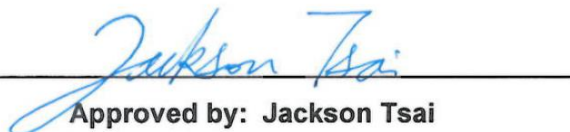


FCC Radio Test Report

FCC ID : NM82QBP100
Equipment : Tracker
Brand Name : VIVE
Model Name : 2QBP100
Applicant : HTC Corporation
No. 88, Section 3, Zhongxing Road, Xindian District,
New Taipei City 231, Taiwan
Manufacturer : HTC Corporation
No.88, Section 3, Zhongxing Rd., Xindian Dist,
New Taipei City 231 Taiwan
Standard : 47 CFR FCC Part 15.247

The product was received on Mar. 16, 2023, and testing was started from 31. Mar, 2023 and completed on Apr. 21, 2023. 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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PHOTOGRAPHS OF EUT V01



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: Barry Hsiao

Report Producer: Amber Chiu



1 General Description

1.1 Information

1.1.1 RF General Information

RF General Information			
Frequency Range(MHz)	Modulation	Ch. Frequency (MHz)	Channel Number
2400 - 2483.5	GFSK	2402~2480	0-39 [40]

Band	Mode	BWch (MHz)	Nant
2.4G	SRD	2	1TX

Channael	Frequency (MHz)	Channael	Frequency (MHz)
0	2402	21	2444
1	2404	22	2446
2	2406	23	2448
3	2408	24	2450
4	2410	25	2452
5	2412	26	2454
6	2414	27	2456
7	2416	28	2458
8	2418	29	2460
9	2420	30	2462
10	2422	31	2464
11	2424	32	2466
12	2426	33	2468
13	2428	34	2470
14	2430	35	2472
15	2432	36	2474
16	2434	37	2476
17	2436	38	2478
18	2438	39	2480
19	2440	-	-
20	2442	-	-

Note:

- ♦ 2.4G Proprietary uses a GFSK (1Mbps) modulation.
- ♦ BWch is the nominal channel bandwidth.



1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type
1	hTC	2QBP100	PIFA antenna
2	hTC	2QBP100	PIFA antenna

Ant.	Port	Gain (dBi)					
		2.4G			5G		
		2412	2442	2472	5180	5500	5805
1	1	0.48	0.26	-0.13	-	-	-
2	1	-	-	-	2.69	2.72	2.87

Note 1: The EUT has two antennas.

For SRD function:

For 2.4G Proprietary mode (1TX/1RX)

Ant. 1 (port 1) could transmit/receive.

For 5GHz function:

For IEEE 802.11 a/n/ac mode (1TX/1RX)

Ant. 2 (port 1) could transmit/receive.

1.1.3 EUT Information

Operational Condition			
EUT Power Type	From AC Adapter / Host system / Battery		
EUT Function	<input checked="" type="checkbox"/> Point-to-multipoint	<input type="checkbox"/> Point-to-point	
Beamforming Function	<input type="checkbox"/> With beamforming	<input checked="" type="checkbox"/> Without beamforming	
Type of EUT			
<input checked="" type="checkbox"/>	Stand-alone		
<input type="checkbox"/>	Combined (EUT where the radio part is fully integrated within another device)		
	Combined Equipment - Brand Name / Model No.: ...		
<input type="checkbox"/>	Plug-in radio (EUT intended for a variety of host systems)		
	Host System - Brand Name / Model No.: ...		
<input type="checkbox"/>	Other:		

1.1.4 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
Proprietary	0.633	1.99	395.625u	3k

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 662911 D01 v02r01
- ♦ KDB 414788 D01 v01r01

1.3 Testing Location Information

Test Lab. : Sporton International Inc. Hsinhua Laboratory				
<input checked="" type="checkbox"/>	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	21.3~22.5°C / 51~56%	14/Apr2023~15/Apr/2023
AC Conduction (Charging Mode)	CO04-HY	Daniel Lin	21.4~22.4°C / 57~63%	19/Apr2023~20/Apr/2023
RF Conducted	TH01-HY	Johnny Yu	22.2~23.2°C / 53~55%	31/Mar/2023~21/Apr/2023
Radiated (below 1GHz)	03CH02-HY	Lego Lin	21.5~22.9°C / 54~58%	18/Apr/2023
Radiated (Charging Mode)	03CH02-HY	Daniel Lin	23.6~24.8°C / 54~58%	19/Apr/2023~20/Apr/2023
<input checked="" type="checkbox"/>	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.				
Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
Radiated (above 1GHz)	03CH09-HY	Lego Lin	23.2~25.5°C / 56~61%	14/Apr/2023
Radiated (Co-location)	03CH09-HY	Lego Lin	23.8~25.3°C / 53~57%	18/Apr/2023~19/Apr/2023



1.4 Measurement Uncertainty

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

Test Items	Uncertainty	Remark
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%
Receiver Radiated Unwanted Emissions	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	Dos V6.1
-----------------------	----------

Mode	Power Setting
Proprietary	-
2402MHz	4
2440MHz	4
2480MHz	4

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	USB Mode
2	Adapter Mode
3	Adapter Charging Mode
4	USB Charging 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	USB Mode		
2	Adapter Mode		
3	Adapter Charging Mode		
4	USB Charging 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
Test Condition	Radiated measurement
Operating Mode	Normal Link
1	2.4GHz Proprietary +WLAN 5GHz

Refer to Sporton Test Report No.: FA331027 for Co-location RF Exposure Evaluation and Appendix G for Radiated Emission Co-location.

2.3 Accessories

Accessories				
Battery	Brand Name	VIVE	Model Name	B2QBP100
	Manufacturer	Dongguan Amperex Technology Limited A/S	SN	-
	Power Rating	3.85Vdc, 2580 mAh	Type	Li-ion, Yes
Type-C Cable	Brand Name	hTC	Model Name	73H00790
	Signal Line	1.5 meter, shielded cable		
Type-C Cable	Brand Name	hTC	Model Name	73H00791
	Signal Line	0.16 meter, shielded cable		

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

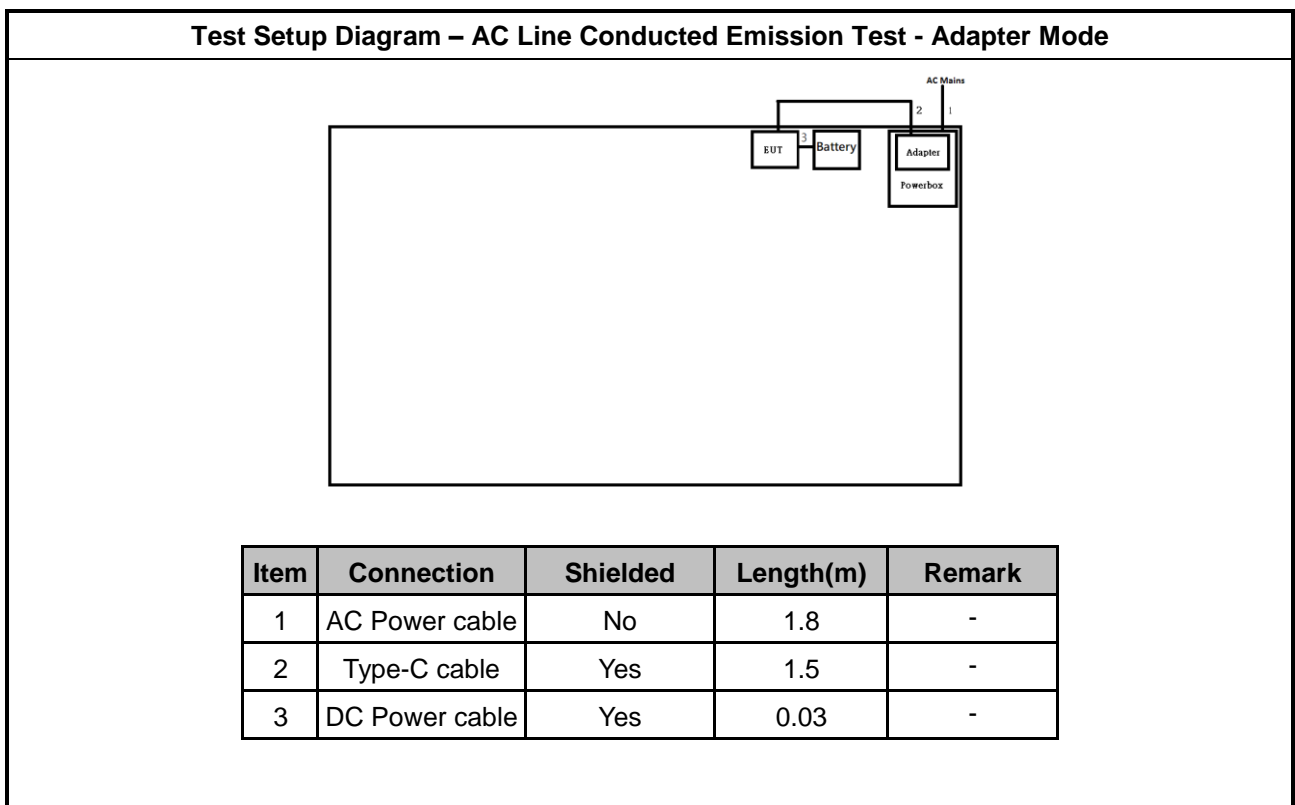
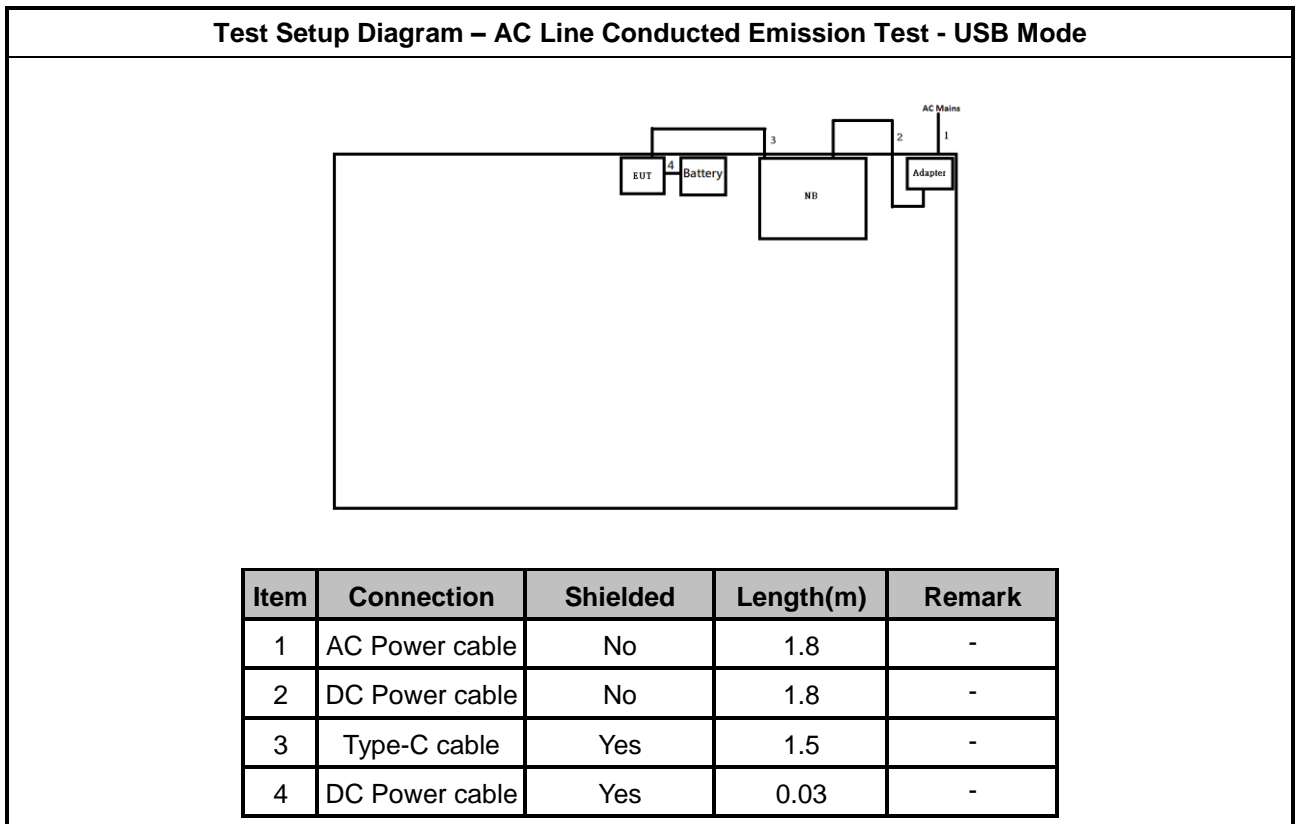
2.4 Support Equipment

Support Equipment – AC Conduction					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Adapter	APPLE	A1385	-	-
2	Notebook	HP	HSTNN-142C	-	-
3	Adapter (for NB)	HP	HSTNN-CA40	-	-
4	AC Power Cable	Atake	SCB-3PM01	-	-

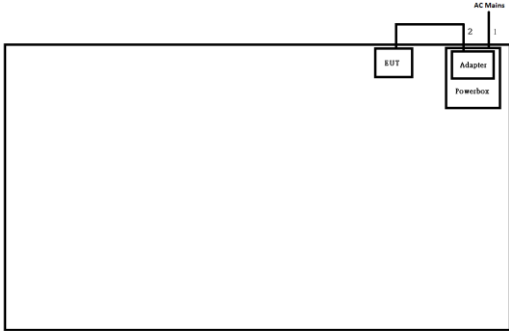
Support Equipment – Conducted					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Notebook	DELL	E5410	-	-
2	Adapter for NB	DELL	HA65NM130	-	-

Support Equipment – Radiated					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Adapter	APPLE	A1385	-	-
2	Notebook	HP	HSTNN-142C	-	-
3	Adapter (for NB)	HP	HSTNN-CA40	-	-
4	AC Power Cable	Atake	SCB-3PM01	-	-
5	Earphone	Apple	MD827FE/A	-	-
6	30-pin to USB Original Cable	Apple	MA591G/C	-	-
7	ipod	APPLE	A1199	-	-
8	Adapter	Innergie	ADP-63AWB	-	-

2.5 Test Setup Diagram

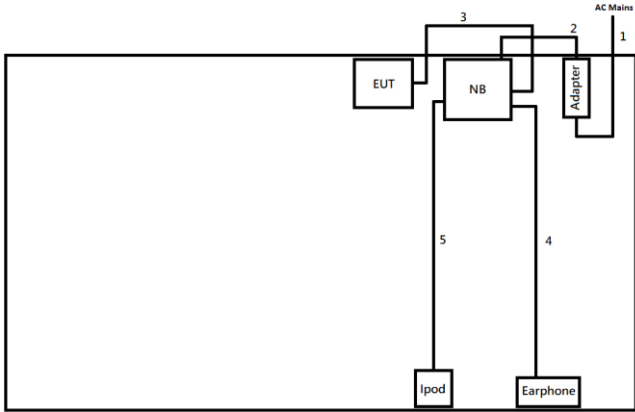


Test Setup Diagram – AC Line Conducted Emission Test - Adapter Charging Mode



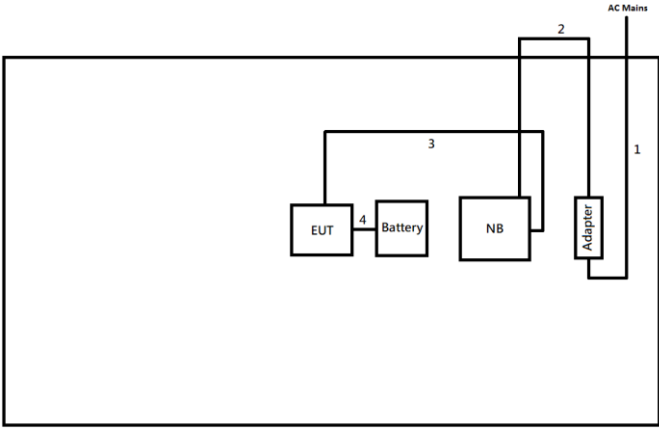
Item	Connection	Shielded	Length(m)	Remark
1	AC Power cable	No	1.8	-
2	Type-C cable	Yes	1.5	-

Test Setup Diagram – AC Line Conducted Emission Test – USB Charging Mode



Item	Connection	Shielded	Length(m)	Remark
1	AC Power cable	No	1.8	-
2	DC Power cable	No	1.0	-
3	Type-C cable	Yes	1.5	-
4	Audio cable	No	1.25	-
5	30-pin to USB Original cable	No	1.0	-

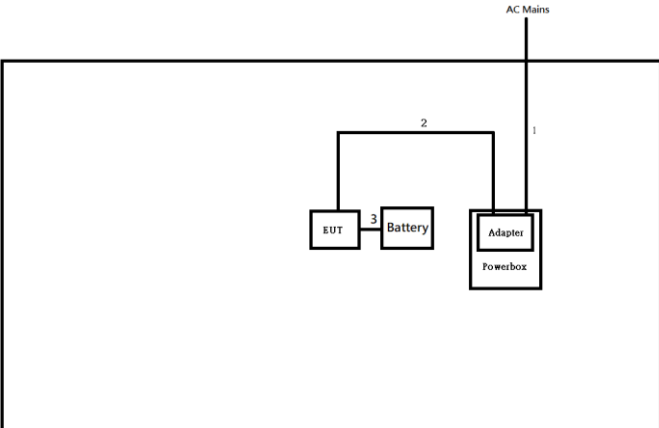
Test Setup Diagram - Radiated Test - USB Mode



The diagram shows a test setup for USB Mode. It includes an EUT (Equipment Under Test), a Battery, an NB (Network Board), and an Adapter. The connections are as follows: AC Mains is connected to the Adapter via cable 1. The Adapter is connected to the NB via cable 2. The NB is connected to the Battery via cable 3. The Battery is connected to the EUT via cable 4.

Item	Connection	Shielded	Length(m)	Remark
1	AC Power cable	No	1.8	-
2	DC Power cable	No	1.0	-
3	Type-C cable	Yes	1.5	-
4	DC Power cable	No	0.03	-

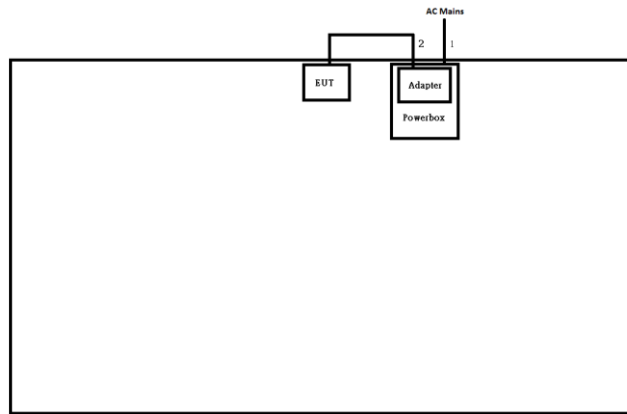
Test Setup Diagram - Radiated Test - Adapter Mode



The diagram shows a test setup for Adapter Mode. It includes an EUT, a Battery, and an Adapter (Powerbox). The connections are as follows: AC Mains is connected to the Adapter via cable 1. The Adapter is connected to the EUT via cable 2. The EUT is connected to the Battery via cable 3.

