FCC Test Report

FCC ID	:	**RWO-RZ350259**
Equipment	:	**Smartphone**
Brand Name	:	**RAZER**
Model Name	:	**RZ35-0259**
Applicant	:	**Razer Inc. 201 3rd Street, Suite 900, San Francisco, CA 94103, USA**
Manufacturer	:	**Razer Inc. 201 3rd Street, Suite 900, San Francisco, CA 94103, USA**
Standard	:	**47 CFR FCC Part 15.247**

The product was received on Nov. 11, 2017, and testing was started from Sep. 06, 2018 and completed on Sep. 11, 2018. 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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APPENDIX I. TEST PHOTOS

PHOTOGRAPHS OF EUT V01

History of this test report

Report No.	Version	Description	Issued Date
FR871722AD	01	Initial issue of report	Sep. 28, 2018
FR871722AD	02	Revised applied standards (This report is the latest version replacing for the report issued on Sep. 28, 2018.)	Oct. 03, 2018

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

Reviewed by: Jackson 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.	Port	Brand	Model Name	Antenna Type	Connector
1	1	-	-	PIFA Antenna	mini Murata
2	2	-	-	PIFA Antenna	mini Murata

Ant.	Port	Gain (dBi)					
		2.4G	Bluetooth	5G			
				UNII-1	UNII-2A	UNII-2C	UNII-3
1	1	1.4	1.4	-3.6	-2.5	-0.2	2.5
2	2	-1.7	-	-0.9	-0.8	0.3	-1.7

Note 1: The EUT has two antennas.

For 2.4GHz function:

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

Support diversity function and pre-tested on each single chain(Maximum Conducted Output Power).

For IEEE 802.11 b/g/n 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) and could transmit/receive simultaneously.

For 5GHz function:

For IEEE 802.11 a/n/ac mode (1TX/1RX)

Support diversity function and pre-tested on each single chain(Maximum Conducted Output Power).

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

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

1.1.3 EUT Information

Identify EUT				
SW	O-MRO-RC005-RZR			
Operational Condition				
EUT Power Type	From AC Adapter/Battery			
EUT Function	☒	Point-to-multipoint	☐	Point-to-point

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

1.1.4 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
BT-BR(1Mbps)	0.776	1.101	2.888m	1k
BT-EDR(2Mbps)	0.759	1.198	2.889m	1k
BT-EDR(3Mbps)	0.766	1.158	2.891m	1k

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 v05
- 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
RF Conducted	TH01-HY	Barry	24.3°C / 63%	11/Sep/2018
Radiated	03CH02-HY	Kevin	23.5°C / 59%	06/Sep/2018
AC Conduction	CO04-HY	Terry	23.5°C / 59%	06/Sep/2018

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)	3.6 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	3.0 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	3.7V

2.2 Test Channel Mode

Test Software	QRCT

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

2.3 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral
Operating Mode	CTX/CRX
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 Receiver Radiated Unwanted Emissions		
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	CTX/CRX		
1	USB Mode		
Orthogonal Planes of EUT	**X Plane**	**Y Plane**	**Z Plane**
			
Worst Planes of EUT		V	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Test Condition	Radiated measurement
Operating Mode	Normal Link
1	Bluetooth+WLAN 2.4GHz
2	Bluetooth+WLAN 5GHz
Refer to Sporton Test Report No.: FA871722 for Co-location RF Exposure Evaluation and Appendix H for Radiated Emission Co-location.	

2.4 Accessories

Accessories				
AC Adapter	Brand Name	Razer	Model Name	RC30-021501
	Power Rating	I/P: 100~240V,50/60Hz, 3A-5V, 2.67A-9V, 2.0A-12V		
Battery	Brand Name	Razer	Model Name	RC30-0259
	Power Rating	3.85 Vdc, 4000mAh	Type	Li-ion, Polymer
USB Cable	Brand Name	Razer	Model Name	RC30-02150705-0000
	Signal Line	1.0 meter, non-shielded cable, w/o ferrite core		
Audio Dongle	Brand Name	Razer	Model Name	RC30-02590400-0000
	Signal Line	0.10 meter, non-shielded cable, w/o ferrite core		

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

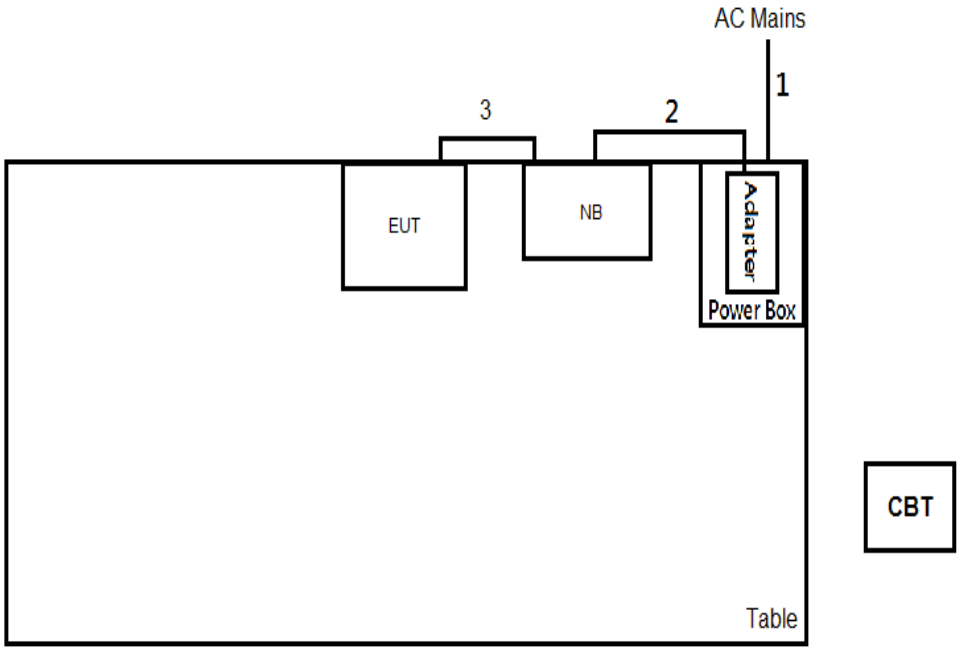
2.5 Support Equipment

Support Equipment – RF Conducted				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	Notebook	DELL	E5410	DoC
2	Adapter for NB	DELL	HA65NM130	DoC
3	DC Power Supply	GW	GPS-3030DD	-

Support Equipment – AC Conduction and Radiated Emission				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	Notebook	HP	Probook 5220m	-
2	AC adapter for NB	HP	PPP012H-S	-
3	Bluetooth Tester (Remote Workstation)	R&S	CBT	-

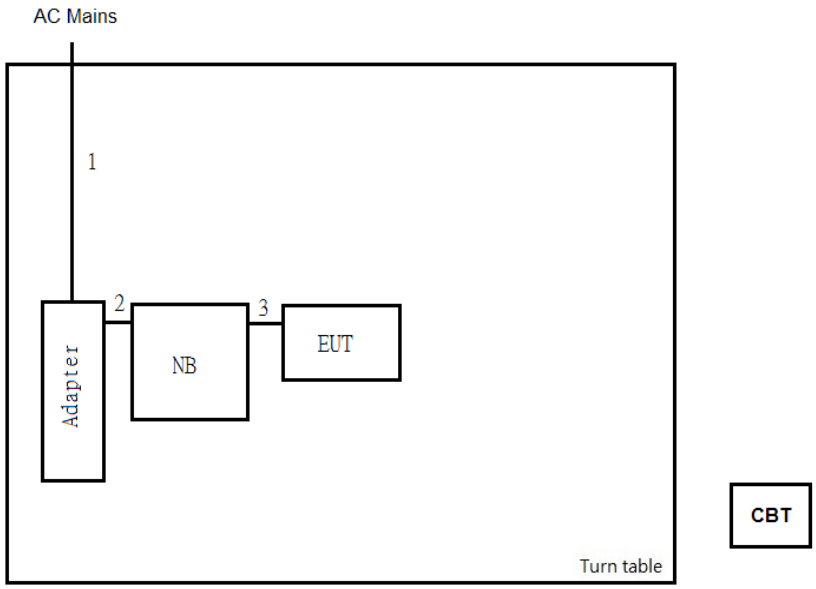
2.6 Test Setup Diagram

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	1.0	-
3	USB Cable	No	1.0	-

Test Setup Diagram - Radiated Test



Item	Connection	Shielded	Length(m)	Remark
1	AC Power line	No	1.5	-
2	DC Power line	No	1.0	-
3	USB Cable	No	1.0	-

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

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

3.1.2 Measuring Instruments

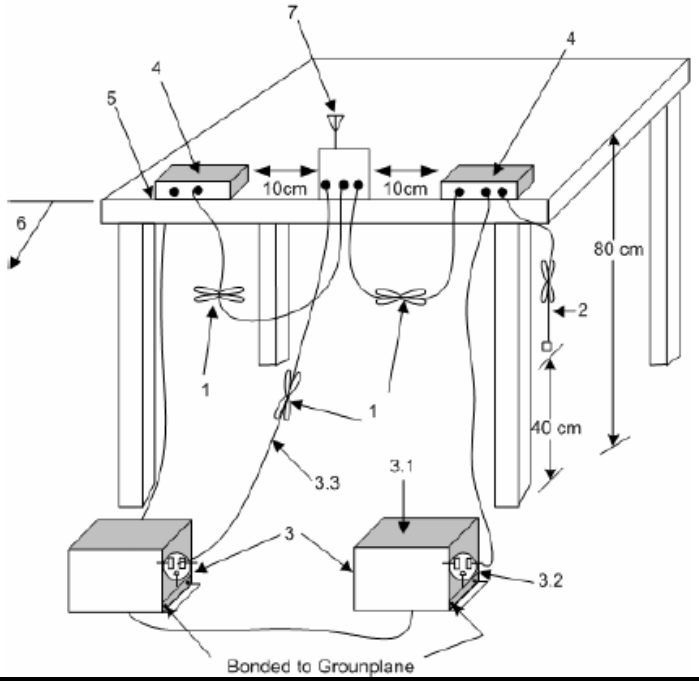
Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

Test Method
▪ Refer as ANSI C63.10-2013, clause 6.2 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	

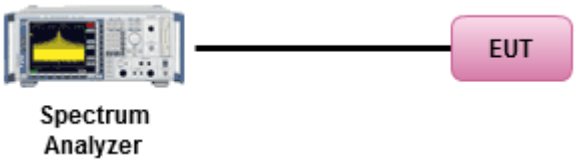
3.2.2 Measuring Instruments

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

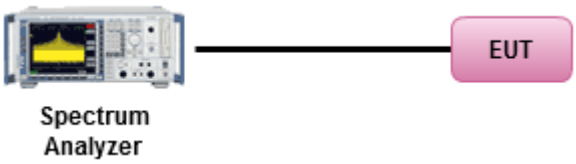
3.4.3 Measuring Instruments

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	

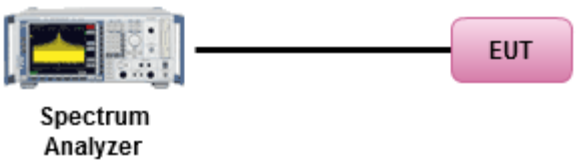
3.5.2 Measuring Instruments

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.	

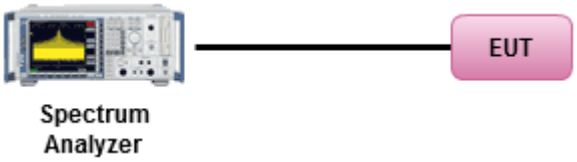
3.6.2 Measuring Instruments

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.

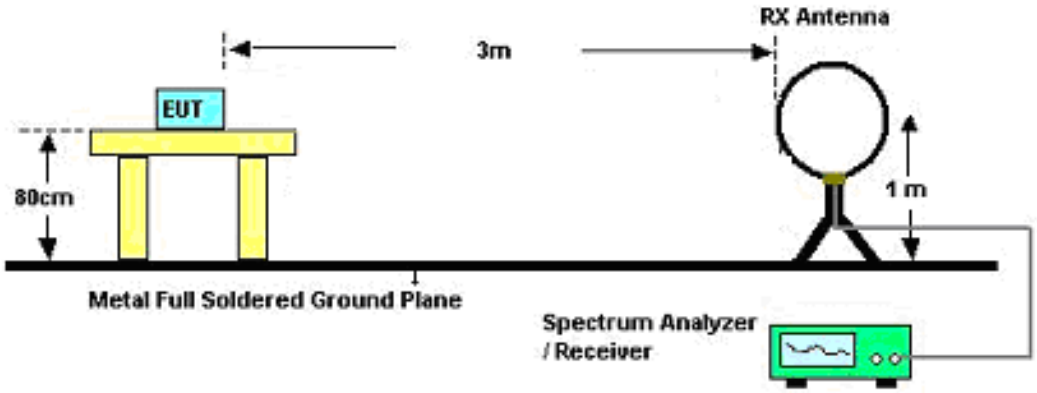
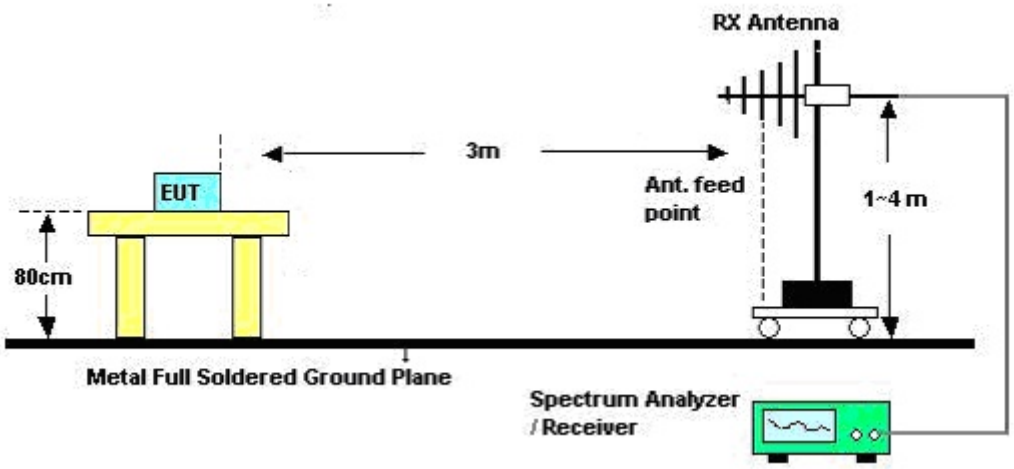
3.7.2 Measuring Instruments

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

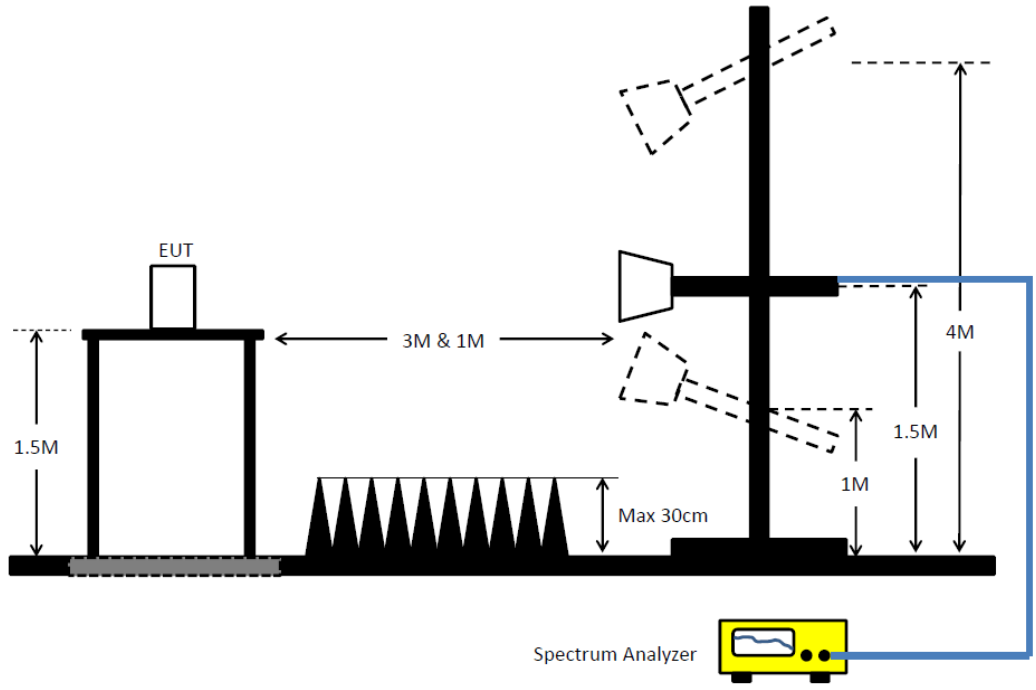
3.7.3 Test Procedures

Test Method	
▪ The average emission levels shall be measured in [hopping duty factor].	
▪ Refer as ANSI C63.10; clause 6.9.2.2 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	ESR	102051	9KHz ~ 3.6GHz	03/May/2018	02/May/2019
LISN	R&S	ENV216	101295	9kHz ~ 30MHz	17/Nov/2017	16/Nov/2018
RF Cable-CON	HUBER+SUHNER	RG213/U	07611832020001	9kHz ~ 30MHz	06/Oct/2017	05/Oct/2018
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/2017	11/Oct/2018

NCR : Non-Calibration Require.

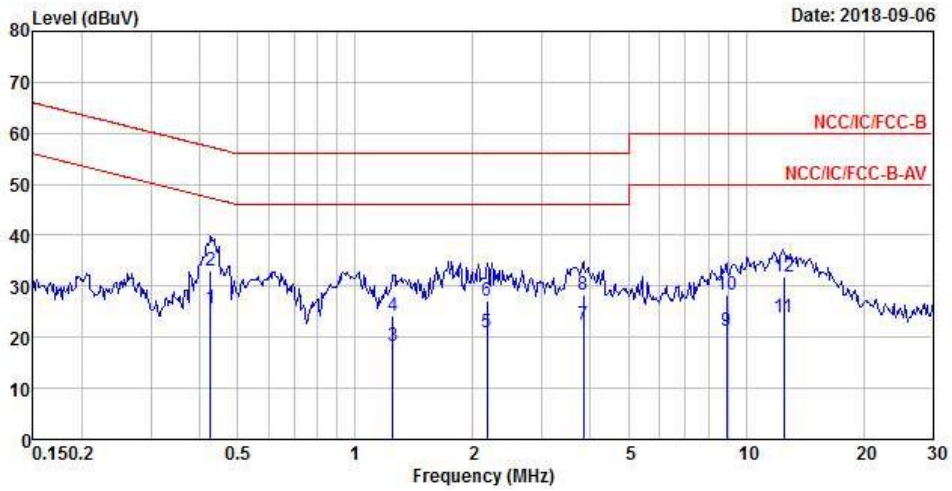
Instrument for Radiated Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	30MHz ~ 1GHz 3m	20/Oct/2017	19/Oct/2018
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz ~ 18GHz 3m	27/Oct/2017	26/Oct/2018
Amplifier	Agilent	8447D	2944A11149	100kHz ~ 1.3GHz	27Jul/2018	02/Jul/2019
Microwave Preamplifier	Agilent	8449B	3008A02373	1GHz ~ 26.5GHz	28/Sep/2017	27/Sep/2018
Spectrum Analyzer	Rohde & Schwarz	FSP40	100593	9KHz - 40GHz	12/Dec/2017	11/Dec/2018
EMI Test Receiver	Rohde & Schwarz	ESCS 30	100354	9kHz ~ 2.75GHz	08/Dec/2017	07/Dec/2018
RF Cable-R03m	Jye Bao	RG142	CB017	9kHz ~ 1GHz	19/Jan/2018	18/Jan/2019
RF Cable-high	SUHNER	SUCOFLEX104	MY34918/4	1GHz ~ 40GHz	19/Jan/2018	18/Jan/2019
Bilog Antenna	SCHAFFNER	CBL 6112B	2723	30MHz ~ 1GHz	09/Sep/2017	08/Sep/2018
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170154	18GHz ~ 40GHz	06/Feb/2018	05/Feb/2019
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120D	BBHA 9120 D 1531	1GHz ~ 18GHz	18/Apr/ 2018	17/Apr/2019
Preamplifier	MITEQ	TTA1840-35-HG	1864481	18GHz ~ 40GHz	24/Aug/2018	23/Aug/2019
Loop Antenna	TESEQ	HLA 6120	31244	9k-30MHz	29/Mar/2018	28/Mar/2019
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170221	15GHz ~ 40GHz	12/Mar/2018	11/Mar/2019
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 01543	1GHz ~ 18GHz	11/May/2018	10/May/2019

Instrument for Conducted Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101013	9kHz~40GHz	04/Jan/2018	03/Jan/2019
Power Sensor	Anritsu	MA2411B	0917017	300MHz ~ 40GHz	05/Feb/2018	04/Feb/2019
Power Meter	Anritsu	ML2495A	0949003	300MHz ~ 40GHz	10/Feb/2017	09/Feb/2018
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY10710/4	30MHz ~ 26.5GHz	23/Aug/2018	22/Aug/2019
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY10709/4	30MHz ~ 26.5GHz	23/Aug/2018	22/Aug/2019
RF Cable-0.5m	HUBER+SUHNER	SUCOFLEX_104	MY10713/4	30MHz ~ 26.5GHz	23/Aug/2018	22/Aug/2019
Signal Generator	R&S	SMR100A	175727	10kHz ~ 40GHz	26/Oct/2017	25/Oct/2018

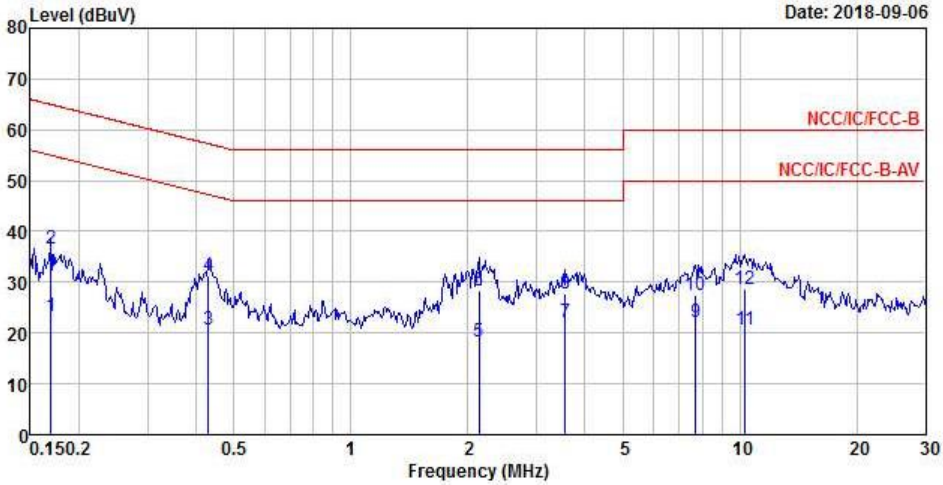
AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	Neutral
Operating Function	USB Mode		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1 MAX	0.43	25.76	-21.57	47.33	16.06	9.61	0.09	Average
2	0.43	32.95	-24.38	57.33	23.25	9.61	0.09	QP
3	1.25	18.18	-27.82	46.00	8.56	9.62	0.00	Average
4	1.25	24.14	-31.86	56.00	14.52	9.62	0.00	QP
5	2.18	21.05	-24.95	46.00	11.41	9.63	0.01	Average
6	2.18	27.17	-28.83	56.00	17.53	9.63	0.01	QP
7	3.84	22.55	-23.45	46.00	12.83	9.64	0.08	Average
8	3.84	28.19	-27.81	56.00	18.47	9.64	0.08	QP
9	8.92	21.23	-28.77	50.00	11.36	9.68	0.19	Average
10	8.92	28.34	-31.66	60.00	18.47	9.68	0.19	QP
11	12.52	23.93	-26.07	50.00	14.14	9.70	0.09	Average
12	12.52	31.96	-28.04	60.00	22.17	9.70	0.09	QP

Note 1: “>20dB” means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found emissions (No emissions were detected.)

