



RADIO TEST REPORT

FCC ID : 2AYRA-03795
Equipment : Linksys Velop Micro-Mesh 6
Brand Name : LINKSYS
Model Name : LN1200, LN1210, LN1215
Applicant : Linksys USA, Inc.
121 Theory, Irvine, CA. 92617, USA
Standard : 47 CFR FCC Part 15.247

The product was received on Aug. 09, 2023, and testing was started from Aug. 14, 2023 and completed on Oct. 12, 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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History of this test report

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

Page Number : 3 of 27
Issued Date : Dec. 01, 2023
Report Version : 01



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: Lavender Zeng**

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)
	2.4GHz	5GHz	Bluetooth					
1	2	1	-	Galtronics	02102140-07935C1	PCB Antenna	U.FL	Note 1
2	1	2	-	Galtronics	02102140-07935C2	PCB Antenna	U.FL	
3	-	-	1	Gemtek	WRTQ-387AX	Printed Antenna	N/A	

Note 1:

Ant.	Gain (dBi)					
	2.4GHz	5GHz UNII 1	5GHz UNII 2A	5GHz UNII 2C	5GHz UNII 3	Bluetooth
1	3.35	4.90	4.90	4.92	4.92	-
2	3.72	4.70	4.70	4.79	4.79	-
3	-	-	-	-	-	2.82

Note 2: The above information was declared by manufacturer.

Note 3: Directional gain information

Type	Maximum Output Power	Power Spectral Density
Non-BF	Directional gain = Max.gain + array gain. For power measurements on IEEE 802.11 devices Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$	$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{ANT}} \left[\sum_{k=1}^{N_{ANT}} \xi_{j,k} \right]^2}{N_{ANT}} \right]$
BF	$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{ANT}} \left[\sum_{k=1}^{N_{ANT}} \xi_{j,k} \right]^2}{N_{ANT}} \right]$	$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{ANT}} \left[\sum_{k=1}^{N_{ANT}} \xi_{j,k} \right]^2}{N_{ANT}} \right]$

Ex.

Directional Gain (NSS1) formula :

$$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{ANT}} \left[\sum_{k=1}^{N_{ANT}} \xi_{j,k} \right]^2}{N_{ANT}} \right]$$

$$NSS1(g1,1) = 10^{G1/20} ; NSS1(g1,2) = 10^{G2/20} ;$$

$$g_{j,k} = (NSS1(g1,1) + NSS1(g1,2))^2$$

$$DG = 10 \log[(NSS1(g1,1) + NSS1(g1,2))^2 / N_{ANT}] \Rightarrow 10 \log[(10^{G1/20} + 10^{G2/20})^2 / N_{ANT}]$$

Where ;

2.4G G1= 3.35 dBi ; G2= 3.72 dBi ;DG= 6.55dBi

5G UNII-1 G1= 4.9 dBi ; G2= 4.7 dBi ;DG= 7.81dBi

5G UNII-2A G1= 4.9 dBi ; G2= 4.7 dBi ;DG= 7.81dBi

5G UNII-2C G1= 4.92 dBi ; G2= 4.79 dBi ;DG= 7.87dBi

5G UNII-3 G1= 4.92 dBi ; G2= 4.79 dBi ;DG= 7.87dBi

Note 4: For 2.4GHz function:

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

Port 1 and Port 2 can be used as transmitting/receiving antenna.

Port 1 and Port 2 could transmit/receive simultaneously.

For 5GHz function:

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

Port 1 and Port 2 can be used as transmitting/receiving antenna.

Port 1 and Port 2 could transmit/receive simultaneously.

For Bluetooth function:

For Bluetooth mode (1TX/1RX):

Only Port 1 can be use as transmit and receive antenna.

**1.1.3 Mode Test Duty Cycle**

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
BT-BR(1Mbps)	0.741	1.3	2.886m	1k
BT-EDR(2Mbps)	0.742	1.3	2.889m	1k
BT-EDR(3Mbps)	0.785	1.05	2.891m	1k

Note:

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

1.1.4 EUT Operational Condition

EUT Power Type	From Power Adapter
Test Software Version	QRCT 4.0.210.0

1.1.5 Table for Multiple Listing

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

Model Name	Description
LN1200	All the models are identical, the difference model served as marketing strategy.
LN1210	
LN1215	

Note 1: From the above models, model: LN1200 was selected as representative model 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 ISED.

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
RF Conducted	TH03-CB	Nyle Chang	24.2-25.3 / 57-69	Aug. 14, 2023 ~ Sep. 26, 2023
Radiated (Below 1GHz)	03CH01-CB	Mark Hsu	22.4-23.5 / 55-58	Aug. 15, 2023 ~ Oct. 12, 2023
Radiated (Above 1GHz)	03CH02-CB	Mark Hsu	21-22 / 55-58	Aug. 15, 2023 ~ Oct. 12, 2023
	03CH06-CB		22.7-23.8 / 56-59	
AC Conduction	CO01-CB	Elvin Yeh	22~23 / 55~56	Sep. 28, 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%
Bandwidth Measurement	2.2%	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

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

2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral Test Voltage: 120Vac / 60Hz
Operating Mode	Normal Link
1	EUT + Adapter 1
2	EUT + Adapter 2
3	EUT + Adapter 3
For operating mode 1 is the worst case and it was record in this test report.	

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
Afrer evaluating, "Z axis" generated the worst test result, so the measurement will follow this same test configuration.	
1	EUT in Z axis + WLAN 2.4GHz + Adapter 1
2	EUT in Z axis + WLAN 2.4GHz + Adapter 2
3	EUT in Z axis + WLAN 2.4GHz + Adapter 3
Mode 1 ha been evaluated to be the worst case between Mode 1~3, thus measurement for Mode 4~5 will follow this same test mode.	
4	EUT in Z axis + WLAN 5GHz + Adapter 1
5	EUT in Z axis + Bluetooth + Adapter 1
For operating mode 1 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX
Afrer evaluating, "Z axis" generated the worst test result, so the measurement will follow this same test configuration.	
1	EUT in Z axis

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	Bluetooth + WLAN 2.4GHz + WLAN 5GHz
Refer to Sporton Test Report No.: FA380908 for Co-location RF Exposure Evaluation.	

2.3 EUT Operation during Test

For CTX Mode:

The EUT was programmed to be in continuously transmitting mode.

For Normal Link:

During the test, the EUT operation to normal function.



2.4 Accessories

Accessories			
Power	Brand	Model	Rating
Adapter 1 (Fixed plug)	Ktec	KSA-18W-050300VU	Input: 100-240V ~ 50/60Hz, 0.5A Output: 5.0V, 3.0A
Adapter 2 (Fixed plug)	MOSO	MSA-C3000IC5.0-18P-US	Input: 100-240V ~ 50/60Hz, 0.7A max. Output: 5.0V, 3A
Adapter 3 (Removable plug)	Ktec	KSA-18W-050300D5	Input: 100-240V ~ 50/60Hz, 0.5A Output: 5.0V, 3.0A, 15.0W
Others			
Plug*1 (for Adapter 3 use)			

2.5 Support Equipment

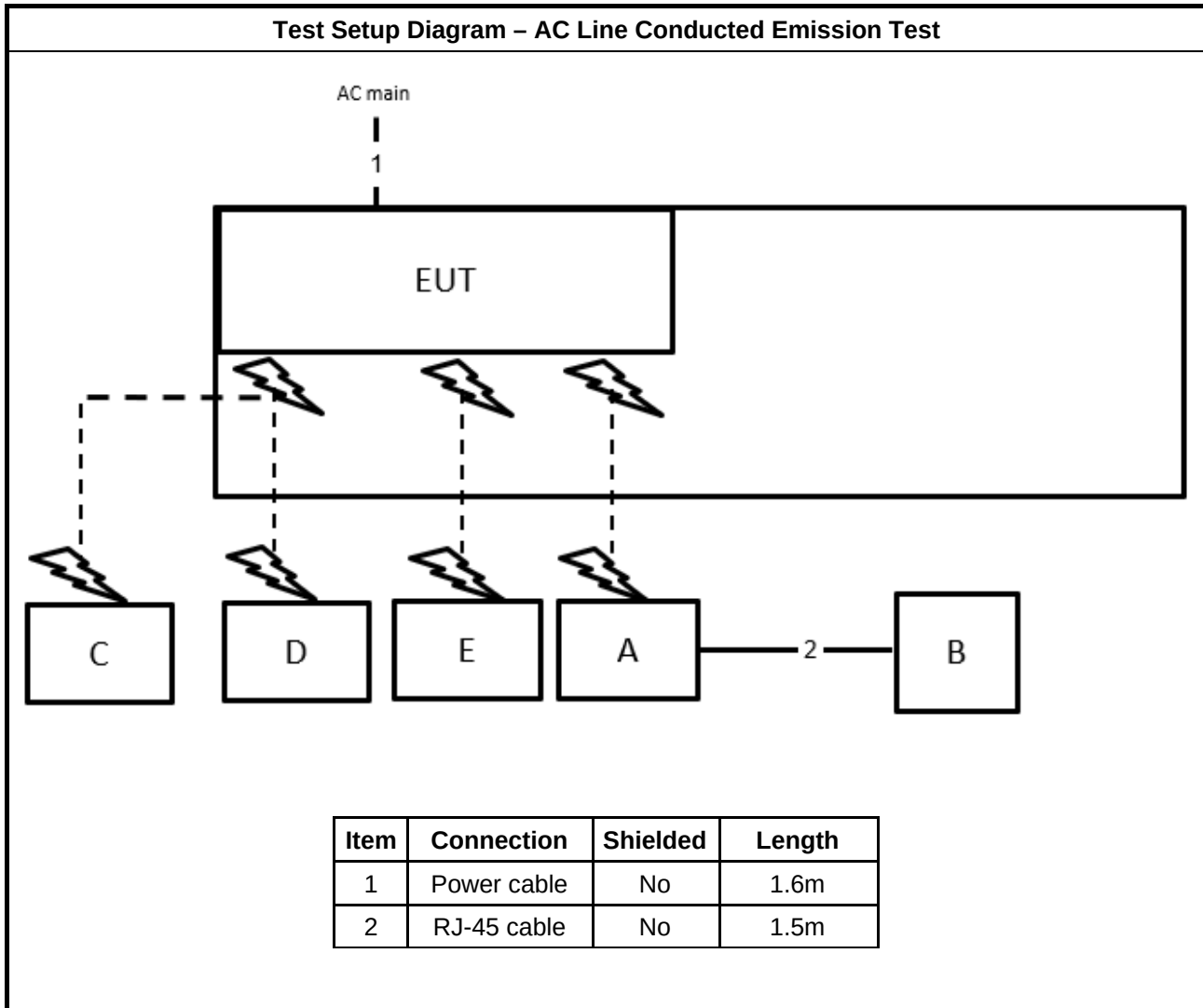
For AC Conduction:

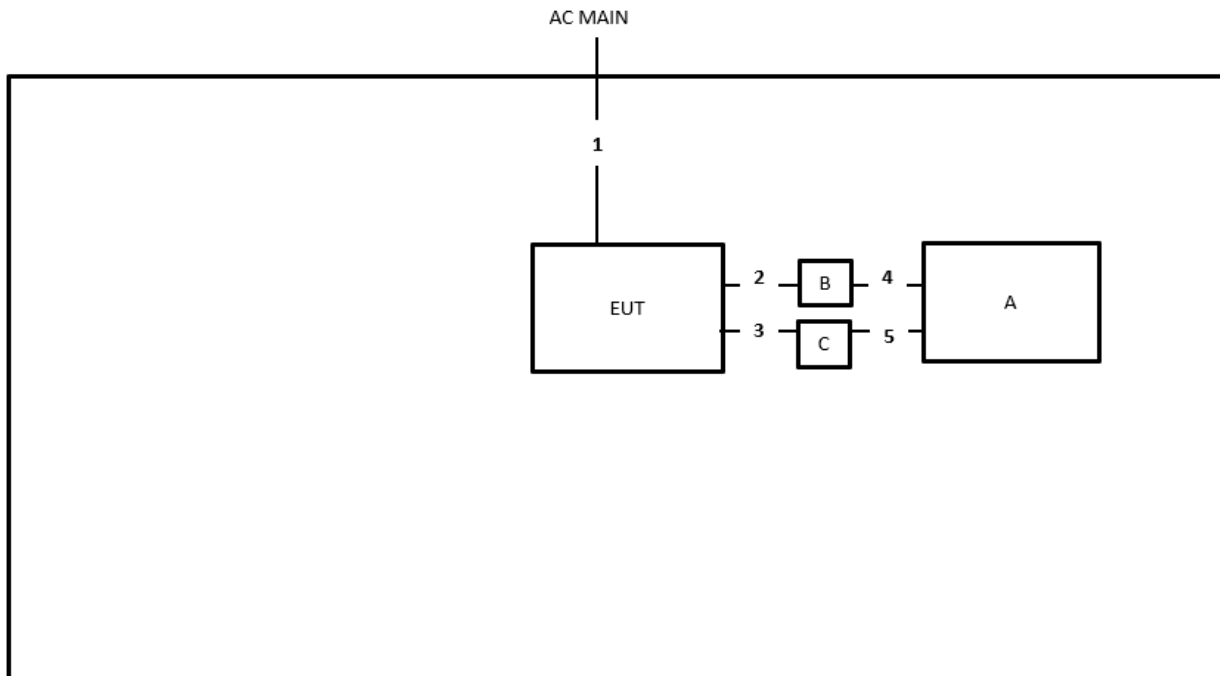
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Device AP	LINKSYS	ELM	N/A
B	Device NB	DELL	E6430	N/A
C	2.4G NB	DELL	E6430	N/A
D	5G NB	DELL	E6430	N/A
E	Smart phone	Samsung	Galaxy J2	N/A

For Radiated and RF Conducted:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E4300	N/A
B	Test Fixture	Linksys	ESK-B21-7400R	N/A
C	Test Fixture	Linksys	N/A	N/A

2.6 Test Setup Diagram



Test Setup Diagram - Radiated Test


Item	Connection	Shielded	Length
1	Power cable	No	1.6m
2	Console cable	No	0.03m
3	Console cable	No	0.03m
4	RJ-45 cable	No	1m
5	USB cable	Yes	1m



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.		

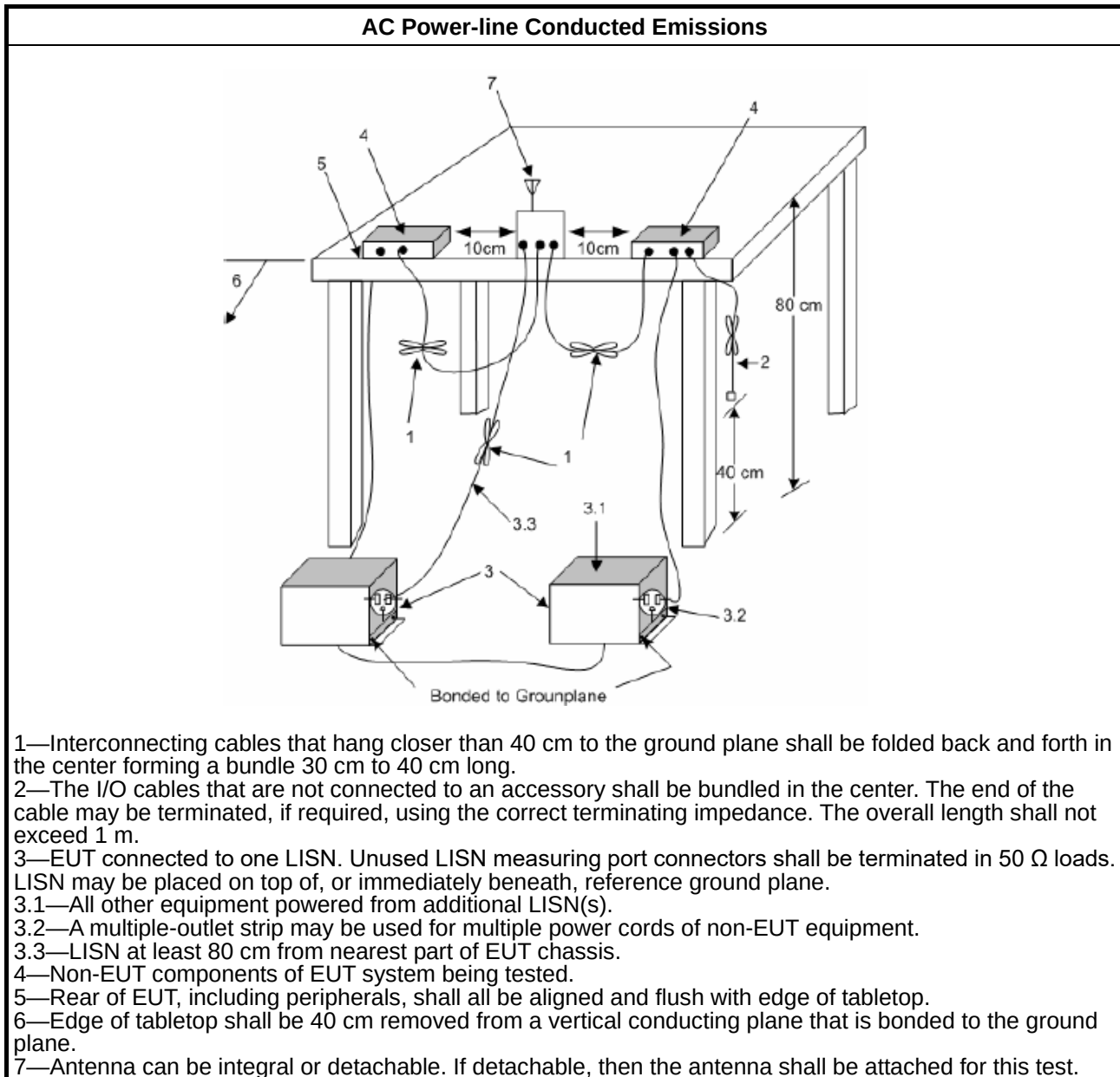
3.1.2 Measuring Instruments

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:

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

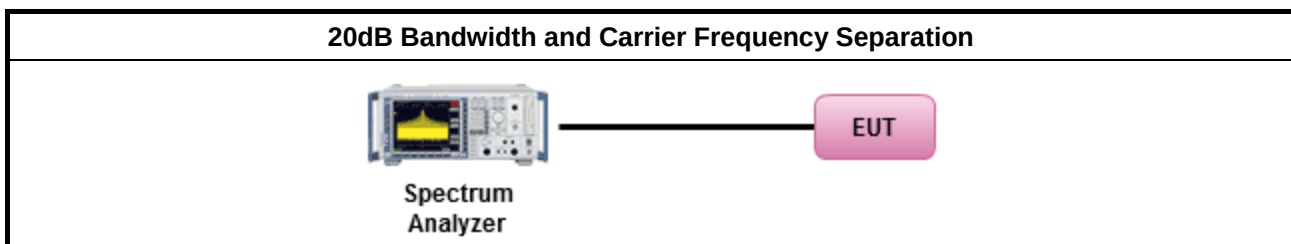
3.2.2 Measuring Instruments

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:	
▪ $N \geq 50$; Power 30dBm; EIRP 36dBm	
▪ $50 > N \geq 25$; Power 23.98dBm; EIRP 29.98dBm	
▪ 2400-2483.5 MHz Band:	
▪ $N \geq 75$; Power 30dBm; EIRP 36dBm	
▪ $75 > N \geq 15$; Power 21dBm; EIRP 27dBm	
▪ 5725-5850 MHz Band:	
▪ $N \geq 75$; 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

Maximum Conducted Output Power (Peak Power Meter)
 The diagram illustrates the test setup for measuring Maximum Conducted Output Power. It shows a Power Meter (a blue and white device with a screen and buttons) connected via a cable to an EUT (Equipment Under Test, represented by a pink box). The Power Meter is also connected to a computer monitor and keyboard, indicating data recording or analysis.

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

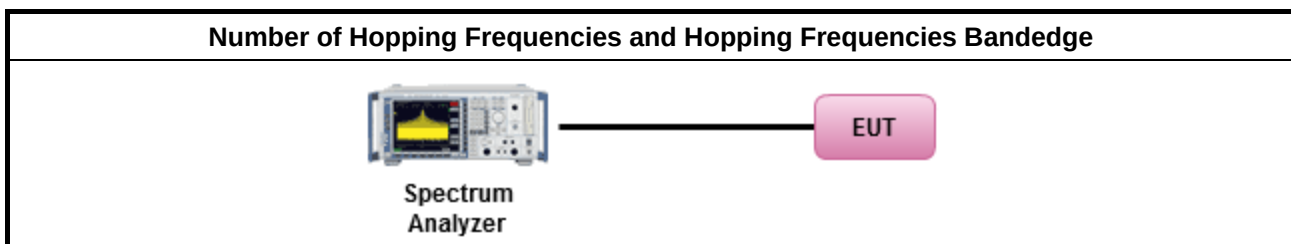
3.4.3 Measuring Instruments

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	

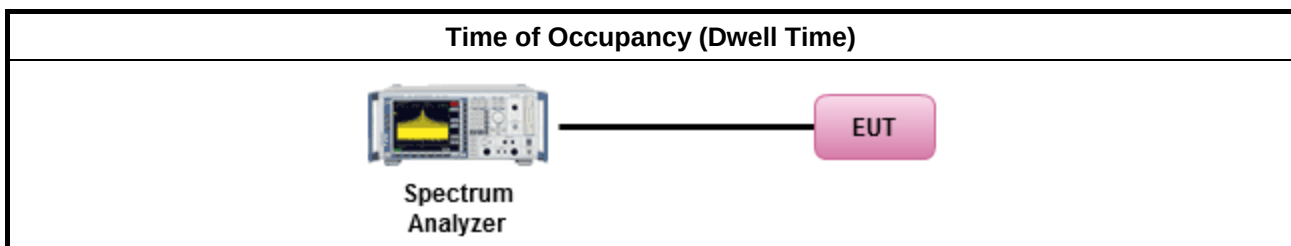
3.5.2 Measuring Instruments

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.	

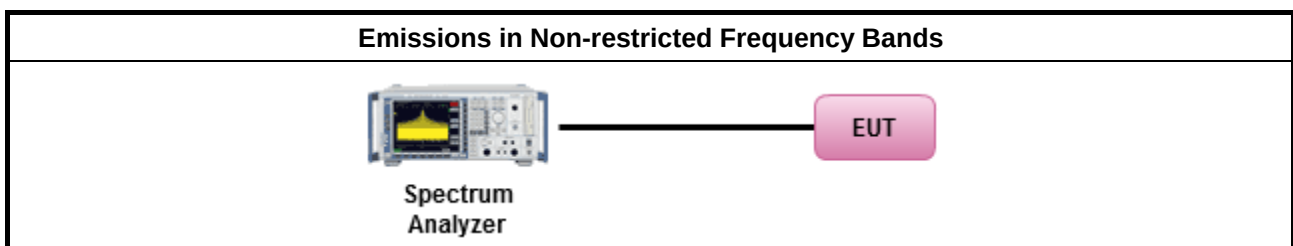
3.6.2 Measuring Instruments

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.

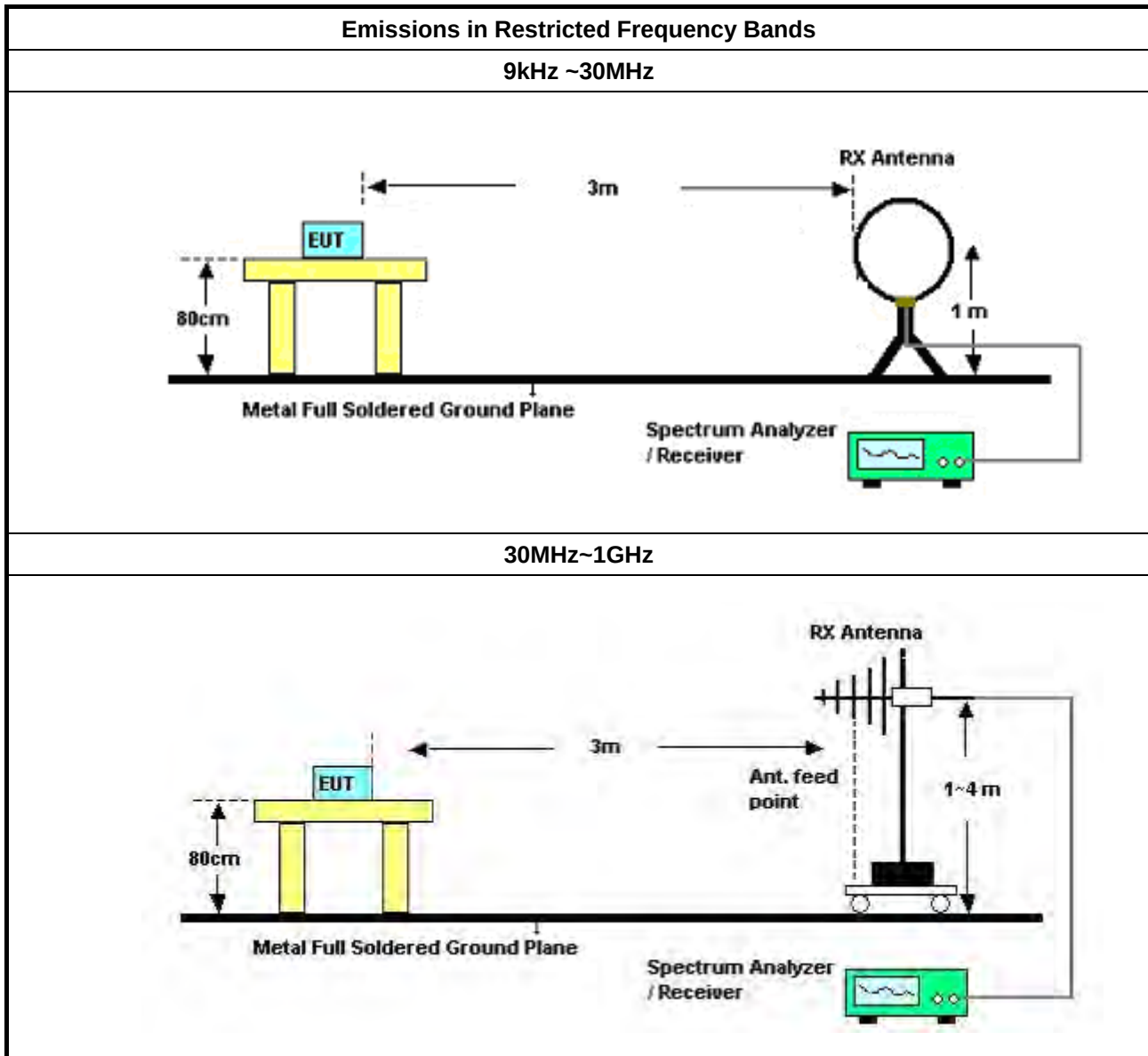
3.7.2 Measuring Instruments

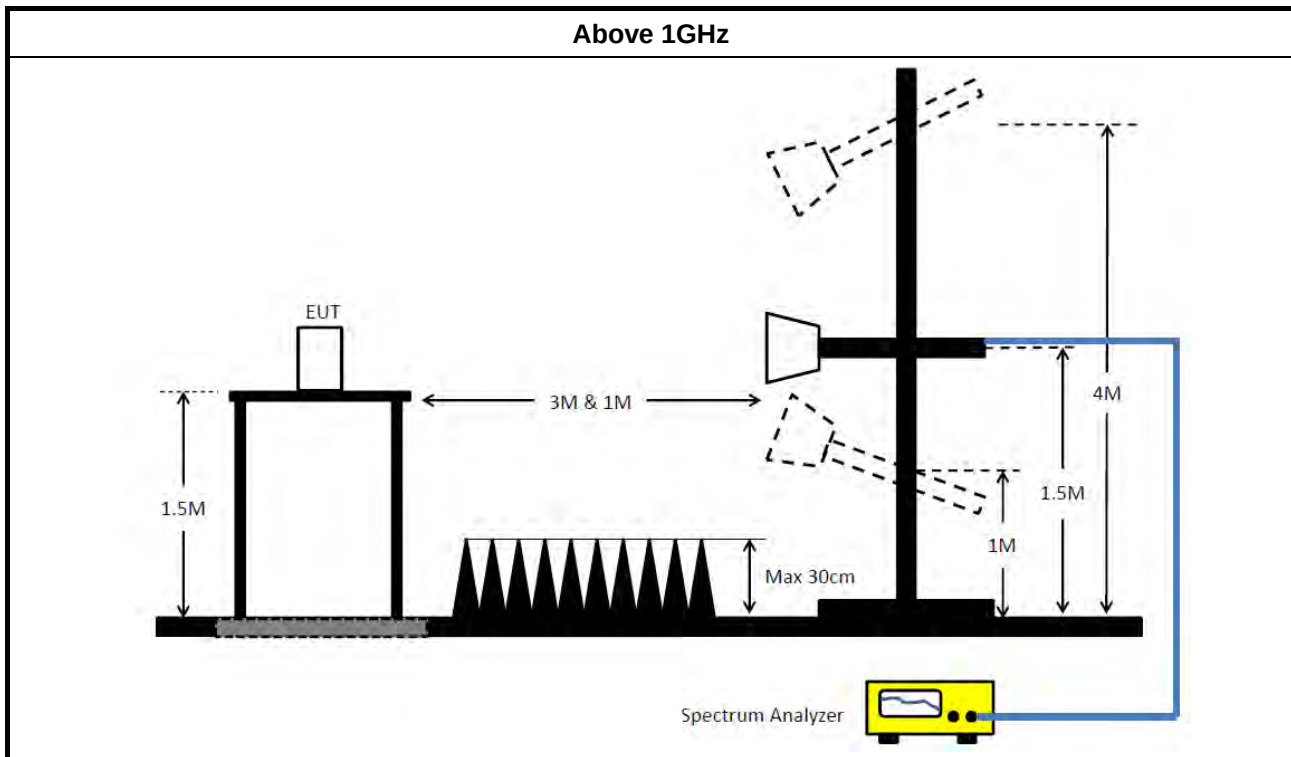
Refer a test equipment and calibration data table in this test report.

