FCC Test Report

FCC ID	:	**WLQTSRX1**
Equipment	:	**True Surround Home Theatre System**
Brand Name	:	**Polk**
Model Name	:	**TSRX1 TRUE SURROUND BAR**
Applicant	:	**DEI Sales, Inc., dba Polk Audio** **5541 FERMI COURT, CARLSBAD, CA, 92008, USA**
Manufacturer	:	**Polk Audio, LLC** **5541 FERMI COURT, CARLSBAD, CA, 92008, USA**
Standard	:	**47 CFR FCC Part 15.247**

The product was received on Aug. 03, 2020, and testing was started from Aug. 19, 2020 and completed on Aug. 21, 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.)

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History of this test report

Report No.	Version	Description	Issued Date
FR072914-04	01	Initial issue of report	Oct. 29, 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	-

Note : From Sporton Project No.:FR072914.

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: Jenny Yang

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	Gain (dBi)
1	Sunplus	-	PCB	N/A	5.2

For BT function:

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

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

1.1.3 EUT Information

Operational Condition				
EUT Power Type	From Internal Power Supply			
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)	0.756	1.21	2.935m	1k
BT-EDR(2Mbps)	0.795	1	2.931m	1k
BT-EDR(3Mbps)	0.754	1.23	2.933m	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 Wang	23.7~24.5°C / 62~65%	Aug/21/2020
RF Conducted	TH06-HY	Raven Chien	22.4~23.7°C / 53~68%	Aug/21/2020
Radiated	03CH09-HY	Lego Lin	20.6~23.2°C / 55~60%	Aug/19/2020

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	RDA Host Controler V1.3.1

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

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	Switching Power Supply

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	Switching Power Supply
Operating Mode > 1GHz	CTX
Orthogonal Planes of EUT	**Z Plane**
	

2.4 Accessories

AC Power Cord	Brand Name	NA	Model Name	NA
	Manufacturer	NA	SN	NA
	Signal Line	1.85 meter, Non-Shielded cable, without ferrite core		
Internal Power Supply (1)	Brand Name	DS	Model Name	DSP614-180360W
	Manufacturer	DONGGUAN DONGSONG ELECTRONIC CO.,LTD		
	Power Rating	I/P:100 - 240Vac,50/60Hz,O/P:18VDC, 3.6A		
Internal Power Supply (2)	Brand Name	Chousen	Model Name	CS65C180360FO
	Manufacturer	Chousen International Co.,Ltd		
	Power Rating	I/P:100 - 240Vac,50/60Hz,O/P:18VDC, 3.6A		
3.5mm Analog Cable	Signal Line	1.75 meter, Non-Shielded cable, without ferrite core		
Optical Cable	Signal Line	1.8 meter, Non-Shielded cable, without ferrite core		
HDMI Cable	Signal Line	1.45 meter, Non-Shielded cable, without ferrite core		
RCA Adapter (cable)	Signal Line	0.15 meter, Non-Shielded cable, without ferrite core		
Remote Control	Brand Name	polk	Model Name	NA
	Manufacturer	NA	SN	NA
Battery (2AAA)	Brand Name	N/A	Model Name	NA
	Manufacturer	NA	SN	NA
USB Dongle	Brand Name	polk	Model Name	DBWA
	Manufacturer	Syncomm Technology Corp.	SN	NA

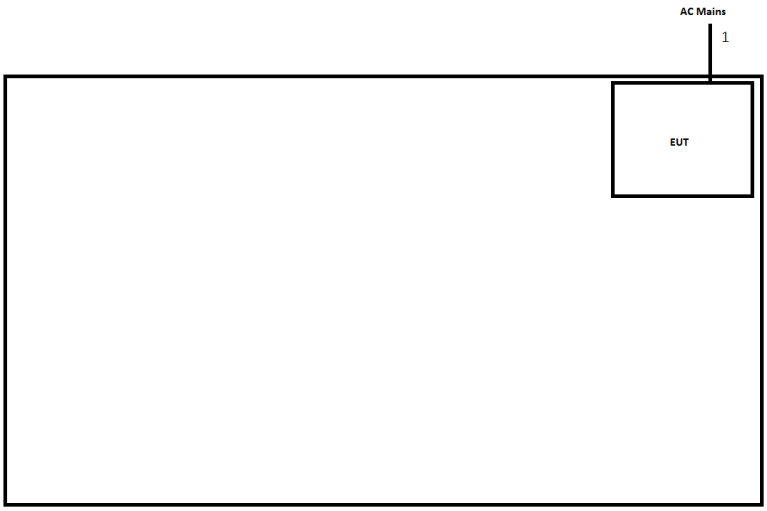
Reminder: Regarding to more detail and other information, please refer to user manual.

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	-	-

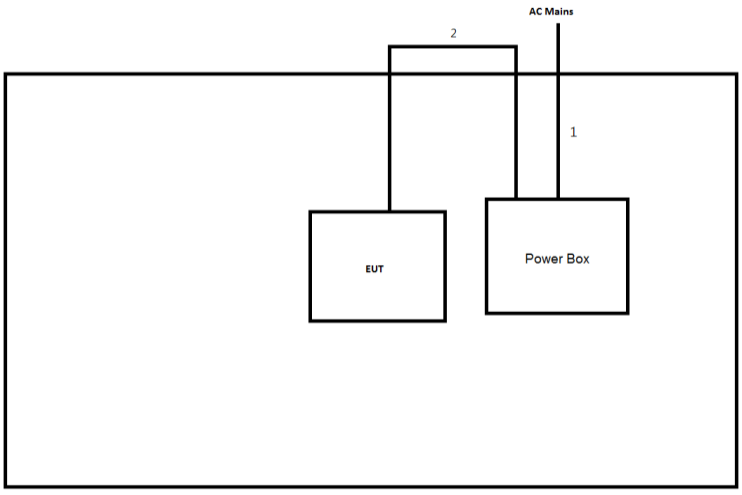
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



Item	Connection	Shielded	Length(m)	Remark
1	AC Power cable	No	1.5	-

Test Setup Diagram - Radiated Test



Item	Connection	Shielded	Length(m)	Remark
1	AC Power cable	No	1.8	-
2	AC Power cable	No	1.5	-

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

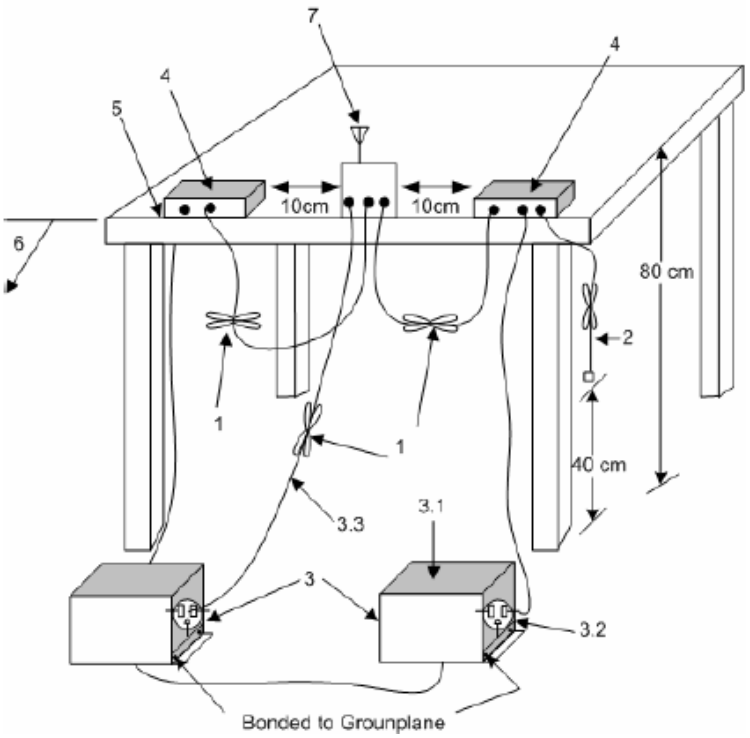
Test Method
▪ Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

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 50Ωloads. 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	

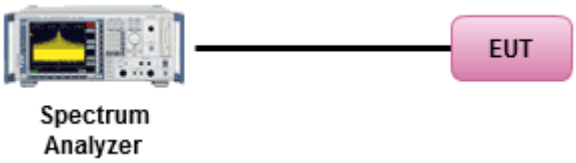
3.2.2 Measuring Instruments

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

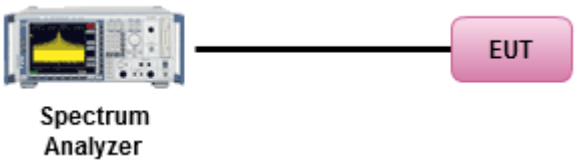
3.4.3 Measuring Instruments

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	

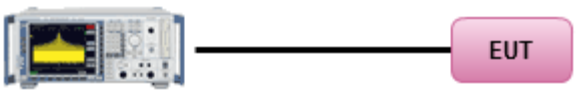
3.5.2 Measuring Instruments

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.	

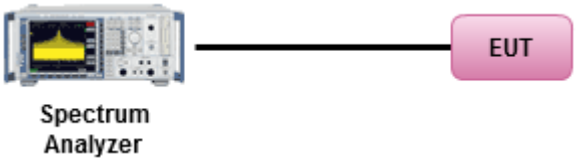
3.6.2 Measuring Instruments

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.

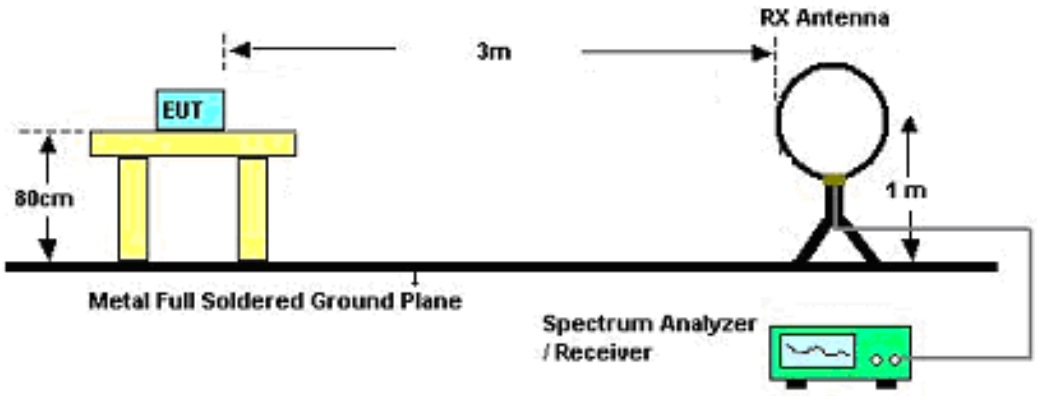
3.7.3 Test Procedures

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.

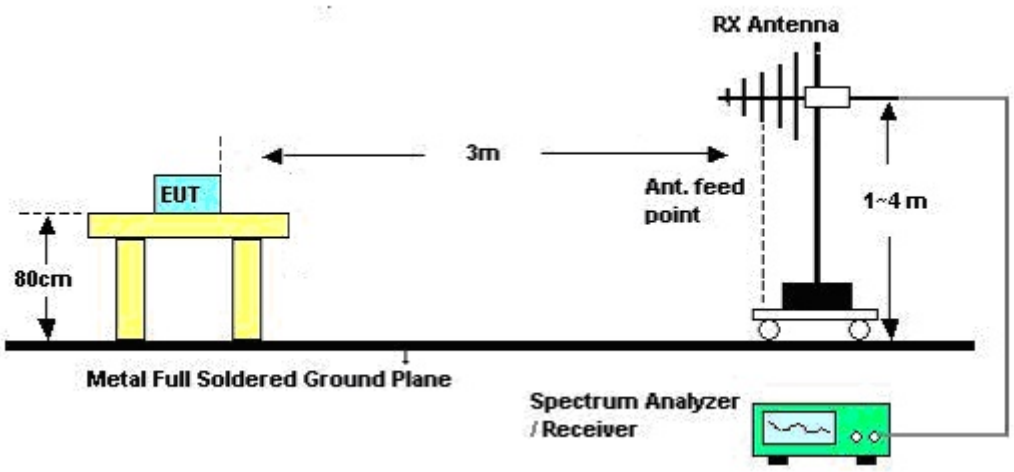
3.7.4 Measurement Results Calculation

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

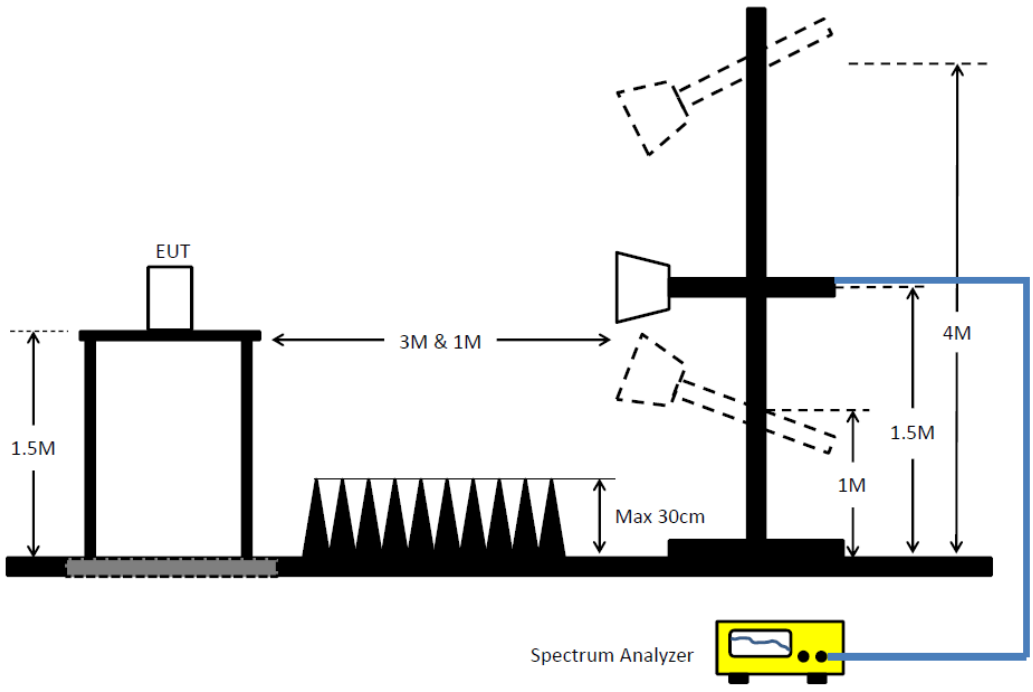
3.7.5 Test Setup

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 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	11/Aug/2020	10/Aug/2021
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
Bilog Antenna & 5dB Attenuator	TESEQ & MTJ	CBL6111D&MT J6102-05	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
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

Instrument for Conducted Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Signal Analyzer	R&S	FSV 40	101029	10kHz ~ 40GHz	01/Oct/2019	30/Sep/2020
SMB100A Signal Generator	R&S	SMB100A03	181147	100kHz~40GHz	12/Nov/2018	11/Nov/2020
Pulse 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

Summary

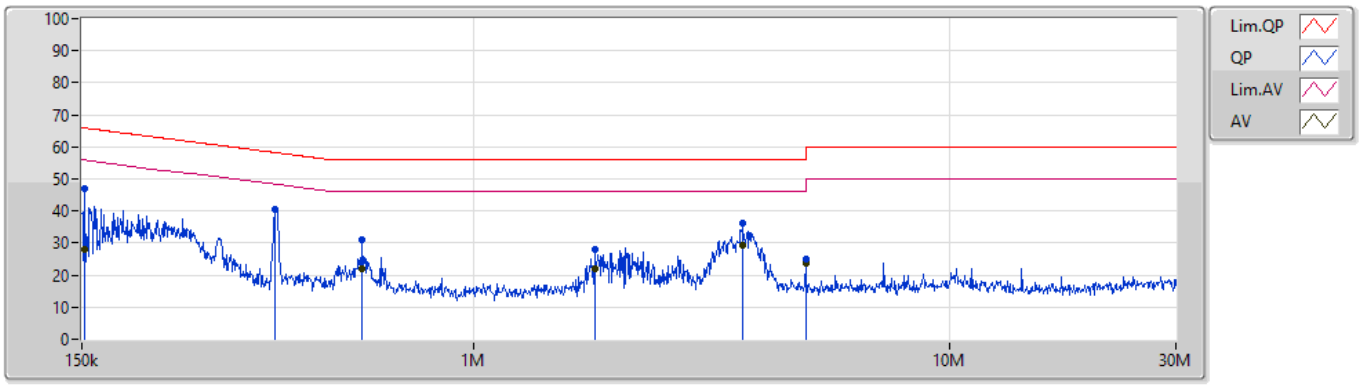
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	383.278k	40.33	48.20	-7.87	Line

Mode Configure

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition	Comments
Mode 1	Pass	QP	152.414k	46.86	65.87	-19.01	Line	-
Mode 1	Pass	AV	152.414k	28.11	55.87	-27.76	Line	-
Mode 1	Pass	QP	383.278k	40.39	58.20	-17.81	Line	-
Mode 1	Pass	AV	383.278k	40.33	48.20	-7.87	Line	"Worst"
Mode 1	Pass	QP	580.524k	30.95	56.00	-25.05	Line	-
Mode 1	Pass	AV	580.524k	22.16	46.00	-23.84	Line	-
Mode 1	Pass	QP	1.797M	28.03	56.00	-27.97	Line	-
Mode 1	Pass	AV	1.797M	21.83	46.00	-24.17	Line	-
Mode 1	Pass	QP	3.671M	36.37	56.00	-19.63	Line	-
Mode 1	Pass	AV	3.671M	29.36	46.00	-16.64	Line	-
Mode 1	Pass	QP	4.992M	24.87	56.00	-31.13	Line	-
Mode 1	Pass	AV	4.992M	23.56	46.00	-22.44	Line	-
Mode 1	Pass	QP	155.487k	46.33	65.69	-19.36	Neutral	-
Mode 1	Pass	AV	155.487k	27.74	55.69	-27.95	Neutral	-
Mode 1	Pass	QP	383.278k	39.61	58.20	-18.59	Neutral	-
Mode 1	Pass	AV	383.278k	39.57	48.20	-8.63	Neutral	"Worst"
Mode 1	Pass	QP	585.177k	29.53	56.00	-26.47	Neutral	-
Mode 1	Pass	AV	585.177k	21.50	46.00	-24.50	Neutral	-
Mode 1	Pass	QP	2.091M	28.34	56.00	-27.66	Neutral	-
Mode 1	Pass	AV	2.091M	21.46	46.00	-24.54	Neutral	-
Mode 1	Pass	QP	3.79M	33.54	56.00	-22.46	Neutral	-
Mode 1	Pass	AV	3.79M	28.90	46.00	-17.10	Neutral	-
Mode 1	Pass	QP	4.992M	24.55	56.00	-31.45	Neutral	-
Mode 1	Pass	AV	4.992M	23.21	46.00	-22.79	Neutral	-

Conducted Emissions at Powerline_Mode 1

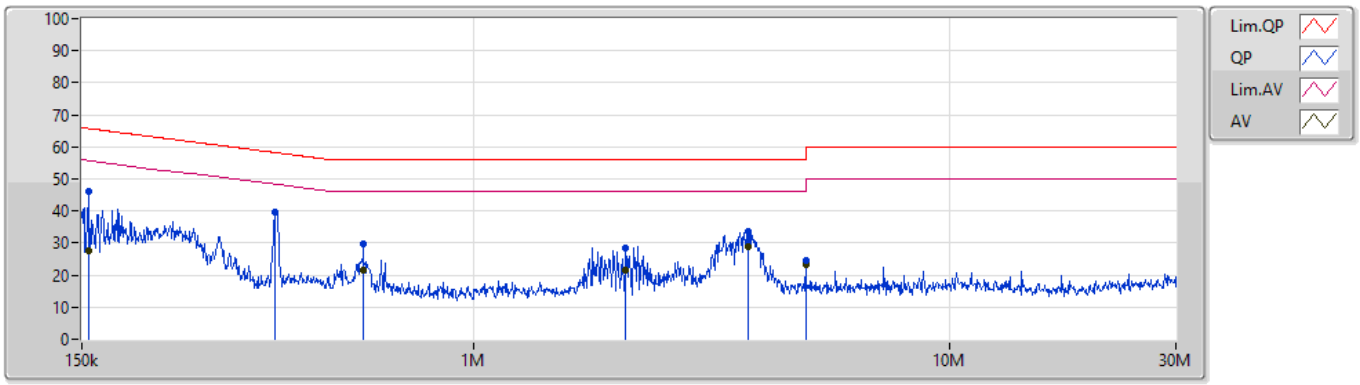
21/08/2020



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	152.414k	46.86	65.87	-19.01	19.64	Line	-	27.22	9.66	0.11	9.87
AV	152.414k	28.11	55.87	-27.76	19.64	Line	-	8.47	9.66	0.11	9.87
QP	383.278k	40.39	58.20	-17.81	19.64	Line	-	20.75	9.64	0.13	9.87
AV	383.278k	40.33	48.20	-7.87	19.64	Line	"Worst"	20.69	9.64	0.13	9.87
QP	580.524k	30.95	56.00	-25.05	19.63	Line	-	11.32	9.64	0.12	9.87
AV	580.524k	22.16	46.00	-23.84	19.63	Line	-	2.53	9.64	0.12	9.87
QP	1.797M	28.03	56.00	-27.97	19.66	Line	-	8.37	9.65	0.14	9.87
AV	1.797M	21.83	46.00	-24.17	19.66	Line	-	2.17	9.65	0.14	9.87
QP	3.671M	36.37	56.00	-19.63	19.72	Line	-	16.65	9.66	0.18	9.88
AV	3.671M	29.36	46.00	-16.64	19.72	Line	-	9.64	9.66	0.18	9.88
QP	4.992M	24.87	56.00	-31.13	19.75	Line	-	5.12	9.67	0.20	9.88
AV	4.992M	23.56	46.00	-22.44	19.75	Line	-	3.81	9.67	0.20	9.88

Conducted Emissions at Powerline_Mode 1

21/08/2020



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	155.487k	46.33	65.69	-19.36	19.63	Neutral	-	26.70	9.65	0.11	9.87
AV	155.487k	27.74	55.69	-27.95	19.63	Neutral	-	8.11	9.65	0.11	9.87
QP	383.278k	39.61	58.20	-18.59	19.63	Neutral	-	19.98	9.63	0.13	9.87
AV	383.278k	39.57	48.20	-8.63	19.63	Neutral	"Worst"	19.94	9.63	0.13	9.87
QP	585.177k	29.53	56.00	-26.47	19.62	Neutral	-	9.91	9.63	0.12	9.87
AV	585.177k	21.50	46.00	-24.50	19.62	Neutral	-	1.88	9.63	0.12	9.87
QP	2.091M	28.34	56.00	-27.66	19.66	Neutral	-	8.68	9.65	0.14	9.87
AV	2.091M	21.46	46.00	-24.54	19.66	Neutral	-	1.80	9.65	0.14	9.87
QP	3.79M	33.54	56.00	-22.46	19.72	Neutral	-	13.82	9.66	0.18	9.88
AV	3.79M	28.90	46.00	-17.10	19.72	Neutral	-	9.18	9.66	0.18	9.88
QP	4.992M	24.55	56.00	-31.45	19.75	Neutral	-	4.80	9.67	0.20	9.88
AV	4.992M	23.21	46.00	-22.79	19.75	Neutral	-	3.46	9.67	0.20	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)	123.75k	94.953k	95K0F1D	101.25k	84.958k
BT-EDR(2Mbps)	807.5k	1.255M	1M26G1D	802.5k	1.184M
BT-EDR(3Mbps)	828.75k	1.222M	1M22G1D	808.75k	1.174M