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



		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1		0.17	23.37	-31.62	54.99	13.73	9.62	0.02	Average
2		0.17	36.57	-28.42	64.99	26.93	9.62	0.02	QP
3		0.43	20.52	-26.72	47.24	10.82	9.61	0.09	Average
4		0.43	31.22	-26.02	57.24	21.52	9.61	0.09	QP
5		2.13	18.25	-27.75	46.00	8.62	9.62	0.01	Average
6		2.13	28.23	-27.77	56.00	18.60	9.62	0.01	QP
7	MAX	3.57	22.06	-23.94	46.00	12.36	9.63	0.07	Average
8		3.57	27.61	-28.39	56.00	17.91	9.63	0.07	QP
9		7.69	22.28	-27.72	50.00	12.46	9.65	0.17	Average
10		7.69	27.46	-32.54	60.00	17.64	9.65	0.17	QP
11		10.34	20.81	-29.19	50.00	10.97	9.66	0.18	Average
12		10.34	28.61	-31.39	60.00	18.77	9.66	0.18	QP

Note 1: “>20dB” means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found emissions (No emissions were detected.)

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)	877.5k	853.323k	853KF1D	875k	845.827k
BT-EDR(2Mbps)	1.316M	1.194M	1M19G1D	1.309M	1.188M
BT-EDR(3Mbps)	1.284M	1.206M	1M21G1D	1.278M	1.201M

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;

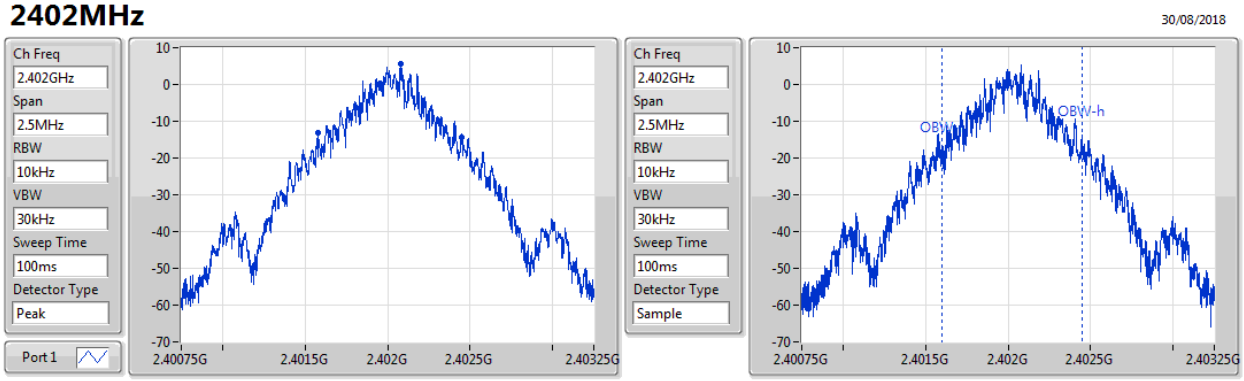
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-BR(1Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	Inf	875k	845.827k
2441MHz_TnomVnom	Pass	Inf	876.25k	853.323k
2480MHz_TnomVnom	Pass	Inf	877.5k	853.323k
BT-EDR(2Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	Inf	1.316M	1.192M
2441MHz_TnomVnom	Pass	Inf	1.315M	1.188M
2480MHz_TnomVnom	Pass	Inf	1.309M	1.194M
BT-EDR(3Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	Inf	1.284M	1.201M
2441MHz_TnomVnom	Pass	Inf	1.284M	1.202M
2480MHz_TnomVnom	Pass	Inf	1.278M	1.206M

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

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

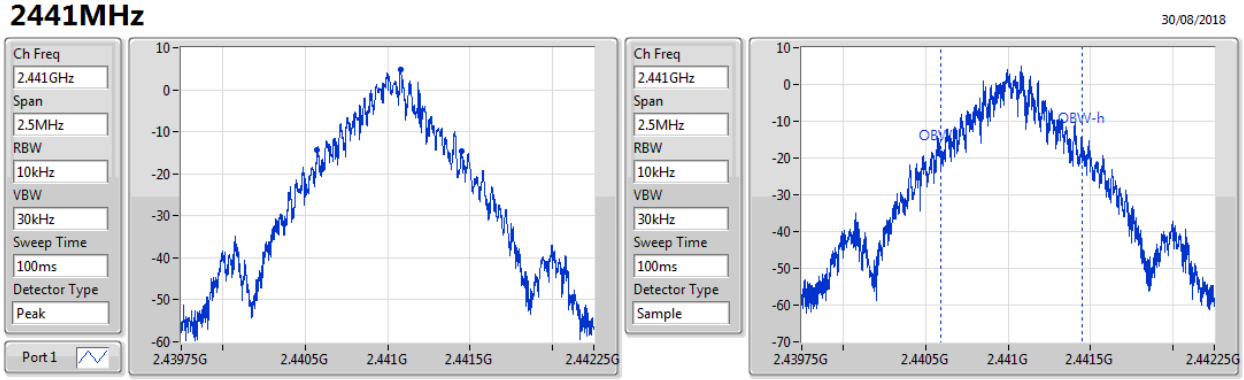
2402MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
875k	2.401576G	2.402451G	845.827k	2.4016G	2.402446G	Inf	1

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

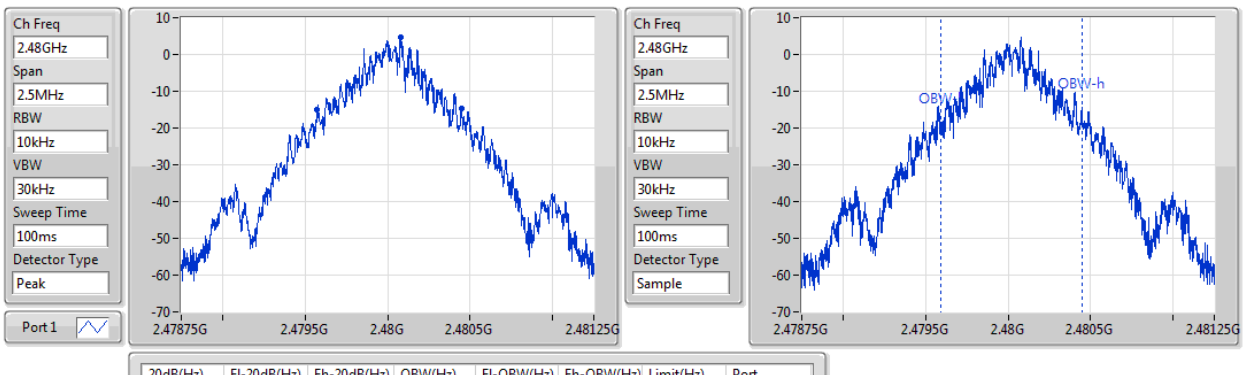
2441MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
876.25k	2.440574G	2.44145G	853.323k	2.440593G	2.441446G	Inf	1

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

2480MHz

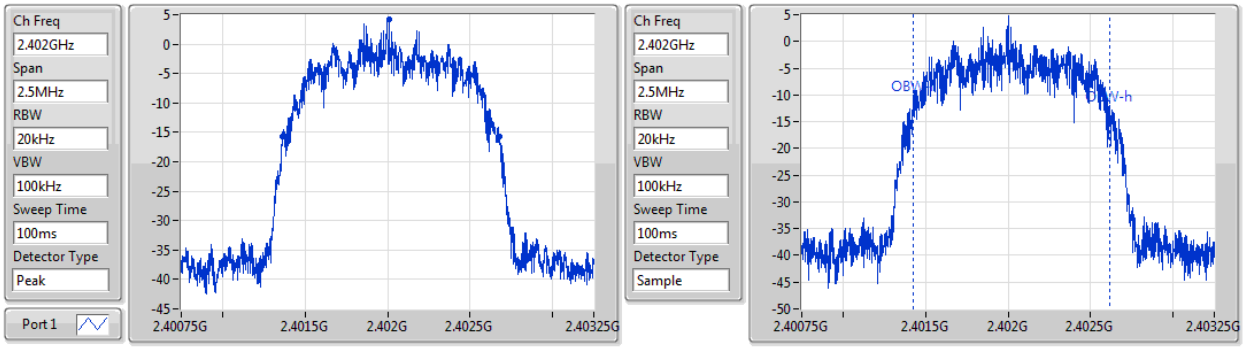


20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
877.5k	2.479573G	2.48045G	853.323k	2.479594G	2.480447G	Inf	1

BT-EDR(2Mbps) **EBW**

2402MHz

30/08/2018

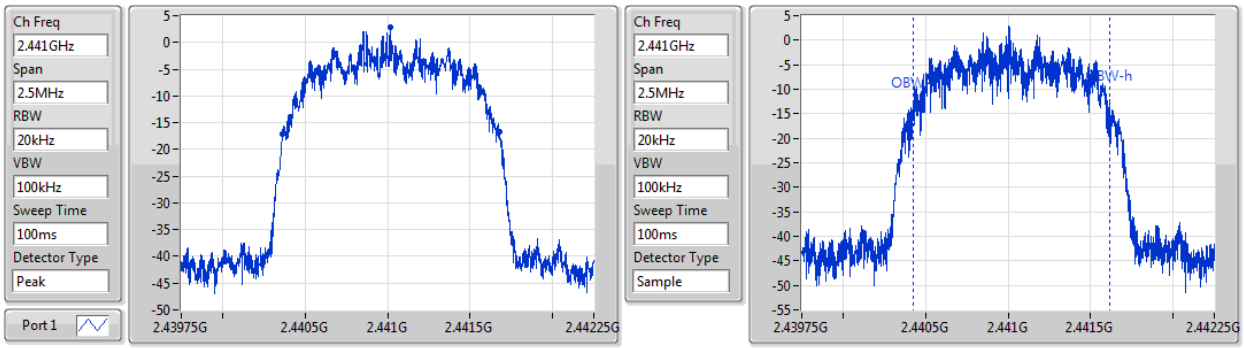


20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.316M	2.401363G	2.402679G	1.192M	2.401427G	2.402618G	Inf	1

BT-EDR(2Mbps) **EBW**

2441MHz

30/08/2018

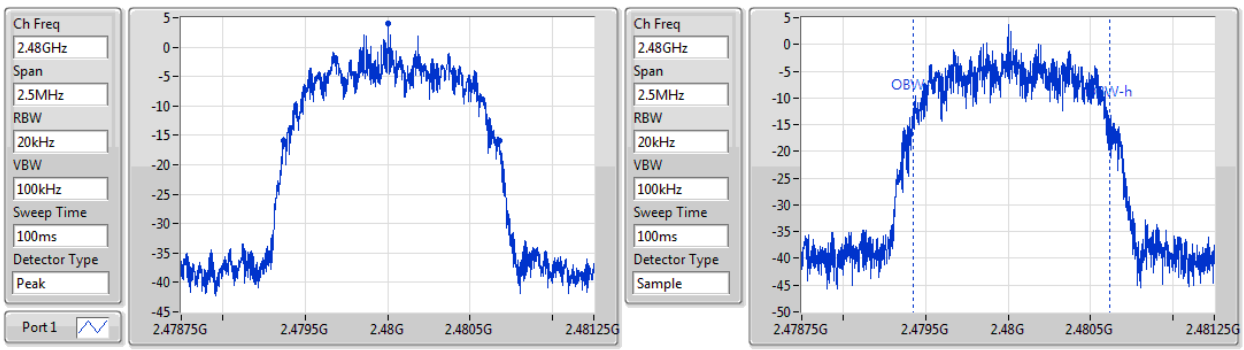


20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.315M	2.440364G	2.441679G	1.188M	2.440427G	2.441615G	Inf	1

BT-EDR(2Mbps) **EBW**

2480MHz

30/08/2018

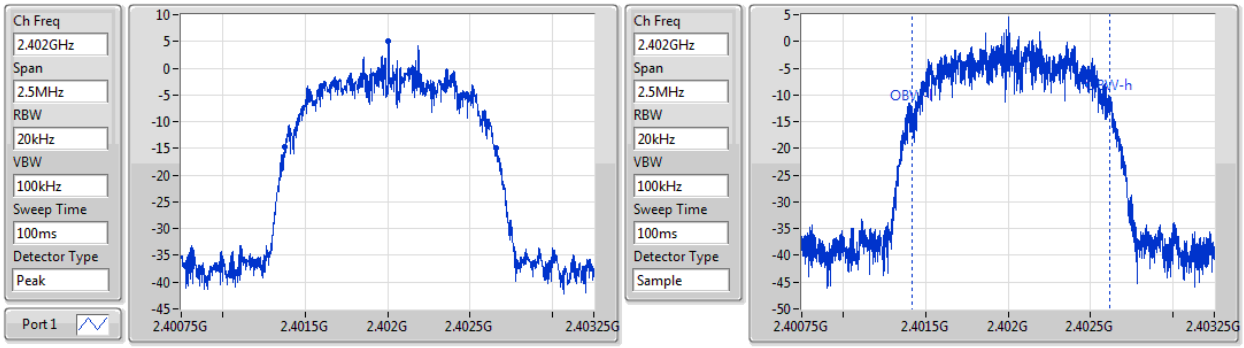


20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.309M	2.479368G	2.480676G	1.194M	2.479425G	2.48062G	Inf	1

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

2402MHz

30/08/2018

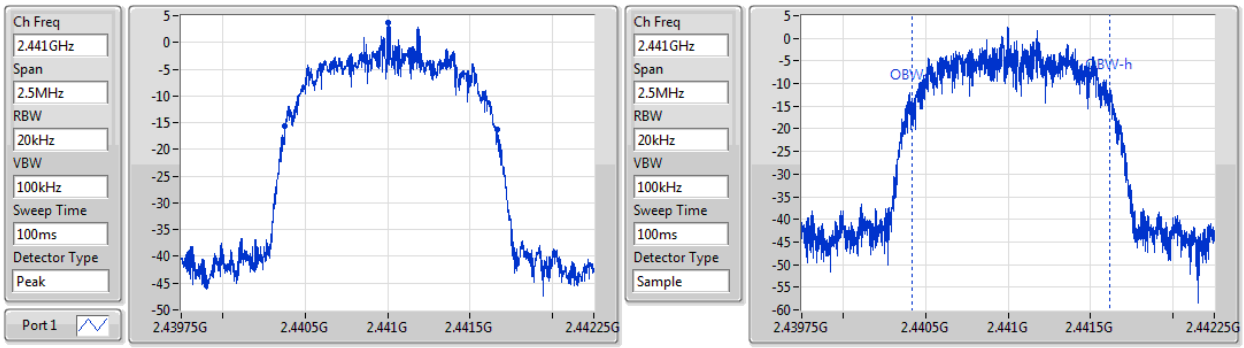


20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.284M	2.401376G	2.40266G	1.201M	2.401419G	2.40262G	Inf	1

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

2441MHz

30/08/2018

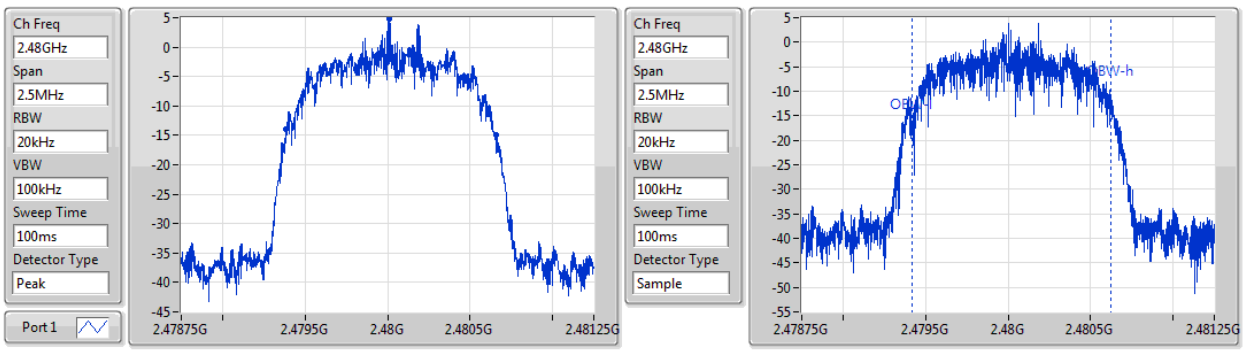


20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.284M	2.440379G	2.441663G	1.202M	2.440417G	2.441618G	Inf	1

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

2480MHz

30/08/2018



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.278M	2.479383G	2.48066G	1.206M	2.479417G	2.480622G	Inf	1

Summary

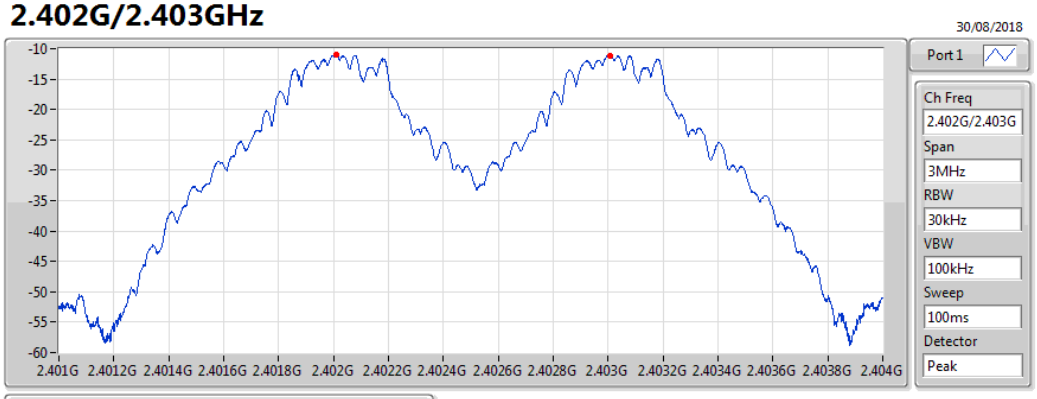
Mode	Max-Space (Hz)	Min-Space (Hz)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	1.002M	997.5k
BT-EDR(2Mbps)	1.005M	1.0005M
BT-EDR(3Mbps)	1.0005M	999k

Result

Mode	Result	Fl (Hz)	Fh (Hz)	Ch.Space (Hz)	Limit (Hz)
BT-BR(1Mbps)	-	-	-	-	-
2402MHz_TnomVnom	Pass	2.402011G	2.403009G	997.5k	582.75k
2441MHz_TnomVnom	Pass	2.44101G	2.442009G	999k	583.5825k
2480MHz_TnomVnom	Pass	2.47901G	2.480012G	1.002M	584.415k
BT-EDR(2Mbps)	-	-	-	-	-
2402MHz_TnomVnom	Pass	2.40201G	2.403012G	1.002M	876.456k
2441MHz_TnomVnom	Pass	2.44101G	2.442015G	1.005M	875.79k
2480MHz_TnomVnom	Pass	2.479011G	2.480012G	1.0005M	871.794k
BT-EDR(3Mbps)	-	-	-	-	-
2402MHz_TnomVnom	Pass	2.402011G	2.40301G	999k	855.144k
2441MHz_TnomVnom	Pass	2.441011G	2.442012G	1.0005M	855.144k
2480MHz_TnomVnom	Pass	2.47901G	2.48001G	1.0005M	851.148k

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

2.402G/2.403GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.402011G	2.403009G	997.5k	582.75k

