FCC Test Report

FCC ID	:	**2AFD2-IO6**
Equipment	:	**Bluetooth Headphone**
Brand Name	:	**DALI**
Model Name	:	**DALI iO-6, DALI iO-4**
Applicant	:	**DALI A/S** **Dali Alle 1, 9610 Noerager, Denmark**
Manufacturer	:	**DALI A/S** **Dali Alle 1, 9610 Noerager, Denmark**
Standard	:	**47 CFR FCC Part 15.247**

The product was received on Jun. 28, 2019, and testing was started from Jul. 04, 2019 and completed on Jul. 06, 2019. 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 report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Approved by: Allen Lin

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

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

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History of this test report

Report No.	Version	Description	Issued Date
FR962606AD	01	Initial issue of report	Aug. 14, 2019

Summary of Test Result

Report Clause	Ref. Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	FCC 15.203
3.1	15.207	AC Power-line Conducted Emissions	PASS	FCC 15.207
3.2	15.247(a)	20dB Bandwidth	PASS	15.247(a)
3.2	15.247(a)	Carrier Frequency Separation	PASS	15.247(a)
3.3	15.247(b)	Maximum Conducted Output Power	PASS	15.247(b)
3.4	15.247(a)	Number of Hopping Frequencies and Hopping Bandedge	PASS	15.247(a)
3.5	15.247(a)	Time of Occupancy (Dwell Time)	PASS	15.247(a)
3.6	15.247(d)	Emissions in Non-restricted Frequency Bands	PASS	15.247(d)
3.7	15.247(d)	Emissions in Restricted Frequency Bands	PASS	Restricted Bands: FCC 15.209

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: Michelle Tsai

1 General Description

1.1 Information

1.1.1 RF General Information

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

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

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

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	Sage Elephant tech.	S306300001000-A	Couple Chip Antenna	NA	1.94

For Bluetooth function:

For Bluetooth mode (1TX/1RX)

Only Ant.1 can be used as transmitting/receiving antenna.

1.1.3 EUT Information

Operational Condition				
EUT Power Type	From 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)	0.751	1.24	2.891m	1k
BT-EDR(2Mbps)	0.772	1.12	2.898m	1k
BT-EDR(3Mbps)	0.787	1.04	2.899m	1k

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

1.1.5 Table for Multiple Listing

The model names in the following table are all refer to the identical product.

Model Name	Description
DALI iO-6	Model iO-6 is full function, iO-4 removed a function ANC noise reduction and button, compared to iO-6. There are two appearance colors.
DALI iO-4	

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
- KDB 558074 D01 v05r02
- ANSI C63.10-2013

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.			

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
AC Conduction	CO04-HY	Edward	22.2~23.2°C / 52.8~54.1%	06/Jul/2019
RF Conducted	TH06-HY	Gary	23.4~26°C / 64~66%	04/Jul/2019
Radiated	03CH01-HY	Edward	25.4~26.2°C / 57.8~60.4%	05/Jul/2019~06/Jul/2019

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)	3.54 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	1.6 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.9 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.3 dB	Confidence levels of 95%
Temperature	0.7 °C	Confidence levels of 95%
Humidity	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	Blue Test3

Mode	PowerSetting
BT-BR(1Mbps)	-
2402MHz	10
2441MHz	10
2480MHz	10
BT-EDR(2Mbps)	-
2402MHz	10
2441MHz	10
2480MHz	10
BT-EDR(3Mbps)	-
2402MHz	10
2441MHz	10
2480MHz	10

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	USB Mode

The Worst Case Mode for Following Conformance Tests	
Tests Item	20dB Bandwidth Carrier Frequency Separation Maximum Conducted Output Power Number of Hopping Frequencies Hopping Bandedge Time of Occupancy (Dwell Time) Emissions in Non-restricted Frequency Bands
Test Condition	Conducted measurement at transmit chains

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	USB Mode		
Operating Mode > 1GHz	CTX		
Orthogonal Planes of EUT	**X Plane**	**Y Plane**	**Z Plane**
			
Worst Planes of EUT	V		

2.4 Accessories and Support Equipment

Accessories				
Battery	Brand Name	Synergy	Model Name	AHB723938PCT-02
	Power Rating	3.7 Vdc,1110mAh	Type	Li-ion
Type C USB Cable	Brand Name	DALI	Model Name	4021XW01830ZAU
	Signal Line	1.2 meter, D-shielded cable, w/o ferrite core		
Audio Cable	Brand Name	DALI	Model Name	4021XW01828ZAS
	Signal Line	1.2 meter, non-shielded cable, w/o ferrite core		

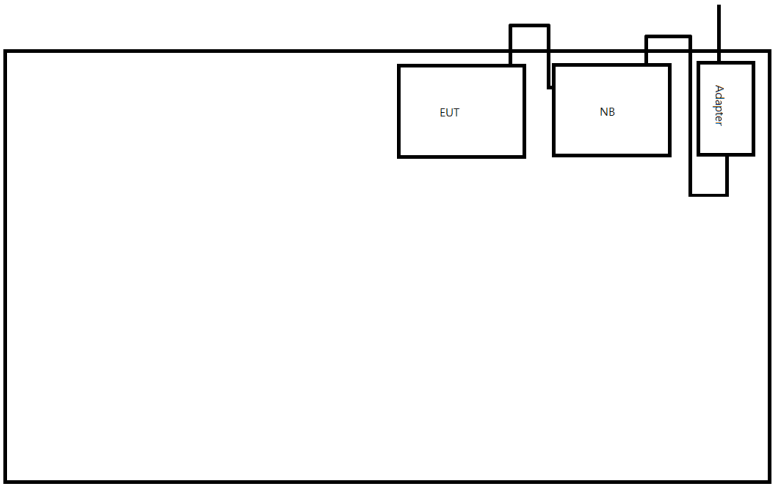
Reminder: Regarding to more detail and other information, please refer to user manual.

Support Equipment – AC Conduction and Radiated Emission				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	Adapter for NB	DELL	AA65NM121	DoC
2	Notebook	DELL	E5410	DoC

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

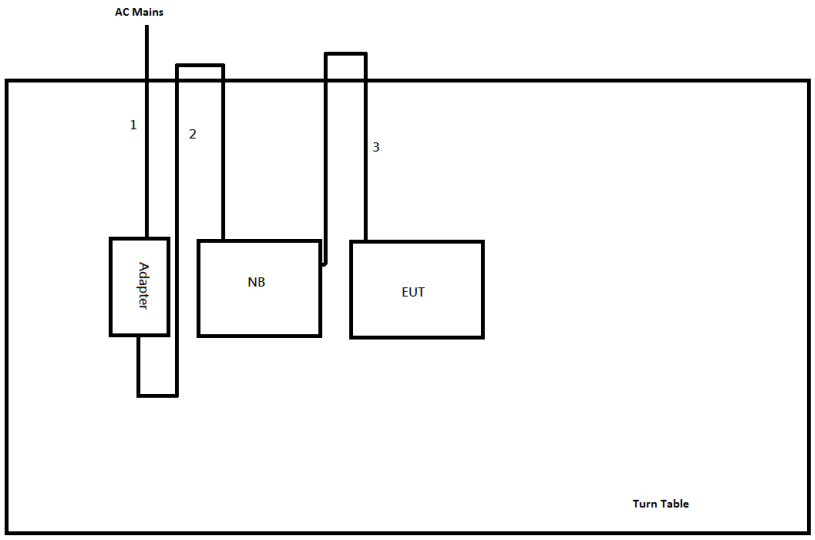
2.5 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



Item	Connection	Shielded	Length(m)	Remark
1	AC Power line	No	1.5	-
2	DC Power line	No	1.5	-
3	Type C USB Cable	No	1.2	-

Test Setup Diagram - Radiated Test



Item	Connection	Shielded	Length(m)	Remark
1	AC Power line	No	1.5	-
2	DC Power line	No	1.5	-
3	Type C USB Cable	No	1.2	-

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

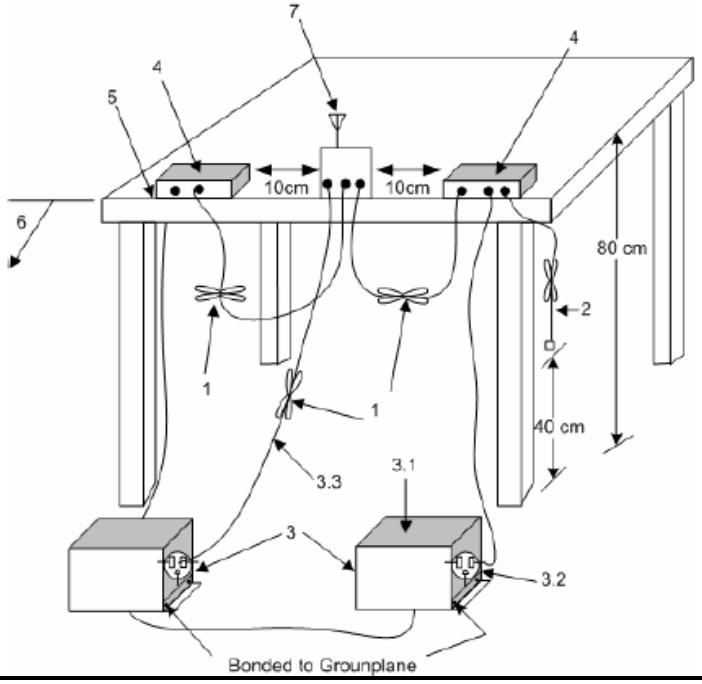
Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

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

3.1.4 Test Setup

AC Power-line Conducted Emissions



3.1.5 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 20dB Bandwidth and Carrier Frequency Separation

3.2.1 20dB Bandwidth and Carrier Frequency Separation Limit

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

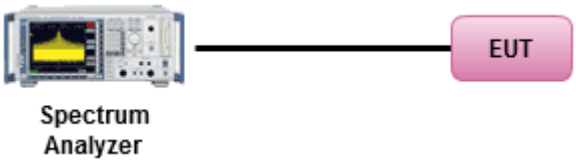
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

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

3.2.4 Test Setup

20dB Bandwidth and Carrier Frequency Separation


3.2.5 Test Result of 20dB Bandwidth

Refer as Appendix B

3.2.6 Test Result of Carrier Frequency Separation

Refer as Appendix B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

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

3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

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

3.3.4 Test Setup

Maximum Conducted Output Power (Peak Power Meter)


3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Number of Hopping Frequencies and Hopping Bandedge

3.4.1 Number of Hopping Frequencies Limit

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

3.4.2 Hopping Bandedge Limit

Refer clause 3.6.1 and clause 3.7.1

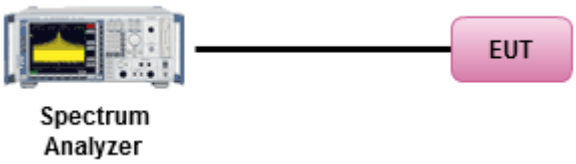
3.4.3 Measuring Instruments

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

3.4.4 Test Procedures

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

3.4.5 Test Setup

Number of Hopping Frequencies and Hopping Frequencies Bandedge


3.4.6 Test Result of Number of Hopping Frequencies

Refer as Appendix D

3.4.7 Test Result of Number of Hopping Frequencies Bandedge

Refer as Appendix D

3.5 Time of Occupancy (Dwell Time)

3.5.1 Time of Occupancy (Dwell Time) Limit

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

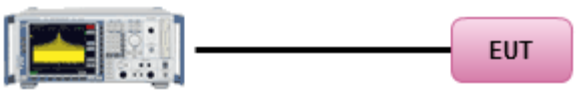
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

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

3.5.4 Test Setup

Time of Occupancy (Dwell Time)
 Spectrum Analyzer

3.5.5 Test Result of Time of Occupancy (Dwell Time)

Refer as Appendix E

3.6 Emissions in Non-restricted Frequency Bands

3.6.1 Emissions in Non-restricted Frequency Bands Limit

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

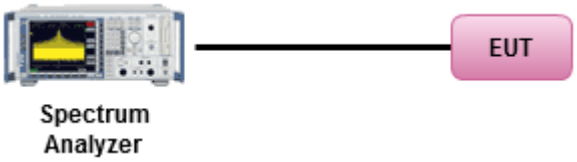
3.6.2 Measuring Instruments

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

3.6.3 Test Procedures

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

3.6.4 Test Setup

Emissions in Non-restricted Frequency Bands


3.6.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix F

3.7 Emissions in Restricted Frequency Bands

3.7.1 Emissions in Restricted Frequency Bands Limit

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

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

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

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

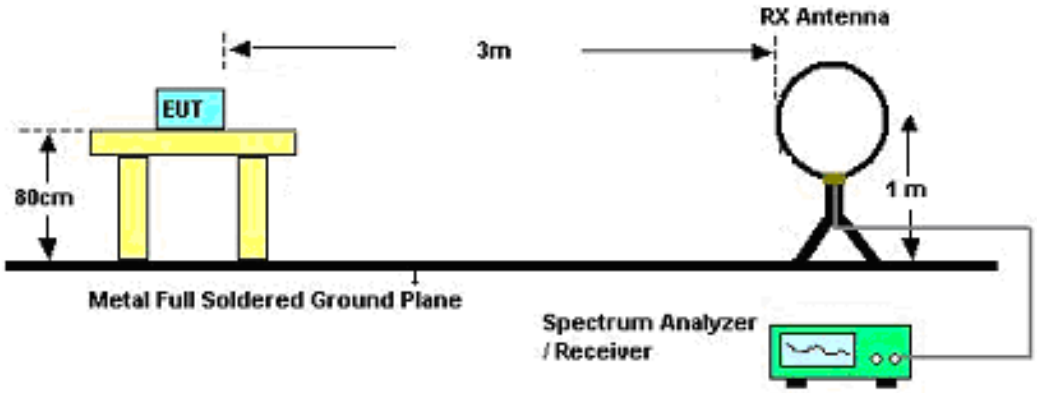
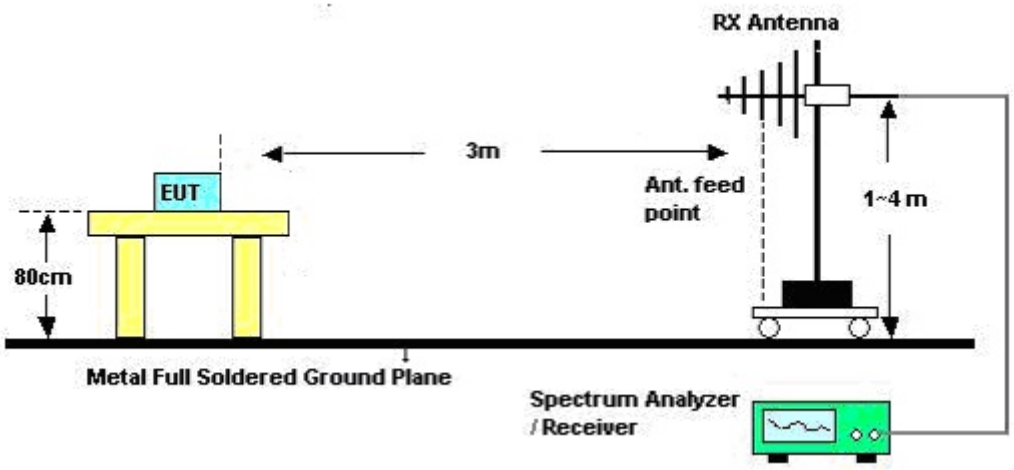
3.7.2 Measuring Instruments

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

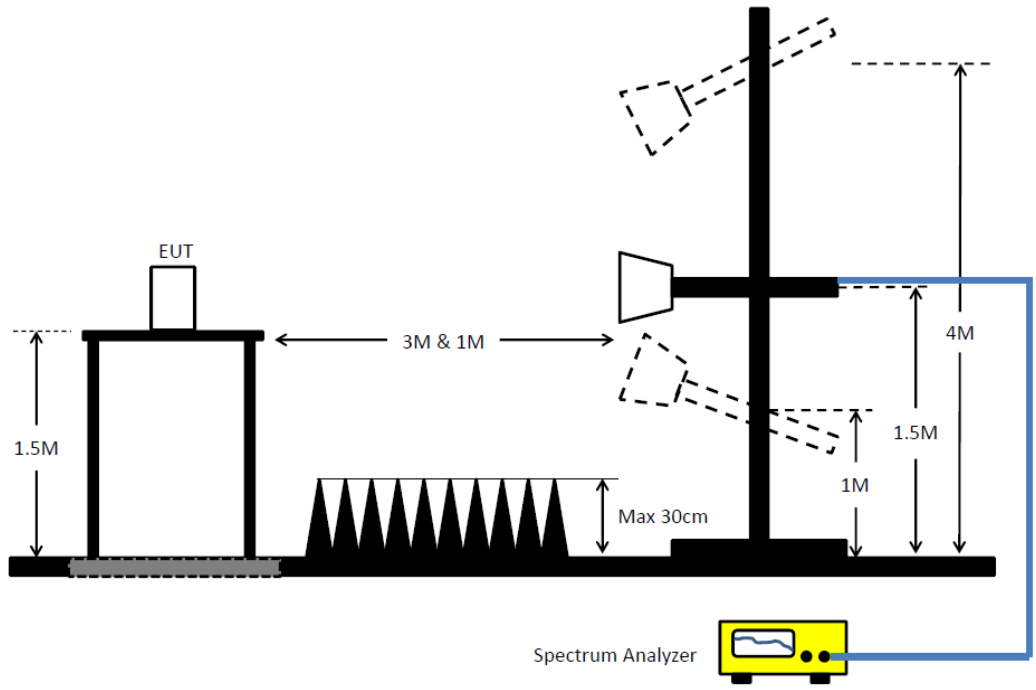
3.7.3 Test Procedures

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

3.7.4 Test Setup

Emissions in Restricted Frequency Bands
9kHz ~30MHz

30MHz~1GHz


Above 1GHz



3.7.5 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.

3.7.6 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
EMC Receiver	R&S	ESR3	102052	9kHz ~ 3.6GHz	09/Apr/2019	08/Apr/2020
LISN	R&S	ENV216	101295	9kHz ~ 30MHz	08/Nov/2018	07/Nov/2019
RF Cable-CON	MTJ	RG142	CB002-CO	9kHz ~ 200MHz	17/Sep/2018	16/Sep/2019
AC POWER	APC	AFC-11005G	F310050055	47Hz~63Hz 5~300V	NCR	NCR
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9 kHz ~ 30 MHz	12/Oct/2018	11/Oct/2019

NCR : Non-Calibration Require

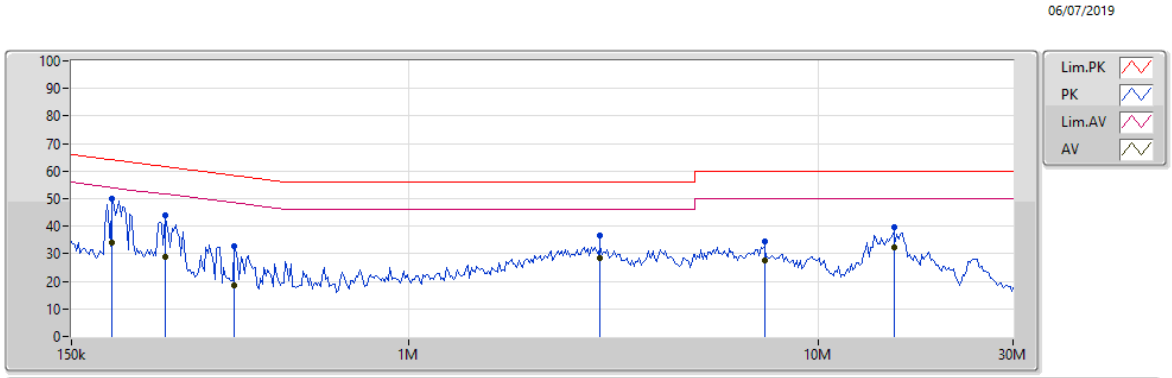
Instrument for Conducted Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101013	10Hz~40GHz	13/Mar/2019	12/Mar/2020
Power Sensor	Anritsu	MA2411B	1339407	300MHz ~ 40GHz	17/Nov/2018	16/Nov/2019
Power Meter	Anritsu	ML2495A	1517010	300MHz ~ 40GHz	17/Nov/2018	16/Nov/2019
Cable 0.2m	HUBER	MY10710/4	RF Cable - 01	30MHz ~18G	10/Jan/2019	09/Jan/2020
Cable 0.2m	HUBER	MY10711/4	RF Cable - 02	30MHz ~18G	10/Jan/2019	09/Jan/2020
Cable 0.5m	HUBER	MY39470/4	RF Cable - 29	30MHz ~18G	10/Jan/2019	09/Jan/2020
CABLE 1.5m	HUBER	MY33066/4	RF Cable - 30	1 to 18GHz	10/Jan/2019	09/Jan/2020
SMB100A Signal Generator	R&S	SMB100A03	181147	100kHz~40GHz	12/Nov/2018	10/Nov/2020

Instrument for Radiated Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	Riken	SAC-3M	03CH01-HY	30MHz ~ 1GHz 3m	11/Jan/2019	10/Jan/2020
3m Semi Anechoic Chamber	Riken	SAC-3M	03CH01-HY	1GHz ~ 18GHz 3m	09/Jan/2019	08/Jan/2020
PreAmplifier	COM-POWER	PA-103	161050	1 MHz ~ 1.0GHz	24/Jul/2018	23/Jul/2019
Microwave Preamplifier	Agilent	8449B	3008A02602	1GHz ~ 26.5GHz	27/Mar/2019	26/Mar/2020
Spectrum Analyzer	R&S	FSV40	101407	10Hz ~ 40GHz	16/Aug/2018	15/Aug/2019
RF Cable-R03m	Jye Bao	RG142	CB019	9kHz ~ 1GHz	14/Dec/2018	13/Dec/2019
RF Cable-HIGH	SUHNER	SUCOFLEX 104	SN805196/4+MY 39495	1 GHz ~ 18 GHz	13/Mar/2019	12/Mar/2020
Bilog Antenna & 5db Attenuator	SCHAFFNER/MTJ	CBL6112D / MTJ6102-05	2678 / 001	30MHz ~ 2GHz	13/Mar/2019	12/Mar/2020
EMI Test Receiver	R&S	ESU-26	100422	20Hz ~ 26.5GHz	25/Oct/2018	24/Oct/2019
Loop Antenna	TESEQ	HLA 6120	31244	9k-30MHz	15/Mar/2019	14/Mar/2020
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170339	18GHz ~ 40GHz	19/Apr/2019	18/Apr/2020
Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D-1130	1GHz ~ 18GHz	26/Oct/2018	25/Oct/2019

