FCC Radio Test Report

FCC ID	:	**RUK-MK104**
Equipment	:	**BLE Keyless System-Control Box**
Brand Name	:	**M.gear**
Model Name	:	**MK104**
Applicant	:	**Wha Yu Industrial Co., Ltd No.326, Sec. 2, Kung Tao 5 Road., Hsinchu City 30070, Taiwan (R.O.C.)**
Manufacturer	:	**Wha Yu Industrial Co., Ltd No.326, Sec. 2, Kung Tao 5 Road., Hsinchu City 30070, Taiwan (R.O.C.)**
Standard	:	**47 CFR FCC Part 15.247**

The product was received on Aug. 05, 2022, and testing was started from Aug. 08, 2022 and completed on Aug. 26, 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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PHOTOGRAPHS OF EUT V01

History of this test report

Report No.	Version	Description	Issued Date
FR280433AL	01	Initial issue of report	Oct. 04, 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	Only employ battery power.
3.1	15.247(a)	DTS Bandwidth	PASS	-
3.2	15.247(b)	Maximum Conducted Output Power	PASS	-
3.3	15.247(e)	Power Spectral Density	PASS	-
3.4	15.247(d)	Emissions in Non-restricted Frequency Bands	PASS	-
3.5	15.247(d)	Emissions in Restricted Frequency Bands	PASS	-

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and explanations:
None

Reviewed by: Barry Hsiao

Report Producer: Amber Chiu

1 General Description

1.1 Information

1.1.1 RF General Information

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
2.4-2.4835GHz	BT-LE(125kbps)	1.0	1TX
2.4-2.4835GHz	BT-LE(500kbps)	1.0	1TX

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

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	M.gear	NE3-21085	PCB antenna	N/A	2.9

Note 1: The EUT has one antenna.

For BT function:

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

Ant. 1 could transmit/receive.

1.1.3 EUT Information

Operational Condition				
EUT Power Type	From DC Power Supply			
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)	0.454	3.43	283.75u	10k
BT-LE(125kbps)	0.824	0.84	3.132m	1k
BT-LE(500kbps)	0.556	2.55	1.098m	1k
BT-LE(2Mbps)	0.382	4.18	238.75u	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**
RF Conducted	TH01-HY	XieXun	21.5~26.9°C / 50~60%	22/Aug/2022
Radiated	03CH02-HY	Jack Tang	21.5~23.2°C / 56~58%	08/Aug/2022~26/Aug/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.				

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**
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	RTL8762C_RFTestTool v1.0.1.5

Mode	Power Setting
BT-LE(1Mbps)	-
2402MHz	Default
2440MHz	Default
2480MHz	Default
BT-LE(2Mbps)	-
2402MHz	Default
2440MHz	Default
2480MHz	Default
BT-LE(125kbps)	-
2402MHz	Default
2440MHz	Default
2480MHz	Default
BT-LE(500kbps)	-
2402MHz	Default
2440MHz	Default
2480MHz	Default

2.2 The Worst Case Measurement Configuration

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	DC Power Supply		
Operating Mode > 1GHz	CTX		
Orthogonal Planes of EUT	**X Plane**	**Y Plane**	**Z Plane**
Worst Planes of EUT	V		

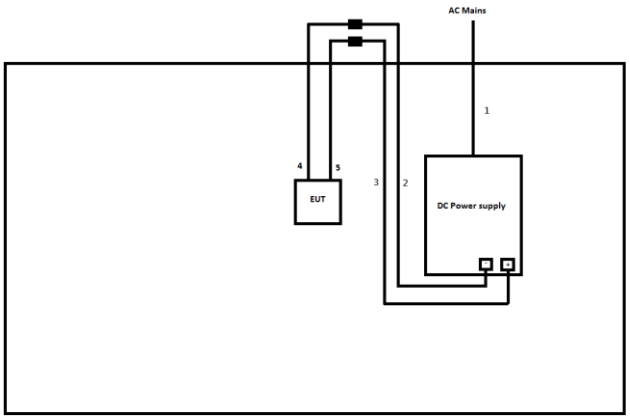
2.3 Support Equipment

Support Equipment – Conducted					
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**	**Remark**
1	Notebook	DELL	E5410	-	-
2	Adapter for NB	DELL	HA65NM130	-	-
3	locker-connector	Hulanne	MTQ24FB	-	-
4	Micro USB-UART-Board	100y	138138(FT232-MicroUSB-UART-Board)	-	-
5	UART-USB5	PRO-BEST	USB A_M TO MICRO USB B	-	-
6	DC Power Supply	GW	GPS-3030DD	-	-

Support Equipment – Radiated					
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**	**Remark**
1	DC Power Supply	GW	GPS-3030DD	-	-
2	DC power cable(-)	MiSUMi	WTN1229-BLACK	-	-
3	DC power cable(+)	MiSUMi	WTN1229-RED	-	-
4	AC Power Cable	Power Sync	PW-GPC180-3	-	-

2.4 Test Setup Diagram

Test Setup Diagram - Radiated Test



Item	Connection	Shielded	Length(m)	Remark
1	AC Power cable	No	1.8	-
2	DC Power cable(+)	No	1.0	-
3	DC Power cable(-)	No	1.0	-
4	DC Power cable(+)	No	1.0	-
5	DC Power cable(-)	No	1.0	-

3 Transmitter Test Result

3.1 DTS Bandwidth

3.1.1 6dB Bandwidth Limit

6dB Bandwidth Limit
Systems using digital modulation techniques:
▪ 6 dB bandwidth ≥ 500 kHz.

3.1.2 Measuring Instruments

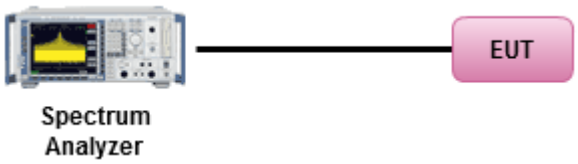
Refer a test equipment and calibration data table in this test report.

3.1.3 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.

3.1.4 Test Setup

Emission Bandwidth



3.1.5 Test Result of Emission Bandwidth

Refer as Appendix A

3.2 Maximum Conducted Output Power

3.2.1 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.			

3.2.2 Measuring Instruments

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

3.2.3 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]) $EIRP_{total} = P_{total} + DG$

3.2.4 Test Setup

Maximum Conducted Output Power (Power Meter)

3.2.5 Test Result of Maximum Conducted Output Power

Refer as Appendix B

3.3 Power Spectral Density

3.3.1 Power Spectral Density Limit

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

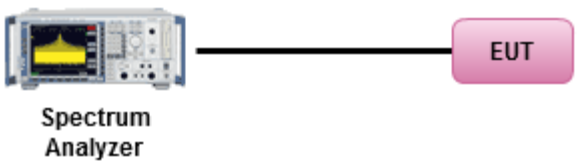
3.3.2 Measuring Instruments

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

3.3.3 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.

3.3.4 Test Setup

Power Spectral Density


3.3.5 Test Result of Power Spectral Density

Refer as Appendix C

3.4 Emissions in Non-restricted Frequency Bands

3.4.1 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.	

3.4.2 Measuring Instruments

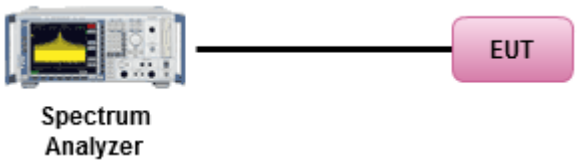
Refer a test equipment and calibration data table in this test report.

3.4.3 Test Procedures

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

3.4.4 Test Setup

Emissions in Non-restricted Frequency Bands



3.4.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix D

3.5 Emissions in Restricted Frequency Bands

3.5.1 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.

3.5.2 Measuring Instruments

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

3.5.3 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.

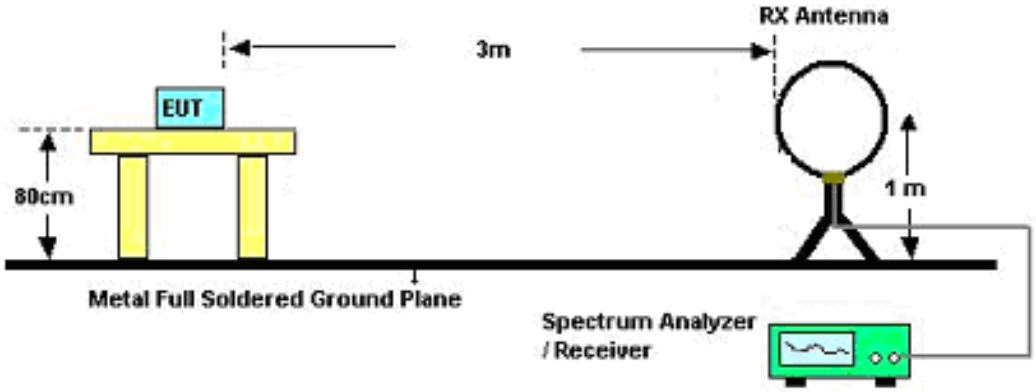
3.5.4 Measurement Results Calculation

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

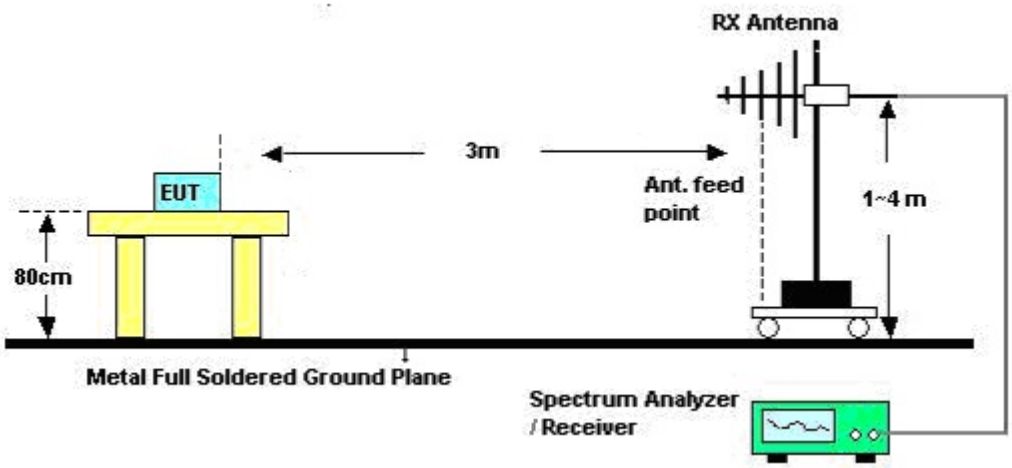
3.5.5 Test Setup

Emissions in Restricted Frequency Bands

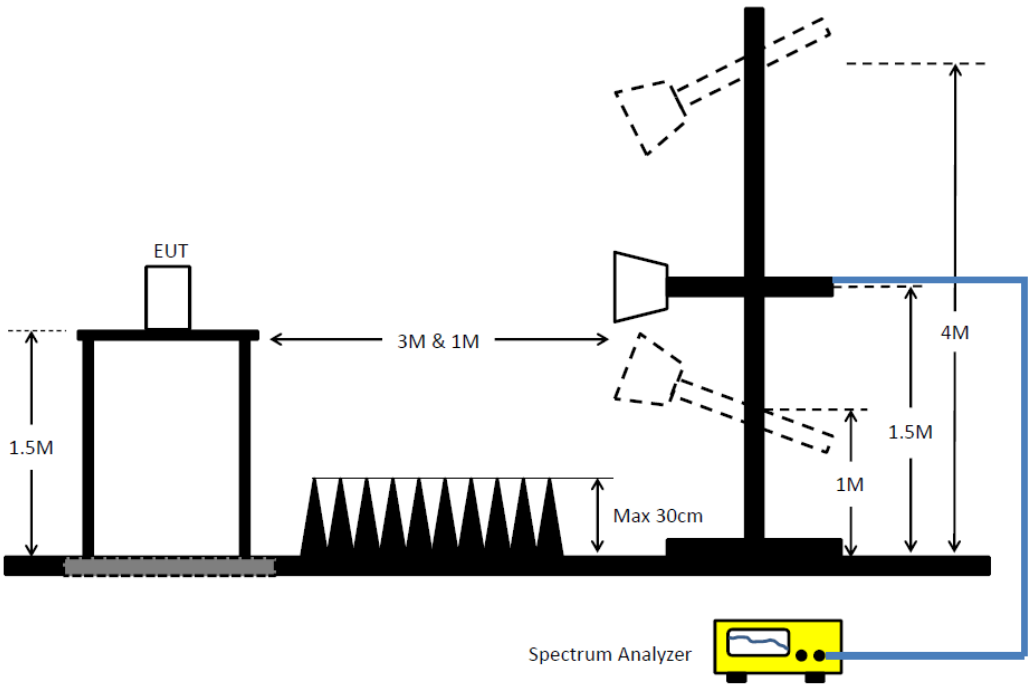
9kHz ~30MHz



30MHz~1GHz



Above 1GHz



3.5.6 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.

3.5.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix E

4 Test Equipment and Calibration Data

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/2021	20/Oct/2022
Pulse Sensor	Anritsu	MA2411B	0917017	300MHz~40GHz	21/Feb/2022	20/Feb/2023
Power Meter	Anritsu	ML2495A	0949003	300MHz~40GHz	21/Feb/2022	20/Feb/2023
SENSE-15247_FS	Sporton	V5.10.7.16	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	31/Jul/2022	30/Jul/2023
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz~18GHz 3m	30/Jul/2022	29/Jul/2023
Signal Analyzer	R&S	FSP40	100305	9kHz~40GHz	21/Mar/2022	20/Mar/2023
Amplifier	Agilent	8447D	2944A11149	100kHz~1.3GHz	28/Jun/2022	27/Jun/2023
Microwave Preamplifier	Agilent	8449B	3008A02373	1GHz~26.5GHz	03/Nov/2021	02/Nov/2022
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	02268	1GHz ~18GHz	14/Sep/2021	13/Sep/2022
Bilog Antenna & 5dB Attenuator	SCHAFFNER / MTJ	CBL 6112B / MTJ6102-05	2723 / 2	30MHz~1GHz	04/Sep/2021	03/Sep/2022
RF Cable	MVE	400LL	MVE-1-0802	9kHz~30MHz	04/May/2022	03/May/2023
RF Cable	MVE	400LL	MVE-1-0802	30MHz~1GHz	04/May/2022	03/May/2023
RF Cable-R03m	HUBER+SUHNER	SUCOFLEX104	805193/4+805192/4	1GHz~40GHz	01/Apr/2022	31/Mar/2023
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170221	15GHz~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

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)	735k	1.053M	1M05F1D	658.75k	1.048M
BT-LE(2Mbps)	1.135M	2.081M	2M08F1D	977.5k	2.041M
BT-LE(125kbps)	697.5k	1.064M	1M06F1D	622.5k	1.059M
BT-LE(500kbps)	710k	1.043M	1M04F1D	643.75k	1.034M

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

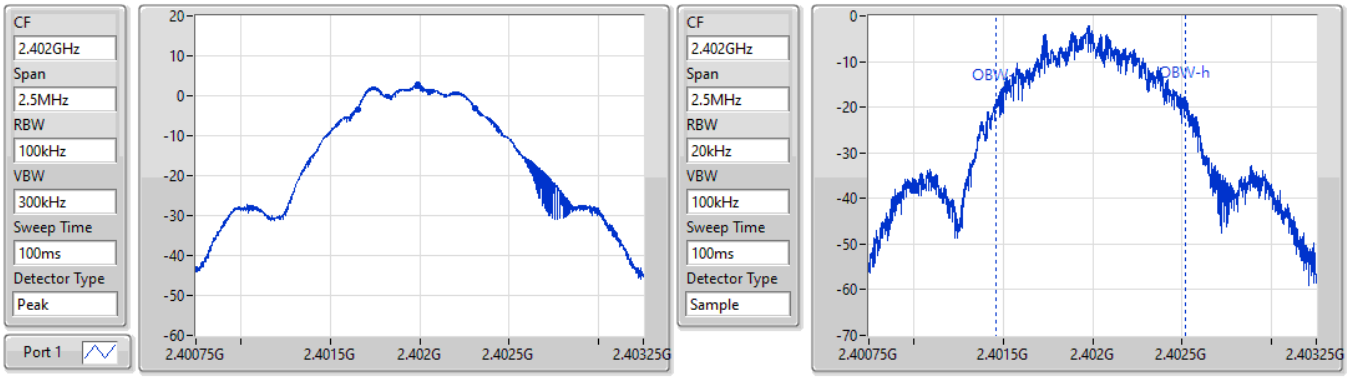
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	500k	658.75k	1.053M
2440MHz	Pass	500k	700k	1.048M
2480MHz	Pass	500k	735k	1.051M
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	500k	977.5k	2.051M
2440MHz	Pass	500k	1.135M	2.081M
2480MHz	Pass	500k	1.128M	2.041M
BT-LE(125kbps)	-	-	-	-
2402MHz	Pass	500k	622.5k	1.059M
2440MHz	Pass	500k	672.5k	1.064M
2480MHz	Pass	500k	697.5k	1.063M
BT-LE(500kbps)	-	-	-	-
2402MHz	Pass	500k	643.75k	1.034M
2440MHz	Pass	500k	692.5k	1.043M
2480MHz	Pass	500k	710k	1.036M

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

BT-LE(1Mbps) EBW-DTS

2402MHz

22/08/2022

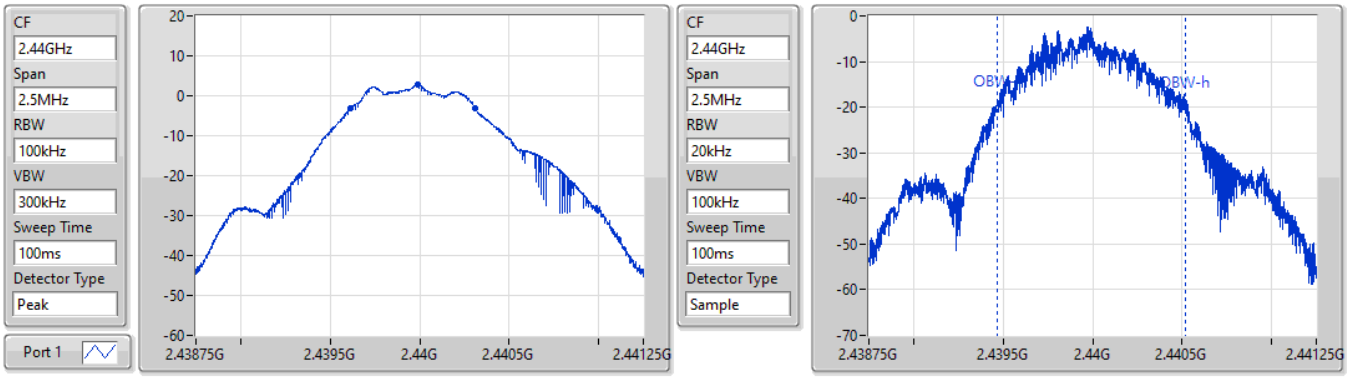


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
658.75k	2.401654G	2.402313G	1.053M	2.401463G	2.402516G	500k	1

BT-LE(1Mbps) EBW-DTS

2440MHz

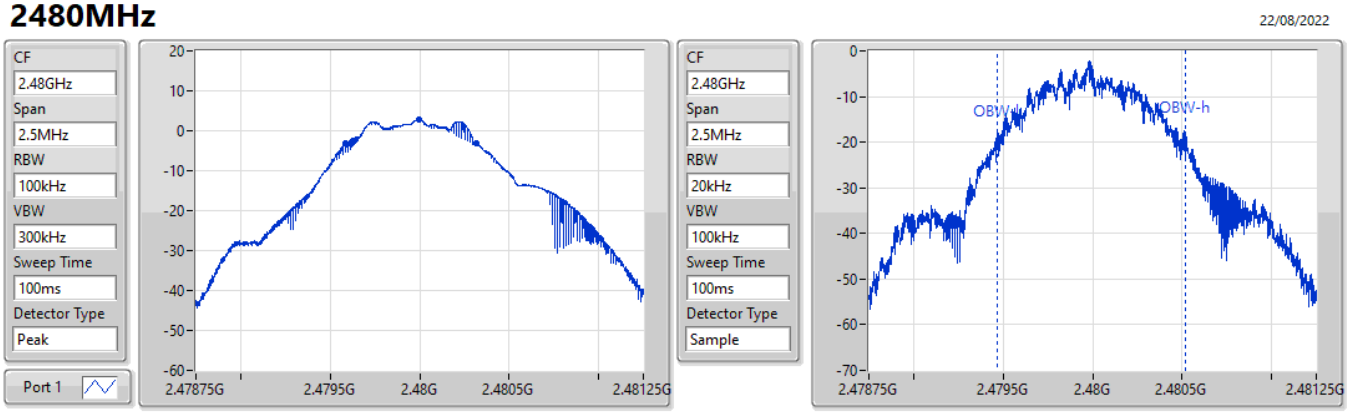
22/08/2022



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
700k	2.439613G	2.440313G	1.048M	2.439468G	2.440516G	500k	1

BT-LE(1Mbps) EBW-DTS

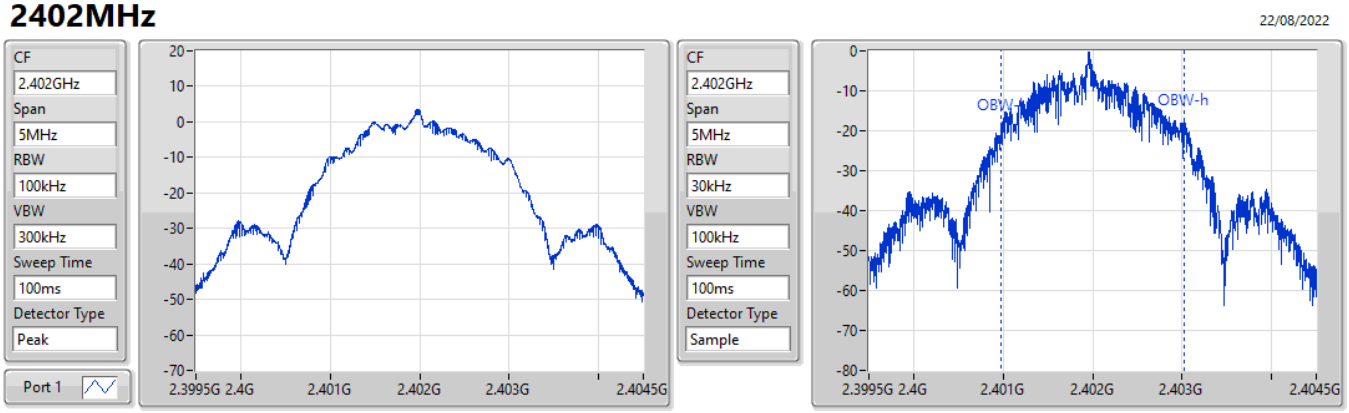
2480MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
735k	2.479585G	2.48032G	1.051M	2.479467G	2.480517G	500k	1

BT-LE(2Mbps) EBW-DTS

2402MHz

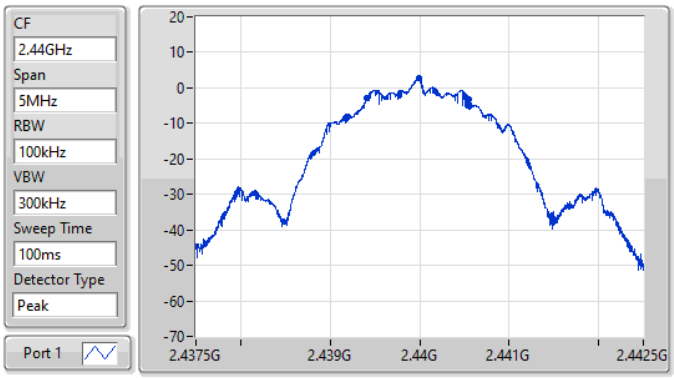


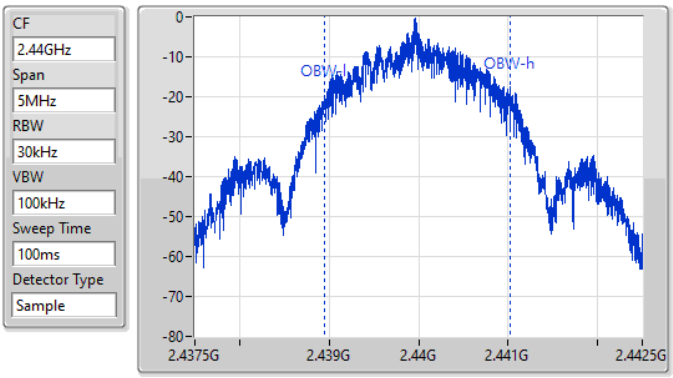
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
977.5k	2.401408G	2.402385G	2.051M	2.400978G	2.403029G	500k	1

BT-LE(2Mbps) EBW-DTS

2440MHz

22/08/2022



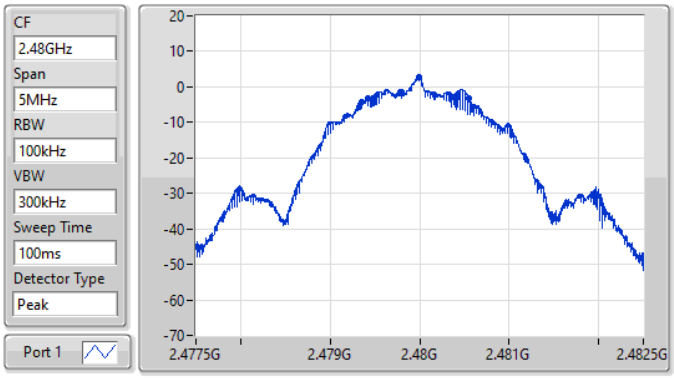


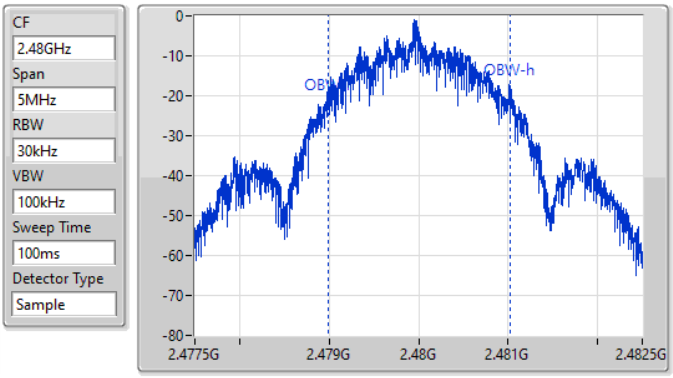
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.135M	2.439413G	2.440548G	2.081M	2.438948G	2.441029G	500k	1

BT-LE(2Mbps) EBW-DTS

2480MHz

22/08/2022



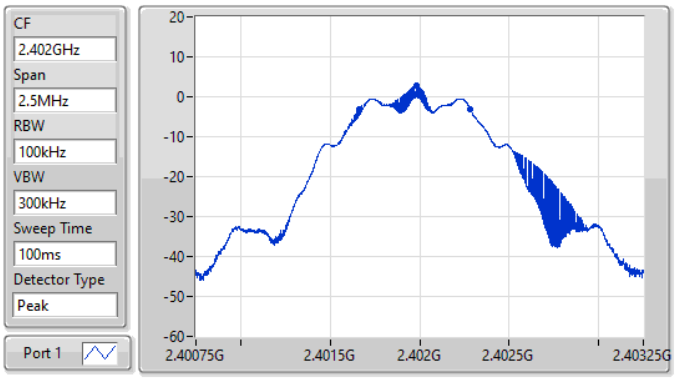


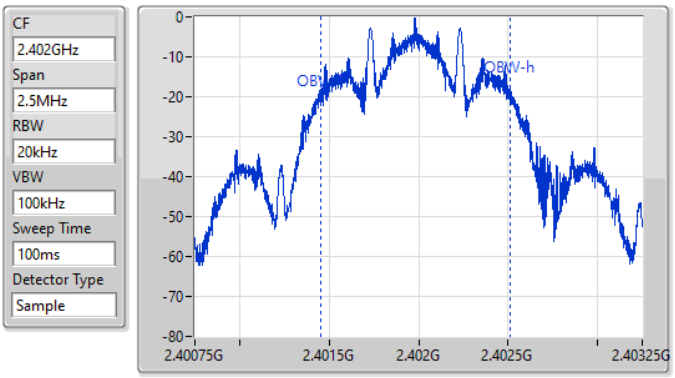
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.128M	2.47942G	2.480548G	2.041M	2.478986G	2.481027G	500k	1

