FCC Test Report

FCC ID	:	**2AIBV-MINICAM**
Equipment	:	**Furbo Dog Camera**
Brand Name	:	**Furbo**
Model Name	:	**Furbo Mini**
Applicant	:	**Tomofun Co. Ltd. 4F., No.178, Sec.3, Minquan E. Rd., Taipei City 1054, Taiwan**
Standard	:	**47 CFR FCC Part 15.247**

The product was received on Jun. 29, 2020, and testing was started from Jul. 04, 2020 and completed on Jul. 22, 2020. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications 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. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Approved by: Allen Lin

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)

Table of Contents

History of this test report

Report No.	Version	Description	Issued Date
FR062515AD	01	Initial issue of report	Sep. 11, 2020

Summary of Test Result

Report Clause	Ref. Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
3.1	15.207	AC Power-line Conducted Emissions	PASS	-
3.2	15.247(a)	20dB Bandwidth	PASS	-
3.2	15.247(a)	Carrier Frequency Separation	PASS	-
3.3	15.247(b)	Maximum Conducted Output Power	PASS	-
3.4	15.247(a)	Number of Hopping Frequencies and Hopping Bandedge	PASS	-
3.5	15.247(a)	Time of Occupancy (Dwell Time)	PASS	-
3.6	15.247(d)	Emissions in Non-restricted Frequency Bands	PASS	-
3.7	15.247(d)	Emissions in Restricted Frequency Bands	PASS	-

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and explanations:
None

Reviewed by: Sam Tsai

Report Producer: Yunha Liou

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 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.	Brand	Model Name	Antenna Type	Connector
1	LYNwave	ALX20F-051AA2-00	Dipole	I-PEX
2	LYNwave	ALX20F-051AA2-00	Dipole	I-PEX

Ant.	Port	Gain (dBi)	
		2.4G	BT
1	1	2.8	-
2	2	-	2.8

Note 1: The EUT has two antennas.

For 2.4GHz function:

For IEEE 802.11 b/g/n mode (1TX/1RX)

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

For BT function:

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

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

1.1.3 EUT Information

Operational Condition				
EUT Power Type	From AC Adapter			
EUT Function	☒	Point-to-multipoint	☐	Point-to-point

Type of EUT		
☒	Stand-alone	
☐	Combined (EUT where the radio part is fully integrated within another device)	
	Combined Equipment - Brand Name / Model No.:	…
☐	Plug-in radio (EUT intended for a variety of host systems)	
	Host System - Brand Name / Model No.:	…
☐	Other:	

1.1.4 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
BT-BR(1Mbps)	0.766	1.16	2.87m	1k
BT-EDR(2Mbps)	0.766	1.16	2.883m	1k
BT-EDR(3Mbps)	0.765	1.16	2.886m	1k

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

1.2 Testing Applied Standards

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

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

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

- KDB 558074 D01 v05r02
- KDB 414788 D01 v01r01

1.3 Testing Location Information

Testing Location			
☒	HWA YA	ADD : No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)	
		TEL : 886-3-327-3456	FAX : 886-3-327-0973
Test site Designation No. TW1190 with FCC.			
☐	JHUBEI	ADD : No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County, Taiwan (R.O.C.)	
		TEL : 886-3-656-9065	FAX : 886-3-656-9085
Test site Designation No. TW0006 with FCC.			
☒	Wen Shan	ADD : No.14-1, Ln. 19, Wen 33rd St., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)	
		TEL : 886-3-318-0787	FAX : 886-3-318-0287
Test site Designation No. TW1097 with FCC.			

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
AC Conduction	CO04-HY	Edward	23.5~24.4°C / 50~53%	15/Jul/2020
RF Conducted	TH06-HY	Alan	20.1~26.9°C / 50~60%	06/Jul/2020~ 22/Jul/2020
Radiated	03CH09-HY	Lego	23.6~25.6°C / 50~60%	04/Jul/2020~ 14/Jul/2020

1.4 Measurement Uncertainty

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

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	0.9 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	2.4 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.6 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.0 dB	Confidence levels of 95%
Temperature	0.41 °C	Confidence levels of 95%
Humidity	3.4 %	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Condition

RF Conducted	Abbreviation	Remark
TnomVnom	Tnom	20°C
-	Vnom	120V

2.2 Test Channel Mode

Test Software Version	Microsoft Windows Version 6.1

Mode	Power Setting
BT-BR(1Mbps)	-
2402MHz	20
2440MHz	20
2480MHz	20
BT-EDR(2Mbps)	-
2402MHz	20
2440MHz	20
2480MHz	20
BT-EDR(3Mbps)	-
2402MHz	20
2440MHz	20
2480MHz	20

2.3 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	CTX
1	Adapter mode

The Worst Case Mode for Following Conformance Tests	
Tests Item	20dB Bandwidth Carrier Frequency Separation Maximum Conducted Output Power Number of Hopping Frequencies Hopping Bandedge Time of Occupancy (Dwell Time) Emissions in Non-restricted Frequency Bands
Test Condition	Conducted measurement at transmit chains ☒ Non-adaptive frequency hopping systems (Non-AFH) ☐ adaptive frequency hopping systems (AFH)
Non-AFH Mode configuration was found to be the worst case and measured during the test.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emissions in Restricted Frequency Bands
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	CTX
1	Adapter mode
Operating Mode > 1GHz	CTX
Orthogonal Planes of EUT	**Y Plane**
	

2.4 Accessories

Accessories				
AC Adapter	**Brand Name**	Furbo	**Model Name**	S005CAU0500100
	Manufacturer	Trillion Win	**SN**	TWN-ADP-R033613L-U
	Power Rating	I/P:100 - 240Vac, 0.2A, O/P:5 Vdc,1A		
USB Cable	**Brand Name**	Furbo	**Model Name**	3061000152F7
	Manufacturer	EACH-TAI	**SN**	E-6B2004055
	Signal Line	2 meter, non-shielded cable, w/o ferrite core		

Reminder: Regarding to more detail and other information, please refer to user manual.

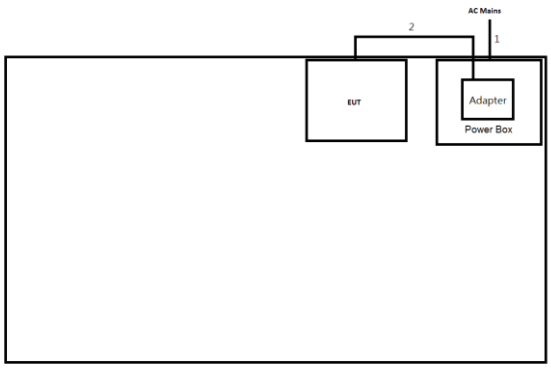
2.5 Support Equipment

Support Equipment – Conducted					
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**	**Remark**
1	Notebook	DELL	E5410	-	-
2	Adapter for NB	DELL	HA65NM130	-	-
3	AC Power Source	Furbo	S005CAU0500100	-	Note 1

Note 1: No.3 was provided by customer.

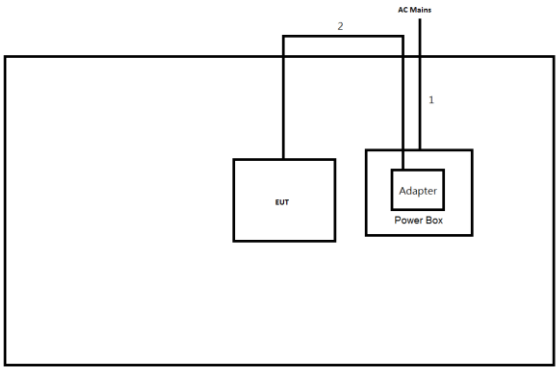
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



Item	Connection	Shielded	Length(m)	Remark
1	AC Power cable	No	1.8	-
2	USB cable	No	2.0	-

Test Setup Diagram - Radiated Test



Item	Connection	Shielded	Length(m)	Remark
1	AC Power cable	No	1.8	-
2	USB cable	No	2.0	-

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

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

3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

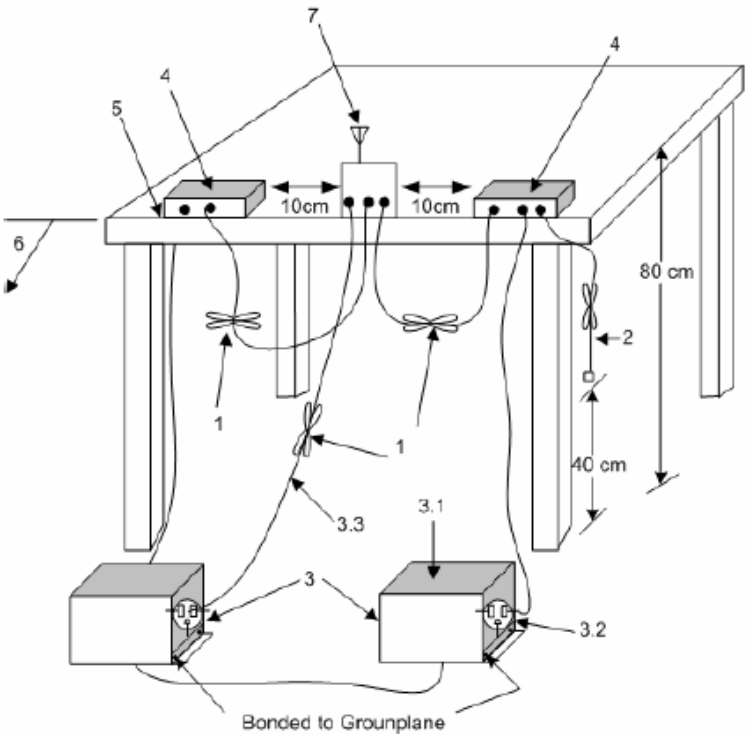
Test Method
▪ Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

3.1.4 Measurement Results Calculation

The measured Level is calculated using:
Corrected Reading: Raw(Read Level) +LISN(LISN Factor) + CL(Cable Loss) - AT(Attenuator).

3.1.5 Test Setup

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 50Ω 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.

3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 20dB Bandwidth and Carrier Frequency Separation

3.2.1 20dB Bandwidth and Carrier Frequency Separation Limit

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

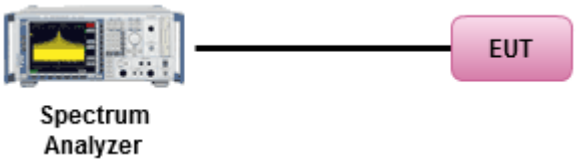
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

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

3.2.4 Test Setup

20dB Bandwidth and Carrier Frequency Separation


3.2.5 Test Result of 20dB Bandwidth

Refer as Appendix B

3.2.6 Test Result of Carrier Frequency Separation

Refer as Appendix B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

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

3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

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

3.3.4 Test Setup

Maximum Conducted Output Power (Peak Power Meter)


3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Number of Hopping Frequencies and Hopping Bandedge

3.4.1 Number of Hopping Frequencies Limit

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

3.4.2 Hopping Bandedge Limit

Refer clause 3.6.1 and clause 3.7.1

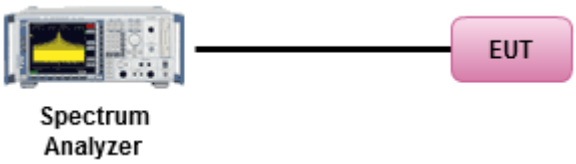
3.4.3 Measuring Instruments

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

3.4.4 Test Procedures

Test Method
▪ Refer as ANSI C63.10-2013, clause 7.8.3 for number of hopping frequencies measurement.
▪ Refer as ANSI C63.10-2013, clause 7.8.6 for hopping frequencies Bandedge measurement.

3.4.5 Test Setup

Number of Hopping Frequencies and Hopping Frequencies Bandedge


3.4.6 Test Result of Number of Hopping Frequencies

Refer as Appendix D

3.4.7 Test Result of Number of Hopping Frequencies Bandedge

Refer as Appendix D

3.5 Time of Occupancy (Dwell Time)

3.5.1 Time of Occupancy (Dwell Time) Limit

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

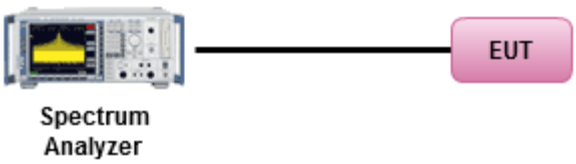
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

Test Method	
▪ Refer as ANSI C63.10-2013, clause 7.8.4 for dwell time measurement.	
▪ Bluetooth ACL packets can be 1, 3, or 5 time slots. Following as dwell time. Operate DH5 at maximum dwell time and maximum duty cycle.	
	▪ The DH5 packet can cover up to 5 time slots. Operate DH5 at maximum dwell time and maximum duty cycle. A maximum length packet has duration of 5 time slots. The hopping rate is 1600 hops/second so the maximum dwell time is 5/1600 seconds, or 3.125ms.DH5 Packet permit maximum 1600/ 79 / 6 = 3.37 hops per second in each channel.

3.5.4 Test Setup

Time of Occupancy (Dwell Time)
 Spectrum Analyzer

3.5.5 Test Result of Time of Occupancy (Dwell Time)

Refer as Appendix E

3.6 Emissions in Non-restricted Frequency Bands

3.6.1 Emissions in Non-restricted Frequency Bands Limit

Un-restricted Band Emissions Limit	
RF output power procedure	**Limit (dB)**
Peak output power procedure	20
Note 1: If the peak output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the peak conducted output power measured within any 100 kHz outside the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum measured in-band peak PSD level.	

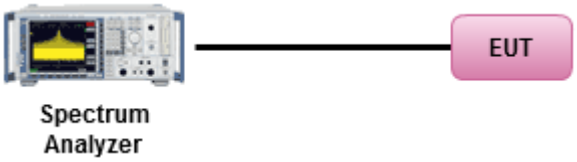
3.6.2 Measuring Instruments

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

3.6.3 Test Procedures

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

3.6.4 Test Setup

Emissions in Non-restricted Frequency Bands


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 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.

3.7.2 Measuring Instruments

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

3.7.3 Test Procedures

Test Method	
▪ The average emission levels shall be measured in [hopping duty factor].	
▪ Refer as ANSI C63.10; clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.	
▪ For the transmitter unwanted emissions shall be measured using following options below:	
	▪ Refer as ANSI C63.10, clause 4.1.4.2.1 QP value.
	▪ Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak.
	▪ Refer as ANSI C63.10, clause 4.1.4.2.4 average value of hopping pulsed emissions.
▪	KDB 414788 Open-Field Test Sites and Chamber Correlation Justification.
	▪ Based on FCC 15.31 (f) (2): measurements may be performed at a distance closer than that specified in regulations; however, an attempt should be made to avoid making measurements in the near field.
	▪ Open-field site and chamber correlation testing had been performed and chamber measured test result is the worst case test result.

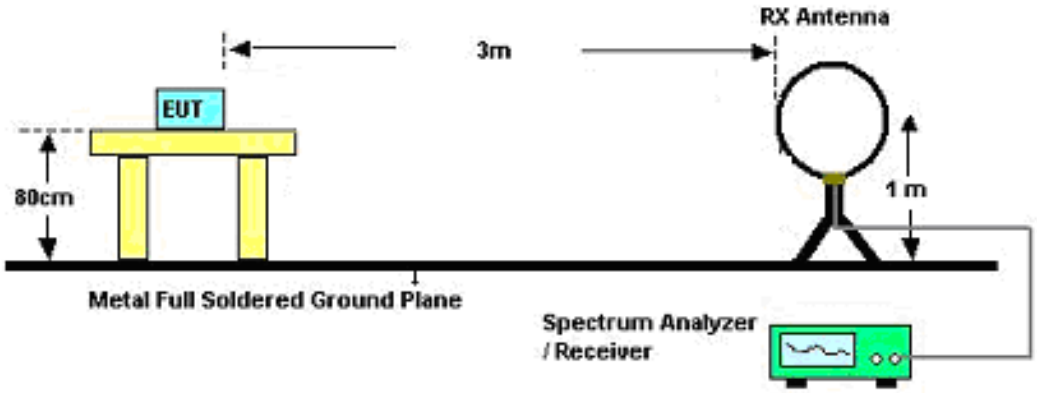
3.7.4 Measurement Results Calculation

The measured Level is calculated using:
Corrected Reading: Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamp Factor)

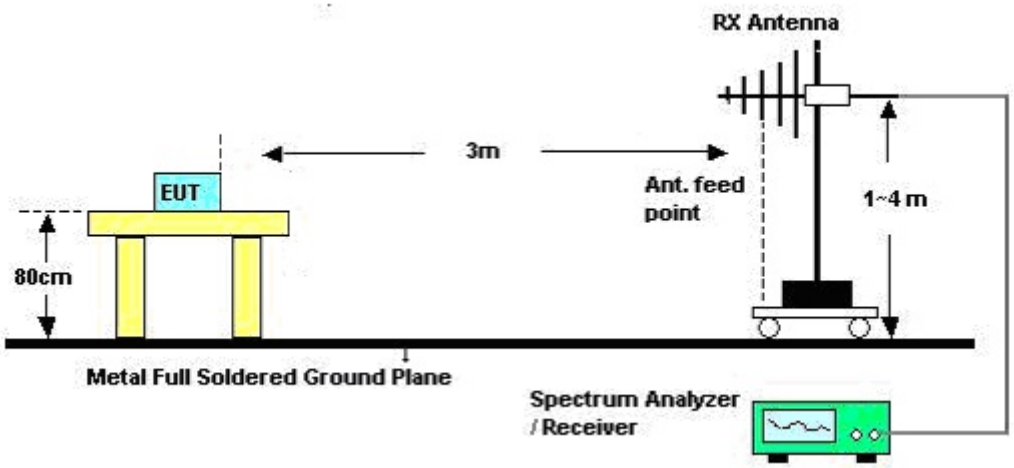
3.7.5 Test Setup

Emissions in Restricted Frequency Bands

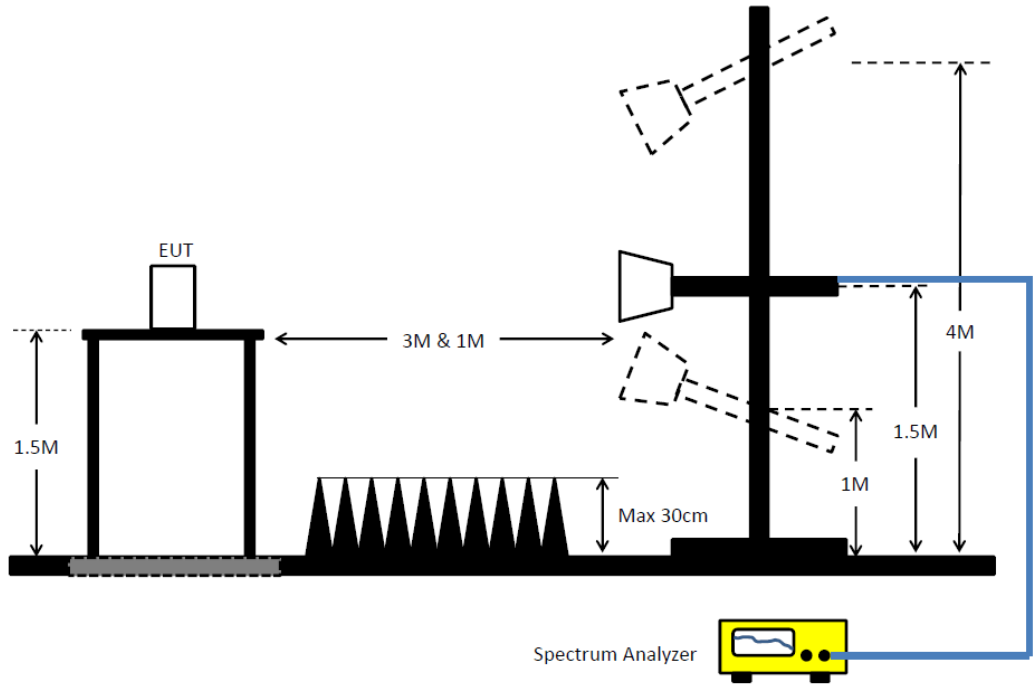
9kHz ~30MHz



30MHz~1GHz



Above 1GHz



3.7.6 Test Result of Emissions in Restricted Frequency Bands (Below 30MHz)

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

3.7.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix G

4 Test Equipment and Calibration Data

Instrument for AC Conduction

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMI Test Receiver	R&S	ESR3	102051	9kHz ~ 3.6GHz	29/May/2020	28/May/2021
LISN	R&S	ENV216	101295	9kHz ~ 30MHz	05/Nov/2019	04/Nov/2020
RF Cable-CON	MTJ	RG142	CB002-CO	9kHz ~ 200MHz	23/Sep/2019	22/Sep/2020
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9kHz ~ 30MHz	24/Sep/2019	23/Sep/2020

Instrument for Conducted Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101029	10kHz ~ 40GHz	01/Oct/2019	30/Sep/2020
Pulse Power Sensor	Anritsu	MA2411B	1027452	300MHz ~ 40GHz	18/Mar/2020	17/Mar/2021
Power Meter	Anritsu	ML2495A	1124009	300MHz ~ 40GHz	18/Mar/2020	17/Mar/2021
SMB100A Signal Generator	R&S	SMB100A03	181147	100kHz ~ 40GHz	12/Nov/2018	10/Nov/2020

Instrument for Radiated Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	30MHz ~ 1GHz 3m	27/Mar/2020	26/Mar/2021
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	1GHz ~ 18GHz 3m	19/Mar/2020	18/Mar/2021
EXA Signal Analyzer	KEYSIGHT	N9010A	MY54200885	10Hz ~ 44GHz	07/Aug/2019	06/Aug/2020
Amplifier	EMC	EMC9135	980232	9kHz ~ 1GHz	14/Apr/2020	13/Apr/2021
Microwave Preamplifier	Agilent	8449B	3008A02096	1GHz ~ 26.5GHz	04/Sep/2019	03/Sep/2020
Microwave Preamplifier	Agilent	8449B	3008A02326	1GHz ~ 26.5GHz	15/Jul/2019	14/Jul/2020
Bilog Antenna & 5dB Attenuator	TESEQ & MTJ	CBL6111D&MTJ6102-05	35418 & 3	30MHz ~ 1GHz	30/Sep/2019	29/Sep/2020
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA9120 D 1534	1GHz ~ 18GHz	28/May/2020	27/May/2021
RF Cable-low	Jye Bao	RG142	CB031+324530/4	30MHz ~ 1GHz	12/Feb/2020	11/Feb/2021
RF Cable-R03m	HUBER+SUHNER	SUCOFLEX104	324530/4+17173/4	1GHz ~ 40GHz	12/Feb/2020	11/Feb/2021
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170221	18GHz ~ 40GHz	13/Mar/2020	12/Mar/2021
Preamplifier	MITEQ	TTA1840-35-HG	1864481	18GHz ~ 40GHz	10/Mar/2020	09/Mar/2021
Loop Antenna	TESEQ	HLA 6120	31244	9kHz ~ 30MHz	16/Mar/2020	15/Mar/2021
EMI Test Receiver	R&S	ESR3	102051	9kHz ~ 3.6GHz	29/May/2020	28/May/2021

