FCC Radio Test Report

FCC ID	:	**2AENP-MTB03R**
Equipment	:	**True Wireless In-Ear Headphones**
Brand Name	:	**Montblanc**
Model Name	:	**MTB 03**
Applicant	:	**Montblanc-Simplo GmbH Hellgrundweg 100, 22525 Hamburg, Germany**
Manufacturer	:	**Montblanc-Simplo GmbH Hellgrundweg 100, 22525 Hamburg, Germany**
Standard	:	**47 CFR FCC Part 15.247**

The product was received on Jul. 07, 2021, and testing was started from Jan. 24, 2022 and completed on Apr. 01, 2022. We, SPORTON INTERNATIONAL INC. Hsinhua Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

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

Approved by: Jackson Tsai

SPORTON INTERNATIONAL INC. Hsinhua Laboratory

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

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PHOTOGRAPHS OF EUT V01

History of this test report

Report No.	Version	Description	Issued Date
FR150815AD	01	Initial issue of report	May 30, 2022

Summary of Test Result

Report Clause	Ref. Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
-	15.207	AC Power-line Conducted Emissions	PASS	Only employ battery power.
3.1	15.247(a)	20dB Bandwidth	PASS	-
3.1	15.247(a)	Carrier Frequency Separation	PASS	-
3.2	15.247(b)	Maximum Conducted Output Power	PASS	-
3.3	15.247(a)	Number of Hopping Frequencies and Hopping Bandedge	PASS	-
3.4	15.247(a)	Time of Occupancy (Dwell Time)	PASS	-
3.5	15.247(d)	Emissions in Non-restricted Frequency Bands	PASS	-
3.6	15.247(d)	Emissions in Restricted Frequency Bands	PASS	-

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

Reviewed by: Sam Tsai
Report Producer: Ann Hou

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	Bluetooth Version	Ch. Frequency (MHz)	Channel Number
2400-2483.5	BR / EDR	2402-2480	0-78 [79]

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	BT-BR(1Mbps)	1	1TX
2.4-2.4835GHz	BT-EDR(2Mbps)	1	1TX
2.4-2.4835GHz	BT-EDR(3Mbps)	1	1TX

Note:
- Bluetooth BR uses a GFSK (1Mbps).
- Bluetooth EDR uses a combination of π/4-DQPSK (2Mbps) and 8DPSK (3Mbps).
- Bluetooth BR/EDR uses as a system using FHSS modulation.
- BWch is the nominal channel bandwidth.

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	OneWave Electronic Co., Ltd.	WAN3216F245L08	Chip Antenna	N/A	-2.3

Note 1: The EUT has one antenna.

For BT function:

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

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

1.1.3 EUT Information

Operational Condition				
EUT Power Type	From Battery			
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-BR(1Mbps)	0.742	1.3	2.891m	1k
BT-EDR(2Mbps)	0.459	3.38	1.534m	1k
BT-EDR(3Mbps)	0.269	5.7	1.073m	1k

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	TH06-HY	Yuna	22.1~23.9°C / 53~58%	24/Jan/2022~18/Mar/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.				
Test Condition	**Test Site No.**	**Test Engineer**	**Test Environment**	**Test Date**
Radiated	03CH09-HY	Daniel	22.1~25.3°C / 57~64%	16/Mar/2022~01/Apr/2022

1.4 Measurement Uncertainty

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

Test Items	**Uncertainty**	**Remark**
Conducted Emission (150kHz ~ 30MHz)	0.9 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	2.4 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.6 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.0 dB	Confidence levels of 95%
Temperature	0.41 °C	Confidence levels of 95%
Humidity	3.4 %	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

Test Software Version	BlueTest3:3.3.5

Mode	Power Setting
BT-BR(1Mbps)	-
2402MHz	5
2440MHz	5
2480MHz	5
BT-EDR(2Mbps)	-
2402MHz	5
2440MHz	5
2480MHz	5
BT-EDR(3Mbps)	-
2402MHz	5
2440MHz	5
2480MHz	5

2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	20dB Bandwidth Carrier Frequency Separation Maximum Conducted Output Power Number of Hopping Frequencies Hopping Bandedge Time of Occupancy (Dwell Time) Emissions in Non-restricted Frequency Bands
Test Condition	Conducted measurement at transmit chains ☒ Non-adaptive frequency hopping systems (Non-AFH) ☒ adaptive frequency hopping systems (AFH)
Non-AFH Mode configuration was found to be the worst case and measured during the test.	

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	Battery mode		
Operating Mode > 1GHz	CTX		
Orthogonal Planes of EUT	**X Plane**	**Y Plane**	**Z Plane**
Worst Planes of EUT	V		

2.3 Accessories

Accessories				
Battery	**Brand Name**	VARTA	**Model Name**	CP1254 A4
	Manufacturer	VARTA MICROBATTERY GMBH		
	Power Rating	3.7Vdc, 70mAh	**Type**	Li-ion, Button cell

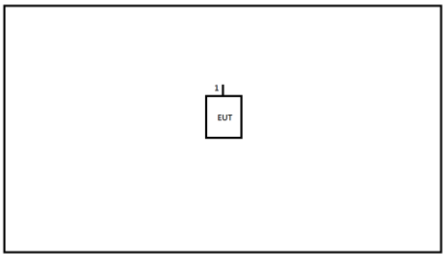
Reminder: Regarding to more detail and other information, please refer to user manual.

2.4 Support Equipment

Support Equipment – Conducted					
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**	**Remark**
1	Notebook	DELL	E5550	-	-
2	Adapter for NB	DELL	HA65NM130	-	-
3	Test fixture cable	Toongin	254-G5-4	-	Provided by Customer

2.5 Test Setup Diagram

Test Setup Diagram - Radiated Test



Item	Connection	Shielded	Length (m)
1	Test fixture cable	No	0.05

3 Transmitter Test Result

3.1 20dB Bandwidth and Carrier Frequency Separation

3.1.1 20dB Bandwidth and Carrier Frequency Separation Limit

20dB Bandwidth and Carrier Frequency Separation Limit for Frequency Hopping Systems	
▪ 2400-2483.5 MHz Band:	
	▪ N ≥75 and ChS ≥ MAX (20 dB bandwidth, 25 kHz).
	▪ 75>N ≥ 15 and ChS ≥ MAX (20 dB bandwidth 2/3,25 kHz).
N:Number of Hopping Frequencies; **ChS**: Hopping Channel Separation	

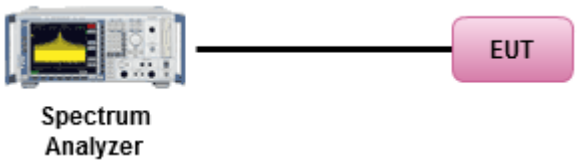
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

Test Method
▪ Refer as ANSI C63.10-2013, clause 6.9.2 for 20 dB bandwidth measurement.
▪ Refer as ANSI C63.10-2013, clause 7.8.2 for carrier frequency separation measurement.

3.1.4 Test Setup

20dB Bandwidth and Carrier Frequency Separation


3.1.5 Test Result of 20dB Bandwidth

Refer as Appendix A

3.1.6 Test Result of Carrier Frequency Separation

Refer as Appendix A

3.2 Maximum Conducted Output Power

3.2.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit	
▪ 2400-2483.5 MHz Band:	
	▪ N ≥ 75; Power 30dBm; EIRP 36dBm
	▪ 75 >N ≥ 15; Power 21dBm; EIRP 27dBm
N:Number of Hopping Frequencies	

3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method
▪ Refer as ANSI C63.10-2013, clause 7.8.5 for output power measurement.

3.2.4 Test Setup

Maximum Conducted Output Power (Peak Power Meter)

3.2.5 Test Result of Maximum Conducted Output Power

Refer as Appendix B

3.3 Number of Hopping Frequencies and Hopping Bandedge

3.3.1 Number of Hopping Frequencies Limit

Number of Hopping Frequencies Limit	
▪ 2400-2483.5 MHz Band:	
	▪ N ≥ 75 and ChS ≥ MAX (20 dB bandwidth, 25 kHz).
	▪ 75 >N ≥ 15 and ChS ≥ MAX (20 dB bandwidth 2/3,25 kHz).
N:Number of Hopping Frequencies; **ChS** : Hopping Channel Separation	

3.3.2 Hopping Bandedge Limit

Refer clause 3.5.1 and clause 3.6.1

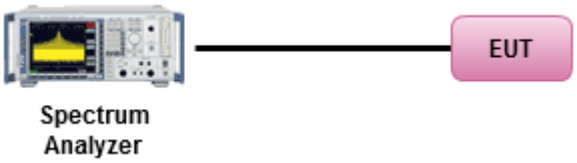
3.3.3 Measuring Instruments

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

3.3.4 Test Procedures

Test Method
▪ Refer as ANSI C63.10-2013, clause 7.8.3 for number of hopping frequencies measurement.
▪ Refer as ANSI C63.10-2013, clause 7.8.6 for hopping frequencies Bandedge measurement.

3.3.5 Test Setup

Number of Hopping Frequencies and Hopping Frequencies Bandedge


3.3.6 Test Result of Number of Hopping Frequencies

Refer as Appendix C

3.3.7 Test Result of Number of Hopping Frequencies Bandedge

Refer as Appendix C

3.4 Time of Occupancy (Dwell Time)

3.4.1 Time of Occupancy (Dwell Time) Limit

Time of Occupancy (Dwell Time) Limit for Frequency Hopping Systems	
▪ 2400-2483.5 MHz Band:	
	▪ N ≥ 75; 0.4s in N x 0.4 period
	▪ 75 >N ≥ 15; 0.4s in N x 0.4 period
N:Number of Hopping Frequencies	

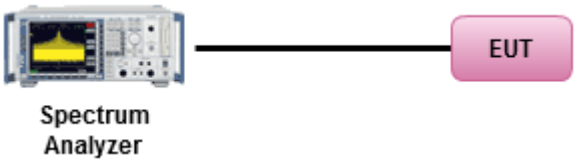
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

Test Method	
▪ Refer as ANSI C63.10-2013, clause 7.8.4 for dwell time measurement.	
▪ Bluetooth ACL packets can be 1, 3, or 5 time slots. Following as dwell time. Operate DH5 at maximum dwell time and maximum duty cycle.	
	▪ The DH5 packet can cover up to 5 time slots. Operate DH5 at maximum dwell time and maximum duty cycle. A maximum length packet has duration of 5 time slots. The hopping rate is 1600 hops/second so the maximum dwell time is 5/1600 seconds, or 3.125ms.DH5 Packet permit maximum 1600/ 79 / 6 = 3.37 hops per second in each channel.

3.4.4 Test Setup

Time of Occupancy (Dwell Time)


3.4.5 Test Result of Time of Occupancy (Dwell Time)

Refer as Appendix D

3.5 Emissions in Non-restricted Frequency Bands

3.5.1 Emissions in Non-restricted Frequency Bands Limit

Un-restricted Band Emissions Limit	
RF output power procedure	**Limit (dB)**
Peak output power procedure	20
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 PSD level.	

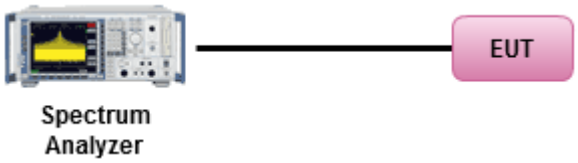
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

Test Method
▪ Refer as ANSI C63.10-2013, clause 7.8.8 for unwanted emissions into non-restricted bands.

3.5.4 Test Setup

Emissions in Non-restricted Frequency Bands


3.5.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix E

3.6 Emissions in Restricted Frequency Bands

3.6.1 Emissions in Restricted Frequency Bands Limit

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

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

Note 2: Test distance for frequencies at below 30 MHz, measurements may be performed at a distance closer than the EUT limit distance; however, an attempt should be made to avoid making measurements in the near field. When performing measurements below30 MHz at a closer distance than the limit distance, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two or more distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB / decade). The test report shall specify the extrapolation method used to determine compliance of the EUT.

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

3.6.2 Measuring Instruments

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

3.6.3 Test Procedures

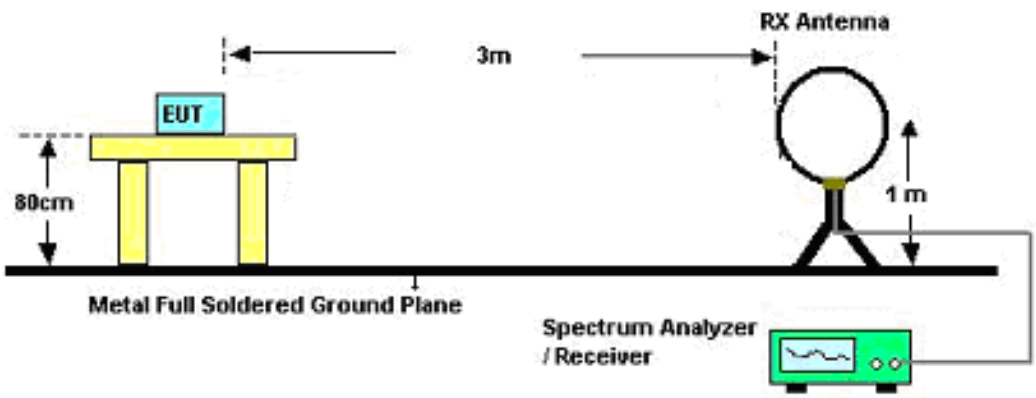
Test Method	
▪ The average emission levels shall be measured in [hopping duty factor].	
▪ Refer as ANSI C63.10; clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.	
▪ For the transmitter unwanted emissions shall be measured using following options below:	
	▪ Refer as ANSI C63.10, clause 4.1.4.2.1 QP value.
	▪ Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak.
	▪ Refer as ANSI C63.10, clause 4.1.4.2.4 average value of hopping pulsed emissions.
▪	KDB 414788 Open-Field Test Sites and Chamber Correlation Justification.
	▪ Based on FCC 15.31(f)(2): measurements may be performed at a distance closer than that specified in regulations; however, an attempt should be made to avoid making measurements in the near field.
	▪ Open-field site and chamber correlation testing had been performed and chamber measured test result is the worst case test result.

3.6.4 Measurement Results Calculation

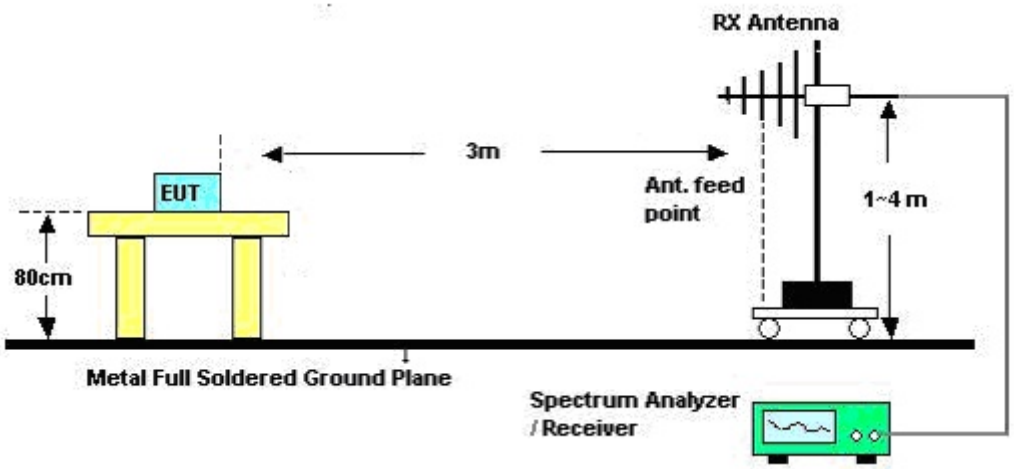
The measured Level is calculated using:
Corrected Reading: Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamp Factor)

3.6.5 Test Setup

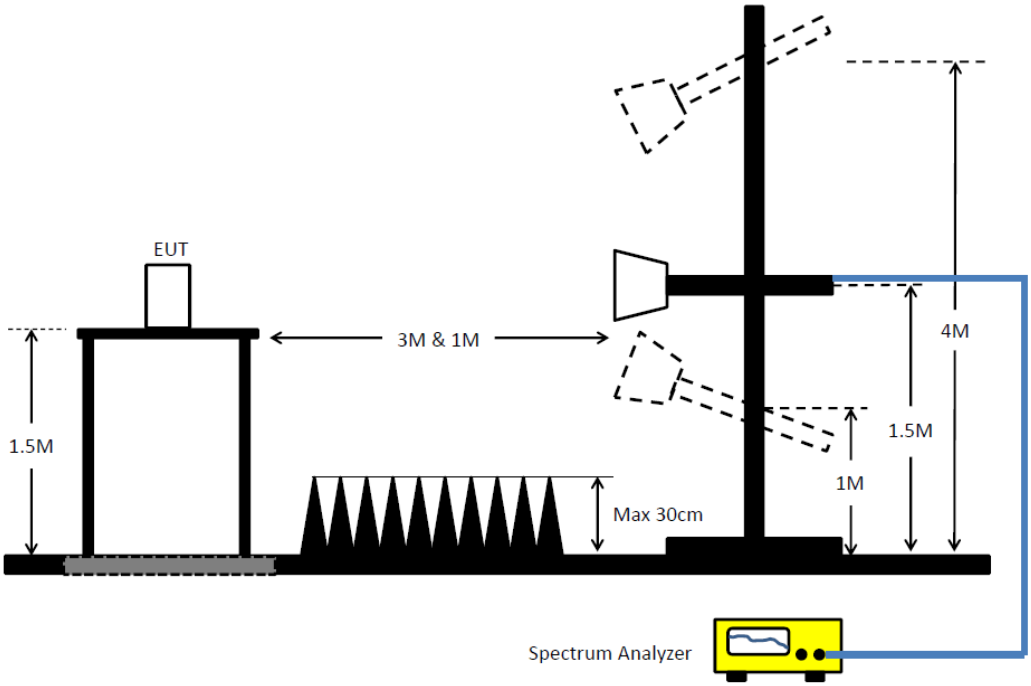
Emissions in Restricted Frequency Bands
9kHz ~30MHz



30MHz~1GHz



Above 1GHz



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

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

3.6.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F

4 Test Equipment and Calibration Data

Instrument for Conducted Test

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Signal Analyzer	R&S	FSV 40	101029	10Hz~40GHz	20/Oct/2021	19/Oct/2022
SMB100A Signal Generator	R&S	SMB100A	181147	100kHz~40GHz	21/Oct/2021	20/Oct/2022
Pulse Sensor	Anritsu	MA2411B	1027452	300MHz~40GHz	25/Mar/2021	24/Mar/2022
Power Meter	Anritsu	ML2495A	1124009	300MHz~40GHz	25/Mar/2021	24/Mar/2022
SENSE-15247_FS	Sporton	V5.10.7.13	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	TDK	SAC-3M	03CH09-HY	30MHz~1GHz 3m	26/Mar/2021	25/Mar/2022
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	30MHz~1GHz 3m	25/Mar/2022	24/Mar/2023
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	1GHz~18GHz 3m	18/Mar/2021	17/Mar/2022
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	1GHz~18GHz 3m	17/Mar/2022	16/Mar/2023
EXA Signal Analyzer	KEYSIGHT	N9010A	MY54200885	10Hz~44GHz	13/Aug/2021	12/Aug/2022
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1531	1GHz~18GHz	27/Dec/2021	26/Dec/2022
Amplifier	EMC	EMC9135	980232	9kHz~1GHz	12/Apr/2021	11/Apr/2022
Microwave Preamplifier	Agilent	8449B	3008A02096	1GHz~26.5GHz	23/Jul/2021	22/Jul/2022
Bilog Antenna & 5dB Attenuator	TESEQ & MTJ	CBL6111D&MT J6102-05	35418 & 3	30MHz~1GHz	04/Sep/2021	03/Sep/2022
RF Cable-low	Jye Bao	RG142	CB031+324530/4	9kHz~30MHz	30/Aug/2021	29/Aug/2022
RF Cable-low	Jye Bao	RG142	CB031+324530/4	30MHz~1GHz	07/Feb/2022	06/Feb/2023
RF CABLE 5m+3m+1m	HUBER+SUHNE R	SUCOFLEX104	CB009	1GHz~40GHz	13/Aug/2021	12/Aug/2022
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170614	18GHz~40GHz	12/May/2021	11/May/2022
Microwave Premplifier	EMC INSTRUMENTS	EM18G40G	060604	18GHz ~ 40GHz	08/Mar/2022	07/Mar/2023
Loop Antenna	Teseq	HLA 6120	24155	9kHz~30MHz	14/Apr/2021	13/Apr/2022
EMI Test Receiver	R&S	ESR3	102052	9kHz~3.6GHz	19/Apr/2021	18/Apr/2022
SENSE-15247_FS	Sporton	V5.10.7.13	N/A	N/A	N/A	N/A
SENSE-EMI	Sporton	V5.10.7.15	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-BR(1Mbps)	936.25k	880.81k	881KF1D	933.75k	870.815k
BT-EDR(2Mbps)	1.321M	1.196M	1M20G1D	1.32M	1.188M
BT-EDR(3Mbps)	1.283M	1.193M	1M19G1D	1.28M	1.191M

Max-N dB = Maximum 20dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 20dB down bandwidth; Min-OBW = Minimum 99% occupied bandwidth

Result

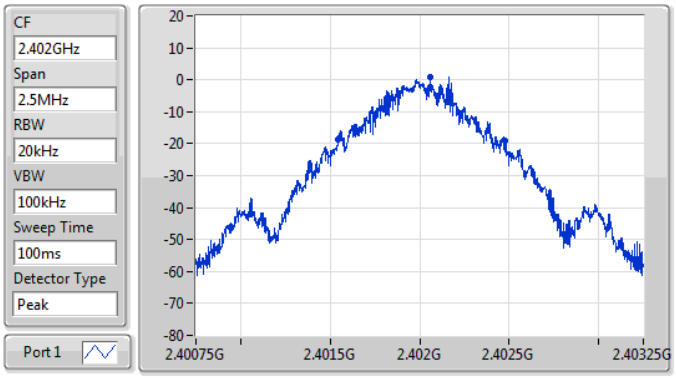
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	Inf	936.25k	880.81k
2440MHz	Pass	Inf	935k	880.81k
2480MHz	Pass	Inf	933.75k	870.815k
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	Inf	1.32M	1.188M
2440MHz	Pass	Inf	1.321M	1.191M
2480MHz	Pass	Inf	1.321M	1.196M
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	Inf	1.283M	1.191M
2440MHz	Pass	Inf	1.28M	1.191M
2480MHz	Pass	Inf	1.281M	1.193M

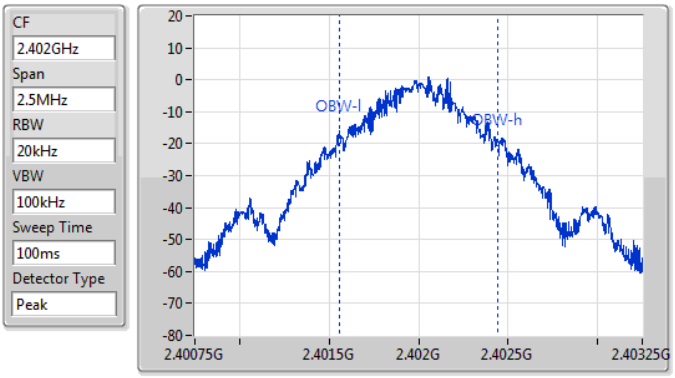
Port X-N dB = Port X 20dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