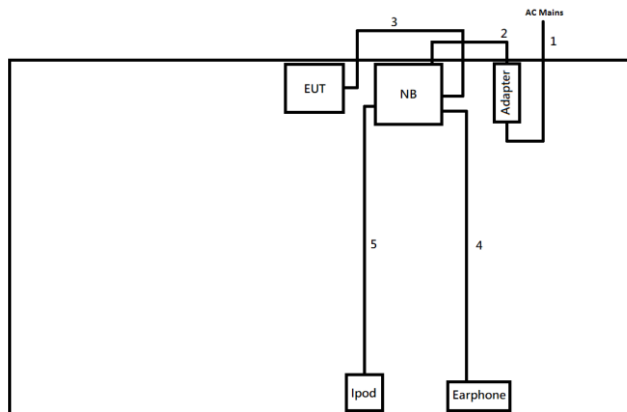
Item	Connection	Shielded	Length(m)	Remark
1	AC Power cable	No	1.8	-
2	Type-C cable	Yes	1.5	-
3	DC Power cable	No	0.03	-

Test Setup Diagram - Radiated Test – Adapter Charging Mode



Item	Connection	Shielded	Length(m)	Remark
1	AC Power cable	No	1.8	-
2	Type-C cable	Yes	1.5	-

Test Setup Diagram - Radiated Test - USB Charging Mode



Item	Connection	Shielded	Length(m)	Remark
1	AC Power cable	No	1.8	-
2	DC Power cable	No	1.0	-
3	Type-C cable	Yes	1.5	-
4	Audio cable	No	1.25	-
5	30-pin to USB Original 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

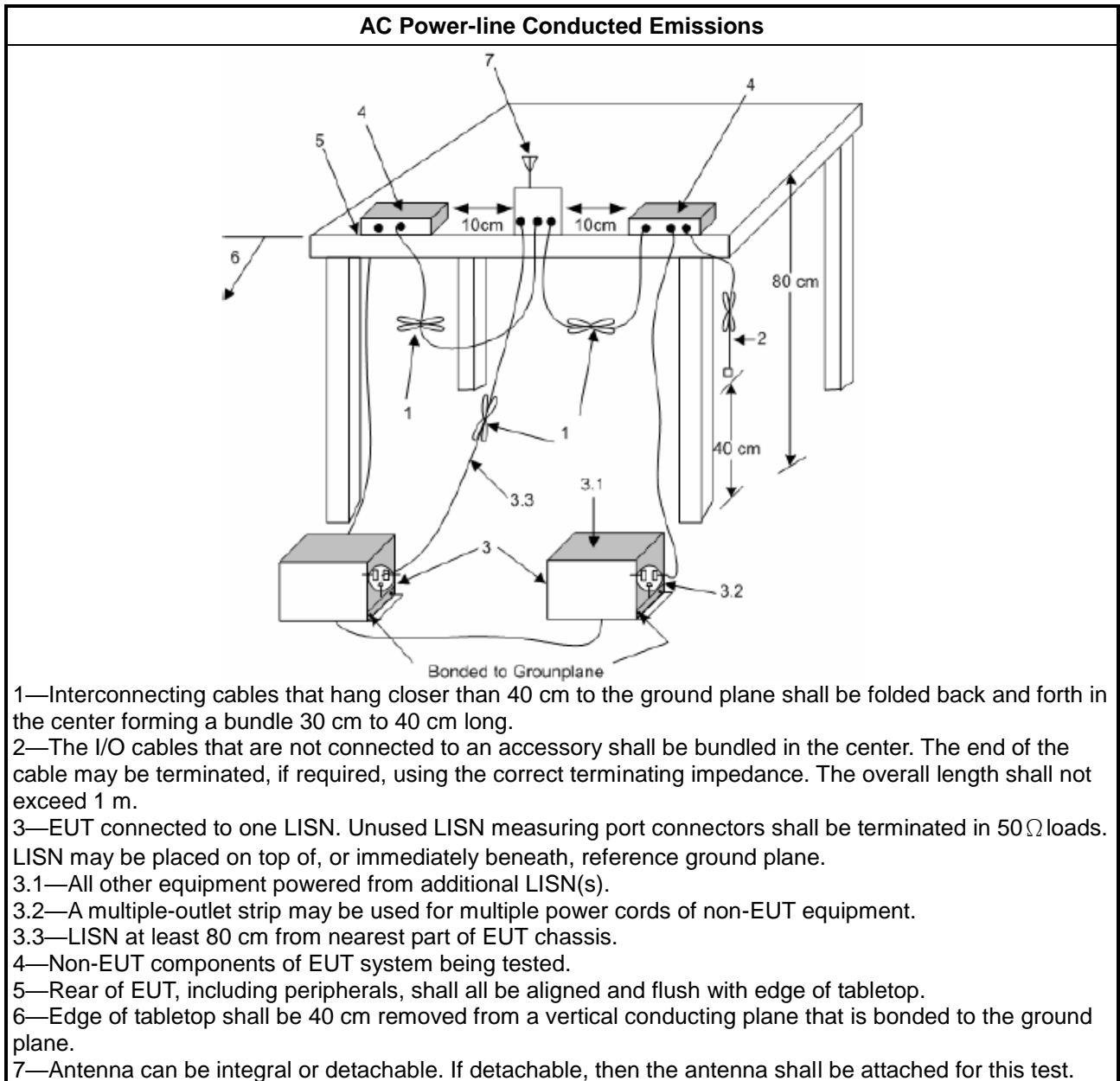
Test Method
<input checked="" type="checkbox"/> Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

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.

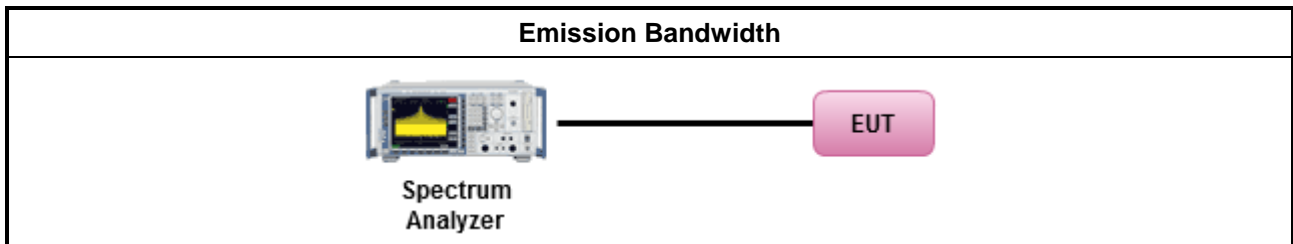
3.2.2 Measuring Instruments

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:
<input checked="" type="checkbox"/>	Refer as KDB 558074. clause 8.2 (11.8 of ANSI C63.10) DTS bandwidth measurement.
<input type="checkbox"/>	Refer as RSS-Gen, clause 6.7 for occupied bandwidth testing.
<input type="checkbox"/>	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	
	<ul style="list-style-type: none"> ▪ If $G_{TX} \leq 6$ dBi, then $P_{Out} \leq 30$ dBm (1 W)
	<ul style="list-style-type: none"> ▪ Point-to-multipoint systems (P2M): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ dBm
	<ul style="list-style-type: none"> ▪ Point-to-point systems (P2P): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	<ul style="list-style-type: none"> ▪ Smart antenna system (SAS):
	<ul style="list-style-type: none"> - Single beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	<ul style="list-style-type: none"> - Overlap beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	<ul style="list-style-type: none"> - Aggregate power on all beams: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3 + 8$ dB dBm
e.i.r.p. Power Limit:	
	<ul style="list-style-type: none"> ▪ 2400-2483.5 MHz Band
	<ul style="list-style-type: none"> ▪ Point-to-multipoint systems (P2M): $P_{eirp} \leq 36$ dBm (4 W)
	<ul style="list-style-type: none"> ▪ Point-to-point systems (P2P): $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX}])$ dBm
	<ul style="list-style-type: none"> ▪ Smart antenna system (SAS)
	<ul style="list-style-type: none"> - Single beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm
	<ul style="list-style-type: none"> - Overlap beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm
	<ul style="list-style-type: none"> - Aggregate power on all beams: $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX} + 8])$ dBm
<p>P_{Out} = maximum peak conducted output power or maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.</p>	

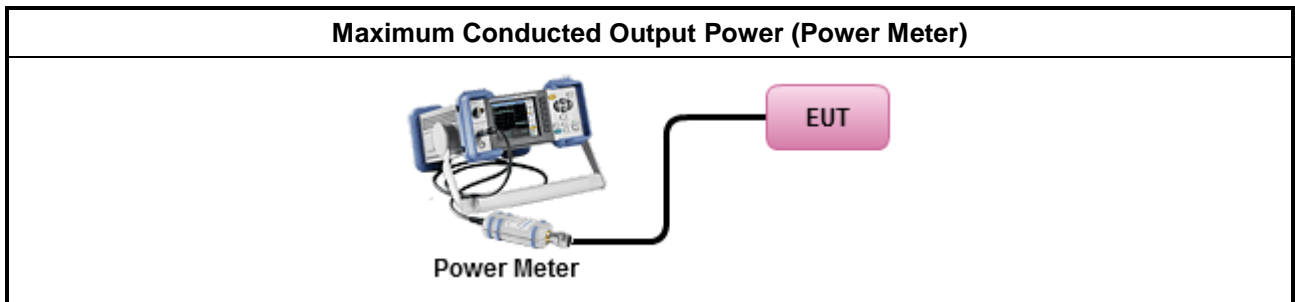
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> ▪ Maximum Peak Conducted Output Power 	
<input type="checkbox"/>	Refer as KDB 558074, clause 8.3.1.1 (11.9.1.1 of ANSI C63.10) RBW ≥ EBW method.
<input type="checkbox"/>	Refer as KDB 558074, clause 8.3.1.2 (11.9.1.2 of ANSI C63.10) integrated band power method.
<input type="checkbox"/>	Refer as KDB 558074, clause 8.3.1.3 (11.9.1.3 of ANSI C63.10) peak power meter.
<ul style="list-style-type: none"> ▪ Maximum Average Conducted Output Power 	
<input type="checkbox"/>	Refer as KDB 558074, clause 8.3.2.2 (11.9.2.2 of ANSI C63.10) using a spectrum analyzer.
<input checked="" type="checkbox"/>	Refer as KDB 558074, clause 8.3.2.3 (11.9.2.3 of ANSI C63.10) using a power meter.
<ul style="list-style-type: none"> ▪ For conducted measurement. 	
<ul style="list-style-type: none"> ▪ If the EUT supports multiple transmit chains using options given below: Refer as KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them. 	
<ul style="list-style-type: none"> ▪ If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$ 	

3.3.4 Test Setup



3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

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

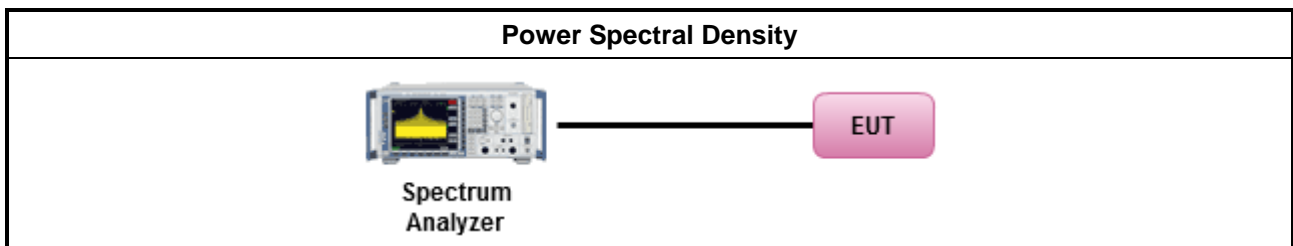
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

Test Method	
	<ul style="list-style-type: none"> Peak power spectral density procedures that the same method as used to determine the conducted output power. If maximum peak conducted output power was measured to demonstrate compliance to the output power limit, then the peak PSD procedure below (Method PKPSD) shall be used. If maximum conducted output power was measured to demonstrate compliance to the output power limit, then one of the average PSD procedures shall be used, as applicable based on the following criteria (the peak PSD procedure is also an acceptable option).
<input checked="" type="checkbox"/>	Refer as KDB 558074, clause 8.4 (11.10 of ANSI C63.10) Max. PSD.
	<ul style="list-style-type: none"> For conducted measurement. <ul style="list-style-type: none"> If The EUT supports multiple transmit chains using options given below: <ul style="list-style-type: none"> 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.

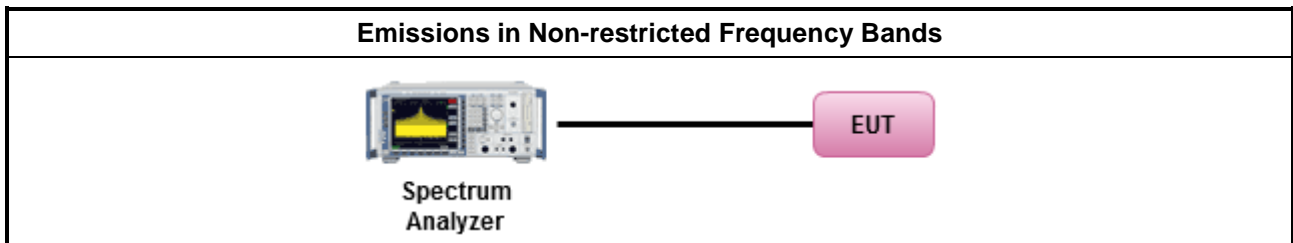
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

Test Method
<ul style="list-style-type: none"> 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

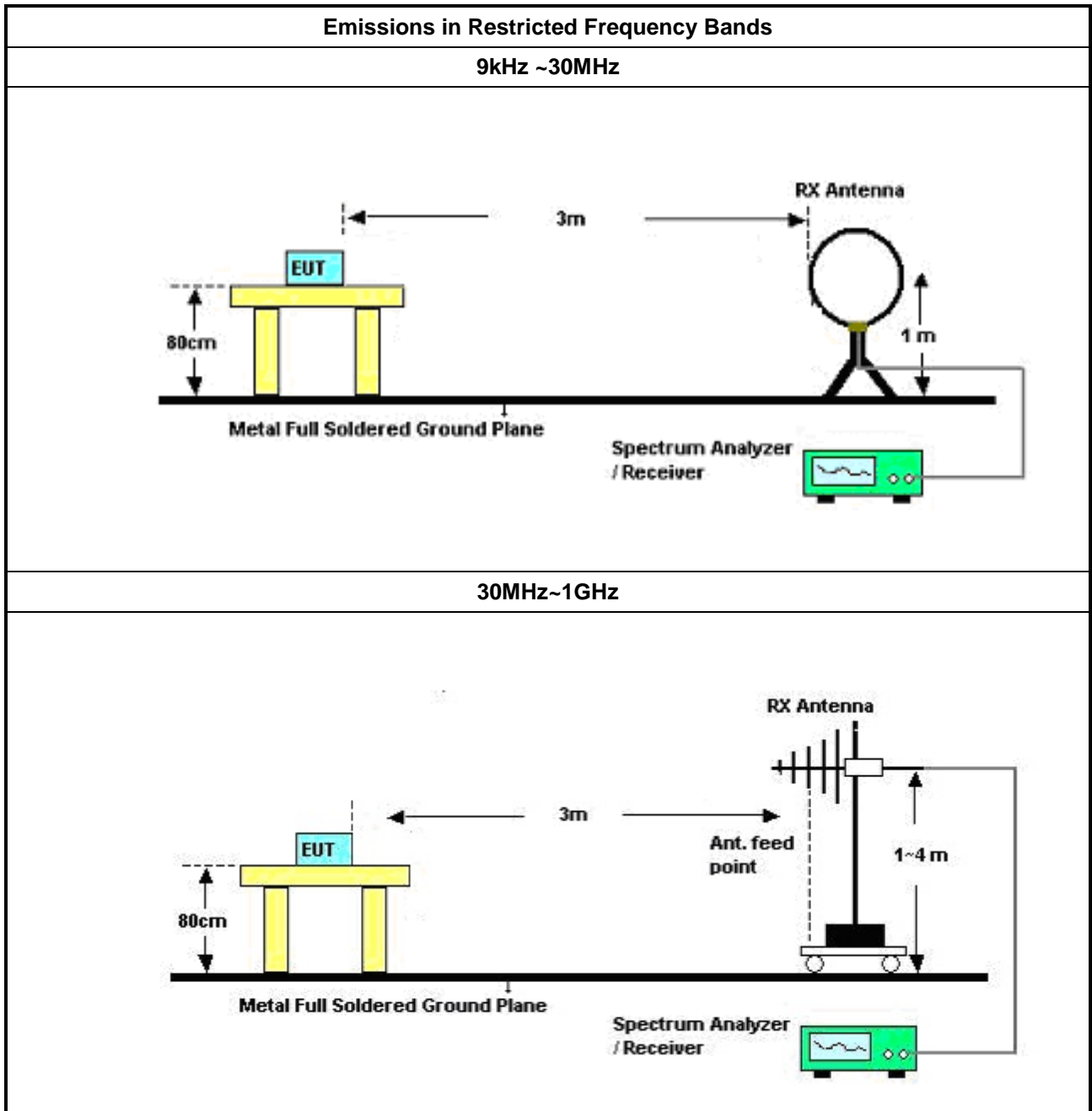
Test Method	
	<ul style="list-style-type: none"> ▪ The average emission levels shall be measured in [duty cycle \geq 98 or duty factor].
	<ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.
	<ul style="list-style-type: none"> ▪ For the transmitter unwanted emissions shall be measured using following options below:
	<ul style="list-style-type: none"> ▪ Refer as KDB 558074, clause 8.6 (11.12 of ANSI C63.10) for restricted frequency bands.
	<ul style="list-style-type: none"> ▪ For the transmitter band-edge emissions shall be measured using following options below:
	<ul style="list-style-type: none"> ▪ Refer as 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.
	<ul style="list-style-type: none"> ▪ Refer as KDB 558074, clause 8.7.2 (6.10.6 of ANSI C63.10) for marker-delta method for band-edge measurements.
	<ul style="list-style-type: none"> ▪ Refer as KDB 558074, clause 8.7.3 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels.
	<ul style="list-style-type: none"> ▪ Use the following spectrum analyzer settings:
	<ul style="list-style-type: none"> ▪ Set RBW=100 kHz for $f < 1$ GHz; VBW=3 * RBW; Sweep = auto; Detector function = peak; Trace = max hold.
	<ul style="list-style-type: none"> ▪ Set RBW = 1 MHz, VBW= 3MHz for $f \geq 1$ GHz for peak measurement. For average measurement, refer as 1.1.4.
	<ul style="list-style-type: none"> ▪ KDB 414788 Open-Field Test Sites and Chamber Correlation Justification.
	<ul style="list-style-type: none"> ▪ 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.
	<ul style="list-style-type: none"> ▪ Open-field site and chamber correlation testing had been performed and chamber measured test result is the worst case test result.

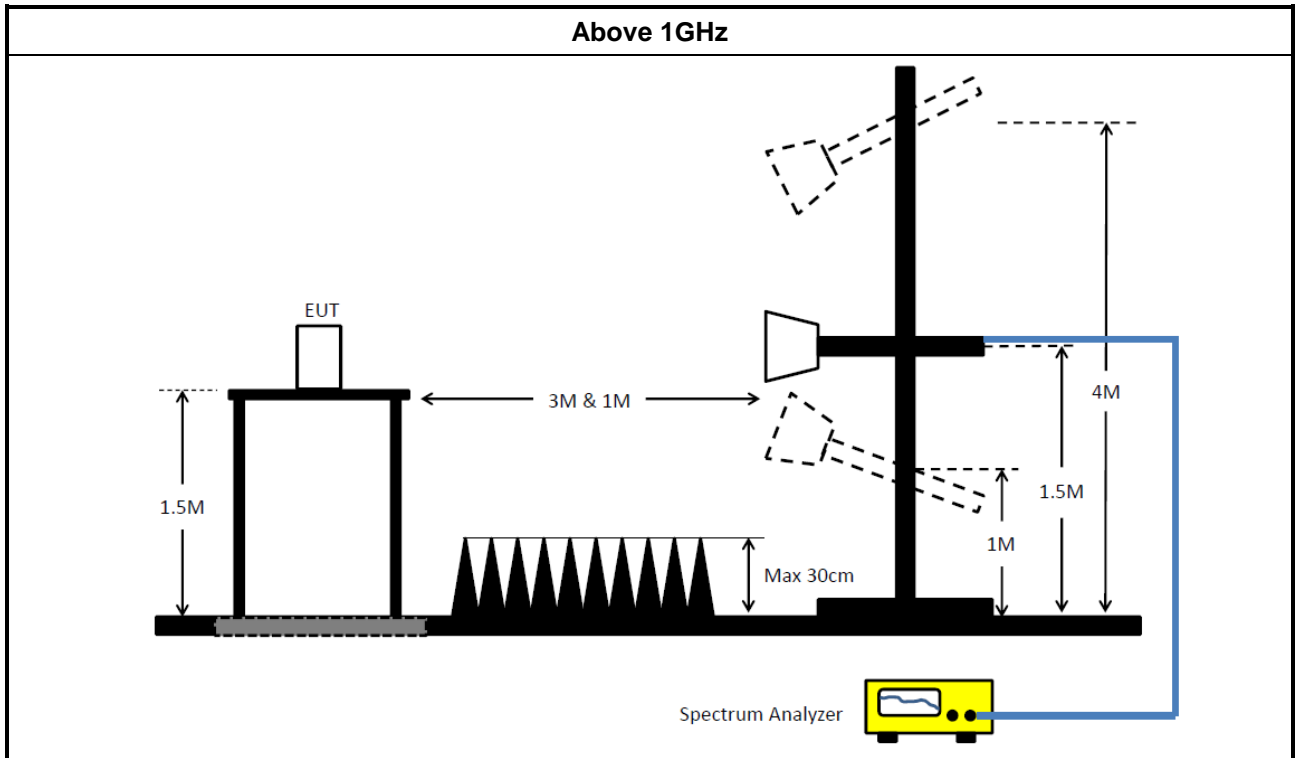
3.6.4 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamp 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	13/May/2022	12/May/2023
Two-Line V-Network	R&S	ENV 216	100003	9kHz ~ 30MHz	16/Feb/2023	15/Feb/2024
RF Cable 5m	TITAN	TITAN	CO04-cable-01	9 kHz~200MHz	28/Feb/2023	27/Feb/2024
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9kHz ~ 30MHz	25/Oct/2022	24/Oct/2023
Software	Sporton	SENSE-EMI	V5.10.8.7	-	NCR	NCR

NCR: No Calibration Required

Instrument for Conducted Test

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Signal Analyzer	R&S	FSV 40	101029	10Hz~40GHz	10/Nov/2022	09/Nov/2023
SMB100A Signal Generator	R&S	SMB100A	181147	100kHz~40GHz	21/Oct/2022	20/Oct/2023
Pulse Sensor	Anritsu	MA2411B	0917017	300MHz~40GHz	15/Feb/2023	14/Feb/2024
Power Meter	Anritsu	ML2495A	0949003	300MHz~40GHz	15/Feb/2023	14/Feb/2024
SENSE-15247_DTS	Sporton	V5.11.3	N/A	N/A	N/A	N/A