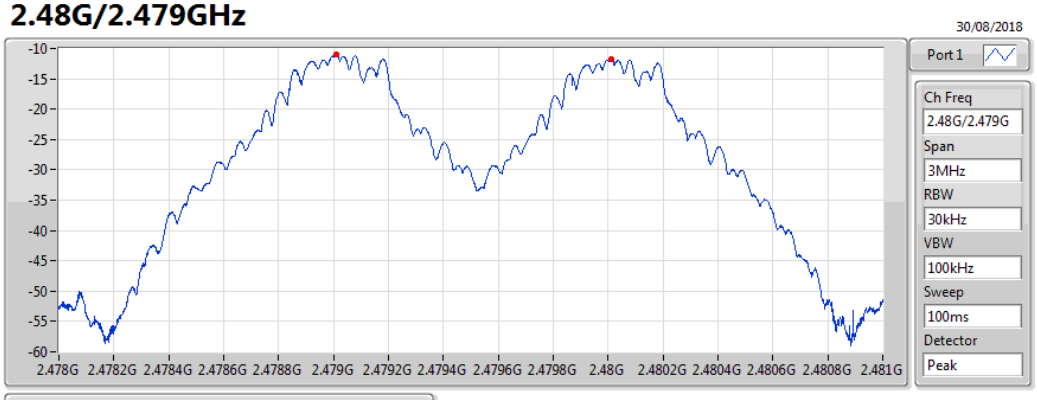
BT-BR(1Mbps) **Channel Separation**

2.441G/2.442GHz

Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.44101G	2.442009G	999k	583.5825k

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

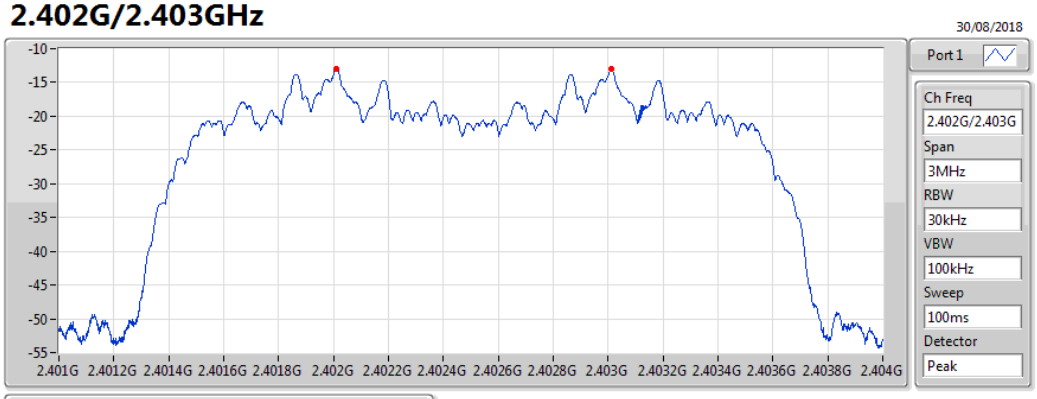
2.48G/2.479GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.47901G	2.480012G	1.002M	584.415k

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

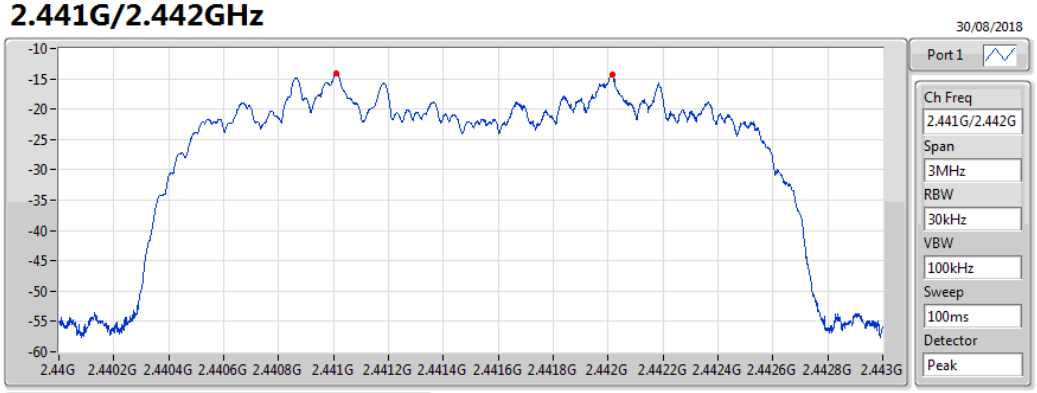
2.402G/2.403GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.40201G	2.403012G	1.002M	876.456k

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

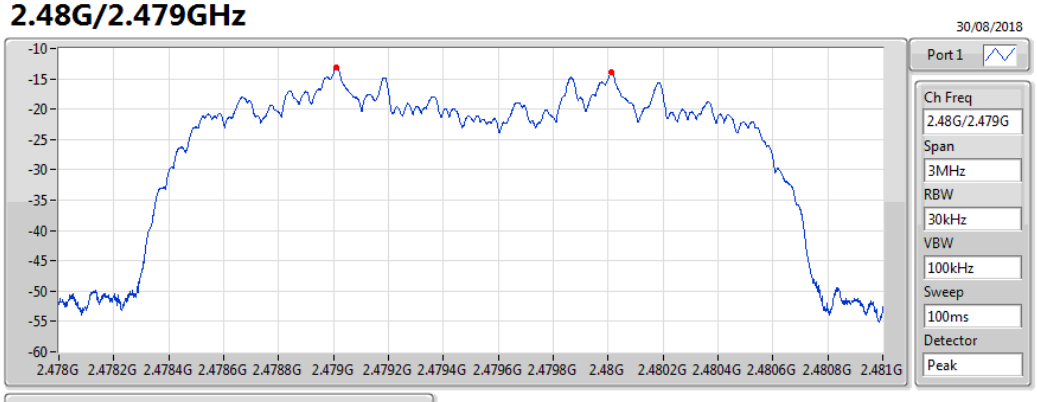
2.441G/2.442GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.44101G	2.442015G	1.005M	875.79k

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

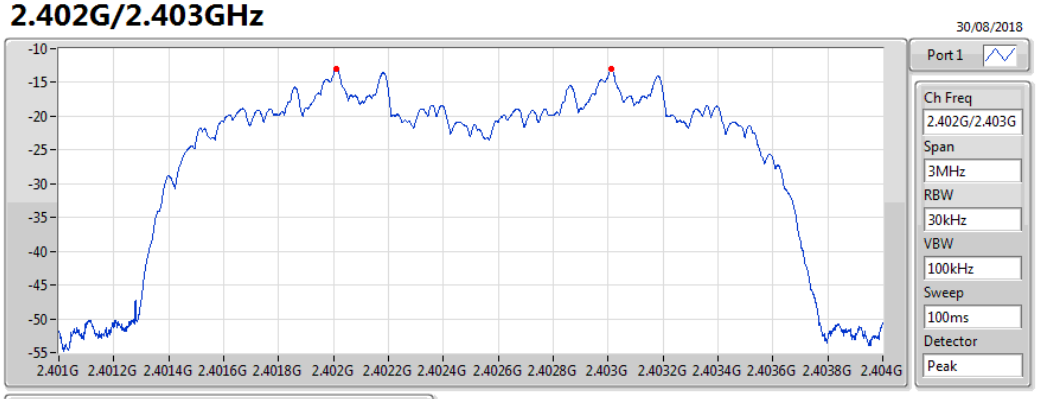
2.48G/2.479GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.479011G	2.480012G	1.0005M	871.794k

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

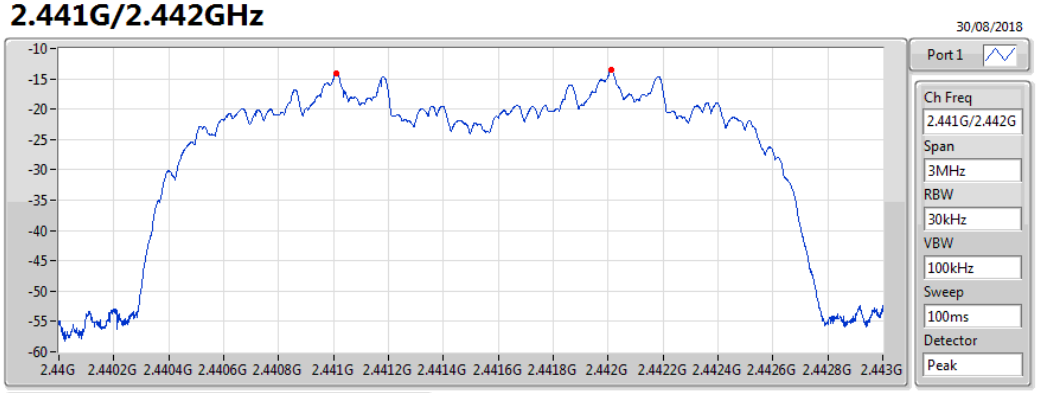
2.402G/2.403GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.402011G	2.40301G	999k	855.144k

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

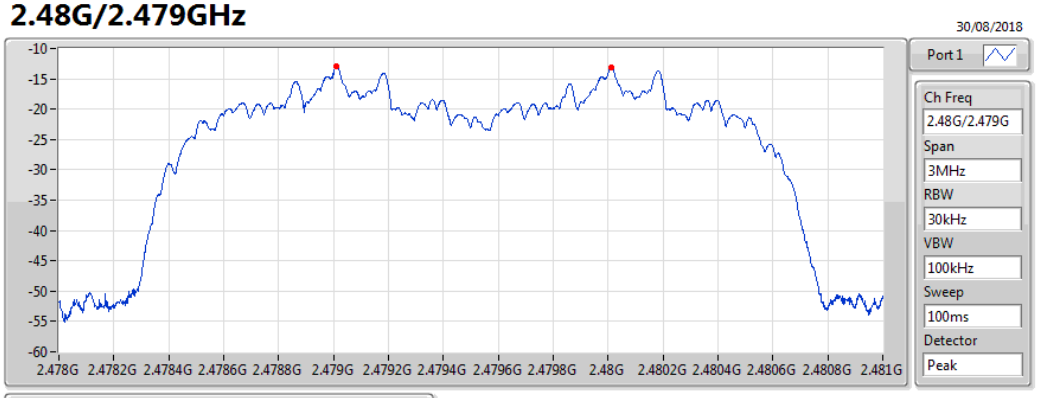
2.441G/2.442GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.441011G	2.442012G	1.0005M	855.144k

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

2.48G/2.479GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.47901G	2.48001G	1.0005M	851.148k

Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	11.53	0.01422
BT-EDR(2Mbps)	10.75	0.01189
BT-EDR(3Mbps)	11.08	0.01282

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	1.40	11.53	21.00
2441MHz_TnomVnom	Pass	1.40	10.73	21.00
2480MHz_TnomVnom	Pass	1.40	10.58	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	1.40	10.75	21.00
2441MHz_TnomVnom	Pass	1.40	9.96	21.00
2480MHz_TnomVnom	Pass	1.40	9.85	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	1.40	11.08	21.00
2441MHz_TnomVnom	Pass	1.40	10.36	21.00
2480MHz_TnomVnom	Pass	1.40	10.95	21.00

Summary

Mode	Power	Power
	(dBm)	(W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	11.22	0.01324
BT-EDR(2Mbps)	8.52	0.00711
BT-EDR(3Mbps)	8.54	0.00714

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	1.40	11.22	21.00
2441MHz_TnomVnom	Pass	1.40	10.44	21.00
2480MHz_TnomVnom	Pass	1.40	10.18	21.00
BT-EDR(2Mbps)	-	-	-	
2402MHz_TnomVnom	Pass	1.40	8.52	21.00
2441MHz_TnomVnom	Pass	1.40	7.42	21.00
2480MHz_TnomVnom	Pass	1.40	7.56	21.00
BT-EDR(3Mbps)	-	-	-	
2402MHz_TnomVnom	Pass	1.40	8.54	21.00
2441MHz_TnomVnom	Pass	1.40	7.56	21.00
2480MHz_TnomVnom	Pass	1.40	8.39	21.00

Summary

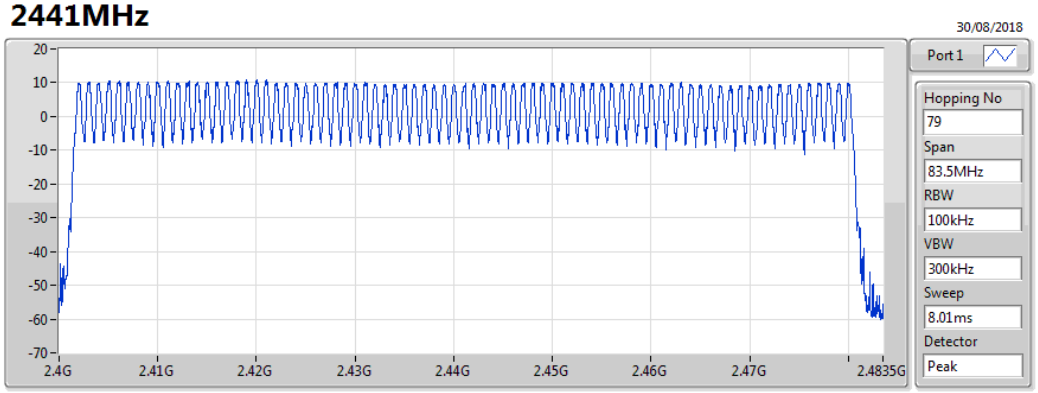
Mode	Max-Hop No
2.4-2.4835GHz	-
BT-BR(1Mbps)	79
BT-EDR(2Mbps)	79
BT-EDR(3Mbps)	79

Result

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

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

2441MHz

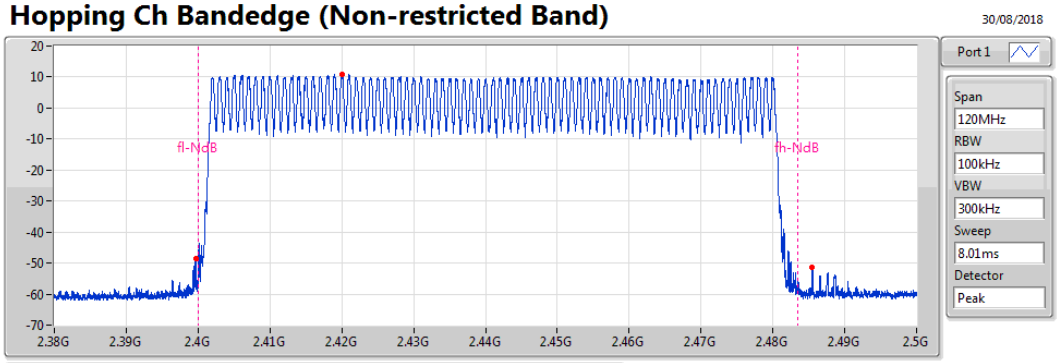


Hopping No	Limit
79	15

BT-BR(1Mbps)

2441MHz

Hopping Ch Bandedge (Non-restricted Band)

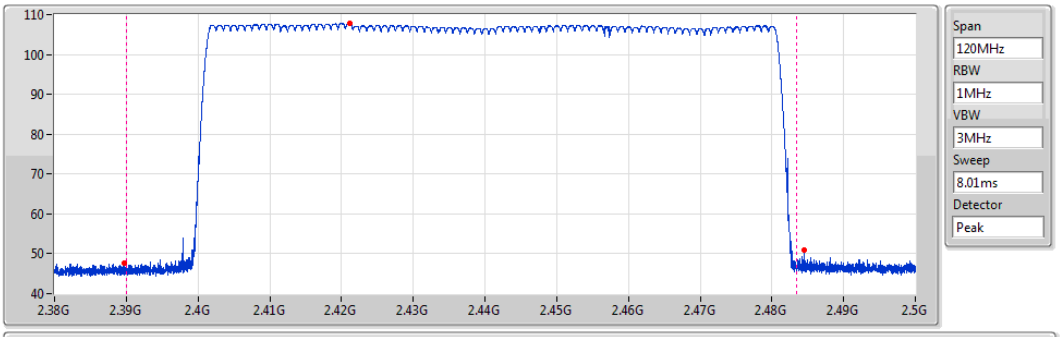


Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-8.99	2.42002G	11.01	2.39965G	-48.47	2.485495G	-51.39

BT-BR(1Mbps)

2441MHz

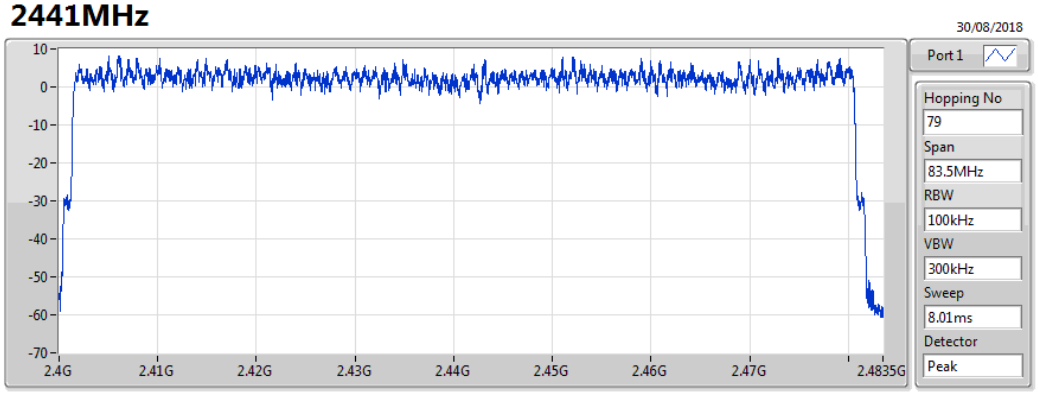
Hopping Ch Bandedge (Restricted Band)



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)
2.421145G	107.79	2.38969G	47.7	17.6	2.48452G	50.82	20.72	74	54	3.125	-30.1

BT-EDR(2Mbps) **Hopping Ch**

2441MHz

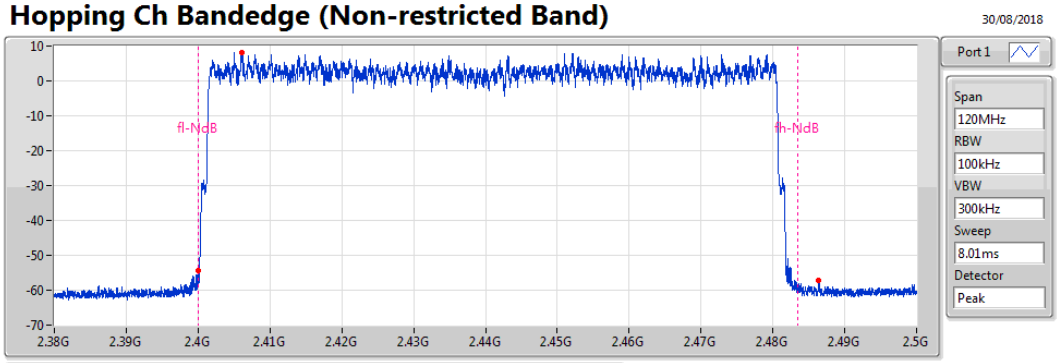


Hopping No	Limit
79	15

BT-EDR(2Mbps)

2441MHz

Hopping Ch Bandedge (Non-restricted Band)

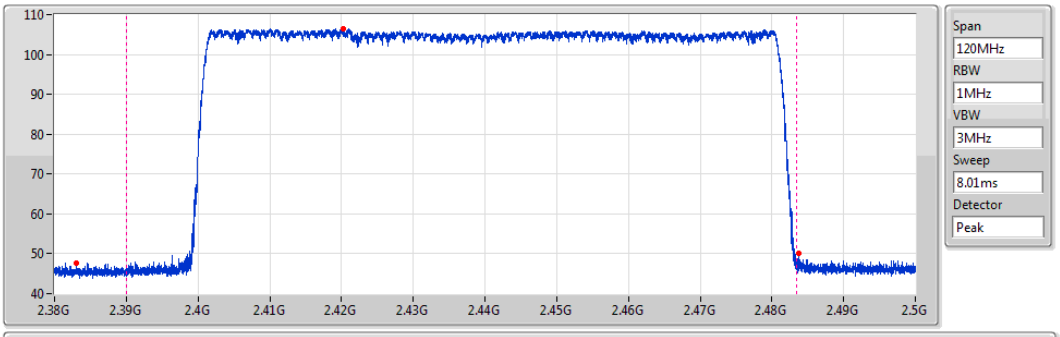


Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-11.77	2.406025G	8.23	2.399995G	-54.33	2.48641G	-57.09

BT-EDR(2Mbps)

2441MHz

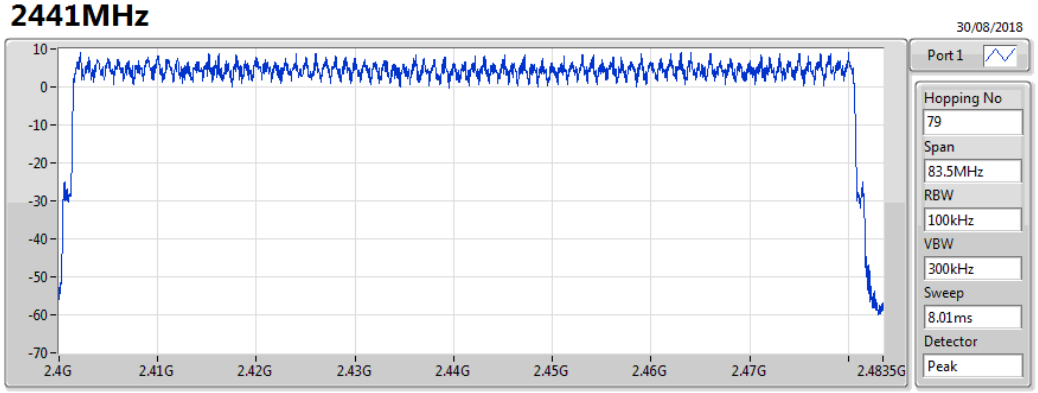
Hopping Ch Bandedge (Restricted Band)



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)
2.420185G	106.41	2.38303G	47.68	17.58	2.48368G	50.14	20.04	74	54	3.125	-30.1

