

FCC Radio Test Report

FCC ID : 2AP85-MCR822CE
Equipment : AC Module MCR822CE-P , AC Module MCR822CE-P4
Brand Name : TAIWAN ANJIE
Model Name : MCR822CE-P, MCR822CE-P4
Applicant : Taiwan Anjie Electronics Co., Ltd
1F., No. 236, Sec. 3, Huanbei Rd., Jhubei City,
Hsinchu Country 30256,Taiwan (R.O.C.)
Manufacturer : Taiwan Anjie Electronics Co., Ltd
1F., No. 236, Sec. 3, Huanbei Rd., Jhubei City,
Hsinchu Country 30256,Taiwan (R.O.C.)
Standard : 47 CFR FCC Part 15.247

The product was received on Nov. 22, 2022, and testing was started from Dec. 22, 2022 and completed on Feb. 11, 2023. We, SPORTON INTERNATIONAL INC. Hsinhua Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

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


Approved by: Ben Tesng

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	8
1.3 Testing Location Information	8
1.4 Measurement Uncertainty	8
2 TEST CONFIGURATION OF EUT.....	9
2.1 Test Channel Mode	9
2.2 The Worst Case Measurement Configuration.....	10
2.3 Support Equipment.....	11
2.4 Test Setup Diagram	12
3 TRANSMITTER TEST RESULT	16
3.1 AC Power-line Conducted Emissions	16
3.2 20dB Bandwidth and Carrier Frequency Separation.....	18
3.3 Maximum Conducted Output Power	19
3.4 Number of Hopping Frequencies and Hopping Bandedge	20
3.5 Time of Occupancy (Dwell Time)	21
3.6 Emissions in Non-restricted Frequency Bands	22
3.7 Emissions in Restricted Frequency Bands.....	23
4 TEST EQUIPMENT AND CALIBRATION DATA.....	26
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 RESULTS OF RADIATED EMISSION CO-LOCATION	
APPENDIX I. TEST PHOTOS	
PHOTOGRAPHS OF EUT V01	



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Report Template No.: HE1-C9 Ver4.3
FCC ID: 2AP85-MCR822CE

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: Barry Hsiao

Report Producer: Amber Chiu

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

Group	Ant.	Brand	Model Name	Antenna Type	Connector	Support
1	1	anjie	AEDQ4S-B0003	Dipole	MHF1	2.4G+5G
1	2	anjie	AEDQ4S-B0003	Dipole	MHF1	2.4G+5G+BT
2	1	anjie	AJDQ1J-B0033	PIFA	MHF1	2.4G+5G
2	2	anjie	AJDQ1J-B0033	PIFA	MHF1	2.4G+5G+BT
3	1	anjie	AEDQ4S-B0003	Dipole	MHF4	2.4G+5G
3	2	anjie	AEDQ4S-B0003	Dipole	MHF4	2.4G+5G+BT
4	1	anjie	AJDQ1J-B0033	PIFA	MHF4	2.4G+5G
4	2	anjie	AJDQ1J-B0033	PIFA	MHF4	2.4G+5G+BT

Group	Ant.	Port	Gain (dBi)		
			2.4G	5G	BT
1	1	S0	5	5.3	-
1	2	S1	5	5.3	5
2	1	S0	2.5	3.9	-
2	2	S1	2.5	3.9	2.5
3	1	S0	5	5.3	-
3	2	S1	5	5.3	5
4	1	S0	2.5	3.9	-
4	2	S1	2.5	3.9	2.5

For 2.4GHz function:

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

Ant. 1 (port S0) and Ant. 2 (port S1) could transmit/receive simultaneously.

For 5GHz function:

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

Ant. 1 (port S0) and Ant. 2 (port S1) could transmit/receive simultaneously.

For BT function:

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

Ant. 2 (port S1) could transmit/receive.

1.1.3 EUT Information

Operational Condition			
EUT Power Type		From Fixture	
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)	0.781	1.07	2.886m	1k
BT-EDR(2Mbps)	0.78	1.08	2.889m	1k
BT-EDR(3Mbps)	0.774	1.11	2.892m	1k

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

1.1.5 Table for Multiple Listing

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

Equipment Name	Model Name	Connector	Description
AC Module MCR822CE-P	MCR822CE-P	With MHF1 connector (One Generations Connector)	The difference of models is in Connector.
AC Module MCR822CE-P4	MCR822CE-P4	With MHF4 connector (Four Generations Connector)	

Note: Model Name MCR822CE-P was selected as representative for the test and its data was recorded in this report. The information is provided by manufacturer.

1.2 Testing Applied Standards

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

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

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

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

1.3 Testing Location Information

Test Lab. : Sporton International Inc. Hsinhua Laboratory				
☒ Hsinhua (TAF: 3785)	ADD: No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.) TEL: 886-3-327-3456 FAX: 886-3-327-0973			
Test site Designation No. TW3785 with FCC.				
Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
AC Conduction	CO04-HY	Daniel Lin	20.5~21.4°C / 50~54%	11/Feb/2023
RF Conducted	TH07-HY	Yuna Lin	22.6~23.7°C / 52~58%	09/Feb/2023~10/Feb/2023
Radiated	03CH02-HY	Daniel Lin	20.2~26.4°C / 51~62%	22/Dec/2022~01/Feb/2023
☐ Wen 33rd.St. (TAF: 3785)	ADD: No.14-1, Ln. 19, Wen 33rd St., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.) TEL: 886-3-318-0787 FAX: 886-3-318-0287			
Test site Designation No. TW0008 with FCC.				

1.4 Measurement Uncertainty

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

Test Items	Uncertainty	Remark
AC Power-line Conducted Emissions	4.53 dB	Confidence levels of 95%
Bandwidth	3 MHz	Confidence levels of 95%
Maximum Conducted Output Power	2 dB	Confidence levels of 95%
Emissions in Non-restricted Frequency Bands	0.14 dB	Confidence levels of 95%
Emissions in Restricted Frequency Bands	4.8 dB	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

Test Software Version	RTLTAPP Version : 5.2.2.99
Mode	Power Setting
BT-BR(1Mbps)	
2402MHz	0x3f
2440MHz	0x3f
2480MHz	0x3f
BT-EDR(2Mbps)	-
2402MHz	0x3f
2440MHz	0x3f
2480MHz	0x3f
BT-EDR(3Mbps)	-
2402MHz	0x3f
2440MHz	0x3f
2480MHz	0x3f

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	Fixture Mode, Dipole Antenna
2	Fixture Mode, PIFA Antenna

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	Fixture Mode, Dipole Antenna		
2	Fixture Mode, PIFA Antenna		
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
Test Condition	Radiated measurement
Operating Mode	Normal Link
1	WLAN 2.4GHz+Bluetooth
2	WLAN 5GHz+Bluetooth
Refer to Sporton Test Report No.: FA2N1502 for Co-location RF Exposure Evaluation and Appendix H for Radiated Emission Co-location.	

2.3 Support Equipment

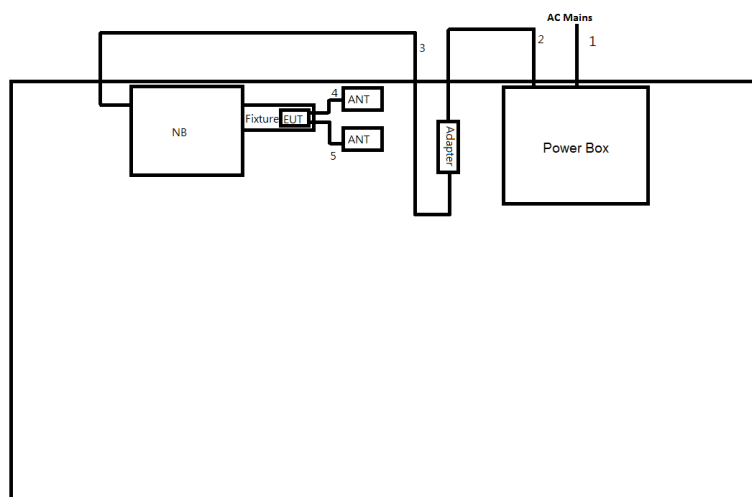
Support Equipment – AC Conduction					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Notebook	Toshiba	PORTEGE R30-A	-	-
2	Adapter for NB	Toshiba	PA5114E-1AC3	-	-
3	Fixture	N/A	N/A	-	Provided by Customer

Support Equipment – Conducted					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Notebook	ASUS	N/A	-	Provided by Customer
2	Adapter for NB	ASUS	ADP-90YD B	-	Provided by Customer
3	Fixture	N/A	N/A	-	Provided by Customer

Support Equipment – Radiated					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Notebook	Toshiba	PORTEGE R30-A	-	-
2	Adapter for NB	Toshiba	PA5114E-1AC3	-	-
3	Fixture	N/A	N/A	-	Provided by Customer

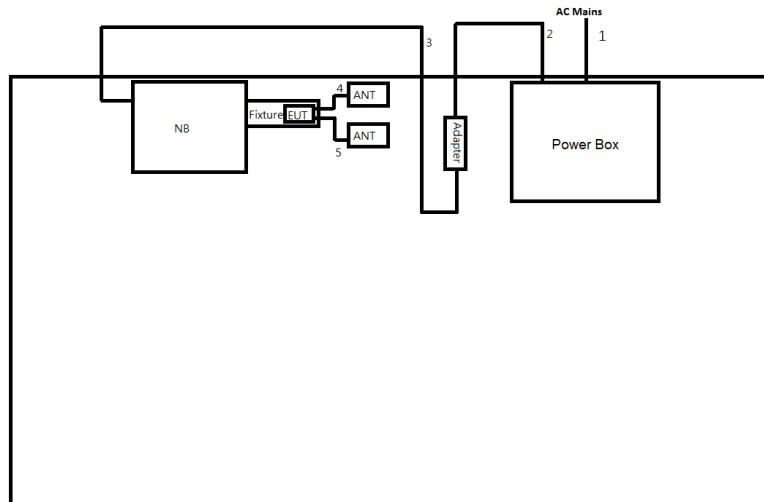
2.4 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test (Dipole Antenna)

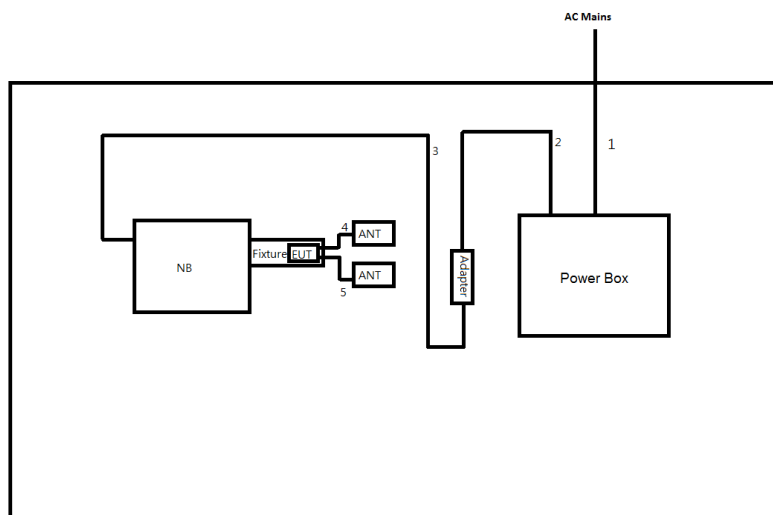


Item	Connection	Shielded	Length(m)	Remark
1	AC Power cable	No	1.8	-
2	AC Power cable	No	1.0	-
3	DC Power cable	No	1.8	-
4	RF cable	No	0.1	-
5	RF cable	No	0.1	-

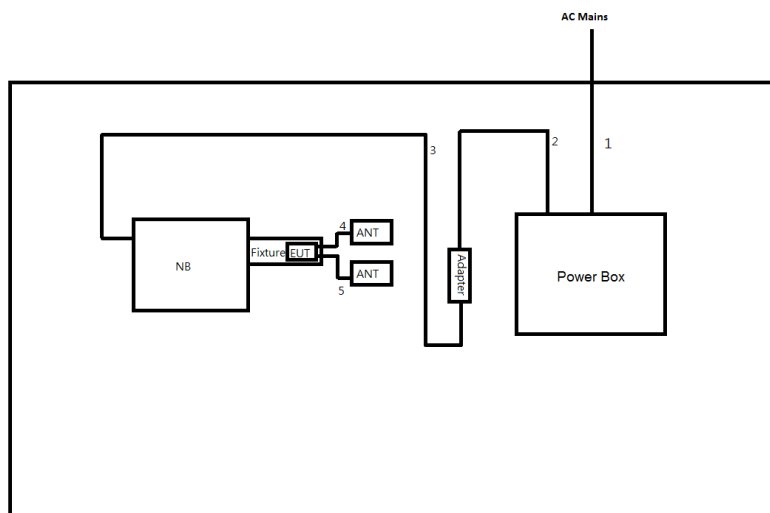
Test Setup Diagram – AC Line Conducted Emission Test (PIFA Antenna)



Item	Connection	Shielded	Length(m)	Remark
1	AC Power cable	No	1.8	-
2	AC Power cable	No	1.0	-
3	DC Power cable	No	1.8	-
4	RF cable	No	0.05	-
5	RF cable	No	0.05	-

Test Setup Diagram - Radiated Test (Dipole Antenna)


Item	Connection	Shielded	Length(m)	Remark
1	AC Power cable	No	1.8	-
2	AC Power cable	No	1.0	-
3	DC Power cable	No	1.8	-
4	RF cable	No	0.1	-
5	RF cable	No	0.1	-

Test Setup Diagram - Radiated Test (PIFA Antenna)


Item	Connection	Shielded	Length(m)	Remark
1	AC Power cable	No	1.8	-
2	AC Power cable	No	1.0	-
3	DC Power cable	No	1.8	-
4	RF cable	No	0.05	-
5	RF cable	No	0.05	-

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

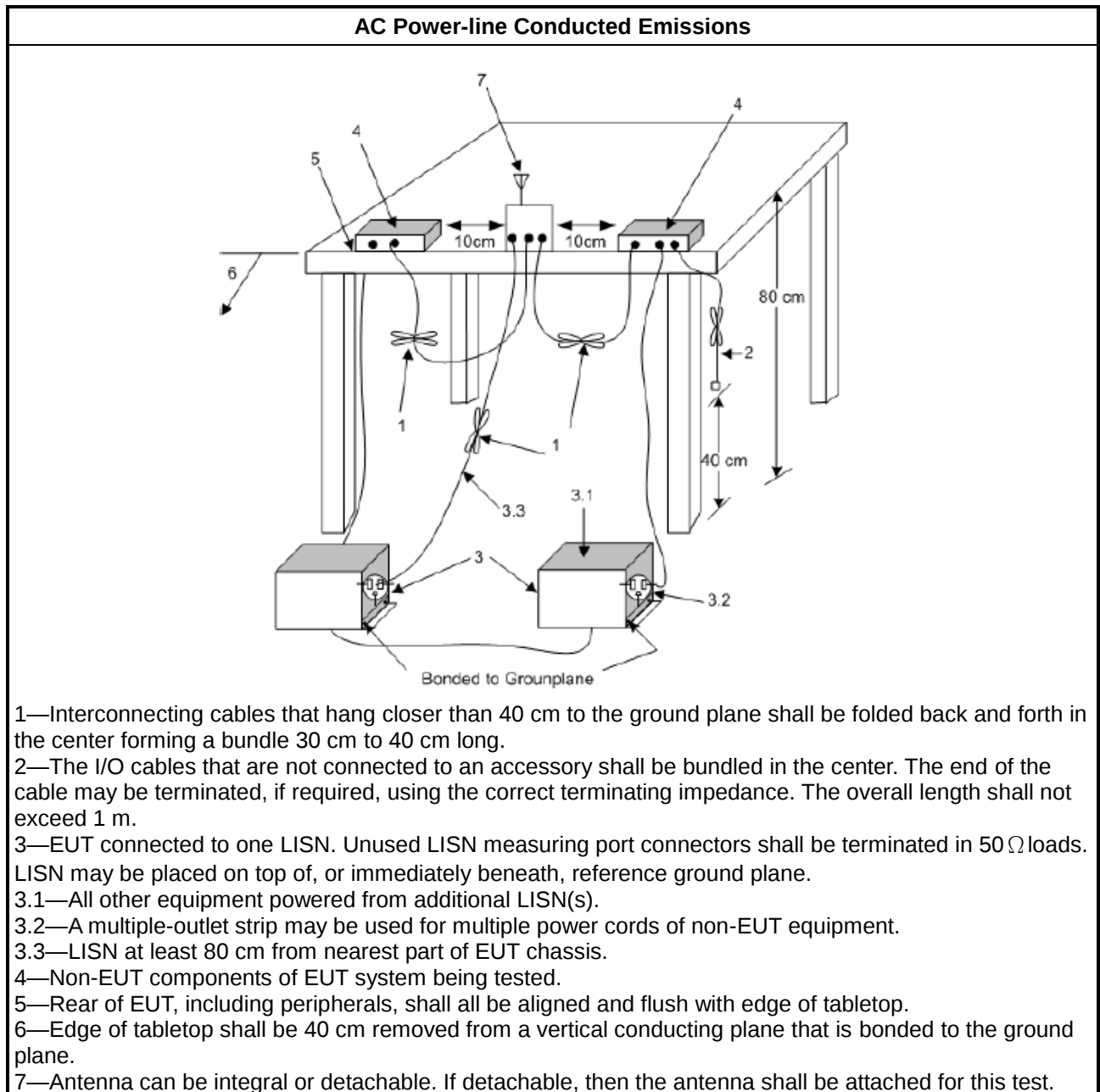
Test Method
▪ Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

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 $ChS \geq \text{MAX}$ (20 dB bandwidth, 25 kHz).
	$75 > N \geq 15$ and $ChS \geq \text{MAX}$ (20 dB bandwidth 2/3, 25 kHz).
N: Number of Hopping Frequencies; ChS: Hopping Channel Separation	

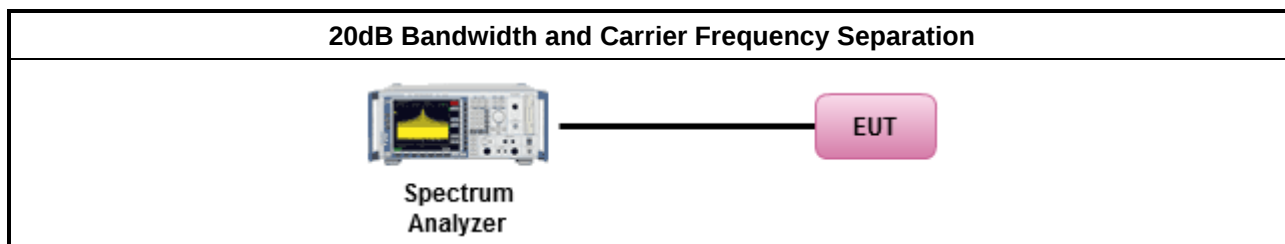
3.2.2 Measuring Instruments

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	

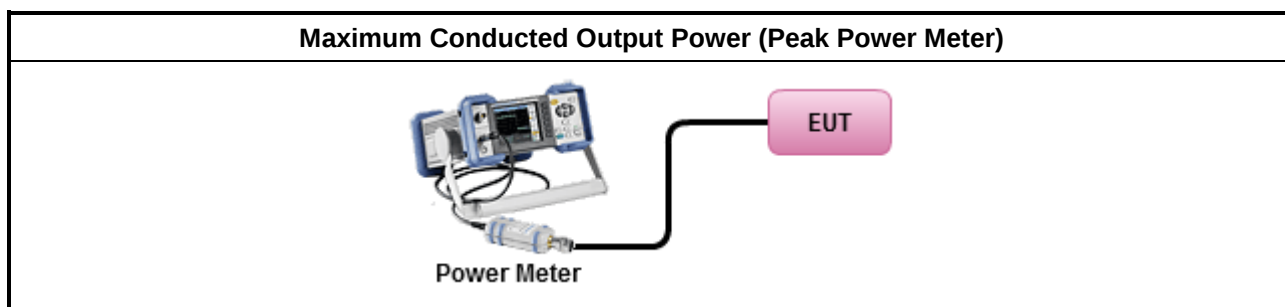
3.3.2 Measuring Instruments

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

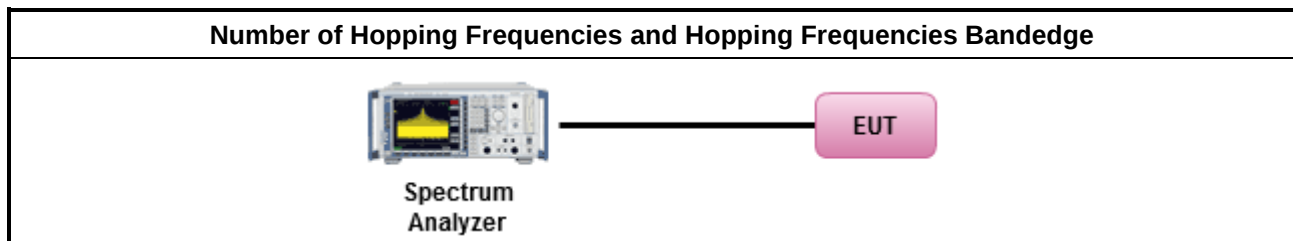
3.4.3 Measuring Instruments

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	

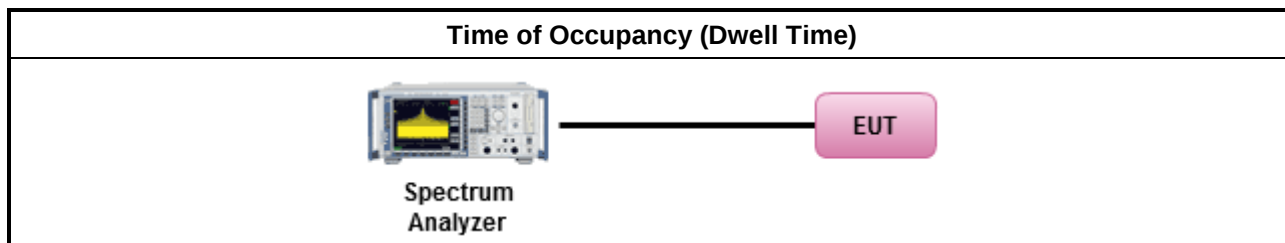
3.5.2 Measuring Instruments

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.	

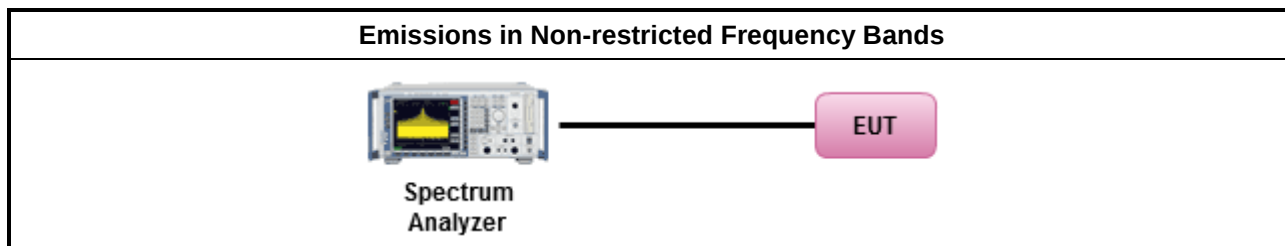
3.6.2 Measuring Instruments

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

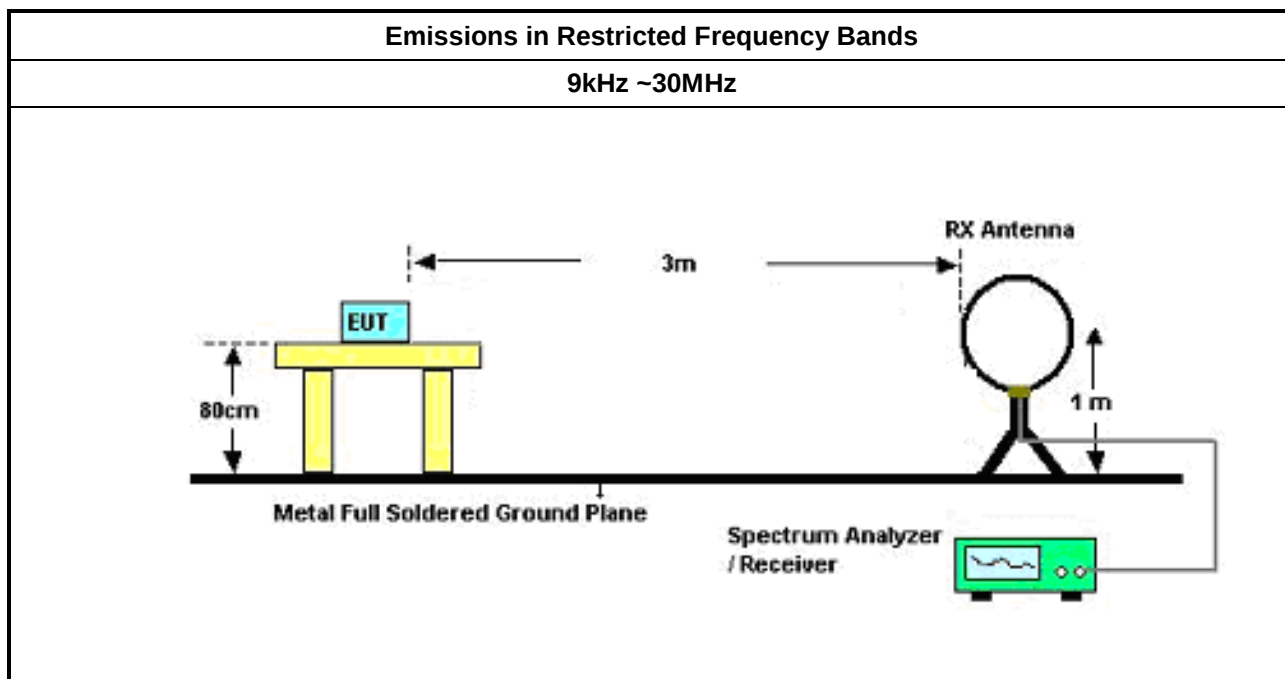
Test Method	
	The average emission levels shall be measured in [hopping duty factor].
	Refer as ANSI C63.10; clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.
	For the transmitter unwanted emissions shall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

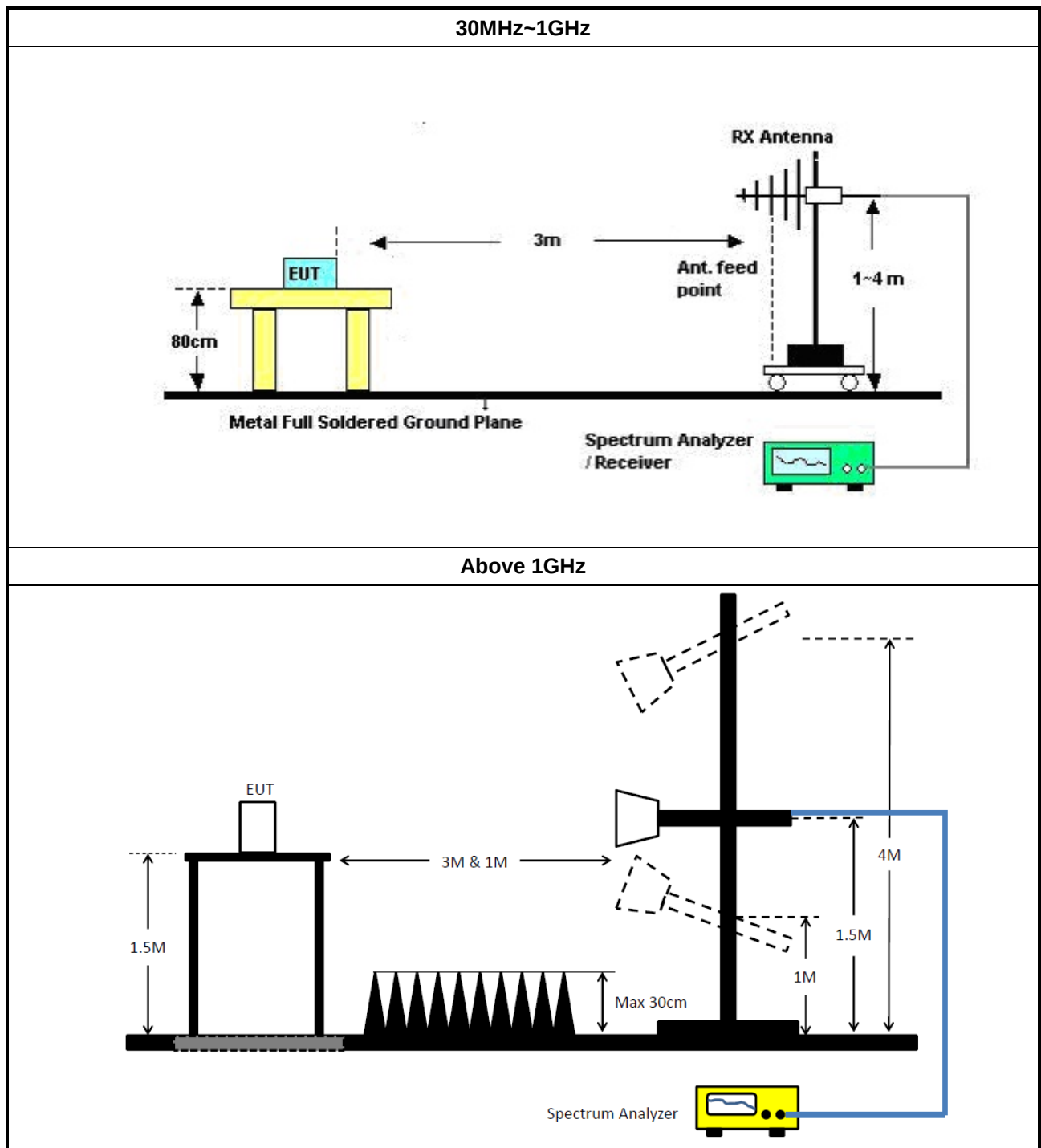
3.7.4 Measurement Results Calculation

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	ESR	102051	9kHz ~ 3.6GHz	13/May/2022	12/May/2023
Two-Line V-Network	R&S	ENV 216	101295	9kHz ~ 30MHz	31/Jan/2023	30/Jan/2024
RF Cable 5m	TITAN	TITAN	CO04-cable-01	9 kHz~200MHz	01/Mar/2022	28/Feb/2023
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9kHz ~ 30MHz	25/Oct/2022	24/Oct/2023
Software	Sporton	SENSE-EMI	V5.10.8.7	-	NCR	NCR

NCR: No Calibration Required

Instrument for Conducted Test

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Signal Analyzer	R&S	FSV 40	101515	10Hz~40GHz	14/Feb/2022	13/Feb/2023
SMB100A Signal Generator	R&S	SMB100A	181147	100kHz~40GHz	21/Oct/2022	20/Oct/2023
Pulse Sensor	Anritsu	MA2411B	1339407	300MHz~40GHz	14/Dec/2022	13/Dec/2023
Power Meter	Anritsu	ML2495A	1517010	300MHz~40GHz	14/Dec/2022	13/Dec/2023
SENSE-15247_FS	Sporton	V5.11.1	N/A	N/A	N/A	N/A

Instrument for Radiated Test (Co-location)

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz~18GHz 3m	30/Jul/2022	29/Jul/2023
Signal Analyzer	R&S	FSP 40	100305	9kHz~40GHz	21/Mar/2022	20/Mar/2023
Microwave Preamplifier	Agilent	8449B	3008A02373	1GHz~26.5GHz	02/Nov/2022	01/Nov/2023
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	02268	1GHz ~18GHz	27/Sep/2022	26/Sep/2023
RF Cable-R03m	HUBER+SUHNER	SUCOFLEX104	03CH02-cable-01	1GHz~40GHz	20/Dec/2022	19/Dec/2023
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170221	15GHz~40GHz	18/Mar/2022	17/Mar/2023
Microwave Premplifier	EMC INSTRUMENTS	EM18G40G	060604	18GHz~40GHz	08/Mar/2022	07/Mar/2023
SENSE-EMI	Sporton	V5.10.8.7	NA	NA	NA	NA

Instrument for Radiated Test

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	30MHz~1GHz 3m	31/Jul/2022	30/Jul/2023
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz~18GHz 3m	30/Jul/2022	29/Jul/2023
Signal Analyzer	R&S	FSP 40	100305	9kHz~40GHz	21/Mar/2022	20/Mar/2023
Amplifier	Agilent	8447D	2944A11149	100kHz~1.3GHz	28/Jun/2022	27/Jun/2023
Microwave Preamplifier	Agilent	8449B	3008A02373	1GHz~26.5GHz	02/Nov/2022	01/Nov/2023
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	02268	1GHz ~18GHz	27/Sep/2022	26/Sep/2023
Bilog Antenna & 5dB Attenuator	SCHAFFNER / MTJ	CBL 6112B / MTJ6102-05	2723 / 2	30MHz~1GHz	28/Aug/2022	27/Aug/2023
RF Cable	MVE	400LL+SN 200207	03CH02-cable-02	9kHz~30MHz	20/Dec/2022	19/Dec/2023
RF Cable	MVE	400LL+SN 200207	03CH02-cable-02	30MHz~1GHz	20/Dec/2022	19/Dec/2023
RF Cable-R03m	HUBER+SUHNER	SUCOFLEX104	03CH02-cable-01	1GHz~40GHz	20/Dec/2022	19/Dec/2023
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170221	15GHz~40GHz	18/Mar/2022	17/Mar/2023
Loop Antenna	TESEQ	HLA 6120	31244	9kHz~30MHz	18/Mar/2022	17/Mar/2023
EMI Test Receiver	R&S	ESR3	102052	9kHz~3.6GHz	30/May/2022	29/May/2023
SENSE-15247_FS	Sporton	V5.10.8.9	NA	NA	NA	NA



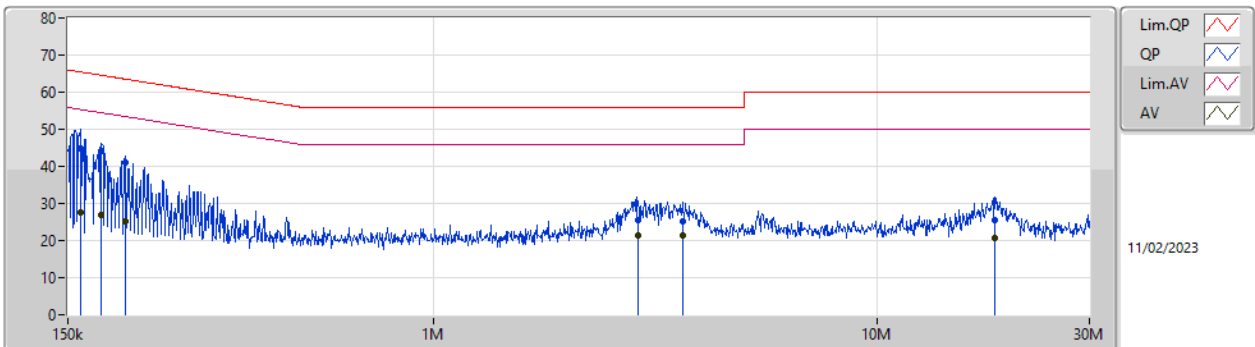
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	178.803k	44.22	64.55	-20.33	Line

