FCC Test Report

FCC ID	:	**U4GSX5WB**
Equipment	:	**Rugged mobile computer with barcode reader**
Brand Name	:	**Datalogic**
Model Name	:	**Skorpio X5**
Applicant	:	**Datalogic S.r.l. Via S. Vitalino 13, 40012 Lippo di Calderara di Reno (BO) - Italy**
Manufacturer	:	**Datalogic S.r.l. Via S. Vitalino 13, 40012 Lippo di Calderara di Reno (BO) - Italy**
Standard	:	**47 CFR FCC Part 15.247**

The product was received on Jun. 08, 2020, and testing was started from Jun. 15, 2020 and completed on Sep. 10, 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.

Allen Lin

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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PHOTOGRAPHS OF EUT V01

History of this test report

Report No.	Version	Description	Issued Date
FR9N0606-03AD	01	Initial issue of report	Oct. 19, 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: Ann Hou

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	Datalogic-USI	Skorpio X5 antenna	PIFA	mini I-pex
2	Datalogic-USI	Skorpio X5 antenna	PIFA	mini I-pex

Ant.	Port	Gain (dBi)					
		2.4G	U-NII-1	U-NII-2A	U-NII-2C	U-NII-3	BT
1	1	1.7	2.6	3.5	3.5	3.8	1.7
2	2	1.5	3.6	3.6	4.2	4.2	-

Note 1: The EUT has two antennas.

For 2.4GHz function:

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

Ant. 1 (port 1) and Ant. 2 (port 2) could transmit/receive simultaneously.

For 5GHz function:

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

Ant. 1 (port 1) and Ant. 2 (port 2) could transmit/receive simultaneously.

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 AC Adapter / Battery			
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)	0.776	1.1	2.888m	1k
BT-EDR(2Mbps)	0.644	1.91	2.381m	1k
BT-EDR(3Mbps)	0.764	1.17	2.891m	1k

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

1.1.5 Table for Multiple Listing

Form factor	Dock connection	2.4G	5G	Bluetooth	NFC	WPC	Description
Handheld	Wired (Pogo pin)	V	V	V	V		Handheld type with wired charging
Handheld	WLC (wireless)	V	V	V	V	V	Handheld type with wireless charging
Pistol (with handle)	Wired (Pogo pin)	V	V	V	V		Pistol type with wired charging
Pistol	WLC (wireless)	V	V	V	V	V	Pistol type with wireless charging

Note: The information from manufacturer.

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	22.3~26.7°C / 53~62%	19/Jun/2020~ 10/Sep/2020
RF Conducted	TH01-HY	Barry	22.6~24.1°C / 53~60%	15/Jun/2020~ 18/Jun/2020
Radiated	03CH02-HY	Streak	21.2~23.8°C / 56~58%	17/Jun/2020~ 10/Sep/2020
Radiated (Co-location)	03CH03-HY	Streak	23.4~23.6°C / 53~58%	01/Aug/2020~ 26/Aug/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	QRCT4

Mode	Power Setting
BT-BR(1Mbps)	-
2402MHz	7
2440MHz	7
2480MHz	7
BT-EDR(2Mbps)	-
2402MHz	7
2440MHz	7
2480MHz	7
BT-EDR(3Mbps)	-
2402MHz	7
2440MHz	7
2480MHz	7

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 (WLC Handheld)
2	Adapter mode (Wired Handheld)
3	Adapter mode (Wired Pistol)
4	USB mode (Wired Pistol)
5	Adapter mode (WLC Pistol)

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 (WLC Handheld)		
2	Adapter mode (Wired Handheld)		
3	Adapter mode (Wired Pistol)		
4	USB mode (Wired Pistol)		
5	Adapter mode (WLC Pistol)		
Operating Mode > 1GHz	CTX		
Orthogonal Planes of EUT	**X Plane**	**Y Plane**	**Z Plane**
Worst Planes of EUT			V

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Test Condition	Radiated measurement
Operating Mode	CTX
1	Bluetooth+WLAN 2.4GHz
2	Bluetooth+WLAN 5GHz
Refer to Sporton Test Report No.: FA9N0606-03 for Co-location RF Exposure Evaluation and Appendix H for Radiated Emission Co-location.	

2.4 Accessories

Accessories				
AC Adapter	**Brand Name**	BI	**Model Name**	BI24-050300-I
	Power Rating	I/P: 100-240Vac, 0.8A, O/P: 5Vdc, 3A		
	Power Cord	1.5 meter, Shielded cable, with ferrite core		
Battery 1	**Brand Name**	Zhuhai Gushine Electronic Technology Co.Ltd.	**Model Name**	BY-07
	Power Rating	3.7Vdc, 3460mAh	**Type**	Li-ion
Battery 2	**Brand Name**	Zhuhai Gushine Electronic Technology Co.Ltd.	**Model Name**	BY-08
	Power Rating	3.635Vdc, 6080mAh	**Type**	Li-ion
USB Cable	**Power Cord**	1.5 meter, Shielded cable, w/o ferrite core		

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

2.5 Support Equipment

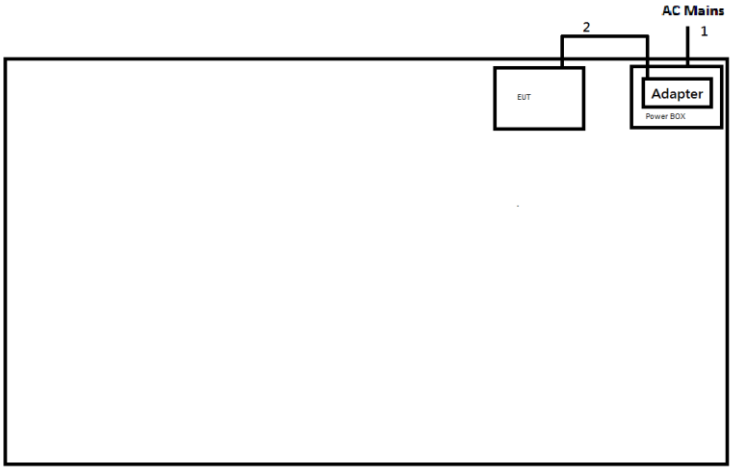
Support Equipment – AC Conduction					
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**	**Remark**
1	Notebook	Dell	PP13S	-	-
2	AC adapter for NB	Dell	AA90PM111	-	-

Support Equipment – Conducted					
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**	**Remark**
1	Notebook	DELL	E5410	-	-
2	Adapter for NB	DELL	HA65NM130	-	-

Support Equipment – Radiated					
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**	**Remark**
1	Notebook	Dell	PP13S	-	-
2	AC adapter for NB	Dell	AA90PM111	-	-

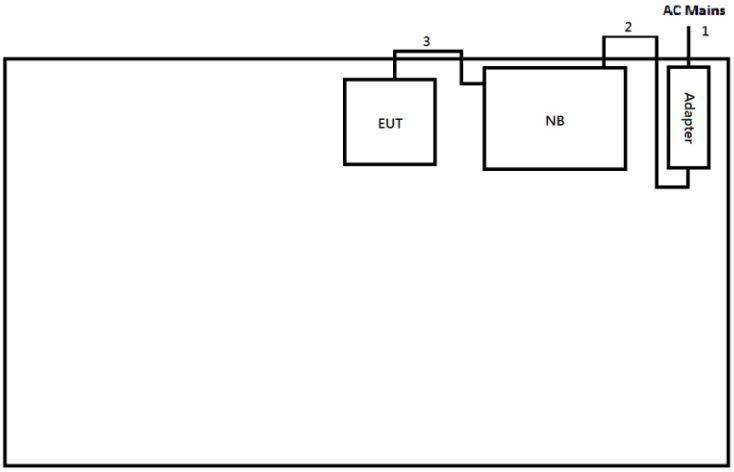
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test (Adapter mode)



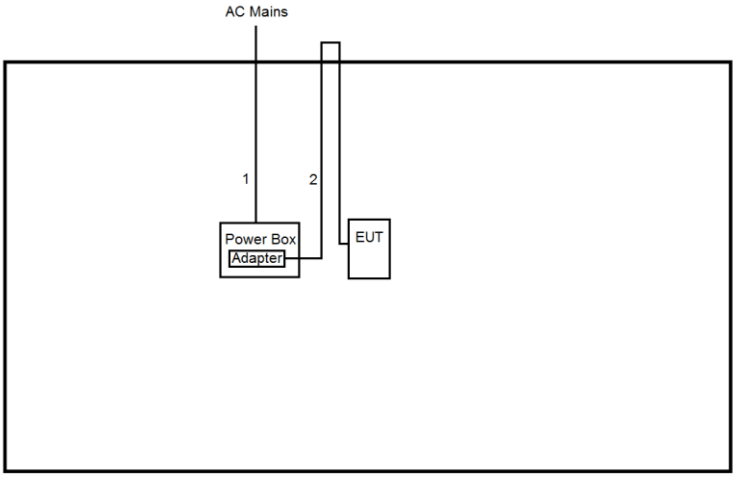
Item	Connection	Shielded	Length (m)
1	AC Power cable	No	1.8
2	DC Power cable	Yes	1.5

Test Setup Diagram – AC Line Conducted Emission Test (USB mode)



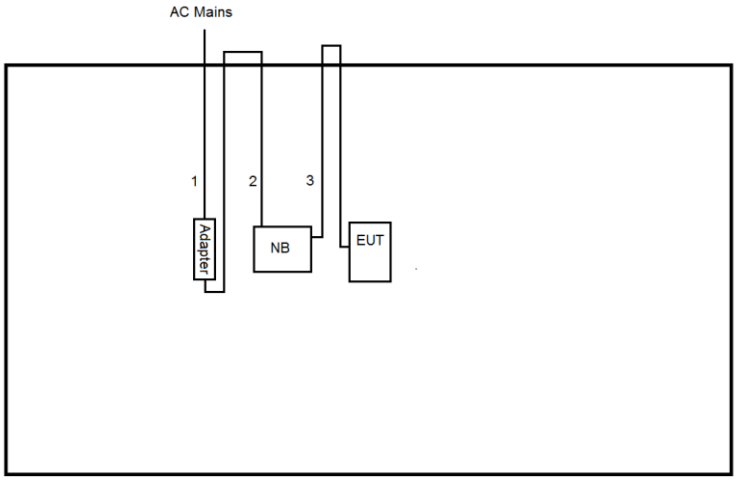
Item	Connection	Shielded	Length (m)
1	AC Power cable	No	1.8
2	DC Power cable	No	1.5
3	USB Cable	Yes	1.5

Test Setup Diagram - Radiated Test (Adapter mode)



Item	Connection	Shielded	Length (m)
1	AC Power cable	No	1.8
2	DC Power cable	Yes	1.5

Test Setup Diagram - Radiated Test (USB mode)



Item	Connection	Shielded	Length (m)
1	AC Power cable	No	1.8
2	DC Power cable	No	1.8
3	USB Cable	Yes	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

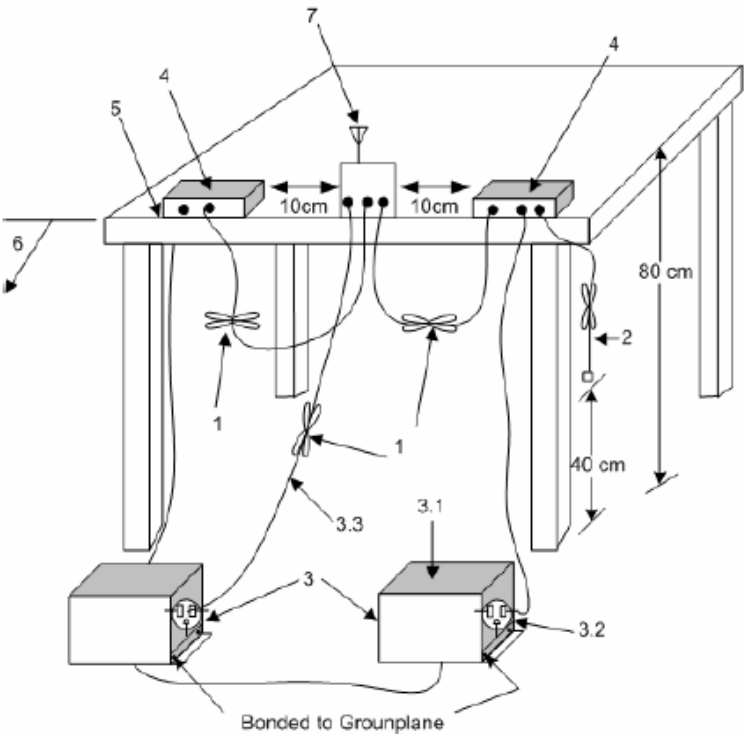
Test Method
▪ Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

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 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	

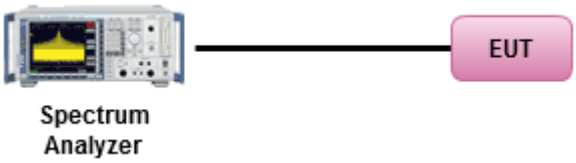
3.2.2 Measuring Instruments

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

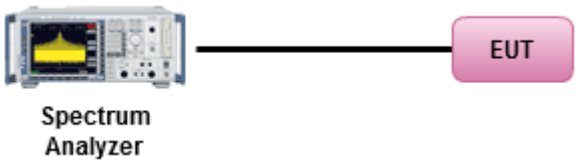
3.4.3 Measuring Instruments

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	

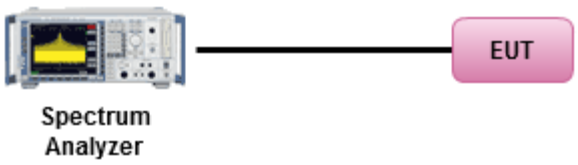
3.5.2 Measuring Instruments

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)


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

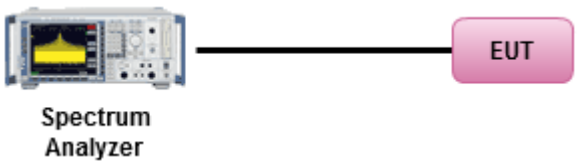
Refer a test equipment and calibration data table in this test report.

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

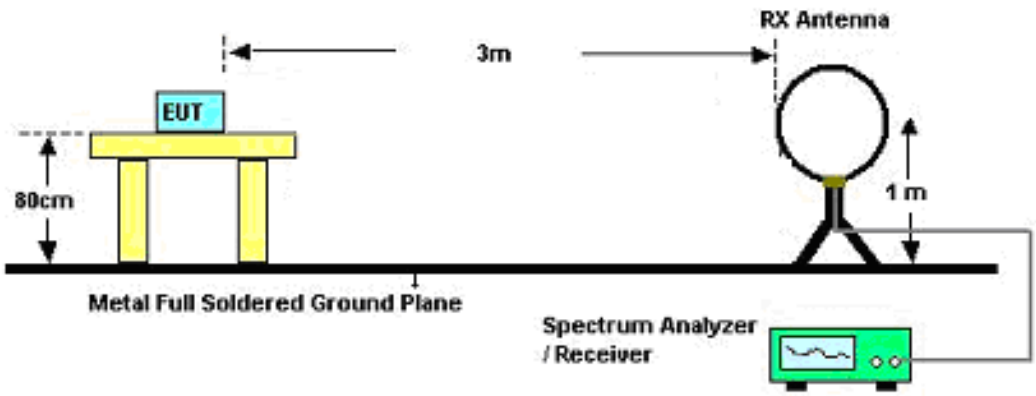
Test Method	
▪ The average emission levels shall be measured in [hopping duty factor].	
▪ Refer as ANSI C63.10; clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.	
▪ For the transmitter unwanted emissions 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

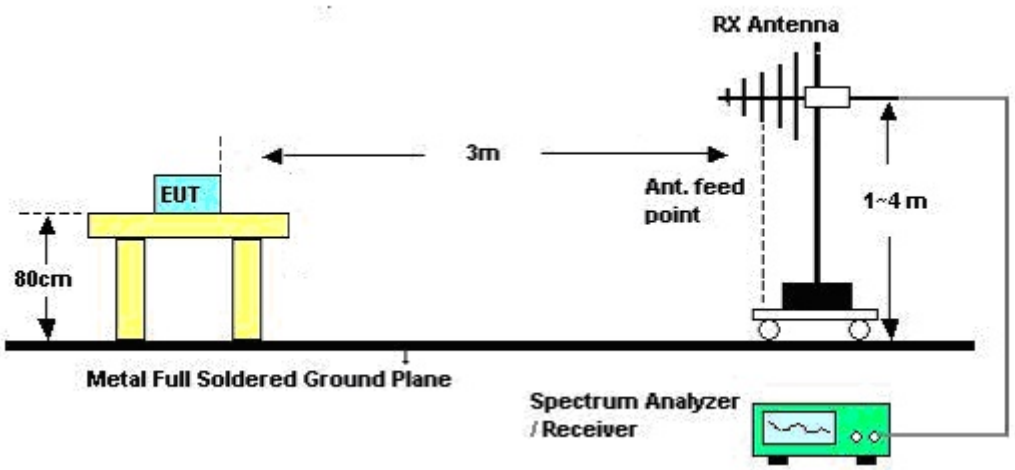
The measured Level is calculated using:
Corrected Reading: Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamp Factor)

3.7.5 Test Setup

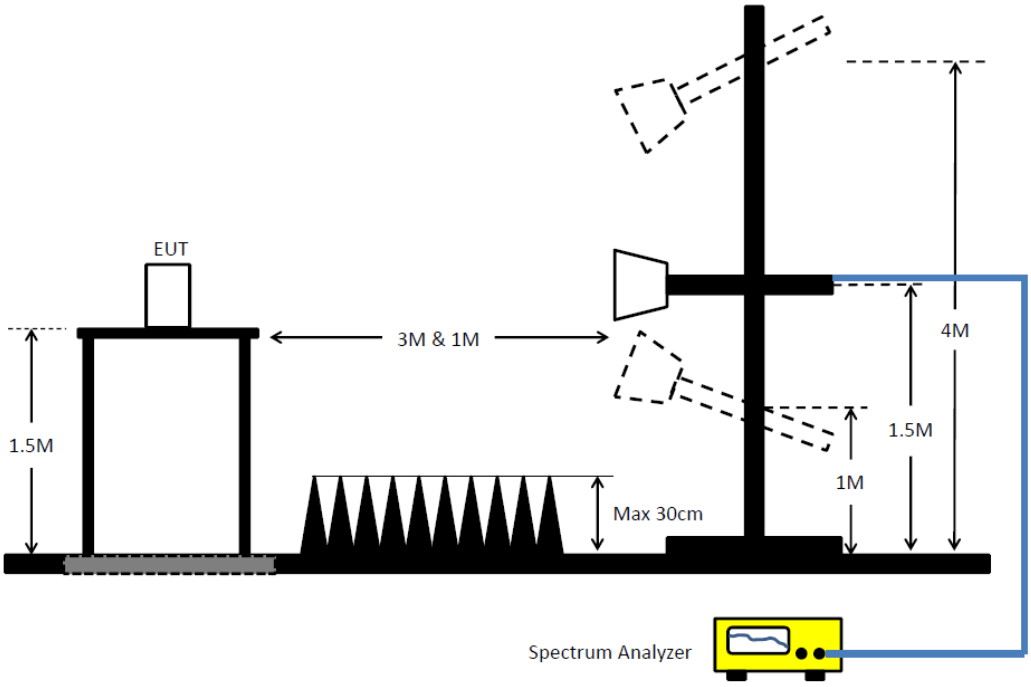
Emissions in Restricted Frequency Bands
9kHz ~30MHz



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	31/Aug/2020	30/Aug/2021
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	101013	10Hz~40GHz	19/Mar/2020	18/Mar/2021
SMB100A Signal Generator	R&S	SMB100A03	181147	100kHz~40GHz	12/Nov/2018	11/Nov/2020
Power Sensor	Anritsu	MA2411B	0917017	300MHz ~ 40GHz	17/Feb/2020	16/Feb/2021
Power Meter	Anritsu	ML2495A	0949003	300MHz ~ 40GHz	17/Feb/2020	16/Feb/2021

Instrument for Radiated Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	30MHz~1GHz 3m	29/Aug/2019	28/Aug/2020
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz~18GHz 3m	29/Aug/2019	28/Aug/2020
Signal Analyzer	R&S	FSP40	100593	9kHz~40GHz	27/Feb/2020	26/Feb/2021
Amplifier	Agilent	8447D	2944A11149	100kHz~1.3GHz	30/Jun/2020	29/Jun/2021
Microwave Preamplifier	Agilent	8449B	3008A02373	1GHz~18GHz	16/Oct/2019	15/Oct/2020
Bilog Antenna & 5dB Attenuator	SCHAFFNER / MTJ	CBL 6112B / MTJ6102-05	2723 / 2	30MHz~1GHz	28/Feb/2020	27/Feb/2021
Double Ridged Guide Horn Antenna	SCHWARZBEC	BBHA 9120 D	BBHA 9120 D 01543	1GHz~18GHz	09/Jun/2020	08/Jun/2021
RF Cable-R03m	Jye Bao	RG142	CB017	9kHz~30MHz	20/Jun/2020	19/Jun/2021
RF Cable-R03m	Jye Bao	RG142	CB017	9kHz~1GHz	25/Mar/2020	24/Mar/2021
RF Cable-R03m	HUBER+SUHNER	SUCOFLEX104	805193/4+80 5192/4	1GHz~40GHz	08/Apr/2020	07/Apr/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

Instrument for Radiated Test (Co-location)

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	1GHz~18GHz 3m	04/Aug/2020	03/Aug/2021
Signal Analyzer	R&S	FSP 30	100793	10Hz~30GHz	15/Feb/2020	14/Feb/2021
Microwave System Preamplifier	KEYSIGHT	83017A	MY53270196	1GHz~26.5GHz	09/Sep/2019	08/Sep/2020
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1531	1GHz~18GHz	26/Mar/2020	25/Mar/2021
RF CABLE 5+6m	HUBER+SUHNER	SUOFLEX 104	SN 805801/4+SN 804300/4	1GHz~40GHz	18/Mar/2020	17/Mar/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

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	430.32k	28.02	47.24	-19.22	Line
Mode 2	Pass	AV	462.379k	26.16	46.65	-20.49	Line
Mode 3	Pass	AV	458.702k	26.09	46.71	-20.62	Line
Mode 4	Pass	QP	173.876k	48.86	64.78	-15.92	Line
Mode 5	Pass	AV	458.702k	30.53	46.71	-16.18	Neutral

Mode Configure

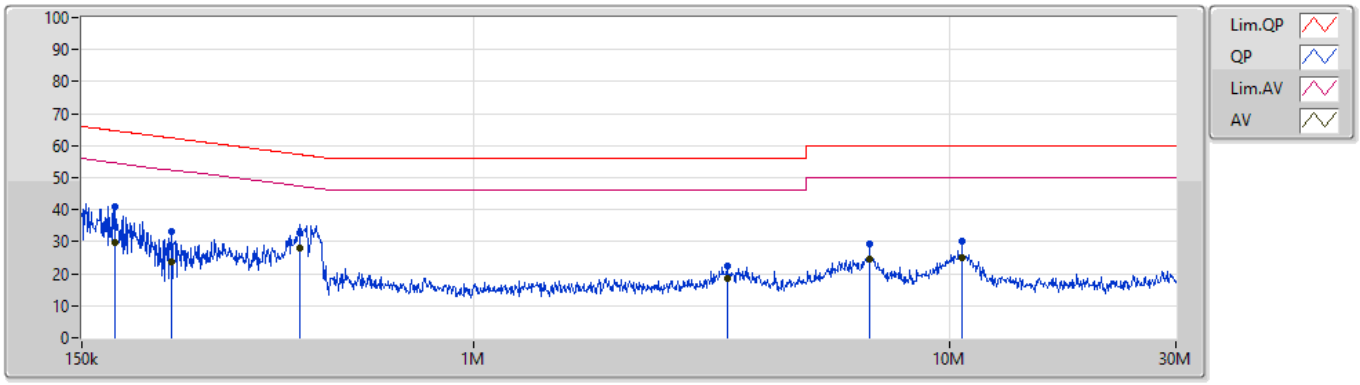
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition	Comments
Mode 1	Pass	QP	175.97k	41.12	64.68	-23.56	Line	-
Mode 1	Pass	AV	175.97k	29.89	54.68	-24.79	Line	-
Mode 1	Pass	QP	230.851k	33.10	62.42	-29.32	Line	-
Mode 1	Pass	AV	230.851k	23.53	52.42	-28.89	Line	-
Mode 1	Pass	QP	430.32k	32.55	57.24	-24.69	Line	-
Mode 1	Pass	AV	430.32k	28.02	47.24	-19.22	Line	"Worst"
Mode 1	Pass	QP	3.43M	22.36	56.00	-33.64	Line	-
Mode 1	Pass	AV	3.43M	18.48	46.00	-27.52	Line	-
Mode 1	Pass	QP	6.816M	29.26	60.00	-30.74	Line	-
Mode 1	Pass	AV	6.816M	24.54	50.00	-25.46	Line	-
Mode 1	Pass	QP	10.659M	30.02	60.00	-29.98	Line	-
Mode 1	Pass	AV	10.659M	24.98	50.00	-25.02	Line	-
Mode 1	Pass	QP	167.071k	42.35	65.10	-22.75	Neutral	"Worst"
Mode 1	Pass	AV	167.071k	29.94	55.10	-25.16	Neutral	-
Mode 1	Pass	QP	237.393k	34.25	62.20	-27.95	Neutral	-
Mode 1	Pass	AV	237.393k	23.95	52.20	-28.25	Neutral	-
Mode 1	Pass	QP	358.13k	26.84	58.77	-31.93	Neutral	-
Mode 1	Pass	AV	358.13k	18.24	48.77	-30.53	Neutral	-
Mode 1	Pass	QP	2.211M	21.81	56.00	-34.19	Neutral	-
Mode 1	Pass	AV	2.211M	16.99	46.00	-29.01	Neutral	-
Mode 1	Pass	QP	6.681M	28.93	60.00	-31.07	Neutral	-
Mode 1	Pass	AV	6.681M	24.15	50.00	-25.85	Neutral	-
Mode 1	Pass	QP	10.532M	28.06	60.00	-31.94	Neutral	-
Mode 1	Pass	AV	10.532M	23.19	50.00	-26.81	Neutral	-
Mode 2	Pass	QP	154.251k	44.37	65.77	-21.40	Line	-
Mode 2	Pass	AV	154.251k	33.28	55.77	-22.49	Line	-
Mode 2	Pass	QP	261.263k	31.57	61.39	-29.82	Line	-
Mode 2	Pass	AV	261.263k	25.46	51.39	-25.93	Line	-
Mode 2	Pass	QP	462.379k	29.97	56.65	-26.68	Line	-
Mode 2	Pass	AV	462.379k	26.16	46.65	-20.49	Line	"Worst"
Mode 2	Pass	QP	3.458M	21.79	56.00	-34.21	Line	-
Mode 2	Pass	AV	3.458M	18.27	46.00	-27.73	Line	-
Mode 2	Pass	QP	6.816M	27.68	60.00	-32.32	Line	-
Mode 2	Pass	AV	6.816M	23.43	50.00	-26.57	Line	-
Mode 2	Pass	QP	10.365M	28.01	60.00	-31.99	Line	-
Mode 2	Pass	AV	10.365M	23.68	50.00	-26.32	Line	-
Mode 2	Pass	QP	159.893k	42.02	65.46	-23.44	Neutral	"Worst"
Mode 2	Pass	AV	159.893k	30.92	55.46	-24.54	Neutral	-
Mode 2	Pass	QP	261.263k	30.04	61.39	-31.35	Neutral	-
Mode 2	Pass	AV	261.263k	23.40	51.39	-27.99	Neutral	-
Mode 2	Pass	QP	473.588k	21.90	56.46	-34.56	Neutral	-
Mode 2	Pass	AV	473.588k	16.59	46.46	-29.87	Neutral	-
Mode 2	Pass	QP	2.211M	29.42	56.00	-26.58	Neutral	-
Mode 2	Pass	AV	2.211M	20.94	46.00	-25.06	Neutral	-
Mode 2	Pass	QP	6.87M	26.23	60.00	-33.77	Neutral	-
Mode 2	Pass	AV	6.87M	22.43	50.00	-27.57	Neutral	-
Mode 2	Pass	QP	10.744M	25.34	60.00	-34.66	Neutral	-
Mode 2	Pass	AV	10.744M	21.02	50.00	-28.98	Neutral	-
Mode 3	Pass	QP	168.41k	42.51	65.04	-22.53	Line	-
Mode 3	Pass	AV	168.41k	31.25	55.04	-23.79	Line	-