BT-EDR(3Mbps) **Hopping Ch**

2441MHz

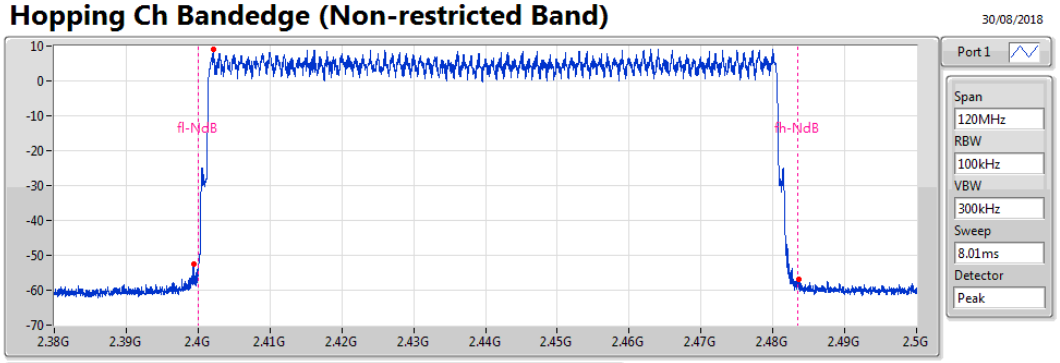


Hopping No	Limit
79	15

BT-EDR(3Mbps)

2441MHz

Hopping Ch Bandedge (Non-restricted Band)

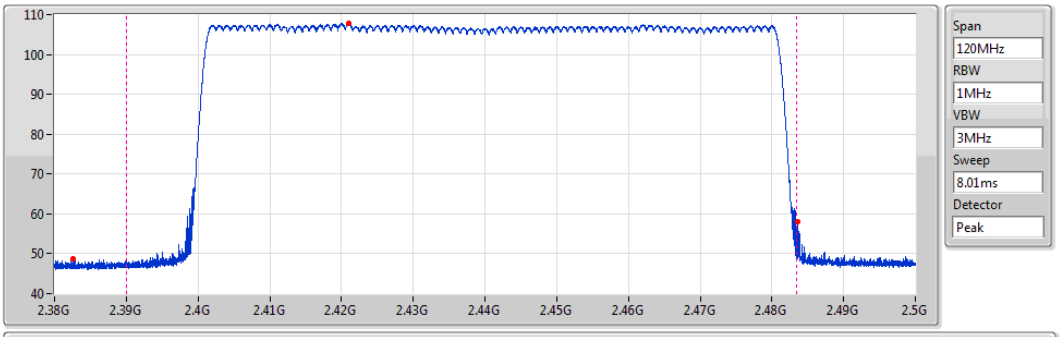


Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-10.8	2.40217G	9.2	2.39935G	-52.35	2.483545G	-56.79

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)
2.42101G	107.76	2.38264G	48.7	18.6	2.48362G	58.18	28.08	74	54	3.125	-30.1

Summary

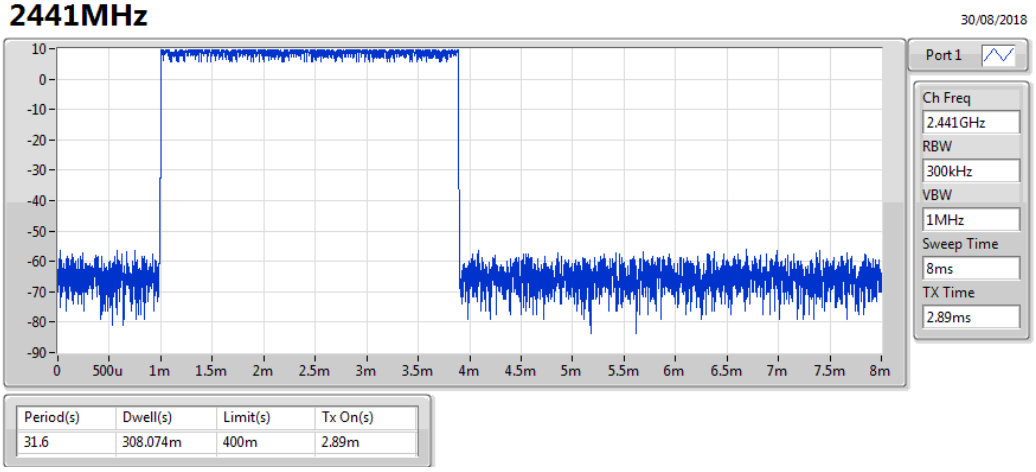
Mode	Max-Dwell (s)
2.4-2.4835GHz	-
BT-BR(1Mbps)	308.074m
BT-EDR(2Mbps)	308.2872m
BT-EDR(3Mbps)	308.3938m

Result

Mode	Result	Period (s)	Dwell (s)	Limit (s)	Tx On (s)
BT-BR(1Mbps)	-	-	-	-	-
2441MHz_TnomVnom	Pass	31.6	308.074m	400m	2.89m
BT-EDR(2Mbps)	-	-	-	-	-
2441MHz_TnomVnom	Pass	31.6	308.2872m	400m	2.892m
BT-EDR(3Mbps)	-	-	-	-	-
2441MHz_TnomVnom	Pass	31.6	308.3938m	400m	2.893m

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

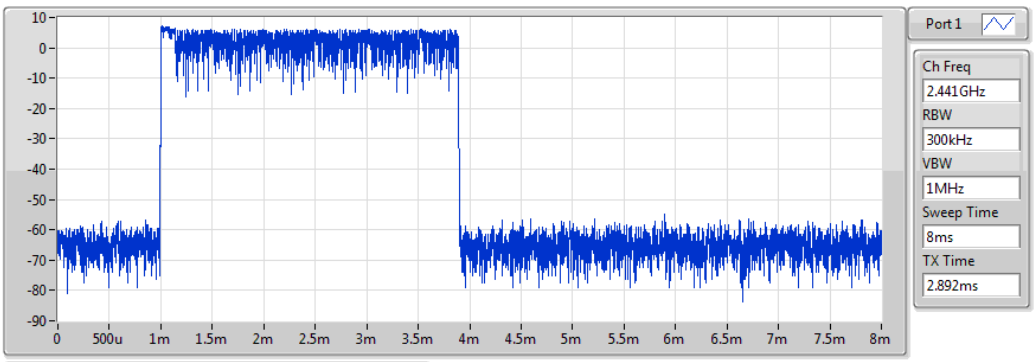
2441MHz



Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	308.074m	400m	2.89m

BT-EDR(2Mbps) **Dwell**

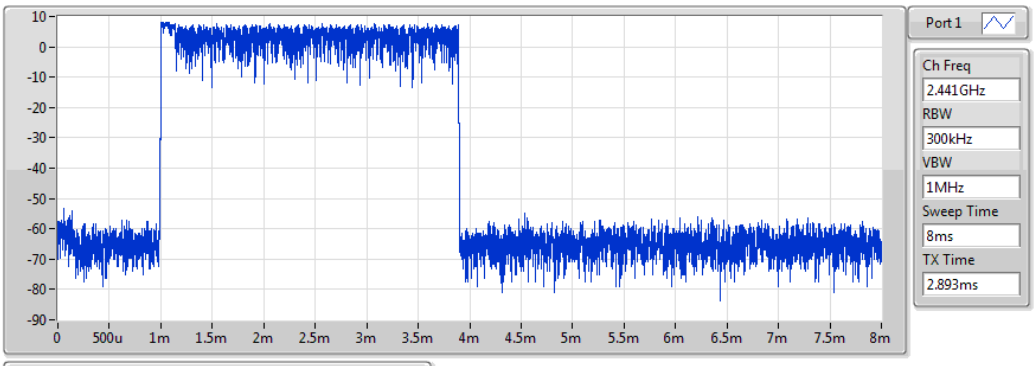
2441MHz



Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	308.2872m	400m	2.892m

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

2441MHz



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

Summary

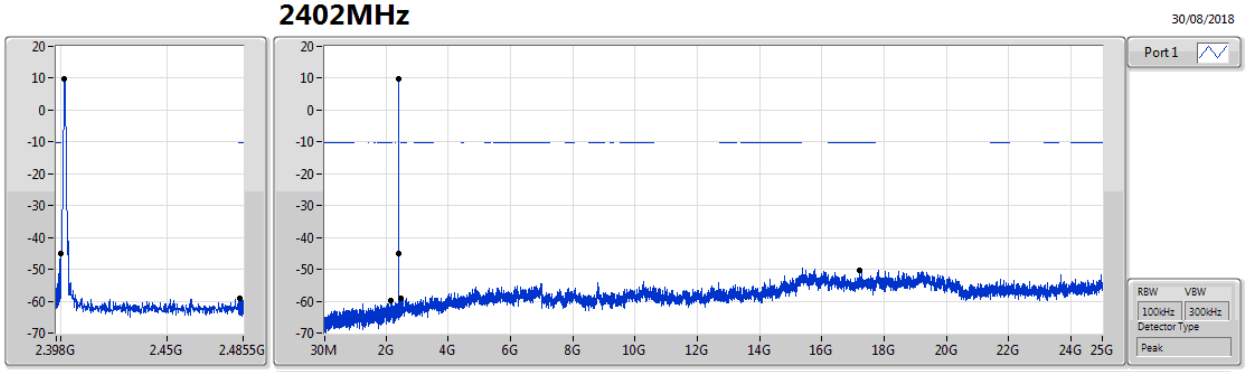
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-
BT-BR(1Mbps)	Pass	2.401837G	9.70	-10.30	2.144624G	-59.80	2.39998G	-44.94	2.48382G	-59.12	17.215612G	-50.15	1
BT-EDR(2Mbps)	Pass	2.402004G	6.96	-13.04	2.396816G	-58.93	2.39998G	-46.97	2.485472G	-57.76	16.413533G	-50.06	1
BT-EDR(3Mbps)	Pass	2.402171G	9.28	-10.72	2.112656G	-59.23	2.399968G	-47.00	2.48432G	-57.76	17.361956G	-51.03	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_TnomVnom	Pass	2.401837G	9.70	-10.30	2.144624G	-59.80	2.39998G	-44.94	2.48382G	-59.12	17.215612G	-50.15	1
2441MHz_TnomVnom	Pass	2.441249G	10.54	-9.46	2.164752G	-60.72	2.399636G	-59.66	2.48408G	-58.19	15.293436G	-50.27	1
2480MHz_TnomVnom	Pass	2.48016G	9.88	-10.12	2.03688G	-60.80	2.399496G	-59.62	2.483684G	-56.52	16.430418G	-50.77	1
BT-EDR(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz_TnomVnom	Pass	2.402004G	6.96	-13.04	2.396816G	-58.93	2.39998G	-46.97	2.485472G	-57.76	16.413533G	-50.06	1
2441MHz_TnomVnom	Pass	2.441249G	4.73	-15.27	1.808368G	-59.13	2.398128G	-59.23	2.484176G	-58.80	16.658378G	-50.94	1
2480MHz_TnomVnom	Pass	2.479993G	5.24	-14.76	2.390896G	-59.73	2.39802G	-59.23	2.484852G	-56.33	15.346908G	-50.53	1
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz_TnomVnom	Pass	2.402171G	9.28	-10.72	2.112656G	-59.23	2.399968G	-47.00	2.48432G	-57.76	17.361956G	-51.03	1
2441MHz_TnomVnom	Pass	2.440915G	5.73	-14.27	1.790608G	-60.43	2.398224G	-59.94	2.483912G	-58.77	17.285969G	-50.98	1
2480MHz_TnomVnom	Pass	2.48016G	9.01	-10.99	2.145808G	-59.24	2.399428G	-59.22	2.483676G	-55.44	17.544886G	-50.67	1

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

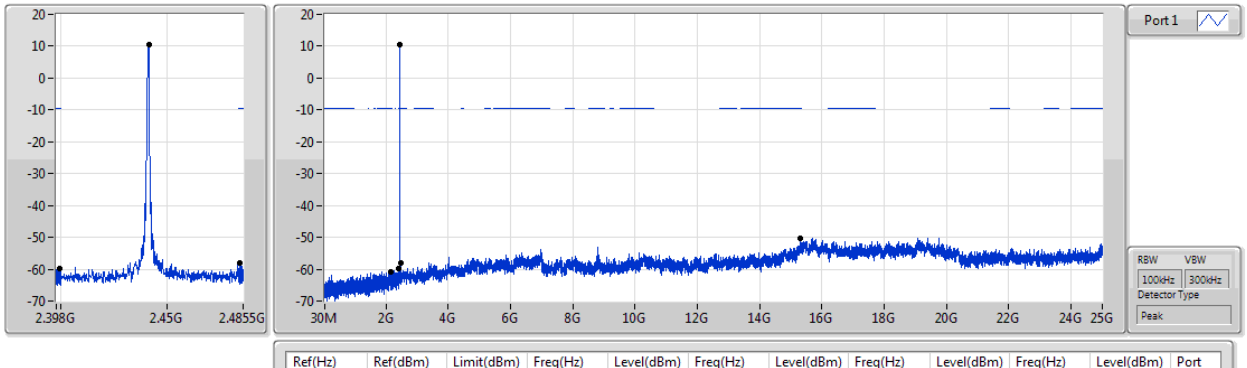
2402MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.401837G	9.70	-10.30	2.144624G	-59.80	2.39998G	-44.94	2.48382G	-59.12	17.215612G	-50.15	1

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

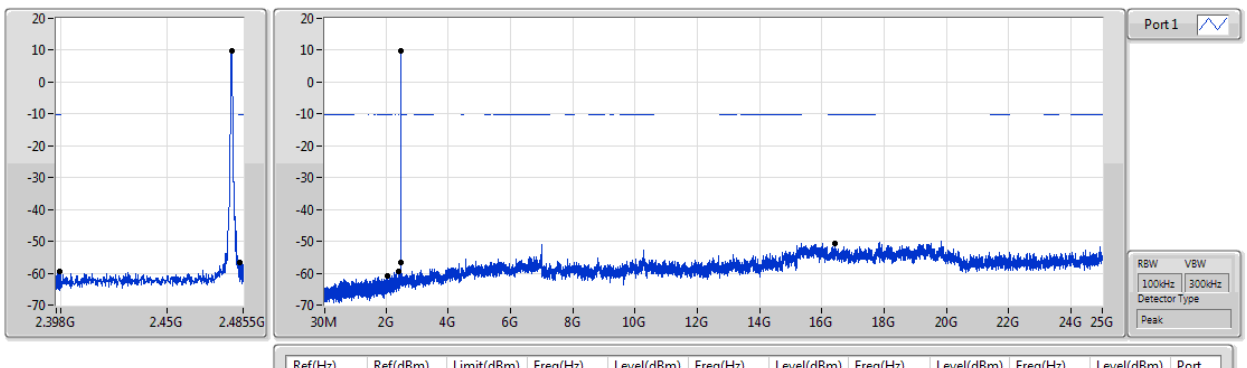
2441MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.441249G	10.54	-9.46	2.164752G	-60.72	2.399636G	-59.66	2.48408G	-58.19	15.293436G	-50.27	1

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

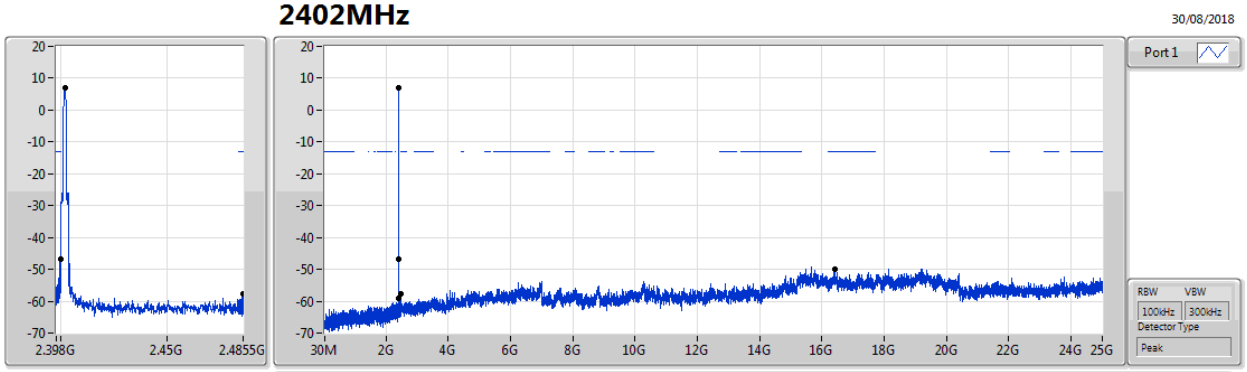
2480MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.48016G	9.88	-10.12	2.03688G	-60.80	2.399496G	-59.62	2.483684G	-56.52	16.430418G	-50.77	1

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

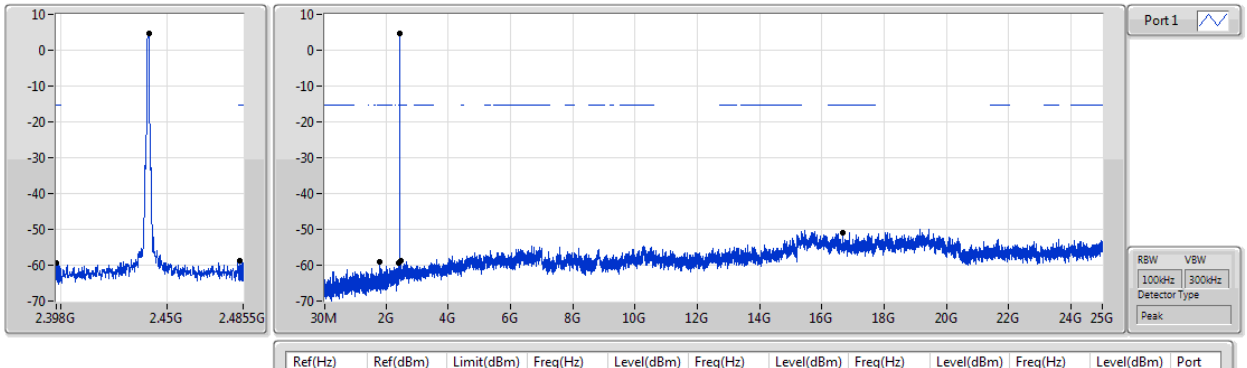
2402MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.402004G	6.96	-13.04	2.396816G	-58.93	2.39998G	-46.97	2.485472G	-57.76	16.413533G	-50.06	1

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

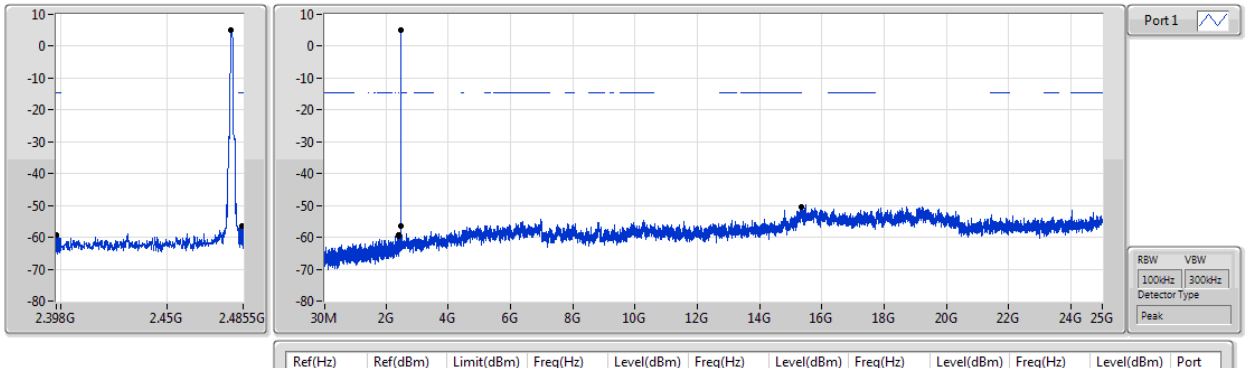
2441MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.441249G	4.73	-15.27	1.808368G	-59.13	2.398128G	-59.23	2.484176G	-58.80	16.658378G	-50.94	1

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

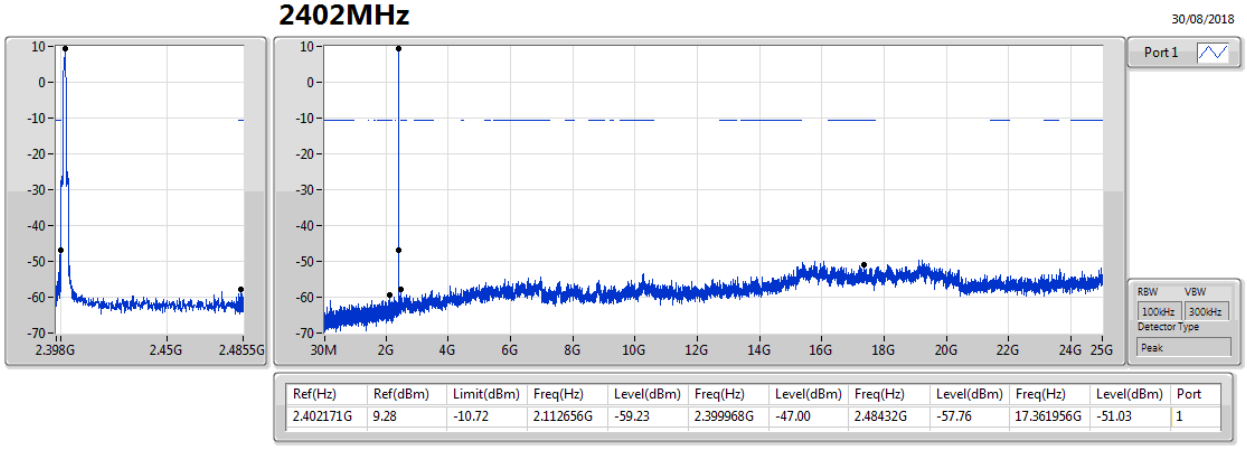
2480MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.479993G	5.24	-14.76	2.390896G	-59.73	2.39802G	-59.23	2.484852G	-56.33	15.346908G	-50.53	1

