

FCC Radio Test Report

FCC ID : TVE-512178E8741
Equipment : Secured Wireless Access Point
Brand Name : FORTINET
Model Name : FortiAP 443Kxxxxxx, FAP-443Kxxxxxx, FORTIAP-443Kxxxxxx
(Where "x" can be used as "A-Z", or "0-9", or "-", or blank for software changes or marketing purposes only)
Applicant : Fortinet, Inc.
899 Kifer Road, Sunnyvale, CA 94086, USA
Manufacturer : Fortinet, Inc.
899 Kifer Road, Sunnyvale, CA 94086, USA
Standard : 47 CFR FCC Part 15.247

The product was received on Oct. 27, 2023, and testing was started from Oct. 27, 2023 and completed on Dec. 09, 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: Ben Tseng

SPORTON INTERNATIONAL INC. Hsinhua Laboratory

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Report Template No.: HE1-C10 Ver4.3
FCC ID: TVE-512178E8741

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: Ann Hou

1 General Description

1.1 Information

1.1.1 RF General Information

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

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

Note:

- Bluetooth LE uses a GFSK (125kbps/500kbps/1Mbps/2Mbps) modulation.
- Bluetooth LE 125k/500k/1Mbps uses the same modulation, and 125kbps was found to be the worst case scenario which was performed full test and recorded in this test report.
- BWch is the nominal channel bandwidth.

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector	Support	Radio
1	AWAN	7102A0668000	Dipole	Reverse SMA	2.4G	Radio 1
					5G	Radio 2
2	AWAN	7102A0668000	Dipole	Reverse SMA	2.4G	Radio 1
					5G	Radio 2
3	AWAN	7102A0668000	Dipole	Reverse SMA	2.4G	Radio 1
					5G	Radio 2
4	AWAN	7102A0668000	Dipole	Reverse SMA	2.4G	Radio 1
					5G	Radio 2
5	AWAN	7102A0667000	Dipole	Reverse SMA	6E	Radio 3
6	AWAN	7102A0667000	Dipole	Reverse SMA	6E	Radio 3
7	AWAN	7102A0667000	Dipole	Reverse SMA	6E	Radio 3
8	AWAN	7102A0667000	Dipole	Reverse SMA	6E	Radio 3
9	AWAN	7102A0669000	Dipole	Reverse SMA	2.4G/5G/6E	Scan radio
10	AWAN	7102A0669000	Dipole	Reverse SMA	2.4G/5G/6E	Scan radio
11	Senao	5718A0736300	PIFA	I-Pex	BT& Zigbee	-
12	Quectel	7102A0656000	Patch	I-Pex	GPS	-
13	Quectel	Y4SEN00A1EA	Patch	Reverse SMA	GPS	-

Ant.	Port	Gain (dBi)										
		2.4G	UNII-1	UNII-2A	UNII-2C	UNII-3	UNII-5	UNII-6	UNII-7	UNII-8	BT/ Zigbee	GPS
1	1	2.09	3.8	3.29	4.33	3.96	-	-	-	-	-	-
2	2	3.21	4.66	5.01	5.49	5.28	-	-	-	-	-	-
3	3	2.14	4.51	5.64	5.94	5.78	-	-	-	-	-	-
4	4	2.42	4.08	3.89	5.43	5.25	-	-	-	-	-	-
5	1	-	-	-	-	-	4.44	4.67	4.72	5.69	-	-
6	2	-	-	-	-	-	5.23	4.75	5.27	4.4	-	-
7	3	-	-	-	-	-	4.46	4.71	5.87	5.89	-	-
8	4	-	-	-	-	-	5.30	4.53	5.86	5.8	-	-
9	1	2.12	4.25	3.56	4.66	4.47	5.88	5.30	5.29	4.25	-	-
10	2	2.22	4.66	5.90	5.63	5.49	5.81	5.83	5.90	4.79	-	-
11	1	-	-	-	-	-	-	-	-	-	4.5	-
12	1	-	-	-	-	-	-	-	-	-	-	-0.5
13	2	-	-	-	-	-	-	-	-	-	-	1.4

Composite Gain (dBi)											
	2.4G	UNII-1	UNII-2A	UNII-2C	UNII-3	5.885G	6.175G	6.475G	6.695G	6.995G	
DG [1SS]	5.45	8.76	8.85	9.06	9.27	9.23	8.72	8.18	8.76	8.30	
DG [2SS]	3.21	5.76	5.85	6.06	6.27	6.23	5.72	5.18	5.87	5.89	
DG [4SS]	3.21	4.66	5.64	5.94	5.78	5.87	5.30	4.75	5.87	5.89	

Note 1: The EUT has thirteen antennas.

Note 2: The antenna 13 mentioned above will not be sold with the EUT in the market

Note 3: The composite gain is derived as KDB 662911 D03 v01 which was used as directional gain. For more detail information, please refer to the Antenna Pattern Report AP370714-03.

For 2.4GHz function:

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

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

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

Ant. 9 (port 1) and Ant. 10 (port 2) could receive simultaneously.

For 5GHz function:

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

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

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

Ant. 9 (port 1) and Ant. 10 (port 2) could receive simultaneously.

For 6GHz function:

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

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

For IEEE 802.11ax/be mode (2RX)

Ant. 9 (port 1) and Ant. 10 (port 2) could receive simultaneously.

For BT function:

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

Ant. 11 (port 1) could transmit/receive.

For 802.15.4 function:

For IEEE 802.15.4 mode (1TX/1RX)

Ant. 11 (port 1) could transmit/receive.

1.1.3 EUT Information

Operational Condition			
EUT Power Type	From AC Adapter		
EUT Function	☒ Point-to-multipoint	☐ Point-to-point	
Type of EUT			
☒	Stand-alone		
☐	Combined (EUT where the radio part is fully integrated within another device)		
	Combined Equipment - Brand Name / Model No.: ...		
☐	Plug-in radio (EUT intended for a variety of host systems)		
	Host System - Brand Name / Model No.: ...		
☐	Other:		

1.1.4 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
BT-LE(125kbps)	1	0	n/a (DC≥0.98)	n/a (DC≥0.98)
BT-LE(2Mbps)	1	0	n/a (DC≥0.98)	n/a (DC≥0.98)

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

1.1.5 Table for Multiple Listing

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

Model Name	Description
FortiAP 443Kxxxxxx, FAP-443Kxxxxxx, FORTIAP-443Kxxxxxx (Where "x" can be used as "A-Z", or "0-9", or "-", or blank for software changes or marketing purposes only)	All the models are identical, the different model served as marketing strategy.

From the above models, model: FAP-443K was selected as representative model for the test and its data was recorded in this report.

1.2 Testing Applied Standards

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

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

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

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

1.3 Testing Location Information

Test Lab. : Sporton International Inc. Hsinhua Laboratory				
☒ Hsinhua (TAF: 3785)	ADD: No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)			
	TEL: 886-3-327-3456		FAX: 886-3-327-0973	
Test site Designation No. TW3785 with FCC.				
Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
AC Conduction	CO04-HY	Daniel Lin	21.3~22.4°C / 49~53%	09/Dec/2023
RF Conducted	TH07-HY	Xun Hsieh	22.6~23.4°C / 52~55%	27/Oct/2023~1/Nov/2023
Radiated	03CH02-HY	Ivan Chung	23.4~25.6°C / 53.1~58.2%	27/Oct/2023~01/Nov/2023
Radiated (co-location)	03CH02-HY	Lego Lin	23.1~24.2°C / 53.5~60.2%	08/Nov/2023~09/Nov/2023
☐ Wenhua 3rd. (TAF: 3785)	ADD: No. 58, Aly. 75, Ln. 564, Wenhua 3rd Rd., Guishan Dist. Taoyuan City 333, Taiwan (R.O.C.)			
	TEL: 886-3-327-0868			
Test site Designation No. TW0036 with FCC.				
☐ Wen 33rd.St. (TAF: 3785)	ADD: No.14-1, Ln. 19, Wen 33rd St., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.)			
	TEL: 886-3-318-0787		FAX: 886-3-318-0287	
Test site Designation No. TW0008 with FCC.				

1.4 Measurement Uncertainty

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

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



2 Test Configuration of EUT

2.1 Test Channel Mode

Test Software Version	PUTTY Release 0.62
-----------------------	--------------------

Mode	Power Setting
BT-LE(125kbps)	-
2402MHz	100
2440MHz	100
2480MHz	100
BT-LE(2Mbps)	-
2402MHz	100
2440MHz	100
2480MHz	100

2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral Test Voltage: 120Vac / 60Hz
Operating Mode	CTX
1	Adapter mode

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

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

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Operating Mode	CTX
1	Radio 1_2.4GHz+Radio 2_5G+Radio 3_6E+Bluetooth
2	Radio 1_2.4GHz+Radio 2_5G+Radio 3_6E+Zigbee
Refer to Sporton Test Report No.: FA370714-02 for Co-location RF Exposure Evaluation and Appendix G for Radiated Emission Co-location.	

2.3 Accessories

Accessories				
Bracket ceiling mount 1	Brand Name	DRAGONJET CORPORTION	Model Name	CLIP CEILING 9/16 LFP
Bracket ceiling mount 2	Brand Name	DRAGONJET CORPORTION	Model Name	CLIP CEILING 15/16 LFP

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

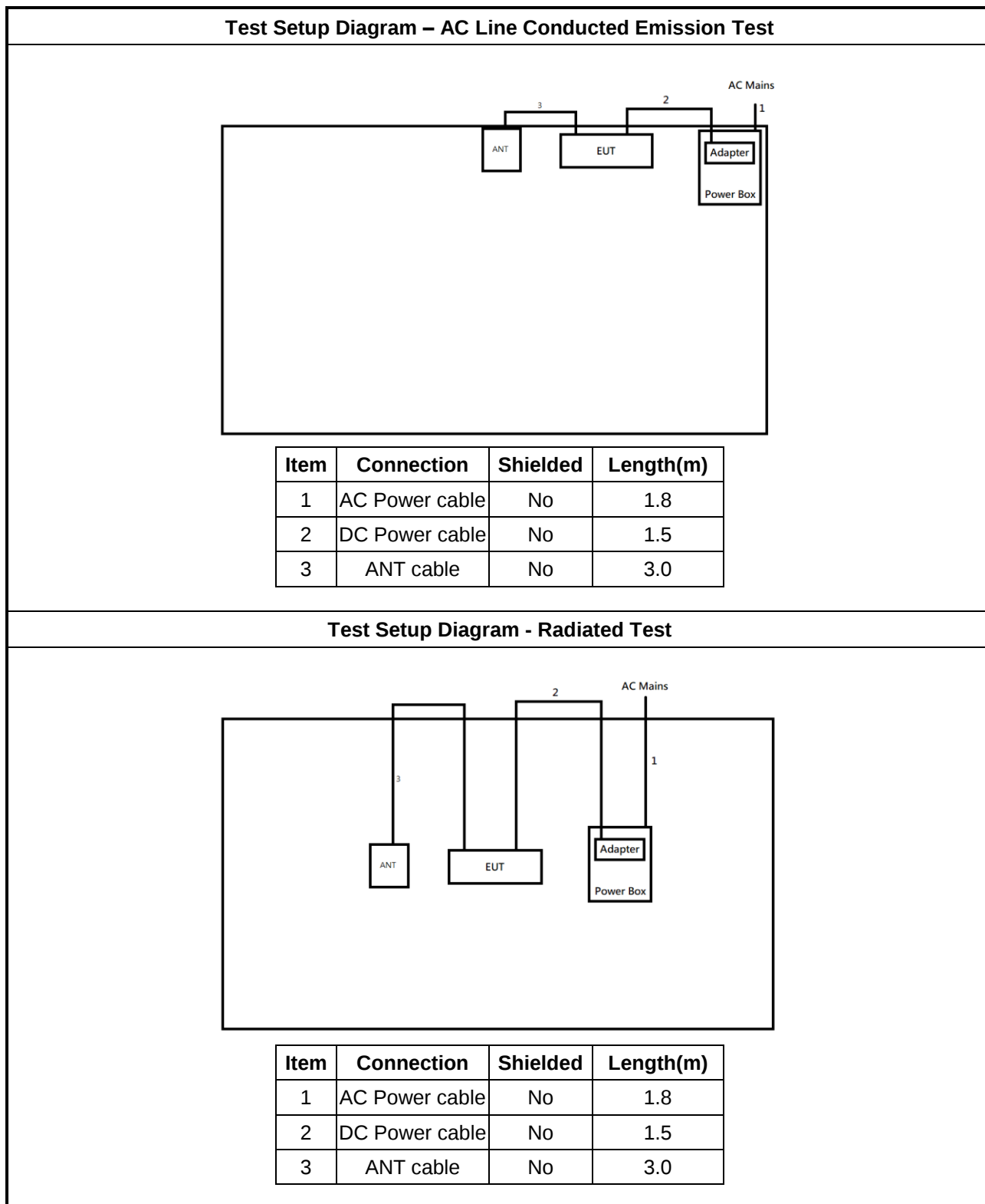
2.4 Support Equipment

Support Equipment – AC Conduction					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Adapter	ASIAN POWER DEVICES INC.	WA-48A12R	-	Provided by Customer

Support Equipment – Conducted					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Notebook	DELL	E5410	-	-
2	Adapter for NB	DELL	HA65NM130	-	-
3	AC Adapter	ASIAN POWER DEVICES INC.	WA-48A12R	-	Provided by Customer

Support Equipment – Radiated					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	AC Adapter	ASIAN POWER DEVICES INC.	WA-48A12R	-	Provided by Customer

2.5 Test Setup Diagram



3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50
Note 1: * Decreases with the logarithm of the frequency.		

3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

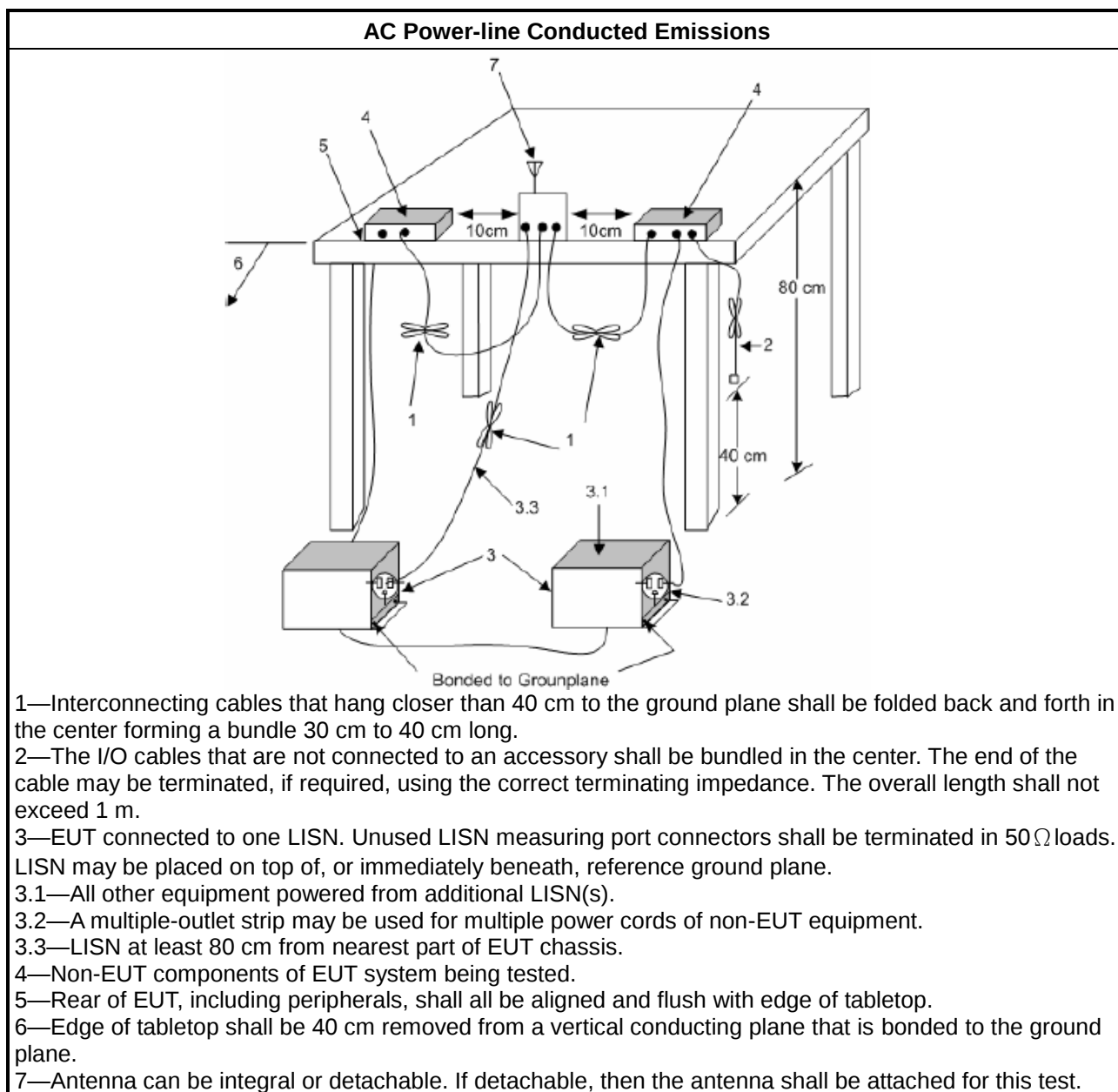
Test Method
▪ Refer as ANSI C63.10-2013, clause 6.2 foray power-line conducted emissions.

3.1.4 Measurement Results Calculation

The measured Level is calculated using:

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

3.1.5 Test Setup



3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 DTS Bandwidth

3.2.1 6dB Bandwidth Limit

6dB Bandwidth Limit	
Systems using digital modulation techniques:	
▪	6 dB bandwidth $\geq$ 500 kHz.

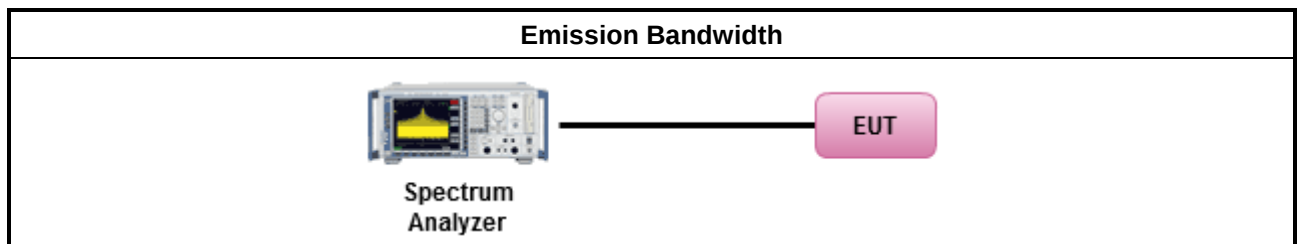
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method	
▪	For the emission bandwidth shall be measured using one of the options below:
☒	Refer as KDB 558074, clause 8.2 (11.8 of ANSI C63.10) DTS bandwidth measurement.
☐	Refer as RSS-Gen, clause 6.7 for occupied bandwidth testing.
☐	Refer as ANSI C63.10, clause 6.9.3 for occupied bandwidth testing.

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit	
	If $G_{TX} \leq 6$ dBi, then $P_{Out} \leq 30$ dBm (1 W)
	Point-to-multipoint systems (P2M): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ dBm
	Point-to-point systems (P2P): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	Smart antenna system (SAS):
	- Single beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	- Overlap beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	- Aggregate power on all beams: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3 + 8$ dB dBm
e.i.r.p. Power Limit:	
	2400-2483.5 MHz Band
	Point-to-multipoint systems (P2M): $P_{eirp} \leq 36$ dBm (4 W)
	Point-to-point systems (P2P): $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX}])$ dBm
	Smart antenna system (SAS)
	- Single beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm
	- Overlap beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm
	- Aggregate power on all beams: $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX} + 8])$ dBm
P_{Out} = maximum peak conducted output power or maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.	

