RADIO TEST REPORT

FCC ID	:	TLZ-XM9098
Equipment	:	IEEE 802.112X2 WiFi 6 SU and MU-MIMO DBC Wireless LAN + Bluetooth 5.1 Combo Module
Brand Name	:	AzureWave
Model Name	:	AW-XM458, AW-XM369, AW-XM458MA-XXX, AW-XM369MA-XXX
Applicant	:	AzureWave Technologies, Inc. 8F., No.94, Baozhong Rd. , Xindian Dist., New Taipei City , Taiwan 231
Manufacturer	:	AzureWave Technologies (Shanghai) Inc. No. 1355, Jiaxin Road, Malu Twon, Jiading District Shanghai, P.R. China
Standard	:	47 CFR FCC Part 15.247

The product was received on Apr. 13, 2021, and testing was started from May 28, 2021 and completed on Sep. 24, 2021. 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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Appendix H. Test Photos

Photographs of EUT v01

History of this test report

Report No.	Version	Description	Issued Date
FR132339AC	01	Initial issue of report	Sep. 29, 2021

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
2.8	15.207	AC Power-line Conducted Emissions	PASS	-
2.9	15.247(a)	20dB Bandwidth	PASS	-
2.9	15.247(a)	Carrier Frequency Separation	PASS	-
2.10	15.247(b)	Maximum Conducted Output Power	PASS	-
2.11	15.247(a)	Number of Hopping Frequencies and Hopping Band edge	PASS	-
2.12	15.247(a)	Time of Occupancy (Dwell Time)	PASS	-
2.13	15.247(d)	Emissions in Non-restricted Frequency Bands	PASS	-
2.14	15.247(d)	Emissions in Restricted Frequency Bands	PASS	-

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and Explanations:
The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Sam Chen
Report Producer: Sandy Chuang

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
2400-2483.5	BT-BR	1	1
2400-2483.5	BT-EDR	1	1

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

1.1.2 Antenna Information

Ant.	Port		Brand	Model Name	Antenna Type	Connector	Gain (dBi)
	2.4GHz	5GHz					
1	1	1	MAG. LAYERS	MSA-4008-25GC1-A2	PIFA	I-PEX	Note 1
2	2	2	MAG. LAYERS	MSA-4008-25GC1-A2	PIFA	I-PEX	
3	1	1	MAG. LAYERS	MSA-4008-25GC1-A2	PIFA	I-PEX	

Note1:

Ant.	Port		Antenna Gain (dBi)		
	2.4GHz	5GHz	WLAN 2.4GHz	WLAN 5GHz	Bluetooth
1	1	1	2.98	5.16	-
2	2	2	2.98	5.16	-
3	1	1	-	-	2.98

Note2: The above information was declared by manufacturer.

Note3:

<WLAN 2.4GHz Function>

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

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

Port 1 and Port 2 could transmit/receive simultaneously.

<WLAN 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.

<Bluetooth Function> (1TX/1RX)

Only Port 1 can be used as transmitting/receiving.

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
BT-BR(1Mbps)	0.743	1.29	2.894m	1k
BT-EDR(3Mbps)	0.828	0.82	2.891m	1k
BT-EDR(2Mbps)	0.742	1.3	2.891m	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	DutApiMimoApApp (Version : 2.0.0.80)

1.1.5 Table for Multiple Listing

Model No.	GPIO	Description
AW-XM458	Without GPIO	All the model names are identical, the difference model names served as marketing strategy.
AW-XM369		
AW-XM458MA-XXX	With GPIO	All the model names are identical, the difference model names served as marketing strategy.
AW-XM369MA-XXX		

Note 1: From the above models, model: AW-XM458MA-XXX 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

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	ADD: No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County 302010, Taiwan (R.O.C.)
(TAF: 3787)	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	TH02-CB	Paul Chen	23.4-25.7 / 64-66	Jun. 02, 2021~ Aug. 19, 2021
Radiated (Below 1GHz)	10CH01-CB	Peter Wu	24~25 / 58~59	Sep. 24, 2021
Radiated (Above 1GHz)	03CH03-CB	JN Chang	24.6-25.7 / 55-58	May 28, 2021~ Jun. 03, 2021
AC Conduction	CO01-CB	Wei Li	22~24 / 57~59	Sep. 24, 2021

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)	2.0 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	1.6 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	4.2 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.7 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.2 dB	Confidence levels of 95%
Conducted Emission	2.5 dB	Confidence levels of 95%
Output Power Measurement	1.3 dB	Confidence levels of 95%
Power Density Measurement	2.5 dB	Confidence levels of 95%
Bandwidth Measurement	0.9%	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

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

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
Operating Mode	Normal Link
1	EUT with GPIO + WLAN 2.4GHz + WLAN 5GHz + Bluetooth + Ant.

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	Normal Link
1	EUT with GPIO in Z axis + WLAN 2.4GHz + WLAN 5GHz + Bluetooth + Ant.
2	EUT with GPIO in Y axis + WLAN 2.4GHz + WLAN 5GHz + Bluetooth + Ant.
For operating mode 2 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX
The EUT was performed at X axis, Y axis and Z axis position, and the worst case as below:	
1	EUT with GPIO in Y axis

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	WLAN 2.4GHz + WLAN 5GHz + Bluetooth
Refer to Sporton Test Report No.: FA132339 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 Mode:

During the test, the EUT operation to normal function.

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	Fixture	Azurewave	2460 I2	N/A
C	AP Router	ASUS	RP-N53	MSQ-RPN53
D	Earphone	SHYARO CHI	MIC-04	N/A
E	Mouse	HP	FM100	N/A
F	AP NB	DELL	E6430	N/A

For Radiated (below 1GHz):

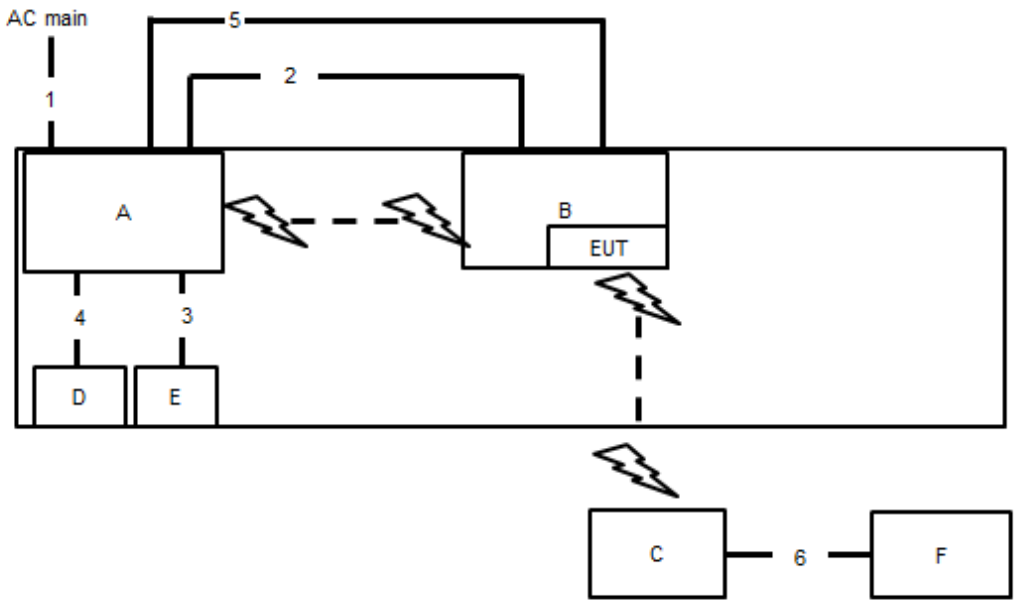
Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	NB	Dell	V14-5490-R1528STW	N/A
B	Fixture	Azurewave	2460 I2	N/A
C	AP Router	ASUS	RP-N53	MSQ-RPN53
D	Earphone	SHYARO CHI	MIC-04	N/A
E	Mouse	HP	FM100	N/A
F	AP NB	DELL	E6430	N/A

For Radiated (above 1GHz) and RF Conducted:

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	NB	DELL	E4300	N/A
B	NB	DELL	E4300	N/A
C	Fixture	Azurewave	CB162NF	N/A
D	Fixture	Azurewave	2458SM I2	N/A

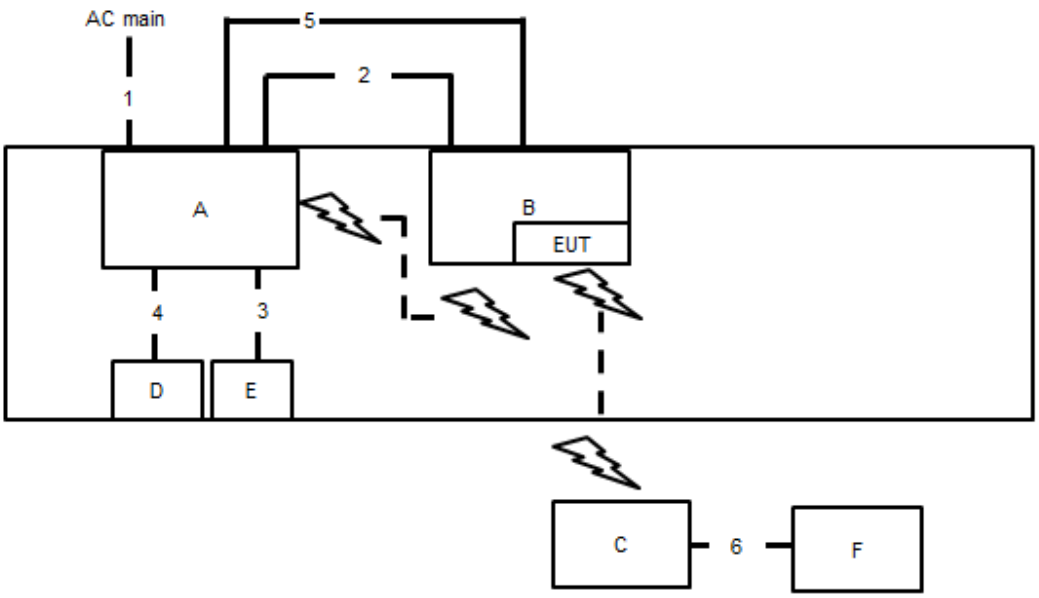
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



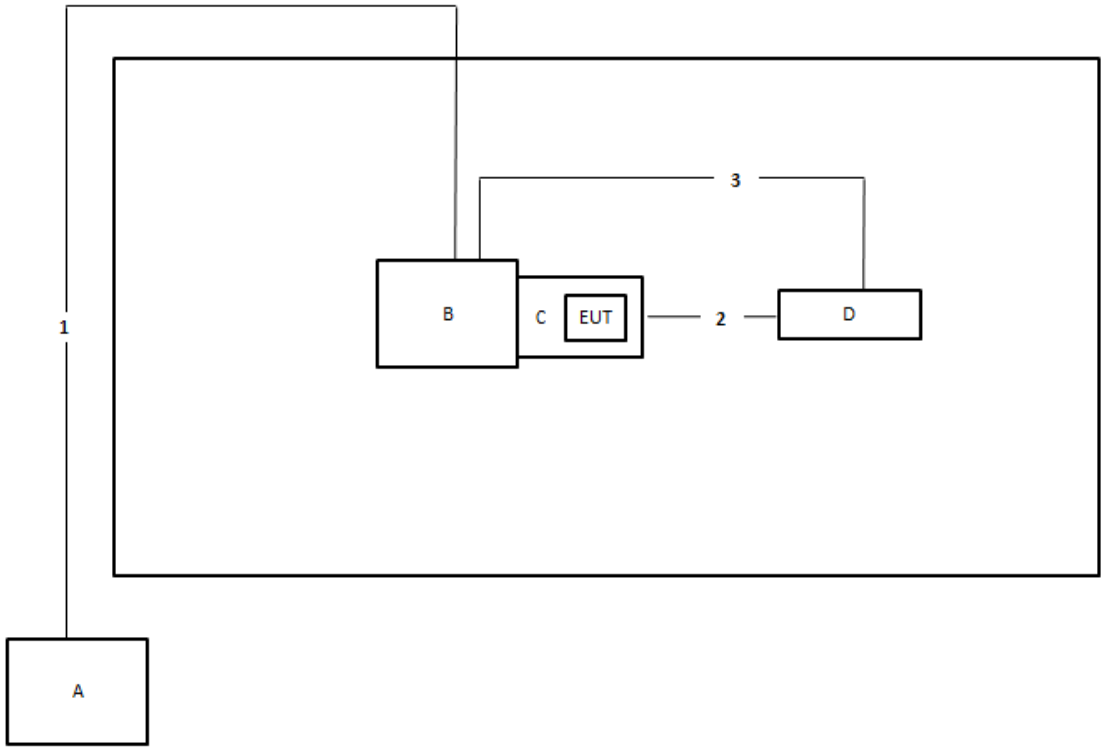
Item	Connection	Shielded	Length
1	Power cable	No	2.6m
2	USB cable	Yes	1m
3	USB cable	Yes	1.5m
4	Audio cable	No	1.5m
5	USB cable	Yes	0.5m
6	RJ-45 cable	No	1.5m

Test Setup Diagram - Radiated Test < 1GHz



Item	Connection	Shielded	Length
1	Power cable	No	2.6m
2	USB cable	Yes	1m
3	USB cable	Yes	1.5m
4	Audio cable	No	1.5m
5	USB cable	Yes	0.5m
6	RJ-45 cable	No	1.5m

Test Setup Diagram - Radiated Test > 1GHz



Item	Connection	Shielded	Length
1	RJ-45 cable	No	10m
2	Console cable	No	0.18m
3	USB cable	No	1.2m

2.7 Transmitter Test Result

2.8 AC Power-line Conducted Emissions

2.8.1 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.		

2.8.2 Measuring Instruments

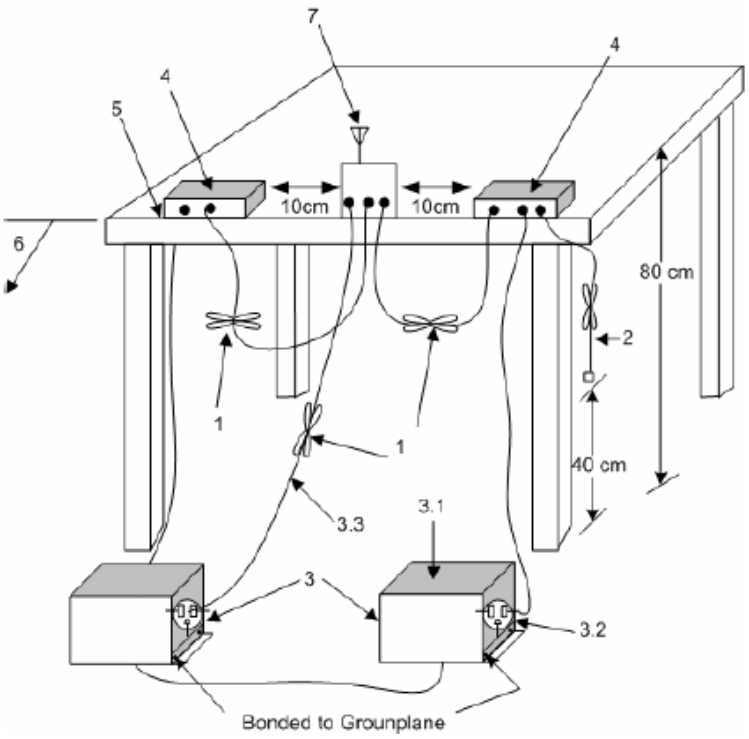
Refer a test equipment and calibration data table in this test report.

2.8.3 Test Procedures

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

2.8.4 Test Setup

AC Power-line Conducted Emissions



1—Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 cm to 40 cm long.
2—The I/O cables that are not connected to an accessory shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
3—EUT connected to one LISN. Unused LISN measuring port connectors shall be terminated in 50 Ω loads. LISN may be placed on top of, or immediately beneath, reference ground plane.
3.1—All other equipment powered from additional LISN(s).
3.2—A multiple-outlet strip may be used for multiple power cords of non-EUT equipment.
3.3—LISN at least 80 cm from nearest part of EUT chassis.
4—Non-EUT components of EUT system being tested.
5—Rear of EUT, including peripherals, shall all be aligned and flush with edge of tabletop.
6—Edge of tabletop shall be 40 cm removed from a vertical conducting plane that is bonded to the ground plane.
7—Antenna can be integral or detachable. If detachable, then the antenna shall be attached for this test.

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

2.8.5 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

2.9 20dB Bandwidth and Carrier Frequency Separation

2.9.1 20dB Bandwidth and Carrier Frequency Separation Limit

20dB Bandwidth and Carrier Frequency Separation Limit for Frequency Hopping Systems	
▪ 902-928 MHz Band:	
	▪ N ≥50 and ChS ≥ MAX (20 dB bandwidth, 25 kHz); 20 dB bandwidth≤ 250 kHz.
	▪ 50 >N≥25 and ChS ≥ MAX (20 dB bandwidth, 25 kHz); 20 dB bandwidth>250 kHz.
▪ 2400-2483.5 MHz Band:	
	▪ N ≥75 and ChS ≥ MAX (20 dB bandwidth, 25 kHz).
	▪ 75>N ≥ 15 and ChS ≥ MAX (20 dB bandwidth 2/3,25 kHz).
▪ 5725-5850 MHz Band:	
	▪ N ≥ 75 and ChS ≥ MAX (20 dB bandwidth, 25 kHz); 20 dB bandwidth≤ 1 MHz.
N:Number of Hopping Frequencies; **ChS**: Hopping Channel Separation	

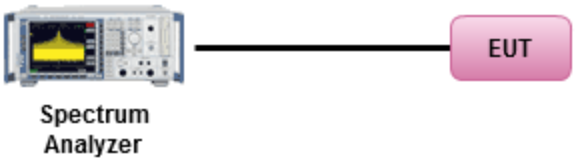
2.9.2 Measuring Instruments

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

2.9.3 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.

2.9.4 Test Setup

20dB Bandwidth and Carrier Frequency Separation


2.9.5 Test Result of 20dB Bandwidth

Refer as Appendix B

2.9.6 Test Result of Carrier Frequency Separation

Refer as Appendix B

2.10 Maximum Conducted Output Power

2.10.1 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	

2.10.2 Measuring Instruments

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

2.10.3 Test Procedures

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

2.10.4 Test Setup

Maximum Conducted Output Power (Peak Power Meter)

2.10.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

2.11 Number of Hopping Frequencies and Hopping Bandedge

2.11.1 Number of Hopping Frequencies Limit

Number of Hopping Frequencies Limit	
▪ 902-928 MHz Band:	
	▪ N ≥50 and ChS ≥ MAX (20 dB bandwidth, 25 kHz); 20 dB bandwidth≤ 250 kHz.
	▪ 50 >N≥ 25 and ChS ≥ MAX (20 dB bandwidth, 25 kHz); 20 dB bandwidth>250 kHz.
▪ 2400-2483.5 MHz Band:	
	▪ N ≥ 75 and ChS ≥ MAX (20 dB bandwidth, 25 kHz).
	▪ 75 >N ≥ 15 and ChS ≥ MAX (20 dB bandwidth 2/3,25 kHz).
▪ 5725-5850 MHz Band:	
	▪ N ≥ 75 and ChS ≥ MAX (20 dB bandwidth, 25 kHz); 20 dB bandwidth≤ 1 MHz.
N:Number of Hopping Frequencies; **ChS** : Hopping Channel Separation	

2.11.2 Hopping Bandedge Limit

Refer clause 2.13.1 and clause 2.14.1

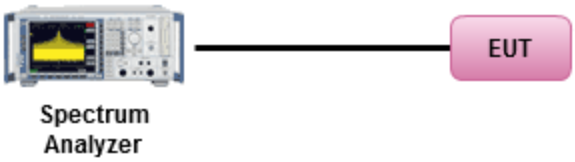
2.11.3 Measuring Instruments

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

2.11.4 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.

2.11.5 Test Setup

Number of Hopping Frequencies and Hopping Frequencies Bandedge


2.11.6 Test Result of Number of Hopping Frequencies

Refer as Appendix D

2.11.7 Test Result of Number of Hopping Frequencies Bandedge

Refer as Appendix D

2.12 Time of Occupancy (Dwell Time)

2.12.1 Time of Occupancy (Dwell Time) Limit

20dB Bandwidth and Carrier Frequency Separation Limit for Frequency Hopping Systems	
▪ 902-928 MHz Band:	
	▪ N ≥50; 0.4s in 20s period
	▪ 50 >N≥ 25; 0.4s in 10s period
▪ 2400-2483.5 MHz Band:	
	▪ N ≥ 75; 0.4s in N x 0.4 period
	▪ 75 >N ≥ 15; 0.4s in N x 0.4 period
▪ 5725-5850 MHz Band:	
	▪ N ≥ 75; 0.4s in 30s period
N:Number of Hopping Frequencies	

2.12.2 Measuring Instruments

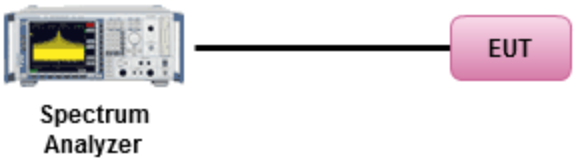
Refer a test equipment and calibration data table in this test report.

2.12.3 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.

2.12.4 Test Setup

Time of Occupancy (Dwell Time)



2.12.5 Test Result of Time of Occupancy (Dwell Time)

Refer as Appendix E

2.13 Emissions in Non-restricted Frequency Bands

2.13.1 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.	

2.13.2 Measuring Instruments

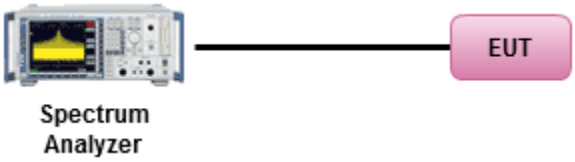
Refer a test equipment and calibration data table in this test report.

2.13.3 Test Procedures

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

2.13.4 Test Setup

Emissions in Non-restricted Frequency Bands



2.13.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix F

2.14 Emissions in Restricted Frequency Bands

2.14.1 Emissions in Restricted Frequency Bands Limit

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

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

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

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

2.14.2 Measuring Instruments

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

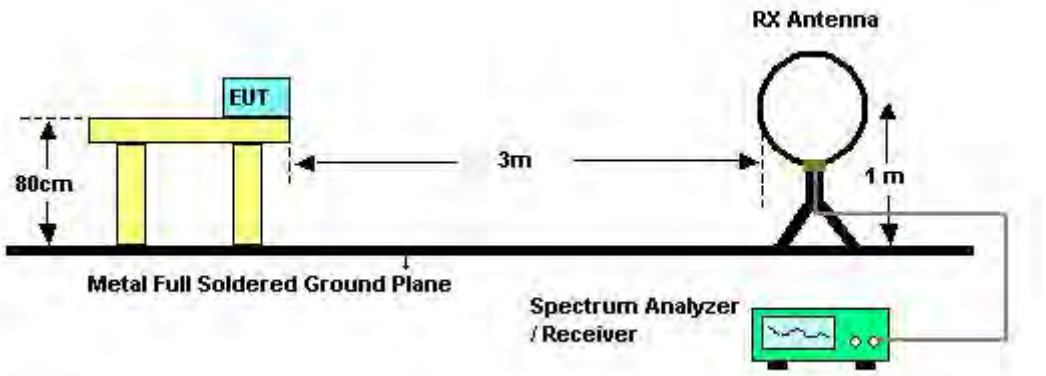
2.14.3 Test Procedures

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.

