



RADIO TEST REPORT

FCC ID : RAXWN8711
Equipment : Wireless LAN Network Module
Brand Name : Arcadyan
Model Name : WN8711BTAAC-YA
Applicant : Arcadyan Technology Corporation
No.8, Sec.2, Guangfu Rd.,Hsinchu, 30071 Taiwan
Manufacturer (1) : Arcadyan Technology Corporation
No.8, Sec.2, Guangfu Rd.,Hsinchu, 30071 Taiwan
Manufacturer (2) : ARCADYAN TECHNOLOGY (VIETNAM) CO.,LTD
Land Plot No. D4-5-6, Thang Long Vinh Phuc Industrial Park,
Thien Ke Commune, Binh Xuyen District, Vinh Phuc Province
Vietnam
Standard : 47 CFR FCC Part 15.247

The product was received on Jul. 13, 2023, and testing was started from Jul. 15, 2023 and completed on Jul. 05, 2024. We, Sporton International Inc. Hsinchu Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

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

Approved by: Sam Chen

Sporton International Inc. Hsinchu Laboratory

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



Table of Contents

History of this test report.....	3
Summary of Test Result.....	4
1 General Description	5
1.1 Information.....	5
1.2 Applicable Standards	9
1.3 Testing Location Information	9
1.4 Measurement Uncertainty	9
2 Test Configuration of EUT.....	10
2.1 The Worst Case Measurement Configuration.....	10
2.2 EUT Operation during Test	10
2.3 Accessories	11
2.4 Support Equipment.....	11
2.5 Test Setup Diagram	12
3 Transmitter Test Result	14
3.1 Emissions in Restricted Frequency Bands.....	14
4 Test Equipment and Calibration Data	18
Appendix A. Test Results of Emissions in Restricted Frequency Bands	
Appendix B. Test Photos	
Appendix C. Photographs of EUT	



History of this test report

TEL : 886-3-656-9065
FAX : 886-3-656-9085
Report Template No.: CB-A10_6 Ver1.3

Page Number : 3 of 19
Issued Date : Aug. 26, 2024
Report Version : 01



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	15.247(d)	Emissions in Restricted Frequency Bands	PASS	-

Conformity Assessment Condition:

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

Disclaimer:

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

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



1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	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(1Mbps)	1	1

Note:

- ♦ Bluetooth LE uses a GFSK modulation.
- ♦ BWch is the nominal channel bandwidth.

**1.1.2 Antenna Information**

Ant.	Brand	Model Name	Type	Connector	Gain (dBi)		Cable Length (mm)
					2.4GHz	5GHz	
1	ACON	AEMEE-10000	Dipole	Reversed-SMA	3.24	4.54	Note 1
2	WNC	YSB2022	PIFA	I-PEX	3.1	4.4	-

Note 1:

Dipole Cable	Brand	Model Name	Cable Length (mm)	Cable Loss (dB)		True Gain (dBi)	
				2.4GHz / BT	5GHz	2.4GHz / BT	5GHz
1	ACON	AEC8P-1000001 (Black)	30	0.08	0.12	3.16	4.42
2	ACON	AEC8P-1000003 (Black)	50	0.13	0.19	3.11	4.35
3	ACON	AEC8P-1000005 (Black)	70	0.19	0.27	3.05	4.27
4	ACON	AEC8P-1000007 (Black)	90	0.24	0.35	3.00	4.19
5	ACON	AEC8P-1000009 (Black)	120	0.32	0.46	2.92	4.08
6	ACON	AEC8P-1000011 (Black)	160	0.43	0.62	2.81	3.92
7	ACON	AEC8P-1000013 (Black)	200	0.54	0.77	2.70	3.77
8	ACON	AEC8P-1000015 (Black)	240	0.64	0.93	2.60	3.61
9	ACON	AEC8P-1000017 (Black)	280	0.75	1.08	2.49	3.46
10	ACON	AEC8P-1000019 (Black)	320	0.86	1.24	2.38	3.30
11	ACON	AEC8P-1000021 (Black)	360	0.96	1.39	2.28	3.15
12	ACON	AEC8P-1000023 (Black)	400	1.07	1.54	2.17	3.00
13	ACON	AEC8P-1000025 (Black)	450	1.21	1.74	2.03	2.80
14	ACON	AEC8P-1000027 (Black)	500	1.34	1.93	1.90	2.61

Note 2: Dipole Antenna collocate with 14 set cables selling, only the highest gain antenna “cable 1” was tested and recorded in the report.

Note 3: PIFA Antenna is only for EUT 2 use.

Note 4: The above information was declared by manufacturer.

Note 5: The EUT has one antenna.

For WLAN 2.4GHz Function**IEEE 802.11b/g/n (1TX/1RX):**

Port 1 can be used as transmitting/receiving antenna.

Port 1 could transmit/receive simultaneously.

For WLAN 5GHz Function**IEEE 802.11a/n/ac (1TX/1RX):**

Port 1 can be used as transmitting/receiving antenna.

Port 1 could transmit/receive simultaneously.

For Bluetooth function (1TX/1RX):

Port 1 can be used as transmitting/receiving antenna.

Port 1 could transmit/receive simultaneously.

**1.1.3 EUT Operational Condition**

EUT Power Type	From host system		
Function	☒ Point-to-multipoint	☐ Point-to-point	
Test Software Version	DOS [ver 6.1.7601]		
Operating frequency of CPU	1GHz		
Rating	3.7V, 4.21W		
Support Mode	☒	LE 1M PHY: 1 Mb/s	
	☐	LE Coded PHY (S=2): 500 Kb/s	
	☐	LE Coded PHY (S=8): 125 Kb/s	
	☐	LE 2M PHY: 2 Mb/s	

Note: The above information was declared by manufacturer.

1.1.4 Table for EUT Supports Function

Function	Supports type
AP	Master
Slave	Slave without radar detection

Note 1: AP Mode and Slave Mode were tested and their data were recorded in this report.

Note 2: The above information was declared by manufacturer.

1.1.5 Table for DDR Detail Information

Source \ Items		DDR
Main	Brand	SAMSUNG
	Model	K4B2G1646F-BYMA
	Capacity	256MB
Second	Brand	WINBOND
	Model	W632GU6NB-11
	Capacity	256MB

Note: The above information was declared by manufacturer.

1.1.6 Table for EUT Information

EUT	DDR	Equipped Antenna
1	Main	Dipole
2	Second	Dipole, PIFA



1.1.7 Table for Permissive Change

This product is an extension of original one reported under Sporton project number: FR770523-13AD

Below is the table for the change of the product with respect to the original one.

Modifications	Performance Checking
1. Adding second source DDR (Brand name: WINBOND / Model name: W632GU6NB-11).	Emissions in Restricted Frequency Bands
2. Add a new type PIFA antenna for EUT 2.	Emissions in Restricted Frequency Bands
3. Adding Manufacturer (Company name: ARCADYAN TECHNOLOGY (VIETNAM) CO.,LTD / Company address: Land Plot No. D4-5-6, Thang Long Vinh Phuc Industrial Park, Thien Ke Commune, Binh Xuyen District, Vinh Phuc Province Vietnam).	After evaluating, it does not affect the test.



1.2 Applicable Standards

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

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

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

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

1.3 Testing Location Information

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

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
Radiated Below 1GHz	03CH05-CB	Stim Sung	24.5~25.6 / 56~59	Jul. 15, 2023
	03CH04-CB	Gordon Hung	21.9~22.4 / 55~58	Jun. 20, 2024
Radiated above 1GHz	03CH01-CB	Paul Hu	22~23 / 55~58	Jun. 19, 2024~ Jul. 05, 2024

Note: The tested sample of PIFA Antenna was received on Jun. 13, 2024.