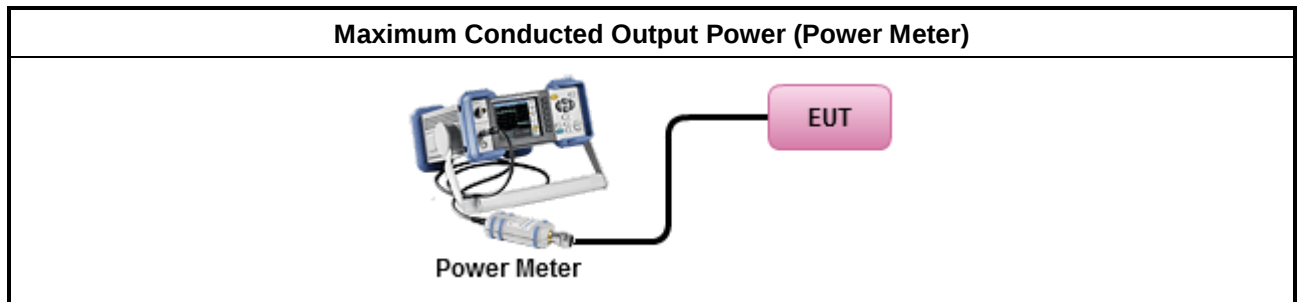
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
Maximum Peak Conducted Output Power	
☐	Refer as KDB 558074, clause 8.3.1.1 (11.9.1.1 of ANSI C63.10) RBW ≥ EBW method.
☐	Refer as KDB 558074, clause 8.3.1.2 (11.9.1.2 of ANSI C63.10) integrated band power method.
☐	Refer as KDB 558074, clause 8.3.1.3 (11.9.1.3 of ANSI C63.10) peak power meter.
Maximum Average Conducted Output Power	
☐	Refer as KDB 558074, clause 8.3.2.2 (11.9.2.2 of ANSI C63.10) using a spectrum analyzer.
☒	Refer as KDB 558074, clause 8.3.2.3 (11.9.2.3 of ANSI C63.10) using a power meter.
For conducted measurement.	
If the EUT supports multiple transmit chains using options given below: Refer as KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.	
If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$	

3.3.4 Test Setup



3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

Power Spectral Density Limit
Power Spectral Density (PSD) ≤ 8 dBm/3kHz

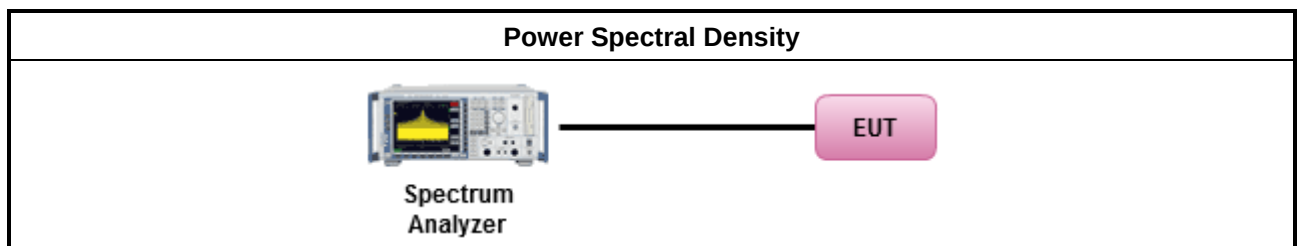
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

Test Method
Peak power spectral density procedures that the same method as used to determine the conducted output power. If maximum peak conducted output power was measured to demonstrate compliance to the output power limit, then the peak PSD procedure below (Method PKPSD) shall be used. If maximum conducted output power was measured to demonstrate compliance to the output power limit, then one of the average PSD procedures shall be used, as applicable based on the following criteria (the peak PSD procedure is also an acceptable option).
☒ Refer as KDB 558074, clause 8.4 (11.10 of ANSI C63.10) Max. PSD.
For conducted measurement.
If The EUT supports multiple transmit chains using options given below:
Measure and sum the spectra across the outputs. Refer as KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.

3.4.4 Test Setup



3.4.5 Test Result of Power Spectral Density

Refer as Appendix D

3.5 Emissions in Non-restricted Frequency Bands

3.5.1 Emissions in Non-restricted Frequency Bands Limit

Un-restricted Band Emissions Limit	
RF output power procedure	Limit (dB)
Peak output power procedure	20
Average output power procedure	30
Note 1: If the peak output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the peak conducted output power measured within any 100 kHz outside the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum measured in-band peak level. Note 2: If the average output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the power in any 100 kHz outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum measured in-band average level.	

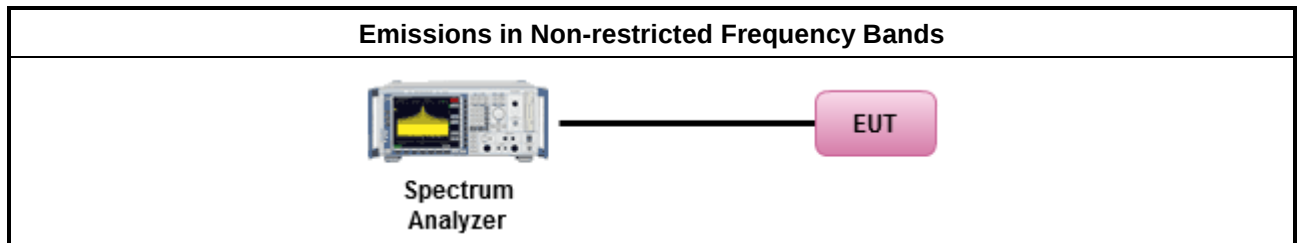
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

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

3.5.4 Test Setup



3.5.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix E

3.6 Emissions in Restricted Frequency Bands

3.6.1 Emissions in Restricted Frequency Bands Limit

Restricted Band Emissions Limit			
Frequency Range (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m)	Measure Distance (m)
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300
0.490~1.705	24000/F(kHz)	33.8 - 23	30
1.705~30.0	30	29	30
30~88	100	40	3
88~216	150	43.5	3
216~960	200	46	3
Above 960	500	54	3

Note 1: Test distance for frequencies at or above 30 MHz, measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

Note 2: Test distance for frequencies at below 30 MHz, measurements may be performed at a distance closer than the EUT limit distance; however, an attempt should be made to avoid making measurements in the near field. When performing measurements below 30 MHz at a closer distance than the limit distance, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two or more distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB / decade). The test report shall specify the extrapolation method used to determine compliance of the EUT.

Note 3: Using the distance of 1m during the test for above 18 GHz, and the test value to correct for the distance factor at 3m.

3.6.2 Measuring Instruments

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

3.6.3 Test Procedures

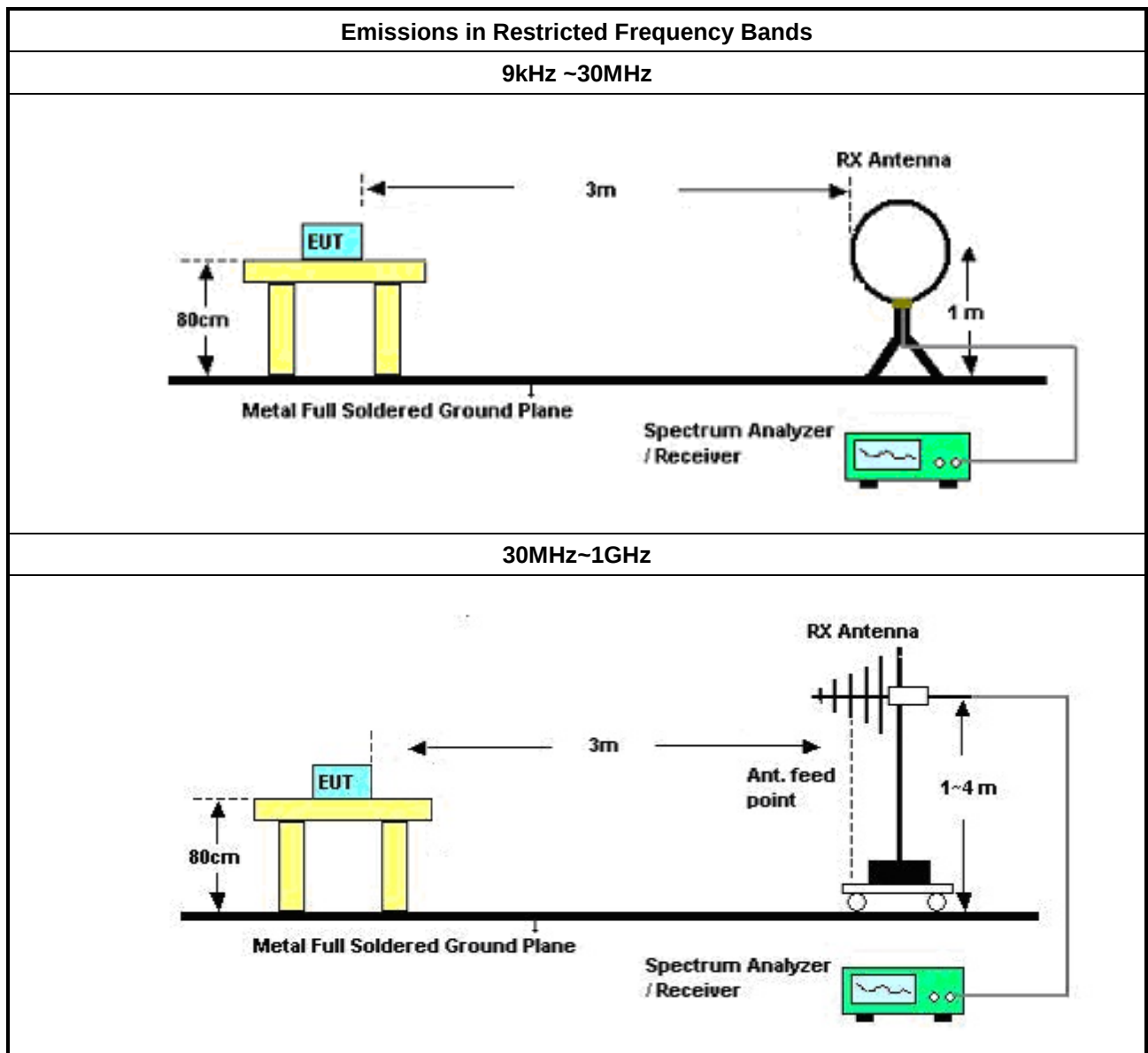
Test Method	
The average emission levels shall be measured in [duty cycle $\geq$ 98 or duty factor].	
Refer as ANSI C63.10, clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.	
For the transmitter unwanted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

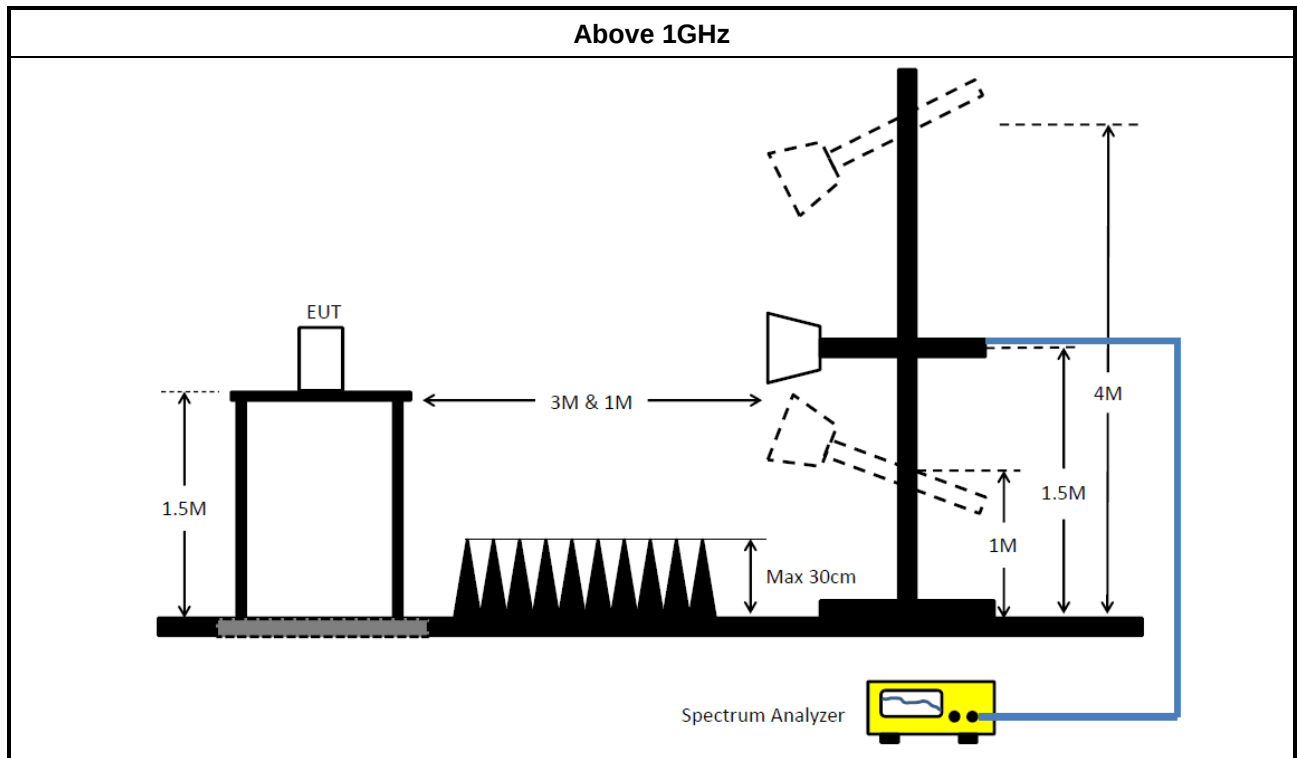
3.6.4 Measurement Results Calculation

The measured Level is calculated using:

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

3.6.5 Test Setup





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

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

3.6.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F

4 Test Equipment and Calibration Data

Instrument for AC Conduction

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMI Test Receiver	R&S	ESR	102051	9kHz ~ 3.6GHz	16/May/2023	15/May/2024
Two-Line V-Network	R&S	ENV 216	101295	9kHz ~ 30MHz	31/Jan/2023	30/Jan/2024
RF Cable 5m	TITAN	TITAN	CO04-cable-01	9kHz ~ 200MHz	28/Feb/2023	27/Feb/2024
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9kHz ~ 30MHz	18/Oct/2023	17/Oct/2024
Software	Sporton	SENSE-EMI	V5.11.3	-	NCR	NCR

NCR: No Calibration Required

Instrument for Conducted Test

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Signal Analyzer	R&S	FSV 40	101515	9kHz~40GHz	14/Feb/2023	13/Feb/2024
SMB100A Signal Generator	R&S	SMB100A	177785	1MHz-40GHz	19/Sep/2023	18/Sep/2024
Pulse Sensor	Anritsu	MA2411B	1339407	300MHz~40GHz	14/Dec/2022	13/Dec/2023
Power Meter	Anritsu	ML2495A	1517010	300MHz~40GHz	14/Dec/2022	13/Dec/2023
SENSE-15247_FS	Sporton	V5.11.2	N/A	N/A	N/A	N/A

**Instrument for Radiated Test**

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	30MHz~1GHz 3m	29/Jul/2023	28/Jul/2024
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz~18GHz 3m	28/Jul/2023	27/Jul/2024
EMI Test Receiver	R&S	ESR	102052	9kHz~3.6GHz	26/May/2023	25/May/2024
Signal Analyzer	R&S	FSP 40	100305	9kHz~40GHz	25/Mar/2023	24/Mar/2024
Loop Antenna	TESEQ	HLA 6120	31244	9kHz~30MHz	23/Mar/2023	22/Mar/2024
Bilog Antenna & 6dB Attenuator	SCHAFFNER / MTJ	CBL 6112B / MTJ6102-05	2723/2	30MHz~1GHz	27/Aug/2023	26/Aug/2024
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	02268	1GHz~18GHz	23/Sep/2023	22/Sep/2024
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170154	15GHz~40GHz	25/Mar/2023	24/Mar/2024
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
RF Cable-R03m	HUBER+SUHNE R	SUCOFLEX104	03CH02-cable-01	1GHz~40GHz	10/Feb/2023	09/Feb/2024
Amplifier	Aglient	8447D	2944A11149	100kHz~1.3GHz	27/Jun/2023	26/Jun/2024
Microwave Preamplifier	Agilent	8449B	3008A02373	1GHz~26.5GHz	24/Oct/2023	23/Oct/2024
Microwave Preamplifier	EMC INSTRUMENTS	EM18G40G	060604	18GHz ~ 40GHz	16/Mar/2023	15/Mar/2024
SENSE-15.247_FS	Sporton	V5.11.13	NA	NA	NA	NA

Instrument for Radiated Test (Co-location)

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz~18GHz 3m	28/Jul/2023	27/Jul/2024
Signal Analyzer	R&S	FSP 40	100305	9kHz~40GHz	25/Mar/2023	24/Mar/2024
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	02268	1GHz~18GHz	23/Sep/2023	22/Sep/2024
RF Cable-R03m	HUBER+SUHNE R	SUCOFLEX104	03CH02-cable-01	1GHz~40GHz	10/Feb/2023	09/Feb/2024
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170154	18GHz~40GHz	25/Mar/2023	24/Mar/2024
Microwave Preamplifier	Agilent	8449B	3008A02373	1GHz~26.5GHz	24/Oct/2023	23/Oct/2024
Microwave Preamplifier	EMC INSTRUMENTS	EM18G40G	060604	18GHz ~40GHz	16/Mar/2023	15/Mar/2024
SENSE-EMI	Sporton	V5.11.6	N/A	N/A	N/A	N/A



Conducted Emissions at Powerline

Appendix A

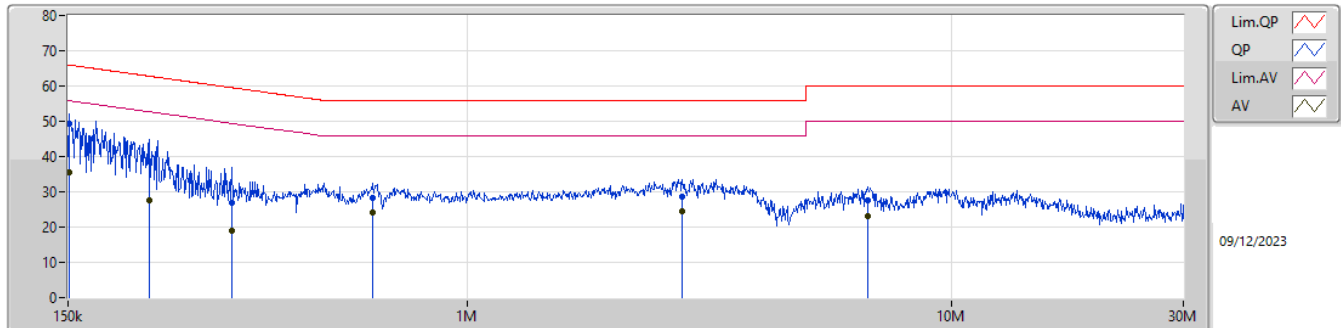
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	150.6k	49.31	65.96	-16.65	Line

