



RADIO TEST REPORT

FCC ID : N89-JB413A1V1
Equipment : 2.4GHz Bluetooth4.1 IoT Module
Brand Name : SonicFi, CyberTAN
Model Name : JB413-A1
Applicant : CyberTAN Technology Inc.
No. 99, Park Avenue III Science-based Industrial
Park Hsinchu Taiwan 308
Manufacturer : CyberTAN Technology Inc.
No. 99, Park Avenue III Science-based Industrial
Park Hsinchu Taiwan 308
Standard : 47 CFR FCC Part 15.247

The product was received on Sep. 28, 2023, and testing was started from Oct. 04, 2023 and completed on Oct. 27, 2023. We, Sporton International Inc. Hsinchu 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. Hsinchu Laboratory, the test report shall not be reproduced except in full.

Approved by: Sam Chen

Sporton International Inc. Hsinchu Laboratory

No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County 302010, Taiwan (R.O.C.)



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TEL : 886-3-656-9065
FAX : 886-3-656-9085
Report Template No.: CB-A10_5 Ver1.3



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 Band edge	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	-

Conformity Assessment Condition:

1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacture who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. The measurement uncertainty please refer to each test result in the chapter "Measurement Uncertainty".

Disclaimer:

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

Reviewed by: Sam Chen

Report Producer: Cathy 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**

Ant.	Port	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	1	INPAQ	ACA-2012-A1-CC-S	Chip Antenna	N/A	1.72

Note: The above information was declared by manufacturer.

For Bluetooth function (1TX/1RX):

Only Port 1 can be used as transmitting/receiving antenna.

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
BT-BR(1Mbps)	0.822	0.85	2.888m	1k
BT-EDR(2Mbps)	0.829	0.81	2.909m	1k
BT-EDR(3Mbps)	0.826	0.83	2.901m	1k

Note:

- ♦ DC is Duty Cycle.
- ♦ DCF is Duty Cycle Factor.

1.1.4 EUT Operational Condition

EUT Power Type	From host system
Test Software Version	BlueTest3 v2.6.2.632

1.1.5 Table for Multiple Listing

The brand names in the following table are all refer to the identical product.

Brand Name	Description
SonicFi	All the brands are identical, the difference brand served as marketing strategy.
CyberTAN	

Note 1: From the above brands, brand: CyberTAN was selected as representative brand for the test and its data was recorded in this report.

Note 2: The above information was declared by manufacturer.



1.2 Applicable Standards

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

- ♦ 47 CFR FCC Part 15.247

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

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

1.3 Testing Location Information

Testing Location Information	
Test Lab. : Sporton International Inc. Hsinchu Laboratory	
Hsinchu (TAF: 3787)	ADD: No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County 302010, Taiwan (R.O.C.) TEL: 886-3-656-9065 FAX: 886-3-656-9085 Test site Designation No. TW3787 with FCC. Conformity Assessment Body Identifier (CABID) TW3787 with ISCED.

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
RF Conducted	TH03-CB	Owen Hsu	24.1-25.1 / 62-67	Oct. 06, 2023
Radiated (Below 1GHz)	03CH04-CB	RJ Huang	21.2-22.3 / 56-59	Oct. 04, 2023~ Oct. 19, 2023
Radiated (Above 1GHz)	03CH02-CB	RJ Huang	23-24 / 55-58	Oct. 04, 2023~ Oct. 19, 2023
AC Conduction	CO02-CB	Joe Chu	22~23 / 61~62	Oct. 27, 2023

1.4 Measurement Uncertainty

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

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	3.4 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.1 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.1 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.2 dB	Confidence levels of 95%
Conducted Emission	3.1 dB	Confidence levels of 95%
Output Power Measurement	0.8 dB	Confidence levels of 95%
Power Density Measurement	3.1 dB	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

Mode	Power Setting
BT-BR(1Mbps)	-
2402MHz	63
2440MHz	63
2480MHz	63
BT-EDR(2Mbps)	-
2402MHz	63
2440MHz	63
2480MHz	63
BT-EDR(3Mbps)	-
2402MHz	63
2440MHz	63
2480MHz	63

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	EUT

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

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
After evaluating, the worst case was found at X axis from Emissions in Restricted Frequency Bands above 1GHz. So the measurement will follow this same test configuration.	
1	EUT in X-axis
Operating Mode > 1GHz	CTX
After evaluating, the worst case was found at X axis, thus the measurement will follow this same test configuration.	
1	EUT in X-axis

2.3 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

2.4 Accessories

N/A



2.5 Support Equipment

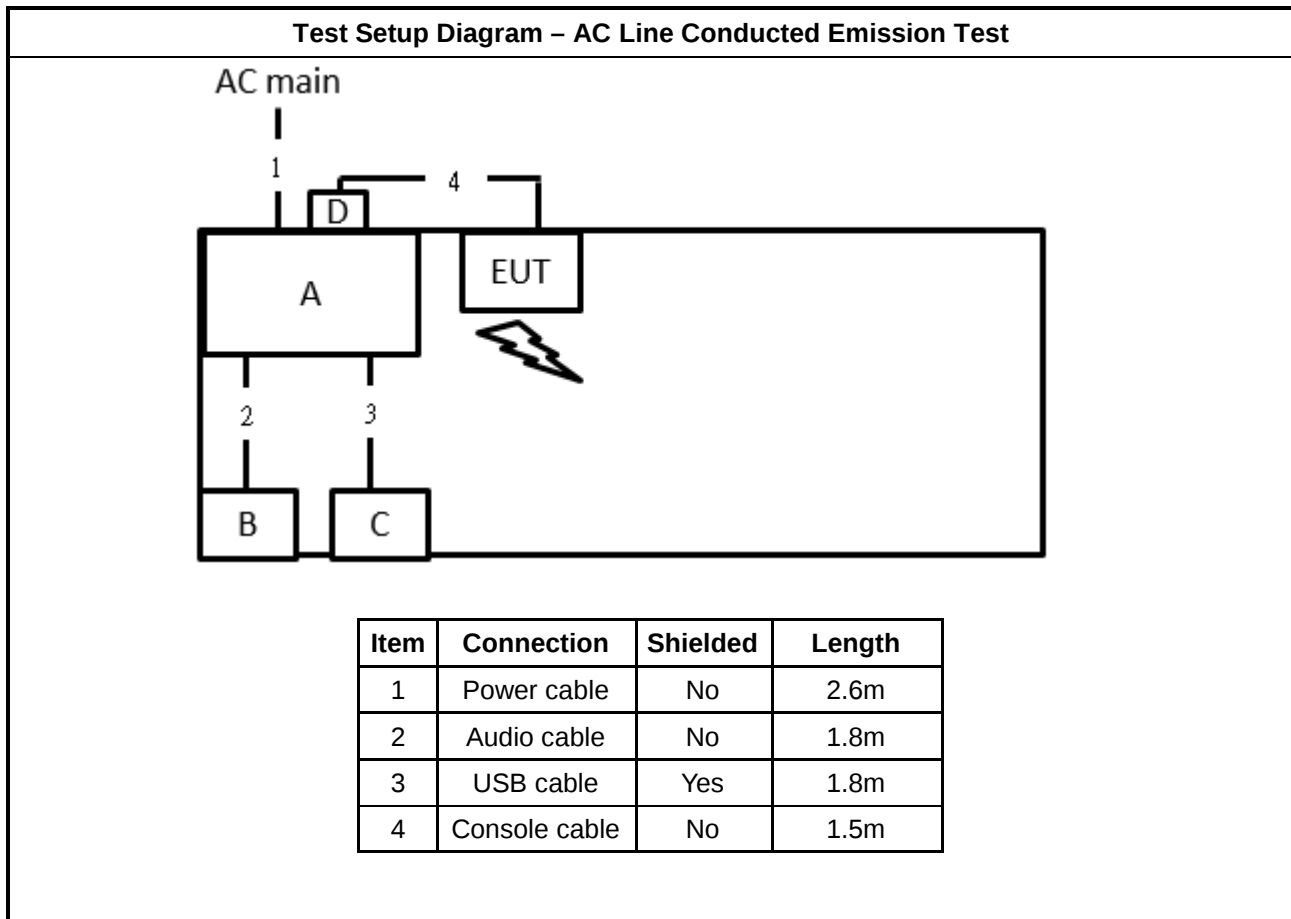
For AC Conduction:

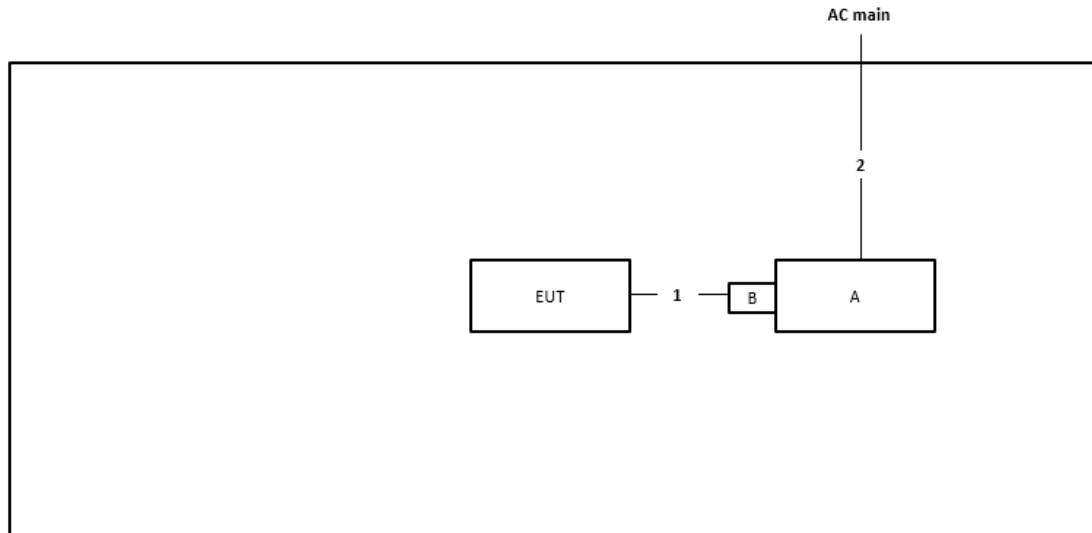
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E6430	N/A
B	Earphone	SHYARO CHI	MIC-04	N/A
C	Mouse	HP	FM100	T41259
D	Fixture	CyberTAN	FT232	N/A

For Radiated and RF Conducted:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A
B	Fixture	CyberTAN	FT232	N/A

2.6 Test Setup Diagram



Test Setup Diagram - Radiated Test


Item	Connection	Shielded	Length
1	Console cable	No	1.5m
2	Power cable	No	1.5m

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.		

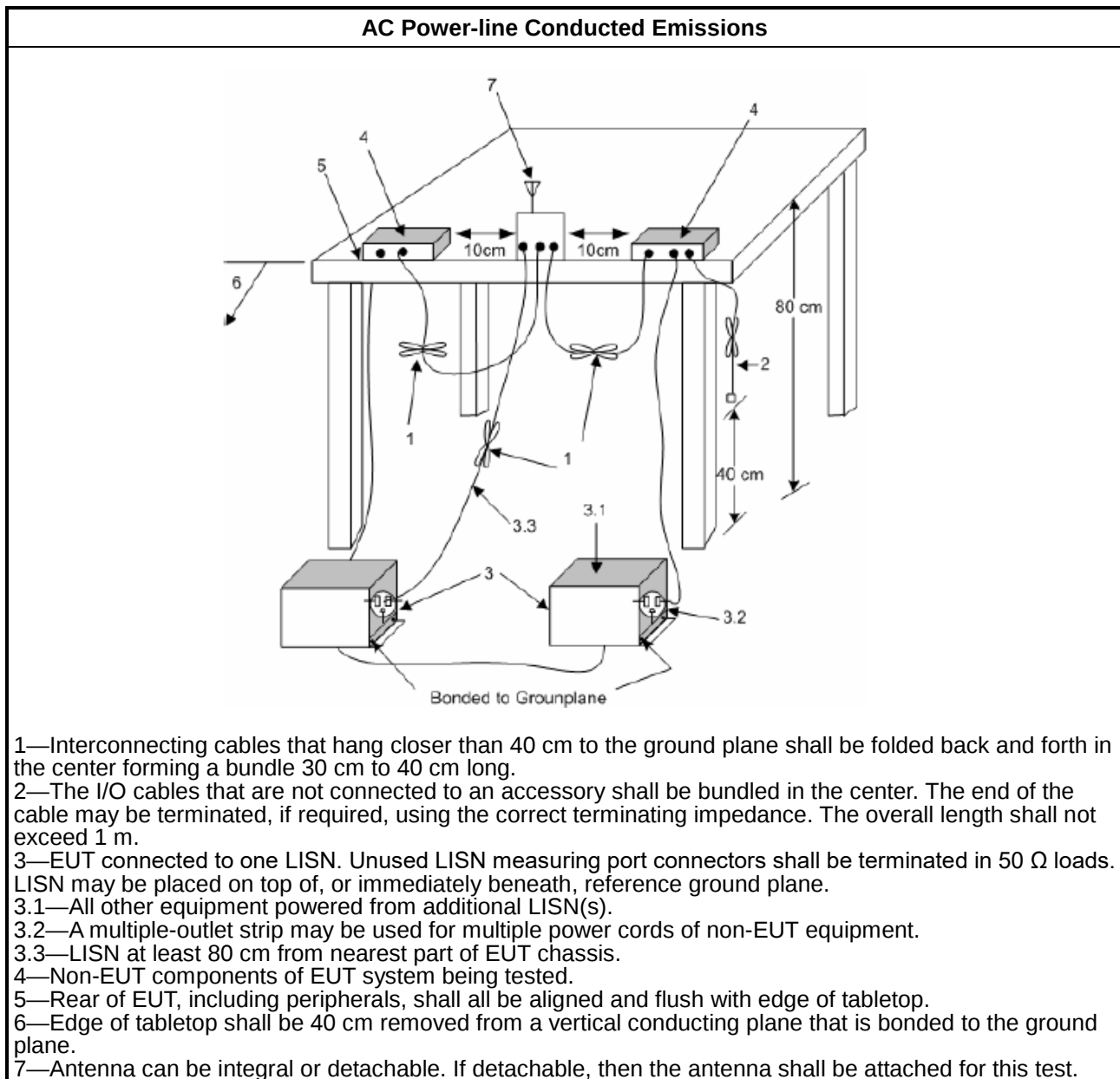
3.1.2 Measuring Instruments

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 Test Setup



1.1.1. Measurement Results Calculation

The measured Level is calculated using:

- Corrected Reading: LISN Factor (LISN) + Attenuator (AT/AUX) + Cable Loss (CL) + Read Level (Raw) = Level
- Margin = -Limit + Level

3.1.5 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	
▪ 902-928 MHz Band:	
	▪ $N \geq 50$ and $ChS \geq \text{MAX}$ (20 dB bandwidth, 25 kHz); 20 dB bandwidth $\leq$ 250 kHz.
	▪ $50 > N \geq 25$ and $ChS \geq \text{MAX}$ (20 dB bandwidth, 25 kHz); 20 dB bandwidth $>$ 250 kHz.
▪ 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).
▪ 5725-5850 MHz Band:	
	▪ $N \geq 75$ and $ChS \geq \text{MAX}$ (20 dB bandwidth, 25 kHz); 20 dB bandwidth $\leq$ 1 MHz.
N: Number of Hopping Frequencies; ChS: Hopping Channel Separation	

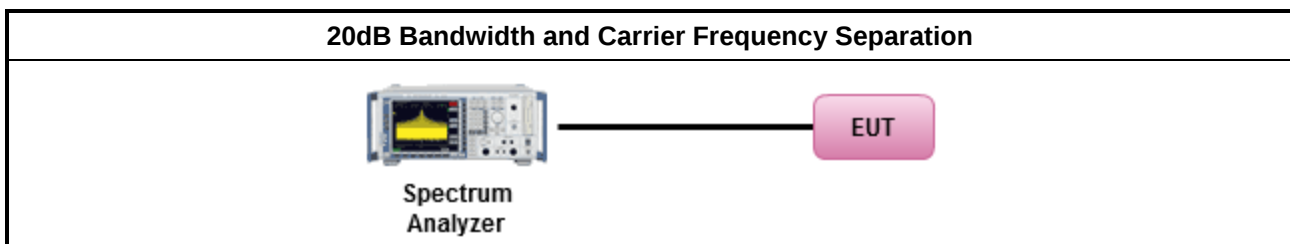
3.2.2 Measuring Instruments

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 6.9.1 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	
▪ 902-928 MHz Band:	
▪ N ≥ 50; Power 30dBm; EIRP 36dBm	
▪ 50 > N ≥ 25; Power 23.98dBm; EIRP 29.98dBm	
▪ 2400-2483.5 MHz Band:	
▪ N ≥ 75; Power 30dBm; EIRP 36dBm	
▪ 75 > N ≥ 15; Power 21dBm; EIRP 27dBm	
▪ 5725-5850 MHz Band:	
▪ N ≥ 75; Power 30dBm; EIRP 36dBm	
N: Number of Hopping Frequencies	

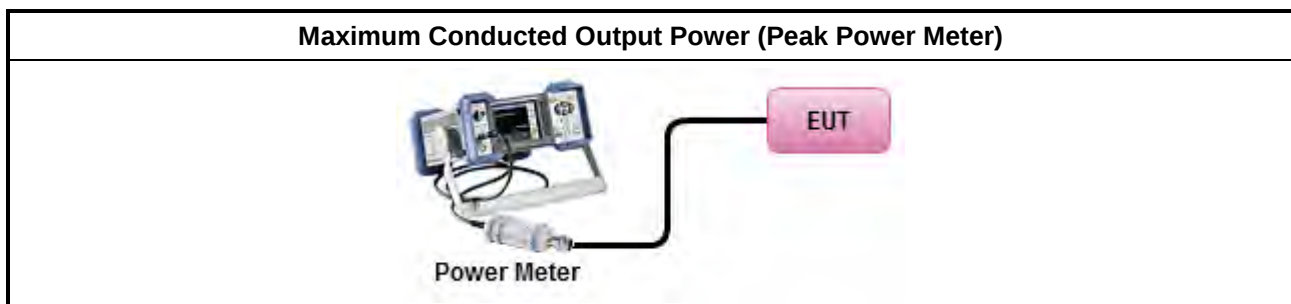
3.3.2 Measuring Instruments

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	
▪ 902-928 MHz Band:	
	▪ $N \geq 50$ and $ChS \geq MAX$ (20 dB bandwidth, 25 kHz); 20 dB bandwidth $\leq$ 250 kHz.
	▪ $50 > N \geq 25$ and $ChS \geq MAX$ (20 dB bandwidth, 25 kHz); 20 dB bandwidth $>$ 250 kHz.
▪ 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).
▪ 5725-5850 MHz Band:	
	▪ $N \geq 75$ and $ChS \geq MAX$ (20 dB bandwidth, 25 kHz); 20 dB bandwidth $\leq$ 1 MHz.
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

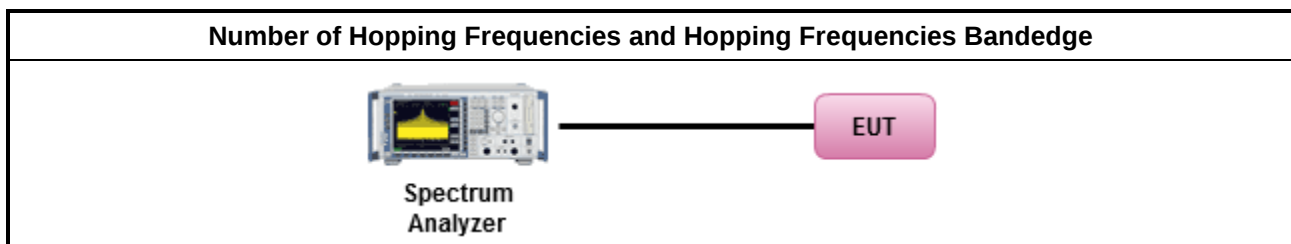
3.4.3 Measuring Instruments

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

20dB Bandwidth and Carrier Frequency Separation Limit for Frequency Hopping Systems	
▪ 902-928 MHz Band:	
	▪ $N \geq 50$; 0.4s in 20s period
	▪ $50 > N \geq 25$; 0.4s in 10s period
▪ 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
▪ 5725-5850 MHz Band:	
	▪ $N \geq 75$; 0.4s in 30s period
N: Number of Hopping Frequencies	

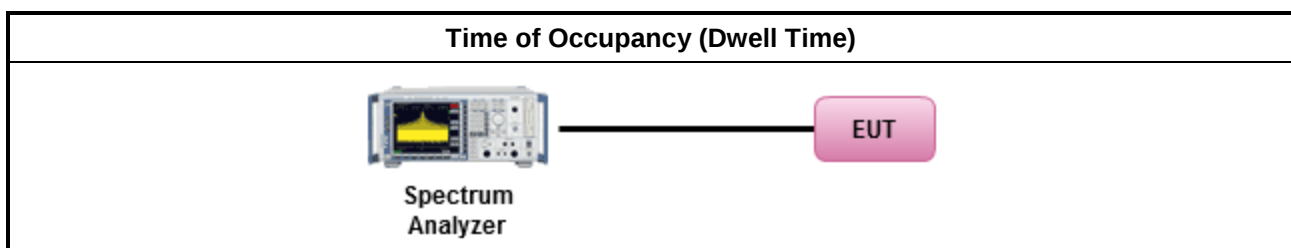
3.5.2 Measuring Instruments

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 (dBc)
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.	

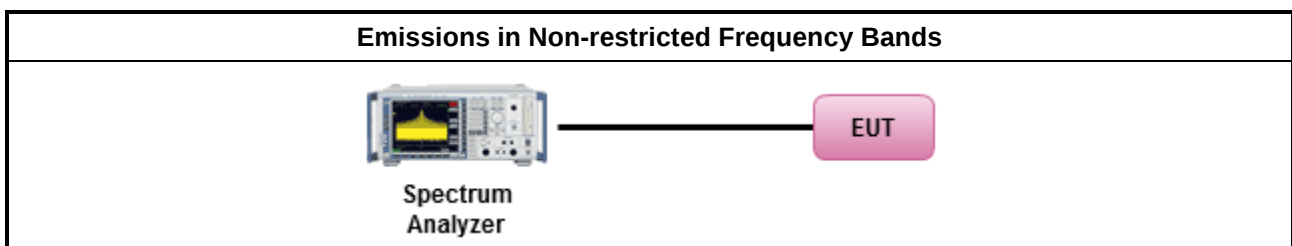
3.6.2 Measuring Instruments

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.

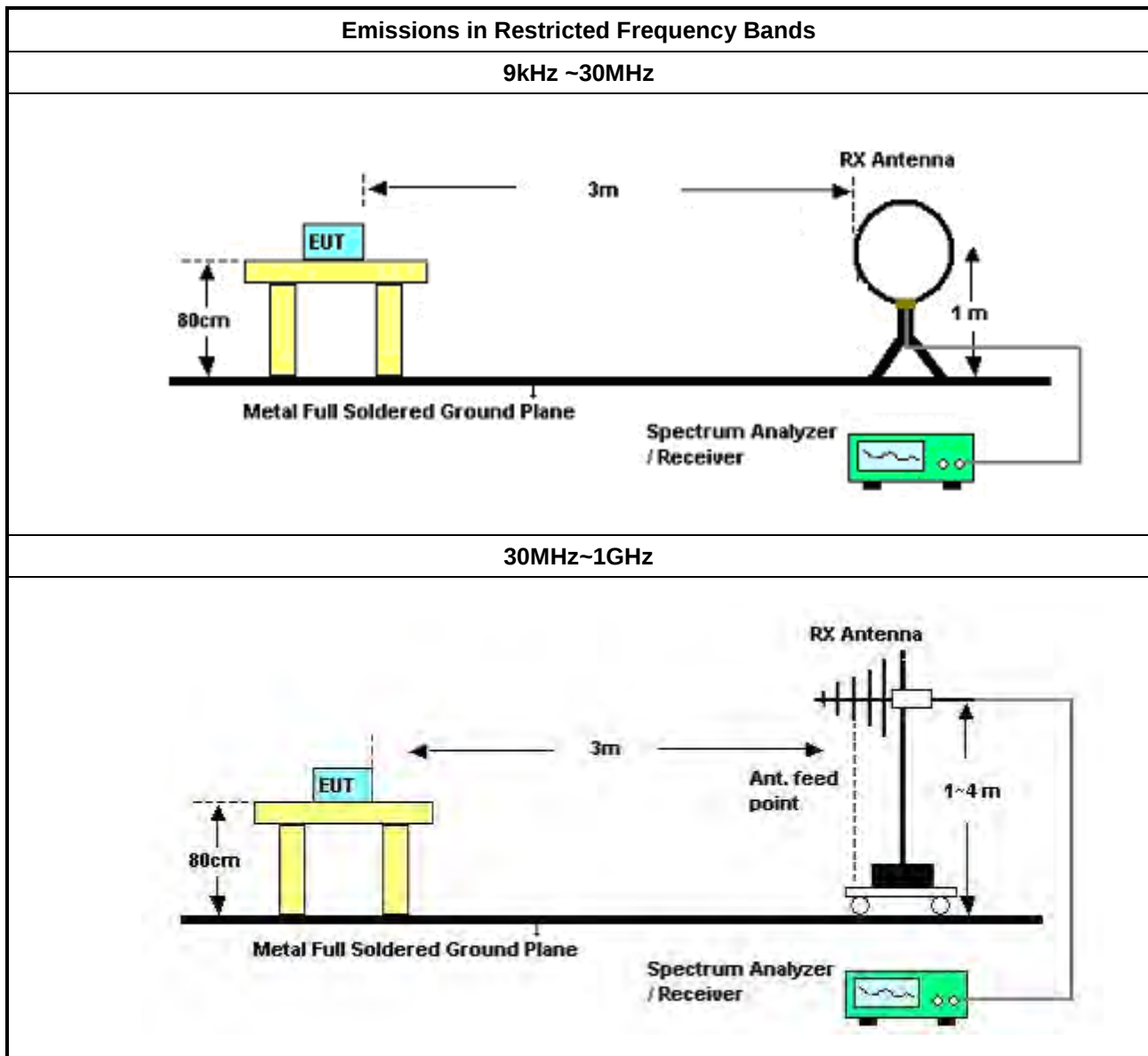
3.7.2 Measuring Instruments

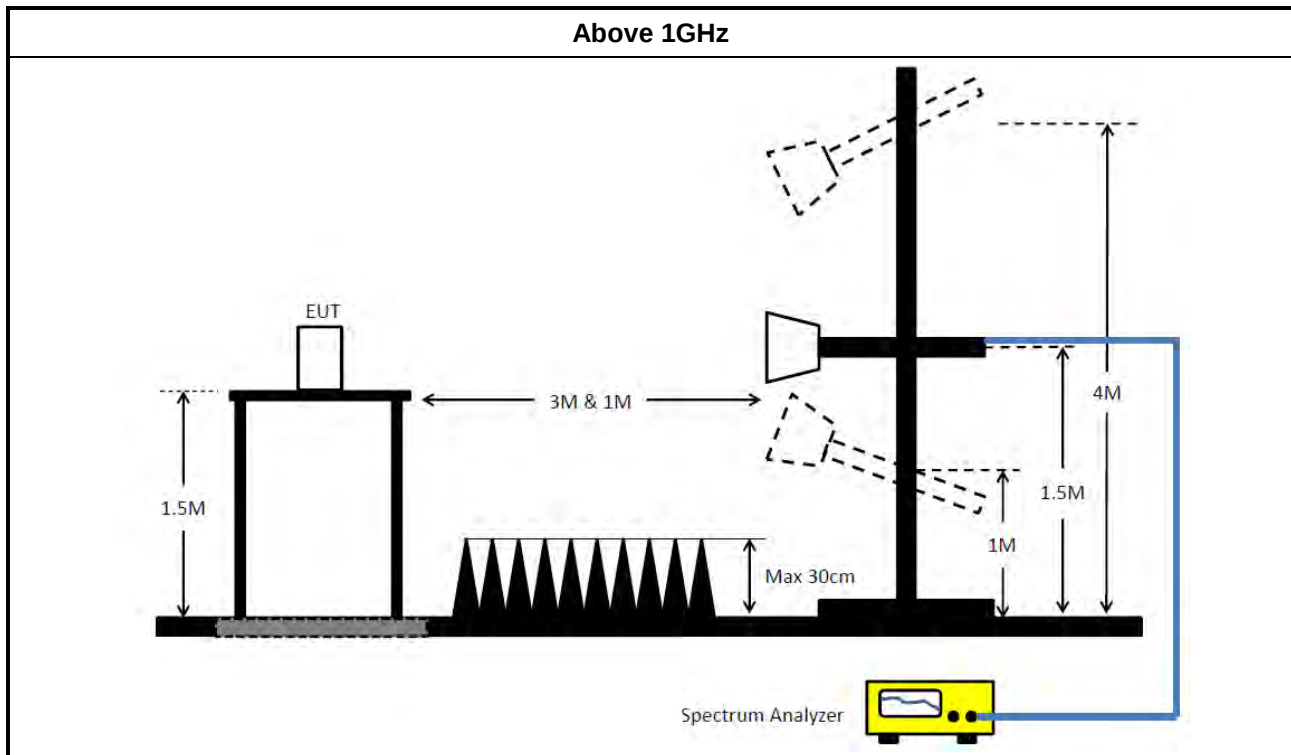
Refer a test equipment and calibration data table in this test report.

