NCC Test Report

Equipment	:	網路攝影機
Brand Name	:	**Cisco Systems, Inc.**
Model No.	:	**MV12W-HW, MV12WE-HW, MV12N-HW**
Standard	:	**LP0002 Section 3.10 (2018-01-10)**
Operating Band	:	**2400 MHz – 2483.5 MHz**
Function	:	☒**Point-to-multipoint;** ☐**Point-to-point**
Applicant/ Manufacturer	:	台灣思科系統股份有限公司 台北市信義路四段 **460** 號 **12** 樓

The product sample received on Dec. 16, 2017 and completely tested on Jan. 31, 2018. 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

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TEST SETUP PHOTOS V01

PHOTOGRAPHS OF EUT V01

Summary of Test Result

Conformance Test Specifications				
Report Clause	**Ref. Std. Clause**	**Description**	**Limit**	**Result**
1.1.2	3.10.1.4	Antenna Requirement	LP0002-2.2	Complied
3.1	2.3	AC Power-line Conducted Emissions	LP0002-2.3	Complied
3.2	3.10.1.6	20dB Bandwidth	3.10.1.6	Complied
3.2	3.10.1.6	Carrier Frequency Separation	3.10.1.6	Complied
3.3	3.10.1.2	Maximum Conducted Output Power	3.10.1.2	Complied
3.4	3.10.1.6	Number of Hopping Frequencies and Hopping Bandedge	3.10.1.6	Complied
3.5	3.10.1.6	Time of Occupancy (Dwell Time)	3.10.1.6	Complied
3.6	3.10.1.5	Emissions in Non-restricted Frequency Bands	3.10.1.5	Complied
3.7	3.10.1.5	Emissions in Restricted Frequency Bands	Restricted Bands: LP0002-2.8	Complied
3.8	2.11	Receiver Radiated Unwanted Emissions	Restricted Bands: LP0002-2.8	Complied

Revision History

Report No.	Version	Description	Issued Date
TR7D2216AD	Rev. 01	Initial issue of report	Feb. 05, 2018
TR7D2216AD	Rev. 02	1. Change equipment name, applicant and Manufacturer 2. Update information of antenna	Feb. 26, 2018

1 General Description

1.1 Information

1.1.1 RF General Information

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

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

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

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector
1	Lynwave	ALX17F-221XX2-00	Dipole	i-Pex
2	Lynwave	ALX17F-222XX0-00	PIFA	i-Pex

Ant.	Port	Gain (dBi)		
		2.4G	BT	5G
1	1	3.97	-	7.78
2	2	1.38	1.38	3.01

For 2.4 GHz function:

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

The EUT support diversity, port 2 was pretested and found to be the worst case and measured during the test.

For 5 GHz function:

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

The EUT support diversity, port 1 was pretested and found to be the worst case and measured during the test.

For Bluetooth function:

For Bluetooth mode (1TX/1RX)
Since only 1 port could be transmit/receive at port 2 which was recorded as port 1.

1.1.3 EUT Information

Identify EUT	
RF chip	QCA SWB-QC46
Operational Condition	
EUT Power Type	From PoE

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)	0.784	1.057	2.886m	1k
BT-EDR(2Mbps)	0.751	1.244	2.888m	1k
BT-EDR(3Mbps)	0.764	1.169	2.891m	1k

1.1.5 Table for Multiple Listing

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

Meraki Model Name	Model Differences	PCBA	IR LED PCBA	Lens
MV12W-HW	W = Wide Angle Lens (256GB)	256G emmc	140 degree LED	YTOT Lens
MV12WE-HW	WE = Wide Angle Lens (128GB, entry level storage)	128G emmc	140 degree LED	YTOT Lens
MV12N-HW	N = Narrow Angle Lens (256GB)	256G emmc	90 degree LED	Rays Lens

1.2 Testing Applied Standards

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

- NCC LP0002 (2018-01-10)
- Public Notice DA 00-705
- ANSI C63.10-2013
- ANSI C63.4-2014

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	Tim	21.6°C / 62%	16/Dec/2017
Radiated	03CH02-HY	Jerry	25°C / 55%	31/Jan/2018
AC Conduction	CO04-HY	Jerry	25°C / 55%	21/Dec/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 (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%

2 Test Configuration of EUT

2.1 Test Condition

RF Conducted	Abbreviation	Remark
TnomVnom	Tnom	20°C
-	Vnom	120V

2.2 Test Channel Mode

Test Software Version	QRCT V3.0.93.0

Mode	Power Setting
BT-BR(1Mbps)	-
2402MHz	9
2441MHz	9
2480MHz	9
BT-EDR(2Mbps)	-
2402MHz	9
2441MHz	9
2480MHz	9
BT-EDR(3Mbps)	-
2402MHz	9
2441MHz	9
2480MHz	9

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	PoE mode

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

The Worst Case Mode for Following Conformance Tests		
Tests Item	Emissions in Restricted Frequency Bands Receiver Radiated Unwanted Emissions	
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.	
Operating Mode < 1GHz	CTX/CRX	
1	PoE mode	
Operating Mode > 1GHz	CTX/CRX	
Orthogonal Planes of EUT	**Y Plane**	**Z Plane**
Worst Planes of EUT	V	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Test Condition	Radiated measurement
Operating Mode	Normal Link
1	Bluetooth+WLAN 2.4GHz
2	Bluetooth+WLAN 5GHz
Refer to Sporton Test Report No.: FA7D2216 for Co-location RF Exposure Evaluation and Appendix H for Radiated Emission Co-location.	

2.4 Support Equipment

Support Equipment – RF Conducted				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	Notebook	DELL	E5410	DoC
2	Adapter for NB	DELL	HA65NM130	DoC
3	AC Source	GW	APS-9102	DoC

Support Equipment – Radiated Emission				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	PoE (remote)	CISCO	MA-INJ-4	-

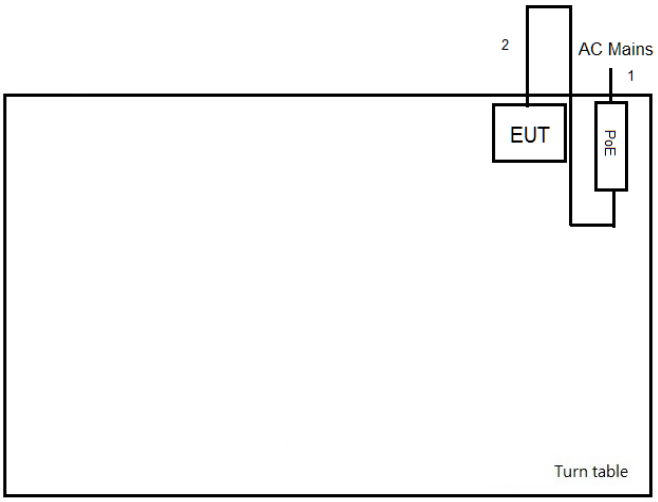
Note: Support equipment No.1 was provided by customer.

Support Equipment – AC Conduction				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	PoE	CISCO	MA-INJ-4	-

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

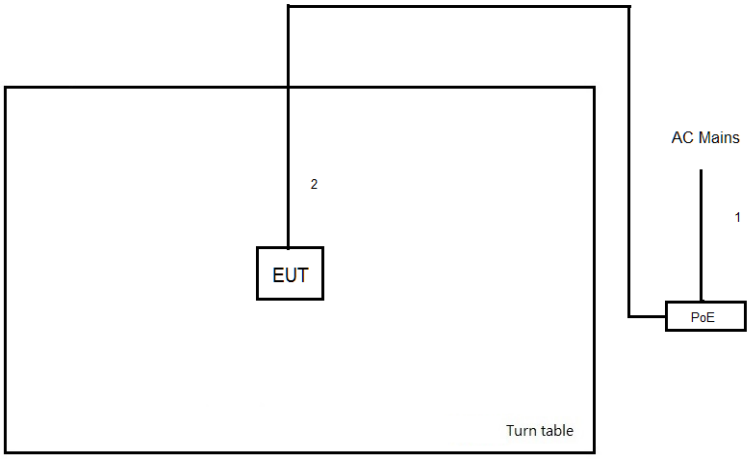
2.5 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



Item	Connection	Shielded	Length(m)	Remark
1	AC Power line	No	1m	-
2	RJ45 Cable	No	10m	-

Test Setup Diagram - Radiated Test



Item	Connection	Shielded	Length(m)	Remark
1	AC Power line	No	1m	-
2	RJ45 Cable	No	10m	-

