FCC Radio Test Report

FCC ID	:	**AL8-CBF60**
Equipment	:	**Wireless Charging case**
Brand Name	:	**PLANTRONICS**
Model Name	:	**CBF60+**
Applicant	:	**Plantronics, Inc. 345 Encinal Street, Santa Cruz, CA 95060 USA**
Manufacturer	:	**Plantronics, Inc. 345 Encinal Street, Santa Cruz, CA 95060 USA**
Standard	:	**47 CFR FCC Part 15.247**

The product was received on Aug. 08, 2022, and testing was started from Oct. 18, 2022 and completed on Nov. 01, 2022. We, SPORTON INTERNATIONAL INC. Hsinhua Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. Hsinhua Laboratory, the test report shall not be reproduced except in full.

Approved by: Jackson Tsai

SPORTON INTERNATIONAL INC. Hsinhua Laboratory

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

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History of this test report

Report No.	Version	Description	Issued Date
FR253009AL	01	Initial issue of report	Dec. 08, 2022

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: Ben Tseng

Report Producer: Michelle Tsai

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)	1.0	1TX
2.4-2.4835GHz	BT-LE(2Mbps)	2.0	1TX

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

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	Toongin	ANT101	Printed Antenna	N/A	-0.29

For BT function:

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

Only Ant. 1 can be used as transmitting/receiving.

1.1.3 EUT Information

Operational Condition				
EUT Power Type	From AC Adapter/Host System			
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(1Mbps)	0.674	1.71	421.333u	3k
BT-LE(2Mbps)	0.378	4.23	237.867u	10k

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

1.2 Testing Applied Standards

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

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

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

- KDB 558074 D01 v05r02
- KDB 414788 D01 v01r01

1.3 Testing Location Information

Test Lab.：Sporton International Inc. Hsinhua Laboratory				
☒ Hsinhua	**ADD:** No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)			
(TAF: 3785**)**	**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	Bart Chen	23.3~24.2°C / 55~58%	24/Oct/2022
RF Conducted	TH06-HY	Alan Chien	22.6~26.4°C / 51~57%	26/Oct/2022~01/Nov/2022
☒ Wen 33rd.St.	**ADD:** No.14-1, Ln. 19, Wen 33rd St., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.)			
(TAF: 3785**)**	**TEL:** 886-3-318-0787		**FAX:** 886-3-318-0287	
Test site Designation No. TW0008 with FCC.				
Radiated	03CH09-HY	Lego Lin	23.7~24.12°C / 55~59%	18/Oct/2022~20/Oct/2022

1.4 Measurement Uncertainty

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

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

2 Test Configuration of EUT

2.1 Test Channel Mode

Test Software Version	BlueTest3: 3.3.5

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

2.2 The Worst Case Measurement Configuration

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

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

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

2.3 Accessories

Accessories				
Battery	Brand Name	VDL	Model Name	13315PN3
	Power Rating	3.8Vdc, 580mAh		
	Type	Lithium-ion Polymer Battery Pack		
Earphone (Optional)	Brand Name	PLANTRONICS	Model Name	F60T
USB Cable (Type-C to A) (Optional)	Brand Name	LOT	Model Name	207488-09
	Signal Line	0.3 meter, D-shielded cable, w/o ferrite core		
USB Cable (Type-C to C) (Optional)	Brand Name	LOT	Model Name	207488-10
	Signal Line	0.3 meter, D-shielded cable, w/o ferrite core		
Audio Cable (Type-C to Audio) (Optional)	Brand Name	LOT	Model Name	219266-02
	Signal Line	0.77meter, non-shielded cable, w/o ferrite core		
Bluetooth Dongle (Type-C) (Optional)	Brand Name	Poly	Model Name	BT700C
	Interface	USB Type-C		
Bluetooth Dongle (Type-A) (Optional)	Brand Name	Poly	Model Name	BT700
	Interface	USB Type-A		

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

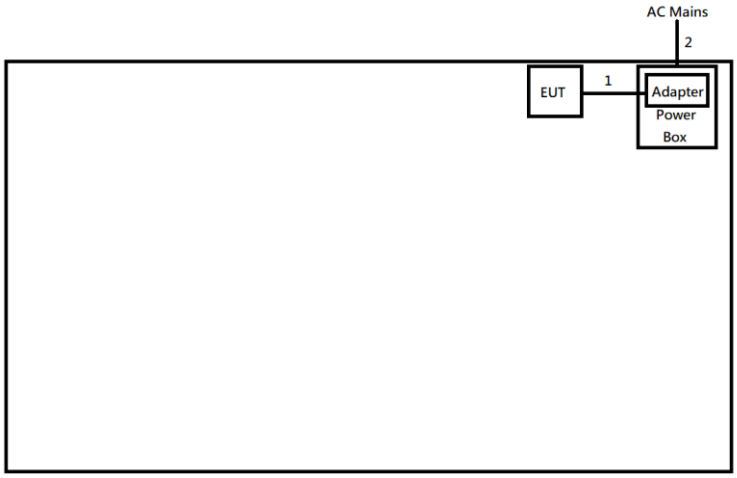
2.4 Support Equipment

Support Equipment – AC Conduction and Radiated					
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**	**Remark**
1	Notebook	HP	HP	-	-
2	Adapter for NB	HP	HP	-	-
3	AC power Cable	Power sync	TPCMRN0018	-	-
4	AC Adapter	APPLE	A1385	-	-

Support Equipment – Conducted					
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**	**Remark**
1	Notebook	HP	HSTNN-I42C	-	-
2	Adapter for NB	HP	HSTNN-CA40	-	-

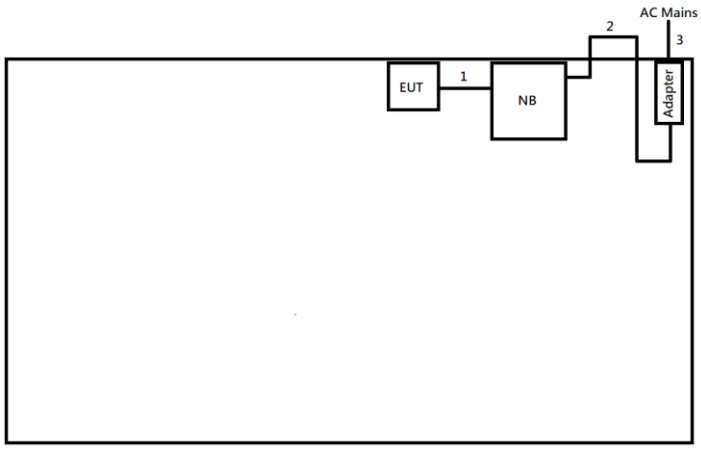
2.5 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test (Adapter Mode)



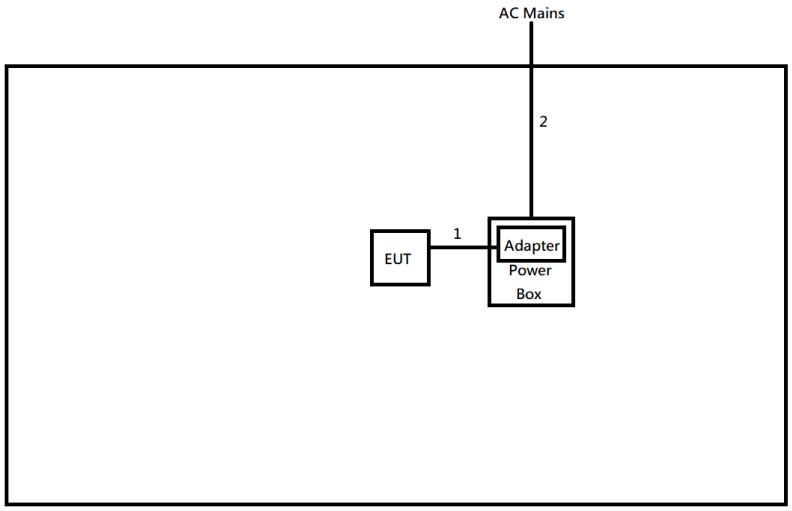
Item	Connection	Shielded	Length(m)	Remark
1	Type-C cable	Yes	0.3	-
2	AC Power cable	No	1.8	-

Test Setup Diagram – AC Line Conducted Emission Test (USB Mode)



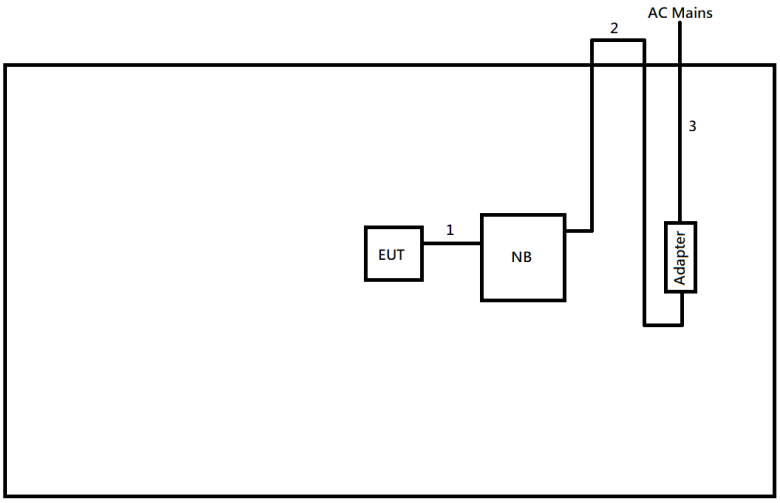
Item	Connection	Shielded	Length(m)	Remark
1.	Type-C cable	Yes	0.3	-
2.	DC Power cable	No	1.5	-
3	AC Power cable	No	1.8	-

Test Setup Diagram - Radiated Test (Adapter Mode)



Item	Connection	Shielded	Length(m)	Remark
1.	Type-C cable	Yes	0.3	-
2.	AC Power cable	No	1.8	-

Test Setup Diagram - Radiated Test (USB Mode)



Item	Connection	Shielded	Length(m)	Remark
1.	Type-C cable	Yes	0.3	-
2.	DC Power cable	No	1.5	-
3	AC Power cable	No	1.8	-

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

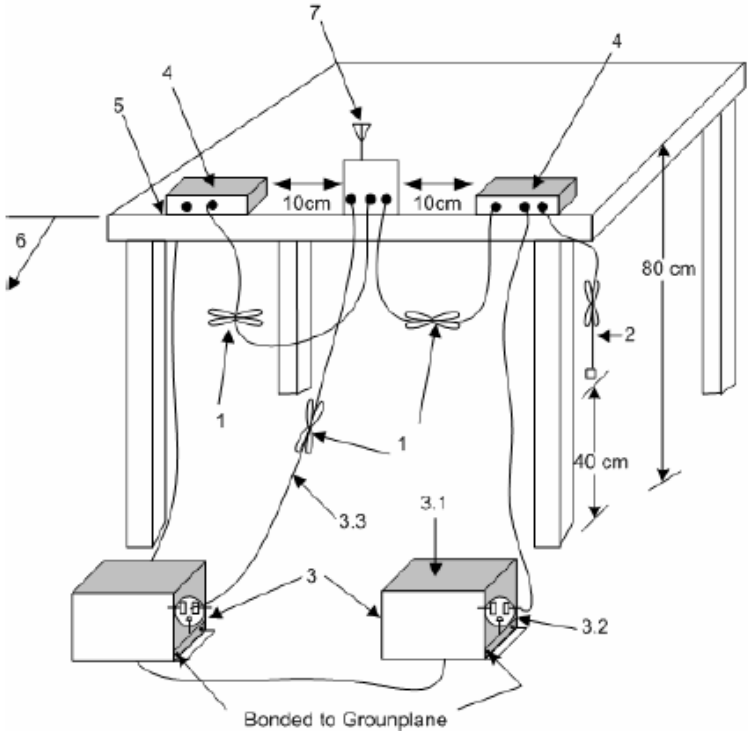
Test Method
▪ Refer as ANSI C63.10-2013, clause 6.2 foray power-line conducted emissions.

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

AC Power-line Conducted Emissions



1—Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 cm to 40 cm long.
2—The I/O cables that are not connected to an accessory shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
3—EUT connected to one LISN. Unused LISN measuring port connectors shall be terminated in 50Ωloads. LISN may be placed on top of, or immediately beneath, reference ground plane.
3.1—All other equipment powered from additional LISN(s).
3.2—A multiple-outlet strip may be used for multiple power cords of non-EUT equipment.
3.3—LISN at least 80 cm from nearest part of EUT chassis.
4—Non-EUT components of EUT system being tested.
5—Rear of EUT, including peripherals, shall all be aligned and flush with edge of tabletop.
6—Edge of tabletop shall be 40 cm removed from a vertical conducting plane that is bonded to the ground plane.
7—Antenna can be integral or detachable. If detachable, then the antenna shall be attached for this test.

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 ≥ 500 kHz.

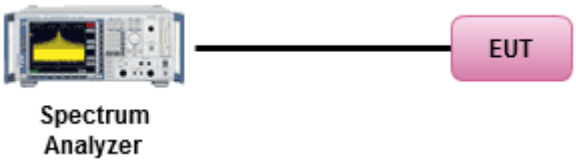
3.2.2 Measuring Instruments

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

Emission Bandwidth


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): $P_{eirp} \leq MAX(36, [P_{Out} + G_{TX}])$ dBm		
	▪ Smart antenna system (SAS)		
		- Single beam: $P_{eirp} \leq MAX(36, P_{Out} + G_{TX})$ dBm	
		- Overlap beam: $P_{eirp} \leq MAX(36, P_{Out} + G_{TX})$ dBm	
		- Aggregate power on all beams: $P_{eirp} \leq MAX(36, [P_{Out} + G_{TX} + 8])$ 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: $P_{total} = P_1 + P_2 + \ldots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$

3.3.4 Test Setup

Maximum Conducted Output Power (Power Meter)


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

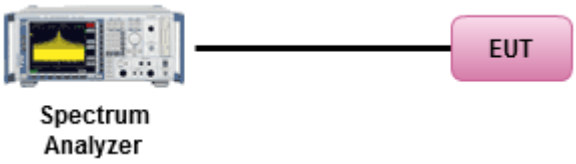
3.4.2 Measuring Instruments

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

Power Spectral Density


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.	

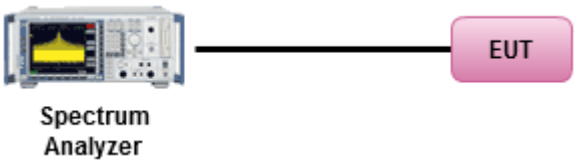
3.5.2 Measuring Instruments

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

Emissions in Non-restricted Frequency Bands


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 below30 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.

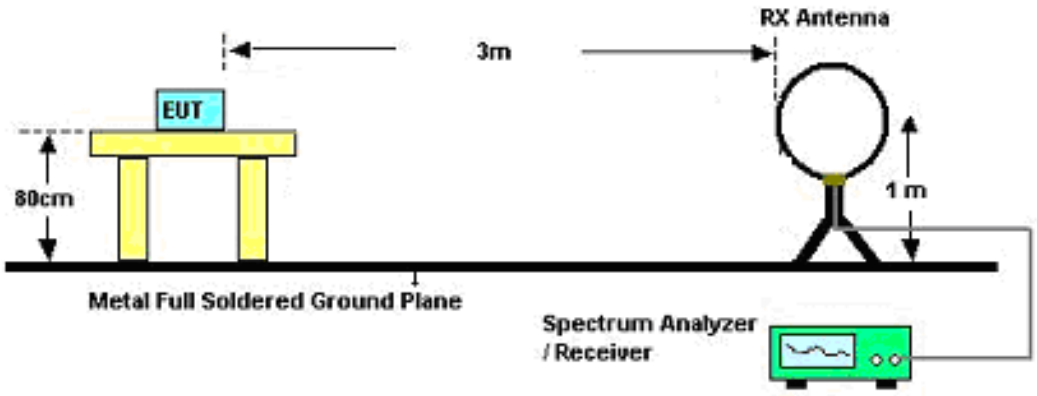
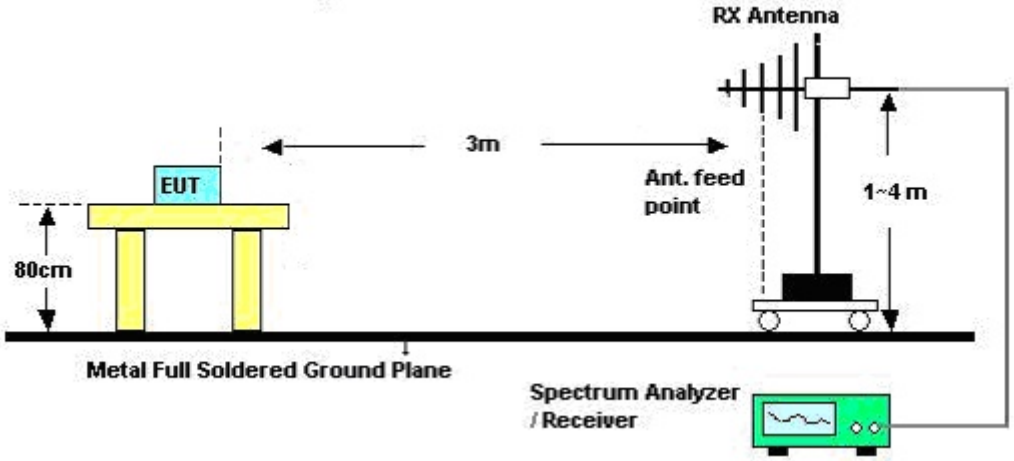
3.6.3 Test Procedures

Test Method	
▪	The average emission levels shall be measured in [duty cycle ≥ 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 ≥ 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.