BT-LE(125kbps) EBW-DTS

2402MHz

22/08/2022



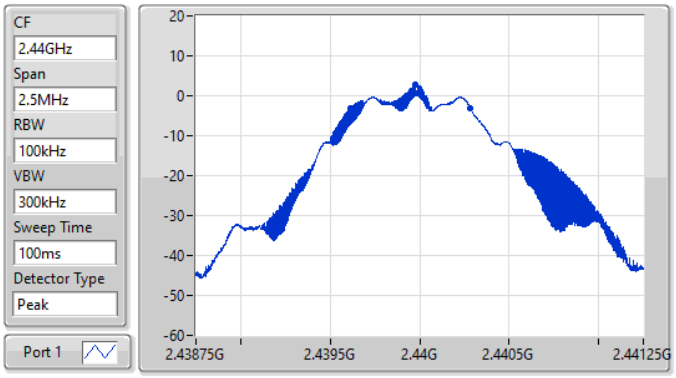


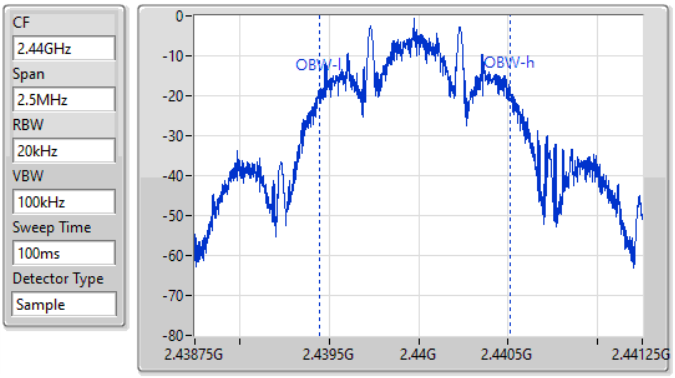
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
622.5k	2.401663G	2.402285G	1.059M	2.401452G	2.402511G	500k	1

BT-LE(125kbps) EBW-DTS

2440MHz

22/08/2022



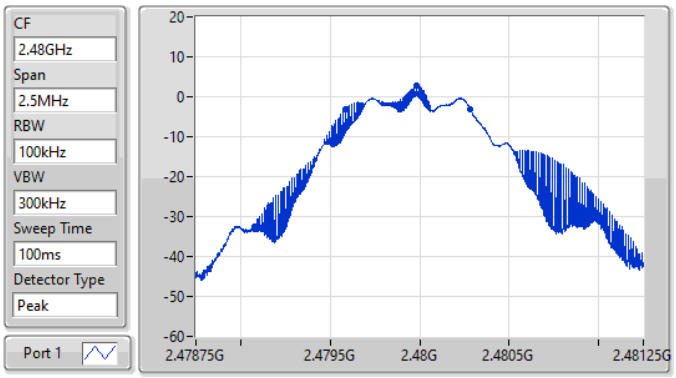


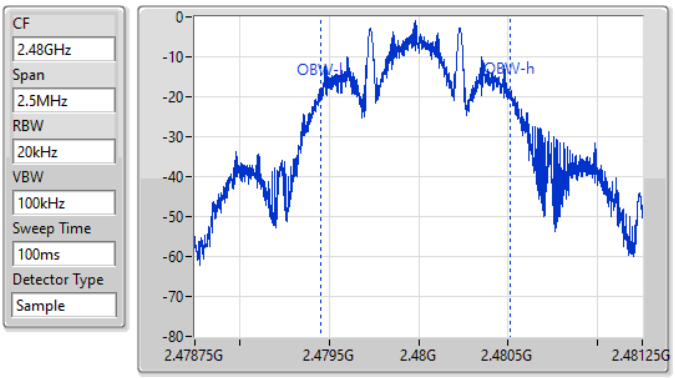
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
672.5k	2.439613G	2.440285G	1.064M	2.439449G	2.440513G	500k	1

BT-LE(125kbps) EBW-DTS

2480MHz

22/08/2022



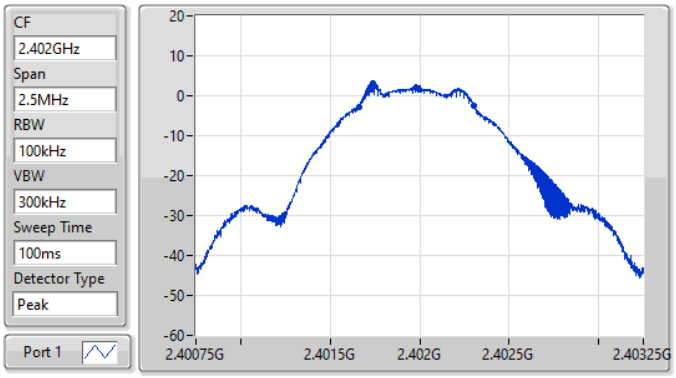


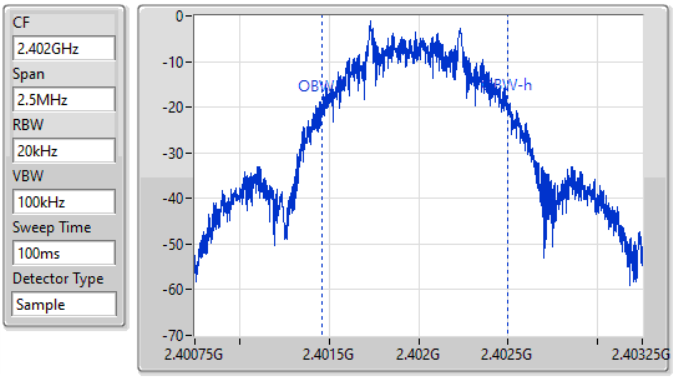
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
697.5k	2.479585G	2.480283G	1.063M	2.479452G	2.480515G	500k	1

BT-LE(500kbps) EBW-DTS

2402MHz

22/08/2022



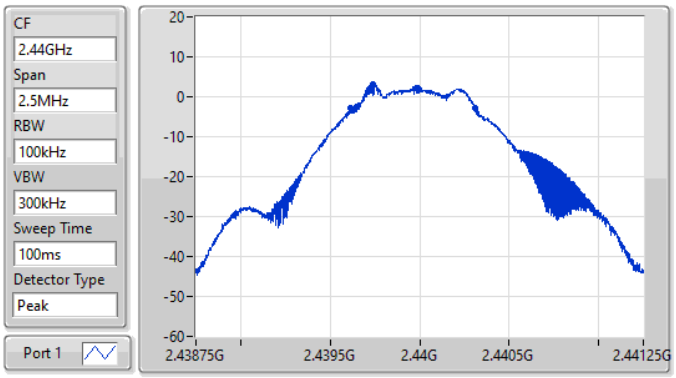


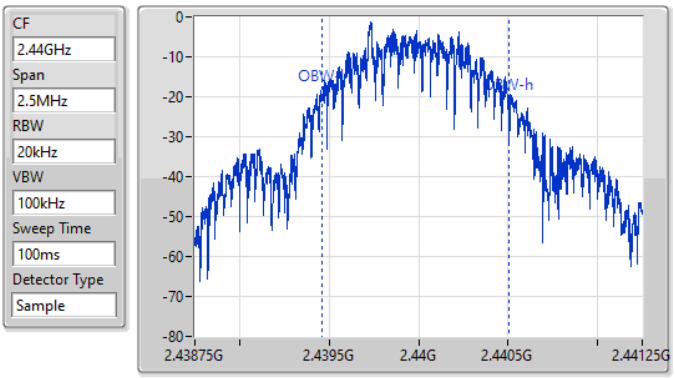
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
643.75k	2.401661G	2.402305G	1.034M	2.401463G	2.402497G	500k	1

BT-LE(500kbps) EBW-DTS

2440MHz

22/08/2022



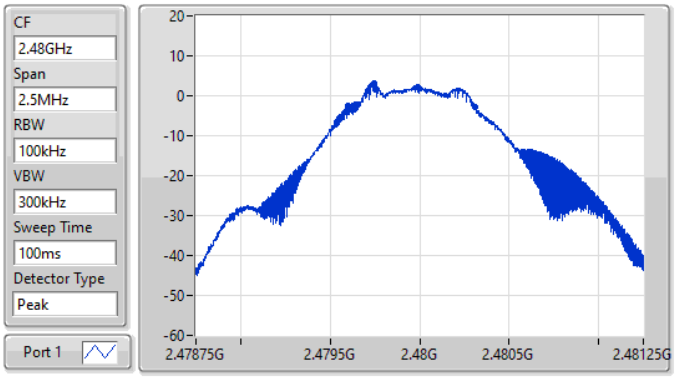


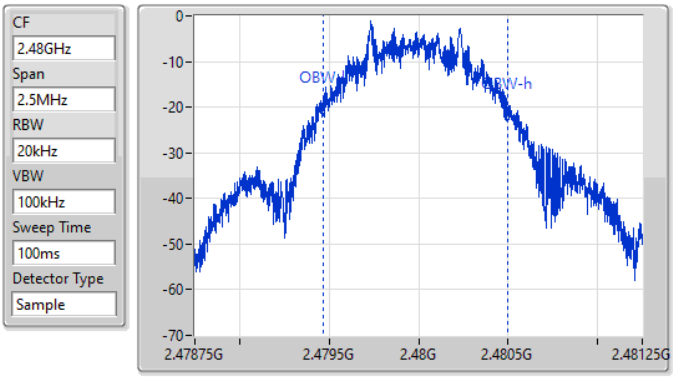
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
692.5k	2.439616G	2.440309G	1.043M	2.43946G	2.440503G	500k	1

BT-LE(500kbps) EBW-DTS

2480MHz

22/08/2022





6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
710k	2.479598G	2.480308G	1.036M	2.479465G	2.480501G	500k	1

Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-LE(1Mbps)	2.94	0.00197
BT-LE(2Mbps)	2.91	0.00195
BT-LE(125kbps)	3.23	0.00210
BT-LE(500kbps)	3.14	0.00206

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	2.90	2.86	30.00
2440MHz	Pass	2.90	2.88	30.00
2480MHz	Pass	2.90	2.94	30.00
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	2.90	2.91	30.00
2440MHz	Pass	2.90	2.73	30.00
2480MHz	Pass	2.90	2.83	30.00
BT-LE(125kbps)	-	-	-	-
2402MHz	Pass	2.90	3.23	30.00
2440MHz	Pass	2.90	3.16	30.00
2480MHz	Pass	2.90	3.19	30.00
BT-LE(500kbps)	-	-	-	-
2402MHz	Pass	2.90	3.14	30.00
2440MHz	Pass	2.90	3.07	30.00
2480MHz	Pass	2.90	3.13	30.00

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

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
BT-LE(1Mbps)	-11.53
BT-LE(2Mbps)	-13.79
BT-LE(125kbps)	-2.81
BT-LE(500kbps)	-3.06

RBW = 3kHz;

Result

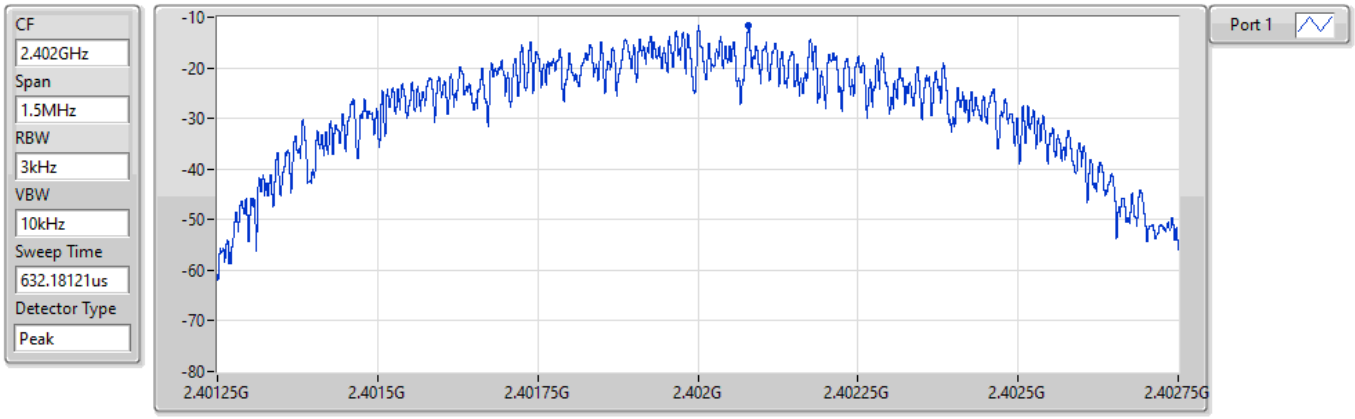
Mode	Result	Gain (dBi)	PD (dBm/RBW)	PD Limit (dBm/RBW)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	2.90	-11.53	8.00
2440MHz	Pass	2.90	-12.11	8.00
2480MHz	Pass	2.90	-13.70	8.00
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	2.90	-13.79	8.00
2440MHz	Pass	2.90	-13.97	8.00
2480MHz	Pass	2.90	-15.30	8.00
BT-LE(125kbps)	-	-	-	-
2402MHz	Pass	2.90	-2.96	8.00
2440MHz	Pass	2.90	-2.81	8.00
2480MHz	Pass	2.90	-2.83	8.00
BT-LE(500kbps)	-	-	-	-
2402MHz	Pass	2.90	-3.47	8.00
2440MHz	Pass	2.90	-3.33	8.00
2480MHz	Pass	2.90	-3.06	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