Instrument for Radiated Test (03CH02-HY)

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	31/Jul/2022	30/Jul/2023
Signal Analyzer	R&S	FSV3044	101410	10Hz~40GHz	02/Nov/2022	01/Nov/2023
Amplifier	Agilent	8447D	2944A11149	100kHz~1.3GHz	28/Jun/2022	27/Jun/2023
Bilog Antenna & 6dB Attenuator	SCHAFFNER	CBL6111C & N-6-06	2737 & AT-N0603	30MHz~1GHz	28/Aug/2022	27/Aug/2023
RF Cable	MVE	400LL+SN 200207	03CH02-cable-02	9kHz~30MHz	20/Dec/2022	19/Dec/2023
RF Cable	MVE	400LL+SN 200207	03CH02-cable-02	30MHz~1GHz	20/Dec/2022	19/Dec/2023
Loop Antenna	TESEQ	HLA 6120	31244	9kHz~30MHz	23/Mar/2023	22/Mar/2024
EMI Test Receiver	R&S	ESR3	102052	9kHz~3.6GHz	30/May/2022	29/May/2023
SENSE-15247_DTS	Sporton	V5.11.5	N/A	N/A	N/A	N/A



Instrument for Radiated Test (03CH09-HY)

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Site V.S.W.R	Riken	SAC-3M	03CH09-HY	1GHz~18GHz 3m	14/Mar/2023	13/Mar/2024
EXA Signal Analyzer	KEYSIGHT	N9010A	MY54200885	10Hz~44GHz	11/Aug/2022	10/Aug/2023
Microwave Preamplifier	Agilent	8449B	3008A02096	1GHz~26.5GHz	22/Jul/2022	21/Jul/2023
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1531	1GHz~18GHz	30/Dec/2022	29/Dec/2023
RF CABLE 5m+3m+1m	HUBER+SUHNER	SUCOFLEX104	03CH09-cable-02	1GHz~40GHz	21/Feb/2023	20/Feb/2024
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170154	18GHz~40GHz	14/May/2022	13/May/2023
Microwave Preamplifier	EMC INSTRUMENTS	EM18G40G	060604	18GHz ~ 40GHz	16/Mar/2023	15/Mar/2024
SENSE_15407_DTS	Sporton	Sporton	V5.11.5	NA	NA	NA

Instrument for Radiated Test (Co-Location)

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Site V.S.W.R	Riken	SAC-3M	03CH09-HY	1GHz~18GHz 3m	14/Mar/2023	13/Mar/2024
EXA Signal Analyzer	KEYSIGHT	N9010A	MY54200885	10Hz~44GHz	11/Aug/2022	10/Aug/2023
Microwave Preamplifier	Agilent	8449B	3008A02096	1GHz~26.5GHz	22/Jul/2022	21/Jul/2023
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1531	1GHz~18GHz	30/Dec/2022	29/Dec/2023
RF CABLE 5m+3m+1m	HUBER+SUHNER	SUCOFLEX104	03CH09-cable-02	1GHz~40GHz	21/Feb/2023	20/Feb/2024
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170154	18GHz~40GHz	14/May/2022	13/May/2023
Microwave Preamplifier	EMC INSTRUMENTS	EM18G40G	060604	18GHz ~ 40GHz	16/Mar/2023	15/Mar/2024
SENSE_EMI	Sporton	Sporton	V5.11.3	NA	NA	NA



Summary

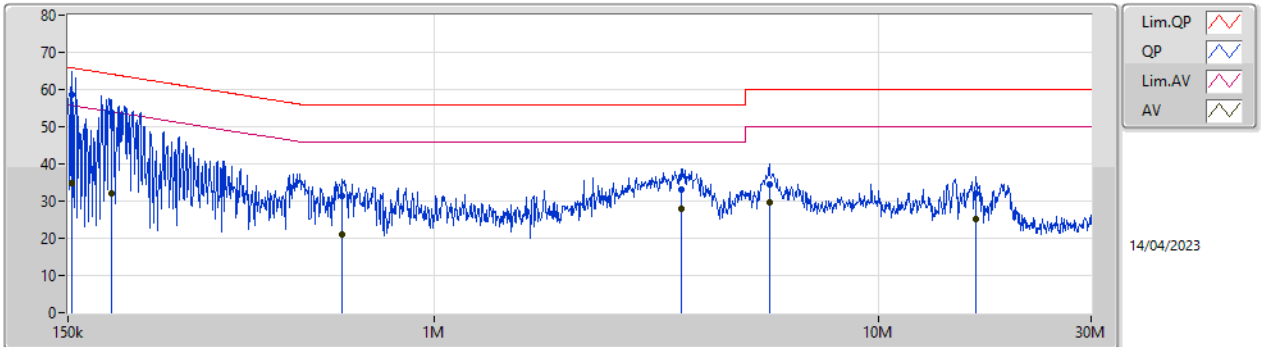
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	150.6k	59.98	65.96	-5.98	Neutral
Mode 2	Pass	AV	811.805k	28.35	46.00	-17.65	Neutral



Result

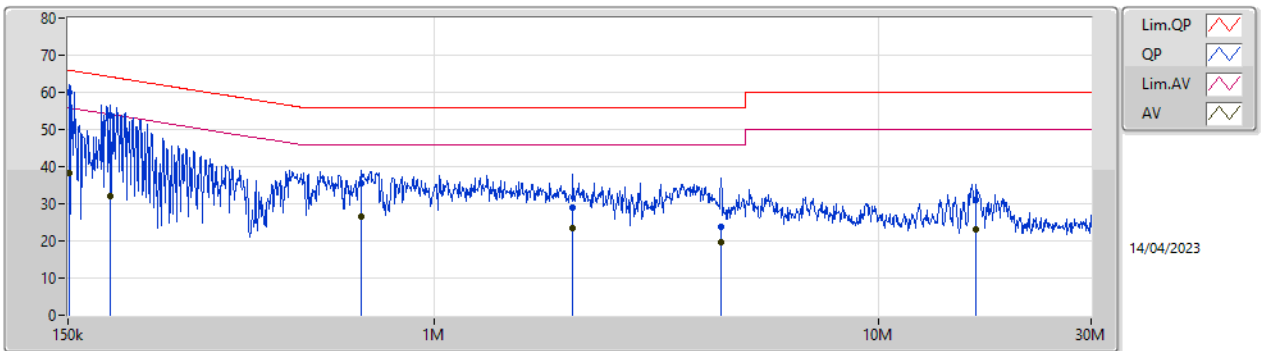
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition	Comments
Mode 1	Pass	QP	153.024k	58.79	65.83	-7.04	Line	-
Mode 1	Pass	AV	153.024k	34.99	55.83	-20.84	Line	-
Mode 1	Pass	QP	187.577k	53.78	64.15	-10.37	Line	-
Mode 1	Pass	AV	187.577k	32.08	54.15	-22.07	Line	-
Mode 1	Pass	QP	621.288k	31.39	56.00	-24.61	Line	-
Mode 1	Pass	AV	621.288k	21.12	46.00	-24.88	Line	-
Mode 1	Pass	QP	3.584M	33.12	56.00	-22.88	Line	-
Mode 1	Pass	AV	3.584M	27.93	46.00	-18.07	Line	-
Mode 1	Pass	QP	5.672M	34.46	60.00	-25.54	Line	-
Mode 1	Pass	AV	5.672M	29.55	50.00	-20.45	Line	-
Mode 1	Pass	QP	16.535M	31.97	60.00	-28.03	Line	-
Mode 1	Pass	AV	16.535M	25.15	50.00	-24.85	Line	-
Mode 1	Pass	QP	150.6k	59.98	65.96	-5.98	Neutral	-
Mode 1	Pass	AV	150.6k	38.11	55.96	-17.85	Neutral	-
Mode 1	Pass	QP	186.085k	53.89	64.20	-10.31	Neutral	-
Mode 1	Pass	AV	186.085k	32.15	54.20	-22.05	Neutral	-
Mode 1	Pass	QP	683.758k	35.44	56.00	-20.56	Neutral	-
Mode 1	Pass	AV	683.758k	26.64	46.00	-19.36	Neutral	-
Mode 1	Pass	QP	2.05M	29.10	56.00	-26.90	Neutral	-
Mode 1	Pass	AV	2.05M	23.45	46.00	-22.55	Neutral	-
Mode 1	Pass	QP	4.411M	23.86	56.00	-32.14	Neutral	-
Mode 1	Pass	AV	4.411M	19.65	46.00	-26.35	Neutral	-
Mode 1	Pass	QP	16.535M	31.04	60.00	-28.96	Neutral	-
Mode 1	Pass	AV	16.535M	23.11	50.00	-26.89	Neutral	-
Mode 2	Pass	QP	161.82k	39.39	65.37	-25.98	Line	-
Mode 2	Pass	AV	161.82k	25.30	55.37	-30.07	Line	-
Mode 2	Pass	QP	245.097k	34.46	61.93	-27.47	Line	-
Mode 2	Pass	AV	245.097k	21.95	51.93	-29.98	Line	-
Mode 2	Pass	QP	723.06k	31.99	56.00	-24.01	Line	-
Mode 2	Pass	AV	723.06k	21.58	46.00	-24.42	Line	-
Mode 2	Pass	QP	815.052k	37.31	56.00	-18.69	Line	-
Mode 2	Pass	AV	815.052k	26.03	46.00	-19.97	Line	-
Mode 2	Pass	QP	3.73M	26.70	56.00	-29.30	Line	-
Mode 2	Pass	AV	3.73M	21.96	46.00	-24.04	Line	-
Mode 2	Pass	QP	16.734M	29.96	60.00	-30.04	Line	-
Mode 2	Pass	AV	16.734M	21.53	50.00	-28.47	Line	-
Mode 2	Pass	QP	168.41k	38.63	65.04	-26.41	Neutral	-
Mode 2	Pass	AV	168.41k	25.00	55.04	-30.04	Neutral	-
Mode 2	Pass	QP	255.079k	32.38	61.58	-29.20	Neutral	-
Mode 2	Pass	AV	255.079k	19.58	51.58	-32.00	Neutral	-
Mode 2	Pass	QP	723.06k	31.09	56.00	-24.91	Neutral	-
Mode 2	Pass	AV	723.06k	23.75	46.00	-22.25	Neutral	-
Mode 2	Pass	QP	811.805k	35.42	56.00	-20.58	Neutral	-
Mode 2	Pass	AV	811.805k	28.35	46.00	-17.65	Neutral	-
Mode 2	Pass	QP	4.609M	27.32	56.00	-28.68	Neutral	-
Mode 2	Pass	AV	4.609M	21.99	46.00	-24.01	Neutral	-
Mode 2	Pass	QP	16.668M	30.09	60.00	-29.91	Neutral	-
Mode 2	Pass	AV	16.668M	25.19	50.00	-24.81	Neutral	-

Conducted Emissions at Powerline_Mode 1



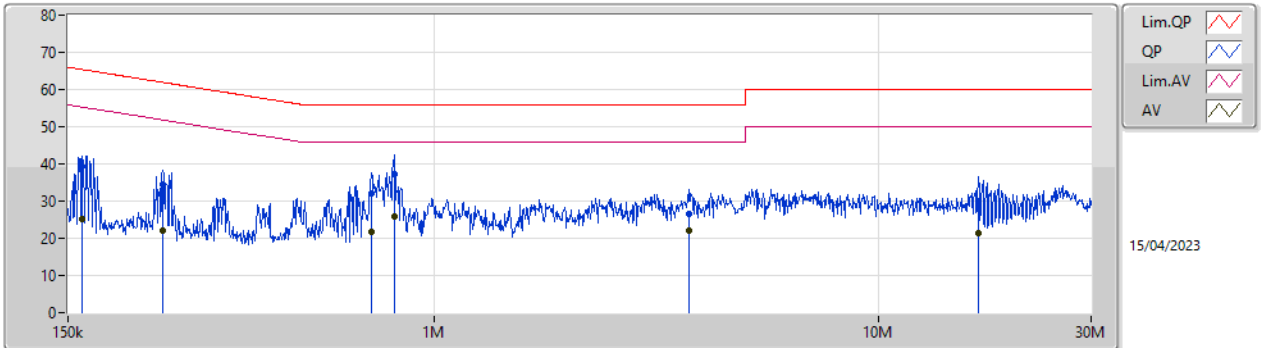
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QP	153.024k	58.79	65.83	-7.04	19.61	Line	-	39.18	9.65	0.03	9.93
AV	153.024k	34.99	55.83	-20.84	19.61	Line	-	15.38	9.65	0.03	9.93
QP	187.577k	53.78	64.15	-10.37	19.61	Line	-	34.17	9.65	0.03	9.93
AV	187.577k	32.08	54.15	-22.07	19.61	Line	-	12.47	9.65	0.03	9.93
QP	621.288k	31.39	56.00	-24.61	19.63	Line	-	11.76	9.64	0.04	9.95
AV	621.288k	21.12	46.00	-24.88	19.63	Line	-	1.49	9.64	0.04	9.95
QP	3.584M	33.12	56.00	-22.88	19.75	Line	-	13.37	9.70	0.12	9.93
AV	3.584M	27.93	46.00	-18.07	19.75	Line	-	8.18	9.70	0.12	9.93
QP	5.672M	34.46	60.00	-25.54	19.83	Line	-	14.63	9.74	0.15	9.94
AV	5.672M	29.55	50.00	-20.45	19.83	Line	-	9.72	9.74	0.15	9.94
QP	16.535M	31.97	60.00	-28.03	20.01	Line	-	11.96	9.79	0.25	9.97
AV	16.535M	25.15	50.00	-24.85	20.01	Line	-	5.14	9.79	0.25	9.97

Conducted Emissions at Powerline_Mode 1



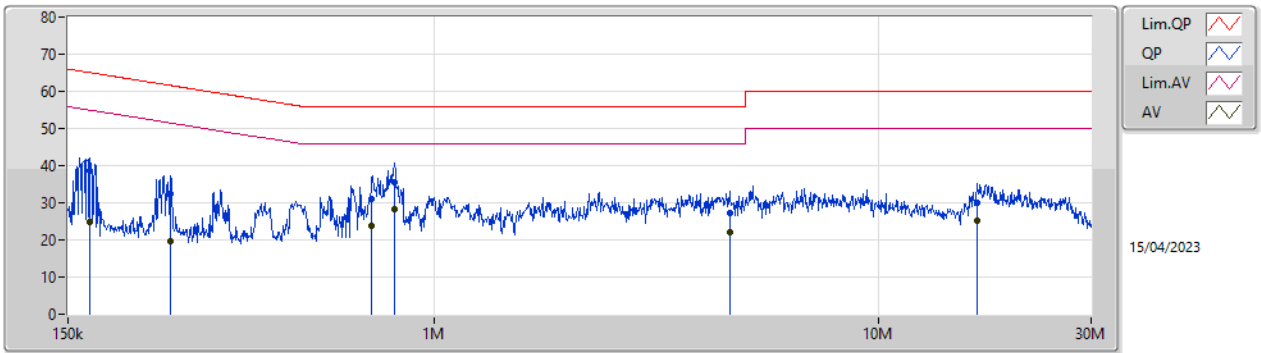
Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	150.6k	59.98	65.96	-5.98	19.59	Neutral	-	40.39	9.63	0.03	9.93
AV	150.6k	38.11	55.96	-17.85	19.59	Neutral	-	18.52	9.63	0.03	9.93
QP	186.085k	53.89	64.20	-10.31	19.58	Neutral	-	34.31	9.62	0.03	9.93
AV	186.085k	32.15	54.20	-22.05	19.58	Neutral	-	12.57	9.62	0.03	9.93
QP	683.758k	35.44	56.00	-20.56	19.64	Neutral	-	15.80	9.64	0.05	9.95
AV	683.758k	26.64	46.00	-19.36	19.64	Neutral	-	7.00	9.64	0.05	9.95
QP	2.05M	29.10	56.00	-26.90	19.68	Neutral	-	9.42	9.66	0.08	9.94
AV	2.05M	23.45	46.00	-22.55	19.68	Neutral	-	3.77	9.66	0.08	9.94
QP	4.411M	23.86	56.00	-32.14	19.76	Neutral	-	4.10	9.69	0.14	9.93
AV	4.411M	19.65	46.00	-26.35	19.76	Neutral	-	-0.11	9.69	0.14	9.93
QP	16.535M	31.04	60.00	-28.96	20.13	Neutral	-	10.91	9.91	0.25	9.97
AV	16.535M	23.11	50.00	-26.89	20.13	Neutral	-	2.98	9.91	0.25	9.97

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	39.39	65.37	-25.98	19.61	Line	-	19.78	9.65	0.03	9.93
AV	161.82k	25.30	55.37	-30.07	19.61	Line	-	5.69	9.65	0.03	9.93
QP	245.097k	34.46	61.93	-27.47	19.62	Line	-	14.84	9.65	0.03	9.94
AV	245.097k	21.95	51.93	-29.98	19.62	Line	-	2.33	9.65	0.03	9.94
QP	723.06k	31.99	56.00	-24.01	19.65	Line	-	12.34	9.65	0.05	9.95
AV	723.06k	21.58	46.00	-24.42	19.65	Line	-	1.93	9.65	0.05	9.95
QP	815.052k	37.31	56.00	-18.69	19.64	Line	-	17.67	9.65	0.05	9.94
AV	815.052k	26.03	46.00	-19.97	19.64	Line	-	6.39	9.65	0.05	9.94
QP	3.73M	26.70	56.00	-29.30	19.76	Line	-	6.94	9.70	0.13	9.93
AV	3.73M	21.96	46.00	-24.04	19.76	Line	-	2.20	9.70	0.13	9.93
QP	16.734M	29.96	60.00	-30.04	20.01	Line	-	9.95	9.79	0.25	9.97
AV	16.734M	21.53	50.00	-28.47	20.01	Line	-	1.52	9.79	0.25	9.97

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	168.41k	38.63	65.04	-26.41	19.59	Neutral	-	19.04	9.63	0.03	9.93
AV	168.41k	25.00	55.04	-30.04	19.59	Neutral	-	5.41	9.63	0.03	9.93
QP	255.079k	32.38	61.58	-29.20	19.59	Neutral	-	12.79	9.62	0.03	9.94
AV	255.079k	19.58	51.58	-32.00	19.59	Neutral	-	-0.01	9.62	0.03	9.94
QP	723.06k	31.09	56.00	-24.91	19.64	Neutral	-	11.45	9.64	0.05	9.95
AV	723.06k	23.75	46.00	-22.25	19.64	Neutral	-	4.11	9.64	0.05	9.95
QP	811.805k	35.42	56.00	-20.58	19.64	Neutral	-	15.78	9.65	0.05	9.94
AV	811.805k	28.35	46.00	-17.65	19.64	Neutral	-	8.71	9.65	0.05	9.94
QP	4.609M	27.32	56.00	-28.68	19.77	Neutral	-	7.55	9.70	0.14	9.93
AV	4.609M	21.99	46.00	-24.01	19.77	Neutral	-	2.22	9.70	0.14	9.93
QP	16.668M	30.09	60.00	-29.91	20.13	Neutral	-	9.96	9.91	0.25	9.97
AV	16.668M	25.19	50.00	-24.81	20.13	Neutral	-	5.06	9.91	0.25	9.97



Summary

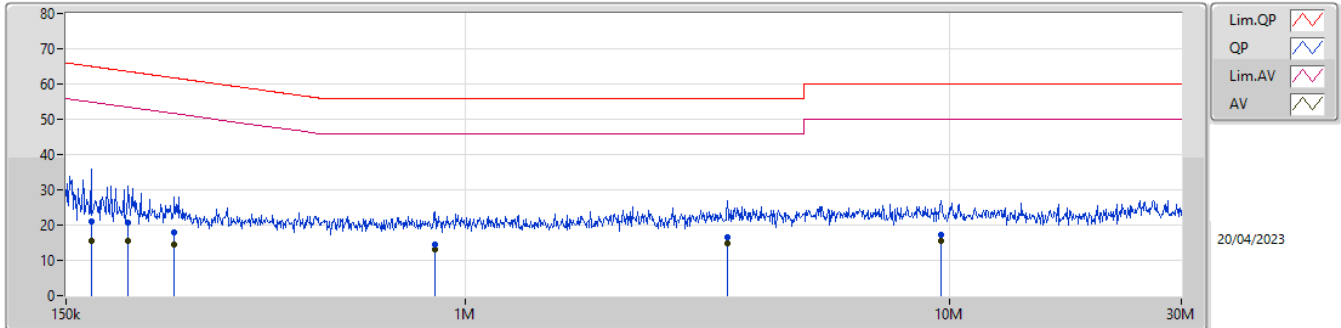
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 3	Pass	AV	3.745M	16.06	46.00	-29.94	Neutral
Mode 4	Pass	QP	152.414k	51.17	65.87	-14.70	Neutral