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition	Comments
Mode 3	Pass	QP	240.253k	35.37	62.08	-26.71	Line	-
Mode 3	Pass	AV	240.253k	26.90	52.08	-25.18	Line	-
Mode 3	Pass	QP	458.702k	30.03	56.71	-26.68	Line	-
Mode 3	Pass	AV	458.702k	26.09	46.71	-20.62	Line	“Worst”
Mode 3	Pass	QP	3.296M	21.58	56.00	-34.42	Line	-
Mode 3	Pass	AV	3.296M	17.60	46.00	-28.40	Line	-
Mode 3	Pass	QP	6.789M	29.65	60.00	-30.35	Line	-
Mode 3	Pass	AV	6.789M	24.94	50.00	-25.06	Line	-
Mode 3	Pass	QP	11.093M	30.40	60.00	-29.60	Line	-
Mode 3	Pass	AV	11.093M	25.01	50.00	-24.99	Line	-
Mode 3	Pass	QP	180.236k	43.73	64.47	-20.74	Neutral	“Worst”
Mode 3	Pass	AV	180.236k	30.28	54.47	-24.19	Neutral	-
Mode 3	Pass	QP	239.296k	36.80	62.12	-25.32	Neutral	-
Mode 3	Pass	AV	239.296k	24.92	52.12	-27.20	Neutral	-
Mode 3	Pass	QP	471.701k	22.79	56.48	-33.69	Neutral	-
Mode 3	Pass	AV	471.701k	17.39	46.48	-29.09	Neutral	-
Mode 3	Pass	QP	2.211M	29.92	56.00	-26.08	Neutral	-
Mode 3	Pass	AV	2.211M	21.33	46.00	-24.67	Neutral	-
Mode 3	Pass	QP	6.843M	30.90	60.00	-29.10	Neutral	-
Mode 3	Pass	AV	6.843M	26.14	50.00	-23.86	Neutral	-
Mode 3	Pass	QP	10.039M	29.09	60.00	-30.91	Neutral	-
Mode 3	Pass	AV	10.039M	24.30	50.00	-25.70	Neutral	-
Mode 4	Pass	QP	173.876k	48.86	64.78	-15.92	Line	“Worst”
Mode 4	Pass	AV	173.876k	30.11	54.78	-24.67	Line	-
Mode 4	Pass	QP	238.343k	40.78	62.16	-21.38	Line	-
Mode 4	Pass	AV	238.343k	28.71	52.16	-23.45	Line	-
Mode 4	Pass	QP	540.273k	18.98	56.00	-37.02	Line	-
Mode 4	Pass	AV	540.273k	14.57	46.00	-31.43	Line	-
Mode 4	Pass	QP	4.376M	27.05	56.00	-28.95	Line	-
Mode 4	Pass	AV	4.376M	20.96	46.00	-25.04	Line	-
Mode 4	Pass	QP	7.122M	25.24	60.00	-34.76	Line	-
Mode 4	Pass	AV	7.122M	20.08	50.00	-29.92	Line	-
Mode 4	Pass	QP	14.552M	29.25	60.00	-30.75	Line	-
Mode 4	Pass	AV	14.552M	19.50	50.00	-30.50	Line	-
Mode 4	Pass	QP	178.803k	47.52	64.55	-17.03	Neutral	“Worst”
Mode 4	Pass	AV	178.803k	28.19	54.55	-26.36	Neutral	-
Mode 4	Pass	QP	278.495k	34.34	60.86	-26.52	Neutral	-
Mode 4	Pass	AV	278.495k	23.14	50.86	-27.72	Neutral	-
Mode 4	Pass	QP	587.518k	23.17	56.00	-32.83	Neutral	-
Mode 4	Pass	AV	587.518k	15.80	46.00	-30.20	Neutral	-
Mode 4	Pass	QP	2.274M	27.83	56.00	-28.17	Neutral	-
Mode 4	Pass	AV	2.274M	22.62	46.00	-23.38	Neutral	-
Mode 4	Pass	QP	6.549M	26.23	60.00	-33.77	Neutral	-
Mode 4	Pass	AV	6.549M	21.72	50.00	-28.28	Neutral	-
Mode 4	Pass	QP	14.669M	33.90	60.00	-26.10	Neutral	-
Mode 4	Pass	AV	14.669M	26.76	50.00	-23.24	Neutral	-
Mode 5	Pass	QP	152.414k	45.71	65.87	-20.16	Line	-
Mode 5	Pass	AV	152.414k	32.69	55.87	-23.18	Line	-
Mode 5	Pass	QP	464.229k	32.54	56.61	-24.07	Line	-
Mode 5	Pass	AV	464.229k	28.77	46.61	-17.84	Line	“Worst”

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition	Comments
Mode 5	Pass	QP	1.011M	23.18	56.00	-32.82	Line	-
Mode 5	Pass	AV	1.011M	17.99	46.00	-28.01	Line	-
Mode 5	Pass	QP	1.915M	27.31	56.00	-28.69	Line	-
Mode 5	Pass	AV	1.915M	22.41	46.00	-23.59	Line	-
Mode 5	Pass	QP	3.527M	33.02	56.00	-22.98	Line	-
Mode 5	Pass	AV	3.527M	27.38	46.00	-18.62	Line	-
Mode 5	Pass	QP	5.364M	28.99	60.00	-31.01	Line	-
Mode 5	Pass	AV	5.364M	24.11	50.00	-25.89	Line	-
Mode 5	Pass	QP	151.202k	42.27	65.92	-23.65	Neutral	-
Mode 5	Pass	AV	151.202k	32.67	55.92	-23.25	Neutral	-
Mode 5	Pass	QP	458.702k	37.52	56.71	-19.19	Neutral	-
Mode 5	Pass	AV	458.702k	30.53	46.71	-16.18	Neutral	“Worst”
Mode 5	Pass	QP	889.871k	26.86	56.00	-29.14	Neutral	-
Mode 5	Pass	AV	889.871k	21.14	46.00	-24.86	Neutral	-
Mode 5	Pass	QP	2.866M	28.49	56.00	-27.51	Neutral	-
Mode 5	Pass	AV	2.866M	23.07	46.00	-22.93	Neutral	-
Mode 5	Pass	QP	3.701M	32.36	56.00	-23.64	Neutral	-
Mode 5	Pass	AV	3.701M	26.56	46.00	-19.44	Neutral	-
Mode 5	Pass	QP	12.756M	31.61	60.00	-28.39	Neutral	-
Mode 5	Pass	AV	12.756M	27.38	50.00	-22.62	Neutral	-

Conducted Emissions at Powerline_Mode 1

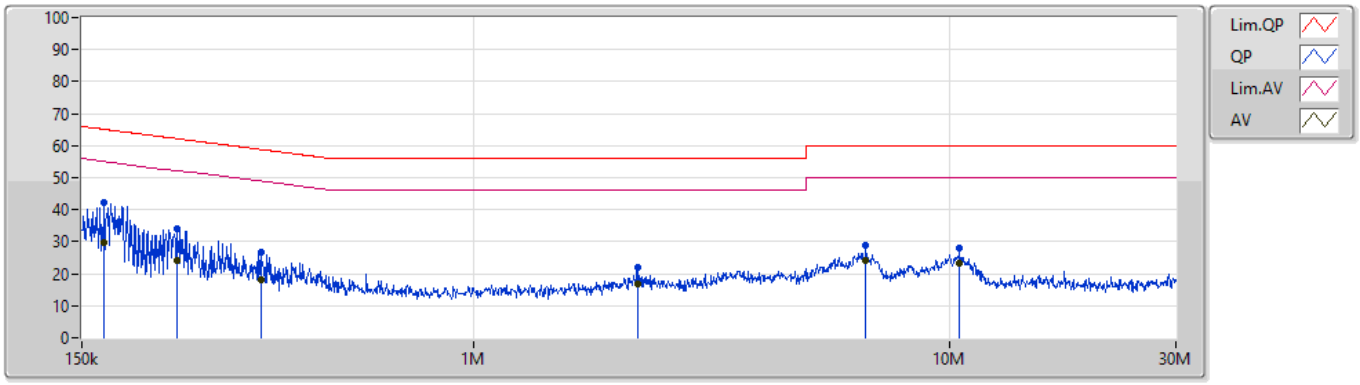
19/06/2020



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)
QP	175.97k	41.12	64.68	-23.56	19.63	Line	-	21.49	9.65	0.11
AV	175.97k	29.89	54.68	-24.79	19.63	Line	-	10.26	9.65	0.11
QP	230.851k	33.10	62.42	-29.32	19.64	Line	-	13.46	9.65	0.12
AV	230.851k	23.53	52.42	-28.89	19.64	Line	-	3.89	9.65	0.12
QP	430.32k	32.55	57.24	-24.69	19.64	Line	-	12.91	9.64	0.13
AV	430.32k	28.02	47.24	-19.22	19.64	Line	"Worst"	8.38	9.64	0.13
QP	3.43M	22.36	56.00	-33.64	19.72	Line	-	2.64	9.66	0.18
AV	3.43M	18.48	46.00	-27.52	19.72	Line	-	-1.24	9.66	0.18
QP	6.816M	29.26	60.00	-30.74	19.79	Line	-	9.47	9.68	0.23
AV	6.816M	24.54	50.00	-25.46	19.79	Line	-	4.75	9.68	0.23
QP	10.659M	30.02	60.00	-29.98	19.85	Line	-	10.17	9.69	0.28
AV	10.659M	24.98	50.00	-25.02	19.85	Line	-	5.13	9.69	0.28

Conducted Emissions at Powerline_Mode 1

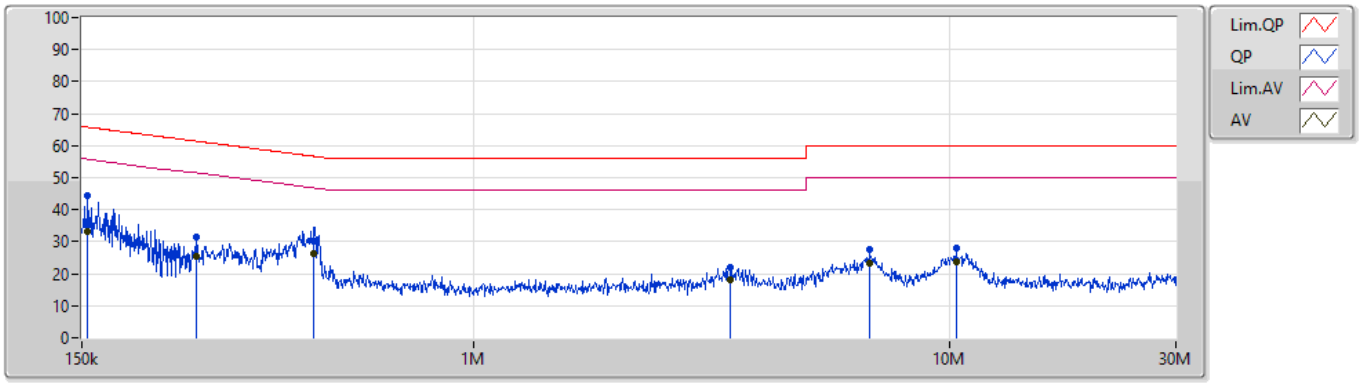
19/06/2020



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)
QP	167.071k	42.35	65.10	-22.75	19.63	Neutral	"Worst"	22.72	9.65	0.11
AV	167.071k	29.94	55.10	-25.16	19.63	Neutral	-	10.31	9.65	0.11
QP	237.393k	34.25	62.20	-27.95	19.63	Neutral	-	14.62	9.64	0.12
AV	237.393k	23.95	52.20	-28.25	19.63	Neutral	-	4.32	9.64	0.12
QP	358.13k	26.84	58.77	-31.93	19.62	Neutral	-	7.22	9.63	0.12
AV	358.13k	18.24	48.77	-30.53	19.62	Neutral	-	-1.38	9.63	0.12
QP	2.211M	21.81	56.00	-34.19	19.67	Neutral	-	2.14	9.65	0.15
AV	2.211M	16.99	46.00	-29.01	19.67	Neutral	-	-2.68	9.65	0.15
QP	6.681M	28.93	60.00	-31.07	19.79	Neutral	-	9.14	9.68	0.23
AV	6.681M	24.15	50.00	-25.85	19.79	Neutral	-	4.36	9.68	0.23
QP	10.532M	28.06	60.00	-31.94	19.86	Neutral	-	8.20	9.70	0.28
AV	10.532M	23.19	50.00	-26.81	19.86	Neutral	-	3.33	9.70	0.28

Conducted Emissions at Powerline_Mode 2

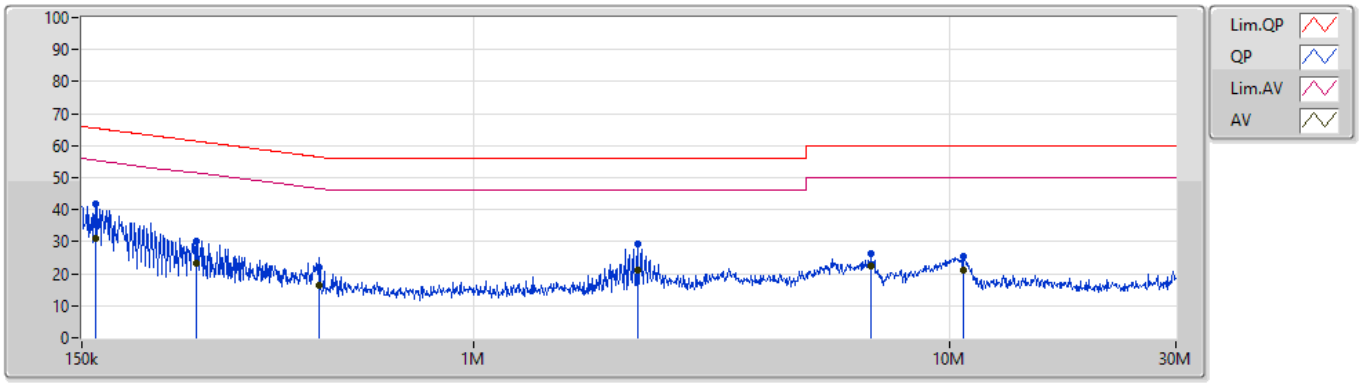
19/06/2020



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)
QP	154.251k	44.37	65.77	-21.40	19.64	Line	-	24.73	9.66	0.11
AV	154.251k	33.28	55.77	-22.49	19.64	Line	-	13.64	9.66	0.11
QP	261.263k	31.57	61.39	-29.82	19.64	Line	-	11.93	9.65	0.12
AV	261.263k	25.46	51.39	-25.93	19.64	Line	-	5.82	9.65	0.12
QP	462.379k	29.97	56.65	-26.68	19.64	Line	-	10.33	9.64	0.13
AV	462.379k	26.16	46.65	-20.49	19.64	Line	"Worst"	6.52	9.64	0.13
QP	3.458M	21.79	56.00	-34.21	19.72	Line	-	2.07	9.66	0.18
AV	3.458M	18.27	46.00	-27.73	19.72	Line	-	-1.45	9.66	0.18
QP	6.816M	27.68	60.00	-32.32	19.79	Line	-	7.89	9.68	0.23
AV	6.816M	23.43	50.00	-26.57	19.79	Line	-	3.64	9.68	0.23
QP	10.365M	28.01	60.00	-31.99	19.84	Line	-	8.17	9.69	0.27
AV	10.365M	23.68	50.00	-26.32	19.84	Line	-	3.84	9.69	0.27

Conducted Emissions at Powerline_Mode 2

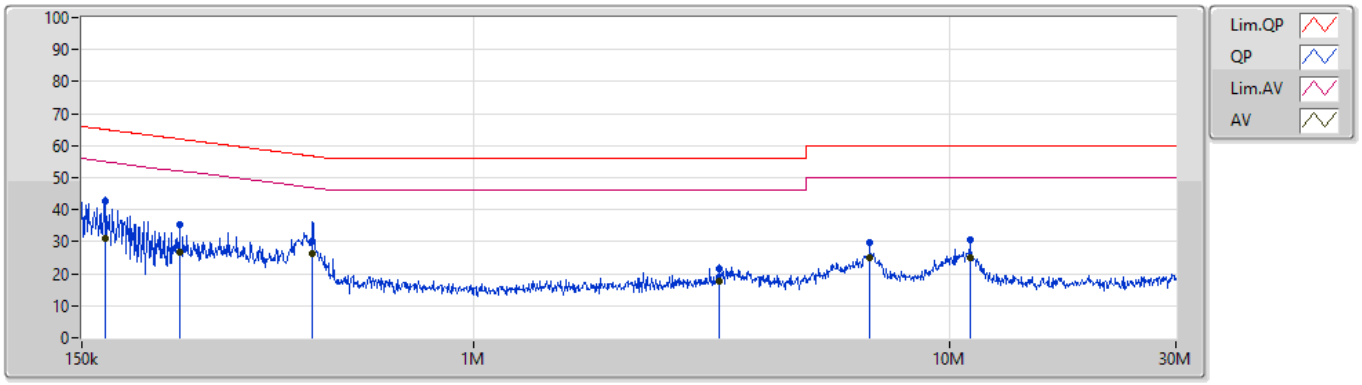
19/06/2020



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)
QP	159.893k	42.02	65.46	-23.44	19.63	Neutral	"Worst"	22.39	9.65	0.11
AV	159.893k	30.92	55.46	-24.54	19.63	Neutral	-	11.29	9.65	0.11
QP	261.263k	30.04	61.39	-31.35	19.63	Neutral	-	10.41	9.64	0.12
AV	261.263k	23.40	51.39	-27.99	19.63	Neutral	-	3.77	9.64	0.12
QP	473.588k	21.90	56.46	-34.56	19.63	Neutral	-	2.27	9.63	0.13
AV	473.588k	16.59	46.46	-29.87	19.63	Neutral	-	-3.04	9.63	0.13
QP	2.211M	29.42	56.00	-26.58	19.67	Neutral	-	9.75	9.65	0.15
AV	2.211M	20.94	46.00	-25.06	19.67	Neutral	-	1.27	9.65	0.15
QP	6.87M	26.23	60.00	-33.77	19.79	Neutral	-	6.44	9.68	0.23
AV	6.87M	22.43	50.00	-27.57	19.79	Neutral	-	2.64	9.68	0.23
QP	10.744M	25.34	60.00	-34.66	19.86	Neutral	-	5.48	9.70	0.28
AV	10.744M	21.02	50.00	-28.98	19.86	Neutral	-	1.16	9.70	0.28

Conducted Emissions at Powerline_Mode 3

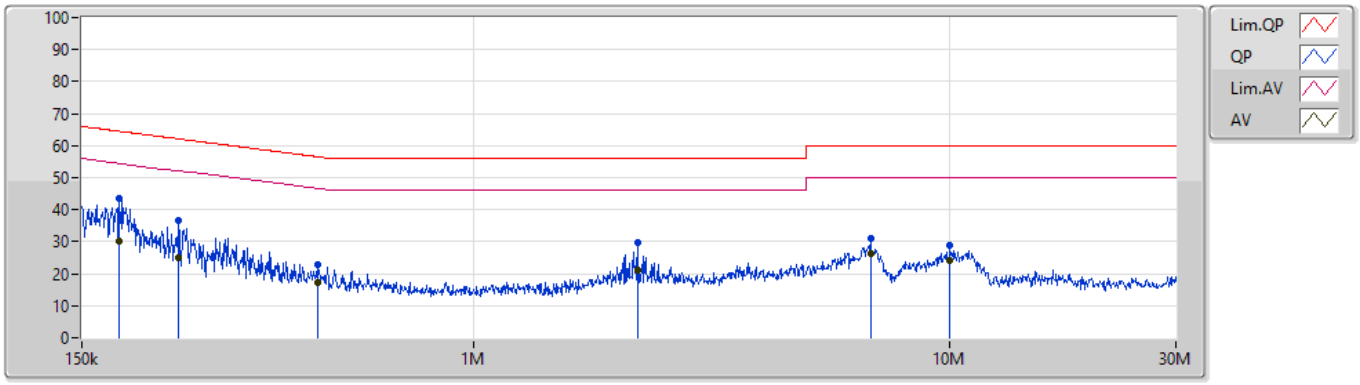
19/06/2020



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)
QP	168.41k	42.51	65.04	-22.53	19.64	Line	-	22.87	9.66	0.11
AV	168.41k	31.25	55.04	-23.79	19.64	Line	-	11.61	9.66	0.11
QP	240.253k	35.37	62.08	-26.71	19.64	Line	-	15.73	9.65	0.12
AV	240.253k	26.90	52.08	-25.18	19.64	Line	-	7.26	9.65	0.12
QP	458.702k	30.03	56.71	-26.68	19.64	Line	-	10.39	9.64	0.13
AV	458.702k	26.09	46.71	-20.62	19.64	Line	"Worst"	6.45	9.64	0.13
QP	3.296M	21.58	56.00	-34.42	19.72	Line	-	1.86	9.66	0.18
AV	3.296M	17.60	46.00	-28.40	19.72	Line	-	-2.12	9.66	0.18
QP	6.789M	29.65	60.00	-30.35	19.79	Line	-	9.86	9.68	0.23
AV	6.789M	24.94	50.00	-25.06	19.79	Line	-	5.15	9.68	0.23
QP	11.093M	30.40	60.00	-29.60	19.84	Line	-	10.56	9.68	0.28
AV	11.093M	25.01	50.00	-24.99	19.84	Line	-	5.17	9.68	0.28

Conducted Emissions at Powerline_Mode 3

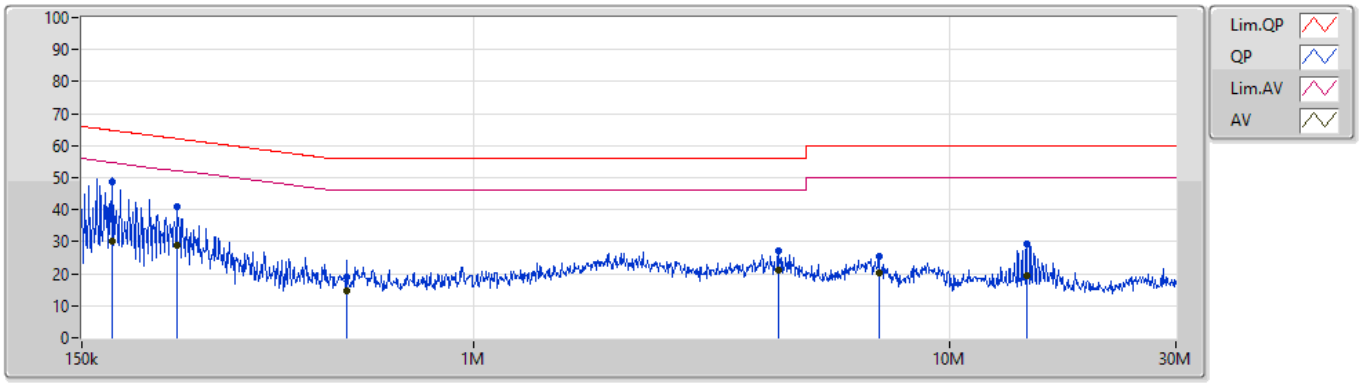
19/06/2020



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)
QP	180.236k	43.73	64.47	-20.74	19.62	Neutral	"Worst"	24.11	9.64	0.11
AV	180.236k	30.28	54.47	-24.19	19.62	Neutral	-	10.66	9.64	0.11
QP	239.296k	36.80	62.12	-25.32	19.63	Neutral	-	17.17	9.64	0.12
AV	239.296k	24.92	52.12	-27.20	19.63	Neutral	-	5.29	9.64	0.12
QP	471.701k	22.79	56.48	-33.69	19.63	Neutral	-	3.16	9.63	0.13
AV	471.701k	17.39	46.48	-29.09	19.63	Neutral	-	-2.24	9.63	0.13
QP	2.211M	29.92	56.00	-26.08	19.67	Neutral	-	10.25	9.65	0.15
AV	2.211M	21.33	46.00	-24.67	19.67	Neutral	-	1.66	9.65	0.15
QP	6.843M	30.90	60.00	-29.10	19.79	Neutral	-	11.11	9.68	0.23
AV	6.843M	26.14	50.00	-23.86	19.79	Neutral	-	6.35	9.68	0.23
QP	10.039M	29.09	60.00	-30.91	19.85	Neutral	-	9.24	9.70	0.27
AV	10.039M	24.30	50.00	-25.70	19.85	Neutral	-	4.45	9.70	0.27

Conducted Emissions at Powerline_Mode 4

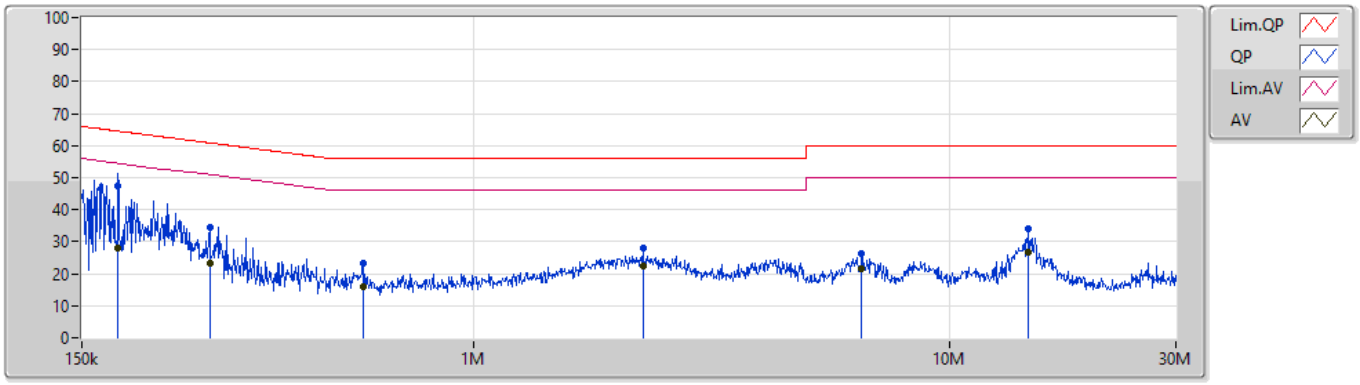
19/06/2020



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)
QP	173.876k	48.86	64.78	-15.92	19.63	Line	"Worst"	29.23	9.65	0.11
AV	173.876k	30.11	54.78	-24.67	19.63	Line	-	10.48	9.65	0.11
QP	238.343k	40.78	62.16	-21.38	19.64	Line	-	21.14	9.65	0.12
AV	238.343k	28.71	52.16	-23.45	19.64	Line	-	9.07	9.65	0.12
QP	540.273k	18.98	56.00	-37.02	19.64	Line	-	-0.66	9.64	0.13
AV	540.273k	14.57	46.00	-31.43	19.64	Line	-	-5.07	9.64	0.13
QP	4.376M	27.05	56.00	-28.95	19.73	Line	-	7.32	9.66	0.19
AV	4.376M	20.96	46.00	-25.04	19.73	Line	-	1.23	9.66	0.19
QP	7.122M	25.24	60.00	-34.76	19.80	Line	-	5.44	9.68	0.24
AV	7.122M	20.08	50.00	-29.92	19.80	Line	-	0.28	9.68	0.24
QP	14.552M	29.25	60.00	-30.75	19.85	Line	-	9.40	9.66	0.31
AV	14.552M	19.50	50.00	-30.50	19.85	Line	-	-0.35	9.66	0.31

Conducted Emissions at Powerline_Mode 4

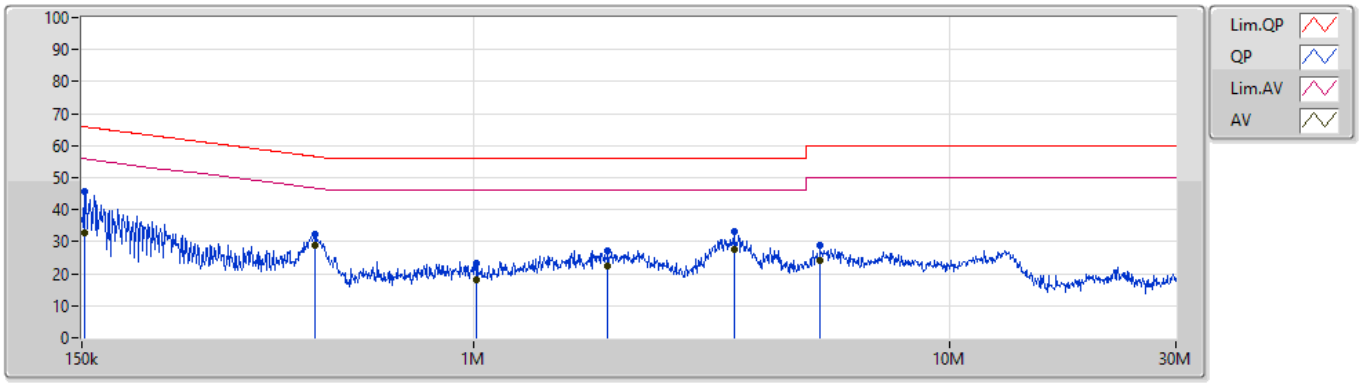
19/06/2020



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)
QP	178.803k	47.52	64.55	-17.03	19.62	Neutral	"Worst"	27.90	9.64	0.11
AV	178.803k	28.19	54.55	-26.36	19.62	Neutral	-	8.57	9.64	0.11
QP	278.495k	34.34	60.86	-26.52	19.63	Neutral	-	14.71	9.64	0.12
AV	278.495k	23.14	50.86	-27.72	19.63	Neutral	-	3.51	9.64	0.12
QP	587.518k	23.17	56.00	-32.83	19.63	Neutral	-	3.54	9.63	0.13
AV	587.518k	15.80	46.00	-30.20	19.63	Neutral	-	-3.83	9.63	0.13
QP	2.274M	27.83	56.00	-28.17	19.68	Neutral	-	8.15	9.65	0.16
AV	2.274M	22.62	46.00	-23.38	19.68	Neutral	-	2.94	9.65	0.16
QP	6.549M	26.23	60.00	-33.77	19.79	Neutral	-	6.44	9.68	0.23
AV	6.549M	21.72	50.00	-28.28	19.79	Neutral	-	1.93	9.68	0.23
QP	14.669M	33.90	60.00	-26.10	19.90	Neutral	-	14.00	9.71	0.31
AV	14.669M	26.76	50.00	-23.24	19.90	Neutral	-	6.86	9.71	0.31

