

FCC Radio Test Report

FCC ID : 2AUIUWF6DBMR
Equipment : Wyze Mesh Router
Brand Name : WYZE
Model Name : WF6DBMR
Applicant : Wyze Labs, Inc.
5808 Lake Washington Blvd NE Ste 300, Kirkland, WA
98033, USA
Manufacturer : Wyze Labs, Inc.
5808 Lake Washington Blvd NE Ste 300, Kirkland, WA
98033, USA
Standard : 47 CFR FCC Part 15.247

The product was received on Jan. 28, 2022, and testing was started from Feb. 18, 2022 and completed on Mar. 04, 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.)



Table of Contents

HISTORY OF THIS TEST REPORT	3
SUMMARY OF TEST RESULT	4
1 GENERAL DESCRIPTION	5
1.1 Information.....	5
1.2 Testing Applied Standards	7
1.3 Testing Location Information	7
1.4 Measurement Uncertainty	7
2 TEST CONFIGURATION OF EUT.....	8
2.1 Test Channel Mode	8
2.2 The Worst Case Measurement Configuration.....	9
2.3 Accessories	10
2.4 Support Equipment.....	10
2.5 Test Setup Diagram	11
3 TRANSMITTER TEST RESULT	12
3.1 AC Power-line Conducted Emissions	12
3.2 20dB Bandwidth and Carrier Frequency Separation.....	14
3.3 Maximum Conducted Output Power	15
3.4 Number of Hopping Frequencies and Hopping Bandedge	16
3.5 Time of Occupancy (Dwell Time)	17
3.6 Emissions in Non-restricted Frequency Bands	18
3.7 Emissions in Restricted Frequency Bands.....	19
4 TEST EQUIPMENT AND CALIBRATION DATA	22
APPENDIX A. TEST RESULTS OF AC POWER-LINE CONDUCTED EMISSIONS	
APPENDIX B. TEST RESULTS OF 20DB BANDWIDTH AND CARRIER FREQUENCY SEPARATION	
APPENDIX C. TEST RESULTS OF MAXIMUM CONDUCTED OUTPUT POWER	
APPENDIX D. TEST RESULTS OF NUMBER OF HOPPING FREQUENCIES AND HOPPING BANDEDGE	
APPENDIX E. TEST RESULTS OF TIME OF OCCUPANCY (DWELL TIME)	
APPENDIX F. TEST RESULTS OF EMISSIONS IN NON-RESTRICTED FREQUENCY BANDS	
APPENDIX G. TEST RESULTS OF EMISSIONS IN RESTRICTED FREQUENCY BANDS	
APPENDIX H. TEST PHOTOS	
PHOTOGRAPHS OF EUT V01	

[illegible]

Summary of Test Result

Report Clause	Ref. Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
3.1	15.207	AC Power-line Conducted Emissions	PASS	-
3.2	15.247(a)	20dB Bandwidth	PASS	-
3.2	15.247(a)	Carrier Frequency Separation	PASS	-
3.3	15.247(b)	Maximum Conducted Output Power	PASS	-
3.4	15.247(a)	Number of Hopping Frequencies and Hopping Bandedge	PASS	-
3.5	15.247(a)	Time of Occupancy (Dwell Time)	PASS	-
3.6	15.247(d)	Emissions in Non-restricted Frequency Bands	PASS	-
3.7	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 $\pi/4$ -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
1	LITEON	N/A	PIFA	I-PEX
2	LITEON	N/A	PIFA	I-PEX
3	LITEON	N/A	PIFA	I-PEX
4	LITEON	N/A	PIFA	I-PEX
5	LITEON	N/A	PIFA	I-PEX
6	LITEON	N/A	PIFA	I-PEX

Ant.	Port	Gain (dBi)			
		2.4G	5G	BT	Zigbee
1	1	3.22	-	-	-
2	2	3.25	-	-	-
3	1	-	4.23	-	-
4	2	-	3.87	-	-
5	1	-	-	3.24	-
6	1	-	-	-	2.14

Note 1: The EUT has six antennas.

For 2.4GHz function:

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

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

For 5GHz function:

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

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

For BT function:

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

Ant. 5 (port 1) could transmit/receive

For Zigbee function:

For Zigbee mode (1TX/1RX)

Ant. 6 (port 1) could transmit/receive.

1.1.3 EUT Information

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

1.1.4 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
BT-BR(1Mbps)	0.742	1.3	2.887m	1k
BT-EDR(2Mbps)	0.742	1.3	2.889m	1k
BT-EDR(3Mbps)	0.742	1.3	2.891m	1k

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

1.1.5 Table for Multiple Listing

SKU No.	Ethernet IC
Main Source (SKU 1)	Brand: Qualcomm / Model: QCA8081
2nd Source (SKU 2)	Brand: Qualcomm / Model: QCA8080

1.2 Testing Applied Standards

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

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

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

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

1.3 Testing Location Information

Test Lab. : Sporton International Inc. Hsinhua Laboratory				
☒ Hsinhua (TAF: 3785)	ADD: No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.) TEL: 886-3-327-3456 FAX: 886-3-327-0973			
Test site Designation No. TW3785 with FCC.				
Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
AC Conduction	CO04-HY	Jack	20.4~21.5°C / 55~64%	22/Feb/2022
RF Conducted	TH07-HY	Johnny	21.1~26.6°C / 52~59%	25/Feb/2022~04/Mar/2022
Radiated	03CH02-HY	Jack	19.2~20.5°C / 58~65%	18/Feb/2022~03/Mar/2022
☐ Wen 33rd.St. (TAF: 3785)	ADD: No.14-1, Ln. 19, Wen 33rd St., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.) TEL: 886-3-318-0787 FAX: 886-3-318-0287			
Test site Designation No. TW0008 with FCC.				

1.4 Measurement Uncertainty

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

Test Items	Uncertainty	Remark
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	qdart_conn.win.1.0_installer_00086.1
-----------------------	--------------------------------------

Mode	Power Setting
BT-BR(1Mbps)	-
2402MHz	9
2440MHz	9
2480MHz	9
BT-EDR(2Mbps)	-
2402MHz	9
2440MHz	9
2480MHz	9
BT-EDR(3Mbps)	-
2402MHz	9
2440MHz	9
2480MHz	9

2.2 The Worst Case Measurement Configuration

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

The Worst Case Mode for Following Conformance Tests	
Tests Item	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	Adapter mode		
Operating Mode > 1GHz	CTX		
Orthogonal Planes of EUT	X Plane	Y Plane	Z Plane
			
Worst Planes of EUT		V	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Operating Mode	CTX
1	WLAN 2.4GHz + WLAN 5GHz + Bluetooth + Zigbee
Refer to Sporton Test Report No.: FA210727 for Co-location RF Exposure Evaluation.	

2.3 Accessories

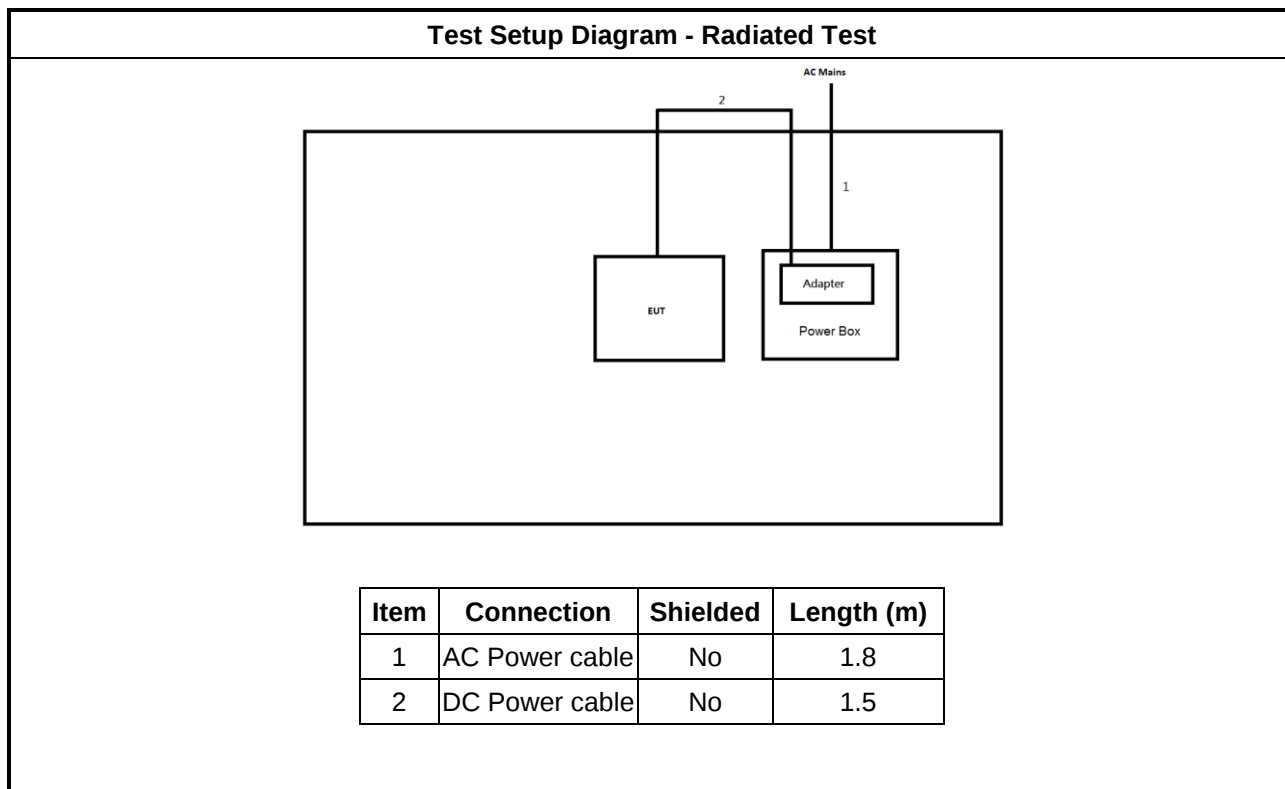
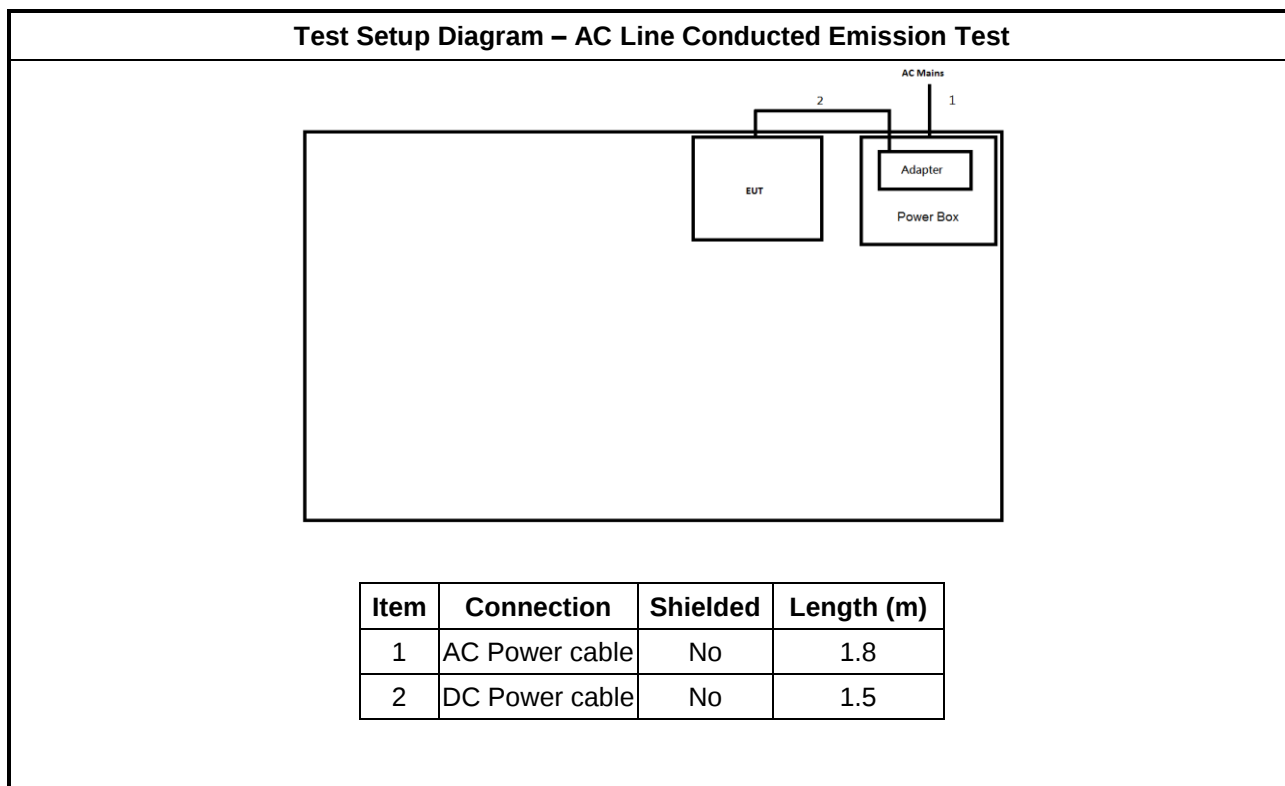
Accessories				
AC Adapter	Brand Name	APD	Model Name	WB-12G12FU
	Manufacturer	Asian Power		
	Power Rating	I/P: 100-240Vac, 50-60Hz, 0.3A, O/P: 12Vdc, 1A		
	Power Cord	1.5 meter, non-shielded cable, w/o ferrite core		

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	E5410	-	-
2	Adapter for NB	DELL	HA65NM130	-	-

2.5 Test Setup Diagram



3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

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

3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

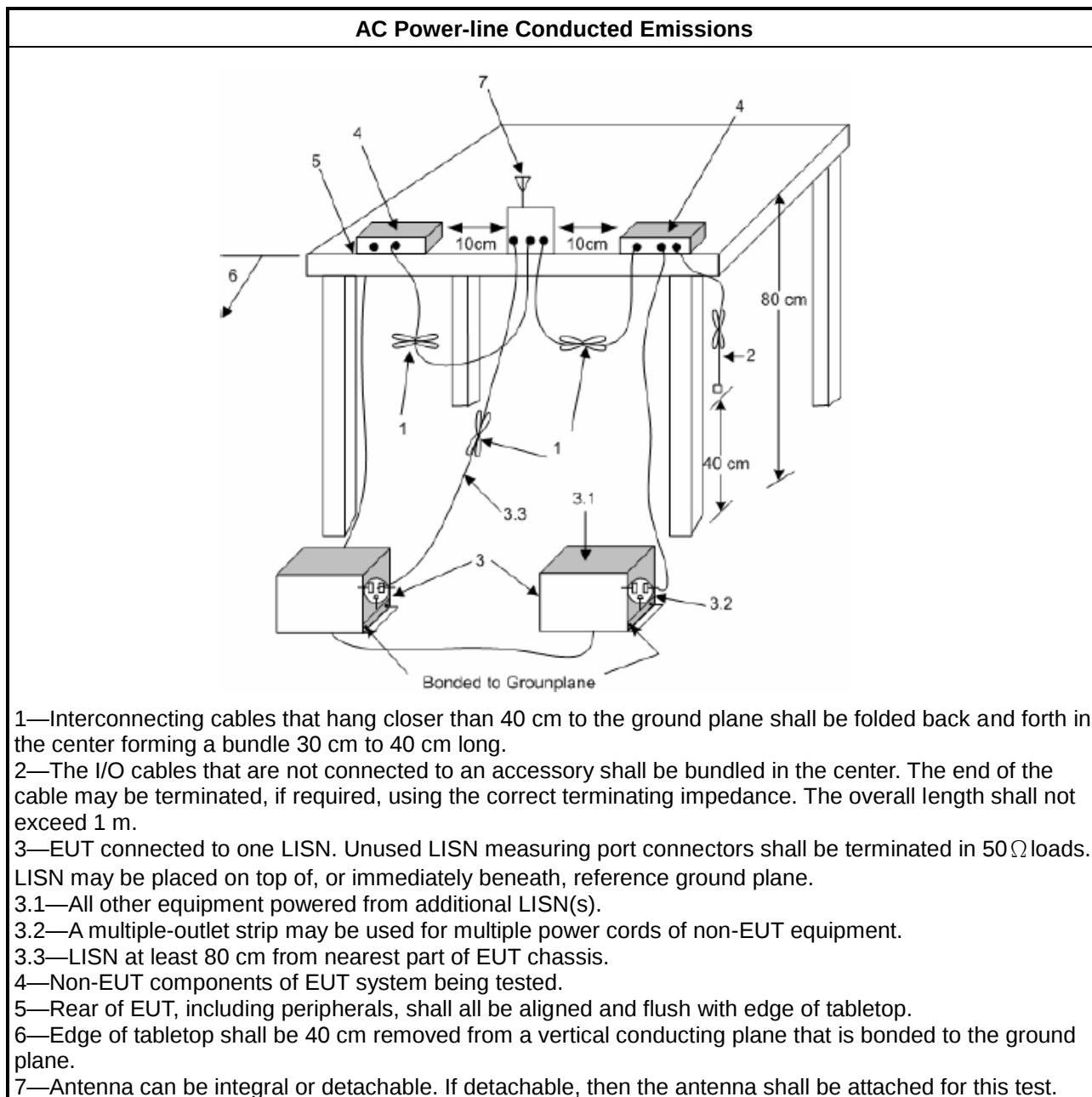
Test Method
▪ Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

3.1.4 Measurement Results Calculation

The measured Level is calculated using:

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

3.1.5 Test Setup



3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 20dB Bandwidth and Carrier Frequency Separation

3.2.1 20dB Bandwidth and Carrier Frequency Separation Limit

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

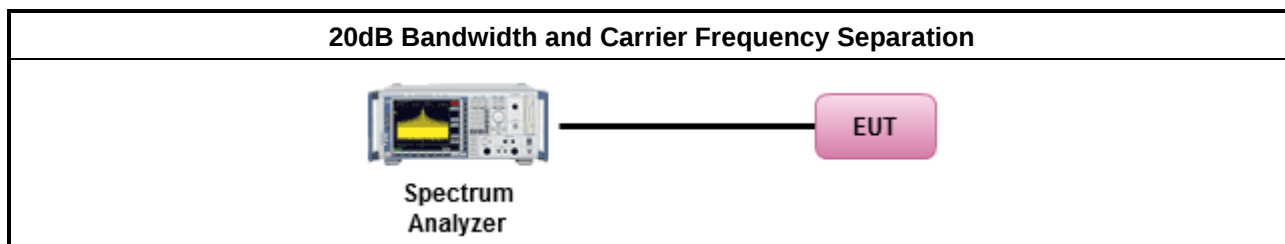
3.2.2 Measuring Instruments

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

3.2.4 Test Setup



3.2.5 Test Result of 20dB Bandwidth

Refer as Appendix B

3.2.6 Test Result of Carrier Frequency Separation

Refer as Appendix B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

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

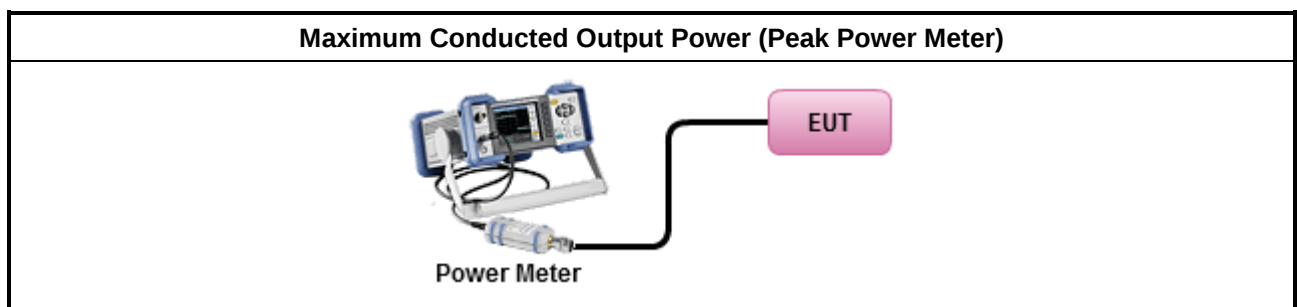
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

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

3.3.4 Test Setup



3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Number of Hopping Frequencies and Hopping Bandedge

3.4.1 Number of Hopping Frequencies Limit

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

3.4.2 Hopping Bandedge Limit

Refer clause 3.6.1 and clause 3.7.1

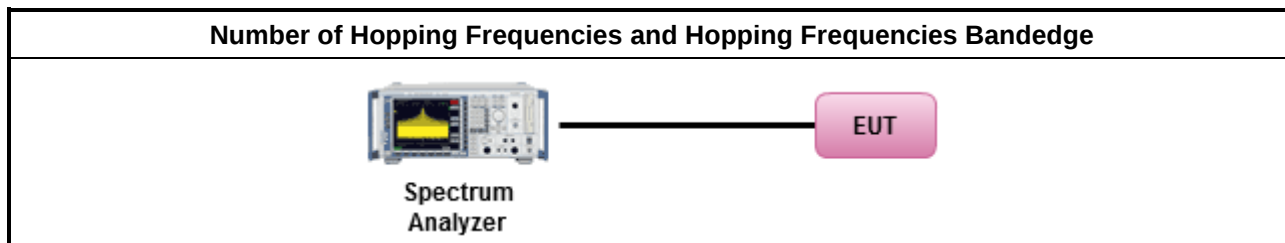
3.4.3 Measuring Instruments

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

3.4.4 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.

3.4.5 Test Setup



3.4.6 Test Result of Number of Hopping Frequencies

Refer as Appendix D

3.4.7 Test Result of Number of Hopping Frequencies Bandedge

Refer as Appendix D

3.5 Time of Occupancy (Dwell Time)

3.5.1 Time of Occupancy (Dwell Time) Limit

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

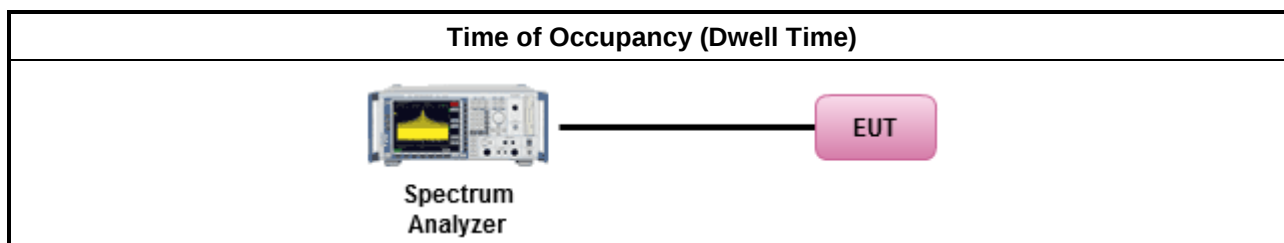
3.5.2 Measuring Instruments

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 7.8.4 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.

3.5.4 Test Setup



3.5.5 Test Result of Time of Occupancy (Dwell Time)

Refer as Appendix E

3.6 Emissions in Non-restricted Frequency Bands

3.6.1 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.	

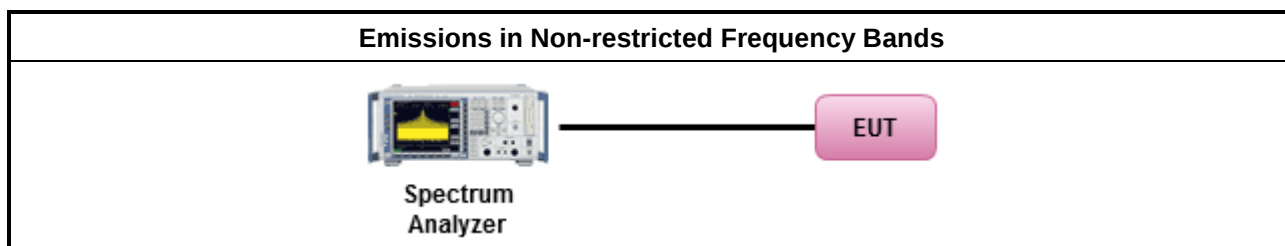
3.6.2 Measuring Instruments

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

3.6.3 Test Procedures

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

3.6.4 Test Setup



3.6.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix F

3.7 Emissions in Restricted Frequency Bands

3.7.1 Emissions in Restricted Frequency Bands Limit

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

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

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

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

3.7.2 Measuring Instruments

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

3.7.3 Test Procedures

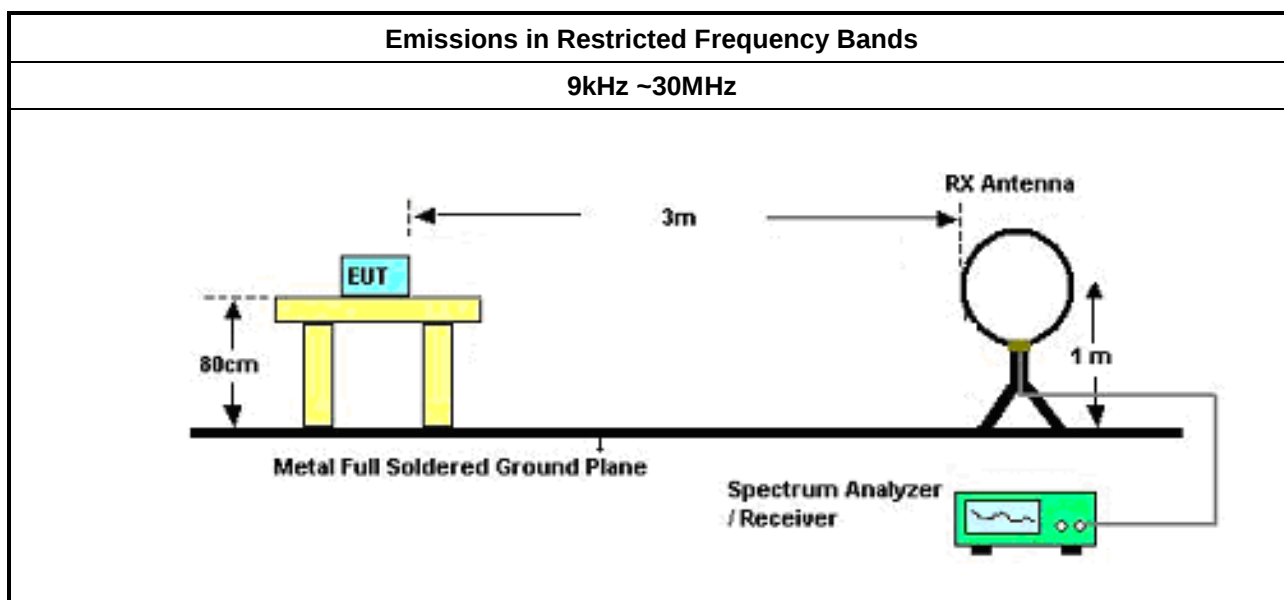
Test Method	
- The average emission levels shall be measured in [hopping duty factor]. - Refer as ANSI C63.10; clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band. - For the transmitter unwanted emissions shall 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.	

