

FCC Radio Test Report

FCC ID : U4GSX5XLRWB
Equipment : Rugged mobile computer with barcode reader XLR version
Brand Name : Datalogic
Model Name : Skorpio X5
Applicantt/ 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 Mar. 18, 2021. We, SPORTON INTERNATIONAL INC. Hsinhua 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. Hsinhua Laboratory, the test report shall not be reproduced except in full.



Approved by: Allen Lin

SPORTON INTERNATIONAL INC. Hsinhua Laboratory

No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)

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APPENDIX A. TEST RESULTS OF AC POWER-LINE CONDUCTED EMISSIONS

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APPENDIX G. TEST RESULTS OF EMISSIONS IN RESTRICTED FREQUENCY BANDS

APPENDIX H. TEST RESULTS OF RADIATED EMISSION CO-LOCATION

APPENDIX I. TEST PHOTOS

PHOTOGRAPHS OF EUT V01



TEL : 886-3-3273456
FAX : 886-3-3270973
Report Template No.: HE1-C9 Ver4.0
FCC ID: U4GSX5XLRWB

Summary of Test Result

Report Clause	Ref. Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.1	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: Amber Chiu

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	Bluetooth Version	Ch. Frequency (MHz)	Channel Number
2400-2483.5	BR / EDR	2402-2480	0-78 [79]

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	BT-BR(1Mbps)	1	1TX
2.4-2.4835GHz	BT-EDR(2Mbps)	1	1TX
2.4-2.4835GHz	BT-EDR(3Mbps)	1	1TX

Note:

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

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector
1	Datalogic-USI	Skorpio X5 antenna	PIFA antenna	mini I-pex
2	Datalogic-USI	Skorpio X5 antenna	PIFA antenna	mini I-pex

Ant.	Port	Gain (dBi)				
		2.4G	5G			
			U-NII-1	U-NII-2A	U-NII-2C	U-NII-3
1	1	1.7	2.6	3.5	3.5	3.8
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 / Host system / 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)	0.771	1.13	2.895m	1k
BT-EDR(2Mbps)	0.771	1.13	2.895m	1k
BT-EDR(3Mbps)	0.772	1.12	2.895m	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	Camera	Keypad	Scan engine	Description
Pistol	Wired (Pogo pin)	V	V	V				Functional	Extra Long Range	Pistol type with wired charging
Pistol	WLC (wireless)	V	V	V		V		Functional	Extra Long Range	Pistol type with wireless charging
Pistol	Wired (Pogo pin)	V	V	V				Numeric	Extra Long Range	Pistol type with wired charging
Pistol	WLC (wireless)	V	V	V		V		Numeric	Extra Long Range	Pistol type with wireless charging
Pistol	Wired (Pogo pin)	V	V	V				Alphanumeric	Extra Long Range	Pistol type with wired charging
Pistol	WLC (wireless)	V	V	V		V		Alphanumeric	Extra Long Range	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

Test Lab. : Sporton International Inc. Hsinhua Laboratory				
☒ Hsinhua (TAF: 3785)	ADD: No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)			
	TEL: 886-3-327-3456		FAX: 886-3-327-0973	
Test site Designation No. TW1190 with FCC.				
Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
AC Conduction	CO04-HY	Edward	20.8~22.7°C / 54~58%	18/Mar/2021
RF Conducted	TH01-HY	Barry	22.6~24.1°C / 53~60%	15/Jun/2020~18/Jun/2020
RF Conducted (Power)	TH06-HY	Johnny	20.1~26.9°C / 50~60%	21/Dec/2020~10/Mar/2021
Radiated (below 1GHz)	03CH03-HY	Edward	21.2~22.5°C/ 53~58%	23/Feb/2021~02/Mar/2021
Radiated (above 1GHz)	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
☐ Wen 33rd.St. (TAF: 3785)	ADD: No.14-1, Ln. 19, Wen 33rd St., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.)			
	TEL: 886-3-318-0787		FAX: 886-3-318-0287	
Test site Designation No. TW0008 with FCC.				

Laboratory number TAF 3785 is a spin-off from the original Laboratory number TAF 1190.

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	QRCT V4.0-00156
-----------------------	-----------------

Mode	Power Setting
BT-BR(1Mbps)	-
2402MHz	7
2441MHz	7
2480MHz	7
BT-EDR(2Mbps)	-
2402MHz	7
2441MHz	7
2480MHz	7
BT-EDR(3Mbps)	-
2402MHz	7
2441MHz	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 (Wired Pistol)
2	Adapter mode (WLC Pistol)
3	USB mode (WLC Pistol)

The Worst Case Mode for Following Conformance Tests	
Tests Item	20dB Bandwidth Carrier Frequency Separation 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.	
According to the manufacturer's declaration of product application, the brand and model name are same as FCC ID : U4GSX5WB. After evaluation and verify, the test data meet our expectation. Therefore the test data could be leveraged as FCC ID : U4GSX5XLRWB.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Maximum Conducted Output Power
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 (Wired Pistol)		
2	Adapter mode (WLC Pistol)		
3	USB mode (WLC Pistol)		
Operating Mode > 1GHz	CTX		
Orthogonal Planes of EUT	X Plane	Y Plane	Z Plane
			
Worst Planes of EUT			V
According to the manufacturer's declaration of product application, the brand and model name are same as FCC ID : U4GSX5WB. After evaluation and verify, the test data meet our expectation. Therefore the test data could be leveraged as FCC ID : U4GSX5XLRWB. (only Radiated measurement above 1G)			

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.: FA9N0606-07 for Co-location RF Exposure Evaluation and Appendix H for Radiated Emission Co-location.	
According to the manufacturer's declaration of product application, the brand and model name are same as FCC ID : U4GSX5WB. After evaluation and verify, the test data meet our expectation. Therefore the test data could be leveraged as FCC ID : U4GSX5XLRWB.	

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

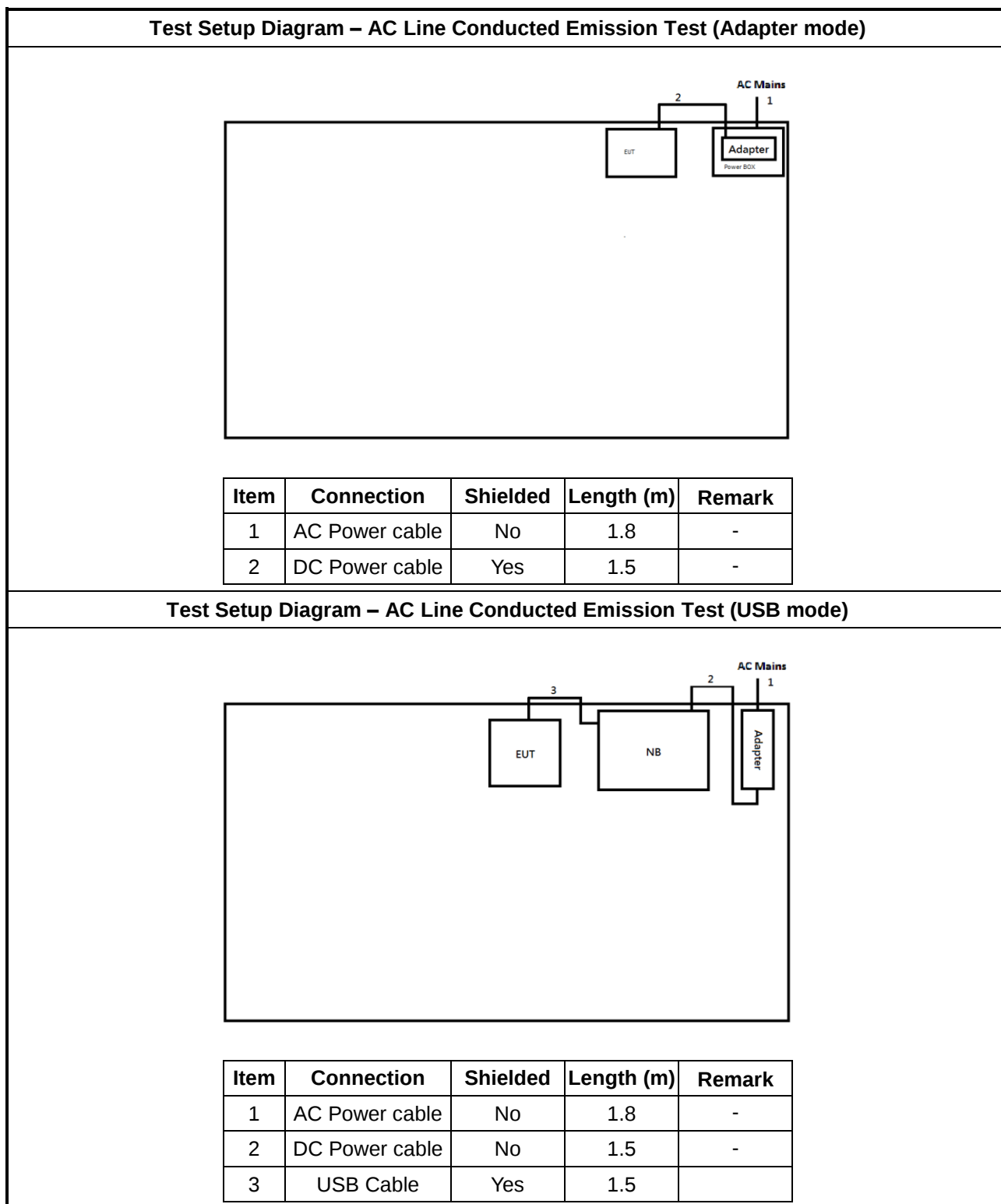
Support Equipment – AC Conduction					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Notebook	DELL	P06G	-	-
2	AC adapter for NB	DELL	AA90PM111	-	-

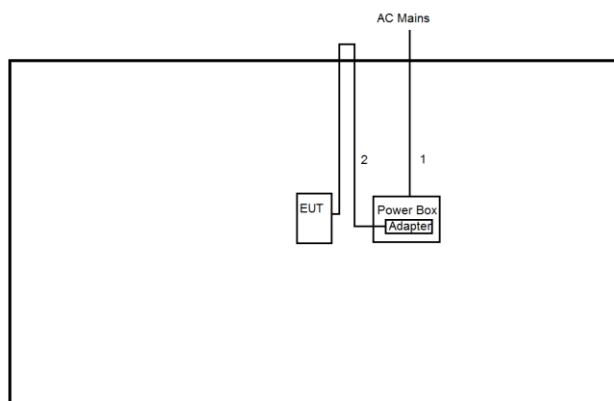
Support Equipment – Conducted					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Notebook	DELL	E5410	-	-
2	Adapter for NB	DELL	HA65NM130	-	-

Support Equipment – Radiated below 1GHz					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Notebook	DELL	P06G	-	-
2	AC adapter for NB	DELL	AA90PM111	-	-

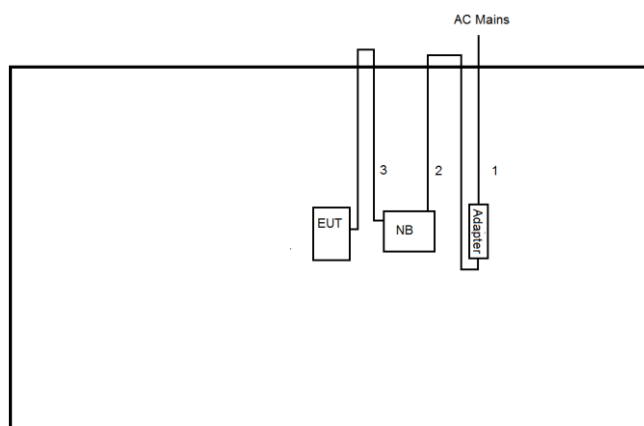
Support Equipment – Radiated above 1GHz					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Notebook	DELL	PP13S	-	-
2	AC adapter for NB	DELL	AA90PM111	-	-

2.6 Test Setup Diagram



Test Setup Diagram - Radiated Test (Adapter mode)


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

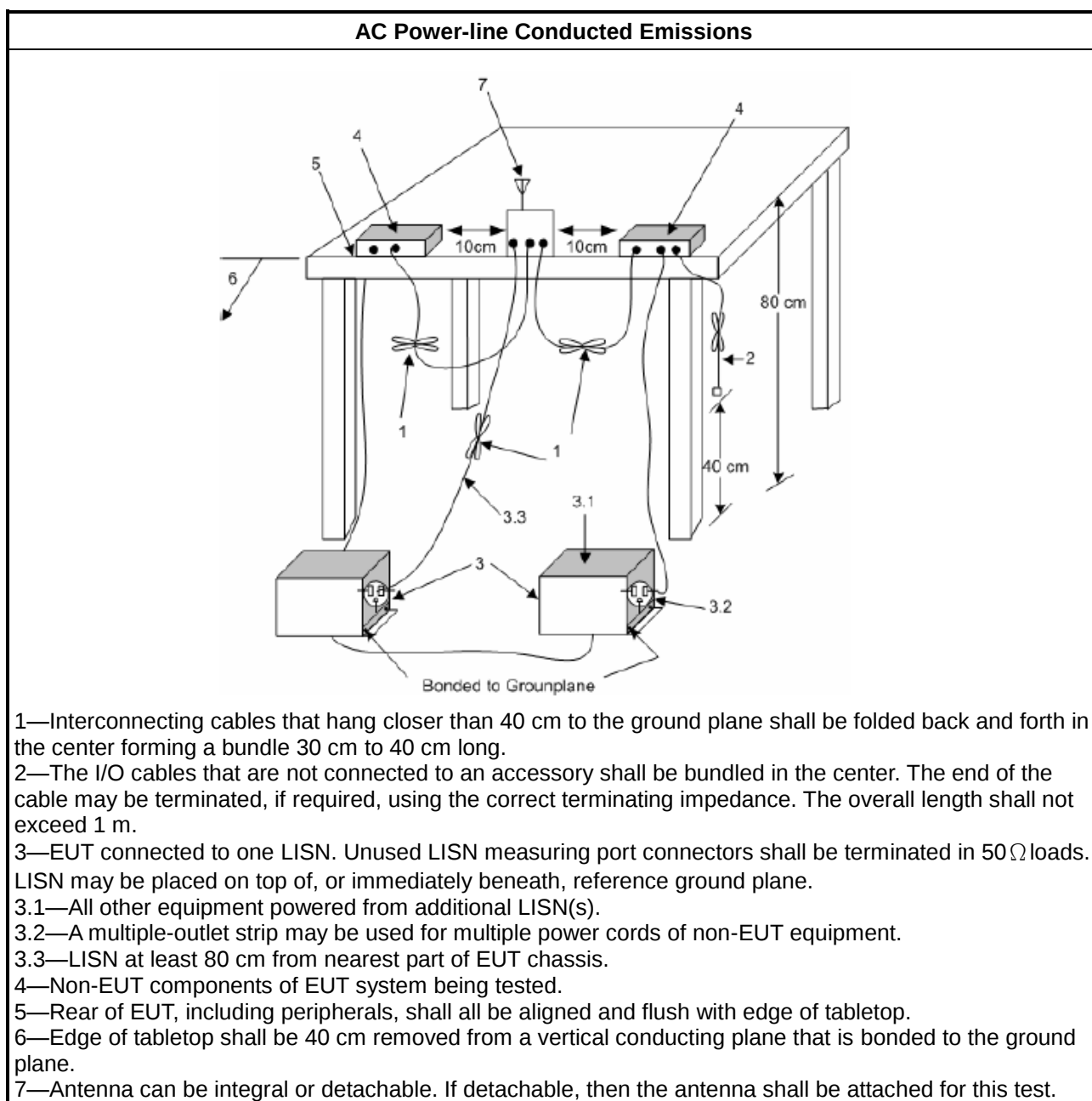
Test Method
▪ Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

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



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:	
	$N \geq 75$ and $ChS \geq MAX$ (20 dB bandwidth, 25 kHz).
	$75 > N \geq 15$ and $ChS \geq MAX$ (20 dB bandwidth 2/3, 25 kHz).
N: Number of Hopping Frequencies; ChS: Hopping Channel Separation	

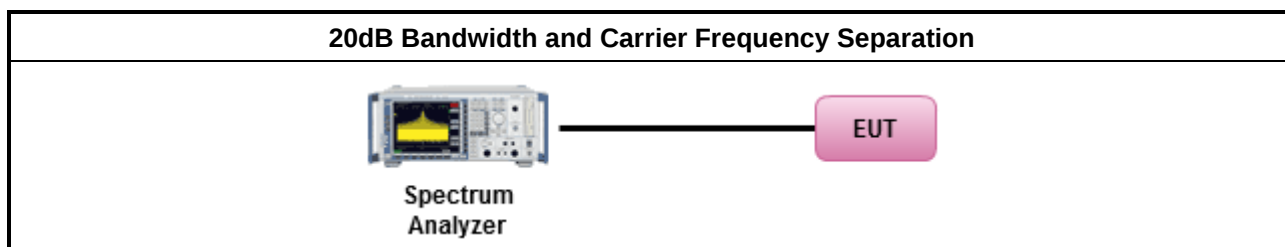
3.2.2 Measuring Instruments

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



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:	
	$N \geq 75$; Power 30dBm; EIRP 36dBm
	$75 > N \geq 15$; Power 21dBm; EIRP 27dBm
N: Number of Hopping Frequencies	

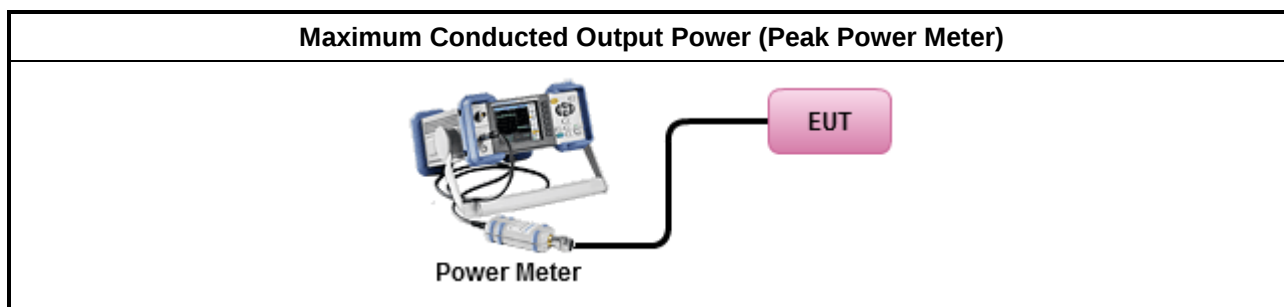
3.3.2 Measuring Instruments

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



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:	
	$N \geq 75$ and $ChS \geq MAX$ (20 dB bandwidth, 25 kHz).
	$75 > N \geq 15$ and $ChS \geq MAX$ (20 dB bandwidth 2/3, 25 kHz).
N: Number of Hopping Frequencies; ChS : Hopping Channel Separation	

3.4.2 Hopping Bandedge Limit

Refer clause 3.6.1 and clause 3.7.1

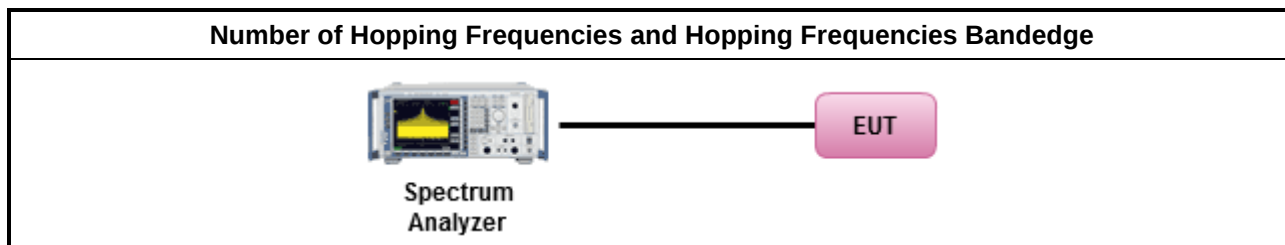
3.4.3 Measuring Instruments

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

3.4.4 Test Procedures

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

3.4.5 Test Setup



3.4.6 Test Result of Number of Hopping Frequencies

Refer as Appendix D

3.4.7 Test Result of Number of Hopping Frequencies Bandedge

Refer as Appendix D

3.5 Time of Occupancy (Dwell Time)

3.5.1 Time of Occupancy (Dwell Time) Limit

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

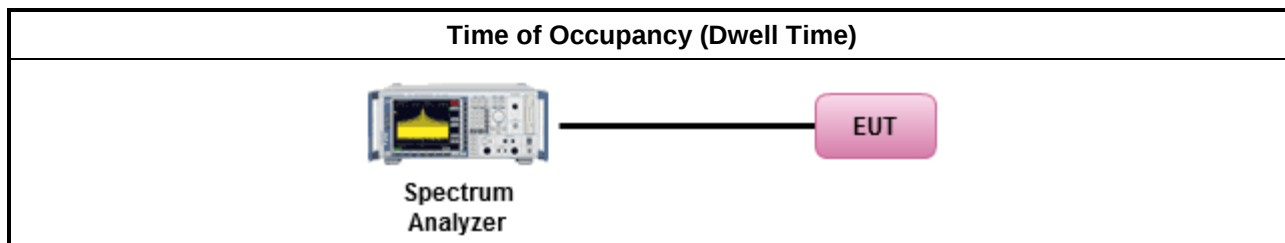
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

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

3.5.4 Test Setup



3.5.5 Test Result of Time of Occupancy (Dwell Time)

Refer as Appendix E

3.6 Emissions in Non-restricted Frequency Bands

3.6.1 Emissions in Non-restricted Frequency Bands Limit

Un-restricted Band Emissions Limit	
RF output power procedure	Limit (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.	

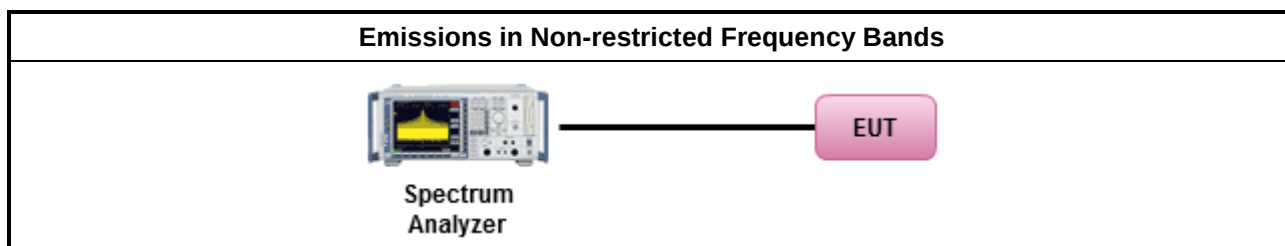
3.6.2 Measuring Instruments

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



3.6.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix F

3.7 Emissions in Restricted Frequency Bands

3.7.1 Emissions in Restricted Frequency Bands Limit

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

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

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

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

3.7.2 Measuring Instruments

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

3.7.3 Test Procedures

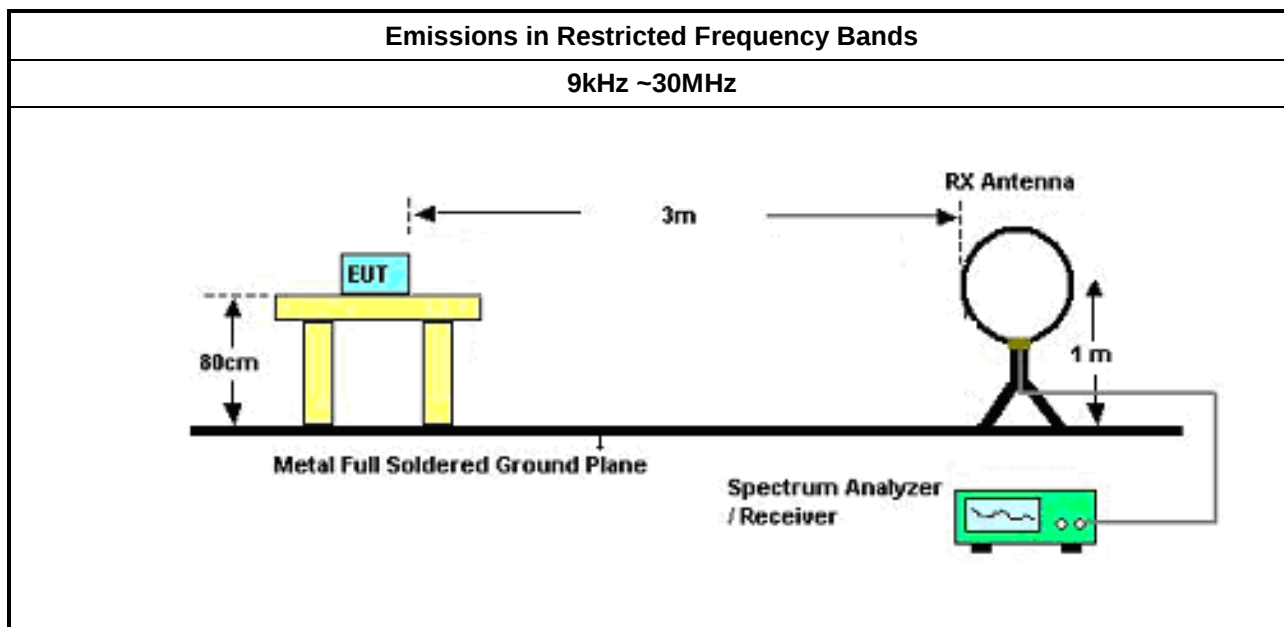
Test Method	
The average emission levels shall be measured in [hopping duty factor].	
Refer as ANSI C63.10; clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.	
For the transmitter unwanted emissions shall be measured using following options below:	
	Refer as ANSI C63.10, clause 4.1.4.2.1 QP value.
	Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak.
	Refer as ANSI C63.10, clause 4.1.4.2.4 average value of hopping pulsed emissions.
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.