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

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

3.1.2 Measuring Instruments

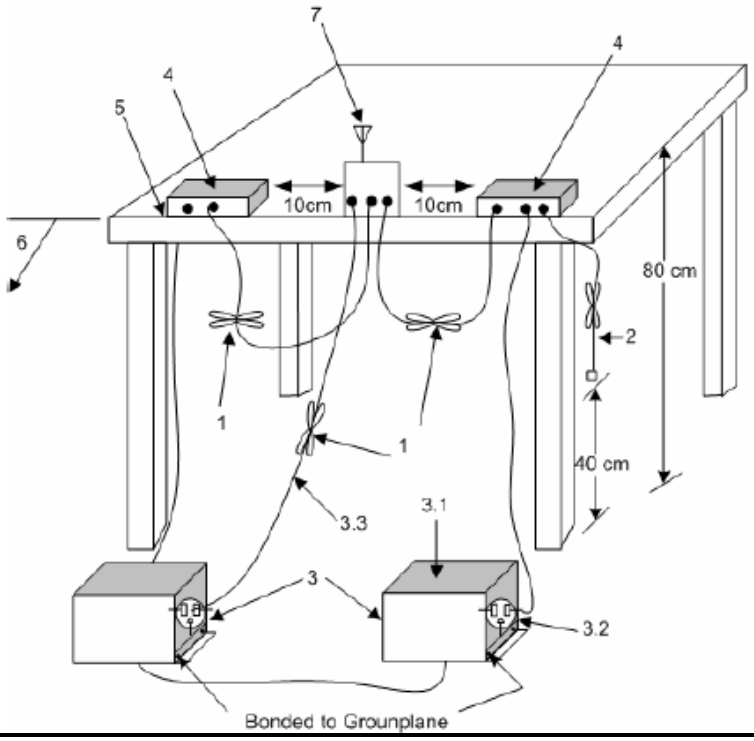
Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

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

3.1.4 Test Setup

AC Power-line Conducted Emissions



3.1.5 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 20dB Bandwidth and Carrier Frequency Separation

3.2.1 20dB Bandwidth and Carrier Frequency Separation Limit

20dB Bandwidth and Carrier Frequency Separation Limit for Frequency Hopping Systems	
▪ 902-928 MHz Band:	
	▪ N ≥50 and ChS ≥ MAX (20 dB bandwidth, 25 kHz); 20 dB bandwidth≤ 250 kHz.
	▪ 50 >N≥25 and ChS ≥ MAX (20 dB bandwidth, 25 kHz); 20 dB bandwidth>250 kHz.
▪ 2400-2483.5 MHz Band:	
	▪ N ≥75 and ChS ≥ MAX (20 dB bandwidth, 25 kHz).
	▪ 75>N ≥ 15 and ChS ≥ MAX (20 dB bandwidth 2/3,25 kHz).
▪ 5725-5850 MHz Band:	
	▪ N ≥ 75 and ChS ≥ MAX (20 dB bandwidth, 25 kHz); 20 dB bandwidth≤ 1 MHz.
N:Number of Hopping Frequencies; **ChS**: Hopping Channel Separation	

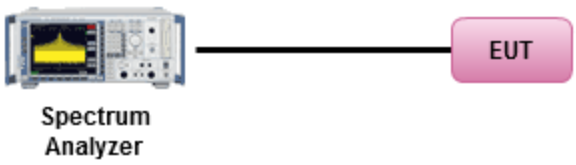
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

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

3.2.4 Test Setup

20dB Bandwidth and Carrier Frequency Separation


3.2.5 Test Result of 20dB Bandwidth

Refer as Appendix B

3.2.6 Test Result of Carrier Frequency Separation

Refer as Appendix B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit	
▪ 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	

3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

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

3.3.4 Test Setup

Maximum Conducted Output Power (Peak Power Meter)

3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Number of Hopping Frequencies and Hopping Bandedge

3.4.1 Number of Hopping Frequencies Limit

Number of Hopping Frequencies Limit	
▪ 902-928 MHz Band:	
	▪ N ≥50 and ChS ≥ MAX (20 dB bandwidth, 25 kHz); 20 dB bandwidth≤ 250 kHz.
	▪ 50 >N≥ 25 and ChS ≥ MAX (20 dB bandwidth, 25 kHz); 20 dB bandwidth>250 kHz.
▪ 2400-2483.5 MHz Band:	
	▪ N ≥ 75 and ChS ≥ MAX (20 dB bandwidth, 25 kHz).
	▪ 75 >N ≥ 15 and ChS ≥ MAX (20 dB bandwidth 2/3,25 kHz).
▪ 5725-5850 MHz Band:	
	▪ N ≥ 75 and ChS ≥ MAX (20 dB bandwidth, 25 kHz); 20 dB bandwidth≤ 1 MHz.
N:Number of Hopping Frequencies; **ChS** : Hopping Channel Separation	

3.4.2 Hopping Bandedge Limit

Refer clause 3.6.1 and clause 3.7.1

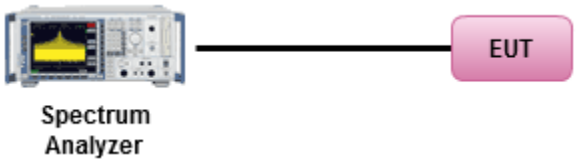
3.4.3 Measuring Instruments

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

3.4.4 Test Procedures

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

3.4.5 Test Setup

Number of Hopping Frequencies and Hopping Frequencies Bandedge


3.4.6 Test Result of Number of Hopping Frequencies

Refer as Appendix D

3.4.7 Test Result of Number of Hopping Frequencies Bandedge

Refer as Appendix D

3.5 Time of Occupancy (Dwell Time)

3.5.1 Time of Occupancy (Dwell Time) Limit

Time of Occupancy (Dwell Time) Limit for Frequency Hopping Systems	
▪ 902-928 MHz Band:	
	▪ N ≥50; 0.4s in 20s period
	▪ 50 >N≥ 25; 0.4s in 10s period
▪ 2400-2483.5 MHz Band:	
	▪ N ≥ 75; 0.4s in N x 0.4 period
	▪ 75 >N ≥ 15; 0.4s in N x 0.4 period
▪ 5725-5850 MHz Band:	
	▪ N ≥ 75; 0.4s in 30s period
N:Number of Hopping Frequencies	

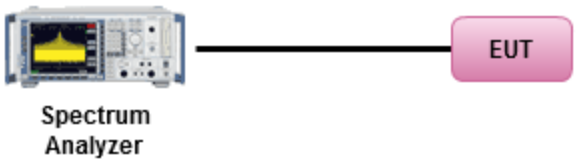
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

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

3.5.4 Test Setup

Time of Occupancy (Dwell Time)


3.5.5 Test Result of Time of Occupancy (Dwell Time)

Refer as Appendix E

3.6 Emissions in Non-restricted Frequency Bands

3.6.1 Emissions in Non-restricted Frequency Bands Limit

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

3.6.2 Measuring Instruments

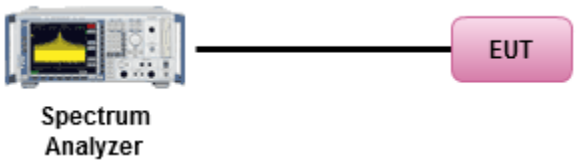
Refer a test equipment and calibration data table in this test report.

3.6.3 Test Procedures

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

3.6.4 Test Setup

Emissions in Non-restricted Frequency Bands



3.6.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix F

3.7 Emissions in Restricted Frequency Bands

3.7.1 Emissions in Restricted Frequency Bands Limit

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

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

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

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

3.7.2 Measuring Instruments

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

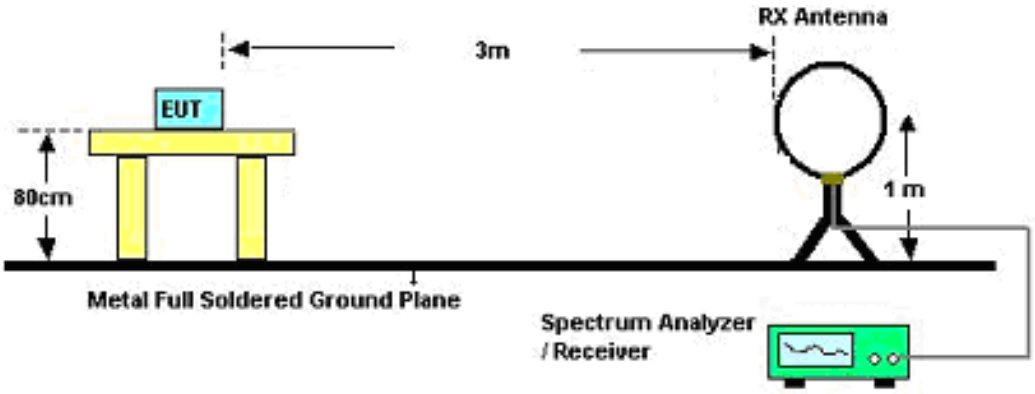
3.7.3 Test Procedures

Test Method	
▪ The average emission levels shall be measured in [hopping duty factor].	
▪ Refer as ANSI C63.10; clause 6.9.2.2 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.	
▪ For the transmitter unwanted emissions shall be measured using following options below:	
	▪ Refer as ANSI C63.10, clause 4.1.4.2.1 QP value.
	▪ Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak.
	▪ Refer as ANSI C63.10, clause 4.1.4.2.4 average value of hopping pulsed emissions.