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

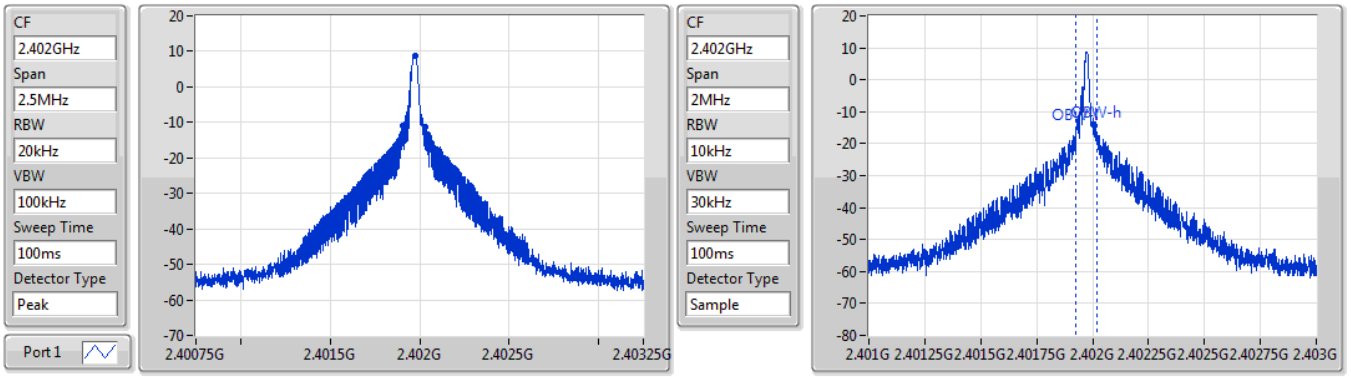
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	Inf	123.75k	94.953k
2440MHz	Pass	Inf	108.75k	87.956k
2480MHz	Pass	Inf	101.25k	84.958k
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	Inf	807.5k	1.189M
2440MHz	Pass	Inf	805k	1.184M
2480MHz	Pass	Inf	802.5k	1.255M
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	Inf	828.75k	1.191M
2440MHz	Pass	Inf	827.5k	1.174M
2480MHz	Pass	Inf	808.75k	1.222M

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

BT-BR(1Mbps) EBW-FS

2402MHz

21/08/2020

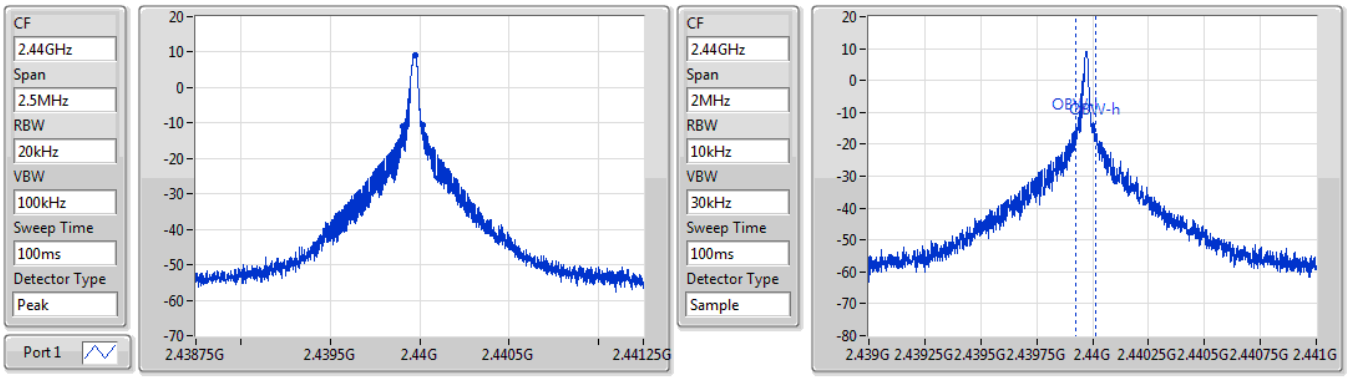


20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
123.75k	2.401908G	2.402031G	94.953k	2.401926G	2.402021G	Inf	1

BT-BR(1Mbps) EBW-FS

2440MHz

21/08/2020

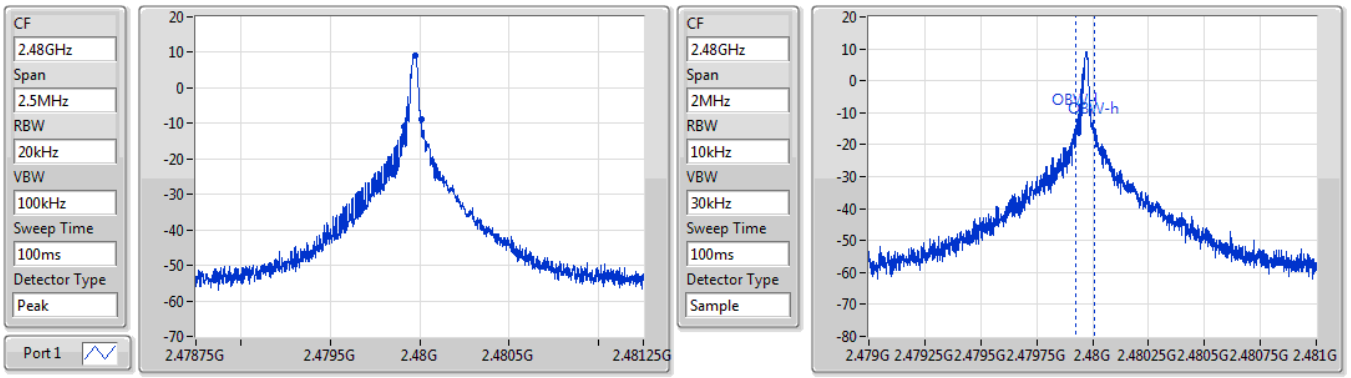


20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
108.75k	2.439909G	2.440018G	87.956k	2.439924G	2.440012G	Inf	1

BT-BR(1Mbps) EBW-FS

2480MHz

21/08/2020

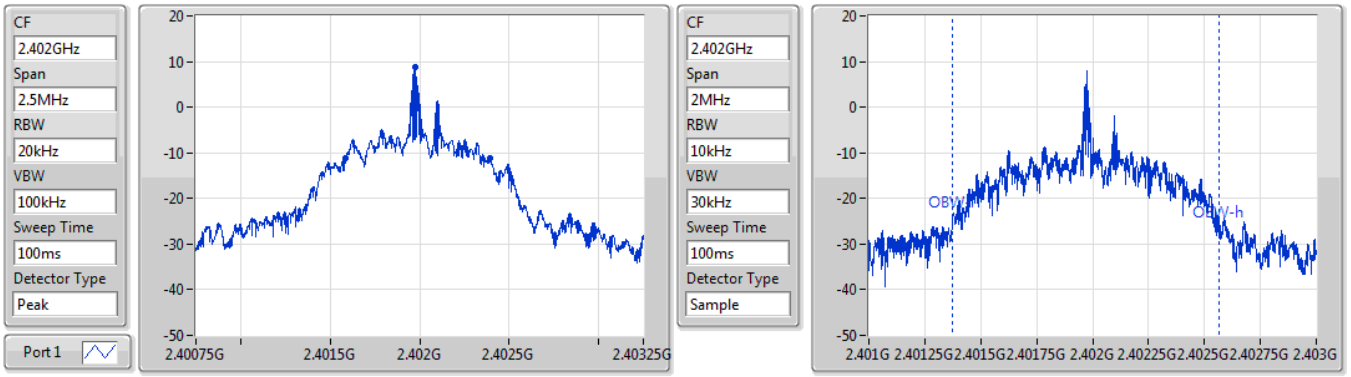


20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
101.25k	2.47991G	2.480011G	84.958k	2.479925G	2.48001G	Inf	1

BT-EDR(2Mbps) EBW-FS

2402MHz

21/08/2020

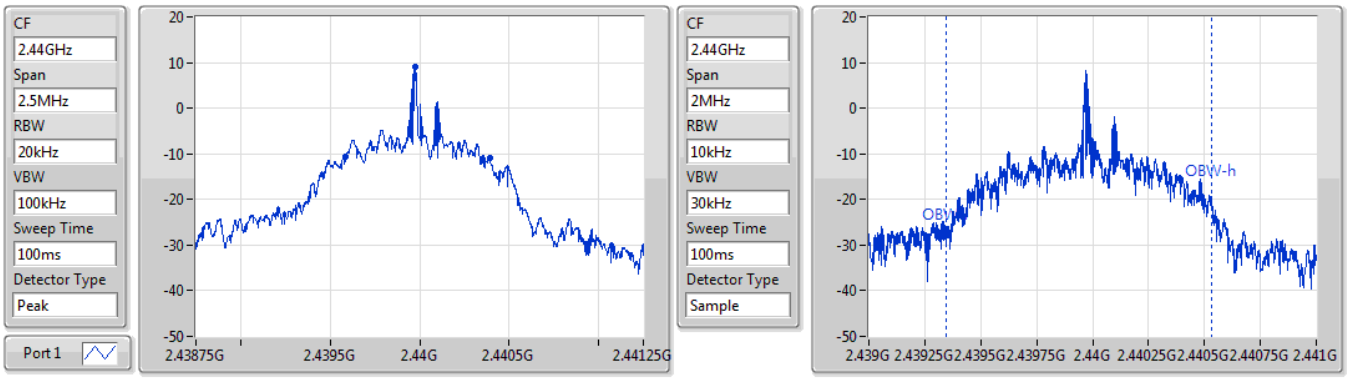


20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
807.5k	2.401585G	2.402393G	1.189M	2.401374G	2.402564G	Inf	1

BT-EDR(2Mbps) EBW-FS

2440MHz

21/08/2020

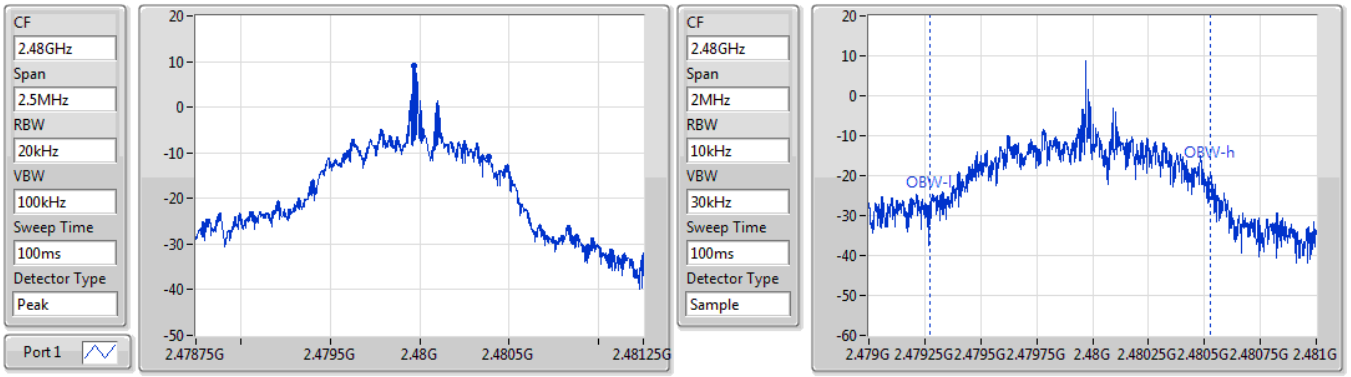


20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
805k	2.439585G	2.44039G	1.184M	2.439345G	2.44053G	Inf	1

BT-EDR(2Mbps) EBW-FS

2480MHz

21/08/2020

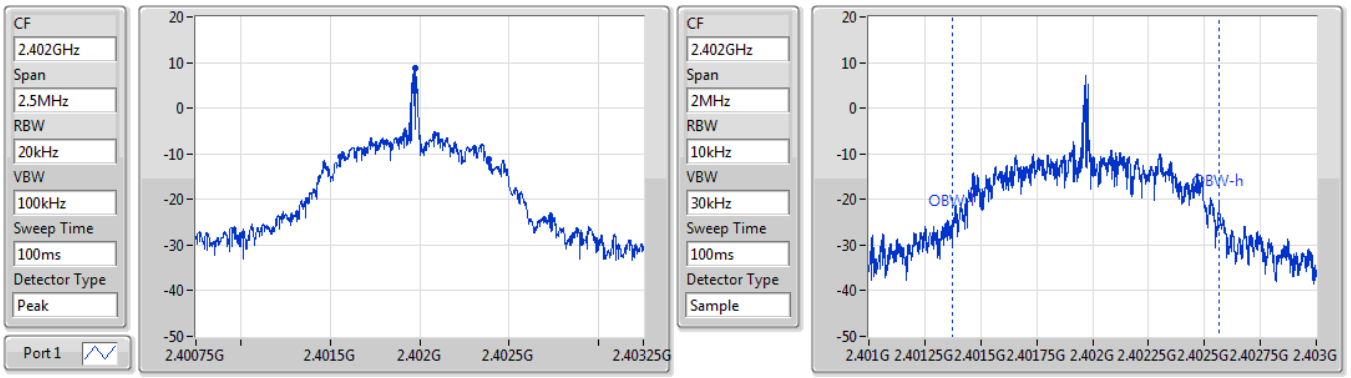


20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
802.5k	2.479585G	2.480388G	1.255M	2.479271G	2.480527G	Inf	1

BT-EDR(3Mbps) EBW-FS

2402MHz

21/08/2020

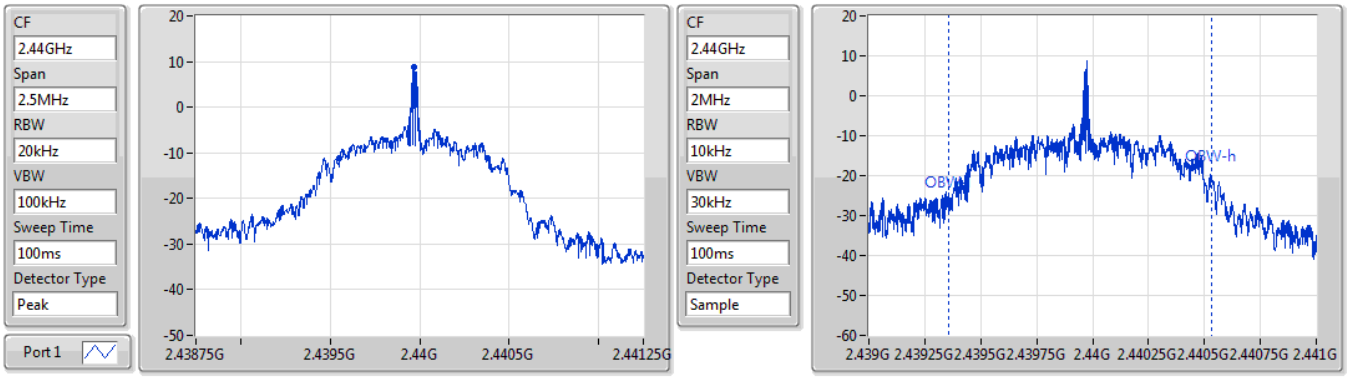


20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
828.75k	2.401558G	2.402386G	1.191M	2.401375G	2.402567G	Inf	1

BT-EDR(3Mbps) EBW-FS

2440MHz

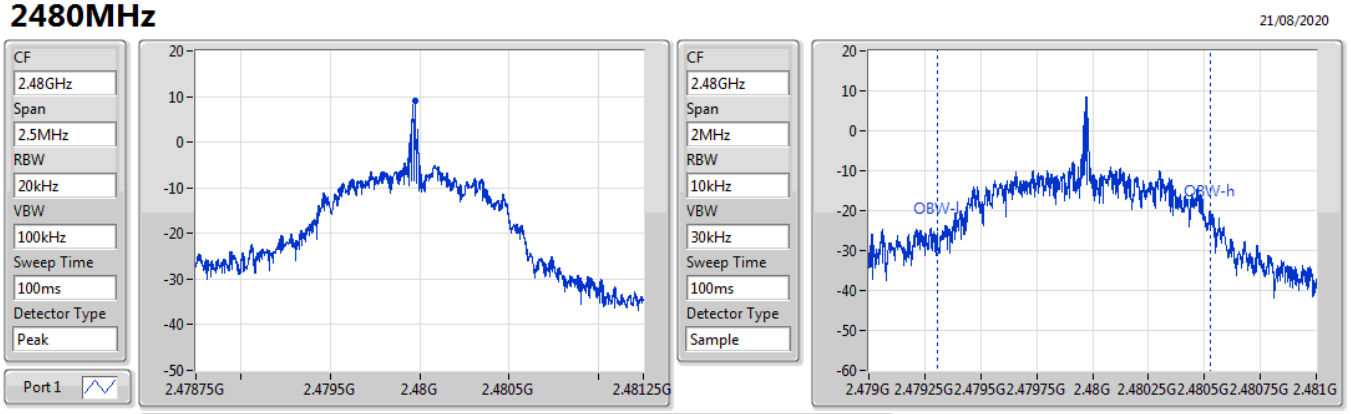
21/08/2020



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
827.5k	2.439554G	2.440381G	1.174M	2.439359G	2.440534G	Inf	1

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

2480MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
808.75k	2.479556G	2.480365G	1.222M	2.479305G	2.480528G	Inf	1

Summary

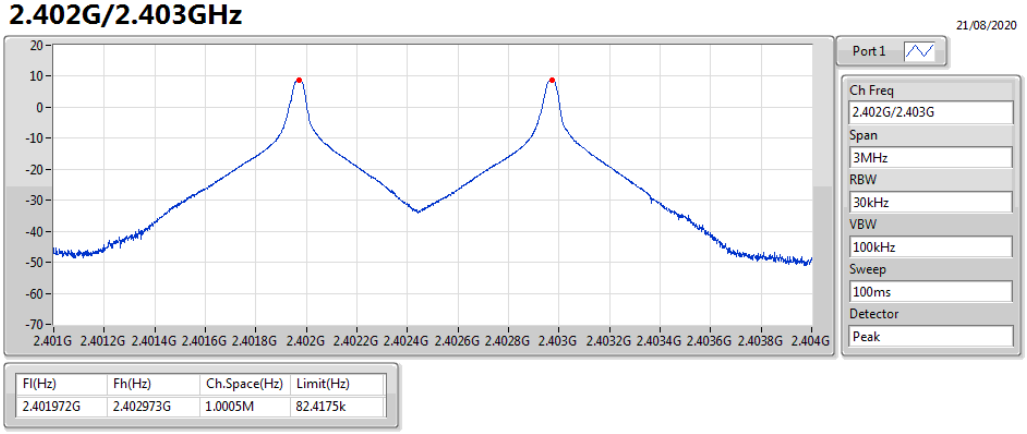
Mode	Max-Space (Hz)	Min-Space (Hz)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	1.008M	999k
BT-EDR(2Mbps)	1.0005M	1.0005M
BT-EDR(3Mbps)	1.0005M	1.0005M

Result

Mode	Result	Fl (Hz)	Fh (Hz)	Ch.Space (Hz)	Limit (Hz)
BT-BR(1Mbps)	-	-	-	-	-
2402MHz	Pass	2.401972G	2.402973G	1.0005M	82.4175k
2440MHz	Pass	2.439963G	2.440971G	1.008M	72.4275k
2480MHz	Pass	2.478968G	2.479967G	999k	67.4325k
BT-EDR(2Mbps)	-	-	-	-	-
2402MHz	Pass	2.401972G	2.402973G	1.0005M	537.795k
2440MHz	Pass	2.439972G	2.440973G	1.0005M	536.13k
2480MHz	Pass	2.478972G	2.479973G	1.0005M	534.465k
BT-EDR(3Mbps)	-	-	-	-	-
2402MHz	Pass	2.401972G	2.402973G	1.0005M	551.9475k
2440MHz	Pass	2.439972G	2.440973G	1.0005M	551.115k
2480MHz	Pass	2.478972G	2.479973G	1.0005M	538.6275k

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

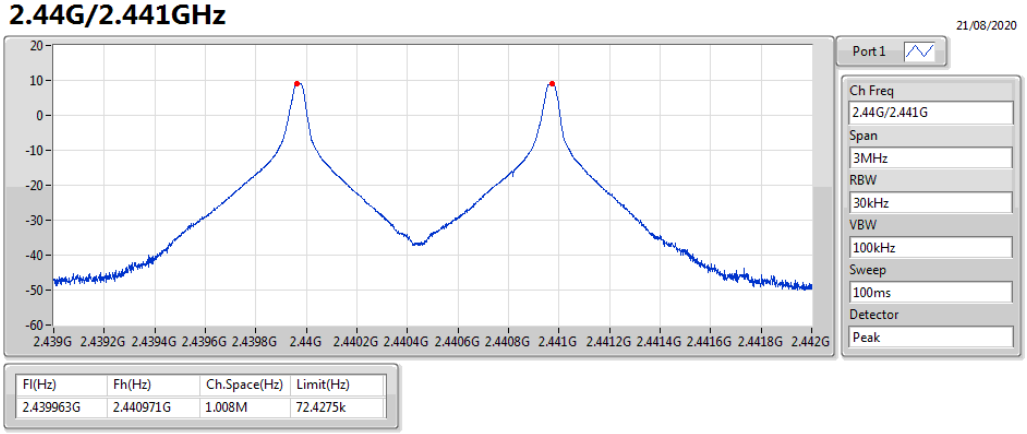
2.402G/2.403GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.401972G	2.402973G	1.0005M	82.4175k

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

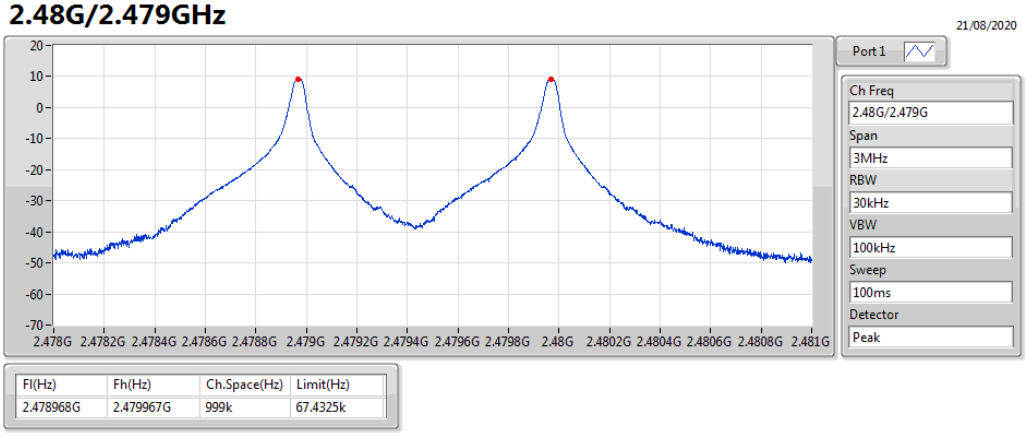
2.44G/2.441GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.439963G	2.440971G	1.008M	72.4275k

