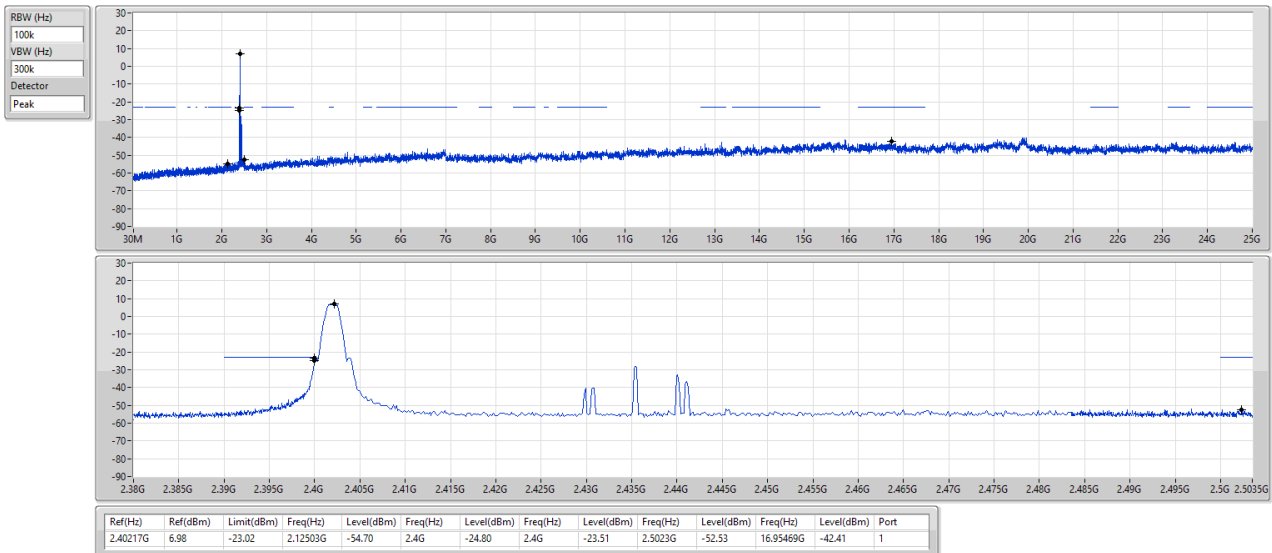
2480MHz



2.4-2.4835GHz_BT-LE(2Mbps)

CSEndB-DTS

2402MHz



2.4-2.4835GHz_BT-LE(2Mbps)

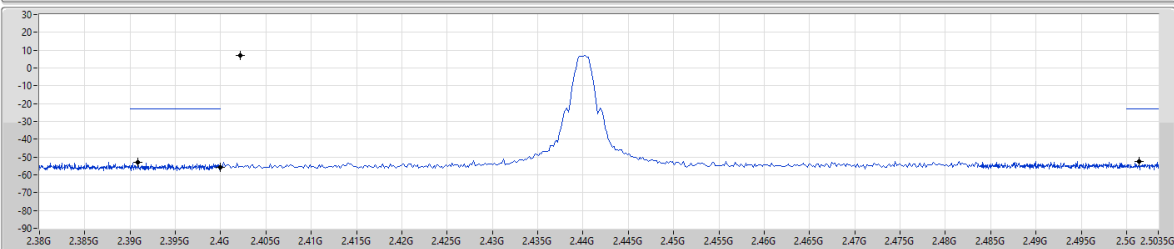
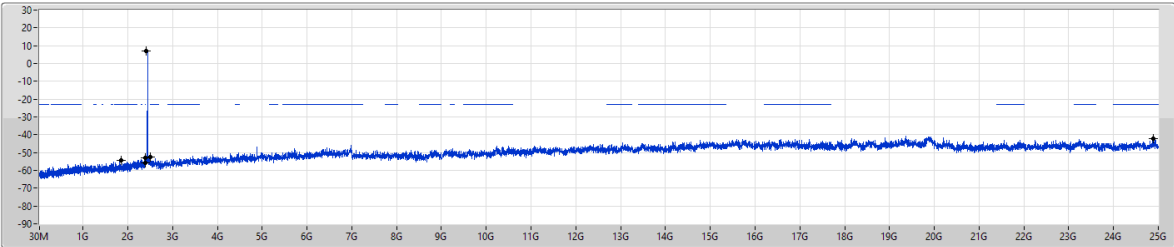
CSEndB-DTS

2440MHz

23/01/2024

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

Port 1



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
2.40217G	6.98	-23.02	1.85008G	-54.44	2.39088G	-53.20	2.4G	-55.67	2.50142G	-52.36	24.89314G	-42.32	1

2.4-2.4835GHz_BT-LE(2Mbps)

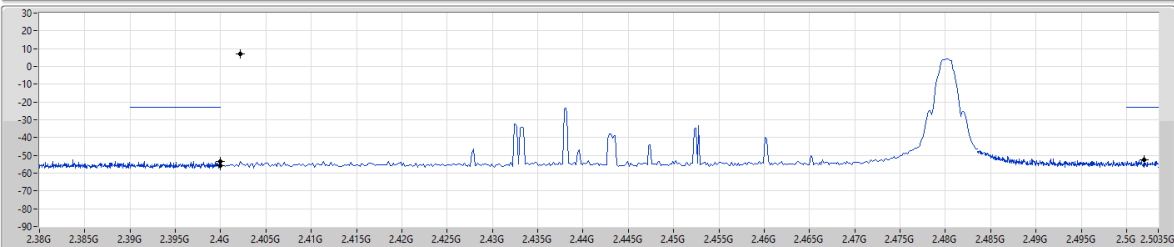
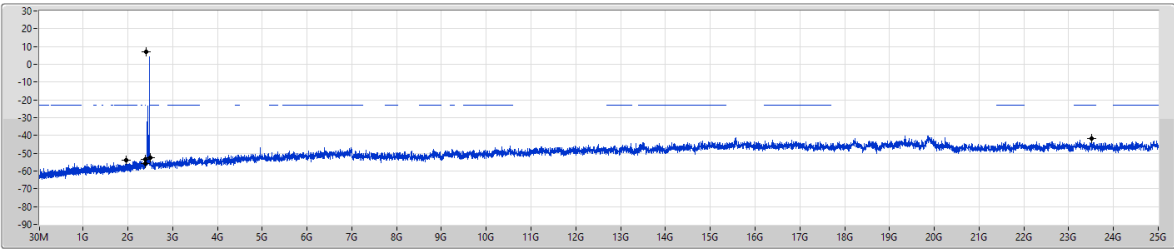
CSEndB-DTS

2480MHz

23/01/2024

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

Port 1



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
2.40217G	6.98	-23.02	1.95935G	-53.68	2.4G	-53.28	2.4G	-55.79	2.50194G	-52.45	23.51804G	-41.81	1



Summary

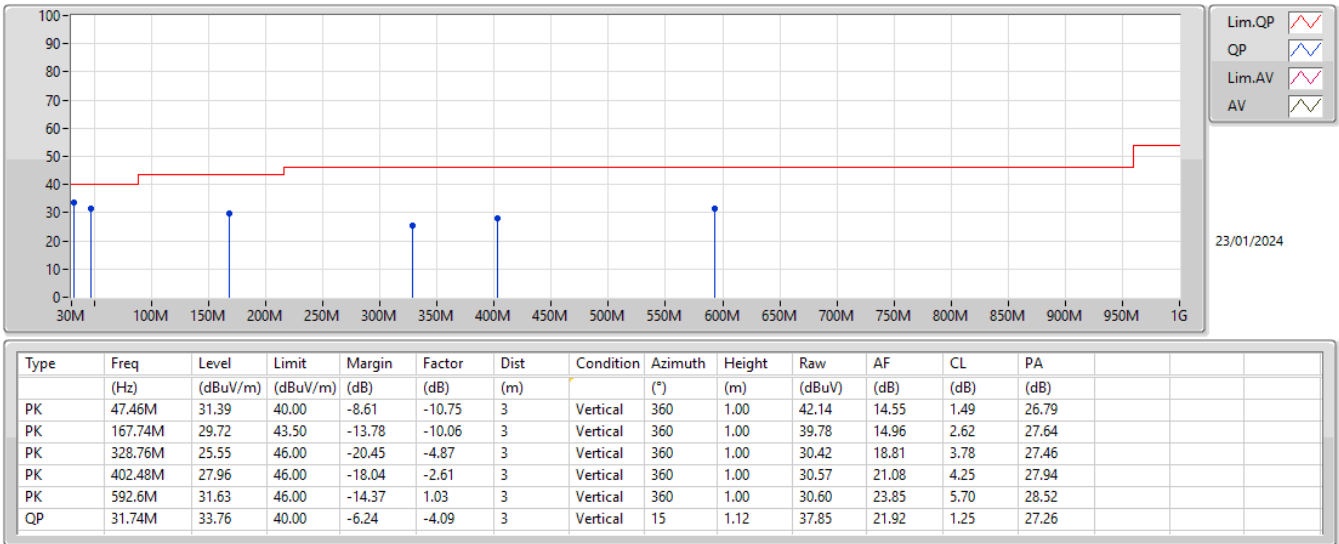
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-
BT-LE(2Mbps)	Pass	PK	45.52M	34.56	40.00	-5.44	3	Horizontal	360	1.00