1.4 Measurement Uncertainty

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

Test Date: Date Before May 28, 2024

Test Items	Uncertainty	Remark
Radiated Emission (9kHz ~ 30MHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.1 dB	Confidence levels of 95%

Test Date: Date After May 27, 2024

Test Items	Uncertainty	Remark
Radiated Emission (9kHz ~ 30MHz)	4.1 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	4.2 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.2 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.0 dB	Confidence levels of 95%

2 Test Configuration of EUT

2.1 The Worst Case Measurement Configuration

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	Normal Link
	1. The EUT was performed at X axis, Y axis and Z axis position for Emissions in Restricted Frequency Bands above 1GHz, and the worst case was found at X axis. So the measurement will follow this same test configuration.
	2. The EUT performed the test at (2.4GHz+Bluetooth) mode and (5GHz+Bluetooth) mode; the worst case was found at (5GHz+Bluetooth) mode. Thus, the measurement will follow this same test configuration.
	3. The EUT performed the test at Master mode and Slave mode; the worst case was found at Master mode. Thus, the measurement will follow this same test configuration.
1	AP Mode_EUT 2 in X axis (5GHz+Bluetooth Master) with Dipole antenna + cable 1
2	AP Mode_EUT 2 in X axis (5GHz+Bluetooth Master) with PIFA antenna
Operating Mode > 1GHz	CTX
	The EUT was performed at X axis, Y axis and Z axis position, and the worst case was found at Y axis. So the measurement will follow this same test configuration.
1	EUT 2 in Y axis with PIFA antenna

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	WLAN 2.4GHz + Bluetooth with Dipole antenna
2	WLAN 5GHz + Bluetooth with Dipole antenna
Refer to Sporton Test Report No.: FA770523-23 for Co-location RF Exposure Evaluation.	

2.2 EUT Operation during Test

For CTX Mode:

The EUT was programmed to be in continuously transmitting mode.

For Normal Link Mode:

During the test, the EUT operation to normal function.



2.3 Accessories

N/A

2.4 Support Equipment

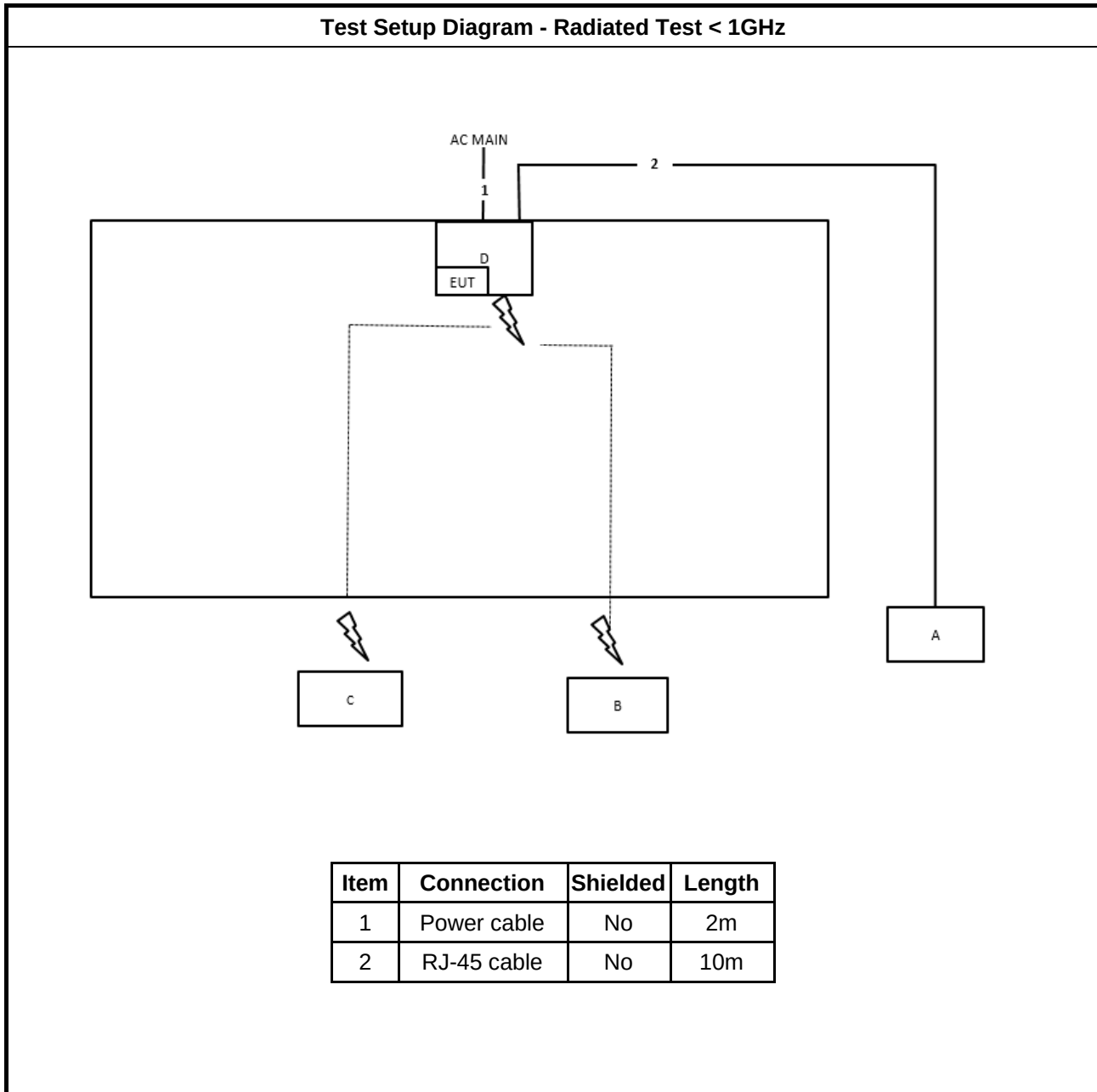
For Radiated (below 1GHz):

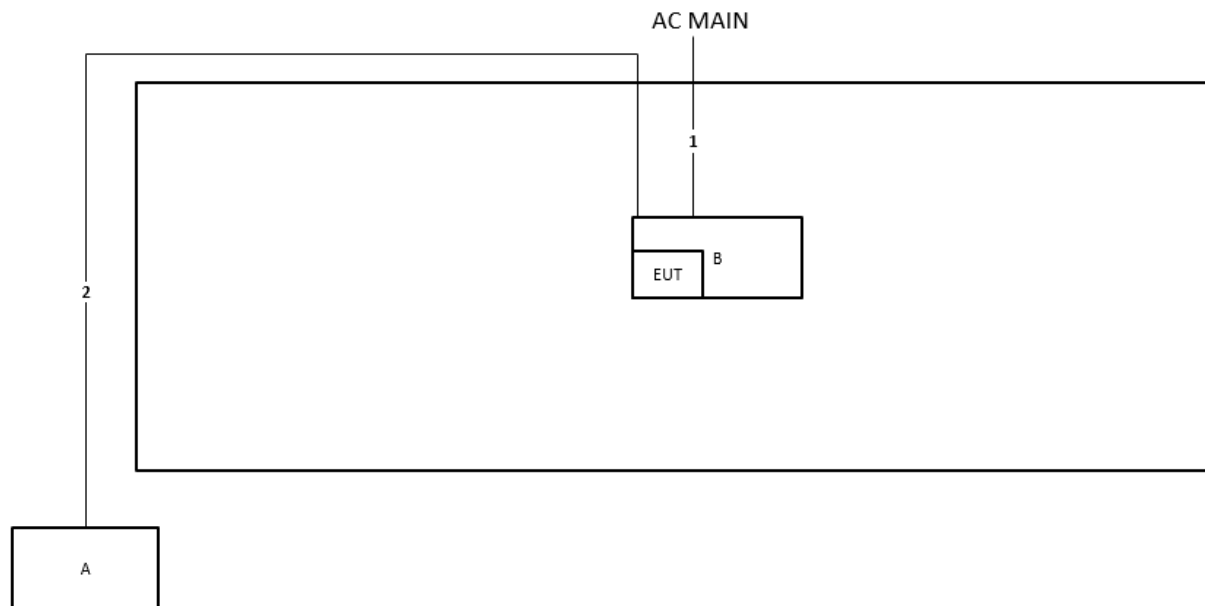
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	LAN NB	DELL	E4300	N/A
B	5G NB	DELL	E4300	N/A
C	BT Speaker	MARUS	MSK06C-RD	N/A
D	Fixture 1	Arcadyan	WN9711BTAAC-YA Test Jig	N/A

For Radiated (above 1GHz):

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E4300	N/A
B	Fixture	Arcadyan	WN9711BTAAC-YA Test Jig	N/A

2.5 Test Setup Diagram



Test Setup Diagram - Radiated Test > 1GHz


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



3 Transmitter Test Result

3.1 Emissions in Restricted Frequency Bands

3.1.1 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.