BT-BR(1Mbps) EBW-FS

2402MHz

18/03/2022



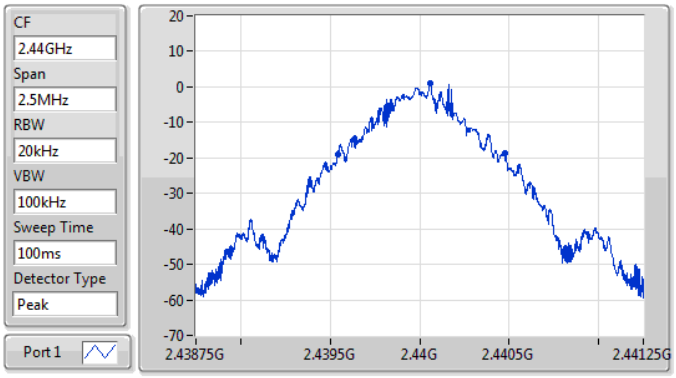


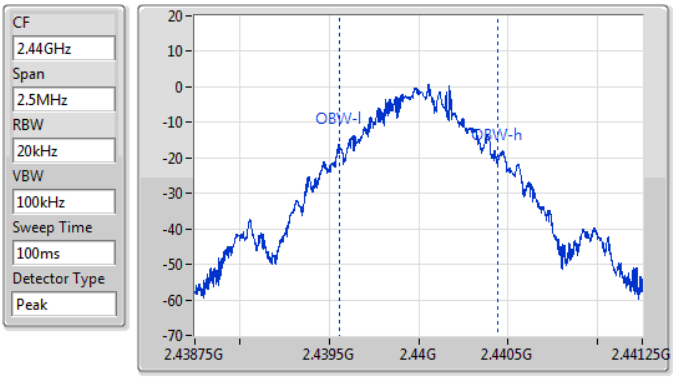
20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
936.25k	2.401544G	2.40248G	880.81k	2.40156G	2.402441G	Inf	1

BT-BR(1Mbps) EBW-FS

2440MHz

18/03/2022



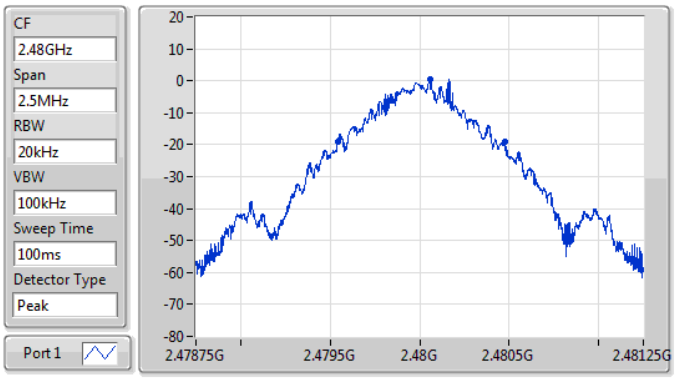


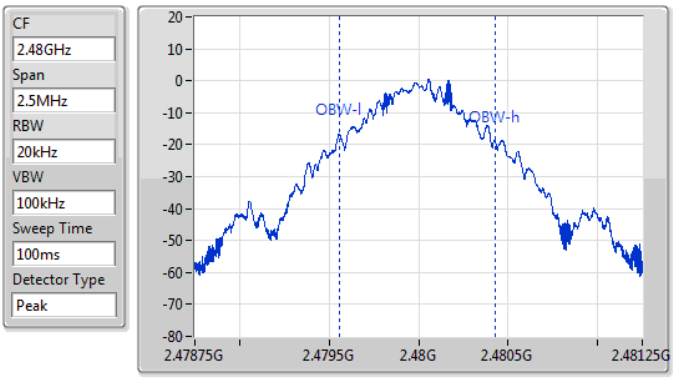
20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
935k	2.439543G	2.440478G	880.81k	2.43956G	2.440441G	Inf	1

BT-BR(1Mbps) EBW-FS

2480MHz

18/03/2022



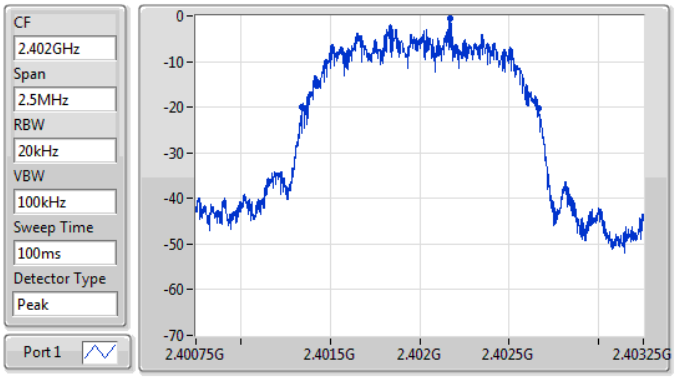


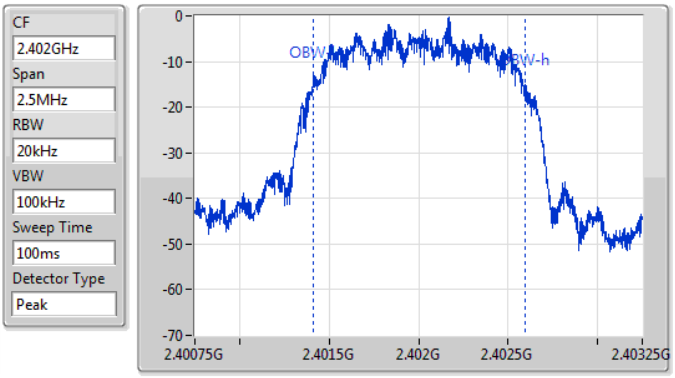
20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
933.75k	2.479543G	2.480476G	870.815k	2.47956G	2.480431G	Inf	1

BT-EDR(2Mbps) EBW-FS

2402MHz

18/03/2022



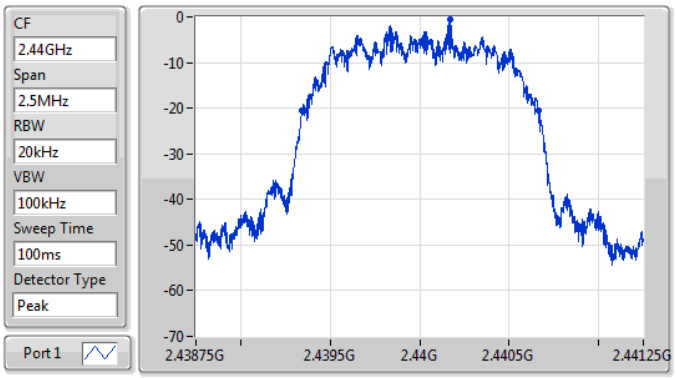


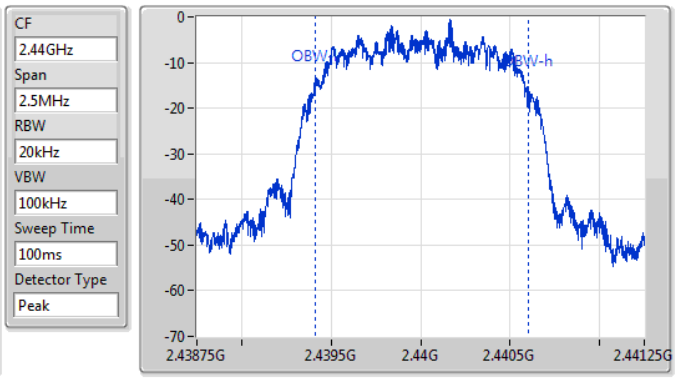
20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.32M	2.401344G	2.402664G	1.188M	2.40141G	2.402598G	Inf	1

BT-EDR(2Mbps) EBW-FS

2440MHz

18/03/2022



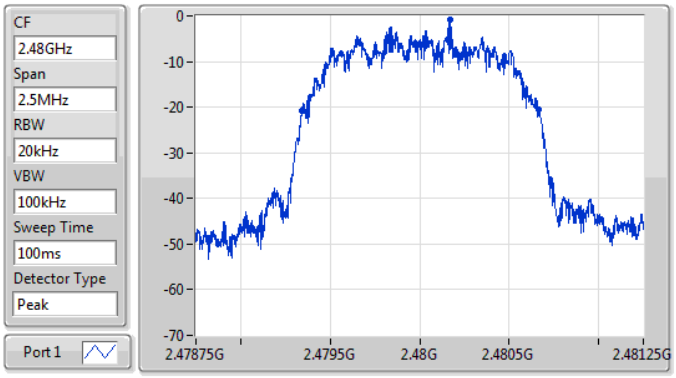


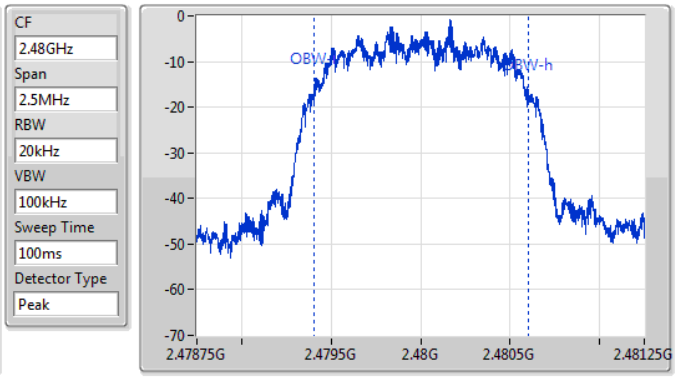
20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.321M	2.439343G	2.440664G	1.191M	2.439409G	2.4406G	Inf	1

BT-EDR(2Mbps) EBW-FS

2480MHz

18/03/2022



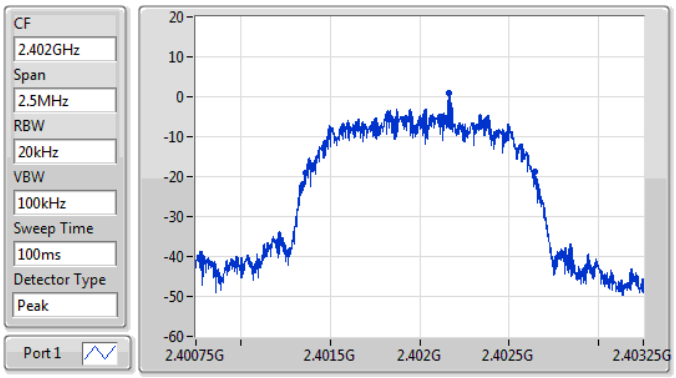


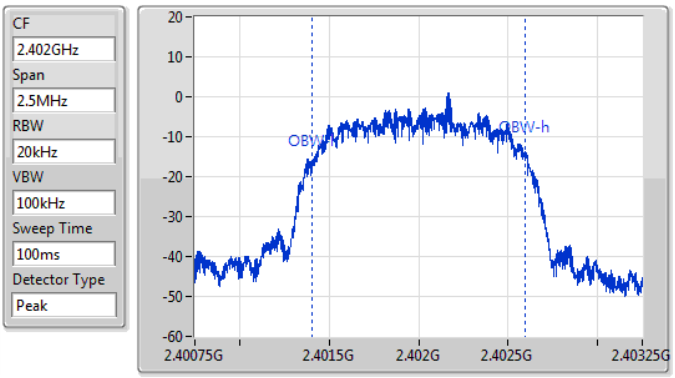
20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.321M	2.479341G	2.480663G	1.196M	2.479408G	2.480603G	Inf	1

BT-EDR(3Mbps) EBW-FS

2402MHz

18/03/2022



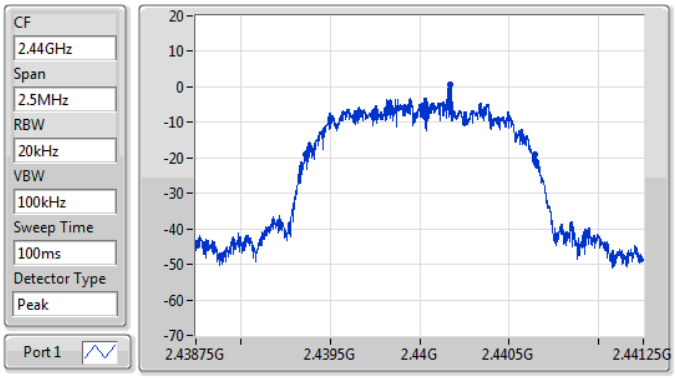


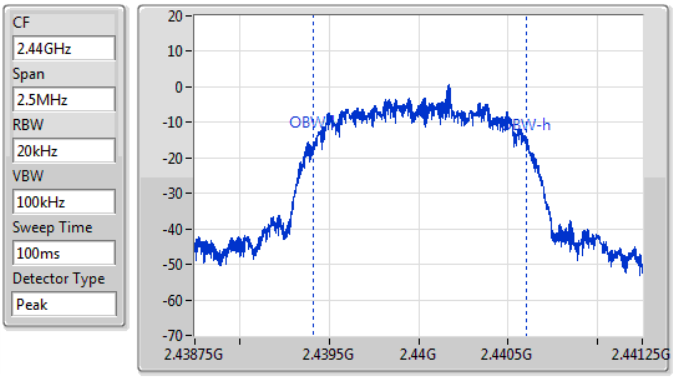
20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.283M	2.40136G	2.402643G	1.191M	2.401408G	2.402598G	Inf	1

BT-EDR(3Mbps) EBW-FS

2440MHz

18/03/2022



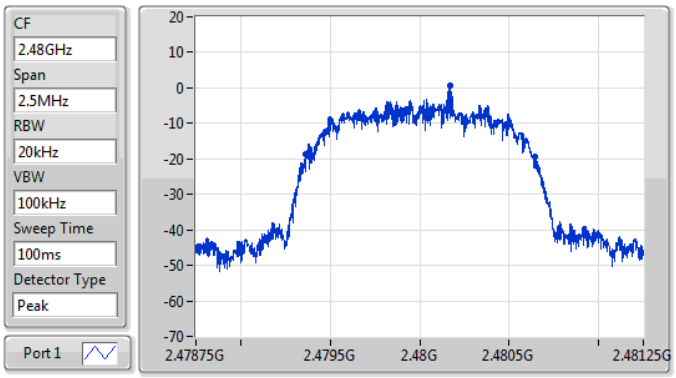


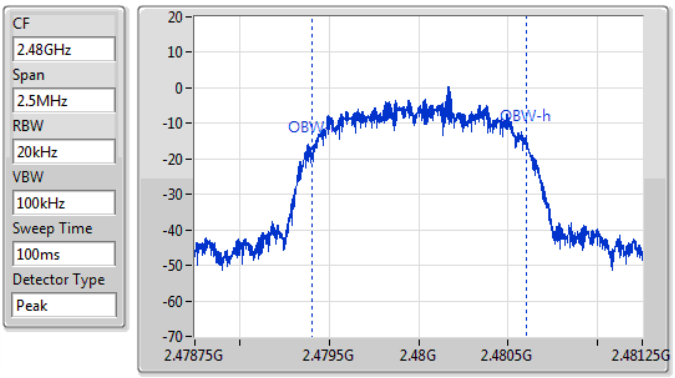
20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.28M	2.439363G	2.440643G	1.191M	2.439409G	2.4406G	Inf	1

BT-EDR(3Mbps) **EBW-FS**

2480MHz

18/03/2022





20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.281M	2.479363G	2.480644G	1.193M	2.479408G	2.480601G	Inf	1

Summary

Mode	Max-Space (Hz)	Min-Space (Hz)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	1.002M	1.0005M
BT-EDR(2Mbps)	1.002M	997.5k
BT-EDR(3Mbps)	1.002M	1.0005M

Result

Mode	Result	Fl (Hz)	Fh (Hz)	Ch.Space (Hz)	Limit (Hz)
BT-BR(1Mbps)	-	-	-	-	-
2402MHz	Pass	2.402164G	2.403166G	1.002M	623.5425k
2440MHz	Pass	2.440164G	2.441165G	1.0005M	622.71k
2480MHz	Pass	2.479166G	2.480166G	1.0005M	621.8775k
BT-EDR(2Mbps)	-	-	-	-	-
2402MHz	Pass	2.402166G	2.403166G	1.0005M	879.12k
2440MHz	Pass	2.440167G	2.441169G	1.002M	879.786k
2480MHz	Pass	2.479169G	2.480166G	997.5k	879.786k
BT-EDR(3Mbps)	-	-	-	-	-
2402MHz	Pass	2.402167G	2.403168G	1.0005M	854.478k
2440MHz	Pass	2.440166G	2.441168G	1.002M	852.48k
2480MHz	Pass	2.479167G	2.480168G	1.0005M	853.146k

BT-BR(1Mbps) Channel Separation-FS

2.402G/2.403GHz

18/03/2022

Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.402164G	2.403166G	1.002M	623.5425k

BT-BR(1Mbps) Channel Separation-FS

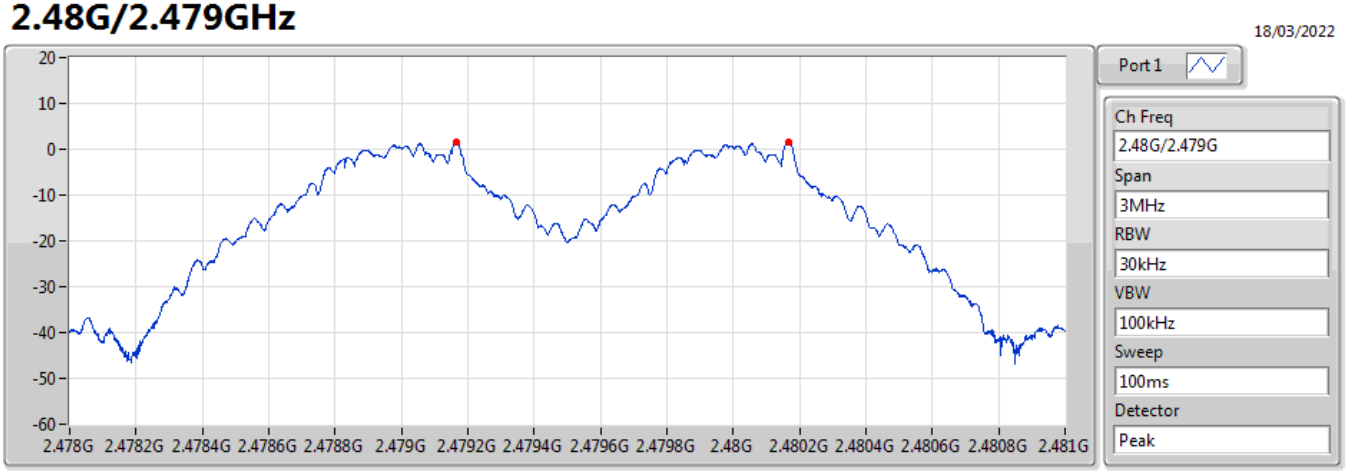
2.44G/2.441GHz

18/03/2022

Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.440164G	2.441165G	1.0005M	622.71k

BT-BR(1Mbps) Channel Separation-FS

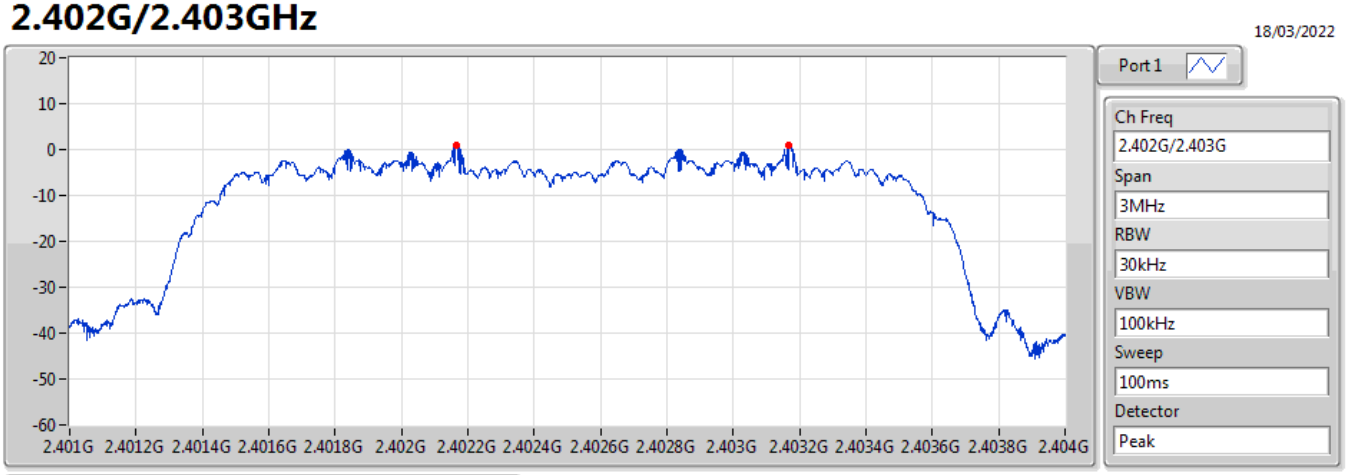
2.48G/2.479GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.479166G	2.480166G	1.0005M	621.8775k

BT-EDR(2Mbps) Channel Separation-FS

2.402G/2.403GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.402166G	2.403166G	1.0005M	879.12k

BT-EDR(2Mbps) Channel Separation-FS

2.44G/2.441GHz

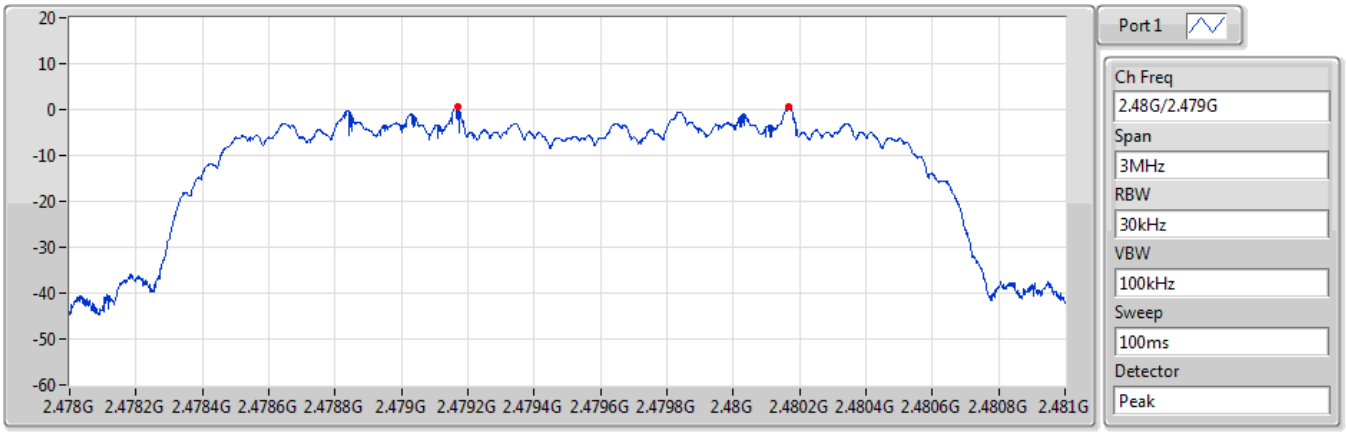
18/03/2022

Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.440167G	2.441169G	1.002M	879.786k

BT-EDR(2Mbps) Channel Separation-FS

2.48G/2.479GHz

18/03/2022



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.479169G	2.480166G	997.5k	879.786k

BT-EDR(3Mbps) Channel Separation-FS

2.402G/2.403GHz

18/03/2022

Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.402167G	2.403168G	1.0005M	854.478k