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

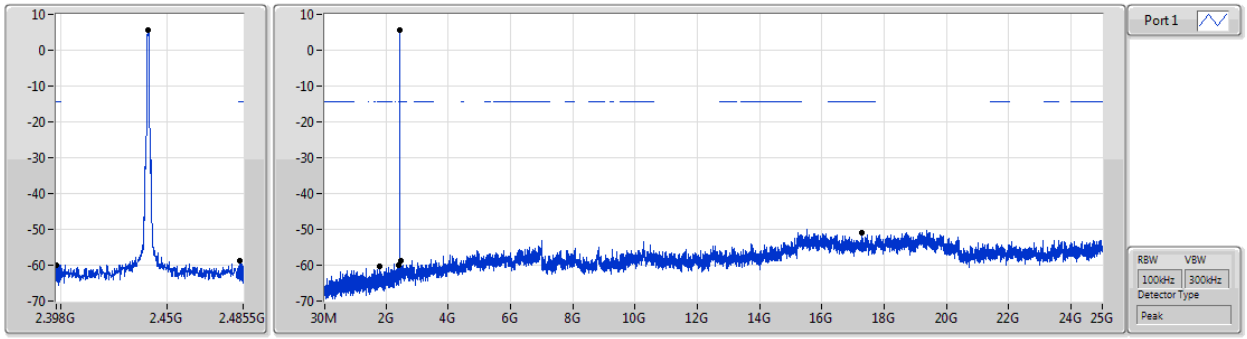
2402MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.402171G	9.28	-10.72	2.112656G	-59.23	2.399968G	-47.00	2.48432G	-57.76	17.361956G	-51.03	1

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

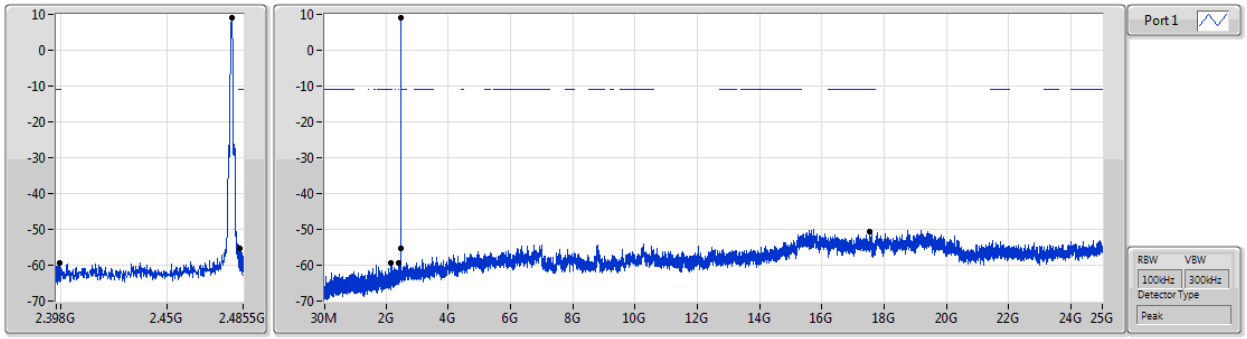
2441MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.440915G	5.73	-14.27	1.790608G	-60.43	2.398224G	-59.94	2.483912G	-58.77	17.285969G	-50.98	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
2.48016G	9.01	-10.99	2.145808G	-59.24	2.399428G	-59.22	2.483676G	-55.44	17.544886G	-50.67	1

Summary

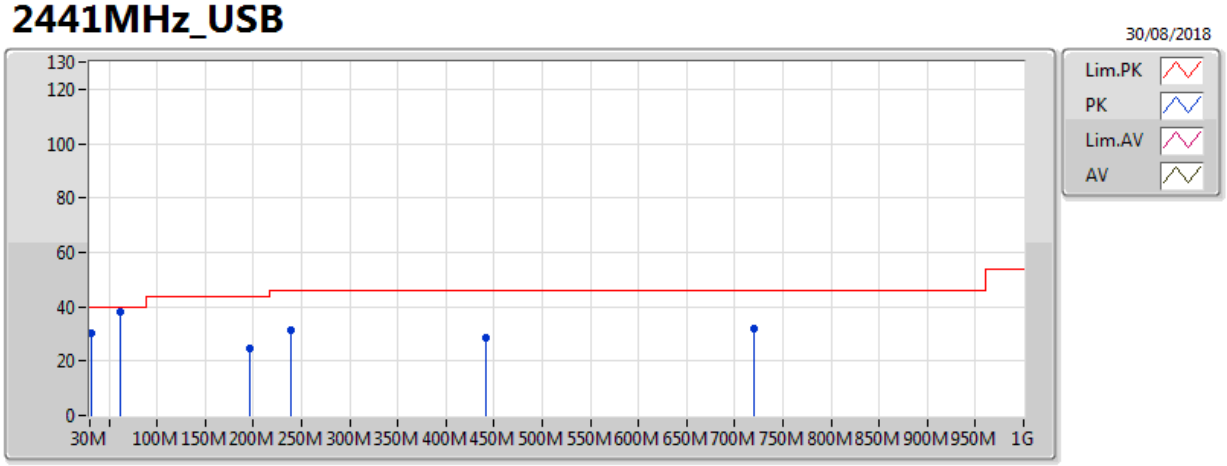
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-
BT-BR(1Mbps)	Pass	PK	61.04M	37.96	40.00	-2.04	-15.33	3	Vertical	0	1.00	-

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	Pass	PK	31.94M	30.53	40.00	-9.47	-5.45	3	Vertical	0	1.00	-
2441MHz	Pass	PK	61.04M	37.96	40.00	-2.04	-15.33	3	Vertical	0	1.00	-
2441MHz	Pass	PK	196.84M	24.67	43.50	-18.83	-10.68	3	Vertical	0	1.00	-
2441MHz	Pass	PK	239.52M	31.35	46.00	-14.65	-8.07	3	Vertical	0	1.00	-
2441MHz	Pass	PK	441.28M	28.46	46.00	-17.54	-2.96	3	Vertical	0	1.00	-
2441MHz	Pass	PK	720.64M	32.06	46.00	-13.94	0.37	3	Vertical	0	1.00	-
2441MHz	Pass	PK	31.94M	27.55	40.00	-12.45	-5.45	3	Horizontal	360	1.00	-
2441MHz	Pass	PK	61.04M	30.09	40.00	-9.91	-15.33	3	Horizontal	360	1.00	-
2441MHz	Pass	PK	196.84M	32.26	43.50	-11.24	-10.68	3	Horizontal	360	1.00	-
2441MHz	Pass	PK	239.52M	37.87	46.00	-8.13	-8.07	3	Horizontal	360	1.00	-
2441MHz	Pass	PK	313.24M	31.87	46.00	-14.13	-5.39	3	Horizontal	360	1.00	-
2441MHz	Pass	PK	720.64M	36.82	46.00	-9.18	0.37	3	Horizontal	360	1.00	-

BT-BR(1Mbps)

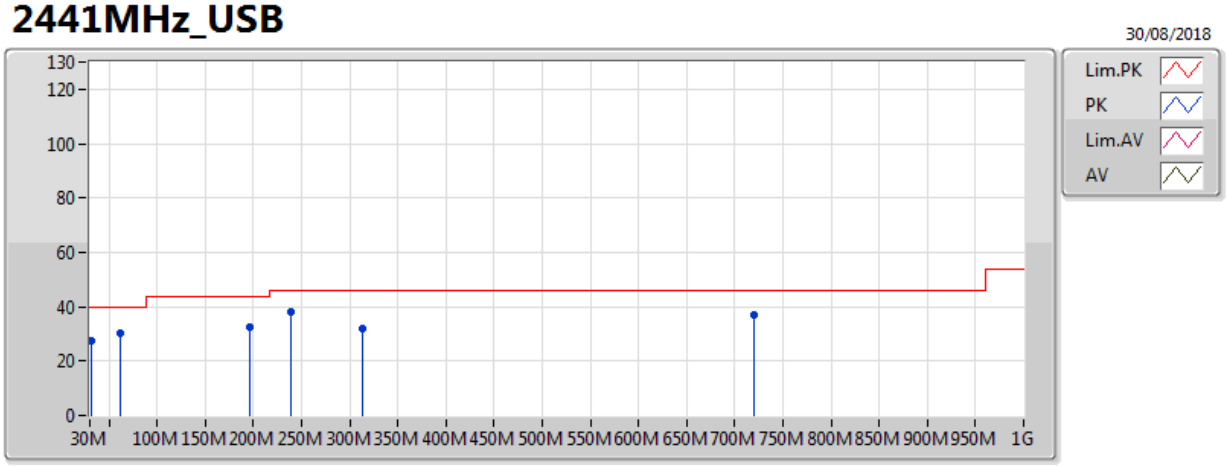
2441MHz_USB



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	31.94M	30.53	40.00	-9.47	-5.45	3	Vertical	0	1.00	-
PK	61.04M	37.96	40.00	-2.04	-15.33	3	Vertical	0	1.00	-
PK	196.84M	24.67	43.50	-18.83	-10.68	3	Vertical	0	1.00	-
PK	239.52M	31.35	46.00	-14.65	-8.07	3	Vertical	0	1.00	-
PK	441.28M	28.46	46.00	-17.54	-2.96	3	Vertical	0	1.00	-
PK	720.64M	32.06	46.00	-13.94	0.37	3	Vertical	0	1.00	-

BT-BR(1Mbps)

2441MHz_USB



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	31.94M	27.55	40.00	-12.45	-5.45	3	Horizontal	360	1.00	-
PK	61.04M	30.09	40.00	-9.91	-15.33	3	Horizontal	360	1.00	-
PK	196.84M	32.26	43.50	-11.24	-10.68	3	Horizontal	360	1.00	-
PK	239.52M	37.87	46.00	-8.13	-8.07	3	Horizontal	360	1.00	-
PK	313.24M	31.87	46.00	-14.13	-5.39	3	Horizontal	360	1.00	-
PK	720.64M	36.82	46.00	-9.18	0.37	3	Horizontal	360	1.00	-

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	AV	2.4986G	48.79	54.00	-5.21	32.67	3	Vertical	271	1.87	-
BT-EDR(2Mbps)	Pass	AV	2.4994G	48.79	54.00	-5.21	32.67	3	Horizontal	345	1.20	-
BT-EDR(3Mbps)	Pass	AV	2.4986G	48.79	54.00	-5.21	32.67	3	Vertical	282	1.50	-

Result

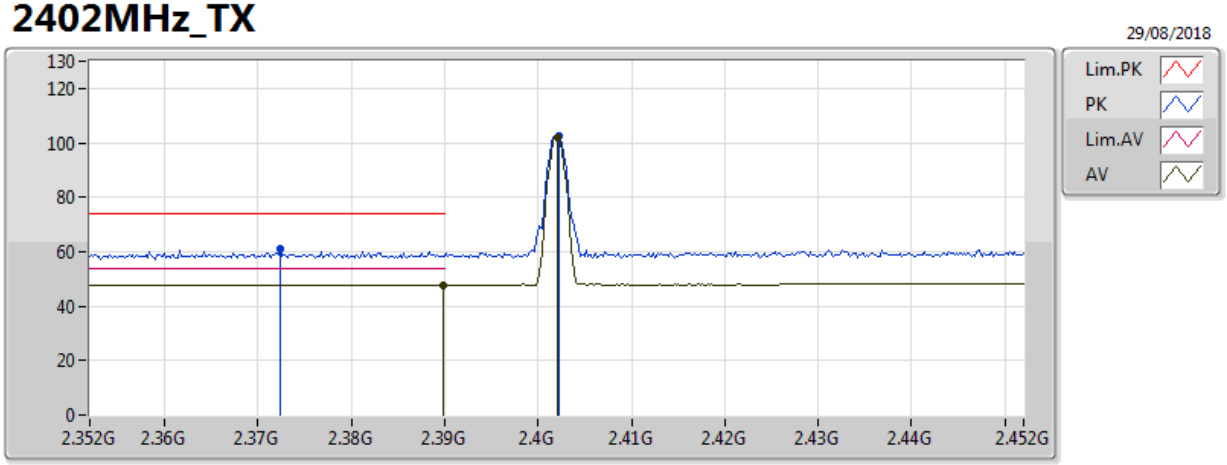
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-BR(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3898G	47.82	54.00	-6.18	32.28	3	Vertical	278	2.10	-
2402MHz	Pass	AV	2.402G	102.07	Inf	-Inf	32.31	3	Vertical	278	2.10	-
2402MHz	Pass	PK	2.3724G	60.91	74.00	-13.09	32.21	3	Vertical	278	2.10	-
2402MHz	Pass	PK	2.4022G	102.58	Inf	-Inf	32.32	3	Vertical	278	2.10	-
2402MHz	Pass	AV	2.388G	47.80	54.00	-6.20	32.27	3	Horizontal	209	1.18	-
2402MHz	Pass	AV	2.402G	102.08	Inf	-Inf	32.31	3	Horizontal	209	1.18	-
2402MHz	Pass	PK	2.3666G	59.93	74.00	-14.07	32.19	3	Horizontal	209	1.18	-
2402MHz	Pass	PK	2.4022G	101.97	Inf	-Inf	32.32	3	Horizontal	209	1.18	-
2402MHz	Pass	AV	4.81822G	33.19	54.00	-20.81	3.01	3	Vertical	131	1.50	-
2402MHz	Pass	PK	4.8142G	45.97	74.00	-28.03	3.01	3	Vertical	131	1.50	-
2402MHz	Pass	AV	4.8166G	33.26	54.00	-20.74	3.01	3	Horizontal	232	1.20	-
2402MHz	Pass	PK	4.80742G	45.80	74.00	-28.20	2.99	3	Horizontal	232	1.20	-
2441MHz	Pass	AV	2.389G	47.80	54.00	-6.20	32.27	3	Vertical	271	1.87	-
2441MHz	Pass	AV	2.441G	102.58	Inf	-Inf	32.46	3	Vertical	271	1.87	-
2441MHz	Pass	AV	2.4986G	48.79	54.00	-5.21	32.67	3	Vertical	271	1.87	-
2441MHz	Pass	PK	2.3542G	60.11	74.00	-13.89	32.15	3	Vertical	271	1.87	-
2441MHz	Pass	PK	2.441G	103.16	Inf	-Inf	32.46	3	Vertical	271	1.87	-
2441MHz	Pass	PK	2.485G	60.70	74.00	-13.30	32.61	3	Vertical	271	1.87	-
2441MHz	Pass	AV	2.3886G	47.80	54.00	-6.20	32.27	3	Horizontal	341	1.50	-
2441MHz	Pass	AV	2.441G	98.47	Inf	-Inf	32.46	3	Horizontal	341	1.50	-
2441MHz	Pass	AV	2.4974G	48.77	54.00	-5.23	32.66	3	Horizontal	341	1.50	-
2441MHz	Pass	PK	2.3698G	60.05	74.00	-13.95	32.20	3	Horizontal	341	1.50	-
2441MHz	Pass	PK	2.441G	99.85	Inf	-Inf	32.46	3	Horizontal	341	1.50	-
2441MHz	Pass	PK	2.4954G	60.95	74.00	-13.05	32.65	3	Horizontal	341	1.50	-
2441MHz	Pass	AV	4.8703G	33.37	54.00	-20.63	3.13	3	Vertical	338	1.49	-
2441MHz	Pass	PK	4.87024G	45.69	74.00	-28.31	3.13	3	Vertical	338	1.49	-
2441MHz	Pass	AV	4.87678G	33.57	54.00	-20.43	3.16	3	Horizontal	221	1.59	-
2441MHz	Pass	PK	4.88332G	45.81	74.00	-28.19	3.17	3	Horizontal	221	1.59	-
2480MHz	Pass	AV	2.48G	100.02	Inf	-Inf	32.60	3	Vertical	7	1.50	-
2480MHz	Pass	AV	2.4984G	48.79	54.00	-5.21	32.67	3	Vertical	7	1.50	-
2480MHz	Pass	PK	2.4798G	100.67	Inf	-Inf	32.60	3	Vertical	7	1.50	-
2480MHz	Pass	PK	2.495G	61.01	74.00	-12.99	32.65	3	Vertical	7	1.50	-
2480MHz	Pass	AV	2.48G	99.47	Inf	-Inf	32.60	3	Horizontal	192	1.49	-
2480MHz	Pass	AV	2.4992G	48.79	54.00	-5.21	32.67	3	Horizontal	192	1.49	-
2480MHz	Pass	PK	2.4798G	99.96	Inf	-Inf	32.60	3	Horizontal	192	1.49	-
2480MHz	Pass	PK	2.4898G	60.62	74.00	-13.38	32.64	3	Horizontal	192	1.49	-
2480MHz	Pass	AV	4.9705G	33.32	54.00	-20.68	3.35	3	Vertical	47	1.48	-
2480MHz	Pass	PK	4.9552G	45.92	74.00	-28.08	3.32	3	Vertical	47	1.48	-
2480MHz	Pass	AV	4.87678G	33.28	54.00	-20.72	3.16	3	Horizontal	1	1.67	-
2480MHz	Pass	PK	4.96498G	46.72	74.00	-27.28	3.34	3	Horizontal	1	1.67	-
BT-EDR(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.389998G	47.31	54.00	-6.69	32.28	3	Vertical	276	1.74	-
2402MHz	Pass	AV	2.402G	95.52	Inf	-Inf	32.31	3	Vertical	276	1.74	-
2402MHz	Pass	PK	2.3768G	60.12	74.00	-13.88	32.22	3	Vertical	276	1.74	-
2402MHz	Pass	PK	2.402G	101.54	Inf	-Inf	32.31	3	Vertical	276	1.74	-
2402MHz	Pass	AV	2.386G	47.78	54.00	-6.22	32.26	3	Horizontal	211	1.17	-
2402MHz	Pass	AV	2.402G	96.89	Inf	-Inf	32.31	3	Horizontal	211	1.17	-

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2402MHz	Pass	PK	2.3678G	60.05	74.00	-13.95	32.19	3	Horizontal	211	1.17	-
2402MHz	Pass	PK	2.4022G	100.45	Inf	-Inf	32.32	3	Horizontal	211	1.17	-
2441MHz	Pass	AV	2.3898G	47.31	54.00	-6.69	32.28	3	Vertical	271	1.88	-
2441MHz	Pass	AV	2.441G	94.47	Inf	-Inf	32.46	3	Vertical	271	1.88	-
2441MHz	Pass	AV	2.499G	48.28	54.00	-5.72	32.67	3	Vertical	271	1.88	-
2441MHz	Pass	PK	2.3782G	60.12	74.00	-13.88	32.23	3	Vertical	271	1.88	-
2441MHz	Pass	PK	2.4414G	101.28	Inf	-Inf	32.46	3	Vertical	271	1.88	-
2441MHz	Pass	PK	2.497G	60.90	74.00	-13.10	32.66	3	Vertical	271	1.88	-
2441MHz	Pass	AV	2.3886G	47.80	54.00	-6.20	32.27	3	Horizontal	345	1.20	-
2441MHz	Pass	AV	2.441G	94.53	Inf	-Inf	32.46	3	Horizontal	345	1.20	-
2441MHz	Pass	AV	2.4994G	48.79	54.00	-5.21	32.67	3	Horizontal	345	1.20	-
2441MHz	Pass	PK	2.389G	60.17	74.00	-13.83	32.27	3	Horizontal	345	1.20	-
2441MHz	Pass	PK	2.441G	98.58	Inf	-Inf	32.46	3	Horizontal	345	1.20	-
2441MHz	Pass	PK	2.4942G	60.57	74.00	-13.43	32.65	3	Horizontal	345	1.20	-
2480MHz	Pass	AV	2.48G	94.65	Inf	-Inf	32.60	3	Vertical	274	1.71	-
2480MHz	Pass	AV	2.4858G	48.46	54.00	-5.54	32.62	3	Vertical	274	1.71	-
2480MHz	Pass	PK	2.4802G	101.20	Inf	-Inf	32.60	3	Vertical	274	1.71	-
2480MHz	Pass	PK	2.4842G	60.38	74.00	-13.62	32.61	3	Vertical	274	1.71	-
2480MHz	Pass	AV	2.48G	92.23	Inf	-Inf	32.60	3	Horizontal	188	1.50	-
2480MHz	Pass	AV	2.499G	48.28	54.00	-5.72	32.67	3	Horizontal	188	1.50	-
2480MHz	Pass	PK	2.4802G	98.50	Inf	-Inf	32.60	3	Horizontal	188	1.50	-
2480MHz	Pass	PK	2.4966G	61.08	74.00	-12.92	32.66	3	Horizontal	188	1.50	-
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.389G	47.80	54.00	-6.20	32.27	3	Vertical	276	2.09	-
2402MHz	Pass	AV	2.402G	97.79	Inf	-Inf	32.31	3	Vertical	276	2.09	-
2402MHz	Pass	PK	2.3742G	59.88	74.00	-14.12	32.22	3	Vertical	276	2.09	-
2402MHz	Pass	PK	2.402G	101.02	Inf	-Inf	32.31	3	Vertical	276	2.09	-
2402MHz	Pass	AV	2.3884G	47.80	54.00	-6.20	32.27	3	Horizontal	210	1.17	-
2402MHz	Pass	AV	2.402G	97.01	Inf	-Inf	32.31	3	Horizontal	210	1.17	-
2402MHz	Pass	PK	2.3594G	60.27	74.00	-13.73	32.16	3	Horizontal	210	1.17	-
2402MHz	Pass	PK	2.402G	100.66	Inf	-Inf	32.31	3	Horizontal	210	1.17	-
2441MHz	Pass	AV	2.3898G	47.31	54.00	-6.69	32.28	3	Vertical	272	1.86	-
2441MHz	Pass	AV	2.441G	94.60	Inf	-Inf	32.46	3	Vertical	272	1.86	-
2441MHz	Pass	AV	2.499G	48.28	54.00	-5.72	32.67	3	Vertical	272	1.86	-
2441MHz	Pass	PK	2.361G	59.98	74.00	-14.02	32.17	3	Vertical	272	1.86	-
2441MHz	Pass	PK	2.441G	100.78	Inf	-Inf	32.46	3	Vertical	272	1.86	-
2441MHz	Pass	PK	2.4918G	61.17	74.00	-12.83	32.64	3	Vertical	272	1.86	-
2441MHz	Pass	AV	2.3794G	47.76	54.00	-6.24	32.24	3	Horizontal	344	1.50	-
2441MHz	Pass	AV	2.441G	93.77	Inf	-Inf	32.46	3	Horizontal	344	1.50	-
2441MHz	Pass	AV	2.4938G	48.75	54.00	-5.25	32.65	3	Horizontal	344	1.50	-
2441MHz	Pass	PK	2.3806G	59.83	74.00	-14.17	32.24	3	Horizontal	344	1.50	-
2441MHz	Pass	PK	2.441G	97.60	Inf	-Inf	32.46	3	Horizontal	344	1.50	-
2441MHz	Pass	PK	2.4934G	60.62	74.00	-13.38	32.64	3	Horizontal	344	1.50	-
2480MHz	Pass	AV	2.48G	95.25	Inf	-Inf	32.60	3	Vertical	282	1.50	-
2480MHz	Pass	AV	2.4986G	48.79	54.00	-5.21	32.67	3	Vertical	282	1.50	-
2480MHz	Pass	PK	2.48G	98.91	Inf	-Inf	32.60	3	Vertical	282	1.50	-
2480MHz	Pass	PK	2.4848G	60.82	74.00	-13.18	32.61	3	Vertical	282	1.50	-
2480MHz	Pass	AV	2.48G	95.54	Inf	-Inf	32.60	3	Horizontal	188	1.50	-
2480MHz	Pass	AV	2.4984G	48.79	54.00	-5.21	32.67	3	Horizontal	188	1.50	-