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
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.4GHz	Feb. 20, 2023	Feb. 19, 2024	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Feb. 16, 2023	Feb. 15, 2024	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Apr. 27, 2023	Apr. 26, 2024	Conduction (CO01-CB)
Pulse Limiter	Rohde&Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Feb. 09, 2023	Feb. 08, 2024	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	Oct. 18, 2022	Oct. 17, 2023	Conduction (CO01-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
Loop Antenna	Teseq	HLA 6120	31244	9kHz - 30 MHz	Mar. 23, 2023	Mar. 22, 2024	Radiation (03CH01-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH01-CB	30 MHz ~ 1 GHz	Jan. 16, 2023	Jan. 15, 2024	Radiation (03CH01-CB)
BILOG ANTENNA with 6dB Attenuator	TESEQ & EMC	CBL6112D N-6-06	37880 & AT-N0609	20MHz ~ 2GHz	Feb. 19, 2023	Feb. 18, 2024	Radiation (03CH01-CB)
Pre-Amplifier	SGH	SGH0301	20230109-2	10M~1GHz	Jun. 23, 2023	Jun. 22, 2024	Radiation (03CH01-CB)
Signal Analyzer	R&S	FSV3044	101437	10kHz ~ 44GHz	Nov. 29, 2022	Nov. 29, 2023	Radiation (03CH01-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	Jun. 13, 2023	Jun. 12, 2024	Radiation (03CH01-CB)
RF Cable-low	Woken	RG402	Low Cable-16+17	30 MHz ~ 1 GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH01-CB)
RF Cable-low	Woken	RG402	Low Cable-16+17	30 MHz ~ 1 GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH01-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH01-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	BBHA9170507	15GHz ~ 40GHz	Jun. 28, 2023	Jun. 27, 2024	Radiation (03CH02-CB)
Pre-Amplifier	Agilent	83017A	MY39501305	1GHz ~ 26.5GHz	Jun. 30, 2023	Jun. 29, 2024	Radiation (03CH02-CB)
Pre-Amplifier	SGH	SGH184	20221107-3	18GHz ~ 40GHz	Nov. 16, 2022	Nov. 15, 2023	Radiation (03CH02-CB)
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. 03, 2022	Oct. 02, 2023	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-18	1GHz ~ 18GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH02-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-18+19	1GHz ~ 18GHz	Oct. 03, 2022	Oct. 02, 2023	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	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH02-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH02-CB)
High Cable	Woken	WCA0929M	40G#6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH02-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH02-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH01-CB	1GHz ~18GHz 3m	May 05, 2023	May 04, 2024	Radiation (03CH06-CB)
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA 9120D-1292	1GHz~18GHz	Jul. 31, 2023	Jul. 30, 2024	Radiation (03CH06-CB)
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170507	15GHz ~ 40GHz	Jun. 28, 2023	Jun. 27, 2024	Radiation (03CH06-CB)
Pre-Amplifier	Agilent	83017A	MY53270064	0.5GHz ~ 26.5GHz	Aug. 01, 2023	Jul. 31, 2024	Radiation (03CH06-CB)
Pre-Amplifier	SGH	SGH184	20221107-3	18GHz ~ 40GHz	Nov. 16, 2022	Nov. 15, 2023	Radiation (03CH06-CB)
Spectrum analyzer	R&S	FSP40	100080	9kHz~40GHz	Dec. 21, 2022	Dec. 20, 2023	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-05+68	1GHz~18GHz	Aug. 15, 2023	Aug. 14, 2024	Radiation (03CH06-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH06-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH06-CB)
High Cable	Woken	WCA0929M	40G#6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH06-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH06-CB)
Spectrum analyzer	R&S	FSV40	101028	9kHz~40GHz	Dec. 30, 2022	Dec. 29, 2023	Conducted (TH03-CB)
Power Sensor	Anritsu	MA2411B	1531344	300MHz~40GHz	Aug. 01, 2023	Jul. 31, 2024	Conducted (TH03-CB)
Power Meter	Anritsu	ML2495A	1728002	300MHz~40GHz	Aug. 01, 2023	Jul. 31, 2024	Conducted (TH03-CB)
RF Cable	Woken	RG402	High Cable-11	30MHz ~18 GHz	Feb. 14, 2023	Feb. 13, 2024	Conducted (TH03-CB)
RF Cable	Woken	RG402	High Cable-12	30MHz ~18 GHz	Feb. 14, 2023	Feb. 13, 2024	Conducted (TH03-CB)
RF Cable	Woken	RG402	High Cable-13	30MHz ~18 GHz	Feb. 14, 2023	Feb. 13, 2024	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-14	1 GHz ~18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH03-CB)

**RADIO TEST REPORT****Report No. : FR380908AA**

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-15	1 GHz –18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH03-CB)
Switch	SPTCB	SP-SWI	SWI-03	1 GHz –26.5 GHz	Oct. 04, 2022	Oct. 03, 2023	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.

N.C.R means Non-Calibration required.



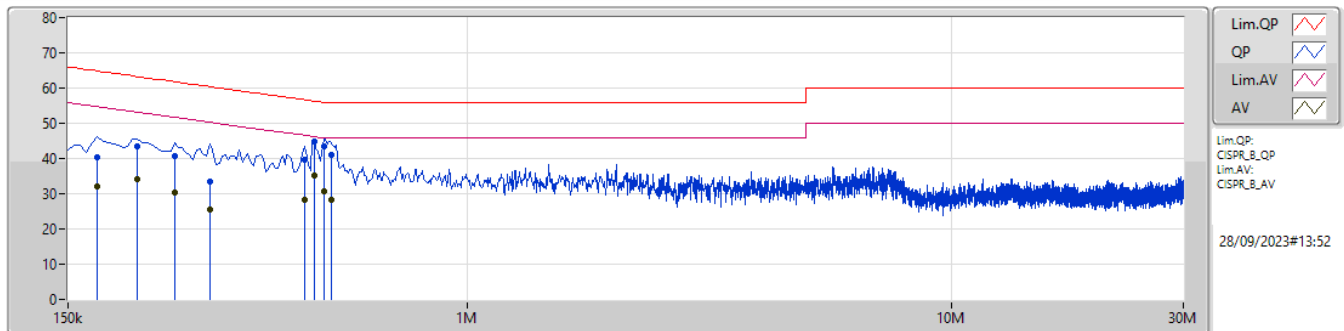
Conducted Emissions at Powerline

Appendix A

Summary

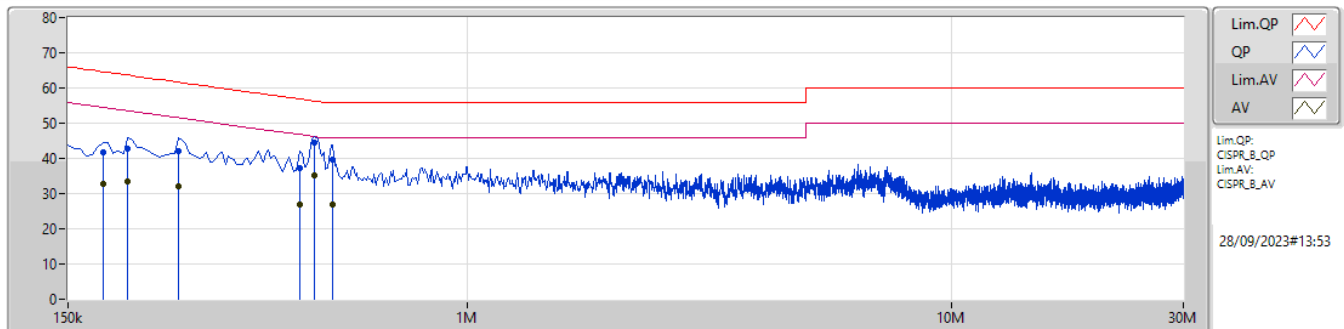
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	483k	35.30	46.29	-10.99	Neutral

Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)						
QP	172.5k	40.50	64.83	-24.33	10.00	Line	-	30.50	0.09	0.04	9.87						
AV	172.5k	32.06	54.83	-22.77	10.00	Line	-	22.06	0.09	0.04	9.87						
QP	208.5k	43.57	63.27	-19.70	9.98	Line	-	33.59	0.08	0.04	9.86						
AV	208.5k	34.19	53.27	-19.08	9.98	Line	-	24.21	0.08	0.04	9.86						
QP	249k	40.59	61.79	-21.20	10.00	Line	-	30.59	0.08	0.05	9.87						
AV	249k	30.28	51.79	-21.51	10.00	Line	-	20.28	0.08	0.05	9.87						
QP	294k	33.31	60.42	-27.11	10.02	Line	-	23.29	0.09	0.05	9.88						
AV	294k	25.53	50.42	-24.89	10.02	Line	-	15.51	0.09	0.05	9.88						
QP	460.5k	39.75	56.69	-16.94	10.05	Line	-	29.70	0.09	0.06	9.90						
AV	460.5k	28.30	46.69	-18.39	10.05	Line	-	18.25	0.09	0.06	9.90						
QP	483k	44.71	56.29	-11.58	10.05	Line	-	34.66	0.09	0.06	9.90						
AV	483k	35.26	46.29	-11.03	10.05	Line	"Worst"	25.21	0.09	0.06	9.90						
QP	505.5k	43.50	56.00	-12.50	10.05	Line	-	33.45	0.10	0.05	9.90						
AV	505.5k	30.75	46.00	-15.25	10.05	Line	-	20.70	0.10	0.05	9.90						
QP	523.5k	40.87	56.00	-15.13	10.05	Line	-	30.82	0.10	0.05	9.90						
AV	523.5k	28.17	46.00	-17.83	10.05	Line	-	18.12	0.10	0.05	9.90						

Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)						
QP	177k	41.69	64.62	-22.93	9.98	Neutral	-	31.71	0.07	0.04	9.87						
AV	177k	32.68	54.62	-21.94	9.98	Neutral	-	22.70	0.07	0.04	9.87						
QP	199.5k	42.79	63.63	-20.84	9.97	Neutral	-	32.82	0.07	0.04	9.86						
AV	199.5k	33.61	53.63	-20.02	9.97	Neutral	-	23.64	0.07	0.04	9.86						
QP	253.5k	42.24	61.64	-19.40	9.99	Neutral	-	32.25	0.07	0.05	9.87						
AV	253.5k	32.06	51.64	-19.58	9.99	Neutral	-	22.07	0.07	0.05	9.87						
QP	451.5k	37.13	56.84	-19.71	10.03	Neutral	-	27.10	0.07	0.06	9.90						
AV	451.5k	27.02	46.84	-19.82	10.03	Neutral	-	16.99	0.07	0.06	9.90						
QP	483k	44.53	56.29	-11.76	10.03	Neutral	-	34.50	0.07	0.06	9.90						
AV	483k	35.30	46.29	-10.99	10.03	Neutral	"Worst"	25.27	0.07	0.06	9.90						
QP	528k	39.60	56.00	-16.40	10.02	Neutral	-	29.58	0.07	0.05	9.90						
AV	528k	27.00	46.00	-19.00	10.02	Neutral	-	16.98	0.07	0.05	9.90						

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)	918.5k	847.877k	848KF1D	880k	842.238k
BT-EDR(2Mbps)	1.309M	1.19M	1M19G1D	1.298M	1.185M
BT-EDR(3Mbps)	1.29M	1.197M	1M20G1D	1.279M	1.195M

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

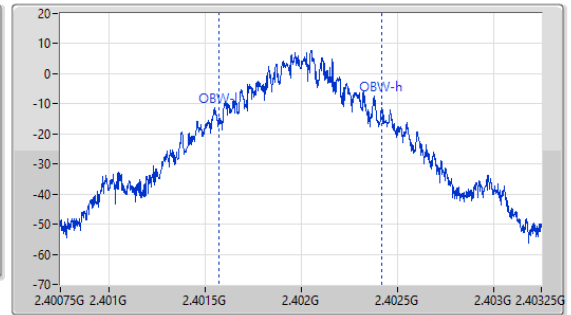
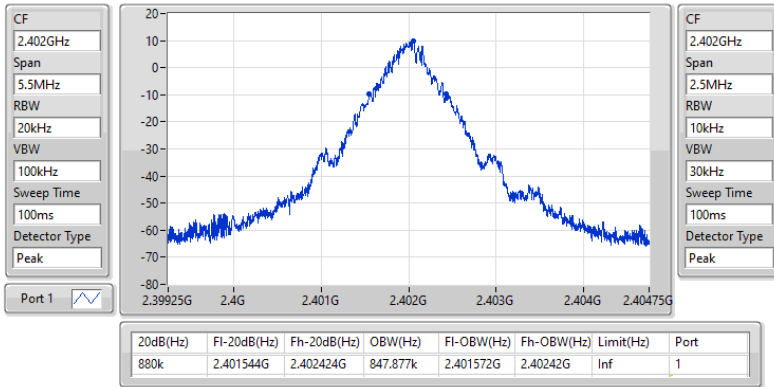
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	Inf	880k	847.877k
2440MHz	Pass	Inf	918.5k	842.238k
2480MHz	Pass	Inf	913k	845.367k
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	Inf	1.306M	1.189M
2440MHz	Pass	Inf	1.298M	1.19M
2480MHz	Pass	Inf	1.309M	1.185M
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	Inf	1.279M	1.197M
2440MHz	Pass	Inf	1.279M	1.197M
2480MHz	Pass	Inf	1.29M	1.195M

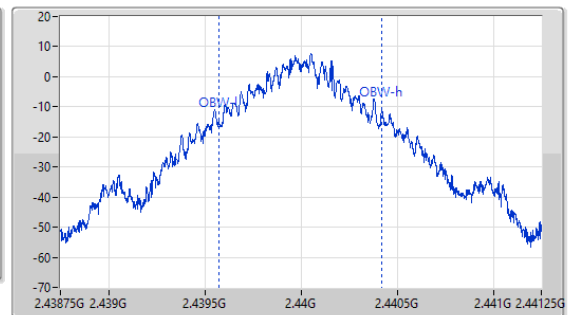
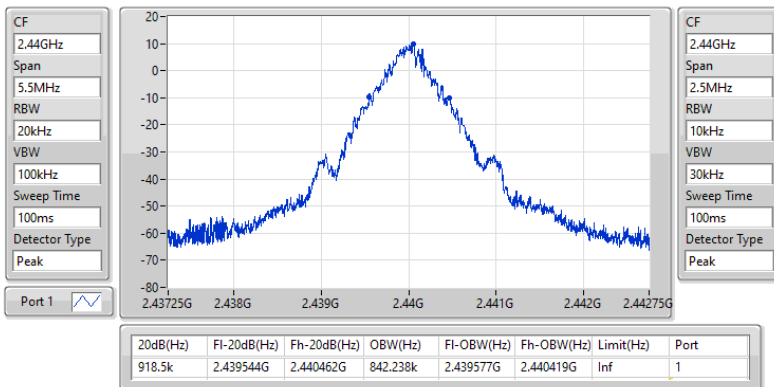
Port X-N dB = Port X 20dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

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

05/09/2023

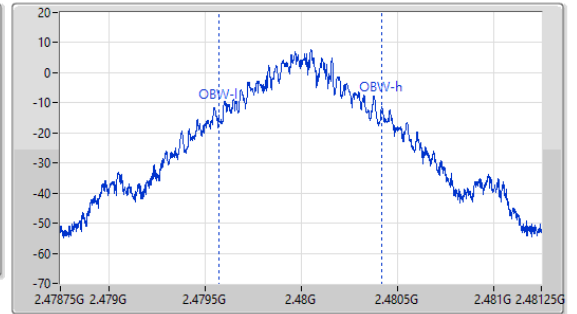
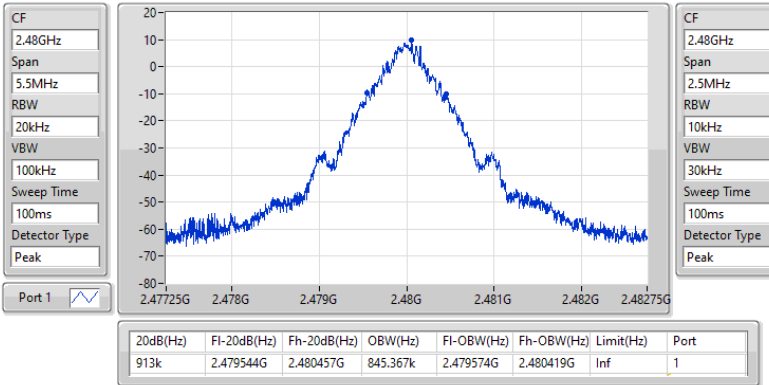

2.4-2.4835GHz_BT-BR(1Mbps)
EBW-FS
2440MHz

05/09/2023

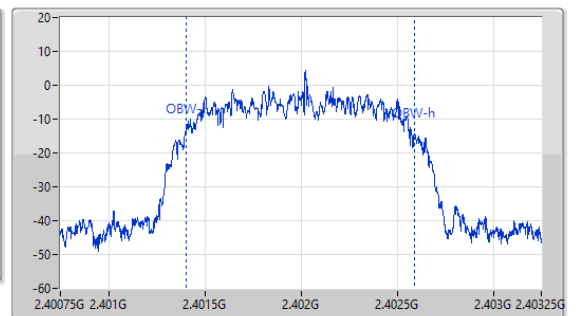
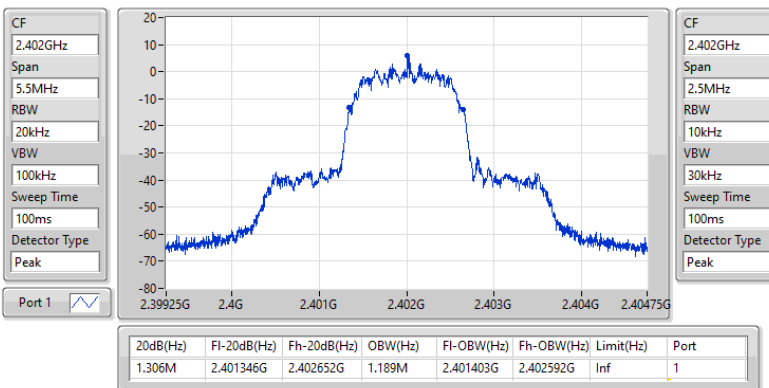


2.4-2.4835GHz_BT-BR(1Mbps)
EBW-FS
2480MHz

05/09/2023

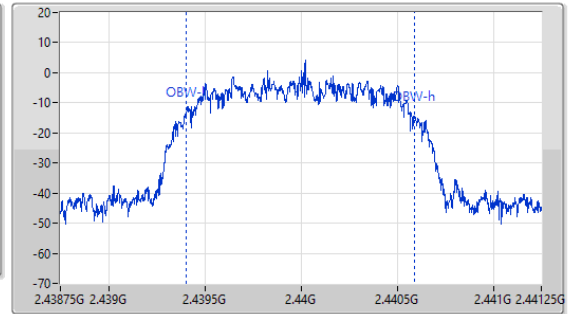
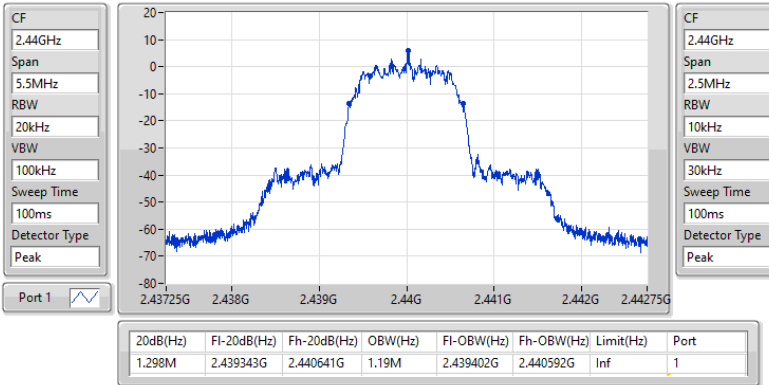

2.4-2.4835GHz_BT-EDR(2Mbps)
EBW-FS
2402MHz

05/09/2023

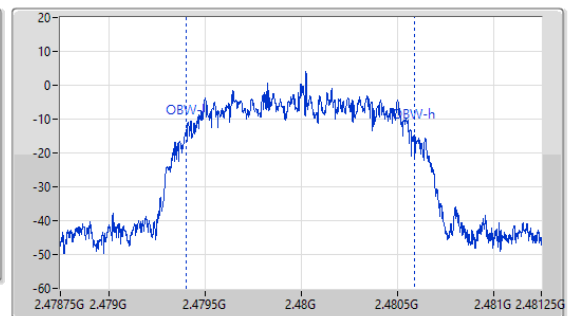
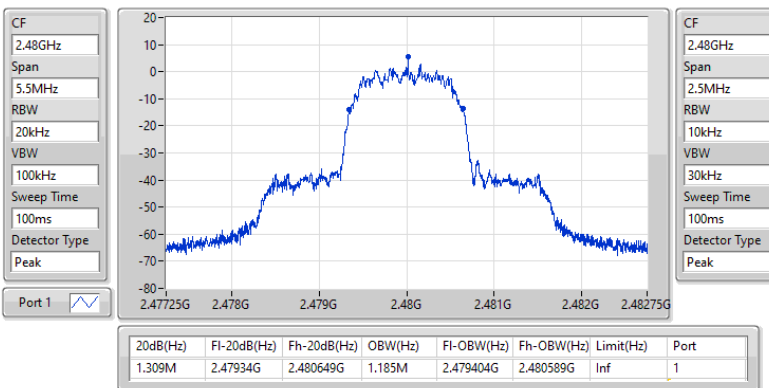


2.4-2.4835GHz_BT-EDR(2Mbps)
EBW-FS
2440MHz

05/09/2023

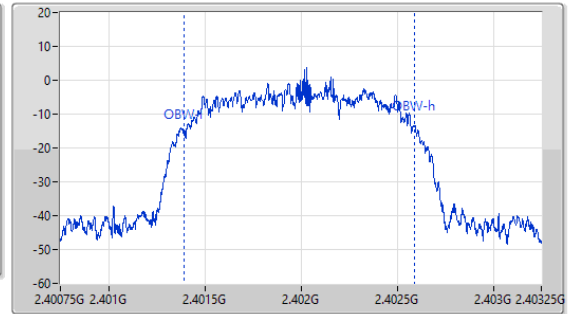
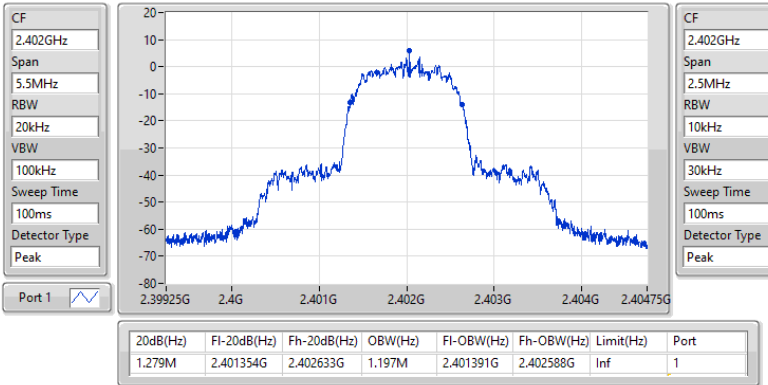