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

2.48G/2.479GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.478968G	2.479967G	999k	67.4325k

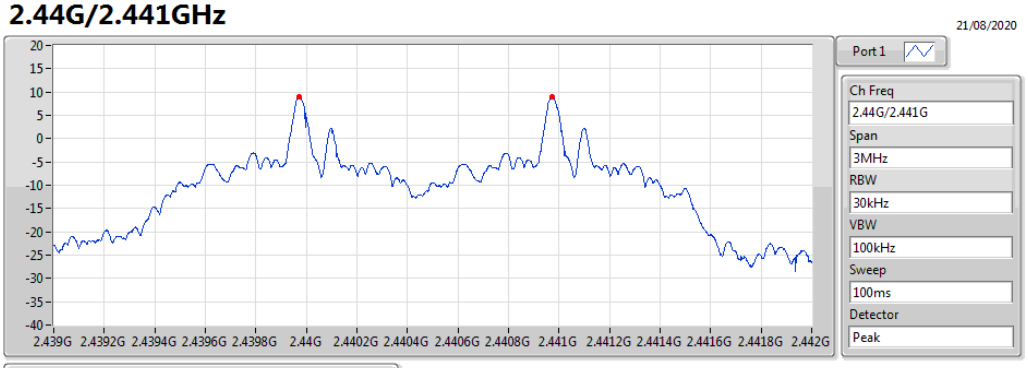
BT-EDR(2Mbps) **Channel Separation-FS**

2.402G/2.403GHz

Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.401972G	2.402973G	1.0005M	537.795k

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

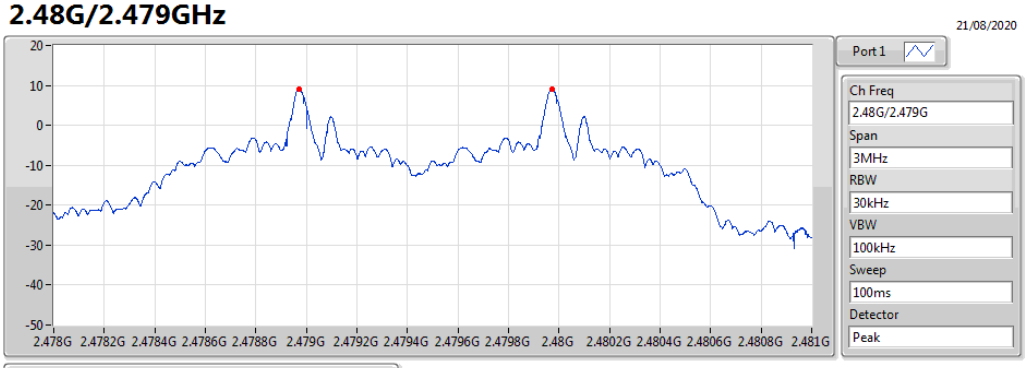
2.44G/2.441GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.439972G	2.440973G	1.0005M	536.13k

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

2.48G/2.479GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.478972G	2.479973G	1.0005M	534.465k

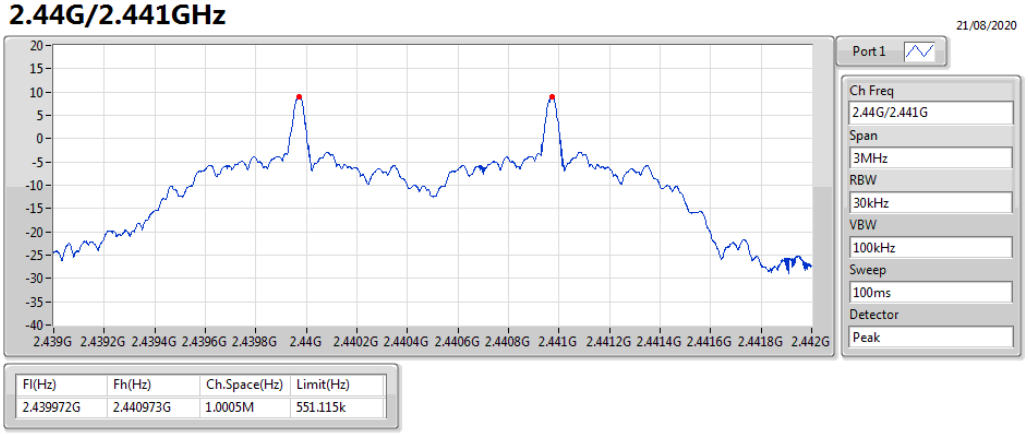
BT-EDR(3Mbps) **Channel Separation-FS**

2.402G/2.403GHz

Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.401972G	2.402973G	1.0005M	551.9475k

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

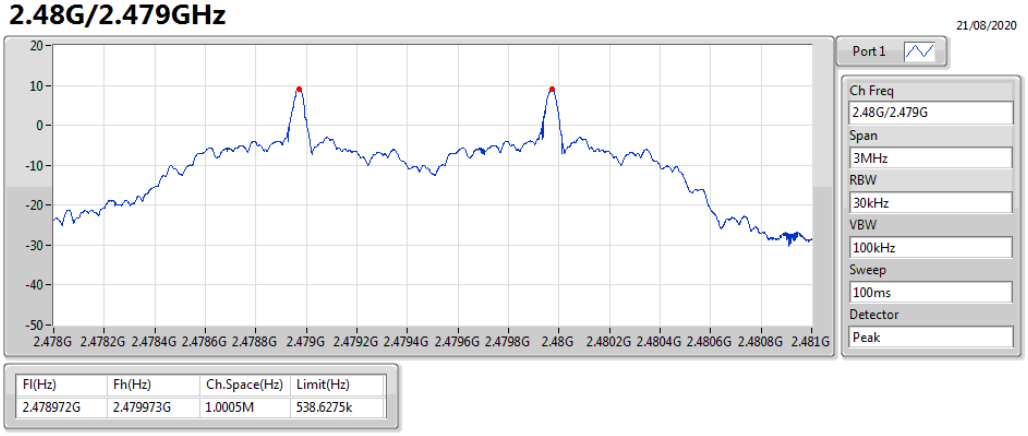
2.44G/2.441GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.439972G	2.440973G	1.0005M	551.115k

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

2.48G/2.479GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.478972G	2.479973G	1.0005M	538.6275k

Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	9.46	0.00883
BT-EDR(2Mbps)	9.44	0.00879
BT-EDR(3Mbps)	9.44	0.00879

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	5.20	9.09	21.00
2440MHz	Pass	5.20	9.25	21.00
2480MHz	Pass	5.20	9.46	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	5.20	9.04	21.00
2440MHz	Pass	5.20	9.20	21.00
2480MHz	Pass	5.20	9.44	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	5.20	9.02	21.00
2440MHz	Pass	5.20	9.30	21.00
2480MHz	Pass	5.20	9.44	21.00

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

Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	9.19	0.00830
BT-EDR(2Mbps)	2.72	0.00187
BT-EDR(3Mbps)	2.75	0.00188

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	5.20	8.56	21.00
2440MHz	Pass	5.20	8.94	21.00
2480MHz	Pass	5.20	9.19	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	5.20	2.64	21.00
2440MHz	Pass	5.20	2.61	21.00
2480MHz	Pass	5.20	2.72	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	5.20	2.65	21.00
2440MHz	Pass	5.20	2.68	21.00
2480MHz	Pass	5.20	2.75	21.00

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

Summary

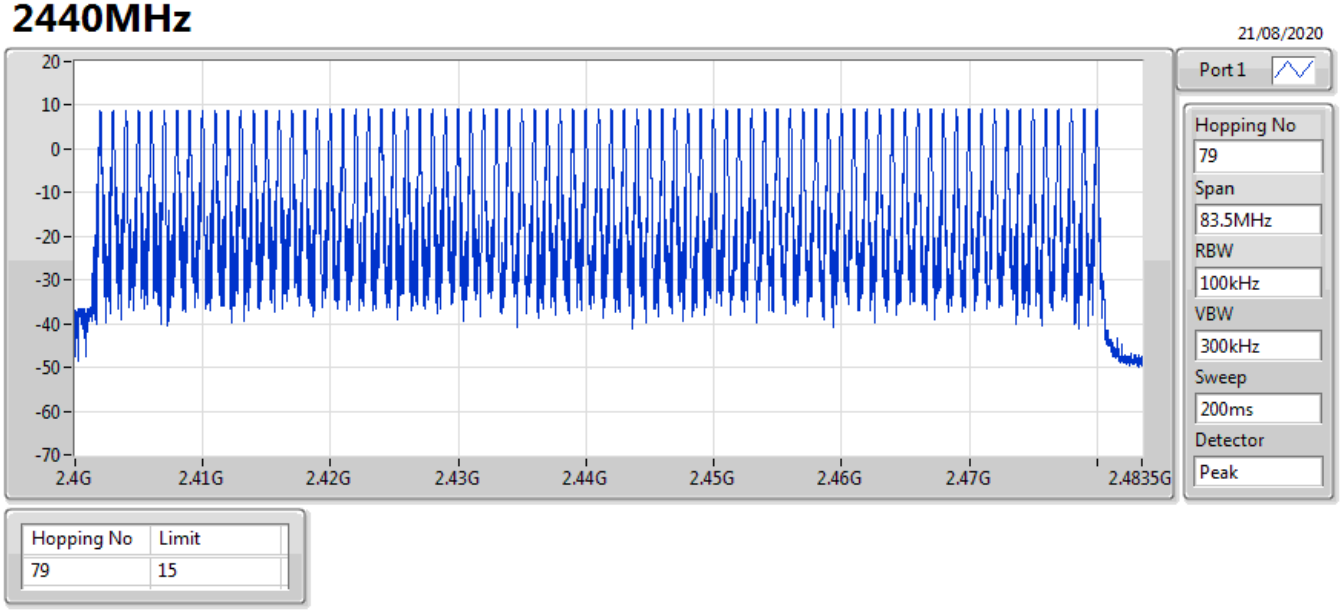
Mode	Max-Hop No
2.4-2.4835GHz	-
BT-BR(1Mbps)	79
BT-EDR(2Mbps)	79
BT-EDR(3Mbps)	79

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-FS**

2440MHz

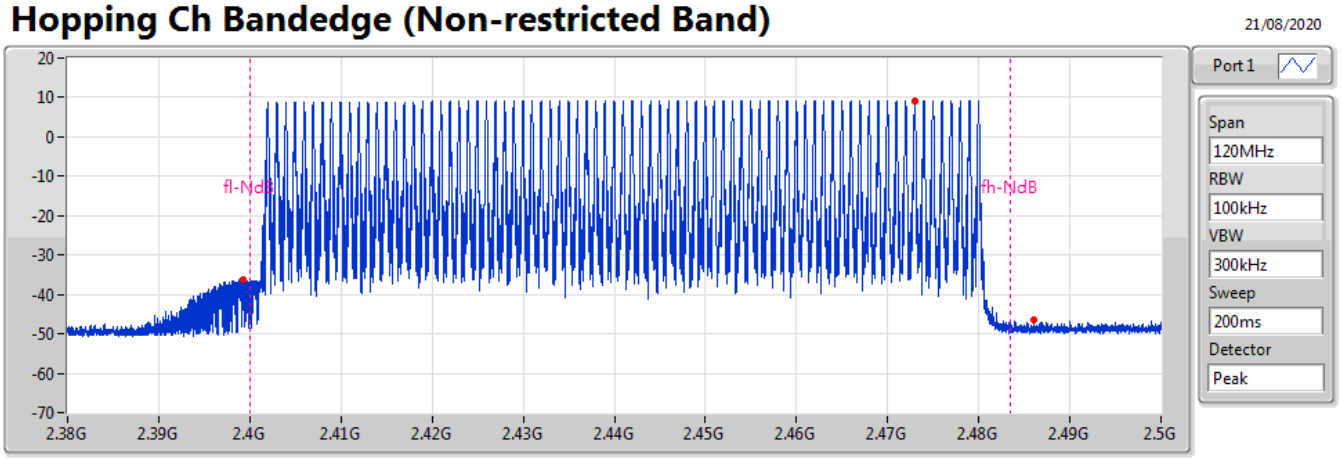


Hopping No	Limit
79	15

BT-BR(1Mbps)

2440MHz

Hopping Ch Bandedge (Non-restricted Band)

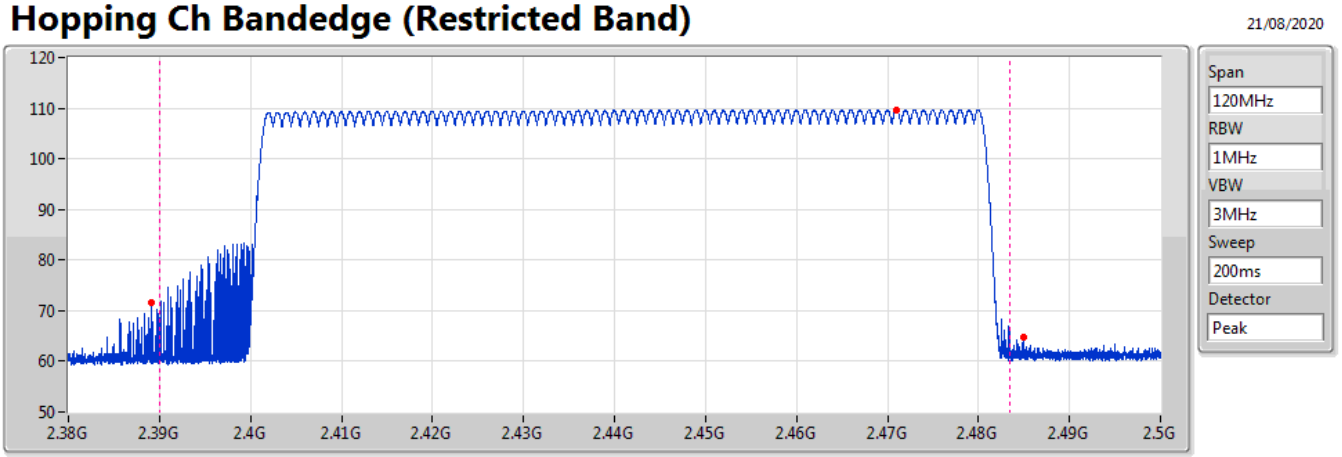


Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-10.8	2.47297G	9.2	2.39923G	-36.31	2.486035G	-46.56

BT-BR(1Mbps)

2440MHz

Hopping Ch Bandedge (Restricted Band)

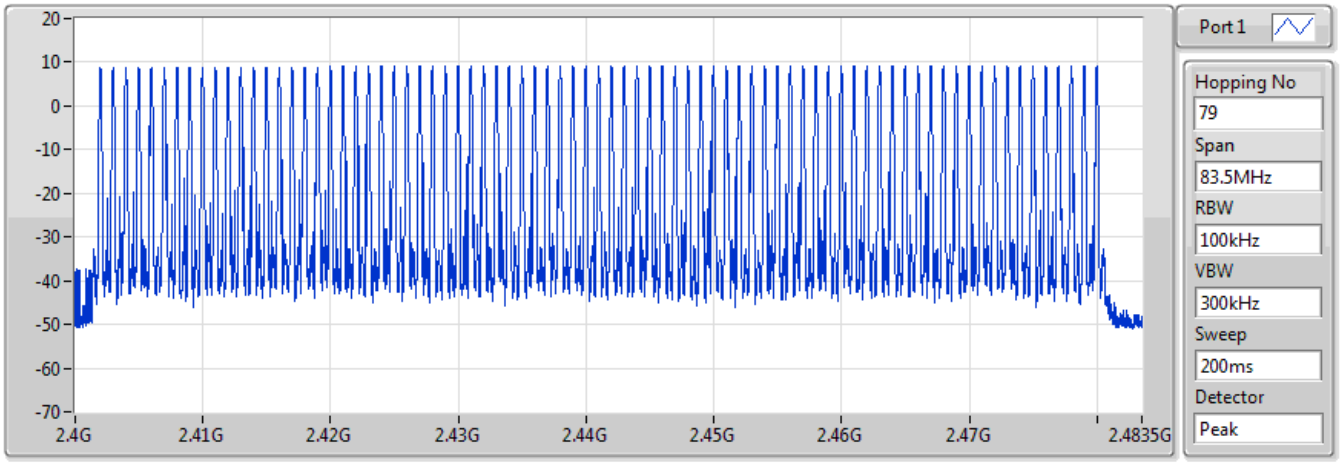


Ref(Hz)	Ref(dBuV/m)	BE-l(Hz)	PK(dBuV/m)	AV(dBuV/m)	BE-h(Hz)	PK(dBuV/m)	AV(dBuV/m)	LimPK(dBuV/	LimAV(dBuV/	Tx On(ms)	DCF(dB)
2.470975G	109.61	2.389135G	71.54	41.44	2.484985G	64.76	34.66	74	54	3.125	-30.1

BT-EDR(2Mbps)

Hopping-FS

2440MHz

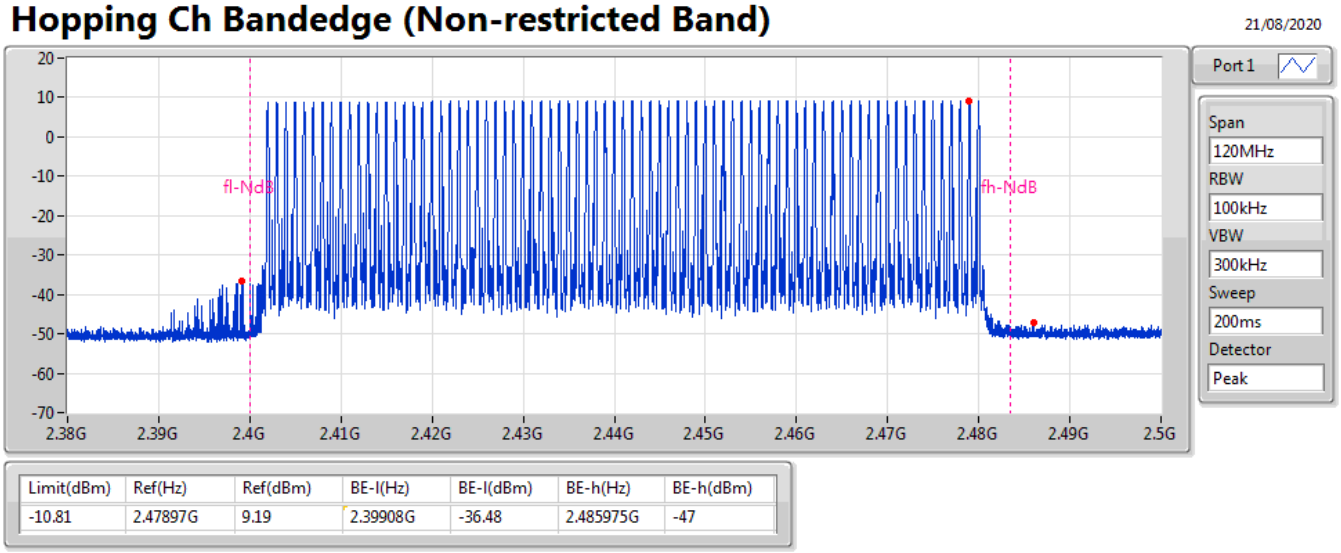


Hopping No	Limit
79	15

BT-EDR(2Mbps)

2440MHz

Hopping Ch Bandedge (Non-restricted Band)

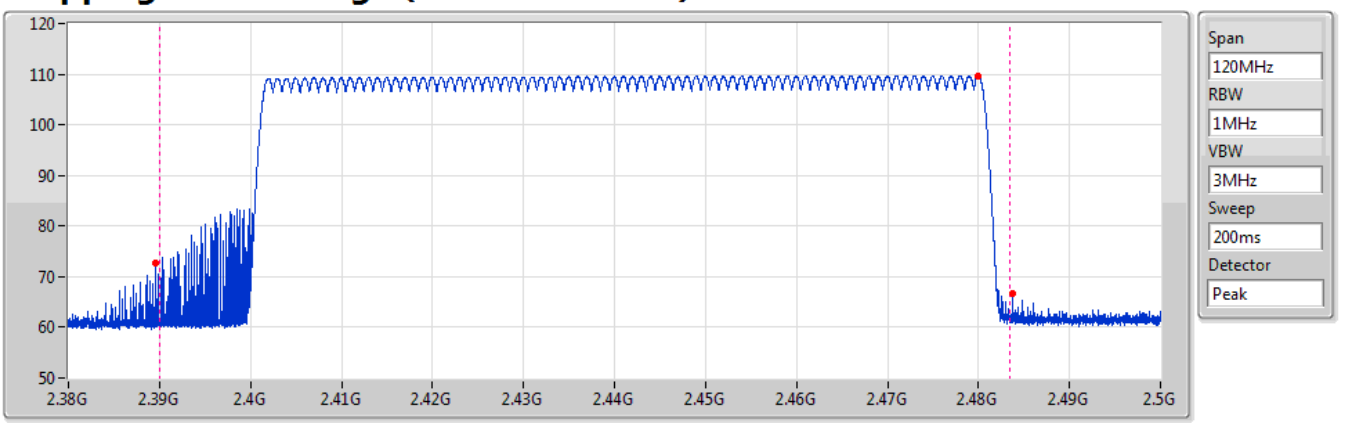


Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-10.81	2.47897G	9.19	2.39908G	-36.48	2.485975G	-47

BT-EDR(2Mbps)

2440MHz

Hopping Ch Bandedge (Restricted Band)