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2480MHz	Pass	PK	2.48G	98.67	Inf	-Inf	32.60	3	Horizontal	188	1.50	-
2480MHz	Pass	PK	2.4892G	60.73	74.00	-13.27	32.63	3	Horizontal	188	1.50	-

BT-BR(1Mbps)

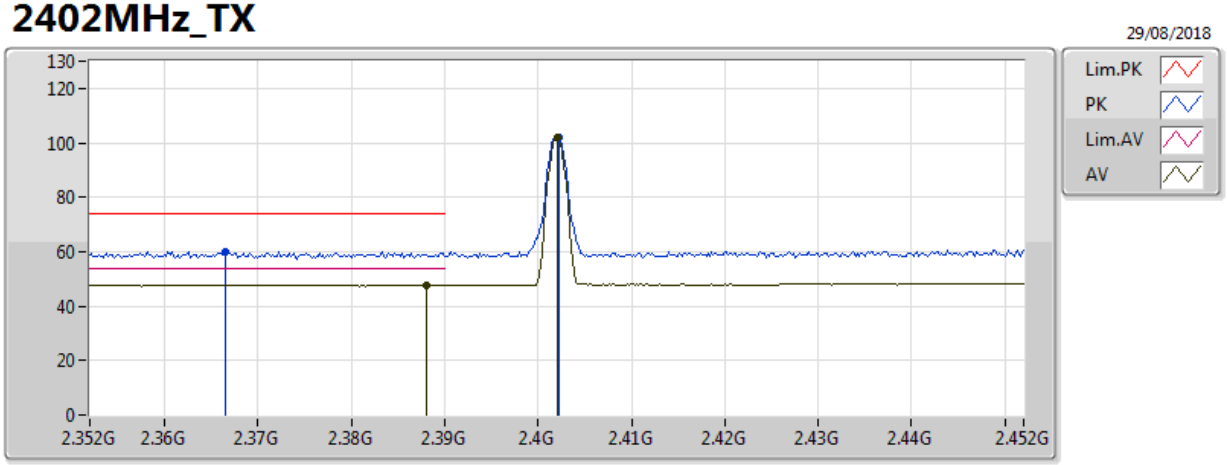
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3898G	47.82	54.00	-6.18	32.28	3	Vertical	278	2.10	-
AV	2.402G	102.07	Inf	-Inf	32.31	3	Vertical	278	2.10	-
PK	2.3724G	60.91	74.00	-13.09	32.21	3	Vertical	278	2.10	-
PK	2.4022G	102.58	Inf	-Inf	32.32	3	Vertical	278	2.10	-

BT-BR(1Mbps)

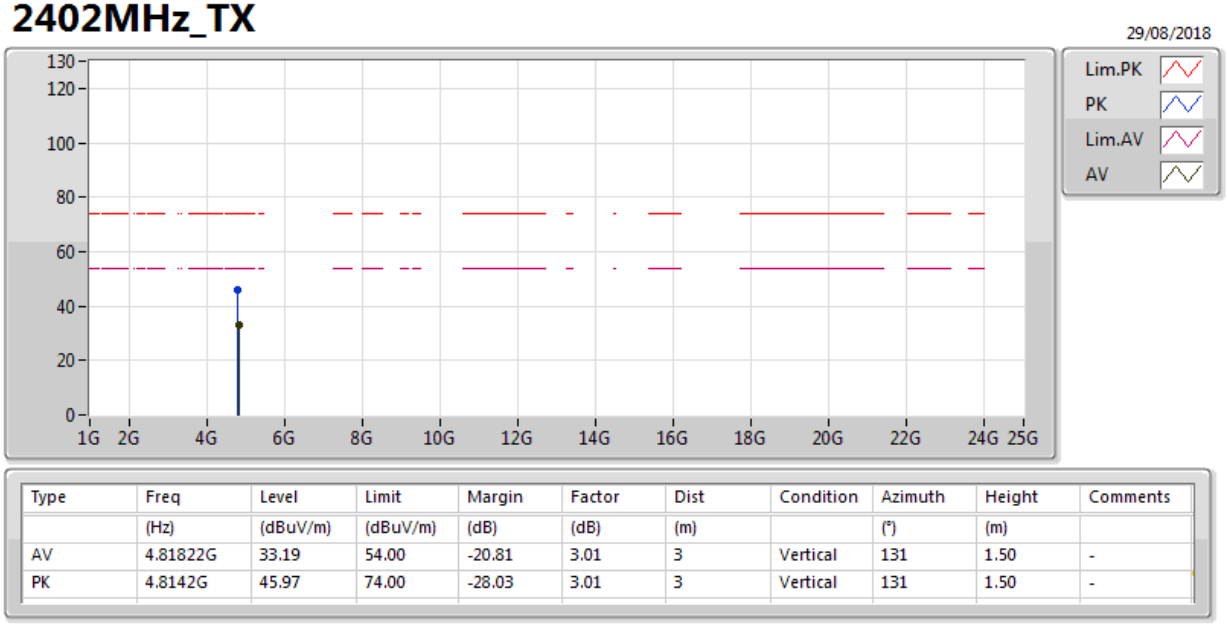
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.388G	47.80	54.00	-6.20	32.27	3	Horizontal	209	1.18	-
AV	2.402G	102.08	Inf	-Inf	32.31	3	Horizontal	209	1.18	-
PK	2.3666G	59.93	74.00	-14.07	32.19	3	Horizontal	209	1.18	-
PK	2.4022G	101.97	Inf	-Inf	32.32	3	Horizontal	209	1.18	-

BT-BR(1Mbps)

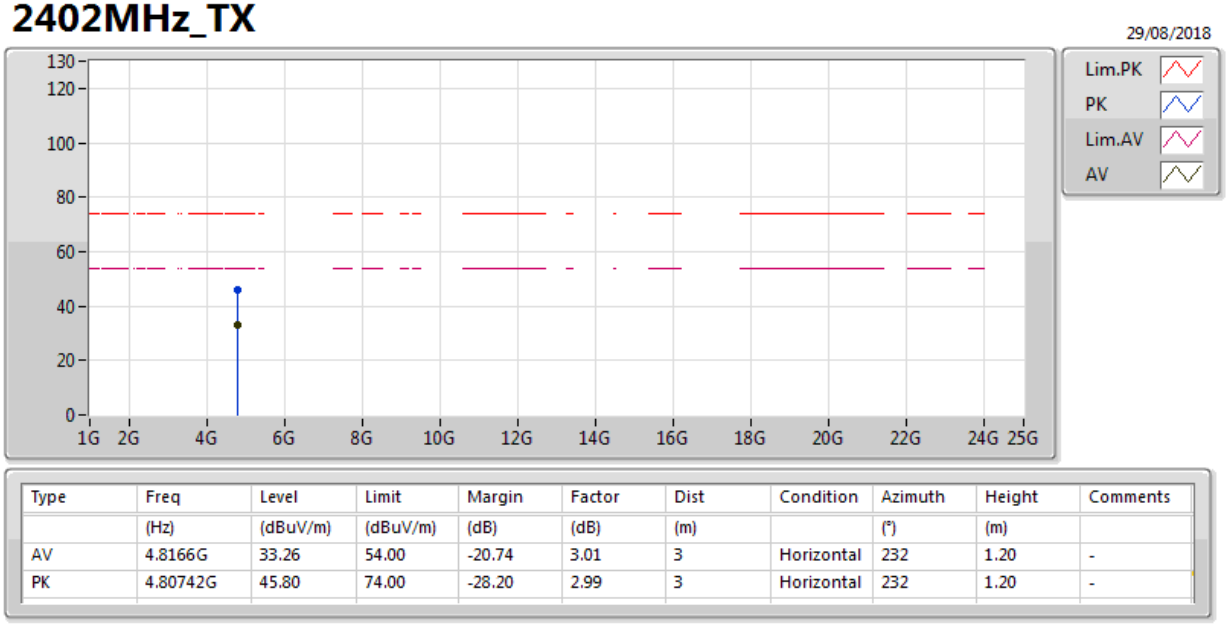
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.81822G	33.19	54.00	-20.81	3.01	3	Vertical	131	1.50	-
PK	4.8142G	45.97	74.00	-28.03	3.01	3	Vertical	131	1.50	-

BT-BR(1Mbps)

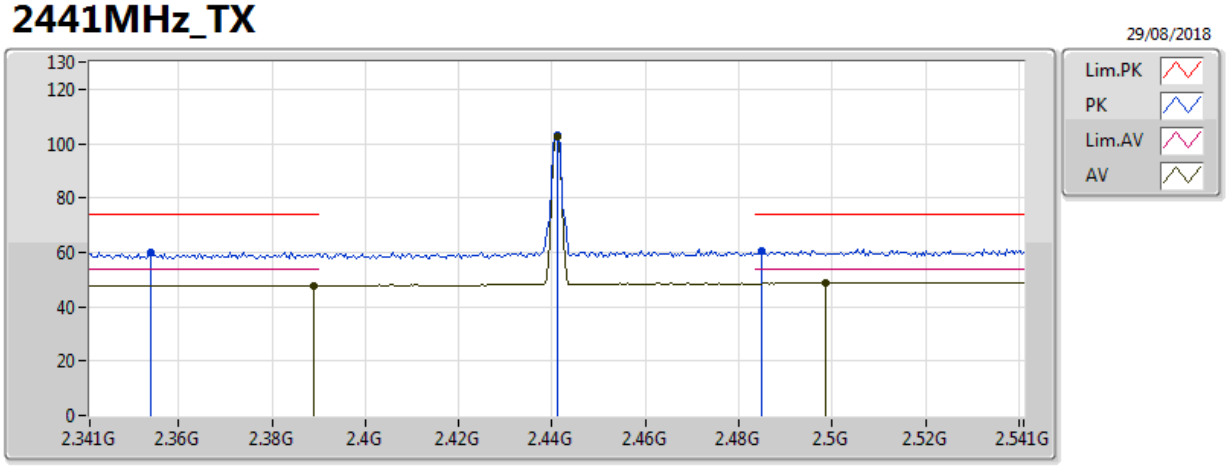
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.8166G	33.26	54.00	-20.74	3.01	3	Horizontal	232	1.20	-
PK	4.80742G	45.80	74.00	-28.20	2.99	3	Horizontal	232	1.20	-

BT-BR(1Mbps)

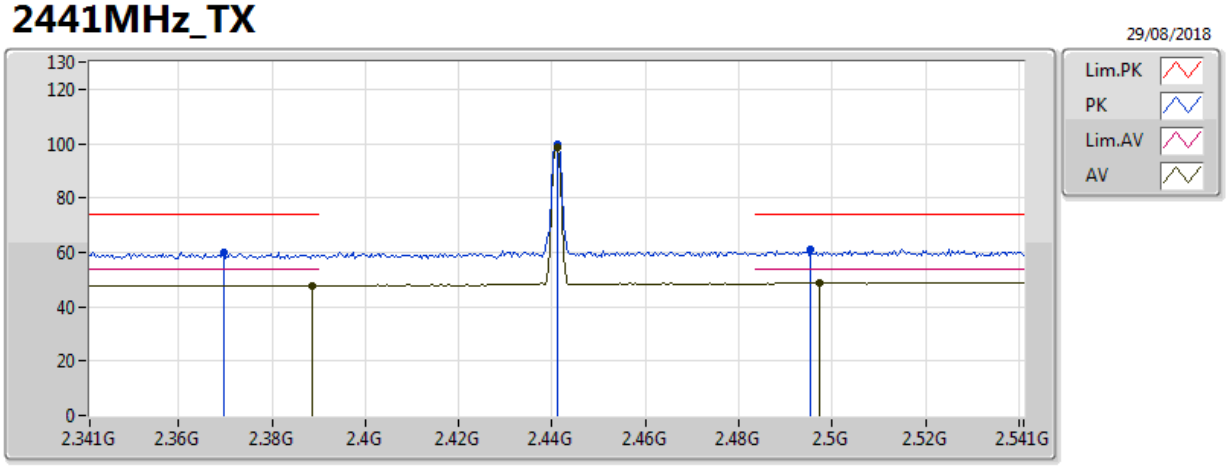
2441MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.389G	47.80	54.00	-6.20	32.27	3	Vertical	271	1.87	-
AV	2.441G	102.58	Inf	-Inf	32.46	3	Vertical	271	1.87	-
AV	2.4986G	48.79	54.00	-5.21	32.67	3	Vertical	271	1.87	-
PK	2.3542G	60.11	74.00	-13.89	32.15	3	Vertical	271	1.87	-
PK	2.441G	103.16	Inf	-Inf	32.46	3	Vertical	271	1.87	-
PK	2.485G	60.70	74.00	-13.30	32.61	3	Vertical	271	1.87	-

BT-BR(1Mbps)

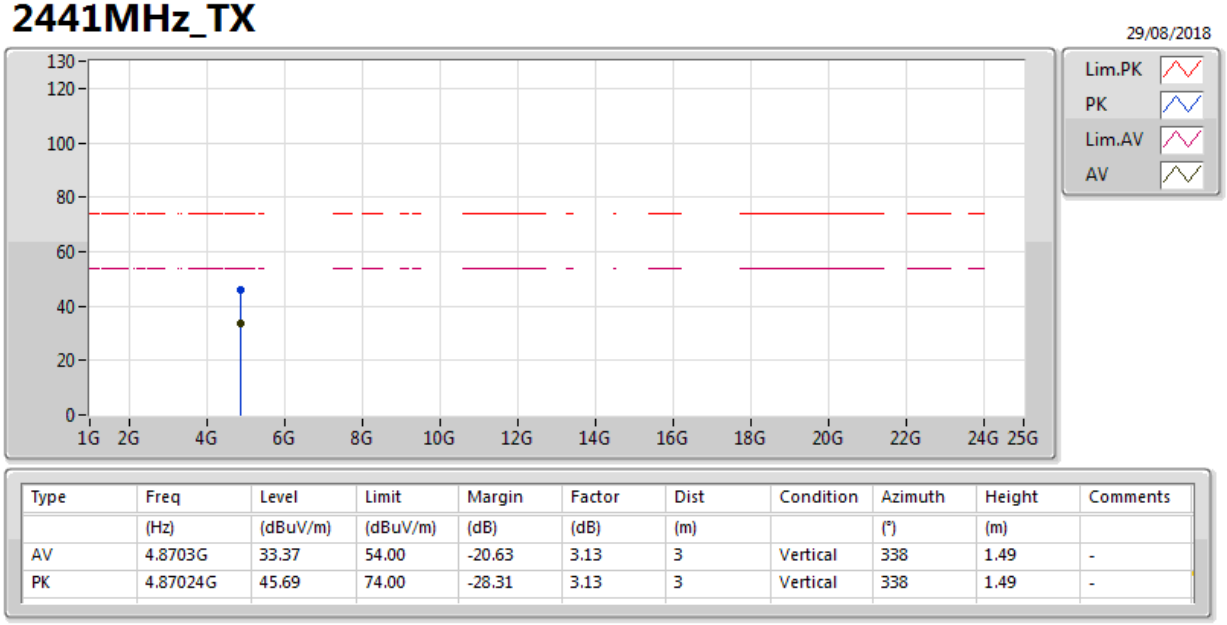
2441MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3886G	47.80	54.00	-6.20	32.27	3	Horizontal	341	1.50	-
AV	2.441G	98.47	Inf	-Inf	32.46	3	Horizontal	341	1.50	-
AV	2.4974G	48.77	54.00	-5.23	32.66	3	Horizontal	341	1.50	-
PK	2.3698G	60.05	74.00	-13.95	32.20	3	Horizontal	341	1.50	-
PK	2.441G	99.85	Inf	-Inf	32.46	3	Horizontal	341	1.50	-
PK	2.4954G	60.95	74.00	-13.05	32.65	3	Horizontal	341	1.50	-

BT-BR(1Mbps)

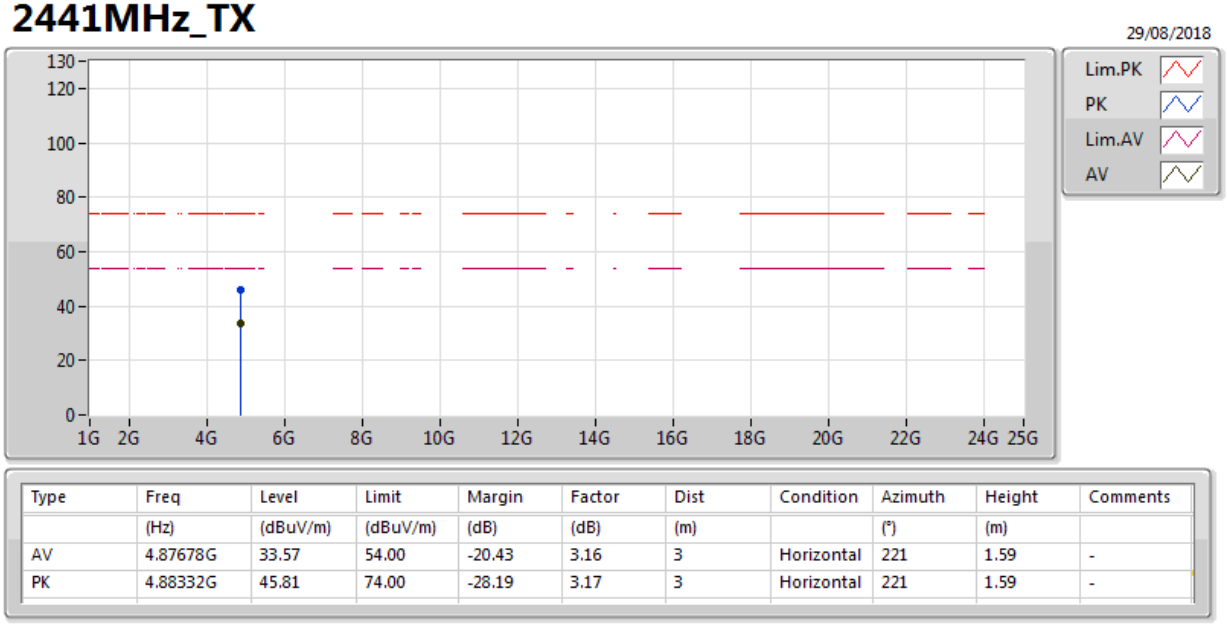
2441MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.8703G	33.37	54.00	-20.63	3.13	3	Vertical	338	1.49	-
PK	4.87024G	45.69	74.00	-28.31	3.13	3	Vertical	338	1.49	-

BT-BR(1Mbps)

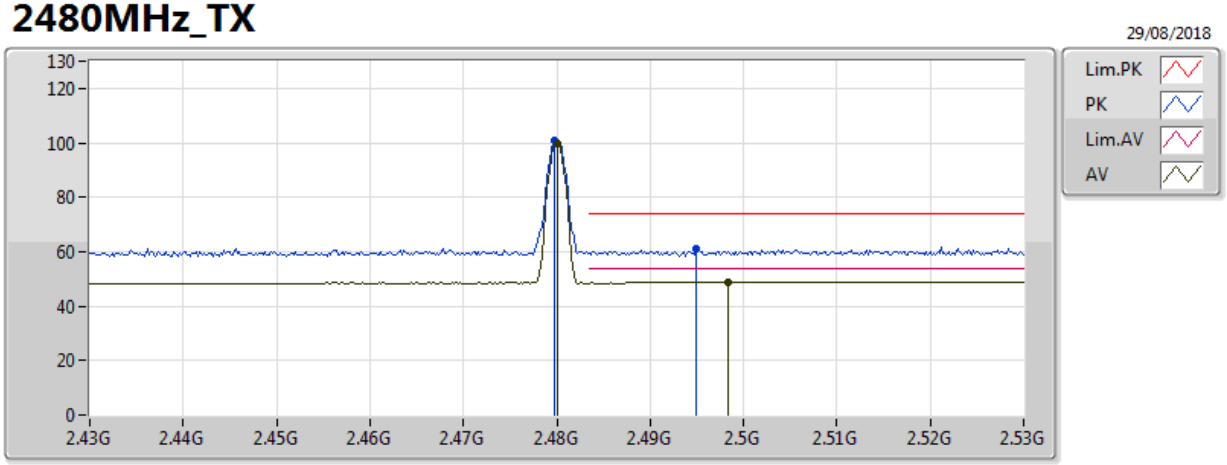
2441MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.87678G	33.57	54.00	-20.43	3.16	3	Horizontal	221	1.59	-
PK	4.88332G	45.81	74.00	-28.19	3.17	3	Horizontal	221	1.59	-

