FCC Test Report

Equipment	:	**802.11b/g/n RTL8723BS Combo module**
Brand Name	:	**REALTEK**
Model No.	:	**RTL8723BS**
FCC ID	:	**TX2-RTL8723BS**
Standard	:	**47 CFR FCC Part 15.247**
Operating Band	:	**2400 MHz – 2483.5 MHz**
Function	:	**☒Point-to-multipoint; ☐Point-to-point**
Applicant / Manufacturer	:	**Realtek Semiconductor Corp. No. 2,Innovation Road II, Hsinchu Science Park, Hsinchu 300,Taiwan**

This is a partial report for permissive change. The product sample received on Nov. 06, 2017 and completely tested on Nov. 09, 2017. We, SPORTON, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONALINC., the test report shall not be reproduced except in full.

Phoenix Chen / Assistant Manager

Testing Laboratory
1190

Table of Contents

Summary of Test Result

Conformance Test Specifications				
Report Clause	**Ref. Std. Clause**	**Description**	**Limit**	**Result**
1.1.2	15.203	Antenna Requirement	FCC 15.203	Complied
3.1	15.247(b)	Maximum Conducted Output Power	15.247(b)	Complied
3.2	15.247(d)	Emissions in Non-restricted Frequency Bands	15.247(d)	Complied
3.3	15.247(d)	Emissions in Restricted Frequency Bands	Restricted Bands: FCC 15.209	Complied

Revision History

Report No.	Version	Description	Issued Date
FR780502-01AD	Rev. 01	Initial issue of report	Dec. 04, 2017

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	Gain (dBi)
1	1	MDLINK	MBMC01551682G	Dipole Antenna	Reversed-SMA	2

1.1.3 EUT Information

Operational Condition		
EUT Power Type	From Host System	
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)	0.779	1.085	2.899m	1k
BT-EDR(2Mbps)	0.789	1.029	2.905m	1k
BT-EDR(3Mbps)	0.789	1.029	2.907m	1k

1.1.5 Table for Permissive Change

This product is an extension of original one reported under Sporton project number: FR431858AB

Below is the table for the change of the product with respect to the original one.

Modifications	Performance Checking
1. Add dipole antenna 2. Update standard to ANSI C63.10-2013	1. Maximum Conducted Output Power is evaluated. 2. Emissions in Non-restricted Frequency Bands is evaluated. 3. Emissions in Restricted Frequency Bands is evaluated.

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
- Public Notice DA 00-705
- 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	TH06-HY	Barry	24°C / 58%	07/Nov/2017
Radiated	03CH02-HY	Andy	22.5°C / 59%	09/Nov/2017

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 (30MHz ~ 1,000MHz)	2.1 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	2.6 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	2.9 dB	Confidence levels of 95%
Conducted Emission	1.3 dB	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	Dos

Mode	Power Setting
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	Maximum Conducted Output Power 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		
Orthogonal Planes of EUT	**X Plane**	**Y Plane**	**Z Plane**
			
Worst Planes of EUT		V	

2.4 Support Equipment

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

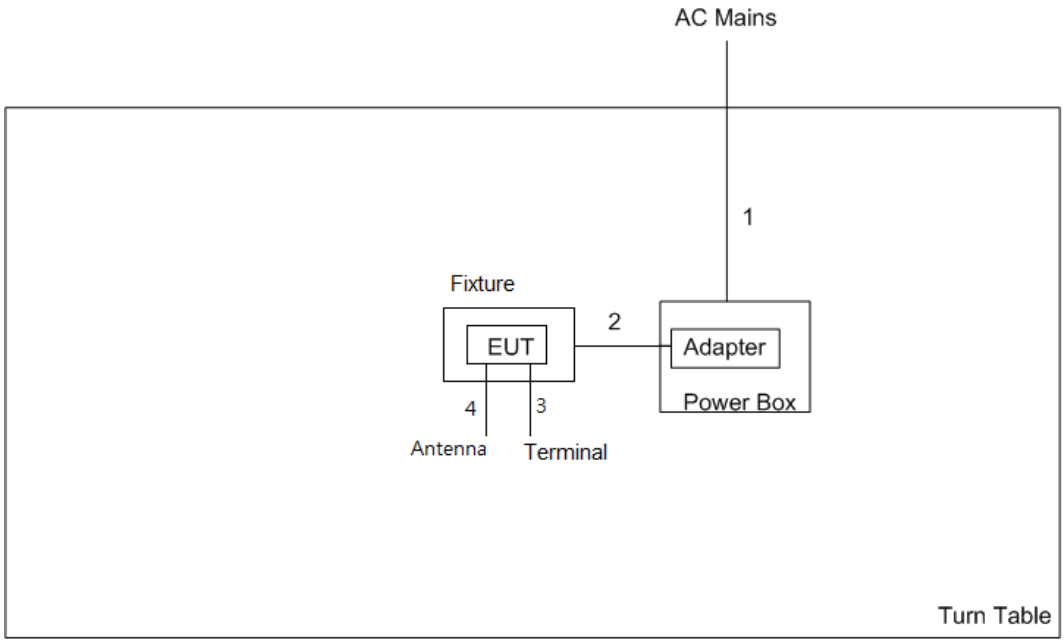
Note: Support equipment No.3 was provided by customer.

Support Equipment – Radiated Emission				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	Fixture	-	-	-
2	Antenna	MDLINK	MBMC01551682G	-
3	AC adapter	Phihong	PSC15R-050	DoC

Note: Support equipment No.1 and 2 was provided by customer.

2.5 Test Setup Diagram

Test Setup Diagram - Radiated Test > 1GHz



Item	Connection	Shielded	Length
1	AC Power line	No	1.8m
2	DC Power line	No	1.5m
3	RF Cable	No	0.15m
4	RF Cable	No	0.15m

3 Transmitter Test Result

3.1 Maximum Conducted Output Power

3.1.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit
▪ 902-928 MHz Band:
▪ N ≥50; Power 30dBm; EIRP 36dBm
▪ 50 >N≥ 25; Power 24dBm; EIRP 30dBm
▪ 2400-2483.5 MHz Band:
▪ N ≥ 75; Power 30dBm; EIRP 36dBm
▪ 75 >N ≥ 15; Power 21dBm; EIRP 27dBm
▪ 5725-5850 MHz Band:
▪ N ≥ 75; Power 30dBm; EIRP 36dBm
N:Number of Hopping Frequencies

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 7.8.5 for output power measurement.

3.1.4 Test Setup

Maximum Conducted Output Power (Peak Power Meter)


3.1.5 Test Result of Maximum Conducted Output Power

Refer as Appendix A

3.2 Emissions in Non-restricted Frequency Bands

3.2.1 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.	

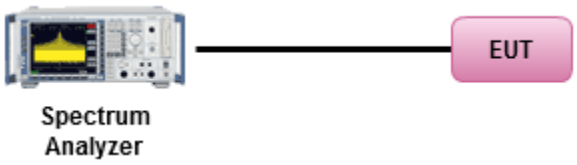
3.2.2 Measuring Instruments

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 7.8.8 for unwanted emissions into non-restricted bands.

3.2.4 Test Setup

Emissions in Non-restricted Frequency Bands


3.2.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix B

3.3 Emissions in Restricted Frequency Bands

3.3.1 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.

3.3.2 Measuring Instruments

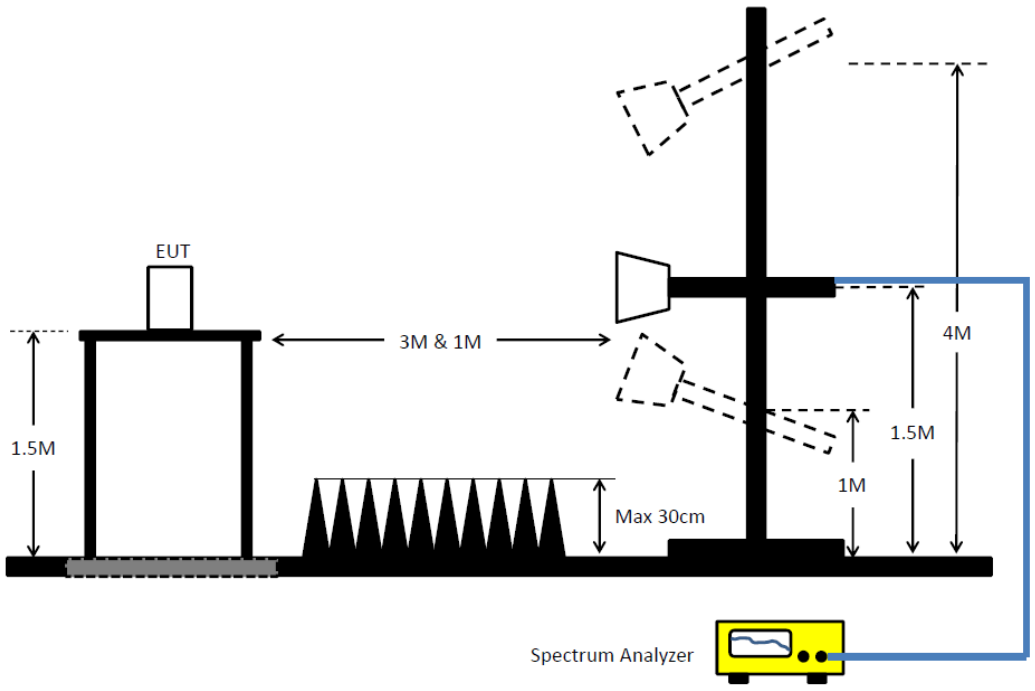
Refer a test equipment and calibration data table in this test report.

3.3.3 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.

3.3.4 Test Setup

Emissions in Restricted Frequency Bands
Above 1GHz



3.3.5 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.

3.3.6 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix C

4 Test Equipment and Calibration Data

Instrument for Radiated Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSP40	100305	9kHz - 40GHz	30/Dec/2016	29/Dec/2017
3m Semi Anechoic	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz ~ 18GHz	12/Dec/2016	11/Dec/2017
Amplifier	Ketsight	8449B	3008A02602	1GHz-26.5GHz	19/Sep/2017	18/Sep/2018
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA9120D 01531	1GHz-18GHz	11/May/2017	10/May/2018
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170154	18GHz-40GHz	06/Feb/2017	05/Feb/2018
Amplifier	MITEQ	JS44-18004000-33-8P	1840917	18GHz-40GHz	06/Feb/2017	05/Feb/2018
RF Cable-high	SUHNER	SUCOFLEX104	MY34918/4	1GHz ~ 40GHz	26/Jan/2017	25/Jan/2018
Bluetooth Tester	ROHDE & SCHWARZ	CBT	100959	-	02/Mar/2016	01/Mar/2018

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	30/Dec/2016	29/Dec/2017
Power Sensor	Anritsu	MA2411B	1027452	300MHz ~ 40GHz	24/Feb/2017	23/Feb/2018
Power Meter	Anritsu	ML2495A	1124009	300MHz ~ 40GHz	24/Feb/2017	23/Feb/2018
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	27/Jul/2017	26/Jul/2018
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY677/3	30MHz ~ 26.5GHz	25/Aug/2017	24/Aug/2018
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY678/3	30MHz ~ 26.5GHz	25/Aug/2017	24/Aug/2018
RF Cable-0.5m	HUBER+SUHNER	SUCOFLEX_104	MY10717/4	30MHz ~ 26.5GHz	25/Aug/2017	24/Aug/2018
Bluetooth Tester	ROHDE & SCHWARZ	CBT	101021	2.4GHz	28/Apr/2017	27/Apr/2018

Summary

Mode	Power	Power
	(dBm)	(W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	4.21	0.00264
BT-EDR(2Mbps)	3.55	0.00226
BT-EDR(3Mbps)	3.49	0.00223

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	2	4.08	21.00
2441MHz	Pass	2	4.21	21.00
2480MHz	Pass	2	3.95	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	2	3.37	21.00
2441MHz	Pass	2	3.55	21.00
2480MHz	Pass	2	3.26	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	2	3.39	21.00
2441MHz	Pass	2	3.49	21.00
2480MHz	Pass	2	3.24	21.00