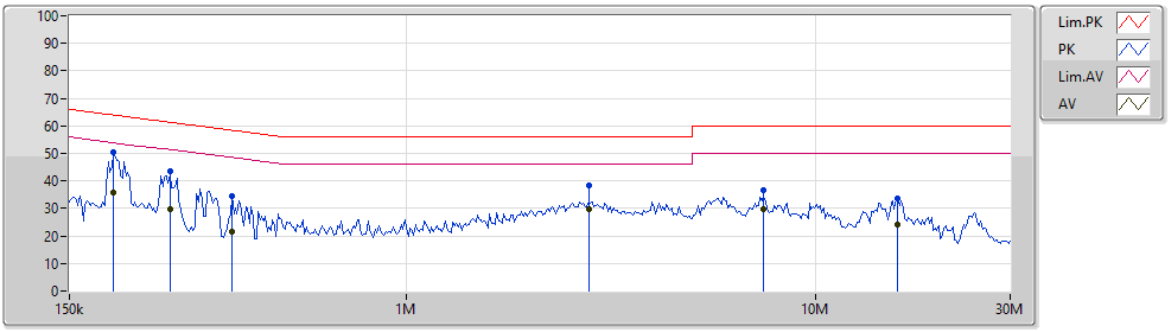
AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	Neutral
Operating Function	USB Mode		



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	188.574k	49.81	64.11	-14.30	19.47	Neutral	"Worst"	30.34	9.59	0.01	9.87
AV	188.574k	34.08	54.11	-20.03	19.47	Neutral	-	14.61	9.59	0.01	9.87
QP	254.17k	44.04	61.62	-17.58	19.47	Neutral	-	24.57	9.59	0.01	9.87
AV	254.17k	28.72	51.62	-22.90	19.47	Neutral	-	9.25	9.59	0.01	9.87
QP	374.678k	32.96	58.39	-25.43	19.48	Neutral	-	13.48	9.59	0.01	9.88
AV	374.678k	18.75	48.39	-29.64	19.48	Neutral	-	-0.73	9.59	0.01	9.88
QP	2.939M	36.81	56.00	-19.19	19.54	Neutral	-	17.27	9.61	0.04	9.89
AV	2.939M	28.27	46.00	-17.73	19.54	Neutral	-	8.73	9.61	0.04	9.89
QP	7.414M	34.60	60.00	-25.40	19.60	Neutral	-	15.00	9.65	0.06	9.89
AV	7.414M	27.51	50.00	-22.49	19.60	Neutral	-	7.91	9.65	0.06	9.89
QP	15.33M	39.72	60.00	-20.28	19.67	Neutral	-	20.05	9.68	0.09	9.90
AV	15.33M	32.31	50.00	-17.69	19.67	Neutral	-	12.64	9.68	0.09	9.90

AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	Line
Operating Function	USB Mode		

06/07/2019



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	192.365k	50.40	63.93	-13.53	19.48	Line	"Worst"	30.92	9.60	0.01	9.87
AV	192.365k	35.74	53.93	-18.19	19.48	Line	-	16.26	9.60	0.01	9.87
QP	264.49k	43.75	61.30	-17.55	19.48	Line	-	24.27	9.60	0.01	9.87
AV	264.49k	29.76	51.30	-21.54	19.48	Line	-	10.28	9.60	0.01	9.87
QP	374.678k	34.39	58.39	-24.00	19.48	Line	-	14.91	9.59	0.01	9.88
AV	374.678k	21.51	48.39	-26.88	19.48	Line	-	2.03	9.59	0.01	9.88
QP	2.796M	38.36	56.00	-17.64	19.55	Line	-	18.81	9.62	0.04	9.89
AV	2.796M	29.79	46.00	-16.21	19.55	Line	-	10.24	9.62	0.04	9.89
QP	7.488M	36.85	60.00	-23.15	19.61	Line	-	17.24	9.66	0.06	9.89
AV	7.488M	29.77	50.00	-20.23	19.61	Line	-	10.16	9.66	0.06	9.89
QP	15.952M	33.44	60.00	-26.56	19.63	Line	-	13.81	9.64	0.09	9.90
AV	15.952M	24.08	50.00	-25.92	19.63	Line	-	4.45	9.64	0.09	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)	920k	872.064k	872KF1D	918.75k	869.565k
BT-EDR(2Mbps)	1.331M	1.211M	1M21G1D	1.324M	1.207M
BT-EDR(3Mbps)	1.318M	1.213M	1M21G1D	1.314M	1.203M

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;

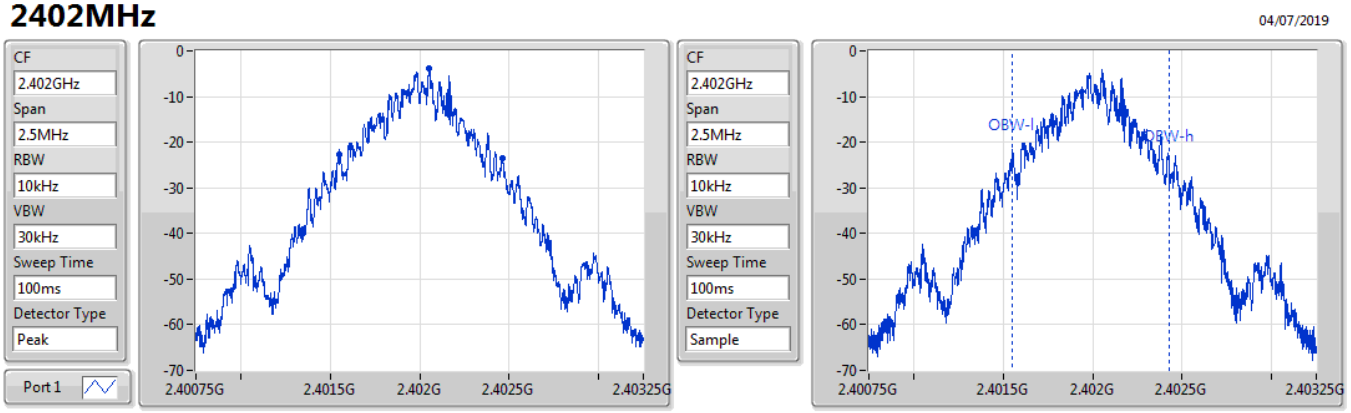
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	Inf	918.75k	872.064k
2441MHz	Pass	Inf	920k	870.815k
2480MHz	Pass	Inf	920k	869.565k
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	Inf	1.331M	1.207M
2441MHz	Pass	Inf	1.33M	1.209M
2480MHz	Pass	Inf	1.324M	1.211M
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	Inf	1.314M	1.203M
2441MHz	Pass	Inf	1.316M	1.213M
2480MHz	Pass	Inf	1.318M	1.211M

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

BT-BR(1Mbps) EBW

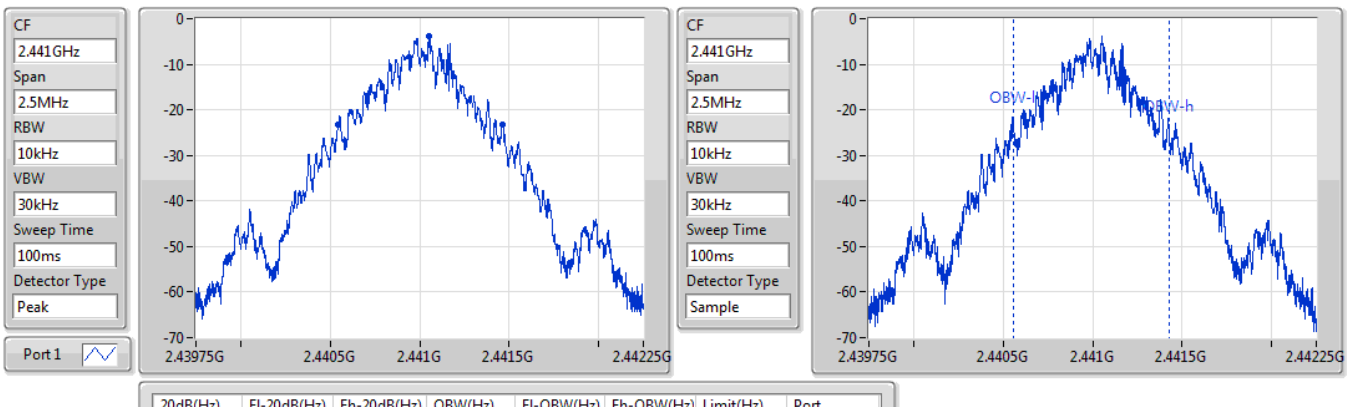
2402MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
918.75k	2.401548G	2.402466G	872.064k	2.401554G	2.402426G	Inf	1

BT-BR(1Mbps) EBW

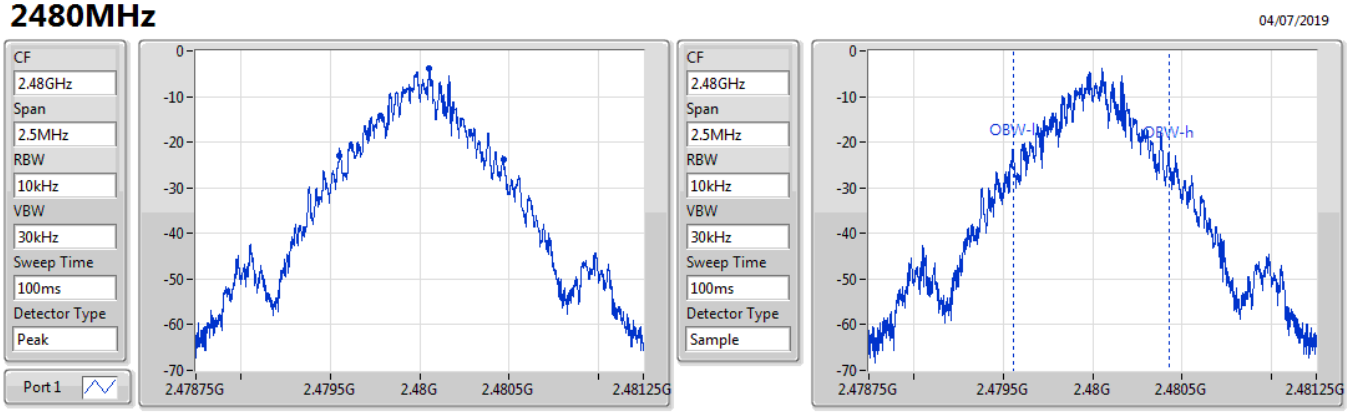
2441MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
920k	2.440546G	2.441466G	870.815k	2.440556G	2.441427G	Inf	1

BT-BR(1Mbps) EBW

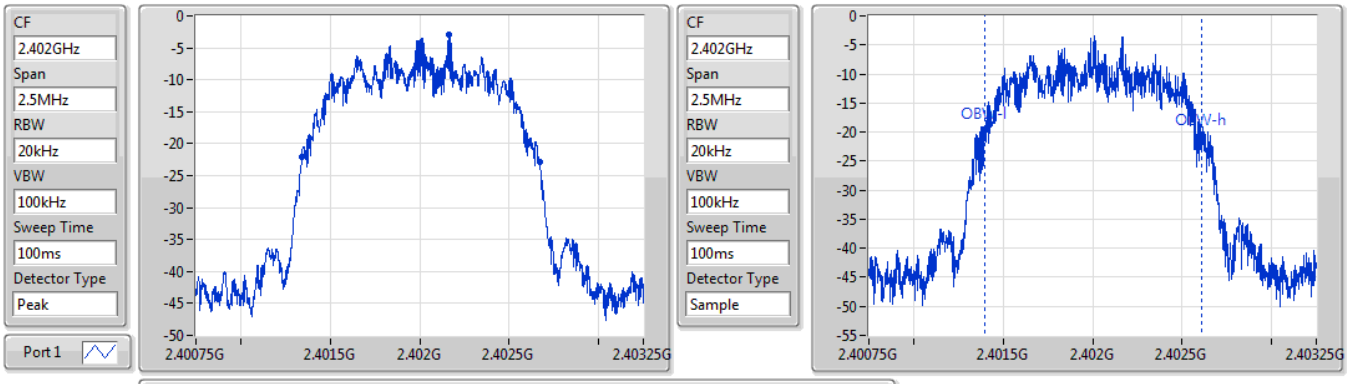
2480MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
920k	2.479549G	2.480469G	869.565k	2.479558G	2.480427G	Inf	1

BT-EDR(2Mbps) EBW

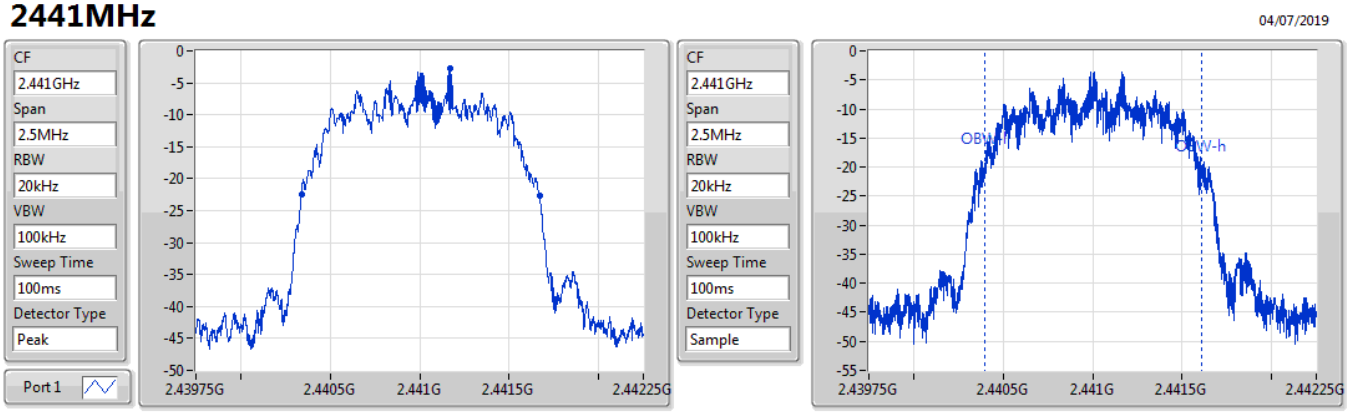
2402MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.331M	2.40134G	2.402671G	1.207M	2.4014G	2.402607G	Inf	1

BT-EDR(2Mbps) EBW

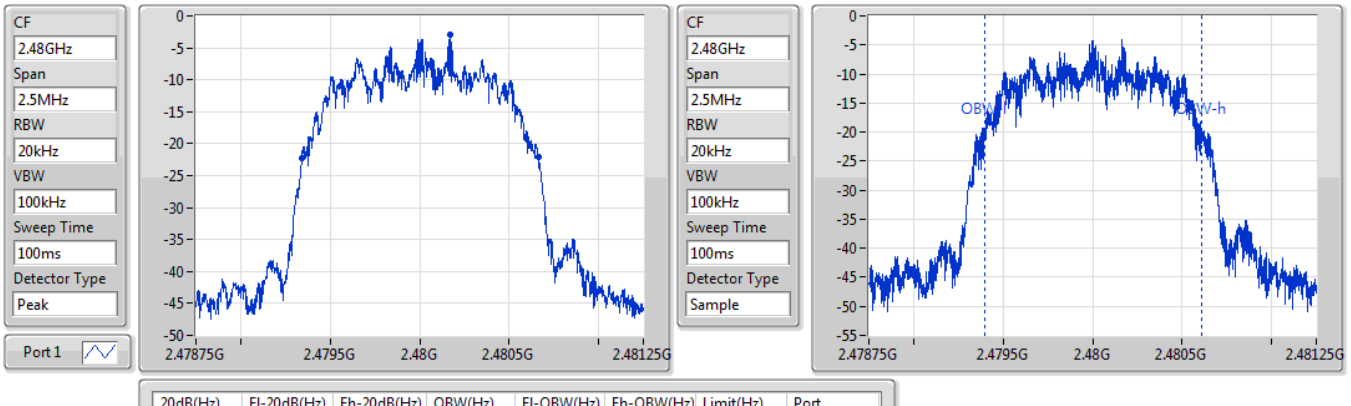
2441MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.33M	2.440339G	2.441669G	1.209M	2.4404G	2.44161G	Inf	1

BT-EDR(2Mbps) EBW

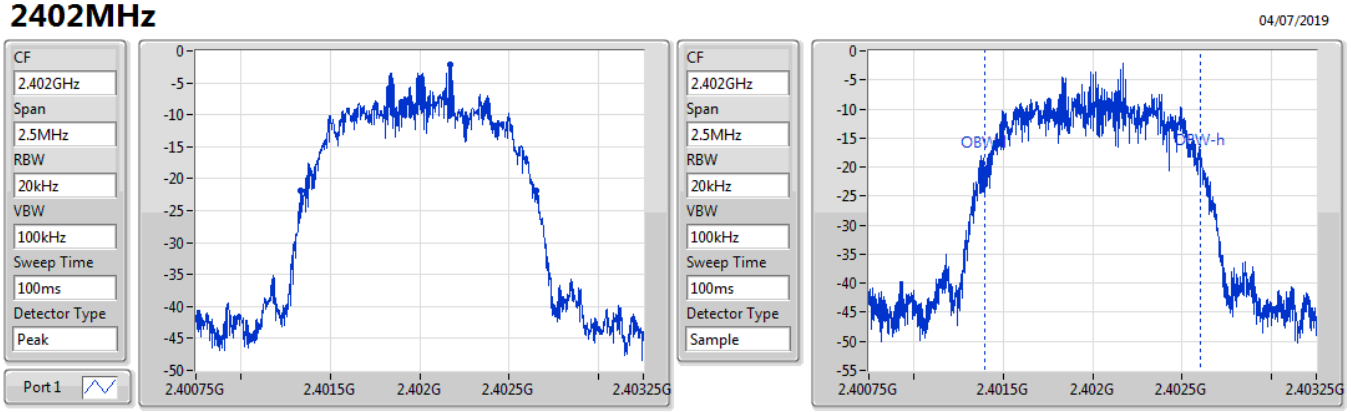
2480MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.324M	2.47934G	2.480664G	1.211M	2.4794G	2.480611G	Inf	1

BT-EDR(3Mbps) EBW

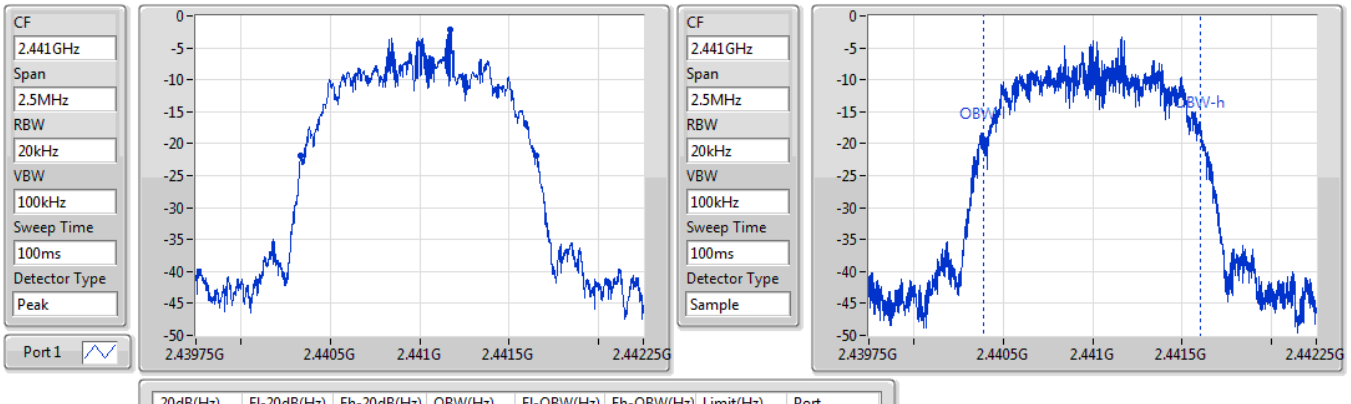
2402MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.314M	2.401336G	2.40265G	1.203M	2.4014G	2.402603G	Inf	1

BT-EDR(3Mbps) EBW

2441MHz

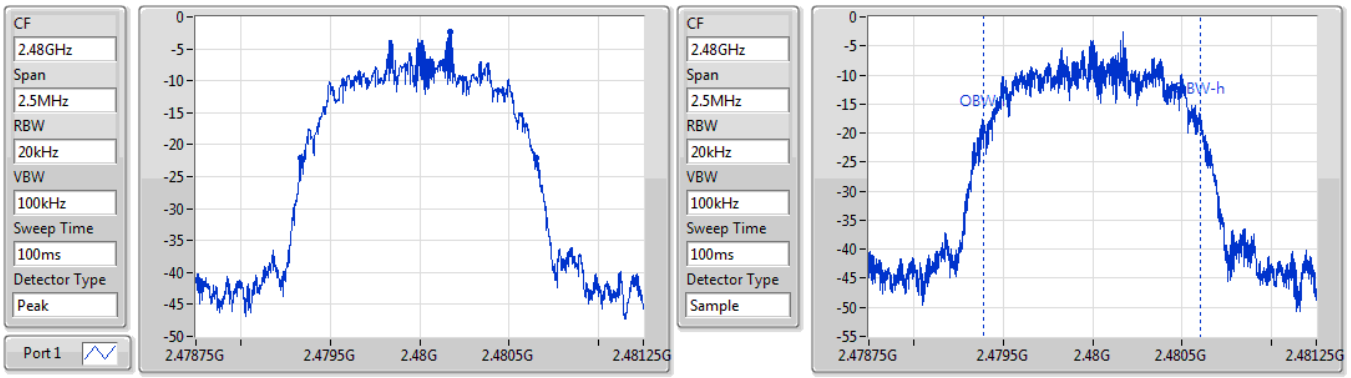


20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.316M	2.440335G	2.441651G	1.213M	2.44039G	2.441603G	Inf	1

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

2480MHz

04/07/2019



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.318M	2.479334G	2.480651G	1.211M	2.47939G	2.480601G	Inf	1

Summary

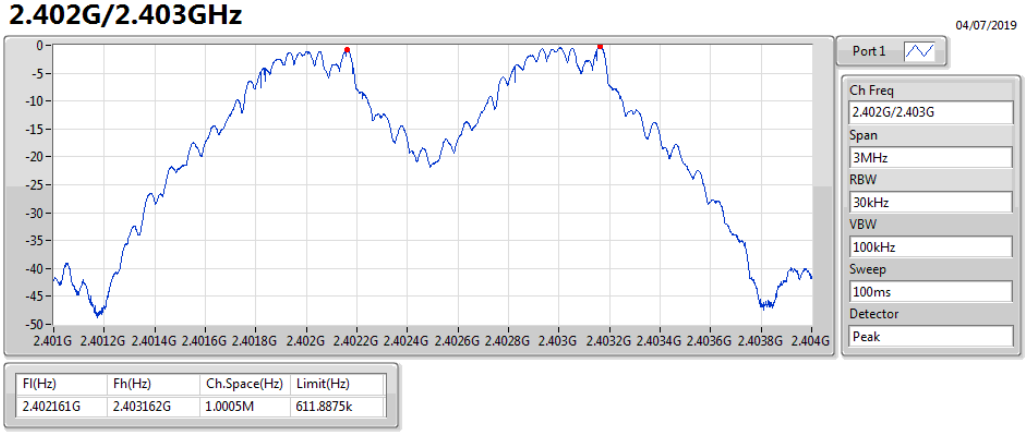
Mode	Max-Space (Hz)	Min-Space (Hz)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	1.002M	1.0005M
BT-EDR(2Mbps)	1.008M	991.5k
BT-EDR(3Mbps)	1.0055M	1.004M