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.

3.7.4 Test Setup





3.7.5 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Antenna factor (AF) + Cable loss (CL) + Read level (Raw) - Preamp factor (PA)(if applicable) = Level.

3.7.6 Emissions in Restricted Frequency Bands (Below 30MHz)

There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to KDB414788 Radiated Test Site, and the result came out very similar.

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

The radiated emissions were investigated from 9 kHz or the lowest frequency generated within the device, up to the 10th harmonic or 40 GHz, whichever is appropriate.

3.7.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix G



4 Test Equipment and Calibration Data

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
LISN	Schwarzbeck	NSLK 8127	8127650	9kHz ~ 30MHz	Apr. 06, 2023	Apr. 05, 2024	Conduction (CO02-CB)
LISN	Schwarzbeck	NSLK 8127	8127478	9kHz ~ 30MHz	Dec. 20, 2022	Dec. 19, 2023	Conduction (CO02-CB)
EMI Receiver	Agilent	N9038A	MY52260140	9kHz ~ 8.4GHz	May 18, 2023	May 17, 2024	Conduction (CO02-CB)
COND Cable	Woken	Cable	2	0.15MHz ~ 30MHz	Oct. 18, 2022	Oct. 17, 2023	Conduction (CO02-CB)
Pulse Limiter	Schwarzbeck	VTSD 9561F-N	00378	9kHz ~ 30MHz	Oct. 18, 2022	Oct. 17, 2023	Conduction (CO02-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO02-CB)
Loop Antenna	Teseq	HLA 6120	31244	9kHz - 30 MHz	Mar. 23, 2023	Mar. 22, 2024	Radiation (03CH04-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH04-CB	30 MHz ~ 1 GHz	Aug. 01, 2023	Jul. 31, 2024	Radiation (03CH04-CB)
BILOG ANTENNA with 6 dB attenuator	Schaffner & EMCI	CBL6112B & N-6-06	22021&AT-N06 07	30MHz ~ 1GHz	Oct. 08, 2022	Oct. 07, 2023	Radiation (03CH04-CB)
BILOG ANTENNA with 6 dB attenuator	Schaffner & EMCI	CBL6112B & N-6-06	22021&AT-N06 07	30MHz ~ 1GHz	Oct. 07, 2023	Oct. 06, 2024	Radiation (03CH04-CB)
Pre-Amplifier	EMCI	EMC330N	980391	20MHz ~ 3GHz	May 23, 2023	May 22, 2024	Radiation (03CH04-CB)
Spectrum Analyzer	R&S	FSP40	100142	9kHz~40GHz	Mar. 21, 2023	Mar. 20, 2024	Radiation (03CH04-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	Jun. 13, 2023	Jun. 12, 2024	Radiation (03CH04-CB)
RF Cable-low	Woken	RG402	Low Cable-03+67	30MHz ~ 1GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH04-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH04-CB)
3m Semi Anechoic Chamber VSWR	RIKEN	SAC-3M	03CH02-CB	1GHz ~18GHz	Mar. 25, 2023	Mar. 24, 2024	Radiation (03CH02-CB)
Horn Antenna	EMCO	3115	9610-4976	1GHz ~ 18GHz	Apr. 18, 2023	Apr. 17, 2024	Radiation (03CH02-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Sep. 04, 2023	Sep. 03, 2024	Radiation (03CH02-CB)
Pre-Amplifier	Agilent	83017A	MY39501305	1GHz ~ 26.5GHz	Jun. 30, 2023	Jun. 29, 2024	Radiation (03CH02-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Spectrum analyzer	R&S	FSU	100015	9kHz~26GHz	Dec. 05, 2022	Dec. 04, 2023	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-18	1GHz ~ 18GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-18+19	1GHz ~ 18GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH02-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH02-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH02-CB)
High Cable	Woken	WCA0929M	40G#6	1GHz ~ 40 GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH02-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH02-CB)
Spectrum analyzer	R&S	FSV40	101028	9kHz~40GHz	Dec. 30, 2022	Dec. 29, 2023	Conducted (TH03-CB)
Power Sensor	Anritsu	MA2411B	1726195	300MHz~40GHz	Sep. 04, 2023	Sep. 03, 2024	Conducted (TH03-CB)
Power Meter	Anritsu	ML2495A	1035008	300MHz~40GHz	Sep. 04, 2023	Sep. 03, 2024	Conducted (TH03-CB)
RF Cable	Woken	RG402	High Cable-11	30MHz ~18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH03-CB)
RF Cable	Woken	RG402	High Cable-12	30MHz ~18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH03-CB)
RF Cable	Woken	RG402	High Cable-13	30MHz ~18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-14	1 GHz ~18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-15	1 GHz ~18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH03-CB)
Switch	SPTCB	SP-SWI	SWI-03	1 ~26.5 GHz	Oct. 03, 2023	Oct. 02, 2024	Conducted (TH03-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH03-CB)

Note: Calibration Interval of instruments listed above is one year.
NCR means Non-Calibration required.



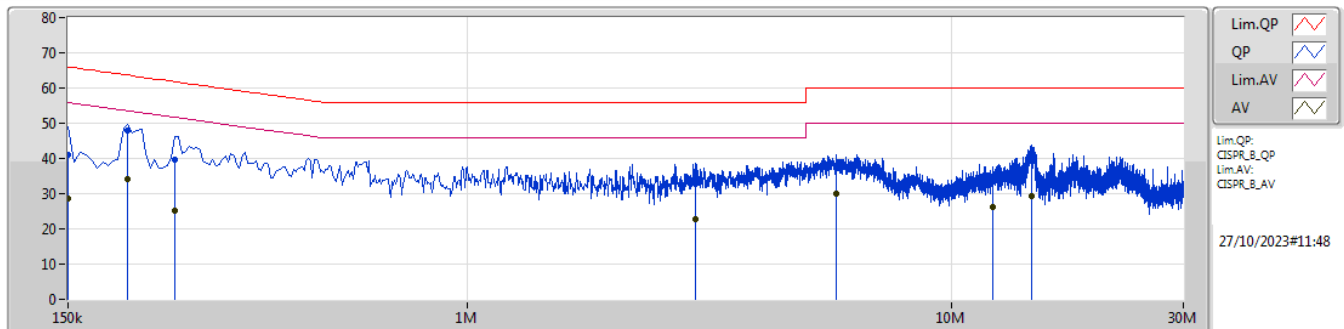
Conducted Emissions at Powerline

Appendix A

Summary

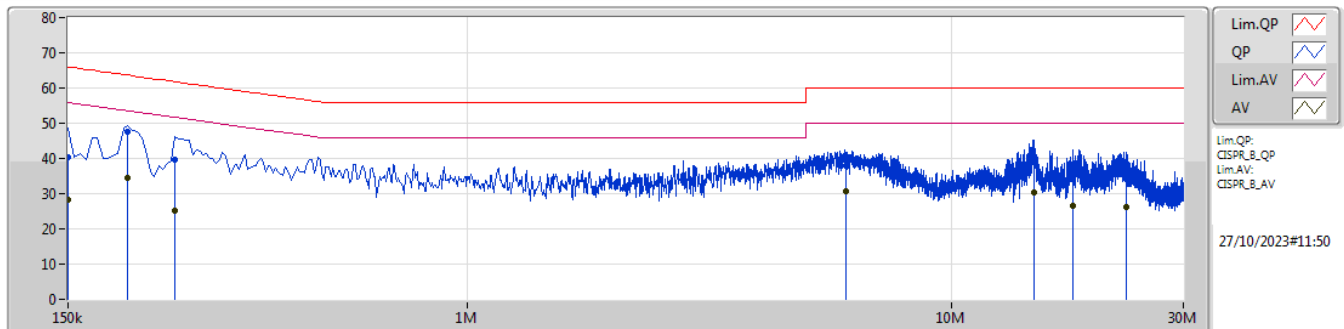
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	199.5k	47.86	63.63	-15.77	Line

Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)						
QP	150k	41.08	66.00	-24.92	10.08	Line	-	31.00	0.04	0.03	10.01						
AV	150k	28.79	56.00	-27.21	10.08	Line	-	18.71	0.04	0.03	10.01						
QP	199.5k	47.86	63.63	-15.77	10.06	Line	"Worst"	37.80	0.04	0.03	9.99						
AV	199.5k	34.25	53.63	-19.38	10.06	Line	-	24.19	0.04	0.03	9.99						
QP	249k	39.61	61.79	-22.18	10.06	Line	-	29.55	0.04	0.03	9.99						
AV	249k	25.19	51.79	-26.60	10.06	Line	-	15.13	0.04	0.03	9.99						
QP	2.963M	32.77	56.00	-23.23	10.10	Line	-	22.67	0.09	0.10	9.91						
AV	2.963M	22.74	46.00	-23.26	10.10	Line	-	12.64	0.09	0.10	9.91						
QP	5.771M	37.80	60.00	-22.20	10.20	Line	-	27.60	0.14	0.12	9.94						
AV	5.771M	29.99	50.00	-20.01	10.20	Line	-	19.79	0.14	0.12	9.94						
QP	12.143M	33.37	60.00	-26.63	10.34	Line	-	23.03	0.24	0.13	9.97						
AV	12.143M	26.17	50.00	-23.83	10.34	Line	-	15.83	0.24	0.13	9.97						
QP	14.622M	40.34	60.00	-19.66	10.35	Line	-	29.99	0.27	0.14	9.94						
AV	14.622M	29.33	50.00	-20.67	10.35	Line	-	18.98	0.27	0.14	9.94						

Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)						
QP	150k	40.23	66.00	-25.77	10.09	Neutral	-	30.14	0.05	0.03	10.01						
AV	150k	28.44	56.00	-27.56	10.09	Neutral	-	18.35	0.05	0.03	10.01						
QP	199.5k	47.75	63.63	-15.88	10.07	Neutral	-	37.68	0.05	0.03	9.99						
AV	199.5k	34.47	53.63	-19.16	10.07	Neutral	-	24.40	0.05	0.03	9.99						
QP	249k	39.61	61.79	-22.18	10.07	Neutral	-	29.54	0.05	0.03	9.99						
AV	249k	25.08	51.79	-26.71	10.07	Neutral	-	15.01	0.05	0.03	9.99						
QP	6.023M	37.80	60.00	-22.20	10.20	Neutral	-	27.60	0.14	0.12	9.94						
AV	6.023M	30.64	50.00	-19.36	10.20	Neutral	-	20.44	0.14	0.12	9.94						
QP	14.721M	40.66	60.00	-19.34	10.28	Neutral	-	30.38	0.21	0.14	9.93						
AV	14.721M	30.45	50.00	-19.55	10.28	Neutral	-	20.17	0.21	0.14	9.93						
QP	17.79M	36.27	60.00	-23.73	10.31	Neutral	-	25.96	0.22	0.18	9.91						
AV	17.79M	26.56	50.00	-23.44	10.31	Neutral	-	16.25	0.22	0.18	9.91						
QP	22.916M	34.03	60.00	-25.97	10.40	Neutral	-	23.63	0.25	0.28	9.87						
AV	22.916M	26.29	50.00	-23.71	10.40	Neutral	-	15.89	0.25	0.28	9.87						

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)	940.5k	871.566k	872KF1D	935k	868.512k
BT-EDR(3Mbps)	1.262M	1.206M	1M21G1D	1.26M	1.196M
BT-EDR(2Mbps)	1.345M	1.195M	1M20G1D	1.309M	1.189M

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

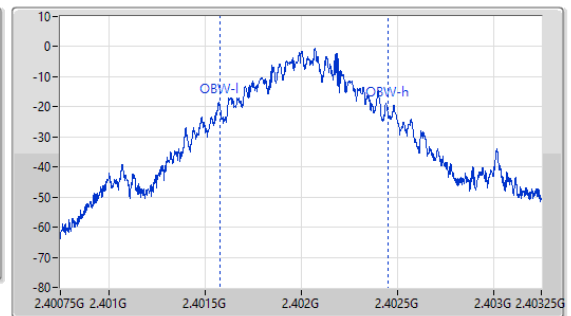
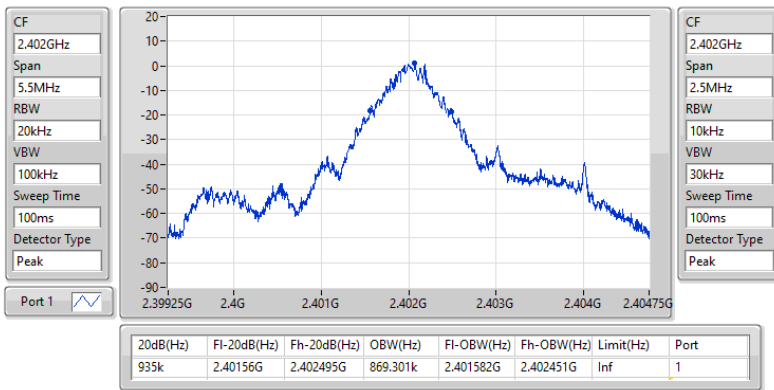
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	Inf	935k	869.301k
2440MHz	Pass	Inf	940.5k	871.566k
2480MHz	Pass	Inf	937.75k	868.512k
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	Inf	1.309M	1.194M
2440MHz	Pass	Inf	1.345M	1.195M
2480MHz	Pass	Inf	1.315M	1.189M
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	Inf	1.262M	1.196M
2440MHz	Pass	Inf	1.26M	1.206M
2480MHz	Pass	Inf	1.262M	1.201M

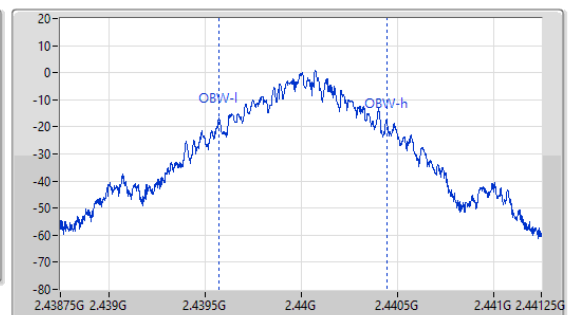
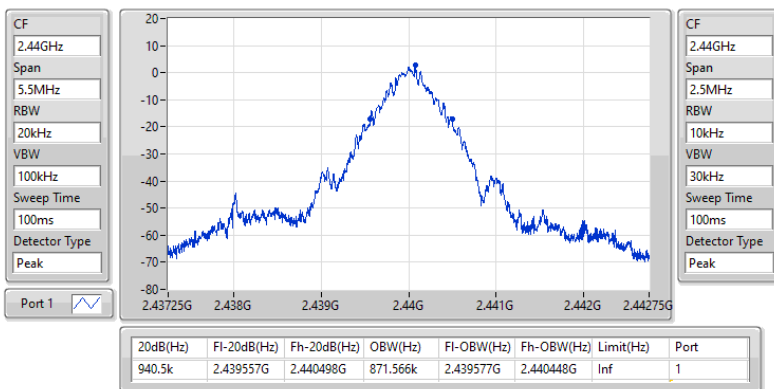
Port X-N dB = Port X 20dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

2.4-2.4835GHz_BT-BR(1Mbps)
EBW-FS
2402MHz

06/10/2023

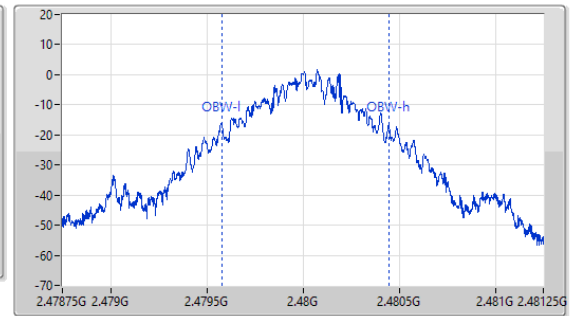
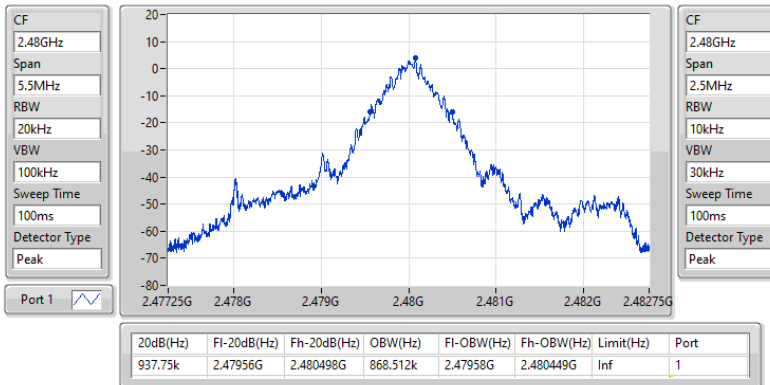

2.4-2.4835GHz_BT-BR(1Mbps)
EBW-FS
2440MHz

06/10/2023

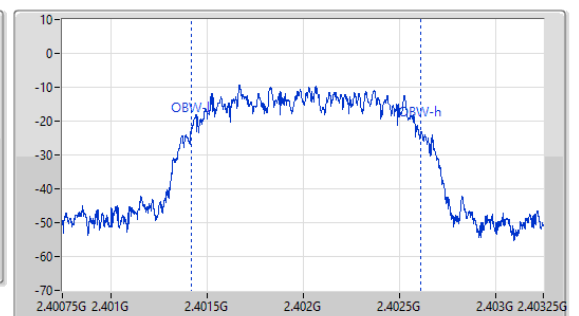
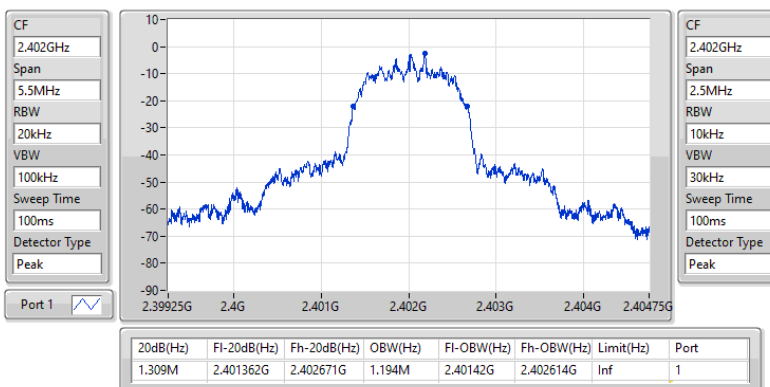


2.4-2.4835GHz_BT-BR(1Mbps)
EBW-FS
2480MHz

06/10/2023

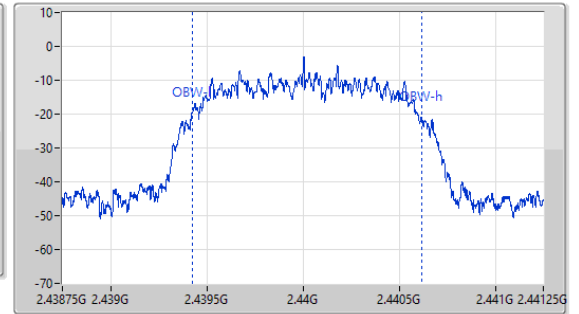
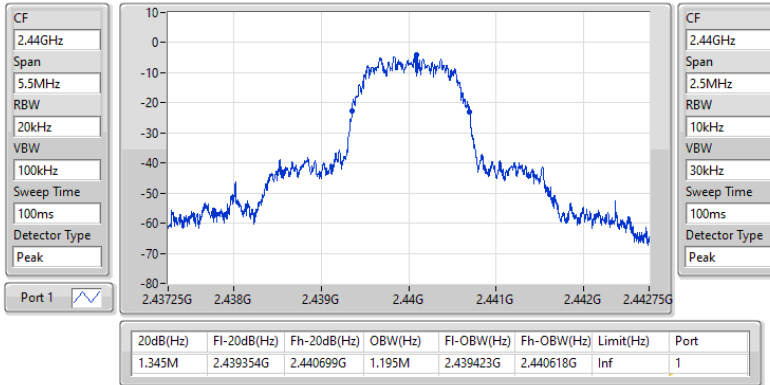

2.4-2.4835GHz_BT-EDR(2Mbps)
EBW-FS
2402MHz

06/10/2023

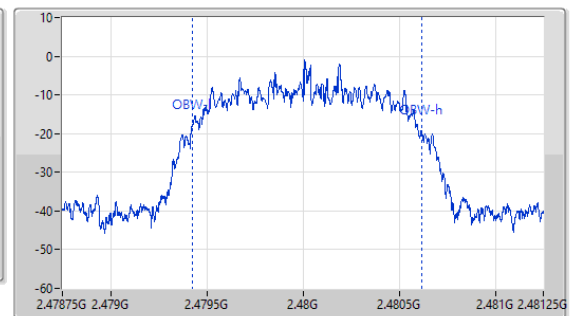
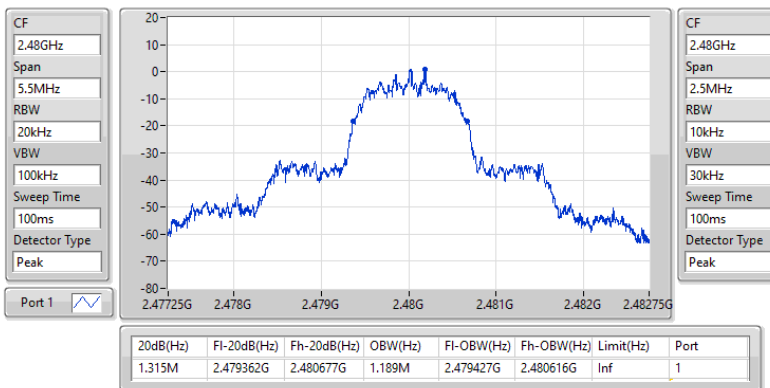


2.4-2.4835GHz_BT-EDR(2Mbps)
EBW-FS
2440MHz

06/10/2023

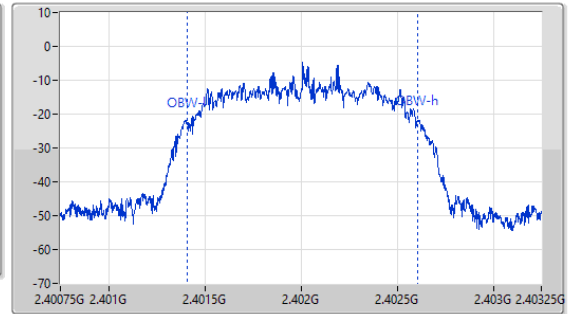
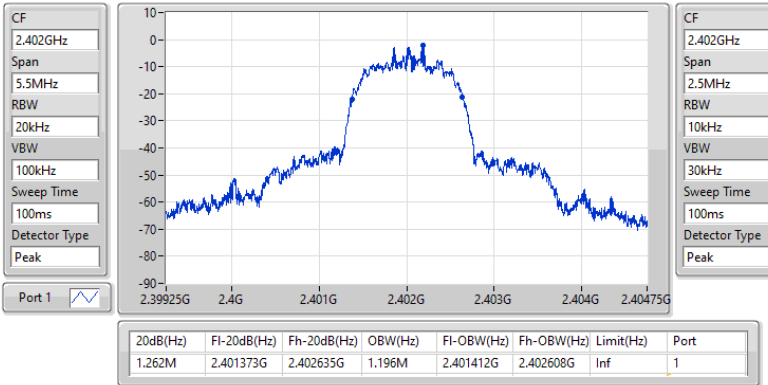