Summary

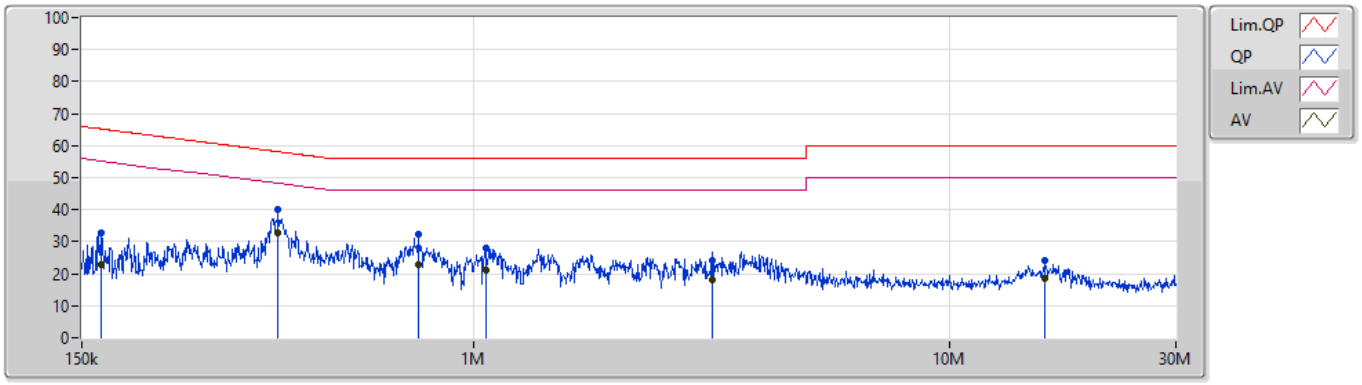
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	389.447k	40.62	48.08	-7.46	Neutral

Mode Configure

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition	Comments
Mode 1	Pass	QP	165.082k	32.76	65.20	-32.44	Line	-
Mode 1	Pass	AV	165.082k	22.65	55.20	-32.55	Line	-
Mode 1	Pass	QP	386.35k	40.21	58.14	-17.93	Line	-
Mode 1	Pass	AV	386.35k	32.58	48.14	-15.56	Line	"Worst"
Mode 1	Pass	QP	767.679k	32.30	56.00	-23.70	Line	-
Mode 1	Pass	AV	767.679k	23.03	46.00	-22.97	Line	-
Mode 1	Pass	QP	1.061M	28.00	56.00	-28.00	Line	-
Mode 1	Pass	AV	1.061M	20.96	46.00	-25.04	Line	-
Mode 1	Pass	QP	3.18M	24.31	56.00	-31.69	Line	-
Mode 1	Pass	AV	3.18M	18.07	46.00	-27.93	Line	-
Mode 1	Pass	QP	15.952M	24.01	60.00	-35.99	Line	-
Mode 1	Pass	AV	15.952M	18.71	50.00	-31.29	Line	-
Mode 1	Pass	QP	253.051k	34.93	61.66	-26.73	Neutral	-
Mode 1	Pass	AV	253.051k	29.98	51.66	-21.68	Neutral	-
Mode 1	Pass	QP	389.447k	47.98	58.08	-10.10	Neutral	-
Mode 1	Pass	AV	389.447k	40.62	48.08	-7.46	Neutral	"Worst"
Mode 1	Pass	QP	749.51k	38.20	56.00	-17.80	Neutral	-
Mode 1	Pass	AV	749.51k	28.96	46.00	-17.04	Neutral	-
Mode 1	Pass	QP	1.078M	36.44	56.00	-19.56	Neutral	-
Mode 1	Pass	AV	1.078M	29.10	46.00	-16.90	Neutral	-
Mode 1	Pass	QP	3.96M	33.50	56.00	-22.50	Neutral	-
Mode 1	Pass	AV	3.96M	26.14	46.00	-19.86	Neutral	-
Mode 1	Pass	QP	16.469M	30.33	60.00	-29.67	Neutral	-
Mode 1	Pass	AV	16.469M	22.91	50.00	-27.09	Neutral	-

Conducted Emissions at Powerline_Mode 1

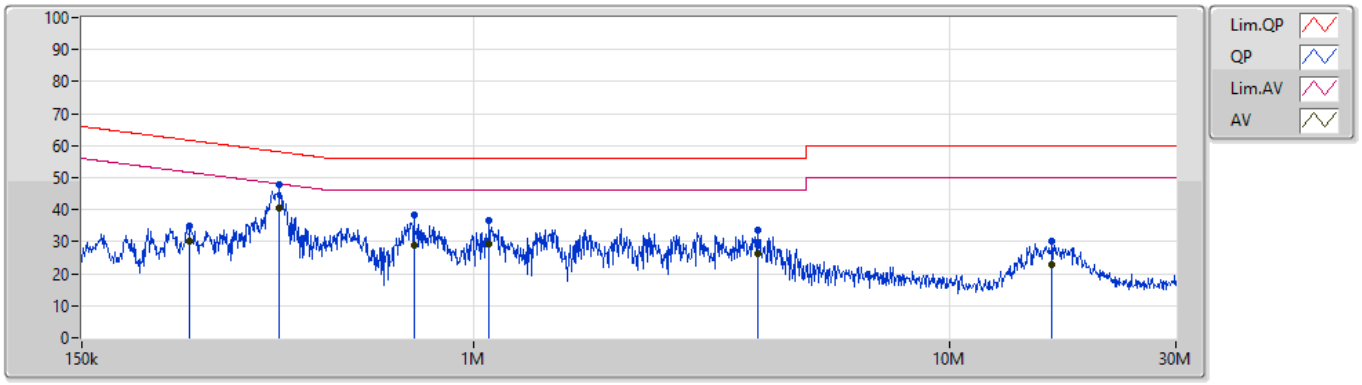
15/07/2020



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	165.082k	32.76	65.20	-32.44	19.64	Line	-	13.12	9.66	0.11	9.87
AV	165.082k	22.65	55.20	-32.55	19.64	Line	-	3.01	9.66	0.11	9.87
QP	386.35k	40.21	58.14	-17.93	19.64	Line	-	20.57	9.64	0.13	9.87
AV	386.35k	32.58	48.14	-15.56	19.64	Line	"Worst"	12.94	9.64	0.13	9.87
QP	767.679k	32.30	56.00	-23.70	19.63	Line	-	12.67	9.64	0.12	9.87
AV	767.679k	23.03	46.00	-22.97	19.63	Line	-	3.40	9.64	0.12	9.87
QP	1.061M	28.00	56.00	-28.00	19.63	Line	-	8.37	9.64	0.11	9.88
AV	1.061M	20.96	46.00	-25.04	19.63	Line	-	1.33	9.64	0.11	9.88
QP	3.18M	24.31	56.00	-31.69	19.71	Line	-	4.60	9.66	0.17	9.88
AV	3.18M	18.07	46.00	-27.93	19.71	Line	-	-1.64	9.66	0.17	9.88
QP	15.952M	24.01	60.00	-35.99	19.86	Line	-	4.15	9.66	0.32	9.88
AV	15.952M	18.71	50.00	-31.29	19.86	Line	-	-1.15	9.66	0.32	9.88

Conducted Emissions at Powerline_Mode 1

15/07/2020



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	253.051k	34.93	61.66	-26.73	19.63	Neutral	-	15.30	9.64	0.12	9.87
AV	253.051k	29.98	51.66	-21.68	19.63	Neutral	-	10.35	9.64	0.12	9.87
QP	389.447k	47.98	58.08	-10.10	19.63	Neutral	-	28.35	9.63	0.13	9.87
AV	389.447k	40.62	48.08	-7.46	19.63	Neutral	"Worst"	20.99	9.63	0.13	9.87
QP	749.51k	38.20	56.00	-17.80	19.62	Neutral	-	18.58	9.63	0.12	9.87
AV	749.51k	28.96	46.00	-17.04	19.62	Neutral	-	9.34	9.63	0.12	9.87
QP	1.078M	36.44	56.00	-19.56	19.62	Neutral	-	16.82	9.63	0.11	9.88
AV	1.078M	29.10	46.00	-16.90	19.62	Neutral	-	9.48	9.63	0.11	9.88
QP	3.96M	33.50	56.00	-22.50	19.72	Neutral	-	13.78	9.66	0.18	9.88
AV	3.96M	26.14	46.00	-19.86	19.72	Neutral	-	6.42	9.66	0.18	9.88
QP	16.469M	30.33	60.00	-29.67	19.92	Neutral	-	10.41	9.71	0.33	9.88
AV	16.469M	22.91	50.00	-27.09	19.92	Neutral	-	2.99	9.71	0.33	9.88

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)	967.5k	884.558k	885KF1D	963.75k	882.559k
BT-EDR(2Mbps)	1.281M	1.195M	1M20G1D	1.28M	1.19M
BT-EDR(3Mbps)	1.28M	1.188M	1M19G1D	1.259M	1.184M

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;

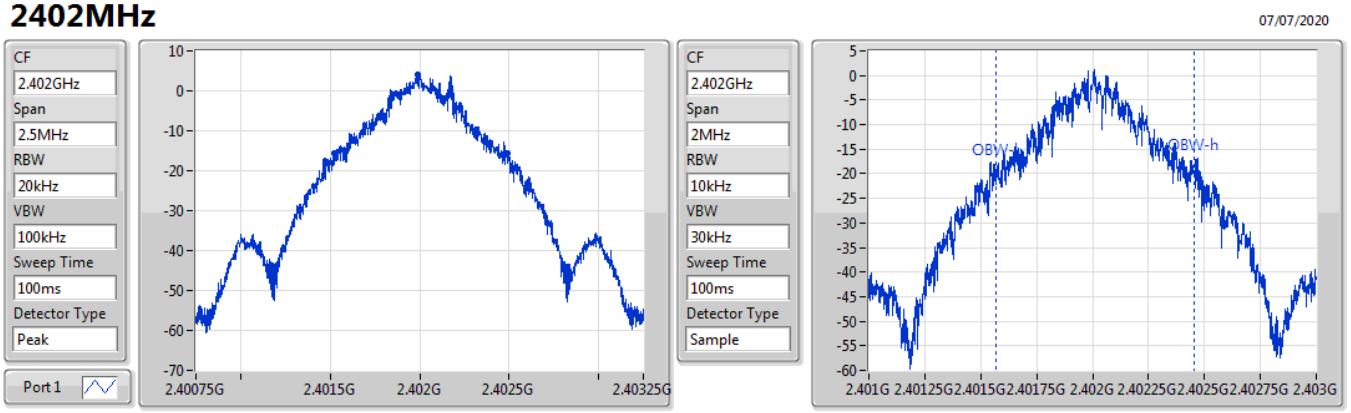
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	Inf	966.25k	882.559k
2440MHz	Pass	Inf	963.75k	884.558k
2480MHz	Pass	Inf	967.5k	882.559k
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	Inf	1.281M	1.195M
2440MHz	Pass	Inf	1.28M	1.193M
2480MHz	Pass	Inf	1.281M	1.19M
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	Inf	1.259M	1.185M
2440MHz	Pass	Inf	1.28M	1.188M
2480MHz	Pass	Inf	1.278M	1.184M

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

BT-BR(1Mbps) **EBW**

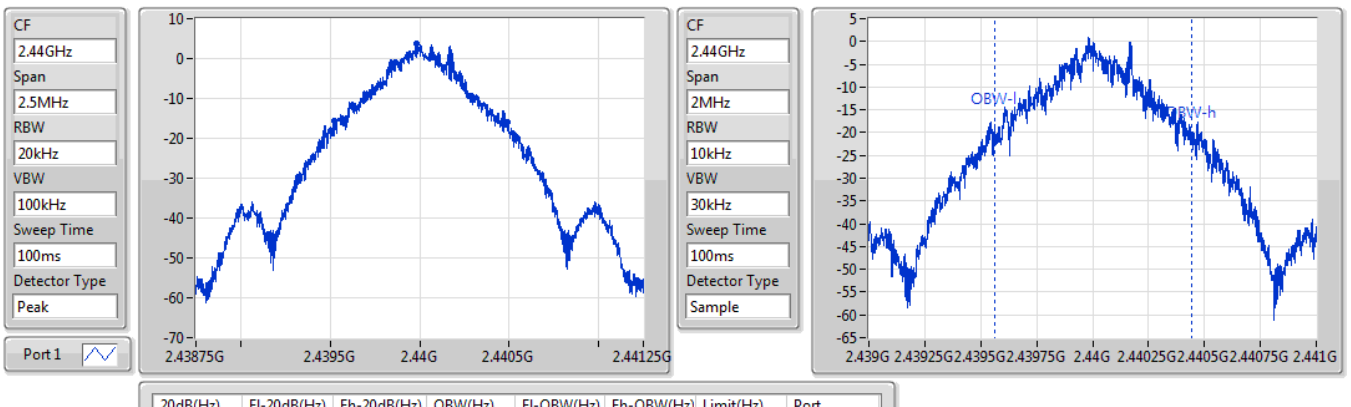
2402MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
966.25k	2.401525G	2.402491G	882.559k	2.401569G	2.402452G	Inf	1

BT-BR(1Mbps) **EBW**

2440MHz

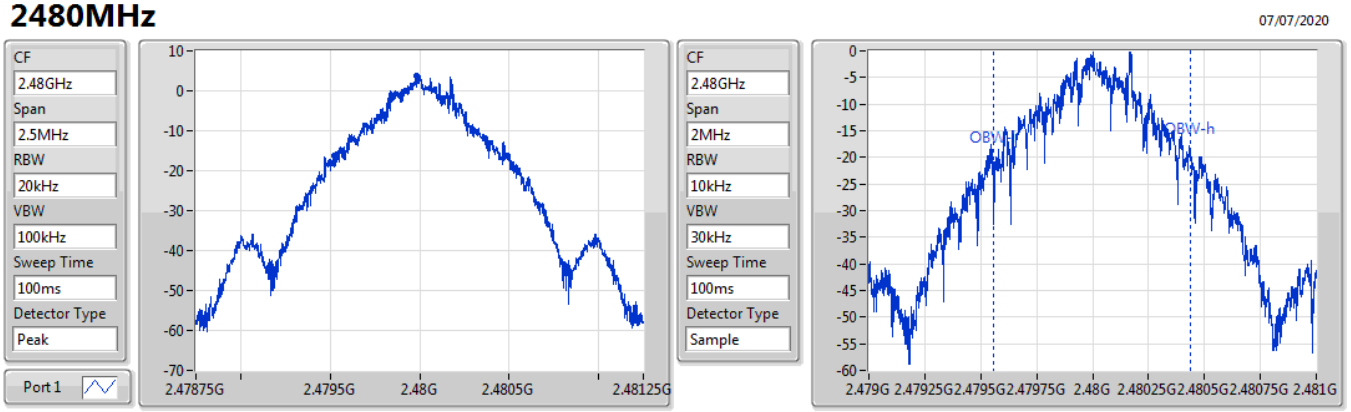


20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
963.75k	2.439526G	2.44049G	884.558k	2.43956G	2.440445G	Inf	1

BT-BR(1Mbps)

EBW

2480MHz

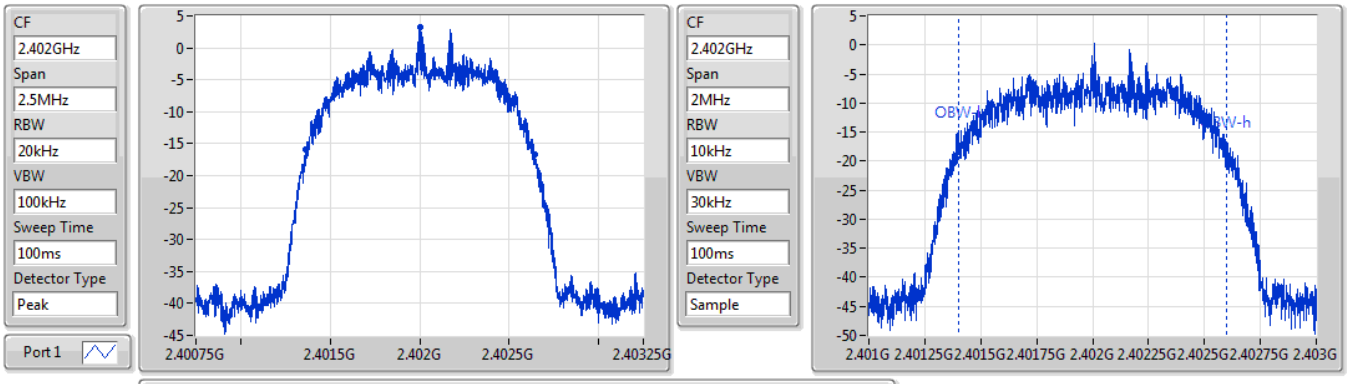


20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
967.5k	2.479521G	2.480489G	882.559k	2.479557G	2.48044G	Inf	1

BT-EDR(2Mbps)

EBW

2402MHz

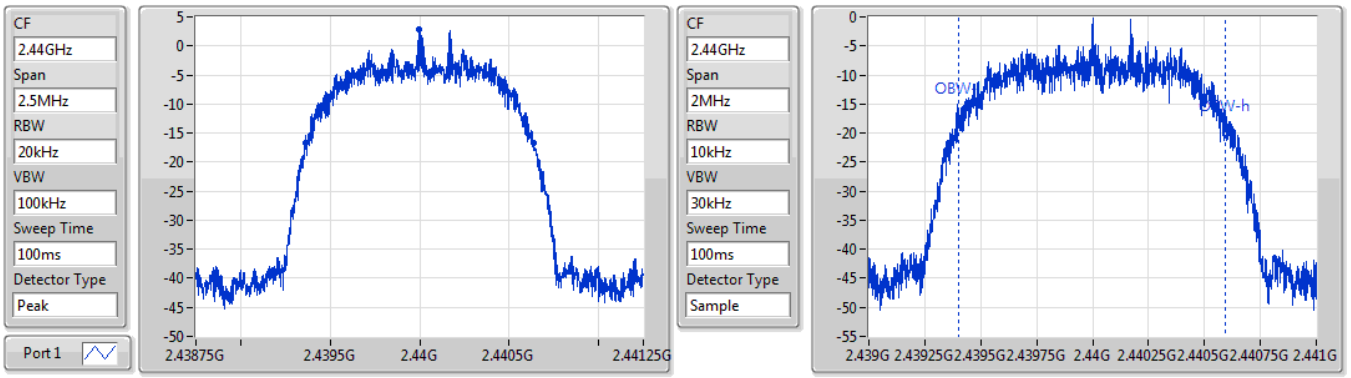


20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.281M	2.401363G	2.402644G	1.195M	2.401402G	2.402598G	Inf	1

BT-EDR(2Mbps) EBW

2440MHz

07/07/2020

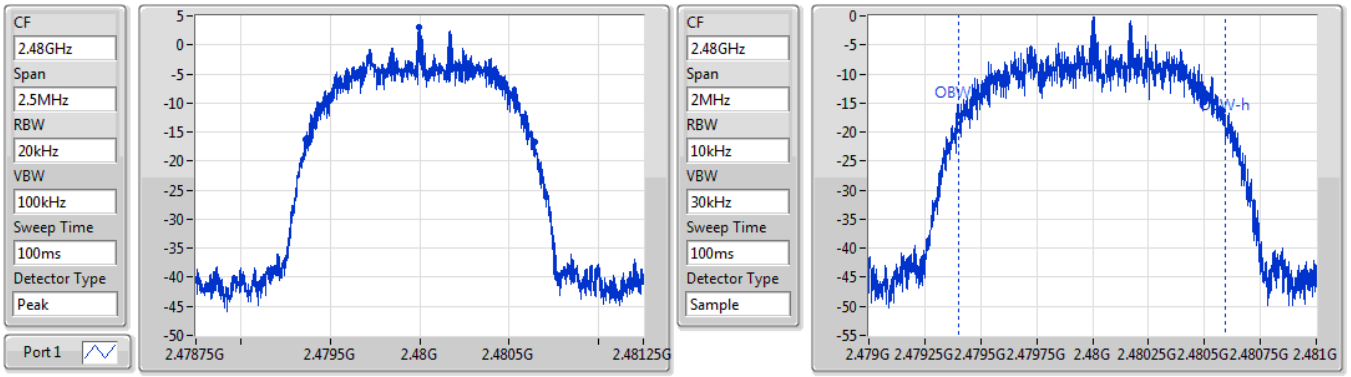


20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.28M	2.43936G	2.44064G	1.193M	2.439402G	2.440596G	Inf	1

BT-EDR(2Mbps) EBW

2480MHz

07/07/2020

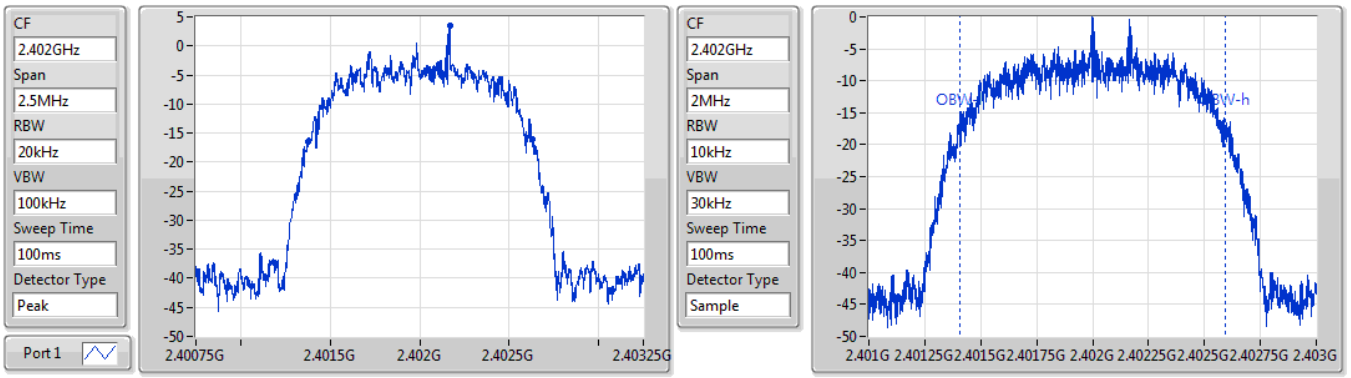


20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.281M	2.47936G	2.480641G	1.19M	2.479402G	2.480593G	Inf	1