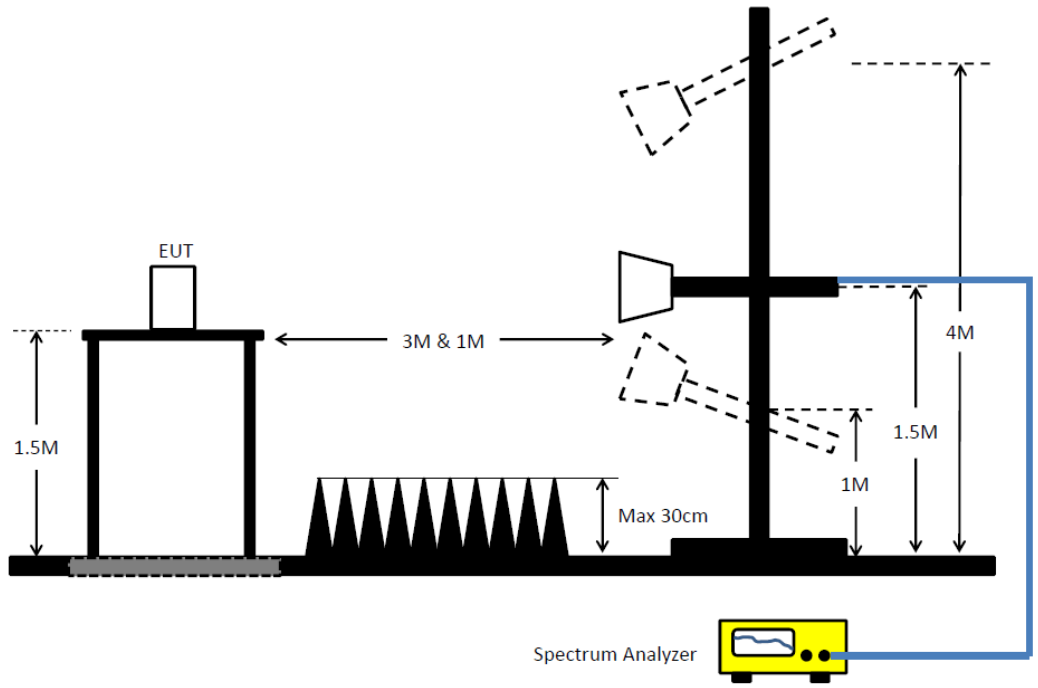
3.6.4 Measurement Results Calculation

The measured Level is calculated using:
Corrected Reading: Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamp Factor)

3.6.5 Test Setup

Emissions in Restricted Frequency Bands
9kHz ~30MHz

30MHz~1GHz


Above 1GHz



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	ESR3	102051	9kHz ~ 3.6GHz	13/May/2022	12/May/2023
Two-Line V-Network	R&S	ENV 216	100003	9kHz ~ 30MHz	18/Feb/2022	17/Feb/2023
RF Cable 5m	TITAN	TITAN	CO04-cable-01	9 kHz~200MHz	01/Mar/2022	28/Feb/2023
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9kHz ~ 30MHz	26/Oct/2021	25/Oct/2022
Software	Sporton	SENSE-EMI	V5.10.8.7	-	NCR	NCR

NCR: No Calibration Required

Instrument for Radiated Test

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	30MHz~1GHz 3m	25/Mar/2022	24/Mar/2023
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	1GHz~18GHz 3m	17/Mar/2022	16/Mar/2023
EXA Signal Analyzer	KEYSIGHT	N9010A	MY54200885	10Hz~44GHz	11/Aug/2022	10/Aug/2023
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1531	1GHz~18GHz	27/Dec/2021	26/Dec/2022
Amplifier	EMC	EMC9135	980232	9kHz~1GHz	08/Apr/2022	07/Apr/2023
Microwave Preamplifier	Agilent	8449B	3008A02096	1GHz~26.5GHz	22/Jul/2022	21/Jul/2023
Bilog Antenna & 5dB Attenuator	TESEQ & MTJ	CBL6111D&M TJ6102-05	35418 & 3	30MHz~1GHz	28/Aug/2022	27/Aug/2023
RF Cable-low	Jye Bao	RG142	CB031+324530/4	9kHz~30MHz	07/Feb/2022	06/Feb/2023
RF Cable-low	Jye Bao	RG142	03CH09-cable-01	30MHz~1GHz	17/Aug/2022	16/Aug/2023
RF CABLE 5m+3m+1m	HUBER+SUHNER	SUCOFLEX104	03CH09-cable-02	1GHz~40GHz	17/Aug/2022	16/Aug/2023
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170221	18GHz~40GHz	18/Mar/2022	17/Mar/2023
Microwave Premplifier	EMC INSTRUMENTS	EM18G40G	060604	18GHz ~ 40GHz	08/Mar/2022	07/Mar/2023
Loop Antenna	TESEQ	HLA 6120	31244	9kHz~30MHz	18/Mar/2022	17/Mar/2023
EMI Test Receiver	R&S	ESR3	102052	9kHz~3.6GHz	13/May/2022	12/May/2023
SENSE-15247_FS	Sporton	V5.10.7.14	N/A	N/A	N/A	N/A

Instrument for Conducted Test

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Signal Analyzer	R&S	FSV 40	101013	10Hz~40GHz	01/Apr/2022	31/Mar/2023
SMB100A Signal Generator	R&S	SMB100A	181147	100kHz~40GHz	21/Oct/2022	20/Oct/2023
Pulse Sensor	Anritsu	MA2411B	1027452	300MHz~40GHz	25/Mar/2022	24/Mar/2023
Power Meter	Anritsu	ML2495A	1124009	300MHz~40GHz	25/Mar/2022	24/Mar/2023
SENSE-15247_FS	Sporton	V5.10.7.16	N/A	N/A	N/A	N/A

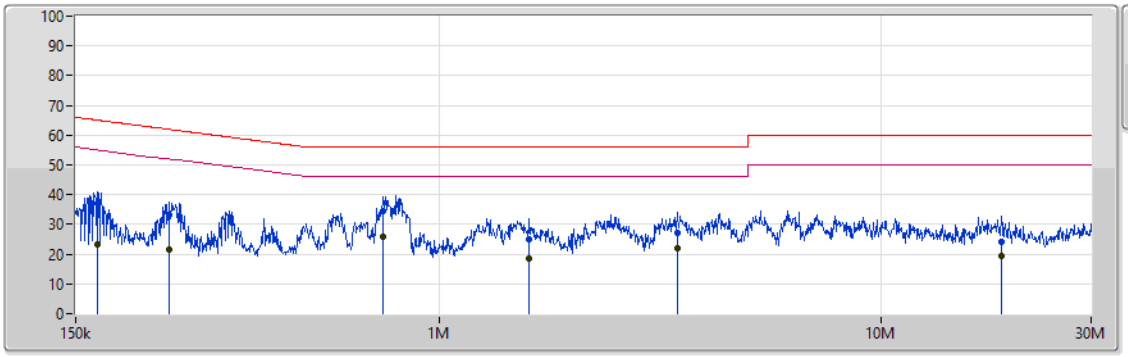
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	746.524k	25.97	46.00	-20.03	Line
Mode 2	Pass	QP	182.408k	50.94	64.37	-13.43	Line

Result

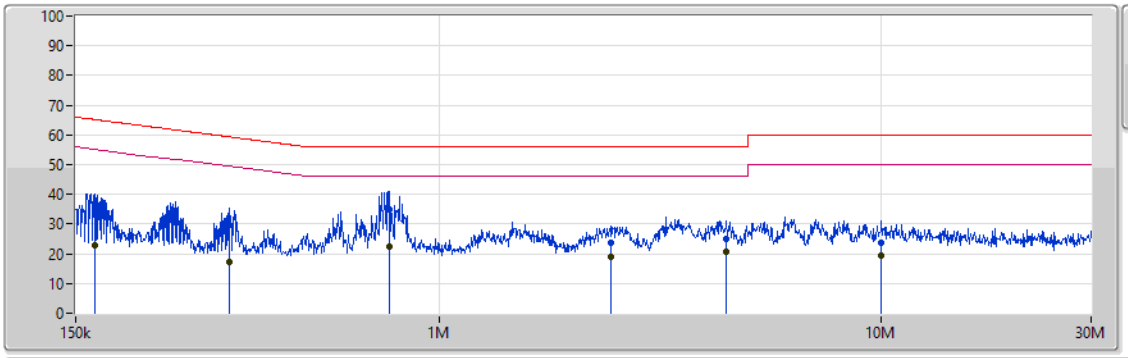
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition	Comments
Mode 1	Pass	QP	167.739k	36.99	65.06	-28.07	Line	-
Mode 1	Pass	AV	167.739k	23.12	55.06	-31.94	Line	-
Mode 1	Pass	QP	245.097k	32.98	61.93	-28.95	Line	-
Mode 1	Pass	AV	245.097k	21.72	51.93	-30.21	Line	-
Mode 1	Pass	QP	746.524k	34.48	56.00	-21.52	Line	-
Mode 1	Pass	AV	746.524k	25.97	46.00	-20.03	Line	-
Mode 1	Pass	QP	1.6M	24.80	56.00	-31.20	Line	-
Mode 1	Pass	AV	1.6M	18.43	46.00	-27.57	Line	-
Mode 1	Pass	QP	3.458M	27.15	56.00	-28.85	Line	-
Mode 1	Pass	AV	3.458M	22.03	46.00	-23.97	Line	-
Mode 1	Pass	QP	18.788M	24.00	60.00	-36.00	Line	-
Mode 1	Pass	AV	18.788M	19.39	50.00	-30.61	Line	-
Mode 1	Pass	QP	165.743k	37.22	65.18	-27.96	Neutral	-
Mode 1	Pass	AV	165.743k	23.00	55.18	-32.18	Neutral	-
Mode 1	Pass	QP	334.632k	29.58	59.33	-29.75	Neutral	-
Mode 1	Pass	AV	334.632k	17.33	49.33	-32.00	Neutral	-
Mode 1	Pass	QP	770.75k	34.89	56.00	-21.11	Neutral	-
Mode 1	Pass	AV	770.75k	22.28	46.00	-23.72	Neutral	-
Mode 1	Pass	QP	2.443M	23.61	56.00	-32.39	Neutral	-
Mode 1	Pass	AV	2.443M	19.13	46.00	-26.87	Neutral	-
Mode 1	Pass	QP	4.482M	25.13	56.00	-30.87	Neutral	-
Mode 1	Pass	AV	4.482M	20.83	46.00	-25.17	Neutral	-
Mode 1	Pass	QP	10.039M	23.54	60.00	-36.46	Neutral	-
Mode 1	Pass	AV	10.039M	19.48	50.00	-30.52	Neutral	-
Mode 2	Pass	QP	182.408k	50.94	64.37	-13.43	Line	-
Mode 2	Pass	AV	182.408k	35.12	54.37	-19.25	Line	-
Mode 2	Pass	QP	246.077k	43.35	61.89	-18.54	Line	-
Mode 2	Pass	AV	246.077k	33.19	51.89	-18.70	Line	-
Mode 2	Pass	QP	496.827k	35.43	56.06	-20.63	Line	-
Mode 2	Pass	AV	496.827k	24.92	46.06	-21.14	Line	-
Mode 2	Pass	QP	1.754M	33.75	56.00	-22.25	Line	-
Mode 2	Pass	AV	1.754M	23.92	46.00	-22.08	Line	-
Mode 2	Pass	QP	3.73M	39.48	56.00	-16.52	Line	-
Mode 2	Pass	AV	3.73M	29.09	46.00	-16.91	Line	-
Mode 2	Pass	QP	19.014M	36.13	60.00	-23.87	Line	-
Mode 2	Pass	AV	19.014M	30.85	50.00	-19.15	Line	-
Mode 2	Pass	QP	178.803k	49.04	64.55	-15.51	Neutral	-
Mode 2	Pass	AV	178.803k	29.85	54.55	-24.70	Neutral	-
Mode 2	Pass	QP	312.676k	41.02	59.90	-18.88	Neutral	-
Mode 2	Pass	AV	312.676k	29.29	49.90	-20.61	Neutral	-
Mode 2	Pass	QP	672.926k	36.12	56.00	-19.88	Neutral	-
Mode 2	Pass	AV	672.926k	25.47	46.00	-20.53	Neutral	-
Mode 2	Pass	QP	1.639M	37.37	56.00	-18.63	Neutral	-
Mode 2	Pass	AV	1.639M	27.19	46.00	-18.81	Neutral	-
Mode 2	Pass	QP	3.656M	34.83	56.00	-21.17	Neutral	-
Mode 2	Pass	AV	3.656M	27.17	46.00	-18.83	Neutral	-
Mode 2	Pass	QP	21.01M	37.08	60.00	-22.92	Neutral	-
Mode 2	Pass	AV	21.01M	30.65	50.00	-19.35	Neutral	-

Conducted Emissions at Powerline_Mode 1



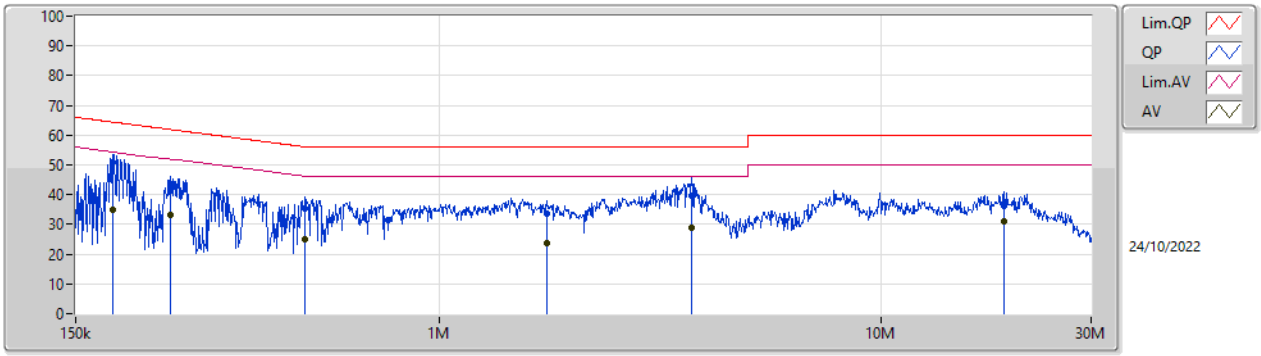
Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	167.739k	36.99	65.06	-28.07	19.63	Line	-	17.36	9.69	0.03	9.91
AV	167.739k	23.12	55.06	-31.94	19.63	Line	-	3.49	9.69	0.03	9.91
QP	245.097k	32.98	61.93	-28.95	19.63	Line	-	13.35	9.69	0.03	9.91
AV	245.097k	21.72	51.93	-30.21	19.63	Line	-	2.09	9.69	0.03	9.91
QP	746.524k	34.48	56.00	-21.52	19.65	Line	-	14.83	9.68	0.05	9.92
AV	746.524k	25.97	46.00	-20.03	19.65	Line	-	6.32	9.68	0.05	9.92
QP	1.6M	24.80	56.00	-31.20	19.68	Line	-	5.12	9.69	0.07	9.92
AV	1.6M	18.43	46.00	-27.57	19.68	Line	-	-1.25	9.69	0.07	9.92
QP	3.458M	27.15	56.00	-28.85	19.75	Line	-	7.40	9.71	0.12	9.92
AV	3.458M	22.03	46.00	-23.97	19.75	Line	-	2.28	9.71	0.12	9.92
QP	18.788M	24.00	60.00	-36.00	19.98	Line	-	4.02	9.79	0.26	9.93
AV	18.788M	19.39	50.00	-30.61	19.98	Line	-	-0.59	9.79	0.26	9.93

Conducted Emissions at Powerline_Mode 1



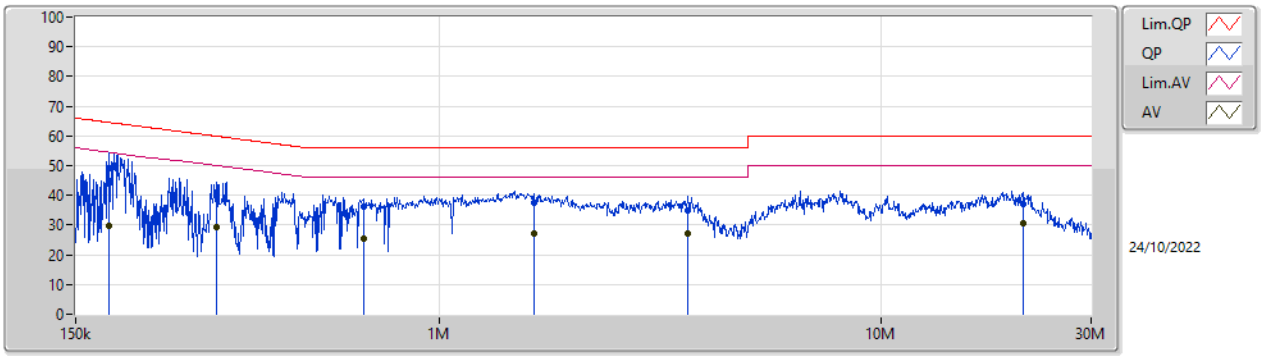
Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	165.743k	37.22	65.18	-27.96	19.67	Neutral	-	17.55	9.73	0.03	9.91
AV	165.743k	23.00	55.18	-32.18	19.67	Neutral	-	3.33	9.73	0.03	9.91
QP	334.632k	29.58	59.33	-29.75	19.67	Neutral	-	9.91	9.72	0.04	9.91
AV	334.632k	17.33	49.33	-32.00	19.67	Neutral	-	-2.34	9.72	0.04	9.91
QP	770.75k	34.89	56.00	-21.11	19.70	Neutral	-	15.19	9.73	0.05	9.92
AV	770.75k	22.28	46.00	-23.72	19.70	Neutral	-	2.58	9.73	0.05	9.92
QP	2.443M	23.61	56.00	-32.39	19.76	Neutral	-	3.85	9.75	0.09	9.92
AV	2.443M	19.13	46.00	-26.87	19.76	Neutral	-	-0.63	9.75	0.09	9.92
QP	4.482M	25.13	56.00	-30.87	19.84	Neutral	-	5.29	9.78	0.14	9.92
AV	4.482M	20.83	46.00	-25.17	19.84	Neutral	-	0.99	9.78	0.14	9.92
QP	10.039M	23.54	60.00	-36.46	20.00	Neutral	-	3.54	9.89	0.18	9.93
AV	10.039M	19.48	50.00	-30.52	20.00	Neutral	-	-0.52	9.89	0.18	9.93

Conducted Emissions at Powerline_Mode 2



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	182.408k	50.94	64.37	-13.43	19.63	Line	-	31.31	9.69	0.03	9.91
AV	182.408k	35.12	54.37	-19.25	19.63	Line	-	15.49	9.69	0.03	9.91
QP	246.077k	43.35	61.89	-18.54	19.63	Line	-	23.72	9.69	0.03	9.91
AV	246.077k	33.19	51.89	-18.70	19.63	Line	-	13.56	9.69	0.03	9.91
QP	496.827k	35.43	56.06	-20.63	19.63	Line	-	15.80	9.68	0.04	9.91
AV	496.827k	24.92	46.06	-21.14	19.63	Line	-	5.29	9.68	0.04	9.91
QP	1.754M	33.75	56.00	-22.25	19.69	Line	-	14.06	9.70	0.07	9.92
AV	1.754M	23.92	46.00	-22.08	19.69	Line	-	4.23	9.70	0.07	9.92
QP	3.73M	39.48	56.00	-16.52	19.76	Line	-	19.72	9.71	0.13	9.92
AV	3.73M	29.09	46.00	-16.91	19.76	Line	-	9.33	9.71	0.13	9.92
QP	19.014M	36.13	60.00	-23.87	19.98	Line	-	16.15	9.79	0.26	9.93
AV	19.014M	30.85	50.00	-19.15	19.98	Line	-	10.87	9.79	0.26	9.93

Conducted Emissions at Powerline_Mode 2



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	178.803k	49.04	64.55	-15.51	19.66	Neutral	-	29.38	9.72	0.03	9.91
AV	178.803k	29.85	54.55	-24.70	19.66	Neutral	-	10.19	9.72	0.03	9.91
QP	312.676k	41.02	59.90	-18.88	19.67	Neutral	-	21.35	9.72	0.04	9.91
AV	312.676k	29.29	49.90	-20.61	19.67	Neutral	-	9.62	9.72	0.04	9.91
QP	672.926k	36.12	56.00	-19.88	19.70	Neutral	-	16.42	9.73	0.05	9.92
AV	672.926k	25.47	46.00	-20.53	19.70	Neutral	-	5.77	9.73	0.05	9.92
QP	1.639M	37.37	56.00	-18.63	19.73	Neutral	-	17.64	9.74	0.07	9.92
AV	1.639M	27.19	46.00	-18.81	19.73	Neutral	-	7.46	9.74	0.07	9.92
QP	3.656M	34.83	56.00	-21.17	19.80	Neutral	-	15.03	9.76	0.12	9.92
AV	3.656M	27.17	46.00	-18.83	19.80	Neutral	-	7.37	9.76	0.12	9.92
QP	21.01M	37.08	60.00	-22.92	20.22	Neutral	-	16.86	10.01	0.28	9.93
AV	21.01M	30.65	50.00	-19.35	20.22	Neutral	-	10.43	10.01	0.28	9.93

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
BT-LE(1Mbps)	720k	1.036M	1M04F1D	707.5k	1.035M
BT-LE(2Mbps)	1.25M	2.062M	2M06F1D	1.195M	2.045M