Summary

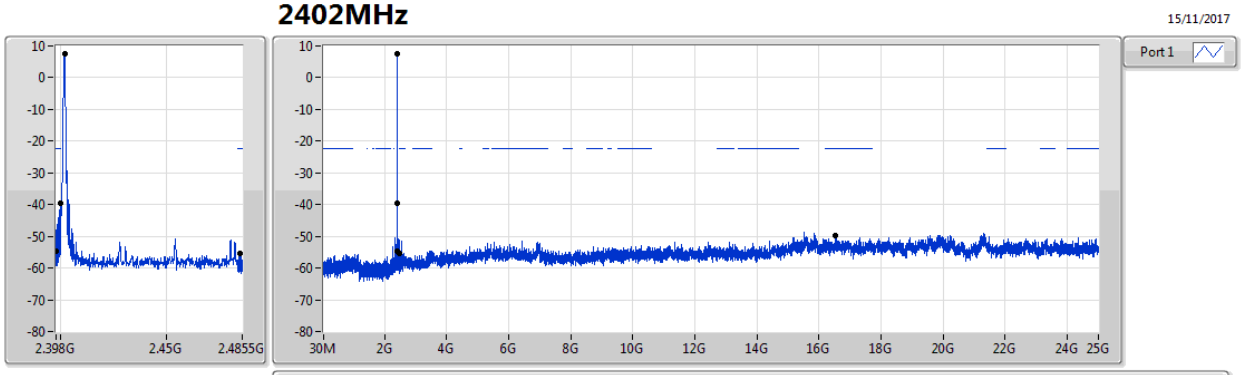
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-
BT-BR(1Mbps)	Pass	2.402004G	7.65	-22.35	2.398G	-54.63	2.39996G	-39.72	2.484492G	-55.51	16.514848G	-49.61	1
BT-EDR(2Mbps)	Pass	2.402171G	4.45	-25.55	604.24M	-55.81	2.399964G	-39.92	2.485456G	-56.26	17.61243G	-49.92	1
BT-EDR(3Mbps)	Pass	2.40167G	5.23	-24.77	2.398G	-54.48	2.399972G	-39.95	2.485452G	-56.18	2.561486G	-46.32	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	2.402004G	7.65	-22.35	2.398G	-54.63	2.39996G	-39.72	2.484492G	-55.51	16.514848G	-49.61	1
2441MHz_TnomVnom	Pass	2.441082G	7.64	-22.36	813.808M	-55.46	2.399528G	-56.57	2.484304G	-55.94	2.600887G	-47.67	1
2480MHz_TnomVnom	Pass	2.479993G	7.39	-22.61	819.728M	-54.65	2.399984G	-45.66	2.483504G	-45.90	15.209007G	-49.44	1
BT-EDR(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz_TnomVnom	Pass	2.402171G	4.45	-25.55	604.24M	-55.81	2.399964G	-39.92	2.485456G	-56.26	17.61243G	-49.92	1
2441MHz_TnomVnom	Pass	2.441249G	8.55	-21.45	579.376M	-54.58	2.398952G	-56.94	2.485108G	-55.11	17.215612G	-49.28	1
2480MHz_TnomVnom	Pass	2.48016G	5.78	-24.22	897.872M	-54.99	2.399944G	-49.98	2.483544G	-45.48	17.22124G	-49.40	1
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz_TnomVnom	Pass	2.40167G	5.23	-24.77	2.398G	-54.48	2.399972G	-39.95	2.485452G	-56.18	2.561486G	-46.32	1
2441MHz_TnomVnom	Pass	2.441082G	5.36	-24.64	742.768M	-56.18	2.398368G	-56.55	2.483856G	-55.59	23.339556G	-50.18	1
2480MHz_TnomVnom	Pass	2.479993G	6.50	-23.50	665.808M	-55.63	2.39994G	-49.03	2.483612G	-45.16	2.637473G	-49.66	1

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

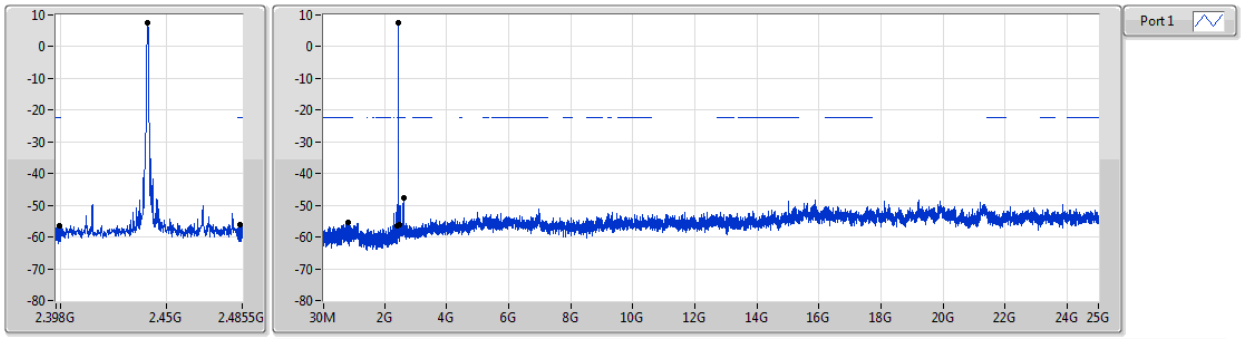
2402MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.402004G	7.65	-22.35	2.398G	-54.63	2.39996G	-39.72	2.484492G	-55.51	16.514848G	-49.61	1

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

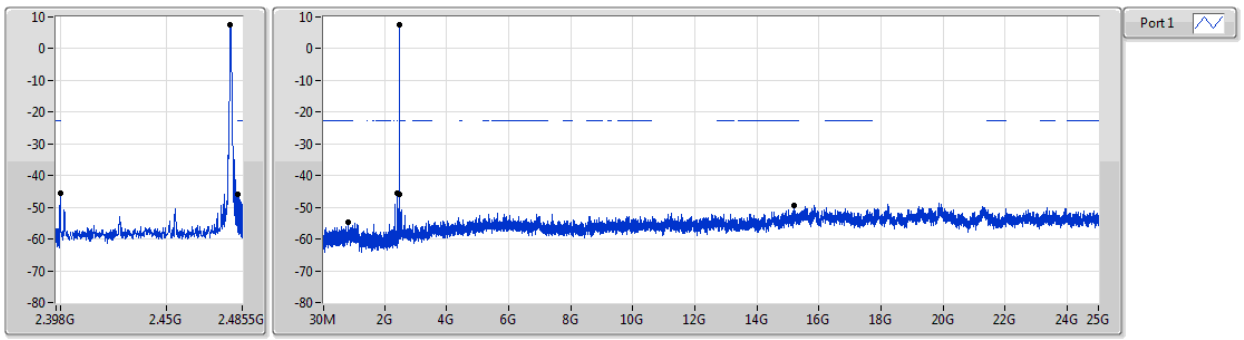
2441MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.441082G	7.64	-22.36	813.808M	-55.46	2.399528G	-56.57	2.484304G	-55.94	2.600887G	-47.67	1

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

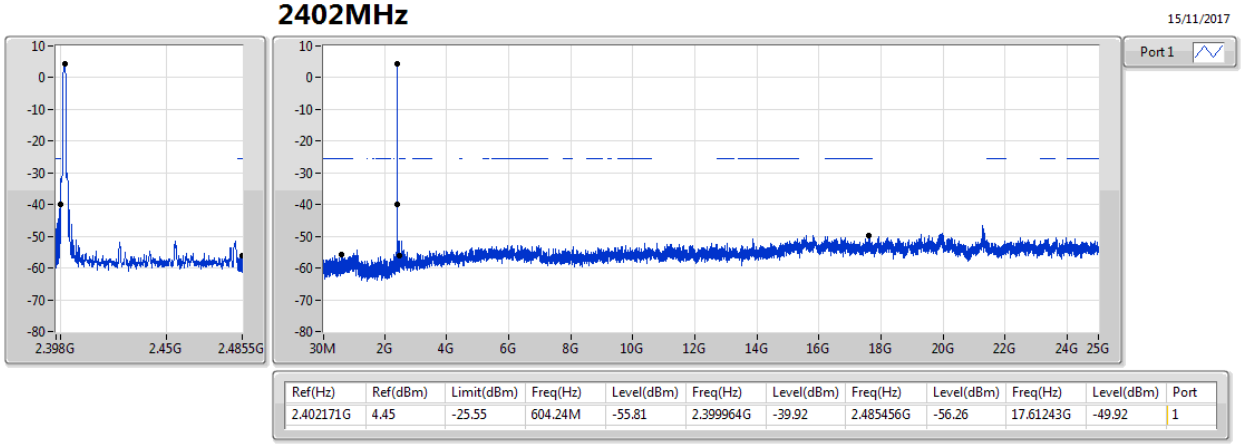
2480MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.479993G	7.39	-22.61	819.728M	-54.65	2.399984G	-45.66	2.483504G	-45.90	15.209007G	-49.44	1

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

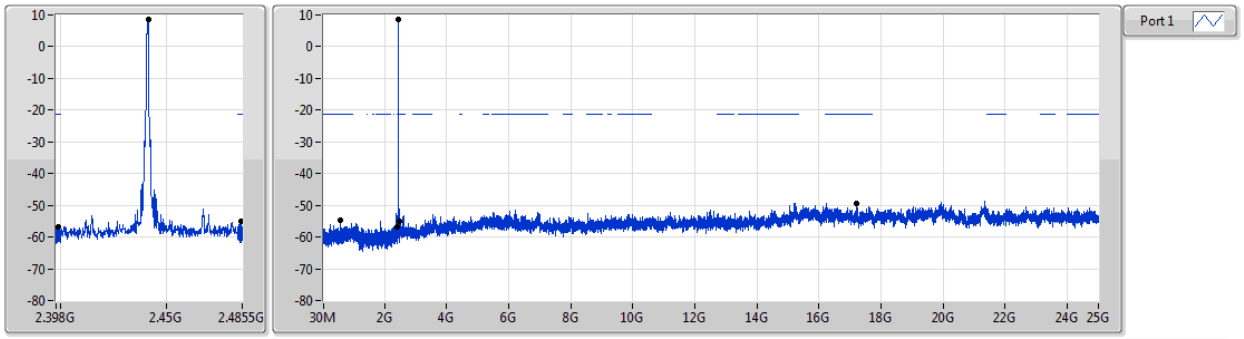
2402MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.402171G	4.45	-25.55	604.24M	-55.81	2.399964G	-39.92	2.485456G	-56.26	17.61243G	-49.92	1

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

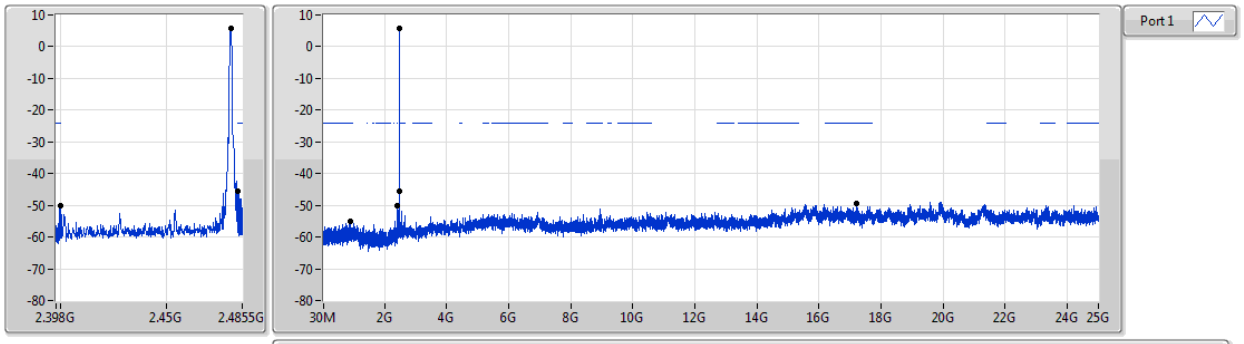
2441MHz



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	8.55	-21.45	579.376M	-54.58	2.398952G	-56.94	2.485108G	-55.11	17.215612G	-49.28	1

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

2480MHz

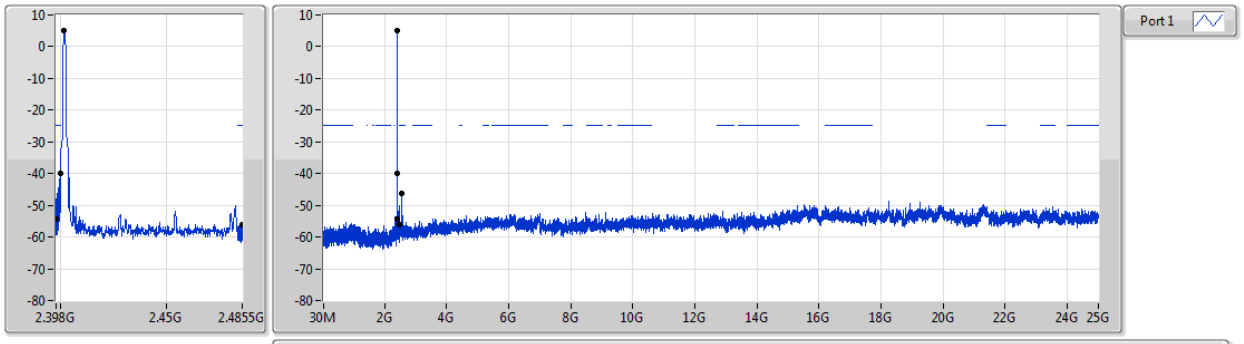


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.48016G	5.78	-24.22	897.872M	-54.99	2.399944G	-49.98	2.483544G	-45.48	17.22124G	-49.40	1