Conducted Emissions at Powerline_Mode 5

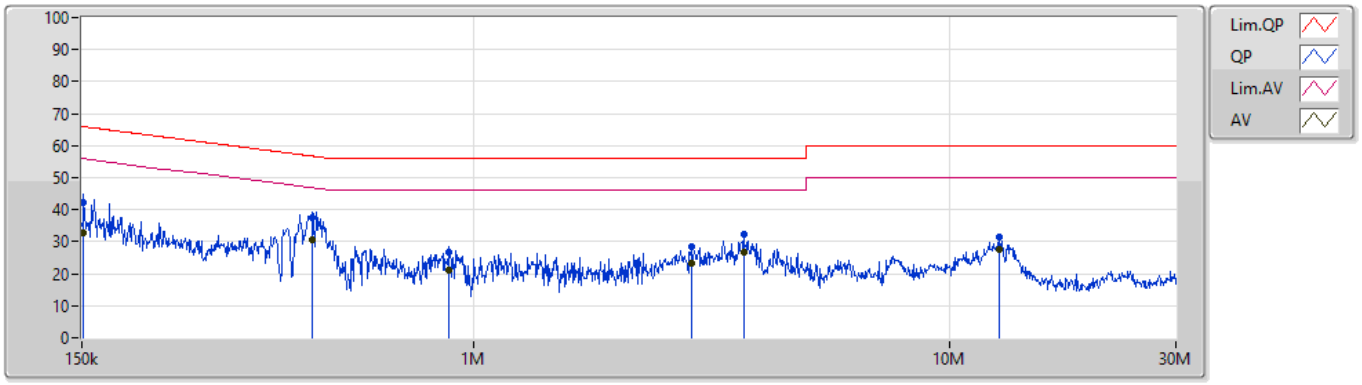
10/09/2020



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	152.414k	45.71	65.87	-20.16	19.54	Line	-	26.17	9.66	0.01	9.87
AV	152.414k	32.69	55.87	-23.18	19.54	Line	-	13.15	9.66	0.01	9.87
QP	464.229k	32.54	56.61	-24.07	19.53	Line	-	13.01	9.64	0.02	9.87
AV	464.229k	28.77	46.61	-17.84	19.53	Line	"Worst"	9.24	9.64	0.02	9.87
QP	1.011M	23.18	56.00	-32.82	19.57	Line	-	3.61	9.64	0.05	9.88
AV	1.011M	17.99	46.00	-28.01	19.57	Line	-	-1.58	9.64	0.05	9.88
QP	1.915M	27.31	56.00	-28.69	19.60	Line	-	7.71	9.65	0.08	9.87
AV	1.915M	22.41	46.00	-23.59	19.60	Line	-	2.81	9.65	0.08	9.87
QP	3.527M	33.02	56.00	-22.98	19.65	Line	-	13.37	9.66	0.11	9.88
AV	3.527M	27.38	46.00	-18.62	19.65	Line	-	7.73	9.66	0.11	9.88
QP	5.364M	28.99	60.00	-31.01	19.70	Line	-	9.29	9.67	0.15	9.88
AV	5.364M	24.11	50.00	-25.89	19.70	Line	-	4.41	9.67	0.15	9.88

Conducted Emissions at Powerline_Mode 5

10/09/2020



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	151.202k	42.27	65.92	-23.65	19.53	Neutral	-	22.74	9.65	0.01	9.87
AV	151.202k	32.67	55.92	-23.25	19.53	Neutral	-	13.14	9.65	0.01	9.87
QP	458.702k	37.52	56.71	-19.19	19.52	Neutral	-	18.00	9.63	0.02	9.87
AV	458.702k	30.53	46.71	-16.18	19.52	Neutral	"Worst"	11.01	9.63	0.02	9.87
QP	889.871k	26.86	56.00	-29.14	19.55	Neutral	-	7.31	9.63	0.05	9.87
AV	889.871k	21.14	46.00	-24.86	19.55	Neutral	-	1.59	9.63	0.05	9.87
QP	2.866M	28.49	56.00	-27.51	19.64	Neutral	-	8.85	9.66	0.10	9.88
AV	2.866M	23.07	46.00	-22.93	19.64	Neutral	-	3.43	9.66	0.10	9.88
QP	3.701M	32.36	56.00	-23.64	19.66	Neutral	-	12.70	9.66	0.12	9.88
AV	3.701M	26.56	46.00	-19.44	19.66	Neutral	-	6.90	9.66	0.12	9.88
QP	12.756M	31.61	60.00	-28.39	19.82	Neutral	-	11.79	9.71	0.23	9.88
AV	12.756M	27.38	50.00	-22.62	19.82	Neutral	-	7.56	9.71	0.23	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)	881.25k	852.574k	853KF1D	880k	849.575k
BT-EDR(2Mbps)	1.255M	1.177M	1M18G1D	1.253M	1.175M
BT-EDR(3Mbps)	1.261M	1.188M	1M19G1D	1.25M	1.185M

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

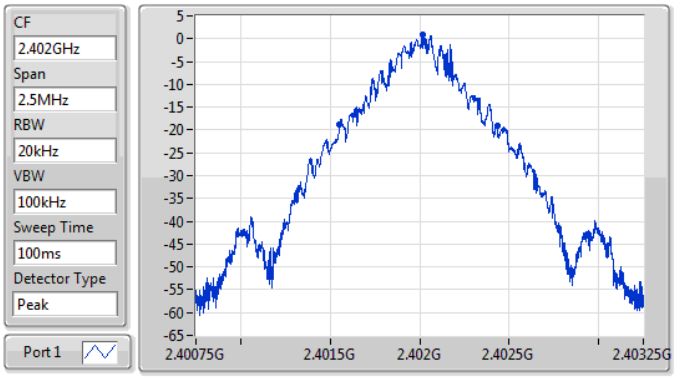
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	Inf	881.25k	849.575k
2440MHz	Pass	Inf	880k	849.575k
2480MHz	Pass	Inf	881.25k	852.574k
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	Inf	1.255M	1.175M
2440MHz	Pass	Inf	1.255M	1.177M
2480MHz	Pass	Inf	1.253M	1.176M
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	Inf	1.25M	1.185M
2440MHz	Pass	Inf	1.261M	1.186M
2480MHz	Pass	Inf	1.251M	1.188M

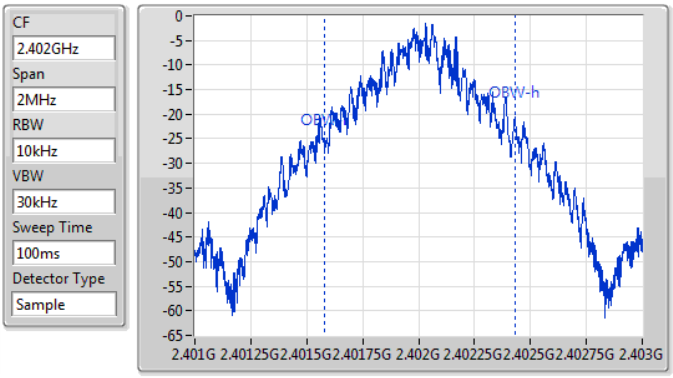
Port X-N dB = Port **X** 20dB down bandwidth; **Port X-OBW** = Port **X** 99% occupied bandwidth;

BT-BR(1Mbps) EBW

2402MHz

16/06/2020



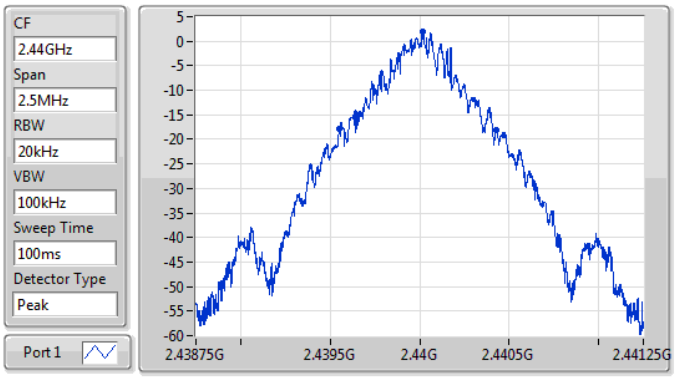


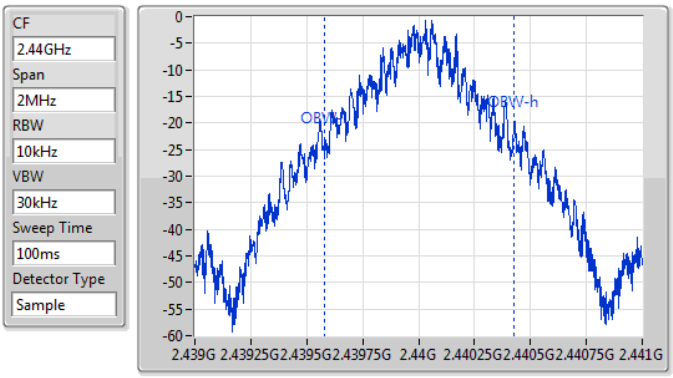
20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
881.25k	2.401551G	2.402433G	849.575k	2.40158G	2.40243G	Inf	1

BT-BR(1Mbps) EBW

2440MHz

16/06/2020



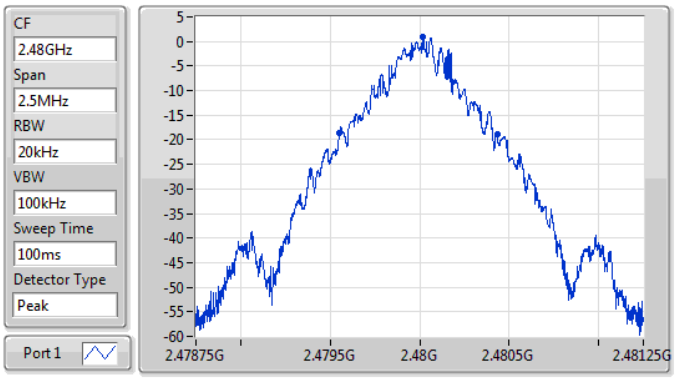


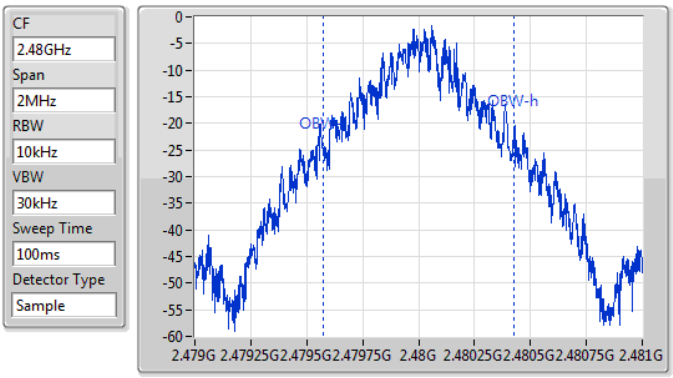
20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
880k	2.439551G	2.440431G	849.575k	2.439577G	2.440427G	Inf	1

BT-BR(1Mbps) EBW

2480MHz

16/06/2020



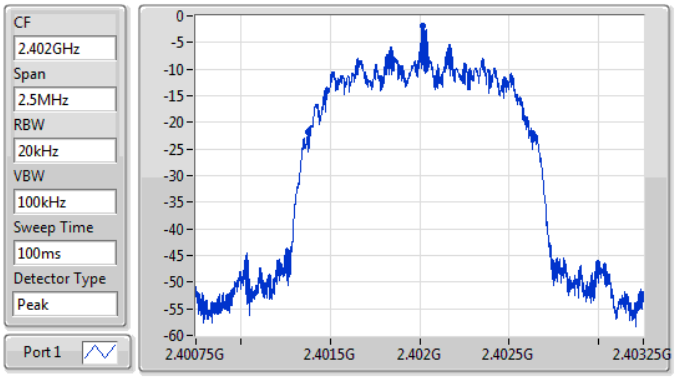


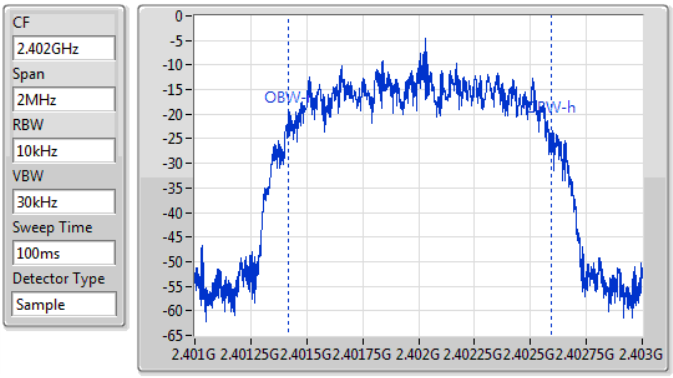
20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
881.25k	2.479551G	2.480433G	852.574k	2.479574G	2.480427G	Inf	1

BT-EDR(2Mbps) EBW

2402MHz

16/06/2020



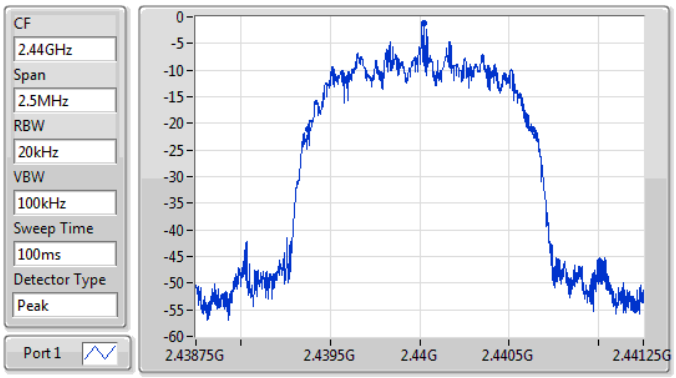


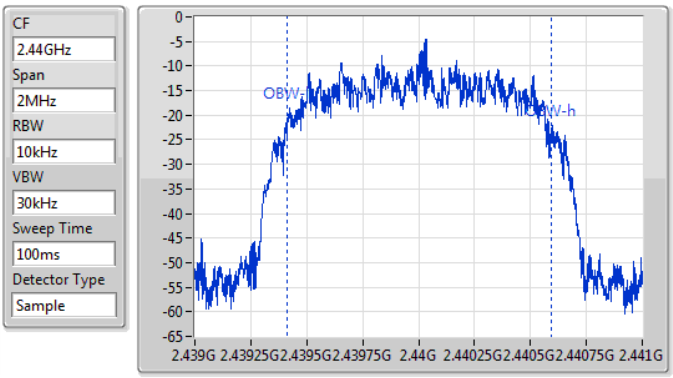
20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.255M	2.401376G	2.402631G	1.175M	2.401417G	2.402593G	Inf	1

BT-EDR(2Mbps) EBW

2440MHz

16/06/2020



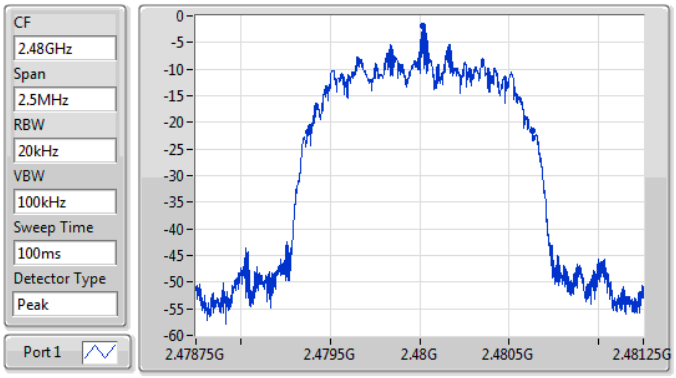


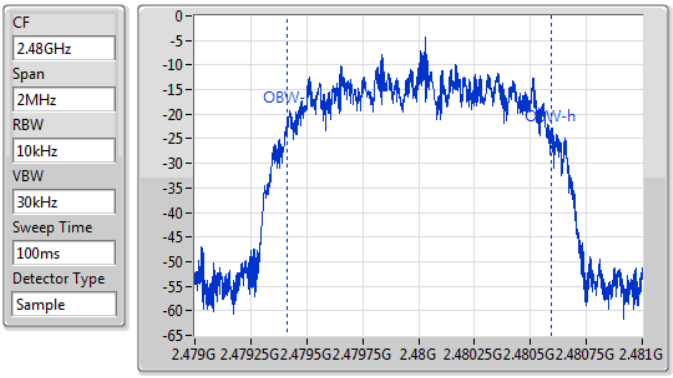
20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.255M	2.439375G	2.44063G	1.177M	2.439414G	2.440592G	Inf	1

BT-EDR(2Mbps) EBW

2480MHz

16/06/2020



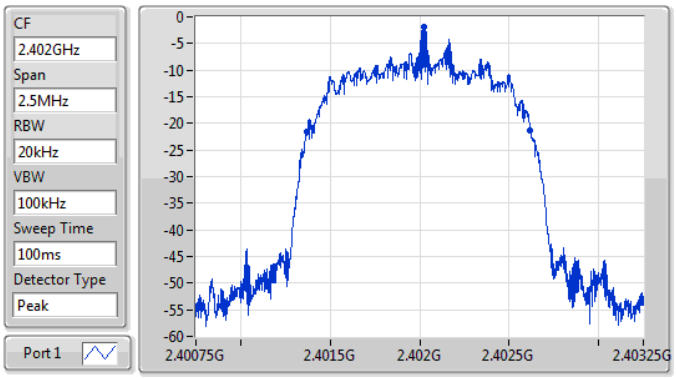


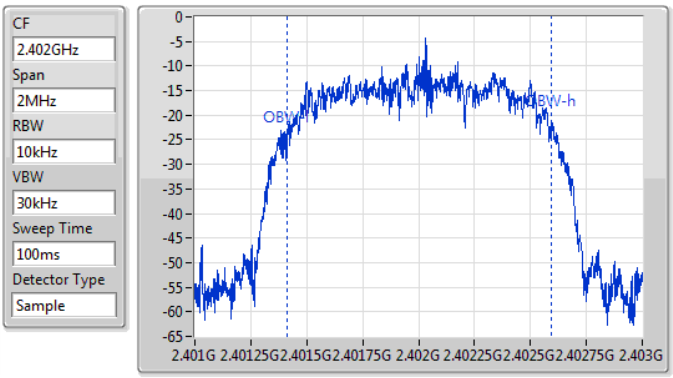
20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.253M	2.479375G	2.480628G	1.176M	2.479414G	2.480591G	Inf	1

BT-EDR(3Mbps) EBW

2402MHz

16/06/2020



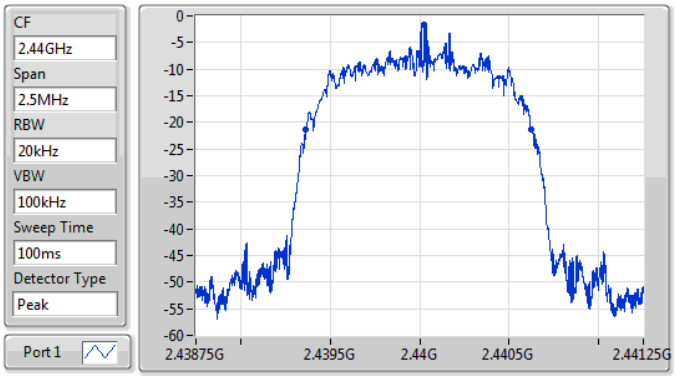


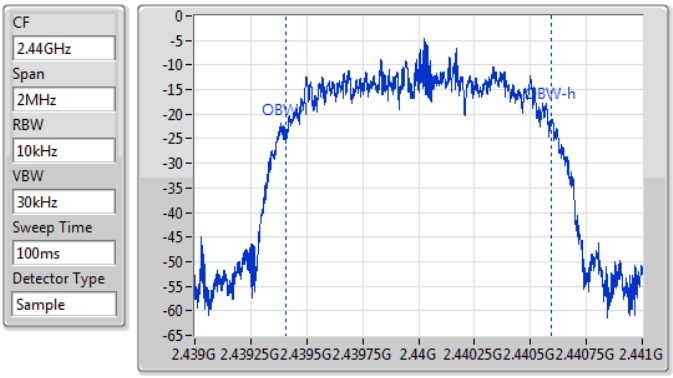
20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.25M	2.401369G	2.402619G	1.185M	2.40141G	2.402596G	Inf	1

BT-EDR(3Mbps) EBW

2440MHz

16/06/2020



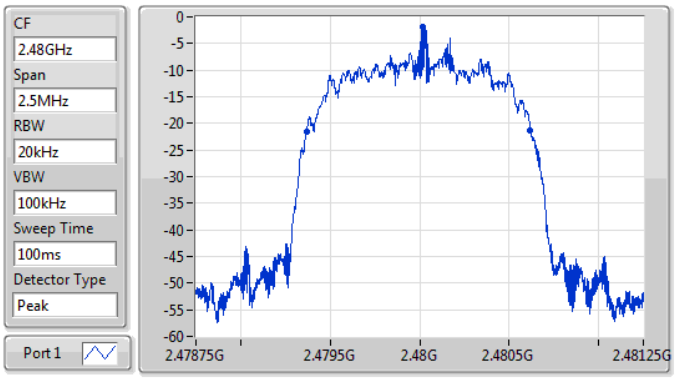


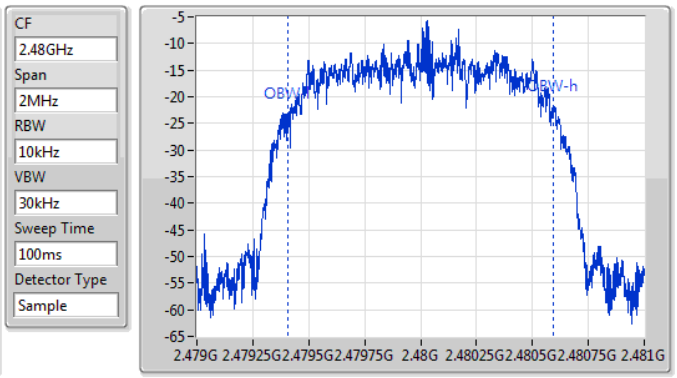
20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.261M	2.439364G	2.440625G	1.186M	2.439407G	2.440594G	Inf	1

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

2480MHz

16/06/2020





20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.251M	2.479368G	2.480619G	1.188M	2.479406G	2.480595G	Inf	1

Summary

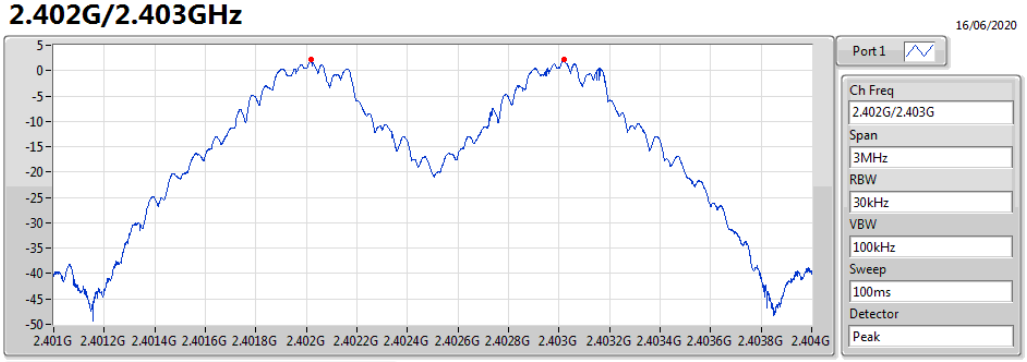
Mode	Max-Space (Hz)	Min-Space (Hz)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	1.002M	1.0005M
BT-EDR(2Mbps)	1.0005M	999k
BT-EDR(3Mbps)	1.0005M	1.0005M

Result

Mode	Result	Fl (Hz)	Fh (Hz)	Ch.Space (Hz)	Limit (Hz)
BT-BR(1Mbps)	-	-	-	-	-
2402MHz	Pass	2.402019G	2.403019G	1.0005M	586.9125k
2440MHz	Pass	2.440019G	2.441021G	1.002M	586.08k
2480MHz	Pass	2.479017G	2.480019G	1.002M	586.9125k
BT-EDR(2Mbps)	-	-	-	-	-
2402MHz	Pass	2.40202G	2.403021G	1.0005M	835.83k
2440MHz	Pass	2.440019G	2.441018G	999k	835.83k
2480MHz	Pass	2.479019G	2.480019G	1.0005M	834.498k
BT-EDR(3Mbps)	-	-	-	-	-
2402MHz	Pass	2.402017G	2.403018G	1.0005M	832.5k
2440MHz	Pass	2.440017G	2.441018G	1.0005M	839.826k
2480MHz	Pass	2.479019G	2.480019G	1.0005M	833.166k

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

2.402G/2.403GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.402019G	2.403019G	1.0005M	586.9125k

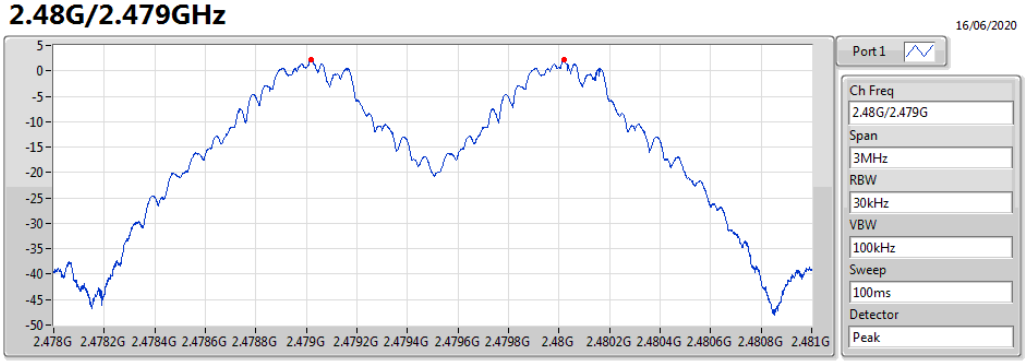
BT-BR(1Mbps) **Channel Separation**

2.44G/2.441GHz

Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.440019G	2.441021G	1.002M	586.08k

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

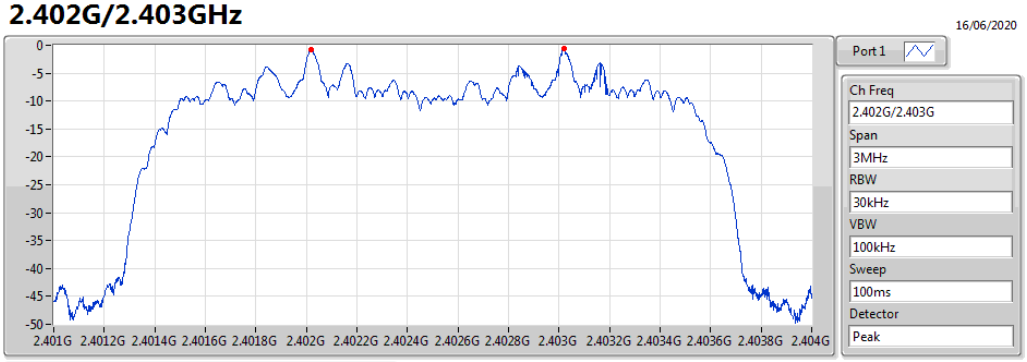
2.48G/2.479GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.479017G	2.480019G	1.002M	586.9125k

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

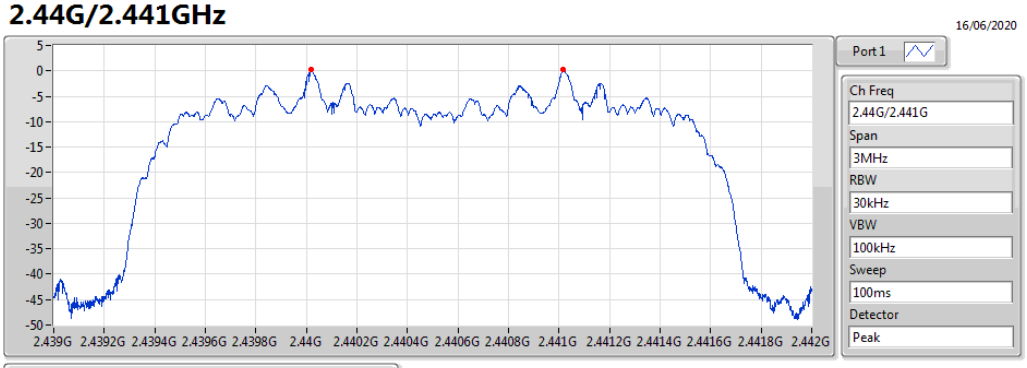
2.402G/2.403GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.40202G	2.403021G	1.0005M	835.83k

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

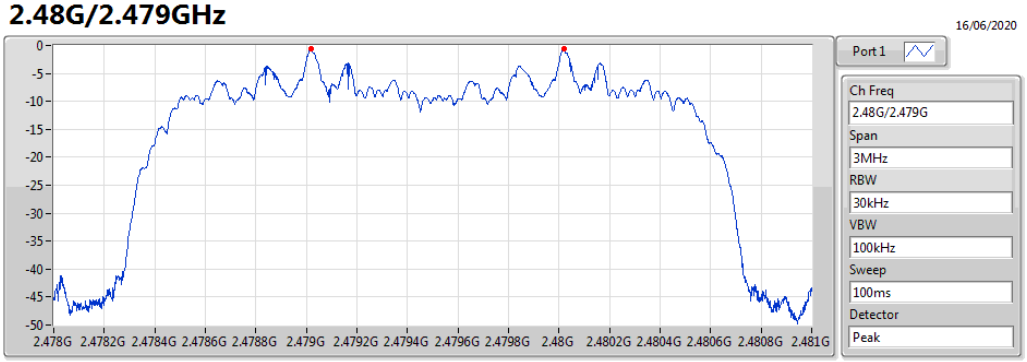
2.44G/2.441GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.440019G	2.441018G	999k	835.83k

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

2.48G/2.479GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.479019G	2.480019G	1.0005M	834.498k

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

2.402G/2.403GHz

Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.402017G	2.403018G	1.0005M	832.5k

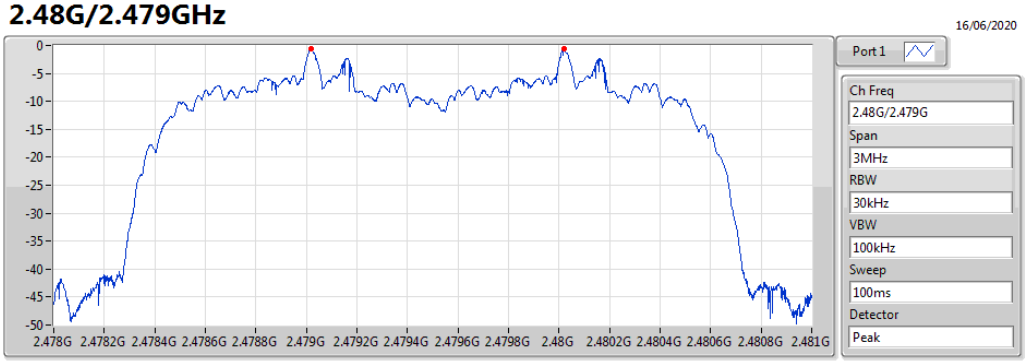
BT-EDR(3Mbps) **Channel Separation**

2.44G/2.441GHz

Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.440017G	2.441018G	1.0005M	839.826k

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

2.48G/2.479GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.479019G	2.480019G	1.0005M	833.166k

Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	5.20	0.00331
BT-EDR(2Mbps)	4.35	0.00272
BT-EDR(3Mbps)	4.79	0.00301

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	1.70	4.34	21.00
2440MHz	Pass	1.70	5.20	21.00
2480MHz	Pass	1.70	4.53	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	1.70	3.45	21.00
2440MHz	Pass	1.70	4.35	21.00
2480MHz	Pass	1.70	3.60	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	1.70	3.78	21.00
2440MHz	Pass	1.70	4.79	21.00
2480MHz	Pass	1.70	4.00	21.00

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

Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	4.83	0.00304
BT-EDR(2Mbps)	1.44	0.00139
BT-EDR(3Mbps)	1.41	0.00138

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	1.70	3.92	21.00
2440MHz	Pass	1.70	4.83	21.00
2480MHz	Pass	1.70	4.07	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	1.70	0.46	21.00
2440MHz	Pass	1.70	1.44	21.00
2480MHz	Pass	1.70	0.69	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	1.70	0.45	21.00
2440MHz	Pass	1.70	1.41	21.00
2480MHz	Pass	1.70	0.66	21.00

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

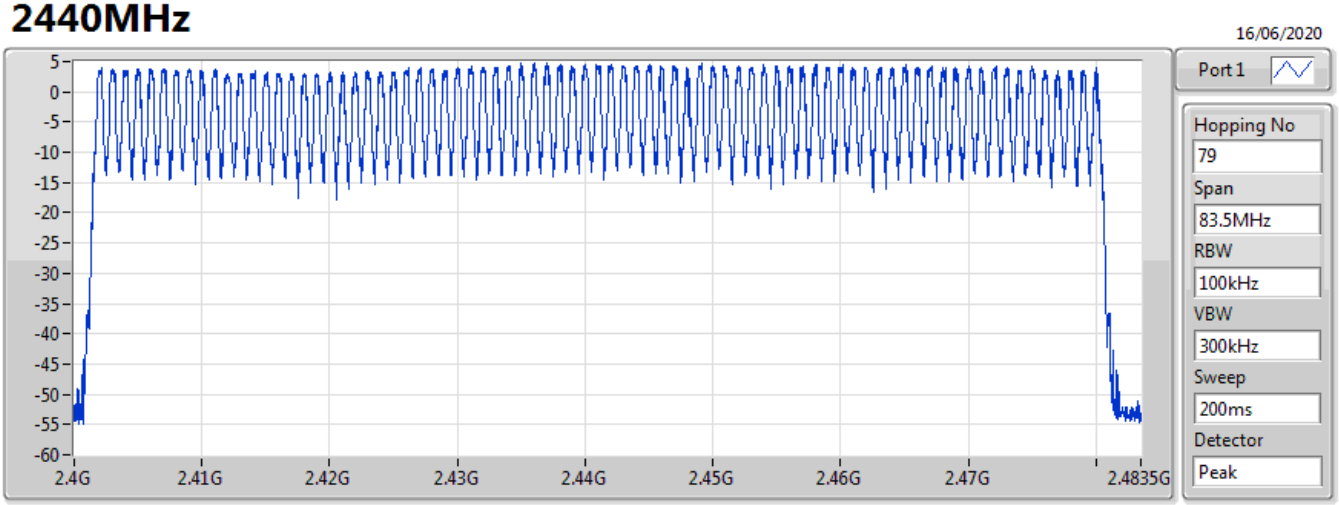
Summary

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

Result

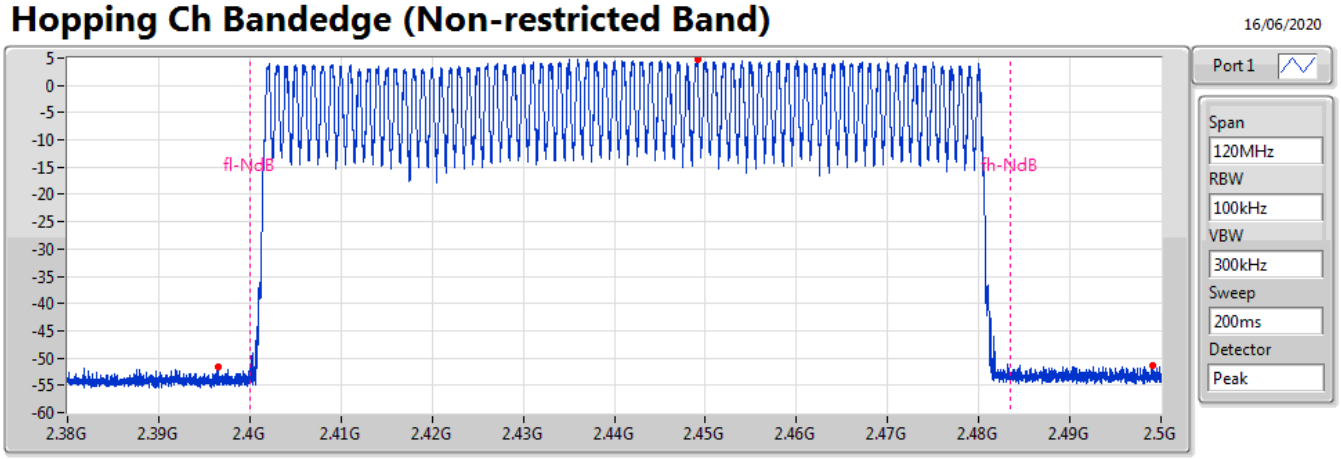
Mode	Result	Hopping No	Limit
BT-BR(1Mbps)	-	-	-
2440MHz	Pass	79	15
BT-EDR(2Mbps)	-	-	-
2440MHz	Pass	79	15
BT-EDR(3Mbps)	-	-	-
2440MHz	Pass	79	15

BT-BR(1Mbps) Hopping Ch
2440MHz



Hopping No	Limit
79	15

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

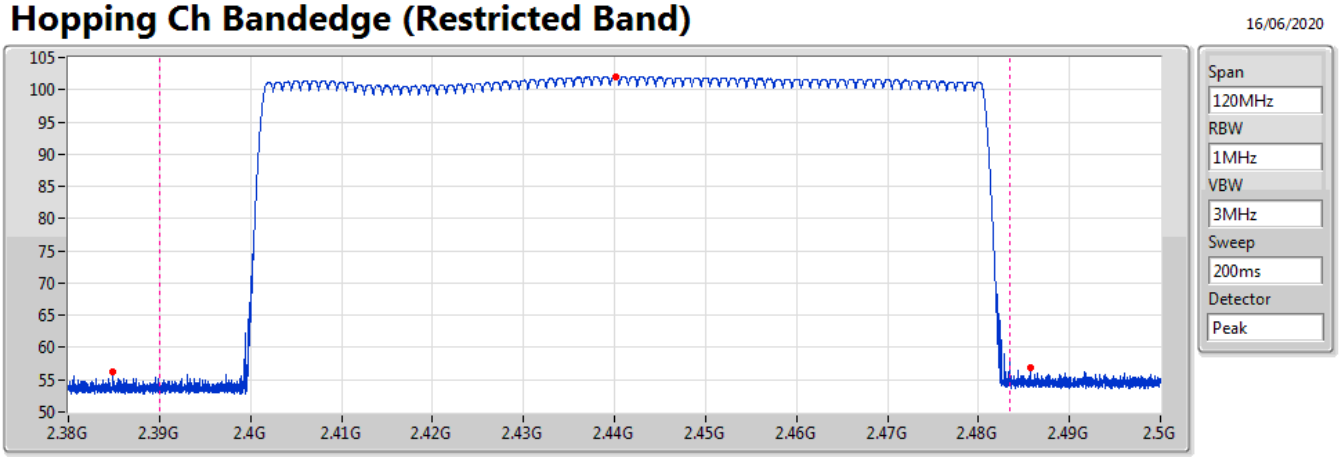


Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-15.24	2.449165G	4.76	2.39659G	-51.68	2.499025G	-51.34

BT-BR(1Mbps)

2440MHz

Hopping Ch Bandedge (Restricted Band)

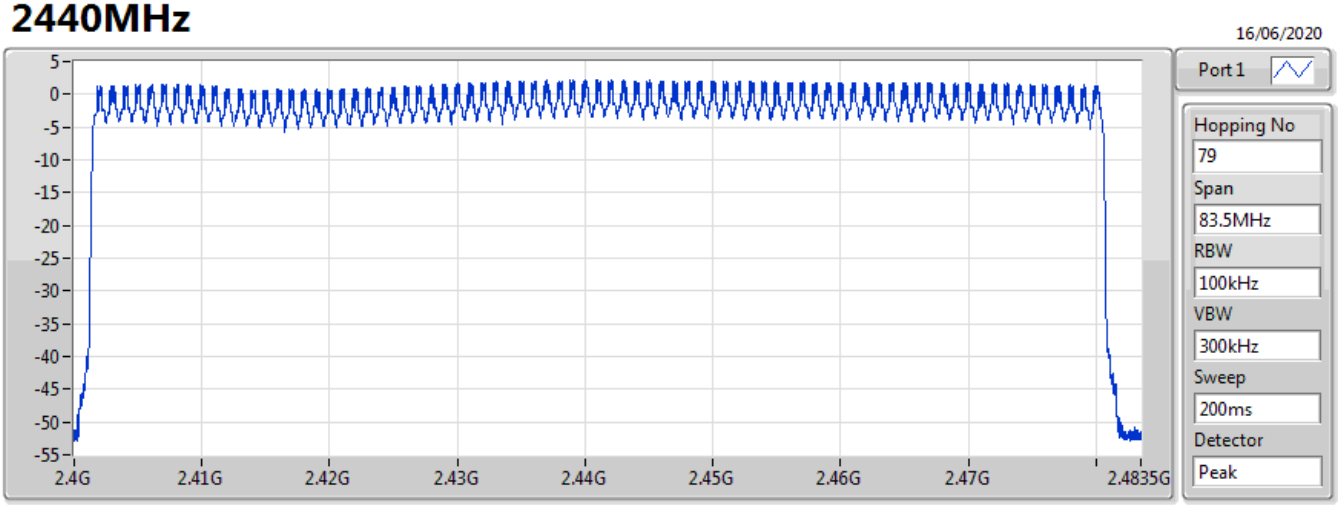


Ref(Hz)	Ref(dBuV/m)	BE-l(Hz)	PK(dBuV/m)	AV(dBuV/m)	BE-h(Hz)	PK(dBuV/m)	AV(dBuV/m)	LimPK(dBuV/	LimAV(dBuV/	Tx On(ms)	DCF(dB)
2.44009G	102	2.384845G	56.22	26.12	2.485675G	56.85	26.75	74	54	3.125	-30.1

BT-EDR(2Mbps)

Hopping Ch

2440MHz



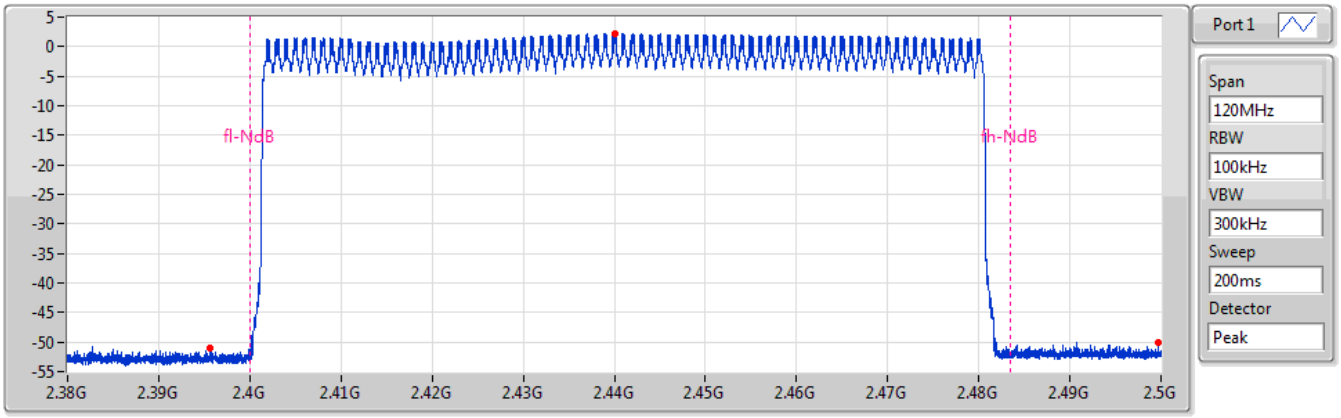
Hopping No	Limit
79	15

BT-EDR(2Mbps)

2440MHz

Hopping Ch Bandedge (Non-restricted Band)

16/06/2020



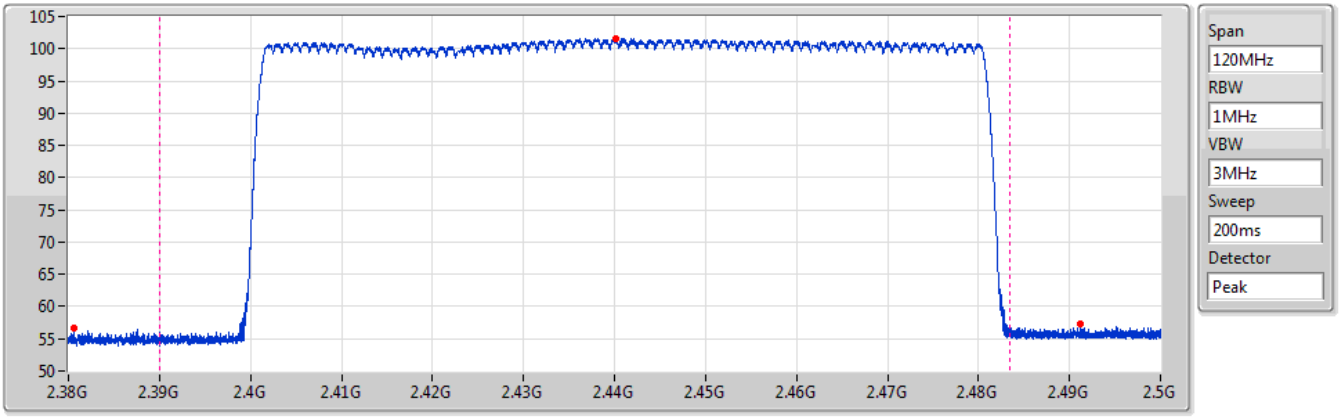
Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-17.8	2.440015G	2.2	2.39557G	-51.11	2.499715G	-50.02

BT-EDR(2Mbps)

2440MHz

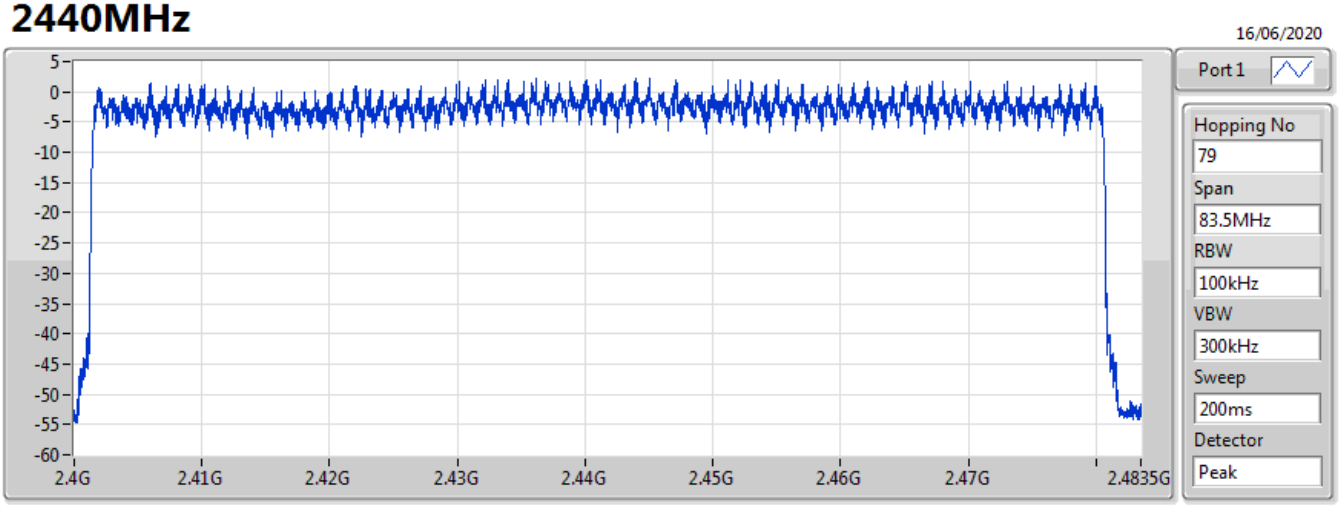
Hopping Ch Bandedge (Restricted Band)

16/06/2020



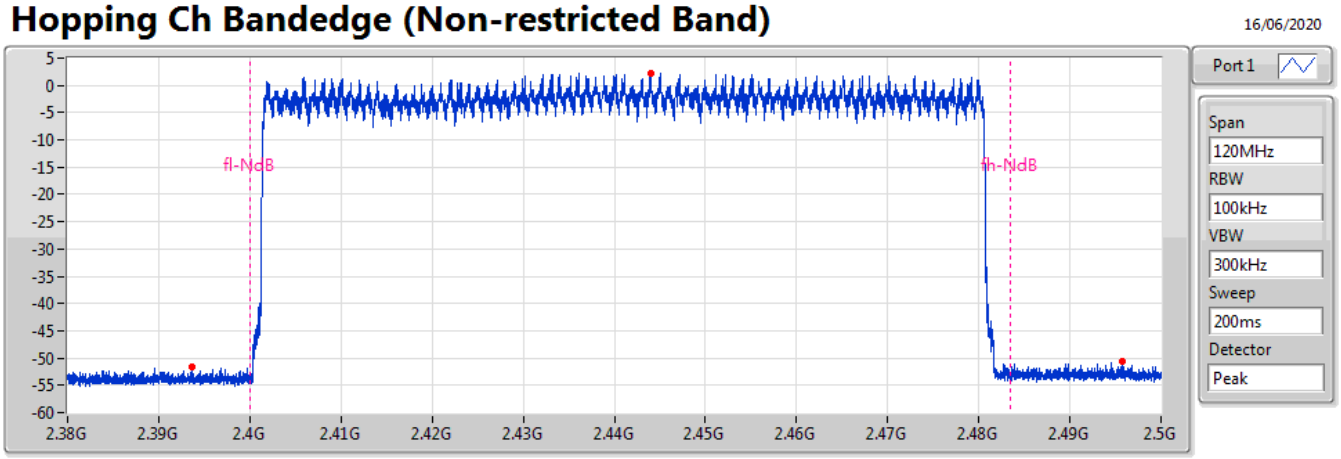
Ref(Hz)	Ref(dBuV/m)	BE-l(Hz)	PK(dBuV/m)	AV(dBuV/m)	BE-h(Hz)	PK(dBuV/m)	AV(dBuV/m)	LimPK(dBuV/	LimAV(dBuV/	Tx On(ms)	DCF(dB)
2.44018G	101.6	2.38066G	56.64	26.54	2.49121G	57.27	27.17	74	54	3.125	-30.1

BT-EDR(3Mbps) Hopping Ch
2440MHz



Hopping No	Limit
79	15

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



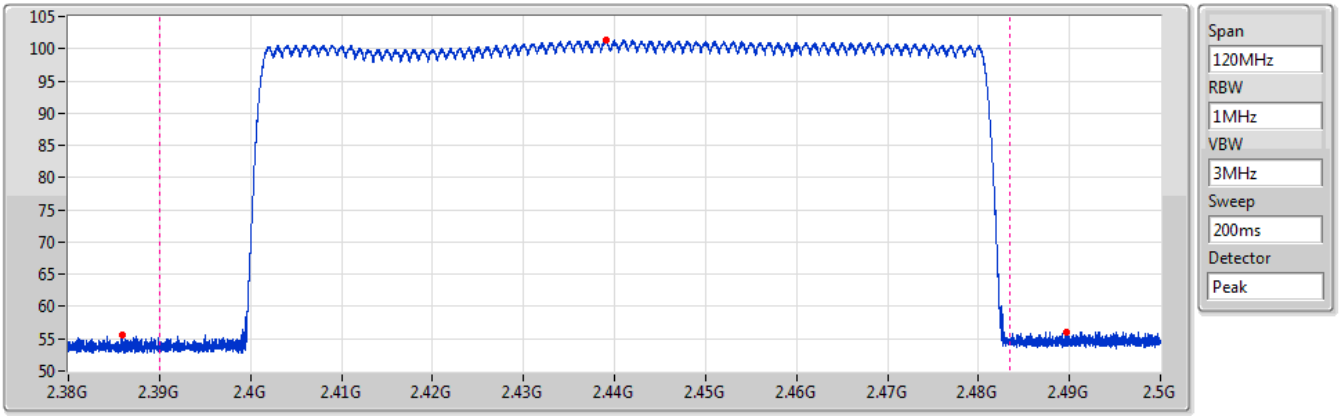
Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-17.83	2.444005G	2.17	2.39368G	-51.7	2.495725G	-50.73

BT-EDR(3Mbps)

2440MHz

Hopping Ch Bandedge (Restricted Band)

16/06/2020



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)
2.439025G	101.28	2.38591G	55.67	25.57	2.489725G	56.09	25.99	74	54	3.125	-30.1

Summary

Mode	Max-Dwell (s)
2.4-2.4835GHz	-
BT-BR(1Mbps)	307.94075m
BT-EDR(2Mbps)	254.0811m
BT-EDR(3Mbps)	309.1933m

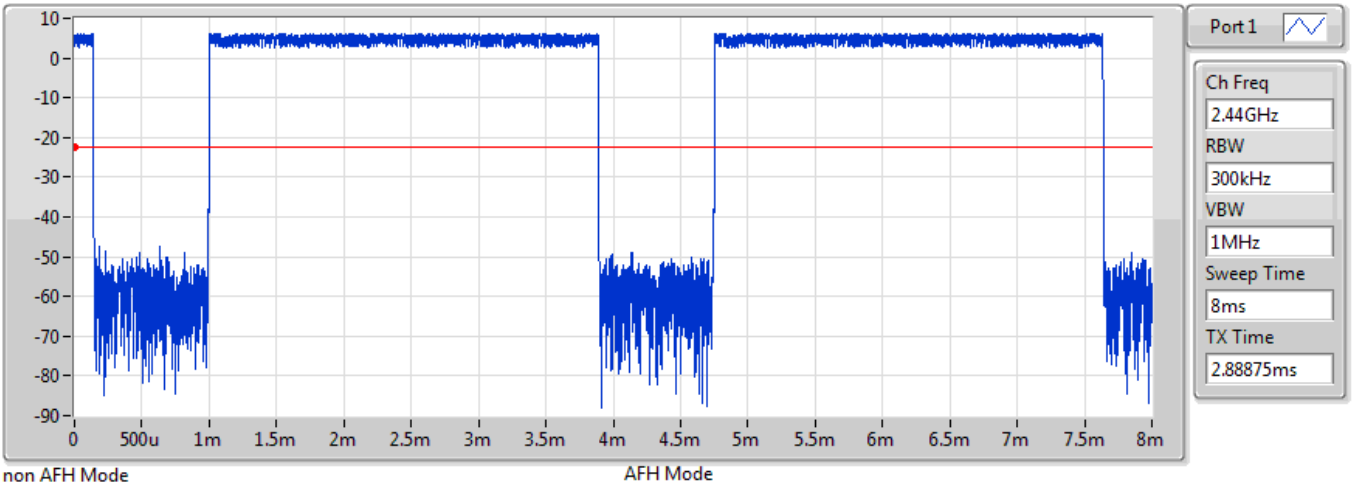
Result

Mode	Result	Period (s)	Dwell (s)	Limit (s)	Tx On (s)
BT-BR(1Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	307.94075m	400m	2.88875m
BT-EDR(2Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	254.0811m	400m	2.3835m
BT-EDR(3Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	309.1933m	400m	2.9005m

BT-BR(1Mbps) Dwell

2440MHz

16/06/2020



non AFH Mode

Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	307.94075m	400m	2.88875m

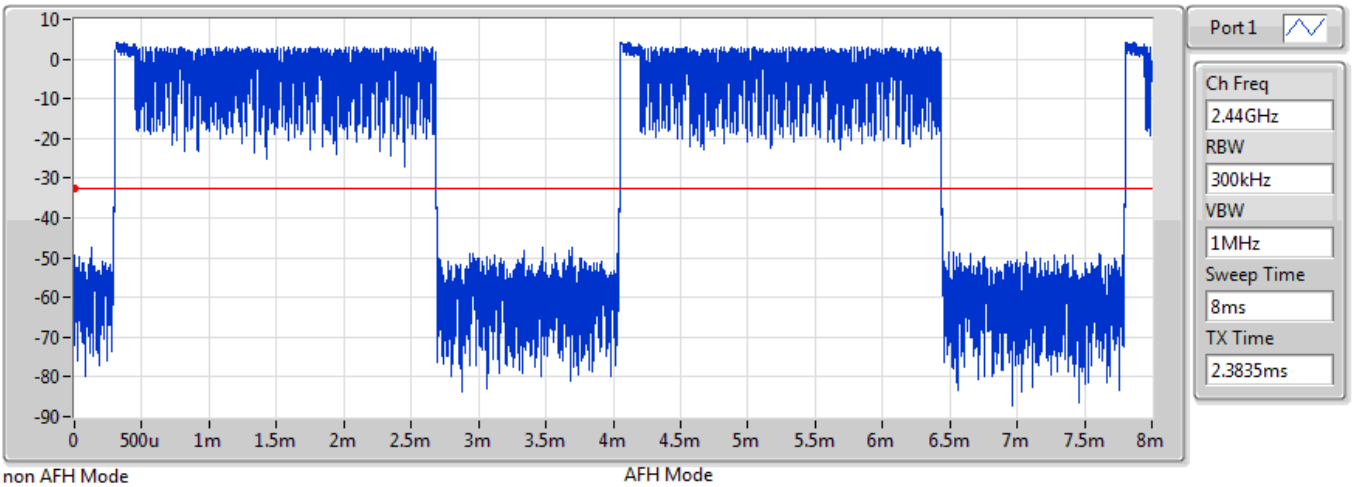
AFH Mode

Period(s)	Dwell(s)	Limit(s)	Tx On(s)
8	153.970375m	400m	2.88875m

BT-EDR(2Mbps) Dwell

2440MHz

16/06/2020



non AFH Mode

Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	254.0811m	400m	2.3835m

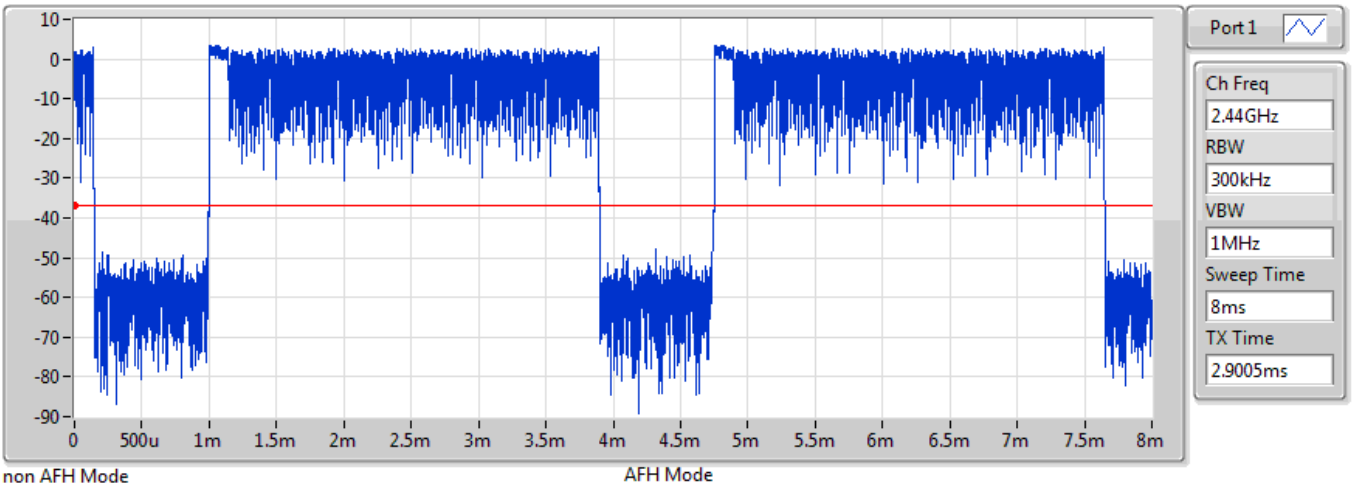
AFH Mode

Period(s)	Dwell(s)	Limit(s)	Tx On(s)
8	127.04055m	400m	2.3835m

BT-EDR(3Mbps) Dwell

2440MHz

16/06/2020



non AFH Mode

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

AFH Mode

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

Summary

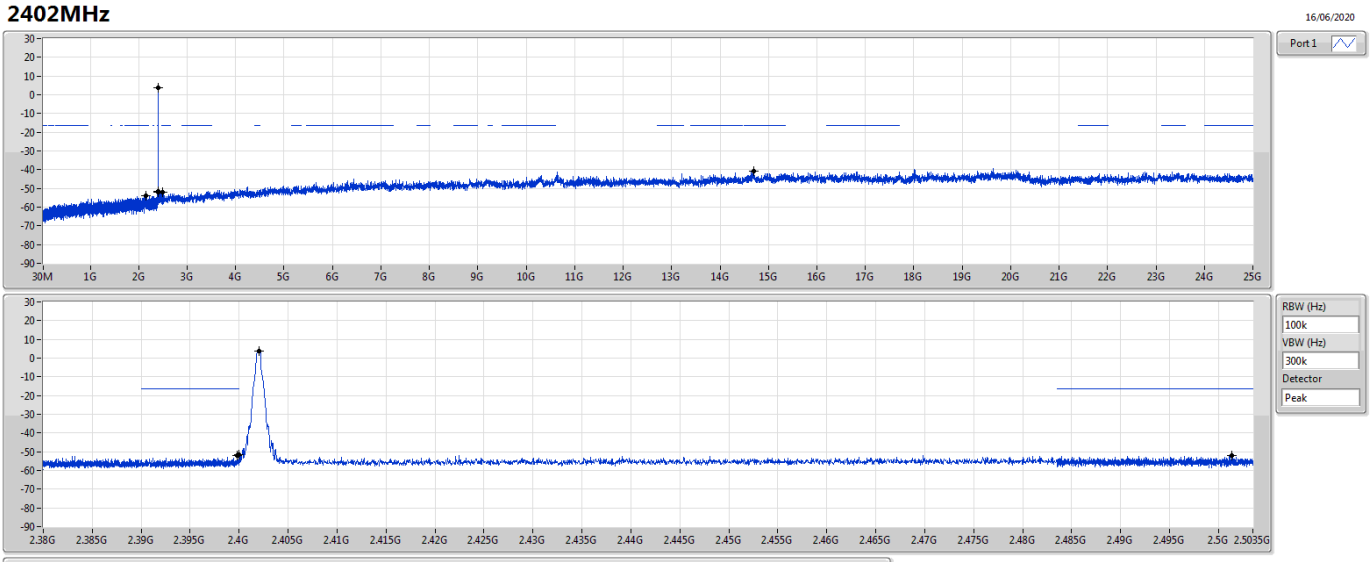
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BT-BR(1Mbps)	Pass	2.402G	3.74	-16.26	2.14412G	-54.08	2.39979G	-52.21	2.4G	-51.60	2.50135G	-52.22	14.70504G	-41.00	1
BT-EDR(2Mbps)	Pass	2.40209G	0.09	-19.91	2.30833G	-54.95	2.3985G	-52.93	2.4G	-52.86	2.48518G	-52.08	24.17888G	-40.51	1
BT-EDR(3Mbps)	Pass	2.40213G	1.03	-18.97	1.92616G	-54.16	2.393G	-52.51	2.4G	-53.77	2.48443G	-51.92	16.75503G	-40.62	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	2.402G	3.74	-16.26	2.14412G	-54.08	2.39979G	-52.21	2.4G	-51.60	2.50135G	-52.22	14.70504G	-41.00	1
2440MHz	Pass	2.44004G	4.36	-15.64	2.14089G	-54.31	2.3965G	-53.57	2.4835G	-55.51	2.48878G	-51.37	14.9525G	-40.93	1
2480MHz	Pass	2.48016G	4.08	-15.92	2.11004G	-54.29	2.39619G	-52.61	2.4835G	-53.85	2.4969G	-51.78	24.83128G	-40.44	1
BT-EDR(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.40209G	0.09	-19.91	2.30833G	-54.95	2.3985G	-52.93	2.4G	-52.86	2.48518G	-52.08	24.17888G	-40.51	1
2440MHz	Pass	2.44012G	0.88	-19.12	1.90559G	-54.00	2.39426G	-52.07	2.4835G	-54.15	2.48397G	-52.32	15.01155G	-41.36	1
2480MHz	Pass	2.47999G	0.66	-19.34	2.15293G	-54.17	2.39431G	-53.68	2.4835G	-54.67	2.50264G	-51.81	16.85627G	-40.82	1
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.40213G	1.03	-18.97	1.92616G	-54.16	2.393G	-52.51	2.4G	-53.77	2.48443G	-51.92	16.75503G	-40.62	1
2440MHz	Pass	2.43983G	1.26	-18.74	2.14294G	-53.31	2.39186G	-52.19	2.4G	-54.87	2.4866G	-52.14	16.36978G	-40.66	1
2480MHz	Pass	2.47987G	0.70	-19.30	2.17232G	-54.19	2.39421G	-53.60	2.4835G	-53.85	2.49611G	-52.48	24.08608G	-39.50	1