Result

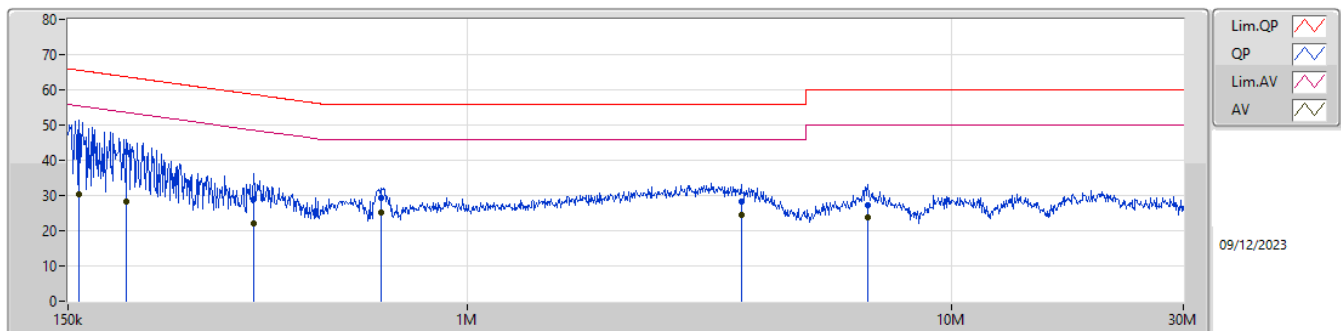
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	150.6k	49.31	65.96	-16.65	Line
Mode 1	Pass	AV	150.6k	35.48	55.96	-20.48	Line
Mode 1	Pass	QP	220.933k	38.69	62.79	-24.10	Line
Mode 1	Pass	AV	220.933k	27.64	52.79	-25.15	Line
Mode 1	Pass	QP	326.712k	26.76	59.54	-32.78	Line
Mode 1	Pass	AV	326.712k	18.86	49.54	-30.68	Line
Mode 1	Pass	QP	636.349k	28.37	56.00	-27.63	Line
Mode 1	Pass	AV	636.349k	24.24	46.00	-21.76	Line
Mode 1	Pass	QP	2.776M	28.54	56.00	-27.46	Line
Mode 1	Pass	AV	2.776M	24.39	46.00	-21.61	Line
Mode 1	Pass	QP	6.708M	27.45	60.00	-32.55	Line
Mode 1	Pass	AV	6.708M	23.03	50.00	-26.97	Line
Mode 1	Pass	QP	157.99k	46.89	65.56	-18.67	Neutral
Mode 1	Pass	AV	157.99k	30.41	55.56	-25.15	Neutral
Mode 1	Pass	QP	198.359k	42.37	63.69	-21.32	Neutral
Mode 1	Pass	AV	198.359k	28.14	53.69	-25.55	Neutral
Mode 1	Pass	QP	362.445k	28.89	58.68	-29.79	Neutral
Mode 1	Pass	AV	362.445k	22.04	48.68	-26.64	Neutral
Mode 1	Pass	QP	664.915k	29.31	56.00	-26.69	Neutral
Mode 1	Pass	AV	664.915k	25.28	46.00	-20.72	Neutral
Mode 1	Pass	QP	3.671M	28.40	56.00	-27.60	Neutral
Mode 1	Pass	AV	3.671M	24.56	46.00	-21.44	Neutral
Mode 1	Pass	QP	6.708M	27.22	60.00	-32.78	Neutral
Mode 1	Pass	AV	6.708M	23.64	50.00	-26.36	Neutral

Conducted Emissions at Powerline_Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)						
QP	150.6k	49.31	65.96	-16.65	19.38	Line	-	29.93	9.59	0.03	9.76						
AV	150.6k	35.48	55.96	-20.48	19.38	Line	-	16.10	9.59	0.03	9.76						
QP	220.933k	38.69	62.79	-24.10	19.31	Line	-	19.38	9.59	0.03	9.69						
AV	220.933k	27.64	52.79	-25.15	19.31	Line	-	8.33	9.59	0.03	9.69						
QP	326.712k	26.76	59.54	-32.78	19.38	Line	-	7.38	9.60	0.04	9.74						
AV	326.712k	18.86	49.54	-30.68	19.38	Line	-	-0.52	9.60	0.04	9.74						
QP	636.349k	28.37	56.00	-27.63	19.44	Line	-	8.93	9.61	0.05	9.78						
AV	636.349k	24.24	46.00	-21.76	19.44	Line	-	4.80	9.61	0.05	9.78						
QP	2.776M	28.54	56.00	-27.46	19.55	Line	-	8.99	9.65	0.10	9.80						
AV	2.776M	24.39	46.00	-21.61	19.55	Line	-	4.84	9.65	0.10	9.80						
QP	6.708M	27.45	60.00	-32.55	19.65	Line	-	7.80	9.70	0.16	9.79						
AV	6.708M	23.03	50.00	-26.97	19.65	Line	-	3.38	9.70	0.16	9.79						

Conducted Emissions at Powerline_Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)						
QP	157.99k	46.89	65.56	-18.67	19.37	Neutral	-	27.52	9.60	0.03	9.74						
AV	157.99k	30.41	55.56	-25.15	19.37	Neutral	-	11.04	9.60	0.03	9.74						
QP	198.359k	42.37	63.69	-21.32	19.31	Neutral	-	23.06	9.60	0.03	9.68						
AV	198.359k	28.14	53.69	-25.55	19.31	Neutral	-	8.83	9.60	0.03	9.68						
QP	362.445k	28.89	58.68	-29.79	19.39	Neutral	-	9.50	9.60	0.04	9.75						
AV	362.445k	22.04	48.68	-26.64	19.39	Neutral	-	2.65	9.60	0.04	9.75						
QP	664.915k	29.31	56.00	-26.69	19.44	Neutral	-	9.87	9.61	0.05	9.78						
AV	664.915k	25.28	46.00	-20.72	19.44	Neutral	-	5.84	9.61	0.05	9.78						
QP	3.671M	28.40	56.00	-27.60	19.55	Neutral	-	8.85	9.64	0.12	9.79						
AV	3.671M	24.56	46.00	-21.44	19.55	Neutral	-	5.01	9.64	0.12	9.79						
QP	6.708M	27.22	60.00	-32.78	19.62	Neutral	-	7.60	9.67	0.16	9.79						
AV	6.708M	23.64	50.00	-26.36	19.62	Neutral	-	4.02	9.67	0.16	9.79						

**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
BT-LE(125kbps)	748.75k	1.124M	1M12F1D	745k	1.121M
BT-LE(2Mbps)	1.345M	2.114M	2M11F1D	1.345M	2.101M

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

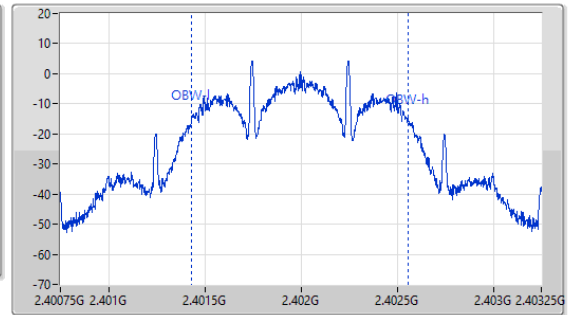
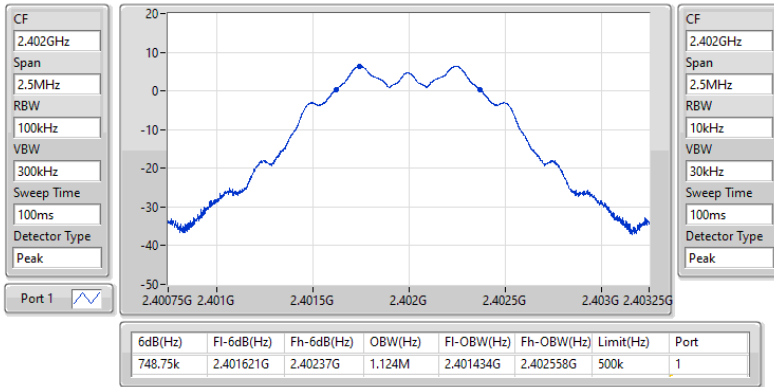
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-LE(125kbps)	-	-	-	-
2402MHz	Pass	500k	748.75k	1.124M
2440MHz	Pass	500k	745k	1.121M
2480MHz	Pass	500k	745k	1.121M
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	500k	1.345M	2.104M
2440MHz	Pass	500k	1.345M	2.101M
2480MHz	Pass	500k	1.345M	2.114M

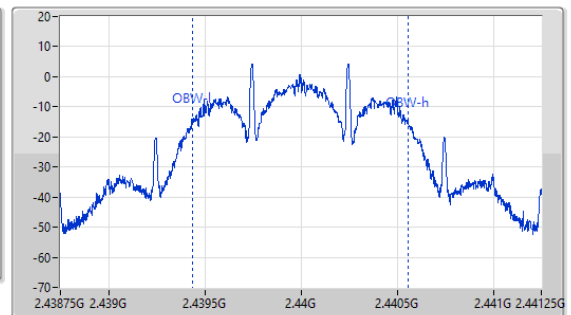
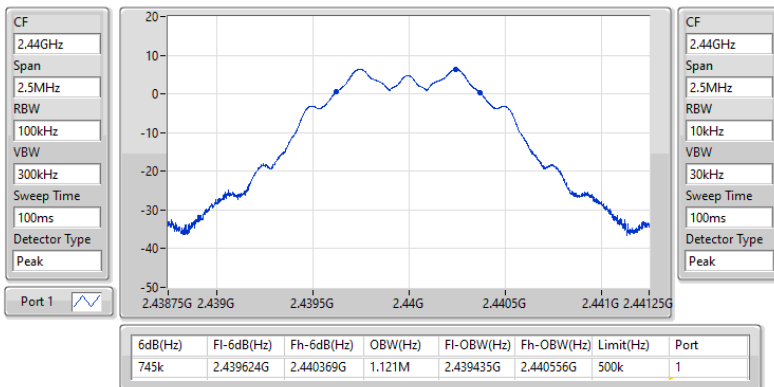
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

2.4-2.4835GHz_BT-LE(125kbps)
EBW-DTS
2402MHz

01/11/2023

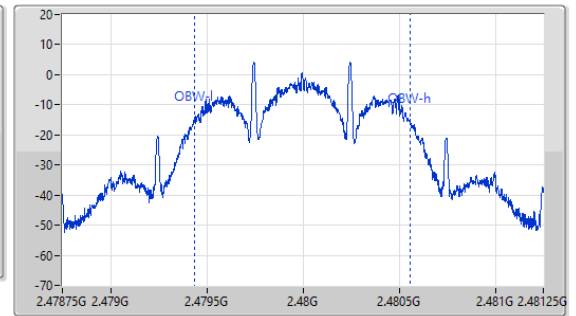
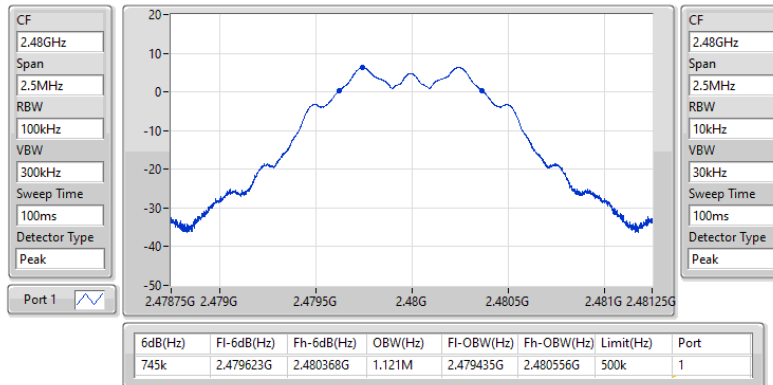

2.4-2.4835GHz_BT-LE(125kbps)
EBW-DTS
2440MHz

01/11/2023

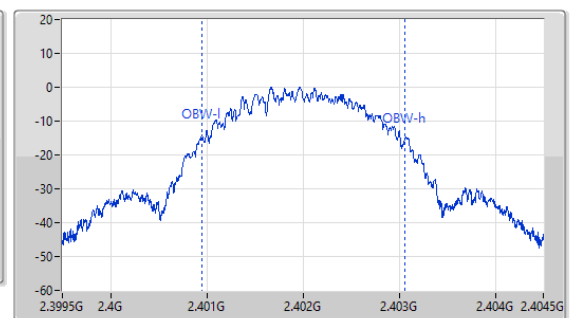
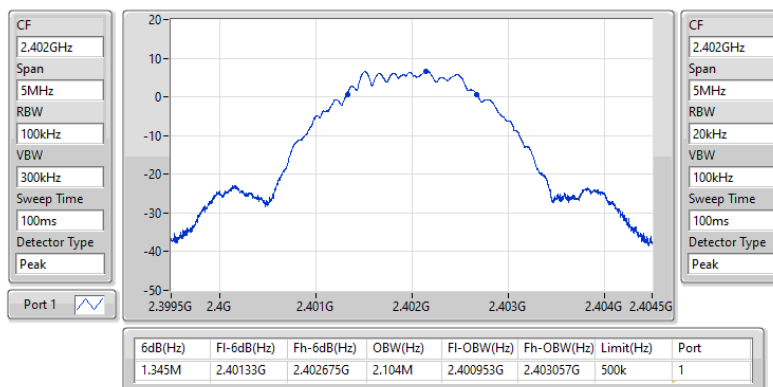


2.4-2.4835GHz_BT-LE(125kbps)
EBW-DTS
2480MHz

01/11/2023

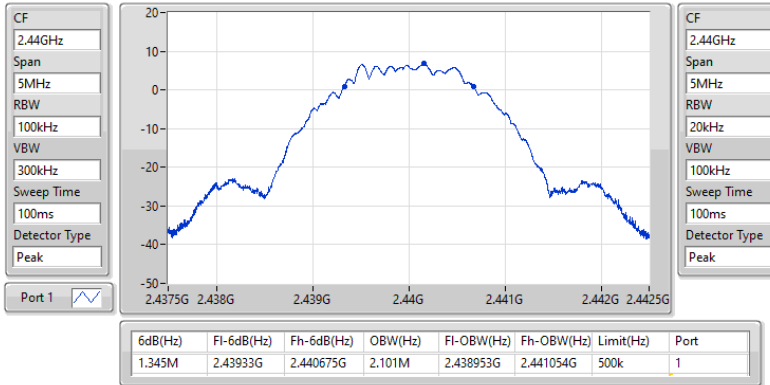

2.4-2.4835GHz_BT-LE(2Mbps)
EBW-DTS
2402MHz

27/10/2023

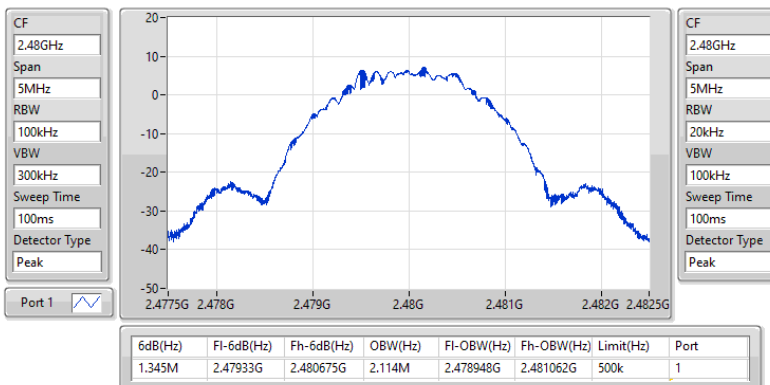


2.4-2.4835GHz_BT-LE(2Mbps)
EBW-DTS
2440MHz

27/10/2023


2.4-2.4835GHz_BT-LE(2Mbps)
EBW-DTS
2480MHz

27/10/2023





Summary

Mode	Total Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-LE(125kbps)	9.98	0.00995
BT-LE(2Mbps)	9.96	0.00991

**Result**

Mode	Result	DG (dBi)	Total Power (dBm)	Power Limit (dBm)
BT-LE(125kbps)	-	-	-	-
2402MHz	Pass	4.50	9.97	30.00
2440MHz	Pass	4.50	9.95	30.00
2480MHz	Pass	4.50	9.98	30.00
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	4.50	9.93	30.00
2440MHz	Pass	4.50	9.94	30.00
2480MHz	Pass	4.50	9.96	30.00

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



Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
BT-LE(125kbps)	4.16
BT-LE(2Mbps)	-7.89

RBW = 3kHz;

**Result**

Mode	Result	DG (dBi)	PD (dBm/RBW)	PD Limit (dBm/RBW)
BT-LE(125kbps)	-	-	-	-
2402MHz	Pass	4.50	4.16	8.00
2440MHz	Pass	4.50	4.16	8.00
2480MHz	Pass	4.50	4.06	8.00
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	4.50	-7.95	8.00
2440MHz	Pass	4.50	-7.89	8.00
2480MHz	Pass	4.50	-8.01	8.00

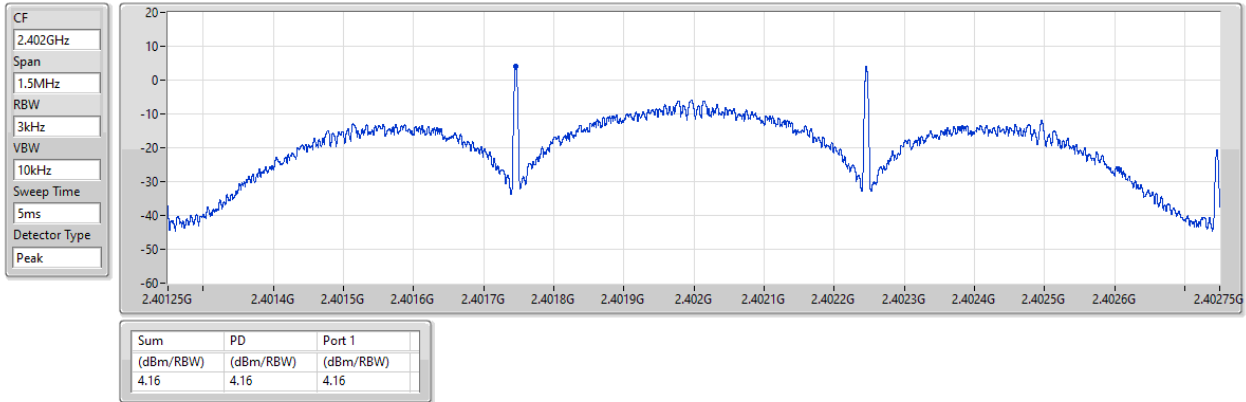
DG = Directional Gain; RBW = 3kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

2.4-2.4835GHz_BT-LE(125kbps)

PSD

2402MHz

01/11/2023

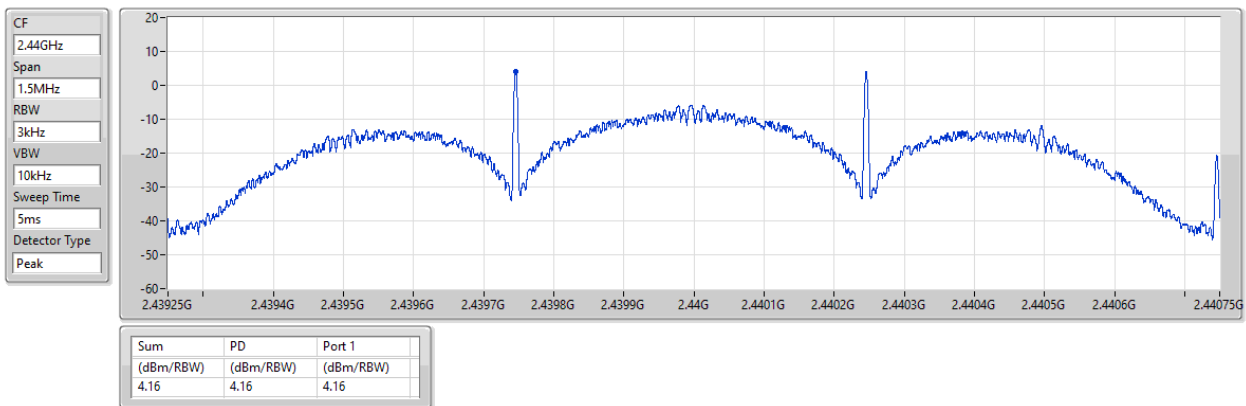


2.4-2.4835GHz_BT-LE(125kbps)