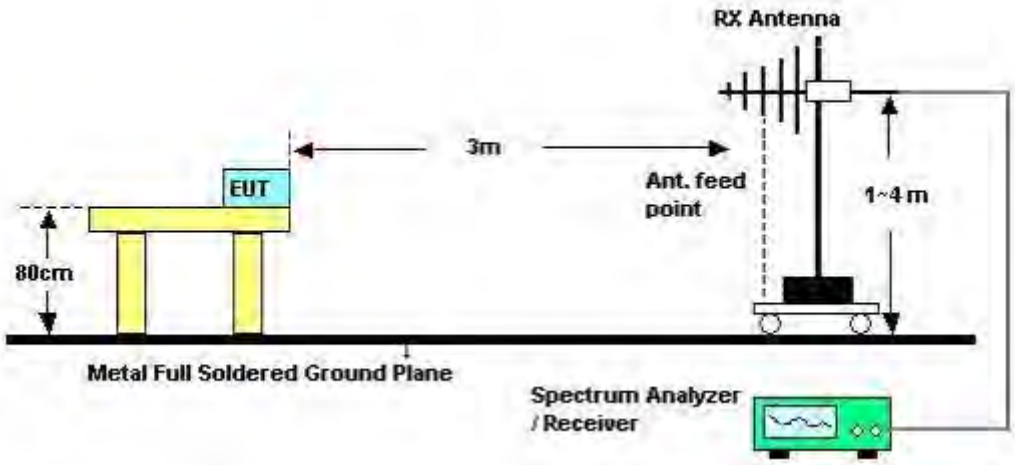
2.14.4 Test Setup

Emissions in Restricted Frequency Bands

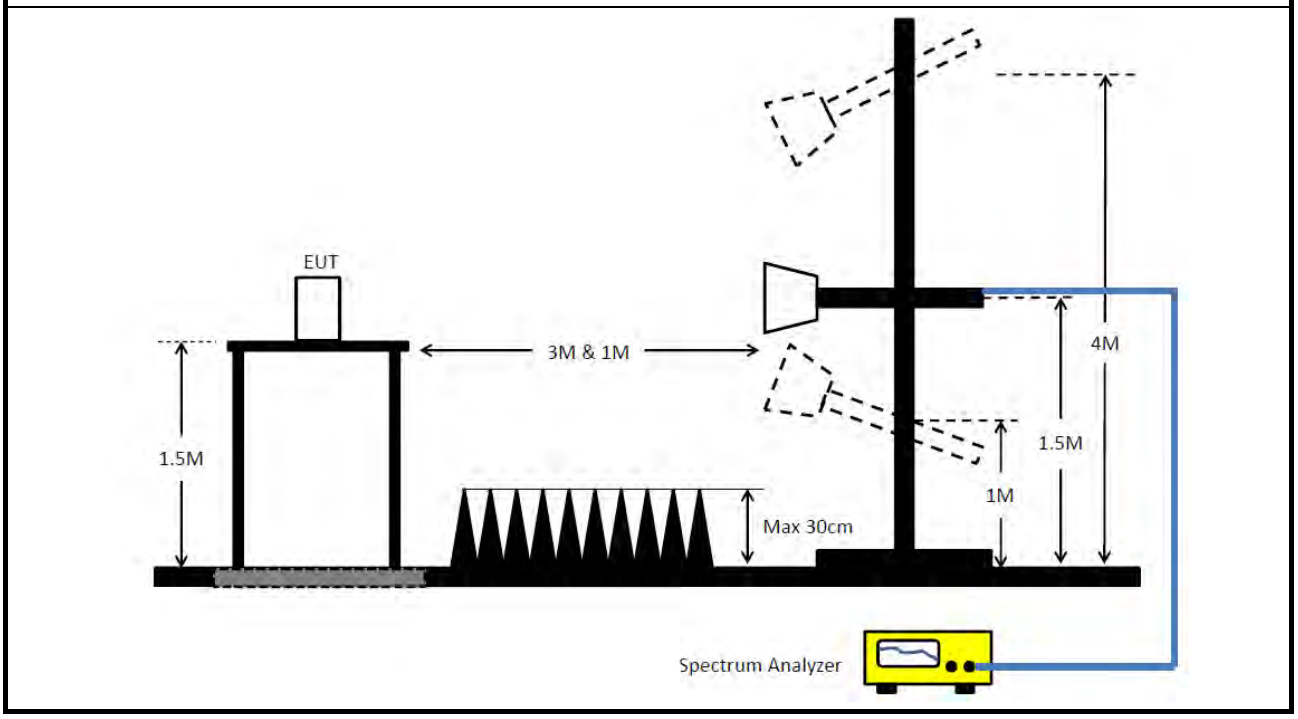
9kHz ~30MHz



30MHz~1GHz



Above 1GHz



2.14.5 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.

2.14.6 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.

2.14.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix G

3 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	Mar. 03, 2021	Mar. 02, 2022	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Jan. 06, 2021	Jan. 05, 2022	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Mar. 07, 2021	Mar. 06, 2022	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	May 19, 2021	May 18, 2022	Conduction (CO01-CB)
Pulse Limiter	Rohde&Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Jan. 30, 2021	Jan. 29, 2022	Conduction (CO01-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Apr. 14, 2021	Apr. 13, 2022	Radiation (10CH01-CB)
10m Semi Anechoic Chamber NSA	TDK	SAC-10M	10CH01-CB	30MHz~1GHz 10m,3m	Jan. 28, 2021	Jan. 27, 2022	Radiation (10CH01-CB)
Pre-Amplifier	Agilent	8447D	2944A10783	9kHz ~ 1.3GHz	Mar. 11, 2021	Mar. 10, 2022	Radiation (10CH01-CB)
Pre-Amplifier	Agilent	8447D	2944A10784	9kHz ~ 1.3GHz	Mar. 11, 2021	Mar. 10, 2022	Radiation (10CH01-CB)
Low Cable	Woken	SUCOFLEX 104	low cable-01	25MHz ~ 1GHz	Oct. 20, 2020	Oct. 19, 2021	Radiation (10CH01-CB)
High Cable	Woken	SUCOFLEX 104	low cable-02	25MHz ~ 1GHz	Oct. 20, 2020	Oct. 19, 2021	Radiation (10CH01-CB)
Bilog Antenna with 6dB Attenuator	Chase & EMCI	CBL6111A &N-6-06	1543 &AT-N0609	30MHz ~ 1GHz	Jul. 01, 2021	Jun. 30, 2022	Radiation (10CH01-CB)
EMI Receiver	Agilent	N9038A	MY52260140	9kHz ~ 8.4GHz	May 05, 2021	May 04, 2022	Radiation (10CH01-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (10CH01-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH01-CB	1GHz ~18GHz 3m	May 07, 2021	May 06, 2022	Radiation (03CH01-CB)
Horn Antenna	ETS-LINDGREN	3115	00075790	750MHz ~ 18GHz	Nov. 06, 2020	Nov. 05, 2021	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 21, 2020	Jul. 20, 2021	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 07, 2021	Jan. 06, 2022	Radiation (03CH01-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 08, 2020	Jul. 07, 2021	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	May 03, 2021	May 02, 2022	Radiation (03CH01-CB)

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-16	1 GHz ~ 18 GHz	Oct. 05, 2020	Oct. 04, 2021	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-16+17	1 GHz ~ 18 GHz	Oct. 05, 2020	Oct. 04, 2021	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 16, 2020	Jul. 15, 2021	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 16, 2020	Jul. 15, 2021	Radiation (03CH01-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSV40	101028	9kHz~40GHz	Dec. 31, 2020	Dec. 30, 2021	Conducted (TH02-CB)
Power Sensor	Anritsu	MA2411B	1126203	300MHz~40GHz	Sep. 17, 2020	Sep. 16, 2021	Conducted (TH02-CB)
Power Meter	Anritsu	ML2495A	1210004	300MHz~40GHz	Sep. 17, 2020	Sep. 16, 2021	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-01	1 GHz – 18 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-02	1 GHz – 18 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-03	1 GHz – 18 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-04	1 GHz – 18 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-05	1 GHz – 18 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH02-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH02-CB)

Note: Calibration Interval of instruments listed above is one year.

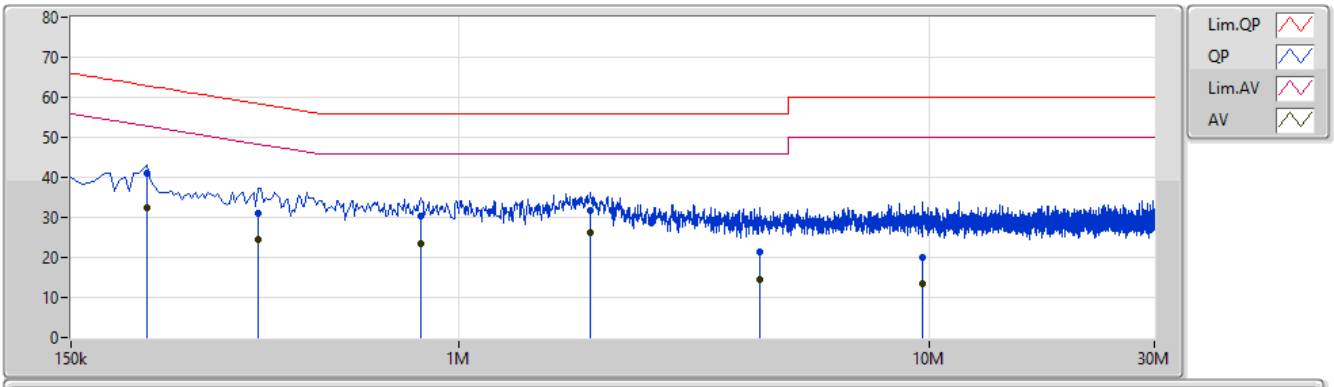
N.C.R. means Non-Calibration required.

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	429k	34.14	47.28	-13.14	Neutral

Mode 1

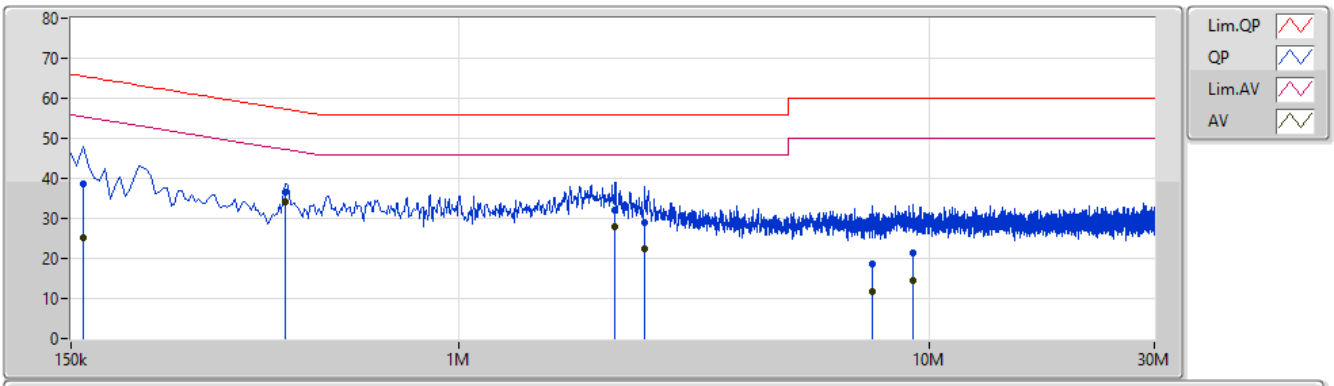
24/09/2021



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	217.5k	40.98	62.92	-21.94	9.89	Line	-	31.09	0.04	0.04	9.81
AV	217.5k	32.51	52.92	-20.41	9.89	Line	-	22.62	0.04	0.04	9.81
QP	375k	30.97	58.39	-27.42	9.90	Line	-	21.07	0.04	0.04	9.82
AV	375k	24.56	48.39	-23.83	9.90	Line	-	14.66	0.04	0.04	9.82
QP	829.5k	30.19	56.00	-25.81	9.93	Line	-	20.26	0.06	0.04	9.83
AV	829.5k	23.58	46.00	-22.42	9.93	Line	-	13.65	0.06	0.04	9.83
QP	1.905M	31.71	56.00	-24.29	9.98	Line	-	21.73	0.09	0.07	9.82
AV	1.905M	26.05	46.00	-19.95	9.98	Line	"Worst"	16.07	0.09	0.07	9.82
QP	4.353M	21.33	56.00	-34.67	10.13	Line	-	11.20	0.14	0.12	9.87
AV	4.353M	14.38	46.00	-31.62	10.13	Line	-	4.25	0.14	0.12	9.87
QP	9.636M	19.92	60.00	-40.08	10.28	Line	-	9.64	0.22	0.16	9.90
AV	9.636M	13.31	50.00	-36.69	10.28	Line	-	3.03	0.22	0.16	9.90

Mode 1

24/09/2021



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	159k	38.57	65.52	-26.95	9.88	Neutral	-	28.69	0.03	0.04	9.81
AV	159k	25.06	55.52	-30.46	9.88	Neutral	-	15.18	0.03	0.04	9.81
QP	429k	36.49	57.28	-20.79	9.89	Neutral	-	26.60	0.03	0.04	9.82
AV	429k	34.14	47.28	-13.14	9.89	Neutral	"Worst"	24.25	0.03	0.04	9.82
QP	2.148M	32.21	56.00	-23.79	9.98	Neutral	-	22.23	0.07	0.08	9.83
AV	2.148M	27.85	46.00	-18.15	9.98	Neutral	-	17.87	0.07	0.08	9.83
QP	2.481M	29.06	56.00	-26.94	10.01	Neutral	-	19.05	0.08	0.09	9.84
AV	2.481M	22.43	46.00	-23.57	10.01	Neutral	-	12.42	0.08	0.09	9.84
QP	7.535M	18.72	60.00	-41.28	10.21	Neutral	-	8.51	0.17	0.15	9.89
AV	7.535M	11.79	50.00	-38.21	10.21	Neutral	-	1.58	0.17	0.15	9.89
QP	9.204M	21.25	60.00	-38.75	10.25	Neutral	-	11.00	0.19	0.16	9.90
AV	9.204M	14.40	50.00	-35.60	10.25	Neutral	-	4.15	0.19	0.16	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)	921.25k	872.064k	872KF1D	918.75k	867.066k
BT-EDR(2Mbps)	1.311M	1.182M	1M18G1D	1.309M	1.179M
BT-EDR(3Mbps)	1.265M	1.194M	1M19G1D	1.259M	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

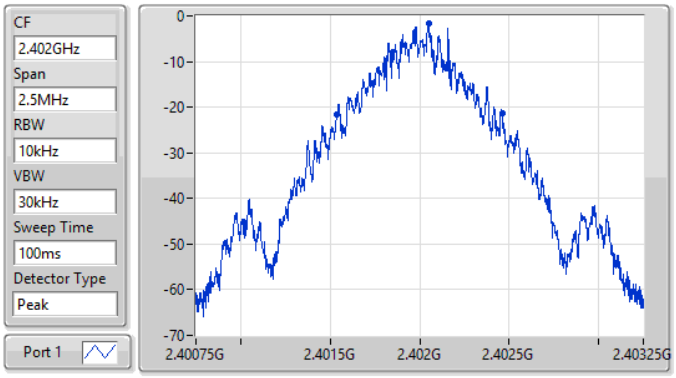
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	Inf	921.25k	867.066k
2440MHz	Pass	Inf	920k	868.316k
2480MHz	Pass	Inf	918.75k	872.064k
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	Inf	1.309M	1.182M
2440MHz	Pass	Inf	1.309M	1.181M
2480MHz	Pass	Inf	1.311M	1.179M
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	Inf	1.259M	1.192M
2440MHz	Pass	Inf	1.259M	1.194M
2480MHz	Pass	Inf	1.265M	1.189M

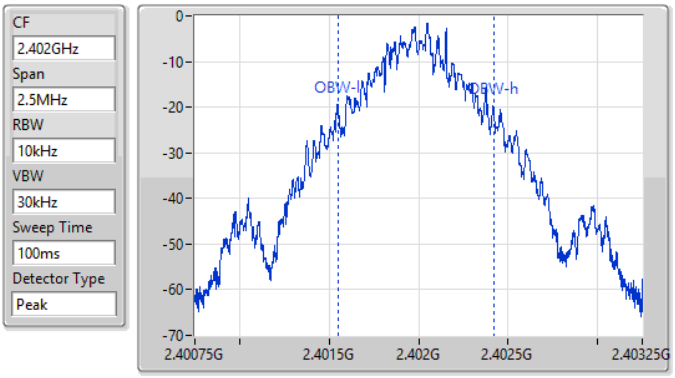
Port X-N dB = Port **X** 20dB down bandwidth; **Port X-OBW** = Port **X** 99% occupied bandwidth;

BT-BR(1Mbps) EBW

2402MHz

03/06/2021



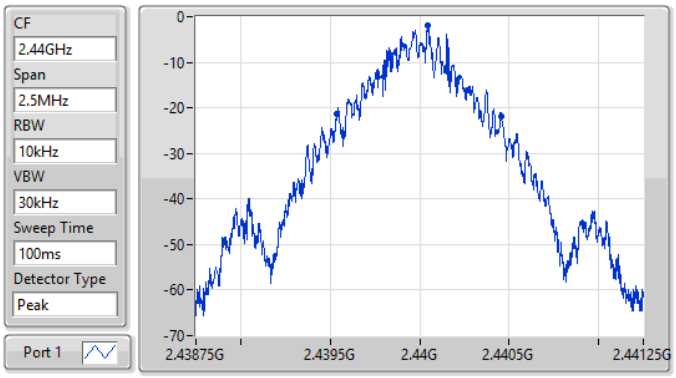


20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
921.25k	2.40154G	2.402461G	867.066k	2.401553G	2.40242G	Inf	1

BT-BR(1Mbps) EBW

2440MHz

03/06/2021

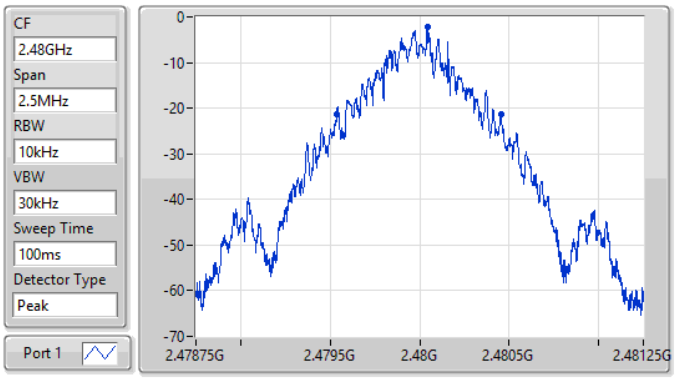


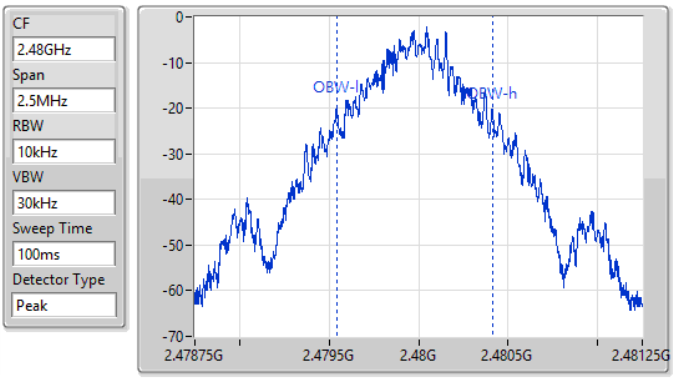
20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
920k	2.439538G	2.440458G	868.316k	2.439549G	2.440417G	Inf	1

BT-BR(1Mbps) EBW

2480MHz

03/06/2021



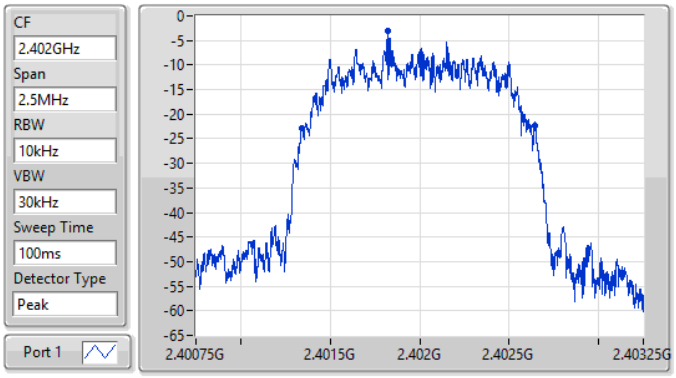


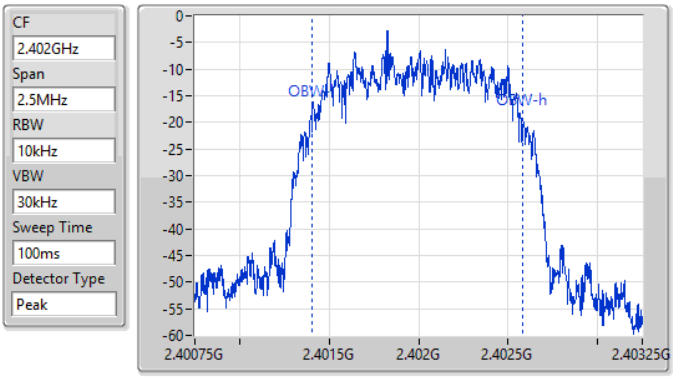
20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
918.75k	2.479536G	2.480455G	872.064k	2.479545G	2.480417G	Inf	1

BT-EDR(2Mbps) EBW

2402MHz

03/06/2021



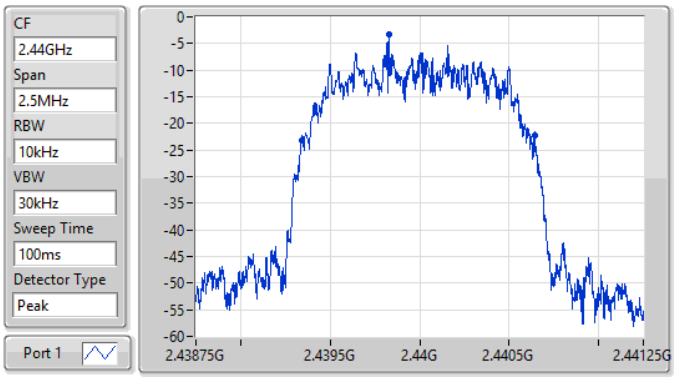


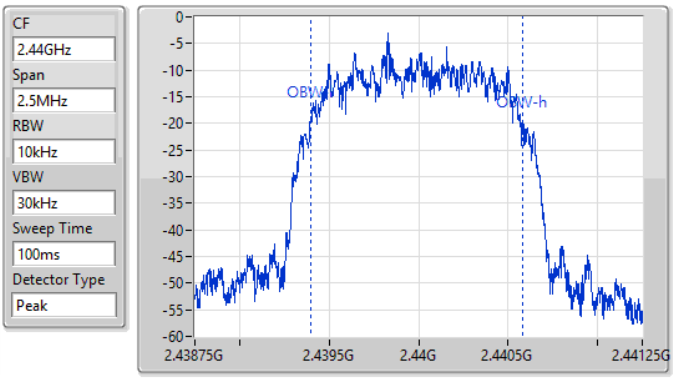
20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.309M	2.401339G	2.402648G	1.182M	2.401402G	2.402583G	Inf	1