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

2402MHz

07/07/2020

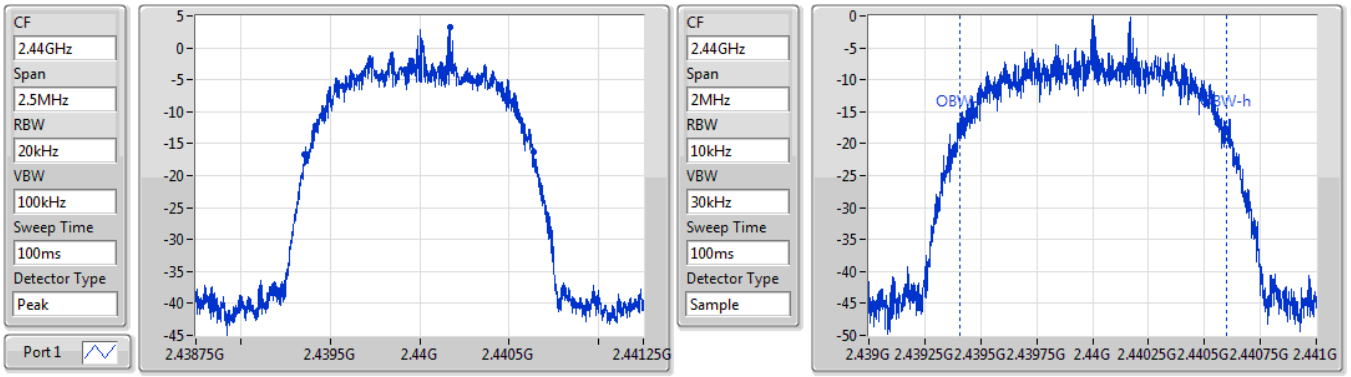


20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.259M	2.401374G	2.402633G	1.185M	2.401407G	2.402593G	Inf	1

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

2440MHz

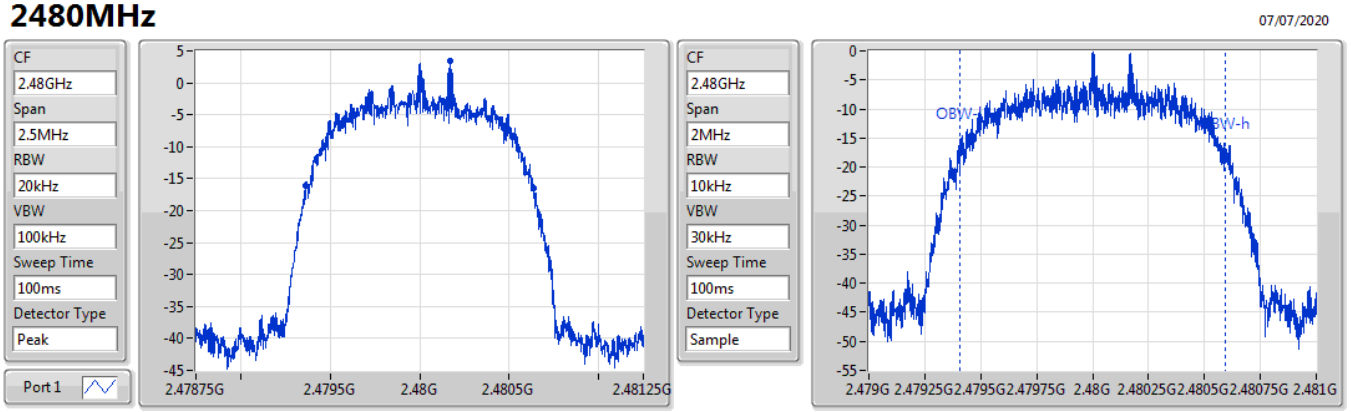
07/07/2020



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.28M	2.439358G	2.440638G	1.188M	2.439408G	2.440597G	Inf	1

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

2480MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.278M	2.47936G	2.480638G	1.184M	2.479409G	2.480594G	Inf	1

Summary

Mode	Max-Space (Hz)	Min-Space (Hz)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	1.005M	996k
BT-EDR(2Mbps)	1.005M	999k
BT-EDR(3Mbps)	1.0035M	996k

Result

Mode	Result	Fl (Hz)	Fh (Hz)	Ch.Space (Hz)	Limit (Hz)
BT-BR(1Mbps)	-	-	-	-	-
2402MHz	Pass	2.401986G	2.402991G	1.005M	643.5225k
2440MHz	Pass	2.439986G	2.440988G	1.002M	641.8575k
2480MHz	Pass	2.478989G	2.479985G	996k	644.355k
BT-EDR(2Mbps)	-	-	-	-	-
2402MHz	Pass	2.401998G	2.403G	1.002M	853.146k
2440MHz	Pass	2.439995G	2.441G	1.005M	852.48k
2480MHz	Pass	2.478999G	2.479998G	999k	853.146k
BT-EDR(3Mbps)	-	-	-	-	-
2402MHz	Pass	2.402167G	2.403169G	1.002M	838.494k
2440MHz	Pass	2.440167G	2.441171G	1.0035M	852.48k
2480MHz	Pass	2.479172G	2.480168G	996k	851.148k

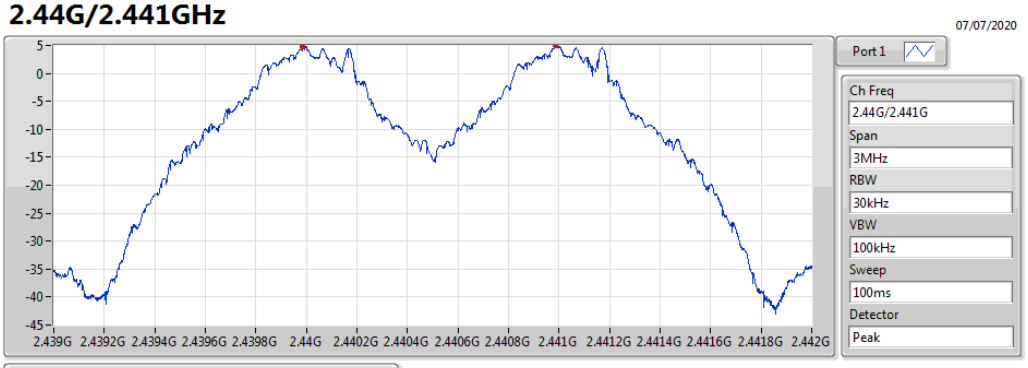
BT-BR(1Mbps) **Channel Separation**

2.402G/2.403GHz

Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.401986G	2.402991G	1.005M	643.5225k

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

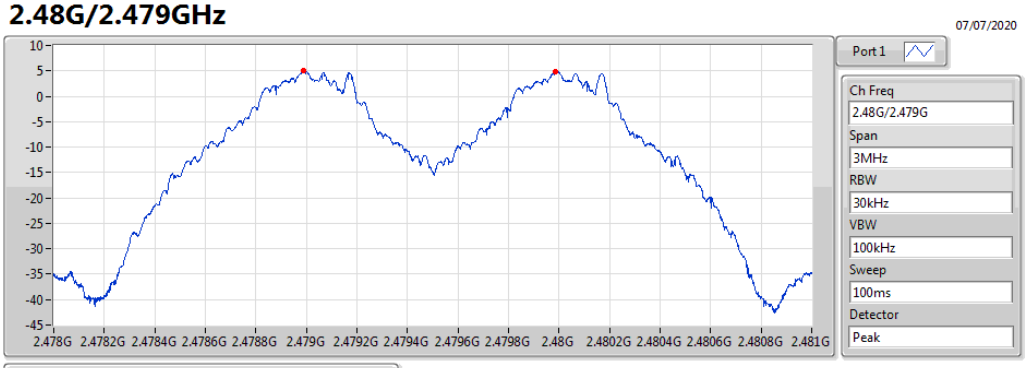
2.44G/2.441GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.439986G	2.440988G	1.002M	641.8575k

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

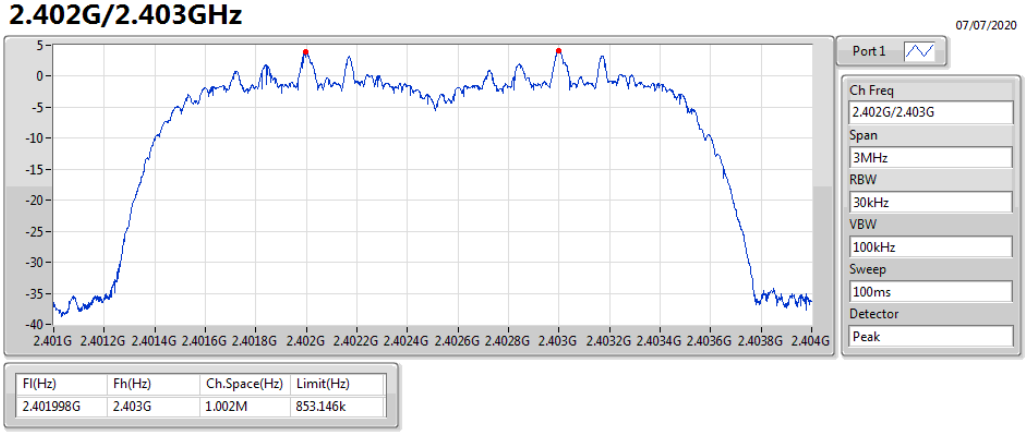
2.48G/2.479GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.478989G	2.479985G	996k	644.355k

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

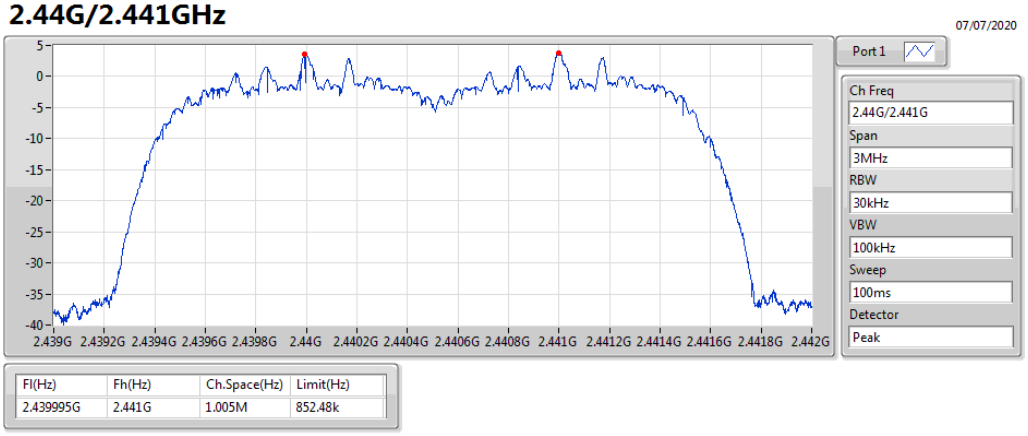
2.402G/2.403GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.401998G	2.403G	1.002M	853.146k

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

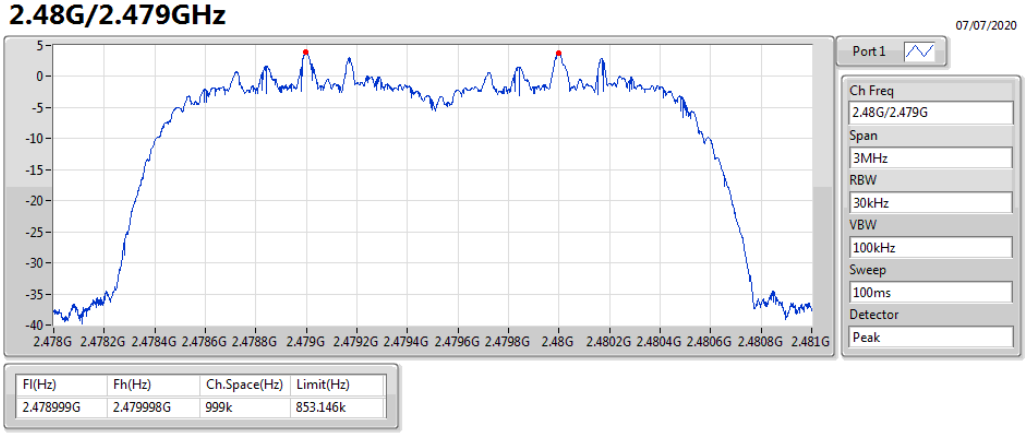
2.44G/2.441GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.439995G	2.441G	1.005M	852.48k

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

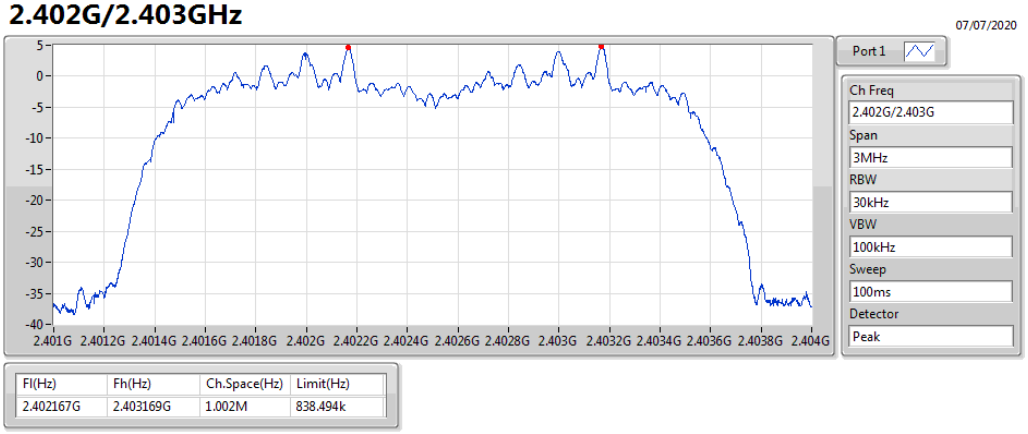
2.48G/2.479GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.478999G	2.479998G	999k	853.146k

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

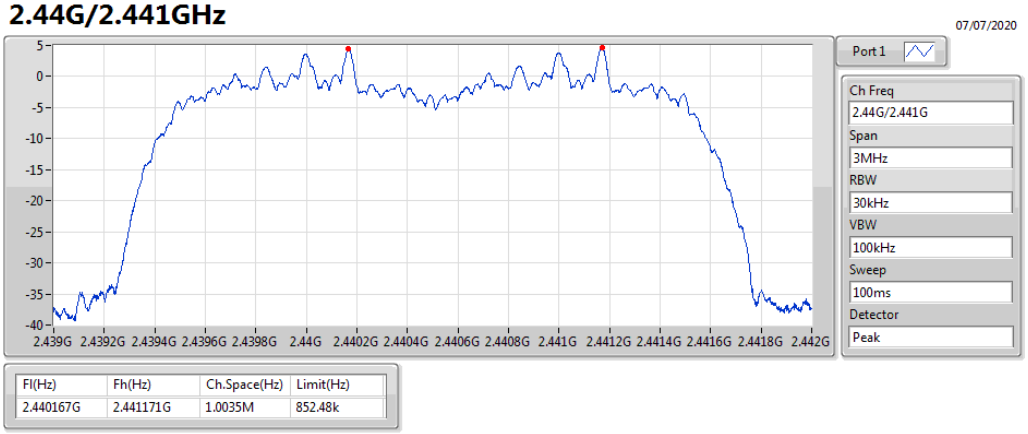
2.402G/2.403GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.402167G	2.403169G	1.002M	838.494k

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

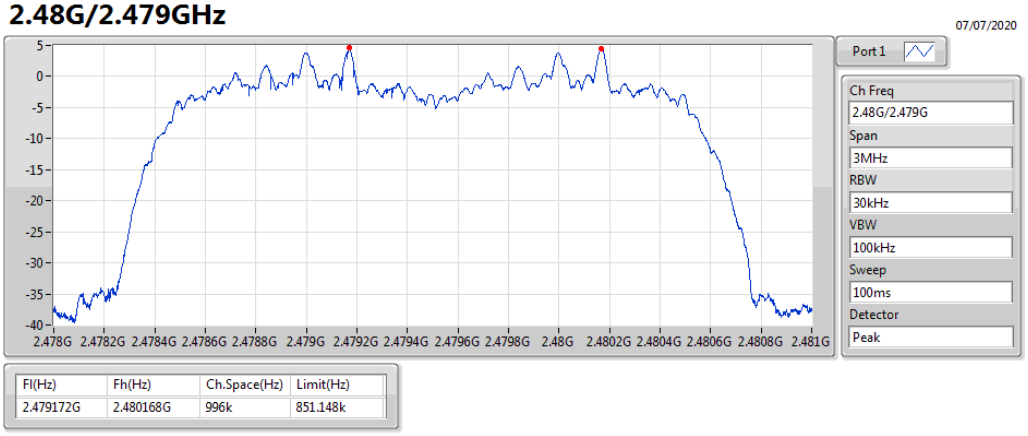
2.44G/2.441GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.440167G	2.441171G	1.0035M	852.48k

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

2.48G/2.479GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.479172G	2.480168G	996k	851.148k

Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	7.14	0.00518
BT-EDR(2Mbps)	8.30	0.00676
BT-EDR(3Mbps)	8.66	0.00735

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	2.80	7.14	21.00
2440MHz	Pass	2.80	6.86	21.00
2480MHz	Pass	2.80	6.99	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	2.80	8.30	21.00
2440MHz	Pass	2.80	8.04	21.00
2480MHz	Pass	2.80	8.17	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	2.80	8.66	21.00
2440MHz	Pass	2.80	8.53	21.00
2480MHz	Pass	2.80	8.65	21.00

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

Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	7.15	0.00519
BT-EDR(2Mbps)	6.20	0.00417
BT-EDR(3Mbps)	6.07	0.00405

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	2.80	7.15	21.00
2440MHz	Pass	2.80	6.75	21.00
2480MHz	Pass	2.80	6.92	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	2.80	6.20	21.00
2440MHz	Pass	2.80	5.77	21.00
2480MHz	Pass	2.80	5.90	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	2.80	6.07	21.00
2440MHz	Pass	2.80	5.77	21.00
2480MHz	Pass	2.80	5.91	21.00

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

Summary

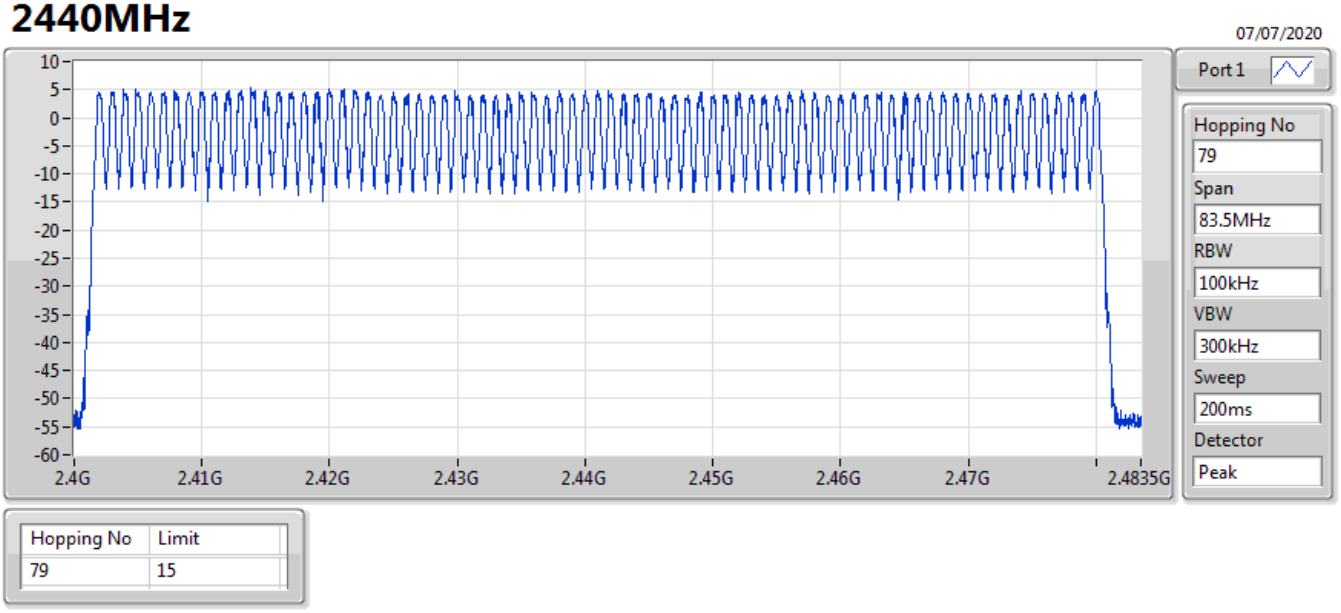
Mode	Max-Hop No
2.4-2.4835GHz	-
BT-BR(1Mbps)	79
BT-EDR(2Mbps)	79
BT-EDR(3Mbps)	79

Result

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

BT-BR(1Mbps) **Hopping Ch**

2440MHz

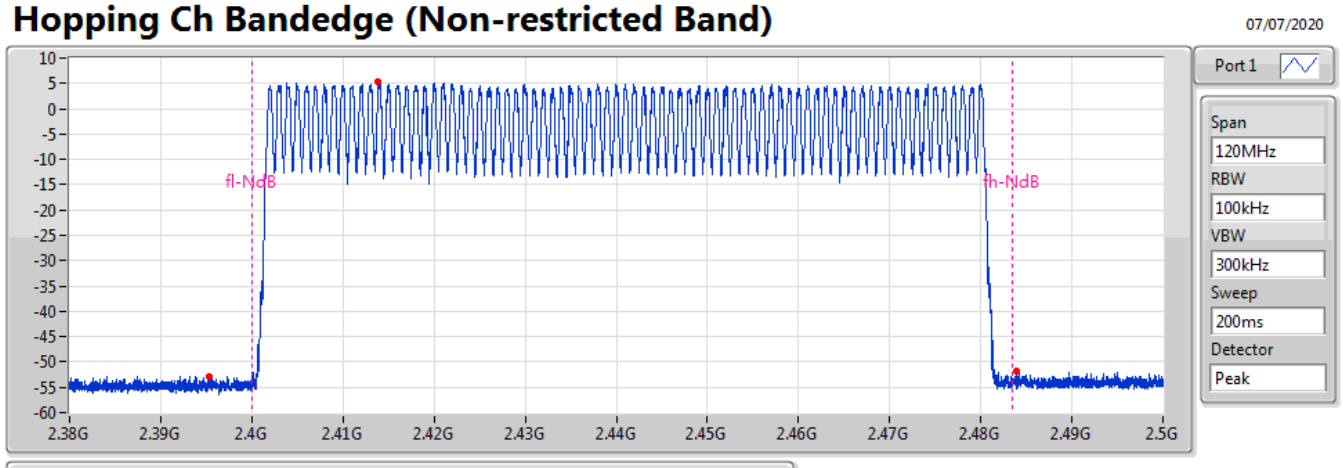


Hopping No	Limit
79	15

BT-BR(1Mbps)

2440MHz

Hopping Ch Bandedge (Non-restricted Band)