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
2.4-2.4835GHz_BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	PK	47.46M	31.39	40.00	-8.61	3	Vertical	360	1.00
2402MHz	Pass	PK	167.74M	29.72	43.50	-13.78	3	Vertical	360	1.00
2402MHz	Pass	PK	328.76M	25.55	46.00	-20.45	3	Vertical	360	1.00
2402MHz	Pass	PK	402.48M	27.96	46.00	-18.04	3	Vertical	360	1.00
2402MHz	Pass	PK	592.6M	31.63	46.00	-14.37	3	Vertical	360	1.00
2402MHz	Pass	QP	31.74M	33.76	40.00	-6.24	3	Vertical	15	1.12
2402MHz	Pass	PK	47.46M	30.27	40.00	-9.73	3	Horizontal	0	1.00
2402MHz	Pass	PK	144.46M	28.58	43.50	-14.92	3	Horizontal	0	1.00
2402MHz	Pass	PK	161.92M	29.70	43.50	-13.80	3	Horizontal	0	1.00
2402MHz	Pass	PK	416.06M	28.50	46.00	-17.50	3	Horizontal	0	1.00
2402MHz	Pass	PK	485.9M	29.72	46.00	-16.28	3	Horizontal	0	1.00
2402MHz	Pass	PK	561.56M	30.73	46.00	-15.27	3	Horizontal	0	1.00
2402MHz	Pass	PK	35.82M	30.83	40.00	-9.17	3	Vertical	0	1.00
2402MHz	Pass	PK	59.1M	24.92	40.00	-15.08	3	Vertical	0	1.00
2402MHz	Pass	PK	90.14M	29.03	43.50	-14.47	3	Vertical	0	1.00
2402MHz	Pass	PK	264.74M	25.52	46.00	-20.48	3	Vertical	0	1.00
2402MHz	Pass	PK	385.02M	29.65	46.00	-16.35	3	Vertical	0	1.00
2402MHz	Pass	PK	565.44M	31.21	46.00	-14.79	3	Vertical	0	1.00
2402MHz	Pass	PK	45.52M	34.56	40.00	-5.44	3	Horizontal	360	1.00
2402MHz	Pass	PK	103.72M	26.13	43.50	-17.37	3	Horizontal	360	1.00
2402MHz	Pass	PK	140.58M	27.79	43.50	-15.71	3	Horizontal	360	1.00
2402MHz	Pass	PK	367.56M	27.62	46.00	-18.38	3	Horizontal	360	1.00
2402MHz	Pass	PK	631.4M	30.88	46.00	-15.12	3	Horizontal	360	1.00
2402MHz	Pass	PK	505.3M	31.25	46.00	-14.75	3	Horizontal	360	1.00

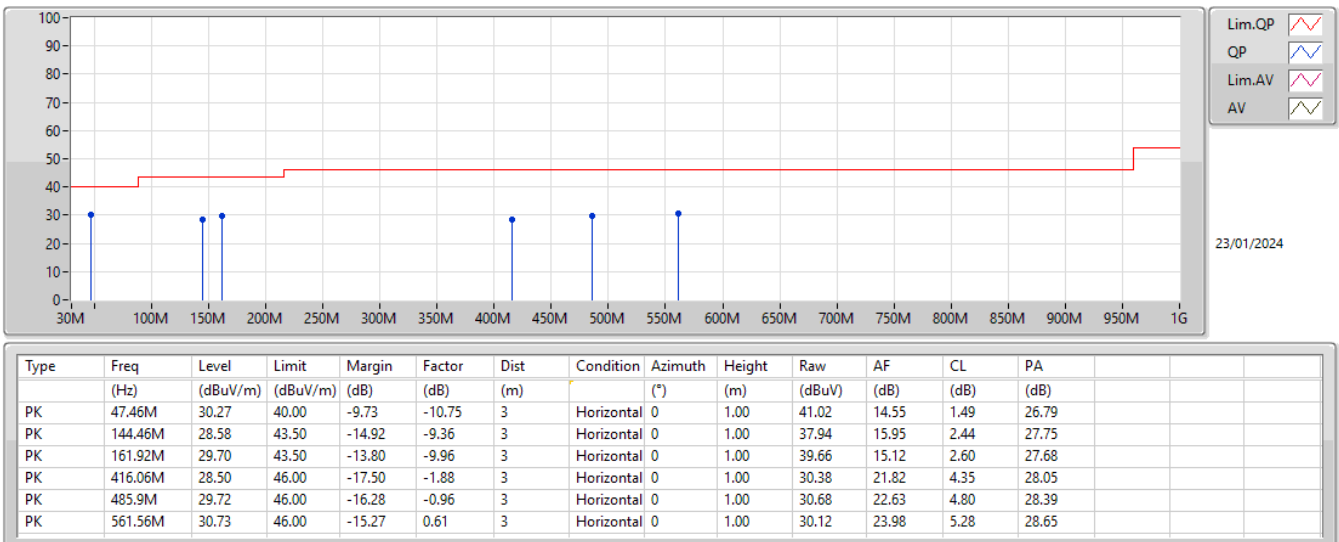
2.4-2.4835GHz_BT-LE(2Mbps)

2402MHz_Adapter



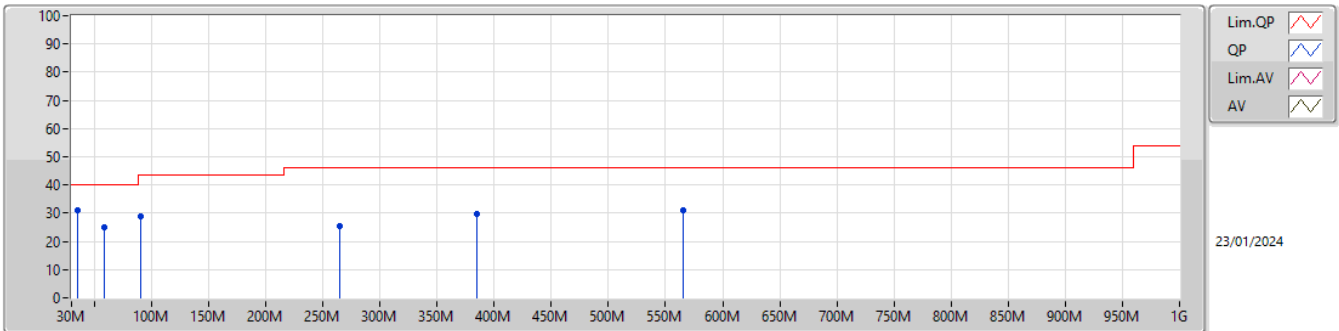
2.4-2.4835GHz_BT-LE(2Mbps)

2402MHz_Adapter



2.4-2.4835GHz_BT-LE(2Mbps)

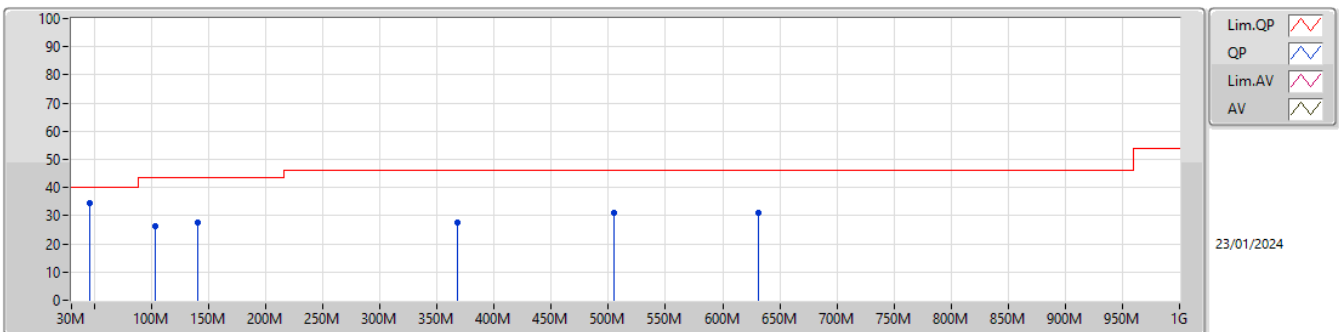
2402MHz_PoE



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)
PK	35.82M	30.83	40.00	-9.17	-5.80	3	Vertical	0	1.00	36.63	19.83	1.31	26.94
PK	59.1M	24.92	40.00	-15.08	-14.18	3	Vertical	0	1.00	39.10	11.48	1.69	27.35
PK	90.14M	29.03	43.50	-14.47	-11.81	3	Vertical	0	1.00	40.84	14.14	1.88	27.83
PK	264.74M	25.52	46.00	-20.48	-5.20	3	Vertical	0	1.00	30.72	18.68	3.36	27.24
PK	385.02M	29.65	46.00	-16.35	-3.41	3	Vertical	0	1.00	33.06	20.29	4.12	27.82
PK	565.44M	31.21	46.00	-14.79	0.62	3	Vertical	0	1.00	30.59	23.92	5.34	28.64

