FCC Test Report

FCC ID	:	**2AFZZ-XMD2TG**
Equipment	:	**Mobile Phone**
Brand Name	:	**MI**
Model Name	:	**M1808D2TG**
Applicant	:	**Xiaomi Communications Co., Ltd. The Rainbow City of China Resources,NO.68,Qinghe Middle Street,Haidian District,Beijing,China**
Manufacturer	:	**Xiaomi Communications Co., Ltd. The Rainbow City of China Resources,NO.68,Qinghe Middle Street,Haidian District,Beijing,China**
Standard	:	**47 CFR FCC Part 15.247**

The product was received on Aug. 20, 2018, and testing was started from Aug. 21, 2018 and completed on Sep. 04, 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.)

Table of Contents

History of this test report

Report No.	Version	Description	Issued Date
FR880207-01AL	01	Initial issue of report	Sep. 07, 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)	DTS Bandwidth	PASS	≥500kHz
3.3	15.247(b)	Maximum Conducted Output Power	PASS	Power [dBm]:30
3.4	15.247(e)	Power Spectral Density	PASS	PSD [dBm/3kHz]:8
3.5	15.247(d)	Emissions in Non-restricted Frequency Bands	PASS	Non-Restricted Bands: >30 dBc
3.6	15.247(d)	Emissions in Restricted Frequency Bands	PASS	Restricted Bands: FCC 15.209

Reviewed by: Sam Tsai

Report Producer: Michelle Tsai

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	Bluetooth Mode	Ch. Frequency (MHz)	Channel Number
2400-2483.5	LE	2402-2480	0-39 [40]

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	BT-LE(1Mbps)	1.0	1TX
2.4-2.4835GHz	BT-LE(2Mbps)	2.0	1TX

Note:
- Bluetooth LE uses a GFSK (1Mbps/2Mbps) modulation for DSSS.
- BWch is the nominal channel bandwidth.

1.1.2 Antenna Information

Ant.	Port	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	1	-	-	PIFA	mini Murata	-1.04

1.1.3 EUT Information

Operational Condition				
EUT Power Type	From AC Adapter / PoE			
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-LE(1Mbps)	0.628	2.02	392.5u	3k
BT-LE(2Mbps)	0.334	4.763	208.75u	10k

1.1.5 Table for Multiple Listing

There are two sample of EUT.

Sample No.	Description
Sample 1	RAM 6, EMMC 128G
Sample 2	RAM 4, EMMC 64G

Note: Sample1 configuration was measured during the test.

1.2 Testing Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- 47 CFR FCC Part 15
- ANSI C63.10-2013
- KDB 558074 D01 v05

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	23.5°C / 65%	21/Aug/2018
Radiated	03CH02-HY	Lego	24°C / 51%	22/Aug/2018
AC Conduction	CO04-HY	Terry	25.8°C / 57%	04/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	110V

2.2 Test Channel Mode

Test Software	CIT

Mode	PowerSetting
BT-LE(1Mbps)	-
2402MHz	Default
2440MHz	Default
2480MHz	Default
BT-LE(2Mbps)	-
2402MHz	Default
2440MHz	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	Adapter Mode

The Worst Case Mode for Following Conformance Tests	
Tests Item	DTS Bandwidth Maximum Conducted Output Power Power Spectral Density 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/CRX		
1	Adapter Mode		
Operating Mode > 1GHz	CTX/CRX		
Orthogonal Planes of EUT	**X Plane**	**Y Plane**	**Z Plane**
			
Worst Planes of EUT		V	

2.4 Accessories and Support Equipment

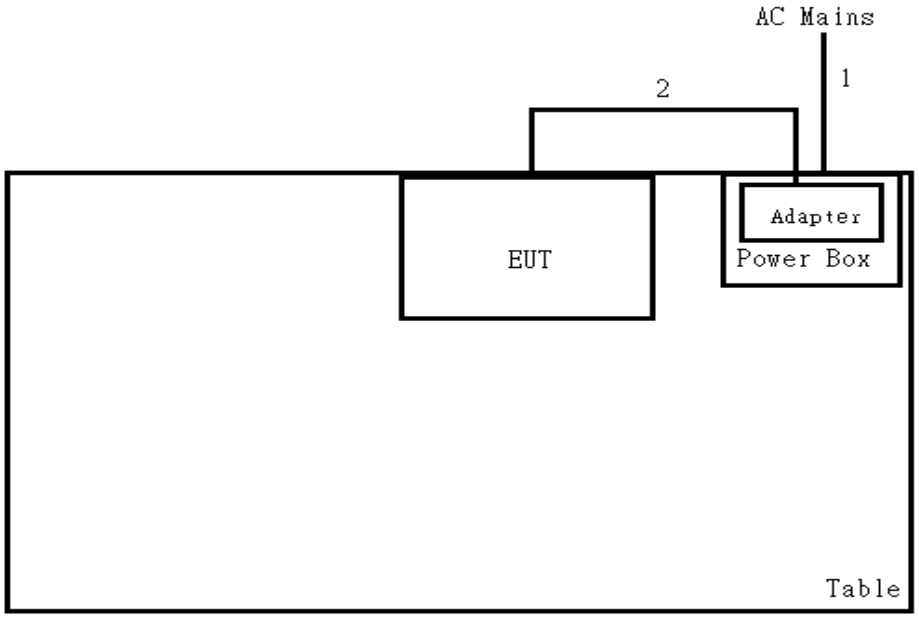
Accessories				
AC Adapter 1	Brand Name	XIAOMI	Model Name	MDY-08-EZ
	Power Rating	I/P: 100 - 240 Vac, 350 mA, O/P: 5 Vdc, 2000 mA		
AC Adapter 2	Brand Name	XIAOMI	Model Name	MDY-08-EZ
	Power Rating	I/P: 100 - 240 Vac, 350 mA, O/P: 5 Vdc, 2000 mA		
Battery	Brand Name	MI	Model Name	BM3J
	Power Rating	3.85 / 4.4 Vdc, 3250/3350 mAh		
USB Cable 1	Brand Name	MI	Model Name	L23312
	Signal Line	1.0 meter, non-shielded cable, without ferrite core		
USB Cable 2	Brand Name	MI	Model Name	K23312
	Signal Line	1.0 meter, non-shielded cable, without ferrite core		
Type C to Earphone Cable 1	Brand Name	MI	Model Name	K41121
	Signal Line	0.09 meter, non-shielded cable, without ferrite core		
Type C to Earphone Cable 2	Brand Name	MI	Model Name	D41121
	Signal Line	0.09 meter, non-shielded cable, without ferrite core		
Type C to Earphone Cable 3	Brand Name	MI	Model Name	B41121
	Signal Line	0.09 meter, non-shielded cable, without ferrite core		
Type C to Earphone Cable 4	Brand Name	MI	Model Name	Y41121
	Signal Line	0.09 meter, non-shielded cable, without ferrite core		
Type C to Earphone Cable 5	Brand Name	MI	Model Name	K41121
	Signal Line	0.09 meter, non-shielded cable, without ferrite core		

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

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

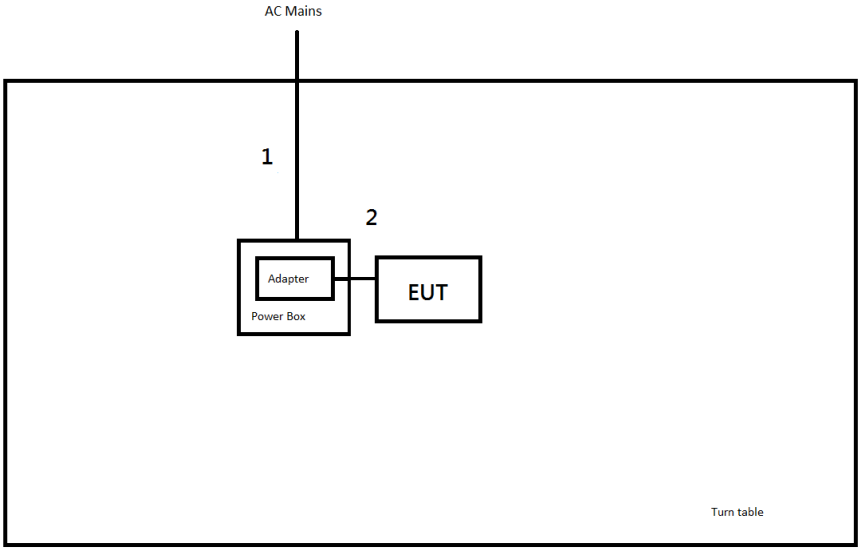
2.5 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test – TX&RX



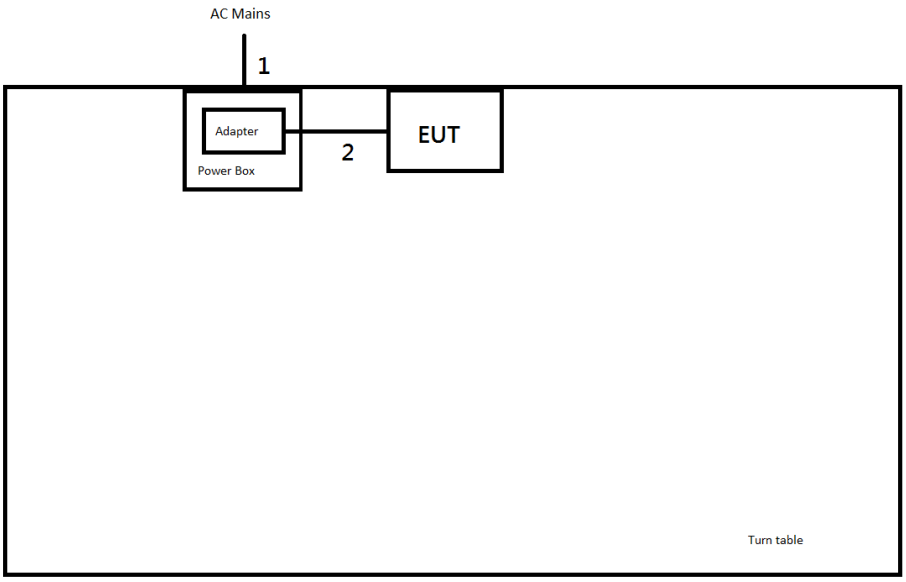
Item	Connection	Shielded	Length(m)	Remark
1	AC Power line	No	1.5	-
2	Type-c cable	No	1.0	-

Test Setup Diagram - Radiated Test – TX Mode



Item	Connection	Shielded	Length(m)	Remark
1	AC Power line	No	1.5	-
2	Type-c cable	No	1.0	-

Test Setup Diagram - Radiated Test – RX Mode



Item	Connection	Shielded	Length(m)	Remark
1	AC Power line	No	1.5	-
2	Type-c 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

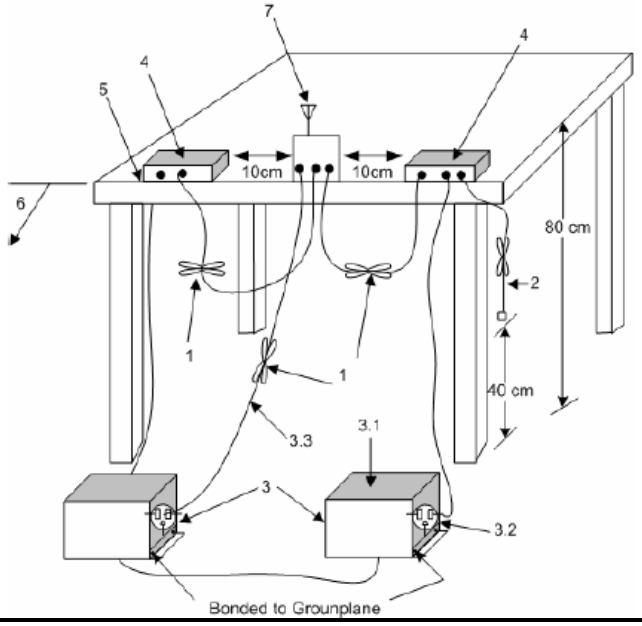
Refer a test equipment and calibration data table in this test report.

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 DTS Bandwidth

3.2.1 6dB Bandwidth Limit

6dB Bandwidth Limit
Systems using digital modulation techniques:
▪ 6 dB bandwidth ≥ 500 kHz.

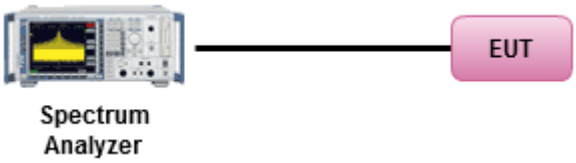
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method	
▪ For the emission bandwidth shall be measured using one of the options below:	
	☒ Refer as KDB 558074, clause 8.2 (11.9.2.2 of ANSI C63.10) DTS bandwidth measurement.
	☐ Refer as RSS-Gen, clause 6.7 for for occupied bandwidth testing.
	☐ Refer as ANSI C63.10, clause 6.9.3 for occupied bandwidth testing.

3.2.4 Test Setup

Emission Bandwidth


3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit		
	▪ If G_{TX} ≤ 6 dBi, then P_{Out} ≤ 30 dBm (1 W)	
	▪ Point-to-multipoint systems (P2M): If G_{TX} > 6 dBi, then P_{Out} = 30 – (G_{TX} – 6) dBm	
	▪ Point-to-point systems (P2P): If G_{TX} > 6 dBi, then P_{Out} = 30 – (G_{TX} – 6)/3 dBm	
	▪ Smart antenna system (SAS):	
		- Single beam: If G_{TX} > 6 dBi, then P_{Out} = 30 – (G_{TX} – 6)/3 dBm
		- Overlap beam: If G_{TX} > 6 dBi, then P_{Out} = 30 – (G_{TX} – 6)/3 dBm
		- Aggregate power on all beams: If G_{TX} > 6 dBi, then P_{Out} = 30 – (G_{TX} – 6)/3 + 8dB dBm
e.i.r.p. Power Limit:		
▪ 2400-2483.5 MHz Band		
	▪ Point-to-multipoint systems (P2M): P_{eirp} ≤ 36 dBm (4 W)	
	▪ Point-to-point systems (P2P): P_{eirp} ≤ MAX(36, [P_{Out} + G_{TX}]) dBm	
	▪ Smart antenna system (SAS)	
		- Single beam: P_{eirp} ≤ MAX(36, P_{Out} + G_{TX}) dBm
		- Overlap beam: P_{eirp} ≤ MAX(36, P_{Out} + G_{TX}) dBm
		- Aggregate power on all beams: P_{eirp} ≤ MAX(36, [P_{Out} + G_{TX} + 8]) dBm
P_{Out} = maximum peak conducted output power or maximum conducted output power in dBm, **G_{TX}** = the maximum transmitting antenna directional gain in dBi.		

3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
▪ Maximum Peak Conducted Output Power	
	☐ Refer as KDB 558074, clause 8.3.1.1 (11.9.1.1 of ANSI C63.10) RBW ≥ EBW method.
	☐ Refer as KDB 558074, clause 8.3.1.2 (11.9.1.2 of ANSI C63.10) integrated band power method.
	☐ Refer as KDB 558074, clause 8.3.1.3 (11.9.1.3 of ANSI C63.10) peak power meter.
▪ Maximum Average Conducted Output Power	
	☐ Refer as KDB 558074, clause 8.3.2.2 (11.9.2.2 of ANSI C63.10) using a spectrum analyzer.
	☒ Refer as KDB 558074, clause 8.3.2.3 (11.9.2.3 of ANSI C63.10) using a power meter.
▪ For conducted measurement.	
	▪ If the EUT supports multiple transmit chains using options given below: Refer as KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.
	▪ If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \ldots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$

3.3.4 Test Setup

Maximum Conducted Output Power (Power Meter)


3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

Power Spectral Density Limit
▪ Power Spectral Density (PSD)≤8 dBm/3kHz

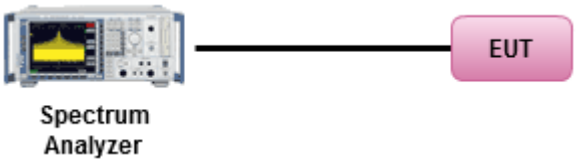
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

Test Method		
▪ Peak power spectral density procedures that the same method as used to determine the conducted output power. If maximum peak conducted output power was measured to demonstrate compliance to the output power limit, then the peak PSD procedure below (Method PKPSD) shall be used. If maximum conducted output power was measured to demonstrate compliance to the output power limit, then one of the average PSD procedures shall be used, as applicable based on the following criteria (the peak PSD procedure is also an acceptable option).		
	☒ Refer as KDB 558074, clause 8.4 (11.10 of ANSI C63.10) Method PKPSD.	
▪ For conducted measurement.		
	▪ If The EUT supports multiple transmit chains using options given below:	
		▪ Measure and sum the spectra across the outputs. Refer as KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.

3.4.4 Test Setup

Power Spectral Density


3.4.5 Test Result of Power Spectral Density

Refer as Appendix D

3.5 Emissions in Non-restricted Frequency Bands

3.5.1 Emissions in Non-restricted Frequency Bands Limit

Un-restricted Band Emissions Limit	
RF output power procedure	**Limit (dB)**
Peak output power procedure	20
Average output power procedure	30
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. Note 2: If the average output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the power in any 100 kHz outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum measured in-band average PSD level.	

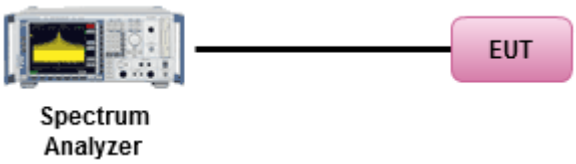
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

Test Method
▪ Refer as KDB 558074, clause 8.5 (11.11 of ANSI C63.10) for non-restricted frequency bands.

3.5.4 Test Setup

Emissions in Non-restricted Frequency Bands


3.5.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix E

3.6 Emissions in Restricted Frequency Bands

3.6.1 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.