2.4-2.4835GHz_BT-EDR(2Mbps)
EBW-FS
2480MHz

05/09/2023

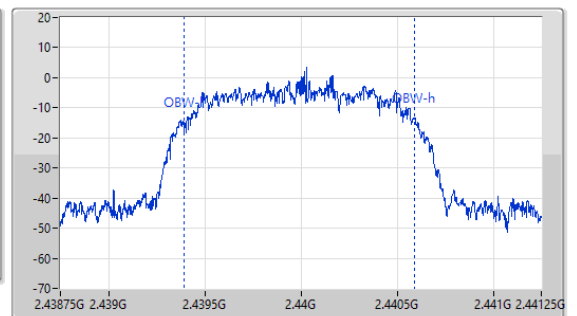
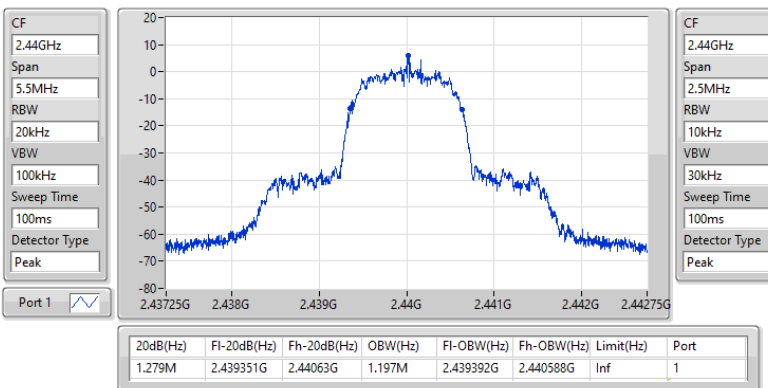


2.4-2.4835GHz_BT-EDR(3Mbps)
EBW-FS
2402MHz

05/09/2023


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

05/09/2023

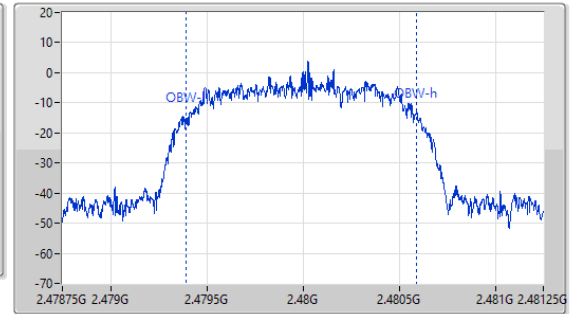
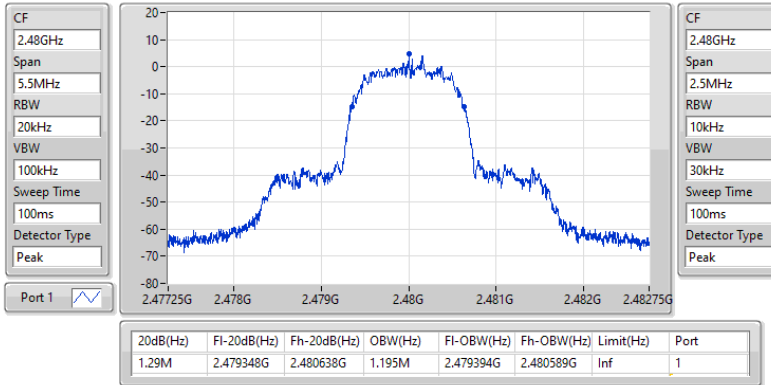


2.4-2.4835GHz_BT-EDR(3Mbps)

EBW-FS

2480MHz

05/09/2023



Summary

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

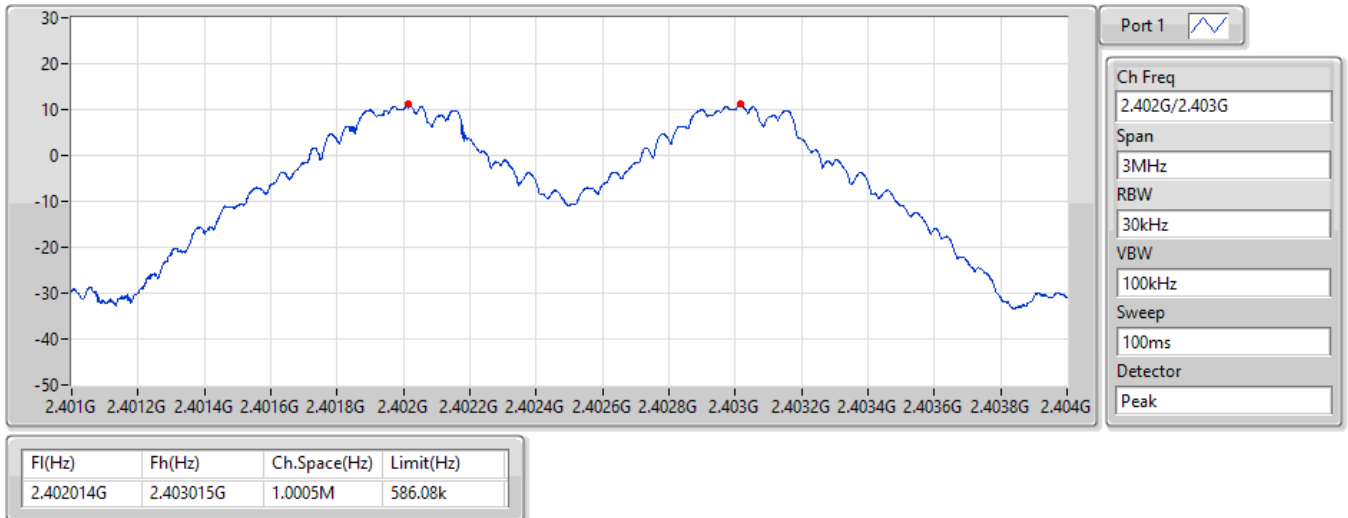
Result

Mode	Result	Fl (Hz)	Fh (Hz)	Ch.Space (Hz)	Limit (Hz)
BT-BR(1Mbps)	-	-	-	-	-
2402MHz	Pass	2.402014G	2.403015G	1.0005M	586.08k
2440MHz	Pass	2.440013G	2.441013G	1.0005M	611.721k
2480MHz	Pass	2.479011G	2.480013G	1.002M	608.058k
BT-EDR(2Mbps)	-	-	-	-	-
2402MHz	Pass	2.402013G	2.403013G	1.0005M	869.796k
2440MHz	Pass	2.440011G	2.441013G	1.002M	864.468k
2480MHz	Pass	2.479013G	2.480013G	1.0005M	871.794k
BT-EDR(3Mbps)	-	-	-	-	-
2402MHz	Pass	2.402011G	2.403013G	1.002M	851.814k
2440MHz	Pass	2.440011G	2.441012G	1.0005M	851.814k
2480MHz	Pass	2.479013G	2.480012G	999k	859.14k

2.4-2.4835GHz_BT-BR(1Mbps)

Channel Separation-FS

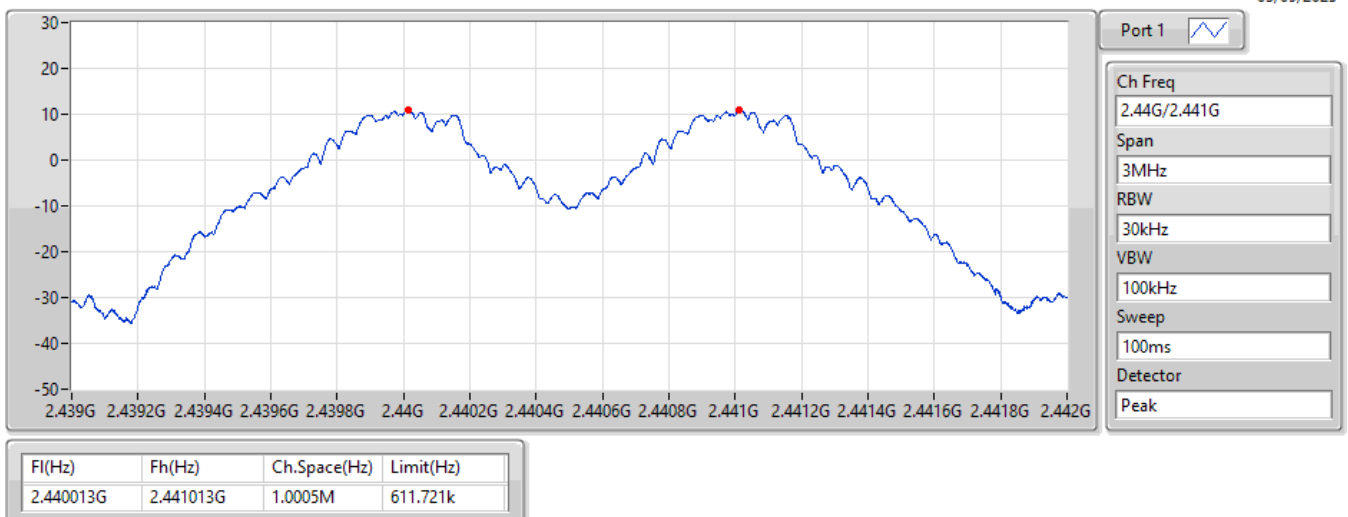
2.402G/2.403GHz



2.4-2.4835GHz_BT-BR(1Mbps)

Channel Separation-FS

2.44G/2.441GHz

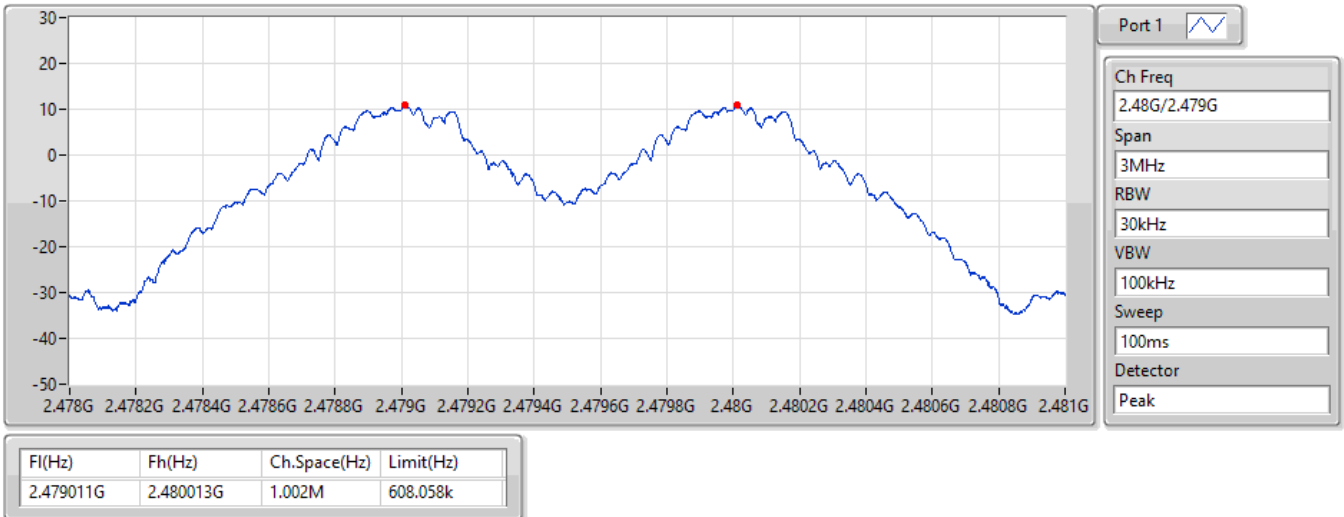


2.4-2.4835GHz_BT-BR(1Mbps)

Channel Separation-FS

2.48G/2.479GHz

05/09/2023

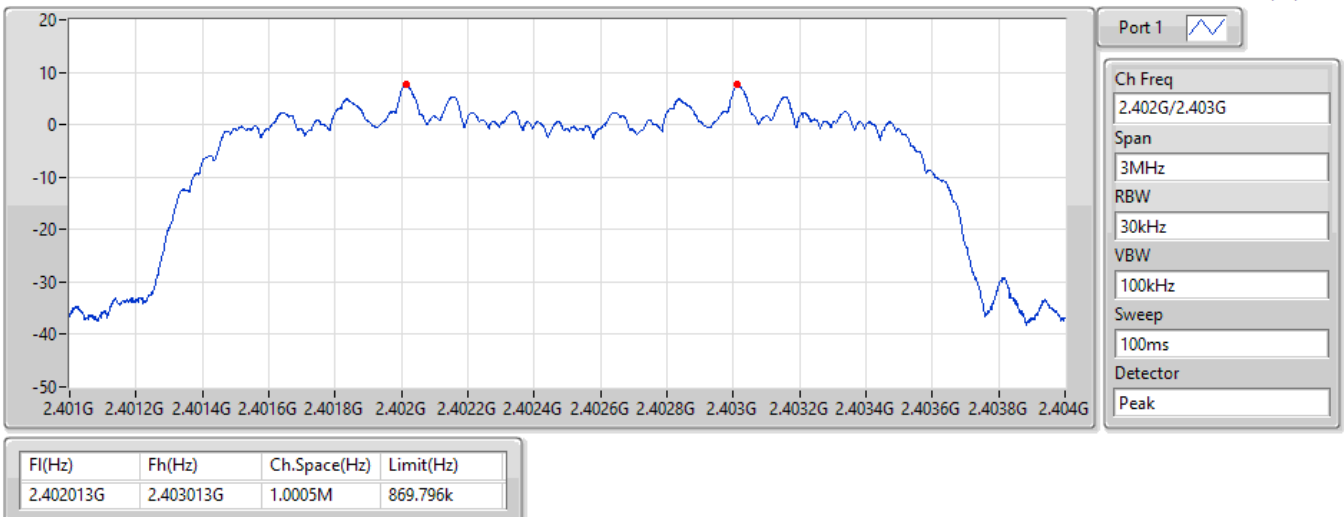


2.4-2.4835GHz_BT-EDR(2Mbps)

Channel Separation-FS

2.402G/2.403GHz

05/09/2023

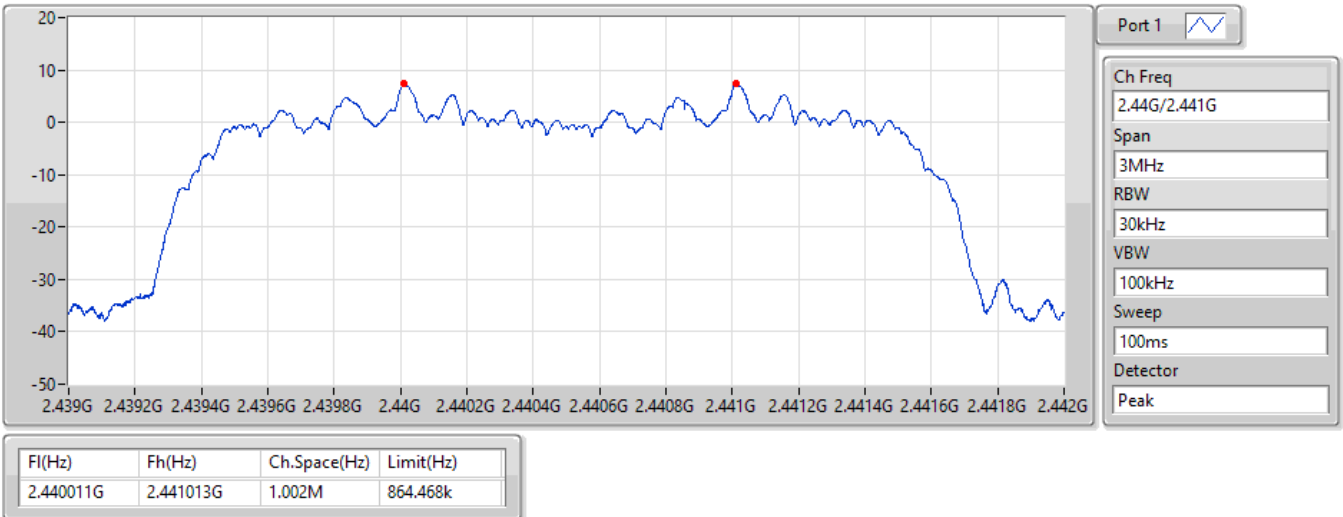


2.4-2.4835GHz_BT-EDR(2Mbps)

Channel Separation-FS

2.44G/2.441GHz

05/09/2023

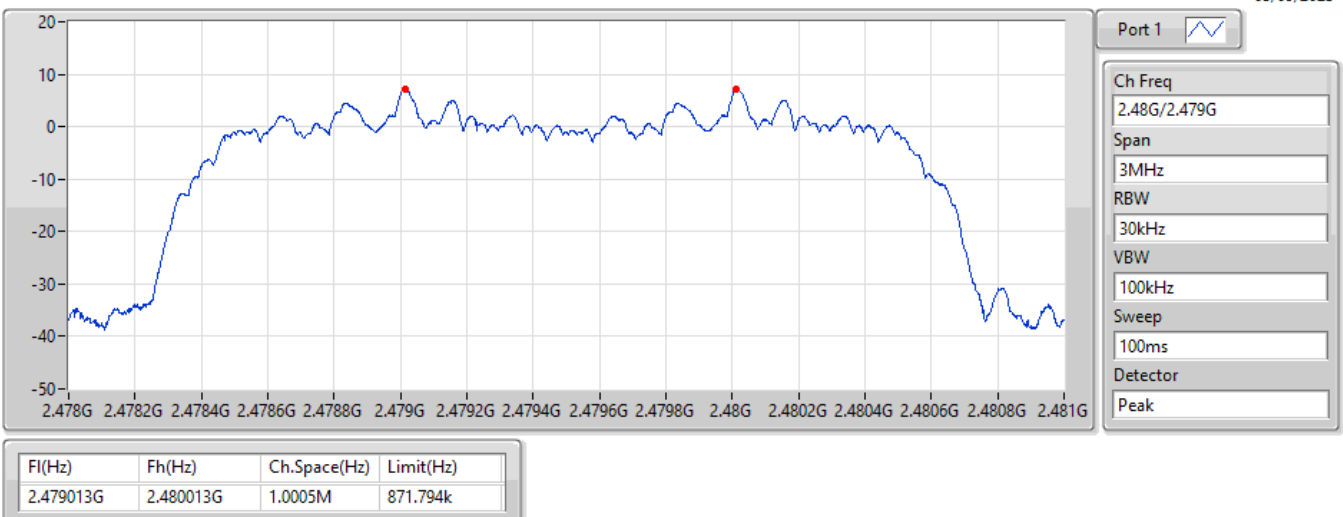


2.4-2.4835GHz_BT-EDR(2Mbps)

Channel Separation-FS

2.48G/2.479GHz

05/09/2023

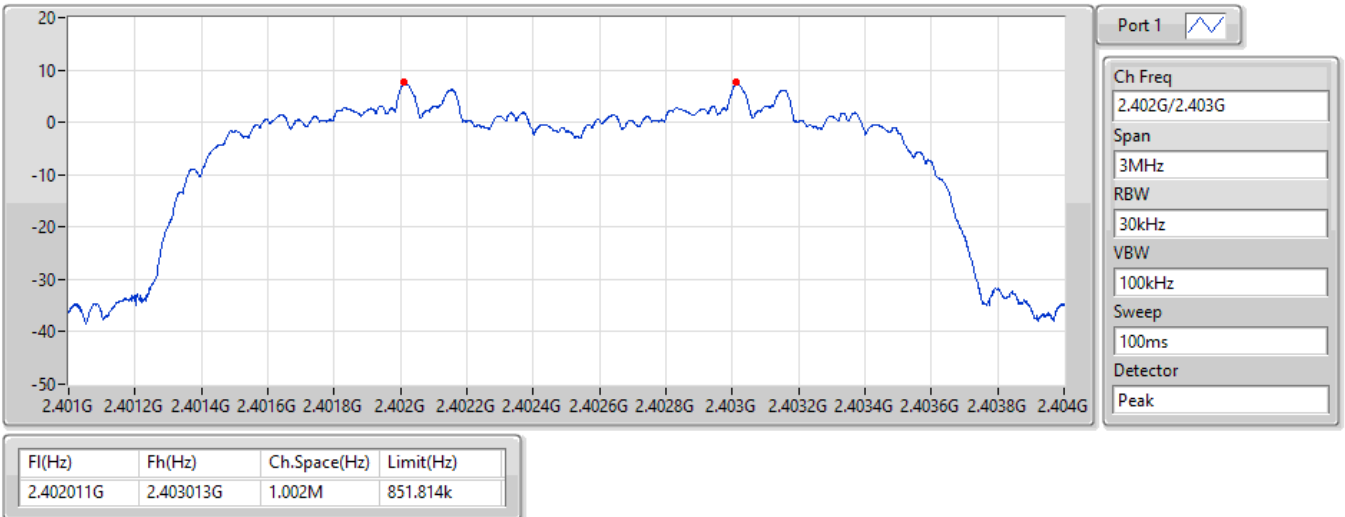


2.4-2.4835GHz_BT-EDR(3Mbps)

Channel Separation-FS

2.402G/2.403GHz

05/09/2023

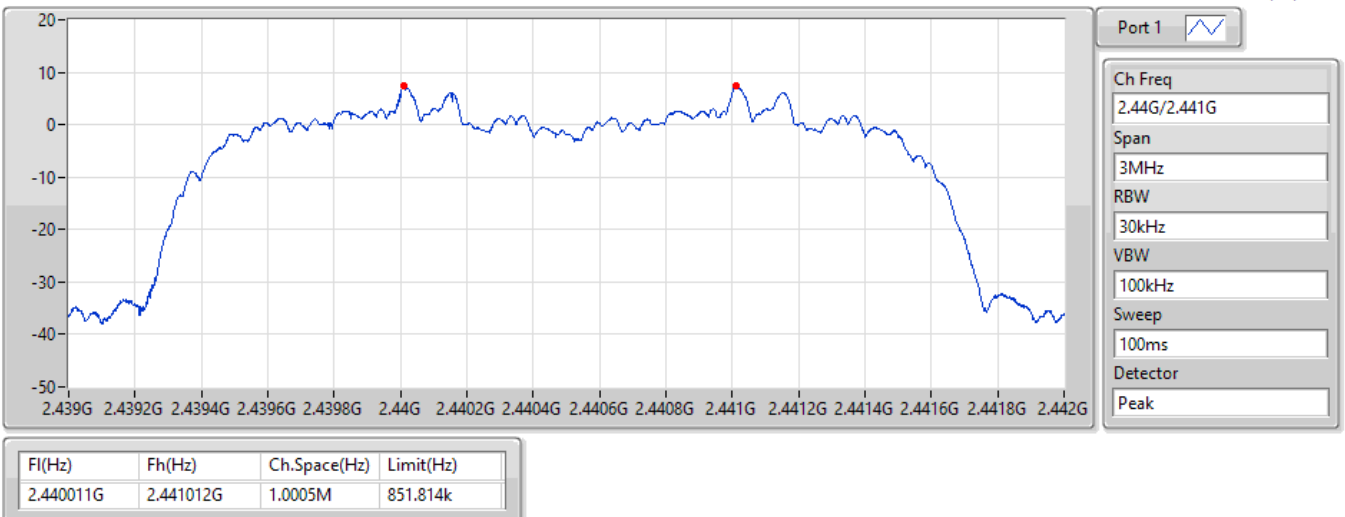


2.4-2.4835GHz_BT-EDR(3Mbps)

Channel Separation-FS

2.44G/2.441GHz

05/09/2023

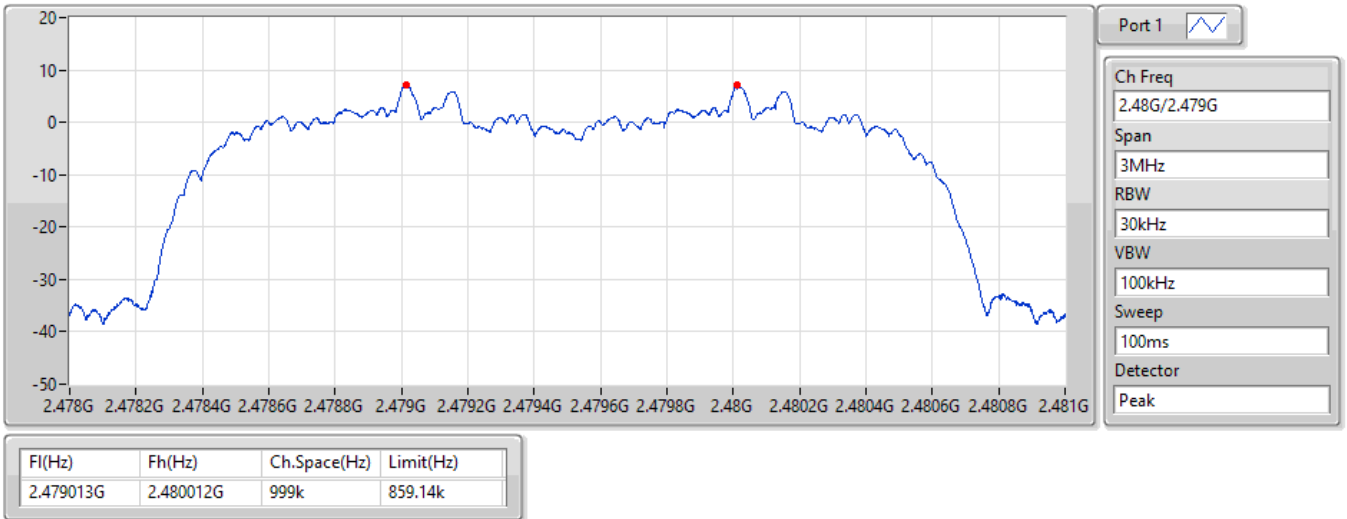


2.4-2.4835GHz_BT-EDR(3Mbps)

Channel Separation-FS

2.48G/2.479GHz

05/09/2023



Summary

Mode	Total Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	13.45	0.02213
BT-EDR(2Mbps)	11.62	0.01452
BT-EDR(3Mbps)	12.12	0.01629

Result

Mode	Result	DG (dBi)	Total Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	2.82	13.45	21.00
2440MHz	Pass	2.82	13.41	21.00
2480MHz	Pass	2.82	13.24	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	2.82	11.62	21.00
2440MHz	Pass	2.82	11.53	21.00
2480MHz	Pass	2.82	11.31	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	2.82	12.12	21.00
2440MHz	Pass	2.82	12.02	21.00
2480MHz	Pass	2.82	11.83	21.00