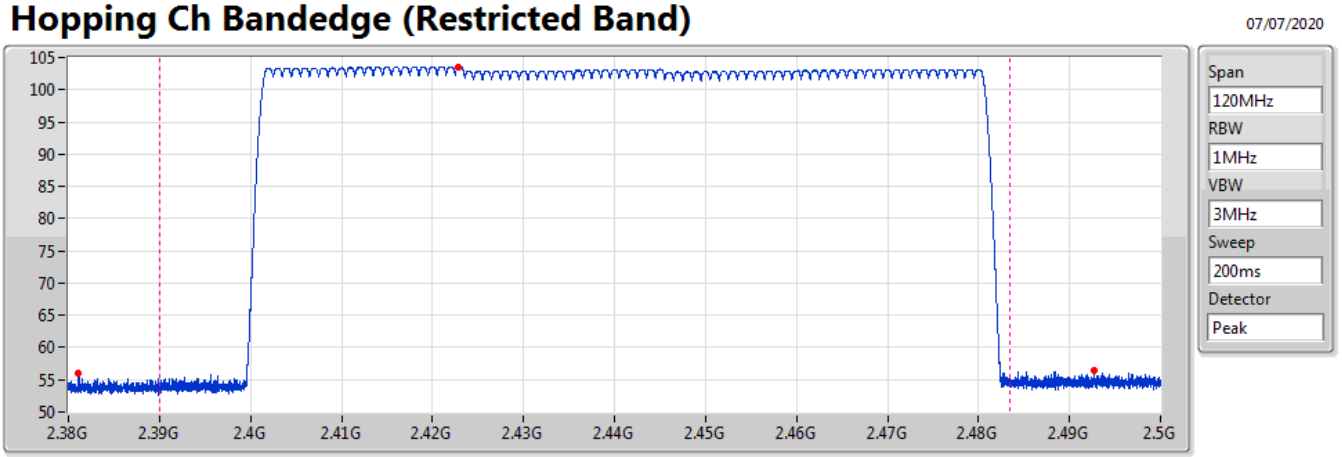


Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-14.75	2.41384G	5.25	2.395375G	-52.8	2.483875G	-51.7

BT-BR(1Mbps)

2440MHz

Hopping Ch Bandedge (Restricted Band)

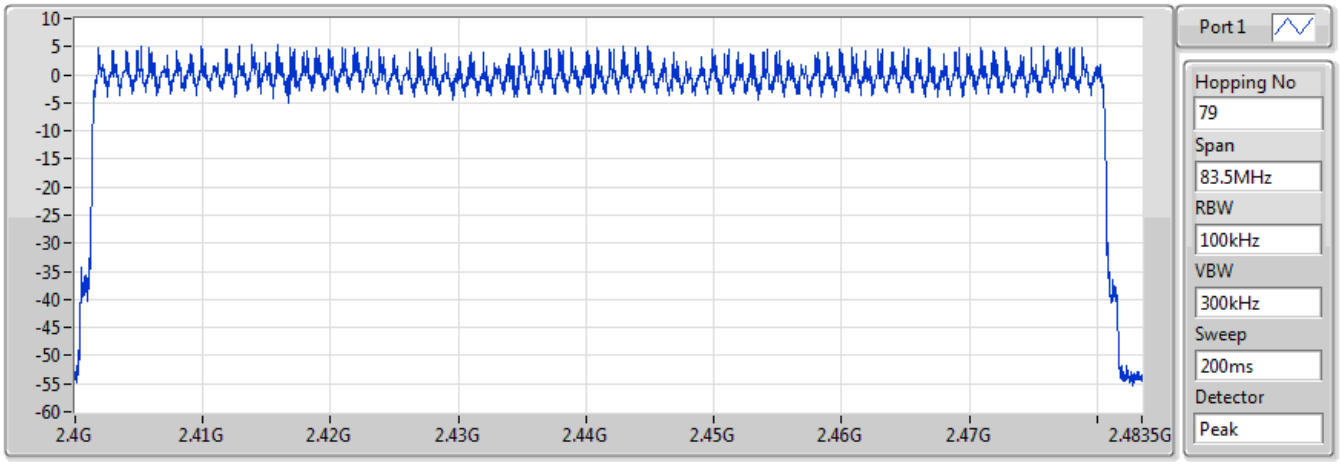


Ref(Hz)	Ref(dBuV/m)	BE-l(Hz)	PK(dBuV/m)	AV(dBuV/m)	BE-h(Hz)	PK(dBuV/m)	AV(dBuV/m)	LimPK(dBuV/	LimAV(dBuV/	Tx On(ms)	DCF(dB)
2.422885G	103.59	2.381095G	56.03	25.93	2.492635G	56.37	26.27	74	54	3.125	-30.1

BT-EDR(2Mbps)

2440MHz

Hopping Ch

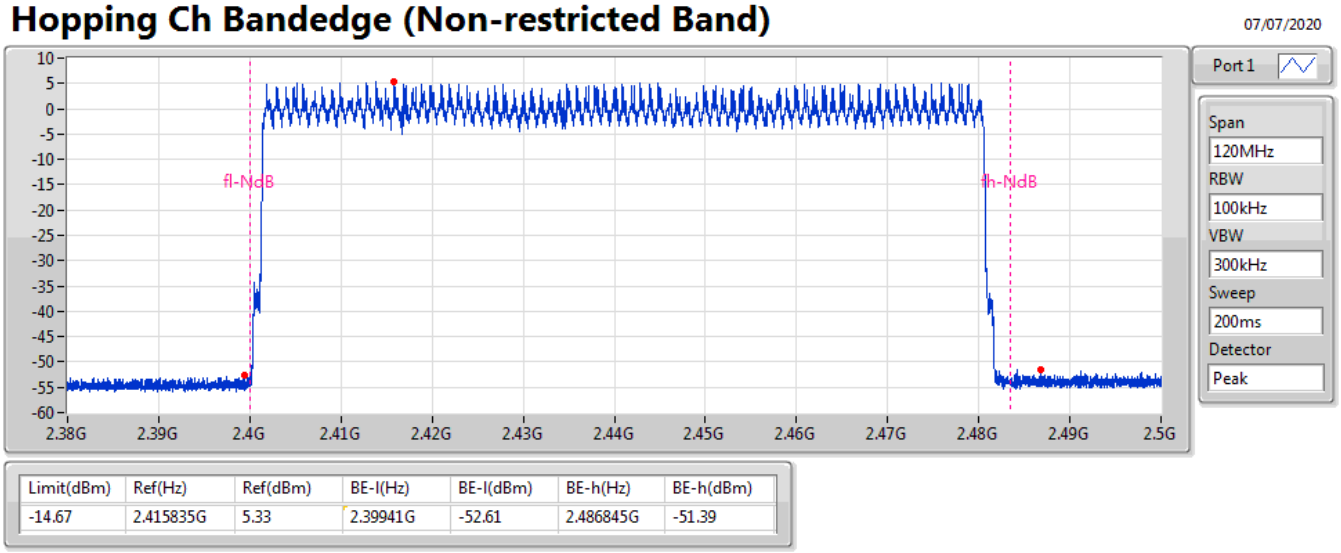


Hopping No	Limit
79	15

BT-EDR(2Mbps)

2440MHz

Hopping Ch Bandedge (Non-restricted Band)

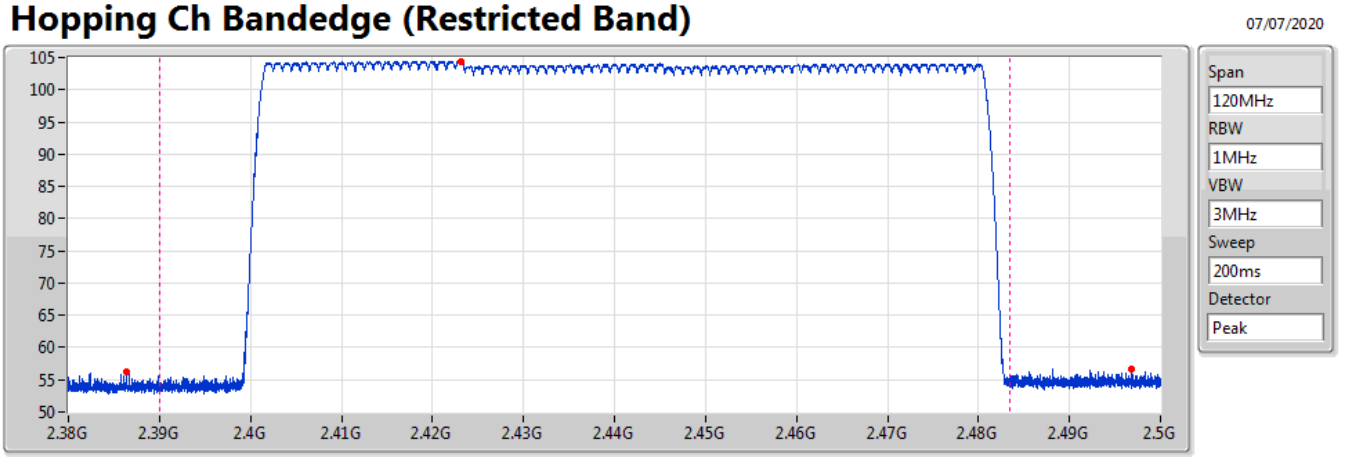


Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-14.67	2.415835G	5.33	2.39941G	-52.61	2.486845G	-51.39

BT-EDR(2Mbps)

2440MHz

Hopping Ch Bandedge (Restricted Band)

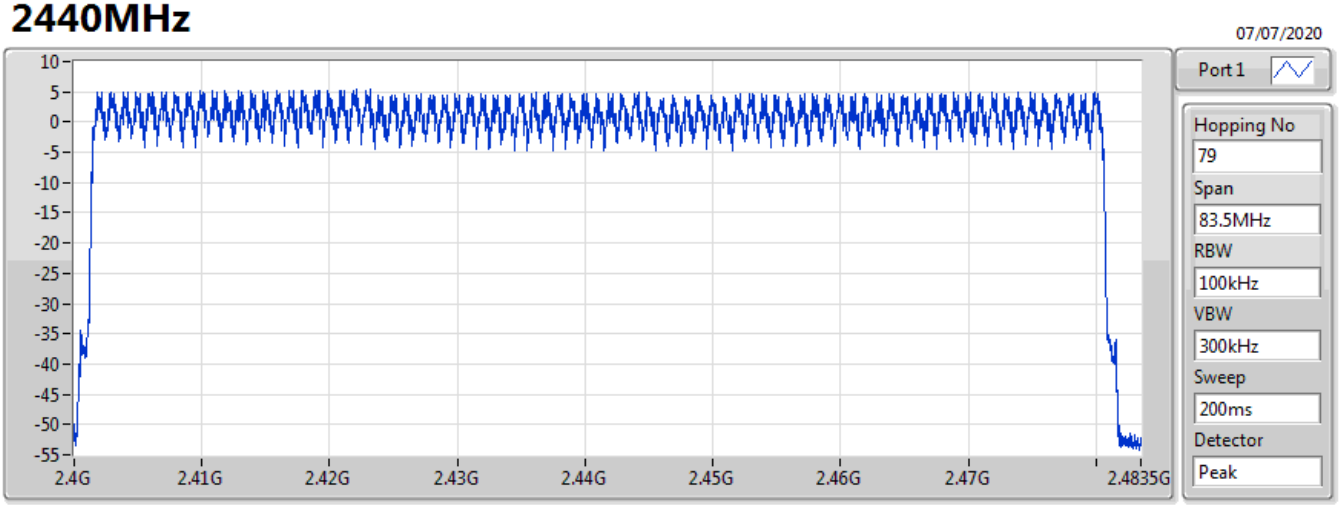


Ref(Hz)	Ref(dBuV/m)	BE-l(Hz)	PK(dBuV/m)	AV(dBuV/m)	BE-h(Hz)	PK(dBuV/m)	AV(dBuV/m)	LimPK(dBuV/	LimAV(dBuV/	Tx On(ms)	DCF(dB)
2.423185G	104.42	2.386435G	56.21	26.11	2.49688G	56.71	26.61	74	54	3.125	-30.1

BT-EDR(3Mbps)

2440MHz

Hopping Ch

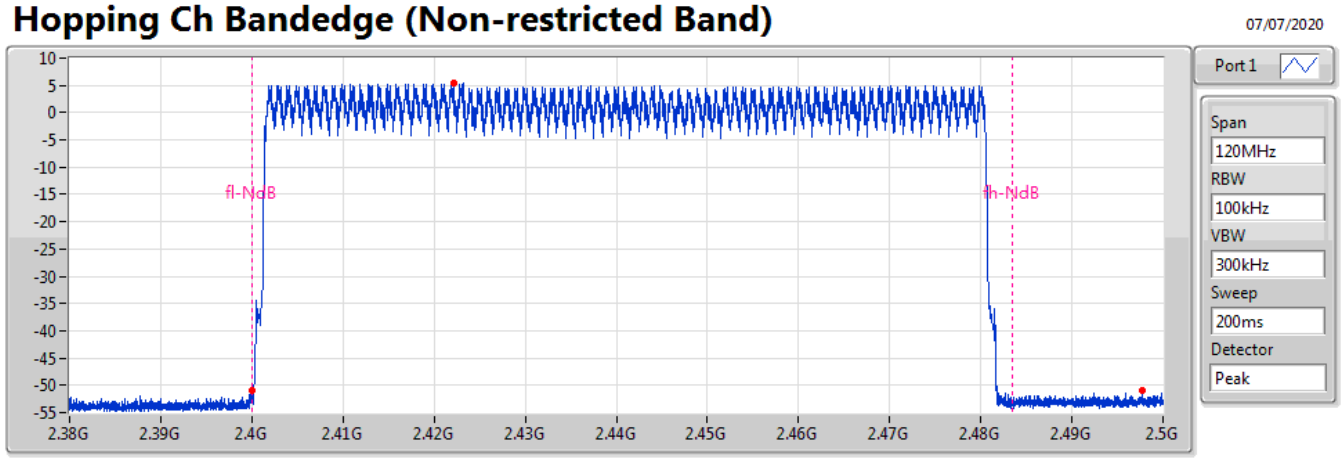


Hopping No	Limit
79	15

BT-EDR(3Mbps)

2440MHz

Hopping Ch Bandedge (Non-restricted Band)

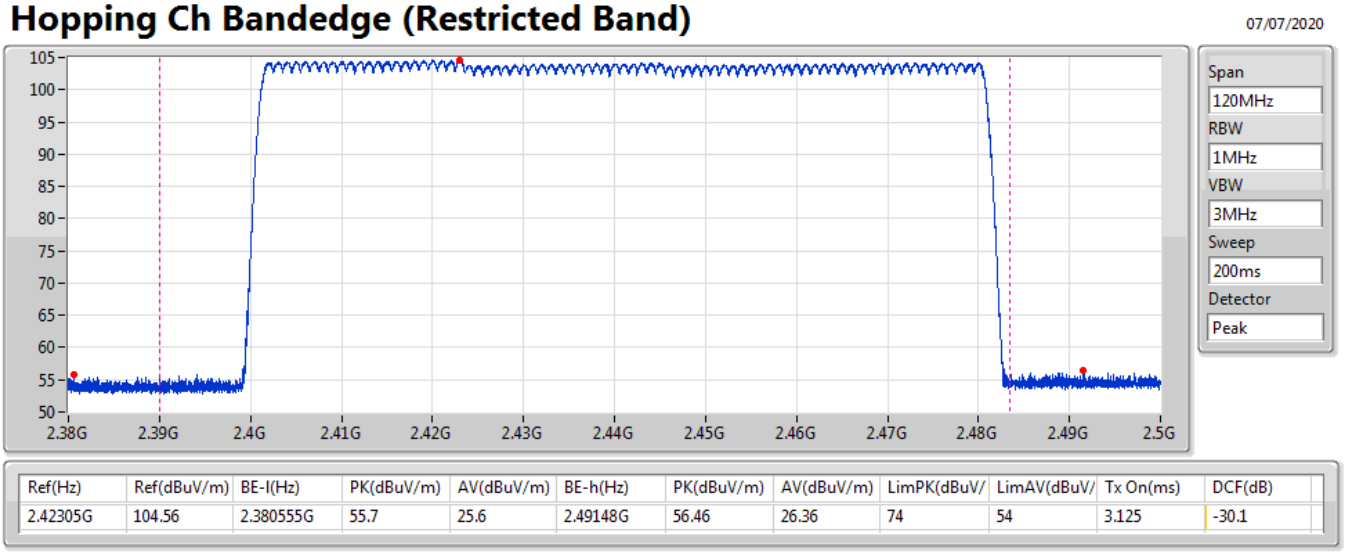


Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-14.62	2.422165G	5.38	2.399995G	-50.89	2.497705G	-50.92

BT-EDR(3Mbps)

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)
2.42305G	104.56	2.380555G	55.7	25.6	2.49148G	56.46	26.36	74	54	3.125	-30.1

Summary

Mode	Max-Dwell (s)
2.4-2.4835GHz	-
BT-BR(1Mbps)	305.96865m
BT-EDR(2Mbps)	307.2745m
BT-EDR(3Mbps)	307.9141m

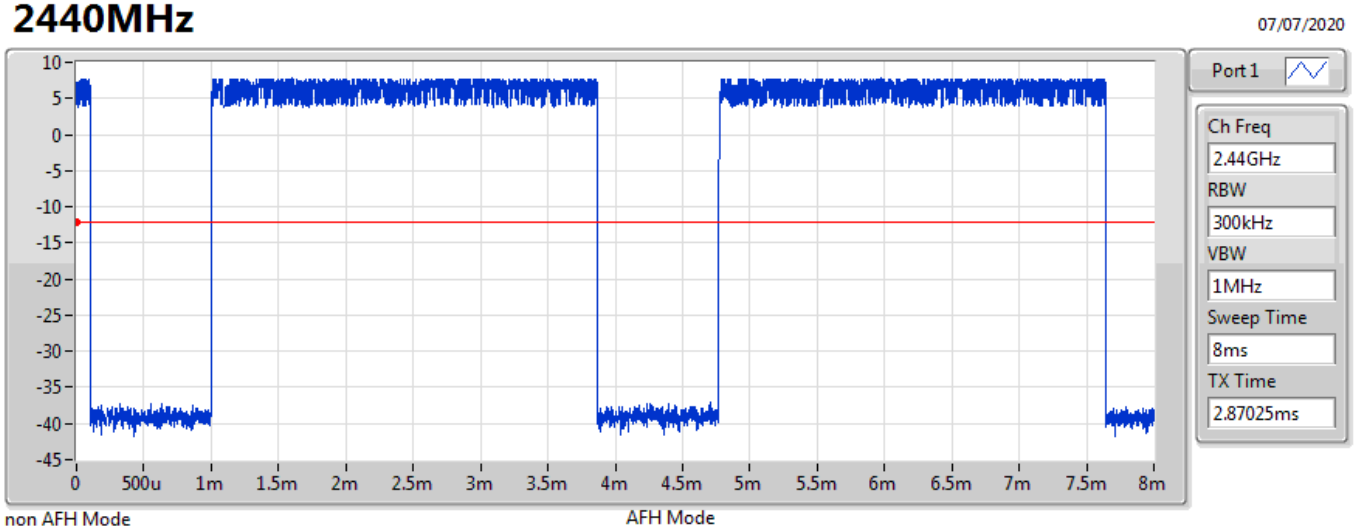
Result

Mode	Result	Period (s)	Dwell (s)	Limit (s)	Tx On (s)
BT-BR(1Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	305.96865m	400m	2.87025m
BT-EDR(2Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	307.2745m	400m	2.8825m
BT-EDR(3Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	307.9141m	400m	2.8885m

BT-BR(1Mbps)

Dwell

2440MHz



non AFH Mode

Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	305.96865m	400m	2.87025m

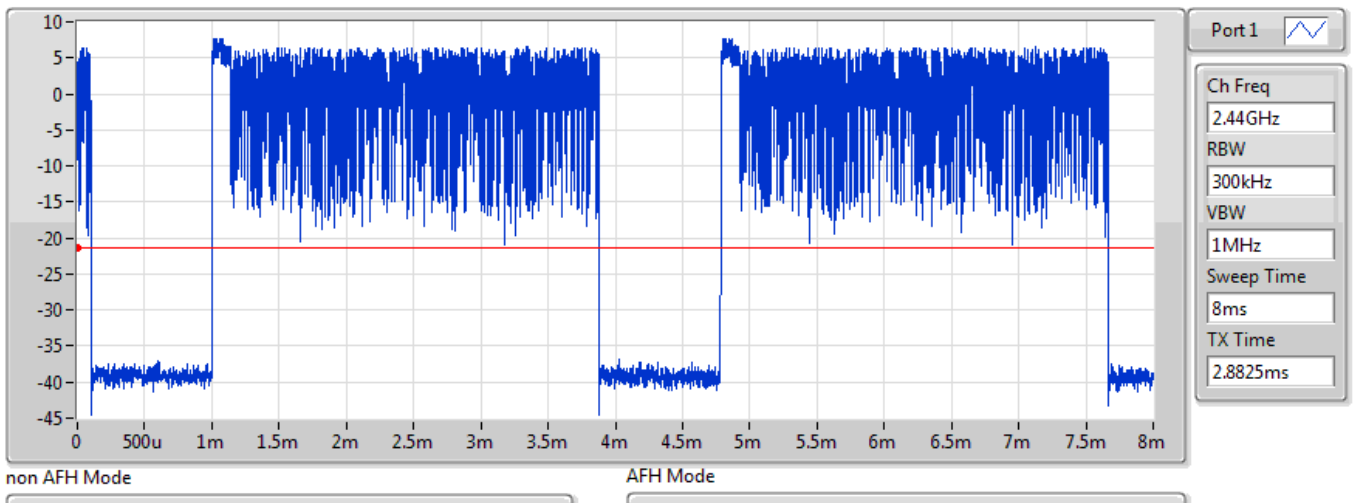
AFH Mode

Period(s)	Dwell(s)	Limit(s)	Tx On(s)

BT-EDR(2Mbps)

Dwell

2440MHz



non AFH Mode

Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	307.2745m	400m	2.8825m

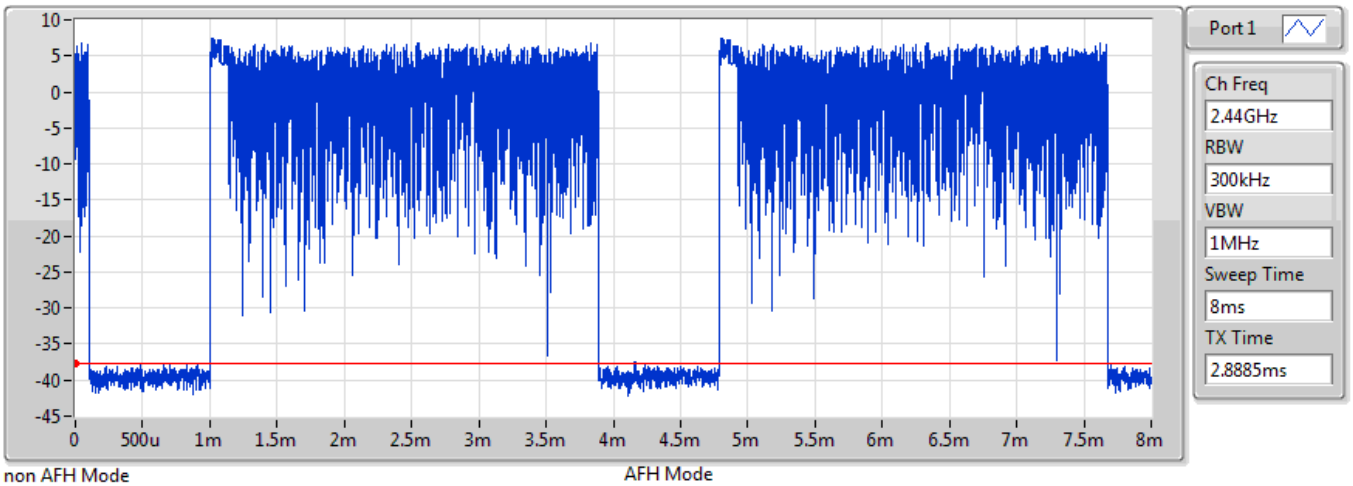
AFH Mode

Period(s)	Dwell(s)	Limit(s)	Tx On(s)