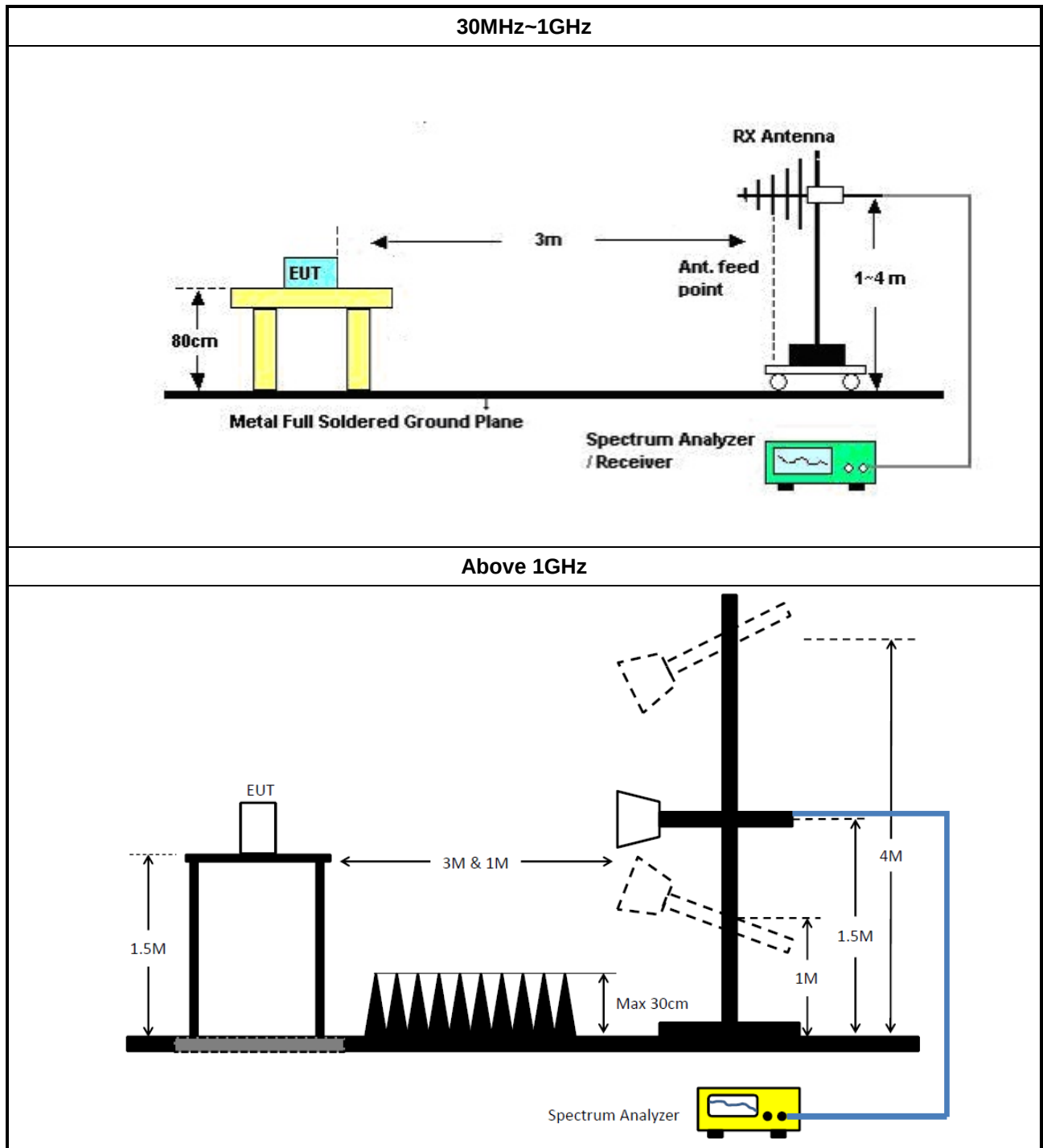
3.7.4 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamplifier Factor)

3.7.5 Test Setup





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 /Brand	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	11/Nov/2020	10/Nov/2021
RF Cable 5m	TITAN	TITAN	CO04-cable-01	9kHz~200MHz	03/Mar/2021	02/Mar/2022
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9kHz ~ 30MHz	21/Sep/2020	20/Sep/2021

Instrument for Conducted Test

Instrument	Manufacturer /Brand	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 Conducted Test for Power

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Signal Analyzer	R&S	FSV 40	101029	10Hz~40GHz	19/Oct/2020	18/Oct/2021
SMB100A Signal Generator	R&S	SMB100A03	181147	100kHz~40GHz	20/Oct/2020	19/Oct/2021
Pulse Sensor	Anritsu	MA2411B	1027452	300MHz~40GHz	18/Mar/2020	17/Mar/2021
Power Meter	Anritsu	ML2495A	1124009	300MHz~40GHz	18/Mar/2020	17/Mar/2021

Instrument for Radiated Test below 1GHz

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30MHz~1GHz 3m	06/Aug/2020	05/Aug/2021
Signal Analyzer	R&S	FSV40	101500	10Hz~40GHz	19/Aug/2020	18/Aug/2021
Amplifier	HP	8447D	2944A08033	10kHz~1.3GHz	14/Apr/2020	13/Apr/2021
Bilog Antenna & 6dB Attenuator	SCHAFFNER / EMCI	CBL6112B / N-6-05	22237 / AT-N-0603	30MHz~1GHz	25/Oct/2020	24/Oct/2021
RF Cable-R03m	Jye Bao	RG142	CB021	9kHz~30MHz	19/Jun/2020	18/Jun/2021
RF Cable-R03m	Jye Bao	RG142	CB021	30MHz~1GHz	18/Mar/2020	17/Mar/2021
EMI Test Receiver	R&S	ESR3	102051	9kHz~3.6GHz	29/May/2020	28/May/2021

Instrument for Radiated Test above 1GHz

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
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
Microwave Preamplifier	Agilent	8449B	3008A02373	1GHz~18GHz	16/Oct/2019	15/Oct/2020
Double Ridged Guide Horn Antenna	SCHWARZBEC	BBHA 9120 D	BBHA 9120 D 01543	1GHz~18GHz	09/Jun/2020	08/Jun/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

Instrument for Radiated Test (Co-location)

Instrument	Manufacturer /Brand	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

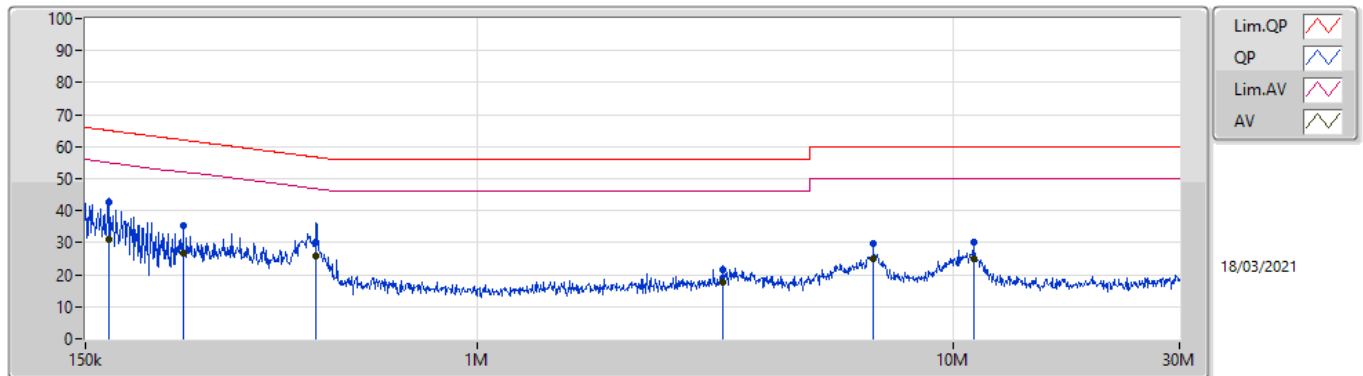
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	458.702k	26.06	46.71	-20.65	Line
Mode 2	Pass	QP	173.876k	48.85	64.78	-15.93	Line
Mode 3	Pass	AV	458.702k	30.62	46.71	-16.09	Neutral

Mode Configure

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition	Comments
Mode 1	Pass	QP	168.41k	42.50	65.04	-22.54	Line	-
Mode 1	Pass	AV	168.41k	31.24	55.04	-23.80	Line	-
Mode 1	Pass	QP	240.253k	35.36	62.08	-26.72	Line	-
Mode 1	Pass	AV	240.253k	26.89	52.08	-25.19	Line	-
Mode 1	Pass	QP	458.702k	30.00	56.71	-26.71	Line	-
Mode 1	Pass	AV	458.702k	26.06	46.71	-20.65	Line	-
Mode 1	Pass	QP	3.296M	21.55	56.00	-34.45	Line	-
Mode 1	Pass	AV	3.296M	17.57	46.00	-28.43	Line	-
Mode 1	Pass	QP	6.789M	29.64	60.00	-30.36	Line	-
Mode 1	Pass	AV	6.789M	24.93	50.00	-25.07	Line	-
Mode 1	Pass	QP	11.093M	30.38	60.00	-29.62	Line	-
Mode 1	Pass	AV	11.093M	24.99	50.00	-25.01	Line	-
Mode 1	Pass	QP	180.236k	43.73	64.47	-20.74	Neutral	-
Mode 1	Pass	AV	180.236k	30.28	54.47	-24.19	Neutral	-
Mode 1	Pass	QP	239.296k	36.80	62.12	-25.32	Neutral	-
Mode 1	Pass	AV	239.296k	24.92	52.12	-27.20	Neutral	-
Mode 1	Pass	QP	471.701k	22.77	56.48	-33.71	Neutral	-
Mode 1	Pass	AV	471.701k	17.37	46.48	-29.11	Neutral	-
Mode 1	Pass	QP	2.211M	29.85	56.00	-26.15	Neutral	-
Mode 1	Pass	AV	2.211M	21.26	46.00	-24.74	Neutral	-
Mode 1	Pass	QP	6.843M	30.90	60.00	-29.10	Neutral	-
Mode 1	Pass	AV	6.843M	26.14	50.00	-23.86	Neutral	-
Mode 1	Pass	QP	10.039M	29.07	60.00	-30.93	Neutral	-
Mode 1	Pass	AV	10.039M	24.28	50.00	-25.72	Neutral	-
Mode 2	Pass	QP	173.876k	48.85	64.78	-15.93	Line	-
Mode 2	Pass	AV	173.876k	30.10	54.78	-24.68	Line	-
Mode 2	Pass	QP	238.343k	40.78	62.16	-21.38	Line	-
Mode 2	Pass	AV	238.343k	28.71	52.16	-23.45	Line	-
Mode 2	Pass	QP	540.273k	18.98	56.00	-37.02	Line	-
Mode 2	Pass	AV	540.273k	14.57	46.00	-31.43	Line	-
Mode 2	Pass	QP	4.376M	27.05	56.00	-28.95	Line	-
Mode 2	Pass	AV	4.376M	20.96	46.00	-25.04	Line	-
Mode 2	Pass	QP	7.122M	25.24	60.00	-34.76	Line	-
Mode 2	Pass	AV	7.122M	20.08	50.00	-29.92	Line	-
Mode 2	Pass	QP	14.552M	29.25	60.00	-30.75	Line	-
Mode 2	Pass	AV	14.552M	19.50	50.00	-30.50	Line	-
Mode 2	Pass	QP	178.803k	47.52	64.55	-17.03	Neutral	-
Mode 2	Pass	AV	178.803k	28.19	54.55	-26.36	Neutral	-
Mode 2	Pass	QP	278.495k	34.34	60.86	-26.52	Neutral	-
Mode 2	Pass	AV	278.495k	23.14	50.86	-27.72	Neutral	-
Mode 2	Pass	QP	587.518k	23.14	56.00	-32.86	Neutral	-
Mode 2	Pass	AV	587.518k	15.77	46.00	-30.23	Neutral	-

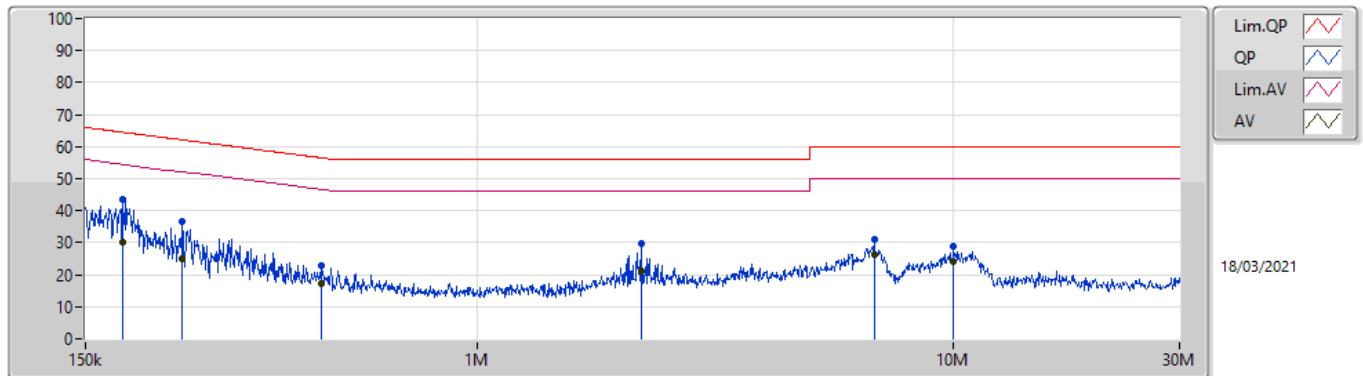
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition	Comments
Mode 2	Pass	QP	2.274M	27.76	56.00	-28.24	Neutral	-
Mode 2	Pass	AV	2.274M	22.55	46.00	-23.45	Neutral	-
Mode 2	Pass	QP	6.549M	26.22	60.00	-33.78	Neutral	-
Mode 2	Pass	AV	6.549M	21.71	50.00	-28.29	Neutral	-
Mode 2	Pass	QP	14.669M	33.89	60.00	-26.11	Neutral	-
Mode 2	Pass	AV	14.669M	26.75	50.00	-23.25	Neutral	-
Mode 3	Pass	QP	152.414k	45.80	65.87	-20.07	Line	-
Mode 3	Pass	AV	152.414k	32.78	55.87	-23.09	Line	-
Mode 3	Pass	QP	464.229k	32.62	56.61	-23.99	Line	-
Mode 3	Pass	AV	464.229k	28.85	46.61	-17.76	Line	-
Mode 3	Pass	QP	1.011M	23.16	56.00	-32.84	Line	-
Mode 3	Pass	AV	1.011M	17.97	46.00	-28.03	Line	-
Mode 3	Pass	QP	1.915M	27.29	56.00	-28.71	Line	-
Mode 3	Pass	AV	1.915M	22.39	46.00	-23.61	Line	-
Mode 3	Pass	QP	3.527M	33.07	56.00	-22.93	Line	-
Mode 3	Pass	AV	3.527M	27.43	46.00	-18.57	Line	-
Mode 3	Pass	QP	5.364M	29.05	60.00	-30.95	Line	-
Mode 3	Pass	AV	5.364M	24.17	50.00	-25.83	Line	-
Mode 3	Pass	QP	151.202k	42.37	65.92	-23.55	Neutral	-
Mode 3	Pass	AV	151.202k	32.77	55.92	-23.15	Neutral	-
Mode 3	Pass	QP	458.702k	37.61	56.71	-19.10	Neutral	-
Mode 3	Pass	AV	458.702k	30.62	46.71	-16.09	Neutral	-
Mode 3	Pass	QP	889.871k	26.87	56.00	-29.13	Neutral	-
Mode 3	Pass	AV	889.871k	21.15	46.00	-24.85	Neutral	-
Mode 3	Pass	QP	2.866M	28.51	56.00	-27.49	Neutral	-
Mode 3	Pass	AV	2.866M	23.09	46.00	-22.91	Neutral	-
Mode 3	Pass	QP	3.701M	32.42	56.00	-23.58	Neutral	-
Mode 3	Pass	AV	3.701M	26.62	46.00	-19.38	Neutral	-
Mode 3	Pass	QP	12.756M	31.66	60.00	-28.34	Neutral	-
Mode 3	Pass	AV	12.756M	27.43	50.00	-22.57	Neutral	-

Conducted Emissions at Powerline_Mode 1



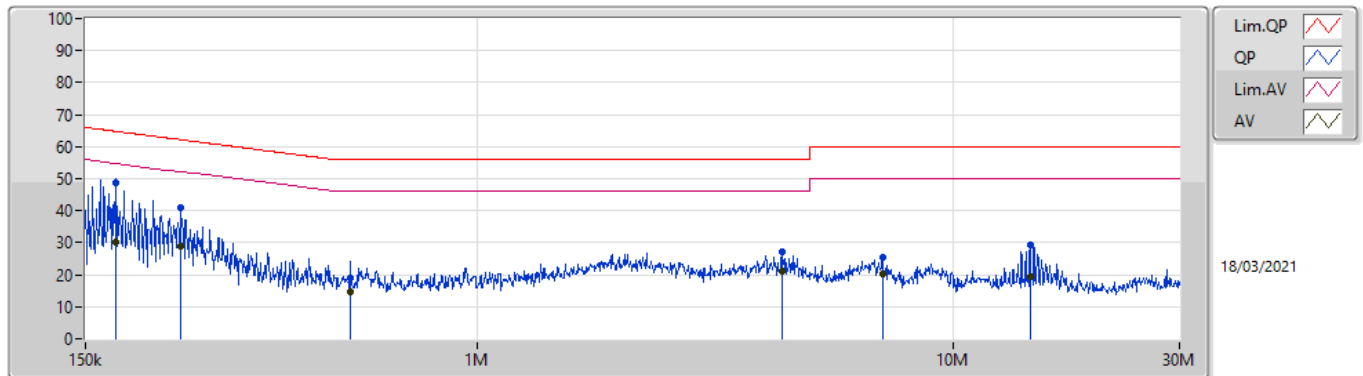
Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	168.41k	42.50	65.04	-22.54	19.63	Line	-	22.87	9.69	0.04	9.90			
AV	168.41k	31.24	55.04	-23.80	19.63	Line	-	11.61	9.69	0.04	9.90			
QP	240.253k	35.36	62.08	-26.72	19.63	Line	-	15.73	9.68	0.05	9.90			
AV	240.253k	26.89	52.08	-25.19	19.63	Line	-	7.26	9.68	0.05	9.90			
QP	458.702k	30.00	56.71	-26.71	19.61	Line	-	10.39	9.67	0.06	9.88			
AV	458.702k	26.06	46.71	-20.65	19.61	Line	-	6.45	9.67	0.06	9.88			
QP	3.296M	21.55	56.00	-34.45	19.69	Line	-	1.86	9.69	0.13	9.87			
AV	3.296M	17.57	46.00	-28.43	19.69	Line	-	-2.12	9.69	0.13	9.87			
QP	6.789M	29.64	60.00	-30.36	19.78	Line	-	9.86	9.71	0.17	9.90			
AV	6.789M	24.93	50.00	-25.07	19.78	Line	-	5.15	9.71	0.17	9.90			
QP	11.093M	30.38	60.00	-29.62	19.82	Line	-	10.56	9.71	0.21	9.90			
AV	11.093M	24.99	50.00	-25.01	19.82	Line	-	5.17	9.71	0.21	9.90			

Conducted Emissions at Powerline_Mode 1



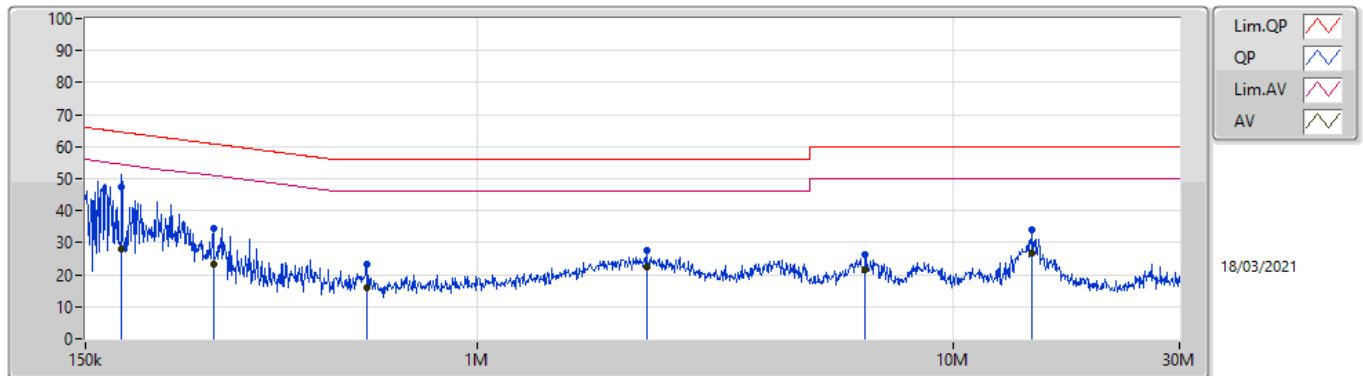
Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	180.236k	43.73	64.47	-20.74	19.62	Neutral	-	24.11	9.68	0.04	9.90			
AV	180.236k	30.28	54.47	-24.19	19.62	Neutral	-	10.66	9.68	0.04	9.90			
QP	239.296k	36.80	62.12	-25.32	19.63	Neutral	-	17.17	9.68	0.05	9.90			
AV	239.296k	24.92	52.12	-27.20	19.63	Neutral	-	5.29	9.68	0.05	9.90			
QP	471.701k	22.77	56.48	-33.71	19.61	Neutral	-	3.16	9.67	0.06	9.88			
AV	471.701k	17.37	46.48	-29.11	19.61	Neutral	-	-2.24	9.67	0.06	9.88			
QP	2.211M	29.85	56.00	-26.15	19.60	Neutral	-	10.25	9.68	0.11	9.81			
AV	2.211M	21.26	46.00	-24.74	19.60	Neutral	-	1.66	9.68	0.11	9.81			
QP	6.843M	30.90	60.00	-29.10	19.79	Neutral	-	11.11	9.71	0.18	9.90			
AV	6.843M	26.14	50.00	-23.86	19.79	Neutral	-	6.35	9.71	0.18	9.90			
QP	10.039M	29.07	60.00	-30.93	19.83	Neutral	-	9.24	9.73	0.20	9.90			
AV	10.039M	24.28	50.00	-25.72	19.83	Neutral	-	4.45	9.73	0.20	9.90			

Conducted Emissions at Powerline_Mode 2



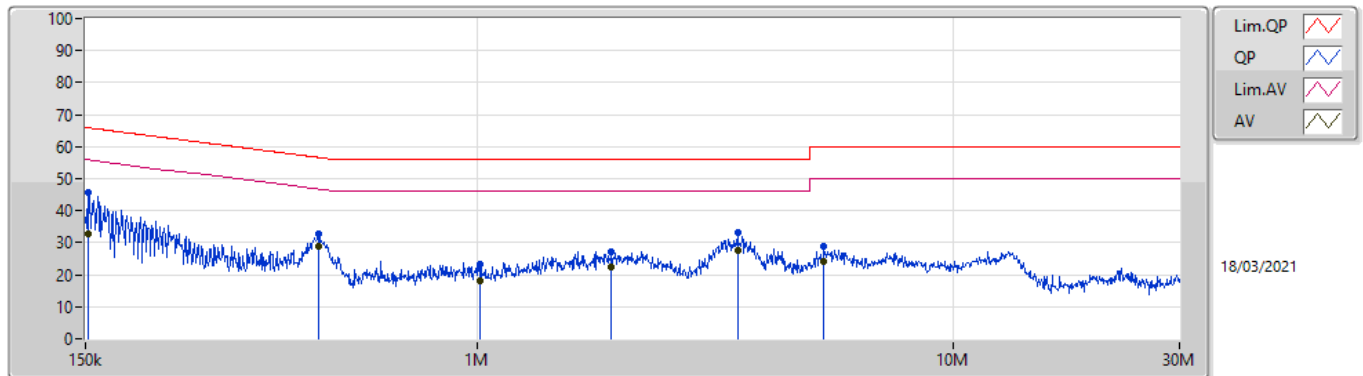
Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	173.876k	48.85	64.78	-15.93	19.62	Line	-	29.23	9.68	0.04	9.90			
AV	173.876k	30.10	54.78	-24.68	19.62	Line	-	10.48	9.68	0.04	9.90			
QP	238.343k	40.78	62.16	-21.38	19.63	Line	-	21.15	9.68	0.05	9.90			
AV	238.343k	28.71	52.16	-23.45	19.63	Line	-	9.08	9.68	0.05	9.90			
QP	540.273k	18.98	56.00	-37.02	19.61	Line	-	-0.63	9.67	0.07	9.87			
AV	540.273k	14.57	46.00	-31.43	19.61	Line	-	-5.04	9.67	0.07	9.87			
QP	4.376M	27.05	56.00	-28.95	19.74	Line	-	7.31	9.69	0.15	9.90			
AV	4.376M	20.96	46.00	-25.04	19.74	Line	-	1.22	9.69	0.15	9.90			
QP	7.122M	25.24	60.00	-34.76	19.79	Line	-	5.45	9.71	0.18	9.90			
AV	7.122M	20.08	50.00	-29.92	19.79	Line	-	0.29	9.71	0.18	9.90			
QP	14.552M	29.25	60.00	-30.75	19.84	Line	-	9.41	9.69	0.25	9.90			
AV	14.552M	19.50	50.00	-30.50	19.84	Line	-	-0.34	9.69	0.25	9.90			