BT-EDR(2Mbps) EBW

2440MHz

03/06/2021



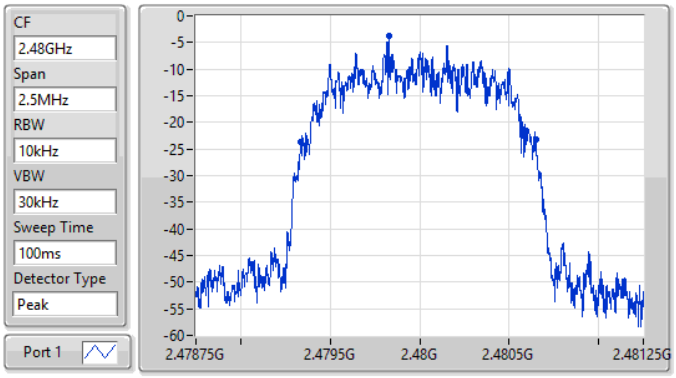


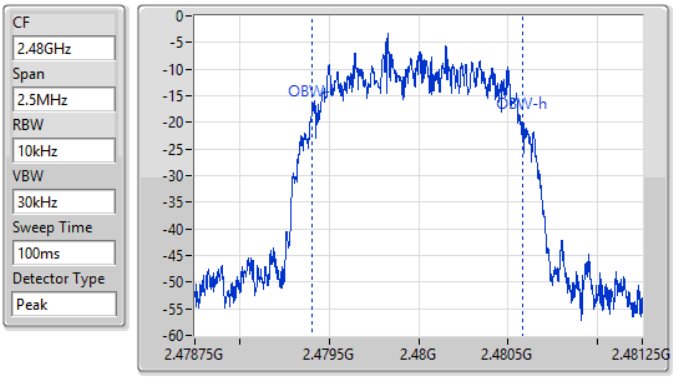
20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.309M	2.439339G	2.440648G	1.181M	2.4394G	2.440581G	Inf	1

BT-EDR(2Mbps) EBW

2480MHz

03/06/2021



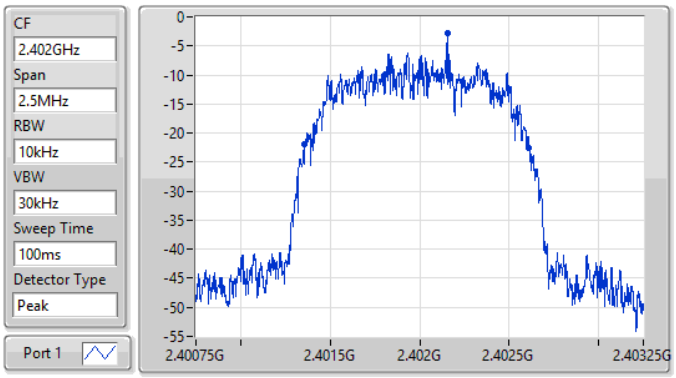


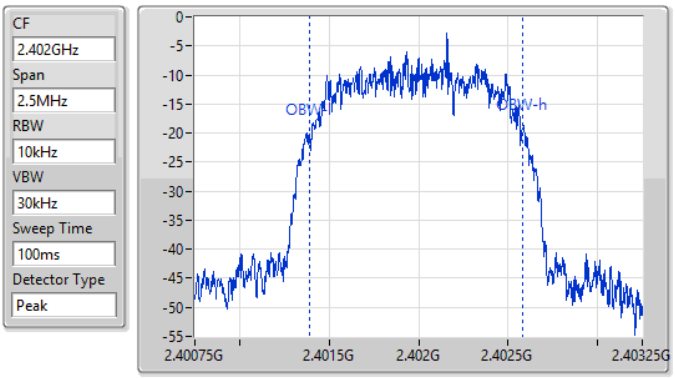
20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.311M	2.479338G	2.480649G	1.179M	2.479402G	2.480581G	Inf	1

BT-EDR(3Mbps) EBW

2402MHz

03/06/2021



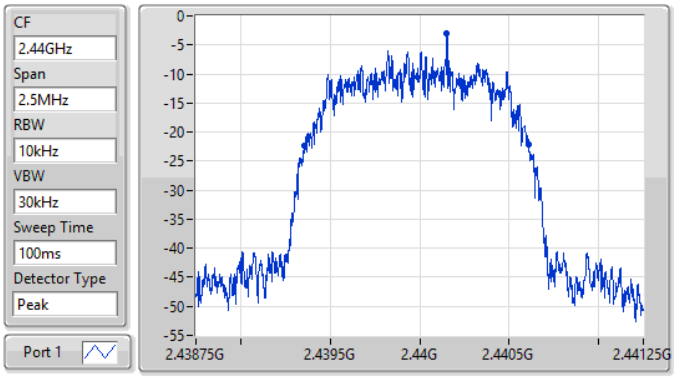


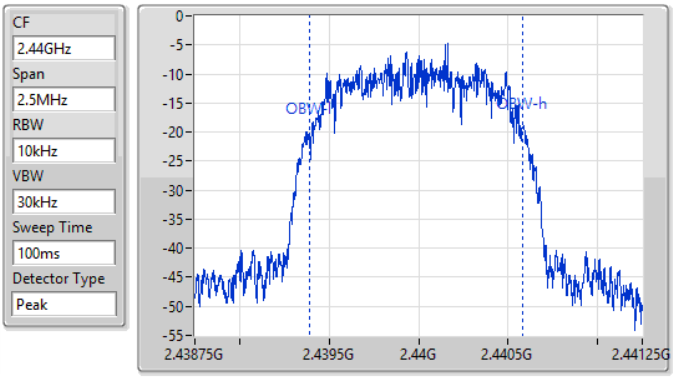
20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.259M	2.401354G	2.402613G	1.192M	2.401392G	2.402583G	Inf	1

BT-EDR(3Mbps) EBW

2440MHz

03/06/2021



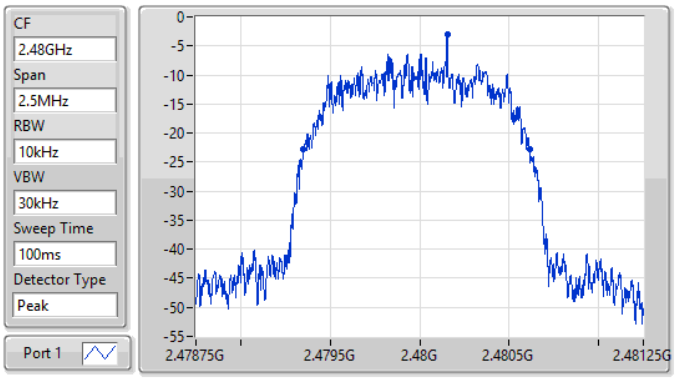


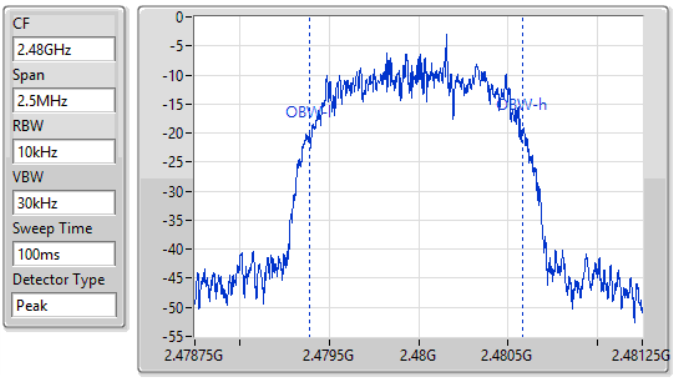
20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.259M	2.439353G	2.440611G	1.194M	2.439389G	2.440583G	Inf	1

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

2480MHz

03/06/2021





20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.265M	2.47935G	2.480615G	1.189M	2.479392G	2.480581G	Inf	1

Summary

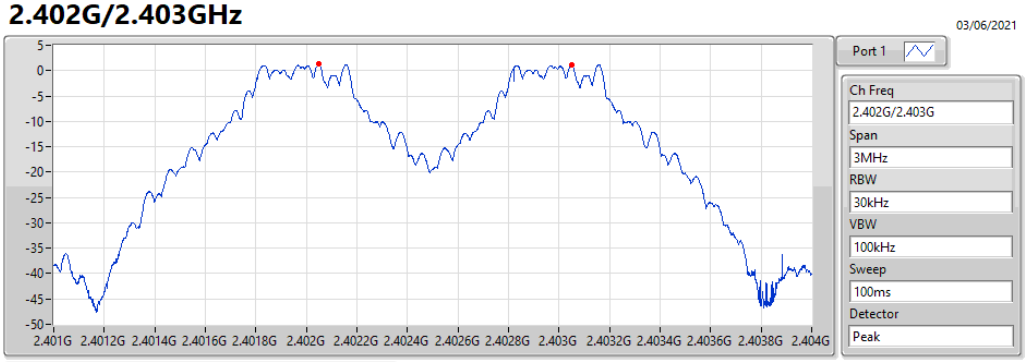
Mode	Max-Space (Hz)	Min-Space (Hz)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	1.002M	999k
BT-EDR(2Mbps)	1.002M	999k
BT-EDR(3Mbps)	1.002M	1.0005M

Result

Mode	Result	Fl (Hz)	Fh (Hz)	Ch.Space (Hz)	Limit (Hz)
BT-BR(1Mbps)	-	-	-	-	-
2402MHz	Pass	2.402047G	2.403049G	1.002M	613.5525k
2440MHz	Pass	2.440046G	2.441045G	999k	612.72k
2480MHz	Pass	2.479043G	2.480043G	1.0005M	611.8875k
BT-EDR(2Mbps)	-	-	-	-	-
2402MHz	Pass	2.401825G	2.402827G	1.002M	871.794k
2440MHz	Pass	2.439827G	2.440826G	999k	871.794k
2480MHz	Pass	2.478825G	2.479826G	1.0005M	873.126k
BT-EDR(3Mbps)	-	-	-	-	-
2402MHz	Pass	2.402155G	2.403157G	1.002M	838.494k
2440MHz	Pass	2.440155G	2.441157G	1.002M	838.494k
2480MHz	Pass	2.479155G	2.480156G	1.0005M	842.49k

BT-BR(1Mbps) **Channel Separation**

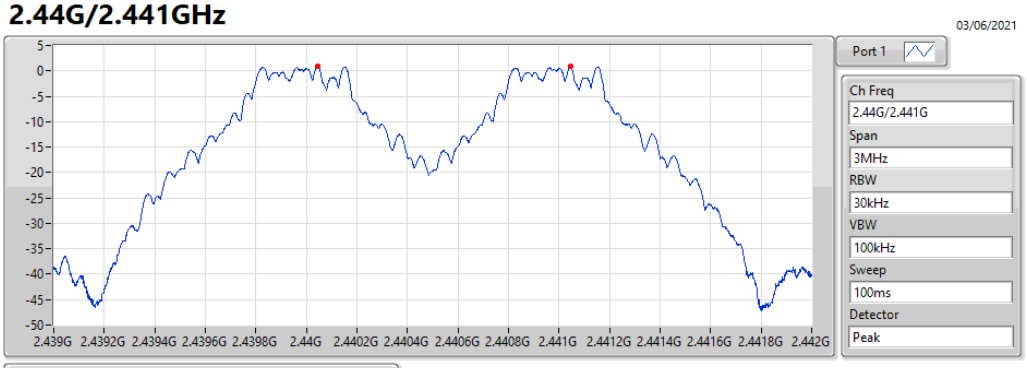
2.402G/2.403GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.402047G	2.403049G	1.002M	613.5525k

BT-BR(1Mbps) **Channel Separation**

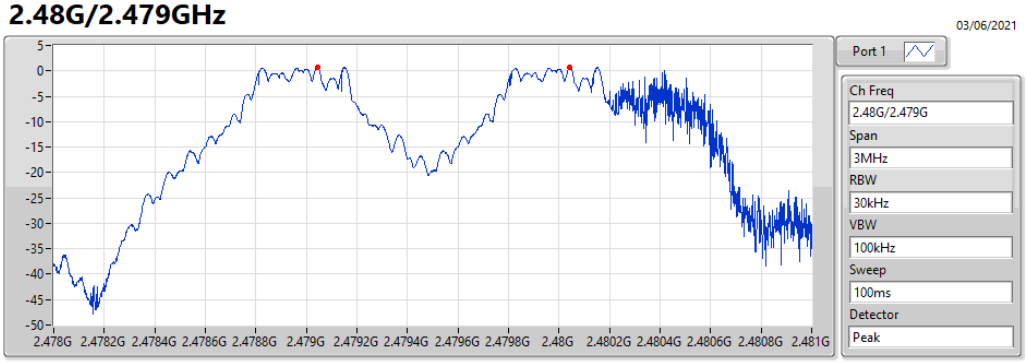
2.44G/2.441GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.440046G	2.441045G	999k	612.72k

BT-BR(1Mbps) **Channel Separation**

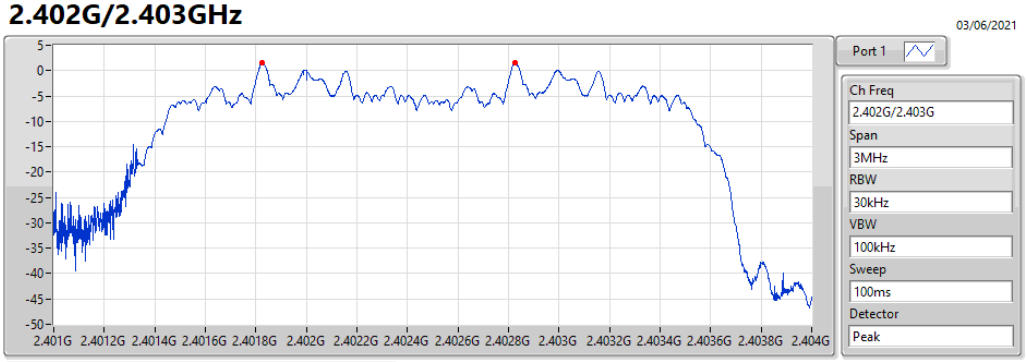
2.48G/2.479GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.479043G	2.480043G	1.0005M	611.8875k

BT-EDR(2Mbps) **Channel Separation**

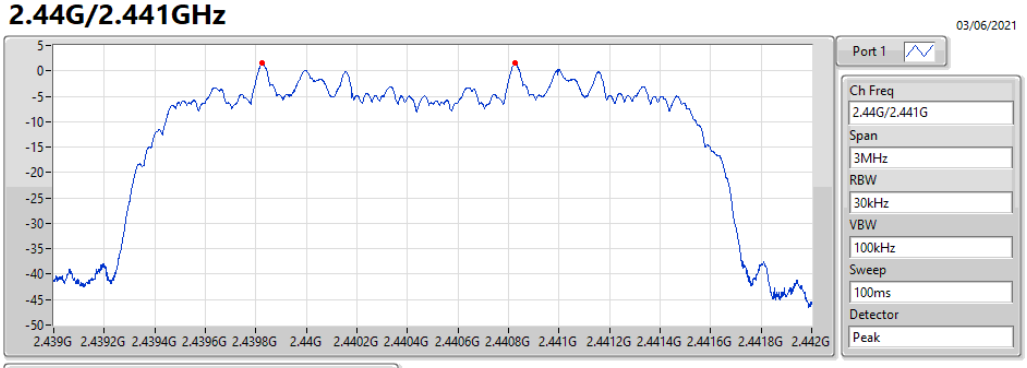
2.402G/2.403GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.401825G	2.402827G	1.002M	871.794k

BT-EDR(2Mbps) **Channel Separation**

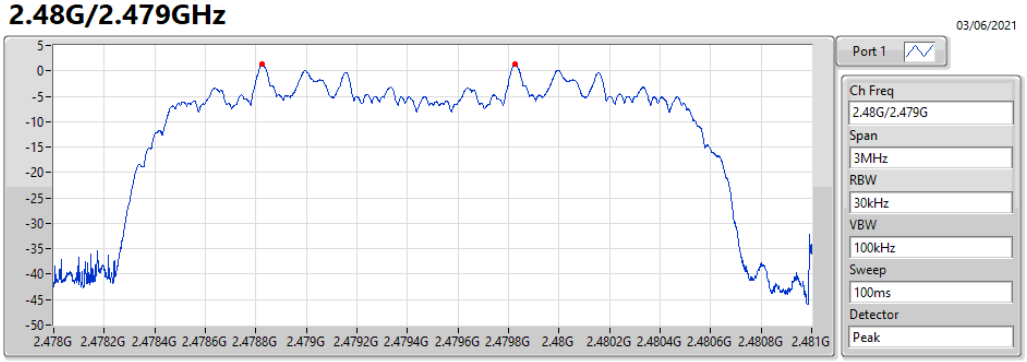
2.44G/2.441GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.439827G	2.440826G	999k	871.794k

BT-EDR(2Mbps) **Channel Separation**

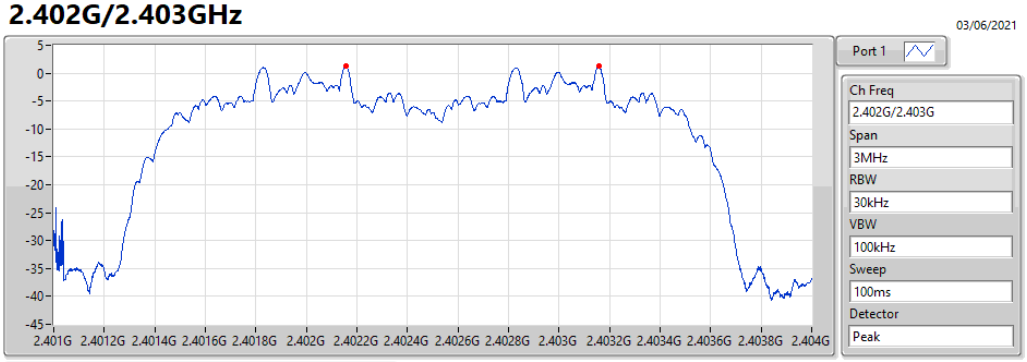
2.48G/2.479GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.478825G	2.479826G	1.0005M	873.126k

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

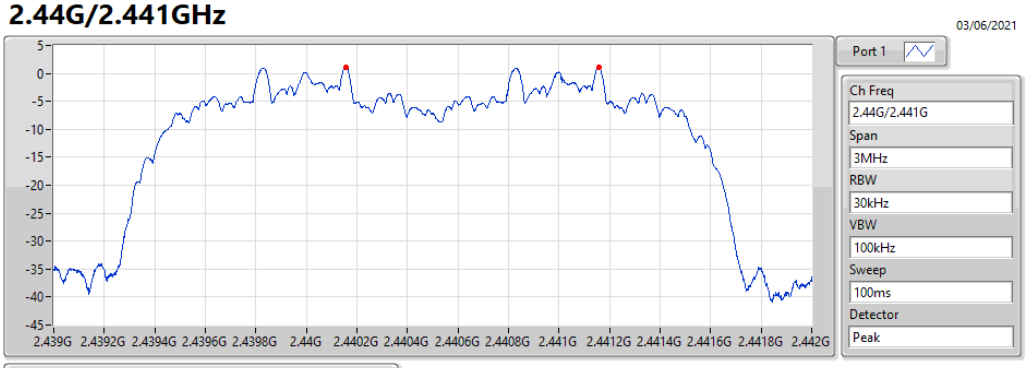
2.402G/2.403GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.402155G	2.403157G	1.002M	838.494k

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

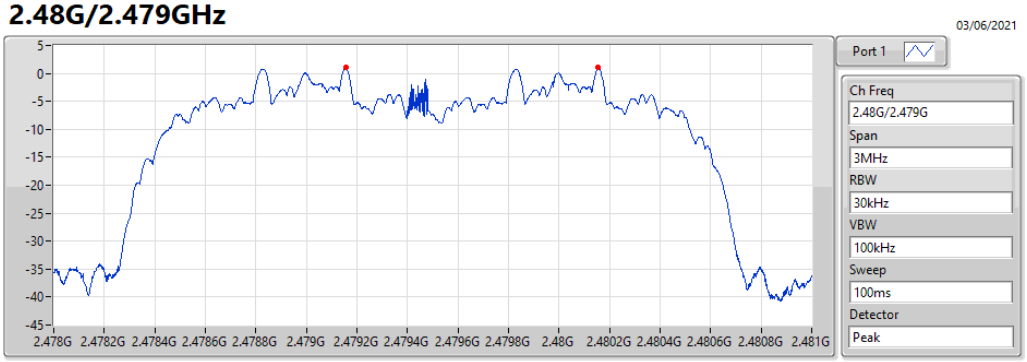
2.44G/2.441GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.440155G	2.441157G	1.002M	838.494k

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

2.48G/2.479GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.479155G	2.480156G	1.0005M	842.49k

Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	2.44	0.00175
BT-EDR(2Mbps)	0.81	0.00121
BT-EDR(3Mbps)	0.31	0.00107

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	2.98	2.44	21.00
2440MHz	Pass	2.98	2.22	21.00
2480MHz	Pass	2.98	1.95	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	2.98	0.30	21.00
2440MHz	Pass	2.98	0.09	21.00
2480MHz	Pass	2.98	0.81	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	2.98	0.31	21.00
2440MHz	Pass	2.98	0.09	21.00
2480MHz	Pass	2.98	-0.14	21.00

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

Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	2.90	0.00195
BT-EDR(2Mbps)	3.92	0.00247
BT-EDR(3Mbps)	3.44	0.00221

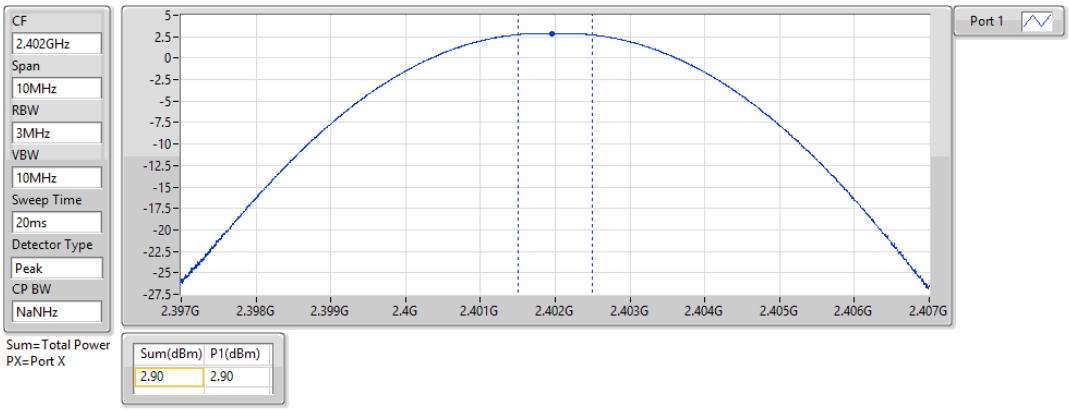
Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	2.98	2.90	21.00
2440MHz	Pass	2.98	2.83	21.00
2480MHz	Pass	2.98	2.63	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	2.98	3.13	21.00
2440MHz	Pass	2.98	3.07	21.00
2480MHz	Pass	2.98	3.92	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	2.98	3.44	21.00
2440MHz	Pass	2.98	3.36	21.00
2480MHz	Pass	2.98	3.13	21.00