2.4-2.4835GHz_BT-LE(2Mbps)

2402MHz_PoE



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)
PK	45.52M	34.56	40.00	-5.44	-9.59	3	Horizontal	360	1.00	44.15	15.64	1.47	26.70
PK	103.72M	26.13	43.50	-17.37	-9.29	3	Horizontal	360	1.00	35.42	16.52	2.03	27.84
PK	140.58M	27.79	43.50	-15.71	-9.06	3	Horizontal	360	1.00	36.85	16.30	2.41	27.77
PK	367.56M	27.62	46.00	-18.38	-3.73	3	Horizontal	360	1.00	31.35	19.99	3.99	27.71
PK	631.4M	30.88	46.00	-15.12	1.33	3	Horizontal	360	1.00	29.55	24.16	5.72	28.55
PK	505.3M	31.25	46.00	-14.75	-1.00	3	Horizontal	360	1.00	32.25	22.53	4.91	28.44



Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-
BT-LE(1Mbps)	Pass	AV	2.4835G	53.30	54.00	-0.70	3	Vertical	315	2.00
BT-LE(2Mbps)	Pass	AV	2.4835G	53.94	54.00	-0.06	3	Vertical	309	2.20

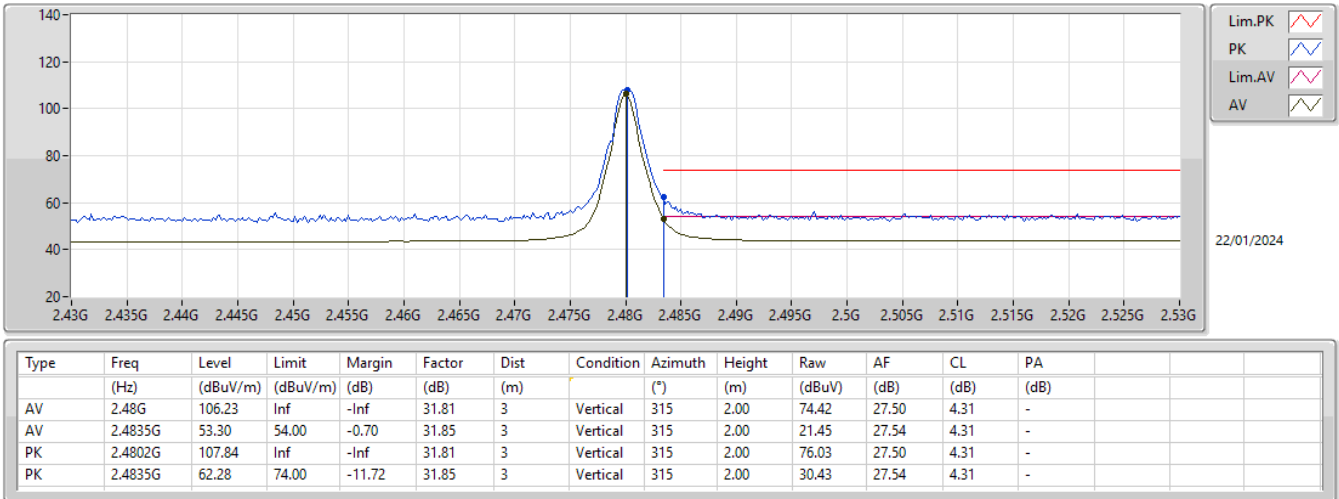
Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
BT-LE(1Mbps)	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.39G	43.61	54.00	-10.39	3	Vertical	312	1.00
2402MHz	Pass	AV	2.402G	106.32	Inf	-Inf	3	Vertical	312	1.00
2402MHz	Pass	PK	2.372G	56.51	74.00	-17.49	3	Vertical	312	1.00
2402MHz	Pass	PK	2.4018G	107.98	Inf	-Inf	3	Vertical	312	1.00
2402MHz	Pass	AV	2.3596G	43.40	54.00	-10.60	3	Horizontal	16	2.55
2402MHz	Pass	AV	2.402G	101.11	Inf	-Inf	3	Horizontal	16	2.55
2402MHz	Pass	PK	2.3608G	55.44	74.00	-18.56	3	Horizontal	16	2.55
2402MHz	Pass	PK	2.4018G	102.81	Inf	-Inf	3	Horizontal	16	2.55
2402MHz	Pass	AV	4.80405G	37.44	54.00	-16.56	3	Vertical	24	1.85
2402MHz	Pass	PK	4.80352G	46.49	74.00	-27.51	3	Vertical	24	1.85
2402MHz	Pass	AV	4.80384G	28.29	54.00	-25.71	3	Horizontal	360	2.99
2402MHz	Pass	PK	4.80446G	41.75	74.00	-32.25	3	Horizontal	360	2.99
2402MHz	Pass	AV	2.36G	43.46	54.00	-10.54	3	Vertical	313	2.04
2440MHz	Pass	AV	2.44G	105.21	Inf	-Inf	3	Vertical	313	2.04
2440MHz	Pass	AV	2.4944G	43.85	54.00	-10.15	3	Vertical	313	2.04
2440MHz	Pass	PK	2.344G	55.48	74.00	-18.52	3	Vertical	313	2.04
2440MHz	Pass	PK	2.4404G	106.85	Inf	-Inf	3	Vertical	313	2.04
2440MHz	Pass	PK	2.4864G	55.39	74.00	-18.61	3	Vertical	313	2.04
2440MHz	Pass	AV	2.3596G	43.53	54.00	-10.47	3	Horizontal	3	3.00
2440MHz	Pass	AV	2.44G	103.97	Inf	-Inf	3	Horizontal	3	3.00
2440MHz	Pass	AV	2.4888G	43.83	54.00	-10.17	3	Horizontal	3	3.00
2440MHz	Pass	PK	2.3732G	55.14	74.00	-18.86	3	Horizontal	3	3.00
2440MHz	Pass	PK	2.4404G	105.62	Inf	-Inf	3	Horizontal	3	3.00
2440MHz	Pass	PK	2.498G	54.88	74.00	-19.12	3	Horizontal	3	3.00
2440MHz	Pass	AV	4.88G	40.21	54.00	-13.79	3	Vertical	48	1.93
2440MHz	Pass	PK	4.88057G	48.13	74.00	-25.87	3	Vertical	48	1.93
2440MHz	Pass	AV	4.88011G	31.64	54.00	-22.36	3	Horizontal	14	1.50
2440MHz	Pass	PK	4.88055G	43.89	74.00	-30.11	3	Horizontal	14	1.50
2480MHz	Pass	AV	2.48G	106.23	Inf	-Inf	3	Vertical	315	2.00
2480MHz	Pass	AV	2.4835G	53.30	54.00	-0.70	3	Vertical	315	2.00
2480MHz	Pass	PK	2.4802G	107.84	Inf	-Inf	3	Vertical	315	2.00
2480MHz	Pass	PK	2.4835G	62.28	74.00	-11.72	3	Vertical	315	2.00
2480MHz	Pass	AV	2.48G	105.32	Inf	-Inf	3	Horizontal	0	2.98
2480MHz	Pass	AV	2.4835G	52.56	54.00	-1.44	3	Horizontal	0	2.98
2480MHz	Pass	PK	2.4798G	106.95	Inf	-Inf	3	Horizontal	0	2.98
2480MHz	Pass	PK	2.4835G	60.99	74.00	-13.01	3	Horizontal	0	2.98
2480MHz	Pass	AV	4.96G	46.98	54.00	-7.02	3	Vertical	48	1.76
2480MHz	Pass	PK	4.96054G	53.12	74.00	-20.88	3	Vertical	48	1.76
2480MHz	Pass	AV	4.96002G	43.53	54.00	-10.47	3	Horizontal	321	2.98
2480MHz	Pass	PK	4.9605G	50.66	74.00	-23.34	3	Horizontal	321	2.98
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3898G	43.70	54.00	-10.30	3	Vertical	313	1.00
2402MHz	Pass	AV	2.402G	104.23	Inf	-Inf	3	Vertical	313	1.00
2402MHz	Pass	PK	2.3802G	54.89	74.00	-19.11	3	Vertical	313	1.00
2402MHz	Pass	PK	2.4016G	107.73	Inf	-Inf	3	Vertical	313	1.00
2402MHz	Pass	AV	2.3596G	43.40	54.00	-10.60	3	Horizontal	24	2.55
2402MHz	Pass	AV	2.402G	98.54	Inf	-Inf	3	Horizontal	24	2.55
2402MHz	Pass	PK	2.3892G	54.66	74.00	-19.34	3	Horizontal	24	2.55
2402MHz	Pass	PK	2.4016G	102.06	Inf	-Inf	3	Horizontal	24	2.55
2402MHz	Pass	AV	4.80309G	33.50	54.00	-20.50	3	Vertical	17	1.86
2402MHz	Pass	PK	4.80297G	44.95	74.00	-29.05	3	Vertical	17	1.86
2402MHz	Pass	AV	4.80306G	28.48	54.00	-25.52	3	Horizontal	345	2.97
2402MHz	Pass	PK	4.8041G	41.76	74.00	-32.24	3	Horizontal	345	2.97
2440MHz	Pass	AV	2.3588G	43.49	54.00	-10.51	3	Vertical	307	2.04
2440MHz	Pass	AV	2.44G	103.60	Inf	-Inf	3	Vertical	307	2.04
2440MHz	Pass	AV	2.4964G	43.89	54.00	-10.11	3	Vertical	307	2.04
2440MHz	Pass	PK	2.3568G	54.77	74.00	-19.23	3	Vertical	307	2.04
2440MHz	Pass	PK	2.4404G	106.96	Inf	-Inf	3	Vertical	307	2.04
2440MHz	Pass	PK	2.4908G	54.99	74.00	-19.01	3	Vertical	307	2.04
2440MHz	Pass	AV	2.3568G	43.46	54.00	-10.54	3	Horizontal	0	3.00