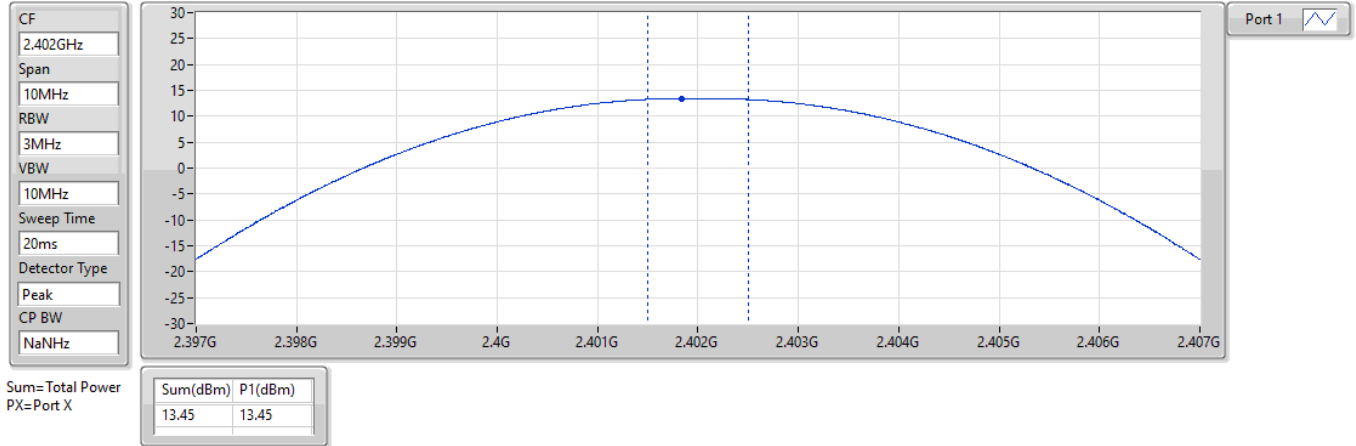
DG = Directional Gain; Port X = Port X output power

2.4-2.4835GHz_BT-BR(1Mbps)

PK Power-FS

2402MHz

05/09/2023

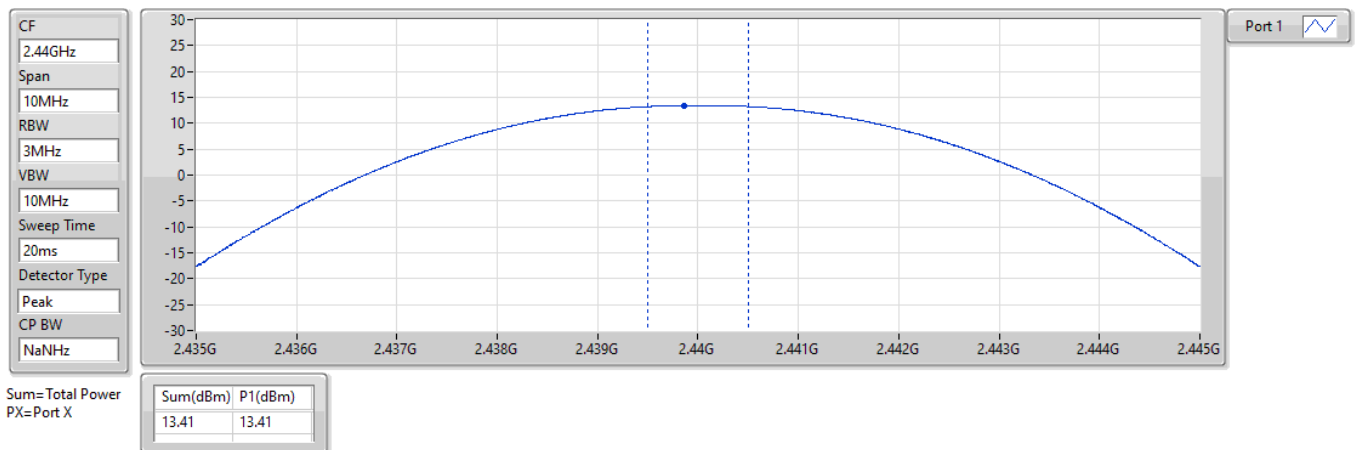


2.4-2.4835GHz_BT-BR(1Mbps)

PK Power-FS

2440MHz

05/09/2023

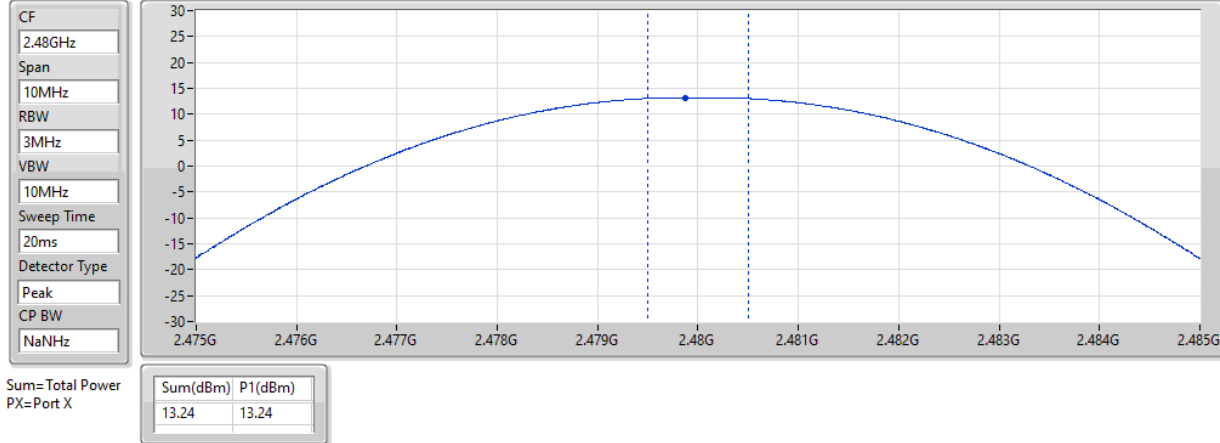


2.4-2.4835GHz_BT-BR(1Mbps)

PK Power-FS

2480MHz

05/09/2023

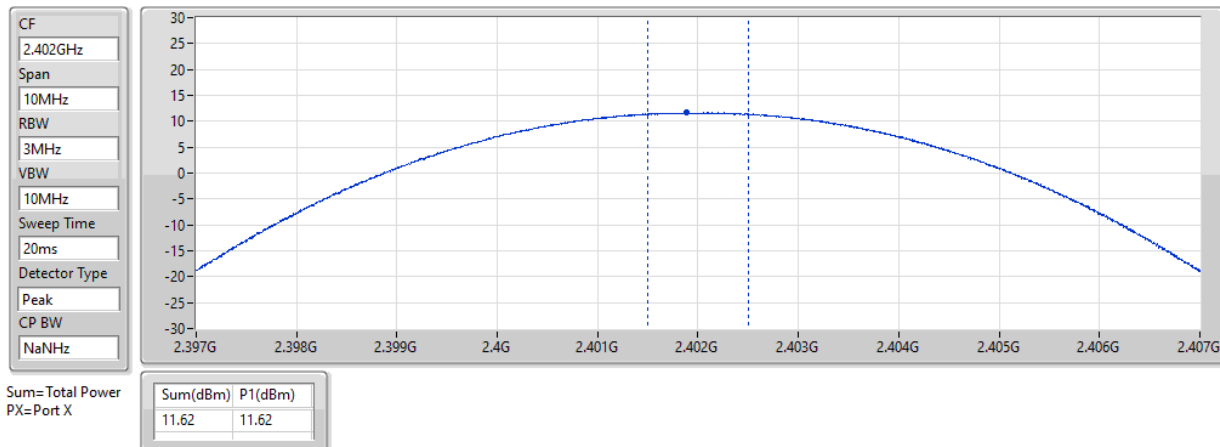


2.4-2.4835GHz_BT-EDR(2Mbps)

PK Power-FS

2402MHz

05/09/2023

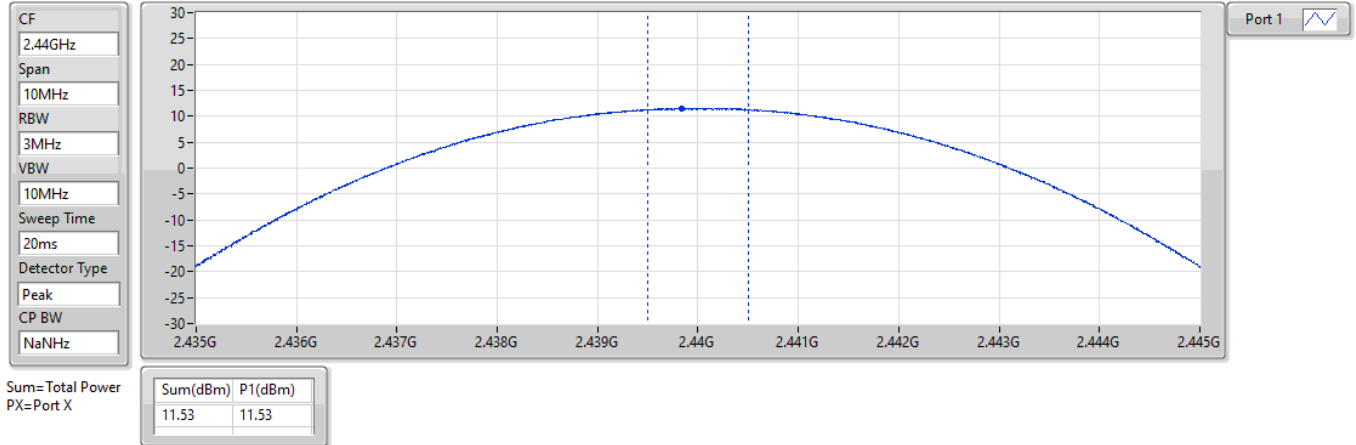


2.4-2.4835GHz_BT-EDR(2Mbps)

PK Power-FS

2440MHz

05/09/2023

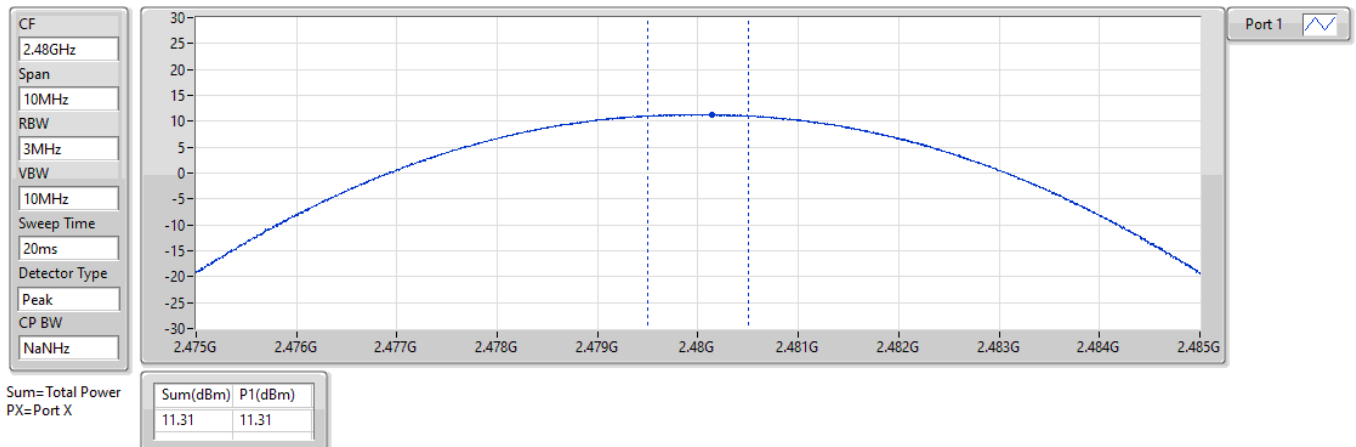


2.4-2.4835GHz_BT-EDR(2Mbps)

PK Power-FS

2480MHz

05/09/2023

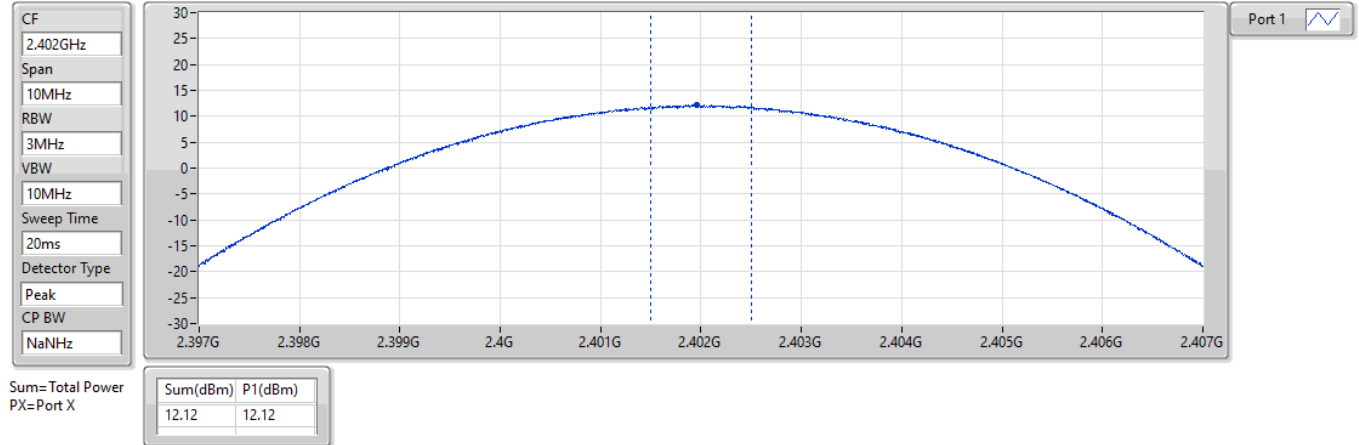


2.4-2.4835GHz_BT-EDR(3Mbps)

PK Power-FS

2402MHz

05/09/2023

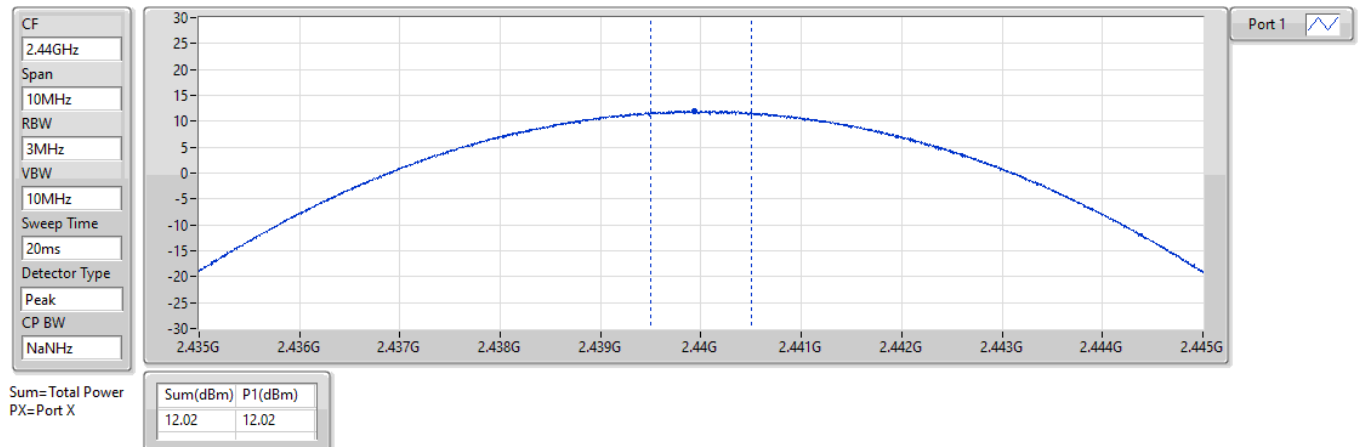


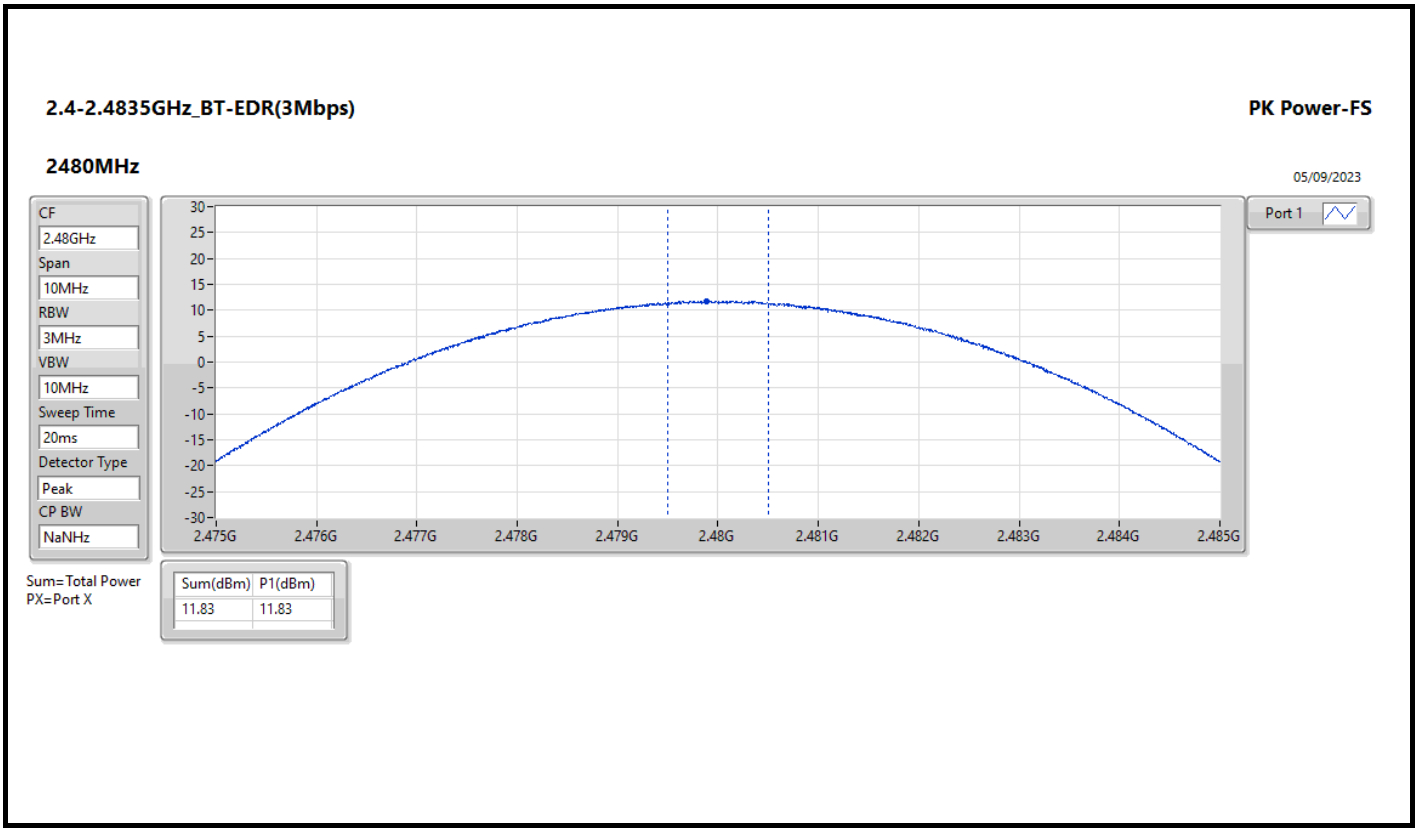
2.4-2.4835GHz_BT-EDR(3Mbps)

PK Power-FS

2440MHz

05/09/2023





Summary

Mode	Total Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	13.25	0.02113
BT-EDR(2Mbps)	9.13	0.00818
BT-EDR(3Mbps)	9.20	0.00832

Result

Mode	Result	DG (dBi)	Total Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	2.82	13.25	21.00
2440MHz	Pass	2.82	13.11	21.00
2480MHz	Pass	2.82	12.73	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	2.82	9.13	21.00
2440MHz	Pass	2.82	8.96	21.00
2480MHz	Pass	2.82	8.76	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	2.82	9.20	21.00
2440MHz	Pass	2.82	9.03	21.00
2480MHz	Pass	2.82	8.77	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

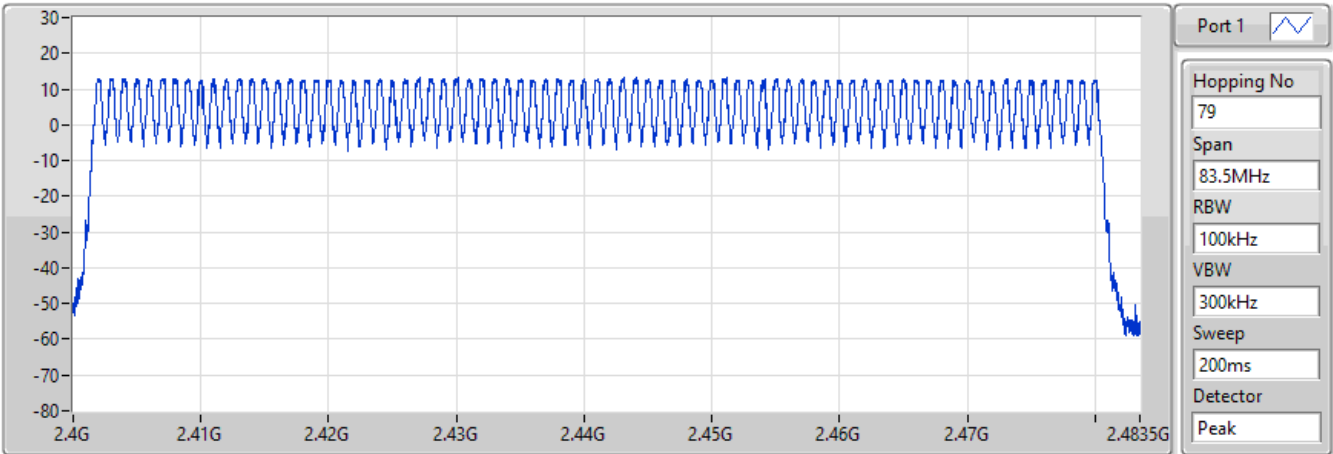
Mode	Result	Hopping No	Limit
BT-BR(1Mbps)	-	-	-
2440MHz	Pass	79	15
BT-EDR(2Mbps)	-	-	-
2440MHz	Pass	79	15
BT-EDR(3Mbps)	-	-	-
2440MHz	Pass	79	15

2.4-2.4835GHz_BT-BR(1Mbps)

Hopping-FS

2440MHz

05/09/2023



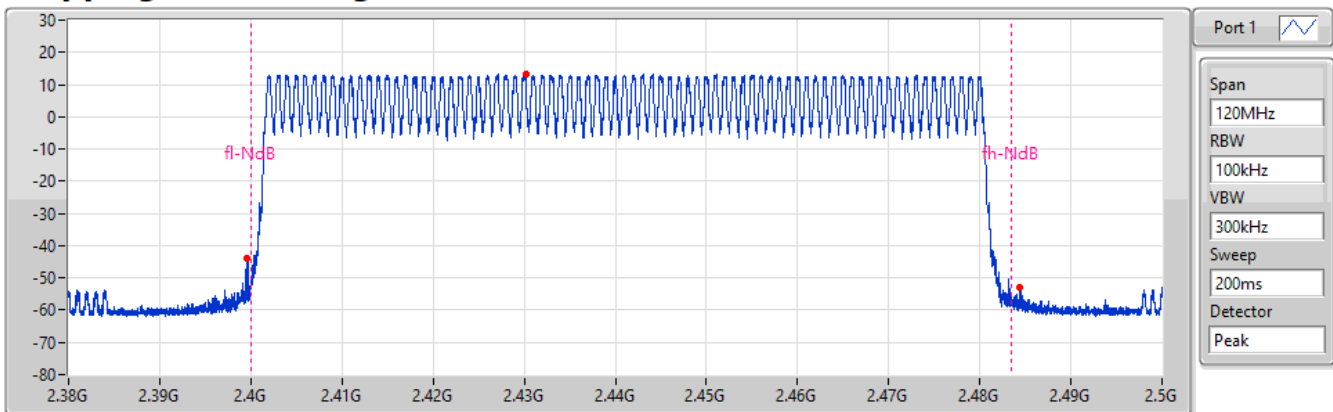
Hopping No	Limit
79	15

2.4-2.4835GHz_BT-BR(1Mbps)

2440MHz

Hopping Ch Bandedge (Non-restricted Band)

05/09/2023



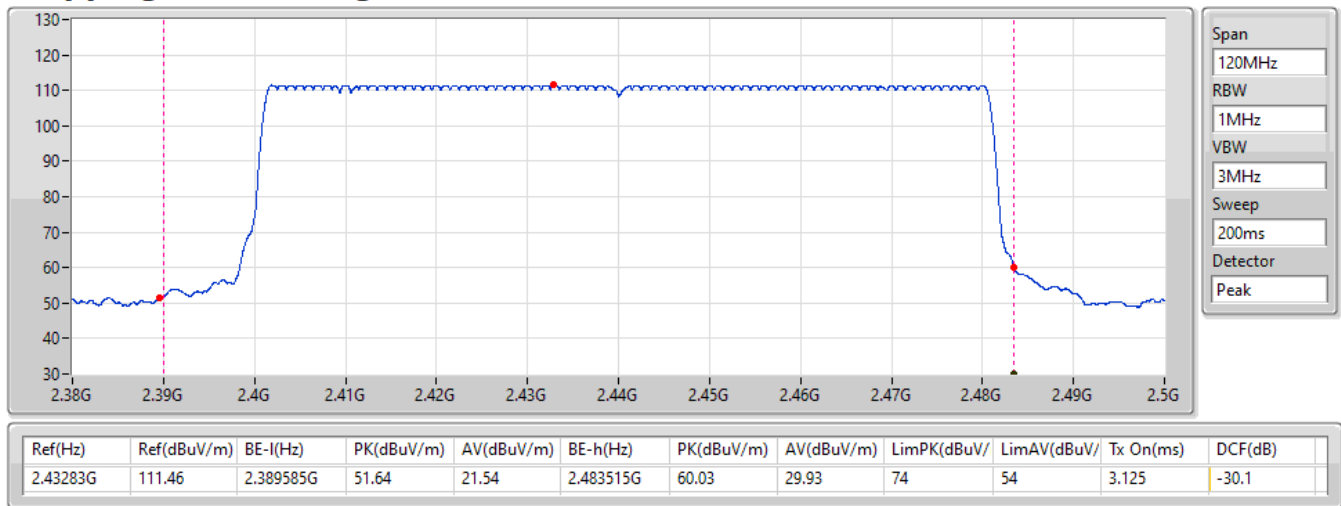
Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-6.7	2.430145G	13.3	2.399575G	-43.95	2.484445G	-52.77

2.4-2.4835GHz_BT-BR(1Mbps)

2440MHz

Hopping Ch Bandedge (Restricted Band)