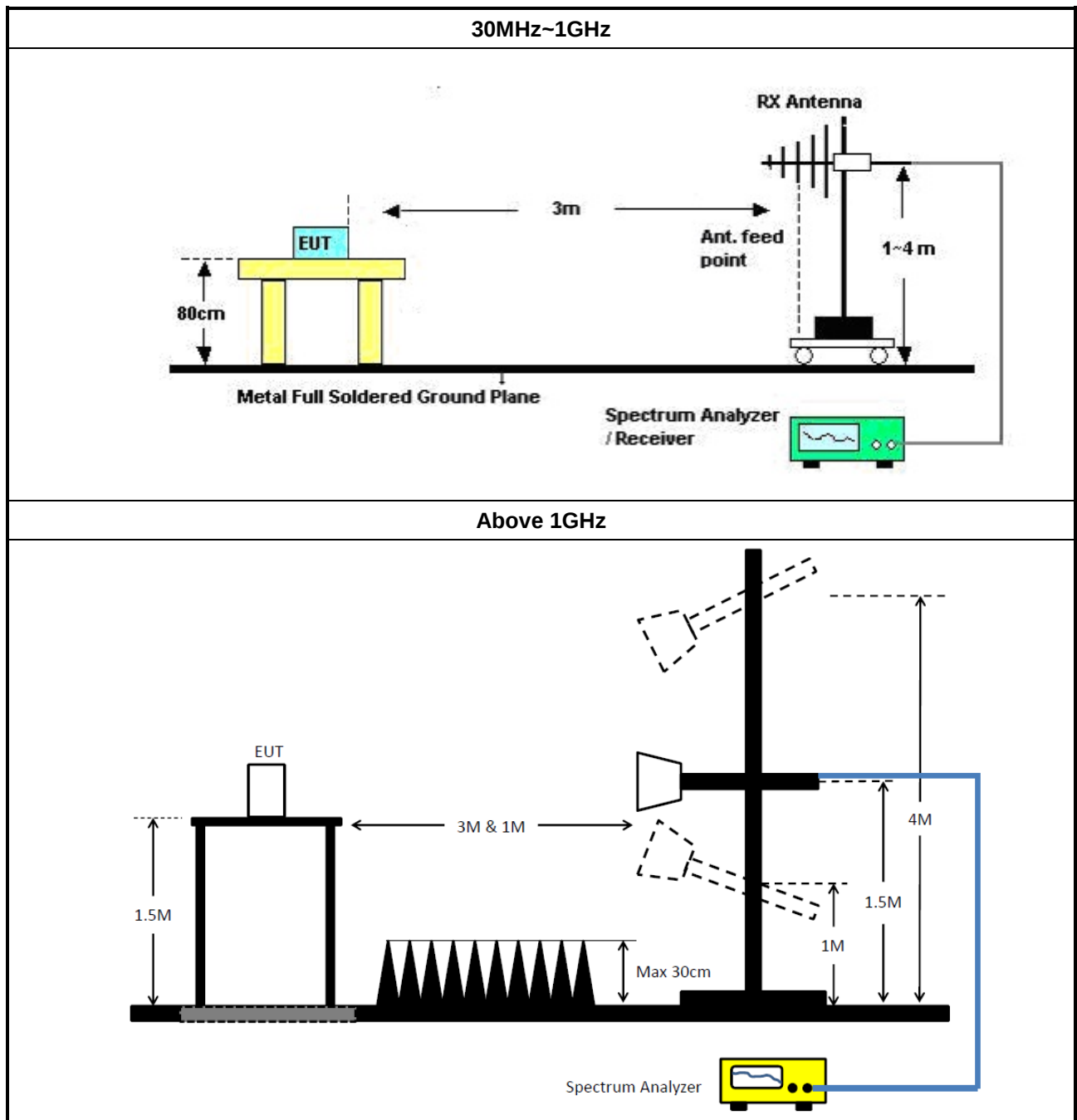
3.7.4 Measurement Results Calculation

The measured Level is calculated using:

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

3.7.5 Test Setup





3.7.6 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.

3.7.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix G

4 Test Equipment and Calibration Data

Instrument for AC Conduction

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMI Test Receiver	R&S	ESR3	102051	9kHz ~ 3.6GHz	21/May/2021	20/May/2022
LISN	R&S	ENV216	101295	9kHz ~ 30MHz	12/Jan/2022	11/Jan/2023
RF Cable 5m	TITAN	TITAN	CO04-cable-01	9 kHz~200MHz	03/Mar/2021	02/Mar/2022
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9kHz ~ 30MHz	26/Oct/2021	25/Oct/2022
Software	Sporton	SENSE-EMI	V5.10.7.14	-	NCR	NCR

NCR: No Calibration Required

Instrument for Conducted Test

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
SMB100A Signal Generator	R&S	SMB100A	181147	100kHz~40GHz	21/Oct/2021	20/Oct/2022
Pulse Sensor	Anritsu	MA2411B	1339407	300MHz~40GHz	17/Dec/2021	16/Dec/2022
Power Meter	Anritsu	ML2495A	1517010	300MHz~40GHz	20/Dec/2021	19/Dec/2022
Signal Analyzer	R&S	FSV 40	101029	10Hz~40GHz	20/Oct/2021	19/Oct/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	SIDT FRANKONIA	SAC-3M	03CH02-HY	30MHz~1GHz 3m	02/Aug/2021	01/Aug/2022
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz~18GHz 3m	01/Aug/2021	31/Jul/2022
Signal Analyzer	R&S	FSP40	100593	9kHz~40GHz	12/Mar/2021	11/Mar/2022
Amplifier	Agilent	8447D	2944A11149	100kHz~1.3GHz	29/Jun/2021	28/Jun/2022
Microwave Preamplifier	Agilent	8449B	3008A02373	1GHz~26.5GHz	03/Nov/2021	02/Nov/2022
Bilog Antenna & 5dB Attenuator	SCHAFFNER / MTJ	CBL 6112B / MTJ6102-05	2723 / 2	30MHz~1GHz	04/Sep/2021	03/Sep/2022
Double Ridged Guide Horn Antenna	SCHWARZBEC	BBHA 9120 D	BBHA 9120 D 01543	1GHz~18GHz	04/Jun/2021	03/Jun/2022
RF Cable	MVE	400LL	MVE-1-0802	9kHz~30MHz	05/May/2021	04/May/2022
RF Cable	MVE	400LL	MVE-1-0802	30MHz~1GHz	05/May/2021	04/May/2022
RF Cable-R03m	HUBER+SUHNER	SUCOFLEX104	805193/4+805192 /4	1GHz~40GHz	06/Apr/2021	05/Apr/2022
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170221	15GHz~40GHz	11/Mar/2021	10/Mar/2022
Microwave Preamplifier	EMC INSTRUMENTS	EM18G40G	060604	18GHz~40GHz	09/Mar/2021	08/Mar/2022
Loop Antenna	TESEQ	HLA 6120	31244	9kHz~30MHz	16/Mar/2021	15/Mar/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



Conducted Emissions at Powerline

Appendix A

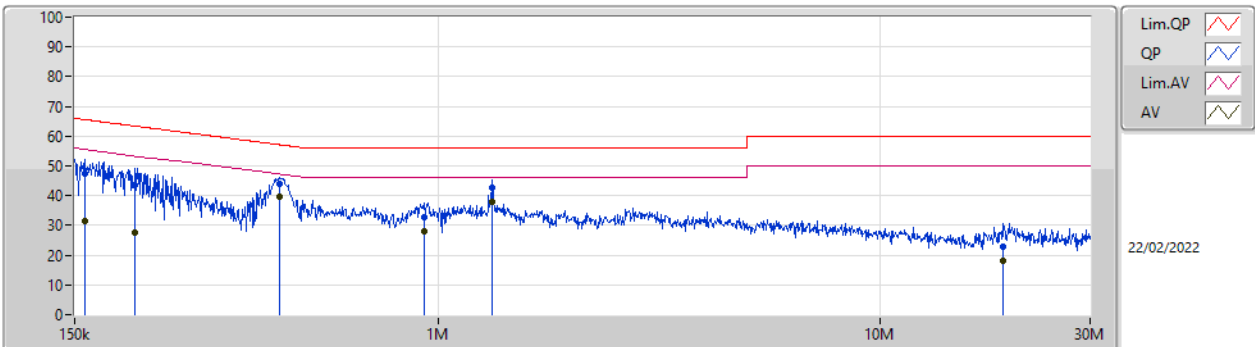
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	1.326M	39.33	46.00	-6.67	Neutral

Mode config

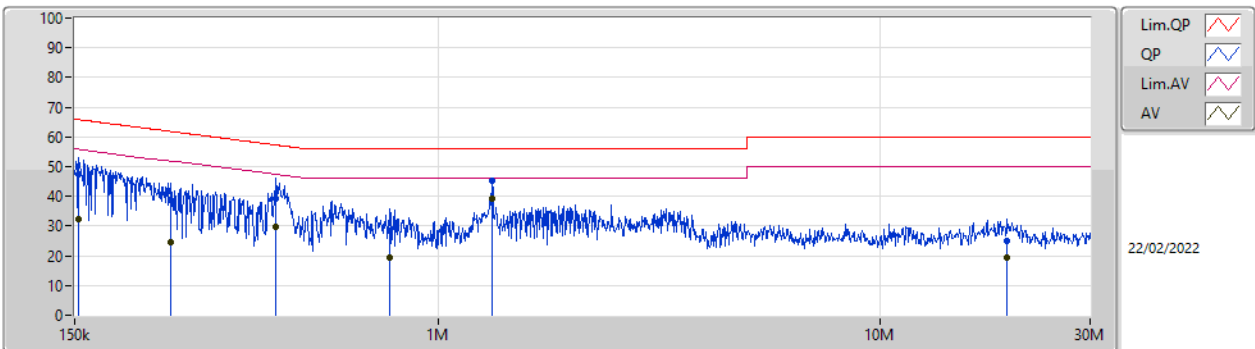
Mode	Result	Type	Freq (Hz)	Level (dBUV)	Limit (dBUV)	Margin (dB)	Condition	Comments
Mode 1	Pass	QP	157.99k	47.39	65.56	-18.17	Line	-
Mode 1	Pass	AV	157.99k	31.32	55.56	-24.24	Line	-
Mode 1	Pass	QP	205.615k	43.64	63.38	-19.74	Line	-
Mode 1	Pass	AV	205.615k	27.75	53.38	-25.63	Line	-
Mode 1	Pass	QP	435.504k	43.97	57.15	-13.18	Line	-
Mode 1	Pass	AV	435.504k	39.44	47.15	-7.71	Line	-
Mode 1	Pass	QP	929.818k	32.58	56.00	-23.42	Line	-
Mode 1	Pass	AV	929.818k	27.88	46.00	-18.12	Line	-
Mode 1	Pass	QP	1.326M	42.74	56.00	-13.26	Line	-
Mode 1	Pass	AV	1.326M	37.77	46.00	-8.23	Line	-
Mode 1	Pass	QP	19.091M	22.76	60.00	-37.24	Line	-
Mode 1	Pass	AV	19.091M	18.12	50.00	-31.88	Line	-
Mode 1	Pass	QP	153.024k	47.42	65.83	-18.41	Neutral	-
Mode 1	Pass	AV	153.024k	32.48	55.83	-23.35	Neutral	-
Mode 1	Pass	QP	247.062k	38.85	61.85	-23.00	Neutral	-
Mode 1	Pass	AV	247.062k	24.38	51.85	-27.47	Neutral	-
Mode 1	Pass	QP	426.898k	39.18	57.32	-18.14	Neutral	-
Mode 1	Pass	AV	426.898k	29.61	47.32	-17.71	Neutral	-
Mode 1	Pass	QP	776.928k	28.63	56.00	-27.37	Neutral	-
Mode 1	Pass	AV	776.928k	19.29	46.00	-26.71	Neutral	-
Mode 1	Pass	QP	1.326M	45.23	56.00	-10.77	Neutral	-
Mode 1	Pass	AV	1.326M	39.33	46.00	-6.67	Neutral	-
Mode 1	Pass	QP	19.475M	25.02	60.00	-34.98	Neutral	-
Mode 1	Pass	AV	19.475M	19.40	50.00	-30.60	Neutral	-

Conducted Emissions at Powerline_Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)				
QP	157.99k	47.39	65.56	-18.17	19.55	Line	-	27.84	9.60	0.04	9.91				
AV	157.99k	31.32	55.56	-24.24	19.55	Line	-	11.77	9.60	0.04	9.91				
QP	205.615k	43.64	63.38	-19.74	19.56	Line	-	24.08	9.61	0.04	9.91				
AV	205.615k	27.75	53.38	-25.63	19.56	Line	-	8.19	9.61	0.04	9.91				
QP	435.504k	43.97	57.15	-13.18	19.57	Line	-	24.40	9.60	0.06	9.91				
AV	435.504k	39.44	47.15	-7.71	19.57	Line	-	19.87	9.60	0.06	9.91				
QP	929.818k	32.58	56.00	-23.42	19.61	Line	-	12.97	9.61	0.08	9.92				
AV	929.818k	27.88	46.00	-18.12	19.61	Line	-	8.27	9.61	0.08	9.92				
QP	1.326M	42.74	56.00	-13.26	19.62	Line	-	23.12	9.61	0.09	9.92				
AV	1.326M	37.77	46.00	-8.23	19.62	Line	-	18.15	9.61	0.09	9.92				
QP	19.091M	22.76	60.00	-37.24	19.81	Line	-	2.95	9.59	0.29	9.93				
AV	19.091M	18.12	50.00	-31.88	19.81	Line	-	-1.69	9.59	0.29	9.93				

Conducted Emissions at Powerline_Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)				
QP	153.024k	47.42	65.83	-18.41	19.54	Neutral	-	27.88	9.59	0.04	9.91				
AV	153.024k	32.48	55.83	-23.35	19.54	Neutral	-	12.94	9.59	0.04	9.91				
QP	247.062k	38.85	61.85	-23.00	19.55	Neutral	-	19.30	9.59	0.05	9.91				
AV	247.062k	24.38	51.85	-27.47	19.55	Neutral	-	4.83	9.59	0.05	9.91				
QP	426.898k	39.18	57.32	-18.14	19.55	Neutral	-	19.63	9.58	0.06	9.91				
AV	426.898k	29.61	47.32	-17.71	19.55	Neutral	-	10.06	9.58	0.06	9.91				
QP	776.928k	28.63	56.00	-27.37	19.58	Neutral	-	9.05	9.59	0.07	9.92				
AV	776.928k	19.29	46.00	-26.71	19.58	Neutral	-	-0.29	9.59	0.07	9.92				
QP	1.326M	45.23	56.00	-10.77	19.60	Neutral	-	25.63	9.59	0.09	9.92				
AV	1.326M	39.33	46.00	-6.67	19.60	Neutral	-	19.73	9.59	0.09	9.92				
QP	19.475M	25.02	60.00	-34.98	19.91	Neutral	-	5.11	9.68	0.30	9.93				
AV	19.475M	19.40	50.00	-30.60	19.91	Neutral	-	-0.51	9.68	0.30	9.93				

**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
BT-BR(1Mbps)	925k	869.565k	870KF1D	922.5k	858.321k
BT-EDR(2Mbps)	1.311M	1.214M	1M21G1D	1.311M	1.206M
BT-EDR(3Mbps)	1.286M	1.218M	1M22G1D	1.284M	1.206M

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	923.75k	869.565k
2440MHz	Pass	Inf	925k	863.318k
2480MHz	Pass	Inf	922.5k	858.321k
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	Inf	1.311M	1.214M
2440MHz	Pass	Inf	1.311M	1.207M
2480MHz	Pass	Inf	1.311M	1.206M
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	Inf	1.286M	1.218M
2440MHz	Pass	Inf	1.286M	1.217M
2480MHz	Pass	Inf	1.284M	1.206M

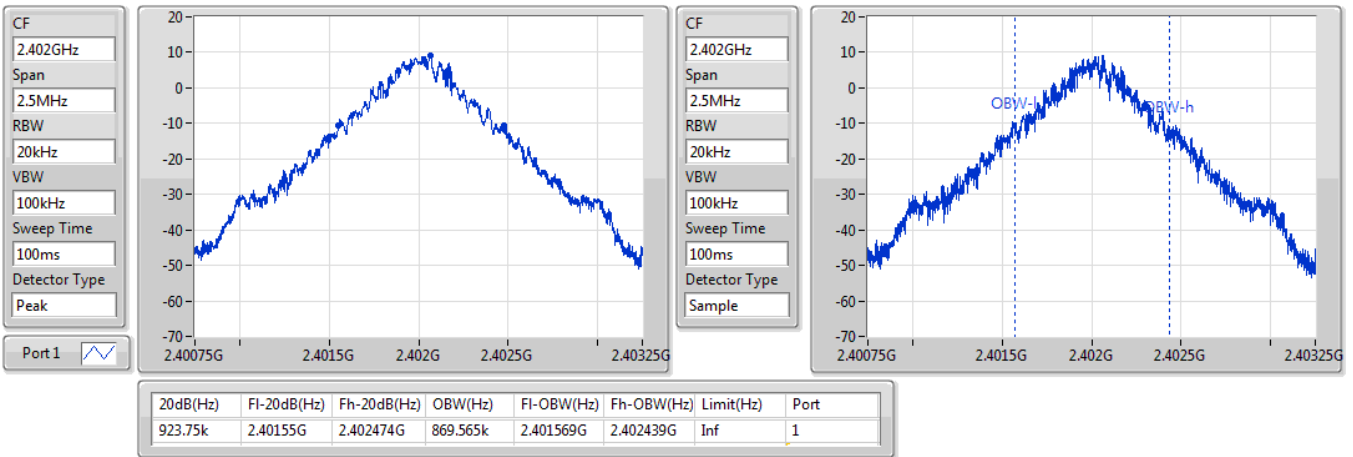
Port X-N dB = Port X 20dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

BT-BR(1Mbps)

2402MHz

EBW-FS

25/02/2022

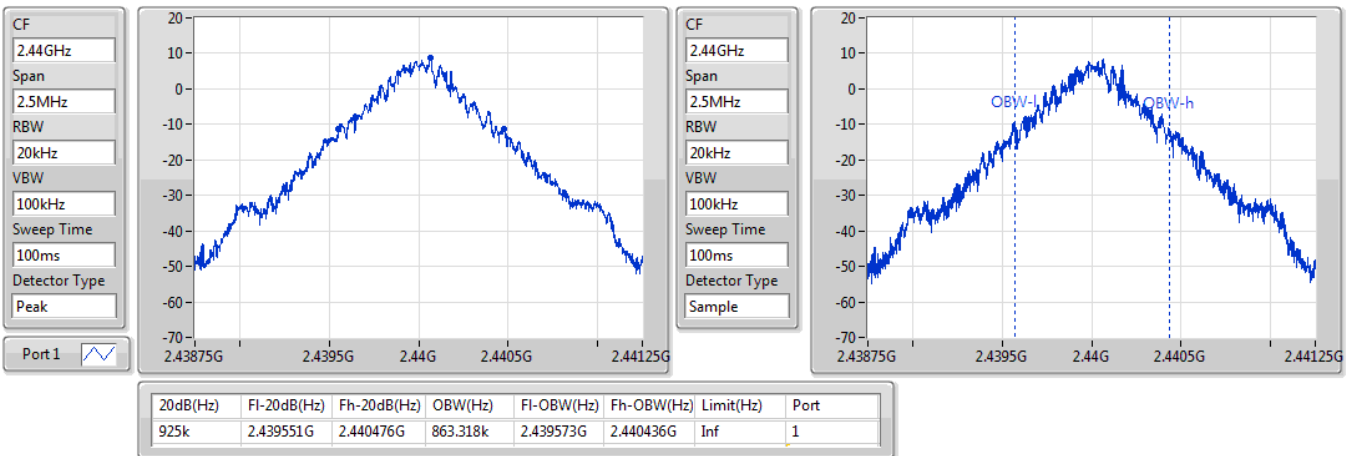


BT-BR(1Mbps)

2440MHz

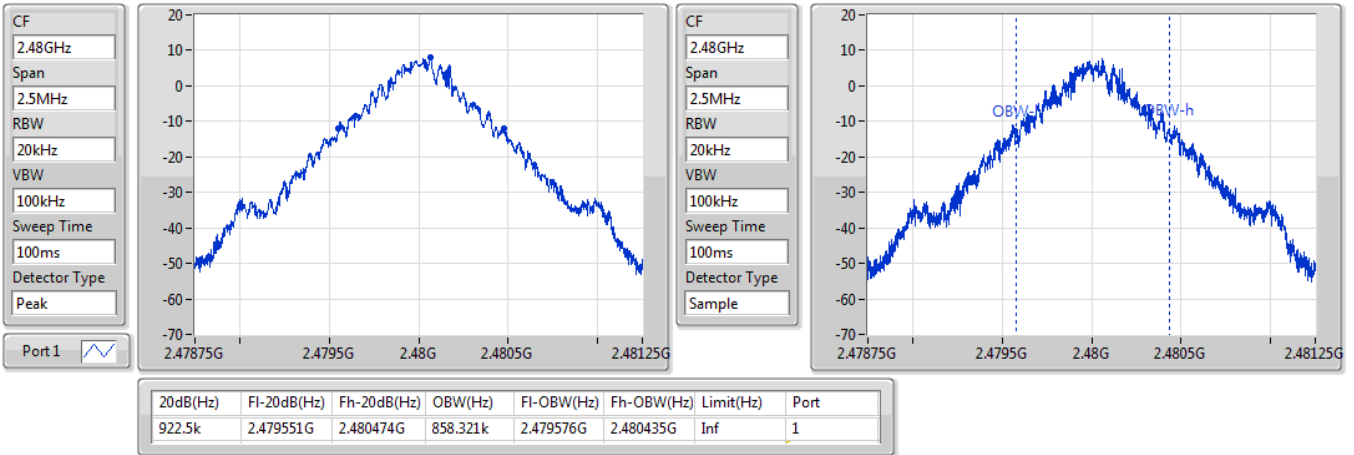
EBW-FS

25/02/2022

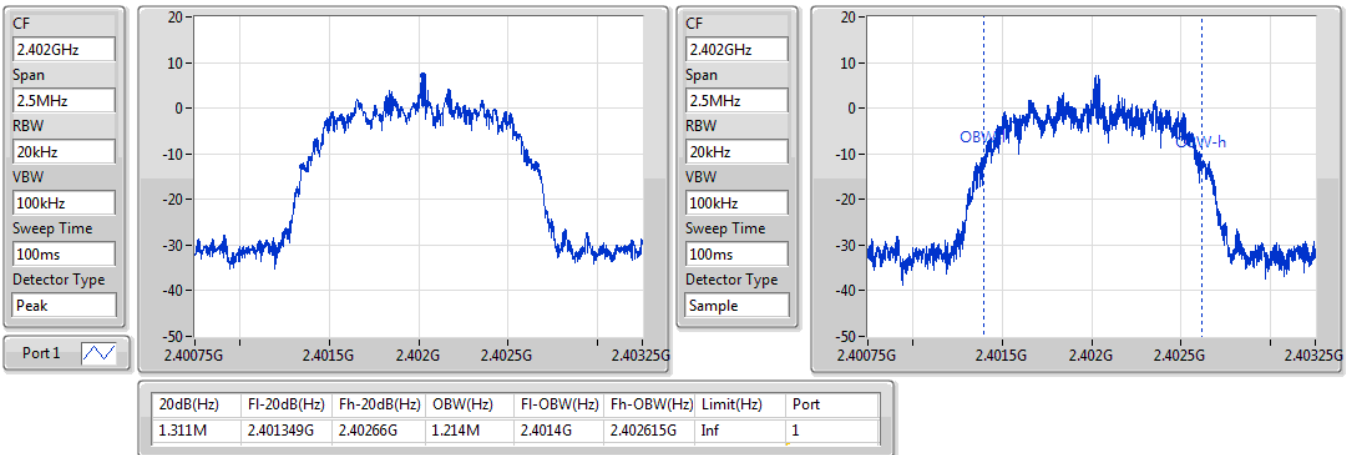


BT-BR(1Mbps)
EBW-FS
2480MHz

25/02/2022

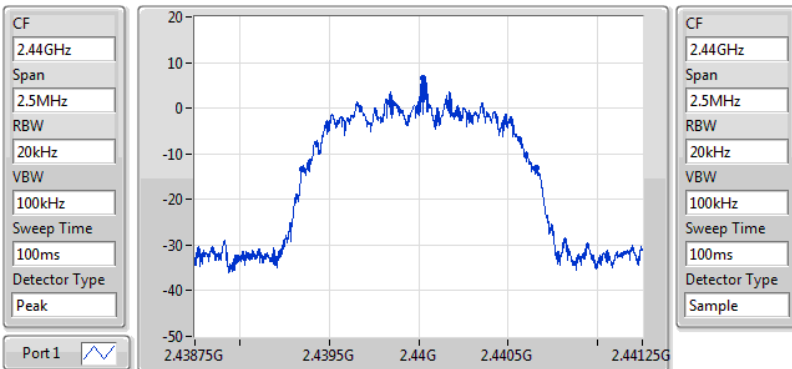

BT-EDR(2Mbps)
EBW-FS
2402MHz

25/02/2022



BT-EDR(2Mbps)

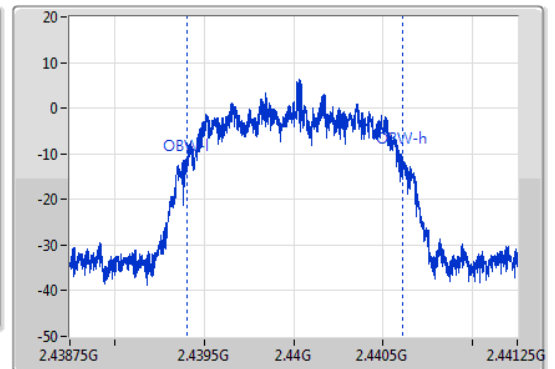
2440MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.311M	2.439349G	2.44066G	1.207M	2.439404G	2.440611G	Inf	1

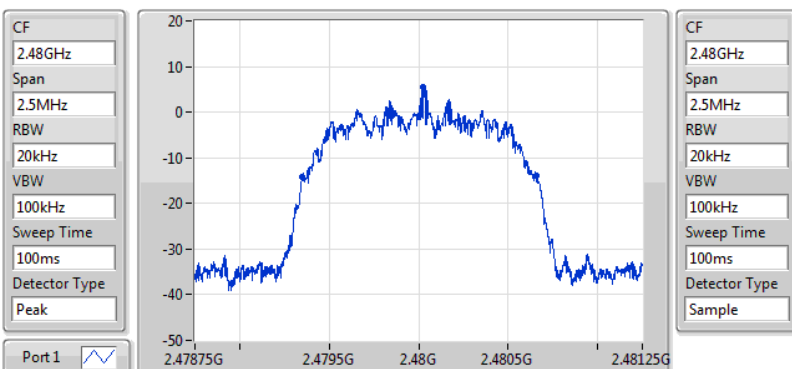
EBW-FS

25/02/2022



BT-EDR(2Mbps)