BT-EDR(3Mbps) Channel Separation-FS

2.44G/2.441GHz

18/03/2022

Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.440166G	2.441168G	1.002M	852.48k

BT-EDR(3Mbps) **Channel Separation-FS**

2.48G/2.479GHz

18/03/2022

Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.479167G	2.480168G	1.0005M	853.146k

Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	4.58	0.00287
BT-EDR(2Mbps)	7.28	0.00535
BT-EDR(3Mbps)	7.33	0.00541

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	-2.30	4.58	21.00
2440MHz	Pass	-2.30	4.43	21.00
2480MHz	Pass	-2.30	4.34	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	-2.30	7.28	21.00
2440MHz	Pass	-2.30	6.76	21.00
2480MHz	Pass	-2.30	6.50	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	-2.30	7.33	21.00
2440MHz	Pass	-2.30	6.80	21.00
2480MHz	Pass	-2.30	6.51	21.00

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

Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	4.43	0.00277
BT-EDR(2Mbps)	4.60	0.00288
BT-EDR(3Mbps)	4.57	0.00286

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	-2.30	4.43	21.00
2440MHz	Pass	-2.30	4.27	21.00
2480MHz	Pass	-2.30	4.20	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	-2.30	4.60	21.00
2440MHz	Pass	-2.30	4.30	21.00
2480MHz	Pass	-2.30	4.16	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	-2.30	4.57	21.00
2440MHz	Pass	-2.30	4.33	21.00
2480MHz	Pass	-2.30	4.18	21.00

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

Summary

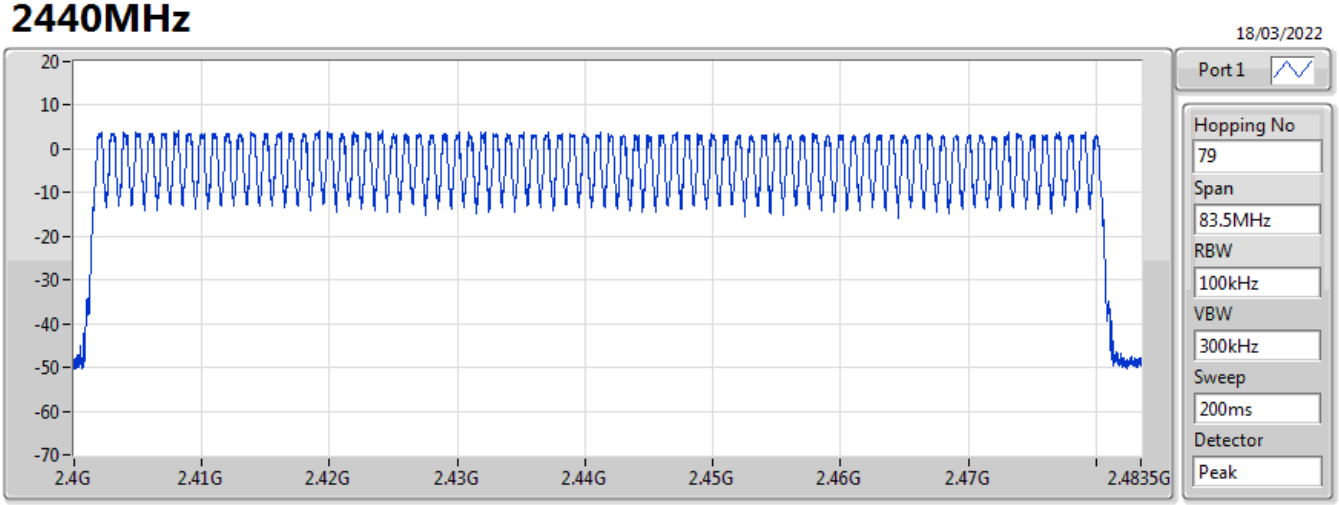
Mode	Max-Hop No
2.4-2.4835GHz	-
BT-BR(1Mbps)	79
BT-EDR(2Mbps)	79
BT-EDR(3Mbps)	79

Result

Mode	Result	Hopping No	Limit
BT-BR(1Mbps)	-	-	-
2440MHz	Pass	79	15
BT-EDR(2Mbps)	-	-	-
2440MHz	Pass	79	15
BT-EDR(3Mbps)	-	-	-
2440MHz	Pass	79	15

BT-BR(1Mbps) Hopping-FS

2440MHz

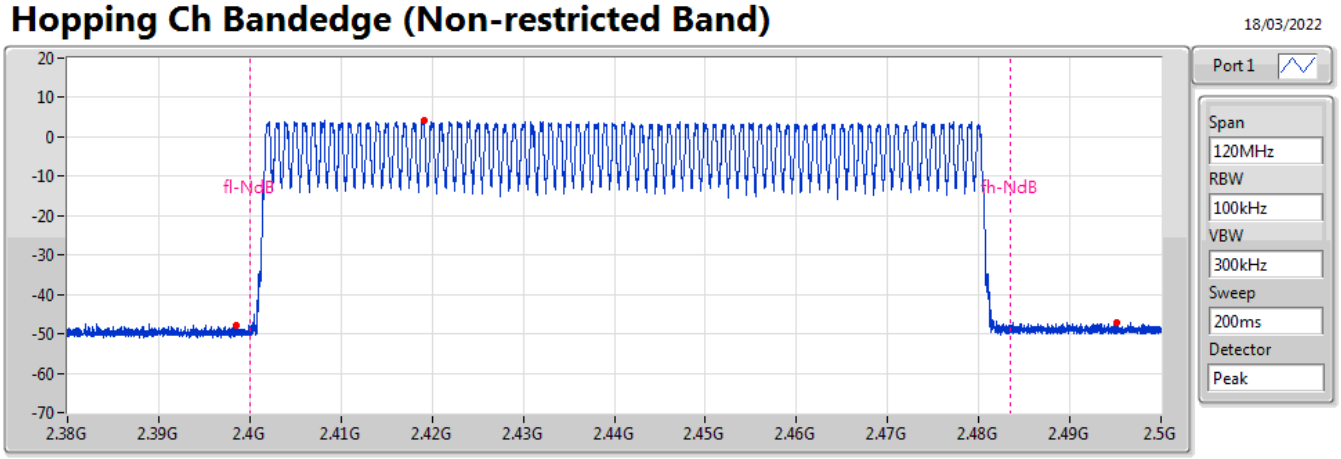


Hopping No	Limit
79	15

BT-BR(1Mbps)

2440MHz

Hopping Ch Bandedge (Non-restricted Band)

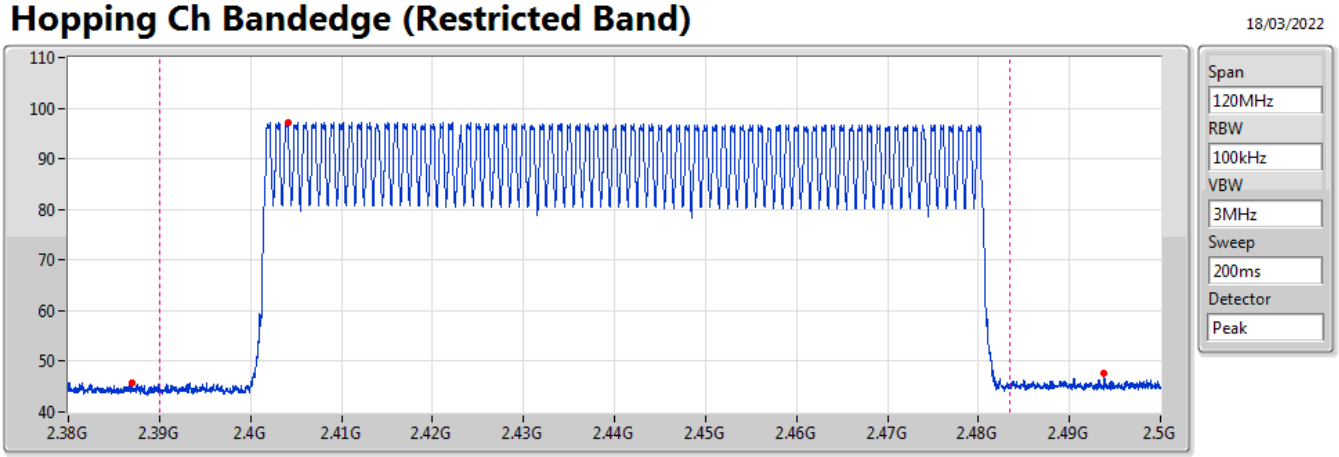


Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-15.89	2.419165G	4.11	2.39851G	-47.68	2.495215G	-47.05

BT-BR(1Mbps)

2440MHz

Hopping Ch Bandedge (Restricted Band)

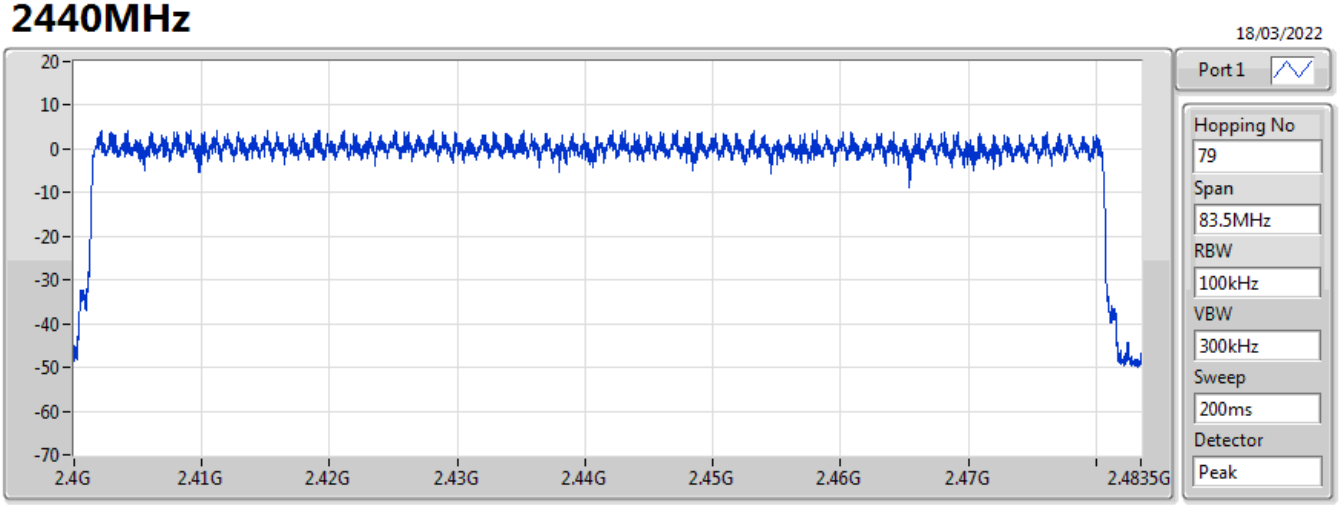


Ref(Hz)	Ref(dBuV/m)	BE-l(Hz)	PK(dBuV/m)	AV(dBuV/m)	BE-h(Hz)	PK(dBuV/m)	AV(dBuV/m)	LimPK(dBuV/	LimAV(dBuV/	Tx On(ms)	DCF(dB)
2.404165G	97.15	2.386915G	45.78	15.68	2.493805G	47.62	17.52	74	54	3.125	-30.1

BT-EDR(2Mbps)

2440MHz

Hopping-FS



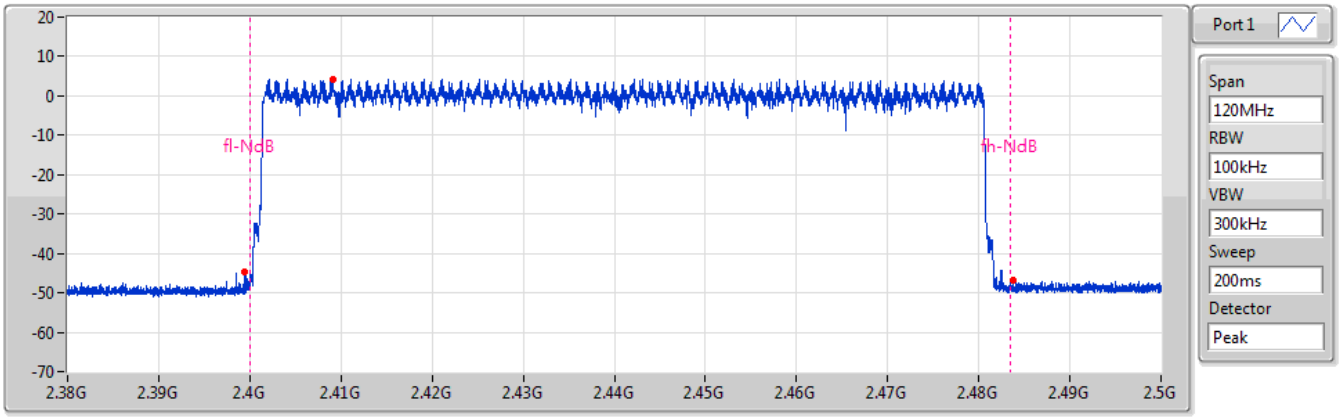
Hopping No	Limit
79	15

BT-EDR(2Mbps)

2440MHz

Hopping Ch Bandedge (Non-restricted Band)

18/03/2022



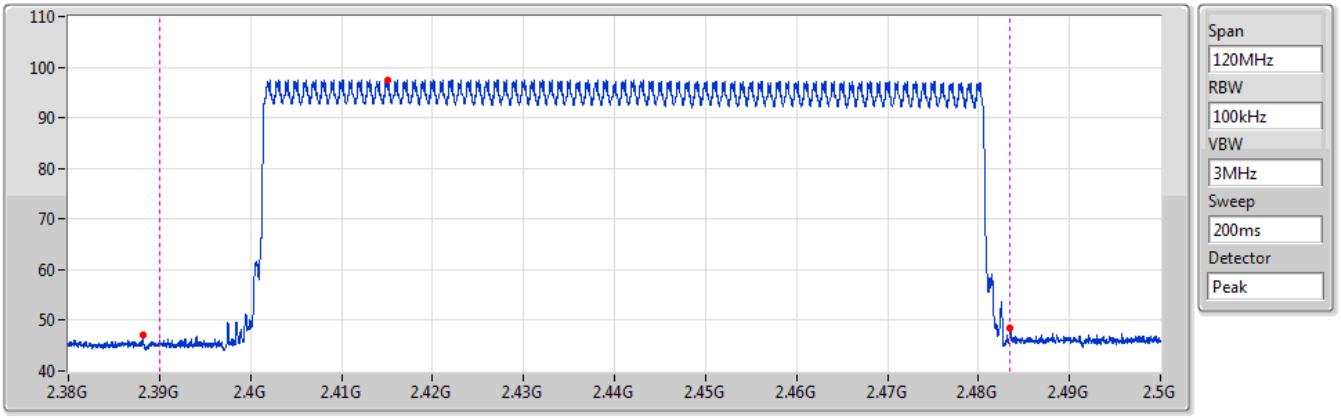
Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-15.8	2.40916G	4.2	2.39944G	-44.65	2.48377G	-46.86

BT-EDR(2Mbps)

2440MHz

Hopping Ch Bandedge (Restricted Band)

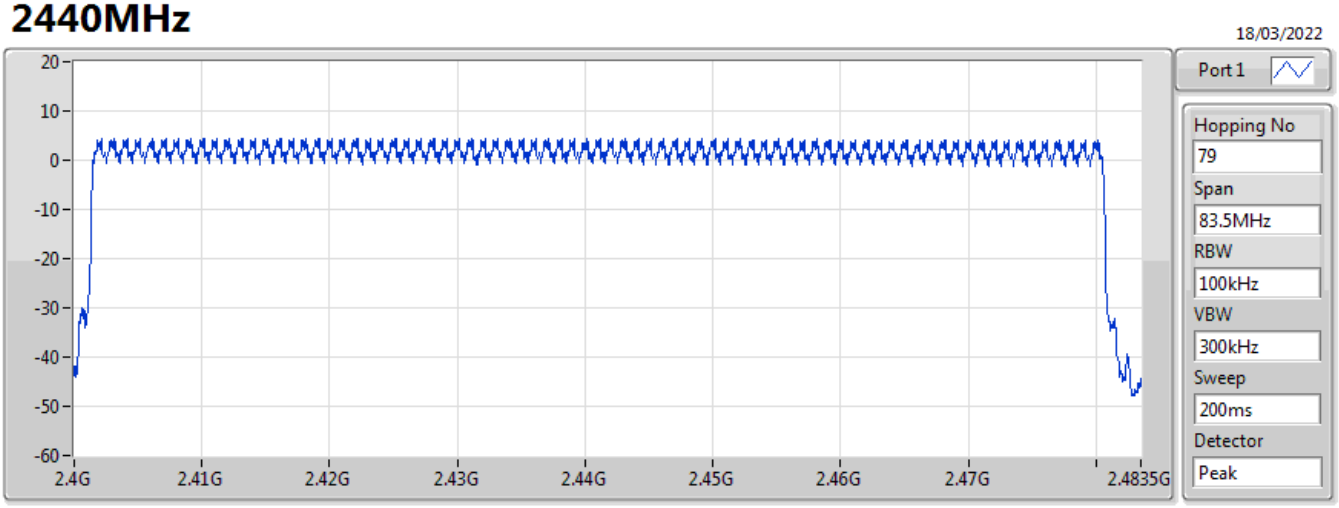
18/03/2022



Ref(Hz)	Ref(dBuV/m)	BE-l(Hz)	PK(dBuV/m)	AV(dBuV/m)	BE-h(Hz)	PK(dBuV/m)	AV(dBuV/m)	LimPK(dBuV/	LimAV(dBuV/	Tx On(ms)	DCF(dB)
2.41516G	97.43	2.38819G	47.23	17.13	2.483515G	48.5	18.4	74	54	3.125	-30.1

BT-EDR(3Mbps) Hopping-FS

2440MHz

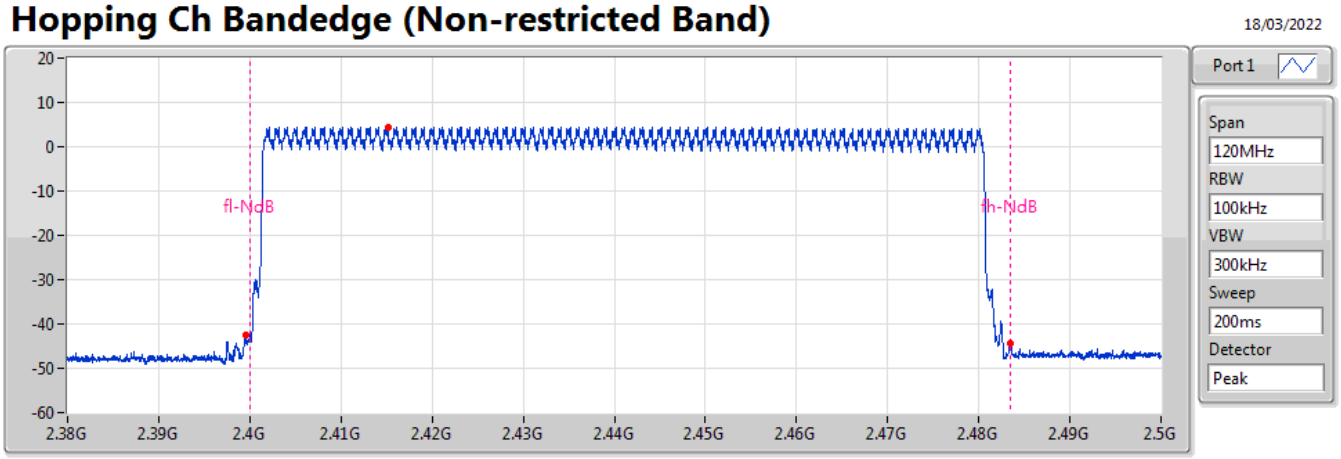


Hopping No	Limit
79	15

BT-EDR(3Mbps)

2440MHz

Hopping Ch Bandedge (Non-restricted Band)



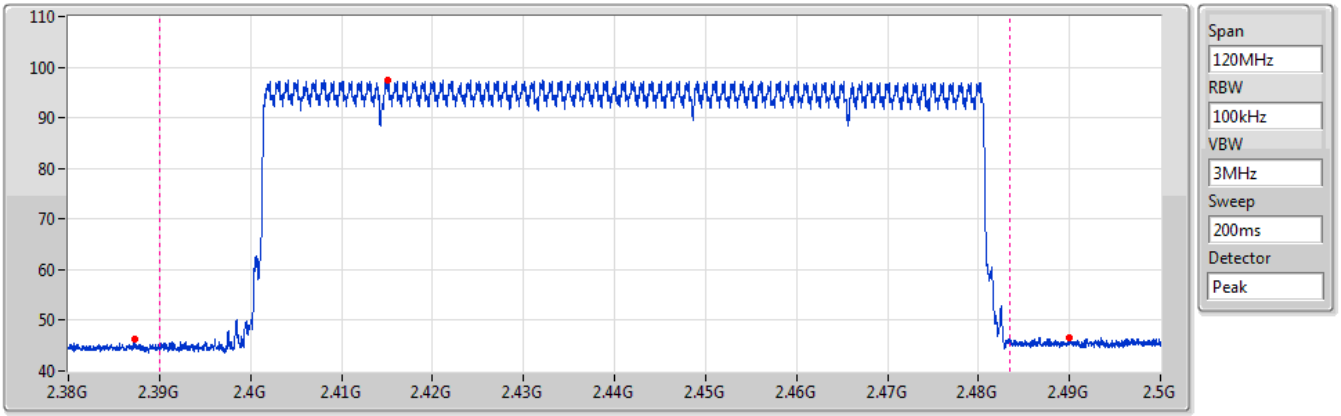
Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-15.55	2.41516G	4.45	2.399545G	-42.39	2.483515G	-44.5

BT-EDR(3Mbps)

2440MHz

Hopping Ch Bandedge (Restricted Band)

18/03/2022



Ref(Hz)	Ref(dBuV/m)	BE-l(Hz)	PK(dBuV/m)	AV(dBuV/m)	BE-h(Hz)	PK(dBuV/m)	AV(dBuV/m)	LimPK(dBuV/	LimAV(dBuV/	Tx On(ms)	DCF(dB)
2.41516G	97.33	2.387245G	46.21	16.11	2.48995G	46.67	16.57	74	54	3.125	-30.1

Summary

Mode	Max-Dwell (s)
2.4-2.4835GHz	-
BT-BR(1Mbps)	308.63365m_DH5
BT-EDR(2Mbps)	163.6843m_DH5
BT-EDR(3Mbps)	115.4478m_DH5