Result

Mode	Result	Fl (Hz)	Fh (Hz)	Ch.Space (Hz)	Limit (Hz)
BT-BR(1Mbps)	-	-	-	-	-
2402MHz	Pass	2.402161G	2.403162G	1.0005M	611.8875k
2441MHz	Pass	2.441161G	2.442162G	1.0005M	612.72k
2480MHz	Pass	2.479163G	2.480165G	1.002M	612.72k
BT-EDR(2Mbps)	-	-	-	-	-
2402MHz	Pass	2.402008G	2.403001G	993k	886.446k
2441MHz	Pass	2.44101G	2.442001G	991.5k	885.78k
2480MHz	Pass	2.479002G	2.48001G	1.008M	881.784k
BT-EDR(3Mbps)	-	-	-	-	-
2402MHz	Pass	2.402002G	2.403168G	1.0055M	875.124k
2441MHz	Pass	2.441002G	2.442166G	1.004M	876.456k
2480MHz	Pass	2.479002G	2.480168G	1.0055M	877.788k

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

2.402G/2.403GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.402161G	2.403162G	1.0005M	611.8875k

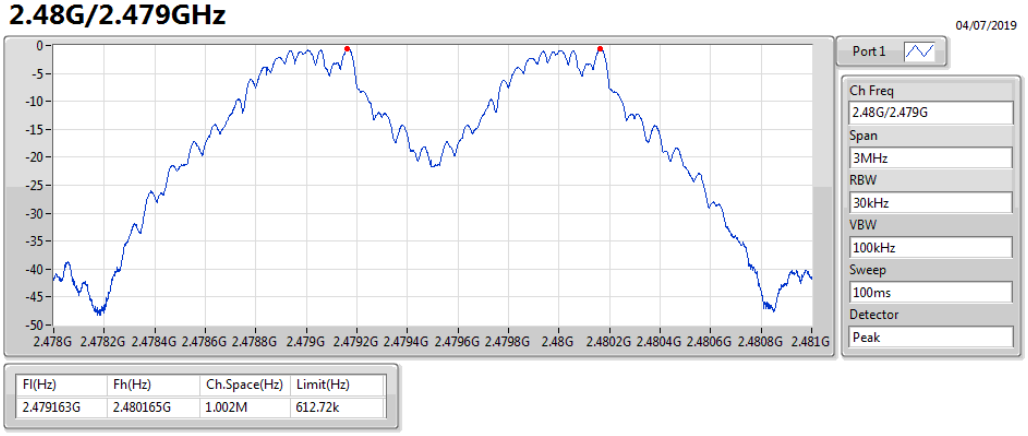
BT-BR(1Mbps) **Channel Separation**

2.441G/2.442GHz

Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.441161G	2.442162G	1.0005M	612.72k

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

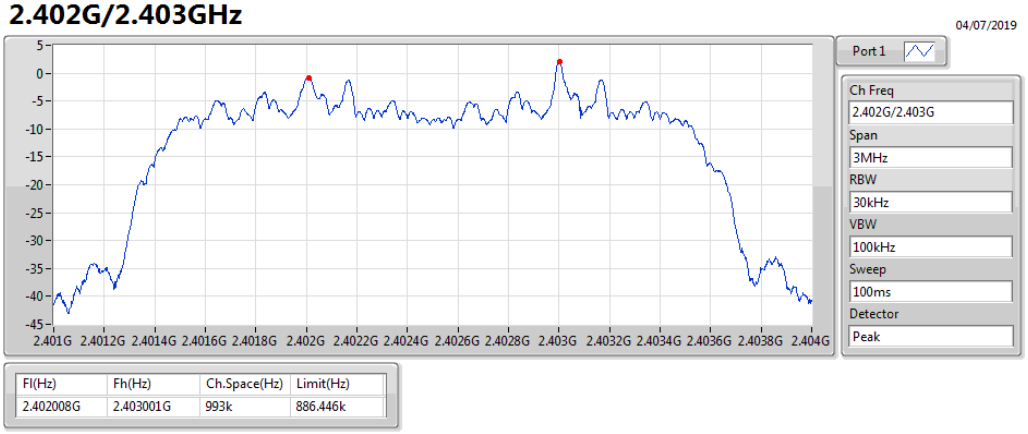
2.48G/2.479GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.479163G	2.480165G	1.002M	612.72k

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

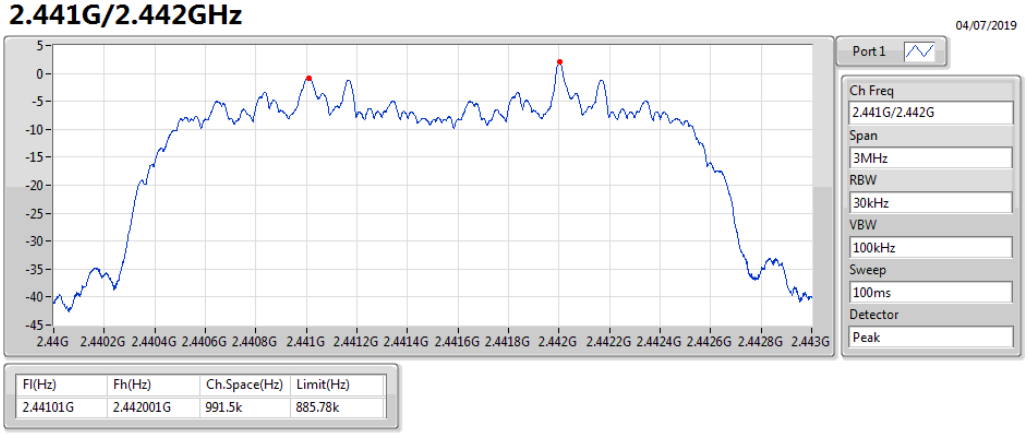
2.402G/2.403GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.402008G	2.403001G	993k	886.446k

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

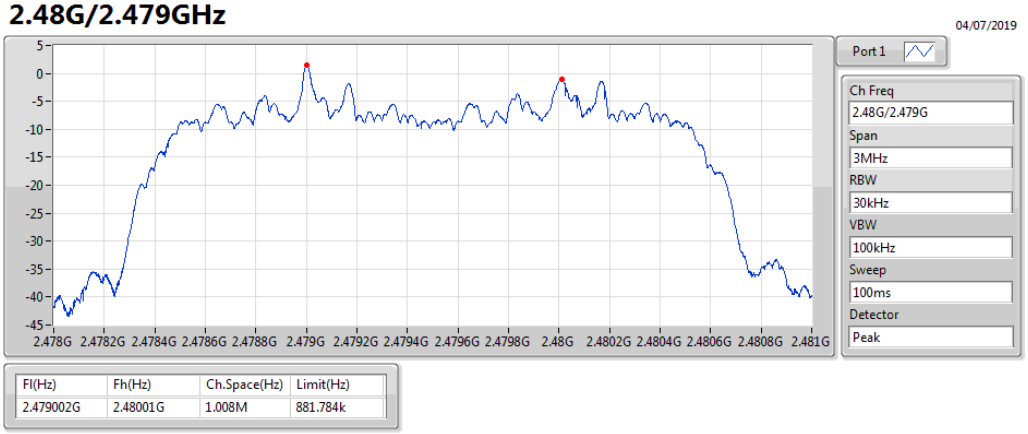
2.441G/2.442GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.44101G	2.442001G	991.5k	885.78k

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

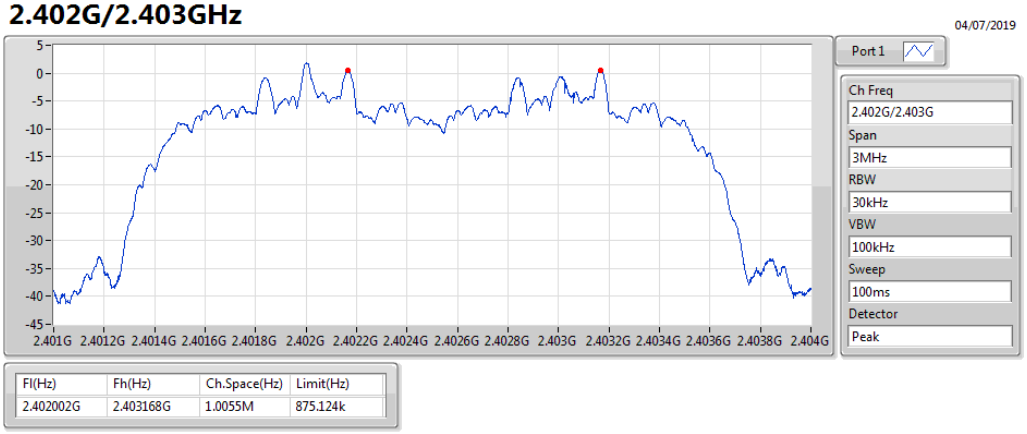
2.48G/2.479GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.479002G	2.48001G	1.008M	881.784k

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

2.402G/2.403GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.402002G	2.403168G	1.0055M	875.124k

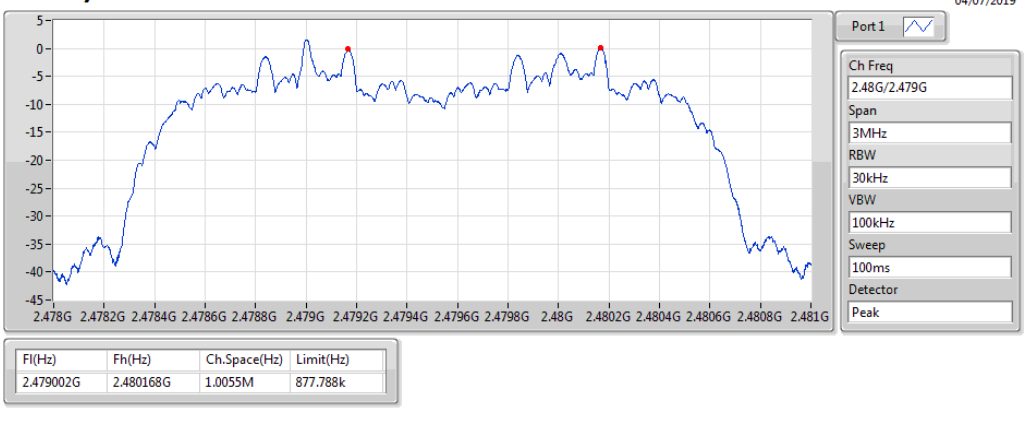
BT-EDR(3Mbps) **Channel Separation**

2.441G/2.442GHz

Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.441002G	2.442166G	1.004M	876.456k

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

2.48G/2.479GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.479002G	2.480168G	1.0055M	877.788k

Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	2.65	0.00184
BT-EDR(2Mbps)	4.76	0.00299
BT-EDR(3Mbps)	5.16	0.00328

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	1.94	2.49	21.00
2441MHz	Pass	1.94	2.65	21.00
2480MHz	Pass	1.94	2.57	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	1.94	4.73	21.00
2441MHz	Pass	1.94	4.76	21.00
2480MHz	Pass	1.94	4.36	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	1.94	5.01	21.00
2441MHz	Pass	1.94	5.16	21.00
2480MHz	Pass	1.94	4.72	21.00

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

Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	1.89	0.00155
BT-EDR(2Mbps)	1.95	0.00157
BT-EDR(3Mbps)	1.87	0.00154

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	1.94	1.66	21.00
2441MHz	Pass	1.94	1.89	21.00
2480MHz	Pass	1.94	1.76	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	1.94	1.95	21.00
2441MHz	Pass	1.94	1.84	21.00
2480MHz	Pass	1.94	1.58	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	1.94	1.87	21.00
2441MHz	Pass	1.94	1.87	21.00
2480MHz	Pass	1.94	1.74	21.00

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

Summary

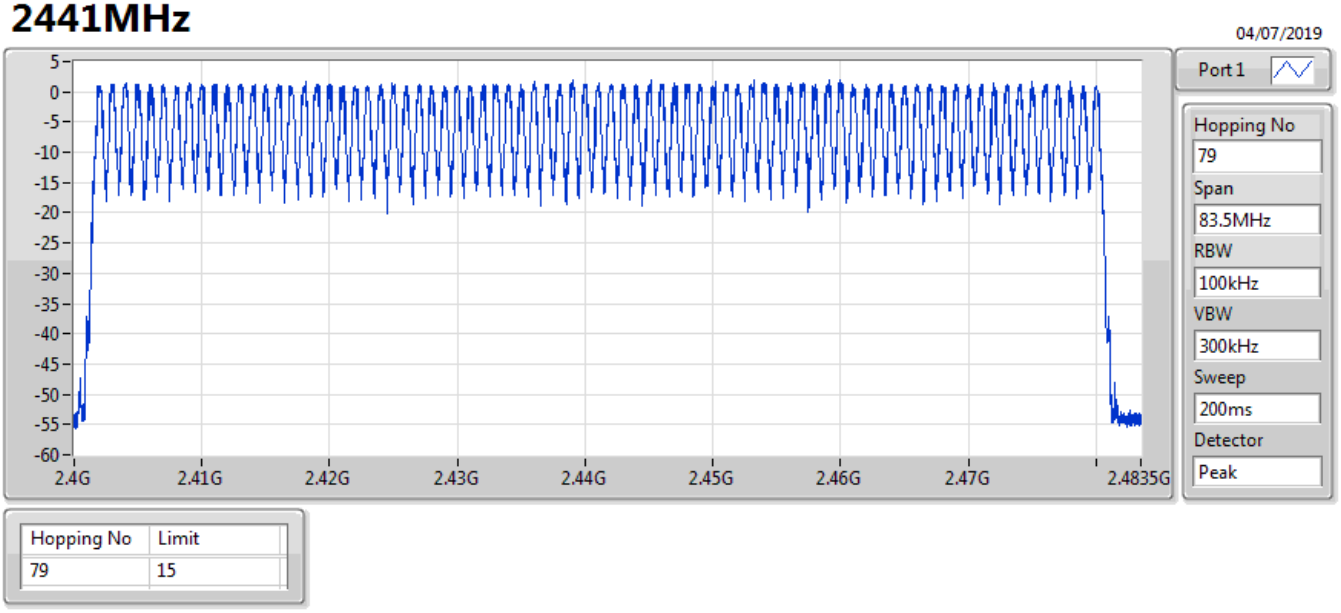
Mode	Max-Hop No
2.4-2.4835GHz	-
BT-BR(1Mbps)	79
BT-EDR(2Mbps)	79
BT-EDR(3Mbps)	79

Result

Mode	Result	Hopping No	Limit
BT-BR(1Mbps)	-	-	-
2441MHz	Pass	79	15
BT-EDR(2Mbps)	-	-	-
2441MHz	Pass	79	15
BT-EDR(3Mbps)	-	-	-
2441MHz	Pass	79	15

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

2441MHz

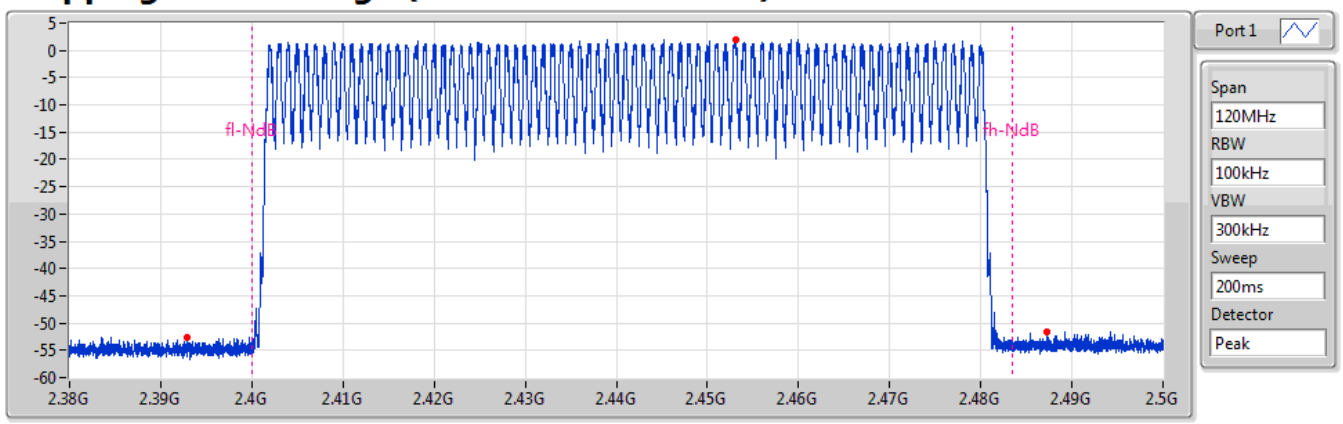


Hopping No	Limit
79	15

BT-BR(1Mbps)

2441MHz

Hopping Ch Bandedge (Non-restricted Band)

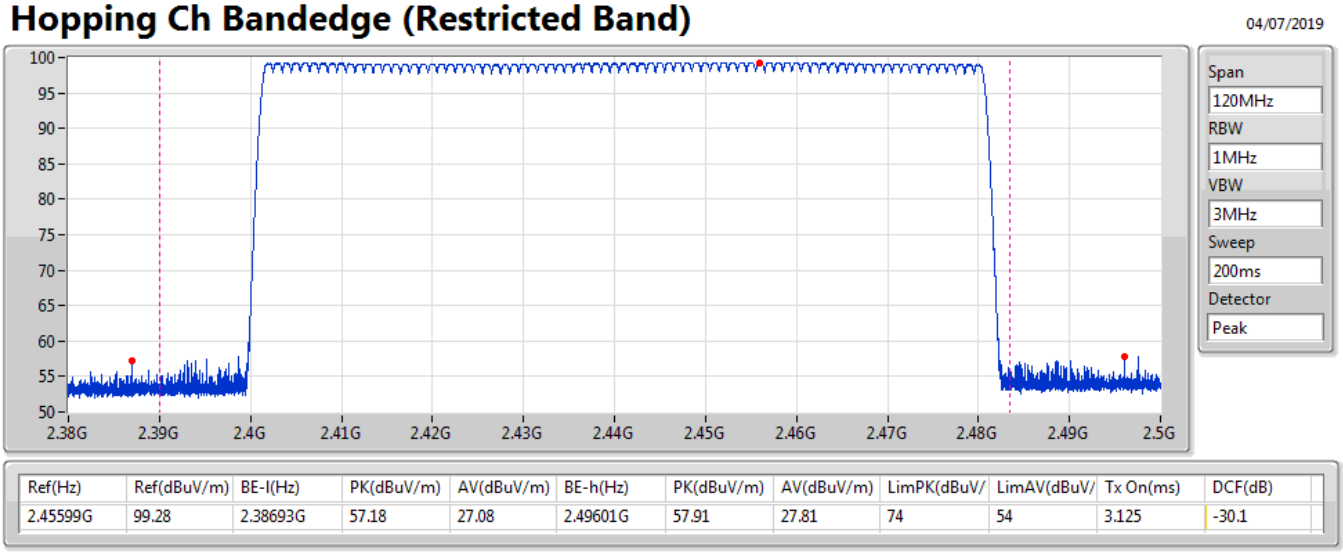


Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-18.04	2.45317G	1.96	2.39284G	-52.52	2.487235G	-51.55

BT-BR(1Mbps)

2441MHz

Hopping Ch Bandedge (Restricted Band)

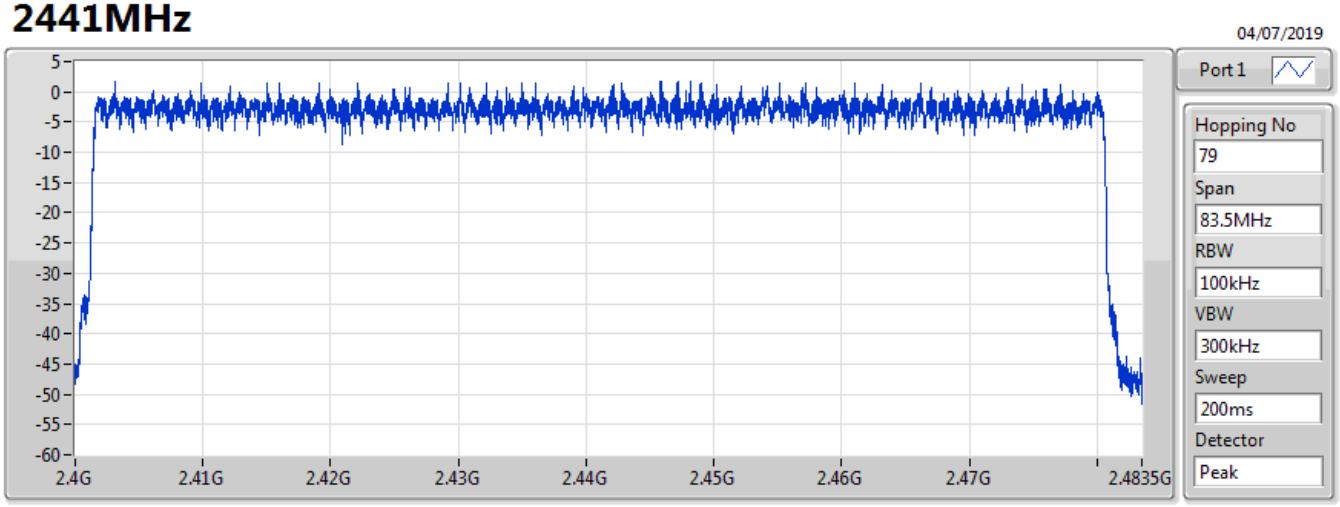


Ref(Hz)	Ref(dBuV/m)	BE-l(Hz)	PK(dBuV/m)	AV(dBuV/m)	BE-h(Hz)	PK(dBuV/m)	AV(dBuV/m)	LimPK(dBuV/	LimAV(dBuV/	Tx On(ms)	DCF(dB)
2.45599G	99.28	2.38693G	57.18	27.08	2.49601G	57.91	27.81	74	54	3.125	-30.1

BT-EDR(2Mbps)