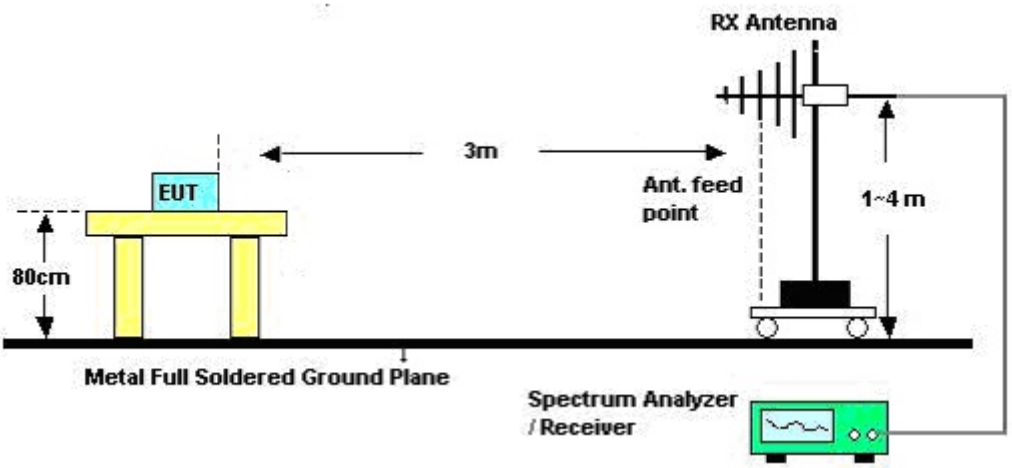
3.7.4 Test Setup

Emissions in Restricted Frequency Bands

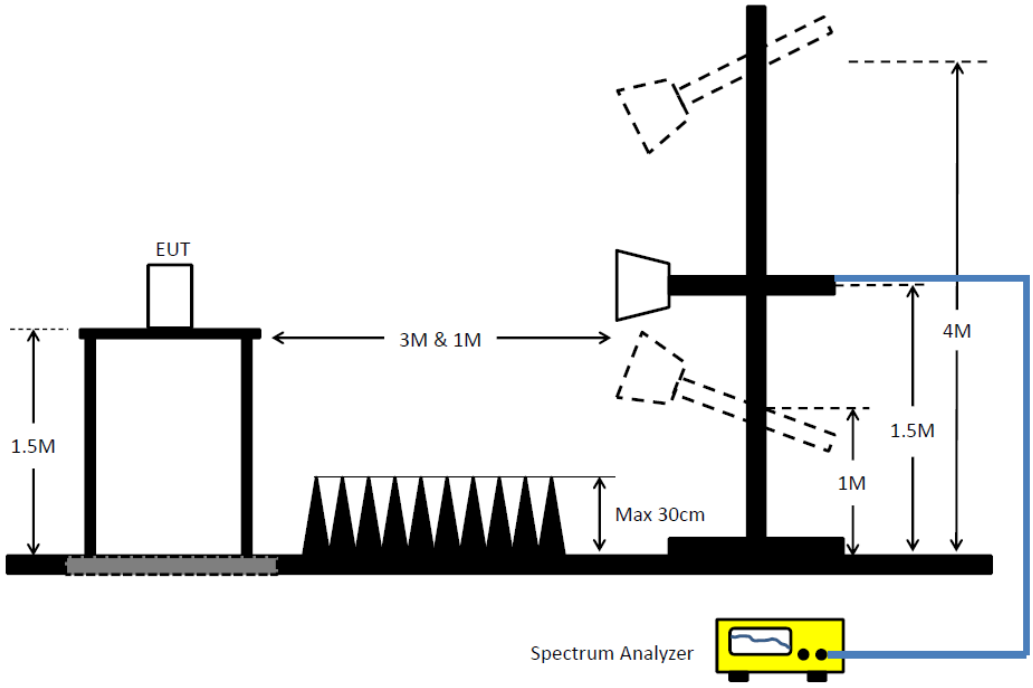
9kHz ~30MHz



30MHz~1GHz



Above 1GHz



3.7.5 Test Result of Emissions in Restricted Frequency Bands (Below 30MHz)

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

3.7.6 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix G

3.8 Receiver Radiated Spurious Emissions

3.8.1 Receiver in Radiated Spurious Emissions Limit

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

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

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

3.8.2 Measuring Instruments

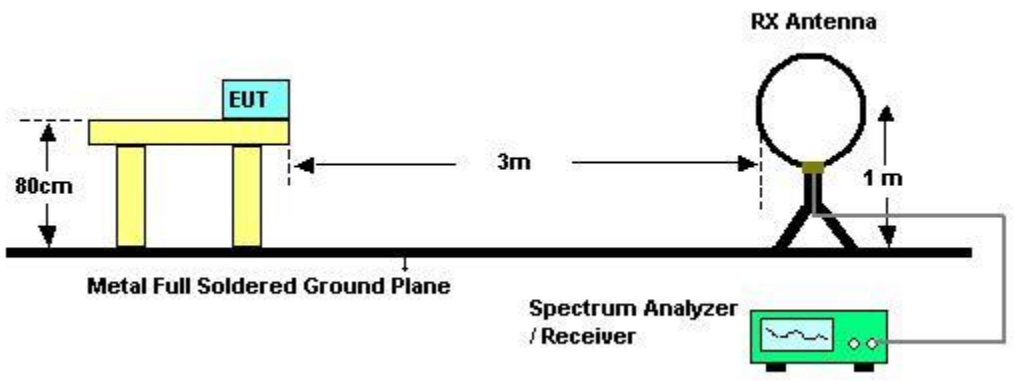
Refer a test equipment and calibration data table in this test report.

3.8.3 Test Procedures

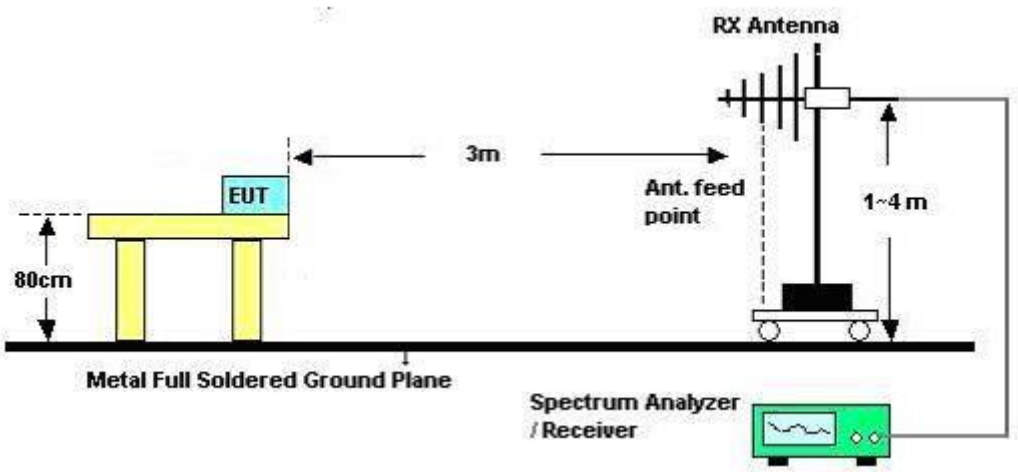
Test Method	
☒	The search for spurious emissions shall be from the lowest frequency internally generated or used in the receiver (e.g. local oscillator, intermediate or carrier frequency), or 30 MHz, whichever is higher, to at least 3 times the highest tuneable or local oscillator frequency, whichever is higher, without exceeding 40 GHz.
☒	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).
☒	For radiated measurement, refer as KDB558074, clause 12.2.7.
☒	Refer as ANSI C63.4, clause 8.3.1.1 and 8.3.2.1 for radiated emissions from below 30 MHz.
☒	Refer as ANSI C63.4, clause 8.3.1.1 and 8.3.2.1 for radiated emissions from 30 MHz-1 GHz. For the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the QP-Limit so that the QP level does not need to be reported in addition.
☒	Refer as ANSI C63.4, clause 8.3.1.2 and 8.3.2.2 for radiated emissions from above 1 GHz. For the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
☒	All amplitude of spurious emissions that are attenuated by more than 30 dB below the permissible value has no need to be reported.