3.6.2 Measuring Instruments

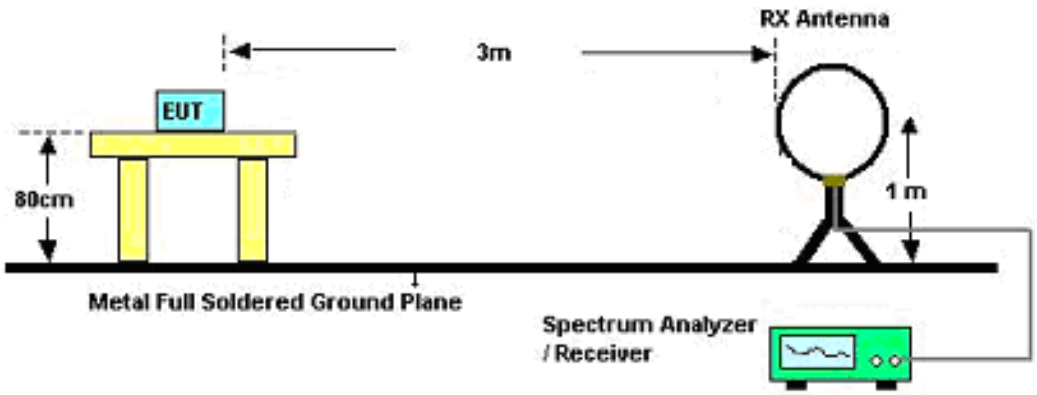
Refer a test equipment and calibration data table in this test report.

3.6.3 Test Procedures

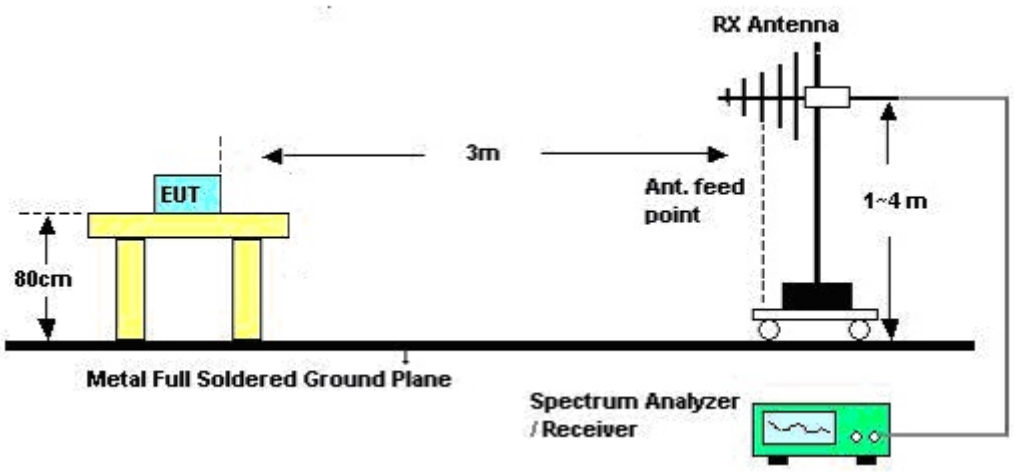
Test Method	
▪ The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].	
▪ Refer as ANSI C63.10, clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.	
▪ For the transmitter unwanted emissions shall be measured using following options below:	
	▪ Refer as KDB 558074, clause 8.6 (11.12 of ANSI C63.10) for restricted frequency bands.
▪ For the transmitter band-edge emissions shall be measured using following options below:	
	▪ Refer as KDB 558074 clause 8.7.1, When the performing peak or average radiated measurements, emissions within 2 MHz of the authorized band edge may be measured using the marker-delta method described below.
	▪ Refer as KDB 558074, clause 8.7.2 (6.10.6 of ANSI C63.10) for marker-delta method for band-edge measurements.
	▪ Refer as KDB 558074, clause 8.7.3 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).

3.6.4 Test Setup

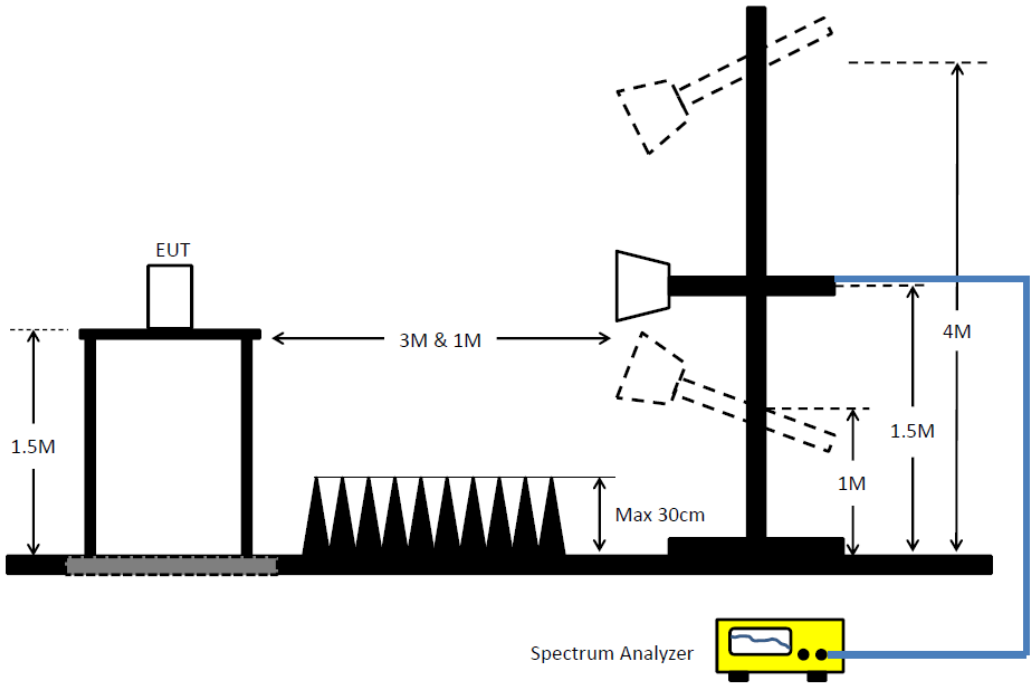
Emissions in Restricted Frequency Bands
9kHz ~30MHz



30MHz~1GHz



Above 1GHz



3.6.5 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.

3.6.6 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F

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.

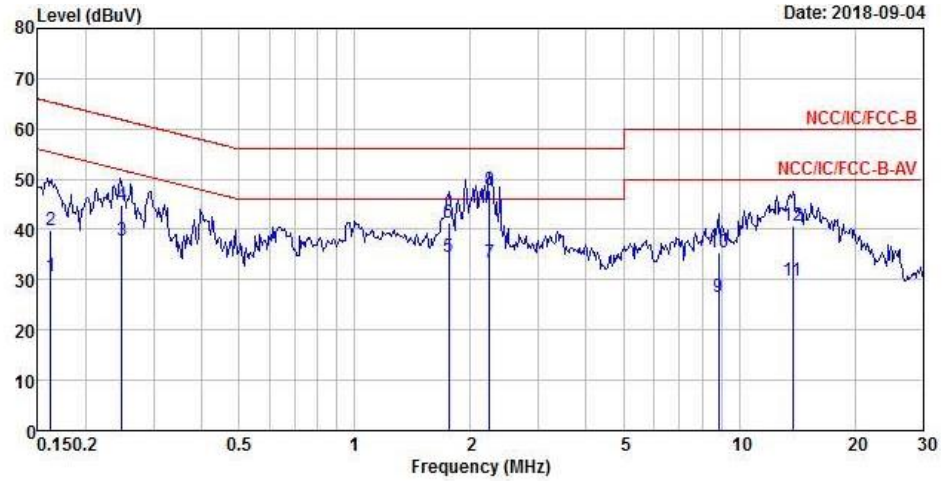
Instrument for Radiated Test

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
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120D	BBHA 9120 D 1531	1GHz ~ 18GHz	18/Apr/ 2018	17/Apr/2019
Loop Antenna	TESEQ	HLA 6120	31244	9k-30MHz	29/Mar/2018	28/Mar/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	29/Dec/2017	28/Dec/2018
Signal Generator	R&S	SMB100A	175727	100kHz~40GHz	26/Oct/2017	25/Oct/2018
Power Sensor	Anritsu	MA2411B	0917017	300MHz ~ 40GHz	05/Feb/2018	04/Feb/2019
Power Meter	Anritsu	ML2495A	0949003	300MHz ~ 40GHz	05/Feb/2018	04/Feb/2019
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY10710/4	30MHz ~ 26.5GHz	25/Aug/2017	24/Aug/2018
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY10709/4	30MHz ~ 26.5GHz	25/Aug/2017	24/Aug/2018
RF Cable-0.5m	HUBER+SUHNER	SUCOFLEX_104	MY10713/4	30MHz ~ 26.5GHz	25/Aug/2017	24/Aug/2018

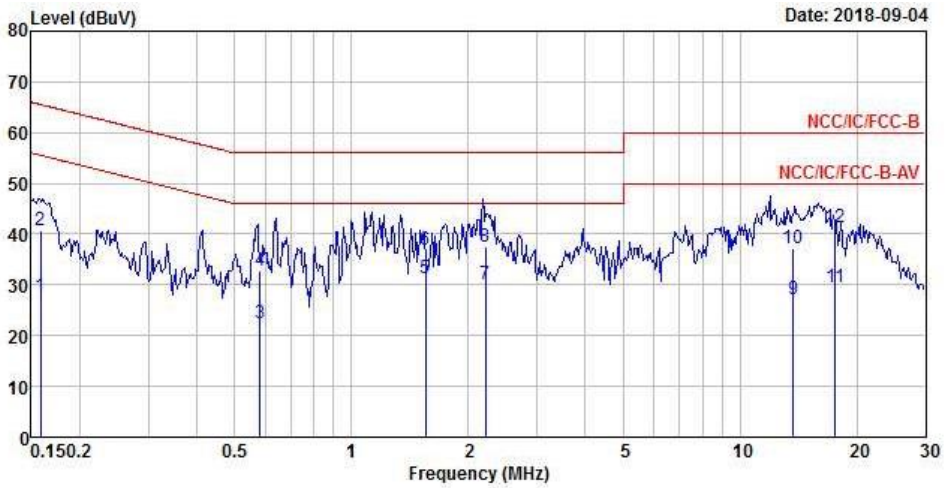
AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	Neutral
Operating Function	Adapter Mode ; TX		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.16	30.57	-24.80	55.37	20.91	9.63	0.03	Average
2	0.16	39.97	-25.40	65.37	30.31	9.63	0.03	QP
3	0.25	37.73	-14.11	51.84	28.08	9.62	0.03	Average
4	0.25	44.97	-16.87	61.84	35.32	9.62	0.03	QP
5	1.75	34.62	-11.38	46.00	24.99	9.63	0.00	Average
6	1.75	41.32	-14.68	56.00	31.69	9.63	0.00	QP
7	2.24	33.26	-12.74	46.00	23.62	9.63	0.01	Average
8 MAX	2.24	47.72	-8.28	56.00	38.08	9.63	0.01	QP
9	8.82	26.56	-23.44	50.00	16.70	9.68	0.18	Average
10	8.82	35.35	-24.65	60.00	25.49	9.68	0.18	QP
11	13.79	29.68	-20.32	50.00	19.94	9.70	0.04	Average
12	13.79	40.78	-19.22	60.00	31.04	9.70	0.04	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.)

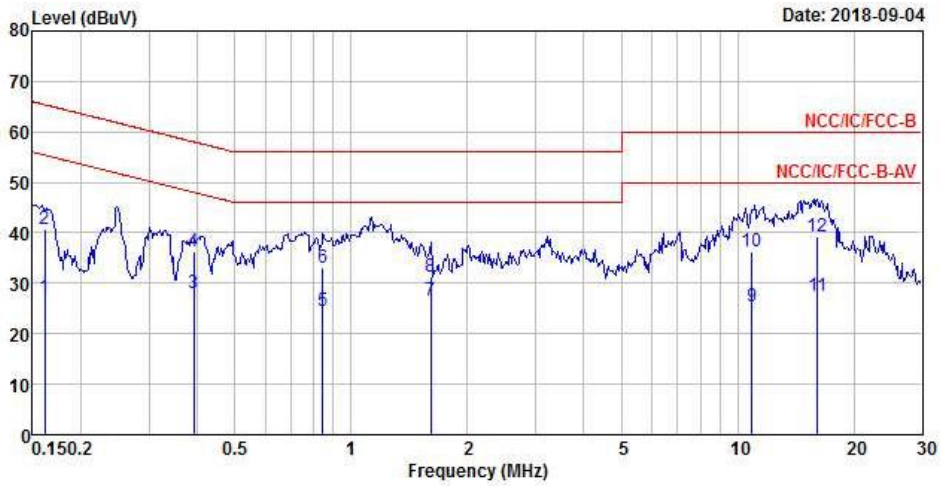
AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	Line
Operating Function	Adapter Mode ; TX		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.16	27.85	-27.68	55.53	18.20	9.62	0.03	Average
2	0.16	40.85	-24.68	65.53	31.20	9.62	0.03	QP
3	0.58	22.53	-23.47	46.00	12.86	9.61	0.06	Average
4	0.58	32.86	-23.14	56.00	23.19	9.61	0.06	QP
5 MAX	1.55	31.33	-14.67	46.00	21.71	9.62	0.00	Average
6	1.55	36.95	-19.05	56.00	27.33	9.62	0.00	QP
7	2.21	30.16	-15.84	46.00	20.53	9.62	0.01	Average
8	2.21	37.55	-18.45	56.00	27.92	9.62	0.01	QP
9	13.74	27.29	-22.71	50.00	17.61	9.64	0.04	Average
10	13.74	37.31	-22.69	60.00	27.63	9.64	0.04	QP
11	17.55	29.62	-20.38	50.00	19.88	9.63	0.11	Average
12	17.55	41.20	-18.80	60.00	31.46	9.63	0.11	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.)

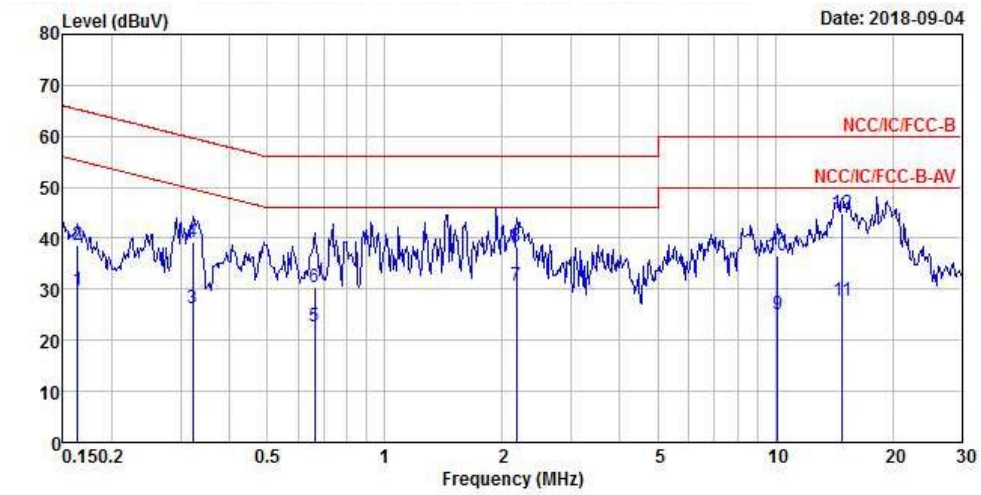
AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	Neutral
Operating Function	Adapter Mode ; RX		



		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1		0.16	27.24	-28.14	55.38	17.58	9.63	0.03	Average
2		0.16	40.69	-24.69	65.38	31.03	9.63	0.03	QP
3		0.39	28.05	-19.96	48.01	18.34	9.61	0.10	Average
4		0.39	36.30	-21.71	58.01	26.59	9.61	0.10	QP
5		0.84	24.57	-21.43	46.00	14.93	9.62	0.02	Average
6		0.84	33.06	-22.94	56.00	23.42	9.62	0.02	QP
7	MAX	1.61	26.45	-19.55	46.00	16.82	9.63	0.00	Average
8		1.61	31.39	-24.61	56.00	21.76	9.63	0.00	QP
9		10.88	25.29	-24.71	50.00	15.44	9.69	0.16	Average
10		10.88	36.28	-23.72	60.00	26.43	9.69	0.16	QP
11		16.12	27.40	-22.60	50.00	17.65	9.70	0.05	Average
12		16.12	39.34	-20.66	60.00	29.59	9.70	0.05	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	Adapter Mode ; RX		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.16	29.75	-25.55	55.30	20.10	9.62	0.03	Average
2	0.16	38.75	-26.55	65.30	29.10	9.62	0.03	QP
3	0.32	26.29	-23.37	49.66	16.61	9.61	0.07	Average
4	0.32	39.29	-20.37	59.66	29.61	9.61	0.07	QP
5	0.66	22.65	-23.35	46.00	12.99	9.61	0.05	Average
6	0.66	30.32	-25.68	56.00	20.66	9.61	0.05	QP
7	2.18	30.75	-15.25	46.00	21.12	9.62	0.01	Average
8	2.18	38.35	-17.65	56.00	28.72	9.62	0.01	QP
9	10.13	25.13	-24.87	50.00	15.28	9.66	0.19	Average
10	10.13	36.52	-23.48	60.00	26.67	9.66	0.19	QP
11	14.83	27.85	-22.15	50.00	18.20	9.64	0.01	Average
12 MAX	14.83	44.85	-15.15	60.00	35.20	9.64	0.01	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-LE(1Mbps)	667.5k	1.034M	1M03F1D	662.5k	1.028M
BT-LE(2Mbps)	1.145M	2.041M	2M04F1D	1.13M	2.034M

Max-N dB = Maximum 6dB down bandwidth; **Max-OBW** = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; **Min-OBW** = Minimum 99% occupied bandwidth;