22/08/2022

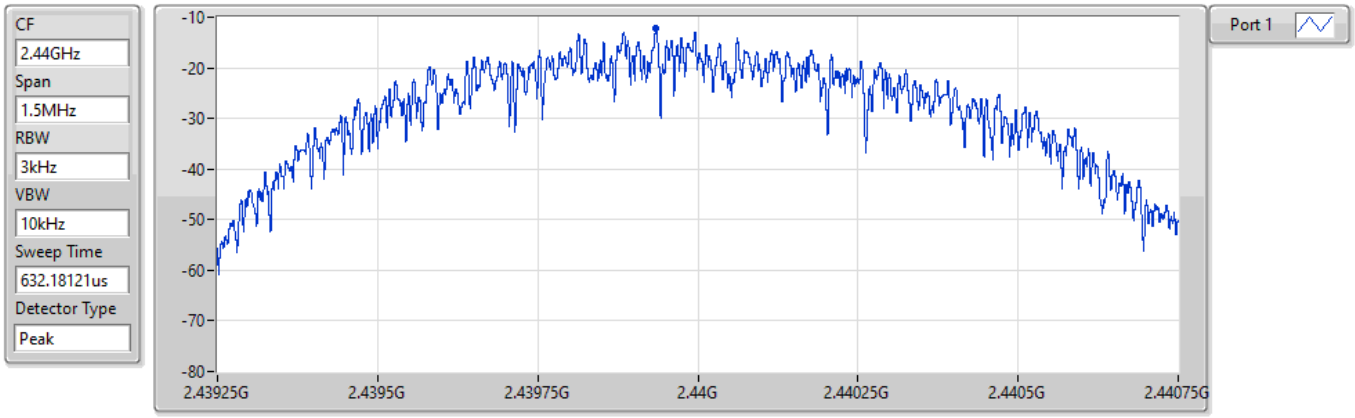


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-11.53	-11.53	-11.53

BT-LE(1Mbps) PSD

2440MHz

22/08/2022

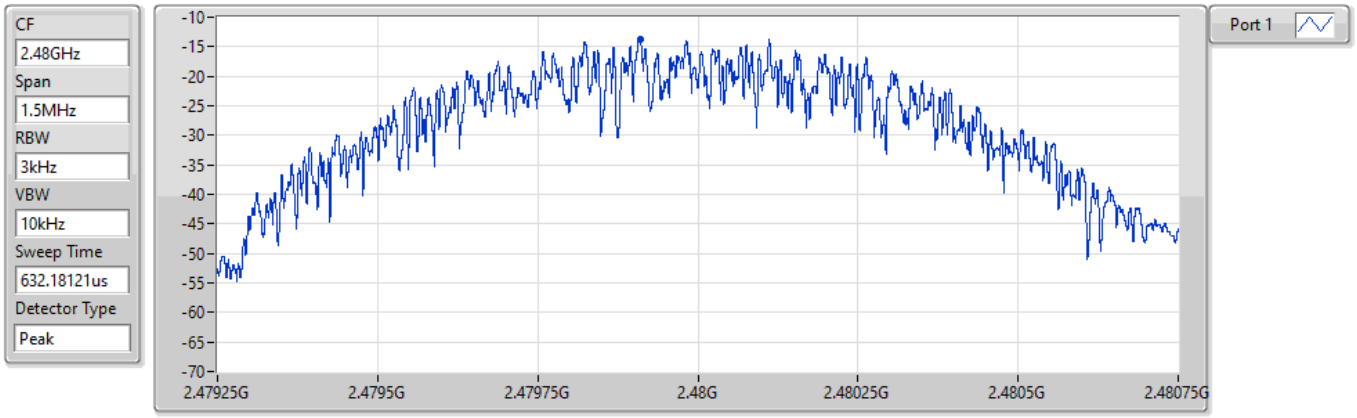


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-12.11	-12.11	-12.11

BT-LE(1Mbps) PSD

2480MHz

22/08/2022

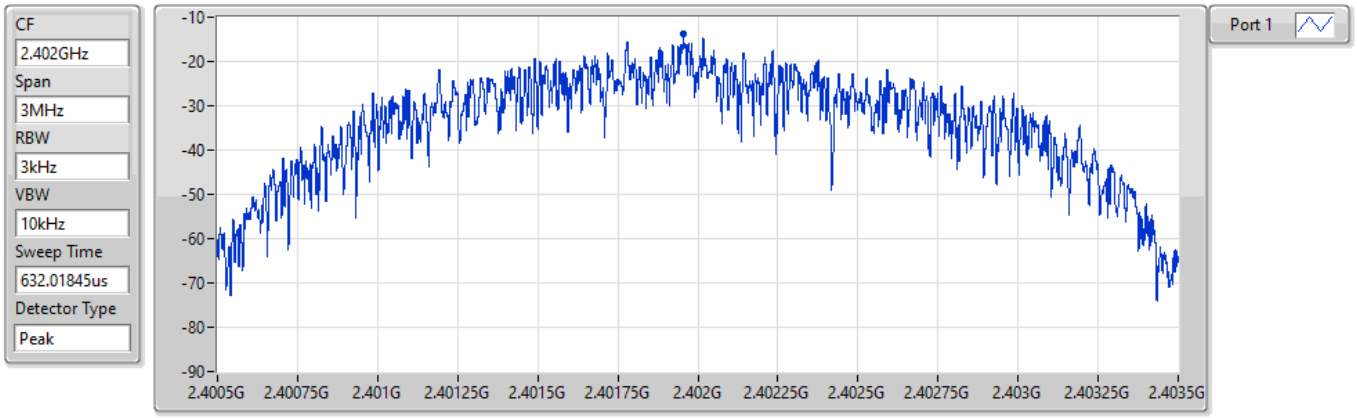


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-13.70	-13.70	-13.70

BT-LE(2Mbps) PSD

2402MHz

22/08/2022

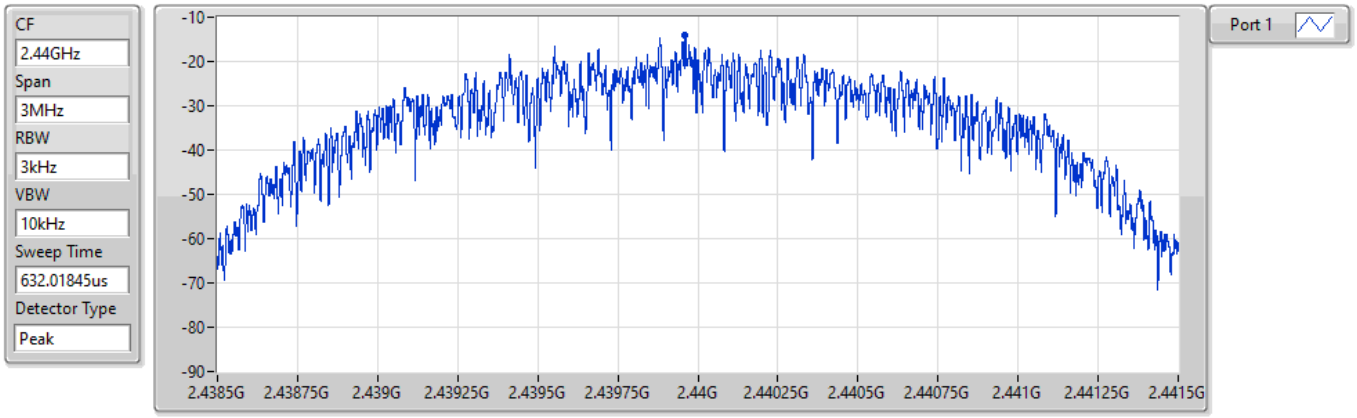


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-13.79	-13.79	-13.79

BT-LE(2Mbps) PSD

2440MHz

22/08/2022

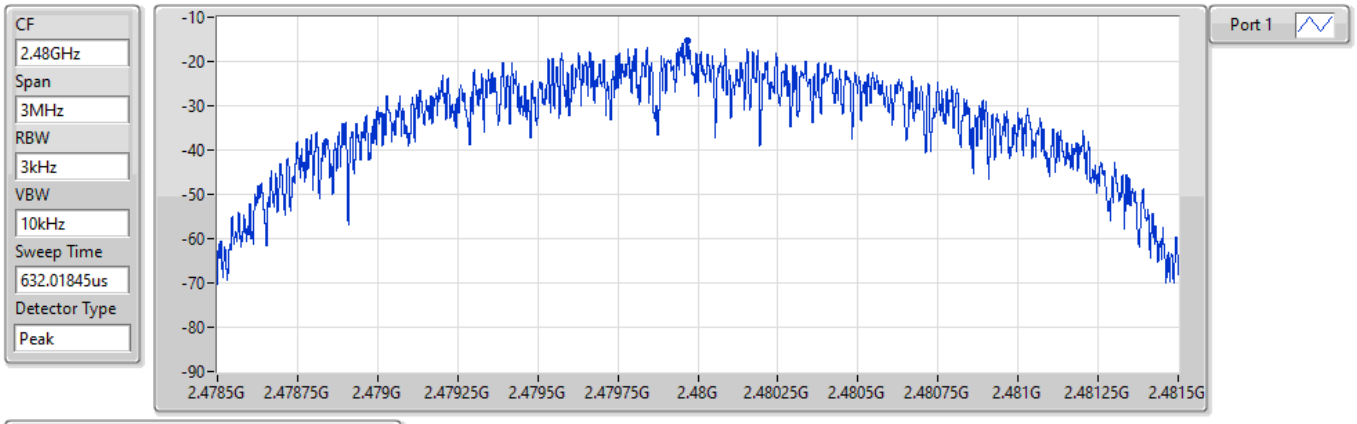


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-13.97	-13.97	-13.97

BT-LE(2Mbps) PSD

2480MHz

22/08/2022

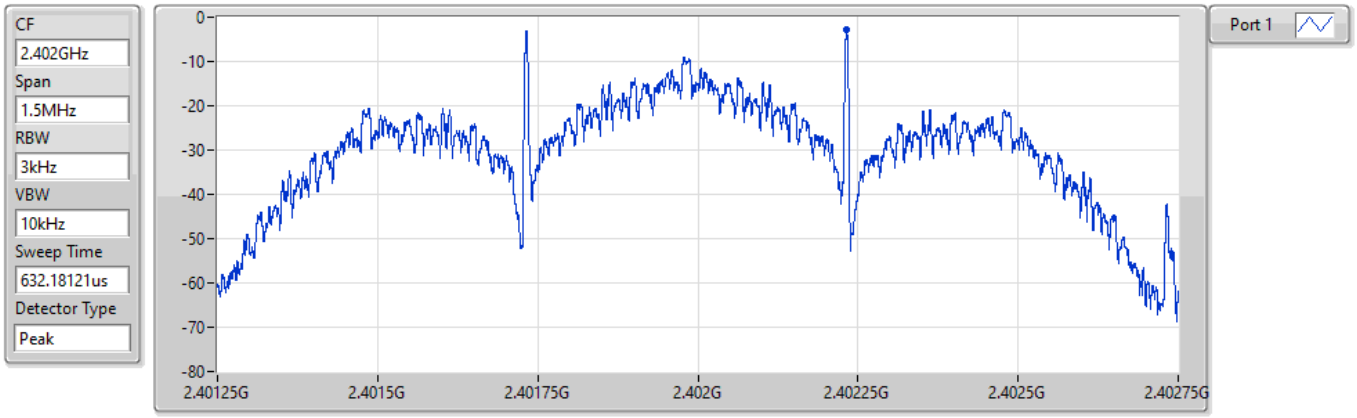


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-15.30	-15.30	-15.30

BT-LE(125kbps) PSD

2402MHz

22/08/2022

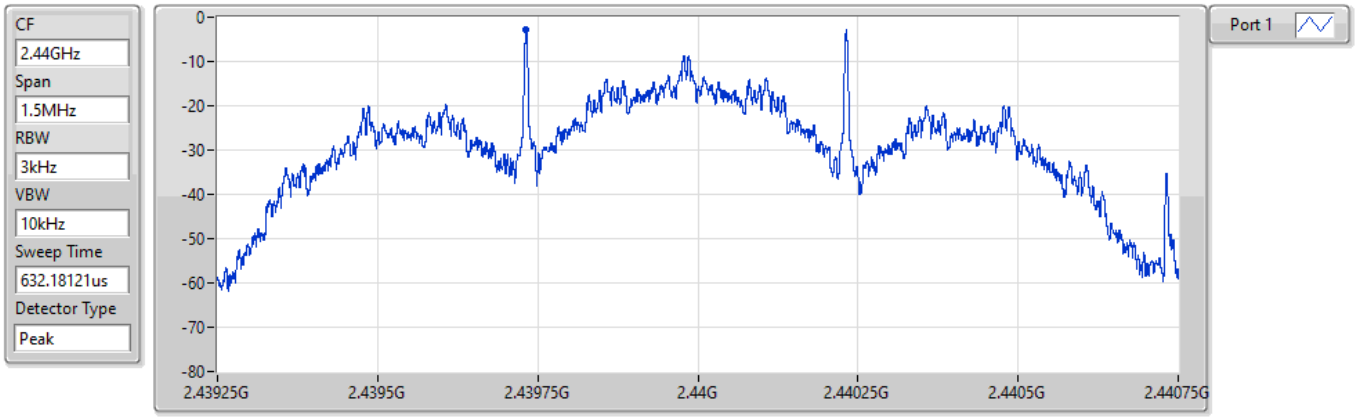


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.96	-2.96	-2.96

BT-LE(125kbps) PSD

2440MHz

22/08/2022

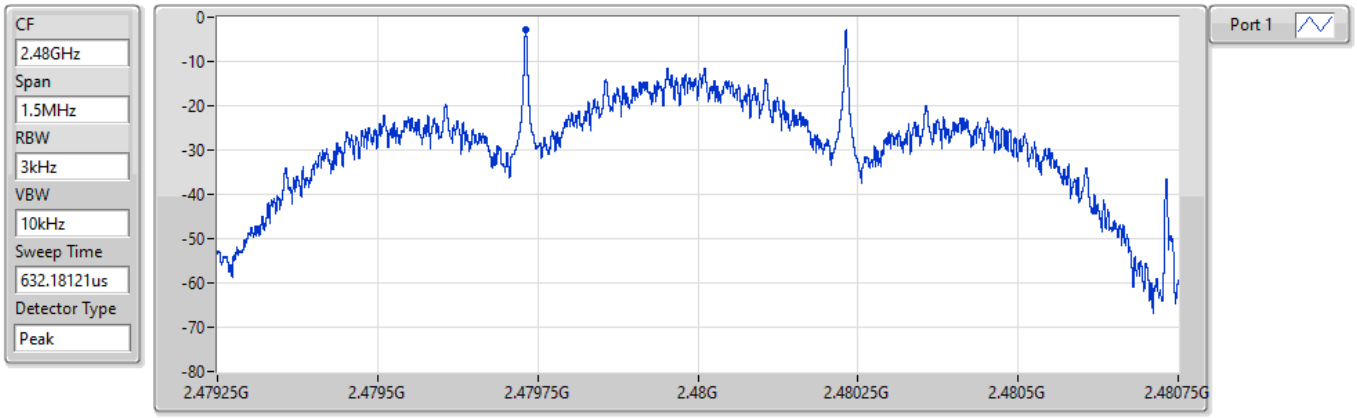


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.81	-2.81	-2.81

BT-LE(125kbps) PSD

2480MHz

22/08/2022

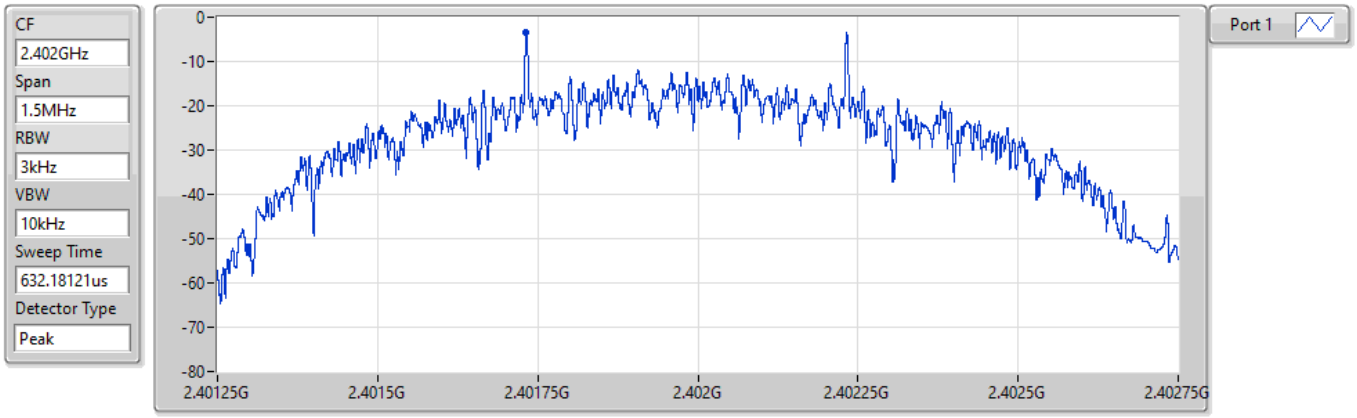


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.83	-2.83	-2.83

BT-LE(500kbps) PSD

2402MHz

22/08/2022

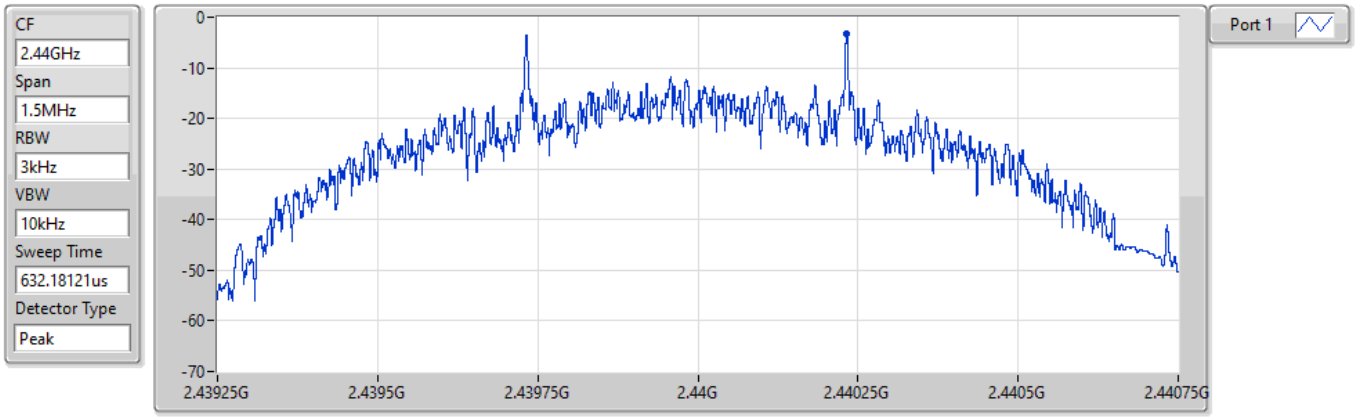


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.47	-3.47	-3.47

BT-LE(500kbps) PSD

2440MHz

22/08/2022

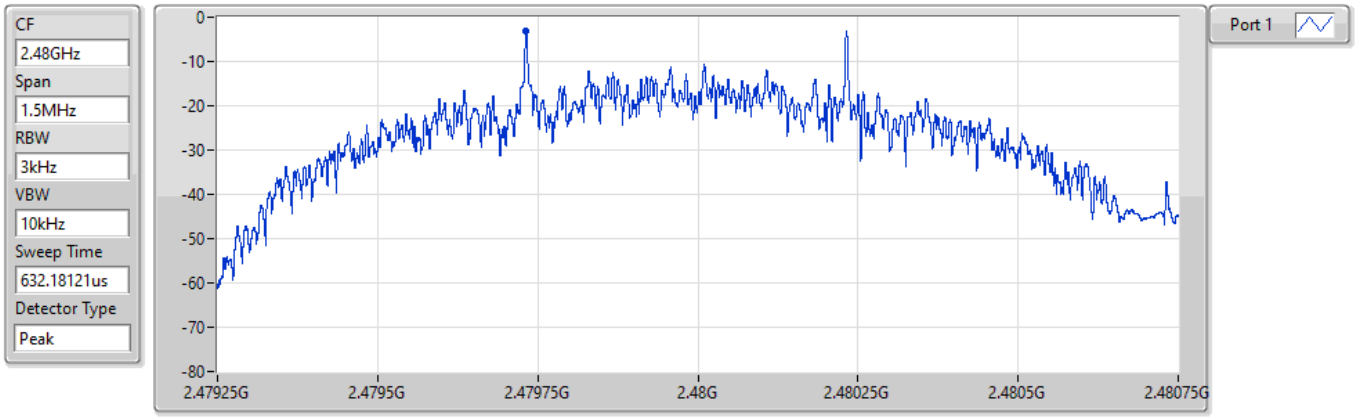


Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.33	-3.33	-3.33

BT-LE(500kbps) PSD

2480MHz

22/08/2022



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.06	-3.06	-3.06

Summary

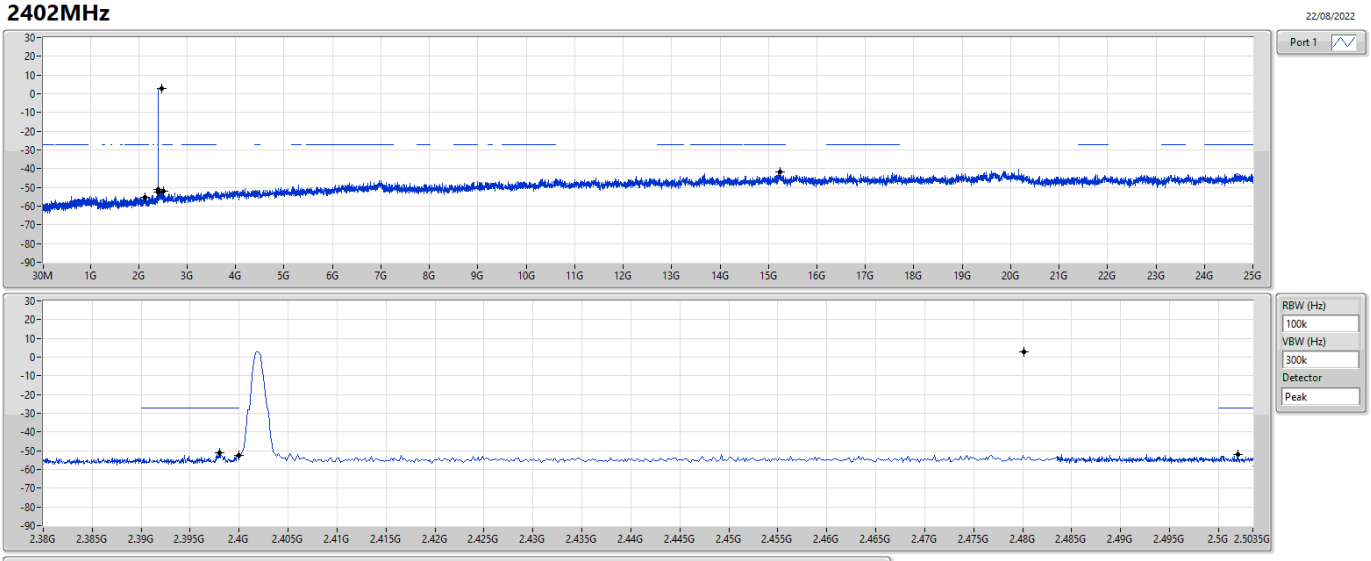
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BT-LE(1Mbps)	Pass	2.48016G	2.59	-27.41	2.13678G	-55.21	2.39804G	-51.32	2.4G	-52.71	2.50198G	-51.81	15.23652G	-41.63	1
BT-LE(2Mbps)	Pass	2.402G	2.61	-27.39	793.75M	-53.16	2.4G	-28.23	2.4G	-28.52	2.5029G	-53.01	15.24214G	-41.86	1
BT-LE(125kbps)	Pass	2.40184G	-0.20	-30.20	2.3095G	-54.56	2.39824G	-51.81	2.4G	-51.66	2.50006G	-51.71	15.23933G	-42.42	1
BT-LE(500kbps)	Pass	2.40167G	3.11	-26.89	2.11563G	-54.52	2.39808G	-51.61	2.4G	-53.70	2.50102G	-53.17	17.62677G	-40.97	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	2.48016G	2.59	-27.41	2.13678G	-55.21	2.39804G	-51.32	2.4G	-52.71	2.50198G	-51.81	15.23652G	-41.63	1
2440MHz	Pass	2.48016G	2.59	-27.41	899.5M	-54.35	2.39464G	-52.70	2.4G	-55.02	2.5031G	-52.64	24.77222G	-42.70	1
2480MHz	Pass	2.48016G	2.59	-27.41	2.14148G	-54.36	2.39124G	-52.74	2.4G	-55.38	2.50162G	-52.72	21.98547G	-41.16	1
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.402G	2.61	-27.39	793.75M	-53.16	2.4G	-28.23	2.4G	-28.52	2.5029G	-53.01	15.24214G	-41.86	1
2440MHz	Pass	2.402G	2.61	-27.39	2.06158G	-54.90	2.39204G	-53.64	2.4G	-54.39	2.5033G	-53.17	15.21402G	-42.24	1
2480MHz	Pass	2.402G	2.61	-27.39	2.15558G	-54.45	2.39576G	-53.27	2.4G	-55.32	2.50298G	-52.62	23.414G	-42.42	1
BT-LE(125kbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.40184G	-0.20	-30.20	2.3095G	-54.56	2.39824G	-51.81	2.4G	-51.66	2.50006G	-51.71	15.23933G	-42.42	1
2440MHz	Pass	2.40184G	-0.20	-30.20	877.18M	-54.83	2.39272G	-53.35	2.4G	-54.63	2.50062G	-52.20	24.65974G	-41.94	1
2480MHz	Pass	2.40184G	-0.20	-30.20	2.30715G	-54.68	2.39728G	-53.50	2.4G	-55.68	2.50322G	-52.34	15.22808G	-41.85	1
BT-LE(500kbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.40167G	3.11	-26.89	2.11563G	-54.52	2.39808G	-51.61	2.4G	-53.70	2.50102G	-53.17	17.62677G	-40.97	1
2440MHz	Pass	2.40167G	3.11	-26.89	1.85595G	-54.42	2.39984G	-53.29	2.4G	-55.90	2.50218G	-52.32	24.05515G	-42.20	1
2480MHz	Pass	2.40167G	3.11	-26.89	2.10975G	-53.60	2.39272G	-53.30	2.4G	-56.16	2.50086G	-53.08	24.7891G	-41.57	1

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

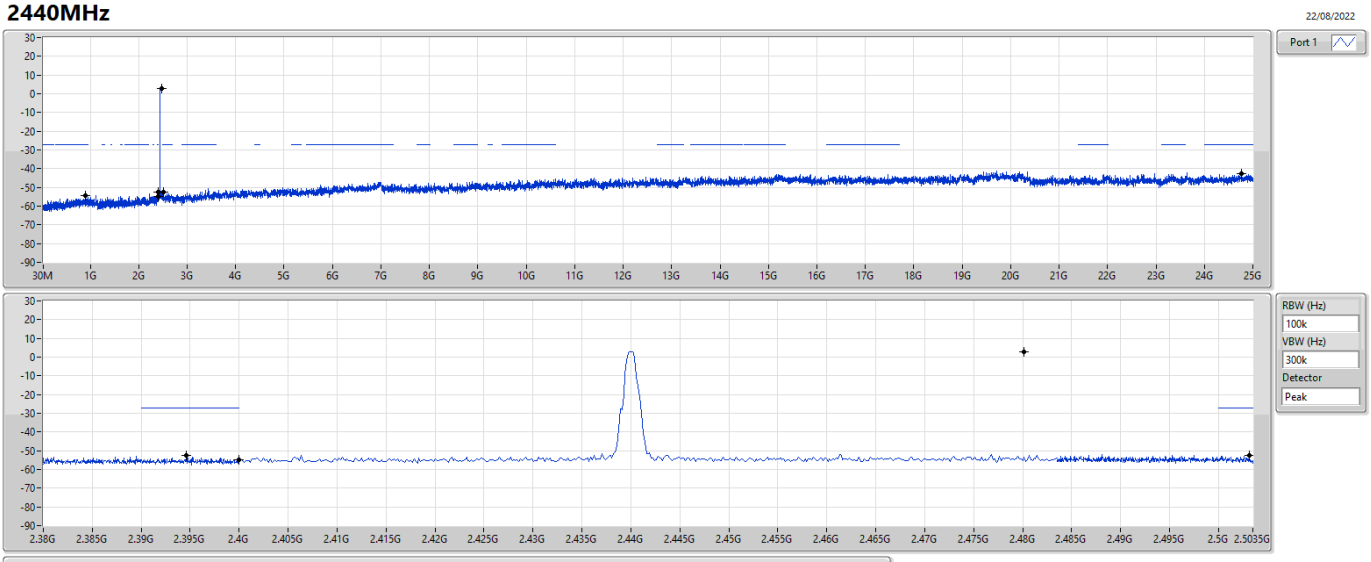
2402MHz



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
2.48016G	2.59	-27.41	2.13678G	-55.21	2.39804G	-51.32	2.4G	-52.71	2.50198G	-51.81	15.23652G	-41.63	1

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

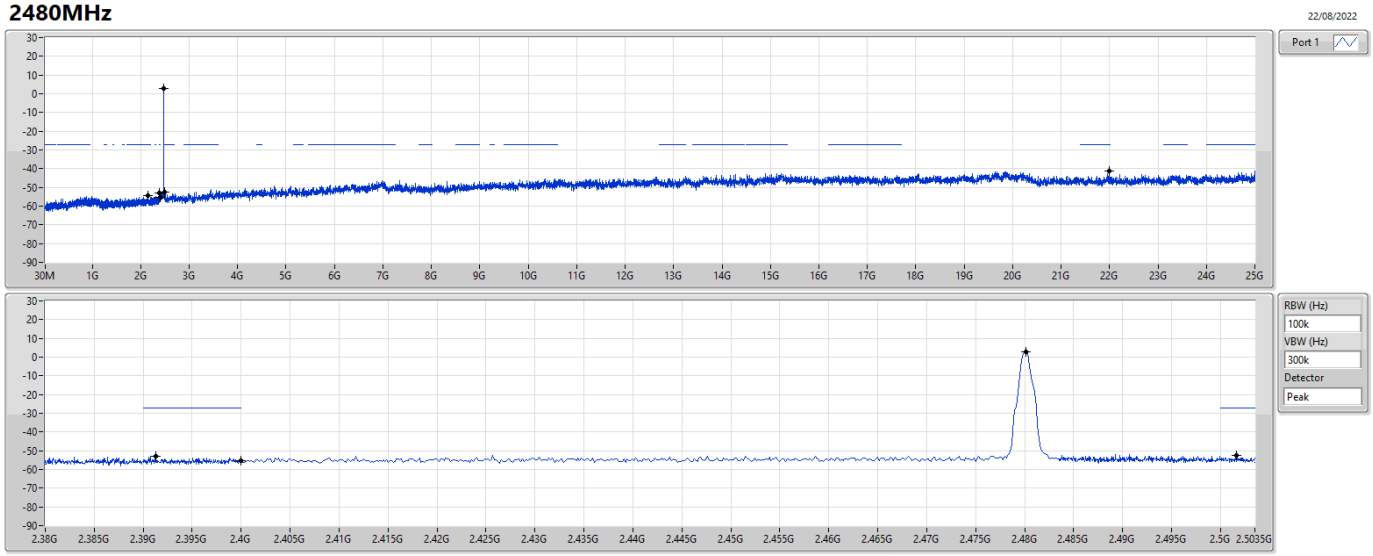
2440MHz



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
2.48016G	2.59	-27.41	899.5M	-54.35	2.39464G	-52.70	2.4G	-55.02	2.5031G	-52.64	24.77222G	-42.70	1

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

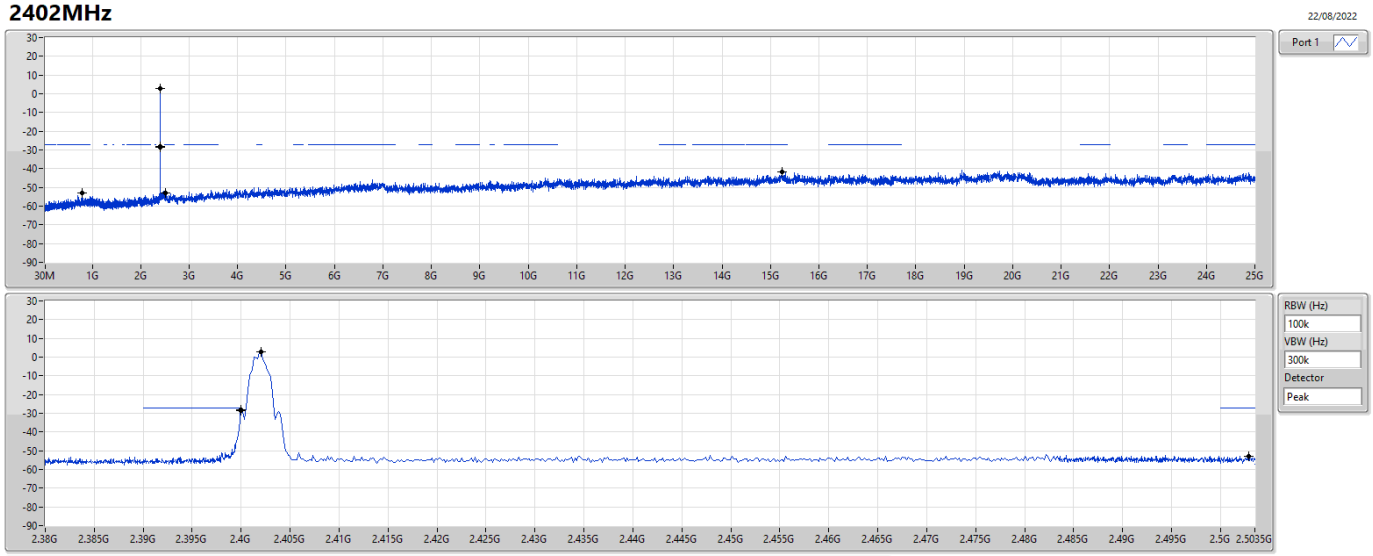
2480MHz



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
2.48016G	2.59	-27.41	2.14148G	-54.36	2.39124G	-52.74	2.4G	-55.38	2.50162G	-52.72	21.98547G	-41.16	1

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

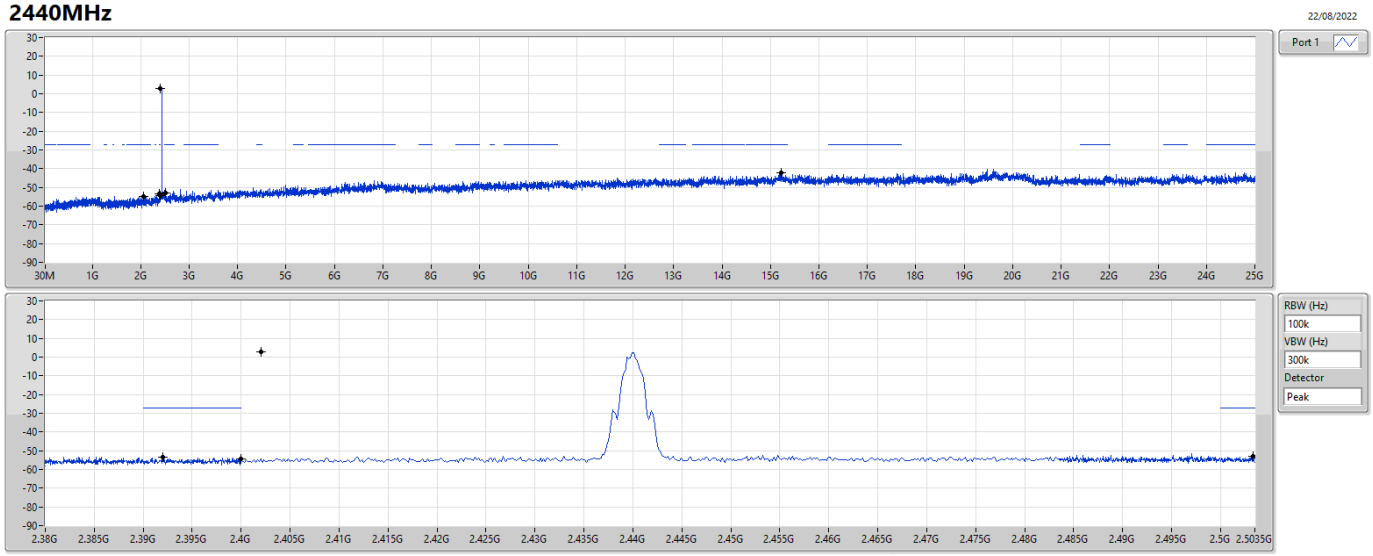
2402MHz



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
2.402G	2.61	-27.39	793.75M	-53.16	2.4G	-28.23	2.4G	-28.52	2.5029G	-53.01	15.24214G	-41.86	1

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

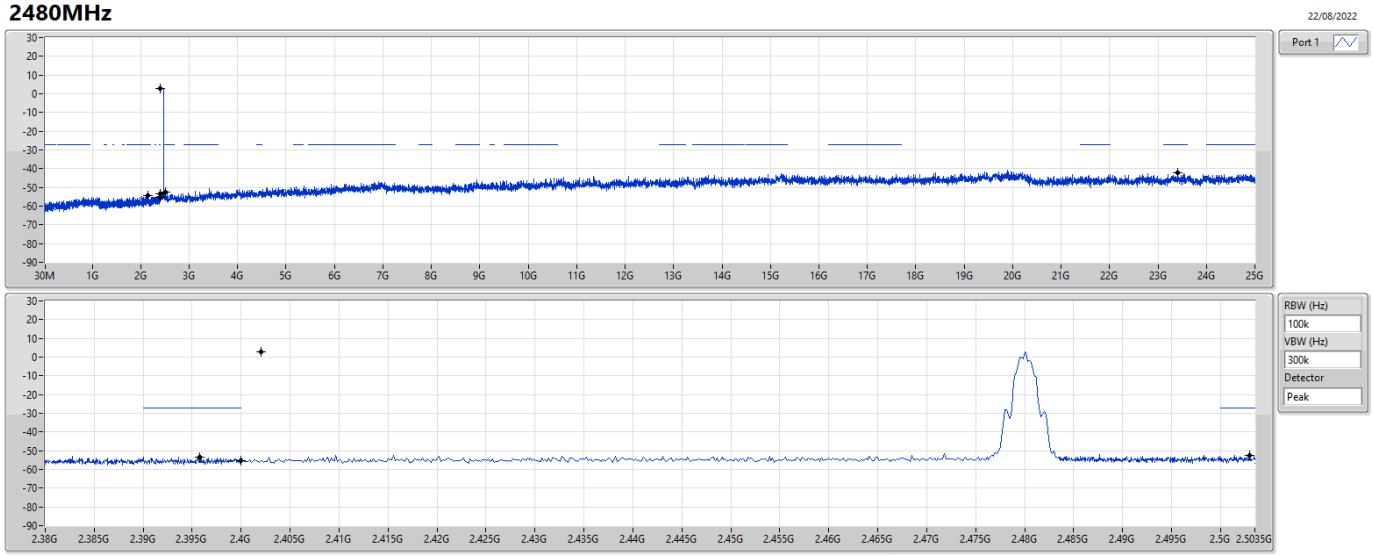
2440MHz



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
2.402G	2.61	-27.39	2.06158G	-54.90	2.39204G	-53.64	2.4G	-54.39	2.5033G	-53.17	15.21402G	-42.24	1

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

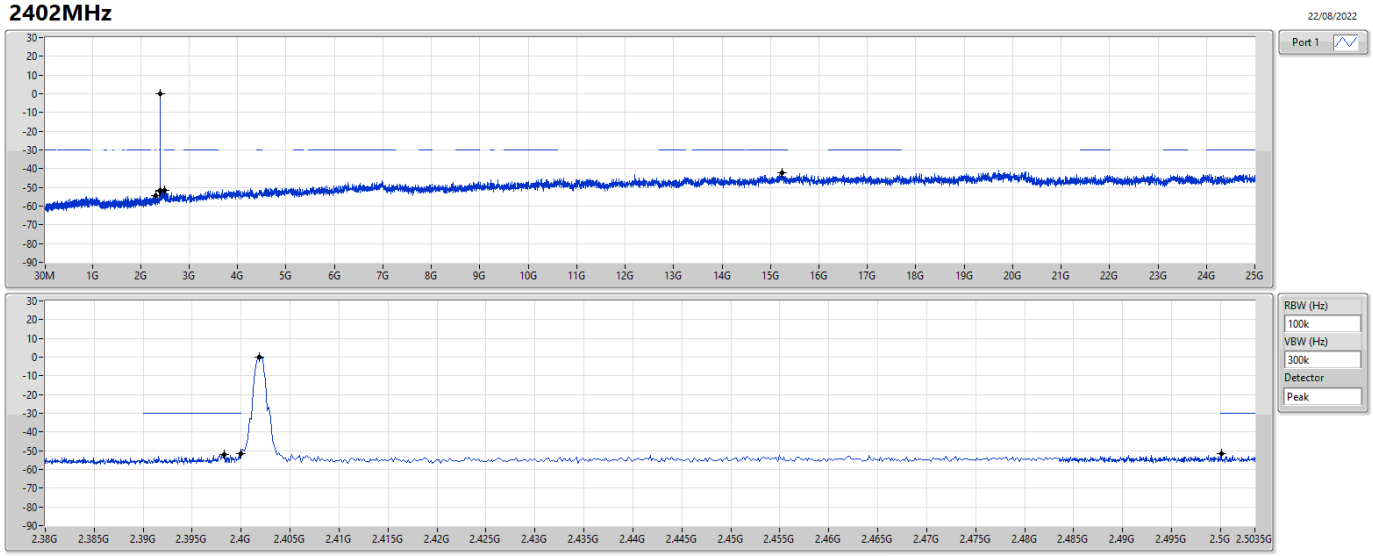
2480MHz



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
2.402G	2.61	-27.39	2.15558G	-54.45	2.39576G	-53.27	2.4G	-55.32	2.50298G	-52.62	23.414G	-42.42	1