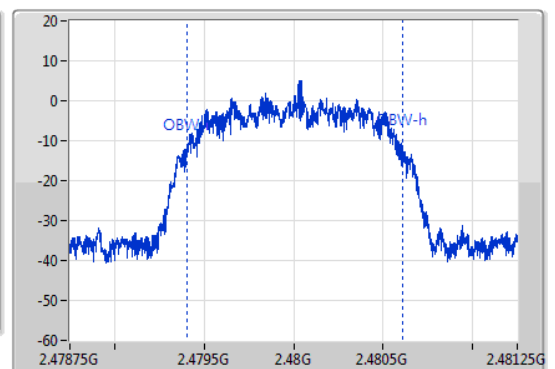
2480MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.311M	2.47935G	2.480661G	1.206M	2.479403G	2.480608G	Inf	1

EBW-FS

25/02/2022

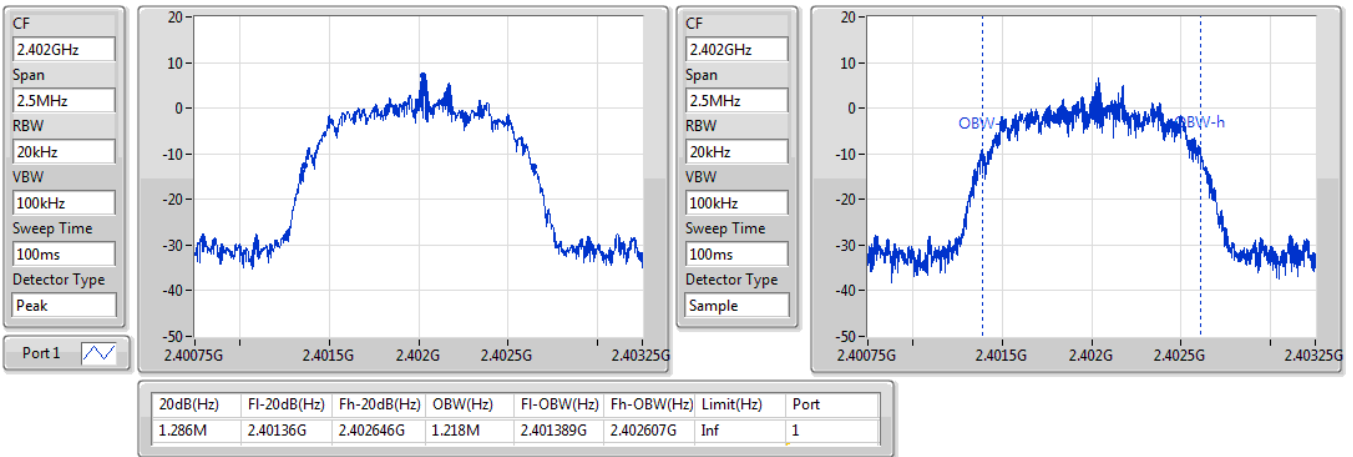


BT-EDR(3Mbps)

2402MHz

EBW-FS

25/02/2022

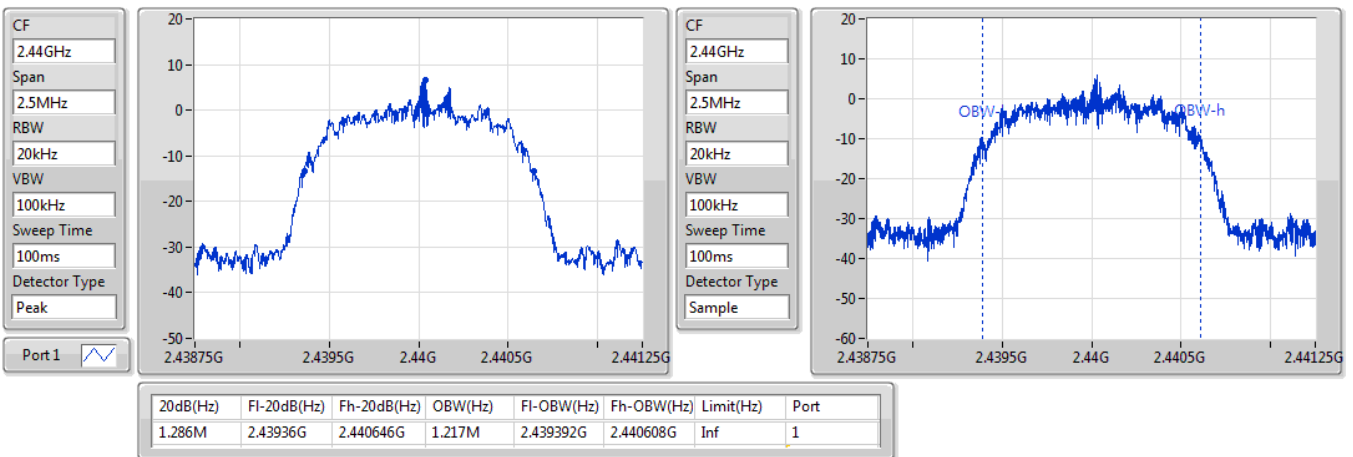


BT-EDR(3Mbps)

2440MHz

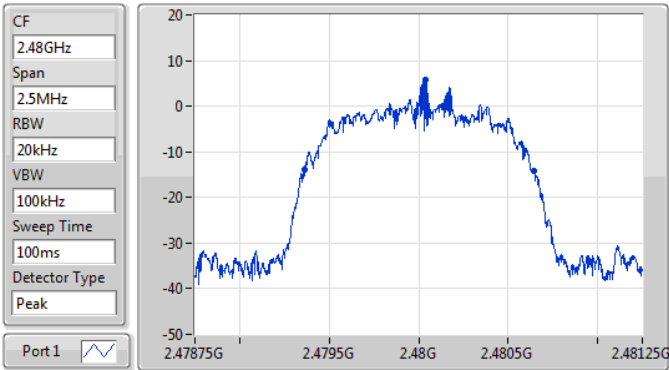
EBW-FS

25/02/2022



BT-EDR(3Mbps)

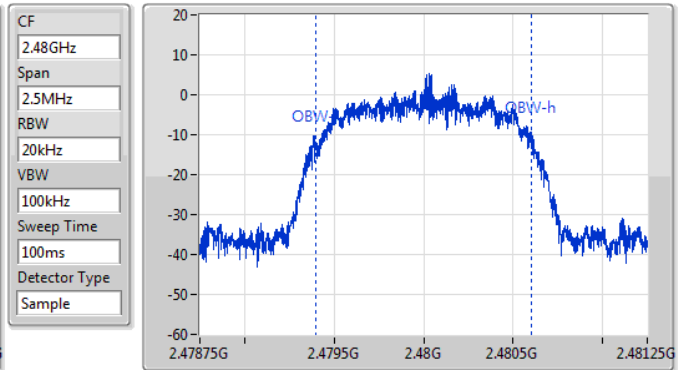
2480MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.284M	2.479361G	2.480645G	1.206M	2.479398G	2.480603G	Inf	1

EBW-FS

25/02/2022





Summary

Mode	Max-Space (Hz)	Min-Space (Hz)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	1.005M	999k
BT-EDR(2Mbps)	1.0005M	999k
BT-EDR(3Mbps)	1.0035M	999k

Result

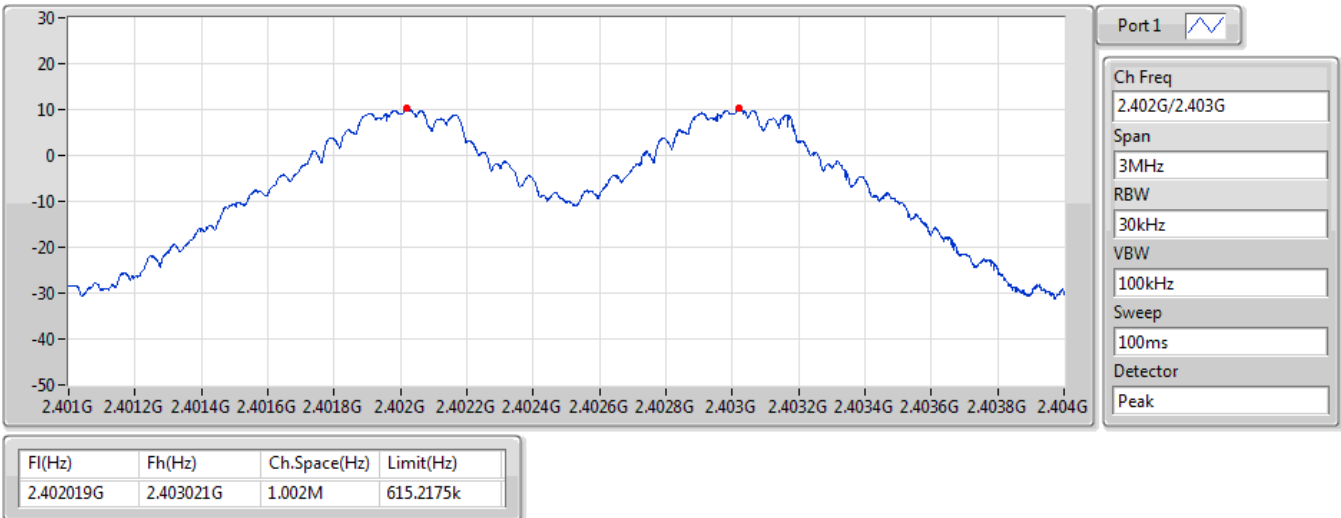
Mode	Result	Fl (Hz)	Fh (Hz)	Ch.Space (Hz)	Limit (Hz)
BT-BR(1Mbps)	-	-	-	-	-
2402MHz	Pass	2.402019G	2.403021G	1.002M	615.2175k
2440MHz	Pass	2.440022G	2.441027G	1.005M	616.05k
2480MHz	Pass	2.479025G	2.480024G	999k	614.385k
BT-EDR(2Mbps)	-	-	-	-	-
2402MHz	Pass	2.402023G	2.403022G	999k	873.126k
2440MHz	Pass	2.440023G	2.441024G	1.0005M	873.126k
2480MHz	Pass	2.479023G	2.480022G	999k	873.126k
BT-EDR(3Mbps)	-	-	-	-	-
2402MHz	Pass	2.402022G	2.403025G	1.0035M	856.476k
2440MHz	Pass	2.440025G	2.441024G	999k	856.476k
2480MHz	Pass	2.479022G	2.480022G	1.0005M	855.144k

BT-BR(1Mbps)

2.402G/2.403GHz

Channel Separation-FS

25/02/2022

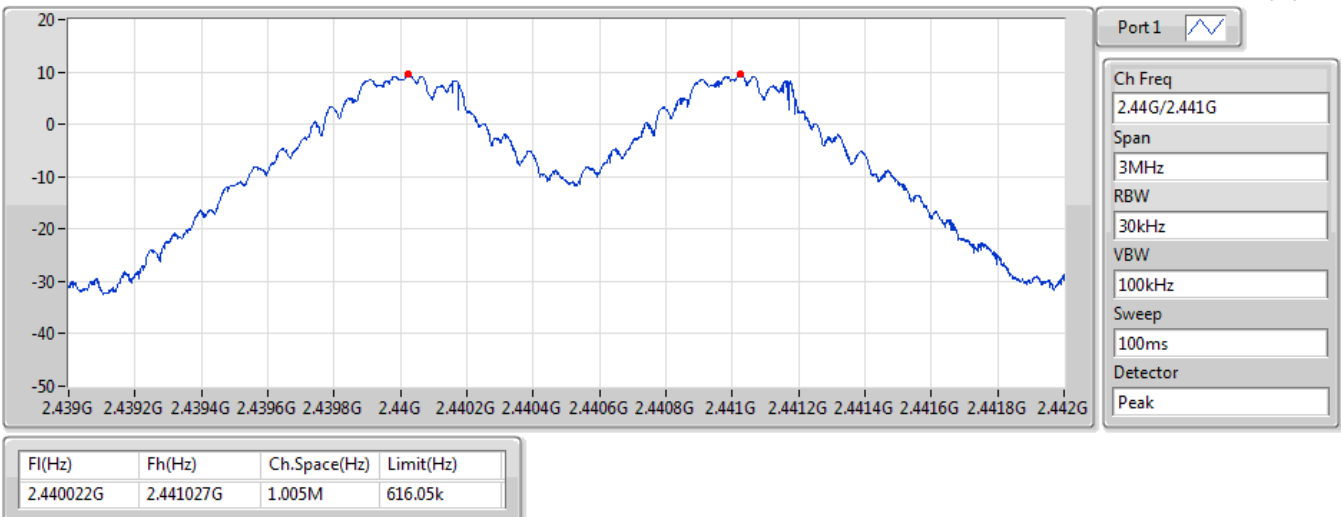


BT-BR(1Mbps)

2.44G/2.441GHz

Channel Separation-FS

25/02/2022

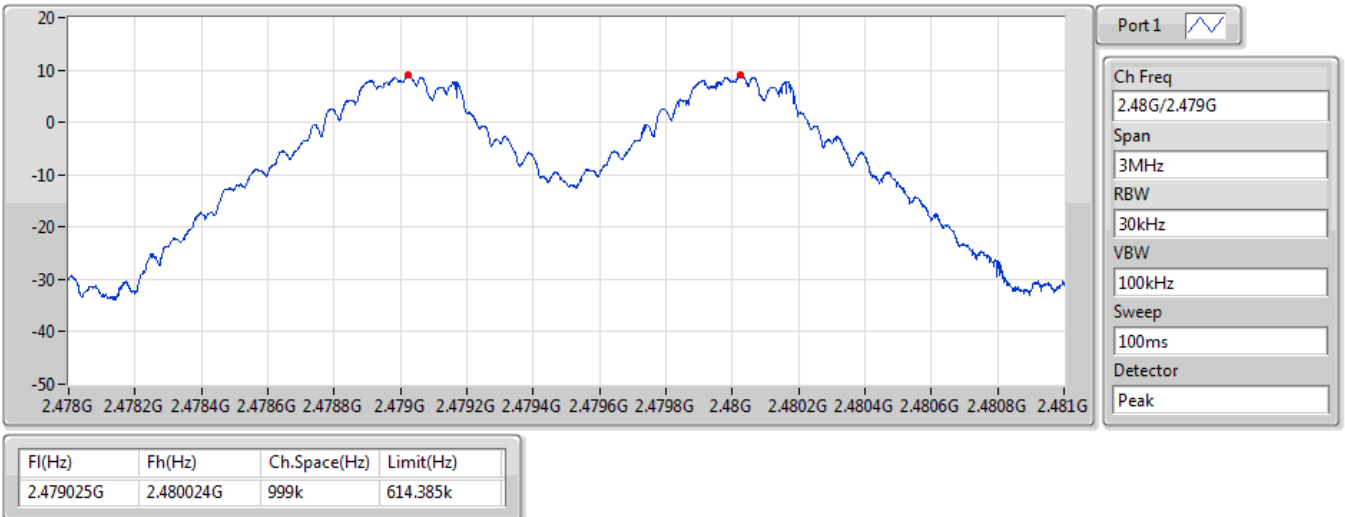


BT-BR(1Mbps)

2.48G/2.479GHz

Channel Separation-FS

25/02/2022

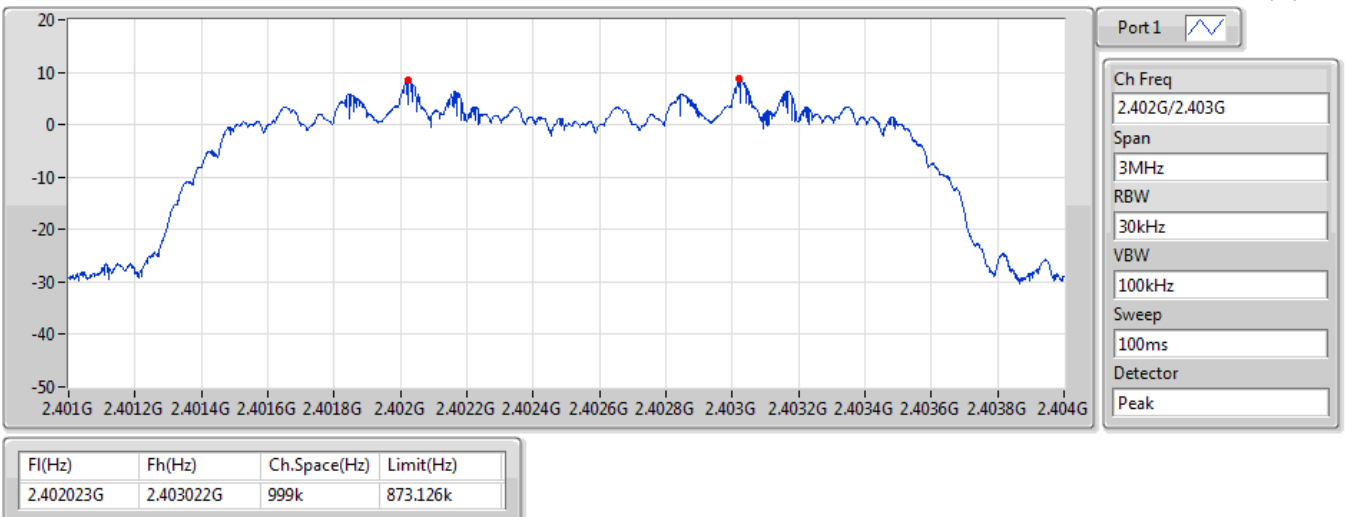


BT-EDR(2Mbps)

2.402G/2.403GHz

Channel Separation-FS

25/02/2022



BT-EDR(2Mbps)

2.44G/2.441GHz

Channel Separation-FS

25/02/2022

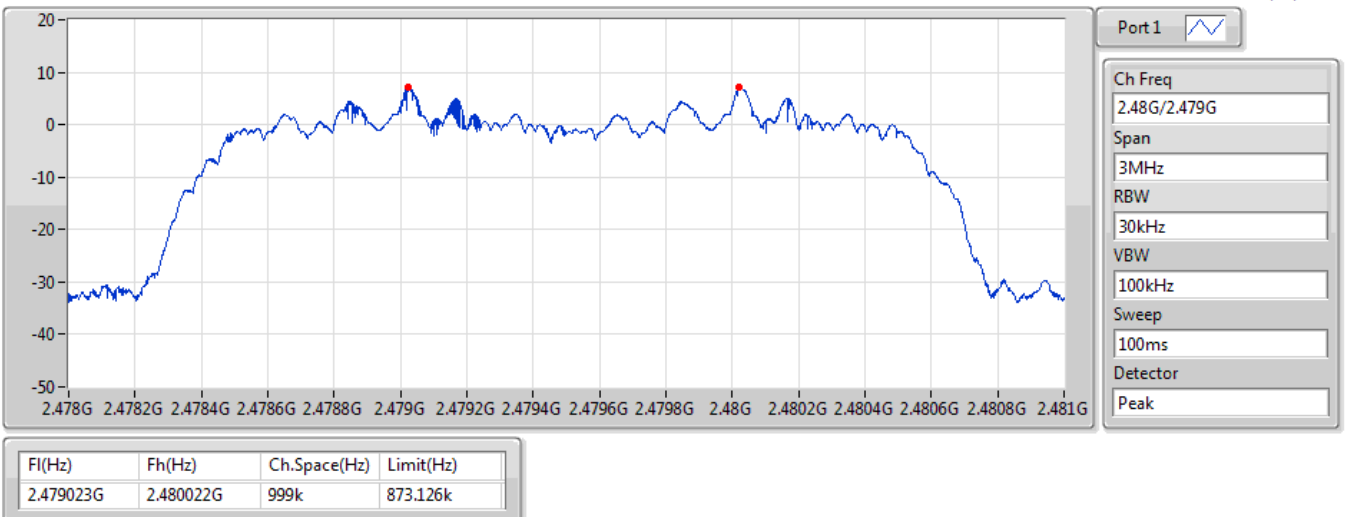


BT-EDR(2Mbps)

2.48G/2.479GHz

Channel Separation-FS

25/02/2022

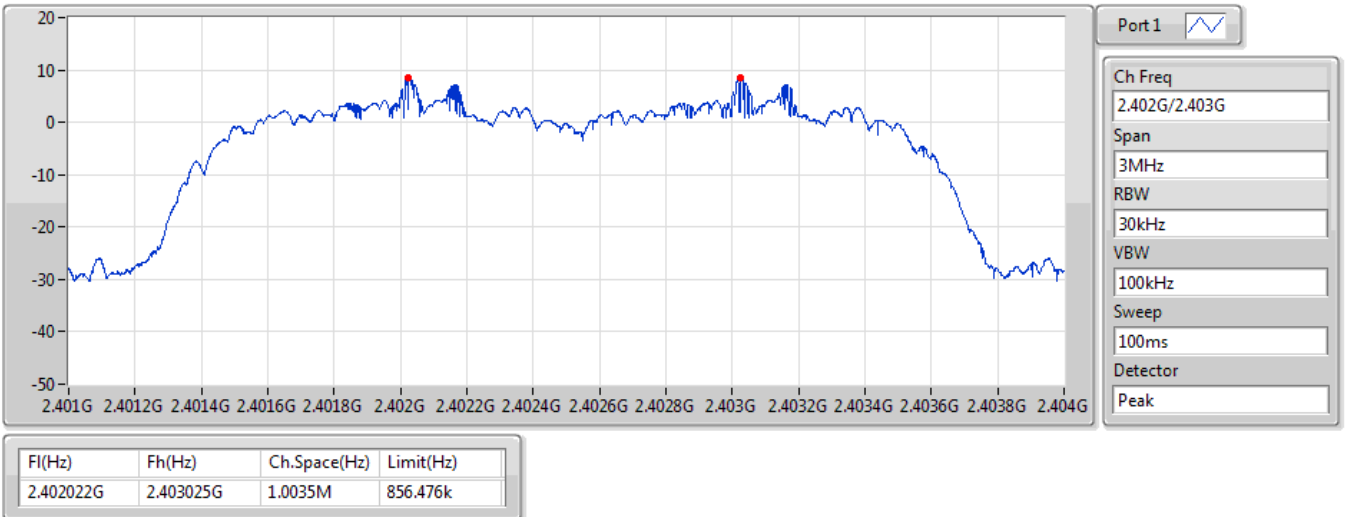


BT-EDR(3Mbps)

2.402G/2.403GHz

Channel Separation-FS

25/02/2022

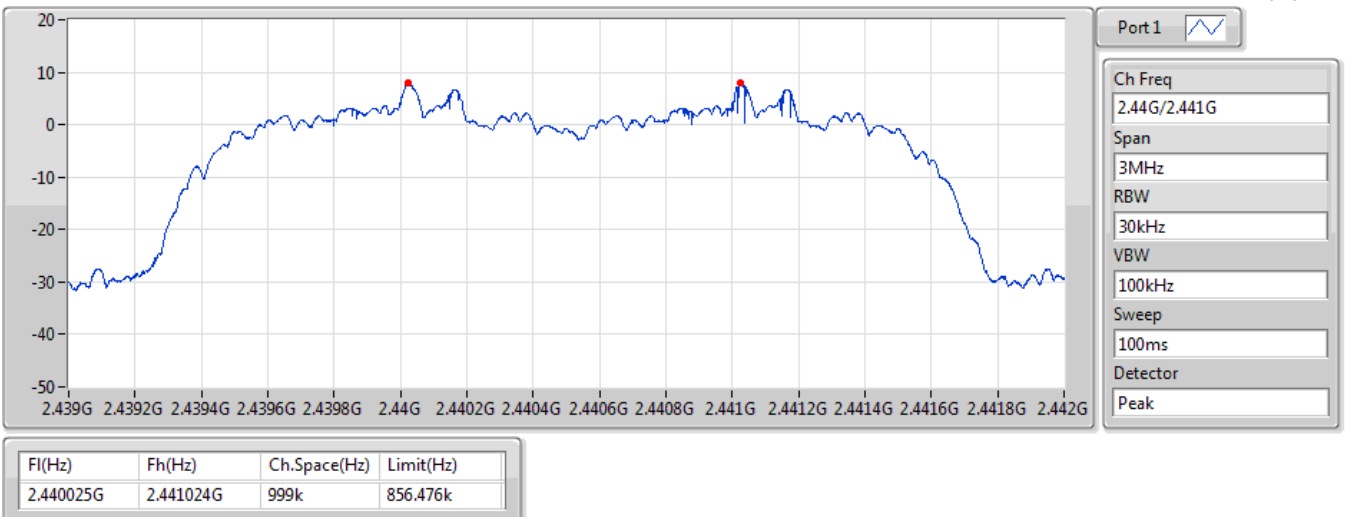


BT-EDR(3Mbps)

2.44G/2.441GHz

Channel Separation-FS

25/02/2022

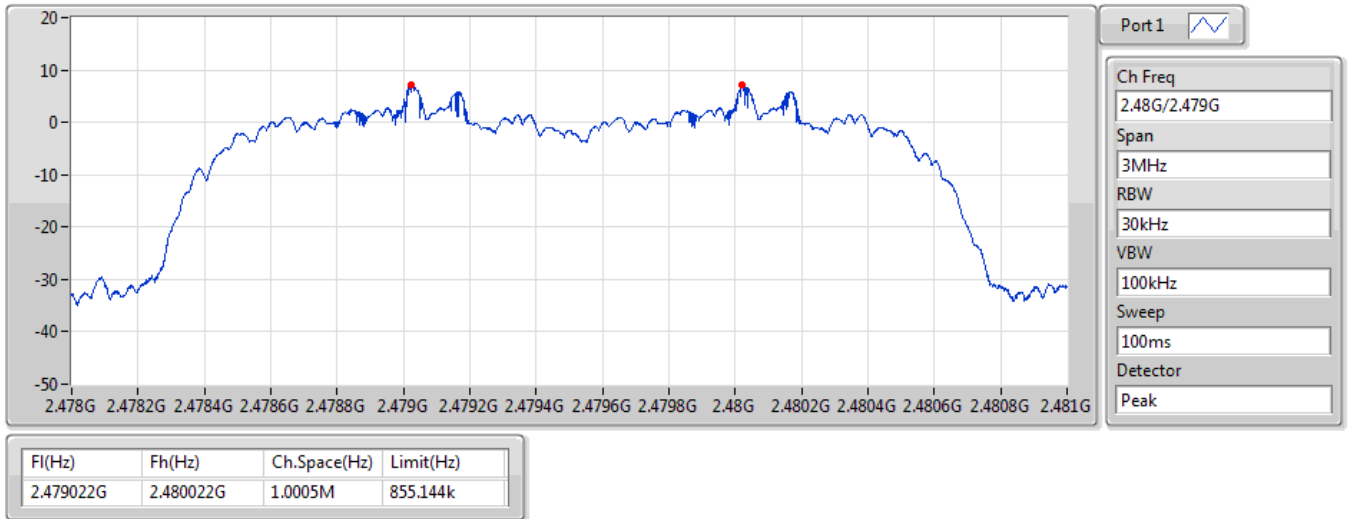


BT-EDR(3Mbps)