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

2402MHz

15/11/2017

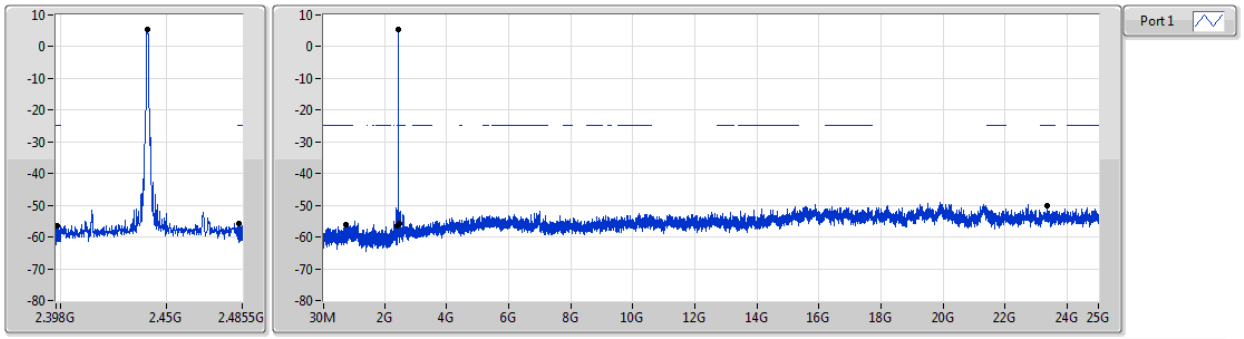


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.40167G	5.23	-24.77	2.398G	-54.48	2.399972G	-39.95	2.485452G	-56.18	2.561486G	-46.32	1

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

2441MHz

15/11/2017

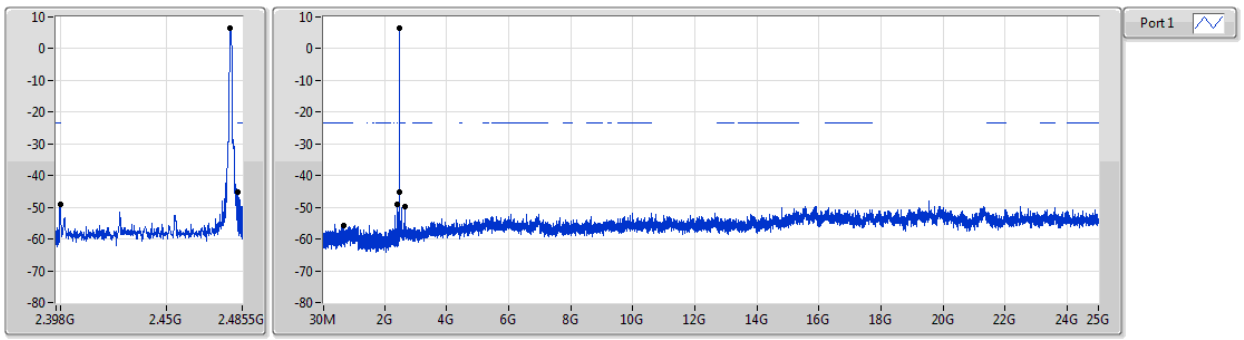


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.441082G	5.36	-24.64	742.768M	-56.18	2.398368G	-56.55	2.483856G	-55.59	23.339556G	-50.18	1

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

2480MHz

15/11/2017



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	6.50	-23.50	665.808M	-55.63	2.39994G	-49.03	2.483612G	-45.16	2.637473G	-49.66	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	AV	2.4856G	49.37	54.00	-4.63	33.10	3	Vertical	354	2.72	-
BT-EDR(2Mbps)	Pass	AV	2.5788G	49.10	54.00	-4.90	33.43	3	Vertical	355	2.22	-
BT-EDR(3Mbps)	Pass	AV	2.5214G	49.60	54.00	-4.40	33.23	3	Vertical	352	2.66	-

Result

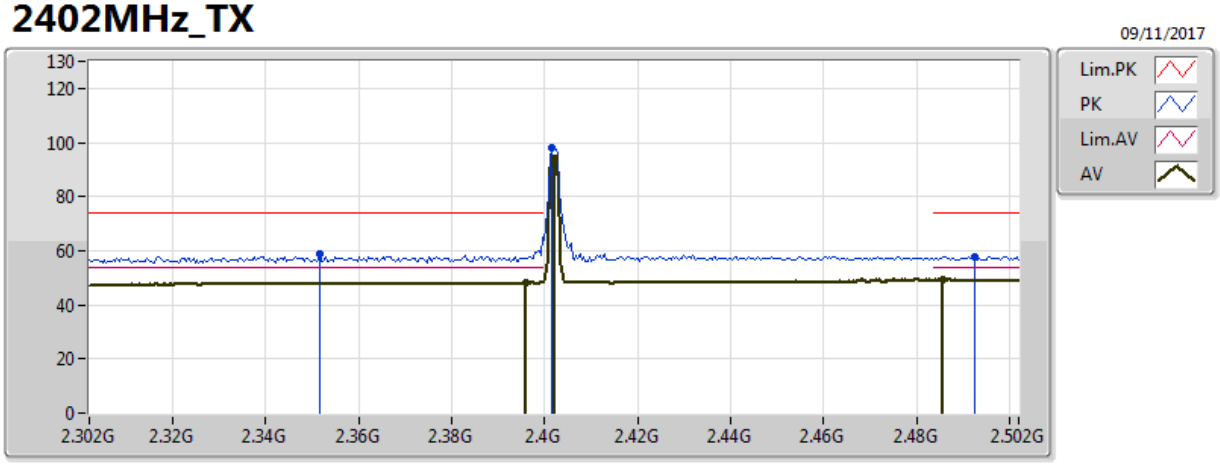
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-BR(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3944G	47.96	54.00	-6.04	32.74	3	Horizontal	174	3.51	-
2402MHz	Pass	AV	2.402G	90.69	Inf	-Inf	32.77	3	Horizontal	174	3.51	-
2402MHz	Pass	AV	2.4836G	48.77	54.00	-5.23	33.09	3	Horizontal	174	3.51	-
2402MHz	Pass	PK	2.3524G	58.63	74.00	-15.37	32.57	3	Horizontal	174	3.51	-
2402MHz	Pass	PK	2.402G	94.37	Inf	-Inf	32.77	3	Horizontal	174	3.51	-
2402MHz	Pass	PK	2.4996G	60.28	74.00	-13.72	33.16	3	Horizontal	174	3.51	-
2402MHz	Pass	AV	2.396G	47.98	54.00	-6.02	32.74	3	Vertical	354	2.72	-
2402MHz	Pass	AV	2.402G	94.23	Inf	-Inf	32.77	3	Vertical	354	2.72	-
2402MHz	Pass	AV	2.4856G	49.37	54.00	-4.63	33.10	3	Vertical	354	2.72	-
2402MHz	Pass	PK	2.3516G	58.69	74.00	-15.31	32.57	3	Vertical	354	2.72	-
2402MHz	Pass	PK	2.4016G	97.85	Inf	-Inf	32.77	3	Vertical	354	2.72	-
2402MHz	Pass	PK	2.4924G	57.55	74.00	-16.45	33.13	3	Vertical	354	2.72	-
2441MHz	Pass	AV	2.3922G	48.00	54.00	-6.00	32.73	3	Horizontal	180	1.50	-
2441MHz	Pass	AV	2.441G	86.50	Inf	-Inf	32.92	3	Horizontal	180	1.50	-
2441MHz	Pass	AV	2.4998G	48.78	54.00	-5.22	33.16	3	Horizontal	180	1.50	-
2441MHz	Pass	PK	2.3854G	59.16	74.00	-14.84	32.70	3	Horizontal	180	1.50	-
2441MHz	Pass	PK	2.441G	90.40	Inf	-Inf	32.92	3	Horizontal	180	1.50	-
2441MHz	Pass	PK	2.5398G	59.93	74.00	-14.07	33.30	3	Horizontal	180	1.50	-
2441MHz	Pass	AV	2.3974G	47.92	54.00	-6.08	32.75	3	Vertical	354	2.68	-
2441MHz	Pass	AV	2.441G	94.92	Inf	-Inf	32.92	3	Vertical	354	2.68	-
2441MHz	Pass	AV	2.5206G	48.94	54.00	-5.06	33.23	3	Vertical	354	2.68	-
2441MHz	Pass	PK	2.3986G	59.79	74.00	-14.21	32.75	3	Vertical	354	2.68	-
2441MHz	Pass	PK	2.4406G	98.81	Inf	-Inf	32.92	3	Vertical	354	2.68	-
2441MHz	Pass	PK	2.5354G	59.82	74.00	-14.18	33.28	3	Vertical	354	2.68	-
2480MHz	Pass	AV	2.3912G	47.97	54.00	-6.03	32.73	3	Horizontal	179	3.65	-
2480MHz	Pass	AV	2.48G	86.34	Inf	-Inf	33.08	3	Horizontal	179	3.65	-
2480MHz	Pass	AV	2.5776G	49.11	54.00	-4.89	33.42	3	Horizontal	179	3.65	-
2480MHz	Pass	PK	2.3888G	58.06	74.00	-15.94	32.72	3	Horizontal	179	3.65	-
2480MHz	Pass	PK	2.48G	90.22	Inf	-Inf	33.08	3	Horizontal	179	3.65	-
2480MHz	Pass	PK	2.5672G	60.16	74.00	-13.84	33.39	3	Horizontal	179	3.65	-
2480MHz	Pass	AV	2.3932G	47.93	54.00	-6.07	32.73	3	Vertical	233	2.55	-
2480MHz	Pass	AV	2.48G	94.98	Inf	-Inf	33.08	3	Vertical	233	2.55	-
2480MHz	Pass	AV	2.5792G	49.14	54.00	-4.86	33.43	3	Vertical	233	2.55	-
2480MHz	Pass	PK	2.3988G	58.57	74.00	-15.43	32.76	3	Vertical	233	2.55	-
2480MHz	Pass	PK	2.48G	98.94	Inf	-Inf	33.08	3	Vertical	233	2.55	-
2480MHz	Pass	PK	2.4836G	63.35	74.00	-10.65	33.09	3	Vertical	233	2.55	-
BT-EDR(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3964G	47.92	54.00	-6.08	32.75	3	Horizontal	173	3.50	-
2402MHz	Pass	AV	2.402G	89.98	Inf	-Inf	32.77	3	Horizontal	173	3.50	-
2402MHz	Pass	AV	2.4992G	48.73	54.00	-5.27	33.16	3	Horizontal	173	3.50	-
2402MHz	Pass	PK	2.3736G	58.54	74.00	-15.46	32.66	3	Horizontal	173	3.50	-
2402MHz	Pass	PK	2.402G	95.68	Inf	-Inf	32.77	3	Horizontal	173	3.50	-
2402MHz	Pass	PK	2.4984G	59.34	74.00	-14.66	33.15	3	Horizontal	173	3.50	-
2402MHz	Pass	PK	2.5008G	59.10	74.00	-14.90	33.16	3	Horizontal	173	3.50	-
2402MHz	Pass	AV	2.396G	48.01	54.00	-5.99	32.74	3	Vertical	353	2.73	-
2402MHz	Pass	AV	2.402G	93.35	Inf	-Inf	32.77	3	Vertical	353	2.73	-
2402MHz	Pass	AV	2.5012G	48.78	54.00	-5.22	33.16	3	Vertical	353	2.73	-