BT-BR(1Mbps)

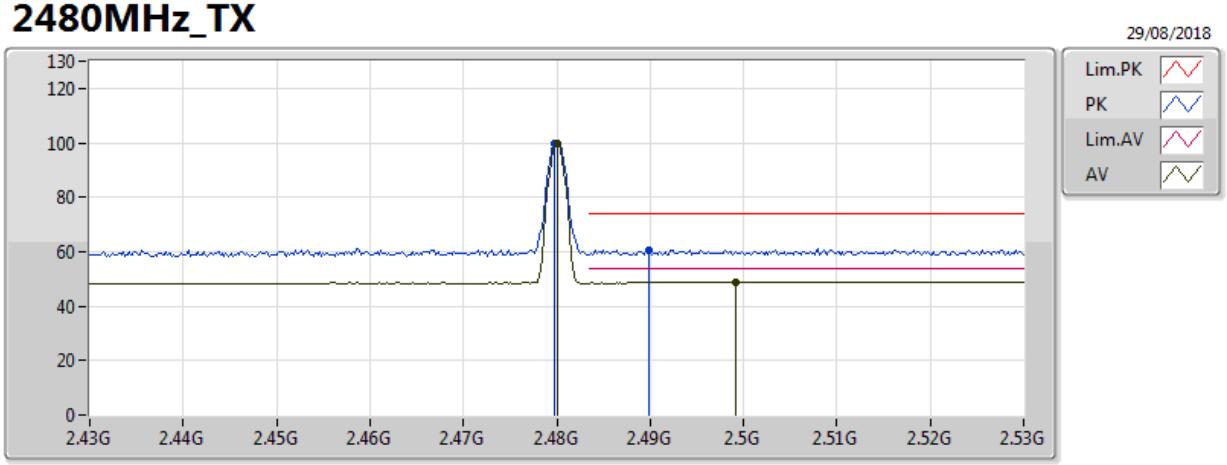
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.48G	100.02	Inf	-Inf	32.60	3	Vertical	7	1.50	-
AV	2.4984G	48.79	54.00	-5.21	32.67	3	Vertical	7	1.50	-
PK	2.4798G	100.67	Inf	-Inf	32.60	3	Vertical	7	1.50	-
PK	2.495G	61.01	74.00	-12.99	32.65	3	Vertical	7	1.50	-

BT-BR(1Mbps)

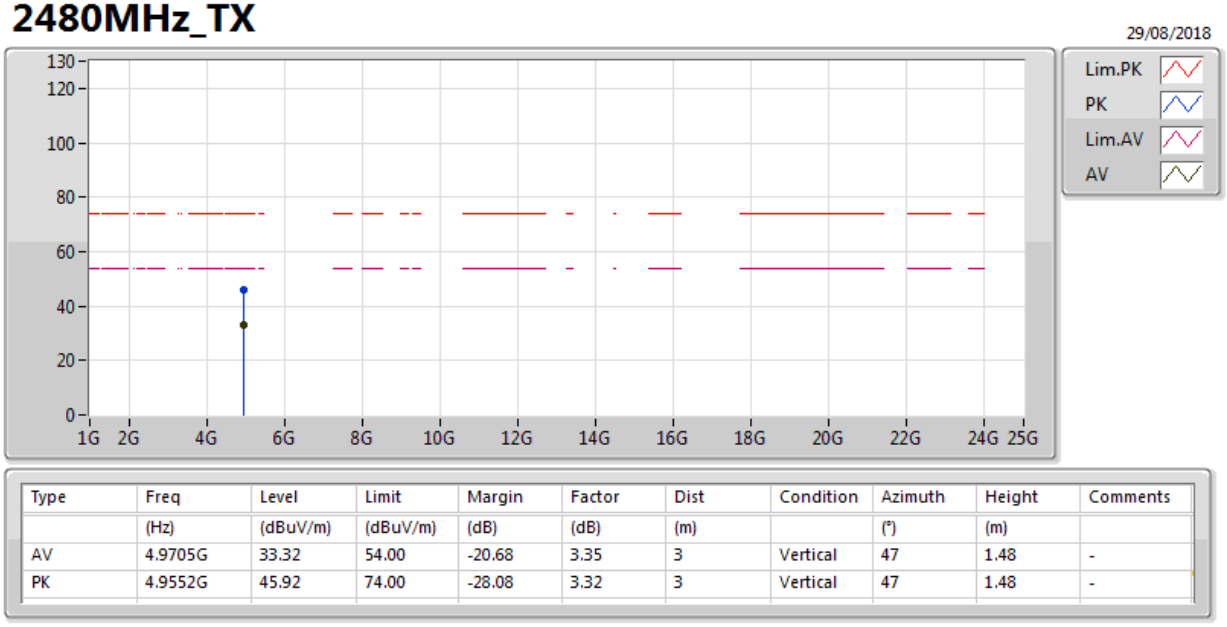
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.48G	99.47	Inf	-Inf	32.60	3	Horizontal	192	1.49	-
AV	2.4992G	48.79	54.00	-5.21	32.67	3	Horizontal	192	1.49	-
PK	2.4798G	99.96	Inf	-Inf	32.60	3	Horizontal	192	1.49	-
PK	2.4898G	60.62	74.00	-13.38	32.64	3	Horizontal	192	1.49	-

BT-BR(1Mbps)

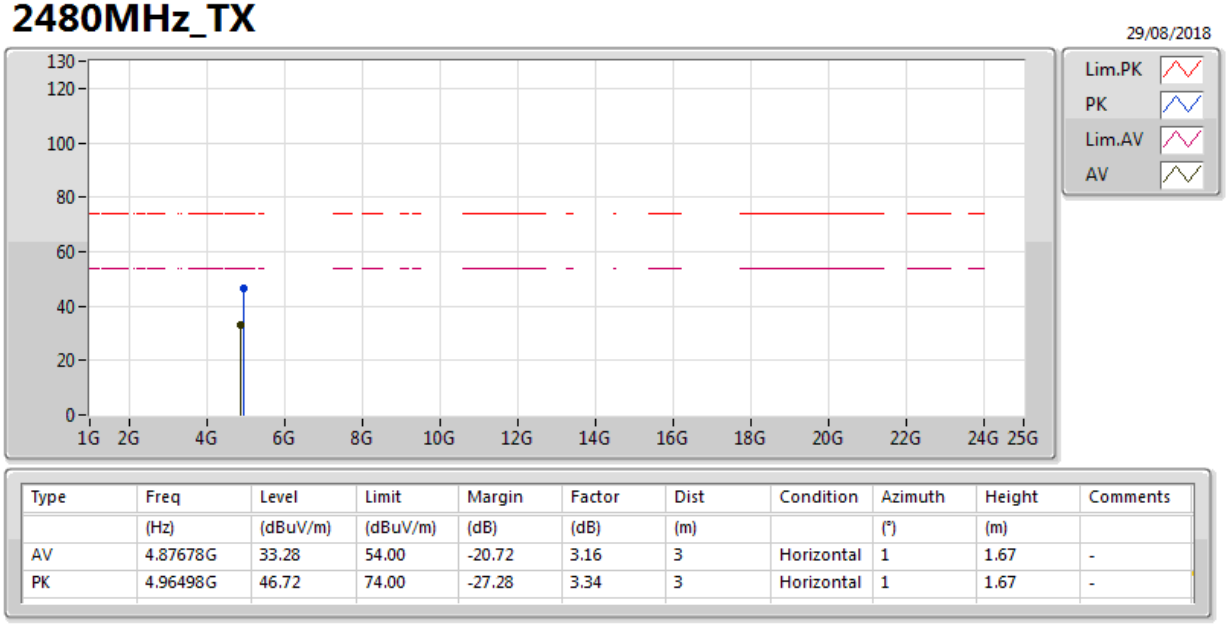
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.9705G	33.32	54.00	-20.68	3.35	3	Vertical	47	1.48	-
PK	4.9552G	45.92	74.00	-28.08	3.32	3	Vertical	47	1.48	-

BT-BR(1Mbps)

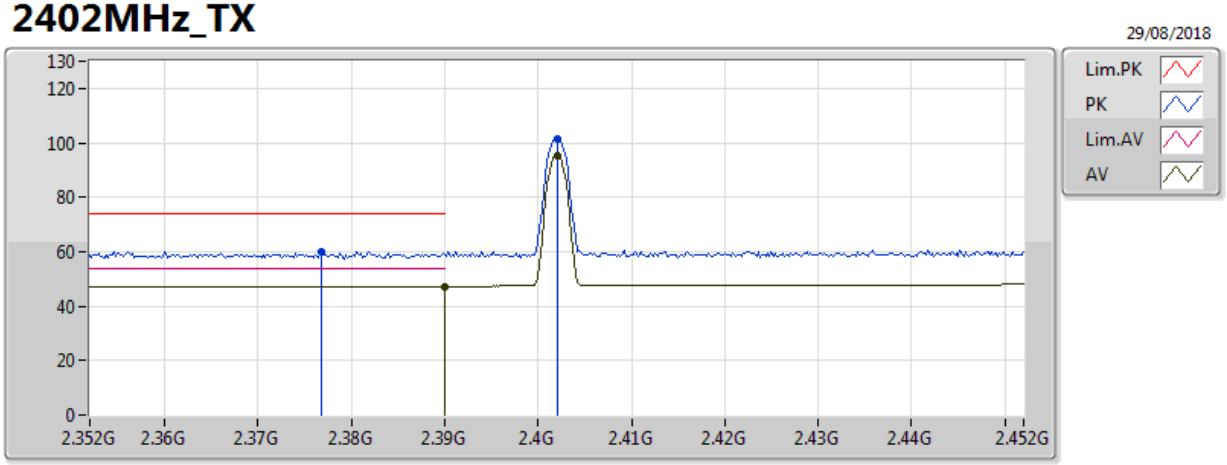
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.87678G	33.28	54.00	-20.72	3.16	3	Horizontal	1	1.67	-
PK	4.96498G	46.72	74.00	-27.28	3.34	3	Horizontal	1	1.67	-

BT-EDR(2Mbps)

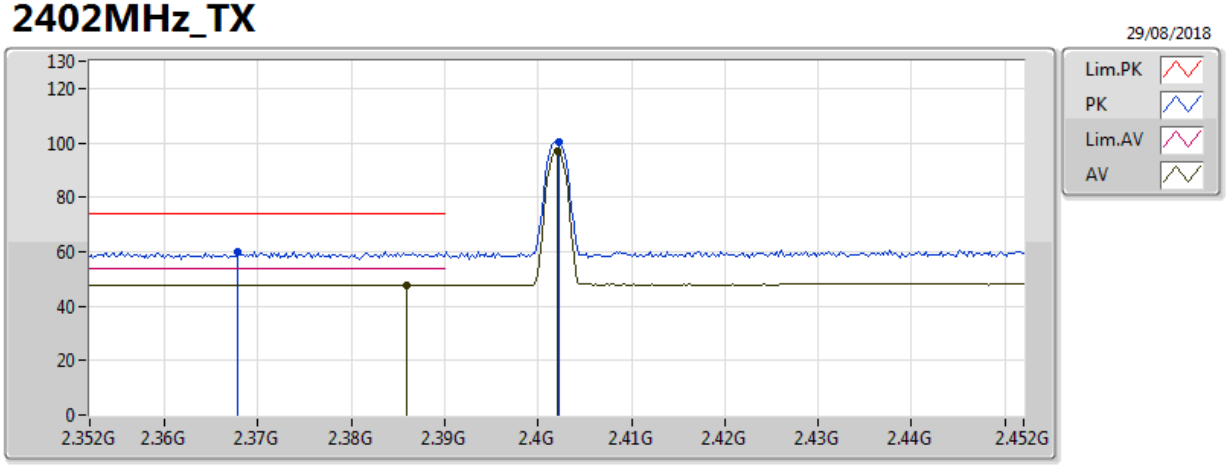
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.389998G	47.31	54.00	-6.69	32.28	3	Vertical	276	1.74	-
AV	2.402G	95.52	Inf	-Inf	32.31	3	Vertical	276	1.74	-
PK	2.3768G	60.12	74.00	-13.88	32.22	3	Vertical	276	1.74	-
PK	2.402G	101.54	Inf	-Inf	32.31	3	Vertical	276	1.74	-

BT-EDR(2Mbps)

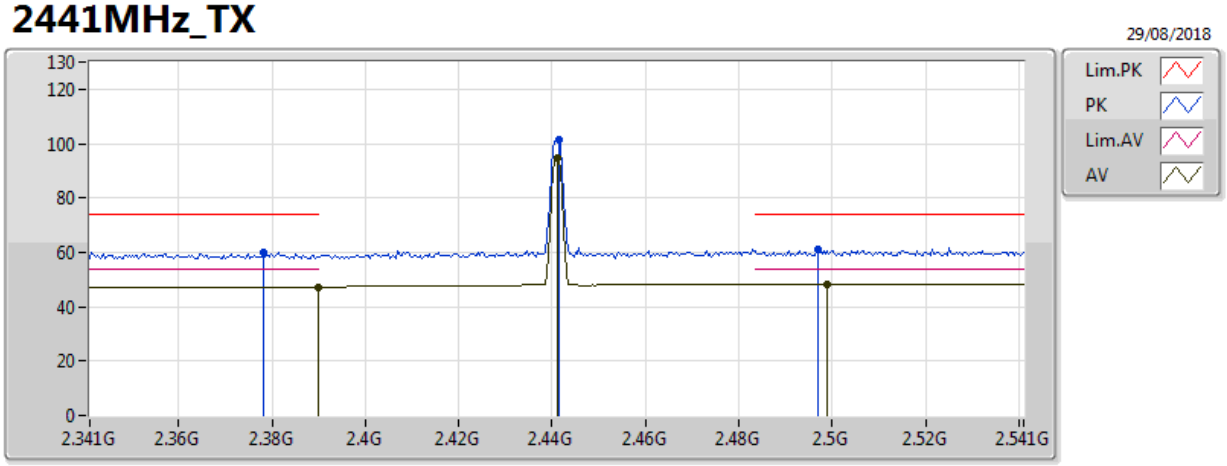
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.386G	47.78	54.00	-6.22	32.26	3	Horizontal	211	1.17	-
AV	2.402G	96.89	Inf	-Inf	32.31	3	Horizontal	211	1.17	-
PK	2.3678G	60.05	74.00	-13.95	32.19	3	Horizontal	211	1.17	-
PK	2.4022G	100.45	Inf	-Inf	32.32	3	Horizontal	211	1.17	-

BT-EDR(2Mbps)

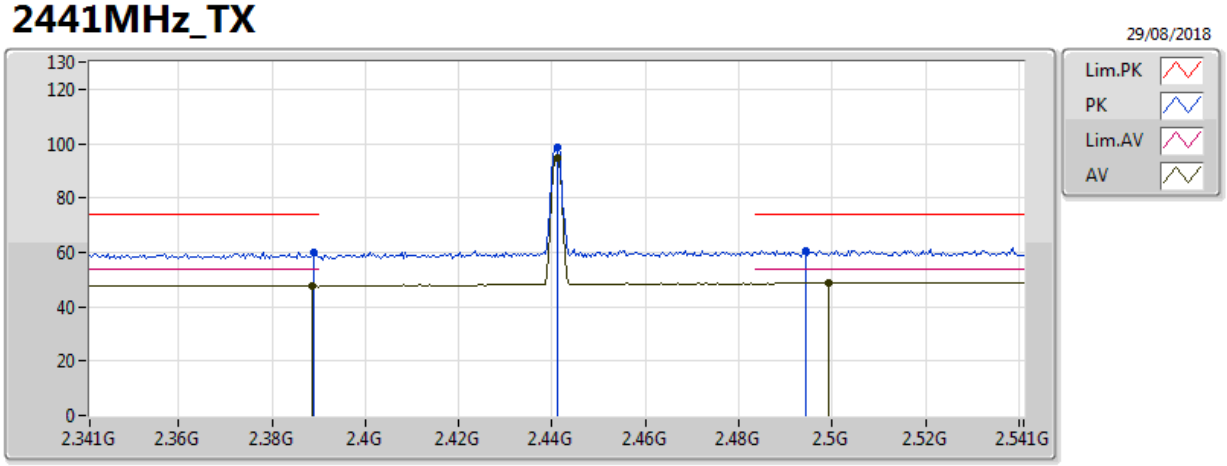
2441MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3898G	47.31	54.00	-6.69	32.28	3	Vertical	271	1.88	-
AV	2.441G	94.47	Inf	-Inf	32.46	3	Vertical	271	1.88	-
AV	2.499G	48.28	54.00	-5.72	32.67	3	Vertical	271	1.88	-
PK	2.3782G	60.12	74.00	-13.88	32.23	3	Vertical	271	1.88	-
PK	2.4414G	101.28	Inf	-Inf	32.46	3	Vertical	271	1.88	-
PK	2.497G	60.90	74.00	-13.10	32.66	3	Vertical	271	1.88	-

BT-EDR(2Mbps)

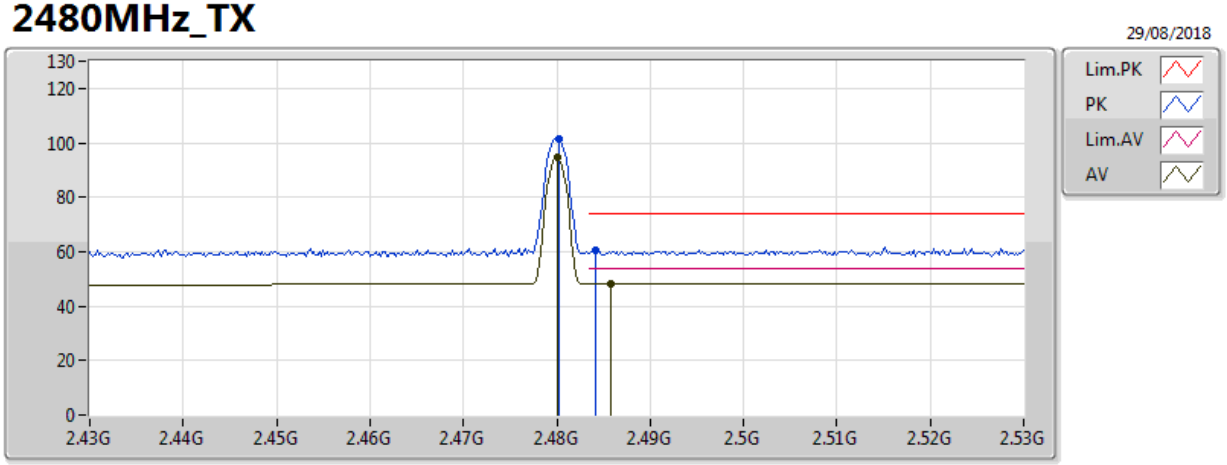
2441MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3886G	47.80	54.00	-6.20	32.27	3	Horizontal	345	1.20	-
AV	2.441G	94.53	Inf	-Inf	32.46	3	Horizontal	345	1.20	-
AV	2.4994G	48.79	54.00	-5.21	32.67	3	Horizontal	345	1.20	-
PK	2.389G	60.17	74.00	-13.83	32.27	3	Horizontal	345	1.20	-
PK	2.441G	98.58	Inf	-Inf	32.46	3	Horizontal	345	1.20	-
PK	2.4942G	60.57	74.00	-13.43	32.65	3	Horizontal	345	1.20	-

BT-EDR(2Mbps)

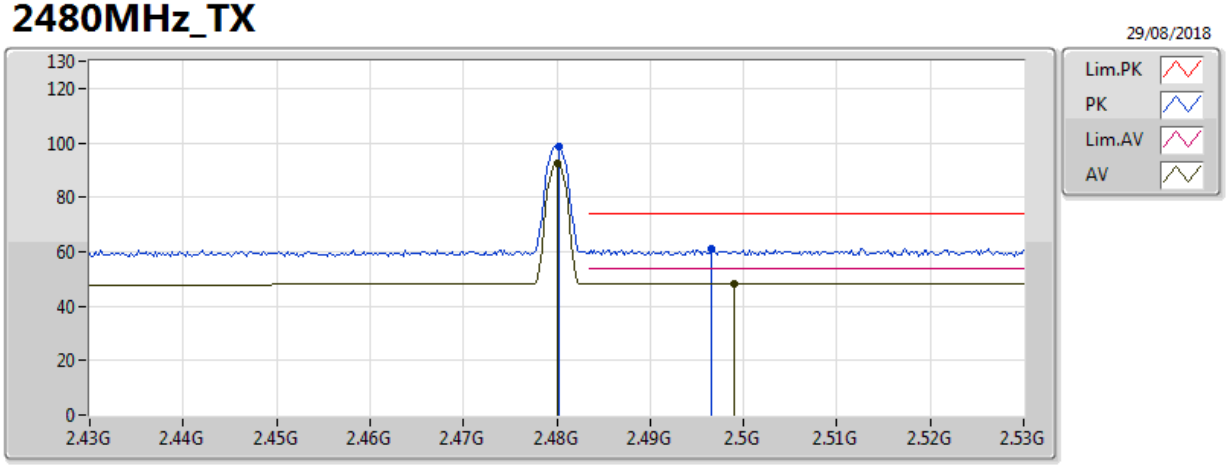
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.48G	94.65	Inf	-Inf	32.60	3	Vertical	274	1.71	-
AV	2.4858G	48.46	54.00	-5.54	32.62	3	Vertical	274	1.71	-
PK	2.4802G	101.20	Inf	-Inf	32.60	3	Vertical	274	1.71	-
PK	2.4842G	60.38	74.00	-13.62	32.61	3	Vertical	274	1.71	-