3.1.2 Measuring Instruments

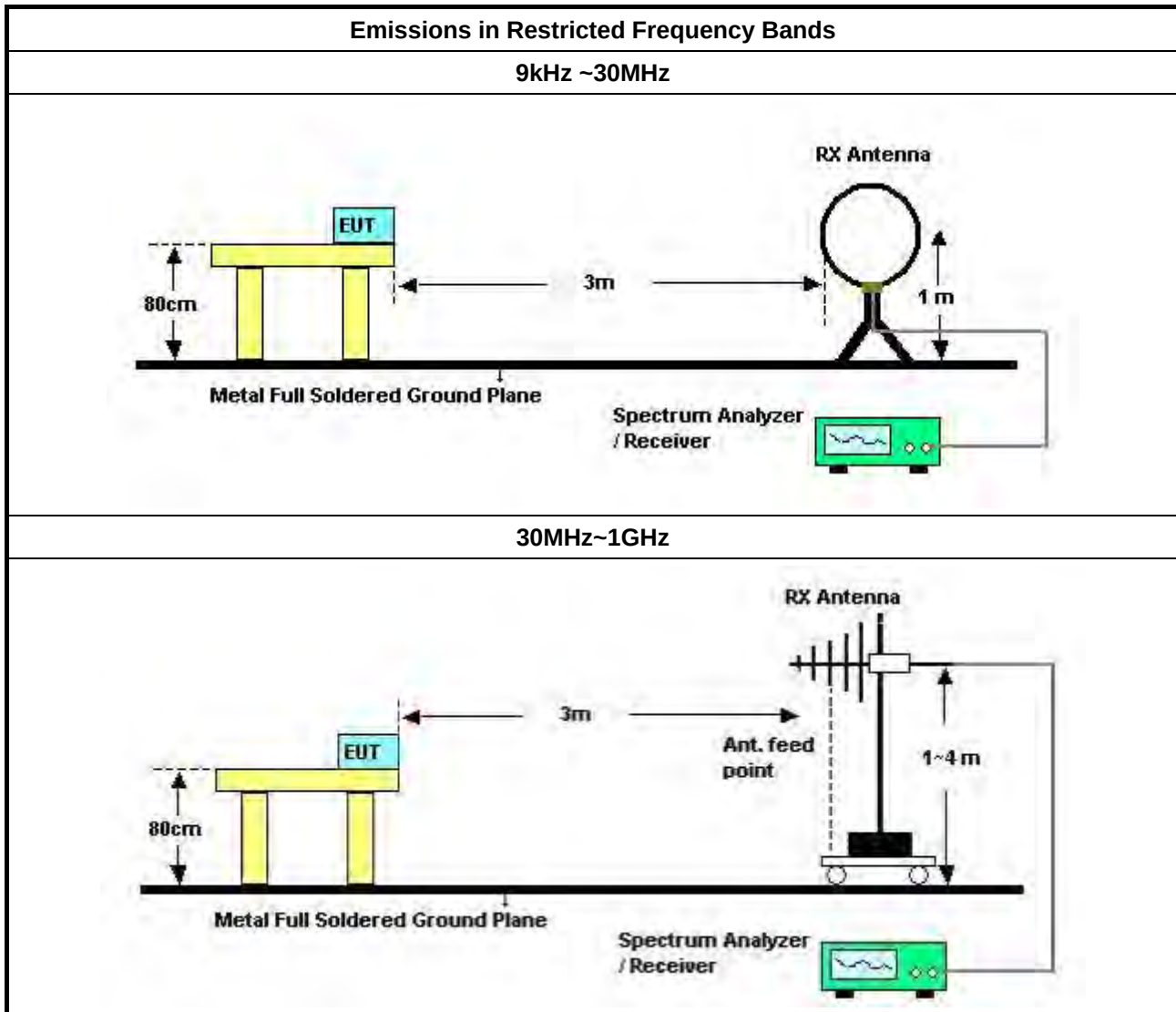
Refer a test equipment and calibration data table in this test report.