Result

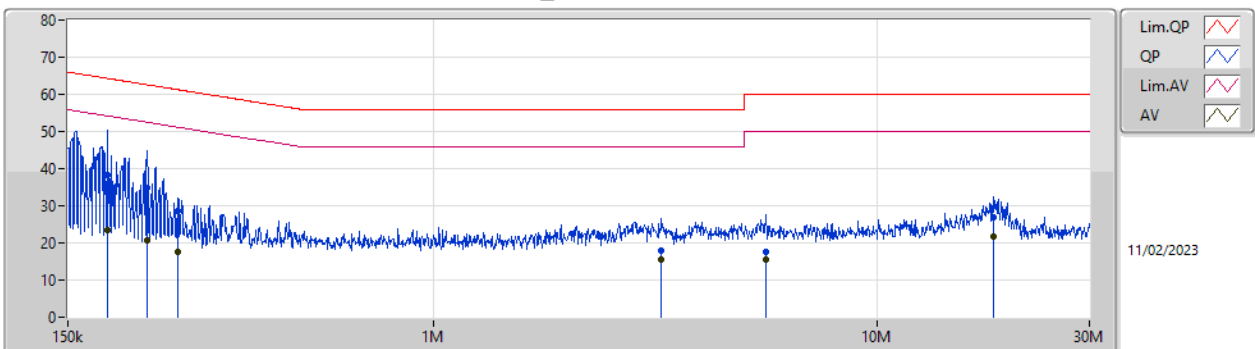
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition	Comments
Mode 1	Pass	QP	159.893k	44.74	65.46	-20.72	Line	-
Mode 1	Pass	AV	159.893k	27.66	55.46	-27.80	Line	-
Mode 1	Pass	QP	178.803k	44.22	64.55	-20.33	Line	-
Mode 1	Pass	AV	178.803k	26.89	54.55	-27.66	Line	-
Mode 1	Pass	QP	201.551k	41.08	63.55	-22.47	Line	-
Mode 1	Pass	AV	201.551k	25.17	53.55	-28.38	Line	-
Mode 1	Pass	QP	2.878M	25.45	56.00	-30.55	Line	-
Mode 1	Pass	AV	2.878M	21.25	46.00	-24.75	Line	-
Mode 1	Pass	QP	3.642M	25.22	56.00	-30.78	Line	-
Mode 1	Pass	AV	3.642M	21.33	46.00	-24.67	Line	-
Mode 1	Pass	QP	18.343M	25.43	60.00	-34.57	Line	-
Mode 1	Pass	AV	18.343M	20.52	50.00	-29.48	Line	-
Mode 1	Pass	QP	183.87k	38.28	64.30	-26.02	Neutral	-
Mode 1	Pass	AV	183.87k	23.57	54.30	-30.73	Neutral	-
Mode 1	Pass	QP	226.289k	34.98	62.58	-27.60	Neutral	-
Mode 1	Pass	AV	226.289k	20.80	52.58	-31.78	Neutral	-
Mode 1	Pass	QP	265.468k	28.56	61.26	-32.70	Neutral	-
Mode 1	Pass	AV	265.468k	17.45	51.26	-33.81	Neutral	-
Mode 1	Pass	QP	3.257M	17.97	56.00	-38.03	Neutral	-
Mode 1	Pass	AV	3.257M	15.40	46.00	-30.60	Neutral	-
Mode 1	Pass	QP	5.605M	17.66	60.00	-42.34	Neutral	-
Mode 1	Pass	AV	5.605M	15.48	50.00	-34.52	Neutral	-
Mode 1	Pass	QP	18.198M	26.94	60.00	-33.06	Neutral	-
Mode 1	Pass	AV	18.198M	21.64	50.00	-28.36	Neutral	-

Conducted Emissions at Powerline_Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	159.893k	44.74	65.46	-20.72	19.55	Line	-	25.19	9.59	0.03	9.93			
AV	159.893k	27.66	55.46	-27.80	19.55	Line	-	8.11	9.59	0.03	9.93			
QP	178.803k	44.22	64.55	-20.33	19.55	Line	-	24.67	9.59	0.03	9.93			
AV	178.803k	26.89	54.55	-27.66	19.55	Line	-	7.34	9.59	0.03	9.93			
QP	201.551k	41.08	63.55	-22.47	19.55	Line	-	21.53	9.59	0.03	9.93			
AV	201.551k	25.17	53.55	-28.38	19.55	Line	-	5.62	9.59	0.03	9.93			
QP	2.878M	25.45	56.00	-30.55	19.70	Line	-	5.75	9.66	0.11	9.93			
AV	2.878M	21.25	46.00	-24.75	19.70	Line	-	1.55	9.66	0.11	9.93			
QP	3.642M	25.22	56.00	-30.78	19.72	Line	-	5.50	9.67	0.12	9.93			
AV	3.642M	21.33	46.00	-24.67	19.72	Line	-	1.61	9.67	0.12	9.93			
QP	18.343M	25.43	60.00	-34.57	19.92	Line	-	5.51	9.69	0.26	9.97			
AV	18.343M	20.52	50.00	-29.48	19.92	Line	-	0.60	9.69	0.26	9.97			

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	183.87k	38.28	64.30	-26.02	19.56	Neutral	-	18.72	9.60	0.03	9.93			
AV	183.87k	23.57	54.30	-30.73	19.56	Neutral	-	4.01	9.60	0.03	9.93			
QP	226.289k	34.98	62.58	-27.60	19.57	Neutral	-	15.41	9.60	0.03	9.94			
AV	226.289k	20.80	52.58	-31.78	19.57	Neutral	-	1.23	9.60	0.03	9.94			
QP	265.468k	28.56	61.26	-32.70	19.57	Neutral	-	8.99	9.60	0.03	9.94			
AV	265.468k	17.45	51.26	-33.81	19.57	Neutral	-	-2.12	9.60	0.03	9.94			
QP	3.257M	17.97	56.00	-38.03	19.68	Neutral	-	-1.71	9.63	0.12	9.93			
AV	3.257M	15.40	46.00	-30.60	19.68	Neutral	-	-4.28	9.63	0.12	9.93			
QP	5.605M	17.66	60.00	-42.34	19.75	Neutral	-	-2.09	9.66	0.15	9.94			
AV	5.605M	15.48	50.00	-34.52	19.75	Neutral	-	-4.27	9.66	0.15	9.94			
QP	18.198M	26.94	60.00	-33.06	19.95	Neutral	-	6.99	9.72	0.26	9.97			
AV	18.198M	21.64	50.00	-28.36	19.95	Neutral	-	1.69	9.72	0.26	9.97			



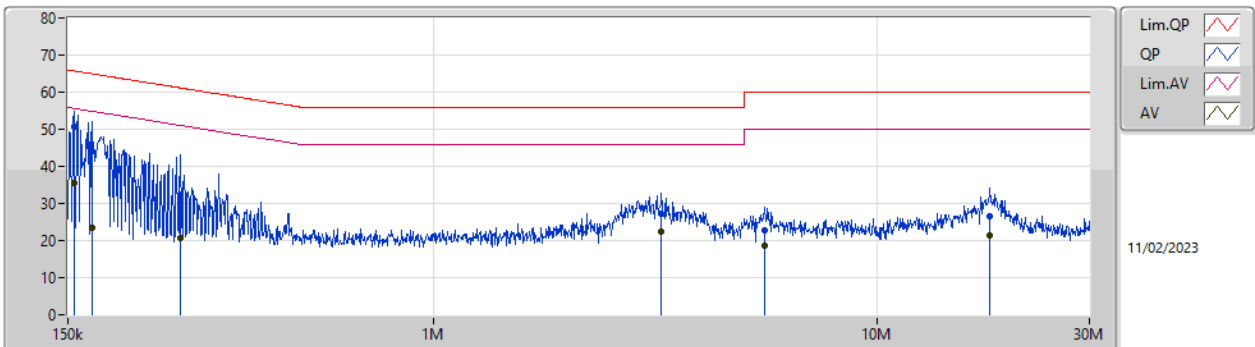
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	154.868k	50.56	65.73	-15.17	Line

Result

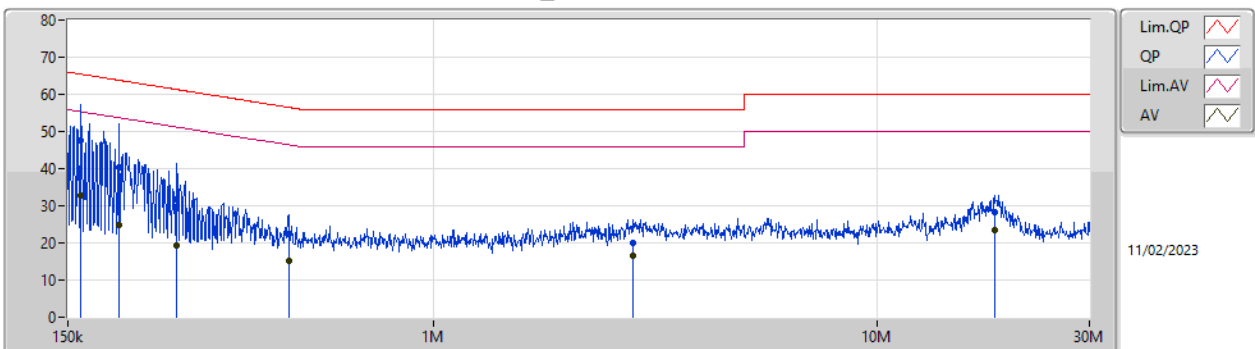
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition	Comments
Mode 1	Pass	QP	154.868k	50.56	65.73	-15.17	Line	-
Mode 1	Pass	AV	154.868k	35.38	55.73	-20.35	Line	-
Mode 1	Pass	QP	169.76k	44.12	64.97	-20.85	Line	-
Mode 1	Pass	AV	169.76k	23.31	54.97	-31.66	Line	-
Mode 1	Pass	QP	269.741k	32.53	61.12	-28.59	Line	-
Mode 1	Pass	AV	269.741k	20.57	51.12	-30.55	Line	-
Mode 1	Pass	QP	3.257M	27.36	56.00	-28.64	Line	-
Mode 1	Pass	AV	3.257M	22.48	46.00	-23.52	Line	-
Mode 1	Pass	QP	5.583M	22.64	60.00	-37.36	Line	-
Mode 1	Pass	AV	5.583M	18.72	50.00	-31.28	Line	-
Mode 1	Pass	QP	17.909M	26.54	60.00	-33.46	Line	-
Mode 1	Pass	AV	17.909M	21.44	50.00	-28.56	Line	-
Mode 1	Pass	QP	159.893k	47.49	65.46	-17.97	Neutral	-
Mode 1	Pass	AV	159.893k	32.71	55.46	-22.75	Neutral	-
Mode 1	Pass	QP	195.997k	40.48	63.78	-23.30	Neutral	-
Mode 1	Pass	AV	195.997k	24.83	53.78	-28.95	Neutral	-
Mode 1	Pass	QP	264.41k	31.71	61.30	-29.59	Neutral	-
Mode 1	Pass	AV	264.41k	19.27	51.30	-32.03	Neutral	-
Mode 1	Pass	QP	471.701k	22.37	56.48	-34.11	Neutral	-
Mode 1	Pass	AV	471.701k	15.29	46.48	-31.19	Neutral	-
Mode 1	Pass	QP	2.81M	19.95	56.00	-36.05	Neutral	-
Mode 1	Pass	AV	2.81M	16.72	46.00	-29.28	Neutral	-
Mode 1	Pass	QP	18.343M	28.41	60.00	-31.59	Neutral	-
Mode 1	Pass	AV	18.343M	23.34	50.00	-26.66	Neutral	-

Conducted Emissions at Powerline_Mode 1



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT			
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)			
QP	154.868k	50.56	65.73	-15.17	19.55	Line	-	31.01	9.59	0.03	9.93			
AV	154.868k	35.38	55.73	-20.35	19.55	Line	-	15.83	9.59	0.03	9.93			
QP	169.76k	44.12	64.97	-20.85	19.55	Line	-	24.57	9.59	0.03	9.93			
AV	169.76k	23.31	54.97	-31.66	19.55	Line	-	3.76	9.59	0.03	9.93			
QP	269.741k	32.53	61.12	-28.59	19.56	Line	-	12.97	9.59	0.03	9.94			
AV	269.741k	20.57	51.12	-30.55	19.56	Line	-	1.01	9.59	0.03	9.94			
QP	3.257M	27.36	56.00	-28.64	19.71	Line	-	7.65	9.66	0.12	9.93			
AV	3.257M	22.48	46.00	-23.52	19.71	Line	-	2.77	9.66	0.12	9.93			
QP	5.583M	22.64	60.00	-37.36	19.78	Line	-	2.86	9.69	0.15	9.94			
AV	5.583M	18.72	50.00	-31.28	19.78	Line	-	-1.06	9.69	0.15	9.94			
QP	17.909M	26.54	60.00	-33.46	19.92	Line	-	6.62	9.69	0.26	9.97			
AV	17.909M	21.44	50.00	-28.56	19.92	Line	-	1.52	9.69	0.26	9.97			

Conducted Emissions at Powerline_Mode 1



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT			
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)			
QP	159.893k	47.49	65.46	-17.97	19.56	Neutral	-	27.93	9.60	0.03	9.93			
AV	159.893k	32.71	55.46	-22.75	19.56	Neutral	-	13.15	9.60	0.03	9.93			
QP	195.997k	40.48	63.78	-23.30	19.56	Neutral	-	20.92	9.60	0.03	9.93			
AV	195.997k	24.83	53.78	-28.95	19.56	Neutral	-	5.27	9.60	0.03	9.93			
QP	264.41k	31.71	61.30	-29.59	19.57	Neutral	-	12.14	9.60	0.03	9.94			
AV	264.41k	19.27	51.30	-32.03	19.57	Neutral	-	-0.30	9.60	0.03	9.94			
QP	471.701k	22.37	56.48	-34.11	19.60	Neutral	-	2.77	9.60	0.04	9.96			
AV	471.701k	15.29	46.48	-31.19	19.60	Neutral	-	-4.31	9.60	0.04	9.96			
QP	2.81M	19.95	56.00	-36.05	19.67	Neutral	-	0.28	9.63	0.10	9.94			
AV	2.81M	16.72	46.00	-29.28	19.67	Neutral	-	-2.95	9.63	0.10	9.94			
QP	18.343M	28.41	60.00	-31.59	19.95	Neutral	-	8.46	9.72	0.26	9.97			
AV	18.343M	23.34	50.00	-26.66	19.95	Neutral	-	3.39	9.72	0.26	9.97			

**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)	937.75k	870.078k	870KF1D	935k	869.158k
BT-EDR(2Mbps)	1.309M	1.188M	1M19G1D	1.298M	1.179M
BT-EDR(3Mbps)	1.29M	1.199M	1M20G1D	1.257M	1.186M

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	937.75k	869.158k
2440MHz	Pass	Inf	935k	869.802k
2480MHz	Pass	Inf	935k	870.078k
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	Inf	1.304M	1.179M
2440MHz	Pass	Inf	1.298M	1.188M
2480MHz	Pass	Inf	1.309M	1.181M
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	Inf	1.262M	1.186M
2440MHz	Pass	Inf	1.29M	1.199M
2480MHz	Pass	Inf	1.257M	1.195M

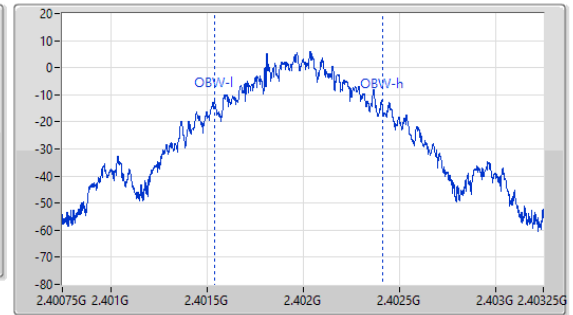
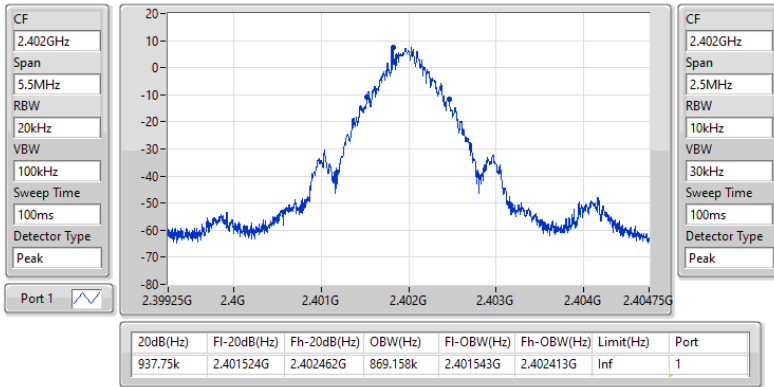
Port X-N dB = Port X 20dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

2.4-2.4835GHz_BT-BR(1Mbps)

EBW-FS

2402MHz

09/02/2023

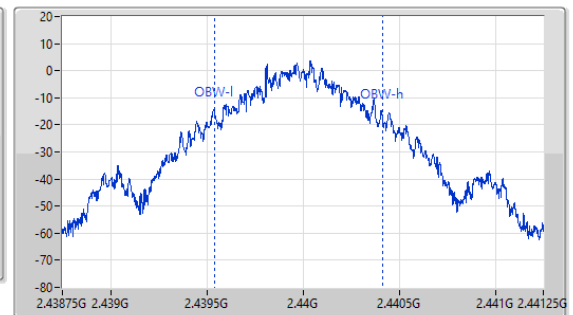
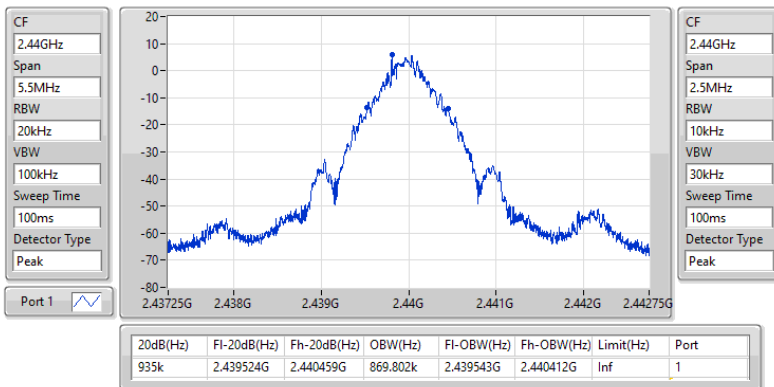


2.4-2.4835GHz_BT-BR(1Mbps)

EBW-FS

2440MHz

09/02/2023

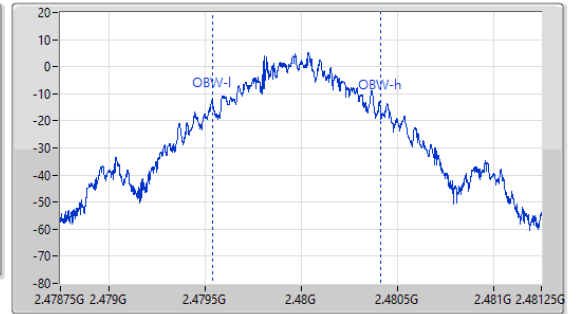
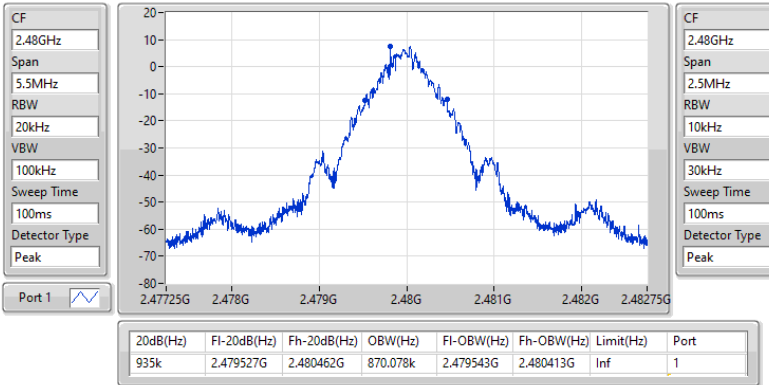


2.4-2.4835GHz_BT-BR(1Mbps)

EBW-FS

2480MHz

09/02/2023

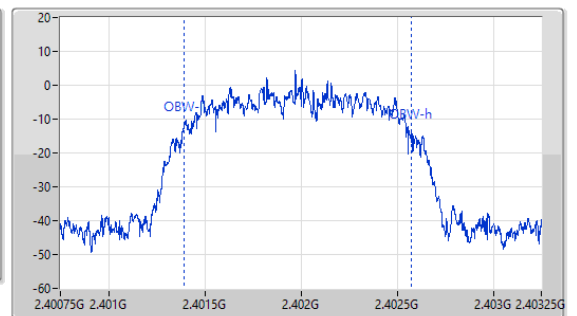
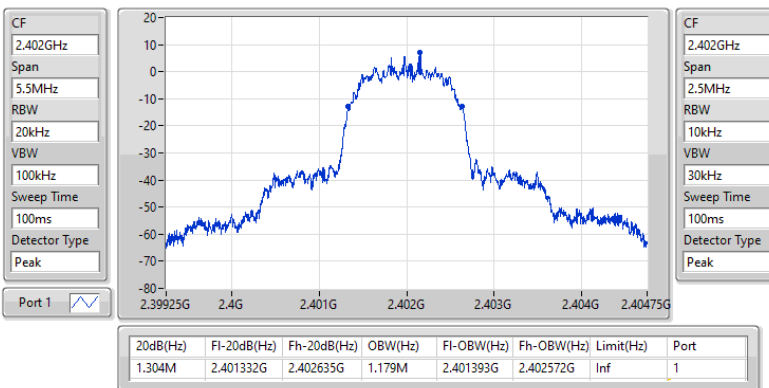


2.4-2.4835GHz_BT-EDR(2Mbps)

EBW-FS

2402MHz

09/02/2023

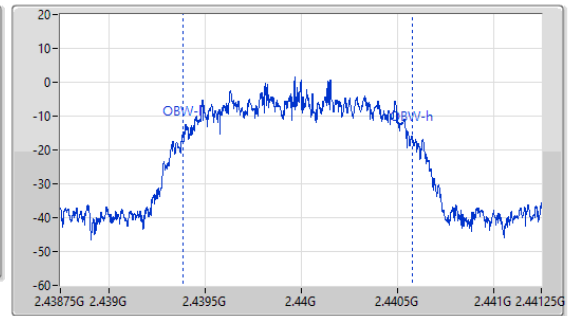
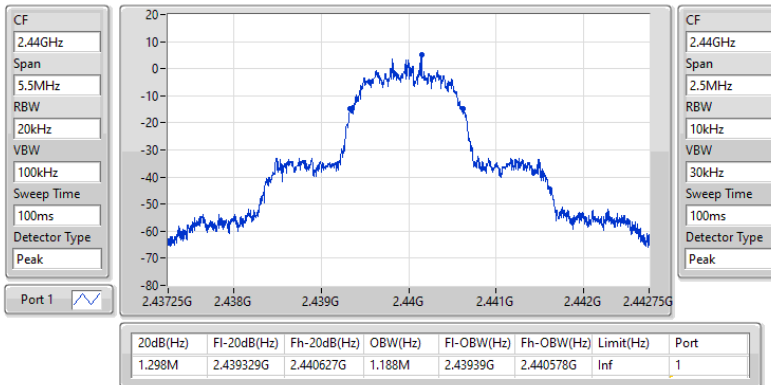


2.4-2.4835GHz_BT-EDR(2Mbps)

EBW-FS

2440MHz

09/02/2023

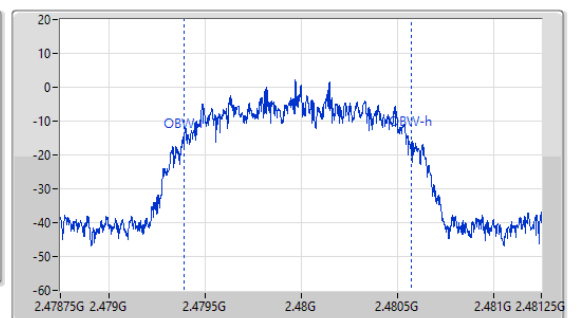
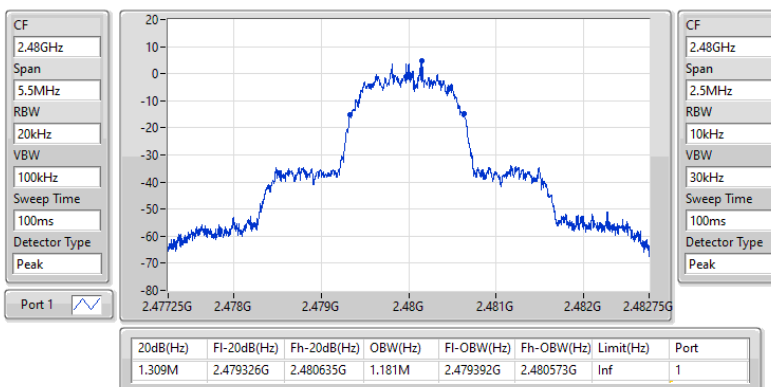


2.4-2.4835GHz_BT-EDR(2Mbps)

EBW-FS

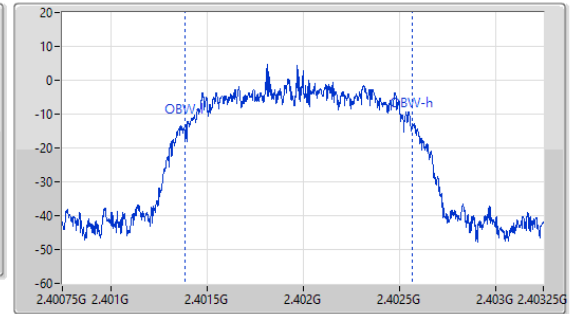
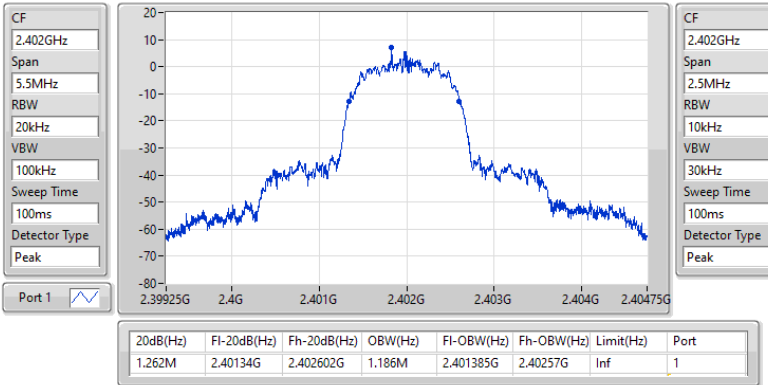
2480MHz

09/02/2023

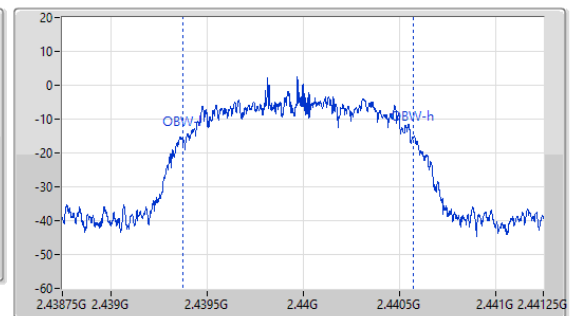
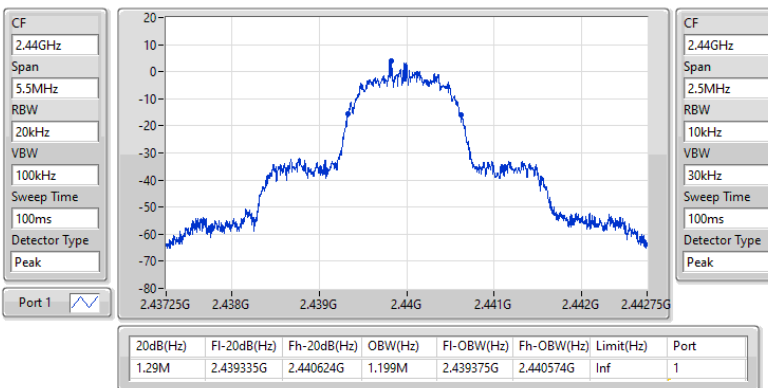


2.4-2.4835GHz_BT-EDR(3Mbps)
EBW-FS
2402MHz

09/02/2023


2.4-2.4835GHz_BT-EDR(3Mbps)
EBW-FS
2440MHz

09/02/2023

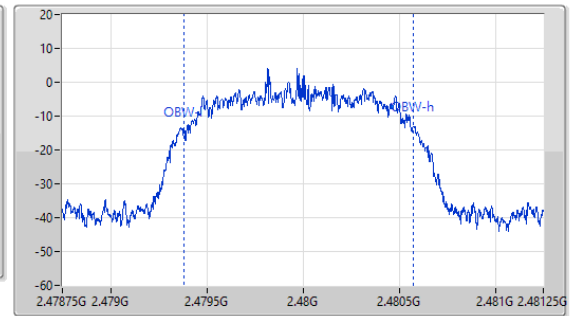
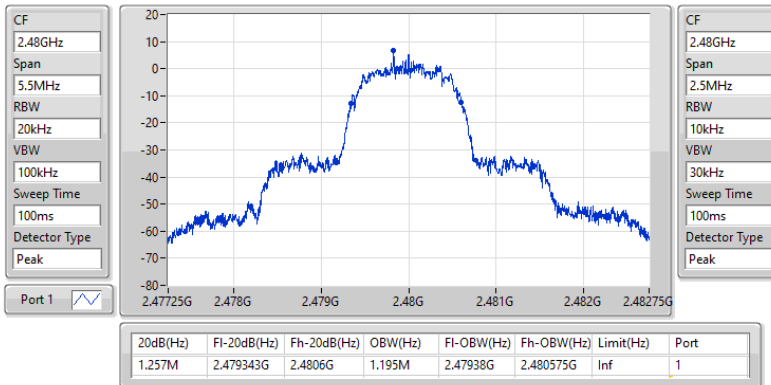


2.4-2.4835GHz_BT-EDR(3Mbps)

EBW-FS

2480MHz

09/02/2023





Summary

Mode	Max-Space (Hz)	Min-Space (Hz)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	1.002M	999k
BT-EDR(2Mbps)	1.002M	999k
BT-EDR(3Mbps)	1.0035M	999k

Result

Mode	Result	Fl (Hz)	Fh (Hz)	Ch.Space (Hz)	Limit (Hz)
BT-BR(1Mbps)	-	-	-	-	-
2402MHz	Pass	2.401815G	2.402817G	1.002M	624.5415k
2440MHz	Pass	2.439815G	2.440815G	1.0005M	622.71k
2480MHz	Pass	2.478816G	2.479815G	999k	622.71k
BT-EDR(2Mbps)	-	-	-	-	-
2402MHz	Pass	2.402146G	2.403148G	1.002M	868.464k
2440MHz	Pass	2.440148G	2.441147G	999k	875.79k
2480MHz	Pass	2.479145G	2.480145G	1.0005M	871.794k
BT-EDR(3Mbps)	-	-	-	-	-
2402MHz	Pass	2.401816G	2.402818G	1.002M	840.492k
2440MHz	Pass	2.439815G	2.440818G	1.0035M	837.162k
2480MHz	Pass	2.478821G	2.47982G	999k	837.162k

2.4-2.4835GHz_BT-BR(1Mbps)

Channel Separation-FS

2.402G/2.403GHz

09/02/2023

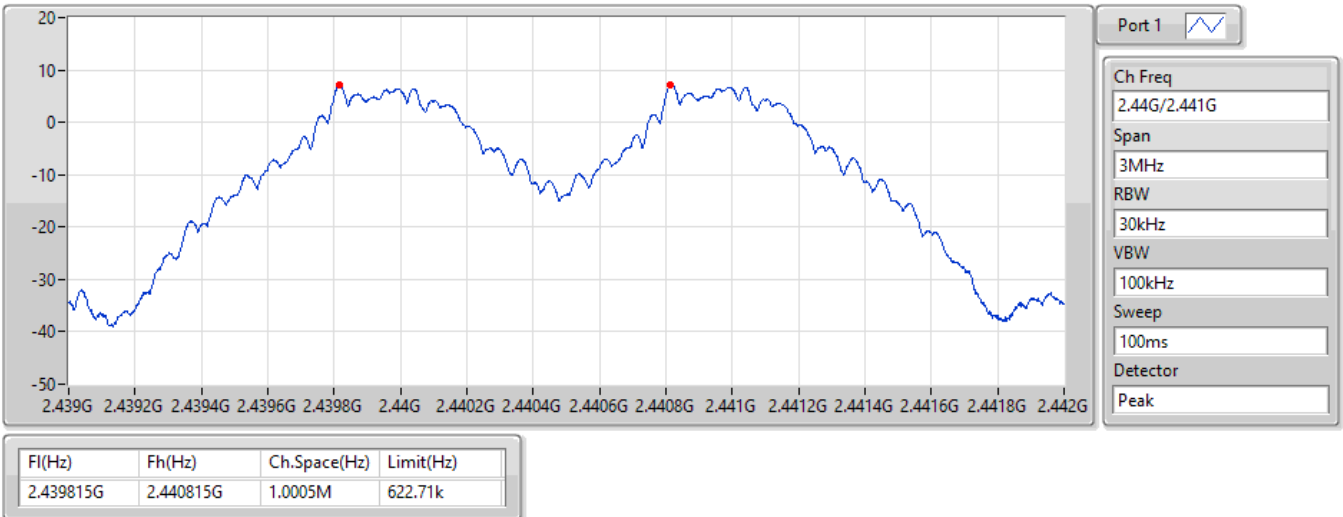


2.4-2.4835GHz_BT-BR(1Mbps)