Result

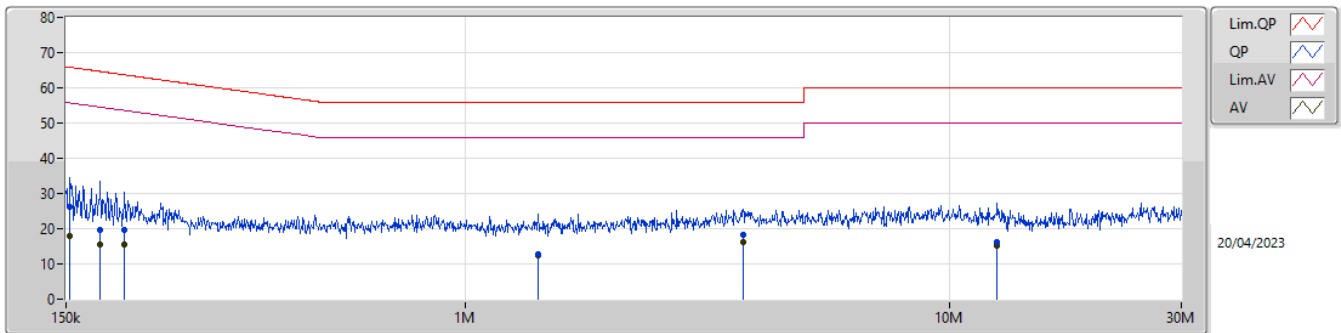
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition	Comments
Mode 3	Pass	QP	169.084k	20.97	65.01	-44.04	Line	-
Mode 3	Pass	AV	169.084k	15.51	55.01	-39.50	Line	-
Mode 3	Pass	QP	201.551k	20.54	63.55	-43.01	Line	-
Mode 3	Pass	AV	201.551k	15.63	53.55	-37.92	Line	-
Mode 3	Pass	QP	251.038k	18.03	61.72	-43.69	Line	-
Mode 3	Pass	AV	251.038k	14.65	51.72	-37.07	Line	-
Mode 3	Pass	QP	865.349k	14.54	56.00	-41.46	Line	-
Mode 3	Pass	AV	865.349k	13.08	46.00	-32.92	Line	-
Mode 3	Pass	QP	3.472M	16.65	56.00	-39.35	Line	-
Mode 3	Pass	AV	3.472M	14.97	46.00	-31.03	Line	-
Mode 3	Pass	QP	9.569M	17.17	60.00	-42.83	Line	-
Mode 3	Pass	AV	9.569M	15.61	50.00	-34.39	Line	-
Mode 3	Pass	QP	153.024k	26.18	65.83	-39.65	Neutral	-
Mode 3	Pass	AV	153.024k	17.98	55.83	-37.85	Neutral	-
Mode 3	Pass	QP	176.674k	19.80	64.64	-44.84	Neutral	-
Mode 3	Pass	AV	176.674k	15.43	54.64	-39.21	Neutral	-
Mode 3	Pass	QP	198.359k	19.67	63.69	-44.02	Neutral	-
Mode 3	Pass	AV	198.359k	15.43	53.69	-38.26	Neutral	-
Mode 3	Pass	QP	1.414M	12.73	56.00	-43.27	Neutral	-
Mode 3	Pass	AV	1.414M	12.31	46.00	-33.69	Neutral	-
Mode 3	Pass	QP	3.745M	18.35	56.00	-37.65	Neutral	-
Mode 3	Pass	AV	3.745M	16.06	46.00	-29.94	Neutral	-
Mode 3	Pass	QP	12.504M	16.31	60.00	-43.69	Neutral	-
Mode 3	Pass	AV	12.504M	15.18	50.00	-34.82	Neutral	-
Mode 4	Pass	QP	154.251k	48.15	65.77	-17.62	Line	-
Mode 4	Pass	AV	154.251k	28.21	55.77	-27.56	Line	-
Mode 4	Pass	QP	188.327k	47.34	64.11	-16.77	Line	-
Mode 4	Pass	AV	188.327k	30.02	54.11	-24.09	Line	-
Mode 4	Pass	QP	502.813k	33.34	56.00	-22.66	Line	-
Mode 4	Pass	AV	502.813k	23.20	46.00	-22.80	Line	-
Mode 4	Pass	QP	3.257M	32.82	56.00	-23.18	Line	-
Mode 4	Pass	AV	3.257M	27.60	46.00	-18.40	Line	-
Mode 4	Pass	QP	5.3M	32.07	60.00	-27.93	Line	-
Mode 4	Pass	AV	5.3M	27.39	50.00	-22.61	Line	-
Mode 4	Pass	QP	15.574M	32.27	60.00	-27.73	Line	-
Mode 4	Pass	AV	15.574M	24.94	50.00	-25.06	Line	-
Mode 4	Pass	QP	152.414k	51.17	65.87	-14.70	Neutral	-
Mode 4	Pass	AV	152.414k	29.98	55.87	-25.89	Neutral	-
Mode 4	Pass	QP	185.344k	48.97	64.24	-15.27	Neutral	-
Mode 4	Pass	AV	185.344k	32.61	54.24	-21.63	Neutral	-
Mode 4	Pass	QP	560.037k	34.81	56.00	-21.19	Neutral	-
Mode 4	Pass	AV	560.037k	25.70	46.00	-20.30	Neutral	-
Mode 4	Pass	QP	3.613M	28.95	56.00	-27.05	Neutral	-
Mode 4	Pass	AV	3.613M	23.98	46.00	-22.02	Neutral	-
Mode 4	Pass	QP	5.516M	27.19	60.00	-32.81	Neutral	-
Mode 4	Pass	AV	5.516M	22.75	50.00	-27.25	Neutral	-
Mode 4	Pass	QP	15.389M	28.76	60.00	-31.24	Neutral	-
Mode 4	Pass	AV	15.389M	21.51	50.00	-28.49	Neutral	-

Conducted Emissions at Powerline_Mode 3



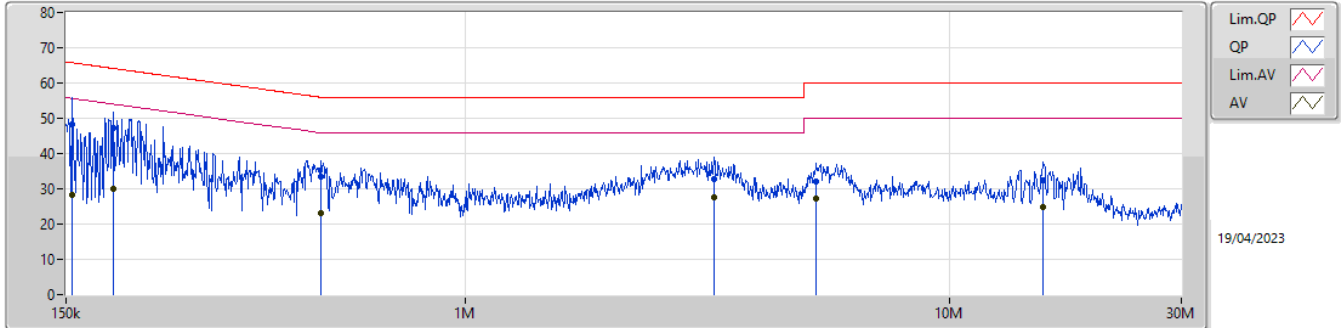
Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	169.084k	20.97	65.01	-44.04	19.61	Line	-	1.36	9.65	0.03	9.93
AV	169.084k	15.51	55.01	-39.50	19.61	Line	-	-4.10	9.65	0.03	9.93
QP	201.551k	20.54	63.55	-43.01	19.61	Line	-	0.93	9.65	0.03	9.93
AV	201.551k	15.63	53.55	-37.92	19.61	Line	-	-3.98	9.65	0.03	9.93
QP	251.038k	18.03	61.72	-43.69	19.62	Line	-	-1.59	9.65	0.03	9.94
AV	251.038k	14.65	51.72	-37.07	19.62	Line	-	-4.97	9.65	0.03	9.94
QP	865.349k	14.54	56.00	-41.46	19.64	Line	-	-5.10	9.65	0.05	9.94
AV	865.349k	13.08	46.00	-32.92	19.64	Line	-	-6.56	9.65	0.05	9.94
QP	3.472M	16.65	56.00	-39.35	19.75	Line	-	-3.10	9.70	0.12	9.93
AV	3.472M	14.97	46.00	-31.03	19.75	Line	-	-4.78	9.70	0.12	9.93
QP	9.569M	17.17	60.00	-42.83	19.94	Line	-	-2.77	9.80	0.18	9.96
AV	9.569M	15.61	50.00	-34.39	19.94	Line	-	-4.33	9.80	0.18	9.96

Conducted Emissions at Powerline_Mode 3



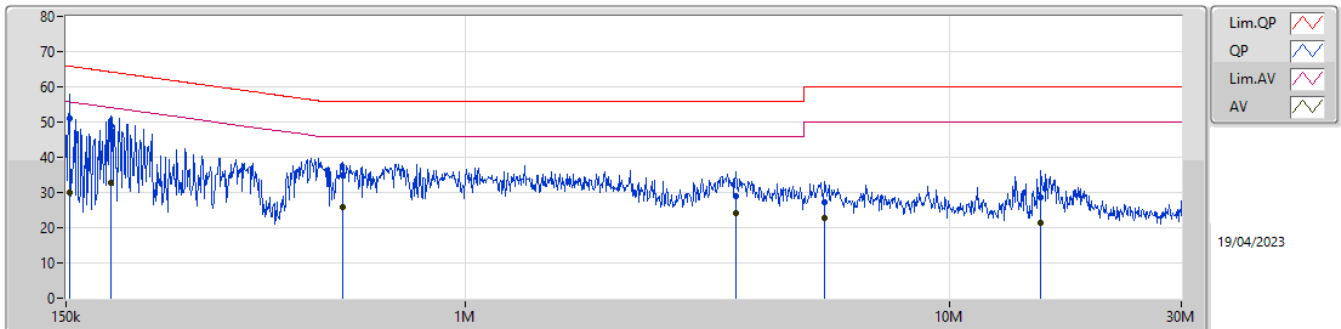
Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	153.024k	26.18	65.83	-39.65	19.59	Neutral	-	6.59	9.63	0.03	9.93
AV	153.024k	17.98	55.83	-37.85	19.59	Neutral	-	-1.61	9.63	0.03	9.93
QP	176.674k	19.80	64.64	-44.84	19.58	Neutral	-	0.22	9.62	0.03	9.93
AV	176.674k	15.43	54.64	-39.21	19.58	Neutral	-	-4.15	9.62	0.03	9.93
QP	198.359k	19.67	63.69	-44.02	19.58	Neutral	-	0.09	9.62	0.03	9.93
AV	198.359k	15.43	53.69	-38.26	19.58	Neutral	-	-4.15	9.62	0.03	9.93
QP	1.414M	12.73	56.00	-43.27	19.65	Neutral	-	-6.92	9.65	0.06	9.94
AV	1.414M	12.31	46.00	-33.69	19.65	Neutral	-	-7.34	9.65	0.06	9.94
QP	3.745M	18.35	56.00	-37.65	19.74	Neutral	-	-1.39	9.68	0.13	9.93
AV	3.745M	16.06	46.00	-29.94	19.74	Neutral	-	-3.68	9.68	0.13	9.93
QP	12.504M	16.31	60.00	-43.69	20.04	Neutral	-	-3.73	9.86	0.21	9.97
AV	12.504M	15.18	50.00	-34.82	20.04	Neutral	-	-4.86	9.86	0.21	9.97

Conducted Emissions at Powerline_Mode 4



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	154.251k	48.15	65.77	-17.62	19.61	Line	-	28.54	9.65	0.03	9.93
AV	154.251k	28.21	55.77	-27.56	19.61	Line	-	8.60	9.65	0.03	9.93
QP	188.327k	47.34	64.11	-16.77	19.61	Line	-	27.73	9.65	0.03	9.93
AV	188.327k	30.02	54.11	-24.09	19.61	Line	-	10.41	9.65	0.03	9.93
QP	502.813k	33.34	56.00	-22.66	19.64	Line	-	13.70	9.64	0.04	9.96
AV	502.813k	23.20	46.00	-22.80	19.64	Line	-	3.56	9.64	0.04	9.96
QP	3.257M	32.82	56.00	-23.18	19.74	Line	-	13.08	9.69	0.12	9.93
AV	3.257M	27.60	46.00	-18.40	19.74	Line	-	7.86	9.69	0.12	9.93
QP	5.3M	32.07	60.00	-27.93	19.82	Line	-	12.25	9.73	0.15	9.94
AV	5.3M	27.39	50.00	-22.61	19.82	Line	-	7.57	9.73	0.15	9.94
QP	15.574M	32.27	60.00	-27.73	20.00	Line	-	12.27	9.79	0.24	9.97
AV	15.574M	24.94	50.00	-25.06	20.00	Line	-	4.94	9.79	0.24	9.97

Conducted Emissions at Powerline_Mode 4



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	152.414k	51.17	65.87	-14.70	19.59	Neutral	-	31.58	9.63	0.03	9.93
AV	152.414k	29.98	55.87	-25.89	19.59	Neutral	-	10.39	9.63	0.03	9.93
QP	185.344k	48.97	64.24	-15.27	19.58	Neutral	-	29.39	9.62	0.03	9.93
AV	185.344k	32.61	54.24	-21.63	19.58	Neutral	-	13.03	9.62	0.03	9.93
QP	560.037k	34.81	56.00	-21.19	19.63	Neutral	-	15.18	9.64	0.04	9.95
AV	560.037k	25.70	46.00	-20.30	19.63	Neutral	-	6.07	9.64	0.04	9.95
QP	3.613M	28.95	56.00	-27.05	19.73	Neutral	-	9.22	9.68	0.12	9.93
AV	3.613M	23.98	46.00	-22.02	19.73	Neutral	-	4.25	9.68	0.12	9.93
QP	5.516M	27.19	60.00	-32.81	19.82	Neutral	-	7.37	9.73	0.15	9.94
AV	5.516M	22.75	50.00	-27.25	19.82	Neutral	-	2.93	9.73	0.15	9.94
QP	15.389M	28.76	60.00	-31.24	20.11	Neutral	-	8.65	9.90	0.24	9.97
AV	15.389M	21.51	50.00	-28.49	20.11	Neutral	-	1.40	9.90	0.24	9.97



Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
Proprietary	720k	1.049M	1M05D1D	707.5k	1.04M

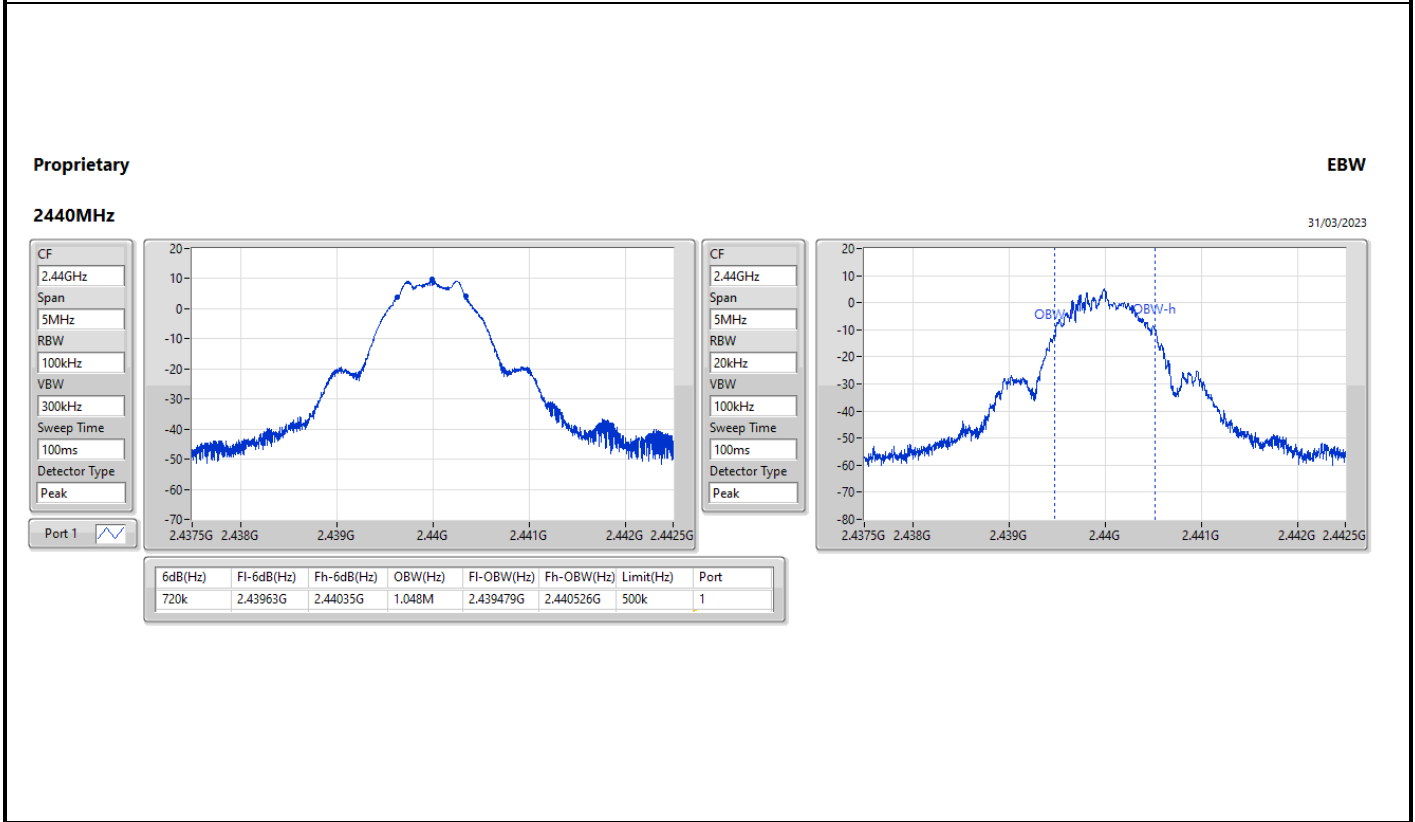
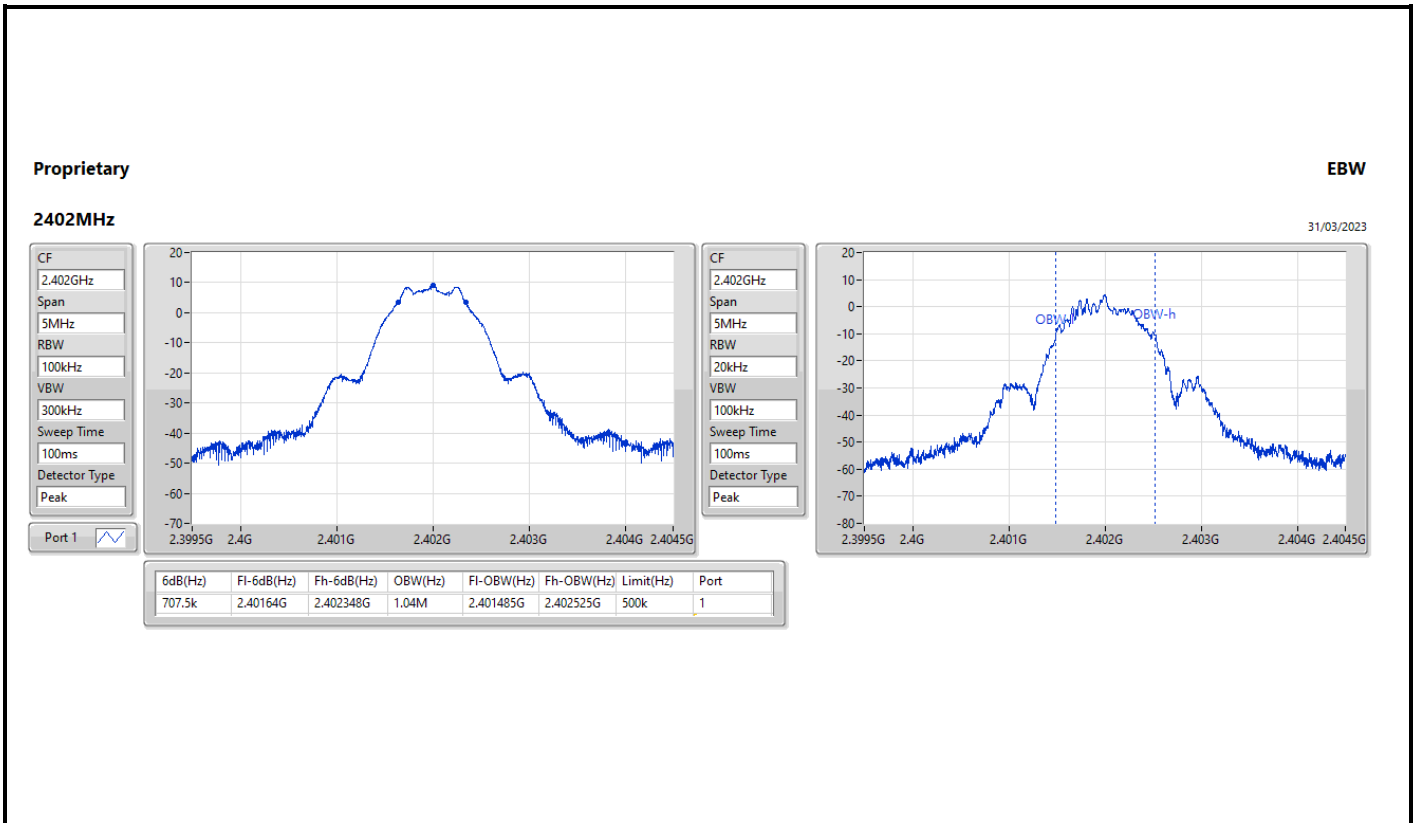
Max-N dB = Maximum 6dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; Min-OBW = Minimum 99% occupied bandwidth