BT-LE(125kbps) **CSENdB-DTS**

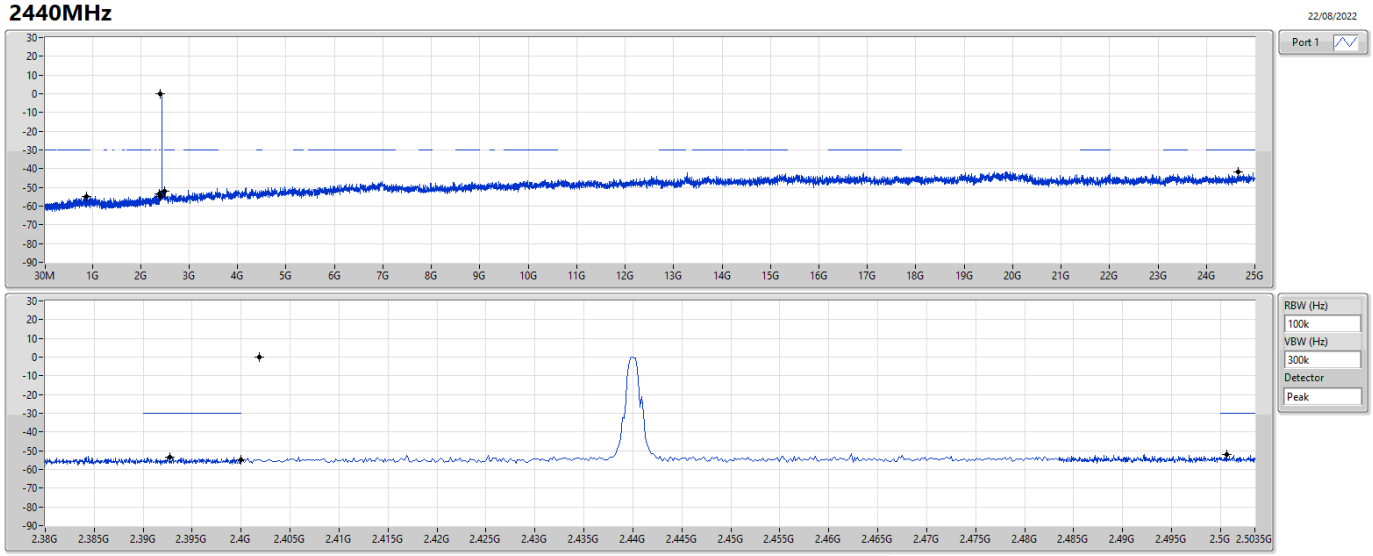
2402MHz



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
2.40184G	-0.20	-30.20	2.3095G	-54.56	2.39824G	-51.81	2.4G	-51.66	2.50006G	-51.71	15.23933G	-42.42	1

BT-LE(125kbps) **CSENdB-DTS**

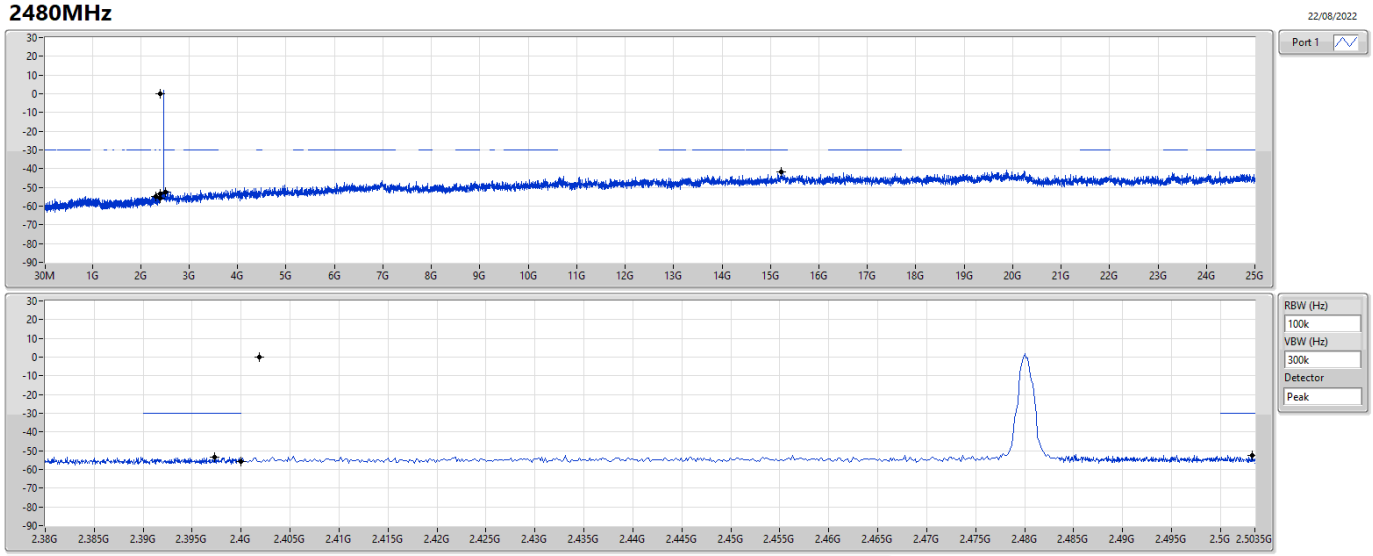
2440MHz



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
2.40184G	-0.20	-30.20	877.18M	-54.83	2.39272G	-53.35	2.4G	-54.63	2.50062G	-52.20	24.65974G	-41.94	1

BT-LE(125kbps) **CSENdB-DTS**

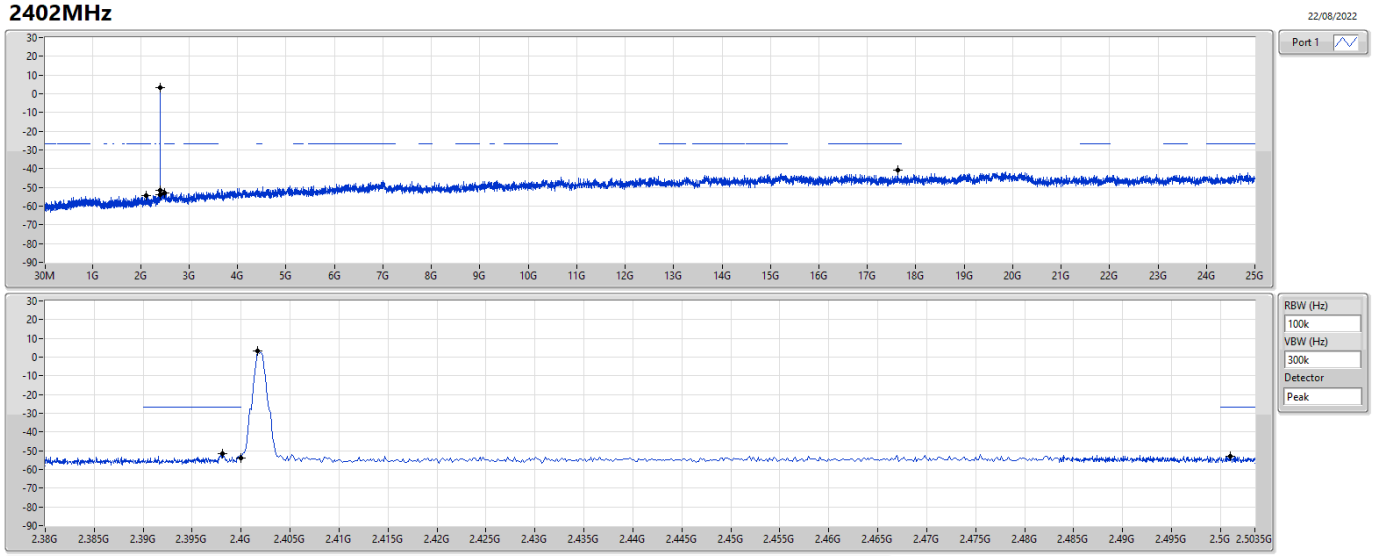
2480MHz



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
2.40184G	-0.20	-30.20	2.30715G	-54.68	2.39728G	-53.50	2.4G	-55.68	2.50322G	-52.34	15.22808G	-41.85	1

BT-LE(500kbps) **CSENdB-DTS**

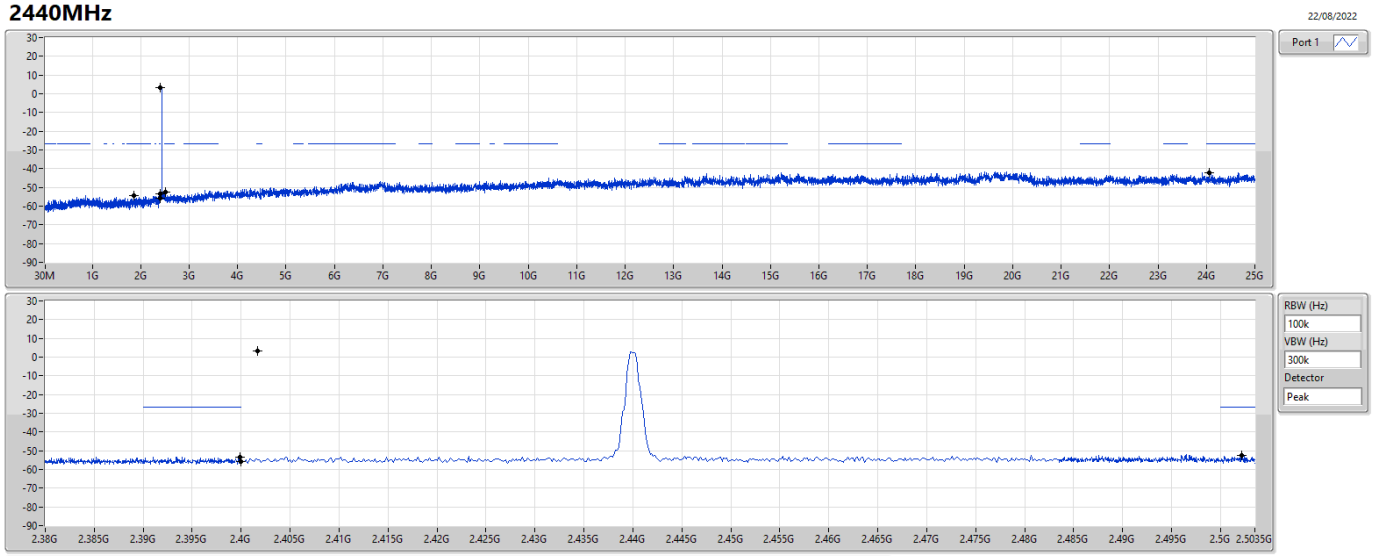
2402MHz



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
2.40167G	3.11	-26.89	2.11563G	-54.52	2.39808G	-51.61	2.4G	-53.70	2.50102G	-53.17	17.62677G	-40.97	1

BT-LE(500kbps) **CSENdB-DTS**

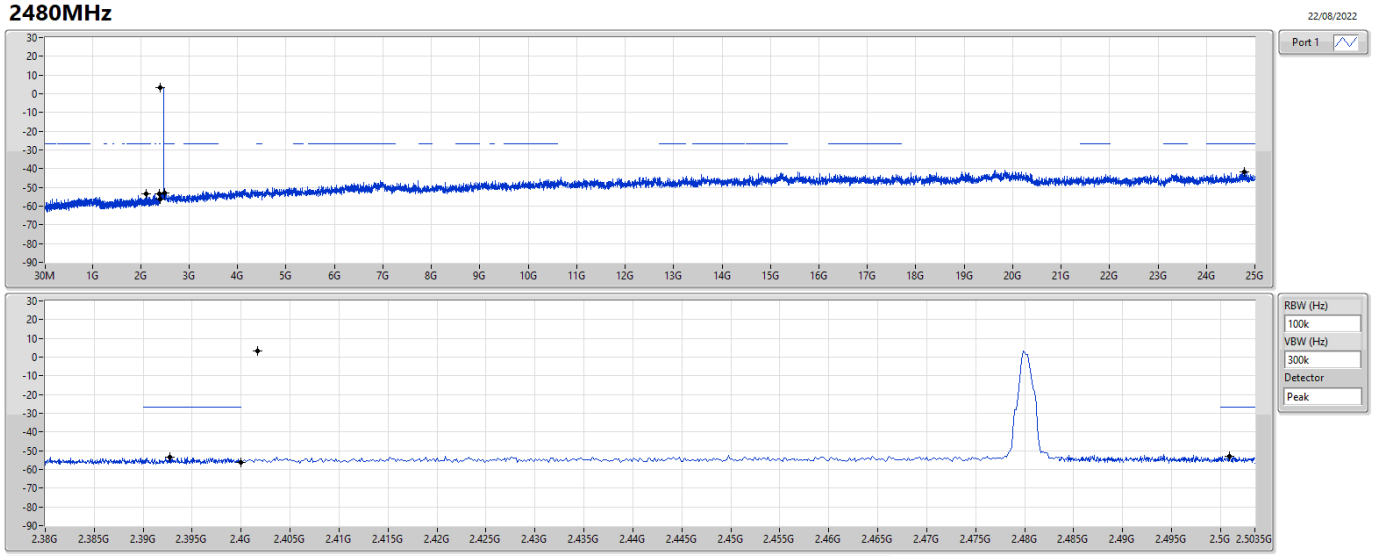
2440MHz



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
2.40167G	3.11	-26.89	1.85595G	-54.42	2.39984G	-53.29	2.4G	-55.90	2.50218G	-52.32	24.05515G	-42.20	1

BT-LE(500kbps) **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
2.40167G	3.11	-26.89	2.10975G	-53.60	2.39272G	-53.30	2.4G	-56.16	2.50086G	-53.08	24.7891G	-41.57	1

Summary

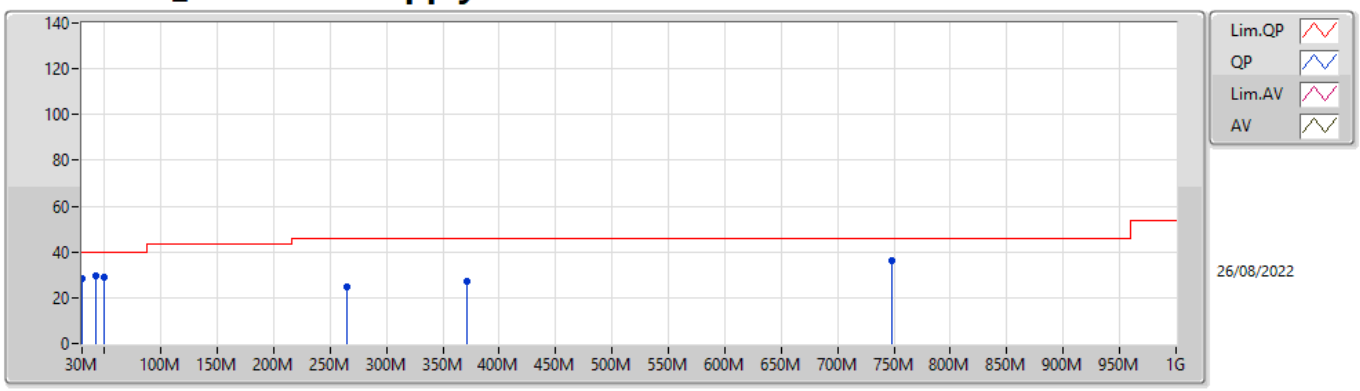
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
BT-LE(2Mbps)	Pass	PK	747.8M	36.04	46.00	-9.96	3	Vertical	0	1.00	-

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	30M	28.61	40.00	-11.39	3	Vertical	0	1.00	-
2440MHz	Pass	PK	41.64M	29.40	40.00	-10.60	3	Vertical	0	1.00	-
2440MHz	Pass	PK	49.4M	28.91	40.00	-11.09	3	Vertical	0	1.00	-
2440MHz	Pass	PK	264.74M	24.96	46.00	-21.04	3	Vertical	0	1.00	-
2440MHz	Pass	PK	371.44M	27.27	46.00	-18.73	3	Vertical	0	1.00	-
2440MHz	Pass	PK	747.8M	36.04	46.00	-9.96	3	Vertical	0	1.00	-
2440MHz	Pass	PK	30M	29.63	40.00	-10.37	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	39.7M	27.22	40.00	-12.78	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	125.06M	23.08	43.50	-20.42	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	256.98M	23.95	46.00	-22.05	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	435.46M	30.96	46.00	-15.04	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	518.88M	29.62	46.00	-16.38	3	Horizontal	360	1.00	-

BT-LE(2Mbps)

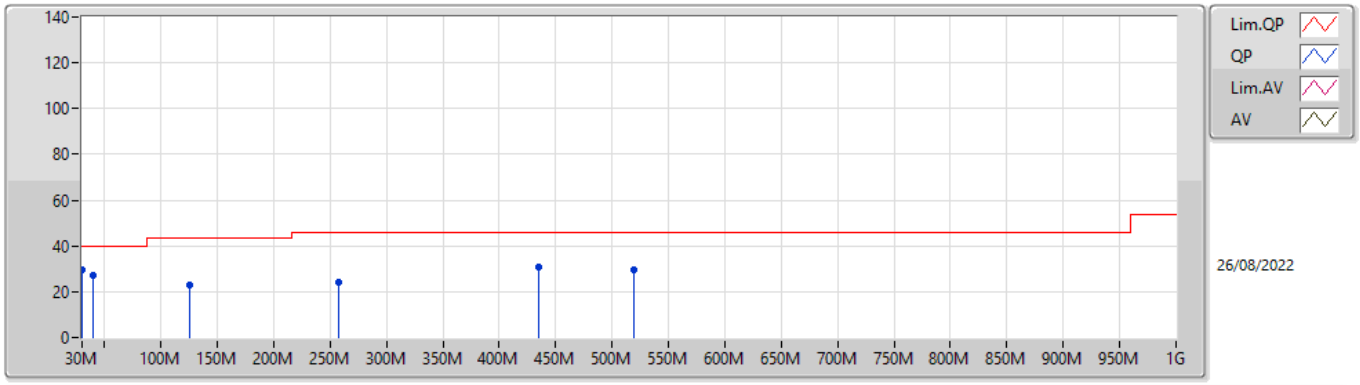
2440MHz_DC Power Supply



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	30M	28.61	40.00	-11.39	-2.68	3	Vertical	0	1.00	-	31.29	23.26	1.02	26.96
PK	41.64M	29.40	40.00	-10.60	-9.09	3	Vertical	0	1.00	-	38.49	16.80	1.03	26.92
PK	49.4M	28.91	40.00	-11.09	-12.90	3	Vertical	0	1.00	-	41.81	13.45	1.04	27.39
PK	264.74M	24.96	46.00	-21.04	-6.25	3	Vertical	0	1.00	-	31.21	18.59	2.33	27.17
PK	371.44M	27.27	46.00	-18.73	-4.86	3	Vertical	0	1.00	-	32.13	20.01	2.78	27.65
PK	747.8M	36.04	46.00	-9.96	0.59	3	Vertical	0	1.00	-	35.45	24.87	3.96	28.24

BT-LE(2Mbps)

2440MHz_DC Power Supply



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	30M	29.63	40.00	-10.37	-2.68	3	Horizontal	360	1.00	-	32.31	23.26	1.02	26.96
PK	39.7M	27.22	40.00	-12.78	-7.84	3	Horizontal	360	1.00	-	35.06	17.92	1.03	26.79
PK	125.06M	23.08	43.50	-20.42	-8.86	3	Horizontal	360	1.00	-	31.94	17.33	1.57	27.76
PK	256.98M	23.95	46.00	-22.05	-6.47	3	Horizontal	360	1.00	-	30.42	18.40	2.29	27.16
PK	435.46M	30.96	46.00	-15.04	-3.35	3	Horizontal	360	1.00	-	34.31	21.77	3.02	28.14
PK	518.88M	29.62	46.00	-16.38	-2.46	3	Horizontal	360	1.00	-	32.08	22.64	3.35	28.45

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	2.4835G	53.09	54.00	-0.91	3	Vertical	41	1.59	-
BT-LE(2Mbps)	Pass	AV	2.4844G	50.83	54.00	-3.17	3	Vertical	44	1.02	-
BT-LE(125kbps)	Pass	AV	2.4835G	53.05	54.00	-0.95	3	Vertical	43	1.60	-
BT-LE(500kbps)	Pass	AV	2.4835G	52.99	54.00	-1.01	3	Vertical	43	1.60	-

Result

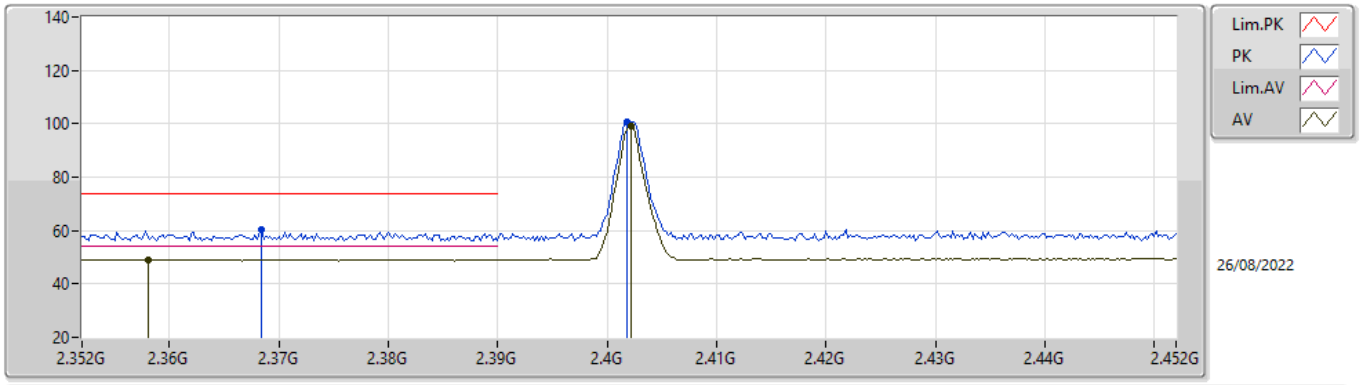
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-LE(1Mbps)	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.358G	49.22	54.00	-4.78	3	Vertical	48	1.04	-
2402MHz	Pass	AV	2.4022G	99.18	Inf	-Inf	3	Vertical	48	1.04	-
2402MHz	Pass	PK	2.3684G	60.17	74.00	-13.83	3	Vertical	48	1.04	-
2402MHz	Pass	PK	2.4018G	100.63	Inf	-Inf	3	Vertical	48	1.04	-
2402MHz	Pass	AV	2.3818G	49.37	54.00	-4.63	3	Horizontal	309	1.33	-
2402MHz	Pass	AV	2.402G	96.21	Inf	-Inf	3	Horizontal	309	1.33	-
2402MHz	Pass	PK	2.3642G	59.71	74.00	-14.29	3	Horizontal	309	1.33	-
2402MHz	Pass	PK	2.4018G	97.60	Inf	-Inf	3	Horizontal	309	1.33	-
2402MHz	Pass	AV	4.80386G	38.25	54.00	-15.75	3	Vertical	318	1.01	-
2402MHz	Pass	PK	4.80394G	48.03	74.00	-25.97	3	Vertical	318	1.01	-
2402MHz	Pass	AV	4.80409G	42.58	54.00	-11.42	3	Horizontal	181	1.34	-
2402MHz	Pass	PK	4.80468G	50.39	74.00	-23.61	3	Horizontal	181	1.34	-
2440MHz	Pass	AV	2.344G	49.30	54.00	-4.70	3	Vertical	44	2.04	-
2440MHz	Pass	AV	2.44G	99.55	Inf	-Inf	3	Vertical	44	2.04	-
2440MHz	Pass	AV	2.488G	49.72	54.00	-4.28	3	Vertical	44	2.04	-
2440MHz	Pass	PK	2.3656G	59.14	74.00	-14.86	3	Vertical	44	2.04	-
2440MHz	Pass	PK	2.4404G	100.93	Inf	-Inf	3	Vertical	44	2.04	-
2440MHz	Pass	PK	2.4908G	60.85	74.00	-13.15	3	Vertical	44	2.04	-
2440MHz	Pass	AV	2.3616G	49.31	54.00	-4.69	3	Horizontal	339	2.86	-
2440MHz	Pass	AV	2.44G	98.04	Inf	-Inf	3	Horizontal	339	2.86	-
2440MHz	Pass	AV	2.4964G	49.86	54.00	-4.14	3	Horizontal	339	2.86	-
2440MHz	Pass	PK	2.3736G	59.24	74.00	-14.76	3	Horizontal	339	2.86	-
2440MHz	Pass	PK	2.4404G	99.41	Inf	-Inf	3	Horizontal	339	2.86	-
2440MHz	Pass	PK	2.494G	59.82	74.00	-14.18	3	Horizontal	339	2.86	-
2440MHz	Pass	AV	4.88008G	36.34	54.00	-17.66	3	Vertical	31	1.49	-
2440MHz	Pass	PK	4.88002G	46.24	74.00	-27.76	3	Vertical	31	1.49	-
2440MHz	Pass	AV	4.88008G	41.62	54.00	-12.38	3	Horizontal	193	1.57	-
2440MHz	Pass	PK	4.88054G	50.16	74.00	-23.84	3	Horizontal	193	1.57	-
2480MHz	Pass	AV	2.48G	100.51	Inf	-Inf	3	Vertical	41	1.59	-
2480MHz	Pass	AV	2.4835G	53.09	54.00	-0.91	3	Vertical	41	1.59	-
2480MHz	Pass	PK	2.4802G	102.04	Inf	-Inf	3	Vertical	41	1.59	-
2480MHz	Pass	PK	2.487G	60.63	74.00	-13.37	3	Vertical	41	1.59	-
2480MHz	Pass	AV	2.48G	96.22	Inf	-Inf	3	Horizontal	184	1.20	-
2480MHz	Pass	AV	2.4835G	50.81	54.00	-3.19	3	Horizontal	184	1.20	-
2480MHz	Pass	PK	2.4798G	97.69	Inf	-Inf	3	Horizontal	184	1.20	-
2480MHz	Pass	PK	2.499G	59.92	74.00	-14.08	3	Horizontal	184	1.20	-
2480MHz	Pass	AV	4.96011G	36.15	54.00	-17.85	3	Vertical	320	1.19	-
2480MHz	Pass	PK	4.96109G	46.70	74.00	-27.30	3	Vertical	320	1.19	-
2480MHz	Pass	AV	4.95996G	41.89	54.00	-12.11	3	Horizontal	193	1.76	-
2480MHz	Pass	PK	4.9604G	49.97	74.00	-24.03	3	Horizontal	193	1.76	-
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3528G	50.07	54.00	-3.93	3	Vertical	46	1.06	-
2402MHz	Pass	AV	2.4022G	96.11	Inf	-Inf	3	Vertical	46	1.06	-
2402MHz	Pass	PK	2.3552G	59.86	74.00	-14.14	3	Vertical	46	1.06	-
2402MHz	Pass	PK	2.4016G	98.71	Inf	-Inf	3	Vertical	46	1.06	-
2402MHz	Pass	AV	2.3688G	50.37	54.00	-3.63	3	Horizontal	317	1.50	-
2402MHz	Pass	AV	2.4022G	92.64	Inf	-Inf	3	Horizontal	317	1.50	-
2402MHz	Pass	PK	2.3686G	59.64	74.00	-14.36	3	Horizontal	317	1.50	-
2402MHz	Pass	PK	2.4016G	95.37	Inf	-Inf	3	Horizontal	317	1.50	-
2402MHz	Pass	AV	4.80406G	39.54	54.00	-14.46	3	Vertical	32	1.54	-
2402MHz	Pass	PK	4.80503G	46.71	74.00	-27.29	3	Vertical	32	1.54	-
2402MHz	Pass	AV	4.80396G	44.22	54.00	-9.78	3	Horizontal	180	1.24	-
2402MHz	Pass	PK	4.8032G	50.15	74.00	-23.85	3	Horizontal	180	1.24	-
2440MHz	Pass	AV	2.344G	50.30	54.00	-3.70	3	Vertical	44	1.02	-
2440MHz	Pass	AV	2.44G	97.70	Inf	-Inf	3	Vertical	44	1.02	-
2440MHz	Pass	AV	2.4844G	50.83	54.00	-3.17	3	Vertical	44	1.02	-
2440MHz	Pass	PK	2.3424G	59.35	74.00	-14.65	3	Vertical	44	1.02	-
2440MHz	Pass	PK	2.4396G	100.39	Inf	-Inf	3	Vertical	44	1.02	-
2440MHz	Pass	PK	2.4944G	60.17	74.00	-13.83	3	Vertical	44	1.02	-
2440MHz	Pass	AV	2.3712G	50.15	54.00	-3.85	3	Horizontal	308	1.50	-