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
2440MHz	Pass	AV	2.44G	102.22	Inf	-Inf	3	Horizontal	0	3.00
2440MHz	Pass	AV	2.4928G	43.87	54.00	-10.13	3	Horizontal	0	3.00
2440MHz	Pass	PK	2.3472G	55.91	74.00	-18.09	3	Horizontal	0	3.00
2440MHz	Pass	PK	2.4404G	105.63	Inf	-Inf	3	Horizontal	0	3.00
2440MHz	Pass	PK	2.4848G	54.65	74.00	-19.35	3	Horizontal	0	3.00
2440MHz	Pass	AV	4.88094G	37.40	54.00	-16.60	3	Vertical	24	1.93
2440MHz	Pass	PK	4.87909G	48.14	74.00	-25.86	3	Vertical	24	1.93
2440MHz	Pass	AV	4.88086G	29.95	54.00	-24.05	3	Horizontal	357	1.50
2440MHz	Pass	PK	4.87912G	43.90	74.00	-30.10	3	Horizontal	357	1.50
2480MHz	Pass	AV	2.48G	102.06	Inf	-Inf	3	Vertical	309	2.20
2480MHz	Pass	AV	2.4835G	53.94	54.00	-0.06	3	Vertical	309	2.20
2480MHz	Pass	PK	2.4806G	105.51	Inf	-Inf	3	Vertical	309	2.20
2480MHz	Pass	PK	2.4835G	63.43	74.00	-10.57	3	Vertical	309	2.20
2480MHz	Pass	AV	2.48G	100.15	Inf	-Inf	3	Horizontal	3	2.95
2480MHz	Pass	AV	2.4835G	52.34	54.00	-1.66	3	Horizontal	3	2.95
2480MHz	Pass	PK	2.4806G	103.62	Inf	-Inf	3	Horizontal	3	2.95
2480MHz	Pass	PK	2.4835G	60.90	74.00	-13.10	3	Horizontal	3	2.95
2480MHz	Pass	AV	4.96095G	42.60	54.00	-11.40	3	Vertical	33	1.77
2480MHz	Pass	PK	4.95917G	52.47	74.00	-21.53	3	Vertical	33	1.77
2480MHz	Pass	AV	4.96095G	39.71	54.00	-14.29	3	Horizontal	314	2.98
2480MHz	Pass	PK	4.96093G	49.99	74.00	-24.01	3	Horizontal	314	2.98

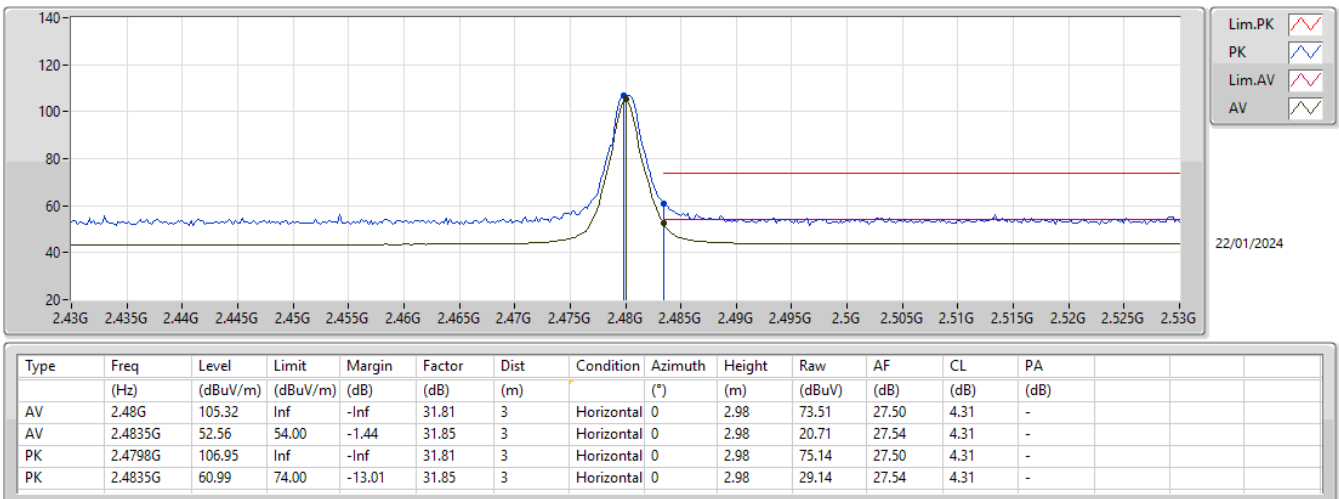
2.4-2.4835GHz_BT-LE(1Mbps)

2480MHz_TX



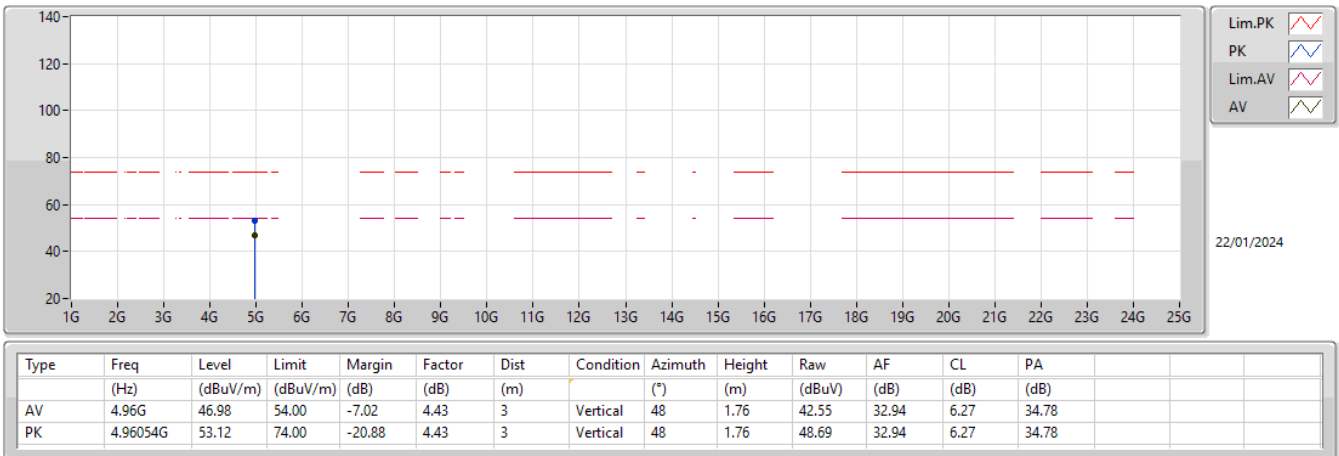
2.4-2.4835GHz_BT-LE(1Mbps)