PSD

2440MHz

01/11/2023

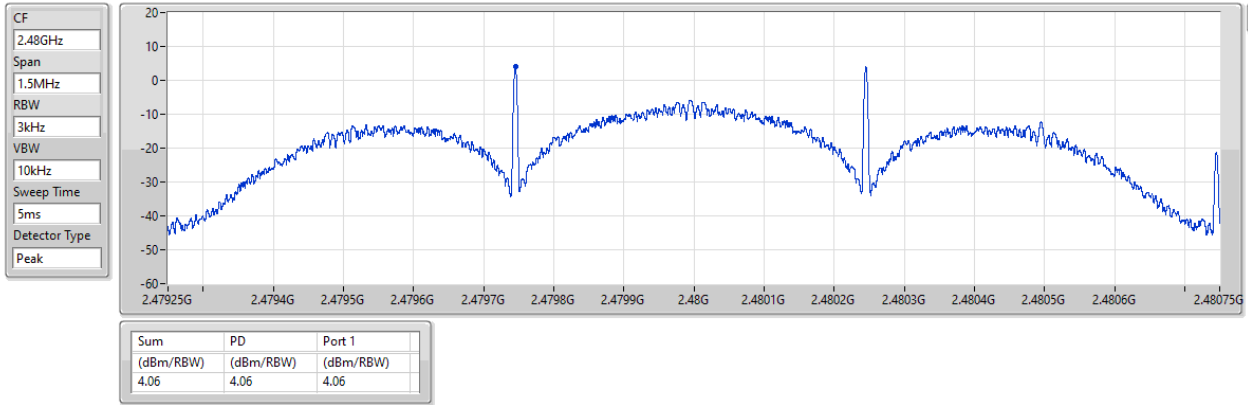


2.4-2.4835GHz_BT-LE(125kbps)

PSD

2480MHz

01/11/2023

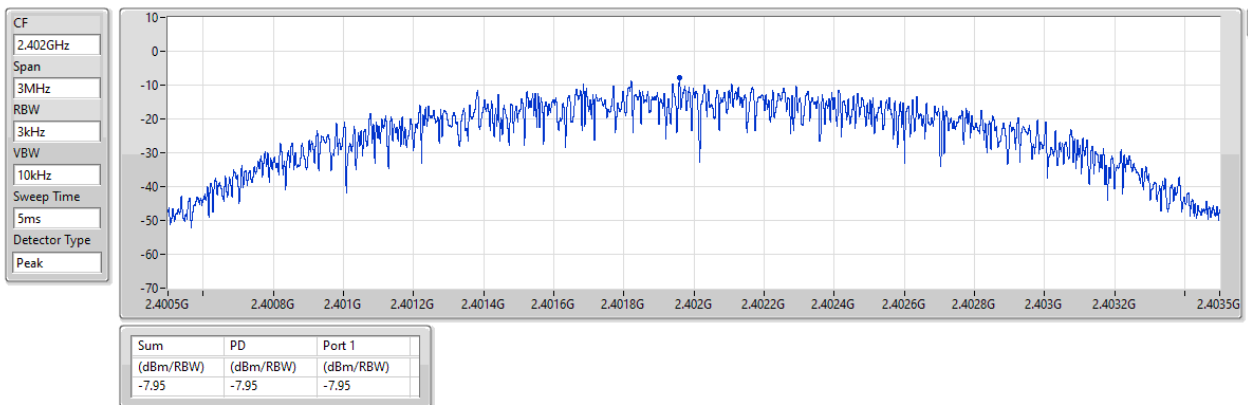


2.4-2.4835GHz_BT-LE(2Mbps)

PSD

2402MHz

27/10/2023

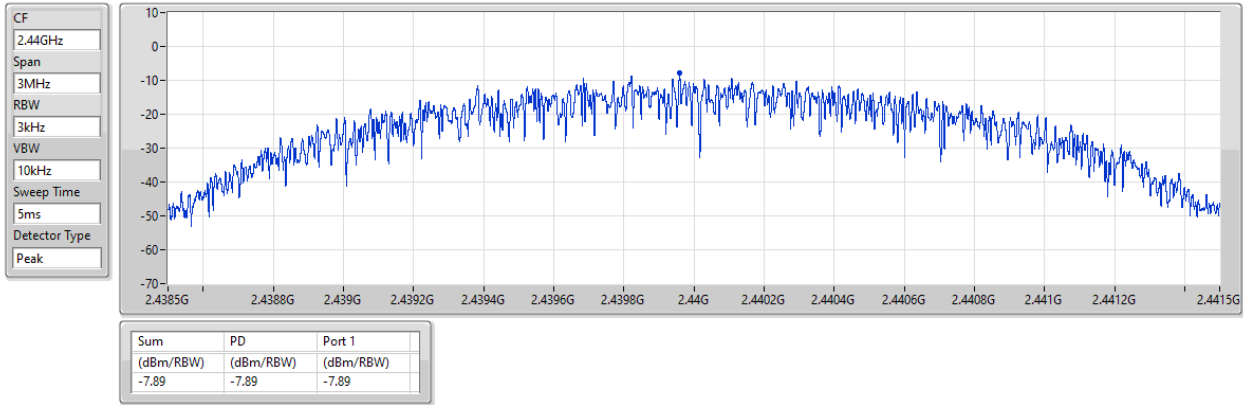


2.4-2.4835GHz_BT-LE(2Mbps)

PSD

2440MHz

27/10/2023

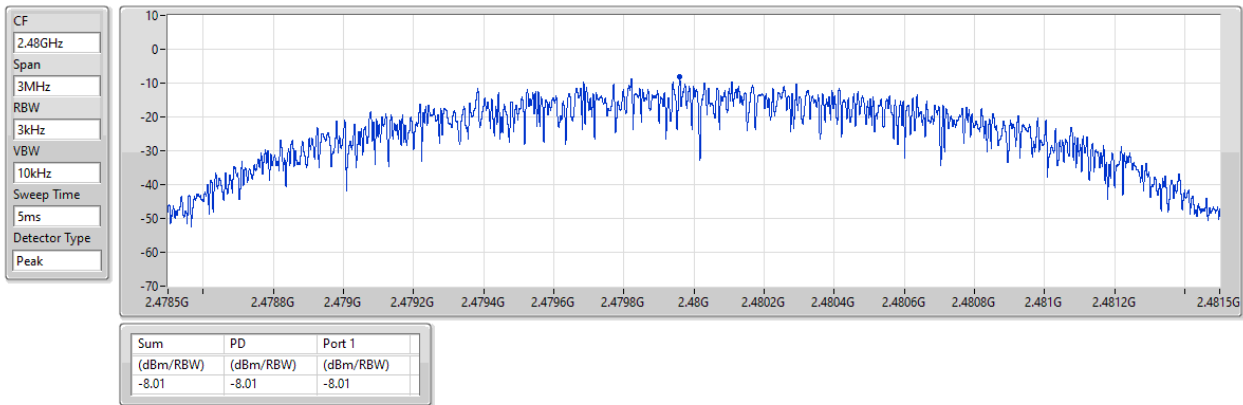


2.4-2.4835GHz_BT-LE(2Mbps)

PSD

2480MHz

27/10/2023



Summary

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BT-LE(125kbps)	Pass	2.47983G	6.66	-23.34	2.09095G	-54.86	2.4G	-42.88	2.4G	-41.89	2.50134G	-53.09	23.19747G	-42.17	1
BT-LE(2Mbps)	Pass	2.48016G	6.63	-23.37	2.1309G	-53.41	2.4G	-24.35	2.4G	-23.45	2.5035G	-52.24	15.10435G	-42.22	1

Result

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
BT-LE(125kbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.47983G	6.66	-23.34	2.09095G	-54.86	2.4G	-42.88	2.4G	-41.89	2.50134G	-53.09	23.19747G	-42.17	1
2440MHz	Pass	2.47983G	6.66	-23.34	2.19318G	-54.20	2.39836G	-52.02	2.4G	-56.18	2.50298G	-52.13	16.31635G	-41.72	1
2480MHz	Pass	2.47983G	6.66	-23.34	1.98285G	-54.25	2.3954G	-53.27	2.4G	-55.58	2.50222G	-52.63	24.47133G	-42.42	1
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.48016G	6.63	-23.37	2.1309G	-53.41	2.4G	-24.35	2.4G	-23.45	2.5035G	-52.24	15.10435G	-42.22	1
2440MHz	Pass	2.48016G	6.63	-23.37	1.98638G	-53.39	2.39676G	-52.17	2.4G	-55.16	2.5029G	-52.12	23.2284G	-41.52	1
2480MHz	Pass	2.48016G	6.63	-23.37	2.10505G	-53.47	2.39416G	-53.17	2.4G	-54.37	2.50158G	-51.76	16.5385G	-42.02	1

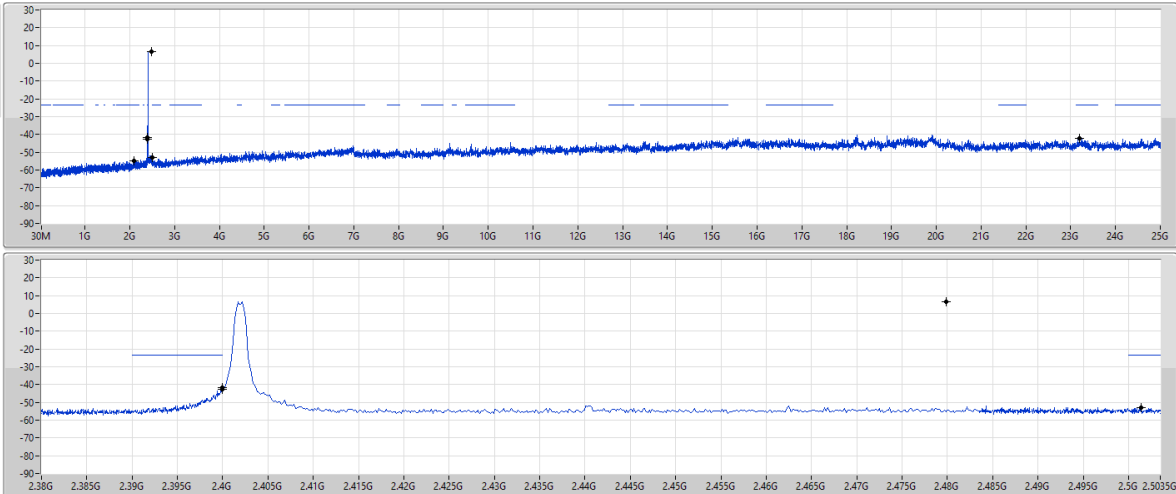
2.4-2.4835GHz_BT-LE(125kbps)

CSEndB-DTS

2402MHz

01/11/2023

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



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.47983G	6.66	-23.34	2.09095G	-54.86	2.4G	-42.88	2.4G	-41.89	2.50134G	-53.09	23.19747G	-42.17	1

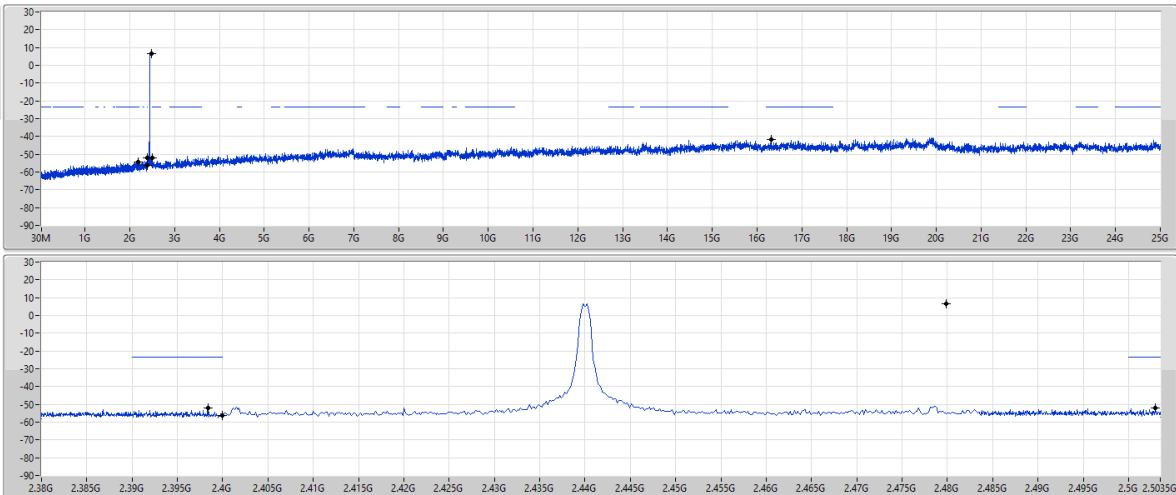
2.4-2.4835GHz_BT-LE(125kbps)

CSEndB-DTS

2440MHz

01/11/2023

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



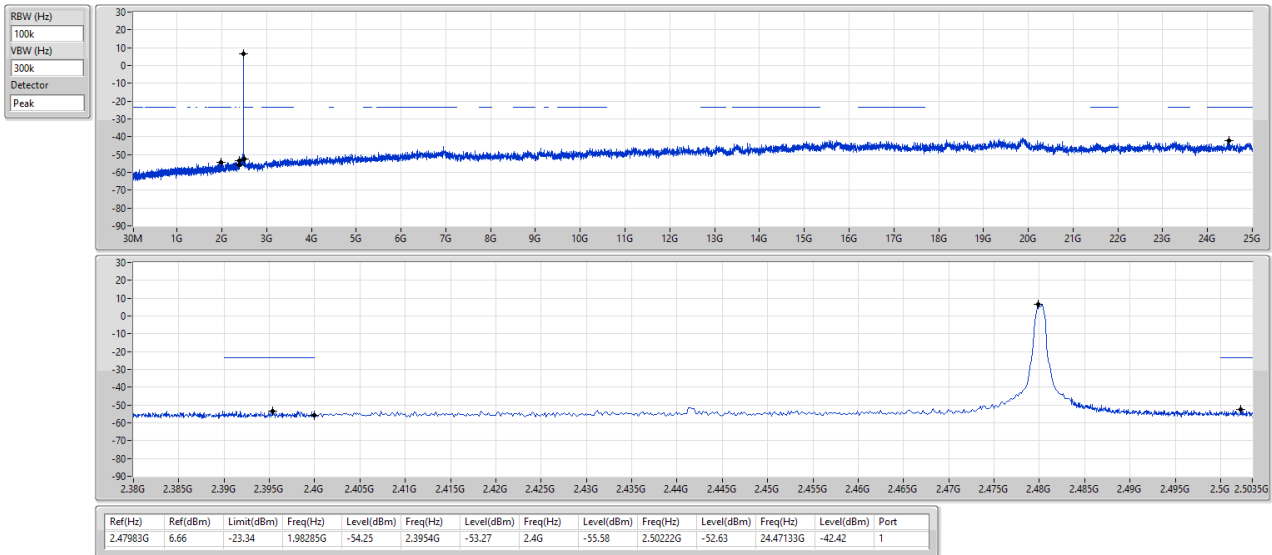
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.47983G	6.66	-23.34	2.19318G	-54.20	2.39636G	-52.02	2.4G	-56.18	2.50298G	-52.13	16.31635G	-41.72	1

2.4-2.4835GHz_BT-LE(125kbps)

CSEndB-DTS

2480MHz

01/11/2023

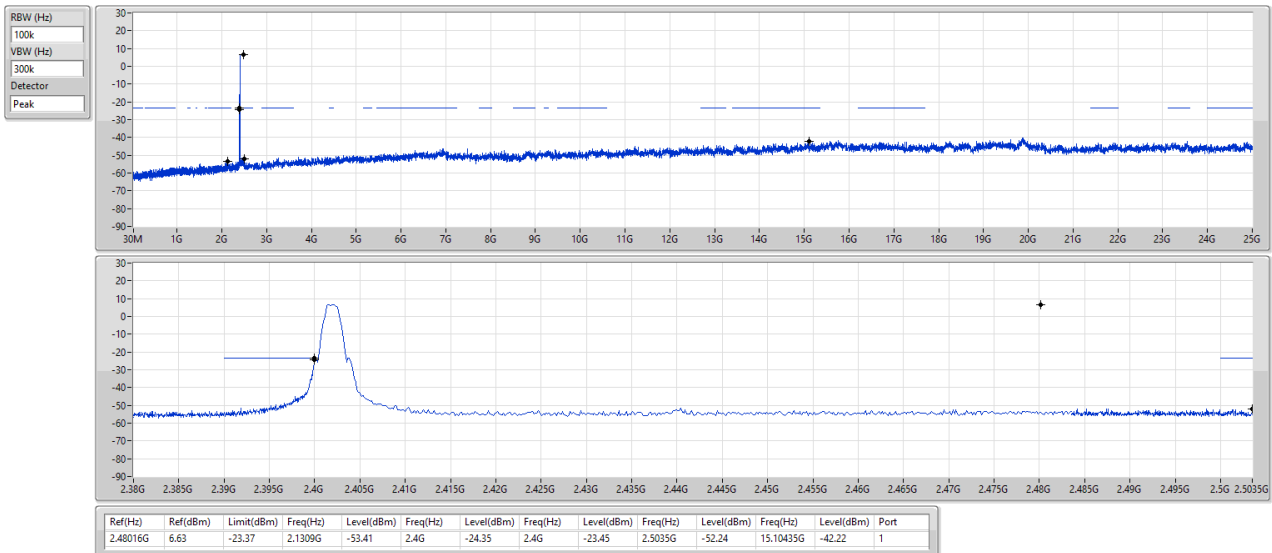


2.4-2.4835GHz_BT-LE(2Mbps)

CSEndB-DTS

2402MHz

27/10/2023

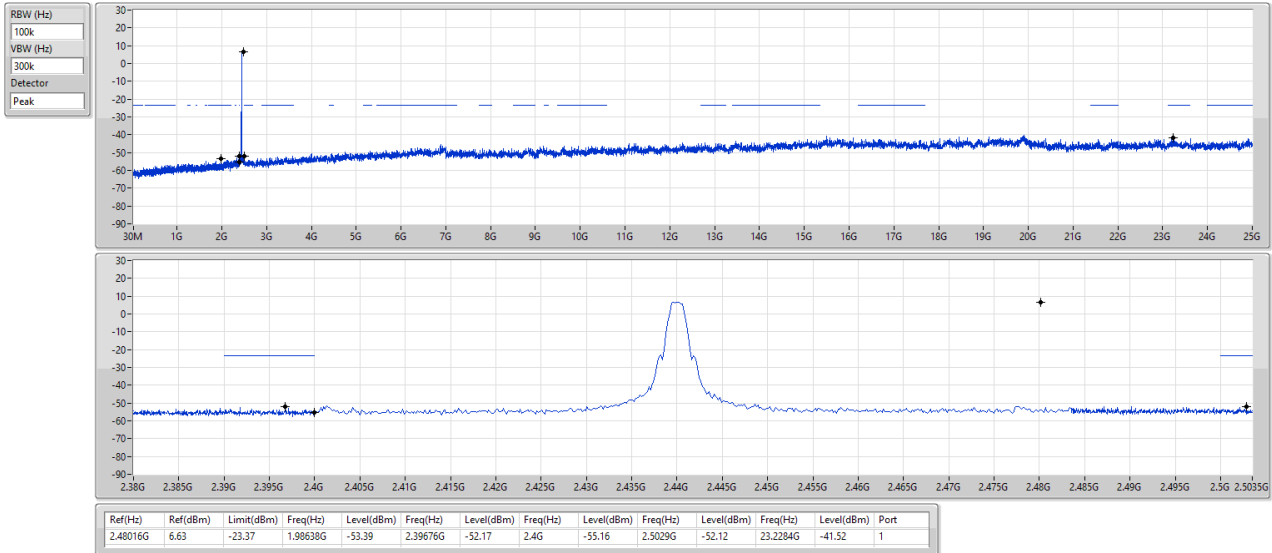


2.4-2.4835GHz_BT-LE(2Mbps)