2441MHz

Hopping Ch

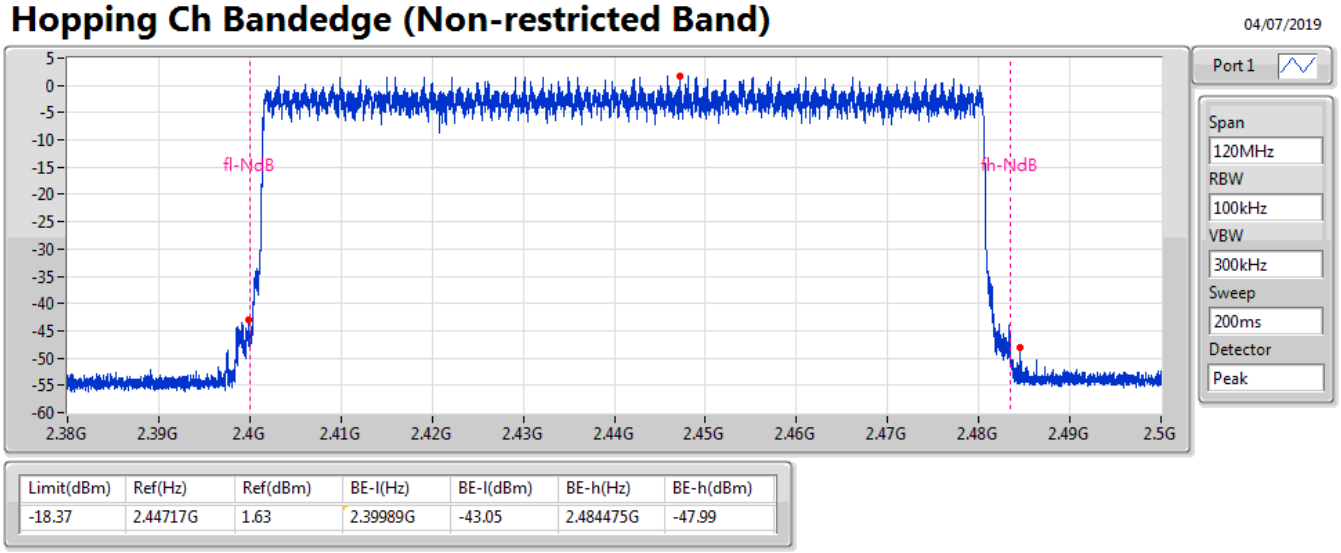


Hopping No	Limit
79	15

BT-EDR(2Mbps)

2441MHz

Hopping Ch Bandedge (Non-restricted Band)

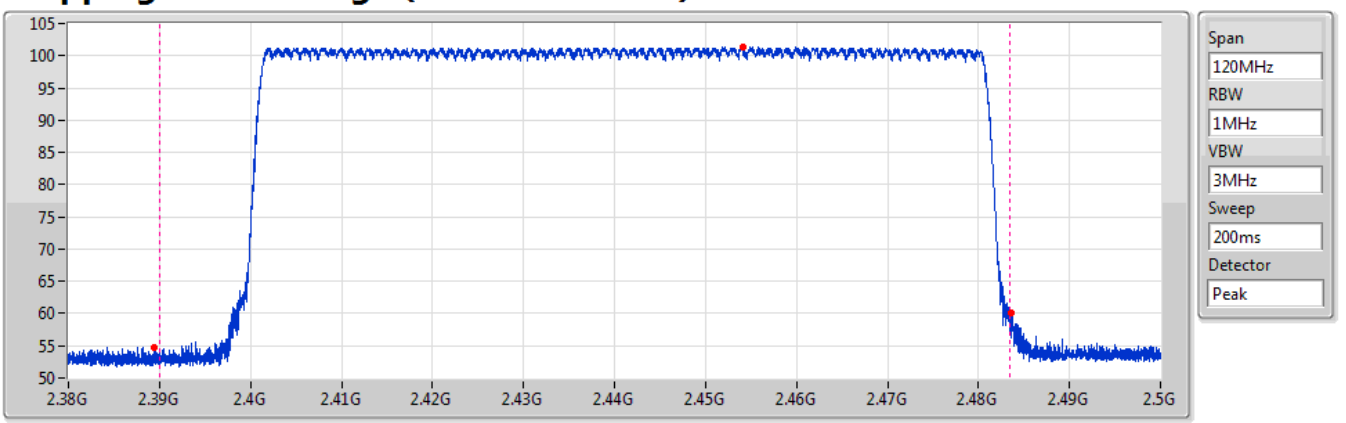


Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-18.37	2.44717G	1.63	2.39989G	-43.05	2.484475G	-47.99

BT-EDR(2Mbps)

2441MHz

Hopping Ch Bandedge (Restricted Band)

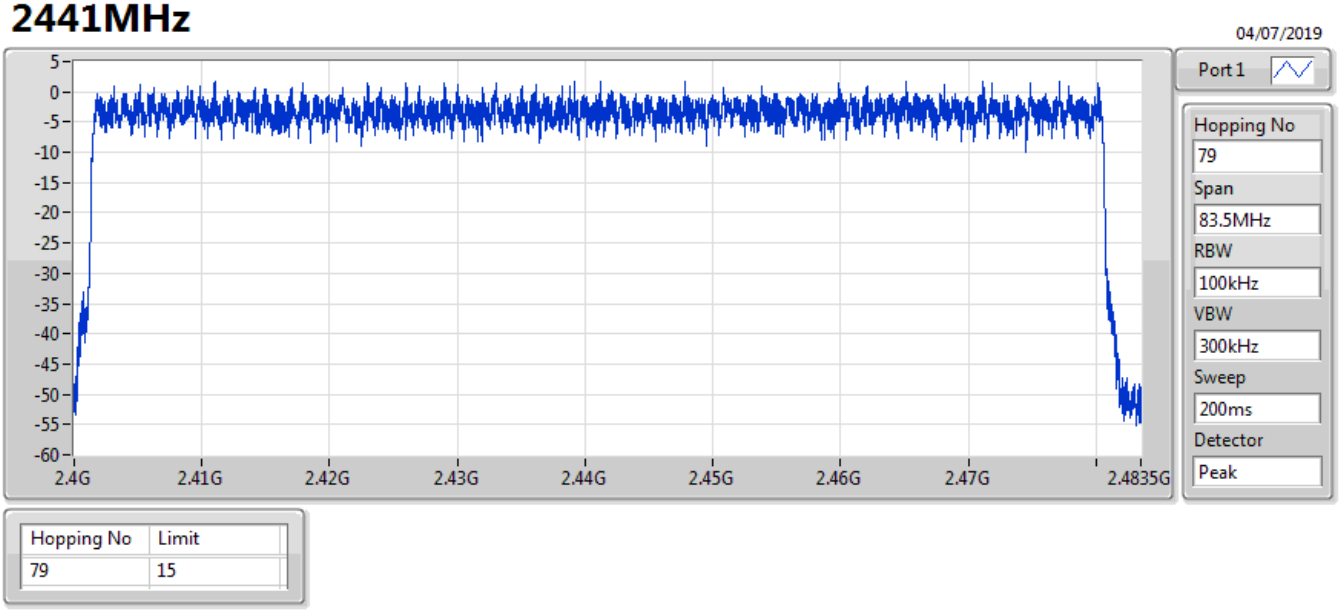


Ref(Hz)	Ref(dBuV/m)	BE-l(Hz)	PK(dBuV/m)	AV(dBuV/m)	BE-h(Hz)	PK(dBuV/m)	AV(dBuV/m)	LimPK(dBuV/	LimAV(dBuV/	Tx On(ms)	DCF(dB)
2.4541G	101.28	2.38939G	54.77	24.67	2.483635G	60.05	29.95	74	54	3.125	-30.1

BT-EDR(3Mbps)

2441MHz

Hopping Ch

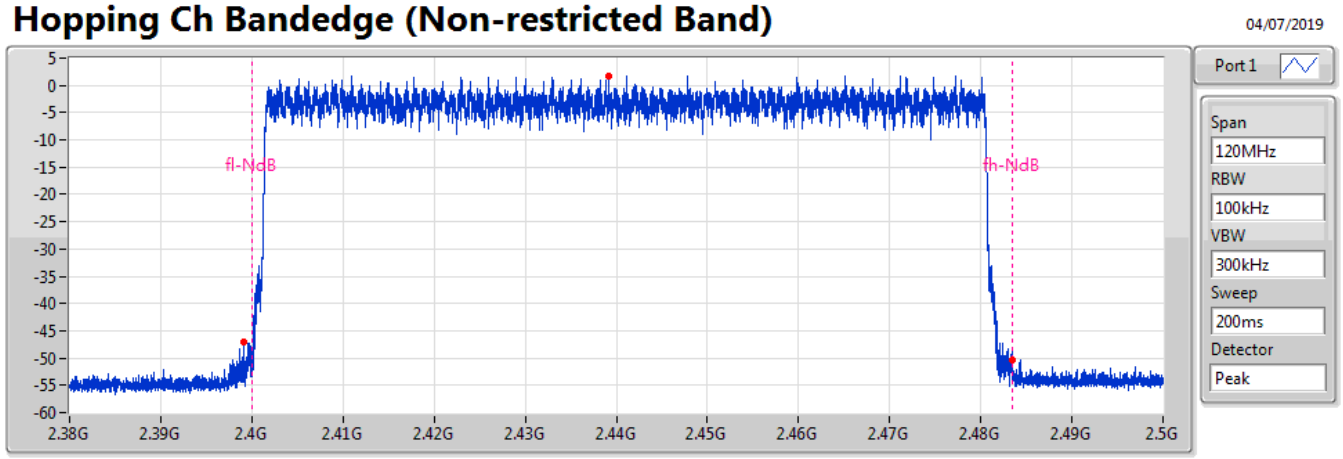


Hopping No	Limit
79	15

BT-EDR(3Mbps)

2441MHz

Hopping Ch Bandedge (Non-restricted Band)

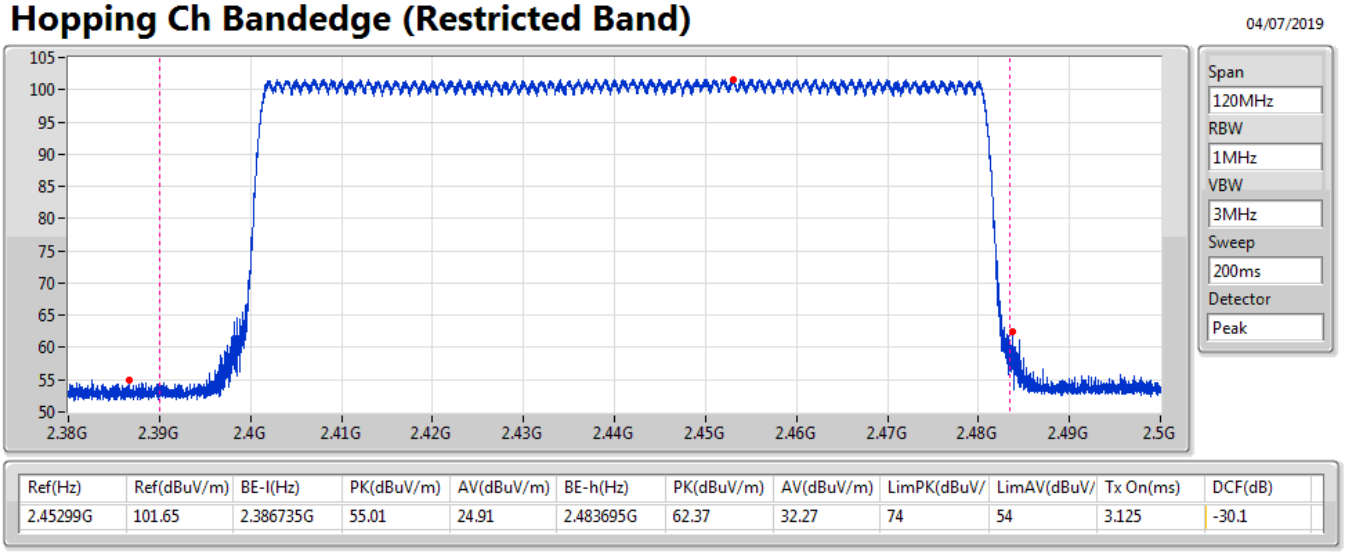


Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-18.25	2.43916G	1.75	2.399065G	-47.15	2.48353G	-50.38

BT-EDR(3Mbps)

2441MHz

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)
2.45299G	101.65	2.386735G	55.01	24.91	2.483695G	62.37	32.27	74	54	3.125	-30.1

Summary

Mode	Max-Dwell (s)
2.4-2.4835GHz	-
BT-BR(1Mbps)	308.3938m
BT-EDR(2Mbps)	309.2466m
BT-EDR(3Mbps)	54.366m

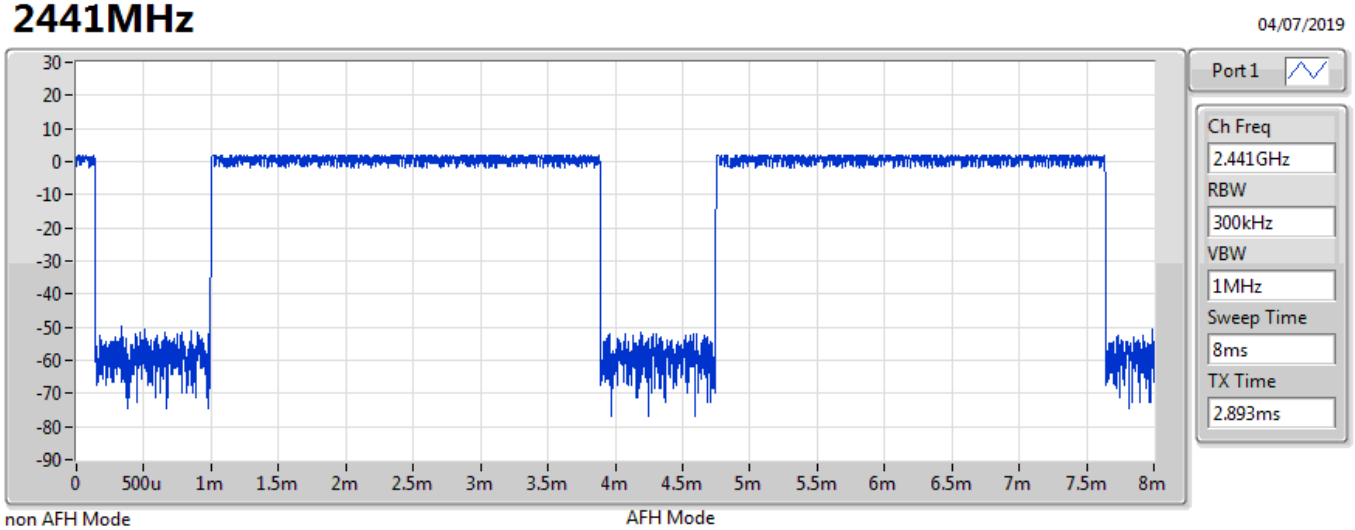
Result

Mode	Result	Period (s)	Dwell (s)	Limit (s)	Tx On (s)
BT-BR(1Mbps)	-	-	-	-	-
2441MHz	Pass	31.6	308.3938m	400m	2.893m
BT-EDR(2Mbps)	-	-	-	-	-
2441MHz	Pass	31.6	309.2466m	400m	2.901m
BT-EDR(3Mbps)	-	-	-	-	-
2441MHz	Pass	31.6	54.366m	400m	510u

BT-BR(1Mbps)

Dwell

2441MHz



non AFH Mode

Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	308.3938m	400m	2.893m

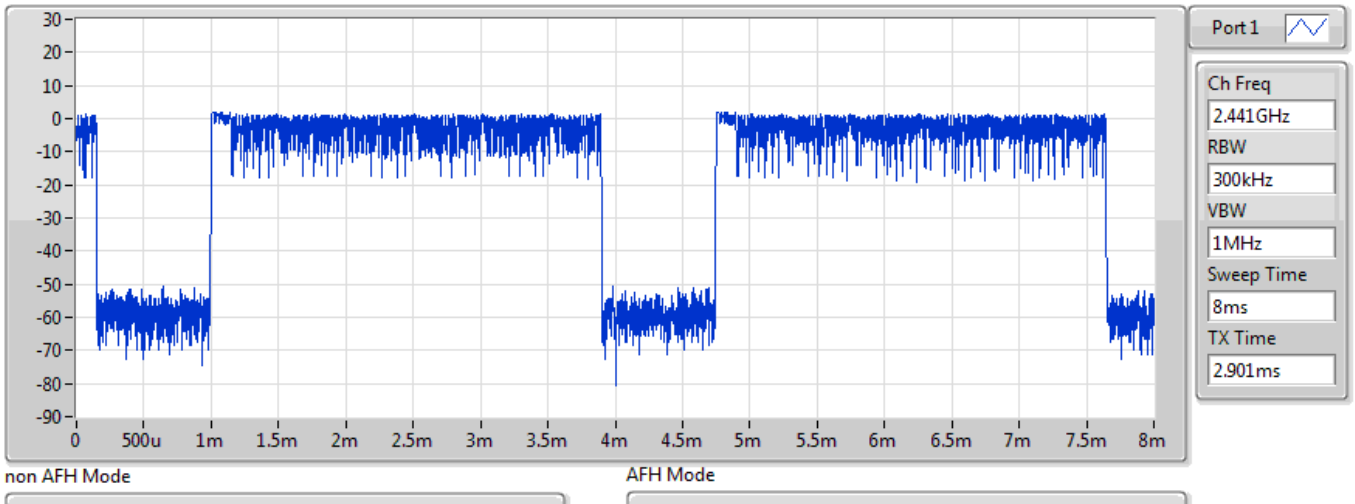
AFH Mode

Period(s)	Dwell(s)	Limit(s)	Tx On(s)
0	154.1969m	400m	2.893m

BT-EDR(2Mbps)

Dwell

2441MHz



non AFH Mode

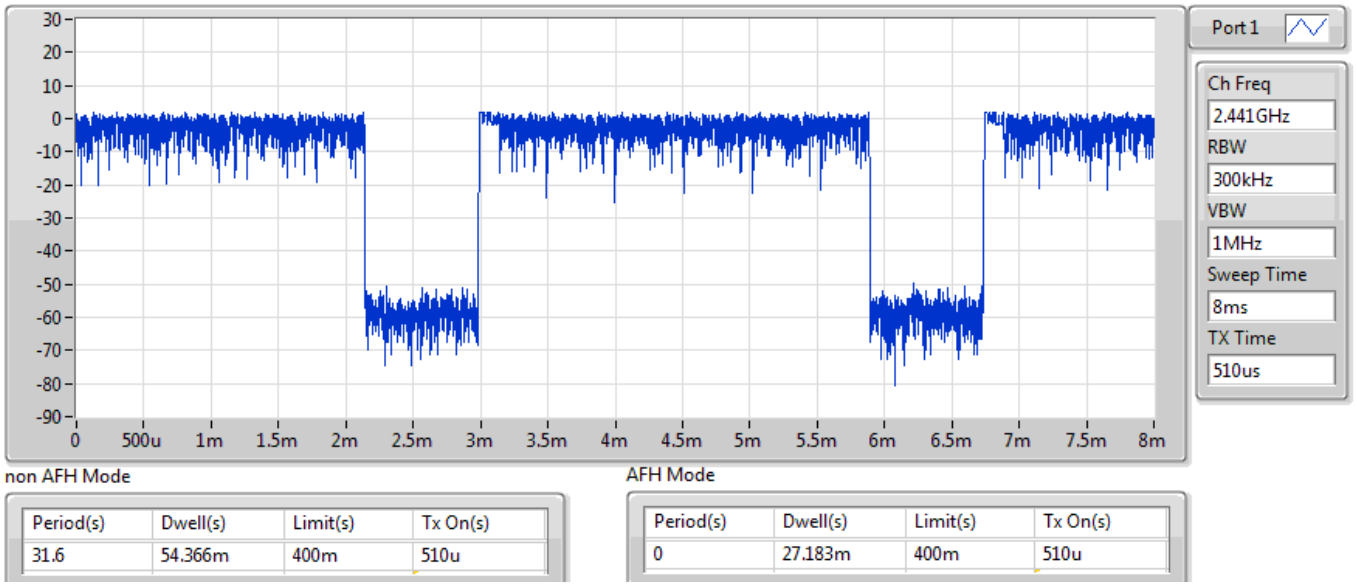
Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	309.2466m	400m	2.901m

AFH Mode

Period(s)	Dwell(s)	Limit(s)	Tx On(s)
0	154.6233m	400m	2.901m

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

2441MHz



non AFH Mode

Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	54.366m	400m	510u

AFH Mode

Period(s)	Dwell(s)	Limit(s)	Tx On(s)
0	27.183m	400m	510u

Summary

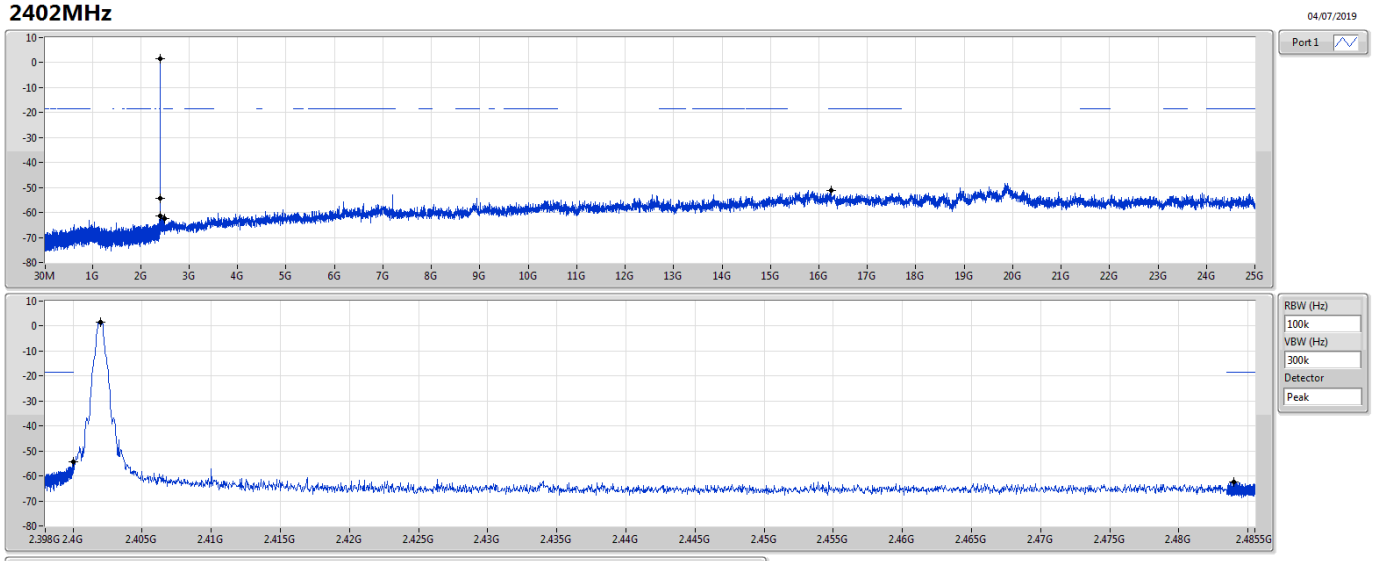
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-
BT-BR(1Mbps)	Pass	2.402G	1.67	-18.33	2.39741G	-61.42	2.4G	-54.47	2.484G	-62.29	16.25593G	-51.23	1
BT-EDR(2Mbps)	Pass	2.402G	1.83	-18.17	2.3977G	-51.95	2.39964G	-44.21	2.48463G	-62.17	17.64339G	-51.19	1
BT-EDR(3Mbps)	Pass	2.40184G	1.42	-18.58	2.398G	-58.03	2.39978G	-39.23	2.48496G	-62.12	17.55896G	-50.15	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)	Port
BT-BR(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.402G	1.67	-18.33	2.39741G	-61.42	2.4G	-54.47	2.484G	-62.29	16.25593G	-51.23	1
2441MHz	Pass	2.441G	1.35	-18.65	2.15617G	-63.96	2.39897G	-62.68	2.48489G	-62.07	16.85257G	-51.70	1
2480MHz	Pass	2.47987G	1.27	-18.73	2.19998G	-64.62	2.39927G	-62.94	2.48365G	-58.62	24.606G	-51.94	1
BT-EDR(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.402G	1.83	-18.17	2.3977G	-51.95	2.39964G	-44.21	2.48463G	-62.17	17.64339G	-51.19	1
2441MHz	Pass	2.44117G	1.54	-18.46	2.13071G	-63.70	2.39905G	-62.28	2.48525G	-61.57	17.53926G	-51.26	1
2480MHz	Pass	2.4802G	1.18	-18.82	2.30032G	-64.20	2.39916G	-62.83	2.48354G	-51.96	16.76532G	-51.71	1
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.40184G	1.42	-18.58	2.398G	-58.03	2.39978G	-39.23	2.48496G	-62.12	17.55896G	-50.15	1
2441MHz	Pass	2.44087G	1.56	-18.44	2.39474G	-64.63	2.39876G	-61.69	2.48479G	-62.10	16.95951G	-50.61	1
2480MHz	Pass	2.47999G	1.62	-18.38	1.94364G	-64.55	2.39961G	-63.18	2.48351G	-51.04	17.55614G	-51.10	1