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	2.3992G	61.57	74.00	-12.43	32.76	3	Vertical	353	2.73	-
2402MHz	Pass	PK	2.402G	99.11	Inf	-Inf	32.77	3	Vertical	353	2.73	-
2402MHz	Pass	PK	2.4852G	59.27	74.00	-14.73	33.10	3	Vertical	353	2.73	-
2441MHz	Pass	AV	2.3886G	47.97	54.00	-6.03	32.72	3	Horizontal	180	1.49	-
2441MHz	Pass	AV	2.441G	87.04	Inf	-Inf	32.92	3	Horizontal	180	1.49	-
2441MHz	Pass	AV	2.539G	48.98	54.00	-5.02	33.29	3	Horizontal	180	1.49	-
2441MHz	Pass	PK	2.3694G	58.88	74.00	-15.12	32.64	3	Horizontal	180	1.49	-
2441MHz	Pass	PK	2.441G	92.60	Inf	-Inf	32.92	3	Horizontal	180	1.49	-
2441MHz	Pass	PK	2.5018G	59.77	74.00	-14.23	33.17	3	Horizontal	180	1.49	-
2441MHz	Pass	AV	2.3982G	48.08	54.00	-5.92	32.75	3	Vertical	352	2.67	-
2441MHz	Pass	AV	2.441G	95.12	Inf	-Inf	32.92	3	Vertical	352	2.67	-
2441MHz	Pass	AV	2.5366G	48.96	54.00	-5.04	33.28	3	Vertical	352	2.67	-
2441MHz	Pass	PK	2.3942G	58.92	74.00	-15.08	32.74	3	Vertical	352	2.67	-
2441MHz	Pass	PK	2.441G	100.92	Inf	-Inf	32.92	3	Vertical	352	2.67	-
2441MHz	Pass	PK	2.485G	59.61	74.00	-14.39	33.10	3	Vertical	352	2.67	-
2480MHz	Pass	AV	2.3912G	47.93	54.00	-6.07	32.73	3	Horizontal	179	3.64	-
2480MHz	Pass	AV	2.48G	87.04	Inf	-Inf	33.08	3	Horizontal	179	3.64	-
2480MHz	Pass	AV	2.5772G	49.03	54.00	-4.97	33.42	3	Horizontal	179	3.64	-
2480MHz	Pass	PK	2.3976G	58.83	74.00	-15.17	32.75	3	Horizontal	179	3.64	-
2480MHz	Pass	PK	2.48G	92.64	Inf	-Inf	33.08	3	Horizontal	179	3.64	-
2480MHz	Pass	PK	2.534G	60.12	74.00	-13.88	33.28	3	Horizontal	179	3.64	-
2480MHz	Pass	AV	2.3976G	48.00	54.00	-6.00	32.75	3	Vertical	355	2.22	-
2480MHz	Pass	AV	2.48G	94.23	Inf	-Inf	33.08	3	Vertical	355	2.22	-
2480MHz	Pass	AV	2.5788G	49.10	54.00	-4.90	33.43	3	Vertical	355	2.22	-
2480MHz	Pass	PK	2.3888G	58.75	74.00	-15.25	32.72	3	Vertical	355	2.22	-
2480MHz	Pass	PK	2.48G	99.97	Inf	-Inf	33.08	3	Vertical	355	2.22	-
2480MHz	Pass	PK	2.4836G	62.64	74.00	-11.36	33.09	3	Vertical	355	2.22	-
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3976G	48.00	54.00	-6.00	32.75	3	Horizontal	173	3.50	-
2402MHz	Pass	AV	2.402G	89.30	Inf	-Inf	32.77	3	Horizontal	173	3.50	-
2402MHz	Pass	AV	2.5008G	48.68	54.00	-5.32	33.16	3	Horizontal	173	3.50	-
2402MHz	Pass	PK	2.3992G	58.95	74.00	-15.05	32.76	3	Horizontal	173	3.50	-
2402MHz	Pass	PK	2.402G	95.03	Inf	-Inf	32.77	3	Horizontal	173	3.50	-
2402MHz	Pass	PK	2.4884G	59.53	74.00	-14.47	33.11	3	Horizontal	173	3.50	-
2402MHz	Pass	AV	2.3996G	48.07	54.00	-5.93	32.76	3	Vertical	273	3.54	-
2402MHz	Pass	AV	2.402G	88.85	Inf	-Inf	32.77	3	Vertical	273	3.54	-
2402MHz	Pass	AV	2.5016G	48.74	54.00	-5.26	33.17	3	Vertical	273	3.54	-
2402MHz	Pass	PK	2.3924G	59.10	74.00	-14.90	32.73	3	Vertical	273	3.54	-
2402MHz	Pass	PK	2.402G	94.66	Inf	-Inf	32.77	3	Vertical	273	3.54	-
2402MHz	Pass	PK	2.4864G	59.60	74.00	-14.40	33.11	3	Vertical	273	3.54	-
2402MHz	Pass	AV	4.88G	36.03	54.00	-17.97	4.29	3	Vertical	0	1.50	-
2402MHz	Pass	AV	4.88G	36.16	54.00	-17.84	4.29	3	Vertical	360	1.50	-
2402MHz	Pass	PK	4.88G	47.03	74.00	-26.97	4.29	3	Vertical	0	1.50	-
2402MHz	Pass	PK	4.88G	46.79	74.00	-27.21	4.29	3	Vertical	360	1.50	-
2441MHz	Pass	AV	2.391G	47.91	54.00	-6.09	32.72	3	Horizontal	179	1.50	-
2441MHz	Pass	AV	2.441G	91.06	Inf	-Inf	32.92	3	Horizontal	179	1.50	-
2441MHz	Pass	AV	2.521G	49.11	54.00	-4.89	33.23	3	Horizontal	179	1.50	-
2441MHz	Pass	PK	2.3526G	59.23	74.00	-14.77	32.58	3	Horizontal	179	1.50	-
2441MHz	Pass	PK	2.441G	96.69	Inf	-Inf	32.92	3	Horizontal	179	1.50	-

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2441MHz	Pass	PK	2.4918G	59.84	74.00	-14.16	33.13	3	Horizontal	179	1.50	-
2441MHz	Pass	AV	2.3898G	48.04	54.00	-5.96	32.72	3	Vertical	352	2.66	-
2441MHz	Pass	AV	2.441G	95.55	Inf	-Inf	32.92	3	Vertical	352	2.66	-
2441MHz	Pass	AV	2.5214G	49.60	54.00	-4.40	33.23	3	Vertical	352	2.66	-
2441MHz	Pass	PK	2.3742G	58.98	74.00	-15.02	32.66	3	Vertical	352	2.66	-
2441MHz	Pass	PK	2.441G	101.36	Inf	-Inf	32.92	3	Vertical	352	2.66	-
2441MHz	Pass	PK	2.5362G	60.52	74.00	-13.48	33.28	3	Vertical	352	2.66	-
2480MHz												

BT-BR(1Mbps)

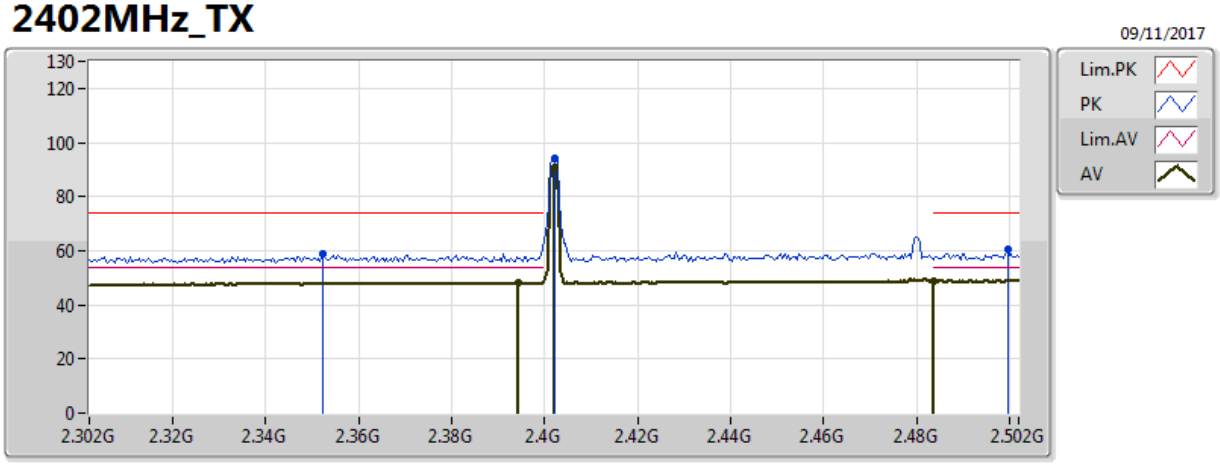
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.396G	47.98	54.00	-6.02	32.74	3	Vertical	354	2.72	-	15.24	27.01	5.74	-
AV	2.402G	94.23	Inf	-Inf	32.77	3	Vertical	354	2.72	-	61.47	27.03	5.74	-
AV	2.4856G	49.37	54.00	-4.63	33.10	3	Vertical	354	2.72	-	16.27	27.26	5.84	-
PK	2.3516G	58.69	74.00	-15.31	32.57	3	Vertical	354	2.72	-	26.12	26.88	5.69	-
PK	2.4016G	97.85	Inf	-Inf	32.77	3	Vertical	354	2.72	-	65.09	27.02	5.74	-
PK	2.4924G	57.55	74.00	-16.45	33.13	3	Vertical	354	2.72	-	24.42	27.28	5.85	-

BT-BR(1Mbps)

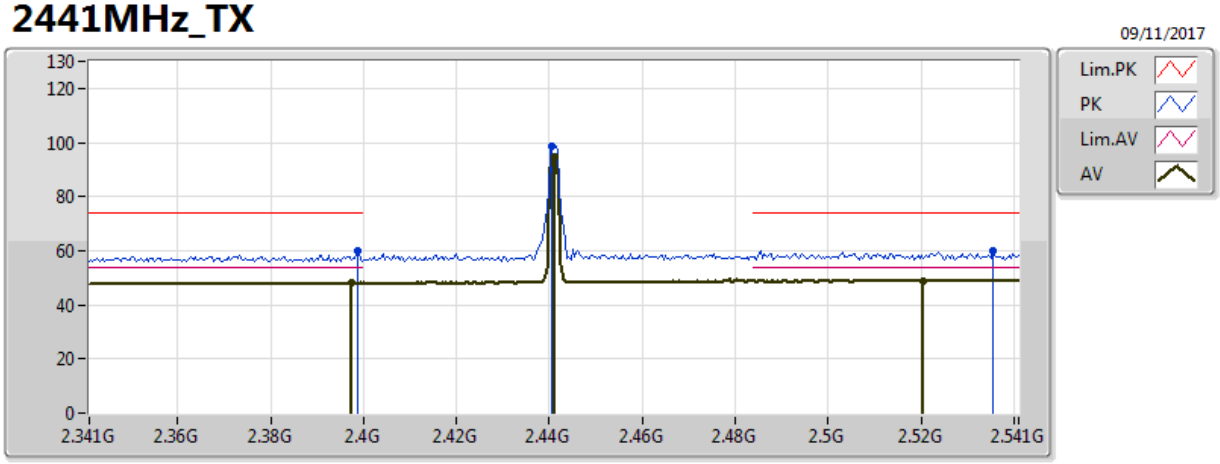
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3944G	47.96	54.00	-6.04	32.74	3	Horizontal	174	3.51	-	15.22	27.00	5.73	-
AV	2.402G	90.69	Inf	-Inf	32.77	3	Horizontal	174	3.51	-	57.92	27.03	5.74	-
AV	2.4836G	48.77	54.00	-5.23	33.09	3	Horizontal	174	3.51	-	15.68	27.25	5.84	-
PK	2.3524G	58.63	74.00	-15.37	32.57	3	Horizontal	174	3.51	-	26.06	26.89	5.69	-
PK	2.402G	94.37	Inf	-Inf	32.77	3	Horizontal	174	3.51	-	61.60	27.03	5.74	-
PK	2.4996G	60.28	74.00	-13.72	33.16	3	Horizontal	174	3.51	-	27.12	27.30	5.86	-

BT-BR(1Mbps)

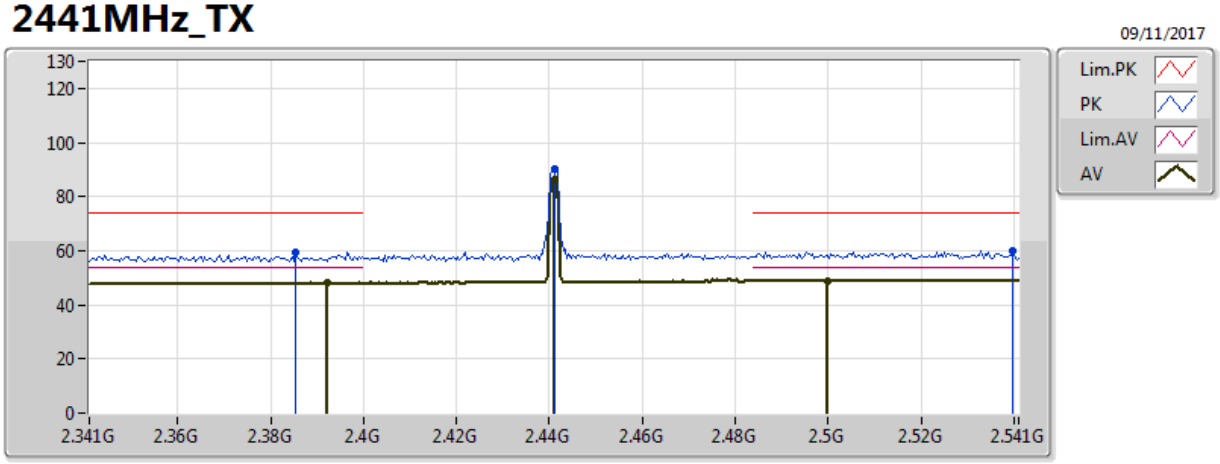
2441MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3974G	47.92	54.00	-6.08	32.75	3	Vertical	354	2.68	-	15.17	27.01	5.74	-
AV	2.441G	94.92	Inf	-Inf	32.92	3	Vertical	354	2.68	-	62.00	27.13	5.79	-
AV	2.5206G	48.94	54.00	-5.06	33.23	3	Vertical	354	2.68	-	15.71	27.35	5.88	-
PK	2.3986G	59.79	74.00	-14.21	32.75	3	Vertical	354	2.68	-	27.04	27.02	5.74	-
PK	2.4406G	98.81	Inf	-Inf	32.92	3	Vertical	354	2.68	-	65.89	27.13	5.79	-
PK	2.5354G	59.82	74.00	-14.18	33.28	3	Vertical	354	2.68	-	26.54	27.39	5.89	-