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

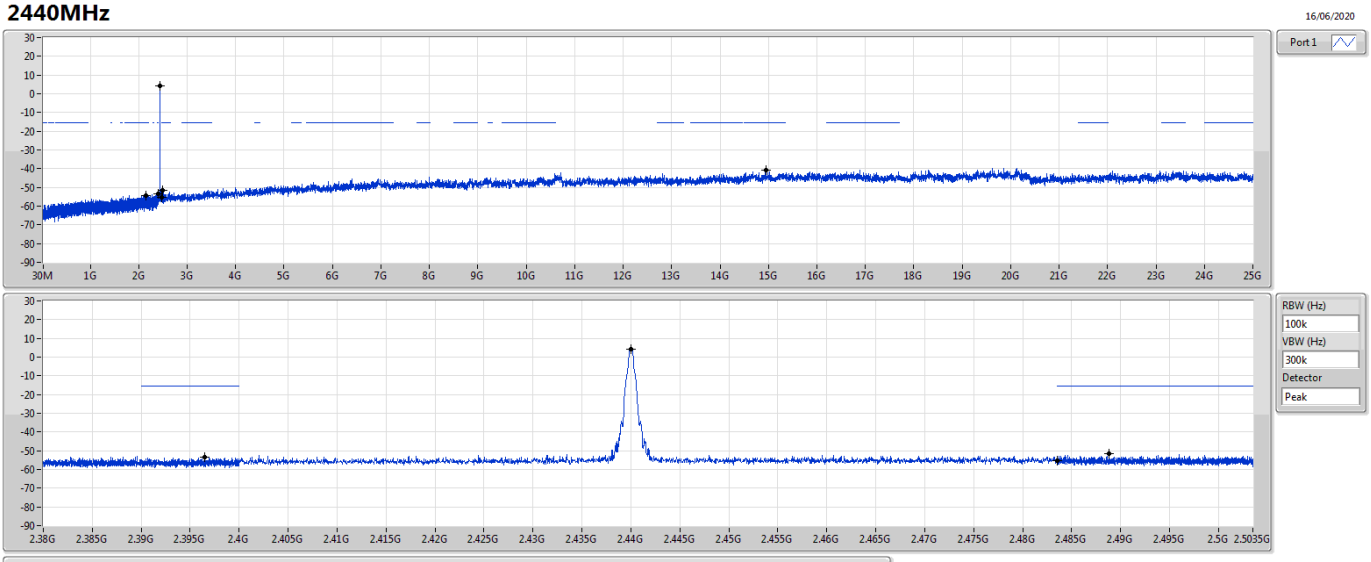
2402MHz



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
2.402G	3.74	-16.26	2.14412G	-54.08	2.39979G	-52.21	2.4G	-51.60	2.50135G	-52.22	14.70504G	-41.00	1

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

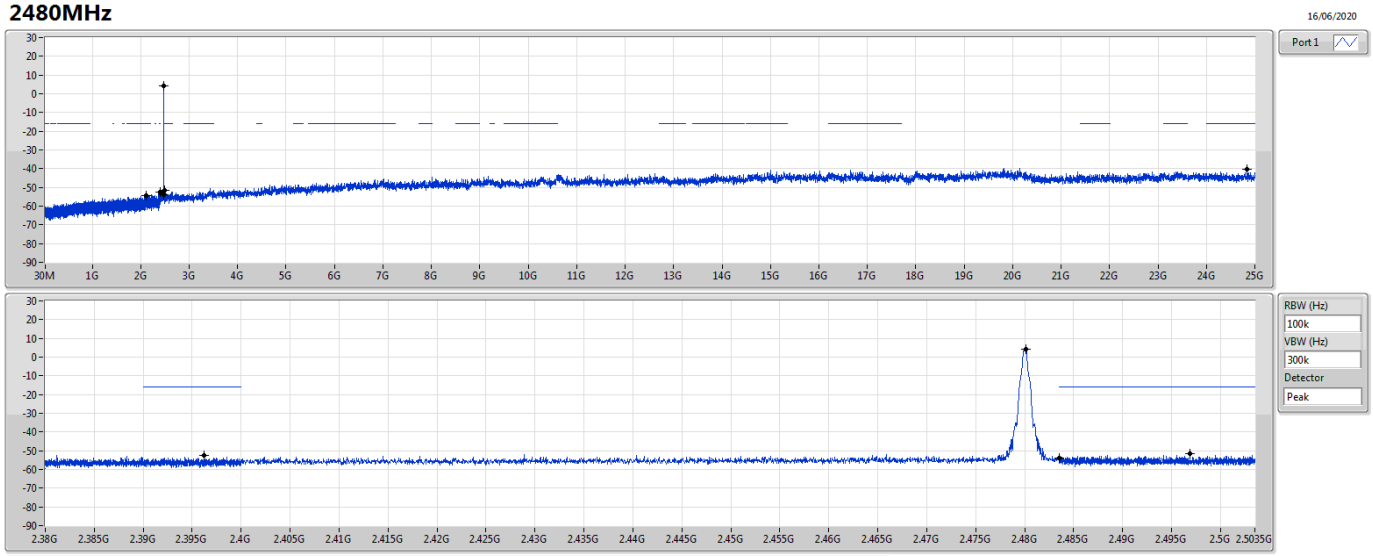
2440MHz



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
2.44004G	4.36	-15.64	2.14089G	-54.31	2.3965G	-53.57	2.4835G	-55.51	2.48878G	-51.37	14.9525G	-40.93	1

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

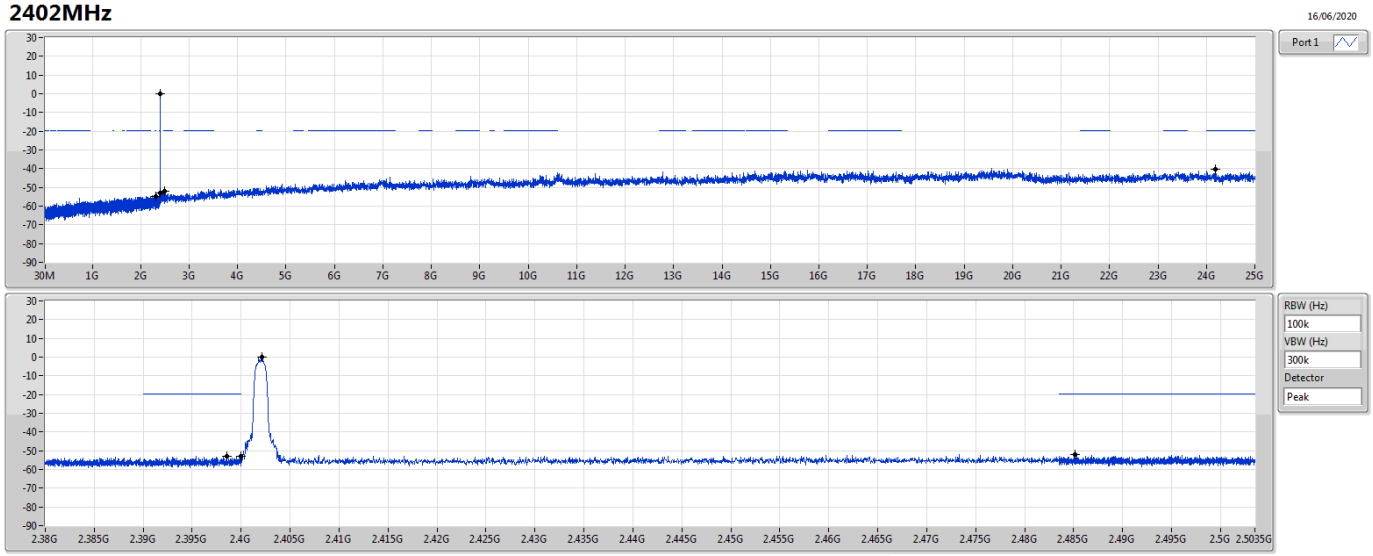
2480MHz



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	4.08	-15.92	2.11004G	-54.29	2.39619G	-52.61	2.4835G	-53.85	2.4969G	-51.78	24.83128G	-40.44	1

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

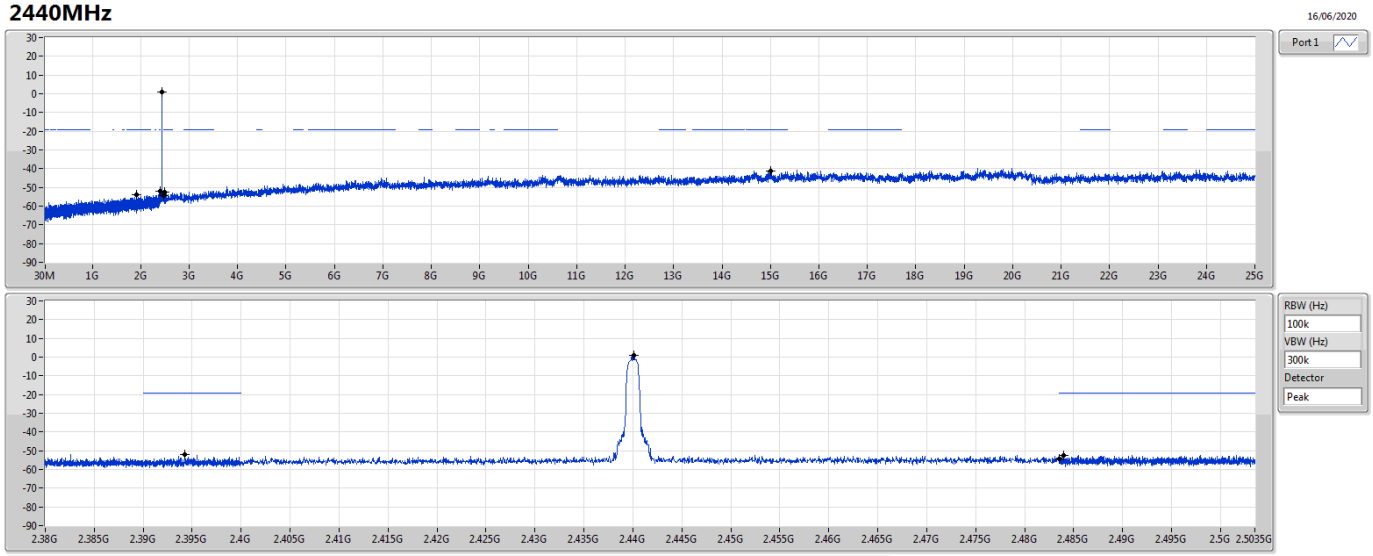
2402MHz



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
2.40209G	0.09	-19.91	2.30833G	-54.95	2.3985G	-52.93	2.4G	-52.86	2.48518G	-52.08	24.17888G	-40.51	1

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

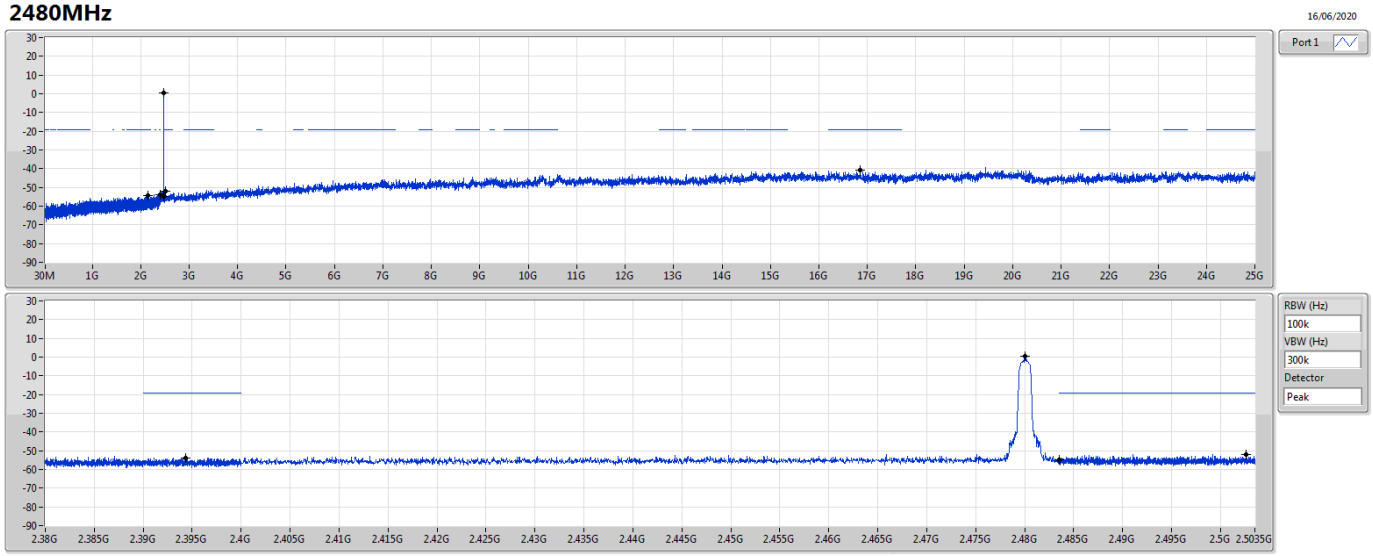
2440MHz



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
2.44012G	0.88	-19.12	1.90559G	-54.00	2.39426G	-52.07	2.4835G	-54.15	2.48397G	-52.32	15.01155G	-41.36	1

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

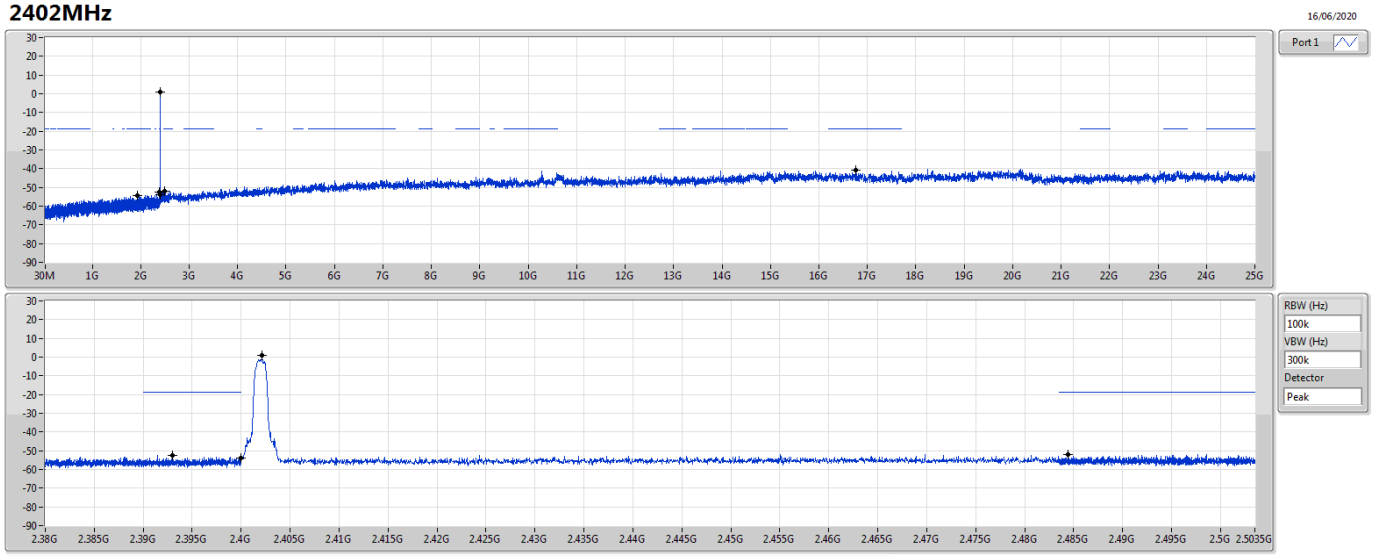
2480MHz



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
2.47999G	0.66	-19.34	2.15293G	-54.17	2.39431G	-53.68	2.4835G	-54.67	2.50264G	-51.81	16.85627G	-40.82	1

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

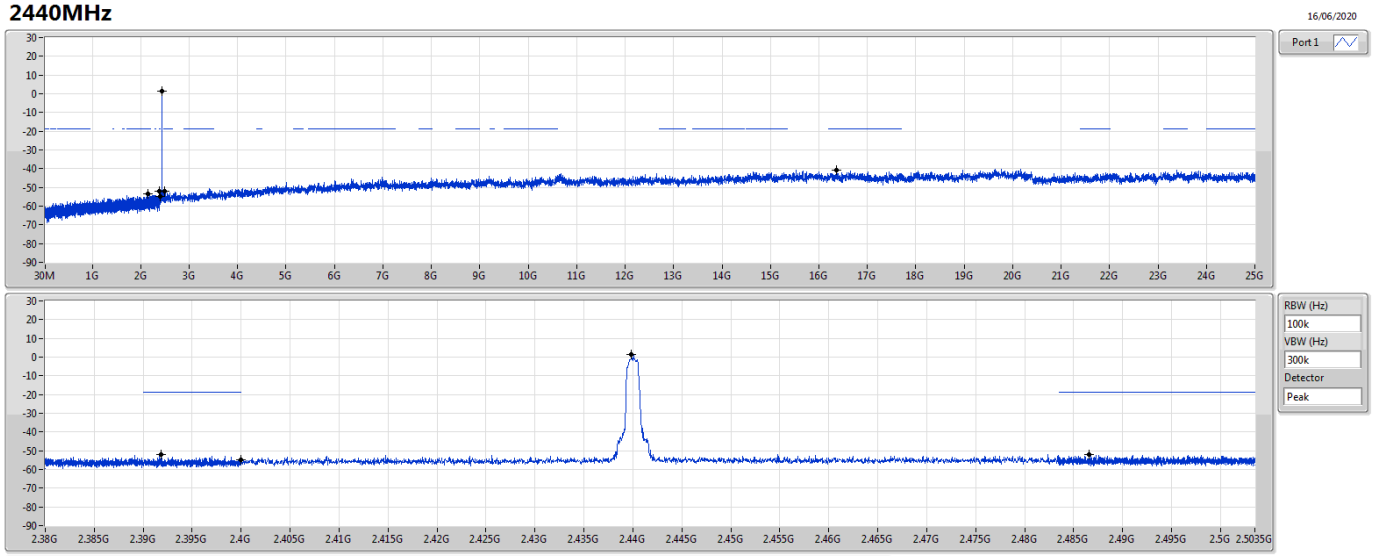
2402MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.40213G	1.03	-18.97	1.92616G	-54.16	2.393G	-52.51	2.4G	-53.77	2.48443G	-51.92	16.75503G	-40.62	1

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

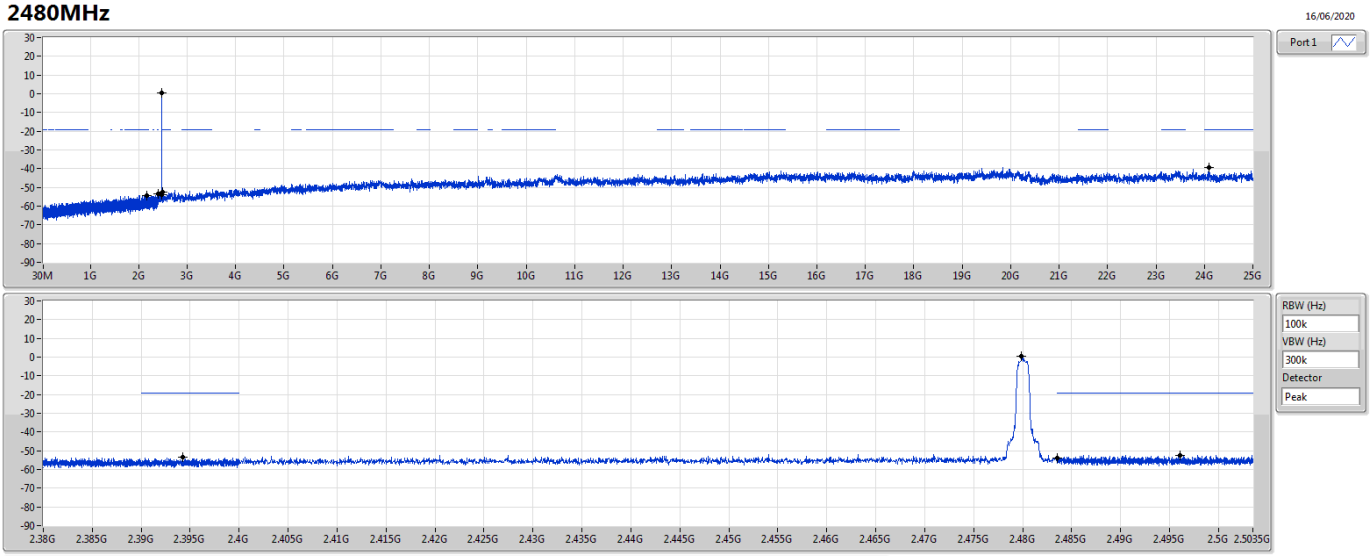
2440MHz



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
2.43983G	1.26	-18.74	2.14294G	-53.31	2.39186G	-52.19	2.4G	-54.87	2.4866G	-52.14	16.36978G	-40.66	1

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

2480MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.47987G	0.70	-19.30	2.17232G	-54.19	2.39421G	-53.60	2.4835G	-53.85	2.49611G	-52.48	24.08608G	-39.50	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	QP	41.64M	36.67	40.00	-3.33	3	Vertical	39	1.00	-

Result

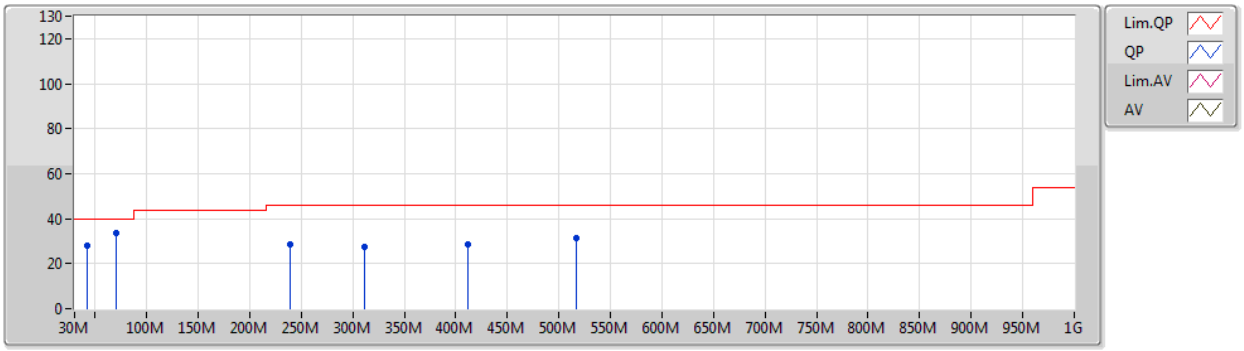
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-BR(1Mbps)	-	-	-	-	-	-	-	-	-	-	-
2440MHz	Pass	PK	70.74M	33.56	40.00	-6.44	3	Vertical	360	1.00	-
2440MHz	Pass	PK	239.52M	28.31	46.00	-17.69	3	Vertical	360	1.00	-
2440MHz	Pass	PK	311.3M	27.54	46.00	-18.46	3	Vertical	360	1.00	-
2440MHz	Pass	PK	412.18M	28.75	46.00	-17.25	3	Vertical	360	1.00	-
2440MHz	Pass	PK	516.94M	31.36	46.00	-14.64	3	Vertical	360	1.00	-
2440MHz	Pass	QP	41.64M	28.06	40.00	-11.94	3	Vertical	270	1.42	-
2440MHz	Pass	PK	36.7M	33.55	40.00	-6.45	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	147.85M	31.14	43.50	-12.36	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	243.4M	33.15	46.00	-12.85	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	397.45M	32.37	46.00	-13.63	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	571M	32.98	46.00	-13.02	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	688M	32.99	46.00	-13.01	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	72.68M	33.88	40.00	-6.12	3	Vertical	360	1.00	-
2440MHz	Pass	PK	289.96M	28.69	46.00	-17.31	3	Vertical	360	1.00	-
2440MHz	Pass	PK	365.62M	27.68	46.00	-18.32	3	Vertical	360	1.00	-
2440MHz	Pass	PK	410.24M	28.41	46.00	-17.59	3	Vertical	360	1.00	-
2440MHz	Pass	PK	584.84M	32.43	46.00	-13.57	3	Vertical	360	1.00	-
2440MHz	Pass	QP	41.64M	36.67	40.00	-3.33	3	Vertical	39	1.00	-
2440MHz	Pass	PK	150.28M	33.22	43.50	-10.28	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	189.08M	30.04	43.50	-13.46	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	291.9M	33.11	46.00	-12.89	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	396.66M	31.01	46.00	-14.99	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	544.1M	31.79	46.00	-14.21	3	Horizontal	0	1.00	-
2440MHz	Pass	QP	37.76M	34.33	40.00	-5.67	3	Horizontal	258	2.31	-
2440MHz	Pass	PK	70.74M	33.19	40.00	-6.81	3	Vertical	360	1.00	-
2440MHz	Pass	PK	288.02M	27.88	46.00	-18.12	3	Vertical	360	1.00	-
2440MHz	Pass	PK	336.52M	28.68	46.00	-17.32	3	Vertical	360	1.00	-
2440MHz	Pass	PK	425.76M	28.58	46.00	-17.42	3	Vertical	360	1.00	-
2440MHz	Pass	PK	575.14M	33.01	46.00	-12.99	3	Vertical	360	1.00	-
2440MHz	Pass	QP	41.64M	36.20	40.00	-3.80	3	Vertical	129	1.64	-
2440MHz	Pass	PK	148.34M	32.86	43.50	-10.64	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	288.02M	31.77	46.00	-14.23	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	324.88M	31.64	46.00	-14.36	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	371.44M	31.18	46.00	-14.82	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	573.2M	31.99	46.00	-14.01	3	Horizontal	0	1.00	-
2440MHz	Pass	QP	37.76M	33.69	40.00	-6.31	3	Horizontal	307	1.13	-
2440MHz	Pass	PK	51.34M	35.86	40.00	-4.14	3	Vertical	0	1.00	-
2440MHz	Pass	PK	125.06M	35.76	43.50	-7.74	3	Vertical	0	1.00	-
2440MHz	Pass	PK	270.56M	33.10	46.00	-12.90	3	Vertical	0	1.00	-
2440MHz	Pass	PK	313.24M	28.44	46.00	-17.56	3	Vertical	0	1.00	-
2440MHz	Pass	PK	447.1M	30.32	46.00	-15.68	3	Vertical	0	1.00	-
2440MHz	Pass	PK	565.44M	31.72	46.00	-14.28	3	Vertical	0	1.00	-
2440MHz	Pass	PK	30M	29.01	40.00	-10.99	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	123.12M	38.90	43.50	-4.60	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	264.74M	38.53	46.00	-7.47	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	315.18M	35.30	46.00	-10.70	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	410.24M	29.41	46.00	-16.59	3	Horizontal	360	1.00	-