2.4-2.4835GHz_BT-EDR(2Mbps)
EBW-FS
2480MHz

06/10/2023

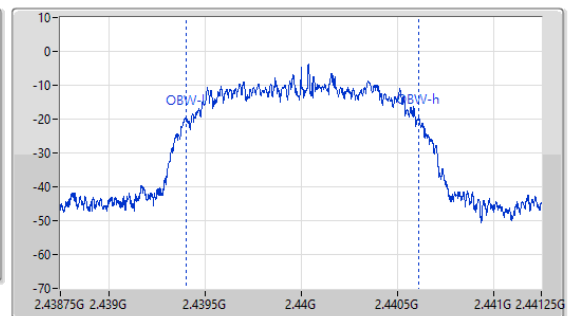
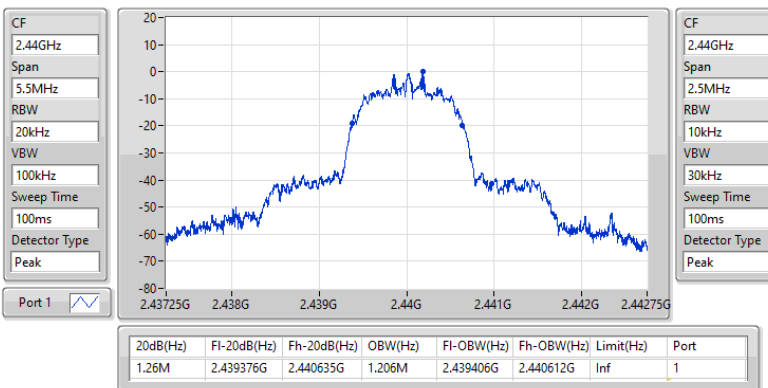


2.4-2.4835GHz_BT-EDR(3Mbps)
EBW-FS
2402MHz

06/10/2023


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

06/10/2023

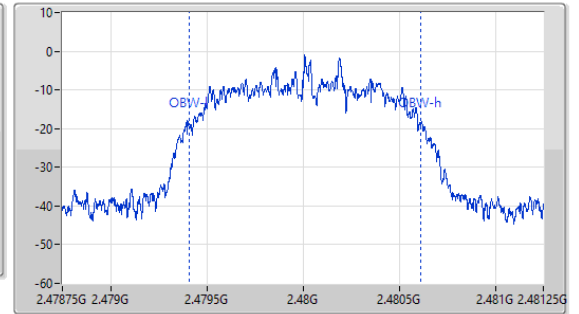
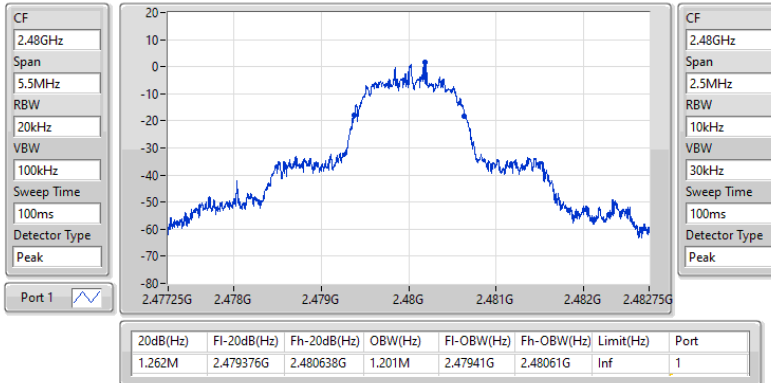


2.4-2.4835GHz_BT-EDR(3Mbps)

EBW-FS

2480MHz

06/10/2023



Summary

Mode	Max-Space (Hz)	Min-Space (Hz)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	1.002M	999k
BT-EDR(3Mbps)	1.161M	1.0005M
BT-EDR(2Mbps)	1.0035M	1.0005M

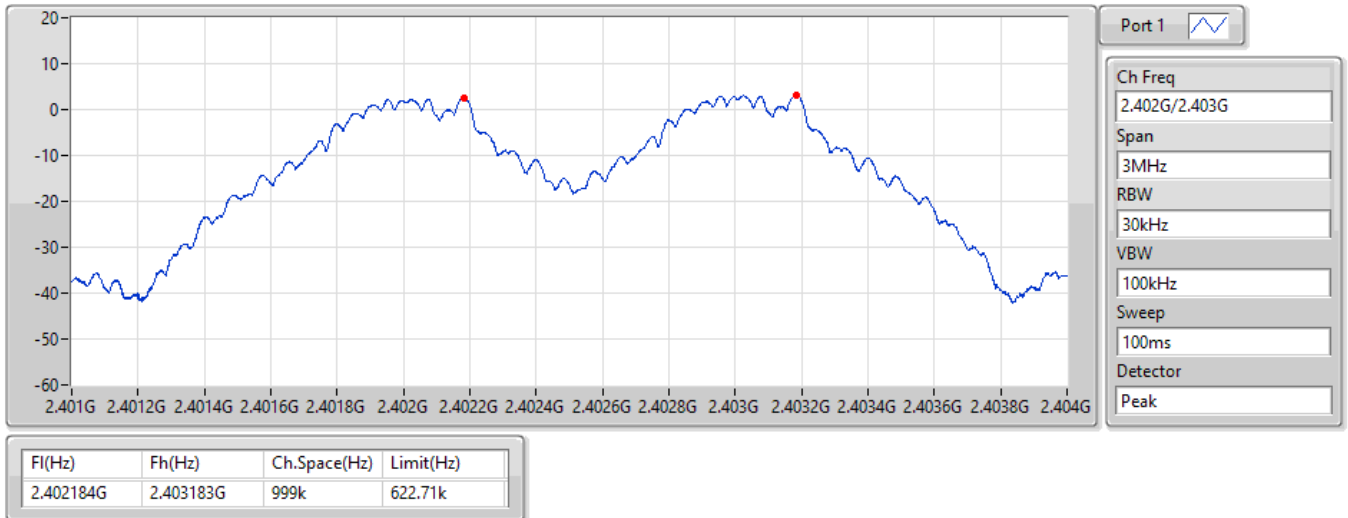
Result

Mode	Result	Fl (Hz)	Fh (Hz)	Ch.Space (Hz)	Limit (Hz)
BT-BR(1Mbps)	-	-	-	-	-
2402MHz	Pass	2.402184G	2.403183G	999k	622.71k
2440MHz	Pass	2.440184G	2.441184G	1.0005M	626.373k
2480MHz	Pass	2.479185G	2.480187G	1.002M	624.5415k
BT-EDR(2Mbps)	-	-	-	-	-
2402MHz	Pass	2.402023G	2.403025G	1.002M	871.794k
2440MHz	Pass	2.440023G	2.441027G	1.0035M	895.77k
2480MHz	Pass	2.479026G	2.480027G	1.0005M	875.79k
BT-EDR(3Mbps)	-	-	-	-	-
2402MHz	Pass	2.402022G	2.403183G	1.161M	840.492k
2440MHz	Pass	2.440184G	2.441184G	1.0005M	839.16k
2480MHz	Pass	2.479184G	2.480184G	1.0005M	840.492k

2.4-2.4835GHz_BT-BR(1Mbps)

Channel Separation-FS

2.402G/2.403GHz

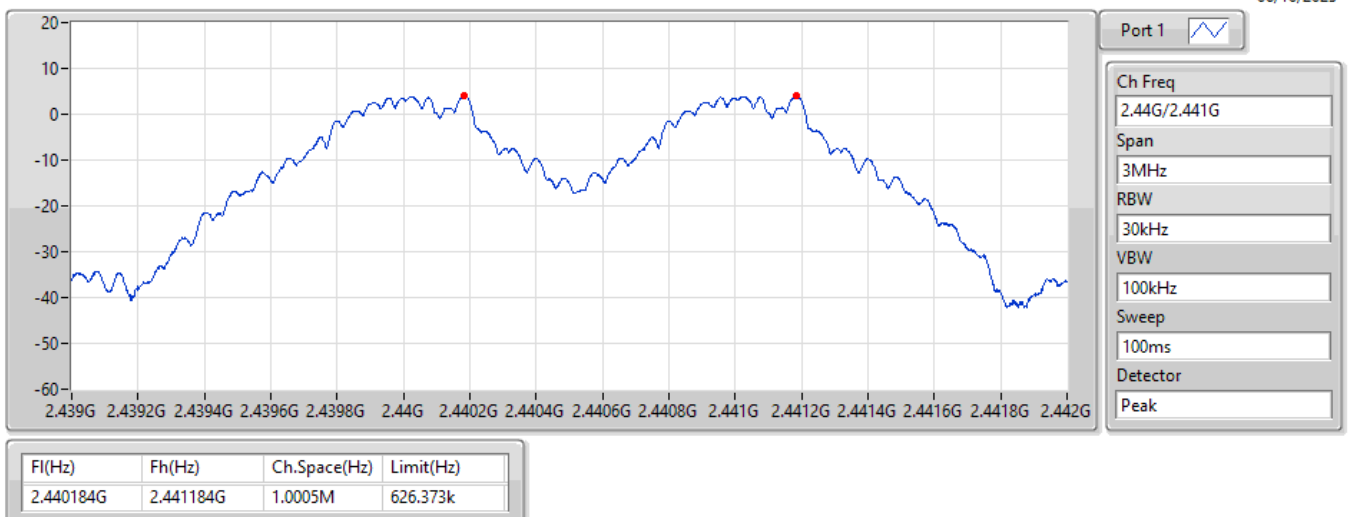


2.4-2.4835GHz_BT-BR(1Mbps)

Channel Separation-FS

2.44G/2.441GHz

06/10/2023



2.4-2.4835GHz_BT-BR(1Mbps)

Channel Separation-FS

2.48G/2.479GHz

06/10/2023

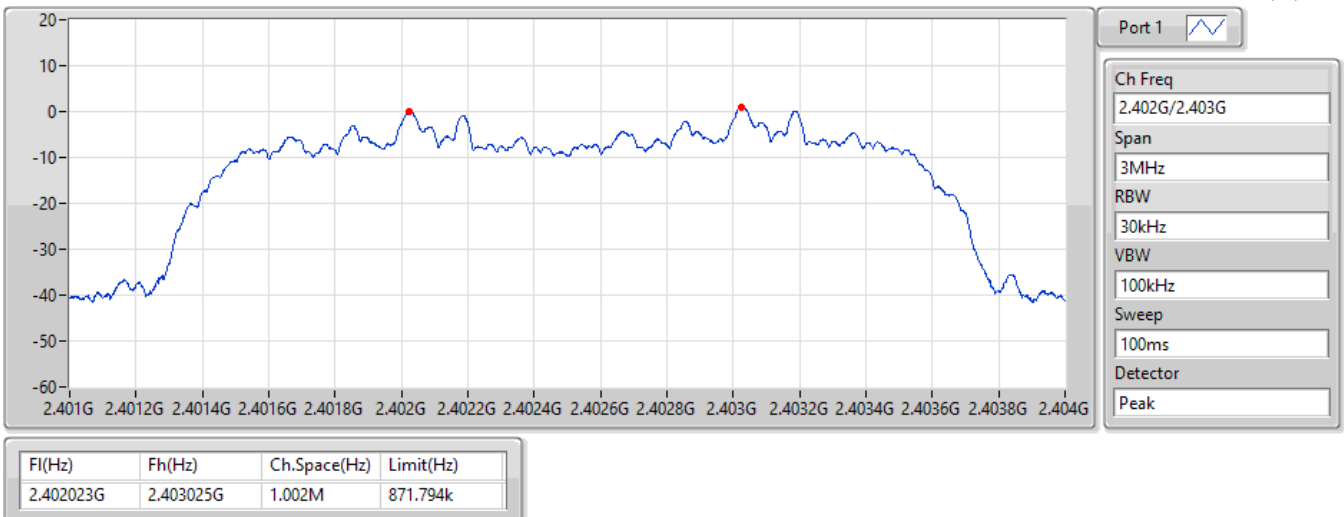


2.4-2.4835GHz_BT-EDR(2Mbps)

Channel Separation-FS

2.402G/2.403GHz

06/10/2023

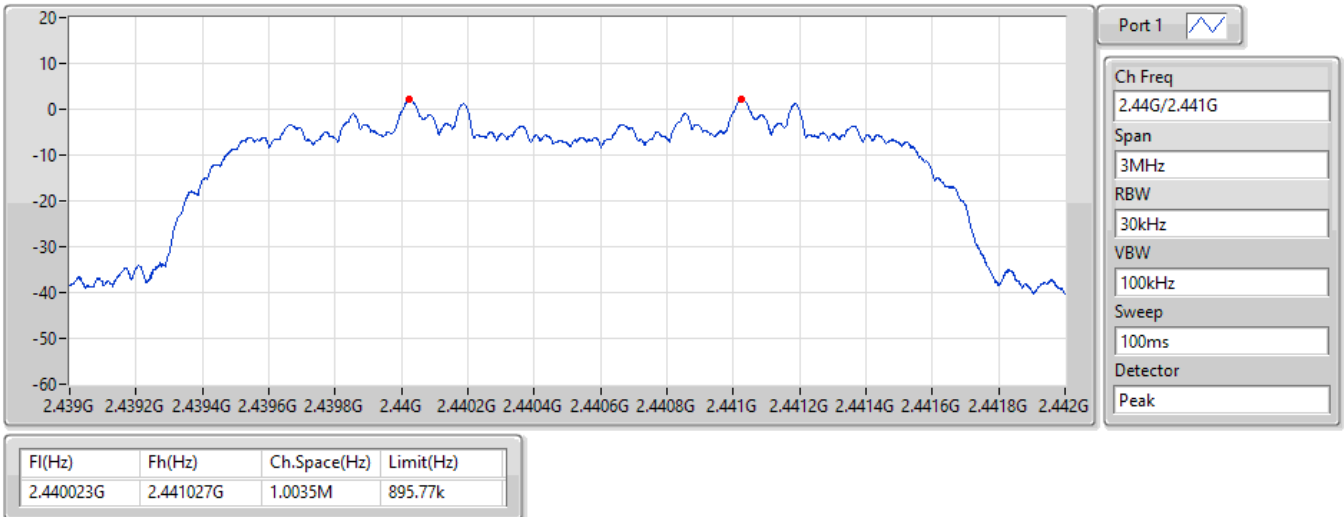


2.4-2.4835GHz_BT-EDR(2Mbps)

Channel Separation-FS

2.44G/2.441GHz

06/10/2023

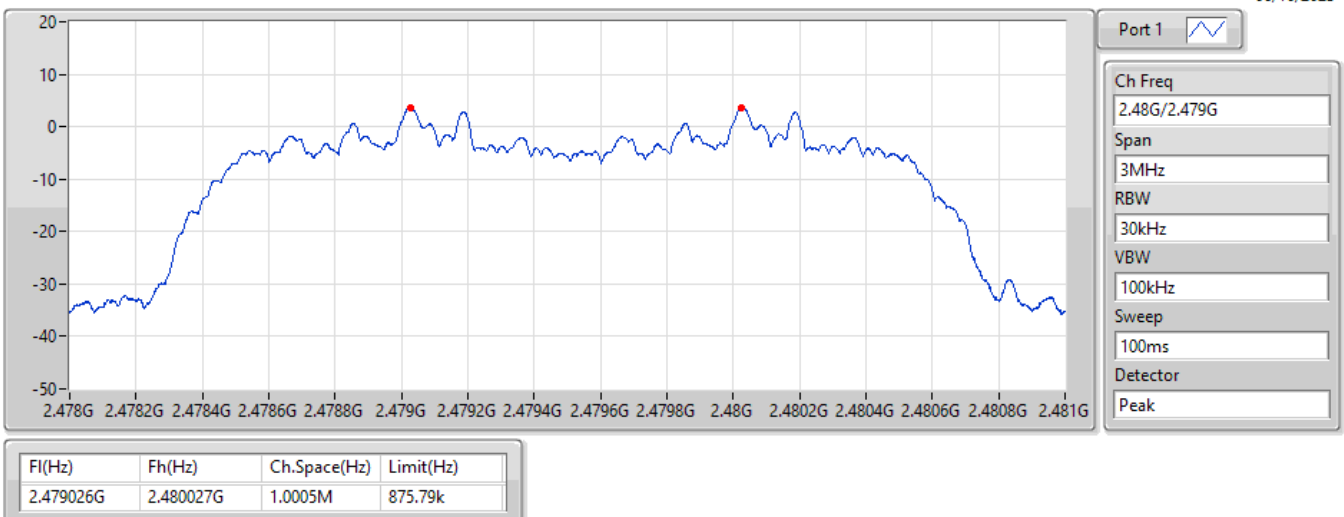


2.4-2.4835GHz_BT-EDR(2Mbps)

Channel Separation-FS

2.48G/2.479GHz

06/10/2023

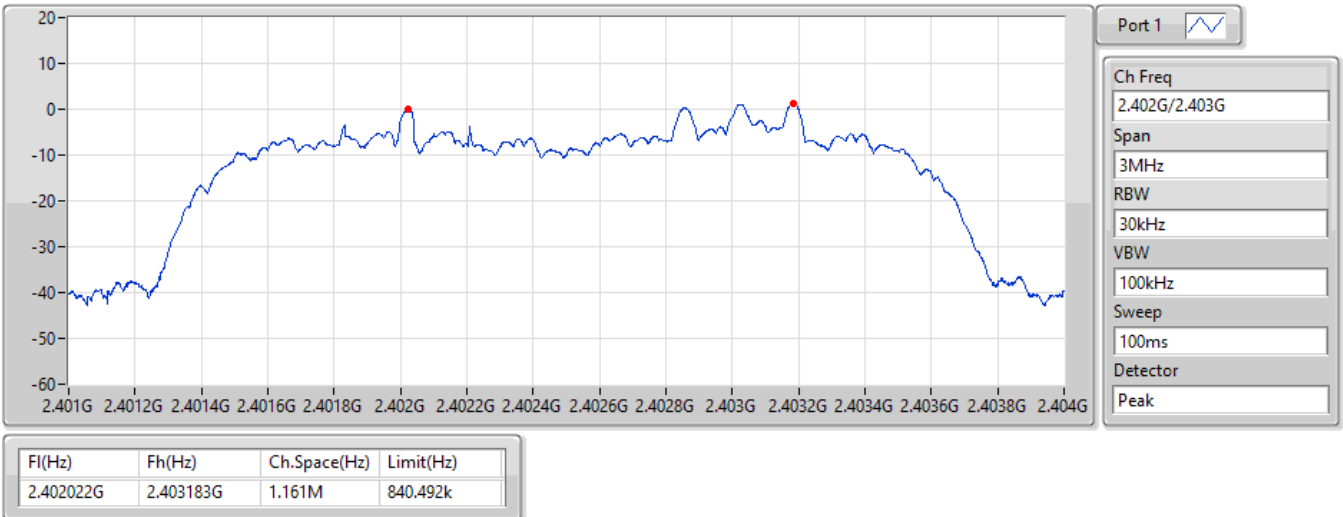


2.4-2.4835GHz_BT-EDR(3Mbps)

Channel Separation-FS

2.402G/2.403GHz

06/10/2023

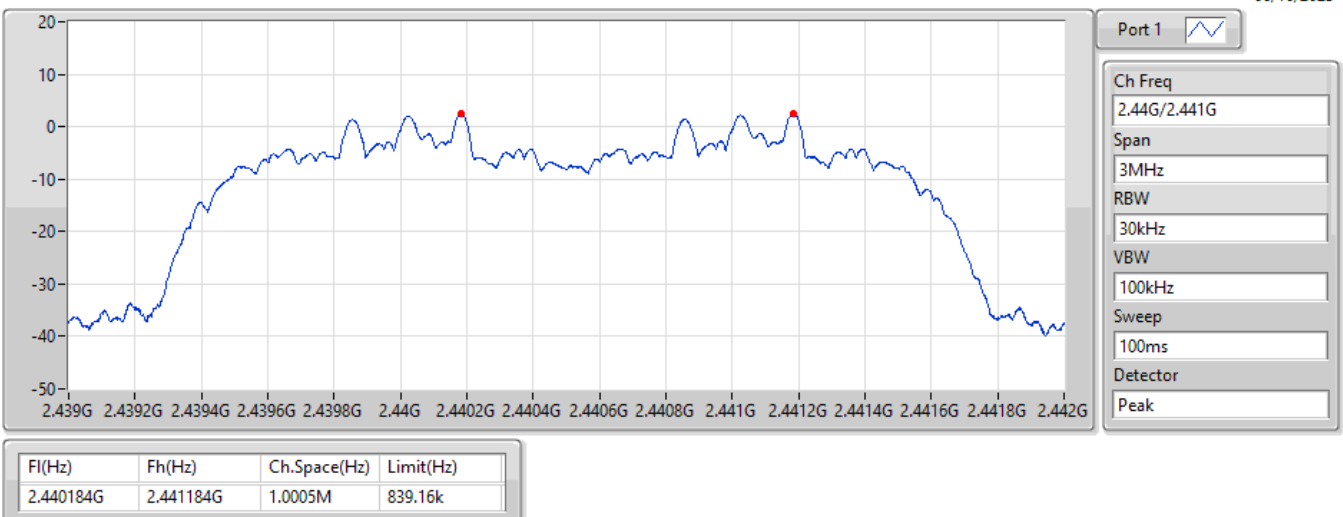


2.4-2.4835GHz_BT-EDR(3Mbps)

Channel Separation-FS

2.44G/2.441GHz

06/10/2023

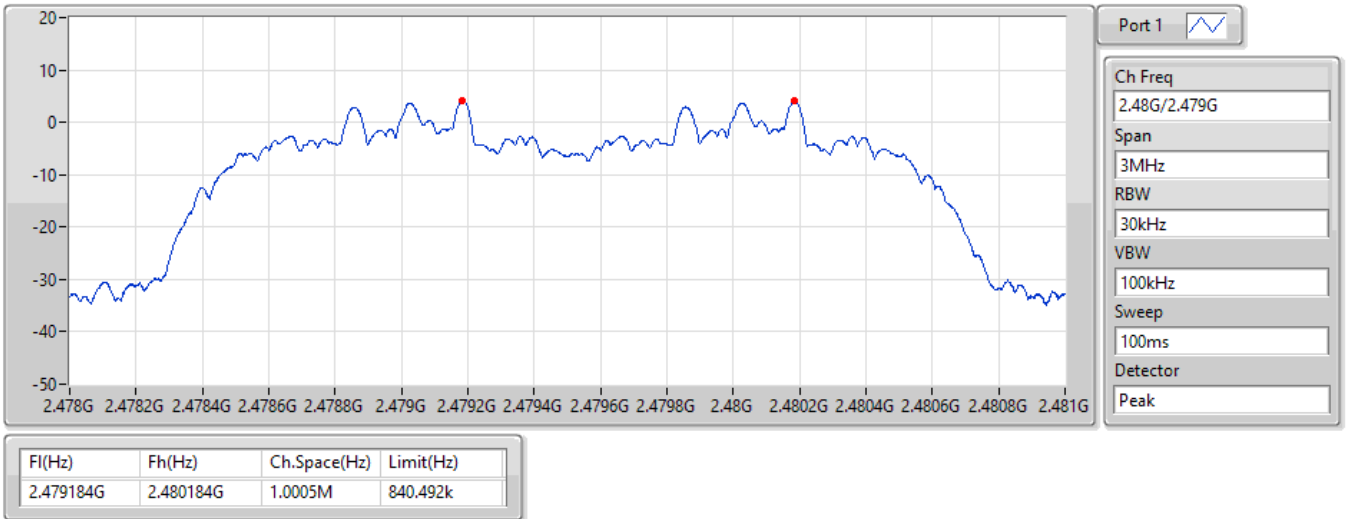


2.4-2.4835GHz_BT-EDR(3Mbps)

Channel Separation-FS

2.48G/2.479GHz

06/10/2023





Average Power-FHSS

Appendix C.1

Summary

Mode	Total Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	7.39	0.00548
BT-EDR(3Mbps)	4.75	0.00299
BT-EDR(2Mbps)	4.76	0.00299



Result

Mode	Result	DG (dBi)	Total Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	1.72	5.06	21.00
2440MHz	Pass	1.72	6.48	21.00
2480MHz	Pass	1.72	7.39	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	1.72	1.09	21.00
2440MHz	Pass	1.72	3.15	21.00
2480MHz	Pass	1.72	4.76	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	1.72	1.06	21.00
2440MHz	Pass	1.72	3.08	21.00
2480MHz	Pass	1.72	4.75	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)	7.41	0.00551
BT-EDR(3Mbps)	7.00	0.00501
BT-EDR(2Mbps)	6.81	0.00480

Result

Mode	Result	DG (dBi)	Total Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	1.72	5.08	21.00
2440MHz	Pass	1.72	6.51	21.00
2480MHz	Pass	1.72	7.41	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	1.72	3.57	21.00
2440MHz	Pass	1.72	5.57	21.00
2480MHz	Pass	1.72	6.81	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	1.72	4.08	21.00
2440MHz	Pass	1.72	5.76	21.00
2480MHz	Pass	1.72	7.00	21.00