CSEndB-DTS

2440MHz

27/10/2023

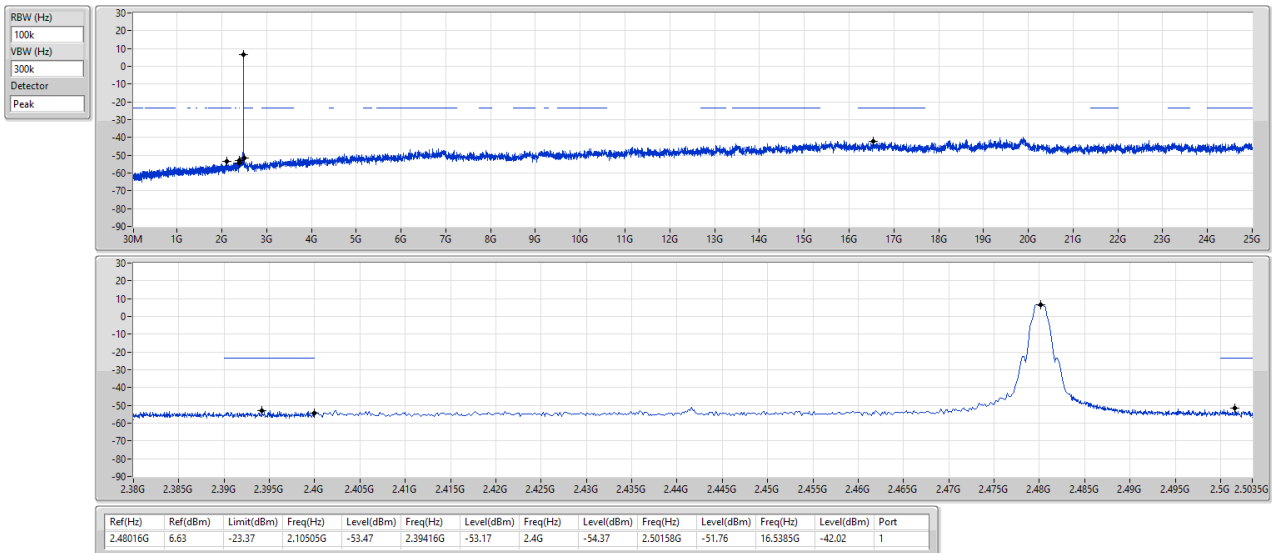


2.4-2.4835GHz_BT-LE(2Mbps)

CSEndB-DTS

2480MHz

27/10/2023





Summary

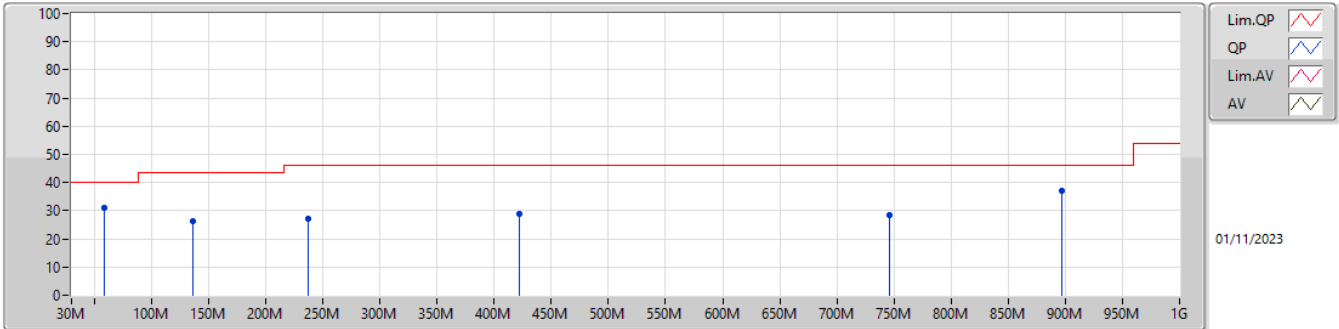
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-
BT-LE(2Mbps)	Pass	PK	897.18M	39.39	46.00	-6.61	3	Horizontal	0	1.00

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	PK	59.1M	31.04	40.00	-8.96	3	Vertical	360	1.00
2402MHz	Pass	PK	136.7M	26.17	43.50	-17.33	3	Vertical	360	1.00
2402MHz	Pass	PK	237.58M	27.20	46.00	-18.80	3	Vertical	360	1.00
2402MHz	Pass	PK	421.88M	28.81	46.00	-17.19	3	Vertical	360	1.00
2402MHz	Pass	PK	745.86M	28.59	46.00	-17.41	3	Vertical	360	1.00
2402MHz	Pass	PK	897.18M	37.05	46.00	-8.95	3	Vertical	360	1.00
2402MHz	Pass	PK	49.4M	30.88	40.00	-9.12	3	Horizontal	0	1.00
2402MHz	Pass	PK	138.64M	29.10	43.50	-14.40	3	Horizontal	0	1.00
2402MHz	Pass	PK	220.12M	27.55	46.00	-18.45	3	Horizontal	0	1.00
2402MHz	Pass	PK	353.98M	27.88	46.00	-18.12	3	Horizontal	0	1.00
2402MHz	Pass	PK	736.16M	29.06	46.00	-16.94	3	Horizontal	0	1.00
2402MHz	Pass	PK	897.18M	39.39	46.00	-6.61	3	Horizontal	0	1.00

2.4-2.4835GHz_BT-LE(2Mbps)

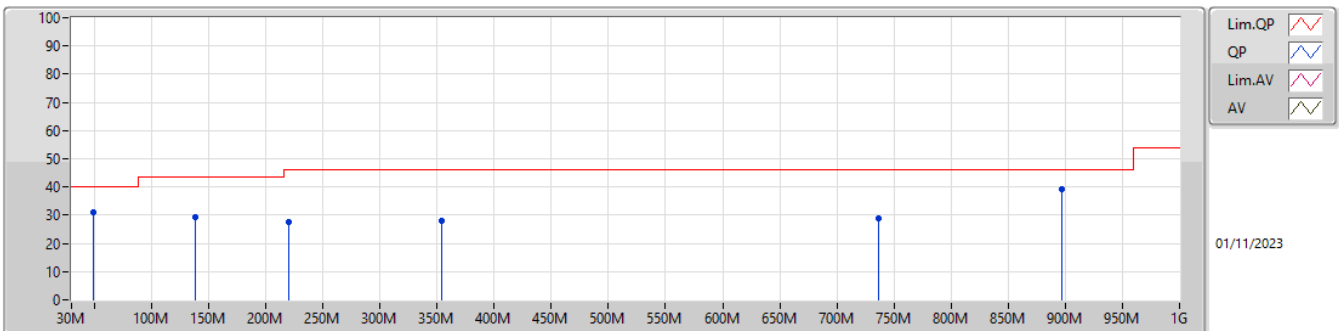
2402MHz_TX



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)
PK	59.1M	31.04	40.00	-8.96	-14.35	3	Vertical	360	1.00	45.39	11.48	1.52	27.35
PK	136.7M	26.17	43.50	-17.33	-8.82	3	Vertical	360	1.00	34.99	16.67	2.29	27.78
PK	237.58M	27.20	46.00	-18.80	-8.10	3	Vertical	360	1.00	35.30	16.20	2.98	27.28
PK	421.88M	28.81	46.00	-17.19	-2.20	3	Vertical	360	1.00	31.01	21.83	4.07	28.10
PK	745.86M	28.59	46.00	-17.41	1.92	3	Vertical	360	1.00	26.67	24.76	5.49	28.33
PK	897.18M	37.05	46.00	-8.95	3.77	3	Vertical	360	1.00	33.28	25.49	6.16	27.88

2.4-2.4835GHz_BT-LE(2Mbps)

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)
PK	49.4M	30.88	40.00	-9.12	-11.67	3	Horizontal	0	1.00	42.55	13.79	1.42	26.88
PK	138.64M	29.10	43.50	-14.40	-8.90	3	Horizontal	0	1.00	38.00	16.55	2.32	27.77
PK	220.12M	27.55	46.00	-18.45	-10.13	3	Horizontal	0	1.00	37.68	14.35	2.90	27.38
PK	353.98M	27.88	46.00	-18.12	-4.24	3	Horizontal	0	1.00	32.12	19.70	3.68	27.62
PK	736.16M	29.06	46.00	-16.94	1.73	3	Horizontal	0	1.00	27.33	24.61	5.47	28.35
PK	897.18M	39.39	46.00	-6.61	3.77	3	Horizontal	0	1.00	35.62	25.49	6.16	27.88



Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-
BT-LE(125kbps)	Pass	AV	2.4835G	49.20	54.00	-4.80	3	Horizontal	61	2.28
BT-LE(2Mbps)	Pass	AV	2.4835G	52.84	54.00	-1.16	3	Horizontal	63	2.09

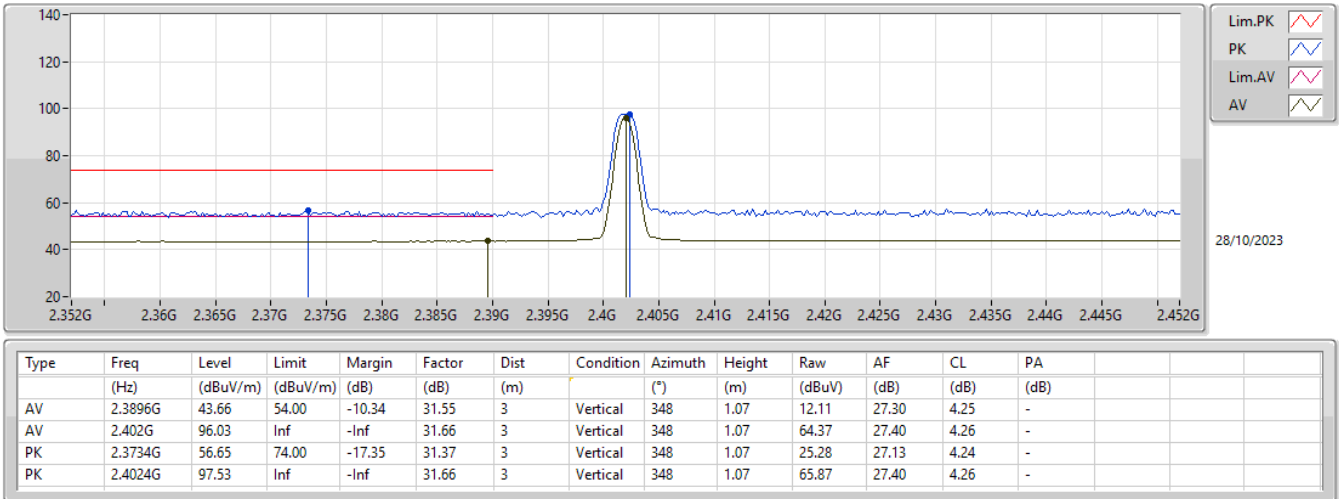
Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
BT-LE(125kbps)	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3896G	43.66	54.00	-10.34	3	Vertical	348	1.07
2402MHz	Pass	AV	2.402G	96.03	Inf	-Inf	3	Vertical	348	1.07
2402MHz	Pass	PK	2.3734G	56.65	74.00	-17.35	3	Vertical	348	1.07
2402MHz	Pass	PK	2.4024G	97.53	Inf	-Inf	3	Vertical	348	1.07
2402MHz	Pass	AV	2.3634G	45.06	54.00	-8.94	3	Horizontal	54	2.17
2402MHz	Pass	AV	2.402G	107.61	Inf	-Inf	3	Horizontal	54	2.17
2402MHz	Pass	PK	2.3854G	56.97	74.00	-17.03	3	Horizontal	54	2.17
2402MHz	Pass	PK	2.4018G	109.07	Inf	-Inf	3	Horizontal	54	2.17
2402MHz	Pass	AV	4.80354G	26.66	54.00	-27.34	3	Vertical	170	2.59
2402MHz	Pass	PK	4.80366G	40.15	74.00	-33.85	3	Vertical	170	2.59
2402MHz	Pass	AV	4.80346G	26.66	54.00	-27.34	3	Horizontal	109	1.50
2402MHz	Pass	PK	4.80186G	40.48	74.00	-33.52	3	Horizontal	109	1.50
2440MHz	Pass	AV	2.3896G	43.68	54.00	-10.32	3	Vertical	157	2.71
2440MHz	Pass	AV	2.44G	96.55	Inf	-Inf	3	Vertical	157	2.71
2440MHz	Pass	AV	2.4968G	44.16	54.00	-9.84	3	Vertical	157	2.71
2440MHz	Pass	PK	2.3896G	57.60	74.00	-16.40	3	Vertical	157	2.71
2440MHz	Pass	PK	2.4396G	98.05	Inf	-Inf	3	Vertical	157	2.71
2440MHz	Pass	PK	2.4872G	58.26	74.00	-15.74	3	Vertical	157	2.71
2440MHz	Pass	AV	2.3856G	43.66	54.00	-10.34	3	Horizontal	59	2.34
2440MHz	Pass	AV	2.44G	107.35	Inf	-Inf	3	Horizontal	59	2.34
2440MHz	Pass	AV	2.492G	44.16	54.00	-9.84	3	Horizontal	59	2.34
2440MHz	Pass	PK	2.3452G	56.86	74.00	-17.14	3	Horizontal	59	2.34
2440MHz	Pass	PK	2.4396G	108.81	Inf	-Inf	3	Horizontal	59	2.34
2440MHz	Pass	PK	2.49G	57.34	74.00	-16.66	3	Horizontal	59	2.34
2440MHz	Pass	AV	4.8796G	27.05	54.00	-26.95	3	Vertical	257	2.89
2440MHz	Pass	AV	7.31924G	33.66	54.00	-20.34	3	Vertical	33	1.92
2440MHz	Pass	PK	4.87956G	41.05	74.00	-32.95	3	Vertical	257	2.89
2440MHz	Pass	PK	7.32074G	47.93	74.00	-26.07	3	Vertical	33	1.92
2440MHz	Pass	AV	4.88042G	27.16	54.00	-26.84	3	Horizontal	172	1.82
2440MHz	Pass	AV	7.31922G	35.34	54.00	-18.66	3	Horizontal	45	1.55
2440MHz	Pass	PK	4.87982G	42.25	74.00	-31.75	3	Horizontal	172	1.82
2440MHz	Pass	PK	7.32078G	48.92	74.00	-25.08	3	Horizontal	45	1.55
2480MHz	Pass	AV	2.48G	96.72	Inf	-Inf	3	Vertical	161	1.04
2480MHz	Pass	AV	2.4835G	44.76	54.00	-9.24	3	Vertical	161	1.04
2480MHz	Pass	PK	2.4798G	98.18	Inf	-Inf	3	Vertical	161	1.04
2480MHz	Pass	PK	2.4966G	57.80	74.00	-16.20	3	Vertical	161	1.04
2480MHz	Pass	AV	2.48G	107.31	Inf	-Inf	3	Horizontal	61	2.28
2480MHz	Pass	AV	2.4835G	49.20	54.00	-4.80	3	Horizontal	61	2.28
2480MHz	Pass	PK	2.4802G	108.74	Inf	-Inf	3	Horizontal	61	2.28
2480MHz	Pass	PK	2.4835G	60.82	74.00	-13.18	3	Horizontal	61	2.28
2480MHz	Pass	AV	4.96044G	27.56	54.00	-26.44	3	Vertical	313	1.59
2480MHz	Pass	AV	7.44074G	33.26	54.00	-20.74	3	Vertical	5	2.73
2480MHz	Pass	PK	4.9598G	42.09	74.00	-31.91	3	Vertical	313	1.59
2480MHz	Pass	PK	7.44098G	46.80	74.00	-27.20	3	Vertical	5	2.73
2480MHz	Pass	AV	4.95952G	27.40	54.00	-26.60	3	Horizontal	230	2.34
2480MHz	Pass	AV	7.43924G	34.02	54.00	-19.98	3	Horizontal	39	1.61
2480MHz	Pass	PK	4.9595G	41.09	74.00	-32.91	3	Horizontal	230	2.34
2480MHz	Pass	PK	7.43906G	46.78	74.00	-27.22	3	Horizontal	39	1.61
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.363G	44.41	54.00	-9.59	3	Vertical	358	1.10
2402MHz	Pass	AV	2.402G	94.71	Inf	-Inf	3	Vertical	358	1.10
2402MHz	Pass	PK	2.3568G	57.67	74.00	-16.33	3	Vertical	358	1.10
2402MHz	Pass	PK	2.4016G	97.47	Inf	-Inf	3	Vertical	358	1.10
2402MHz	Pass	AV	2.3634G	44.52	54.00	-9.48	3	Horizontal	69	1.94
2402MHz	Pass	AV	2.402G	106.45	Inf	-Inf	3	Horizontal	69	1.94
2402MHz	Pass	PK	2.3668G	57.58	74.00	-16.42	3	Horizontal	69	1.94
2402MHz	Pass	PK	2.4016G	109.32	Inf	-Inf	3	Horizontal	69	1.94
2402MHz	Pass	AV	4.8041G	27.96	54.00	-26.04	3	Vertical	252	1.50
2402MHz	Pass	PK	4.80132G	41.99	74.00	-32.01	3	Vertical	252	1.50
2402MHz	Pass	AV	4.811G	27.80	54.00	-26.20	3	Horizontal	17	1.50

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
2402MHz	Pass	PK	4.80112G	41.87	74.00	-32.13	3	Horizontal	17	1.50
2440MHz	Pass	AV	2.3896G	43.63	54.00	-10.37	3	Vertical	158	2.44
2440MHz	Pass	AV	2.44G	94.79	Inf	-Inf	3	Vertical	158	2.44
2440MHz	Pass	AV	2.4876G	44.19	54.00	-9.81	3	Vertical	158	2.44
2440MHz	Pass	PK	2.3768G	57.68	74.00	-16.32	3	Vertical	158	2.44
2440MHz	Pass	PK	2.4404G	97.64	Inf	-Inf	3	Vertical	158	2.44
2440MHz	Pass	PK	2.4896G	57.99	74.00	-16.01	3	Vertical	158	2.44
2440MHz	Pass	AV	2.3892G	43.66	54.00	-10.34	3	Horizontal	63	2.34
2440MHz	Pass	AV	2.44G	105.92	Inf	-Inf	3	Horizontal	63	2.34
2440MHz	Pass	AV	2.4936G	44.17	54.00	-9.83	3	Horizontal	63	2.34
2440MHz	Pass	PK	2.3516G	57.03	74.00	-16.97	3	Horizontal	63	2.34
2440MHz	Pass	PK	2.4396G	108.74	Inf	-Inf	3	Horizontal	63	2.34
2440MHz	Pass	PK	2.494G	57.75	74.00	-16.25	3	Horizontal	63	2.34
2440MHz	Pass	AV	4.87574G	27.39	54.00	-26.61	3	Vertical	349	1.50
2440MHz	Pass	AV	7.32144G	33.86	54.00	-20.14	3	Vertical	22	1.49
2440MHz	Pass	PK	4.86698G	41.55	74.00	-32.45	3	Vertical	349	1.50
2440MHz	Pass	PK	7.31892G	48.59	74.00	-25.41	3	Vertical	22	1.49
2440MHz	Pass	AV	4.87904G	27.19	54.00	-26.81	3	Horizontal	351	1.79
2440MHz	Pass	AV	7.32114G	34.50	54.00	-19.50	3	Horizontal	47	1.50
2440MHz	Pass	PK	4.8788G	40.66	74.00	-33.34	3	Horizontal	351	1.79
2440MHz	Pass	PK	7.31868G	47.41	74.00	-26.59	3	Horizontal	47	1.50
2480MHz	Pass	AV	2.48G	95.32	Inf	-Inf	3	Vertical	163	1.04
2480MHz	Pass	AV	2.4835G	45.88	54.00	-8.12	3	Vertical	163	1.04
2480MHz	Pass	PK	2.4806G	98.15	Inf	-Inf	3	Vertical	163	1.04
2480MHz	Pass	PK	2.4835G	58.23	74.00	-15.77	3	Vertical	163	1.04
2480MHz	Pass	AV	2.48G	106.23	Inf	-Inf	3	Horizontal	63	2.09
2480MHz	Pass	AV	2.4835G	52.84	54.00	-1.16	3	Horizontal	63	2.09
2480MHz	Pass	PK	2.4796G	109.08	Inf	-Inf	3	Horizontal	63	2.09
2480MHz	Pass	PK	2.4836G	65.46	74.00	-8.54	3	Horizontal	63	2.09
2480MHz	Pass	AV	4.95718G	27.28	54.00	-26.72	3	Vertical	127	1.50
2480MHz	Pass	AV	7.43868G	32.69	54.00	-21.31	3	Vertical	8	1.46
2480MHz	Pass	PK	4.95972G	42.14	74.00	-31.86	3	Vertical	127	1.50
2480MHz	Pass	PK	7.44088G	46.28	74.00	-27.72	3	Vertical	8	1.46
2480MHz	Pass	AV	4.95916G	27.95	54.00	-26.05	3	Horizontal	211	2.97
2480MHz	Pass	AV	7.4412G	33.94	54.00	-20.06	3	Horizontal	40	1.63
2480MHz	Pass	PK	4.96438G	41.50	74.00	-32.50	3	Horizontal	211	2.97
2480MHz	Pass	PK	7.4388G	46.21	74.00	-27.79	3	Horizontal	40	1.63