3.8.4 Test Setup

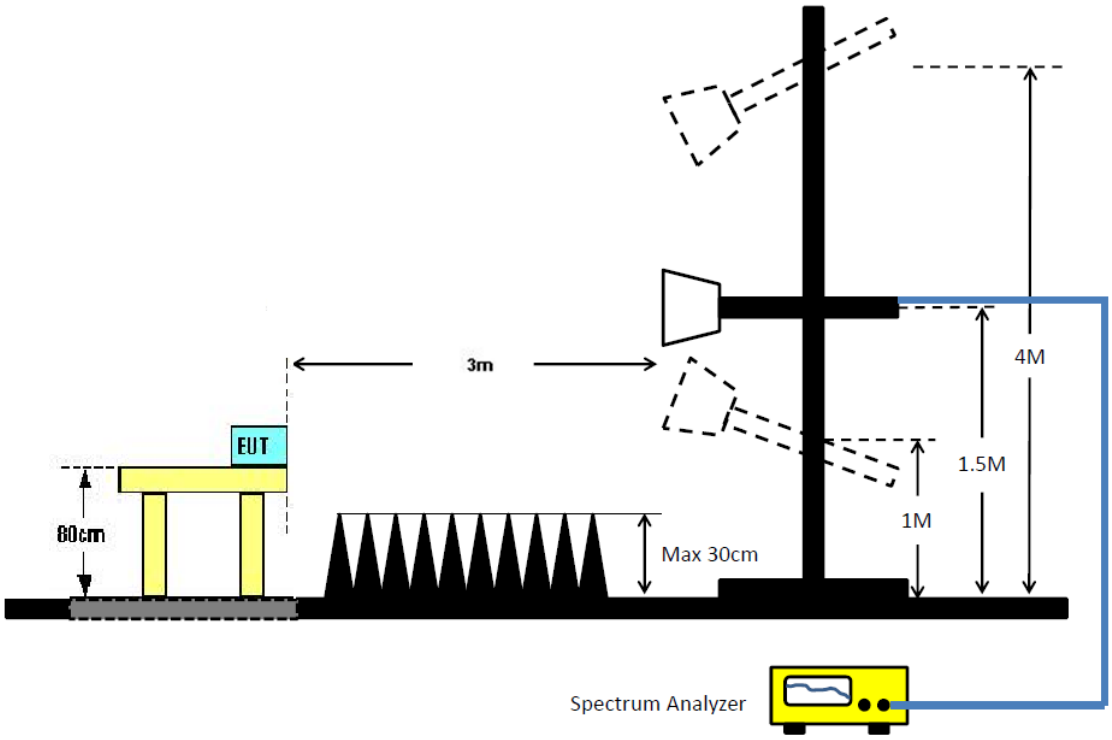
Receiver Spurious and Out of Band Emissions (9 kHz - 30 MHz)



Receiver Radiated Unwanted Emissions (below 1GHz)



Receiver Radiated Unwanted Emissions (above 1GHz)



3.8.5 Receiver Radiated Unwanted Emissions (Below 30MHz)

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

3.8.6 Test Result of Receiver Radiated Unwanted Emissions

Refer as Appendix I

4 Test Equipment and Calibration Data

Instrument for AC Conduction

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMC Receiver	R&S	ESR3	102052	9KHz ~ 3.6GHz	29/Apr/2017	28/Apr/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
LISN	R&S	ENV216	101295	9kHz ~ 30MHz	17/Nov/2017	16/Nov/2018

NCR : Non-Calibration Require

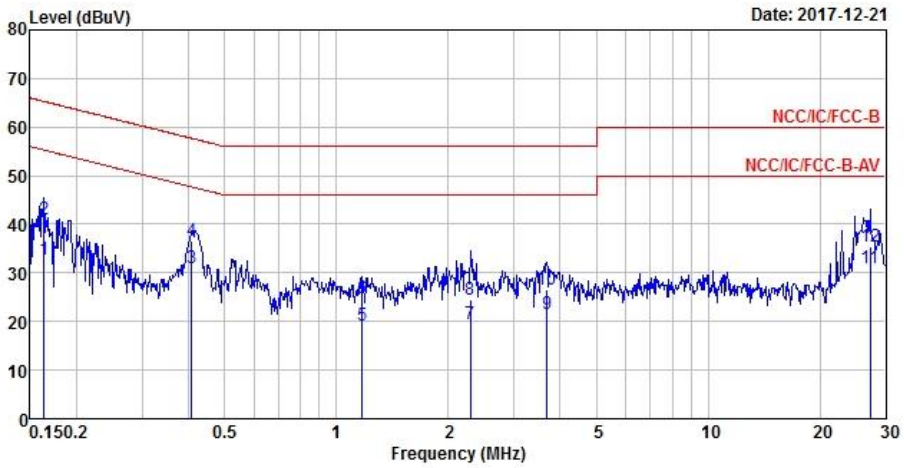
Instrument for Radiated Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSP40	100305	9KHz - 40GHz	12/Dec/2017	11/Dec/2018
3m Semi Anechoic	SIDT FRANKONIA	SAC-3M	03CH02-HY	30MHz-1GHz	20/Oct/2017	19/Oct/2018
3m Semi Anechoic	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz ~ 18GHz	27/Oct/2017	26/Oct/2018
Amplifier	Agilent	8447D	2944A11149	100KHz-1.3GHz	29/Jun/2017	28/Jun/2018
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
Bilog Antenna	SCHAFFNER	CBL6112B	2723	30MHz-1GHz	09/Sep/2017	08/Sep/2018
Amplifier	MITEQ	JS44-18004000 -33-8P	1840917	18GHz-40GHz	06/Feb/2017	05/Feb/2018
Loop Antenna	TESEQ	HLA 6120	31244	9KHz-30MHz	02/Mar/2017	01/Mar/2018
RF Cable-high	SUHNER	SUCOFLEX104	MY34918/4	1GHz ~ 40GHz	02/Feb/2017	01/Feb/2018
RF Cable-R03m	Jye Bao	RG142	CB017	9kHz ~ 1GHz	02/Feb/2017	01/Feb/2018
Receiver	R&S	ESU3	102052	9kHz ~ 3.6GHz	29/Apr/2017	28/Apr/2018

Instrument for Conducted Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101515	9kHz~40GHz	08/Dec/2017	07/Dec/2018
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	27/Jul/2017	26/Jul/2018
Temp. and Humidity Chamber	Giant Force	GTH-225-40-CP-AR	MAA1611-005	-40 ~ 100℃	21/Nov/2016	20/Nov/2018
Power Sensor	Anritsu	MA2411B	0917017	300MHz ~ 40GHz	10/Feb/2017	09/Feb/2018
Power Meter	Anritsu	ML2495A	0949003	300MHz ~ 40GHz	10/Feb/2017	09/Feb/2018
RF Cable-1.5m	HUBER+SUHNER	SUCOFLEX_104	MY12582/4	30MHz ~ 26.5GHz	25/Aug/2017	24/Aug/2018
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

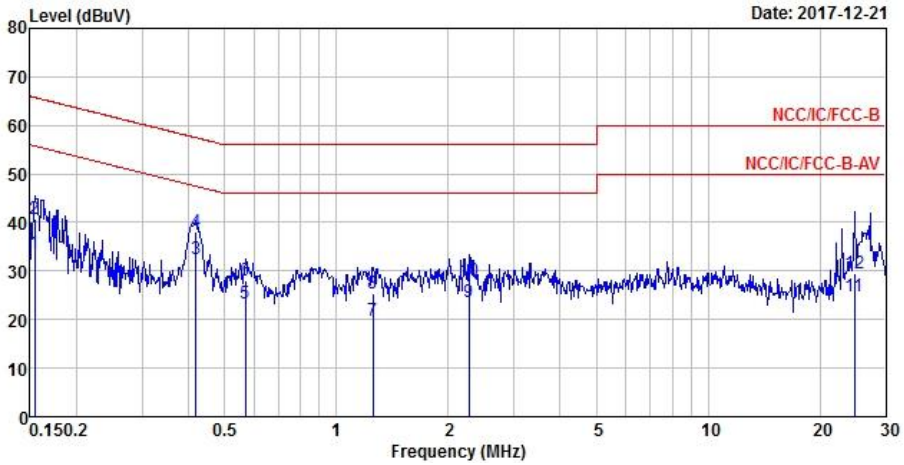
AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	Neutral
Operating Function	PoE mode		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.1633	32.78	-22.52	55.30	23.12	9.63	0.03	Average
2	0.1633	41.02	-24.28	65.30	31.36	9.63	0.03	QP
3 MAX	0.4083	31.00	-16.68	47.68	21.29	9.61	0.10	Average
4	0.4083	36.54	-21.14	57.68	26.83	9.61	0.10	QP
5	1.1719	19.31	-26.69	46.00	9.69	9.62	0.00	Average
6	1.1719	24.65	-31.35	56.00	15.03	9.62	0.00	QP
7	2.2968	19.55	-26.45	46.00	9.90	9.63	0.02	Average
8	2.2968	24.49	-31.51	56.00	14.84	9.63	0.02	QP
9	3.6806	21.40	-24.60	46.00	11.68	9.64	0.08	Average
10	3.6806	26.43	-29.57	56.00	16.71	9.64	0.08	QP
11	27.2711	30.95	-19.05	50.00	21.12	9.69	0.14	Average
12	27.2711	35.33	-24.67	60.00	25.50	9.69	0.14	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	PoE mode		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.1540	33.78	-22.00	55.78	24.12	9.62	0.04	Average
2	0.1540	40.61	-25.17	65.78	30.95	9.62	0.04	QP
3 MAX	0.4193	32.45	-15.01	47.46	22.74	9.61	0.10	Average
4	0.4193	38.22	-19.24	57.46	28.51	9.61	0.10	QP
5	0.5701	23.30	-22.70	46.00	13.63	9.61	0.06	Average
6	0.5701	28.18	-27.82	56.00	18.51	9.61	0.06	QP
7	1.2555	19.70	-26.30	46.00	10.09	9.61	0.00	Average
8	1.2555	25.25	-30.75	56.00	15.64	9.61	0.00	QP
9	2.2726	23.54	-22.46	46.00	13.90	9.62	0.02	Average
10	2.2726	28.08	-27.92	56.00	18.44	9.62	0.02	QP
11	24.7904	24.71	-25.29	50.00	15.14	9.56	0.01	Average
12	24.7904	29.51	-30.49	60.00	19.94	9.56	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-BR(1Mbps)	920k	892.054k	892KF1D	912.5k	890.805k
BT-EDR(2Mbps)	1.275M	1.188M	1M19G1D	1.253M	1.187M
BT-EDR(3Mbps)	1.261M	1.196M	1M20G1D	1.25M	1.194M