2.48G/2.479GHz

Channel Separation-FS

25/02/2022





Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	13.12	0.02051
BT-EDR(2Mbps)	12.63	0.01832
BT-EDR(3Mbps)	12.87	0.01936

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	3.24	13.12	21.00
2440MHz	Pass	3.24	12.56	21.00
2480MHz	Pass	3.24	12.01	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	3.24	12.63	21.00
2440MHz	Pass	3.24	12.06	21.00
2480MHz	Pass	3.24	11.47	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	3.24	12.87	21.00
2440MHz	Pass	3.24	12.29	21.00
2480MHz	Pass	3.24	11.72	21.00

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



Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	12.95	0.01972
BT-EDR(2Mbps)	10.73	0.01183
BT-EDR(3Mbps)	10.65	0.01161



Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	3.24	12.95	21.00
2440MHz	Pass	3.24	12.28	21.00
2480MHz	Pass	3.24	11.71	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	3.24	10.73	21.00
2440MHz	Pass	3.24	10.07	21.00
2480MHz	Pass	3.24	9.33	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	3.24	10.65	21.00
2440MHz	Pass	3.24	10.06	21.00
2480MHz	Pass	3.24	9.35	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

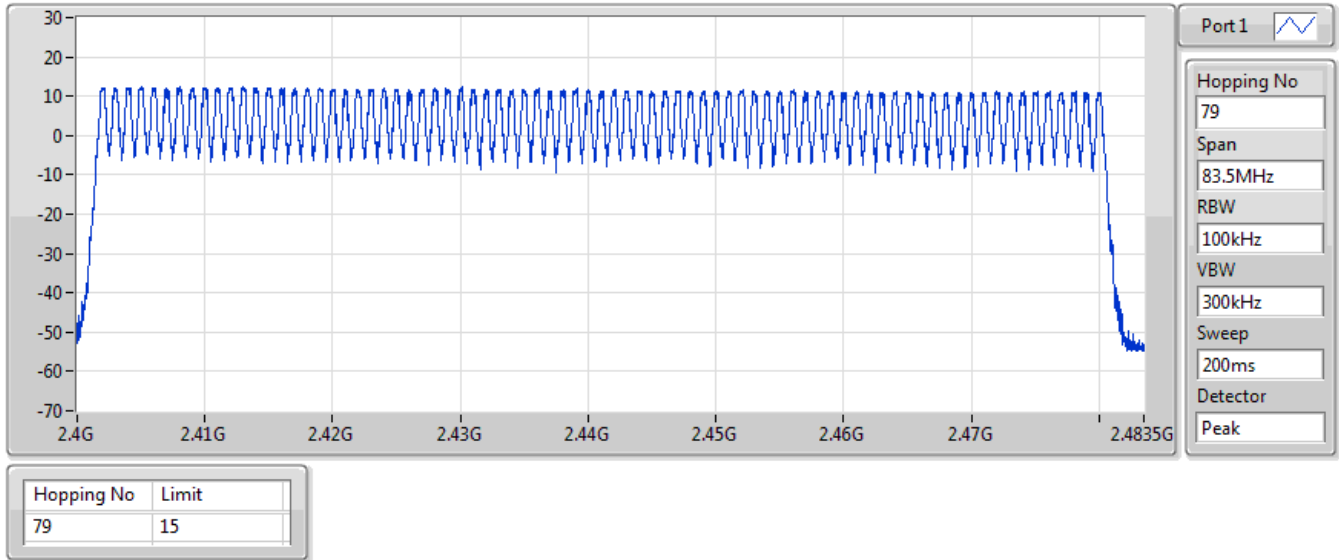
Mode	Result	Hopping No	Limit
BT-BR(1Mbps)	-	-	-
2440MHz	Pass	79	15
BT-EDR(2Mbps)	-	-	-
2440MHz	Pass	79	15
BT-EDR(3Mbps)	-	-	-
2440MHz	Pass	79	15

BT-BR(1Mbps)

2440MHz

Hopping-FS

25/02/2022

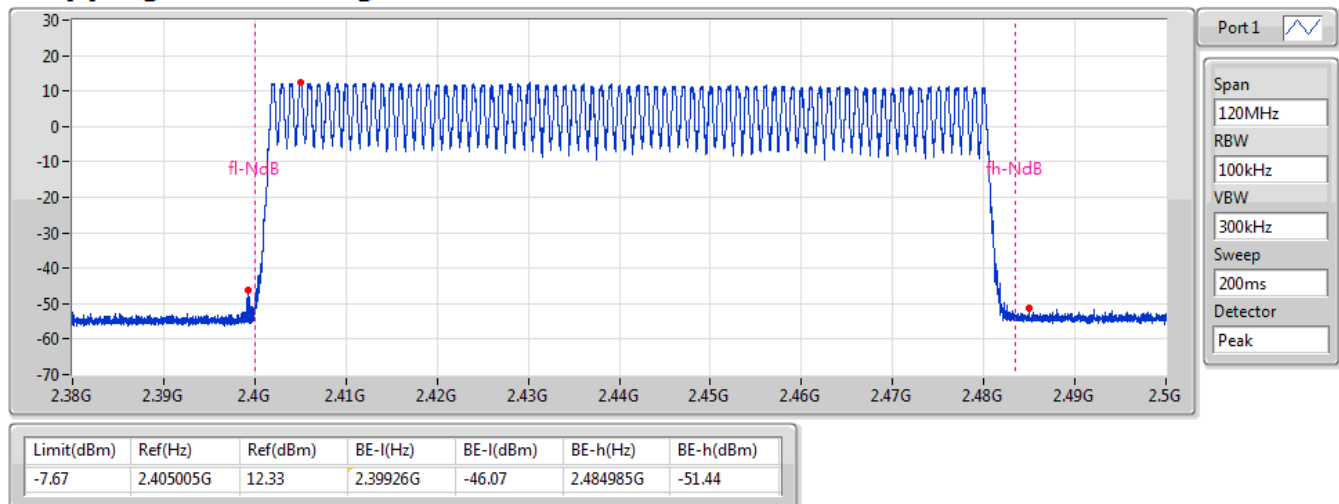


BT-BR(1Mbps)

2440MHz

Hopping Ch Bandedge (Non-restricted Band)

25/02/2022

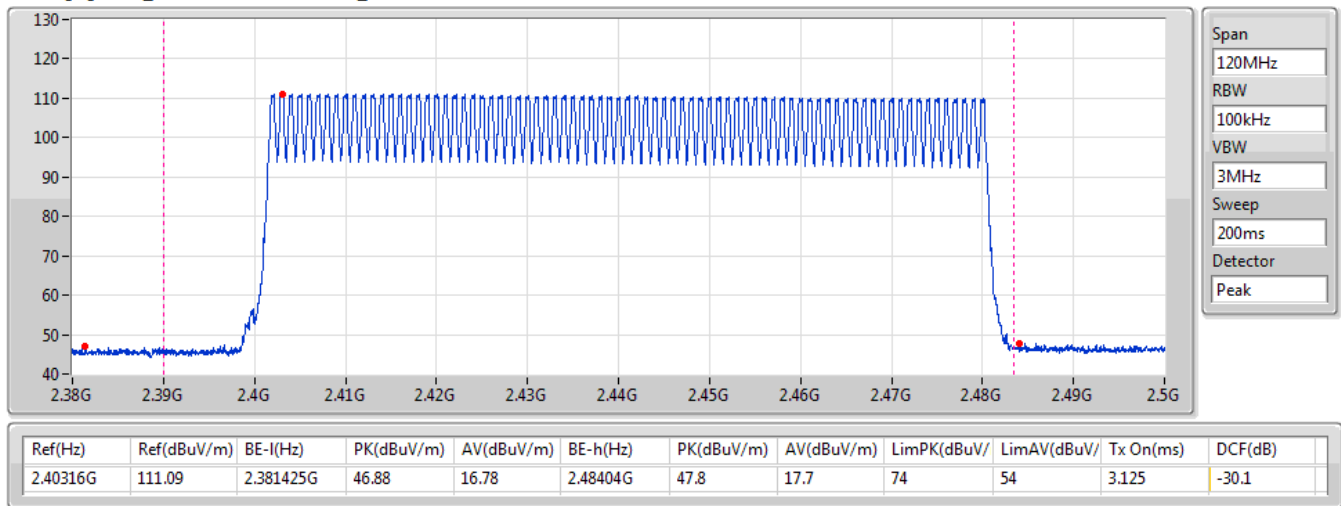


BT-BR(1Mbps)

2440MHz

Hopping Ch Bandedge (Restricted Band)

25/02/2022

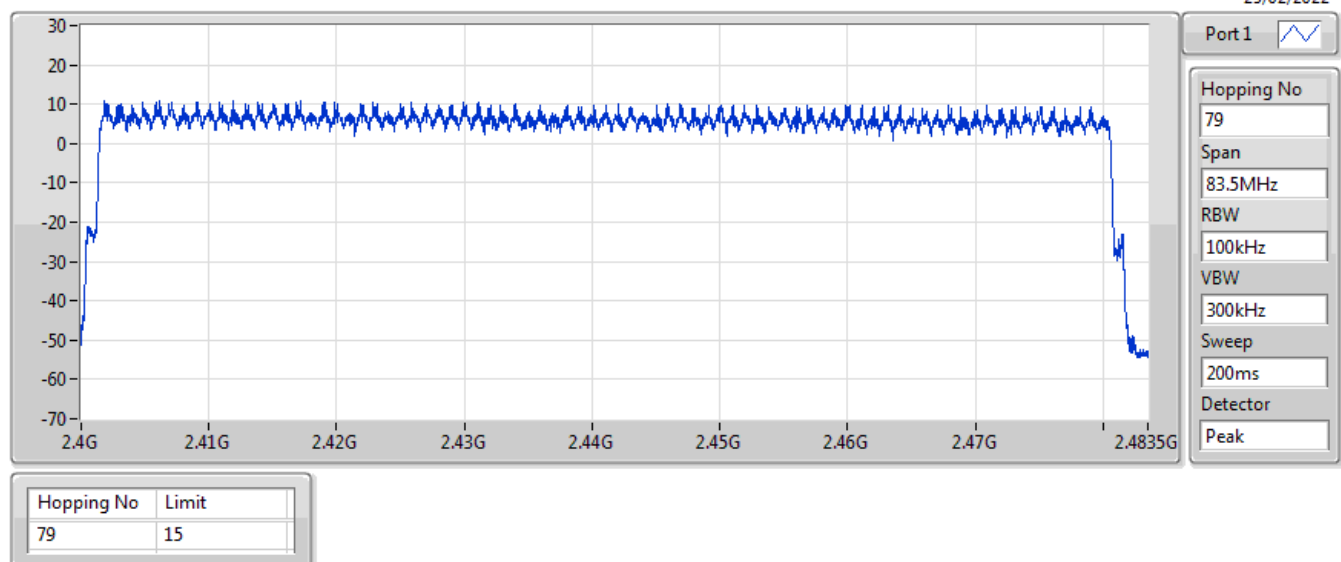


BT-EDR(2Mbps)

2440MHz

Hopping-FS

25/02/2022

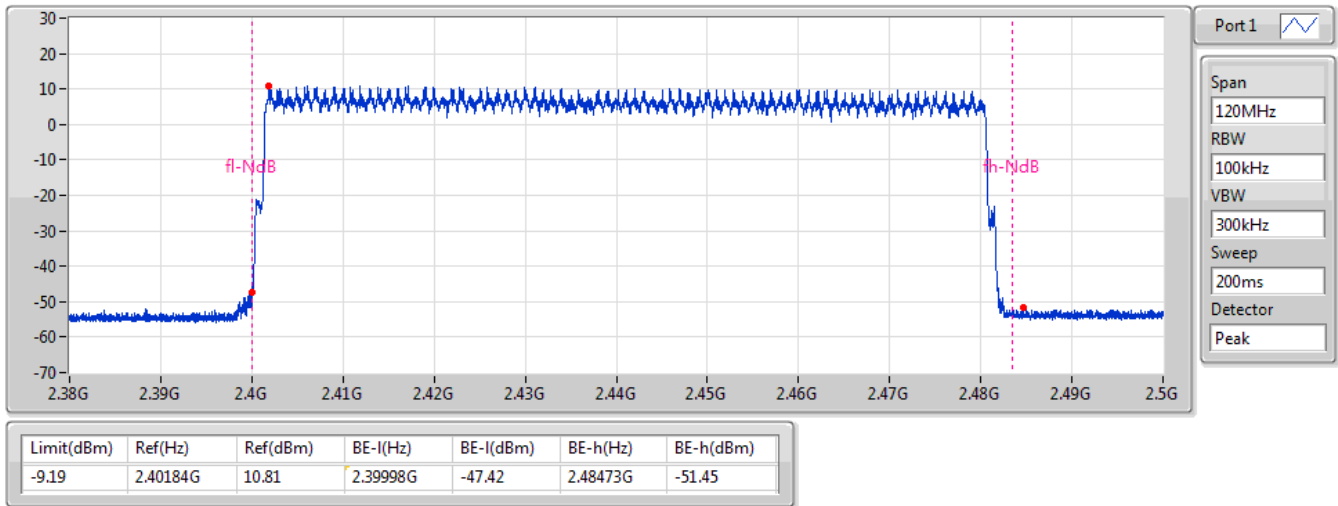


BT-EDR(2Mbps)

2440MHz

Hopping Ch Bandedge (Non-restricted Band)

25/02/2022

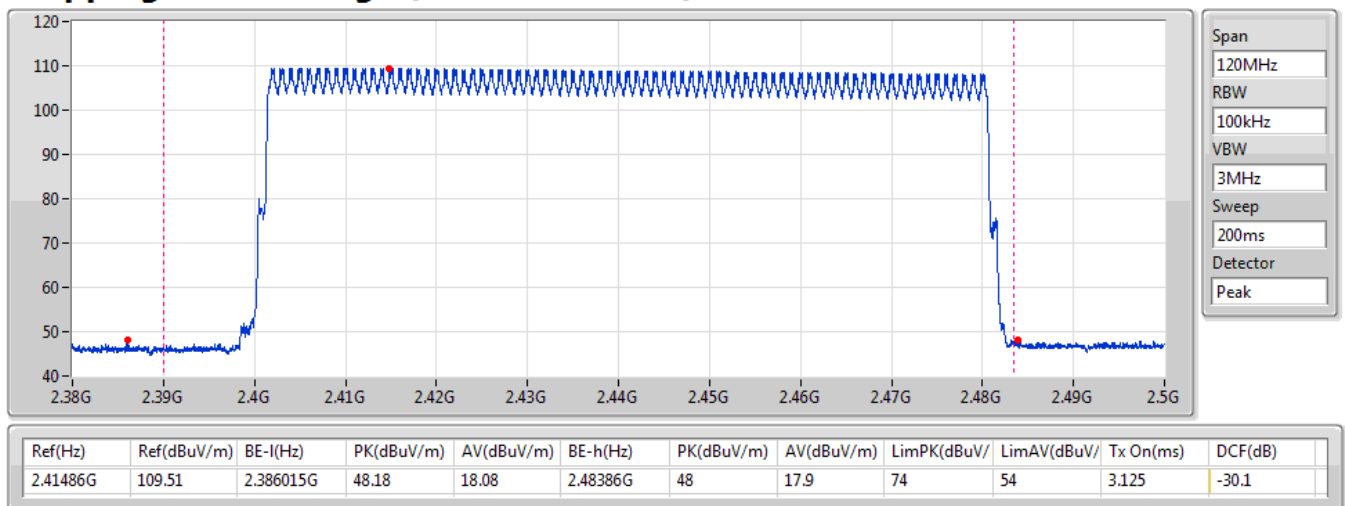


BT-EDR(2Mbps)

2440MHz

Hopping Ch Bandedge (Restricted Band)

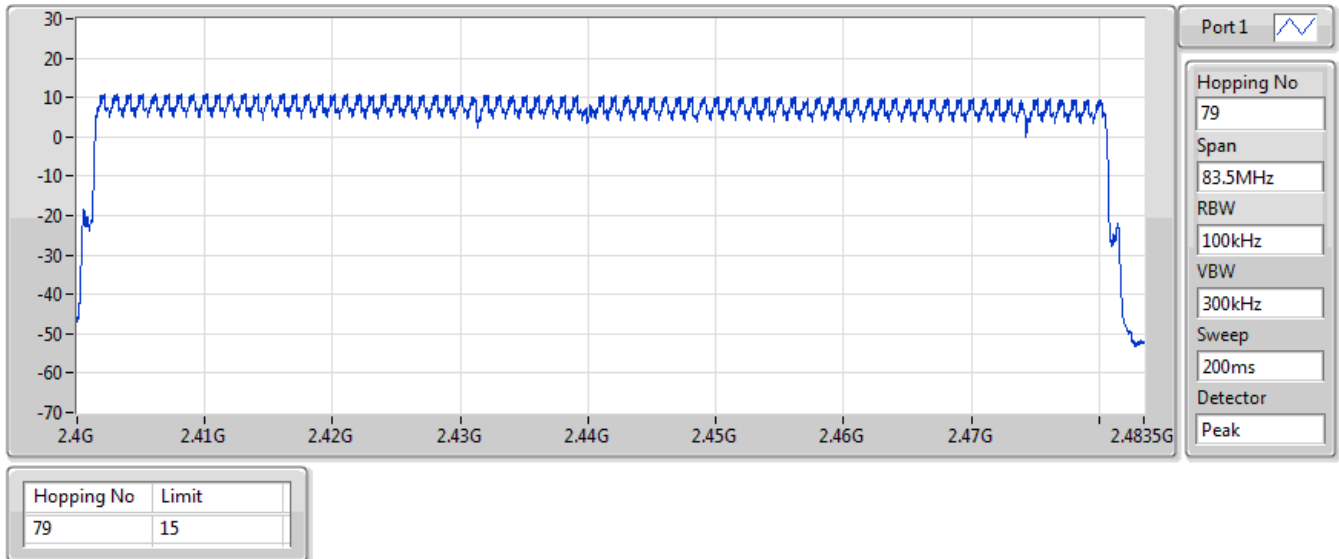
25/02/2022



BT-EDR(3Mbps) 2440MHz

Hopping-FS

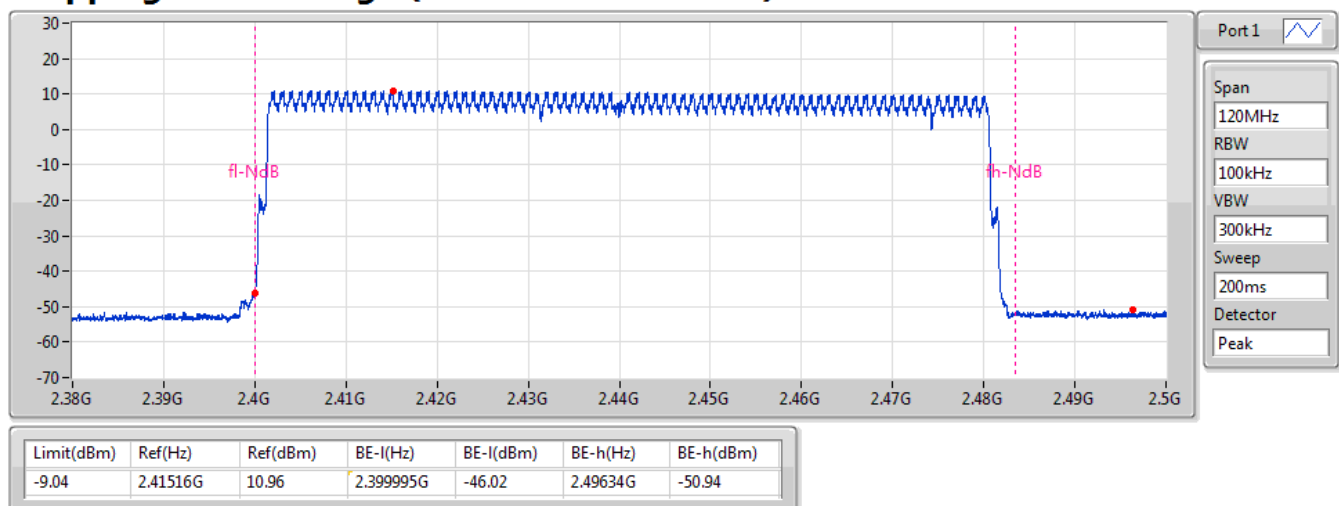
25/02/2022



BT-EDR(3Mbps) 2440MHz

Hopping Ch Bandedge (Non-restricted Band)

25/02/2022

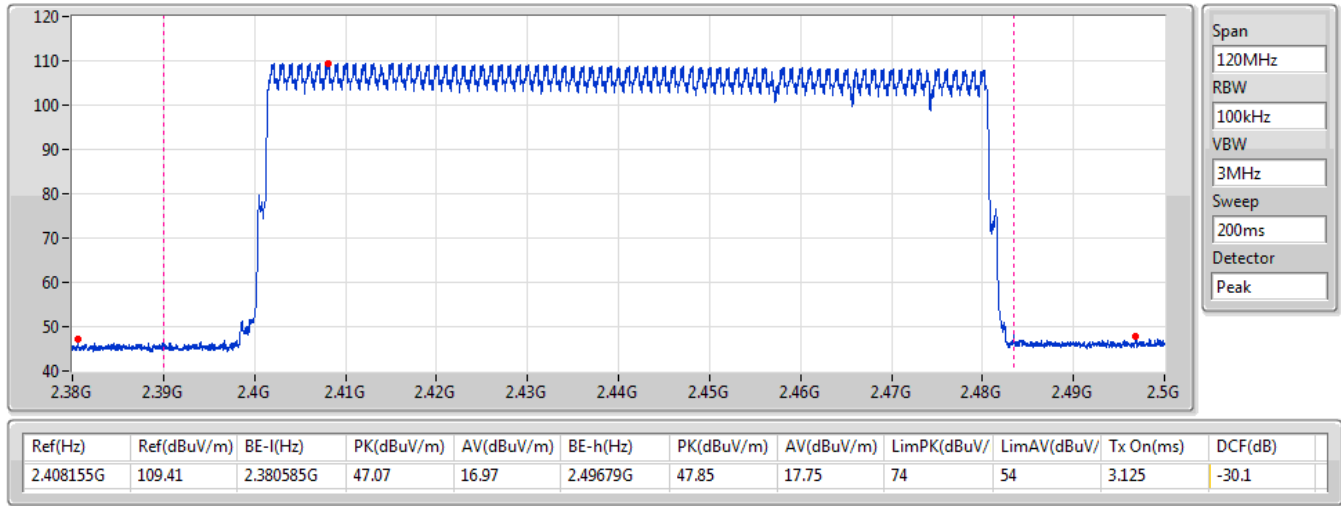


BT-EDR(3Mbps)

2440MHz

Hopping Ch Bandedge (Restricted Band)

25/02/2022





Summary

Mode	Max-Dwell (s)
2.4-2.4835GHz	-
BT-BR(1Mbps)	308.2872m_DH5
BT-EDR(2Mbps)	308.31385m_DH5
BT-EDR(3Mbps)	309.06005m_DH5

Result

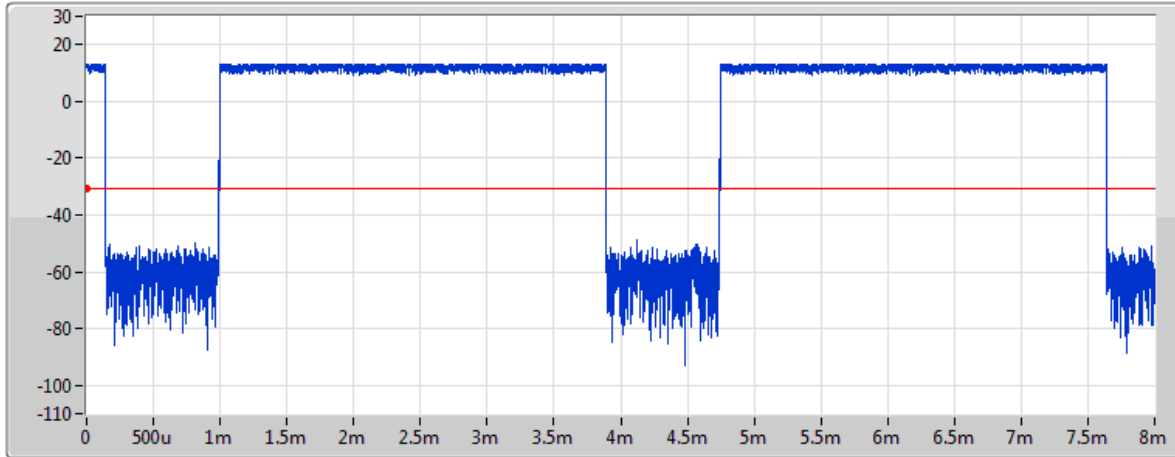
Mode	Result	Period (s)	Dwell (s)	Limit (s)	Tx On (s)
BT-BR(1Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	308.2872m_DH5	400m	2.892m
2440MHz	Pass	8	154.64995m_DH5-AFH	400m	2.9015m
BT-EDR(2Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	308.31385m_DH5	400m	2.89225m
2440MHz	Pass	8	154.17025m_DH5-AFH	400m	2.8925m
BT-EDR(3Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	309.06005m_DH5	400m	2.89925m
2440MHz	Pass	8	154.59665m_DH5-AFH	400m	2.9005m

BT-BR(1Mbps)