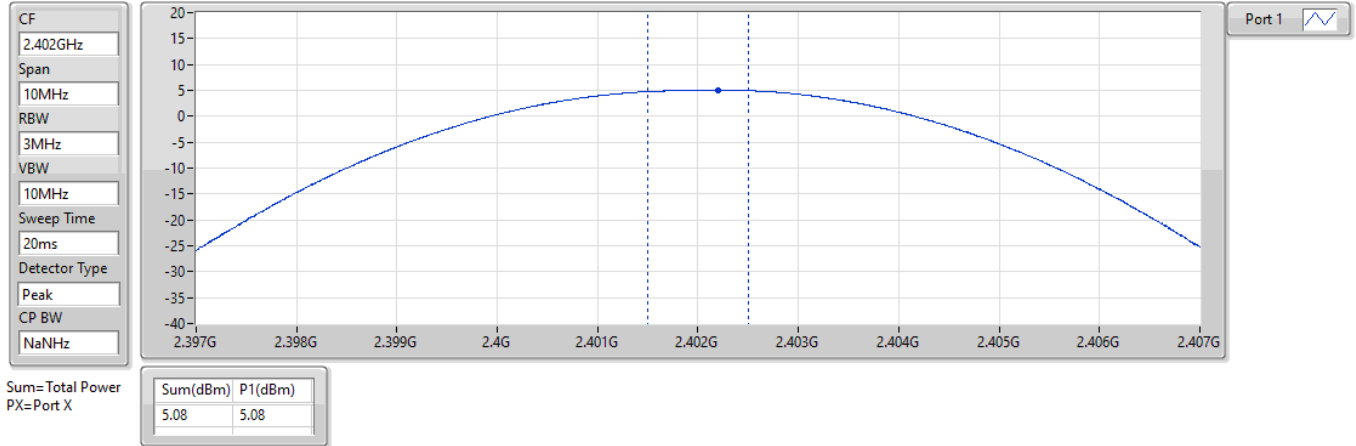
DG = Directional Gain; Port X = Port X output power

2.4-2.4835GHz_BT-BR(1Mbps)

PK Power-FS

2402MHz

06/10/2023

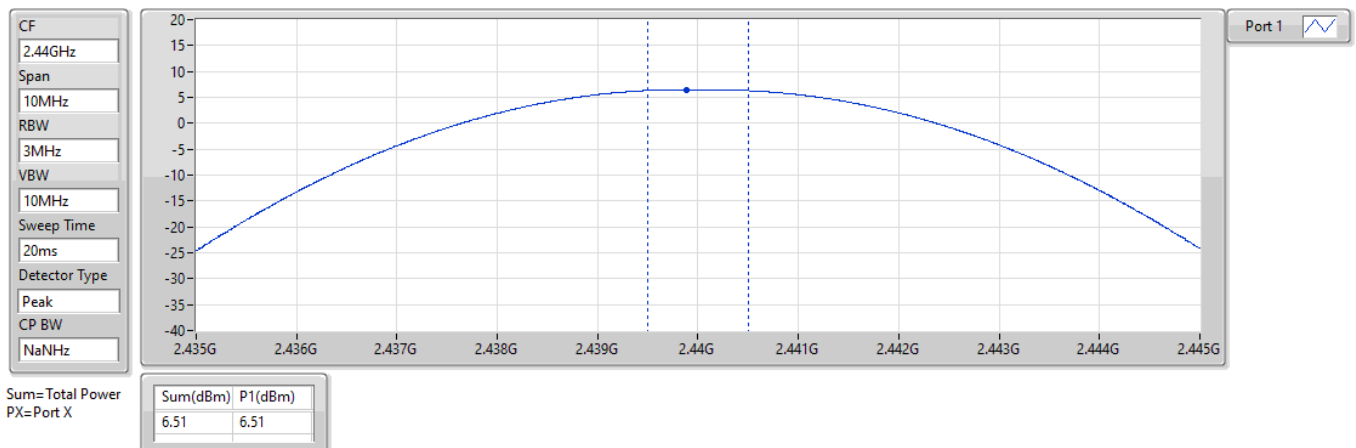


2.4-2.4835GHz_BT-BR(1Mbps)

PK Power-FS

2440MHz

06/10/2023

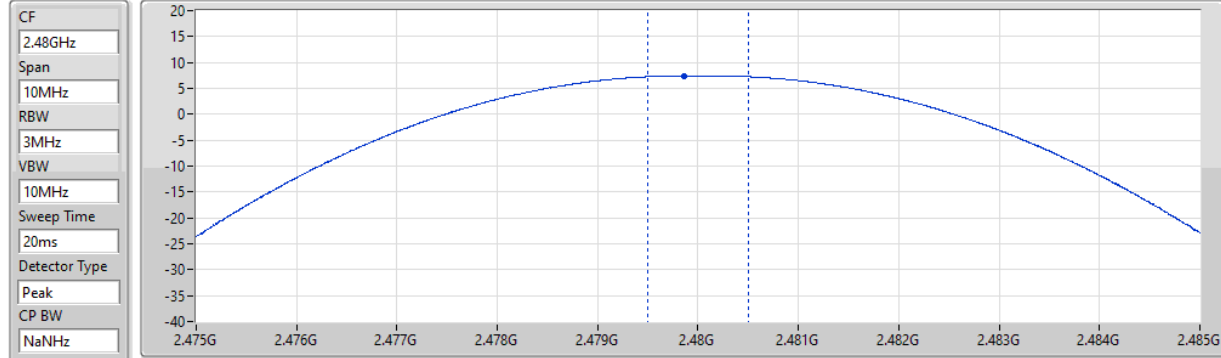


2.4-2.4835GHz_BT-BR(1Mbps)

PK Power-FS

2480MHz

06/10/2023



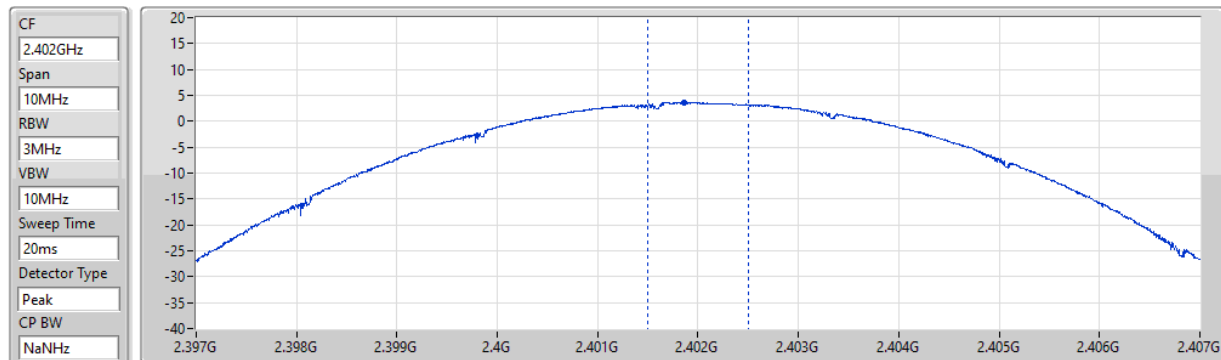
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PX=Port X

2.4-2.4835GHz_BT-EDR(2Mbps)

PK Power-FS

2402MHz

06/10/2023



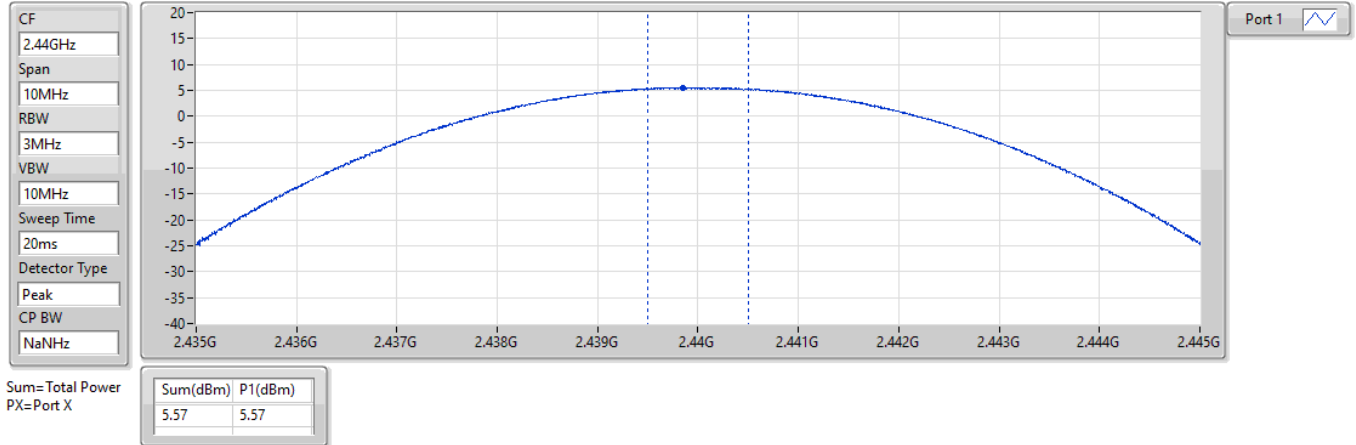
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PX=Port X

2.4-2.4835GHz_BT-EDR(2Mbps)

PK Power-FS

2440MHz

06/10/2023

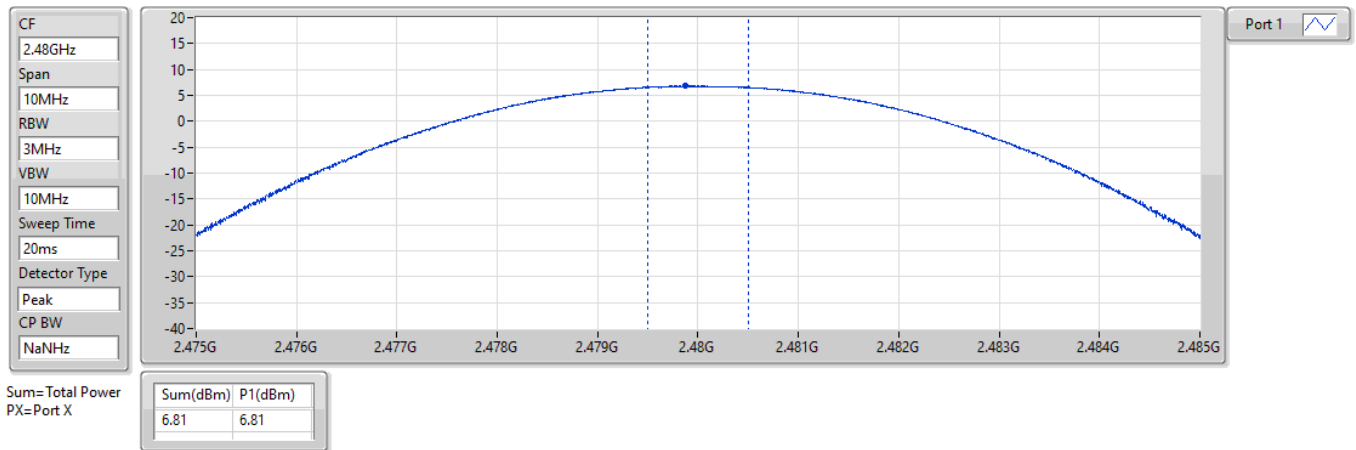


2.4-2.4835GHz_BT-EDR(2Mbps)

PK Power-FS

2480MHz

06/10/2023

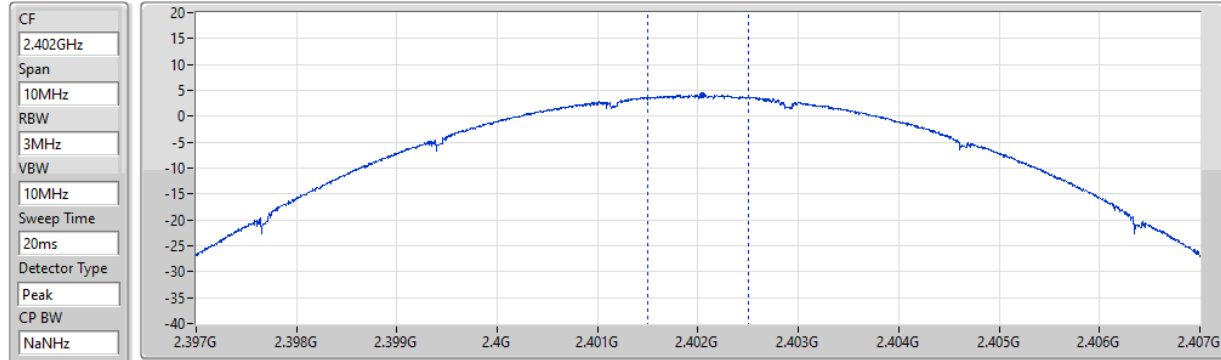


2.4-2.4835GHz_BT-EDR(3Mbps)

PK Power-FS

2402MHz

06/10/2023



Sum= Total Power
PX=Port X

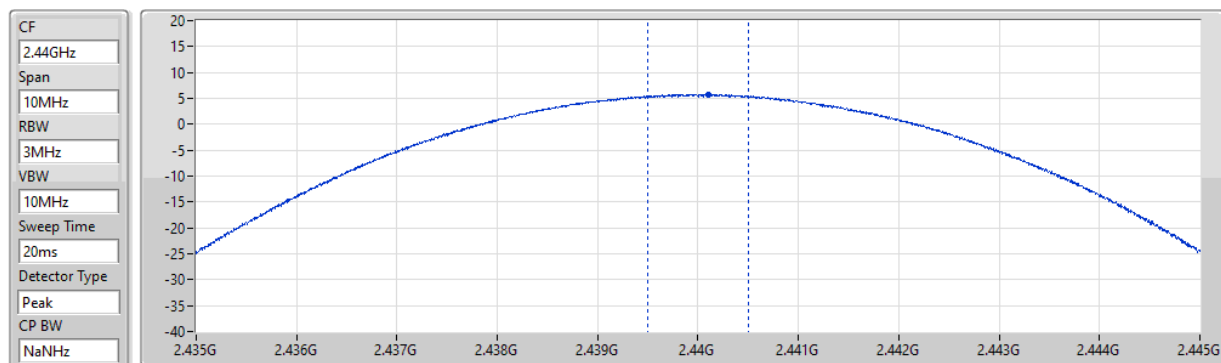
Sum(dBm)	P1(dBm)
4.08	4.08

2.4-2.4835GHz_BT-EDR(3Mbps)

PK Power-FS

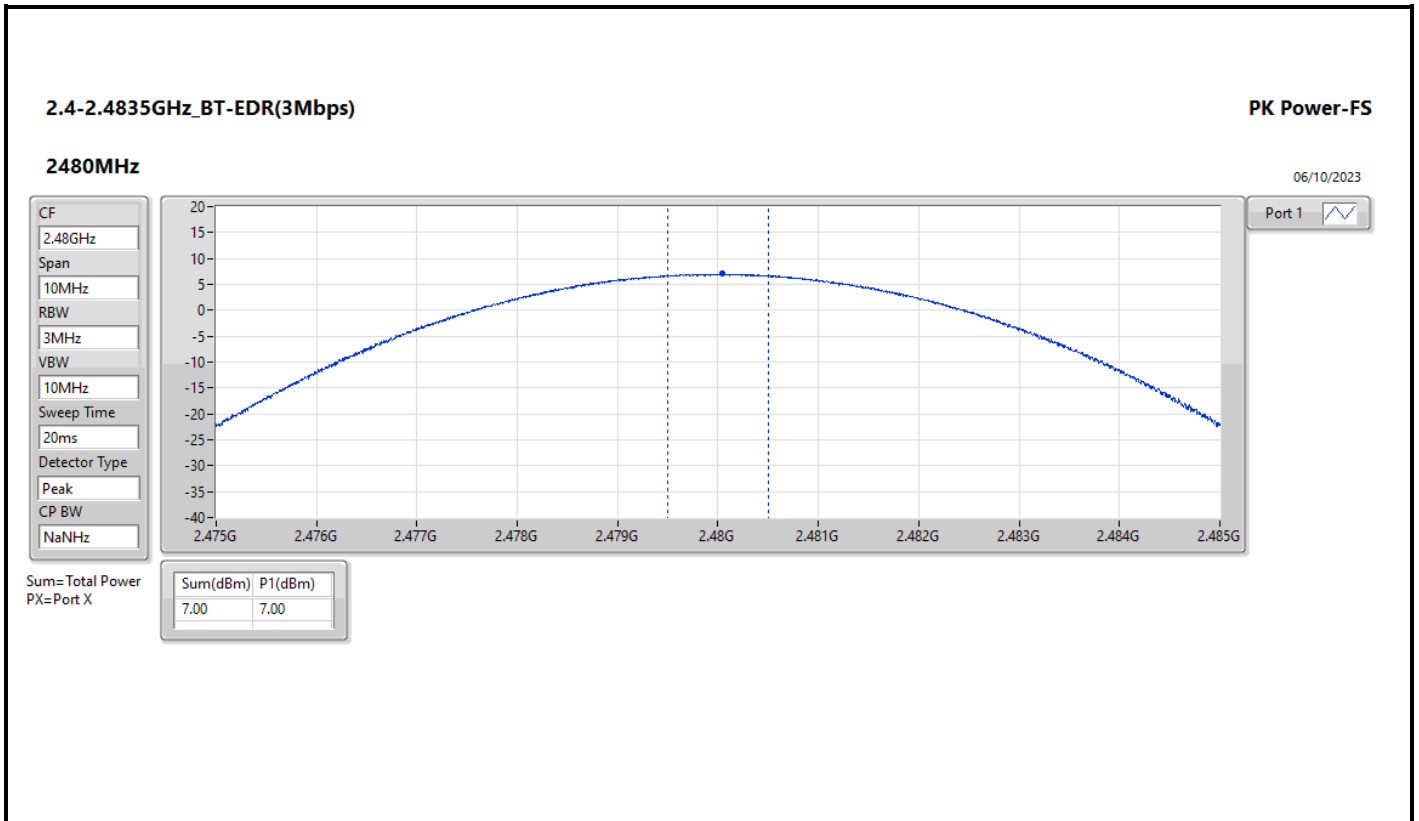
2440MHz

06/10/2023



Sum= Total Power
PX=Port X

Sum(dBm)	P1(dBm)
5.76	5.76





Summary

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

Result

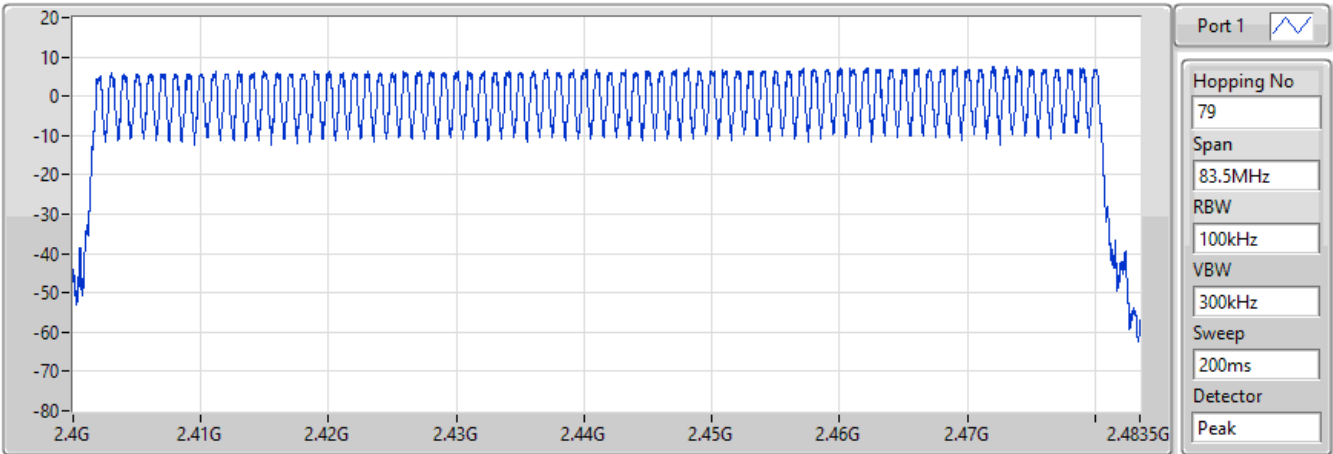
Mode	Result	Hopping No	Limit
BT-BR(1Mbps)	-	-	-
2440MHz	Pass	79	15
BT-EDR(2Mbps)	-	-	-
2440MHz	Pass	79	15
BT-EDR(3Mbps)	-	-	-
2440MHz	Pass	79	15

2.4-2.4835GHz_BT-BR(1Mbps)

Hopping-FS

2440MHz

06/10/2023



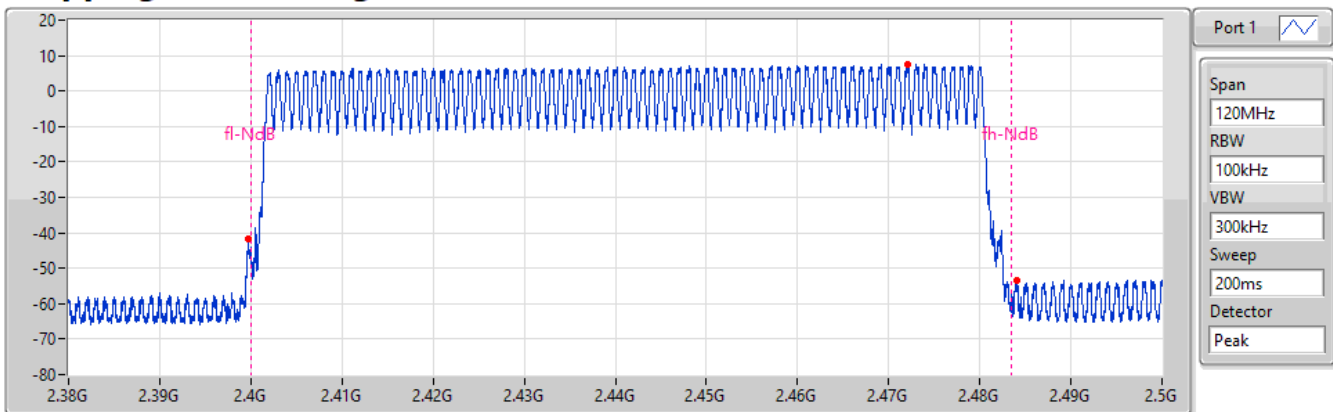
Hopping No	Limit
79	15

2.4-2.4835GHz_BT-BR(1Mbps)

2440MHz

Hopping Ch Bandedge (Non-restricted Band)

06/10/2023



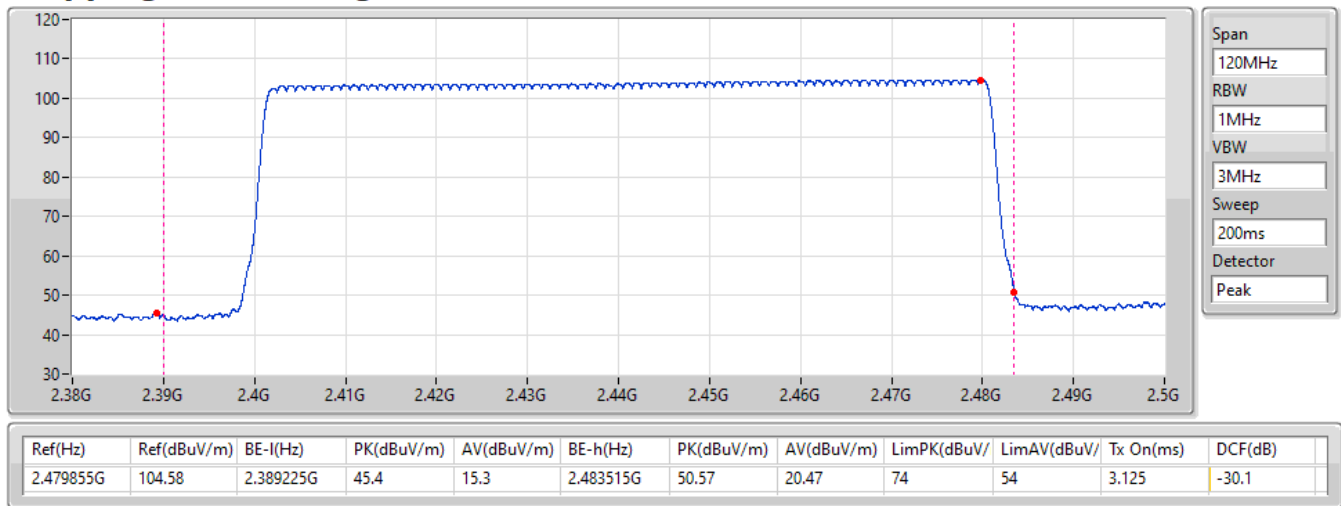
Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-12.58	2.472025G	7.42	2.399695G	-41.72	2.48404G	-53.47

2.4-2.4835GHz_BT-BR(1Mbps)

2440MHz

Hopping Ch Bandedge (Restricted Band)

06/10/2023

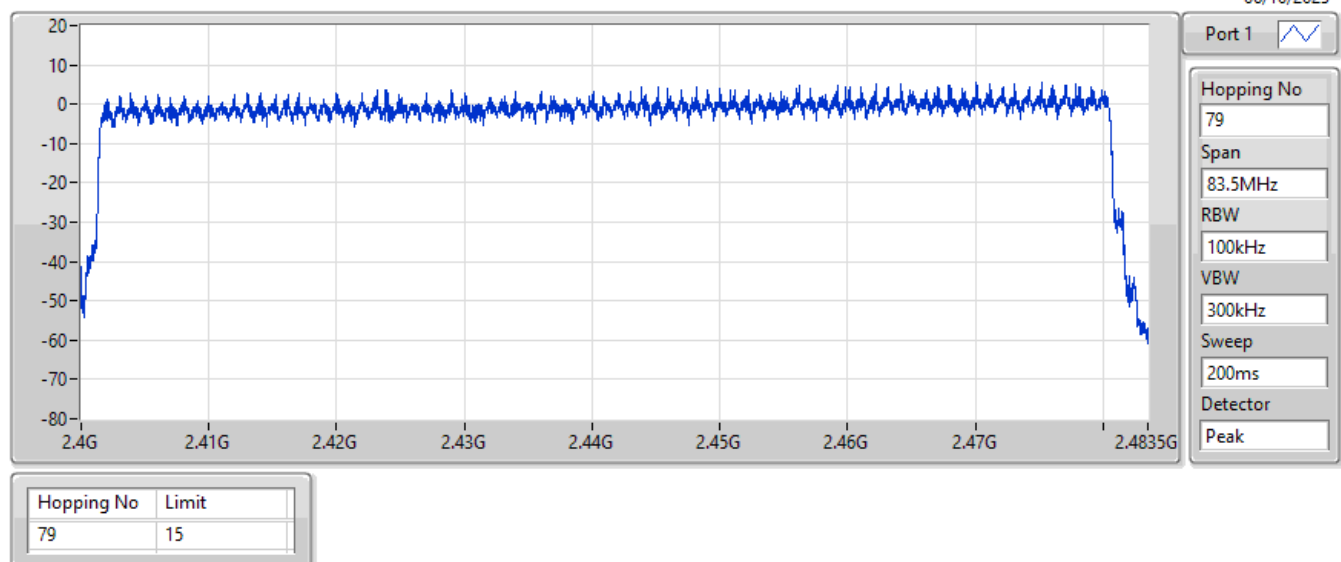


2.4-2.4835GHz_BT-EDR(2Mbps)