2480MHz_TX



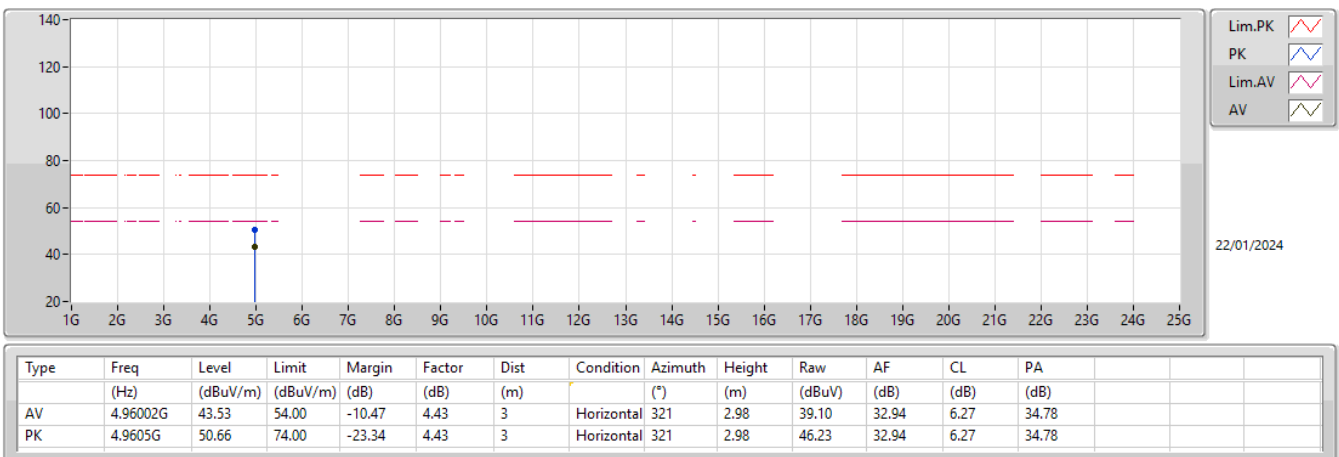
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2480MHz_TX



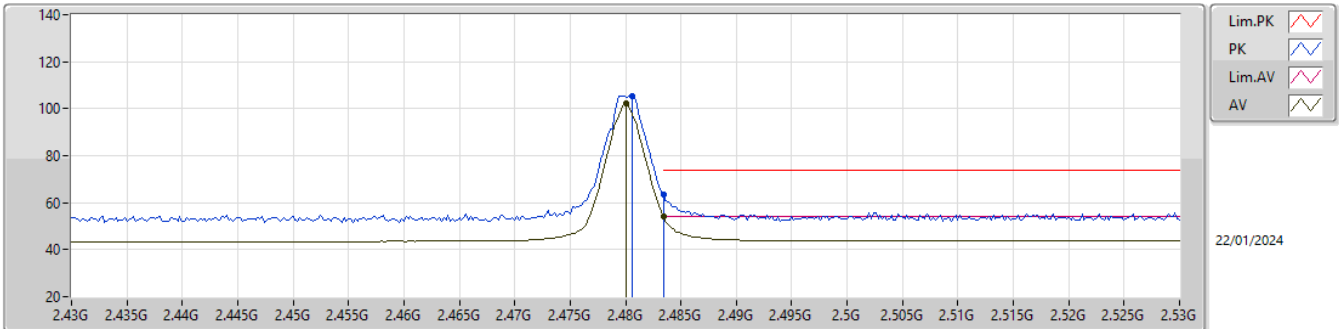
2.4-2.4835GHz_BT-LE(1Mbps)

2480MHz_TX



2.4-2.4835GHz_BT-LE(2Mbps)

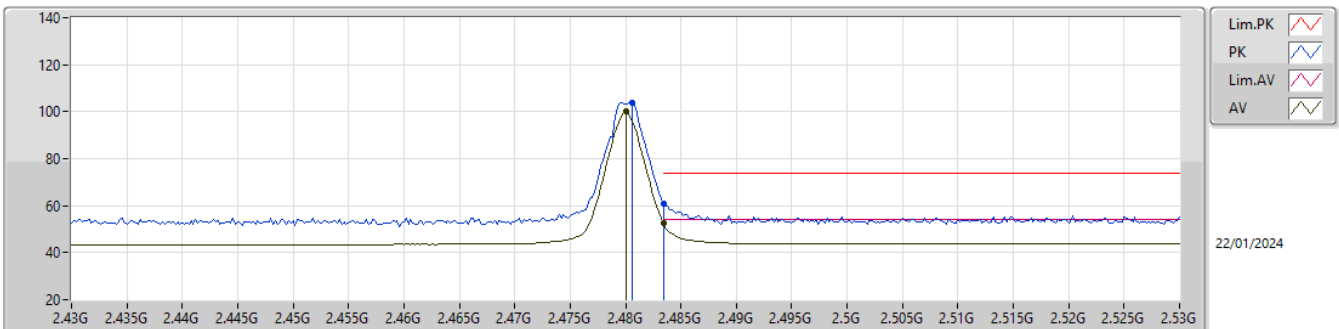
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Raw	AF	CL	PA				
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	(dBuV)	(dB)	(dB)	(dB)				
AV	2.48G	102.06	Inf	-Inf	31.81	3	Vertical	309	2.20	70.25	27.50	4.31	-				
AV	2.4835G	53.94	54.00	-0.06	31.85	3	Vertical	309	2.20	22.09	27.54	4.31	-				
PK	2.4806G	105.51	Inf	-Inf	31.82	3	Vertical	309	2.20	73.69	27.51	4.31	-				
PK	2.4835G	63.43	74.00	-10.57	31.85	3	Vertical	309	2.20	31.58	27.54	4.31	-				

2.4-2.4835GHz_BT-LE(2Mbps)

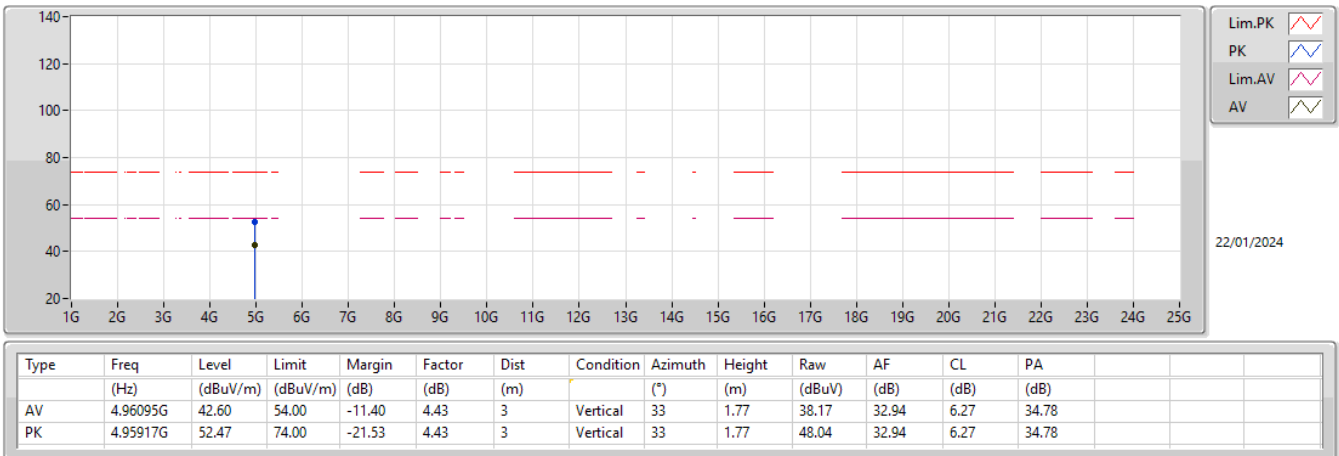
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Raw	AF	CL	PA			
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	(dBuV)	(dB)	(dB)	(dB)			
AV	2.48G	100.15	Inf	-Inf	31.81	3	Horizontal	3	2.95	68.34	27.50	4.31	-			
AV	2.4835G	52.34	54.00	-1.66	31.85	3	Horizontal	3	2.95	20.49	27.54	4.31	-			
PK	2.4806G	103.62	Inf	-Inf	31.82	3	Horizontal	3	2.95	71.80	27.51	4.31	-			
PK	2.4835G	60.90	74.00	-13.10	31.85	3	Horizontal	3	2.95	29.05	27.54	4.31	-			