05/09/2023

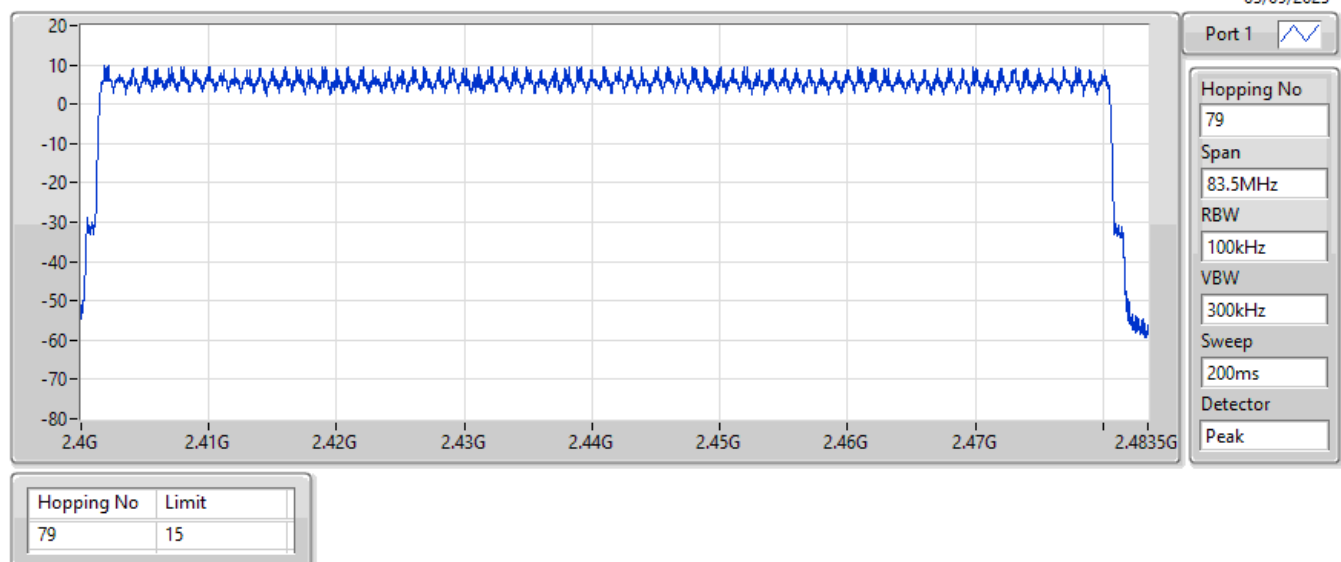


2.4-2.4835GHz_BT-EDR(2Mbps)

2440MHz

Hopping-FS

05/09/2023

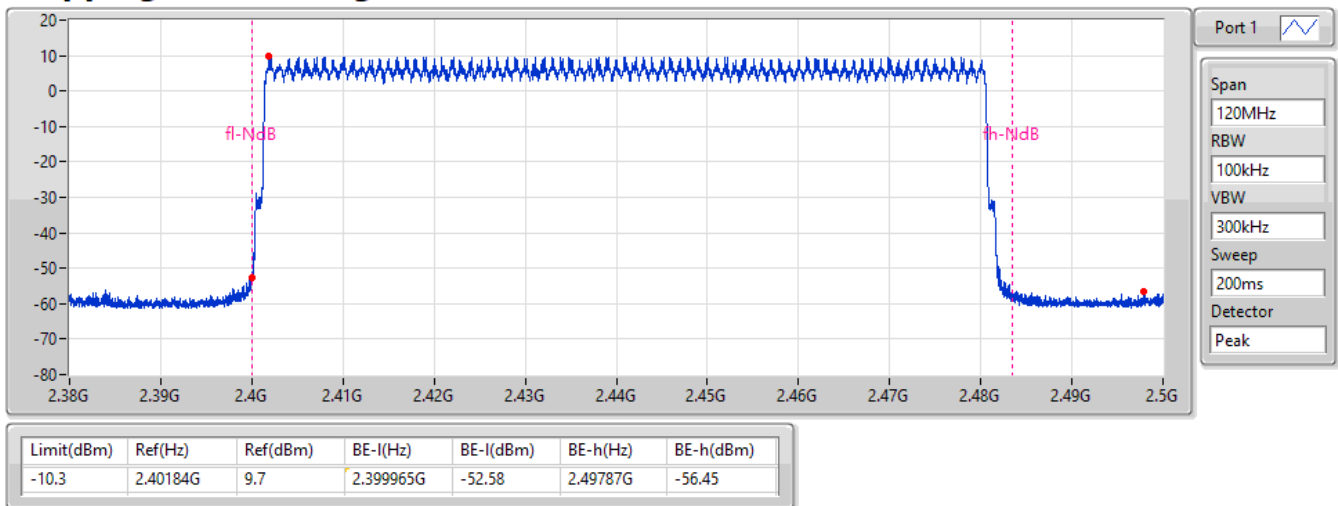


2.4-2.4835GHz_BT-EDR(2Mbps)

2440MHz

Hopping Ch Bandedge (Non-restricted Band)

05/09/2023

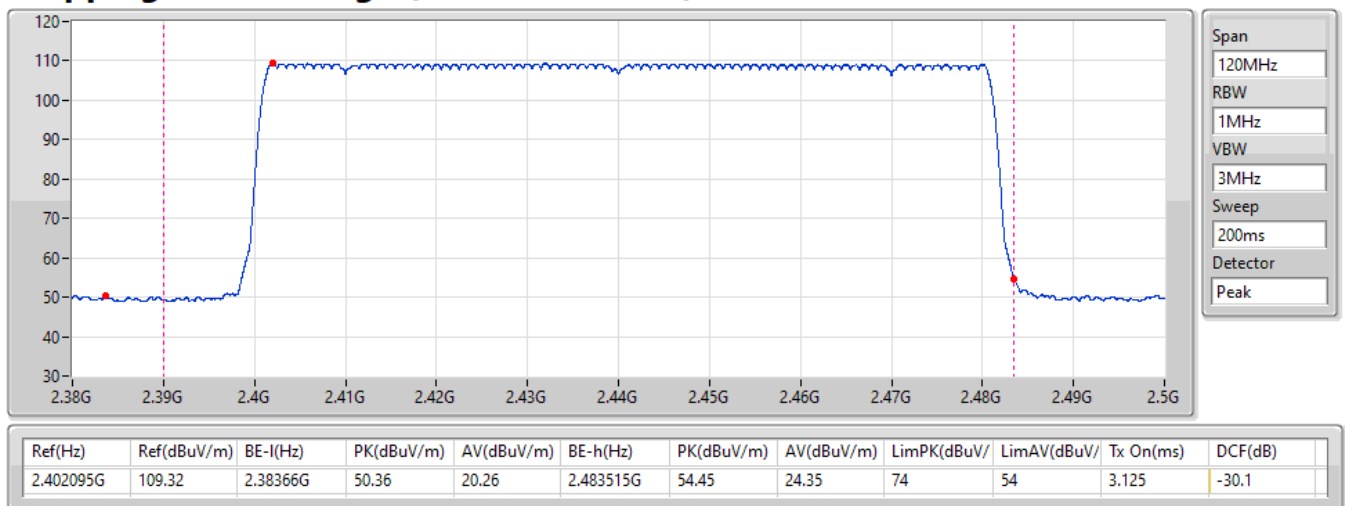


2.4-2.4835GHz_BT-EDR(2Mbps)

2440MHz

Hopping Ch Bandedge (Restricted Band)

05/09/2023

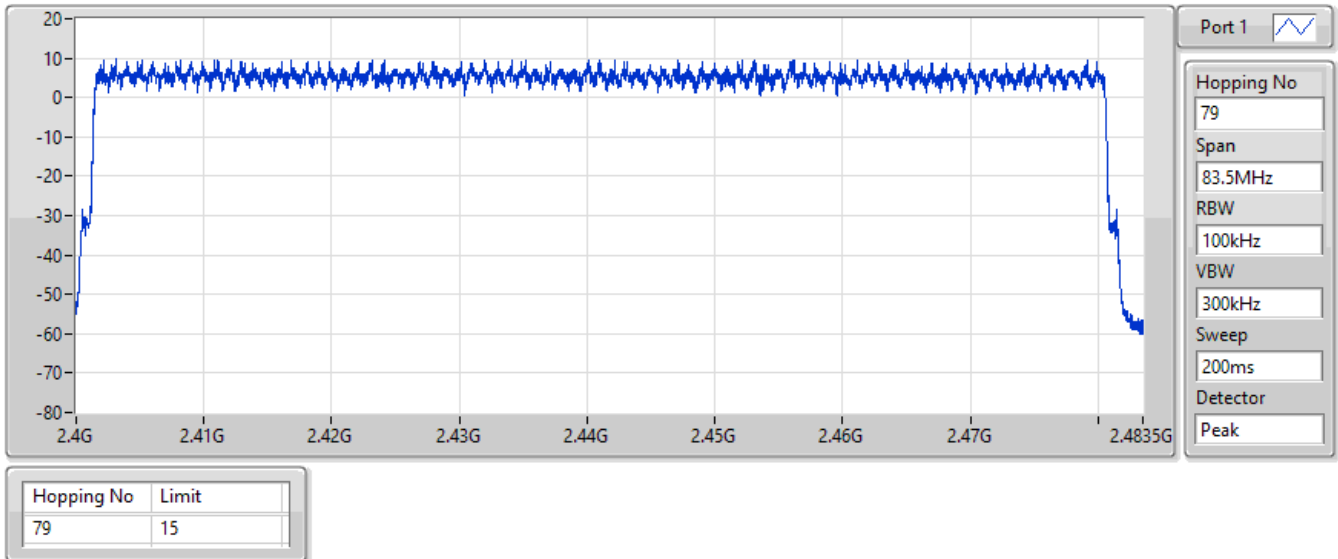


2.4-2.4835GHz_BT-EDR(3Mbps)

Hopping-FS

2440MHz

05/09/2023

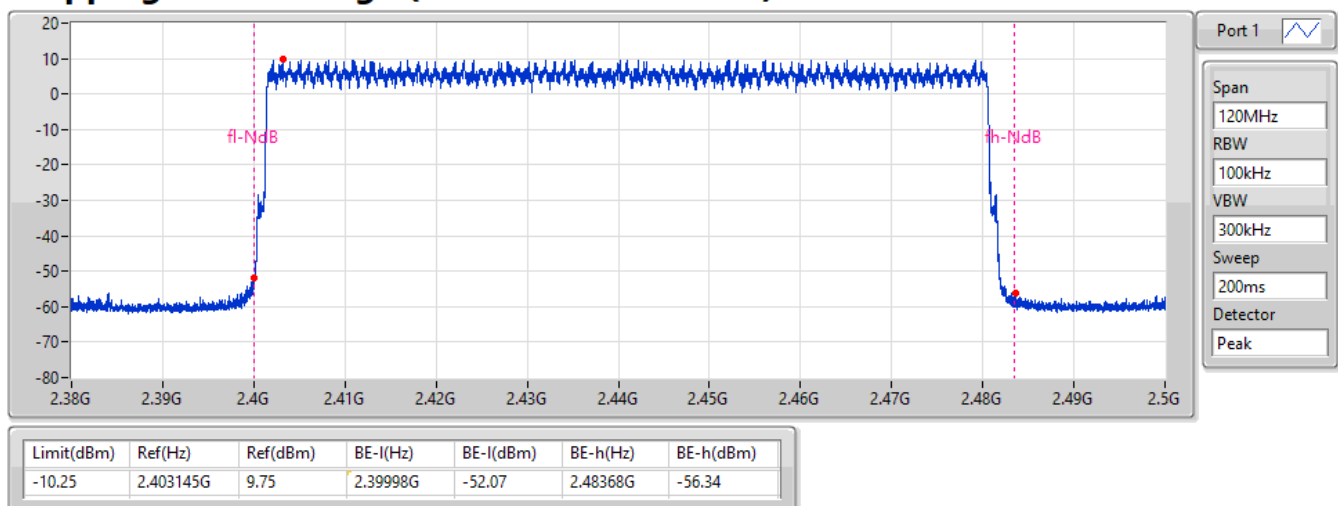


2.4-2.4835GHz_BT-EDR(3Mbps)

2440MHz

Hopping Ch Bandedge (Non-restricted Band)

05/09/2023

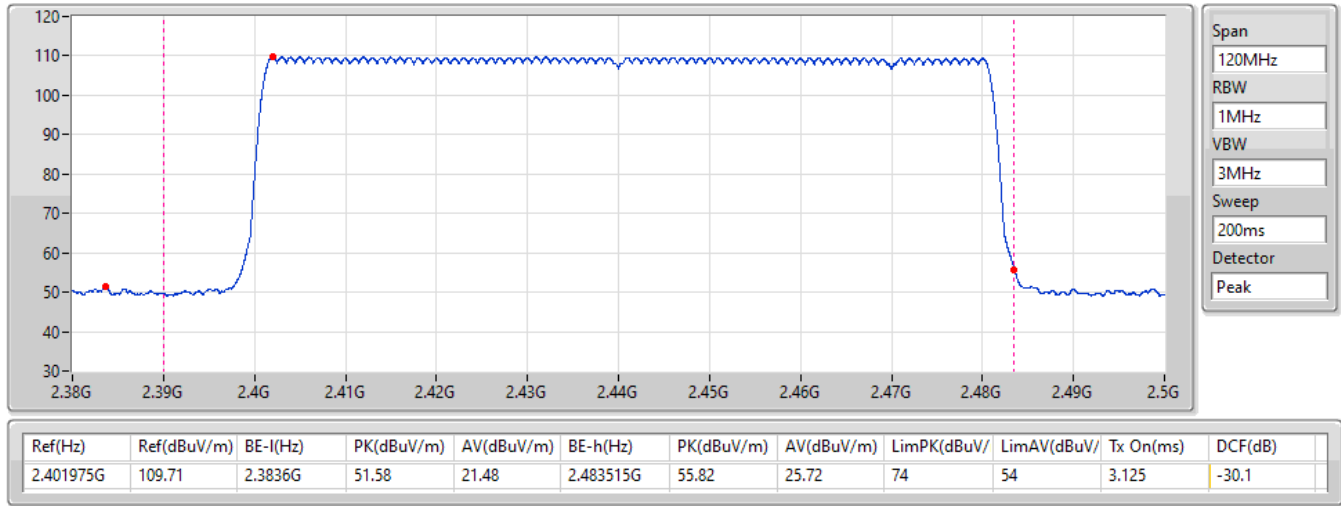


2.4-2.4835GHz_BT-EDR(3Mbps)

2440MHz

Hopping Ch Bandedge (Restricted Band)

05/09/2023





Summary

Mode	Max-Dwell (s)
2.4-2.4835GHz	-
BT-BR(1Mbps)	309.16665m_DH5
BT-EDR(2Mbps)	308.3405m_DH5
BT-EDR(3Mbps)	256.3197m_DH5

Result

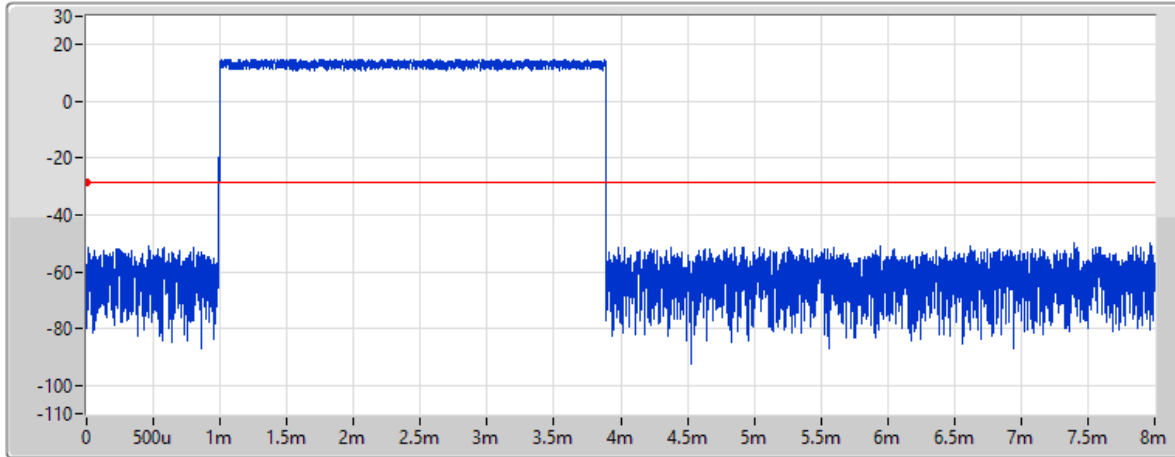
Mode	Result	Period (s)	Dwell (s)	Limit (s)	Tx On (s)
BT-BR(1Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	309.16665m_DH5	400m	2.90025m
2440MHz	Pass	8	154.11695m_DH5-AFH	400m	2.8915m
BT-EDR(2Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	308.3405m_DH5	400m	2.8925m
2440MHz	Pass	8	154.183575m_DH5-AFH	400m	2.89275m
BT-EDR(3Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	256.3197m_DH5	400m	2.4045m
2440MHz	Pass	8	154.316825m_DH5-AFH	400m	2.89525m

2.4-2.4835GHz_BT-BR(1Mbps)

Dwell-FS

2440MHz

05/09/2023



Port 1 

Ch Freq
2.44GHz

RBW
300kHz

VBW
1MHz

Sweep Time
8ms

TX Time
2.90025ms

Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	309.16665m_DH5	400m	2.90025m

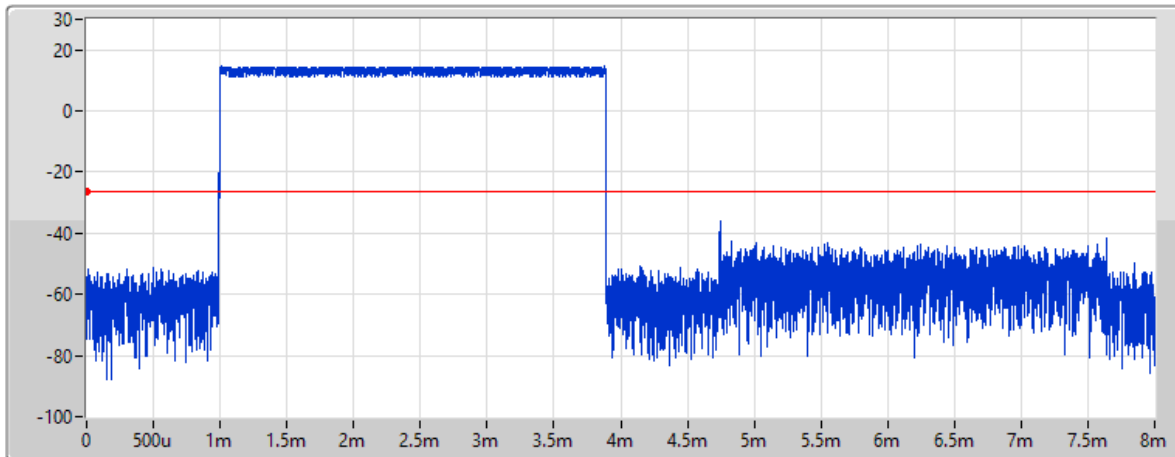
DH5

2.4-2.4835GHz_BT-BR(1Mbps)

Dwell-FS

2440MHz

05/09/2023



Port 1 

Ch Freq
2.44GHz

RBW
300kHz

VBW
1MHz

Sweep Time
8ms

TX Time
2.8915ms

Period(s)	Dwell(s)	Limit(s)	Tx On(s)
8	154.11695m_DH5-AFH	400m	2.8915m

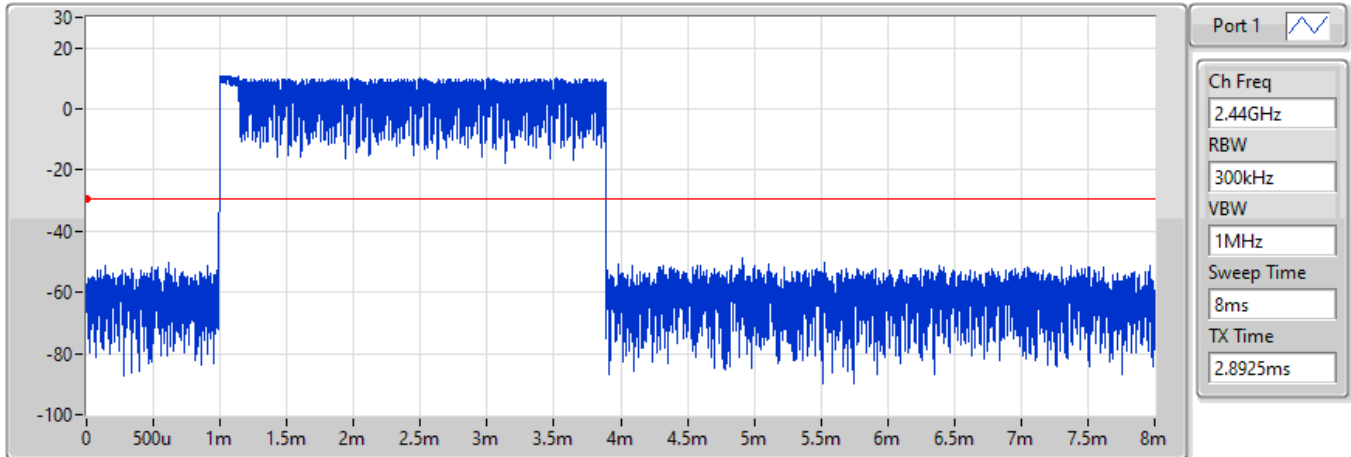
DH5-AFH

2.4-2.4835GHz_BT-EDR(2Mbps)

Dwell-FS

2440MHz

05/09/2023



Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	308.3405m_DH5	400m	2.8925m

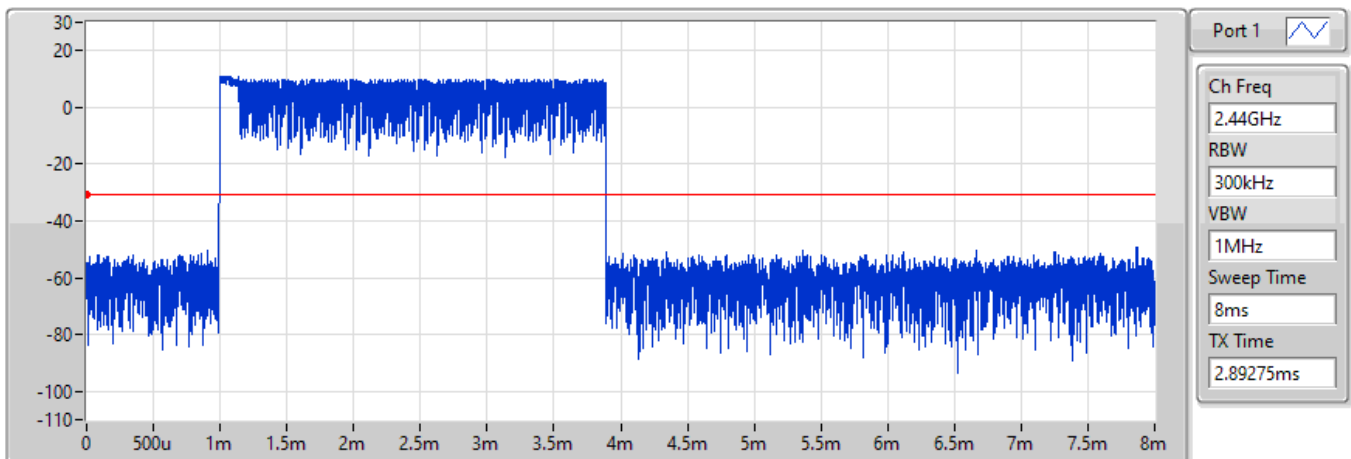
DH5

2.4-2.4835GHz_BT-EDR(2Mbps)

Dwell-FS

2440MHz

05/09/2023



Period(s)	Dwell(s)	Limit(s)	Tx On(s)
8	154.183575m_DH5-AF	400m	2.89275m

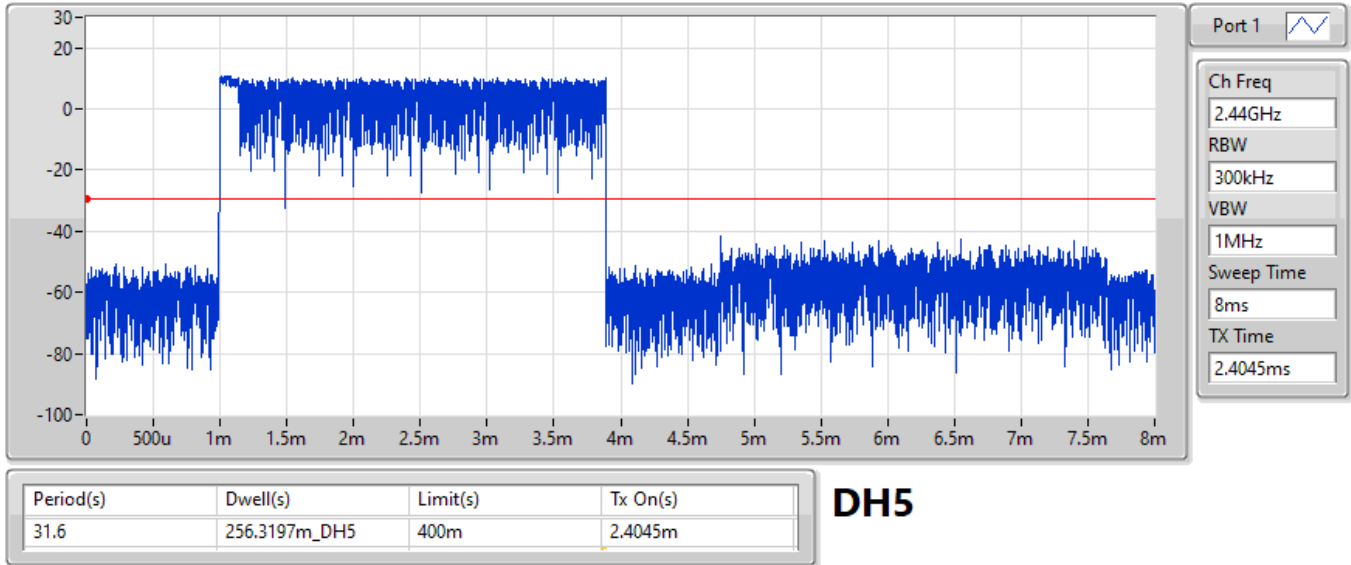
DH5-AFH

2.4-2.4835GHz_BT-EDR(3Mbps)