Max-N dB = Maximum 20dB down bandwidth; **Max-OBW** = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 20dB down bandwidth; **Min-OBW** = Minimum 99% occupied bandwidth;

Result

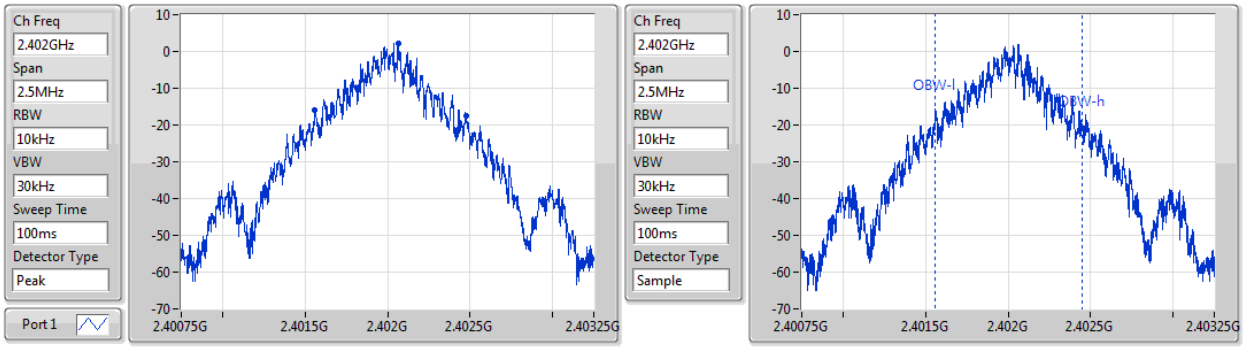
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-BR(1Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	Inf	916.25k	890.805k
2441MHz_TnomVnom	Pass	Inf	912.5k	892.054k
2480MHz_TnomVnom	Pass	Inf	920k	892.054k
BT-EDR(2Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	Inf	1.253M	1.188M
2441MHz_TnomVnom	Pass	Inf	1.254M	1.187M
2480MHz_TnomVnom	Pass	Inf	1.275M	1.187M
BT-EDR(3Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	Inf	1.25M	1.194M
2441MHz_TnomVnom	Pass	Inf	1.254M	1.194M
2480MHz_TnomVnom	Pass	Inf	1.261M	1.196M

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

BT-BR(1Mbps) EBW

2402MHz

16/12/2017

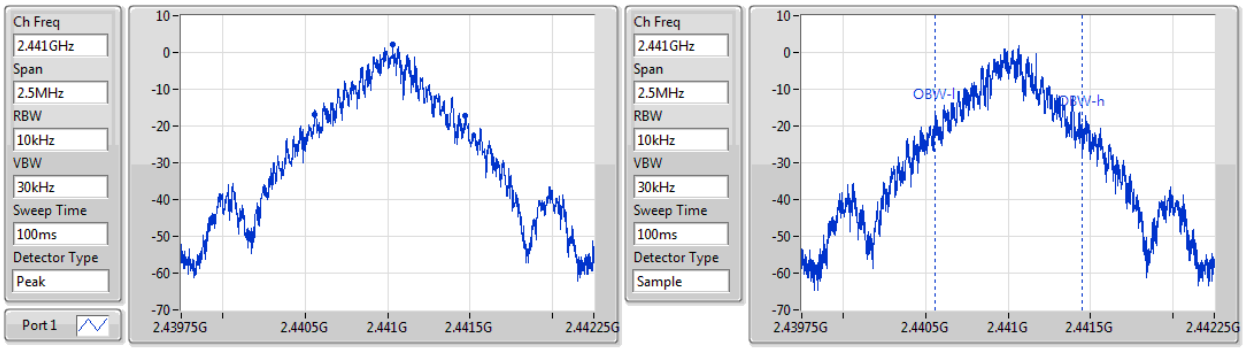


20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
916.25k	2.401559G	2.402475G	890.805k	2.40156G	2.402451G	Inf	1

BT-BR(1Mbps) EBW

2441MHz

16/12/2017

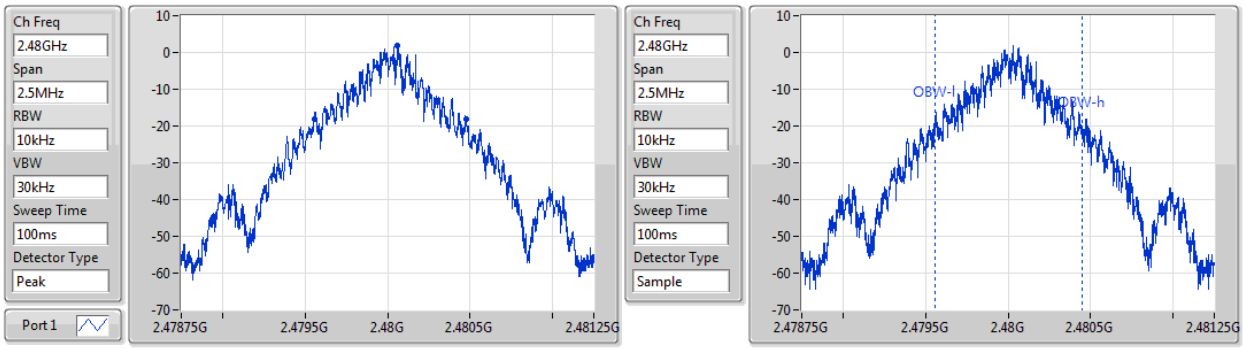


20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
912.5k	2.440558G	2.44147G	892.054k	2.44056G	2.441452G	Inf	1

BT-BR(1Mbps) EBW

2480MHz

16/12/2017

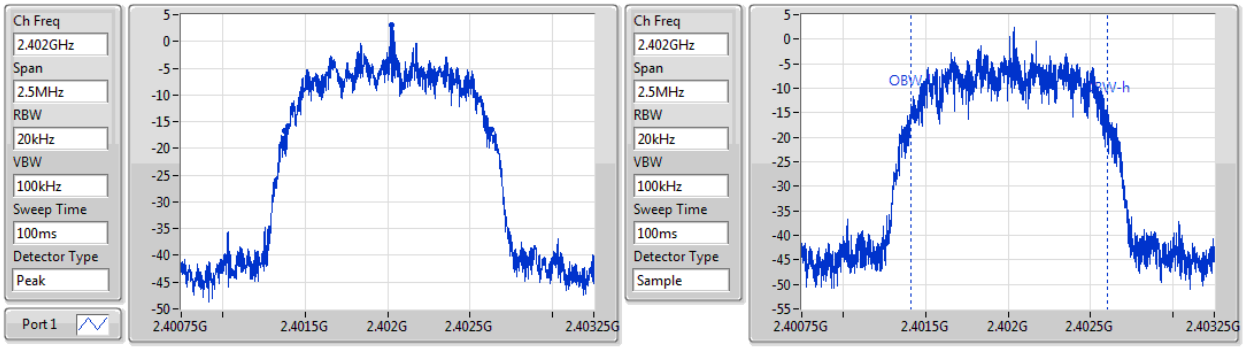


20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
920k	2.479556G	2.480476G	892.054k	2.479559G	2.480451G	Inf	1