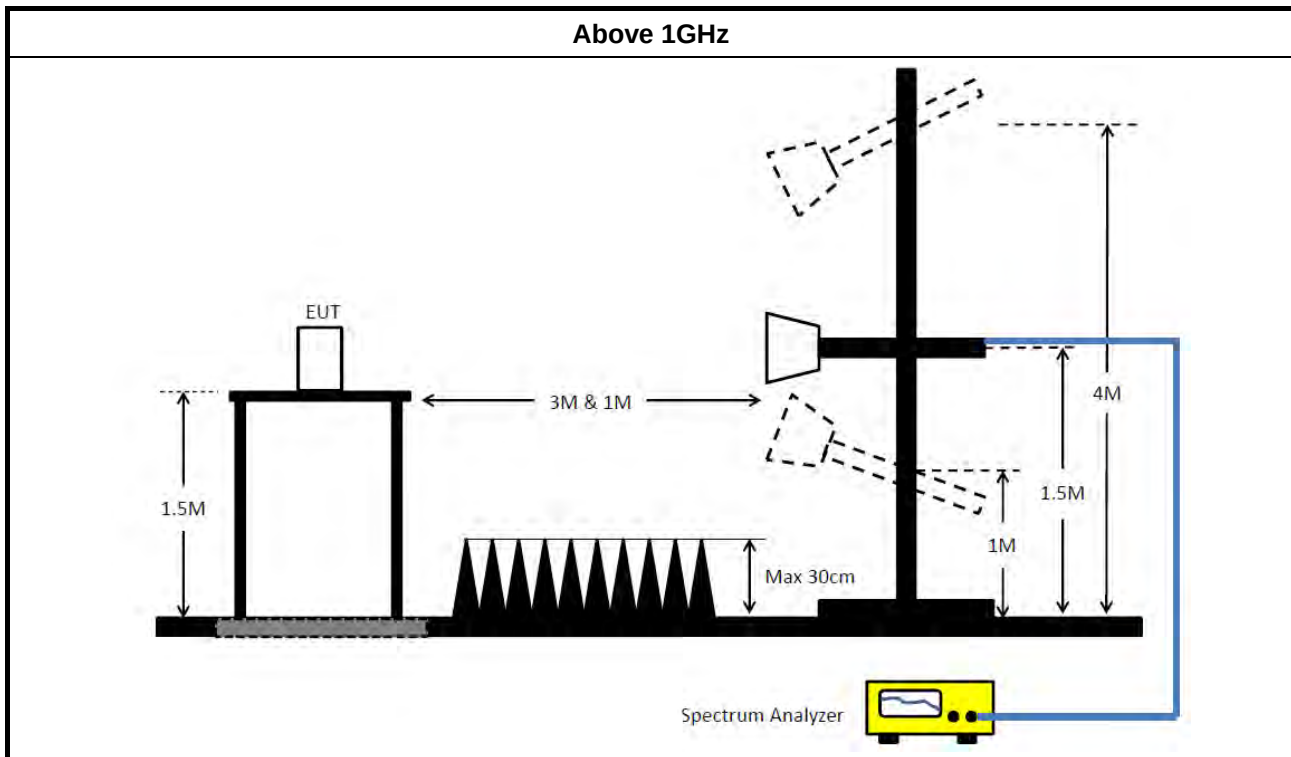


3.1.3 Test Procedures

Test Method	
▪ The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].	
▪ Refer as ANSI C63.10, clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.	
▪ For the transmitter unwanted emissions shall be measured using following options below:	
	▪ Refer as FCC KDB 558074, clause 8.6 for unwanted emissions into restricted bands.
	☐ Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.1(trace averaging for duty cycle $\geq 98\%$).
	☐ Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.2(trace averaging + duty factor).
	☒ Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.3(Reduced VBW $\geq 1/T$).
	☐ Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW $\geq 1/T$, where T is pulse time.
	☐ Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.
	☒ Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.4 measurement procedure peak limit.
▪ For the transmitter band-edge emissions shall be measured using following options below:	
	▪ Refer as FCC KDB 558074 clause 8.7 & c63.10 clause 11.13.1, When the performing peak or average radiated measurements, emissions within 2 MHz of the authorized band edge may be measured using the marker-delta method described below.
	▪ Refer as FCC KDB 558074, clause 8.7 (ANSI C63.10, clause 6.10.6) for marker-delta method for band-edge measurements.
	▪ Refer as FCC KDB 558074, clause 8.7 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).
	▪ For conducted unwanted emissions into restricted bands (absolute emission limits). Devices with multiple transmit chains using options given below: (1) Measure and sum the spectra across the outputs or (2) Measure and add 10 log(N) dB
	▪ For FCC KDB 662911 The methodology described here may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance may be demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred.

3.1.4 Test Setup





3.1.5 Measurement Results Calculation

The measured Level is calculated using:

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

3.1.6 Emissions in Restricted Frequency Bands (Below 30MHz)

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

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

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

3.1.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix A



4 Test Equipment and Calibration Data

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Loop Antenna	Teseq	HLA 6120	31244	9kHz - 30 MHz	Mar. 23, 2023	Mar. 22, 2024	Radiation (03CH05-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH05-CB	30 MHz ~ 1 GHz	Aug. 03, 2022	Aug. 02, 2023	Radiation (03CH05-CB)
Bilog Antenna with 6dB Attenuator	TESEQ & EMCI	CBL 6112D & N-6-06	35236 & AT-N0610	30MHz ~ 2GHz	Mar. 24, 2023	Mar. 23, 2024	Radiation (03CH05-CB)
Amplifier	EMCI	EMC330N	980331	20MHz ~ 3GHz	May 03, 2023	May 02, 2024	Radiation (03CH05-CB)
Spectrum Analyzer	R&S	FSP40	100304	9kHz ~ 40GHz	Apr. 18, 2023	Apr. 17, 2024	Radiation (03CH05-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	Jun. 13, 2023	Jun. 12, 2024	Radiation (03CH05-CB)
RF Cable-low	Woken	RG402	Low Cable-04+23	30MHz~1GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH05-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH05-CB)
Loop Antenna	Teseq	HLA 6121	65417	9kHz - 30 MHz	Oct. 13, 2023	Oct. 12, 2024	Radiation (03CH04-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH04-CB	30 MHz ~ 1 GHz	Aug. 01, 2023	Jul. 31, 2024	Radiation (03CH04-CB)
BILOG ANTENNA with 6 dB attenuator	Schaffner & EMCI	CBL6112B & N-6-06	22021&AT-N06 07	30MHz ~ 1GHz	Oct. 07, 2023	Oct. 06, 2024	Radiation (03CH04-CB)
Pre-Amplifier	EMCI	EMC330N	980391	20MHz ~ 3GHz	May 22, 2024	May 21, 2025	Radiation (03CH04-CB)
Spectrum Analyzer	R&S	FSP40	100142	9kHz~40GHz	Mar. 19, 2024	Mar. 18, 2025	Radiation (03CH04-CB)
EMI Test Receiver	R&S	ESR7	102172	9kHz ~ 7GHz	Oct. 20, 2023	Oct. 19, 2024	Radiation (03CH04-CB)
RF Cable-low	Woken	RG402	Low Cable-03+67	30MHz ~ 1GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH04-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH04-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH01-CB	1GHz ~18GHz 3m	May 04, 2024	May 03, 2025	Radiation (03CH01-CB)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120D-01816	1GHz~18GHz	Dec. 20, 2023	Dec. 19, 2024	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Sep. 04, 2023	Sep. 03, 2024	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02121	1GHz ~ 26.5GHz	May 17, 2024	May 16, 2025	Radiation (03CH01-CB)

**RADIO TEST REPORT****Report No. : FR770523-23AD**

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Pre-Amplifier	SGH	SGH184	20221107-3	18GHz ~ 40GHz	Nov. 24, 2023	Nov. 23, 2024	Radiation (03CH01-CB)
Signal Analyzer	R&S	FSV3044	101437	10kHz ~ 44GHz	Nov. 28, 2023	Nov. 27, 2024	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-16	1 GHz ~ 18 GHz	Nov. 06, 2023	Nov. 05, 2024	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-16+17	1 GHz ~ 18 GHz	Nov. 06, 2023	Nov. 05, 2024	Radiation (03CH01-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Jan. 11, 2024	Jan. 10, 2025	Radiation (03CH01-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH01-CB)

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

N.C.R. means Non-Calibration required.



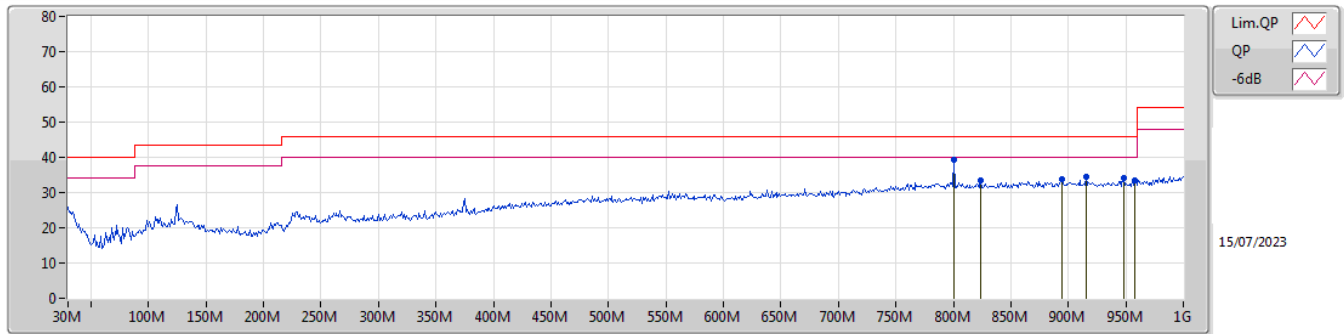
Radiated Emissions below 1GHz

Appendix A.1

Summary

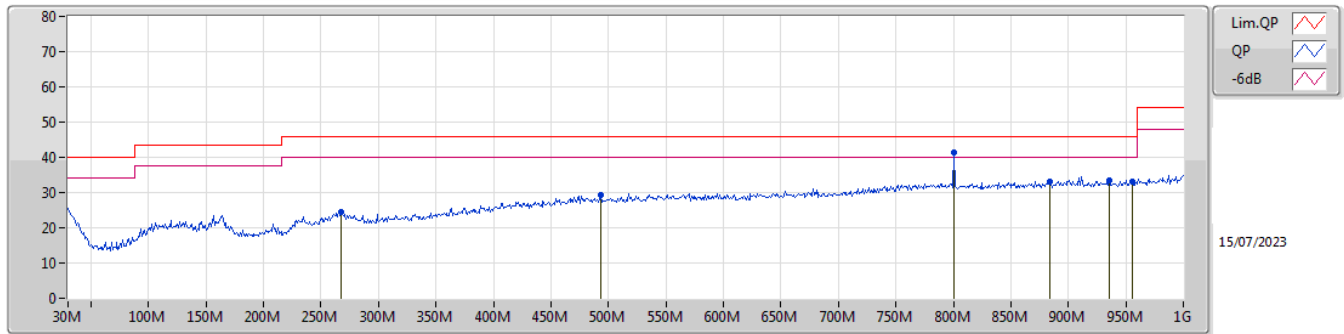
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	PK	800.18M	41.36	46.00	-4.64	Horizontal