Conducted Emissions at Powerline_Mode 2



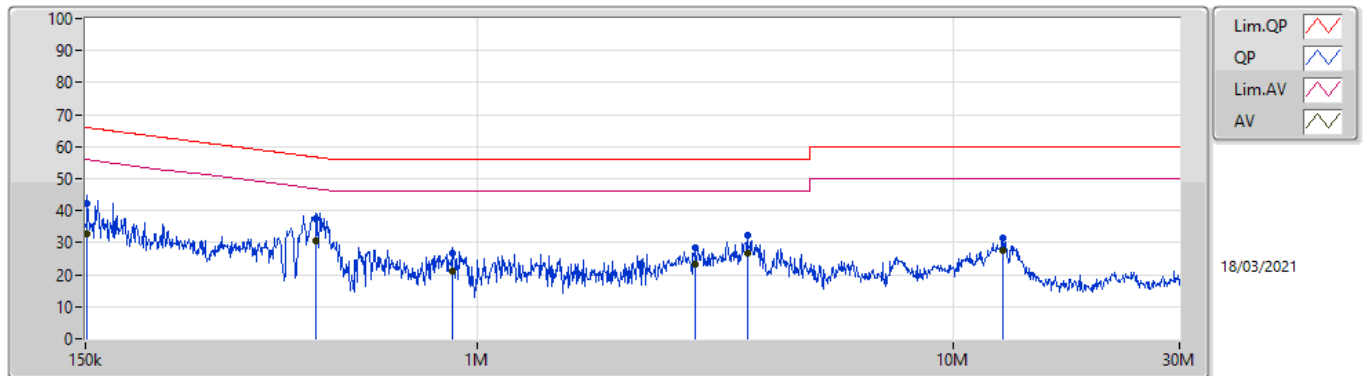
Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	178.803k	47.52	64.55	-17.03	19.62	Neutral	-	27.90	9.68	0.04	9.90			
AV	178.803k	28.19	54.55	-26.36	19.62	Neutral	-	8.57	9.68	0.04	9.90			
QP	278.495k	34.34	60.86	-26.52	19.63	Neutral	-	14.71	9.68	0.05	9.90			
AV	278.495k	23.14	50.86	-27.72	19.63	Neutral	-	3.51	9.68	0.05	9.90			
QP	587.518k	23.14	56.00	-32.86	19.60	Neutral	-	3.54	9.67	0.07	9.86			
AV	587.518k	15.77	46.00	-30.23	19.60	Neutral	-	-3.83	9.67	0.07	9.86			
QP	2.274M	27.76	56.00	-28.24	19.61	Neutral	-	8.15	9.68	0.11	9.82			
AV	2.274M	22.55	46.00	-23.45	19.61	Neutral	-	2.94	9.68	0.11	9.82			
QP	6.549M	26.22	60.00	-33.78	19.78	Neutral	-	6.44	9.71	0.17	9.90			
AV	6.549M	21.71	50.00	-28.29	19.78	Neutral	-	1.93	9.71	0.17	9.90			
QP	14.669M	33.89	60.00	-26.11	19.89	Neutral	-	14.00	9.74	0.25	9.90			
AV	14.669M	26.75	50.00	-23.25	19.89	Neutral	-	6.86	9.74	0.25	9.90			

Conducted Emissions at Powerline_Mode 3



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	152.414k	45.80	65.87	-20.07	19.63	Line	-	26.17	9.69	0.04	9.90			
AV	152.414k	32.78	55.87	-23.09	19.63	Line	-	13.15	9.69	0.04	9.90			
QP	464.229k	32.62	56.61	-23.99	19.61	Line	-	13.01	9.67	0.06	9.88			
AV	464.229k	28.85	46.61	-17.76	19.61	Line	-	9.24	9.67	0.06	9.88			
QP	1.011M	23.16	56.00	-32.84	19.55	Line	-	3.61	9.67	0.08	9.80			
AV	1.011M	17.97	46.00	-28.03	19.55	Line	-	-1.58	9.67	0.08	9.80			
QP	1.915M	27.29	56.00	-28.71	19.58	Line	-	7.71	9.68	0.10	9.80			
AV	1.915M	22.39	46.00	-23.61	19.58	Line	-	2.81	9.68	0.10	9.80			
QP	3.527M	33.07	56.00	-22.93	19.70	Line	-	13.37	9.69	0.13	9.88			
AV	3.527M	27.43	46.00	-18.57	19.70	Line	-	7.73	9.69	0.13	9.88			
QP	5.364M	29.05	60.00	-30.95	19.76	Line	-	9.29	9.70	0.16	9.90			
AV	5.364M	24.17	50.00	-25.83	19.76	Line	-	4.41	9.70	0.16	9.90			

Conducted Emissions at Powerline_Mode 3



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	151.202k	42.37	65.92	-23.55	19.63	Neutral	-	22.74	9.69	0.04	9.90			
AV	151.202k	32.77	55.92	-23.15	19.63	Neutral	-	13.14	9.69	0.04	9.90			
QP	458.702k	37.61	56.71	-19.10	19.61	Neutral	-	18.00	9.67	0.06	9.88			
AV	458.702k	30.62	46.71	-16.09	19.61	Neutral	-	11.01	9.67	0.06	9.88			
QP	889.871k	26.87	56.00	-29.13	19.56	Neutral	-	7.31	9.67	0.08	9.81			
AV	889.871k	21.15	46.00	-24.85	19.56	Neutral	-	1.59	9.67	0.08	9.81			
QP	2.866M	28.51	56.00	-27.49	19.66	Neutral	-	8.85	9.69	0.12	9.85			
AV	2.866M	23.09	46.00	-22.91	19.66	Neutral	-	3.43	9.69	0.12	9.85			
QP	3.701M	32.42	56.00	-23.58	19.72	Neutral	-	12.70	9.69	0.14	9.89			
AV	3.701M	26.62	46.00	-19.38	19.72	Neutral	-	6.90	9.69	0.14	9.89			
QP	12.756M	31.66	60.00	-28.34	19.87	Neutral	-	11.79	9.74	0.23	9.90			
AV	12.756M	27.43	50.00	-22.57	19.87	Neutral	-	7.56	9.74	0.23	9.90			

**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
BT-BR(1Mbps)	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;

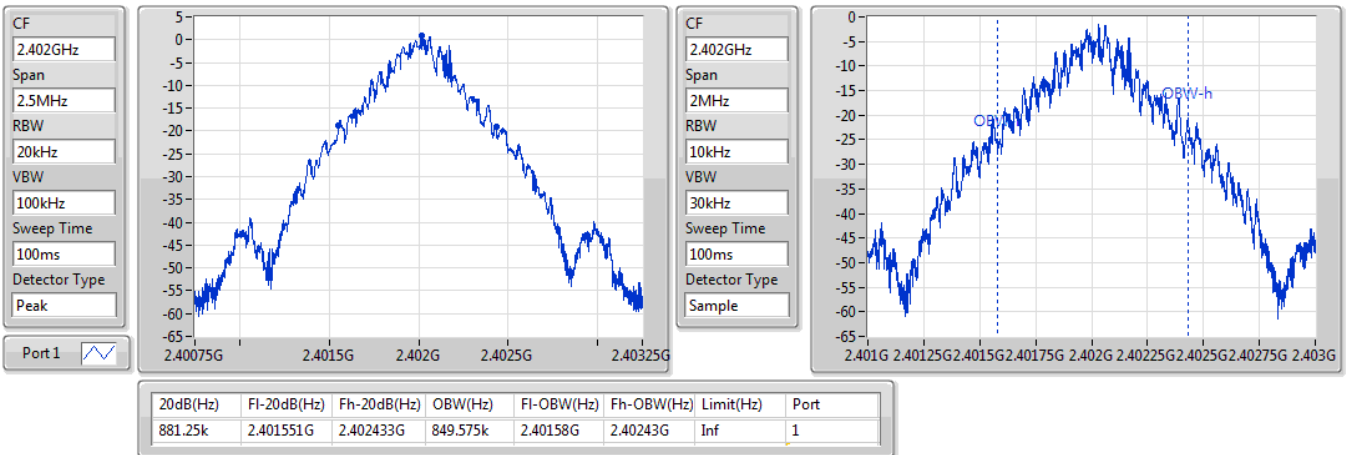
Result

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

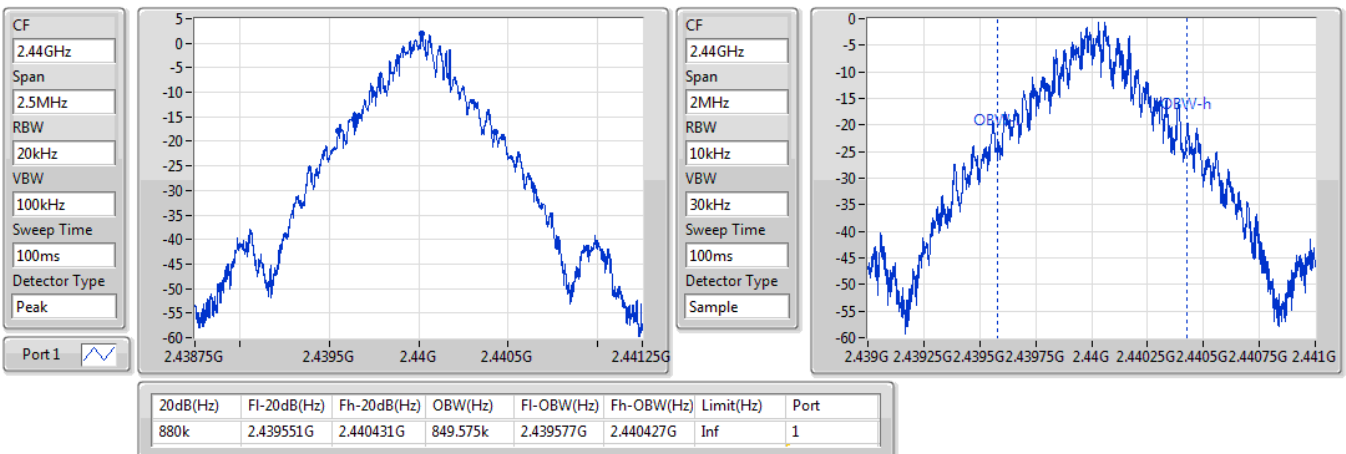
Port X-N dB = Port X 20dB down bandwidth; **Port X-OBW** = Port X 99% occupied bandwidth;

BT-BR(1Mbps)
2402MHz
EBW

16/06/2020

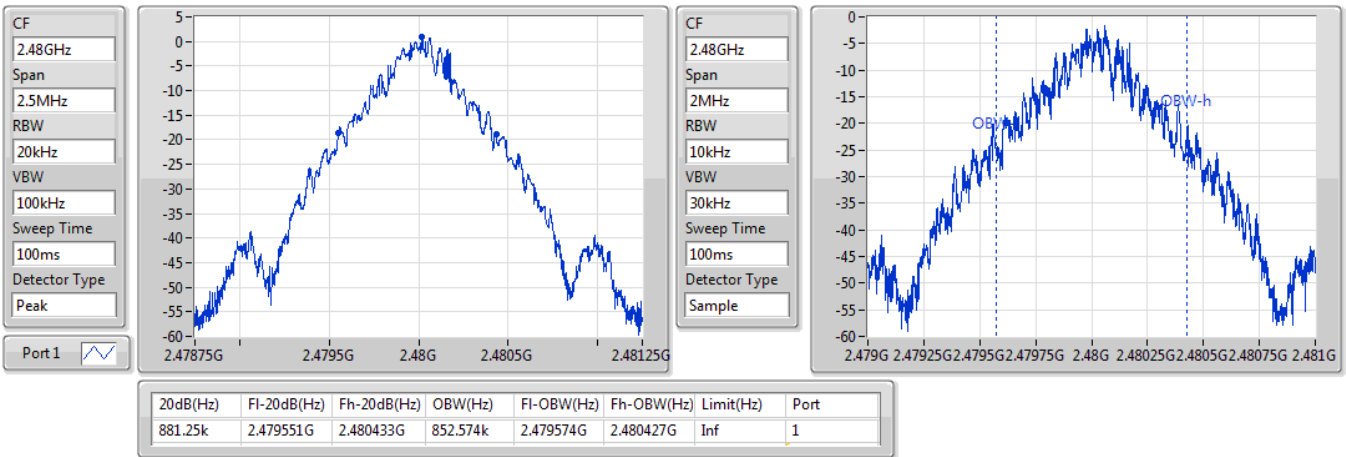

BT-BR(1Mbps)
2440MHz
EBW

16/06/2020

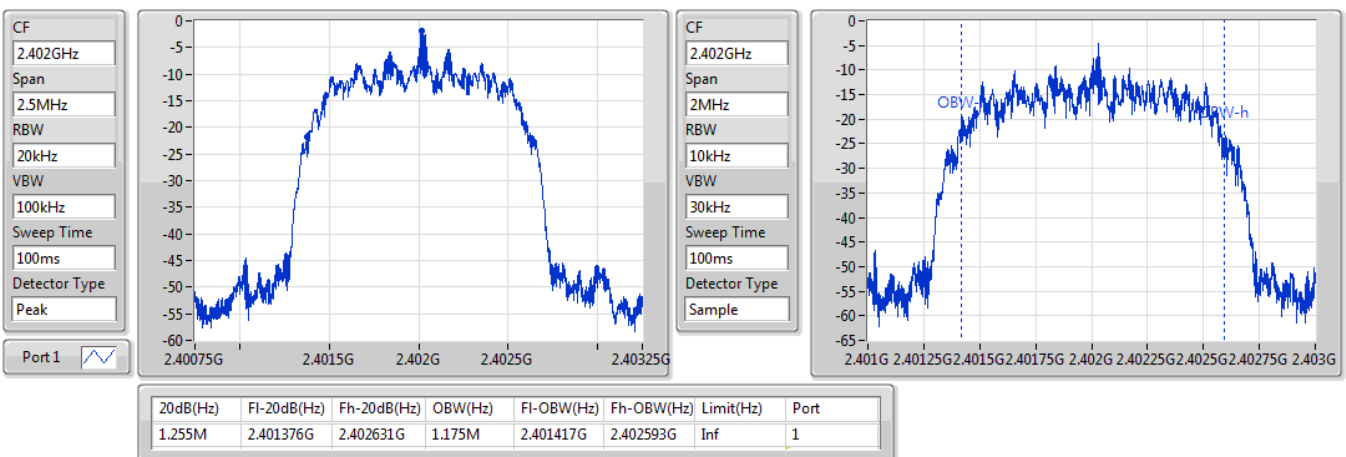


BT-BR(1Mbps)
EBW
2480MHz

16/06/2020

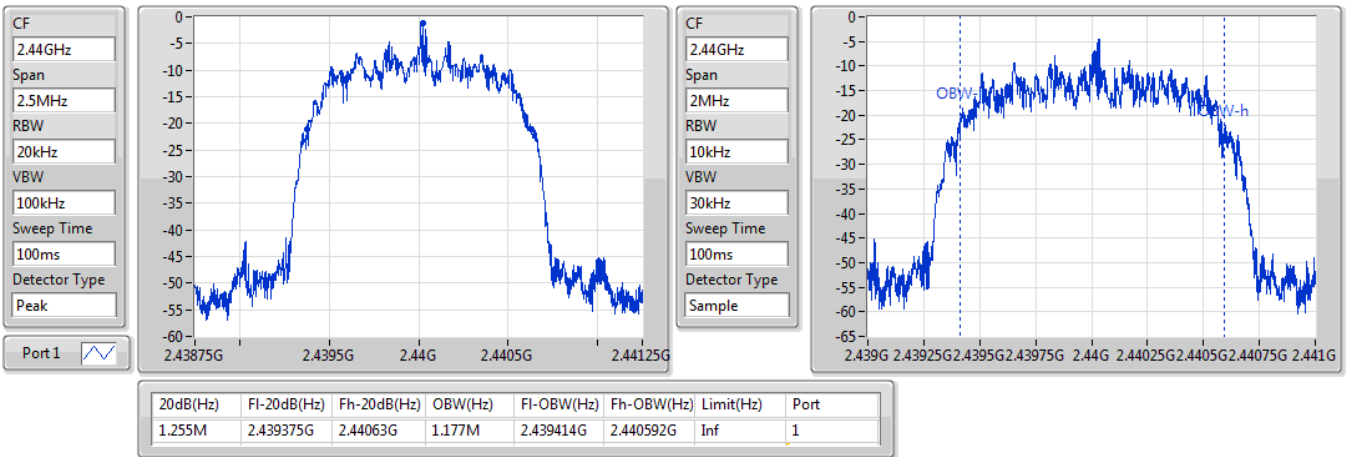

BT-EDR(2Mbps)
EBW
2402MHz

16/06/2020

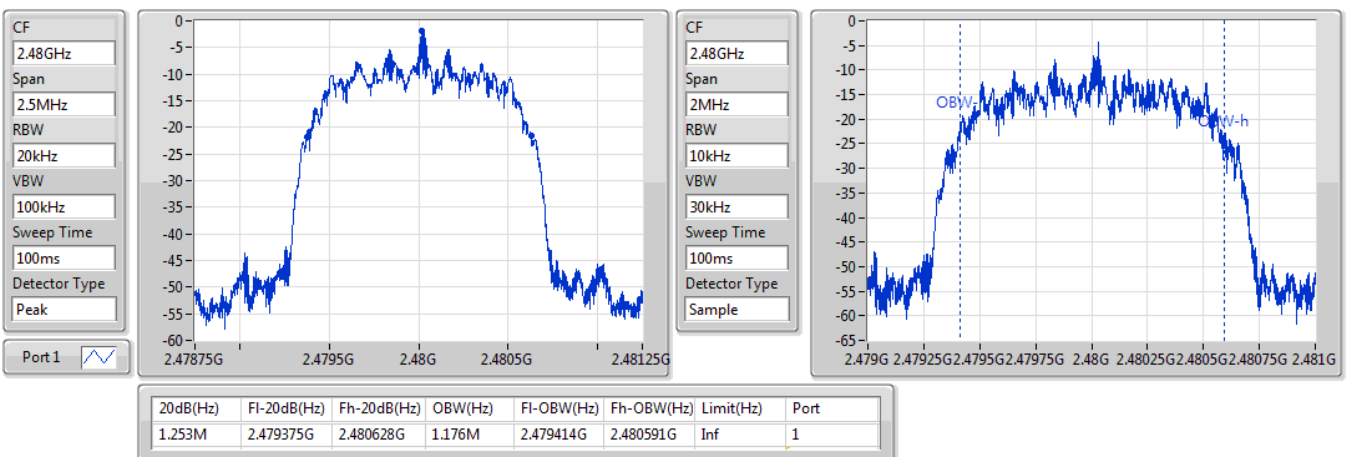


BT-EDR(2Mbps)
EBW
2440MHz

16/06/2020

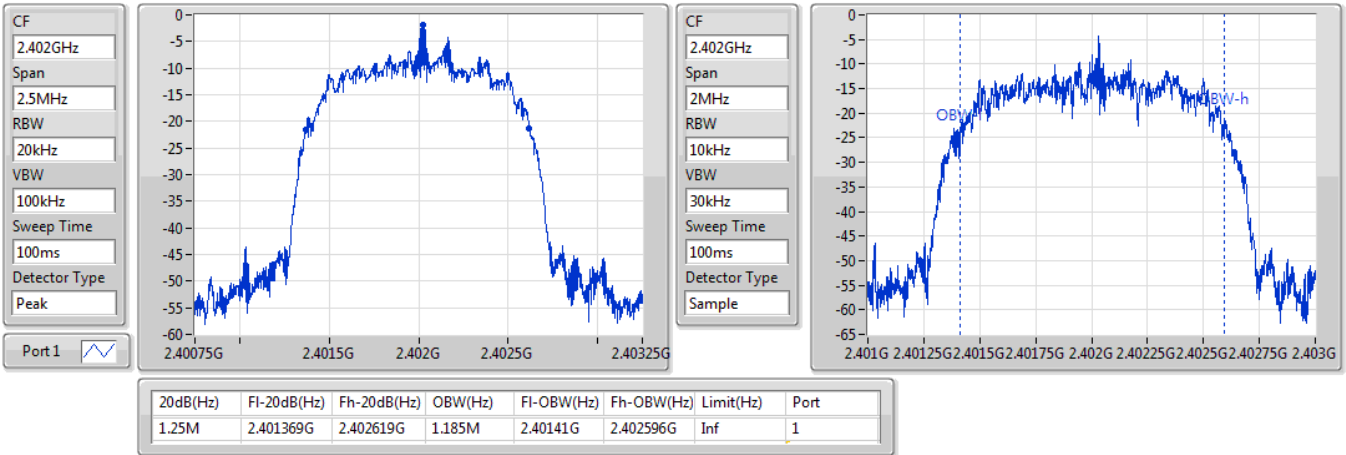

BT-EDR(2Mbps)
EBW
2480MHz

16/06/2020

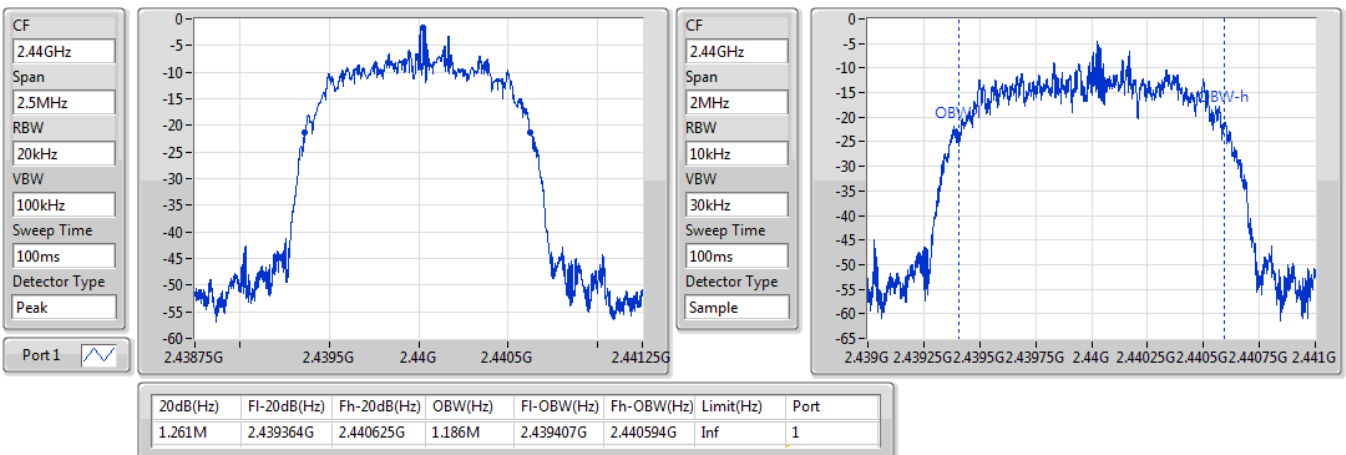


BT-EDR(3Mbps)
EBW
2402MHz

16/06/2020


BT-EDR(3Mbps)
EBW
2440MHz

16/06/2020

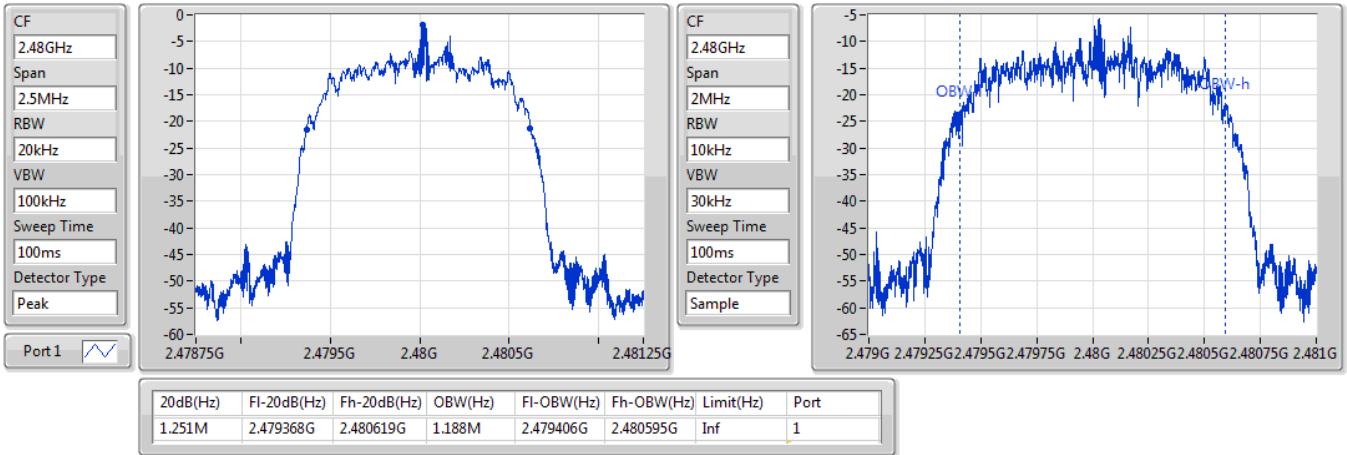


BT-EDR(3Mbps)