Dwell-FS

2440MHz

05/09/2023

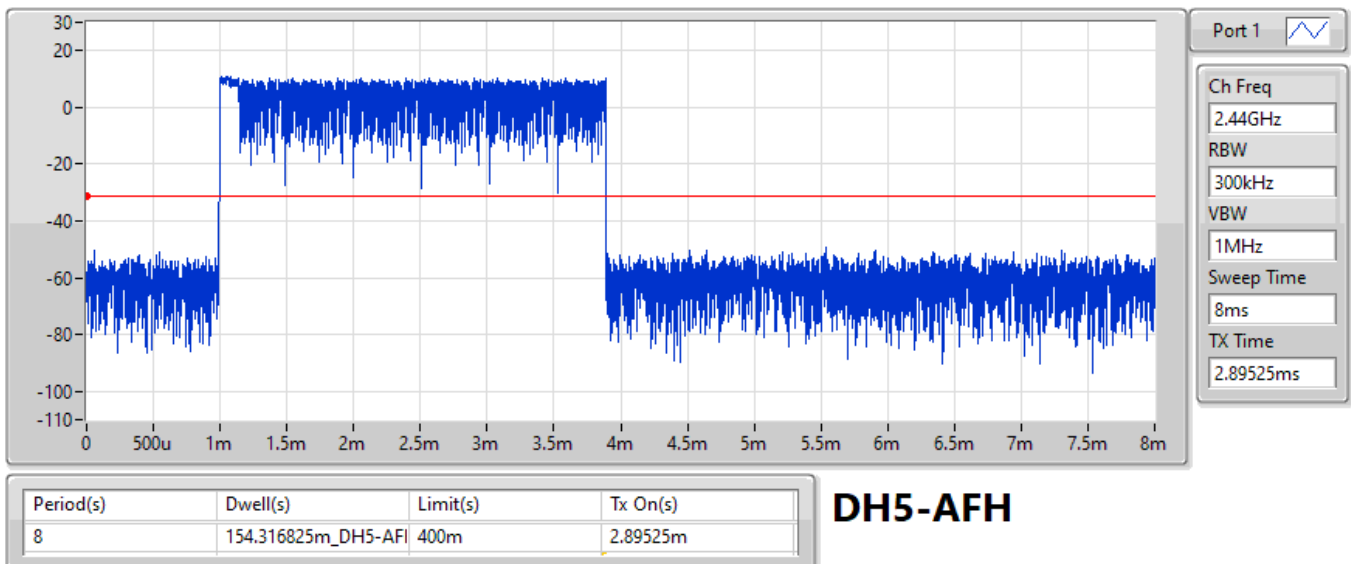


2.4-2.4835GHz_BT-EDR(3Mbps)

Dwell-FS

2440MHz

05/09/2023



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	12.73	-7.27	1.88298G	-53.62	2.39988G	-41.64	2.4G	-45.28	2.50002G	-51.29	7.20527G	-41.06	1
BT-EDR(2Mbps)	Pass	2.40217G	9.12	-10.88	1.88063G	-54.02	2.4G	-49.50	2.4G	-49.99	2.50022G	-51.74	21.84487G	-47.36	1
BT-EDR(3Mbps)	Pass	2.402G	9.51	-10.49	749.1M	-53.58	2.4G	-49.39	2.4G	-49.91	2.50098G	-50.87	21.79987G	-46.19	1

Result

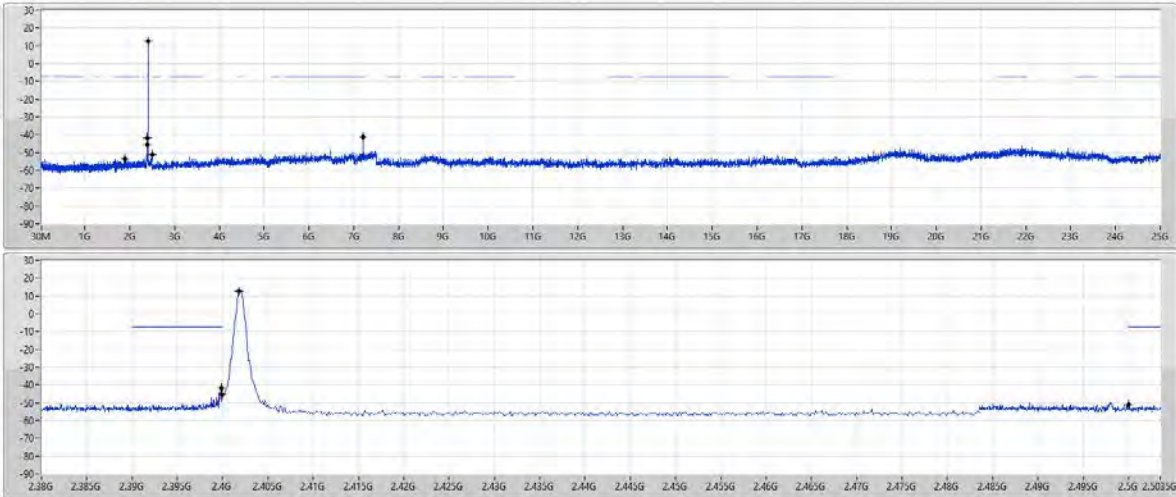
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
BT-BR(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.40184G	12.73	-7.27	1.88298G	-53.62	2.39988G	-41.64	2.4G	-45.28	2.50002G	-51.29	7.20527G	-41.06	1
2440MHz	Pass	2.43991G	12.87	-7.13	2.11445G	-54.19	2.39656G	-50.96	2.4G	-55.97	2.50098G	-51.75	21.65646G	-46.82	1
2480MHz	Pass	2.47999G	12.49	-7.51	1.89825G	-53.39	2.39088G	-50.87	2.4G	-56.61	2.50306G	-51.20	21.49055G	-47.21	1
BT-EDR(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.40217G	9.12	-10.88	1.88063G	-54.02	2.4G	-49.50	2.4G	-49.99	2.50022G	-51.74	21.84487G	-47.36	1
2440MHz	Pass	2.43991G	9.52	-10.48	2.192G	-53.37	2.3948G	-51.64	2.4G	-56.44	2.50298G	-51.86	21.86736G	-46.61	1
2480MHz	Pass	2.48016G	8.82	-11.18	1.85478G	-53.94	2.39056G	-51.21	2.4G	-56.46	2.5031G	-51.40	21.87017G	-47.38	1
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.402G	9.51	-10.49	749.1M	-53.58	2.4G	-49.39	2.4G	-49.91	2.50098G	-50.87	21.79987G	-46.19	1
2440MHz	Pass	2.44008G	9.09	-10.91	2.1168G	-54.05	2.391G	-51.56	2.4G	-57.62	2.50218G	-51.72	21.61146G	-47.26	1
2480MHz	Pass	2.47999G	8.71	-11.29	1.79015G	-53.57	2.3902G	-51.52	2.4G	-56.24	2.50282G	-51.31	21.63677G	-47.59	1

2.4-2.4835GHz_BT-BR(1Mbps)

CSEndB-FS

2402MHz

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

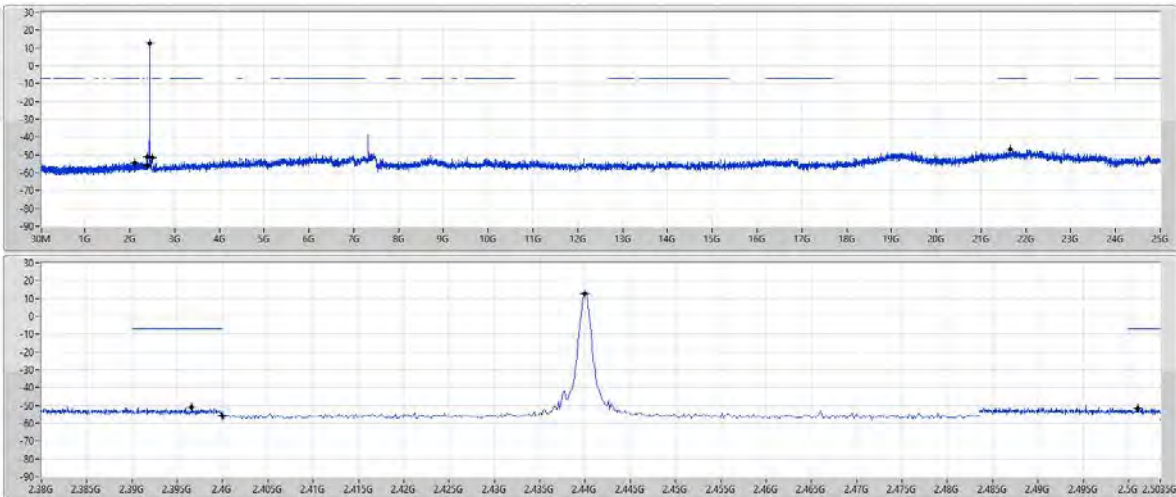


2.4-2.4835GHz_BT-BR(1Mbps)

CSEndB-FS

2440MHz

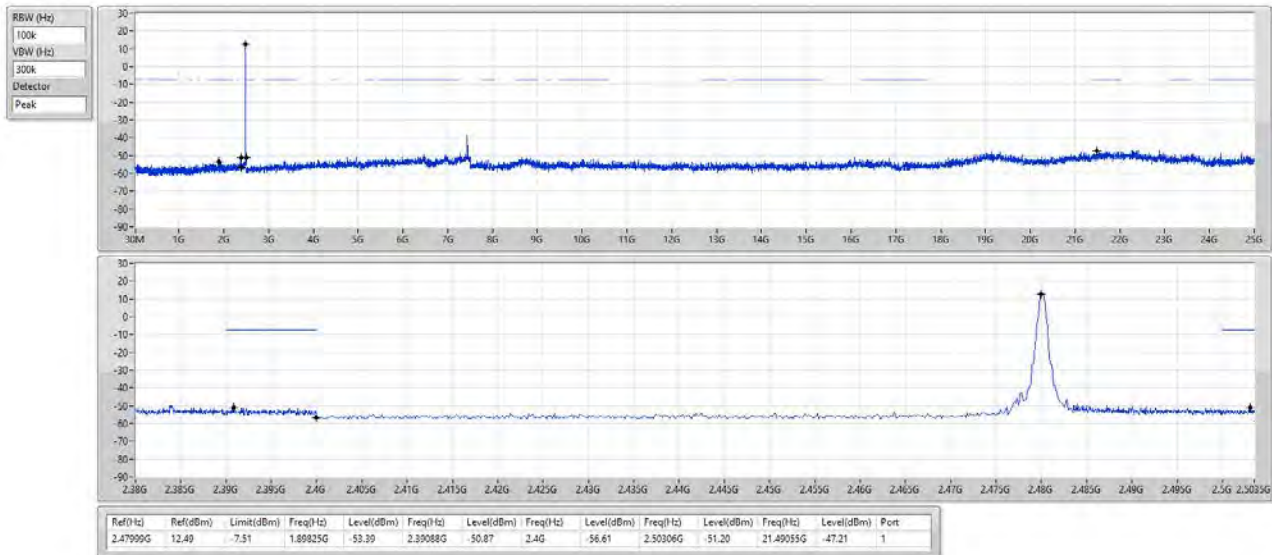
RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak



2.4-2.4835GHz_BT-BR(1Mbps)

CSEndB-FS

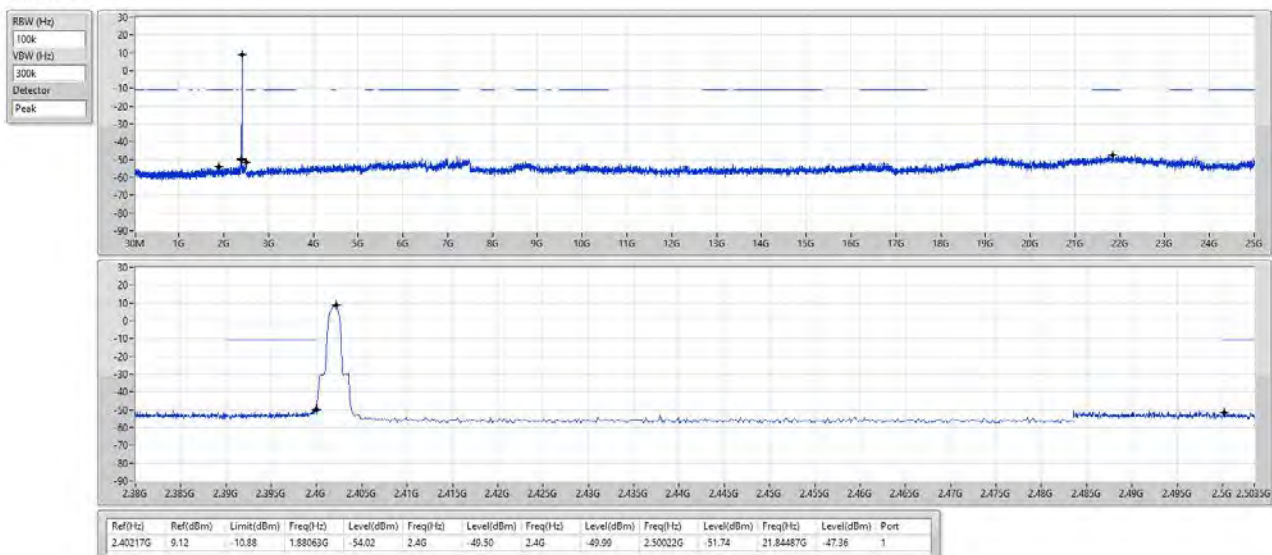
2480MHz



2.4-2.4835GHz_BT-EDR(2Mbps)

CSEndB-FS

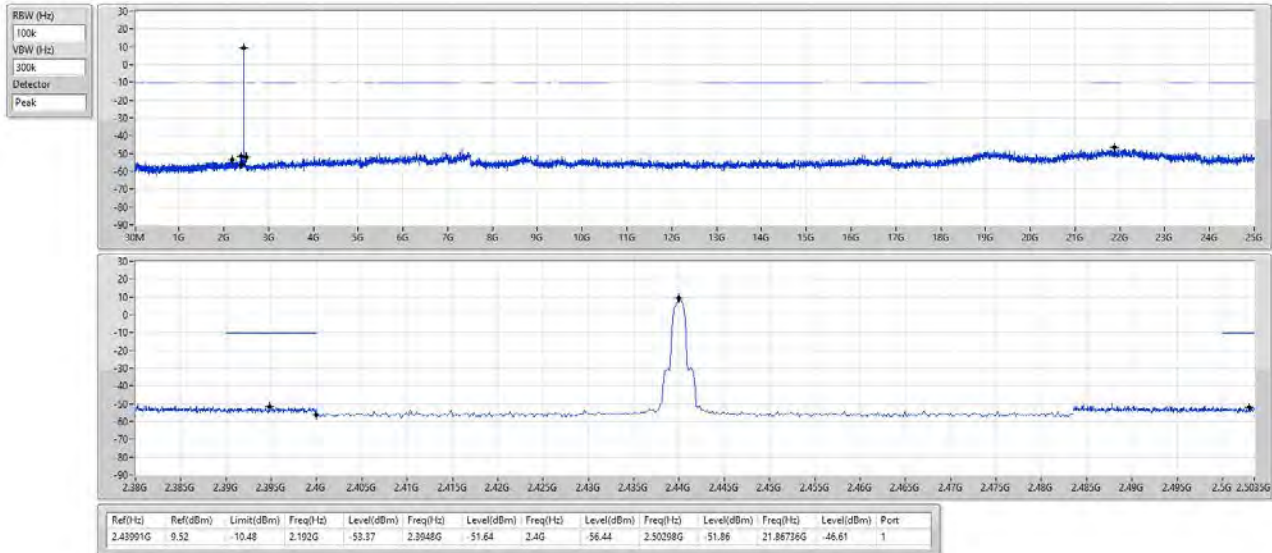
2402MHz



2.4-2.4835GHz_BT-EDR(2Mbps)

CSEndB-FS

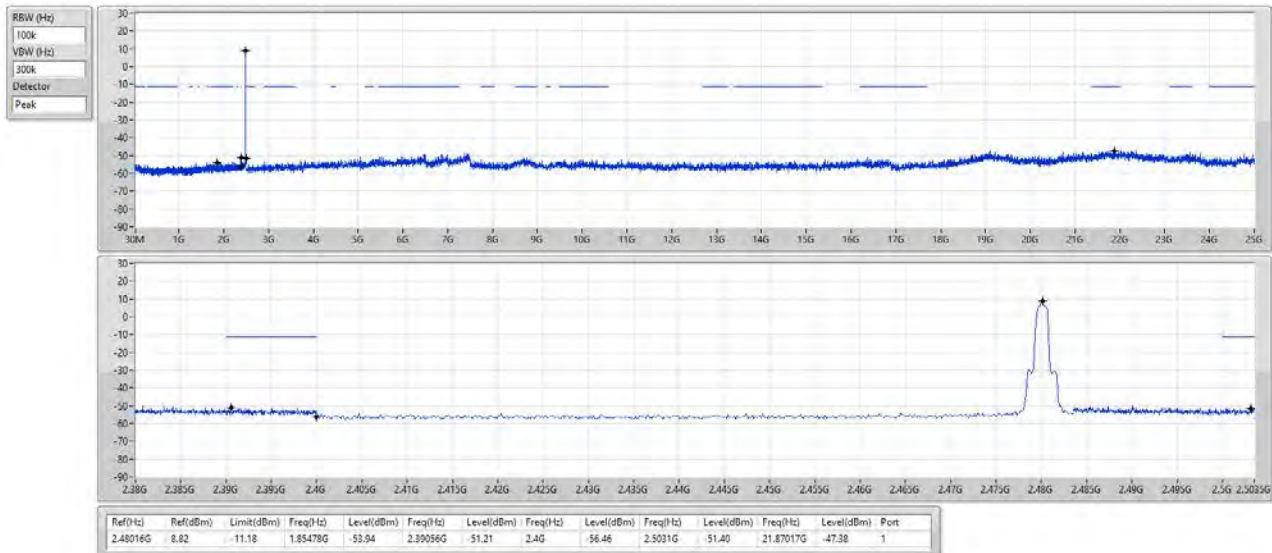
2440MHz



2.4-2.4835GHz_BT-EDR(2Mbps)

CSEndB-FS

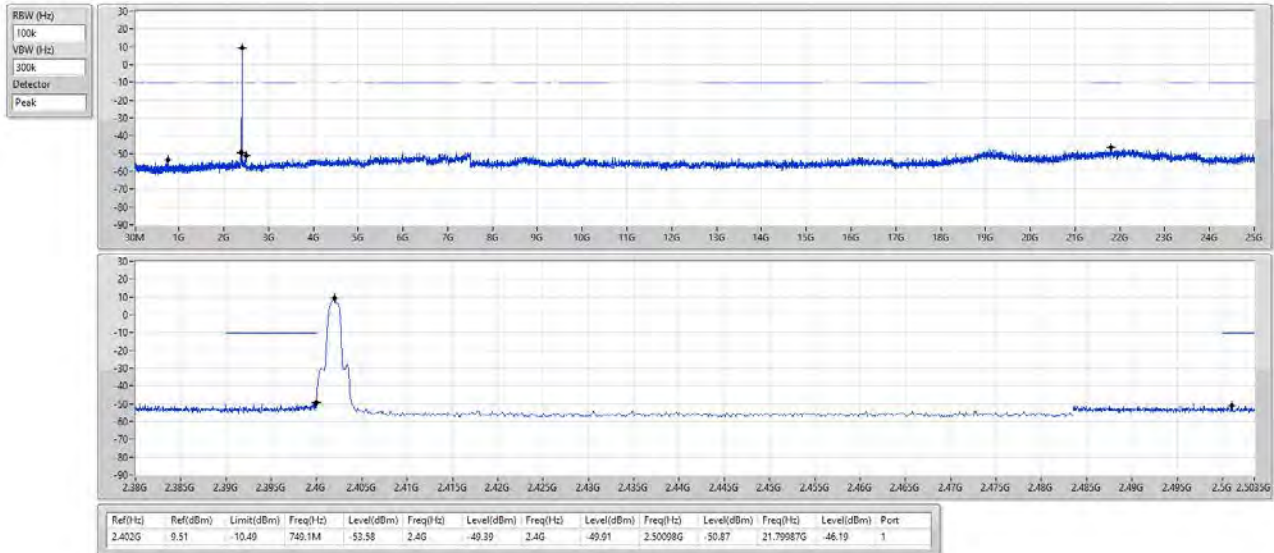
2480MHz



2.4-2.4835GHz_BT-EDR(3Mbps)

CSEndB-FS

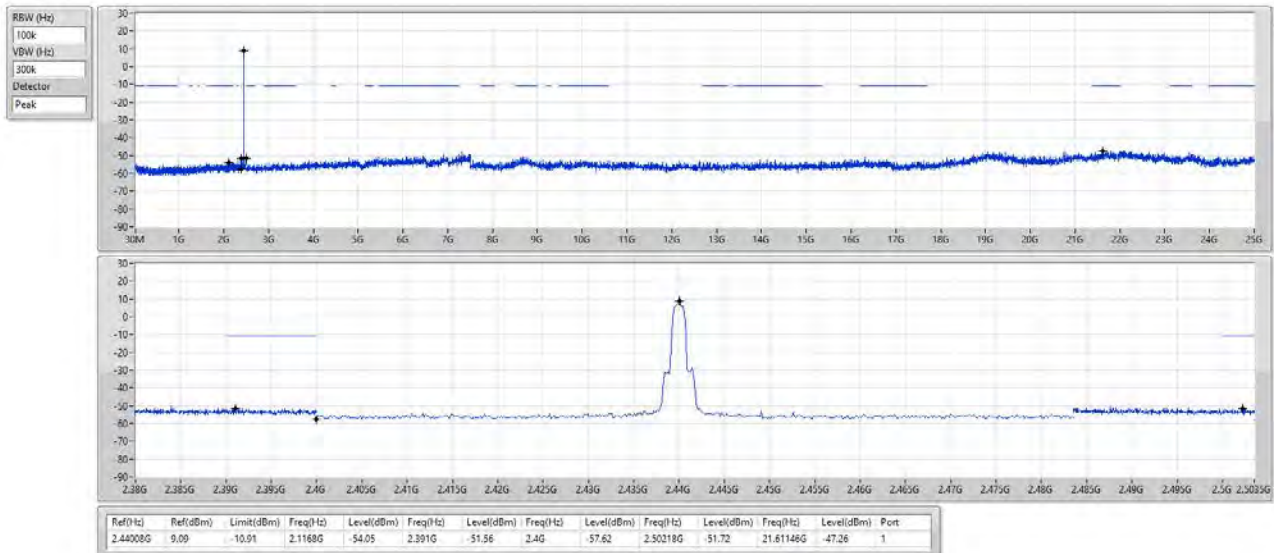
2402MHz

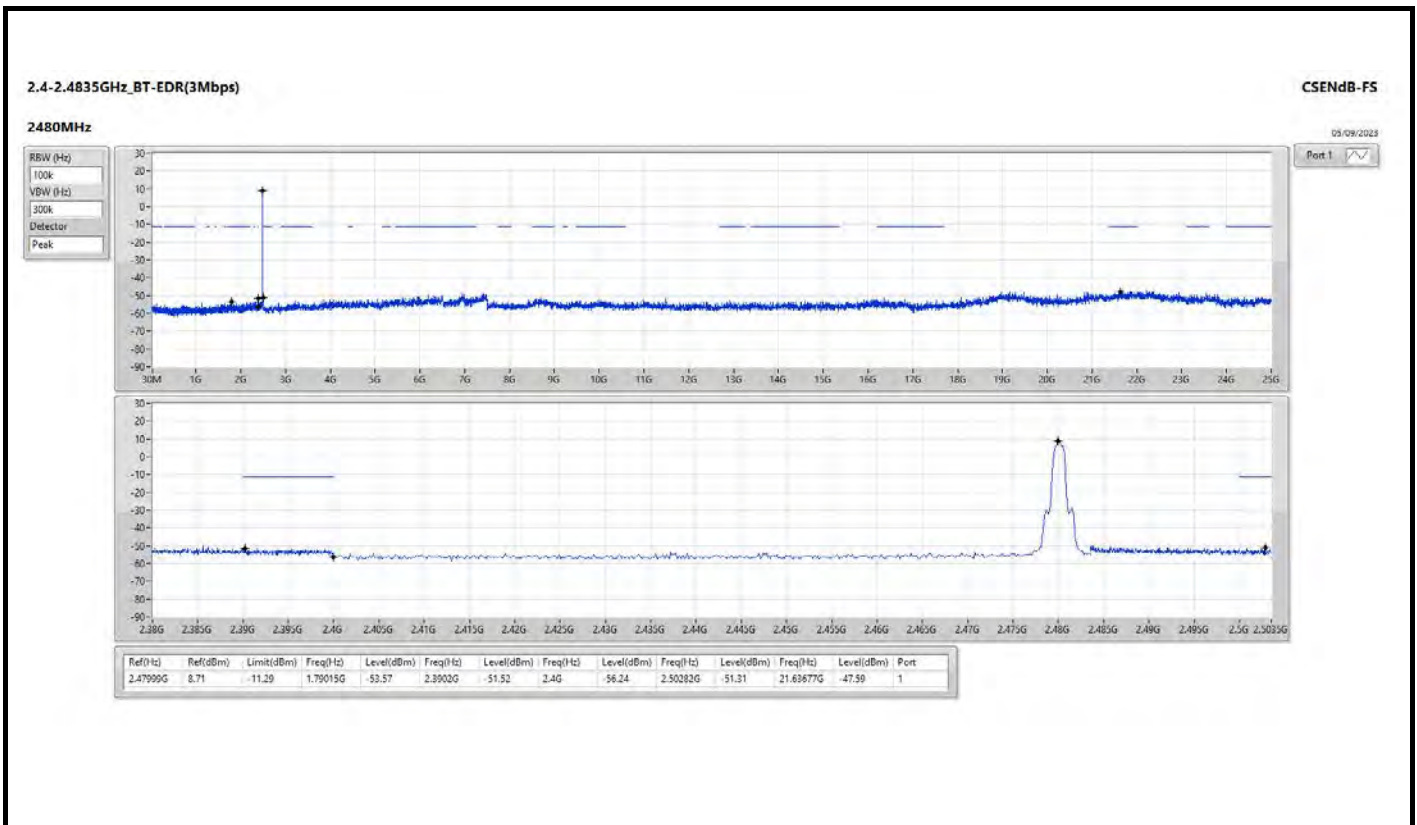


2.4-2.4835GHz_BT-EDR(3Mbps)