BT-EDR(2Mbps) EBW

2402MHz

16/12/2017

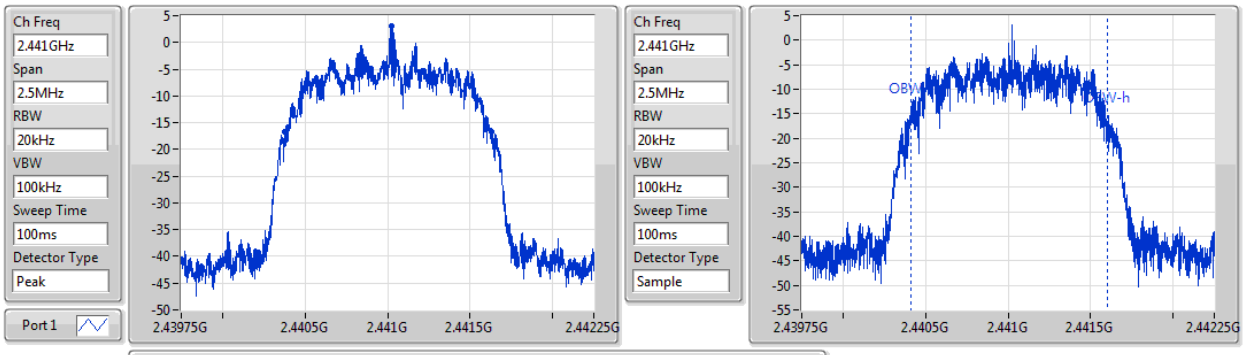


20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.253M	2.401378G	2.40263G	1.188M	2.401412G	2.4026G	Inf	1

BT-EDR(2Mbps) EBW

2441MHz

16/12/2017

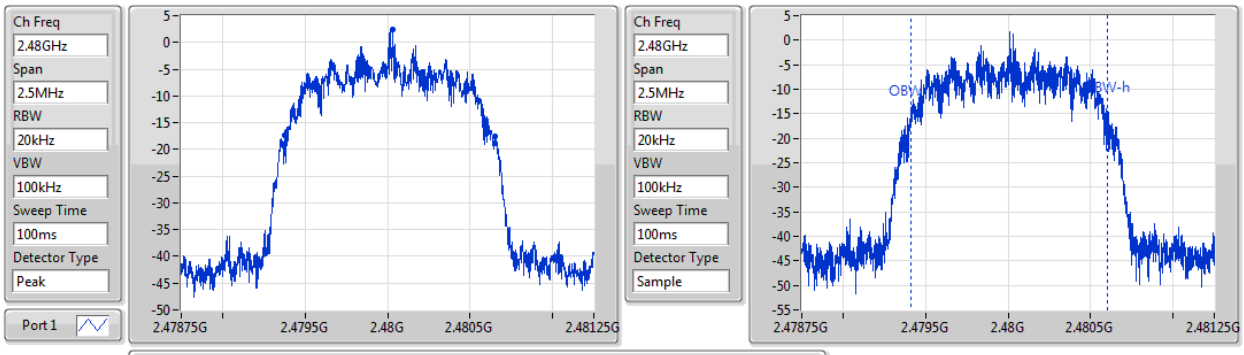


20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.254M	2.440378G	2.441631G	1.187M	2.440414G	2.441601G	Inf	1

BT-EDR(2Mbps) EBW

2480MHz

16/12/2017

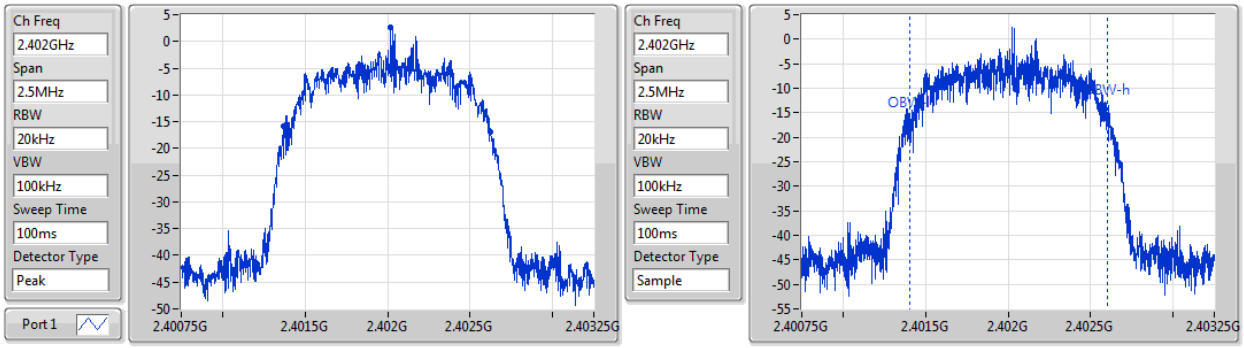


20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.275M	2.479376G	2.480651G	1.187M	2.479413G	2.4806G	Inf	1

BT-EDR(3Mbps) EBW

2402MHz

16/12/2017

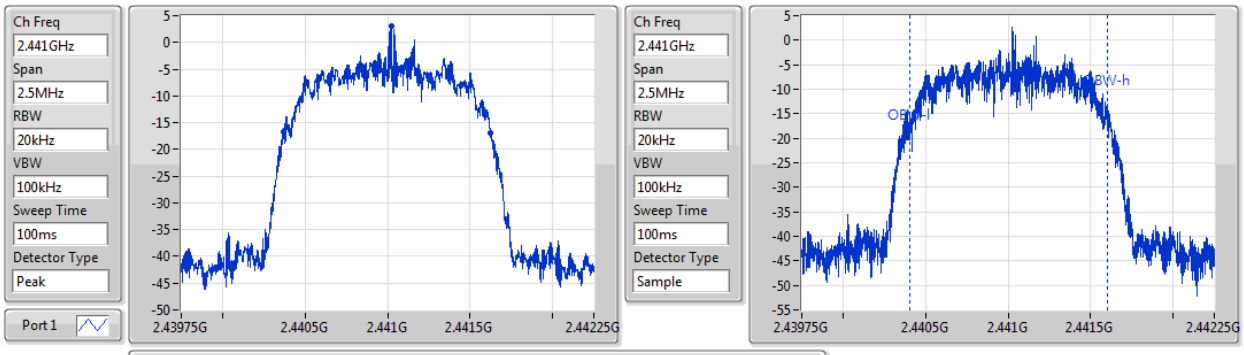


20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.25M	2.401373G	2.402623G	1.194M	2.401405G	2.4026G	Inf	1

BT-EDR(3Mbps) EBW

2441MHz

16/12/2017

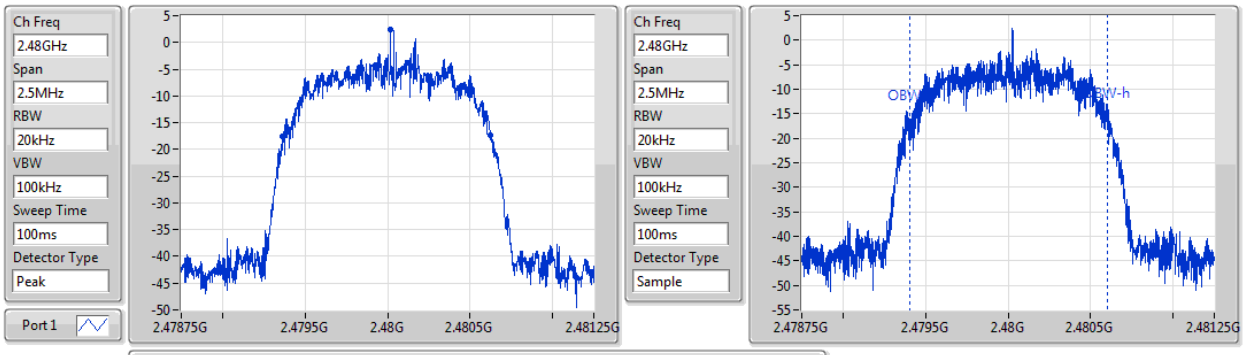


20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.254M	2.440368G	2.441621G	1.194M	2.440408G	2.441602G	Inf	1

BT-EDR(3Mbps) EBW

2480MHz

16/12/2017



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.261M	2.479364G	2.480625G	1.196M	2.479404G	2.4806G	Inf	1

Summary

Mode	Max-Space (Hz)	Min-Space (Hz)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	1.0035M	1.002M
BT-EDR(2Mbps)	1.0005M	999k
BT-EDR(3Mbps)	1.002M	997.5k