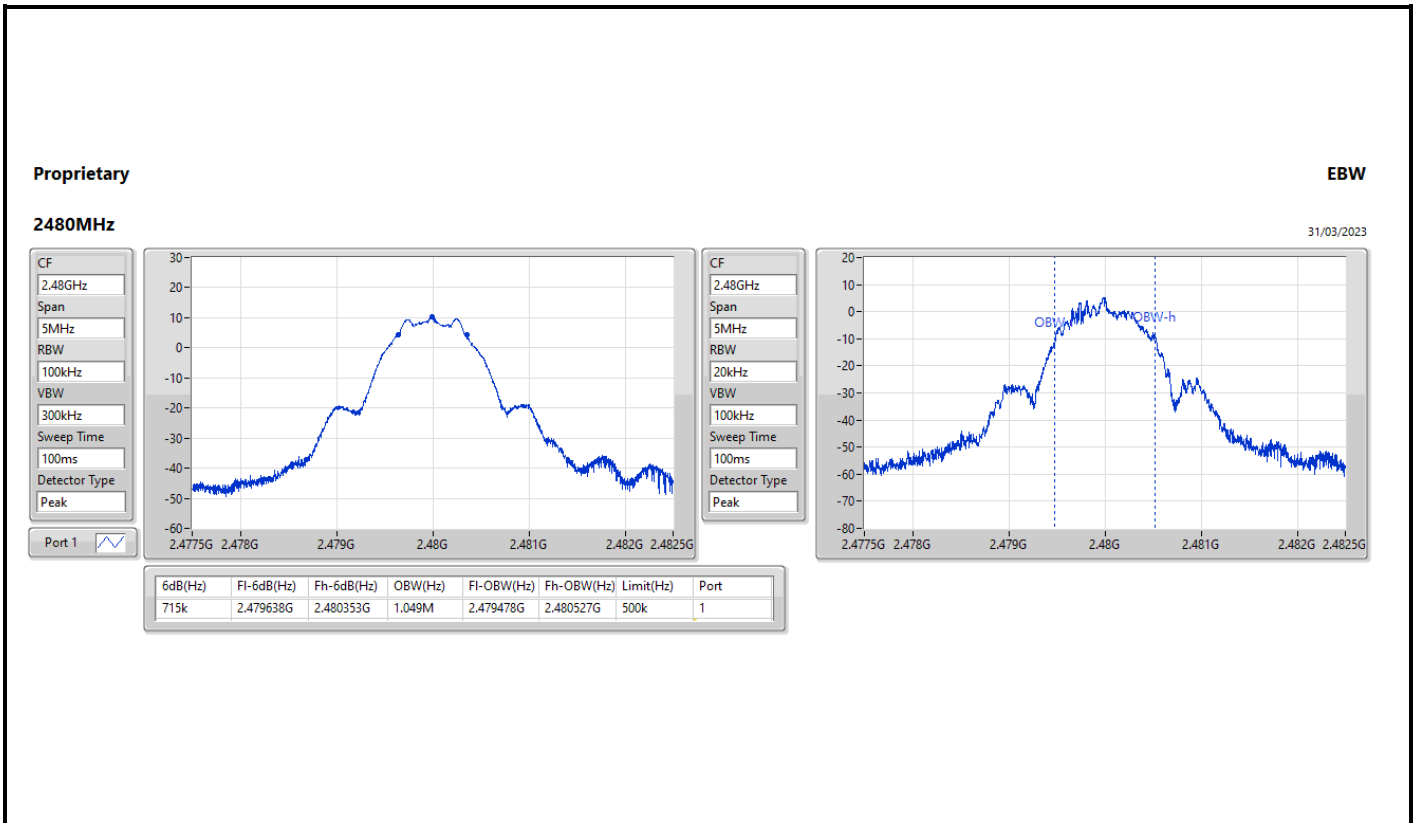


Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
Proprietary	-	-	-	-
2402MHz	Pass	500k	707.5k	1.04M
2440MHz	Pass	500k	720k	1.048M
2480MHz	Pass	500k	715k	1.049M

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







Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
Proprietary	9.80	0.00955



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)
Proprietary	-	-	-	-	-
2402MHz	Pass	0.48	8.99	8.99	30.00
2440MHz	Pass	0.26	9.47	9.47	30.00
2480MHz	Pass	-0.13	9.80	9.80	30.00

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



Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
Proprietary	-5.43

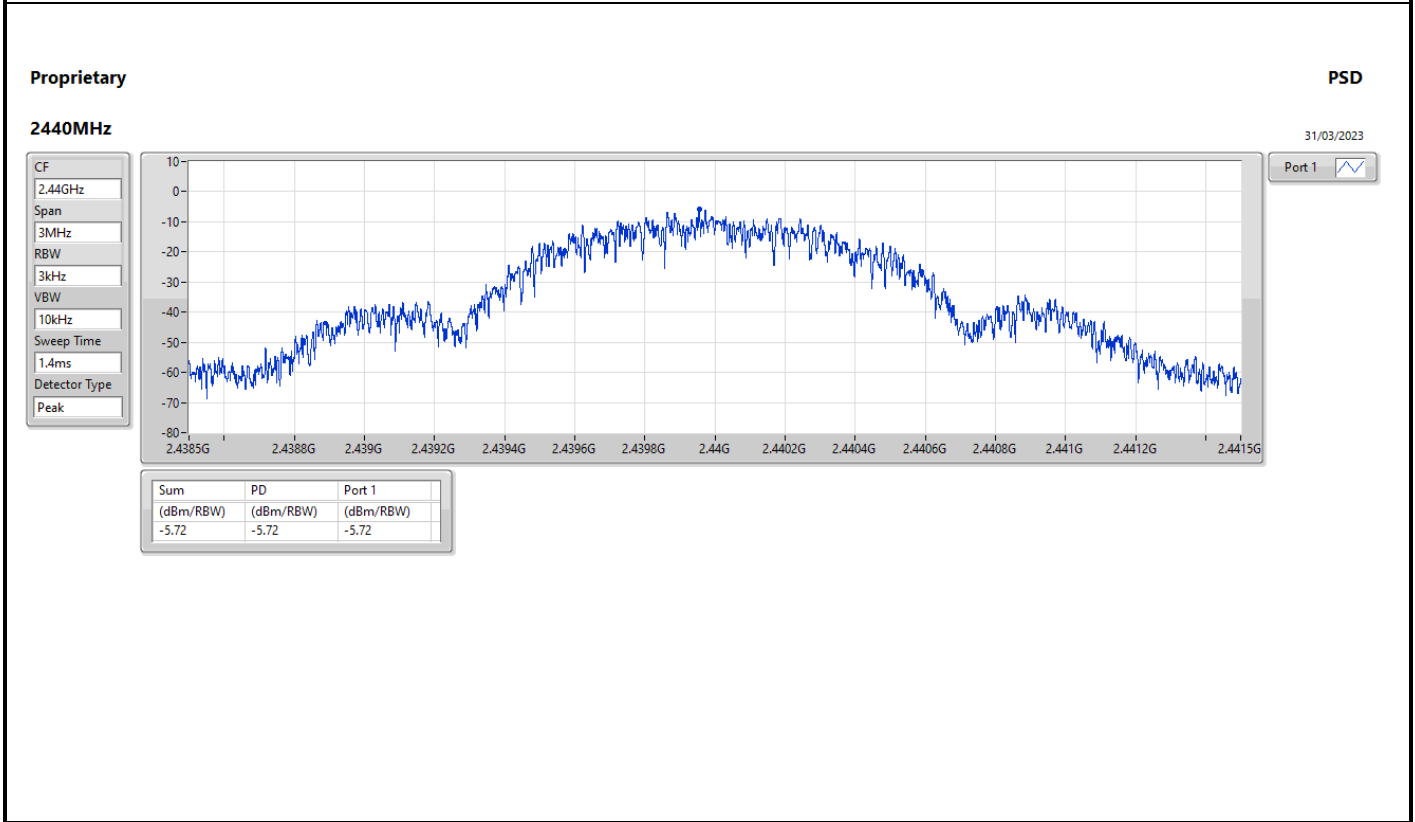
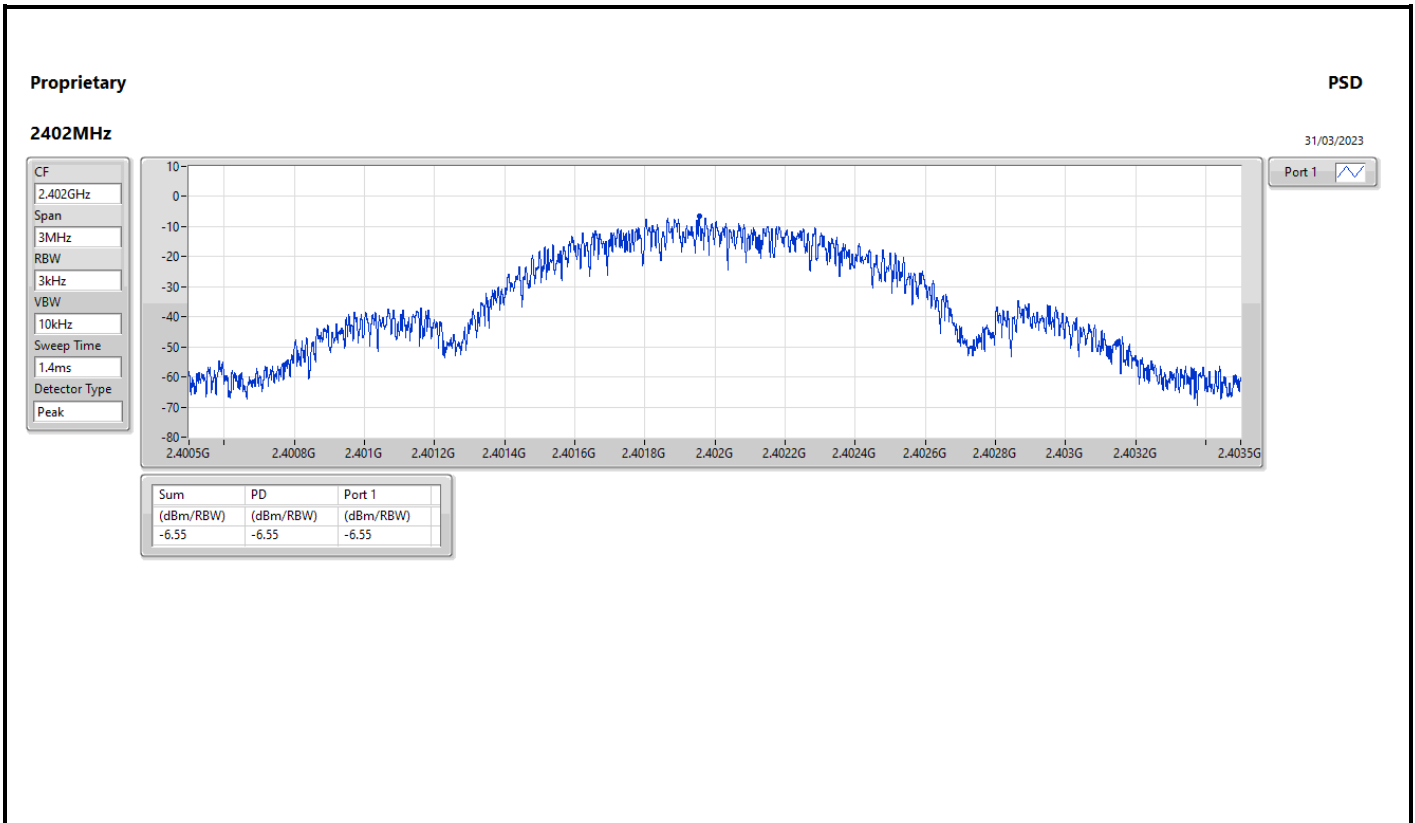
RBW = 3kHz;

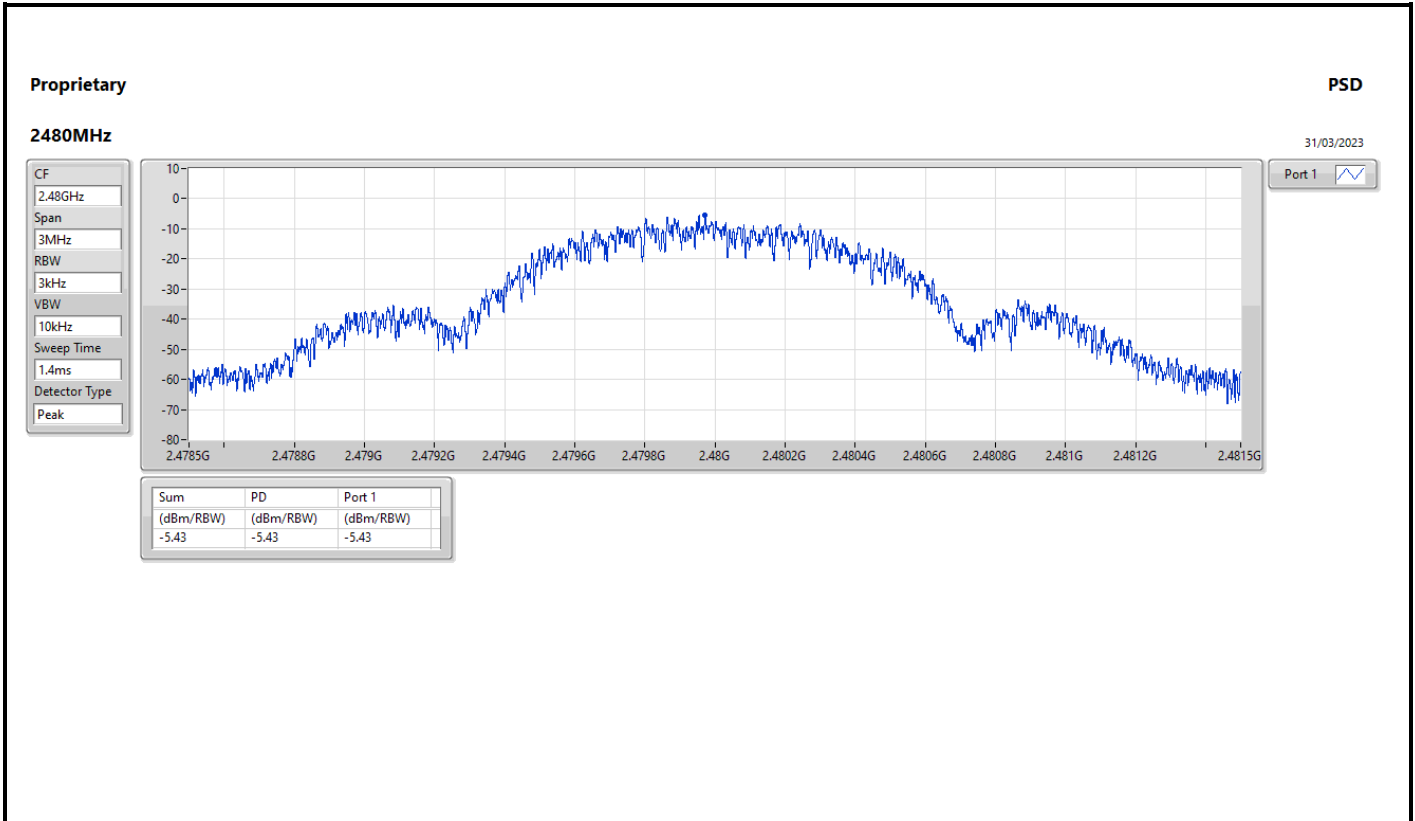


Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
Proprietary	-	-	-	-	-
2402MHz	Pass	0.48	-6.55	-6.55	8.00
2440MHz	Pass	0.26	-5.72	-5.72	8.00
2480MHz	Pass	-0.13	-5.43	-5.43	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;







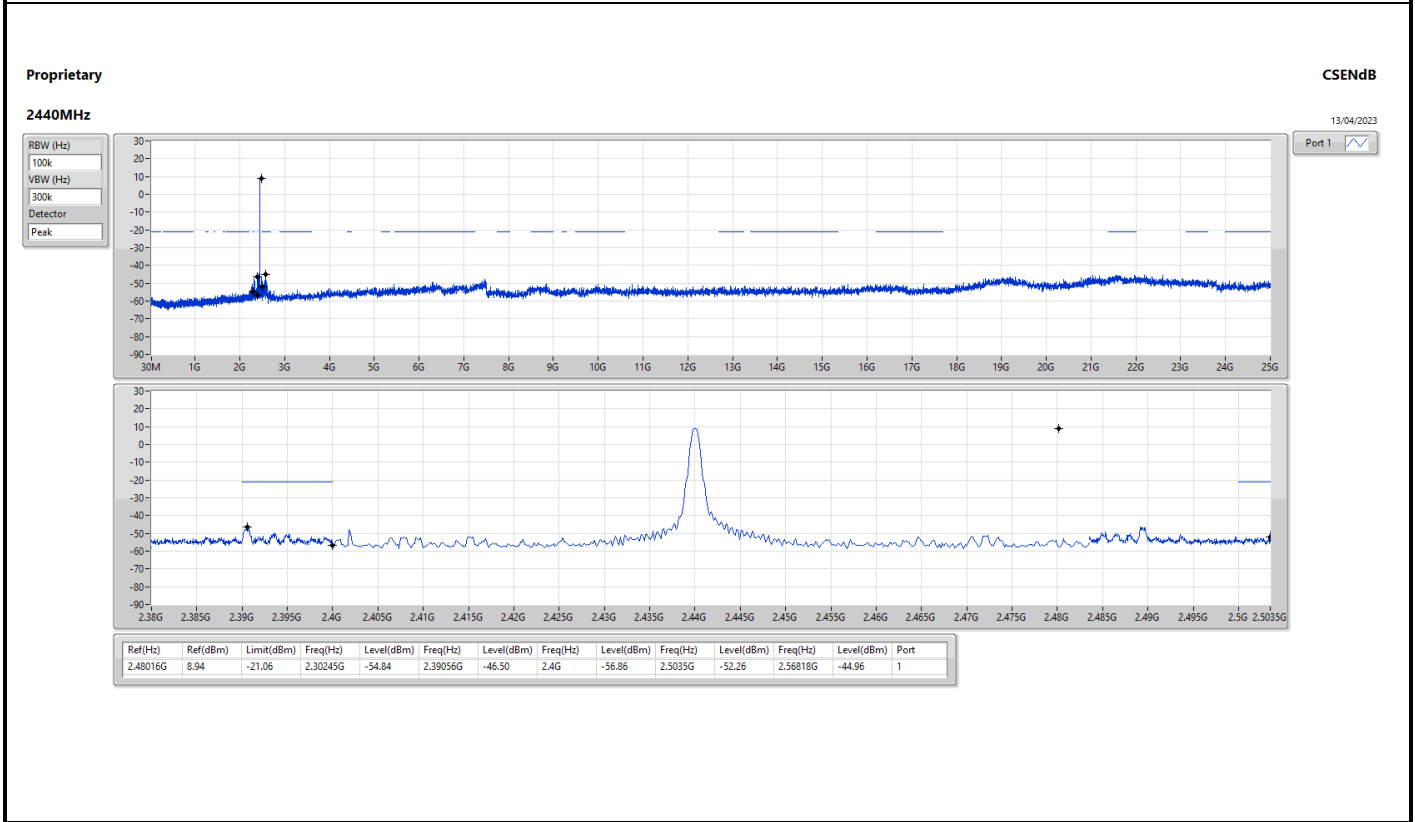
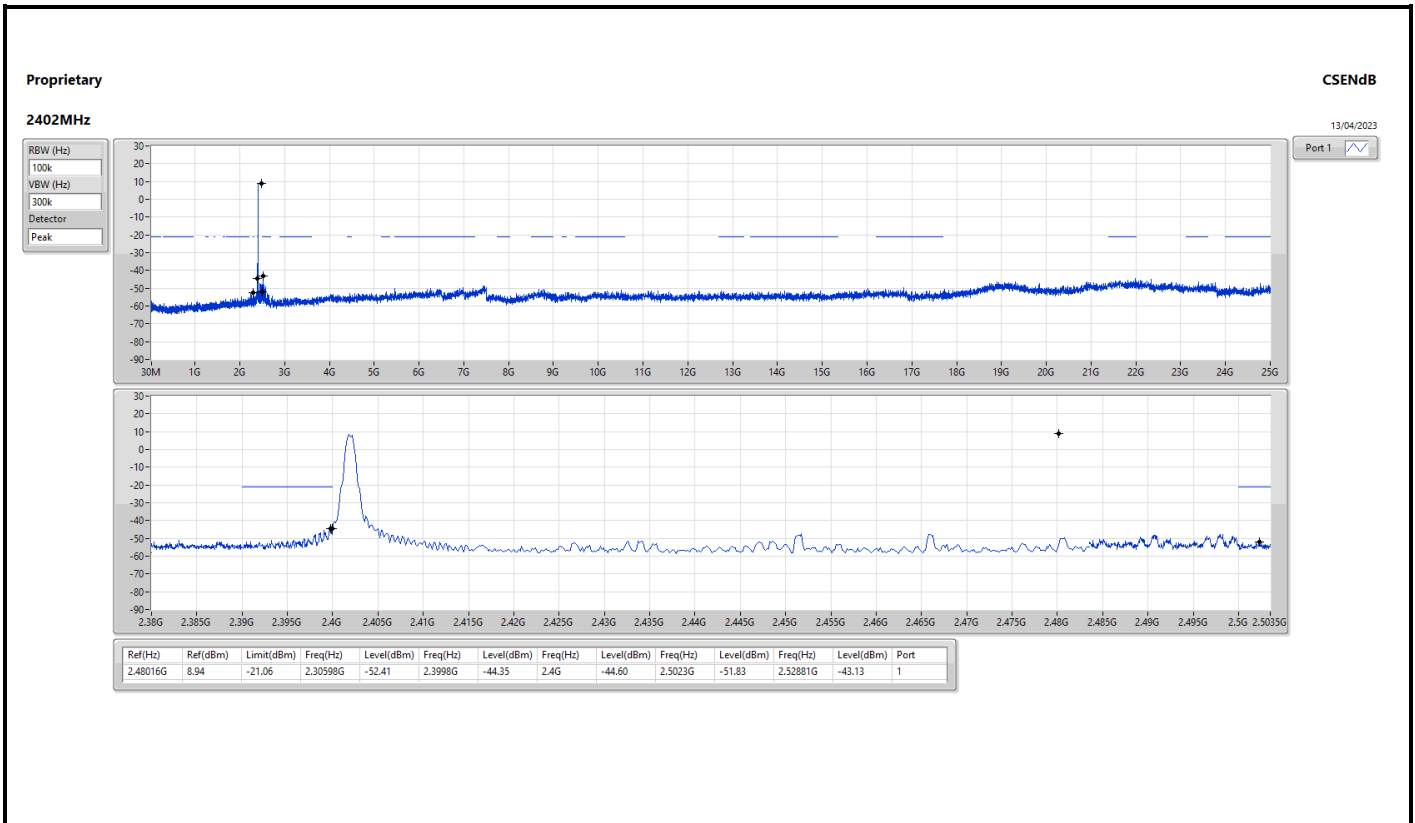
Summary