Channel Separation-FS

2.44G/2.441GHz

09/02/2023



2.4-2.4835GHz_BT-BR(1Mbps)

Channel Separation-FS

2.48G/2.479GHz

09/02/2023

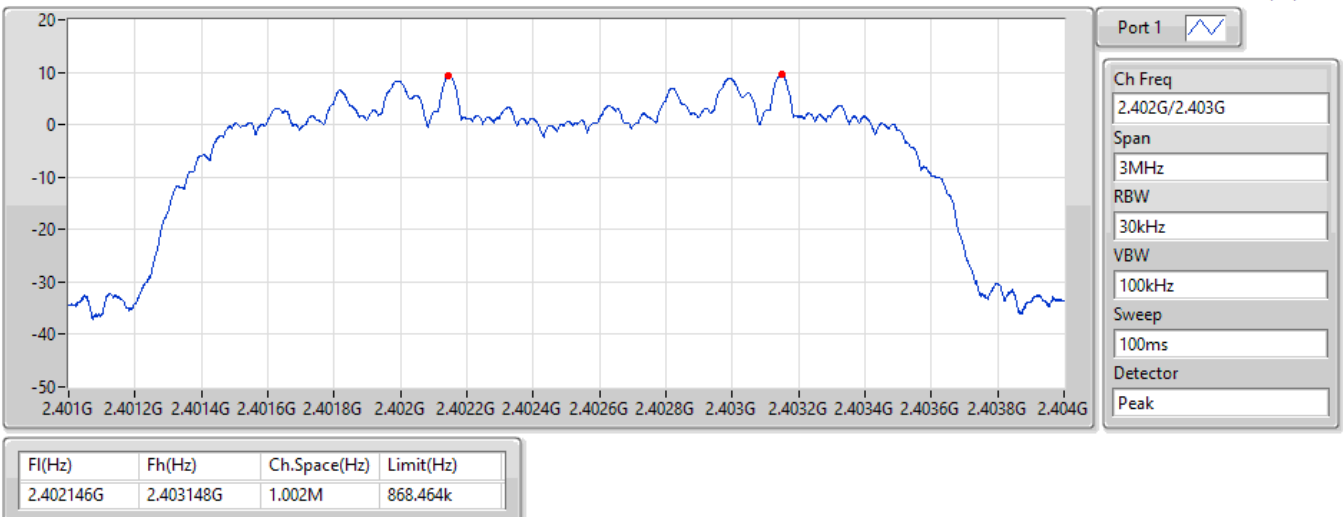


2.4-2.4835GHz_BT-EDR(2Mbps)

Channel Separation-FS

2.402G/2.403GHz

09/02/2023

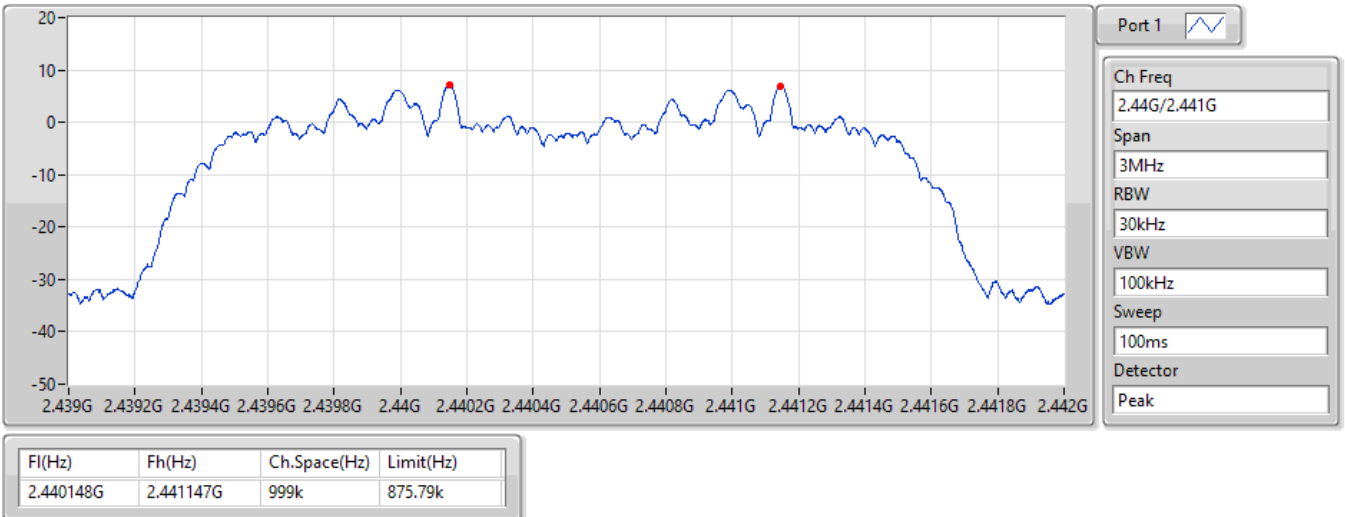


2.4-2.4835GHz_BT-EDR(2Mbps)

Channel Separation-FS

2.44G/2.441GHz

09/02/2023

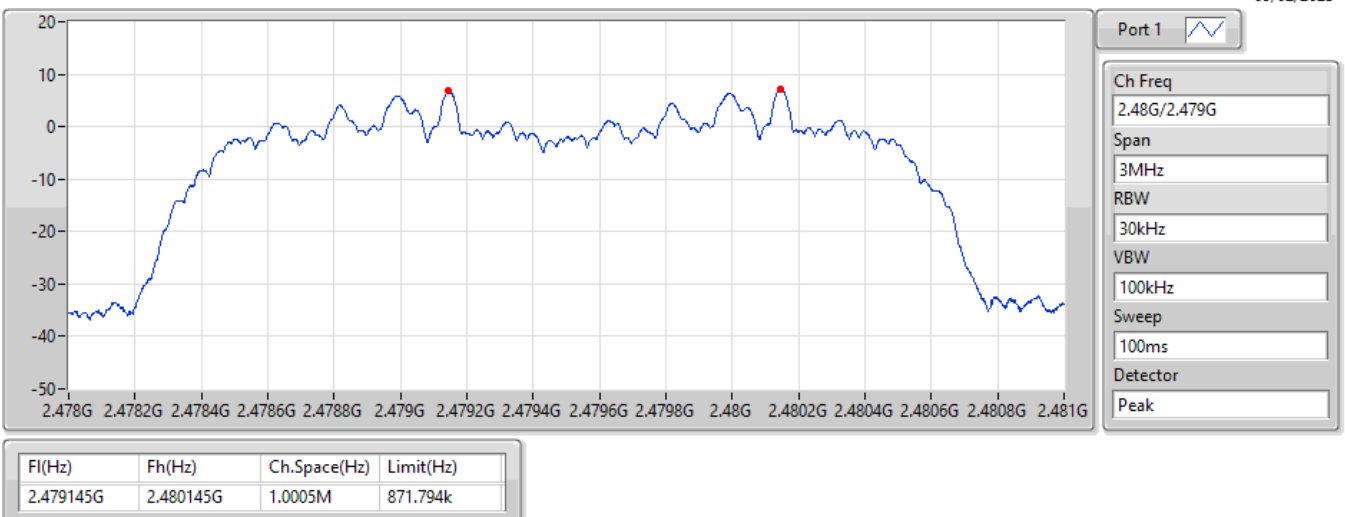


2.4-2.4835GHz_BT-EDR(2Mbps)

Channel Separation-FS

2.48G/2.479GHz

09/02/2023



2.4-2.4835GHz_BT-EDR(3Mbps)

Channel Separation-FS

2.402G/2.403GHz

09/02/2023



2.4-2.4835GHz_BT-EDR(3Mbps)

Channel Separation-FS

2.44G/2.441GHz

09/02/2023



2.4-2.4835GHz_BT-EDR(3Mbps)

Channel Separation-FS

2.48G/2.479GHz

09/02/2023





Summary

Mode	Total Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	12.05	0.01603
BT-EDR(2Mbps)	12.41	0.01742
BT-EDR(3Mbps)	12.99	0.01991



Result

Mode	Result	DG (dBi)	Total Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	5.00	12.05	21.00
2440MHz	Pass	5.00	10.44	21.00
2480MHz	Pass	5.00	11.12	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	5.00	12.41	21.00
2440MHz	Pass	5.00	10.04	21.00
2480MHz	Pass	5.00	10.30	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	5.00	12.99	21.00
2440MHz	Pass	5.00	10.38	21.00
2480MHz	Pass	5.00	12.48	21.00

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



Summary

Mode	Total Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	11.83	0.01524
BT-EDR(2Mbps)	10.06	0.01014
BT-EDR(3Mbps)	10.13	0.01030



Result

Mode	Result	DG (dBi)	Total Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	5.00	11.83	21.00
2440MHz	Pass	5.00	10.22	21.00
2480MHz	Pass	5.00	10.89	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	5.00	10.06	21.00
2440MHz	Pass	5.00	7.95	21.00
2480MHz	Pass	5.00	8.06	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	5.00	10.13	21.00
2440MHz	Pass	5.00	8.00	21.00
2480MHz	Pass	5.00	9.95	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

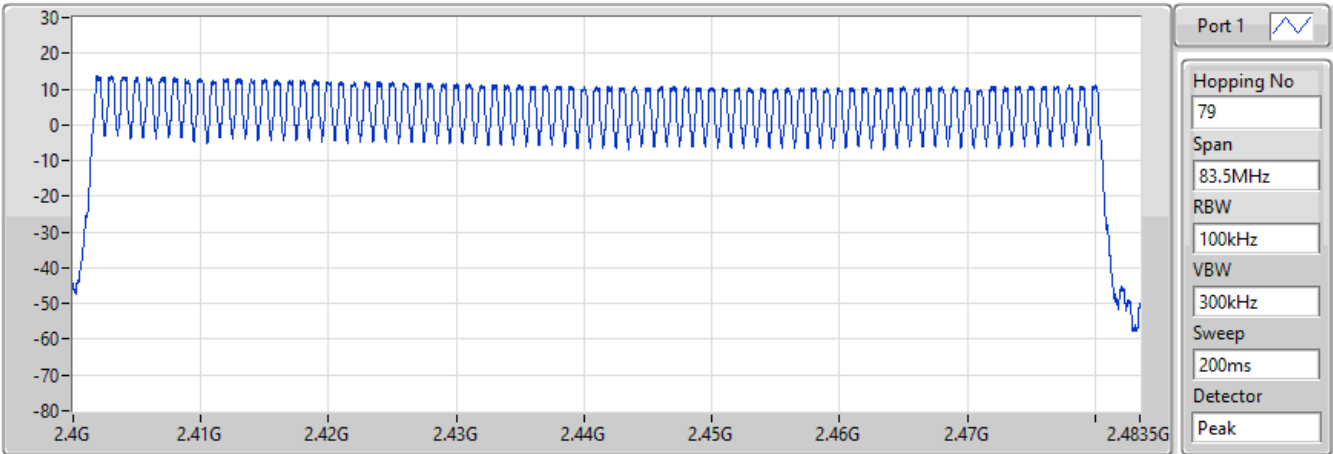
Mode	Result	Hopping No	Limit
BT-BR(1Mbps)	-	-	-
2440MHz	Pass	79	15
BT-EDR(2Mbps)	-	-	-
2440MHz	Pass	79	15
BT-EDR(3Mbps)	-	-	-
2440MHz	Pass	79	15

2.4-2.4835GHz_BT-BR(1Mbps)

Hopping-FS

2440MHz

09/02/2023



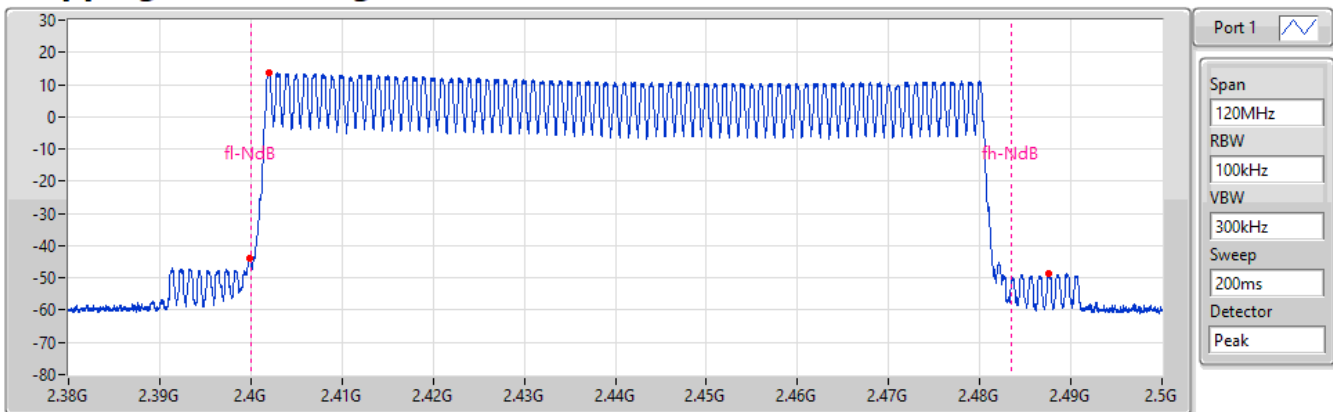
Hopping No	Limit
79	15

2.4-2.4835GHz_BT-BR(1Mbps)

2440MHz

Hopping Ch Bandedge (Non-restricted Band)

09/02/2023



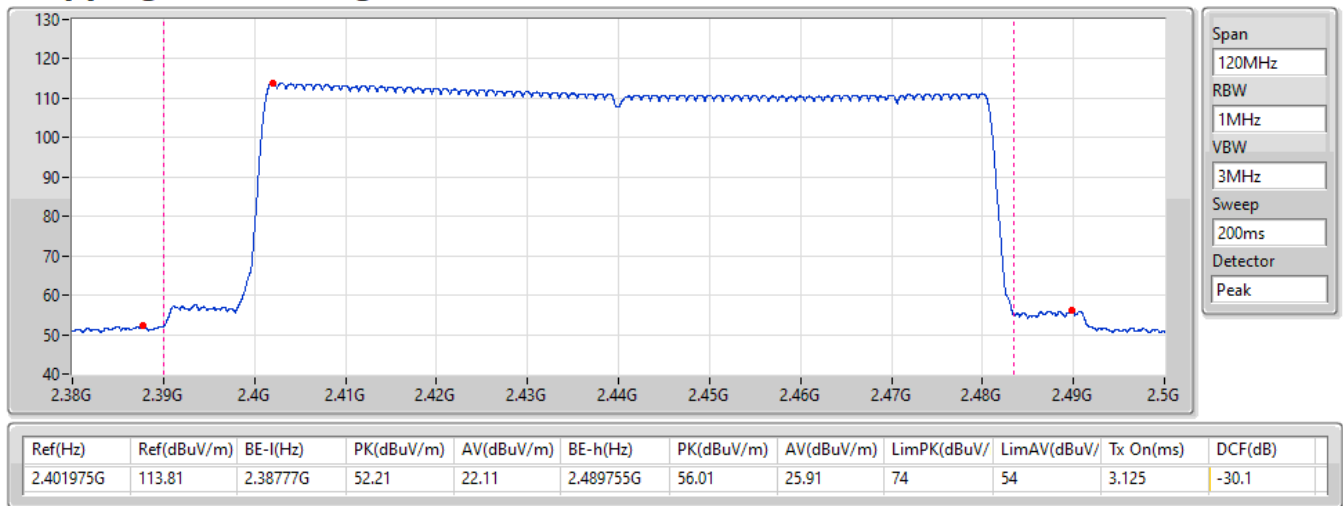
Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-6.44	2.401975G	13.56	2.399815G	-43.85	2.487535G	-48.48

2.4-2.4835GHz_BT-BR(1Mbps)

2440MHz

Hopping Ch Bandedge (Restricted Band)

09/02/2023

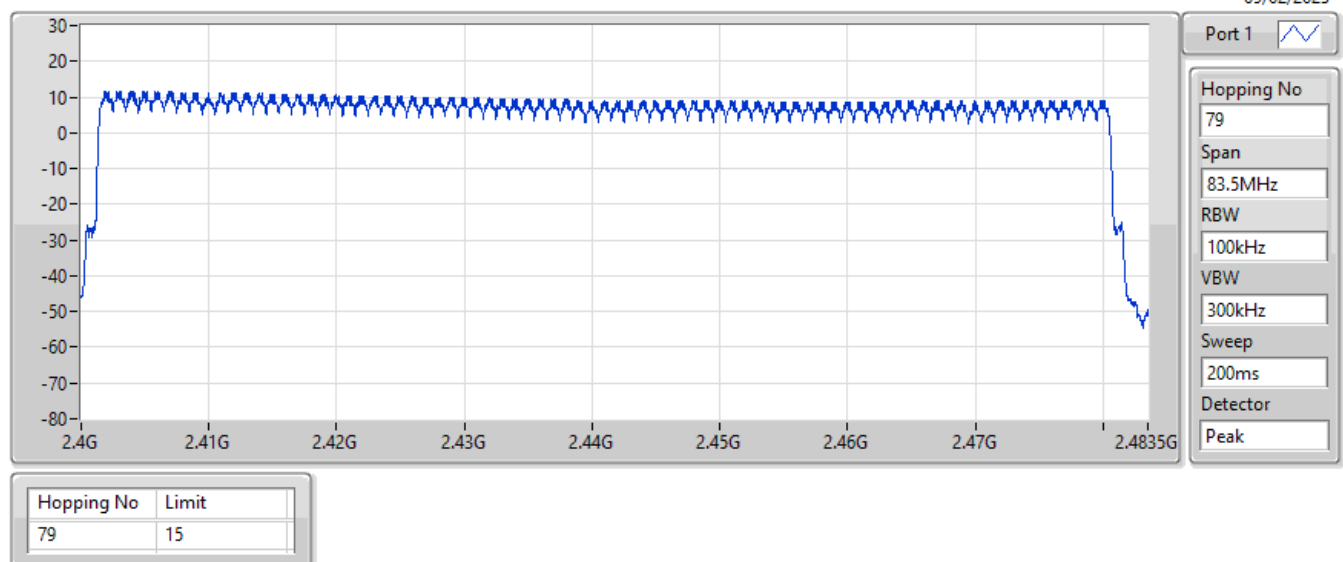


2.4-2.4835GHz_BT-EDR(2Mbps)

2440MHz

Hopping-FS

09/02/2023

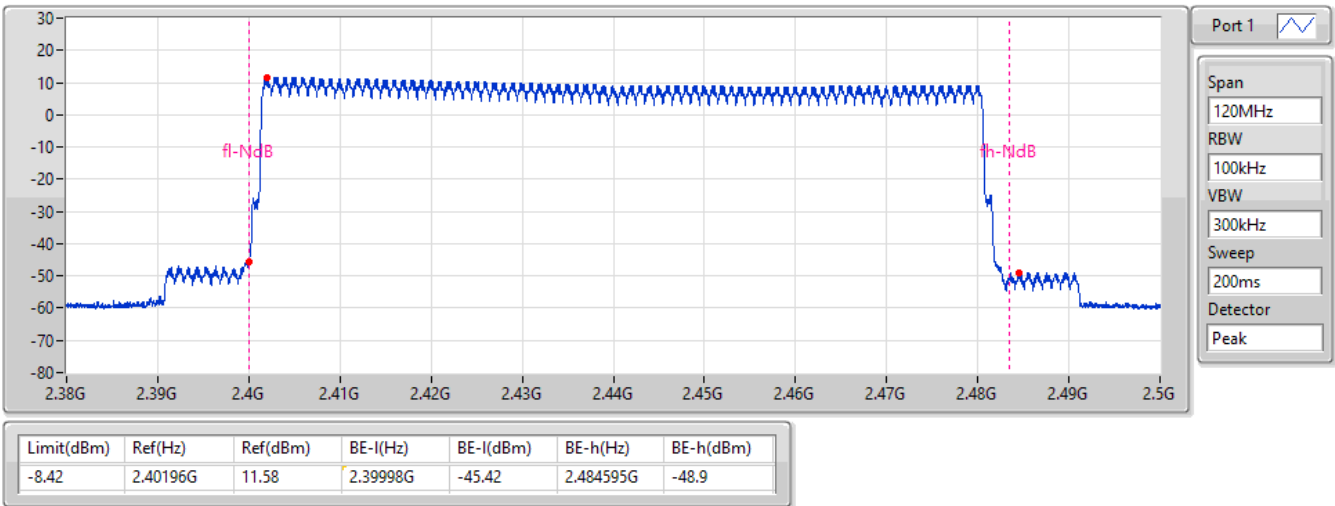


2.4-2.4835GHz_BT-EDR(2Mbps)

2440MHz

Hopping Ch Bandedge (Non-restricted Band)

09/02/2023

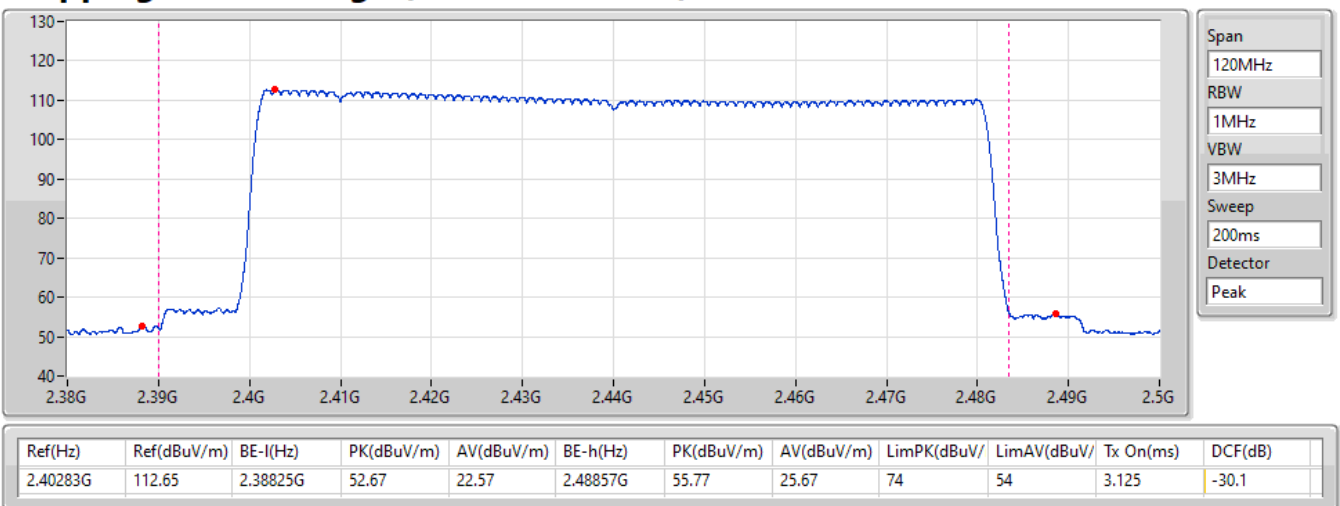


2.4-2.4835GHz_BT-EDR(2Mbps)

2440MHz

Hopping Ch Bandedge (Restricted Band)

09/02/2023

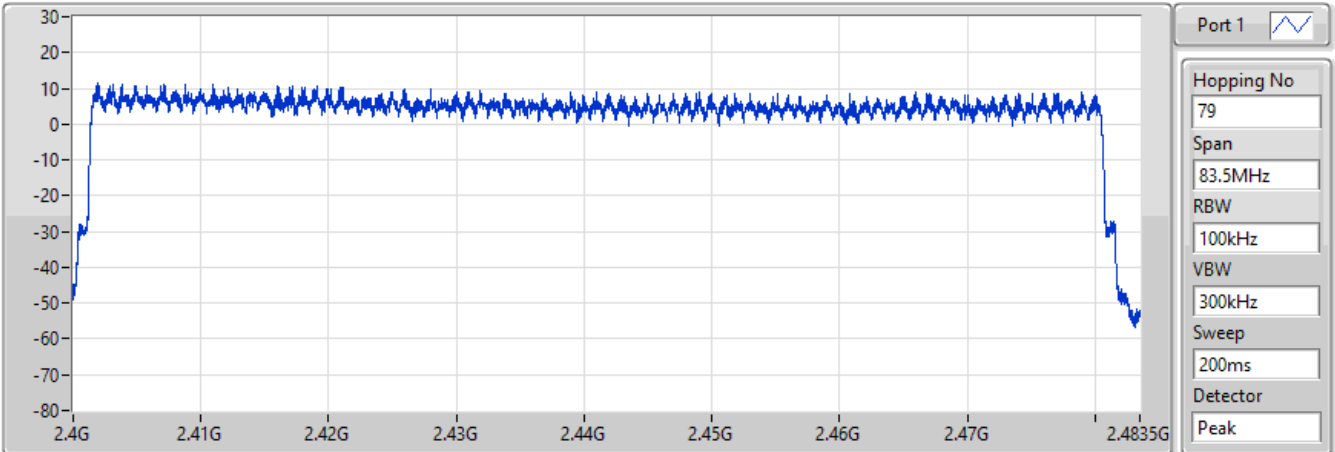


2.4-2.4835GHz_BT-EDR(3Mbps)

Hopping-FS

2440MHz

09/02/2023



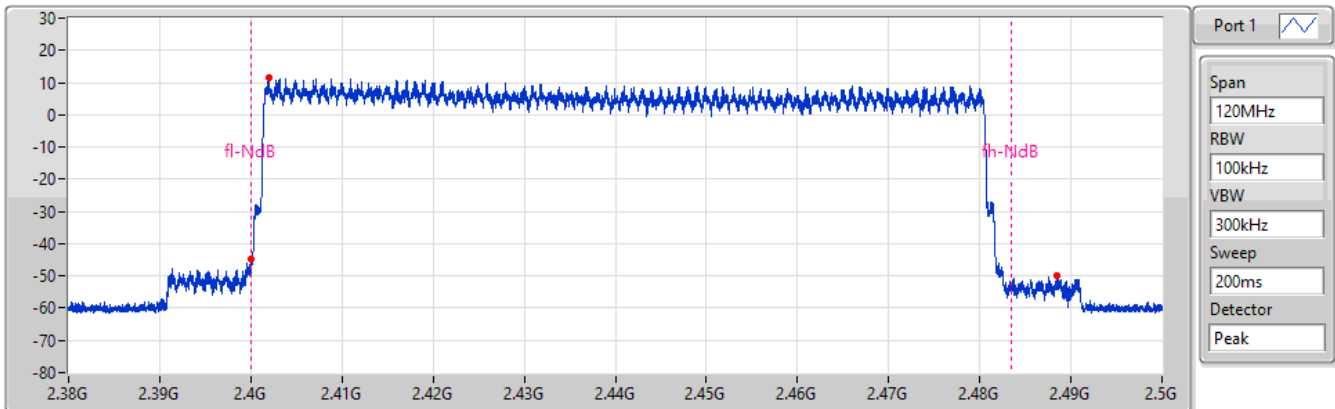
Hopping No	Limit
79	15

2.4-2.4835GHz_BT-EDR(3Mbps)

2440MHz

Hopping Ch Bandedge (Non-restricted Band)

09/02/2023



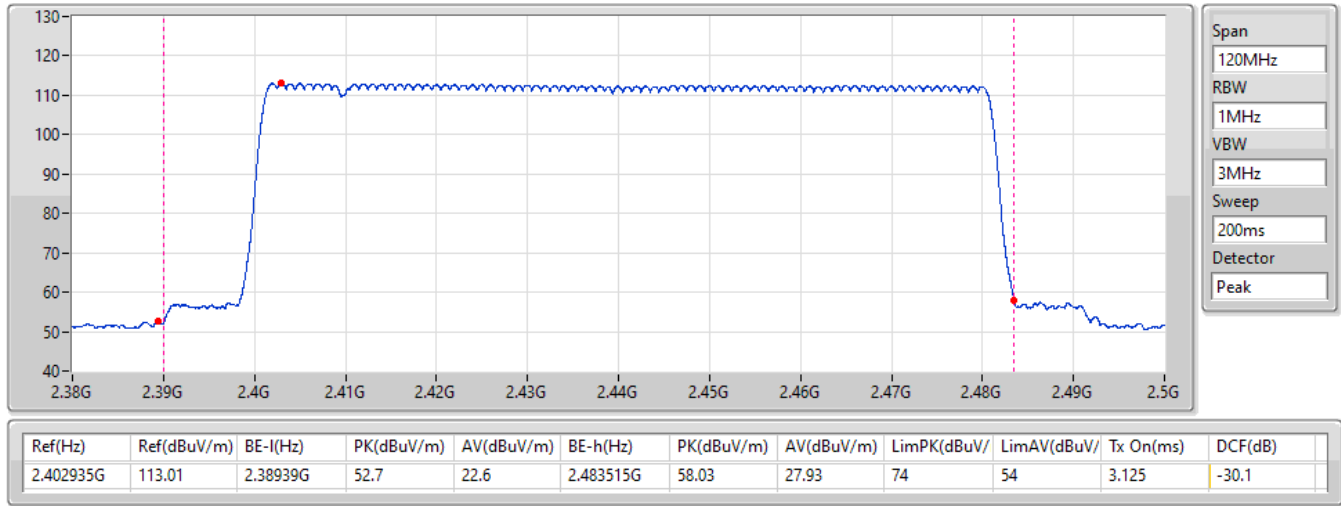
Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-8.56	2.401975G	11.44	2.39995G	-44.71	2.488465G	-49.91

2.4-2.4835GHz_BT-EDR(3Mbps)

2440MHz

Hopping Ch Bandedge (Restricted Band)

09/02/2023





Summary

Mode	Max-Dwell (s)
2.4-2.4835GHz	-
BT-BR(1Mbps)	307.72755m_DH5
BT-EDR(2Mbps)	308.1806m_DH5
BT-EDR(3Mbps)	308.4471m_DH5

Result

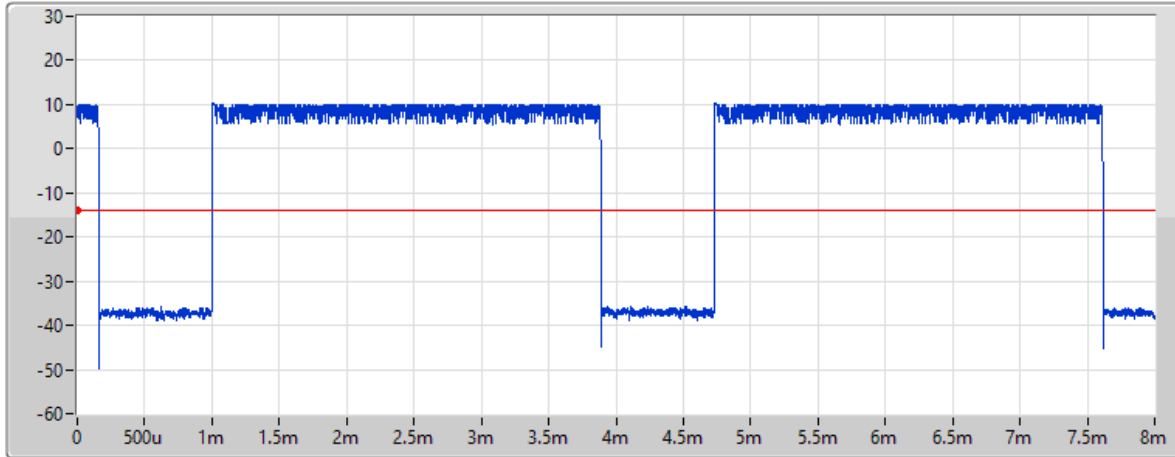
Mode	Result	Period (s)	Dwell (s)	Limit (s)	Tx On (s)
BT-BR(1Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	307.72755m_DH5	400m	2.88675m
2440MHz	Pass	8	153.863775m_DH5-AFH	400m	2.88675m
BT-EDR(2Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	308.1806m_DH5	400m	2.891m
2440MHz	Pass	8	154.0903m_DH5-AFH	400m	2.891m
BT-EDR(3Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	308.4471m_DH5	400m	2.8935m
2440MHz	Pass	8	154.210225m_DH5-AFH	400m	2.89325m

2.4-2.4835GHz_BT-BR(1Mbps)

Dwell-FS

2440MHz

09/02/2023



Port 1 

Ch Freq
2.44GHz

RBW
300kHz

VBW
1MHz

Sweep Time
8ms

TX Time
2.88675ms

Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	307.72755m_DH5	400m	2.88675m

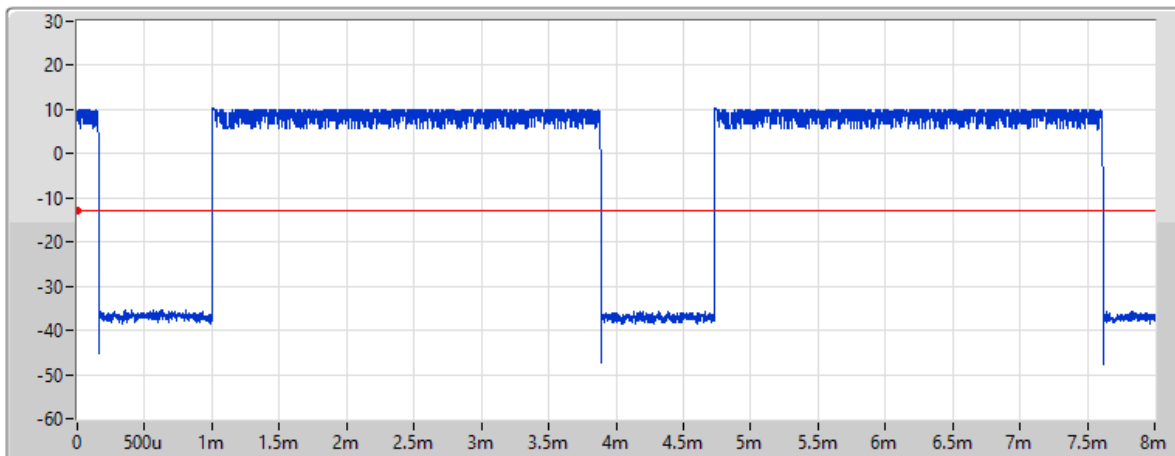
DH5

2.4-2.4835GHz_BT-BR(1Mbps)