2480MHz

EBW

16/06/2020





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

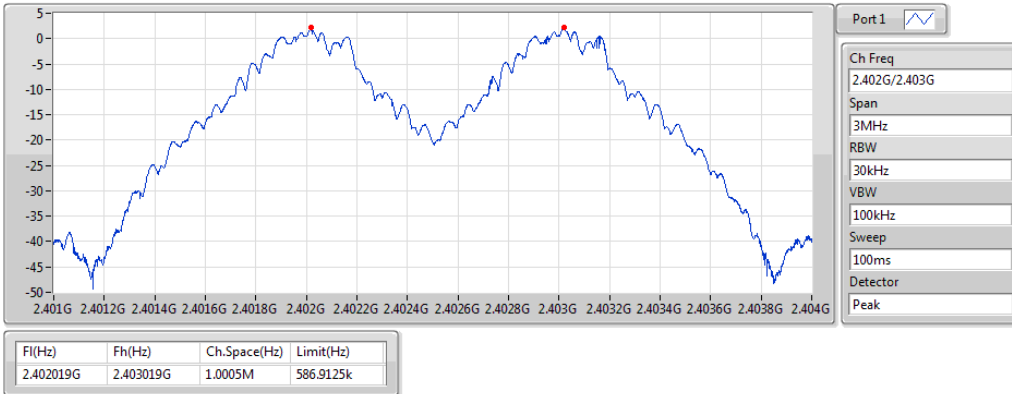
Mode	Result	Fl (Hz)	Fh (Hz)	Ch.Space (Hz)	Limit (Hz)
BT-BR(1Mbps)	-	-	-	-	-
2402MHz	Pass	2.402019G	2.403019G	1.0005M	586.9125k
2440MHz	Pass	2.440019G	2.441021G	1.002M	586.08k
2480MHz	Pass	2.479017G	2.480019G	1.002M	586.9125k
BT-EDR(2Mbps)	-	-	-	-	-
2402MHz	Pass	2.40202G	2.403021G	1.0005M	835.83k
2440MHz	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)

2.402G/2.403GHz

Channel Separation

16/06/2020



BT-BR(1Mbps)

2.44G/2.441GHz

Channel Separation

16/06/2020

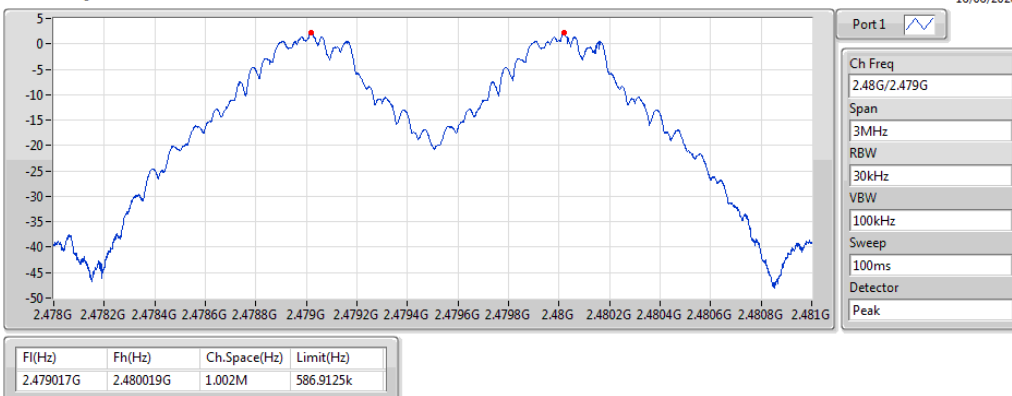


BT-BR(1Mbps)

2.48G/2.479GHz

Channel Separation

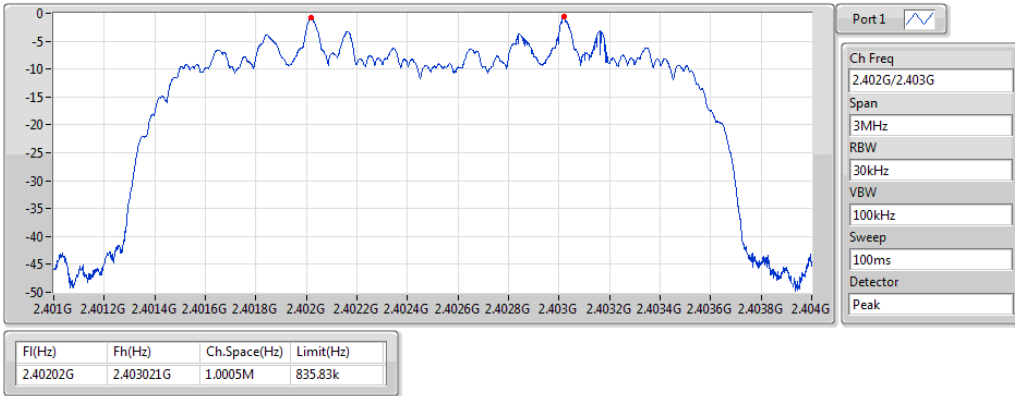
16/06/2020



BT-EDR(2Mbps)

2.402G/2.403GHz

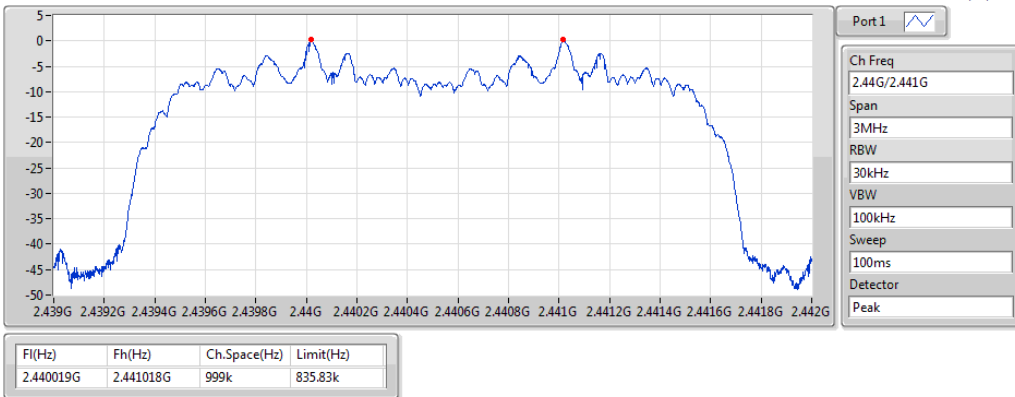
Channel Separation



BT-EDR(2Mbps)

2.44G/2.441GHz

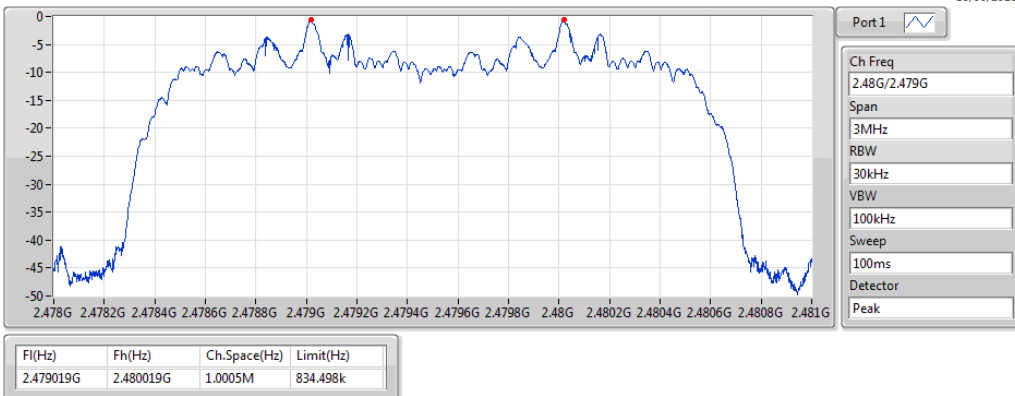
Channel Separation



BT-EDR(2Mbps)

2.48G/2.479GHz

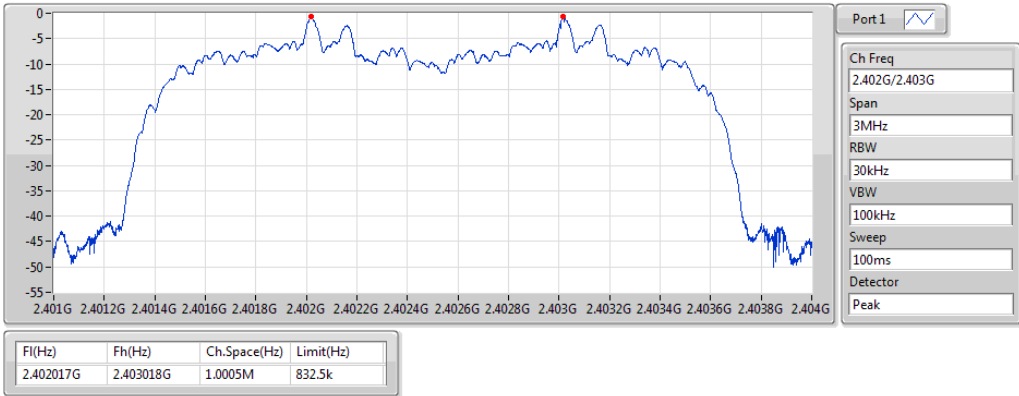
Channel Separation



BT-EDR(3Mbps)

2.402G/2.403GHz

Channel Separation



BT-EDR(3Mbps)

2.44G/2.441GHz

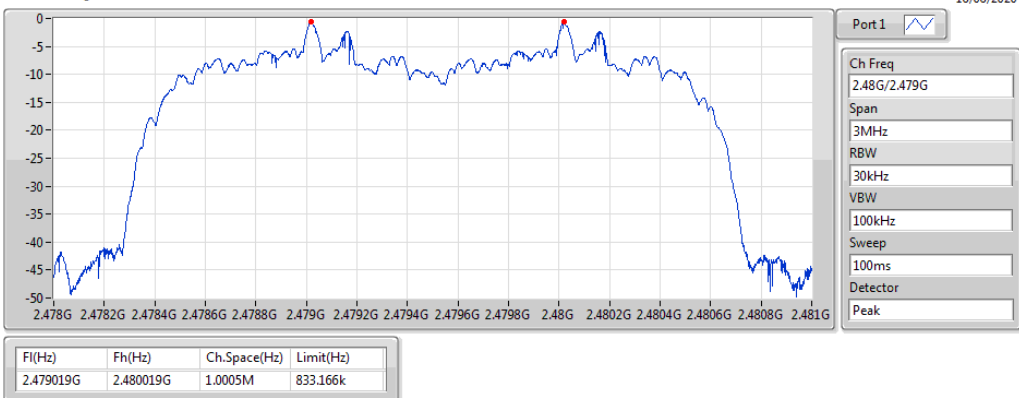
Channel Separation



BT-EDR(3Mbps)

2.48G/2.479GHz

Channel Separation





Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	6.30	0.00427
BT-EDR(2Mbps)	3.22	0.00210
BT-EDR(3Mbps)	2.96	0.00198

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	1.70	5.49	21.00
2441MHz	Pass	1.70	6.30	21.00
2480MHz	Pass	1.70	5.99	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	1.70	2.12	21.00
2441MHz	Pass	1.70	3.22	21.00
2480MHz	Pass	1.70	2.75	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	1.70	2.25	21.00
2441MHz	Pass	1.70	2.96	21.00
2480MHz	Pass	1.70	2.87	21.00

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



Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	6.26	0.00423
BT-EDR(2Mbps)	3.08	0.00203
BT-EDR(3Mbps)	2.90	0.00195



Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	1.70	5.46	21.00
2441MHz	Pass	1.70	6.26	21.00
2480MHz	Pass	1.70	5.96	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	1.70	2.09	21.00
2441MHz	Pass	1.70	3.08	21.00
2480MHz	Pass	1.70	2.66	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	1.70	2.15	21.00
2441MHz	Pass	1.70	2.90	21.00
2480MHz	Pass	1.70	2.83	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

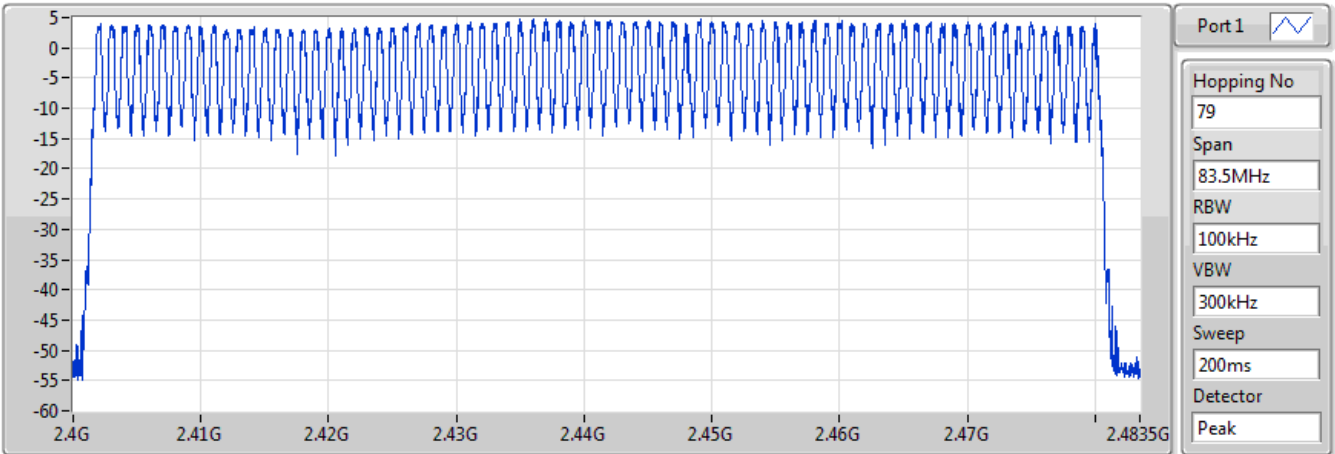
Mode	Result	Hopping No	Limit
BT-BR(1Mbps)	-	-	-
2440MHz	Pass	79	15
BT-EDR(2Mbps)	-	-	-
2440MHz	Pass	79	15
BT-EDR(3Mbps)	-	-	-
2440MHz	Pass	79	15

BT-BR(1Mbps)

2440MHz

Hopping Ch

16/06/2020



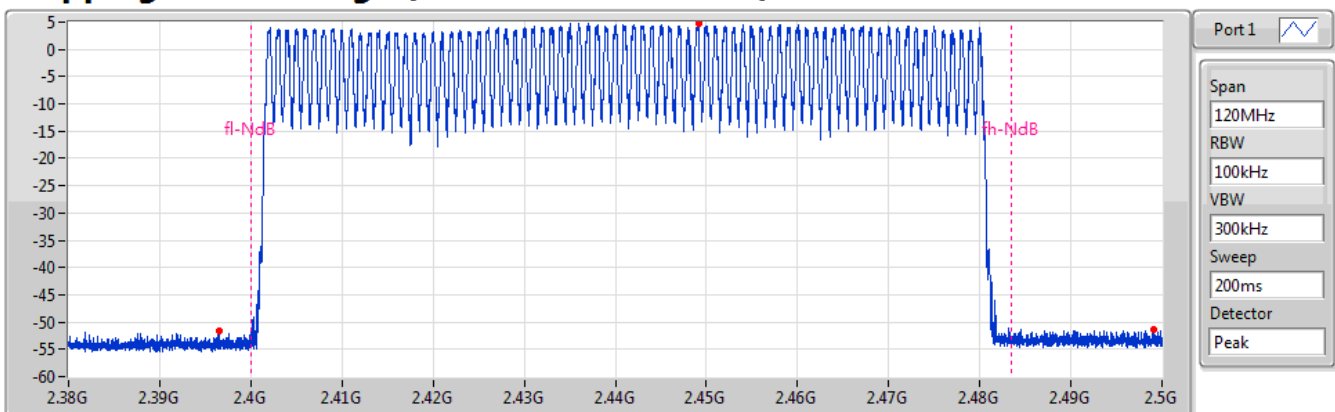
Hopping No	Limit
79	15

BT-BR(1Mbps)

2440MHz

Hopping Ch Bandedge (Non-restricted Band)

16/06/2020



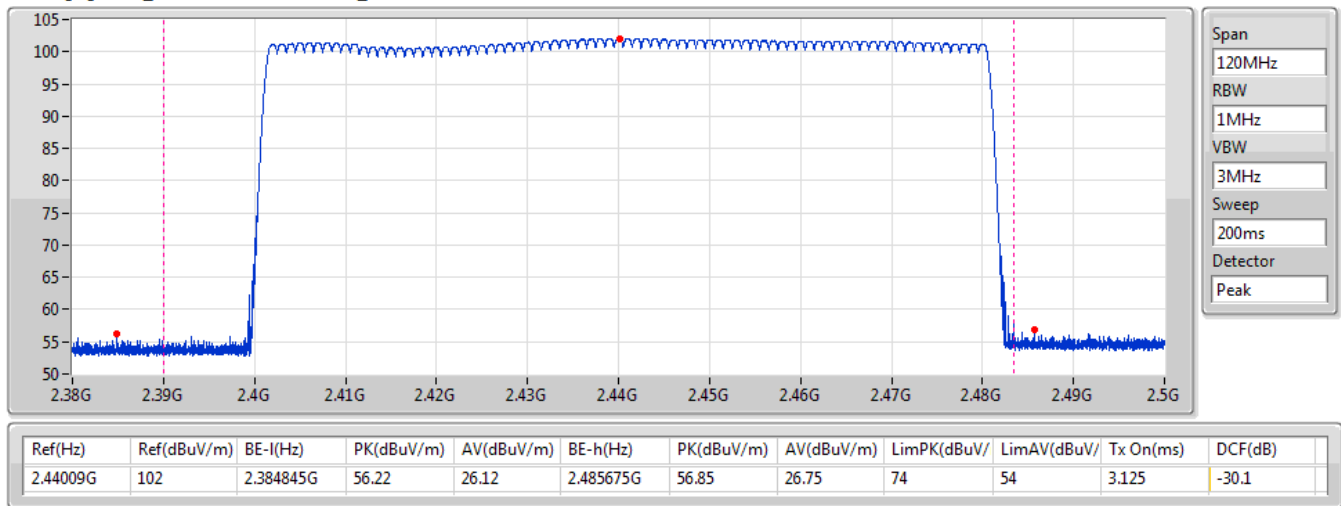
Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-15.24	2.449165G	4.76	2.39659G	-51.68	2.499025G	-51.34

BT-BR(1Mbps)

2440MHz

Hopping Ch Bandedge (Restricted Band)

16/06/2020

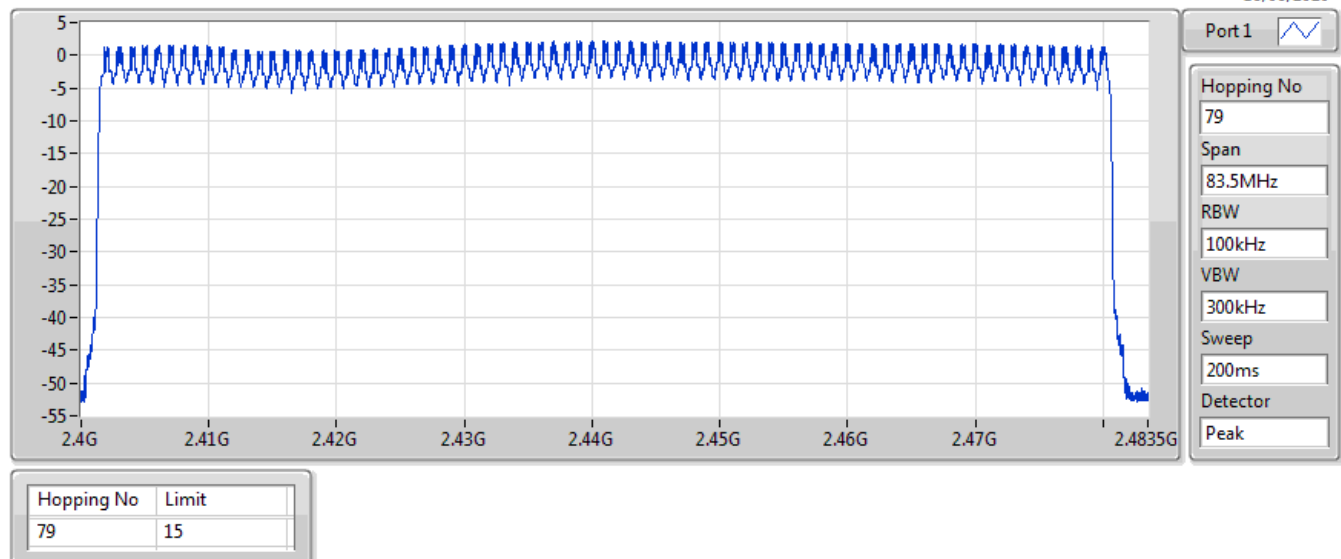


BT-EDR(2Mbps)

2440MHz

Hopping Ch

16/06/2020

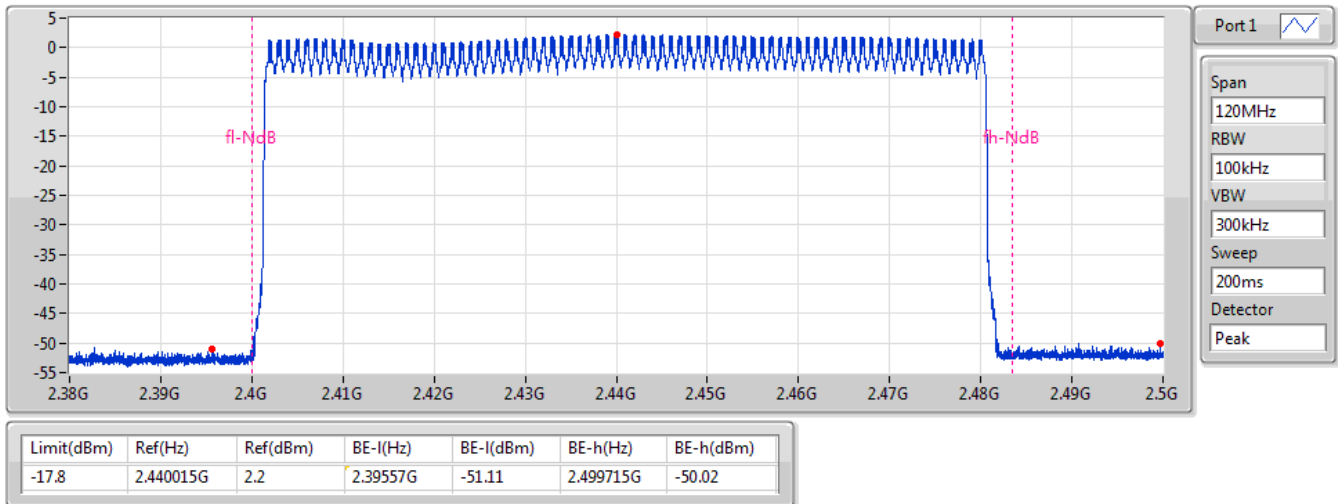


BT-EDR(2Mbps)

2440MHz

Hopping Ch Bandedge (Non-restricted Band)

16/06/2020

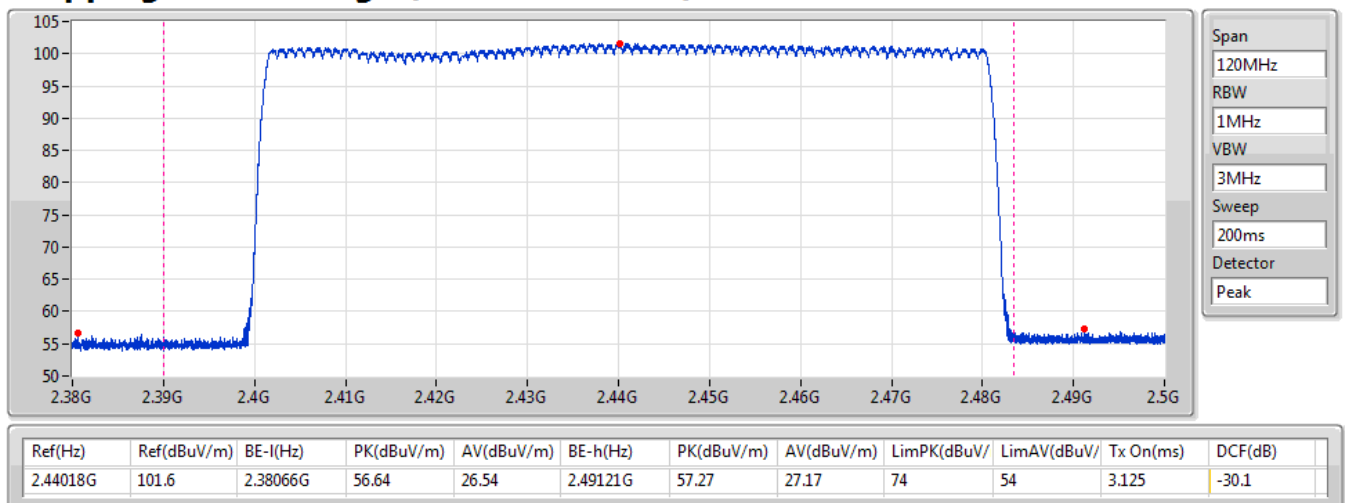


BT-EDR(2Mbps)

2440MHz

Hopping Ch Bandedge (Restricted Band)