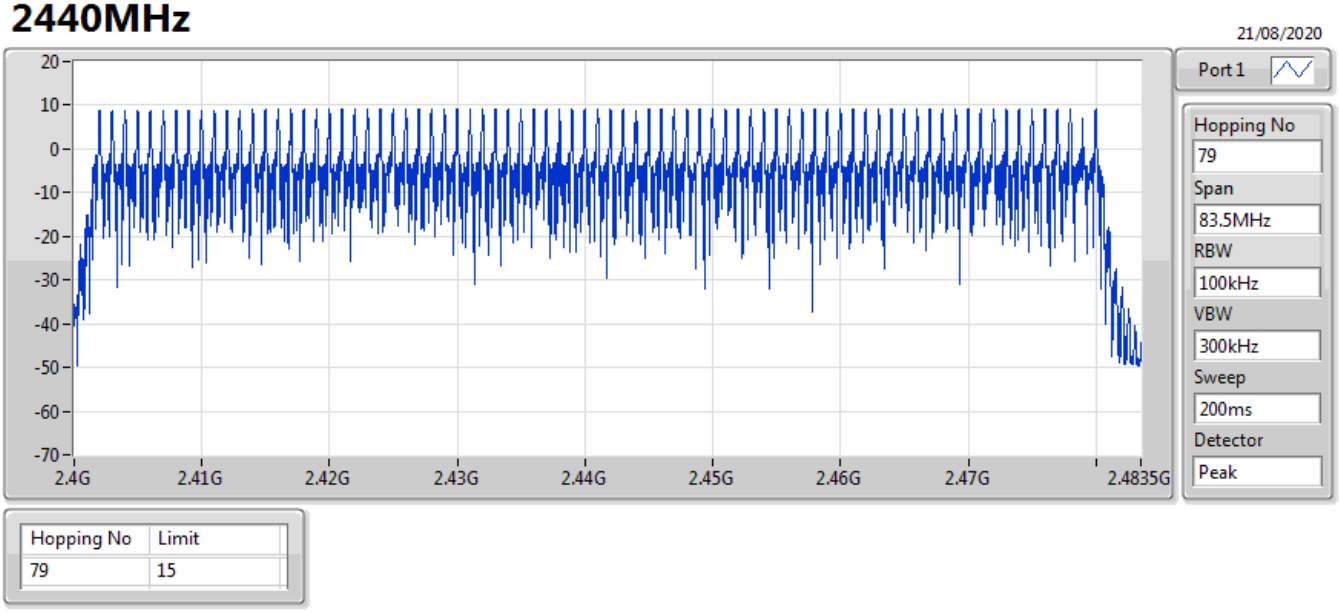


Ref(Hz)	Ref(dBuV/m)	BE-l(Hz)	PK(dBuV/m)	AV(dBuV/m)	BE-h(Hz)	PK(dBuV/m)	AV(dBuV/m)	LimPK(dBuV/	LimAV(dBuV/	Tx On(ms)	DCF(dB)
2.479945G	109.61	2.389585G	72.58	42.48	2.483755G	66.8	36.7	74	54	3.125	-30.1

BT-EDR(3Mbps)

2440MHz

Hopping-FS

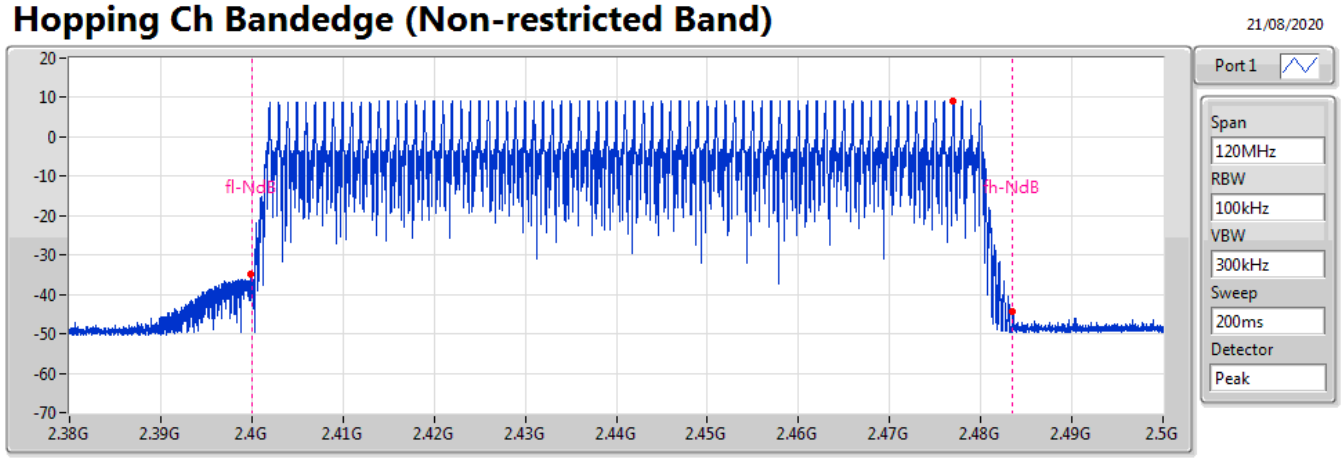


Hopping No	Limit
79	15

BT-EDR(3Mbps)

2440MHz

Hopping Ch Bandedge (Non-restricted Band)

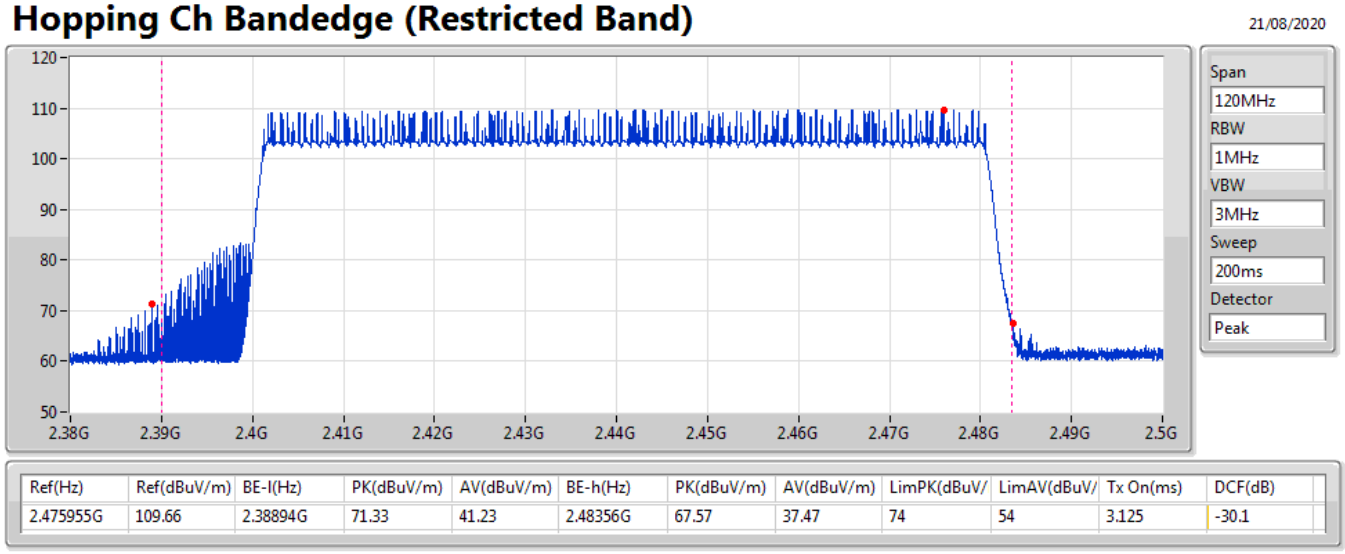


Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-10.76	2.476975G	9.24	2.399935G	-34.86	2.483515G	-44.18

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)
2.475955G	109.66	2.38894G	71.33	41.23	2.48356G	67.57	37.47	74	54	3.125	-30.1

Summary

Mode	Max-Dwell (s)
2.4-2.4835GHz	-
BT-BR(1Mbps)	313.4573m_DH5
BT-EDR(2Mbps)	312.89765m_DH5
BT-EDR(3Mbps)	312.871m_DH5

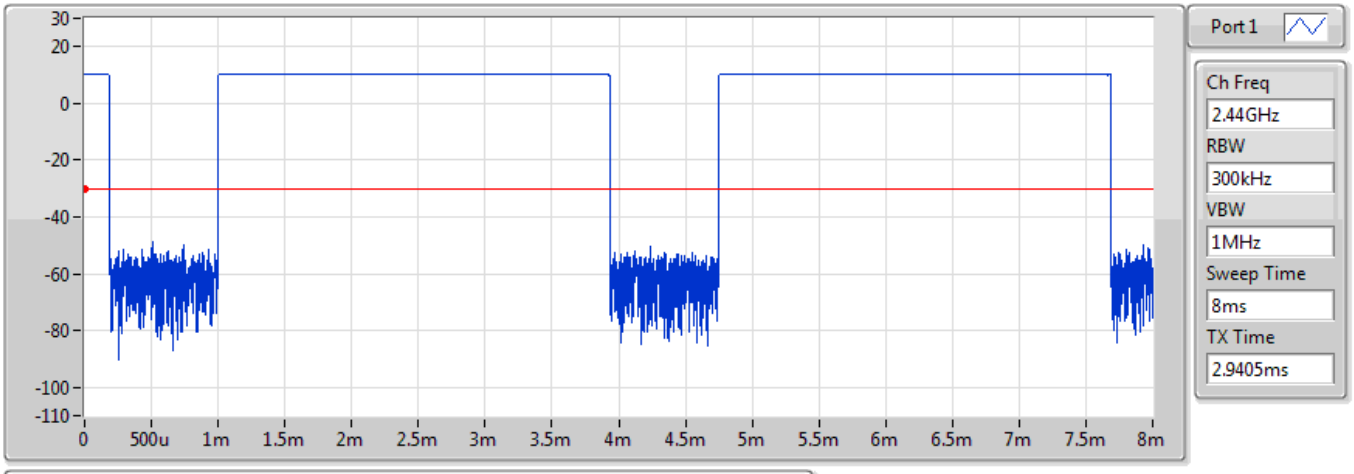
Result

Mode	Result	Period (s)	Dwell (s)	Limit (s)	Tx On (s)
BT-BR(1Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	313.4573m_DH5	400m	2.9405m
2440MHz	Pass	8	156.635375m_DH5-AFH	400m	2.93875m
BT-EDR(2Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	312.89765m_DH5	400m	2.93525m
2440MHz	Pass	8	156.368875m_DH5-AFH	400m	2.93375m
BT-EDR(3Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	312.871m_DH5	400m	2.935m
2440MHz	Pass	8	156.422175m_DH5-AFH	400m	2.93475m

BT-BR(1Mbps) **Dwell-FS**

2440MHz

21/08/2020



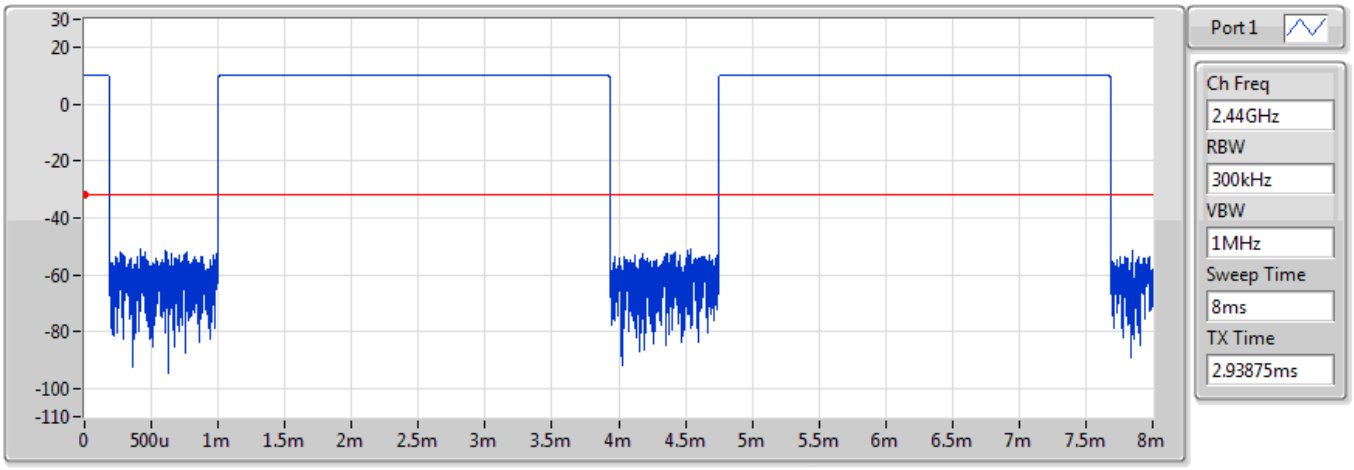
Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	313.4573m_DH5	400m	2.9405m

DH5

BT-BR(1Mbps) **Dwell-FS**

2440MHz

21/08/2020

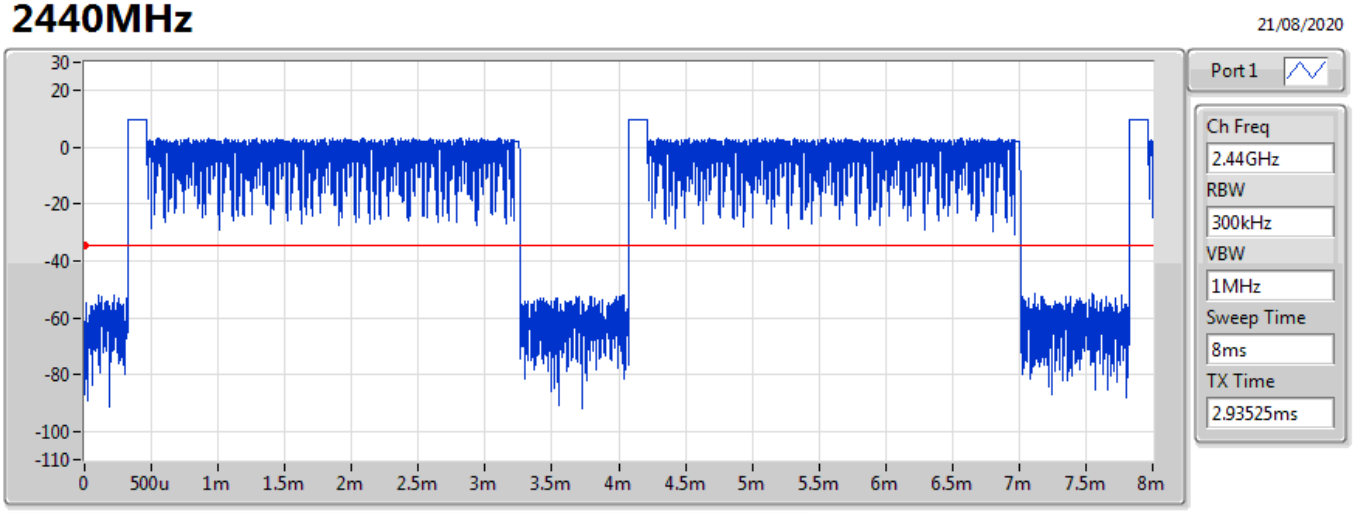


Period(s)	Dwell(s)	Limit(s)	Tx On(s)
8	156.635375m_DH5-AFI	400m	2.93875m

DH5-AFH

BT-EDR(2Mbps) Dwell-FS

2440MHz

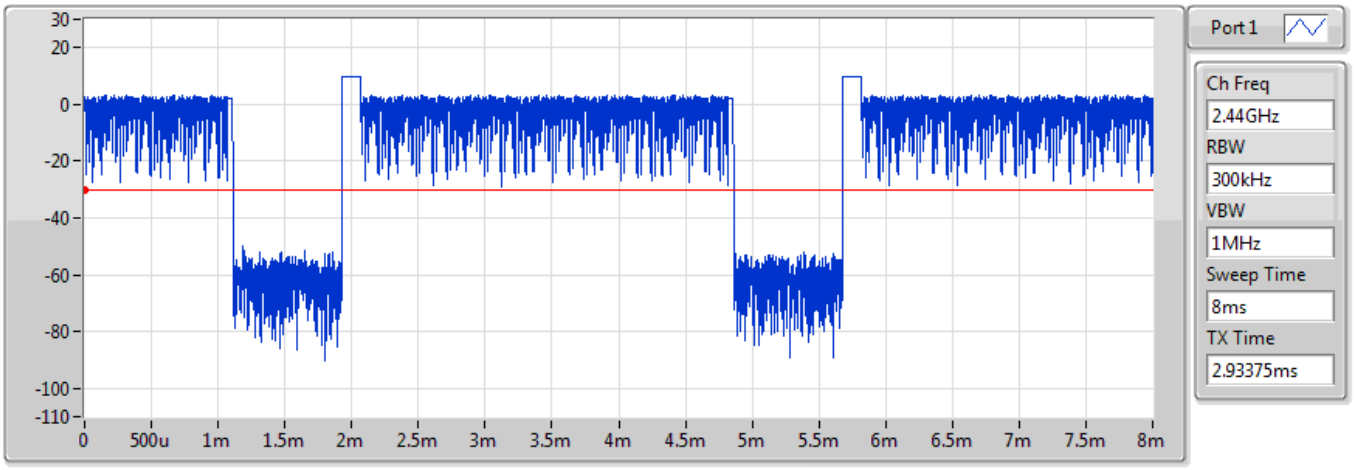


Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	312.89765m_DH5	400m	2.93525m

DH5

BT-EDR(2Mbps) Dwell-FS

2440MHz

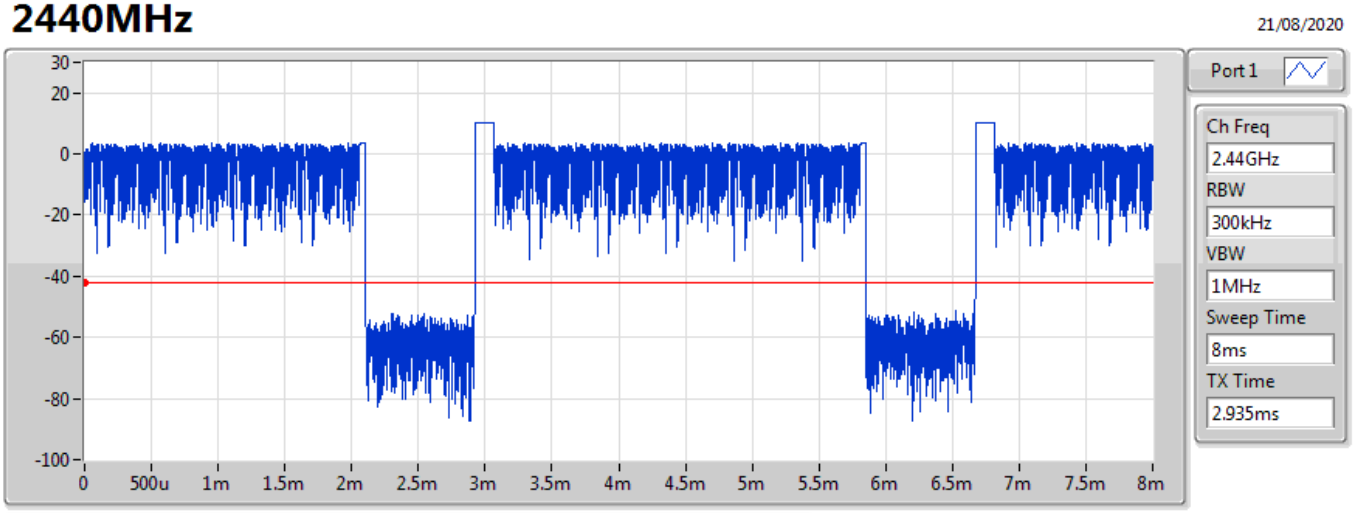


Period(s)	Dwell(s)	Limit(s)	Tx On(s)
8	156.368875m_DH5-AFI	400m	2.93375m

DH5-AFH

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

2440MHz

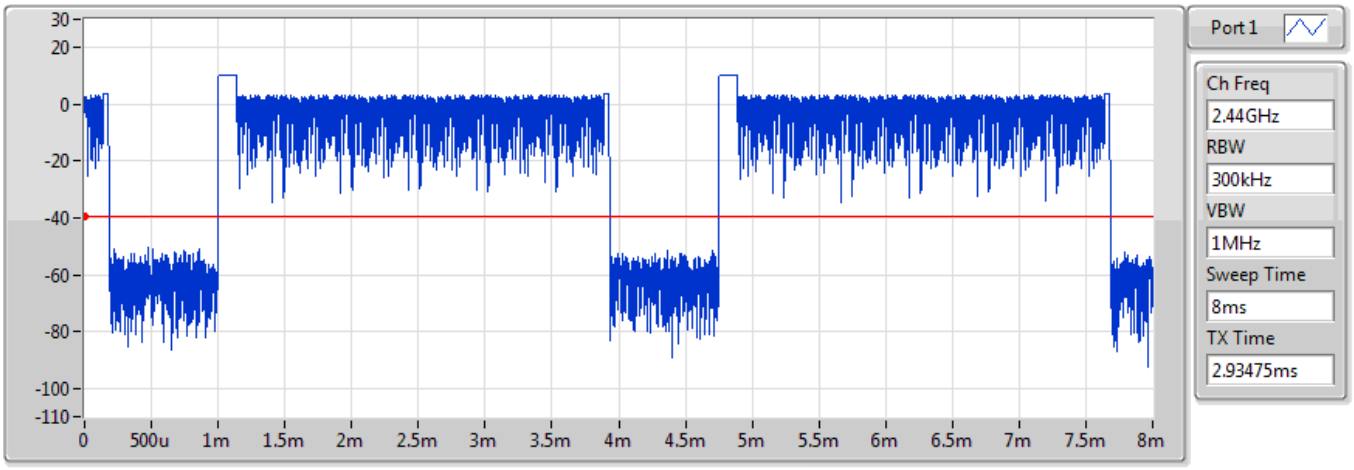


Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	312.871m_DH5	400m	2.935m

DH5

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

2440MHz



Period(s)	Dwell(s)	Limit(s)	Tx On(s)
8	156.422175m_DH5-AFI	400m	2.93475m

DH5-AFH

Summary

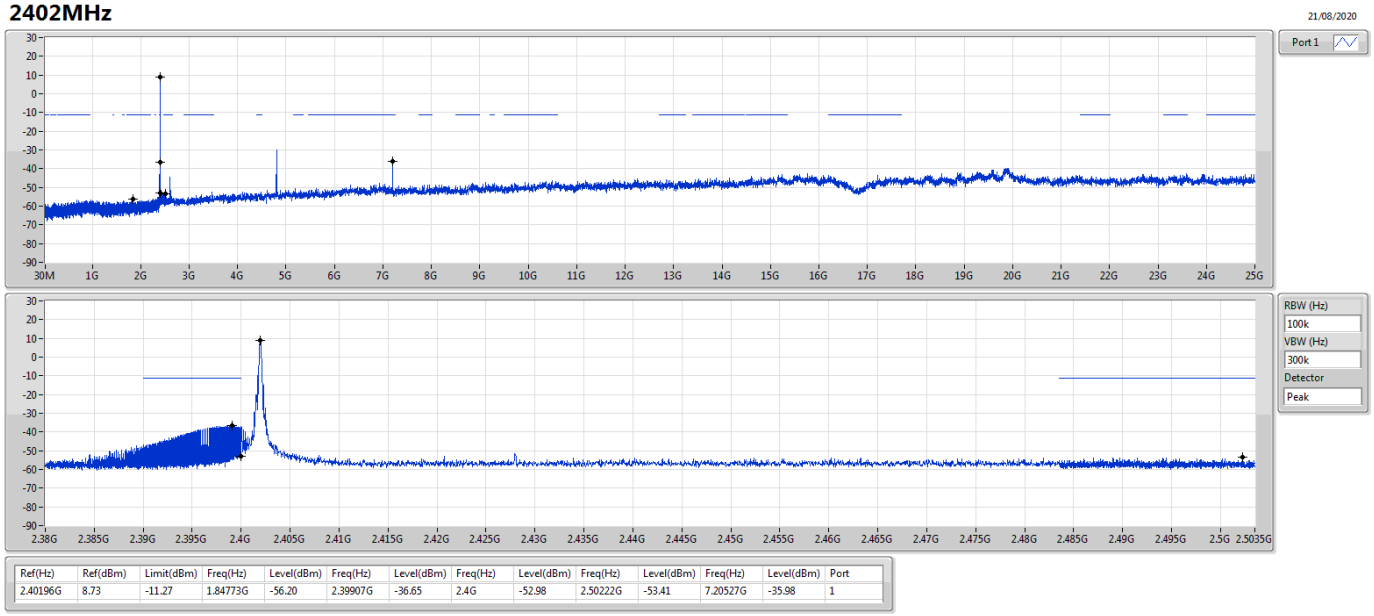
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BT-BR(1Mbps)	Pass	2.40196G	8.73	-11.27	1.84773G	-56.20	2.39907G	-36.65	2.4G	-52.98	2.50222G	-53.41	7.20527G	-35.98	1
BT-EDR(2Mbps)	Pass	2.40196G	8.74	-11.26	1.96699G	-55.19	2.39994G	-35.06	2.4G	-36.63	2.49193G	-53.65	7.20527G	-42.55	1
BT-EDR(3Mbps)	Pass	2.402G	1.22	-18.78	2.19406G	-53.66	2.39987G	-32.94	2.4G	-34.32	2.50135G	-53.20	23.23684G	-42.00	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	2.40196G	8.73	-11.27	1.84773G	-56.20	2.39907G	-36.65	2.4G	-52.98	2.50222G	-53.41	7.20527G	-35.98	1
2440MHz	Pass	2.43995G	9.01	-10.99	944.15M	-56.37	2.39754G	-54.08	2.4835G	-57.60	2.48992G	-53.17	23.30995G	-42.78	1
2480MHz	Pass	2.47999G	9.21	-10.79	2.30539G	-55.37	2.39564G	-54.41	2.4835G	-52.30	2.48423G	-50.88	23.27339G	-42.47	1
BT-EDR(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.40196G	8.74	-11.26	1.96699G	-55.19	2.39994G	-35.06	2.4G	-36.63	2.49193G	-53.65	7.20527G	-42.55	1
2440MHz	Pass	2.43995G	8.73	-11.27	2.15088G	-56.42	2.39273G	-54.59	2.4835G	-57.78	2.48373G	-53.10	21.6902G	-43.26	1
2480MHz	Pass	2.47999G	8.97	-11.03	2.10564G	-56.17	2.39901G	-53.99	2.4835G	-51.62	2.48445G	-51.24	23.30151G	-42.61	1
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.402G	1.22	-18.78	2.19406G	-53.66	2.39987G	-32.94	2.4G	-34.32	2.50135G	-53.20	23.23684G	-42.00	1
2440MHz	Pass	2.43991G	5.96	-14.04	1.94496G	-55.58	2.39346G	-54.96	2.4G	-56.70	2.50237G	-53.77	23.56304G	-43.06	1
2480MHz	Pass	2.47999G	8.97	-11.03	2.15381G	-55.24	2.3979G	-54.26	2.4835G	-44.91	2.48352G	-46.62	24.83409G	-41.76	1