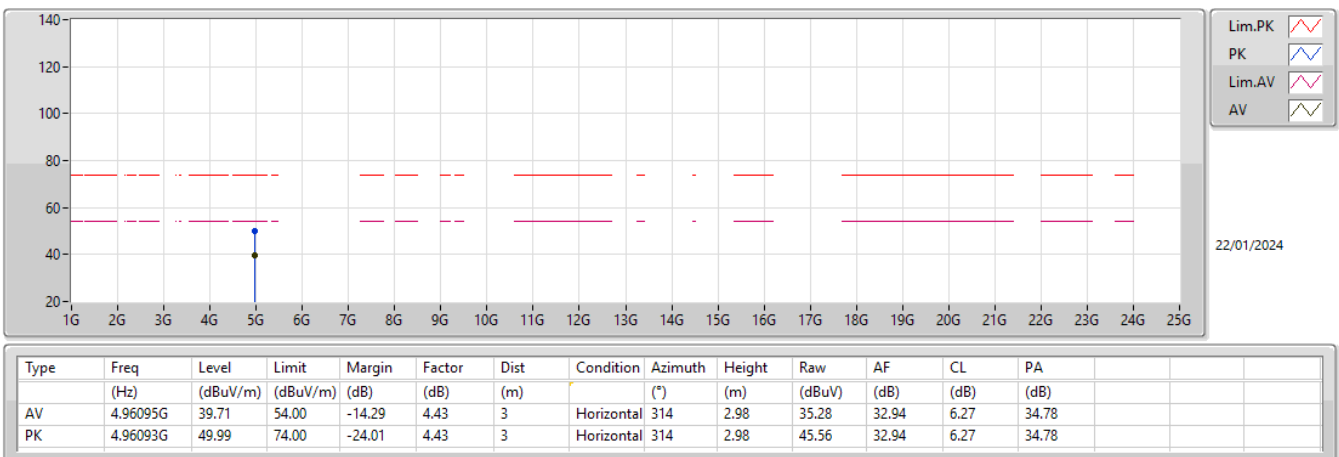
2.4-2.4835GHz_BT-LE(2Mbps)

2480MHz_TX



2.4-2.4835GHz_BT-LE(2Mbps)

2480MHz_TX



Summary

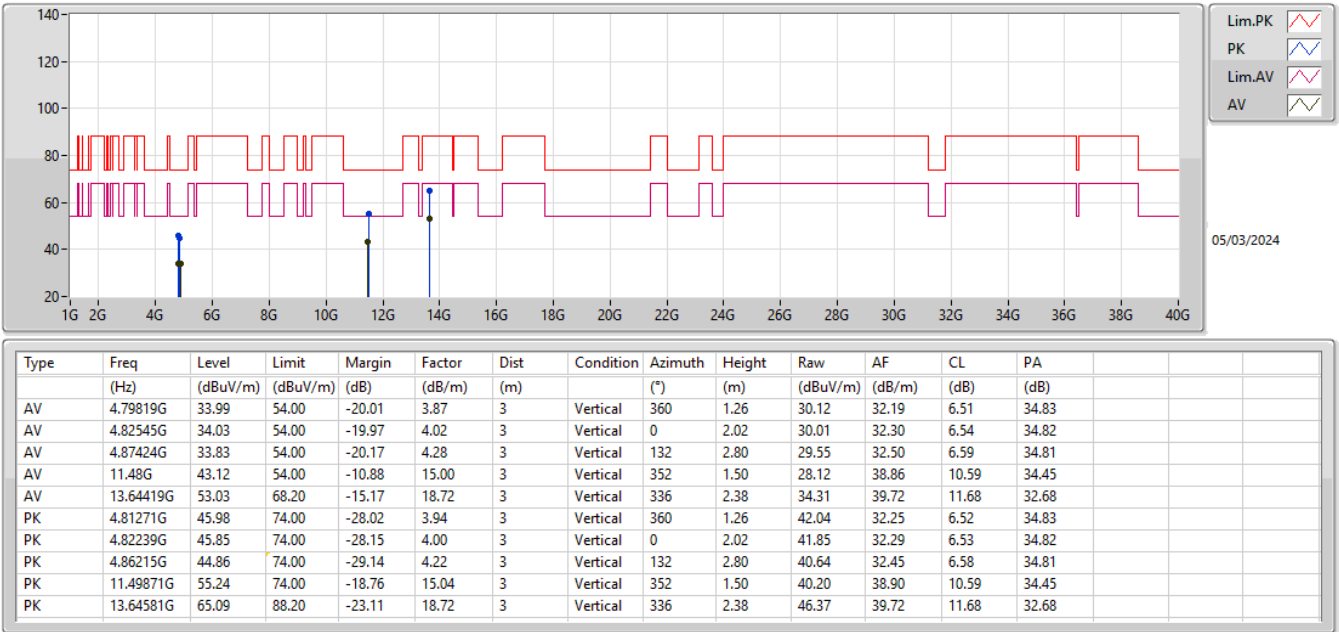
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	AV	11.48065G	43.13	54.00	-10.87	Horizontal
Mode 2	Pass	AV	11.48685G	43.43	54.00	-10.57	Horizontal
Mode 3	Pass	AV	12.35194G	45.12	54.00	-8.88	Horizontal