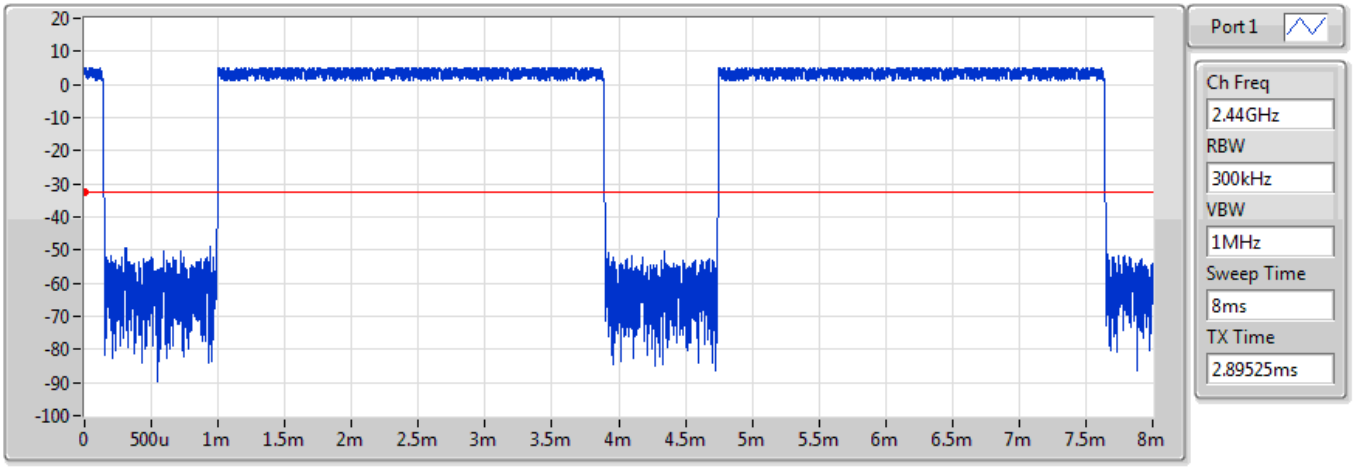
Result

Mode	Result	Period (s)	Dwell (s)	Limit (s)	Tx On (s)
BT-BR(1Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	308.63365m_DH5	400m	2.89525m
2440MHz	Pass	8	154.636625m_DH5-AFH	400m	2.90125m
BT-EDR(2Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	163.6843m_DH5	400m	1.5355m
2440MHz	Pass	8	82.1353m_DH5-AFH	400m	1.541m
BT-EDR(3Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	115.4478m_DH5	400m	1.083m
2440MHz	Pass	8	57.37745m_DH5-AFH	400m	1.0765m

BT-BR(1Mbps) Dwell-FS

2440MHz

18/03/2022



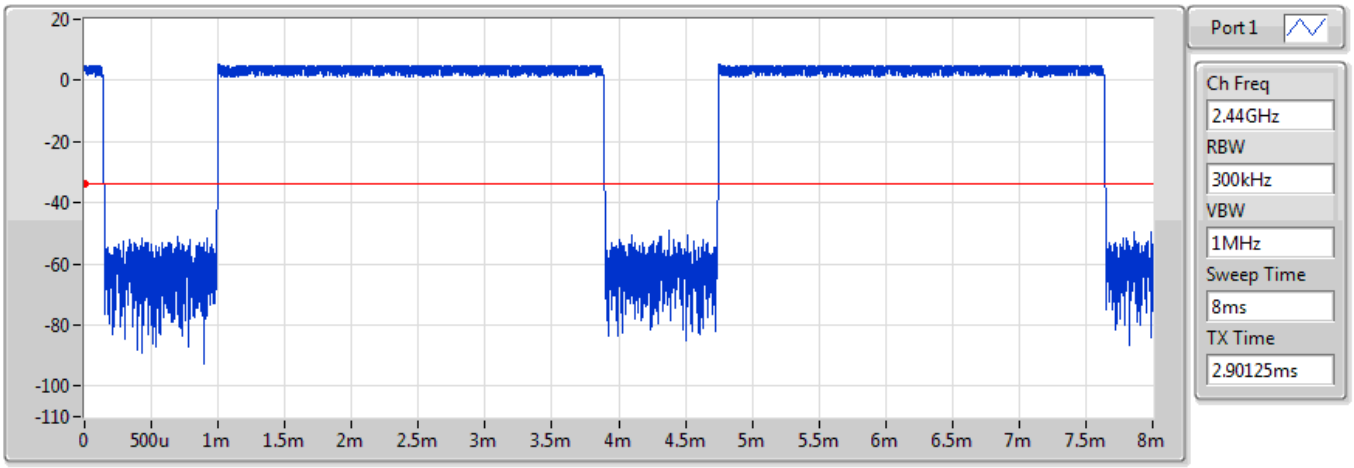
Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	308.63365m_DH5	400m	2.89525m

DH5

BT-BR(1Mbps) Dwell-FS

2440MHz

18/03/2022



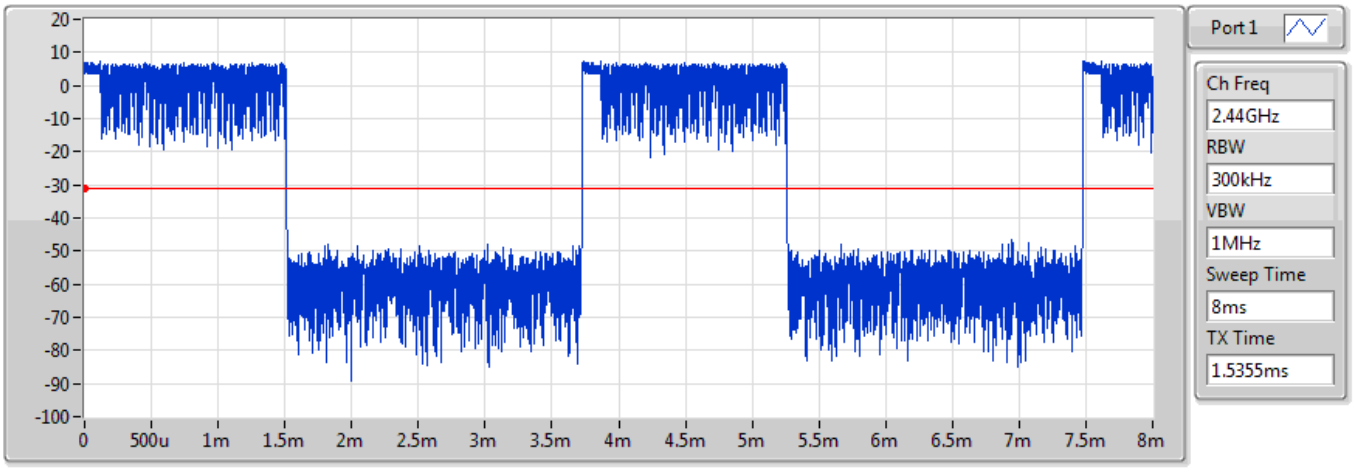
Period(s)	Dwell(s)	Limit(s)	Tx On(s)
8	154.636625m_DH5-AFI	400m	2.90125m

DH5-AFH

BT-EDR(2Mbps) Dwell-FS

2440MHz

18/03/2022



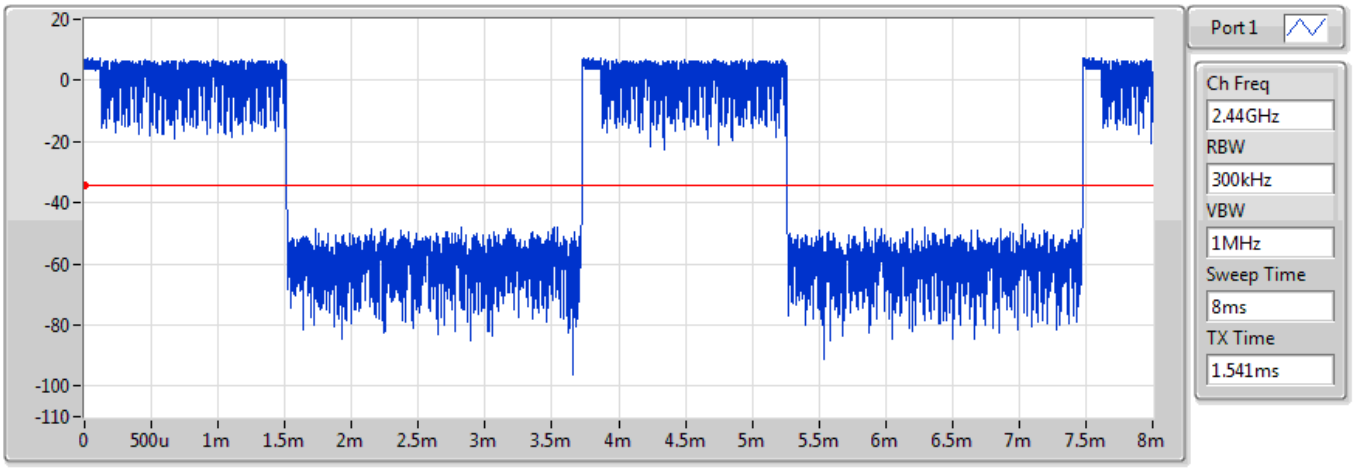
Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	163.6843m_DH5	400m	1.5355m

DH5

BT-EDR(2Mbps) Dwell-FS

2440MHz

18/03/2022



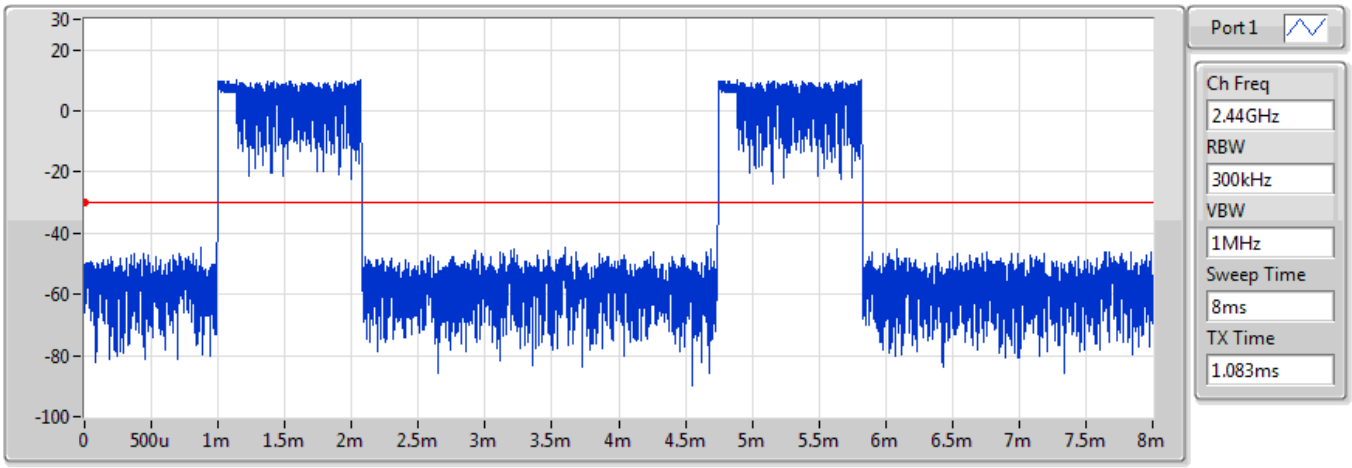
Period(s)	Dwell(s)	Limit(s)	Tx On(s)
8	82.1353m_DH5-AFH	400m	1.541m

DH5-AFH

BT-EDR(3Mbps) Dwell-FS

2440MHz

18/03/2022



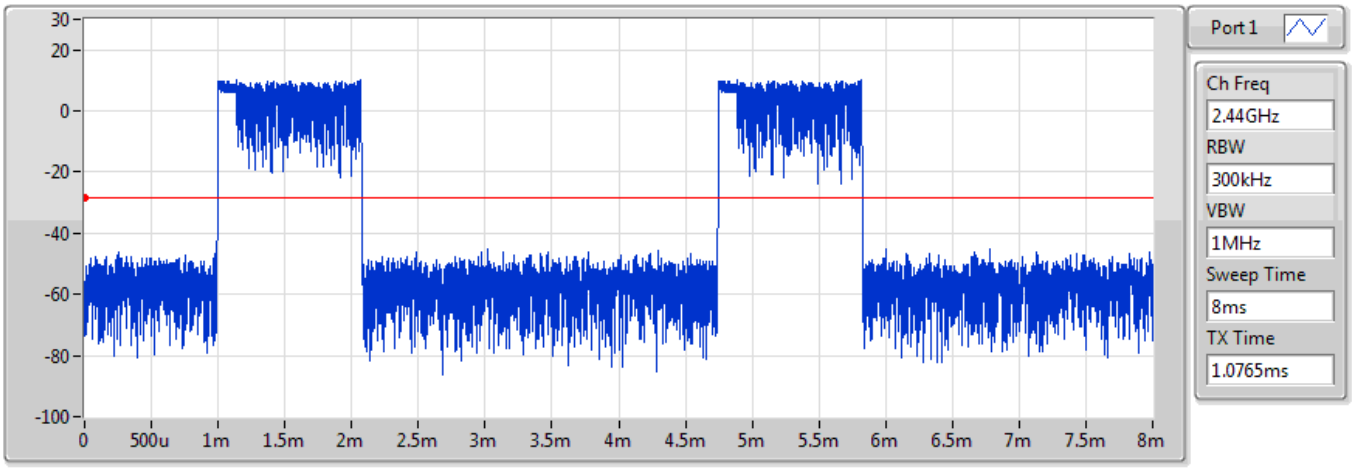
Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	115.4478m_DH5	400m	1.083m

DH5

BT-EDR(3Mbps) Dwell-FS

2440MHz

18/03/2022



Period(s)	Dwell(s)	Limit(s)	Tx On(s)
8	57.37745m_DH5-AFH	400m	1.0765m

DH5-AFH

Summary

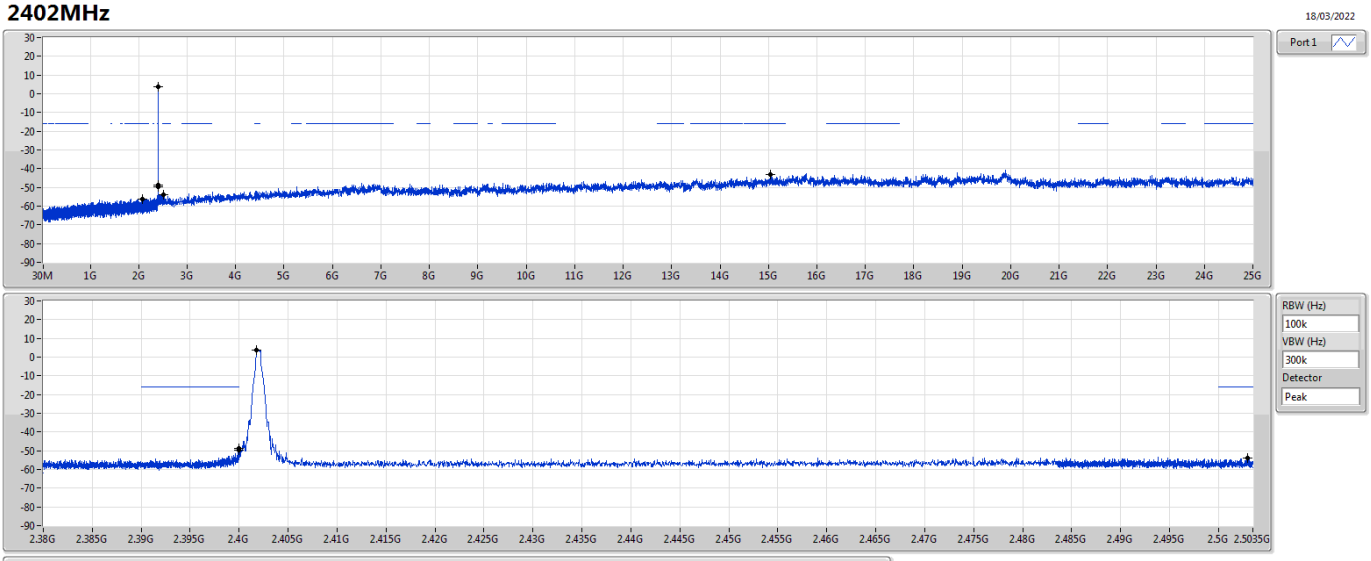
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BT-BR(1Mbps)	Pass	2.4018G	3.89	-16.11	2.07568G	-56.02	2.39997G	-49.82	2.4G	-48.79	2.50293G	-54.05	15.03686G	-43.27	1
BT-EDR(2Mbps)	Pass	2.40188G	3.06	-16.94	2.12356G	-55.81	2.39945G	-44.26	2.4G	-57.10	2.50013G	-53.97	16.89845G	-42.82	1
BT-EDR(3Mbps)	Pass	2.40196G	3.21	-16.79	1.87681G	-55.61	2.39947G	-43.47	2.4G	-58.87	2.50327G	-53.38	16.22355G	-43.08	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-BR(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.4018G	3.89	-16.11	2.07568G	-56.02	2.39997G	-49.82	2.4G	-48.79	2.50293G	-54.05	15.03686G	-43.27	1
2440MHz	Pass	2.44016G	4.07	-15.93	2.13971G	-55.66	2.39366G	-54.17	2.4G	-59.19	2.50017G	-54.15	15.06498G	-42.52	1
2480MHz	Pass	2.48003G	3.34	-16.66	2.13678G	-55.78	2.39749G	-54.11	2.4G	-57.74	2.50058G	-54.39	24.86502G	-42.90	1
BT-EDR(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.40188G	3.06	-16.94	2.12356G	-55.81	2.39945G	-44.26	2.4G	-57.10	2.50013G	-53.97	16.89845G	-42.82	1
2440MHz	Pass	2.44G	3.51	-16.49	2.18231G	-56.11	2.39244G	-54.41	2.4G	-57.45	2.50262G	-53.91	23.2987G	-43.26	1
2480MHz	Pass	2.47987G	3.42	-16.58	2.19964G	-55.35	2.39583G	-54.79	2.4G	-56.42	2.50169G	-53.74	16.78034G	-43.20	1
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.40196G	3.21	-16.79	1.87681G	-55.61	2.39947G	-43.47	2.4G	-58.87	2.50327G	-53.38	16.22355G	-43.08	1
2440MHz	Pass	2.43983G	3.70	-16.30	2.11004G	-55.87	2.39381G	-54.16	2.4G	-57.11	2.50071G	-53.54	16.63693G	-43.53	1
2480MHz	Pass	2.47987G	3.38	-16.62	2.05688G	-55.42	2.39697G	-54.57	2.4G	-57.16	2.50277G	-53.99	23.1356G	-43.17	1

BT-BR(1Mbps) **CSENdB-FS**

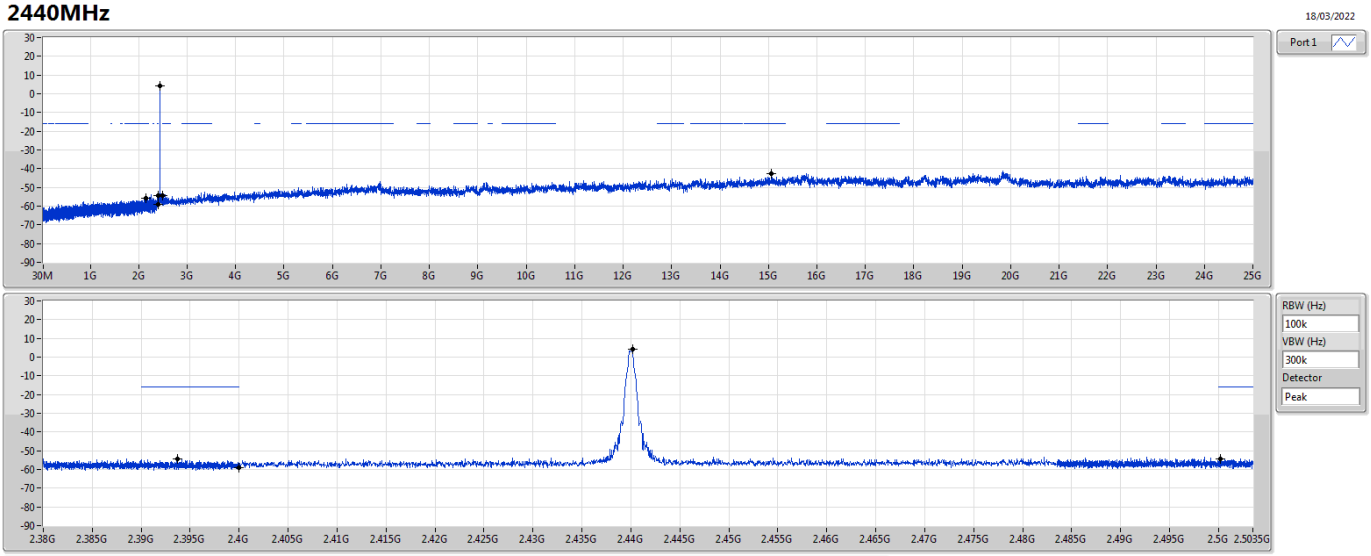
2402MHz



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
2.4018G	3.89	-16.11	2.07568G	-56.02	2.39997G	-49.82	2.4G	-48.79	2.50293G	-54.05	15.03686G	-43.27	1

BT-BR(1Mbps) **CSENdB-FS**

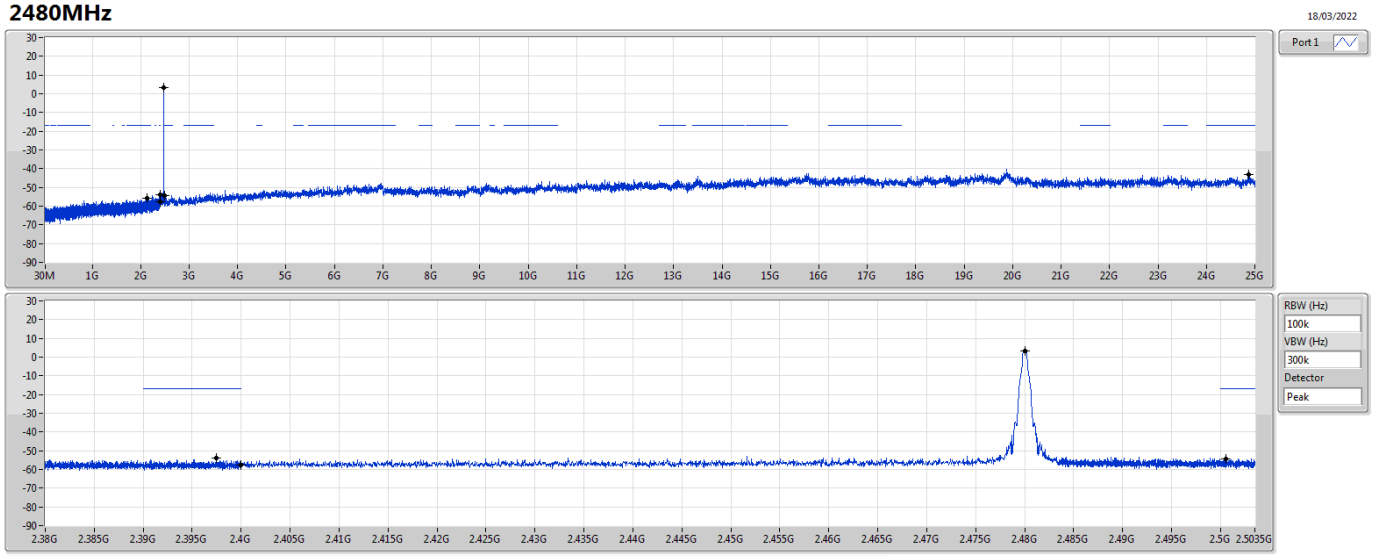
2440MHz



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
2.44016G	4.07	-15.93	2.13971G	-55.66	2.39366G	-54.17	2.4G	-59.19	2.50017G	-54.15	15.06498G	-42.52	1