BT-BR(1Mbps) **CSENdB-FS**

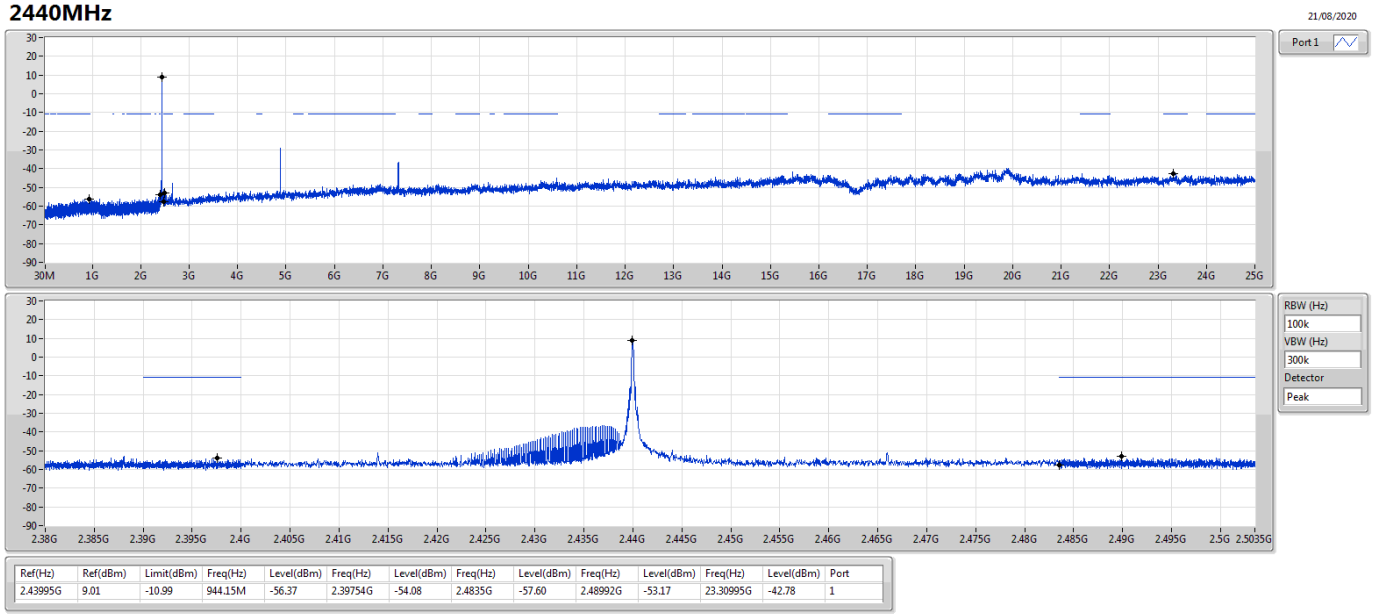
2402MHz



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
2.40196G	8.73	-11.27	1.84773G	-56.20	2.39907G	-36.65	2.4G	-52.98	2.50222G	-53.41	7.20527G	-35.98	1

BT-BR(1Mbps) **CSENdB-FS**

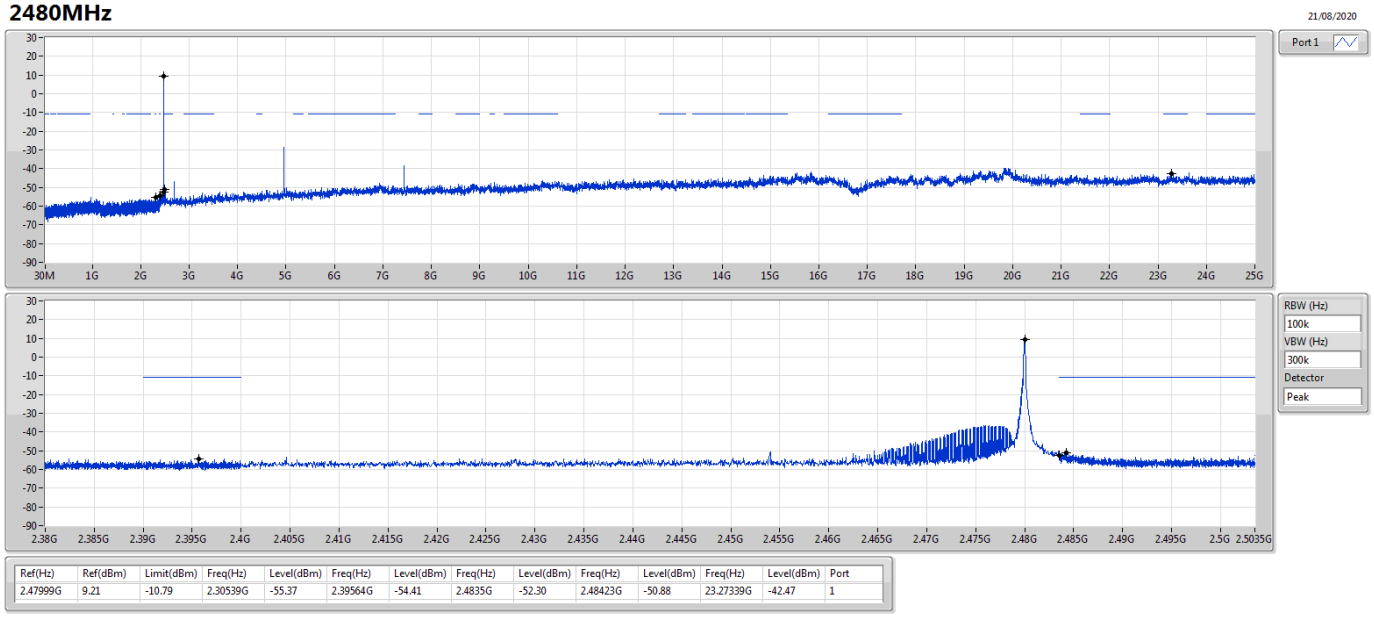
2440MHz



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
2.43995G	9.01	-10.99	944.15M	-56.37	2.39754G	-54.08	2.4835G	-57.60	2.48992G	-53.17	23.30995G	-42.78	1

BT-BR(1Mbps) **CSENdB-FS**

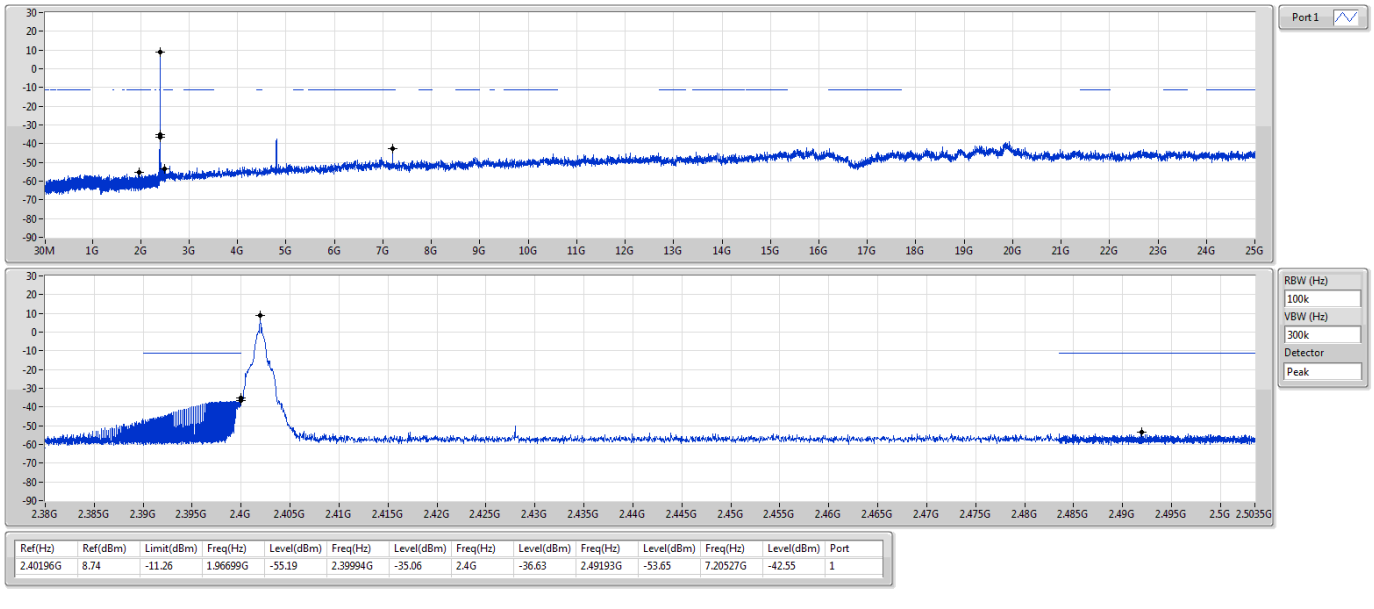
2480MHz



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
2.47999G	9.21	-10.79	2.30539G	-55.37	2.39564G	-54.41	2.4835G	-52.30	2.48423G	-50.88	23.27339G	-42.47	1

BT-EDR(2Mbps) **CSENdB-FS**

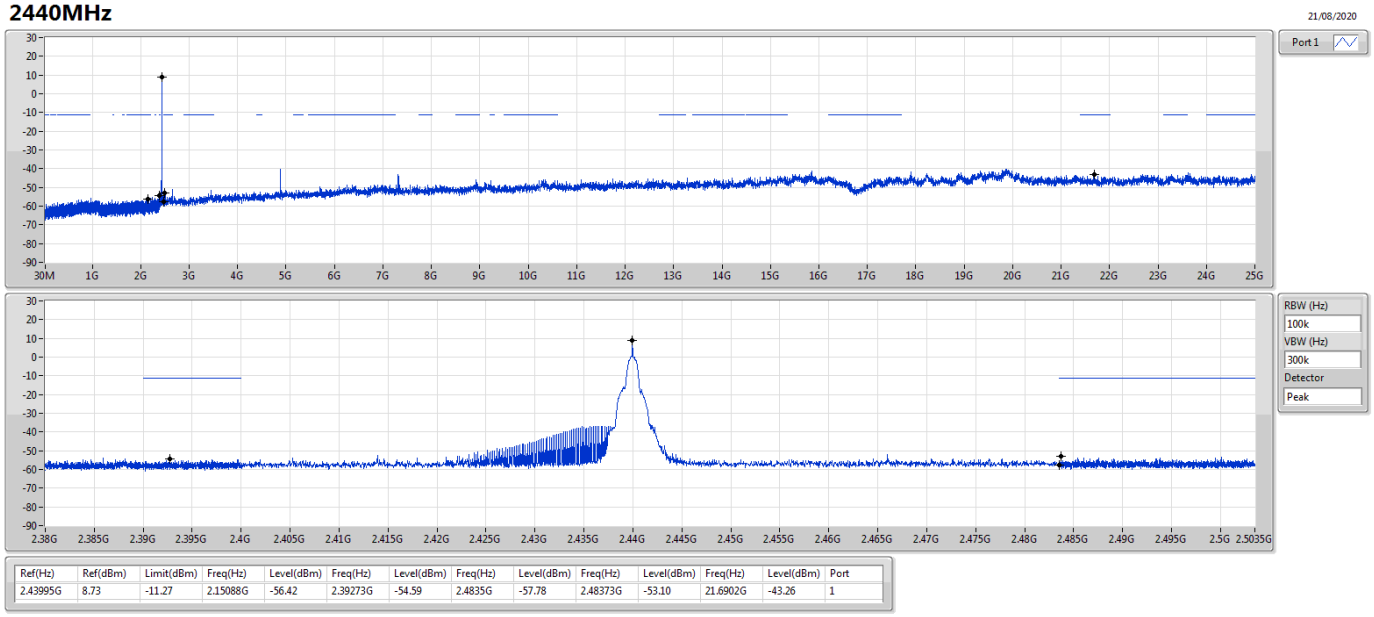
2402MHz



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
2.40196G	8.74	-11.26	1.96699G	-55.19	2.39994G	-35.06	2.4G	-36.63	2.49193G	-53.65	7.20527G	-42.55	1

BT-EDR(2Mbps) **CSENdB-FS**

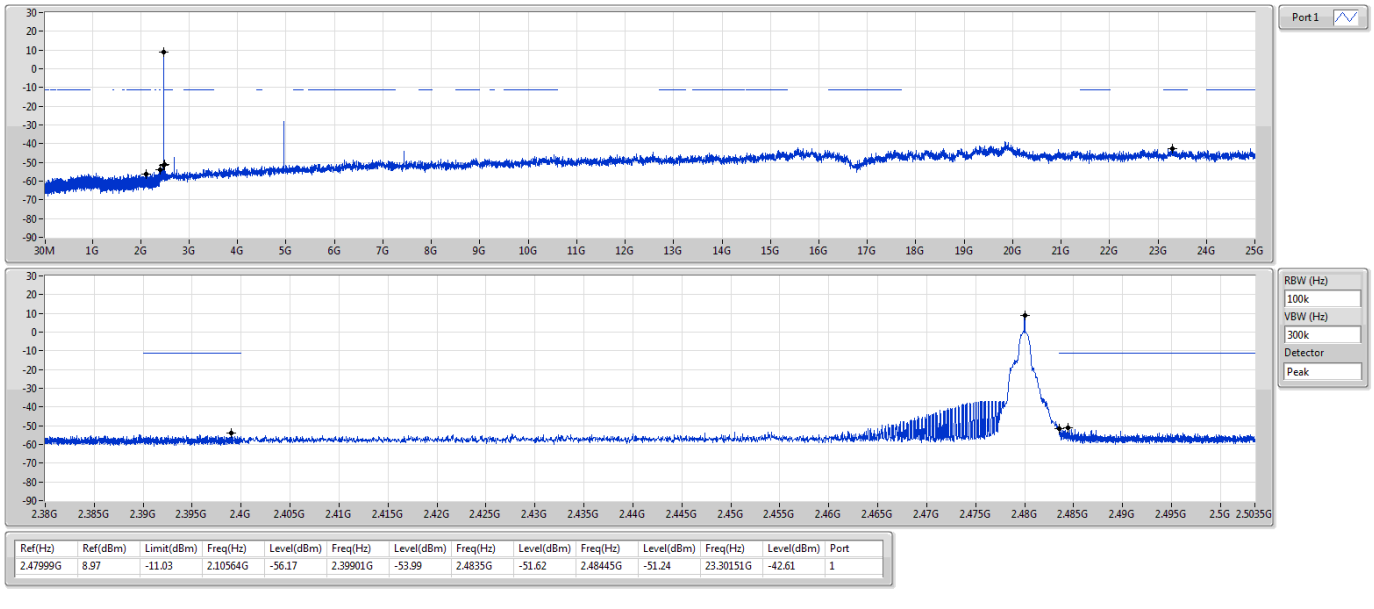
2440MHz



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
2.43995G	8.73	-11.27	2.15088G	-56.42	2.39273G	-54.59	2.4835G	-57.78	2.48373G	-53.10	21.6902G	-43.26	1

BT-EDR(2Mbps) **CSENdB-FS**

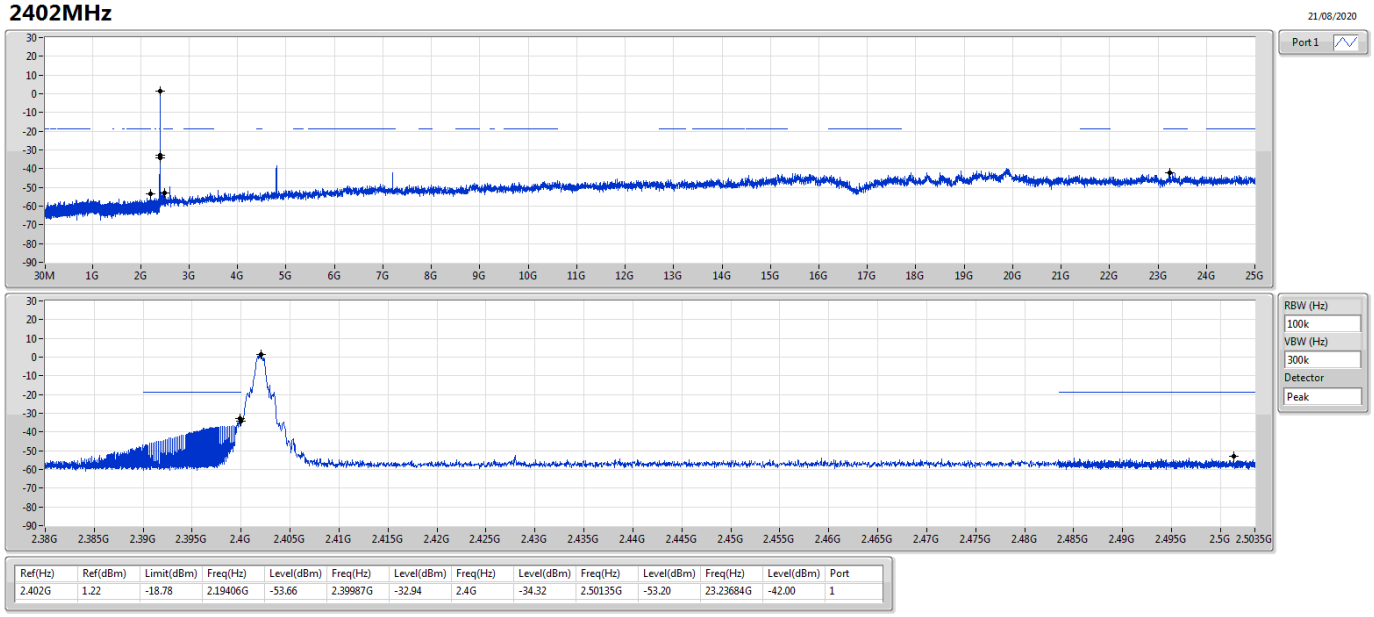
2480MHz



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
2.47999G	8.97	-11.03	2.10564G	-56.17	2.39901G	-53.99	2.4835G	-51.62	2.48445G	-51.24	23.30151G	-42.61	1

BT-EDR(3Mbps) **CSENdB-FS**

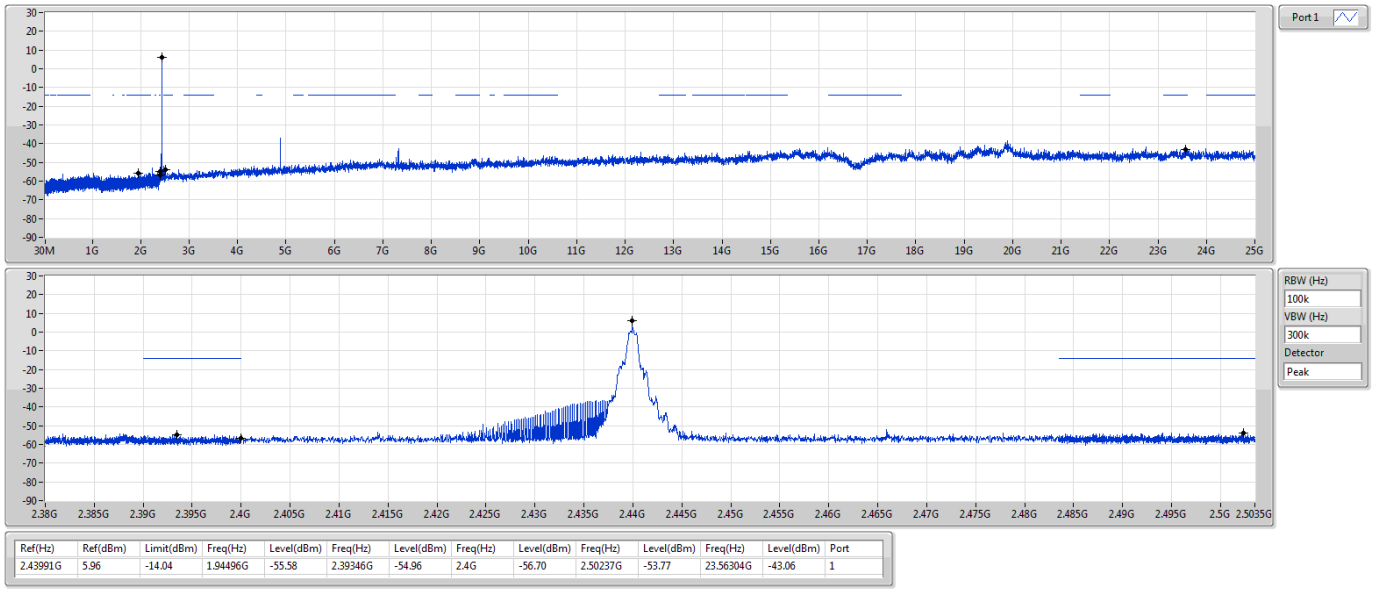
2402MHz



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
2.402G	1.22	-18.78	2.19406G	-53.66	2.39987G	-32.94	2.4G	-34.32	2.50135G	-53.20	23.23684G	-42.00	1