CSEndB-FS

2440MHz







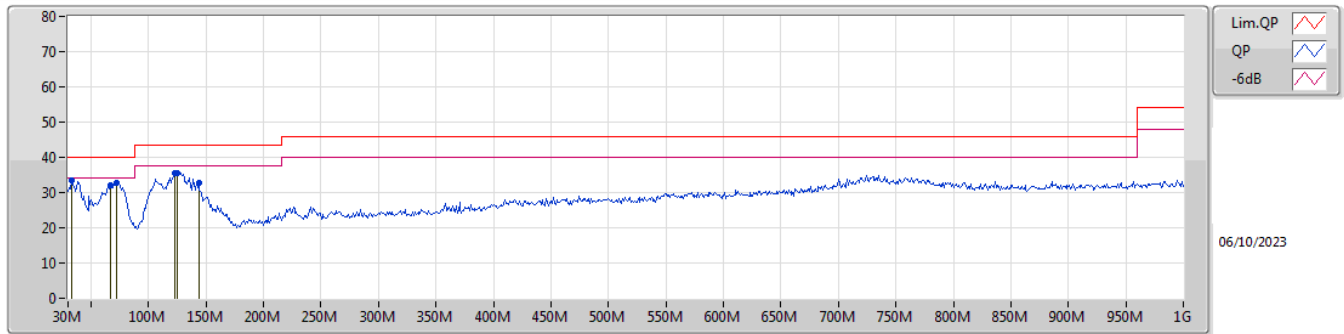
Radiated Emissions below 1GHz

Appendix G.1

Summary

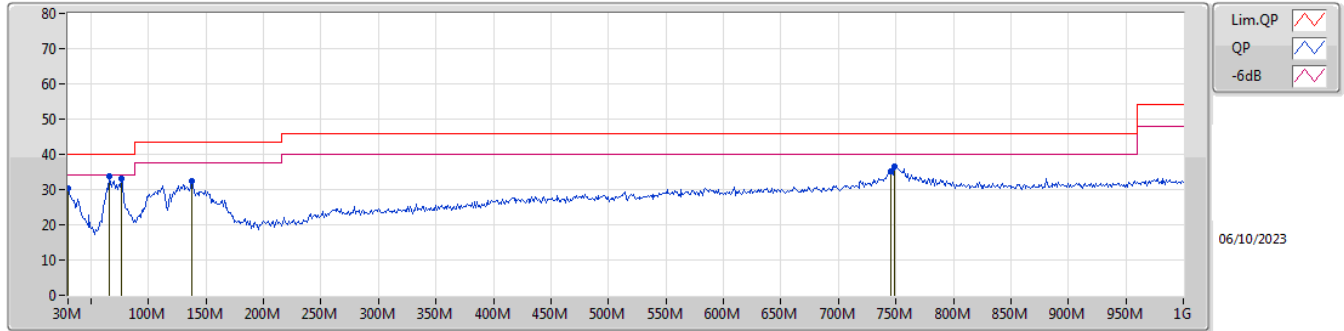
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	PK	65.89M	33.88	40.00	-6.12	Horizontal

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	32.91M	33.33	40.00	-6.67	-21.37	3	Vertical	105	1.00	"Worst"	54.70	22.25	0.70	44.32		
PK	66.86M	31.94	40.00	-8.06	-32.32	3	Vertical	174	3.00	-	64.26	11.39	0.92	44.63		
PK	71.71M	32.63	40.00	-7.37	-32.15	3	Vertical	0	1.25	-	64.78	11.48	0.98	44.61		
PK	123.12M	35.45	43.50	-8.05	-26.18	3	Vertical	179	1.00	-	61.63	17.20	1.25	44.63		
PK	125.06M	35.47	43.50	-8.03	-26.25	3	Vertical	192	1.25	-	61.72	17.11	1.26	44.62		
PK	143.49M	32.60	43.50	-10.90	-27.20	3	Vertical	141	1.00	-	59.80	16.06	1.33	44.59		

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	30M	30.42	40.00	-9.58	-19.56	3	Horizontal	68	3.00	-	49.98	24.08	0.68	44.32		
PK	65.89M	33.88	40.00	-6.12	-32.34	3	Horizontal	78	3.00	"Worst"	66.22	11.38	0.91	44.63		
PK	76.56M	33.06	40.00	-6.94	-31.88	3	Horizontal	128	3.00	-	64.94	11.72	1.00	44.60		
PK	137.67M	32.46	43.50	-11.04	-26.89	3	Horizontal	114	2.00	-	59.35	16.40	1.31	44.60		
PK	745.86M	35.31	46.00	-10.69	-16.03	3	Horizontal	288	1.00	-	51.34	24.66	2.93	43.62		
PK	748.77M	36.70	46.00	-9.30	-15.98	3	Horizontal	110	1.00	-	52.68	24.71	2.93	43.62		

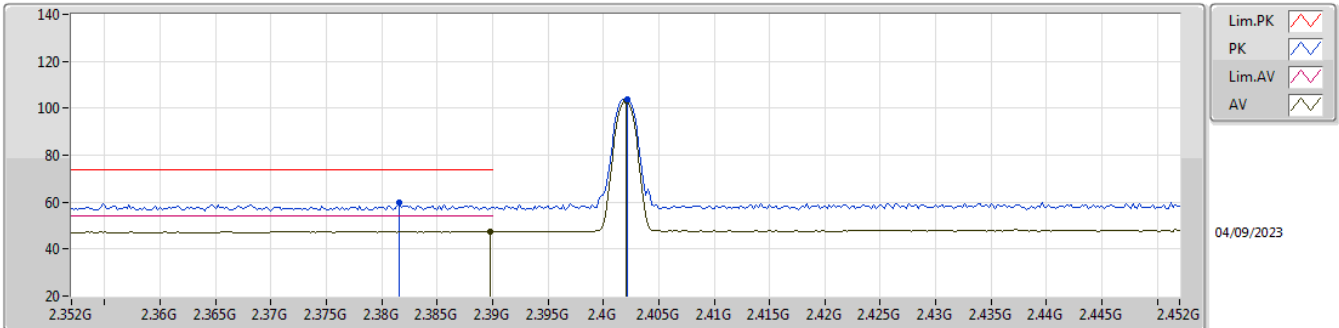


Summary

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	4.804G	52.34	54.00	-1.66	3	Vertical	27	2.09	-

2.4-2.4835GHz_BT-BR(1Mbps)

2402MHz_TX

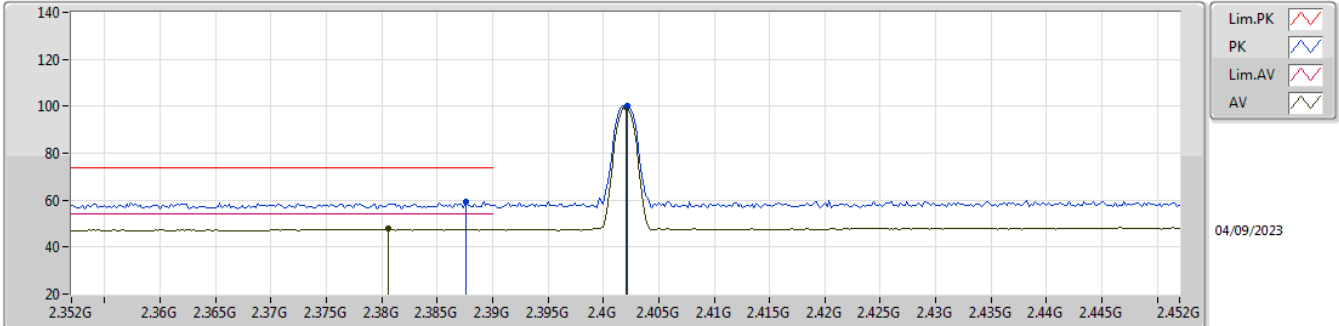


EUT_Z1TX
Setting 9
02-L-P-5

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	2.3816G	59.67	74.00	-14.33	28.08	3	Vertical	94	2.55	-	28.40	3.19	-				
AV	2.3898G	47.58	54.00	-6.42	15.99	3	Vertical	94	2.55	-	28.40	3.19	-				
PK	2.4022G	103.60	Inf	-Inf	72.00	3	Vertical	94	2.55	-	28.40	3.20	-				
AV	2.402G	103.15	Inf	-Inf	71.55	3	Vertical	94	2.55	-	28.40	3.20	-				

2.4-2.4835GHz_BT-BR(1Mbps)

2402MHz_TX

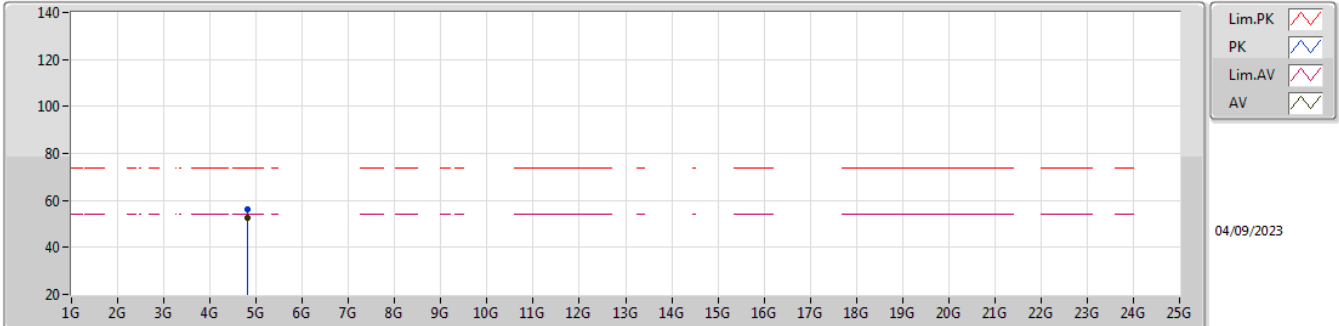


EUT_Z1TX
Setting 9
02-L-P-5

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	2.3876G	59.37	74.00	-14.63	27.78	3	Horizontal	100	3.00	-	28.40	3.19	-				
AV	2.3806G	47.79	54.00	-6.21	16.20	3	Horizontal	100	3.00	-	28.40	3.19	-				
PK	2.4022G	100.16	Inf	-Inf	68.56	3	Horizontal	100	3.00	-	28.40	3.20	-				
AV	2.402G	99.69	Inf	-Inf	68.09	3	Horizontal	100	3.00	-	28.40	3.20	-				

2.4-2.4835GHz_BT-BR(1Mbps)

2402MHz_TX

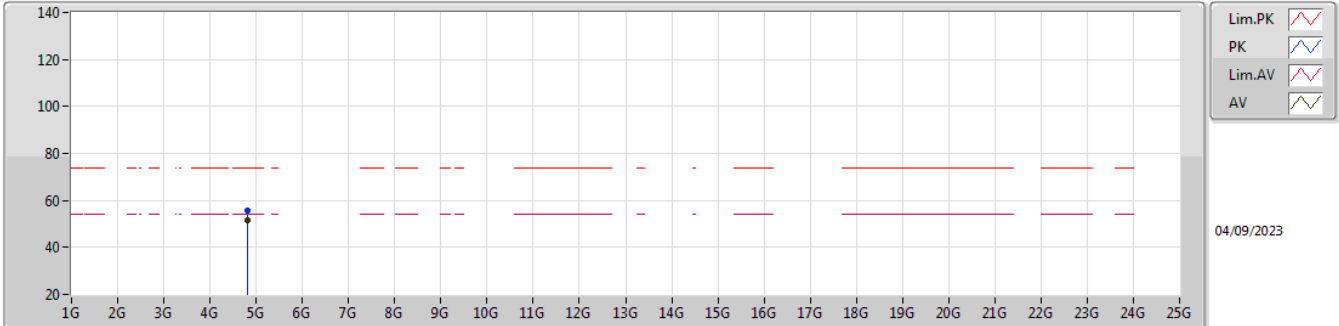


EUT_Z_1TX
Setting 9
02-L-P-5

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	4.80428G	56.11	74.00	-17.89	48.37	3	Vertical	27	2.09	-	32.83	5.60	30.69			
AV	4.804G	52.34	54.00	-1.66	44.61	3	Vertical	27	2.09	-	32.82	5.60	30.69			

2.4-2.4835GHz_BT-BR(1Mbps)

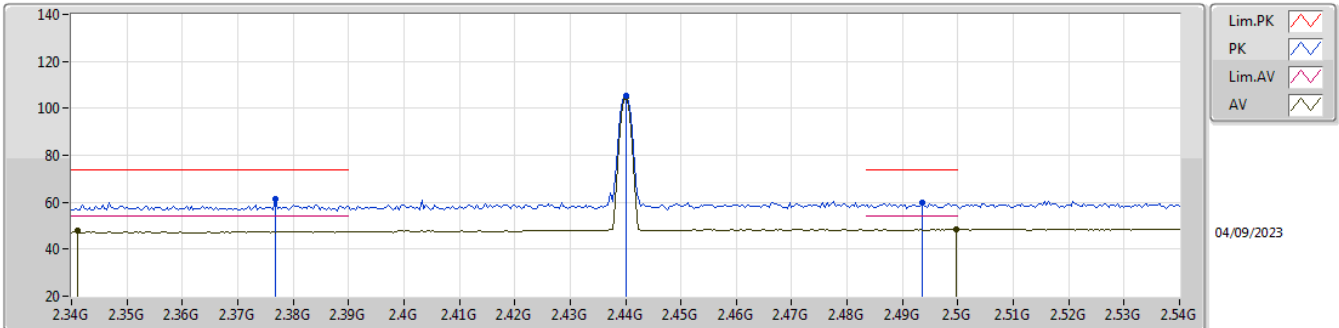
2402MHz_TX


EUT_Z1TX
Setting 9
02-L-P-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	4.80373G	55.73	74.00	-18.27	48.00	3	Horizontal	125	2.27	-	32.82	5.60	30.69			
AV	4.80396G	51.77	54.00	-2.23	44.04	3	Horizontal	125	2.27	-	32.82	5.60	30.69			

2.4-2.4835GHz_BT-BR(1Mbps)

2440MHz_TX

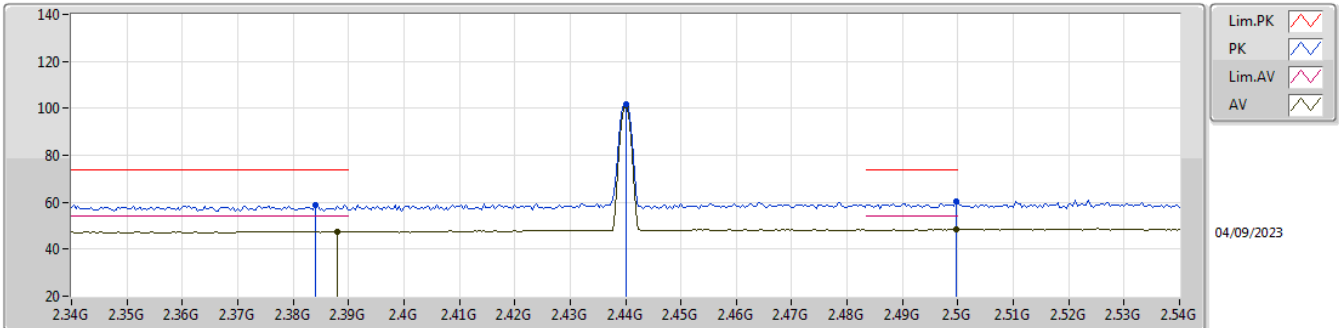


EUT_Z1TX
Setting 9
02-L-P-5

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	61.45	74.00	-12.55	29.89	3	Vertical	54	2.02	-	28.37	3.19	-				
AV	2.3412G	47.82	54.00	-6.18	16.54	3	Vertical	54	2.02	-	28.11	3.17	-				
PK	2.44G	105.11	Inf	-Inf	73.49	3	Vertical	54	2.02	-	28.40	3.22	-				
AV	2.44G	104.65	Inf	-Inf	73.03	3	Vertical	54	2.02	-	28.40	3.22	-				
PK	2.4936G	59.62	74.00	-14.38	27.83	3	Vertical	54	2.02	-	28.54	3.25	-				
AV	2.4996G	48.50	54.00	-5.50	16.65	3	Vertical	54	2.02	-	28.60	3.25	-				

2.4-2.4835GHz_BT-BR(1Mbps)

2440MHz_TX

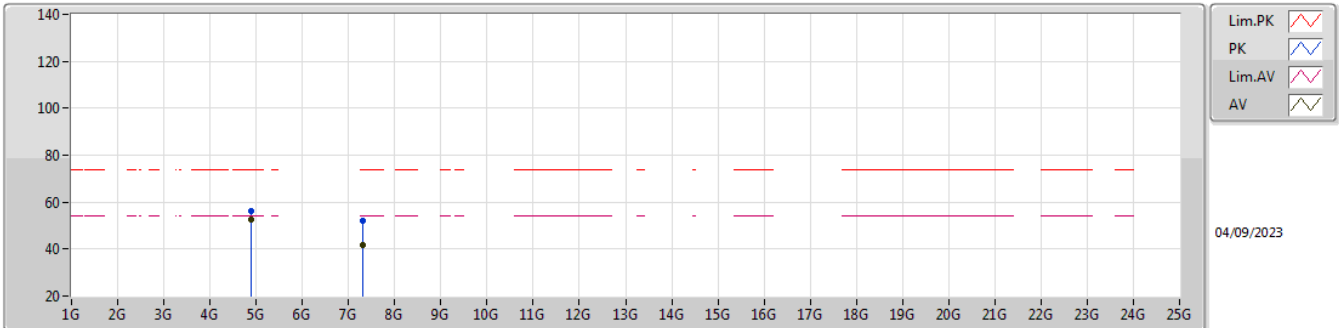


EUT_Z1TX
Setting 9
02-L-P-5

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	2.384G	58.93	74.00	-15.07	27.34	3	Horizontal	161	1.00	-	28.40	3.19	-			
AV	2.388G	47.57	54.00	-6.43	15.98	3	Horizontal	161	1.00	-	28.40	3.19	-			
PK	2.44G	101.51	Inf	-Inf	69.89	3	Horizontal	161	1.00	-	28.40	3.22	-			
AV	2.44G	101.07	Inf	-Inf	69.45	3	Horizontal	161	1.00	-	28.40	3.22	-			
PK	2.4996G	60.10	74.00	-13.90	28.25	3	Horizontal	161	1.00	-	28.60	3.25	-			
AV	2.4996G	48.50	54.00	-5.50	16.65	3	Horizontal	161	1.00	-	28.60	3.25	-			

2.4-2.4835GHz_BT-BR(1Mbps)

2440MHz_TX

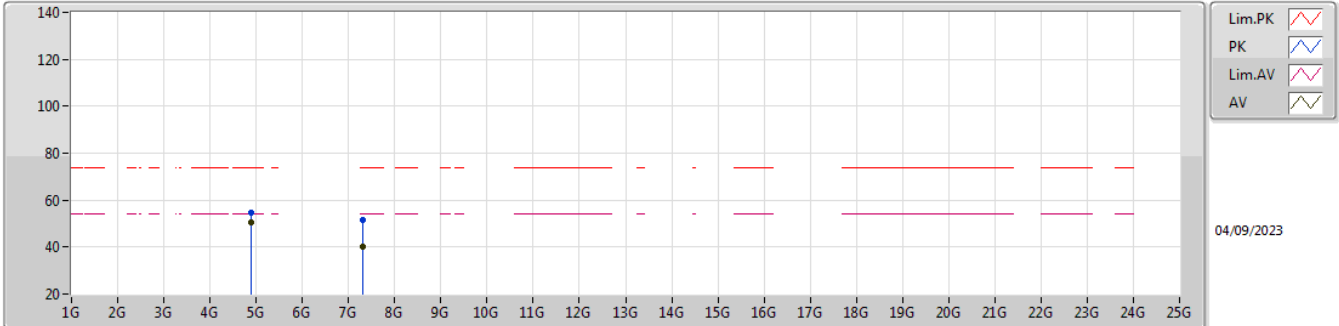


EUT_Z_1TX
Setting 9
02-L-P-5

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	4.87982G	56.43	74.00	-17.57	48.27	3	Vertical	28	2.42	-	33.16	5.64	30.64			
AV	4.87997G	52.33	54.00	-1.67	44.17	3	Vertical	28	2.42	-	33.16	5.64	30.64			
PK	7.32087G	51.99	74.00	-22.01	40.63	3	Vertical	350	2.32	-	36.64	6.84	32.12			
AV	7.31989G	41.57	54.00	-12.43	30.21	3	Vertical	350	2.32	-	36.64	6.84	32.12			

2.4-2.4835GHz_BT-BR(1Mbps)

2440MHz_TX

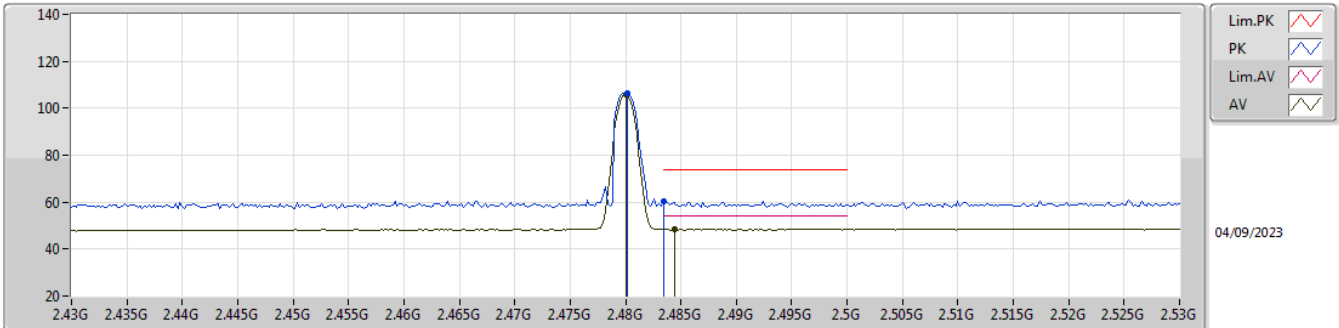


EUT_Z_1TX
Setting 9
02-L-P-5

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	4.8797G	54.84	74.00	-19.16	46.68	3	Horizontal	125	2.45	-	33.16	5.64	30.64			
AV	4.87998G	50.51	54.00	-3.49	42.35	3	Horizontal	125	2.45	-	33.16	5.64	30.64			
PK	7.31776G	51.46	74.00	-22.54	40.10	3	Horizontal	190	1.84	-	36.64	6.84	32.12			
AV	7.31988G	40.07	54.00	-13.93	28.71	3	Horizontal	190	1.84	-	36.64	6.84	32.12			

2.4-2.4835GHz_BT-BR(1Mbps)

2480MHz_TX

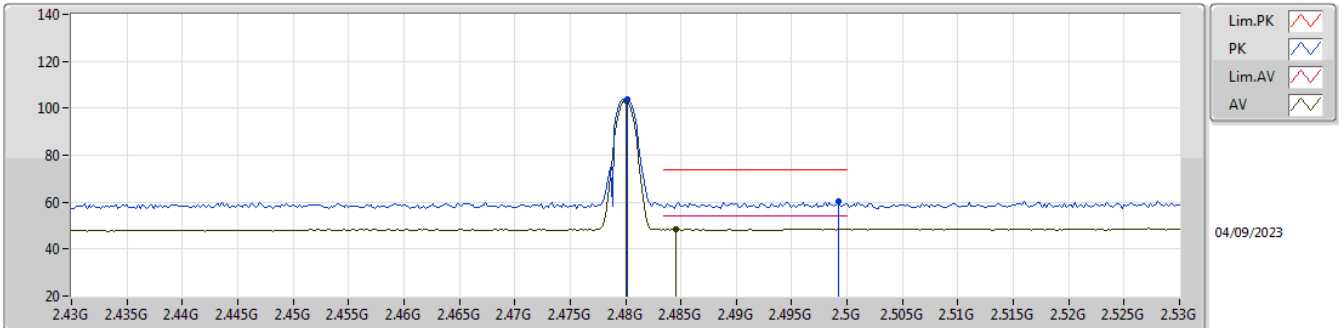


EUT_Z1TX
Setting 9
02-L-P-5

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	106.38	Inf	-Inf	74.64	3	Vertical	51	2.68	-	28.50	3.24	-				
AV	2.48G	105.96	Inf	-Inf	74.22	3	Vertical	51	2.68	-	28.50	3.24	-				
PK	2.4835G	60.40	74.00	-13.60	28.66	3	Vertical	51	2.68	-	28.50	3.24	-				
AV	2.4844G	48.65	54.00	-5.35	16.91	3	Vertical	51	2.68	-	28.50	3.24	-				

2.4-2.4835GHz_BT-BR(1Mbps)

2480MHz_TX

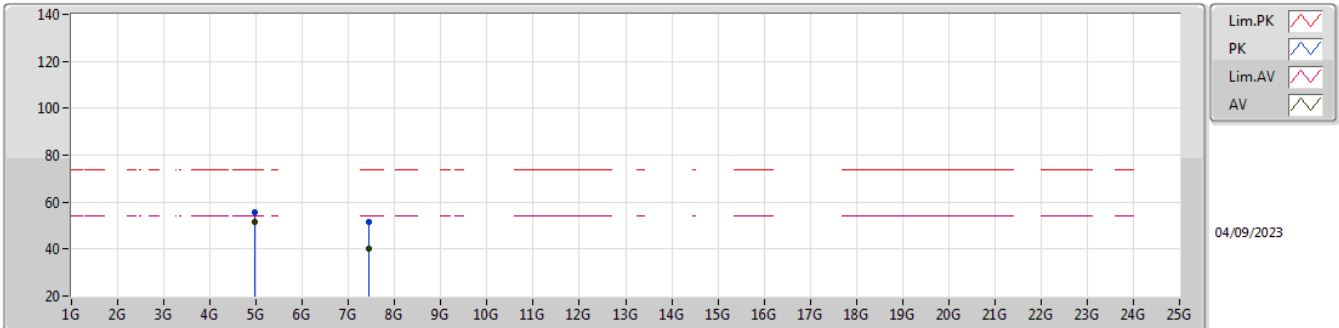


EUT_Z1TX
Setting 9
02-L-P-5

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	103.70	Inf	-Inf	71.96	3	Horizontal	89	1.08	-	28.50	3.24	-				
AV	2.48G	103.28	Inf	-Inf	71.54	3	Horizontal	89	1.08	-	28.50	3.24	-				
PK	2.4992G	60.09	74.00	-13.91	28.25	3	Horizontal	89	1.08	-	28.59	3.25	-				
AV	2.4846G	48.65	54.00	-5.35	16.91	3	Horizontal	89	1.08	-	28.50	3.24	-				

2.4-2.4835GHz_BT-BR(1Mbps)