BT-BR(1Mbps)

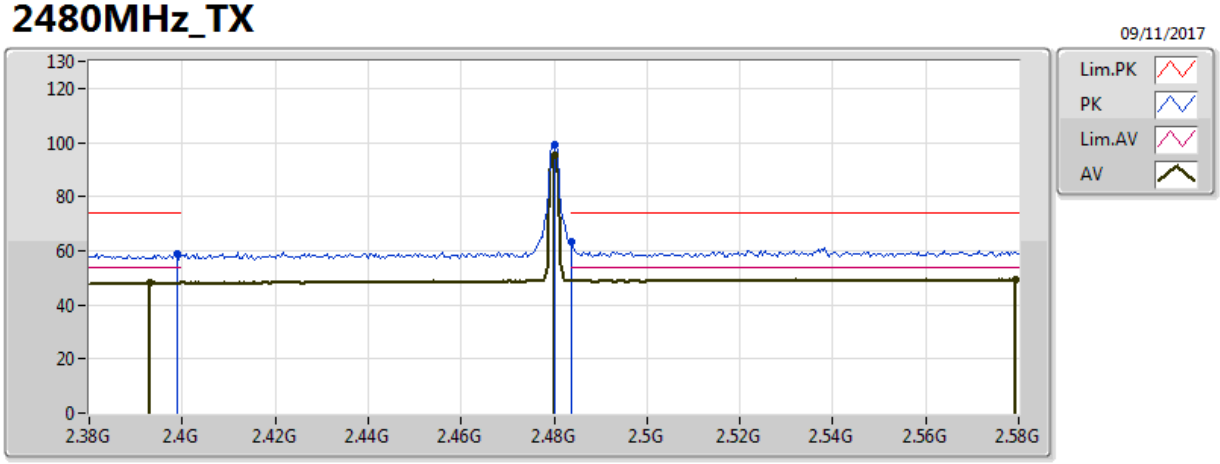
2441MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3922G	48.00	54.00	-6.00	32.73	3	Horizontal	180	1.50	-	15.27	27.00	5.73	-
AV	2.441G	86.50	Inf	-Inf	32.92	3	Horizontal	180	1.50	-	53.58	27.13	5.79	-
AV	2.4998G	48.78	54.00	-5.22	33.16	3	Horizontal	180	1.50	-	15.62	27.30	5.86	-
PK	2.3854G	59.16	74.00	-14.84	32.70	3	Horizontal	180	1.50	-	26.46	26.98	5.72	-
PK	2.441G	90.40	Inf	-Inf	32.92	3	Horizontal	180	1.50	-	57.48	27.13	5.79	-
PK	2.5398G	59.93	74.00	-14.07	33.30	3	Horizontal	180	1.50	-	26.63	27.40	5.89	-

BT-BR(1Mbps)

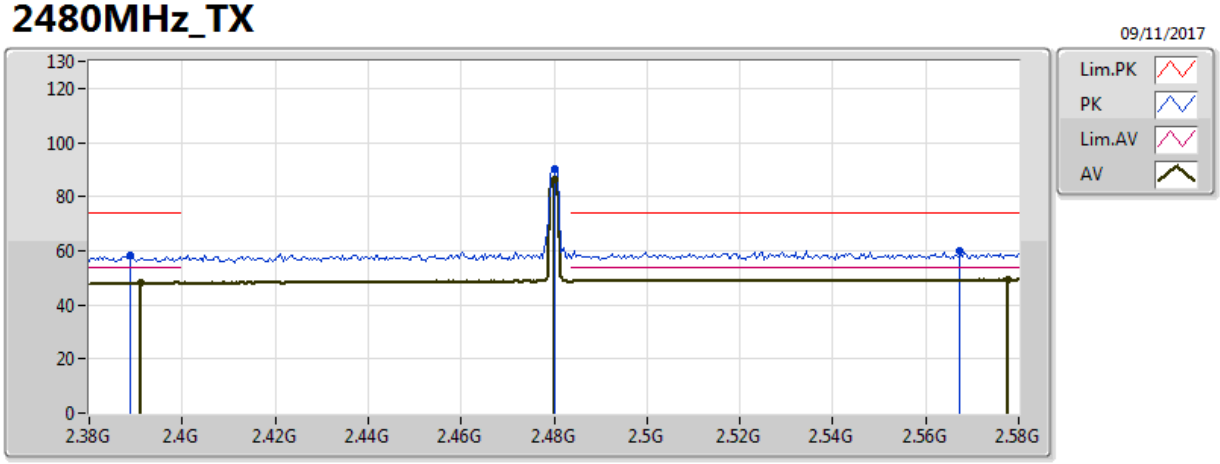
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3932G	47.93	54.00	-6.07	32.73	3	Vertical	233	2.55	-	15.20	27.00	5.73	-
AV	2.48G	94.98	Inf	-Inf	33.08	3	Vertical	233	2.55	-	61.90	27.24	5.84	-
AV	2.5792G	49.14	54.00	-4.86	33.43	3	Vertical	233	2.55	-	15.71	27.51	5.92	-
PK	2.3988G	58.57	74.00	-15.43	32.76	3	Vertical	233	2.55	-	25.81	27.02	5.74	-
PK	2.48G	98.94	Inf	-Inf	33.08	3	Vertical	233	2.55	-	65.86	27.24	5.84	-
PK	2.4836G	63.35	74.00	-10.65	33.09	3	Vertical	233	2.55	-	30.26	27.25	5.84	-

BT-BR(1Mbps)

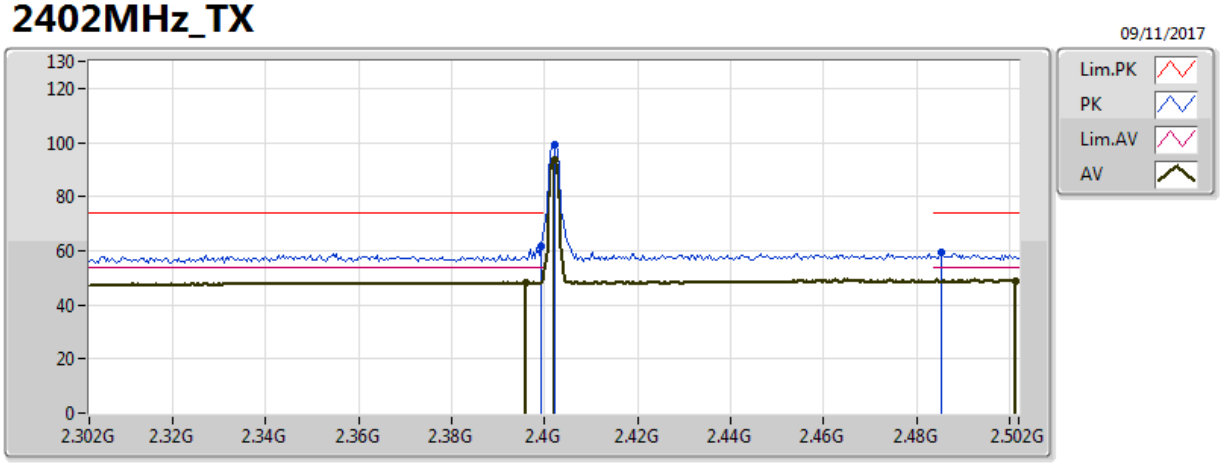
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3912G	47.97	54.00	-6.03	32.73	3	Horizontal	179	3.65	-	15.24	27.00	5.73	-
AV	2.48G	86.34	Inf	-Inf	33.08	3	Horizontal	179	3.65	-	53.26	27.24	5.84	-
AV	2.5776G	49.11	54.00	-4.89	33.42	3	Horizontal	179	3.65	-	15.69	27.50	5.92	-
PK	2.3888G	58.06	74.00	-15.94	32.72	3	Horizontal	179	3.65	-	25.34	26.99	5.73	-
PK	2.48G	90.22	Inf	-Inf	33.08	3	Horizontal	179	3.65	-	57.14	27.24	5.84	-
PK	2.5672G	60.16	74.00	-13.84	33.39	3	Horizontal	179	3.65	-	26.77	27.47	5.91	-

BT-EDR(2Mbps)

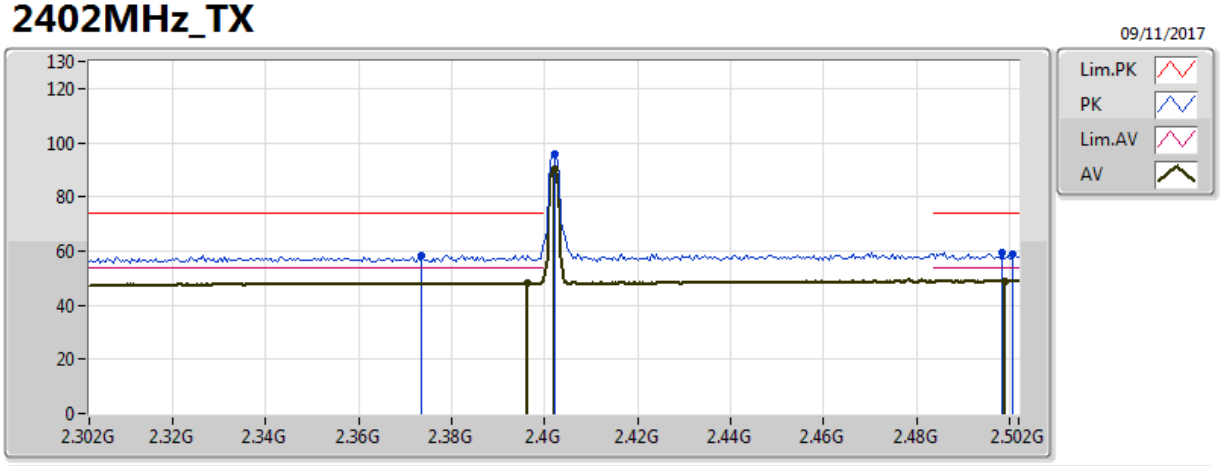
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.396G	48.01	54.00	-5.99	32.74	3	Vertical	353	2.73	-	15.27	27.01	5.74	-
AV	2.402G	93.35	Inf	-Inf	32.77	3	Vertical	353	2.73	-	60.58	27.03	5.74	-
AV	2.5012G	48.78	54.00	-5.22	33.16	3	Vertical	353	2.73	-	15.62	27.30	5.86	-
PK	2.402G	99.11	Inf	-Inf	32.77	3	Vertical	353	2.73	-	66.34	27.03	5.74	-
PK	2.4852G	59.27	74.00	-14.73	33.10	3	Vertical	353	2.73	-	26.17	27.26	5.84	-
PK	2.3992G	61.57	74.00	-12.43	32.76	3	Vertical	353	2.73	-	28.81	27.02	5.74	-

BT-EDR(2Mbps)

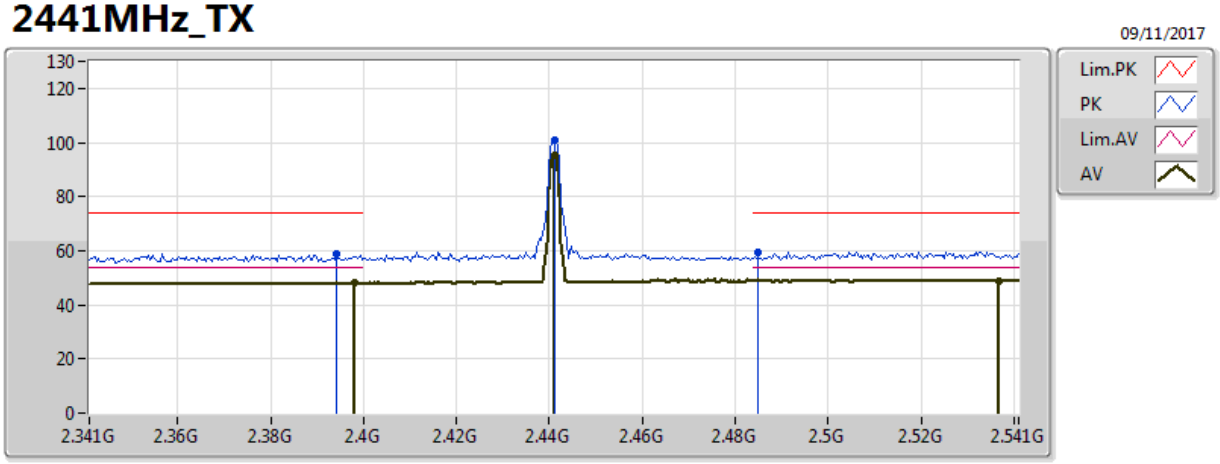
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3964G	47.92	54.00	-6.08	32.75	3	Horizontal	173	3.50	-	15.17	27.01	5.74	-
AV	2.402G	89.98	Inf	-Inf	32.77	3	Horizontal	173	3.50	-	57.21	27.03	5.74	-
AV	2.4992G	48.73	54.00	-5.27	33.16	3	Horizontal	173	3.50	-	15.57	27.30	5.86	-
PK	2.3736G	58.54	74.00	-15.46	32.66	3	Horizontal	173	3.50	-	25.88	26.95	5.71	-
PK	2.402G	95.68	Inf	-Inf	32.77	3	Horizontal	173	3.50	-	62.92	27.03	5.74	-
PK	2.4984G	59.34	74.00	-14.66	33.15	3	Horizontal	173	3.50	-	26.18	27.30	5.86	-
PK	2.5008G	59.10	74.00	-14.90	33.16	3	Horizontal	173	3.50	-	25.94	27.30	5.86	-