Dwell-FS

2440MHz

25/02/2022



Port 1 

Ch Freq
2.44GHz

RBW
300kHz

VBW
1MHz

Sweep Time
8ms

TX Time
2.892ms

Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	308.287m_DH5	400m	2.892m

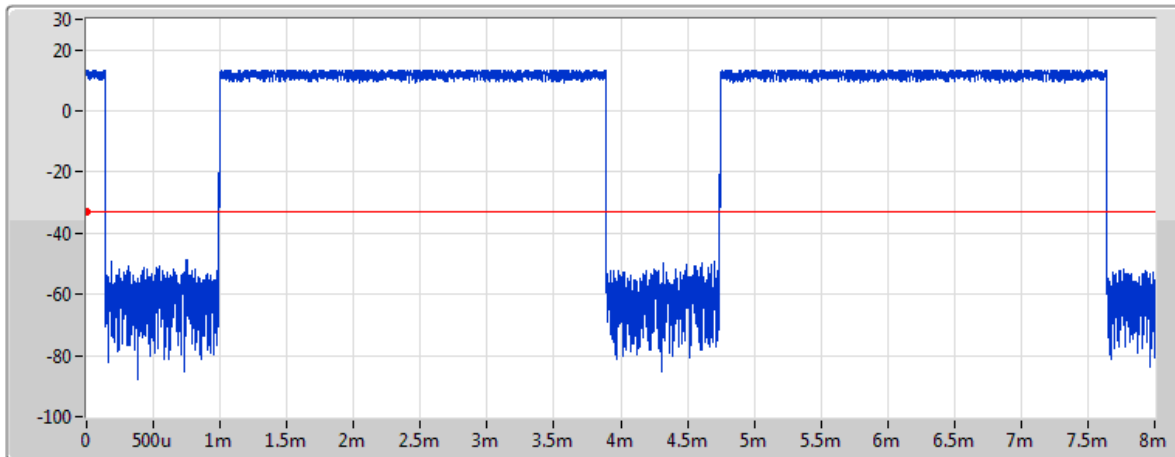
DH5

BT-BR(1Mbps)

Dwell-FS

2440MHz

25/02/2022



Port 1 

Ch Freq
2.44GHz

RBW
300kHz

VBW
1MHz

Sweep Time
8ms

TX Time
2.9015ms

Period(s)	Dwell(s)	Limit(s)	Tx On(s)
8	154.64995m_DH5-AFH	400m	2.9015m

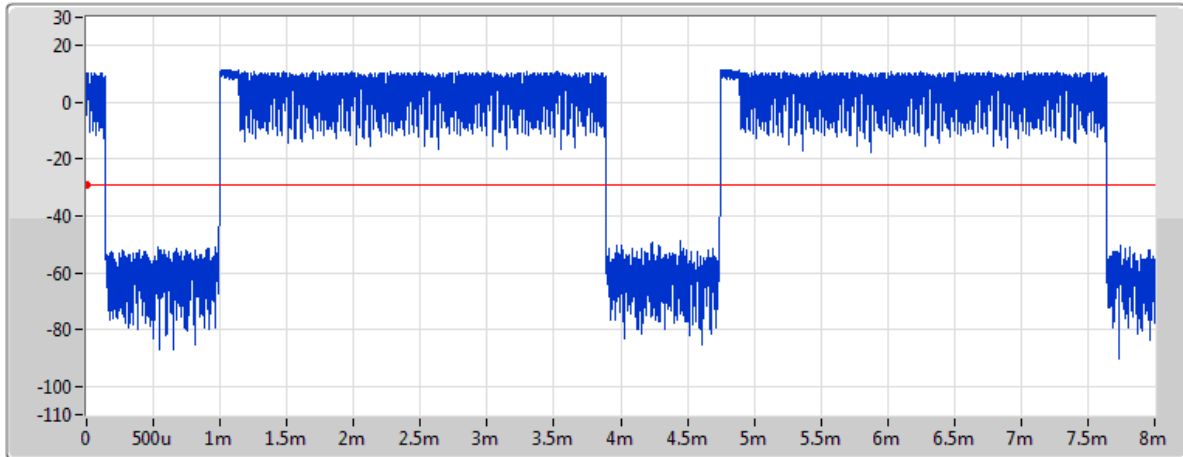
DH5-AFH

BT-EDR(2Mbps)

2440MHz

Dwell-FS

25/02/2022



Port 1 

Ch Freq
2.44GHz

RBW
300kHz

VBW
1MHz

Sweep Time
8ms

TX Time
2.89225ms

Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	308.31385m_DH5	400m	2.89225m

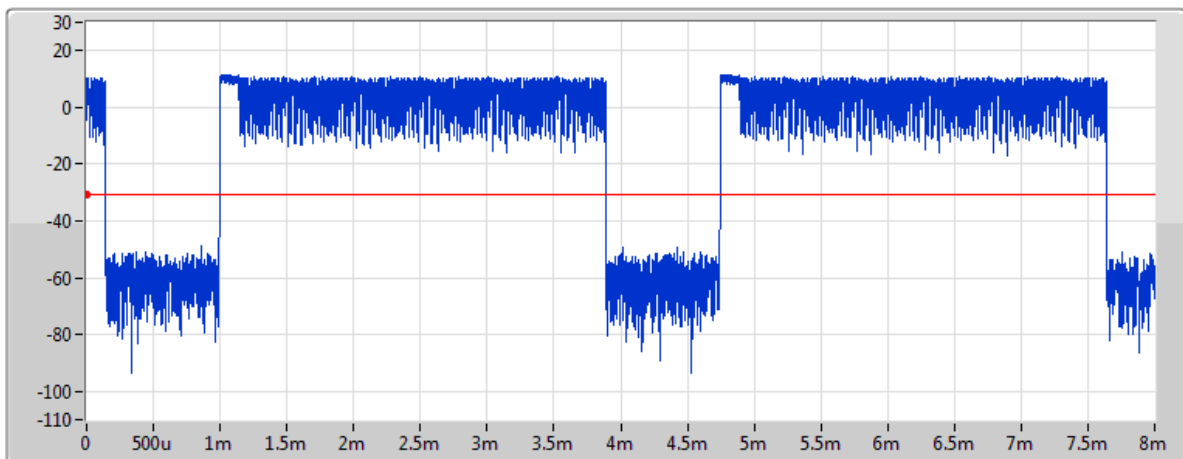
DH5

BT-EDR(2Mbps)

2440MHz

Dwell-FS

25/02/2022



Port 1 

Ch Freq
2.44GHz

RBW
300kHz

VBW
1MHz

Sweep Time
8ms

TX Time
2.8925ms

Period(s)	Dwell(s)	Limit(s)	Tx On(s)
8	154.17025m_DH5-AFH	400m	2.8925m

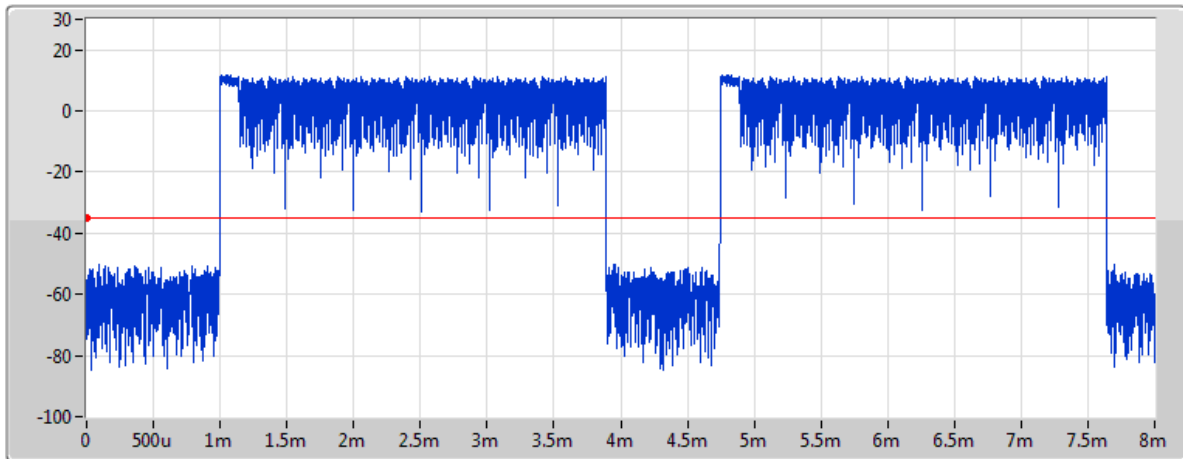
DH5-AFH

BT-EDR(3Mbps)

2440MHz

Dwell-FS

25/02/2022



Port 1 

Ch Freq
2.44GHz

RBW
300kHz

VBW
1MHz

Sweep Time
8ms

TX Time
2.89925ms

Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	309.06005m_DH5	400m	2.89925m

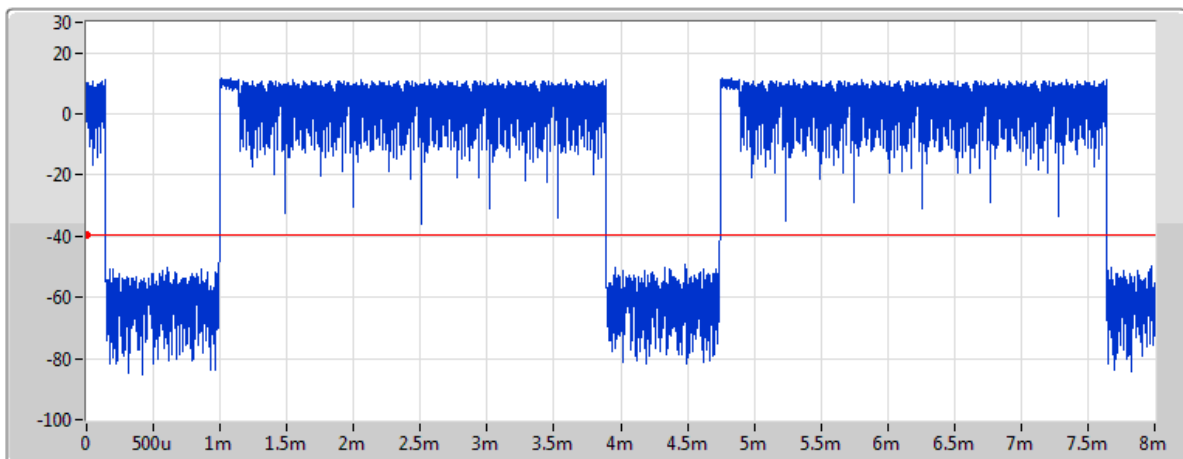
DH5

BT-EDR(3Mbps)

2440MHz

Dwell-FS

25/02/2022



Port 1 

Ch Freq
2.44GHz

RBW
300kHz

VBW
1MHz

Sweep Time
8ms

TX Time
2.9005ms

Period(s)	Dwell(s)	Limit(s)	Tx On(s)
8	154.59665m_DH5-AFH	400m	2.9005m

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	2.40213G	12.31	-7.69	2.17966G	-54.80	2.3997G	-42.44	2.4G	-49.24	2.49225G	-52.35	24.82846G	-41.95	1
BT-EDR(2Mbps)	Pass	2.40205G	9.95	-10.05	2.17085G	-54.92	2.39963G	-46.51	2.4G	-47.91	2.48474G	-53.04	23.24809G	-42.68	1
BT-EDR(3Mbps)	Pass	2.40184G	10.36	-9.64	2.10299G	-53.95	2.39997G	-46.18	2.4G	-48.20	2.49789G	-53.18	16.58068G	-41.91	1

Result

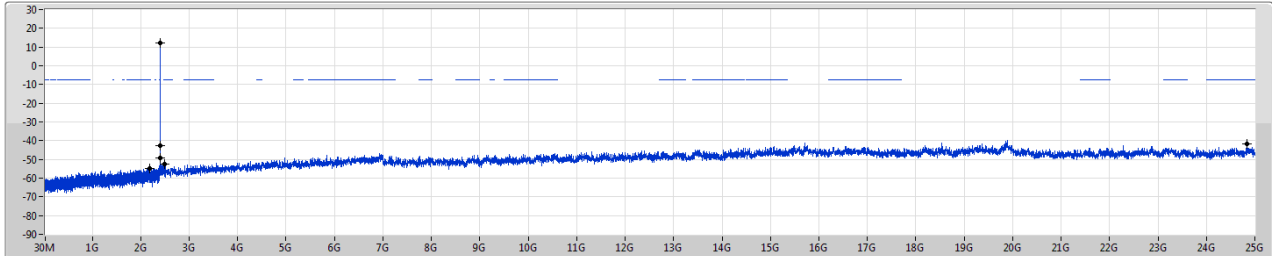
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
BT-BR(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.40213G	12.31	-7.69	2.17966G	-54.80	2.3997G	-42.44	2.4G	-49.24	2.49225G	-52.35	24.82846G	-41.95	1
2440MHz	Pass	2.44004G	11.45	-8.55	2.30216G	-54.62	2.39068G	-53.11	2.4835G	-55.59	2.49582G	-52.48	14.50257G	-42.77	1
2480MHz	Pass	2.48003G	10.92	-9.08	2.19229G	-53.31	2.39524G	-53.34	2.4835G	-55.02	2.48358G	-52.51	16.81409G	-42.27	1
BT-EDR(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.40205G	9.95	-10.05	2.17085G	-54.92	2.39963G	-46.51	2.4G	-47.91	2.48474G	-53.04	23.24809G	-42.68	1
2440MHz	Pass	2.44016G	9.95	-10.05	2.15088G	-54.51	2.39915G	-53.06	2.4G	-56.06	2.49471G	-52.41	23.25371G	-42.73	1
2480MHz	Pass	2.48003G	8.98	-11.02	1.97139G	-54.90	2.3944G	-54.03	2.4835G	-53.20	2.48356G	-50.29	23.3212G	-41.95	1
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.40184G	10.36	-9.64	2.10299G	-53.95	2.39997G	-46.18	2.4G	-48.20	2.49789G	-53.18	16.58068G	-41.91	1
2440MHz	Pass	2.44016G	10.15	-9.85	2.11533G	-55.11	2.39985G	-53.05	2.4835G	-55.56	2.48895G	-52.21	16.20106G	-42.70	1
2480MHz	Pass	2.47987G	9.06	-10.94	1.9617G	-55.24	2.39294G	-53.25	2.4835G	-53.17	2.49271G	-51.25	23.1356G	-42.05	1

BT-BR(1Mbps)

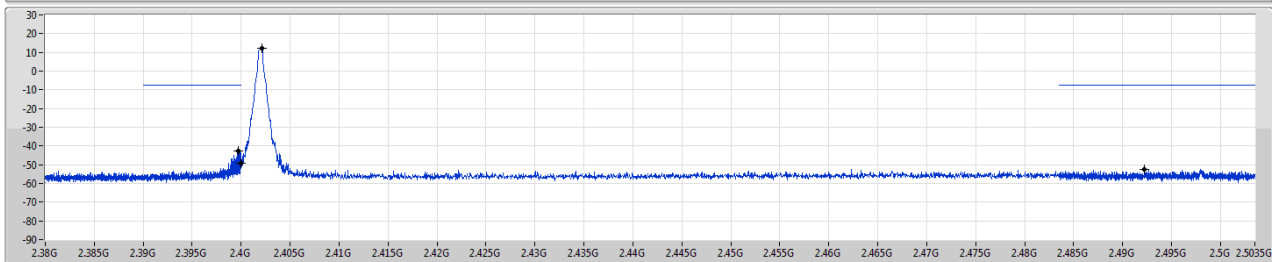
CSENdB-FS

2402MHz

25/02/2022



Port1



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

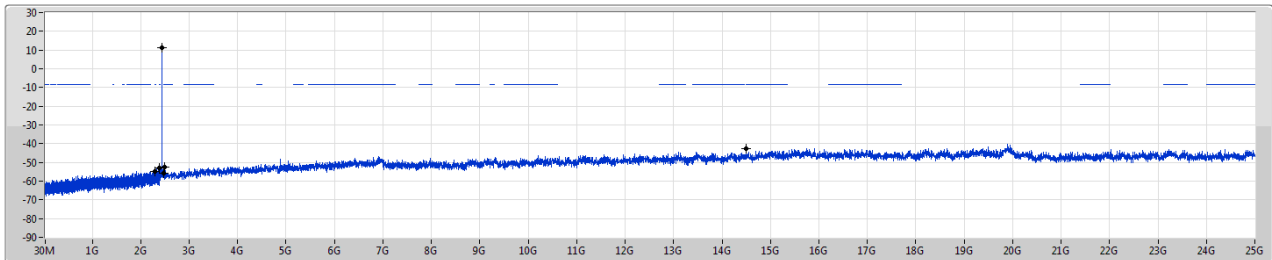
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.40213G	12.31	-7.69	2.17966G	-54.80	2.3997G	-42.44	2.4G	-49.24	2.49225G	-52.35	2.48246G	-41.95	1

BT-BR(1Mbps)

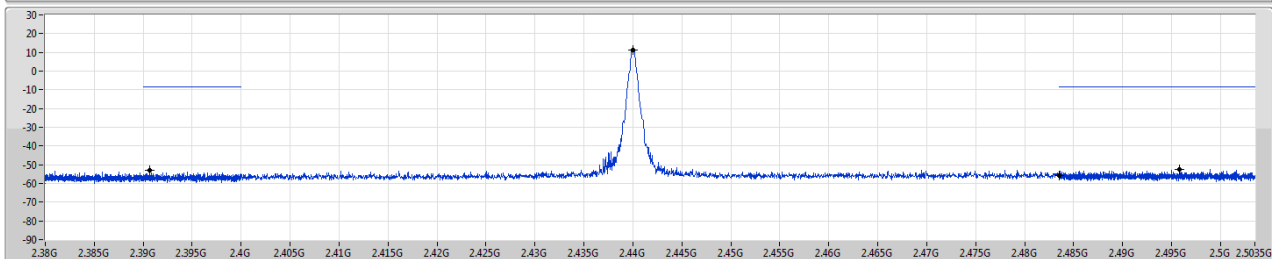
CSENdB-FS

2440MHz

25/02/2022



Port1



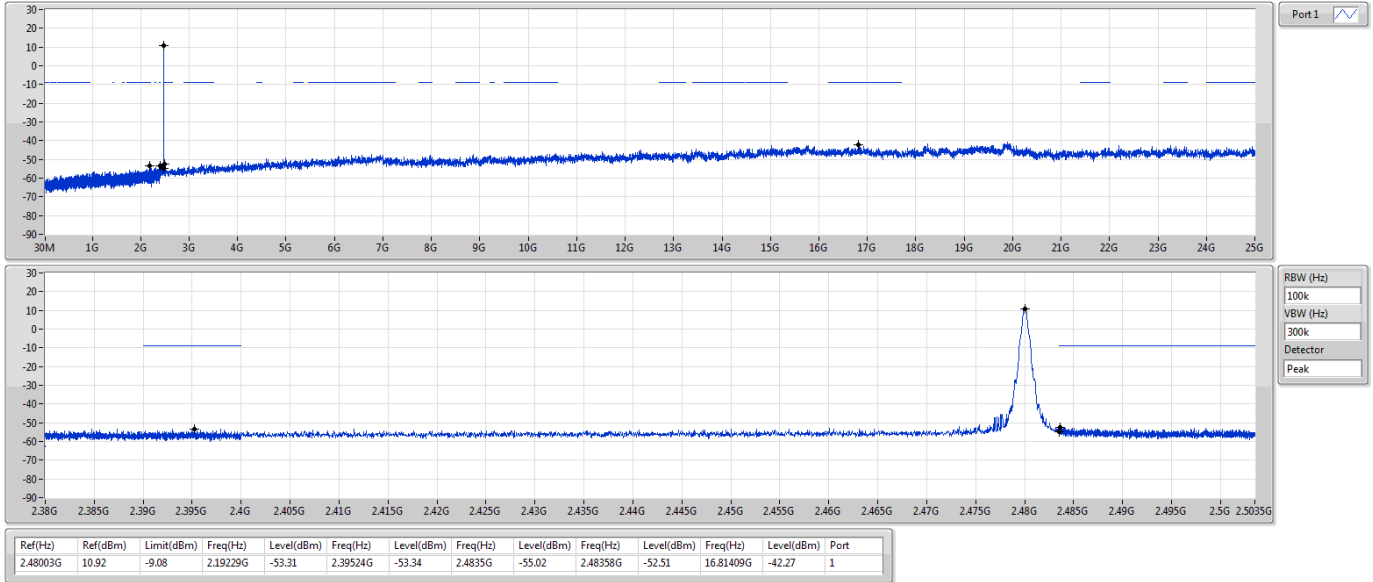
RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.44004G	11.45	-8.55	2.30216G	-54.62	2.39068G	-53.11	2.4835G	-55.59	2.49582G	-52.48	14.50257G	-42.77	1

BT-BR(1Mbps)

CSEndB-FS

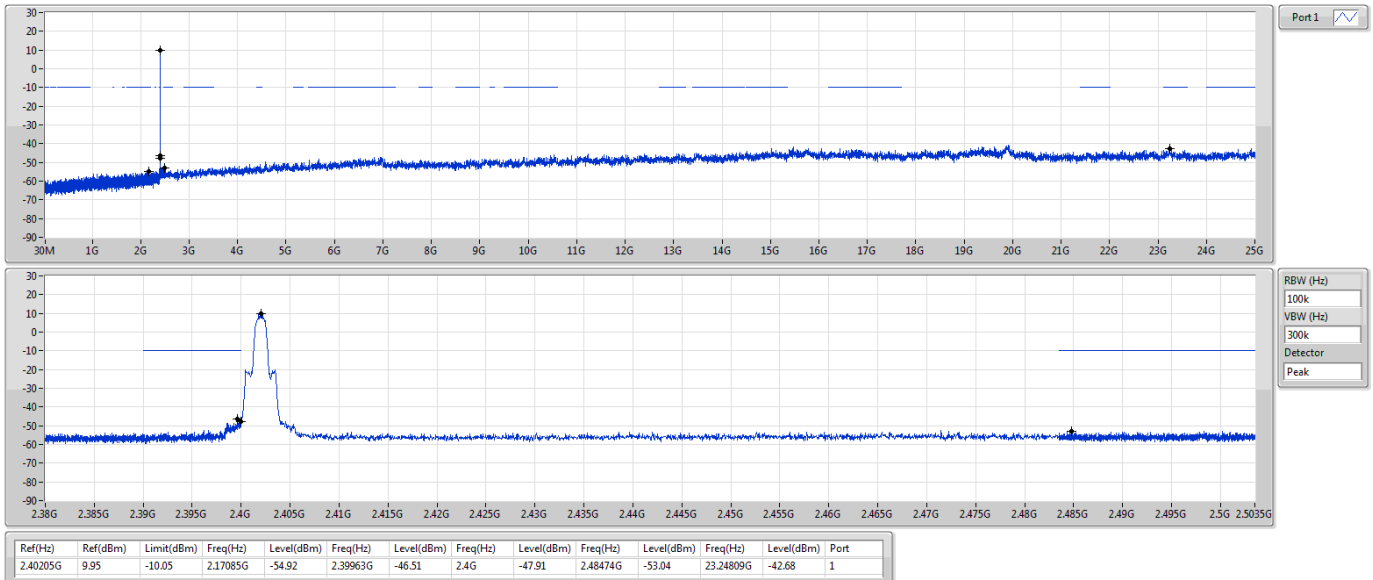
2480MHz



BT-EDR(2Mbps)

CSEndB-FS

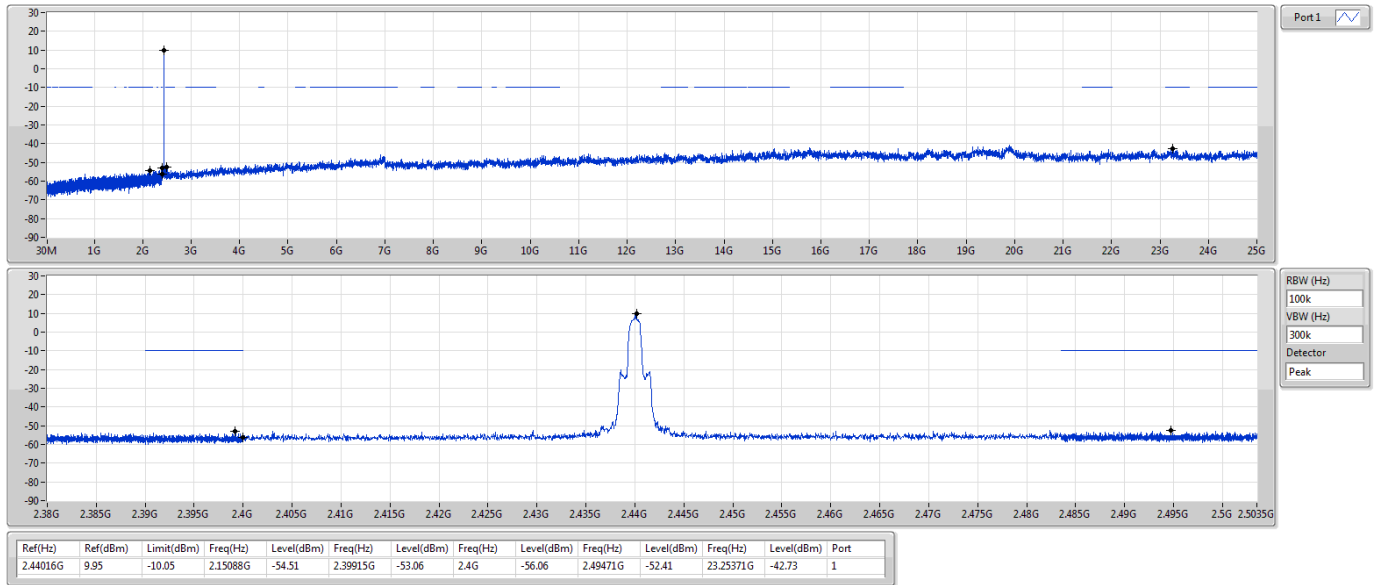
2402MHz



BT-EDR(2Mbps)

CSEndB-FS

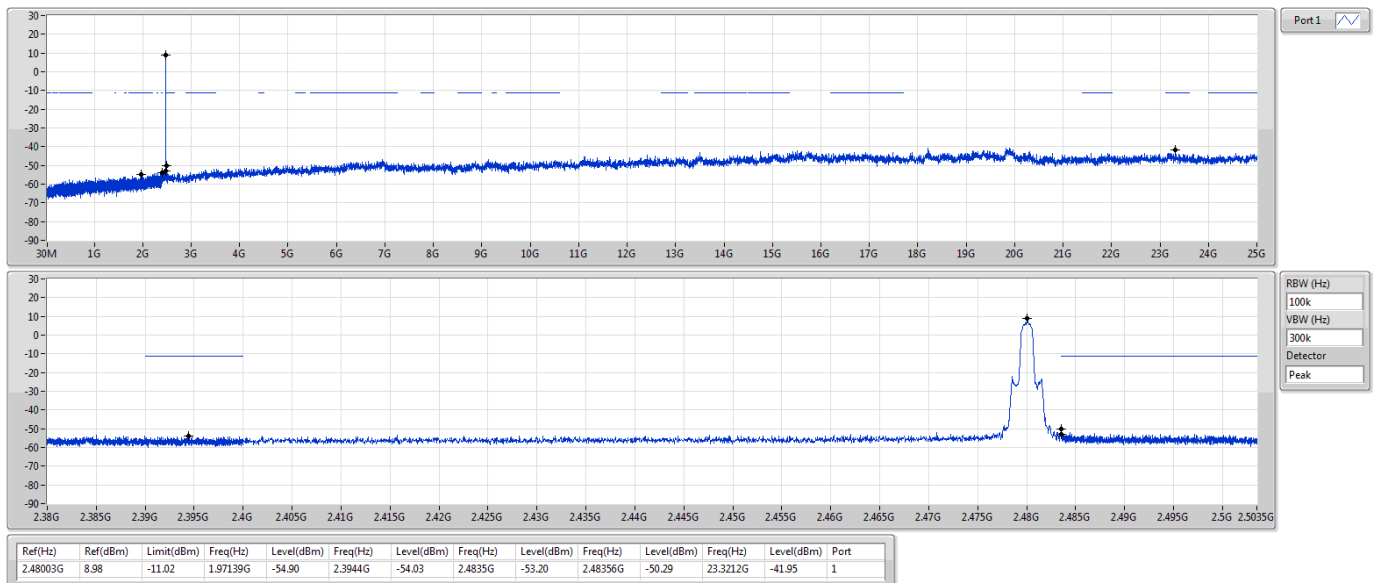
2440MHz



BT-EDR(2Mbps)