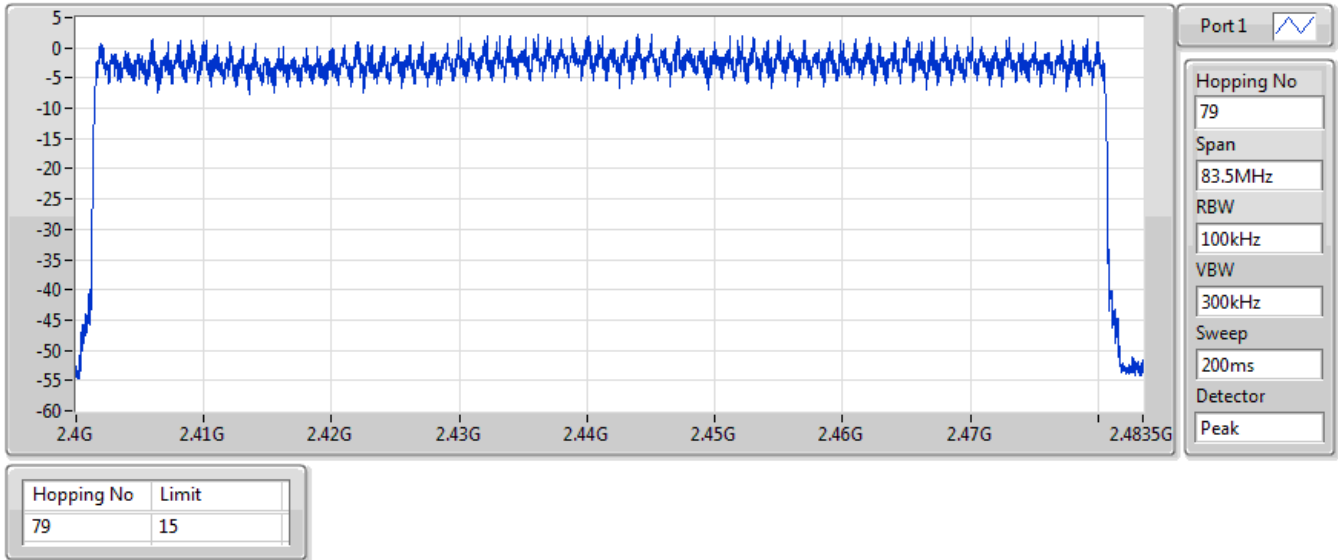
16/06/2020



BT-EDR(3Mbps) 2440MHz

Hopping Ch

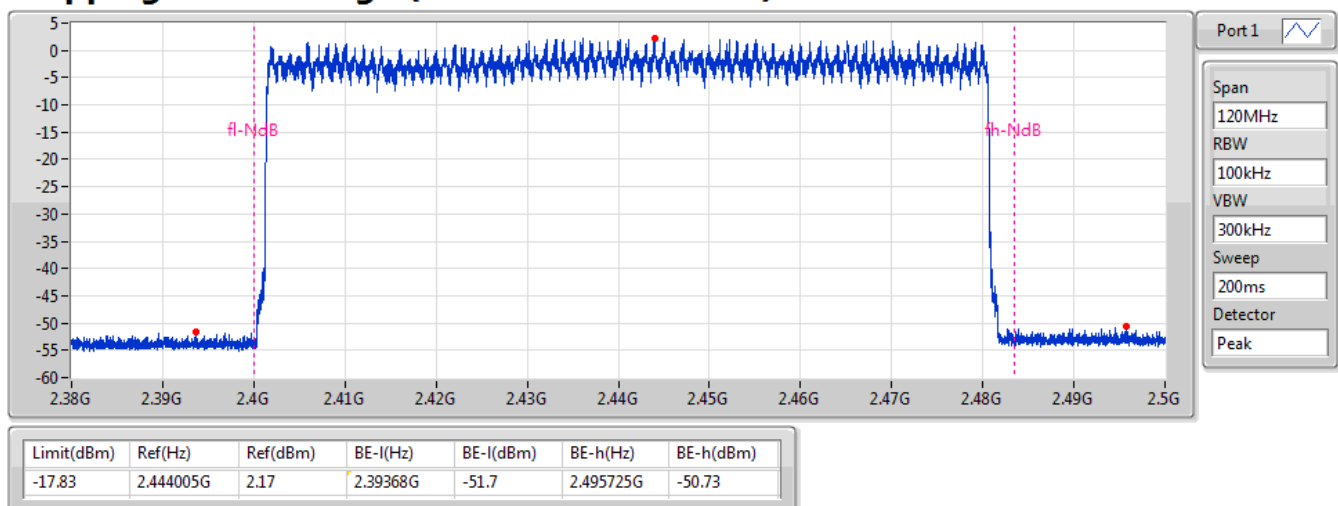
16/06/2020



BT-EDR(3Mbps) 2440MHz

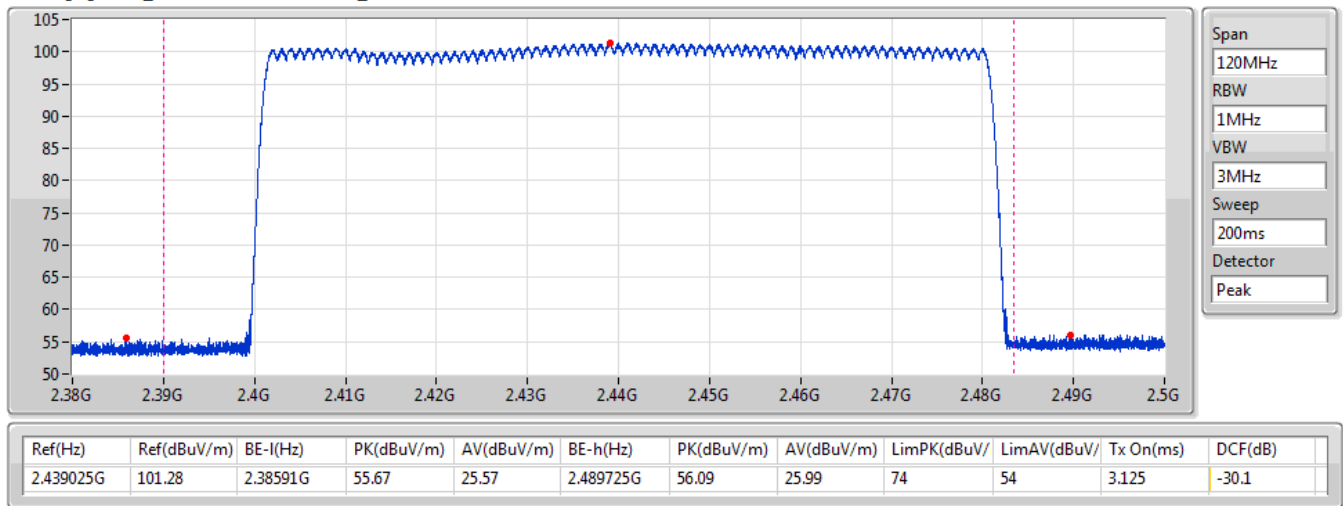
Hopping Ch Bandedge (Non-restricted Band)

16/06/2020



BT-EDR(3Mbps)**2440MHz****Hopping Ch Bandedge (Restricted Band)**

16/06/2020





Summary

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

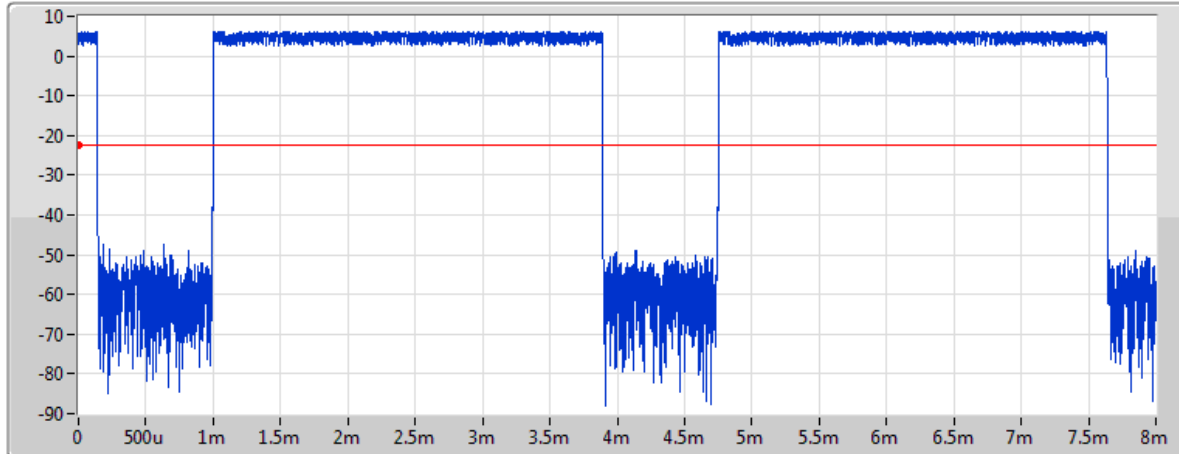
Result

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)

2440MHz

16/06/2020



Port1 

Ch Freq
2.44GHz

RBW
300kHz

VBW
1MHz

Sweep Time
8ms

TX Time
2.88875ms

non AFH Mode

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

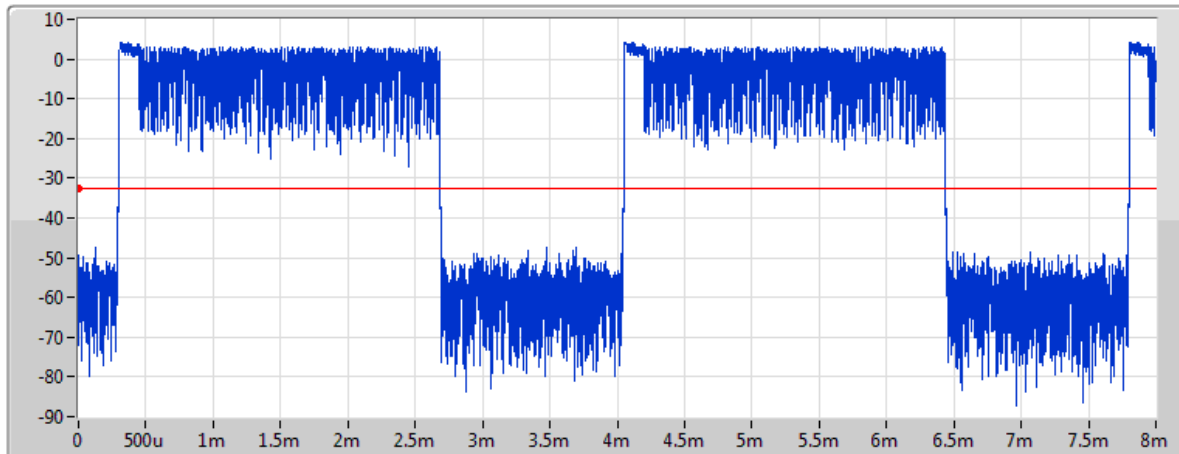
AFH Mode

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

BT-EDR(2Mbps)

2440MHz

16/06/2020



Port1 

Ch Freq
2.44GHz

RBW
300kHz

VBW
1MHz

Sweep Time
8ms

TX Time
2.3835ms

non AFH Mode

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

AFH Mode

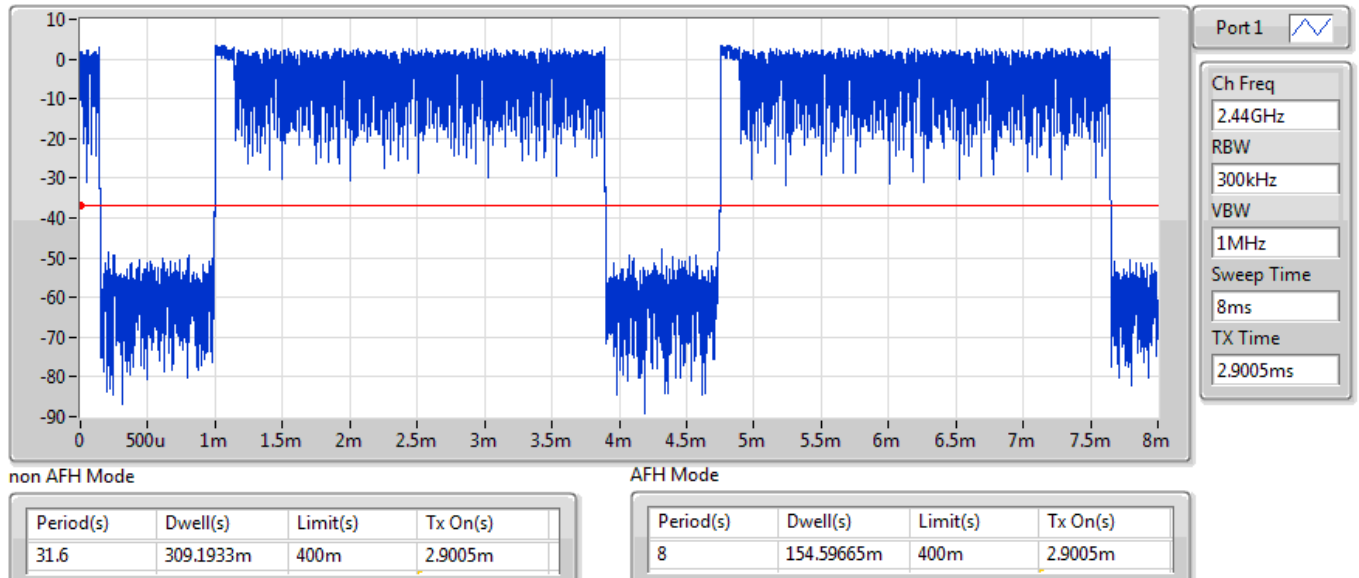
Period(s)	Dwell(s)	Limit(s)	Tx On(s)
8	127.04055m	400m	2.3835m

BT-EDR(3Mbps)

2440MHz

Dwell

16/06/2020



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

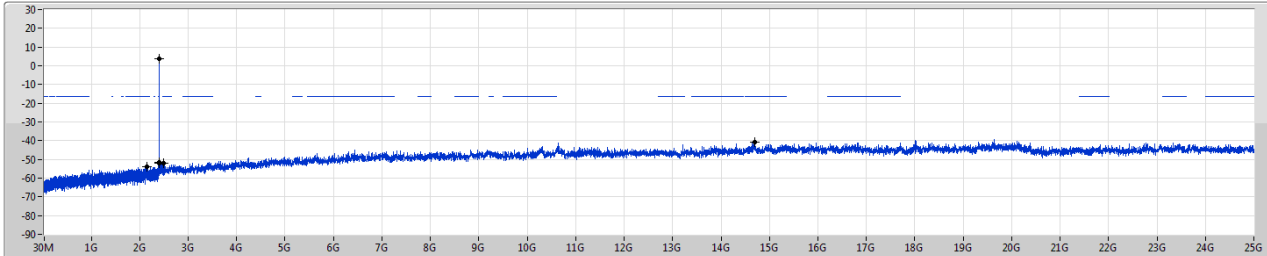
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
BT-BR(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.402G	3.74	-16.26	2.14412G	-54.08	2.39979G	-52.21	2.4G	-51.60	2.50135G	-52.22	14.70504G	-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)

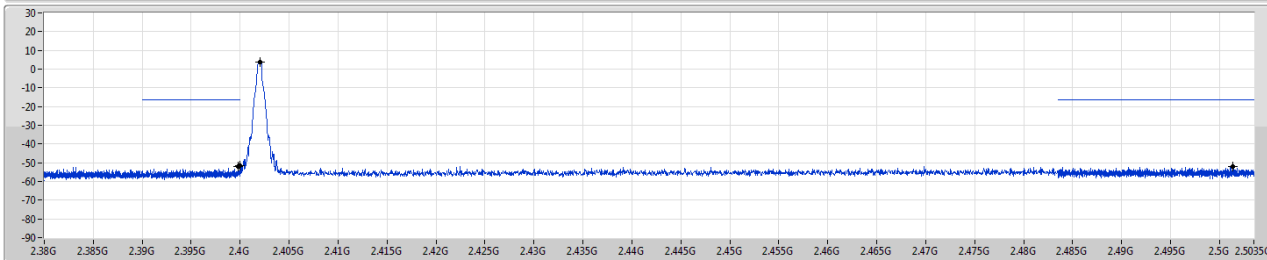
CSE NdB

2402MHz

16/06/2020



Port1



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

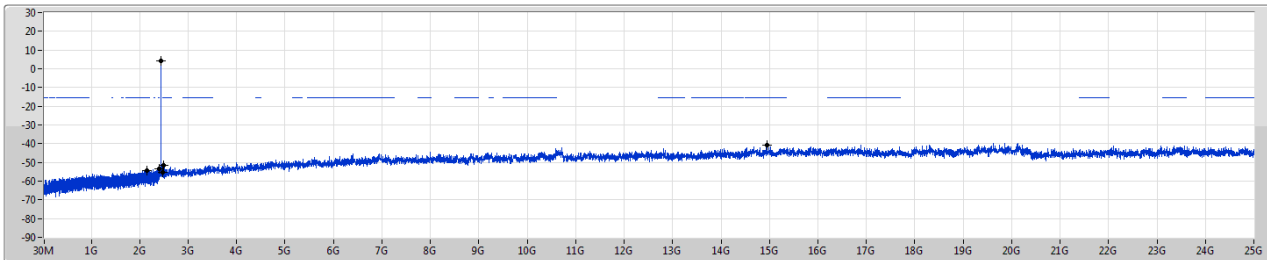
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.402G	3.74	-16.26	2.14412G	-54.08	2.39979G	-52.21	2.4G	-51.60	2.50135G	-52.22	14.70504G	-41.00	1

BT-BR(1Mbps)

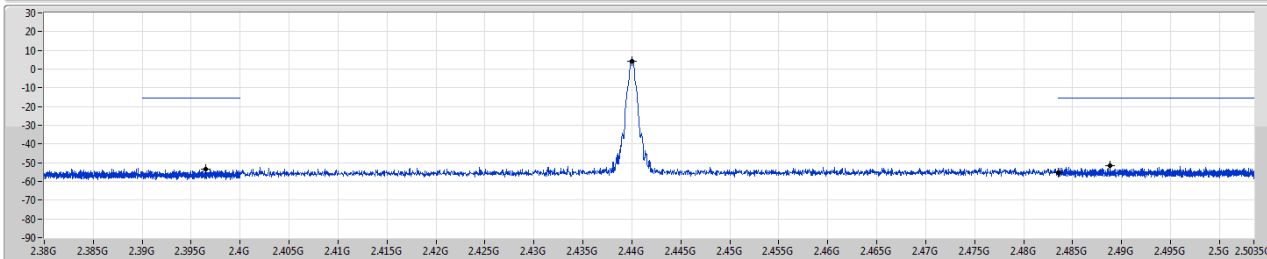
CSE NdB

2440MHz

16/06/2020



Port1



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

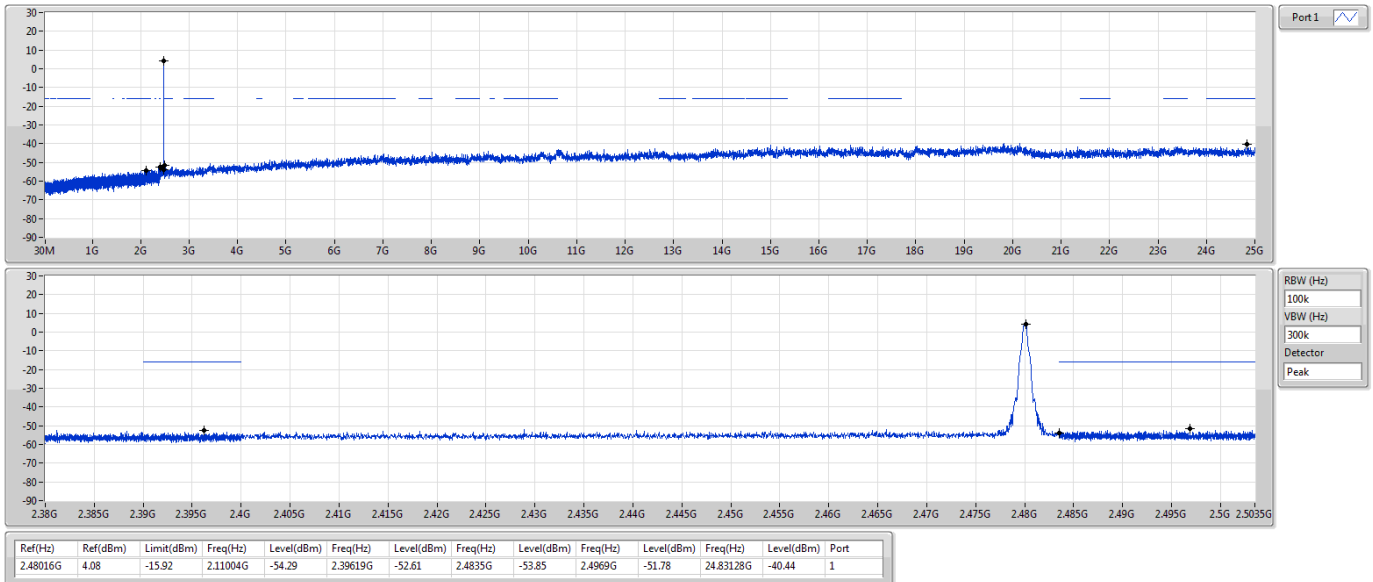
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2.44004G	4.36	-15.64	2.14089G	-54.31	2.3965G	-53.57	2.4835G	-55.51	2.48878G	-51.37	14.9525G	-40.93	1

BT-BR(1Mbps)

2480MHz

CSE NdB

16/06/2020

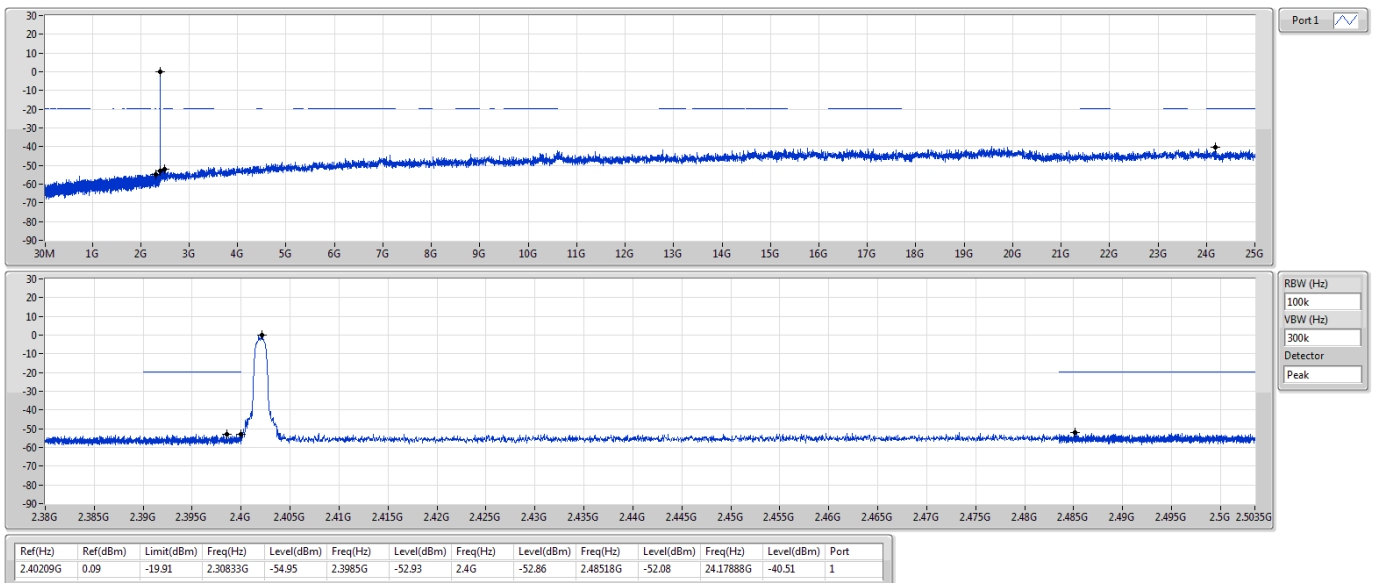


BT-EDR(2Mbps)

2402MHz

CSE NdB

16/06/2020

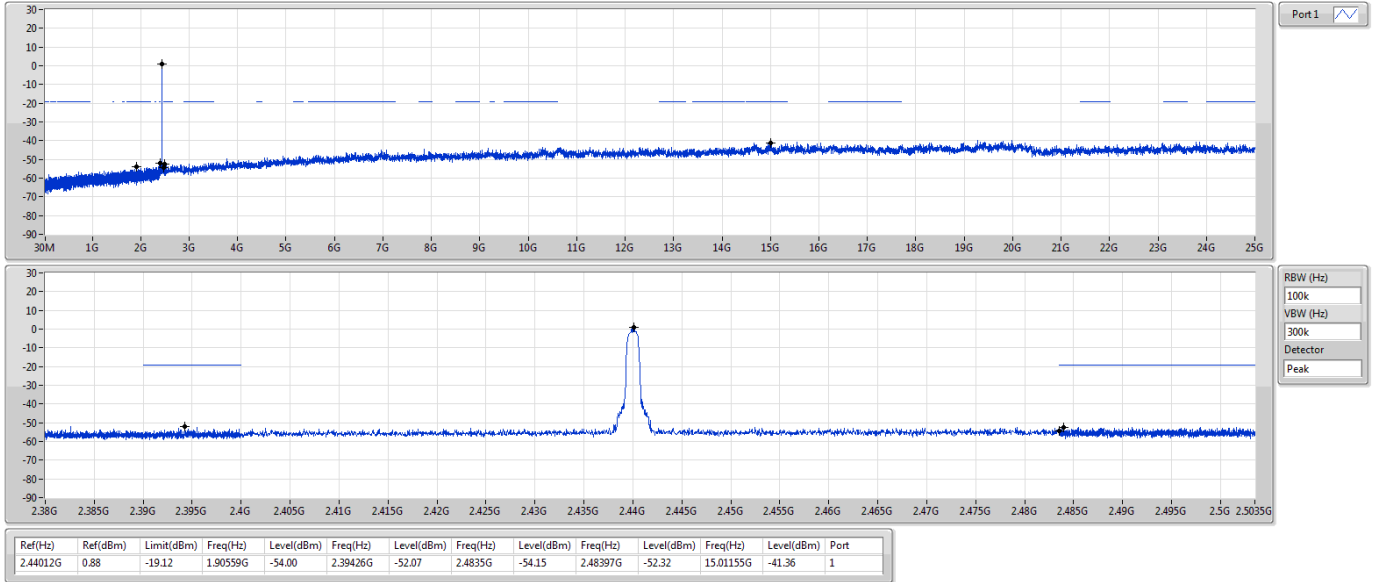


BT-EDR(2Mbps)