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

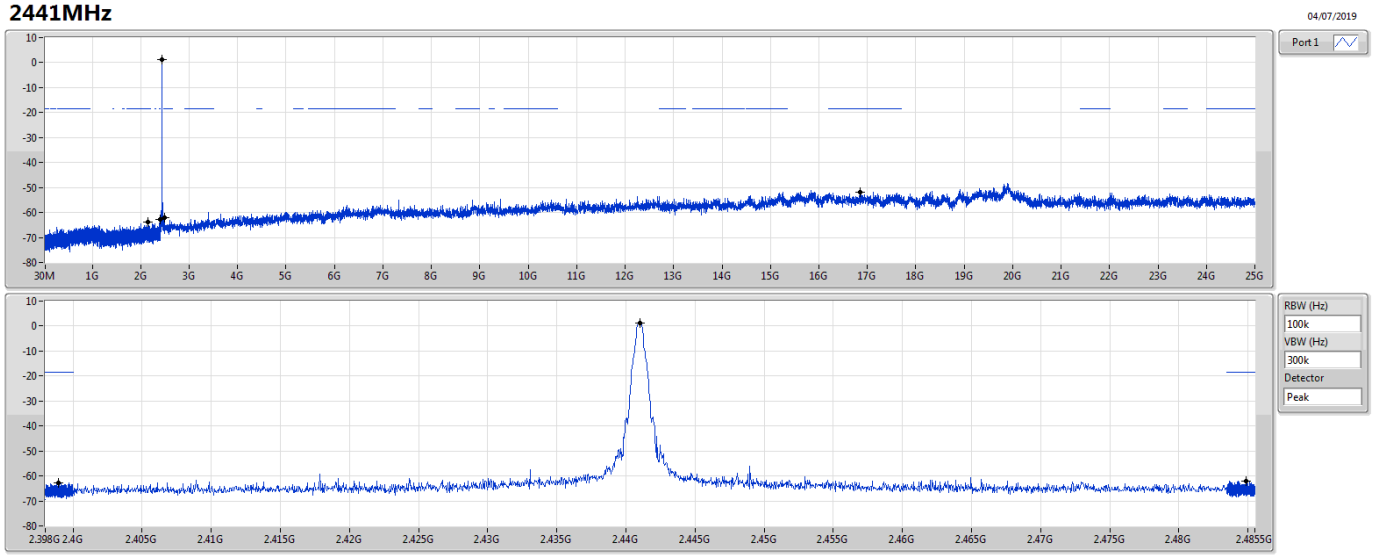
2402MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.402G	1.67	-18.33	2.39741G	-61.42	2.4G	-54.47	2.484G	-62.29	16.25593G	-51.23	1

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

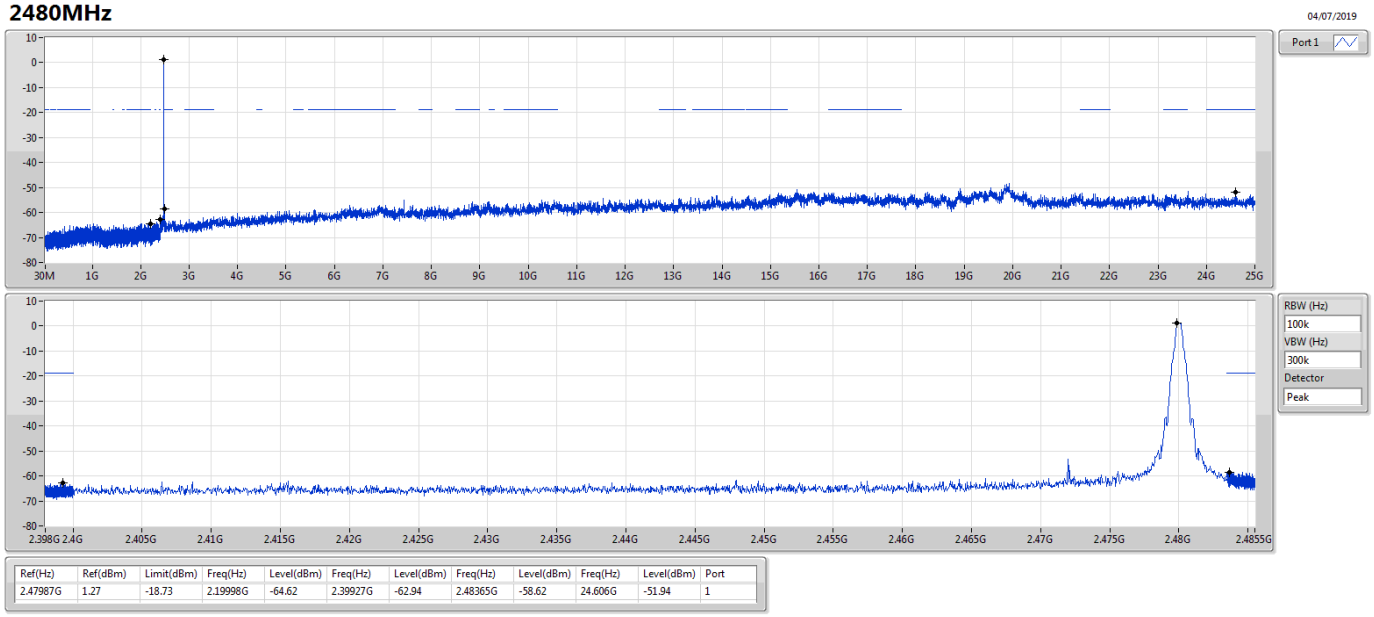
2441MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.441G	1.35	-18.65	2.15617G	-63.96	2.39897G	-62.68	2.48489G	-62.07	16.85257G	-51.70	1

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

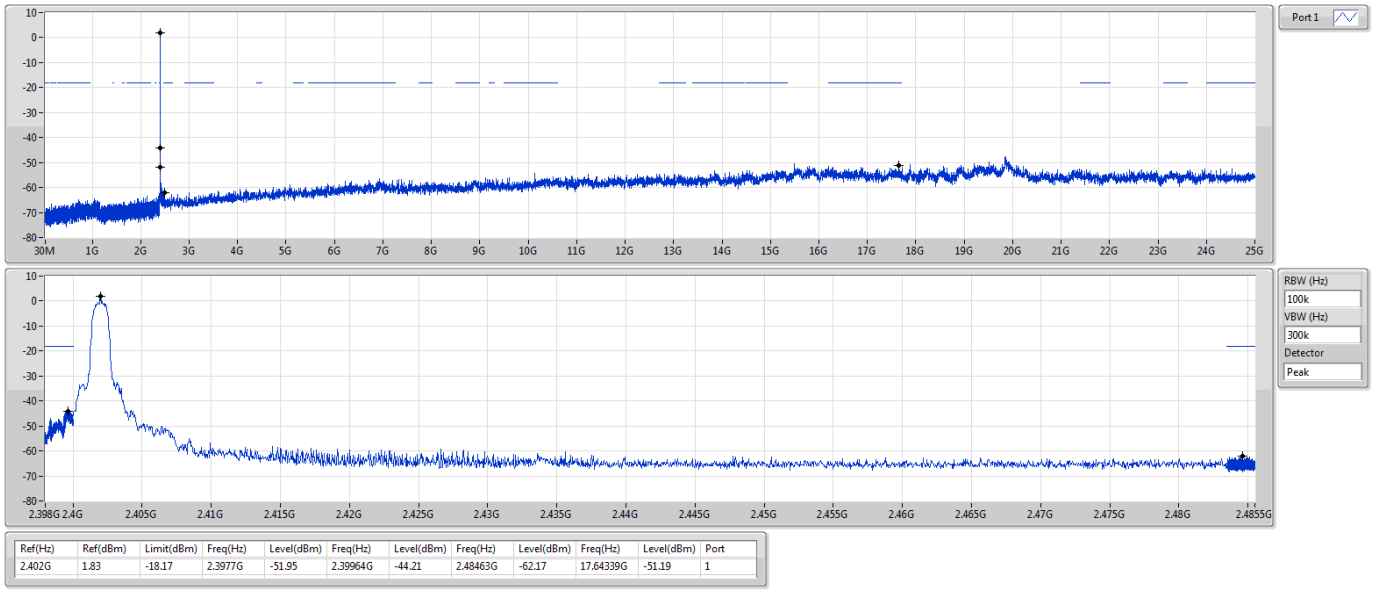
2480MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.47987G	1.27	-18.73	2.19998G	-64.62	2.39927G	-62.94	2.48365G	-58.62	24.606G	-51.94	1

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

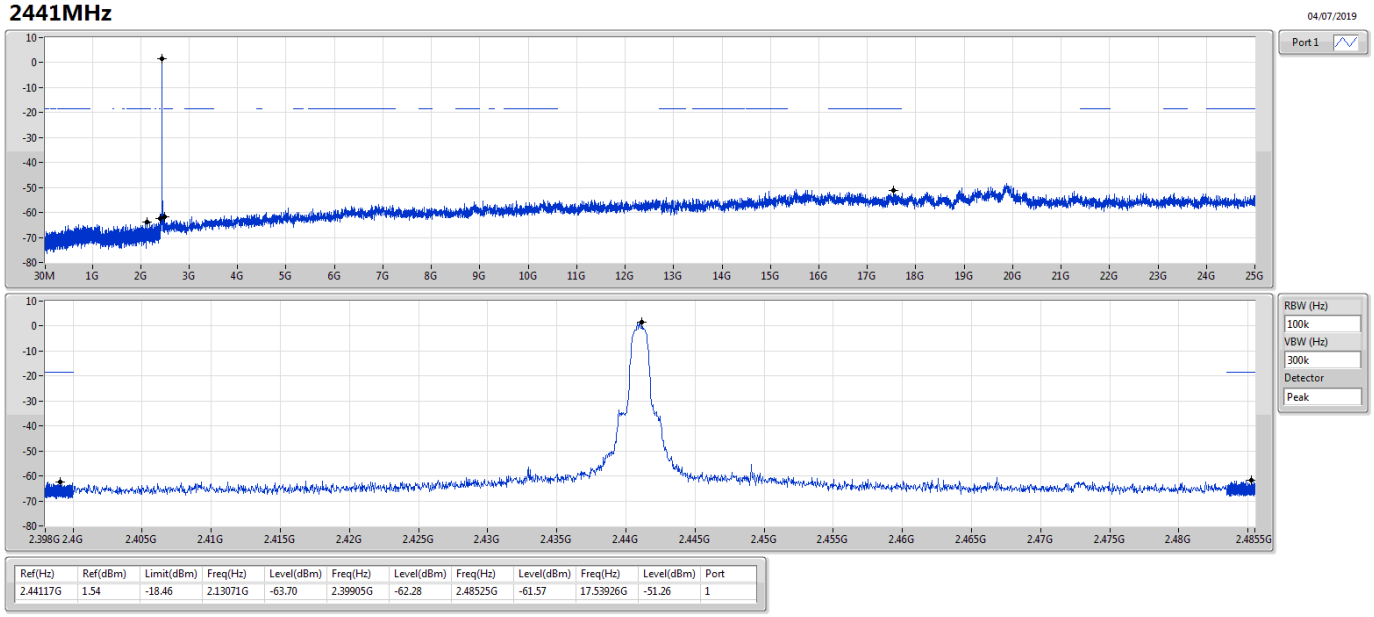
2402MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.402G	1.83	-18.17	2.3977G	-51.95	2.39964G	-44.21	2.48463G	-62.17	17.64339G	-51.19	1

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

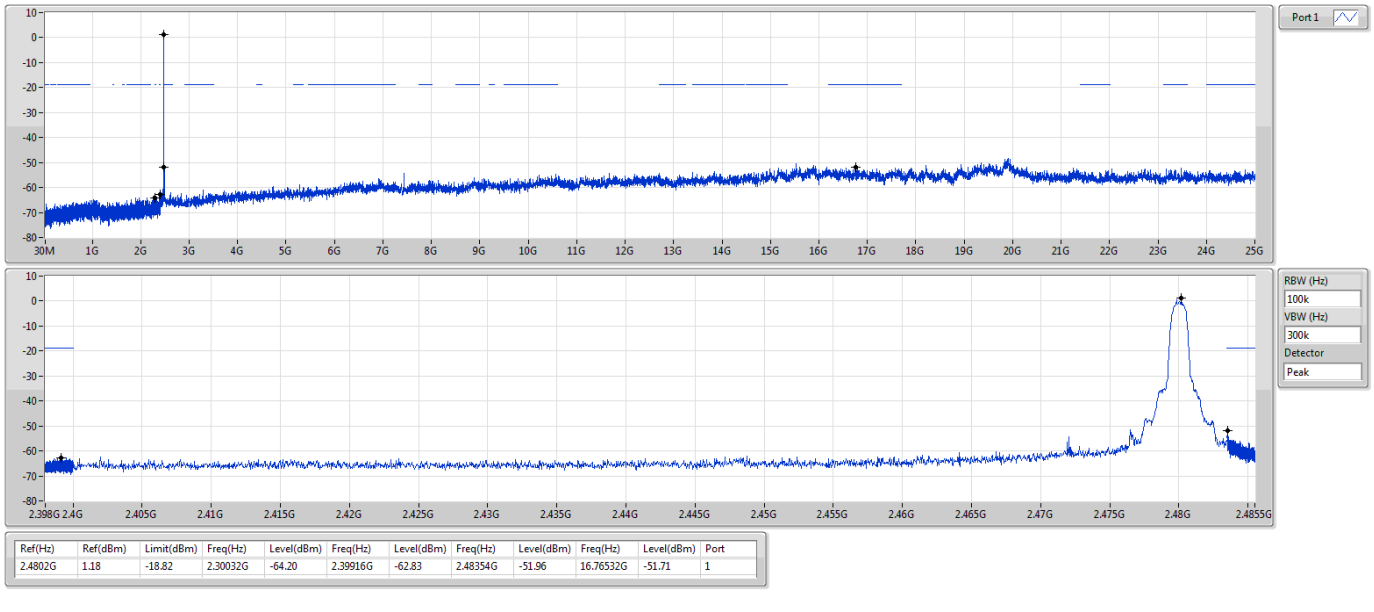
2441MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.44117G	1.54	-18.46	2.13071G	-63.70	2.39905G	-62.28	2.48525G	-61.57	17.53926G	-51.26	1

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

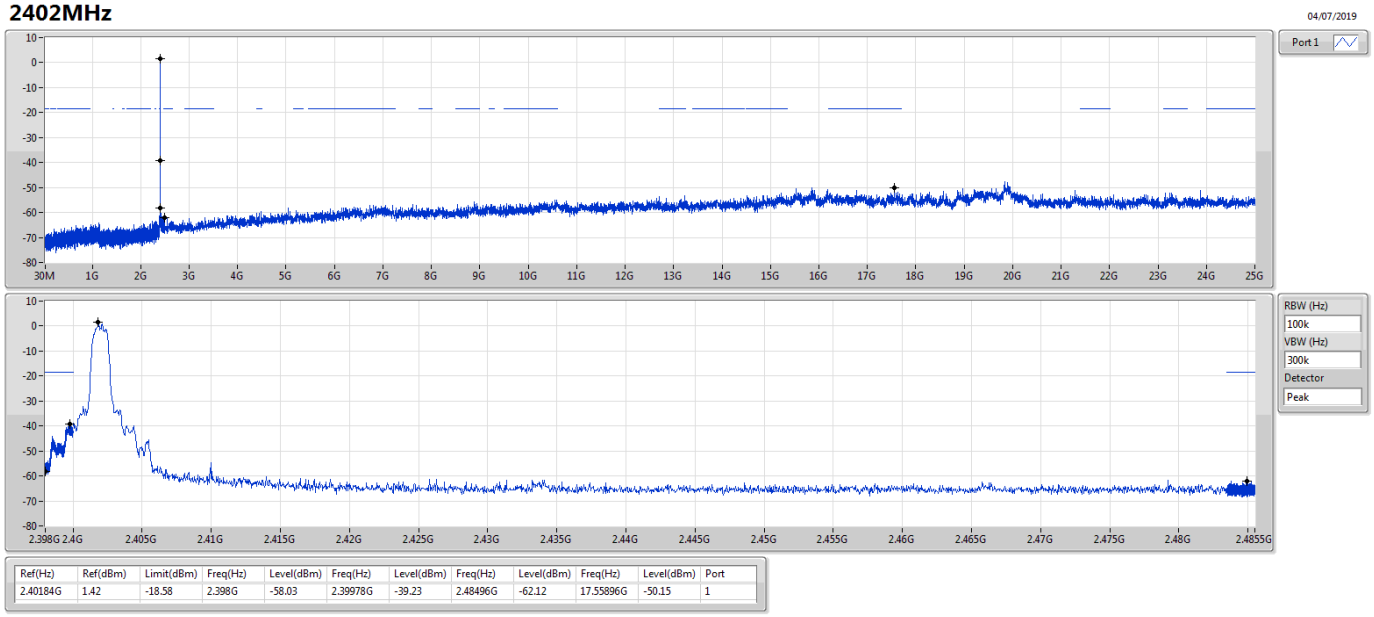
2480MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.4802G	1.18	-18.82	2.30032G	-64.20	2.39916G	-62.83	2.48354G	-51.96	16.76532G	-51.71	1

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

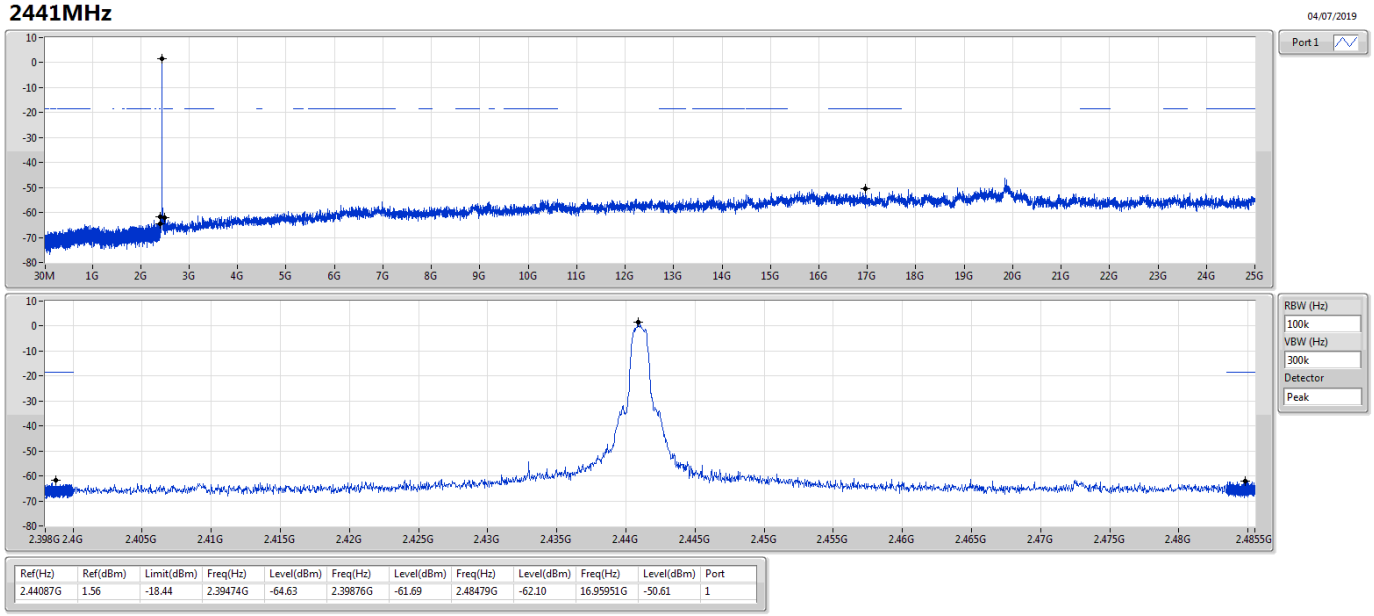
2402MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.40184G	1.42	-18.58	2.398G	-58.03	2.39978G	-39.23	2.48496G	-62.12	17.55896G	-50.15	1

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

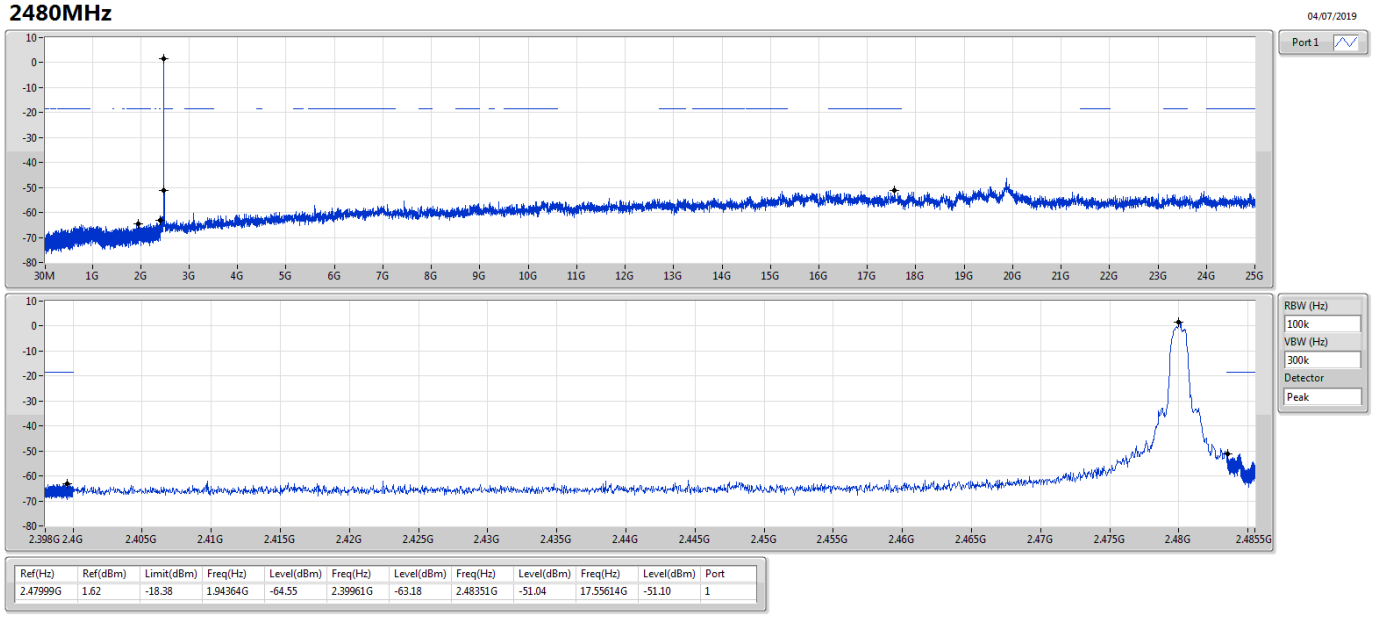
2441MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.44087G	1.56	-18.44	2.39474G	-64.63	2.39876G	-61.69	2.48479G	-62.10	16.95951G	-50.61	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)	Port
2.47999G	1.62	-18.38	1.94364G	-64.55	2.39961G	-63.18	2.48351G	-51.04	17.55614G	-51.10	1