CSEndB-FS

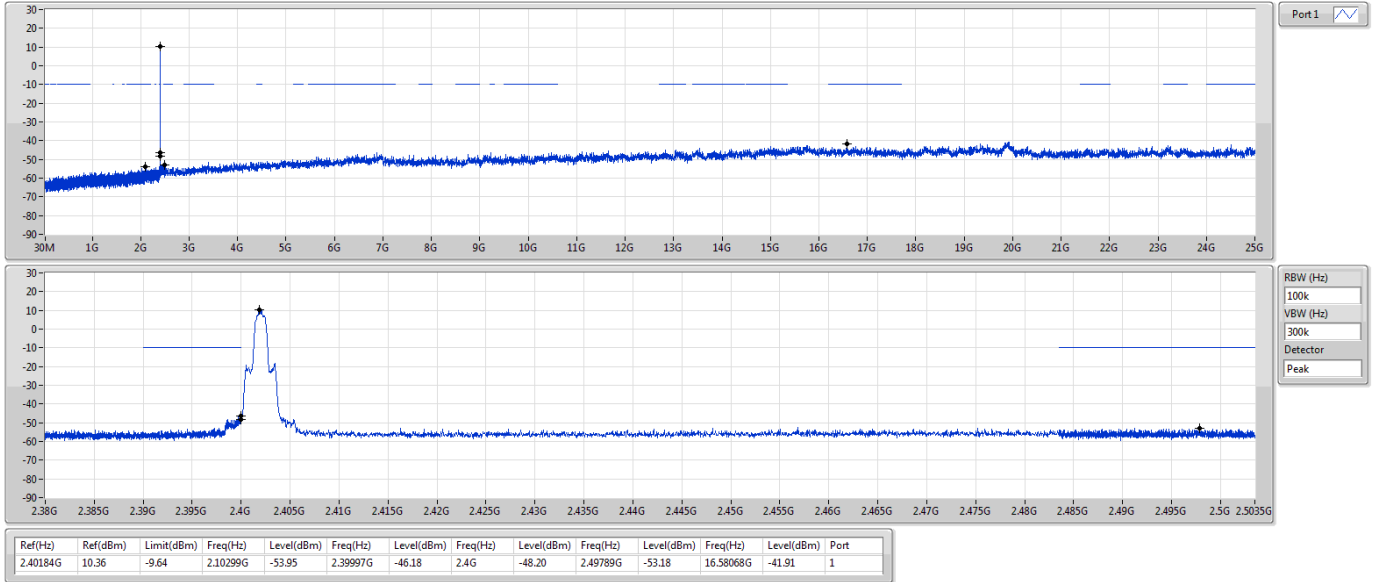
2480MHz



BT-EDR(3Mbps)

CSEndB-FS

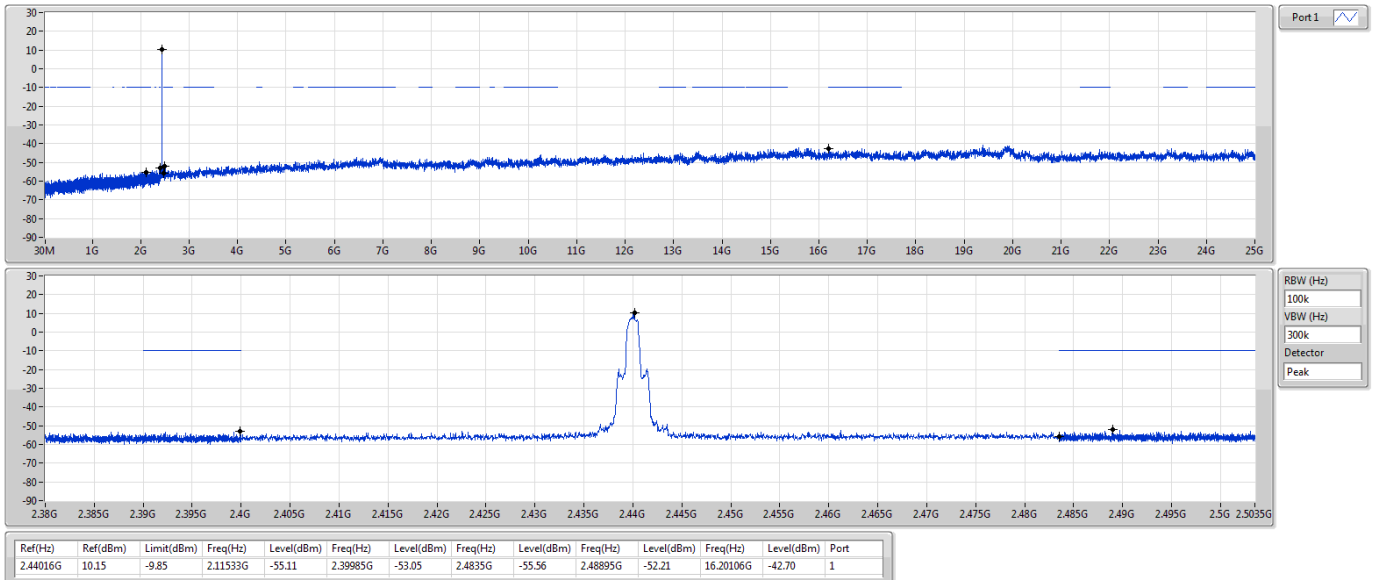
2402MHz



BT-EDR(3Mbps)

CSEndB-FS

2440MHz

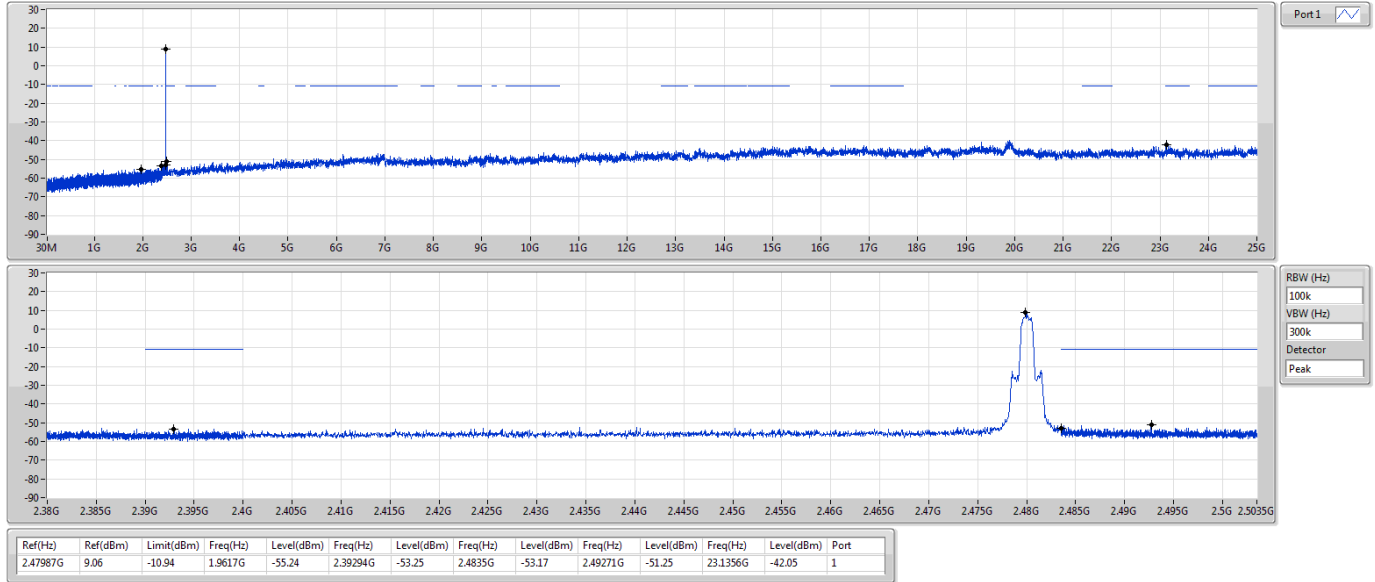


BT-EDR(3Mbps)

CSEndB-FS

2480MHz

25/02/2022





Summary

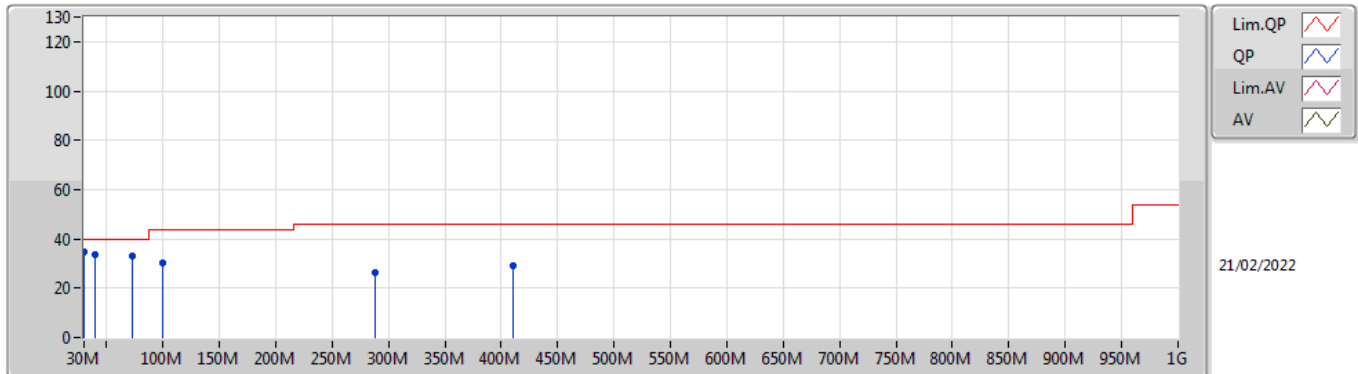
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
BT-EDR(3Mbps)	Pass	PK	30M	34.79	40.00	-5.21	3	Vertical	0	1.00	-

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-
2440MHz	Pass	PK	30M	34.79	40.00	-5.21	3	Vertical	0	1.00	-
2440MHz	Pass	PK	39.7M	33.84	40.00	-6.16	3	Vertical	0	1.00	-
2440MHz	Pass	PK	72.68M	33.15	40.00	-6.85	3	Vertical	0	1.00	-
2440MHz	Pass	PK	99.84M	29.99	43.50	-13.51	3	Vertical	0	1.00	-
2440MHz	Pass	PK	288.02M	26.11	46.00	-19.89	3	Vertical	0	1.00	-
2440MHz	Pass	PK	410.24M	28.89	46.00	-17.11	3	Vertical	0	1.00	-
2440MHz	Pass	PK	41.64M	31.63	40.00	-8.37	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	148.34M	31.90	43.50	-11.60	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	220.12M	27.60	46.00	-18.40	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	249.22M	26.77	46.00	-19.23	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	408.3M	27.45	46.00	-18.55	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	495.6M	29.52	46.00	-16.48	3	Horizontal	360	1.00	-

BT-EDR(3Mbps)

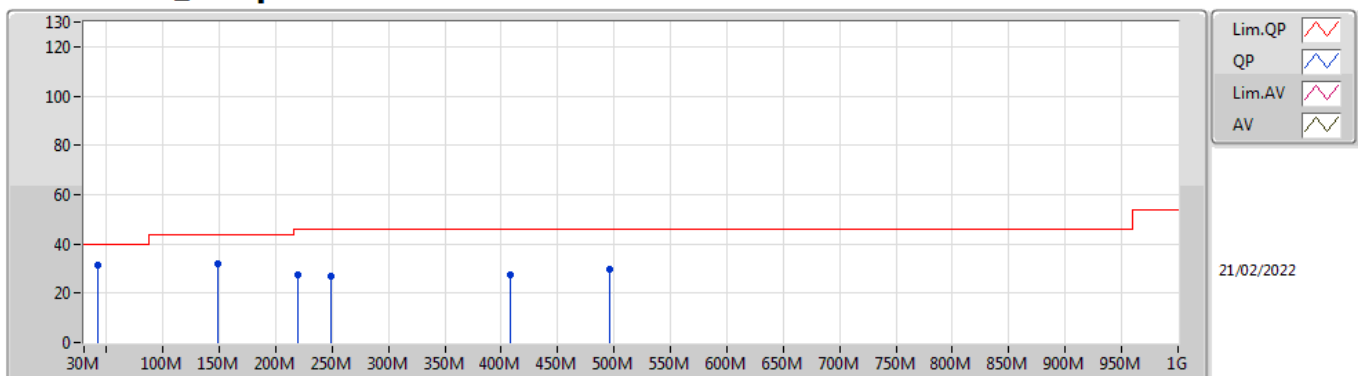
2440MHz_Adapter



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	30M	34.79	40.00	-5.21	-2.87	3	Vertical	0	1.00	-	37.66	23.26	0.86	26.99
PK	39.7M	33.84	40.00	-6.16	-8.49	3	Vertical	0	1.00	-	42.33	17.92	0.96	27.37
PK	72.68M	33.15	40.00	-6.85	-15.15	3	Vertical	0	1.00	-	48.30	11.46	1.25	27.86
PK	99.84M	29.99	43.50	-13.51	-10.35	3	Vertical	0	1.00	-	40.34	16.00	1.42	27.77
PK	288.02M	26.11	46.00	-19.89	-6.64	3	Vertical	0	1.00	-	32.75	18.10	2.31	27.05
PK	410.24M	28.89	46.00	-17.11	-3.52	3	Vertical	0	1.00	-	32.41	21.55	2.77	27.84

BT-EDR(3Mbps)

2440MHz_Adapter



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	41.64M	31.63	40.00	-8.37	-9.66	3	Horizontal	360	1.00	-	41.29	16.80	0.98	27.44
PK	148.34M	31.90	43.50	-11.60	-10.16	3	Horizontal	360	1.00	-	42.06	15.72	1.69	27.57
PK	220.12M	27.60	46.00	-18.40	-10.77	3	Horizontal	360	1.00	-	38.37	14.39	2.04	27.20
PK	249.22M	26.77	46.00	-19.23	-7.40	3	Horizontal	360	1.00	-	34.17	17.47	2.15	27.02
PK	408.3M	27.45	46.00	-18.55	-3.61	3	Horizontal	360	1.00	-	31.06	21.45	2.77	27.83
PK	495.6M	29.52	46.00	-16.48	-2.56	3	Horizontal	360	1.00	-	32.08	22.71	3.06	28.33



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	2.4835G	60.99	74.00	-13.01	3	Horizontal	355	1.14	-
BT-EDR(3Mbps)	Pass	PK	2.4835G	62.67	74.00	-11.33	3	Horizontal	355	1.34	-

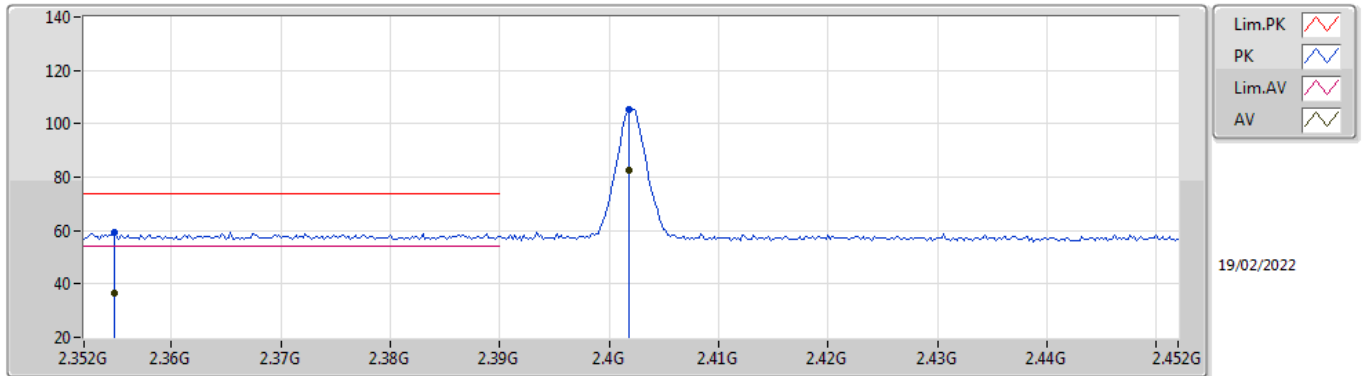
Result

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	2.3548G	36.71	54.00	-17.29	3	Vertical	200	1.06	-
2402MHz	Pass	AV	2.4018G	82.72	Inf	-Inf	3	Vertical	200	1.06	-
2402MHz	Pass	PK	2.3548G	59.21	74.00	-14.79	3	Vertical	200	1.06	-
2402MHz	Pass	PK	2.4018G	105.22	Inf	-Inf	3	Vertical	200	1.06	-
2402MHz	Pass	AV	2.3854G	36.89	54.00	-17.11	3	Horizontal	360	2.83	-
2402MHz	Pass	AV	2.4018G	90.78	Inf	-Inf	3	Horizontal	360	2.83	-
2402MHz	Pass	PK	2.3854G	59.39	74.00	-14.61	3	Horizontal	360	2.83	-
2402MHz	Pass	PK	2.4018G	113.28	Inf	-Inf	3	Horizontal	360	2.83	-
2402MHz	Pass	AV	4.80444G	23.15	54.00	-30.85	3	Vertical	283	1.00	-
2402MHz	Pass	PK	4.80444G	45.65	74.00	-28.35	3	Vertical	283	1.00	-
2402MHz	Pass	AV	4.80365G	24.10	54.00	-29.90	3	Horizontal	60	1.01	-
2402MHz	Pass	PK	4.80365G	46.60	74.00	-27.40	3	Horizontal	60	1.01	-
2440MHz	Pass	AV	2.3668G	36.36	54.00	-17.64	3	Vertical	196	1.36	-
2440MHz	Pass	AV	2.44G	79.51	Inf	-Inf	3	Vertical	196	1.36	-
2440MHz	Pass	AV	2.4924G	35.53	54.00	-18.47	3	Vertical	196	1.36	-
2440MHz	Pass	PK	2.3668G	58.86	74.00	-15.14	3	Vertical	196	1.36	-
2440MHz	Pass	PK	2.44G	102.01	Inf	-Inf	3	Vertical	196	1.36	-
2440MHz	Pass	PK	2.4924G	58.03	74.00	-15.97	3	Vertical	196	1.36	-
2440MHz	Pass	AV	2.3504G	37.26	54.00	-16.74	3	Horizontal	351	1.01	-
2440MHz	Pass	AV	2.44G	88.55	Inf	-Inf	3	Horizontal	351	1.01	-
2440MHz	Pass	AV	2.4948G	35.66	54.00	-18.34	3	Horizontal	351	1.01	-
2440MHz	Pass	PK	2.3504G	59.76	74.00	-14.24	3	Horizontal	351	1.01	-
2440MHz	Pass	PK	2.44G	111.05	Inf	-Inf	3	Horizontal	351	1.01	-
2440MHz	Pass	PK	2.4948G	58.16	74.00	-15.84	3	Horizontal	351	1.01	-
2440MHz	Pass	AV	4.8799G	23.36	54.00	-30.64	3	Vertical	359	1.00	-
2440MHz	Pass	AV	7.31961G	29.73	54.00	-24.27	3	Vertical	355	1.16	-
2440MHz	Pass	PK	4.8799G	45.86	74.00	-28.14	3	Vertical	359	1.00	-
2440MHz	Pass	PK	7.31961G	52.23	74.00	-21.77	3	Vertical	355	1.16	-
2440MHz	Pass	AV	4.87973G	23.42	54.00	-30.58	3	Horizontal	58	1.17	-
2440MHz	Pass	AV	7.32038G	30.12	54.00	-23.88	3	Horizontal	339	1.87	-
2440MHz	Pass	PK	4.87973G	45.92	74.00	-28.08	3	Horizontal	58	1.17	-
2440MHz	Pass	PK	7.32038G	52.62	74.00	-21.38	3	Horizontal	339	1.87	-
2480MHz	Pass	AV	2.4798G	80.43	Inf	-Inf	3	Vertical	328	1.00	-
2480MHz	Pass	AV	2.4984G	36.33	54.00	-17.67	3	Vertical	328	1.00	-
2480MHz	Pass	PK	2.4798G	102.93	Inf	-Inf	3	Vertical	328	1.00	-
2480MHz	Pass	PK	2.4984G	58.83	74.00	-15.17	3	Vertical	328	1.00	-
2480MHz	Pass	AV	2.4802G	88.77	Inf	-Inf	3	Horizontal	355	1.14	-
2480MHz	Pass	AV	2.4835G	38.49	54.00	-15.51	3	Horizontal	355	1.14	-
2480MHz	Pass	PK	2.4802G	111.27	Inf	-Inf	3	Horizontal	355	1.14	-
2480MHz	Pass	PK	2.4835G	60.99	74.00	-13.01	3	Horizontal	355	1.14	-
2480MHz	Pass	AV	4.96034G	22.70	54.00	-31.30	3	Vertical	360	2.96	-
2480MHz	Pass	AV	7.43942G	30.75	54.00	-23.25	3	Vertical	324	1.11	-
2480MHz	Pass	PK	4.96034G	45.20	74.00	-28.80	3	Vertical	360	2.96	-
2480MHz	Pass	PK	7.43942G	53.25	74.00	-20.75	3	Vertical	324	1.11	-
2480MHz	Pass	AV	4.95985G	22.77	54.00	-31.23	3	Horizontal	21	2.08	-
2480MHz	Pass	AV	7.43935G	31.35	54.00	-22.65	3	Horizontal	25	1.13	-
2480MHz	Pass	PK	4.95985G	45.27	74.00	-28.73	3	Horizontal	21	2.08	-
2480MHz	Pass	PK	7.43935G	53.85	74.00	-20.15	3	Horizontal	25	1.13	-
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3628G	37.13	54.00	-16.87	3	Vertical	199	1.07	-
2402MHz	Pass	AV	2.402G	80.75	Inf	-Inf	3	Vertical	199	1.07	-
2402MHz	Pass	PK	2.3628G	59.63	74.00	-14.37	3	Vertical	199	1.07	-
2402MHz	Pass	PK	2.402G	103.25	Inf	-Inf	3	Vertical	199	1.07	-
2402MHz	Pass	AV	2.354G	37.11	54.00	-16.89	3	Horizontal	352	1.08	-
2402MHz	Pass	AV	2.4018G	88.51	Inf	-Inf	3	Horizontal	352	1.08	-
2402MHz	Pass	PK	2.354G	59.61	74.00	-14.39	3	Horizontal	352	1.08	-
2402MHz	Pass	PK	2.4018G	111.01	Inf	-Inf	3	Horizontal	352	1.08	-
2402MHz	Pass	AV	4.79944G	20.01	54.00	-33.99	3	Vertical	360	1.08	-
2402MHz	Pass	PK	4.79944G	42.51	74.00	-31.49	3	Vertical	360	1.08	-
2402MHz	Pass	AV	4.79972G	20.26	54.00	-33.74	3	Horizontal	112	1.74	-

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2402MHz	Pass	PK	4.79972G	42.76	74.00	-31.24	3	Horizontal	112	1.74	-
2440MHz	Pass	AV	2.3496G	37.32	54.00	-16.68	3	Vertical	195	1.36	-
2440MHz	Pass	AV	2.44G	80.45	Inf	-Inf	3	Vertical	195	1.36	-
2440MHz	Pass	AV	2.4856G	35.90	54.00	-18.10	3	Vertical	195	1.36	-
2440MHz	Pass	PK	2.3496G	59.82	74.00	-14.18	3	Vertical	195	1.36	-
2440MHz	Pass	PK	2.44G	102.95	Inf	-Inf	3	Vertical	195	1.36	-
2440MHz	Pass	PK	2.4856G	58.40	74.00	-15.60	3	Vertical	195	1.36	-
2440MHz	Pass	AV	2.3588G	37.83	54.00	-16.17	3	Horizontal	351	1.00	-
2440MHz	Pass	AV	2.44G	89.80	Inf	-Inf	3	Horizontal	351	1.00	-
2440MHz	Pass	AV	2.4928G	35.64	54.00	-18.36	3	Horizontal	351	1.00	-
2440MHz	Pass	PK	2.3588G	60.33	74.00	-13.67	3	Horizontal	351	1.00	-
2440MHz	Pass	PK	2.44G	112.30	Inf	-Inf	3	Horizontal	351	1.00	-
2440MHz	Pass	PK	2.4928G	58.14	74.00	-15.86	3	Horizontal	351	1.00	-
2440MHz	Pass	AV	4.88384G	19.68	54.00	-34.32	3	Vertical	70	1.72	-
2440MHz	Pass	AV	7.32048G	27.61	54.00	-26.39	3	Vertical	360	1.02	-
2440MHz	Pass	PK	4.88384G	42.18	74.00	-31.82	3	Vertical	70	1.72	-
2440MHz	Pass	PK	7.32048G	50.11	74.00	-23.89	3	Vertical	360	1.02	-
2440MHz	Pass	AV	4.88136G	20.08	54.00	-33.92	3	Horizontal	339	1.48	-
2440MHz	Pass	AV	7.31916G	28.58	54.00	-25.42	3	Horizontal	340	1.86	-
2440MHz	Pass	PK	4.88136G	42.58	74.00	-31.42	3	Horizontal	339	1.48	-
2440MHz	Pass	PK	7.31916G	51.08	74.00	-22.92	3	Horizontal	340	1.86	-
2480MHz	Pass	AV	2.48G	80.84	Inf	-Inf	3	Vertical	325	1.00	-
2480MHz	Pass	AV	2.4835G	36.92	54.00	-17.08	3	Vertical	325	1.00	-
2480MHz	Pass	PK	2.48G	103.34	Inf	-Inf	3	Vertical	325	1.00	-
2480MHz	Pass	PK	2.4835G	59.42	74.00	-14.58	3	Vertical	325	1.00	-
2480MHz	Pass	AV	2.4798G	89.02	Inf	-Inf	3	Horizontal	355	1.34	-
2480MHz	Pass	AV	2.4835G	40.17	54.00	-13.83	3	Horizontal	355	1.34	-
2480MHz	Pass	PK	2.4798G	111.52	Inf	-Inf	3	Horizontal	355	1.34	-
2480MHz	Pass	PK	2.4835G	62.67	74.00	-11.33	3	Horizontal	355	1.34	-
2480MHz	Pass	AV	4.96124G	20.51	54.00	-33.49	3	Vertical	136	3.00	-
2480MHz	Pass	AV	7.43924G	29.40	54.00	-24.60	3	Vertical	316	1.26	-
2480MHz	Pass	PK	4.96124G	43.01	74.00	-30.99	3	Vertical	136	3.00	-
2480MHz	Pass	PK	7.43924G	51.90	74.00	-22.10	3	Vertical	316	1.26	-
2480MHz	Pass	AV	4.95982G	20.01	54.00	-33.99	3	Horizontal	97	1.50	-
2480MHz	Pass	AV	7.44004G	27.95	54.00	-26.05	3	Horizontal	322	1.50	-
2480MHz	Pass	PK	4.95982G	42.51	74.00	-31.49	3	Horizontal	97	1.50	-
2480MHz	Pass	PK	7.44004G	50.45	74.00	-23.55	3	Horizontal	322	1.50	-