2440MHz

CSE NdB

16/06/2020

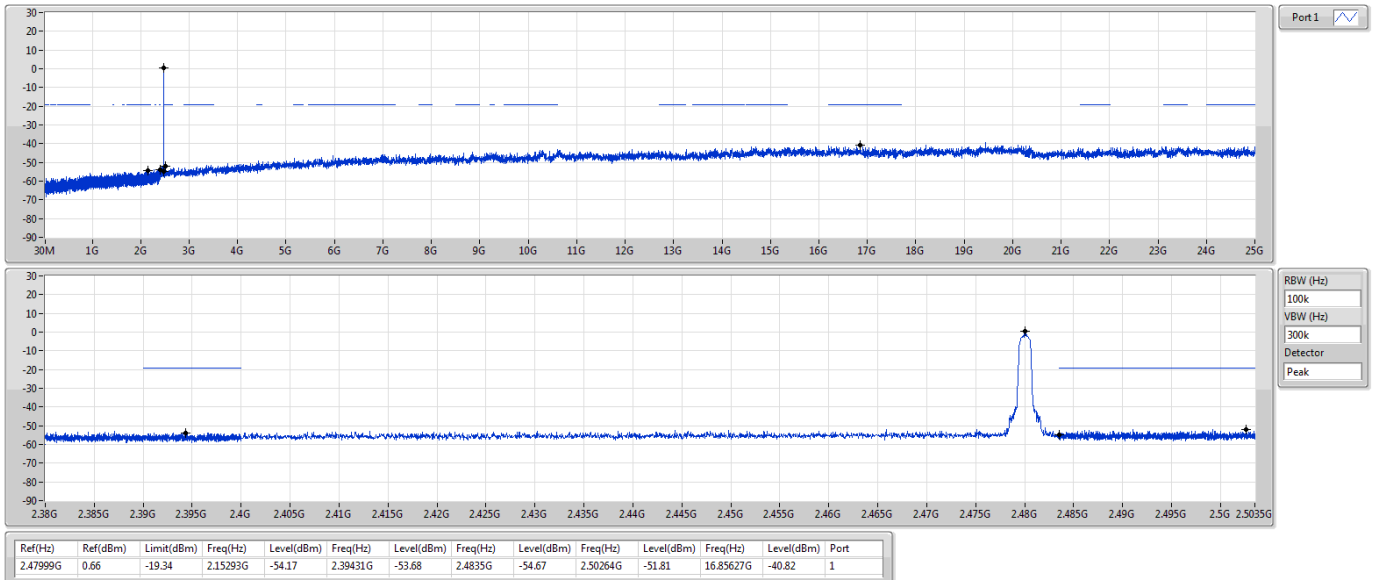


BT-EDR(2Mbps)

2480MHz

CSE NdB

16/06/2020



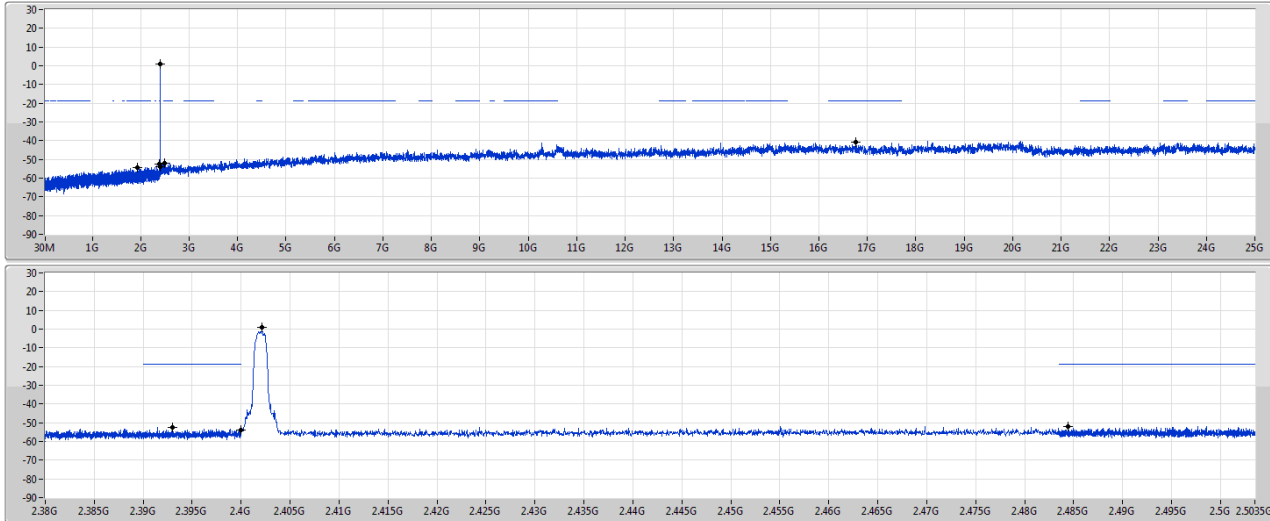
BT-EDR(3Mbps)

2402MHz

CSE NdB

16/06/2020

Port 1



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

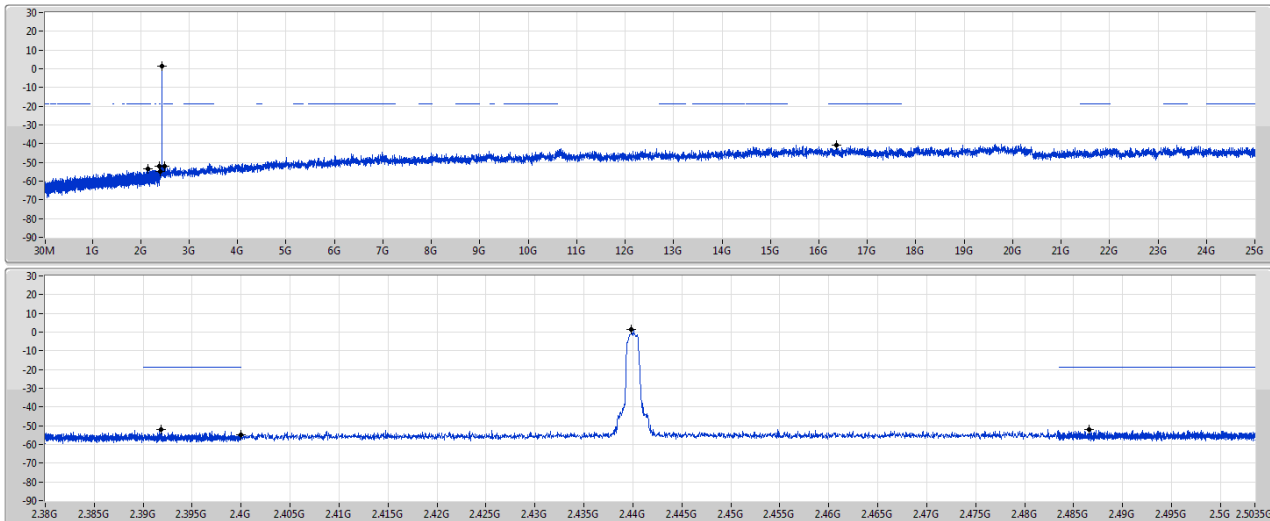
BT-EDR(3Mbps)

2440MHz

CSE NdB

16/06/2020

Port 1



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

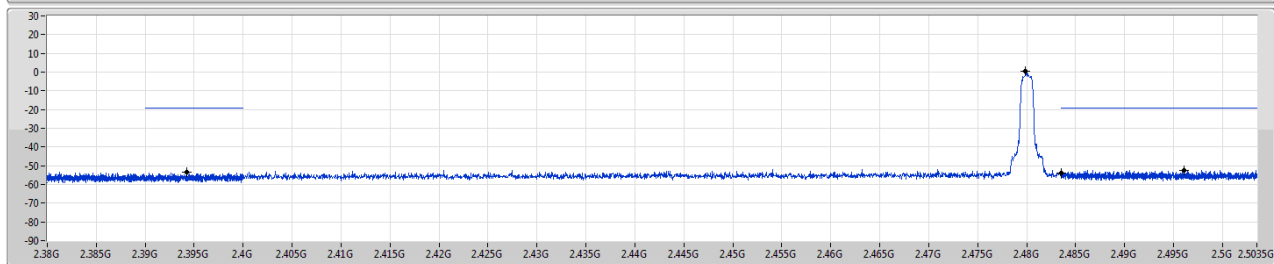
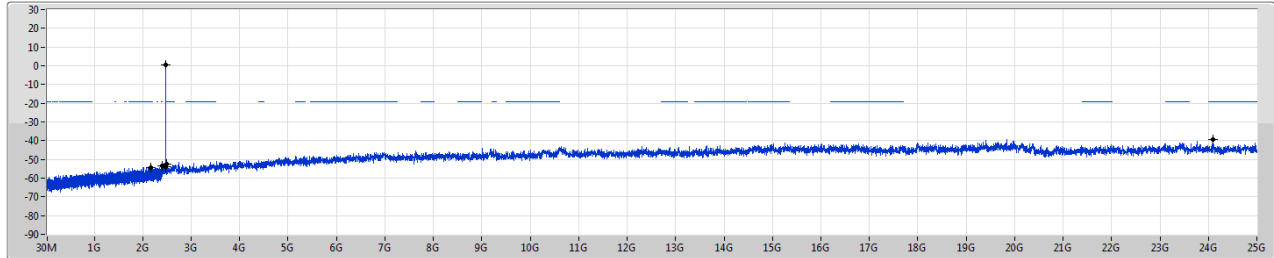
BT-EDR(3Mbps)

2480MHz

CSE NdB

16/06/2020

Port 1



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

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	2.49608G	-39.50	1



Summary

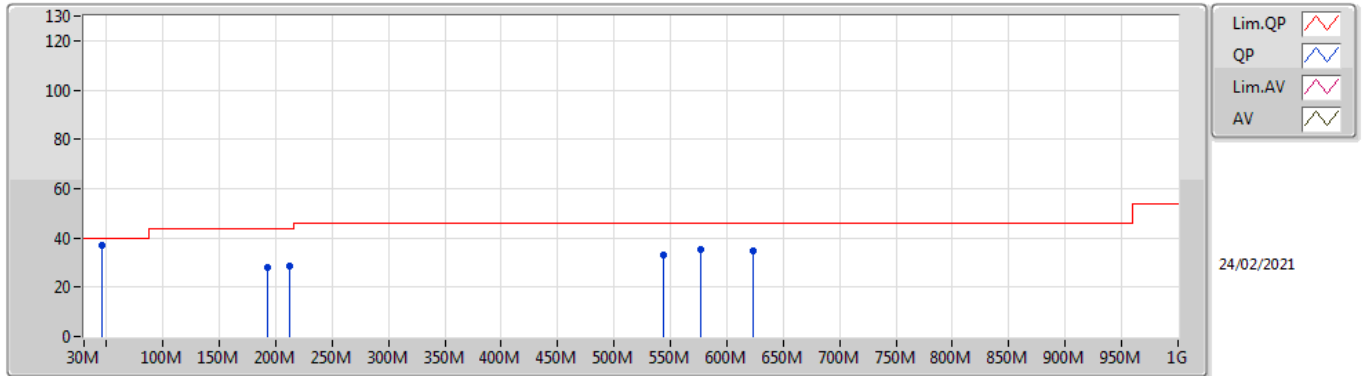
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
BT-BR(1Mbps)	Pass	QP	45.52M	36.71	40.00	-3.29	3	Vertical	293	1.00	-

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	192.96M	28.21	43.50	-15.29	3	Vertical	0	1.00	-
2440MHz	Pass	PK	212.36M	28.43	43.50	-15.07	3	Vertical	0	1.00	-
2440MHz	Pass	PK	544.1M	33.34	46.00	-12.66	3	Vertical	0	1.00	-
2440MHz	Pass	PK	577.08M	35.11	46.00	-10.89	3	Vertical	0	1.00	-
2440MHz	Pass	PK	623.64M	34.86	46.00	-11.14	3	Vertical	0	1.00	-
2440MHz	Pass	QP	45.52M	36.71	40.00	-3.29	3	Vertical	293	1.00	-
2440MHz	Pass	PK	45.52M	29.28	40.00	-10.72	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	125.06M	24.27	43.50	-19.23	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	196.84M	30.14	43.50	-13.36	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	303.54M	30.06	46.00	-15.94	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	623.64M	37.97	46.00	-8.03	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	648.86M	37.48	46.00	-8.52	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	35.82M	35.65	40.00	-4.35	3	Vertical	360	1.00	-
2440MHz	Pass	PK	97.9M	31.11	43.50	-12.39	3	Vertical	360	1.00	-
2440MHz	Pass	PK	383.08M	29.57	46.00	-16.43	3	Vertical	360	1.00	-
2440MHz	Pass	PK	456.8M	30.53	46.00	-15.47	3	Vertical	360	1.00	-
2440MHz	Pass	PK	577.08M	36.29	46.00	-9.71	3	Vertical	360	1.00	-
2440MHz	Pass	QP	45.52M	36.24	40.00	-3.76	3	Vertical	316	1.00	-
2440MHz	Pass	PK	45.52M	28.27	40.00	-11.73	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	191.02M	24.96	43.50	-18.54	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	282.2M	25.80	46.00	-20.20	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	383.08M	29.72	46.00	-16.28	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	557.68M	30.92	46.00	-15.08	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	666.32M	30.34	46.00	-15.66	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	47.46M	34.77	40.00	-5.23	3	Vertical	360	1.00	-
2440MHz	Pass	PK	165.8M	32.94	43.50	-10.56	3	Vertical	360	1.00	-
2440MHz	Pass	PK	299.66M	27.10	46.00	-18.90	3	Vertical	360	1.00	-
2440MHz	Pass	PK	383.08M	28.36	46.00	-17.64	3	Vertical	360	1.00	-
2440MHz	Pass	PK	456.8M	29.55	46.00	-16.45	3	Vertical	360	1.00	-
2440MHz	Pass	PK	532.46M	30.29	46.00	-15.71	3	Vertical	360	1.00	-
2440MHz	Pass	PK	70.74M	28.25	40.00	-11.75	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	191.02M	33.56	43.50	-9.94	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	231.76M	33.85	46.00	-12.15	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	336.52M	35.15	46.00	-10.85	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	383.08M	38.78	46.00	-7.22	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	528.58M	29.30	46.00	-16.70	3	Horizontal	0	1.00	-

BT-BR(1Mbps)

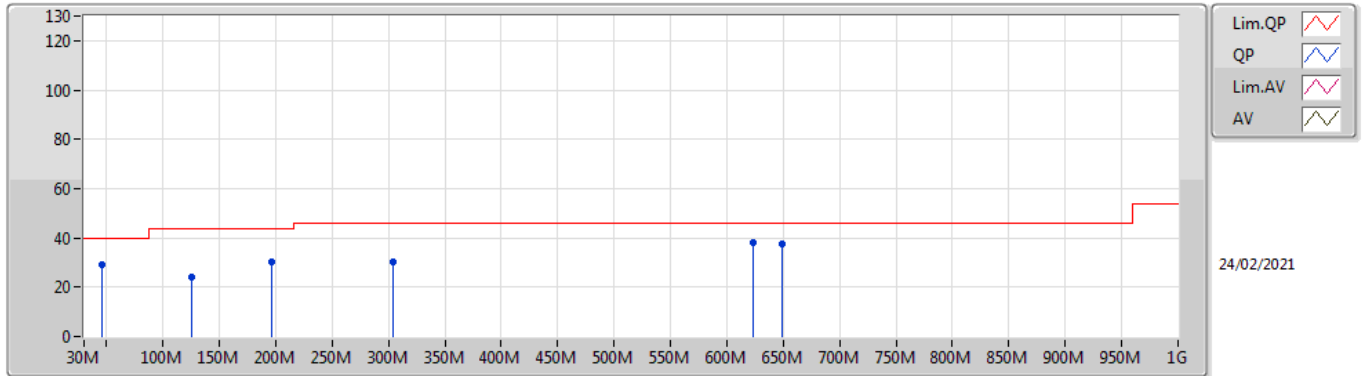
2440MHz_Wired Gun+EXT Battery+Adapter



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	192.96M	28.21	43.50	-15.29	-10.36	3	Vertical	0	1.00	-	38.57	14.34	2.26	26.96
PK	212.36M	28.43	43.50	-15.07	-10.25	3	Vertical	0	1.00	-	38.68	14.25	2.37	26.87
PK	544.1M	33.34	46.00	-12.66	0.44	3	Vertical	0	1.00	-	32.90	24.55	3.88	27.99
PK	577.08M	35.11	46.00	-10.89	0.02	3	Vertical	0	1.00	-	35.09	24.02	4.01	28.01
PK	623.64M	34.86	46.00	-11.14	0.23	3	Vertical	0	1.00	-	34.63	24.09	4.19	28.05
QP	45.52M	36.71	40.00	-3.29	-11.56	3	Vertical	293	1.00	-	48.27	14.96	1.01	27.53

BT-BR(1Mbps)

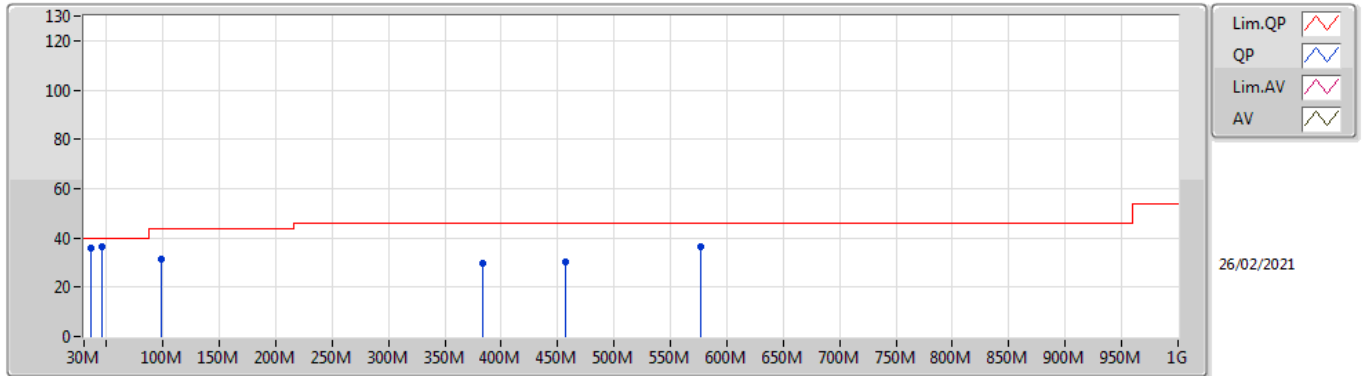
2440MHz_Wired Gun+EXT Battery+Adapter



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	45.52M	29.28	40.00	-10.72	-11.56	3	Horizontal	360	1.00	-	40.84	14.96	1.01	27.53
PK	125.06M	24.27	43.50	-19.23	-7.89	3	Horizontal	360	1.00	-	32.16	17.55	1.83	27.27
PK	196.84M	30.14	43.50	-13.36	-10.24	3	Horizontal	360	1.00	-	40.38	14.42	2.28	26.94
PK	303.54M	30.06	46.00	-15.94	-5.28	3	Horizontal	360	1.00	-	35.34	18.48	2.91	26.67
PK	623.64M	37.97	46.00	-8.03	0.23	3	Horizontal	360	1.00	-	37.74	24.09	4.19	28.05
PK	648.86M	37.48	46.00	-8.52	0.47	3	Horizontal	360	1.00	-	37.01	24.27	4.30	28.10

BT-BR(1Mbps)

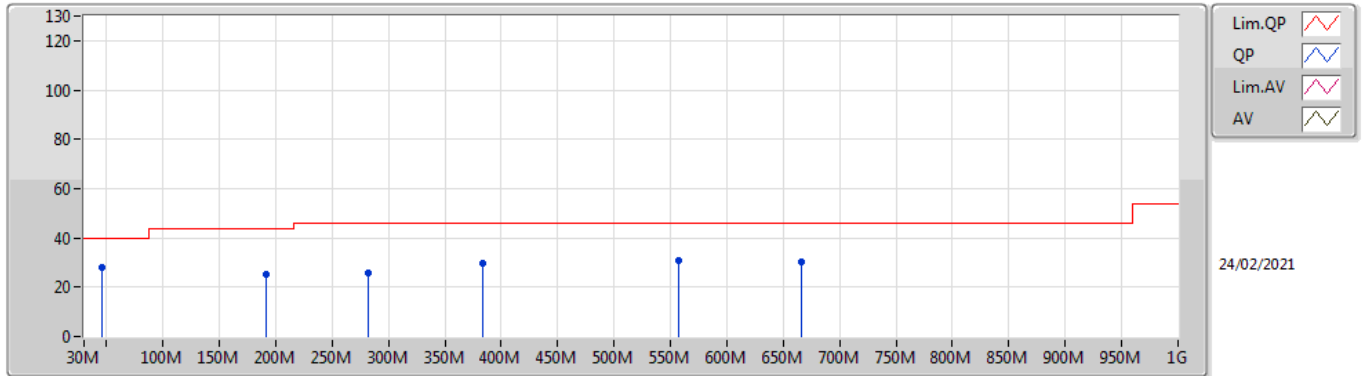
2440MHz_WLC Gun+EXT Battery+Adapter



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	35.82M	35.65	40.00	-4.35	-6.51	3	Vertical	360	1.00	-	42.16	20.12	0.92	27.55
PK	97.9M	31.11	43.50	-12.39	-9.85	3	Vertical	360	1.00	-	40.96	15.94	1.60	27.39
PK	383.08M	29.57	46.00	-16.43	-3.62	3	Vertical	360	1.00	-	33.19	20.30	3.23	27.15
PK	456.8M	30.53	46.00	-15.47	-1.96	3	Vertical	360	1.00	-	32.49	22.30	3.44	27.70
PK	577.08M	36.29	46.00	-9.71	0.02	3	Vertical	360	1.00	-	36.27	24.02	4.01	28.01
QP	45.52M	36.24	40.00	-3.76	-11.56	3	Vertical	316	1.00	-	47.80	14.96	1.01	27.53

BT-BR(1Mbps)

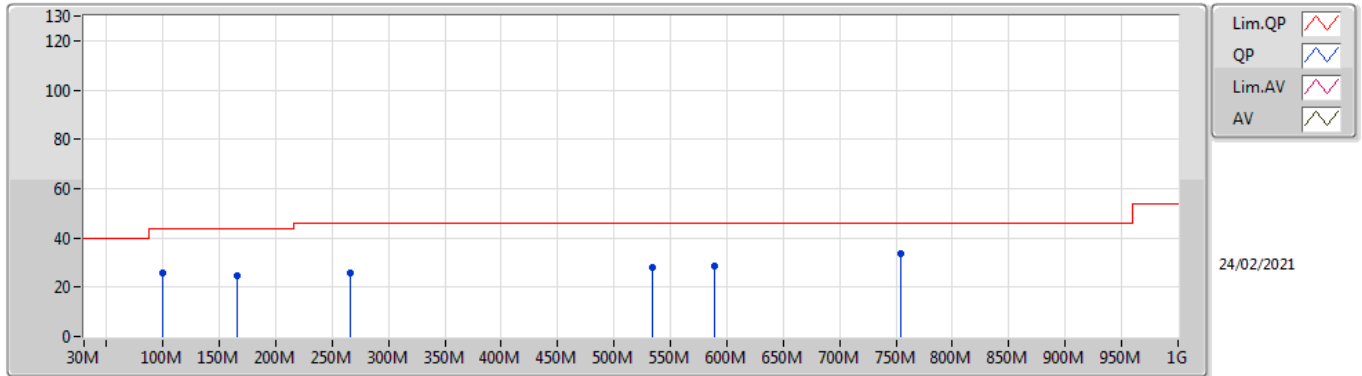
2440MHz_WLC Gun+EXT Battery+Adapter



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	45.52M	28.27	40.00	-11.73	-11.56	3	Horizontal	0	1.00	-	39.83	14.96	1.01	27.53
PK	191.02M	24.96	43.50	-18.54	-10.29	3	Horizontal	0	1.00	-	35.25	14.41	2.26	26.96
PK	282.2M	25.80	46.00	-20.20	-5.72	3	Horizontal	0	1.00	-	31.52	18.16	2.79	26.67
PK	383.08M	29.72	46.00	-16.28	-3.62	3	Horizontal	0	1.00	-	33.34	20.30	3.23	27.15
PK	557.68M	30.92	46.00	-15.08	0.30	3	Horizontal	0	1.00	-	30.62	24.39	3.93	28.02
PK	666.32M	30.34	46.00	-15.66	0.59	3	Horizontal	0	1.00	-	29.75	24.32	4.33	28.06

BT-BR(1Mbps)