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

2440MHz

07/07/2020



non AFH Mode

Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	307.9141m	400m	2.8885m

AFH Mode

Period(s)	Dwell(s)	Limit(s)	Tx On(s)

Summary

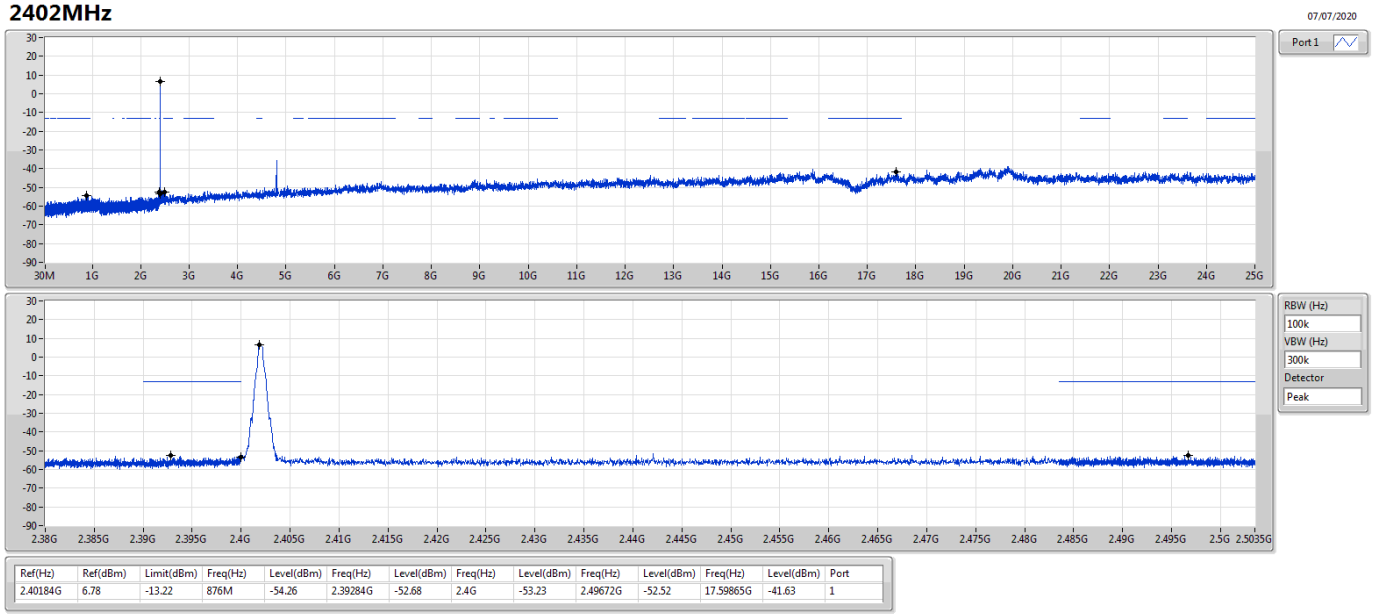
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BT-BR(1Mbps)	Pass	2.48016G	6.29	-13.71	1.62771G	-54.85	2.39693G	-53.25	2.4835G	-54.98	2.48378G	-51.87	23.59959G	-40.96	1
BT-EDR(2Mbps)	Pass	2.4018G	6.74	-13.26	1.9288G	-55.37	2.39947G	-48.53	2.4G	-49.88	2.48491G	-52.72	23.59678G	-41.77	1
BT-EDR(3Mbps)	Pass	2.40217G	6.04	-13.96	1.98784G	-54.78	2.39961G	-48.61	2.4G	-51.59	2.49155G	-52.43	23.30433G	-41.33	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	6.78	-13.22	876M	-54.26	2.39284G	-52.68	2.4G	-53.23	2.49672G	-52.52	17.59865G	-41.63	1
2440MHz	Pass	2.43983G	6.46	-13.54	1.96934G	-54.72	2.39957G	-53.19	2.4835G	-55.62	2.49389G	-52.11	23.28183G	-41.79	1
2480MHz	Pass	2.48016G	6.29	-13.71	1.62771G	-54.85	2.39693G	-53.25	2.4835G	-54.98	2.48378G	-51.87	23.59959G	-40.96	1
BT-EDR(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.4018G	6.74	-13.26	1.9288G	-55.37	2.39947G	-48.53	2.4G	-49.88	2.48491G	-52.72	23.59678G	-41.77	1
2440MHz	Pass	2.44016G	5.94	-14.06	728.54M	-55.10	2.39351G	-53.76	2.4835G	-56.26	2.49848G	-52.15	15.20559G	-41.25	1
2480MHz	Pass	2.48016G	5.57	-14.43	2.16145G	-54.39	2.39112G	-53.67	2.4835G	-54.09	2.48398G	-50.26	16.22355G	-41.50	1
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.40217G	6.04	-13.96	1.98784G	-54.78	2.39961G	-48.61	2.4G	-51.59	2.49155G	-52.43	23.30433G	-41.33	1
2440MHz	Pass	2.44016G	6.40	-13.60	2.18671G	-53.98	2.39494G	-53.07	2.4835G	-56.68	2.48765G	-52.23	23.59959G	-41.58	1
2480MHz	Pass	2.48016G	5.02	-14.98	2.14089G	-54.24	2.3918G	-53.64	2.4835G	-54.03	2.49935G	-51.80	15.19153G	-41.84	1

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

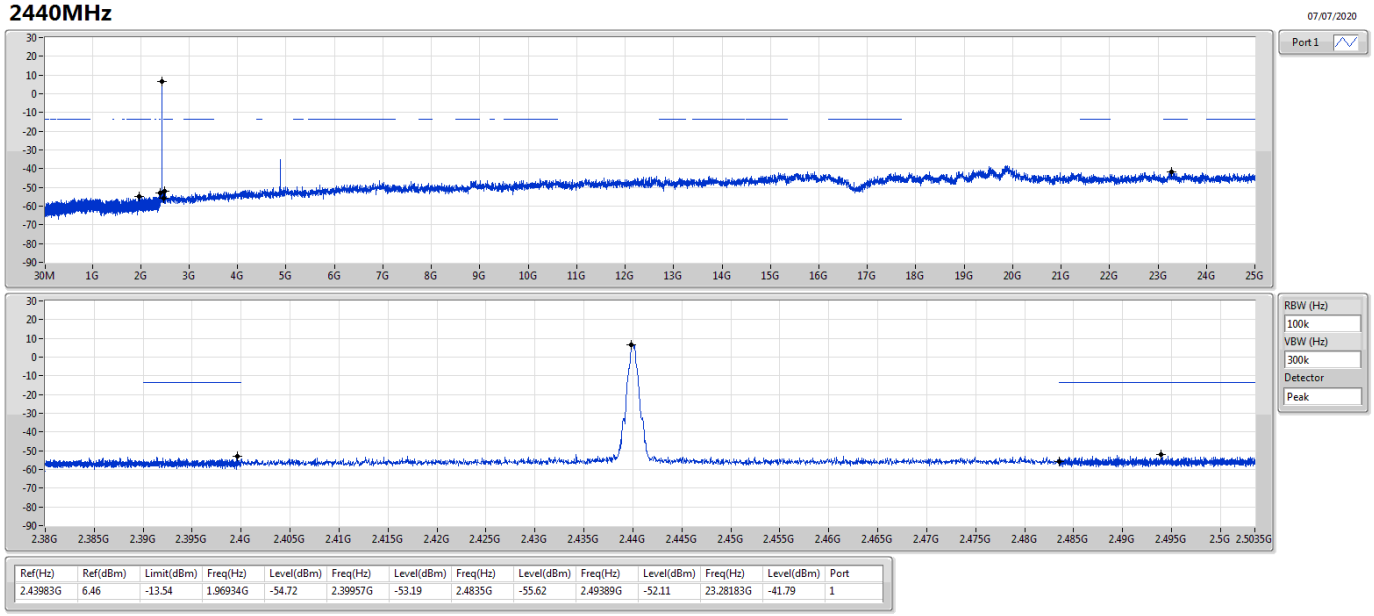
2402MHz



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	6.78	-13.22	876M	-54.26	2.39284G	-52.68	2.4G	-53.23	2.49672G	-52.52	17.59865G	-41.63	1

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

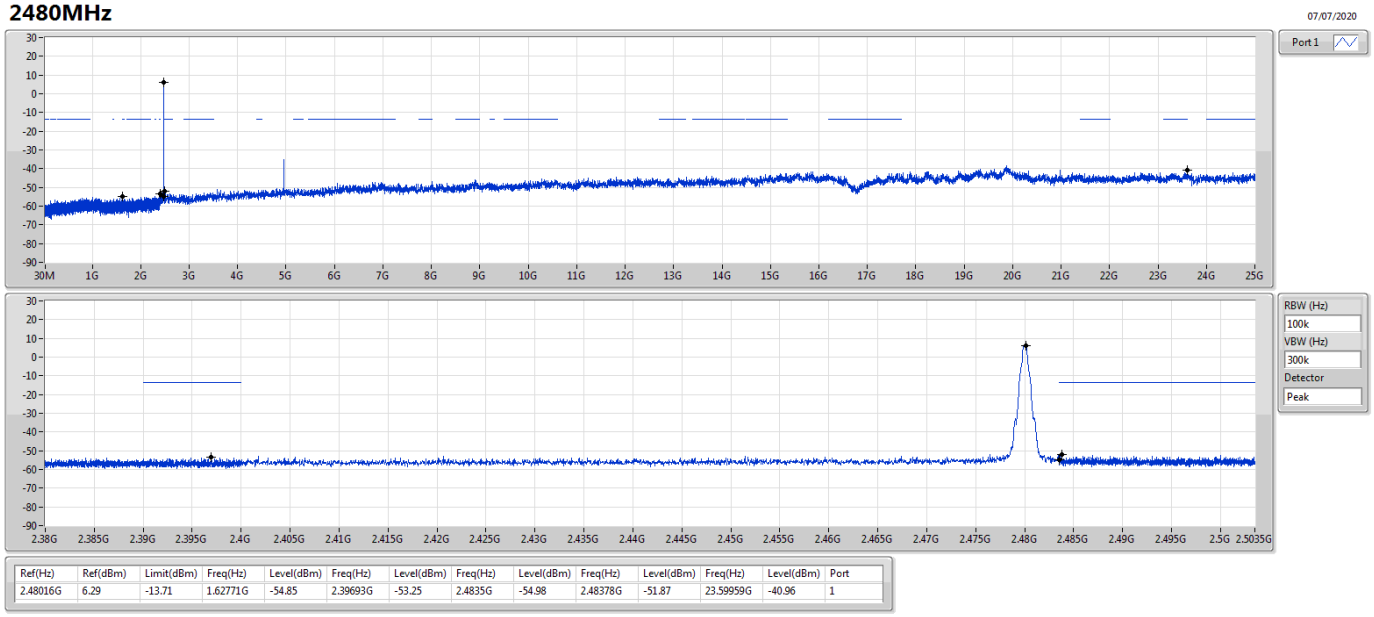
2440MHz



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
2.43983G	6.46	-13.54	1.96934G	-54.72	2.39957G	-53.19	2.4835G	-55.62	2.49389G	-52.11	23.28183G	-41.79	1

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

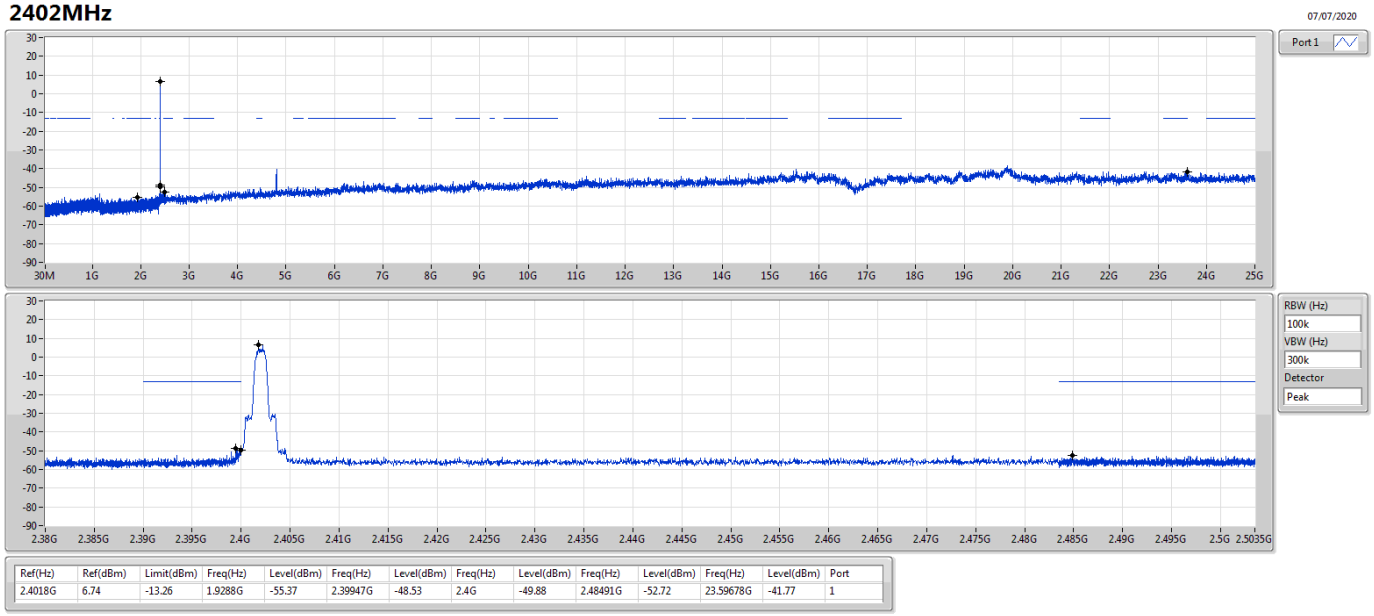
2480MHz



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	6.29	-13.71	1.62771G	-54.85	2.39693G	-53.25	2.4835G	-54.98	2.48378G	-51.87	23.59959G	-40.96	1

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

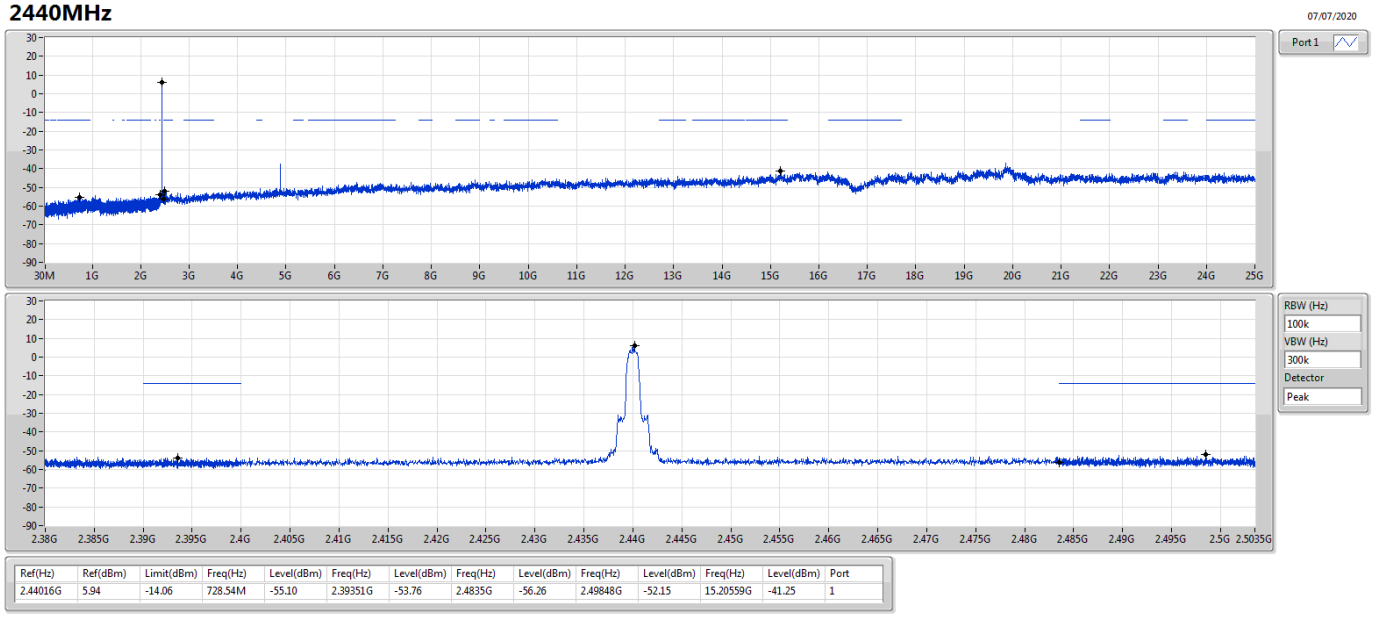
2402MHz



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	6.74	-13.26	1.9288G	-55.37	2.39947G	-48.53	2.4G	-49.88	2.48491G	-52.72	23.59678G	-41.77	1

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

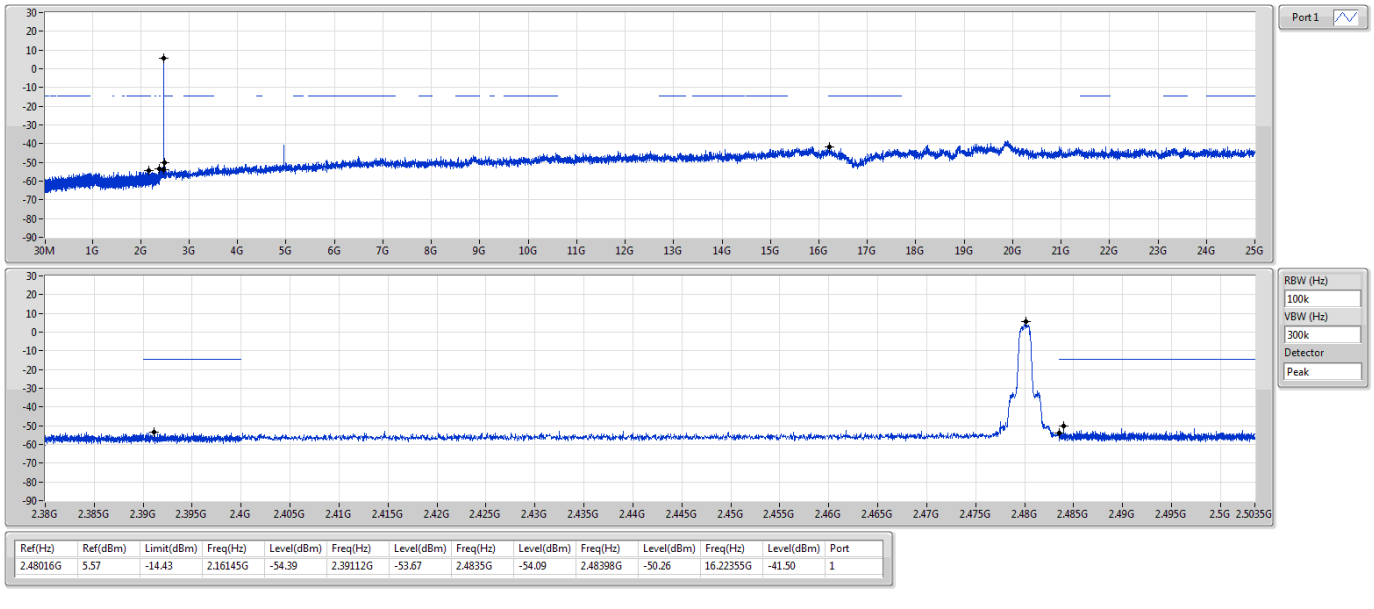
2440MHz



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	5.94	-14.06	728.54M	-55.10	2.39351G	-53.76	2.4835G	-56.26	2.49848G	-52.15	15.20559G	-41.25	1

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

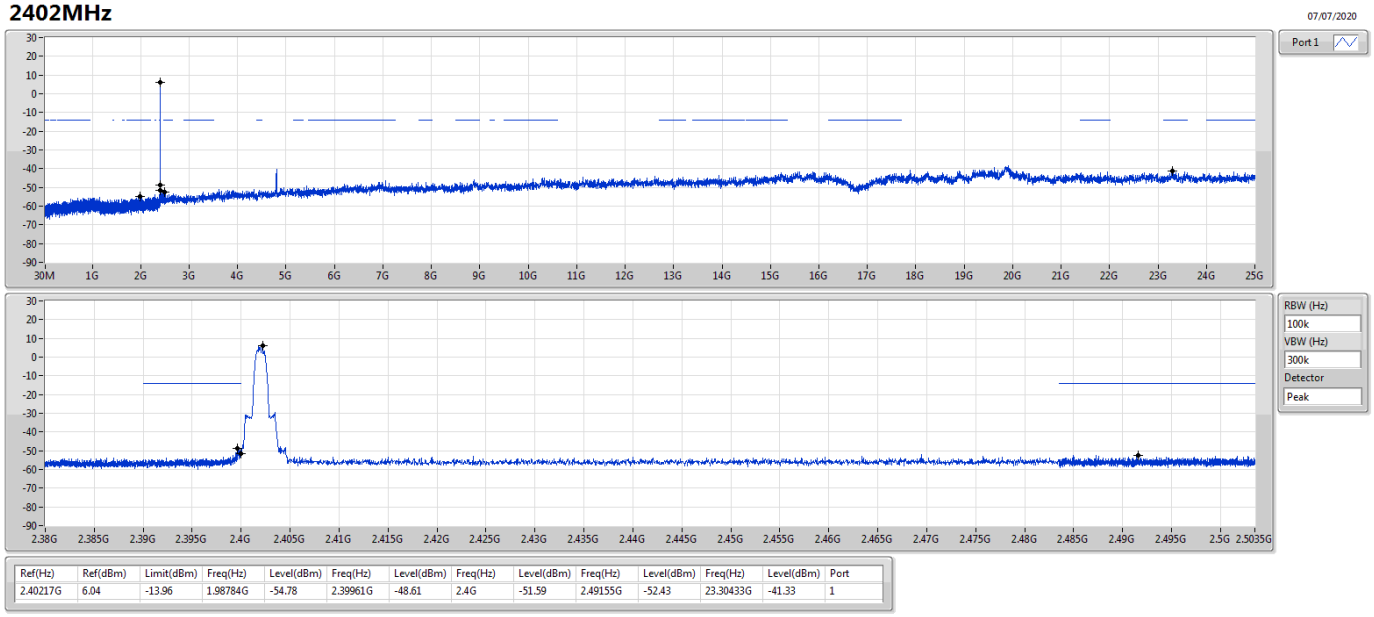
2480MHz



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
2.48016G	5.57	-14.43	2.16145G	-54.39	2.39112G	-53.67	2.4835G	-54.09	2.48398G	-50.26	16.22355G	-41.50	1