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

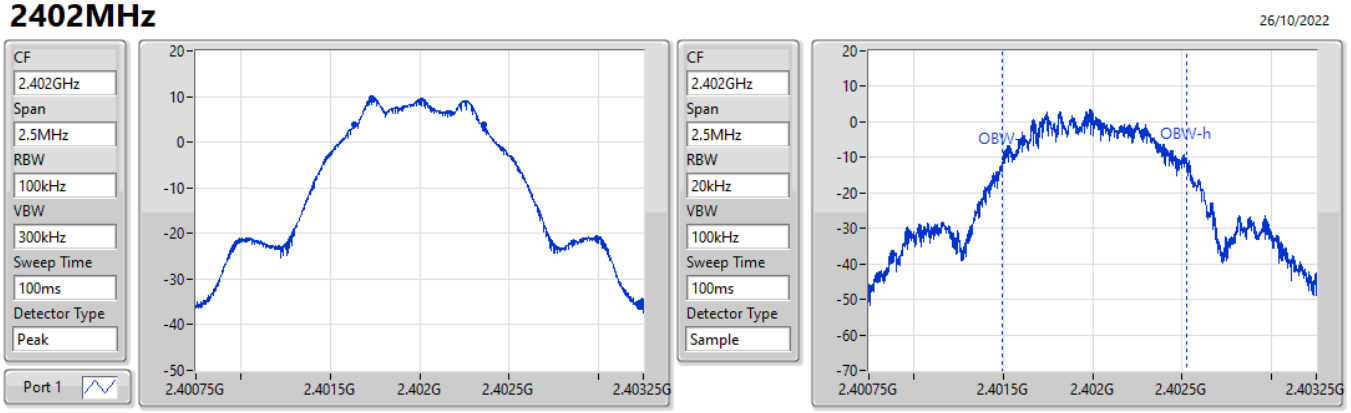
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	500k	720k	1.036M
2440MHz	Pass	500k	715k	1.036M
2480MHz	Pass	500k	707.5k	1.035M
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	500k	1.195M	2.062M
2440MHz	Pass	500k	1.25M	2.045M
2480MHz	Pass	500k	1.24M	2.051M

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

BT-LE(1Mbps) **EBW-DTS**

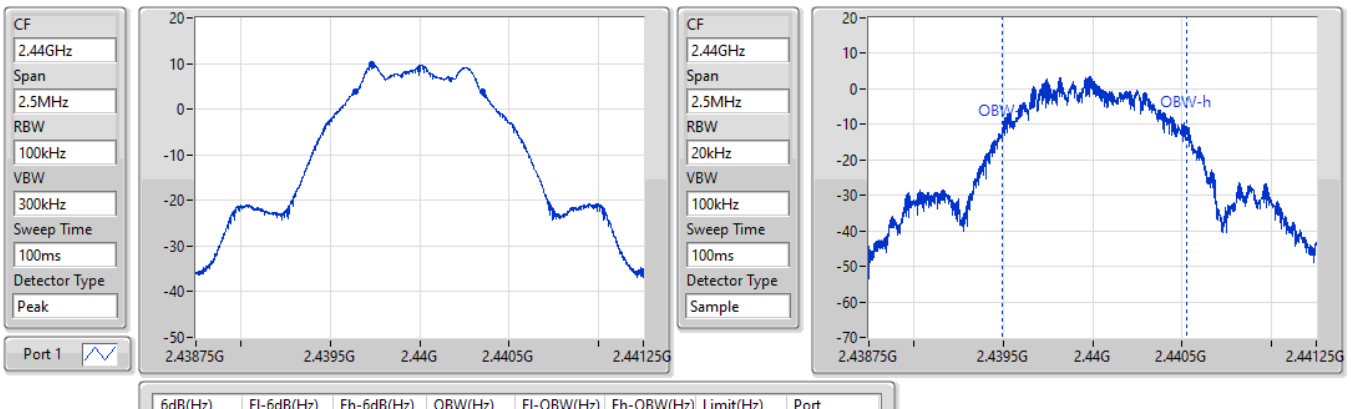
2402MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
720k	2.401636G	2.402356G	1.036M	2.401492G	2.402528G	500k	1

BT-LE(1Mbps) **EBW-DTS**

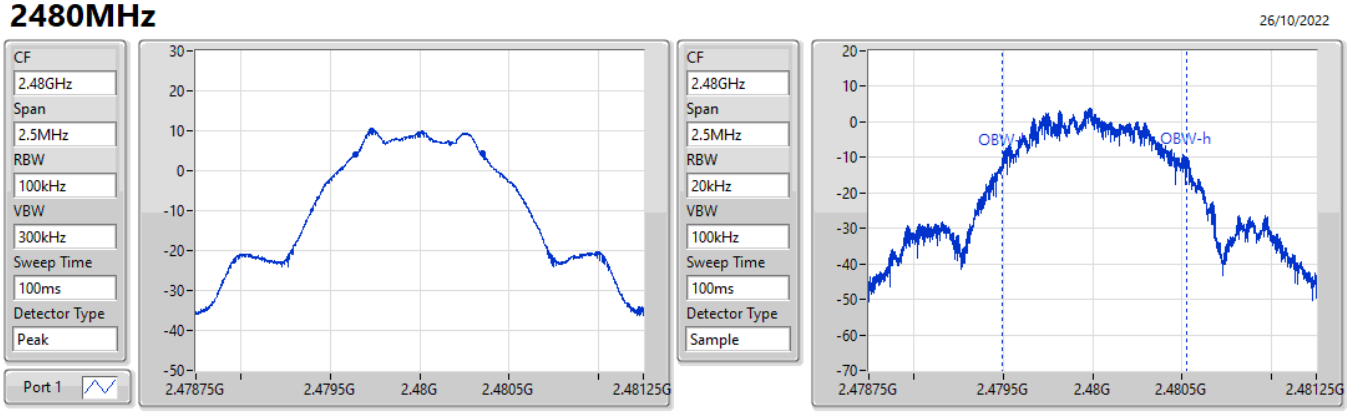
2440MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
715k	2.439639G	2.440354G	1.036M	2.439492G	2.440528G	500k	1

BT-LE(1Mbps) EBW-DTS

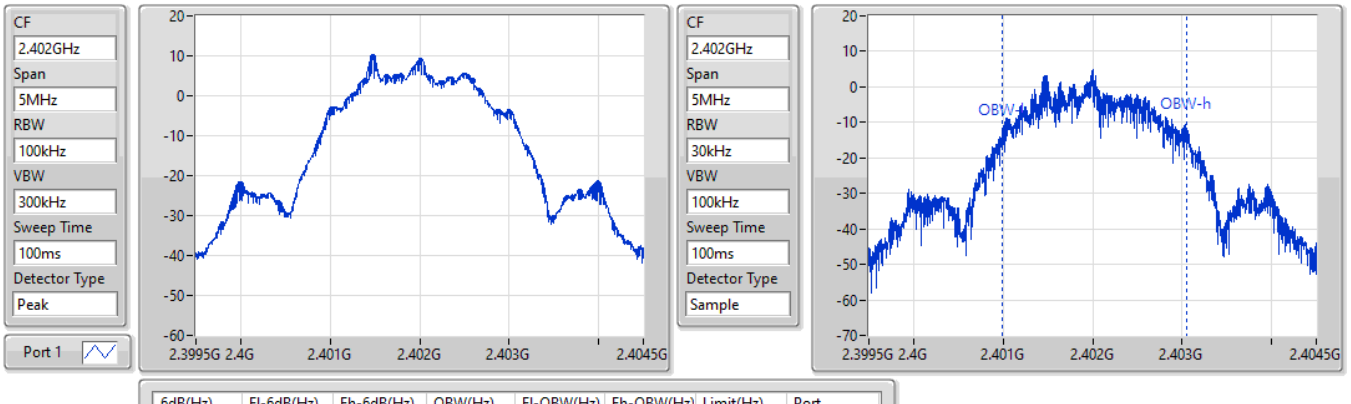
2480MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
707.5k	2.479641G	2.480349G	1.035M	2.479492G	2.480528G	500k	1

BT-LE(2Mbps) EBW-DTS

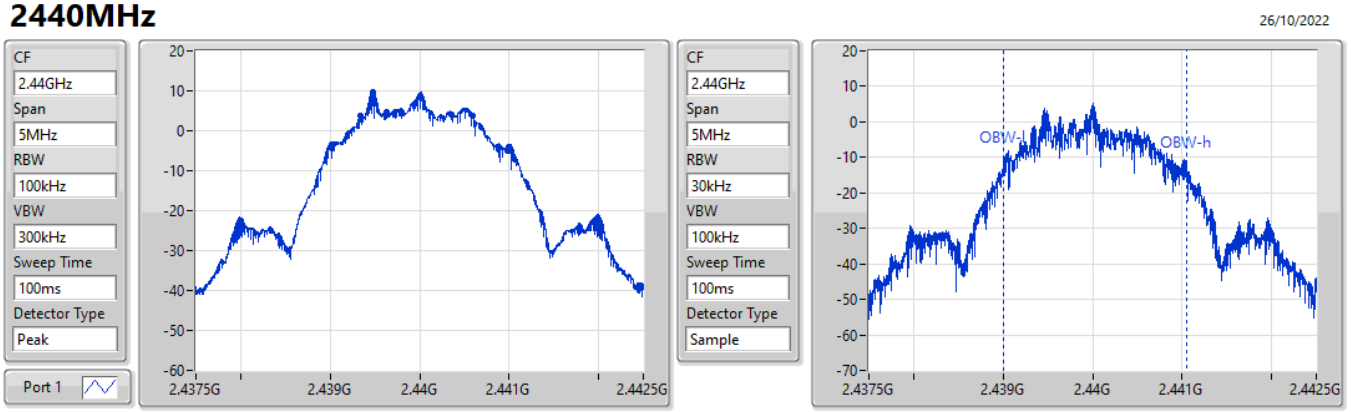
2402MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.195M	2.401395G	2.40259G	2.062M	2.400994G	2.403056G	500k	1

BT-LE(2Mbps) EBW-DTS

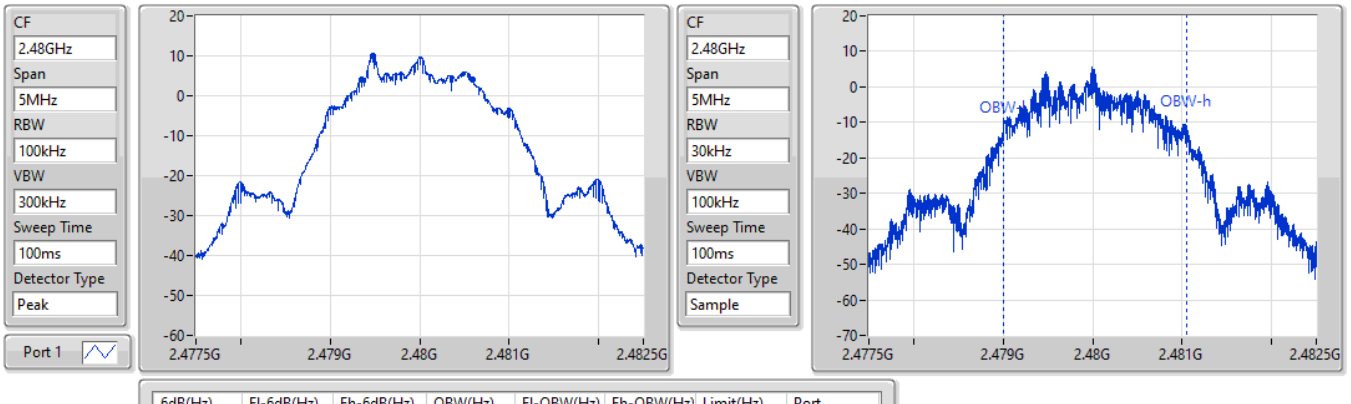
2440MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.25M	2.439343G	2.440593G	2.045M	2.439002G	2.441047G	500k	1

BT-LE(2Mbps) EBW-DTS

2480MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.24M	2.47935G	2.48059G	2.051M	2.478999G	2.48105G	500k	1

Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-LE(1Mbps)	9.54	0.00899
BT-LE(2Mbps)	9.47	0.00885

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	-0.29	9.19	30.00
2440MHz	Pass	-0.29	9.48	30.00
2480MHz	Pass	-0.29	9.54	30.00
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	-0.29	9.40	30.00
2440MHz	Pass	-0.29	9.37	30.00
2480MHz	Pass	-0.29	9.47	30.00

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

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
BT-LE(1Mbps)	-5.33
BT-LE(2Mbps)	-8.61

RBW = 3kHz;

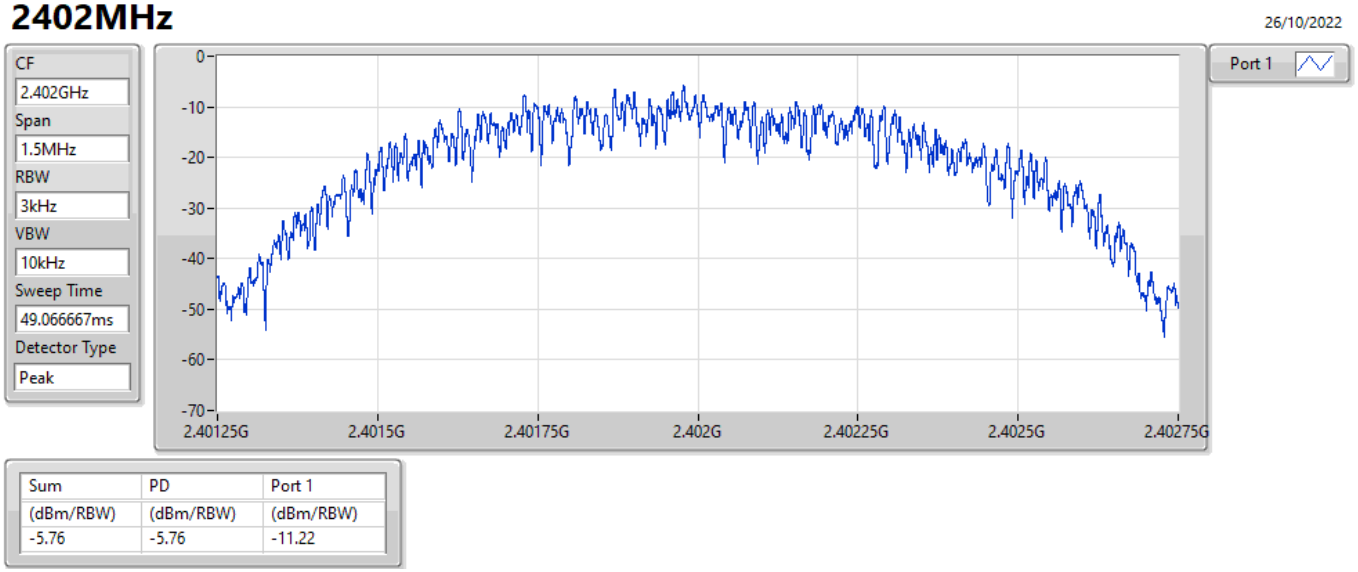
Result

Mode	Result	Gain (dBi)	PD (dBm/RBW)	PD Limit (dBm/RBW)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	-0.29	-5.76	8.00
2440MHz	Pass	-0.29	-5.51	8.00
2480MHz	Pass	-0.29	-5.33	8.00
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	-0.29	-8.87	8.00
2440MHz	Pass	-0.29	-9.25	8.00
2480MHz	Pass	-0.29	-8.61	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;

BT-LE(1Mbps) PSD

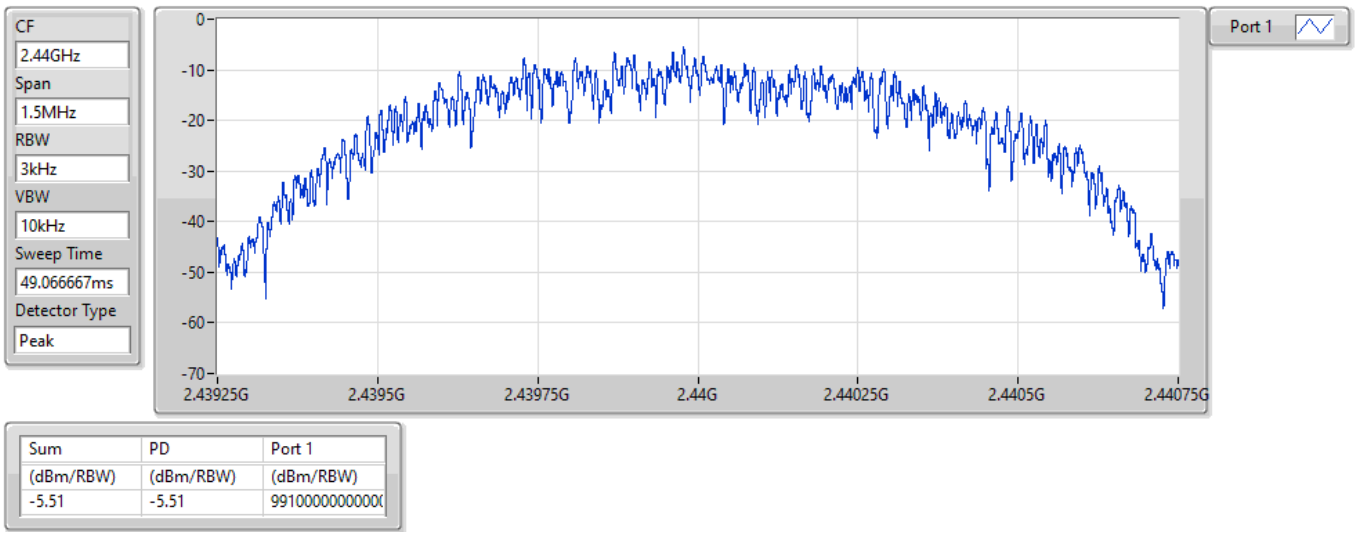
2402MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-5.76	-5.76	-11.22

BT-LE(1Mbps) PSD

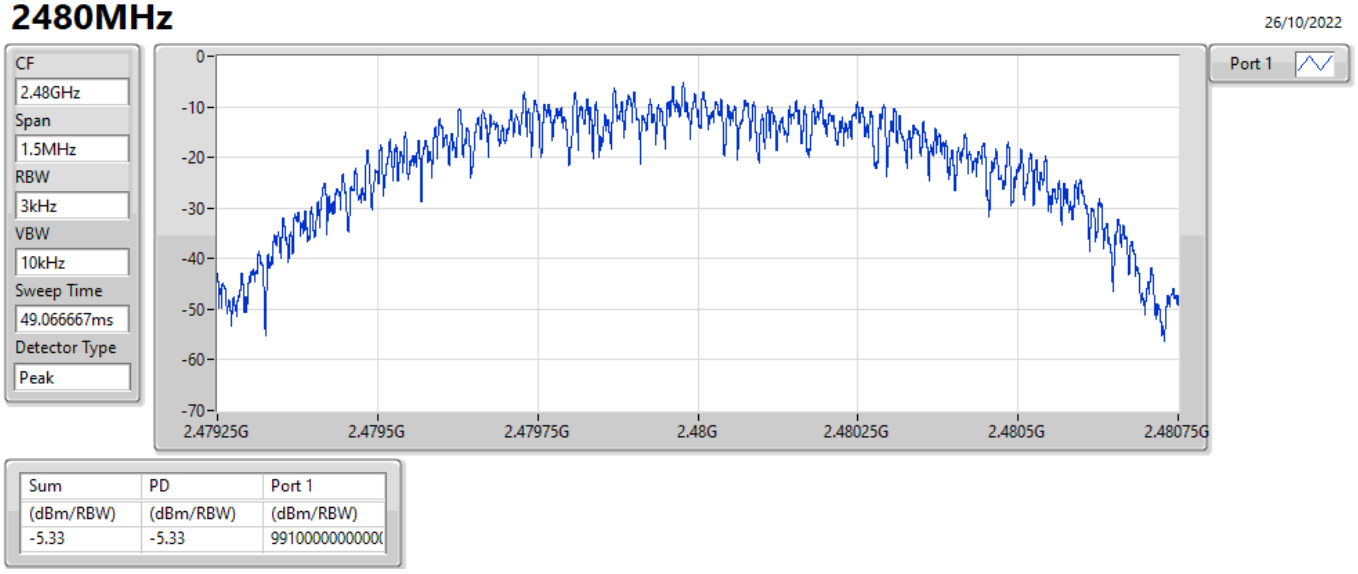
2440MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-5.51	-5.51	9910000000000