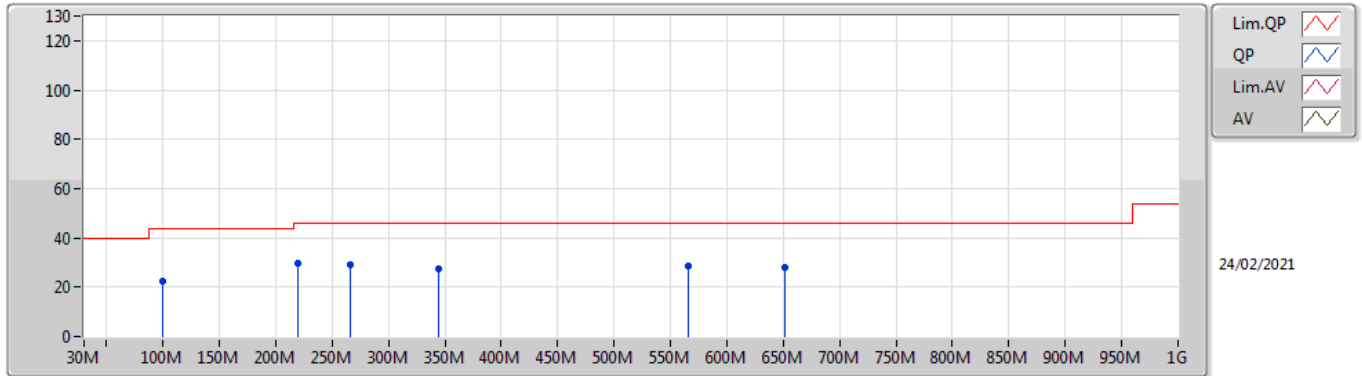
2440MHz_WLC Gun+EXT Battery+USB



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	99.84M	25.52	43.50	-17.98	-9.59	3	Vertical	0	1.00	-	35.11	16.20	1.60	27.39
PK	165.8M	24.64	43.50	-18.86	-10.18	3	Vertical	0	1.00	-	34.82	14.86	2.06	27.10
PK	266.68M	25.97	46.00	-20.03	-5.57	3	Vertical	0	1.00	-	31.54	18.42	2.70	26.69
PK	534.4M	28.06	46.00	-17.94	-0.35	3	Vertical	0	1.00	-	28.41	23.76	3.84	27.95
PK	588.72M	28.81	46.00	-17.19	-0.09	3	Vertical	0	1.00	-	28.90	23.87	4.05	28.01
PK	753.62M	33.81	46.00	-12.19	2.17	3	Vertical	0	1.00	-	31.64	25.55	4.61	27.99

BT-BR(1Mbps)

2440MHz_WLC Gun+EXT Battery+USB



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	99.84M	22.28	43.50	-21.22	-9.59	3	Horizontal	360	1.00	-	31.87	16.20	1.60	27.39
PK	220.12M	29.55	46.00	-16.45	-9.95	3	Horizontal	360	1.00	-	39.50	14.47	2.42	26.84
PK	266.68M	29.02	46.00	-16.98	-5.57	3	Horizontal	360	1.00	-	34.59	18.42	2.70	26.69
PK	344.28M	27.32	46.00	-18.68	-4.51	3	Horizontal	360	1.00	-	31.83	19.32	3.08	26.91
PK	565.44M	28.70	46.00	-17.30	0.23	3	Horizontal	360	1.00	-	28.47	24.29	3.96	28.02
PK	650.8M	27.93	46.00	-18.07	0.47	3	Horizontal	360	1.00	-	27.46	24.27	4.30	28.10



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

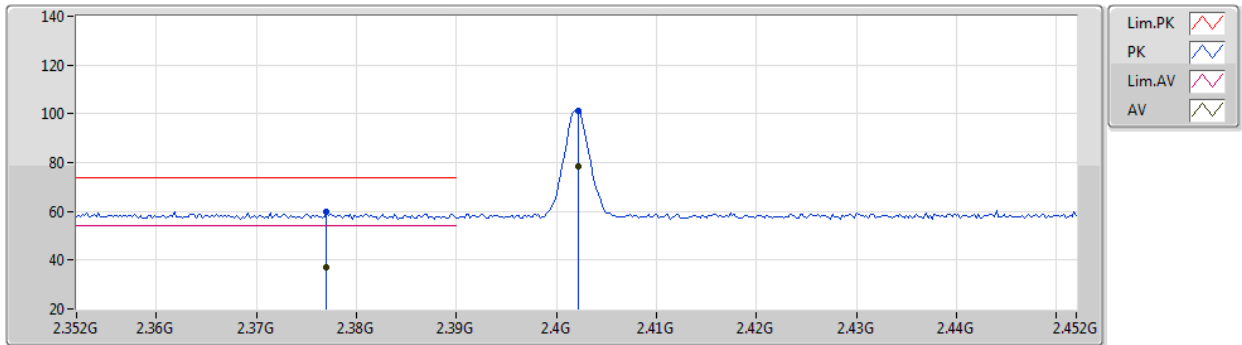
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-BR(1Mbps)	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.377G	37.32	54.00	-16.68	3	Vertical	106	2.38	-
2402MHz	Pass	AV	2.4022G	78.69	Inf	-Inf	3	Vertical	106	2.38	-
2402MHz	Pass	PK	2.377G	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

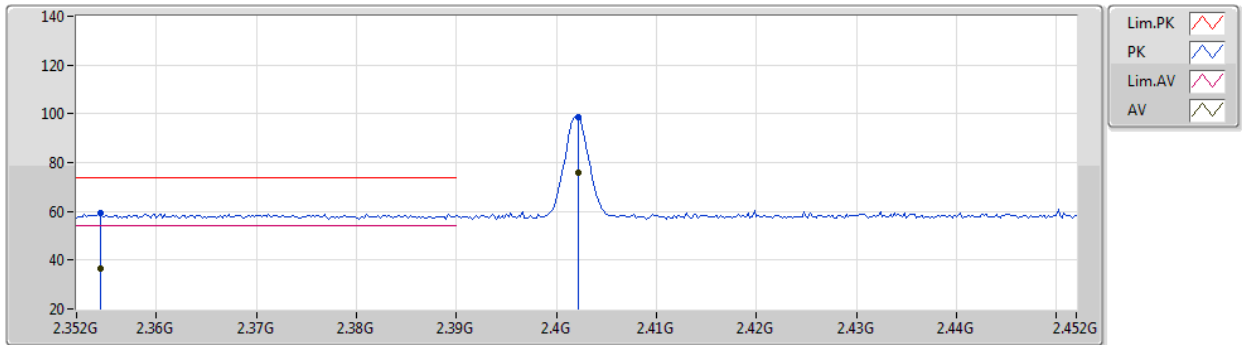


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.377G	37.32	54.00	-16.68	35.59	3	Vertical	106	2.38	-	1.73	29.65	5.94	-
AV	2.4022G	78.69	Inf	-Inf	35.67	3	Vertical	106	2.38	-	43.02	29.71	5.96	-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

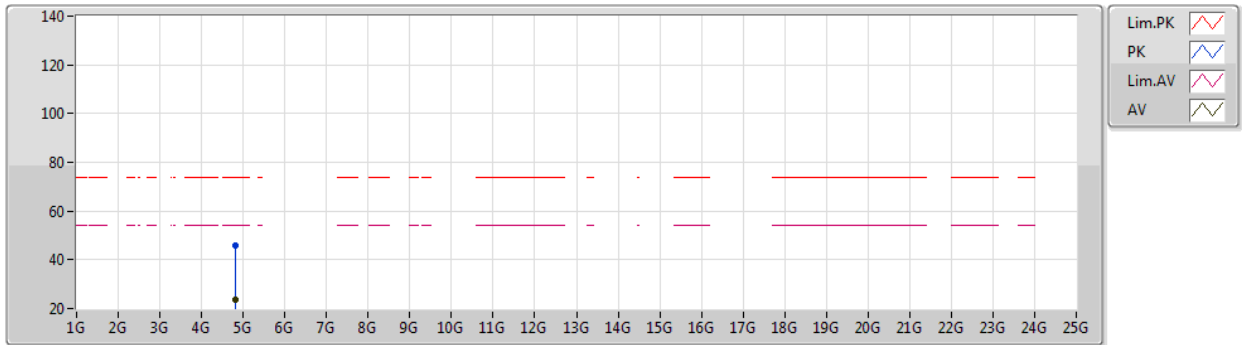


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3544G	36.58	54.00	-17.42	35.54	3	Horizontal	357	1.54	-	1.04	29.61	5.93	-
AV	2.4022G	75.96	Inf	-Inf	35.67	3	Horizontal	357	1.54	-	40.29	29.71	5.96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

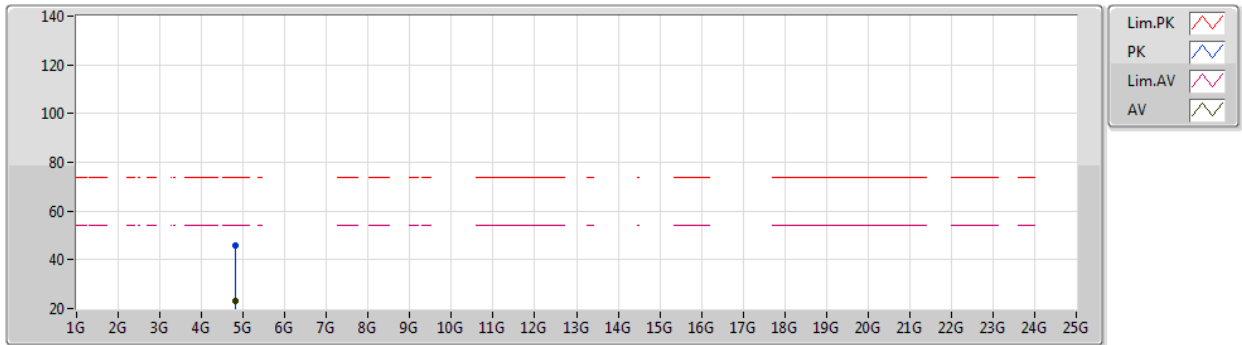


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.80808G	23.48	54.00	-30.52	7.97	3	Vertical	61	1.48	-	15.51	33.62	8.26	33.91
PK	4.80808G	45.98	74.00	-28.02	7.97	3	Vertical	61	1.48	-	38.01	33.62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

BT-BR(1Mbps)

2402MHz_TX

17/06/2020

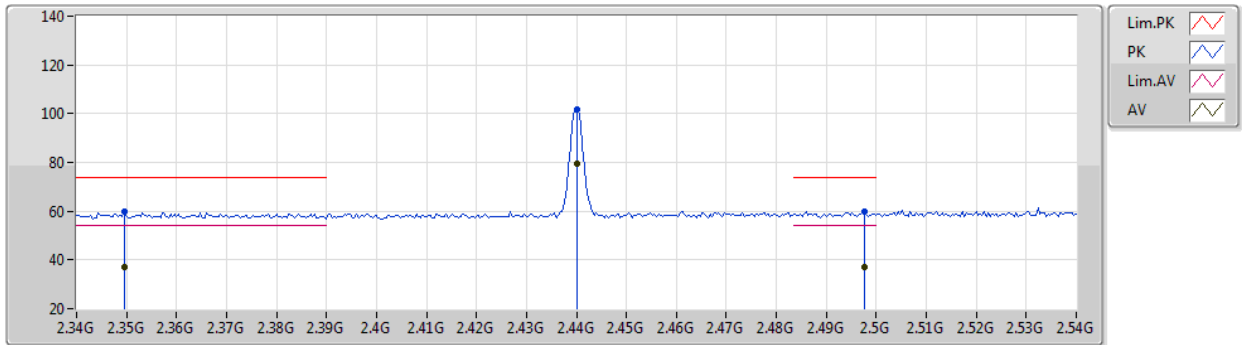


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.81162G	23.33	54.00	-30.67	7.98	3	Horizontal	288	1.49	-	15.35	33.62	8.26	33.90
PK	4.81162G	45.83	74.00	-28.17	7.98	3	Horizontal	288	1.49	-	37.85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

BT-BR(1Mbps)

2440MHz_TX

17/06/2020

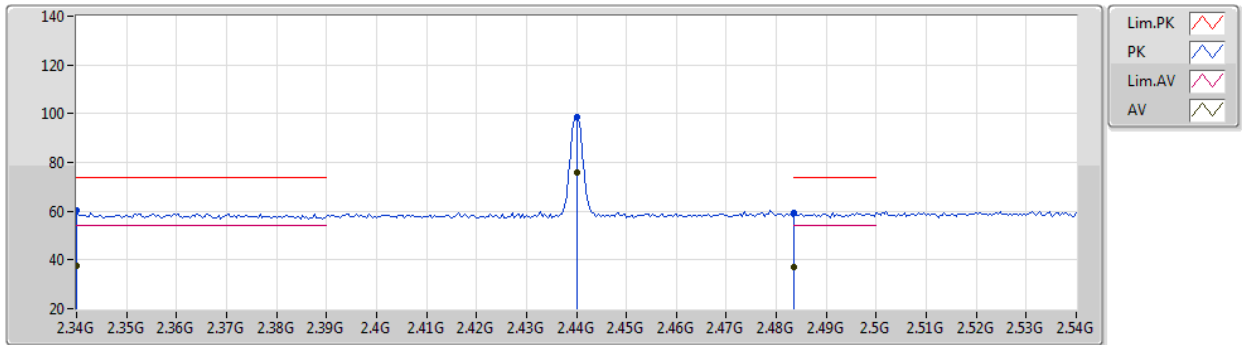


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3496G	37.08	54.00	-16.92	35.52	3	Vertical	119	1.31	-	1.56	29.60	5.92	-
AV	2.44G	79.35	Inf	-Inf	35.91	3	Vertical	119	1.31	-	43.44	29.90	6.01	-
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

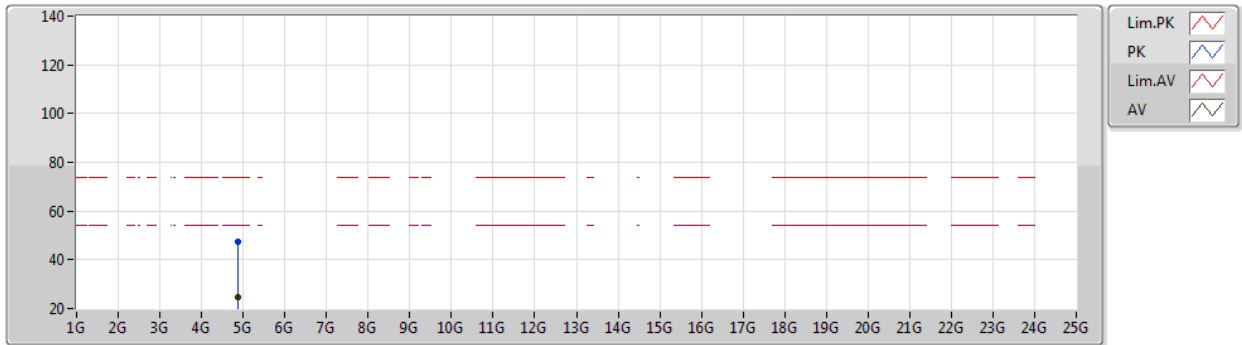


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.34G	37.73	54.00	-16.27	35.50	3	Horizontal	106	1.00	-	2.23	29.58	5.92	-
AV	2.44G	76.05	Inf	-Inf	35.91	3	Horizontal	106	1.00	-	40.14	29.90	6.01	-
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

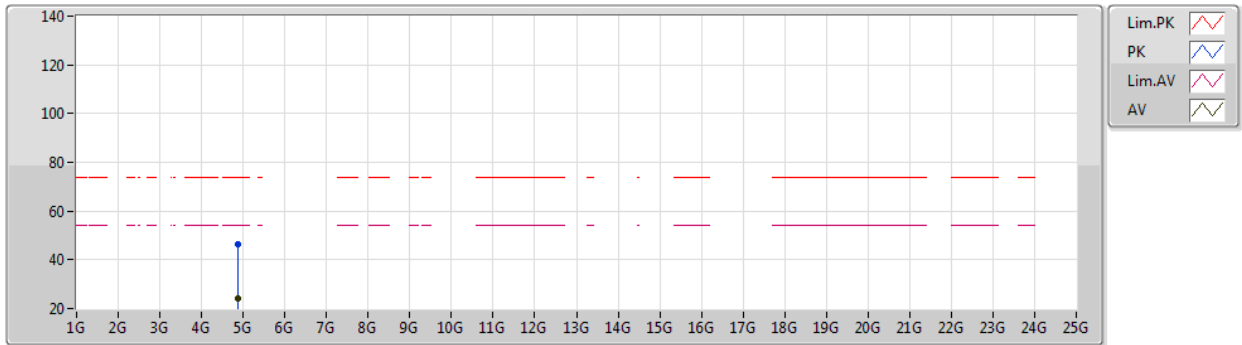


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.87298G	24.85	54.00	-29.15	8.18	3	Vertical	247	1.48	-	16.67	33.75	8.30	33.87
PK	4.87298G	47.35	74.00	-26.65	8.18	3	Vertical	247	1.48	-	39.17	33.75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

BT-BR(1Mbps)

2440MHz_TX

17/06/2020

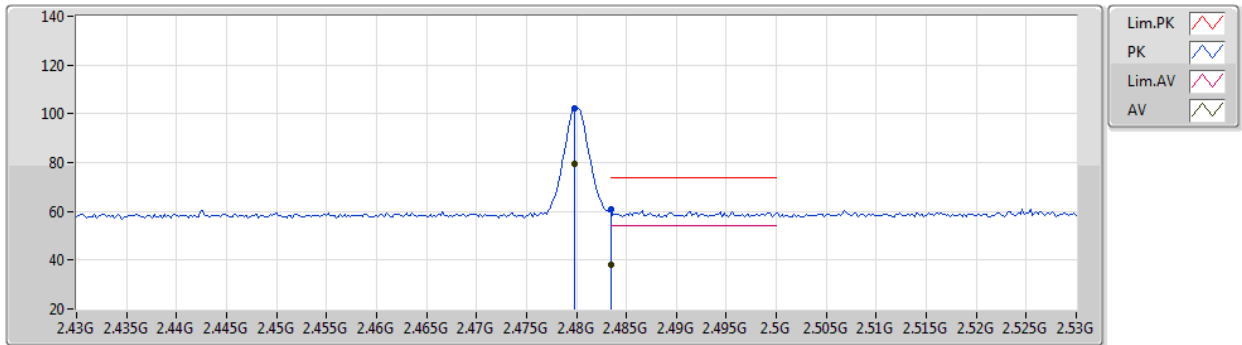


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.8851G	23.90	54.00	-30.10	8.21	3	Horizontal	202	2.69	-	15.69	33.77	8.31	33.87
PK	4.8851G	46.40	74.00	-27.60	8.21	3	Horizontal	202	2.69	-	38.19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

BT-BR(1Mbps)

2480MHz_TX

17/06/2020

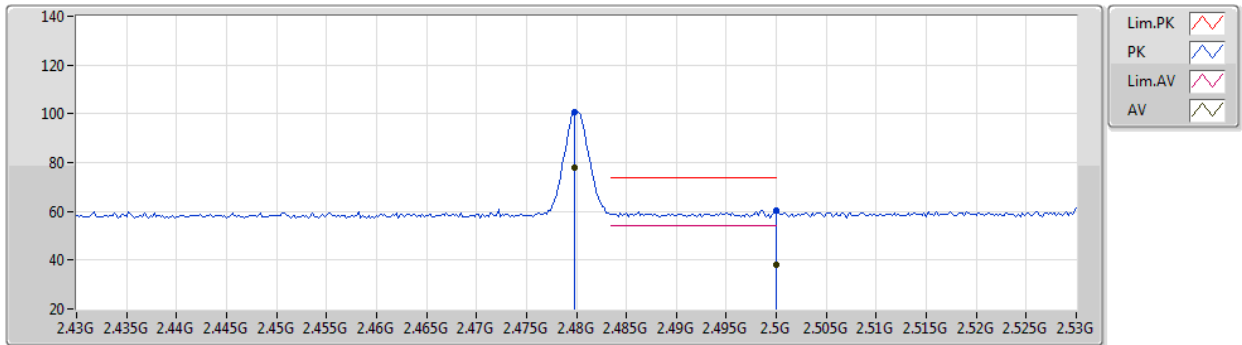


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.4798G	79.56	Inf	-Inf	36.16	3	Vertical	119	1.00	-	43.40	30.10	6.06	-
AV	2.4835G	38.25	54.00	-15.75	36.18	3	Vertical	119	1.00	-	2.07	30.12	6.06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

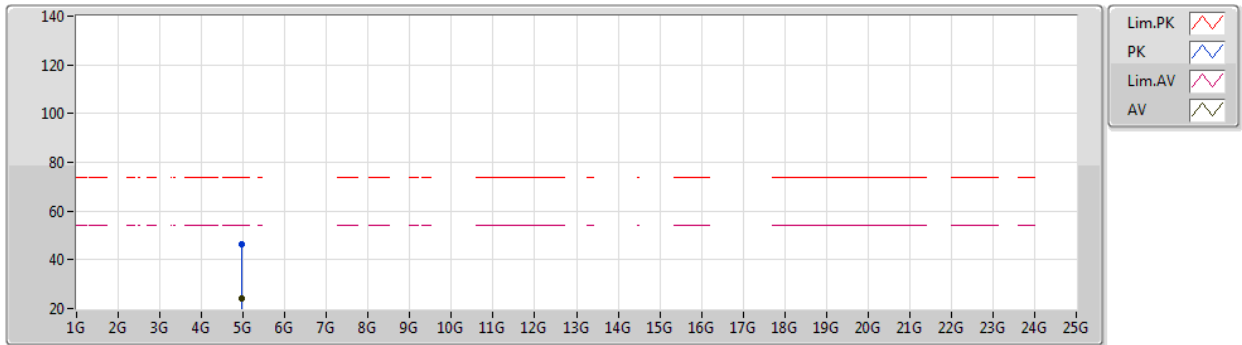


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.4798G	78.12	Inf	-Inf	36.16	3	Horizontal	344	1.12	-	41.96	30.10	6.06	-
AV	2.5G	37.94	54.00	-16.06	36.28	3	Horizontal	344	1.12	-	1.66	30.20	6.08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

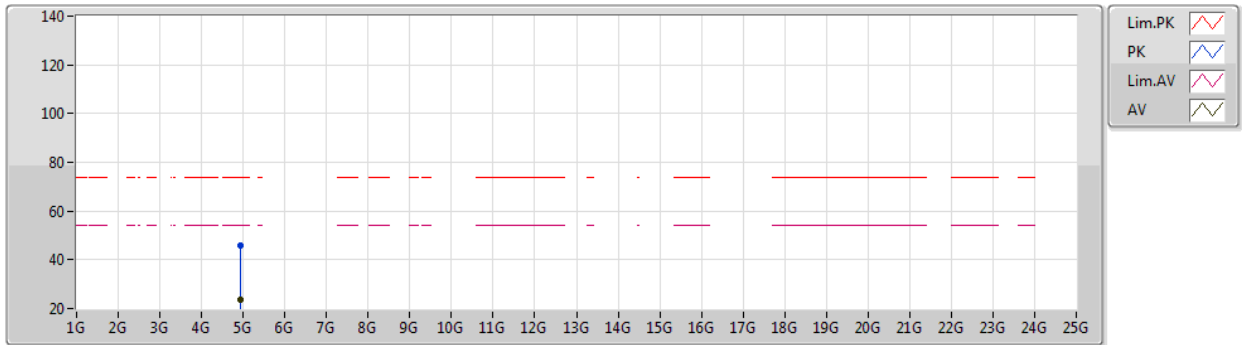


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.9699G	23.93	54.00	-30.07	8.48	3	Vertical	26	1.48	-	15.45	33.94	8.36	33.82
PK	4.9699G	46.43	74.00	-27.57	8.48	3	Vertical	26	1.48	-	37.95	33.94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

BT-BR(1Mbps)

2480MHz_TX

17/06/2020

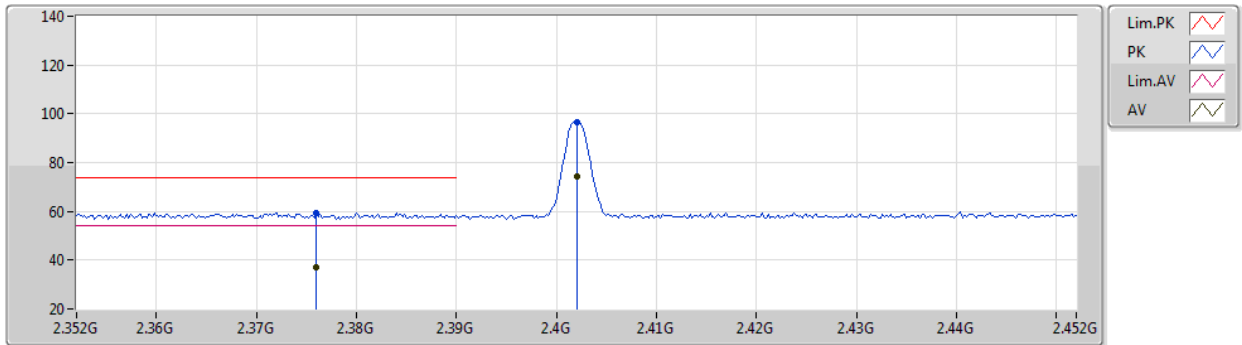


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.9489G	23.52	54.00	-30.48	8.42	3	Horizontal	272	1.49	-	15.10	33.90	8.35	33.83
PK	4.9489G	46.02	74.00	-27.98	8.42	3	Horizontal	272	1.49	-	37.60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

BT-EDR(3Mbps)