BT-EDR(2Mbps)

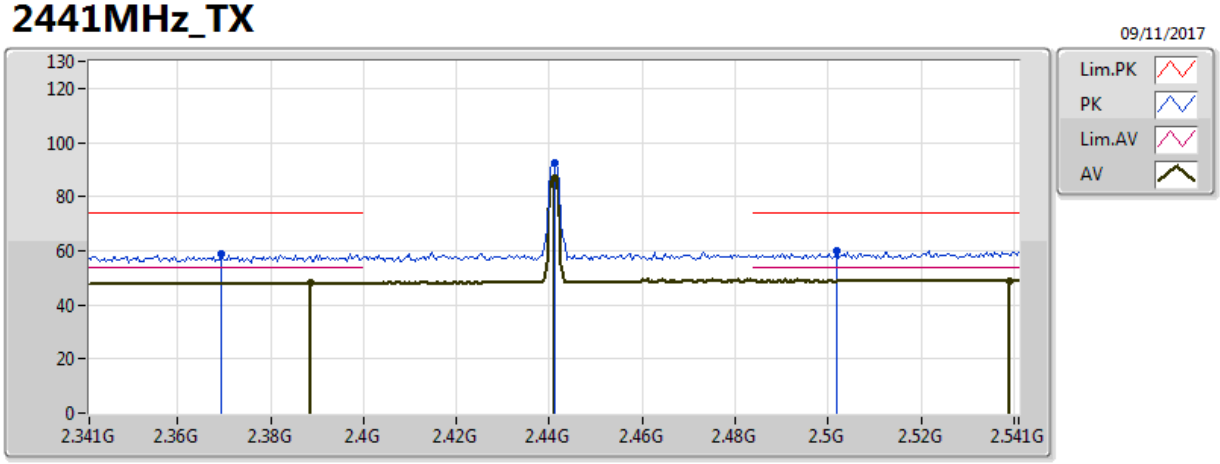
2441MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3982G	48.08	54.00	-5.92	32.75	3	Vertical	352	2.67	-	15.33	27.01	5.74	-
AV	2.441G	95.12	Inf	-Inf	32.92	3	Vertical	352	2.67	-	62.20	27.13	5.79	-
AV	2.5366G	48.96	54.00	-5.04	33.28	3	Vertical	352	2.67	-	15.68	27.40	5.89	-
PK	2.3942G	58.92	74.00	-15.08	32.74	3	Vertical	352	2.67	-	26.18	27.00	5.73	-
PK	2.441G	100.92	Inf	-Inf	32.92	3	Vertical	352	2.67	-	68.00	27.13	5.79	-
PK	2.485G	59.61	74.00	-14.39	33.10	3	Vertical	352	2.67	-	26.51	27.26	5.84	-

BT-EDR(2Mbps)

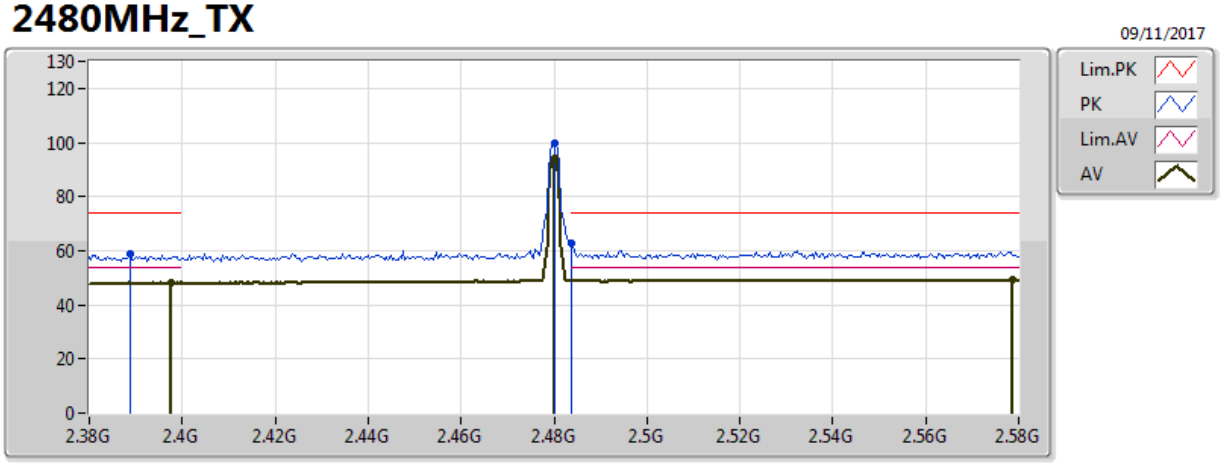
2441MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3886G	47.97	54.00	-6.03	32.72	3	Horizontal	180	1.49	-	15.25	26.99	5.73	-
AV	2.441G	87.04	Inf	-Inf	32.92	3	Horizontal	180	1.49	-	54.12	27.13	5.79	-
AV	2.539G	48.98	54.00	-5.02	33.29	3	Horizontal	180	1.49	-	15.69	27.40	5.89	-
PK	2.3694G	58.88	74.00	-15.12	32.64	3	Horizontal	180	1.49	-	26.24	26.93	5.71	-
PK	2.441G	92.60	Inf	-Inf	32.92	3	Horizontal	180	1.49	-	59.67	27.13	5.79	-
PK	2.5018G	59.77	74.00	-14.23	33.17	3	Horizontal	180	1.49	-	26.61	27.30	5.86	-

BT-EDR(2Mbps)

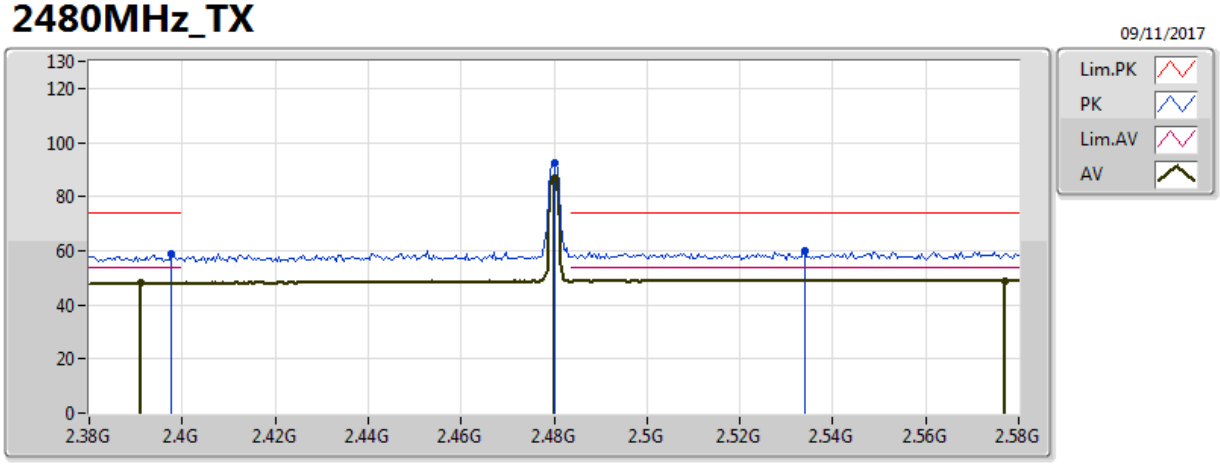
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3976G	48.00	54.00	-6.00	32.75	3	Vertical	237	2.54	-	15.25	27.01	5.74	-
AV	2.48G	94.23	Inf	-Inf	33.08	3	Vertical	237	2.54	-	61.15	27.24	5.84	-
AV	2.5788G	49.10	54.00	-4.90	33.43	3	Vertical	237	2.54	-	15.67	27.50	5.92	-
PK	2.3888G	58.75	74.00	-15.25	32.72	3	Vertical	237	2.54	-	26.03	26.99	5.73	-
PK	2.48G	99.97	Inf	-Inf	33.08	3	Vertical	237	2.54	-	66.89	27.24	5.84	-
PK	2.4836G	62.64	74.00	-11.36	33.09	3	Vertical	237	2.54	-	29.54	27.25	5.84	-

BT-EDR(2Mbps)

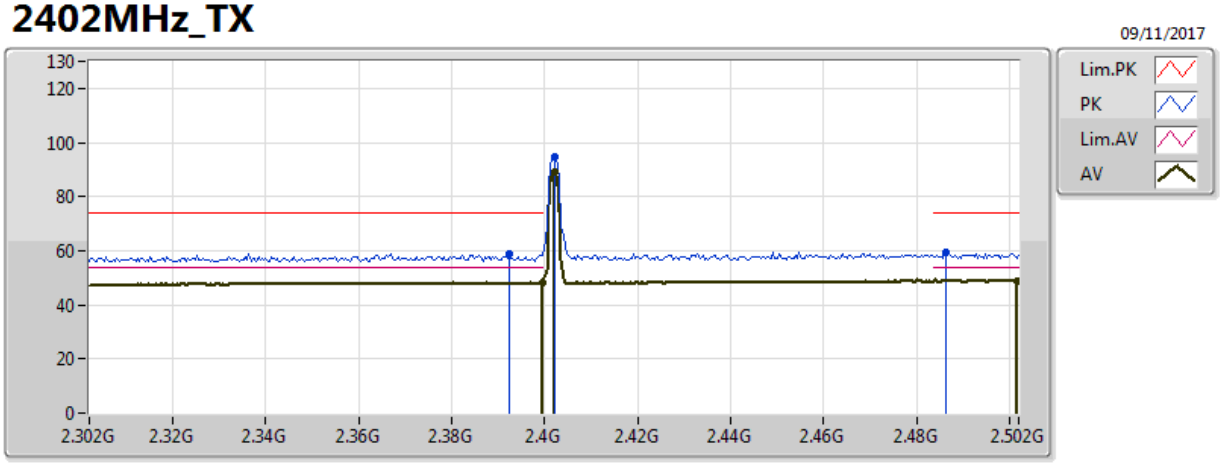
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3912G	47.93	54.00	-6.07	32.73	3	Horizontal	179	3.64	-	15.20	27.00	5.73	-
AV	2.48G	87.04	Inf	-Inf	33.08	3	Horizontal	179	3.64	-	53.96	27.24	5.84	-
AV	2.5772G	49.03	54.00	-4.97	33.42	3	Horizontal	179	3.64	-	15.61	27.50	5.92	-
PK	2.3976G	58.83	74.00	-15.17	32.75	3	Horizontal	179	3.64	-	26.08	27.01	5.74	-
PK	2.48G	92.64	Inf	-Inf	33.08	3	Horizontal	179	3.64	-	59.56	27.24	5.84	-
PK	2.534G	60.12	74.00	-13.88	33.28	3	Horizontal	179	3.64	-	26.84	27.39	5.89	-

BT-EDR(3Mbps)

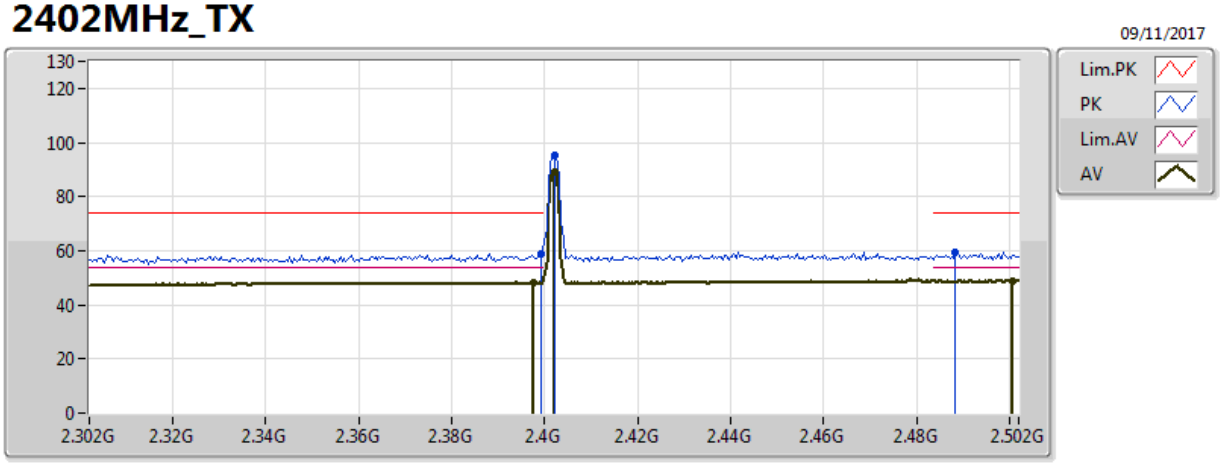
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3996G	48.07	54.00	-5.93	32.76	3	Vertical	273	3.54	-	15.31	27.02	5.74	-
AV	2.402G	88.85	Inf	-Inf	32.77	3	Vertical	273	3.54	-	56.09	27.03	5.74	-
AV	2.5016G	48.74	54.00	-5.26	33.17	3	Vertical	273	3.54	-	15.58	27.30	5.86	-
PK	2.3924G	59.10	74.00	-14.90	32.73	3	Vertical	273	3.54	-	26.37	27.00	5.73	-
PK	2.402G	94.66	Inf	-Inf	32.77	3	Vertical	273	3.54	-	61.89	27.03	5.74	-
PK	2.4864G	59.60	74.00	-14.40	33.11	3	Vertical	273	3.54	-	26.49	27.26	5.84	-