BT-LE(1Mbps) PSD

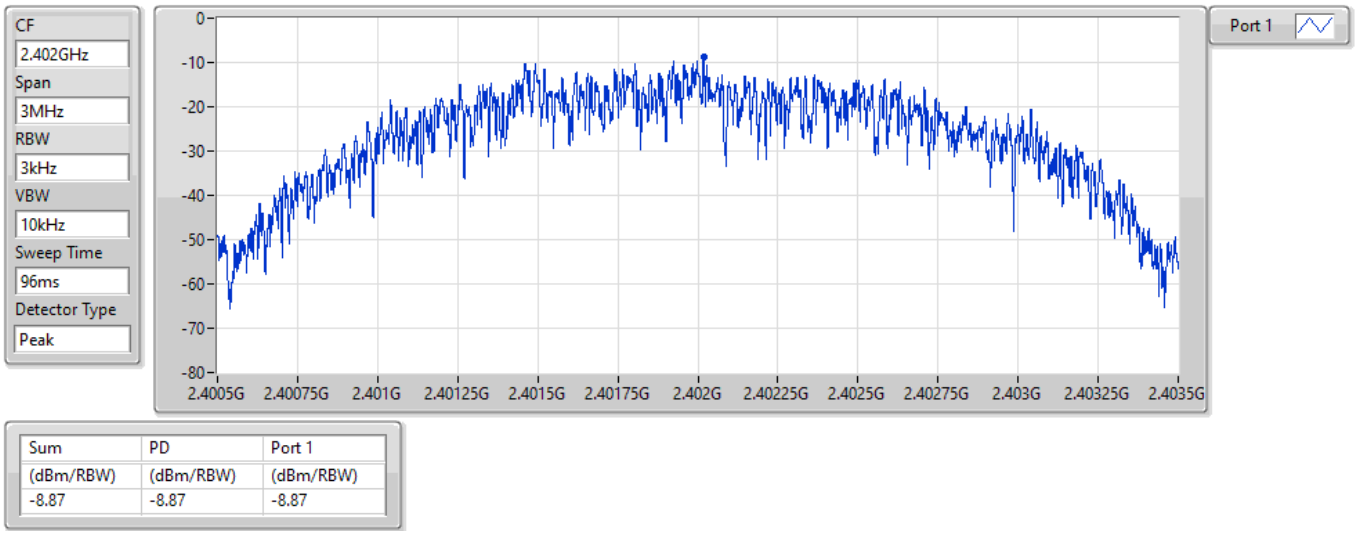
2480MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-5.33	-5.33	9910000000000(

BT-LE(2Mbps) PSD

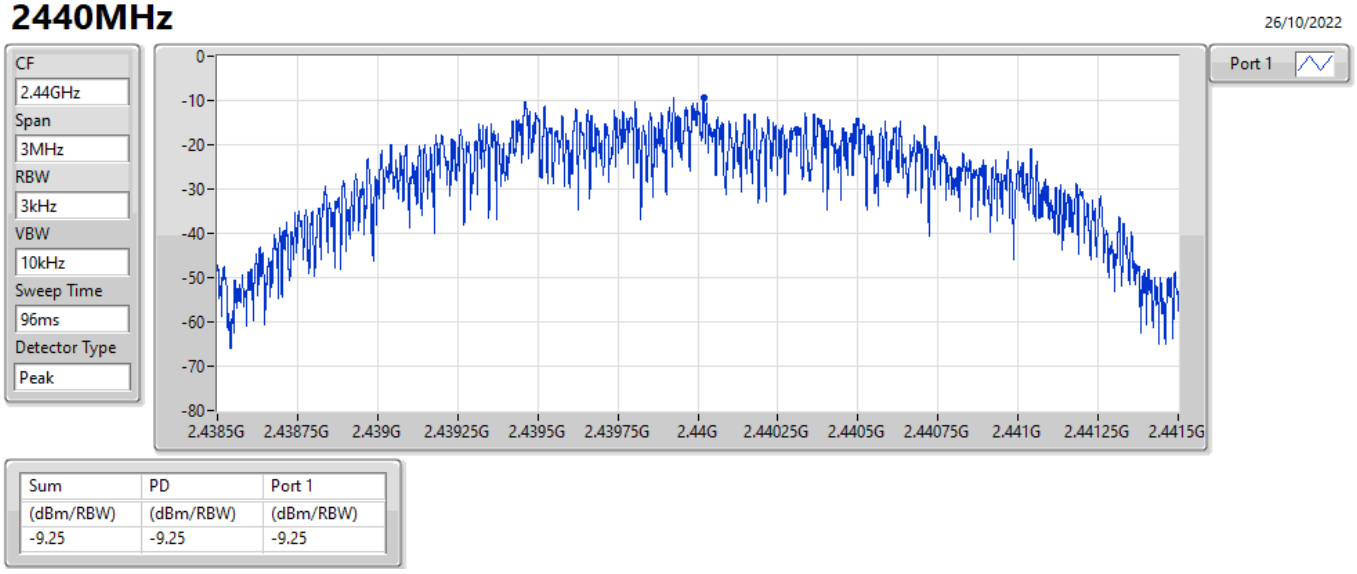
2402MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.87	-8.87	-8.87

BT-LE(2Mbps) PSD

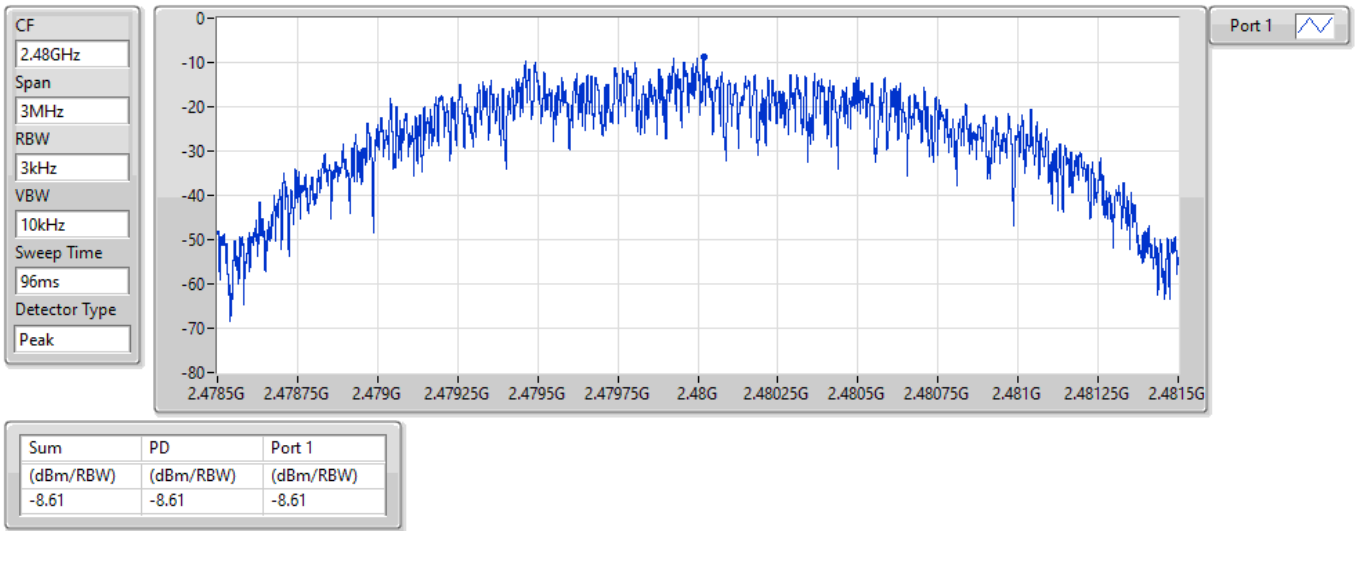
2440MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-9.25	-9.25	-9.25

BT-LE(2Mbps) PSD

2480MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.61	-8.61	-8.61

Summary

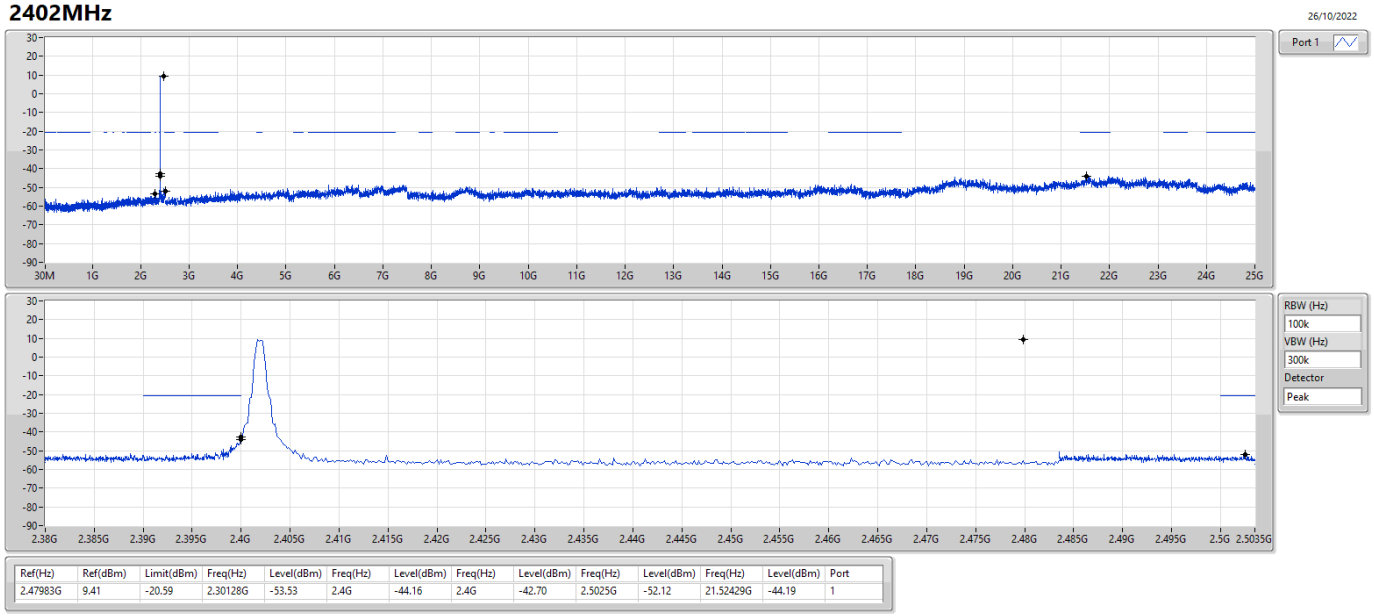
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BT-LE(1Mbps)	Pass	2.47983G	9.41	-20.59	2.30128G	-53.53	2.4G	-44.16	2.4G	-42.70	2.5025G	-52.12	21.52429G	-44.19	1
BT-LE(2Mbps)	Pass	2.47949G	9.23	-20.77	2.15205G	-54.52	2.4G	-22.04	2.4G	-22.16	2.50054G	-52.37	22.00515G	-44.47	1

Result

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
BT-LE(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.47983G	9.41	-20.59	2.30128G	-53.53	2.4G	-44.16	2.4G	-42.70	2.5025G	-52.12	21.52429G	-44.19	1
2440MHz	Pass	2.47983G	9.41	-20.59	2.12503G	-54.73	2.39508G	-52.19	2.4G	-57.39	2.50106G	-52.41	22.00234G	-44.20	1
2480MHz	Pass	2.47983G	9.41	-20.59	1.72435G	-54.34	2.39156G	-52.21	2.4G	-56.59	2.5027G	-52.80	6.45865G	-48.73	1
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.47949G	9.23	-20.77	2.15205G	-54.52	2.4G	-22.04	2.4G	-22.16	2.50054G	-52.37	22.00515G	-44.47	1
2440MHz	Pass	2.47949G	9.23	-20.77	1.73023G	-54.04	2.39388G	-51.56	2.4G	-56.19	2.50014G	-52.96	21.97703G	-44.19	1
2480MHz	Pass	2.47949G	9.23	-20.77	2.04983G	-54.75	2.39564G	-51.47	2.4G	-56.52	2.5001G	-52.79	21.49336G	-44.83	1

BT-LE(1Mbps) **CSENdB-DTS**

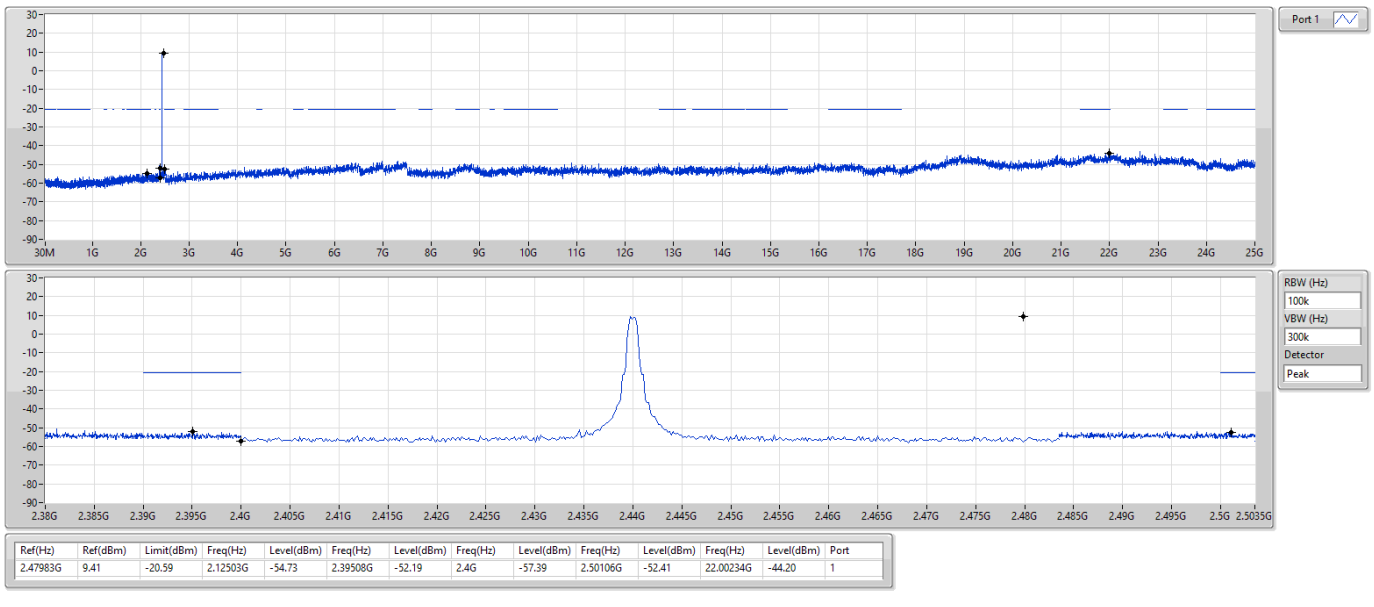
2402MHz



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	9.41	-20.59	2.30128G	-53.53	2.4G	-44.16	2.4G	-42.70	2.5025G	-52.12	21.52429G	-44.19	1

BT-LE(1Mbps) **CSENdB-DTS**

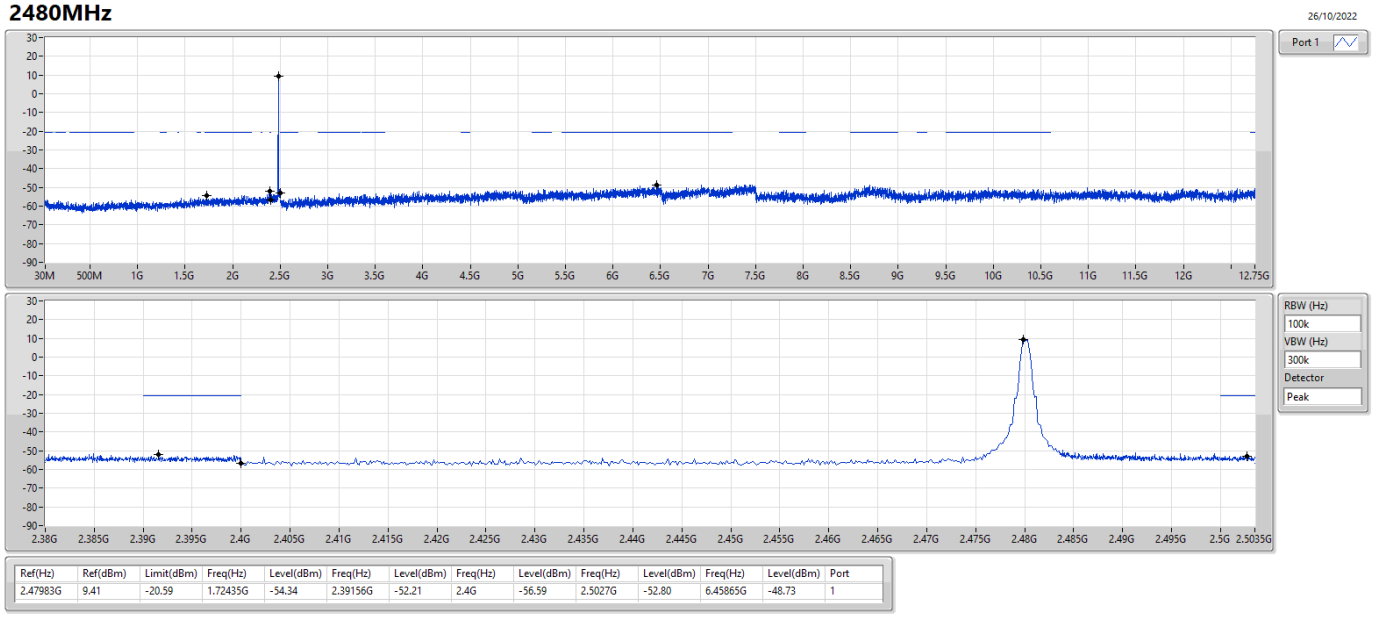
2440MHz



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	9.41	-20.59	2.12503G	-54.73	2.39508G	-52.19	2.4G	-57.39	2.50106G	-52.41	22.00234G	-44.20	1

BT-LE(1Mbps) **CSENdB-DTS**

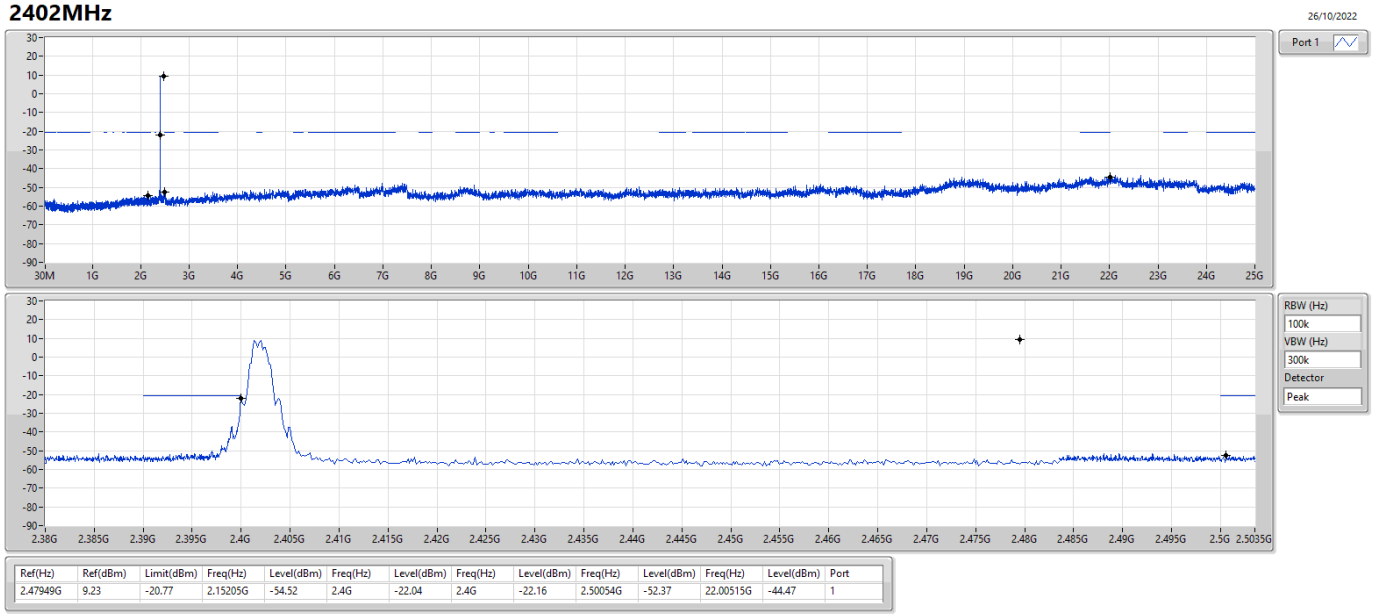
2480MHz



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	9.41	-20.59	1.72435G	-54.34	2.39156G	-52.21	2.4G	-56.59	2.5027G	-52.80	6.45865G	-48.73	1