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

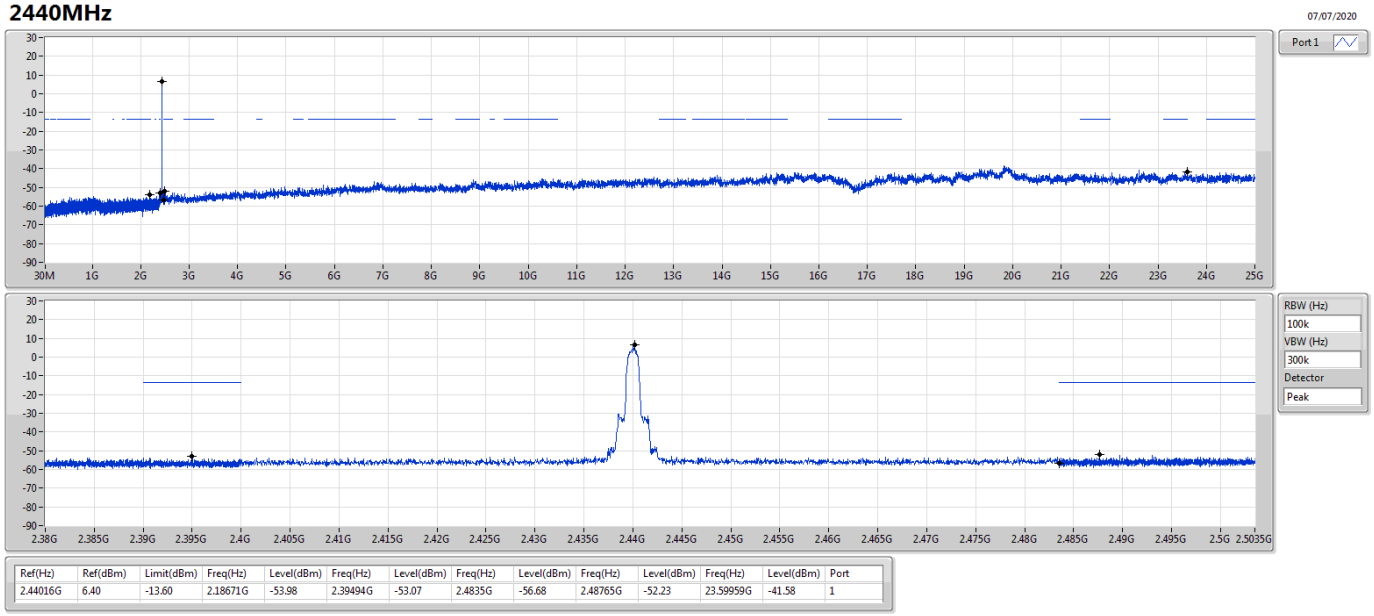
2402MHz



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
2.40217G	6.04	-13.96	1.98784G	-54.78	2.39961G	-48.61	2.4G	-51.59	2.49155G	-52.43	23.30433G	-41.33	1

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

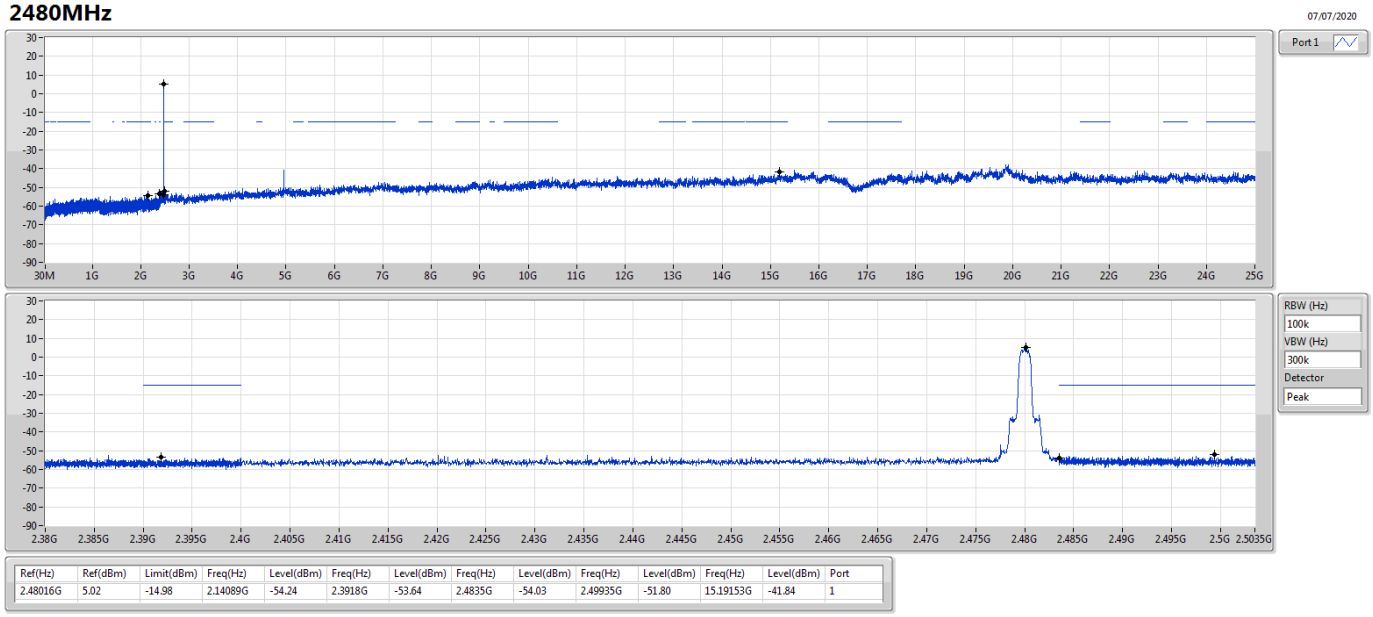
2440MHz



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
2.44016G	6.40	-13.60	2.18671G	-53.98	2.39494G	-53.07	2.4835G	-56.68	2.48765G	-52.23	23.59959G	-41.58	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
2.48016G	5.02	-14.98	2.14089G	-54.24	2.3918G	-53.64	2.4835G	-54.03	2.49935G	-51.80	15.19153G	-41.84	1

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
BT-BR(1Mbps)	Pass	PK	317.12M	42.20	46.00	-3.80	3	Horizontal	0	1.00	-

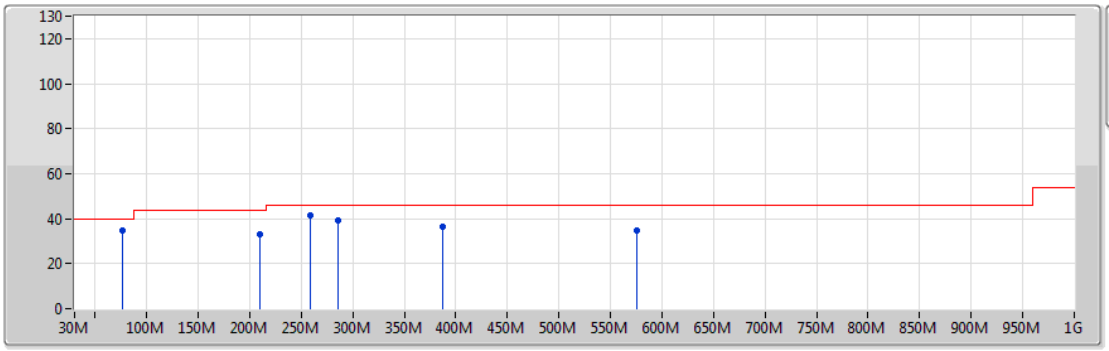
Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-BR(1Mbps)	-	-	-	-	-	-	-	-	-	-	-
2440MHz	Pass	PK	76.56M	34.77	40.00	-5.23	3	Vertical	360	1.00	-
2440MHz	Pass	PK	210.42M	32.83	43.50	-10.67	3	Vertical	360	1.00	-
2440MHz	Pass	PK	258.92M	41.27	46.00	-4.73	3	Vertical	360	1.00	-
2440MHz	Pass	PK	286.08M	39.38	46.00	-6.62	3	Vertical	360	1.00	-
2440MHz	Pass	PK	386.96M	36.42	46.00	-9.58	3	Vertical	360	1.00	-
2440MHz	Pass	PK	575.14M	34.91	46.00	-11.09	3	Vertical	360	1.00	-
2440MHz	Pass	PK	62.98M	35.73	40.00	-4.27	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	299.66M	39.50	46.00	-6.50	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	317.12M	42.20	46.00	-3.80	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	400.54M	34.99	46.00	-11.01	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	476.2M	34.63	46.00	-11.37	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	959.26M	39.09	46.00	-6.91	3	Horizontal	0	1.00	-

BT-BR(1Mbps)

2440MHz_Adapter

14/07/2020

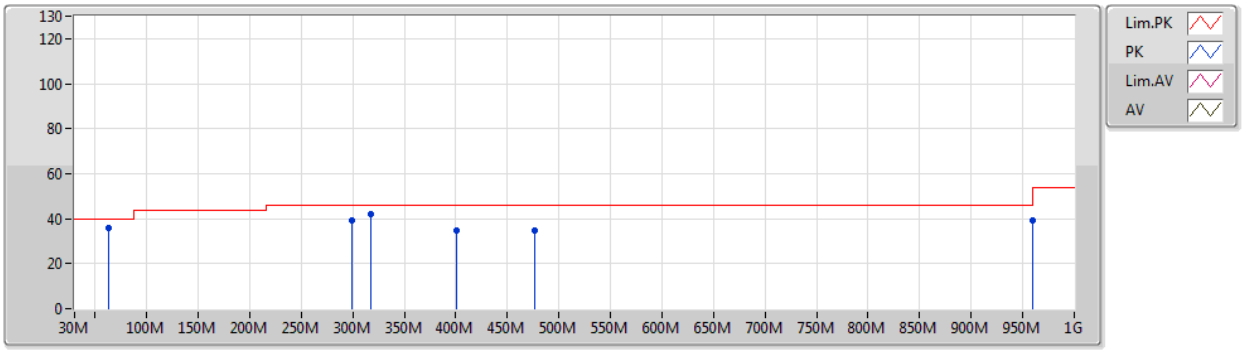


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBm)	(dB)	(dB)	(dB)
PK	76.56M	34.77	40.00	-5.23	-24.38	3	Vertical	360	1.00	-	59.15	11.87	0.70	36.95
PK	210.42M	32.83	43.50	-10.67	-21.07	3	Vertical	360	1.00	-	53.90	14.16	1.14	36.37
PK	258.92M	41.27	46.00	-4.73	-16.06	3	Vertical	360	1.00	-	57.33	19.05	1.32	36.43
PK	286.08M	39.38	46.00	-6.62	-17.07	3	Vertical	360	1.00	-	56.45	18.03	1.37	36.47
PK	386.96M	36.42	46.00	-9.58	-14.61	3	Vertical	360	1.00	-	51.03	20.35	1.65	36.61
PK	575.14M	34.91	46.00	-11.09	-10.05	3	Vertical	360	1.00	-	44.96	25.00	2.10	37.15

BT-BR(1Mbps)

2440MHz_Adapter

14/07/2020



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBm)	(dB)	(dB)	(dB)
PK	62.98M	35.73	40.00	-4.27	-25.64	3	Horizontal	0	1.00	-	61.37	10.82	0.60	37.06
PK	299.66M	39.50	46.00	-6.50	-16.72	3	Horizontal	0	1.00	-	56.22	18.23	1.40	36.35
PK	317.12M	42.20	46.00	-3.80	-16.62	3	Horizontal	0	1.00	-	58.82	18.45	1.43	36.50
PK	400.54M	34.99	46.00	-11.01	-13.80	3	Horizontal	0	1.00	-	48.79	20.93	1.70	36.43
PK	476.2M	34.63	46.00	-11.37	-12.35	3	Horizontal	0	1.00	-	46.98	22.65	1.85	36.85
PK	959.26M	39.09	46.00	-6.91	-4.30	3	Horizontal	0	1.00	-	43.39	30.04	2.92	37.26

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
BT-BR(1Mbps)	Pass	PK	2.4858G	58.49	74.00	-15.51	3	Vertical	357	1.01	-
BT-EDR(3Mbps)	Pass	PK	2.495G	59.00	74.00	-15.00	3	Horizontal	74	1.00	-

Result

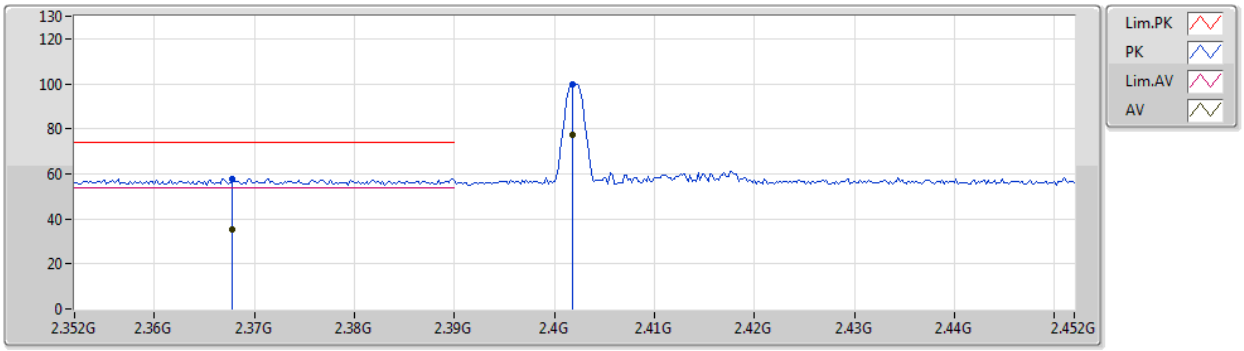
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-BR(1Mbps)	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3678G	35.32	54.00	-18.68	3	Vertical	0	1.06	-
2402MHz	Pass	AV	2.4018G	77.44	Inf	-Inf	3	Vertical	0	1.06	-
2402MHz	Pass	PK	2.3678G	57.82	74.00	-16.18	3	Vertical	0	1.06	-
2402MHz	Pass	PK	2.4018G	99.94	Inf	-Inf	3	Vertical	0	1.06	-
2402MHz	Pass	AV	2.367G	35.66	54.00	-18.34	3	Horizontal	79	1.00	-
2402MHz	Pass	AV	2.4018G	73.22	Inf	-Inf	3	Horizontal	79	1.00	-
2402MHz	Pass	PK	2.367G	58.16	74.00	-15.84	3	Horizontal	79	1.00	-
2402MHz	Pass	PK	2.4018G	95.72	Inf	-Inf	3	Horizontal	79	1.00	-
2402MHz	Pass	AV	4.80369G	29.56	54.00	-24.44	3	Vertical	345	1.96	-
2402MHz	Pass	PK	4.80369G	52.06	74.00	-21.94	3	Vertical	345	1.96	-
2402MHz	Pass	AV	4.80368G	30.68	54.00	-23.32	3	Horizontal	312	1.80	-
2402MHz	Pass	PK	4.80368G	53.18	74.00	-20.82	3	Horizontal	312	1.80	-
2440MHz	Pass	AV	2.3832G	34.85	54.00	-19.15	3	Vertical	0	1.50	-
2440MHz	Pass	AV	2.44G	78.34	Inf	-Inf	3	Vertical	0	1.50	-
2440MHz	Pass	AV	2.4944G	35.80	54.00	-18.20	3	Vertical	0	1.50	-
2440MHz	Pass	PK	2.3832G	57.35	74.00	-16.65	3	Vertical	0	1.50	-
2440MHz	Pass	PK	2.44G	100.84	Inf	-Inf	3	Vertical	0	1.50	-
2440MHz	Pass	PK	2.4944G	58.30	74.00	-15.70	3	Vertical	0	1.50	-
2440MHz	Pass	AV	2.3632G	35.55	54.00	-18.45	3	Horizontal	88	1.00	-
2440MHz	Pass	AV	2.44G	74.43	Inf	-Inf	3	Horizontal	88	1.00	-
2440MHz	Pass	AV	2.4844G	35.35	54.00	-18.65	3	Horizontal	88	1.00	-
2440MHz	Pass	PK	2.3632G	58.05	74.00	-15.95	3	Horizontal	88	1.00	-
2440MHz	Pass	PK	2.44G	96.93	Inf	-Inf	3	Horizontal	88	1.00	-
2440MHz	Pass	PK	2.4844G	57.85	74.00	-16.15	3	Horizontal	88	1.00	-
2440MHz	Pass	AV	4.88025G	29.09	54.00	-24.91	3	Vertical	0	1.91	-
2440MHz	Pass	PK	4.88025G	51.59	74.00	-22.41	3	Vertical	0	1.91	-
2440MHz	Pass	AV	4.87972G	30.73	54.00	-23.27	3	Horizontal	312	1.00	-
2440MHz	Pass	PK	4.87972G	53.23	74.00	-20.77	3	Horizontal	312	1.00	-
2480MHz	Pass	AV	2.48G	79.66	Inf	-Inf	3	Vertical	357	1.01	-
2480MHz	Pass	AV	2.4858G	35.99	54.00	-18.01	3	Vertical	357	1.01	-
2480MHz	Pass	PK	2.48G	102.16	Inf	-Inf	3	Vertical	357	1.01	-
2480MHz	Pass	PK	2.4858G	58.49	74.00	-15.51	3	Vertical	357	1.01	-
2480MHz	Pass	AV	2.48G	73.97	Inf	-Inf	3	Horizontal	74	1.00	-
2480MHz	Pass	AV	2.484G	35.76	54.00	-18.24	3	Horizontal	74	1.00	-
2480MHz	Pass	PK	2.48G	96.47	Inf	-Inf	3	Horizontal	74	1.00	-
2480MHz	Pass	PK	2.484G	58.26	74.00	-15.74	3	Horizontal	74	1.00	-
2480MHz	Pass	AV	4.96038G	28.83	54.00	-25.17	3	Vertical	339	1.96	-
2480MHz	Pass	PK	4.96038G	51.33	74.00	-22.67	3	Vertical	339	1.96	-
2480MHz	Pass	AV	4.95968G	29.80	54.00	-24.20	3	Horizontal	310	1.93	-
2480MHz	Pass	PK	4.95968G	52.30	74.00	-21.70	3	Horizontal	310	1.93	-
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.359G	36.42	54.00	-17.58	3	Vertical	360	1.05	-
2402MHz	Pass	AV	2.402G	79.76	Inf	-Inf	3	Vertical	360	1.05	-
2402MHz	Pass	PK	2.359G	58.92	74.00	-15.08	3	Vertical	360	1.05	-
2402MHz	Pass	PK	2.402G	102.26	Inf	-Inf	3	Vertical	360	1.05	-
2402MHz	Pass	AV	2.3602G	35.70	54.00	-18.30	3	Horizontal	79	1.00	-
2402MHz	Pass	AV	2.402G	75.41	Inf	-Inf	3	Horizontal	79	1.00	-

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2402MHz	Pass	PK	2.3602G	58.20	74.00	-15.80	3	Horizontal	79	1.00	-
2402MHz	Pass	PK	2.402G	97.91	Inf	-Inf	3	Horizontal	79	1.00	-
2402MHz	Pass	AV	4.80395G	30.62	54.00	-23.38	3	Vertical	346	1.95	-
2402MHz	Pass	PK	4.80395G	53.12	74.00	-20.88	3	Vertical	346	1.95	-
2402MHz	Pass	AV	4.80441G	32.52	54.00	-21.48	3	Horizontal	312	1.80	-
2402MHz	Pass	PK	4.80441G	55.02	74.00	-18.98	3	Horizontal	312	1.80	-
2440MHz	Pass	AV	2.372G	35.03	54.00	-18.97	3	Vertical	0	1.29	-
2440MHz	Pass	AV	2.44G	80.65	Inf	-Inf	3	Vertical	0	1.29	-
2440MHz	Pass	AV	2.4848G	35.60	54.00	-18.40	3	Vertical	0	1.29	-
2440MHz	Pass	PK	2.372G	57.53	74.00	-16.47	3	Vertical	0	1.29	-
2440MHz	Pass	PK	2.44G	103.15	Inf	-Inf	3	Vertical	0	1.29	-
2440MHz	Pass	PK	2.4848G	58.10	74.00	-15.90	3	Vertical	0	1.29	-
2440MHz	Pass	AV	2.3516G	34.95	54.00	-19.05	3	Horizontal	89	1.00	-
2440MHz	Pass	AV	2.44G	75.86	Inf	-Inf	3	Horizontal	89	1.00	-
2440MHz	Pass	AV	2.4932G	35.34	54.00	-18.66	3	Horizontal	89	1.00	-
2440MHz	Pass	PK	2.3516G	57.45	74.00	-16.55	3	Horizontal	89	1.00	-
2440MHz	Pass	PK	2.44G	98.36	Inf	-Inf	3	Horizontal	89	1.00	-
2440MHz	Pass	PK	2.4932G	57.54	74.00	-16.46	3	Horizontal	89	1.00	-
2440MHz	Pass	AV	4.87976G	30.06	54.00	-23.94	3	Vertical	340	1.90	-
2440MHz	Pass	PK	4.87976G	52.56	74.00	-21.44	3	Vertical	340	1.90	-
2440MHz	Pass	AV	4.88035G	31.57	54.00	-22.43	3	Horizontal	322	2.00	-
2440MHz	Pass	PK	4.88035G	54.07	74.00	-19.93	3	Horizontal	322	2.00	-
2480MHz	Pass	AV	2.48G	81.07	Inf	-Inf	3	Vertical	356	1.02	-
2480MHz	Pass	AV	2.4836G	35.59	54.00	-18.41	3	Vertical	356	1.02	-
2480MHz	Pass	PK	2.48G	103.57	Inf	-Inf	3	Vertical	356	1.02	-
2480MHz	Pass	PK	2.4836G	58.09	74.00	-15.91	3	Vertical	356	1.02	-
2480MHz	Pass	AV	2.48G	75.45	Inf	-Inf	3	Horizontal	74	1.00	-
2480MHz	Pass	AV	2.495G	36.50	54.00	-17.50	3	Horizontal	74	1.00	-
2480MHz	Pass	PK	2.48G	97.95	Inf	-Inf	3	Horizontal	74	1.00	-
2480MHz	Pass	PK	2.495G	59.00	74.00	-15.00	3	Horizontal	74	1.00	-
2480MHz	Pass	AV	4.95997G	28.73	54.00	-25.27	3	Vertical	342	1.97	-
2480MHz	Pass	PK	4.95997G	51.23	74.00	-22.77	3	Vertical	342	1.97	-
2480MHz	Pass	AV	4.96001G	29.69	54.00	-24.31	3	Horizontal	312	1.93	-
2480MHz	Pass	PK	4.96001G	52.19	74.00	-21.81	3	Horizontal	312	1.93	-