BT-EDR(3Mbps)

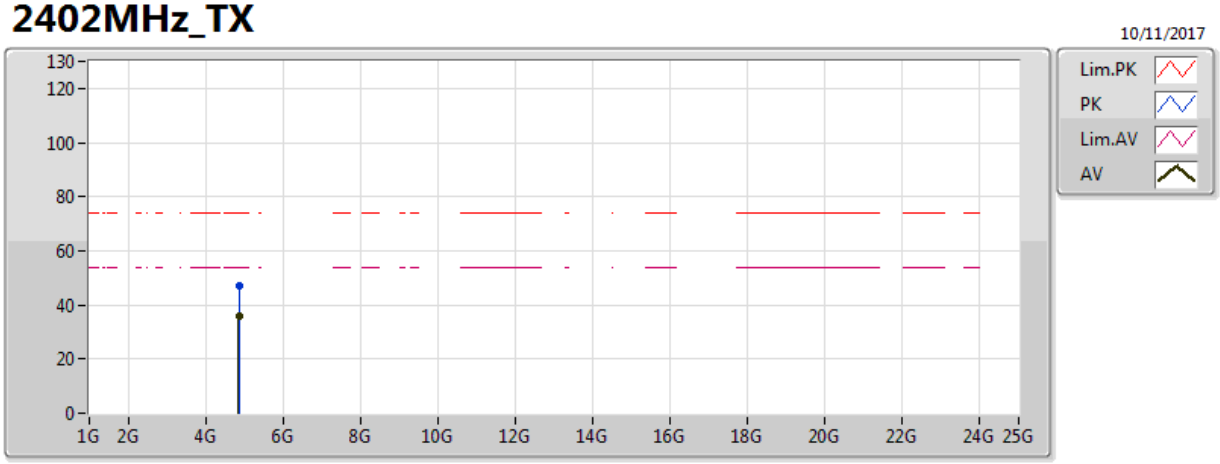
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3976G	48.00	54.00	-6.00	32.75	3	Horizontal	173	3.50	-	15.25	27.01	5.74	-
AV	2.402G	89.30	Inf	-Inf	32.77	3	Horizontal	173	3.50	-	56.53	27.03	5.74	-
AV	2.5008G	48.68	54.00	-5.32	33.16	3	Horizontal	173	3.50	-	15.52	27.30	5.86	-
PK	2.3992G	58.95	74.00	-15.05	32.76	3	Horizontal	173	3.50	-	26.19	27.02	5.74	-
PK	2.402G	95.03	Inf	-Inf	32.77	3	Horizontal	173	3.50	-	62.26	27.03	5.74	-
PK	2.4884G	59.53	74.00	-14.47	33.11	3	Horizontal	173	3.50	-	26.42	27.27	5.85	-

BT-EDR(3Mbps)

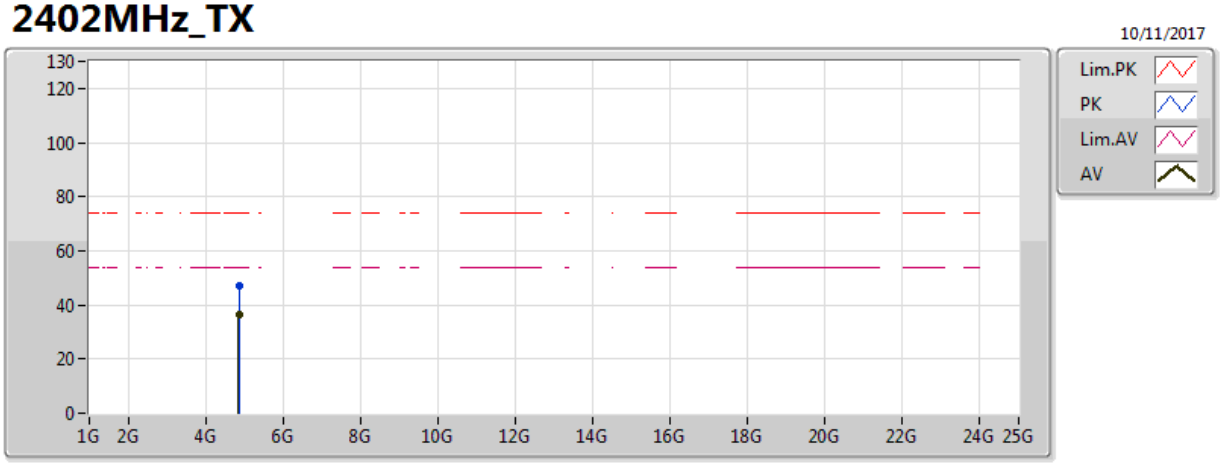
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	4.88G	47.03	74.00	-26.97	4.29	3	Vertical	0	1.50	-	42.74	31.31	8.18	35.19
AV	4.88G	36.03	54.00	-17.97	4.29	3	Vertical	0	1.50	-	31.75	31.31	8.18	35.19

BT-EDR(3Mbps)

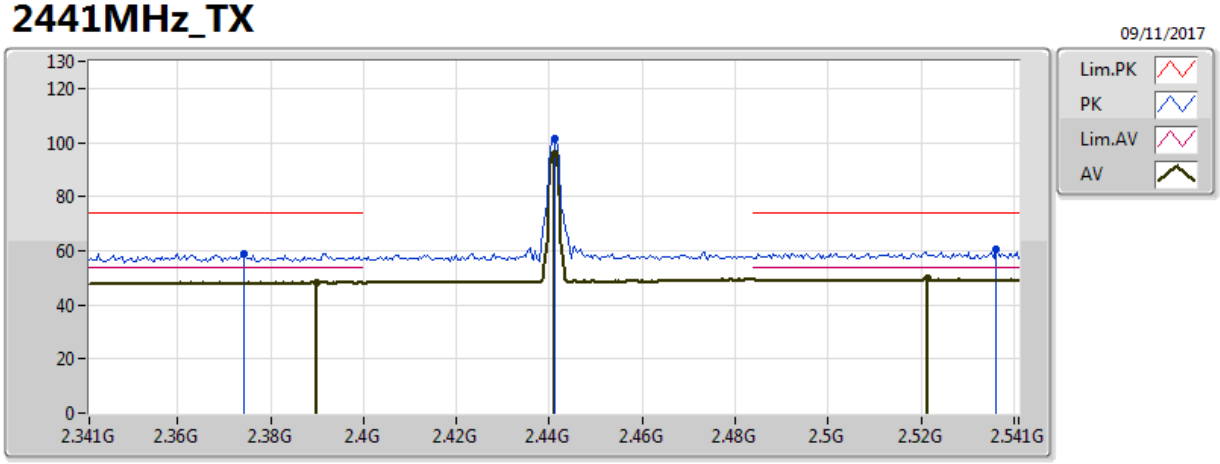
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	4.88G	46.79	74.00	-27.21	4.29	3	Vertical	360	1.50	-	42.50	31.31	8.18	35.19
AV	4.88G	36.16	54.00	-17.84	4.29	3	Vertical	360	1.50	-	31.87	31.31	8.18	35.19

BT-EDR(3Mbps)

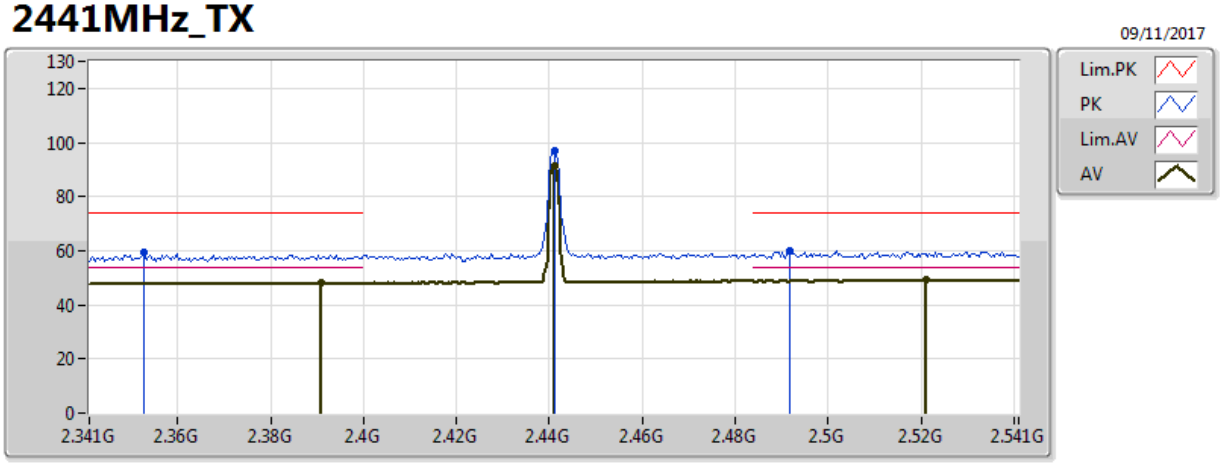
2441MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3898G	48.04	54.00	-5.96	32.72	3	Vertical	352	2.66	-	15.32	26.99	5.73	-
AV	2.441G	95.55	Inf	-Inf	32.92	3	Vertical	352	2.66	-	62.63	27.13	5.79	-
AV	2.5214G	49.60	54.00	-4.40	33.23	3	Vertical	352	2.66	-	16.37	27.36	5.88	-
PK	2.3742G	58.98	74.00	-15.02	32.66	3	Vertical	352	2.66	-	26.32	26.95	5.71	-
PK	2.441G	101.36	Inf	-Inf	32.92	3	Vertical	352	2.66	-	68.44	27.13	5.79	-
PK	2.5362G	60.52	74.00	-13.48	33.28	3	Vertical	352	2.66	-	27.24	27.39	5.89	-

BT-EDR(3Mbps)

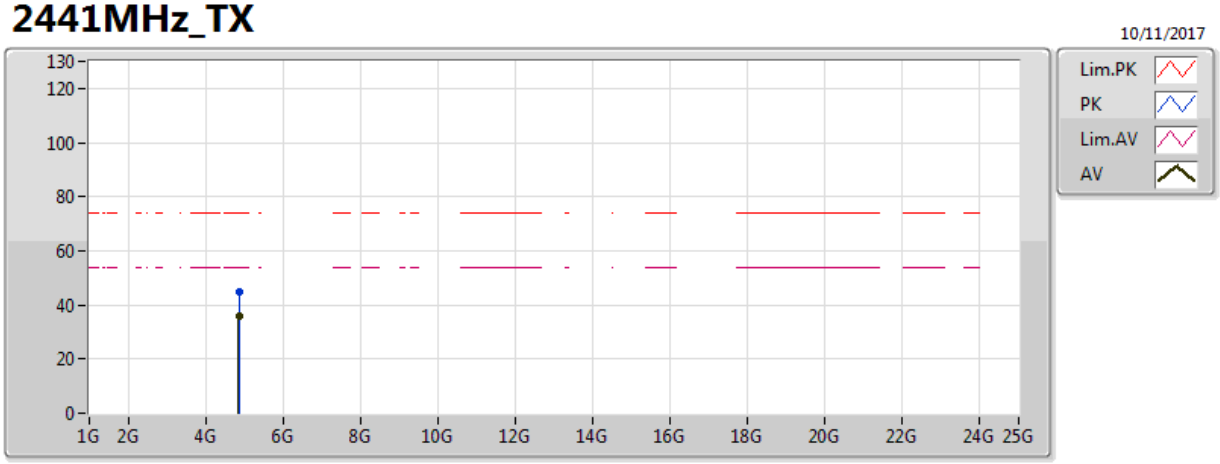
2441MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.391G	47.91	54.00	-6.09	32.72	3	Horizontal	179	1.50	-	15.19	26.99	5.73	-
AV	2.441G	91.06	Inf	-Inf	32.92	3	Horizontal	179	1.50	-	58.13	27.13	5.79	-
AV	2.521G	49.11	54.00	-4.89	33.23	3	Horizontal	179	1.50	-	15.88	27.35	5.88	-
PK	2.3526G	59.23	74.00	-14.77	32.58	3	Horizontal	179	1.50	-	26.65	26.89	5.69	-
PK	2.441G	96.69	Inf	-Inf	32.92	3	Horizontal	179	1.50	-	63.76	27.13	5.79	-
PK	2.4918G	59.84	74.00	-14.16	33.13	3	Horizontal	179	1.50	-	26.72	27.28	5.85	-