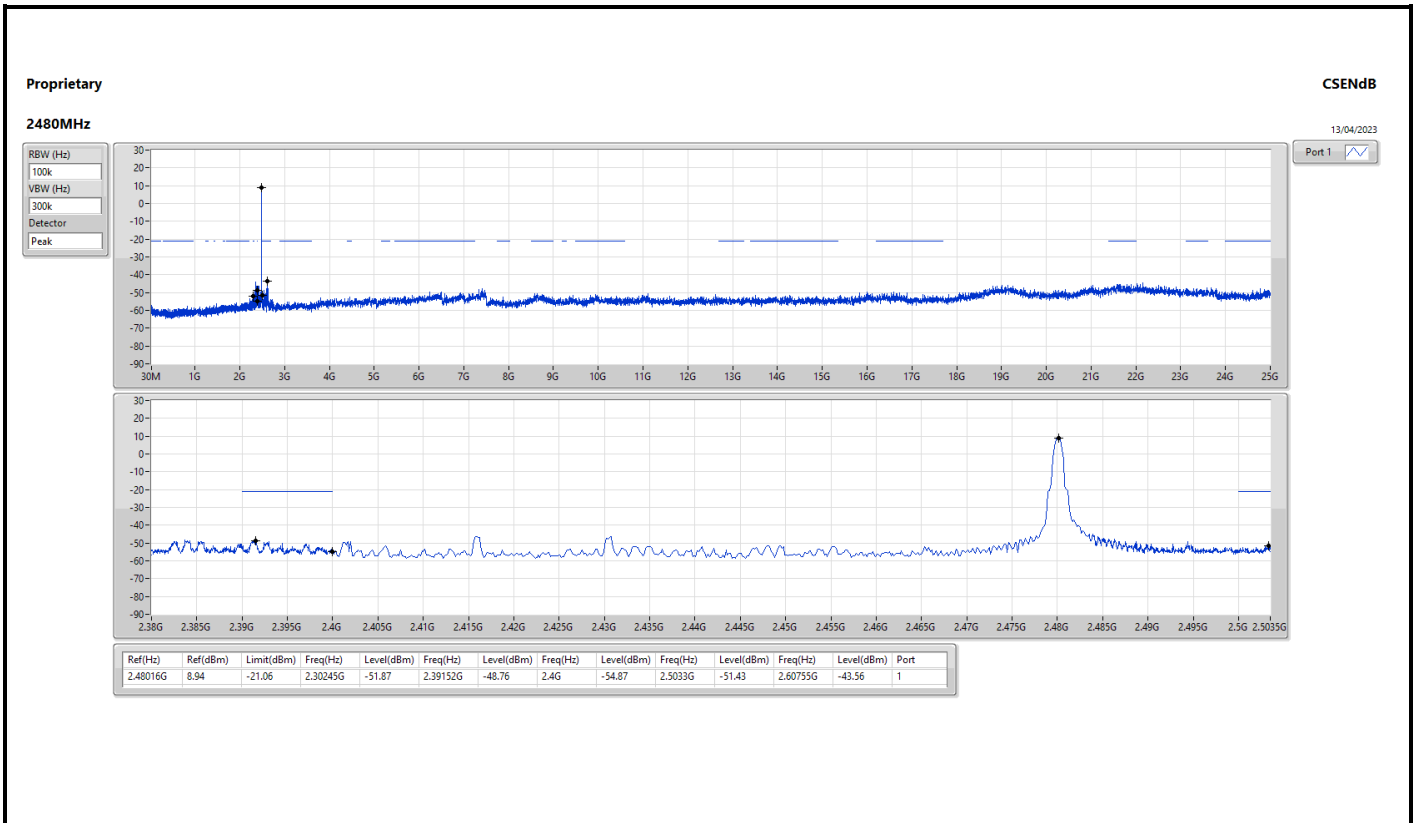
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Proprietary	Pass	2.48016G	8.94	-21.06	2.30598G	-52.41	2.3998G	-44.35	2.4G	-44.60	2.5023G	-51.83	2.52881G	-43.13	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
Proprietary	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.48016G	8.94	-21.06	2.30598G	-52.41	2.3998G	-44.35	2.4G	-44.60	2.5023G	-51.83	2.52881G	-43.13	1
2440MHz	Pass	2.48016G	8.94	-21.06	2.30245G	-54.84	2.39056G	-46.50	2.4G	-56.86	2.5035G	-52.26	2.56818G	-44.96	1
2480MHz	Pass	2.48016G	8.94	-21.06	2.30245G	-51.87	2.39152G	-48.76	2.4G	-54.87	2.5033G	-51.43	2.60755G	-43.56	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	-	-	-	-	-	-	-	-	-	-
Proprietary	Pass	PK	62.98M	29.52	40.00	-10.48	3	Vertical	360	1.00

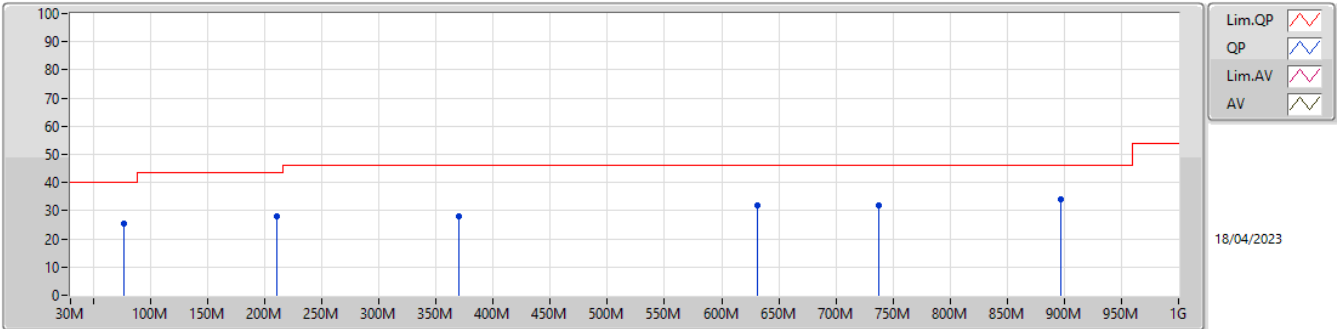


Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
Proprietary	-	-	-	-	-	-	-	-	-	-
2480MHz	Pass	PK	76.56M	25.50	40.00	-14.50	3	Vertical	0	1.00
2480MHz	Pass	PK	210.42M	28.12	43.50	-15.38	3	Vertical	0	1.00
2480MHz	Pass	PK	369.5M	28.11	46.00	-17.89	3	Vertical	0	1.00
2480MHz	Pass	PK	631.4M	31.71	46.00	-14.29	3	Vertical	0	1.00
2480MHz	Pass	PK	738.1M	31.81	46.00	-14.19	3	Vertical	0	1.00
2480MHz	Pass	PK	897.18M	34.18	46.00	-11.82	3	Vertical	0	1.00
2480MHz	Pass	PK	57.16M	23.72	40.00	-16.28	3	Horizontal	360	1.00
2480MHz	Pass	PK	210.42M	29.80	43.50	-13.70	3	Horizontal	360	1.00
2480MHz	Pass	PK	328.76M	26.90	46.00	-19.10	3	Horizontal	360	1.00
2480MHz	Pass	PK	582.9M	29.06	46.00	-16.94	3	Horizontal	360	1.00
2480MHz	Pass	PK	666.32M	31.43	46.00	-14.57	3	Horizontal	360	1.00
2480MHz	Pass	PK	943.74M	35.32	46.00	-10.68	3	Horizontal	360	1.00
2480MHz	Pass	PK	62.98M	29.52	40.00	-10.48	3	Vertical	360	1.00
2480MHz	Pass	PK	210.42M	27.88	43.50	-15.62	3	Vertical	360	1.00
2480MHz	Pass	PK	371.44M	27.53	46.00	-18.47	3	Vertical	360	1.00
2480MHz	Pass	PK	561.56M	29.53	46.00	-16.47	3	Vertical	360	1.00
2480MHz	Pass	PK	631.4M	31.29	46.00	-14.71	3	Vertical	360	1.00
2480MHz	Pass	PK	858.38M	32.98	46.00	-13.02	3	Vertical	360	1.00
2480MHz	Pass	PK	64.92M	23.03	40.00	-16.97	3	Horizontal	0	1.00
2480MHz	Pass	PK	165.8M	22.46	43.50	-21.04	3	Horizontal	0	1.00
2480MHz	Pass	PK	210.42M	30.01	43.50	-13.49	3	Horizontal	0	1.00
2480MHz	Pass	PK	328.76M	27.53	46.00	-18.47	3	Horizontal	0	1.00
2480MHz	Pass	PK	666.32M	30.91	46.00	-15.09	3	Horizontal	0	1.00
2480MHz	Pass	PK	928.22M	35.14	46.00	-10.86	3	Horizontal	0	1.00

2.4-2.4835GHz_Proprietary

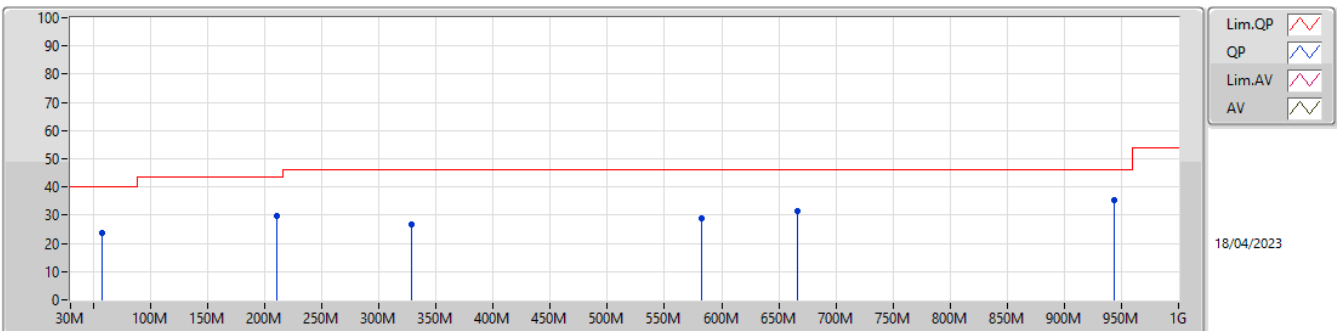
2480MHz_USB



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	76.56M	25.50	40.00	-14.50	-13.96	3	Vertical	0	1.00	39.46	12.08	1.79	27.83
PK	210.42M	28.12	43.50	-15.38	-10.33	3	Vertical	0	1.00	38.45	14.18	2.85	27.36
PK	369.5M	28.11	46.00	-17.89	-4.05	3	Vertical	0	1.00	32.16	19.83	3.75	27.63
PK	631.4M	31.71	46.00	-14.29	2.02	3	Vertical	0	1.00	29.69	25.55	4.99	28.52
PK	738.1M	31.81	46.00	-14.19	4.47	3	Vertical	0	1.00	27.34	27.26	5.47	28.26
PK	897.18M	34.18	46.00	-11.82	6.48	3	Vertical	0	1.00	27.70	28.08	6.16	27.76

2.4-2.4835GHz_Proprietary

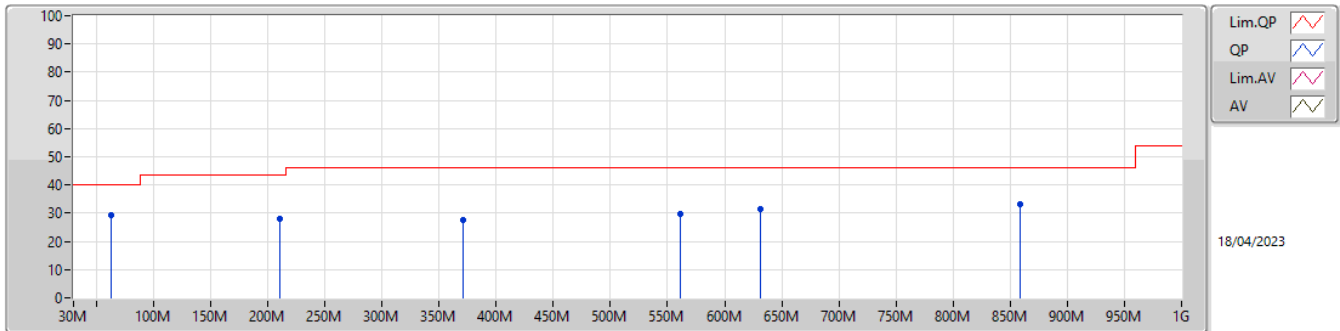
2480MHz_USB



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	57.16M	23.72	40.00	-16.28	-15.04	3	Horizontal	360	1.00	38.76	11.10	1.48	27.62
PK	210.42M	29.80	43.50	-13.70	-10.33	3	Horizontal	360	1.00	40.13	14.18	2.85	27.36
PK	328.76M	26.90	46.00	-19.10	-5.09	3	Horizontal	360	1.00	31.99	18.78	3.50	27.37
PK	582.9M	29.06	46.00	-16.94	0.93	3	Horizontal	360	1.00	28.13	24.77	4.67	28.51
PK	666.32M	31.43	46.00	-14.57	2.17	3	Horizontal	360	1.00	29.26	25.45	5.21	28.49
PK	943.74M	35.32	46.00	-10.68	8.53	3	Horizontal	360	1.00	26.79	29.70	6.39	27.56

2.4-2.4835GHz_Proprietary

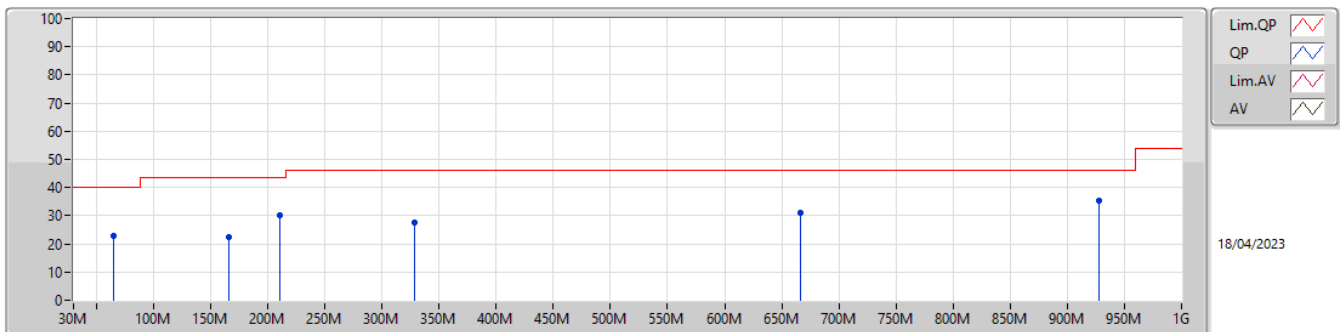
2480MHz_Adapter



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	62.98M	29.52	40.00	-10.48	-15.13	3	Vertical	360	1.00	44.65	11.02	1.57	27.72
PK	210.42M	27.88	43.50	-15.62	-10.33	3	Vertical	360	1.00	38.21	14.18	2.85	27.36
PK	371.44M	27.53	46.00	-18.47	-4.00	3	Vertical	360	1.00	31.53	19.89	3.76	27.65
PK	561.56M	29.53	46.00	-16.47	1.18	3	Vertical	360	1.00	28.35	25.20	4.57	28.59
PK	631.4M	31.29	46.00	-14.71	2.02	3	Vertical	360	1.00	29.27	25.55	4.99	28.52
PK	858.38M	32.98	46.00	-13.02	6.25	3	Vertical	360	1.00	26.73	28.25	5.85	27.85

2.4-2.4835GHz_Proprietary

2480MHz_Adapter



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	64.92M	23.03	40.00	-16.97	-15.02	3	Horizontal	0	1.00	38.05	11.13	1.60	27.75
PK	165.8M	22.46	43.50	-21.04	-9.98	3	Horizontal	0	1.00	32.44	15.12	2.49	27.59
PK	210.42M	30.01	43.50	-13.49	-10.33	3	Horizontal	0	1.00	40.34	14.18	2.85	27.36
PK	328.76M	27.53	46.00	-18.47	-5.09	3	Horizontal	0	1.00	32.62	18.78	3.50	27.37
PK	666.32M	30.91	46.00	-15.09	2.17	3	Horizontal	0	1.00	28.74	25.45	5.21	28.49
PK	928.22M	35.14	46.00	-10.86	7.67	3	Horizontal	0	1.00	27.47	28.98	6.32	27.63



Summary

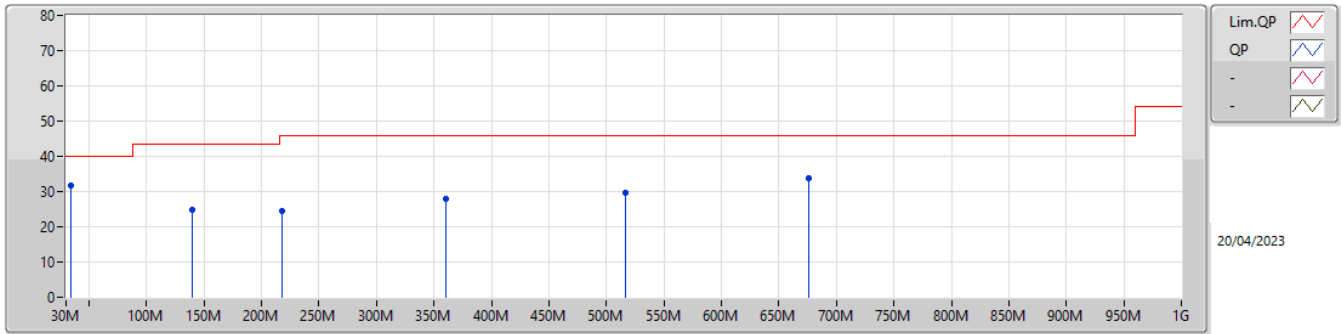
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 3	Pass	PK	30M	35.25	40.00	-4.75	Horizontal
Mode 4	Pass	PK	30M	33.00	40.00	-7.00	Horizontal