Result

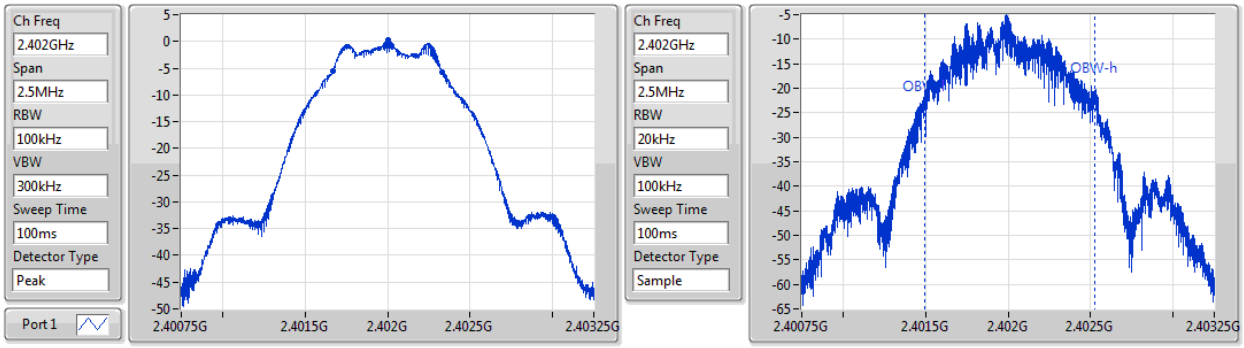
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-LE(1Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	500k	663.75k	1.034M
2440MHz_TnomVnom	Pass	500k	667.5k	1.028M
2480MHz_TnomVnom	Pass	500k	662.5k	1.029M
BT-LE(2Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	500k	1.13M	2.041M
2440MHz_TnomVnom	Pass	500k	1.145M	2.039M
2480MHz_TnomVnom	Pass	500k	1.138M	2.034M

Port X-N dB = Port **X** 6dB down bandwidth; **Port X-OBW** = Port **X** 99% occupied bandwidth;

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

2402MHz

21/08/2018

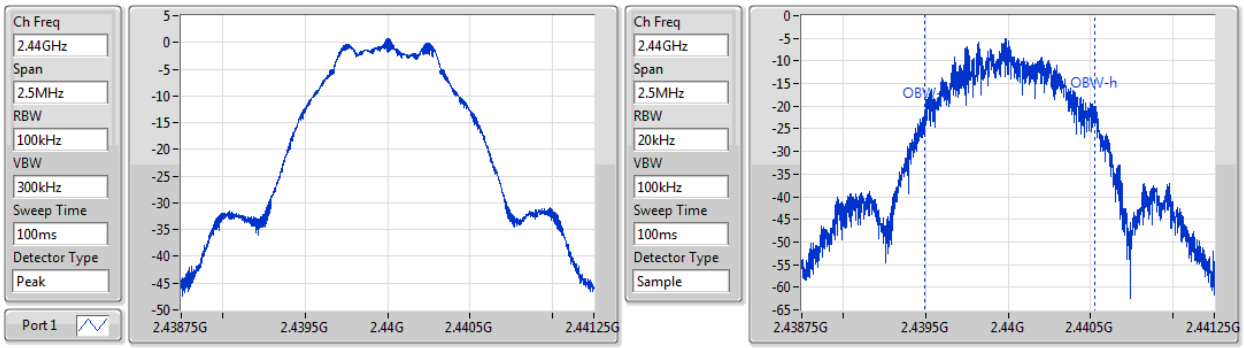


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
663.75k	2.401666G	2.40233G	1.034M	2.401494G	2.402528G	500k	1

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

2440MHz

21/08/2018

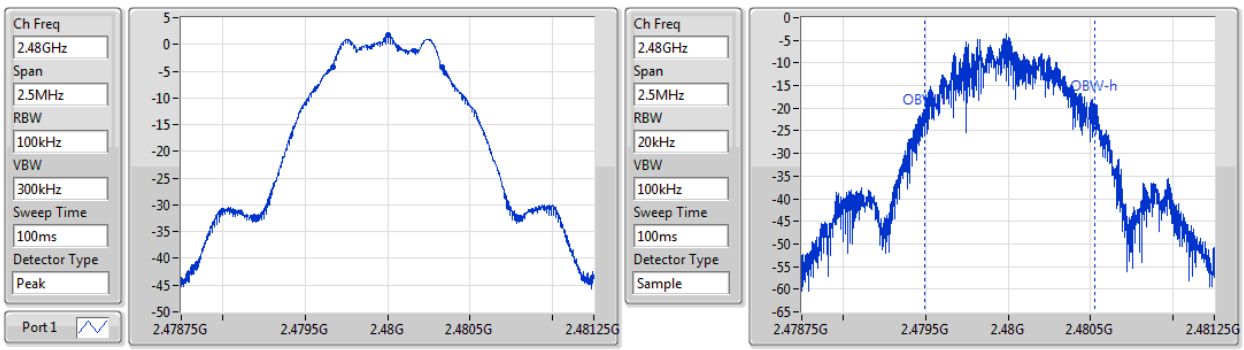


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
667.5k	2.439664G	2.440331G	1.028M	2.439498G	2.440526G	500k	1

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

2480MHz

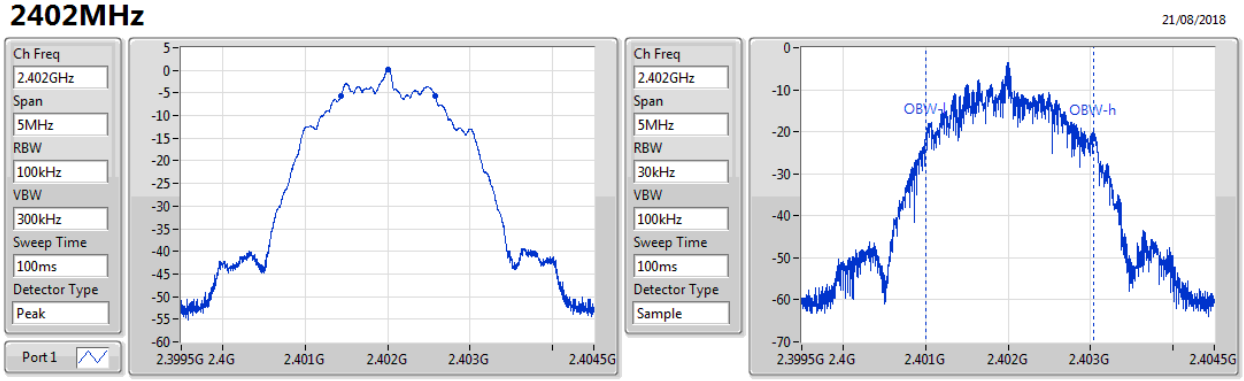
21/08/2018



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
662.5k	2.479666G	2.480329G	1.029M	2.479495G	2.480525G	500k	1

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

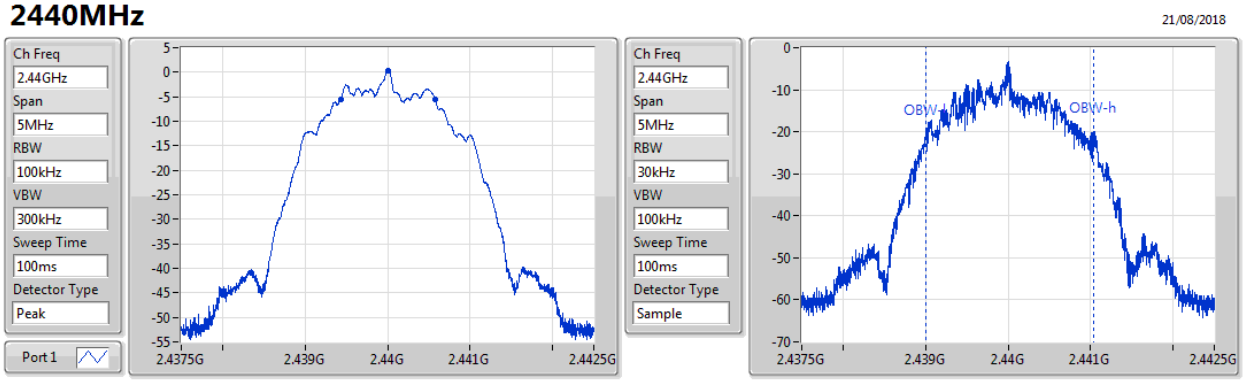
2402MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.13M	2.401443G	2.402573G	2.041M	2.401003G	2.403044G	500k	1

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

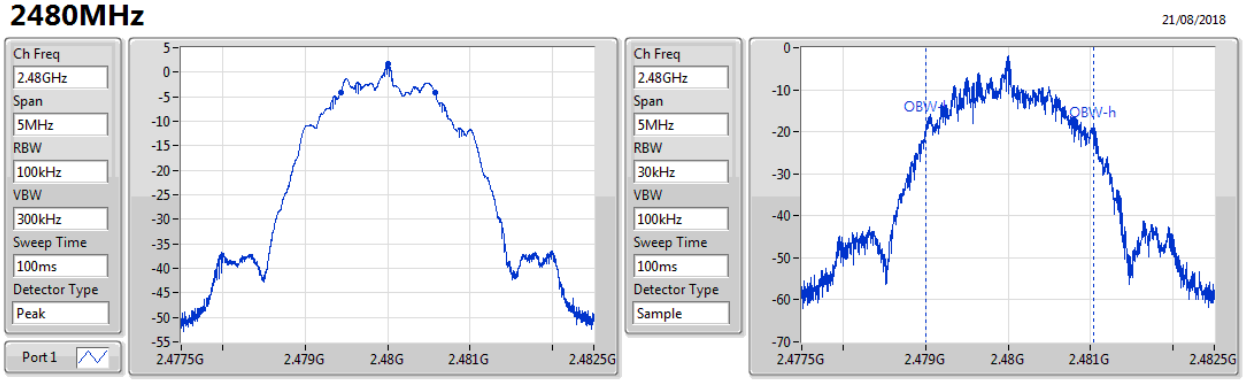
2440MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.145M	2.43943G	2.440575G	2.039M	2.439G	2.441039G	500k	1

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

2480MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.138M	2.479438G	2.480575G	2.034M	2.478998G	2.481032G	500k	1

Summary

Mode	Power	Power
	(dBm)	(W)
2.4-2.4835GHz	-	-
BT-LE(1Mbps)	1.37	0.00137
BT-LE(2Mbps)	1.00	0.00126

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-LE(1Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	-1.04	-1.34	30.00
2440MHz_TnomVnom	Pass	-1.04	-1.28	30.00
2480MHz_TnomVnom	Pass	-1.04	1.37	30.00
BT-LE(2Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	-1.04	-4.30	30.00
2440MHz_TnomVnom	Pass	-1.04	-4.06	30.00
2480MHz_TnomVnom	Pass	-1.04	1.00	30.00

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
BT-LE(1Mbps)	-12.84
BT-LE(2Mbps)	-16.78

RBW=3kHz.

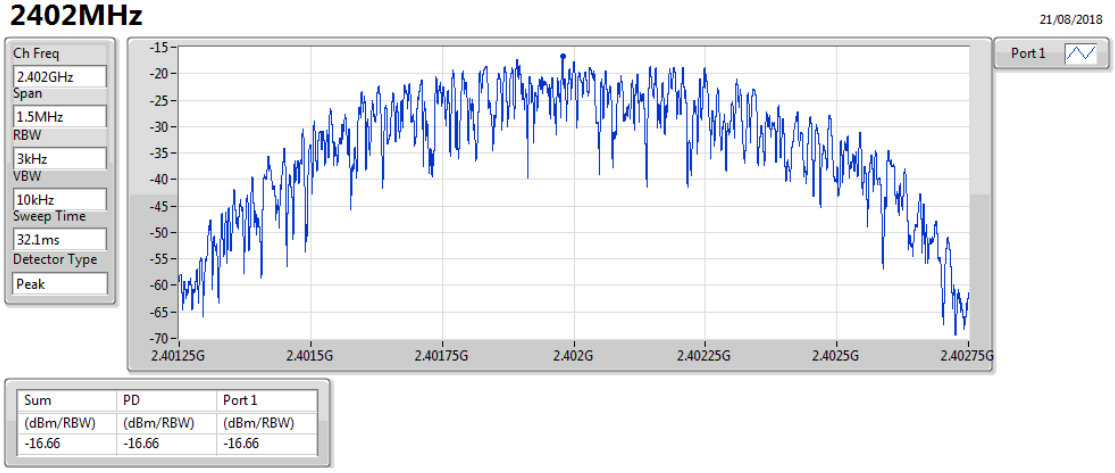
Result

Mode	Result	Gain (dBi)	PD (dBm/RBW)	PD Limit (dBm/RBW)
BT-LE(1Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	-1.04	-16.66	8.00
2440MHz_TnomVnom	Pass	-1.04	-15.70	8.00
2480MHz_TnomVnom	Pass	-1.04	-12.84	8.00
BT-LE(2Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	-1.04	-18.26	8.00
2440MHz_TnomVnom	Pass	-1.04	-17.72	8.00
2480MHz_TnomVnom	Pass	-1.04	-16.78	8.00

RBW=3kHz.

BT-LE(1Mbps) **PSD**

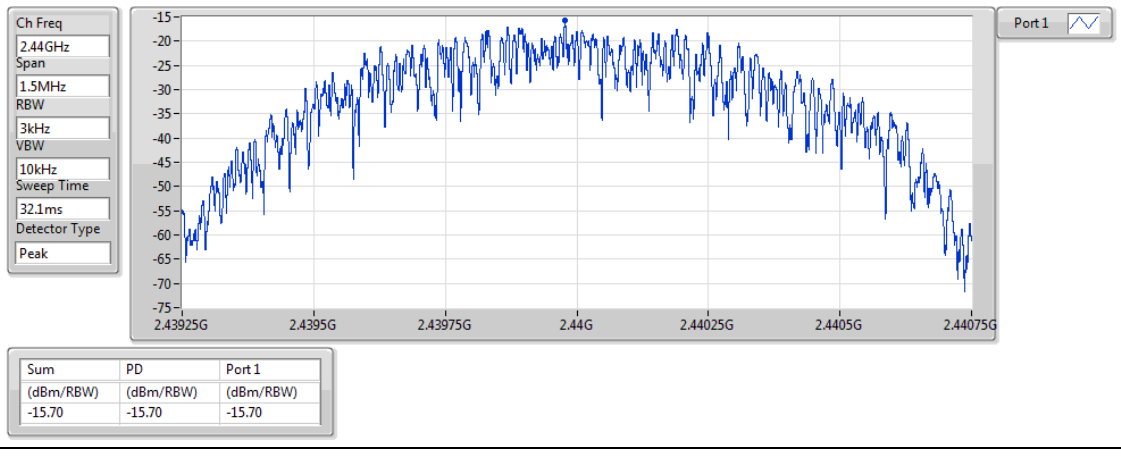
2402MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-16.66	-16.66	-16.66

BT-LE(1Mbps) **PSD**

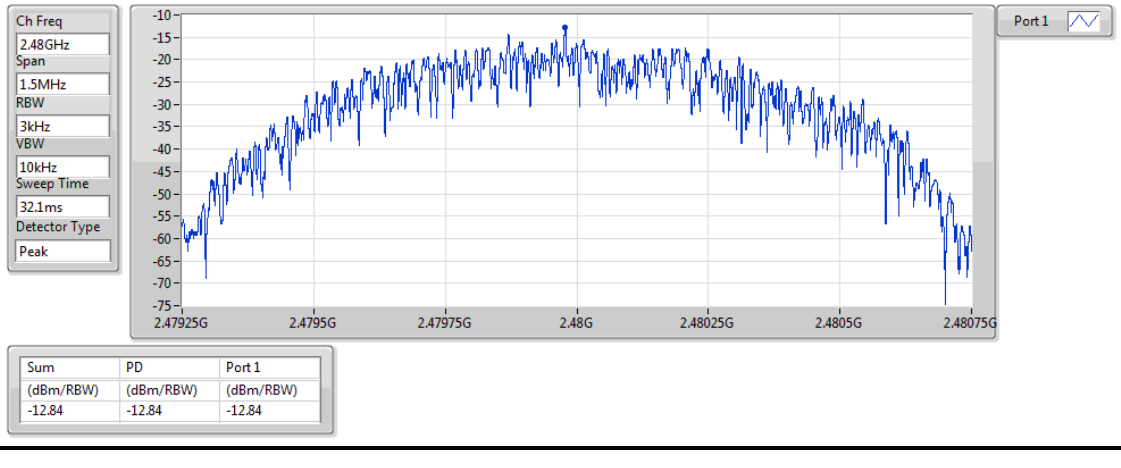
2440MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-15.70	-15.70	-15.70

BT-LE(1Mbps) **PSD**

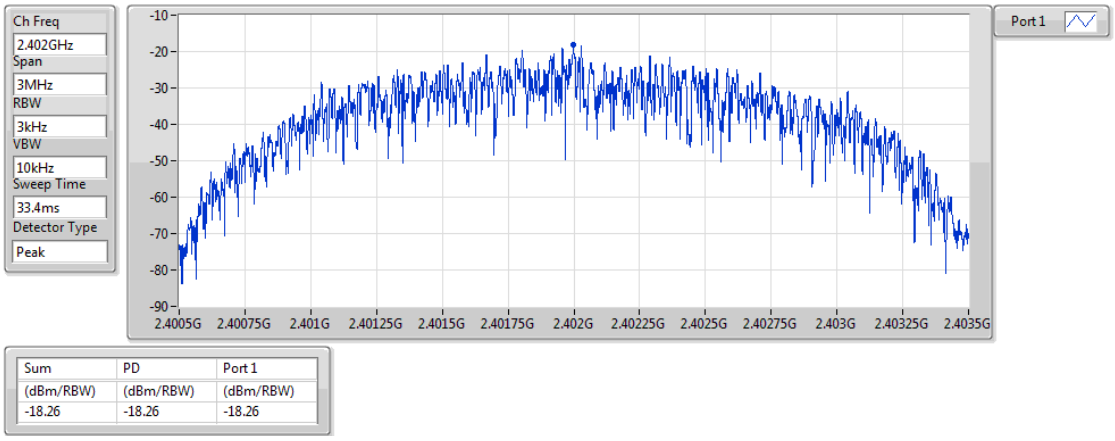
2480MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-12.84	-12.84	-12.84