Result

Mode	Result	Fl (Hz)	Fh (Hz)	Ch.Space (Hz)	Limit (Hz)
BT-BR(1Mbps)	-	-	-	-	-
2402MHz_TnomVnom	Pass	2.40202G	2.403024G	1.0035M	610.2225k
2441MHz_TnomVnom	Pass	2.44102G	2.442022G	1.002M	607.725k
2480MHz_TnomVnom	Pass	2.479022G	2.480024G	1.002M	612.72k
BT-EDR(2Mbps)	-	-	-	-	-
2402MHz_TnomVnom	Pass	2.402022G	2.403021G	999k	834.498k
2441MHz_TnomVnom	Pass	2.441022G	2.442022G	1.0005M	835.164k
2480MHz_TnomVnom	Pass	2.479022G	2.480021G	999k	849.15k
BT-EDR(3Mbps)	-	-	-	-	-
2402MHz_TnomVnom	Pass	2.402022G	2.403022G	1.0005M	832.5k
2441MHz_TnomVnom	Pass	2.441022G	2.442024G	1.002M	835.164k
2480MHz_TnomVnom	Pass	2.479023G	2.480021G	997.5k	839.826k

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

2.402G/2.403GHz

Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.40202G	2.403024G	1.0035M	610.2225k

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

2.441G/2.442GHz

Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.44102G	2.442022G	1.002M	607.725k

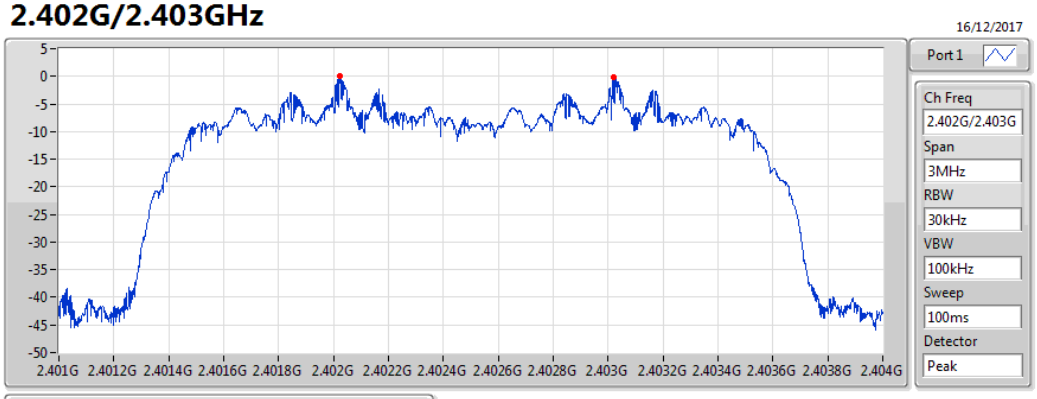
BT-BR(1Mbps) **Channel Separation**

2.48G/2.479GHz

Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.479022G	2.480024G	1.002M	612.72k

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

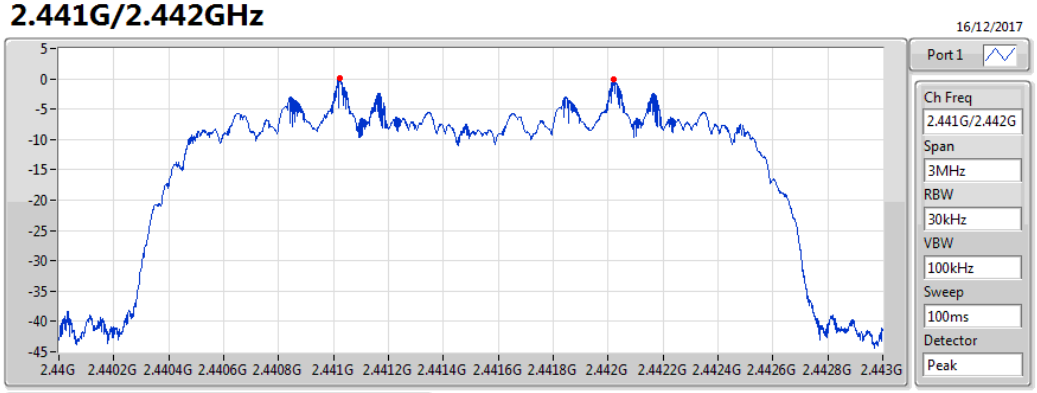
2.402G/2.403GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.402022G	2.403021G	999k	834.498k

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

2.441G/2.442GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.441022G	2.442022G	1.0005M	835.164k

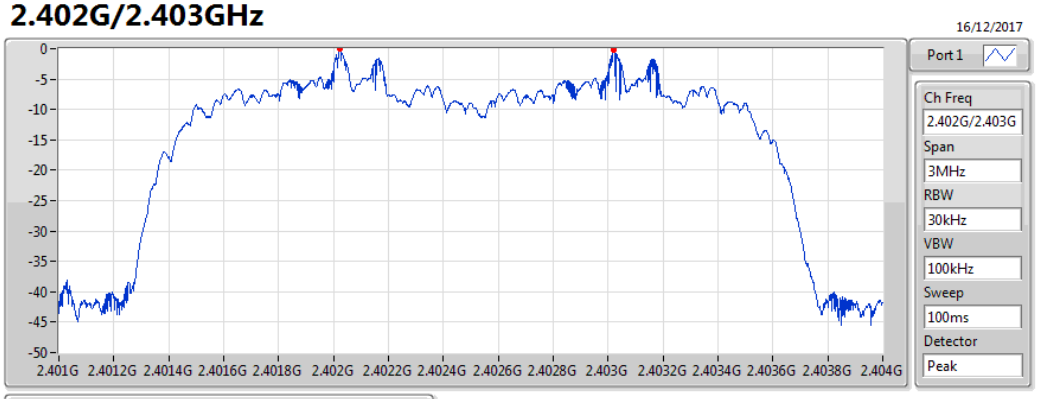
BT-EDR(2Mbps) **Channel Separation**

2.48G/2.479GHz

Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.479022G	2.480021G	999k	849.15k

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

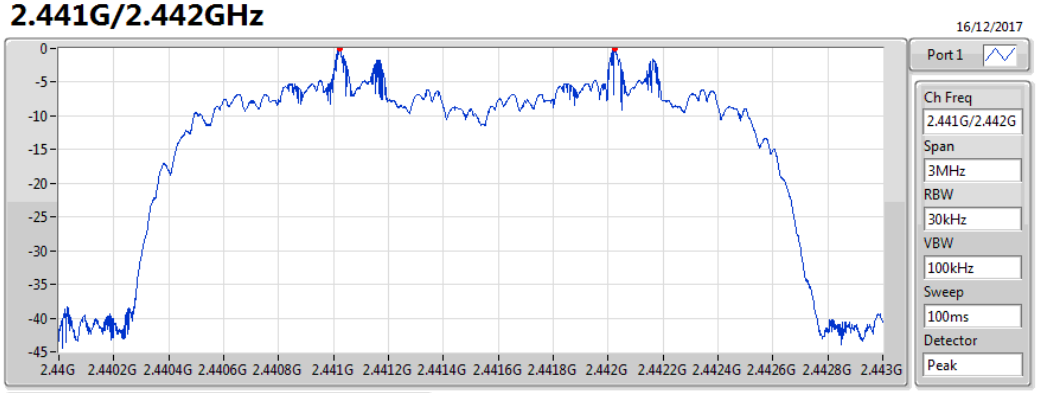
2.402G/2.403GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.402022G	2.403022G	1.0005M	832.5k

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

2.441G/2.442GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.441022G	2.442024G	1.002M	835.164k

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

2.48G/2.479GHz

Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.479023G	2.480021G	997.5k	839.826k

Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	8.11	0.00647
BT-EDR(2Mbps)	8.16	0.00655
BT-EDR(3Mbps)	8.35	0.00684

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	1.38	8.11	21.00
2441MHz_TnomVnom	Pass	1.38	8.01	21.00
2480MHz_TnomVnom	Pass	1.38	7.75	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	1.38	8.16	21.00
2441MHz_TnomVnom	Pass	1.38	8.07	21.00
2480MHz_TnomVnom	Pass	1.38	7.81	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	1.38	8.35	21.00
2441MHz_TnomVnom	Pass	1.38	8.30	21.00
2480MHz_TnomVnom	Pass	1.38	8.04	21.00

Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	7.83	0.00607
BT-EDR(2Mbps)	5.77	0.00378
BT-EDR(3Mbps)	5.72	0.00373

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	1.38	7.83	21.00
2441MHz_TnomVnom	Pass	1.38	7.77	21.00
2480MHz_TnomVnom	Pass	1.38	7.50	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	1.38	5.77	21.00
2441MHz_TnomVnom	Pass	1.38	5.65	21.00
2480MHz_TnomVnom	Pass	1.38	5.41	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	1.38	5.66	21.00
2441MHz_TnomVnom	Pass	1.38	5.72	21.00
2480MHz_TnomVnom	Pass	1.38	5.42	21.00