Dwell-FS

2440MHz

09/02/2023



Port 1 

Ch Freq
2.44GHz

RBW
300kHz

VBW
1MHz

Sweep Time
8ms

TX Time
2.88675ms

Period(s)	Dwell(s)	Limit(s)	Tx On(s)
8	153.863775m_DH5-AFI	400m	2.88675m

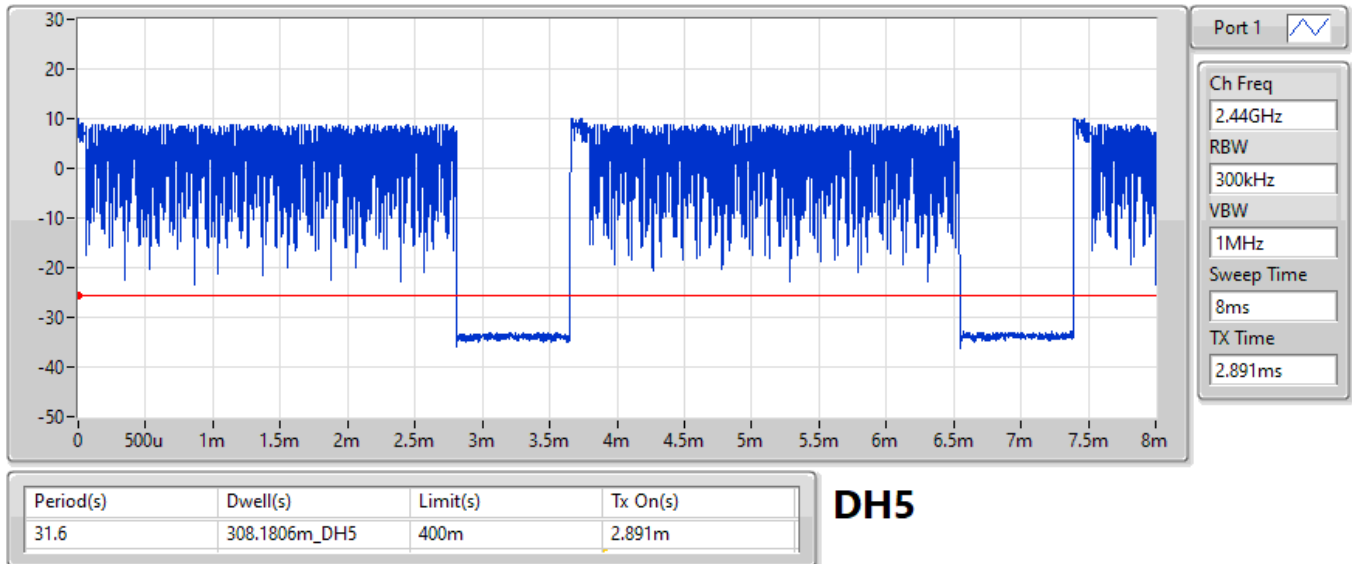
DH5-AFH

2.4-2.4835GHz_BT-EDR(2Mbps)

Dwell-FS

2440MHz

09/02/2023

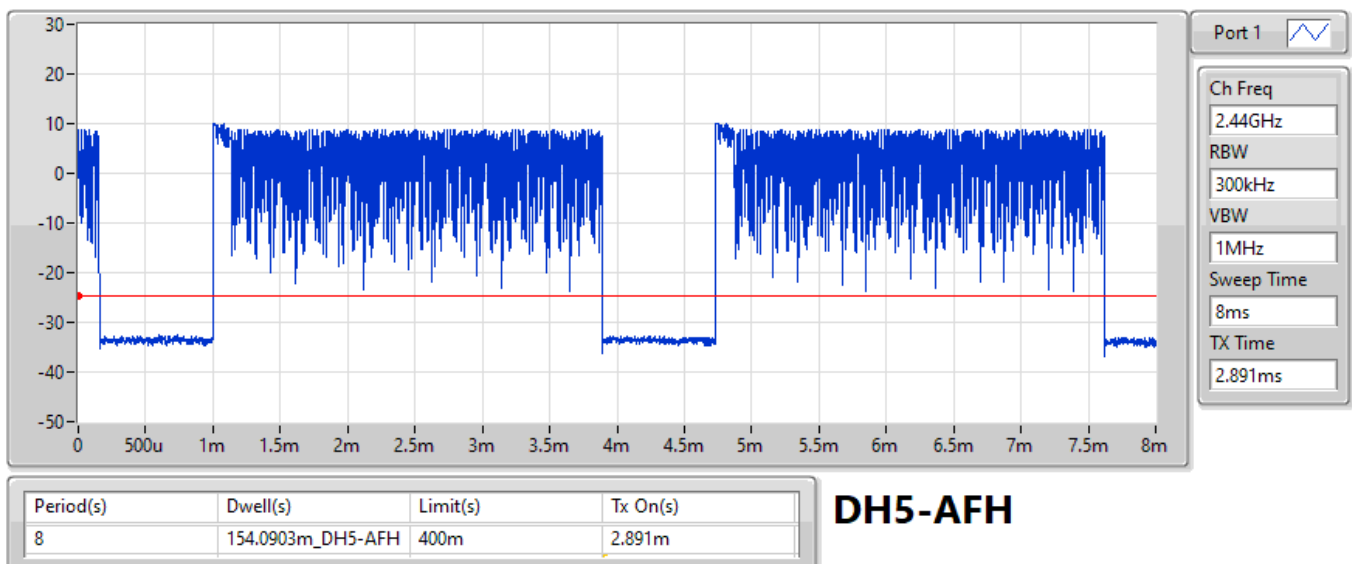


2.4-2.4835GHz_BT-EDR(2Mbps)

Dwell-FS

2440MHz

09/02/2023

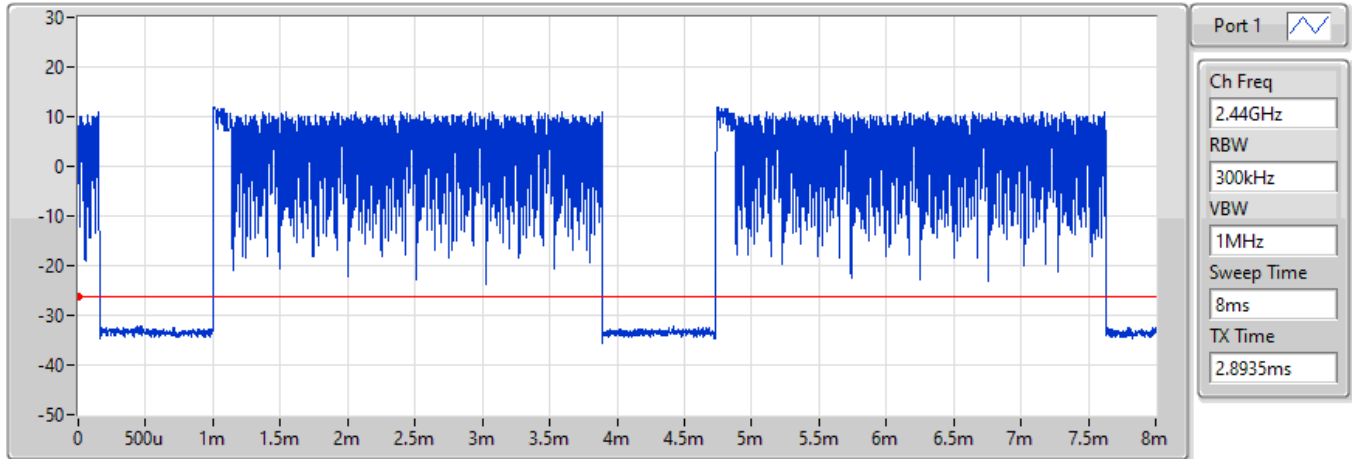


2.4-2.4835GHz_BT-EDR(3Mbps)

Dwell-FS

2440MHz

09/02/2023



Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	308.4471m_DH5	400m	2.8935m

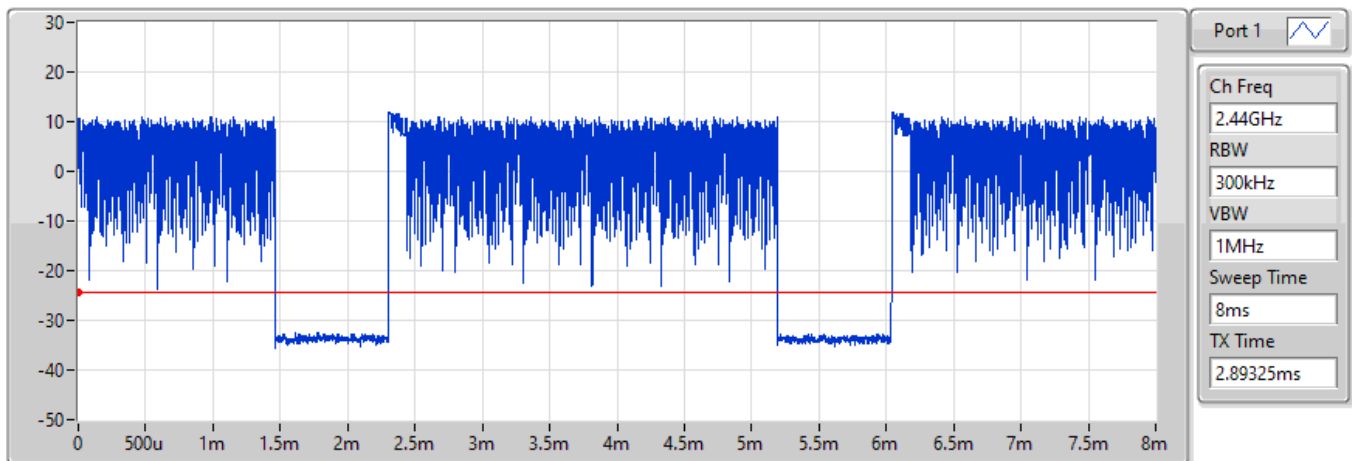
DH5

2.4-2.4835GHz_BT-EDR(3Mbps)

Dwell-FS

2440MHz

09/02/2023



Period(s)	Dwell(s)	Limit(s)	Tx On(s)
8	154.210225m_DH5-AFH	400m	2.89325m

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	2.40167G	11.26	-8.74	2.12385G	-53.76	2.39152G	-45.87	2.4G	-49.75	2.50214G	-52.46	21.61146G	-43.21	1
BT-EDR(2Mbps)	Pass	2.402G	9.83	-10.17	1.86653G	-54.17	2.39976G	-45.90	2.4G	-47.06	2.50046G	-52.38	21.66208G	-44.15	1
BT-EDR(3Mbps)	Pass	2.40167G	10.59	-9.41	1.7925G	-54.70	2.39988G	-45.77	2.4G	-45.23	2.50254G	-52.65	21.6199G	-43.25	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	2.40167G	11.26	-8.74	2.12385G	-53.76	2.39152G	-45.87	2.4G	-49.75	2.50214G	-52.46	21.61146G	-43.21	1
2440MHz	Pass	2.44092G	10.18	-9.82	2.1215G	-54.67	2.39808G	-51.83	2.4G	-56.48	2.50218G	-52.20	21.58897G	-44.11	1
2480MHz	Pass	2.47983G	10.89	-9.11	2.19905G	-54.32	2.39132G	-51.95	2.4G	-54.88	2.50014G	-51.35	21.66208G	-44.77	1
BT-EDR(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.402G	9.83	-10.17	1.86653G	-54.17	2.39976G	-45.90	2.4G	-47.06	2.50046G	-52.38	21.66208G	-44.15	1
2440MHz	Pass	2.43991G	9.01	-10.99	1.72435G	-54.12	2.39728G	-52.53	2.4G	-55.80	2.5011G	-51.61	21.86736G	-44.28	1
2480MHz	Pass	2.48016G	8.05	-11.95	2.30598G	-54.40	2.39152G	-51.92	2.4G	-54.81	2.50234G	-51.79	21.59178G	-43.47	1
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.40167G	10.59	-9.41	1.7925G	-54.70	2.39988G	-45.77	2.4G	-45.23	2.50254G	-52.65	21.6199G	-43.25	1
2440MHz	Pass	2.44008G	8.53	-11.47	1.64445G	-54.22	2.39584G	-52.24	2.4G	-54.74	2.50058G	-51.90	21.59459G	-43.21	1
2480MHz	Pass	2.47999G	10.92	-9.08	1.6327G	-54.08	2.39092G	-51.69	2.4G	-55.96	2.50186G	-52.53	21.93204G	-44.07	1

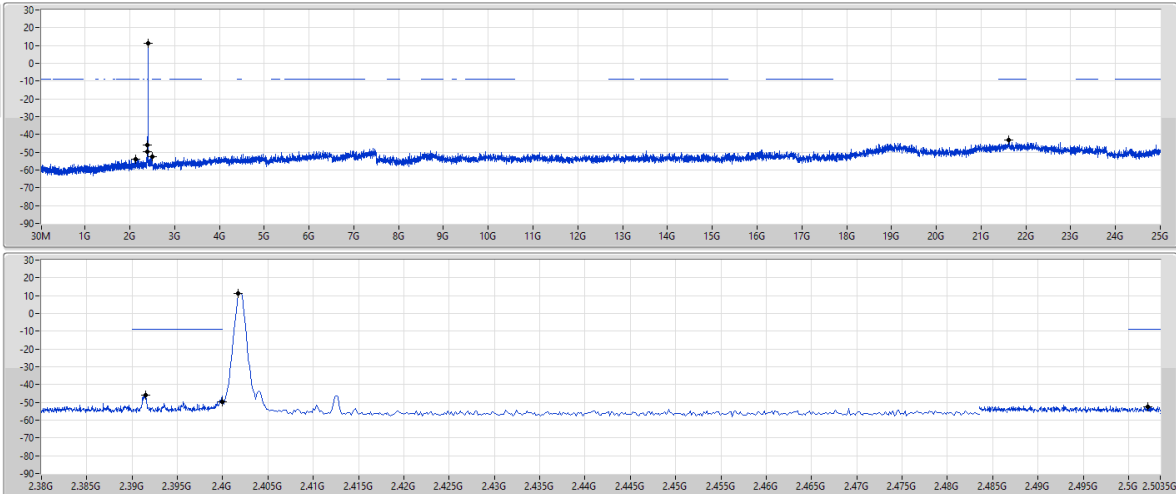
2.4-2.4835GHz_BT-BR(1Mbps)

CSEndB-FS

2402MHz

09/02/2023

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



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.40167G	11.26	-8.74	2.12385G	-53.76	2.39152G	-45.87	2.4G	-49.75	2.50214G	-52.46	2.161146G	-43.21	1

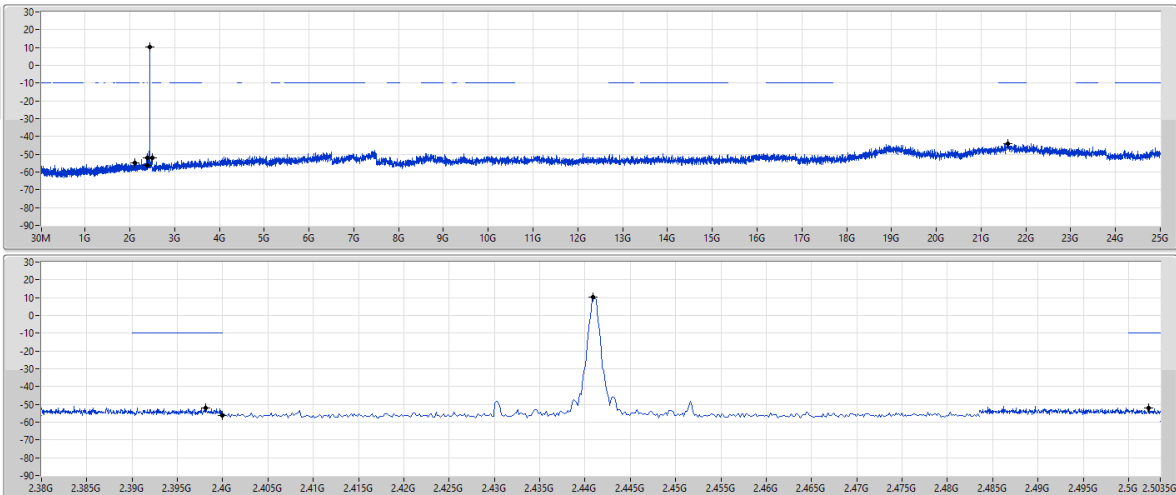
2.4-2.4835GHz_BT-BR(1Mbps)

CSEndB-FS

2440MHz

09/02/2023

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

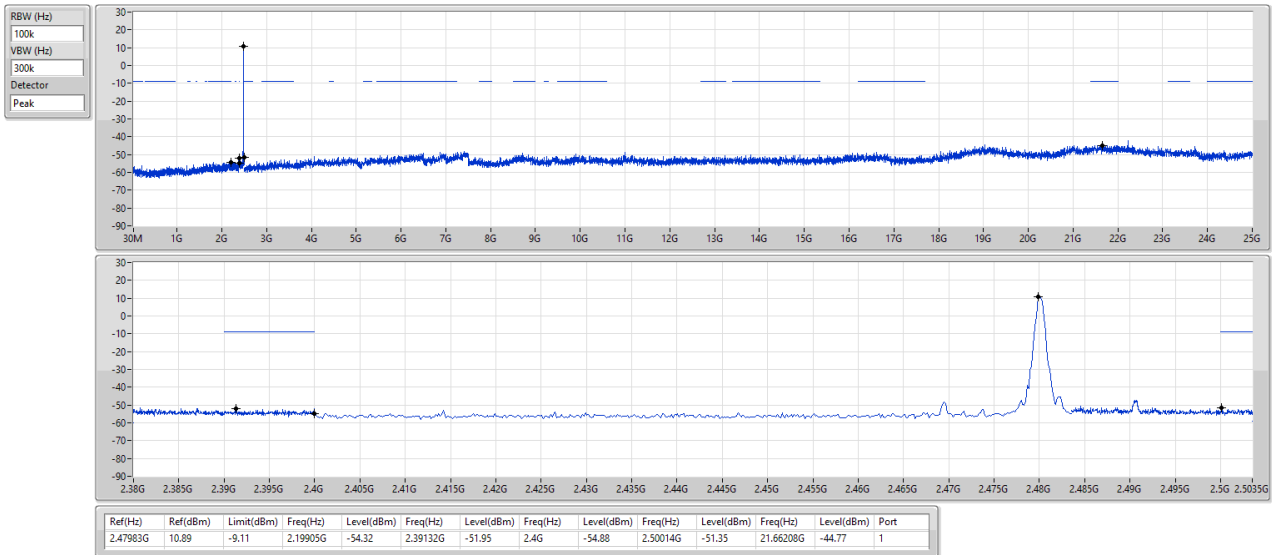


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.44092G	10.18	-9.82	2.1215G	-54.67	2.3908G	-51.83	2.4G	-56.48	2.50218G	-52.20	2.15897G	-44.11	1

2.4-2.4835GHz_BT-BR(1Mbps)

CSEndB-FS

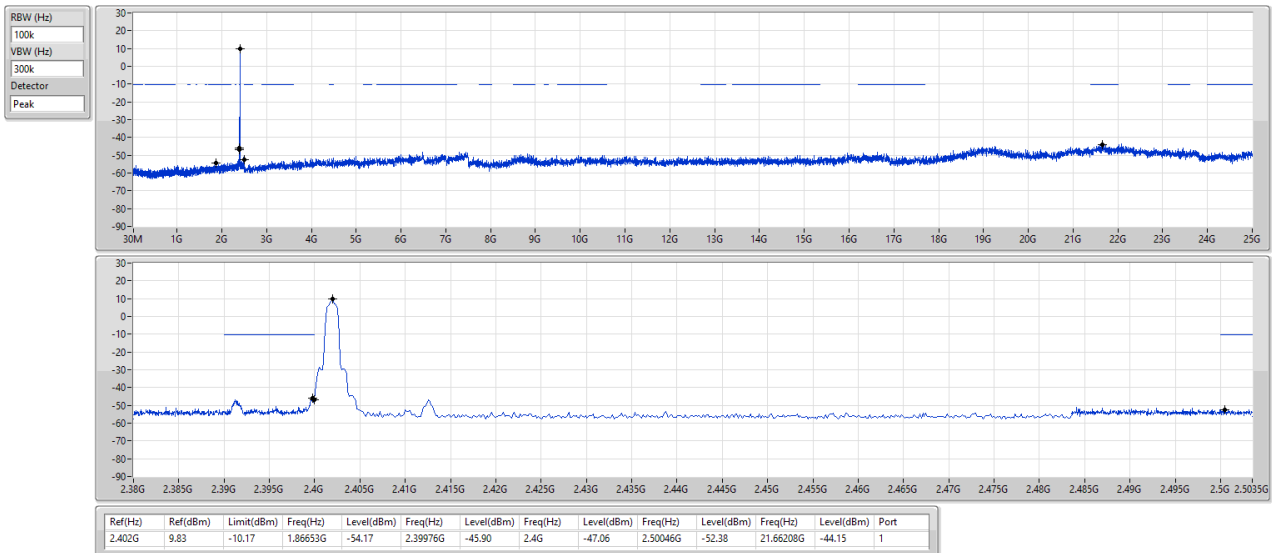
2480MHz



2.4-2.4835GHz_BT-EDR(2Mbps)

CSEndB-FS

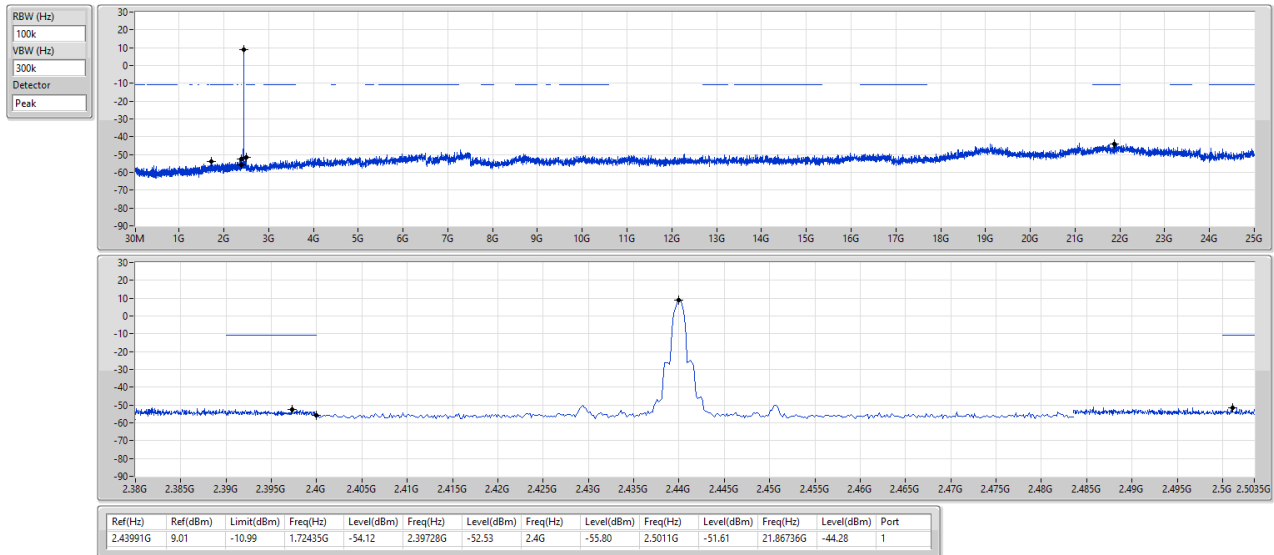
2402MHz



2.4-2.4835GHz_BT-EDR(2Mbps)

CSEndB-FS

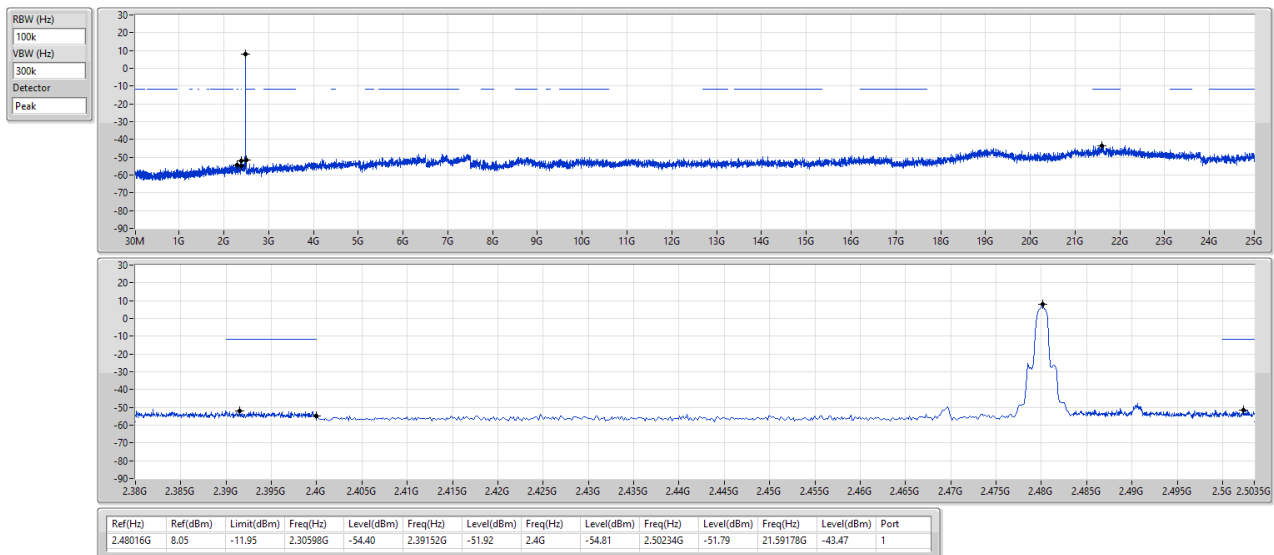
2440MHz



2.4-2.4835GHz_BT-EDR(2Mbps)

CSEndB-FS

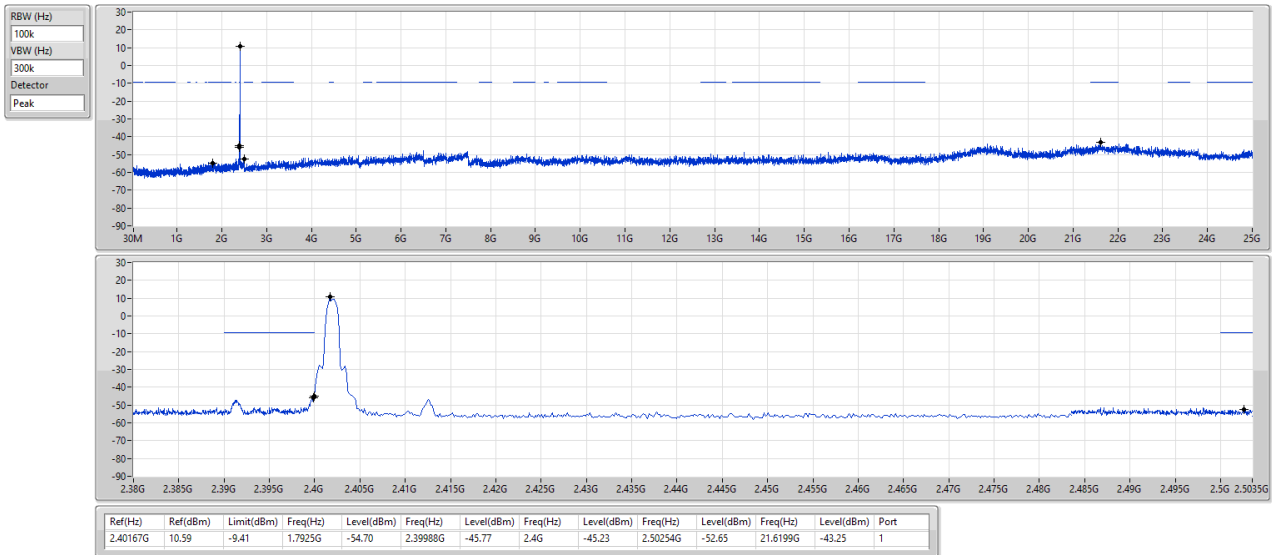
2480MHz



2.4-2.4835GHz_BT-EDR(3Mbps)

CSEndB-FS

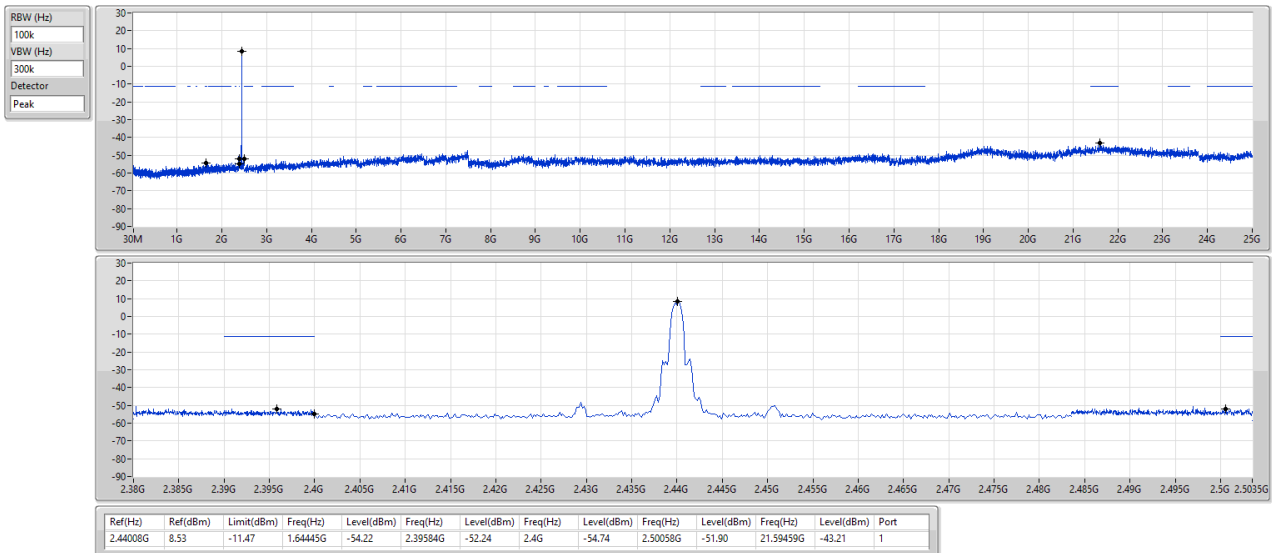
2402MHz



2.4-2.4835GHz_BT-EDR(3Mbps)

CSEndB-FS

2440MHz



2.4-2.4835GHz_BT-EDR(3Mbps)

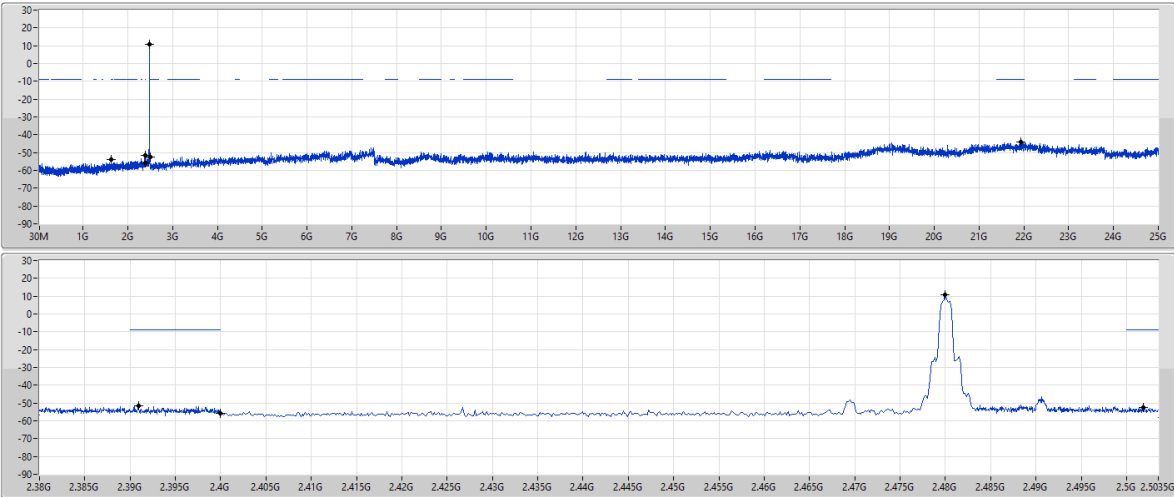
CSEndB-FS

2480MHz

09/02/2023

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

Port 1



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
2.47999G	10.92	-9.08	1.6327G	-54.08	2.39092G	-51.69	2.4G	-55.96	2.50186G	-52.53	21.93204G	-44.07	1



Summary

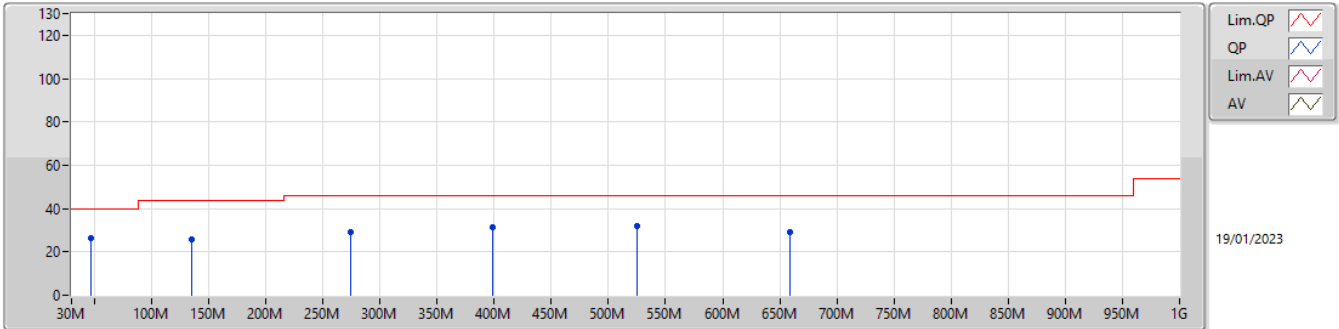
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
BT-BR(1Mbps)	Pass	PK	45.52M	36.63	40.00	-3.37	3	Horizontal	0	1.00	-

**Result**

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-BR(1Mbps)	-	-	-	-	-	-	-	-	-	-	-
2440MHz	Pass	PK	134.76M	25.93	43.50	-17.57	3	Vertical	360	1.00	-
2440MHz	Pass	PK	274.44M	29.11	46.00	-16.89	3	Vertical	360	1.00	-
2440MHz	Pass	PK	398.6M	31.26	46.00	-14.74	3	Vertical	360	1.00	-
2440MHz	Pass	PK	524.7M	31.66	46.00	-14.34	3	Vertical	360	1.00	-
2440MHz	Pass	PK	658.56M	29.14	46.00	-16.86	3	Vertical	360	1.00	-
2440MHz	Pass	QP	47.46M	26.48	40.00	-13.52	3	Vertical	167	1.00	-
2440MHz	Pass	PK	45.52M	36.63	40.00	-3.37	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	214.3M	35.26	43.50	-8.24	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	274.44M	40.42	46.00	-5.58	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	400.54M	32.41	46.00	-13.59	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	524.7M	31.17	46.00	-14.83	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	920.46M	36.79	46.00	-9.21	3	Horizontal	0	1.00	-