BT-LE(2Mbps) **CSENdB-DTS**

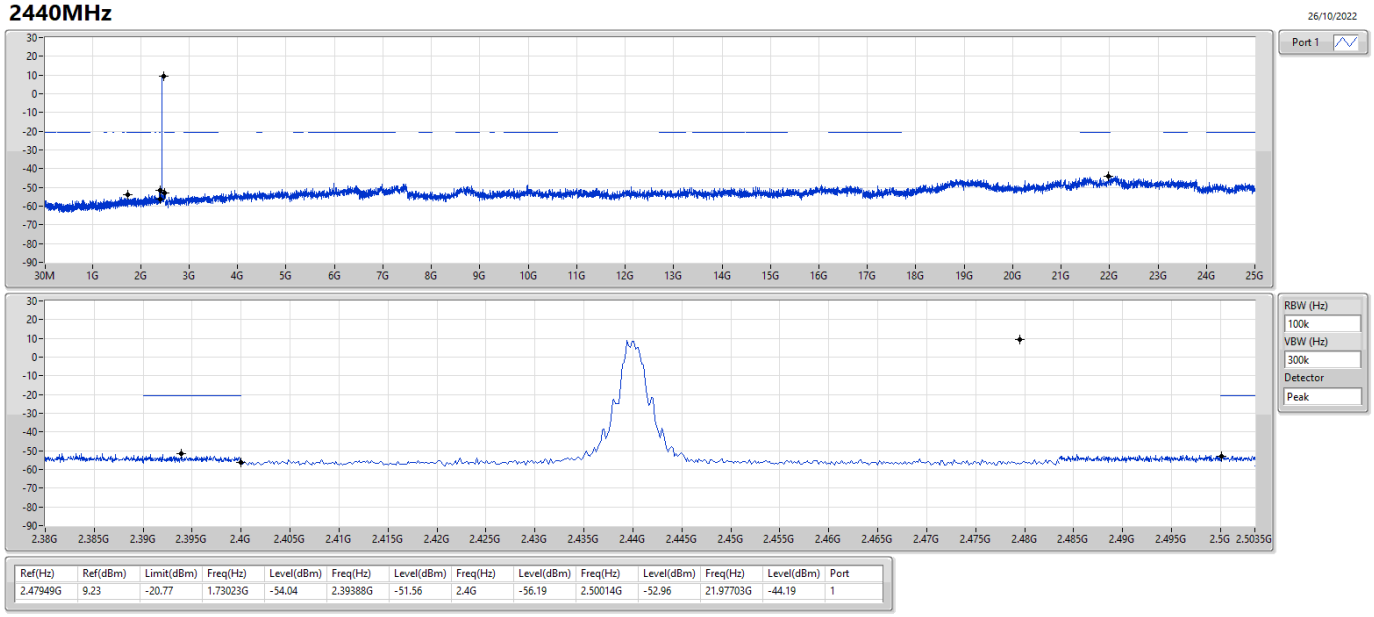
2402MHz



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
2.47949G	9.23	-20.77	2.15205G	-54.52	2.4G	-22.04	2.4G	-22.16	2.50054G	-52.37	22.00515G	-44.47	1

BT-LE(2Mbps) **CSENdB-DTS**

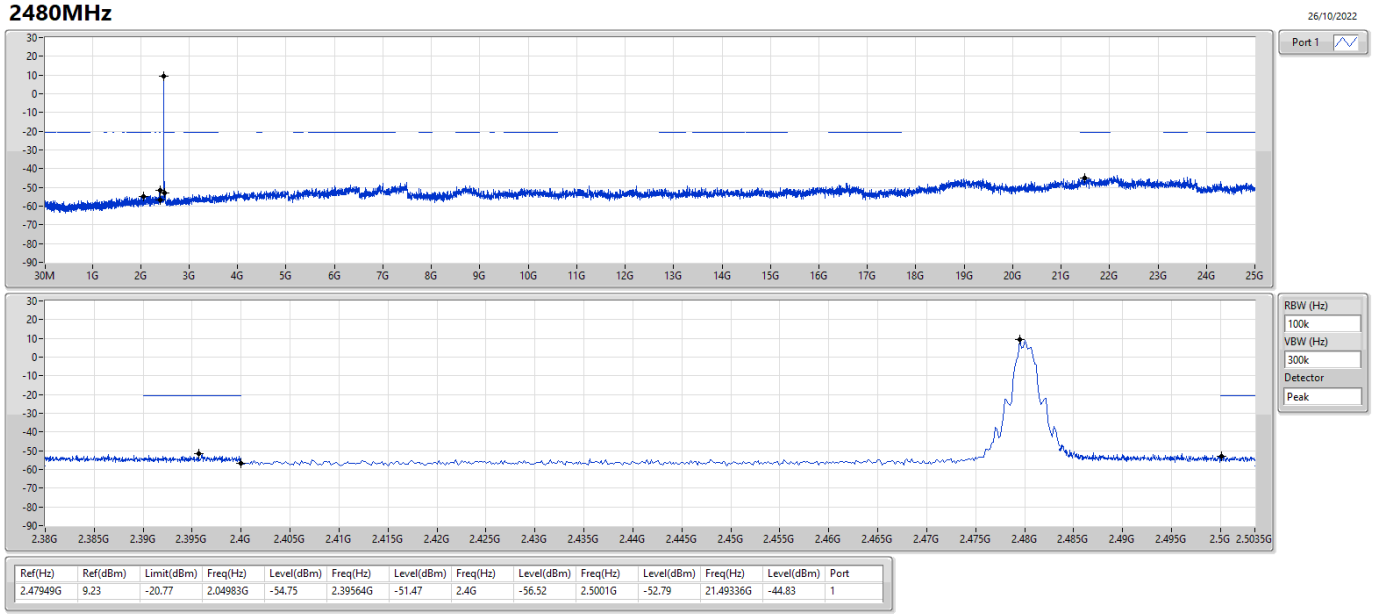
2440MHz



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
2.47949G	9.23	-20.77	1.73023G	-54.04	2.39388G	-51.56	2.4G	-56.19	2.50014G	-52.96	21.97703G	-44.19	1

BT-LE(2Mbps) **CSENdB-DTS**

2480MHz



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
2.47949G	9.23	-20.77	2.04983G	-54.75	2.39564G	-51.47	2.4G	-56.52	2.5001G	-52.79	21.49336G	-44.83	1

Summary

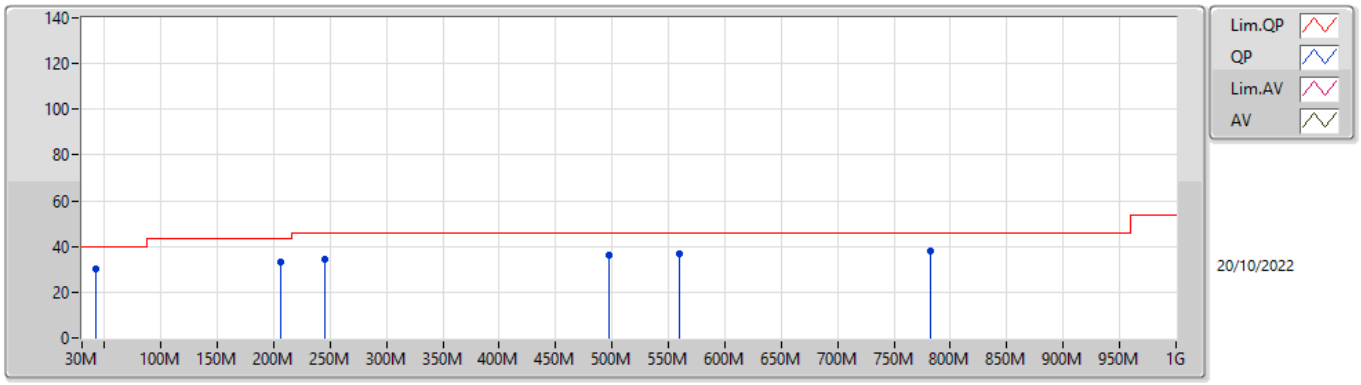
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
BT-LE(2Mbps)	Pass	PK	782.72M	38.29	46.00	-7.71	3	Vertical	0	1.00	-

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-	-
2440MHz	Pass	PK	41.64M	30.18	40.00	-9.82	3	Vertical	0	1.00	-
2440MHz	Pass	PK	206.54M	33.35	43.50	-10.15	3	Vertical	0	1.00	-
2440MHz	Pass	PK	245.34M	34.15	46.00	-11.85	3	Vertical	0	1.00	-
2440MHz	Pass	PK	497.54M	36.06	46.00	-9.94	3	Vertical	0	1.00	-
2440MHz	Pass	PK	559.62M	36.93	46.00	-9.07	3	Vertical	0	1.00	-
2440MHz	Pass	PK	782.72M	38.29	46.00	-7.71	3	Vertical	0	1.00	-
2440MHz	Pass	PK	57.16M	30.21	40.00	-9.79	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	293.84M	37.77	46.00	-8.23	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	317.12M	38.24	46.00	-7.76	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	577.08M	32.37	46.00	-13.63	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	776.9M	38.29	46.00	-7.71	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	1G	37.87	54.00	-16.13	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	35.82M	32.25	40.00	-7.75	3	Vertical	360	1.00	-
2440MHz	Pass	PK	72.68M	29.14	40.00	-10.86	3	Vertical	360	1.00	-
2440MHz	Pass	PK	212.36M	31.40	43.50	-12.10	3	Vertical	360	1.00	-
2440MHz	Pass	PK	291.9M	34.74	46.00	-11.26	3	Vertical	360	1.00	-
2440MHz	Pass	PK	800.18M	35.36	46.00	-10.64	3	Vertical	360	1.00	-
2440MHz	Pass	PK	1G	42.50	74.00	-31.50	3	Vertical	360	1.00	-
2440MHz	Pass	PK	72.68M	25.20	40.00	-14.80	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	111.48M	27.34	43.50	-16.16	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	291.9M	37.74	46.00	-8.26	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	522.76M	34.22	46.00	-11.78	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	782.72M	35.07	46.00	-10.93	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	934.04M	35.56	46.00	-10.44	3	Horizontal	0	1.00	-

BT-LE(2Mbps)

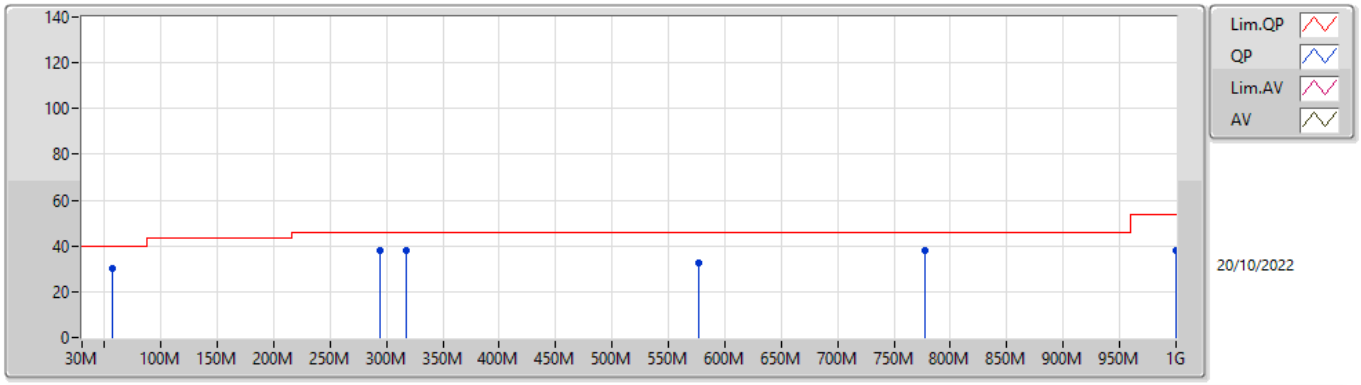
2440MHz_Adapter



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	41.64M	30.18	40.00	-9.82	-18.74	3	Vertical	0	1.00	-	48.92	17.72	0.66	37.12
PK	206.54M	33.35	43.50	-10.15	-20.52	3	Vertical	0	1.00	-	53.87	14.30	1.48	36.30
PK	245.34M	34.15	46.00	-11.85	-17.77	3	Vertical	0	1.00	-	51.92	17.08	1.61	36.46
PK	497.54M	36.06	46.00	-9.94	-11.50	3	Vertical	0	1.00	-	47.56	23.06	2.40	36.96
PK	559.62M	36.93	46.00	-9.07	-9.32	3	Vertical	0	1.00	-	46.25	25.25	2.55	37.12
PK	782.72M	38.29	46.00	-7.71	-7.06	3	Vertical	0	1.00	-	45.35	27.36	3.04	37.46

BT-LE(2Mbps)

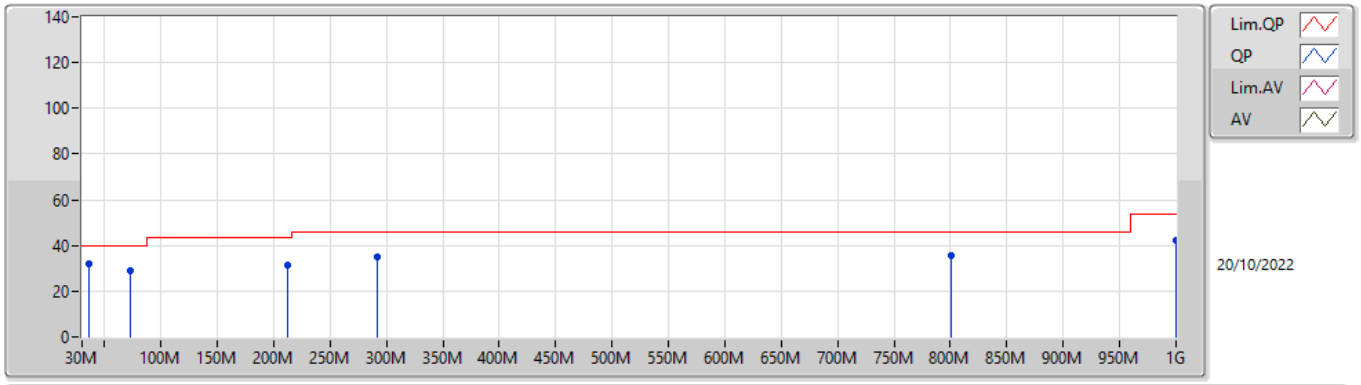
2440MHz_Adapter



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	57.16M	30.21	40.00	-9.79	-25.15	3	Horizontal	360	1.00	-	55.36	11.19	0.75	37.09
PK	293.84M	37.77	46.00	-8.23	-16.36	3	Horizontal	360	1.00	-	54.13	18.29	1.77	36.42
PK	317.12M	38.24	46.00	-7.76	-16.03	3	Horizontal	360	1.00	-	54.27	18.56	1.86	36.45
PK	577.08M	32.37	46.00	-13.63	-9.64	3	Horizontal	360	1.00	-	42.01	24.90	2.57	37.11
PK	776.9M	38.29	46.00	-7.71	-7.06	3	Horizontal	360	1.00	-	45.35	27.37	3.03	37.46
PK	1G	37.87	54.00	-16.13	-4.03	3	Horizontal	360	1.00	-	41.90	29.69	3.43	37.15

BT-LE(2Mbps)

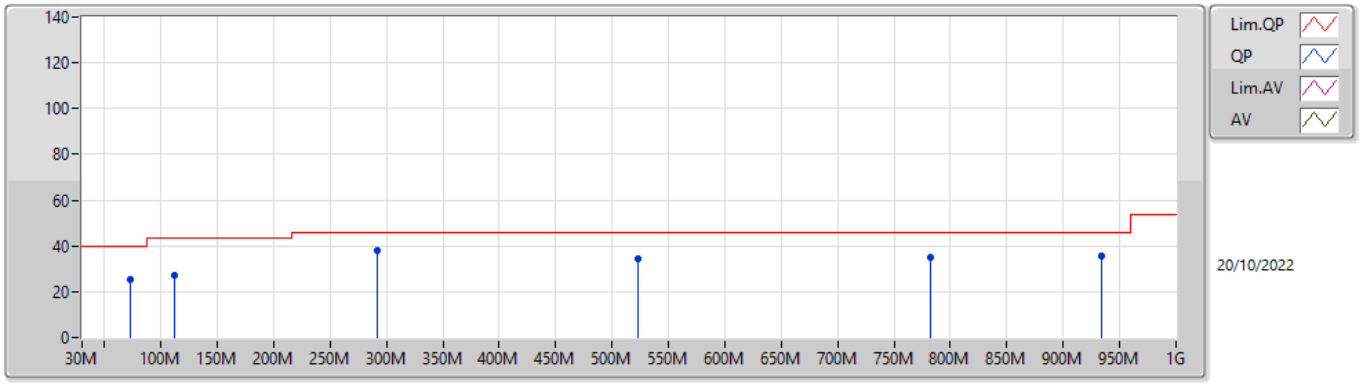
2440MHz_USB



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	35.82M	32.25	40.00	-7.75	-15.70	3	Vertical	360	1.00	-	47.95	20.82	0.61	37.13
PK	72.68M	29.14	40.00	-10.86	-24.34	3	Vertical	360	1.00	-	53.48	11.74	0.86	36.94
PK	212.36M	31.40	43.50	-12.10	-20.68	3	Vertical	360	1.00	-	52.08	14.14	1.50	36.32
PK	291.9M	34.74	46.00	-11.26	-16.42	3	Vertical	360	1.00	-	51.16	18.24	1.76	36.42
PK	800.18M	35.36	46.00	-10.64	-7.18	3	Vertical	360	1.00	-	42.54	27.22	3.08	37.48
PK	1G	42.50	74.00	-31.50	-4.03	3	Vertical	360	1.00	-	46.53	29.69	3.43	37.15

BT-LE(2Mbps)

2440MHz_USB



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	72.68M	25.20	40.00	-14.80	-24.34	3	Horizontal	0	1.00	-	49.54	11.74	0.86	36.94
PK	111.48M	27.34	43.50	-16.16	-19.42	3	Horizontal	0	1.00	-	46.76	16.15	1.06	36.63
PK	291.9M	37.74	46.00	-8.26	-16.42	3	Horizontal	0	1.00	-	54.16	18.24	1.76	36.42
PK	522.76M	34.22	46.00	-11.78	-11.47	3	Horizontal	0	1.00	-	45.69	23.12	2.46	37.05
PK	782.72M	35.07	46.00	-10.93	-7.06	3	Horizontal	0	1.00	-	42.13	27.36	3.04	37.46
PK	934.04M	35.56	46.00	-10.44	-4.86	3	Horizontal	0	1.00	-	40.42	29.25	3.32	37.43

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	2.4988G	47.46	54.00	-6.54	3	Horizontal	165	1.20	-
BT-LE(2Mbps)	Pass	AV	2.4835G	50.52	54.00	-3.48	3	Horizontal	165	1.18	-