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

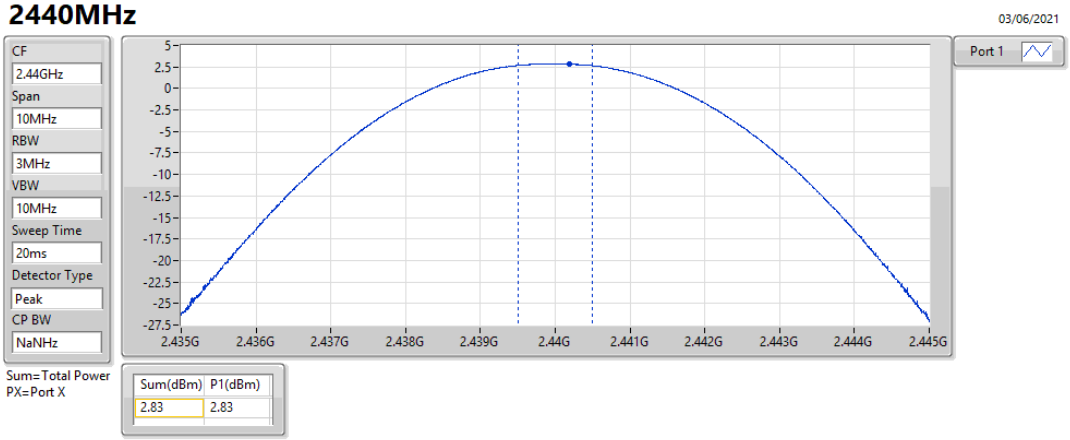
BT-BR(1Mbps) **PK Power**

2402MHz



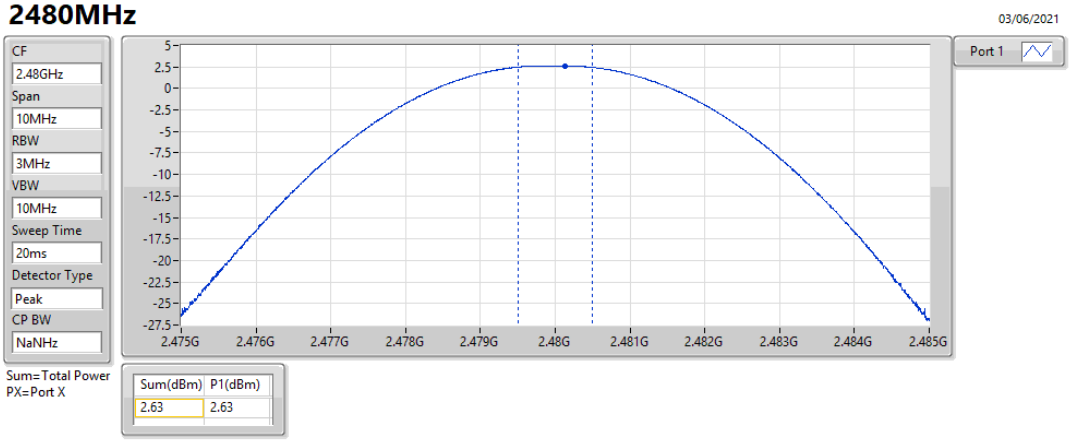
BT-BR(1Mbps) **PK Power**

2440MHz



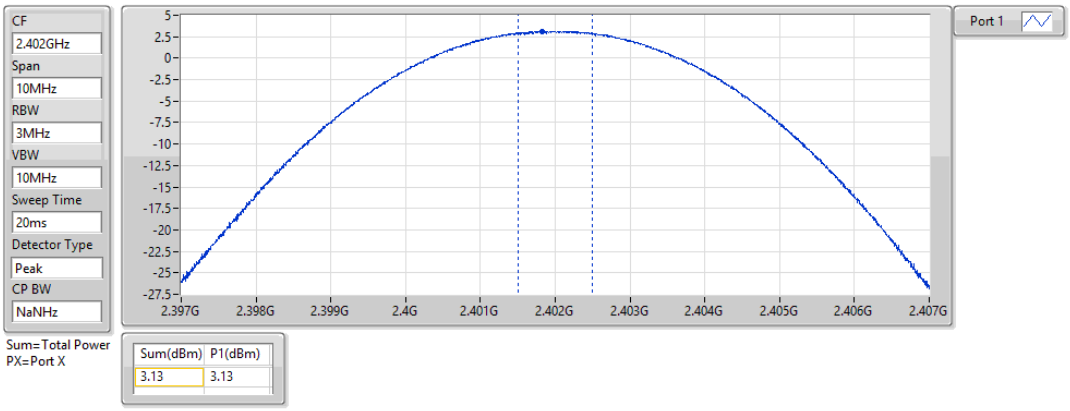
BT-BR(1Mbps) **PK Power**

2480MHz



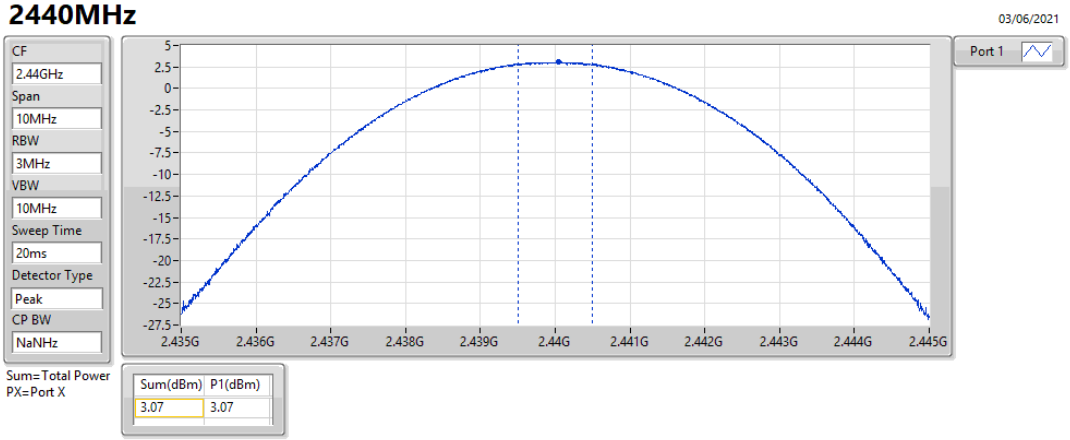
BT-EDR(2Mbps) **PK Power**

2402MHz



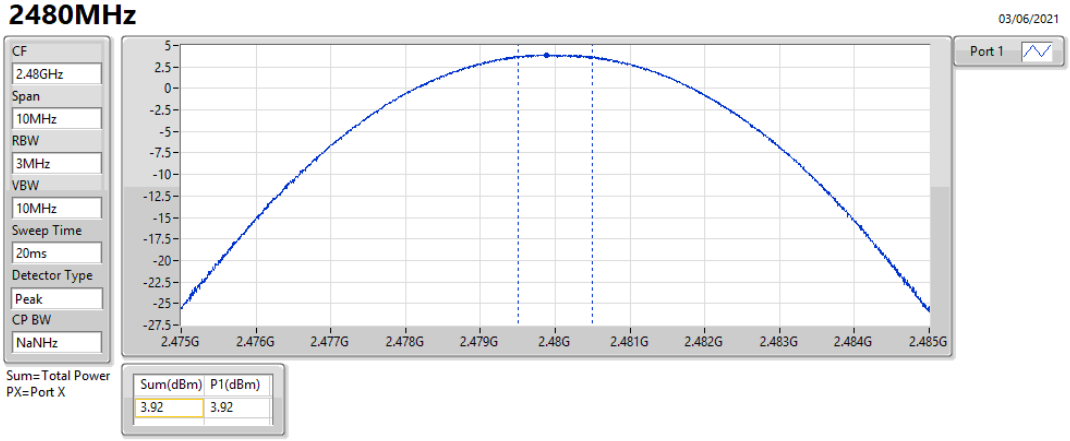
BT-EDR(2Mbps) **PK Power**

2440MHz



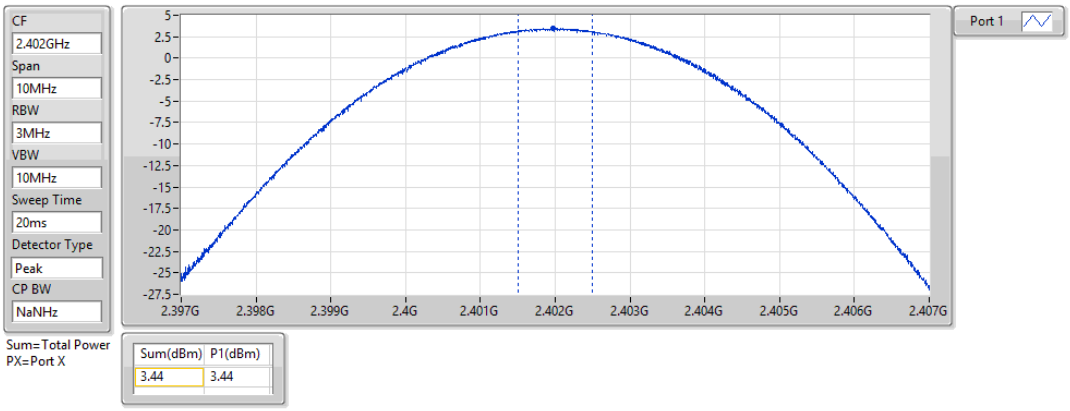
BT-EDR(2Mbps) **PK Power**

2480MHz



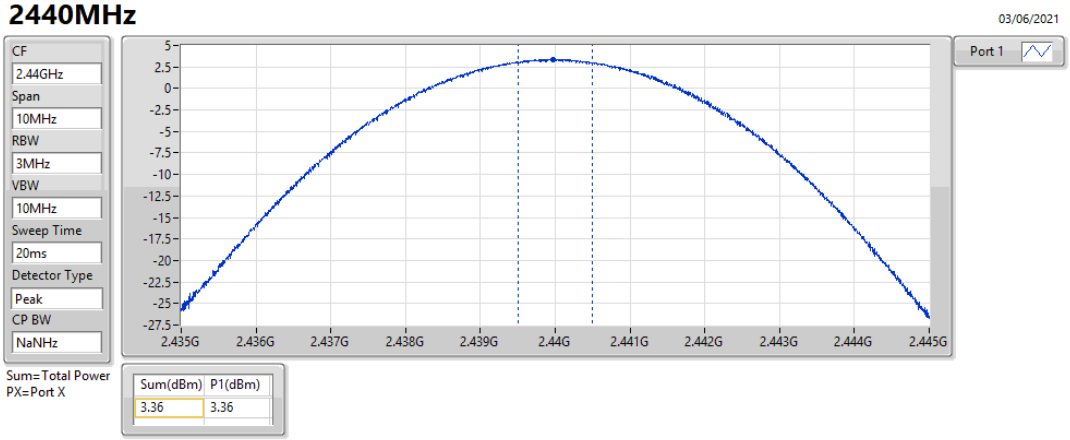
BT-EDR(3Mbps) **PK Power**

2402MHz



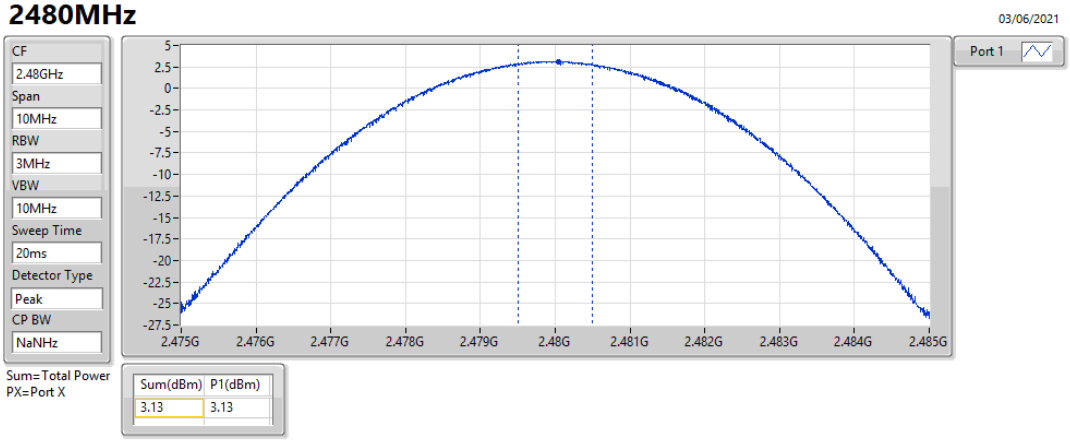
BT-EDR(3Mbps) **PK Power**

2440MHz



BT-EDR(3Mbps) **PK Power**

2480MHz



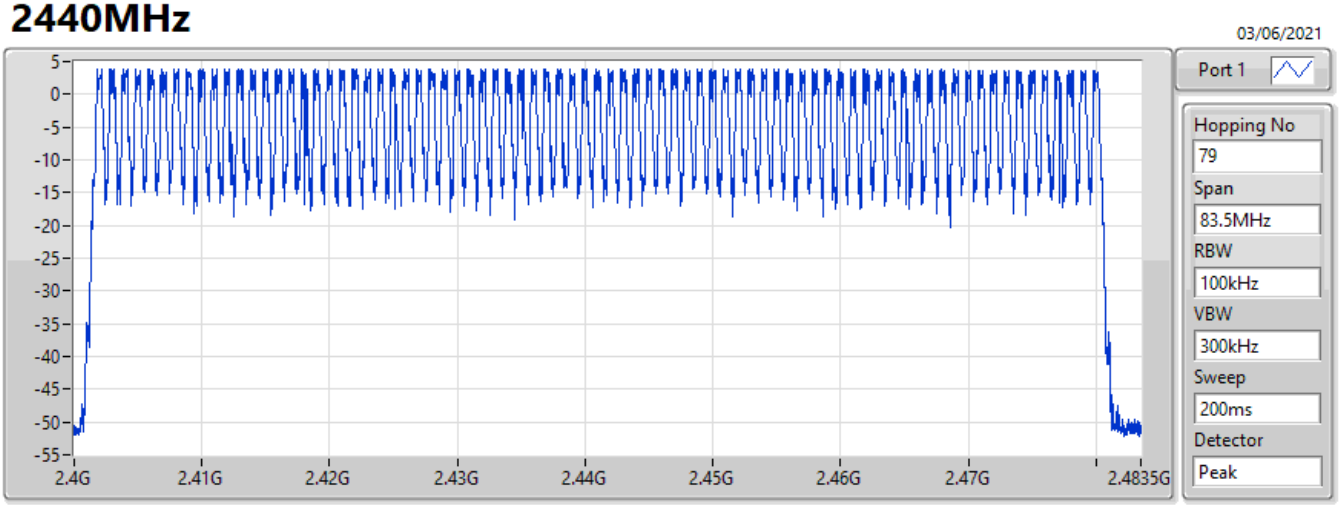
Summary

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

Result

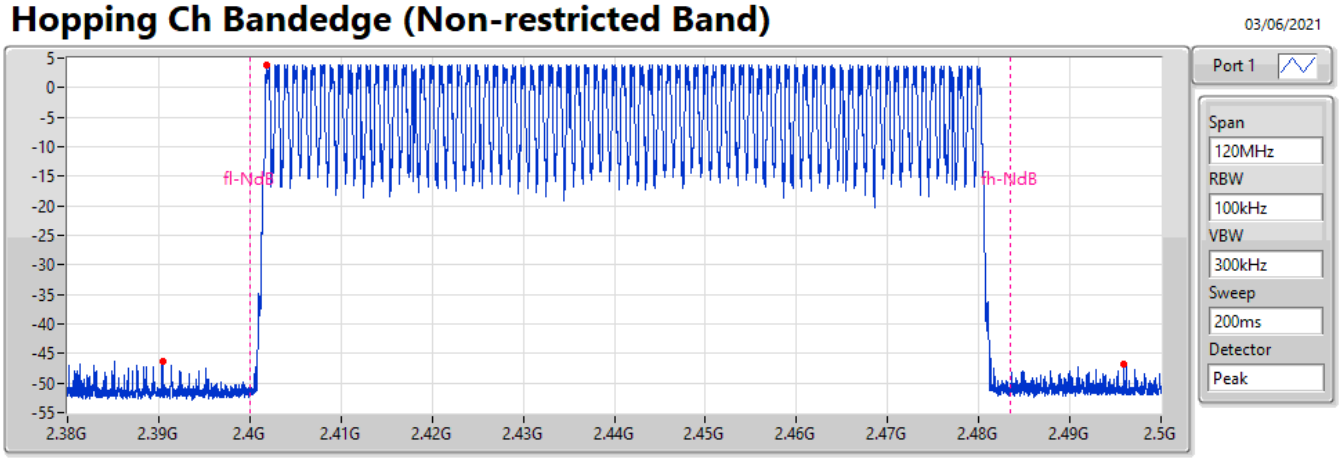
Mode	Result	Hopping No	Limit
BT-BR(1Mbps)	-	-	-
2440MHz	Pass	79	15
BT-EDR(2Mbps)	-	-	-
2440MHz	Pass	79	15
BT-EDR(3Mbps)	-	-	-
2440MHz	Pass	79	15

BT-BR(1Mbps) Hopping Ch
2440MHz



Hopping No	Limit
79	15

BT-BR(1Mbps)
2440MHz
Hopping Ch Bandedge (Non-restricted Band)

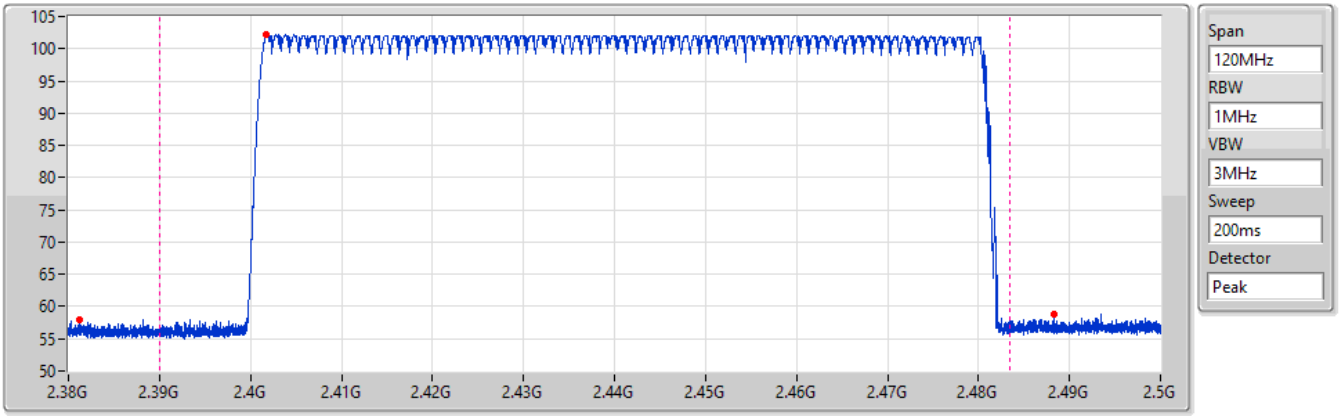


Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-16.09	2.40181G	3.91	2.390395G	-46.24	2.49592G	-46.82

BT-BR(1Mbps)

2440MHz

Hopping Ch Bandedge (Restricted Band)

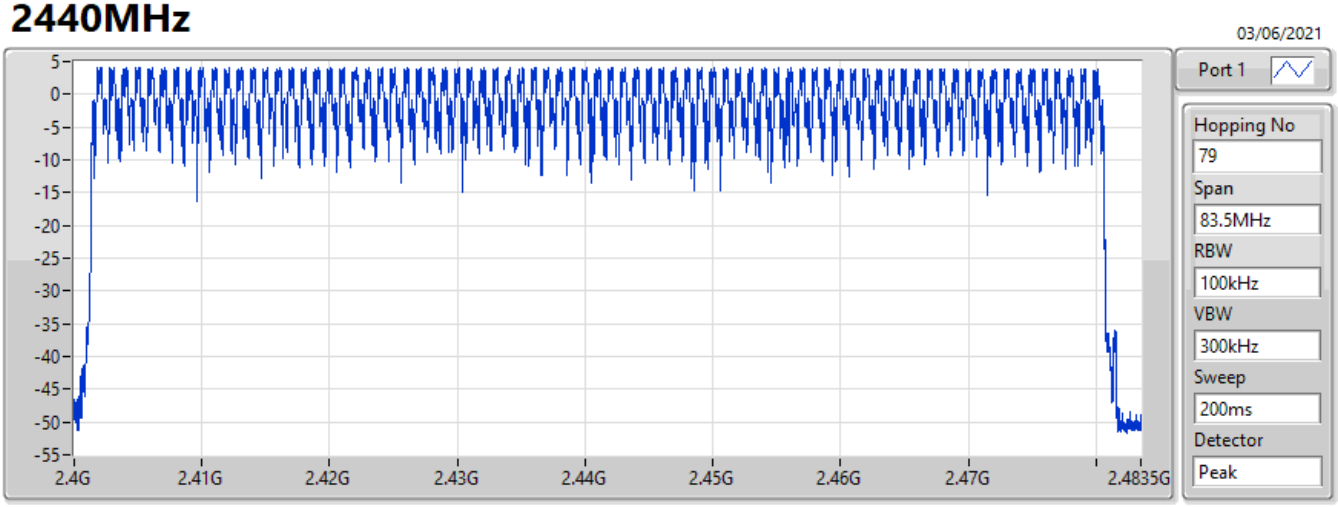


Ref(Hz)	Ref(dBuV/m)	BE-l(Hz)	PK(dBuV/m)	AV(dBuV/m)	BE-h(Hz)	PK(dBuV/m)	AV(dBuV/m)	LimPK(dBuV/	LimAV(dBuV/	Tx On(ms)	DCF(dB)
2.401795G	102.12	2.381185G	57.99	27.89	2.48836G	58.9	28.8	74	54	3.125	-30.1

BT-EDR(2Mbps)

Hopping Ch

2440MHz

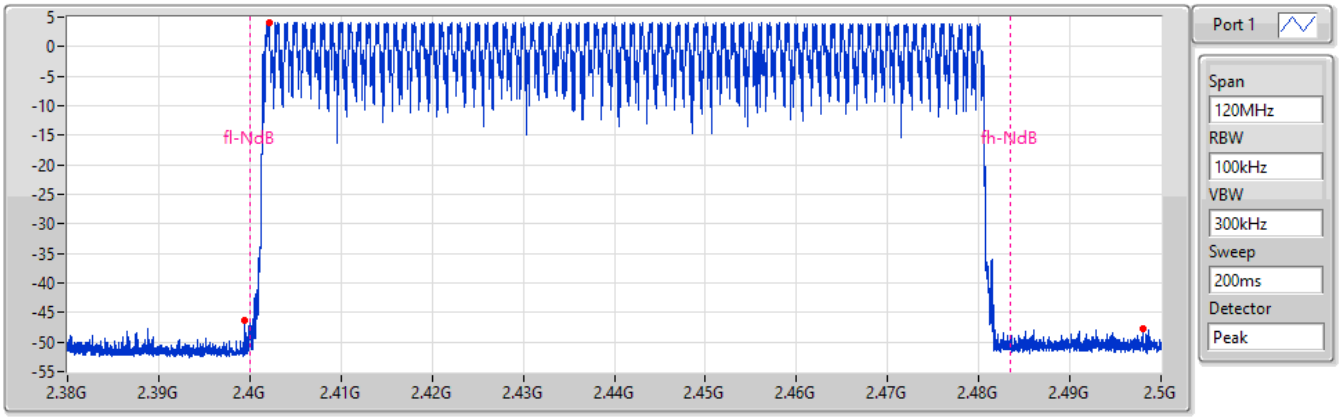


Hopping No	Limit
79	15

BT-EDR(2Mbps)

2440MHz

Hopping Ch Bandedge (Non-restricted Band)