BT-EDR(3Mbps) **CSENdB-FS**

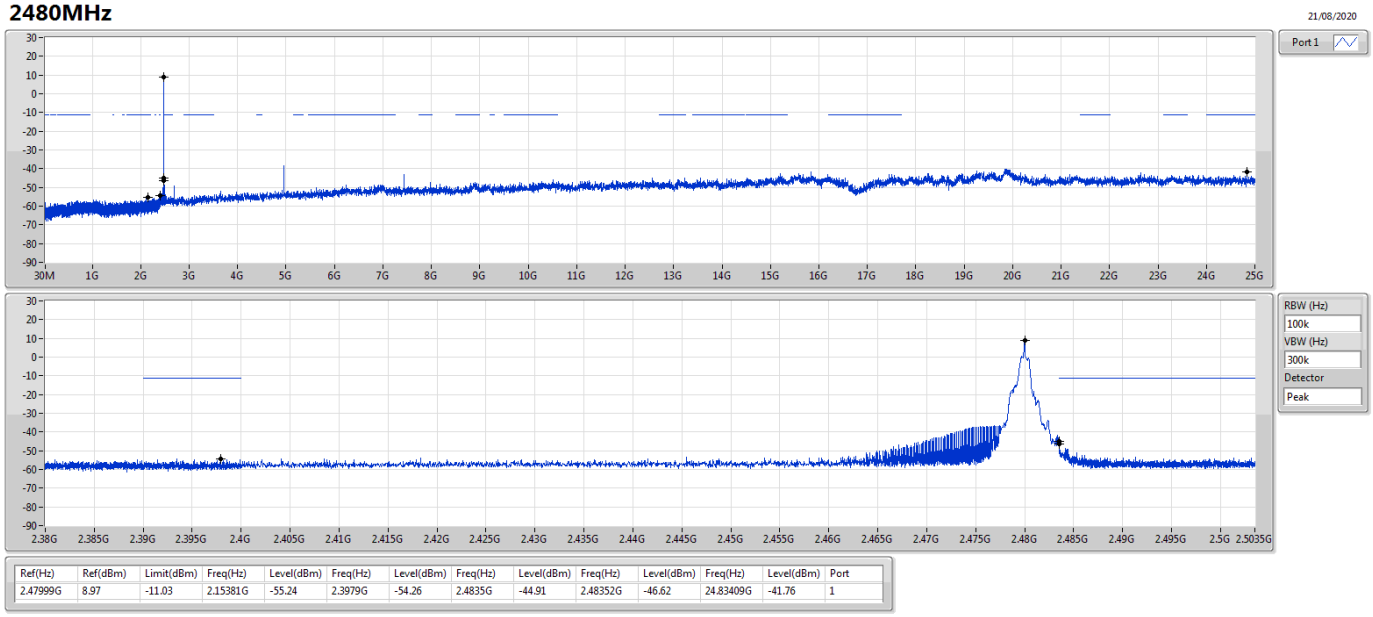
2440MHz



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
2.43991G	5.96	-14.04	1.94496G	-55.58	2.39346G	-54.96	2.4G	-56.70	2.50237G	-53.77	23.56304G	-43.06	1

BT-EDR(3Mbps) **CSENdB-FS**

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
2.47999G	8.97	-11.03	2.15381G	-55.24	2.3979G	-54.26	2.4835G	-44.91	2.48352G	-46.62	24.83409G	-41.76	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	148.34M	38.45	43.50	-5.05	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	148.34M	31.07	43.50	-12.43	3	Vertical	360	1.00	-
2440MHz	Pass	PK	249.22M	23.03	46.00	-22.97	3	Vertical	360	1.00	-
2440MHz	Pass	PK	297.72M	33.91	46.00	-12.09	3	Vertical	360	1.00	-
2440MHz	Pass	PK	396.66M	27.99	46.00	-18.01	3	Vertical	360	1.00	-
2440MHz	Pass	PK	445.16M	40.79	46.00	-5.21	3	Vertical	360	1.00	-
2440MHz	Pass	PK	594.54M	35.33	46.00	-10.67	3	Vertical	360	1.00	-
2440MHz	Pass	PK	148.34M	38.45	43.50	-5.05	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	243.4M	30.64	46.00	-15.36	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	297.72M	39.93	46.00	-6.07	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	445.16M	31.16	46.00	-14.84	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	594.54M	33.00	46.00	-13.00	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	741.98M	40.12	46.00	-5.88	3	Horizontal	0	1.00	-

BT-BR(1Mbps)

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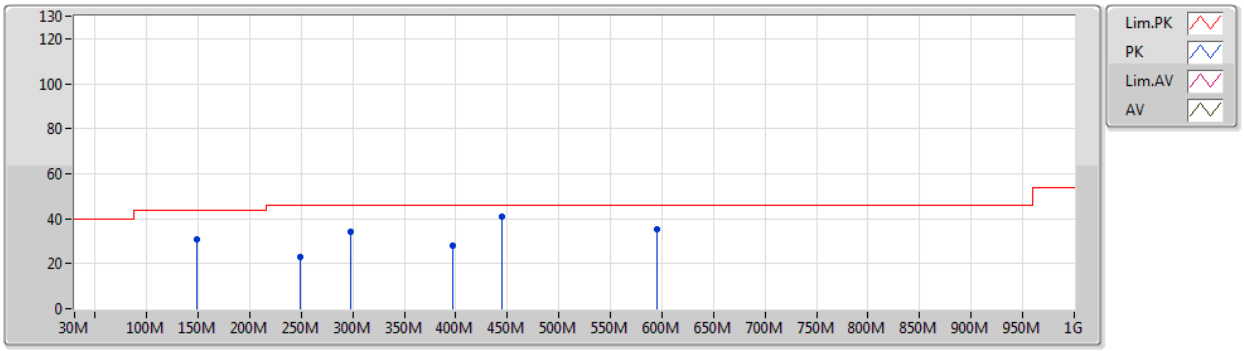
2440MHz_Switching power supply



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	148.34M	31.07	43.50	-12.43	-19.09	3	Vertical	360	1.00	-	50.16	16.30	0.94	36.33
PK	249.22M	23.03	46.00	-22.97	-17.62	3	Vertical	360	1.00	-	40.65	17.51	1.30	36.43
PK	297.72M	33.91	46.00	-12.09	-16.72	3	Vertical	360	1.00	-	50.63	18.23	1.40	36.35
PK	396.66M	27.99	46.00	-18.01	-13.96	3	Vertical	360	1.00	-	41.95	20.78	1.69	36.43
PK	445.16M	40.79	46.00	-5.21	-12.74	3	Vertical	360	1.00	-	53.53	22.06	1.79	36.59
PK	594.54M	35.33	46.00	-10.67	-10.21	3	Vertical	360	1.00	-	45.54	24.76	2.18	37.15

BT-BR(1Mbps)

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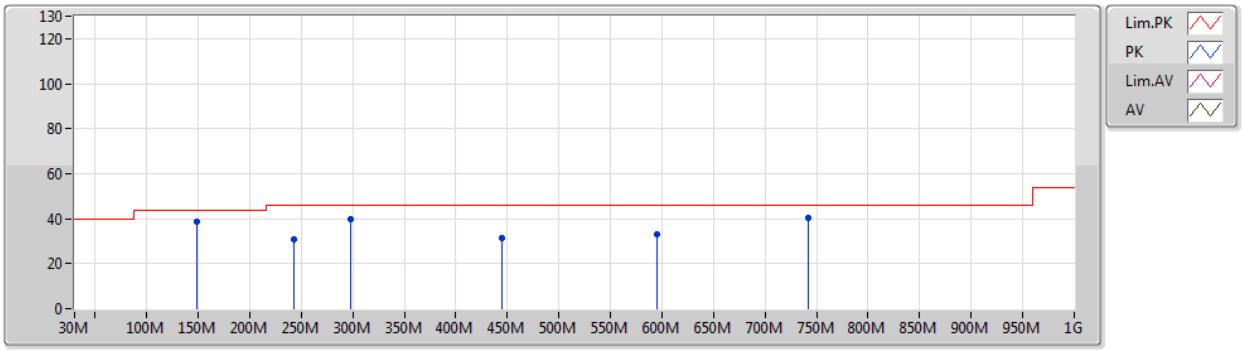
2440MHz_Switching power supply



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	148.34M	38.45	43.50	-5.05	-19.09	3	Horizontal	0	1.00	-	57.54	16.30	0.94	36.33
PK	243.4M	30.64	46.00	-15.36	-18.38	3	Horizontal	0	1.00	-	49.02	16.75	1.27	36.40
PK	297.72M	39.93	46.00	-6.07	-16.72	3	Horizontal	0	1.00	-	56.65	18.23	1.40	36.35
PK	445.16M	31.16	46.00	-14.84	-12.74	3	Horizontal	0	1.00	-	43.90	22.06	1.79	36.59
PK	594.54M	33.00	46.00	-13.00	-10.21	3	Horizontal	0	1.00	-	43.21	24.76	2.18	37.15
PK	741.98M	40.12	46.00	-5.88	-7.72	3	Horizontal	0	1.00	-	47.84	27.01	2.48	37.21

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	2.3898G	67.50	74.00	-6.50	3	Vertical	278	1.67	-
BT-EDR(3Mbps)	Pass	PK	2.4836G	73.19	74.00	-0.81	3	Vertical	271	1.58	-

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	2.3898G	45.00	54.00	-9.00	3	Vertical	278	1.67	-
2402MHz	Pass	AV	2.4018G	85.95	Inf	-Inf	3	Vertical	278	1.67	-
2402MHz	Pass	PK	2.3898G	67.50	74.00	-6.50	3	Vertical	278	1.67	-
2402MHz	Pass	PK	2.4018G	108.45	Inf	-Inf	3	Vertical	278	1.67	-
2402MHz	Pass	AV	2.3896G	40.29	54.00	-13.71	3	Horizontal	298	1.13	-
2402MHz	Pass	AV	2.4022G	80.73	Inf	-Inf	3	Horizontal	298	1.13	-
2402MHz	Pass	PK	2.3896G	62.79	74.00	-11.21	3	Horizontal	298	1.13	-
2402MHz	Pass	PK	2.4022G	103.23	Inf	-Inf	3	Horizontal	298	1.13	-
2402MHz	Pass	AV	4.80362G	42.96	54.00	-11.04	3	Vertical	273	1.83	-
2402MHz	Pass	PK	4.80362G	65.46	74.00	-8.54	3	Vertical	273	1.83	-
2402MHz	Pass	AV	4.8036G	40.96	54.00	-13.04	3	Horizontal	242	1.00	-
2402MHz	Pass	PK	4.8036G	63.46	74.00	-10.54	3	Horizontal	242	1.00	-
2440MHz	Pass	AV	2.3756G	34.88	54.00	-9.54	3	Vertical	271	1.39	-
2440MHz	Pass	AV	2.44G	85.78	Inf	-Inf	3	Vertical	271	1.39	-
2440MHz	Pass	AV	2.4848G	34.52	54.00	-9.28	3	Vertical	271	1.39	-
2440MHz	Pass	PK	2.3756G	57.38	74.00	-16.62	3	Vertical	271	1.39	-
2440MHz	Pass	PK	2.44G	108.28	Inf	-Inf	3	Vertical	271	1.39	-
2440MHz	Pass	PK	2.4848G	57.02	74.00	-16.98	3	Vertical	271	1.39	-
2440MHz	Pass	AV	2.3612G	34.48	54.00	-19.52	3	Horizontal	257	1.78	-
2440MHz	Pass	AV	2.44G	81.26	Inf	-Inf	3	Horizontal	257	1.78	-
2440MHz	Pass	AV	2.4872G	35.04	54.00	-18.96	3	Horizontal	257	1.78	-
2440MHz	Pass	PK	2.3612G	56.98	74.00	-17.02	3	Horizontal	257	1.78	-
2440MHz	Pass	PK	2.44G	103.76	Inf	-Inf	3	Horizontal	257	1.78	-
2440MHz	Pass	PK	2.4872G	57.54	74.00	-16.46	3	Horizontal	257	1.78	-
2440MHz	Pass	AV	4.87997G	42.23	54.00	-11.77	3	Vertical	240	1.50	-
2440MHz	Pass	AV	7.31995G	36.60	54.00	-17.40	3	Vertical	107	1.02	-
2440MHz	Pass	PK	4.87997G	64.73	74.00	-9.27	3	Vertical	240	1.50	-
2440MHz	Pass	PK	7.31995G	59.10	74.00	-14.90	3	Vertical	107	1.02	-
2440MHz	Pass	AV	4.87998G	43.59	54.00	-10.41	3	Horizontal	241	1.04	-
2440MHz	Pass	AV	7.31993G	32.66	54.00	-21.34	3	Horizontal	53	1.03	-
2440MHz	Pass	PK	4.87998G	66.09	74.00	-7.91	3	Horizontal	241	1.04	-
2440MHz	Pass	PK	7.31993G	55.16	74.00	-18.84	3	Horizontal	53	1.03	-
2480MHz	Pass	AV	2.48G	84.95	Inf	-Inf	3	Vertical	273	1.58	-
2480MHz	Pass	AV	2.4838G	41.26	54.00	-12.74	3	Vertical	273	1.58	-
2480MHz	Pass	PK	2.48G	107.45	Inf	-Inf	3	Vertical	273	1.58	-
2480MHz	Pass	PK	2.4838G	63.76	74.00	-10.24	3	Vertical	273	1.58	-
2480MHz	Pass	AV	2.48G	80.39	Inf	-Inf	3	Horizontal	255	1.77	-
2480MHz	Pass	AV	2.4838G	35.37	54.00	-18.63	3	Horizontal	255	1.77	-
2480MHz	Pass	PK	2.48G	102.89	Inf	-Inf	3	Horizontal	255	1.77	-
2480MHz	Pass	PK	2.4838G	57.87	74.00	-16.13	3	Horizontal	255	1.77	-
2480MHz	Pass	AV	4.95998G	43.74	54.00	-10.26	3	Vertical	241	1.44	-
2480MHz	Pass	AV	7.43993G	36.02	54.00	-17.98	3	Vertical	102	1.00	-
2480MHz	Pass	PK	4.95998G	66.24	74.00	-7.76	3	Vertical	241	1.44	-
2480MHz	Pass	PK	7.43993G	58.52	74.00	-15.48	3	Vertical	102	1.00	-
2480MHz	Pass	AV	4.95998G	44.55	54.00	-9.45	3	Horizontal	240	1.18	-
2480MHz	Pass	AV	7.43994G	34.70	54.00	-19.30	3	Horizontal	119	1.21	-
2480MHz	Pass	PK	4.95998G	67.05	74.00	-6.95	3	Horizontal	240	1.18	-

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2480MHz	Pass	PK	7.43994G	57.20	74.00	-16.80	3	Horizontal	119	1.21	-
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.39G	45.58	54.00	-8.42	3	Vertical	272	1.46	-
2402MHz	Pass	AV	2.4018G	85.87	Inf	-Inf	3	Vertical	272	1.46	-
2402MHz	Pass	PK	2.39G	68.08	74.00	-5.92	3	Vertical	272	1.46	-
2402MHz	Pass	PK	2.4018G	108.37	Inf	-Inf	3	Vertical	272	1.46	-
2402MHz	Pass	AV	2.39G	41.50	54.00	-12.50	3	Horizontal	256	2.00	-
2402MHz	Pass	AV	2.4018G	80.86	Inf	-Inf	3	Horizontal	256	2.00	-
2402MHz	Pass	PK	2.39G	64.00	74.00	-10.00	3	Horizontal	256	2.00	-
2402MHz	Pass	PK	2.4018G	103.36	Inf	-Inf	3	Horizontal	256	2.00	-
2402MHz	Pass	AV	4.80408G	42.95	54.00	-11.05	3	Vertical	270	1.69	-
2402MHz	Pass	PK	4.80408G	65.45	74.00	-8.55	3	Vertical	270	1.69	-
2402MHz	Pass	AV	4.80374G	42.92	54.00	-11.08	3	Horizontal	238	1.02	-
2402MHz	Pass	PK	4.80374G	65.42	74.00	-8.58	3	Horizontal	238	1.02	-
2440MHz	Pass	AV	2.364G	34.29	54.00	-19.71	3	Vertical	270	1.42	-
2440MHz	Pass	AV	2.44G	85.84	Inf	-Inf	3	Vertical	270	1.42	-
2440MHz	Pass	AV	2.4876G	35.30	54.00	-18.70	3	Vertical	270	1.42	-
2440MHz	Pass	PK	2.364G	56.79	74.00	-17.21	3	Vertical	270	1.42	-
2440MHz	Pass	PK	2.44G	108.34	Inf	-Inf	3	Vertical	270	1.42	-
2440MHz	Pass	PK	2.4876G	57.80	74.00	-16.20	3	Vertical	270	1.42	-
2440MHz	Pass	AV	2.362G	34.96	54.00	-19.04	3	Horizontal	256	1.78	-
2440MHz	Pass	AV	2.44G	81.32	Inf	-Inf	3	Horizontal	256	1.78	-
2440MHz	Pass	AV	2.4852G	34.58	54.00	-19.42	3	Horizontal	256	1.78	-
2440MHz	Pass	PK	2.362G	57.46	74.00	-16.54	3	Horizontal	256	1.78	-
2440MHz	Pass	PK	2.44G	103.82	Inf	-Inf	3	Horizontal	256	1.78	-
2440MHz	Pass	PK	2.4852G	57.08	74.00	-16.92	3	Horizontal	256	1.78	-
2440MHz	Pass	AV	4.87966G	42.51	54.00	-11.49	3	Vertical	234	2.96	-
2440MHz	Pass	AV	7.31988G	36.37	54.00	-17.63	3	Vertical	100	1.00	-
2440MHz	Pass	PK	4.87966G	65.01	74.00	-8.99	3	Vertical	234	2.96	-
2440MHz	Pass	PK	7.31988G	59.17	74.00	-14.83	3	Vertical	100	1.00	-
2440MHz	Pass	AV	4.87967G	43.64	54.00	-10.36	3	Horizontal	240	1.14	-
2440MHz	Pass	AV	7.3199G	37.35	54.00	-16.65	3	Horizontal	52	1.00	-
2440MHz	Pass	PK	4.87967G	66.14	74.00	-7.86	3	Horizontal	240	1.14	-
2440MHz	Pass	PK	7.3199G	59.85	74.00	-14.15	3	Horizontal	52	1.00	-
2480MHz	Pass	AV	2.4798G	85.05	Inf	-Inf	3	Vertical	271	1.58	-
2480MHz	Pass	AV	2.4836G	50.69	54.00	-3.31	3	Vertical	271	1.58	-
2480MHz	Pass	PK	2.4798G	107.55	Inf	-Inf	3	Vertical	271	1.58	-
2480MHz	Pass	PK	2.4836G	73.19	74.00	-0.81	3	Vertical	271	1.58	-
2480MHz	Pass	AV	2.4798G	80.28	Inf	-Inf	3	Horizontal	256	1.76	-
2480MHz	Pass	AV	2.4836G	46.21	54.00	-7.79	3	Horizontal	256	1.76	-
2480MHz	Pass	PK	2.4798G	102.78	Inf	-Inf	3	Horizontal	256	1.76	-
2480MHz	Pass	PK	2.4836G	68.71	74.00	-5.29	3	Horizontal	256	1.76	-
2480MHz	Pass	AV	4.95957G	42.44	54.00	-11.56	3	Vertical	77	1.50	-
2480MHz	Pass	AV	7.43987G	37.08	54.00	-16.92	3	Vertical	99	1.00	-
2480MHz	Pass	PK	4.95957G	64.94	74.00	-9.06	3	Vertical	77	1.50	-
2480MHz	Pass	PK	7.43987G	59.58	74.00	-14.42	3	Vertical	99	1.00	-
2480MHz	Pass	AV	4.95962G	44.66	54.00	-9.34	3	Horizontal	237	1.16	-
2480MHz	Pass	AV	7.4399G	34.92	54.00	-19.08	3	Horizontal	116	1.23	-
2480MHz	Pass	PK	4.95962G	67.16	74.00	-6.84	3	Horizontal	237	1.16	-

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2480MHz	Pass	PK	7.4399G	57.42	74.00	-16.58	3	Horizontal	116	1.23	-

BT-BR(1Mbps)

2402MHz_TX

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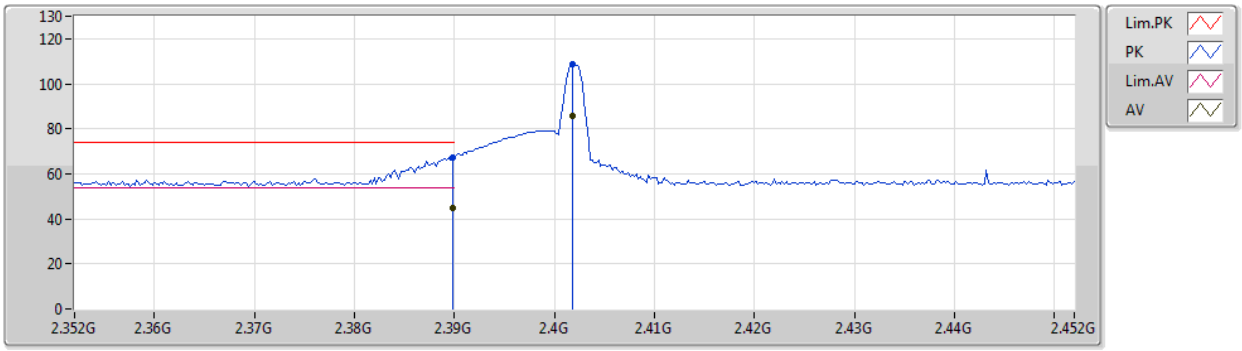
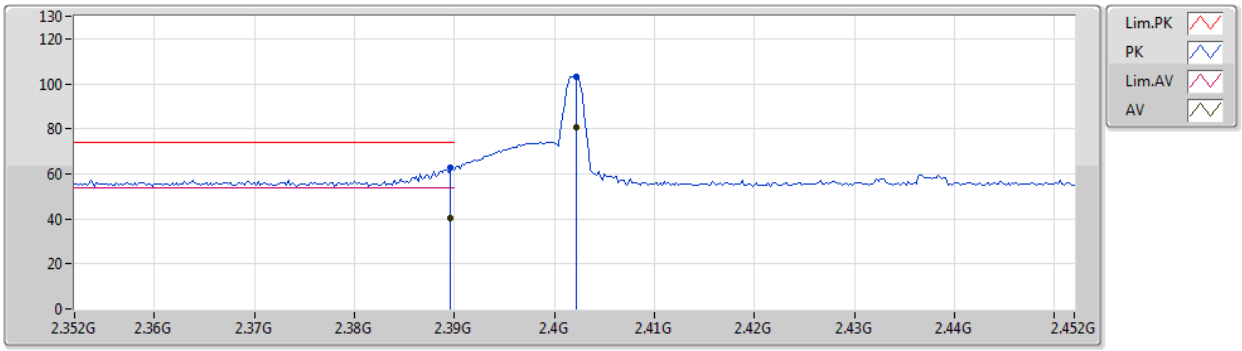