2480MHz_TX

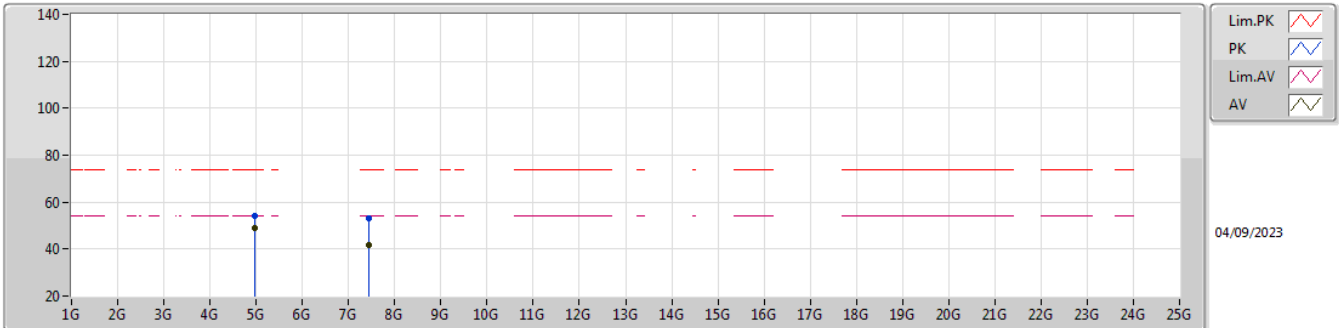


EUT_Z_1TX
Setting 9
02-L-P-5

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	55.89	74.00	-18.11	47.48	3	Vertical	98	1.11	-	33.32	5.68	30.59				
AV	4.95995G	51.64	54.00	-2.36	43.23	3	Vertical	98	1.11	-	33.32	5.68	30.59				
PK	7.44062G	51.35	74.00	-22.65	40.00	3	Vertical	193	1.86	-	36.70	6.84	32.19				
AV	7.43969G	40.10	54.00	-13.90	28.75	3	Vertical	193	1.86	-	36.70	6.84	32.19				

2.4-2.4835GHz_BT-BR(1Mbps)

2480MHz_TX

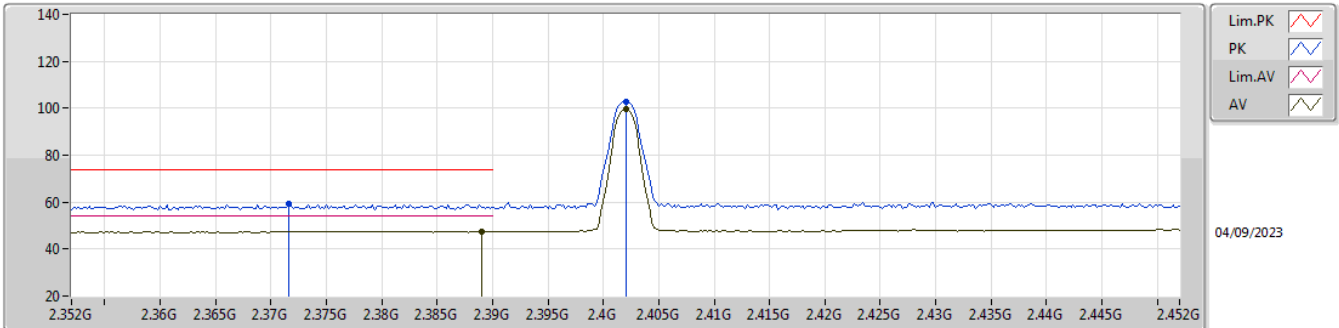


EUT_Z_1TX
Setting 9
02-L-P-5

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	4.95995G	54.24	74.00	-19.76	45.83	3	Horizontal	115	2.14	-	33.32	5.68	30.59			
AV	4.95991G	49.11	54.00	-4.89	40.70	3	Horizontal	115	2.14	-	33.32	5.68	30.59			
PK	7.43922G	52.87	74.00	-21.13	41.52	3	Horizontal	156	1.96	-	36.70	6.84	32.19			
AV	7.43982G	41.61	54.00	-12.39	30.26	3	Horizontal	156	1.96	-	36.70	6.84	32.19			

2.4-2.4835GHz_BT-EDR(3Mbps)

2402MHz_TX

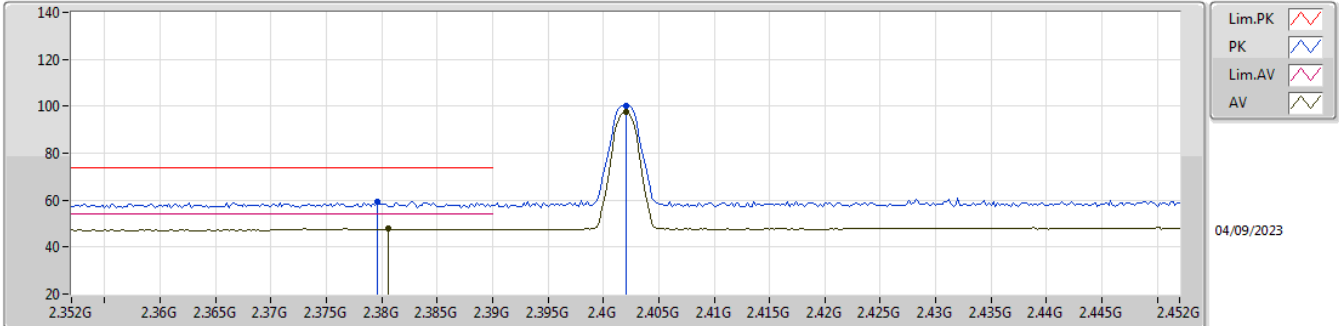


EUT_Z1TX
Setting 9
02-L-G-4

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	2.3716G	59.19	74.00	-14.81	27.68	3	Vertical	92	2.55	-	28.32	3.19	-				
AV	2.389G	47.57	54.00	-6.43	15.98	3	Vertical	92	2.55	-	28.40	3.19	-				
PK	2.402G	102.83	Inf	-Inf	71.23	3	Vertical	92	2.55	-	28.40	3.20	-				
AV	2.402G	99.77	Inf	-Inf	68.17	3	Vertical	92	2.55	-	28.40	3.20	-				

2.4-2.4835GHz_BT-EDR(3Mbps)

2402MHz_TX

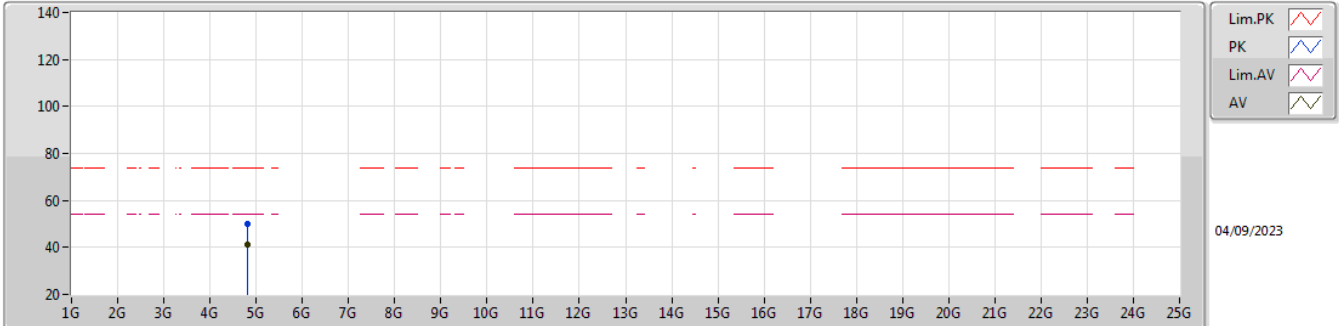


EUT_Z1TX
Setting 9
02-L-G-4

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	2.3796G	59.47	74.00	-14.53	27.88	3	Horizontal	156	1.95	-	28.40	3.19	-				
AV	2.3806G	47.79	54.00	-6.21	16.20	3	Horizontal	156	1.95	-	28.40	3.19	-				
PK	2.402G	100.43	Inf	-Inf	68.83	3	Horizontal	156	1.95	-	28.40	3.20	-				
AV	2.402G	97.33	Inf	-Inf	65.73	3	Horizontal	156	1.95	-	28.40	3.20	-				

2.4-2.4835GHz_BT-EDR(3Mbps)

2402MHz_TX

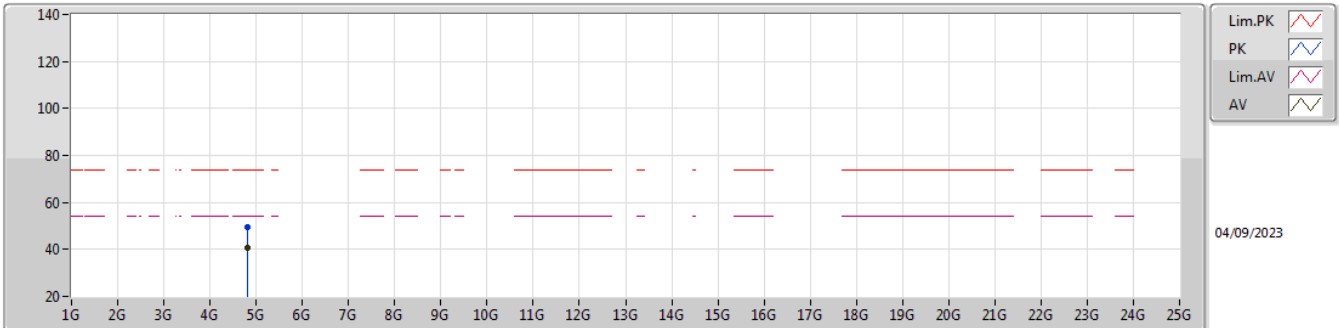


EUT_Z_1TX
Setting 9
02-L-G-4

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	4.80414G	50.23	74.00	-23.77	42.50	3	Vertical	204	1.50	-	32.82	5.60	30.69			
AV	4.80398G	40.99	54.00	-13.01	33.26	3	Vertical	204	1.50	-	32.82	5.60	30.69			

2.4-2.4835GHz_BT-EDR(3Mbps)

2402MHz_TX

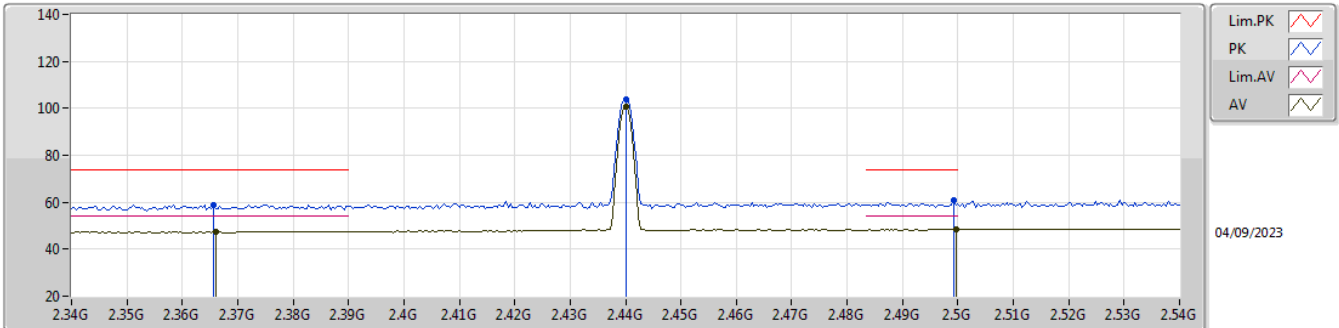


EUT_Z_1TX
Setting 9
02-L-G-4

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	4.8042G	49.72	74.00	-24.28	41.98	3	Horizontal	124	2.27	-	32.83	5.60	30.69			
AV	4.8039G	40.51	54.00	-13.49	32.78	3	Horizontal	124	2.27	-	32.82	5.60	30.69			

2.4-2.4835GHz_BT-EDR(3Mbps)

2440MHz_TX

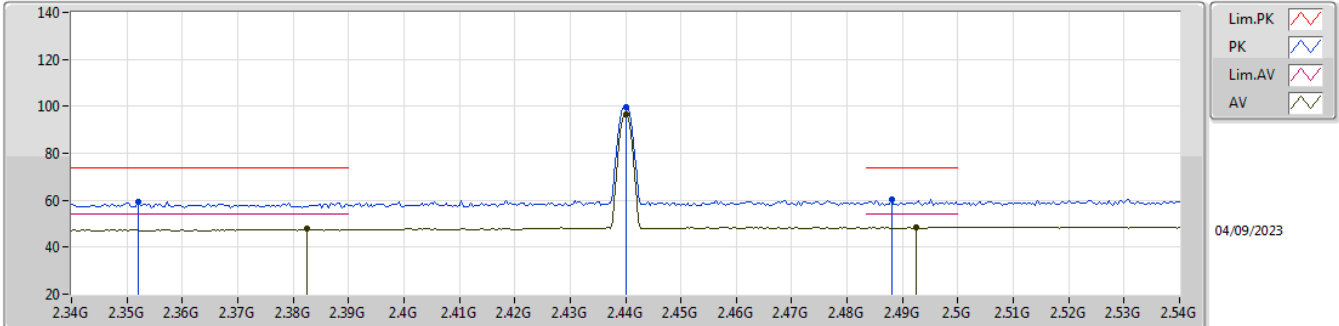


EUT_Z_1TX
Setting 9
02-L-G-4

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	2.3656G	59.05	74.00	-14.95	27.61	3	Vertical	96	2.78	-	28.26	3.18	-				
AV	2.366G	47.64	54.00	-6.36	16.20	3	Vertical	96	2.78	-	28.26	3.18	-				
PK	2.44G	103.85	Inf	-Inf	72.23	3	Vertical	96	2.78	-	28.40	3.22	-				
AV	2.44G	100.73	Inf	-Inf	69.11	3	Vertical	96	2.78	-	28.40	3.22	-				
PK	2.4992G	61.07	74.00	-12.93	29.23	3	Vertical	96	2.78	-	28.59	3.25	-				
AV	2.4996G	48.50	54.00	-5.50	16.65	3	Vertical	96	2.78	-	28.60	3.25	-				

2.4-2.4835GHz_BT-EDR(3Mbps)

2440MHz_TX

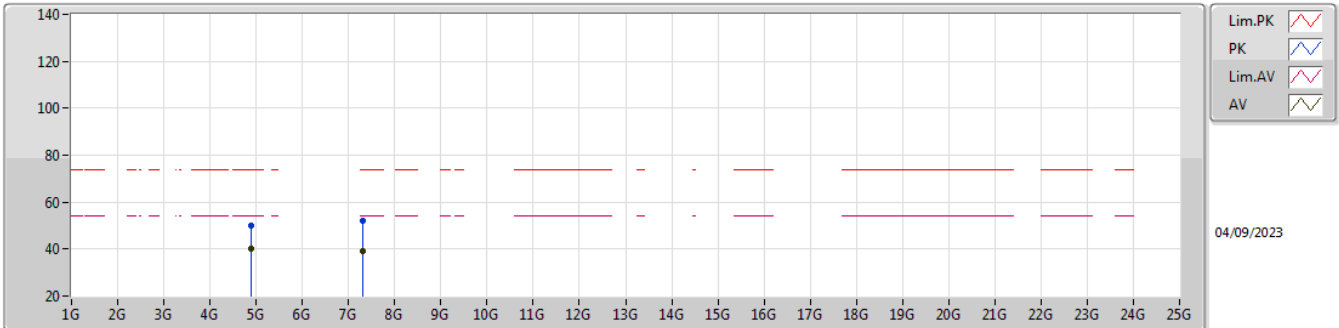


EUT_Z1TX
Setting 9
02-L-G-4

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	2.352G	59.56	74.00	-14.44	28.18	3	Horizontal	165	1.25	-	28.20	3.18	-			
AV	2.3824G	47.79	54.00	-6.21	16.20	3	Horizontal	165	1.25	-	28.40	3.19	-			
PK	2.44G	99.77	Inf	-Inf	68.15	3	Horizontal	165	1.25	-	28.40	3.22	-			
AV	2.44G	96.64	Inf	-Inf	65.02	3	Horizontal	165	1.25	-	28.40	3.22	-			
PK	2.488G	60.53	74.00	-13.47	28.79	3	Horizontal	165	1.25	-	28.50	3.24	-			
AV	2.4924G	48.68	54.00	-5.32	16.91	3	Horizontal	165	1.25	-	28.52	3.25	-			

2.4-2.4835GHz_BT-EDR(3Mbps)

2440MHz_TX

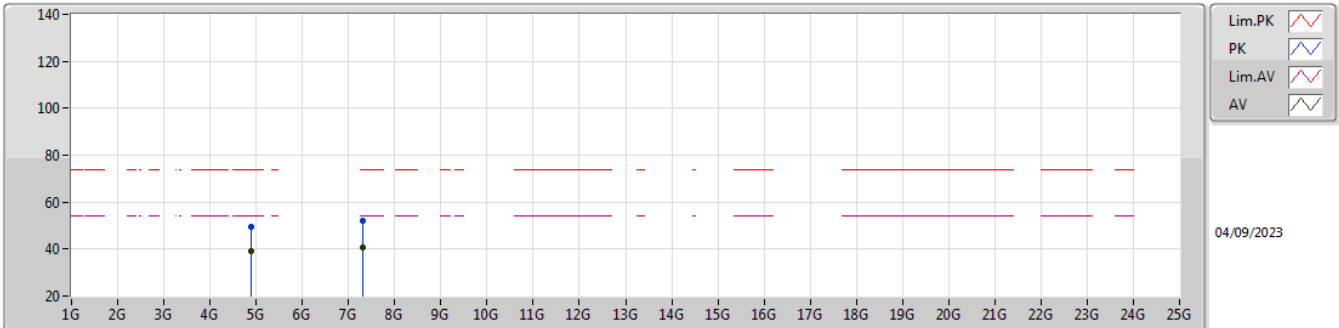


EUT_Z_1TX
Setting 9
02-L-G-4

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	4.8801G	49.95	74.00	-24.05	41.79	3	Vertical	29	2.41	-	33.16	5.64	30.64			
AV	4.87998G	40.13	54.00	-13.87	31.97	3	Vertical	29	2.41	-	33.16	5.64	30.64			
PK	7.3213G	51.99	74.00	-22.01	40.63	3	Vertical	284	2.32	-	36.64	6.84	32.12			
AV	7.31882G	39.31	54.00	-14.69	27.95	3	Vertical	284	2.32	-	36.64	6.84	32.12			

2.4-2.4835GHz_BT-EDR(3Mbps)

2440MHz_TX

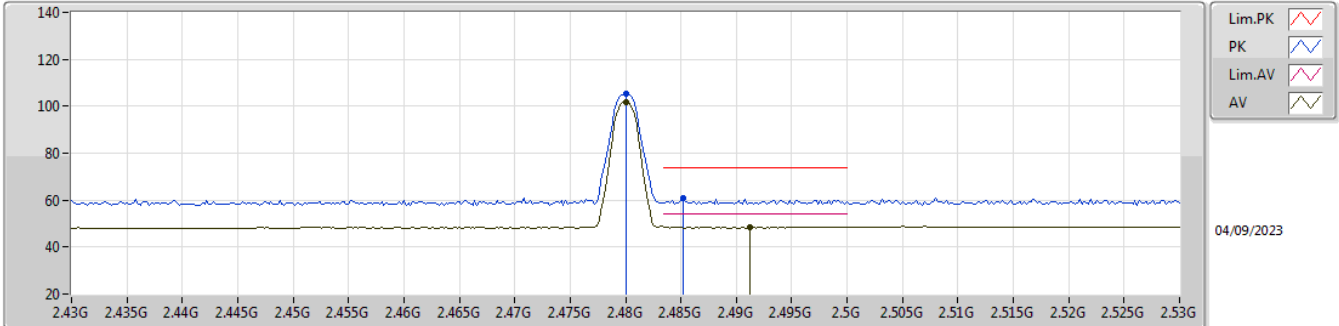


EUT_Z_1TX
Setting 9
02-L-G-4

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	4.88024G	49.51	74.00	-24.49	41.35	3	Horizontal	125	2.46	-	33.16	5.64	30.64			
AV	4.87996G	39.34	54.00	-14.66	31.18	3	Horizontal	125	2.46	-	33.16	5.64	30.64			
PK	7.32096G	52.07	74.00	-21.93	40.71	3	Horizontal	161	2.14	-	36.64	6.84	32.12			
AV	7.31966G	40.65	54.00	-13.35	29.29	3	Horizontal	161	2.14	-	36.64	6.84	32.12			

2.4-2.4835GHz_BT-EDR(3Mbps)

2480MHz_TX

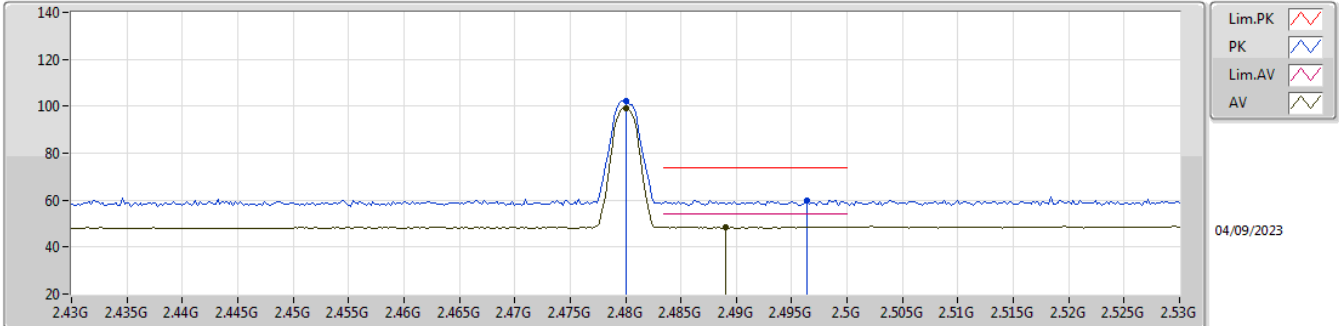


EUT_Z_1TX
Setting 9
02-L-G-4

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	105.26	Inf	-Inf	73.52	3	Vertical	52	2.68	-	28.50	3.24	-				
AV	2.48G	101.95	Inf	-Inf	70.21	3	Vertical	52	2.68	-	28.50	3.24	-				
PK	2.4852G	60.66	74.00	-13.34	28.92	3	Vertical	52	2.68	-	28.50	3.24	-				
AV	2.4912G	48.67	54.00	-5.33	16.91	3	Vertical	52	2.68	-	28.51	3.25	-				

2.4-2.4835GHz_BT-EDR(3Mbps)

2480MHz_TX

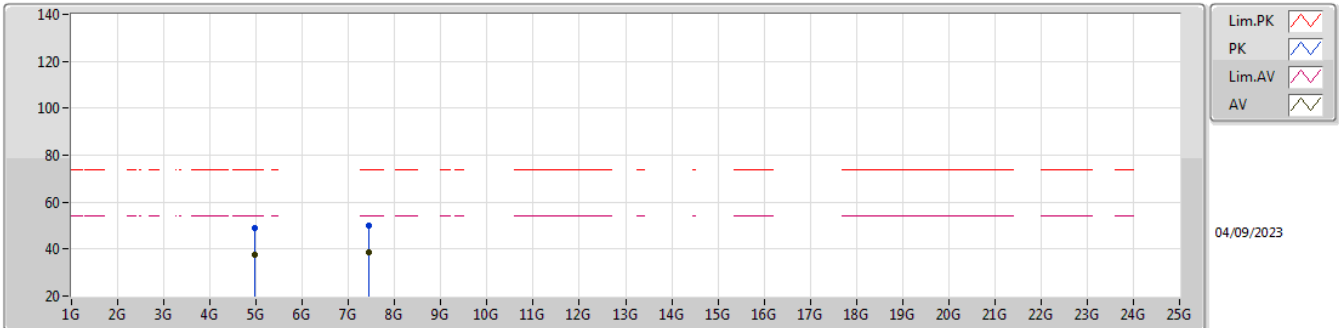


EUT_Z1TX
Setting 9
02-L-G-4

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	102.43	Inf	-Inf	70.69	3	Horizontal	89	1.09	-	28.50	3.24	-				
AV	2.48G	99.24	Inf	-Inf	67.50	3	Horizontal	89	1.09	-	28.50	3.24	-				
PK	2.4964G	59.92	74.00	-14.08	28.11	3	Horizontal	89	1.09	-	28.56	3.25	-				
AV	2.489G	48.65	54.00	-5.35	16.91	3	Horizontal	89	1.09	-	28.50	3.24	-				

2.4-2.4835GHz_BT-EDR(3Mbps)

2480MHz_TX

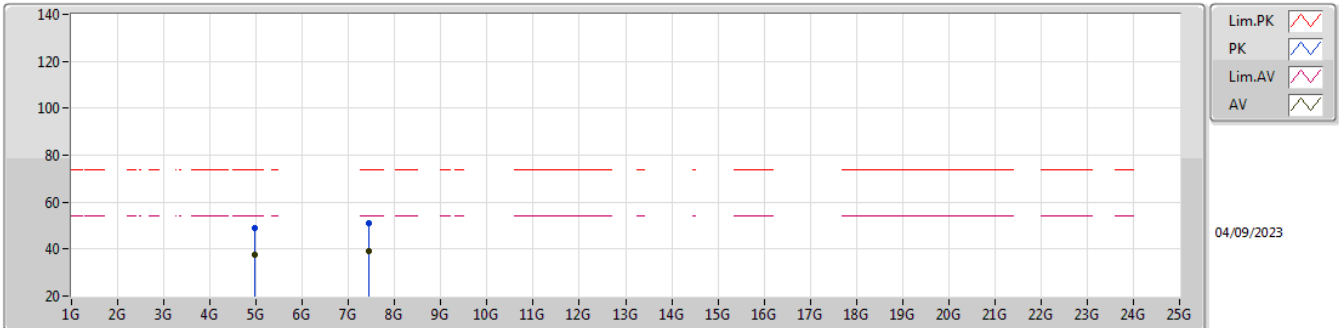


EUT_Z_1TX
Setting 9
02-L-G-4

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	4.96062G	49.00	74.00	-25.00	40.59	3	Vertical	98	1.08	-	33.32	5.68	30.59			
AV	4.95974G	37.63	54.00	-16.37	29.22	3	Vertical	98	1.08	-	33.32	5.68	30.59			
PK	7.4366G	49.99	74.00	-24.01	38.63	3	Vertical	328	2.38	-	36.70	6.84	32.18			
AV	7.43948G	38.81	54.00	-15.19	27.46	3	Vertical	328	2.38	-	36.70	6.84	32.19			

2.4-2.4835GHz_BT-EDR(3Mbps)

2480MHz_TX



EUT_Z_1TX
Setting 9
02-L-G-4

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	4.96046G	48.91	74.00	-25.09	40.50	3	Horizontal	99	1.09	-	33.32	5.68	30.59			
AV	4.95986G	37.37	54.00	-16.63	28.96	3	Horizontal	99	1.09	-	33.32	5.68	30.59			
PK	7.4432G	50.90	74.00	-23.10	39.55	3	Horizontal	231	1.45	-	36.70	6.84	32.19			
AV	7.44988G	38.98	54.00	-15.02	27.62	3	Horizontal	231	1.45	-	36.70	6.85	32.19			