Mode 1



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)		
PK	800.18M	39.42	46.00	-6.58	-1.67	3	Vertical	310	1.00	"Worst"	41.09	25.76	5.20	32.63		
PK	823.46M	33.39	46.00	-12.61	-1.71	3	Vertical	29	1.25	-	35.10	25.63	5.29	32.63		
PK	894.27M	33.86	46.00	-12.14	-0.46	3	Vertical	120	2.00	-	34.32	26.37	5.64	32.47		
PK	915.61M	34.60	46.00	-11.40	-0.43	3	Vertical	80	2.00	-	35.03	26.37	5.68	32.48		
PK	948.59M	34.13	46.00	-11.87	-0.16	3	Vertical	24	1.50	-	34.29	26.70	5.69	32.55		
PK	957.32M	33.43	46.00	-12.57	0.03	3	Vertical	0	1.00	-	33.40	26.82	5.72	32.51		

Mode 1



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)		
PK	267.65M	24.50	46.00	-21.50	-10.38	3	Horizontal	340	2.00	-	34.88	18.86	2.83	32.07		
PK	493.66M	29.29	46.00	-16.71	-5.10	3	Horizontal	211	2.00	-	34.39	23.22	3.96	32.28		
PK	800.18M	41.36	46.00	-4.64	-1.67	3	Horizontal	284	1.25	"Worst"	43.03	25.76	5.20	32.63		
PK	883.6M	33.23	46.00	-12.77	-0.69	3	Horizontal	36	2.00	-	33.92	26.24	5.58	32.51		
PK	935.98M	33.41	46.00	-12.59	-0.22	3	Horizontal	277	1.50	-	33.63	26.62	5.68	32.52		
PK	955.38M	33.24	46.00	-12.76	-0.01	3	Horizontal	207	2.00	-	33.25	26.80	5.71	32.52		



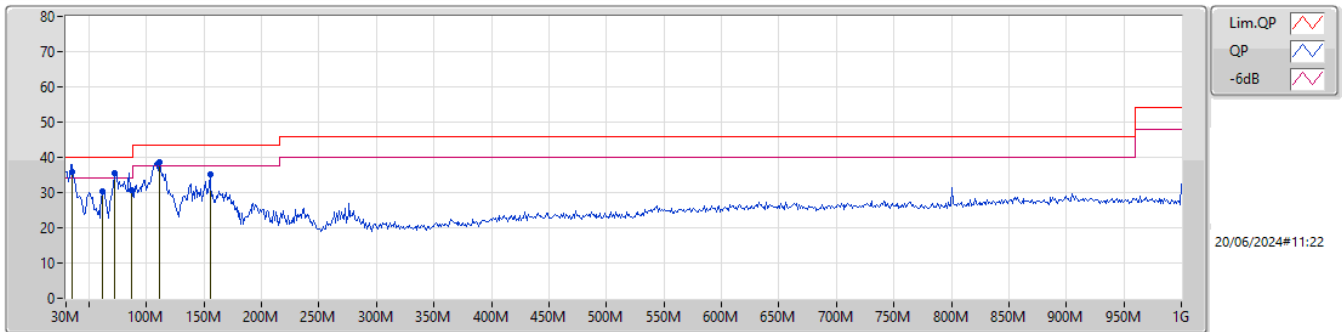
Radiated Emissions below 1GHz

Appendix A.2

Summary

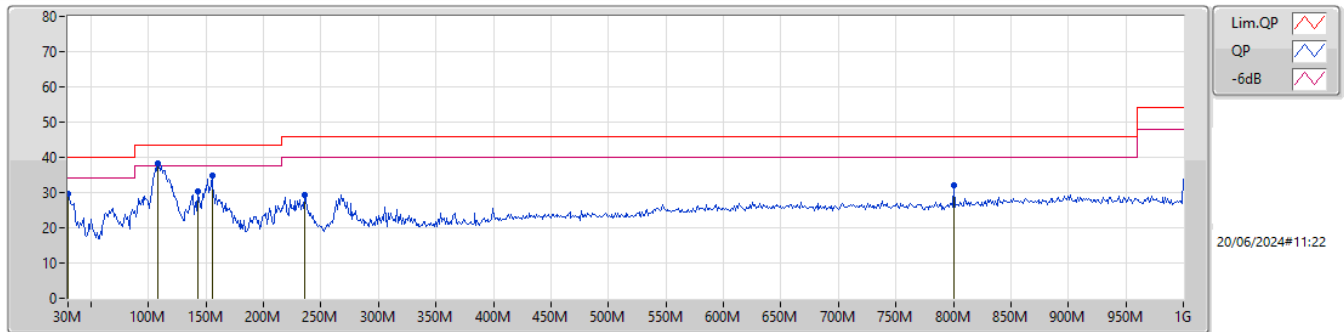
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 2	Pass	QP	34.85M	35.70	40.00	-4.30	Vertical

Mode 2



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)		
QP	34.85M	35.70	40.00	-4.30	-9.00	3	Vertical	86	1.50	"Worst"	44.70	21.32	0.37	30.69		
PK	62.01M	30.46	40.00	-9.54	-18.01	3	Vertical	70	1.00	-	48.47	12.53	0.60	31.14		
PK	72.68M	35.66	40.00	-4.34	-17.64	3	Vertical	29	2.00	-	53.30	12.43	0.67	30.74		
PK	87.23M	30.62	40.00	-9.38	-15.43	3	Vertical	160	1.25	-	46.05	14.62	0.78	30.83		
PK	111.48M	38.79	43.50	-4.71	-11.84	3	Vertical	226	1.00	-	50.63	18.16	0.89	30.89		
PK	155.13M	35.19	43.50	-8.31	-13.82	3	Vertical	178	1.25	-	49.01	16.37	1.11	31.30		

Mode 2



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)		
PK	30M	29.51	40.00	-10.49	-7.16	3	Horizontal	3	1.25	-	36.67	23.56	0.33	31.05		
PK	107.6M	38.32	43.50	-5.18	-12.11	3	Horizontal	143	3.00	"Worst"	50.43	17.84	0.87	30.82		
PK	142.52M	30.46	43.50	-13.04	-12.99	3	Horizontal	240	1.50	-	43.45	17.28	1.09	31.36		
PK	155.13M	34.68	43.50	-8.82	-13.82	3	Horizontal	260	2.00	-	48.50	16.37	1.11	31.30		
PK	235.64M	29.36	46.00	-16.64	-12.79	3	Horizontal	258	1.50	-	42.15	16.72	1.40	30.91		
PK	800.18M	32.22	46.00	-13.78	-3.19	3	Horizontal	184	1.00	-	35.41	25.86	2.92	31.97		

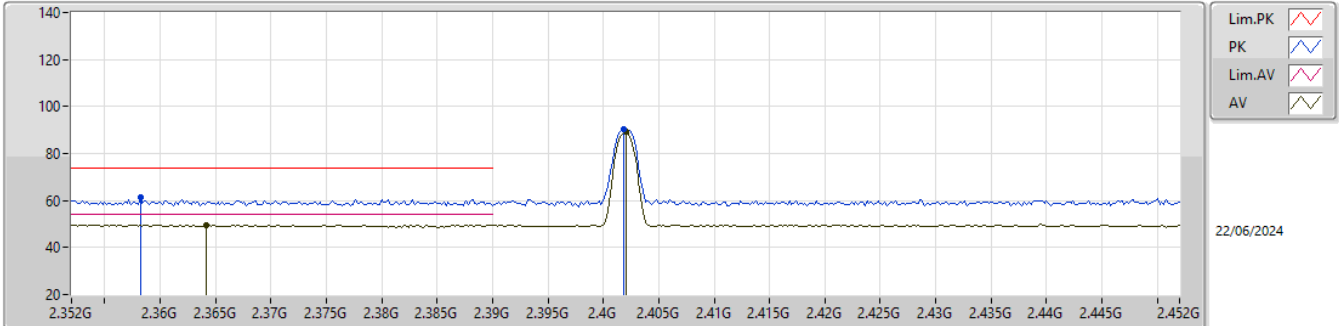


Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
BT-LE(1Mbps)	Pass	AV	2.4859G	50.26	54.00	-3.74	3	Horizontal	130	3.00	-