BT-BR(1Mbps) **CSENdB-FS**

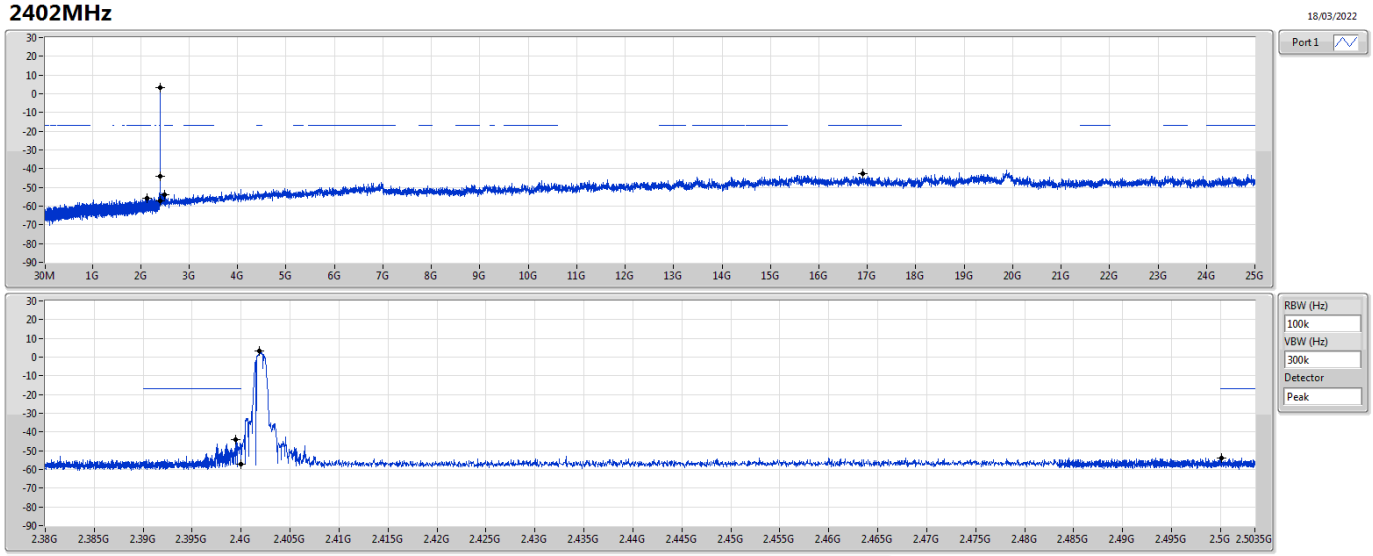
2480MHz



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
2.48003G	3.34	-16.66	2.13678G	-55.78	2.39749G	-54.11	2.4G	-57.74	2.50058G	-54.39	24.86502G	-42.90	1

BT-EDR(2Mbps) **CSENdB-FS**

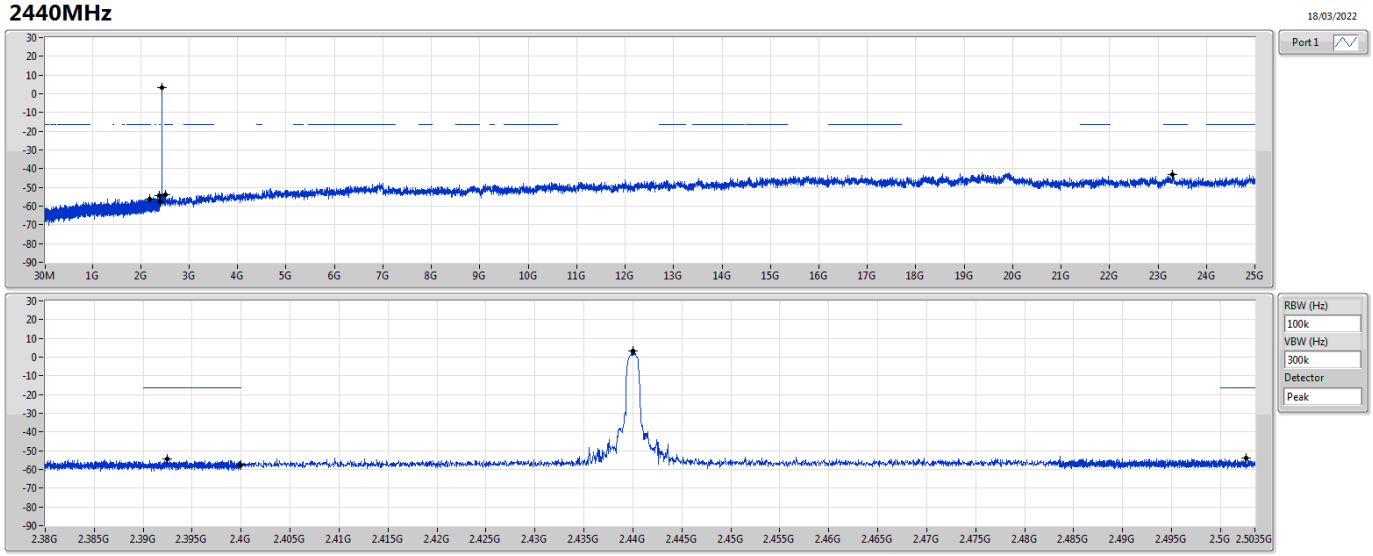
2402MHz



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
2.40188G	3.06	-16.94	2.12356G	-55.81	2.39945G	-44.26	2.4G	-57.10	2.50013G	-53.97	16.89845G	-42.82	1

BT-EDR(2Mbps) **CSENdB-FS**

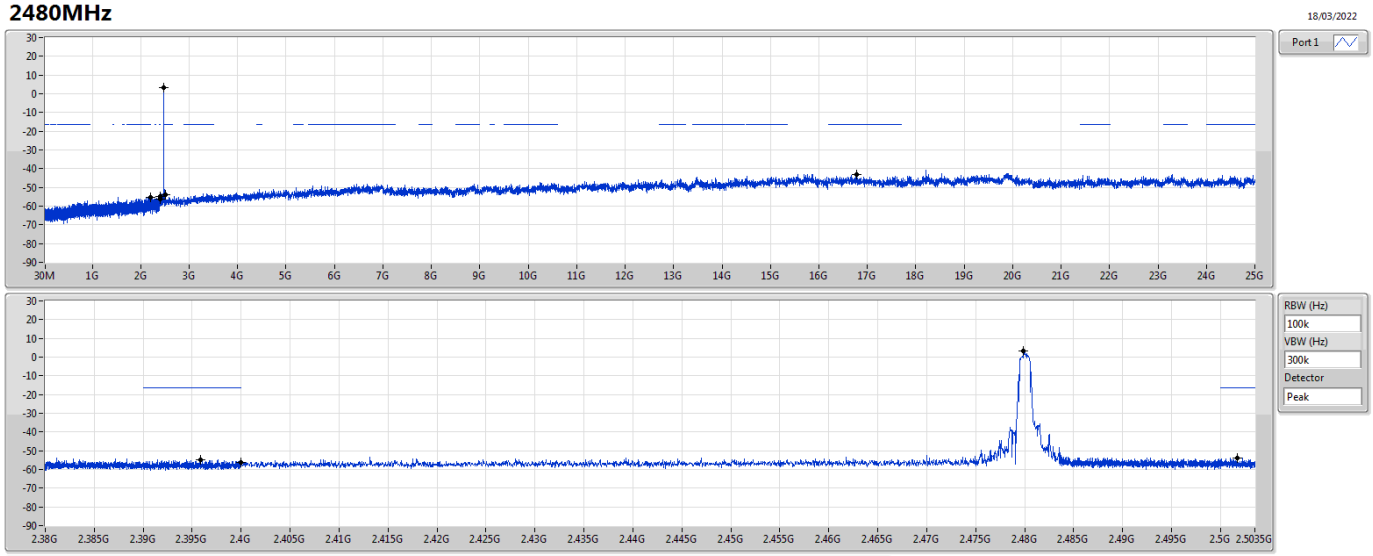
2440MHz



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
2.44G	3.51	-16.49	2.18231G	-56.11	2.39244G	-54.41	2.4G	-57.45	2.50262G	-53.91	23.2987G	-43.26	1

BT-EDR(2Mbps) **CSENdB-FS**

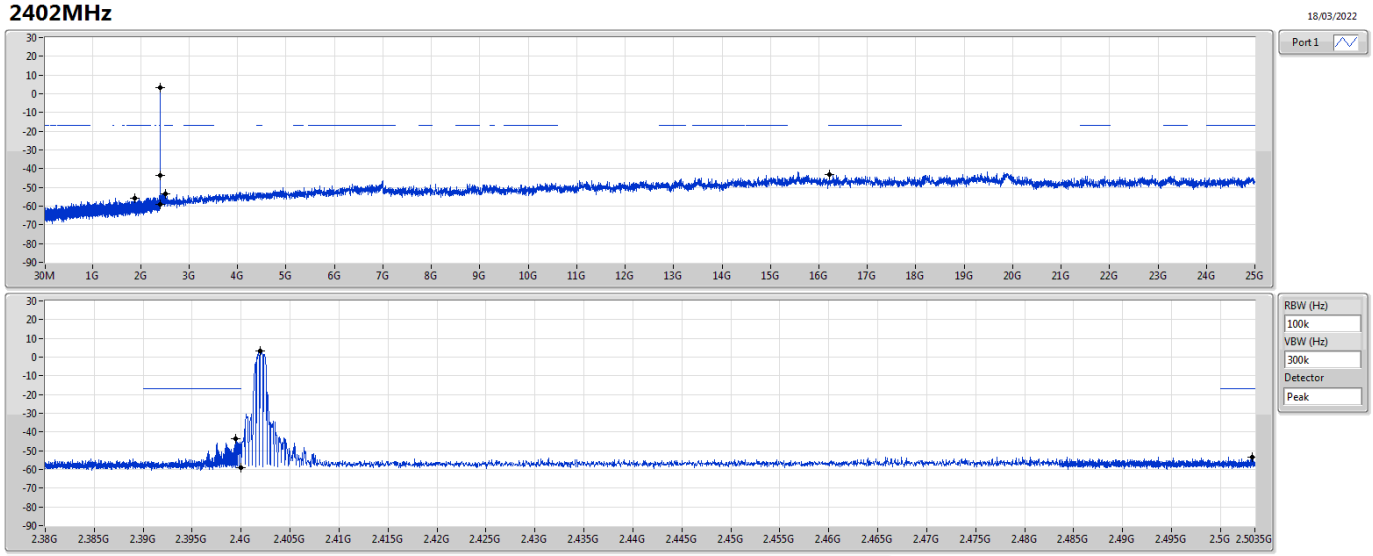
2480MHz



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
2.47987G	3.42	-16.58	2.19964G	-55.35	2.39583G	-54.79	2.4G	-56.42	2.50169G	-53.74	16.78034G	-43.20	1

BT-EDR(3Mbps) **CSENdB-FS**

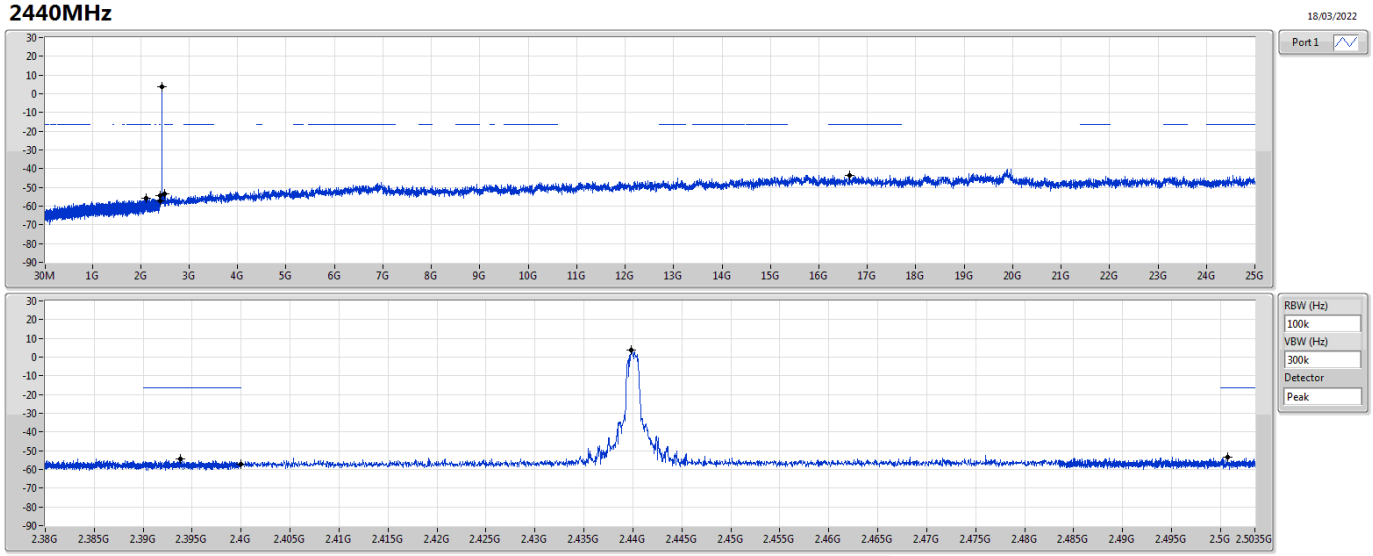
2402MHz



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
2.40196G	3.21	-16.79	1.87681G	-55.61	2.39947G	-43.47	2.4G	-58.87	2.50327G	-53.38	16.22355G	-43.08	1

BT-EDR(3Mbps) **CSENdB-FS**

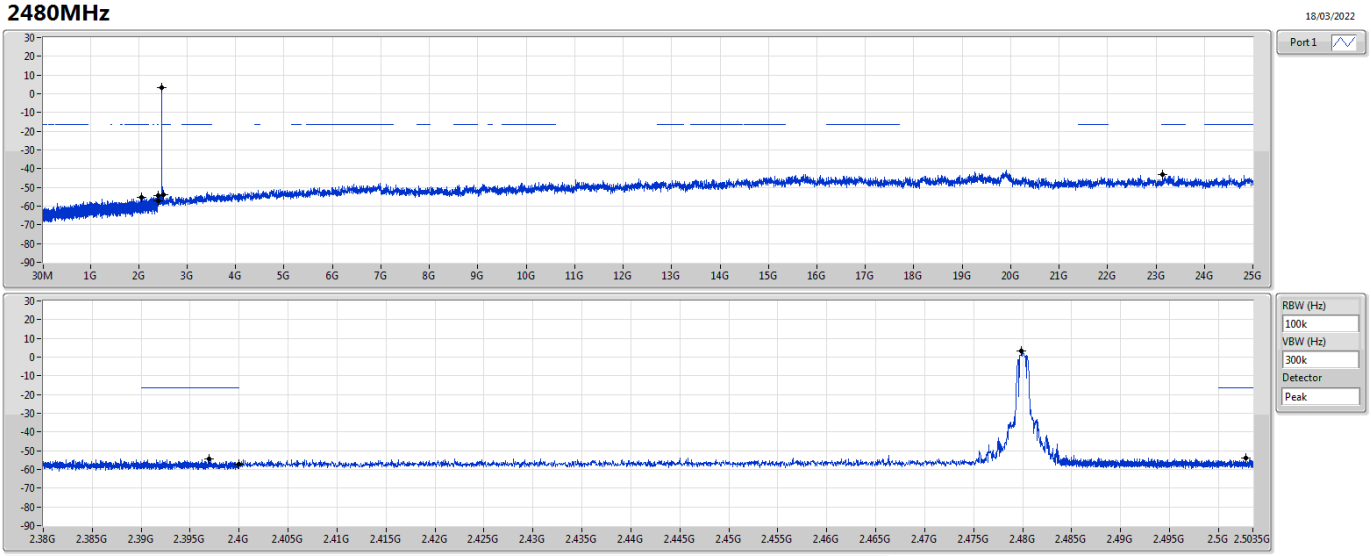
2440MHz



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
2.43983G	3.70	-16.30	2.11004G	-55.87	2.39381G	-54.16	2.4G	-57.11	2.50071G	-53.54	16.63693G	-43.53	1

BT-EDR(3Mbps) **CSENdB-FS**

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
2.47987G	3.38	-16.62	2.05688G	-55.42	2.39697G	-54.57	2.4G	-57.16	2.50277G	-53.99	23.1356G	-43.17	1

Summary

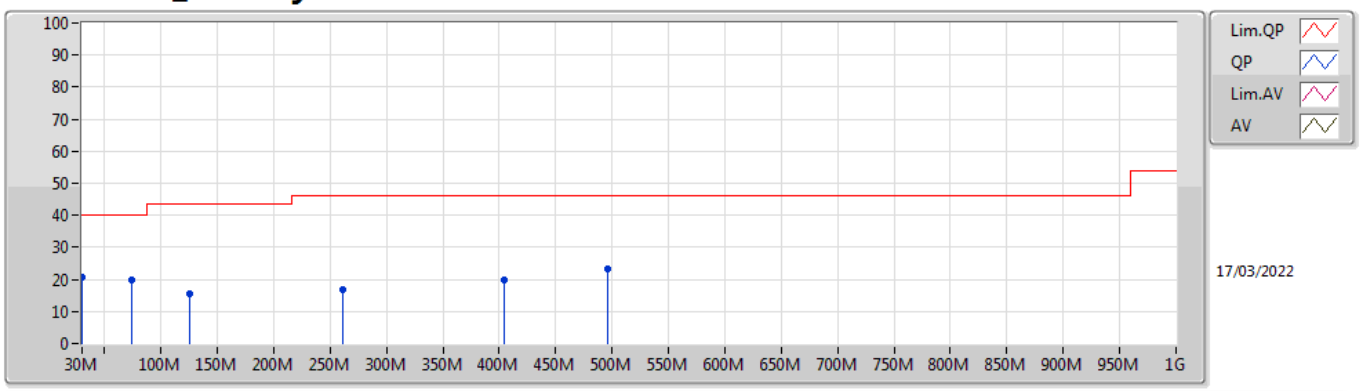
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
BT-EDR(3Mbps)	Pass	PK	30M	20.50	40.00	-19.50	3	Vertical	360	1.00	-

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-
2440MHz	Pass	PK	30M	20.50	40.00	-19.50	3	Vertical	360	1.00	-
2440MHz	Pass	PK	74.62M	19.71	40.00	-20.29	3	Vertical	360	1.00	-
2440MHz	Pass	PK	125.06M	15.50	43.50	-28.00	3	Vertical	360	1.00	-
2440MHz	Pass	PK	260.86M	17.02	46.00	-28.98	3	Vertical	360	1.00	-
2440MHz	Pass	PK	404.42M	19.74	46.00	-26.26	3	Vertical	360	1.00	-
2440MHz	Pass	PK	495.6M	23.19	46.00	-22.81	3	Vertical	360	1.00	-
2440MHz	Pass	PK	30M	19.81	40.00	-20.19	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	113.42M	14.46	43.50	-29.04	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	258.92M	17.55	46.00	-28.45	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	359.8M	18.47	46.00	-27.53	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	468.44M	21.71	46.00	-24.29	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	553.8M	24.68	46.00	-21.32	3	Horizontal	0	1.00	-

BT-EDR(3Mbps)

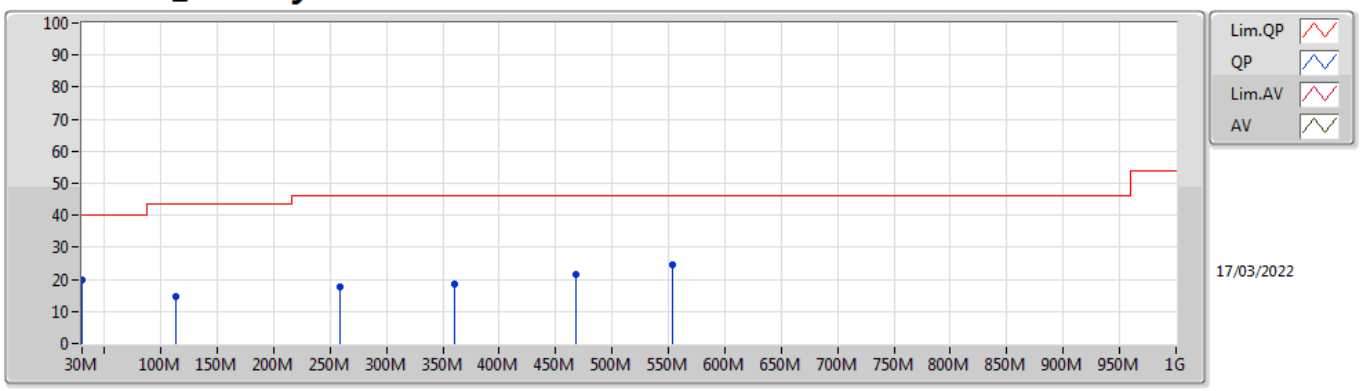
2440MHz_Battery



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	20.50	40.00	-19.50	-12.94	3	Vertical	360	1.00	-	33.44	23.73	0.48	37.15
PK	74.62M	19.71	40.00	-20.29	-24.17	3	Vertical	360	1.00	-	43.88	11.97	0.79	36.93
PK	125.06M	15.50	43.50	-28.00	-18.68	3	Vertical	360	1.00	-	34.18	16.76	1.17	36.61
PK	260.86M	17.02	46.00	-28.98	-15.44	3	Vertical	360	1.00	-	32.46	19.39	1.57	36.40
PK	404.42M	19.74	46.00	-26.26	-13.34	3	Vertical	360	1.00	-	33.08	21.20	2.03	36.57
PK	495.6M	23.19	46.00	-22.81	-11.56	3	Vertical	360	1.00	-	34.75	23.07	2.33	36.96

BT-EDR(3Mbps)

2440MHz_Battery



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	19.81	40.00	-20.19	-12.94	3	Horizontal	0	1.00	-	32.75	23.73	0.48	37.15
PK	113.42M	14.46	43.50	-29.04	-19.20	3	Horizontal	0	1.00	-	33.66	16.39	1.07	36.66
PK	258.92M	17.55	46.00	-28.45	-15.59	3	Horizontal	0	1.00	-	33.14	19.25	1.56	36.40
PK	359.8M	18.47	46.00	-27.53	-14.72	3	Horizontal	0	1.00	-	33.19	19.91	1.91	36.54
PK	468.44M	21.71	46.00	-24.29	-11.84	3	Horizontal	0	1.00	-	33.55	22.68	2.24	36.76
PK	553.8M	24.68	46.00	-21.32	-9.58	3	Horizontal	0	1.00	-	34.26	24.96	2.54	37.08

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-BR(1Mbps)	Pass	PK	2.4952G	58.53	74.00	-15.47	3	Horizontal	204	1.90	-
BT-EDR(3Mbps)	Pass	PK	2.4835G	71.19	74.00	-2.81	3	Vertical	144	2.60	-