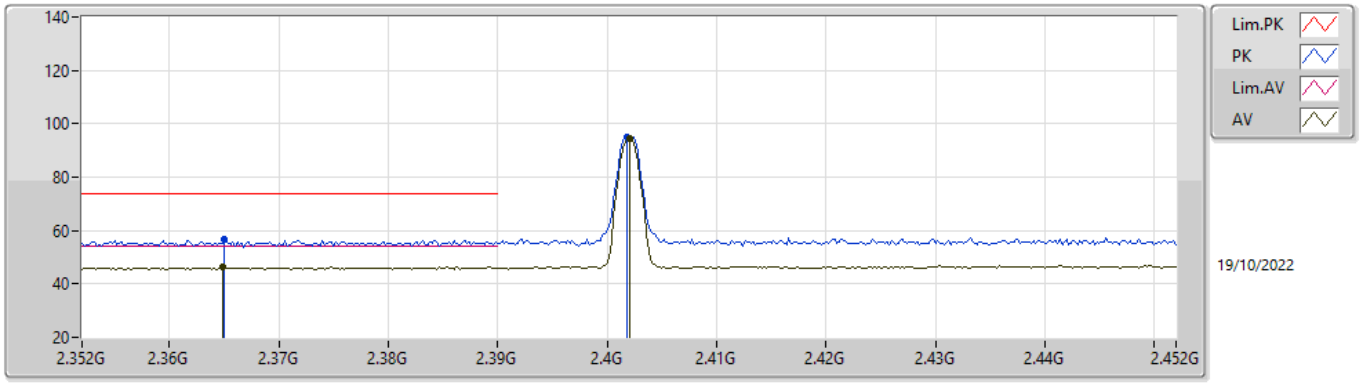
Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-LE(1Mbps)	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3648G	46.20	54.00	-7.80	3	Vertical	80	1.38	-
2402MHz	Pass	AV	2.402G	94.30	Inf	-Inf	3	Vertical	80	1.38	-
2402MHz	Pass	PK	2.365G	56.86	74.00	-17.14	3	Vertical	80	1.38	-
2402MHz	Pass	PK	2.4018G	94.99	Inf	-Inf	3	Vertical	80	1.38	-
2402MHz	Pass	AV	2.3882G	46.26	54.00	-7.74	3	Horizontal	155	1.40	-
2402MHz	Pass	AV	2.402G	98.31	Inf	-Inf	3	Horizontal	155	1.40	-
2402MHz	Pass	PK	2.3784G	56.80	74.00	-17.20	3	Horizontal	155	1.40	-
2402MHz	Pass	PK	2.4018G	98.99	Inf	-Inf	3	Horizontal	155	1.40	-
2402MHz	Pass	AV	4.8038G	40.44	54.00	-13.56	3	Vertical	104	1.00	-
2402MHz	Pass	PK	4.80447G	49.16	74.00	-24.84	3	Vertical	104	1.00	-
2402MHz	Pass	AV	4.80369G	37.97	54.00	-16.03	3	Horizontal	199	1.15	-
2402MHz	Pass	PK	4.80362G	48.06	74.00	-25.94	3	Horizontal	199	1.15	-
2440MHz	Pass	AV	2.3788G	46.30	54.00	-7.70	3	Vertical	76	1.00	-
2440MHz	Pass	AV	2.44G	95.59	Inf	-Inf	3	Vertical	76	1.00	-
2440MHz	Pass	AV	2.4912G	47.22	54.00	-6.78	3	Vertical	76	1.00	-
2440MHz	Pass	PK	2.372G	56.79	74.00	-17.21	3	Vertical	76	1.00	-
2440MHz	Pass	PK	2.4396G	96.35	Inf	-Inf	3	Vertical	76	1.00	-
2440MHz	Pass	PK	2.49G	57.40	74.00	-16.60	3	Vertical	76	1.00	-
2440MHz	Pass	AV	2.3788G	46.38	54.00	-7.62	3	Horizontal	167	1.56	-
2440MHz	Pass	AV	2.44G	98.20	Inf	-Inf	3	Horizontal	167	1.56	-
2440MHz	Pass	AV	2.4876G	47.15	54.00	-6.85	3	Horizontal	167	1.56	-
2440MHz	Pass	PK	2.3556G	56.90	74.00	-17.10	3	Horizontal	167	1.56	-
2440MHz	Pass	PK	2.4404G	98.88	Inf	-Inf	3	Horizontal	167	1.56	-
2440MHz	Pass	PK	2.4928G	58.19	74.00	-15.81	3	Horizontal	167	1.56	-
2440MHz	Pass	AV	4.87966G	40.05	54.00	-13.95	3	Vertical	97	1.00	-
2440MHz	Pass	PK	4.8794G	49.00	74.00	-25.00	3	Vertical	97	1.00	-
2440MHz	Pass	AV	4.87964G	38.83	54.00	-15.17	3	Horizontal	197	1.12	-
2440MHz	Pass	PK	4.87961G	48.03	74.00	-25.97	3	Horizontal	197	1.12	-
2480MHz	Pass	AV	2.48G	95.16	Inf	-Inf	3	Vertical	78	1.00	-
2480MHz	Pass	AV	2.4862G	47.21	54.00	-6.79	3	Vertical	78	1.00	-
2480MHz	Pass	PK	2.4802G	95.90	Inf	-Inf	3	Vertical	78	1.00	-
2480MHz	Pass	PK	2.497G	58.24	74.00	-15.76	3	Vertical	78	1.00	-
2480MHz	Pass	AV	2.48G	98.21	Inf	-Inf	3	Horizontal	165	1.20	-
2480MHz	Pass	AV	2.4988G	47.46	54.00	-6.54	3	Horizontal	165	1.20	-
2480MHz	Pass	PK	2.4802G	98.90	Inf	-Inf	3	Horizontal	165	1.20	-
2480MHz	Pass	PK	2.4842G	57.92	74.00	-16.08	3	Horizontal	165	1.20	-
2480MHz	Pass	AV	4.95953G	40.53	54.00	-13.47	3	Vertical	108	1.20	-
2480MHz	Pass	PK	4.96058G	49.17	74.00	-24.83	3	Vertical	108	1.20	-
2480MHz	Pass	AV	4.95994G	40.07	54.00	-13.93	3	Horizontal	193	1.14	-
2480MHz	Pass	PK	4.95975G	48.77	74.00	-25.23	3	Horizontal	193	1.14	-
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3884G	48.01	54.00	-5.99	3	Vertical	76	1.00	-
2402MHz	Pass	AV	2.402G	93.27	Inf	-Inf	3	Vertical	76	1.00	-
2402MHz	Pass	PK	2.3874G	57.29	74.00	-16.71	3	Vertical	76	1.00	-
2402MHz	Pass	PK	2.4026G	95.43	Inf	-Inf	3	Vertical	76	1.00	-
2402MHz	Pass	AV	2.3868G	47.80	54.00	-6.20	3	Horizontal	154	1.40	-
2402MHz	Pass	AV	2.402G	97.00	Inf	-Inf	3	Horizontal	154	1.40	-
2402MHz	Pass	PK	2.3806G	56.61	74.00	-17.39	3	Horizontal	154	1.40	-
2402MHz	Pass	PK	2.4014G	99.04	Inf	-Inf	3	Horizontal	154	1.40	-
2402MHz	Pass	AV	4.80293G	41.63	54.00	-12.37	3	Vertical	106	1.00	-
2402MHz	Pass	PK	4.80279G	48.98	74.00	-25.02	3	Vertical	106	1.00	-
2402MHz	Pass	AV	4.80292G	39.23	54.00	-14.77	3	Horizontal	201	1.29	-
2402MHz	Pass	PK	4.80286G	47.21	74.00	-26.79	3	Horizontal	201	1.29	-
2440MHz	Pass	AV	2.3688G	47.82	54.00	-6.18	3	Vertical	76	1.00	-
2440MHz	Pass	AV	2.44G	94.37	Inf	-Inf	3	Vertical	76	1.00	-
2440MHz	Pass	AV	2.496G	48.50	54.00	-5.50	3	Vertical	76	1.00	-
2440MHz	Pass	PK	2.3452G	57.80	74.00	-16.20	3	Vertical	76	1.00	-
2440MHz	Pass	PK	2.4404G	96.49	Inf	-Inf	3	Vertical	76	1.00	-
2440MHz	Pass	PK	2.4872G	57.43	74.00	-16.57	3	Vertical	76	1.00	-
2440MHz	Pass	AV	2.3764G	47.65	54.00	-6.35	3	Horizontal	166	1.55	-

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2440MHz	Pass	AV	2.44G	96.93	Inf	-Inf	3	Horizontal	166	1.55	-
2440MHz	Pass	AV	2.4988G	48.87	54.00	-5.13	3	Horizontal	166	1.55	-
2440MHz	Pass	PK	2.3408G	56.43	74.00	-17.57	3	Horizontal	166	1.55	-
2440MHz	Pass	PK	2.4404G	99.00	Inf	-Inf	3	Horizontal	166	1.55	-
2440MHz	Pass	PK	2.4964G	57.22	74.00	-16.78	3	Horizontal	166	1.55	-
2440MHz	Pass	AV	4.8788G	41.12	54.00	-12.88	3	Vertical	96	1.01	-
2440MHz	Pass	PK	4.8791G	48.63	74.00	-25.37	3	Vertical	96	1.01	-
2440MHz	Pass	AV	4.87905G	39.80	54.00	-14.20	3	Horizontal	195	1.00	-
2440MHz	Pass	PK	4.87896G	47.77	74.00	-26.23	3	Horizontal	195	1.00	-
2480MHz	Pass	AV	2.48G	93.87	Inf	-Inf	3	Vertical	78	1.00	-
2480MHz	Pass	AV	2.4835G	49.68	54.00	-4.32	3	Vertical	78	1.00	-
2480MHz	Pass	PK	2.4806G	95.97	Inf	-Inf	3	Vertical	78	1.00	-
2480MHz	Pass	PK	2.4842G	57.66	74.00	-16.34	3	Vertical	78	1.00	-
2480MHz	Pass	AV	2.48G	96.97	Inf	-Inf	3	Horizontal	165	1.18	-
2480MHz	Pass	AV	2.4835G	50.52	54.00	-3.48	3	Horizontal	165	1.18	-
2480MHz	Pass	PK	2.48G	99.01	Inf	-Inf	3	Horizontal	165	1.18	-
2480MHz	Pass	PK	2.4838G	58.16	74.00	-15.84	3	Horizontal	165	1.18	-
2480MHz	Pass	AV	4.95906G	41.46	54.00	-12.54	3	Vertical	95	1.00	-
2480MHz	Pass	PK	4.96093G	49.06	74.00	-24.94	3	Vertical	95	1.00	-
2480MHz	Pass	AV	4.959G	41.02	54.00	-12.98	3	Horizontal	192	1.01	-
2480MHz	Pass	PK	4.96025G	48.62	74.00	-25.38	3	Horizontal	192	1.01	-

BT-LE(1Mbps)

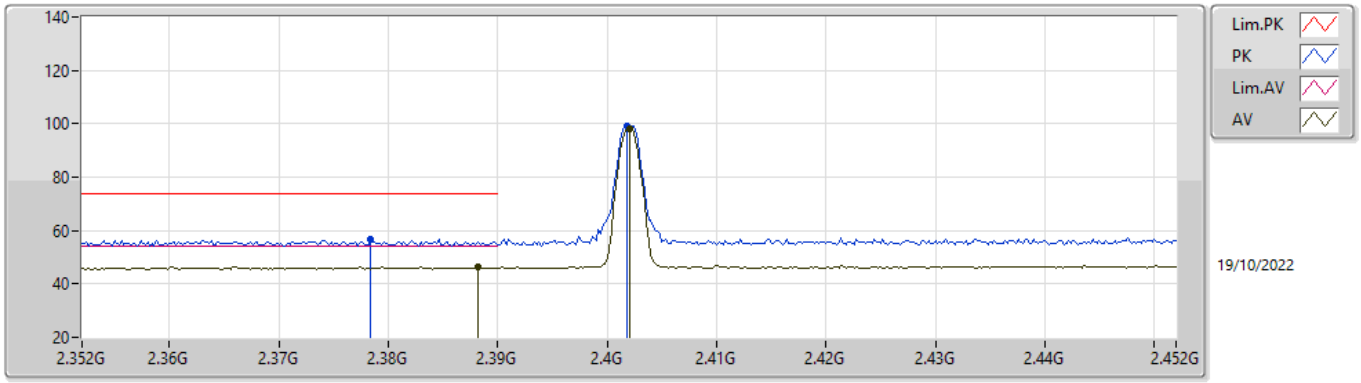
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3648G	46.20	54.00	-7.80	31.43	3	Vertical	80	1.38	-	14.77	27.29	4.14	-
AV	2.402G	94.30	Inf	-Inf	31.67	3	Vertical	80	1.38	-	62.63	27.50	4.17	-
PK	2.365G	56.86	74.00	-17.14	31.43	3	Vertical	80	1.38	-	25.43	27.29	4.14	-
PK	2.4018G	94.99	Inf	-Inf	31.67	3	Vertical	80	1.38	-	63.32	27.50	4.17	-

BT-LE(1Mbps)

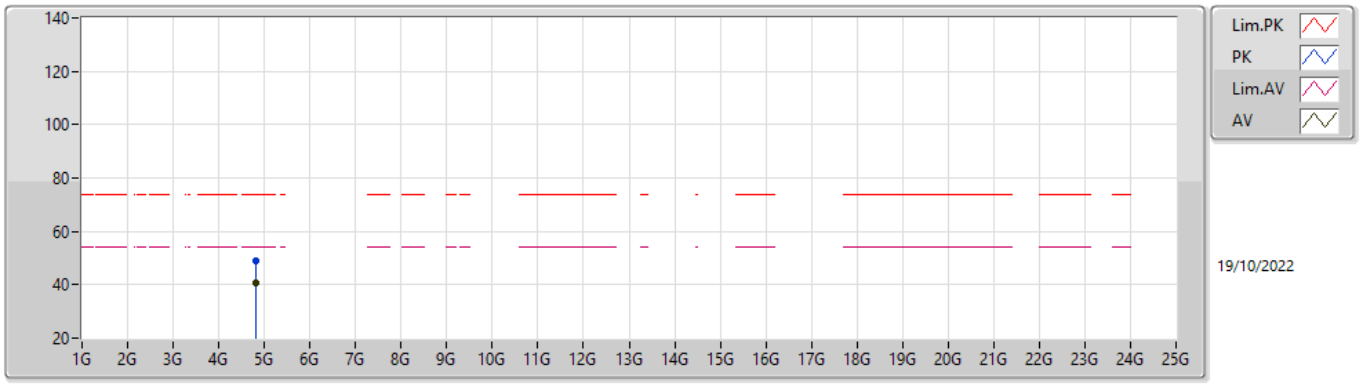
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3882G	46.26	54.00	-7.74	31.59	3	Horizontal	155	1.40	-	14.67	27.43	4.16	-
AV	2.402G	98.31	Inf	-Inf	31.67	3	Horizontal	155	1.40	-	66.64	27.50	4.17	-
PK	2.3784G	56.80	74.00	-17.20	31.52	3	Horizontal	155	1.40	-	25.28	27.37	4.15	-
PK	2.4018G	98.99	Inf	-Inf	31.67	3	Horizontal	155	1.40	-	67.32	27.50	4.17	-

BT-LE(1Mbps)

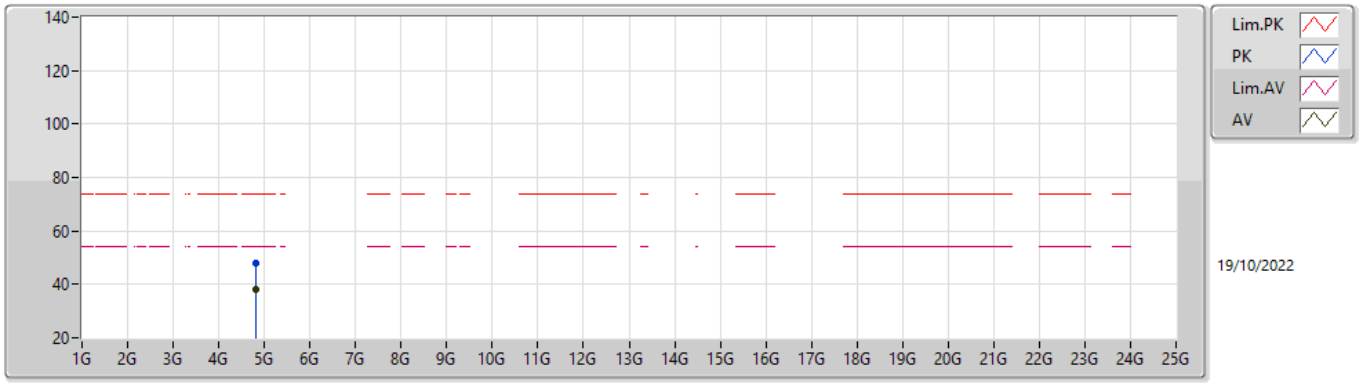
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.8038G	40.44	54.00	-13.56	3.33	3	Vertical	104	1.00	-	37.11	32.32	5.67	34.66
PK	4.80447G	49.16	74.00	-24.84	3.34	3	Vertical	104	1.00	-	45.82	32.33	5.67	34.66

BT-LE(1Mbps)

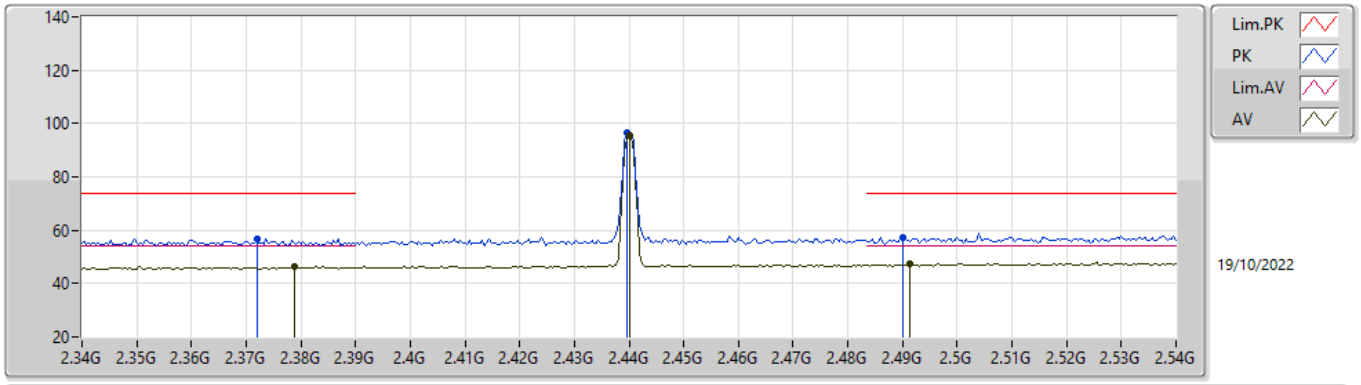
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.80369G	37.97	54.00	-16.03	3.33	3	Horizontal	199	1.15	-	34.64	32.32	5.67	34.66
PK	4.80362G	48.06	74.00	-25.94	3.33	3	Horizontal	199	1.15	-	44.73	32.32	5.67	34.66

BT-LE(1Mbps)

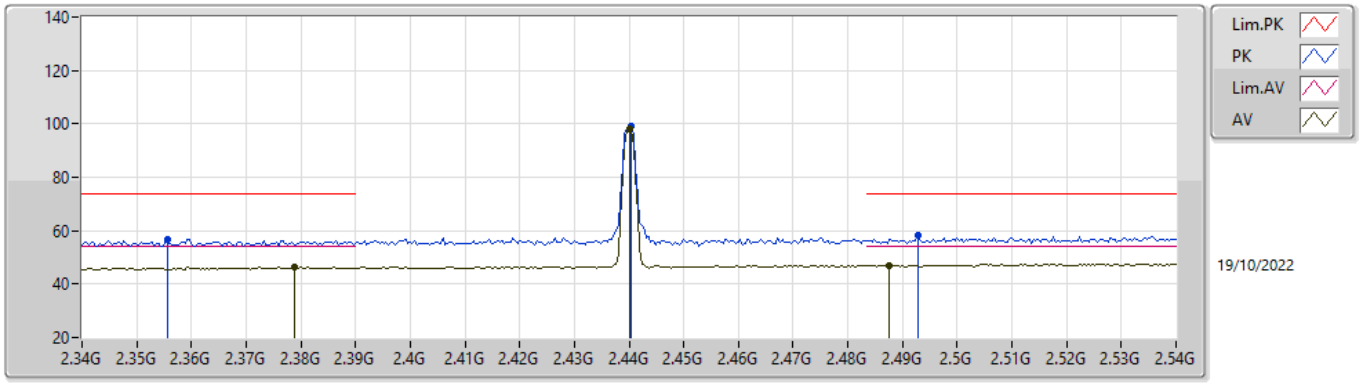
2440MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3788G	46.30	54.00	-7.70	31.52	3	Vertical	76	1.00	-	14.78	27.37	4.15	-
AV	2.44G	95.59	Inf	-Inf	31.77	3	Vertical	76	1.00	-	63.82	27.58	4.19	-
AV	2.4912G	47.22	54.00	-6.78	32.07	3	Vertical	76	1.00	-	15.15	27.85	4.22	-
PK	2.372G	56.79	74.00	-17.21	31.47	3	Vertical	76	1.00	-	25.32	27.33	4.14	-
PK	2.4396G	96.35	Inf	-Inf	31.77	3	Vertical	76	1.00	-	64.58	27.58	4.19	-
PK	2.49G	57.40	74.00	-16.60	32.06	3	Vertical	76	1.00	-	25.34	27.84	4.22	-