BT-BR(1Mbps)

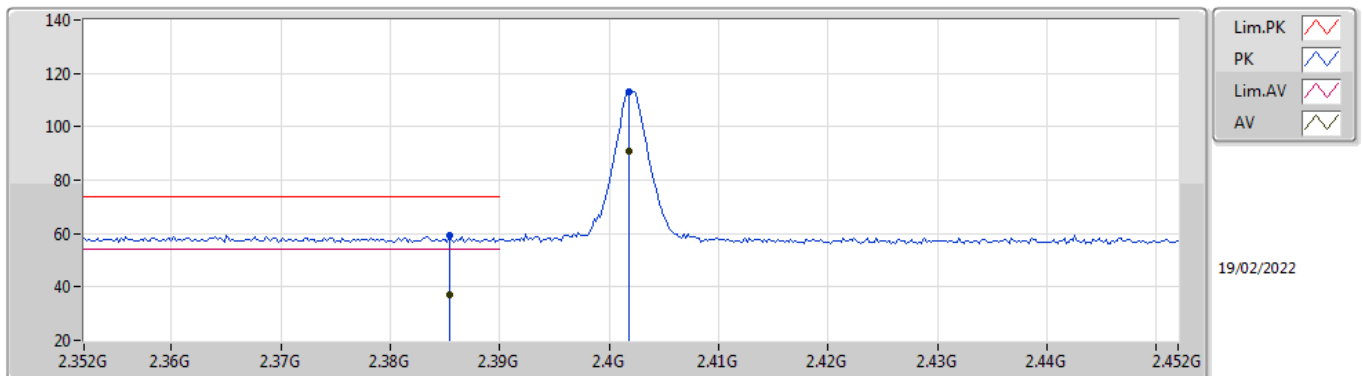
2402MHz_TX



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	2.3548G	36.71	54.00	-17.29	35.03	3	Vertical	200	1.06	-	1.68	27.79	7.24	-
AV	2.4018G	82.72	Inf	-Inf	34.95	3	Vertical	200	1.06	-	47.77	27.69	7.26	-
PK	2.3548G	59.21	74.00	-14.79	35.03	3	Vertical	200	1.06	-	24.18	27.79	7.24	-
PK	2.4018G	105.22	Inf	-Inf	34.95	3	Vertical	200	1.06	-	70.27	27.69	7.26	-

BT-BR(1Mbps)

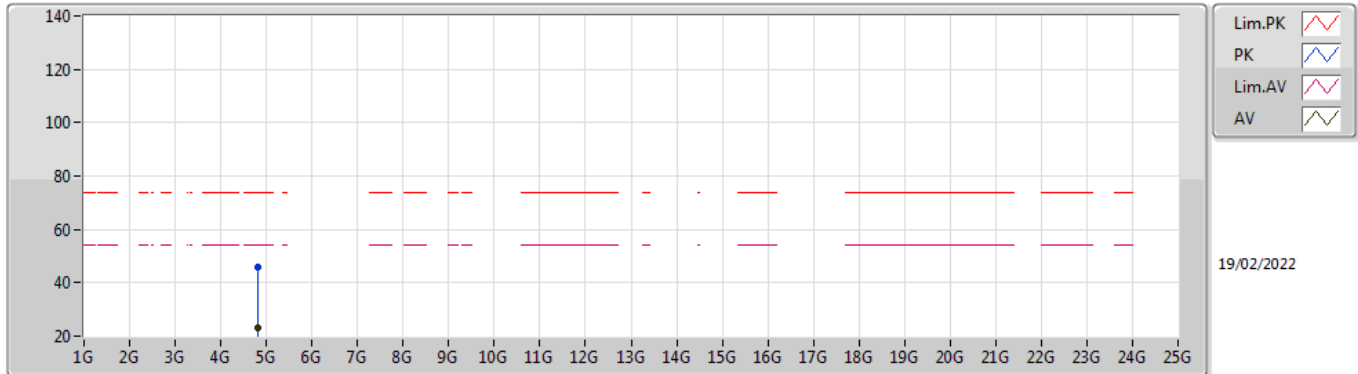
2402MHz_TX



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	2.3854G	36.89	54.00	-17.11	34.98	3	Horizontal	360	2.83	-	1.91	27.73	7.25	-
AV	2.4018G	90.78	Inf	-Inf	34.95	3	Horizontal	360	2.83	-	55.83	27.69	7.26	-
PK	2.3854G	59.39	74.00	-14.61	34.98	3	Horizontal	360	2.83	-	24.41	27.73	7.25	-
PK	2.4018G	113.28	Inf	-Inf	34.95	3	Horizontal	360	2.83	-	78.33	27.69	7.26	-

BT-BR(1Mbps)

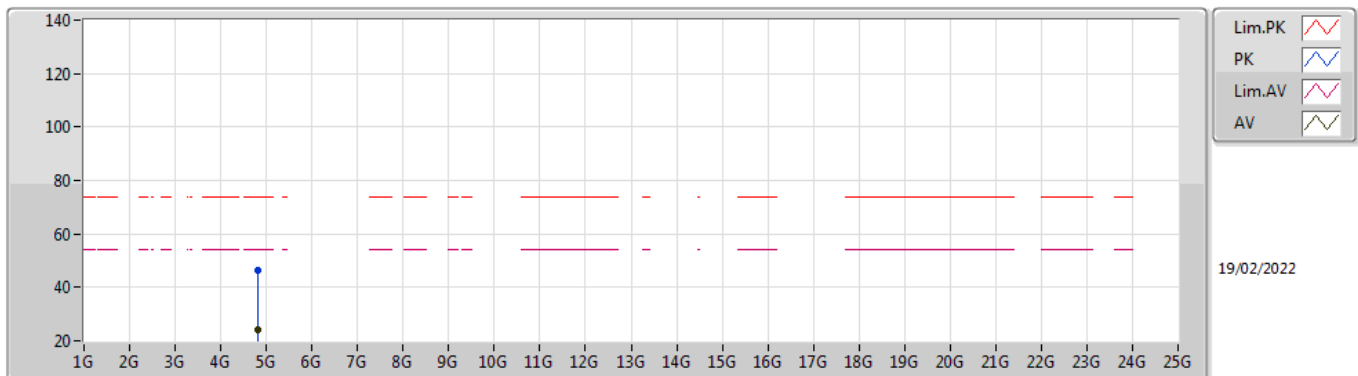
2402MHz_TX



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	4.80444G	23.15	54.00	-30.85	5.82	3	Vertical	283	1.00	-	17.33	31.11	8.90	34.19
PK	4.80444G	45.65	74.00	-28.35	5.82	3	Vertical	283	1.00	-	39.83	31.11	8.90	34.19

BT-BR(1Mbps)

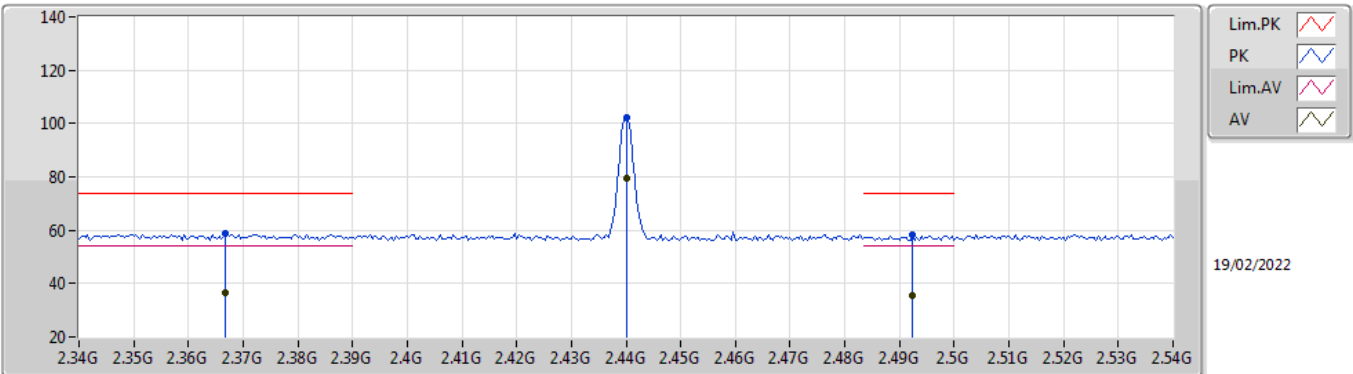
2402MHz_TX



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	4.80365G	24.10	54.00	-29.90	5.82	3	Horizontal	60	1.01	-	18.28	31.11	8.90	34.19
PK	4.80365G	46.60	74.00	-27.40	5.82	3	Horizontal	60	1.01	-	40.78	31.11	8.90	34.19

BT-BR(1Mbps)

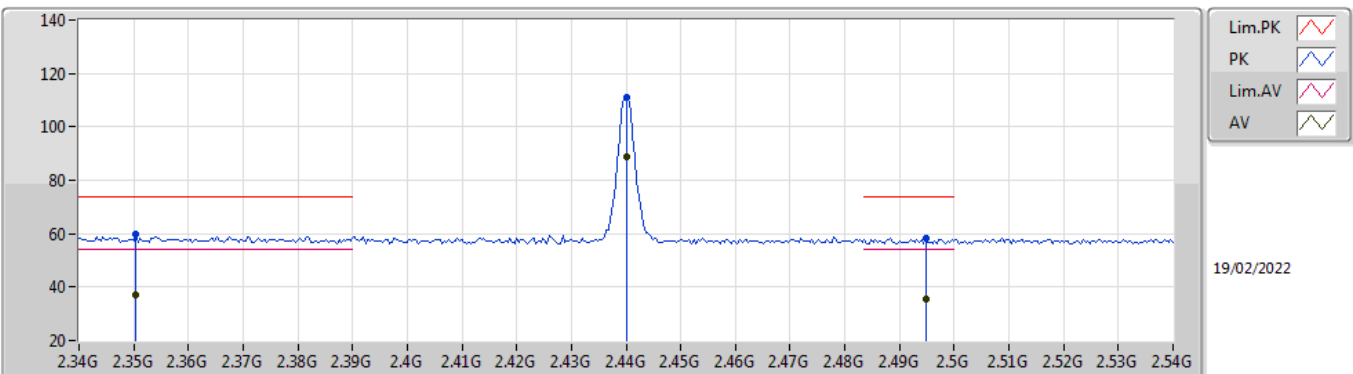
2440MHz_TX



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	2.3668G	36.36	54.00	-17.64	35.02	3	Vertical	196	1.36	-	1.34	27.77	7.25	-
AV	2.44G	79.51	Inf	-Inf	34.75	3	Vertical	196	1.36	-	44.76	27.46	7.29	-
AV	2.4924G	35.53	54.00	-18.47	34.73	3	Vertical	196	1.36	-	0.80	27.40	7.33	-
PK	2.3668G	58.86	74.00	-15.14	35.02	3	Vertical	196	1.36	-	23.84	27.77	7.25	-
PK	2.44G	102.01	Inf	-Inf	34.75	3	Vertical	196	1.36	-	67.26	27.46	7.29	-
PK	2.4924G	58.03	74.00	-15.97	34.73	3	Vertical	196	1.36	-	23.30	27.40	7.33	-

BT-BR(1Mbps)

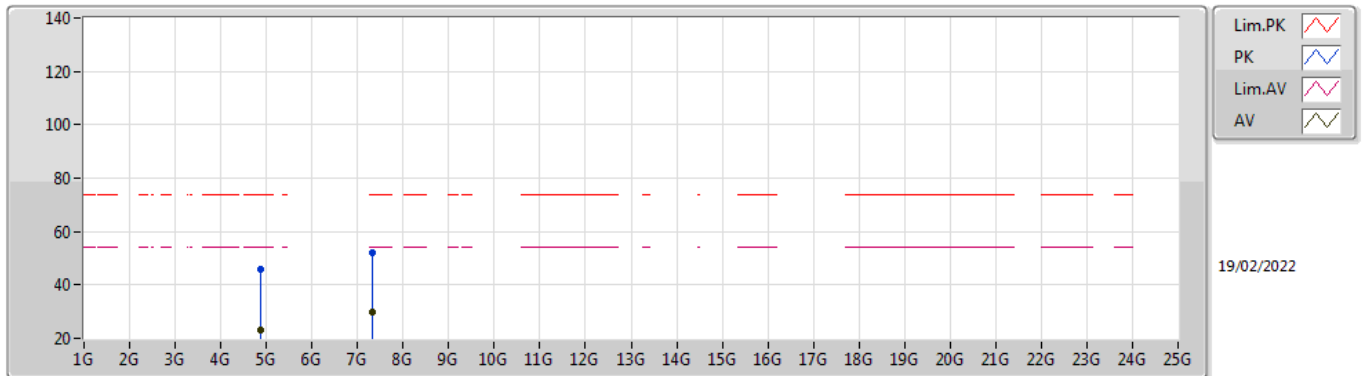
2440MHz_TX



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	2.3504G	37.26	54.00	-16.74	35.04	3	Horizontal	351	1.01	-	2.22	27.80	7.24	-
AV	2.44G	88.55	Inf	-Inf	34.75	3	Horizontal	351	1.01	-	53.80	27.46	7.29	-
AV	2.4948G	35.66	54.00	-18.34	34.74	3	Horizontal	351	1.01	-	0.92	27.40	7.34	-
PK	2.3504G	59.76	74.00	-14.24	35.04	3	Horizontal	351	1.01	-	24.72	27.80	7.24	-
PK	2.44G	111.05	Inf	-Inf	34.75	3	Horizontal	351	1.01	-	76.30	27.46	7.29	-
PK	2.4948G	58.16	74.00	-15.84	34.74	3	Horizontal	351	1.01	-	23.42	27.40	7.34	-

BT-BR(1Mbps)

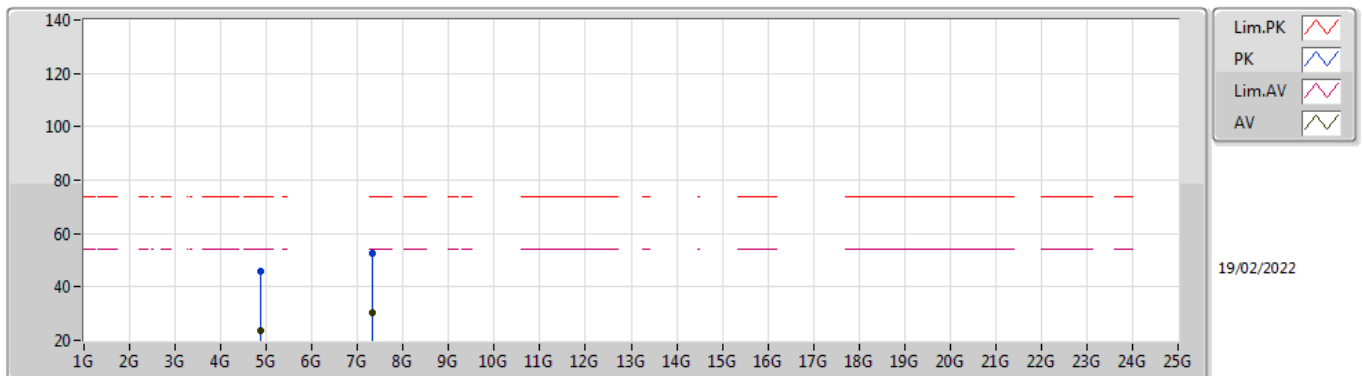
2440MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.8799G	23.36	54.00	-30.64	6.00	3	Vertical	359	1.00	-	17.36	31.20	8.96	34.16
AV	7.31961G	29.73	54.00	-24.27	12.49	3	Vertical	355	1.16	-	17.24	36.36	10.63	34.50
PK	4.8799G	45.86	74.00	-28.14	6.00	3	Vertical	359	1.00	-	39.86	31.20	8.96	34.16
PK	7.31961G	52.23	74.00	-21.77	12.49	3	Vertical	355	1.16	-	39.74	36.36	10.63	34.50

BT-BR(1Mbps)

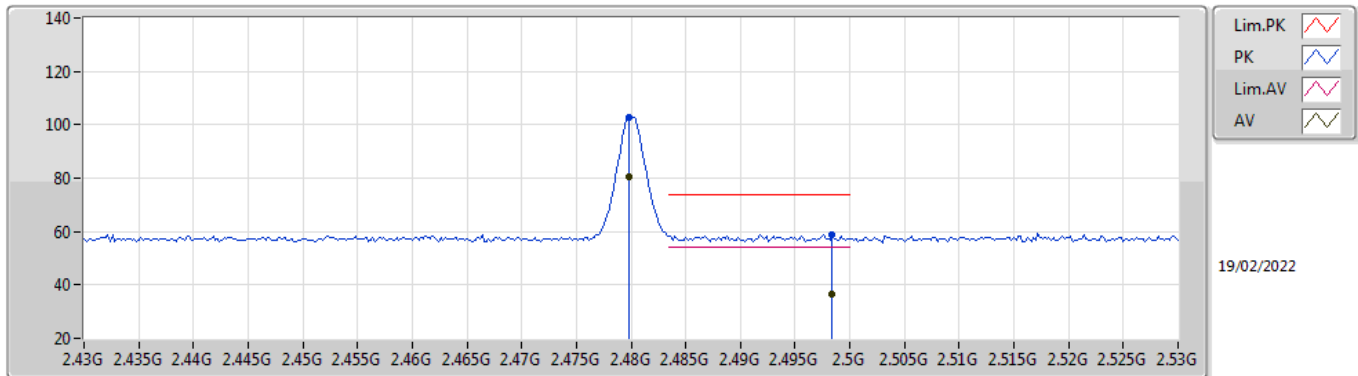
2440MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.87973G	23.42	54.00	-30.58	6.00	3	Horizontal	58	1.17	-	17.42	31.20	8.96	34.16
AV	7.32038G	30.12	54.00	-23.88	12.49	3	Horizontal	339	1.87	-	17.63	36.36	10.63	34.50
PK	4.87973G	45.92	74.00	-28.08	6.00	3	Horizontal	58	1.17	-	39.92	31.20	8.96	34.16
PK	7.32038G	52.62	74.00	-21.38	12.49	3	Horizontal	339	1.87	-	40.13	36.36	10.63	34.50

BT-BR(1Mbps)

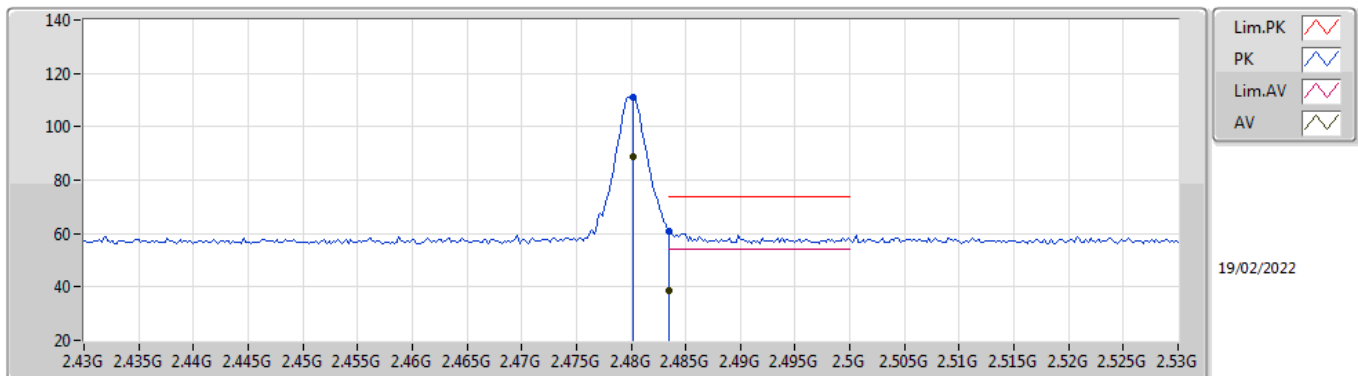
2480MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.4798G	80.43	Inf	-Inf	34.72	3	Vertical	328	1.00	-	45.71	27.40	7.32	-
AV	2.4984G	36.33	54.00	-17.67	34.74	3	Vertical	328	1.00	-	1.59	27.40	7.34	-
PK	2.4798G	102.93	Inf	-Inf	34.72	3	Vertical	328	1.00	-	68.21	27.40	7.32	-
PK	2.4984G	58.83	74.00	-15.17	34.74	3	Vertical	328	1.00	-	24.09	27.40	7.34	-

BT-BR(1Mbps)

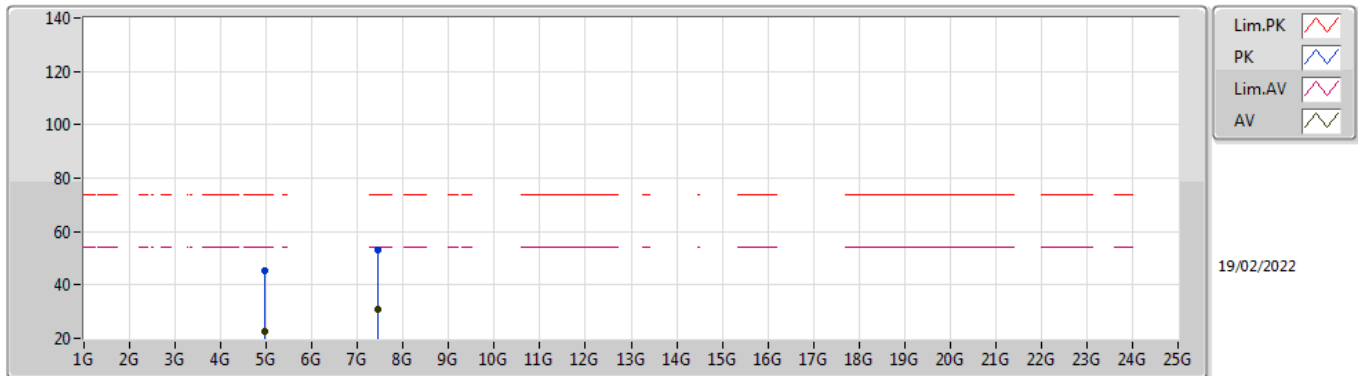
2480MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.4802G	88.77	Inf	-Inf	34.72	3	Horizontal	355	1.14	-	54.05	27.40	7.32	-
AV	2.4835G	38.49	54.00	-15.51	34.73	3	Horizontal	355	1.14	-	3.76	27.40	7.33	-
PK	2.4802G	111.27	Inf	-Inf	34.72	3	Horizontal	355	1.14	-	76.55	27.40	7.32	-
PK	2.4835G	60.99	74.00	-13.01	34.73	3	Horizontal	355	1.14	-	26.26	27.40	7.33	-

BT-BR(1Mbps)

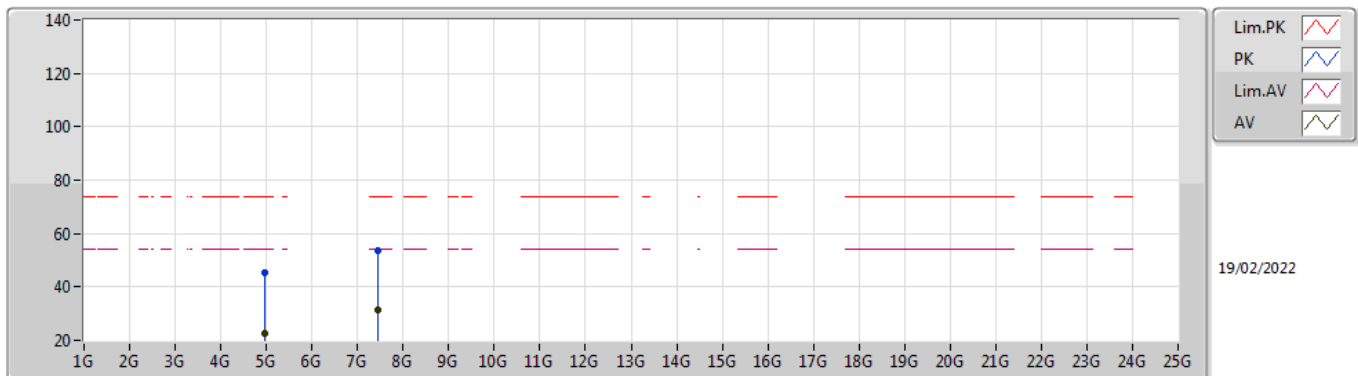
2480MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.96034G	22.70	54.00	-31.30	6.32	3	Vertical	360	2.96	-	16.38	31.42	9.02	34.12
AV	7.43942G	30.75	54.00	-23.25	12.51	3	Vertical	324	1.11	-	18.24	36.28	10.72	34.49
PK	4.96034G	45.20	74.00	-28.80	6.32	3	Vertical	360	2.96	-	38.88	31.42	9.02	34.12
PK	7.43942G	53.25	74.00	-20.75	12.51	3	Vertical	324	1.11	-	40.74	36.28	10.72	34.49

BT-BR(1Mbps)