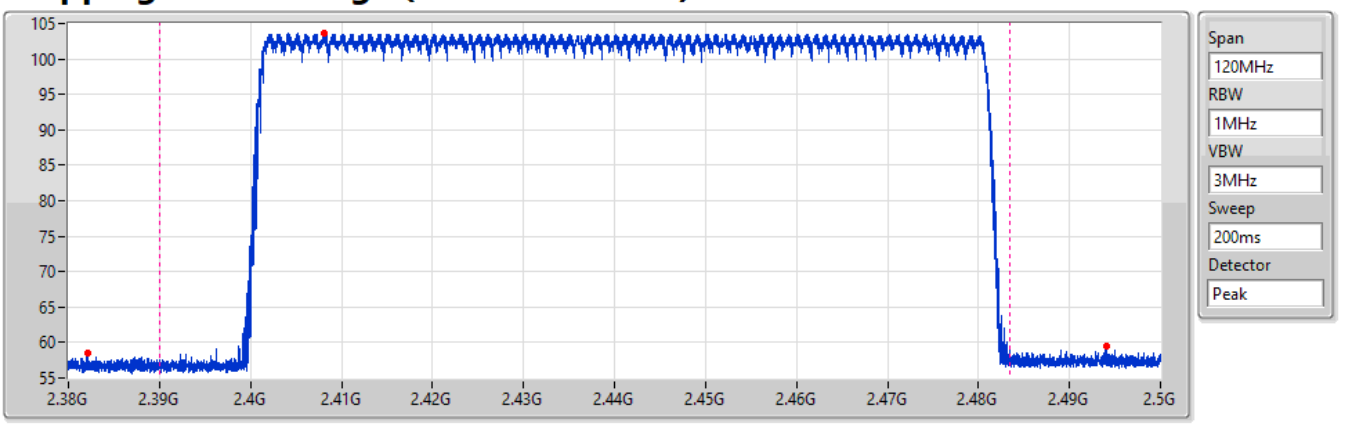


Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-15.95	2.40211G	4.05	2.39944G	-46.4	2.498035G	-47.67

BT-EDR(2Mbps)

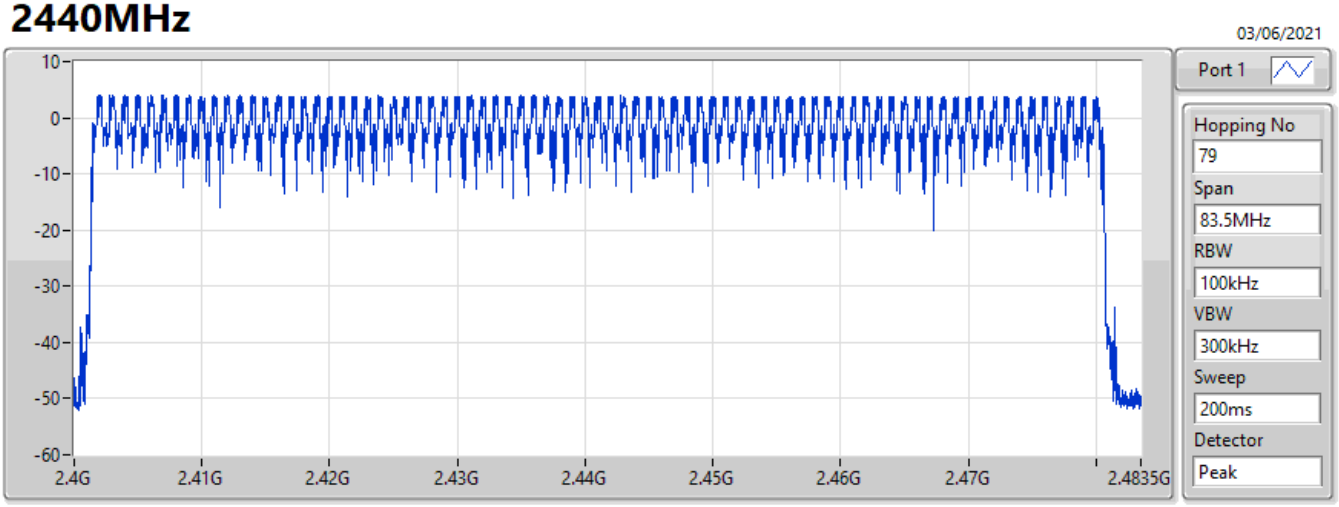
2440MHz

Hopping Ch Bandedge (Restricted Band)



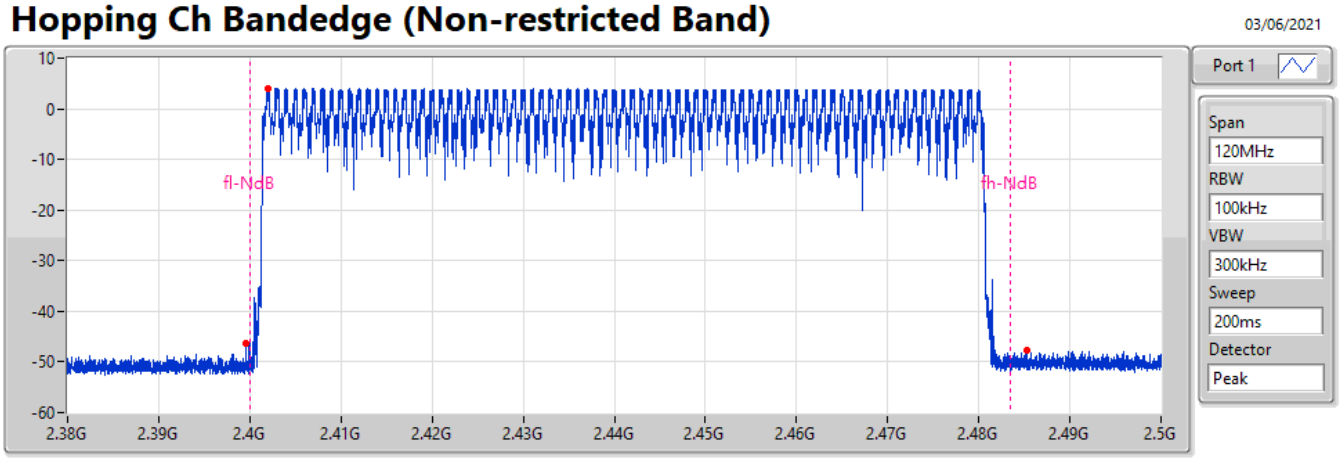
Ref(Hz)	Ref(dBuV/m)	BE-l(Hz)	PK(dBuV/m)	AV(dBuV/m)	BE-h(Hz)	PK(dBuV/m)	AV(dBuV/m)	LimPK(dBuV/	LimAV(dBuV/	Tx On(ms)	DCF(dB)
2.40817G	103.55	2.382145G	58.43	28.33	2.494105G	59.43	29.33	74	54	3.125	-30.1

BT-EDR(3Mbps) Hopping Ch
2440MHz



Hopping No	Limit
79	15

BT-EDR(3Mbps)
2440MHz
Hopping Ch Bandedge (Non-restricted Band)



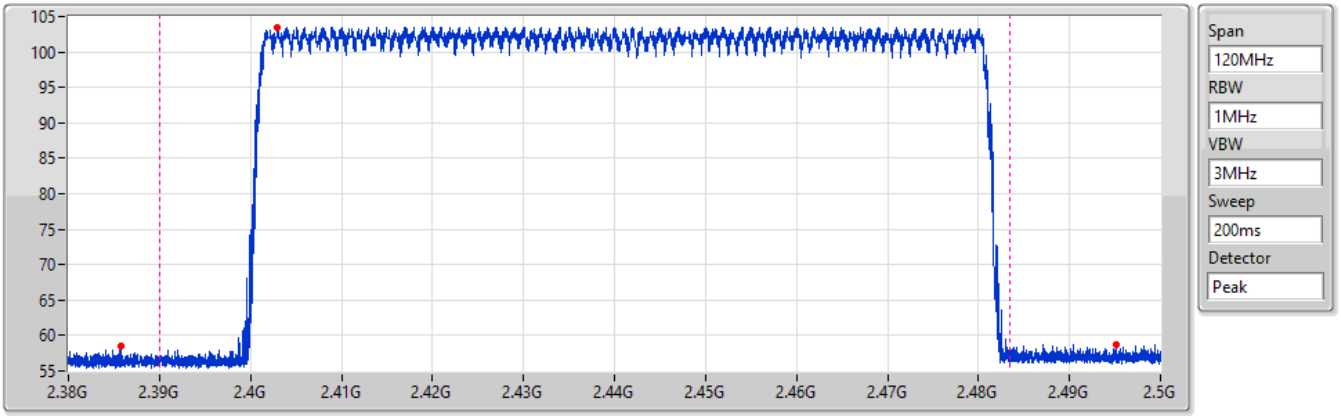
Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-16.1	2.401975G	3.9	2.399545G	-46.2	2.485315G	-47.82

BT-EDR(3Mbps)

2440MHz

Hopping Ch Bandedge (Restricted Band)

03/06/2021



Ref(Hz)	Ref(dBuV/m)	BE-l(Hz)	PK(dBuV/m)	AV(dBuV/m)	BE-h(Hz)	PK(dBuV/m)	AV(dBuV/m)	LimPK(dBuV/	LimAV(dBuV/	Tx On(ms)	DCF(dB)
2.40298G	103.52	2.385775G	58.48	28.38	2.495185G	58.77	28.67	74	54	3.125	-30.1

Summary

Mode	Max-Dwell (s)
2.4-2.4835GHz	-
BT-BR(1Mbps)	308.4471m
BT-EDR(2Mbps)	308.31385m
BT-EDR(3Mbps)	308.36715m

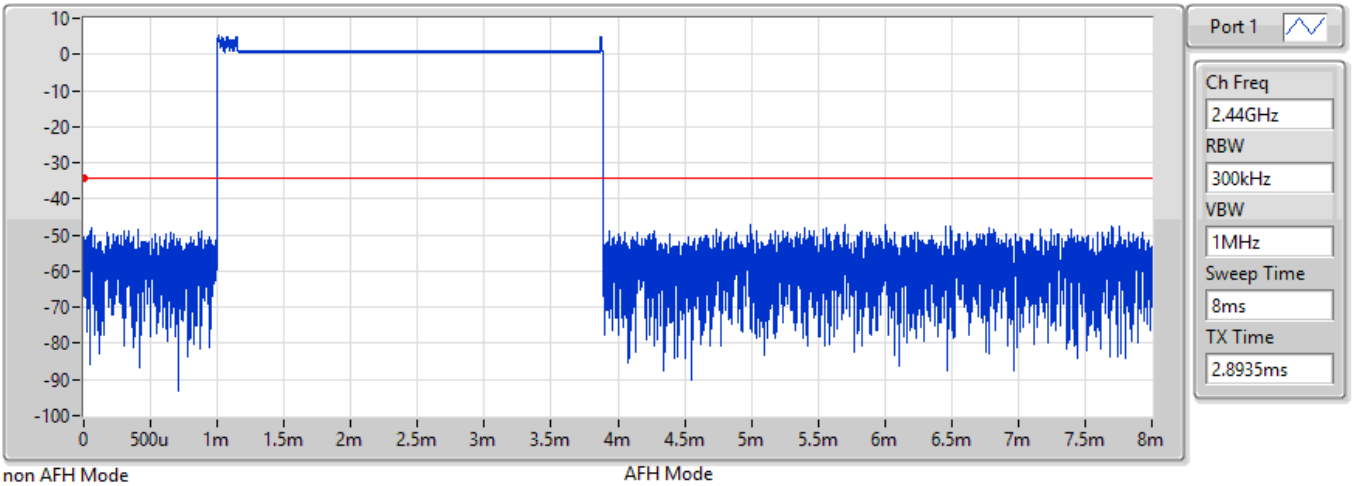
Result

Mode	Result	Period (s)	Dwell (s)	Limit (s)	Tx On (s)
BT-BR(1Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	308.4471m	400m	2.8935m
BT-EDR(2Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	308.31385m	400m	2.89225m
BT-EDR(3Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	308.36715m	400m	2.89275m

BT-BR(1Mbps) Dwell

2440MHz

03/06/2021



non AFH Mode

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

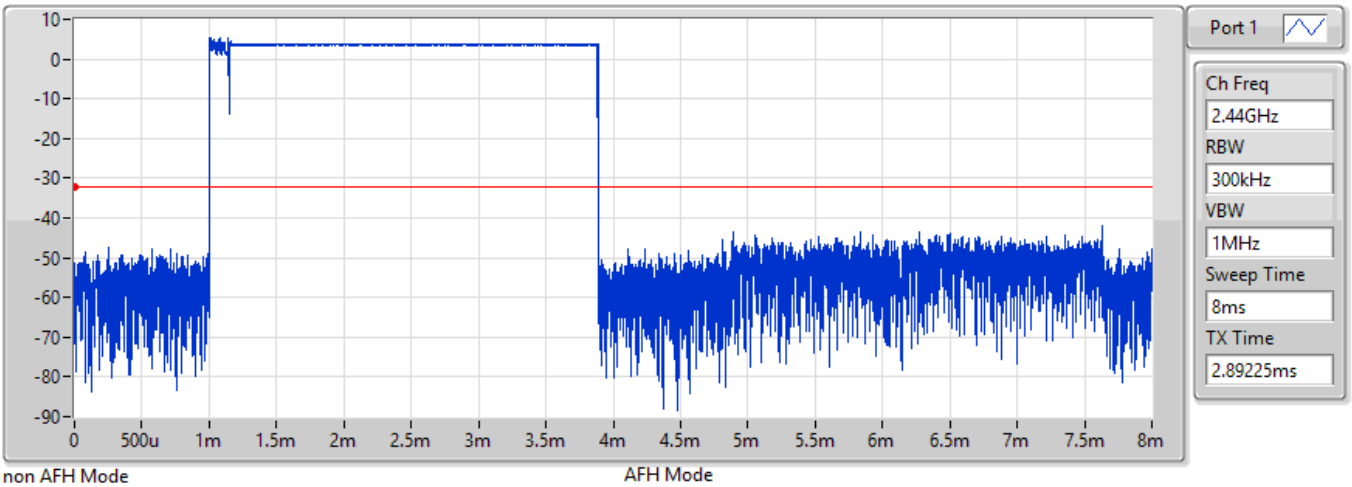
AFH Mode

Period(s)	Dwell(s)	Limit(s)	Tx On(s)
8	154.22355m	400m	2.8935m

BT-EDR(2Mbps) Dwell

2440MHz

03/06/2021



non AFH Mode

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

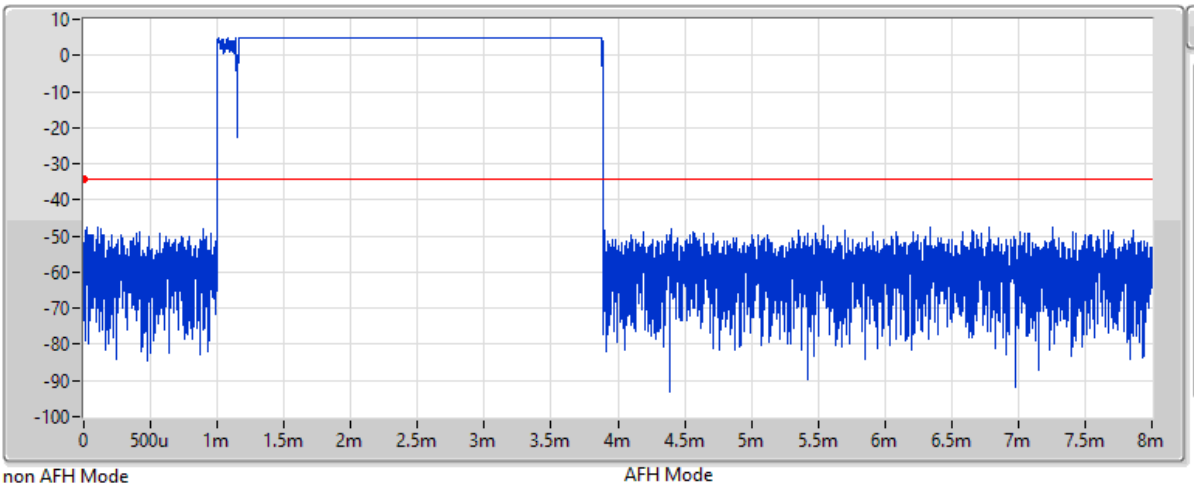
AFH Mode

Period(s)	Dwell(s)	Limit(s)	Tx On(s)
8	154.156925m	400m	2.89225m

BT-EDR(3Mbps) Dwell

2440MHz

03/06/2021



Port 1

Ch Freq
2.44GHz
RBW
300kHz
VBW
1MHz
Sweep Time
8ms
TX Time
2.89275ms

non AFH Mode

Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	308.36715m	400m	2.89275m

AFH Mode

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

Summary

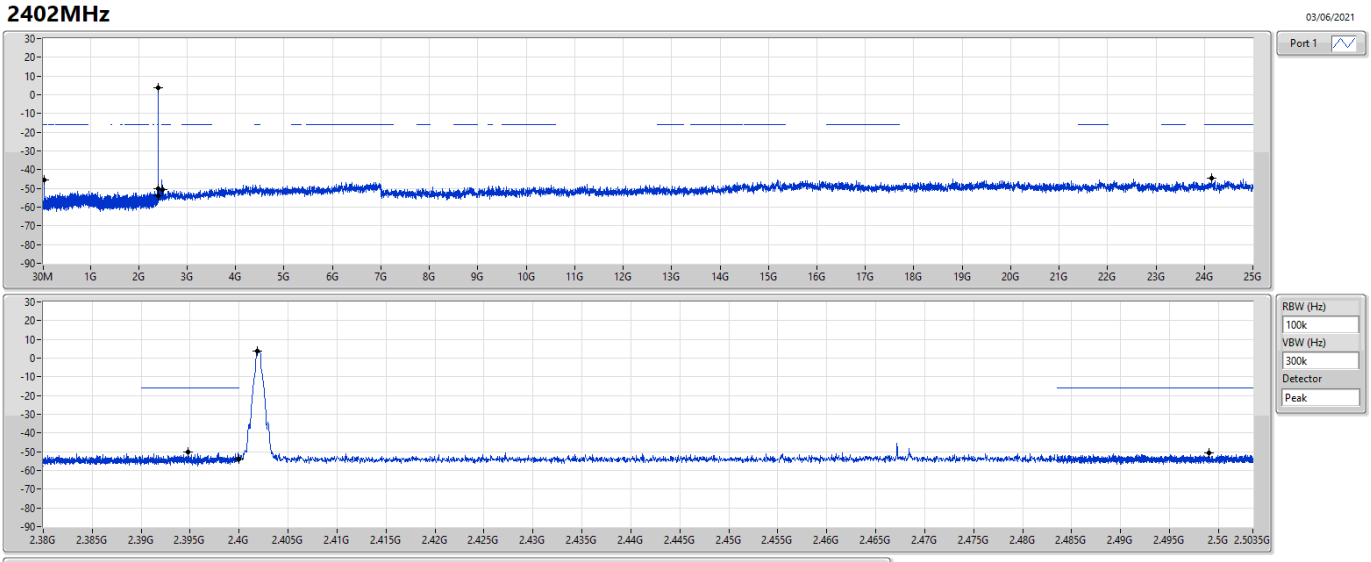
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BT-BR(1Mbps)	Pass	2.44016G	3.58	-16.42	47.92M	-45.28	2.39143G	-51.43	2.4835G	-52.38	2.49967G	-50.68	24.47414G	-44.40	1
BT-EDR(2Mbps)	Pass	2.4018G	3.90	-16.10	47.63M	-45.13	2.4G	-44.59	2.4G	-44.90	2.49521G	-50.26	24.15076G	-45.37	1
BT-EDR(3Mbps)	Pass	2.40213G	4.13	-15.87	47.63M	-44.72	2.39988G	-42.48	2.4G	-45.40	2.49888G	-50.88	14.84564G	-45.03	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	3.92	-16.08	47.63M	-45.62	2.39477G	-50.09	2.4G	-53.91	2.49904G	-50.54	24.15076G	-44.49	1
2440MHz	Pass	2.44016G	3.58	-16.42	47.92M	-45.28	2.39143G	-51.43	2.4835G	-52.38	2.49967G	-50.68	24.47414G	-44.40	1
2480MHz	Pass	2.48016G	3.53	-16.47	47.63M	-46.34	2.39514G	-48.62	2.4835G	-52.84	2.4843G	-50.10	24.44602G	-44.97	1
BT-EDR(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.4018G	3.90	-16.10	47.63M	-45.13	2.4G	-44.59	2.4G	-44.90	2.49521G	-50.26	24.15076G	-45.37	1
2440MHz	Pass	2.44016G	3.92	-16.08	47.92M	-46.02	2.39459G	-51.55	2.4835G	-53.95	2.5033G	-48.62	15.18871G	-44.17	1
2480MHz	Pass	2.48003G	2.91	-17.09	47.92M	-46.41	2.39402G	-50.99	2.4835G	-53.36	2.49313G	-50.64	15.19153G	-45.68	1
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.40213G	4.13	-15.87	47.63M	-44.72	2.39988G	-42.48	2.4G	-45.40	2.49888G	-50.88	14.84564G	-45.03	1
2440MHz	Pass	2.44012G	3.78	-16.22	47.63M	-45.37	2.39008G	-50.45	2.4835G	-52.86	2.48476G	-50.73	15.19153G	-44.54	1
2480MHz	Pass	2.47987G	3.74	-16.26	47.63M	-45.87	2.39644G	-49.89	2.4835G	-51.52	2.4885G	-50.84	24.55569G	-45.18	1

BT-BR(1Mbps) **CSE NdB**

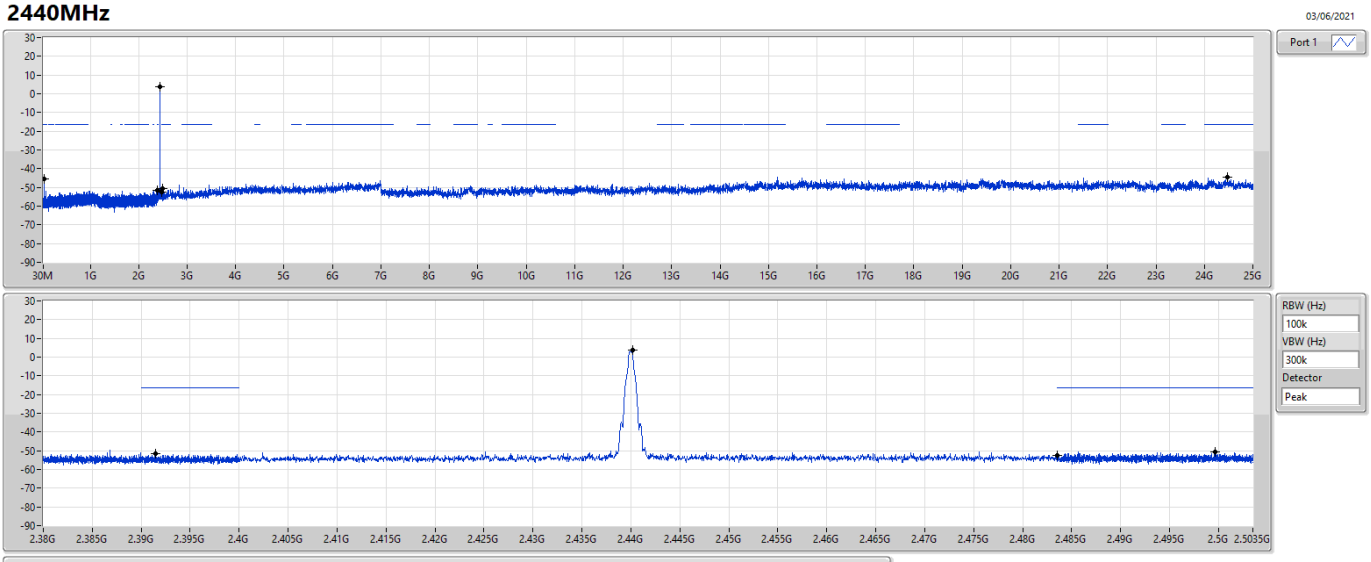
2402MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.40184G	3.92	-16.08	47.63M	-45.62	2.39477G	-50.09	2.4G	-53.91	2.49904G	-50.54	24.15076G	-44.49	1