BT-LE(2Mbps) **PSD**

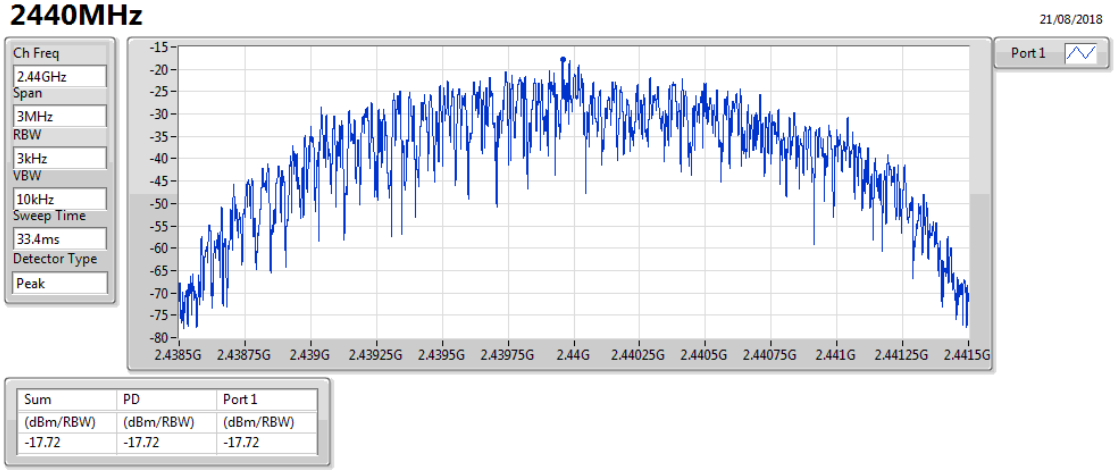
2402MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-18.26	-18.26	-18.26

BT-LE(2Mbps) **PSD**

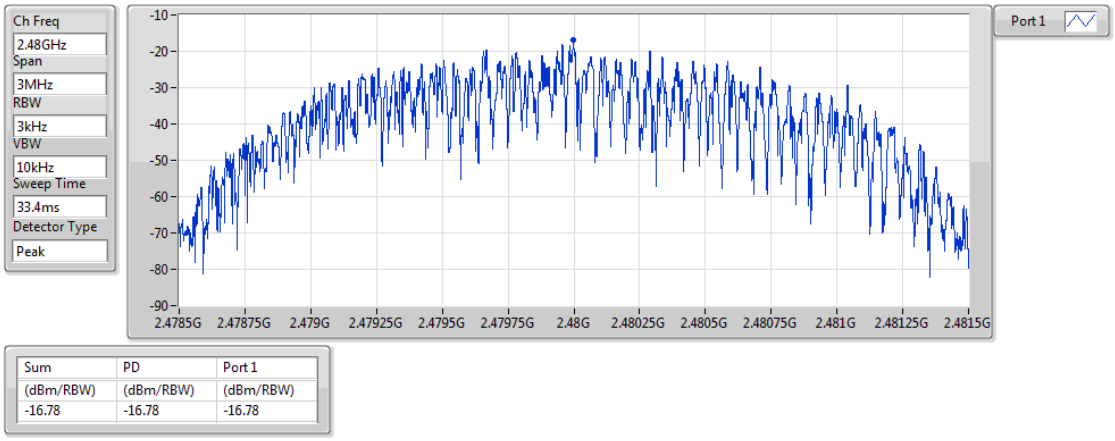
2440MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-17.72	-17.72	-17.72

BT-LE(2Mbps) **PSD**

2480MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-16.78	-16.78	-16.78

Summary

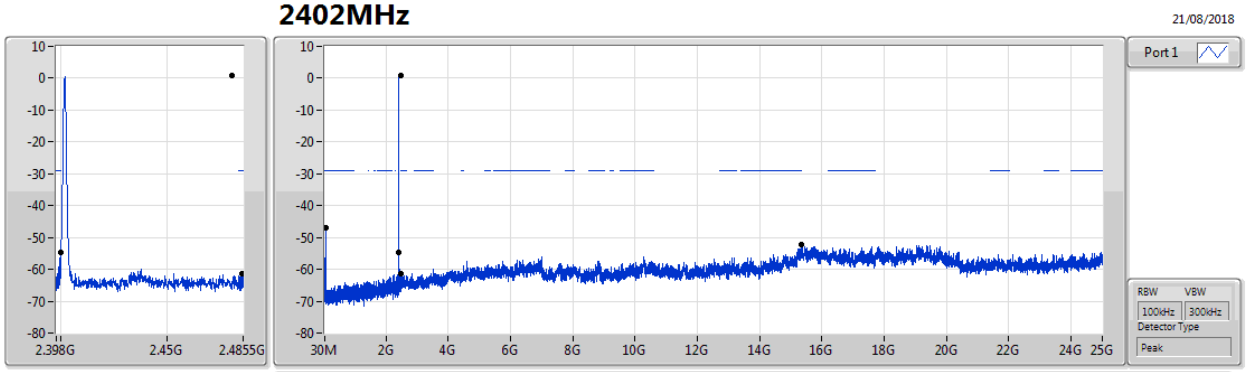
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-
BT-LE(1Mbps)	Pass	2.480327G	0.87	-29.13	48.944M	-42.60	2.399196G	-61.20	2.483728G	-60.11	16.362875G	-52.48	1
BT-LE(2Mbps)	Pass	2.479659G	-2.33	-32.33	2.300177G	-61.94	2.399992G	-43.48	2.484548G	-60.62	16.633792G	-53.36	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-LE(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz_TnomVnom	Pass	2.480327G	0.87	-29.13	48.944M	-47.03	2.399996G	-54.66	2.48482G	-61.35	15.34128G	-52.24	1
2440MHz_TnomVnom	Pass	2.480327G	0.87	-29.13	48.944M	-44.76	2.398736G	-61.27	2.484884G	-61.48	15.231521G	-53.06	1
2480MHz_TnomVnom	Pass	2.480327G	0.87	-29.13	48.944M	-42.60	2.399196G	-61.20	2.483728G	-60.11	16.362875G	-52.48	1
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz_TnomVnom	Pass	2.479659G	-2.33	-32.33	2.300177G	-61.94	2.399992G	-43.48	2.484548G	-60.62	16.633792G	-53.36	1
2440MHz_TnomVnom	Pass	2.479659G	-2.33	-32.33	2.009159G	-62.60	2.396888G	-60.86	2.48406G	-59.61	17.568061G	-53.44	1
2480MHz_TnomVnom	Pass	2.479659G	-2.33	-32.33	32.366M	-54.38	2.397808G	-61.86	2.484036G	-60.26	15.299927G	-53.30	1

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

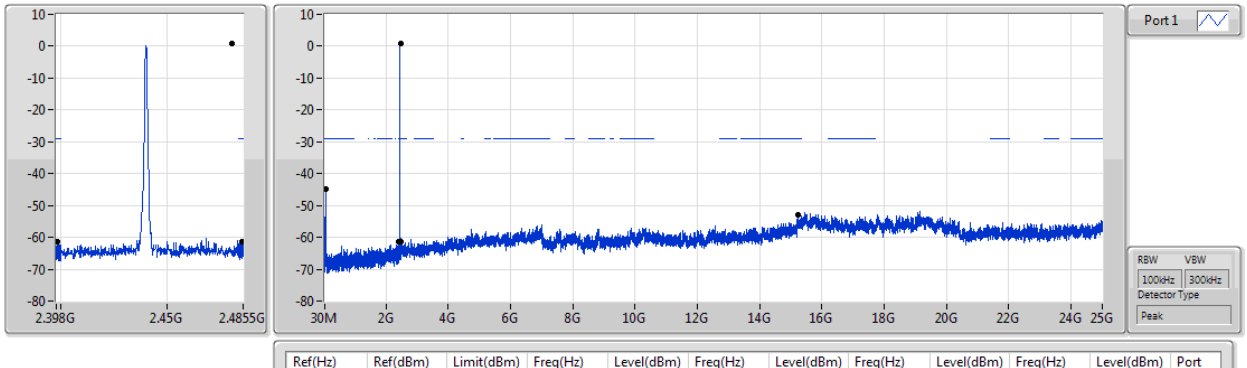
2402MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.480327G	0.87	-29.13	48.944M	-47.03	2.399996G	-54.66	2.48482G	-61.35	15.34128G	-52.24	1

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

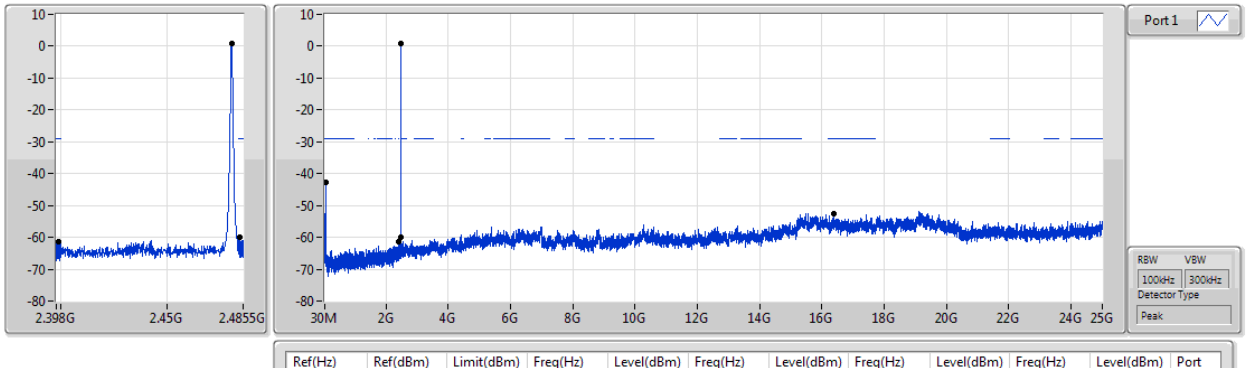
2440MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.480327G	0.87	-29.13	48.944M	-44.76	2.398736G	-61.27	2.484884G	-61.48	15.231521G	-53.06	1

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

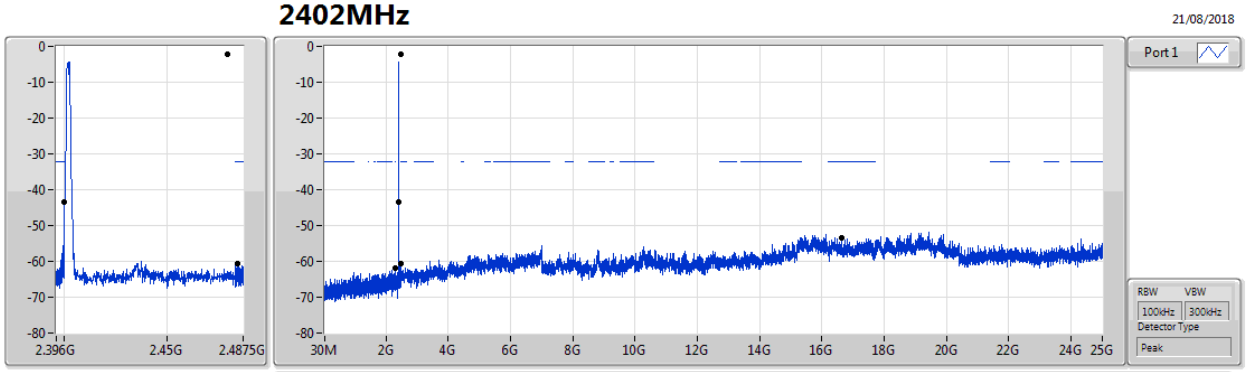
2480MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.480327G	0.87	-29.13	48.944M	-42.60	2.399196G	-61.20	2.483728G	-60.11	16.362875G	-52.48	1

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

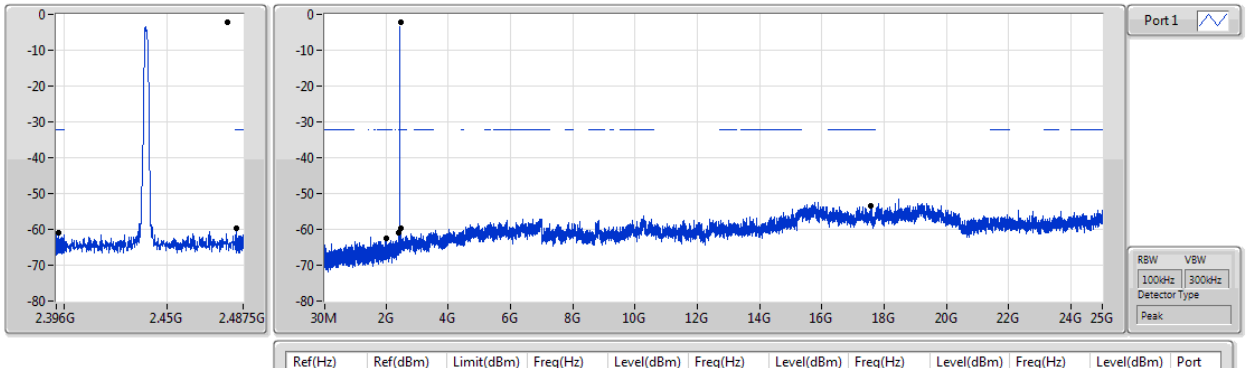
2402MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.479659G	-2.33	-32.33	2.300177G	-61.94	2.399992G	-43.48	2.484548G	-60.62	16.633792G	-53.36	1

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

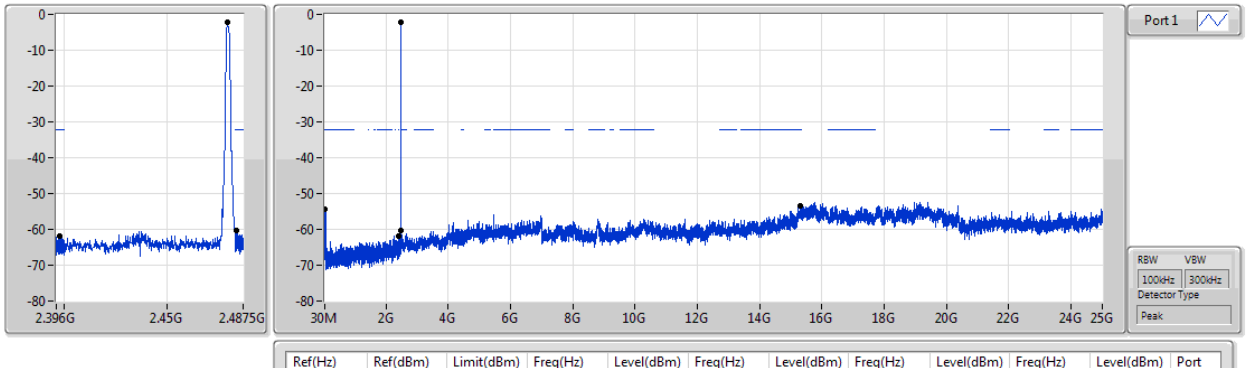
2440MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.479659G	-2.33	-32.33	2.009159G	-62.60	2.396888G	-60.86	2.48406G	-59.61	17.568061G	-53.44	1

BT-LE(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
2.479659G	-2.33	-32.33	32.366M	-54.38	2.397808G	-61.86	2.484036G	-60.26	15.299927G	-53.30	1

Summary

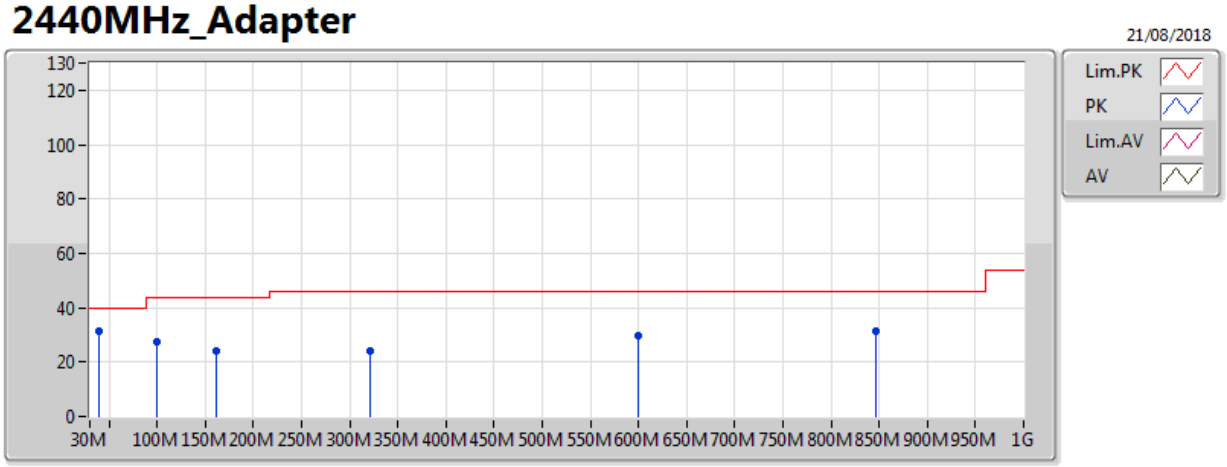
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-
BT-LE(2Mbps)	Pass	PK	39.7M	31.25	40.00	-8.75	-9.52	3	Vertical	360	1.00	-

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-
2440MHz	Pass	PK	39.7M	31.25	40.00	-8.75	-9.52	3	Vertical	360	1.00	-
2440MHz	Pass	PK	99.84M	27.23	43.50	-16.27	-10.34	3	Vertical	360	1.00	-
2440MHz	Pass	PK	161.92M	24.02	43.50	-19.48	-10.43	3	Vertical	360	1.00	-
2440MHz	Pass	PK	321M	24.06	46.00	-21.94	-5.39	3	Vertical	360	1.00	-
2440MHz	Pass	PK	600.36M	29.76	46.00	-16.24	-0.91	3	Vertical	360	1.00	-
2440MHz	Pass	PK	846.74M	31.37	46.00	-14.63	2.06	3	Vertical	360	1.00	-
2440MHz	Pass	PK	39.7M	28.03	40.00	-11.97	-9.52	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	99.84M	23.32	43.50	-20.18	-10.34	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	177.44M	20.15	43.50	-23.35	-10.83	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	326.82M	27.83	46.00	-18.17	-5.39	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	625.58M	29.18	46.00	-16.82	-0.30	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	844.8M	31.25	46.00	-14.75	2.06	3	Horizontal	0	1.00	-

BT-LE(2Mbps)