2.4-2.4835GHz_BT-BR(1Mbps)

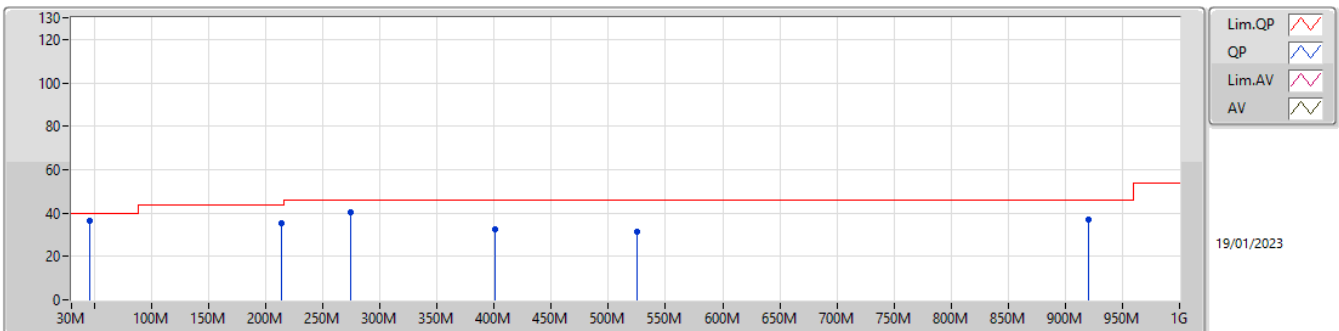
2440MHz_Fixture



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	134.76M	25.93	43.50	-17.57	-8.69	3	Vertical	360	1.00	34.62	16.77	2.27	27.73
PK	274.44M	29.11	46.00	-16.89	-6.01	3	Vertical	360	1.00	35.12	18.00	3.16	27.17
PK	398.6M	31.26	46.00	-14.74	-3.15	3	Vertical	360	1.00	34.41	20.89	3.79	27.83
PK	524.7M	31.66	46.00	-14.34	-1.27	3	Vertical	360	1.00	32.93	22.76	4.46	28.49
PK	658.56M	29.14	46.00	-16.86	1.52	3	Vertical	360	1.00	27.62	24.87	5.17	28.52
QP	47.46M	26.48	40.00	-13.52	-11.46	3	Vertical	167	1.00	37.94	14.39	1.44	27.29

2.4-2.4835GHz_BT-BR(1Mbps)

2440MHz_Fixture



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	45.52M	36.63	40.00	-3.37	-10.53	3	Horizontal	0	1.00	47.16	15.21	1.45	27.19
PK	214.3M	35.26	43.50	-8.24	-10.37	3	Horizontal	0	1.00	45.63	14.10	2.87	27.34
PK	274.44M	40.42	46.00	-5.58	-6.01	3	Horizontal	0	1.00	46.43	18.00	3.16	27.17
PK	400.54M	32.41	46.00	-13.59	-2.94	3	Horizontal	0	1.00	35.35	21.00	3.90	27.84
PK	524.7M	31.17	46.00	-14.83	-1.27	3	Horizontal	0	1.00	32.44	22.76	4.46	28.49
PK	920.46M	36.79	46.00	-9.21	4.40	3	Horizontal	0	1.00	32.39	25.78	6.28	27.66



Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-
BT-BR(1Mbps)	Pass	PK	2.4968G	58.82	74.00	-15.18	3	Vertical	206	1.93
BT-EDR(3Mbps)	Pass	PK	2.3748G	58.43	74.00	-15.57	3	Horizontal	23	1.92

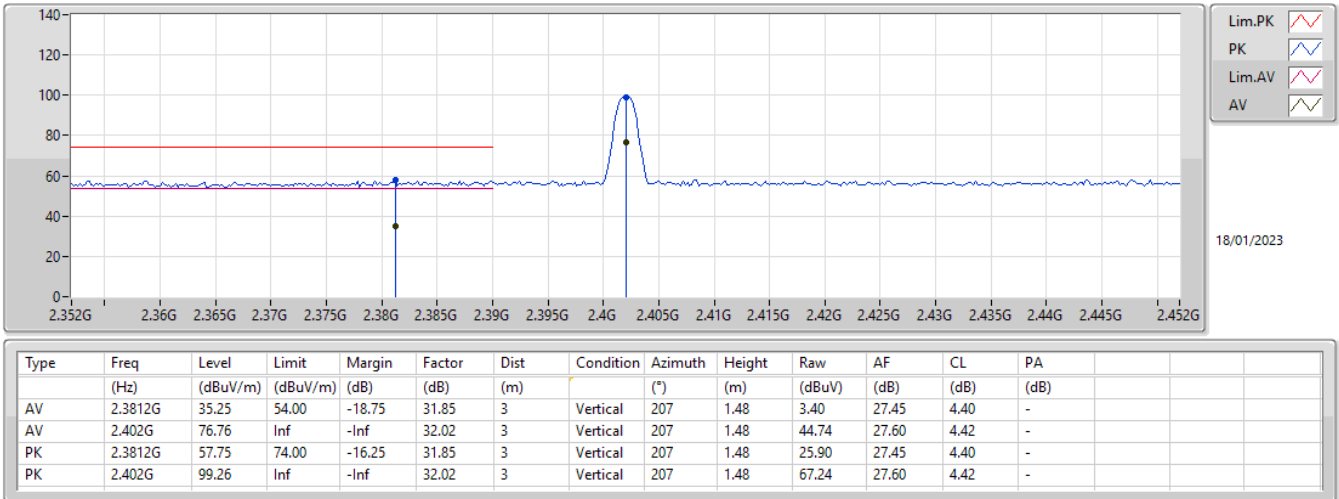
Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
BT-BR(1Mbps)	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3812G	35.25	54.00	-18.75	3	Vertical	207	1.48
2402MHz	Pass	AV	2.402G	76.76	Inf	-Inf	3	Vertical	207	1.48
2402MHz	Pass	PK	2.3812G	57.75	74.00	-16.25	3	Vertical	207	1.48
2402MHz	Pass	PK	2.402G	99.26	Inf	-Inf	3	Vertical	207	1.48
2402MHz	Pass	AV	2.3546G	34.89	54.00	-19.11	3	Horizontal	19	1.97
2402MHz	Pass	AV	2.402G	84.85	Inf	-Inf	3	Horizontal	19	1.97
2402MHz	Pass	PK	2.3546G	57.39	74.00	-16.61	3	Horizontal	19	1.97
2402MHz	Pass	PK	2.402G	107.35	Inf	-Inf	3	Horizontal	19	1.97
2402MHz	Pass	AV	4.80433G	19.33	54.00	-34.67	3	Vertical	31	2.93
2402MHz	Pass	PK	4.80433G	41.83	74.00	-32.17	3	Vertical	31	2.93
2402MHz	Pass	AV	4.8036G	21.09	54.00	-32.91	3	Horizontal	86	2.77
2402MHz	Pass	PK	4.8036G	43.59	74.00	-30.41	3	Horizontal	86	2.77
2440MHz	Pass	AV	2.3744G	35.59	54.00	-18.41	3	Vertical	206	1.93
2440MHz	Pass	AV	2.44G	74.62	Inf	-Inf	3	Vertical	206	1.93
2440MHz	Pass	AV	2.4968G	36.32	54.00	-17.68	3	Vertical	206	1.93
2440MHz	Pass	PK	2.3744G	58.09	74.00	-15.91	3	Vertical	206	1.93
2440MHz	Pass	PK	2.44G	97.12	Inf	-Inf	3	Vertical	206	1.93
2440MHz	Pass	PK	2.4968G	58.82	74.00	-15.18	3	Vertical	206	1.93
2440MHz	Pass	AV	2.3744G	34.61	54.00	-19.39	3	Horizontal	24	1.92
2440MHz	Pass	AV	2.44G	85.65	Inf	-Inf	3	Horizontal	24	1.92
2440MHz	Pass	AV	2.4876G	35.51	54.00	-18.49	3	Horizontal	24	1.92
2440MHz	Pass	PK	2.3744G	57.11	74.00	-16.89	3	Horizontal	24	1.92
2440MHz	Pass	PK	2.44G	108.15	Inf	-Inf	3	Horizontal	24	1.92
2440MHz	Pass	PK	2.4876G	58.01	74.00	-15.99	3	Horizontal	24	1.92
2440MHz	Pass	PK	4.87954G	41.31	74.00	-32.69	3	Vertical	85	1.00
2440MHz	Pass	AV	4.87954G	18.81	54.00	-35.19	3	Vertical	85	1.00
2440MHz	Pass	PK	4.8801G	42.66	74.00	-31.34	3	Horizontal	287	1.09
2440MHz	Pass	AV	4.8801G	20.16	54.00	-33.84	3	Horizontal	287	1.09
2480MHz	Pass	AV	2.48G	72.98	Inf	-Inf	3	Vertical	14	1.28
2480MHz	Pass	AV	2.4932G	35.82	54.00	-18.18	3	Vertical	14	1.28
2480MHz	Pass	PK	2.48G	95.48	Inf	-Inf	3	Vertical	14	1.28
2480MHz	Pass	PK	2.4932G	58.32	74.00	-15.68	3	Vertical	14	1.28
2480MHz	Pass	AV	2.48G	86.75	Inf	-Inf	3	Horizontal	24	2.88
2480MHz	Pass	AV	2.4962G	35.50	54.00	-18.50	3	Horizontal	24	2.88
2480MHz	Pass	PK	2.48G	109.25	Inf	-Inf	3	Horizontal	24	2.88
2480MHz	Pass	PK	2.4962G	58.00	74.00	-16.00	3	Horizontal	24	2.88
2480MHz	Pass	AV	4.9622G	20.30	54.00	-33.70	3	Vertical	305	1.50
2480MHz	Pass	PK	4.9622G	42.80	74.00	-31.20	3	Vertical	305	1.50
2480MHz	Pass	AV	4.96428G	18.56	54.00	-35.44	3	Horizontal	82	1.05
2480MHz	Pass	PK	4.96428G	41.06	74.00	-32.94	3	Horizontal	82	1.05
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3782G	34.86	54.00	-19.14	3	Vertical	207	1.46
2402MHz	Pass	AV	2.4022G	74.77	Inf	-Inf	3	Vertical	207	1.46
2402MHz	Pass	PK	2.3782G	57.36	74.00	-16.64	3	Vertical	207	1.46
2402MHz	Pass	PK	2.4022G	97.27	Inf	-Inf	3	Vertical	207	1.46
2402MHz	Pass	AV	2.3882G	34.91	54.00	-19.09	3	Horizontal	21	2.73
2402MHz	Pass	AV	2.402G	85.10	Inf	-Inf	3	Horizontal	21	2.73
2402MHz	Pass	PK	2.3882G	57.41	74.00	-16.59	3	Horizontal	21	2.73
2402MHz	Pass	PK	2.402G	107.60	Inf	-Inf	3	Horizontal	21	2.73
2402MHz	Pass	AV	4.79906G	21.08	54.00	-32.92	3	Vertical	10	1.50
2402MHz	Pass	PK	4.79906G	43.58	74.00	-30.42	3	Vertical	10	1.50
2402MHz	Pass	AV	4.8043G	19.15	54.00	-34.85	3	Horizontal	86	1.18
2402MHz	Pass	PK	4.8043G	41.65	74.00	-32.35	3	Horizontal	86	1.18
2440MHz	Pass	AV	2.3712G	34.91	54.00	-19.09	3	Vertical	206	1.93
2440MHz	Pass	AV	2.44G	73.27	Inf	-Inf	3	Vertical	206	1.93
2440MHz	Pass	AV	2.484G	35.73	54.00	-18.27	3	Vertical	206	1.93
2440MHz	Pass	PK	2.3712G	57.41	74.00	-16.59	3	Vertical	206	1.93
2440MHz	Pass	PK	2.44G	95.77	Inf	-Inf	3	Vertical	206	1.93
2440MHz	Pass	PK	2.484G	58.23	74.00	-15.77	3	Vertical	206	1.93
2440MHz	Pass	AV	2.3748G	35.93	54.00	-18.07	3	Horizontal	23	1.92

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
2440MHz	Pass	AV	2.44G	84.45	Inf	-Inf	3	Horizontal	23	1.92
2440MHz	Pass	AV	2.492G	35.12	54.00	-18.88	3	Horizontal	23	1.92
2440MHz	Pass	PK	2.3748G	58.43	74.00	-15.57	3	Horizontal	23	1.92
2440MHz	Pass	PK	2.44G	106.95	Inf	-Inf	3	Horizontal	23	1.92
2440MHz	Pass	PK	2.492G	57.62	74.00	-16.38	3	Horizontal	23	1.92
2440MHz	Pass	AV	4.88026G	19.76	54.00	-34.24	3	Vertical	72	1.48
2440MHz	Pass	PK	4.88026G	42.26	74.00	-31.74	3	Vertical	72	1.48
2440MHz	Pass	AV	4.88004G	19.56	54.00	-34.44	3	Horizontal	83	3.00
2440MHz	Pass	PK	4.88004G	42.06	74.00	-31.94	3	Horizontal	83	3.00
2480MHz	Pass	AV	2.48G	78.11	Inf	-Inf	3	Vertical	57	2.85
2480MHz	Pass	AV	2.4942G	35.32	54.00	-18.68	3	Vertical	57	2.85
2480MHz	Pass	PK	2.48G	100.61	Inf	-Inf	3	Vertical	57	2.85
2480MHz	Pass	PK	2.4942G	57.82	74.00	-16.18	3	Vertical	57	2.85
2480MHz	Pass	AV	2.48G	85.50	Inf	-Inf	3	Horizontal	23	2.88
2480MHz	Pass	AV	2.4888G	35.37	54.00	-18.63	3	Horizontal	23	2.88
2480MHz	Pass	PK	2.48G	108.00	Inf	-Inf	3	Horizontal	23	2.88
2480MHz	Pass	PK	2.4888G	57.87	74.00	-16.13	3	Horizontal	23	2.88
2480MHz	Pass	AV	4.96168G	19.59	54.00	-34.41	3	Vertical	33	1.40
2480MHz	Pass	PK	4.96168G	42.09	74.00	-31.91	3	Vertical	33	1.40
2480MHz	Pass	AV	4.96434G	20.84	54.00	-33.16	3	Horizontal	289	1.50
2480MHz	Pass	PK	4.96434G	43.34	74.00	-30.66	3	Horizontal	289	1.50

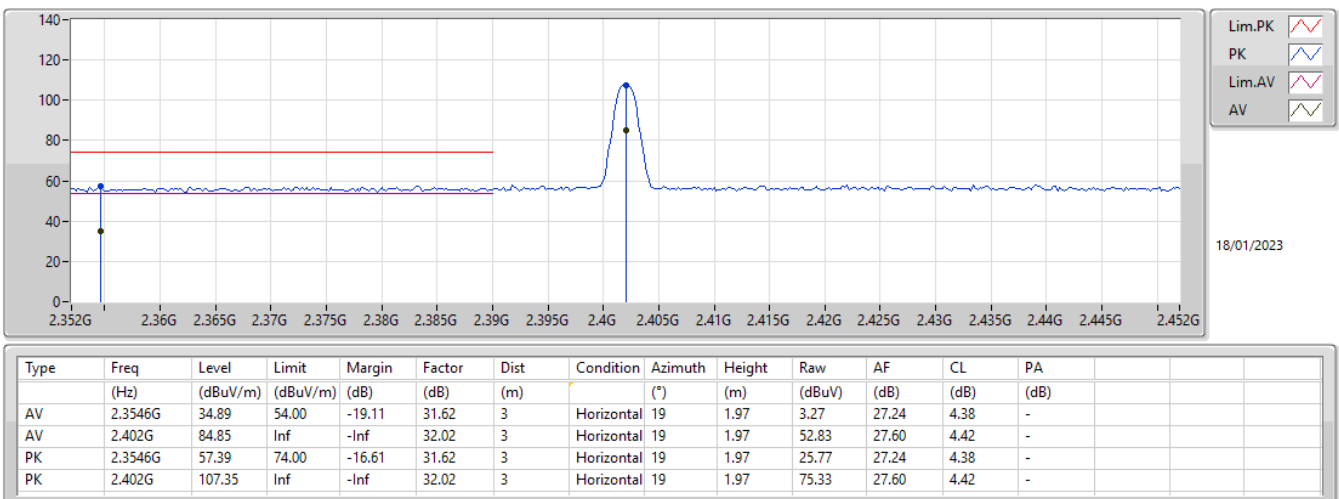
2.4-2.4835GHz_BT-BR(1Mbps)

2402MHz_TX



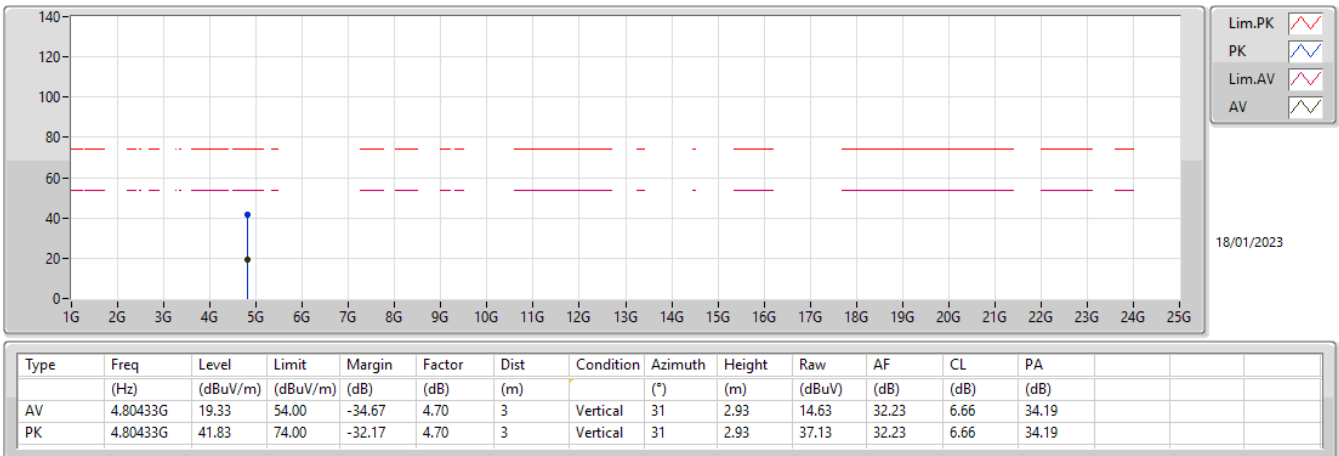
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2402MHz_TX



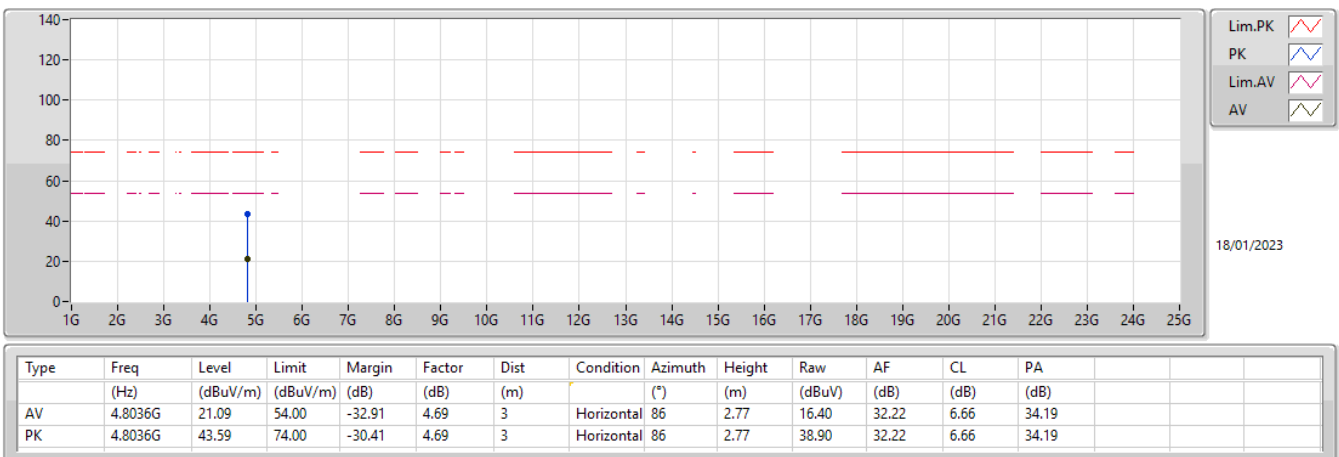
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2402MHz_TX



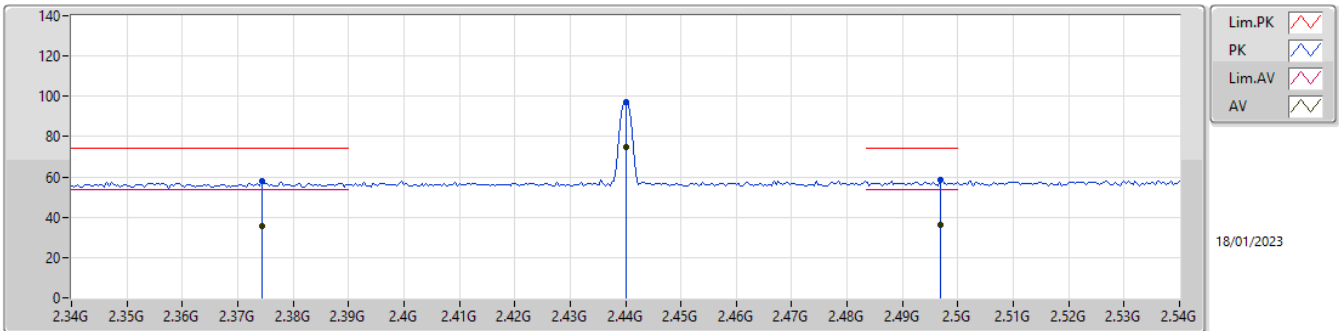
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2402MHz_TX



2.4-2.4835GHz_BT-BR(1Mbps)

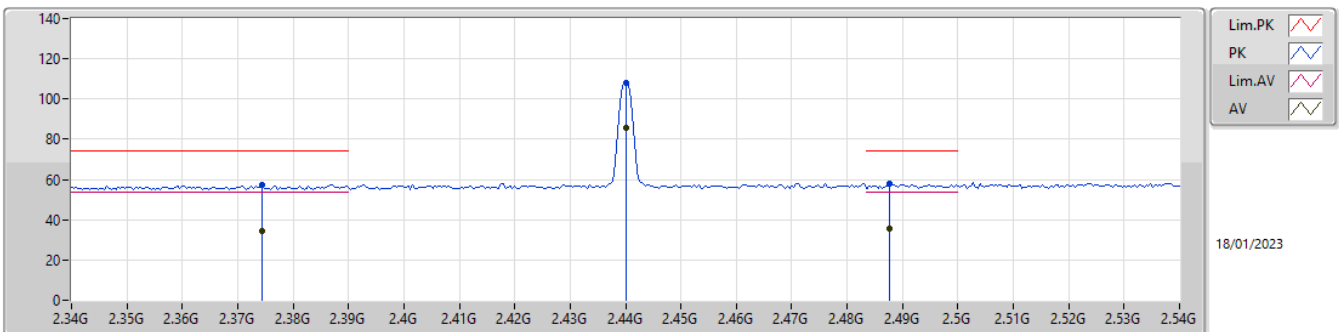
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Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Raw	AF	CL	PA				
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	(dBuV)	(dB)	(dB)	(dB)				
AV	2.3744G	35.59	54.00	-18.41	31.80	3	Vertical	206	1.93	3.79	27.40	4.40	-				
AV	2.44G	74.62	Inf	-Inf	32.14	3	Vertical	206	1.93	42.48	27.68	4.46	-				
AV	2.4968G	36.32	54.00	-17.68	32.41	3	Vertical	206	1.93	3.91	27.89	4.52	-				
PK	2.3744G	58.09	74.00	-15.91	31.80	3	Vertical	206	1.93	26.29	27.40	4.40	-				
PK	2.44G	97.12	Inf	-Inf	32.14	3	Vertical	206	1.93	64.98	27.68	4.46	-				
PK	2.4968G	58.82	74.00	-15.18	32.41	3	Vertical	206	1.93	26.41	27.89	4.52	-				

2.4-2.4835GHz_BT-BR(1Mbps)

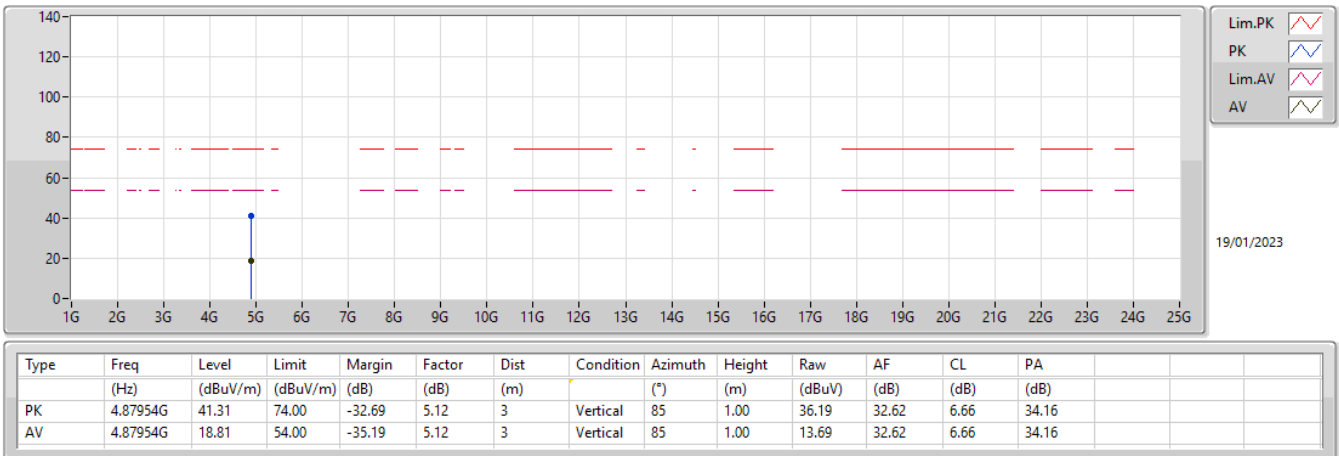
2440MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Raw	AF	CL	PA				
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	(dBuV)	(dB)	(dB)	(dB)				
AV	2.3744G	34.61	54.00	-19.39	31.80	3	Horizontal	24	1.92	2.81	27.40	4.40	-				
AV	2.44G	85.65	Inf	-Inf	32.14	3	Horizontal	24	1.92	53.51	27.68	4.46	-				
AV	2.4876G	35.51	54.00	-18.49	32.36	3	Horizontal	24	1.92	3.15	27.85	4.51	-				
PK	2.3744G	57.11	74.00	-16.89	31.80	3	Horizontal	24	1.92	25.31	27.40	4.40	-				
PK	2.44G	108.15	Inf	-Inf	32.14	3	Horizontal	24	1.92	76.01	27.68	4.46	-				
PK	2.4876G	58.01	74.00	-15.99	32.36	3	Horizontal	24	1.92	25.65	27.85	4.51	-				

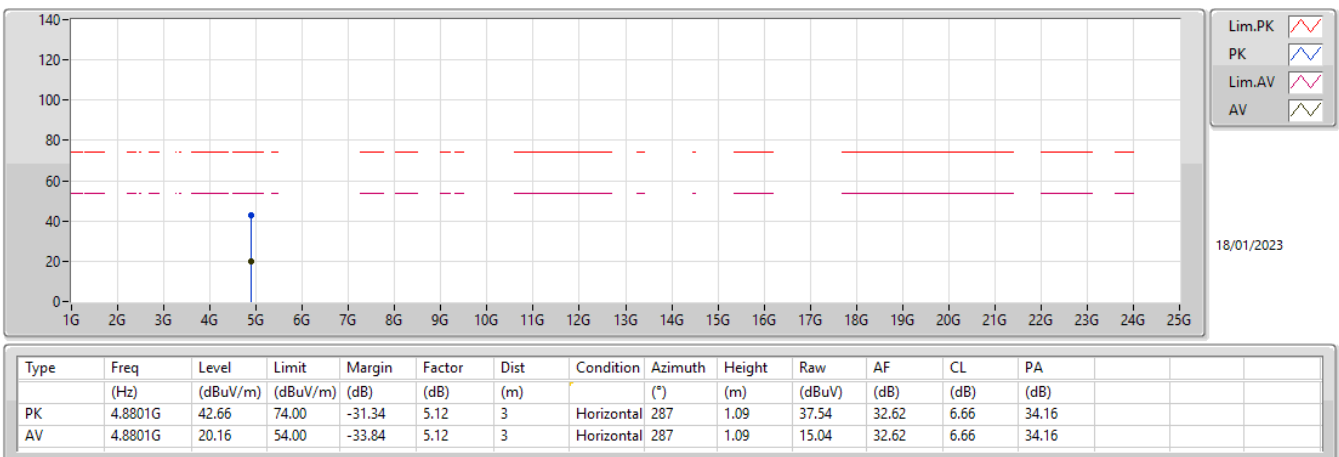
2.4-2.4835GHz_BT-BR(1Mbps)

2440MHz_TX



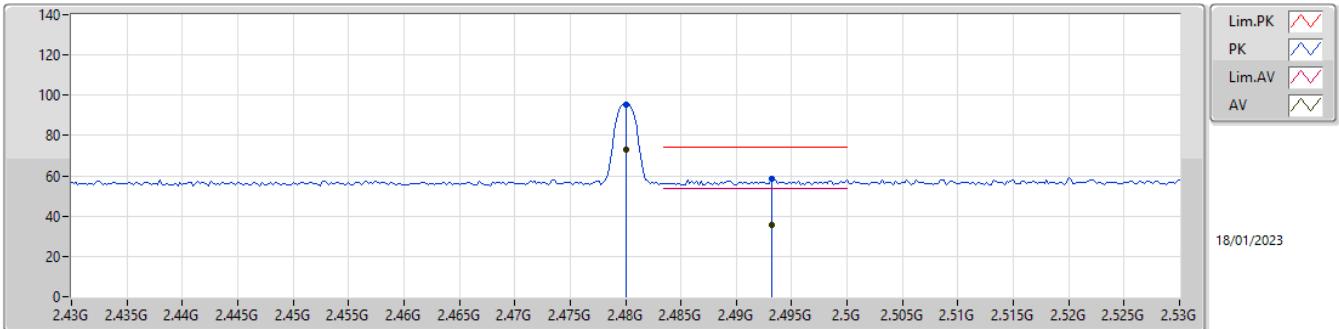
2.4-2.4835GHz_BT-BR(1Mbps)

2440MHz_TX



2.4-2.4835GHz_BT-BR(1Mbps)

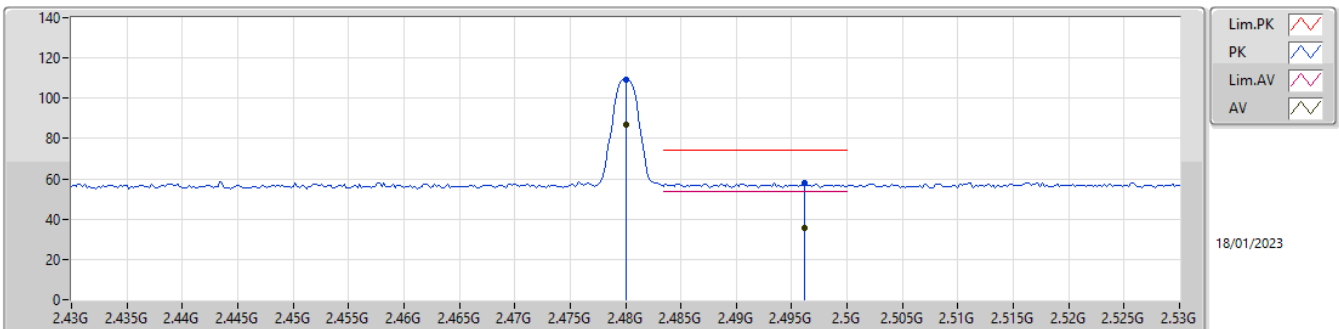
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	(dBuV)	(dB)	(dB)	(dB)
AV	2.48G	72.98	Inf	-Inf	32.32	3	Vertical	14	1.28	40.66	27.82	4.50	-
AV	2.4932G	35.82	54.00	-18.18	32.39	3	Vertical	14	1.28	3.43	27.87	4.52	-
PK	2.48G	95.48	Inf	-Inf	32.32	3	Vertical	14	1.28	63.16	27.82	4.50	-
PK	2.4932G	58.32	74.00	-15.68	32.39	3	Vertical	14	1.28	25.93	27.87	4.52	-

2.4-2.4835GHz_BT-BR(1Mbps)

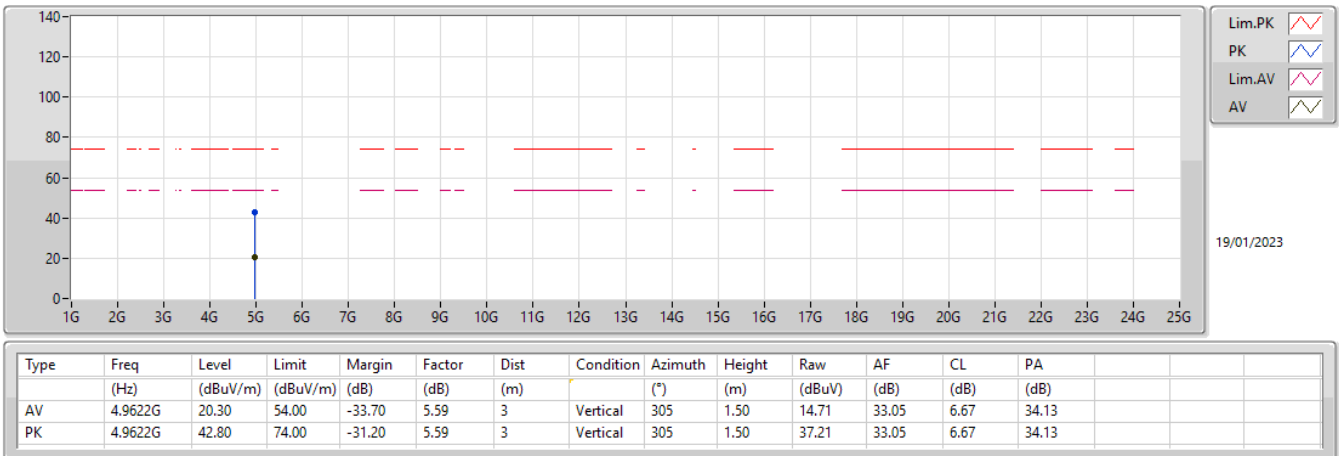
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	(dBuV)	(dB)	(dB)	(dB)
AV	2.48G	86.75	Inf	-Inf	32.32	3	Horizontal	24	2.88	54.43	27.82	4.50	-
AV	2.4962G	35.50	54.00	-18.50	32.40	3	Horizontal	24	2.88	3.10	27.88	4.52	-
PK	2.48G	109.25	Inf	-Inf	32.32	3	Horizontal	24	2.88	76.93	27.82	4.50	-
PK	2.4962G	58.00	74.00	-16.00	32.40	3	Horizontal	24	2.88	25.60	27.88	4.52	-