Result

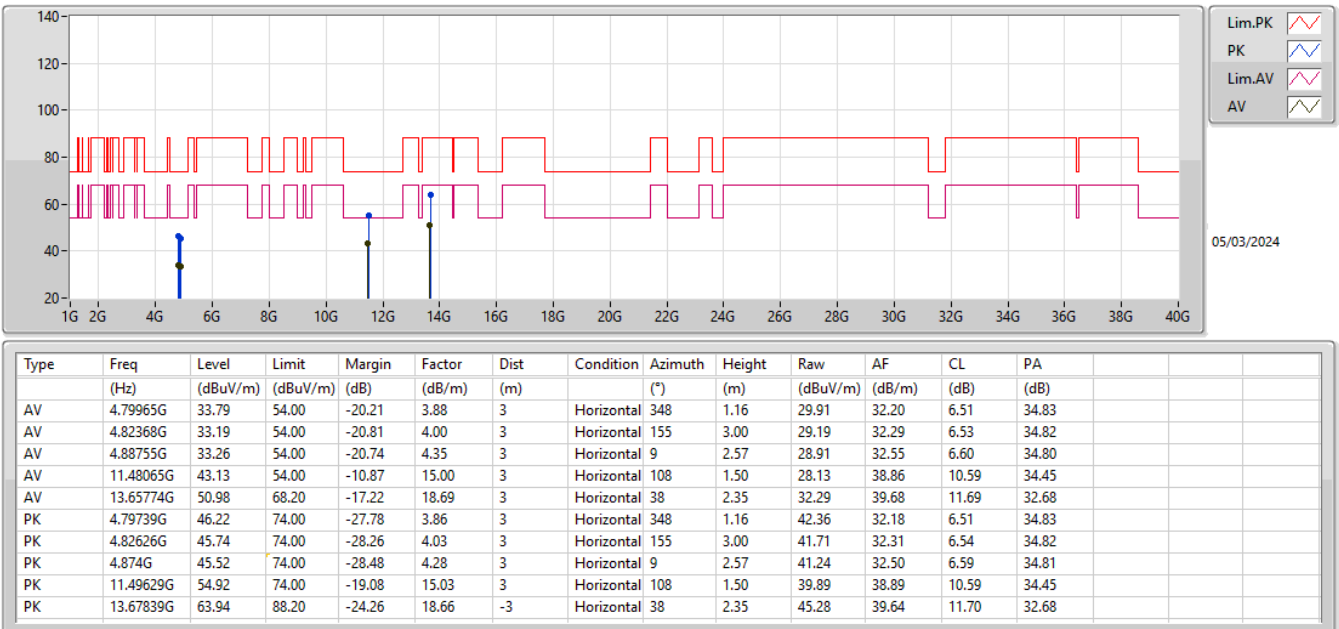
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
Mode 1	Pass	AV	4.79819G	33.99	54.00	-20.01	3	Vertical	360	1.26
Mode 1	Pass	AV	4.82545G	34.03	54.00	-19.97	3	Vertical	0	2.02
Mode 1	Pass	AV	4.87424G	33.83	54.00	-20.17	3	Vertical	132	2.80
Mode 1	Pass	AV	11.48G	43.12	54.00	-10.88	3	Vertical	352	1.50
Mode 1	Pass	AV	13.64419G	53.03	68.20	-15.17	3	Vertical	336	2.38
Mode 1	Pass	PK	4.81271G	45.98	74.00	-28.02	3	Vertical	360	1.26
Mode 1	Pass	PK	4.82239G	45.85	74.00	-28.15	3	Vertical	0	2.02
Mode 1	Pass	PK	4.86215G	44.86	74.00	-29.14	3	Vertical	132	2.80
Mode 1	Pass	PK	11.49871G	55.24	74.00	-18.76	3	Vertical	352	1.50
Mode 1	Pass	PK	13.64581G	65.09	88.20	-23.11	3	Vertical	336	2.38
Mode 1	Pass	AV	4.79965G	33.79	54.00	-20.21	3	Horizontal	348	1.16
Mode 1	Pass	AV	4.82368G	33.19	54.00	-20.81	3	Horizontal	155	3.00
Mode 1	Pass	AV	4.88755G	33.26	54.00	-20.74	3	Horizontal	9	2.57
Mode 1	Pass	AV	11.48065G	43.13	54.00	-10.87	3	Horizontal	108	1.50
Mode 1	Pass	AV	13.65774G	50.98	68.20	-17.22	3	Horizontal	38	2.35
Mode 1	Pass	PK	4.79739G	46.22	74.00	-27.78	3	Horizontal	348	1.16
Mode 1	Pass	PK	4.82626G	45.74	74.00	-28.26	3	Horizontal	155	3.00
Mode 1	Pass	PK	4.874G	45.52	74.00	-28.48	3	Horizontal	9	2.57
Mode 1	Pass	PK	11.49629G	54.92	74.00	-19.08	3	Horizontal	108	1.50
Mode 1	Pass	PK	13.67839G	63.94	88.20	-24.26	-3	Horizontal	38	2.35
Mode 2	Pass	AV	4.79561G	33.58	54.00	-20.42	3	Vertical	47	1.70
Mode 2	Pass	AV	4.86505G	34.86	54.00	-19.14	3	Vertical	224	2.42
Mode 2	Pass	AV	11.49726G	43.27	54.00	-10.73	3	Vertical	154	2.93
Mode 2	Pass	AV	11.55766G	43.27	54.00	-10.73	3	Vertical	89	2.33
Mode 2	Pass	AV	13.64742G	53.61	68.20	-14.59	3	Vertical	331	2.48
Mode 2	Pass	PK	4.79868G	45.19	74.00	-28.81	3	Vertical	47	1.70
Mode 2	Pass	PK	4.87037G	46.67	74.00	-27.33	3	Vertical	224	2.42
Mode 2	Pass	PK	11.48855G	54.83	74.00	-19.17	3	Vertical	154	2.93
Mode 2	Pass	PK	11.58355G	55.13	74.00	-18.87	3	Vertical	89	2.33
Mode 2	Pass	PK	13.66677G	68.27	88.20	-19.93	3	Vertical	331	2.48
Mode 2	Pass	AV	4.81223G	34.23	54.00	-19.77	3	Horizontal	5	2.60
Mode 2	Pass	AV	4.88827G	33.87	54.00	-20.13	3	Horizontal	287	2.64
Mode 2	Pass	AV	11.48685G	43.43	54.00	-10.57	3	Horizontal	238	1.50
Mode 2	Pass	AV	11.5625G	43.20	54.00	-10.80	3	Horizontal	144	1.37
Mode 2	Pass	AV	13.67839G	50.74	68.20	-17.46	3	Horizontal	39	2.39
Mode 2	Pass	PK	4.80513G	45.58	74.00	-28.42	3	Horizontal	5	2.60
Mode 2	Pass	PK	4.87255G	46.05	74.00	-27.95	3	Horizontal	287	2.64
Mode 2	Pass	PK	11.47524G	55.22	74.00	-18.78	3	Horizontal	238	1.50
Mode 2	Pass	PK	11.55621G	55.11	74.00	-18.89	3	Horizontal	144	1.37
Mode 2	Pass	PK	13.65774G	61.39	88.20	-26.81	3	Horizontal	39	2.39
Mode 3	Pass	AV	4.794G	34.00	54.00	-20.00	3	Vertical	1	1.50
Mode 3	Pass	AV	4.87376G	34.49	54.00	-19.51	3	Vertical	40	2.25
Mode 3	Pass	AV	11.48032G	43.01	54.00	-10.99	3	Vertical	37	2.39
Mode 3	Pass	AV	12.35968G	45.09	54.00	-8.91	3	Vertical	92	1.50
Mode 3	Pass	AV	13.68613G	52.76	68.20	-15.44	3	Vertical	39	1.82
Mode 3	Pass	PK	4.79626G	45.90	74.00	-28.10	3	Vertical	1	1.50
Mode 3	Pass	PK	4.87739G	46.93	74.00	-27.07	3	Vertical	40	2.25
Mode 3	Pass	PK	11.49468G	54.68	74.00	-19.32	3	Vertical	37	2.39
Mode 3	Pass	PK	12.34032G	56.68	74.00	-17.32	3	Vertical	92	1.50
Mode 3	Pass	PK	13.66806G	64.69	88.20	-23.51	3	Vertical	39	1.82

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
Mode 3	Pass	AV	4.79497G	33.86	54.00	-20.14	3	Horizontal	0	1.26
Mode 3	Pass	AV	4.88876G	33.81	54.00	-20.19	3	Horizontal	195	1.50
Mode 3	Pass	AV	11.48G	43.12	54.00	-10.88	3	Horizontal	39	2.98
Mode 3	Pass	AV	12.35194G	45.12	54.00	-8.88	3	Horizontal	276	2.38
Mode 3	Pass	AV	13.63839G	51.29	68.20	-16.91	3	Horizontal	33	2.20
Mode 3	Pass	PK	4.79497G	45.47	74.00	-28.53	3	Horizontal	0	1.26
Mode 3	Pass	PK	4.86384G	46.02	74.00	-27.98	3	Horizontal	195	1.50
Mode 3	Pass	PK	11.48968G	55.00	74.00	-19.00	3	Horizontal	39	2.98
Mode 3	Pass	PK	12.3829G	56.67	74.00	-17.33	3	Horizontal	276	2.38
Mode 3	Pass	PK	13.65774G	63.12	88.20	-25.08	3	Horizontal	33	2.20