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-
BT-BR(1Mbps)	Pass	PK	46.87M	32.31	40.00	-7.69	-16.30	3	Horizontal	0	1.00	-

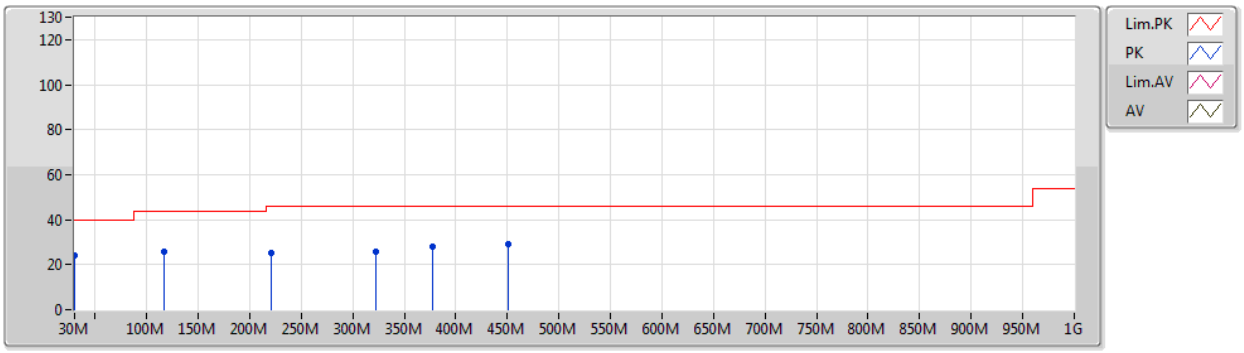
Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-BR(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-
2441MHz_USB	Pass	PK	30M	24.20	40.00	-15.80	-8.16	3	Vertical	360	1.00	-
2441MHz_USB	Pass	PK	117.16M	25.76	43.50	-17.74	-13.76	3	Vertical	360	1.00	-
2441MHz_USB	Pass	PK	221.19M	25.23	46.00	-20.77	-16.00	3	Vertical	360	1.00	-
2441MHz_USB	Pass	PK	322.41M	25.53	46.00	-20.47	-11.11	3	Vertical	360	1.00	-
2441MHz_USB	Pass	PK	377.23M	27.90	46.00	-18.10	-9.46	3	Vertical	360	1.00	-
2441MHz_USB	Pass	PK	450.33M	29.31	46.00	-16.69	-7.19	3	Vertical	360	1.00	-
2441MHz_USB	Pass	PK	46.87M	32.31	40.00	-7.69	-16.30	3	Horizontal	0	1.00	-
2441MHz_USB	Pass	PK	115.75M	26.93	43.50	-16.57	-13.80	3	Horizontal	0	1.00	-
2441MHz_USB	Pass	PK	249.3M	28.28	46.00	-17.72	-12.56	3	Horizontal	0	1.00	-
2441MHz_USB	Pass	PK	318.19M	32.28	46.00	-13.72	-11.21	3	Horizontal	0	1.00	-
2441MHz_USB	Pass	PK	437.68M	30.15	46.00	-15.85	-7.47	3	Horizontal	0	1.00	-
2441MHz_USB	Pass	PK	479.86M	29.33	46.00	-16.67	-6.39	3	Horizontal	0	1.00	-

BT-BR(1Mbps)

06/07/2019

2441MHz_USB

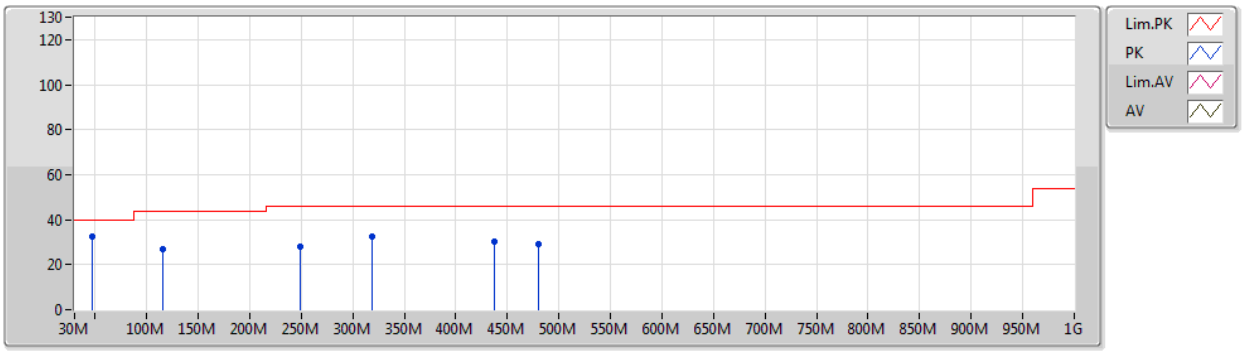


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	30M	24.20	40.00	-15.80	-8.16	3	Vertical	360	1.00	-	32.36	23.66	0.76	32.58
PK	117.16M	25.76	43.50	-17.74	-13.76	3	Vertical	360	1.00	-	39.52	17.08	1.69	32.53
PK	221.19M	25.23	46.00	-20.77	-16.00	3	Vertical	360	1.00	-	41.23	14.37	2.04	32.41
PK	322.41M	25.53	46.00	-20.47	-11.11	3	Vertical	360	1.00	-	36.64	18.69	2.46	32.26
PK	377.23M	27.90	46.00	-18.10	-9.46	3	Vertical	360	1.00	-	37.36	20.03	2.68	32.17
PK	450.33M	29.31	46.00	-16.69	-7.19	3	Vertical	360	1.00	-	36.50	21.92	2.94	32.05

BT-BR(1Mbps)

06/07/2019

2441MHz_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	46.87M	32.31	40.00	-7.69	-16.30	3	Horizontal	0	1.00	-	48.61	15.01	1.25	32.56
PK	115.75M	26.93	43.50	-16.57	-13.80	3	Horizontal	0	1.00	-	40.73	17.05	1.68	32.53
PK	249.3M	28.28	46.00	-17.72	-12.56	3	Horizontal	0	1.00	-	40.84	17.65	2.15	32.36
PK	318.19M	32.28	46.00	-13.72	-11.21	3	Horizontal	0	1.00	-	43.49	18.61	2.44	32.26
PK	437.68M	30.15	46.00	-15.85	-7.47	3	Horizontal	0	1.00	-	37.62	21.70	2.90	32.07
PK	479.86M	29.33	46.00	-16.67	-6.39	3	Horizontal	0	1.00	-	35.72	22.49	3.12	32.00

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-
BT-BR(1Mbps)	Pass	PK	2.49G	59.05	74.00	-14.95	31.36	3	Vertical	202	1.50	-
BT-EDR(3Mbps)	Pass	PK	2.4835G	61.42	74.00	-12.58	31.37	3	Horizontal	294	1.50	-

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-BR(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz_TX	Pass	AV	2.3596G	36.50	54.00	-17.50	31.42	3	Vertical	192	1.15	-
2402MHz_TX	Pass	AV	2.4018G	67.64	Inf	-Inf	31.37	3	Vertical	192	1.15	-
2402MHz_TX	Pass	PK	2.3596G	59.00	74.00	-15.00	31.42	3	Vertical	192	1.15	-
2402MHz_TX	Pass	PK	2.4018G	90.14	Inf	-Inf	31.37	3	Vertical	192	1.15	-
2402MHz_TX	Pass	AV	2.354G	36.33	54.00	-17.67	31.43	3	Horizontal	295	1.50	-
2402MHz_TX	Pass	AV	2.4018G	71.28	Inf	-Inf	31.37	3	Horizontal	295	1.50	-
2402MHz_TX	Pass	PK	2.354G	58.83	74.00	-15.17	31.43	3	Horizontal	295	1.50	-
2402MHz_TX	Pass	PK	2.4018G	93.78	Inf	-Inf	31.37	3	Horizontal	295	1.50	-
2402MHz_TX	Pass	AV	4.80374G	23.91	54.00	-30.09	1.67	3	Vertical	203	1.47	-
2402MHz_TX	Pass	PK	4.80374G	46.41	74.00	-27.59	1.67	3	Vertical	203	1.47	-
2402MHz_TX	Pass	AV	4.80417G	23.60	54.00	-30.40	1.67	3	Horizontal	13	2.11	-
2402MHz_TX	Pass	PK	4.80417G	46.10	74.00	-27.90	1.67	3	Horizontal	13	2.11	-
2441MHz_TX	Pass	AV	2.3746G	36.50	54.00	-17.50	31.40	3	Vertical	204	1.25	-
2441MHz_TX	Pass	AV	2.441G	69.06	Inf	-Inf	31.37	3	Vertical	204	1.25	-
2441MHz_TX	Pass	AV	2.4874G	36.12	54.00	-17.88	31.36	3	Vertical	204	1.25	-
2441MHz_TX	Pass	PK	2.3746G	59.00	74.00	-15.00	31.40	3	Vertical	204	1.25	-
2441MHz_TX	Pass	PK	2.441G	91.56	Inf	-Inf	31.37	3	Vertical	204	1.25	-
2441MHz_TX	Pass	PK	2.4874G	58.62	74.00	-15.38	31.36	3	Vertical	204	1.25	-
2441MHz_TX	Pass	AV	2.3438G	36.45	54.00	-17.55	31.44	3	Horizontal	293	1.50	-
2441MHz_TX	Pass	AV	2.441G	72.84	Inf	-Inf	31.37	3	Horizontal	293	1.50	-
2441MHz_TX	Pass	AV	2.4846G	36.13	54.00	-17.87	31.37	3	Horizontal	293	1.50	-
2441MHz_TX	Pass	PK	2.3438G	58.95	74.00	-15.05	31.44	3	Horizontal	293	1.50	-
2441MHz_TX	Pass	PK	2.441G	95.34	Inf	-Inf	31.37	3	Horizontal	293	1.50	-
2441MHz_TX	Pass	PK	2.4846G	58.63	74.00	-15.37	31.37	3	Horizontal	293	1.50	-
2441MHz_TX	Pass	AV	4.88224G	24.19	54.00	-29.81	1.81	3	Vertical	210	1.50	-
2441MHz_TX	Pass	AV	7.3234G	29.63	54.00	-24.37	8.01	3	Vertical	164	1.99	-
2441MHz_TX	Pass	PK	4.88224G	46.69	74.00	-27.31	1.81	3	Vertical	210	1.50	-
2441MHz_TX	Pass	PK	7.3234G	52.13	74.00	-21.87	8.01	3	Vertical	164	1.99	-
2441MHz_TX	Pass	AV	4.8815G	25.02	54.00	-28.98	1.81	3	Horizontal	22	1.50	-
2441MHz_TX	Pass	AV	7.32348G	30.32	54.00	-23.68	8.01	3	Horizontal	311	1.50	-
2441MHz_TX	Pass	PK	4.8815G	47.52	74.00	-26.48	1.81	3	Horizontal	22	1.50	-
2441MHz_TX	Pass	PK	7.32348G	52.82	74.00	-21.18	8.01	3	Horizontal	311	1.50	-
2480MHz_TX	Pass	AV	2.4798G	69.63	Inf	-Inf	31.36	3	Vertical	202	1.50	-
2480MHz_TX	Pass	AV	2.49G	36.55	54.00	-17.45	31.36	3	Vertical	202	1.50	-
2480MHz_TX	Pass	PK	2.4798G	92.13	Inf	-Inf	31.36	3	Vertical	202	1.50	-
2480MHz_TX	Pass	PK	2.49G	59.05	74.00	-14.95	31.36	3	Vertical	202	1.50	-
2480MHz_TX	Pass	AV	2.4798G	72.68	Inf	-Inf	31.36	3	Horizontal	289	1.64	-
2480MHz_TX	Pass	AV	2.4902G	36.27	54.00	-17.73	31.36	3	Horizontal	289	1.64	-
2480MHz_TX	Pass	PK	2.4798G	95.18	Inf	-Inf	31.36	3	Horizontal	289	1.64	-
2480MHz_TX	Pass	PK	2.4902G	58.77	74.00	-15.23	31.36	3	Horizontal	289	1.64	-
2480MHz_TX	Pass	AV	4.95978G	23.81	54.00	-30.19	2.01	3	Vertical	112	2.29	-
2480MHz_TX	Pass	AV	7.44052G	28.91	54.00	-25.09	7.95	3	Vertical	170	2.30	-
2480MHz_TX	Pass	PK	4.95978G	46.31	74.00	-27.69	2.01	3	Vertical	112	2.29	-
2480MHz_TX	Pass	PK	7.44052G	51.41	74.00	-22.59	7.95	3	Vertical	170	2.30	-
2480MHz_TX	Pass	AV	4.95956G	23.96	54.00	-30.04	2.01	3	Horizontal	328	1.00	-
2480MHz_TX	Pass	AV	7.44037G	29.31	54.00	-24.69	7.95	3	Horizontal	59	1.50	-
2480MHz_TX	Pass	PK	4.95956G	46.46	74.00	-27.54	2.01	3	Horizontal	328	1.00	-

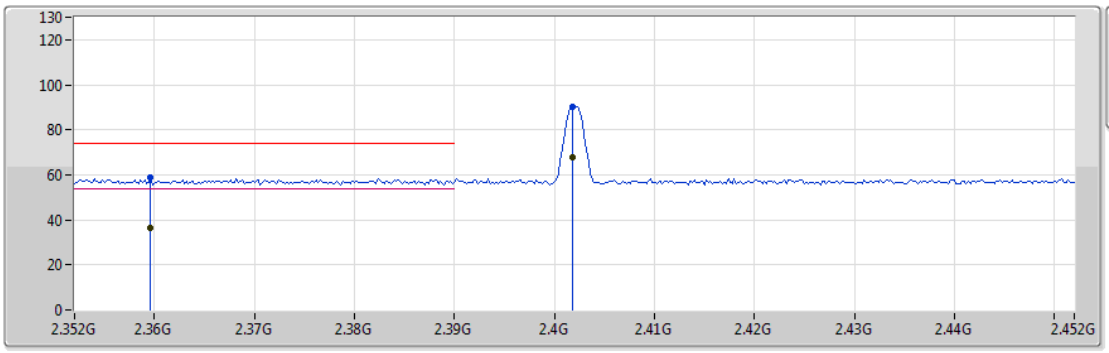
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2480MHz_TX	Pass	PK	7.44037G	51.81	74.00	-22.19	7.95	3	Horizontal	59	1.50	-
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz_TX	Pass	AV	2.356G	36.46	54.00	-17.54	31.43	3	Vertical	194	1.15	-
2402MHz_TX	Pass	AV	2.402G	68.92	Inf	-Inf	31.37	3	Vertical	194	1.15	-
2402MHz_TX	Pass	PK	2.356G	58.96	74.00	-15.04	31.43	3	Vertical	194	1.15	-
2402MHz_TX	Pass	PK	2.402G	91.42	Inf	-Inf	31.37	3	Vertical	194	1.15	-
2402MHz_TX	Pass	AV	2.373G	36.50	54.00	-17.50	31.40	3	Horizontal	299	1.23	-
2402MHz_TX	Pass	AV	2.402G	73.18	Inf	-Inf	31.37	3	Horizontal	299	1.23	-
2402MHz_TX	Pass	PK	2.373G	59.00	74.00	-15.00	31.40	3	Horizontal	299	1.23	-
2402MHz_TX	Pass	PK	2.402G	95.68	Inf	-Inf	31.37	3	Horizontal	299	1.23	-
2402MHz_TX	Pass	AV	4.80385G	24.20	54.00	-29.80	1.67	3	Vertical	208	1.57	-
2402MHz_TX	Pass	PK	4.80385G	46.70	74.00	-27.30	1.67	3	Vertical	208	1.57	-
2402MHz_TX	Pass	AV	4.80469G	23.97	54.00	-30.03	1.67	3	Horizontal	25	2.25	-
2402MHz_TX	Pass	PK	4.80469G	46.47	74.00	-27.53	1.67	3	Horizontal	25	2.25	-
2441MHz_TX	Pass	AV	2.3414G	35.98	54.00	-18.02	31.45	3	Vertical	201	2.89	-
2441MHz_TX	Pass	AV	2.441G	71.59	Inf	-Inf	31.37	3	Vertical	201	2.89	-
2441MHz_TX	Pass	AV	2.4966G	35.97	54.00	-18.03	31.36	3	Vertical	201	2.89	-
2441MHz_TX	Pass	PK	2.3414G	58.48	74.00	-15.52	31.45	3	Vertical	201	2.89	-
2441MHz_TX	Pass	PK	2.441G	94.09	Inf	-Inf	31.37	3	Vertical	201	2.89	-
2441MHz_TX	Pass	PK	2.4966G	58.47	74.00	-15.53	31.36	3	Vertical	201	2.89	-
2441MHz_TX	Pass	AV	2.3414G	35.90	54.00	-18.10	31.45	3	Horizontal	300	1.22	-
2441MHz_TX	Pass	AV	2.441G	74.70	Inf	-Inf	31.37	3	Horizontal	300	1.22	-
2441MHz_TX	Pass	AV	2.4986G	36.04	54.00	-17.96	31.36	3	Horizontal	300	1.22	-
2441MHz_TX	Pass	PK	2.3414G	58.40	74.00	-15.60	31.45	3	Horizontal	300	1.22	-
2441MHz_TX	Pass	PK	2.441G	97.20	Inf	-Inf	31.37	3	Horizontal	300	1.22	-
2441MHz_TX	Pass	PK	2.4986G	58.54	74.00	-15.46	31.36	3	Horizontal	300	1.22	-
2441MHz_TX	Pass	AV	4.88201G	24.00	54.00	-30.00	1.81	3	Vertical	211	1.50	-
2441MHz_TX	Pass	AV	7.3221G	28.31	54.00	-25.69	8.01	3	Vertical	15	1.50	-
2441MHz_TX	Pass	PK	4.88201G	46.50	74.00	-27.50	1.81	3	Vertical	211	1.50	-
2441MHz_TX	Pass	PK	7.3221G	50.81	74.00	-23.19	8.01	3	Vertical	15	1.50	-
2441MHz_TX	Pass	AV	4.88155G	25.51	54.00	-28.49	1.81	3	Horizontal	22	1.92	-
2441MHz_TX	Pass	AV	7.3231G	29.41	54.00	-24.59	8.01	3	Horizontal	316	1.50	-
2441MHz_TX	Pass	PK	4.88155G	48.01	74.00	-25.99	1.81	3	Horizontal	22	1.92	-
2441MHz_TX	Pass	PK	7.3231G	51.91	74.00	-22.09	8.01	3	Horizontal	316	1.50	-
2480MHz_TX	Pass	AV	2.48G	71.39	Inf	-Inf	31.36	3	Vertical	206	1.07	-
2480MHz_TX	Pass	AV	2.4836G	37.10	54.00	-16.90	31.37	3	Vertical	206	1.07	-
2480MHz_TX	Pass	PK	2.48G	93.89	Inf	-Inf	31.36	3	Vertical	206	1.07	-
2480MHz_TX	Pass	PK	2.4836G	59.60	74.00	-14.40	31.37	3	Vertical	206	1.07	-
2480MHz_TX	Pass	AV	2.48G	73.63	Inf	-Inf	31.36	3	Horizontal	294	1.50	-
2480MHz_TX	Pass	AV	2.4835G	38.92	Inf	-Inf	31.37	3	Horizontal	294	1.50	-
2480MHz_TX	Pass	PK	2.48G	96.13	Inf	-Inf	31.36	3	Horizontal	294	1.50	-
2480MHz_TX	Pass	PK	2.4835G	61.42	74.00	-12.58	31.37	3	Horizontal	294	1.50	-
2480MHz_TX	Pass	AV	4.95975G	23.90	54.00	-30.10	2.01	3	Vertical	103	1.86	-
2480MHz_TX	Pass	AV	7.44074G	28.20	54.00	-25.80	7.95	3	Vertical	103	1.86	-
2480MHz_TX	Pass	PK	4.95975G	46.40	74.00	-27.60	2.01	3	Vertical	103	1.86	-
2480MHz_TX	Pass	PK	7.44074G	50.70	74.00	-23.30	7.95	3	Vertical	266	1.34	-
2480MHz_TX	Pass	AV	4.96005G	24.22	54.00	-29.78	2.01	3	Horizontal	29	1.55	-
2480MHz_TX	Pass	AV	7.44051G	29.79	54.00	-24.21	7.95	3	Horizontal	57	1.63	-
2480MHz_TX	Pass	PK	4.96005G	46.72	74.00	-27.28	2.01	3	Horizontal	29	1.55	-

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2480MHz_TX	Pass	PK	7.44051G	52.29	74.00	-21.71	7.95	3	Horizontal	57	1.63	-

BT-BR(1Mbps)