2.4-2.4835GHz_BT-LE(1Mbps)

2402MHz_TX

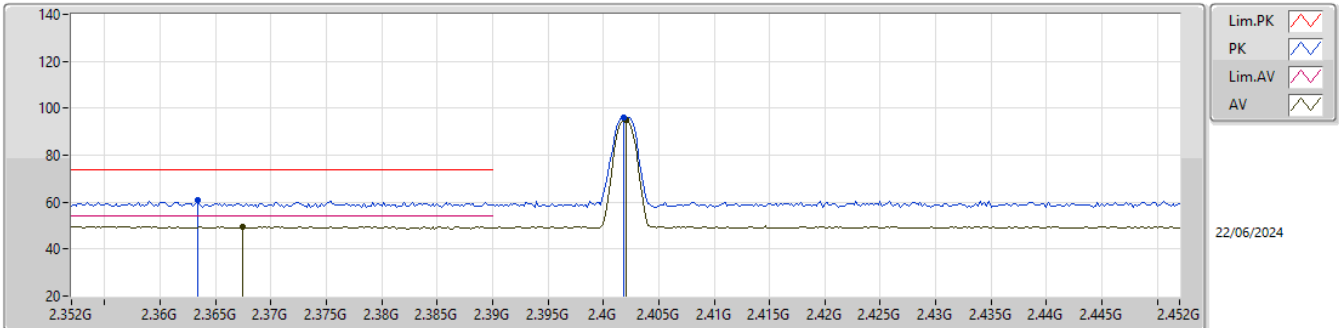


EUT_V_1TX
Setting Default
01-I-J-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.3582G	61.46	74.00	-12.54	28.93	3	Vertical	23	2.90	-	27.92	4.61	-			
AV	2.3642G	49.70	54.00	-4.30	17.22	3	Vertical	23	2.90	-	27.86	4.62	-			
PK	2.4018G	90.13	Inf	-Inf	57.78	3	Vertical	23	2.90	-	27.68	4.67	-			
AV	2.402G	89.06	Inf	-Inf	56.71	3	Vertical	23	2.90	-	27.68	4.67	-			

2.4-2.4835GHz_BT-LE(1Mbps)

2402MHz_TX

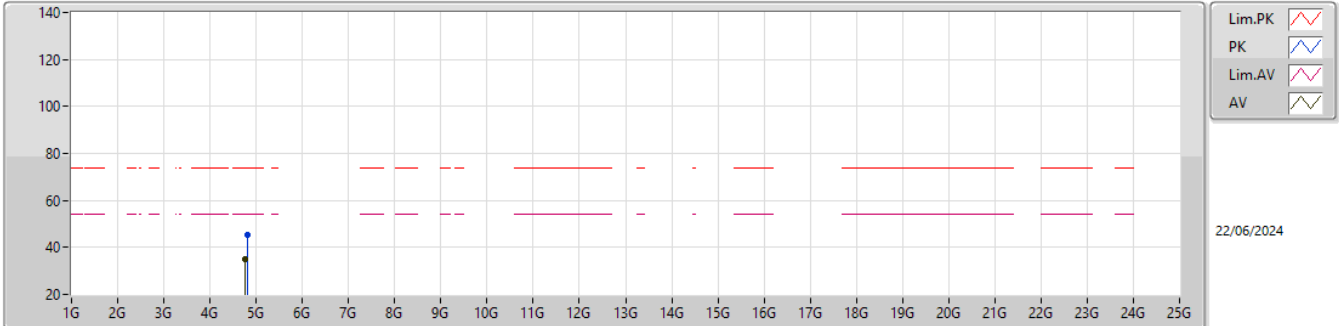


EUT_Y_1TX
Setting Default
01-I-J-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.3634G	60.63	74.00	-13.37	28.14	3	Horizontal	133	2.95	-	27.87	4.62	-			
AV	2.3674G	49.66	54.00	-4.34	17.21	3	Horizontal	133	2.95	-	27.83	4.62	-			
PK	2.4018G	96.12	Inf	-Inf	63.77	3	Horizontal	133	2.95	-	27.68	4.67	-			
AV	2.402G	95.14	Inf	-Inf	62.79	3	Horizontal	133	2.95	-	27.68	4.67	-			

2.4-2.4835GHz_BT-LE(1Mbps)

2402MHz_TX

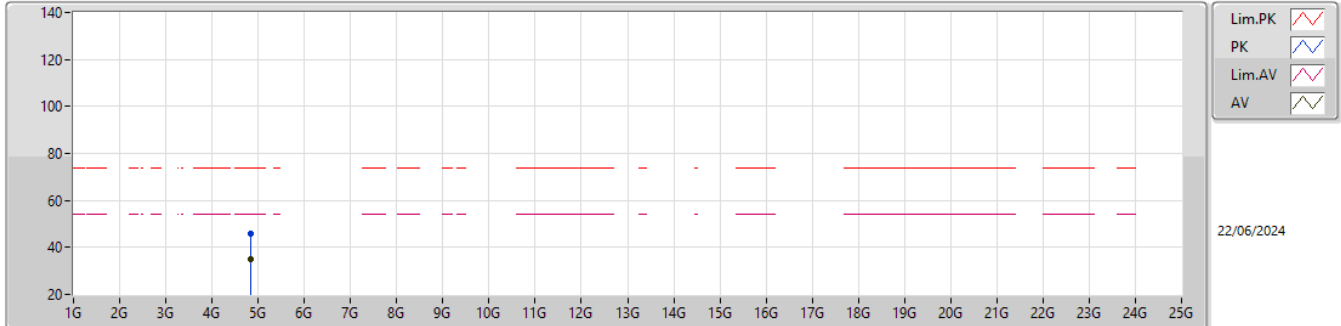


EUT_Y_1TX
Setting Default
01-I-J-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.8068G	45.48	74.00	-28.52	39.83	3	Vertical	200	1.37	-	31.30	6.92	32.57			
AV	4.77G	34.86	54.00	-19.14	29.31	3	Vertical	200	1.37	-	31.24	6.88	32.57			

2.4-2.4835GHz_BT-LE(1Mbps)

2402MHz_TX

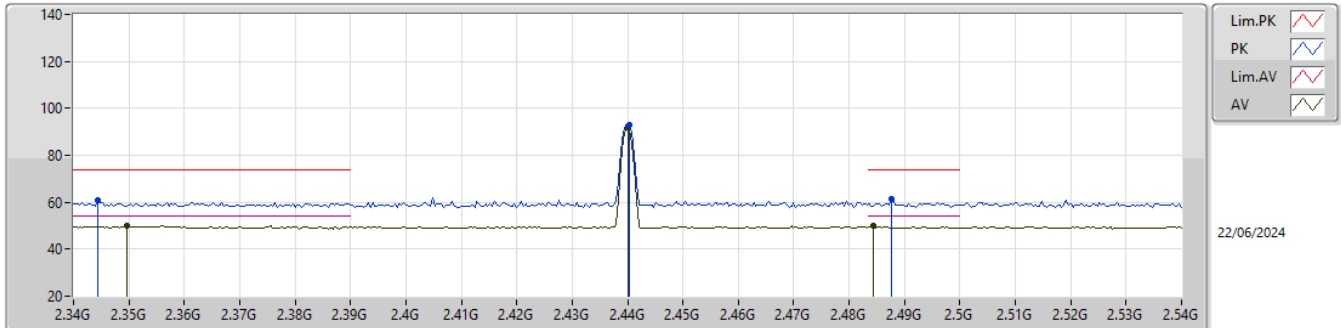


EUT_V_1TX
Setting Default
01-I-J-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.839G	45.61	74.00	-28.39	39.93	3	Horizontal	348	2.59	-	31.30	6.95	32.57			
AV	4.8292G	34.79	54.00	-19.21	29.12	3	Horizontal	348	2.59	-	31.30	6.94	32.57			