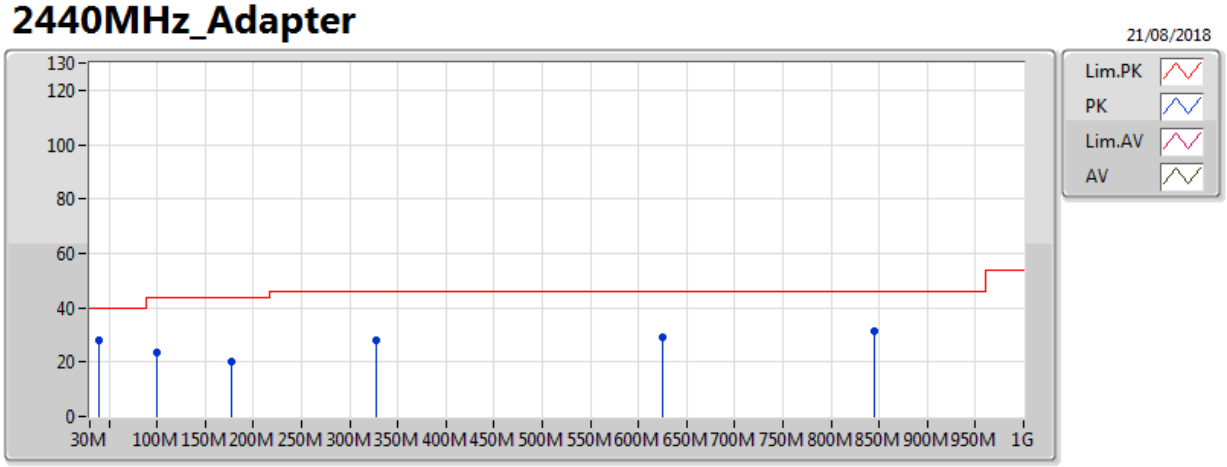
2440MHz_Adapter



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	39.7M	31.25	40.00	-8.75	-9.52	3	Vertical	360	1.00	-
PK	99.84M	27.23	43.50	-16.27	-10.34	3	Vertical	360	1.00	-
PK	161.92M	24.02	43.50	-19.48	-10.43	3	Vertical	360	1.00	-
PK	321M	24.06	46.00	-21.94	-5.39	3	Vertical	360	1.00	-
PK	600.36M	29.76	46.00	-16.24	-0.91	3	Vertical	360	1.00	-
PK	846.74M	31.37	46.00	-14.63	2.06	3	Vertical	360	1.00	-

BT-LE(2Mbps)

2440MHz_Adapter



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	39.7M	28.03	40.00	-11.97	-9.52	3	Horizontal	0	1.00	-
PK	99.84M	23.32	43.50	-20.18	-10.34	3	Horizontal	0	1.00	-
PK	177.44M	20.15	43.50	-23.35	-10.83	3	Horizontal	0	1.00	-
PK	326.82M	27.83	46.00	-18.17	-5.39	3	Horizontal	0	1.00	-
PK	625.58M	29.18	46.00	-16.82	-0.30	3	Horizontal	0	1.00	-
PK	844.8M	31.25	46.00	-14.75	2.06	3	Horizontal	0	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-LE(1Mbps)	Pass	AV	2.483502G	45.99	54.00	-8.01	32.29	3	Horizontal	145	2.40	-
BT-LE(2Mbps)	Pass	AV	2.483502G	46.55	54.00	-7.45	32.29	3	Horizontal	162	2.66	-

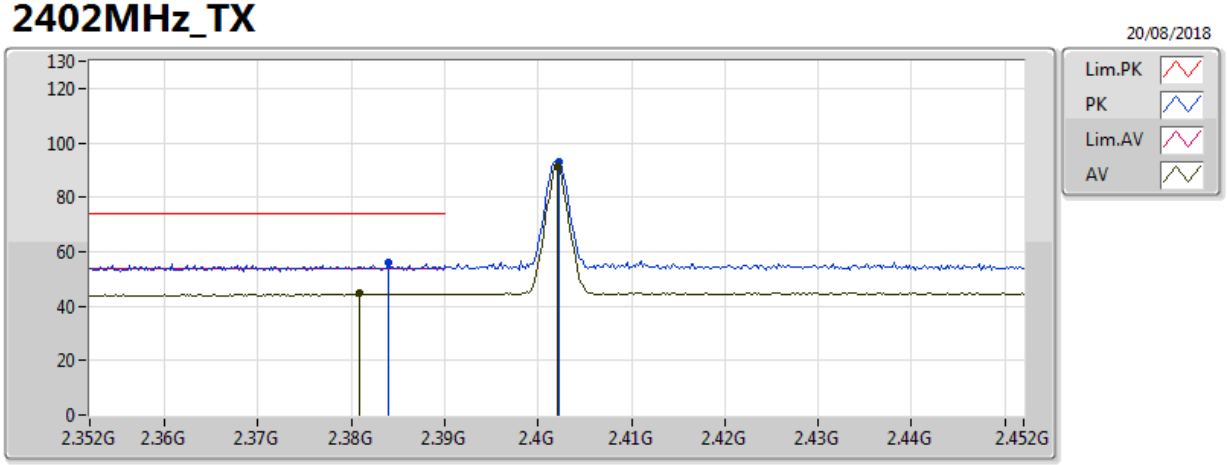
Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-LE(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3808G	44.66	54.00	-9.34	31.97	3	Vertical	91	2.84	-
2402MHz	Pass	AV	2.402G	91.47	Inf	-Inf	32.04	3	Vertical	91	2.84	-
2402MHz	Pass	PK	2.384G	55.80	74.00	-18.20	31.98	3	Vertical	91	2.84	-
2402MHz	Pass	PK	2.4022G	92.83	Inf	-Inf	32.05	3	Vertical	91	2.84	-
2402MHz	Pass	AV	2.389998G	44.49	54.00	-9.51	32.01	3	Horizontal	144	2.26	-
2402MHz	Pass	AV	2.402G	93.08	Inf	-Inf	32.04	3	Horizontal	144	2.26	-
2402MHz	Pass	PK	2.3862G	55.38	74.00	-18.62	32.00	3	Horizontal	144	2.26	-
2402MHz	Pass	PK	2.4022G	94.47	Inf	-Inf	32.05	3	Horizontal	144	2.26	-
2402MHz	Pass	AV	4.79704G	33.18	54.00	-20.82	3.32	3	Vertical	254	1.68	-
2402MHz	Pass	PK	4.79608G	45.43	74.00	-28.57	3.32	3	Vertical	254	1.68	-
2402MHz	Pass	AV	4.79158G	33.20	54.00	-20.80	3.30	3	Horizontal	212	1.49	-
2402MHz	Pass	PK	4.80472G	45.38	74.00	-28.62	3.34	3	Horizontal	212	1.49	-
2440MHz	Pass	AV	2.3804G	44.48	54.00	-9.52	31.97	3	Vertical	80	2.58	-
2440MHz	Pass	AV	2.44G	91.51	Inf	-Inf	32.16	3	Vertical	80	2.58	-
2440MHz	Pass	AV	2.4892G	45.08	54.00	-8.92	32.30	3	Vertical	80	2.58	-
2440MHz	Pass	PK	2.389998G	54.97	74.00	-19.03	32.01	3	Vertical	80	2.58	-
2440MHz	Pass	PK	2.4396G	92.87	Inf	-Inf	32.16	3	Vertical	80	2.58	-
2440MHz	Pass	PK	2.486G	55.43	74.00	-18.57	32.30	3	Vertical	80	2.58	-
2440MHz	Pass	AV	2.3884G	44.45	54.00	-9.55	32.00	3	Horizontal	24	2.99	-
2440MHz	Pass	AV	2.44G	93.18	Inf	-Inf	32.16	3	Horizontal	24	2.99	-
2440MHz	Pass	AV	2.4968G	45.05	54.00	-8.95	32.33	3	Horizontal	24	2.99	-
2440MHz	Pass	PK	2.34G	55.08	74.00	-18.92	31.84	3	Horizontal	24	2.99	-
2440MHz	Pass	PK	2.4404G	94.58	Inf	-Inf	32.16	3	Horizontal	24	2.99	-
2440MHz	Pass	PK	2.4928G	55.79	74.00	-18.21	32.32	3	Horizontal	24	2.99	-
2440MHz	Pass	AV	4.89476G	32.86	54.00	-21.14	3.56	3	Vertical	124	1.88	-
2440MHz	Pass	PK	4.88306G	45.65	74.00	-28.35	3.53	3	Vertical	124	1.88	-
2440MHz	Pass	AV	4.87178G	32.94	54.00	-21.06	3.50	3	Horizontal	214	1.54	-
2440MHz	Pass	PK	4.88426G	45.78	74.00	-28.22	3.53	3	Horizontal	214	1.54	-
2480MHz	Pass	AV	2.48G	93.20	Inf	-Inf	32.28	3	Vertical	81	2.21	-
2480MHz	Pass	AV	2.483502G	45.39	54.00	-8.61	32.29	3	Vertical	81	2.21	-
2480MHz	Pass	PK	2.48G	94.63	Inf	-Inf	32.28	3	Vertical	81	2.21	-
2480MHz	Pass	PK	2.4886G	55.75	74.00	-18.25	32.30	3	Vertical	81	2.21	-
2480MHz	Pass	AV	2.48G	95.14	Inf	-Inf	32.28	3	Horizontal	145	2.40	-
2480MHz	Pass	AV	2.483502G	45.99	54.00	-8.01	32.29	3	Horizontal	145	2.40	-
2480MHz	Pass	PK	2.4798G	96.47	Inf	-Inf	32.28	3	Horizontal	145	2.40	-
2480MHz	Pass	PK	2.4918G	55.89	74.00	-18.11	32.32	3	Horizontal	145	2.40	-
2480MHz	Pass	AV	4.97188G	33.53	54.00	-20.47	3.74	3	Vertical	225	1.58	-
2480MHz	Pass	PK	4.94914G	45.92	74.00	-28.08	3.69	3	Vertical	225	1.58	-
2480MHz	Pass	AV	4.97458G	33.42	54.00	-20.58	3.74	3	Horizontal	158	2.12	-
2480MHz	Pass	PK	4.95682G	45.41	74.00	-28.59	3.70	3	Horizontal	158	2.12	-
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3786G	44.39	54.00	-9.61	31.97	3	Vertical	84	2.83	-
2402MHz	Pass	AV	2.402G	88.03	Inf	-Inf	32.04	3	Vertical	84	2.83	-
2402MHz	Pass	PK	2.3604G	55.56	74.00	-18.44	31.90	3	Vertical	84	2.83	-
2402MHz	Pass	PK	2.402G	92.39	Inf	-Inf	32.04	3	Vertical	84	2.83	-
2402MHz	Pass	AV	2.382G	44.46	54.00	-9.54	31.98	3	Horizontal	28	1.83	-
2402MHz	Pass	AV	2.402G	89.16	Inf	-Inf	32.04	3	Horizontal	28	1.83	-

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	2.3826G	55.83	74.00	-18.17	31.98	3	Horizontal	28	1.83	-
2402MHz	Pass	PK	2.402G	93.58	Inf	-Inf	32.04	3	Horizontal	28	1.83	-
2402MHz	Pass	AV	4.7896G	32.98	54.00	-21.02	3.30	3	Vertical	24	1.45	-
2402MHz	Pass	PK	4.80844G	45.34	74.00	-28.66	3.35	3	Vertical	24	1.45	-
2402MHz	Pass	AV	4.79458G	33.08	54.00	-20.92	3.31	3	Horizontal	241	2.13	-
2402MHz	Pass	PK	4.80688G	45.21	74.00	-28.79	3.34	3	Horizontal	241	2.13	-
2440MHz	Pass	AV	2.3872G	44.46	54.00	-9.54	32.00	3	Vertical	81	2.93	-
2440MHz	Pass	AV	2.44G	88.46	Inf	-Inf	32.16	3	Vertical	81	2.93	-
2440MHz	Pass	AV	2.4868G	45.16	54.00	-8.84	32.30	3	Vertical	81	2.93	-
2440MHz	Pass	PK	2.356G	55.32	74.00	-18.68	31.89	3	Vertical	81	2.93	-
2440MHz	Pass	PK	2.4404G	92.77	Inf	-Inf	32.16	3	Vertical	81	2.93	-
2440MHz	Pass	PK	2.496G	55.76	74.00	-18.24	32.33	3	Vertical	81	2.93	-
2440MHz	Pass	AV	2.3868G	44.48	54.00	-9.52	32.00	3	Horizontal	24	2.99	-
2440MHz	Pass	AV	2.44G	90.01	Inf	-Inf	32.16	3	Horizontal	24	2.99	-
2440MHz	Pass	AV	2.496G	45.23	54.00	-8.77	32.33	3	Horizontal	24	2.99	-
2440MHz	Pass	PK	2.3856G	55.82	74.00	-18.18	32.00	3	Horizontal	24	2.99	-
2440MHz	Pass	PK	2.4404G	94.37	Inf	-Inf	32.16	3	Horizontal	24	2.99	-
2440MHz	Pass	PK	2.4848G	55.59	74.00	-18.41	32.29	3	Horizontal	24	2.99	-
2440MHz	Pass	AV	4.89398G	32.70	54.00	-21.30	3.56	3	Vertical	197	1.84	-
2440MHz	Pass	PK	4.87706G	45.37	74.00	-28.63	3.52	3	Vertical	197	1.84	-
2440MHz	Pass	AV	4.8917G	33.09	54.00	-20.91	3.56	3	Horizontal	54	1.65	-
2440MHz	Pass	PK	4.88894G	45.95	74.00	-28.05	3.55	3	Horizontal	54	1.65	-
2480MHz	Pass	AV	2.48G	89.34	Inf	-Inf	32.28	3	Vertical	66	2.20	-
2480MHz	Pass	AV	2.483502G	45.77	54.00	-8.23	32.29	3	Vertical	66	2.20	-
2480MHz	Pass	PK	2.48G	93.64	Inf	-Inf	32.28	3	Vertical	66	2.20	-
2480MHz	Pass	PK	2.483502G	56.28	74.00	-17.72	32.29	3	Vertical	66	2.20	-
2480MHz	Pass	AV	2.48G	91.69	Inf	-Inf	32.28	3	Horizontal	162	2.66	-
2480MHz	Pass	AV	2.483502G	46.55	54.00	-7.45	32.29	3	Horizontal	162	2.66	-
2480MHz	Pass	PK	2.48G	96.04	Inf	-Inf	32.28	3	Horizontal	162	2.66	-
2480MHz	Pass	PK	2.483502G	56.93	74.00	-17.07	32.29	3	Horizontal	162	2.66	-
2480MHz	Pass	AV	4.96918G	33.49	54.00	-20.51	3.73	3	Vertical	123	1.66	-
2480MHz	Pass	PK	4.96774G	45.58	74.00	-28.42	3.73	3	Vertical	123	1.66	-
2480MHz	Pass	AV	4.96546G	33.37	54.00	-20.63	3.73	3	Horizontal	160	1.72	-
2480MHz	Pass	PK	4.96846G	46.48	74.00	-27.52	3.73	3	Horizontal	160	1.72	-

BT-LE(1Mbps)

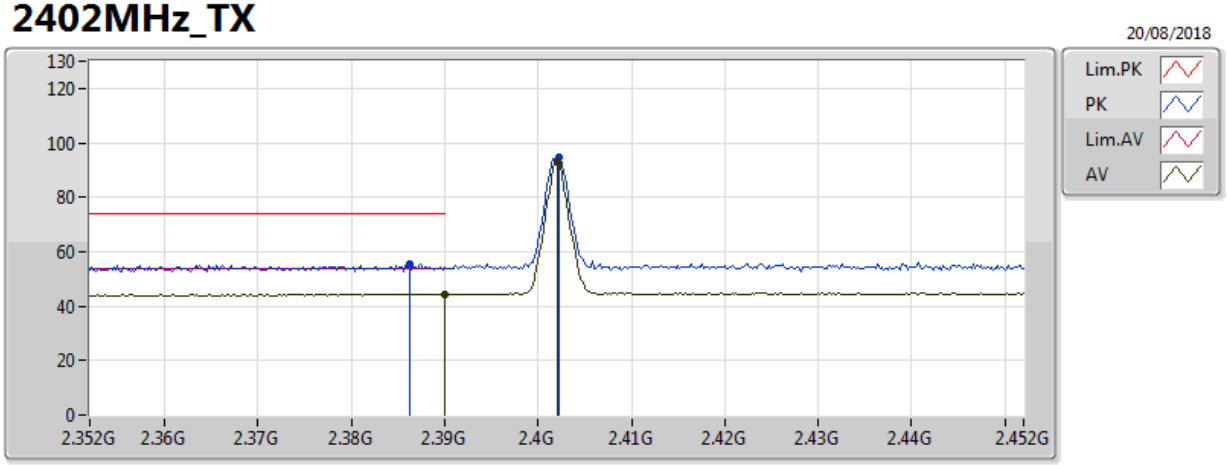
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3808G	44.66	54.00	-9.34	31.97	3	Vertical	91	2.84	-
AV	2.402G	91.47	Inf	-Inf	32.04	3	Vertical	91	2.84	-
PK	2.384G	55.80	74.00	-18.20	31.98	3	Vertical	91	2.84	-
PK	2.4022G	92.83	Inf	-Inf	32.05	3	Vertical	91	2.84	-

BT-LE(1Mbps)