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2440MHz	Pass	PK	532.46M	34.91	46.00	-11.09	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	117.3M	28.93	43.50	-14.57	3	Vertical	360	1.00	-
2440MHz	Pass	PK	204.6M	26.96	43.50	-16.54	3	Vertical	360	1.00	-
2440MHz	Pass	PK	324.88M	27.20	46.00	-18.80	3	Vertical	360	1.00	-
2440MHz	Pass	PK	447.1M	28.08	46.00	-17.92	3	Vertical	360	1.00	-
2440MHz	Pass	PK	561.56M	29.87	46.00	-16.13	3	Vertical	360	1.00	-
2440MHz	Pass	QP	47.46M	34.54	40.00	-5.46	3	Vertical	348	1.00	-
2440MHz	Pass	PK	47.46M	35.27	40.00	-4.73	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	136.7M	31.33	43.50	-12.17	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	258.92M	31.02	46.00	-14.98	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	326.82M	30.18	46.00	-15.82	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	447.1M	29.45	46.00	-16.55	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	547.98M	29.10	46.00	-16.90	3	Horizontal	0	1.00	-

BT-BR(1Mbps)

21/07/2020

2440MHz_WLC+EXT Battery+Adapter

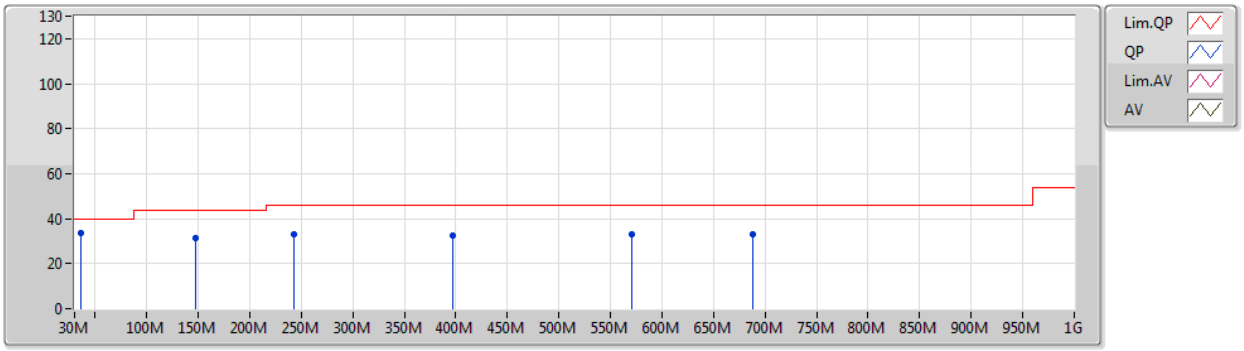


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	70.74M	33.56	40.00	-6.44	-15.11	3	Vertical	360	1.00	-	48.67	11.49	1.24	27.84
PK	239.52M	28.31	46.00	-17.69	-8.33	3	Vertical	360	1.00	-	36.64	16.42	2.35	27.10
PK	311.3M	27.54	46.00	-18.46	-5.70	3	Vertical	360	1.00	-	33.24	18.69	2.71	27.10
PK	412.18M	28.75	46.00	-17.25	-3.07	3	Vertical	360	1.00	-	31.82	21.61	3.13	27.81
PK	516.94M	31.36	46.00	-14.64	-2.05	3	Vertical	360	1.00	-	33.41	22.70	3.56	28.31
QP	41.64M	28.06	40.00	-11.94	-9.51	3	Vertical	270	1.42	-	37.57	16.99	0.94	27.44

BT-BR(1Mbps)

21/07/2020

2440MHz_WLC+EXT Battery+Adapter

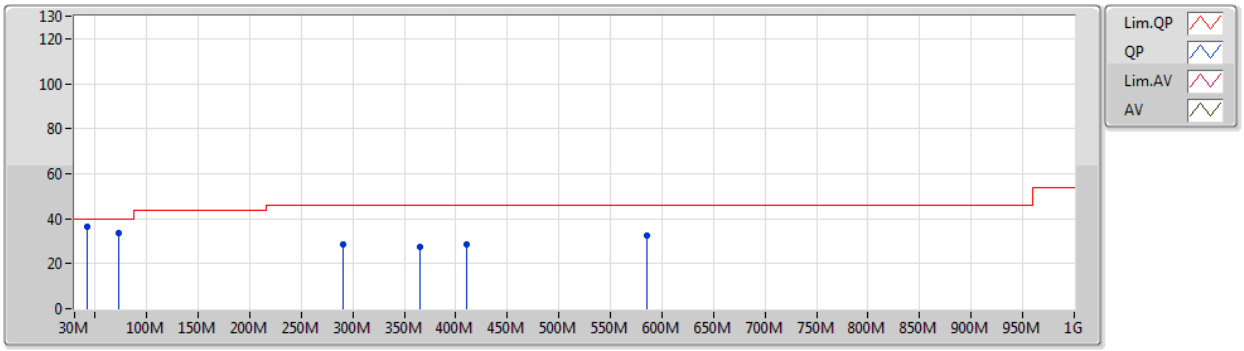


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	36.7M	33.55	40.00	-6.45	-6.50	3	Horizontal	0	1.00	-	40.05	19.68	0.87	27.05
PK	147.85M	31.14	43.50	-12.36	-10.13	3	Horizontal	0	1.00	-	41.27	15.66	1.80	27.59
PK	243.4M	33.15	46.00	-12.85	-7.90	3	Horizontal	0	1.00	-	41.05	16.81	2.37	27.08
PK	397.45M	32.37	46.00	-13.63	-3.74	3	Horizontal	0	1.00	-	36.11	20.90	3.07	27.71
PK	571M	32.98	46.00	-13.02	-0.61	3	Horizontal	0	1.00	-	33.59	23.98	3.75	28.34
PK	688M	32.99	46.00	-13.01	0.05	3	Horizontal	0	1.00	-	32.94	24.05	4.15	28.15

BT-BR(1Mbps)

21/07/2020

2440MHz_Wired+EXT Battery+Adapter

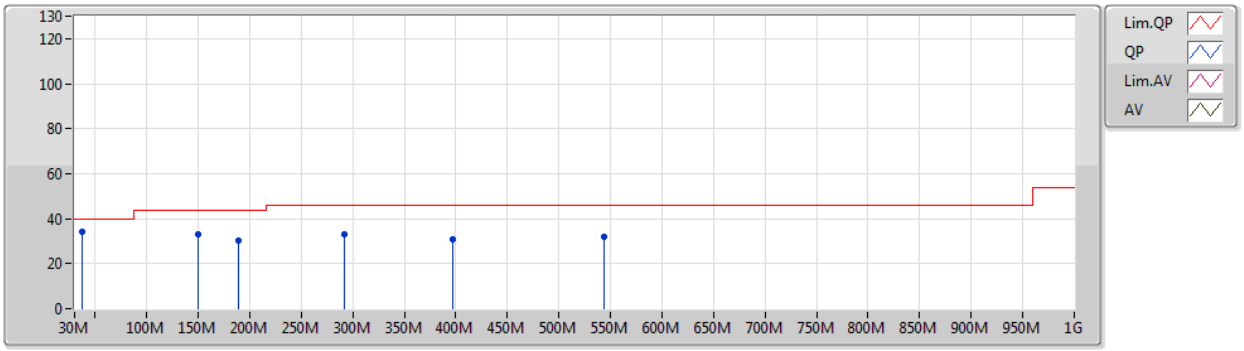


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	72.68M	33.88	40.00	-6.12	-15.05	3	Vertical	360	1.00	-	48.93	11.52	1.26	27.83
PK	289.96M	28.69	46.00	-17.31	-6.23	3	Vertical	360	1.00	-	34.92	18.20	2.61	27.04
PK	365.62M	27.68	46.00	-18.32	-4.51	3	Vertical	360	1.00	-	32.19	20.00	2.94	27.45
PK	410.24M	28.41	46.00	-17.59	-3.15	3	Vertical	360	1.00	-	31.56	21.53	3.12	27.80
PK	584.84M	32.43	46.00	-13.57	-0.61	3	Vertical	360	1.00	-	33.04	23.91	3.81	28.33
QP	41.64M	36.67	40.00	-3.33	-9.51	3	Vertical	39	1.00	-	46.18	16.99	0.94	27.44

BT-BR(1Mbps)

21/07/2020

2440MHz_Wired+EXT Battery+Adapter

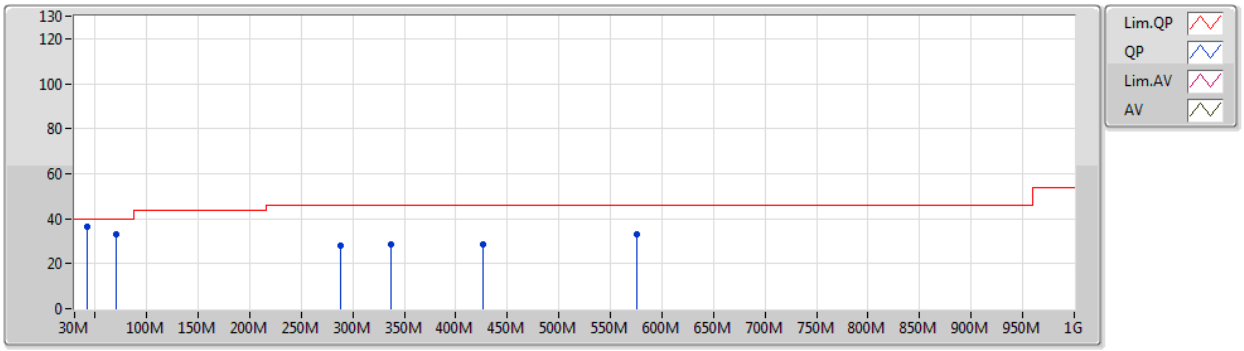


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	150.28M	33.22	43.50	-10.28	-10.25	3	Horizontal	0	1.00	-	43.47	15.51	1.82	27.58
PK	189.08M	30.04	43.50	-13.46	-11.19	3	Horizontal	0	1.00	-	41.23	14.12	2.06	27.37
PK	291.9M	33.11	46.00	-12.89	-6.20	3	Horizontal	0	1.00	-	39.31	18.22	2.62	27.04
PK	396.66M	31.01	46.00	-14.99	-3.76	3	Horizontal	0	1.00	-	34.77	20.87	3.07	27.70
PK	544.1M	31.79	46.00	-14.21	-0.97	3	Horizontal	0	1.00	-	32.76	23.75	3.63	28.35
QP	37.76M	34.33	40.00	-5.67	-7.23	3	Horizontal	258	2.31	-	41.56	19.03	0.89	27.15

BT-BR(1Mbps)

22/07/2020

2440MHz_Gun+EXT Battery+Adapter

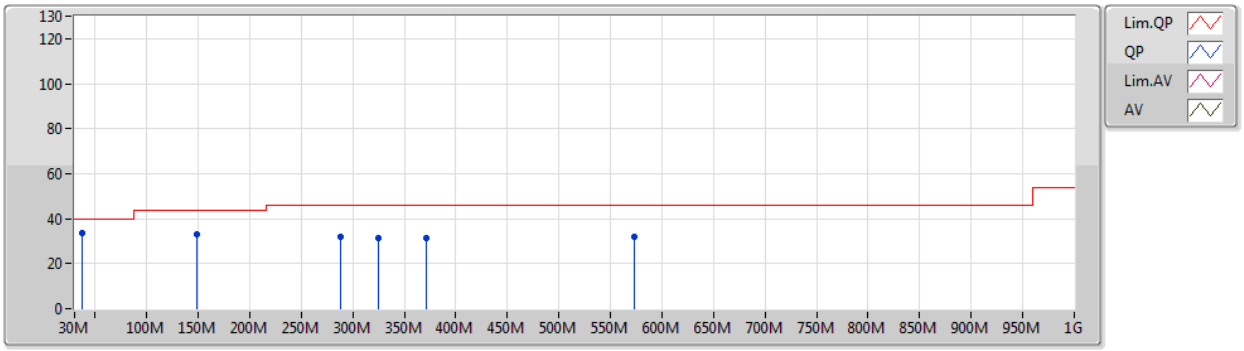


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	70.74M	33.19	40.00	-6.81	-15.11	3	Vertical	360	1.00	-	48.30	11.49	1.24	27.84
PK	288.02M	27.88	46.00	-18.12	-6.25	3	Vertical	360	1.00	-	34.13	18.19	2.60	27.04
PK	336.52M	28.68	46.00	-17.32	-5.48	3	Vertical	360	1.00	-	34.16	18.95	2.81	27.24
PK	425.76M	28.58	46.00	-17.42	-2.93	3	Vertical	360	1.00	-	31.51	21.80	3.18	27.91
PK	575.14M	33.01	46.00	-12.99	-0.47	3	Vertical	360	1.00	-	33.48	24.10	3.77	28.34
QP	41.64M	36.20	40.00	-3.80	-9.51	3	Vertical	129	1.64	-	45.71	16.99	0.94	27.44

BT-BR(1Mbps)

22/07/2020

2440MHz_Gun+EXT Battery+Adapter

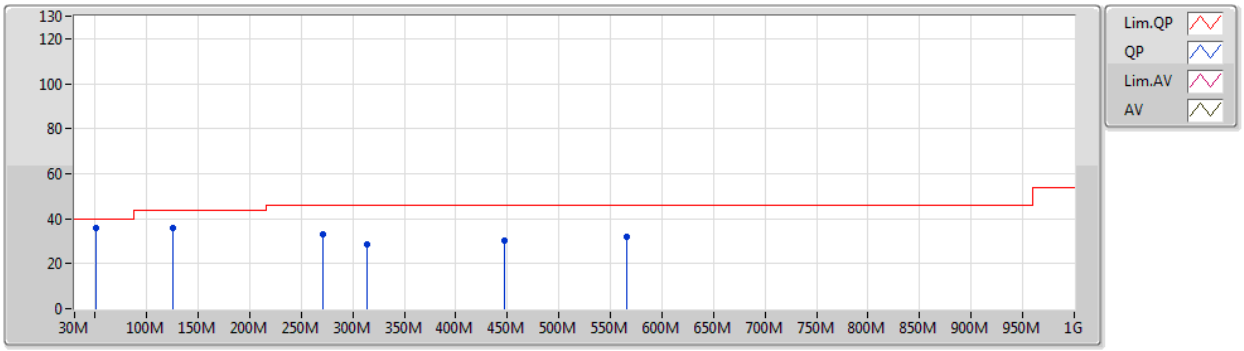


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	148.34M	32.86	43.50	-10.64	-10.12	3	Horizontal	0	1.00	-	42.98	15.67	1.80	27.59
PK	288.02M	31.77	46.00	-14.23	-6.25	3	Horizontal	0	1.00	-	38.02	18.19	2.60	27.04
PK	324.88M	31.64	46.00	-14.36	-5.67	3	Horizontal	0	1.00	-	37.31	18.75	2.76	27.18
PK	371.44M	31.18	46.00	-14.82	-4.48	3	Horizontal	0	1.00	-	35.66	20.06	2.96	27.50
PK	573.2M	31.99	46.00	-14.01	-0.52	3	Horizontal	0	1.00	-	32.51	24.06	3.76	28.34
QP	37.76M	33.69	40.00	-6.31	-7.23	3	Horizontal	307	1.13	-	40.92	19.03	0.89	27.15

BT-BR(1Mbps)

22/07/2020

2440MHz_Gun+EXT Battery+USB

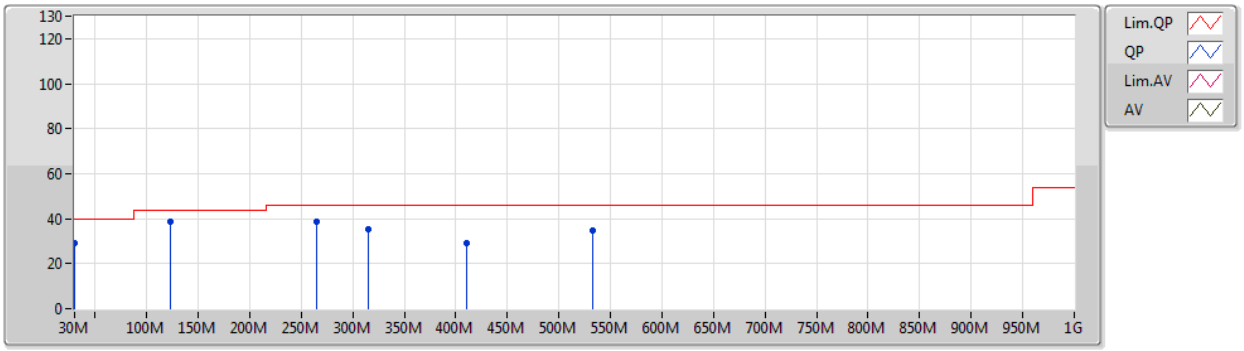


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	51.34M	35.86	40.00	-4.14	-13.83	3	Vertical	0	1.00	-	49.69	12.84	1.05	27.72
PK	125.06M	35.76	43.50	-7.74	-8.83	3	Vertical	0	1.00	-	44.59	17.20	1.66	27.69
PK	270.56M	33.10	46.00	-12.90	-6.36	3	Vertical	0	1.00	-	39.46	18.18	2.51	27.05
PK	313.24M	28.44	46.00	-17.56	-5.68	3	Vertical	0	1.00	-	34.12	18.71	2.72	27.11
PK	447.1M	30.32	46.00	-15.68	-2.97	3	Vertical	0	1.00	-	33.29	21.81	3.27	28.05
PK	565.44M	31.72	46.00	-14.28	-0.72	3	Vertical	0	1.00	-	32.44	23.91	3.72	28.35

BT-BR(1Mbps)

22/07/2020

2440MHz_Gun+EXT Battery+USB

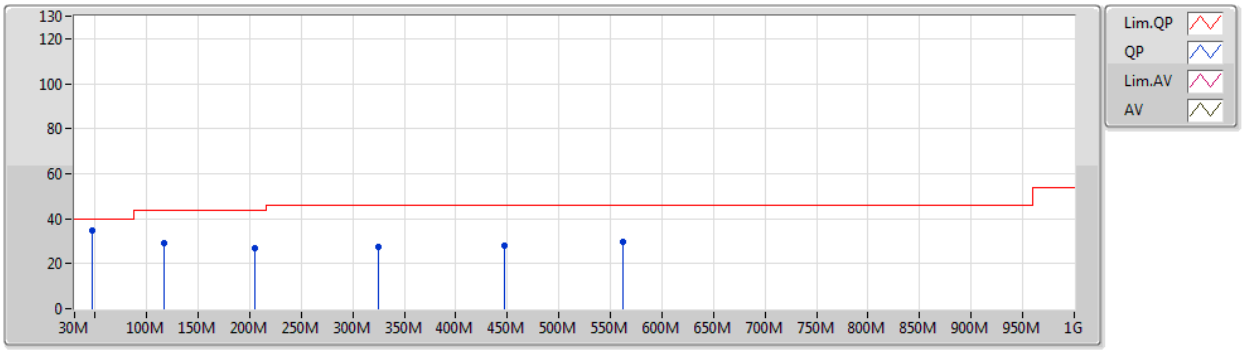


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	30M	29.01	40.00	-10.99	-2.89	3	Horizontal	360	1.00	-	31.90	23.48	0.84	27.21
PK	123.12M	38.90	43.50	-4.60	-8.89	3	Horizontal	360	1.00	-	47.79	17.16	1.65	27.70
PK	264.74M	38.53	46.00	-7.47	-6.00	3	Horizontal	360	1.00	-	44.53	18.57	2.48	27.05
PK	315.18M	35.30	46.00	-10.70	-5.68	3	Horizontal	360	1.00	-	40.98	18.73	2.72	27.13
PK	410.24M	29.41	46.00	-16.59	-3.15	3	Horizontal	360	1.00	-	32.56	21.53	3.12	27.80
PK	532.46M	34.91	46.00	-11.09	-1.71	3	Horizontal	360	1.00	-	36.62	23.02	3.60	28.33

BT-BR(1Mbps)

10/09/2020

2440MHz_WLC Gun+EXT Battery+Adapter

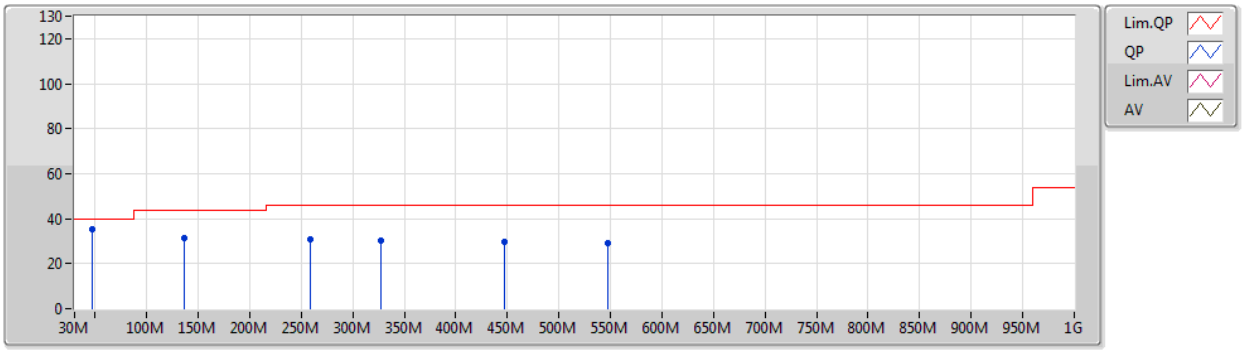


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	117.3M	28.93	43.50	-14.57	-8.14	3	Vertical	360	1.00	-	37.07	17.39	1.77	27.30
PK	204.6M	26.96	43.50	-16.54	-10.00	3	Vertical	360	1.00	-	36.96	14.57	2.33	26.90
PK	324.88M	27.20	46.00	-18.80	-5.00	3	Vertical	360	1.00	-	32.20	18.79	3.00	26.79
PK	447.1M	28.08	46.00	-17.92	-2.27	3	Vertical	360	1.00	-	30.35	22.00	3.39	27.66
PK	561.56M	29.87	46.00	-16.13	0.05	3	Vertical	360	1.00	-	29.82	24.12	3.95	28.02
QP	47.46M	34.54	40.00	-5.46	-12.42	3	Vertical	348	1.00	-	46.96	14.05	1.05	27.52

BT-BR(1Mbps)

10/09/2020

2440MHz_WLC Gun+EXT Battery+Adapter



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	47.46M	35.27	40.00	-4.73	-12.42	3	Horizontal	0	1.00	-	47.69	14.05	1.05	27.52
PK	136.7M	31.33	43.50	-12.17	-8.75	3	Horizontal	0	1.00	-	40.08	16.61	1.88	27.24
PK	258.92M	31.02	46.00	-14.98	-5.41	3	Horizontal	0	1.00	-	36.43	18.64	2.65	26.70
PK	326.82M	30.18	46.00	-15.82	-4.99	3	Horizontal	0	1.00	-	35.17	18.81	3.01	26.81
PK	447.1M	29.45	46.00	-16.55	-2.27	3	Horizontal	0	1.00	-	31.72	22.00	3.39	27.66
PK	547.98M	29.10	46.00	-16.90	-0.27	3	Horizontal	0	1.00	-	29.37	23.85	3.89	28.01

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	2.4835G	60.75	74.00	-13.25	3	Vertical	119	1.00	-
BT-EDR(3Mbps)	Pass	PK	2.3568G	60.36	74.00	-13.64	3	Vertical	119	1.40	-

Result

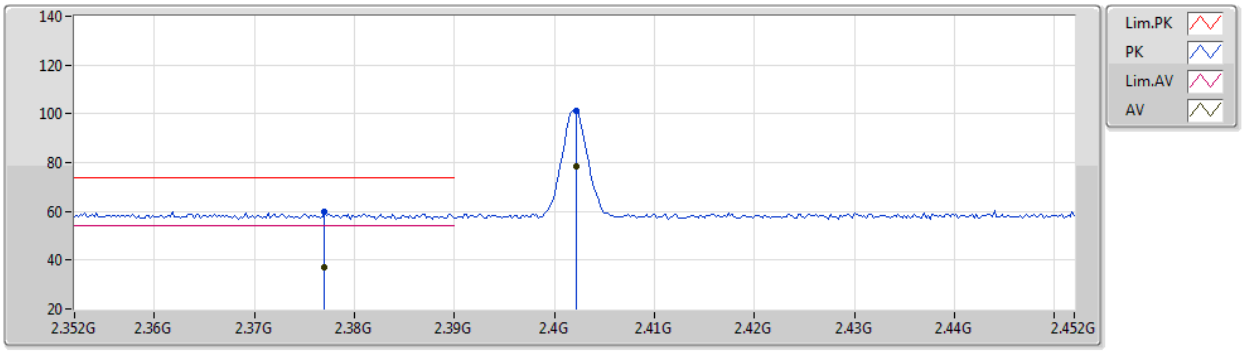
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-BR(1Mbps)	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.377G	37.32	54.00	-16.68	3	Vertical	106	2.38	-
2402MHz	Pass	AV	2.4022G	78.69	Inf	-Inf	3	Vertical	106	2.38	-
2402MHz	Pass	PK	2.377G	59.82	74.00	-14.18	3	Vertical	106	2.38	-
2402MHz	Pass	PK	2.4022G	101.19	Inf	-Inf	3	Vertical	106	2.38	-
2402MHz	Pass	AV	2.3544G	36.58	54.00	-17.42	3	Horizontal	357	1.54	-
2402MHz	Pass	AV	2.4022G	75.96	Inf	-Inf	3	Horizontal	357	1.54	-
2402MHz	Pass	PK	2.3544G	59.08	74.00	-14.92	3	Horizontal	357	1.54	-
2402MHz	Pass	PK	2.4022G	98.46	Inf	-Inf	3	Horizontal	357	1.54	-
2402MHz	Pass	AV	4.80808G	23.48	54.00	-30.52	3	Vertical	61	1.48	-
2402MHz	Pass	PK	4.80808G	45.98	74.00	-28.02	3	Vertical	61	1.48	-
2402MHz	Pass	AV	4.81162G	23.33	54.00	-30.67	3	Horizontal	288	1.49	-
2402MHz	Pass	PK	4.81162G	45.83	74.00	-28.17	3	Horizontal	288	1.49	-
2440MHz	Pass	AV	2.3496G	37.08	54.00	-16.92	3	Vertical	119	1.31	-
2440MHz	Pass	AV	2.44G	79.35	Inf	-Inf	3	Vertical	119	1.31	-
2440MHz	Pass	AV	2.4976G	37.22	54.00	-16.78	3	Vertical	119	1.31	-
2440MHz	Pass	PK	2.3496G	59.58	74.00	-14.42	3	Vertical	119	1.31	-
2440MHz	Pass	PK	2.44G	101.85	Inf	-Inf	3	Vertical	119	1.31	-
2440MHz	Pass	PK	2.4976G	59.72	74.00	-14.28	3	Vertical	119	1.31	-
2440MHz	Pass	AV	2.34G	37.73	54.00	-16.27	3	Horizontal	106	1.00	-
2440MHz	Pass	AV	2.44G	76.05	Inf	-Inf	3	Horizontal	106	1.00	-
2440MHz	Pass	AV	2.4835G	36.89	54.00	-17.11	3	Horizontal	106	1.00	-
2440MHz	Pass	PK	2.34G	60.23	74.00	-13.77	3	Horizontal	106	1.00	-
2440MHz	Pass	PK	2.44G	98.55	Inf	-Inf	3	Horizontal	106	1.00	-
2440MHz	Pass	PK	2.4835G	59.39	74.00	-14.61	3	Horizontal	106	1.00	-
2440MHz	Pass	AV	4.87298G	24.85	54.00	-29.15	3	Vertical	247	1.48	-
2440MHz	Pass	PK	4.87298G	47.35	74.00	-26.65	3	Vertical	247	1.48	-
2440MHz	Pass	AV	4.8851G	23.90	54.00	-30.10	3	Horizontal	202	2.69	-
2440MHz	Pass	PK	4.8851G	46.40	74.00	-27.60	3	Horizontal	202	2.69	-
2480MHz	Pass	AV	2.4798G	79.56	Inf	-Inf	3	Vertical	119	1.00	-
2480MHz	Pass	AV	2.4835G	38.25	54.00	-15.75	3	Vertical	119	1.00	-
2480MHz	Pass	PK	2.4798G	102.06	Inf	-Inf	3	Vertical	119	1.00	-
2480MHz	Pass	PK	2.4835G	60.75	74.00	-13.25	3	Vertical	119	1.00	-
2480MHz	Pass	AV	2.4798G	78.12	Inf	-Inf	3	Horizontal	344	1.12	-
2480MHz	Pass	AV	2.5G	37.94	54.00	-16.06	3	Horizontal	344	1.12	-
2480MHz	Pass	PK	2.4798G	100.62	Inf	-Inf	3	Horizontal	344	1.12	-
2480MHz	Pass	PK	2.5G	60.44	74.00	-13.56	3	Horizontal	344	1.12	-
2480MHz	Pass	AV	4.9699G	23.93	54.00	-30.07	3	Vertical	26	1.48	-
2480MHz	Pass	PK	4.9699G	46.43	74.00	-27.57	3	Vertical	26	1.48	-
2480MHz	Pass	AV	4.9489G	23.52	54.00	-30.48	3	Horizontal	272	1.49	-
2480MHz	Pass	PK	4.9489G	46.02	74.00	-27.98	3	Horizontal	272	1.49	-
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.376G	36.82	54.00	-17.18	3	Vertical	105	2.36	-
2402MHz	Pass	AV	2.402G	74.22	Inf	-Inf	3	Vertical	105	2.36	-
2402MHz	Pass	PK	2.376G	59.32	74.00	-14.68	3	Vertical	105	2.36	-
2402MHz	Pass	PK	2.402G	96.72	Inf	-Inf	3	Vertical	105	2.36	-
2402MHz	Pass	AV	2.3602G	37.08	54.00	-16.92	3	Horizontal	342	1.17	-
2402MHz	Pass	AV	2.4018G	72.42	Inf	-Inf	3	Horizontal	342	1.17	-