2.4-2.4835GHz_BT-LE(1Mbps)

2440MHz_TX

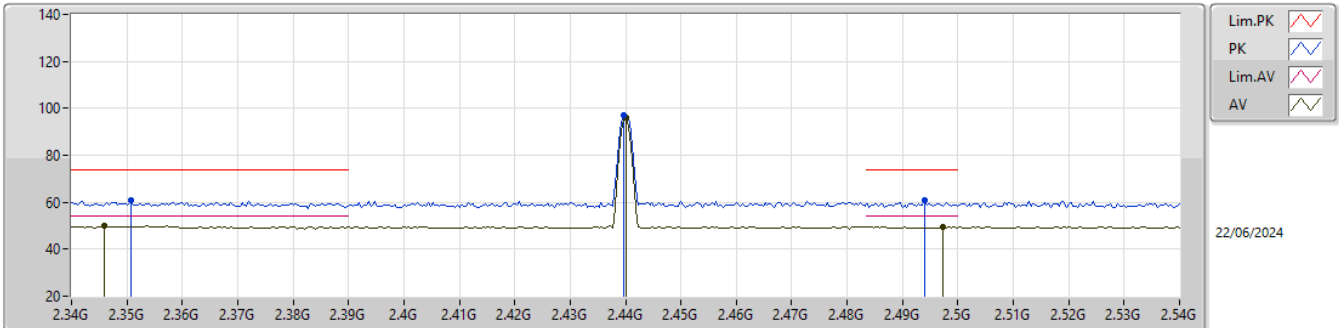


EUT_Y_1TX
Setting Default
01-I-J-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.3444G	60.76	74.00	-13.24	28.17	3	Vertical	55	3.00	-	28.00	4.59	-			
AV	2.3496G	49.90	54.00	-4.10	17.30	3	Vertical	55	3.00	-	28.00	4.60	-			
PK	2.4404G	92.95	Inf	-Inf	60.81	3	Vertical	55	3.00	-	27.50	4.64	-			
AV	2.44G	91.99	Inf	-Inf	59.85	3	Vertical	55	3.00	-	27.50	4.64	-			
PK	2.4876G	61.56	74.00	-12.44	29.46	3	Vertical	55	3.00	-	27.50	4.60	-			
AV	2.4844G	50.01	54.00	-3.99	17.91	3	Vertical	55	3.00	-	27.50	4.60	-			

2.4-2.4835GHz_BT-LE(1Mbps)

2440MHz_TX

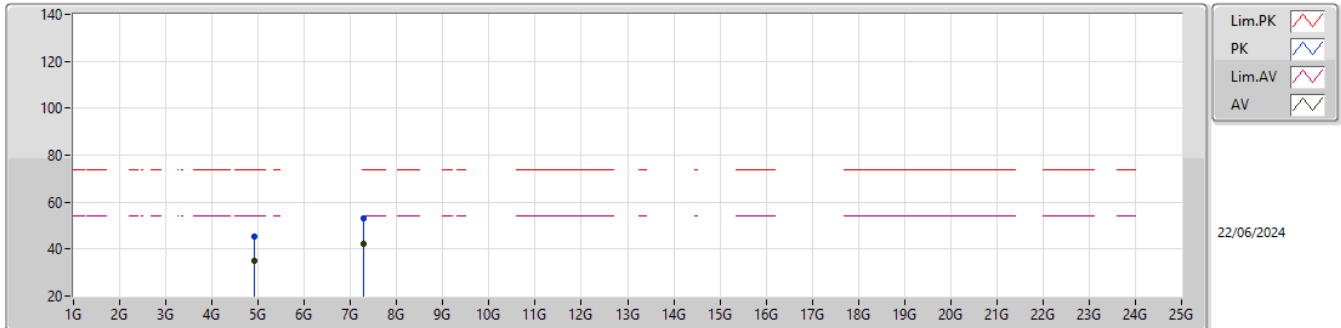


EUT_Y_1TX
Setting Default
01-I-J-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)				
PK	2.3508G	61.01	74.00	-12.99	28.42	3	Horizontal	133	2.85	-	27.99	4.60	-				
AV	2.346G	49.91	54.00	-4.09	17.32	3	Horizontal	133	2.85	-	28.00	4.59	-				
PK	2.4396G	96.89	Inf	-Inf	64.75	3	Horizontal	133	2.85	-	27.50	4.64	-				
AV	2.44G	95.93	Inf	-Inf	63.79	3	Horizontal	133	2.85	-	27.50	4.64	-				
PK	2.494G	60.62	74.00	-13.38	28.53	3	Horizontal	133	2.85	-	27.50	4.59	-				
AV	2.4972G	49.69	54.00	-4.31	17.60	3	Horizontal	133	2.85	-	27.50	4.59	-				

2.4-2.4835GHz_BT-LE(1Mbps)

2440MHz_TX

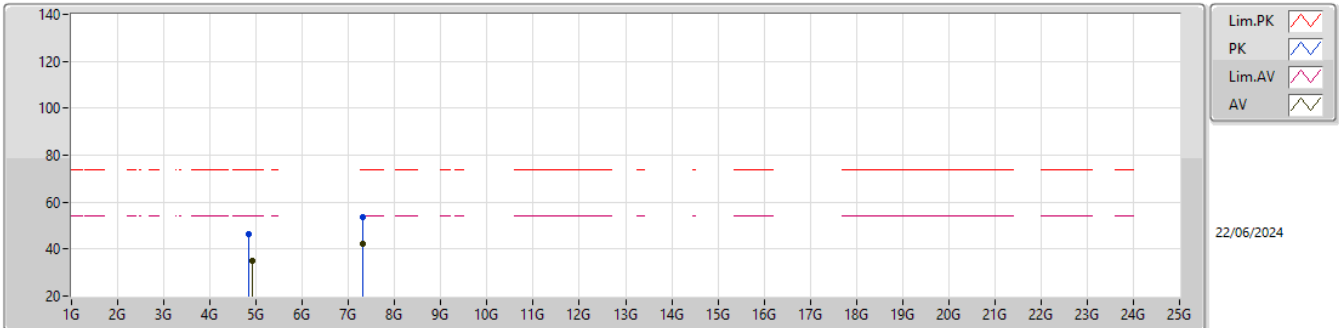


EUT_Y_1TX
Setting Default
01-I-J-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.9152G	45.39	74.00	-28.61	39.58	3	Vertical	307	2.23	-	31.36	7.03	32.58			
AV	4.9114G	34.97	54.00	-19.03	29.18	3	Vertical	307	2.23	-	31.35	7.02	32.58			
PK	7.2704G	52.93	74.00	-21.07	40.77	3	Vertical	200	1.91	-	36.24	8.57	32.65			
AV	7.2832G	42.08	54.00	-11.92	29.86	3	Vertical	200	1.91	-	36.27	8.59	32.64			

2.4-2.4835GHz_BT-LE(1Mbps)