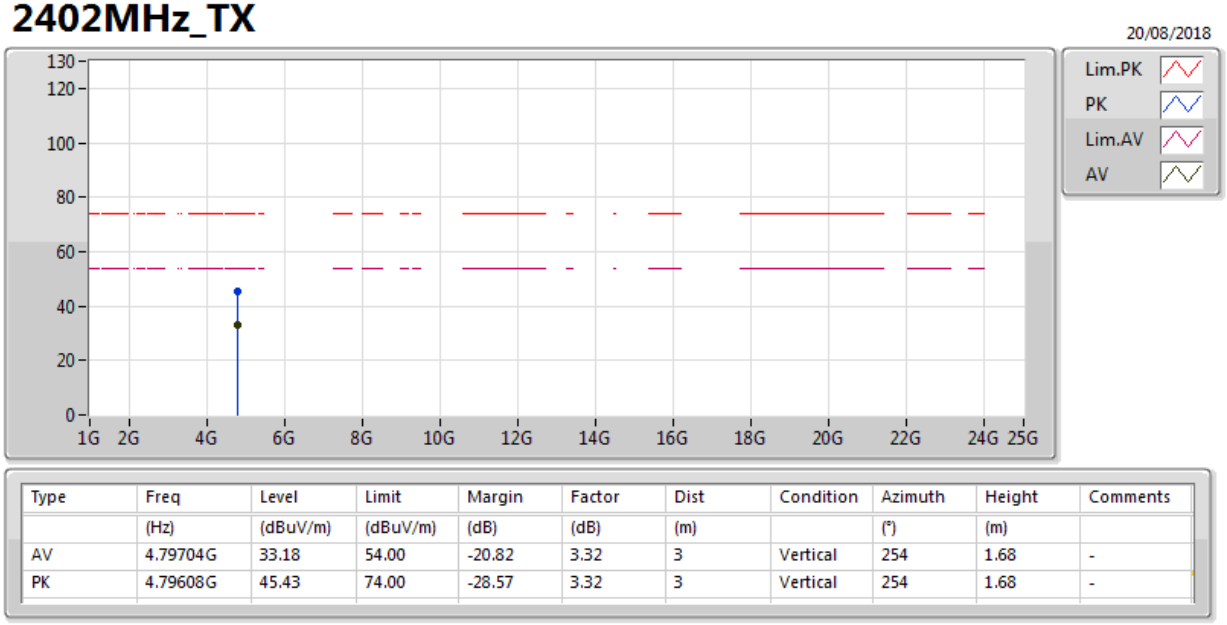
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.389998G	44.49	54.00	-9.51	32.01	3	Horizontal	144	2.26	-
AV	2.402G	93.08	Inf	-Inf	32.04	3	Horizontal	144	2.26	-
PK	2.3862G	55.38	74.00	-18.62	32.00	3	Horizontal	144	2.26	-
PK	2.4022G	94.47	Inf	-Inf	32.05	3	Horizontal	144	2.26	-

BT-LE(1Mbps)

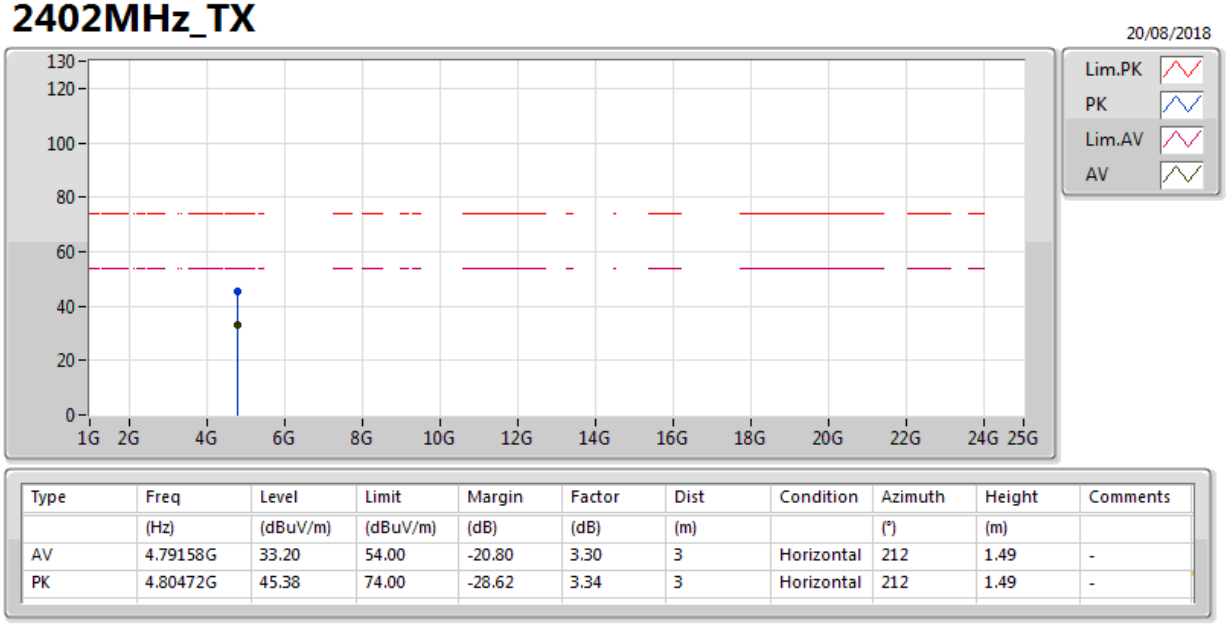
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.79704G	33.18	54.00	-20.82	3.32	3	Vertical	254	1.68	-
PK	4.79608G	45.43	74.00	-28.57	3.32	3	Vertical	254	1.68	-

BT-LE(1Mbps)

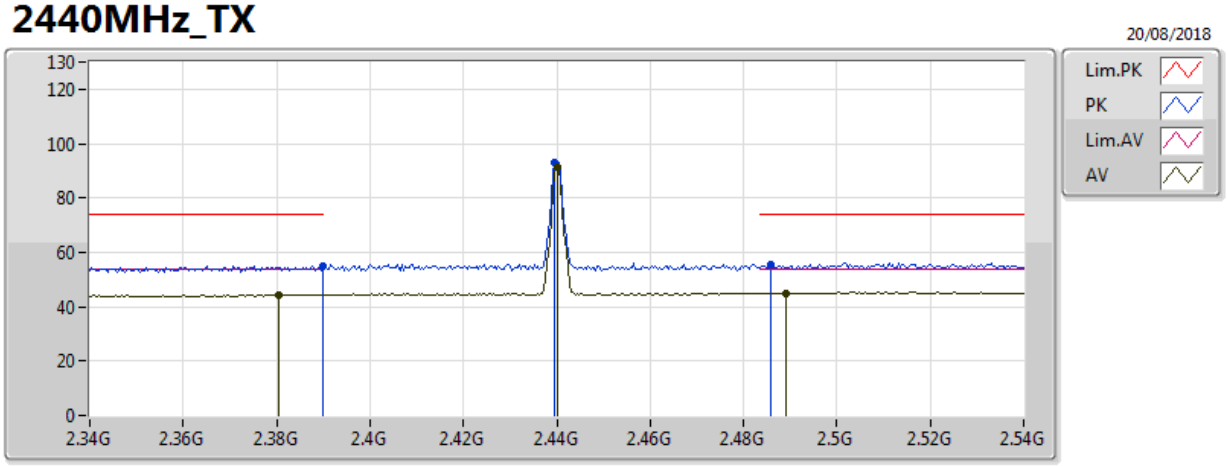
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.79158G	33.20	54.00	-20.80	3.30	3	Horizontal	212	1.49	-
PK	4.80472G	45.38	74.00	-28.62	3.34	3	Horizontal	212	1.49	-

BT-LE(1Mbps)

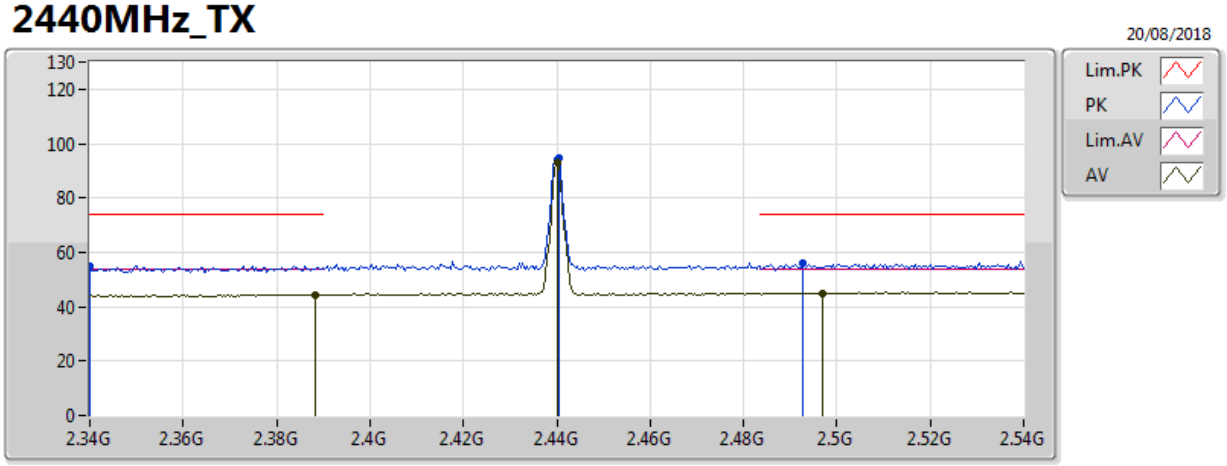
2440MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3804G	44.48	54.00	-9.52	31.97	3	Vertical	80	2.58	-
AV	2.44G	91.51	Inf	-Inf	32.16	3	Vertical	80	2.58	-
AV	2.4892G	45.08	54.00	-8.92	32.30	3	Vertical	80	2.58	-
PK	2.389998G	54.97	74.00	-19.03	32.01	3	Vertical	80	2.58	-
PK	2.4396G	92.87	Inf	-Inf	32.16	3	Vertical	80	2.58	-
PK	2.486G	55.43	74.00	-18.57	32.30	3	Vertical	80	2.58	-

BT-LE(1Mbps)

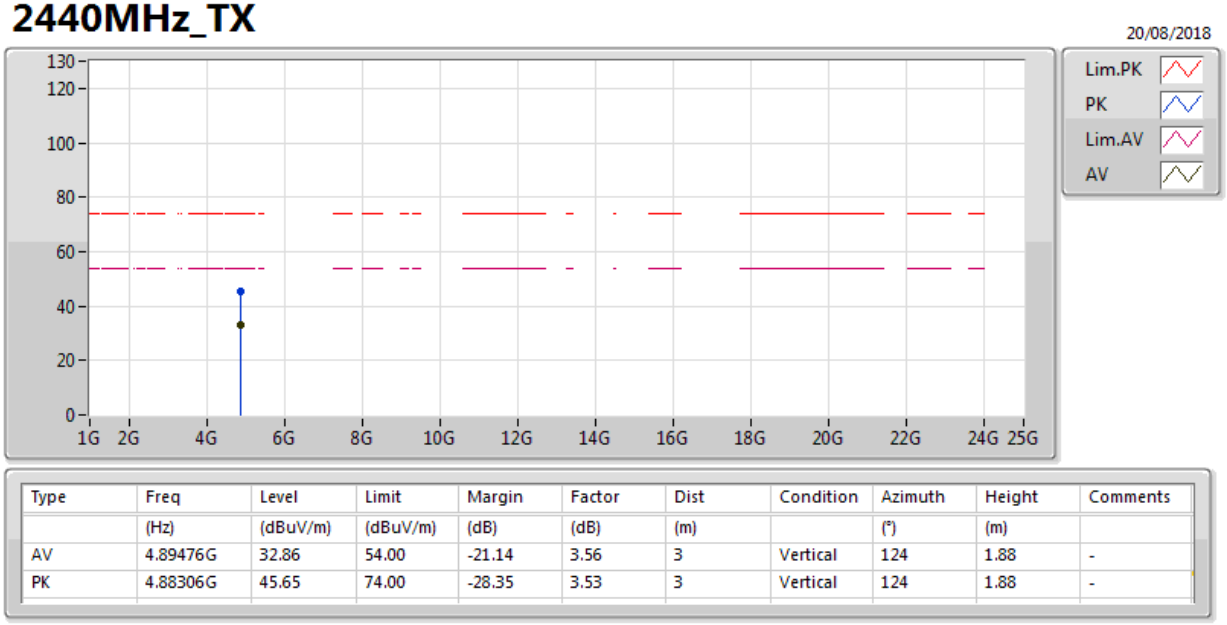
2440MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3884G	44.45	54.00	-9.55	32.00	3	Horizontal	24	2.99	-
AV	2.44G	93.18	Inf	-Inf	32.16	3	Horizontal	24	2.99	-
AV	2.4968G	45.05	54.00	-8.95	32.33	3	Horizontal	24	2.99	-
PK	2.34G	55.08	74.00	-18.92	31.84	3	Horizontal	24	2.99	-
PK	2.4404G	94.58	Inf	-Inf	32.16	3	Horizontal	24	2.99	-
PK	2.4928G	55.79	74.00	-18.21	32.32	3	Horizontal	24	2.99	-

BT-LE(1Mbps)

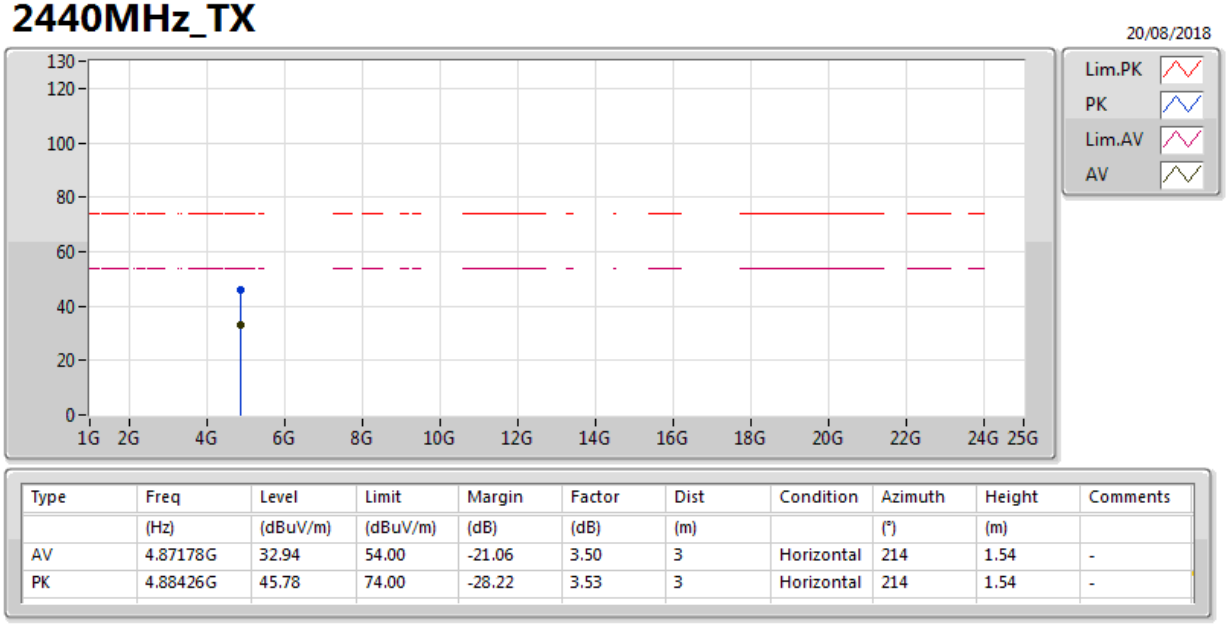
2440MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.89476G	32.86	54.00	-21.14	3.56	3	Vertical	124	1.88	-
PK	4.88306G	45.65	74.00	-28.35	3.53	3	Vertical	124	1.88	-

BT-LE(1Mbps)

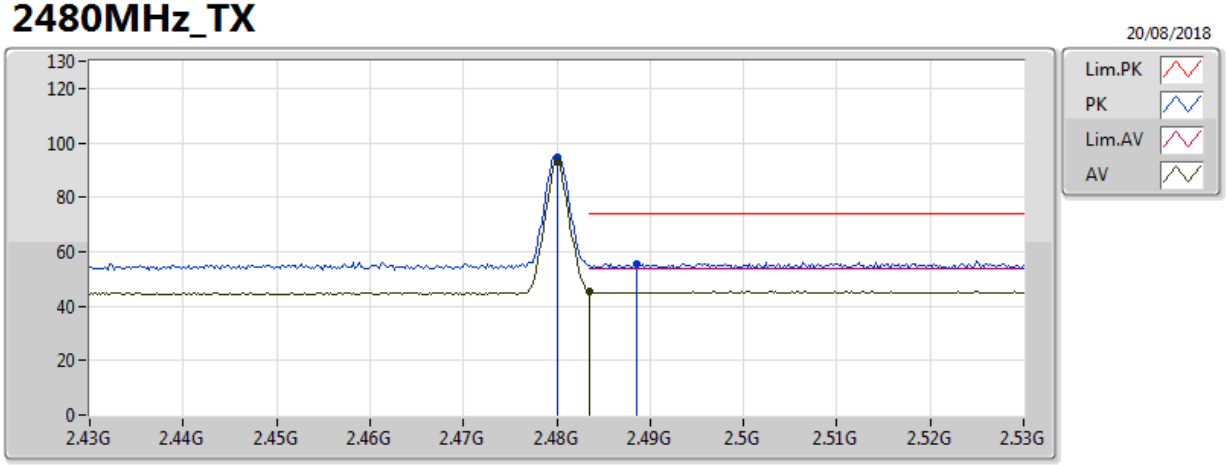
2440MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.87178G	32.94	54.00	-21.06	3.50	3	Horizontal	214	1.54	-
PK	4.88426G	45.78	74.00	-28.22	3.53	3	Horizontal	214	1.54	-

BT-LE(1Mbps)

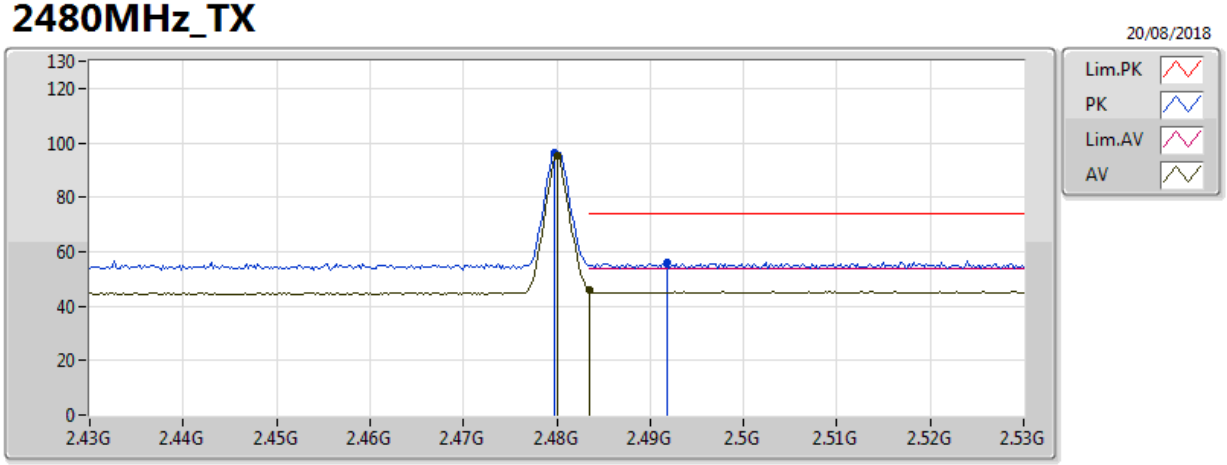
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.48G	93.20	Inf	-Inf	32.28	3	Vertical	81	2.21	-
AV	2.483502G	45.39	54.00	-8.61	32.29	3	Vertical	81	2.21	-
PK	2.48G	94.63	Inf	-Inf	32.28	3	Vertical	81	2.21	-
PK	2.4886G	55.75	74.00	-18.25	32.30	3	Vertical	81	2.21	-