2402MHz_TX

17/06/2020

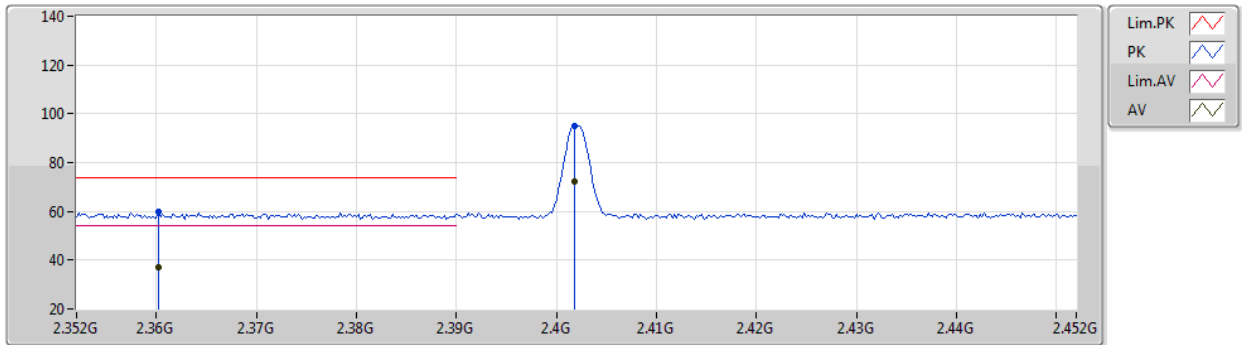


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.376G	36.82	54.00	-17.18	35.59	3	Vertical	105	2.36	-	1.23	29.65	5.94	-
AV	2.402G	74.22	Inf	-Inf	35.67	3	Vertical	105	2.36	-	38.55	29.71	5.96	-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

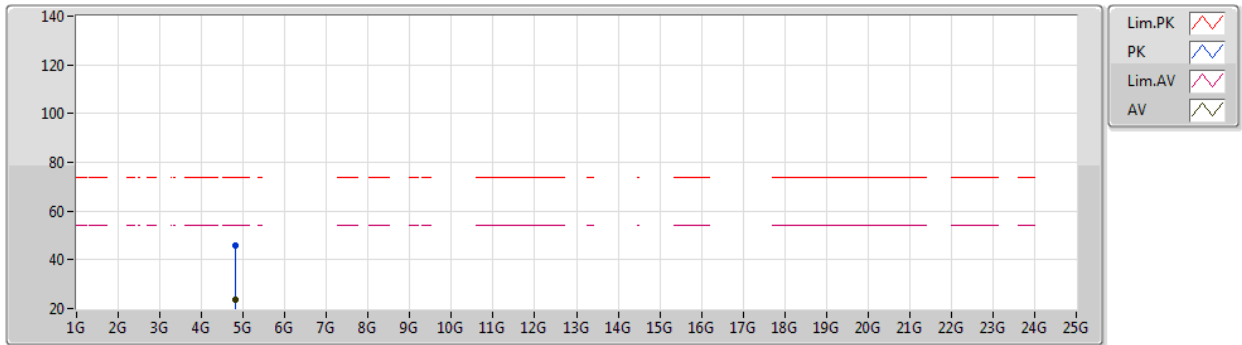


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3602G	37.08	54.00	-16.92	35.55	3	Horizontal	342	1.17	-	1.53	29.62	5.93	-
AV	2.4018G	72.42	Inf	-Inf	35.67	3	Horizontal	342	1.17	-	36.75	29.71	5.96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

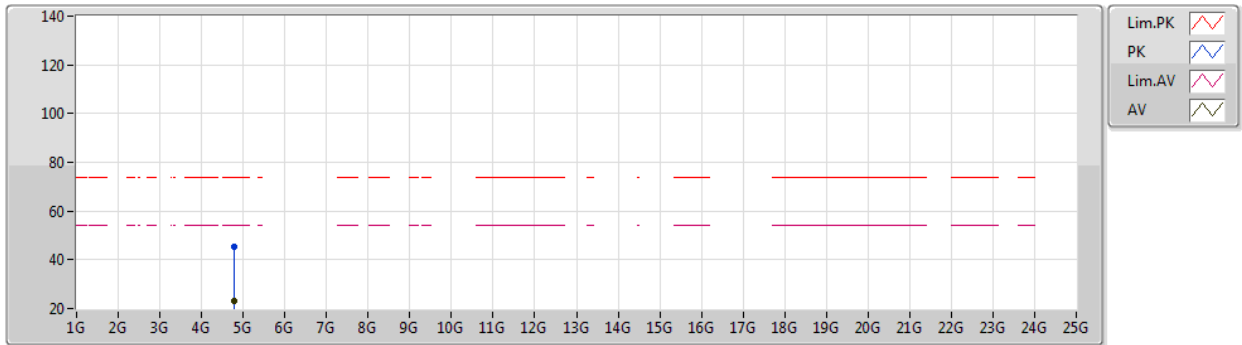


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.80592G	23.48	54.00	-30.52	7.95	3	Vertical	337	1.01	-	15.53	33.61	8.25	33.91
PK	4.80592G	45.98	74.00	-28.02	7.95	3	Vertical	337	1.01	-	38.03	33.61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

BT-EDR(3Mbps)

17/06/2020

2402MHz_TX

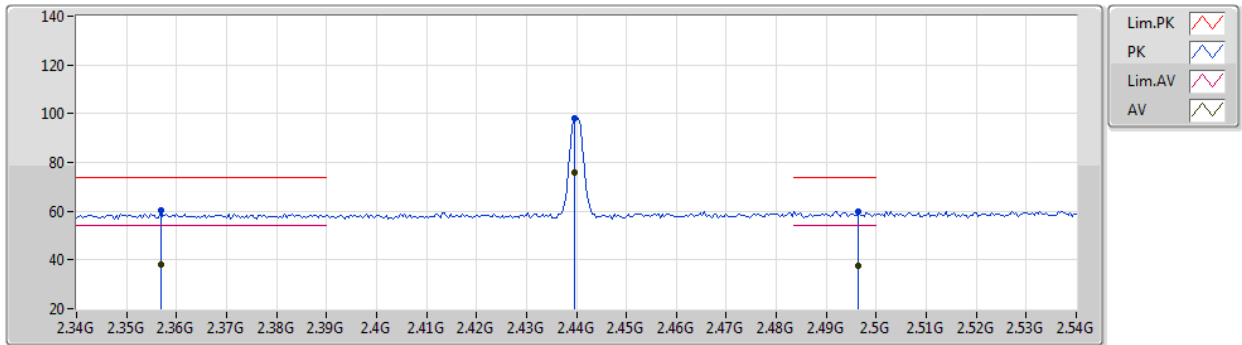


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.79254G	22.96	54.00	-31.04	7.90	3	Horizontal	97	1.88	-	15.06	33.56	8.25	33.91
PK	4.79254G	45.46	74.00	-28.54	7.90	3	Horizontal	97	1.88	-	37.56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

BT-EDR(3Mbps)

2440MHz_TX

17/06/2020

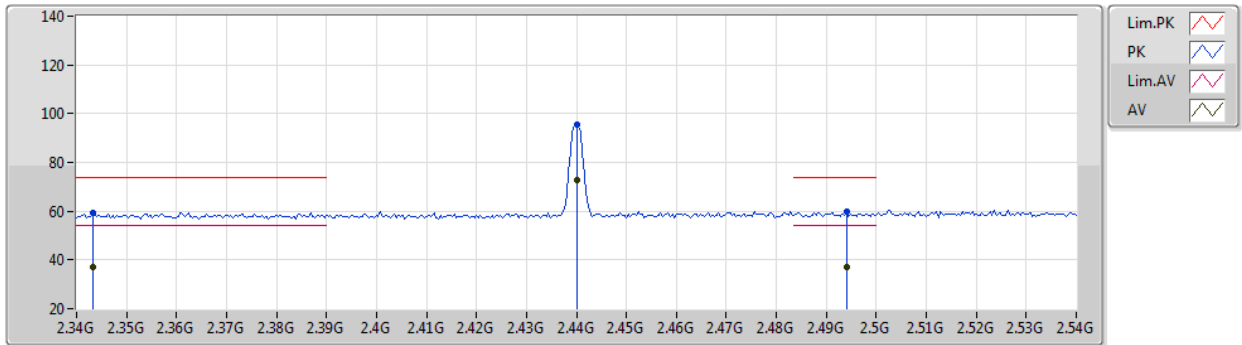


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3568G	37.86	54.00	-16.14	35.54	3	Vertical	119	1.40	-	2.32	29.61	5.93	-
AV	2.4396G	75.66	Inf	-Inf	35.91	3	Vertical	119	1.40	-	39.75	29.90	6.01	-
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

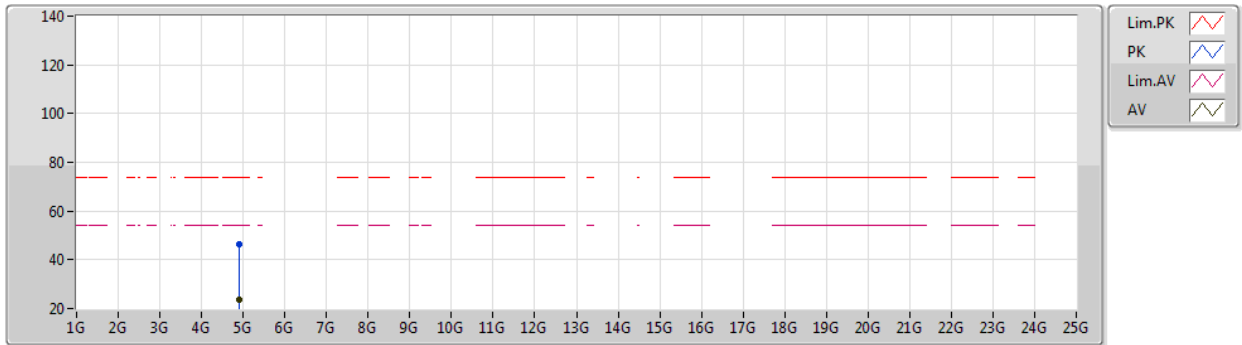


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3432G	36.95	54.00	-17.05	35.51	3	Horizontal	109	1.00	-	1.44	29.59	5.92	-
AV	2.44G	73.00	Inf	-Inf	35.91	3	Horizontal	109	1.00	-	37.09	29.90	6.01	-
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)

17/06/2020

2440MHz_TX

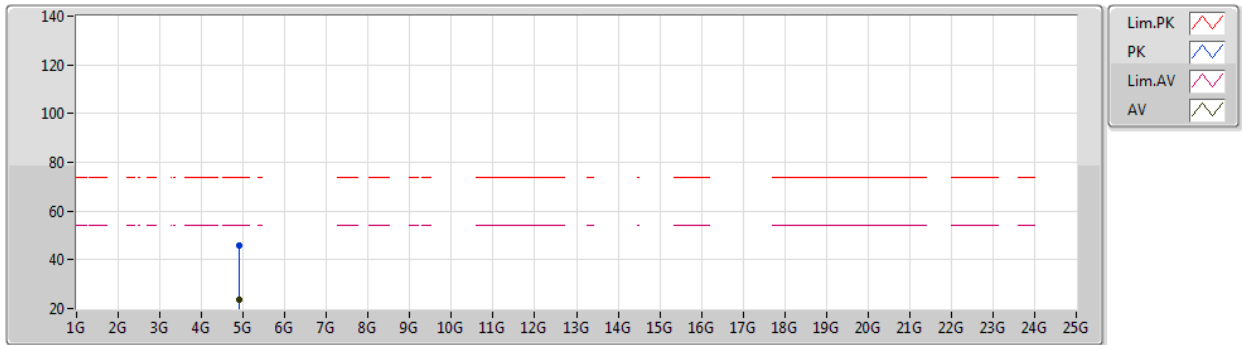


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.88924G	23.74	54.00	-30.26	8.22	3	Vertical	259	1.41	-	15.52	33.78	8.31	33.87
PK	4.88924G	46.24	74.00	-27.76	8.22	3	Vertical	259	1.41	-	38.02	33.78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

BT-EDR(3Mbps)

17/06/2020

2440MHz_TX

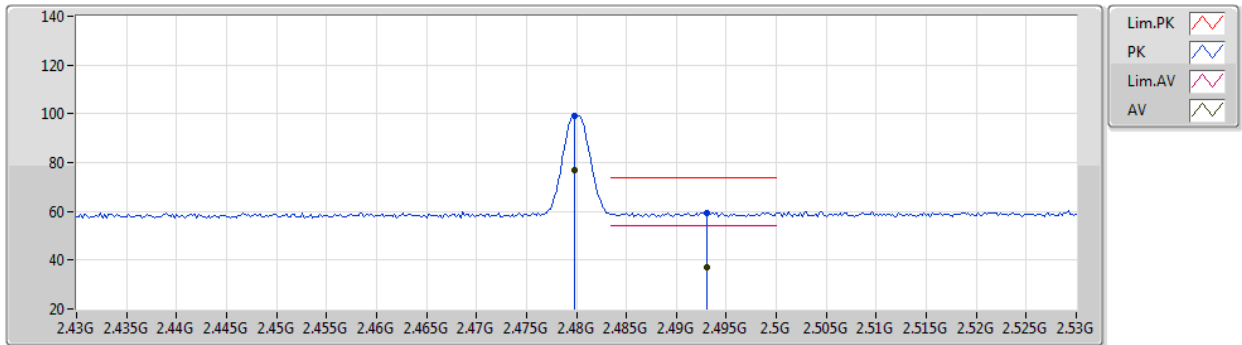


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.8929G	23.54	54.00	-30.46	8.24	3	Horizontal	359	1.15	-	15.30	33.79	8.31	33.86
PK	4.8929G	46.04	74.00	-27.96	8.24	3	Horizontal	359	1.15	-	37.80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

BT-EDR(3Mbps)

2480MHz_TX

17/06/2020

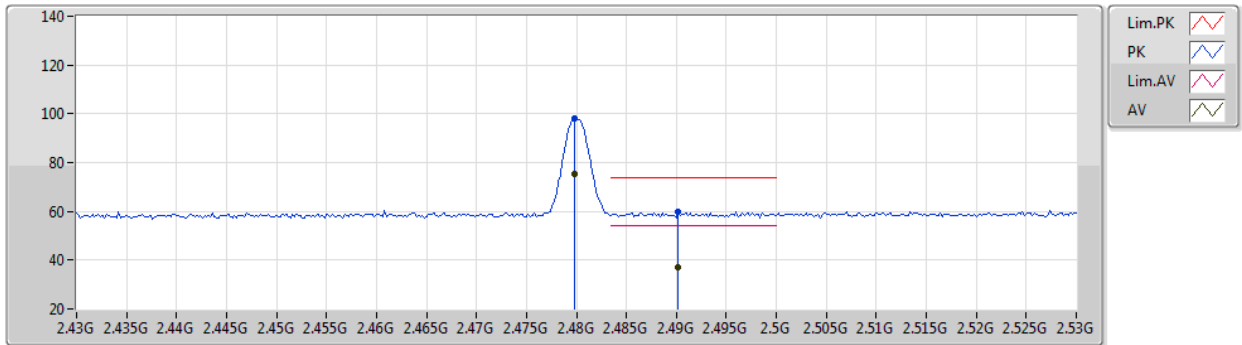


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.4798G	76.85	Inf	-Inf	36.16	3	Vertical	120	1.02	-	40.69	30.10	6.06	-
AV	2.493G	37.05	54.00	-16.95	36.23	3	Vertical	120	1.02	-	0.82	30.16	6.07	-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

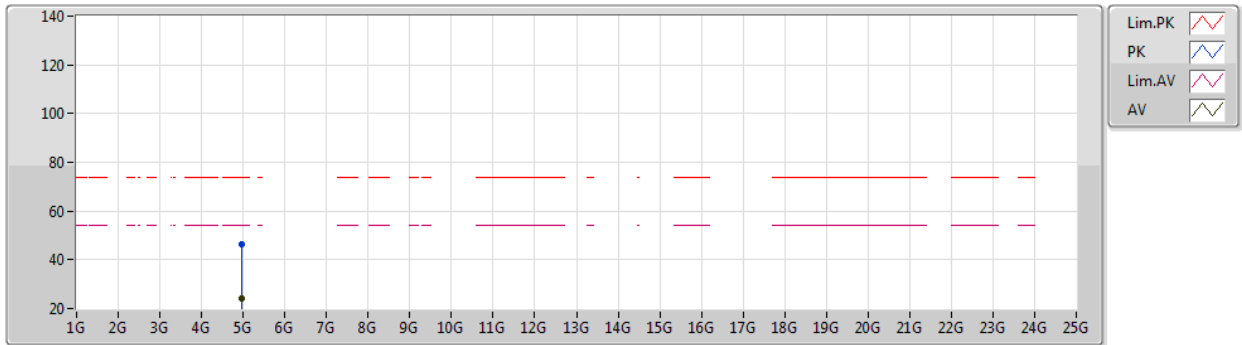


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.4798G	75.51	Inf	-Inf	36.16	3	Horizontal	344	1.13	-	39.35	30.10	6.06	-
AV	2.4902G	37.29	54.00	-16.71	36.22	3	Horizontal	344	1.13	-	1.07	30.15	6.07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

17/06/2020

2480MHz_TX

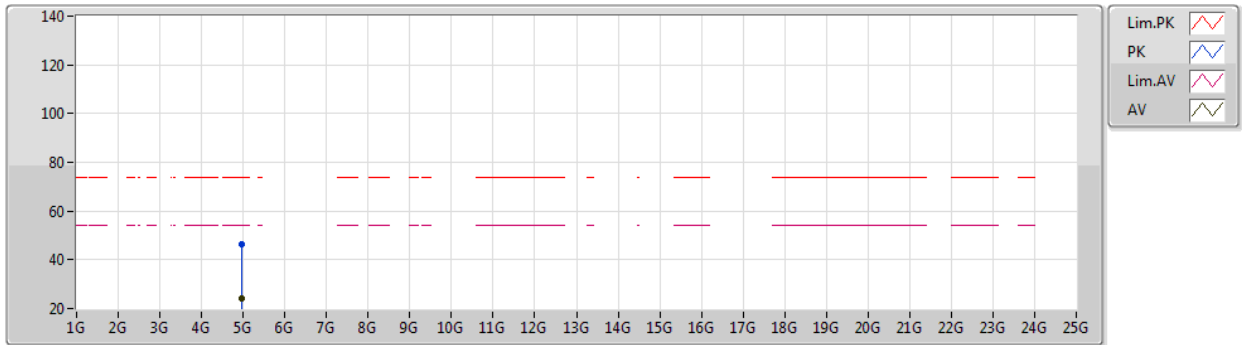


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.95394G	24.00	54.00	-30.00	8.43	3	Vertical	161	1.48	-	15.57	33.91	8.35	33.83
PK	4.95394G	46.50	74.00	-27.50	8.43	3	Vertical	161	1.48	-	38.07	33.91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

BT-EDR(3Mbps)

17/06/2020

2480MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (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

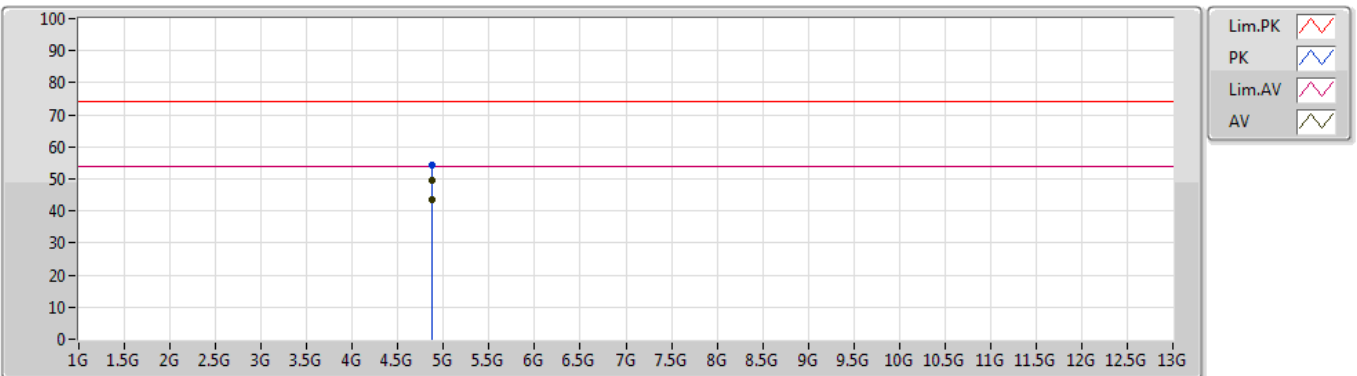
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	AV	4.87996G	51.48	54.00	-2.52	Horizontal
Mode 2	Pass	AV	4.88G	51.90	54.00	-2.10	Vertical

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

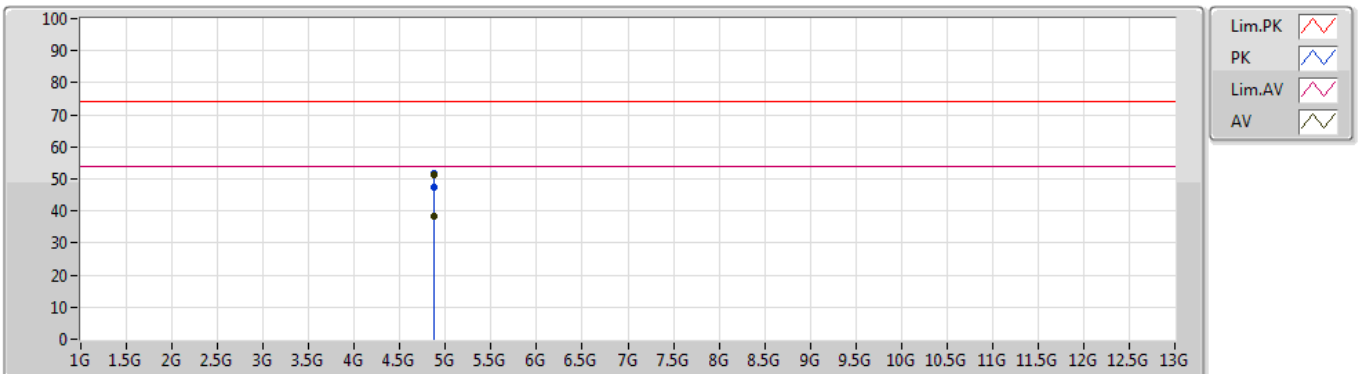
26/08/2020



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

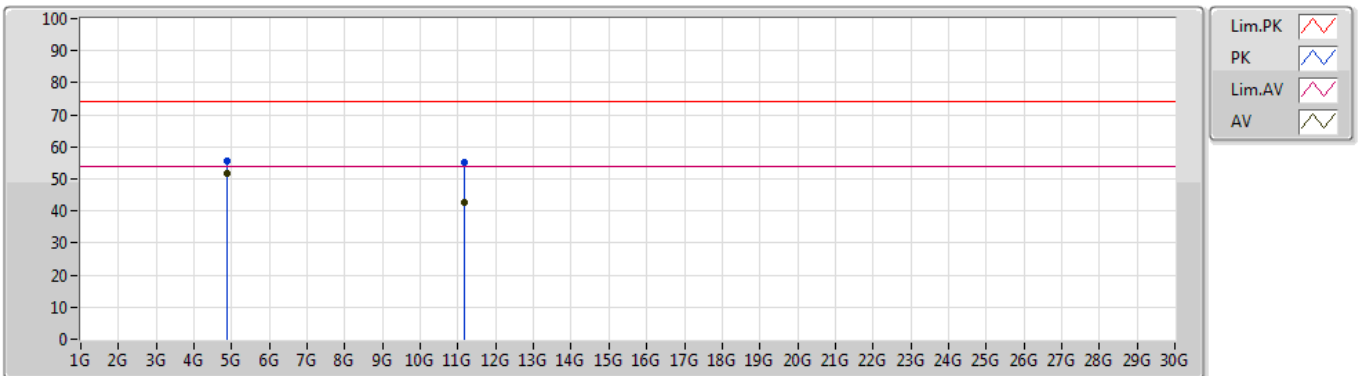
26/08/2020



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

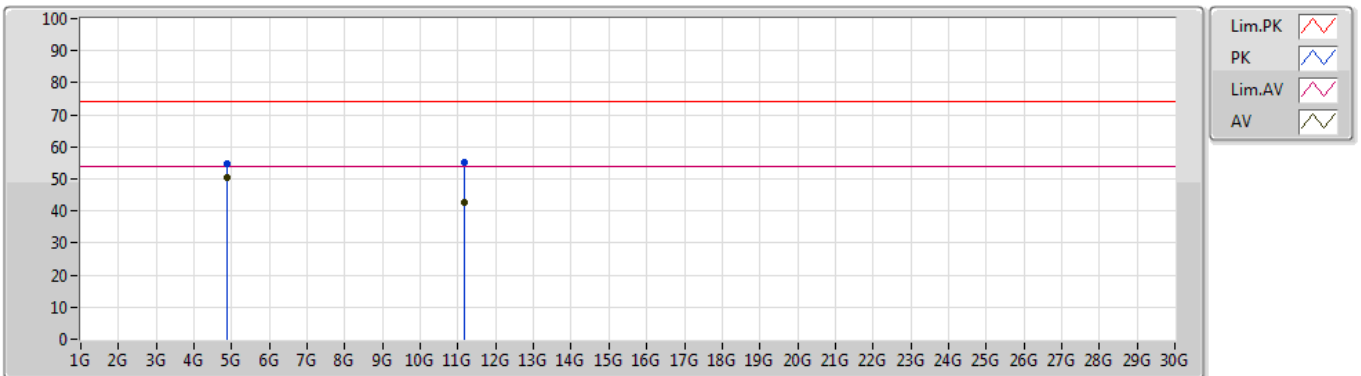
26/08/2020



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (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 (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (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