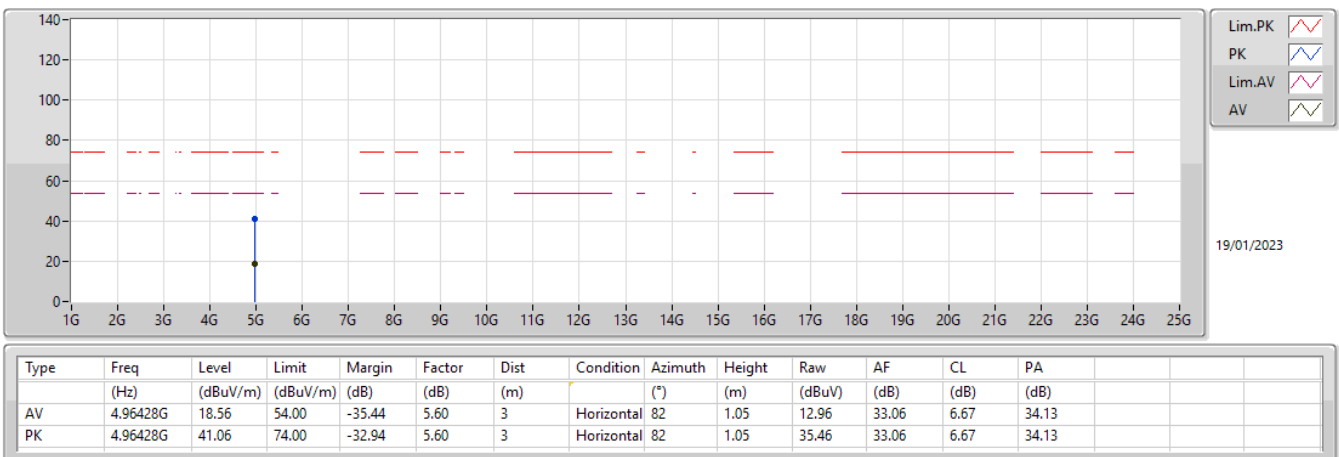
2.4-2.4835GHz_BT-BR(1Mbps)

2480MHz_TX



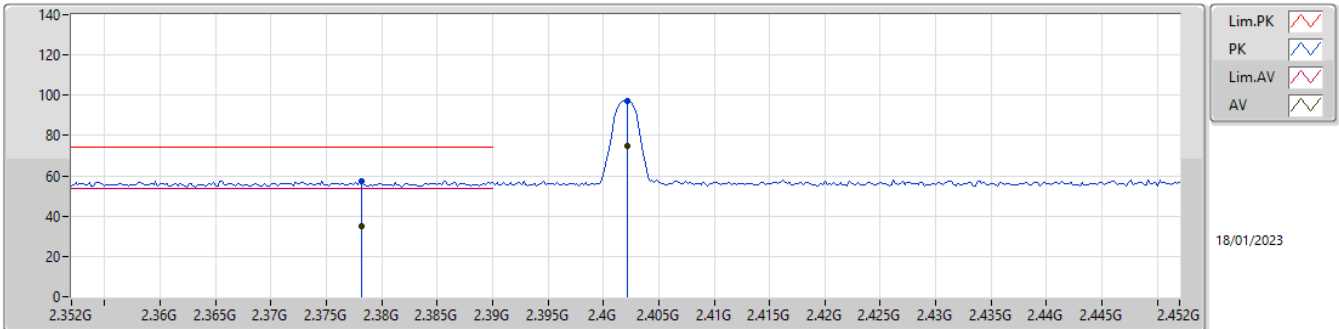
2.4-2.4835GHz_BT-BR(1Mbps)

2480MHz_TX



2.4-2.4835GHz_BT-EDR(3Mbps)

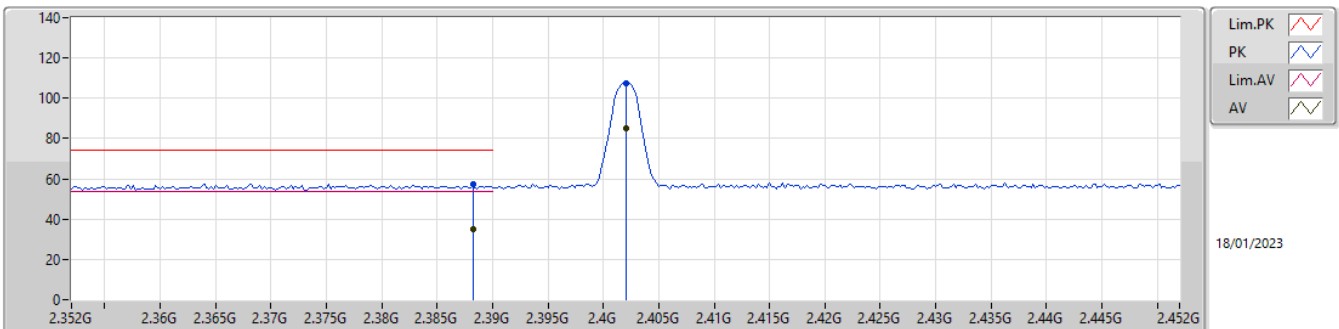
2402MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3782G	34.86	54.00	-19.14	31.83	3	Vertical	207	1.46	3.03	27.43	4.40	-
AV	2.4022G	74.77	Inf	-Inf	32.02	3	Vertical	207	1.46	42.75	27.60	4.42	-
PK	2.3782G	57.36	74.00	-16.64	31.83	3	Vertical	207	1.46	25.53	27.43	4.40	-
PK	2.4022G	97.27	Inf	-Inf	32.02	3	Vertical	207	1.46	65.25	27.60	4.42	-

2.4-2.4835GHz_BT-EDR(3Mbps)

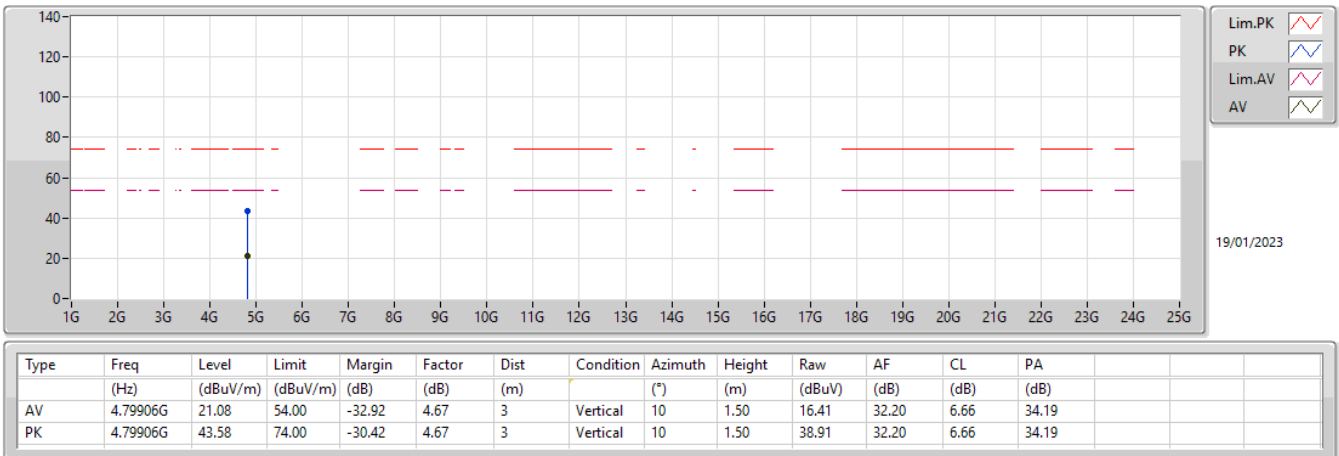
2402MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3882G	34.91	54.00	-19.09	31.92	3	Horizontal	21	2.73	2.99	27.51	4.41	-
AV	2.402G	85.10	Inf	-Inf	32.02	3	Horizontal	21	2.73	53.08	27.60	4.42	-
PK	2.3882G	57.41	74.00	-16.59	31.92	3	Horizontal	21	2.73	25.49	27.51	4.41	-
PK	2.402G	107.60	Inf	-Inf	32.02	3	Horizontal	21	2.73	75.58	27.60	4.42	-

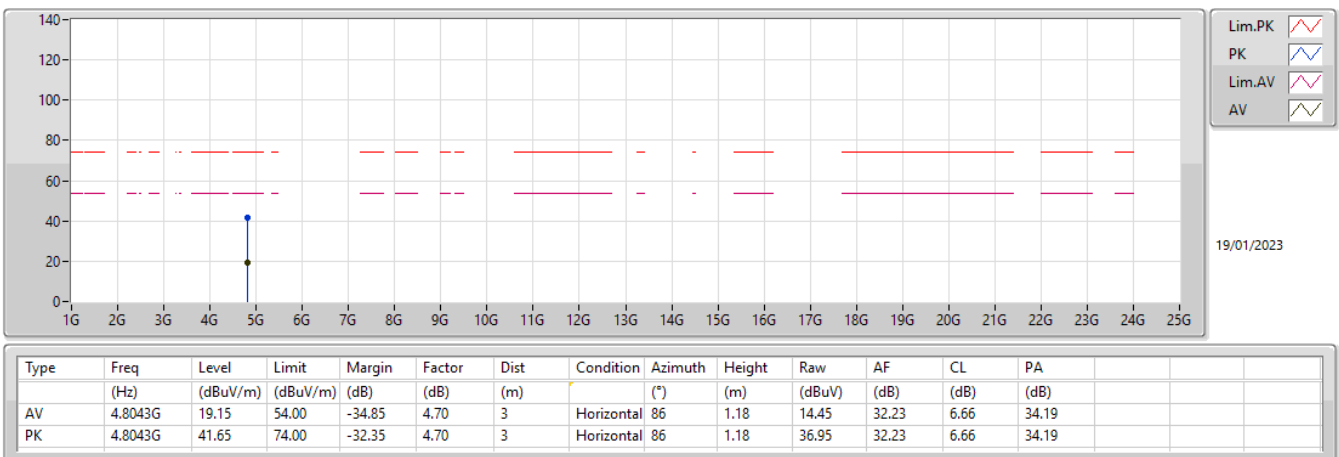
2.4-2.4835GHz_BT-EDR(3Mbps)

2402MHz_TX



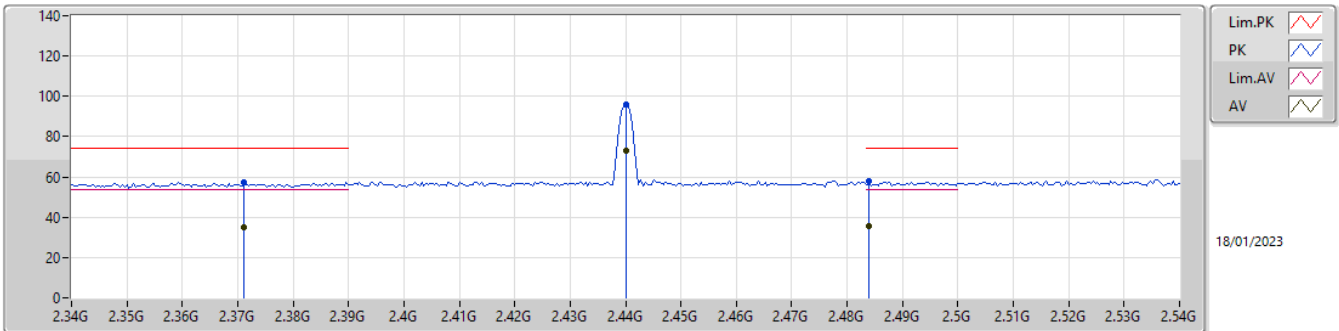
2.4-2.4835GHz_BT-EDR(3Mbps)

2402MHz_TX



2.4-2.4835GHz_BT-EDR(3Mbps)

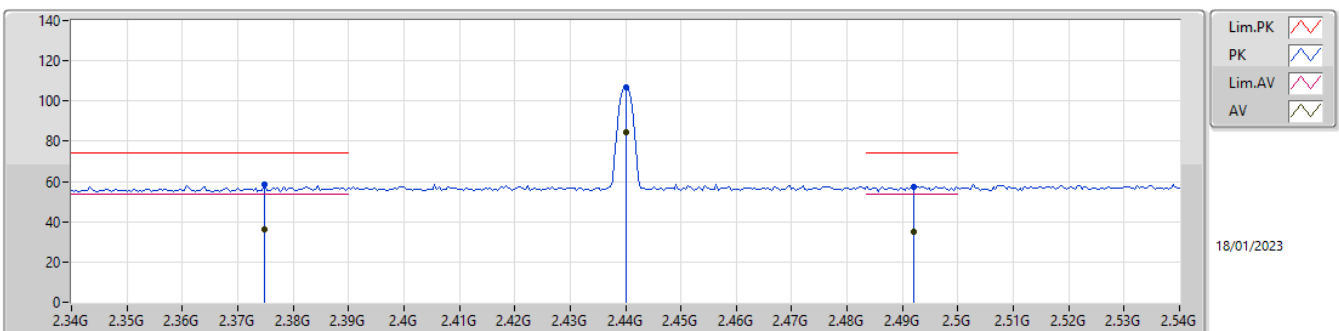
2440MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Raw	AF	CL	PA				
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	(dBuV)	(dB)	(dB)	(dB)				
AV	2.3712G	34.91	54.00	-19.09	31.76	3	Vertical	206	1.93	3.15	27.37	4.39	-				
AV	2.44G	73.27	Inf	-Inf	32.14	3	Vertical	206	1.93	41.13	27.68	4.46	-				
AV	2.484G	35.73	54.00	-18.27	32.35	3	Vertical	206	1.93	3.38	27.84	4.51	-				
PK	2.3712G	57.41	74.00	-16.59	31.76	3	Vertical	206	1.93	25.65	27.37	4.39	-				
PK	2.44G	95.77	Inf	-Inf	32.14	3	Vertical	206	1.93	63.63	27.68	4.46	-				
PK	2.484G	58.23	74.00	-15.77	32.35	3	Vertical	206	1.93	25.88	27.84	4.51	-				

2.4-2.4835GHz_BT-EDR(3Mbps)

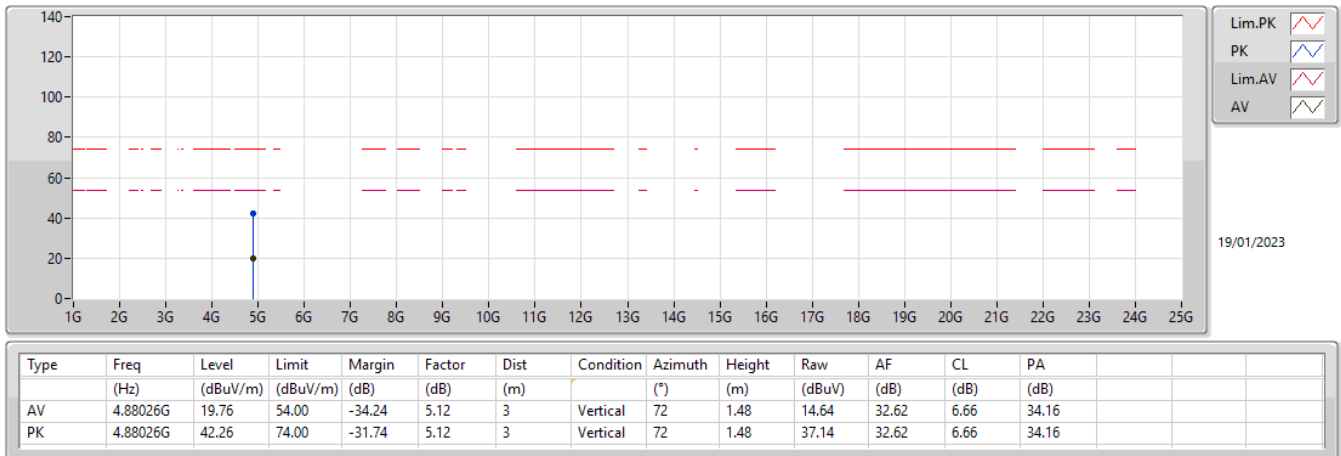
2440MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Raw	AF	CL	PA				
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	(dBuV)	(dB)	(dB)	(dB)				
AV	2.3748G	35.93	54.00	-18.07	31.80	3	Horizontal	23	1.92	4.13	27.40	4.40	-				
AV	2.44G	84.45	Inf	-Inf	32.14	3	Horizontal	23	1.92	52.31	27.68	4.46	-				
AV	2.492G	35.12	54.00	-18.88	32.39	3	Horizontal	23	1.92	2.73	27.87	4.52	-				
PK	2.3748G	58.43	74.00	-15.57	31.80	3	Horizontal	23	1.92	26.63	27.40	4.40	-				
PK	2.44G	106.95	Inf	-Inf	32.14	3	Horizontal	23	1.92	74.81	27.68	4.46	-				
PK	2.492G	57.62	74.00	-16.38	32.39	3	Horizontal	23	1.92	25.23	27.87	4.52	-				

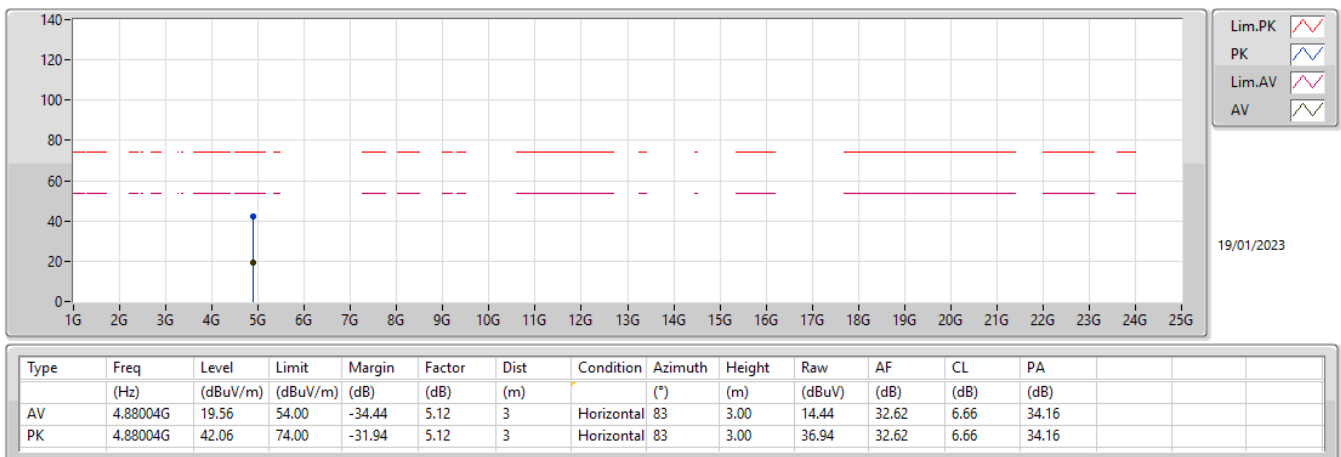
2.4-2.4835GHz_BT-EDR(3Mbps)

2440MHz_TX



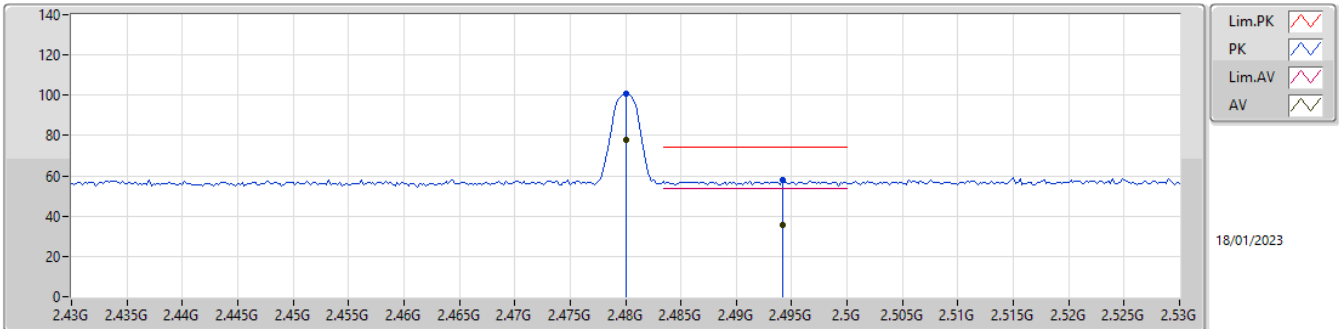
2.4-2.4835GHz_BT-EDR(3Mbps)

2440MHz_TX



2.4-2.4835GHz_BT-EDR(3Mbps)

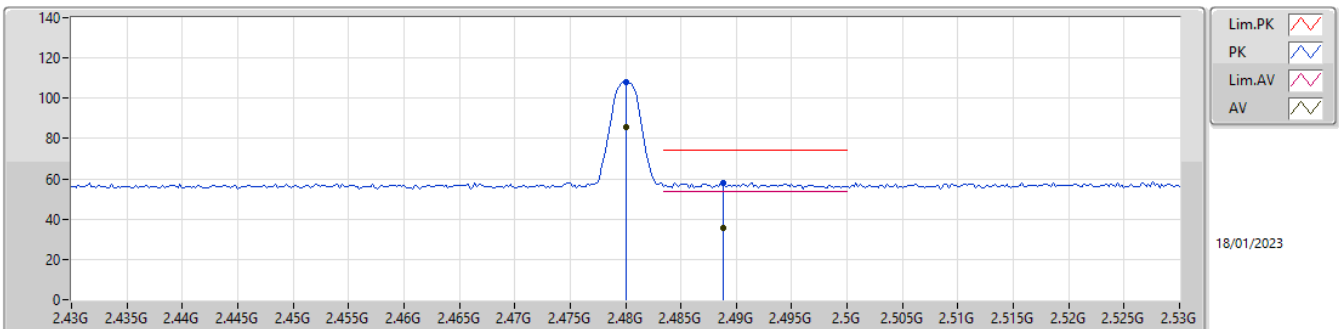
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	(dBuV)	(dB)	(dB)	(dB)
AV	2.48G	78.11	Inf	-Inf	32.32	3	Vertical	57	2.85	45.79	27.82	4.50	-
AV	2.4942G	35.32	54.00	-18.68	32.40	3	Vertical	57	2.85	2.92	27.88	4.52	-
PK	2.48G	100.61	Inf	-Inf	32.32	3	Vertical	57	2.85	68.29	27.82	4.50	-
PK	2.4942G	57.82	74.00	-16.18	32.40	3	Vertical	57	2.85	25.42	27.88	4.52	-

2.4-2.4835GHz_BT-EDR(3Mbps)

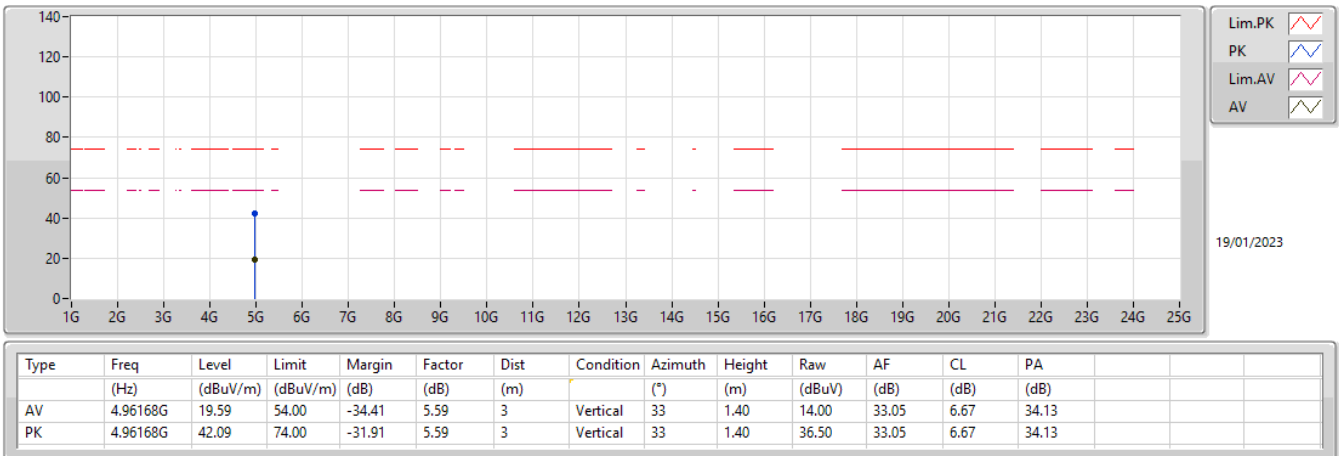
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	(dBuV)	(dB)	(dB)	(dB)
AV	2.48G	85.50	Inf	-Inf	32.32	3	Horizontal	23	2.88	53.18	27.82	4.50	-
AV	2.4888G	35.37	54.00	-18.63	32.37	3	Horizontal	23	2.88	3.00	27.86	4.51	-
PK	2.48G	108.00	Inf	-Inf	32.32	3	Horizontal	23	2.88	75.68	27.82	4.50	-
PK	2.4888G	57.87	74.00	-16.13	32.37	3	Horizontal	23	2.88	25.50	27.86	4.51	-

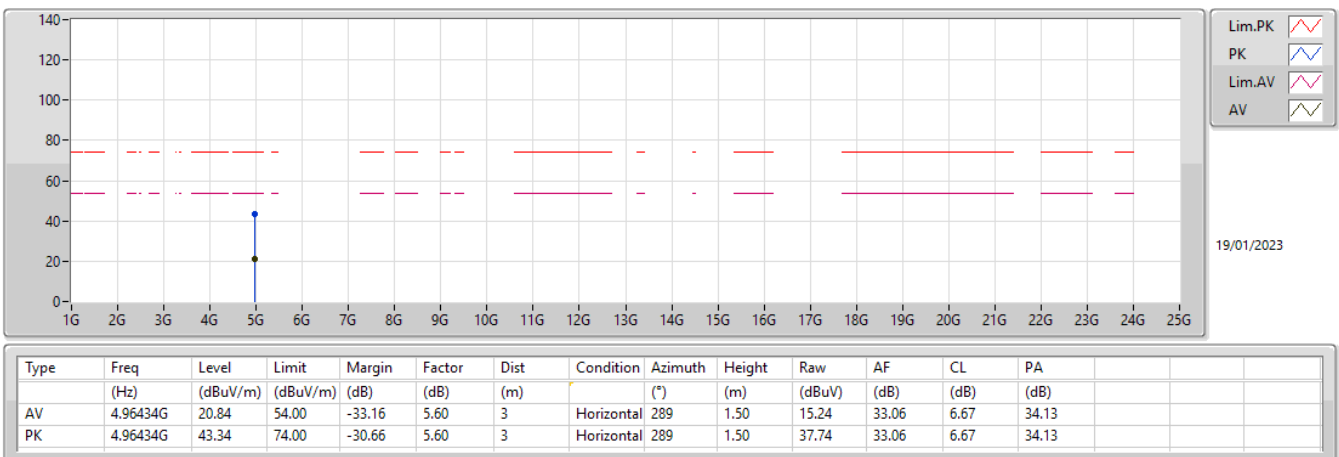
2.4-2.4835GHz_BT-EDR(3Mbps)

2480MHz_TX



2.4-2.4835GHz_BT-EDR(3Mbps)

2480MHz_TX





Summary

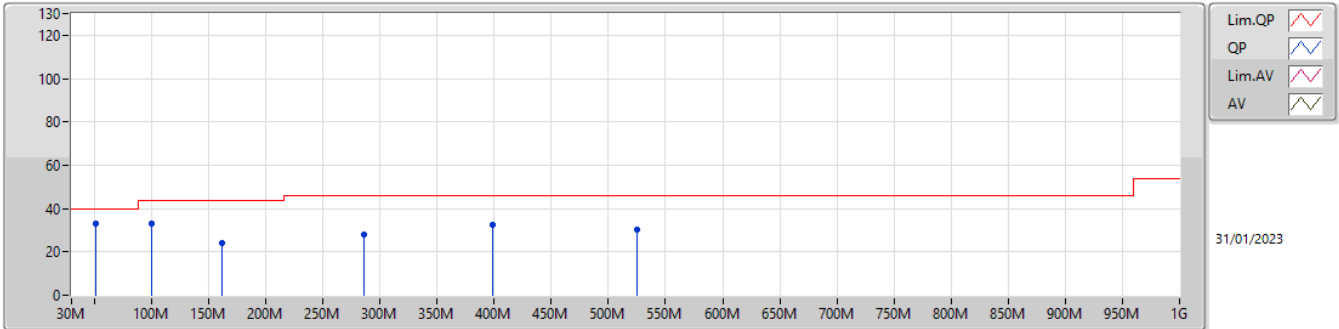
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
BT-BR(1Mbps)	Pass	PK	51.34M	33.25	40.00	-6.75	3	Vertical	360	1.00	-

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-BR(1Mbps)	-	-	-	-	-	-	-	-	-	-	-
2440MHz	Pass	PK	51.34M	33.25	40.00	-6.75	3	Vertical	360	1.00	-
2440MHz	Pass	PK	99.84M	33.18	43.50	-10.32	3	Vertical	360	1.00	-
2440MHz	Pass	PK	161.92M	23.90	43.50	-19.60	3	Vertical	360	1.00	-
2440MHz	Pass	PK	286.08M	28.10	46.00	-17.90	3	Vertical	360	1.00	-
2440MHz	Pass	PK	398.6M	32.66	46.00	-13.34	3	Vertical	360	1.00	-
2440MHz	Pass	PK	524.7M	30.34	46.00	-15.66	3	Vertical	360	1.00	-
2440MHz	Pass	PK	45.52M	30.10	40.00	-9.90	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	99.84M	32.38	43.50	-11.12	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	142.52M	27.22	43.50	-16.28	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	225.94M	29.33	46.00	-16.67	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	342.34M	33.30	46.00	-12.70	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	516.94M	36.34	46.00	-9.66	3	Horizontal	0	1.00	-

2.4-2.4835GHz_BT-BR(1Mbps)

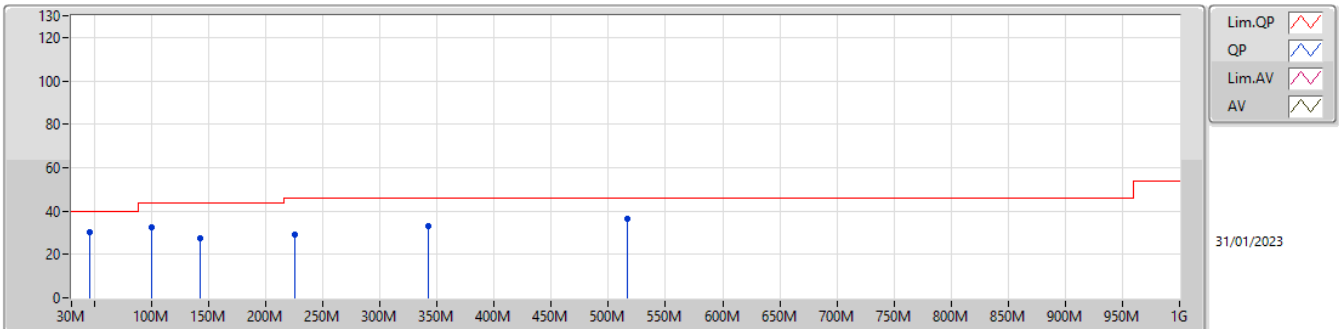
2440MHz_Fixture



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	51.34M	33.25	40.00	-6.75	-13.10	3	Vertical	360	1.00	46.35	12.94	1.42	27.46
PK	99.84M	33.18	43.50	-10.32	-9.85	3	Vertical	360	1.00	43.03	16.04	1.93	27.82
PK	161.92M	23.90	43.50	-19.60	-10.10	3	Vertical	360	1.00	34.00	15.04	2.48	27.62
PK	286.08M	28.10	46.00	-17.90	-5.87	3	Vertical	360	1.00	33.97	18.09	3.22	27.18
PK	398.6M	32.66	46.00	-13.34	-3.15	3	Vertical	360	1.00	35.81	20.89	3.79	27.83
PK	524.7M	30.34	46.00	-15.66	-1.27	3	Vertical	360	1.00	31.61	22.76	4.46	28.49

2.4-2.4835GHz_BT-BR(1Mbps)

2440MHz_Fixture



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	45.52M	30.10	40.00	-9.90	-10.53	3	Horizontal	0	1.00	40.63	15.21	1.45	27.19
PK	99.84M	32.38	43.50	-11.12	-9.85	3	Horizontal	0	1.00	42.23	16.04	1.93	27.82
PK	142.52M	27.22	43.50	-16.28	-9.21	3	Horizontal	0	1.00	36.43	16.15	2.35	27.71
PK	225.94M	29.33	46.00	-16.67	-9.51	3	Horizontal	0	1.00	38.84	14.85	2.92	27.28
PK	342.34M	33.30	46.00	-12.70	-7.76	3	Horizontal	0	1.00	41.06	19.19	0.50	27.45
PK	516.94M	36.34	46.00	-9.66	-1.32	3	Horizontal	0	1.00	37.66	22.67	4.45	28.44



Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-
BT-BR(1Mbps)	Pass	PK	2.4898G	58.99	74.00	-15.01	3	Vertical	42	1.95
BT-EDR(3Mbps)	Pass	PK	2.496G	58.72	74.00	-15.28	3	Horizontal	80	2.59