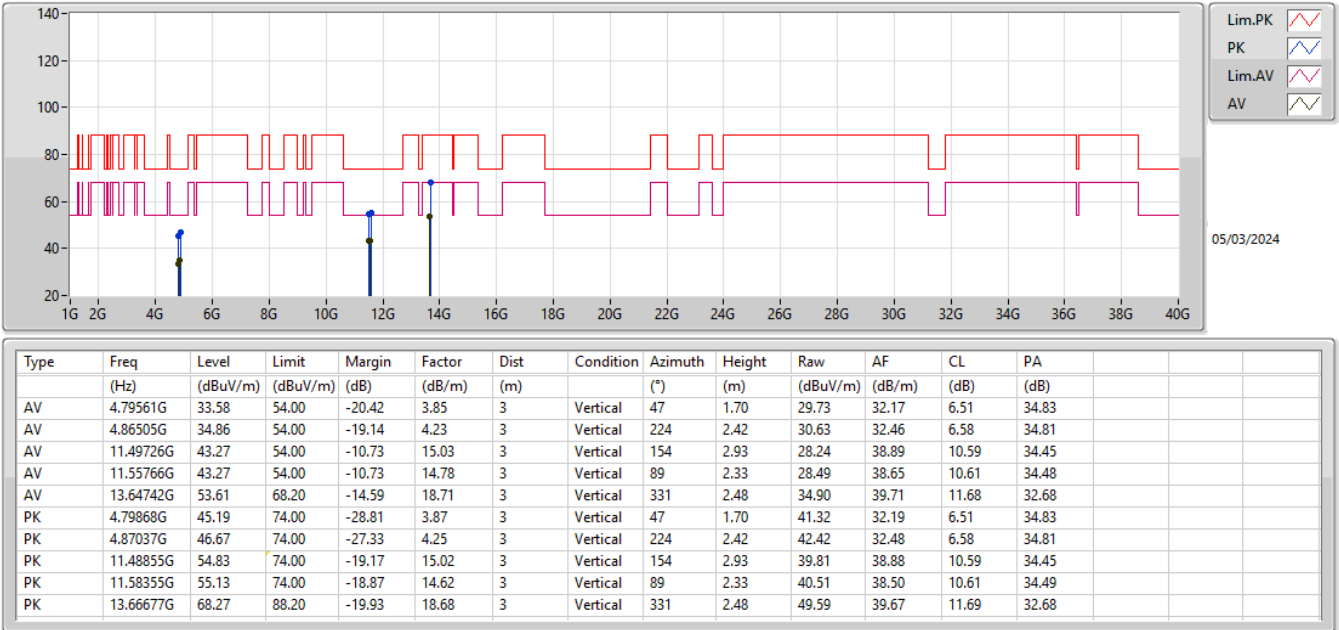
Radiated Emissions above 1GHz_Mode 1



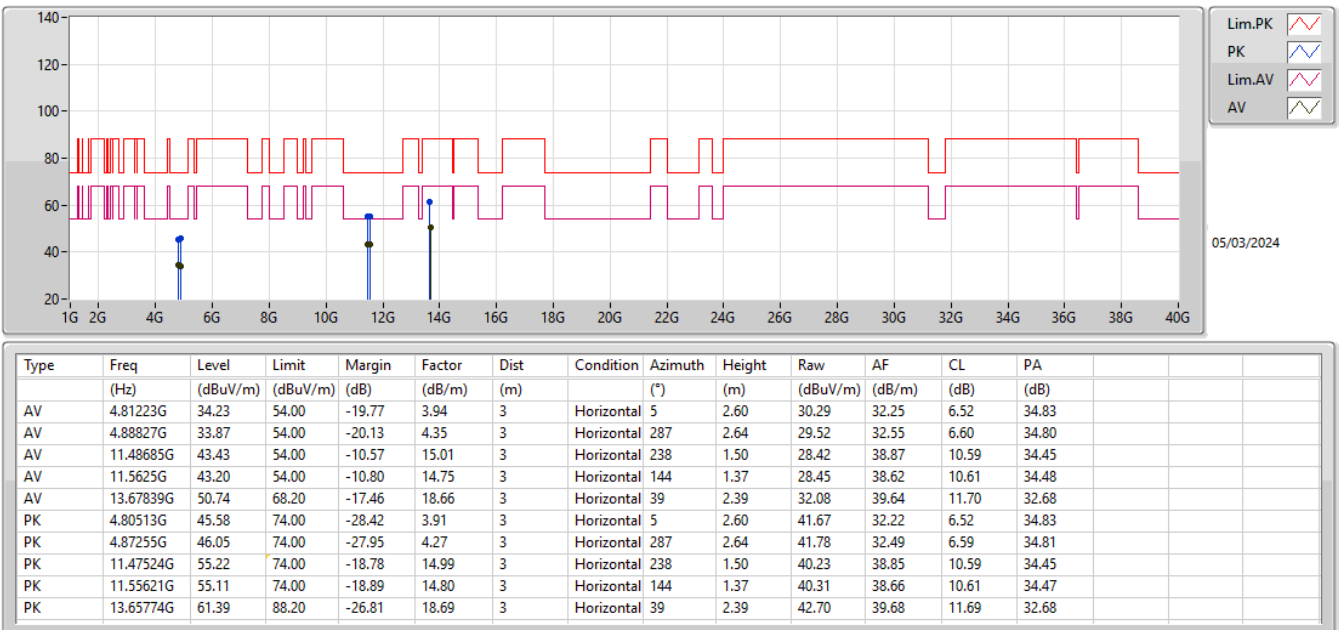
Radiated Emissions above 1GHz_Mode 1



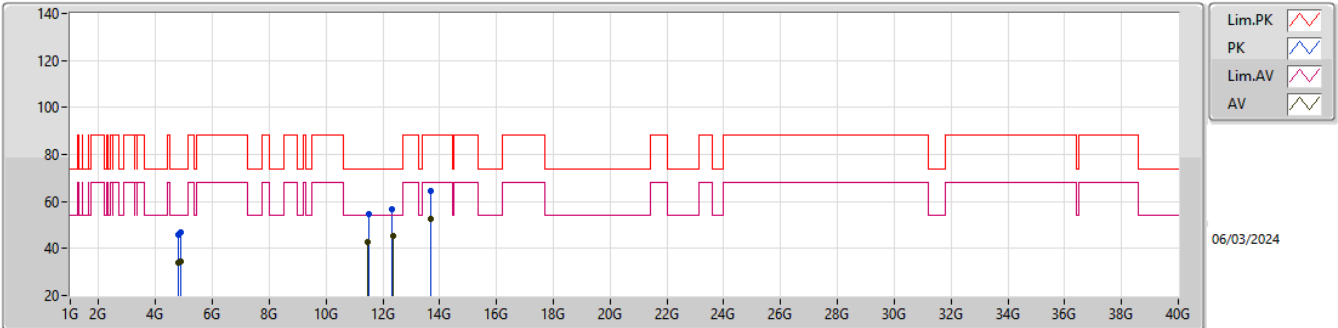
Radiated Emissions above 1GHz_Mode 2



Radiated Emissions above 1GHz_Mode 2

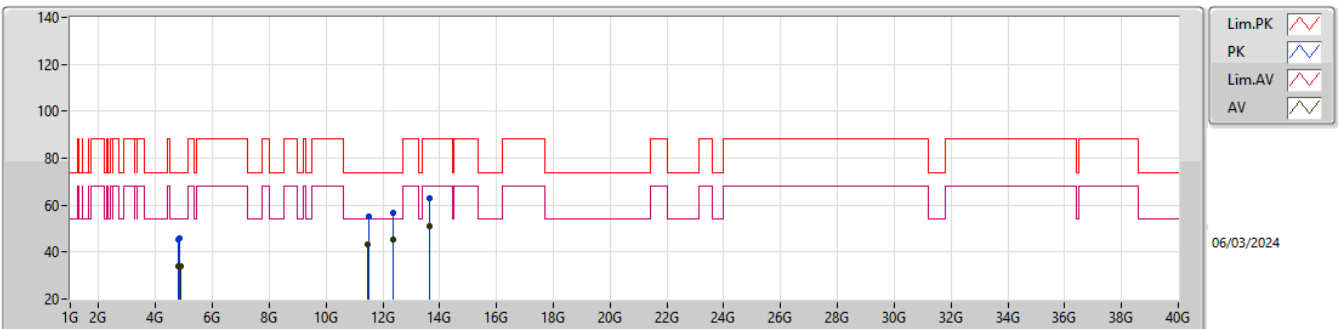


Radiated Emissions above 1GHz_Mode 3



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	4.794G	34.00	54.00	-20.00	3.84	3	Vertical	1	1.50	30.16	32.16	6.51	34.83
AV	4.87376G	34.49	54.00	-19.51	4.28	3	Vertical	40	2.25	30.21	32.50	6.59	34.81
AV	11.48032G	43.01	54.00	-10.99	15.00	3	Vertical	37	2.39	28.01	38.86	10.59	34.45
AV	12.35968G	45.09	54.00	-8.91	15.32	3	Vertical	92	1.50	29.77	38.88	10.92	34.48
AV	13.68613G	52.76	68.20	-15.44	18.65	3	Vertical	39	1.82	34.11	39.63	11.70	32.68
PK	4.79626G	45.90	74.00	-28.10	3.86	3	Vertical	1	1.50	42.04	32.18	6.51	34.83
PK	4.87739G	46.93	74.00	-27.07	4.29	3	Vertical	40	2.25	42.64	32.51	6.59	34.81
PK	11.49468G	54.68	74.00	-19.32	15.03	3	Vertical	37	2.39	39.65	38.89	10.59	34.45
PK	12.34032G	56.68	74.00	-17.32	15.30	3	Vertical	92	1.50	41.38	38.88	10.91	34.49
PK	13.66806G	64.69	88.20	-23.51	18.67	3	Vertical	39	1.82	46.02	39.66	11.69	32.68

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	4.79497G	33.86	54.00	-20.14	3.85	3	Horizontal	0	1.26	30.01	32.17	6.51	34.83
AV	4.88876G	33.81	54.00	-20.19	4.36	3	Horizontal	195	1.50	29.45	32.56	6.60	34.80
AV	11.48G	43.12	54.00	-10.88	15.00	3	Horizontal	39	2.98	28.12	38.86	10.59	34.45
AV	12.35194G	45.12	54.00	-8.88	15.33	3	Horizontal	276	2.38	29.79	38.90	10.92	34.49
AV	13.63839G	51.29	68.20	-16.91	18.75	3	Horizontal	33	2.20	32.54	39.75	11.68	32.68
PK	4.79497G	45.47	74.00	-28.53	3.85	3	Horizontal	0	1.26	41.62	32.17	6.51	34.83
PK	4.86384G	46.02	74.00	-27.98	4.23	3	Horizontal	195	1.50	41.79	32.46	6.58	34.81
PK	11.48968G	55.00	74.00	-19.00	15.02	3	Horizontal	39	2.98	39.98	38.88	10.59	34.45
PK	12.3829G	56.67	74.00	-17.33	15.30	3	Horizontal	276	2.38	41.37	38.83	10.94	34.47
PK	13.65774G	63.12	88.20	-25.08	18.69	3	Horizontal	33	2.20	44.43	39.68	11.69	32.68