BT-BR(1Mbps) **CSE NdB**

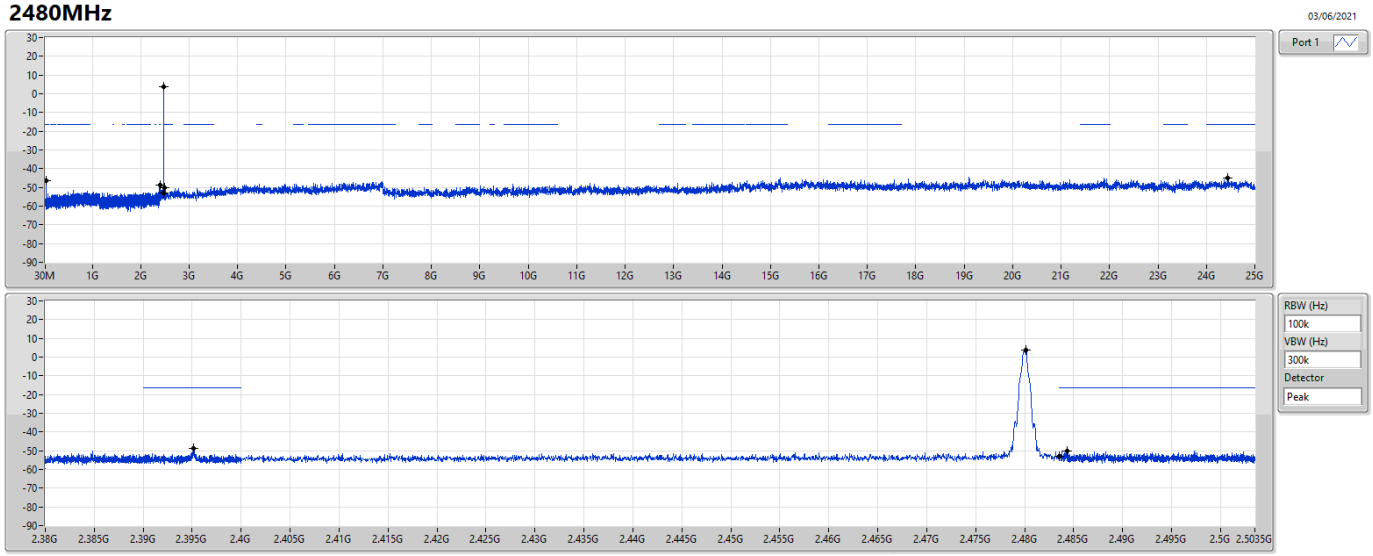
2440MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.44016G	3.58	-16.42	47.92M	-45.28	2.39143G	-51.43	2.4835G	-52.38	2.49967G	-50.68	24.47414G	-44.40	1

BT-BR(1Mbps) **CSE NdB**

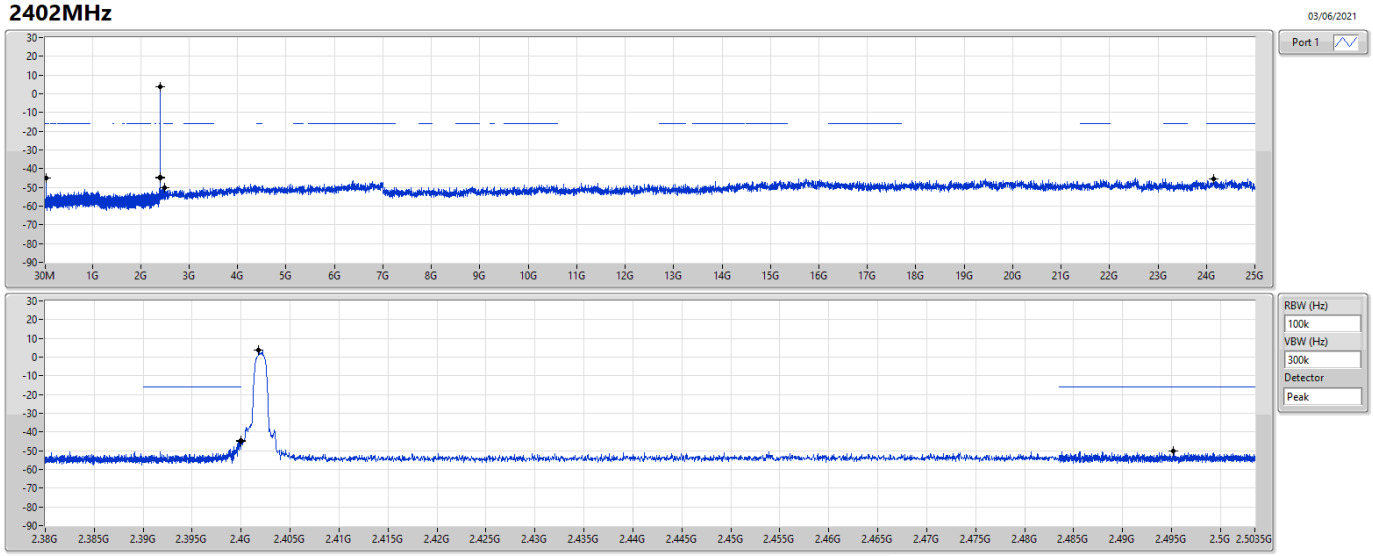
2480MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.48016G	3.53	-16.47	47.63M	-46.34	2.39514G	-48.62	2.4835G	-52.84	2.4843G	-50.10	24.44602G	-44.97	1

BT-EDR(2Mbps) **CSE NdB**

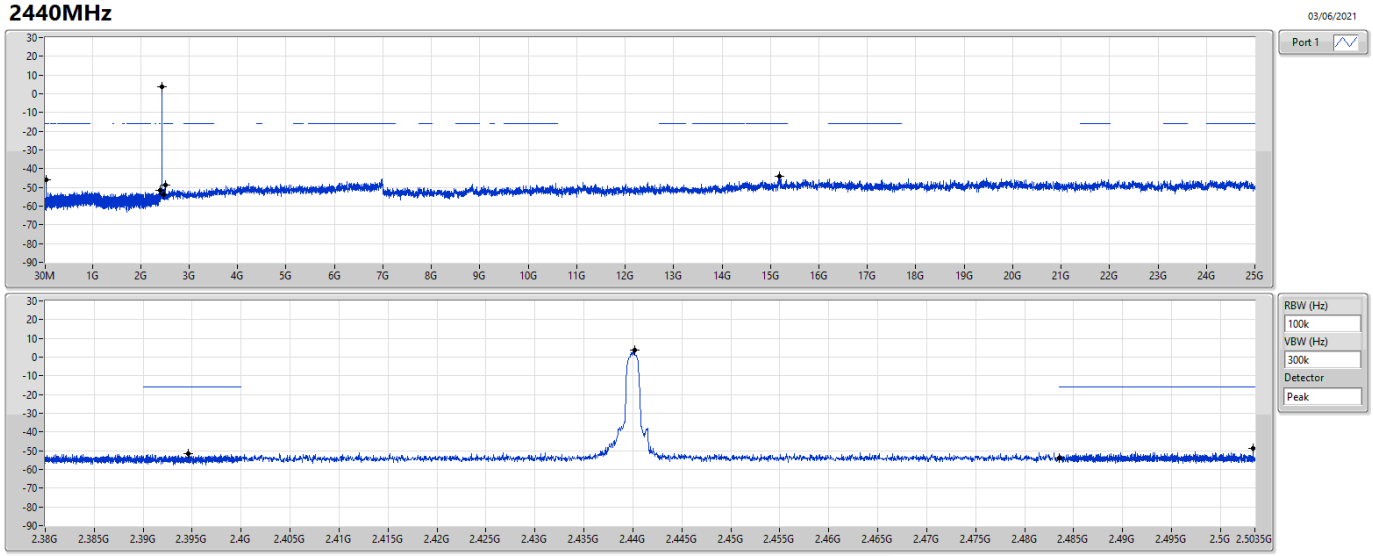
2402MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.4018G	3.90	-16.10	47.63M	-45.13	2.4G	-44.59	2.4G	-44.90	2.49521G	-50.26	24.15076G	-45.37	1

BT-EDR(2Mbps) **CSE NdB**

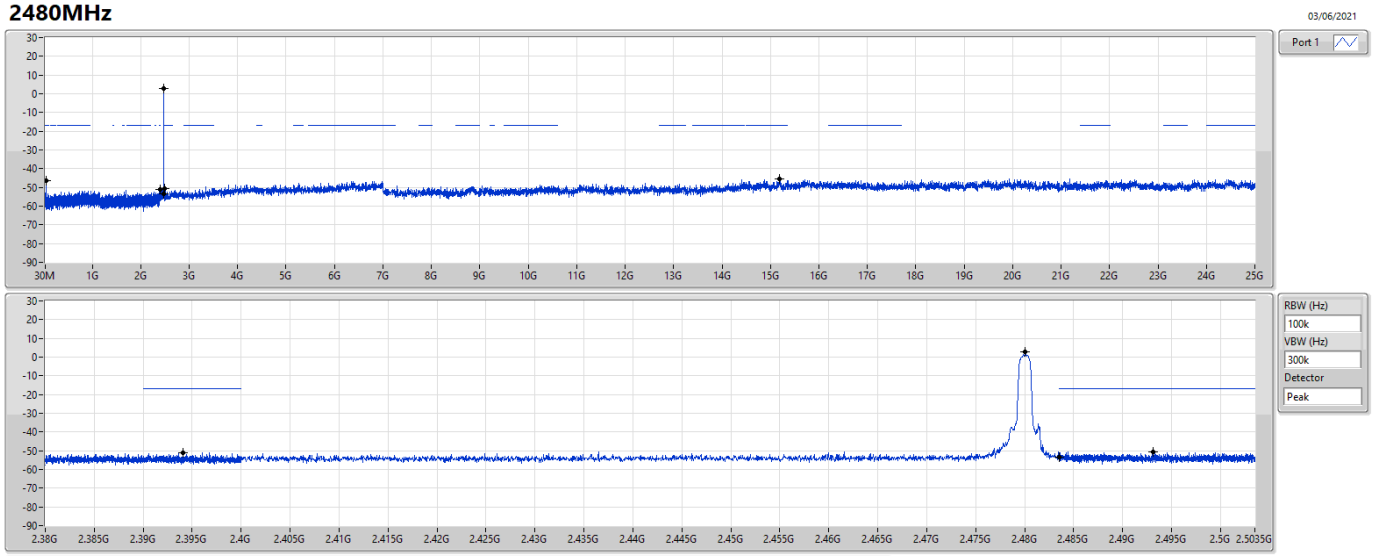
2440MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.44016G	3.92	-16.08	47.92M	-46.02	2.39459G	-51.55	2.4835G	-53.95	2.5033G	-48.62	15.18871G	-44.17	1

BT-EDR(2Mbps) **CSE NdB**

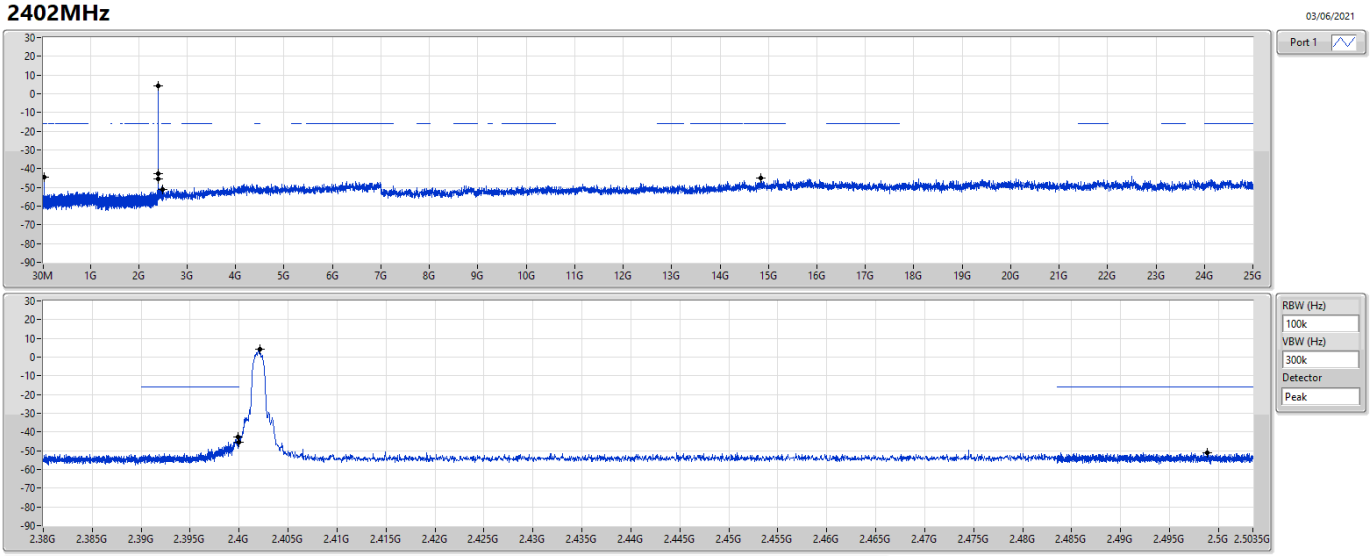
2480MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.48003G	2.91	-17.09	47.92M	-46.41	2.39402G	-50.99	2.4835G	-53.36	2.49313G	-50.64	15.19153G	-45.68	1

BT-EDR(3Mbps) **CSE NdB**

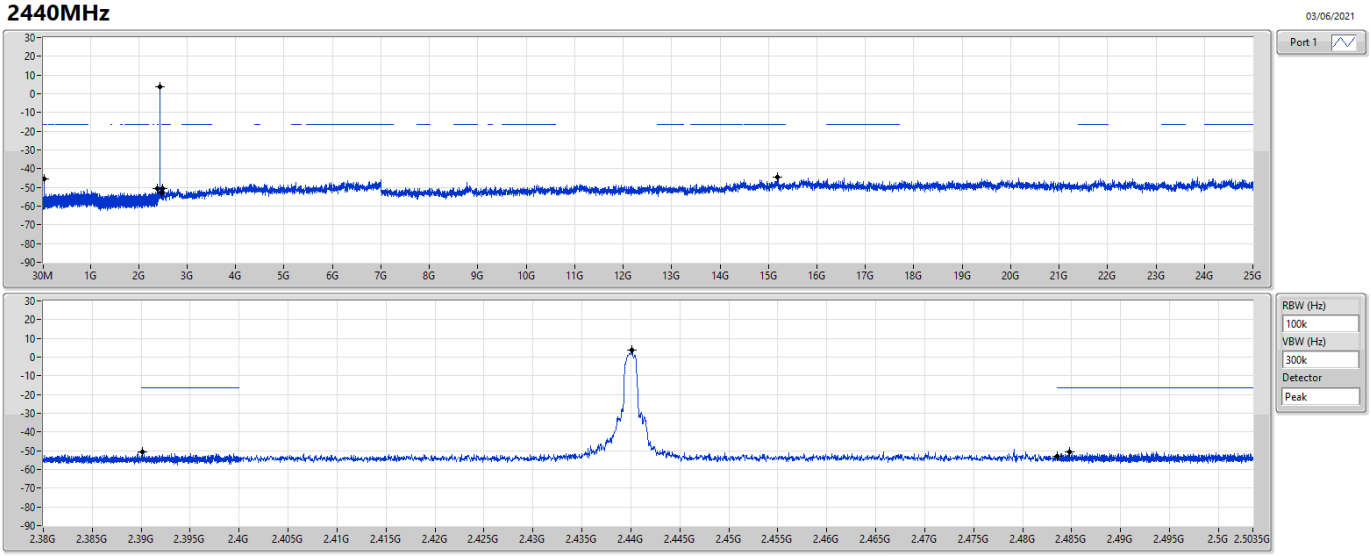
2402MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.40213G	4.13	-15.87	47.63M	-44.72	2.39988G	-42.48	2.4G	-45.40	2.49888G	-50.88	14.84564G	-45.03	1

BT-EDR(3Mbps) **CSE NdB**

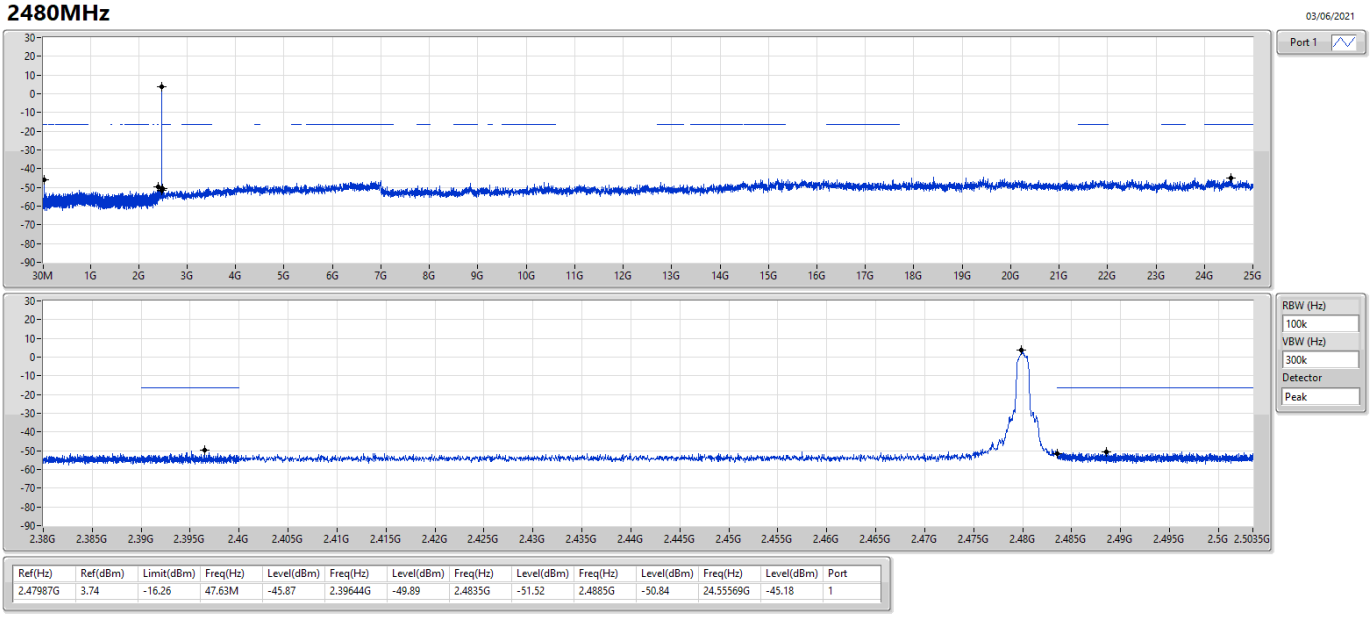
2440MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.44012G	3.78	-16.22	47.63M	-45.37	2.39008G	-50.45	2.4835G	-52.86	2.48476G	-50.73	15.19153G	-44.54	1

BT-EDR(3Mbps) **CSE NdB**

2480MHz



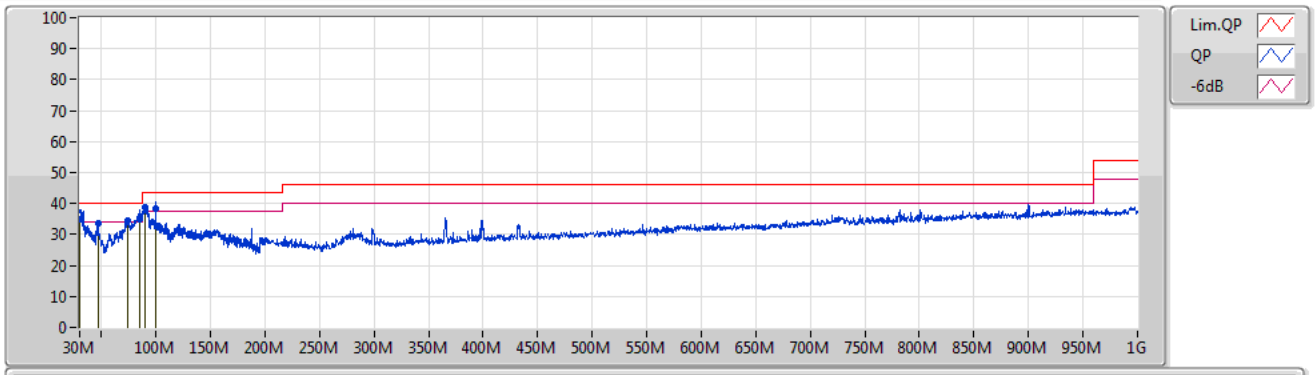
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.47987G	3.74	-16.26	47.63M	-45.87	2.39644G	-49.89	2.4835G	-51.52	2.4885G	-50.84	24.55569G	-45.18	1

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 2	Pass	PK	90.18M	38.76	43.50	-4.74	Vertical

Mode 2

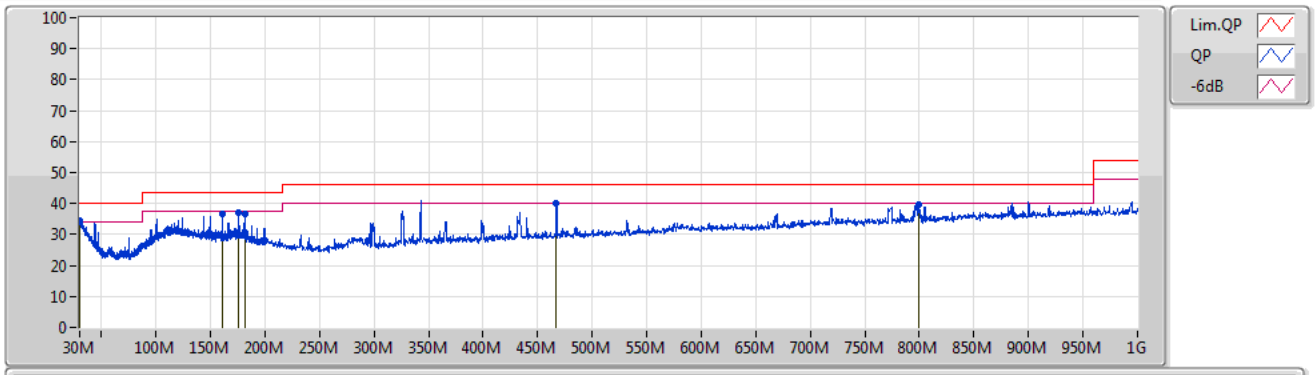
24/09/2021



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
QP	30.51M	34.86	40.00	-5.14	-3.21	3	Vertical	17	1.00	-	38.07	23.65	1.02	27.88
PK	46.58M	33.77	40.00	-6.23	-11.51	3	Vertical	44	1.00	-	45.28	15.00	1.43	27.94
PK	73.44M	34.51	40.00	-5.49	-13.62	3	Vertical	96	1.00	-	48.13	12.19	1.97	27.78
QP	84.91M	34.76	40.00	-5.24	-11.97	3	Vertical	350	2.00	-	46.73	13.68	2.20	27.85
PK	90.18M	38.76	43.50	-4.74	-10.78	3	Vertical	301	4.00	"Worst"	49.54	14.87	2.20	27.85
QP	99.96M	38.32	43.50	-5.18	-8.43	3	Vertical	279	1.00	-	46.75	16.98	2.40	27.81

Mode 2

24/09/2021



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	30.43M	34.66	40.00	-5.34	-3.19	3	Horizontal	28	2.00	"Worst"	37.85	23.67	1.02	27.88
PK	176.03M	37.25	43.50	-6.25	-8.53	3	Horizontal	3	2.00	-	45.78	15.43	3.44	27.40
PK	181.22M	36.85	43.50	-6.65	-8.60	3	Horizontal	81	2.00	-	45.45	15.25	3.51	27.36
PK	467.2M	39.94	46.00	-6.06	-6.09	3	Horizontal	102	1.00	-	46.03	17.01	4.67	27.77
PK	799.2M	39.83	46.00	-6.17	-0.24	3	Horizontal	354	2.00	-	40.07	20.59	6.30	27.13
PK	160.82M	36.51	43.50	-6.99	-8.36	3	Horizontal	208	2.00	-	44.87	15.94	3.21	27.51