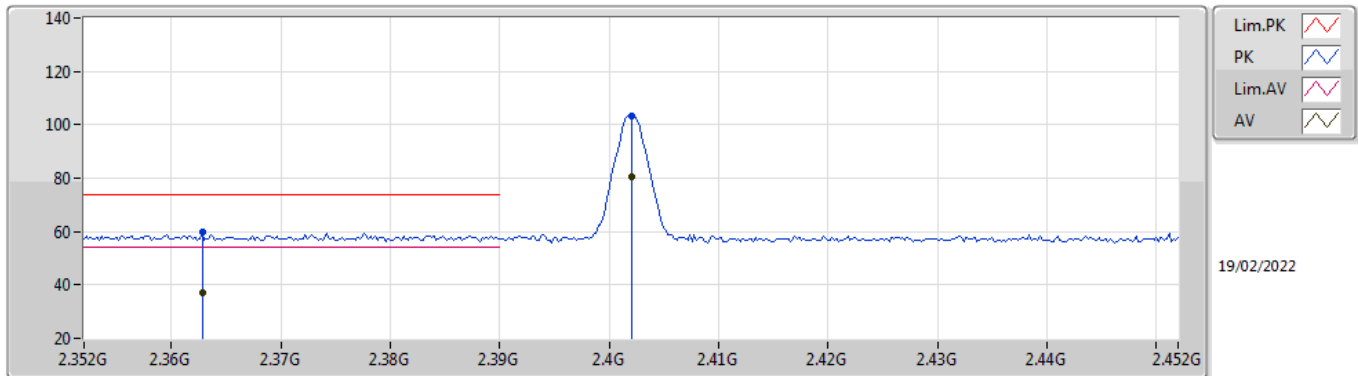
2480MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.95985G	22.77	54.00	-31.23	6.32	3	Horizontal	21	2.08	-	16.45	31.42	9.02	34.12
AV	7.43935G	31.35	54.00	-22.65	12.51	3	Horizontal	25	1.13	-	18.84	36.28	10.72	34.49
PK	4.95985G	45.27	74.00	-28.73	6.32	3	Horizontal	21	2.08	-	38.95	31.42	9.02	34.12
PK	7.43935G	53.85	74.00	-20.15	12.51	3	Horizontal	25	1.13	-	41.34	36.28	10.72	34.49

BT-EDR(3Mbps)

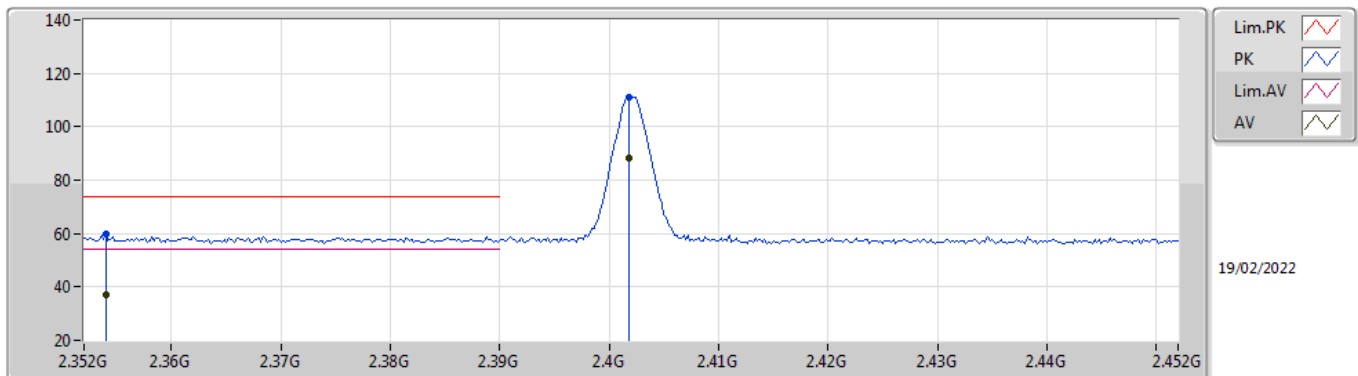
2402MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3628G	37.13	54.00	-16.87	35.01	3	Vertical	199	1.07	-	2.12	27.77	7.24	-
AV	2.402G	80.75	Inf	-Inf	34.95	3	Vertical	199	1.07	-	45.80	27.69	7.26	-
PK	2.3628G	59.63	74.00	-14.37	35.01	3	Vertical	199	1.07	-	24.62	27.77	7.24	-
PK	2.402G	103.25	Inf	-Inf	34.95	3	Vertical	199	1.07	-	68.30	27.69	7.26	-

BT-EDR(3Mbps)

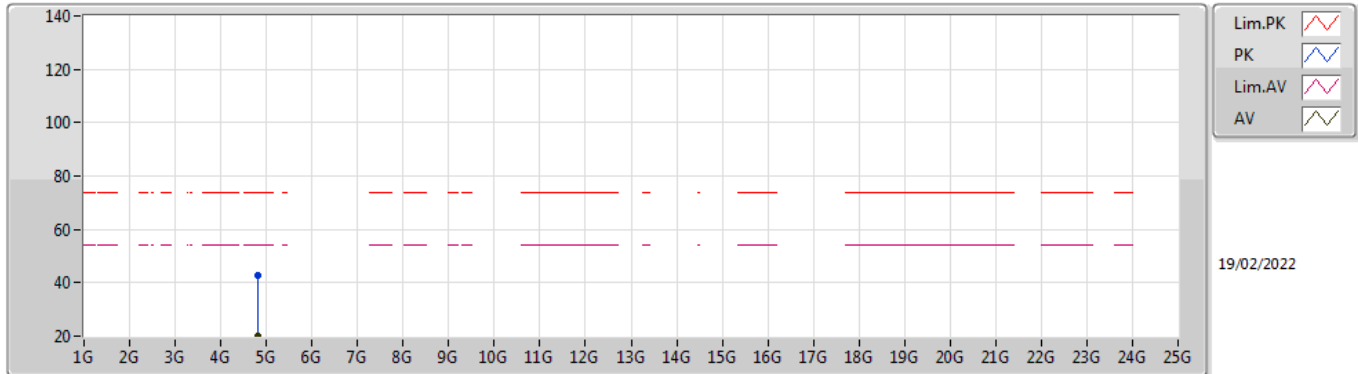
2402MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.354G	37.11	54.00	-16.89	35.03	3	Horizontal	352	1.08	-	2.08	27.79	7.24	-
AV	2.4018G	88.51	Inf	-Inf	34.95	3	Horizontal	352	1.08	-	53.56	27.69	7.26	-
PK	2.354G	59.61	74.00	-14.39	35.03	3	Horizontal	352	1.08	-	24.58	27.79	7.24	-
PK	2.4018G	111.01	Inf	-Inf	34.95	3	Horizontal	352	1.08	-	76.06	27.69	7.26	-

BT-EDR(3Mbps)

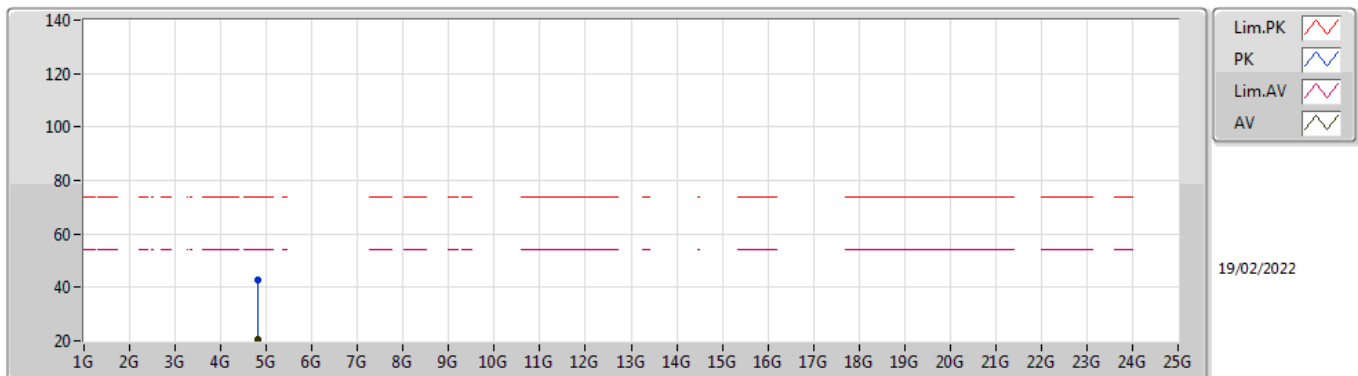
2402MHz_TX



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	4.79944G	20.01	54.00	-33.99	5.80	3	Vertical	360	1.08	-	14.21	31.10	8.90	34.20
PK	4.79944G	42.51	74.00	-31.49	5.80	3	Vertical	360	1.08	-	36.71	31.10	8.90	34.20

BT-EDR(3Mbps)

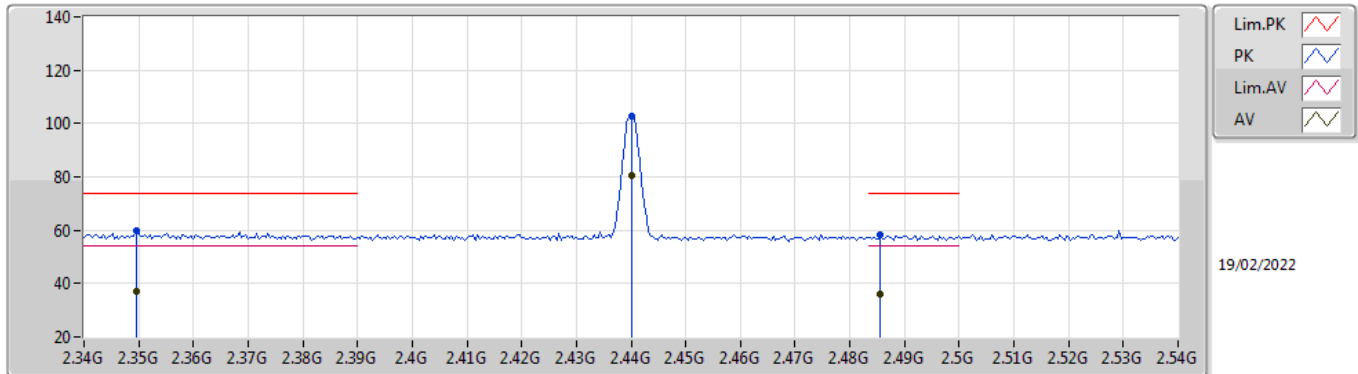
2402MHz_TX



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	4.79972G	20.26	54.00	-33.74	5.80	3	Horizontal	112	1.74	-	14.46	31.10	8.90	34.20
PK	4.79972G	42.76	74.00	-31.24	5.80	3	Horizontal	112	1.74	-	36.96	31.10	8.90	34.20

BT-EDR(3Mbps)

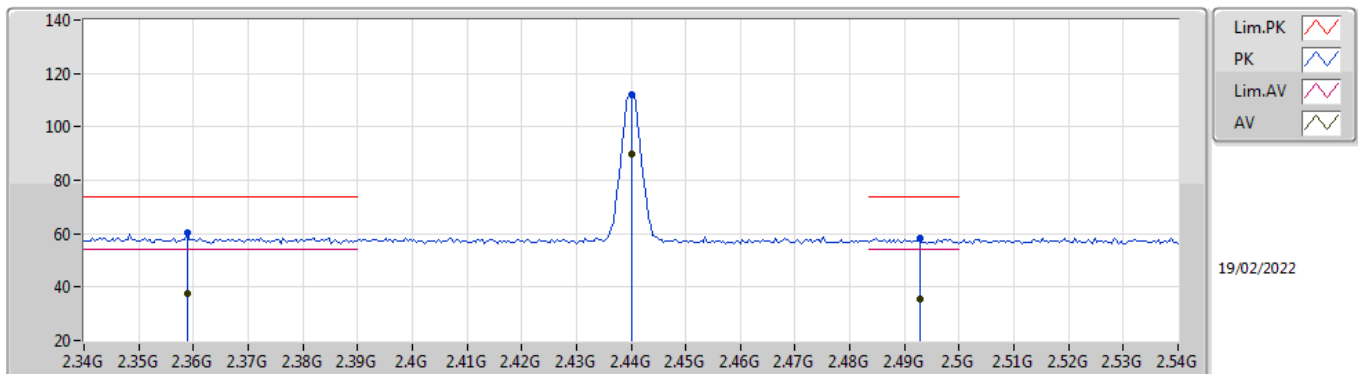
2440MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3496G	37.32	54.00	-16.68	35.04	3	Vertical	195	1.36	-	2.28	27.80	7.24	-
AV	2.44G	80.45	Inf	-Inf	34.75	3	Vertical	195	1.36	-	45.70	27.46	7.29	-
AV	2.4856G	35.90	54.00	-18.10	34.73	3	Vertical	195	1.36	-	1.17	27.40	7.33	-
PK	2.3496G	59.82	74.00	-14.18	35.04	3	Vertical	195	1.36	-	24.78	27.80	7.24	-
PK	2.44G	102.95	Inf	-Inf	34.75	3	Vertical	195	1.36	-	68.20	27.46	7.29	-
PK	2.4856G	58.40	74.00	-15.60	34.73	3	Vertical	195	1.36	-	23.67	27.40	7.33	-

BT-EDR(3Mbps)

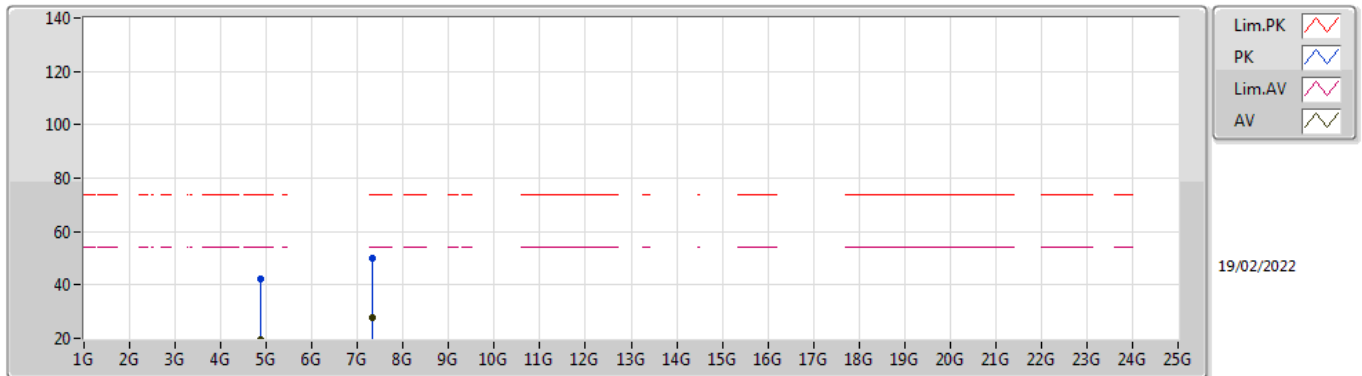
2440MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3588G	37.83	54.00	-16.17	35.02	3	Horizontal	351	1.00	-	2.81	27.78	7.24	-
AV	2.44G	89.80	Inf	-Inf	34.75	3	Horizontal	351	1.00	-	55.05	27.46	7.29	-
AV	2.4928G	35.64	54.00	-18.36	34.73	3	Horizontal	351	1.00	-	0.91	27.40	7.33	-
PK	2.3588G	60.33	74.00	-13.67	35.02	3	Horizontal	351	1.00	-	25.31	27.78	7.24	-
PK	2.44G	112.30	Inf	-Inf	34.75	3	Horizontal	351	1.00	-	77.55	27.46	7.29	-
PK	2.4928G	58.14	74.00	-15.86	34.73	3	Horizontal	351	1.00	-	23.41	27.40	7.33	-

BT-EDR(3Mbps)

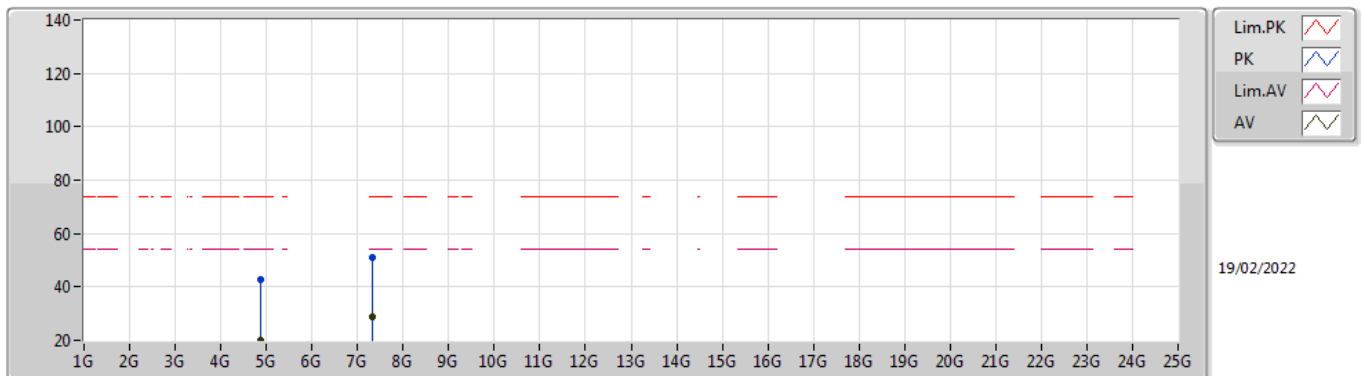
2440MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.88384G	19.68	54.00	-34.32	6.00	3	Vertical	70	1.72	-	13.68	31.20	8.96	34.16
AV	7.32048G	27.61	54.00	-26.39	12.49	3	Vertical	360	1.02	-	15.12	36.36	10.63	34.50
PK	4.88384G	42.18	74.00	-31.82	6.00	3	Vertical	70	1.72	-	36.18	31.20	8.96	34.16
PK	7.32048G	50.11	74.00	-23.89	12.49	3	Vertical	360	1.02	-	37.62	36.36	10.63	34.50

BT-EDR(3Mbps)

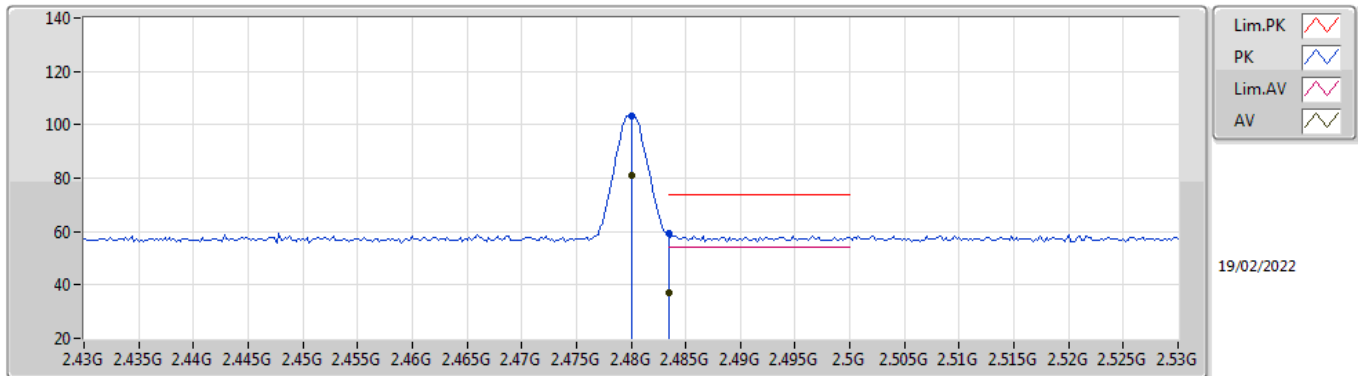
2440MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.88136G	20.08	54.00	-33.92	6.00	3	Horizontal	339	1.48	-	14.08	31.20	8.96	34.16
AV	7.31916G	28.58	54.00	-25.42	12.49	3	Horizontal	340	1.86	-	16.09	36.36	10.63	34.50
PK	4.88136G	42.58	74.00	-31.42	6.00	3	Horizontal	339	1.48	-	36.58	31.20	8.96	34.16
PK	7.31916G	51.08	74.00	-22.92	12.49	3	Horizontal	340	1.86	-	38.59	36.36	10.63	34.50

BT-EDR(3Mbps)

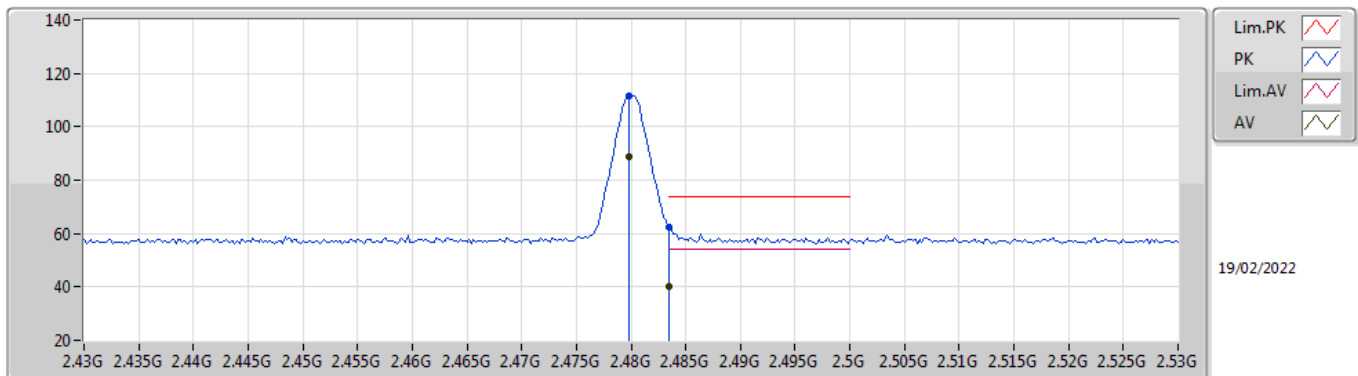
2480MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.48G	80.84	Inf	-Inf	34.72	3	Vertical	325	1.00	-	46.12	27.40	7.32	-
AV	2.4835G	36.92	54.00	-17.08	34.73	3	Vertical	325	1.00	-	2.19	27.40	7.33	-
PK	2.48G	103.34	Inf	-Inf	34.72	3	Vertical	325	1.00	-	68.62	27.40	7.32	-
PK	2.4835G	59.42	74.00	-14.58	34.73	3	Vertical	325	1.00	-	24.69	27.40	7.33	-

BT-EDR(3Mbps)

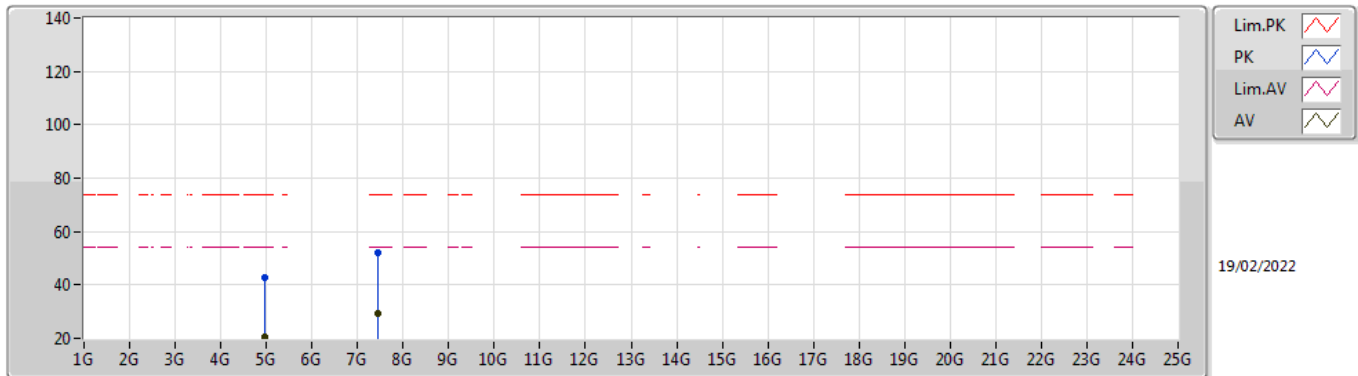
2480MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.4798G	89.02	Inf	-Inf	34.72	3	Horizontal	355	1.34	-	54.30	27.40	7.32	-
AV	2.4835G	40.17	54.00	-13.83	34.73	3	Horizontal	355	1.34	-	5.44	27.40	7.33	-
PK	2.4798G	111.52	Inf	-Inf	34.72	3	Horizontal	355	1.34	-	76.80	27.40	7.32	-
PK	2.4835G	62.67	74.00	-11.33	34.73	3	Horizontal	355	1.34	-	27.94	27.40	7.33	-

BT-EDR(3Mbps)

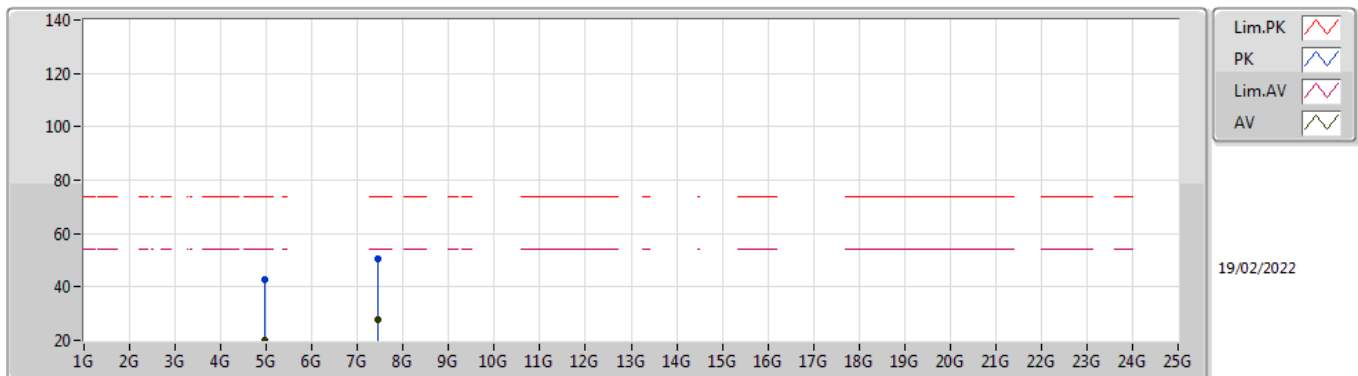
2480MHz_TX



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	4.96124G	20.51	54.00	-33.49	6.32	3	Vertical	136	3.00	-	14.19	31.42	9.02	34.12
AV	7.43924G	29.40	54.00	-24.60	12.51	3	Vertical	316	1.26	-	16.89	36.28	10.72	34.49
PK	4.96124G	43.01	74.00	-30.99	6.32	3	Vertical	136	3.00	-	36.69	31.42	9.02	34.12
PK	7.43924G	51.90	74.00	-22.10	12.51	3	Vertical	316	1.26	-	39.39	36.28	10.72	34.49

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	4.95982G	20.01	54.00	-33.99	6.32	3	Horizontal	97	1.50	-	13.69	31.42	9.02	34.12
AV	7.44004G	27.95	54.00	-26.05	12.51	3	Horizontal	322	1.50	-	15.44	36.28	10.72	34.49
PK	4.95982G	42.51	74.00	-31.49	6.32	3	Horizontal	97	1.50	-	36.19	31.42	9.02	34.12
PK	7.44004G	50.45	74.00	-23.55	12.51	3	Horizontal	322	1.50	-	37.94	36.28	10.72	34.49