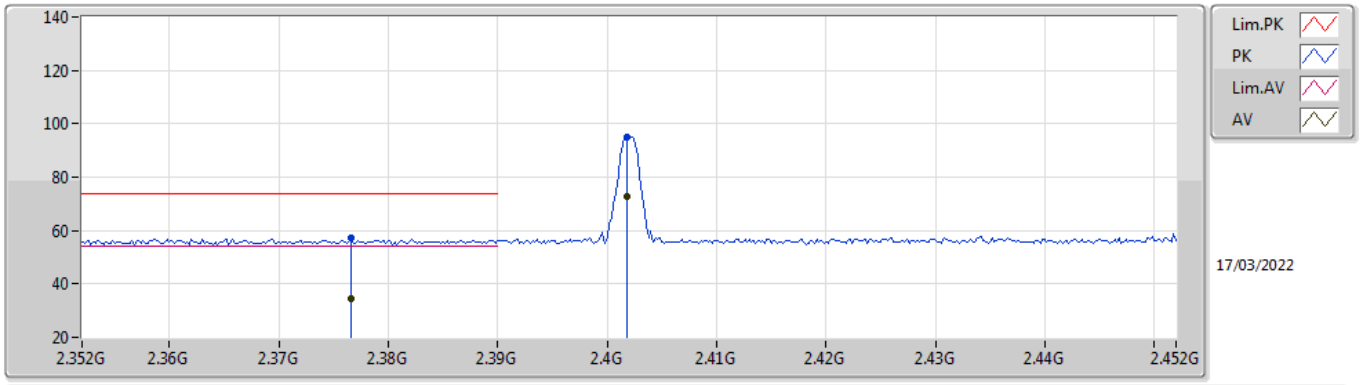
Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-BR(1Mbps)	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3766G	34.65	54.00	-19.35	3	Vertical	144	2.77	-
2402MHz	Pass	AV	2.4018G	72.68	Inf	-Inf	3	Vertical	144	2.77	-
2402MHz	Pass	PK	2.3766G	57.15	74.00	-16.85	3	Vertical	144	2.77	-
2402MHz	Pass	PK	2.4018G	95.18	Inf	-Inf	3	Vertical	144	2.77	-
2402MHz	Pass	AV	2.3706G	34.88	54.00	-19.12	3	Horizontal	197	1.50	-
2402MHz	Pass	AV	2.4018G	71.53	Inf	-Inf	3	Horizontal	197	1.50	-
2402MHz	Pass	PK	2.3706G	57.38	74.00	-16.62	3	Horizontal	197	1.50	-
2402MHz	Pass	PK	2.4018G	94.03	Inf	-Inf	3	Horizontal	197	1.50	-
2402MHz	Pass	AV	3.60332G	28.65	54.00	-25.35	3	Vertical	196	1.04	-
2402MHz	Pass	AV	4.80431G	23.52	54.00	-30.48	3	Vertical	272	1.50	-
2402MHz	Pass	PK	3.60332G	51.15	74.00	-22.85	3	Vertical	196	1.04	-
2402MHz	Pass	PK	4.80431G	46.02	74.00	-27.98	3	Vertical	272	1.50	-
2402MHz	Pass	AV	3.60331G	27.47	54.00	-26.53	3	Horizontal	192	1.03	-
2402MHz	Pass	AV	4.80403G	23.70	54.00	-30.30	3	Horizontal	331	1.50	-
2402MHz	Pass	PK	3.60331G	49.97	74.00	-24.03	3	Horizontal	192	1.03	-
2402MHz	Pass	PK	4.80403G	46.20	74.00	-27.80	3	Horizontal	331	1.50	-
2440MHz	Pass	AV	2.3764G	34.67	54.00	-19.33	3	Vertical	142	2.96	-
2440MHz	Pass	AV	2.44G	70.63	Inf	-Inf	3	Vertical	142	2.96	-
2440MHz	Pass	AV	2.4952G	35.65	54.00	-18.35	3	Vertical	142	2.96	-
2440MHz	Pass	PK	2.3764G	57.17	74.00	-16.83	3	Vertical	142	2.96	-
2440MHz	Pass	PK	2.44G	93.13	Inf	-Inf	3	Vertical	142	2.96	-
2440MHz	Pass	PK	2.4952G	58.15	74.00	-15.85	3	Vertical	142	2.96	-
2440MHz	Pass	AV	2.3572G	35.20	54.00	-18.80	3	Horizontal	204	1.90	-
2440MHz	Pass	AV	2.44G	69.69	Inf	-Inf	3	Horizontal	204	1.90	-
2440MHz	Pass	AV	2.4952G	36.03	54.00	-17.97	3	Horizontal	204	1.90	-
2440MHz	Pass	PK	2.3572G	57.70	74.00	-16.30	3	Horizontal	204	1.90	-
2440MHz	Pass	PK	2.44G	92.19	Inf	-Inf	3	Horizontal	204	1.90	-
2440MHz	Pass	PK	2.4952G	58.53	74.00	-15.47	3	Horizontal	204	1.90	-
2440MHz	Pass	AV	3.65988G	27.00	54.00	-27.00	3	Vertical	194	1.08	-
2440MHz	Pass	AV	4.88007G	24.48	54.00	-29.52	3	Vertical	44	1.01	-
2440MHz	Pass	AV	7.3193G	29.68	54.00	-24.32	3	Vertical	195	1.62	-
2440MHz	Pass	PK	3.65988G	49.50	74.00	-24.50	3	Vertical	194	1.08	-
2440MHz	Pass	PK	4.88007G	46.98	74.00	-27.02	3	Vertical	44	1.01	-
2440MHz	Pass	PK	7.3193G	52.18	74.00	-21.82	3	Vertical	195	1.62	-
2440MHz	Pass	AV	3.66G	25.85	54.00	-28.15	3	Horizontal	193	1.00	-
2440MHz	Pass	AV	4.88027G	23.46	54.00	-30.54	3	Horizontal	74	1.50	-
2440MHz	Pass	AV	7.32036G	30.69	54.00	-23.31	3	Horizontal	181	1.34	-
2440MHz	Pass	PK	3.66G	48.35	74.00	-25.65	3	Horizontal	193	1.00	-
2440MHz	Pass	PK	4.88027G	45.96	74.00	-28.04	3	Horizontal	74	1.50	-
2440MHz	Pass	PK	7.32036G	53.19	74.00	-20.81	3	Horizontal	181	1.34	-
2480MHz	Pass	AV	2.4802G	69.54	Inf	-Inf	3	Vertical	145	2.60	-
2480MHz	Pass	AV	2.486G	35.89	54.00	-18.11	3	Vertical	145	2.60	-
2480MHz	Pass	PK	2.4802G	92.04	Inf	-Inf	3	Vertical	145	2.60	-
2480MHz	Pass	PK	2.486G	58.39	74.00	-15.61	3	Vertical	145	2.60	-
2480MHz	Pass	AV	2.4798G	67.13	Inf	-Inf	3	Horizontal	205	1.59	-
2480MHz	Pass	AV	2.4864G	35.95	54.00	-18.05	3	Horizontal	205	1.59	-
2480MHz	Pass	PK	2.4798G	89.63	Inf	-Inf	3	Horizontal	205	1.59	-
2480MHz	Pass	PK	2.4864G	58.45	74.00	-15.55	3	Horizontal	205	1.59	-
2480MHz	Pass	AV	3.72002G	25.07	54.00	-28.93	3	Vertical	194	1.10	-
2480MHz	Pass	AV	4.95976G	24.98	54.00	-29.02	3	Vertical	97	1.21	-
2480MHz	Pass	AV	7.44022G	30.15	54.00	-23.85	3	Vertical	187	1.26	-
2480MHz	Pass	PK	3.72002G	47.57	74.00	-26.43	3	Vertical	194	1.10	-
2480MHz	Pass	PK	4.95976G	47.48	74.00	-26.52	3	Vertical	97	1.21	-
2480MHz	Pass	PK	7.44022G	52.65	74.00	-21.35	3	Vertical	187	1.26	-
2480MHz	Pass	AV	3.72018G	24.75	54.00	-29.25	3	Horizontal	192	1.26	-
2480MHz	Pass	AV	4.95974G	23.85	54.00	-30.15	3	Horizontal	0	1.49	-
2480MHz	Pass	AV	7.44071G	30.03	54.00	-23.97	3	Horizontal	181	1.41	-
2480MHz	Pass	PK	3.72018G	47.25	74.00	-26.75	3	Horizontal	192	1.26	-
2480MHz	Pass	PK	4.95974G	46.35	74.00	-27.65	3	Horizontal	0	1.49	-
2480MHz	Pass	PK	7.44071G	52.53	74.00	-21.47	3	Horizontal	181	1.41	-

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3586G	35.11	54.00	-18.89	3	Vertical	144	2.77	-
2402MHz	Pass	AV	2.4018G	73.55	Inf	-Inf	3	Vertical	144	2.77	-
2402MHz	Pass	PK	2.3586G	57.61	74.00	-16.39	3	Vertical	144	2.77	-
2402MHz	Pass	PK	2.4018G	96.05	Inf	-Inf	3	Vertical	144	2.77	-
2402MHz	Pass	AV	2.3726G	35.05	54.00	-18.95	3	Horizontal	198	1.50	-
2402MHz	Pass	AV	2.4018G	72.36	Inf	-Inf	3	Horizontal	198	1.50	-
2402MHz	Pass	PK	2.3726G	57.55	74.00	-16.45	3	Horizontal	198	1.50	-
2402MHz	Pass	PK	2.4018G	94.86	Inf	-Inf	3	Horizontal	198	1.50	-
2402MHz	Pass	AV	3.60306G	28.84	54.00	-25.16	3	Vertical	195	1.04	-
2402MHz	Pass	AV	4.80674G	24.04	54.00	-29.96	3	Vertical	181	2.13	-
2402MHz	Pass	PK	3.60306G	51.34	74.00	-22.66	3	Vertical	195	1.04	-
2402MHz	Pass	PK	4.80674G	46.54	74.00	-27.46	3	Vertical	181	2.13	-
2402MHz	Pass	AV	3.60318G	27.19	54.00	-26.81	3	Horizontal	190	1.04	-
2402MHz	Pass	AV	4.80386G	23.56	54.00	-30.44	3	Horizontal	119	1.38	-
2402MHz	Pass	PK	3.60318G	49.69	74.00	-24.31	3	Horizontal	190	1.04	-
2402MHz	Pass	PK	4.80386G	46.06	74.00	-27.94	3	Horizontal	119	1.38	-
2440MHz	Pass	AV	2.3684G	34.75	54.00	-19.25	3	Vertical	143	2.98	-
2440MHz	Pass	AV	2.44G	71.57	Inf	-Inf	3	Vertical	143	2.98	-
2440MHz	Pass	AV	2.484G	35.09	54.00	-18.91	3	Vertical	143	2.98	-
2440MHz	Pass	PK	2.3684G	57.25	74.00	-16.75	3	Vertical	143	2.98	-
2440MHz	Pass	PK	2.44G	94.07	Inf	-Inf	3	Vertical	143	2.98	-
2440MHz	Pass	PK	2.484G	57.59	74.00	-16.41	3	Vertical	143	2.98	-
2440MHz	Pass	AV	2.3404G	35.13	54.00	-18.87	3	Horizontal	202	1.92	-
2440MHz	Pass	AV	2.44G	70.64	Inf	-Inf	3	Horizontal	202	1.92	-
2440MHz	Pass	AV	2.4984G	35.09	54.00	-18.91	3	Horizontal	202	1.92	-
2440MHz	Pass	PK	2.3404G	57.63	74.00	-16.37	3	Horizontal	202	1.92	-
2440MHz	Pass	PK	2.44G	93.14	Inf	-Inf	3	Horizontal	202	1.92	-
2440MHz	Pass	PK	2.4984G	57.59	74.00	-16.41	3	Horizontal	202	1.92	-
2440MHz	Pass	AV	3.66016G	26.63	54.00	-27.37	3	Vertical	196	1.12	-
2440MHz	Pass	AV	4.87984G	23.13	54.00	-30.87	3	Vertical	98	1.50	-
2440MHz	Pass	AV	7.32037G	28.55	54.00	-25.45	3	Vertical	196	1.50	-
2440MHz	Pass	PK	3.66016G	49.13	74.00	-24.87	3	Vertical	196	1.12	-
2440MHz	Pass	PK	4.87984G	45.63	74.00	-28.37	3	Vertical	98	1.50	-
2440MHz	Pass	PK	7.32037G	51.05	74.00	-22.95	3	Vertical	196	1.50	-
2440MHz	Pass	AV	3.6605G	25.63	54.00	-28.37	3	Horizontal	195	1.02	-
2440MHz	Pass	AV	4.88031G	23.29	54.00	-30.71	3	Horizontal	4	1.50	-
2440MHz	Pass	AV	7.31922G	28.55	54.00	-25.45	3	Horizontal	184	1.50	-
2440MHz	Pass	PK	3.6605G	48.13	74.00	-25.87	3	Horizontal	195	1.02	-
2440MHz	Pass	PK	4.88031G	45.79	74.00	-28.21	3	Horizontal	4	1.50	-
2440MHz	Pass	PK	7.31922G	51.45	74.00	-22.55	3	Horizontal	184	1.50	-
2480MHz	Pass	AV	2.4798G	70.81	Inf	-Inf	3	Vertical	144	2.60	-
2480MHz	Pass	AV	2.4835G	48.69	54.00	-5.31	3	Vertical	144	2.60	-
2480MHz	Pass	PK	2.4798G	93.31	Inf	-Inf	3	Vertical	144	2.60	-
2480MHz	Pass	PK	2.4835G	71.19	74.00	-2.81	3	Vertical	144	2.60	-
2480MHz	Pass	AV	2.4798G	68.45	Inf	-Inf	3	Horizontal	205	1.59	-
2480MHz	Pass	AV	2.4835G	47.05	54.00	-6.95	3	Horizontal	205	1.59	-
2480MHz	Pass	PK	2.4798G	90.95	Inf	-Inf	3	Horizontal	205	1.59	-
2480MHz	Pass	PK	2.4835G	69.55	74.00	-4.45	3	Horizontal	205	1.59	-
2480MHz	Pass	AV	3.72072G	24.49	54.00	-29.51	3	Vertical	194	1.09	-
2480MHz	Pass	AV	4.95993G	24.79	54.00	-29.21	3	Vertical	67	1.04	-
2480MHz	Pass	AV	7.43915G	29.34	54.00	-24.66	3	Vertical	189	1.29	-
2480MHz	Pass	PK	3.72072G	46.99	74.00	-27.01	3	Vertical	194	1.09	-
2480MHz	Pass	PK	4.95993G	47.29	74.00	-26.71	3	Vertical	67	1.04	-
2480MHz	Pass	PK	7.43915G	51.84	74.00	-22.16	3	Vertical	189	1.29	-
2480MHz	Pass	AV	3.72052G	24.04	54.00	-29.96	3	Horizontal	200	1.25	-
2480MHz	Pass	AV	4.96096G	24.25	54.00	-29.75	3	Horizontal	5	1.50	-
2480MHz	Pass	AV	7.4404G	29.00	54.00	-25.00	3	Horizontal	185	1.58	-
2480MHz	Pass	PK	3.72052G	46.54	74.00	-27.46	3	Horizontal	200	1.25	-
2480MHz	Pass	PK	4.96096G	46.75	74.00	-27.25	3	Horizontal	5	1.50	-
2480MHz	Pass	PK	7.4404G	51.50	74.00	-22.50	3	Horizontal	185	1.58	-

BT-BR(1Mbps)

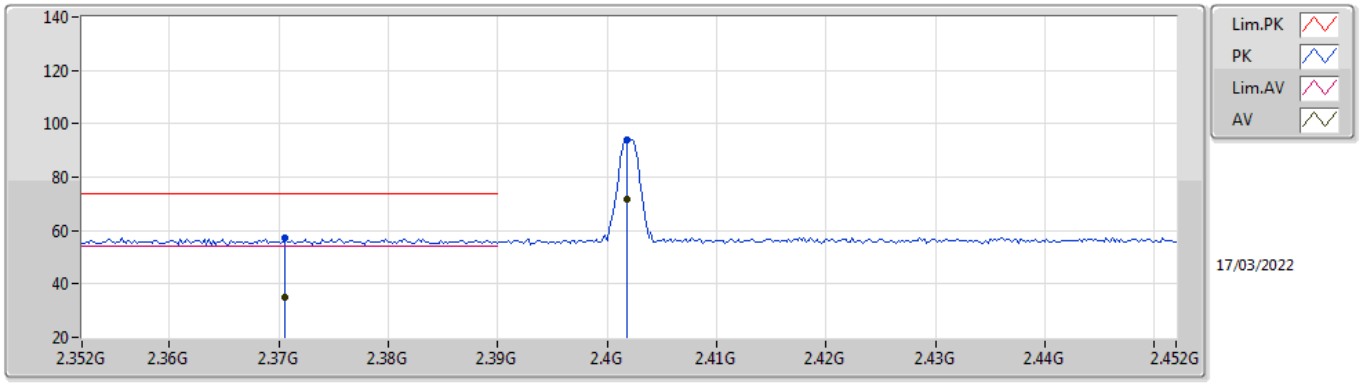
2402MHz_TX



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	2.3766G	34.65	54.00	-19.35	31.92	3	Vertical	144	2.77	-	2.73	27.36	4.56	-
AV	2.4018G	72.68	Inf	-Inf	32.08	3	Vertical	144	2.77	-	40.60	27.50	4.58	-
PK	2.3766G	57.15	74.00	-16.85	31.92	3	Vertical	144	2.77	-	25.23	27.36	4.56	-
PK	2.4018G	95.18	Inf	-Inf	32.08	3	Vertical	144	2.77	-	63.10	27.50	4.58	-

BT-BR(1Mbps)

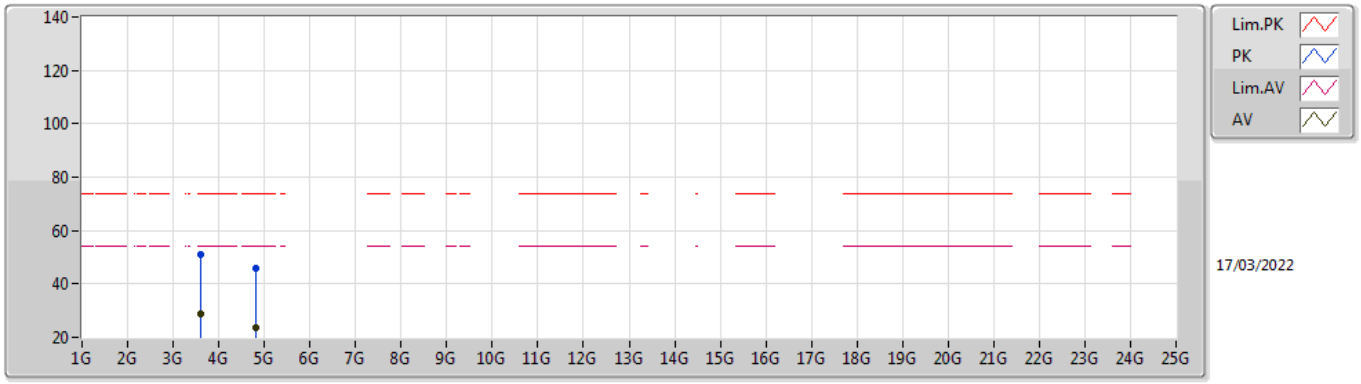
2402MHz_TX



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	2.3706G	34.88	54.00	-19.12	31.87	3	Horizontal	197	1.50	-	3.01	27.32	4.55	-
AV	2.4018G	71.53	Inf	-Inf	32.08	3	Horizontal	197	1.50	-	39.45	27.50	4.58	-
PK	2.3706G	57.38	74.00	-16.62	31.87	3	Horizontal	197	1.50	-	25.51	27.32	4.55	-
PK	2.4018G	94.03	Inf	-Inf	32.08	3	Horizontal	197	1.50	-	61.95	27.50	4.58	-

BT-BR(1Mbps)

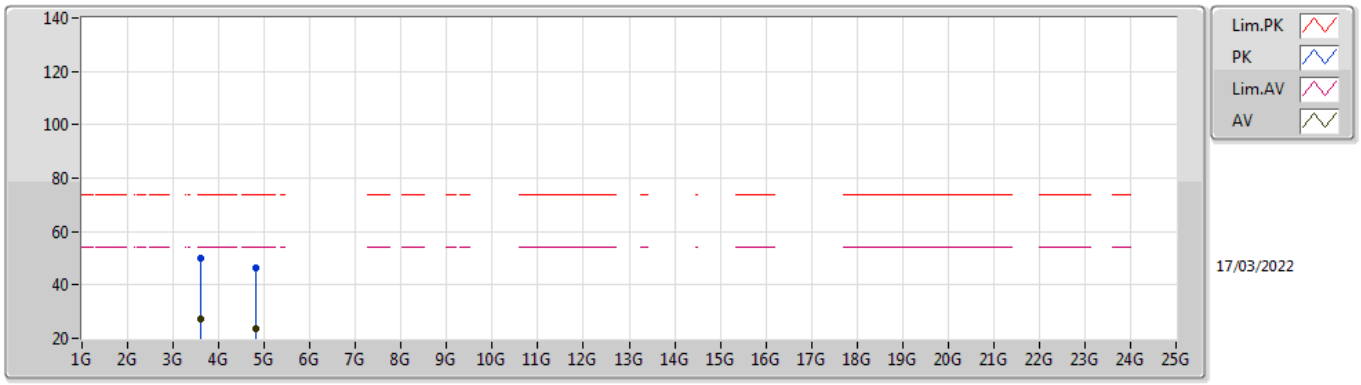
2402MHz_TX



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	3.60332G	28.65	54.00	-25.35	-0.03	3	Vertical	196	1.04	-	28.68	29.60	5.28	34.91
AV	4.80431G	23.52	54.00	-30.48	4.18	3	Vertical	272	1.50	-	19.34	32.33	6.66	34.81
PK	3.60332G	51.15	74.00	-22.85	-0.03	3	Vertical	196	1.04	-	51.18	29.60	5.28	34.91
PK	4.80431G	46.02	74.00	-27.98	4.18	3	Vertical	272	1.50	-	41.84	32.33	6.66	34.81

BT-BR(1Mbps)

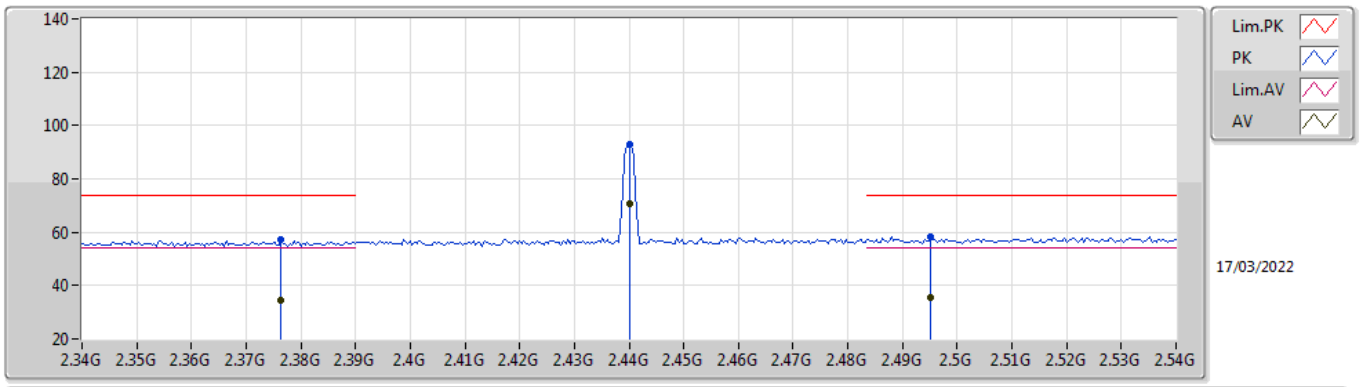
2402MHz_TX



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	3.60331G	27.47	54.00	-26.53	-0.03	3	Horizontal	192	1.03	-	27.50	29.60	5.28	34.91
AV	4.80403G	23.70	54.00	-30.30	4.17	3	Horizontal	331	1.50	-	19.53	32.32	6.66	34.81
PK	3.60331G	49.97	74.00	-24.03	-0.03	3	Horizontal	192	1.03	-	50.00	29.60	5.28	34.91
PK	4.80403G	46.20	74.00	-27.80	4.17	3	Horizontal	331	1.50	-	42.03	32.32	6.66	34.81

BT-BR(1Mbps)