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	93.46	Inf	-Inf	3	Horizontal	308	1.50	-
2440MHz	Pass	AV	2.4916G	50.69	54.00	-3.31	3	Horizontal	308	1.50	-
2440MHz	Pass	PK	2.3604G	60.62	74.00	-13.38	3	Horizontal	308	1.50	-
2440MHz	Pass	PK	2.44G	96.21	Inf	-Inf	3	Horizontal	308	1.50	-
2440MHz	Pass	PK	2.4996G	59.88	74.00	-14.12	3	Horizontal	308	1.50	-
2440MHz	Pass	AV	4.88009G	38.20	54.00	-15.80	3	Vertical	34	2.06	-
2440MHz	Pass	PK	4.88003G	46.73	74.00	-27.27	3	Vertical	34	2.06	-
2440MHz	Pass	AV	4.88008G	41.61	54.00	-12.39	3	Horizontal	195	1.50	-
2440MHz	Pass	PK	4.88079G	49.56	74.00	-24.44	3	Horizontal	195	1.50	-
2480MHz	Pass	AV	2.48G	95.98	Inf	-Inf	3	Vertical	106	1.33	-
2480MHz	Pass	AV	2.4835G	50.75	54.00	-3.25	3	Vertical	106	1.33	-
2480MHz	Pass	PK	2.4796G	98.85	Inf	-Inf	3	Vertical	106	1.33	-
2480MHz	Pass	PK	2.4856G	59.94	74.00	-14.06	3	Vertical	106	1.33	-
2480MHz	Pass	AV	2.4802G	95.84	Inf	-Inf	3	Horizontal	185	1.37	-
2480MHz	Pass	AV	2.4835G	50.80	54.00	-3.20	3	Horizontal	185	1.37	-
2480MHz	Pass	PK	2.4794G	98.59	Inf	-Inf	3	Horizontal	185	1.37	-
2480MHz	Pass	PK	2.4882G	60.35	74.00	-13.65	3	Horizontal	185	1.37	-
2480MHz	Pass	AV	4.96009G	37.37	54.00	-16.63	3	Vertical	52	1.01	-
2480MHz	Pass	PK	4.95987G	45.95	74.00	-28.05	3	Vertical	52	1.01	-
2480MHz	Pass	AV	4.96011G	41.60	54.00	-12.40	3	Horizontal	193	2.32	-
2480MHz	Pass	PK	4.96099G	49.01	74.00	-24.99	3	Horizontal	193	2.32	-
BT-LE(125kbps)	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.388G	48.94	54.00	-5.06	3	Vertical	47	1.05	-
2402MHz	Pass	AV	2.402G	99.98	Inf	-Inf	3	Vertical	47	1.05	-
2402MHz	Pass	PK	2.3758G	59.50	74.00	-14.50	3	Vertical	47	1.05	-
2402MHz	Pass	PK	2.4018G	101.63	Inf	-Inf	3	Vertical	47	1.05	-
2402MHz	Pass	AV	2.3754G	48.87	54.00	-5.13	3	Horizontal	310	1.34	-
2402MHz	Pass	AV	2.402G	96.57	Inf	-Inf	3	Horizontal	310	1.34	-
2402MHz	Pass	PK	2.388G	59.08	74.00	-14.92	3	Horizontal	310	1.34	-
2402MHz	Pass	PK	2.4018G	98.21	Inf	-Inf	3	Horizontal	310	1.34	-
2402MHz	Pass	AV	4.80422G	36.24	54.00	-17.76	3	Vertical	326	1.33	-
2402MHz	Pass	PK	4.80384G	47.10	74.00	-26.90	3	Vertical	326	1.33	-
2402MHz	Pass	AV	4.80412G	41.21	54.00	-12.79	3	Horizontal	181	1.26	-
2402MHz	Pass	PK	4.80364G	50.34	74.00	-23.66	3	Horizontal	181	1.26	-
2440MHz	Pass	AV	2.3748G	48.89	54.00	-5.11	3	Vertical	46	1.21	-
2440MHz	Pass	AV	2.44G	99.88	Inf	-Inf	3	Vertical	46	1.21	-
2440MHz	Pass	AV	2.498G	49.49	54.00	-4.51	3	Vertical	46	1.21	-
2440MHz	Pass	PK	2.3524G	59.33	74.00	-14.67	3	Vertical	46	1.21	-
2440MHz	Pass	PK	2.4404G	101.51	Inf	-Inf	3	Vertical	46	1.21	-
2440MHz	Pass	PK	2.4872G	59.92	74.00	-14.08	3	Vertical	46	1.21	-
2440MHz	Pass	AV	2.3712G	48.84	54.00	-5.16	3	Horizontal	308	1.69	-
2440MHz	Pass	AV	2.44G	96.22	Inf	-Inf	3	Horizontal	308	1.69	-
2440MHz	Pass	AV	2.4928G	49.51	54.00	-4.49	3	Horizontal	308	1.69	-
2440MHz	Pass	PK	2.378G	58.94	74.00	-15.06	3	Horizontal	308	1.69	-
2440MHz	Pass	PK	2.4404G	97.84	Inf	-Inf	3	Horizontal	308	1.69	-
2440MHz	Pass	PK	2.4912G	59.42	74.00	-14.58	3	Horizontal	308	1.69	-
2440MHz	Pass	AV	4.88039G	35.40	54.00	-18.60	3	Vertical	328	1.15	-
2440MHz	Pass	PK	4.87926G	47.39	74.00	-26.61	3	Vertical	328	1.15	-
2440MHz	Pass	AV	4.88008G	41.32	54.00	-12.68	3	Horizontal	182	1.02	-
2440MHz	Pass	PK	4.88042G	50.56	74.00	-23.44	3	Horizontal	182	1.02	-
2480MHz	Pass	AV	2.48G	100.35	Inf	-Inf	3	Vertical	43	1.60	-
2480MHz	Pass	AV	2.4835G	53.05	54.00	-0.95	3	Vertical	43	1.60	-
2480MHz	Pass	PK	2.4802G	102.00	Inf	-Inf	3	Vertical	43	1.60	-
2480MHz	Pass	PK	2.499G	60.07	74.00	-13.93	3	Vertical	43	1.60	-
2480MHz	Pass	AV	2.48G	96.64	Inf	-Inf	3	Horizontal	184	1.20	-
2480MHz	Pass	AV	2.4835G	51.16	54.00	-2.84	3	Horizontal	184	1.20	-
2480MHz	Pass	PK	2.4798G	98.25	Inf	-Inf	3	Horizontal	184	1.20	-
2480MHz	Pass	PK	2.4992G	60.16	74.00	-13.84	3	Horizontal	184	1.20	-
2480MHz	Pass	AV	4.96007G	36.79	54.00	-17.21	3	Vertical	175	2.77	-
2480MHz	Pass	PK	4.95981G	48.04	74.00	-25.96	3	Vertical	175	2.77	-
2480MHz	Pass	AV	4.96004G	41.12	54.00	-12.88	3	Horizontal	192	1.76	-
2480MHz	Pass	PK	4.95945G	50.76	74.00	-23.24	3	Horizontal	192	1.76	-

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-LE(500kbps)	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.368G	48.86	54.00	-5.14	3	Vertical	47	1.04	-
2402MHz	Pass	AV	2.402G	100.59	Inf	-Inf	3	Vertical	47	1.04	-
2402MHz	Pass	PK	2.364G	60.19	74.00	-13.81	3	Vertical	47	1.04	-
2402MHz	Pass	PK	2.4018G	102.23	Inf	-Inf	3	Vertical	47	1.04	-
2402MHz	Pass	AV	2.388G	48.88	54.00	-5.12	3	Horizontal	308	1.32	-
2402MHz	Pass	AV	2.402G	97.09	Inf	-Inf	3	Horizontal	308	1.32	-
2402MHz	Pass	PK	2.3804G	59.45	74.00	-14.55	3	Horizontal	308	1.32	-
2402MHz	Pass	PK	2.4018G	98.61	Inf	-Inf	3	Horizontal	308	1.32	-
2402MHz	Pass	AV	4.80406G	36.90	54.00	-17.10	3	Vertical	327	1.12	-
2402MHz	Pass	PK	4.80422G	47.48	74.00	-26.52	3	Vertical	327	1.12	-
2402MHz	Pass	AV	4.80403G	41.50	54.00	-12.50	3	Horizontal	181	1.31	-
2402MHz	Pass	PK	4.80361G	50.10	74.00	-23.90	3	Horizontal	181	1.31	-
2440MHz	Pass	AV	2.3804G	48.92	54.00	-5.08	3	Vertical	46	1.21	-
2440MHz	Pass	AV	2.44G	100.15	Inf	-Inf	3	Vertical	46	1.21	-
2440MHz	Pass	AV	2.4984G	49.47	54.00	-4.53	3	Vertical	46	1.21	-
2440MHz	Pass	PK	2.3748G	59.84	74.00	-14.16	3	Vertical	46	1.21	-
2440MHz	Pass	PK	2.44G	101.65	Inf	-Inf	3	Vertical	46	1.21	-
2440MHz	Pass	PK	2.4876G	59.08	74.00	-14.92	3	Vertical	46	1.21	-
2440MHz	Pass	AV	2.3576G	48.90	54.00	-5.10	3	Horizontal	309	2.13	-
2440MHz	Pass	AV	2.44G	96.45	Inf	-Inf	3	Horizontal	309	2.13	-
2440MHz	Pass	AV	2.4992G	49.49	54.00	-4.51	3	Horizontal	309	2.13	-
2440MHz	Pass	PK	2.3564G	59.69	74.00	-14.31	3	Horizontal	309	2.13	-
2440MHz	Pass	PK	2.4404G	97.87	Inf	-Inf	3	Horizontal	309	2.13	-
2440MHz	Pass	PK	2.494G	60.21	74.00	-13.79	3	Horizontal	309	2.13	-
2440MHz	Pass	AV	4.87998G	35.07	54.00	-18.93	3	Vertical	301	2.92	-
2440MHz	Pass	PK	4.88006G	46.85	74.00	-27.15	3	Vertical	301	2.92	-
2440MHz	Pass	AV	4.88004G	39.79	54.00	-14.21	3	Horizontal	195	1.68	-
2440MHz	Pass	PK	4.8795G	49.24	74.00	-24.76	3	Horizontal	195	1.68	-
2480MHz	Pass	AV	2.48G	100.62	Inf	-Inf	3	Vertical	43	1.60	-
2480MHz	Pass	AV	2.4835G	52.99	54.00	-1.01	3	Vertical	43	1.60	-
2480MHz	Pass	PK	2.4802G	102.05	Inf	-Inf	3	Vertical	43	1.60	-
2480MHz	Pass	PK	2.4835G	60.11	74.00	-13.89	3	Vertical	43	1.60	-
2480MHz	Pass	AV	2.48G	96.92	Inf	-Inf	3	Horizontal	184	1.19	-
2480MHz	Pass	AV	2.4835G	51.33	54.00	-2.67	3	Horizontal	184	1.19	-
2480MHz	Pass	PK	2.4798G	98.41	Inf	-Inf	3	Horizontal	184	1.19	-
2480MHz	Pass	PK	2.4864G	60.66	74.00	-13.34	3	Horizontal	184	1.19	-
2480MHz	Pass	AV	4.96G	37.43	54.00	-16.57	3	Vertical	179	2.76	-
2480MHz	Pass	PK	4.96049G	48.62	74.00	-25.38	3	Vertical	179	2.76	-
2480MHz	Pass	AV	4.96004G	41.14	54.00	-12.86	3	Horizontal	193	1.50	-
2480MHz	Pass	PK	4.96059G	49.82	74.00	-24.18	3	Horizontal	193	1.50	-

BT-LE(1Mbps)

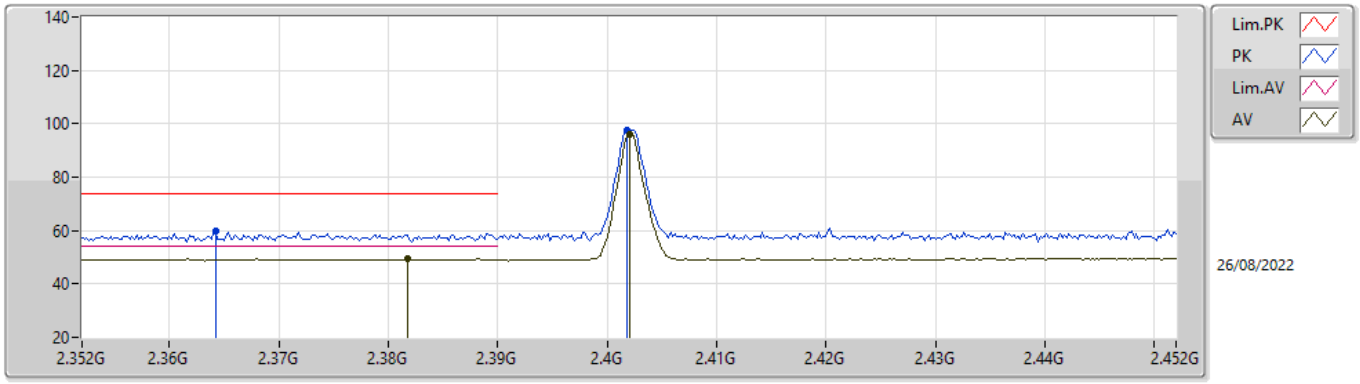
2402MHz_TX



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	2.358G	49.22	54.00	-4.78	35.48	3	Vertical	48	1.04	-	13.74	27.22	8.26	-
AV	2.4022G	99.18	Inf	-Inf	35.60	3	Vertical	48	1.04	-	63.58	27.31	8.29	-
PK	2.3684G	60.17	74.00	-13.83	35.51	3	Vertical	48	1.04	-	24.66	27.24	8.27	-
PK	2.4018G	100.63	Inf	-Inf	35.60	3	Vertical	48	1.04	-	65.03	27.31	8.29	-

BT-LE(1Mbps)

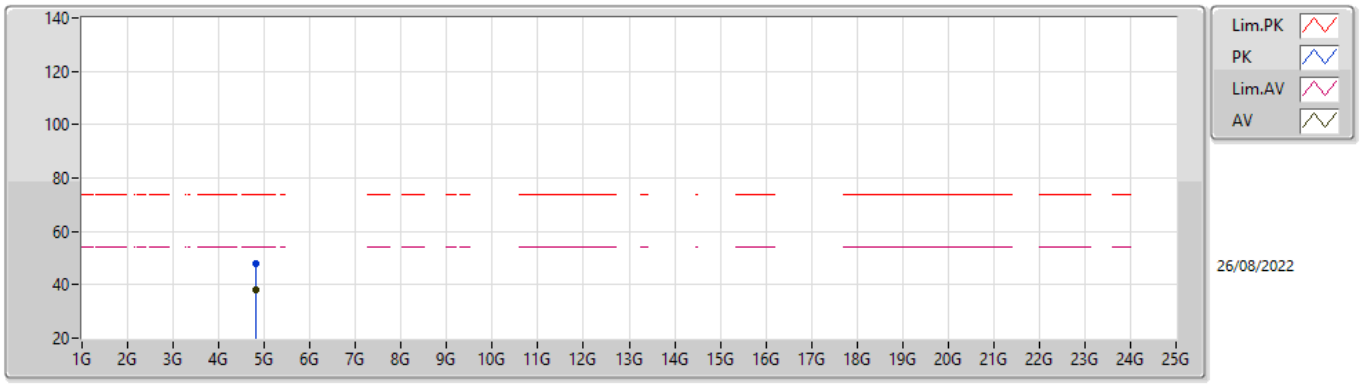
2402MHz_TX



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	2.3818G	49.37	54.00	-4.63	35.54	3	Horizontal	309	1.33	-	13.83	27.26	8.28	-
AV	2.402G	96.21	Inf	-Inf	35.60	3	Horizontal	309	1.33	-	60.61	27.31	8.29	-
PK	2.3642G	59.71	74.00	-14.29	35.49	3	Horizontal	309	1.33	-	24.22	27.23	8.26	-
PK	2.4018G	97.60	Inf	-Inf	35.60	3	Horizontal	309	1.33	-	62.00	27.31	8.29	-

BT-LE(1Mbps)

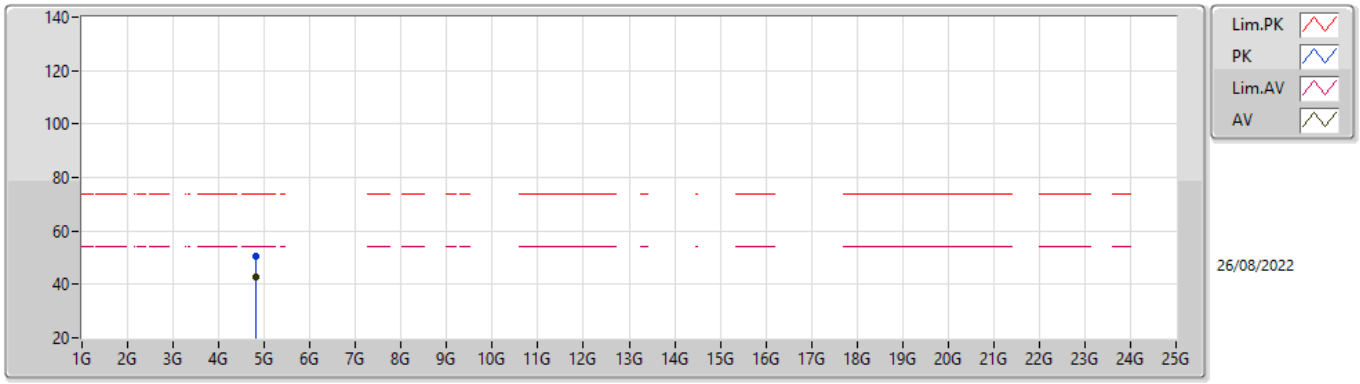
2402MHz_TX



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	4.80386G	38.25	54.00	-15.75	7.99	3	Vertical	318	1.01	-	30.26	32.51	9.67	34.19
PK	4.80394G	48.03	74.00	-25.97	7.99	3	Vertical	318	1.01	-	40.04	32.51	9.67	34.19

BT-LE(1Mbps)

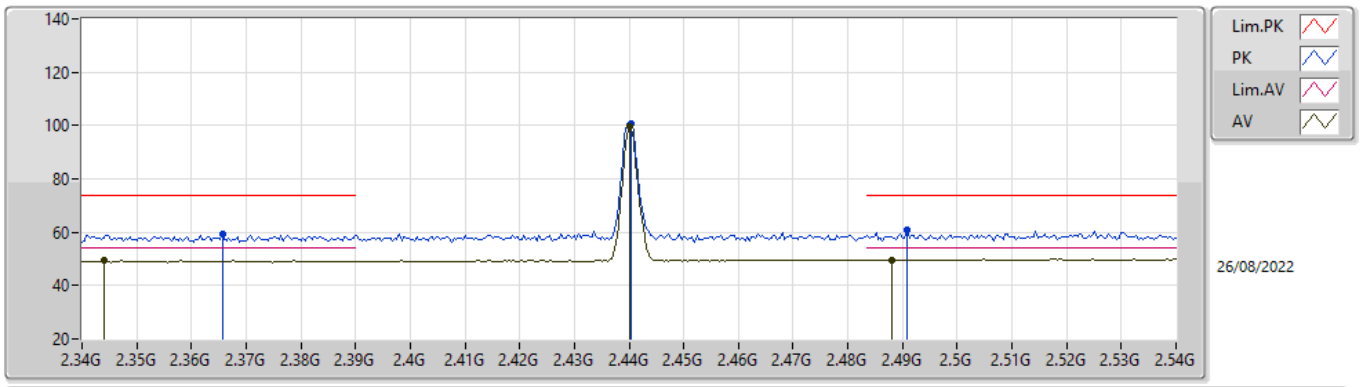
2402MHz_TX



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	4.80409G	42.58	54.00	-11.42	7.99	3	Horizontal	181	1.34	-	34.59	32.51	9.67	34.19
PK	4.80468G	50.39	74.00	-23.61	7.99	3	Horizontal	181	1.34	-	42.40	32.51	9.67	34.19

BT-LE(1Mbps)

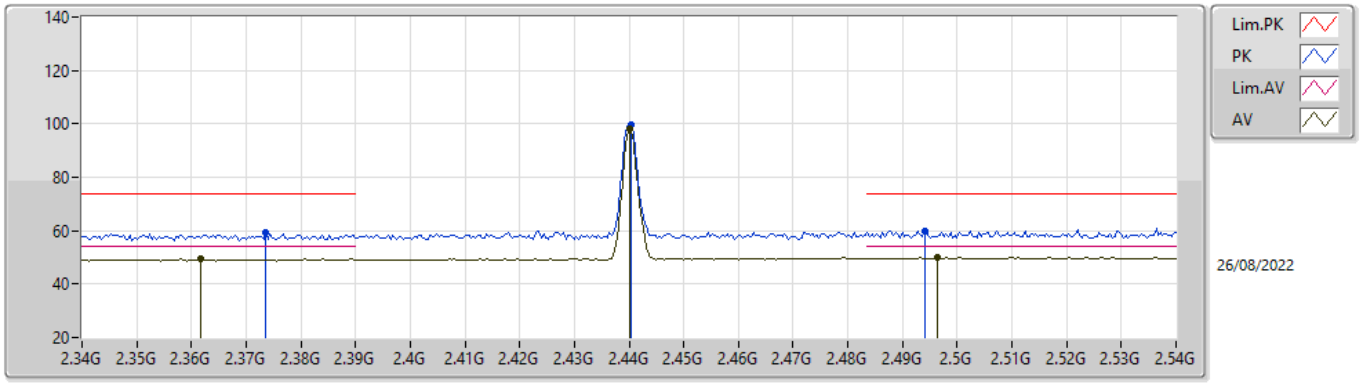
2440MHz_TX



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	2.344G	49.30	54.00	-4.70	35.43	3	Vertical	44	2.04	-	13.87	27.18	8.25	-
AV	2.44G	99.55	Inf	-Inf	35.78	3	Vertical	44	2.04	-	63.77	27.46	8.32	-
AV	2.488G	49.72	54.00	-4.28	36.08	3	Vertical	44	2.04	-	13.64	27.73	8.35	-
PK	2.3656G	59.14	74.00	-14.86	35.49	3	Vertical	44	2.04	-	23.65	27.23	8.26	-
PK	2.4404G	100.93	Inf	-Inf	35.78	3	Vertical	44	2.04	-	65.15	27.46	8.32	-
PK	2.4908G	60.85	74.00	-13.15	36.09	3	Vertical	44	2.04	-	24.76	27.74	8.35	-

BT-LE(1Mbps)

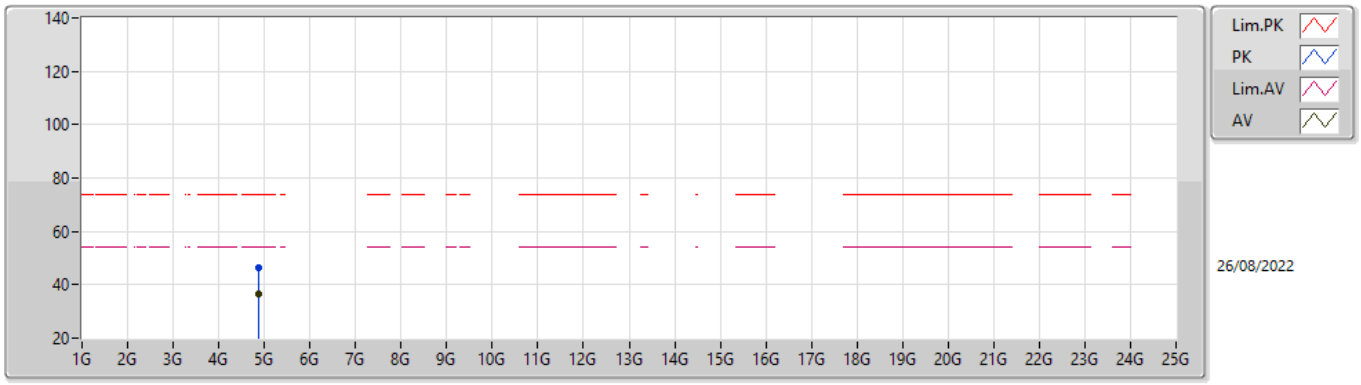
2440MHz_TX



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	2.3616G	49.31	54.00	-4.69	35.48	3	Horizontal	339	2.86	-	13.83	27.22	8.26	-
AV	2.44G	98.04	Inf	-Inf	35.78	3	Horizontal	339	2.86	-	62.26	27.46	8.32	-
AV	2.4964G	49.86	54.00	-4.14	36.13	3	Horizontal	339	2.86	-	13.73	27.78	8.35	-
PK	2.3736G	59.24	74.00	-14.76	35.52	3	Horizontal	339	2.86	-	23.72	27.25	8.27	-
PK	2.4404G	99.41	Inf	-Inf	35.78	3	Horizontal	339	2.86	-	63.63	27.46	8.32	-
PK	2.494G	59.82	74.00	-14.18	36.11	3	Horizontal	339	2.86	-	23.71	27.76	8.35	-

BT-LE(1Mbps)

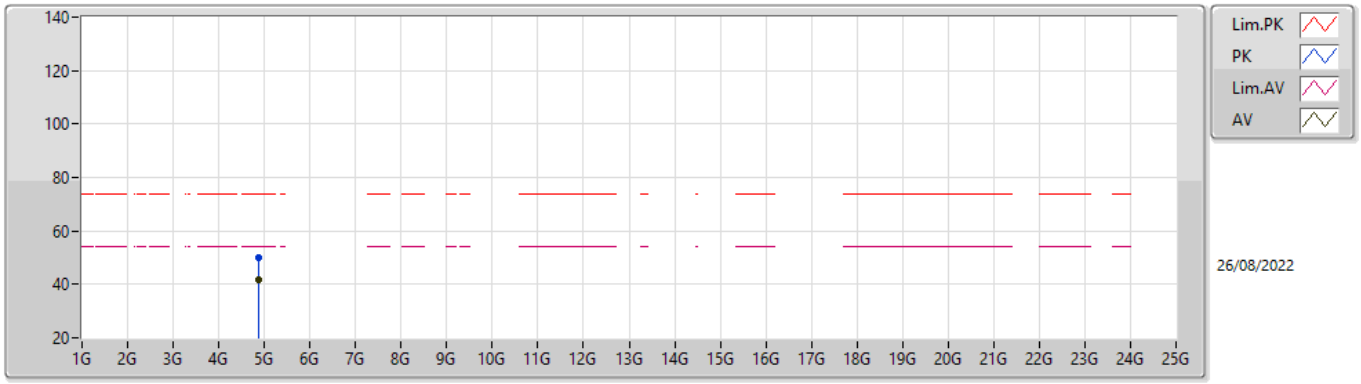
2440MHz_TX



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	4.88008G	36.34	54.00	-17.66	8.20	3	Vertical	31	1.49	-	28.14	32.66	9.70	34.16
PK	4.88002G	46.24	74.00	-27.76	8.20	3	Vertical	31	1.49	-	38.04	32.66	9.70	34.16

BT-LE(1Mbps)

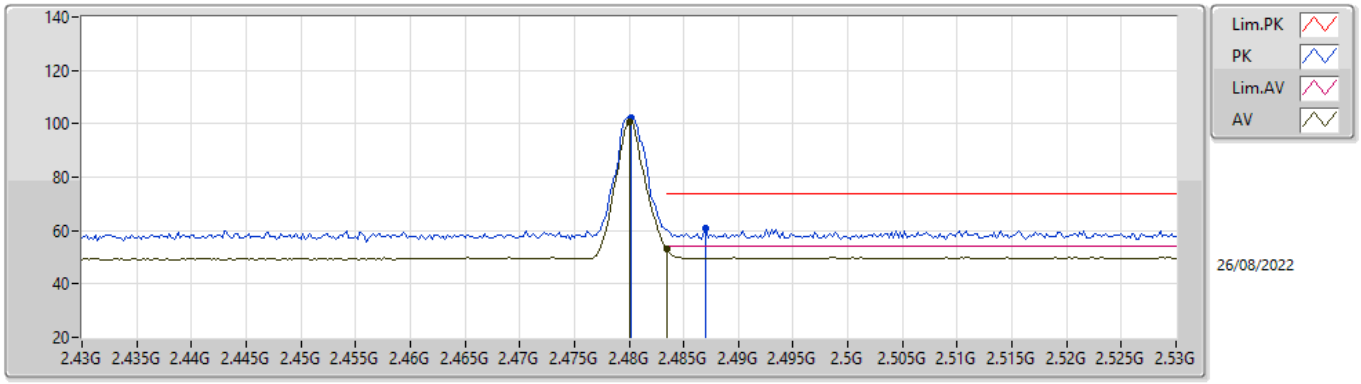
2440MHz_TX



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	4.88008G	41.62	54.00	-12.38	8.20	3	Horizontal	193	1.57	-	33.42	32.66	9.70	34.16
PK	4.88054G	50.16	74.00	-23.84	8.20	3	Horizontal	193	1.57	-	41.96	32.66	9.70	34.16