BT-LE(1Mbps)

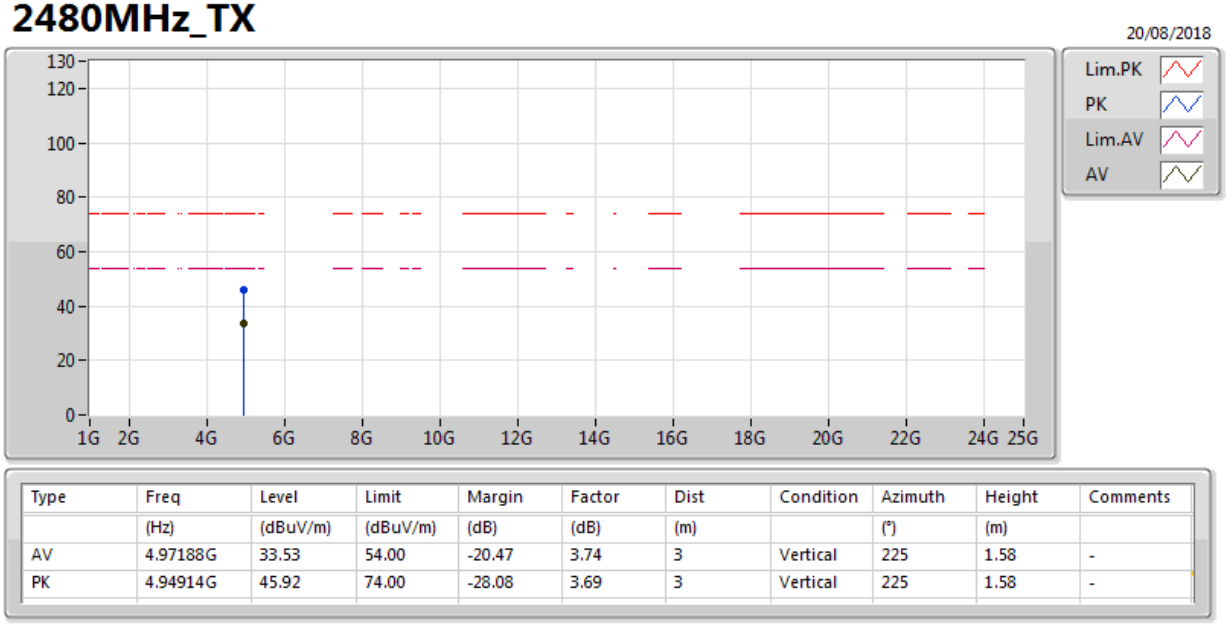
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.48G	95.14	Inf	-Inf	32.28	3	Horizontal	145	2.40	-
AV	2.483502G	45.99	54.00	-8.01	32.29	3	Horizontal	145	2.40	-
PK	2.4798G	96.47	Inf	-Inf	32.28	3	Horizontal	145	2.40	-
PK	2.4918G	55.89	74.00	-18.11	32.32	3	Horizontal	145	2.40	-

BT-LE(1Mbps)

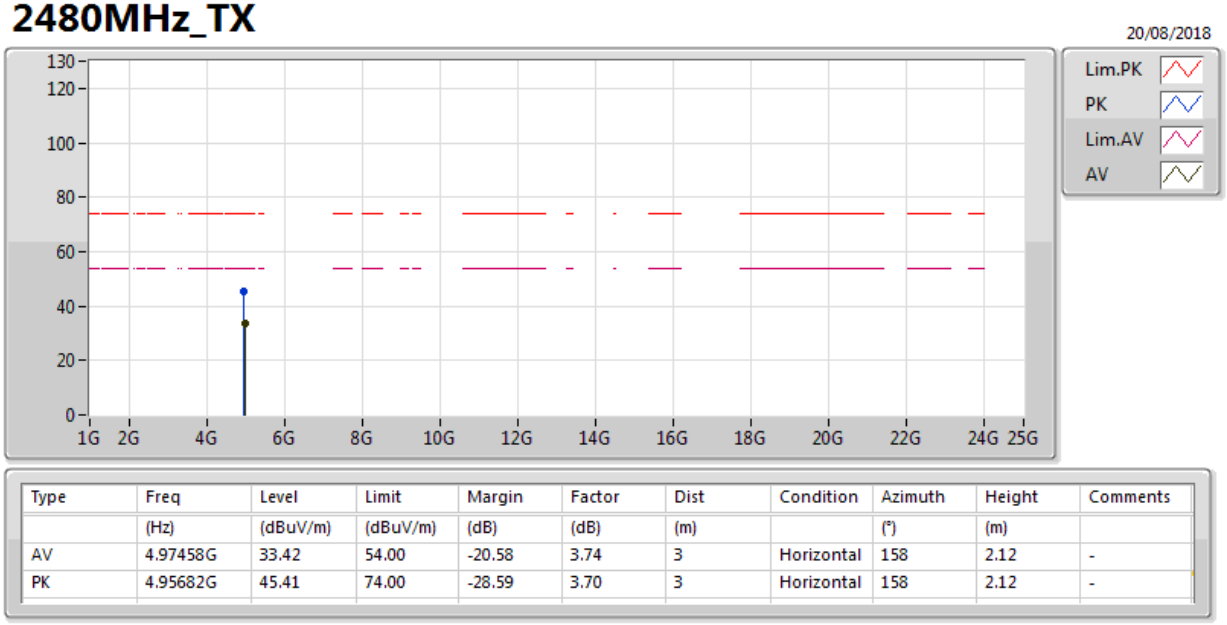
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.97188G	33.53	54.00	-20.47	3.74	3	Vertical	225	1.58	-
PK	4.94914G	45.92	74.00	-28.08	3.69	3	Vertical	225	1.58	-

BT-LE(1Mbps)

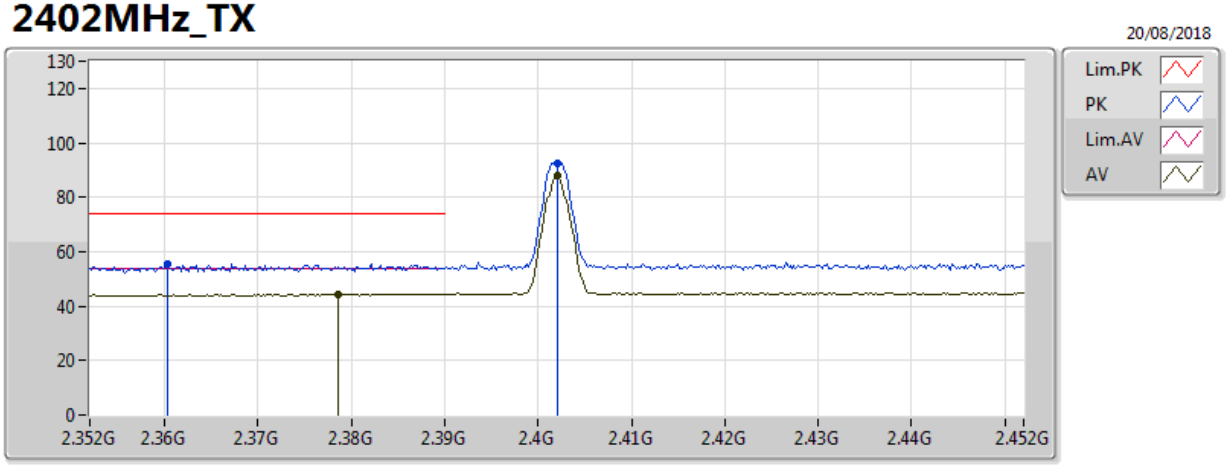
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.97458G	33.42	54.00	-20.58	3.74	3	Horizontal	158	2.12	-
PK	4.95682G	45.41	74.00	-28.59	3.70	3	Horizontal	158	2.12	-

BT-LE(2Mbps)

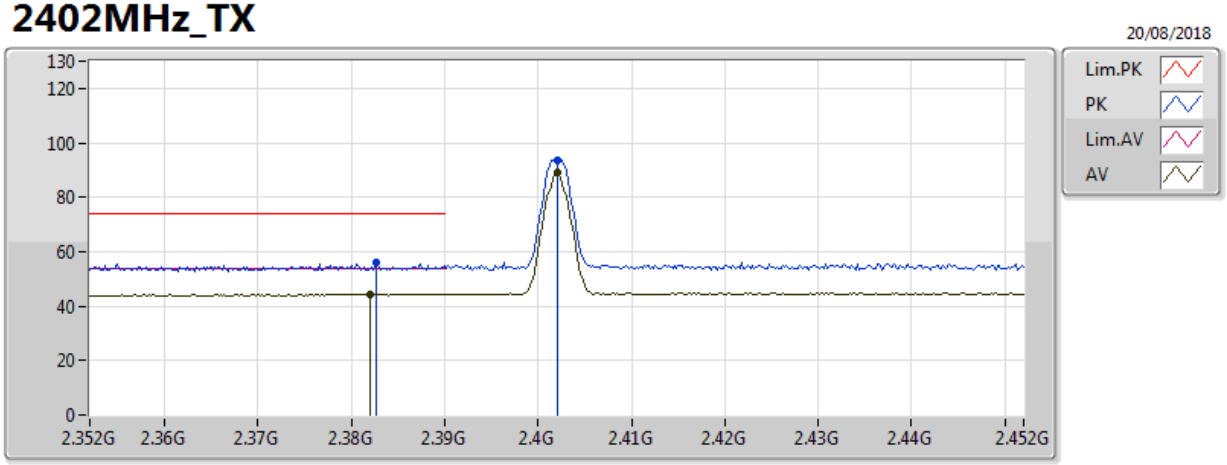
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3786G	44.39	54.00	-9.61	31.97	3	Vertical	84	2.83	-
AV	2.402G	88.03	Inf	-Inf	32.04	3	Vertical	84	2.83	-
PK	2.3604G	55.56	74.00	-18.44	31.90	3	Vertical	84	2.83	-
PK	2.402G	92.39	Inf	-Inf	32.04	3	Vertical	84	2.83	-

BT-LE(2Mbps)

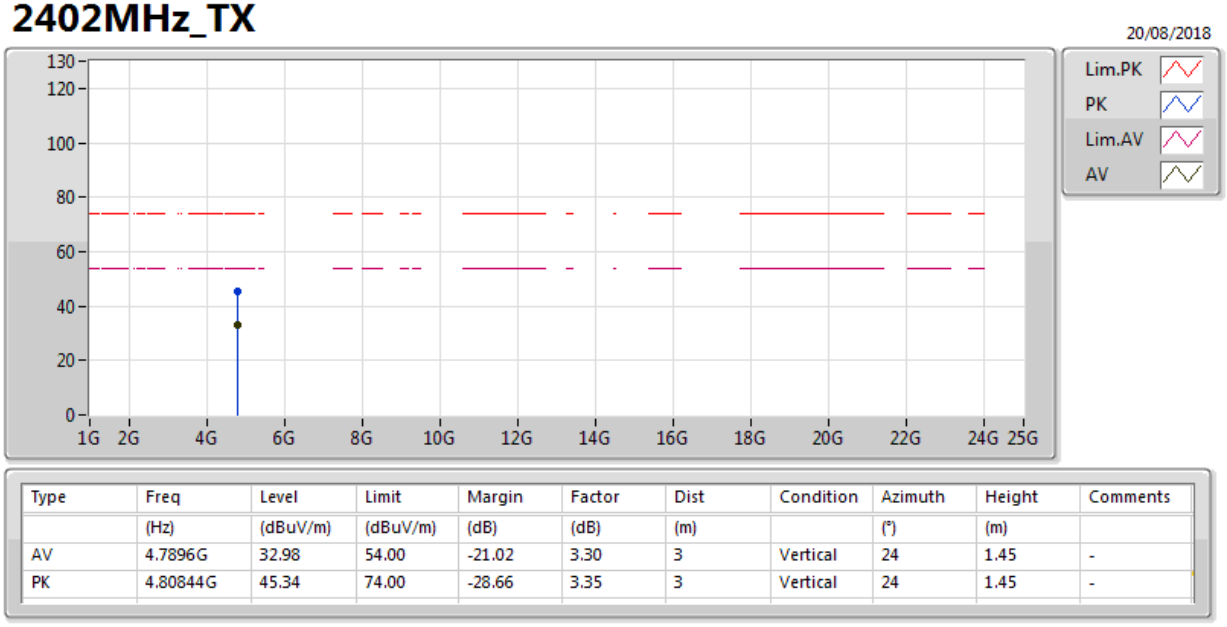
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.382G	44.46	54.00	-9.54	31.98	3	Horizontal	28	1.83	-
AV	2.402G	89.16	Inf	-Inf	32.04	3	Horizontal	28	1.83	-
PK	2.3826G	55.83	74.00	-18.17	31.98	3	Horizontal	28	1.83	-
PK	2.402G	93.58	Inf	-Inf	32.04	3	Horizontal	28	1.83	-

BT-LE(2Mbps)

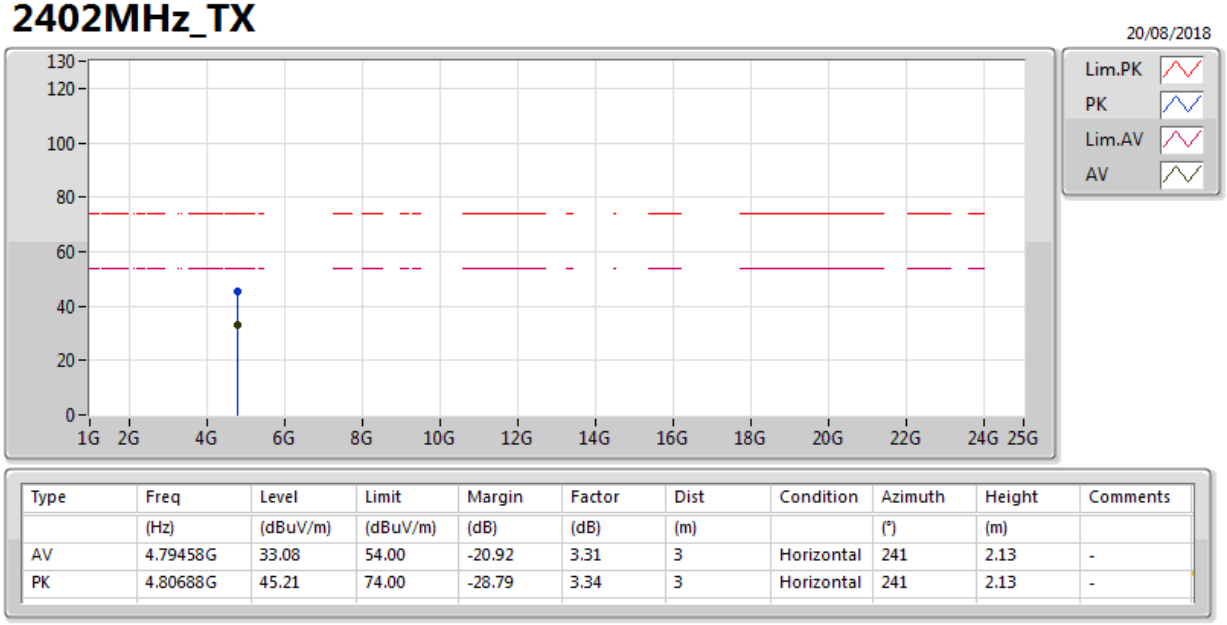
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.7896G	32.98	54.00	-21.02	3.30	3	Vertical	24	1.45	-
PK	4.80844G	45.34	74.00	-28.66	3.35	3	Vertical	24	1.45	-

BT-LE(2Mbps)

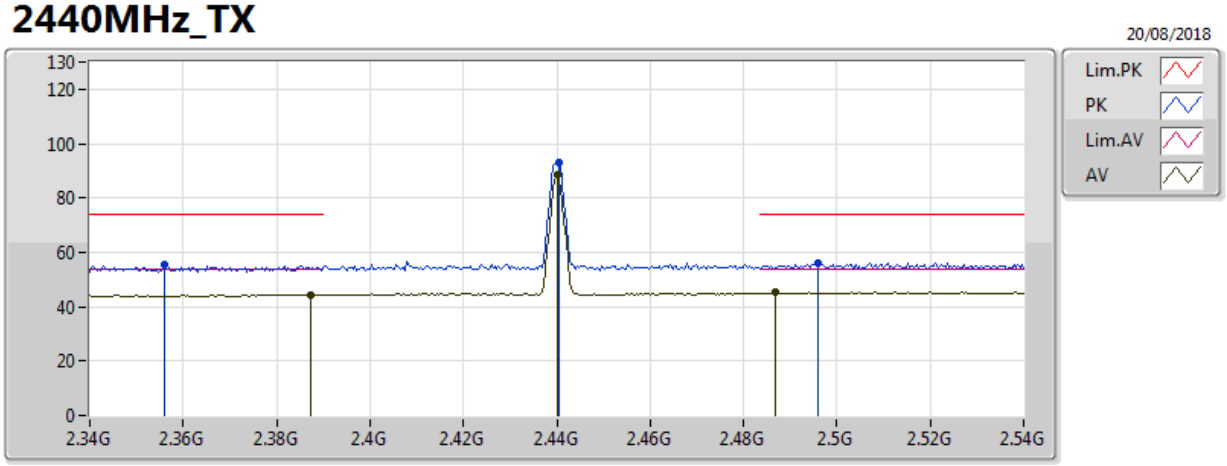
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.79458G	33.08	54.00	-20.92	3.31	3	Horizontal	241	2.13	-
PK	4.80688G	45.21	74.00	-28.79	3.34	3	Horizontal	241	2.13	-

BT-LE(2Mbps)