2440MHz

Hopping-FS

06/10/2023

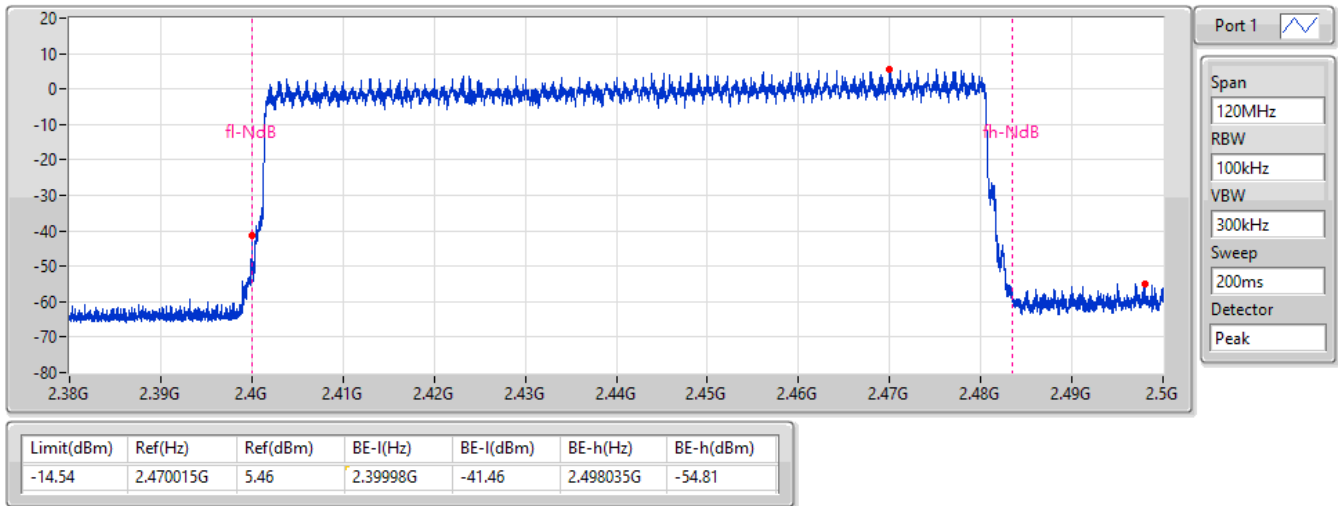


2.4-2.4835GHz_BT-EDR(2Mbps)

2440MHz

Hopping Ch Bandedge (Non-restricted Band)

06/10/2023

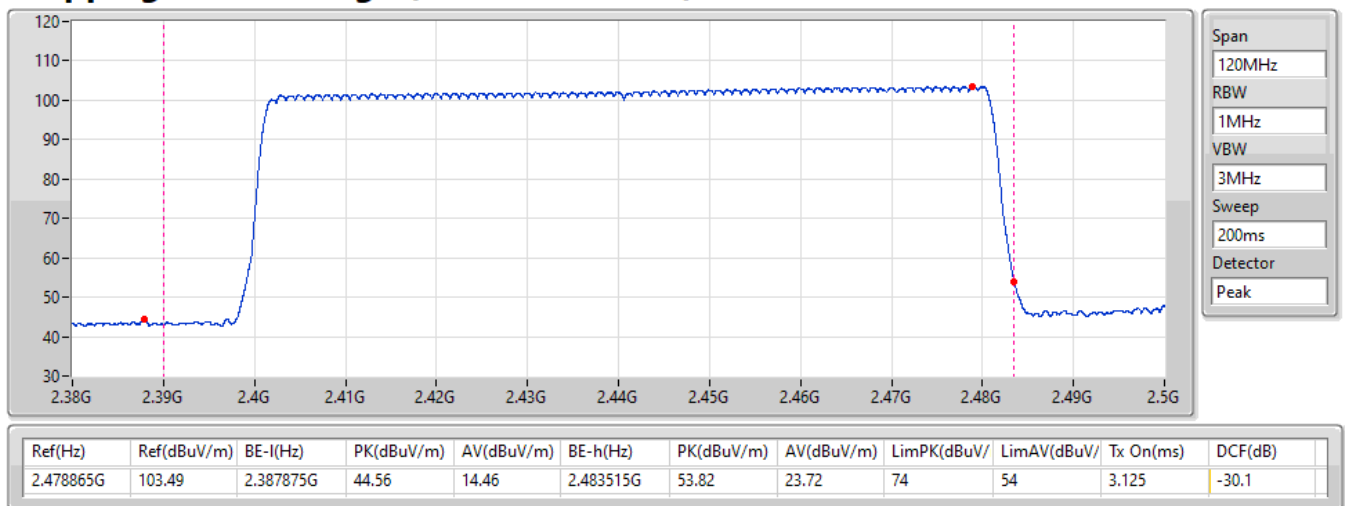


2.4-2.4835GHz_BT-EDR(2Mbps)

2440MHz

Hopping Ch Bandedge (Restricted Band)

06/10/2023

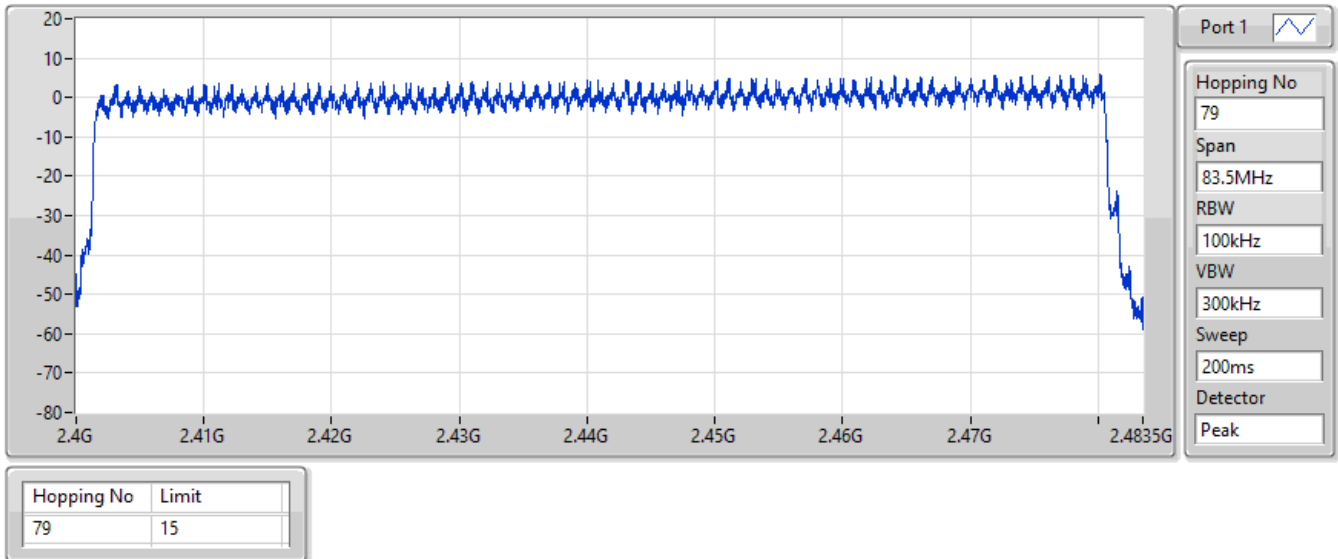


2.4-2.4835GHz_BT-EDR(3Mbps)

Hopping-FS

2440MHz

06/10/2023

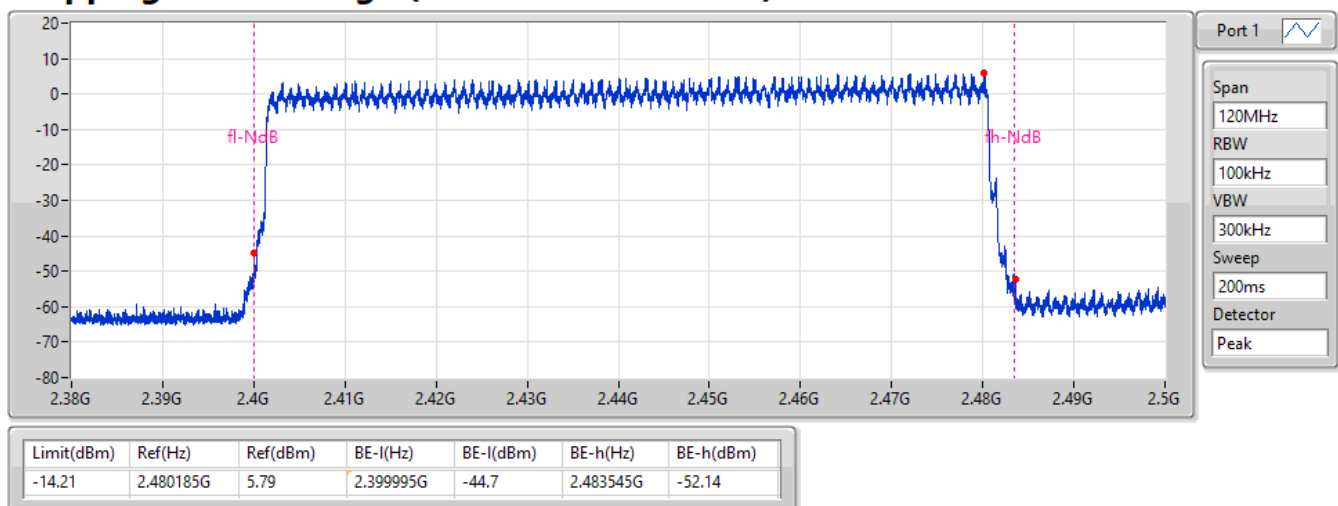


2.4-2.4835GHz_BT-EDR(3Mbps)

2440MHz

Hopping Ch Bandedge (Non-restricted Band)

06/10/2023

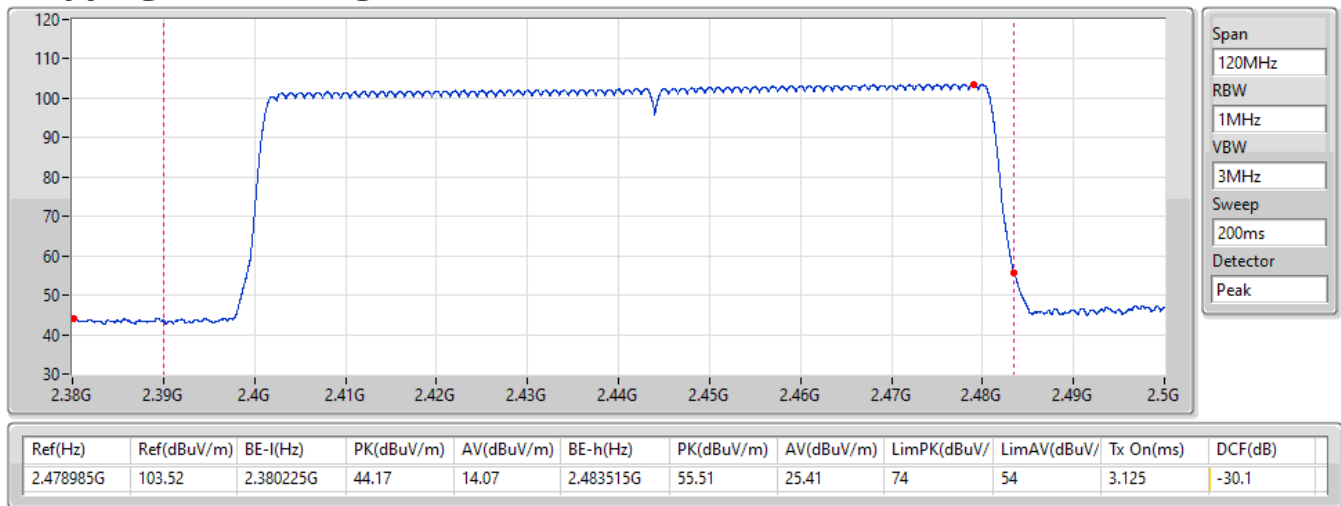


2.4-2.4835GHz_BT-EDR(3Mbps)

2440MHz

Hopping Ch Bandedge (Restricted Band)

06/10/2023





Summary

Mode	Max-Dwell (s)
2.4-2.4835GHz	-
BT-BR(1Mbps)	309.1933m_DH5
BT-EDR(3Mbps)	310.49915m_DH5
BT-EDR(2Mbps)	310.33925m_DH5

Result

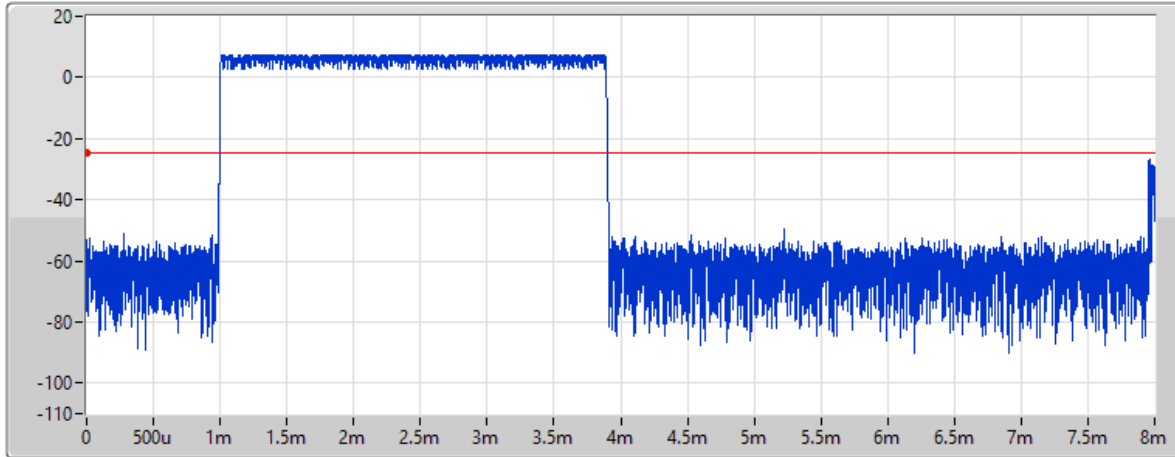
Mode	Result	Period (s)	Dwell (s)	Limit (s)	Tx On (s)
BT-BR(1Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	309.1933m_DH5	400m	2.9005m
2440MHz	Pass	8	154.59665m_DH5-AFH	400m	2.9005m
BT-EDR(2Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	310.33925m_DH5	400m	2.91125m
2440MHz	Pass	8	155.1563m_DH5-AFH	400m	2.911m
BT-EDR(3Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	310.49915m_DH5	400m	2.91275m
2440MHz	Pass	8	155.3695m_DH5-AFH	400m	2.915m

2.4-2.4835GHz_BT-BR(1Mbps)

Dwell-FS

2440MHz

06/10/2023



Port 1 

Ch Freq
2.44GHz

RBW
300kHz

VBW
1MHz

Sweep Time
8ms

TX Time
2.9005ms

Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	309.1933m_DH5	400m	2.9005m

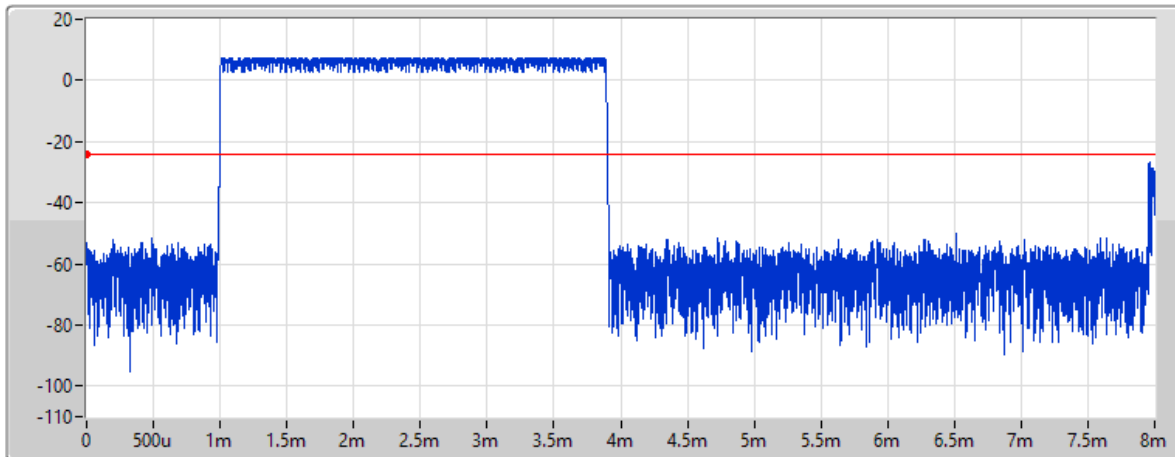
DH5

2.4-2.4835GHz_BT-BR(1Mbps)

Dwell-FS

2440MHz

06/10/2023



Port 1 

Ch Freq
2.44GHz

RBW
300kHz

VBW
1MHz

Sweep Time
8ms

TX Time
2.9005ms

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

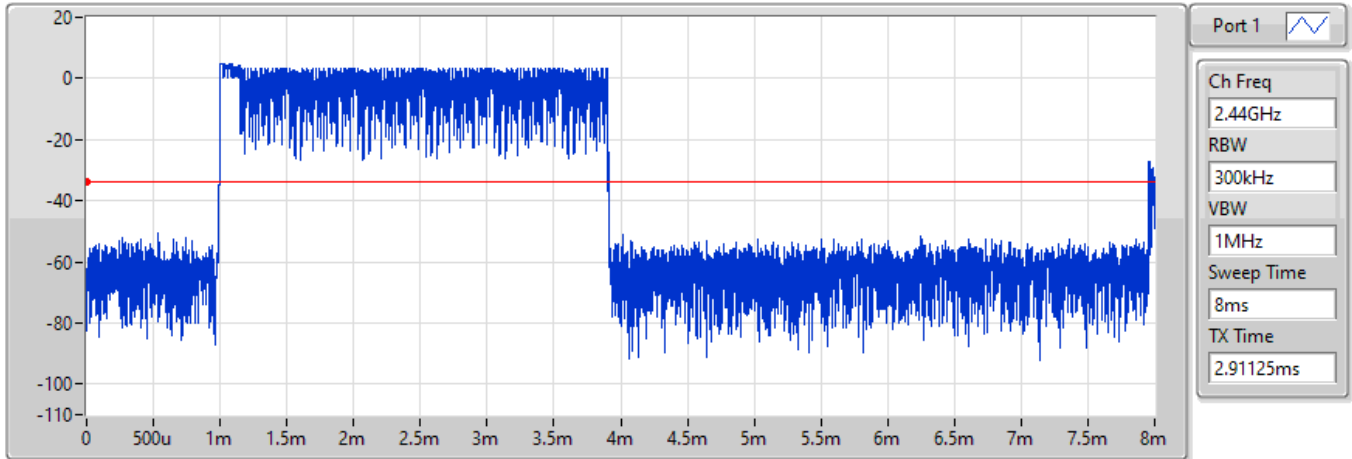
DH5-AFH

2.4-2.4835GHz_BT-EDR(2Mbps)

Dwell-FS

2440MHz

06/10/2023



Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	310.33925m_DH5	400m	2.91125m

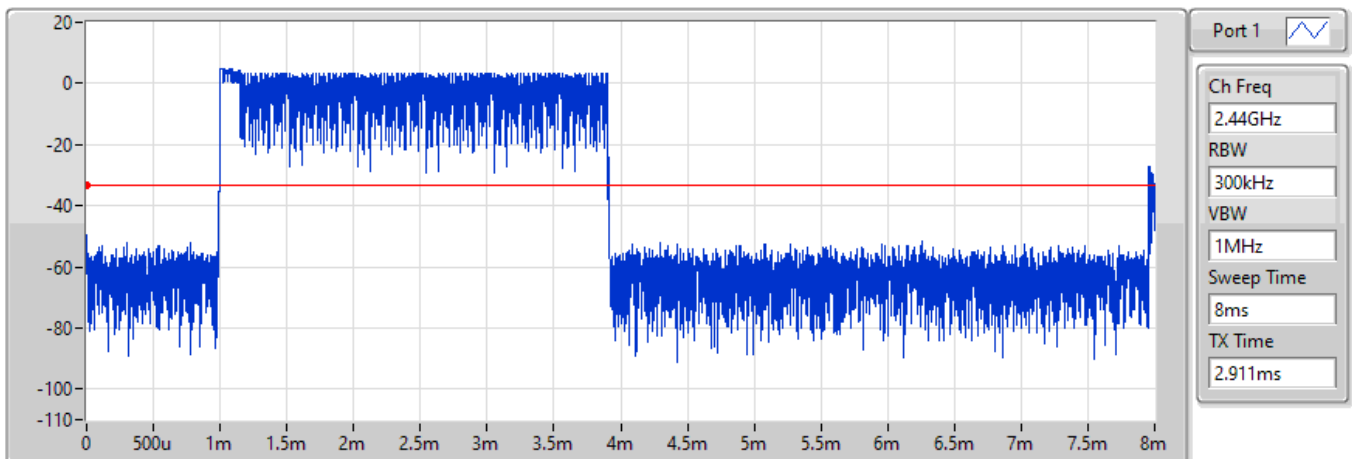
DH5

2.4-2.4835GHz_BT-EDR(2Mbps)

Dwell-FS

2440MHz

06/10/2023



Period(s)	Dwell(s)	Limit(s)	Tx On(s)
8	155.1563m_DH5-AFH	400m	2.911m

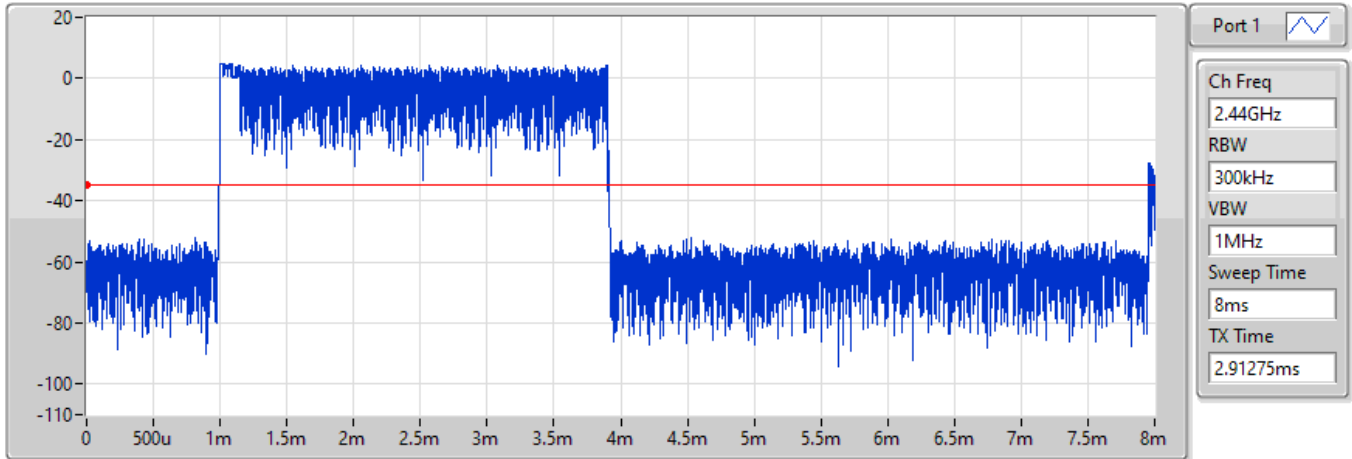
DH5-AFH

2.4-2.4835GHz_BT-EDR(3Mbps)

Dwell-FS

2440MHz

06/10/2023



Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	310.49915m_DH5	400m	2.91275m

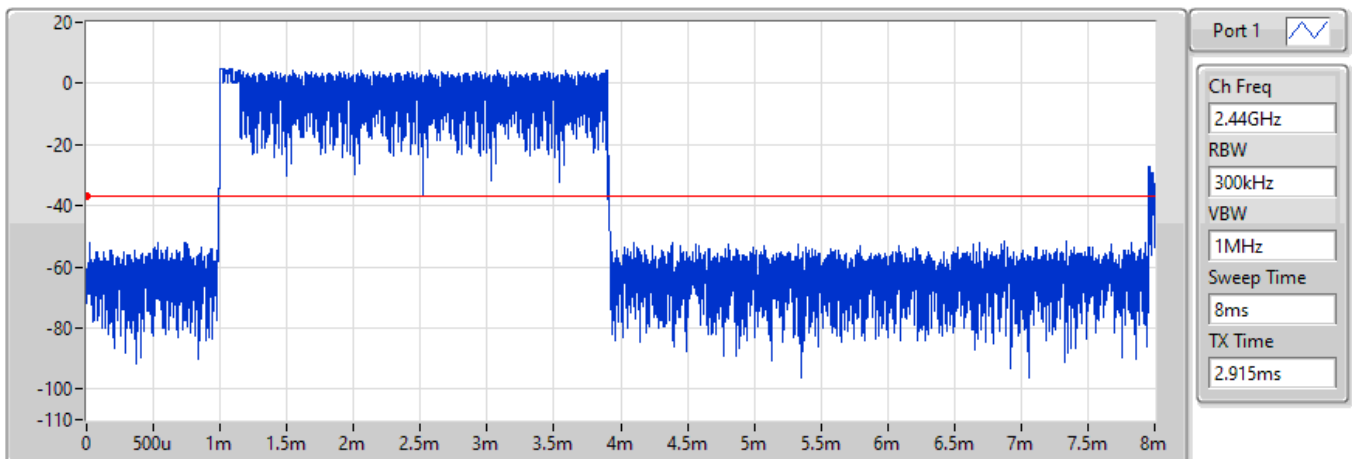
DH5

2.4-2.4835GHz_BT-EDR(3Mbps)