BT-EDR(3Mbps)

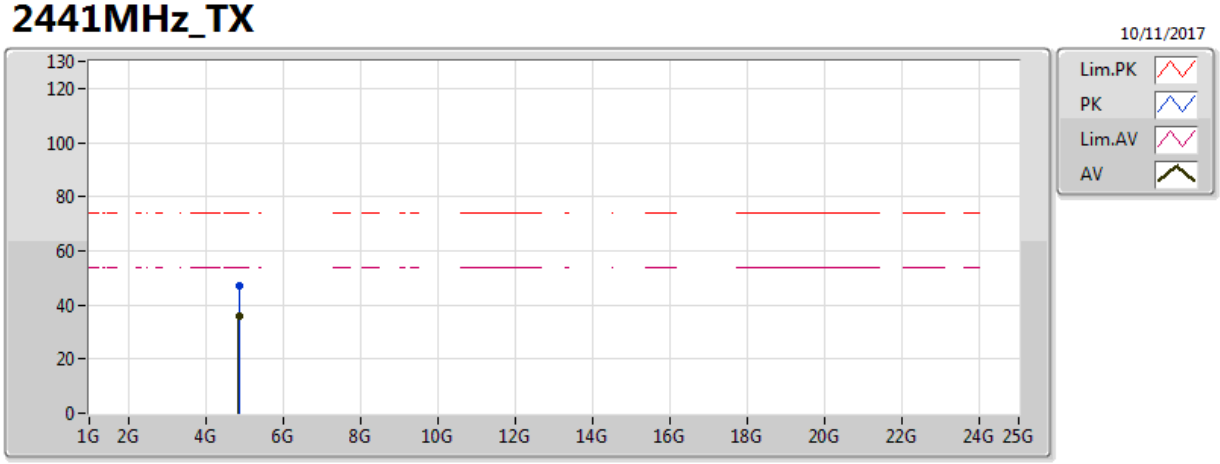
2441MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.88G	35.61	54.00	-18.39	4.29	3	Vertical	0	1.50	-	31.32	31.31	8.18	35.19
PK	4.88G	45.08	74.00	-28.92	4.29	3	Vertical	0	1.50	-	40.79	31.31	8.18	35.19

BT-EDR(3Mbps)

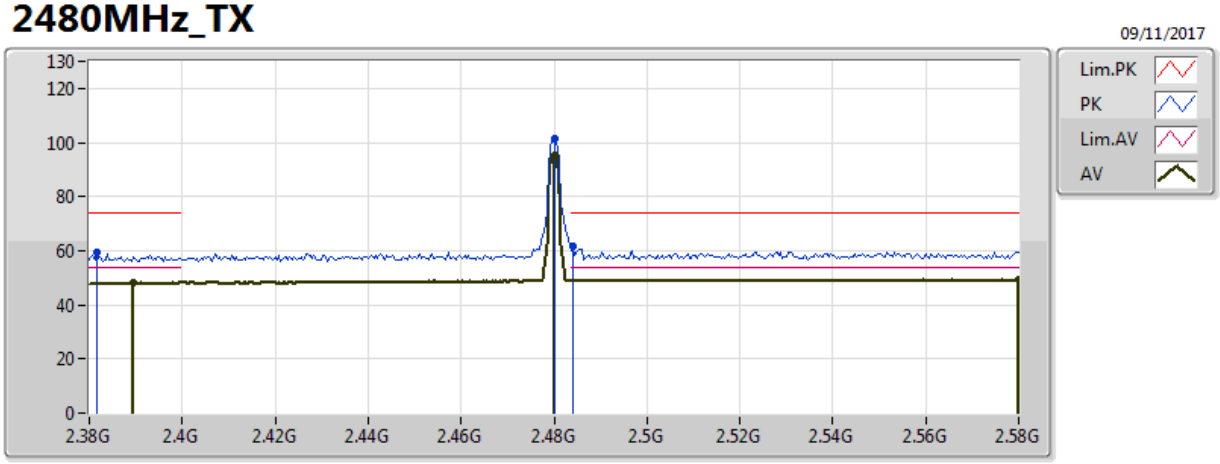
2441MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	4.88G	47.05	74.00	-26.95	4.29	3	Horizontal	360	1.50	-	42.76	31.31	8.18	35.19
AV	4.88G	35.68	54.00	-18.32	4.29	3	Horizontal	360	1.50	-	31.39	31.31	8.18	35.19

BT-EDR(3Mbps)

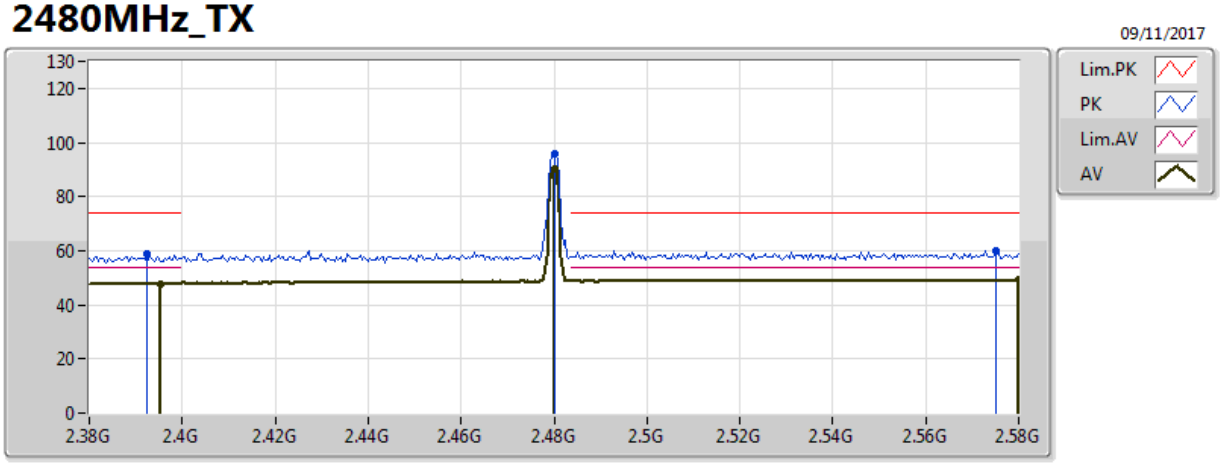
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3896G	48.00	54.00	-6.00	32.72	3	Vertical	234	2.55	-	15.28	26.99	5.73	-
AV	2.48G	95.15	Inf	-Inf	33.08	3	Vertical	234	2.55	-	62.07	27.24	5.84	-
AV	2.58G	49.11	54.00	-4.89	33.43	3	Vertical	234	2.55	-	15.68	27.51	5.92	-
PK	2.3816G	59.20	74.00	-14.80	32.69	3	Vertical	234	2.55	-	26.51	26.97	5.72	-
PK	2.48G	101.29	Inf	-Inf	33.08	3	Vertical	234	2.55	-	68.21	27.24	5.84	-
PK	2.484G	61.87	74.00	-12.13	33.10	3	Vertical	234	2.55	-	28.77	27.26	5.84	-

BT-EDR(3Mbps)

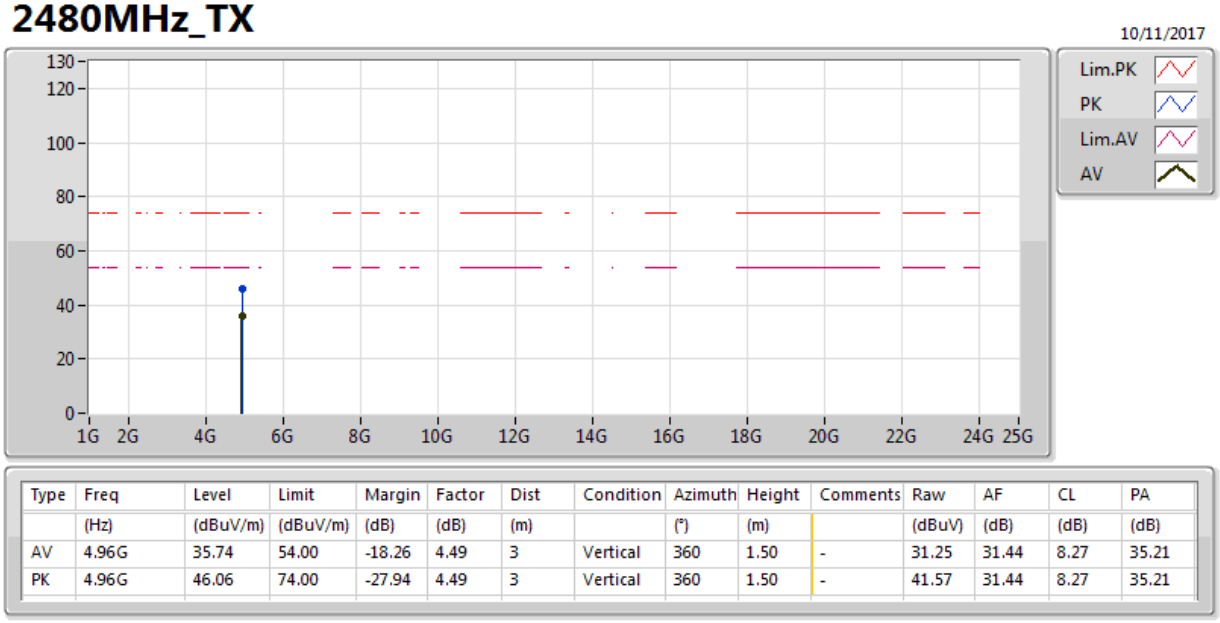
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3952G	47.88	54.00	-6.12	32.74	3	Horizontal	179	3.65	-	15.14	27.01	5.73	-
AV	2.48G	90.34	Inf	-Inf	33.08	3	Horizontal	179	3.65	-	57.26	27.24	5.84	-
AV	2.58G	49.17	54.00	-4.83	33.43	3	Horizontal	179	3.65	-	15.73	27.51	5.92	-
PK	2.3924G	58.57	74.00	-15.43	32.73	3	Horizontal	179	3.65	-	25.84	27.00	5.73	-
PK	2.48G	95.85	Inf	-Inf	33.08	3	Horizontal	179	3.65	-	62.77	27.24	5.84	-
PK	2.5752G	59.86	74.00	-14.14	33.42	3	Horizontal	179	3.65	-	26.44	27.50	5.92	-

BT-EDR(3Mbps)

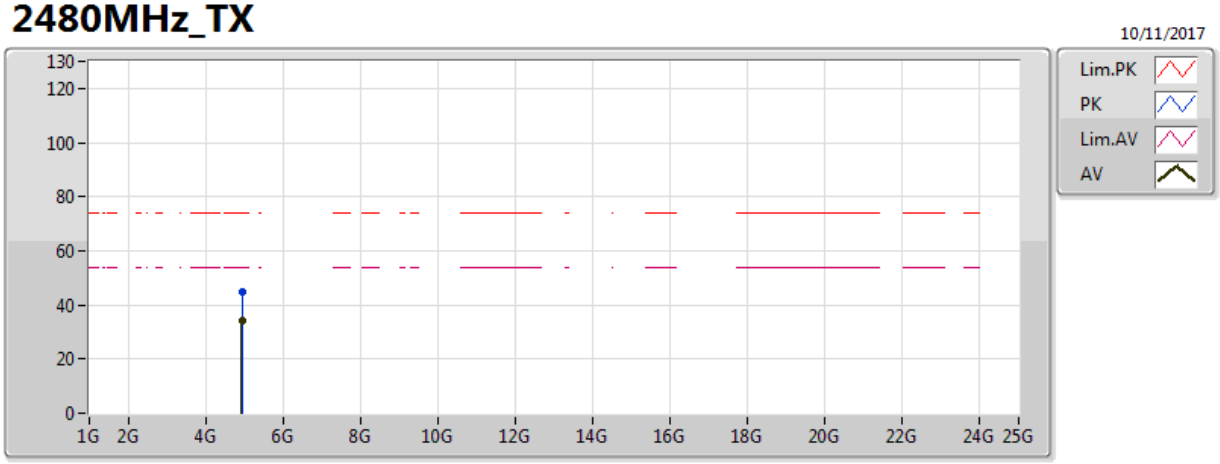
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.96G	35.74	54.00	-18.26	4.49	3	Vertical	360	1.50	-	31.25	31.44	8.27	35.21
PK	4.96G	46.06	74.00	-27.94	4.49	3	Vertical	360	1.50	-	41.57	31.44	8.27	35.21

BT-EDR(3Mbps)

2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.96G	34.08	54.00	-19.92	4.49	3	Horizontal	0	1.50	-	29.59	31.44	8.27	35.21
PK	4.96G	44.90	74.00	-29.10	4.49	3	Horizontal	0	1.50	-	40.41	31.44	8.27	35.21