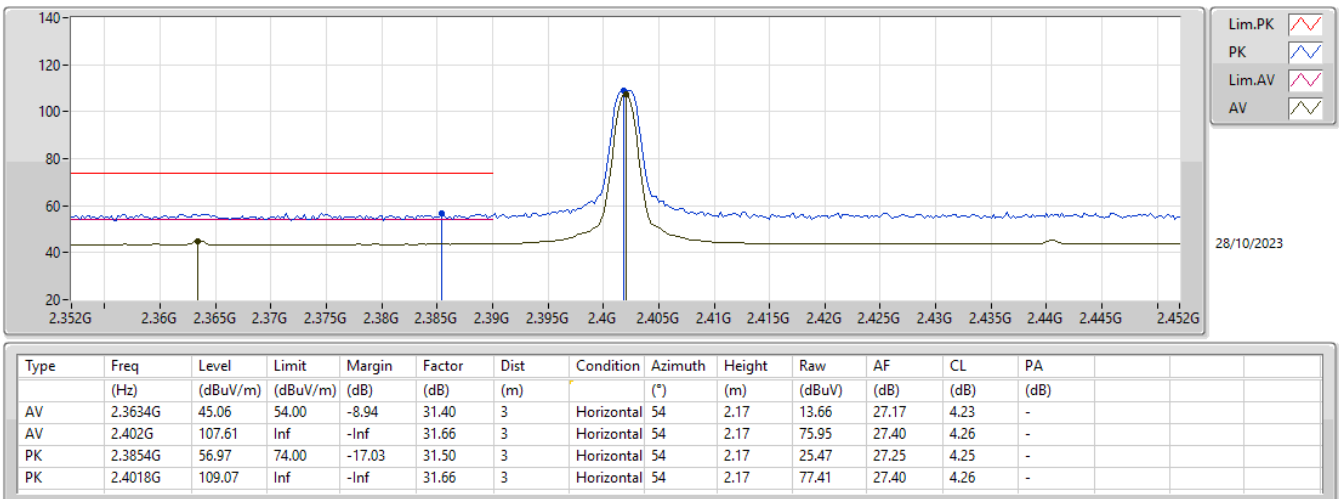
2.4-2.4835GHz_BT-LE(125kbps)

2402MHz_TX



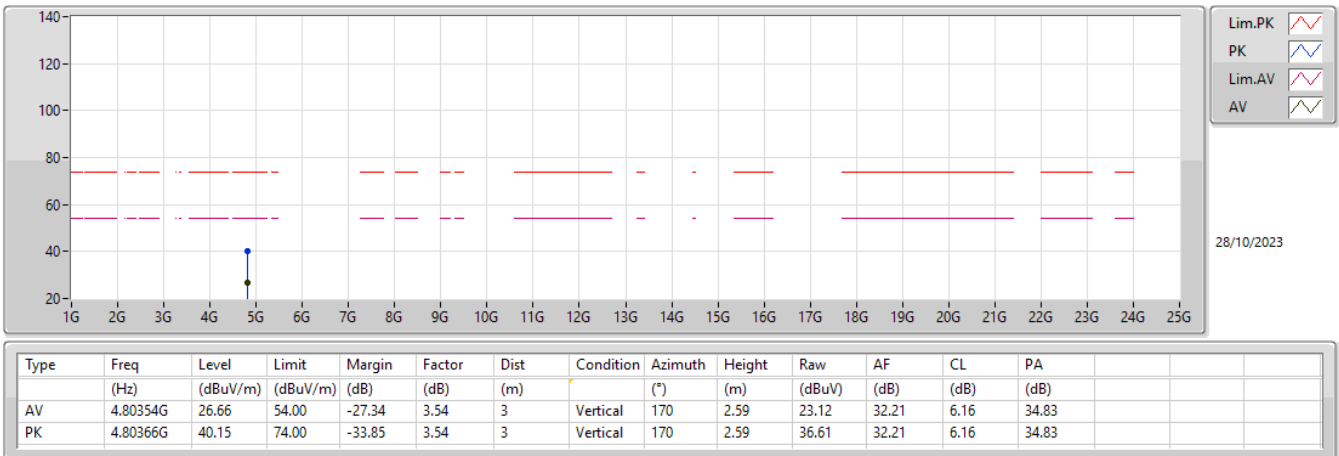
2.4-2.4835GHz_BT-LE(125kbps)

2402MHz_TX



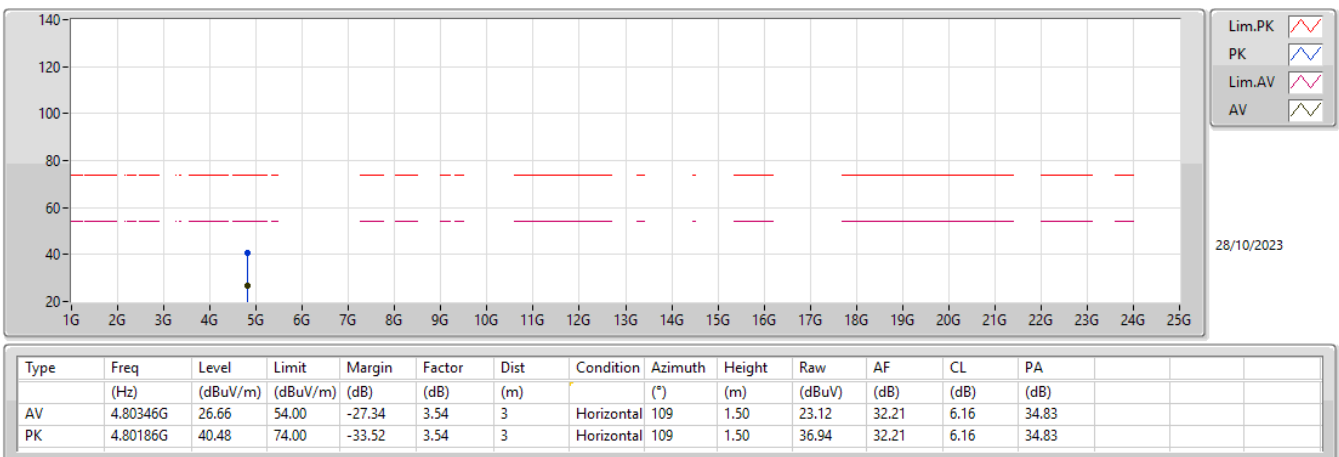
2.4-2.4835GHz_BT-LE(125kbps)

2402MHz_TX



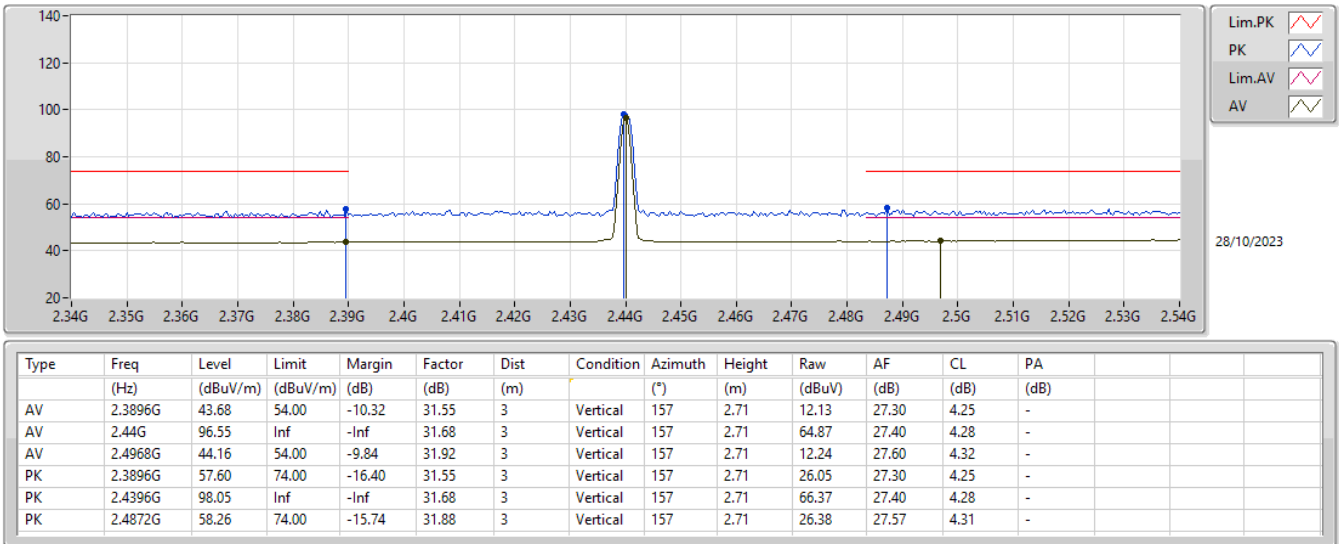
2.4-2.4835GHz_BT-LE(125kbps)

2402MHz_TX



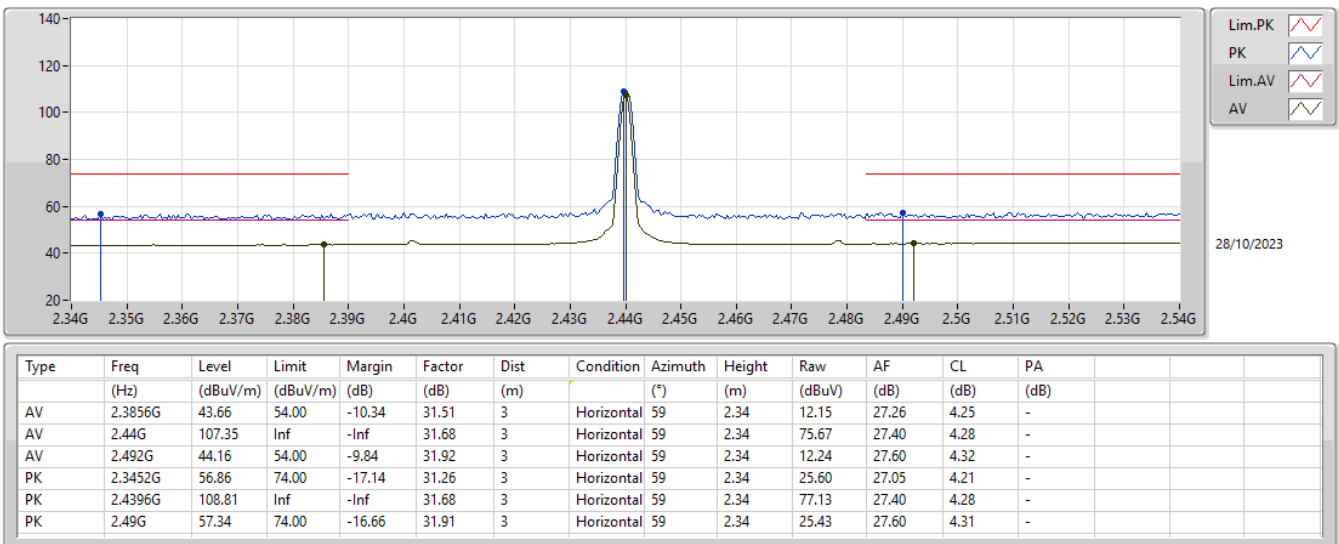
2.4-2.4835GHz_BT-LE(125kbps)

2440MHz_TX



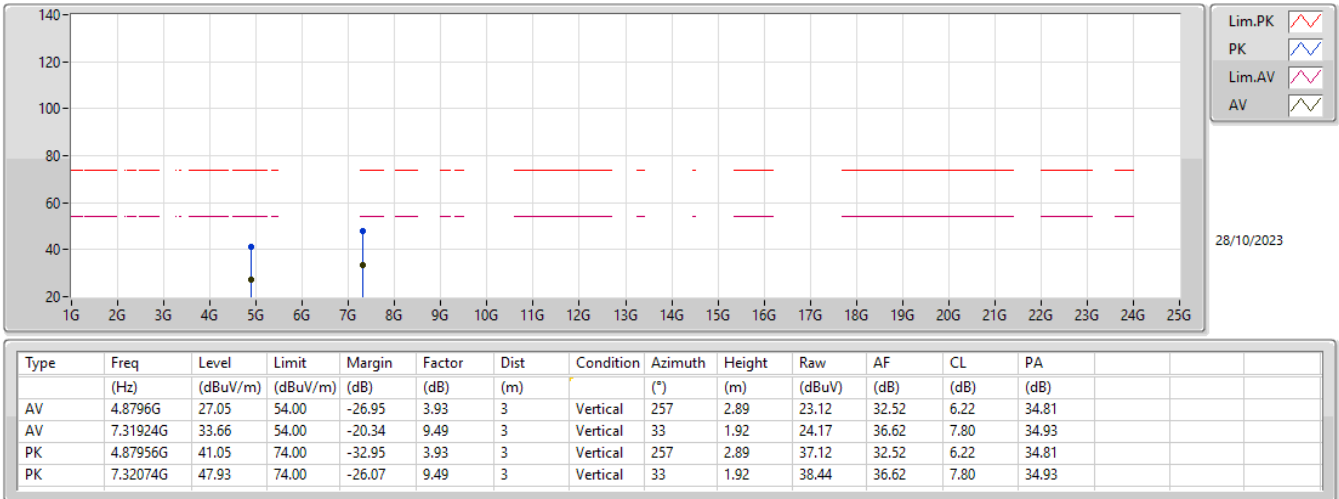
2.4-2.4835GHz_BT-LE(125kbps)

2440MHz_TX



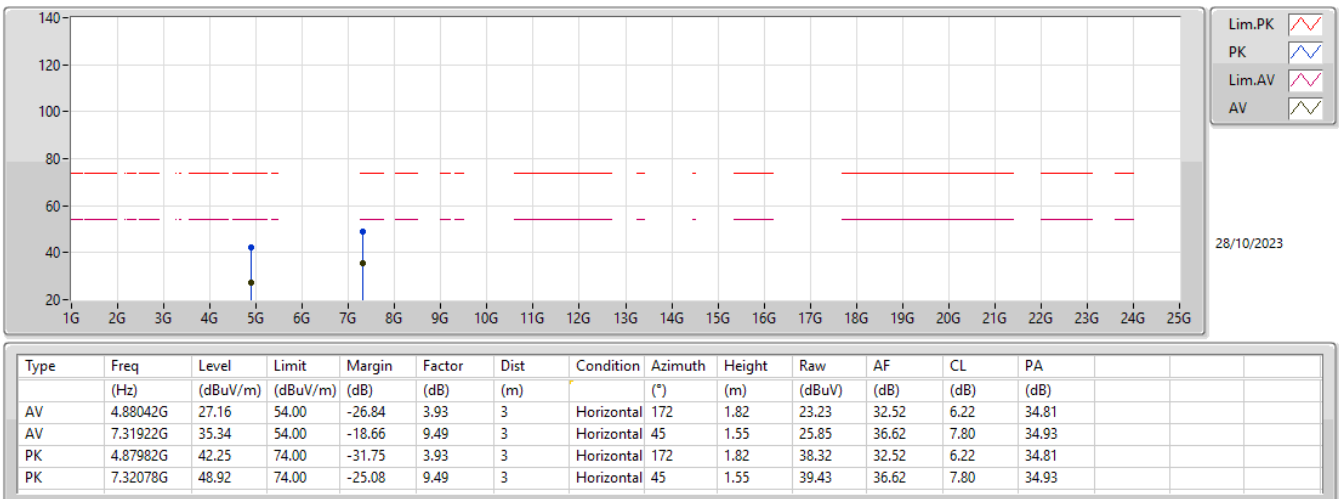
2.4-2.4835GHz_BT-LE(125kbps)

2440MHz_TX



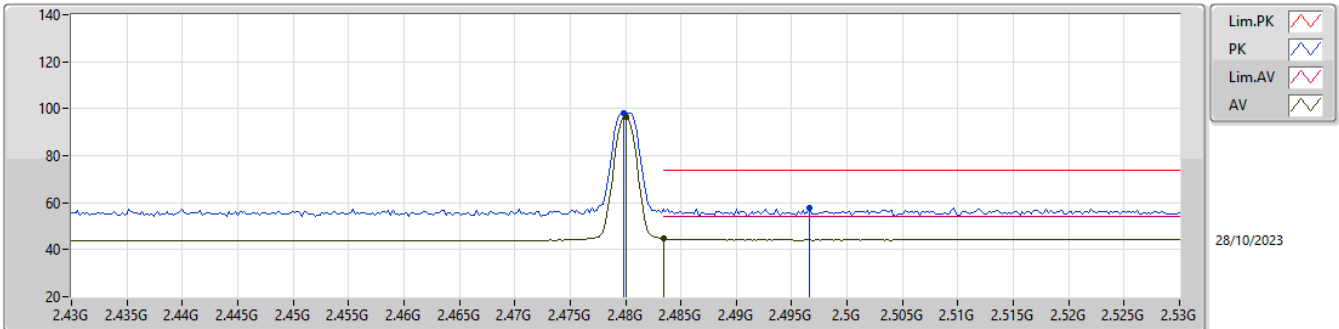
2.4-2.4835GHz_BT-LE(125kbps)

2440MHz_TX



2.4-2.4835GHz_BT-LE(125kbps)

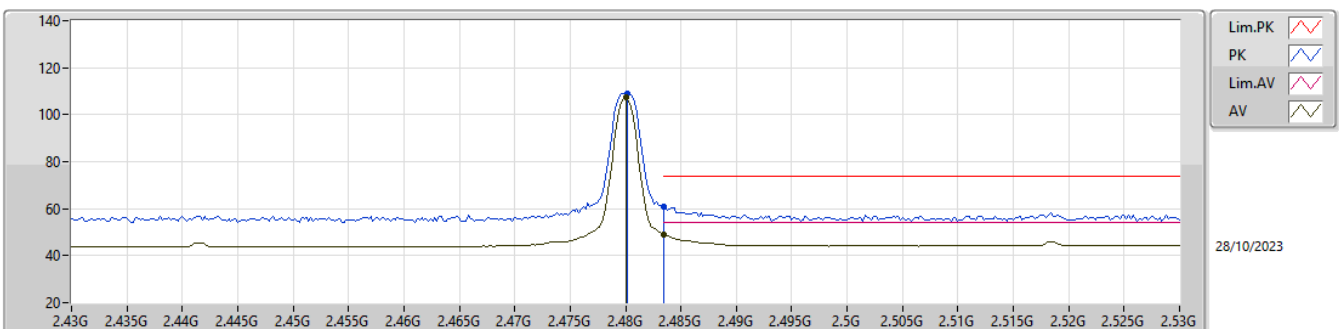
2480MHz_TX



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	96.72	Inf	-Inf	31.81	3	Vertical	161	1.04	64.91	27.50	4.31	-
AV	2.4835G	44.76	54.00	-9.24	31.85	3	Vertical	161	1.04	12.91	27.54	4.31	-
PK	2.4798G	98.18	Inf	-Inf	31.81	3	Vertical	161	1.04	66.37	27.50	4.31	-
PK	2.4966G	57.80	74.00	-16.20	31.92	3	Vertical	161	1.04	25.88	27.60	4.32	-

2.4-2.4835GHz_BT-LE(125kbps)