BT-BR(1Mbps)

2402MHz_TX

04/07/2020

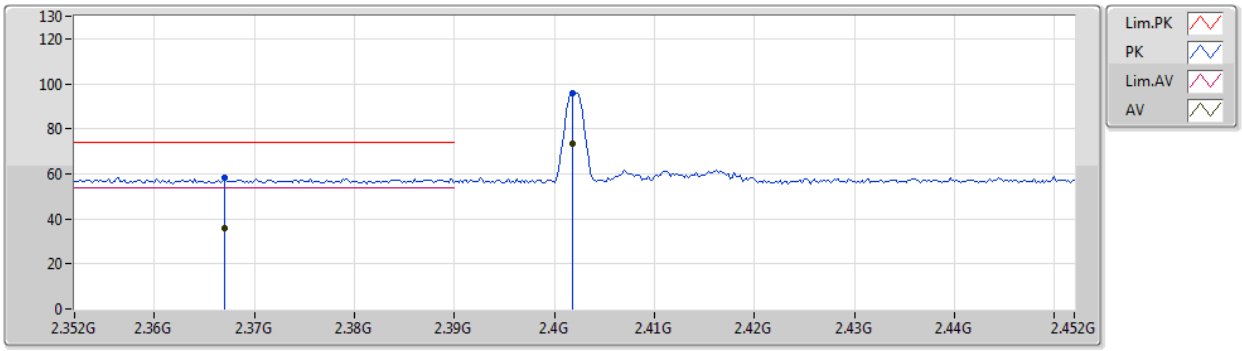


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3678G	35.32	54.00	-18.68	32.77	3	Vertical	0	1.06	-	2.55	27.73	5.04	-
AV	2.4018G	77.44	Inf	-Inf	32.70	3	Vertical	0	1.06	-	44.74	27.60	5.10	-
PK	2.3678G	57.82	74.00	-16.18	32.77	3	Vertical	0	1.06	-	25.05	27.73	5.04	-
PK	2.4018G	99.94	Inf	-Inf	32.70	3	Vertical	0	1.06	-	67.24	27.60	5.10	-

BT-BR(1Mbps)

2402MHz_TX

04/07/2020

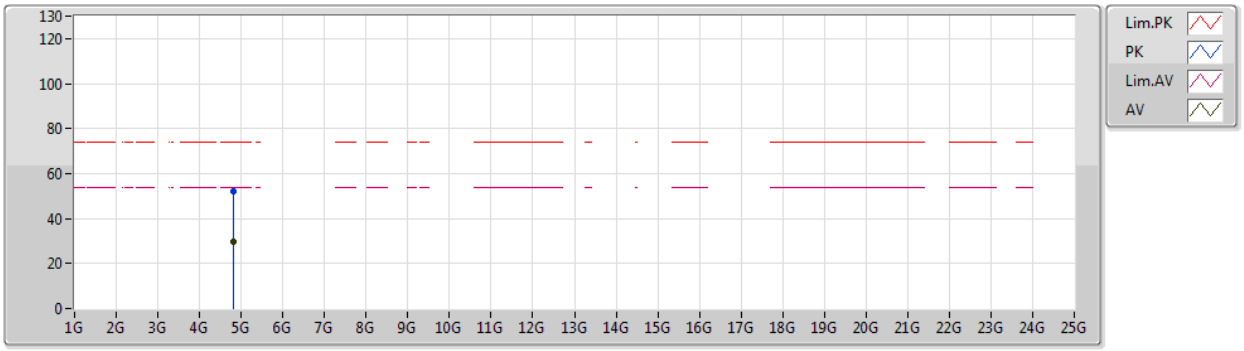


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.367G	35.66	54.00	-18.34	32.76	3	Horizontal	79	1.00	-	2.90	27.73	5.03	-
AV	2.4018G	73.22	Inf	-Inf	32.70	3	Horizontal	79	1.00	-	40.52	27.60	5.10	-
PK	2.367G	58.16	74.00	-15.84	32.76	3	Horizontal	79	1.00	-	25.40	27.73	5.03	-
PK	2.4018G	95.72	Inf	-Inf	32.70	3	Horizontal	79	1.00	-	63.02	27.60	5.10	-

BT-BR(1Mbps)

2402MHz_TX

04/07/2020

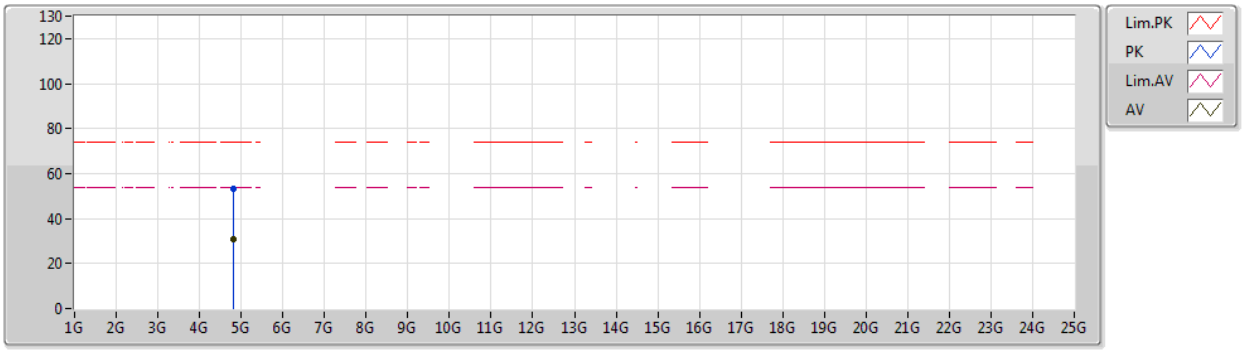


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.80369G	29.56	54.00	-24.44	4.11	3	Vertical	345	1.96	-	25.45	31.11	7.30	34.30
PK	4.80369G	52.06	74.00	-21.94	4.11	3	Vertical	345	1.96	-	47.95	31.11	7.30	34.30

BT-BR(1Mbps)

2402MHz_TX

04/07/2020

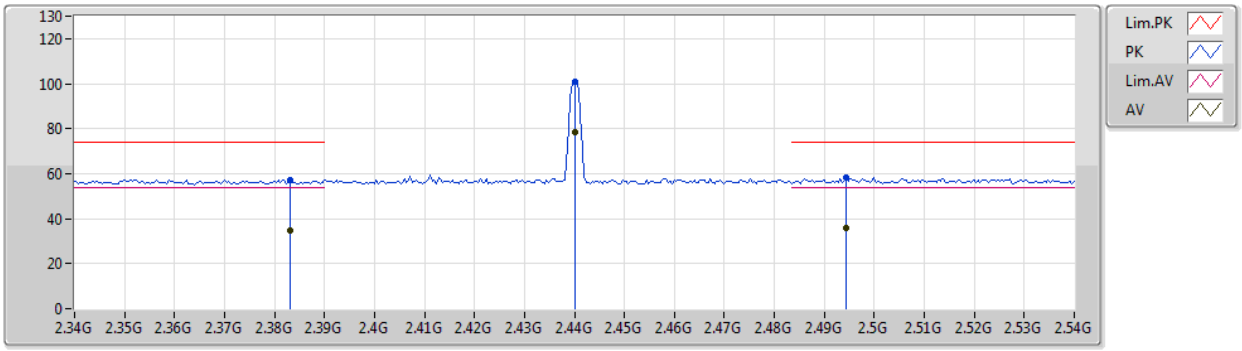


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.80368G	30.68	54.00	-23.32	4.11	3	Horizontal	312	1.80	-	26.57	31.11	7.30	34.30
PK	4.80368G	53.18	74.00	-20.82	4.11	3	Horizontal	312	1.80	-	49.07	31.11	7.30	34.30

BT-BR(1Mbps)

2440MHz_TX

04/07/2020

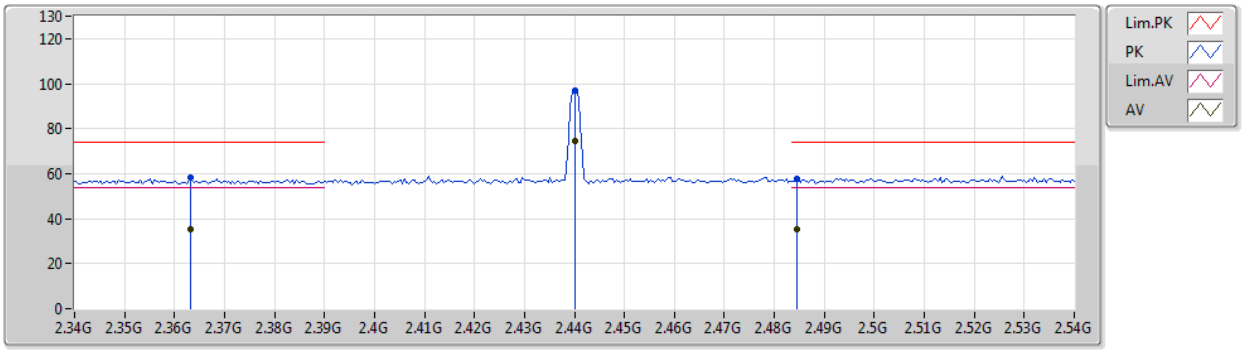


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3832G	34.85	54.00	-19.15	32.74	3	Vertical	0	1.50	-	2.11	27.67	5.07	-
AV	2.44G	78.34	Inf	-Inf	32.76	3	Vertical	0	1.50	-	45.58	27.60	5.16	-
AV	2.4944G	35.80	54.00	-18.20	32.84	3	Vertical	0	1.50	-	2.96	27.60	5.24	-
PK	2.3832G	57.35	74.00	-16.65	32.74	3	Vertical	0	1.50	-	24.61	27.67	5.07	-
PK	2.44G	100.84	Inf	-Inf	32.76	3	Vertical	0	1.50	-	68.08	27.60	5.16	-
PK	2.4944G	58.30	74.00	-15.70	32.84	3	Vertical	0	1.50	-	25.46	27.60	5.24	-

BT-BR(1Mbps)

2440MHz_TX

04/07/2020

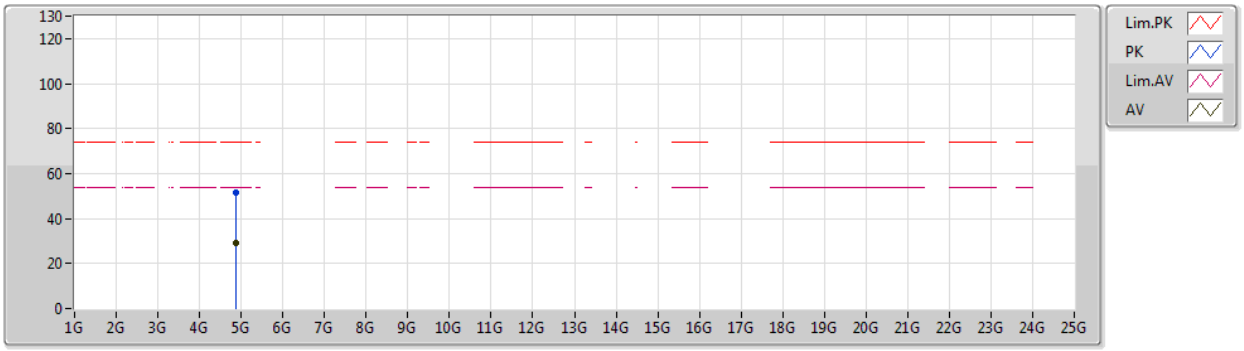


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3632G	35.55	54.00	-18.45	32.78	3	Horizontal	88	1.00	-	2.77	27.75	5.03	-
AV	2.44G	74.43	Inf	-Inf	32.76	3	Horizontal	88	1.00	-	41.67	27.60	5.16	-
AV	2.4844G	35.35	54.00	-18.65	32.83	3	Horizontal	88	1.00	-	2.52	27.60	5.23	-
PK	2.3632G	58.05	74.00	-15.95	32.78	3	Horizontal	88	1.00	-	25.27	27.75	5.03	-
PK	2.44G	96.93	Inf	-Inf	32.76	3	Horizontal	88	1.00	-	64.17	27.60	5.16	-
PK	2.4844G	57.85	74.00	-16.15	32.83	3	Horizontal	88	1.00	-	25.02	27.60	5.23	-

BT-BR(1Mbps)

2440MHz_TX

04/07/2020

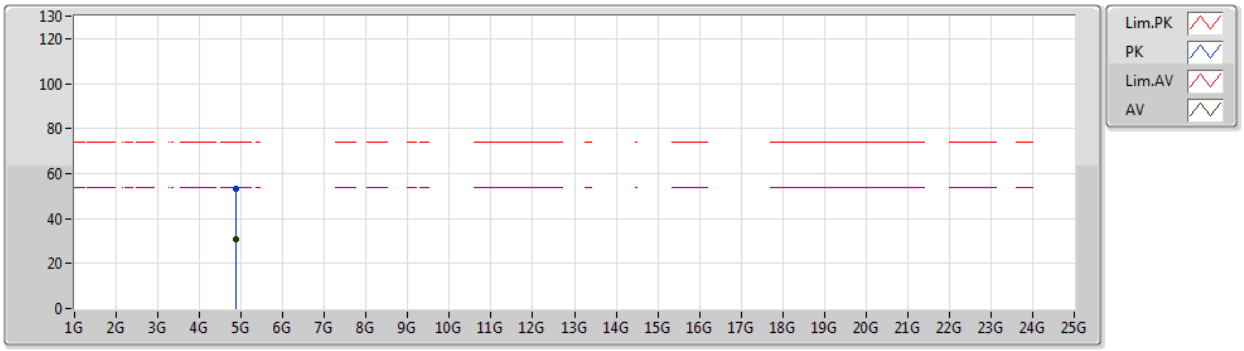


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.88025G	29.09	54.00	-24.91	4.34	3	Vertical	0	1.91	-	24.75	31.24	7.38	34.28
PK	4.88025G	51.59	74.00	-22.41	4.34	3	Vertical	0	1.91	-	47.25	31.24	7.38	34.28

BT-BR(1Mbps)

2440MHz_TX

04/07/2020

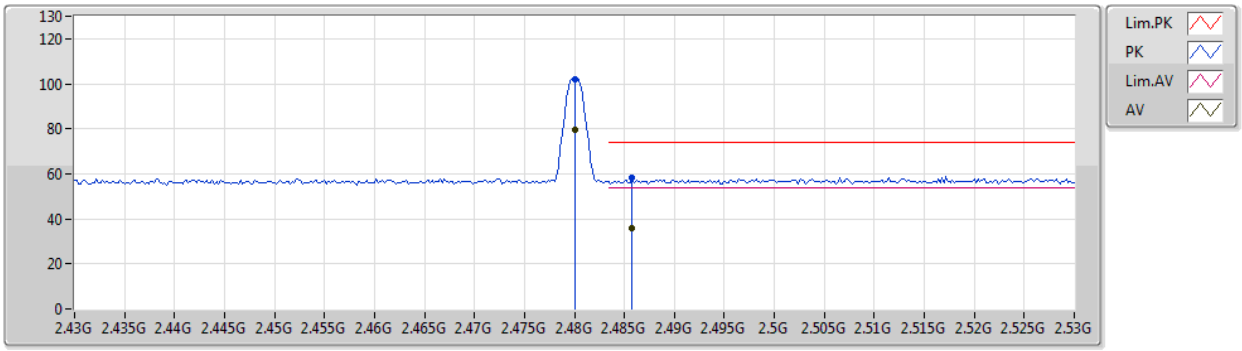


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.87972G	30.73	54.00	-23.27	4.34	3	Horizontal	312	1.00	-	26.39	31.24	7.38	34.28
PK	4.87972G	53.23	74.00	-20.77	4.34	3	Horizontal	312	1.00	-	48.89	31.24	7.38	34.28

BT-BR(1Mbps)

2480MHz_TX

04/07/2020

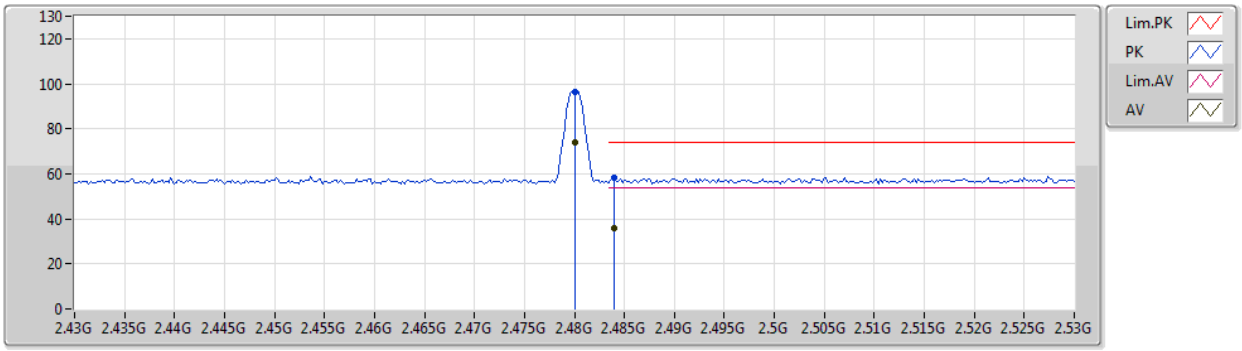


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.48G	79.66	Inf	-Inf	32.82	3	Vertical	357	1.01	-	46.84	27.60	5.22	-
AV	2.4858G	35.99	54.00	-18.01	32.83	3	Vertical	357	1.01	-	3.16	27.60	5.23	-
PK	2.48G	102.16	Inf	-Inf	32.82	3	Vertical	357	1.01	-	69.34	27.60	5.22	-
PK	2.4858G	58.49	74.00	-15.51	32.83	3	Vertical	357	1.01	-	25.66	27.60	5.23	-

BT-BR(1Mbps)

2480MHz_TX

04/07/2020

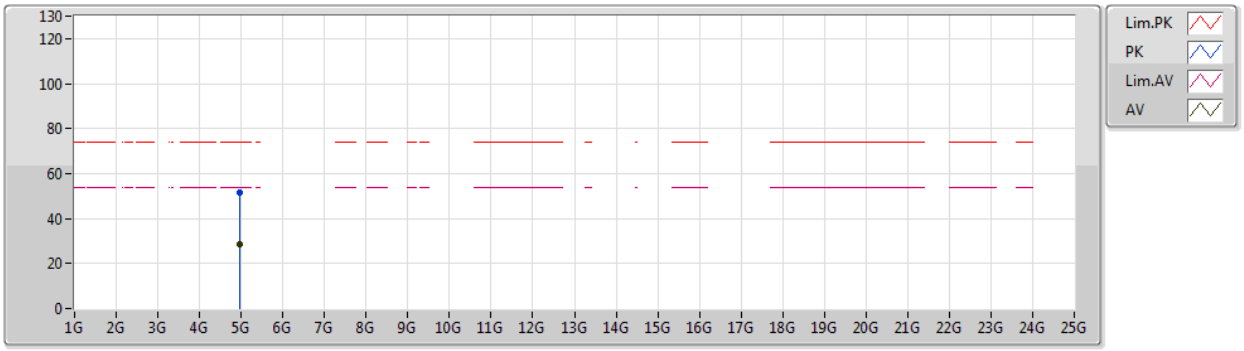


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.48G	73.97	Inf	-Inf	32.82	3	Horizontal	74	1.00	-	41.15	27.60	5.22	-
AV	2.484G	35.76	54.00	-18.24	32.83	3	Horizontal	74	1.00	-	2.93	27.60	5.23	-
PK	2.48G	96.47	Inf	-Inf	32.82	3	Horizontal	74	1.00	-	63.65	27.60	5.22	-
PK	2.484G	58.26	74.00	-15.74	32.83	3	Horizontal	74	1.00	-	25.43	27.60	5.23	-

BT-BR(1Mbps)

2480MHz_TX

04/07/2020

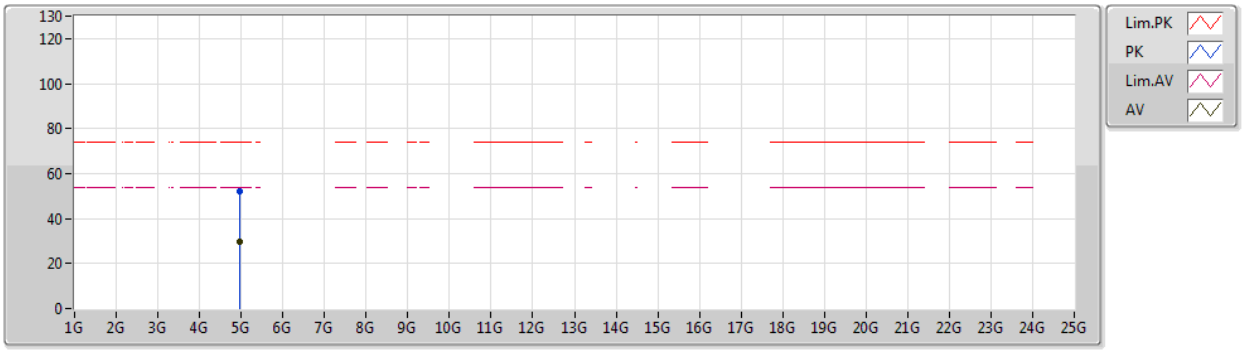


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.96038G	28.83	54.00	-25.17	4.72	3	Vertical	339	1.96	-	24.11	31.42	7.46	34.16
PK	4.96038G	51.33	74.00	-22.67	4.72	3	Vertical	339	1.96	-	46.61	31.42	7.46	34.16

BT-BR(1Mbps)