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	59.58	74.00	-14.42	3	Horizontal	342	1.17	-
2402MHz	Pass	PK	2.4018G	94.92	Inf	-Inf	3	Horizontal	342	1.17	-
2402MHz	Pass	AV	4.80592G	23.48	54.00	-30.52	3	Vertical	337	1.01	-
2402MHz	Pass	PK	4.80592G	45.98	74.00	-28.02	3	Vertical	337	1.01	-
2402MHz	Pass	AV	4.79254G	22.96	54.00	-31.04	3	Horizontal	97	1.88	-
2402MHz	Pass	PK	4.79254G	45.46	74.00	-28.54	3	Horizontal	97	1.88	-
2440MHz	Pass	AV	2.3568G	37.86	54.00	-16.14	3	Vertical	119	1.40	-
2440MHz	Pass	AV	2.4396G	75.66	Inf	-Inf	3	Vertical	119	1.40	-
2440MHz	Pass	AV	2.4964G	37.56	54.00	-16.44	3	Vertical	119	1.40	-
2440MHz	Pass	PK	2.3568G	60.36	74.00	-13.64	3	Vertical	119	1.40	-
2440MHz	Pass	PK	2.4396G	98.16	Inf	-Inf	3	Vertical	119	1.40	-
2440MHz	Pass	PK	2.4964G	60.06	74.00	-13.94	3	Vertical	119	1.40	-
2440MHz	Pass	AV	2.3432G	36.95	54.00	-17.05	3	Horizontal	109	1.00	-
2440MHz	Pass	AV	2.44G	73.00	Inf	-Inf	3	Horizontal	109	1.00	-
2440MHz	Pass	AV	2.494G	37.14	54.00	-16.86	3	Horizontal	109	1.00	-
2440MHz	Pass	PK	2.3432G	59.45	74.00	-14.55	3	Horizontal	109	1.00	-
2440MHz	Pass	PK	2.44G	95.50	Inf	-Inf	3	Horizontal	109	1.00	-
2440MHz	Pass	PK	2.494G	59.64	74.00	-14.36	3	Horizontal	109	1.00	-
2440MHz	Pass	AV	4.88924G	23.74	54.00	-30.26	3	Vertical	259	1.41	-
2440MHz	Pass	PK	4.88924G	46.24	74.00	-27.76	3	Vertical	259	1.41	-
2440MHz	Pass	AV	4.8929G	23.54	54.00	-30.46	3	Horizontal	359	1.15	-
2440MHz	Pass	PK	4.8929G	46.04	74.00	-27.96	3	Horizontal	359	1.15	-
2480MHz	Pass	AV	2.4798G	76.85	Inf	-Inf	3	Vertical	120	1.02	-
2480MHz	Pass	AV	2.493G	37.05	54.00	-16.95	3	Vertical	120	1.02	-
2480MHz	Pass	PK	2.4798G	99.35	Inf	-Inf	3	Vertical	120	1.02	-
2480MHz	Pass	PK	2.493G	59.55	74.00	-14.45	3	Vertical	120	1.02	-
2480MHz	Pass	AV	2.4798G	75.51	Inf	-Inf	3	Horizontal	344	1.13	-
2480MHz	Pass	AV	2.4902G	37.29	54.00	-16.71	3	Horizontal	344	1.13	-
2480MHz	Pass	PK	2.4798G	98.01	Inf	-Inf	3	Horizontal	344	1.13	-
2480MHz	Pass	PK	2.4902G	59.79	74.00	-14.21	3	Horizontal	344	1.13	-
2480MHz	Pass	AV	4.95394G	24.00	54.00	-30.00	3	Vertical	161	1.48	-
2480MHz	Pass	PK	4.95394G	46.50	74.00	-27.50	3	Vertical	161	1.48	-
2480MHz	Pass	AV	4.95634G	24.01	54.00	-29.99	3	Horizontal	346	1.49	-
2480MHz	Pass	PK	4.95634G	46.51	74.00	-27.49	3	Horizontal	346	1.49	-

BT-BR(1Mbps)

2402MHz_TX

17/06/2020

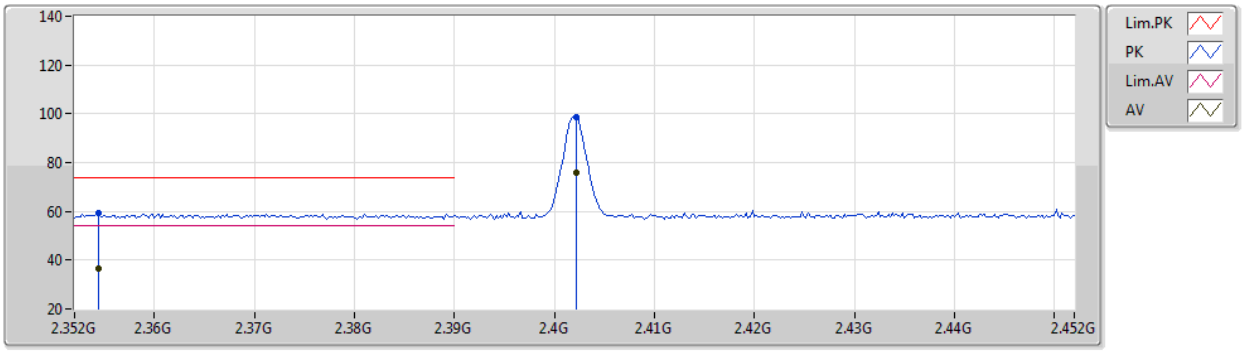


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.377G	37.32	54.00	-16.68	35.59	3	Vertical	106	2.38	-	1.73	29.65	5.94	-
AV	2.4022G	78.69	Inf	-Inf	35.67	3	Vertical	106	2.38	-	43.02	29.71	5.96	-
PK	2.377G	59.82	74.00	-14.18	35.59	3	Vertical	106	2.38	-	24.23	29.65	5.94	-
PK	2.4022G	101.19	Inf	-Inf	35.67	3	Vertical	106	2.38	-	65.52	29.71	5.96	-

BT-BR(1Mbps)

2402MHz_TX

17/06/2020

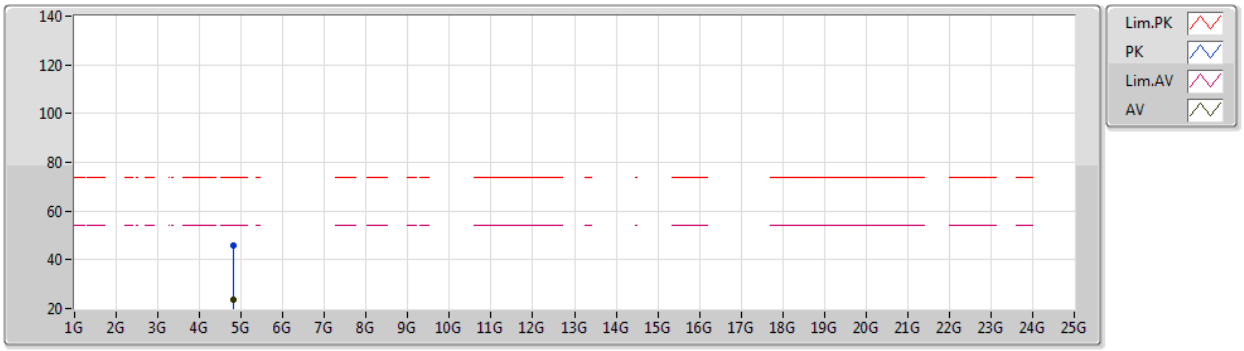


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3544G	36.58	54.00	-17.42	35.54	3	Horizontal	357	1.54	-	1.04	29.61	5.93	-
AV	2.4022G	75.96	Inf	-Inf	35.67	3	Horizontal	357	1.54	-	40.29	29.71	5.96	-
PK	2.3544G	59.08	74.00	-14.92	35.54	3	Horizontal	357	1.54	-	23.54	29.61	5.93	-
PK	2.4022G	98.46	Inf	-Inf	35.67	3	Horizontal	357	1.54	-	62.79	29.71	5.96	-

BT-BR(1Mbps)

2402MHz_TX

17/06/2020

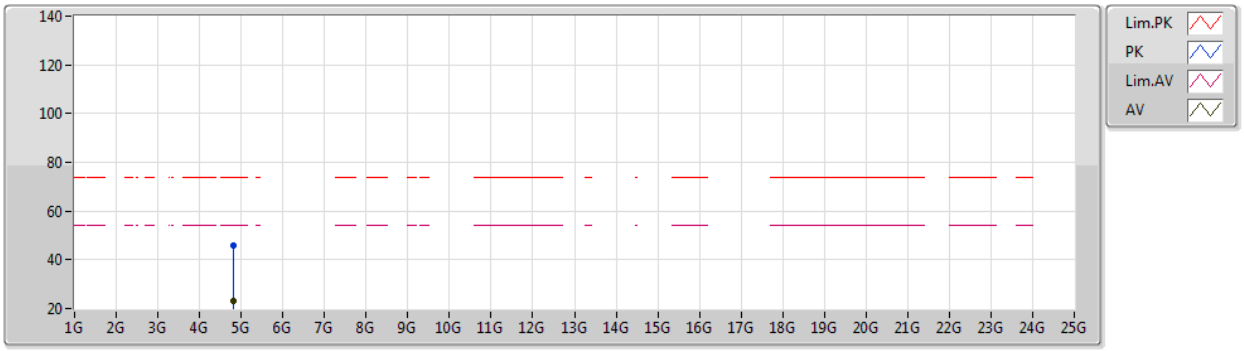


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.80808G	23.48	54.00	-30.52	7.97	3	Vertical	61	1.48	-	15.51	33.62	8.26	33.91
PK	4.80808G	45.98	74.00	-28.02	7.97	3	Vertical	61	1.48	-	38.01	33.62	8.26	33.91

BT-BR(1Mbps)

2402MHz_TX

17/06/2020

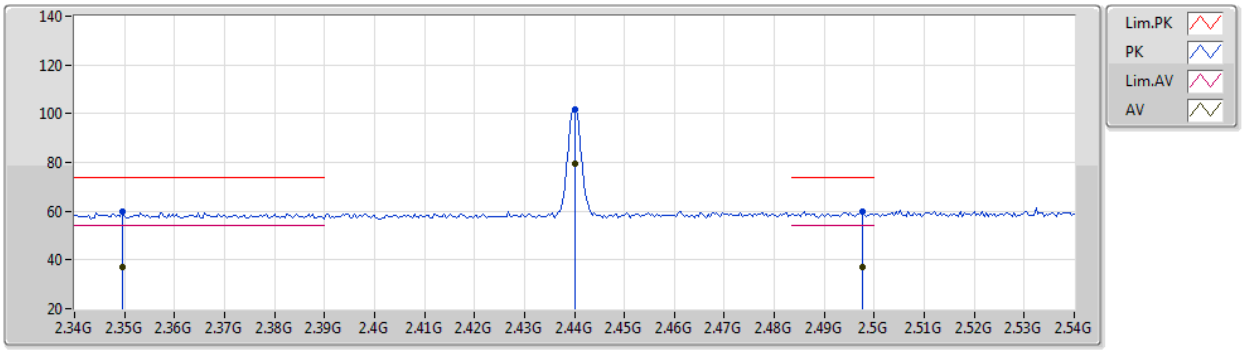


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.81162G	23.33	54.00	-30.67	7.98	3	Horizontal	288	1.49	-	15.35	33.62	8.26	33.90
PK	4.81162G	45.83	74.00	-28.17	7.98	3	Horizontal	288	1.49	-	37.85	33.62	8.26	33.90

BT-BR(1Mbps)

2440MHz_TX

17/06/2020

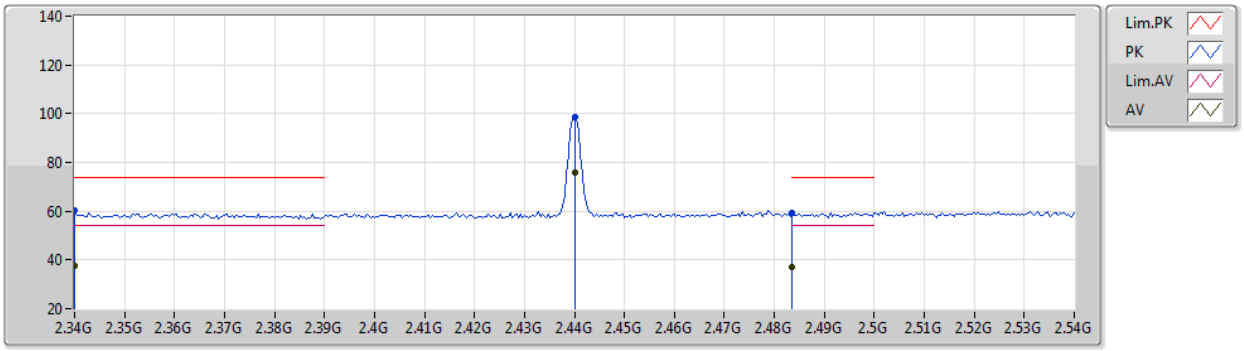


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3496G	37.08	54.00	-16.92	35.52	3	Vertical	119	1.31	-	1.56	29.60	5.92	-
AV	2.44G	79.35	Inf	-Inf	35.91	3	Vertical	119	1.31	-	43.44	29.90	6.01	-
AV	2.4976G	37.22	54.00	-16.78	36.27	3	Vertical	119	1.31	-	0.95	30.19	6.08	-
PK	2.3496G	59.58	74.00	-14.42	35.52	3	Vertical	119	1.31	-	24.06	29.60	5.92	-
PK	2.44G	101.85	Inf	-Inf	35.91	3	Vertical	119	1.31	-	65.94	29.90	6.01	-
PK	2.4976G	59.72	74.00	-14.28	36.27	3	Vertical	119	1.31	-	23.45	30.19	6.08	-

BT-BR(1Mbps)

2440MHz_TX

17/06/2020

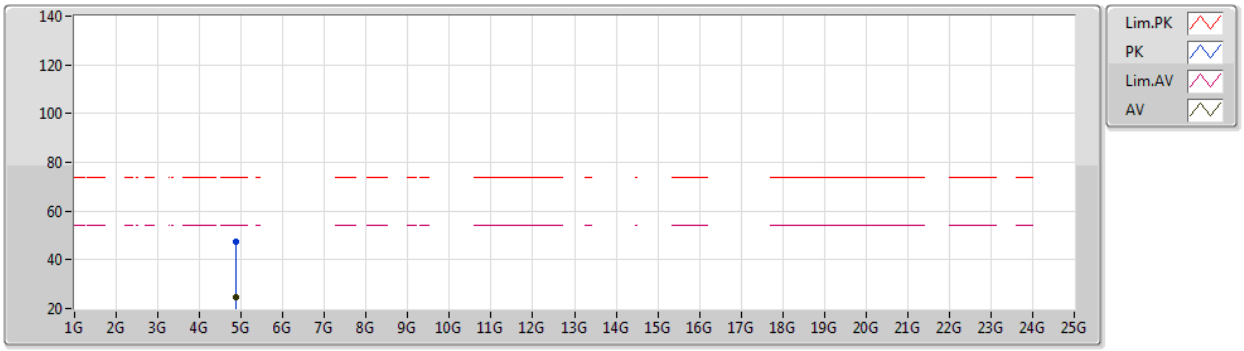


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.34G	37.73	54.00	-16.27	35.50	3	Horizontal	106	1.00	-	2.23	29.58	5.92	-
AV	2.44G	76.05	Inf	-Inf	35.91	3	Horizontal	106	1.00	-	40.14	29.90	6.01	-
AV	2.4835G	36.89	54.00	-17.11	36.18	3	Horizontal	106	1.00	-	0.71	30.12	6.06	-
PK	2.34G	60.23	74.00	-13.77	35.50	3	Horizontal	106	1.00	-	24.73	29.58	5.92	-
PK	2.44G	98.55	Inf	-Inf	35.91	3	Horizontal	106	1.00	-	62.64	29.90	6.01	-
PK	2.4835G	59.39	74.00	-14.61	36.18	3	Horizontal	106	1.00	-	23.21	30.12	6.06	-

BT-BR(1Mbps)

2440MHz_TX

17/06/2020

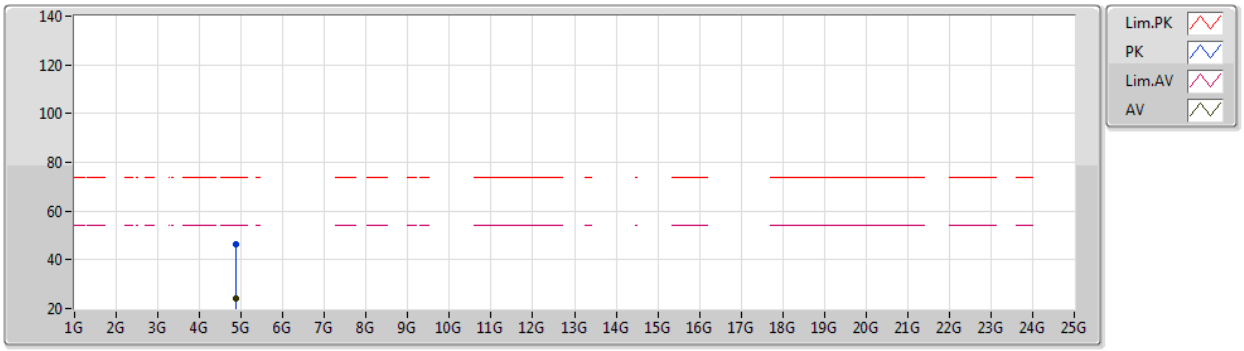


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.87298G	24.85	54.00	-29.15	8.18	3	Vertical	247	1.48	-	16.67	33.75	8.30	33.87
PK	4.87298G	47.35	74.00	-26.65	8.18	3	Vertical	247	1.48	-	39.17	33.75	8.30	33.87

BT-BR(1Mbps)

2440MHz_TX

17/06/2020

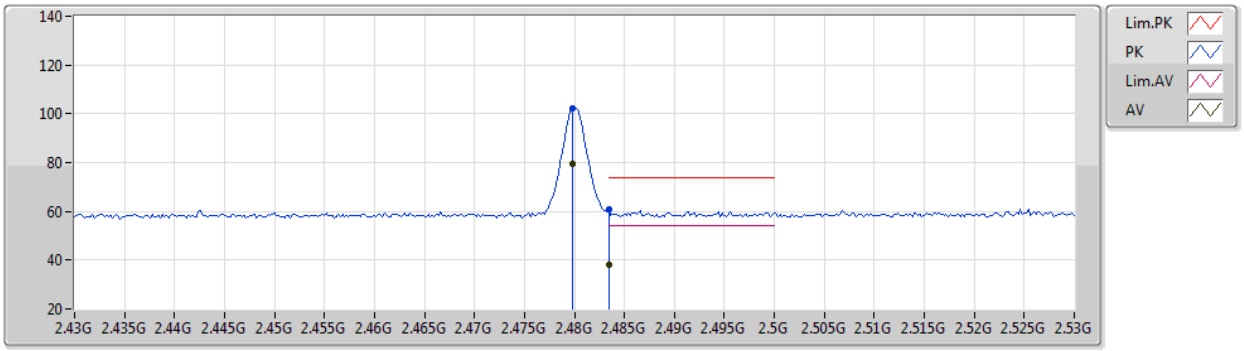


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.8851G	23.90	54.00	-30.10	8.21	3	Horizontal	202	2.69	-	15.69	33.77	8.31	33.87
PK	4.8851G	46.40	74.00	-27.60	8.21	3	Horizontal	202	2.69	-	38.19	33.77	8.31	33.87

BT-BR(1Mbps)

2480MHz_TX

17/06/2020

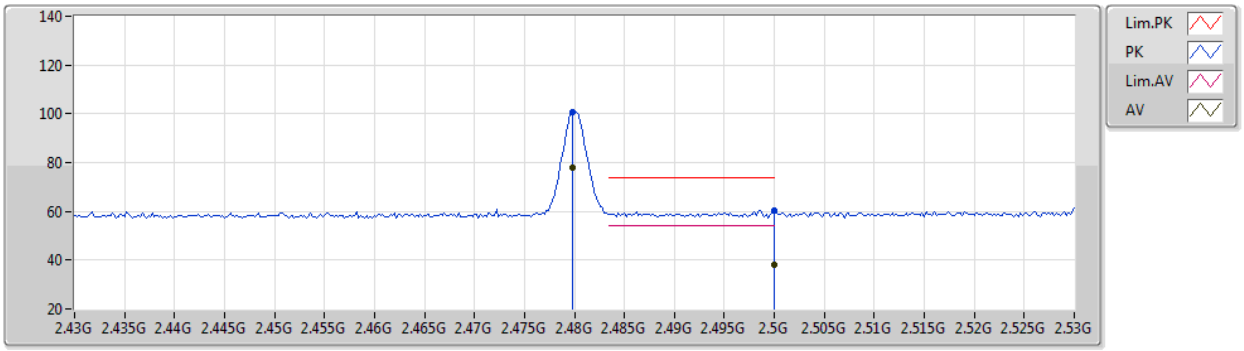


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.4798G	79.56	Inf	-Inf	36.16	3	Vertical	119	1.00	-	43.40	30.10	6.06	-
AV	2.4835G	38.25	54.00	-15.75	36.18	3	Vertical	119	1.00	-	2.07	30.12	6.06	-
PK	2.4798G	102.06	Inf	-Inf	36.16	3	Vertical	119	1.00	-	65.90	30.10	6.06	-
PK	2.4835G	60.75	74.00	-13.25	36.18	3	Vertical	119	1.00	-	24.57	30.12	6.06	-

BT-BR(1Mbps)

2480MHz_TX

17/06/2020

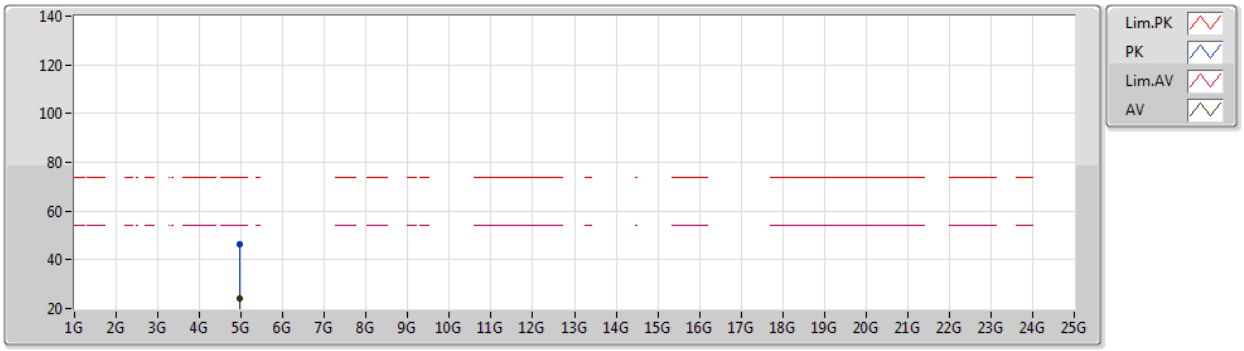


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.4798G	78.12	Inf	-Inf	36.16	3	Horizontal	344	1.12	-	41.96	30.10	6.06	-
AV	2.5G	37.94	54.00	-16.06	36.28	3	Horizontal	344	1.12	-	1.66	30.20	6.08	-
PK	2.4798G	100.62	Inf	-Inf	36.16	3	Horizontal	344	1.12	-	64.46	30.10	6.06	-
PK	2.5G	60.44	74.00	-13.56	36.28	3	Horizontal	344	1.12	-	24.16	30.20	6.08	-

BT-BR(1Mbps)

2480MHz_TX

17/06/2020

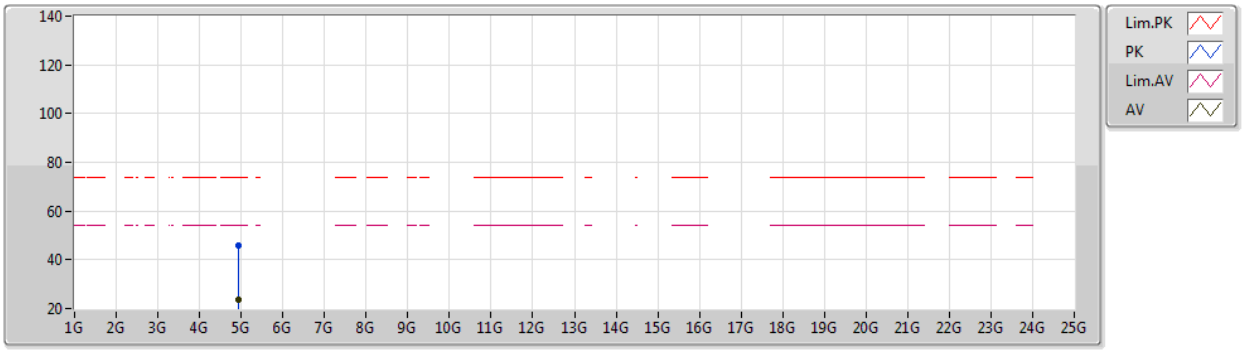


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.9699G	23.93	54.00	-30.07	8.48	3	Vertical	26	1.48	-	15.45	33.94	8.36	33.82
PK	4.9699G	46.43	74.00	-27.57	8.48	3	Vertical	26	1.48	-	37.95	33.94	8.36	33.82

BT-BR(1Mbps)

2480MHz_TX

17/06/2020

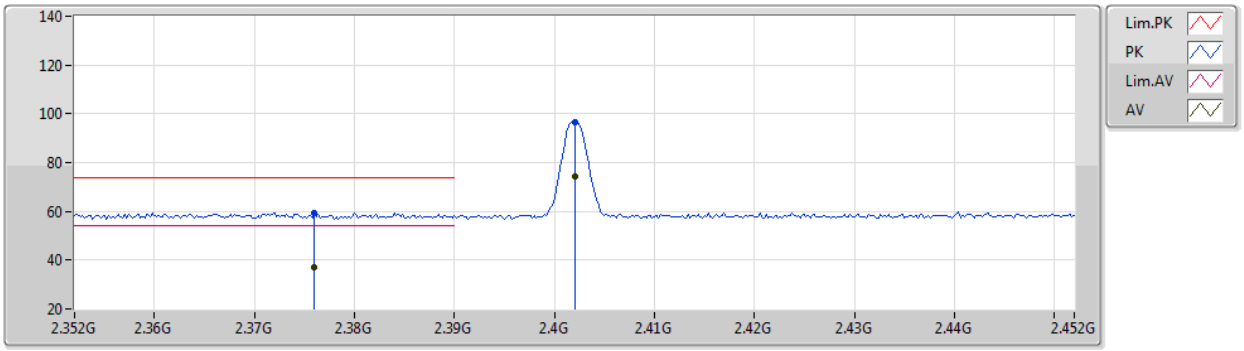


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.9489G	23.52	54.00	-30.48	8.42	3	Horizontal	272	1.49	-	15.10	33.90	8.35	33.83
PK	4.9489G	46.02	74.00	-27.98	8.42	3	Horizontal	272	1.49	-	37.60	33.90	8.35	33.83

BT-EDR(3Mbps)

2402MHz_TX

17/06/2020

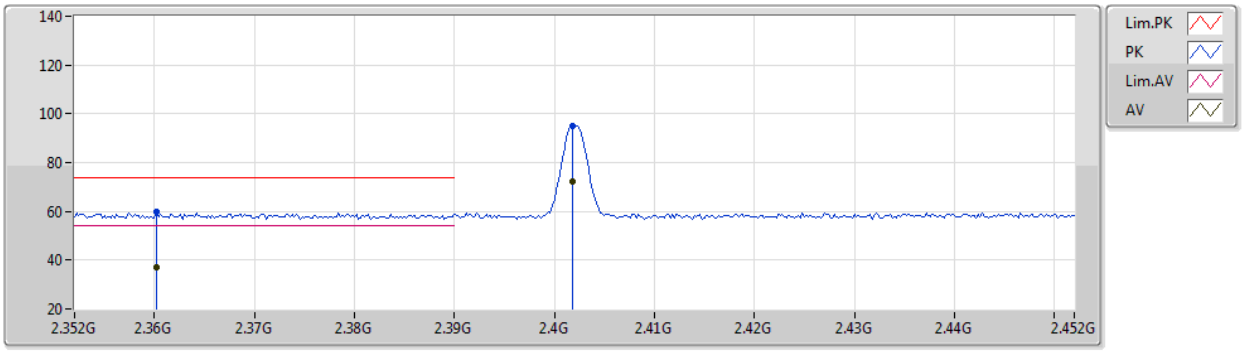


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.376G	36.82	54.00	-17.18	35.59	3	Vertical	105	2.36	-	1.23	29.65	5.94	-
AV	2.402G	74.22	Inf	-Inf	35.67	3	Vertical	105	2.36	-	38.55	29.71	5.96	-
PK	2.376G	59.32	74.00	-14.68	35.59	3	Vertical	105	2.36	-	23.73	29.65	5.94	-
PK	2.402G	96.72	Inf	-Inf	35.67	3	Vertical	105	2.36	-	61.05	29.71	5.96	-

BT-EDR(3Mbps)