Result

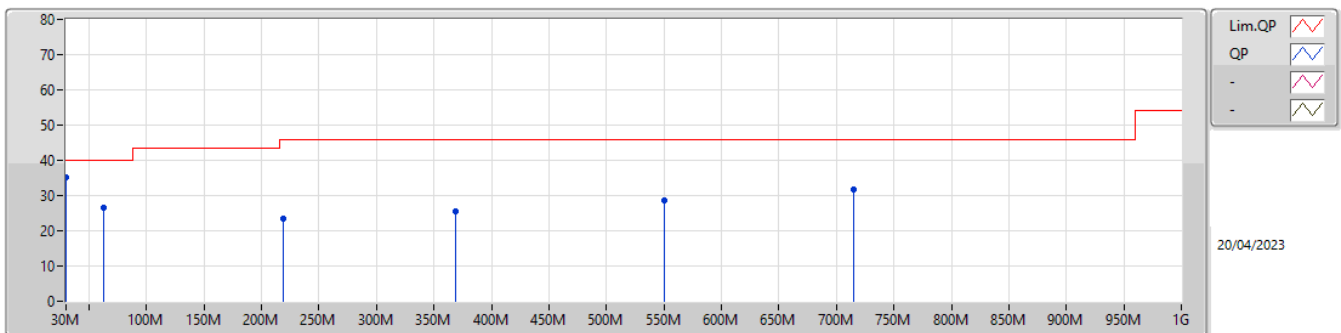
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
Mode 3	Pass	PK	33.88M	31.86	40.00	-8.14	3	Vertical	360	1.00
Mode 3	Pass	PK	139.61M	24.92	43.50	-18.58	3	Vertical	360	1.00
Mode 3	Pass	PK	218.18M	24.59	46.00	-21.41	3	Vertical	360	1.00
Mode 3	Pass	PK	360.77M	27.84	46.00	-18.16	3	Vertical	360	1.00
Mode 3	Pass	PK	516.94M	29.60	46.00	-16.40	3	Vertical	360	1.00
Mode 3	Pass	PK	676.02M	33.95	46.00	-12.05	3	Vertical	360	1.00
Mode 3	Pass	PK	30M	35.25	40.00	-4.75	3	Horizontal	0	1.00
Mode 3	Pass	PK	62.98M	26.52	40.00	-13.48	3	Horizontal	0	1.00
Mode 3	Pass	PK	219.15M	23.51	46.00	-22.49	3	Horizontal	0	1.00
Mode 3	Pass	PK	368.53M	25.62	46.00	-20.38	3	Horizontal	0	1.00
Mode 3	Pass	PK	549.92M	28.50	46.00	-17.50	3	Horizontal	0	1.00
Mode 3	Pass	PK	714.82M	31.71	46.00	-14.29	3	Horizontal	0	1.00
Mode 4	Pass	PK	46.49M	31.52	40.00	-8.48	3	Vertical	0	1.00
Mode 4	Pass	PK	64.92M	29.89	40.00	-10.11	3	Vertical	0	1.00
Mode 4	Pass	PK	240.49M	27.76	46.00	-18.24	3	Vertical	0	1.00
Mode 4	Pass	PK	379.2M	25.89	46.00	-20.11	3	Vertical	0	1.00
Mode 4	Pass	PK	641.1M	29.29	46.00	-16.71	3	Vertical	0	1.00
Mode 4	Pass	PK	718.7M	31.11	46.00	-14.89	3	Vertical	0	1.00
Mode 4	Pass	PK	30M	33.00	40.00	-7.00	3	Horizontal	360	1.00
Mode 4	Pass	PK	41.64M	29.44	40.00	-10.56	3	Horizontal	360	1.00
Mode 4	Pass	PK	240.49M	26.96	46.00	-19.04	3	Horizontal	360	1.00
Mode 4	Pass	PK	315.18M	24.08	46.00	-21.92	3	Horizontal	360	1.00
Mode 4	Pass	PK	464.56M	27.56	46.00	-18.44	3	Horizontal	360	1.00
Mode 4	Pass	PK	688.63M	30.10	46.00	-15.90	3	Horizontal	360	1.00

Radiated Emissions below 1GHz_Mode 3



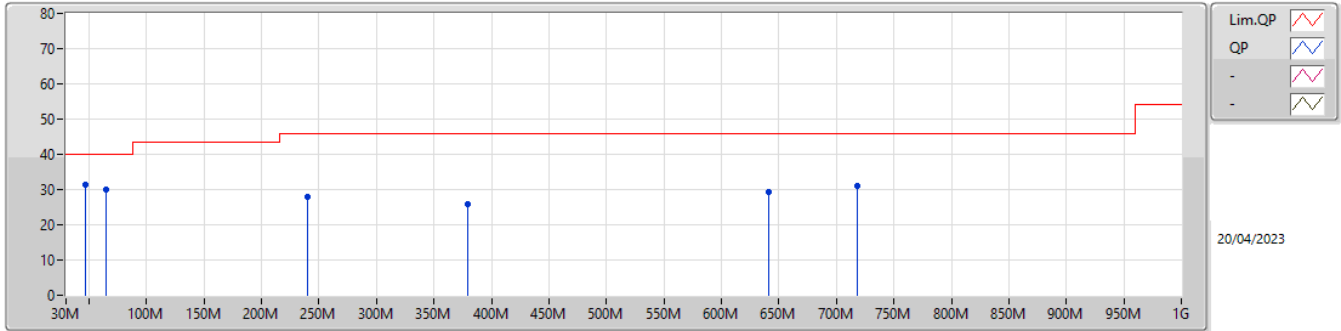
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	33.88M	31.86	40.00	-8.14	-3.20	3	Vertical	360	1.00	-	35.06	22.19	1.31	26.70
PK	139.61M	24.92	43.50	-18.58	-8.81	3	Vertical	360	1.00	-	33.73	16.58	2.33	27.72
PK	218.18M	24.59	46.00	-21.41	-10.18	3	Vertical	360	1.00	-	34.77	14.25	2.89	27.32
PK	360.77M	27.84	46.00	-18.16	-4.14	3	Vertical	360	1.00	-	31.98	19.72	3.71	27.57
PK	516.94M	29.60	46.00	-16.40	-0.84	3	Vertical	360	1.00	-	30.44	23.15	4.45	28.44
PK	676.02M	33.95	46.00	-12.05	2.34	3	Vertical	360	1.00	-	31.61	25.53	5.26	28.45

Radiated Emissions below 1GHz_Mode 3



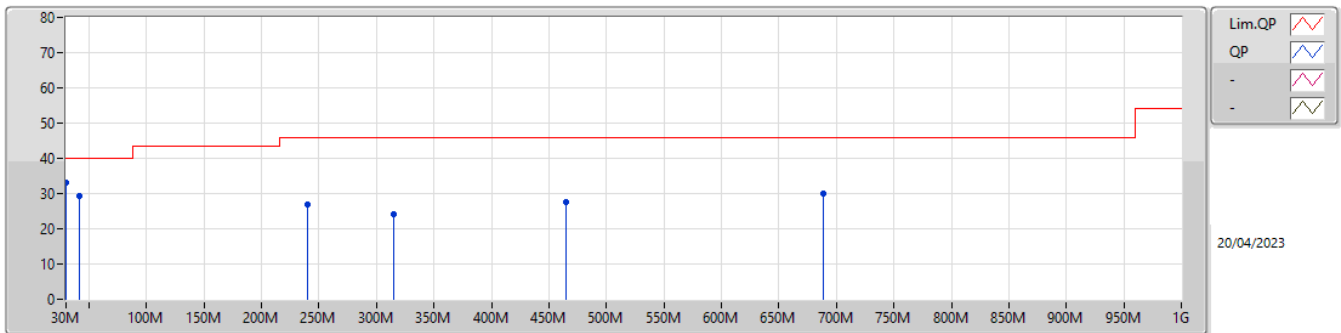
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	30M	35.25	40.00	-4.75	-1.69	3	Horizontal	0	1.00	-	36.94	24.06	1.21	26.96
PK	62.98M	26.52	40.00	-13.48	-15.13	3	Horizontal	0	1.00	-	41.65	11.02	1.57	27.72
PK	219.15M	23.51	46.00	-22.49	-10.10	3	Horizontal	0	1.00	-	33.61	14.32	2.89	27.31
PK	368.53M	25.62	46.00	-20.38	-4.07	3	Horizontal	0	1.00	-	29.69	19.81	3.75	27.63
PK	549.92M	28.50	46.00	-17.50	0.46	3	Horizontal	0	1.00	-	28.04	24.58	4.52	28.64
PK	714.82M	31.71	46.00	-14.29	3.20	3	Horizontal	0	1.00	-	28.51	26.09	5.42	28.31

Radiated Emissions below 1GHz_Mode 4



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	46.49M	31.52	40.00	-8.48	-10.50	3	Vertical	0	1.00	-	42.02	15.29	1.45	27.24
PK	64.92M	29.89	40.00	-10.11	-15.02	3	Vertical	0	1.00	-	44.91	11.13	1.60	27.75
PK	240.49M	27.76	46.00	-18.24	-7.93	3	Vertical	0	1.00	-	35.69	16.29	2.99	27.21
PK	379.2M	25.89	46.00	-20.11	-3.81	3	Vertical	0	1.00	-	29.70	20.09	3.80	27.70
PK	641.1M	29.29	46.00	-16.71	2.14	3	Vertical	0	1.00	-	27.15	25.62	5.06	28.54
PK	718.7M	31.11	46.00	-14.89	3.41	3	Vertical	0	1.00	-	27.70	26.29	5.42	28.30

Radiated Emissions below 1GHz_Mode 4



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	30M	33.00	40.00	-7.00	-1.69	3	Horizontal	360	1.00	-	34.69	24.06	1.21	26.96
PK	41.64M	29.44	40.00	-10.56	-7.63	3	Horizontal	360	1.00	-	37.07	17.86	1.43	26.92
PK	240.49M	26.96	46.00	-19.04	-7.93	3	Horizontal	360	1.00	-	34.89	16.29	2.99	27.21
PK	315.18M	24.08	46.00	-21.92	-5.48	3	Horizontal	360	1.00	-	29.56	18.40	3.40	27.28
PK	464.56M	27.56	46.00	-18.44	-1.52	3	Horizontal	360	1.00	-	29.08	22.45	4.32	28.29
PK	688.63M	30.10	46.00	-15.90	2.63	3	Horizontal	360	1.00	-	27.47	25.70	5.32	28.39



Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-
Proprietary	Pass	PK	2.4835G	69.12	74.00	-4.88	3	Vertical	7	1.60

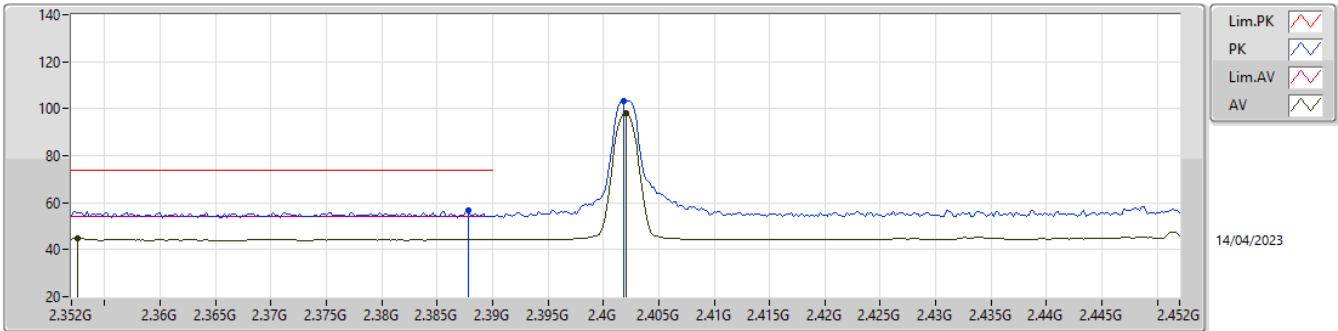


Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
Proprietary	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3526G	45.06	54.00	-8.94	3	Vertical	286	2.09
2402MHz	Pass	AV	2.402G	98.33	Inf	-Inf	3	Vertical	286	2.09
2402MHz	Pass	PK	2.3878G	56.56	74.00	-17.44	3	Vertical	286	2.09
2402MHz	Pass	PK	2.4018G	103.22	Inf	-Inf	3	Vertical	286	2.09
2402MHz	Pass	AV	2.3526G	45.25	54.00	-8.75	3	Horizontal	16	2.04
2402MHz	Pass	AV	2.402G	98.25	Inf	-Inf	3	Horizontal	16	2.04
2402MHz	Pass	PK	2.3852G	57.13	74.00	-16.87	3	Horizontal	16	2.04
2402MHz	Pass	PK	2.4018G	103.12	Inf	-Inf	3	Horizontal	16	2.04
2402MHz	Pass	AV	4.80386G	39.56	54.00	-14.44	3	Vertical	121	2.35
2402MHz	Pass	PK	4.80349G	50.15	74.00	-23.85	3	Vertical	121	2.35
2402MHz	Pass	AV	4.80392G	47.36	54.00	-6.64	3	Horizontal	150	2.09
2402MHz	Pass	PK	4.8034G	56.23	74.00	-17.77	3	Horizontal	150	2.09
2440MHz	Pass	AV	2.376G	47.40	54.00	-6.60	3	Vertical	10	1.42
2440MHz	Pass	AV	2.44G	102.71	Inf	-Inf	3	Vertical	10	1.42
2440MHz	Pass	AV	2.4896G	49.01	54.00	-4.99	3	Vertical	10	1.42
2440MHz	Pass	PK	2.3768G	56.59	74.00	-17.41	3	Vertical	10	1.42
2440MHz	Pass	PK	2.4404G	107.01	Inf	-Inf	3	Vertical	10	1.42
2440MHz	Pass	PK	2.4892G	58.42	74.00	-15.58	3	Vertical	10	1.42
2440MHz	Pass	AV	2.376G	46.46	54.00	-7.54	3	Horizontal	299	1.50
2440MHz	Pass	AV	2.44G	101.18	Inf	-Inf	3	Horizontal	299	1.50
2440MHz	Pass	AV	2.4896G	48.39	54.00	-5.61	3	Horizontal	299	1.50
2440MHz	Pass	PK	2.3764G	57.53	74.00	-16.47	3	Horizontal	299	1.50
2440MHz	Pass	PK	2.4396G	105.47	Inf	-Inf	3	Horizontal	299	1.50
2440MHz	Pass	PK	2.4892G	58.08	74.00	-15.92	3	Horizontal	299	1.50
2440MHz	Pass	AV	4.87965G	34.47	54.00	-19.53	3	Vertical	173	1.71
2440MHz	Pass	PK	4.87942G	46.40	74.00	-27.60	3	Vertical	173	1.71
2440MHz	Pass	AV	4.87995G	36.05	54.00	-17.95	3	Horizontal	139	2.00
2440MHz	Pass	PK	4.88016G	47.86	74.00	-26.14	3	Horizontal	139	2.00
2480MHz	Pass	AV	2.48G	102.93	Inf	-Inf	3	Vertical	7	1.60
2480MHz	Pass	AV	2.4835G	46.93	54.00	-7.07	3	Vertical	7	1.60
2480MHz	Pass	PK	2.4802G	107.26	Inf	-Inf	3	Vertical	7	1.60
2480MHz	Pass	PK	2.4835G	69.12	74.00	-4.88	3	Vertical	7	1.60
2480MHz	Pass	AV	2.48G	101.31	Inf	-Inf	3	Horizontal	300	1.66
2480MHz	Pass	AV	2.4835G	46.48	54.00	-7.52	3	Horizontal	300	1.66
2480MHz	Pass	PK	2.4802G	105.53	Inf	-Inf	3	Horizontal	300	1.66
2480MHz	Pass	PK	2.4835G	67.05	74.00	-6.95	3	Horizontal	300	1.66
2480MHz	Pass	AV	4.95976G	36.46	54.00	-17.54	3	Vertical	141	2.31
2480MHz	Pass	PK	4.95774G	47.91	74.00	-26.09	3	Vertical	141	2.31
2480MHz	Pass	AV	4.95989G	39.19	54.00	-14.81	3	Horizontal	160	2.08
2480MHz	Pass	PK	4.96056G	49.79	74.00	-24.21	3	Horizontal	160	2.08

2.4-2.4835GHz_Proprietary

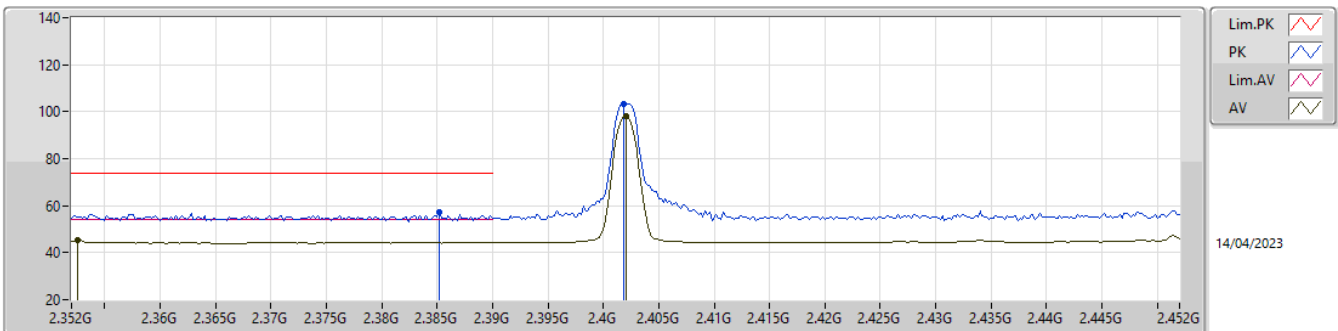
2402MHz_TX



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	2.3526G	45.06	54.00	-8.94	31.03	3	Vertical	286	2.09	14.03	27.31	3.72	-
AV	2.402G	98.33	Inf	-Inf	31.17	3	Vertical	286	2.09	67.16	27.40	3.77	-
PK	2.3878G	56.56	74.00	-17.44	31.14	3	Vertical	286	2.09	25.42	27.38	3.76	-
PK	2.4018G	103.22	Inf	-Inf	31.17	3	Vertical	286	2.09	72.05	27.40	3.77	-

2.4-2.4835GHz_Proprietary

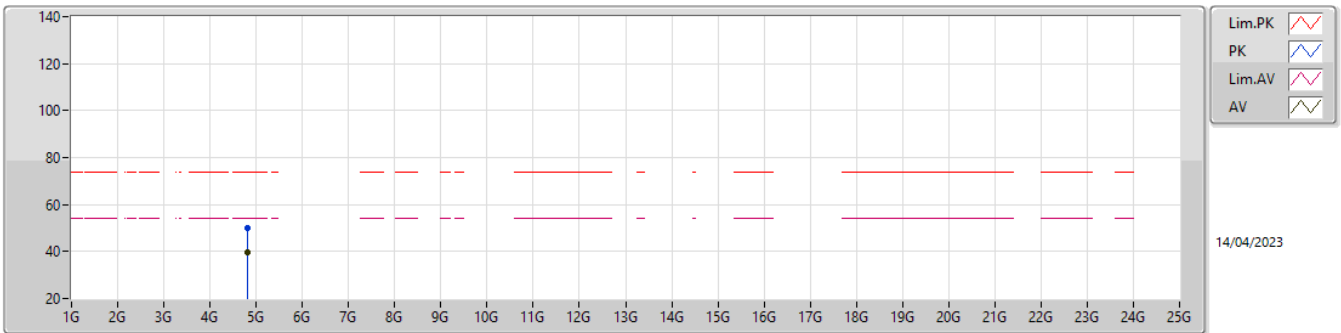
2402MHz_TX



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	2.3526G	45.25	54.00	-8.75	31.03	3	Horizontal	16	2.04	14.22	27.31	3.72	-
AV	2.402G	98.25	Inf	-Inf	31.17	3	Horizontal	16	2.04	67.08	27.40	3.77	-
PK	2.3852G	57.13	74.00	-16.87	31.12	3	Horizontal	16	2.04	26.01	27.37	3.75	-
PK	2.4018G	103.12	Inf	-Inf	31.17	3	Horizontal	16	2.04	71.95	27.40	3.77	-

2.4-2.4835GHz_Proprietary

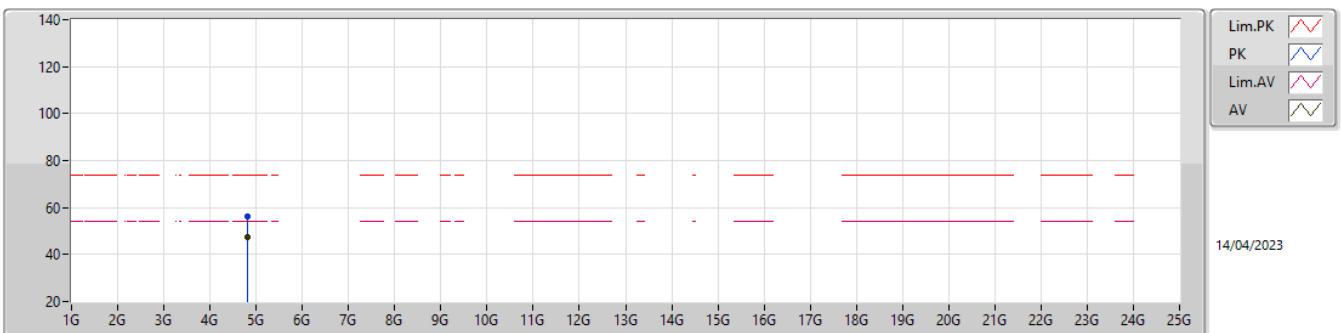
2402MHz_TX



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	4.80386G	39.56	54.00	-14.44	2.98	3	Vertical	121	2.35	36.58	32.32	5.32	34.66
PK	4.80349G	50.15	74.00	-23.85	2.98	3	Vertical	121	2.35	47.17	32.32	5.32	34.66