Dwell-FS

2440MHz

06/10/2023



Period(s)	Dwell(s)	Limit(s)	Tx On(s)
8	155.3695m_DH5-AFH	400m	2.915m

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	2.40184G	4.59	-15.41	65.25M	-53.68	2.39972G	-41.32	2.4G	-44.95	2.50122G	-51.05	2.55693G	-47.11	1
BT-EDR(3Mbps)	Pass	2.402G	2.19	-17.81	1.64798G	-54.59	2.4G	-44.10	2.4G	-48.80	2.50066G	-52.08	21.63959G	-47.54	1
BT-EDR(2Mbps)	Pass	2.402G	2.18	-17.82	1.9429G	-53.49	2.4G	-41.96	2.4G	-43.62	2.50154G	-52.43	21.63959G	-47.91	1

Result

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
BT-BR(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.40184G	4.59	-15.41	65.25M	-53.68	2.39972G	-41.32	2.4G	-44.95	2.50122G	-51.05	2.55693G	-47.11	1
2440MHz	Pass	2.43991G	5.79	-14.21	1.9617G	-54.01	2.39932G	-51.99	2.4G	-56.72	2.5033G	-51.70	21.55522G	-47.79	1
2480MHz	Pass	2.48033G	7.25	-12.75	1.7173G	-53.09	2.39368G	-51.91	2.4G	-55.57	2.50326G	-51.55	21.63115G	-47.11	1
BT-EDR(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.402G	2.18	-17.82	1.9429G	-53.49	2.4G	-41.96	2.4G	-43.62	2.50154G	-52.43	21.63959G	-47.91	1
2440MHz	Pass	2.44008G	4.26	-15.74	92.28M	-53.23	2.39288G	-52.02	2.4G	-56.17	2.50006G	-52.24	21.63677G	-47.11	1
2480MHz	Pass	2.48016G	4.22	-15.78	1.6374G	-52.37	2.39472G	-52.20	2.4G	-56.44	2.5013G	-51.97	21.6199G	-47.38	1
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.402G	2.19	-17.81	1.64798G	-54.59	2.4G	-44.10	2.4G	-48.80	2.50066G	-52.08	21.63959G	-47.54	1
2440MHz	Pass	2.43991G	3.47	-16.53	1.73258G	-53.93	2.39152G	-51.29	2.4G	-55.80	2.50102G	-50.61	21.4343G	-46.15	1
2480MHz	Pass	2.48033G	5.72	-14.28	1.76665G	-53.95	2.39436G	-51.77	2.4G	-57.82	2.50278G	-51.14	21.48211G	-47.19	1

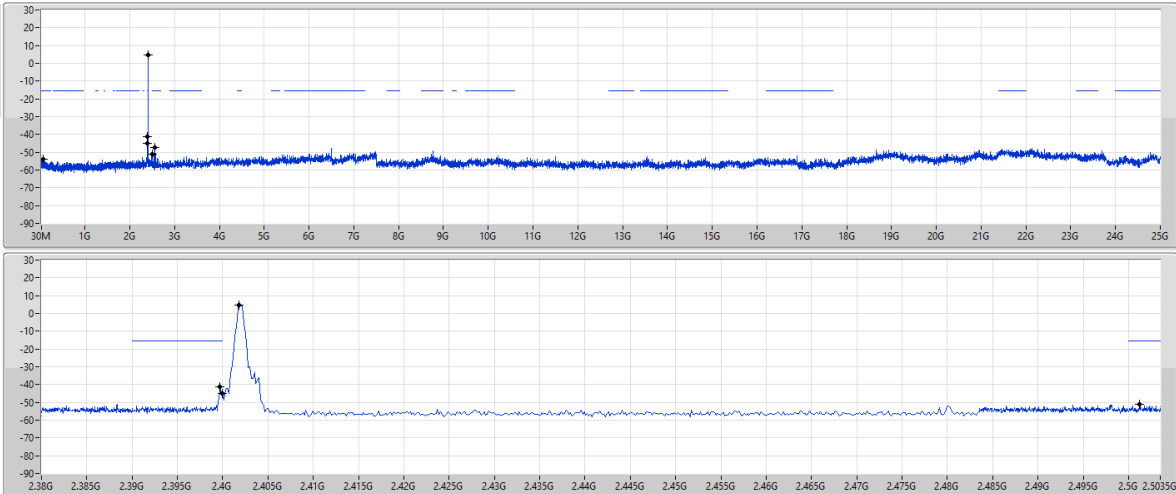
2.4-2.4835GHz_BT-BR(1Mbps)

CSEndB-FS

2402MHz

06/10/2023

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
2.40184G	4.59	-15.41	65.25M	-53.68	2.39972G	-41.32	2.4G	-44.95	2.50122G	-51.05	2.55693G	-47.11	1

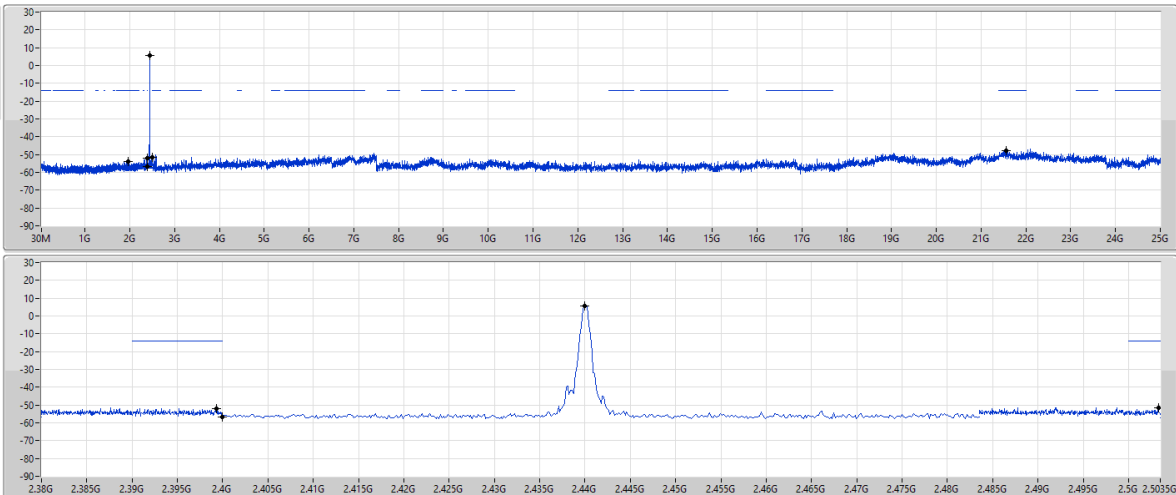
2.4-2.4835GHz_BT-BR(1Mbps)

CSEndB-FS

2440MHz

06/10/2023

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

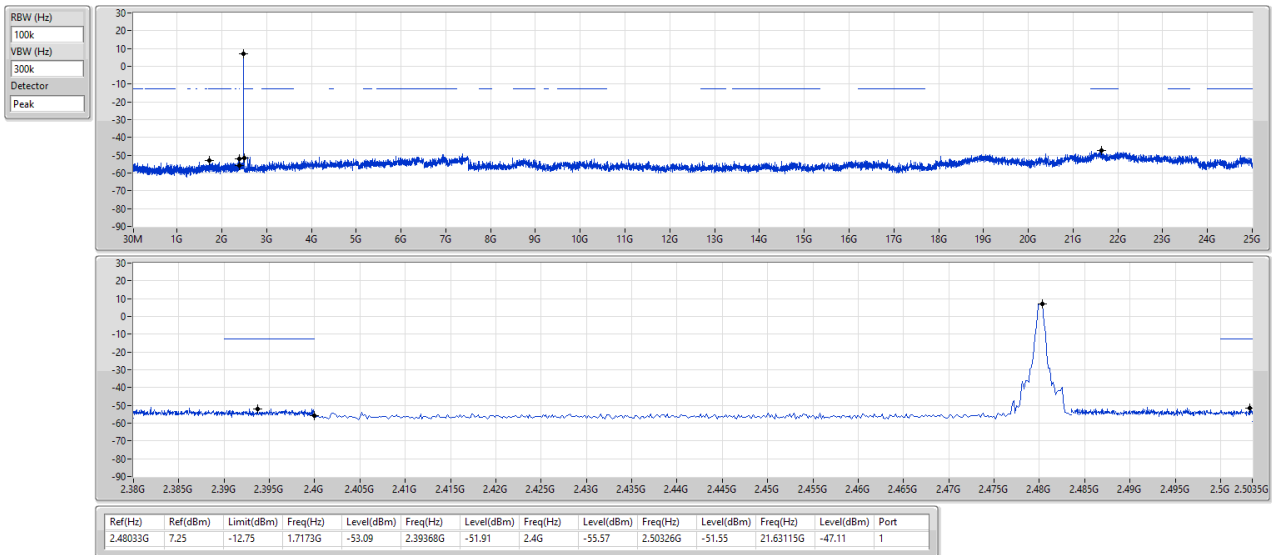


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43991G	5.79	-14.21	1.9617G	-54.01	2.39932G	-51.99	2.4G	-56.72	2.5033G	-51.70	2.55522G	-47.79	1

2.4-2.4835GHz_BT-BR(1Mbps)

CSEndB-FS

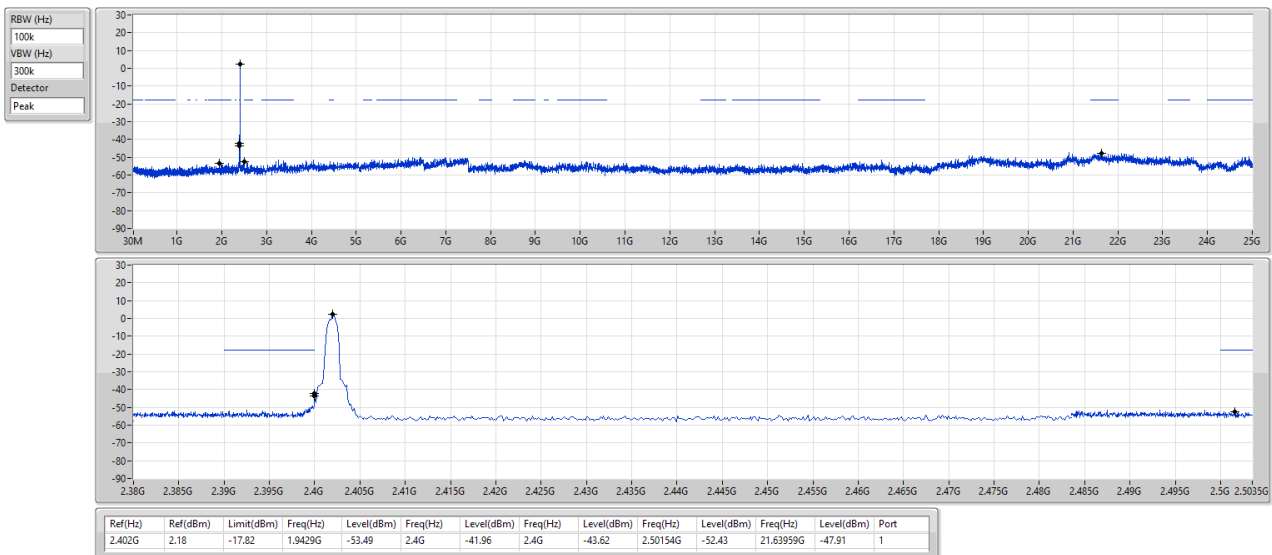
2480MHz



2.4-2.4835GHz_BT-EDR(2Mbps)

CSEndB-FS

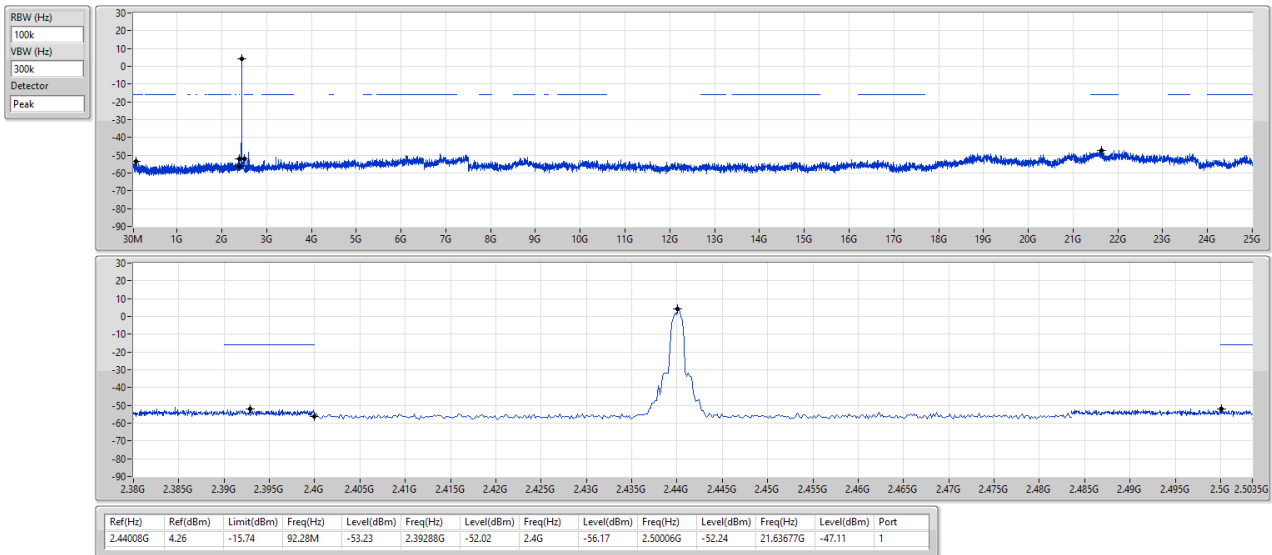
2402MHz



2.4-2.4835GHz_BT-EDR(2Mbps)

CSEndB-FS

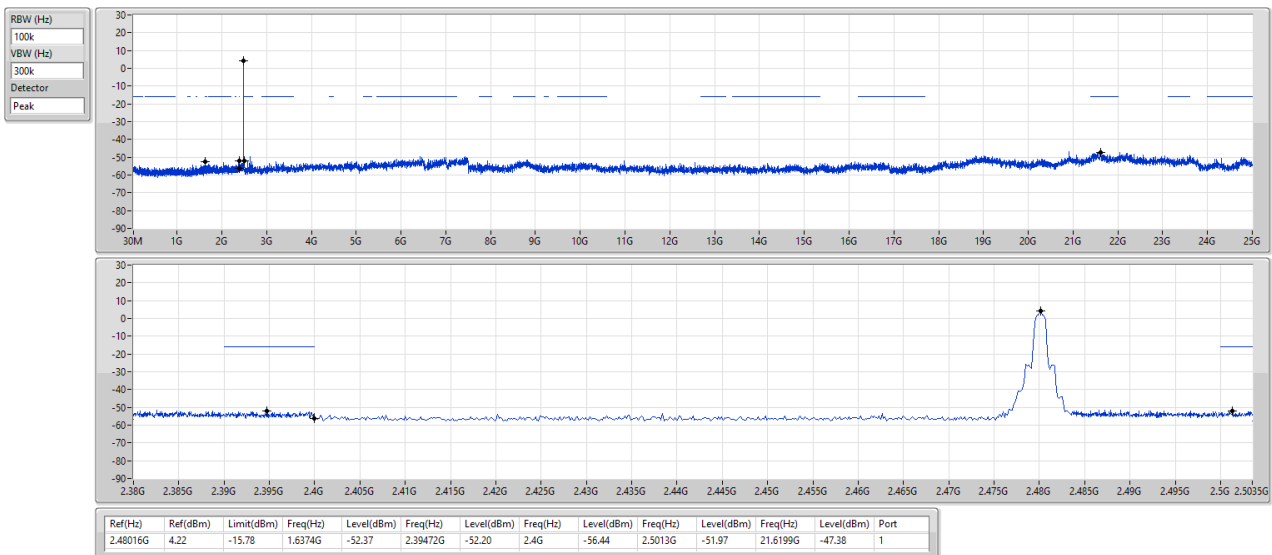
2440MHz



2.4-2.4835GHz_BT-EDR(2Mbps)

CSEndB-FS

2480MHz

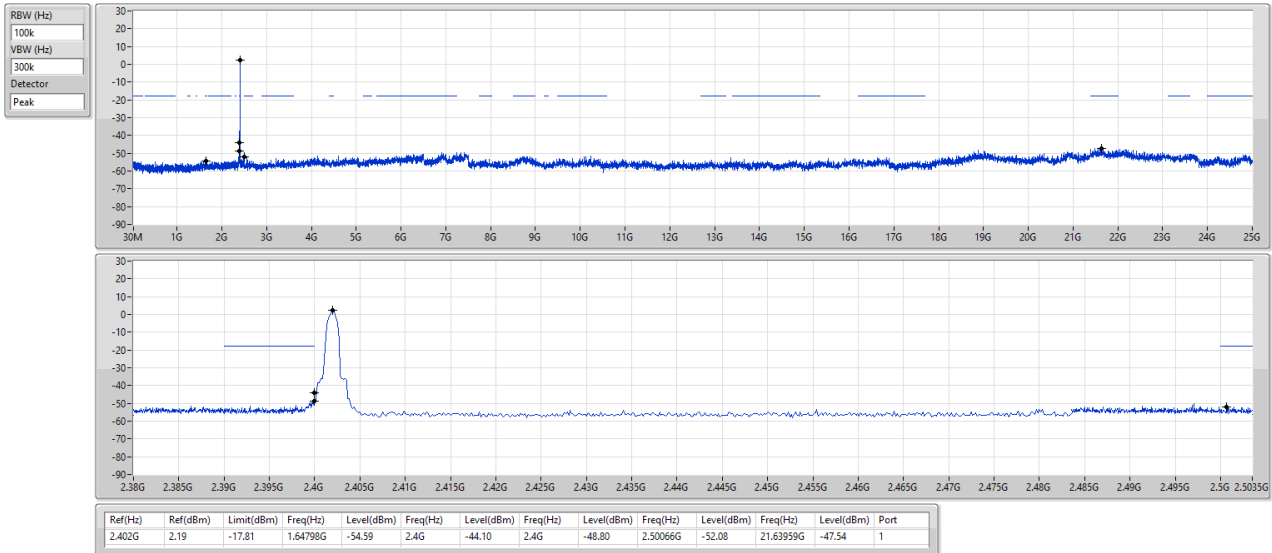


2.4-2.4835GHz_BT-EDR(3Mbps)

CSEndB-FS

2402MHz

06/10/2023

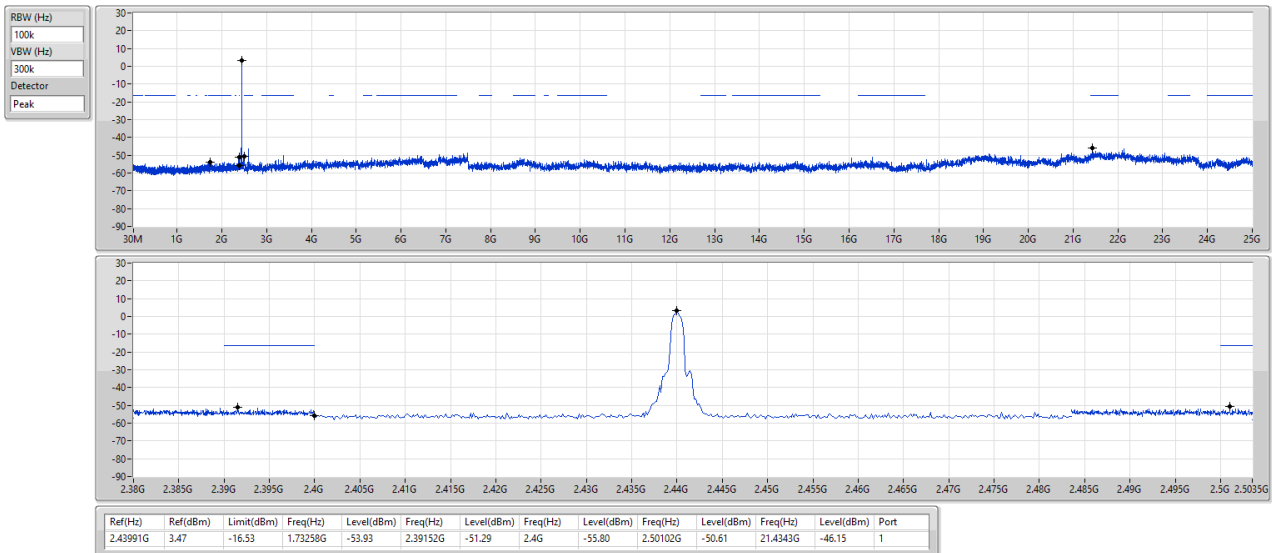


2.4-2.4835GHz_BT-EDR(3Mbps)

CSEndB-FS

2440MHz

06/10/2023



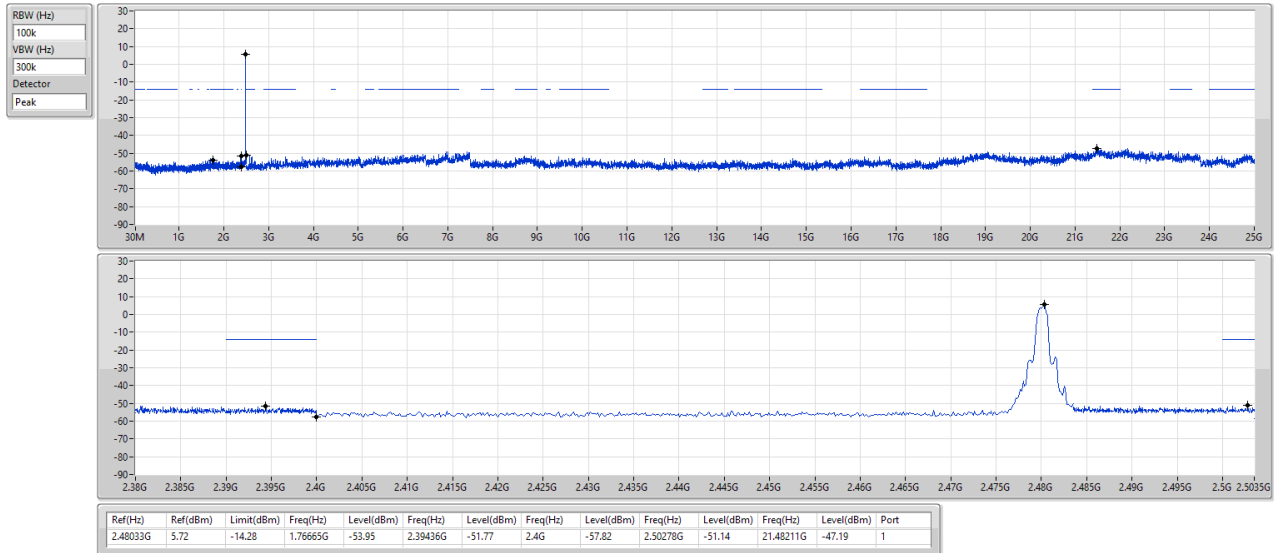
2.4-2.4835GHz_BT-EDR(3Mbps)

CSENdB-FS

2480MHz

06/10/2023

Port 1





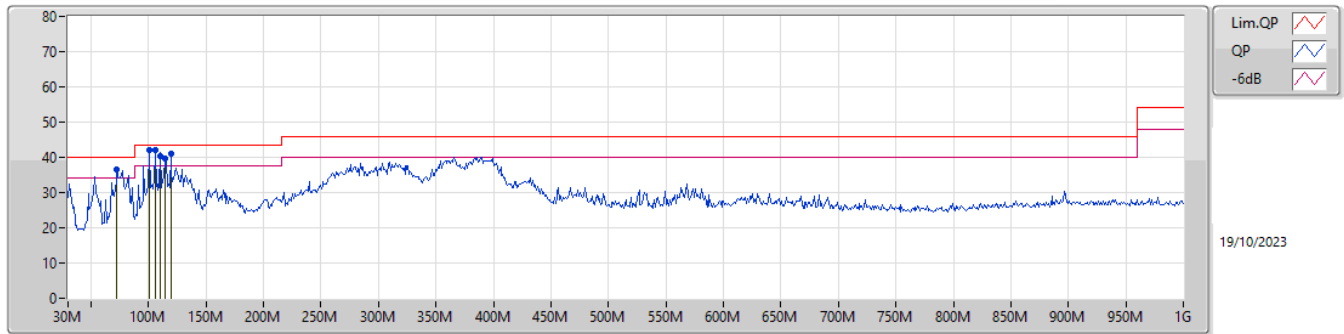
Radiated Emissions below 1GHz

Appendix G.1

Summary

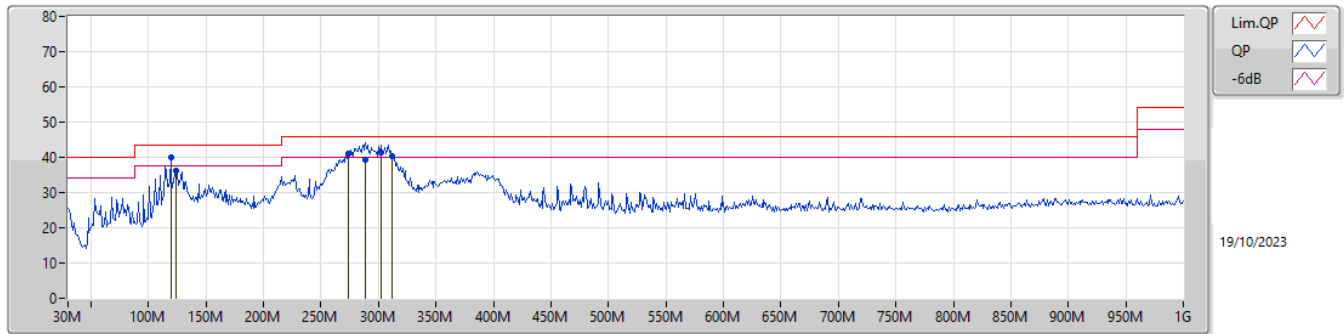
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	QP	105.66M	42.20	43.50	-1.30	Vertical