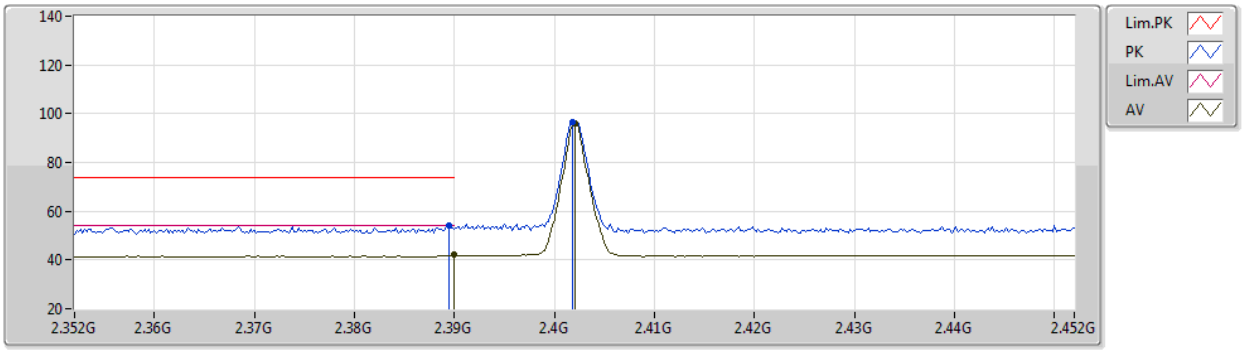
Summary

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	4.95997G	50.07	54.00	-3.93	3	Horizontal	16	1.47	-

BT-BR(1Mbps)

2402MHz_TX

03/06/2021



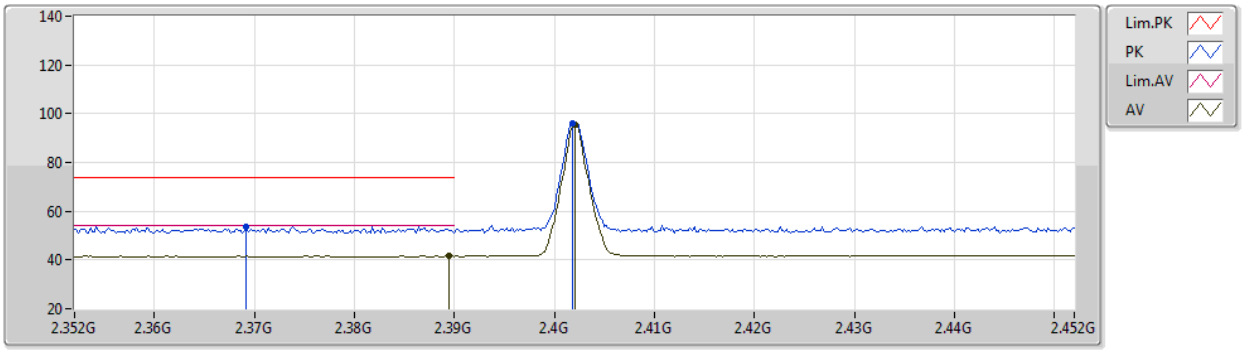
EUT Y_1TX
Setting 4
01-A-J-7

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	2.3894G	54.03	74.00	-19.97	24.46	3	Vertical	331	1.77	-	27.38	2.19	-
AV	2.39G	42.03	54.00	-11.97	12.46	3	Vertical	331	1.77	-	27.38	2.19	-
PK	2.4018G	96.79	Inf	-Inf	67.19	3	Vertical	331	1.77	-	27.40	2.20	-
AV	2.402G	95.92	Inf	-Inf	66.32	3	Vertical	331	1.77	-	27.40	2.20	-

BT-BR(1Mbps)

2402MHz_TX

03/06/2021



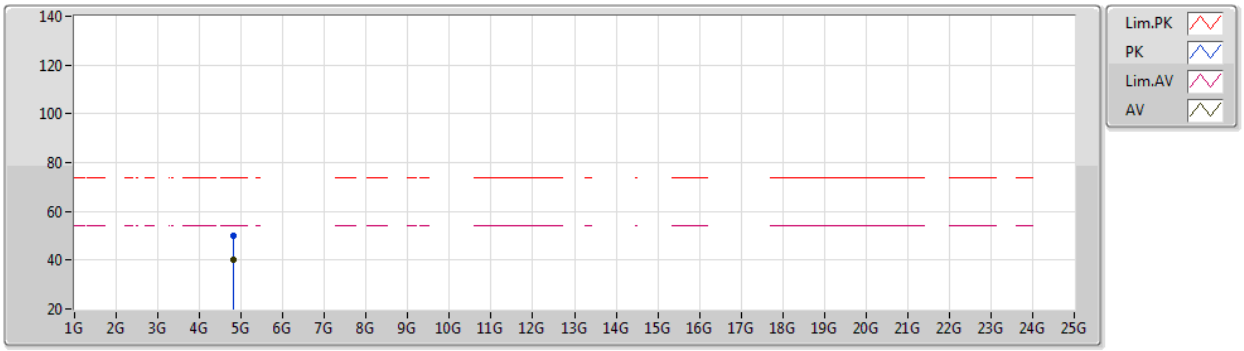
EUT Y_1TX
Setting 4
01-A-J-7

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	2.3692G	53.86	74.00	-20.14	24.35	3	Horizontal	204	1.80	-	27.34	2.17	-
AV	2.3894G	41.66	54.00	-12.34	12.09	3	Horizontal	204	1.80	-	27.38	2.19	-
PK	2.4018G	96.17	Inf	-Inf	66.57	3	Horizontal	204	1.80	-	27.40	2.20	-
AV	2.402G	95.34	Inf	-Inf	65.74	3	Horizontal	204	1.80	-	27.40	2.20	-

BT-BR(1Mbps)

2402MHz_TX

03/06/2021



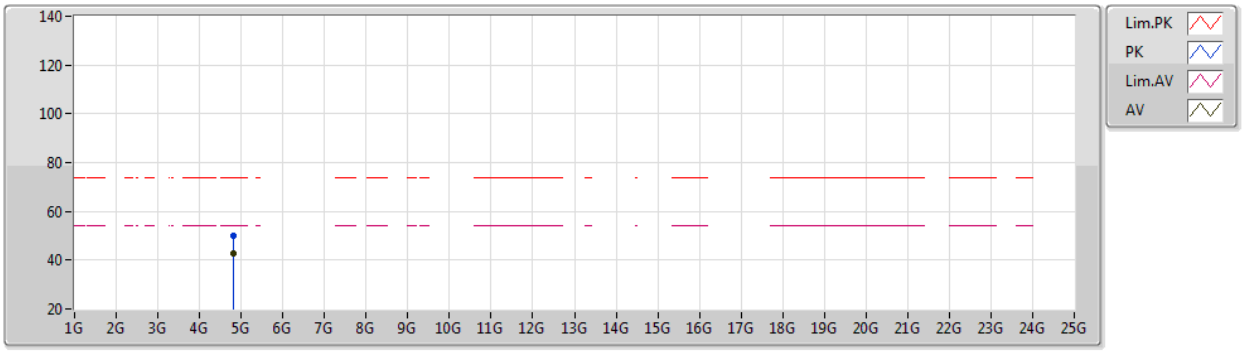
EUT Y_1TX
Setting 4
01-A-J-7

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	4.80363G	49.75	74.00	-24.25	45.62	3	Vertical	309	1.58	-	32.12	5.00	32.99
AV	4.80395G	40.33	54.00	-13.67	36.20	3	Vertical	309	1.58	-	32.12	5.00	32.99

BT-BR(1Mbps)

2402MHz_TX

03/06/2021



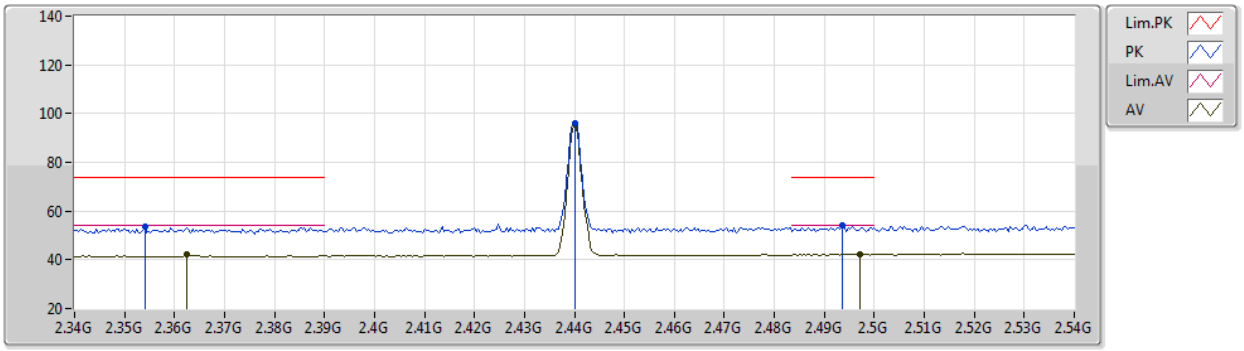
EUT Y_1TX
Setting 4
01-A-J-7

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	4.80425G	50.03	74.00	-23.97	45.89	3	Horizontal	359	1.80	-	32.13	5.00	32.99
AV	4.80399G	42.88	54.00	-11.12	38.75	3	Horizontal	359	1.80	-	32.12	5.00	32.99

BT-BR(1Mbps)

2440MHz_TX

03/06/2021



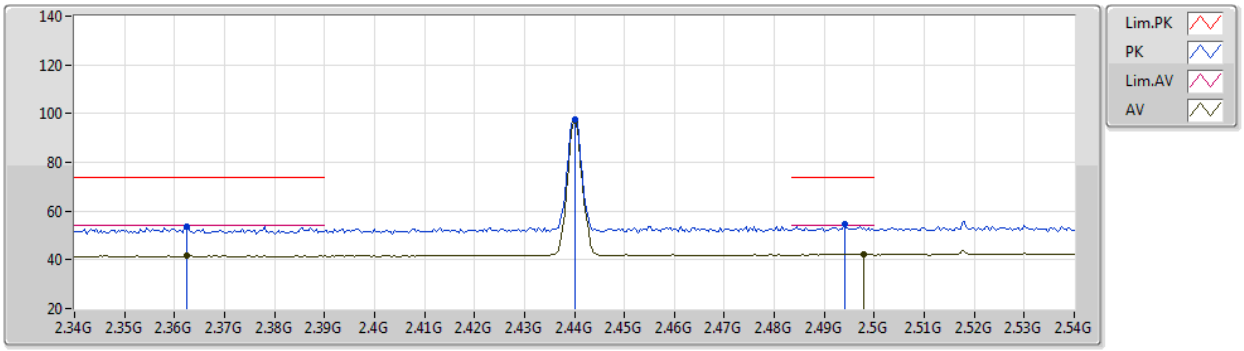
EUT Y_1TX
Setting 4
01-A-J-7

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	2.354G	53.38	74.00	-20.62	23.92	3	Vertical	161	1.75	-	27.31	2.15	-
AV	2.3624G	41.99	54.00	-12.01	12.51	3	Vertical	161	1.75	-	27.32	2.16	-
PK	2.44G	96.25	Inf	-Inf	66.53	3	Vertical	161	1.75	-	27.48	2.24	-
AV	2.44G	95.43	Inf	-Inf	65.71	3	Vertical	161	1.75	-	27.48	2.24	-
PK	2.4936G	53.92	74.00	-20.08	23.87	3	Vertical	161	1.75	-	27.76	2.29	-
AV	2.4972G	42.33	54.00	-11.67	12.25	3	Vertical	161	1.75	-	27.78	2.30	-

BT-BR(1Mbps)

2440MHz_TX

03/06/2021



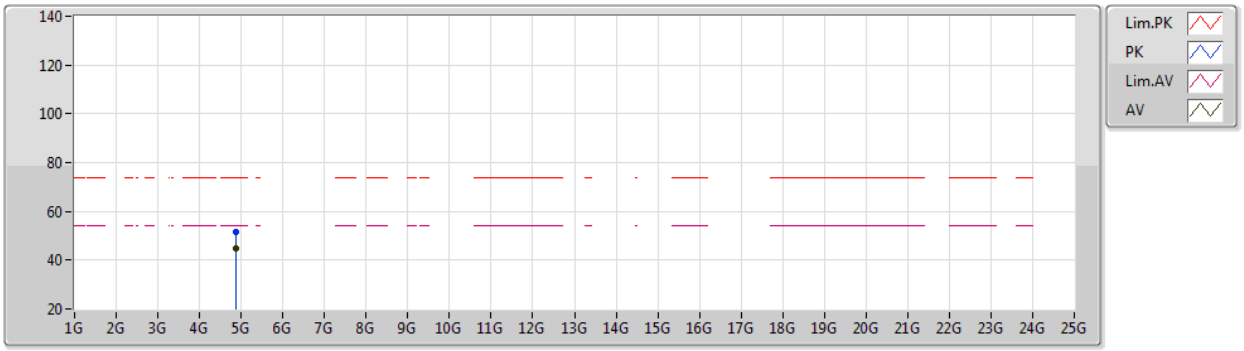
EUT Y_1TX
Setting 4
01-A-J-7

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	2.3624G	53.43	74.00	-20.57	23.95	3	Horizontal	353	1.94	-	27.32	2.16	-
AV	2.3624G	41.84	54.00	-12.16	12.36	3	Horizontal	353	1.94	-	27.32	2.16	-
PK	2.44G	97.79	Inf	-Inf	68.07	3	Horizontal	353	1.94	-	27.48	2.24	-
AV	2.44G	96.96	Inf	-Inf	67.24	3	Horizontal	353	1.94	-	27.48	2.24	-
PK	2.494G	54.44	74.00	-19.56	24.39	3	Horizontal	353	1.94	-	27.76	2.29	-
AV	2.498G	42.26	54.00	-11.74	12.17	3	Horizontal	353	1.94	-	27.79	2.30	-

BT-BR(1Mbps)

2440MHz_TX

03/06/2021



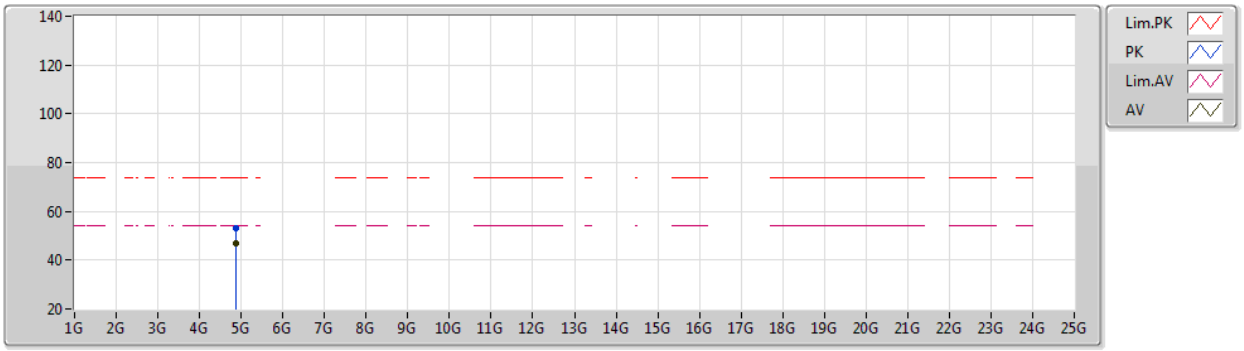
EUT Y_1TX
Setting 4
01-A-J-7

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	4.8797G	51.77	74.00	-22.23	47.25	3	Vertical	313	1.00	-	32.46	5.04	32.98
AV	4.87997G	44.92	54.00	-9.08	40.40	3	Vertical	313	1.00	-	32.46	5.04	32.98

BT-BR(1Mbps)

2440MHz_TX

03/06/2021



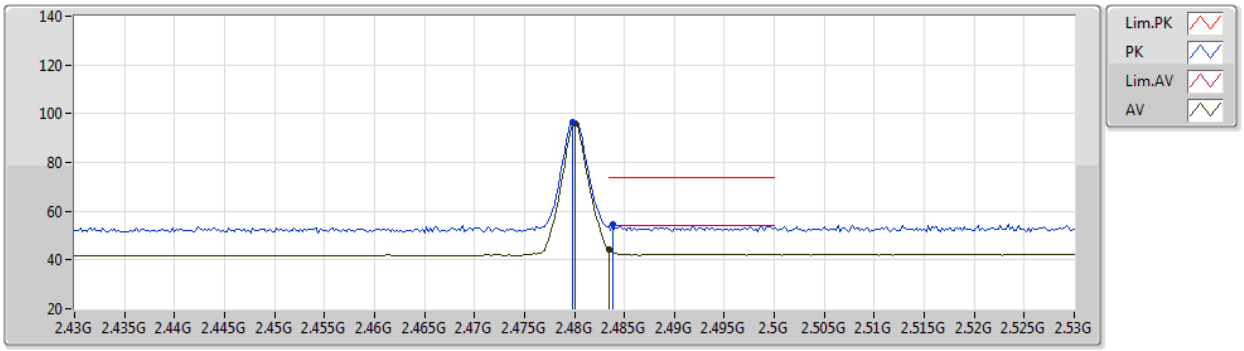
EUT Y_1TX
Setting 4
01-A-J-7

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	4.87973G	52.88	74.00	-21.12	48.36	3	Horizontal	11	1.37	-	32.46	5.04	32.98
AV	4.87998G	47.04	54.00	-6.96	42.52	3	Horizontal	11	1.37	-	32.46	5.04	32.98

BT-BR(1Mbps)

2480MHz_TX

03/06/2021



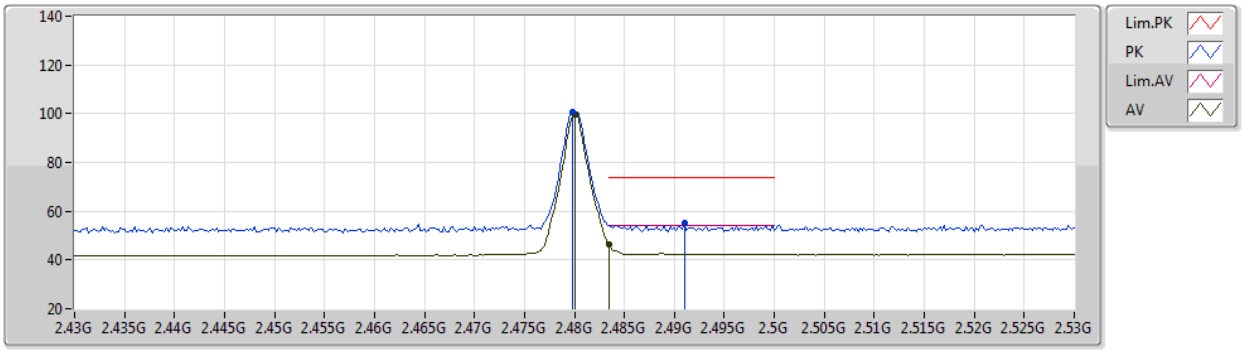
EUT Y_1TX
Setting 4
01-A-J-7

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	2.4798G	96.77	Inf	-Inf	66.81	3	Vertical	163	1.35	-	27.68	2.28	-
AV	2.48G	95.94	Inf	-Inf	65.98	3	Vertical	163	1.35	-	27.68	2.28	-
PK	2.4838G	54.72	74.00	-19.28	24.74	3	Vertical	163	1.35	-	27.70	2.28	-
AV	2.4835G	44.19	54.00	-9.81	14.21	3	Vertical	163	1.35	-	27.70	2.28	-

BT-BR(1Mbps)

2480MHz_TX

03/06/2021



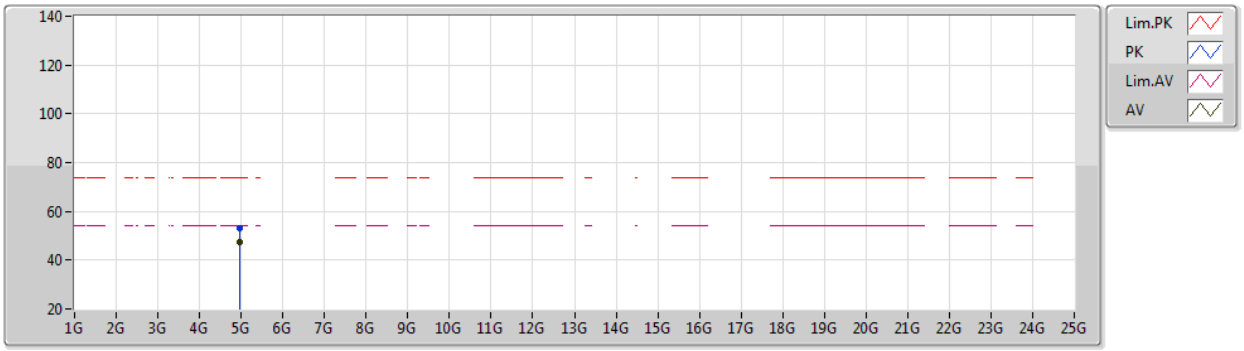
EUT Y_1TX
Setting 4
01-A-J-7

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	2.4798G	100.57	Inf	-Inf	70.61	3	Horizontal	352	2.48	-	27.68	2.28	-
AV	2.48G	99.71	Inf	-Inf	69.75	3	Horizontal	352	2.48	-	27.68	2.28	-
PK	2.491G	55.01	74.00	-18.99	24.97	3	Horizontal	352	2.48	-	27.75	2.29	-
AV	2.4835G	46.43	54.00	-7.57	16.45	3	Horizontal	352	2.48	-	27.70	2.28	-

BT-BR(1Mbps)

2480MHz_TX

03/06/2021



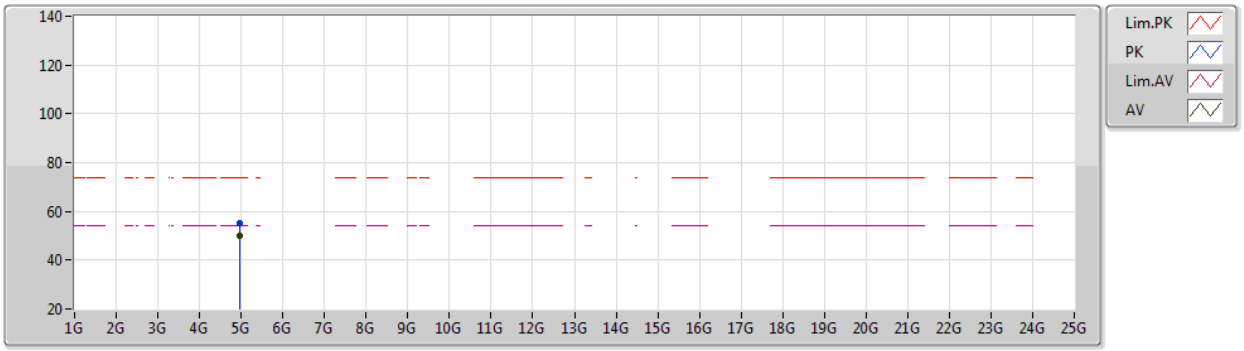
EUT Y_1TX
Setting 4
01-A-J-7

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	4.96023G	52.97	74.00	-21.03	48.08	3	Vertical	311	1.49	-	32.78	5.08	32.97
AV	4.95993G	47.49	54.00	-6.51	42.60	3	Vertical	311	1.49	-	32.78	5.08	32.97

BT-BR(1Mbps)