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3898G	45.00	54.00	-9.00	31.52	3	Vertical	278	1.67	-	13.48	27.64	3.88	-
AV	2.4018G	85.95	Inf	-Inf	31.50	3	Vertical	278	1.67	-	54.45	27.60	3.90	-
PK	2.3898G	67.50	74.00	-6.50	31.52	3	Vertical	278	1.67	-	35.98	27.64	3.88	-
PK	2.4018G	108.45	Inf	-Inf	31.50	3	Vertical	278	1.67	-	76.95	27.60	3.90	-

BT-BR(1Mbps)

2402MHz_TX

18/08/2020

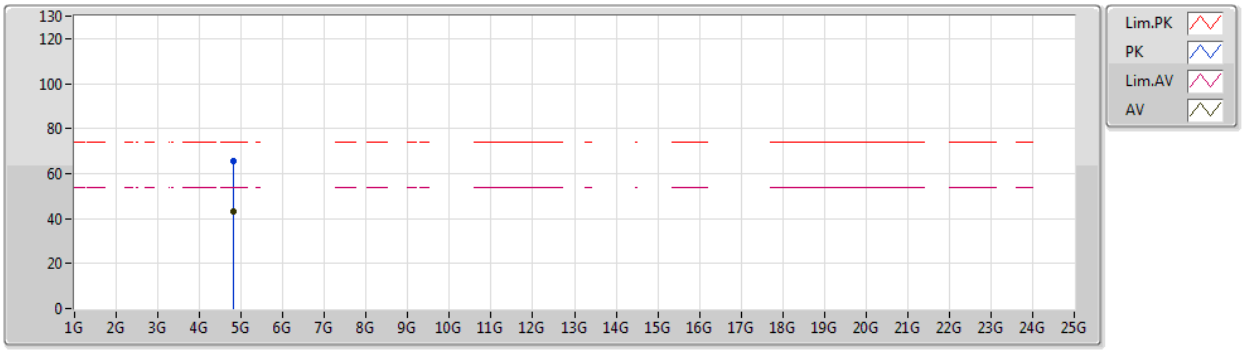


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3896G	40.29	54.00	-13.71	31.52	3	Horizontal	298	1.13	-	8.77	27.64	3.88	-
AV	2.4022G	80.73	Inf	-Inf	31.50	3	Horizontal	298	1.13	-	49.23	27.60	3.90	-
PK	2.3896G	62.79	74.00	-11.21	31.52	3	Horizontal	298	1.13	-	31.27	27.64	3.88	-
PK	2.4022G	103.23	Inf	-Inf	31.50	3	Horizontal	298	1.13	-	71.73	27.60	3.90	-

BT-BR(1Mbps)

2402MHz_TX

18/08/2020



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	4.80362G	42.96	54.00	-11.04	1.48	3	Vertical	273	1.83	-	41.48	31.11	5.30	34.93
PK	4.80362G	65.46	74.00	-8.54	1.48	3	Vertical	273	1.83	-	63.98	31.11	5.30	34.93

BT-BR(1Mbps)

2402MHz_TX

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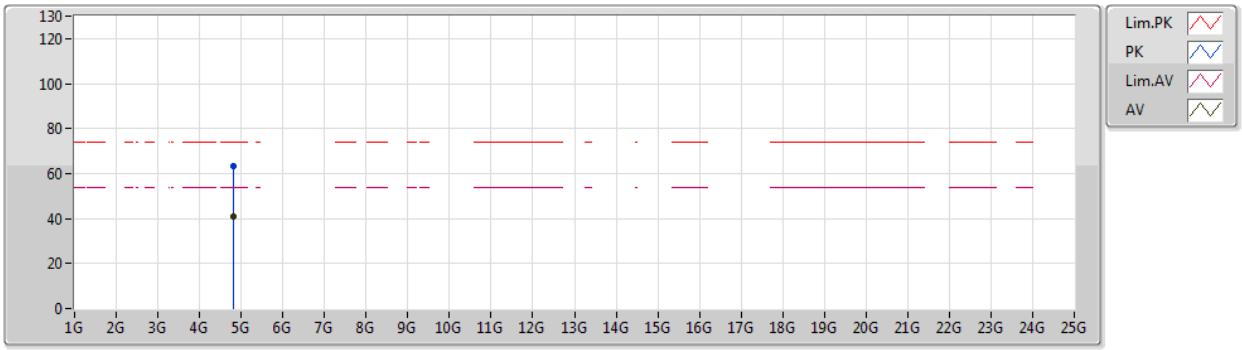

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.8036G	40.96	54.00	-13.04	1.48	3	Horizontal	242	1.00	-	39.48	31.11	5.30	34.93
PK	4.8036G	63.46	74.00	-10.54	1.48	3	Horizontal	242	1.00	-	61.98	31.11	5.30	34.93

BT-BR(1Mbps)

2440MHz_TX

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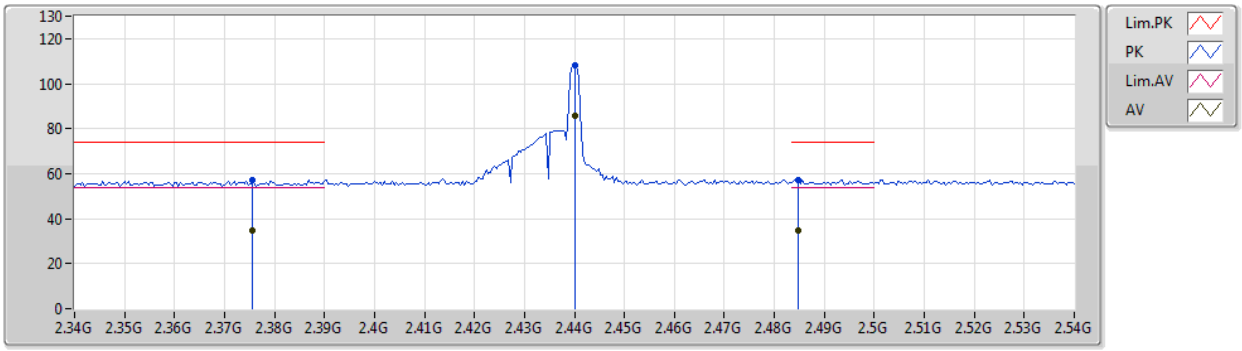
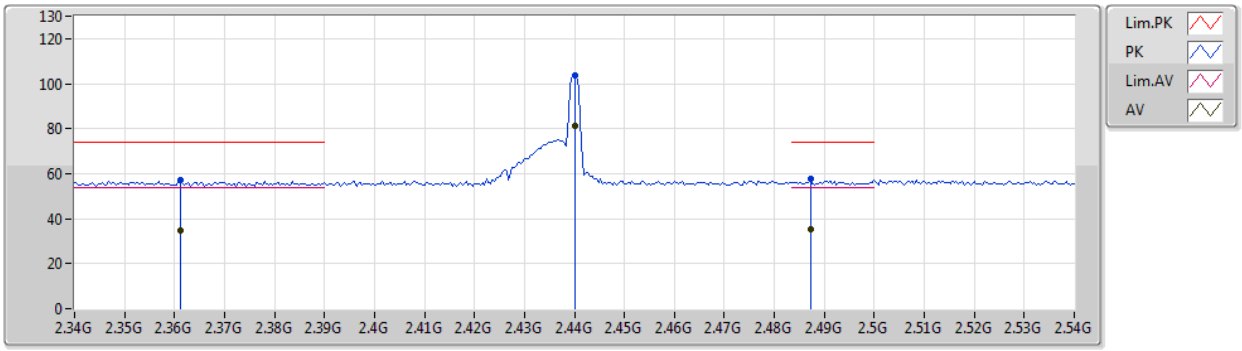


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3756G	34.88	54.00	-9.54	31.53	3	Vertical	271	1.39	-	12.93	27.65	3.88	-
AV	2.44G	85.78	Inf	-Inf	31.56	3	Vertical	271	1.39	-	76.43	27.60	3.96	-
AV	2.4848G	34.52	54.00	-9.28	31.64	3	Vertical	271	1.39	-	13.08	27.60	4.04	-
PK	2.3756G	57.38	74.00	-16.62	31.56	3	Vertical	271	1.39	-	25.82	27.70	3.86	-
PK	2.44G	108.28	Inf	-Inf	31.56	3	Vertical	271	1.39	-	76.72	27.60	3.96	-
PK	2.4848G	57.02	74.00	-16.98	31.63	3	Vertical	271	1.39	-	25.39	27.60	4.03	-

BT-BR(1Mbps)

2440MHz_TX

18/08/2020

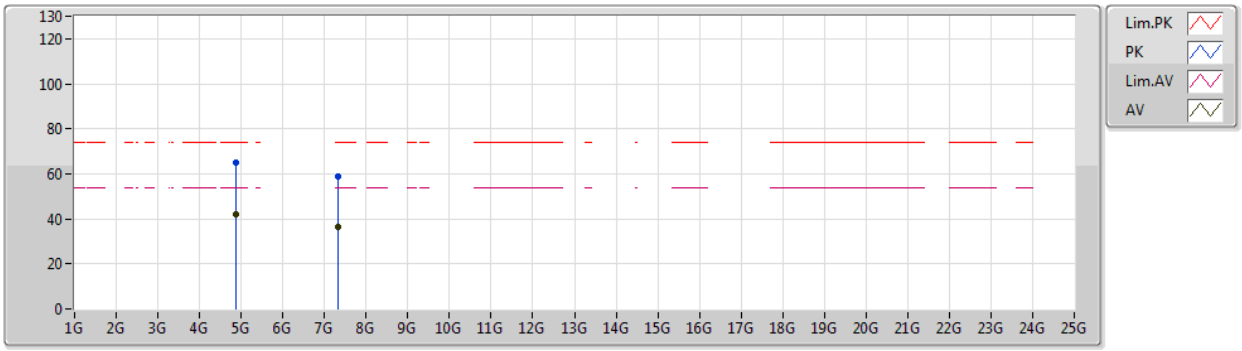


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3612G	34.48	54.00	-19.52	31.60	3	Horizontal	257	1.78	-	2.88	27.76	3.84	-
AV	2.44G	81.26	Inf	-Inf	31.56	3	Horizontal	257	1.78	-	49.70	27.60	3.96	-
AV	2.4872G	35.04	54.00	-18.96	31.63	3	Horizontal	257	1.78	-	3.41	27.60	4.03	-
PK	2.3612G	56.98	74.00	-17.02	31.60	3	Horizontal	257	1.78	-	25.38	27.76	3.84	-
PK	2.44G	103.76	Inf	-Inf	31.56	3	Horizontal	257	1.78	-	72.20	27.60	3.96	-
PK	2.4872G	57.54	74.00	-16.46	31.63	3	Horizontal	257	1.78	-	25.91	27.60	4.03	-

BT-BR(1Mbps)

2440MHz_TX

18/08/2020

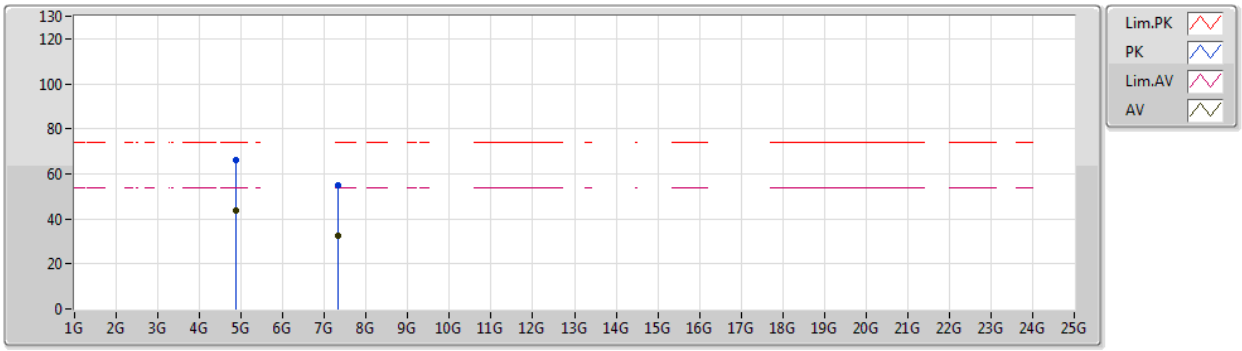


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.87997G	42.23	54.00	-11.77	1.65	3	Vertical	240	1.50	-	40.58	31.24	5.34	34.93
AV	7.31995G	36.60	54.00	-17.40	8.18	3	Vertical	107	1.02	-	28.42	36.56	6.80	35.18
PK	4.87997G	64.73	74.00	-9.27	1.65	3	Vertical	240	1.50	-	63.08	31.24	5.34	34.93
PK	7.31995G	59.10	74.00	-14.90	8.18	3	Vertical	107	1.02	-	50.92	36.56	6.80	35.18

BT-BR(1Mbps)

2440MHz_TX

18/08/2020

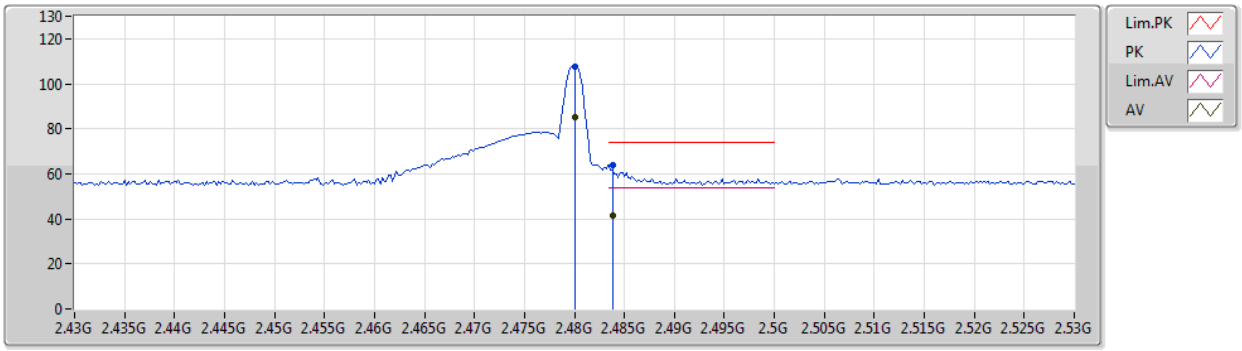


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.87998G	43.59	54.00	-10.41	1.65	3	Horizontal	241	1.04	-	41.94	31.24	5.34	34.93
AV	7.31993G	32.66	54.00	-21.34	8.18	3	Horizontal	53	1.03	-	24.48	36.56	6.80	35.18
PK	4.87998G	66.09	74.00	-7.91	1.65	3	Horizontal	241	1.04	-	64.44	31.24	5.34	34.93
PK	7.31993G	55.16	74.00	-18.84	8.18	3	Horizontal	53	1.03	-	46.98	36.56	6.80	35.18

BT-BR(1Mbps)

2480MHz_TX

18/08/2020

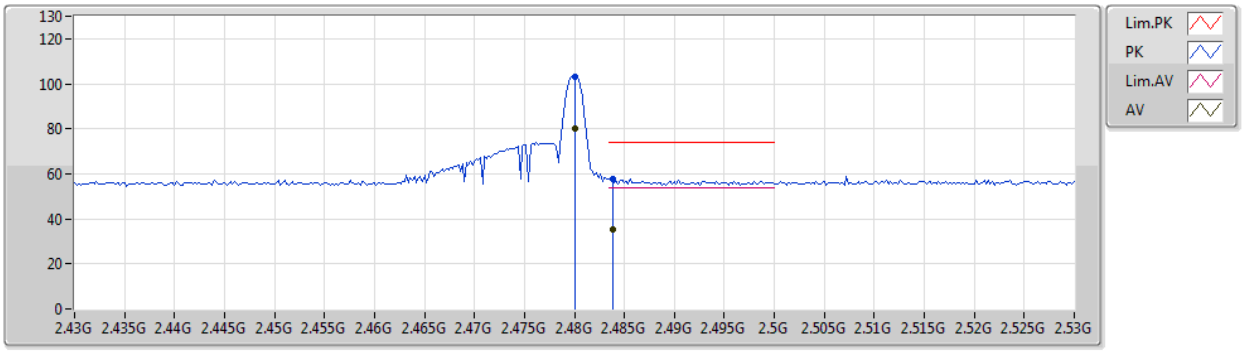


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.48G	84.95	Inf	-Inf	31.62	3	Vertical	273	1.58	-	53.33	27.60	4.02	-
AV	2.4838G	41.26	54.00	-12.74	31.63	3	Vertical	273	1.58	-	9.63	27.60	4.03	-
PK	2.48G	107.45	Inf	-Inf	31.62	3	Vertical	273	1.58	-	75.83	27.60	4.02	-
PK	2.4838G	63.76	74.00	-10.24	31.63	3	Vertical	273	1.58	-	32.13	27.60	4.03	-

BT-BR(1Mbps)

2480MHz_TX

18/08/2020

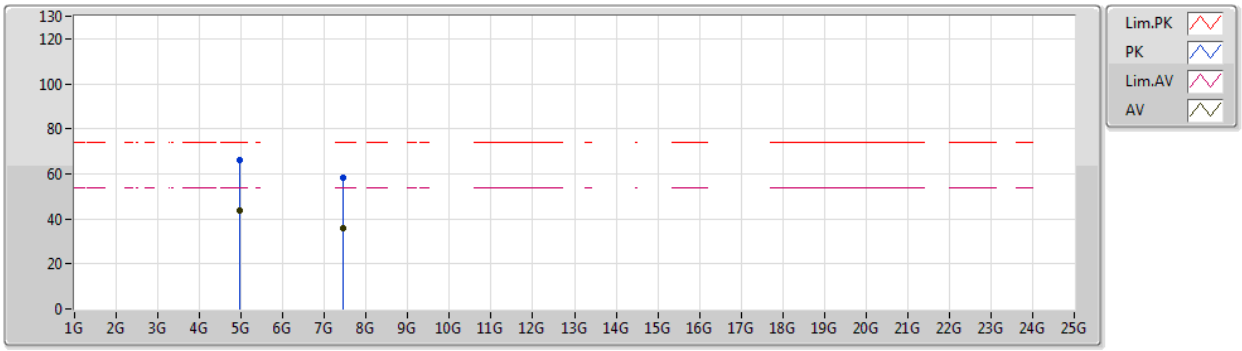


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.48G	80.39	Inf	-Inf	31.62	3	Horizontal	255	1.77	-	48.77	27.60	4.02	-
AV	2.4838G	35.37	54.00	-18.63	31.63	3	Horizontal	255	1.77	-	3.74	27.60	4.03	-
PK	2.48G	102.89	Inf	-Inf	31.62	3	Horizontal	255	1.77	-	71.27	27.60	4.02	-
PK	2.4838G	57.87	74.00	-16.13	31.63	3	Horizontal	255	1.77	-	26.24	27.60	4.03	-

BT-BR(1Mbps)

2480MHz_TX

18/08/2020

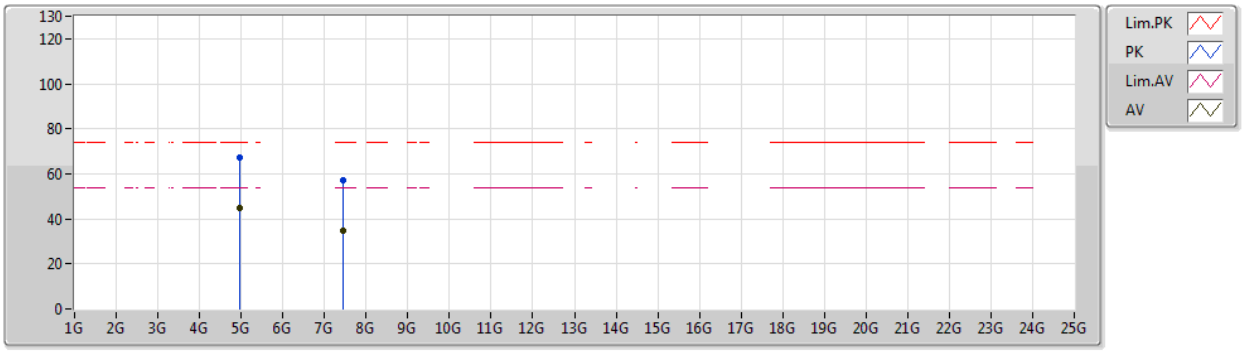


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.95998G	43.74	54.00	-10.26	1.86	3	Vertical	241	1.44	-	41.88	31.42	5.38	34.94
AV	7.43993G	36.02	54.00	-17.98	8.21	3	Vertical	102	1.00	-	27.81	36.56	6.82	35.17
PK	4.95998G	66.24	74.00	-7.76	1.86	3	Vertical	241	1.44	-	64.38	31.42	5.38	34.94
PK	7.43993G	58.52	74.00	-15.48	8.21	3	Vertical	102	1.00	-	50.31	36.56	6.82	35.17

BT-BR(1Mbps)

2480MHz_TX

18/08/2020

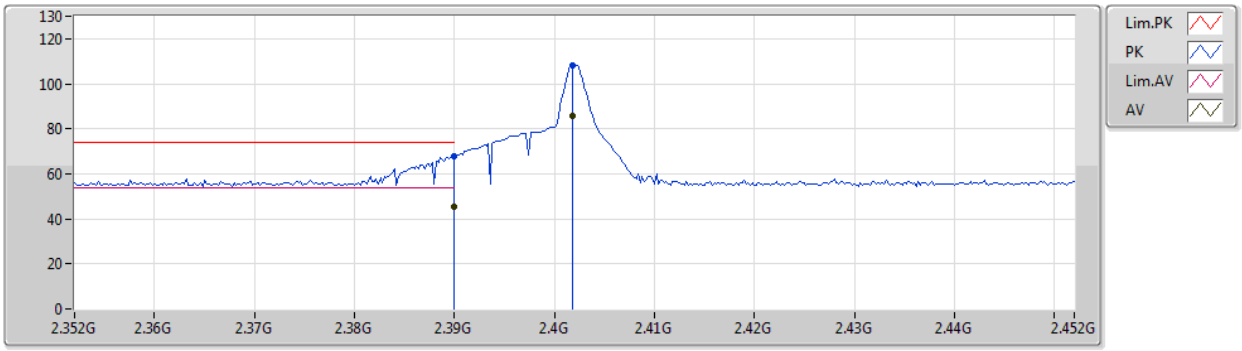


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.95998G	44.55	54.00	-9.45	1.86	3	Horizontal	240	1.18	-	42.69	31.42	5.38	34.94
AV	7.43994G	34.70	54.00	-19.30	8.21	3	Horizontal	119	1.21	-	26.49	36.56	6.82	35.17
PK	4.95998G	67.05	74.00	-6.95	1.86	3	Horizontal	240	1.18	-	65.19	31.42	5.38	34.94
PK	7.43994G	57.20	74.00	-16.80	8.21	3	Horizontal	119	1.21	-	48.99	36.56	6.82	35.17