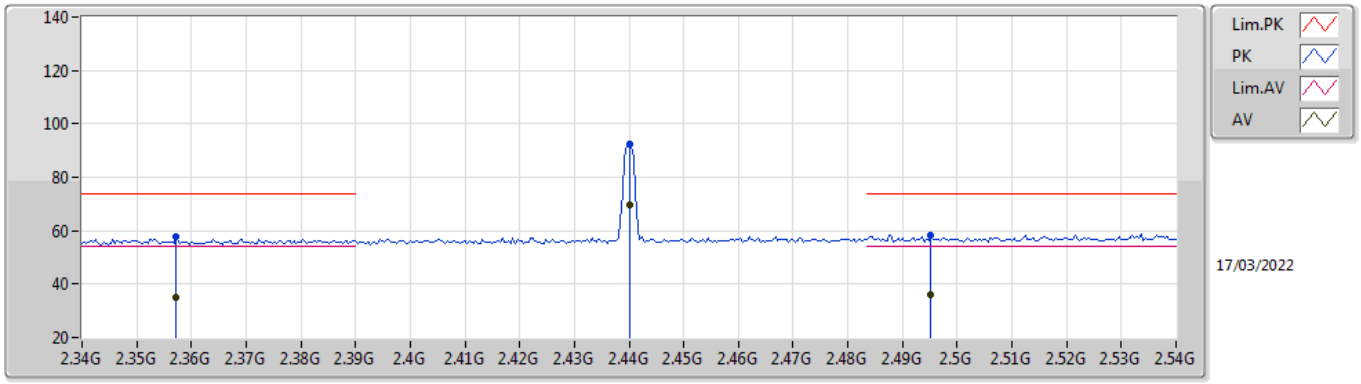
2440MHz_TX



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	2.3764G	34.67	54.00	-19.33	31.92	3	Vertical	142	2.96	-	2.75	27.36	4.56	-
AV	2.44G	70.63	Inf	-Inf	32.18	3	Vertical	142	2.96	-	38.45	27.58	4.60	-
AV	2.4952G	35.65	54.00	-18.35	32.49	3	Vertical	142	2.96	-	3.16	27.87	4.62	-
PK	2.3764G	57.17	74.00	-16.83	31.92	3	Vertical	142	2.96	-	25.25	27.36	4.56	-
PK	2.44G	93.13	Inf	-Inf	32.18	3	Vertical	142	2.96	-	60.95	27.58	4.60	-
PK	2.4952G	58.15	74.00	-15.85	32.49	3	Vertical	142	2.96	-	25.66	27.87	4.62	-

BT-BR(1Mbps)

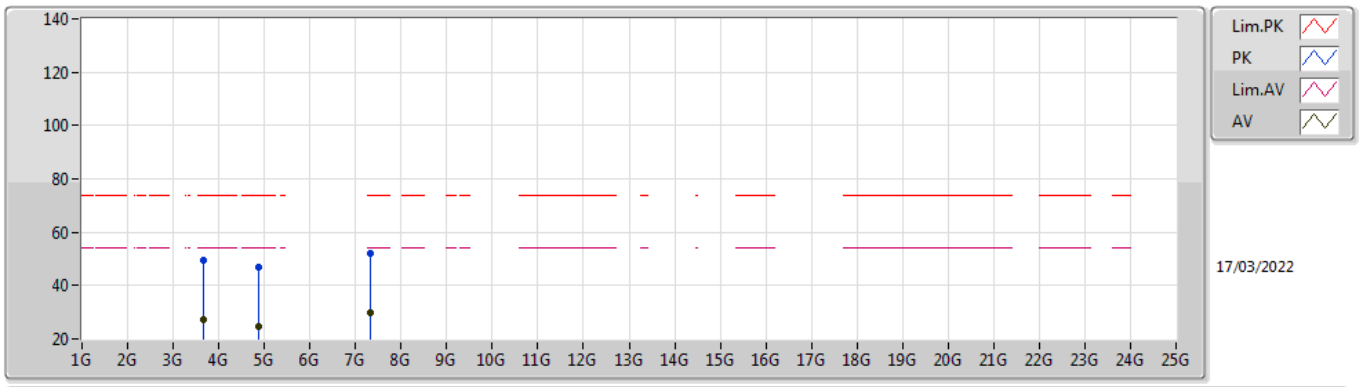
2440MHz_TX



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	2.3572G	35.20	54.00	-18.80	31.78	3	Horizontal	204	1.90	-	3.42	27.24	4.54	-
AV	2.44G	69.69	Inf	-Inf	32.18	3	Horizontal	204	1.90	-	37.51	27.58	4.60	-
AV	2.4952G	36.03	54.00	-17.97	32.49	3	Horizontal	204	1.90	-	3.54	27.87	4.62	-
PK	2.3572G	57.70	74.00	-16.30	31.78	3	Horizontal	204	1.90	-	25.92	27.24	4.54	-
PK	2.44G	92.19	Inf	-Inf	32.18	3	Horizontal	204	1.90	-	60.01	27.58	4.60	-
PK	2.4952G	58.53	74.00	-15.47	32.49	3	Horizontal	204	1.90	-	26.04	27.87	4.62	-

BT-BR(1Mbps)

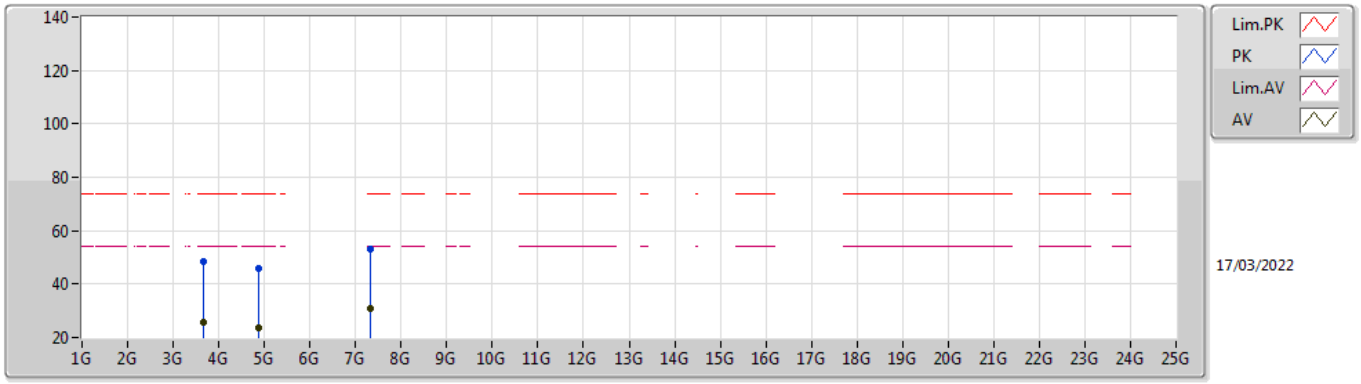
2440MHz_TX



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	3.65988G	27.00	54.00	-27.00	0.21	3	Vertical	194	1.08	-	26.79	29.64	5.48	34.91
AV	4.88007G	24.48	54.00	-29.52	4.65	3	Vertical	44	1.01	-	19.83	32.72	6.72	34.79
AV	7.3193G	29.68	54.00	-24.32	9.73	3	Vertical	195	1.62	-	19.95	36.68	7.87	34.82
PK	3.65988G	49.50	74.00	-24.50	0.21	3	Vertical	194	1.08	-	49.29	29.64	5.48	34.91
PK	4.88007G	46.98	74.00	-27.02	4.65	3	Vertical	44	1.01	-	42.33	32.72	6.72	34.79
PK	7.3193G	52.18	74.00	-21.82	9.73	3	Vertical	195	1.62	-	42.45	36.68	7.87	34.82

BT-BR(1Mbps)

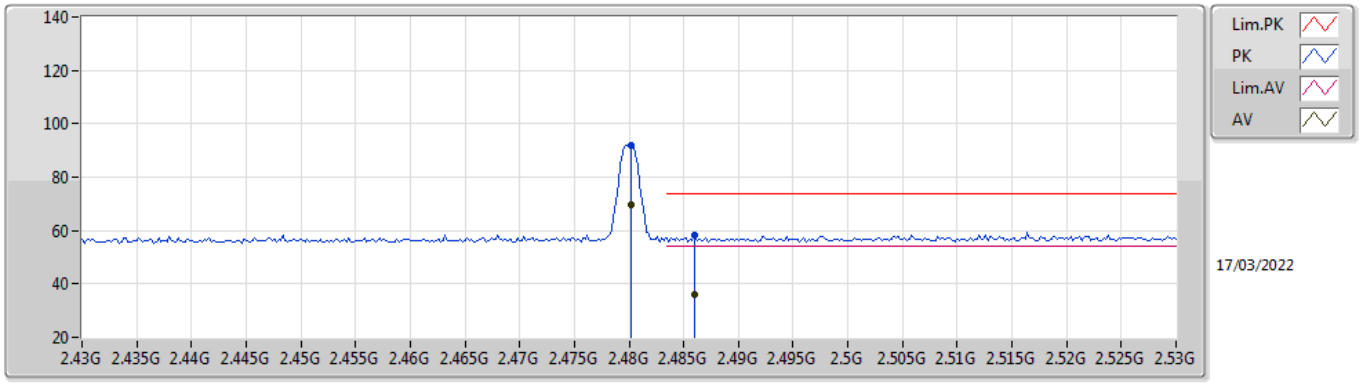
2440MHz_TX



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	3.66G	25.85	54.00	-28.15	0.21	3	Horizontal	193	1.00	-	25.64	29.64	5.48	34.91
AV	4.88027G	23.46	54.00	-30.54	4.65	3	Horizontal	74	1.50	-	18.81	32.72	6.72	34.79
AV	7.32036G	30.69	54.00	-23.31	9.73	3	Horizontal	181	1.34	-	20.96	36.68	7.87	34.82
PK	3.66G	48.35	74.00	-25.65	0.21	3	Horizontal	193	1.00	-	48.14	29.64	5.48	34.91
PK	4.88027G	45.96	74.00	-28.04	4.65	3	Horizontal	74	1.50	-	41.31	32.72	6.72	34.79
PK	7.32036G	53.19	74.00	-20.81	9.73	3	Horizontal	181	1.34	-	43.46	36.68	7.87	34.82

BT-BR(1Mbps)

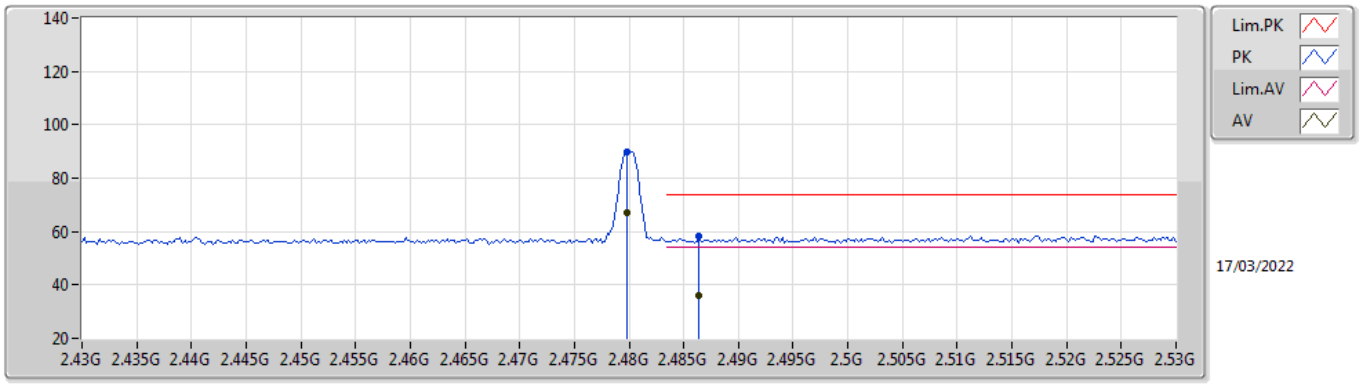
2480MHz_TX



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	2.4802G	69.54	Inf	-Inf	32.39	3	Vertical	145	2.60	-	37.15	27.78	4.61	-
AV	2.486G	35.89	54.00	-18.11	32.43	3	Vertical	145	2.60	-	3.46	27.82	4.61	-
PK	2.4802G	92.04	Inf	-Inf	32.39	3	Vertical	145	2.60	-	59.65	27.78	4.61	-
PK	2.486G	58.39	74.00	-15.61	32.43	3	Vertical	145	2.60	-	25.96	27.82	4.61	-

BT-BR(1Mbps)

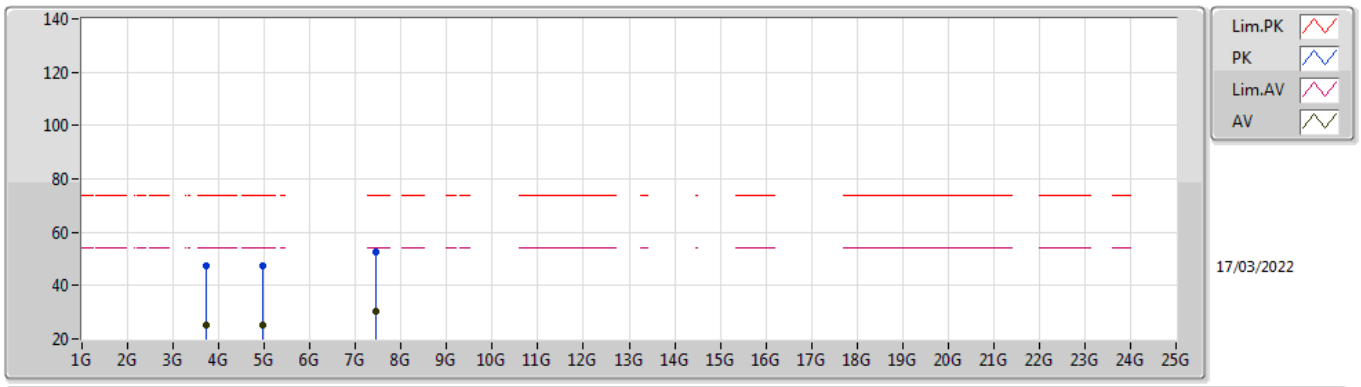
2480MHz_TX



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	2.4798G	67.13	Inf	-Inf	32.39	3	Horizontal	205	1.59	-	34.74	27.78	4.61	-
AV	2.4864G	35.95	54.00	-18.05	32.43	3	Horizontal	205	1.59	-	3.52	27.82	4.61	-
PK	2.4798G	89.63	Inf	-Inf	32.39	3	Horizontal	205	1.59	-	57.24	27.78	4.61	-
PK	2.4864G	58.45	74.00	-15.55	32.43	3	Horizontal	205	1.59	-	26.02	27.82	4.61	-

BT-BR(1Mbps)

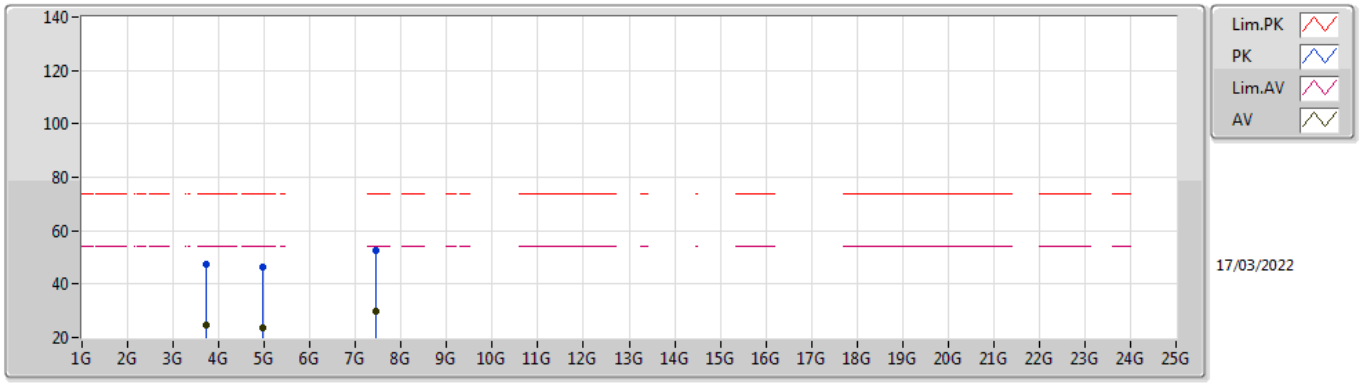
2480MHz_TX



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	3.72002G	25.07	54.00	-28.93	0.69	3	Vertical	194	1.10	-	24.38	29.92	5.69	34.92
AV	4.95976G	24.98	54.00	-29.02	5.03	3	Vertical	97	1.21	-	19.95	33.02	6.78	34.77
AV	7.44022G	30.15	54.00	-23.85	9.52	3	Vertical	187	1.26	-	20.63	36.30	8.06	34.84
PK	3.72002G	47.57	74.00	-26.43	0.69	3	Vertical	194	1.10	-	46.88	29.92	5.69	34.92
PK	4.95976G	47.48	74.00	-26.52	5.03	3	Vertical	97	1.21	-	42.45	33.02	6.78	34.77
PK	7.44022G	52.65	74.00	-21.35	9.52	3	Vertical	187	1.26	-	43.13	36.30	8.06	34.84

BT-BR(1Mbps)

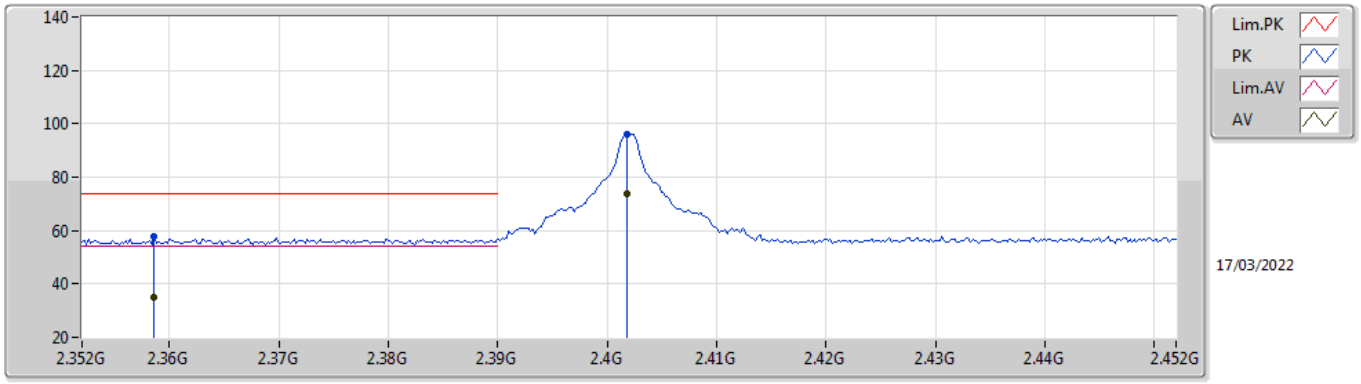
2480MHz_TX



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	3.72018G	24.75	54.00	-29.25	0.69	3	Horizontal	192	1.26	-	24.06	29.92	5.69	34.92
AV	4.95974G	23.85	54.00	-30.15	5.03	3	Horizontal	0	1.49	-	18.82	33.02	6.78	34.77
AV	7.44071G	30.03	54.00	-23.97	9.52	3	Horizontal	181	1.41	-	20.51	36.30	8.06	34.84
PK	3.72018G	47.25	74.00	-26.75	0.69	3	Horizontal	192	1.26	-	46.56	29.92	5.69	34.92
PK	4.95974G	46.35	74.00	-27.65	5.03	3	Horizontal	0	1.49	-	41.32	33.02	6.78	34.77
PK	7.44071G	52.53	74.00	-21.47	9.52	3	Horizontal	181	1.41	-	43.01	36.30	8.06	34.84

BT-EDR(3Mbps)

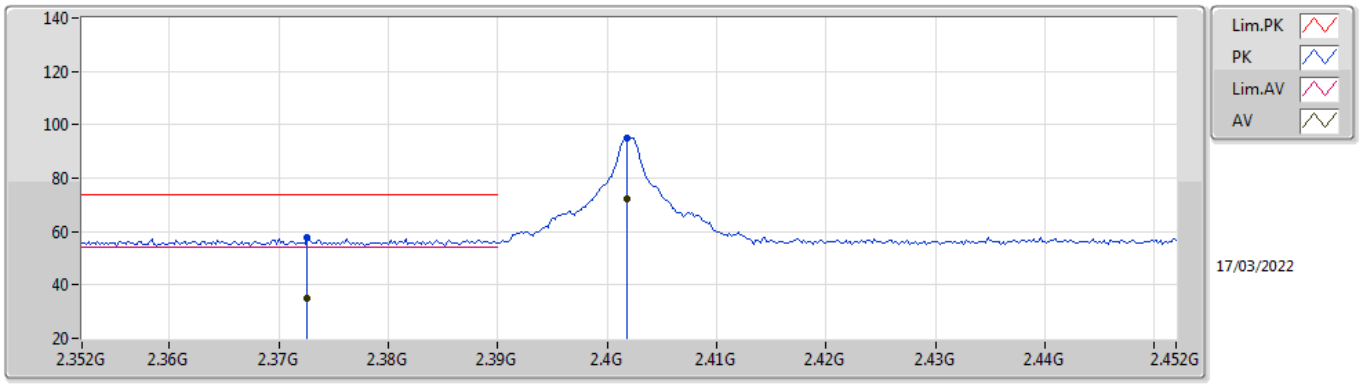
2402MHz_TX



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	2.3586G	35.11	54.00	-18.89	31.79	3	Vertical	144	2.77	-	3.32	27.25	4.54	-
AV	2.4018G	73.55	Inf	-Inf	32.08	3	Vertical	144	2.77	-	41.47	27.50	4.58	-
PK	2.3586G	57.61	74.00	-16.39	31.79	3	Vertical	144	2.77	-	25.82	27.25	4.54	-
PK	2.4018G	96.05	Inf	-Inf	32.08	3	Vertical	144	2.77	-	63.97	27.50	4.58	-

BT-EDR(3Mbps)

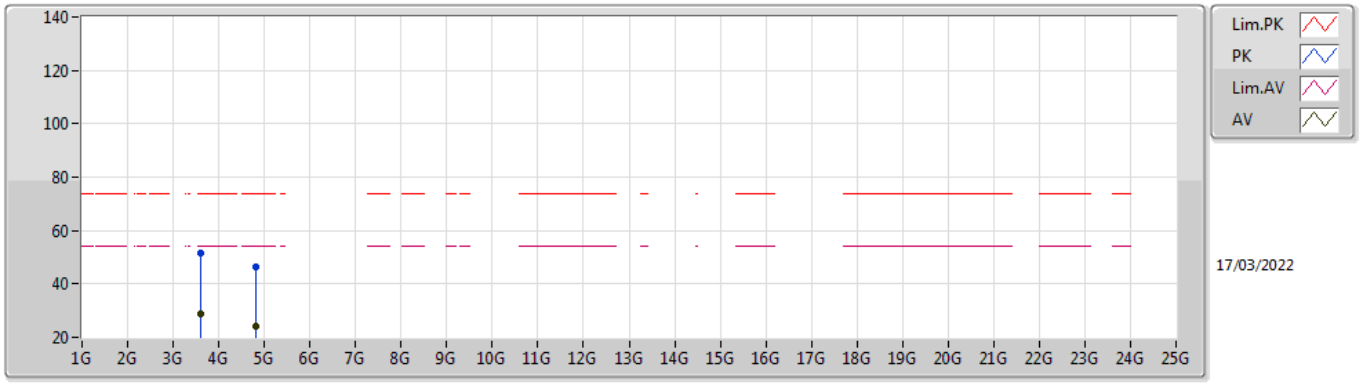
2402MHz_TX



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	2.3726G	35.05	54.00	-18.95	31.89	3	Horizontal	198	1.50	-	3.16	27.34	4.55	-
AV	2.4018G	72.36	Inf	-Inf	32.08	3	Horizontal	198	1.50	-	40.28	27.50	4.58	-
PK	2.3726G	57.55	74.00	-16.45	31.89	3	Horizontal	198	1.50	-	25.66	27.34	4.55	-
PK	2.4018G	94.86	Inf	-Inf	32.08	3	Horizontal	198	1.50	-	62.78	27.50	4.58	-