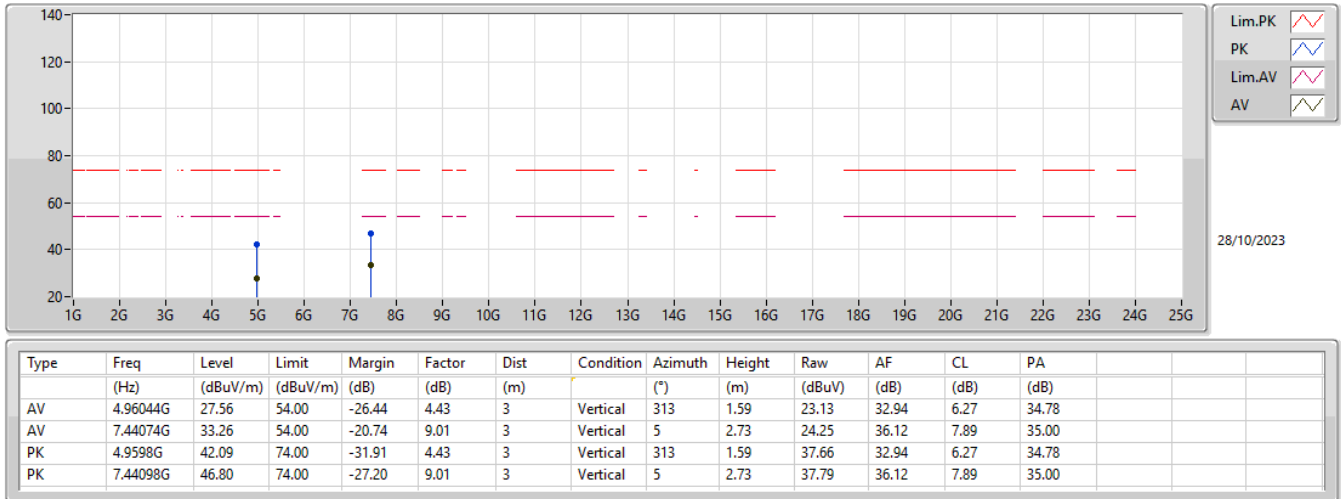
2480MHz_TX



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	107.31	Inf	-Inf	31.81	3	Horizontal	61	2.28	75.50	27.50	4.31	-
AV	2.4835G	49.20	54.00	-4.80	31.85	3	Horizontal	61	2.28	17.35	27.54	4.31	-
PK	2.4802G	108.74	Inf	-Inf	31.81	3	Horizontal	61	2.28	76.93	27.50	4.31	-
PK	2.4835G	60.82	74.00	-13.18	31.85	3	Horizontal	61	2.28	28.97	27.54	4.31	-

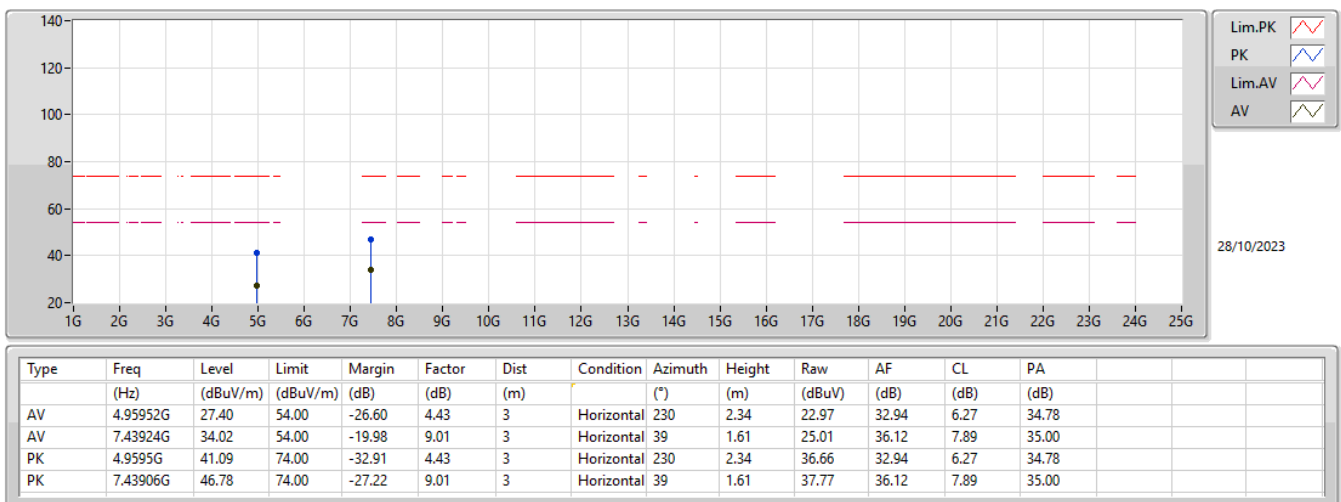
2.4-2.4835GHz_BT-LE(125kbps)

2480MHz_TX



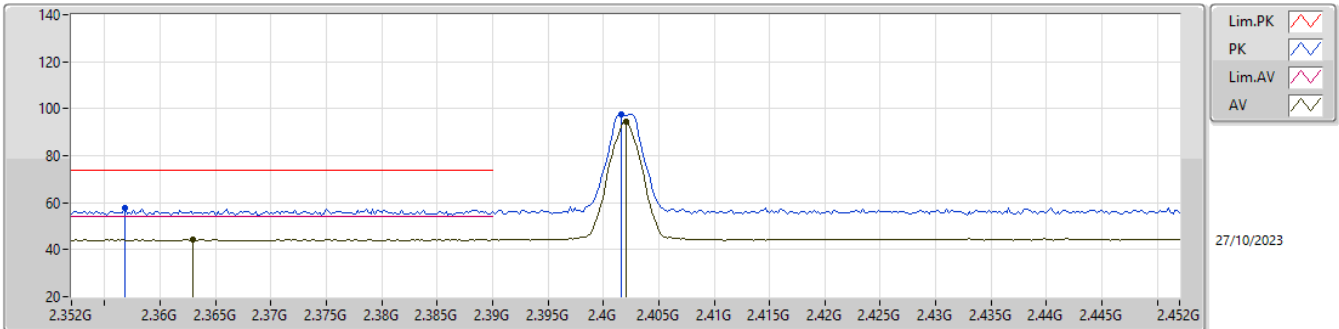
2.4-2.4835GHz_BT-LE(125kbps)

2480MHz_TX



2.4-2.4835GHz_BT-LE(2Mbps)

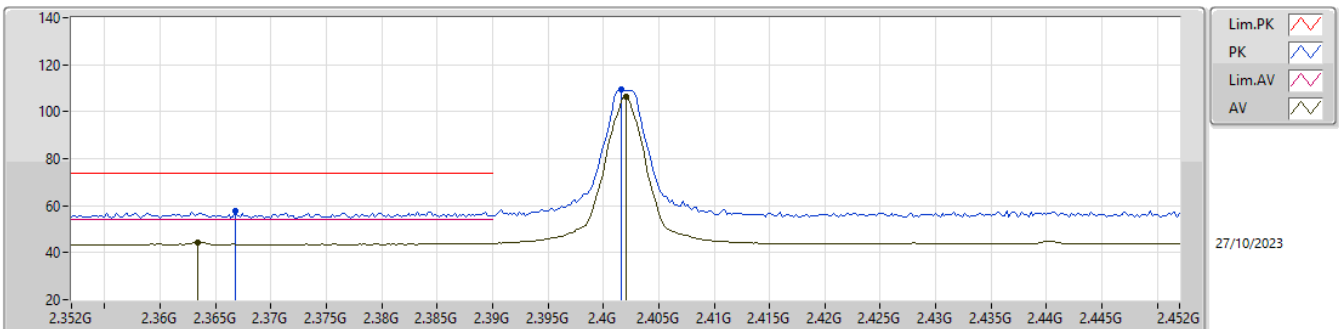
2402MHz_TX



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	2.363G	44.41	54.00	-9.59	31.40	3	Vertical	358	1.10	13.01	27.17	4.23	-
AV	2.402G	94.71	Inf	-Inf	31.66	3	Vertical	358	1.10	63.05	27.40	4.26	-
PK	2.3568G	57.67	74.00	-16.33	31.39	3	Vertical	358	1.10	26.28	27.17	4.22	-
PK	2.4016G	97.47	Inf	-Inf	31.66	3	Vertical	358	1.10	65.81	27.40	4.26	-

2.4-2.4835GHz_BT-LE(2Mbps)

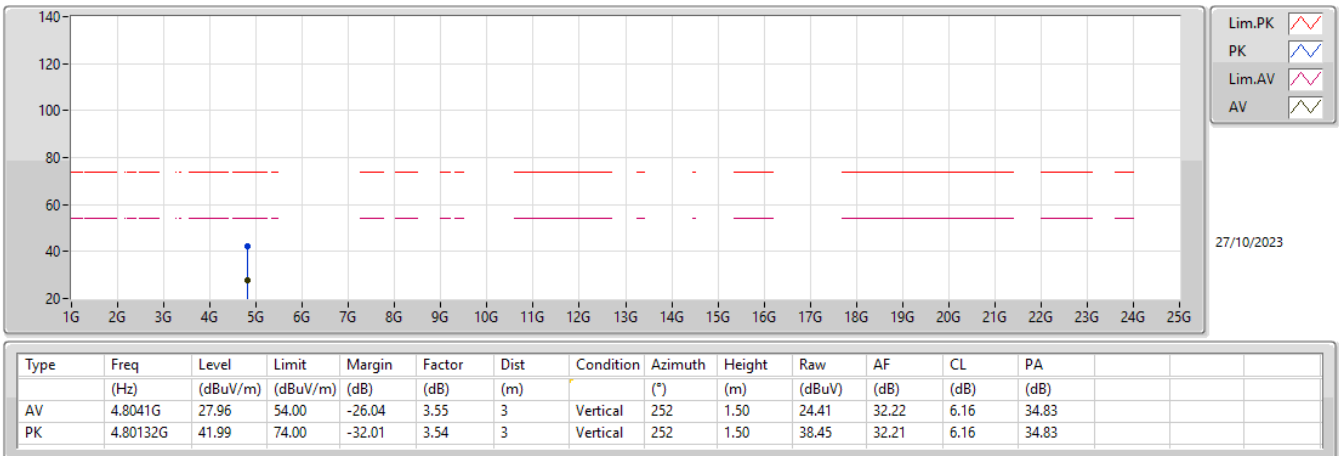
2402MHz_TX



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	2.3634G	44.52	54.00	-9.48	31.40	3	Horizontal	69	1.94	13.12	27.17	4.23	-
AV	2.402G	106.45	Inf	-Inf	31.66	3	Horizontal	69	1.94	74.79	27.40	4.26	-
PK	2.3668G	57.58	74.00	-16.42	31.36	3	Horizontal	69	1.94	26.22	27.13	4.23	-
PK	2.4016G	109.32	Inf	-Inf	31.66	3	Horizontal	69	1.94	77.66	27.40	4.26	-

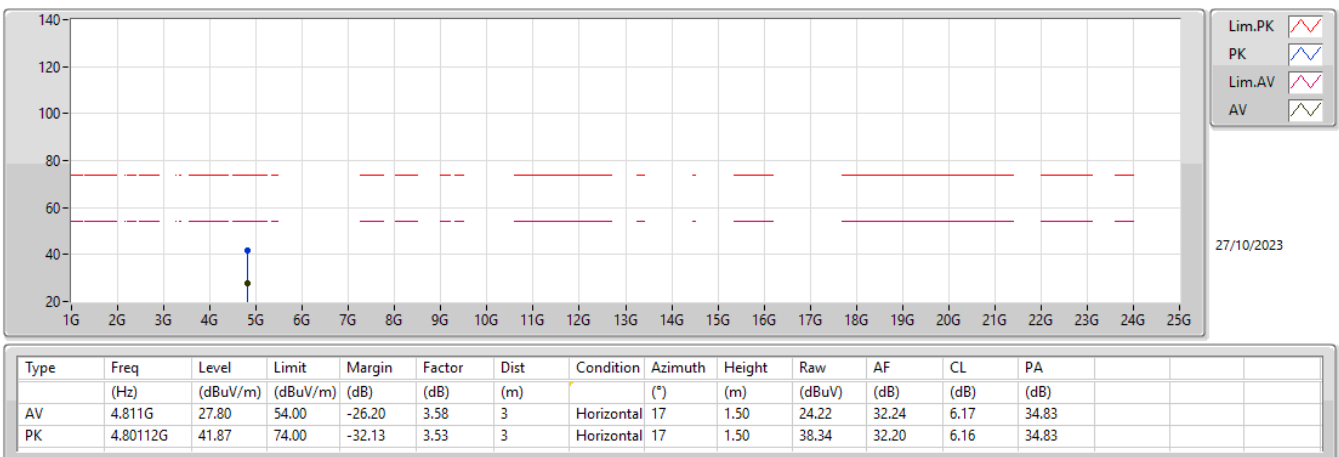
2.4-2.4835GHz_BT-LE(2Mbps)

2402MHz_TX



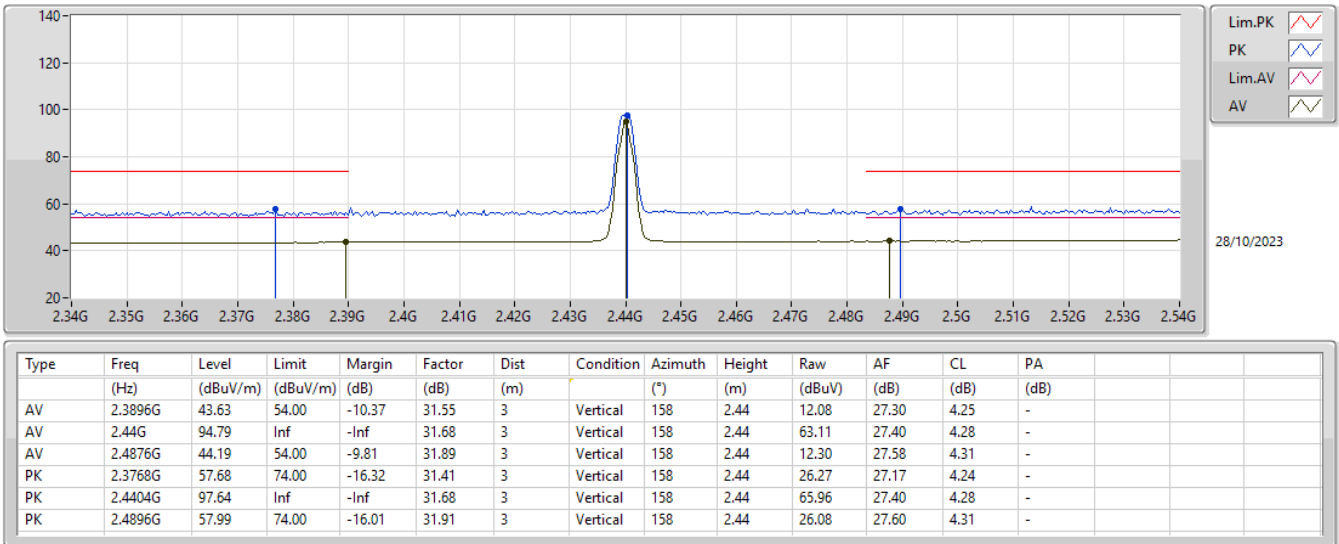
2.4-2.4835GHz_BT-LE(2Mbps)

2402MHz_TX



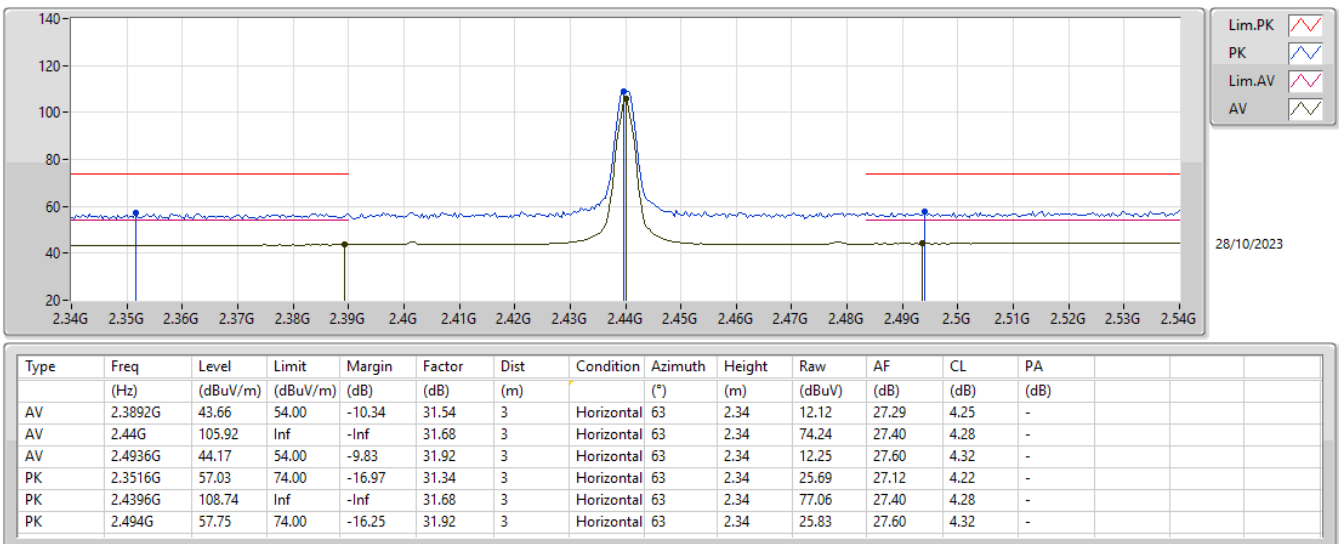
2.4-2.4835GHz_BT-LE(2Mbps)

2440MHz_TX



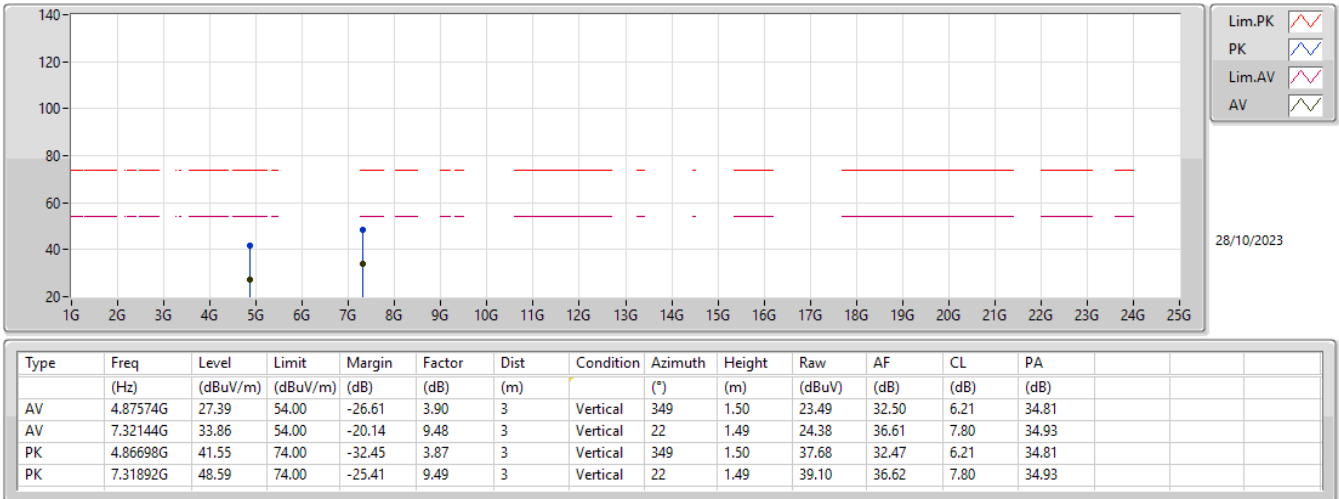
2.4-2.4835GHz_BT-LE(2Mbps)