2480MHz_TX

04/07/2020

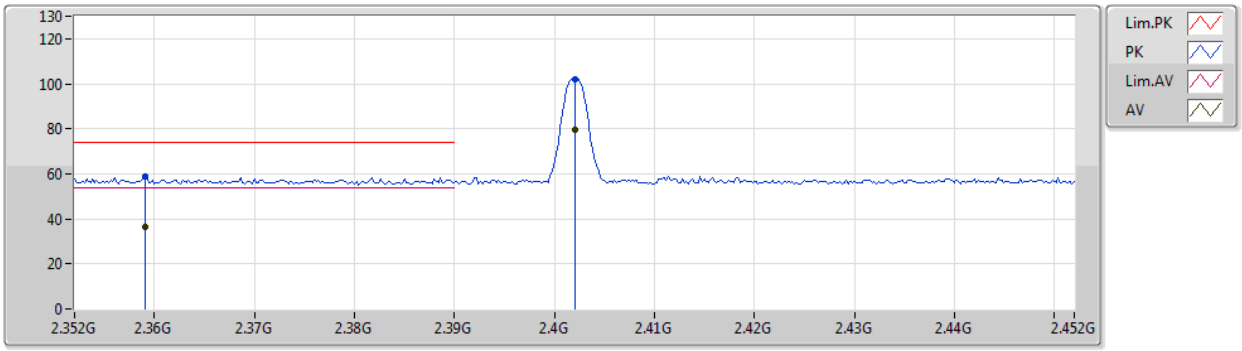


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.95968G	29.80	54.00	-24.20	4.72	3	Horizontal	310	1.93	-	25.08	31.42	7.46	34.16
PK	4.95968G	52.30	74.00	-21.70	4.72	3	Horizontal	310	1.93	-	47.58	31.42	7.46	34.16

BT-EDR(3Mbps)

2402MHz_TX

04/07/2020

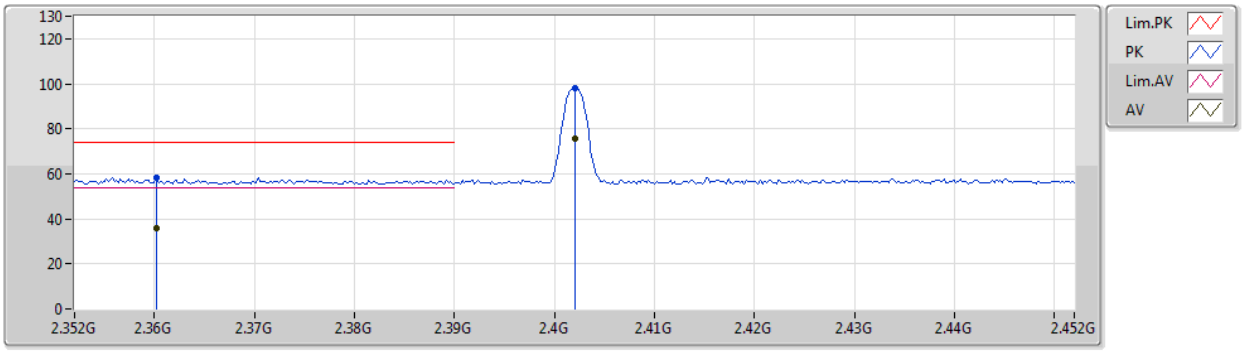


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.359G	36.42	54.00	-17.58	32.78	3	Vertical	360	1.05	-	3.64	27.76	5.02	-
AV	2.402G	79.76	Inf	-Inf	32.70	3	Vertical	360	1.05	-	47.06	27.60	5.10	-
PK	2.359G	58.92	74.00	-15.08	32.78	3	Vertical	360	1.05	-	26.14	27.76	5.02	-
PK	2.402G	102.26	Inf	-Inf	32.70	3	Vertical	360	1.05	-	69.56	27.60	5.10	-

BT-EDR(3Mbps)

2402MHz_TX

04/07/2020

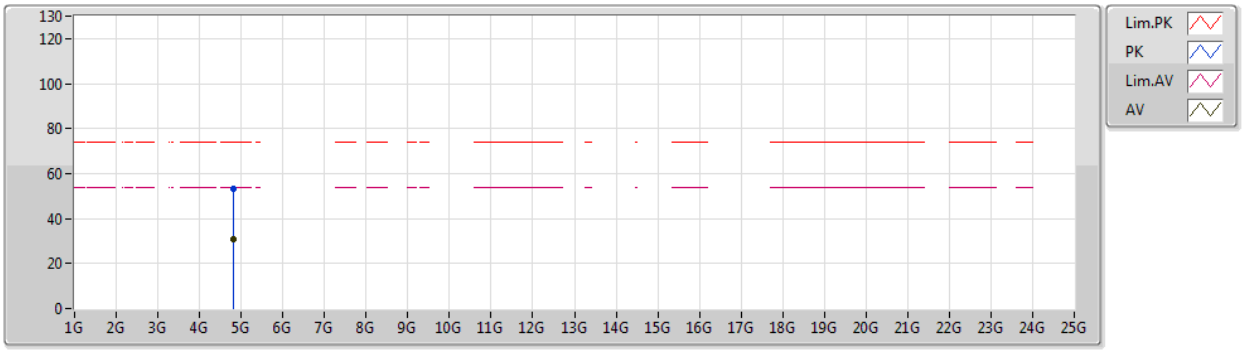


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3602G	35.70	54.00	-18.30	32.78	3	Horizontal	79	1.00	-	2.92	27.76	5.02	-
AV	2.402G	75.41	Inf	-Inf	32.70	3	Horizontal	79	1.00	-	42.71	27.60	5.10	-
PK	2.3602G	58.20	74.00	-15.80	32.78	3	Horizontal	79	1.00	-	25.42	27.76	5.02	-
PK	2.402G	97.91	Inf	-Inf	32.70	3	Horizontal	79	1.00	-	65.21	27.60	5.10	-

BT-EDR(3Mbps)

2402MHz_TX

04/07/2020

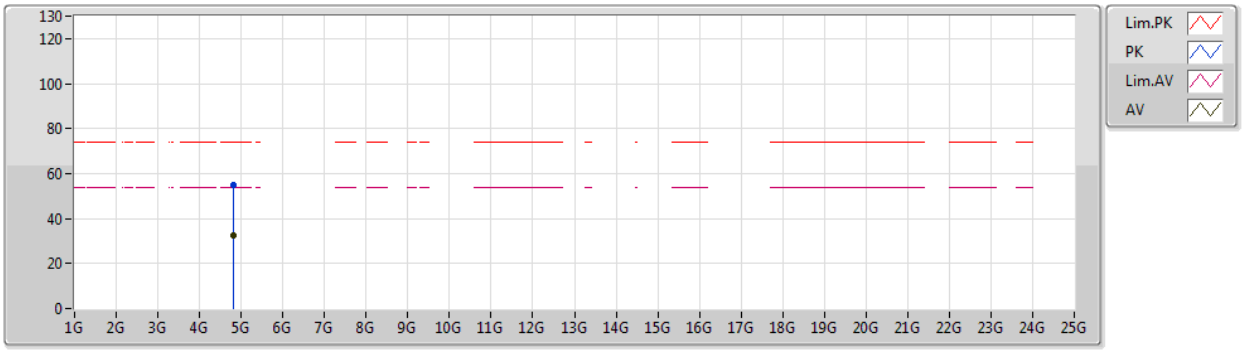


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.80395G	30.62	54.00	-23.38	4.12	3	Vertical	346	1.95	-	26.50	31.12	7.30	34.30
PK	4.80395G	53.12	74.00	-20.88	4.12	3	Vertical	346	1.95	-	49.00	31.12	7.30	34.30

BT-EDR(3Mbps)

2402MHz_TX

04/07/2020

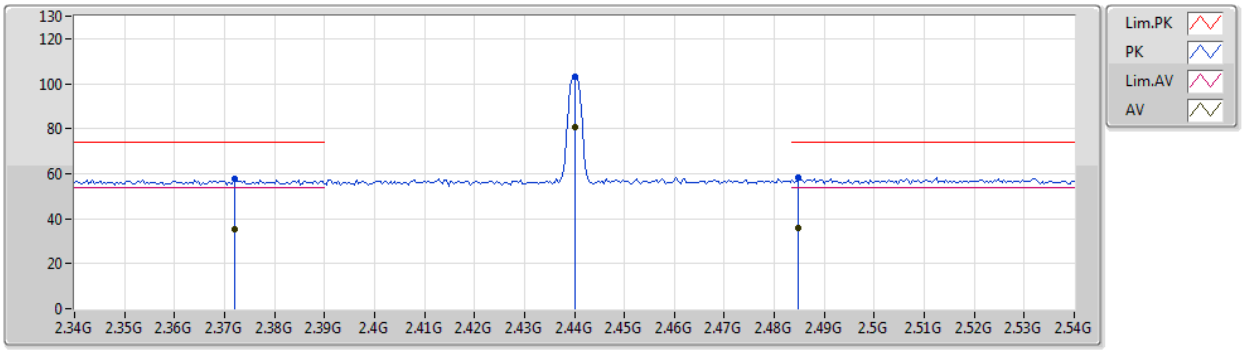


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.80441G	32.52	54.00	-21.48	4.12	3	Horizontal	312	1.80	-	28.40	31.12	7.30	34.30
PK	4.80441G	55.02	74.00	-18.98	4.12	3	Horizontal	312	1.80	-	50.90	31.12	7.30	34.30

BT-EDR(3Mbps)

2440MHz_TX

04/07/2020

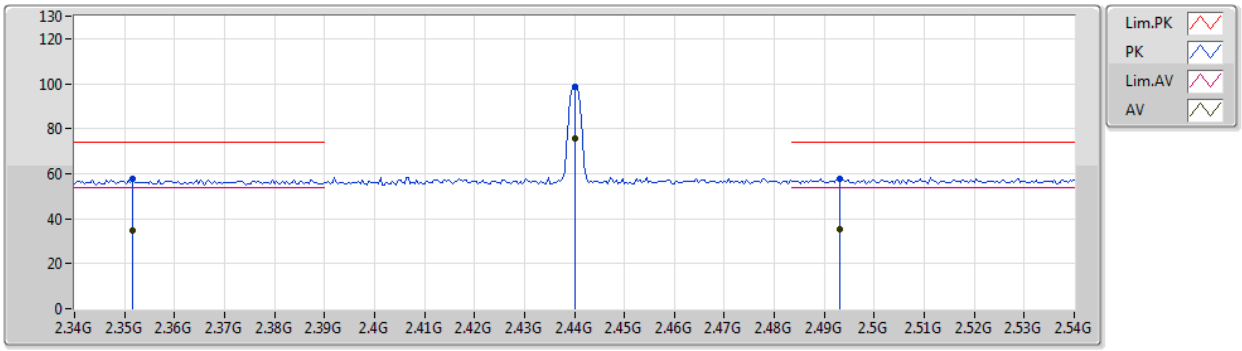


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.372G	35.03	54.00	-18.97	32.75	3	Vertical	0	1.29	-	2.28	27.71	5.04	-
AV	2.44G	80.65	Inf	-Inf	32.76	3	Vertical	0	1.29	-	47.89	27.60	5.16	-
AV	2.4848G	35.60	54.00	-18.40	32.83	3	Vertical	0	1.29	-	2.77	27.60	5.23	-
PK	2.372G	57.53	74.00	-16.47	32.75	3	Vertical	0	1.29	-	24.78	27.71	5.04	-
PK	2.44G	103.15	Inf	-Inf	32.76	3	Vertical	0	1.29	-	70.39	27.60	5.16	-
PK	2.4848G	58.10	74.00	-15.90	32.83	3	Vertical	0	1.29	-	25.27	27.60	5.23	-

BT-EDR(3Mbps)

2440MHz_TX

04/07/2020

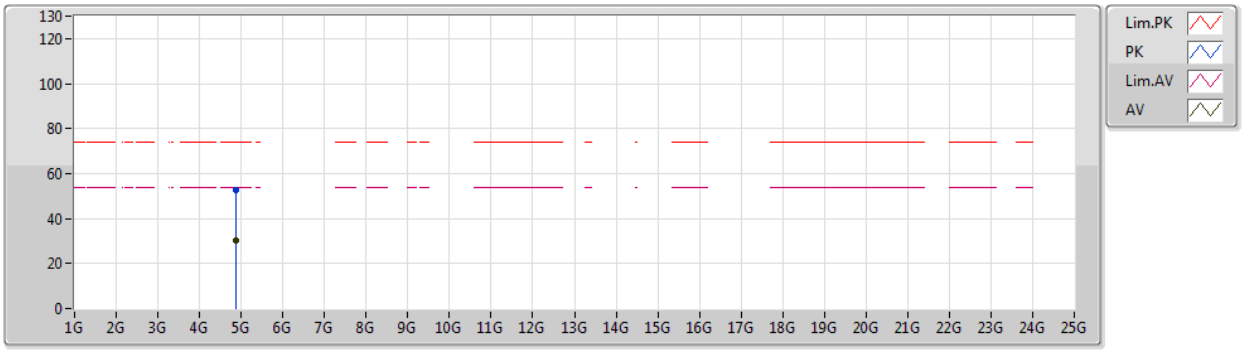


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3516G	34.95	54.00	-19.05	32.79	3	Horizontal	89	1.00	-	2.16	27.79	5.00	-
AV	2.44G	75.86	Inf	-Inf	32.76	3	Horizontal	89	1.00	-	43.10	27.60	5.16	-
AV	2.4932G	35.34	54.00	-18.66	32.84	3	Horizontal	89	1.00	-	2.50	27.60	5.24	-
PK	2.3516G	57.45	74.00	-16.55	32.79	3	Horizontal	89	1.00	-	24.66	27.79	5.00	-
PK	2.44G	98.36	Inf	-Inf	32.76	3	Horizontal	89	1.00	-	65.60	27.60	5.16	-
PK	2.4932G	57.54	74.00	-16.46	32.84	3	Horizontal	89	1.00	-	24.70	27.60	5.24	-

BT-EDR(3Mbps)

2440MHz_TX

04/07/2020

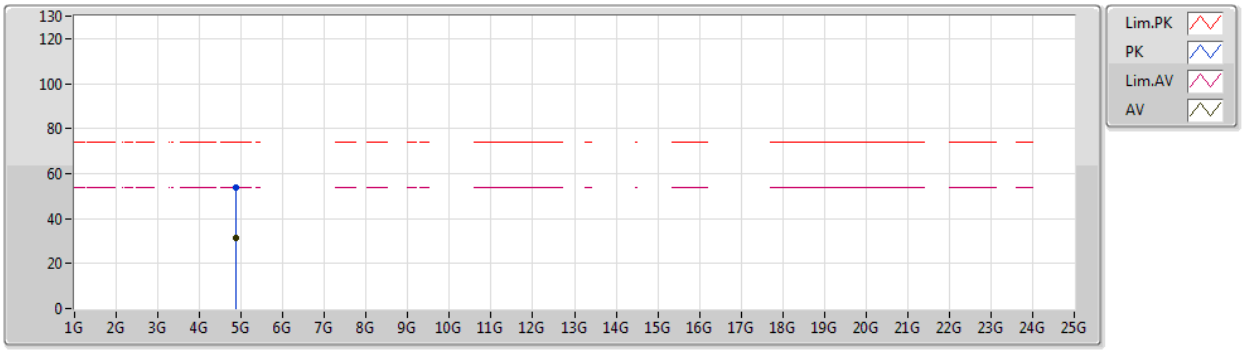


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.87976G	30.06	54.00	-23.94	4.34	3	Vertical	340	1.90	-	25.72	31.24	7.38	34.28
PK	4.87976G	52.56	74.00	-21.44	4.34	3	Vertical	340	1.90	-	48.22	31.24	7.38	34.28

BT-EDR(3Mbps)

2440MHz_TX

04/07/2020

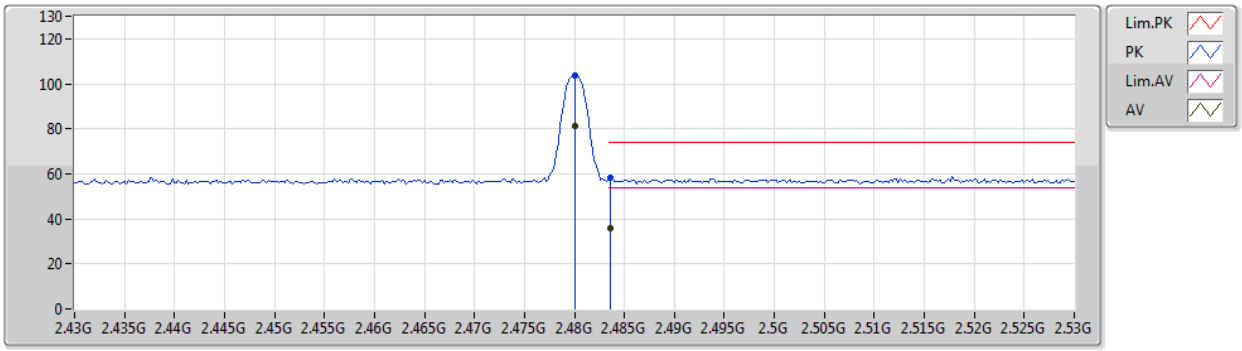


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.88035G	31.57	54.00	-22.43	4.34	3	Horizontal	322	2.00	-	27.23	31.24	7.38	34.28
PK	4.88035G	54.07	74.00	-19.93	4.34	3	Horizontal	322	2.00	-	49.73	31.24	7.38	34.28

BT-EDR(3Mbps)

2480MHz_TX

04/07/2020

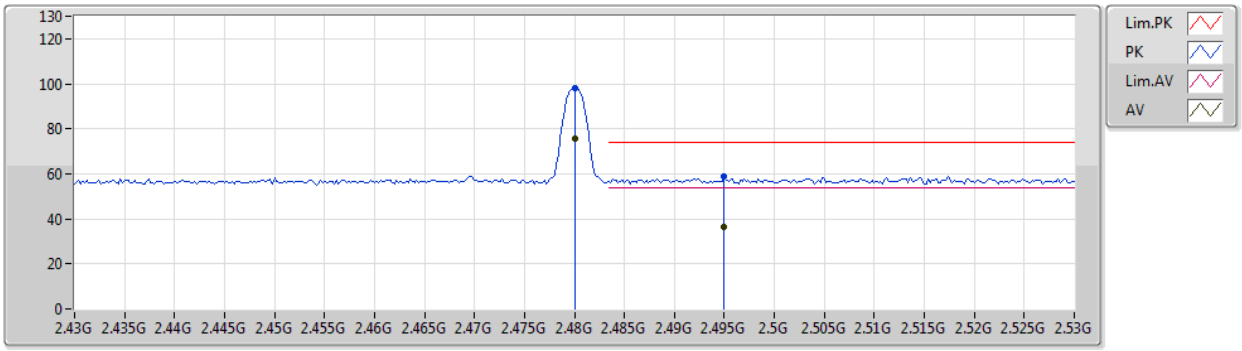


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.48G	81.07	Inf	-Inf	32.82	3	Vertical	356	1.02	-	48.25	27.60	5.22	-
AV	2.4836G	35.59	54.00	-18.41	32.83	3	Vertical	356	1.02	-	2.76	27.60	5.23	-
PK	2.48G	103.57	Inf	-Inf	32.82	3	Vertical	356	1.02	-	70.75	27.60	5.22	-
PK	2.4836G	58.09	74.00	-15.91	32.83	3	Vertical	356	1.02	-	25.26	27.60	5.23	-

BT-EDR(3Mbps)

2480MHz_TX

04/07/2020

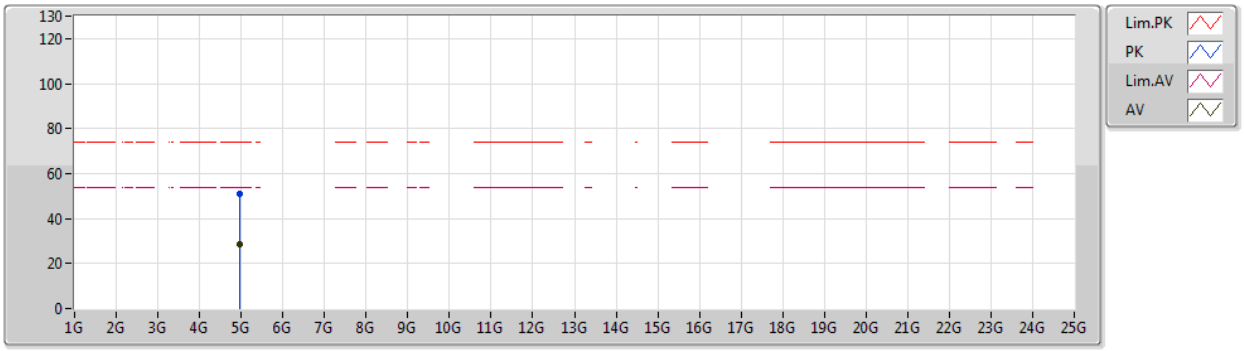


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.48G	75.45	Inf	-Inf	32.82	3	Horizontal	74	1.00	-	42.63	27.60	5.22	-
AV	2.495G	36.50	54.00	-17.50	32.84	3	Horizontal	74	1.00	-	3.66	27.60	5.24	-
PK	2.48G	97.95	Inf	-Inf	32.82	3	Horizontal	74	1.00	-	65.13	27.60	5.22	-
PK	2.495G	59.00	74.00	-15.00	32.84	3	Horizontal	74	1.00	-	26.16	27.60	5.24	-

BT-EDR(3Mbps)

2480MHz_TX

04/07/2020

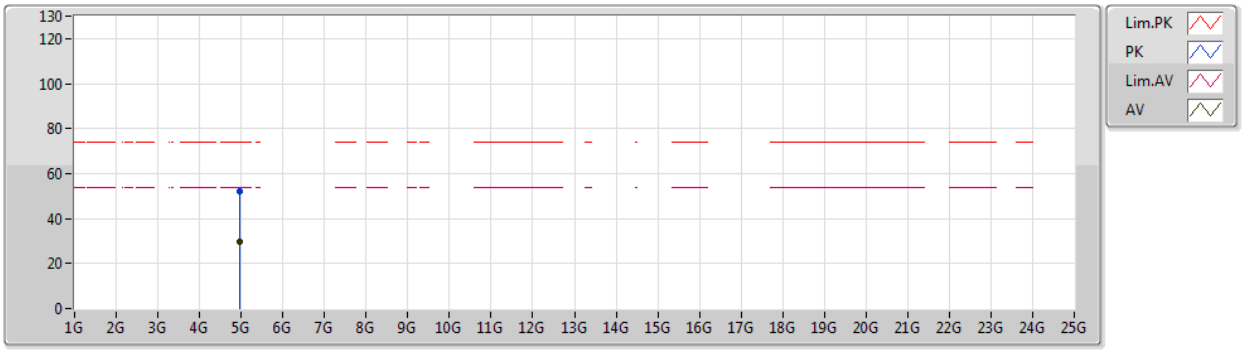


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.95997G	28.73	54.00	-25.27	4.72	3	Vertical	342	1.97	-	24.01	31.42	7.46	34.16
PK	4.95997G	51.23	74.00	-22.77	4.72	3	Vertical	342	1.97	-	46.51	31.42	7.46	34.16

BT-EDR(3Mbps)

2480MHz_TX

04/07/2020



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.96001G	29.69	54.00	-24.31	4.72	3	Horizontal	312	1.93	-	24.97	31.42	7.46	34.16
PK	4.96001G	52.19	74.00	-21.81	4.72	3	Horizontal	312	1.93	-	47.47	31.42	7.46	34.16