BT-LE(1Mbps)

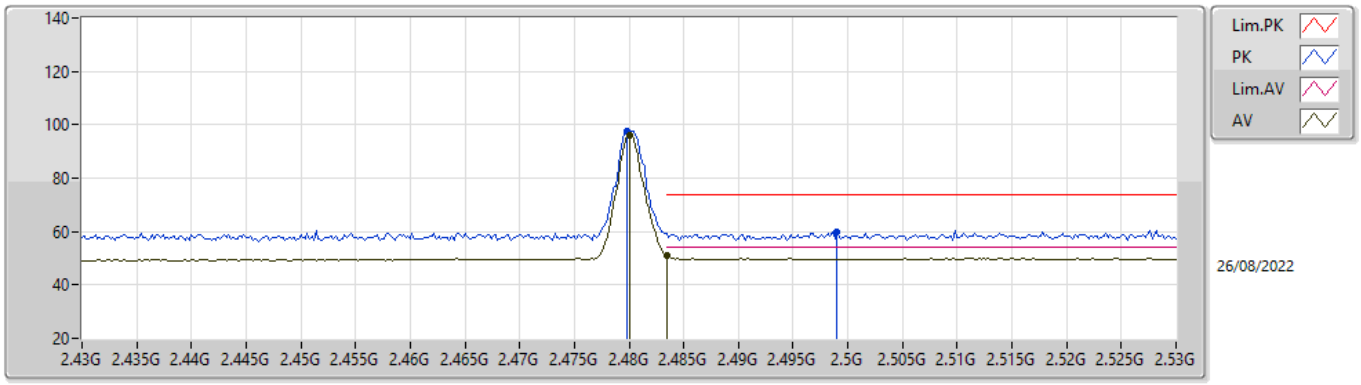
2480MHz_TX



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	100.51	Inf	-Inf	36.02	3	Vertical	41	1.59	-	64.49	27.68	8.34	-
AV	2.4835G	53.09	54.00	-0.91	36.04	3	Vertical	41	1.59	-	17.05	27.70	8.34	-
PK	2.4802G	102.04	Inf	-Inf	36.02	3	Vertical	41	1.59	-	66.02	27.68	8.34	-
PK	2.487G	60.63	74.00	-13.37	36.07	3	Vertical	41	1.59	-	24.56	27.72	8.35	-

BT-LE(1Mbps)

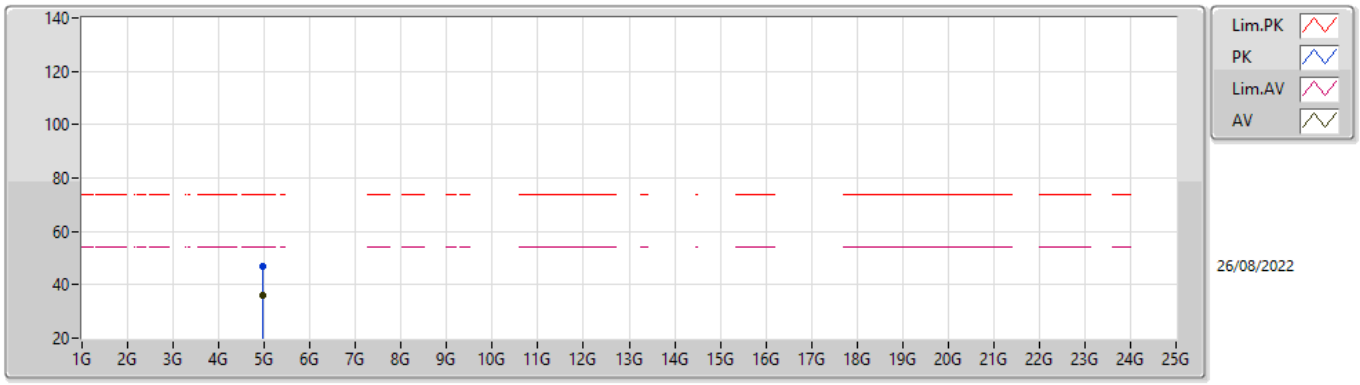
2480MHz_TX



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	96.22	Inf	-Inf	36.02	3	Horizontal	184	1.20	-	60.20	27.68	8.34	-
AV	2.4835G	50.81	54.00	-3.19	36.04	3	Horizontal	184	1.20	-	14.77	27.70	8.34	-
PK	2.4798G	97.69	Inf	-Inf	36.02	3	Horizontal	184	1.20	-	61.67	27.68	8.34	-
PK	2.499G	59.92	74.00	-14.08	36.14	3	Horizontal	184	1.20	-	23.78	27.79	8.35	-

BT-LE(1Mbps)

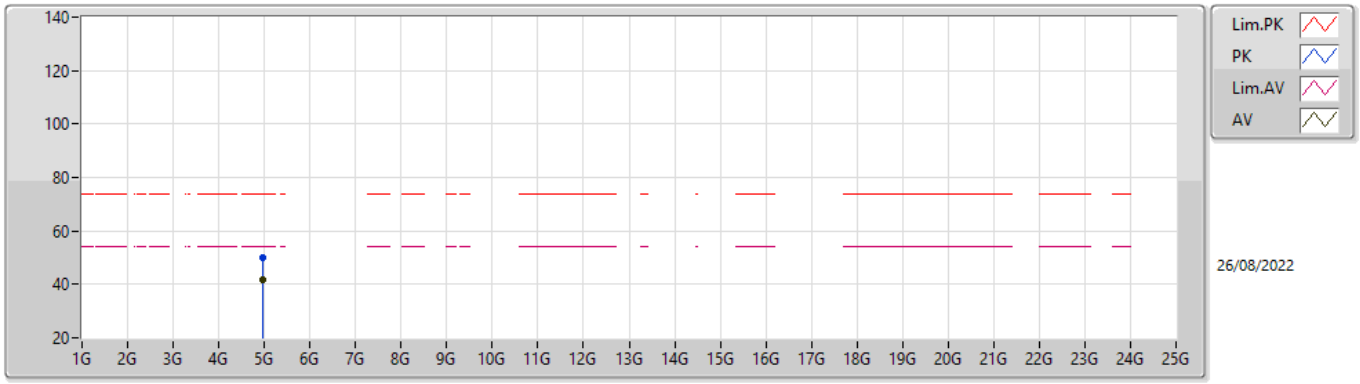
2480MHz_TX



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	4.96011G	36.15	54.00	-17.85	8.55	3	Vertical	320	1.19	-	27.60	32.94	9.73	34.12
PK	4.96109G	46.70	74.00	-27.30	8.55	3	Vertical	320	1.19	-	38.15	32.94	9.73	34.12

BT-LE(1Mbps)

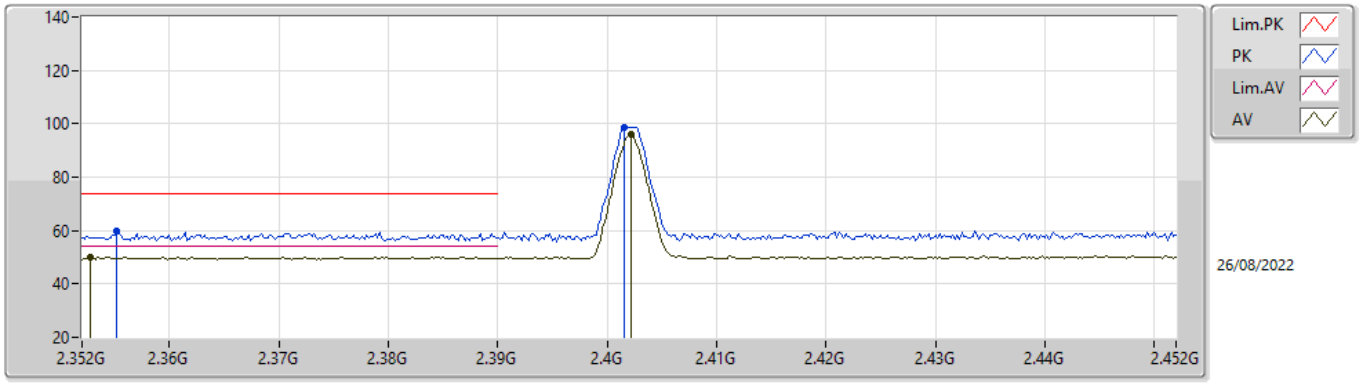
2480MHz_TX



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	4.95996G	41.89	54.00	-12.11	8.55	3	Horizontal	193	1.76	-	33.34	32.94	9.73	34.12
PK	4.9604G	49.97	74.00	-24.03	8.55	3	Horizontal	193	1.76	-	41.42	32.94	9.73	34.12

BT-LE(2Mbps)

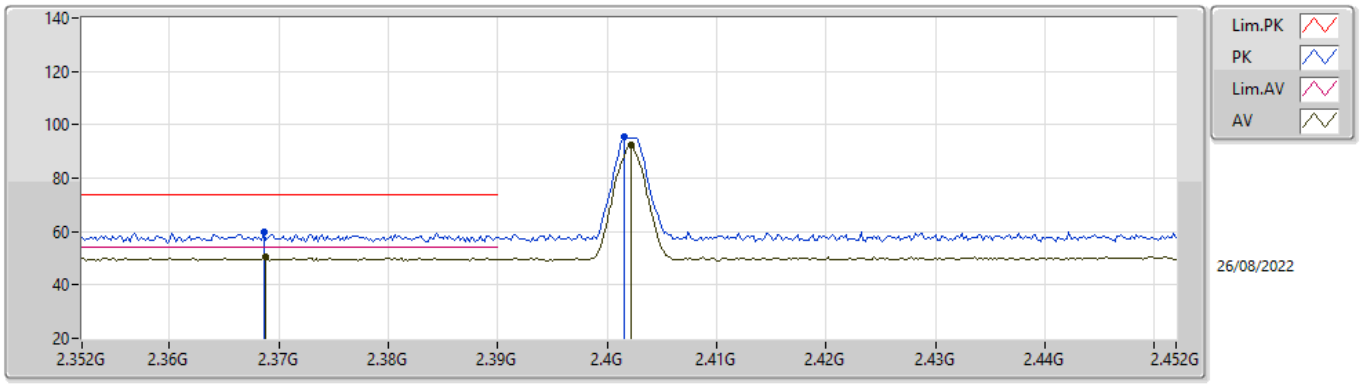
2402MHz_TX



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	2.3528G	50.07	54.00	-3.93	35.46	3	Vertical	46	1.06	-	14.61	27.21	8.25	-
AV	2.4022G	96.11	Inf	-Inf	35.60	3	Vertical	46	1.06	-	60.51	27.31	8.29	-
PK	2.3552G	59.86	74.00	-14.14	35.47	3	Vertical	46	1.06	-	24.39	27.21	8.26	-
PK	2.4016G	98.71	Inf	-Inf	35.60	3	Vertical	46	1.06	-	63.11	27.31	8.29	-

BT-LE(2Mbps)

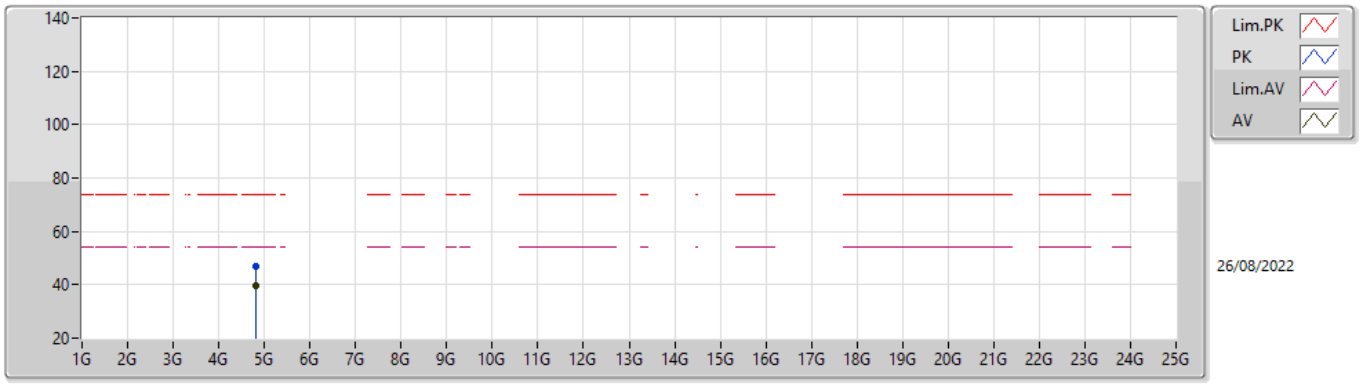
2402MHz_TX



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	2.3688G	50.37	54.00	-3.63	35.51	3	Horizontal	317	1.50	-	14.86	27.24	8.27	-
AV	2.4022G	92.64	Inf	-Inf	35.60	3	Horizontal	317	1.50	-	57.04	27.31	8.29	-
PK	2.3686G	59.64	74.00	-14.36	35.51	3	Horizontal	317	1.50	-	24.13	27.24	8.27	-
PK	2.4016G	95.37	Inf	-Inf	35.60	3	Horizontal	317	1.50	-	59.77	27.31	8.29	-

BT-LE(2Mbps)

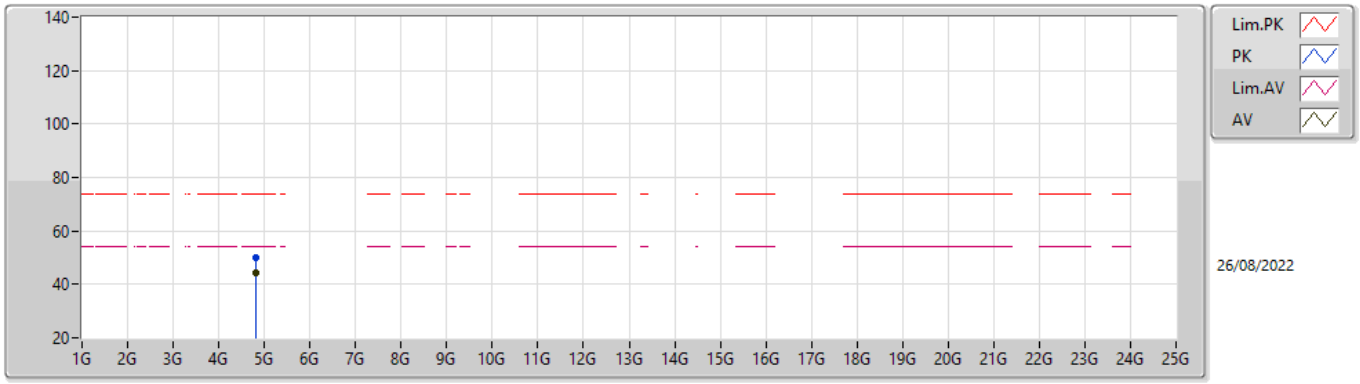
2402MHz_TX



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	4.80406G	39.54	54.00	-14.46	7.99	3	Vertical	32	1.54	-	31.55	32.51	9.67	34.19
PK	4.80503G	46.71	74.00	-27.29	7.99	3	Vertical	32	1.54	-	38.72	32.51	9.67	34.19

BT-LE(2Mbps)

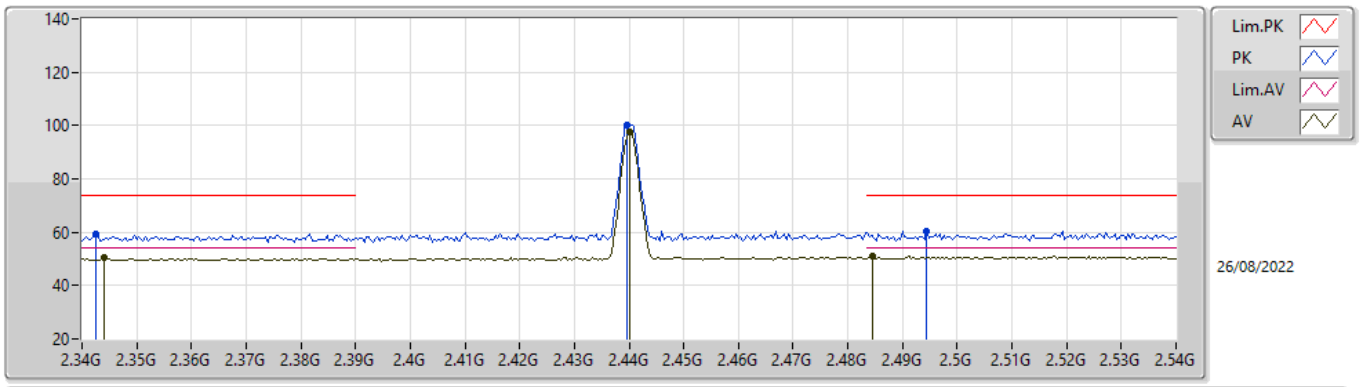
2402MHz_TX



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	4.80396G	44.22	54.00	-9.78	7.99	3	Horizontal	180	1.24	-	36.23	32.51	9.67	34.19
PK	4.8032G	50.15	74.00	-23.85	7.99	3	Horizontal	180	1.24	-	42.16	32.51	9.67	34.19

BT-LE(2Mbps)

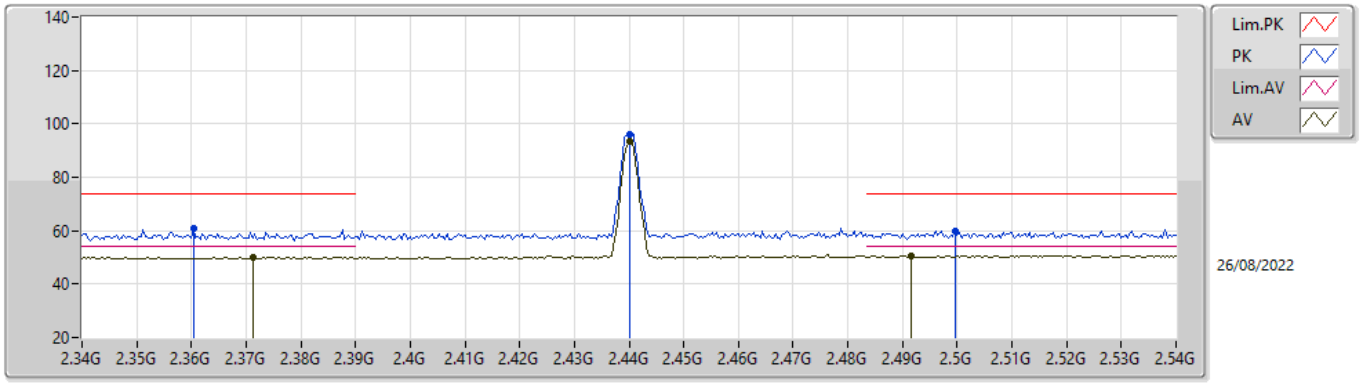
2440MHz_TX



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	2.344G	50.30	54.00	-3.70	35.43	3	Vertical	44	1.02	-	14.87	27.18	8.25	-
AV	2.44G	97.70	Inf	-Inf	35.78	3	Vertical	44	1.02	-	61.92	27.46	8.32	-
AV	2.4844G	50.83	54.00	-3.17	36.05	3	Vertical	44	1.02	-	14.78	27.71	8.34	-
PK	2.3424G	59.35	74.00	-14.65	35.42	3	Vertical	44	1.02	-	23.93	27.17	8.25	-
PK	2.4396G	100.39	Inf	-Inf	35.78	3	Vertical	44	1.02	-	64.61	27.46	8.32	-
PK	2.4944G	60.17	74.00	-13.83	36.12	3	Vertical	44	1.02	-	24.05	27.77	8.35	-

BT-LE(2Mbps)

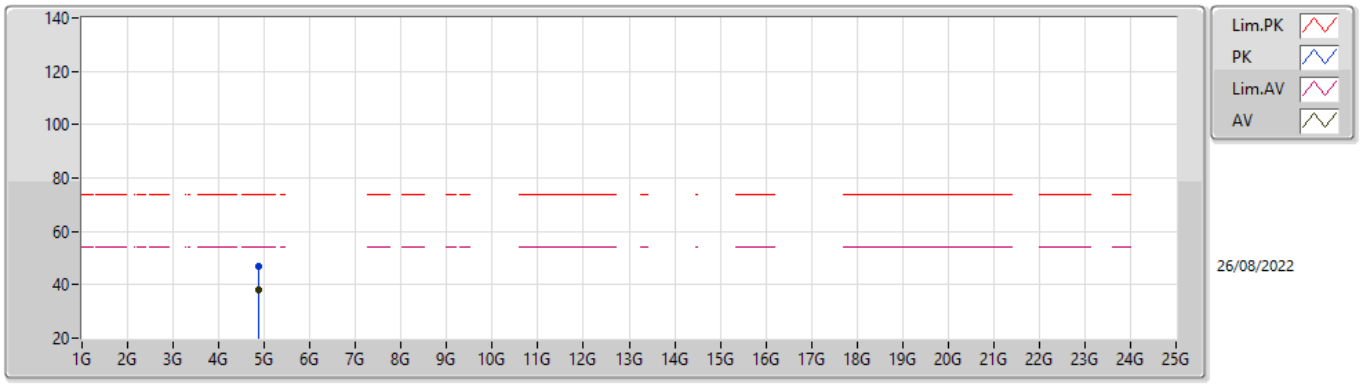
2440MHz_TX



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	2.3712G	50.15	54.00	-3.85	35.51	3	Horizontal	308	1.50	-	14.64	27.24	8.27	-
AV	2.44G	93.46	Inf	-Inf	35.78	3	Horizontal	308	1.50	-	57.68	27.46	8.32	-
AV	2.4916G	50.69	54.00	-3.31	36.10	3	Horizontal	308	1.50	-	14.59	27.75	8.35	-
PK	2.3604G	60.62	74.00	-13.38	35.48	3	Horizontal	308	1.50	-	25.14	27.22	8.26	-
PK	2.44G	96.21	Inf	-Inf	35.78	3	Horizontal	308	1.50	-	60.43	27.46	8.32	-
PK	2.4996G	59.88	74.00	-14.12	36.15	3	Horizontal	308	1.50	-	23.73	27.80	8.35	-

BT-LE(2Mbps)

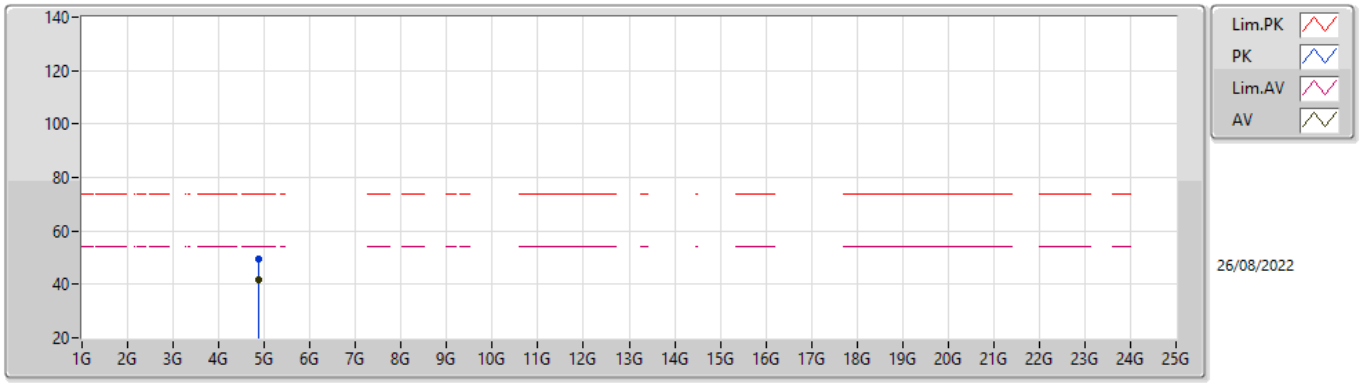
2440MHz_TX



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	4.88009G	38.20	54.00	-15.80	8.20	3	Vertical	34	2.06	-	30.00	32.66	9.70	34.16
PK	4.88003G	46.73	74.00	-27.27	8.20	3	Vertical	34	2.06	-	38.53	32.66	9.70	34.16

BT-LE(2Mbps)

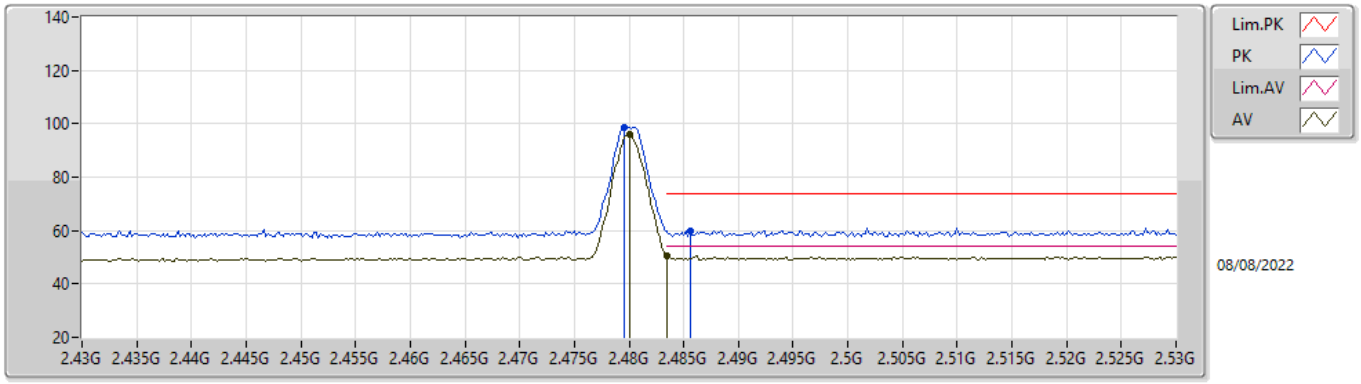
2440MHz_TX



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	4.88008G	41.61	54.00	-12.39	8.20	3	Horizontal	195	1.50	-	33.41	32.66	9.70	34.16
PK	4.88079G	49.56	74.00	-24.44	8.20	3	Horizontal	195	1.50	-	41.36	32.66	9.70	34.16

BT-LE(2Mbps)

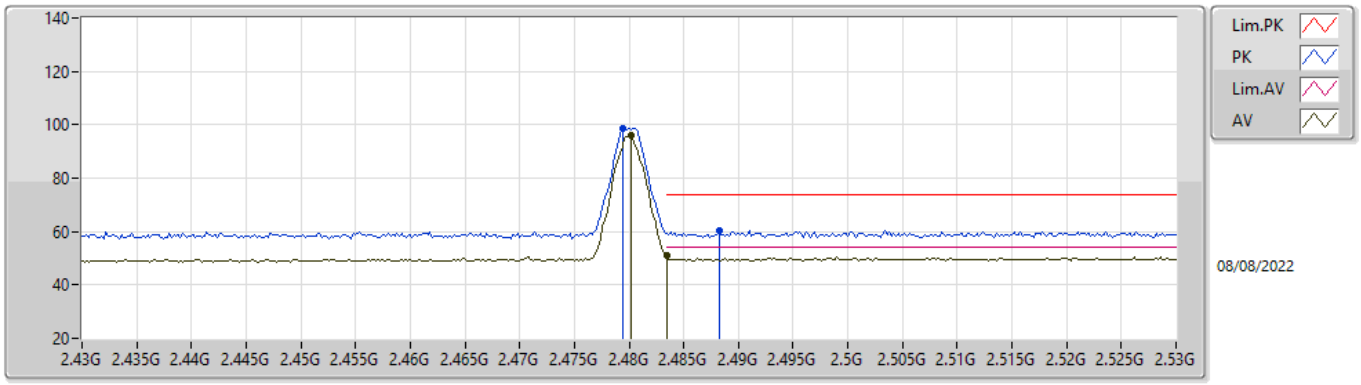
2480MHz_TX



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	95.98	Inf	-Inf	36.02	3	Vertical	106	1.33	-	59.96	27.68	8.34	-
AV	2.4835G	50.75	54.00	-3.25	36.04	3	Vertical	106	1.33	-	14.71	27.70	8.34	-
PK	2.4796G	98.85	Inf	-Inf	36.02	3	Vertical	106	1.33	-	62.83	27.68	8.34	-
PK	2.4856G	59.94	74.00	-14.06	36.06	3	Vertical	106	1.33	-	23.88	27.71	8.35	-