Mode 1



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)		
QP	72.68M	36.71	40.00	-3.29	-18.60	3	Vertical	16	2.00	-	55.31	12.43	0.67	31.70		
QP	100.81M	41.92	43.50	-1.58	-13.49	3	Vertical	219	1.00	-	55.41	17.23	0.82	31.54		
QP	105.66M	42.20	43.50	-1.30	-13.02	3	Vertical	239	1.00	"Worst"	55.22	17.70	0.85	31.57		
QP	110.51M	40.20	43.50	-3.30	-12.60	3	Vertical	206	1.00	-	52.80	18.11	0.88	31.59		
PK	114.39M	39.56	43.50	-3.94	-12.40	3	Vertical	180	1.00	-	51.96	18.30	0.91	31.61		
QP	119.24M	41.18	43.50	-2.32	-12.22	3	Vertical	186	1.00	-	53.40	18.48	0.94	31.64		

Mode 1



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)		
PK	119.24M	39.88	43.50	-3.62	-12.22	3	Horizontal	313	3.00	"Worst"	52.10	18.48	0.94	31.64		
PK	124.09M	36.23	43.50	-7.27	-12.29	3	Horizontal	326	3.00	-	48.52	18.42	0.97	31.68		
PK	273.47M	40.99	46.00	-5.01	-11.60	3	Horizontal	330	1.25	-	52.59	18.66	1.56	31.82		
QP	288.99M	39.23	46.00	-6.77	-11.27	3	Horizontal	347	1.50	-	50.50	18.93	1.63	31.83		
QP	302.57M	41.42	46.00	-4.58	-10.94	3	Horizontal	340	1.00	-	52.36	19.21	1.69	31.84		
PK	312.27M	40.45	46.00	-5.55	-10.72	3	Horizontal	327	1.00	-	51.17	19.41	1.70	31.83		

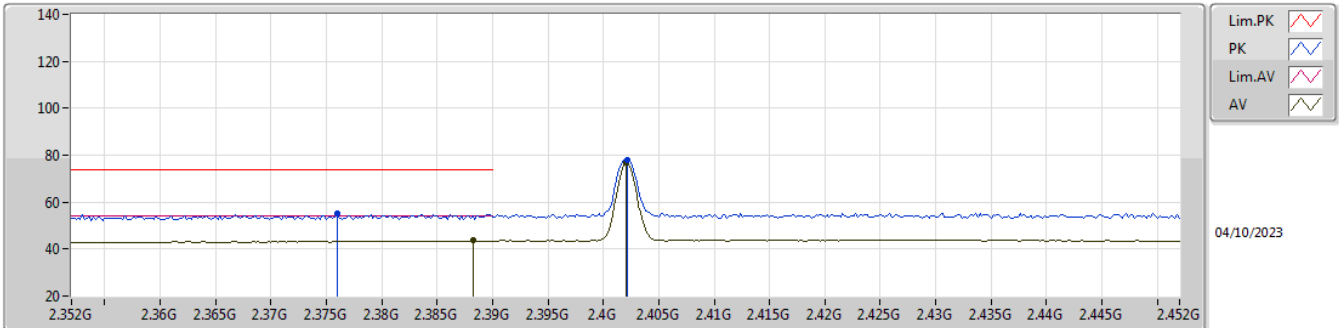


Summary

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	AV	4.96006G	50.14	54.00	-3.86	3	Vertical	294	1.06	-

2.4-2.4835GHz_BT-BR(1Mbps)

2402MHz_TX

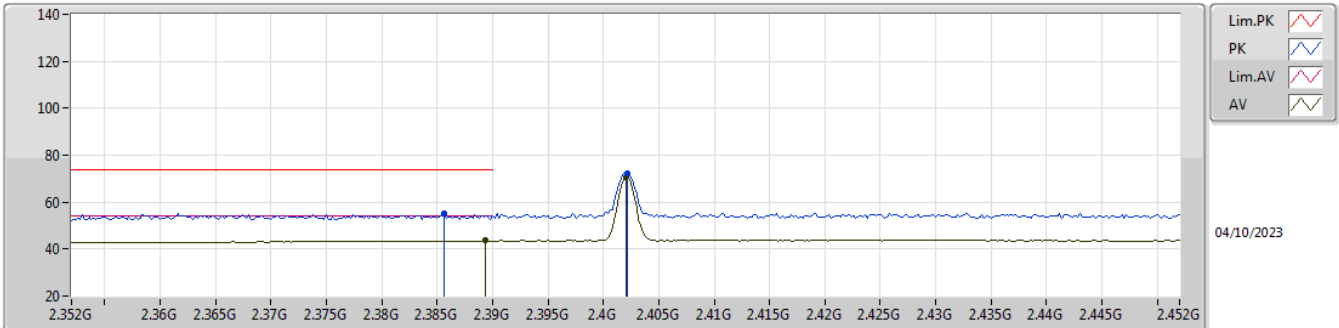


EUT X_1TX
Setting 63
02-F-R-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)				
PK	2.376G	55.09	74.00	-18.91	23.68	3	Vertical	97	1.03	-	28.36	3.05	-				
AV	2.3882G	43.61	54.00	-10.39	12.16	3	Vertical	97	1.03	-	28.40	3.05	-				
PK	2.4022G	78.01	Inf	-Inf	46.55	3	Vertical	97	1.03	-	28.40	3.06	-				
AV	2.402G	76.77	Inf	-Inf	45.31	3	Vertical	97	1.03	-	28.40	3.06	-				

2.4-2.4835GHz_BT-BR(1Mbps)

2402MHz_TX

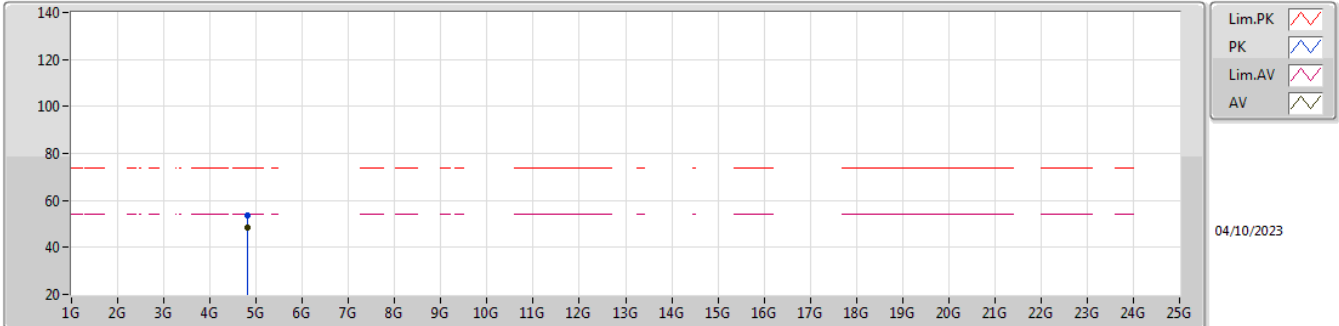


EUT X_1TX
Setting 63
02-F-R-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)				
PK	2.3856G	55.14	74.00	-18.86	23.69	3	Horizontal	329	2.72	-	28.40	3.05	-				
AV	2.3894G	43.58	54.00	-10.42	12.13	3	Horizontal	329	2.72	-	28.40	3.05	-				
PK	2.4022G	72.33	Inf	-Inf	40.87	3	Horizontal	329	2.72	-	28.40	3.06	-				
AV	2.402G	70.62	Inf	-Inf	39.16	3	Horizontal	329	2.72	-	28.40	3.06	-				

2.4-2.4835GHz_BT-BR(1Mbps)

2402MHz_TX

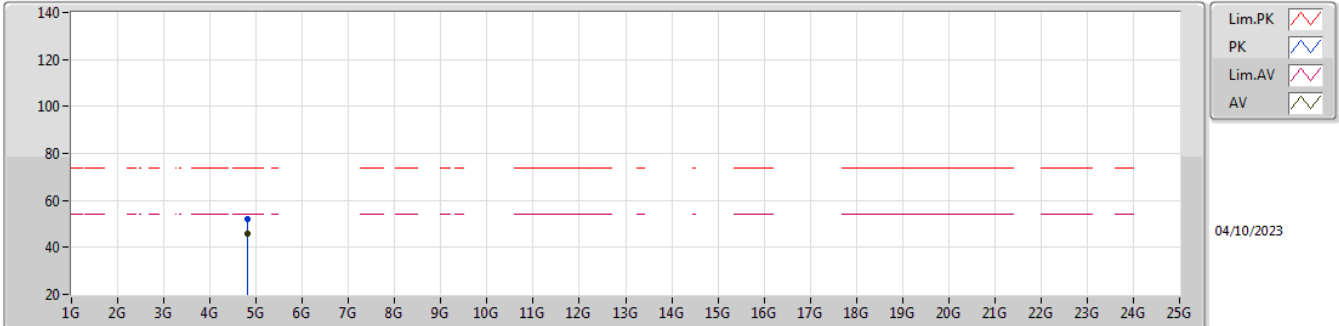


EUT_X1TX
Setting 63
02-F-R-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA			
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)			
PK	4.80436G	53.79	74.00	-20.21	46.56	3	Vertical	101	1.01	-	32.83	5.09	30.69			
AV	4.80406G	48.33	54.00	-5.67	41.11	3	Vertical	101	1.01	-	32.82	5.09	30.69			

2.4-2.4835GHz_BT-BR(1Mbps)

2402MHz_TX

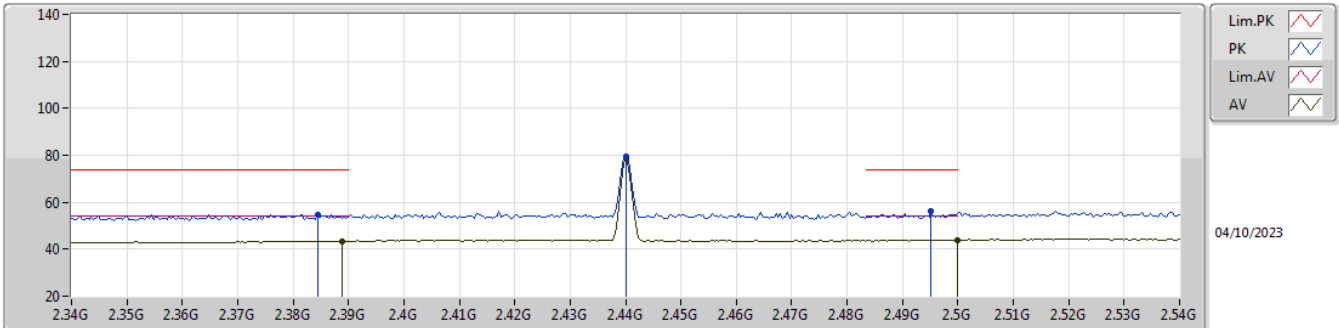


EUT_X1TX
Setting 63
02-F-R-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA			
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)			
PK	4.8043G	52.11	74.00	-21.89	44.88	3	Horizontal	138	1.06	-	32.83	5.09	30.69			
AV	4.80406G	45.94	54.00	-8.06	38.72	3	Horizontal	138	1.06	-	32.82	5.09	30.69			

2.4-2.4835GHz_BT-BR(1Mbps)

2440MHz_TX

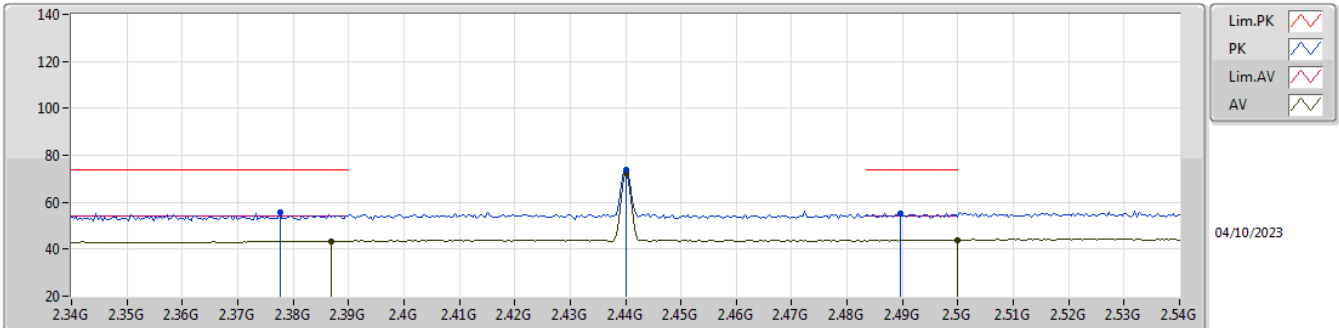


EUT X_1TX
Setting 63
02-F-R-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.3844G	54.84	74.00	-19.16	23.39	3	Vertical	93	1.09	-	28.40	3.05	-			
AV	2.3888G	43.51	54.00	-10.49	12.06	3	Vertical	93	1.09	-	28.40	3.05	-			
PK	2.44G	79.37	Inf	-Inf	47.89	3	Vertical	93	1.09	-	28.40	3.08	-			
AV	2.44G	78.21	Inf	-Inf	46.73	3	Vertical	93	1.09	-	28.40	3.08	-			
PK	2.4952G	56.01	74.00	-17.99	24.36	3	Vertical	93	1.09	-	28.55	3.10	-			
AV	2.5G	44.02	54.00	-9.98	12.32	3	Vertical	93	1.09	-	28.60	3.10	-			

2.4-2.4835GHz_BT-BR(1Mbps)

2440MHz_TX

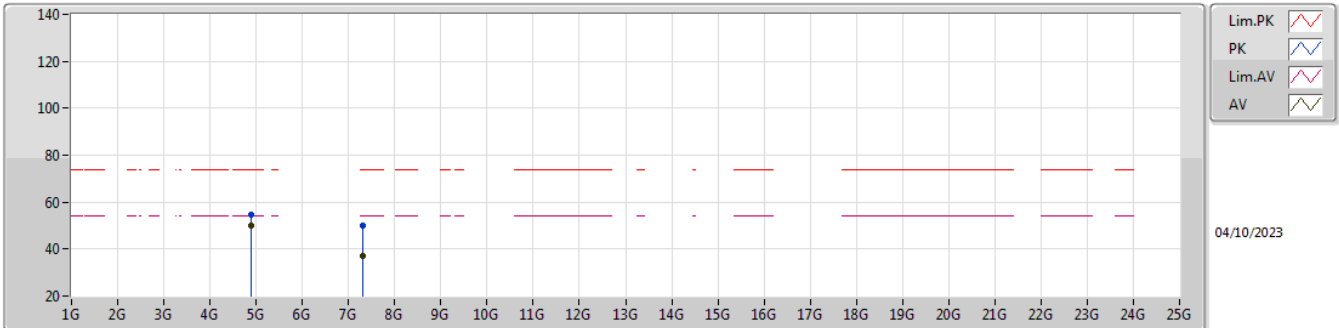


EUT X_1TX
Setting 63
02-F-R-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)				
PK	2.3776G	55.52	74.00	-18.48	24.09	3	Horizontal	183	1.24	-	28.38	3.05	-				
AV	2.3868G	43.47	54.00	-10.53	12.02	3	Horizontal	183	1.24	-	28.40	3.05	-				
PK	2.44G	73.54	Inf	-Inf	42.06	3	Horizontal	183	1.24	-	28.40	3.08	-				
AV	2.44G	72.14	Inf	-Inf	40.66	3	Horizontal	183	1.24	-	28.40	3.08	-				
PK	2.4896G	55.28	74.00	-18.72	23.68	3	Horizontal	183	1.24	-	28.50	3.10	-				
AV	2.5G	44.03	54.00	-9.97	12.33	3	Horizontal	183	1.24	-	28.60	3.10	-				

2.4-2.4835GHz_BT-BR(1Mbps)

2440MHz_TX

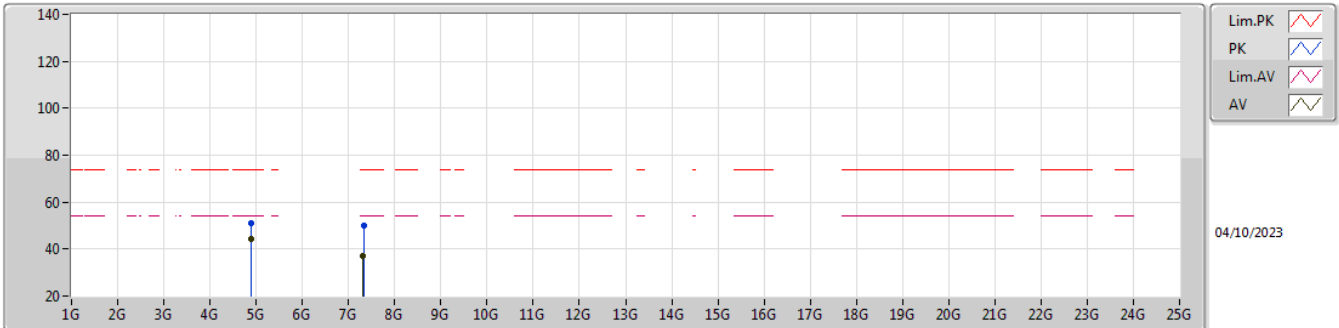


EUT X_1TX
Setting 63
02-F-R-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)				
PK	4.87984G	54.74	74.00	-19.26	47.11	3	Vertical	89	1.00	-	33.16	5.11	30.64				
AV	4.88008G	49.87	54.00	-4.13	42.24	3	Vertical	89	1.00	-	33.16	5.11	30.64				
PK	7.32046G	50.22	74.00	-23.78	39.18	3	Vertical	305	1.01	-	36.64	6.52	32.12				
AV	7.31662G	37.08	54.00	-16.92	26.06	3	Vertical	305	1.01	-	36.63	6.51	32.12				

2.4-2.4835GHz_BT-BR(1Mbps)

2440MHz_TX

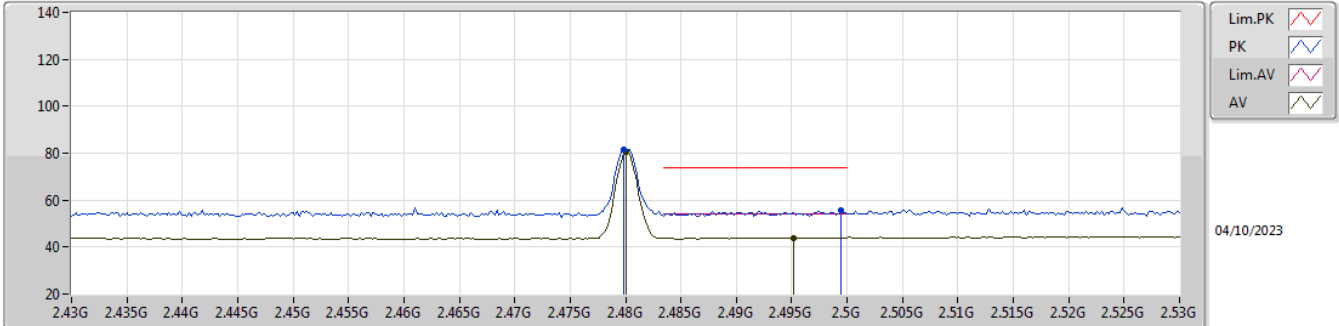


EUT X_1TX
Setting 63
02-F-R-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.8803G	51.10	74.00	-22.90	43.47	3	Horizontal	154	1.04	-	33.16	5.11	30.64			
AV	4.88004G	44.40	54.00	-9.60	36.77	3	Horizontal	154	1.04	-	33.16	5.11	30.64			
PK	7.32334G	50.22	74.00	-23.78	39.17	3	Horizontal	138	1.51	-	36.65	6.52	32.12			
AV	7.31596G	37.13	54.00	-16.87	26.11	3	Horizontal	138	1.51	-	36.63	6.51	32.12			

2.4-2.4835GHz_BT-BR(1Mbps)

2480MHz_TX

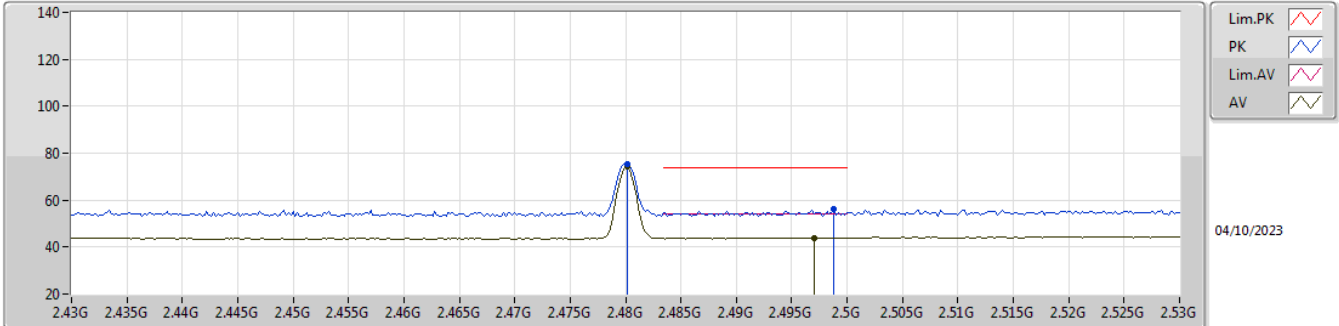


EUT X_1TX
Setting 63
02-F-R-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)				
PK	2.4798G	81.71	Inf	-Inf	50.12	3	Vertical	258	2.55	-	28.50	3.09	-				
AV	2.48G	80.71	Inf	-Inf	49.12	3	Vertical	258	2.55	-	28.50	3.09	-				
PK	2.4994G	55.90	74.00	-18.10	24.21	3	Vertical	258	2.55	-	28.59	3.10	-				
AV	2.4952G	43.98	54.00	-10.02	12.33	3	Vertical	258	2.55	-	28.55	3.10	-				

2.4-2.4835GHz_BT-BR(1Mbps)

2480MHz_TX

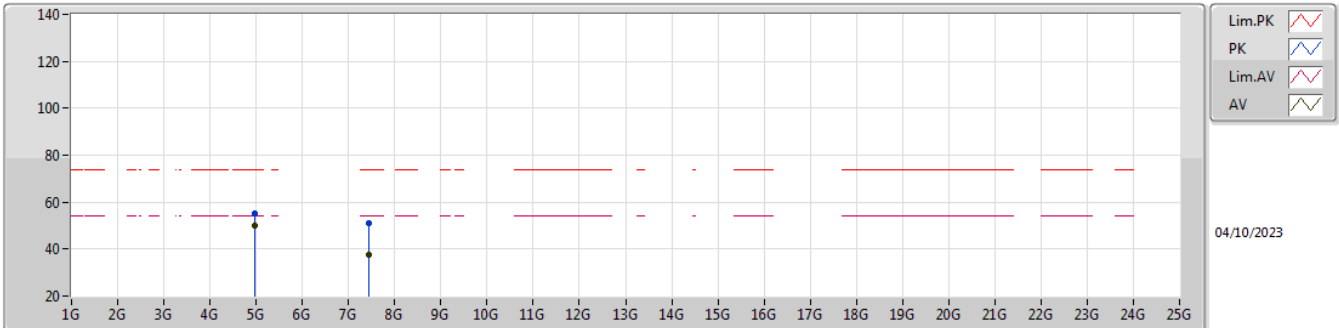


EUT X_1TX
Setting 63
02-F-R-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)				
PK	2.4802G	75.55	Inf	-Inf	43.96	3	Horizontal	150	2.78	-	28.50	3.09	-				
AV	2.4802G	74.19	Inf	-Inf	42.60	3	Horizontal	150	2.78	-	28.50	3.09	-				
PK	2.4988G	55.95	74.00	-18.05	24.26	3	Horizontal	150	2.78	-	28.59	3.10	-				
AV	2.497G	44.05	54.00	-9.95	12.38	3	Horizontal	150	2.78	-	28.57	3.10	-				

2.4-2.4835GHz_BT-BR(1Mbps)

2480MHz_TX

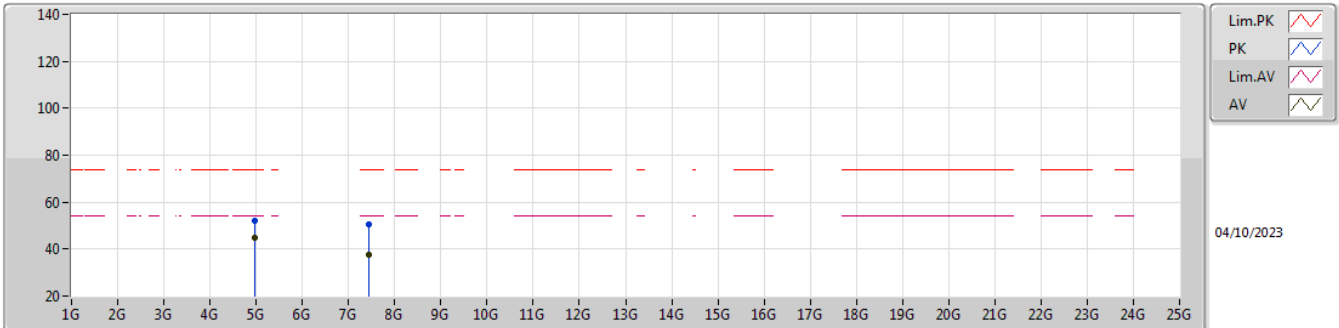


EUT X_1TX
Setting 63
02-F-R-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.96016G	55.33	74.00	-18.67	47.46	3	Vertical	294	1.06	-	33.32	5.14	30.59			
AV	4.96006G	50.14	54.00	-3.86	42.27	3	Vertical	294	1.06	-	33.32	5.14	30.59			
PK	7.43534G	51.09	74.00	-22.91	39.99	3	Vertical	204	1.25	-	36.70	6.58	32.18			
AV	7.43528G	37.66	54.00	-16.34	26.56	3	Vertical	204	1.25	-	36.70	6.58	32.18			