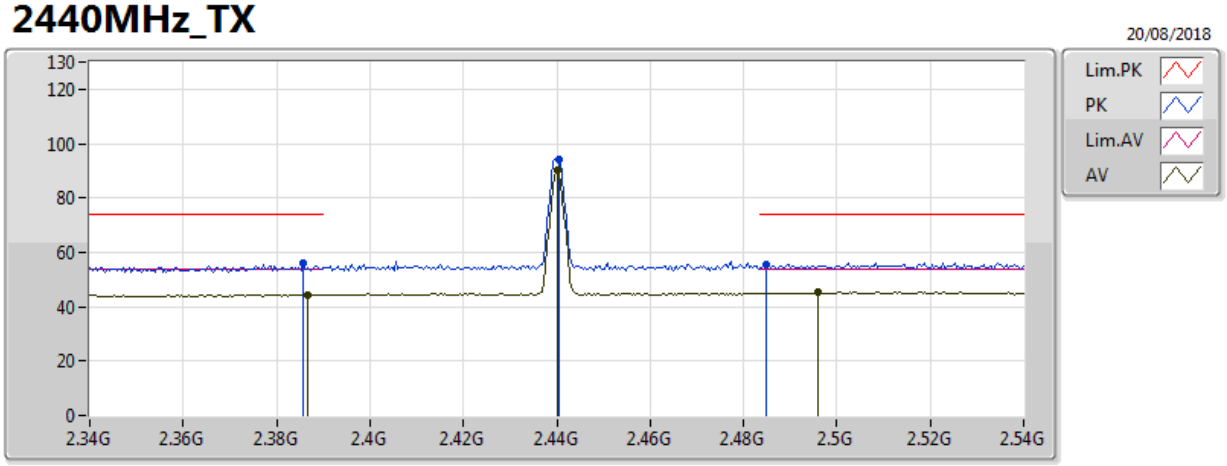
2440MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3872G	44.46	54.00	-9.54	32.00	3	Vertical	81	2.93	-
AV	2.44G	88.46	Inf	-Inf	32.16	3	Vertical	81	2.93	-
AV	2.4868G	45.16	54.00	-8.84	32.30	3	Vertical	81	2.93	-
PK	2.356G	55.32	74.00	-18.68	31.89	3	Vertical	81	2.93	-
PK	2.4404G	92.77	Inf	-Inf	32.16	3	Vertical	81	2.93	-
PK	2.496G	55.76	74.00	-18.24	32.33	3	Vertical	81	2.93	-

BT-LE(2Mbps)

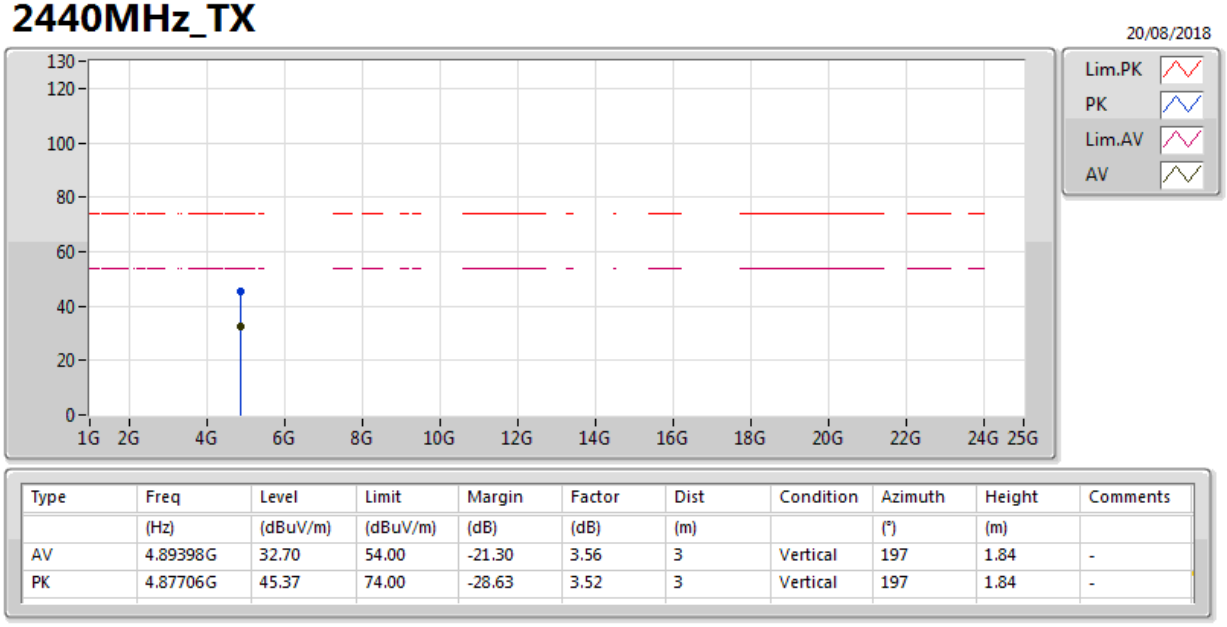
2440MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3868G	44.48	54.00	-9.52	32.00	3	Horizontal	24	2.99	-
AV	2.44G	90.01	Inf	-Inf	32.16	3	Horizontal	24	2.99	-
AV	2.496G	45.23	54.00	-8.77	32.33	3	Horizontal	24	2.99	-
PK	2.3856G	55.82	74.00	-18.18	32.00	3	Horizontal	24	2.99	-
PK	2.4404G	94.37	Inf	-Inf	32.16	3	Horizontal	24	2.99	-
PK	2.4848G	55.59	74.00	-18.41	32.29	3	Horizontal	24	2.99	-

BT-LE(2Mbps)

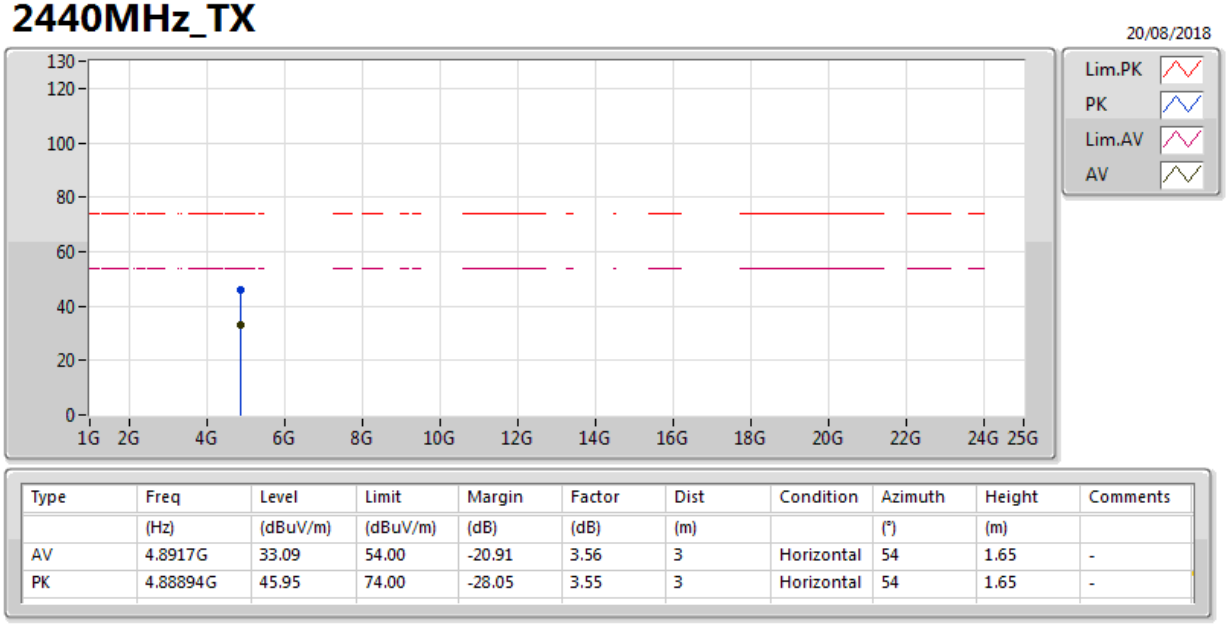
2440MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.89398G	32.70	54.00	-21.30	3.56	3	Vertical	197	1.84	-
PK	4.87706G	45.37	74.00	-28.63	3.52	3	Vertical	197	1.84	-

BT-LE(2Mbps)

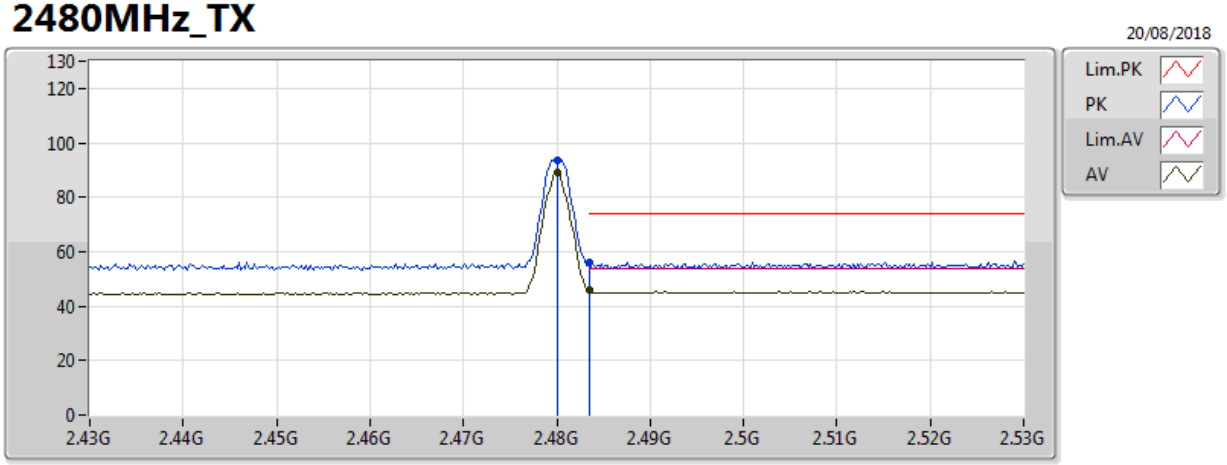
2440MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.8917G	33.09	54.00	-20.91	3.56	3	Horizontal	54	1.65	-
PK	4.88894G	45.95	74.00	-28.05	3.55	3	Horizontal	54	1.65	-

BT-LE(2Mbps)

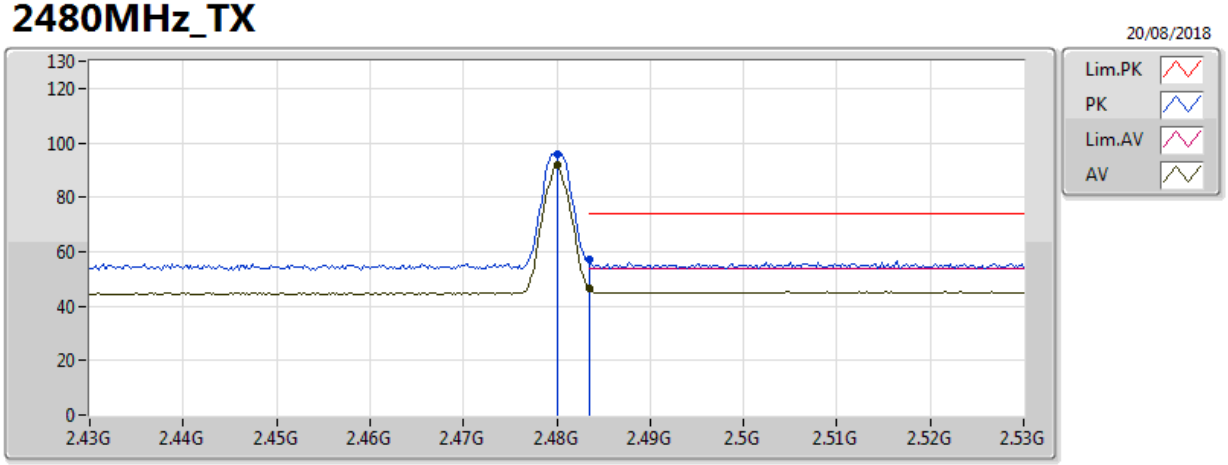
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.48G	89.34	Inf	-Inf	32.28	3	Vertical	66	2.20	-
AV	2.483502G	45.77	54.00	-8.23	32.29	3	Vertical	66	2.20	-
PK	2.48G	93.64	Inf	-Inf	32.28	3	Vertical	66	2.20	-
PK	2.483502G	56.28	74.00	-17.72	32.29	3	Vertical	66	2.20	-

BT-LE(2Mbps)

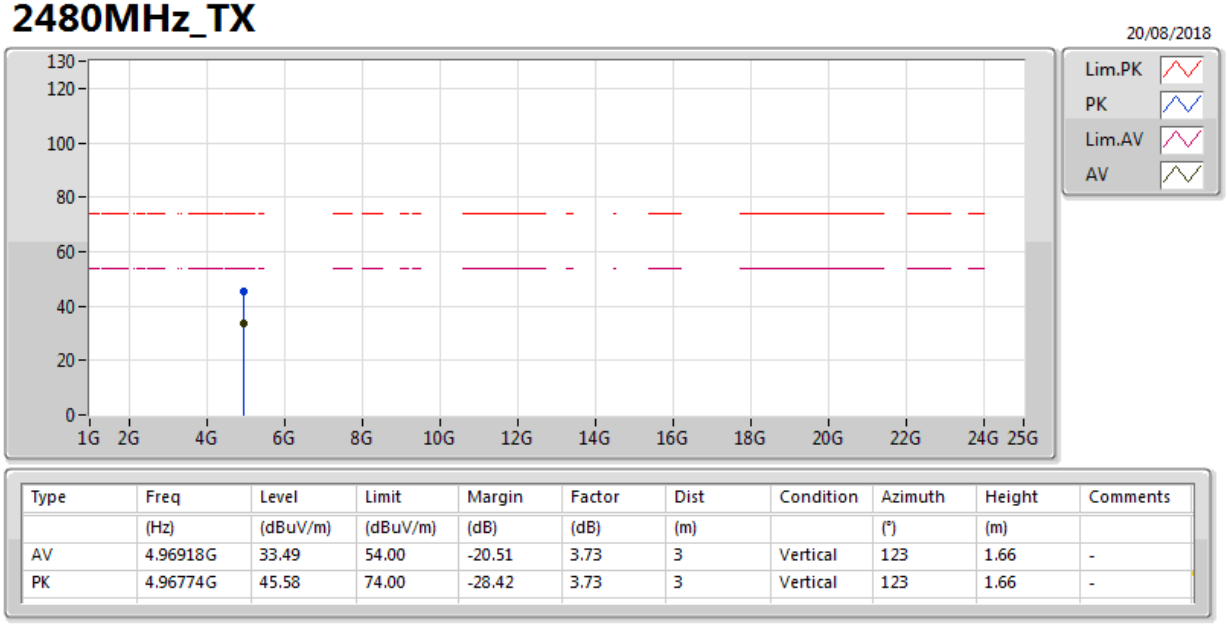
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.48G	91.69	Inf	-Inf	32.28	3	Horizontal	162	2.66	-
AV	2.483502G	46.55	54.00	-7.45	32.29	3	Horizontal	162	2.66	-
PK	2.48G	96.04	Inf	-Inf	32.28	3	Horizontal	162	2.66	-
PK	2.483502G	56.93	74.00	-17.07	32.29	3	Horizontal	162	2.66	-

BT-LE(2Mbps)

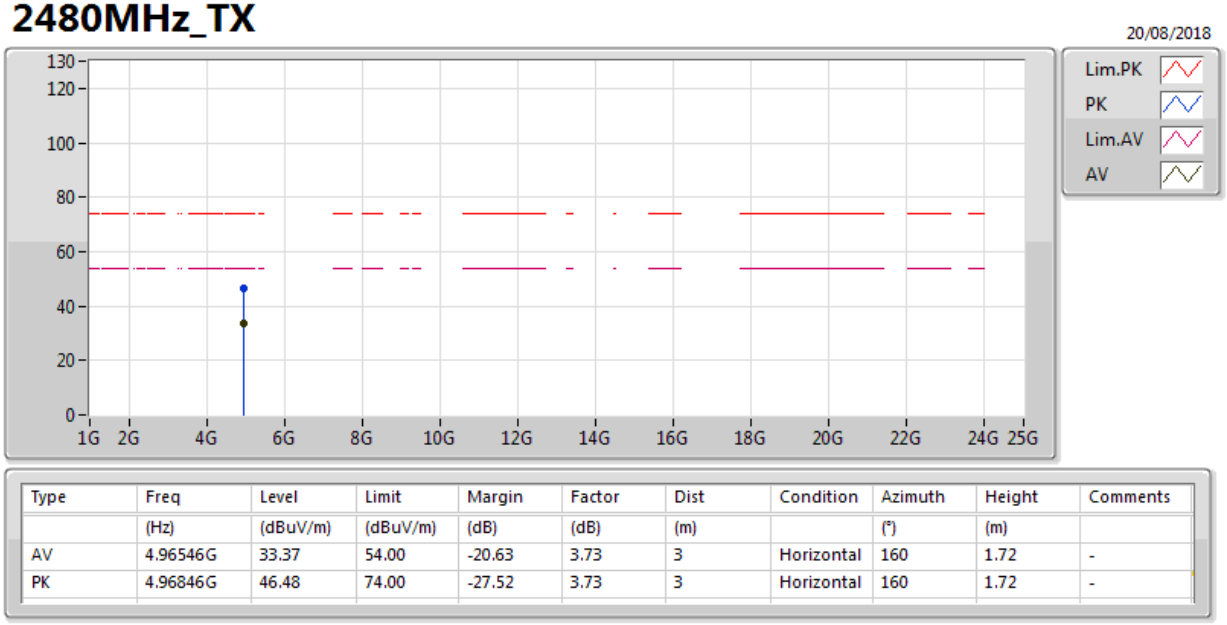
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.96918G	33.49	54.00	-20.51	3.73	3	Vertical	123	1.66	-
PK	4.96774G	45.58	74.00	-28.42	3.73	3	Vertical	123	1.66	-

BT-LE(2Mbps)

2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.96546G	33.37	54.00	-20.63	3.73	3	Horizontal	160	1.72	-
PK	4.96846G	46.48	74.00	-27.52	3.73	3	Horizontal	160	1.72	-