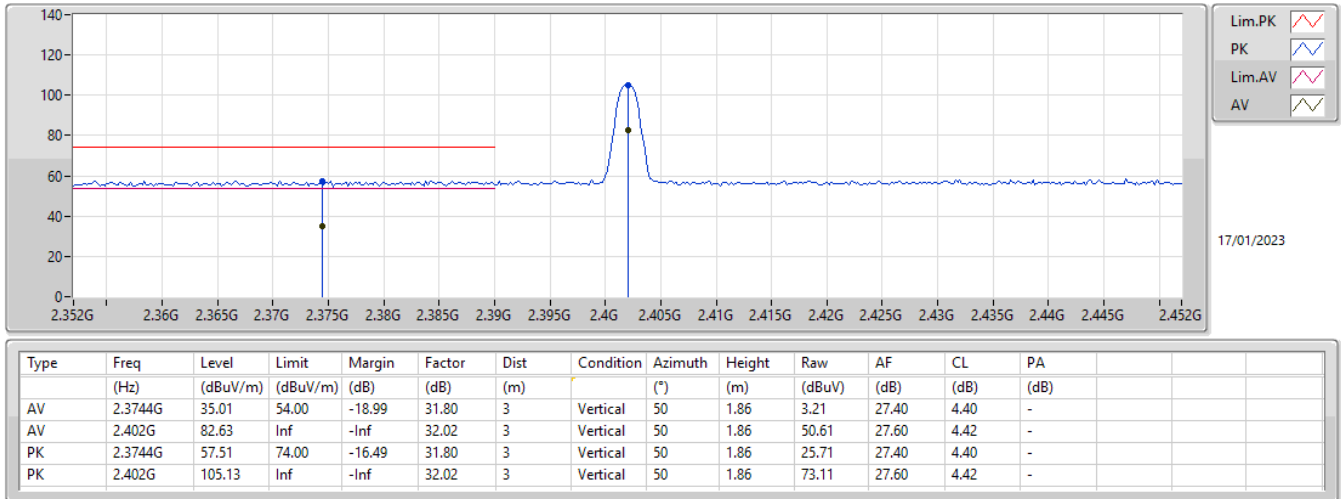
Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
BT-BR(1Mbps)	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3744G	35.01	54.00	-18.99	3	Vertical	50	1.86
2402MHz	Pass	AV	2.402G	82.63	Inf	-Inf	3	Vertical	50	1.86
2402MHz	Pass	PK	2.3744G	57.51	74.00	-16.49	3	Vertical	50	1.86
2402MHz	Pass	PK	2.402G	105.13	Inf	-Inf	3	Vertical	50	1.86
2402MHz	Pass	AV	2.3868G	35.64	54.00	-18.36	3	Horizontal	16	2.01
2402MHz	Pass	AV	2.402G	79.57	Inf	-Inf	3	Horizontal	16	2.01
2402MHz	Pass	PK	2.3868G	58.14	74.00	-15.86	3	Horizontal	16	2.01
2402MHz	Pass	PK	2.402G	102.07	Inf	-Inf	3	Horizontal	16	2.01
2402MHz	Pass	AV	4.80396G	19.58	54.00	-34.42	3	Vertical	215	2.78
2402MHz	Pass	PK	4.80396G	42.08	74.00	-31.92	3	Vertical	215	2.78
2402MHz	Pass	AV	4.80372G	19.96	54.00	-34.04	3	Horizontal	318	2.54
2402MHz	Pass	PK	4.80372G	42.46	74.00	-31.54	3	Horizontal	318	2.54
2440MHz	Pass	PK	2.348G	57.54	74.00	-16.46	3	Vertical	41	1.86
2440MHz	Pass	AV	2.348G	35.04	54.00	-18.96	3	Vertical	41	1.86
2440MHz	Pass	PK	2.44G	106.29	Inf	-Inf	3	Vertical	41	1.86
2440MHz	Pass	AV	2.44G	83.79	Inf	-Inf	3	Vertical	41	1.86
2440MHz	Pass	PK	2.4928G	57.90	74.00	-16.10	3	Vertical	41	1.86
2440MHz	Pass	AV	2.4928G	35.40	54.00	-18.60	3	Vertical	41	1.86
2440MHz	Pass	PK	2.3756G	58.51	74.00	-15.49	3	Horizontal	80	2.58
2440MHz	Pass	AV	2.3756G	36.01	54.00	-17.99	3	Horizontal	80	2.58
2440MHz	Pass	PK	2.44G	100.05	Inf	-Inf	3	Horizontal	80	2.58
2440MHz	Pass	AV	2.44G	77.55	Inf	-Inf	3	Horizontal	80	2.58
2440MHz	Pass	PK	2.4984G	57.83	74.00	-16.17	3	Horizontal	80	2.58
2440MHz	Pass	AV	2.4984G	35.33	54.00	-18.67	3	Horizontal	80	2.58
2440MHz	Pass	PK	4.88108G	42.14	74.00	-31.86	3	Vertical	76	2.48
2440MHz	Pass	AV	4.88108G	19.64	54.00	-34.36	3	Vertical	76	2.48
2440MHz	Pass	PK	4.88038G	42.09	74.00	-31.91	3	Horizontal	324	2.22
2440MHz	Pass	AV	4.88038G	19.59	54.00	-34.41	3	Horizontal	324	2.22
2480MHz	Pass	PK	2.4798G	107.79	Inf	-Inf	3	Vertical	42	1.95
2480MHz	Pass	AV	2.4798G	85.29	Inf	-Inf	3	Vertical	42	1.95
2480MHz	Pass	PK	2.4898G	58.99	74.00	-15.01	3	Vertical	42	1.95
2480MHz	Pass	AV	2.4898G	36.49	54.00	-17.51	3	Vertical	42	1.95
2480MHz	Pass	PK	2.4798G	103.25	Inf	-Inf	3	Horizontal	72	1.92
2480MHz	Pass	AV	2.4798G	80.75	Inf	-Inf	3	Horizontal	72	1.92
2480MHz	Pass	PK	2.487G	58.30	74.00	-15.70	3	Horizontal	72	1.92
2480MHz	Pass	AV	2.487G	35.80	54.00	-18.20	3	Horizontal	72	1.92
2480MHz	Pass	PK	4.96008G	43.76	74.00	-30.24	3	Vertical	284	2.75
2480MHz	Pass	AV	4.96008G	21.26	54.00	-32.74	3	Vertical	284	2.75
2480MHz	Pass	PK	4.95964G	45.04	74.00	-28.96	3	Horizontal	320	2.34
2480MHz	Pass	AV	4.95964G	22.54	54.00	-31.46	3	Horizontal	320	2.34
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3752G	35.11	54.00	-18.89	3	Vertical	51	1.87
2402MHz	Pass	AV	2.402G	80.11	Inf	-Inf	3	Vertical	51	1.87
2402MHz	Pass	PK	2.3752G	57.61	74.00	-16.39	3	Vertical	51	1.87
2402MHz	Pass	PK	2.402G	102.61	Inf	-Inf	3	Vertical	51	1.87
2402MHz	Pass	AV	2.3892G	35.41	54.00	-18.59	3	Horizontal	79	1.86
2402MHz	Pass	AV	2.402G	78.10	Inf	-Inf	3	Horizontal	79	1.86
2402MHz	Pass	PK	2.3892G	57.91	74.00	-16.09	3	Horizontal	79	1.86
2402MHz	Pass	PK	2.402G	100.60	Inf	-Inf	3	Horizontal	79	1.86
2402MHz	Pass	AV	4.79864G	25.33	54.00	-28.67	3	Vertical	11	1.02
2402MHz	Pass	PK	4.79864G	47.83	74.00	-26.17	3	Vertical	11	1.02
2402MHz	Pass	AV	4.80456G	19.51	54.00	-34.49	3	Horizontal	48	2.99
2402MHz	Pass	PK	4.80456G	42.01	74.00	-31.99	3	Horizontal	48	2.99
2440MHz	Pass	AV	2.3792G	35.36	54.00	-18.64	3	Vertical	41	1.86
2440MHz	Pass	AV	2.44G	81.20	Inf	-Inf	3	Vertical	41	1.86
2440MHz	Pass	AV	2.4964G	35.74	54.00	-18.26	3	Vertical	41	1.86
2440MHz	Pass	PK	2.3792G	57.86	74.00	-16.14	3	Vertical	41	1.86
2440MHz	Pass	PK	2.44G	103.70	Inf	-Inf	3	Vertical	41	1.86
2440MHz	Pass	PK	2.4964G	58.24	74.00	-15.76	3	Vertical	41	1.86
2440MHz	Pass	AV	2.376G	34.65	54.00	-19.35	3	Horizontal	80	2.59

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
2440MHz	Pass	AV	2.44G	75.88	Inf	-Inf	3	Horizontal	80	2.59
2440MHz	Pass	AV	2.496G	36.22	54.00	-17.78	3	Horizontal	80	2.59
2440MHz	Pass	PK	2.376G	57.15	74.00	-16.85	3	Horizontal	80	2.59
2440MHz	Pass	PK	2.44G	98.38	Inf	-Inf	3	Horizontal	80	2.59
2440MHz	Pass	PK	2.496G	58.72	74.00	-15.28	3	Horizontal	80	2.59
2440MHz	Pass	AV	4.889G	19.52	54.00	-34.48	3	Vertical	346	1.50
2440MHz	Pass	PK	4.889G	42.02	74.00	-31.98	3	Vertical	346	1.50
2440MHz	Pass	AV	4.87144G	20.00	54.00	-34.00	3	Horizontal	261	1.50
2440MHz	Pass	PK	4.87144G	42.50	74.00	-31.50	3	Horizontal	261	1.50
2480MHz	Pass	AV	2.48G	83.17	Inf	-Inf	3	Vertical	44	1.96
2480MHz	Pass	AV	2.484G	35.76	54.00	-18.24	3	Vertical	44	1.96
2480MHz	Pass	PK	2.48G	105.67	Inf	-Inf	3	Vertical	44	1.96
2480MHz	Pass	PK	2.484G	58.26	74.00	-15.74	3	Vertical	44	1.96
2480MHz	Pass	AV	2.48G	79.06	Inf	-Inf	3	Horizontal	71	1.91
2480MHz	Pass	AV	2.4914G	35.95	54.00	-18.05	3	Horizontal	71	1.91
2480MHz	Pass	PK	2.48G	101.56	Inf	-Inf	3	Horizontal	71	1.91
2480MHz	Pass	PK	2.4914G	58.45	74.00	-15.55	3	Horizontal	71	1.91
2480MHz	Pass	AV	4.96124G	19.82	54.00	-34.18	3	Vertical	72	1.50
2480MHz	Pass	PK	4.96124G	42.32	74.00	-31.68	3	Vertical	72	1.50
2480MHz	Pass	AV	4.96464G	20.24	54.00	-33.76	3	Horizontal	323	2.24
2480MHz	Pass	PK	4.96464G	42.74	74.00	-31.26	3	Horizontal	323	2.24

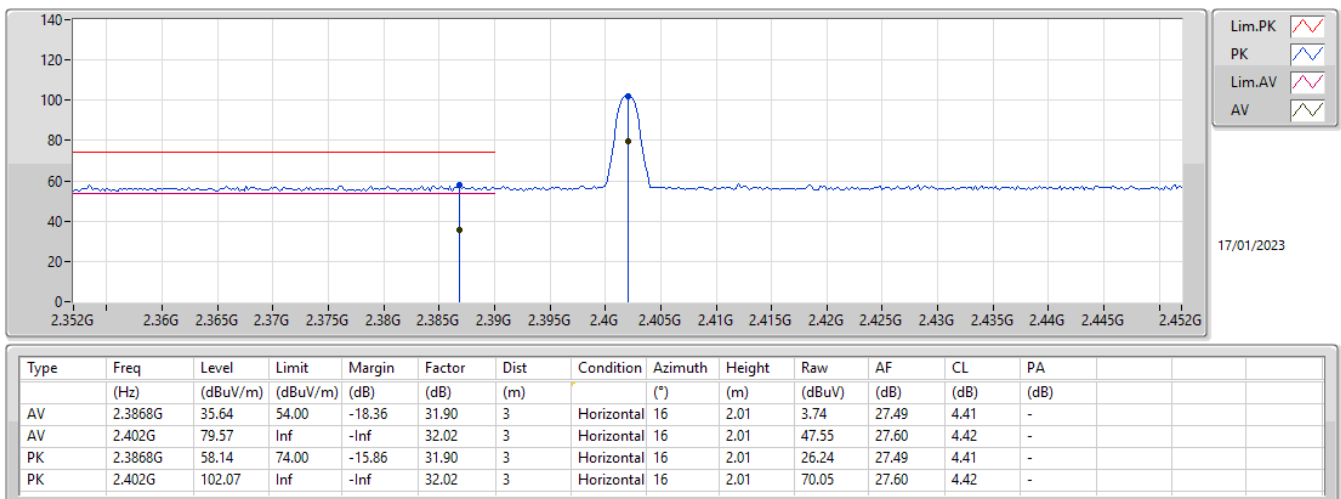
2.4-2.4835GHz_BT-BR(1Mbps)

2402MHz_TX



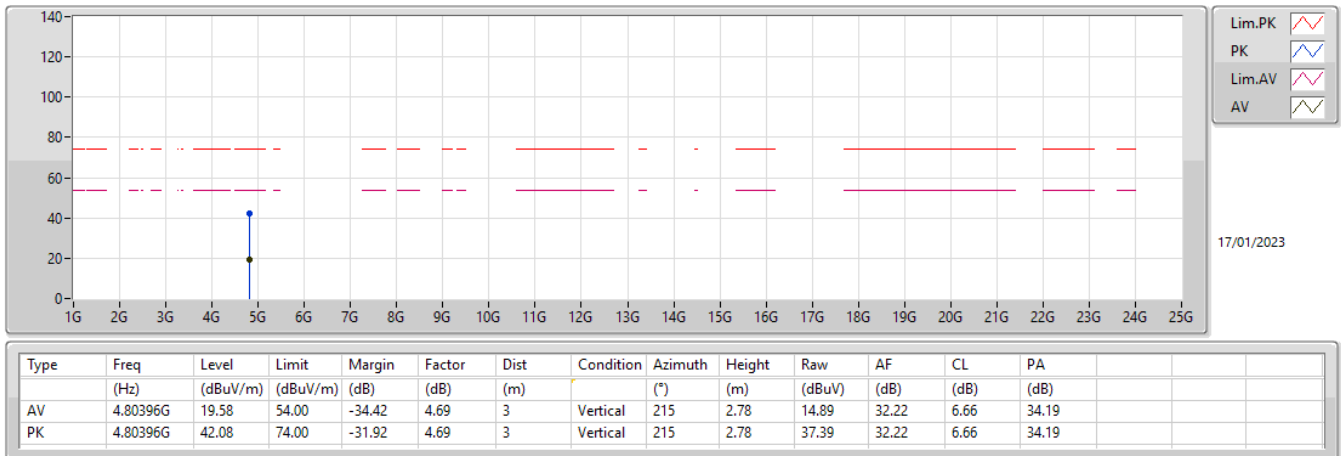
2.4-2.4835GHz_BT-BR(1Mbps)

2402MHz_TX



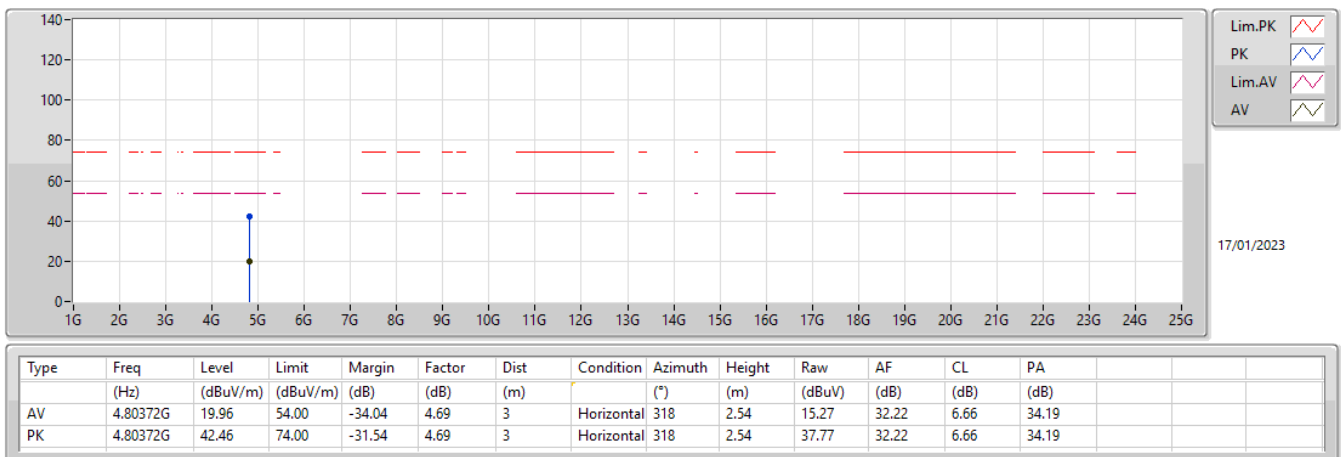
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2402MHz_TX



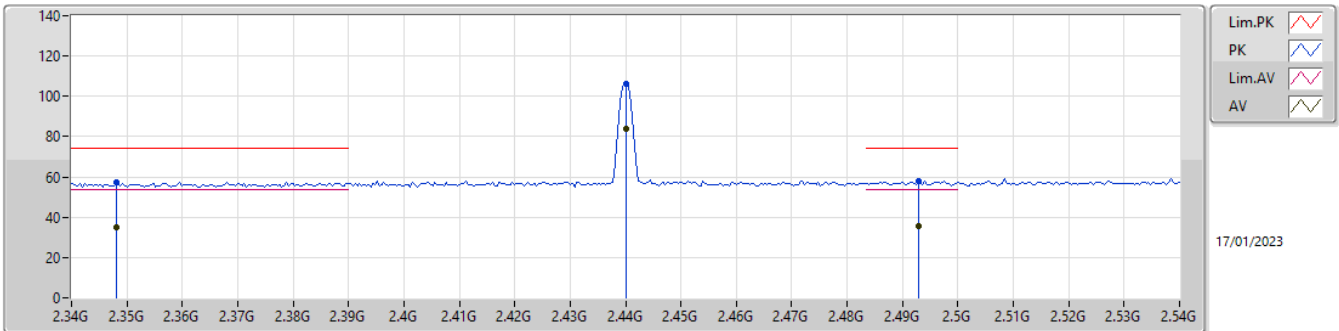
2.4-2.4835GHz_BT-BR(1Mbps)

2402MHz_TX



2.4-2.4835GHz_BT-BR(1Mbps)

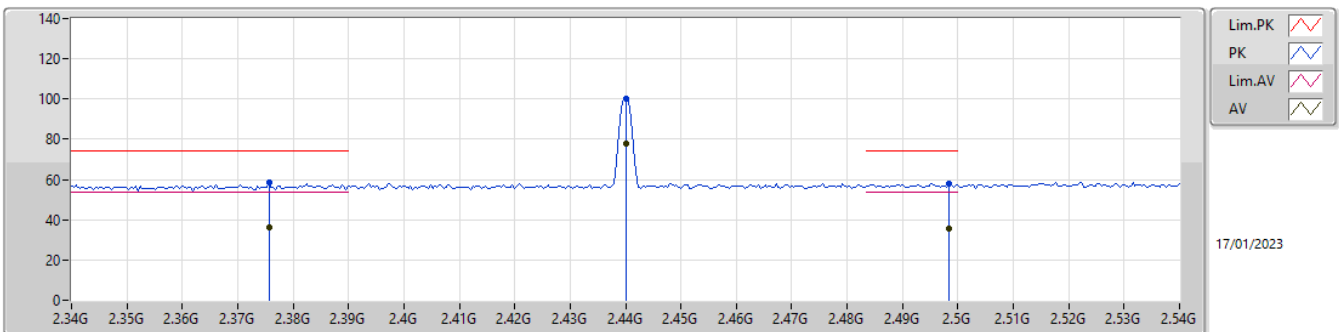
2440MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	(dBuV)	(dB)	(dB)	(dB)
AV	2.348G	35.04	54.00	-18.96	31.57	3	Vertical	41	1.86	3.47	27.20	4.37	-
AV	2.44G	83.79	Inf	-Inf	32.14	3	Vertical	41	1.86	51.65	27.68	4.46	-
AV	2.4928G	35.40	54.00	-18.60	32.39	3	Vertical	41	1.86	3.01	27.87	4.52	-
PK	2.348G	57.54	74.00	-16.46	31.57	3	Vertical	41	1.86	25.97	27.20	4.37	-
PK	2.44G	106.29	Inf	-Inf	32.14	3	Vertical	41	1.86	74.15	27.68	4.46	-
PK	2.4928G	57.90	74.00	-16.10	32.39	3	Vertical	41	1.86	25.51	27.87	4.52	-

2.4-2.4835GHz_BT-BR(1Mbps)

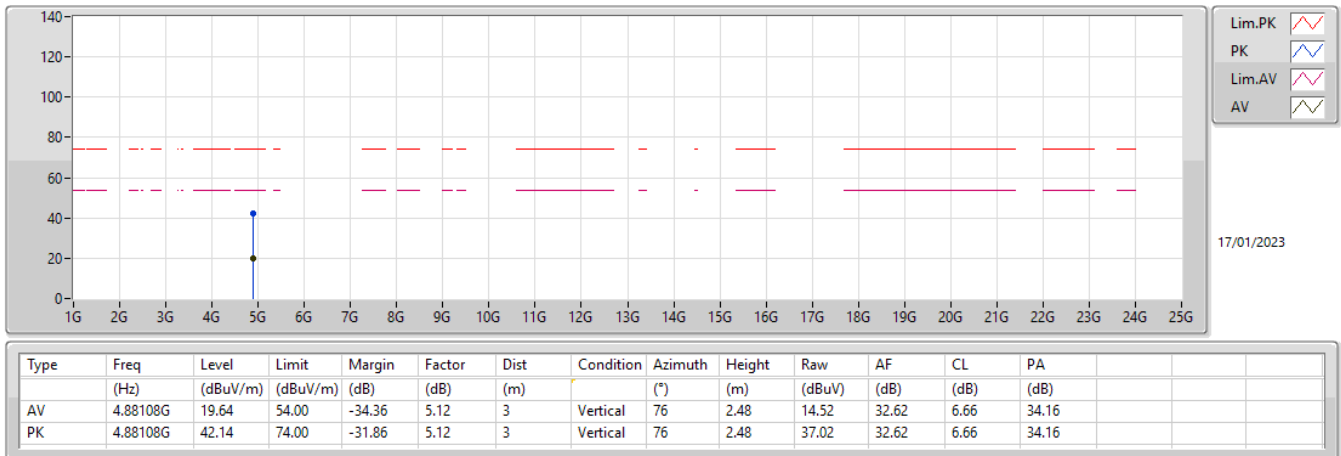
2440MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	(dBuV)	(dB)	(dB)	(dB)
AV	2.3756G	36.01	54.00	-17.99	31.80	3	Horizontal	80	2.58	4.21	27.40	4.40	-
AV	2.44G	77.55	Inf	-Inf	32.14	3	Horizontal	80	2.58	45.41	27.68	4.46	-
AV	2.4984G	35.33	54.00	-18.67	32.41	3	Horizontal	80	2.58	2.92	27.89	4.52	-
PK	2.3756G	58.51	74.00	-15.49	31.80	3	Horizontal	80	2.58	26.71	27.40	4.40	-
PK	2.44G	100.05	Inf	-Inf	32.14	3	Horizontal	80	2.58	67.91	27.68	4.46	-
PK	2.4984G	57.83	74.00	-16.17	32.41	3	Horizontal	80	2.58	25.42	27.89	4.52	-

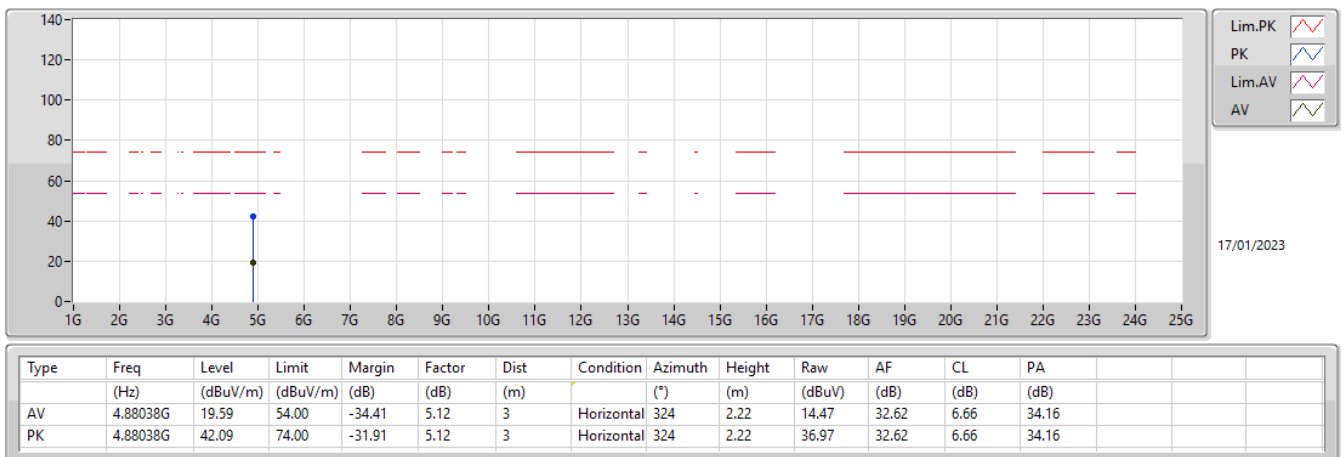
2.4-2.4835GHz_BT-BR(1Mbps)

2440MHz_TX



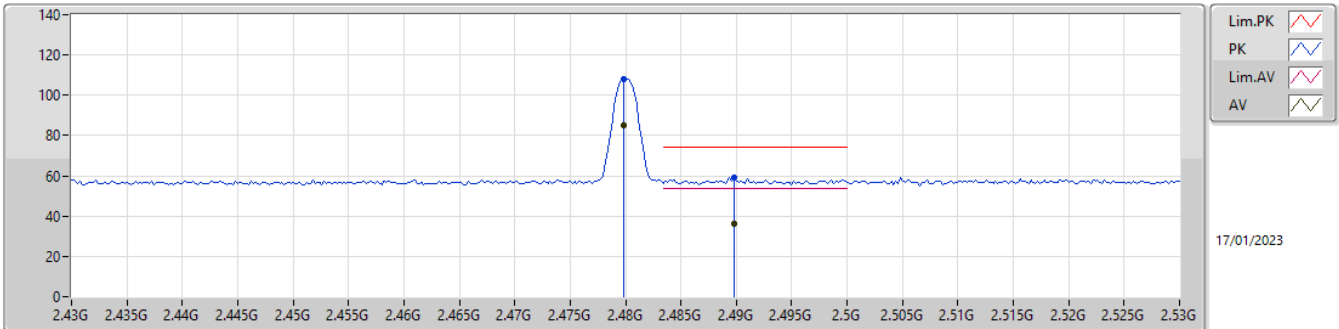
2.4-2.4835GHz_BT-BR(1Mbps)

2440MHz_TX



2.4-2.4835GHz_BT-BR(1Mbps)

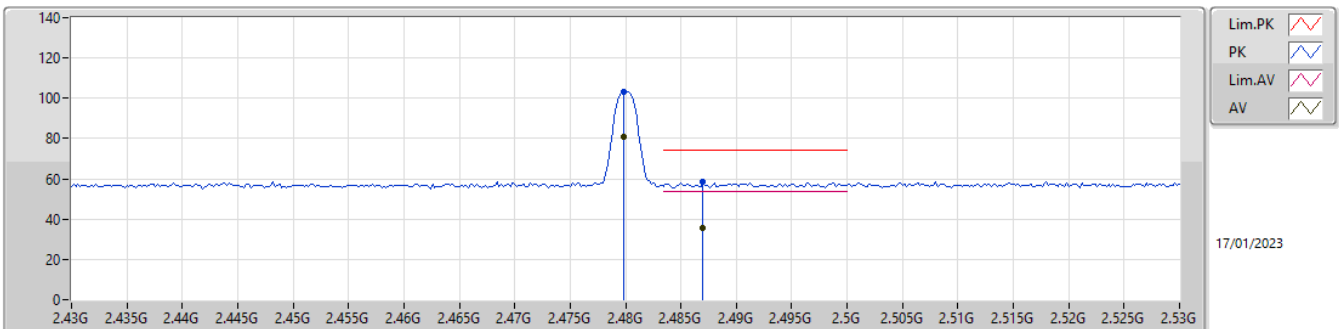
2480MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.4798G	85.29	Inf	-Inf	32.32	3	Vertical	42	1.95	52.97	27.82	4.50	-
AV	2.4898G	36.49	54.00	-17.51	32.37	3	Vertical	42	1.95	4.12	27.86	4.51	-
PK	2.4798G	107.79	Inf	-Inf	32.32	3	Vertical	42	1.95	75.47	27.82	4.50	-
PK	2.4898G	58.99	74.00	-15.01	32.37	3	Vertical	42	1.95	26.62	27.86	4.51	-

2.4-2.4835GHz_BT-BR(1Mbps)

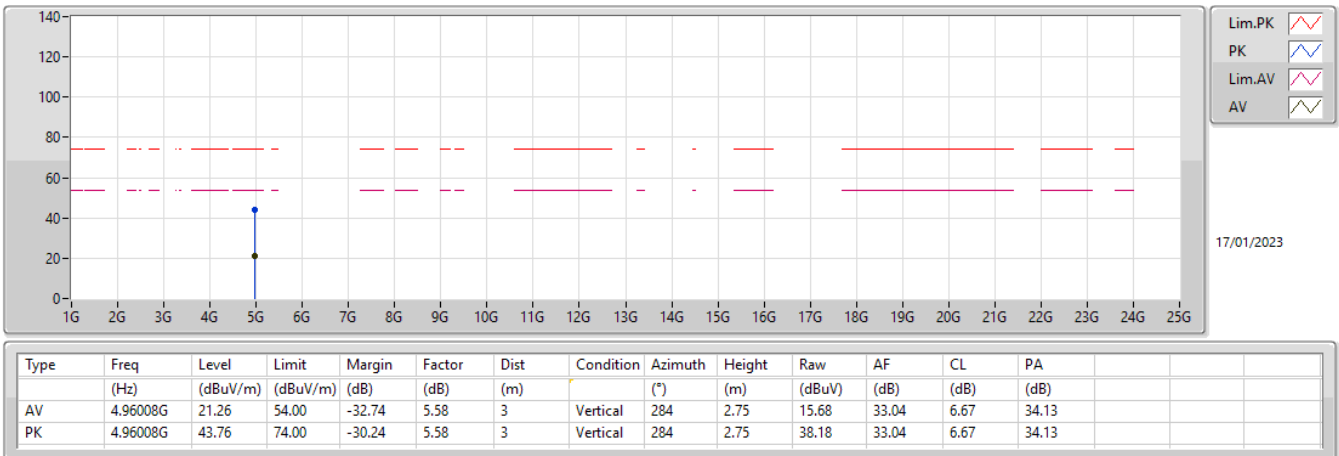
2480MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.4798G	80.75	Inf	-Inf	32.32	3	Horizontal	72	1.92	48.43	27.82	4.50	-
AV	2.487G	35.80	54.00	-18.20	32.36	3	Horizontal	72	1.92	3.44	27.85	4.51	-
PK	2.4798G	103.25	Inf	-Inf	32.32	3	Horizontal	72	1.92	70.93	27.82	4.50	-
PK	2.487G	58.30	74.00	-15.70	32.36	3	Horizontal	72	1.92	25.94	27.85	4.51	-

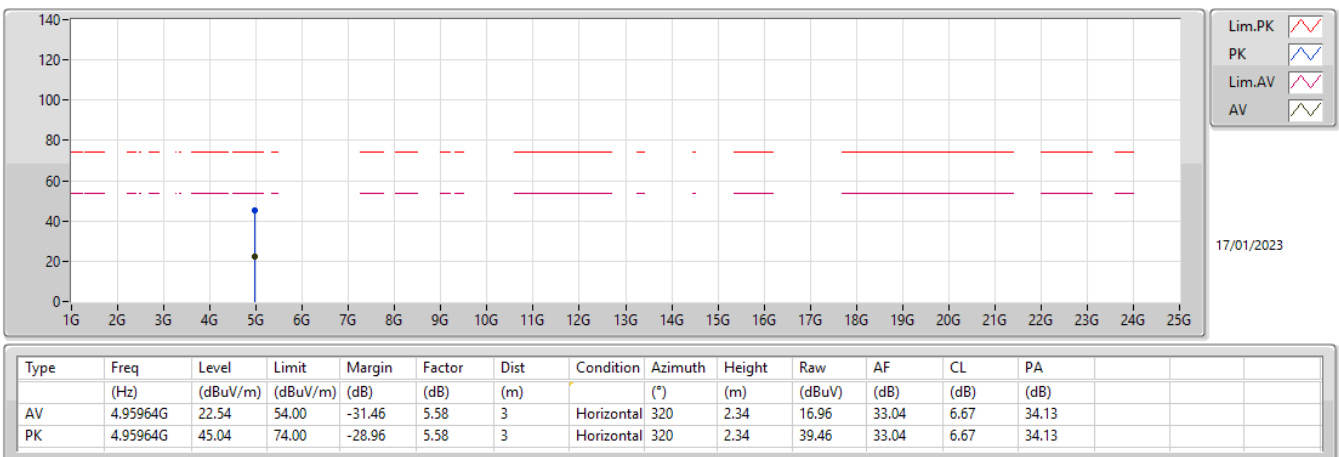
2.4-2.4835GHz_BT-BR(1Mbps)

2480MHz_TX



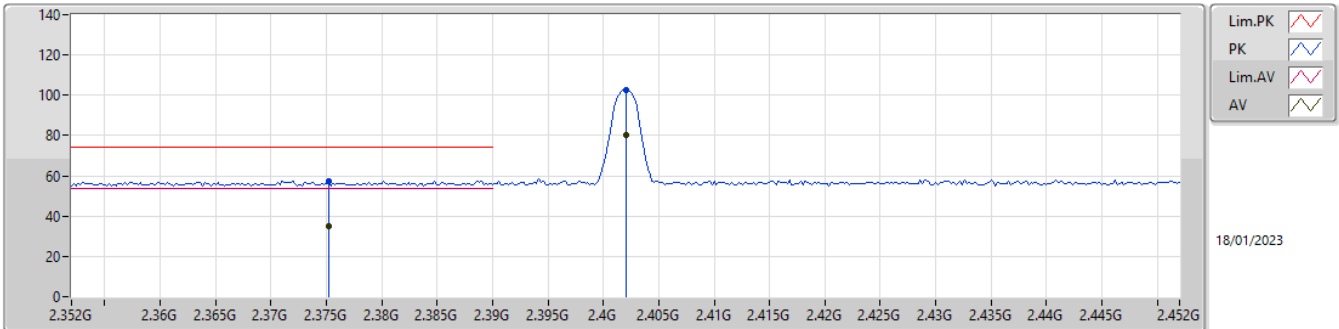
2.4-2.4835GHz_BT-BR(1Mbps)