2480MHz_TX

03/06/2021



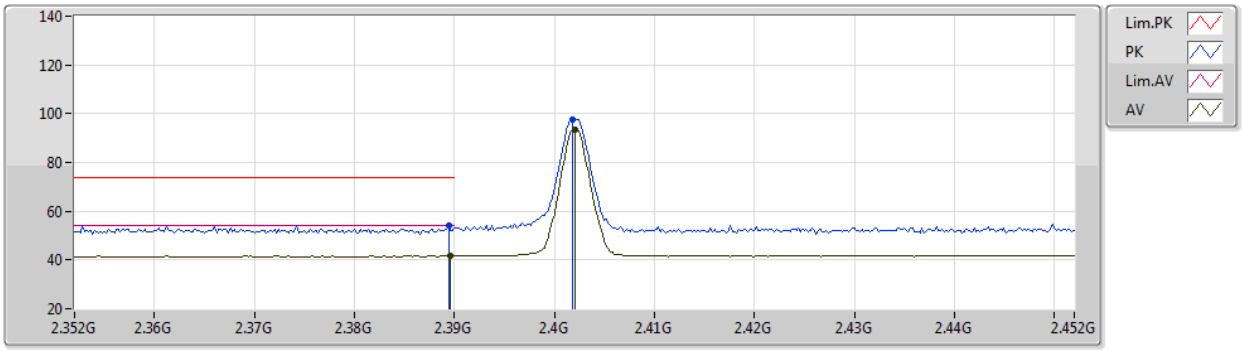
EUT Y_1TX
Setting 4
01-A-J-7

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	4.96021G	55.03	74.00	-18.97	50.14	3	Horizontal	16	1.47	-	32.78	5.08	32.97
AV	4.95997G	50.07	54.00	-3.93	45.18	3	Horizontal	16	1.47	-	32.78	5.08	32.97

BT-EDR(3Mbps)

2402MHz_TX

03/06/2021



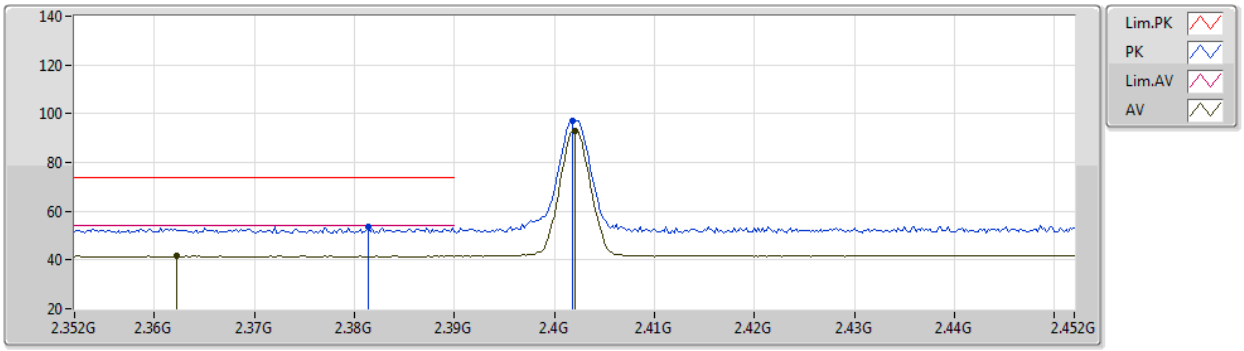
EUT Y_1TX
Setting 4
01-A-J-7

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	2.3894G	54.29	74.00	-19.71	24.72	3	Vertical	329	1.79	-	27.38	2.19	-
AV	2.3896G	41.89	54.00	-12.11	12.32	3	Vertical	329	1.79	-	27.38	2.19	-
PK	2.4018G	97.78	Inf	-Inf	68.18	3	Vertical	329	1.79	-	27.40	2.20	-
AV	2.402G	93.68	Inf	-Inf	64.08	3	Vertical	329	1.79	-	27.40	2.20	-

BT-EDR(3Mbps)

2402MHz_TX

03/06/2021



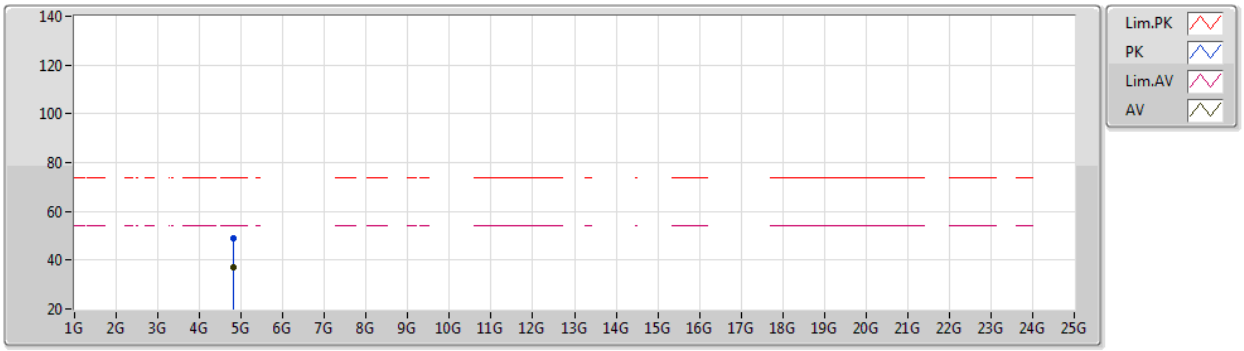
EUT Y_1TX
Setting 4
01-A-J-7

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	2.3814G	53.57	74.00	-20.43	24.03	3	Horizontal	204	1.80	-	27.36	2.18	-
AV	2.3622G	41.66	54.00	-12.34	12.18	3	Horizontal	204	1.80	-	27.32	2.16	-
PK	2.4018G	97.23	Inf	-Inf	67.63	3	Horizontal	204	1.80	-	27.40	2.20	-
AV	2.402G	93.12	Inf	-Inf	63.52	3	Horizontal	204	1.80	-	27.40	2.20	-

BT-EDR(3Mbps)

2402MHz_TX

03/06/2021



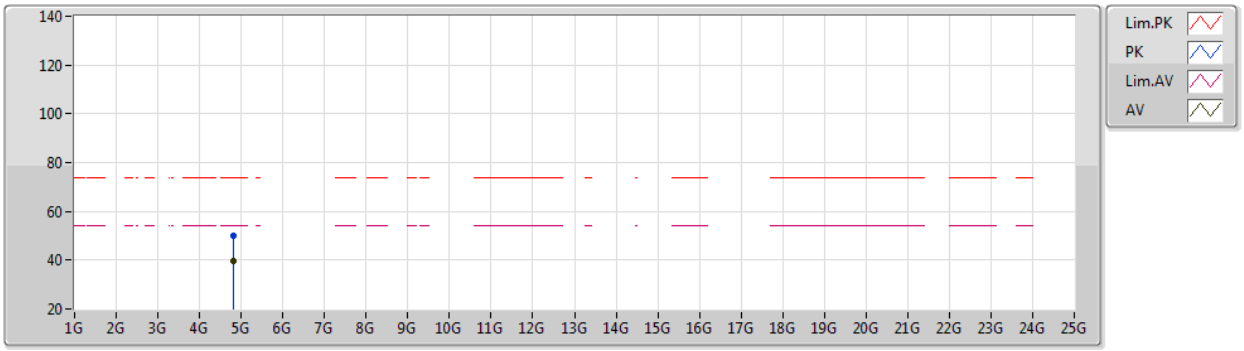
EUT Y_1TX
Setting 4
01-A-J-7

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	4.80418G	49.04	74.00	-24.96	44.90	3	Vertical	308	1.56	-	32.13	5.00	32.99
AV	4.80391G	37.11	54.00	-16.89	32.98	3	Vertical	308	1.56	-	32.12	5.00	32.99

BT-EDR(3Mbps)

2402MHz_TX

03/06/2021



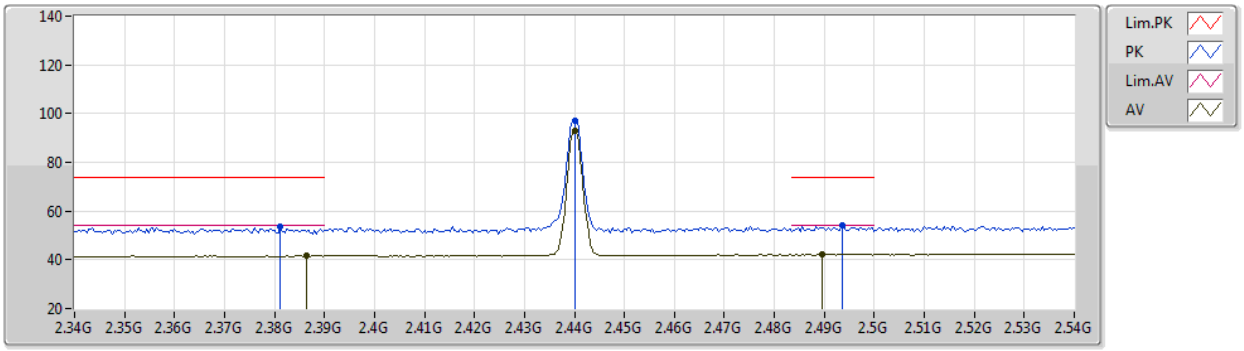
EUT Y_1TX
Setting 4
01-A-J-7

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	4.80381G	50.04	74.00	-23.96	45.91	3	Horizontal	0	1.80	-	32.12	5.00	32.99
AV	4.80406G	39.60	54.00	-14.40	35.47	3	Horizontal	0	1.80	-	32.12	5.00	32.99

BT-EDR(3Mbps)

2440MHz_TX

03/06/2021



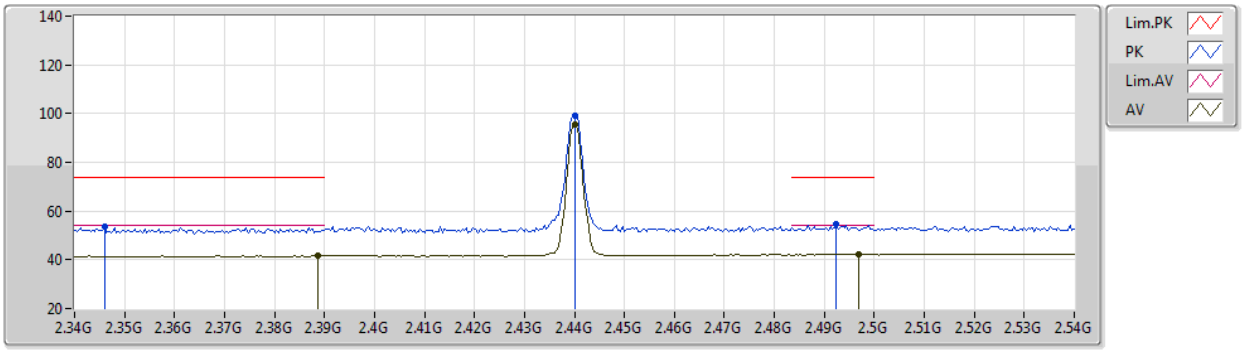
EUT Y_1TX
Setting 4
01-A-J-7

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	2.3812G	53.45	74.00	-20.55	23.91	3	Vertical	161	1.80	-	27.36	2.18	-
AV	2.3864G	41.76	54.00	-12.24	12.20	3	Vertical	161	1.80	-	27.37	2.19	-
PK	2.44G	97.18	Inf	-Inf	67.46	3	Vertical	161	1.80	-	27.48	2.24	-
AV	2.44G	93.06	Inf	-Inf	63.34	3	Vertical	161	1.80	-	27.48	2.24	-
PK	2.4936G	54.27	74.00	-19.73	24.22	3	Vertical	161	1.80	-	27.76	2.29	-
AV	2.4896G	42.28	54.00	-11.72	12.25	3	Vertical	161	1.80	-	27.74	2.29	-

BT-EDR(3Mbps)

2440MHz_TX

03/06/2021



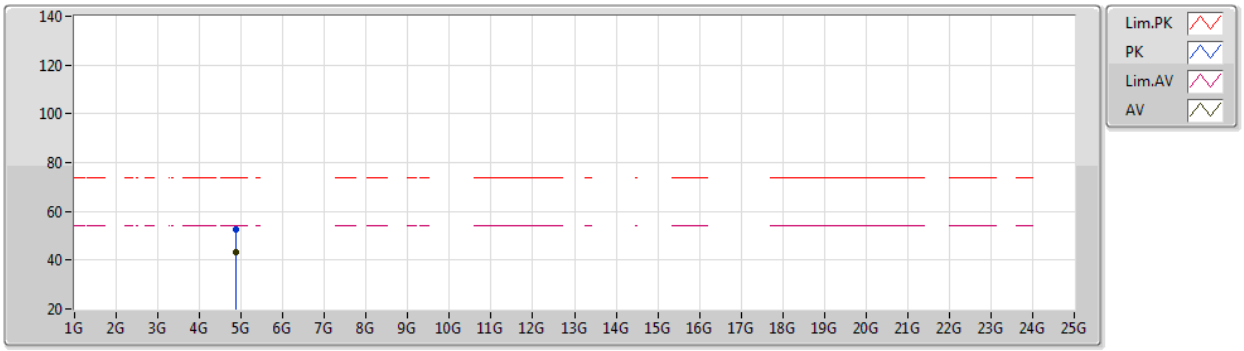
EUT Y_1TX
Setting 4
01-A-J-7

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	2.346G	53.71	74.00	-20.29	24.26	3	Horizontal	352	2.04	-	27.30	2.15	-
AV	2.3888G	41.68	54.00	-12.32	12.11	3	Horizontal	352	2.04	-	27.38	2.19	-
PK	2.44G	99.34	Inf	-Inf	69.62	3	Horizontal	352	2.04	-	27.48	2.24	-
AV	2.44G	95.29	Inf	-Inf	65.57	3	Horizontal	352	2.04	-	27.48	2.24	-
PK	2.4924G	54.53	74.00	-19.47	24.49	3	Horizontal	352	2.04	-	27.75	2.29	-
AV	2.4968G	42.37	54.00	-11.63	12.29	3	Horizontal	352	2.04	-	27.78	2.30	-

BT-EDR(3Mbps)

2440MHz_TX

03/06/2021



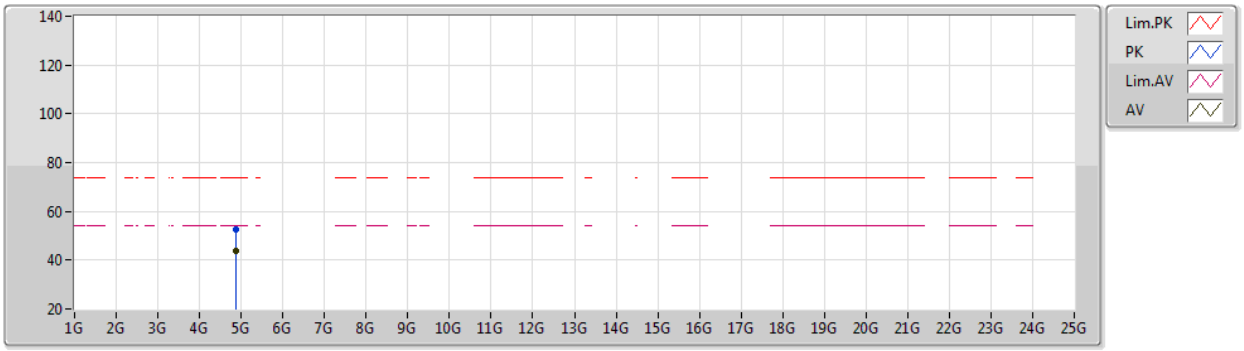
EUT Y_1TX
Setting 4
01-A-J-7

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	4.8799G	52.71	74.00	-21.29	48.19	3	Vertical	313	1.35	-	32.46	5.04	32.98
AV	4.87993G	43.30	54.00	-10.70	38.78	3	Vertical	313	1.35	-	32.46	5.04	32.98

BT-EDR(3Mbps)

2440MHz_TX

03/06/2021



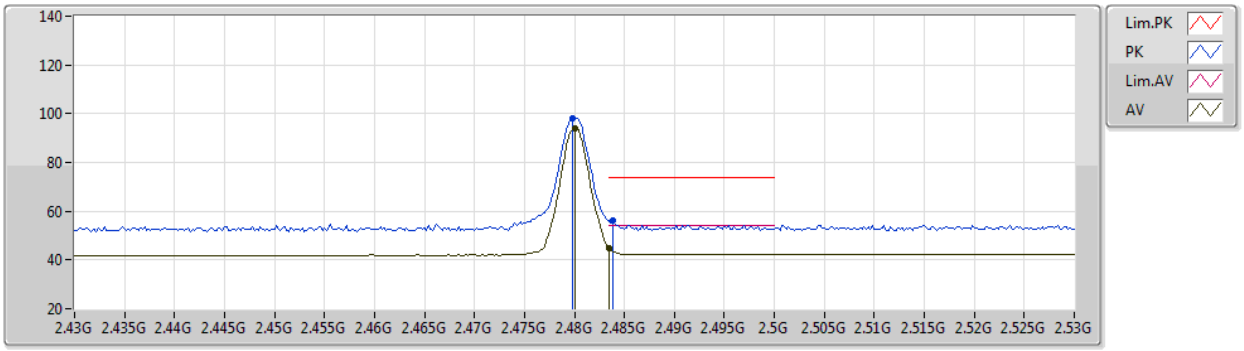
EUT Y_1TX
Setting 4
01-A-J-7

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	4.87988G	52.77	74.00	-21.23	48.25	3	Horizontal	12	1.37	-	32.46	5.04	32.98
AV	4.87997G	43.63	54.00	-10.37	39.11	3	Horizontal	12	1.37	-	32.46	5.04	32.98

BT-EDR(3Mbps)

2480MHz_TX

03/06/2021



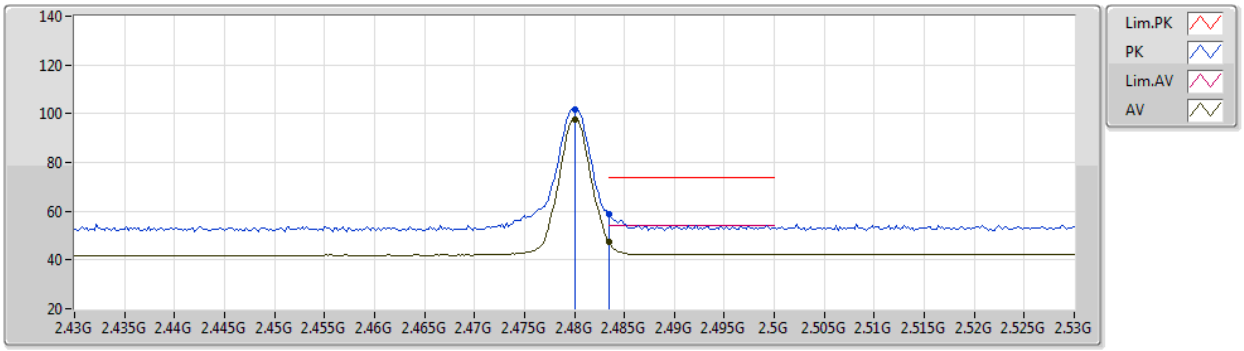
EUT Y_1TX
Setting 4
01-A-J-7

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	2.4798G	97.95	Inf	-Inf	67.99	3	Vertical	162	1.36	-	27.68	2.28	-
AV	2.48G	93.81	Inf	-Inf	63.85	3	Vertical	162	1.36	-	27.68	2.28	-
PK	2.4838G	56.21	74.00	-17.79	26.23	3	Vertical	162	1.36	-	27.70	2.28	-
AV	2.4835G	44.99	54.00	-9.01	15.01	3	Vertical	162	1.36	-	27.70	2.28	-

BT-EDR(3Mbps)

2480MHz_TX

03/06/2021



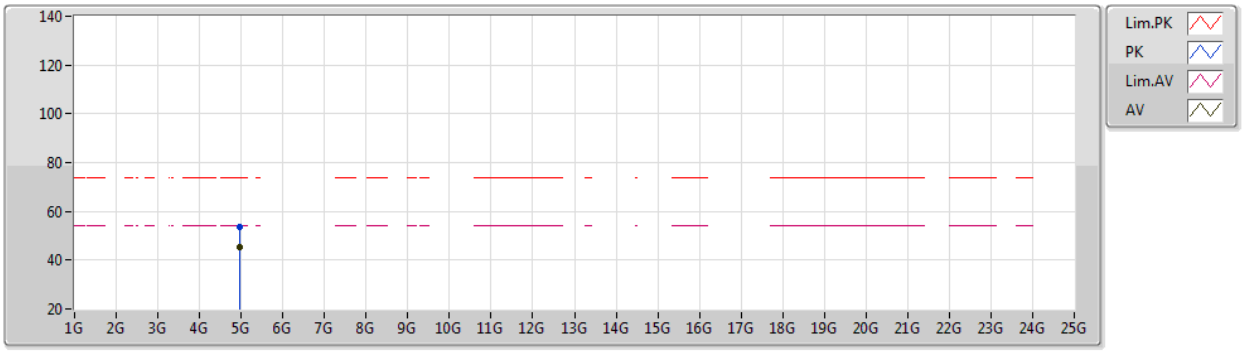
EUT Y_1TX
Setting 4
01-A-J-7

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	2.48G	101.74	Inf	-Inf	71.78	3	Horizontal	351	2.46	-	27.68	2.28	-
AV	2.48G	97.61	Inf	-Inf	67.65	3	Horizontal	351	2.46	-	27.68	2.28	-
PK	2.4835G	58.97	74.00	-15.03	28.99	3	Horizontal	351	2.46	-	27.70	2.28	-
AV	2.4835G	47.50	54.00	-6.50	17.52	3	Horizontal	351	2.46	-	27.70	2.28	-

BT-EDR(3Mbps)

2480MHz_TX

03/06/2021



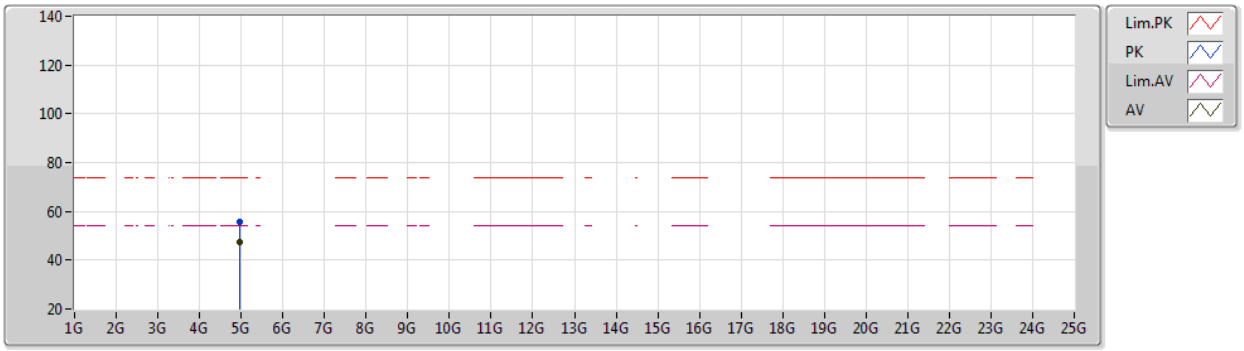
EUT Y_1TX
Setting 4
01-A-J-7

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	4.95993G	53.70	74.00	-20.30	48.81	3	Vertical	309	1.75	-	32.78	5.08	32.97
AV	4.95991G	45.19	54.00	-8.81	40.30	3	Vertical	309	1.75	-	32.78	5.08	32.97

BT-EDR(3Mbps)

2480MHz_TX

03/06/2021



EUT Y_1TX
Setting 4
01-A-J-7

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	4.96004G	55.45	74.00	-18.55	50.56	3	Horizontal	14	1.47	-	32.78	5.08	32.97
AV	4.95998G	47.55	54.00	-6.45	42.66	3	Horizontal	14	1.47	-	32.78	5.08	32.97