BT-EDR(3Mbps)

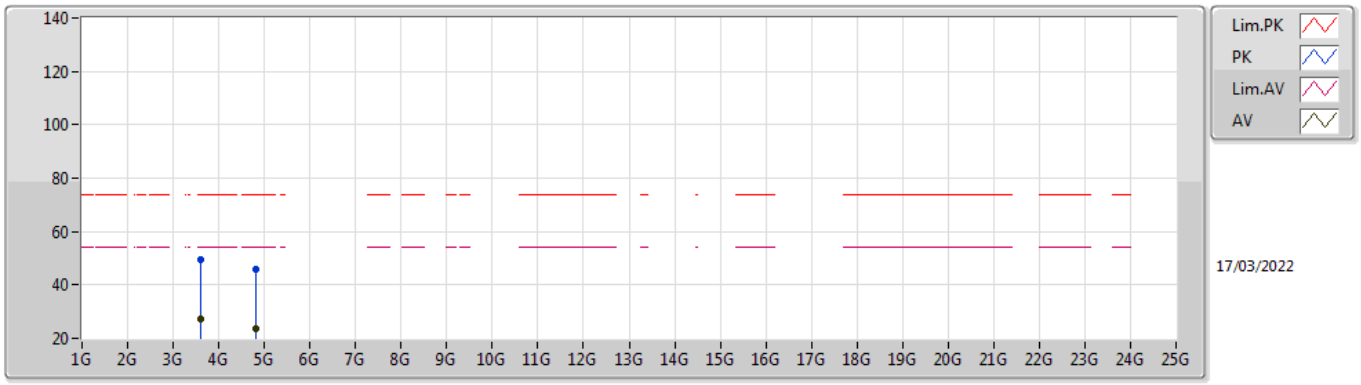
2402MHz_TX



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	3.60306G	28.84	54.00	-25.16	-0.03	3	Vertical	195	1.04	-	28.87	29.60	5.28	34.91
AV	4.80674G	24.04	54.00	-29.96	4.20	3	Vertical	181	2.13	-	19.84	32.34	6.67	34.81
PK	3.60306G	51.34	74.00	-22.66	-0.03	3	Vertical	195	1.04	-	51.37	29.60	5.28	34.91
PK	4.80674G	46.54	74.00	-27.46	4.20	3	Vertical	181	2.13	-	42.34	32.34	6.67	34.81

BT-EDR(3Mbps)

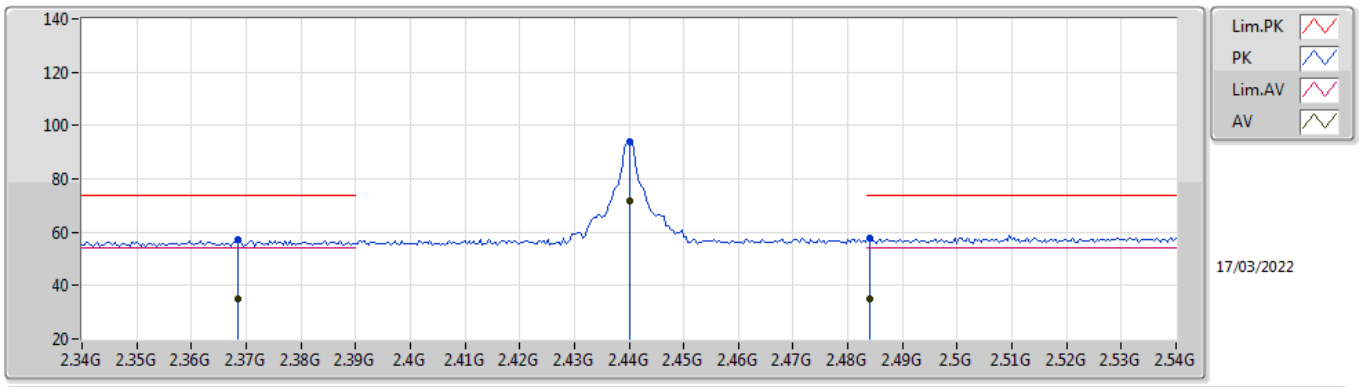
2402MHz_TX



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	3.60318G	27.19	54.00	-26.81	-0.03	3	Horizontal	190	1.04	-	27.22	29.60	5.28	34.91
AV	4.80386G	23.56	54.00	-30.44	4.17	3	Horizontal	119	1.38	-	19.39	32.32	6.66	34.81
PK	3.60318G	49.69	74.00	-24.31	-0.03	3	Horizontal	190	1.04	-	49.72	29.60	5.28	34.91
PK	4.80386G	46.06	74.00	-27.94	4.17	3	Horizontal	119	1.38	-	41.89	32.32	6.66	34.81

BT-EDR(3Mbps)

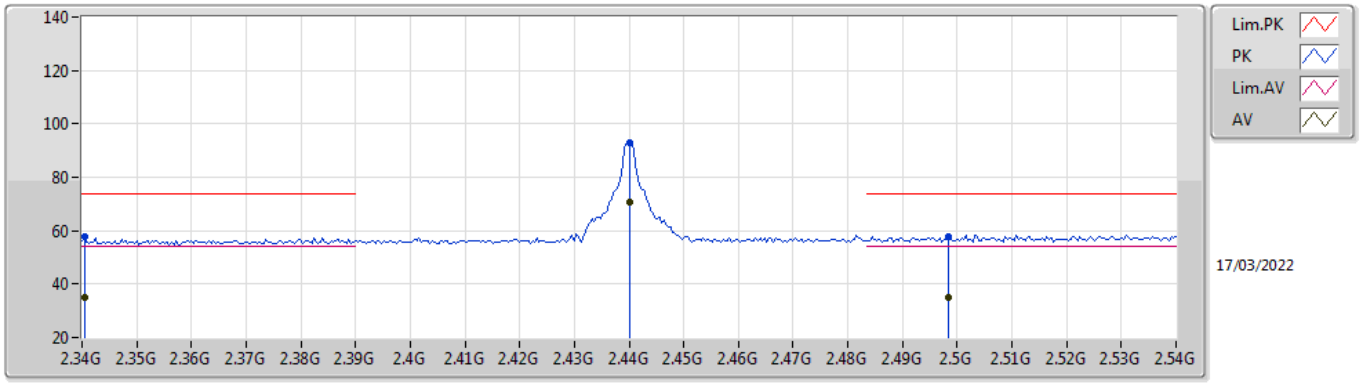
2440MHz_TX



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	2.3684G	34.75	54.00	-19.25	31.86	3	Vertical	143	2.98	-	2.89	27.31	4.55	-
AV	2.44G	71.57	Inf	-Inf	32.18	3	Vertical	143	2.98	-	39.39	27.58	4.60	-
AV	2.484G	35.09	54.00	-18.91	32.41	3	Vertical	143	2.98	-	2.68	27.80	4.61	-
PK	2.3684G	57.25	74.00	-16.75	31.86	3	Vertical	143	2.98	-	25.39	27.31	4.55	-
PK	2.44G	94.07	Inf	-Inf	32.18	3	Vertical	143	2.98	-	61.89	27.58	4.60	-
PK	2.484G	57.59	74.00	-16.41	32.41	3	Vertical	143	2.98	-	25.18	27.80	4.61	-

BT-EDR(3Mbps)

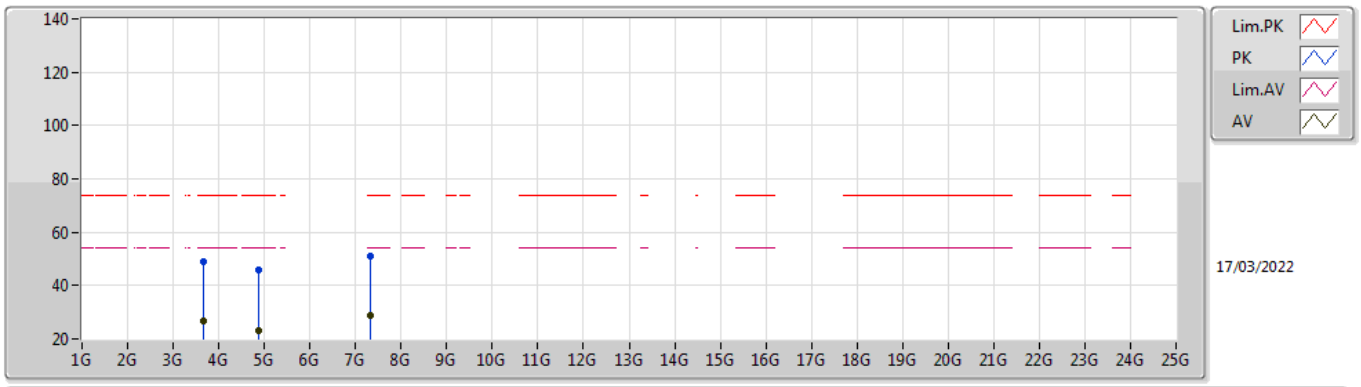
2440MHz_TX



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	2.3404G	35.13	54.00	-18.87	31.68	3	Horizontal	202	1.92	-	3.45	27.16	4.52	-
AV	2.44G	70.64	Inf	-Inf	32.18	3	Horizontal	202	1.92	-	38.46	27.58	4.60	-
AV	2.4984G	35.09	54.00	-18.91	32.51	3	Horizontal	202	1.92	-	2.58	27.89	4.62	-
PK	2.3404G	57.63	74.00	-16.37	31.68	3	Horizontal	202	1.92	-	25.95	27.16	4.52	-
PK	2.44G	93.14	Inf	-Inf	32.18	3	Horizontal	202	1.92	-	60.96	27.58	4.60	-
PK	2.4984G	57.59	74.00	-16.41	32.51	3	Horizontal	202	1.92	-	25.08	27.89	4.62	-

BT-EDR(3Mbps)

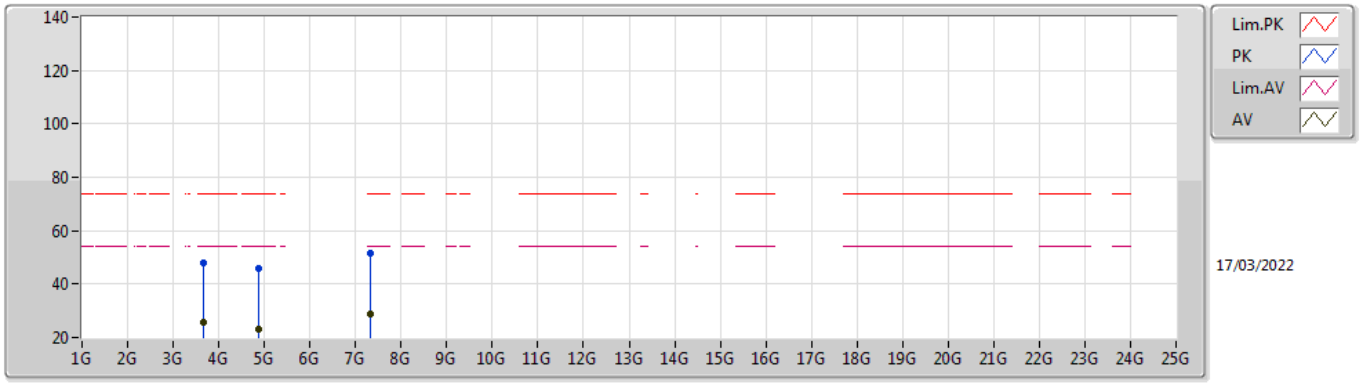
2440MHz_TX



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	3.66016G	26.63	54.00	-27.37	0.21	3	Vertical	196	1.12	-	26.42	29.64	5.48	34.91
AV	4.87984G	23.13	54.00	-30.87	4.65	3	Vertical	98	1.50	-	18.48	32.72	6.72	34.79
AV	7.32037G	28.55	54.00	-25.45	9.73	3	Vertical	196	1.50	-	18.82	36.68	7.87	34.82
PK	3.66016G	49.13	74.00	-24.87	0.21	3	Vertical	196	1.12	-	48.92	29.64	5.48	34.91
PK	4.87984G	45.63	74.00	-28.37	4.65	3	Vertical	98	1.50	-	40.98	32.72	6.72	34.79
PK	7.32037G	51.05	74.00	-22.95	9.73	3	Vertical	196	1.50	-	41.32	36.68	7.87	34.82

BT-EDR(3Mbps)

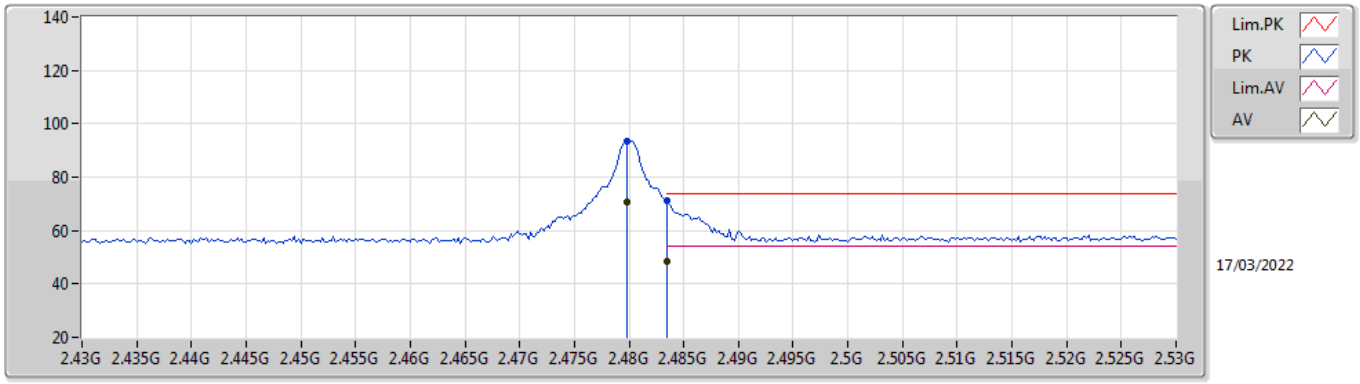
2440MHz_TX



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	3.6605G	25.63	54.00	-28.37	0.21	3	Horizontal	195	1.02	-	25.42	29.64	5.48	34.91
AV	4.88031G	23.29	54.00	-30.71	4.65	3	Horizontal	4	1.50	-	18.64	32.72	6.72	34.79
AV	7.31922G	28.55	54.00	-25.45	9.73	3	Horizontal	184	1.50	-	18.82	36.68	7.87	34.82
PK	3.6605G	48.13	74.00	-25.87	0.21	3	Horizontal	195	1.02	-	47.92	29.64	5.48	34.91
PK	4.88031G	45.79	74.00	-28.21	4.65	3	Horizontal	4	1.50	-	41.14	32.72	6.72	34.79
PK	7.31922G	51.45	74.00	-22.55	9.73	3	Horizontal	184	1.50	-	41.72	36.68	7.87	34.82

BT-EDR(3Mbps)

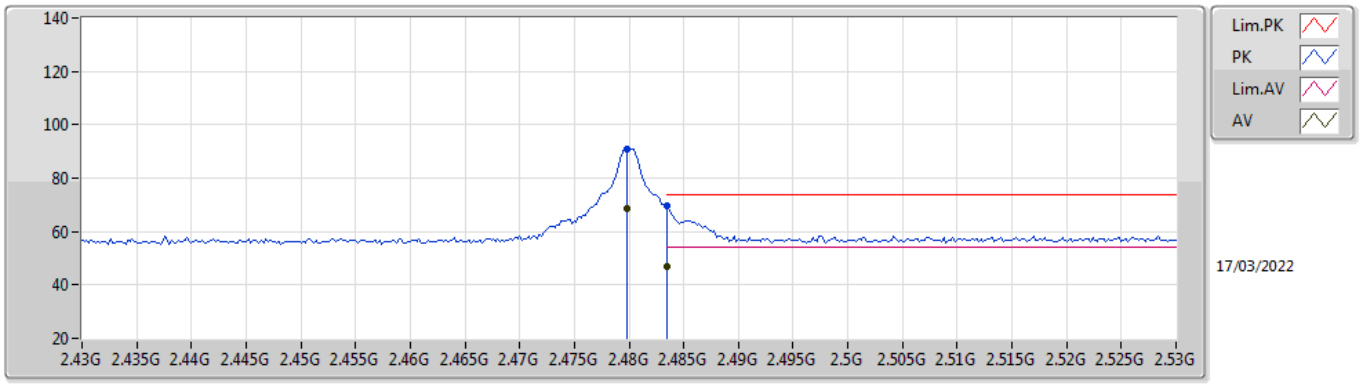
2480MHz_TX



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	2.4798G	70.81	Inf	-Inf	32.39	3	Vertical	144	2.60	-	38.42	27.78	4.61	-
AV	2.4835G	48.69	54.00	-5.31	32.41	3	Vertical	144	2.60	-	16.28	27.80	4.61	-
PK	2.4798G	93.31	Inf	-Inf	32.39	3	Vertical	144	2.60	-	60.92	27.78	4.61	-
PK	2.4835G	71.19	74.00	-2.81	32.41	3	Vertical	144	2.60	-	38.78	27.80	4.61	-

BT-EDR(3Mbps)

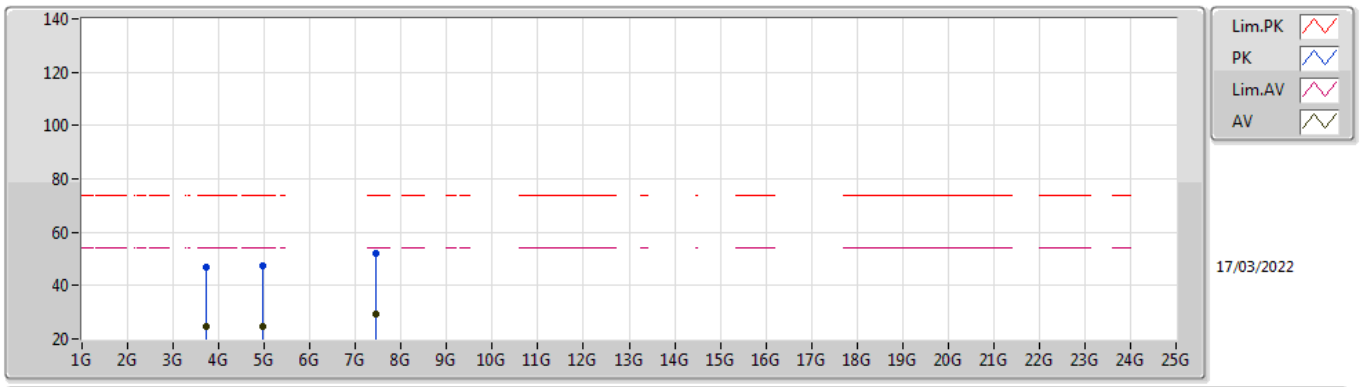
2480MHz_TX



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	2.4798G	68.45	Inf	-Inf	32.39	3	Horizontal	205	1.59	-	36.06	27.78	4.61	-
AV	2.4835G	47.05	54.00	-6.95	32.41	3	Horizontal	205	1.59	-	14.64	27.80	4.61	-
PK	2.4798G	90.95	Inf	-Inf	32.39	3	Horizontal	205	1.59	-	58.56	27.78	4.61	-
PK	2.4835G	69.55	74.00	-4.45	32.41	3	Horizontal	205	1.59	-	37.14	27.80	4.61	-

BT-EDR(3Mbps)

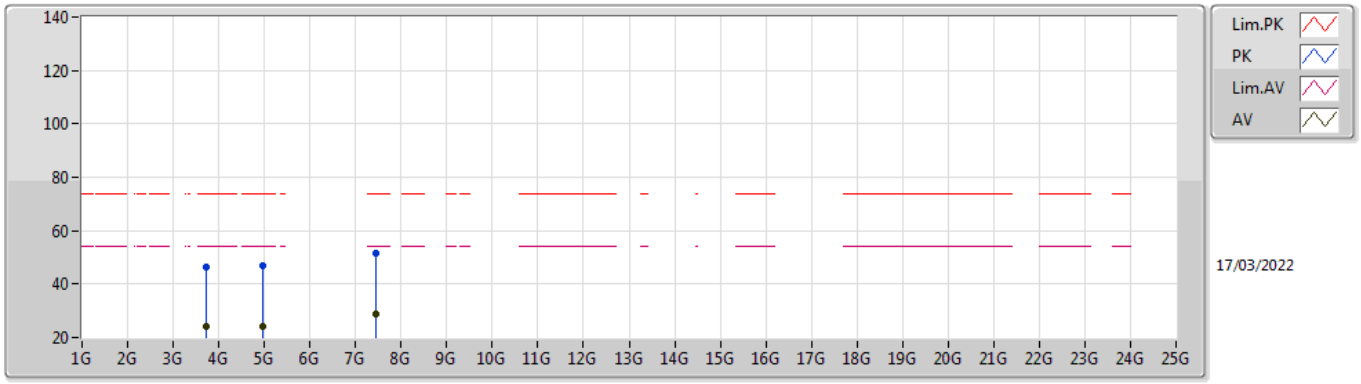
2480MHz_TX



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	3.72072G	24.49	54.00	-29.51	0.69	3	Vertical	194	1.09	-	23.80	29.92	5.69	34.92
AV	4.95993G	24.79	54.00	-29.21	5.03	3	Vertical	67	1.04	-	19.76	33.02	6.78	34.77
AV	7.43915G	29.34	54.00	-24.66	9.51	3	Vertical	189	1.29	-	19.83	36.30	8.05	34.84
PK	3.72072G	46.99	74.00	-27.01	0.69	3	Vertical	194	1.09	-	46.30	29.92	5.69	34.92
PK	4.95993G	47.29	74.00	-26.71	5.03	3	Vertical	67	1.04	-	42.26	33.02	6.78	34.77
PK	7.43915G	51.84	74.00	-22.16	9.51	3	Vertical	189	1.29	-	42.33	36.30	8.05	34.84

BT-EDR(3Mbps)

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	3.72052G	24.04	54.00	-29.96	0.69	3	Horizontal	200	1.25	-	23.35	29.92	5.69	34.92
AV	4.96096G	24.25	54.00	-29.75	5.03	3	Horizontal	5	1.50	-	19.22	33.02	6.78	34.77
AV	7.4404G	29.00	54.00	-25.00	9.52	3	Horizontal	185	1.58	-	19.48	36.30	8.06	34.84
PK	3.72052G	46.54	74.00	-27.46	0.69	3	Horizontal	200	1.25	-	45.85	29.92	5.69	34.92
PK	4.96096G	46.75	74.00	-27.25	5.03	3	Horizontal	5	1.50	-	41.72	33.02	6.78	34.77
PK	7.4404G	51.50	74.00	-22.50	9.52	3	Horizontal	185	1.58	-	41.98	36.30	8.06	34.84