2402MHz_TX

05/07/2019

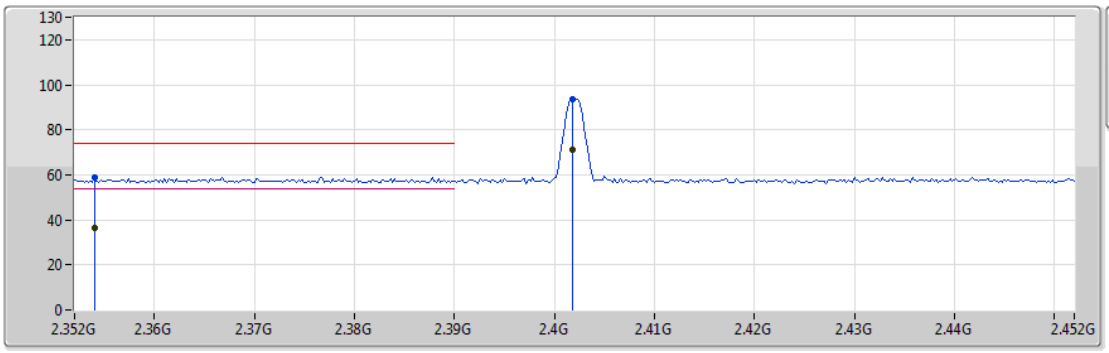


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3596G	36.50	54.00	-17.50	31.42	3	Vertical	192	1.15	-	5.08	27.78	3.64	-
AV	2.4018G	67.64	Inf	-Inf	31.37	3	Vertical	192	1.15	-	36.27	27.70	3.67	-
PK	2.3596G	59.00	74.00	-15.00	31.42	3	Vertical	192	1.15	-	27.58	27.78	3.64	-
PK	2.4018G	90.14	Inf	-Inf	31.37	3	Vertical	192	1.15	-	58.77	27.70	3.67	-

BT-BR(1Mbps)

2402MHz_TX

05/07/2019

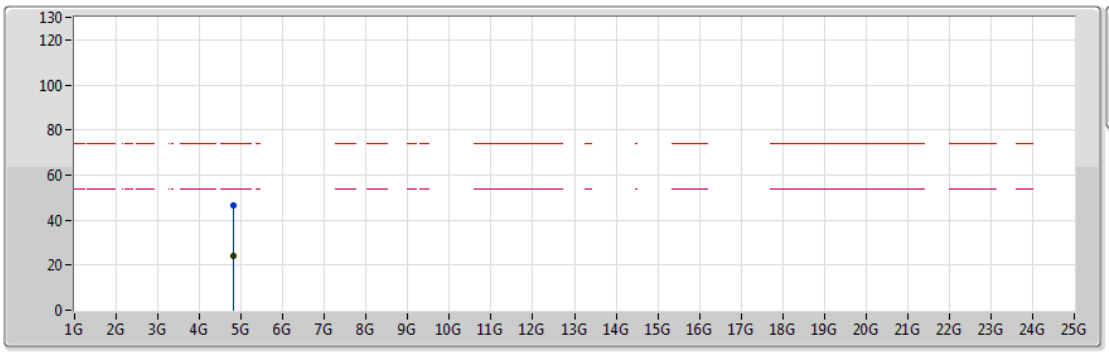


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.354G	36.33	54.00	-17.67	31.43	3	Horizontal	295	1.50	-	4.90	27.79	3.64	-
AV	2.4018G	71.28	Inf	-Inf	31.37	3	Horizontal	295	1.50	-	39.91	27.70	3.67	-
PK	2.354G	58.83	74.00	-15.17	31.43	3	Horizontal	295	1.50	-	27.40	27.79	3.64	-
PK	2.4018G	93.78	Inf	-Inf	31.37	3	Horizontal	295	1.50	-	62.41	27.70	3.67	-

BT-BR(1Mbps)

2402MHz_TX

05/07/2019

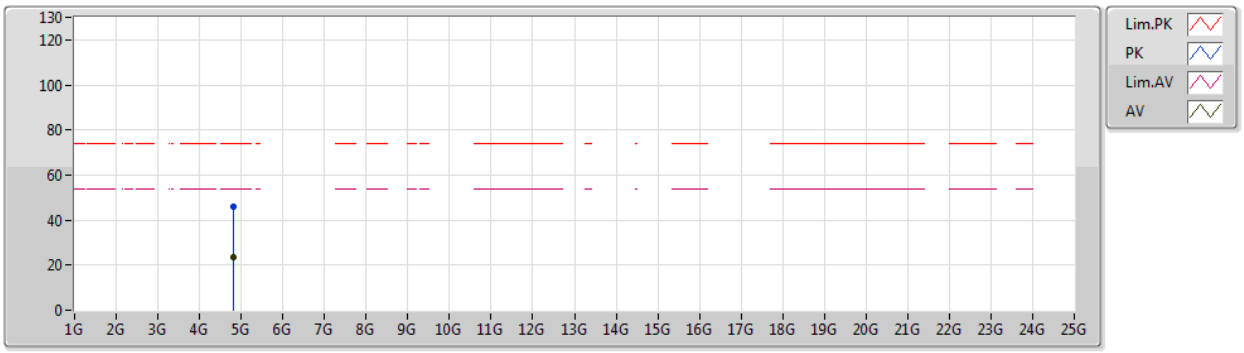


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.80374G	23.91	54.00	-30.09	1.67	3	Vertical	203	1.47	-	22.24	31.20	5.32	34.85
PK	4.80374G	46.41	74.00	-27.59	1.67	3	Vertical	203	1.47	-	44.74	31.20	5.32	34.85

BT-BR(1Mbps)

2402MHz_TX

05/07/2019

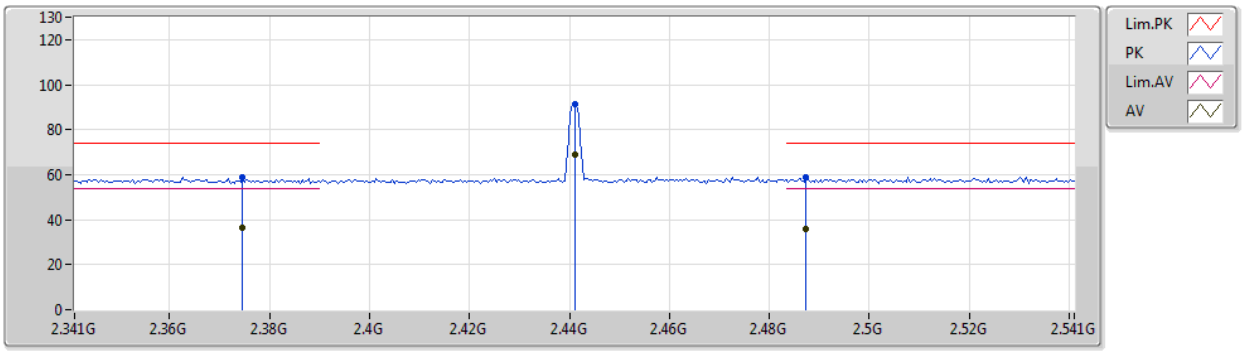


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.80417G	23.60	54.00	-30.40	1.67	3	Horizontal	13	2.11	-	21.93	31.20	5.32	34.85
PK	4.80417G	46.10	74.00	-27.90	1.67	3	Horizontal	13	2.11	-	44.43	31.20	5.32	34.85

BT-BR(1Mbps)

05/07/2019

2441MHz_TX

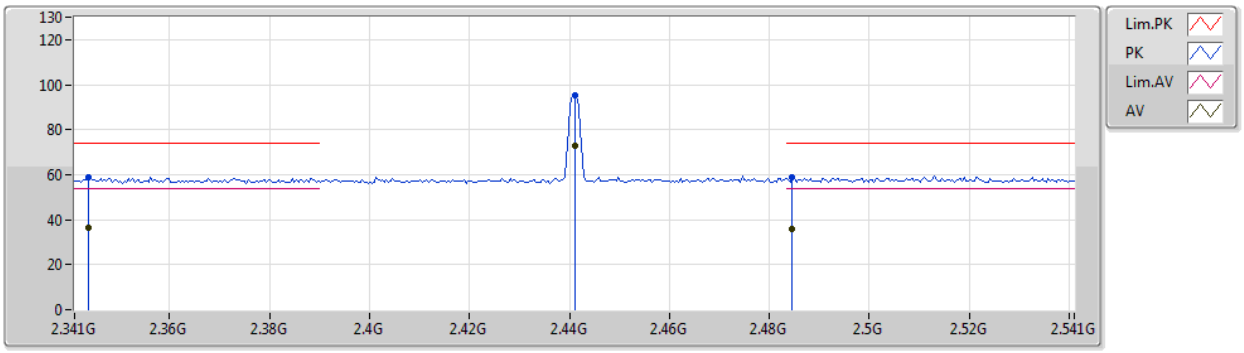


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3746G	36.50	54.00	-17.50	31.40	3	Vertical	204	1.25	-	5.10	27.75	3.65	-
AV	2.441G	69.06	Inf	-Inf	31.37	3	Vertical	204	1.25	-	37.69	27.66	3.71	-
AV	2.4874G	36.12	54.00	-17.88	31.36	3	Vertical	204	1.25	-	4.76	27.61	3.75	-
PK	2.3746G	59.00	74.00	-15.00	31.40	3	Vertical	204	1.25	-	27.60	27.75	3.65	-
PK	2.441G	91.56	Inf	-Inf	31.37	3	Vertical	204	1.25	-	60.19	27.66	3.71	-
PK	2.4874G	58.62	74.00	-15.38	31.36	3	Vertical	204	1.25	-	27.26	27.61	3.75	-

BT-BR(1Mbps)

05/07/2019

2441MHz_TX

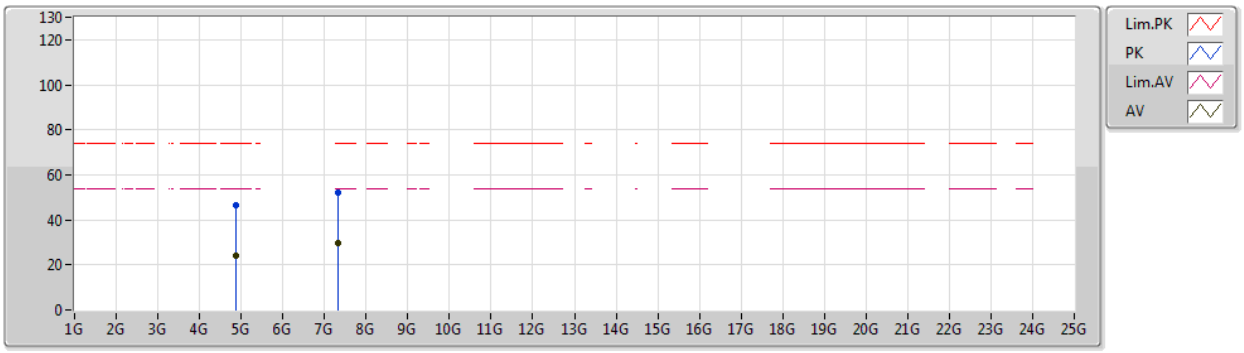


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3438G	36.45	54.00	-17.55	31.44	3	Horizontal	293	1.50	-	5.01	27.81	3.63	-
AV	2.441G	72.84	Inf	-Inf	31.37	3	Horizontal	293	1.50	-	41.47	27.66	3.71	-
AV	2.4846G	36.13	54.00	-17.87	31.37	3	Horizontal	293	1.50	-	4.76	27.62	3.75	-
PK	2.3438G	58.95	74.00	-15.05	31.44	3	Horizontal	293	1.50	-	27.51	27.81	3.63	-
PK	2.441G	95.34	Inf	-Inf	31.37	3	Horizontal	293	1.50	-	63.97	27.66	3.71	-
PK	2.4846G	58.63	74.00	-15.37	31.37	3	Horizontal	293	1.50	-	27.26	27.62	3.75	-

BT-BR(1Mbps)

05/07/2019

2441MHz_TX

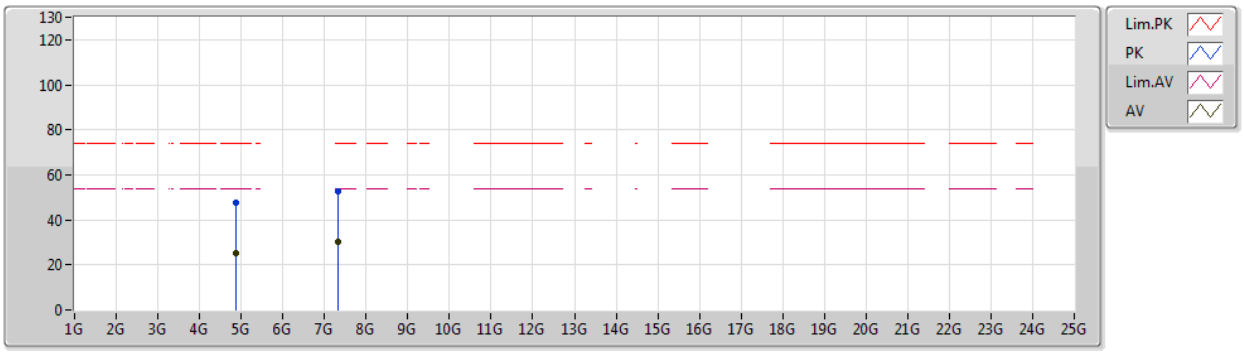


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.88224G	24.19	54.00	-29.81	1.81	3	Vertical	210	1.50	-	22.38	31.28	5.36	34.83
AV	7.3234G	29.63	54.00	-24.37	8.01	3	Vertical	164	1.99	-	21.62	36.48	6.62	35.09
PK	4.88224G	46.69	74.00	-27.31	1.81	3	Vertical	210	1.50	-	44.88	31.28	5.36	34.83
PK	7.3234G	52.13	74.00	-21.87	8.01	3	Vertical	164	1.99	-	44.12	36.48	6.62	35.09

BT-BR(1Mbps)

05/07/2019

2441MHz_TX

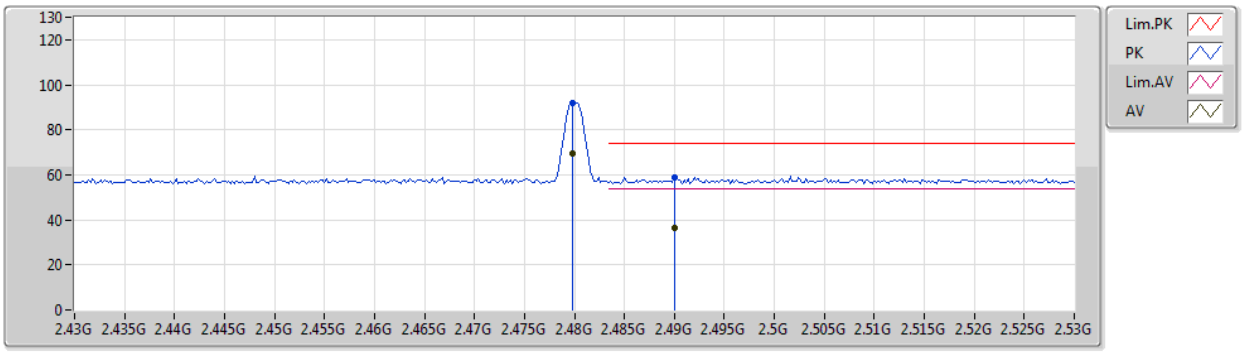


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.8815G	25.02	54.00	-28.98	1.81	3	Horizontal	22	1.50	-	23.21	31.28	5.36	34.83
AV	7.32348G	30.32	54.00	-23.68	8.01	3	Horizontal	311	1.50	-	22.31	36.48	6.62	35.09
PK	4.8815G	47.52	74.00	-26.48	1.81	3	Horizontal	22	1.50	-	45.71	31.28	5.36	34.83
PK	7.32348G	52.82	74.00	-21.18	8.01	3	Horizontal	311	1.50	-	44.81	36.48	6.62	35.09

BT-BR(1Mbps)

2480MHz_TX

05/07/2019

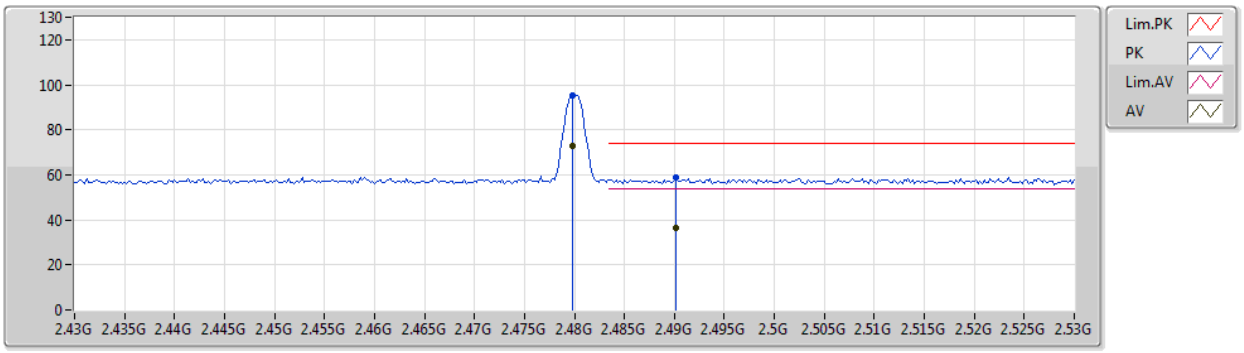


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.4798G	69.63	Inf	-Inf	31.36	3	Vertical	202	1.50	-	38.27	27.62	3.74	-
AV	2.49G	36.55	54.00	-17.45	31.36	3	Vertical	202	1.50	-	5.19	27.61	3.75	-
PK	2.4798G	92.13	Inf	-Inf	31.36	3	Vertical	202	1.50	-	60.77	27.62	3.74	-
PK	2.49G	59.05	74.00	-14.95	31.36	3	Vertical	202	1.50	-	27.69	27.61	3.75	-

BT-BR(1Mbps)

05/07/2019

2480MHz_TX

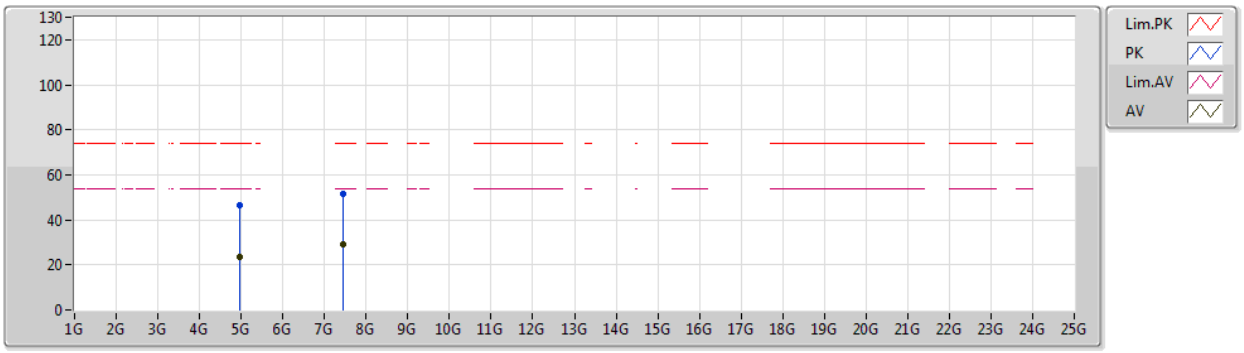


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.4798G	72.68	Inf	-Inf	31.36	3	Horizontal	289	1.64	-	41.32	27.62	3.74	-
AV	2.4902G	36.27	54.00	-17.73	31.36	3	Horizontal	289	1.64	-	4.91	27.61	3.75	-
PK	2.4798G	95.18	Inf	-Inf	31.36	3	Horizontal	289	1.64	-	63.82	27.62	3.74	-
PK	2.4902G	58.77	74.00	-15.23	31.36	3	Horizontal	289	1.64	-	27.41	27.61	3.75	-

BT-BR(1Mbps)

05/07/2019

2480MHz_TX

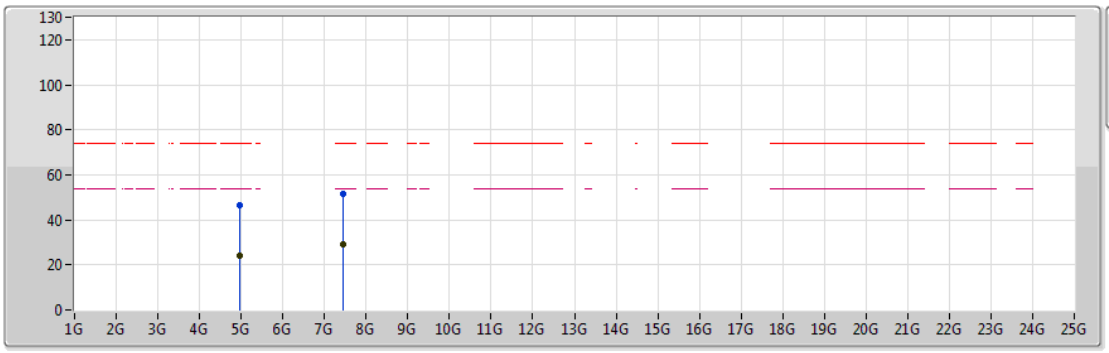


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.95978G	23.81	54.00	-30.19	2.01	3	Vertical	112	2.29	-	21.80	31.42	5.40	34.81
AV	7.44052G	28.91	54.00	-25.09	7.95	3	Vertical	170	2.30	-	20.96	36.40	6.66	35.11
PK	4.95978G	46.31	74.00	-27.69	2.01	3	Vertical	112	2.29	-	44.30	31.42	5.40	34.81
PK	7.44052G	51.41	74.00	-22.59	7.95	3	Vertical	170	2.30	-	43.46	36.40	6.66	35.11

BT-BR(1Mbps)

2480MHz_TX

05/07/2019

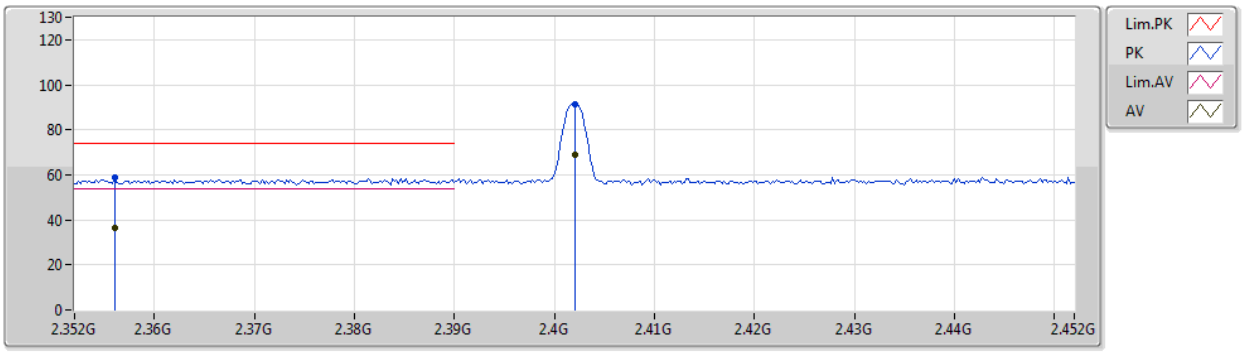


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.95956G	23.96	54.00	-30.04	2.01	3	Horizontal	328	1.00	-	21.95	31.42	5.40	34.81
AV	7.44037G	29.31	54.00	-24.69	7.95	3	Horizontal	59	1.50	-	21.36	36.40	6.66	35.11
PK	4.95956G	46.46	74.00	-27.54	2.01	3	Horizontal	328	1.00	-	44.45	31.42	5.40	34.81
PK	7.44037G	51.81	74.00	-22.19	7.95	3	Horizontal	59	1.50	-	43.86	36.40	6.66	35.11