2402MHz_TX

17/06/2020

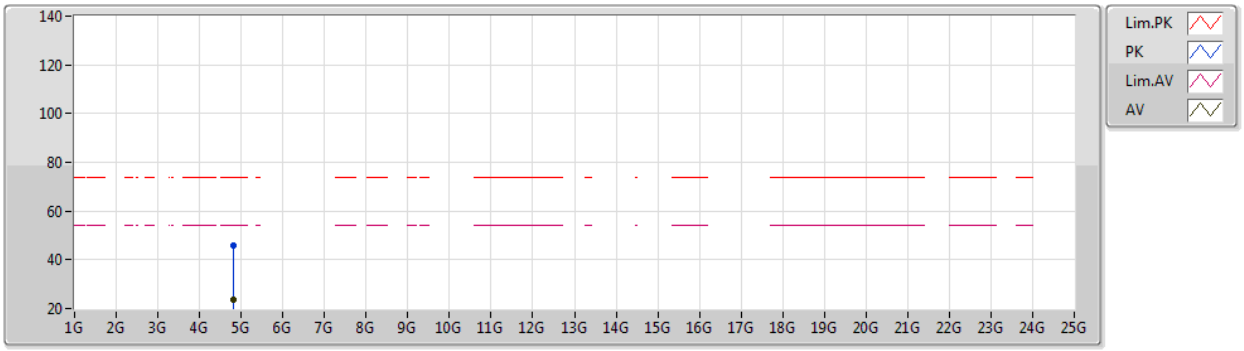


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3602G	37.08	54.00	-16.92	35.55	3	Horizontal	342	1.17	-	1.53	29.62	5.93	-
AV	2.4018G	72.42	Inf	-Inf	35.67	3	Horizontal	342	1.17	-	36.75	29.71	5.96	-
PK	2.3602G	59.58	74.00	-14.42	35.55	3	Horizontal	342	1.17	-	24.03	29.62	5.93	-
PK	2.4018G	94.92	Inf	-Inf	35.67	3	Horizontal	342	1.17	-	59.25	29.71	5.96	-

BT-EDR(3Mbps)

2402MHz_TX

17/06/2020

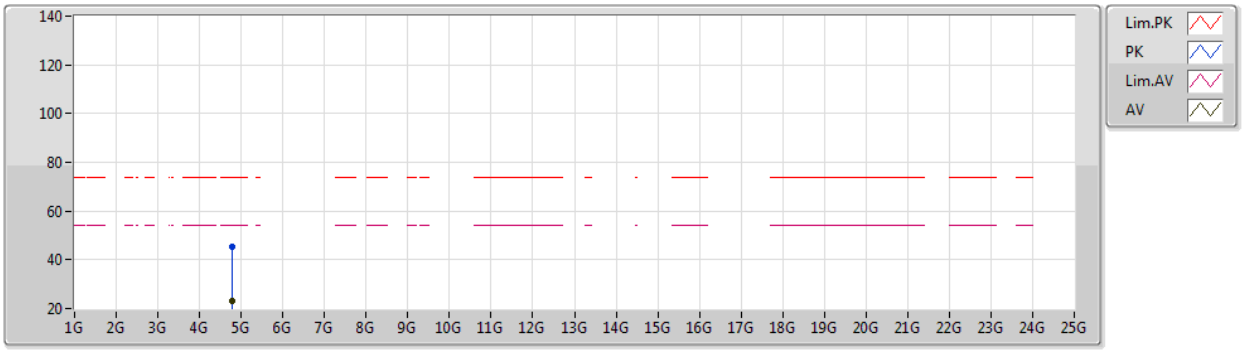


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.80592G	23.48	54.00	-30.52	7.95	3	Vertical	337	1.01	-	15.53	33.61	8.25	33.91
PK	4.80592G	45.98	74.00	-28.02	7.95	3	Vertical	337	1.01	-	38.03	33.61	8.25	33.91

BT-EDR(3Mbps)

2402MHz_TX

17/06/2020

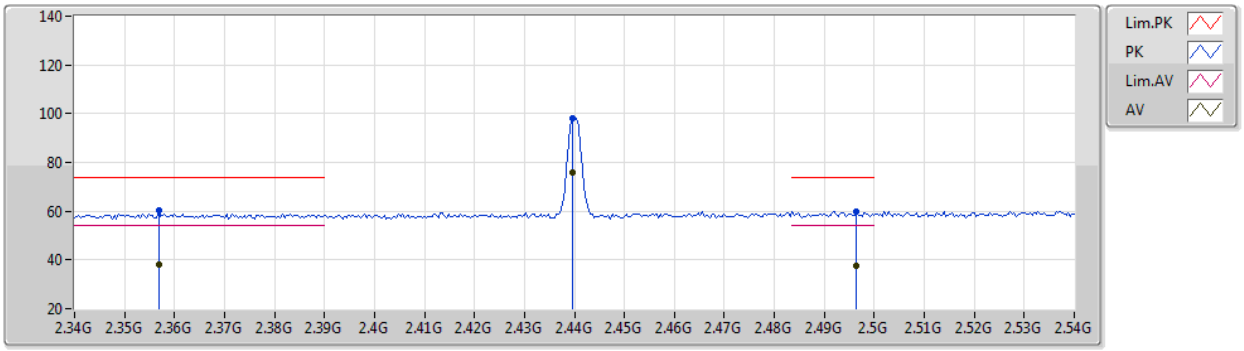


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.79254G	22.96	54.00	-31.04	7.90	3	Horizontal	97	1.88	-	15.06	33.56	8.25	33.91
PK	4.79254G	45.46	74.00	-28.54	7.90	3	Horizontal	97	1.88	-	37.56	33.56	8.25	33.91

BT-EDR(3Mbps)

2440MHz_TX

17/06/2020

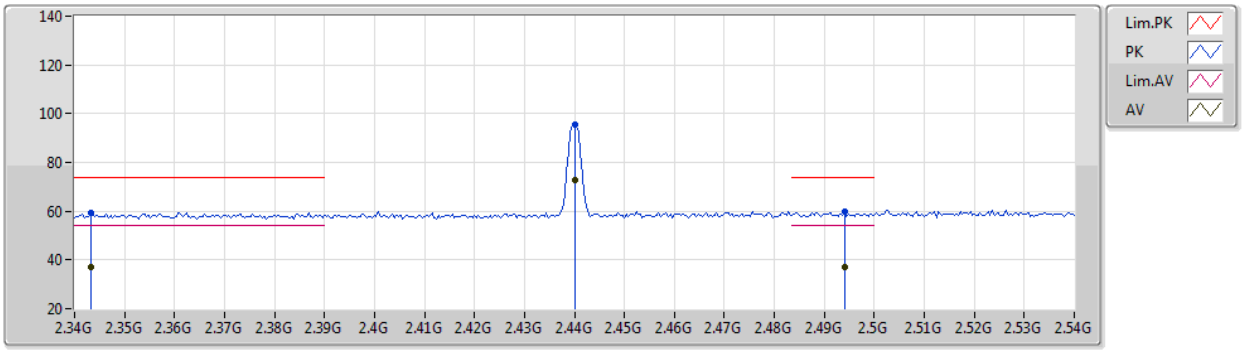


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3568G	37.86	54.00	-16.14	35.54	3	Vertical	119	1.40	-	2.32	29.61	5.93	-
AV	2.4396G	75.66	Inf	-Inf	35.91	3	Vertical	119	1.40	-	39.75	29.90	6.01	-
AV	2.4964G	37.56	54.00	-16.44	36.26	3	Vertical	119	1.40	-	1.30	30.18	6.08	-
PK	2.3568G	60.36	74.00	-13.64	35.54	3	Vertical	119	1.40	-	24.82	29.61	5.93	-
PK	2.4396G	98.16	Inf	-Inf	35.91	3	Vertical	119	1.40	-	62.25	29.90	6.01	-
PK	2.4964G	60.06	74.00	-13.94	36.26	3	Vertical	119	1.40	-	23.80	30.18	6.08	-

BT-EDR(3Mbps)

2440MHz_TX

17/06/2020

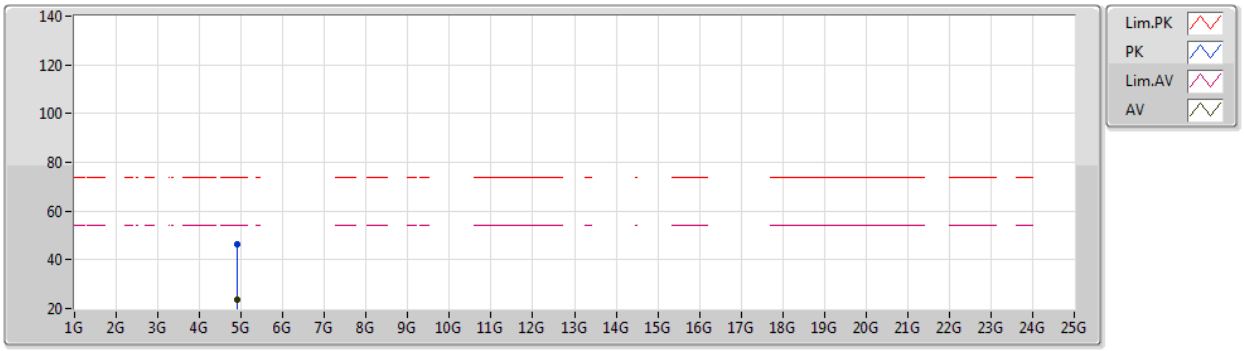


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3432G	36.95	54.00	-17.05	35.51	3	Horizontal	109	1.00	-	1.44	29.59	5.92	-
AV	2.44G	73.00	Inf	-Inf	35.91	3	Horizontal	109	1.00	-	37.09	29.90	6.01	-
AV	2.494G	37.14	54.00	-16.86	36.24	3	Horizontal	109	1.00	-	0.90	30.17	6.07	-
PK	2.3432G	59.45	74.00	-14.55	35.51	3	Horizontal	109	1.00	-	23.94	29.59	5.92	-
PK	2.44G	95.50	Inf	-Inf	35.91	3	Horizontal	109	1.00	-	59.59	29.90	6.01	-
PK	2.494G	59.64	74.00	-14.36	36.24	3	Horizontal	109	1.00	-	23.40	30.17	6.07	-

BT-EDR(3Mbps)

2440MHz_TX

17/06/2020

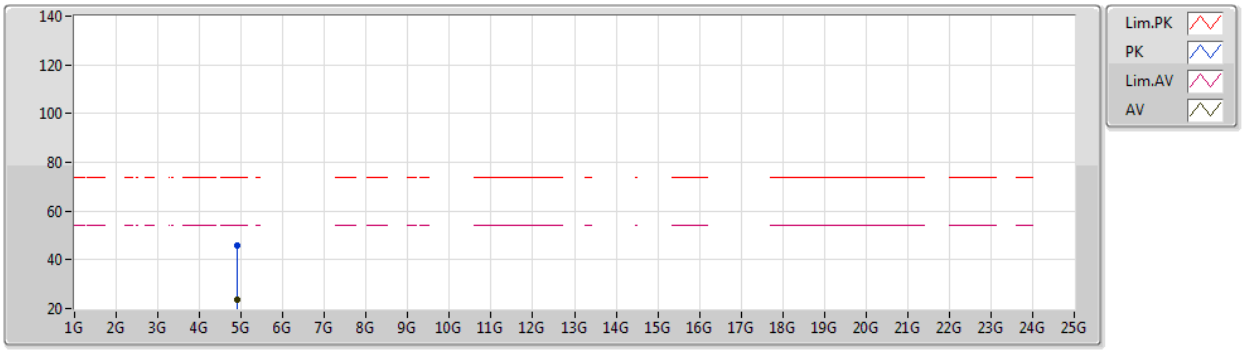


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.88924G	23.74	54.00	-30.26	8.22	3	Vertical	259	1.41	-	15.52	33.78	8.31	33.87
PK	4.88924G	46.24	74.00	-27.76	8.22	3	Vertical	259	1.41	-	38.02	33.78	8.31	33.87

BT-EDR(3Mbps)

2440MHz_TX

17/06/2020

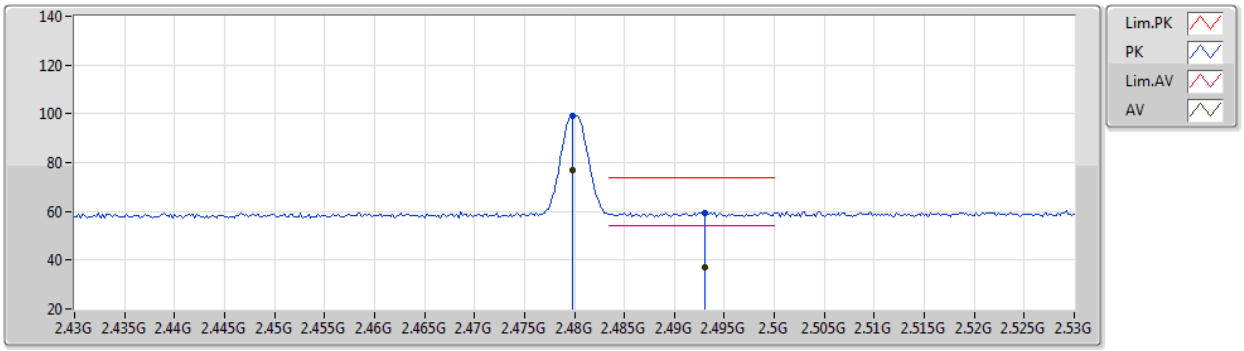


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.8929G	23.54	54.00	-30.46	8.24	3	Horizontal	359	1.15	-	15.30	33.79	8.31	33.86
PK	4.8929G	46.04	74.00	-27.96	8.24	3	Horizontal	359	1.15	-	37.80	33.79	8.31	33.86

BT-EDR(3Mbps)

2480MHz_TX

17/06/2020

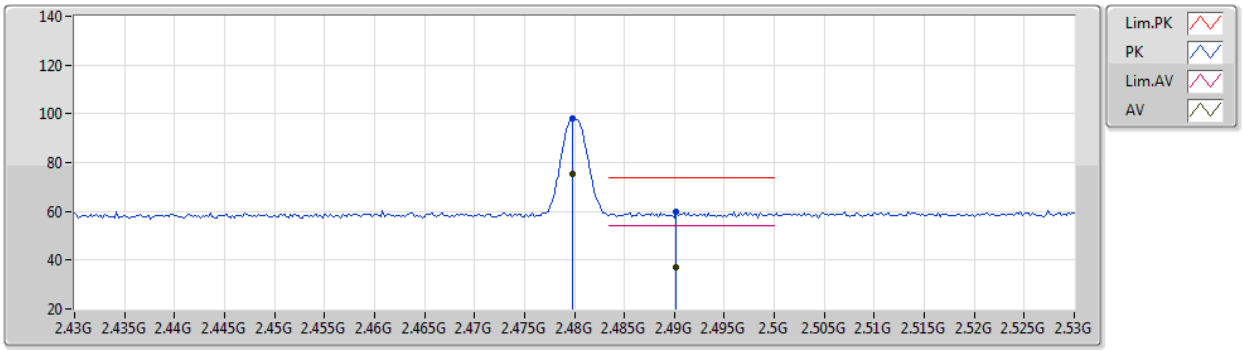


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.4798G	76.85	Inf	-Inf	36.16	3	Vertical	120	1.02	-	40.69	30.10	6.06	-
AV	2.493G	37.05	54.00	-16.95	36.23	3	Vertical	120	1.02	-	0.82	30.16	6.07	-
PK	2.4798G	99.35	Inf	-Inf	36.16	3	Vertical	120	1.02	-	63.19	30.10	6.06	-
PK	2.493G	59.55	74.00	-14.45	36.23	3	Vertical	120	1.02	-	23.32	30.16	6.07	-

BT-EDR(3Mbps)

2480MHz_TX

17/06/2020

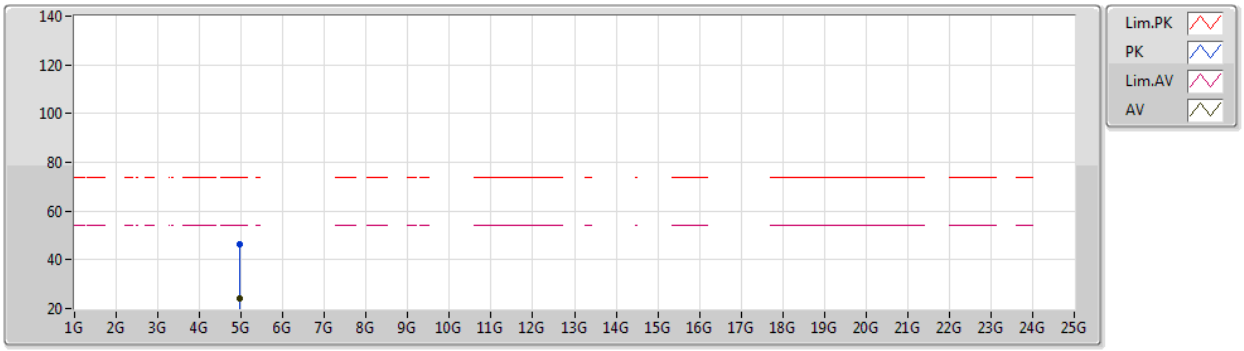


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.4798G	75.51	Inf	-Inf	36.16	3	Horizontal	344	1.13	-	39.35	30.10	6.06	-
AV	2.4902G	37.29	54.00	-16.71	36.22	3	Horizontal	344	1.13	-	1.07	30.15	6.07	-
PK	2.4798G	98.01	Inf	-Inf	36.16	3	Horizontal	344	1.13	-	61.85	30.10	6.06	-
PK	2.4902G	59.79	74.00	-14.21	36.22	3	Horizontal	344	1.13	-	23.57	30.15	6.07	-

BT-EDR(3Mbps)

2480MHz_TX

17/06/2020

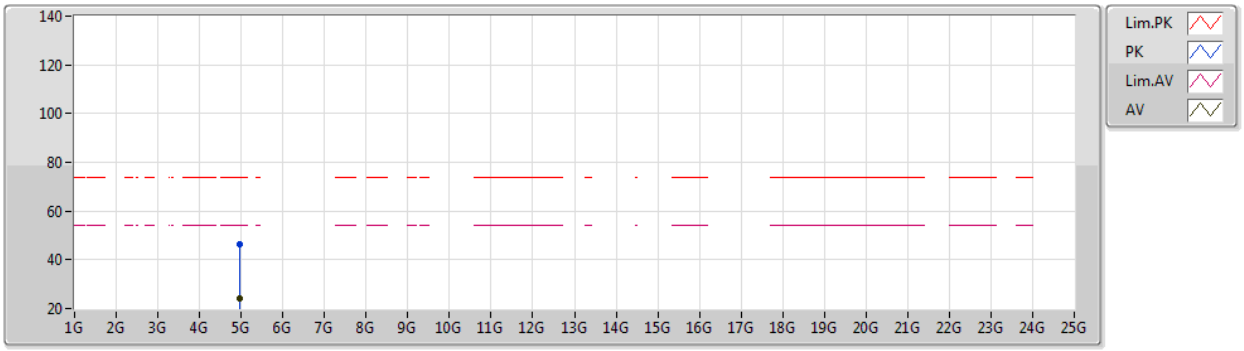


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.95394G	24.00	54.00	-30.00	8.43	3	Vertical	161	1.48	-	15.57	33.91	8.35	33.83
PK	4.95394G	46.50	74.00	-27.50	8.43	3	Vertical	161	1.48	-	38.07	33.91	8.35	33.83

BT-EDR(3Mbps)

2480MHz_TX

17/06/2020



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	4.95634G	24.01	54.00	-29.99	8.43	3	Horizontal	346	1.49	-	15.58	33.91	8.35	33.83
PK	4.95634G	46.51	74.00	-27.49	8.43	3	Horizontal	346	1.49	-	38.08	33.91	8.35	33.83

Summary

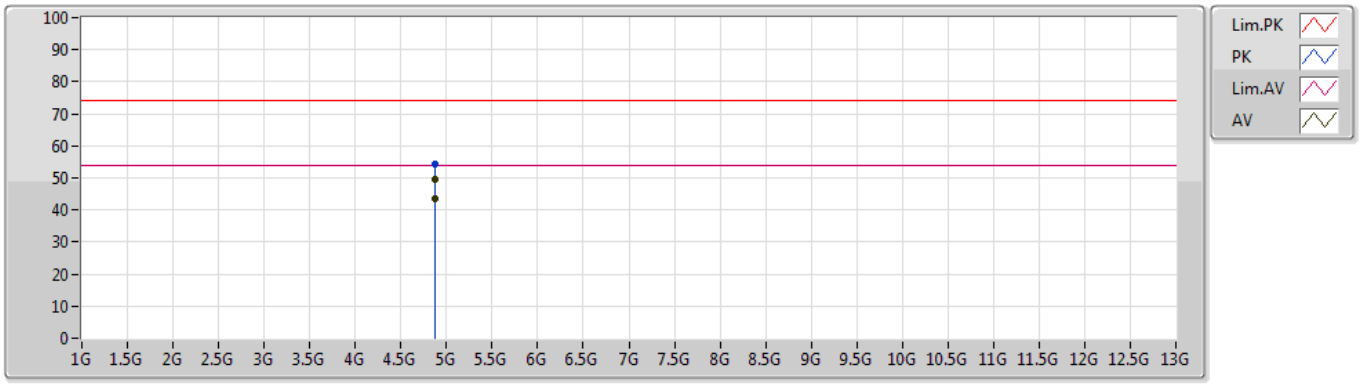
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	AV	4.87996G	51.48	54.00	-2.52	Horizontal
Mode 2	Pass	AV	4.88G	51.90	54.00	-2.10	Vertical

Mode Configure

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
Mode 1	Pass	AV	4.87394G	43.57	54.00	-10.43	3	Vertical	169	1.05	-
Mode 1	Pass	AV	4.87996G	49.51	54.00	-4.49	3	Vertical	140	1.01	“Worst”
Mode 1	Pass	PK	4.87399G	49.54	74.00	-24.46	3	Vertical	169	1.05	-
Mode 1	Pass	PK	4.87968G	54.42	74.00	-19.58	3	Vertical	140	1.01	-
Mode 1	Pass	AV	4.87394G	38.55	54.00	-15.45	3	Horizontal	275	1.01	-
Mode 1	Pass	AV	4.87996G	51.48	54.00	-2.52	3	Horizontal	1	1.01	“Worst”
Mode 1	Pass	PK	4.87399G	47.50	74.00	-26.50	3	Horizontal	275	1.01	-
Mode 1	Pass	PK	4.8798G	51.54	74.00	-22.46	3	Horizontal	1	1.01	-
Mode 2	Pass	AV	4.88G	51.90	54.00	-2.10	3	Vertical	129	1.10	“Worst”
Mode 2	Pass	AV	11.15484G	42.56	54.00	-11.44	3	Vertical	300	2.41	-
Mode 2	Pass	PK	4.88024G	55.45	74.00	-18.55	3	Vertical	129	1.10	-
Mode 2	Pass	PK	11.16868G	55.24	74.00	-18.76	3	Vertical	300	2.41	-
Mode 2	Pass	AV	4.87996G	50.62	54.00	-3.38	3	Horizontal	67	1.08	“Worst”
Mode 2	Pass	AV	11.16164G	42.55	54.00	-11.45	3	Horizontal	199	2.81	-
Mode 2	Pass	PK	4.87964G	54.59	74.00	-19.41	3	Horizontal	67	1.08	-
Mode 2	Pass	PK	11.15088G	55.34	74.00	-18.66	3	Horizontal	199	2.81	-

Radiated Emissions above 1GHz_Mode 1

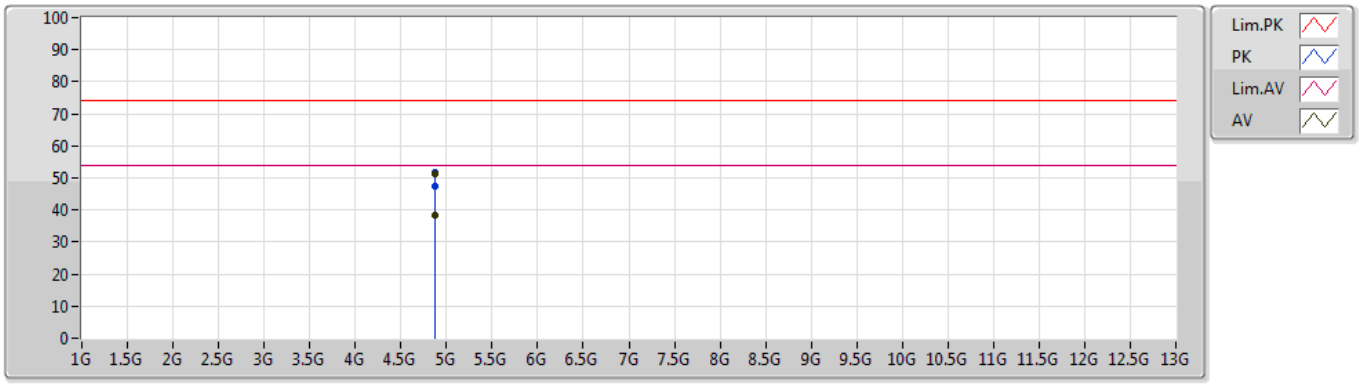
26/08/2020



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	4.87394G	43.57	54.00	-10.43	8.29	3	Vertical	169	1.05	-	35.28	31.10	6.57	29.38
AV	4.87996G	49.51	54.00	-4.49	8.30	3	Vertical	140	1.01	"Worst"	41.21	31.10	6.58	29.38
PK	4.87399G	49.54	74.00	-24.46	8.29	3	Vertical	169	1.05	-	41.25	31.10	6.57	29.38
PK	4.87968G	54.42	74.00	-19.58	8.30	3	Vertical	140	1.01	-	46.12	31.10	6.58	29.38

Radiated Emissions above 1GHz_Mode 1

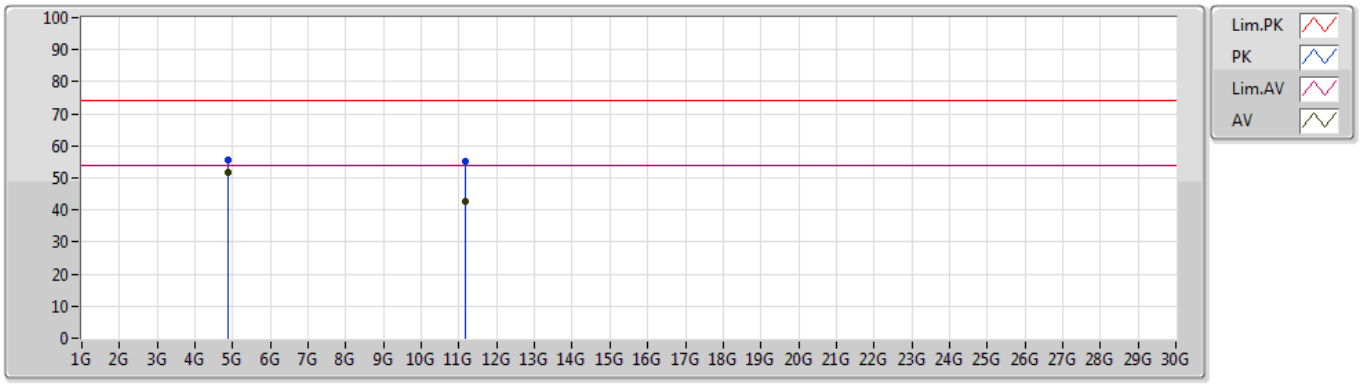
26/08/2020



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	4.87394G	38.55	54.00	-15.45	8.29	3	Horizontal	275	1.01	-	30.26	31.10	6.57	29.38
AV	4.87996G	51.48	54.00	-2.52	8.30	3	Horizontal	1	1.01	"Worst"	43.18	31.10	6.58	29.38
PK	4.87399G	47.50	74.00	-26.50	8.29	3	Horizontal	275	1.01	-	39.21	31.10	6.57	29.38
PK	4.8798G	51.54	74.00	-22.46	8.30	3	Horizontal	1	1.01	-	43.24	31.10	6.58	29.38

Radiated Emissions above 1GHz_Mode 2

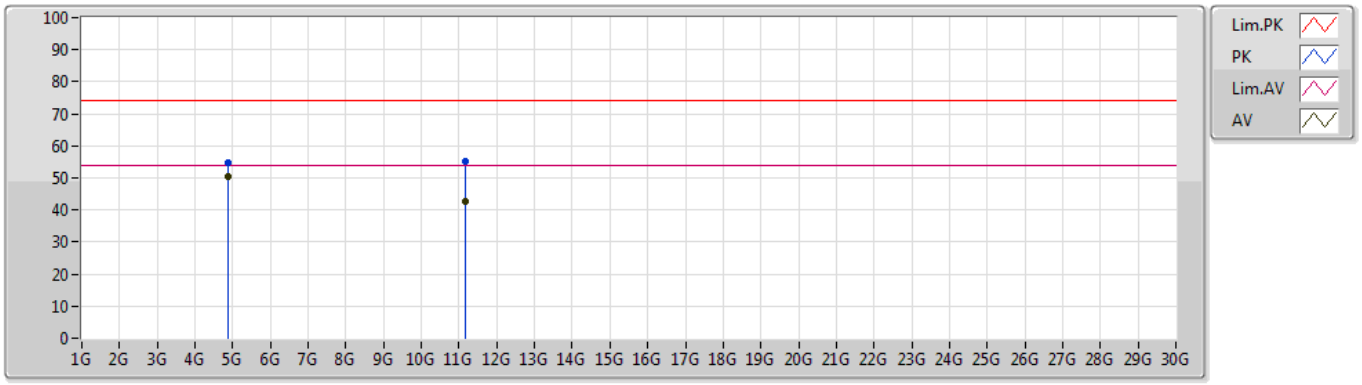
26/08/2020



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	4.88G	51.90	54.00	-2.10	8.30	3	Vertical	129	1.10	"Worst"	43.60	31.10	6.58	29.38
AV	11.15484G	42.56	54.00	-11.44	18.30	3	Vertical	300	2.41	-	24.26	39.85	9.32	30.87
PK	4.88024G	55.45	74.00	-18.55	8.30	3	Vertical	129	1.10	-	47.15	31.10	6.58	29.38
PK	11.16868G	55.24	74.00	-18.76	18.29	3	Vertical	300	2.41	-	36.95	39.83	9.33	30.87

Radiated Emissions above 1GHz_Mode 2

26/08/2020



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	4.87996G	50.62	54.00	-3.38	8.30	3	Horizontal	67	1.08	"Worst"	42.32	31.10	6.58	29.38
AV	11.16164G	42.55	54.00	-11.45	18.29	3	Horizontal	199	2.81	-	24.26	39.84	9.32	30.87
PK	4.87964G	54.59	74.00	-19.41	8.30	3	Horizontal	67	1.08	-	46.29	31.10	6.58	29.38
PK	11.15088G	55.34	74.00	-18.66	18.30	3	Horizontal	199	2.81	-	37.04	39.85	9.32	30.87