BT-LE(2Mbps)

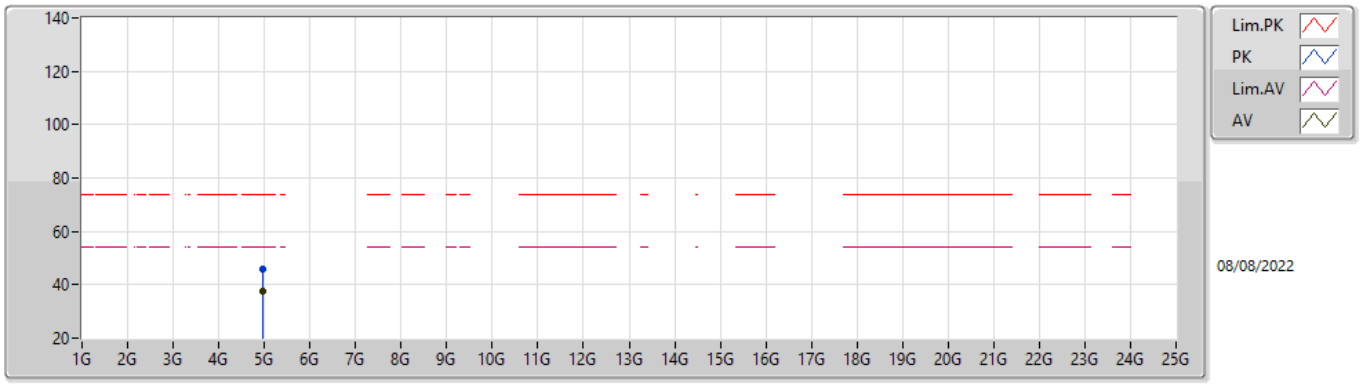
2480MHz_TX



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	2.4802G	95.84	Inf	-Inf	36.02	3	Horizontal	185	1.37	-	59.82	27.68	8.34	-
AV	2.4835G	50.80	54.00	-3.20	36.04	3	Horizontal	185	1.37	-	14.76	27.70	8.34	-
PK	2.4794G	98.59	Inf	-Inf	36.02	3	Horizontal	185	1.37	-	62.57	27.68	8.34	-
PK	2.4882G	60.35	74.00	-13.65	36.08	3	Horizontal	185	1.37	-	24.27	27.73	8.35	-

BT-LE(2Mbps)

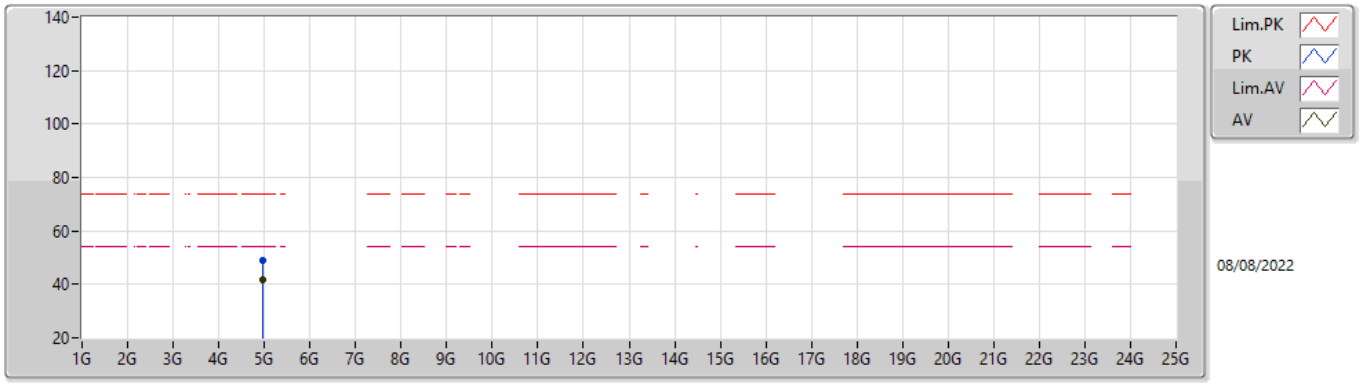
2480MHz_TX



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	4.96009G	37.37	54.00	-16.63	8.55	3	Vertical	52	1.01	-	28.82	32.94	9.73	34.12
PK	4.95987G	45.95	74.00	-28.05	8.55	3	Vertical	52	1.01	-	37.40	32.94	9.73	34.12

BT-LE(2Mbps)

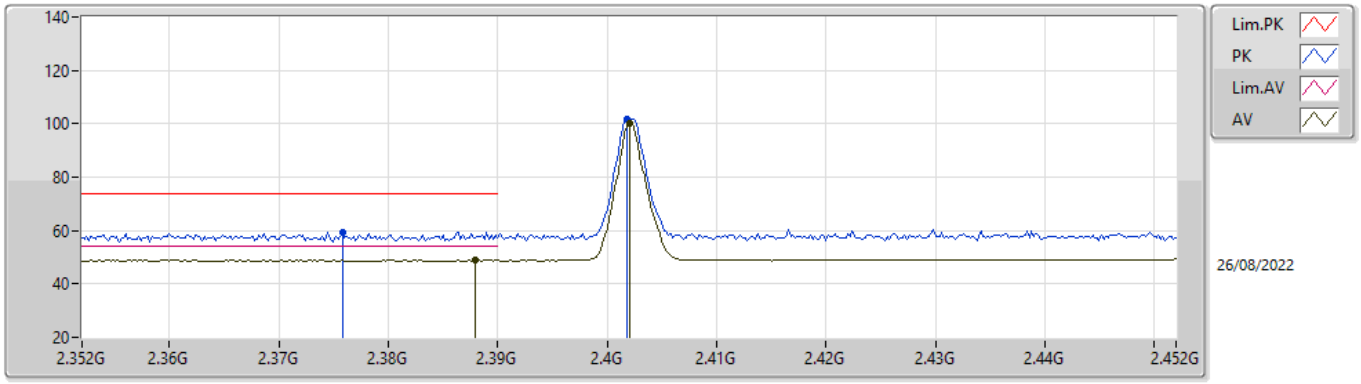
2480MHz_TX



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	4.96011G	41.60	54.00	-12.40	8.55	3	Horizontal	193	2.32	-	33.05	32.94	9.73	34.12
PK	4.96099G	49.01	74.00	-24.99	8.55	3	Horizontal	193	2.32	-	40.46	32.94	9.73	34.12

BT-LE(125kbps)

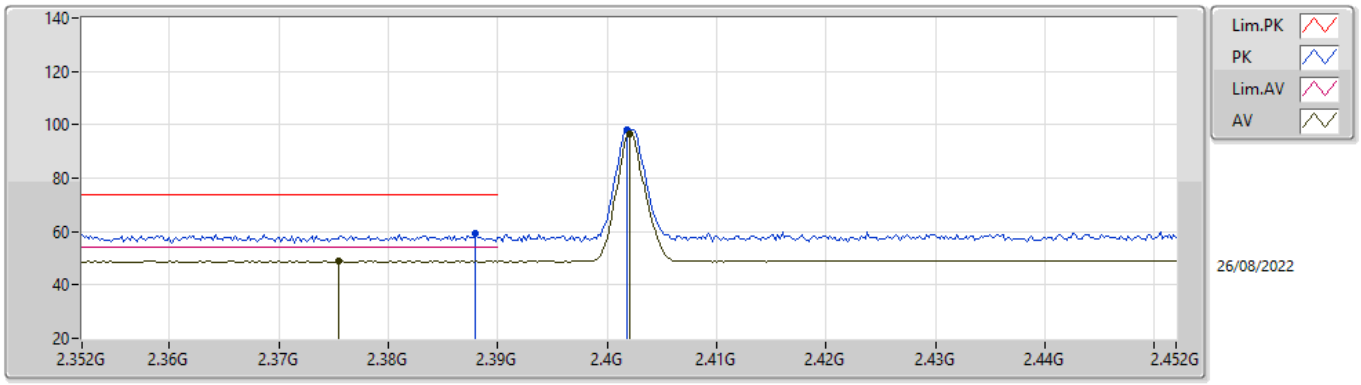
2402MHz_TX



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	2.388G	48.94	54.00	-5.06	35.56	3	Vertical	47	1.05	-	13.38	27.28	8.28	-
AV	2.402G	99.98	Inf	-Inf	35.60	3	Vertical	47	1.05	-	64.38	27.31	8.29	-
PK	2.3758G	59.50	74.00	-14.50	35.52	3	Vertical	47	1.05	-	23.98	27.25	8.27	-
PK	2.4018G	101.63	Inf	-Inf	35.60	3	Vertical	47	1.05	-	66.03	27.31	8.29	-

BT-LE(125kbps)

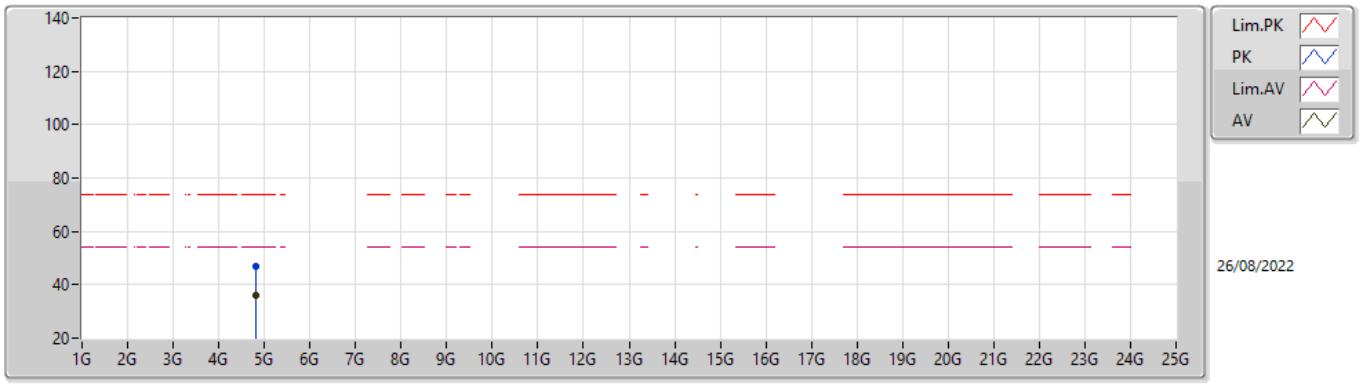
2402MHz_TX



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	2.3754G	48.87	54.00	-5.13	35.52	3	Horizontal	310	1.34	-	13.35	27.25	8.27	-
AV	2.402G	96.57	Inf	-Inf	35.60	3	Horizontal	310	1.34	-	60.97	27.31	8.29	-
PK	2.388G	59.08	74.00	-14.92	35.56	3	Horizontal	310	1.34	-	23.52	27.28	8.28	-
PK	2.4018G	98.21	Inf	-Inf	35.60	3	Horizontal	310	1.34	-	62.61	27.31	8.29	-

BT-LE(125kbps)

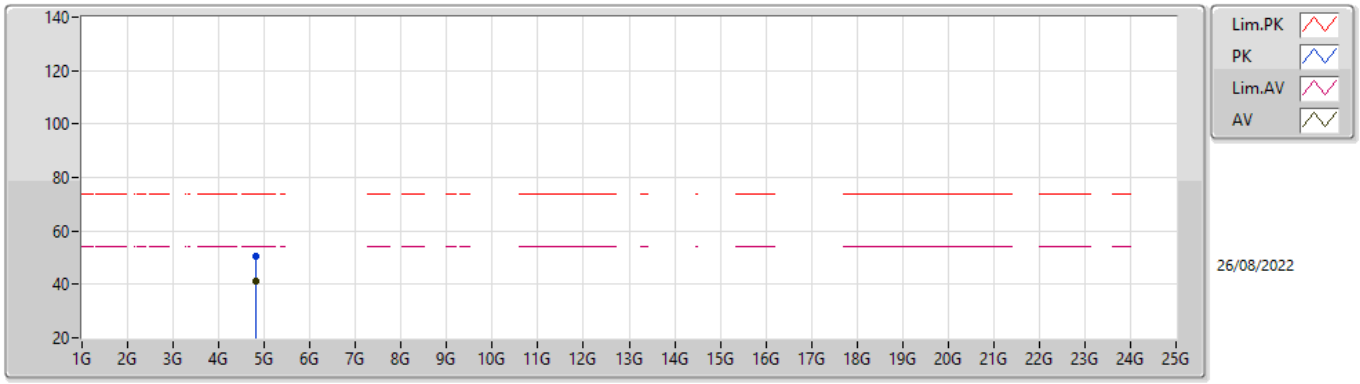
2402MHz_TX



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	4.80422G	36.24	54.00	-17.76	7.99	3	Vertical	326	1.33	-	28.25	32.51	9.67	34.19
PK	4.80384G	47.10	74.00	-26.90	7.99	3	Vertical	326	1.33	-	39.11	32.51	9.67	34.19

BT-LE(125kbps)

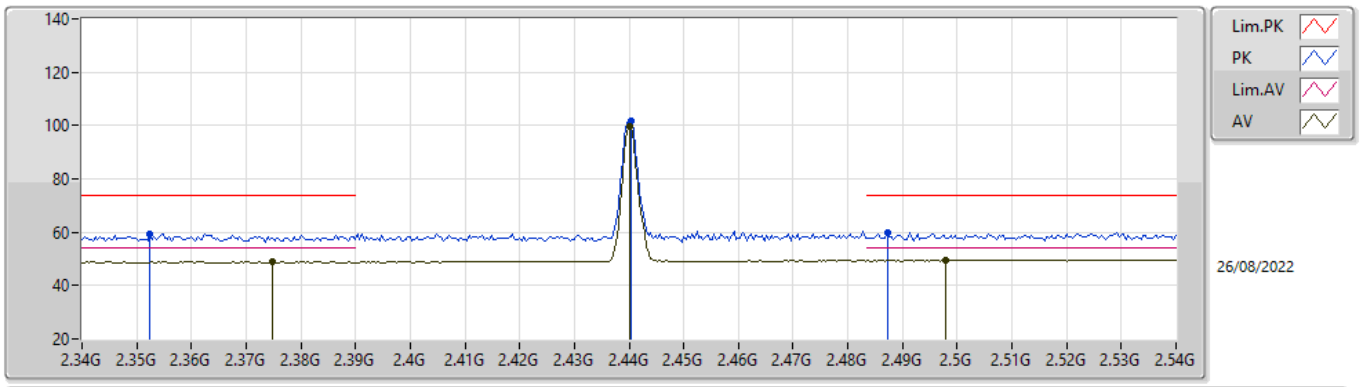
2402MHz_TX



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	4.80412G	41.21	54.00	-12.79	7.99	3	Horizontal	181	1.26	-	33.22	32.51	9.67	34.19
PK	4.80364G	50.34	74.00	-23.66	7.99	3	Horizontal	181	1.26	-	42.35	32.51	9.67	34.19

BT-LE(125kbps)

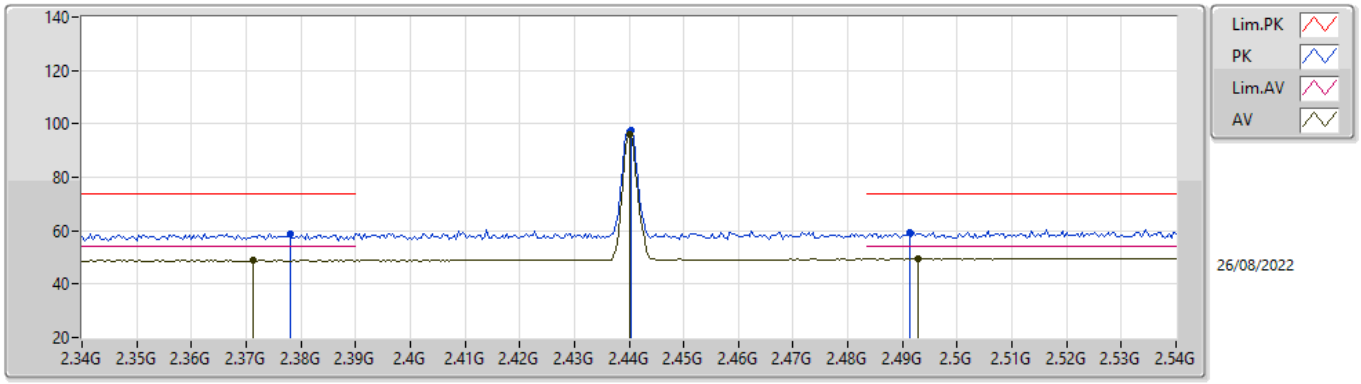
2440MHz_TX



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	2.3748G	48.89	54.00	-5.11	35.52	3	Vertical	46	1.21	-	13.37	27.25	8.27	-
AV	2.44G	99.88	Inf	-Inf	35.78	3	Vertical	46	1.21	-	64.10	27.46	8.32	-
AV	2.498G	49.49	54.00	-4.51	36.14	3	Vertical	46	1.21	-	13.35	27.79	8.35	-
PK	2.3524G	59.33	74.00	-14.67	35.45	3	Vertical	46	1.21	-	23.88	27.20	8.25	-
PK	2.4404G	101.51	Inf	-Inf	35.78	3	Vertical	46	1.21	-	65.73	27.46	8.32	-
PK	2.4872G	59.92	74.00	-14.08	36.07	3	Vertical	46	1.21	-	23.85	27.72	8.35	-

BT-LE(125kbps)

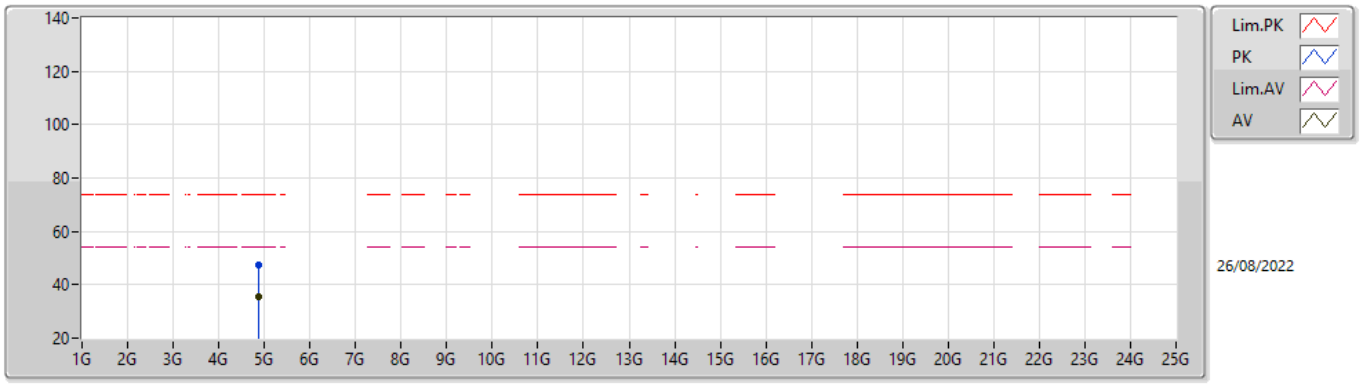
2440MHz_TX



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	2.3712G	48.84	54.00	-5.16	35.51	3	Horizontal	308	1.69	-	13.33	27.24	8.27	-
AV	2.44G	96.22	Inf	-Inf	35.78	3	Horizontal	308	1.69	-	60.44	27.46	8.32	-
AV	2.4928G	49.51	54.00	-4.49	36.11	3	Horizontal	308	1.69	-	13.40	27.76	8.35	-
PK	2.378G	58.94	74.00	-15.06	35.53	3	Horizontal	308	1.69	-	23.41	27.26	8.27	-
PK	2.4404G	97.84	Inf	-Inf	35.78	3	Horizontal	308	1.69	-	62.06	27.46	8.32	-
PK	2.4912G	59.42	74.00	-14.58	36.10	3	Horizontal	308	1.69	-	23.32	27.75	8.35	-

BT-LE(125kbps)

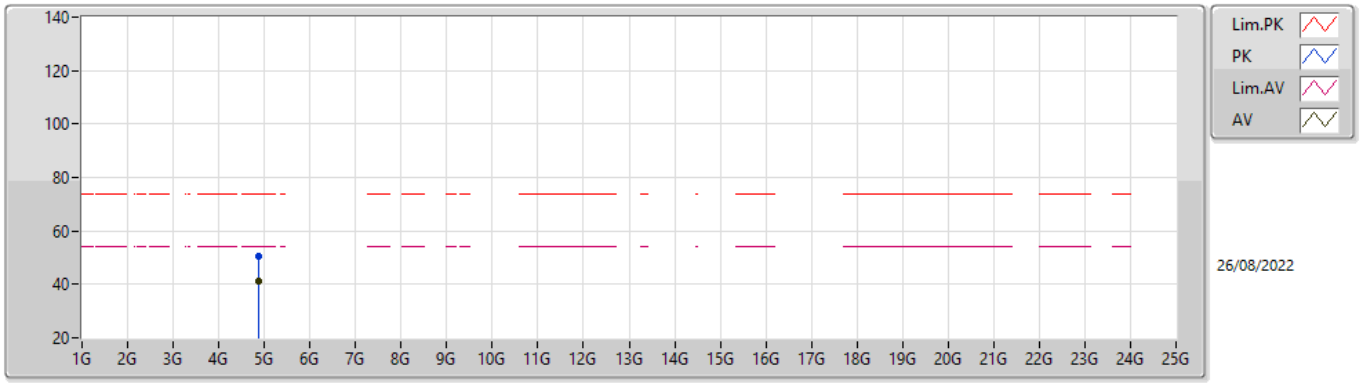
2440MHz_TX



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	4.88039G	35.40	54.00	-18.60	8.20	3	Vertical	328	1.15	-	27.20	32.66	9.70	34.16
PK	4.87926G	47.39	74.00	-26.61	8.20	3	Vertical	328	1.15	-	39.19	32.66	9.70	34.16

BT-LE(125kbps)

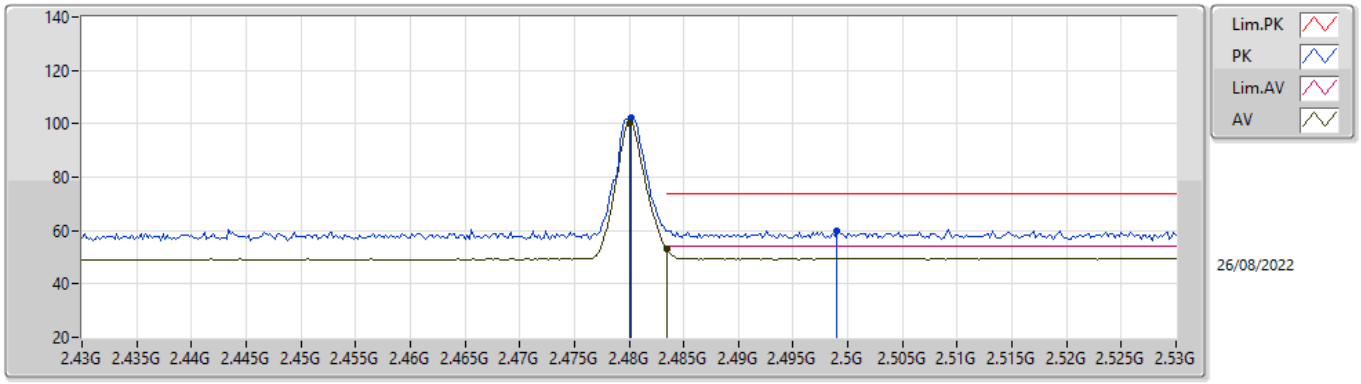
2440MHz_TX



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	4.88008G	41.32	54.00	-12.68	8.20	3	Horizontal	182	1.02	-	33.12	32.66	9.70	34.16
PK	4.88042G	50.56	74.00	-23.44	8.20	3	Horizontal	182	1.02	-	42.36	32.66	9.70	34.16

BT-LE(125kbps)

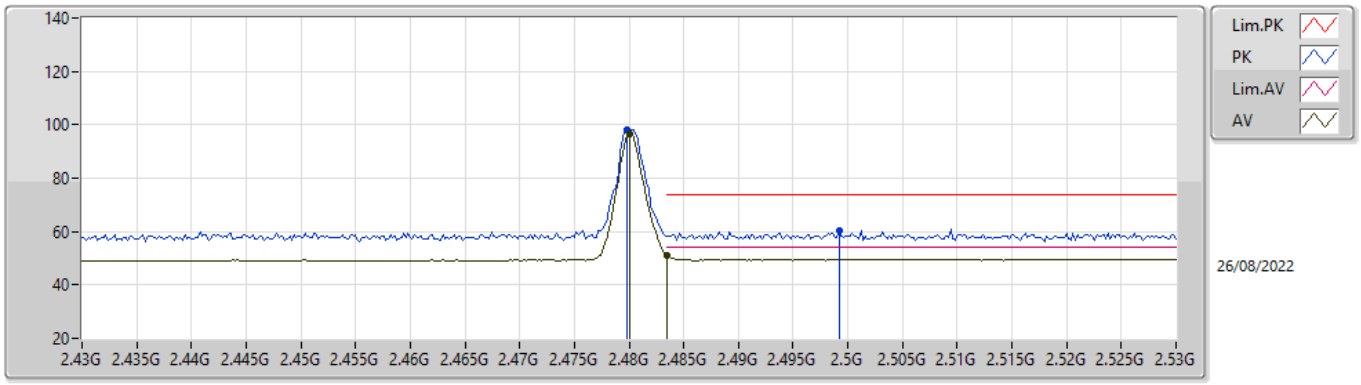
2480MHz_TX



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	100.35	Inf	-Inf	36.02	3	Vertical	43	1.60	-	64.33	27.68	8.34	-
AV	2.4835G	53.05	54.00	-0.95	36.04	3	Vertical	43	1.60	-	17.01	27.70	8.34	-
PK	2.4802G	102.00	Inf	-Inf	36.02	3	Vertical	43	1.60	-	65.98	27.68	8.34	-
PK	2.499G	60.07	74.00	-13.93	36.14	3	Vertical	43	1.60	-	23.93	27.79	8.35	-

BT-LE(125kbps)

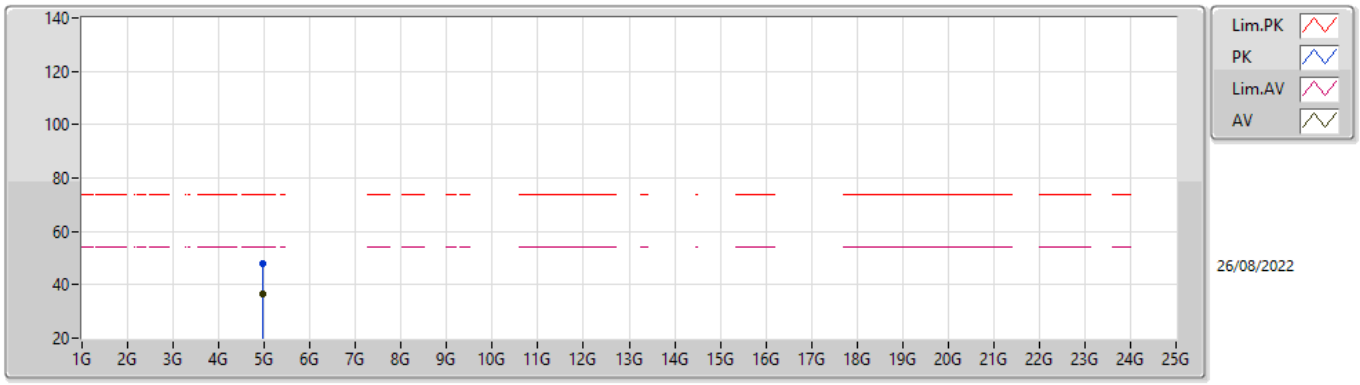
2480MHz_TX



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	96.64	Inf	-Inf	36.02	3	Horizontal	184	1.20	-	60.62	27.68	8.34	-
AV	2.4835G	51.16	54.00	-2.84	36.04	3	Horizontal	184	1.20	-	15.12	27.70	8.34	-
PK	2.4798G	98.25	Inf	-Inf	36.02	3	Horizontal	184	1.20	-	62.23	27.68	8.34	-
PK	2.4992G	60.16	74.00	-13.84	36.15	3	Horizontal	184	1.20	-	24.01	27.80	8.35	-