BT-EDR(3Mbps)

05/07/2019

2402MHz_TX

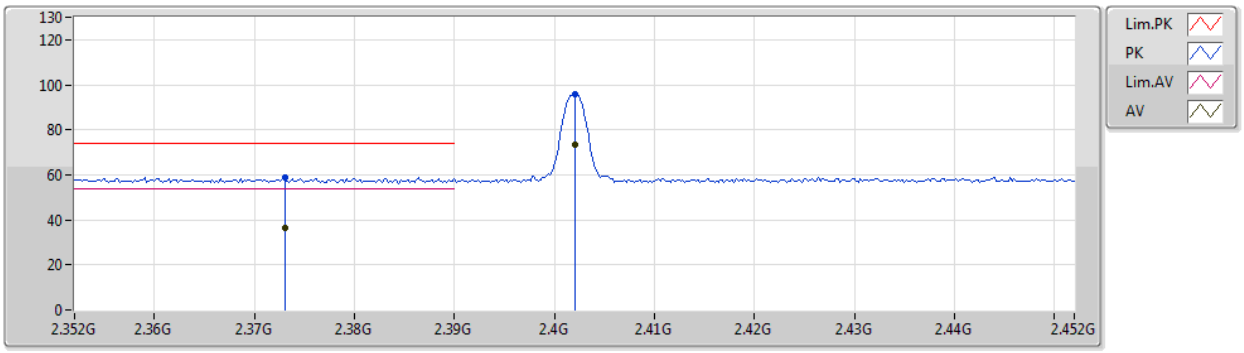


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.356G	36.46	54.00	-17.54	31.43	3	Vertical	194	1.15	-	5.03	27.79	3.64	-
AV	2.402G	68.92	Inf	-Inf	31.37	3	Vertical	194	1.15	-	37.55	27.70	3.67	-
PK	2.356G	58.96	74.00	-15.04	31.43	3	Vertical	194	1.15	-	27.53	27.79	3.64	-
PK	2.402G	91.42	Inf	-Inf	31.37	3	Vertical	194	1.15	-	60.05	27.70	3.67	-

BT-EDR(3Mbps)

05/07/2019

2402MHz_TX

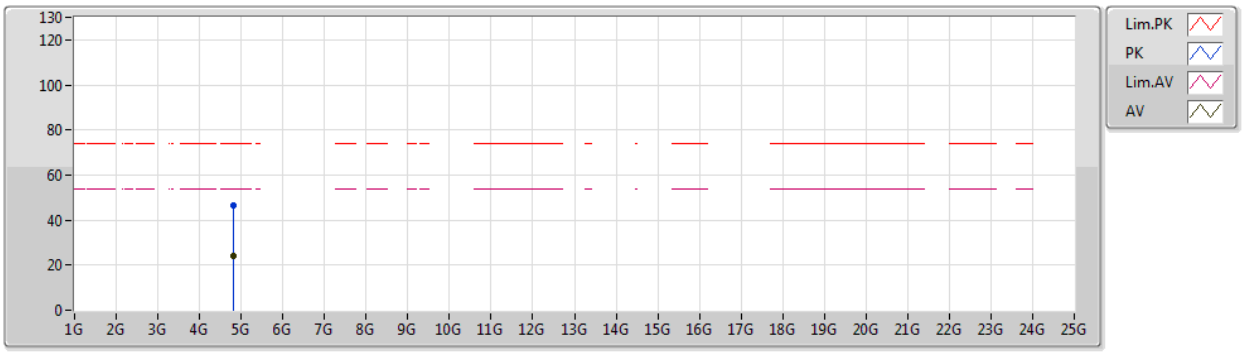


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.373G	36.50	54.00	-17.50	31.40	3	Horizontal	299	1.23	-	5.10	27.75	3.65	-
AV	2.402G	73.18	Inf	-Inf	31.37	3	Horizontal	299	1.23	-	41.81	27.70	3.67	-
PK	2.373G	59.00	74.00	-15.00	31.40	3	Horizontal	299	1.23	-	27.60	27.75	3.65	-
PK	2.402G	95.68	Inf	-Inf	31.37	3	Horizontal	299	1.23	-	64.31	27.70	3.67	-

BT-EDR(3Mbps)

05/07/2019

2402MHz_TX

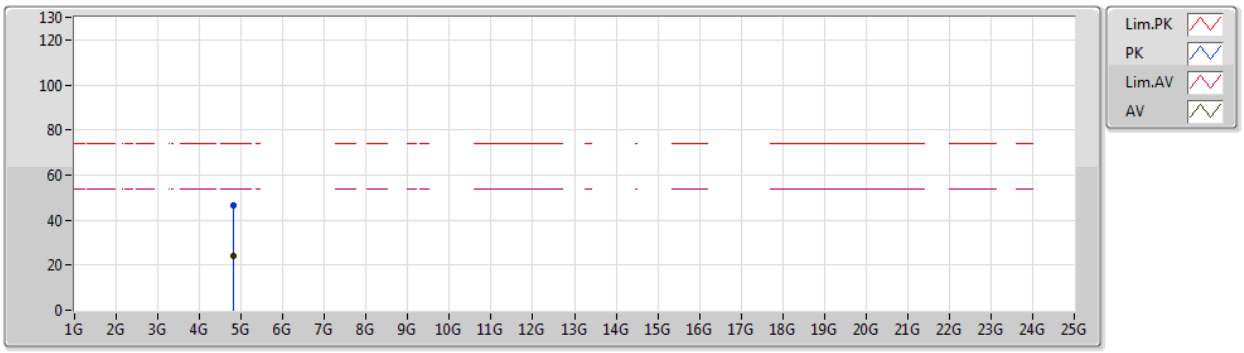


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.80385G	24.20	54.00	-29.80	1.67	3	Vertical	208	1.57	-	22.53	31.20	5.32	34.85
PK	4.80385G	46.70	74.00	-27.30	1.67	3	Vertical	208	1.57	-	45.03	31.20	5.32	34.85

BT-EDR(3Mbps)

2402MHz_TX

05/07/2019

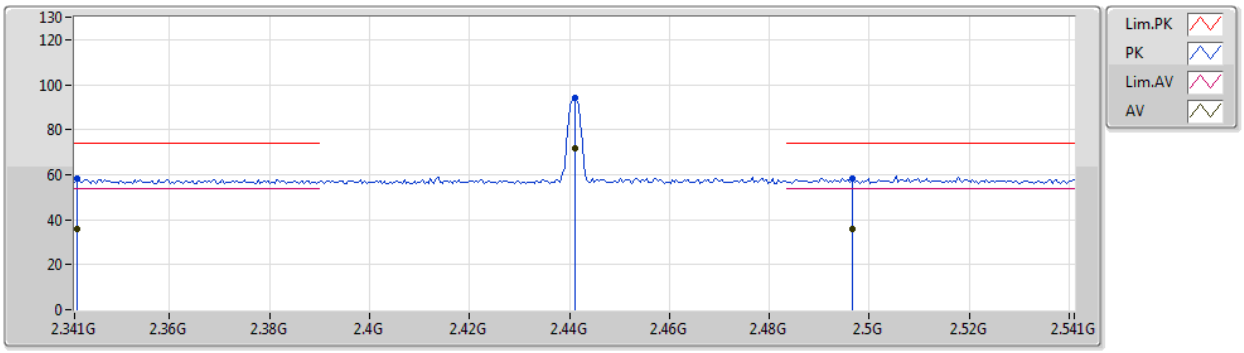


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.80469G	23.97	54.00	-30.03	1.67	3	Horizontal	25	2.25	-	22.30	31.20	5.32	34.85
PK	4.80469G	46.47	74.00	-27.53	1.67	3	Horizontal	25	2.25	-	44.80	31.20	5.32	34.85

BT-EDR(3Mbps)

05/07/2019

2441MHz_TX

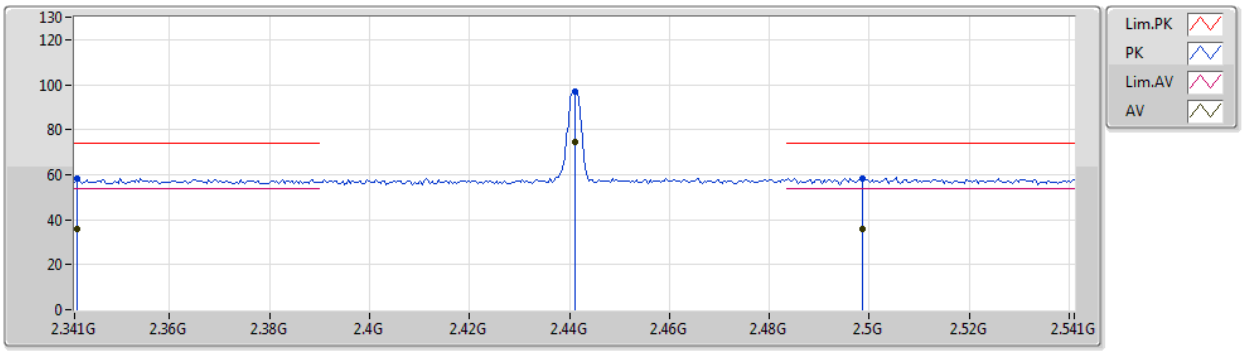


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3414G	35.98	54.00	-18.02	31.45	3	Vertical	201	2.89	-	4.53	27.82	3.63	-
AV	2.441G	71.59	Inf	-Inf	31.37	3	Vertical	201	2.89	-	40.22	27.66	3.71	-
AV	2.4966G	35.97	54.00	-18.03	31.36	3	Vertical	201	2.89	-	4.61	27.60	3.76	-
PK	2.3414G	58.48	74.00	-15.52	31.45	3	Vertical	201	2.89	-	27.03	27.82	3.63	-
PK	2.441G	94.09	Inf	-Inf	31.37	3	Vertical	201	2.89	-	62.72	27.66	3.71	-
PK	2.4966G	58.47	74.00	-15.53	31.36	3	Vertical	201	2.89	-	27.11	27.60	3.76	-

BT-EDR(3Mbps)

05/07/2019

2441MHz_TX

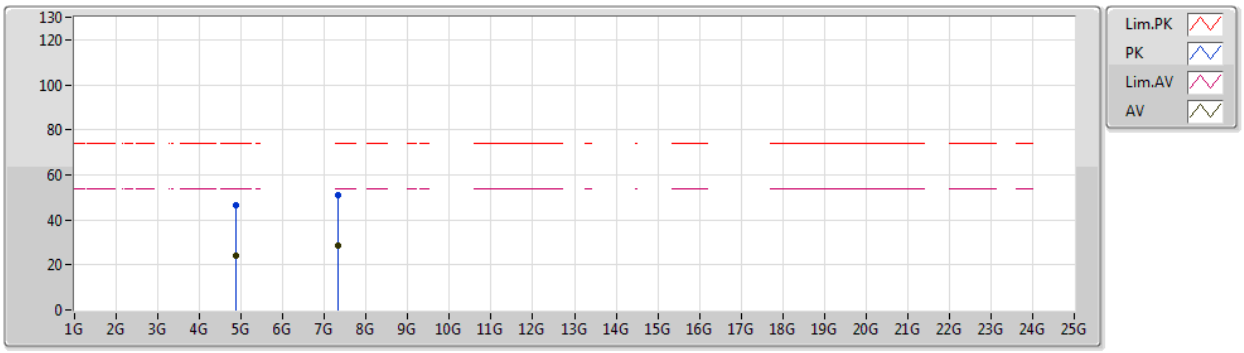


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3414G	35.90	54.00	-18.10	31.45	3	Horizontal	300	1.22	-	4.45	27.82	3.63	-
AV	2.441G	74.70	Inf	-Inf	31.37	3	Horizontal	300	1.22	-	43.33	27.66	3.71	-
AV	2.4986G	36.04	54.00	-17.96	31.36	3	Horizontal	300	1.22	-	4.68	27.60	3.76	-
PK	2.3414G	58.40	74.00	-15.60	31.45	3	Horizontal	300	1.22	-	26.95	27.82	3.63	-
PK	2.441G	97.20	Inf	-Inf	31.37	3	Horizontal	300	1.22	-	65.83	27.66	3.71	-
PK	2.4986G	58.54	74.00	-15.46	31.36	3	Horizontal	300	1.22	-	27.18	27.60	3.76	-

BT-EDR(3Mbps)

05/07/2019

2441MHz_TX

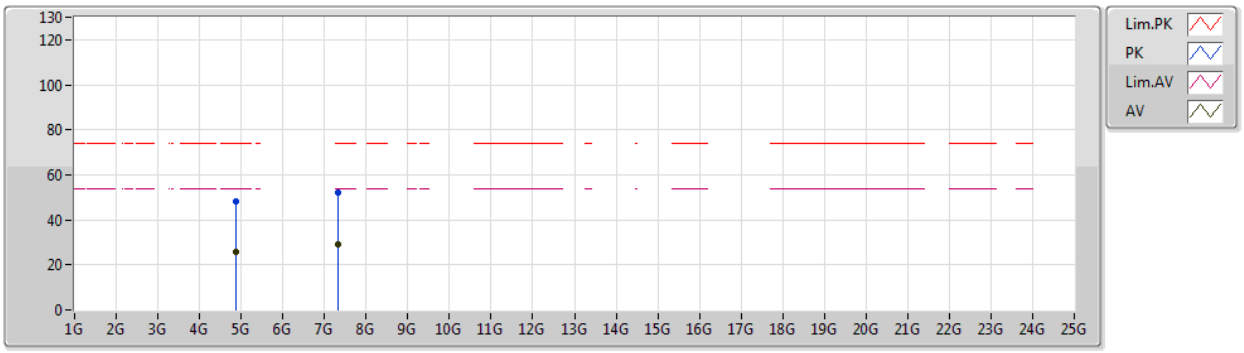


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.88201G	24.00	54.00	-30.00	1.81	3	Vertical	211	1.50	-	22.19	31.28	5.36	34.83
AV	7.3221G	28.31	54.00	-25.69	8.01	3	Vertical	15	1.50	-	20.30	36.48	6.62	35.09
PK	4.88201G	46.50	74.00	-27.50	1.81	3	Vertical	211	1.50	-	44.69	31.28	5.36	34.83
PK	7.3221G	50.81	74.00	-23.19	8.01	3	Vertical	15	1.50	-	42.80	36.48	6.62	35.09

BT-EDR(3Mbps)

05/07/2019

2441MHz_TX

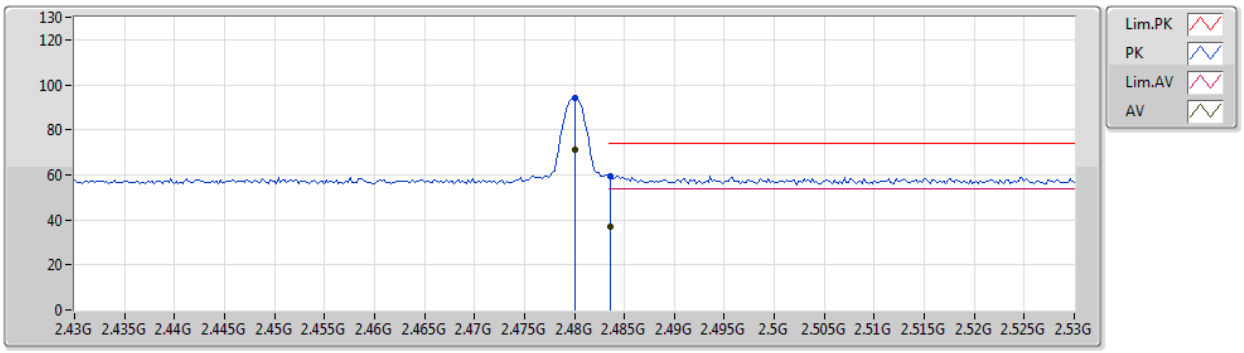


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.88155G	25.51	54.00	-28.49	1.81	3	Horizontal	22	1.92	-	23.70	31.28	5.36	34.83
AV	7.3231G	29.41	54.00	-24.59	8.01	3	Horizontal	316	1.50	-	21.40	36.48	6.62	35.09
PK	4.88155G	48.01	74.00	-25.99	1.81	3	Horizontal	22	1.92	-	46.20	31.28	5.36	34.83
PK	7.3231G	51.91	74.00	-22.09	8.01	3	Horizontal	316	1.50	-	43.90	36.48	6.62	35.09

BT-EDR(3Mbps)

05/07/2019

2480MHz_TX

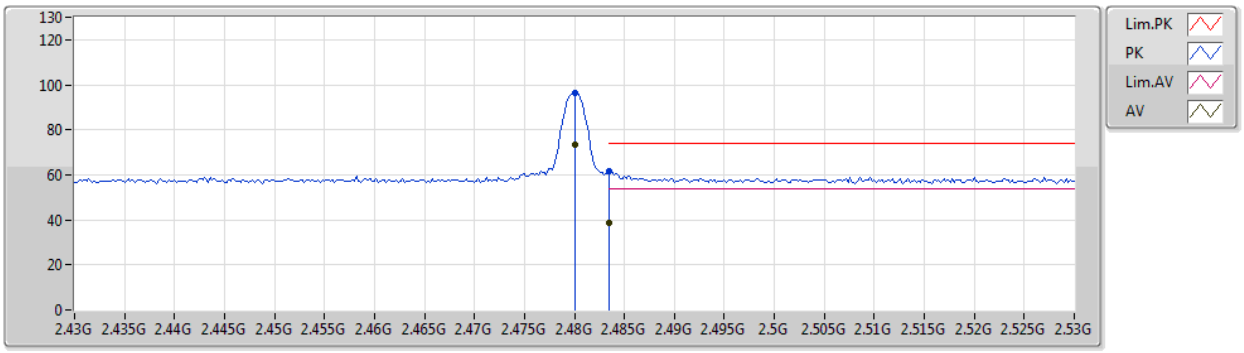


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.48G	71.39	Inf	-Inf	31.36	3	Vertical	206	1.07	-	40.03	27.62	3.74	-
AV	2.4836G	37.10	54.00	-16.90	31.37	3	Vertical	206	1.07	-	5.73	27.62	3.75	-
PK	2.48G	93.89	Inf	-Inf	31.36	3	Vertical	206	1.07	-	62.53	27.62	3.74	-
PK	2.4836G	59.60	74.00	-14.40	31.37	3	Vertical	206	1.07	-	28.23	27.62	3.75	-

BT-EDR(3Mbps)

05/07/2019

2480MHz_TX

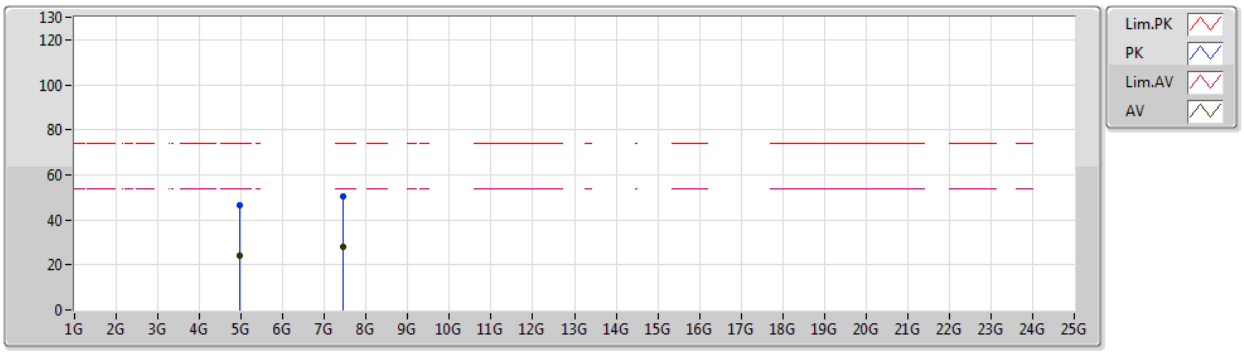


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.48G	73.63	Inf	-Inf	31.36	3	Horizontal	294	1.50	-	42.27	27.62	3.74	-
AV	2.4835G	38.92	Inf	-Inf	31.37	3	Horizontal	294	1.50	-	7.55	27.62	3.75	-
PK	2.48G	96.13	Inf	-Inf	31.36	3	Horizontal	294	1.50	-	64.77	27.62	3.74	-
PK	2.4835G	61.42	74.00	-12.58	31.37	3	Horizontal	294	1.50	-	30.05	27.62	3.75	-

BT-EDR(3Mbps)

05/07/2019

2480MHz_TX

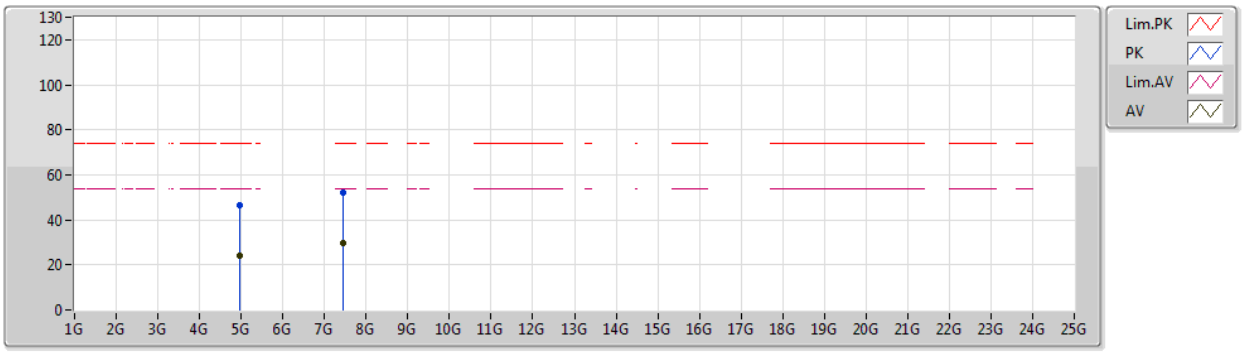


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.95975G	23.90	54.00	-30.10	2.01	3	Vertical	103	1.86	-	21.89	31.42	5.40	34.81
AV	7.44074G	28.20	54.00	-25.80	7.95	3	Vertical	103	1.86	-	20.25	36.40	6.66	35.11
PK	4.95975G	46.40	74.00	-27.60	2.01	3	Vertical	103	1.86	-	44.39	31.42	5.40	34.81
PK	7.44074G	50.70	74.00	-23.30	7.95	3	Vertical	266	1.34	-	42.75	36.40	6.66	35.11

BT-EDR(3Mbps)

05/07/2019

2480MHz_TX



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	4.96005G	24.22	54.00	-29.78	2.01	3	Horizontal	29	1.55	-	22.21	31.42	5.40	34.81
AV	7.44051G	29.79	54.00	-24.21	7.95	3	Horizontal	57	1.63	-	21.84	36.40	6.66	35.11
PK	4.96005G	46.72	74.00	-27.28	2.01	3	Horizontal	29	1.55	-	44.71	31.42	5.40	34.81
PK	7.44051G	52.29	74.00	-21.71	7.95	3	Horizontal	57	1.63	-	44.34	36.40	6.66	35.11