2440MHz_TX



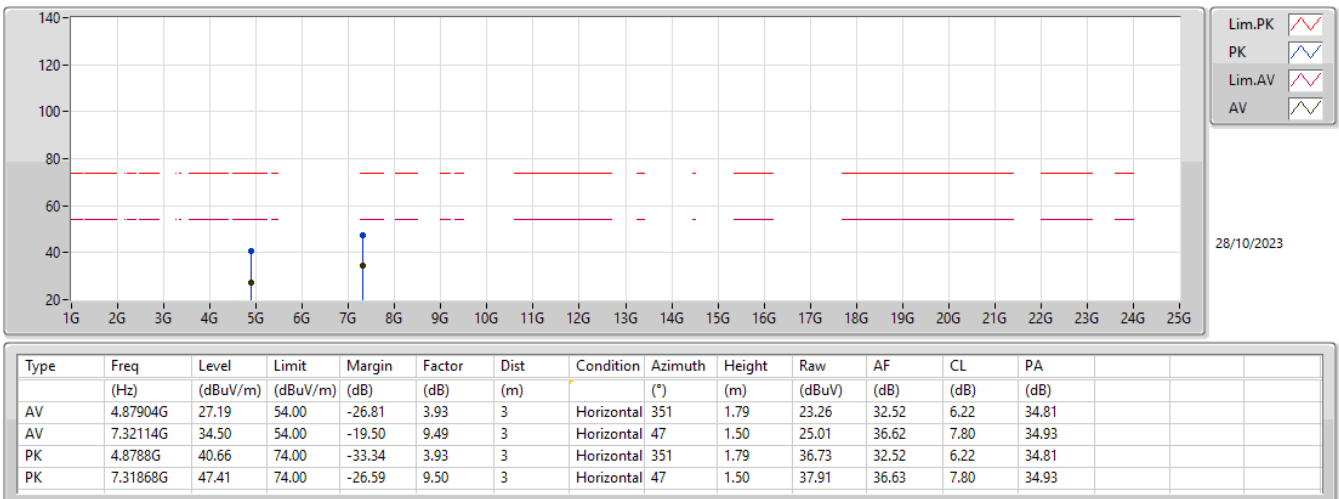
2.4-2.4835GHz_BT-LE(2Mbps)

2440MHz_TX



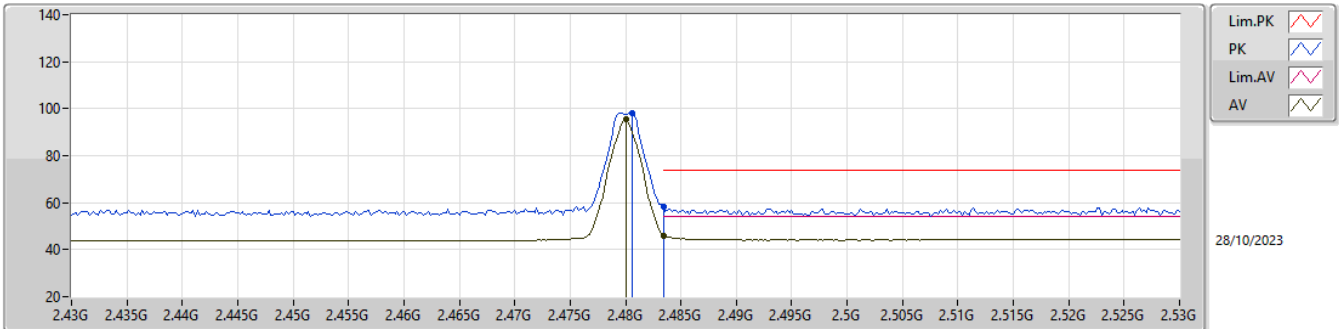
2.4-2.4835GHz_BT-LE(2Mbps)

2440MHz_TX



2.4-2.4835GHz_BT-LE(2Mbps)

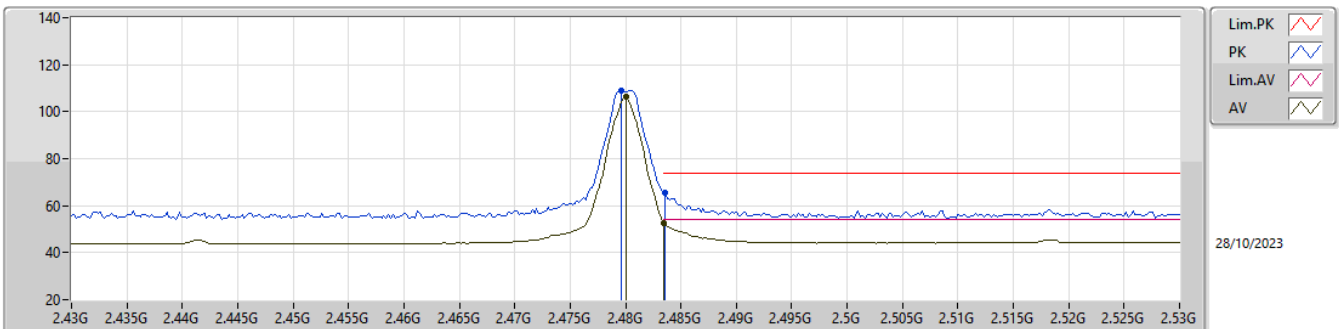
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	(dBuV)	(dB)	(dB)	(dB)
AV	2.48G	95.32	Inf	-Inf	31.81	3	Vertical	163	1.04	63.51	27.50	4.31	-
AV	2.4835G	45.88	54.00	-8.12	31.85	3	Vertical	163	1.04	14.03	27.54	4.31	-
PK	2.4806G	98.15	Inf	-Inf	31.82	3	Vertical	163	1.04	66.33	27.51	4.31	-
PK	2.4835G	58.23	74.00	-15.77	31.85	3	Vertical	163	1.04	26.38	27.54	4.31	-

2.4-2.4835GHz_BT-LE(2Mbps)

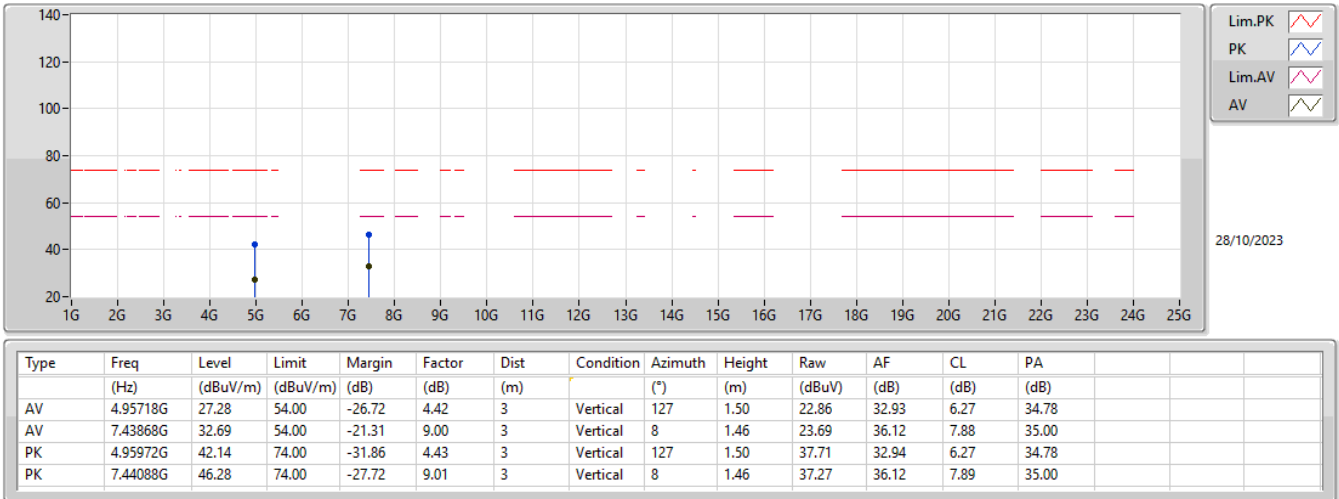
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	(dBuV)	(dB)	(dB)	(dB)
AV	2.48G	106.23	Inf	-Inf	31.81	3	Horizontal	63	2.09	74.42	27.50	4.31	-
AV	2.4835G	52.84	54.00	-1.16	31.85	3	Horizontal	63	2.09	20.99	27.54	4.31	-
PK	2.4796G	109.08	Inf	-Inf	31.81	3	Horizontal	63	2.09	77.27	27.50	4.31	-
PK	2.4836G	65.46	74.00	-8.54	31.85	3	Horizontal	63	2.09	33.61	27.54	4.31	-

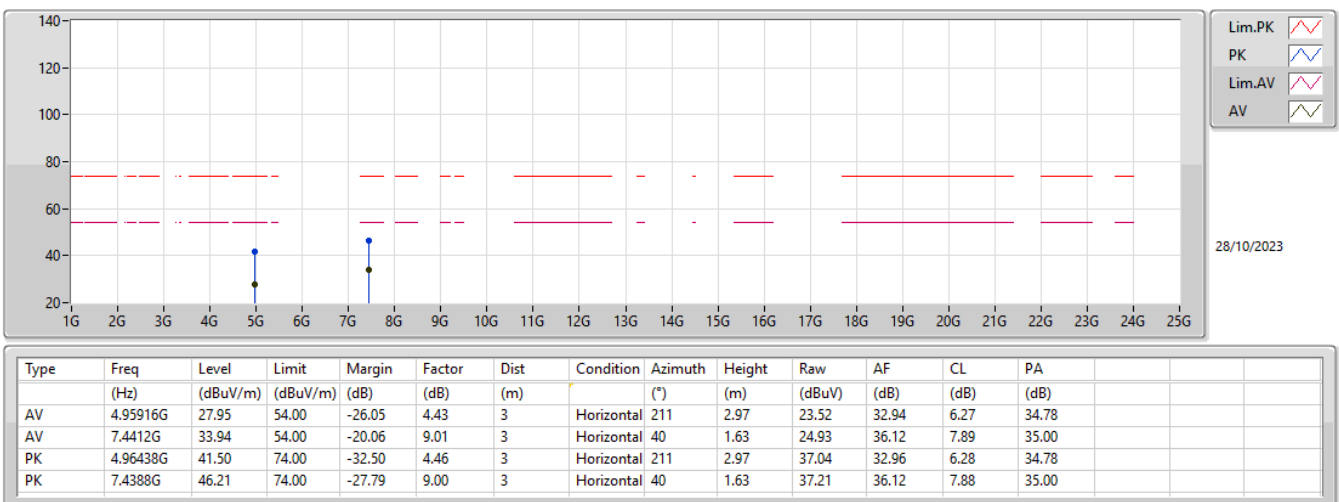
2.4-2.4835GHz_BT-LE(2Mbps)

2480MHz_TX



2.4-2.4835GHz_BT-LE(2Mbps)

2480MHz_TX





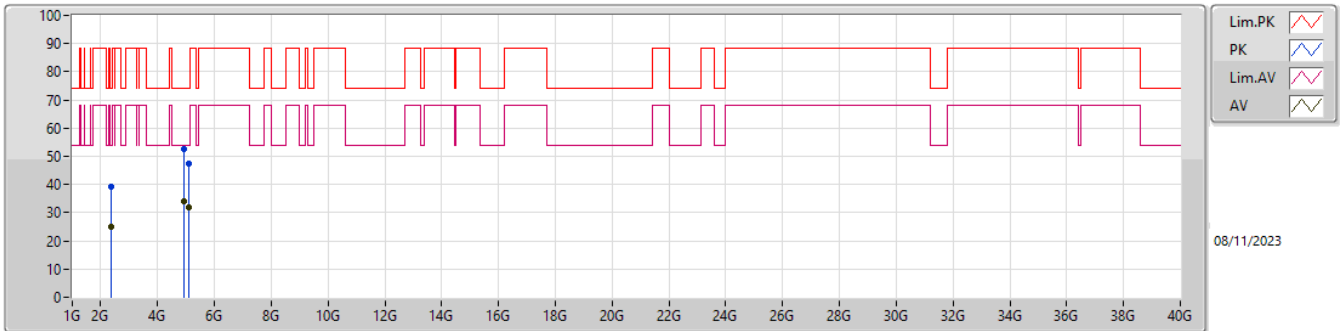
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	PK	5.11722G	67.41	74.00	-6.59	Horizontal
Mode 2	Pass	AV	4.91877G	42.08	54.00	-11.92	Horizontal

Result

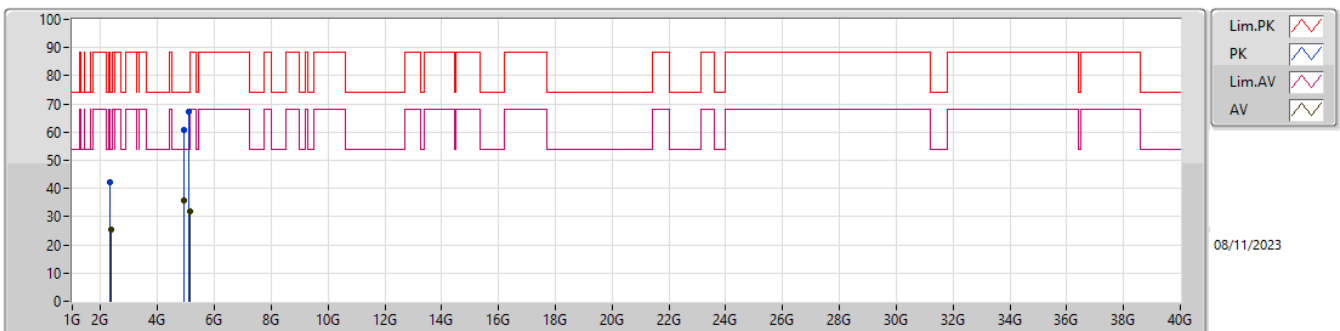
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
Mode 1	Pass	AV	2.35024G	24.88	54.00	-29.12	3	Vertical	218	1.45
Mode 1	Pass	AV	4.91393G	33.92	54.00	-20.08	3	Vertical	11	2.46
Mode 1	Pass	AV	5.09623G	31.72	54.00	-22.28	3	Vertical	121	1.17
Mode 1	Pass	PK	2.34736G	39.05	74.00	-34.95	3	Vertical	218	1.45
Mode 1	Pass	PK	4.91401G	52.48	74.00	-21.52	3	Vertical	11	2.46
Mode 1	Pass	PK	5.10952G	47.36	74.00	-26.64	3	Vertical	121	1.17
Mode 1	Pass	AV	2.34923G	25.27	54.00	-28.73	3	Horizontal	341	1.24
Mode 1	Pass	AV	4.91402G	35.66	54.00	-18.34	3	Horizontal	93	1.00
Mode 1	Pass	AV	5.1293G	31.98	54.00	-22.02	3	Horizontal	259	1.74
Mode 1	Pass	PK	2.34468G	42.12	74.00	-31.88	3	Horizontal	341	1.24
Mode 1	Pass	PK	4.91395G	60.89	74.00	-13.11	3	Horizontal	93	1.00
Mode 1	Pass	PK	5.11722G	67.41	74.00	-6.59	3	Horizontal	259	1.74
Mode 2	Pass	AV	2.46062G	28.29	68.20	-39.91	3	Vertical	189	1.50
Mode 2	Pass	AV	4.91404G	34.55	54.00	-19.45	3	Vertical	0	2.47
Mode 2	Pass	AV	5.21878G	32.30	68.20	-35.90	3	Vertical	123	1.50
Mode 2	Pass	PK	2.46034G	44.83	88.20	-43.37	3	Vertical	189	1.50
Mode 2	Pass	PK	4.9139G	52.79	74.00	-21.21	3	Vertical	0	2.47
Mode 2	Pass	PK	5.2176G	53.38	88.20	-34.82	3	Vertical	123	1.50
Mode 2	Pass	AV	2.3463G	38.74	54.00	-15.26	3	Horizontal	72	2.15
Mode 2	Pass	AV	4.91877G	42.08	54.00	-11.92	3	Horizontal	92	1.00
Mode 2	Pass	AV	5.21412G	47.64	68.20	-20.56	3	Horizontal	273	2.11
Mode 2	Pass	PK	2.34478G	57.02	74.00	-16.98	3	Horizontal	72	2.15
Mode 2	Pass	PK	4.91398G	61.68	74.00	-12.32	3	Horizontal	92	1.00
Mode 2	Pass	PK	5.21568G	65.62	88.20	-22.58	3	Horizontal	273	2.11

Radiated Emissions above 1GHz_Mode 1



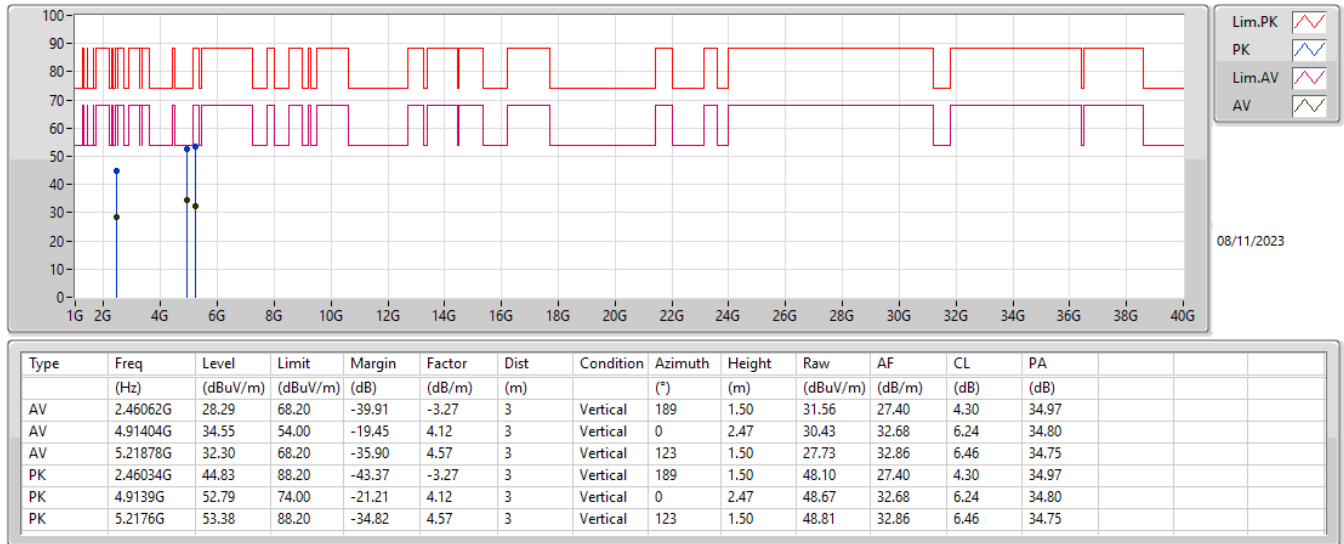
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)
AV	2.35024G	24.88	54.00	-29.12	-3.62	3	Vertical	218	1.45	28.50	27.10	4.22	34.94
AV	4.91393G	33.92	54.00	-20.08	4.12	3	Vertical	11	2.46	29.80	32.68	6.24	34.80
AV	5.09623G	31.72	54.00	-22.28	4.42	3	Vertical	121	1.17	27.30	32.81	6.37	34.76
PK	2.34736G	39.05	74.00	-34.95	-3.64	3	Vertical	218	1.45	42.69	27.07	4.22	34.93
PK	4.91401G	52.48	74.00	-21.52	4.12	3	Vertical	11	2.46	48.36	32.68	6.24	34.80
PK	5.10952G	47.36	74.00	-26.64	4.48	3	Vertical	121	1.17	42.88	32.86	6.38	34.76

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	2.34923G	25.27	54.00	-28.73	-3.62	3	Horizontal	341	1.24	28.89	27.09	4.22	34.93
AV	4.91402G	35.66	54.00	-18.34	4.12	3	Horizontal	93	1.00	31.54	32.68	6.24	34.80
AV	5.1293G	31.98	54.00	-22.02	4.62	3	Horizontal	259	1.74	27.36	32.98	6.40	34.76
PK	2.34468G	42.12	74.00	-31.88	-3.67	3	Horizontal	341	1.24	45.79	27.05	4.21	34.93
PK	4.91395G	60.89	74.00	-13.11	4.12	3	Horizontal	93	1.00	56.77	32.68	6.24	34.80
PK	5.11722G	67.41	74.00	-6.59	4.53	3	Horizontal	259	1.74	62.88	32.90	6.39	34.76

Radiated Emissions above 1GHz_Mode 2



Radiated Emissions above 1GHz_Mode 2