2440MHz_TX

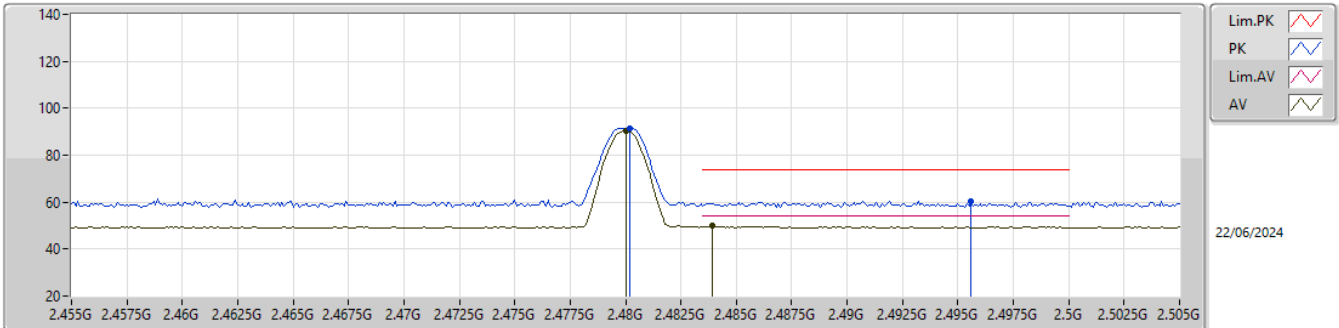


EUT_Y_1TX
Setting Default
01-I-J-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.8418G	46.21	74.00	-27.79	40.53	3	Horizontal	178	1.65	-	31.30	6.95	32.57			
AV	4.9136G	35.00	54.00	-19.00	29.21	3	Horizontal	178	1.65	-	31.35	7.02	32.58			
PK	7.2972G	53.42	74.00	-20.58	41.16	3	Horizontal	285	2.21	-	36.29	8.61	32.64			
AV	7.3016G	42.40	54.00	-11.60	30.14	3	Horizontal	285	2.21	-	36.29	8.61	32.64			

2.4-2.4835GHz_BT-LE(1Mbps)

2480MHz_TX

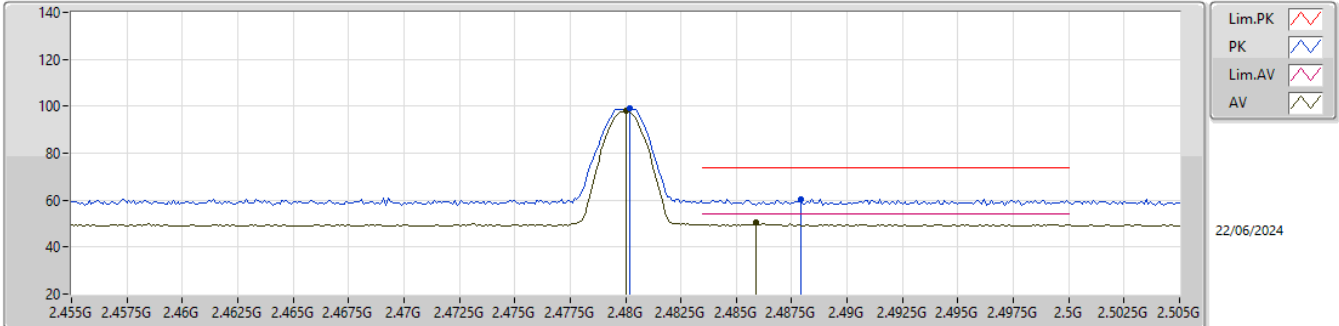


EUT_Y_1TX
Setting Default
01-I-J-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.4802G	91.37	Inf	-Inf	59.27	3	Vertical	14	3.00	-	27.50	4.60	-			
AV	2.48G	90.39	Inf	-Inf	58.29	3	Vertical	14	3.00	-	27.50	4.60	-			
PK	2.4956G	60.47	74.00	-13.53	28.38	3	Vertical	14	3.00	-	27.50	4.59	-			
AV	2.4839G	49.76	54.00	-4.24	17.66	3	Vertical	14	3.00	-	27.50	4.60	-			

2.4-2.4835GHz_BT-LE(1Mbps)

2480MHz_TX

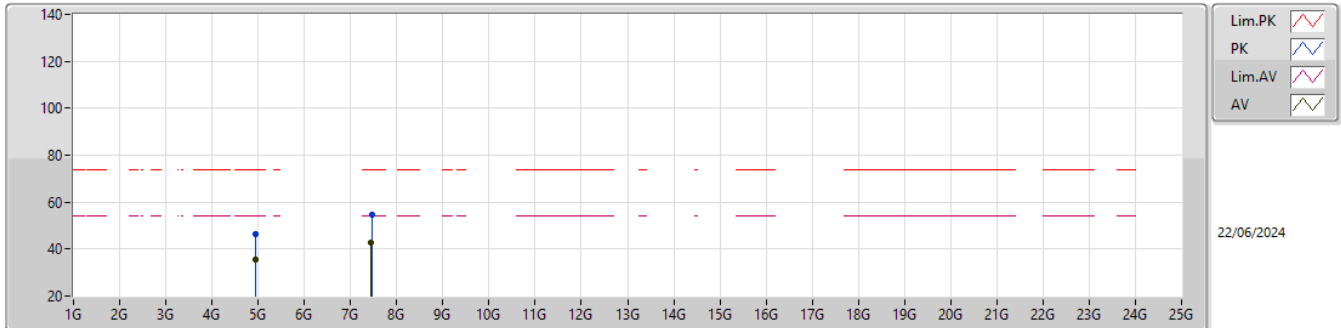


EUT_Y_1TX
Setting Default
01-I-J-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.4802G	98.88	Inf	-Inf	66.78	3	Horizontal	130	3.00	-	27.50	4.60	-			
AV	2.48G	97.90	Inf	-Inf	65.80	3	Horizontal	130	3.00	-	27.50	4.60	-			
PK	2.4879G	60.52	74.00	-13.48	28.42	3	Horizontal	130	3.00	-	27.50	4.60	-			
AV	2.4859G	50.26	54.00	-3.74	18.16	3	Horizontal	130	3.00	-	27.50	4.60	-			

2.4-2.4835GHz_BT-LE(1Mbps)

2480MHz_TX

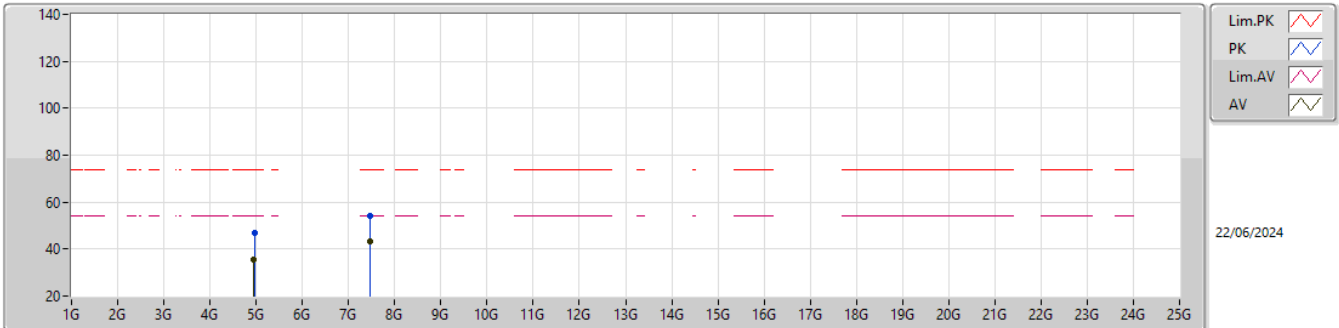


EUT_Y_1TX
Setting Default
01-I-J-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.955G	46.36	74.00	-27.64	40.35	3	Vertical	106	2.15	-	31.52	7.07	32.58			
AV	4.9477G	35.75	54.00	-18.25	29.78	3	Vertical	106	2.15	-	31.49	7.06	32.58			
PK	7.4563G	54.78	74.00	-19.22	42.23	3	Vertical	17	2.40	-	36.39	8.74	32.58			
AV	7.4431G	42.82	54.00	-11.18	30.31	3	Vertical	17	2.40	-	36.36	8.73	32.58			

2.4-2.4835GHz_BT-LE(1Mbps)

2480MHz_TX



EUT_Y_1TX
Setting Default
01-I-J-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.9684G	46.83	74.00	-27.17	40.76	3	Horizontal	95	2.31	-	31.57	7.08	32.58			
AV	4.9509G	35.61	54.00	-18.39	29.63	3	Horizontal	95	2.31	-	31.50	7.06	32.58			
PK	7.4543G	54.32	74.00	-19.68	41.77	3	Horizontal	326	1.14	-	36.39	8.74	32.58			
AV	7.4602G	43.09	54.00	-10.91	30.55	3	Horizontal	326	1.14	-	36.38	8.74	32.58			