2.4-2.4835GHz_Proprietary

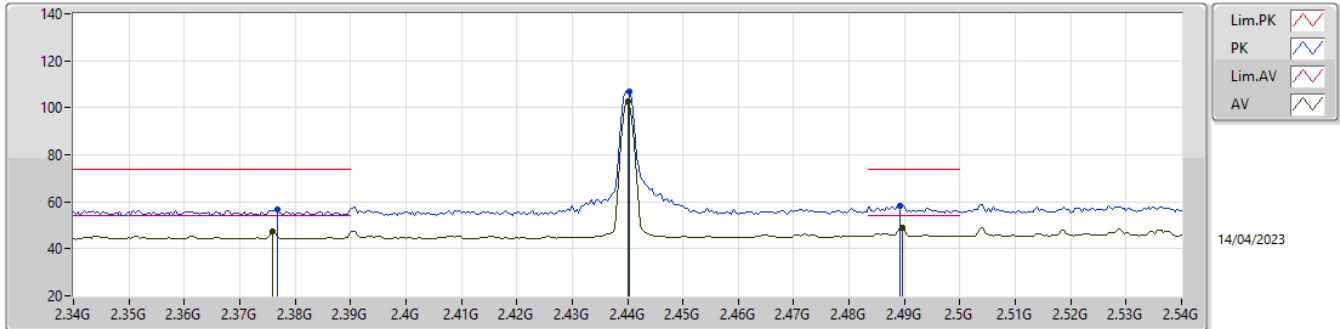
2402MHz_TX



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	4.80392G	47.36	54.00	-6.64	2.98	3	Horizontal	150	2.09	44.38	32.32	5.32	34.66
PK	4.8034G	56.23	74.00	-17.77	2.98	3	Horizontal	150	2.09	53.25	32.32	5.32	34.66

2.4-2.4835GHz_Proprietary

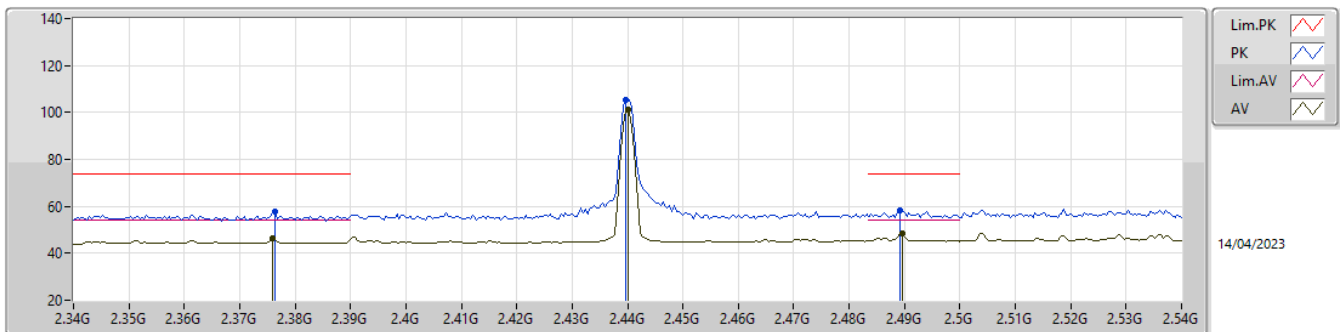
2440MHz_TX



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	2.376G	47.40	54.00	-6.60	31.09	3	Vertical	10	1.42	16.31	27.35	3.74	-
AV	2.44G	102.71	Inf	-Inf	31.28	3	Vertical	10	1.42	71.43	27.48	3.80	-
AV	2.4896G	49.01	54.00	-4.99	31.59	3	Vertical	10	1.42	17.42	27.74	3.85	-
PK	2.3768G	56.59	74.00	-17.41	31.10	3	Vertical	10	1.42	25.49	27.35	3.75	-
PK	2.4404G	107.01	Inf	-Inf	31.28	3	Vertical	10	1.42	75.73	27.48	3.80	-
PK	2.4892G	58.42	74.00	-15.58	31.59	3	Vertical	10	1.42	26.83	27.74	3.85	-

2.4-2.4835GHz_Proprietary

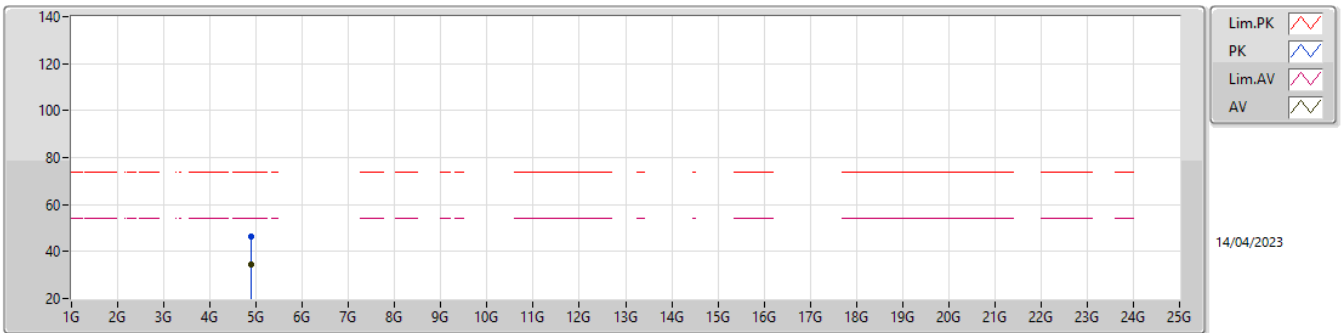
2440MHz_TX



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	2.376G	46.46	54.00	-7.54	31.09	3	Horizontal	299	1.50	15.37	27.35	3.74	-
AV	2.44G	101.18	Inf	-Inf	31.28	3	Horizontal	299	1.50	69.90	27.48	3.80	-
AV	2.4896G	48.39	54.00	-5.61	31.59	3	Horizontal	299	1.50	16.80	27.74	3.85	-
PK	2.3764G	57.53	74.00	-16.47	31.10	3	Horizontal	299	1.50	26.43	27.35	3.75	-
PK	2.4396G	105.47	Inf	-Inf	31.28	3	Horizontal	299	1.50	74.19	27.48	3.80	-
PK	2.4892G	58.08	74.00	-15.92	31.59	3	Horizontal	299	1.50	26.49	27.74	3.85	-

2.4-2.4835GHz_Proprietary

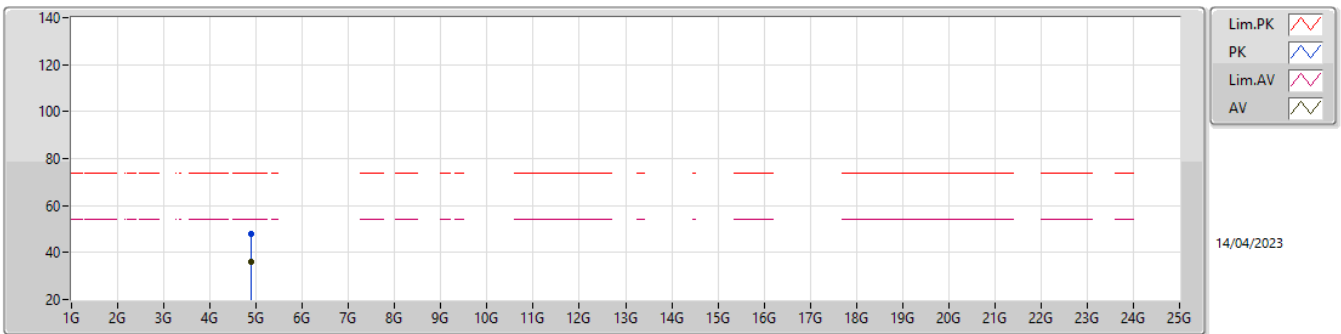
2440MHz_TX



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	4.87965G	34.47	54.00	-19.53	3.33	3	Vertical	173	1.71	31.14	32.60	5.38	34.65
PK	4.87942G	46.40	74.00	-27.60	3.33	3	Vertical	173	1.71	43.07	32.60	5.38	34.65

2.4-2.4835GHz_Proprietary

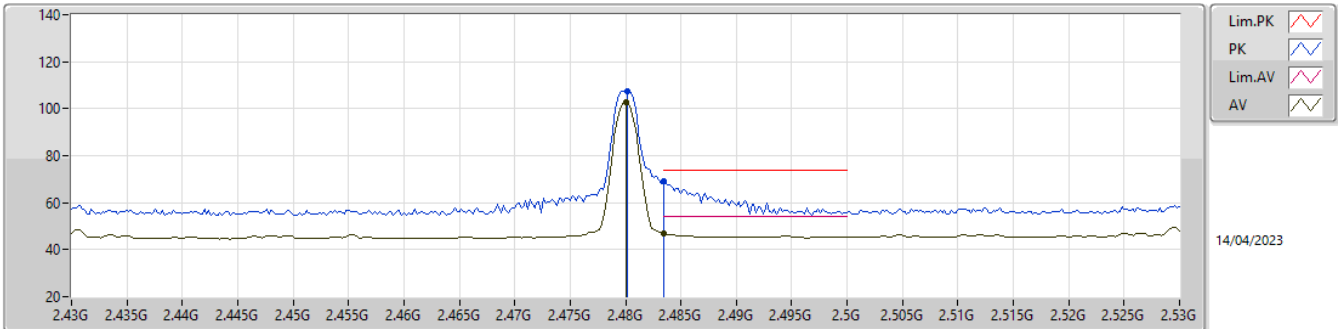
2440MHz_TX



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	4.87995G	36.05	54.00	-17.95	3.33	3	Horizontal	139	2.00	32.72	32.60	5.38	34.65
PK	4.88016G	47.86	74.00	-26.14	3.33	3	Horizontal	139	2.00	44.53	32.60	5.38	34.65

2.4-2.4835GHz_Proprietary

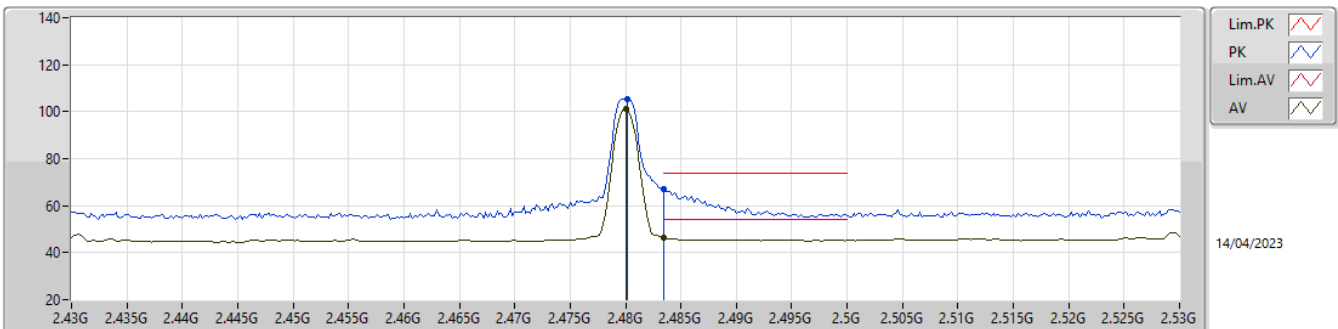
2480MHz_TX



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	2.48G	102.93	Inf	-Inf	31.52	3	Vertical	7	1.60	71.41	27.68	3.84	-
AV	2.4835G	46.93	54.00	-7.07	31.54	3	Vertical	7	1.60	15.39	27.70	3.84	-
PK	2.4802G	107.26	Inf	-Inf	31.52	3	Vertical	7	1.60	75.74	27.68	3.84	-
PK	2.4835G	69.12	74.00	-4.88	31.54	3	Vertical	7	1.60	37.58	27.70	3.84	-

2.4-2.4835GHz_Proprietary

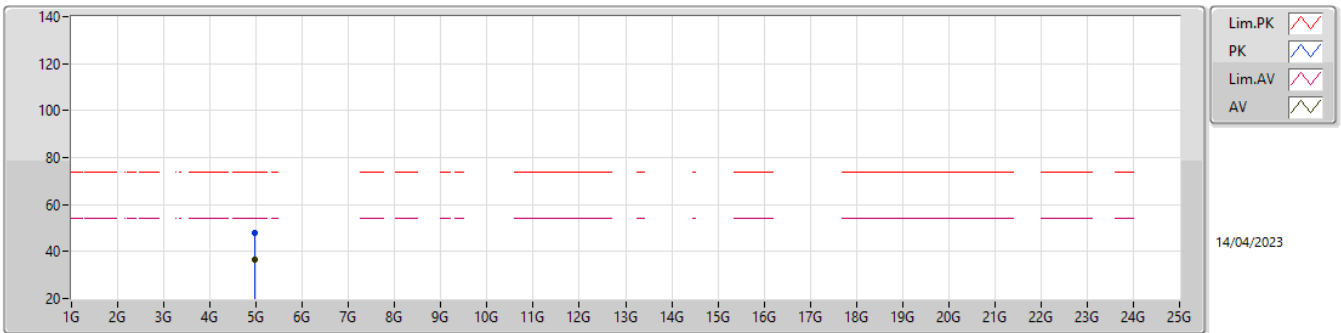
2480MHz_TX



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	2.48G	101.31	Inf	-Inf	31.52	3	Horizontal	300	1.66	69.79	27.68	3.84	-
AV	2.4835G	46.48	54.00	-7.52	31.54	3	Horizontal	300	1.66	14.94	27.70	3.84	-
PK	2.4802G	105.53	Inf	-Inf	31.52	3	Horizontal	300	1.66	74.01	27.68	3.84	-
PK	2.4835G	67.05	74.00	-6.95	31.54	3	Horizontal	300	1.66	35.51	27.70	3.84	-

2.4-2.4835GHz_Proprietary

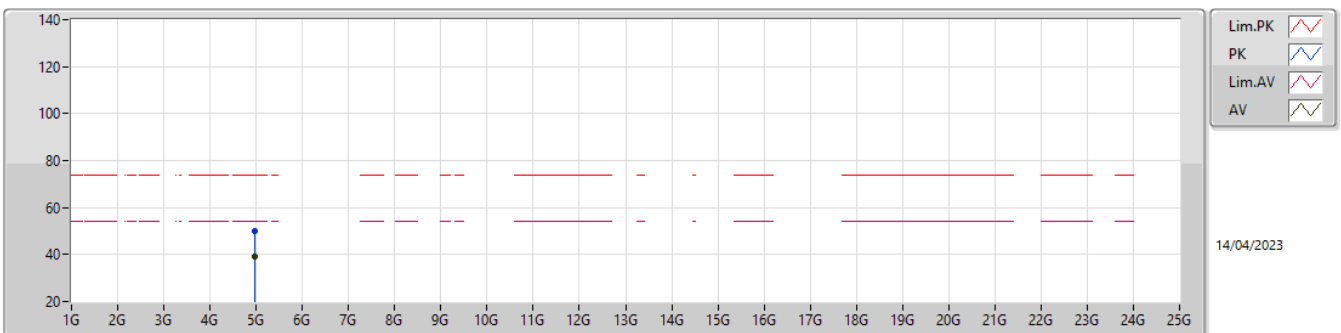
2480MHz_TX



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	4.95976G	36.46	54.00	-17.54	3.64	3	Vertical	141	2.31	32.82	32.84	5.44	34.64
PK	4.95774G	47.91	74.00	-26.09	3.63	3	Vertical	141	2.31	44.28	32.83	5.44	34.64

2.4-2.4835GHz_Proprietary

2480MHz_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	4.95989G	39.19	54.00	-14.81	3.64	3	Horizontal	160	2.08	35.55	32.84	5.44	34.64
PK	4.96056G	49.79	74.00	-24.21	3.64	3	Horizontal	160	2.08	46.15	32.84	5.44	34.64



Summary

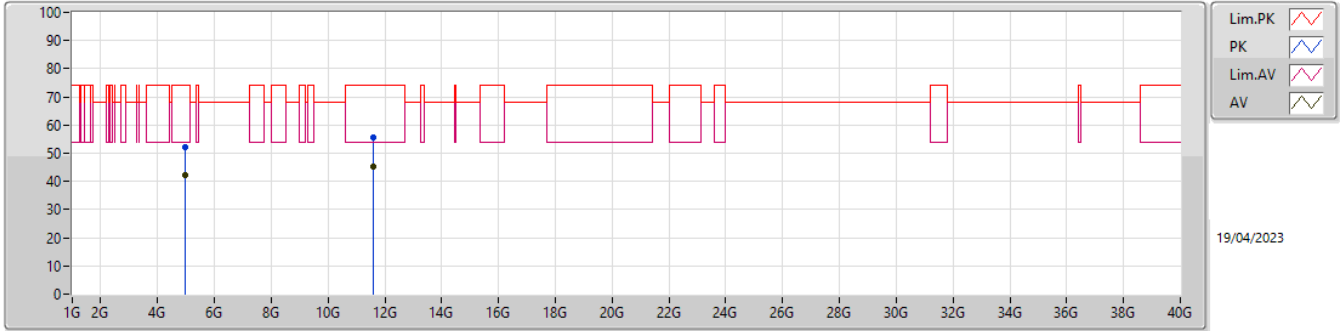
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	AV	4.95998G	45.77	54.00	-8.23	Horizontal



Result

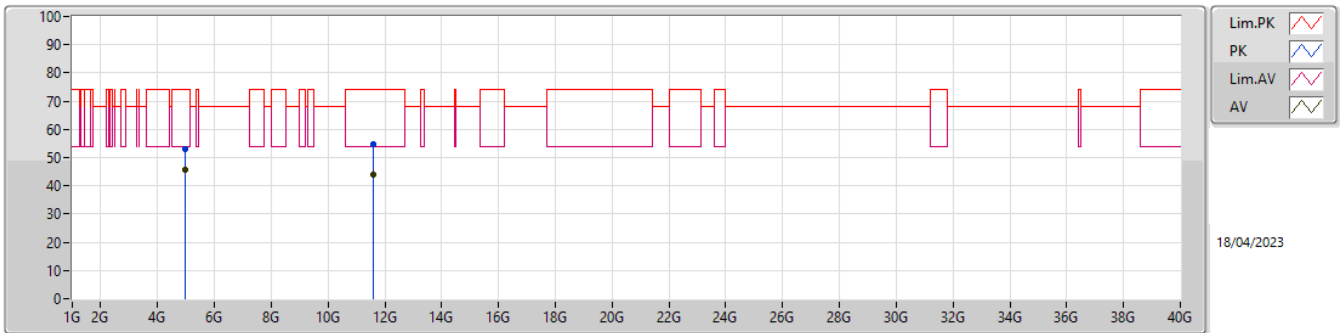
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
Mode 1	Pass	AV	4.95975G	42.18	54.00	-11.82	3	Vertical	305	1.44
Mode 1	Pass	AV	11.5902G	45.32	54.00	-8.68	3	Vertical	4	1.45
Mode 1	Pass	PK	4.95954G	51.97	74.00	-22.03	3	Vertical	305	1.44
Mode 1	Pass	PK	11.59039G	55.47	74.00	-18.53	3	Vertical	4	1.45
Mode 1	Pass	AV	4.95998G	45.77	54.00	-8.23	3	Horizontal	167	2.11
Mode 1	Pass	AV	11.59021G	43.95	54.00	-10.05	3	Horizontal	34	1.89
Mode 1	Pass	PK	4.95951G	53.14	74.00	-20.86	3	Horizontal	167	2.11
Mode 1	Pass	PK	11.59001G	54.87	74.00	-19.13	3	Horizontal	34	1.89

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	4.95975G	42.18	54.00	-11.82	3.64	3	Vertical	305	1.44	38.54	32.84	5.44	34.64
AV	11.5902G	45.32	54.00	-8.68	12.18	3	Vertical	4	1.45	33.14	38.43	8.35	34.60
PK	4.95954G	51.97	74.00	-22.03	3.64	3	Vertical	305	1.44	48.33	32.84	5.44	34.64
PK	11.59039G	55.47	74.00	-18.53	12.18	3	Vertical	4	1.45	43.29	38.43	8.35	34.60

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	4.95998G	45.77	54.00	-8.23	3.64	3	Horizontal	167	2.11	42.13	32.84	5.44	34.64
AV	11.59021G	43.95	54.00	-10.05	12.18	3	Horizontal	34	1.89	31.77	38.43	8.35	34.60
PK	4.95951G	53.14	74.00	-20.86	3.64	3	Horizontal	167	2.11	49.50	32.84	5.44	34.64
PK	11.59001G	54.87	74.00	-19.13	12.18	3	Horizontal	34	1.89	42.69	38.43	8.35	34.60