BT-EDR(3Mbps)

2402MHz_TX

19/08/2020

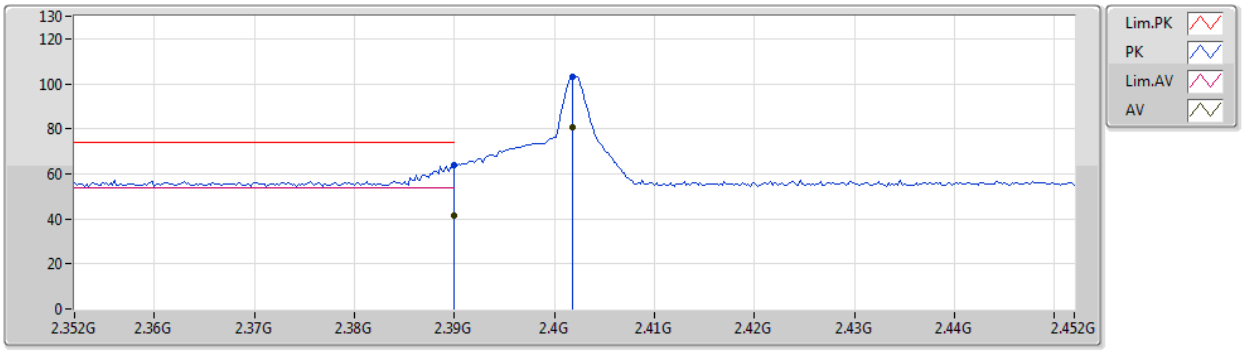


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.39G	45.58	54.00	-8.42	31.52	3	Vertical	272	1.46	-	14.06	27.64	3.88	-
AV	2.4018G	85.87	Inf	-Inf	31.50	3	Vertical	272	1.46	-	54.37	27.60	3.90	-
PK	2.39G	68.08	74.00	-5.92	31.52	3	Vertical	272	1.46	-	36.56	27.64	3.88	-
PK	2.4018G	108.37	Inf	-Inf	31.50	3	Vertical	272	1.46	-	76.87	27.60	3.90	-

BT-EDR(3Mbps)

2402MHz_TX

19/08/2020

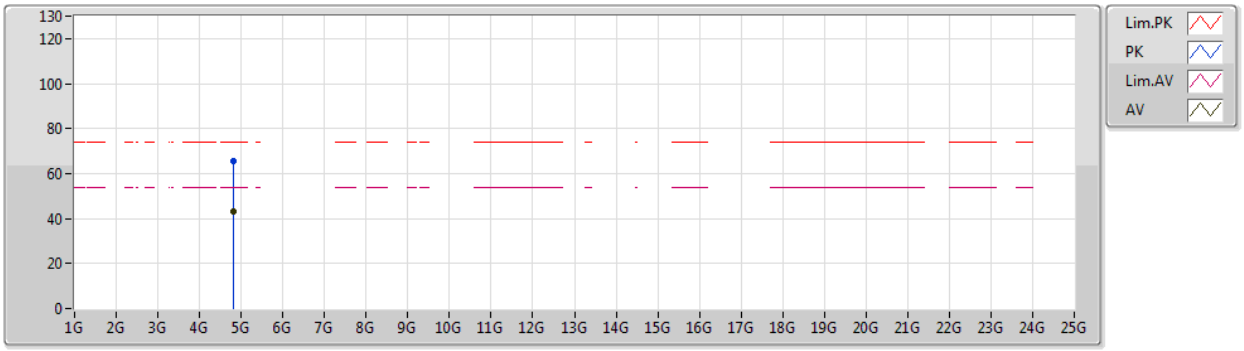


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.39G	41.50	54.00	-12.50	31.52	3	Horizontal	256	2.00	-	9.98	27.64	3.88	-
AV	2.4018G	80.86	Inf	-Inf	31.50	3	Horizontal	256	2.00	-	49.36	27.60	3.90	-
PK	2.39G	64.00	74.00	-10.00	31.52	3	Horizontal	256	2.00	-	32.48	27.64	3.88	-
PK	2.4018G	103.36	Inf	-Inf	31.50	3	Horizontal	256	2.00	-	71.86	27.60	3.90	-

BT-EDR(3Mbps)

2402MHz_TX

19/08/2020

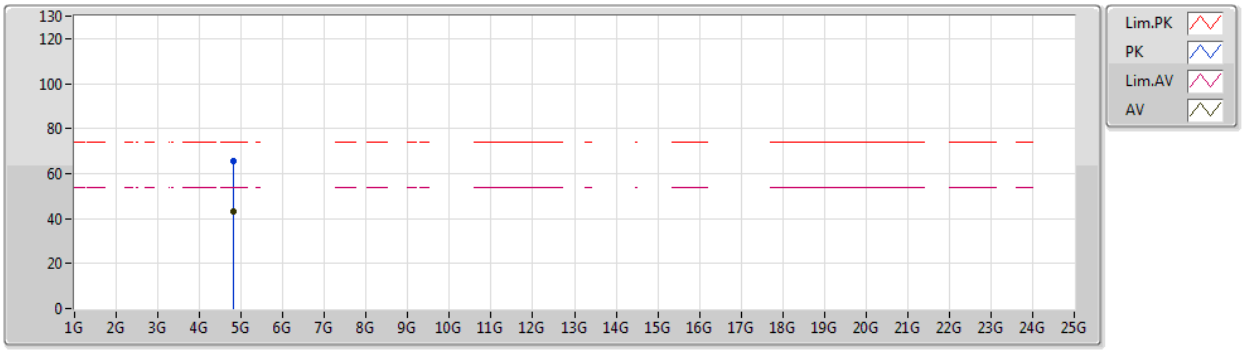


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.80408G	42.95	54.00	-11.05	1.49	3	Vertical	270	1.69	-	41.46	31.12	5.30	34.93
PK	4.80408G	65.45	74.00	-8.55	1.49	3	Vertical	270	1.69	-	63.96	31.12	5.30	34.93

BT-EDR(3Mbps)

2402MHz_TX

19/08/2020

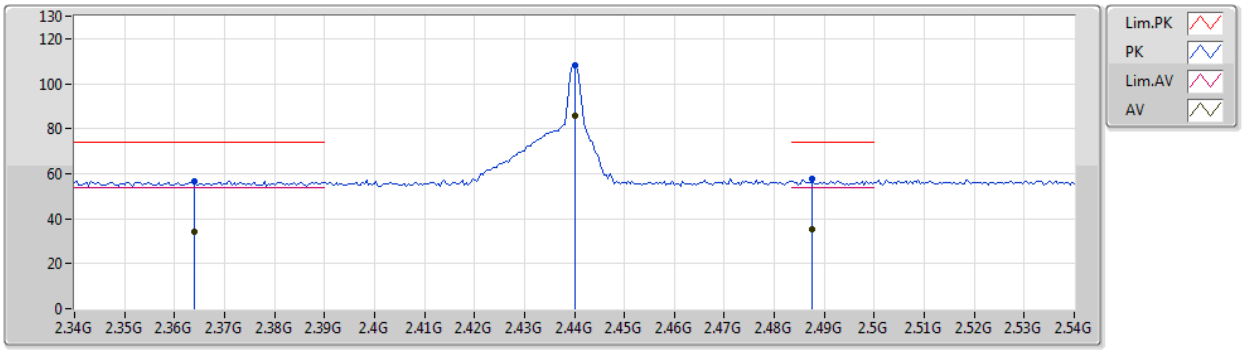


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.80374G	42.92	54.00	-11.08	1.48	3	Horizontal	238	1.02	-	41.44	31.11	5.30	34.93
PK	4.80374G	65.42	74.00	-8.58	1.48	3	Horizontal	238	1.02	-	63.94	31.11	5.30	34.93

BT-EDR(3Mbps)

2440MHz_TX

19/08/2020

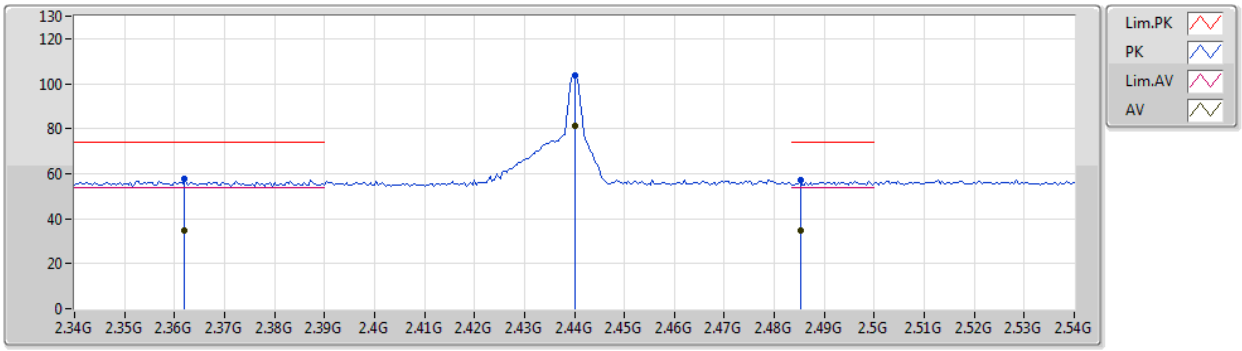


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.364G	34.29	54.00	-19.71	31.59	3	Vertical	270	1.42	-	2.70	27.74	3.85	-
AV	2.44G	85.84	Inf	-Inf	31.56	3	Vertical	270	1.42	-	54.28	27.60	3.96	-
AV	2.4876G	35.30	54.00	-18.70	31.63	3	Vertical	270	1.42	-	3.67	27.60	4.03	-
PK	2.364G	56.79	74.00	-17.21	31.59	3	Vertical	270	1.42	-	25.20	27.74	3.85	-
PK	2.44G	108.34	Inf	-Inf	31.56	3	Vertical	270	1.42	-	76.78	27.60	3.96	-
PK	2.4876G	57.80	74.00	-16.20	31.63	3	Vertical	270	1.42	-	26.17	27.60	4.03	-

BT-EDR(3Mbps)

2440MHz_TX

19/08/2020

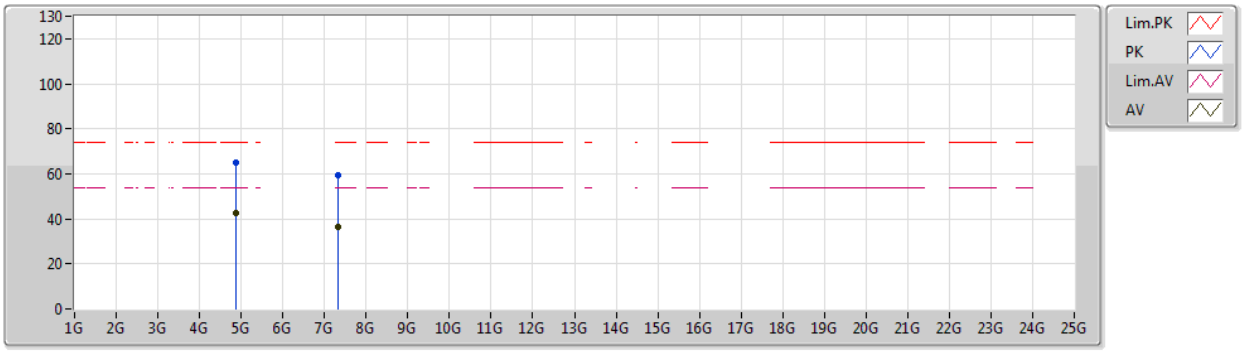


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.362G	34.96	54.00	-19.04	31.59	3	Horizontal	256	1.78	-	3.37	27.75	3.84	-
AV	2.44G	81.32	Inf	-Inf	31.56	3	Horizontal	256	1.78	-	49.76	27.60	3.96	-
AV	2.4852G	34.58	54.00	-19.42	31.63	3	Horizontal	256	1.78	-	2.95	27.60	4.03	-
PK	2.362G	57.46	74.00	-16.54	31.59	3	Horizontal	256	1.78	-	25.87	27.75	3.84	-
PK	2.44G	103.82	Inf	-Inf	31.56	3	Horizontal	256	1.78	-	72.26	27.60	3.96	-
PK	2.4852G	57.08	74.00	-16.92	31.63	3	Horizontal	256	1.78	-	25.45	27.60	4.03	-

BT-EDR(3Mbps)

2440MHz_TX

19/08/2020

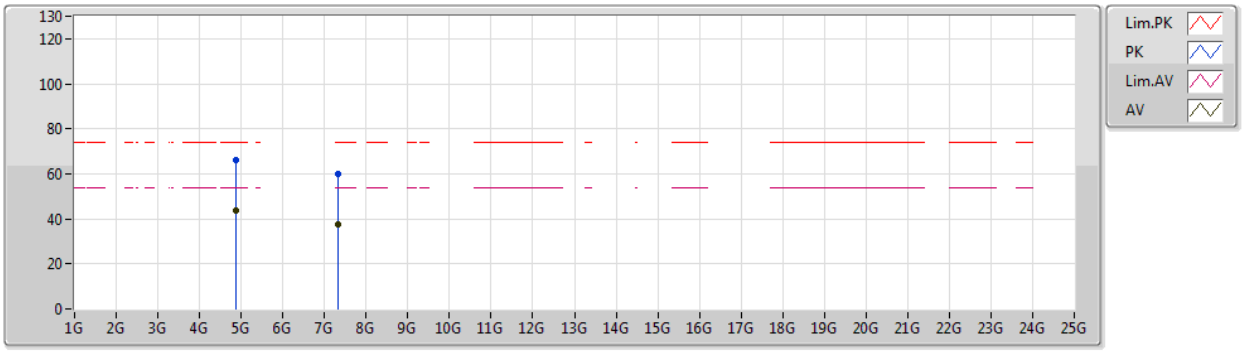


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.87966G	42.51	54.00	-11.49	1.65	3	Vertical	234	2.96	-	40.86	31.24	5.34	34.93
AV	7.31988G	36.37	54.00	-17.63	8.18	3	Vertical	100	1.00	-	28.19	36.56	6.80	35.18
PK	4.87966G	65.01	74.00	-8.99	1.65	3	Vertical	234	2.96	-	63.36	31.24	5.34	34.93
PK	7.31988G	59.17	74.00	-14.83	8.18	3	Vertical	100	1.00	-	50.99	36.56	6.80	35.18

BT-EDR(3Mbps)

2440MHz_TX

19/08/2020

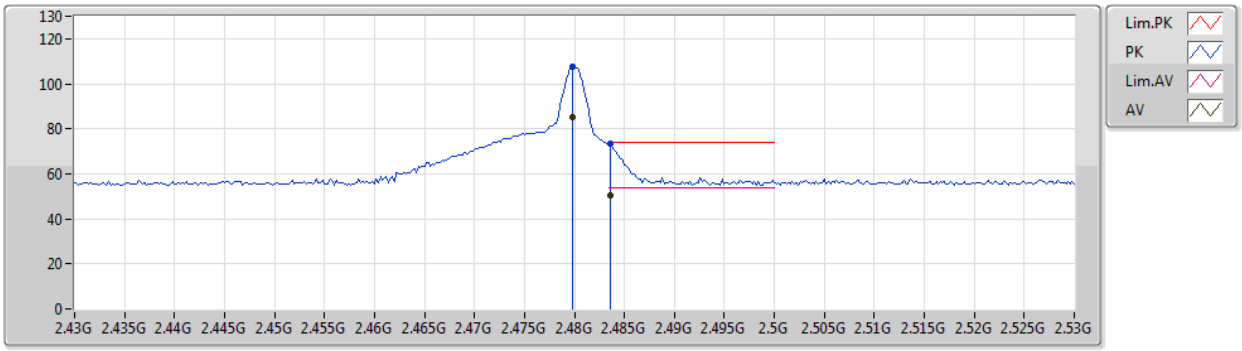


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.87967G	43.64	54.00	-10.36	1.65	3	Horizontal	240	1.14	-	41.99	31.24	5.34	34.93
AV	7.3199G	37.35	54.00	-16.65	8.18	3	Horizontal	52	1.00	-	29.17	36.56	6.80	35.18
PK	4.87967G	66.14	74.00	-7.86	1.65	3	Horizontal	240	1.14	-	64.49	31.24	5.34	34.93
PK	7.3199G	59.85	74.00	-14.15	8.18	3	Horizontal	52	1.00	-	51.67	36.56	6.80	35.18

BT-EDR(3Mbps)

2480MHz_TX

19/08/2020

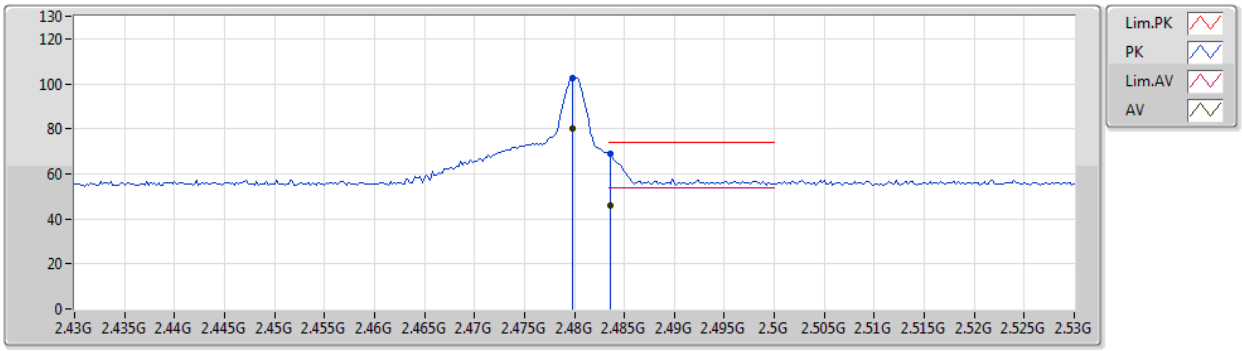


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.4798G	85.05	Inf	-Inf	31.62	3	Vertical	271	1.58	-	53.43	27.60	4.02	-
AV	2.4836G	50.69	54.00	-3.31	31.63	3	Vertical	271	1.58	-	19.06	27.60	4.03	-
PK	2.4798G	107.55	Inf	-Inf	31.62	3	Vertical	271	1.58	-	75.93	27.60	4.02	-
PK	2.4836G	73.19	74.00	-0.81	31.63	3	Vertical	271	1.58	-	41.56	27.60	4.03	-

BT-EDR(3Mbps)

2480MHz_TX

19/08/2020

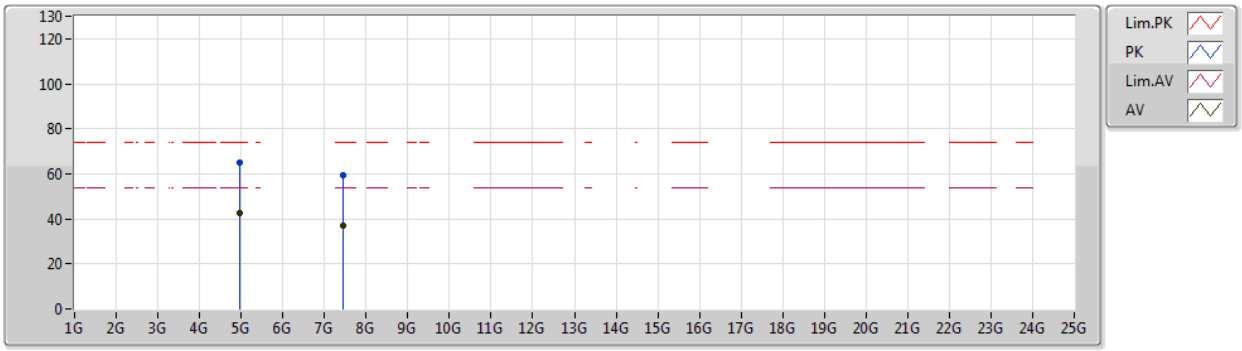


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.4798G	80.28	Inf	-Inf	31.62	3	Horizontal	256	1.76	-	48.66	27.60	4.02	-
AV	2.4836G	46.21	54.00	-7.79	31.63	3	Horizontal	256	1.76	-	14.58	27.60	4.03	-
PK	2.4798G	102.78	Inf	-Inf	31.62	3	Horizontal	256	1.76	-	71.16	27.60	4.02	-
PK	2.4836G	68.71	74.00	-5.29	31.63	3	Horizontal	256	1.76	-	37.08	27.60	4.03	-

BT-EDR(3Mbps)

2480MHz_TX

19/08/2020

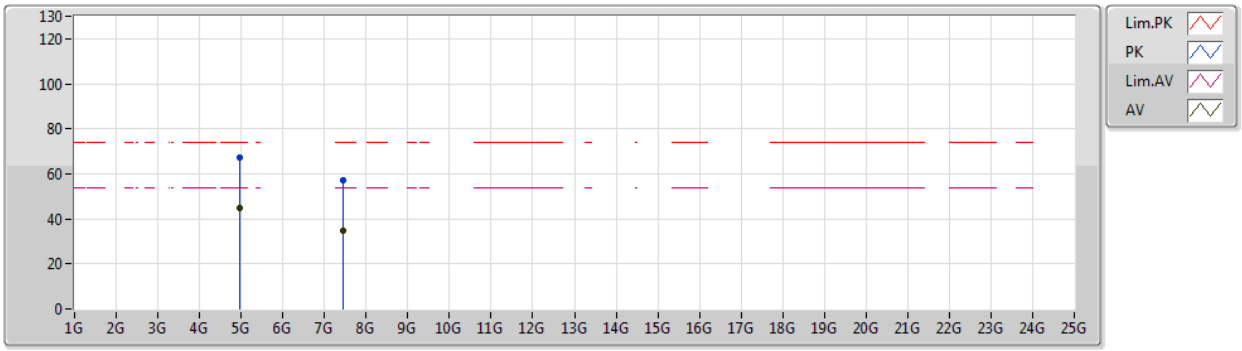


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.95957G	42.44	54.00	-11.56	1.86	3	Vertical	77	1.50	-	40.58	31.42	5.38	34.94
AV	7.43987G	37.08	54.00	-16.92	8.21	3	Vertical	99	1.00	-	28.87	36.56	6.82	35.17
PK	4.95957G	64.94	74.00	-9.06	1.86	3	Vertical	77	1.50	-	63.08	31.42	5.38	34.94
PK	7.43987G	59.58	74.00	-14.42	8.21	3	Vertical	99	1.00	-	51.37	36.56	6.82	35.17

BT-EDR(3Mbps)

2480MHz_TX

19/08/2020



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	4.95962G	44.66	54.00	-9.34	1.86	3	Horizontal	237	1.16	-	42.80	31.42	5.38	34.94
AV	7.4399G	34.92	54.00	-19.08	8.21	3	Horizontal	116	1.23	-	26.71	36.56	6.82	35.17
PK	4.95962G	67.16	74.00	-6.84	1.86	3	Horizontal	237	1.16	-	65.30	31.42	5.38	34.94
PK	7.4399G	57.42	74.00	-16.58	8.21	3	Horizontal	116	1.23	-	49.21	36.56	6.82	35.17