BT-LE(1Mbps)

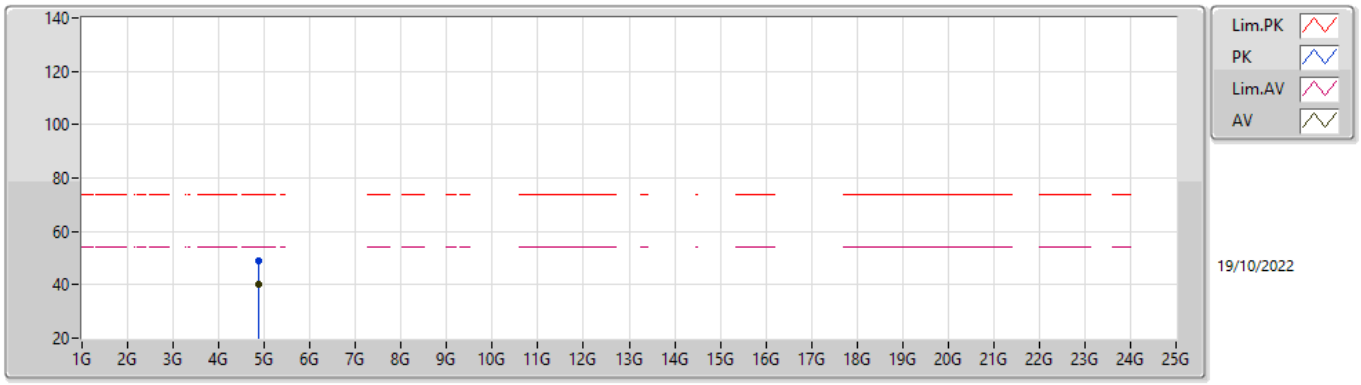
2440MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3788G	46.38	54.00	-7.62	31.52	3	Horizontal	167	1.56	-	14.86	27.37	4.15	-
AV	2.44G	98.20	Inf	-Inf	31.77	3	Horizontal	167	1.56	-	66.43	27.58	4.19	-
AV	2.4876G	47.15	54.00	-6.85	32.05	3	Horizontal	167	1.56	-	15.10	27.83	4.22	-
PK	2.3556G	56.90	74.00	-17.10	31.36	3	Horizontal	167	1.56	-	25.54	27.23	4.13	-
PK	2.4404G	98.88	Inf	-Inf	31.77	3	Horizontal	167	1.56	-	67.11	27.58	4.19	-
PK	2.4928G	58.19	74.00	-15.81	32.09	3	Horizontal	167	1.56	-	26.10	27.86	4.23	-

BT-LE(1Mbps)

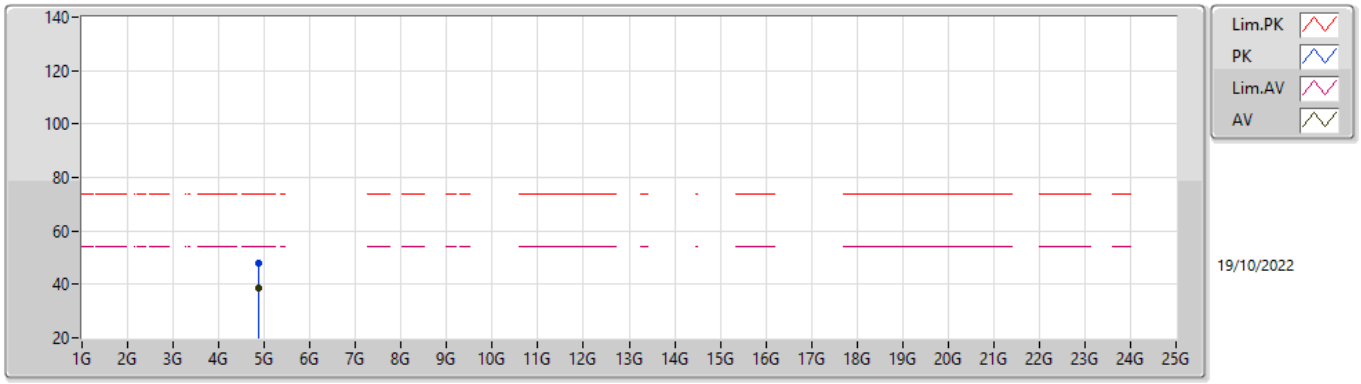
2440MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.87966G	40.05	54.00	-13.95	3.79	3	Vertical	97	1.00	-	36.26	32.72	5.72	34.65
PK	4.8794G	49.00	74.00	-25.00	3.79	3	Vertical	97	1.00	-	45.21	32.72	5.72	34.65

BT-LE(1Mbps)

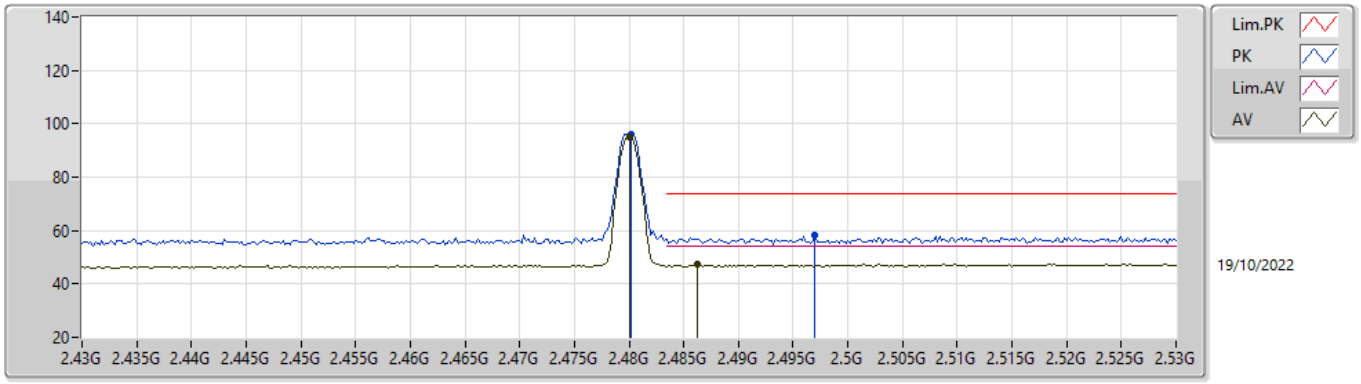
2440MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.87964G	38.83	54.00	-15.17	3.79	3	Horizontal	197	1.12	-	35.04	32.72	5.72	34.65
PK	4.87961G	48.03	74.00	-25.97	3.79	3	Horizontal	197	1.12	-	44.24	32.72	5.72	34.65

BT-LE(1Mbps)

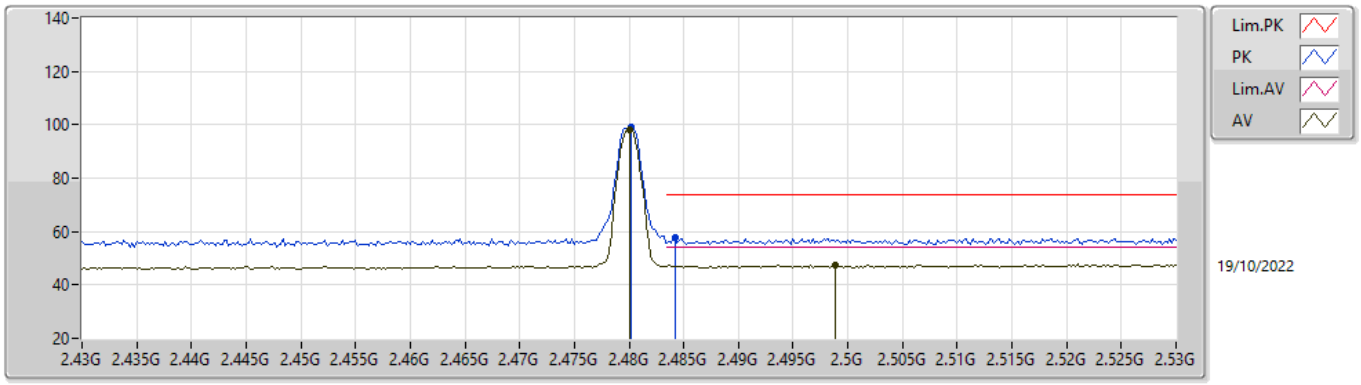
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.48G	95.16	Inf	-Inf	32.00	3	Vertical	78	1.00	-	63.16	27.78	4.22	-
AV	2.4862G	47.21	54.00	-6.79	32.04	3	Vertical	78	1.00	-	15.17	27.82	4.22	-
PK	2.4802G	95.90	Inf	-Inf	32.00	3	Vertical	78	1.00	-	63.90	27.78	4.22	-
PK	2.497G	58.24	74.00	-15.76	32.11	3	Vertical	78	1.00	-	26.13	27.88	4.23	-

BT-LE(1Mbps)

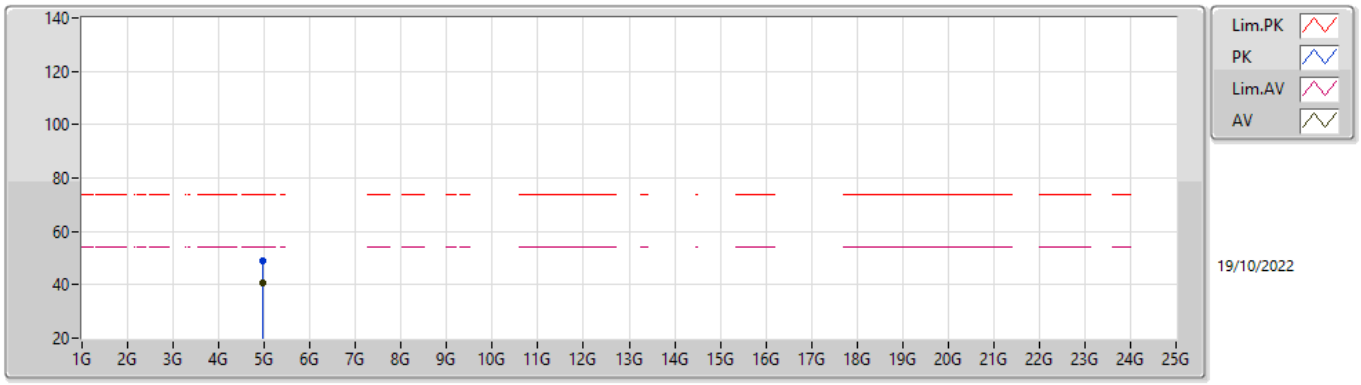
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.48G	98.21	Inf	-Inf	32.00	3	Horizontal	165	1.20	-	66.21	27.78	4.22	-
AV	2.4988G	47.46	54.00	-6.54	32.12	3	Horizontal	165	1.20	-	15.34	27.89	4.23	-
PK	2.4802G	98.90	Inf	-Inf	32.00	3	Horizontal	165	1.20	-	66.90	27.78	4.22	-
PK	2.4842G	57.92	74.00	-16.08	32.03	3	Horizontal	165	1.20	-	25.89	27.81	4.22	-

BT-LE(1Mbps)

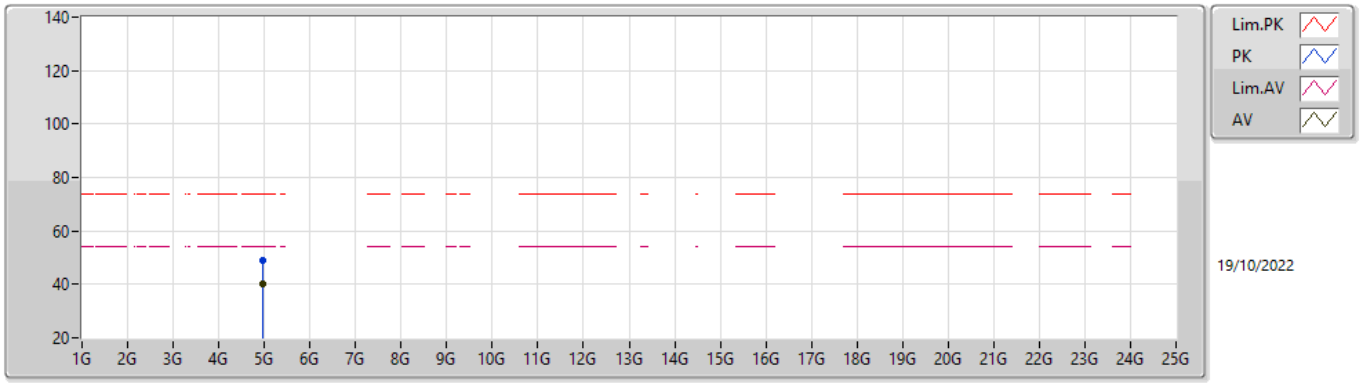
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.95953G	40.53	54.00	-13.47	4.15	3	Vertical	108	1.20	-	36.38	33.02	5.77	34.64
PK	4.96058G	49.17	74.00	-24.83	4.15	3	Vertical	108	1.20	-	45.02	33.02	5.77	34.64

BT-LE(1Mbps)

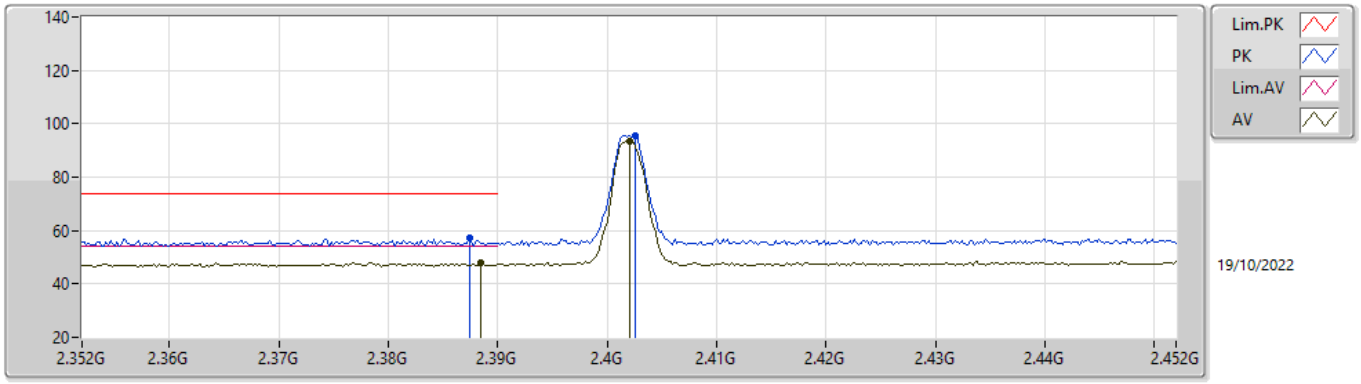
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.95994G	40.07	54.00	-13.93	4.15	3	Horizontal	193	1.14	-	35.92	33.02	5.77	34.64
PK	4.95975G	48.77	74.00	-25.23	4.15	3	Horizontal	193	1.14	-	44.62	33.02	5.77	34.64

BT-LE(2Mbps)

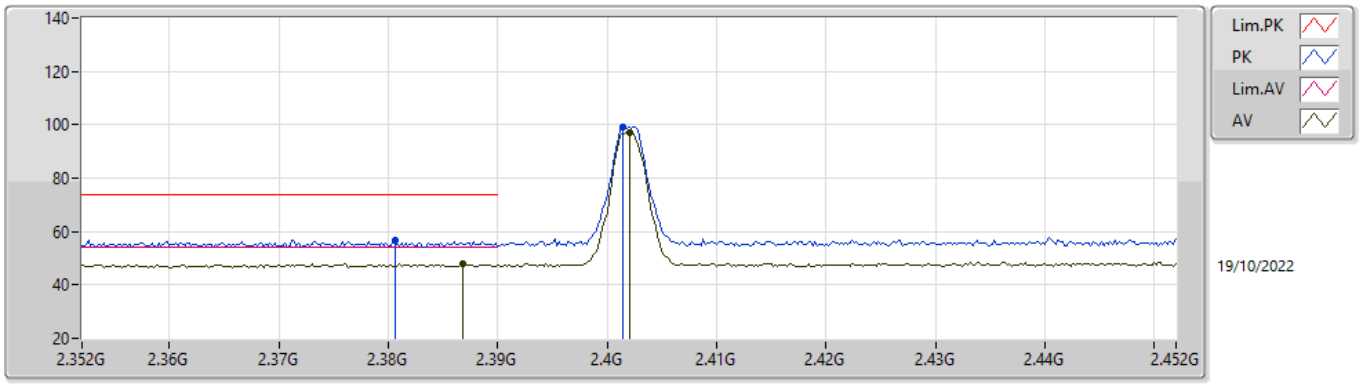
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3884G	48.01	54.00	-5.99	31.59	3	Vertical	76	1.00	-	16.42	27.43	4.16	-
AV	2.402G	93.27	Inf	-Inf	31.67	3	Vertical	76	1.00	-	61.60	27.50	4.17	-
PK	2.3874G	57.29	74.00	-16.71	31.58	3	Vertical	76	1.00	-	25.71	27.42	4.16	-
PK	2.4026G	95.43	Inf	-Inf	31.68	3	Vertical	76	1.00	-	63.75	27.51	4.17	-

BT-LE(2Mbps)

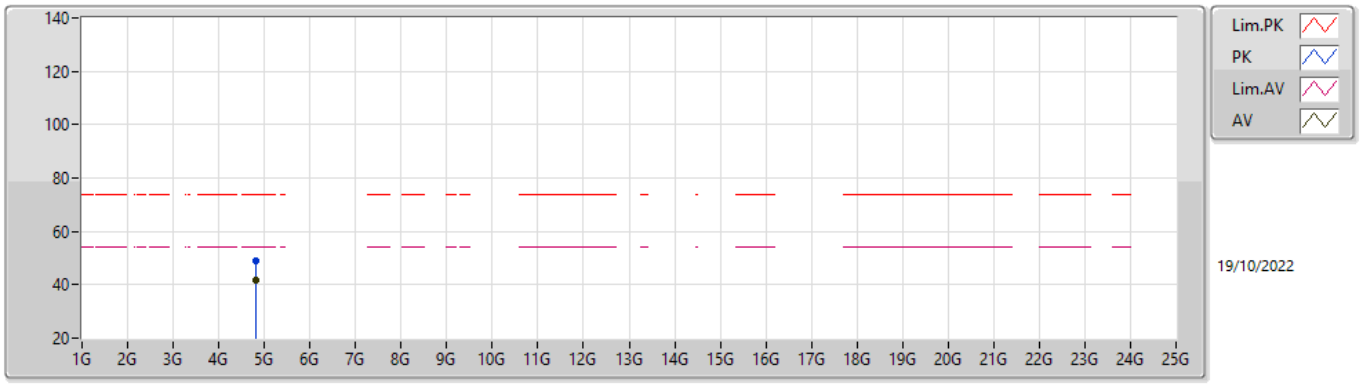
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3868G	47.80	54.00	-6.20	31.58	3	Horizontal	154	1.40	-	16.22	27.42	4.16	-
AV	2.402G	97.00	Inf	-Inf	31.67	3	Horizontal	154	1.40	-	65.33	27.50	4.17	-
PK	2.3806G	56.61	74.00	-17.39	31.53	3	Horizontal	154	1.40	-	25.08	27.38	4.15	-
PK	2.4014G	99.04	Inf	-Inf	31.67	3	Horizontal	154	1.40	-	67.37	27.50	4.17	-