BT-EDR(2Mbps)

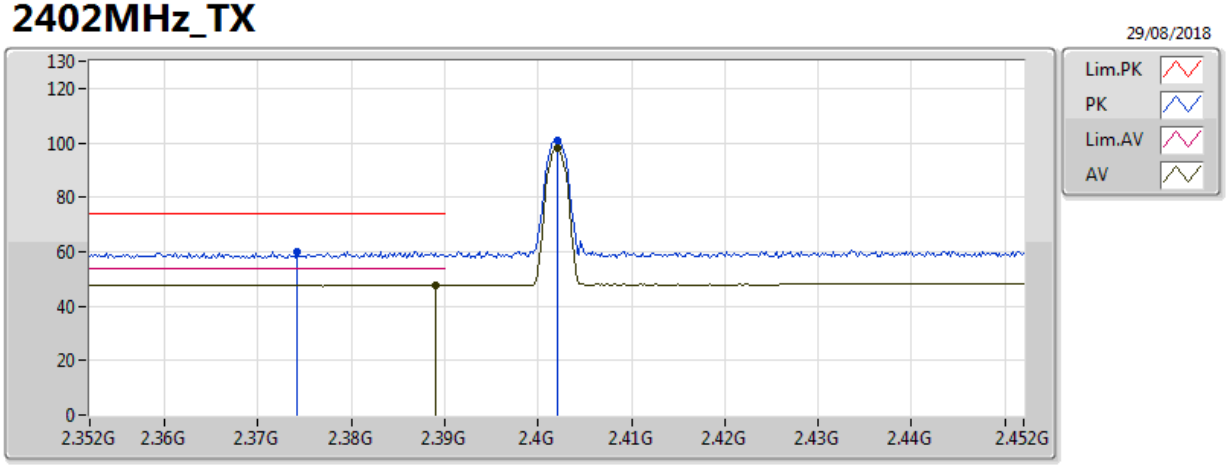
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.48G	92.23	Inf	-Inf	32.60	3	Horizontal	188	1.50	-
AV	2.499G	48.28	54.00	-5.72	32.67	3	Horizontal	188	1.50	-
PK	2.4802G	98.50	Inf	-Inf	32.60	3	Horizontal	188	1.50	-
PK	2.4966G	61.08	74.00	-12.92	32.66	3	Horizontal	188	1.50	-

BT-EDR(3Mbps)

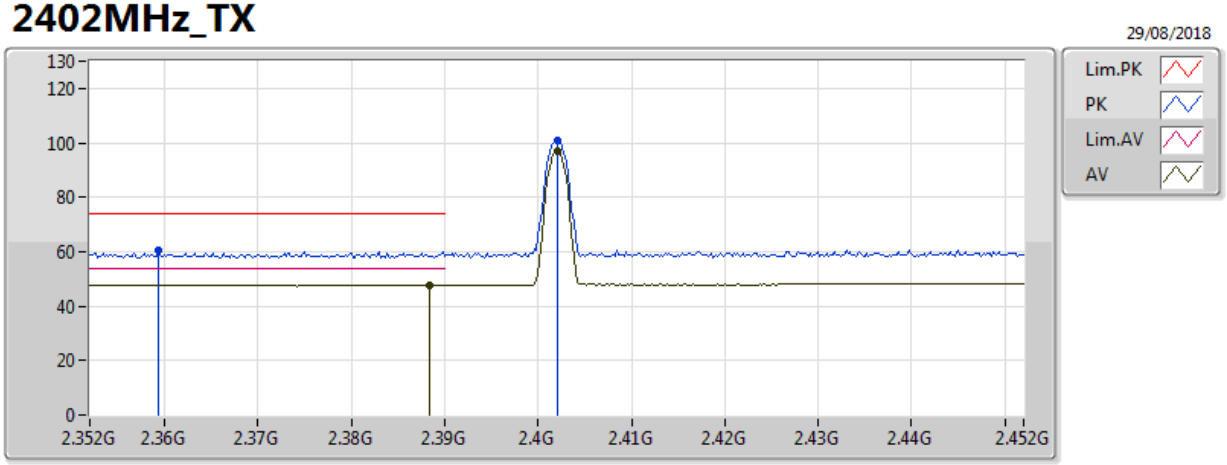
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.389G	47.80	54.00	-6.20	32.27	3	Vertical	276	2.09	-
AV	2.402G	97.79	Inf	-Inf	32.31	3	Vertical	276	2.09	-
PK	2.3742G	59.88	74.00	-14.12	32.22	3	Vertical	276	2.09	-
PK	2.402G	101.02	Inf	-Inf	32.31	3	Vertical	276	2.09	-

BT-EDR(3Mbps)

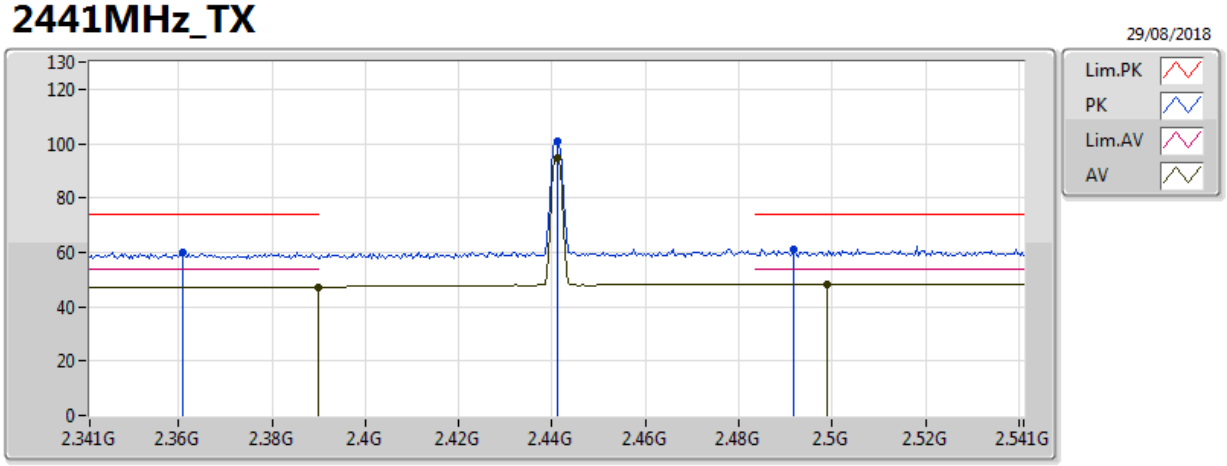
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3884G	47.80	54.00	-6.20	32.27	3	Horizontal	210	1.17	-
AV	2.402G	97.01	Inf	-Inf	32.31	3	Horizontal	210	1.17	-
PK	2.3594G	60.27	74.00	-13.73	32.16	3	Horizontal	210	1.17	-
PK	2.402G	100.66	Inf	-Inf	32.31	3	Horizontal	210	1.17	-

BT-EDR(3Mbps)

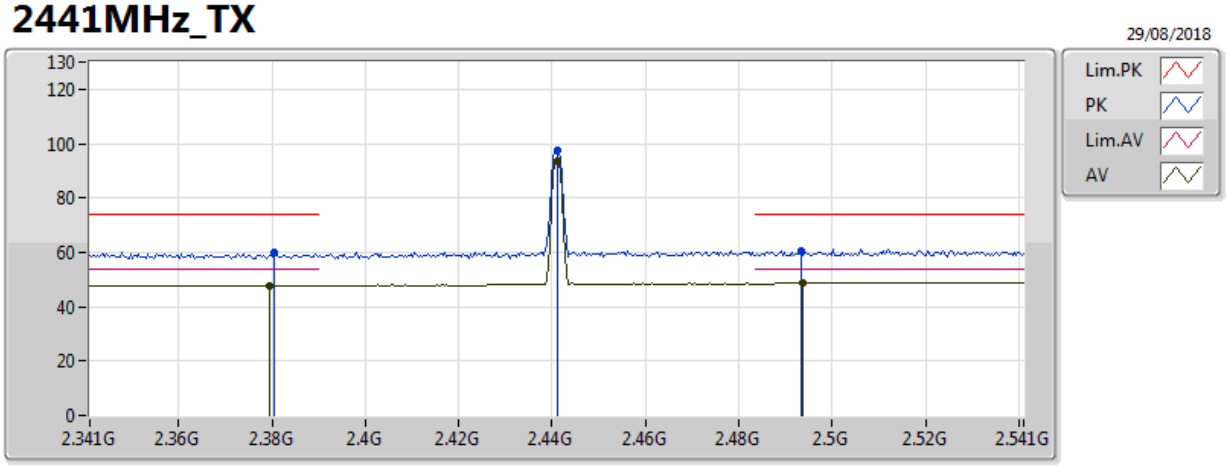
2441MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3898G	47.31	54.00	-6.69	32.28	3	Vertical	272	1.86	-
AV	2.441G	94.60	Inf	-Inf	32.46	3	Vertical	272	1.86	-
AV	2.499G	48.28	54.00	-5.72	32.67	3	Vertical	272	1.86	-
PK	2.361G	59.98	74.00	-14.02	32.17	3	Vertical	272	1.86	-
PK	2.441G	100.78	Inf	-Inf	32.46	3	Vertical	272	1.86	-
PK	2.4918G	61.17	74.00	-12.83	32.64	3	Vertical	272	1.86	-

BT-EDR(3Mbps)

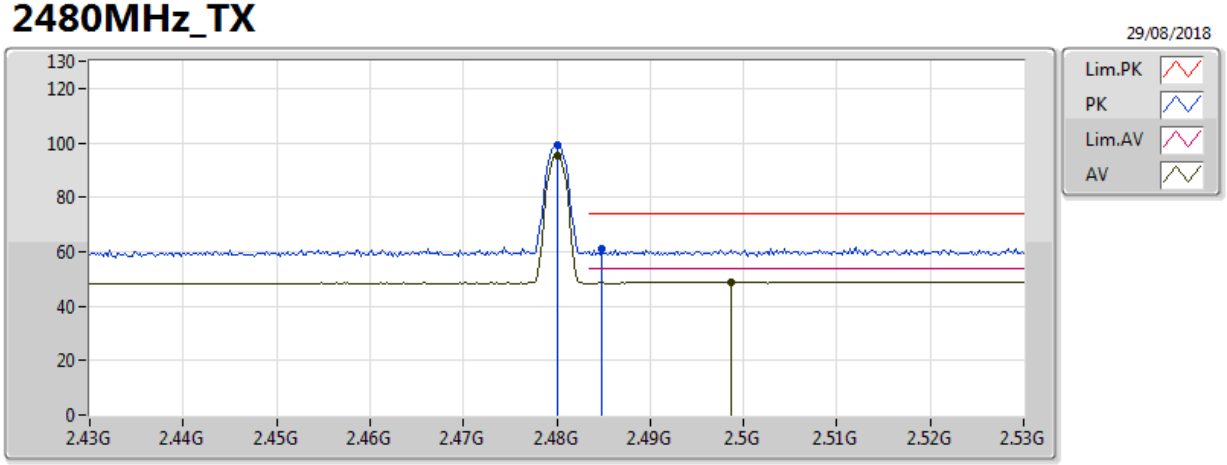
2441MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3794G	47.76	54.00	-6.24	32.24	3	Horizontal	344	1.50	-
AV	2.441G	93.77	Inf	-Inf	32.46	3	Horizontal	344	1.50	-
AV	2.4938G	48.75	54.00	-5.25	32.65	3	Horizontal	344	1.50	-
PK	2.3806G	59.83	74.00	-14.17	32.24	3	Horizontal	344	1.50	-
PK	2.441G	97.60	Inf	-Inf	32.46	3	Horizontal	344	1.50	-
PK	2.4934G	60.62	74.00	-13.38	32.64	3	Horizontal	344	1.50	-

BT-EDR(3Mbps)

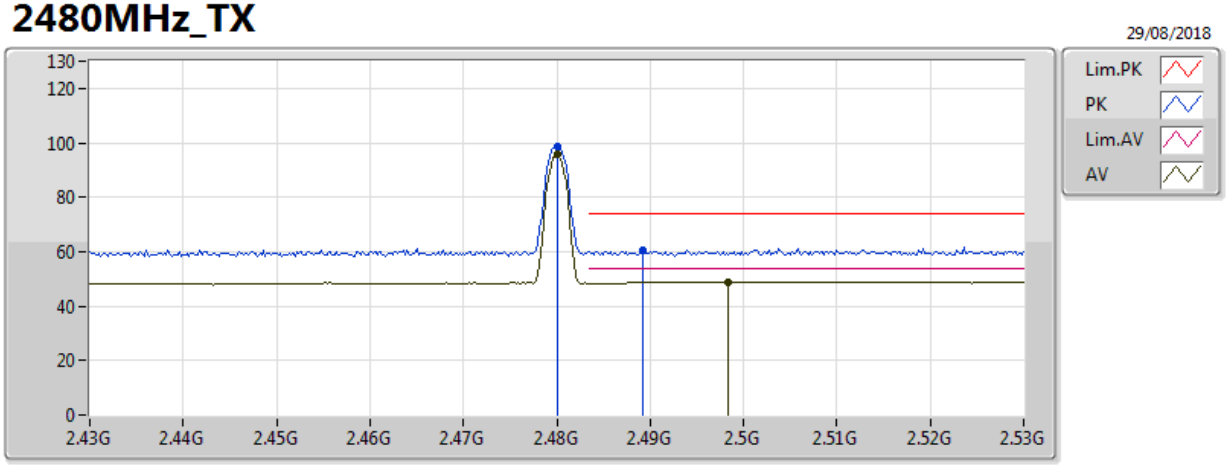
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.48G	95.25	Inf	-Inf	32.60	3	Vertical	282	1.50	-
AV	2.4986G	48.79	54.00	-5.21	32.67	3	Vertical	282	1.50	-
PK	2.48G	98.91	Inf	-Inf	32.60	3	Vertical	282	1.50	-
PK	2.4848G	60.82	74.00	-13.18	32.61	3	Vertical	282	1.50	-

BT-EDR(3Mbps)

2480MHz_TX



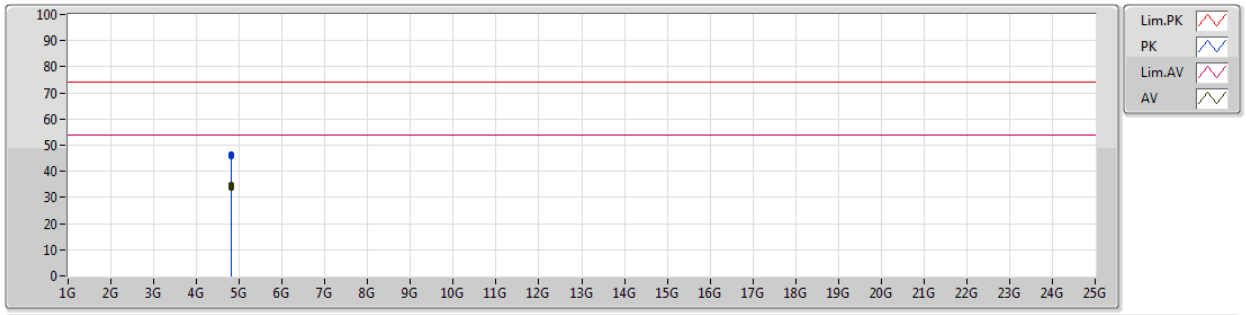
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.48G	95.54	Inf	-Inf	32.60	3	Horizontal	188	1.50	-
AV	2.4984G	48.79	54.00	-5.21	32.67	3	Horizontal	188	1.50	-
PK	2.48G	98.67	Inf	-Inf	32.60	3	Horizontal	188	1.50	-
PK	2.4892G	60.73	74.00	-13.27	32.63	3	Horizontal	188	1.50	-

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
1	Pass	PK	4.80299G	45.94	54.00	-8.06	2.07	3	Horizontal	237	1.26	-
2	Pass	AV	10.36876G	45.62	54.00	-8.38	12.66	3	Horizontal	50	1.28	-

Radiation-above 1GHz_Mode 1

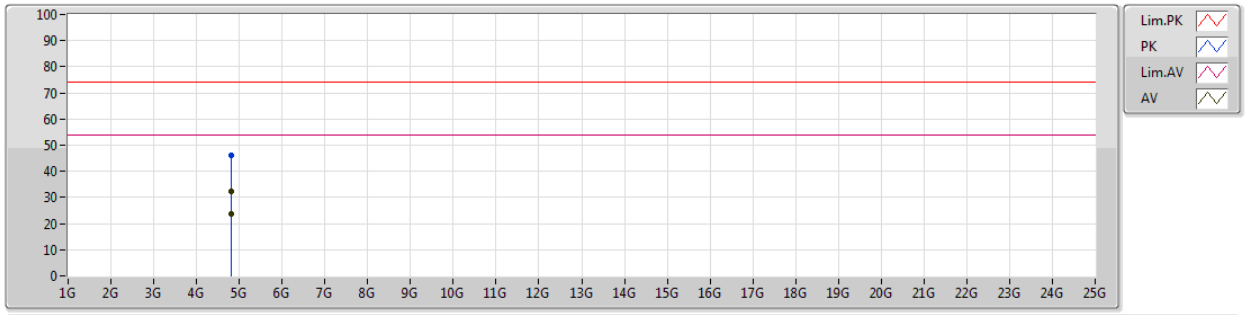
12/09/2018



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.80478G	33.74	54.00	-20.26	2.08	3	Vertical	124	1.48	-
AV	4.82456G	35.01	54.00	-18.99	2.13	3	Vertical	184	3.00	-
PK	4.80459G	45.63	74.00	-28.37	2.08	3	Vertical	124	1.48	-
PK	4.82466G	46.70	74.00	-27.30	2.13	3	Vertical	184	3.00	-

Radiation-above 1GHz_Mode 1

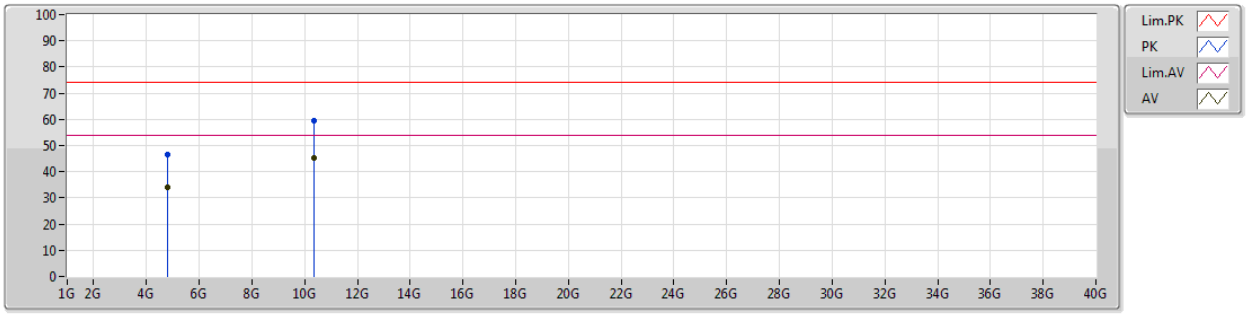
12/09/2018



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.806G	23.85	54.00	-30.15	2.08	3	Horizontal	237	1.26	-
AV	4.82247G	32.36	54.00	-21.64	2.13	3	Horizontal	116	1.55	-
PK	4.80299G	45.94	54.00	-8.06	2.07	3	Horizontal	237	1.26	-
PK	4.82417G	46.24	74.00	-27.76	2.13	3	Horizontal	116	1.55	-

Radiation-above 1GHz_Mode 2

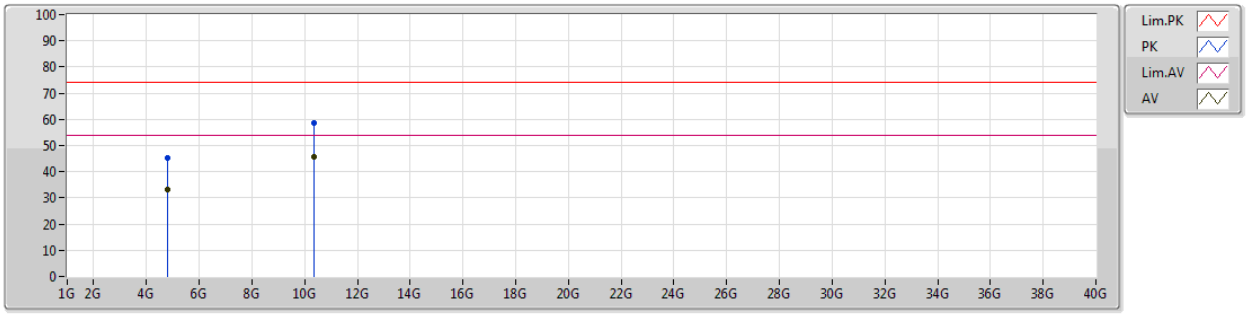
12/09/2018



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.80569G	34.03	54.00	-19.97	2.08	3	Vertical	129	1.45	-
AV	10.36546G	45.38	54.00	-8.62	12.64	3	Vertical	20	1.52	-
PK	4.80569G	46.67	74.00	-27.33	2.08	3	Vertical	129	1.45	-
PK	10.36546G	59.59	74.00	-14.41	12.64	3	Vertical	20	1.52	-

Radiation-above 1GHz_Mode 2

12/09/2018



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.80655G	33.20	54.00	-20.80	2.08	3	Horizontal	220	1.23	-
AV	10.36876G	45.62	54.00	-8.38	12.66	3	Horizontal	50	1.28	-
PK	4.80634G	45.12	74.00	-28.88	2.08	3	Horizontal	220	1.23	-
PK	10.36432G	58.65	74.00	-15.35	12.64	3	Horizontal	50	1.28	-