2480MHz_TX



2.4-2.4835GHz_BT-EDR(3Mbps)

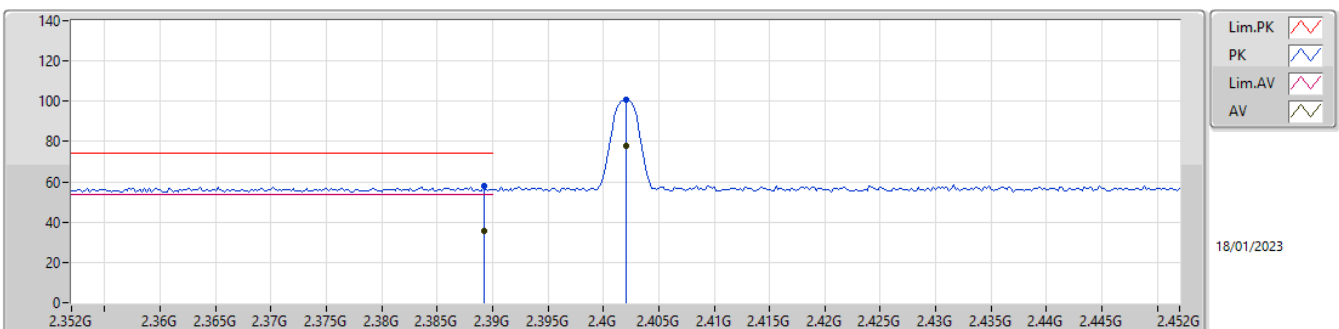
2402MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3752G	35.11	54.00	-18.89	31.80	3	Vertical	51	1.87	3.31	27.40	4.40	-
AV	2.402G	80.11	Inf	-Inf	32.02	3	Vertical	51	1.87	48.09	27.60	4.42	-
PK	2.3752G	57.61	74.00	-16.39	31.80	3	Vertical	51	1.87	25.81	27.40	4.40	-
PK	2.402G	102.61	Inf	-Inf	32.02	3	Vertical	51	1.87	70.59	27.60	4.42	-

2.4-2.4835GHz_BT-EDR(3Mbps)

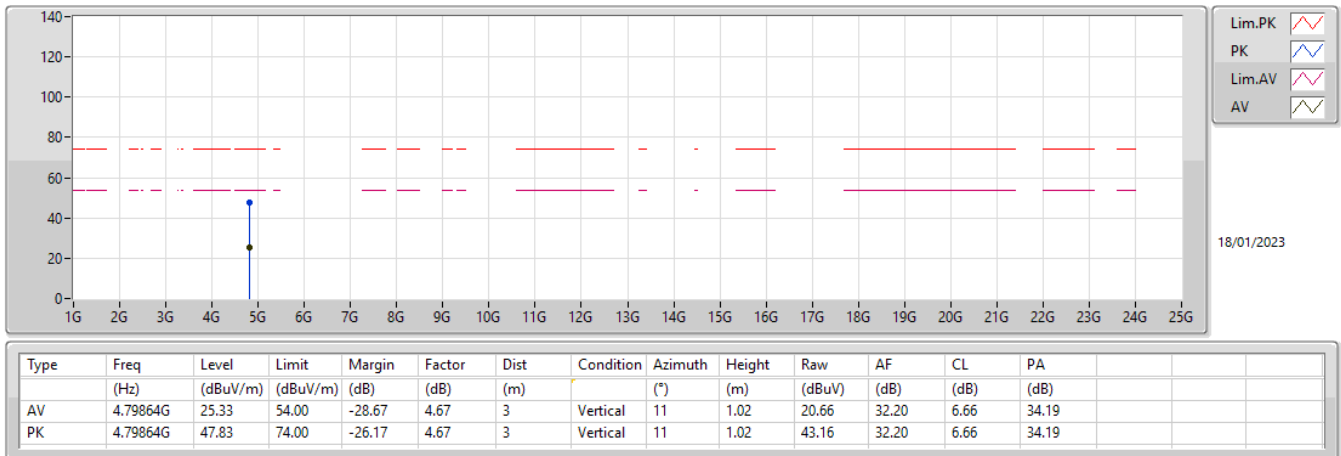
2402MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3892G	35.41	54.00	-18.59	31.92	3	Horizontal	79	1.86	3.49	27.51	4.41	-
AV	2.402G	78.10	Inf	-Inf	32.02	3	Horizontal	79	1.86	46.08	27.60	4.42	-
PK	2.3892G	57.91	74.00	-16.09	31.92	3	Horizontal	79	1.86	25.99	27.51	4.41	-
PK	2.402G	100.60	Inf	-Inf	32.02	3	Horizontal	79	1.86	68.58	27.60	4.42	-

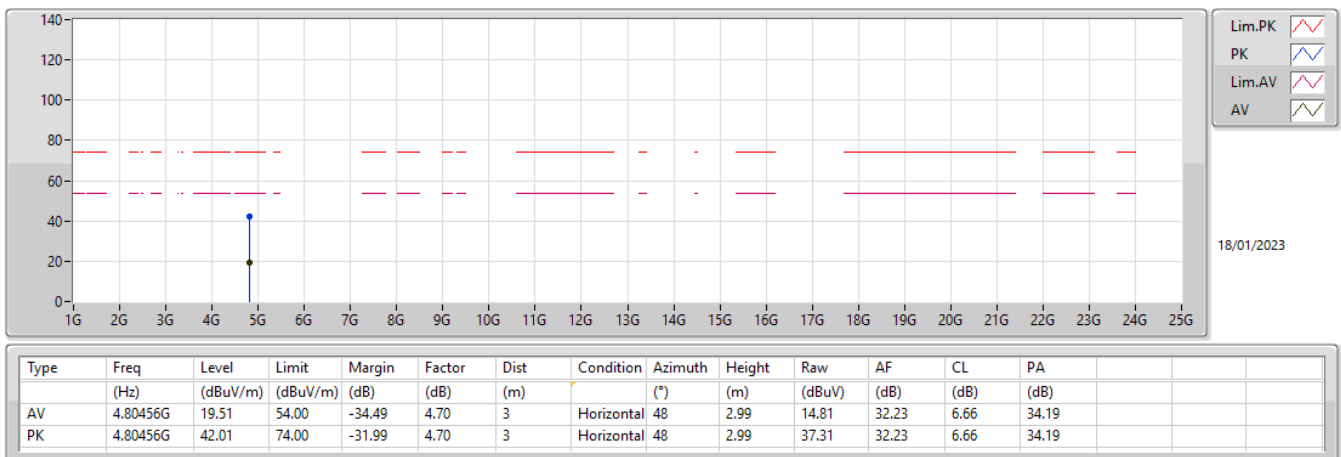
2.4-2.4835GHz_BT-EDR(3Mbps)

2402MHz_TX



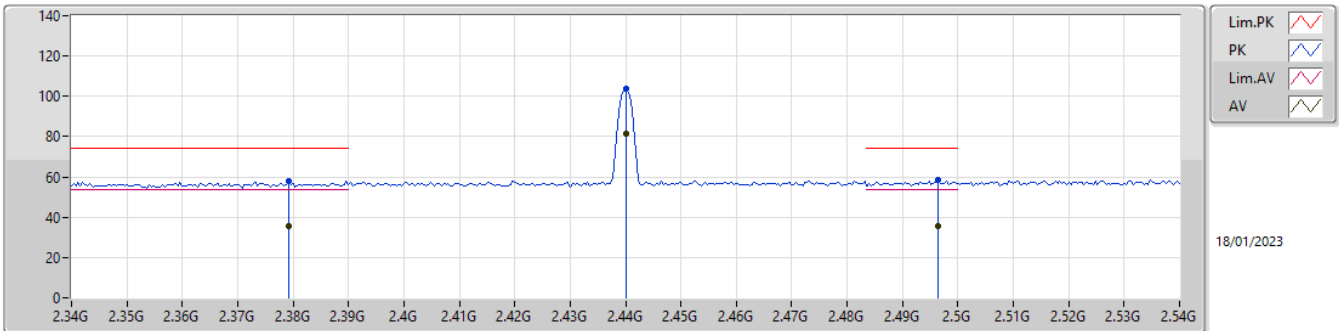
2.4-2.4835GHz_BT-EDR(3Mbps)

2402MHz_TX



2.4-2.4835GHz_BT-EDR(3Mbps)

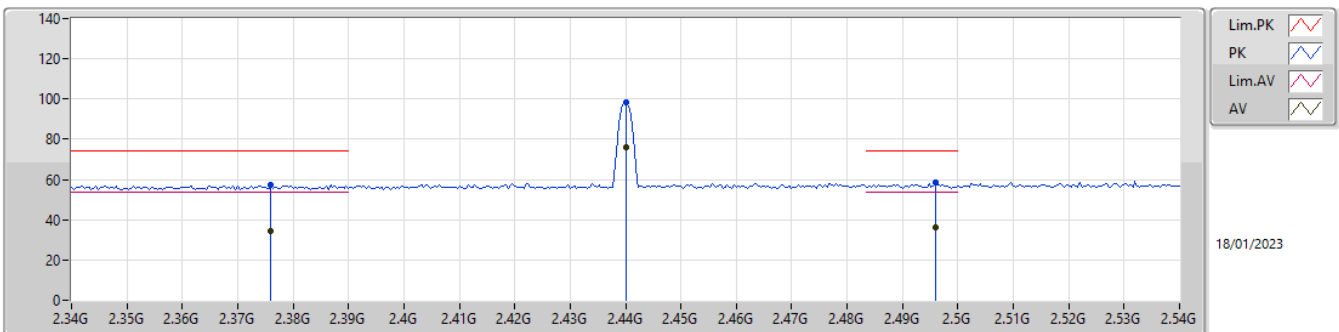
2440MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3792G	35.36	54.00	-18.64	31.83	3	Vertical	41	1.86	3.53	27.43	4.40	-
AV	2.44G	81.20	Inf	-Inf	32.14	3	Vertical	41	1.86	49.06	27.68	4.46	-
AV	2.4964G	35.74	54.00	-18.26	32.41	3	Vertical	41	1.86	3.33	27.89	4.52	-
PK	2.3792G	57.86	74.00	-16.14	31.83	3	Vertical	41	1.86	26.03	27.43	4.40	-
PK	2.44G	103.70	Inf	-Inf	32.14	3	Vertical	41	1.86	71.56	27.68	4.46	-
PK	2.4964G	58.24	74.00	-15.76	32.41	3	Vertical	41	1.86	25.83	27.89	4.52	-

2.4-2.4835GHz_BT-EDR(3Mbps)

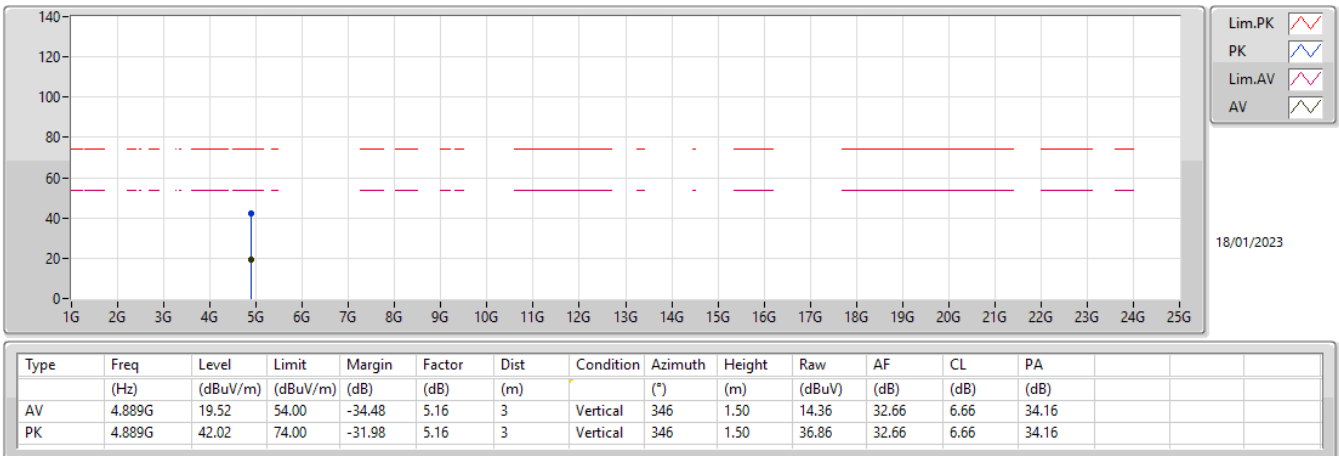
2440MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.376G	34.65	54.00	-19.35	31.81	3	Horizontal	80	2.59	2.84	27.41	4.40	-
AV	2.44G	75.88	Inf	-Inf	32.14	3	Horizontal	80	2.59	43.74	27.68	4.46	-
AV	2.496G	36.22	54.00	-17.78	32.40	3	Horizontal	80	2.59	3.82	27.88	4.52	-
PK	2.376G	57.15	74.00	-16.85	31.81	3	Horizontal	80	2.59	25.34	27.41	4.40	-
PK	2.44G	98.38	Inf	-Inf	32.14	3	Horizontal	80	2.59	66.24	27.68	4.46	-
PK	2.496G	58.72	74.00	-15.28	32.40	3	Horizontal	80	2.59	26.32	27.88	4.52	-

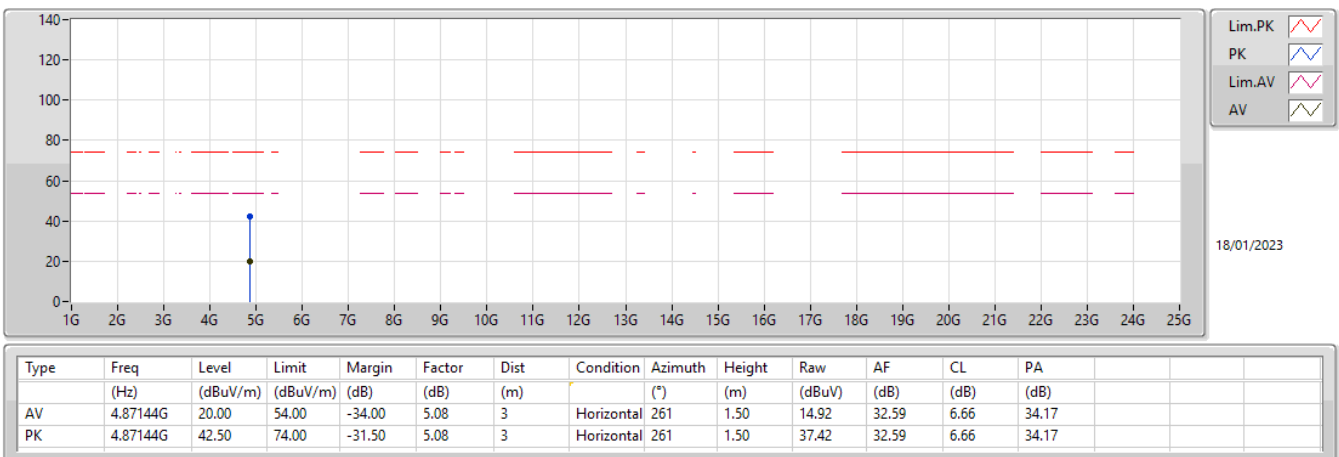
2.4-2.4835GHz_BT-EDR(3Mbps)

2440MHz_TX



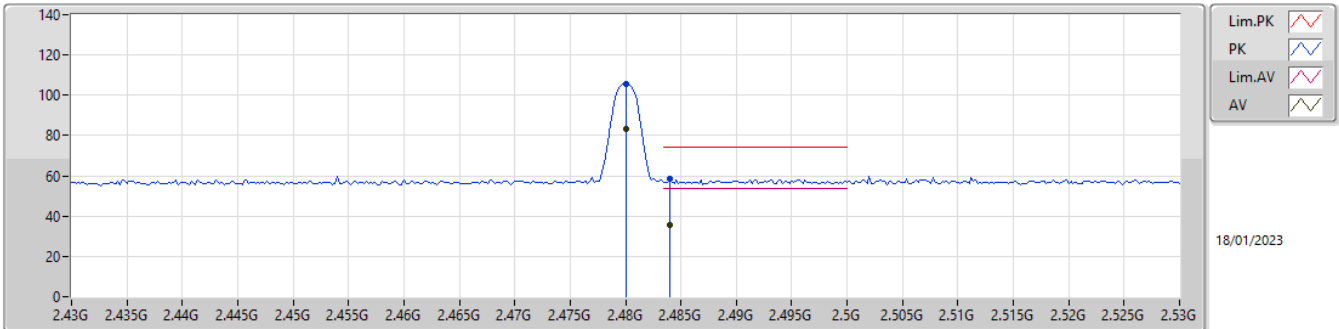
2.4-2.4835GHz_BT-EDR(3Mbps)

2440MHz_TX



2.4-2.4835GHz_BT-EDR(3Mbps)

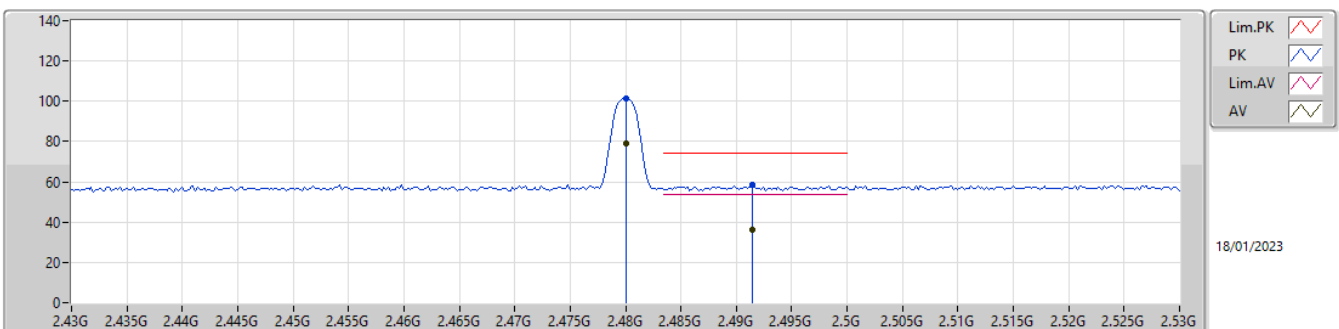
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Raw	AF	CL	PA
(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(dB)	(m)		(°)	(m)	(dBuV)	(dB)	(dB)	(dB)
AV	2.48G	83.17	Inf	-Inf	32.32	3	Vertical	44	1.96	50.85	27.82	4.50	-
AV	2.484G	35.76	54.00	-18.24	32.35	3	Vertical	44	1.96	3.41	27.84	4.51	-
PK	2.48G	105.67	Inf	-Inf	32.32	3	Vertical	44	1.96	73.35	27.82	4.50	-
PK	2.484G	58.26	74.00	-15.74	32.35	3	Vertical	44	1.96	25.91	27.84	4.51	-

2.4-2.4835GHz_BT-EDR(3Mbps)

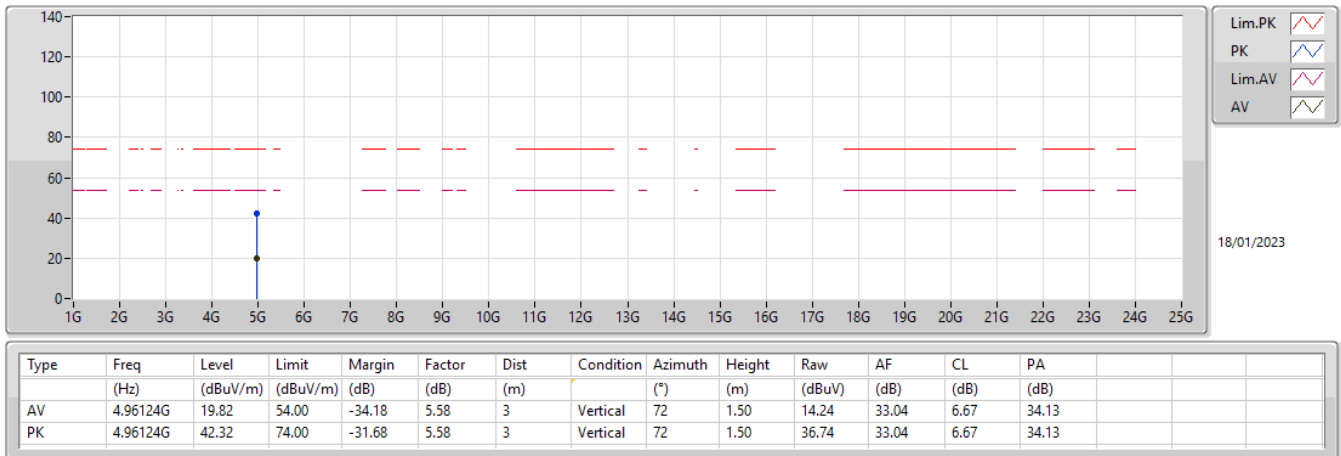
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Raw	AF	CL	PA
(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(dB)	(m)		(°)	(m)	(dBuV)	(dB)	(dB)	(dB)
AV	2.48G	79.06	Inf	-Inf	32.32	3	Horizontal	71	1.91	46.74	27.82	4.50	-
AV	2.4914G	35.95	54.00	-18.05	32.39	3	Horizontal	71	1.91	3.56	27.87	4.52	-
PK	2.48G	101.56	Inf	-Inf	32.32	3	Horizontal	71	1.91	69.24	27.82	4.50	-
PK	2.4914G	58.45	74.00	-15.55	32.39	3	Horizontal	71	1.91	26.06	27.87	4.52	-

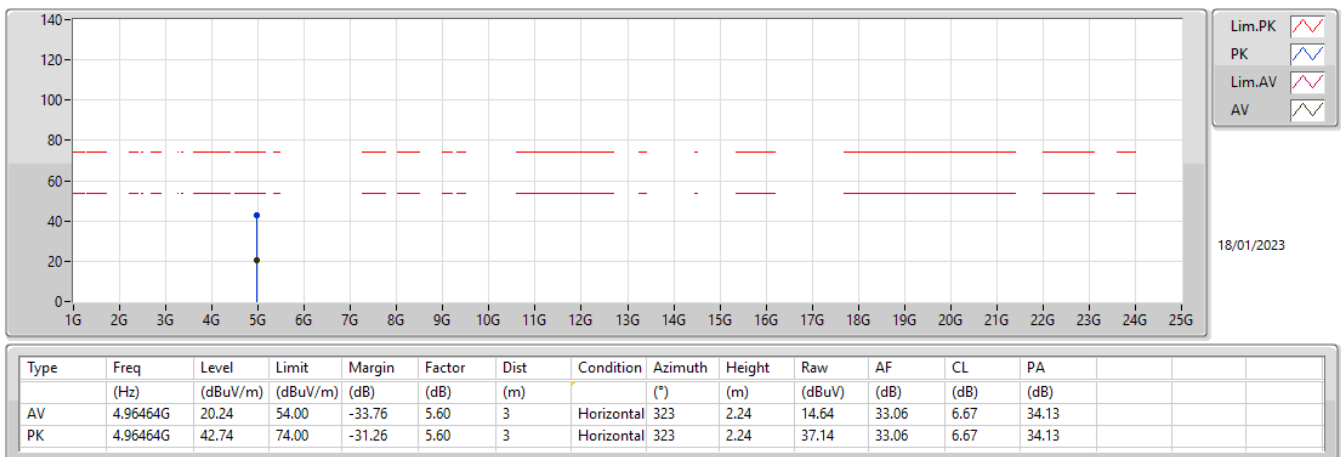
2.4-2.4835GHz_BT-EDR(3Mbps)

2480MHz_TX



2.4-2.4835GHz_BT-EDR(3Mbps)

2480MHz_TX





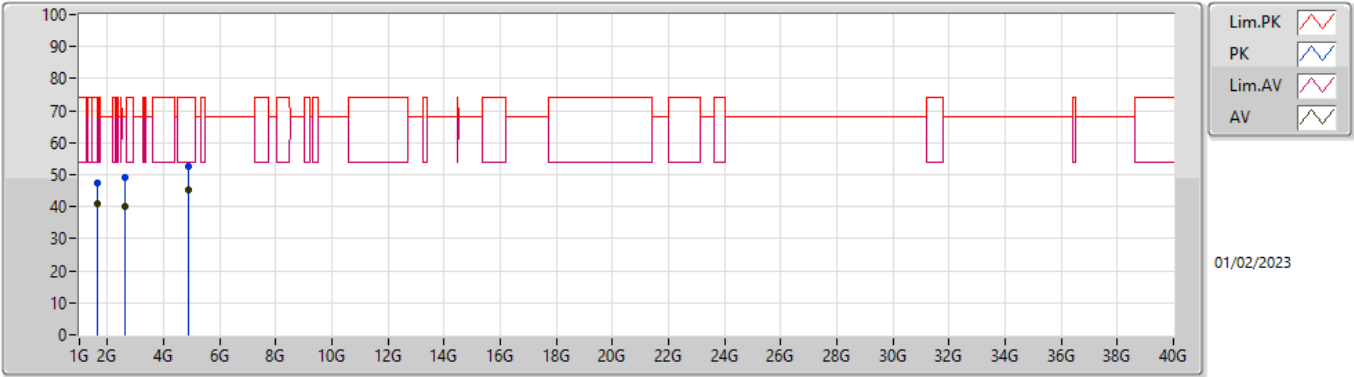
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	4.87389G	46.74	54.00	-7.26	Horizontal
Mode 2	Pass	AV	1.35491G	44.84	54.00	-9.16	Vertical

Result

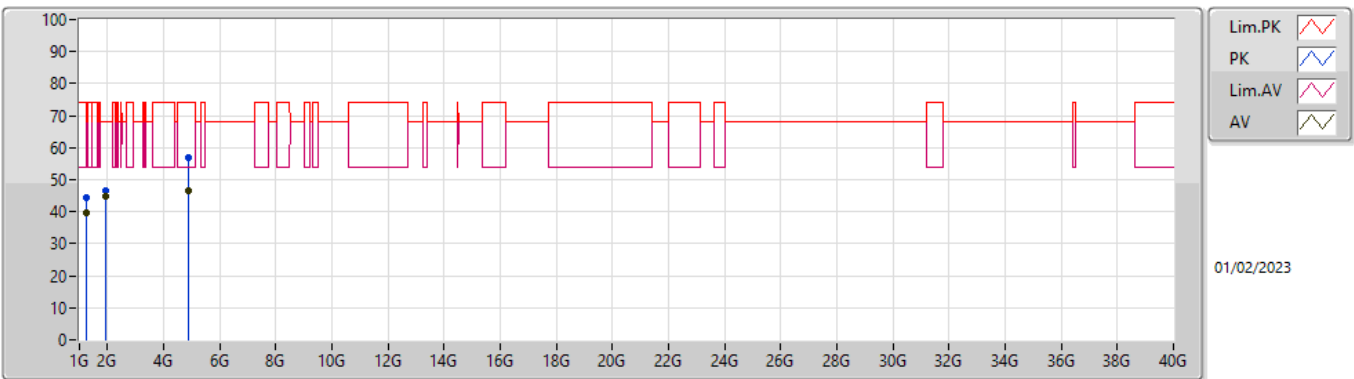
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
Mode 1	Pass	AV	1.65896G	40.87	68.20	-27.33	3	Vertical	68	1.51	-
Mode 1	Pass	AV	2.60236G	40.09	68.20	-28.11	3	Vertical	298	1.18	-
Mode 1	Pass	AV	4.87402G	45.14	54.00	-8.86	3	Vertical	132	2.37	-
Mode 1	Pass	PK	1.65933G	47.39	68.20	-20.81	3	Vertical	68	1.51	-
Mode 1	Pass	PK	2.60582G	49.31	68.20	-18.89	3	Vertical	298	1.18	-
Mode 1	Pass	PK	4.87411G	52.73	74.00	-21.27	3	Vertical	132	2.37	-
Mode 1	Pass	AV	1.2449G	39.71	68.20	-28.49	3	Horizontal	178	1.84	-
Mode 1	Pass	AV	1.9156G	44.86	68.20	-23.34	3	Horizontal	262	1.53	-
Mode 1	Pass	AV	4.87389G	46.74	54.00	-7.26	3	Horizontal	45	2.76	-
Mode 1	Pass	PK	1.24483G	44.37	68.20	-23.83	3	Horizontal	178	1.84	-
Mode 1	Pass	PK	1.92314G	46.73	68.20	-21.47	3	Horizontal	262	1.53	-
Mode 1	Pass	PK	4.87412G	56.84	74.00	-17.16	3	Horizontal	45	2.76	-
Mode 2	Pass	AV	1.35491G	44.84	54.00	-9.16	3	Vertical	197	1.29	-
Mode 2	Pass	AV	2.8196G	43.72	54.00	-10.28	3	Vertical	96	2.43	-
Mode 2	Pass	AV	3.6418G	39.95	54.00	-14.05	3	Vertical	205	1.64	-
Mode 2	Pass	PK	1.3607G	48.55	74.00	-25.45	3	Vertical	197	1.29	-
Mode 2	Pass	PK	2.82088G	57.70	74.00	-16.30	3	Vertical	96	2.43	-
Mode 2	Pass	PK	3.6587G	48.72	74.00	-25.28	3	Vertical	205	1.64	-
Mode 2	Pass	AV	1.4696G	42.02	54.00	-11.98	3	Horizontal	115	2.29	-
Mode 2	Pass	AV	2.1633G	50.08	68.20	-18.12	3	Horizontal	260	1.46	-
Mode 2	Pass	AV	3.48907G	46.19	68.20	-22.01	3	Horizontal	183	1.61	-
Mode 2	Pass	PK	1.47013G	48.90	74.00	-25.10	3	Horizontal	115	2.29	-
Mode 2	Pass	PK	2.15993G	51.08	68.20	-17.12	3	Horizontal	260	1.46	-
Mode 2	Pass	PK	3.49121G	51.57	68.20	-16.63	3	Horizontal	183	1.61	-

Radiated Emissions above 1GHz_Mode 1



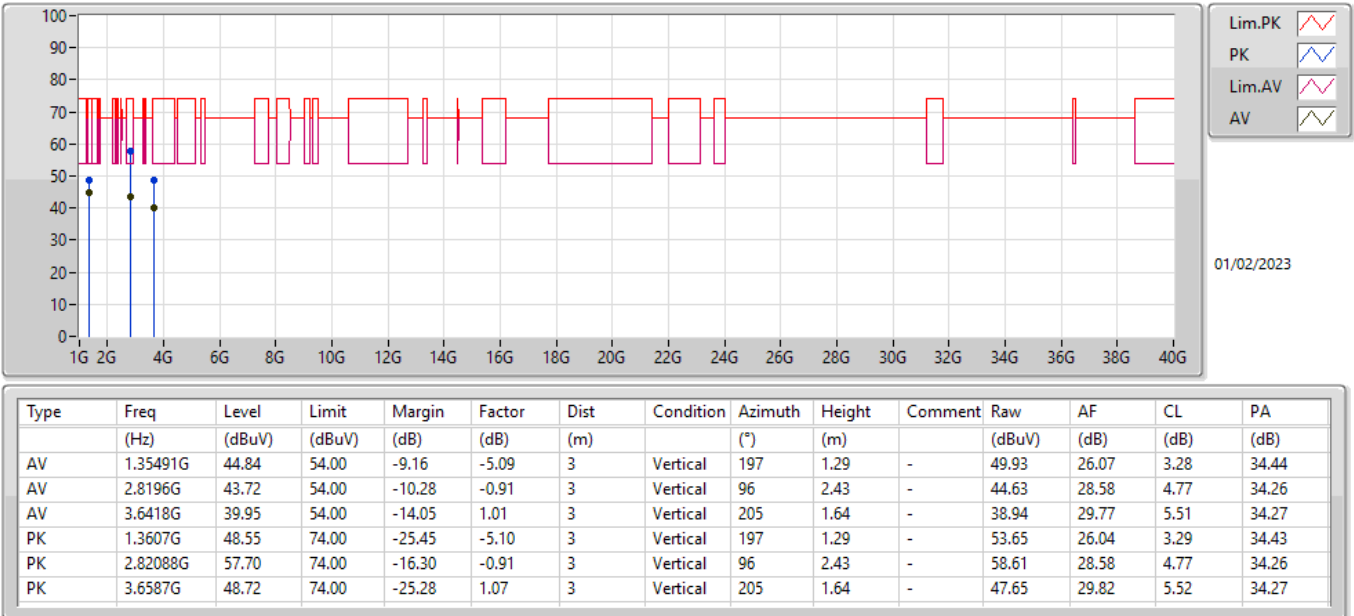
Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	1.65896G	40.87	68.20	-27.33	-5.27	3	Vertical	68	1.51	-	46.14	25.23	3.67	34.17
AV	2.60236G	40.09	68.20	-28.11	-1.40	3	Vertical	298	1.18	-	41.49	28.20	4.63	34.23
AV	4.87402G	45.14	54.00	-8.86	5.09	3	Vertical	132	2.37	-	40.05	32.60	6.66	34.17
PK	1.65933G	47.39	68.20	-20.81	-5.27	3	Vertical	68	1.51	-	52.66	25.23	3.67	34.17
PK	2.60582G	49.31	68.20	-18.89	-1.40	3	Vertical	298	1.18	-	50.71	28.20	4.63	34.23
PK	4.87411G	52.73	74.00	-21.27	5.09	3	Vertical	132	2.37	-	47.64	32.60	6.66	34.17

Radiated Emissions above 1GHz_Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	1.2449G	39.71	68.20	-28.49	-5.47	3	Horizontal	178	1.84	-	45.18	26.01	3.15	34.63
AV	1.9156G	44.86	68.20	-23.34	-4.29	3	Horizontal	262	1.53	-	49.15	25.92	3.92	34.13
AV	4.87389G	46.74	54.00	-7.26	5.09	3	Horizontal	45	2.76	-	41.65	32.60	6.66	34.17
PK	1.24483G	44.37	68.20	-23.83	-5.47	3	Horizontal	178	1.84	-	49.84	26.01	3.15	34.63
PK	1.92314G	46.73	68.20	-21.47	-4.18	3	Horizontal	262	1.53	-	50.91	26.02	3.93	34.13
PK	4.87412G	56.84	74.00	-17.16	5.09	3	Horizontal	45	2.76	-	51.75	32.60	6.66	34.17

Radiated Emissions above 1GHz_Mode 2



Radiated Emissions above 1GHz_Mode 2