BT-LE(2Mbps)

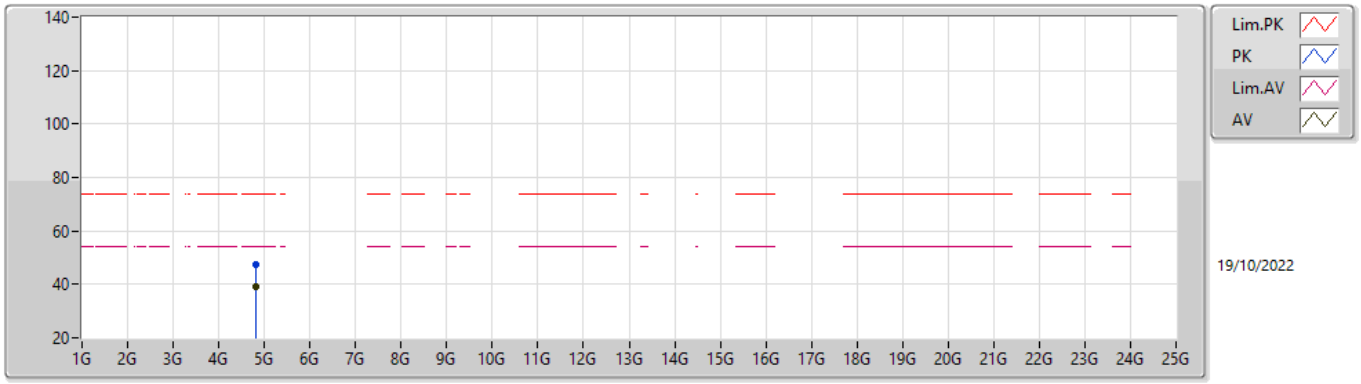
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.80293G	41.63	54.00	-12.37	3.33	3	Vertical	106	1.00	-	38.30	32.32	5.67	34.66
PK	4.80279G	48.98	74.00	-25.02	3.33	3	Vertical	106	1.00	-	45.65	32.32	5.67	34.66

BT-LE(2Mbps)

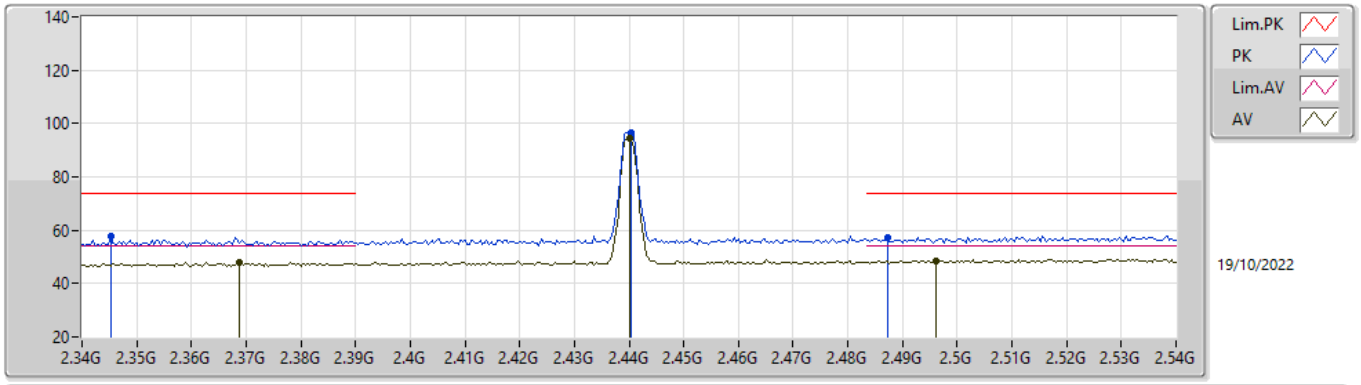
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.80292G	39.23	54.00	-14.77	3.33	3	Horizontal	201	1.29	-	35.90	32.32	5.67	34.66
PK	4.80286G	47.21	74.00	-26.79	3.33	3	Horizontal	201	1.29	-	43.88	32.32	5.67	34.66

BT-LE(2Mbps)

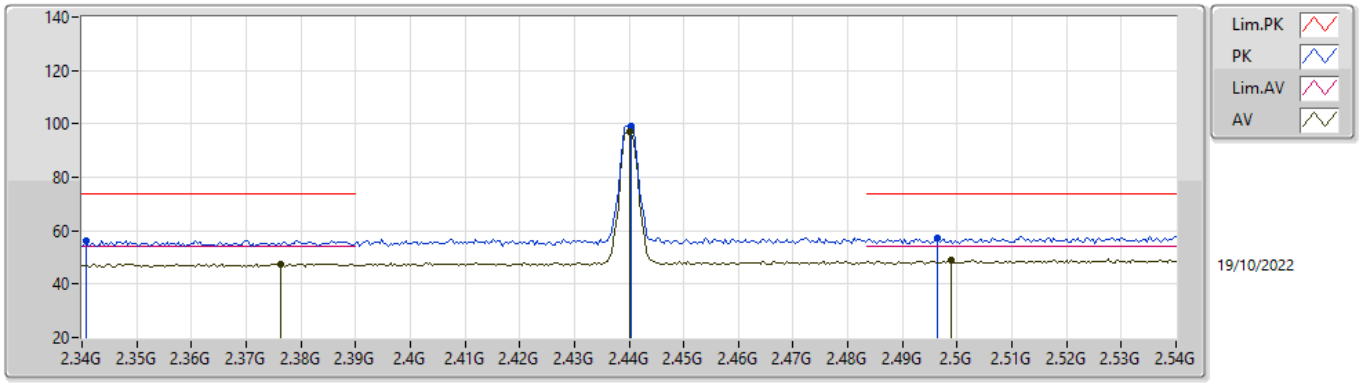
2440MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3688G	47.82	54.00	-6.18	31.45	3	Vertical	76	1.00	-	16.37	27.31	4.14	-
AV	2.44G	94.37	Inf	-Inf	31.77	3	Vertical	76	1.00	-	62.60	27.58	4.19	-
AV	2.496G	48.50	54.00	-5.50	32.11	3	Vertical	76	1.00	-	16.39	27.88	4.23	-
PK	2.3452G	57.80	74.00	-16.20	31.30	3	Vertical	76	1.00	-	26.50	27.18	4.12	-
PK	2.4404G	96.49	Inf	-Inf	31.77	3	Vertical	76	1.00	-	64.72	27.58	4.19	-
PK	2.4872G	57.43	74.00	-16.57	32.04	3	Vertical	76	1.00	-	25.39	27.82	4.22	-

BT-LE(2Mbps)

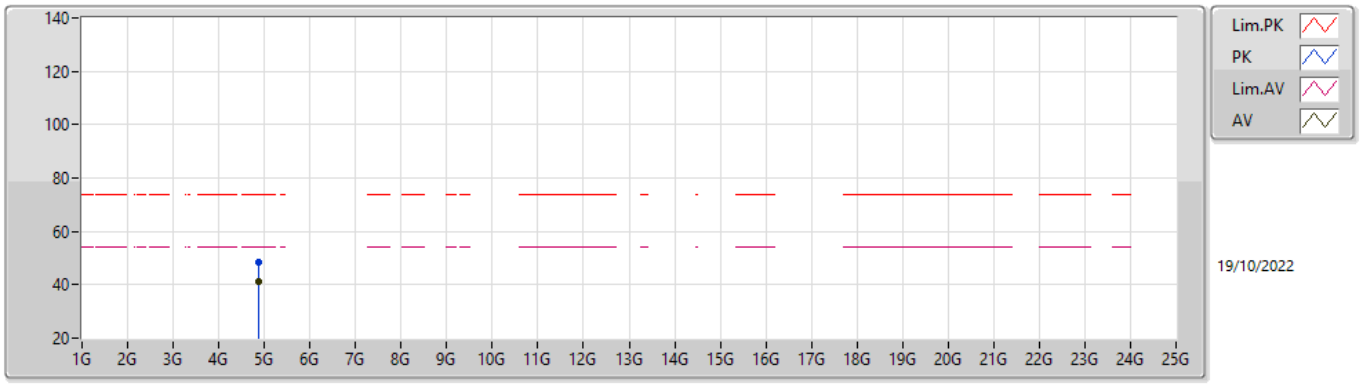
2440MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3764G	47.65	54.00	-6.35	31.51	3	Horizontal	166	1.55	-	16.14	27.36	4.15	-
AV	2.44G	96.93	Inf	-Inf	31.77	3	Horizontal	166	1.55	-	65.16	27.58	4.19	-
AV	2.4988G	48.87	54.00	-5.13	32.12	3	Horizontal	166	1.55	-	16.75	27.89	4.23	-
PK	2.3408G	56.43	74.00	-17.57	31.27	3	Horizontal	166	1.55	-	25.16	27.16	4.11	-
PK	2.4404G	99.00	Inf	-Inf	31.77	3	Horizontal	166	1.55	-	67.23	27.58	4.19	-
PK	2.4964G	57.22	74.00	-16.78	32.11	3	Horizontal	166	1.55	-	25.11	27.88	4.23	-

BT-LE(2Mbps)

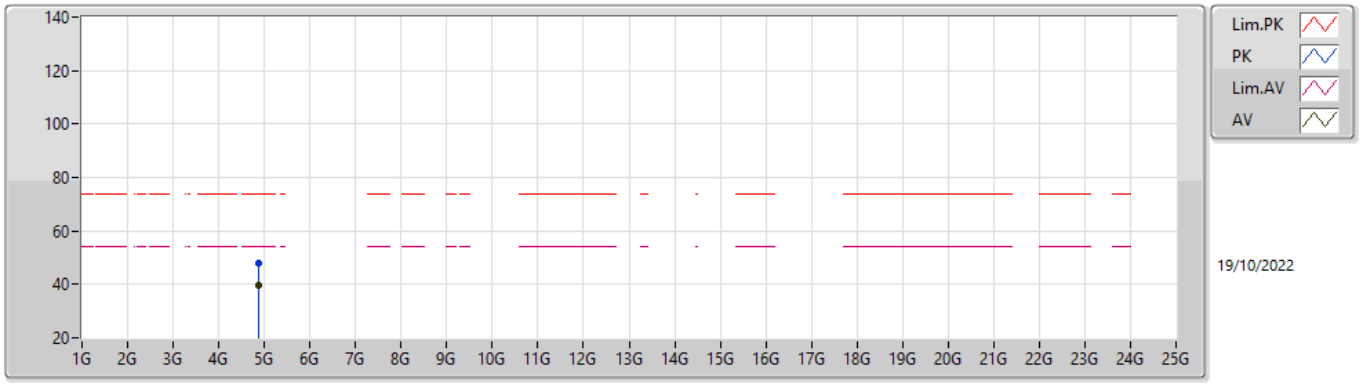
2440MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.8788G	41.12	54.00	-12.88	3.79	3	Vertical	96	1.01	-	37.33	32.72	5.72	34.65
PK	4.8791G	48.63	74.00	-25.37	3.79	3	Vertical	96	1.01	-	44.84	32.72	5.72	34.65

BT-LE(2Mbps)

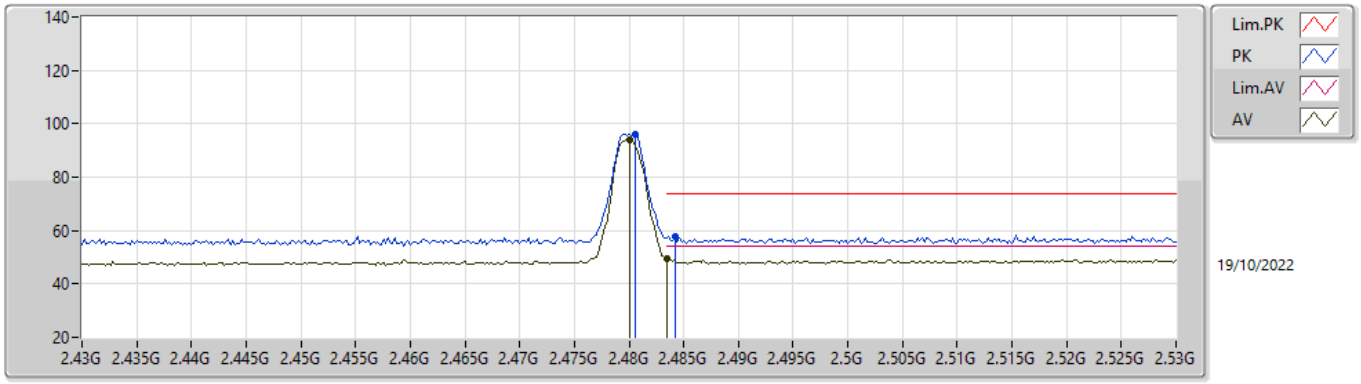
2440MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.87905G	39.80	54.00	-14.20	3.79	3	Horizontal	195	1.00	-	36.01	32.72	5.72	34.65
PK	4.87896G	47.77	74.00	-26.23	3.79	3	Horizontal	195	1.00	-	43.98	32.72	5.72	34.65

BT-LE(2Mbps)

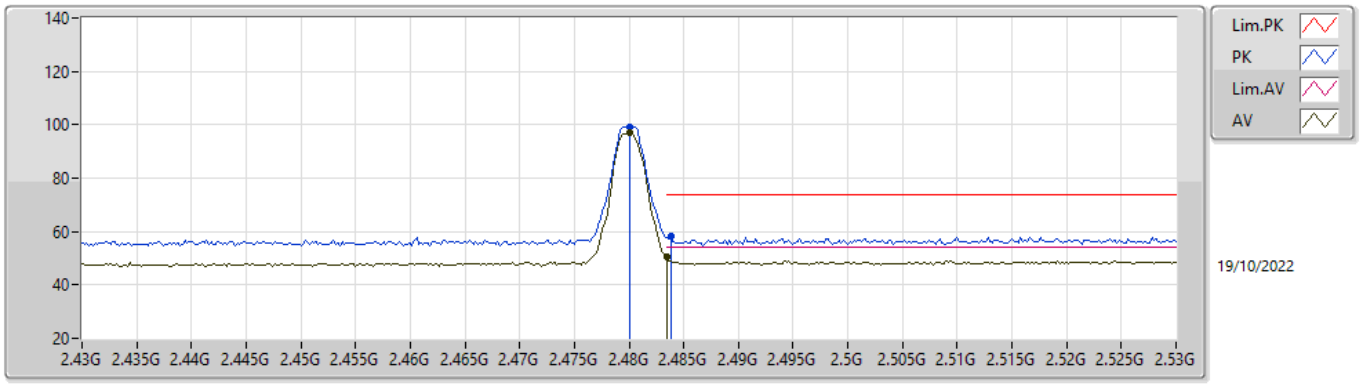
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.48G	93.87	Inf	-Inf	32.00	3	Vertical	78	1.00	-	61.87	27.78	4.22	-
AV	2.4835G	49.68	54.00	-4.32	32.02	3	Vertical	78	1.00	-	17.66	27.80	4.22	-
PK	2.4806G	95.97	Inf	-Inf	32.00	3	Vertical	78	1.00	-	63.97	27.78	4.22	-
PK	2.4842G	57.66	74.00	-16.34	32.03	3	Vertical	78	1.00	-	25.63	27.81	4.22	-

BT-LE(2Mbps)

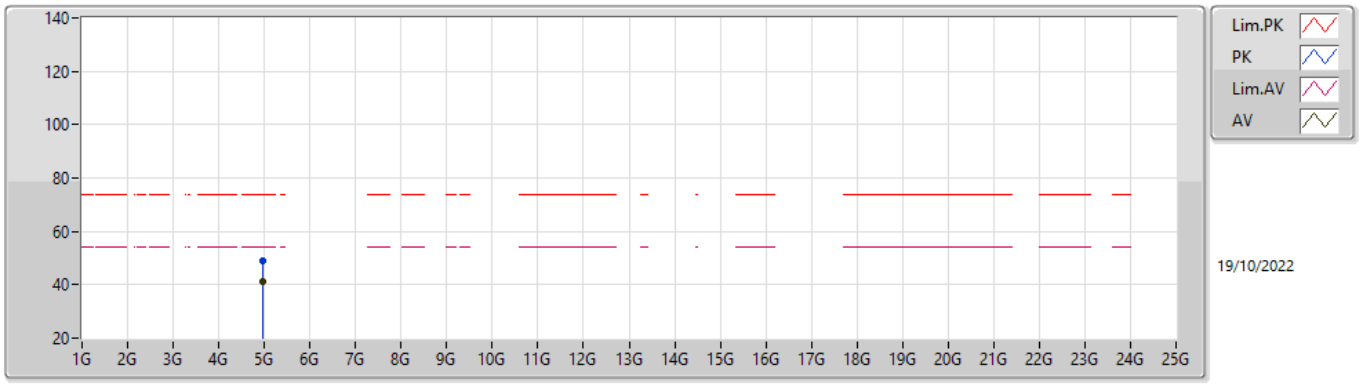
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.48G	96.97	Inf	-Inf	32.00	3	Horizontal	165	1.18	-	64.97	27.78	4.22	-
AV	2.4835G	50.52	54.00	-3.48	32.02	3	Horizontal	165	1.18	-	18.50	27.80	4.22	-
PK	2.48G	99.01	Inf	-Inf	32.00	3	Horizontal	165	1.18	-	67.01	27.78	4.22	-
PK	2.4838G	58.16	74.00	-15.84	32.02	3	Horizontal	165	1.18	-	26.14	27.80	4.22	-

BT-LE(2Mbps)

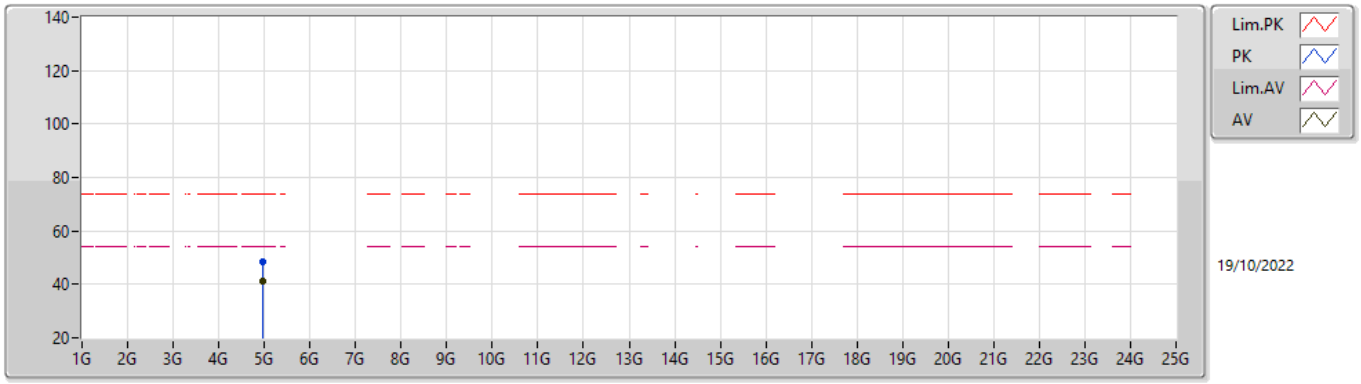
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.95906G	41.46	54.00	-12.54	4.15	3	Vertical	95	1.00	-	37.31	33.02	5.77	34.64
PK	4.96093G	49.06	74.00	-24.94	4.15	3	Vertical	95	1.00	-	44.91	33.02	5.77	34.64

BT-LE(2Mbps)

2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.959G	41.02	54.00	-12.98	4.15	3	Horizontal	192	1.01	-	36.87	33.02	5.77	34.64
PK	4.96025G	48.62	74.00	-25.38	4.15	3	Horizontal	192	1.01	-	44.47	33.02	5.77	34.64