2.4-2.4835GHz_BT-BR(1Mbps)

2480MHz_TX

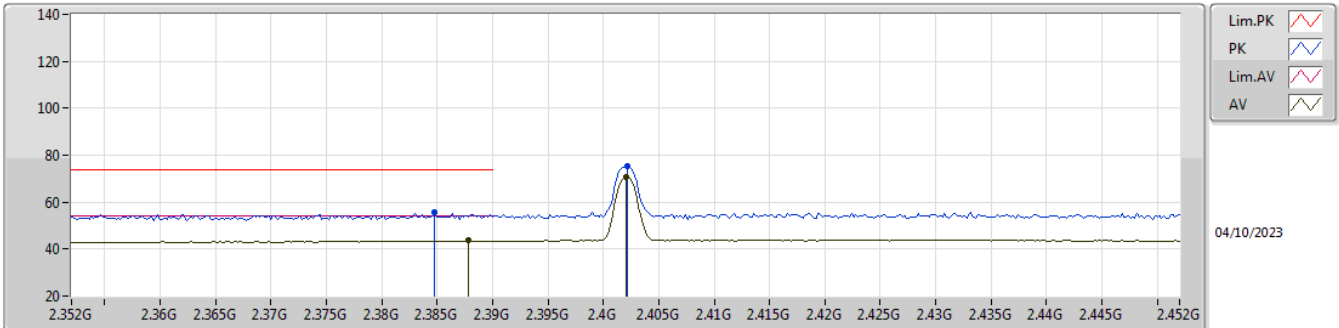


EUT X_1TX
Setting 63
02-F-R-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.96016G	52.22	74.00	-21.78	44.35	3	Horizontal	124	2.45	-	33.32	5.14	30.59			
AV	4.96002G	44.60	54.00	-9.40	36.73	3	Horizontal	124	2.45	-	33.32	5.14	30.59			
PK	7.43516G	50.55	74.00	-23.45	39.45	3	Horizontal	90	1.81	-	36.70	6.58	32.18			
AV	7.43528G	37.81	54.00	-16.19	26.71	3	Horizontal	90	1.81	-	36.70	6.58	32.18			

2.4-2.4835GHz_BT-EDR(3Mbps)

2402MHz_TX

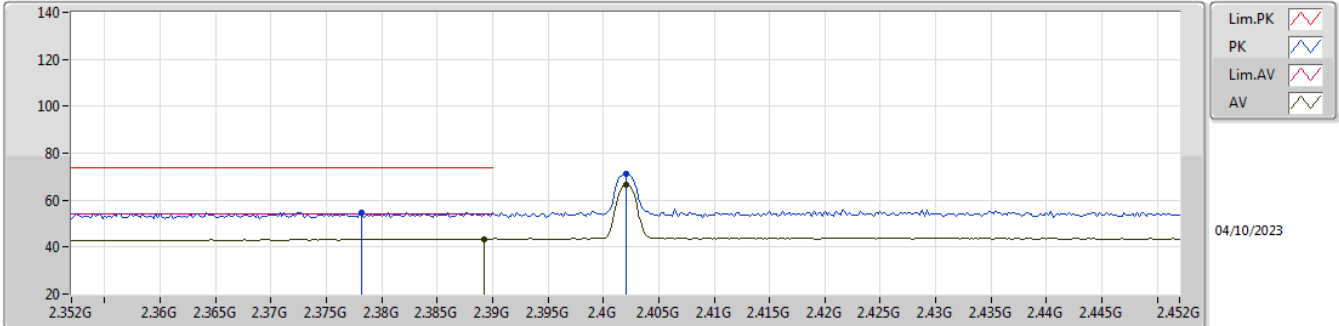


EUT X_1TX
Setting 63
02-F-R-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.3848G	55.78	74.00	-18.22	24.33	3	Vertical	269	1.17	-	28.40	3.05	-			
AV	2.3878G	43.57	54.00	-10.43	12.12	3	Vertical	269	1.17	-	28.40	3.05	-			
PK	2.4022G	75.10	Inf	-Inf	43.64	3	Vertical	269	1.17	-	28.40	3.06	-			
AV	2.402G	70.68	Inf	-Inf	39.22	3	Vertical	269	1.17	-	28.40	3.06	-			

2.4-2.4835GHz_BT-EDR(3Mbps)

2402MHz_TX

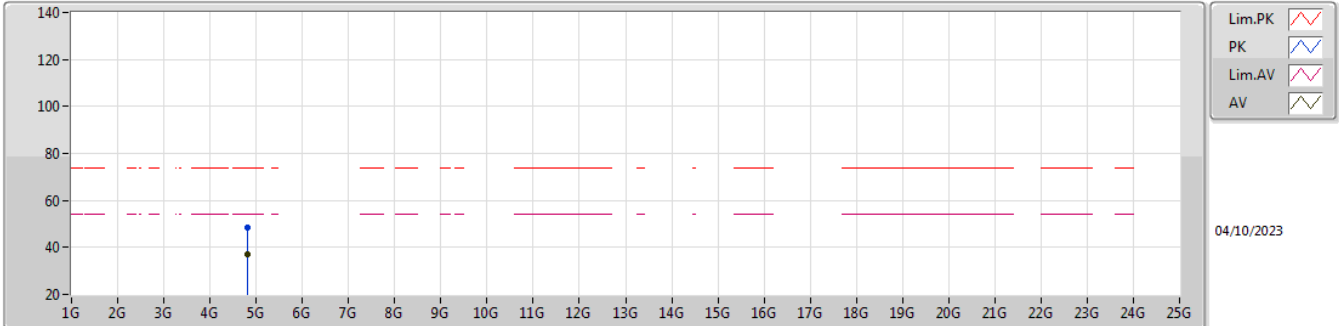


EUT X_1TX
Setting 63
02-F-R-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.3782G	54.80	74.00	-19.20	23.37	3	Horizontal	154	2.08	-	28.38	3.05	-			
AV	2.3892G	43.45	54.00	-10.55	12.00	3	Horizontal	154	2.08	-	28.40	3.05	-			
PK	2.402G	71.40	Inf	-Inf	39.94	3	Horizontal	154	2.08	-	28.40	3.06	-			
AV	2.402G	66.69	Inf	-Inf	35.23	3	Horizontal	154	2.08	-	28.40	3.06	-			

2.4-2.4835GHz_BT-EDR(3Mbps)

2402MHz_TX

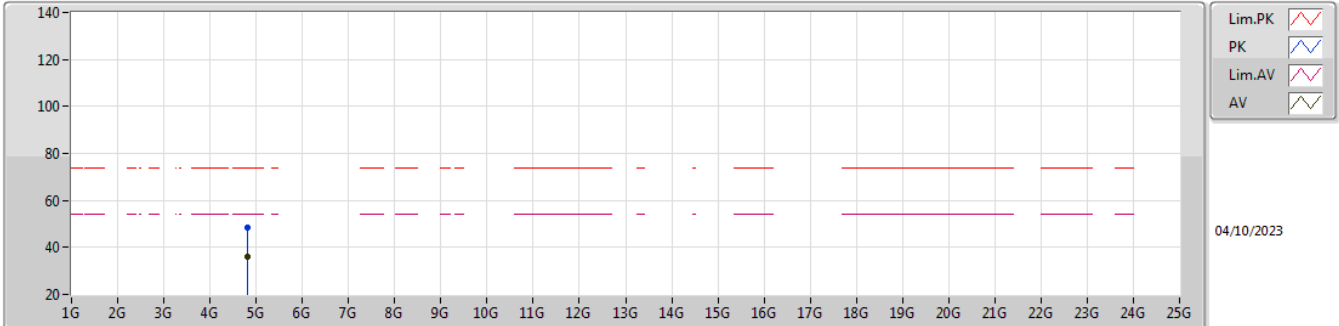


EUT_X_1TX
Setting 63
02-F-R-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA			
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)			
PK	4.80382G	48.62	74.00	-25.38	41.40	3	Vertical	279	2.56	-	32.82	5.09	30.69			
AV	4.80402G	37.31	54.00	-16.69	30.09	3	Vertical	279	2.56	-	32.82	5.09	30.69			

2.4-2.4835GHz_BT-EDR(3Mbps)

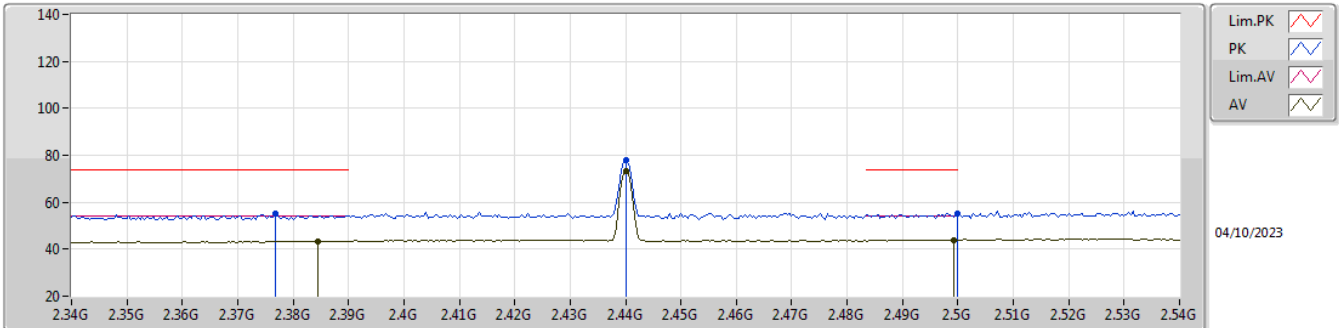
2402MHz_TX


EUT X_1TX
Setting 63
02-F-R-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA			
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)			
PK	4.80434G	48.25	74.00	-25.75	41.02	3	Horizontal	175	2.64	-	32.83	5.09	30.69			
AV	4.80406G	36.29	54.00	-17.71	29.07	3	Horizontal	175	2.64	-	32.82	5.09	30.69			

2.4-2.4835GHz_BT-EDR(3Mbps)

2440MHz_TX

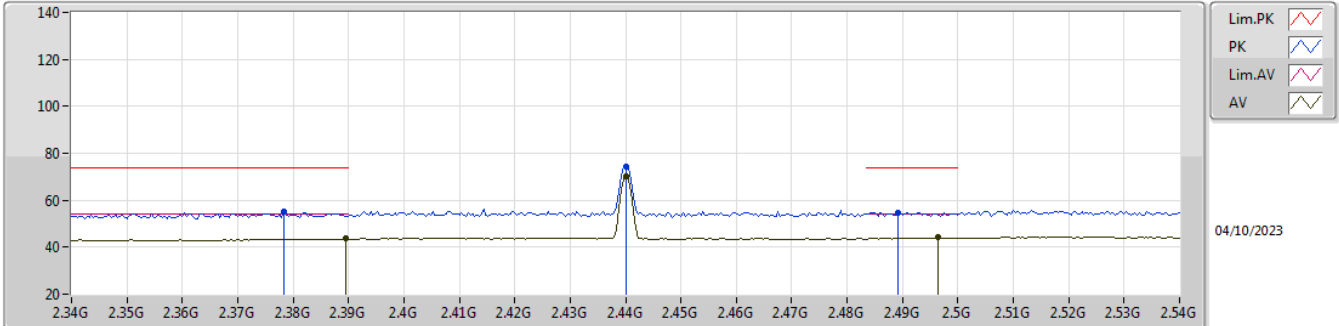


EUT_X1TX
Setting 63
02-F-R-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)				
PK	2.3768G	55.26	74.00	-18.74	23.84	3	Vertical	295	2.28	-	28.37	3.05	-				
AV	2.3844G	43.46	54.00	-10.54	12.01	3	Vertical	295	2.28	-	28.40	3.05	-				
PK	2.44G	77.79	Inf	-Inf	46.31	3	Vertical	295	2.28	-	28.40	3.08	-				
AV	2.44G	73.42	Inf	-Inf	41.94	3	Vertical	295	2.28	-	28.40	3.08	-				
PK	2.5G	55.33	74.00	-18.67	23.63	3	Vertical	295	2.28	-	28.60	3.10	-				
AV	2.4992G	43.90	54.00	-10.10	12.21	3	Vertical	295	2.28	-	28.59	3.10	-				

2.4-2.4835GHz_BT-EDR(3Mbps)

2440MHz_TX

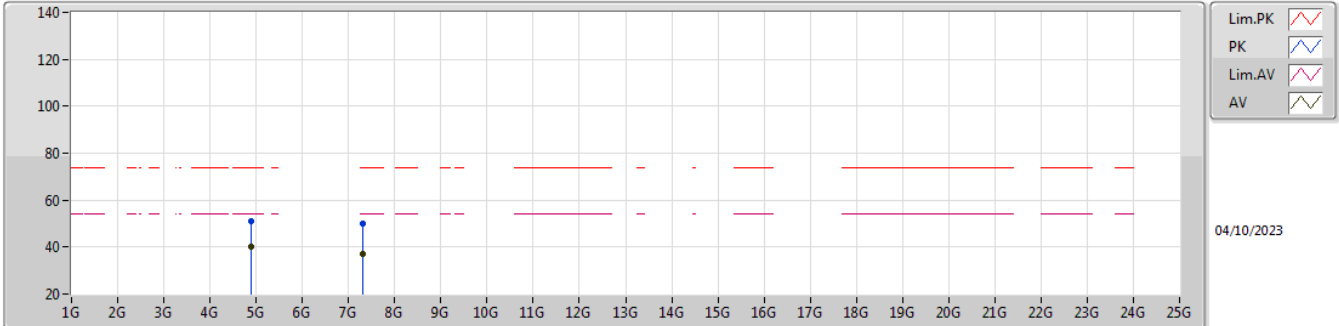


EUT X_1TX
Setting 63
02-F-R-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.3784G	55.03	74.00	-18.97	23.60	3	Horizontal	358	2.62	-	28.38	3.05	-			
AV	2.3896G	43.54	54.00	-10.46	12.09	3	Horizontal	358	2.62	-	28.40	3.05	-			
PK	2.44G	74.39	Inf	-Inf	42.91	3	Horizontal	358	2.62	-	28.40	3.08	-			
AV	2.44G	70.12	Inf	-Inf	38.64	3	Horizontal	358	2.62	-	28.40	3.08	-			
PK	2.4892G	54.83	74.00	-19.17	23.23	3	Horizontal	358	2.62	-	28.50	3.10	-			
AV	2.4964G	44.06	54.00	-9.94	12.40	3	Horizontal	358	2.62	-	28.56	3.10	-			

2.4-2.4835GHz_BT-EDR(3Mbps)

2440MHz_TX

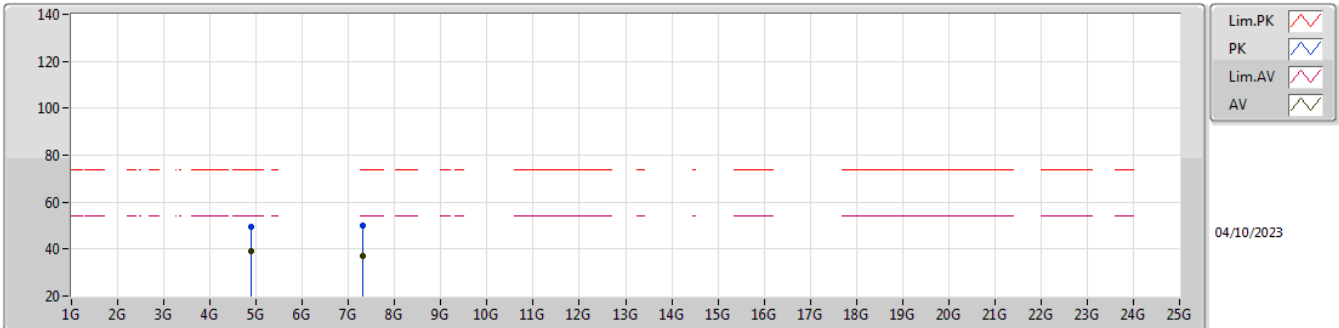


EUT X_1TX
Setting 63
02-F-R-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.8802G	51.10	74.00	-22.90	43.47	3	Vertical	247	2.45	-	33.16	5.11	30.64			
AV	4.8801G	40.11	54.00	-13.89	32.48	3	Vertical	247	2.45	-	33.16	5.11	30.64			
PK	7.32034G	50.14	74.00	-23.86	39.10	3	Vertical	212	1.71	-	36.64	6.52	32.12			
AV	7.3189G	37.16	54.00	-16.84	26.12	3	Vertical	212	1.71	-	36.64	6.52	32.12			

2.4-2.4835GHz_BT-EDR(3Mbps)

2440MHz_TX

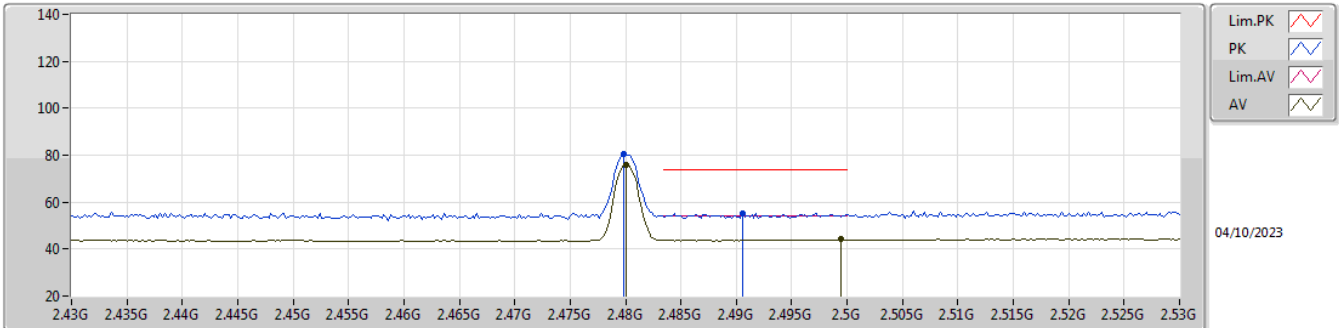


EUT X_1TX
Setting 63
02-F-R-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.8805G	49.50	74.00	-24.50	41.87	3	Horizontal	200	2.55	-	33.16	5.11	30.64			
AV	4.88012G	39.12	54.00	-14.88	31.49	3	Horizontal	200	2.55	-	33.16	5.11	30.64			
PK	7.31896G	50.01	74.00	-23.99	38.97	3	Horizontal	19	2.91	-	36.64	6.52	32.12			
AV	7.31942G	37.14	54.00	-16.86	26.10	3	Horizontal	19	2.91	-	36.64	6.52	32.12			

2.4-2.4835GHz_BT-EDR(3Mbps)

2480MHz_TX

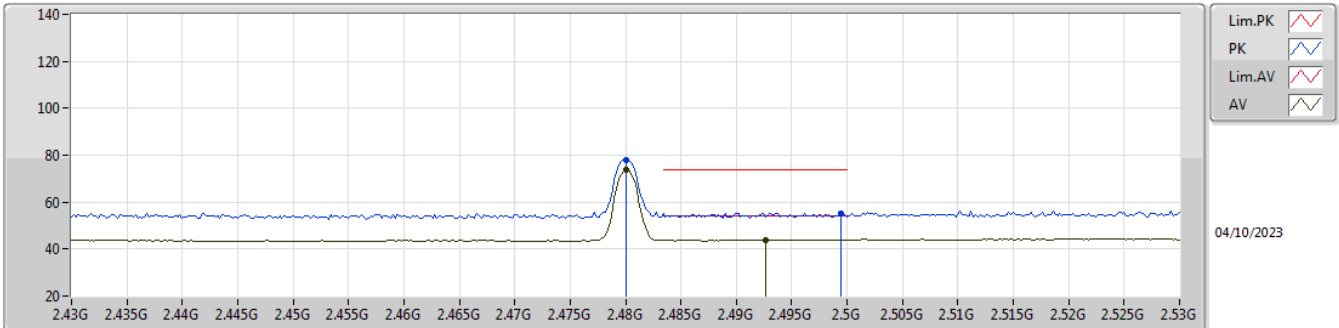


EUT X_1TX
Setting 63
02-F-R-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.4798G	80.29	Inf	-Inf	48.70	3	Vertical	296	2.48	-	28.50	3.09	-			
AV	2.48G	75.95	Inf	-Inf	44.36	3	Vertical	296	2.48	-	28.50	3.09	-			
PK	2.4906G	55.37	74.00	-18.63	23.76	3	Vertical	296	2.48	-	28.51	3.10	-			
AV	2.4994G	44.16	54.00	-9.84	12.47	3	Vertical	296	2.48	-	28.59	3.10	-			

2.4-2.4835GHz_BT-EDR(3Mbps)

2480MHz_TX

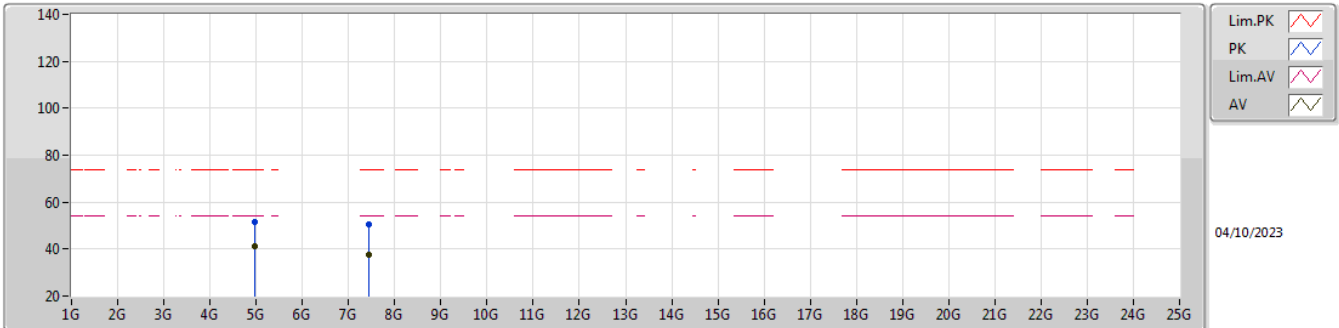


EUT X_1TX
Setting 63
02-F-R-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.48G	77.90	Inf	-Inf	46.31	3	Horizontal	360	2.77	-	28.50	3.09	-			
AV	2.48G	73.54	Inf	-Inf	41.95	3	Horizontal	360	2.77	-	28.50	3.09	-			
PK	2.4994G	55.23	74.00	-18.77	23.54	3	Horizontal	360	2.77	-	28.59	3.10	-			
AV	2.4926G	44.03	54.00	-9.97	12.40	3	Horizontal	360	2.77	-	28.53	3.10	-			

2.4-2.4835GHz_BT-EDR(3Mbps)

2480MHz_TX

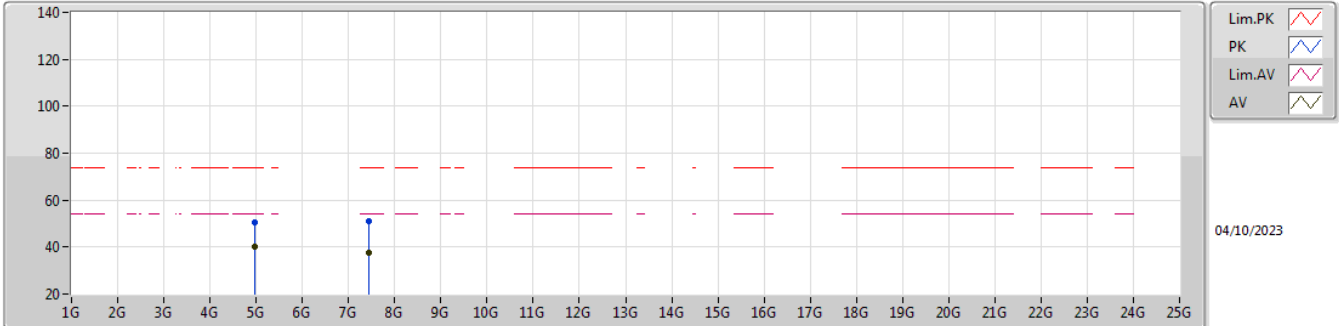


EUT X_1TX
Setting 63
02-F-R-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.9604G	51.33	74.00	-22.67	43.46	3	Vertical	48	1.00	-	33.32	5.14	30.59			
AV	4.96G	41.22	54.00	-12.78	33.35	3	Vertical	48	1.00	-	33.32	5.14	30.59			
PK	7.44092G	50.48	74.00	-23.52	39.39	3	Vertical	172	2.45	-	36.70	6.58	32.19			
AV	7.43638G	37.62	54.00	-16.38	26.52	3	Vertical	172	2.45	-	36.70	6.58	32.18			

2.4-2.4835GHz_BT-EDR(3Mbps)

2480MHz_TX



EUT X_1TX
Setting 63
02-F-R-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.96022G	50.41	74.00	-23.59	42.54	3	Horizontal	44	1.39	-	33.32	5.14	30.59			
AV	4.96016G	40.11	54.00	-13.89	32.24	3	Horizontal	44	1.39	-	33.32	5.14	30.59			
PK	7.43614G	50.84	74.00	-23.16	39.74	3	Horizontal	34	2.34	-	36.70	6.58	32.18			
AV	7.4375G	37.63	54.00	-16.37	26.54	3	Horizontal	34	2.34	-	36.70	6.58	32.19			