BT-LE(125kbps)

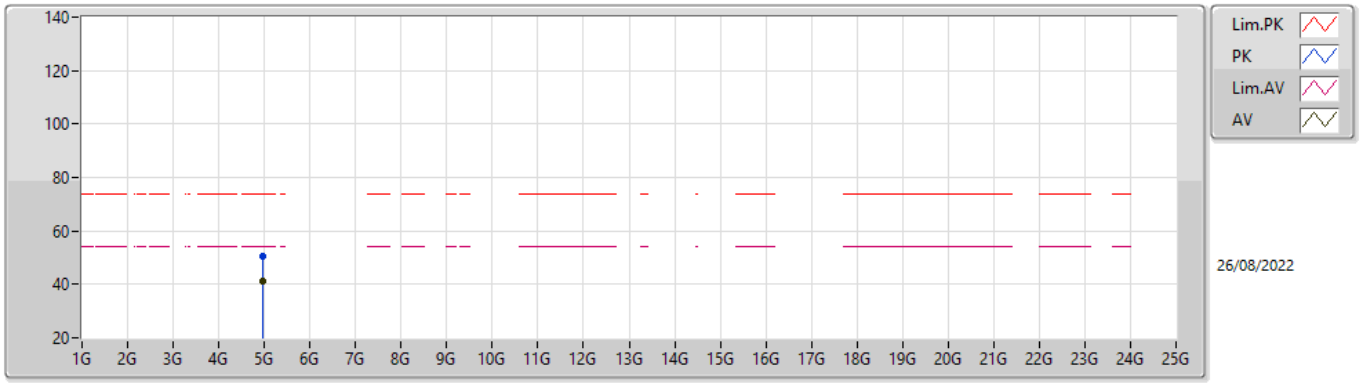
2480MHz_TX



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	4.96007G	36.79	54.00	-17.21	8.55	3	Vertical	175	2.77	-	28.24	32.94	9.73	34.12
PK	4.95981G	48.04	74.00	-25.96	8.55	3	Vertical	175	2.77	-	39.49	32.94	9.73	34.12

BT-LE(125kbps)

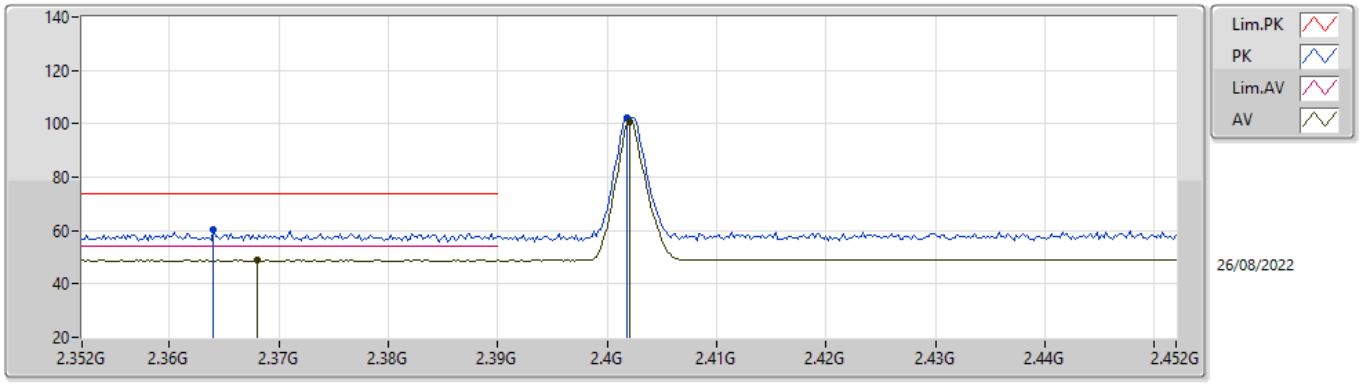
2480MHz_TX



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	4.96004G	41.12	54.00	-12.88	8.55	3	Horizontal	192	1.76	-	32.57	32.94	9.73	34.12
PK	4.95945G	50.76	74.00	-23.24	8.55	3	Horizontal	192	1.76	-	42.21	32.94	9.73	34.12

BT-LE(500kbps)

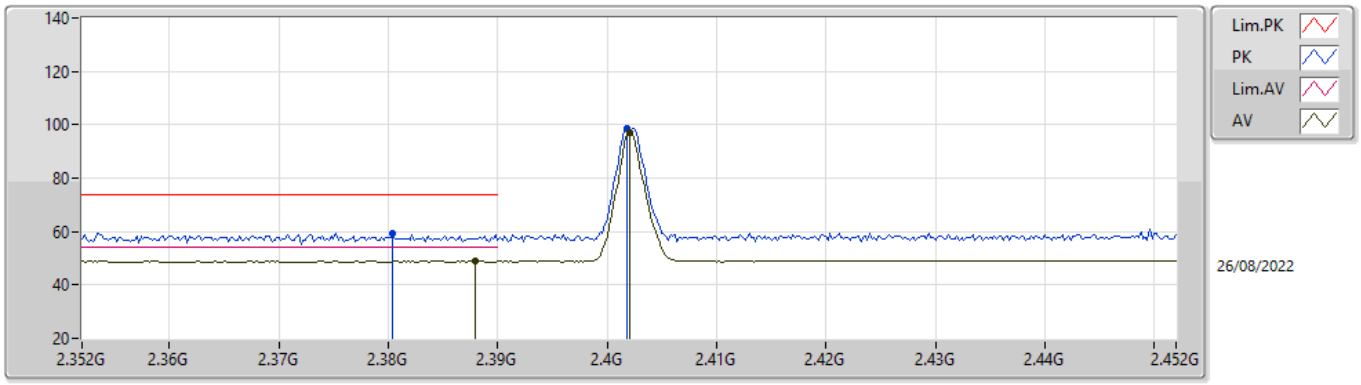
2402MHz_TX



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	2.368G	48.86	54.00	-5.14	35.51	3	Vertical	47	1.04	-	13.35	27.24	8.27	-
AV	2.402G	100.59	Inf	-Inf	35.60	3	Vertical	47	1.04	-	64.99	27.31	8.29	-
PK	2.364G	60.19	74.00	-13.81	35.49	3	Vertical	47	1.04	-	24.70	27.23	8.26	-
PK	2.4018G	102.23	Inf	-Inf	35.60	3	Vertical	47	1.04	-	66.63	27.31	8.29	-

BT-LE(500kbps)

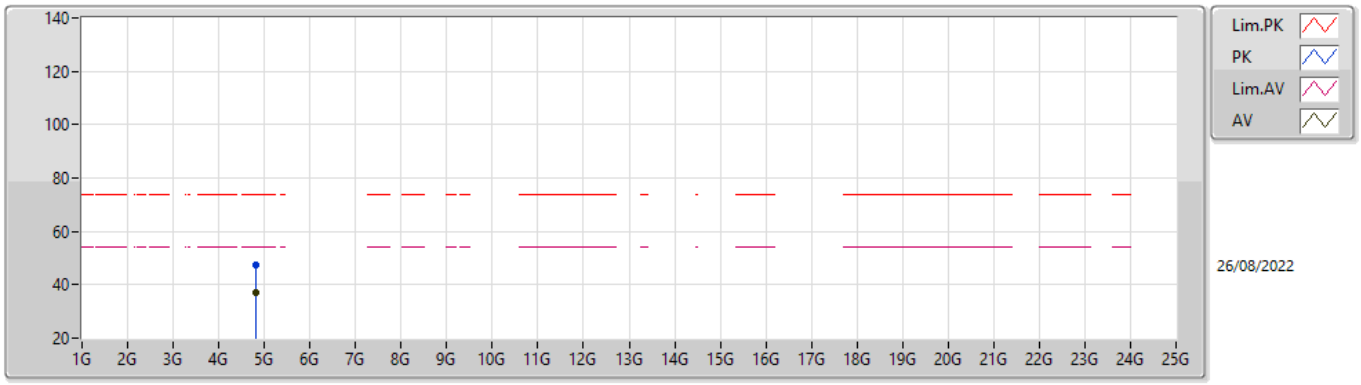
2402MHz_TX



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	2.388G	48.88	54.00	-5.12	35.56	3	Horizontal	308	1.32	-	13.32	27.28	8.28	-
AV	2.402G	97.09	Inf	-Inf	35.60	3	Horizontal	308	1.32	-	61.49	27.31	8.29	-
PK	2.3804G	59.45	74.00	-14.55	35.54	3	Horizontal	308	1.32	-	23.91	27.26	8.28	-
PK	2.4018G	98.61	Inf	-Inf	35.60	3	Horizontal	308	1.32	-	63.01	27.31	8.29	-

BT-LE(500kbps)

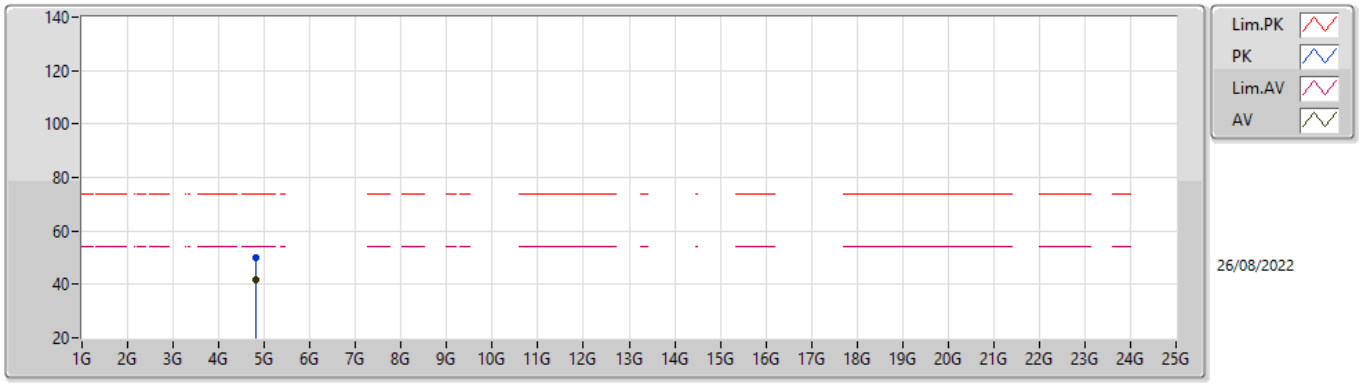
2402MHz_TX



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	4.80406G	36.90	54.00	-17.10	7.99	3	Vertical	327	1.12	-	28.91	32.51	9.67	34.19
PK	4.80422G	47.48	74.00	-26.52	7.99	3	Vertical	327	1.12	-	39.49	32.51	9.67	34.19

BT-LE(500kbps)

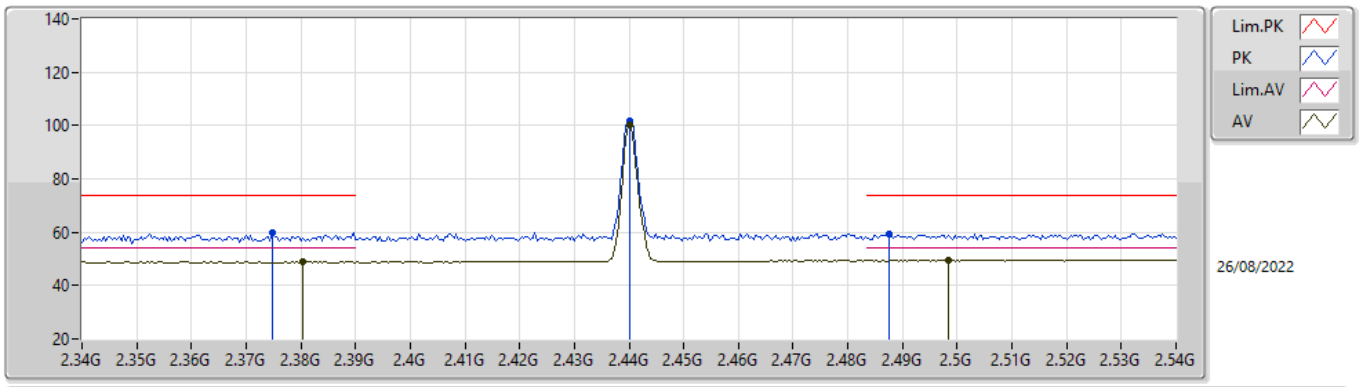
2402MHz_TX



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	4.80403G	41.50	54.00	-12.50	7.99	3	Horizontal	181	1.31	-	33.51	32.51	9.67	34.19
PK	4.80361G	50.10	74.00	-23.90	7.99	3	Horizontal	181	1.31	-	42.11	32.51	9.67	34.19

BT-LE(500kbps)

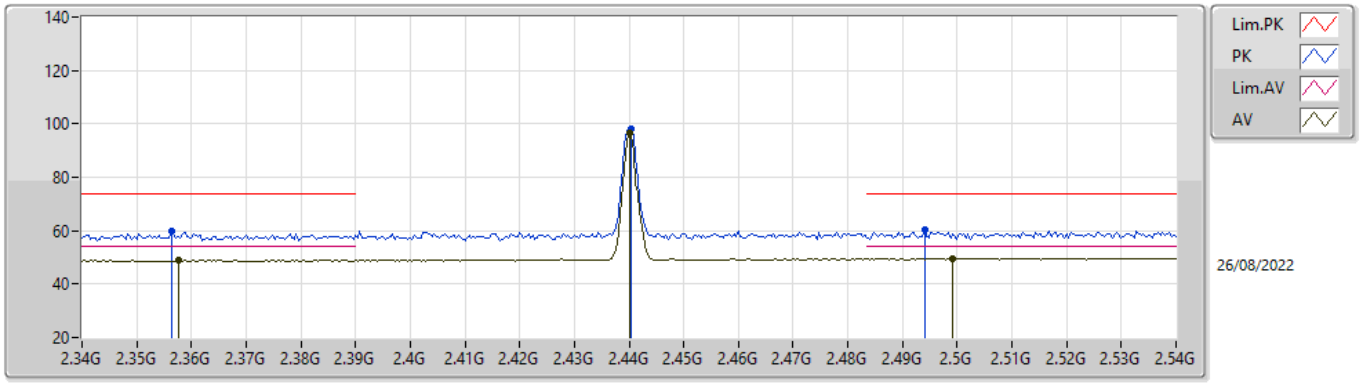
2440MHz_TX



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	2.3804G	48.92	54.00	-5.08	35.54	3	Vertical	46	1.21	-	13.38	27.26	8.28	-
AV	2.44G	100.15	Inf	-Inf	35.78	3	Vertical	46	1.21	-	64.37	27.46	8.32	-
AV	2.4984G	49.47	54.00	-4.53	36.14	3	Vertical	46	1.21	-	13.33	27.79	8.35	-
PK	2.3748G	59.84	74.00	-14.16	35.52	3	Vertical	46	1.21	-	24.32	27.25	8.27	-
PK	2.44G	101.65	Inf	-Inf	35.78	3	Vertical	46	1.21	-	65.87	27.46	8.32	-
PK	2.4876G	59.08	74.00	-14.92	36.08	3	Vertical	46	1.21	-	23.00	27.73	8.35	-

BT-LE(500kbps)

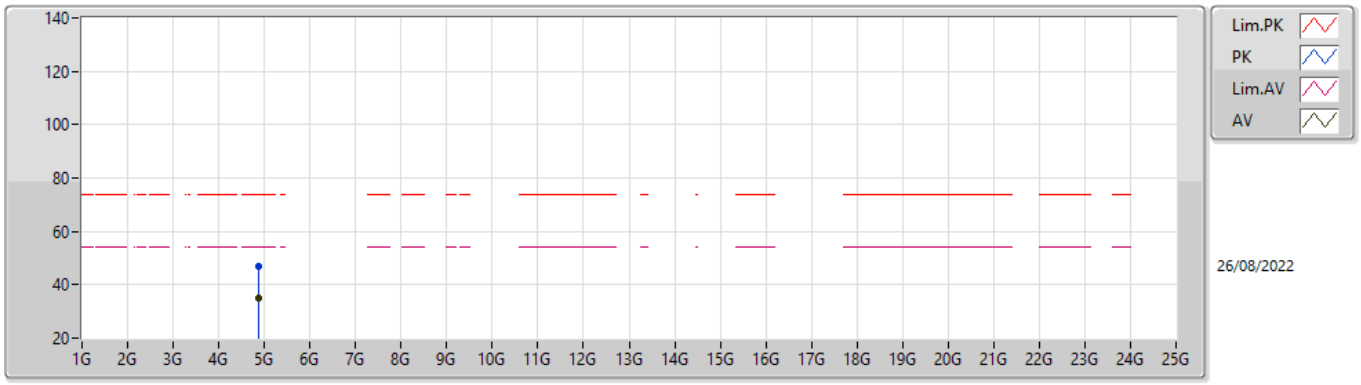
2440MHz_TX



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	2.3576G	48.90	54.00	-5.10	35.48	3	Horizontal	309	2.13	-	13.42	27.22	8.26	-
AV	2.44G	96.45	Inf	-Inf	35.78	3	Horizontal	309	2.13	-	60.67	27.46	8.32	-
AV	2.4992G	49.49	54.00	-4.51	36.15	3	Horizontal	309	2.13	-	13.34	27.80	8.35	-
PK	2.3564G	59.69	74.00	-14.31	35.47	3	Horizontal	309	2.13	-	24.22	27.21	8.26	-
PK	2.4404G	97.87	Inf	-Inf	35.78	3	Horizontal	309	2.13	-	62.09	27.46	8.32	-
PK	2.494G	60.21	74.00	-13.79	36.11	3	Horizontal	309	2.13	-	24.10	27.76	8.35	-

BT-LE(500kbps)

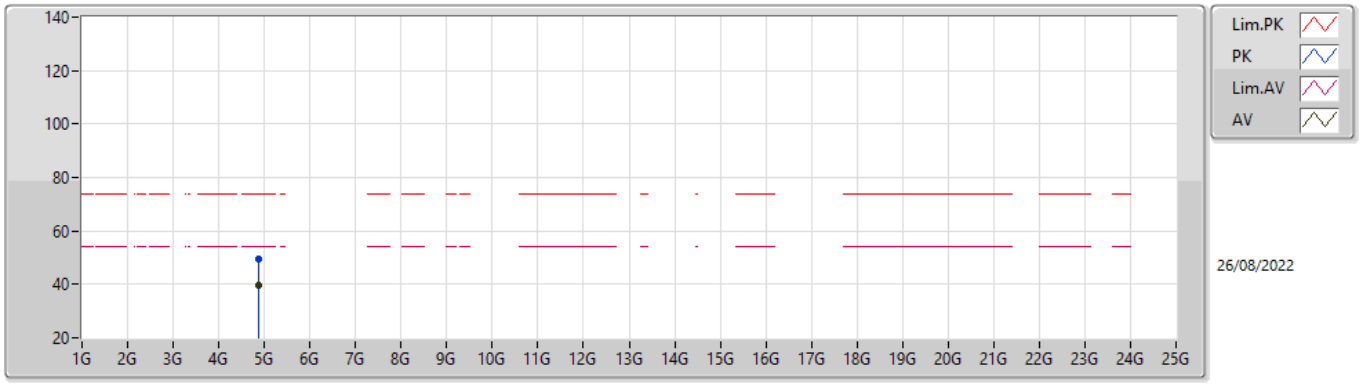
2440MHz_TX



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	4.87998G	35.07	54.00	-18.93	8.20	3	Vertical	301	2.92	-	26.87	32.66	9.70	34.16
PK	4.88006G	46.85	74.00	-27.15	8.20	3	Vertical	301	2.92	-	38.65	32.66	9.70	34.16

BT-LE(500kbps)

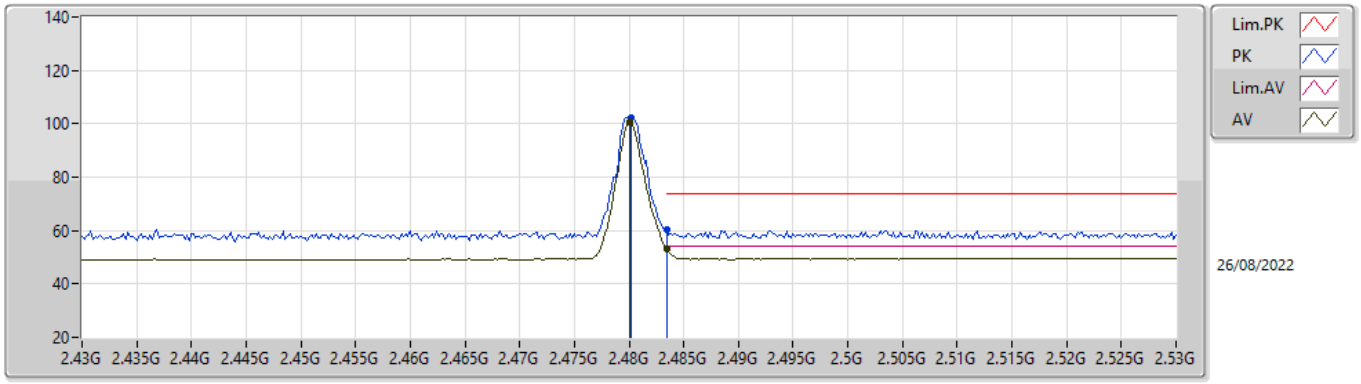
2440MHz_TX



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	4.88004G	39.79	54.00	-14.21	8.20	3	Horizontal	195	1.68	-	31.59	32.66	9.70	34.16
PK	4.8795G	49.24	74.00	-24.76	8.20	3	Horizontal	195	1.68	-	41.04	32.66	9.70	34.16

BT-LE(500kbps)

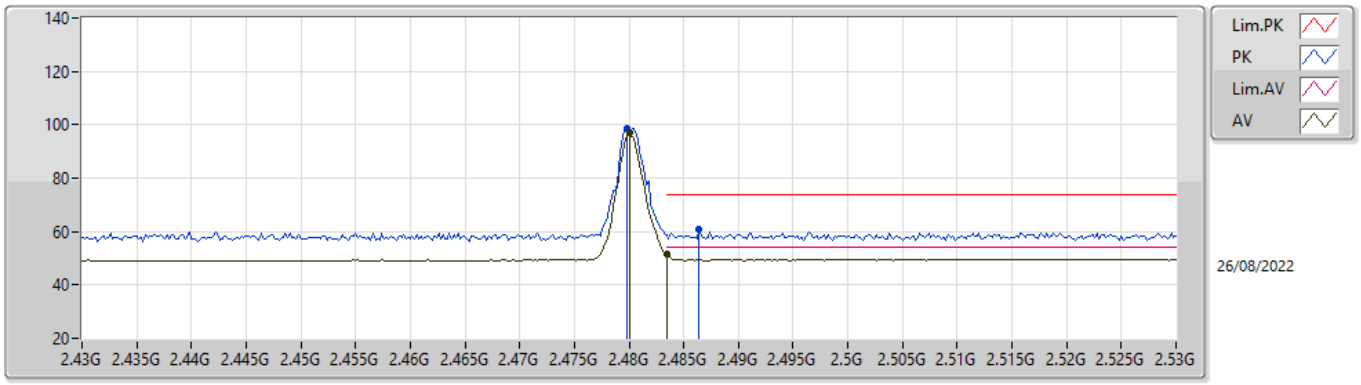
2480MHz_TX



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	100.62	Inf	-Inf	36.02	3	Vertical	43	1.60	-	64.60	27.68	8.34	-
AV	2.4835G	52.99	54.00	-1.01	36.04	3	Vertical	43	1.60	-	16.95	27.70	8.34	-
PK	2.4802G	102.05	Inf	-Inf	36.02	3	Vertical	43	1.60	-	66.03	27.68	8.34	-
PK	2.4835G	60.11	74.00	-13.89	36.04	3	Vertical	43	1.60	-	24.07	27.70	8.34	-

BT-LE(500kbps)

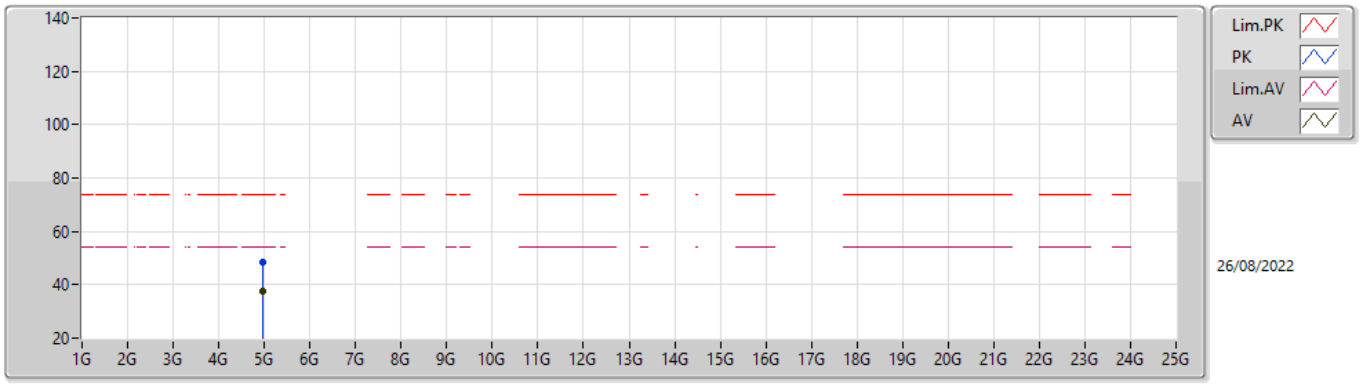
2480MHz_TX



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	96.92	Inf	-Inf	36.02	3	Horizontal	184	1.19	-	60.90	27.68	8.34	-
AV	2.4835G	51.33	54.00	-2.67	36.04	3	Horizontal	184	1.19	-	15.29	27.70	8.34	-
PK	2.4798G	98.41	Inf	-Inf	36.02	3	Horizontal	184	1.19	-	62.39	27.68	8.34	-
PK	2.4864G	60.66	74.00	-13.34	36.07	3	Horizontal	184	1.19	-	24.59	27.72	8.35	-

BT-LE(500kbps)

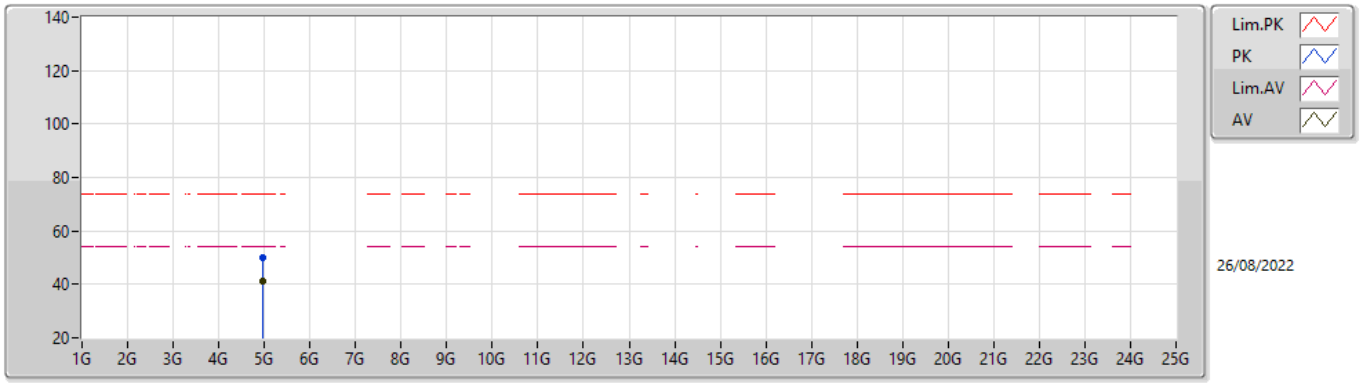
2480MHz_TX



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	4.96G	37.43	54.00	-16.57	8.55	3	Vertical	179	2.76	-	28.88	32.94	9.73	34.12
PK	4.96049G	48.62	74.00	-25.38	8.55	3	Vertical	179	2.76	-	40.07	32.94	9.73	34.12

BT-LE(500kbps)

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	4.96004G	41.14	54.00	-12.86	8.55	3	Horizontal	193	1.50	-	32.59	32.94	9.73	34.12
PK	4.96059G	49.82	74.00	-24.18	8.55	3	Horizontal	193	1.50	-	41.27	32.94	9.73	34.12