Summary

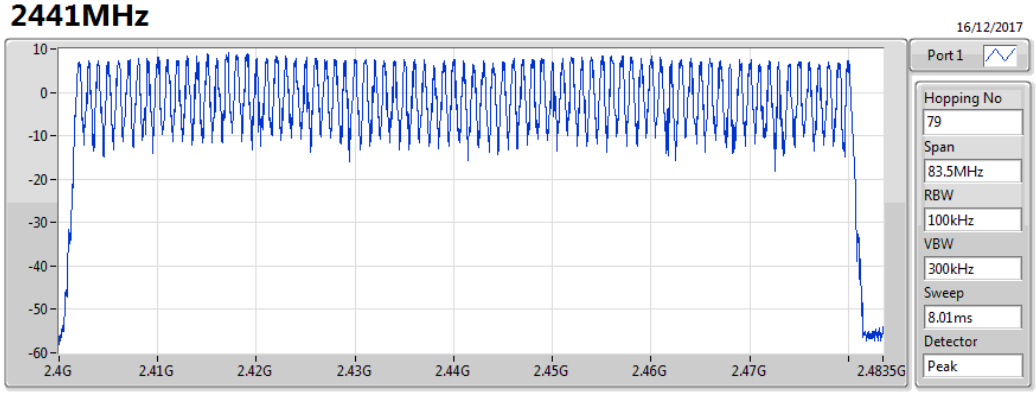
Mode	Max-Hop No
2.4-2.4835GHz	-
BT-BR(1Mbps)	79
BT-EDR(2Mbps)	79
BT-EDR(3Mbps)	79

Result

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

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

2441MHz

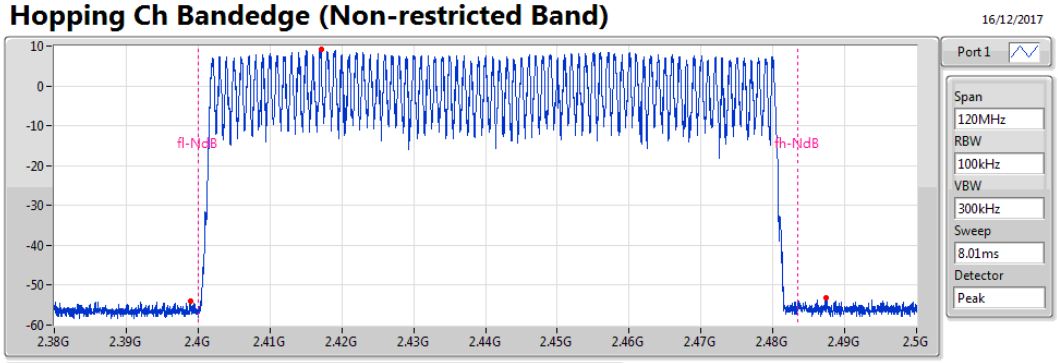


Hopping No	Limit
79	15

BT-BR(1Mbps)

2441MHz

Hopping Ch Bandedge (Non-restricted Band)

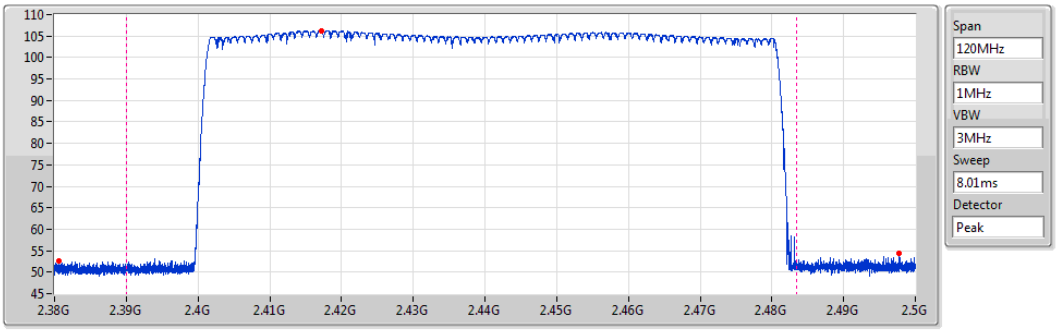


Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-10.88	2.417155G	9.12	2.399005G	-53.94	2.487355G	-53.16

BT-BR(1Mbps)

2441MHz

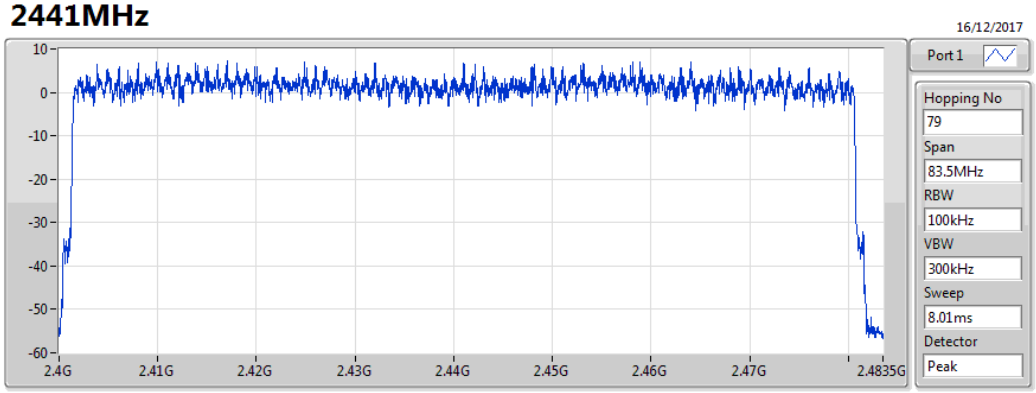
Hopping Ch Bandedge (Restricted Band)



Ref(Hz)	Ref(dBuV/m)	BE-l(Hz)	PK(dBuV/m)	AV(dBuV/m)	BE-h(Hz)	PK(dBuV/m)	AV(dBuV/m)	LimPK(dBuV/	LimAV(dBuV/	Tx On(ms)	DCF(dB)
2.417185G	106.22	2.38054G	52.57	-Inf	2.49775G	54.28	-Inf	74	54	0	-Inf

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

2441MHz

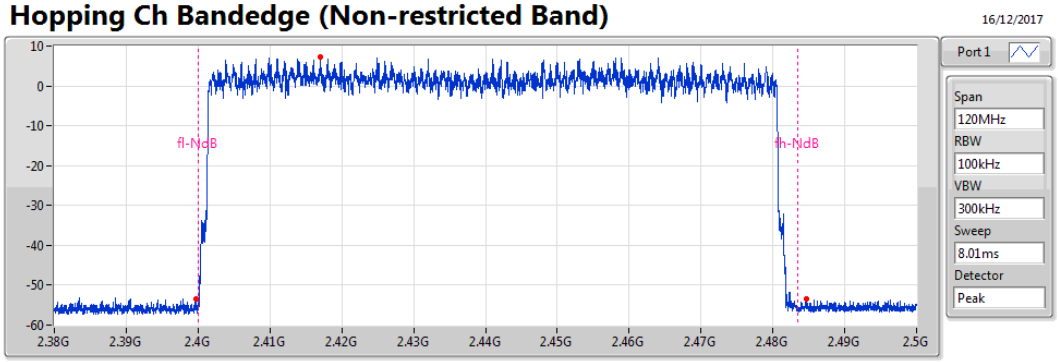


Hopping No	Limit
79	15

BT-EDR(2Mbps)

2441MHz

Hopping Ch Bandedge (Non-restricted Band)

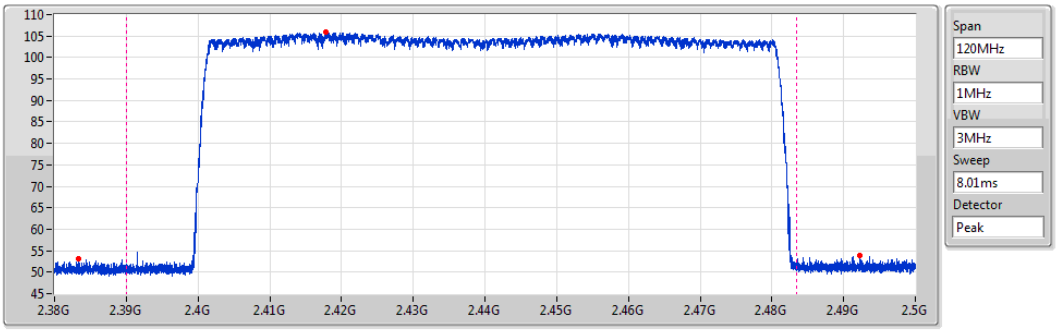


Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-12.73	2.41702G	7.27	2.399755G	-53.4	2.484685G	-53.43

BT-EDR(2Mbps)

2441MHz

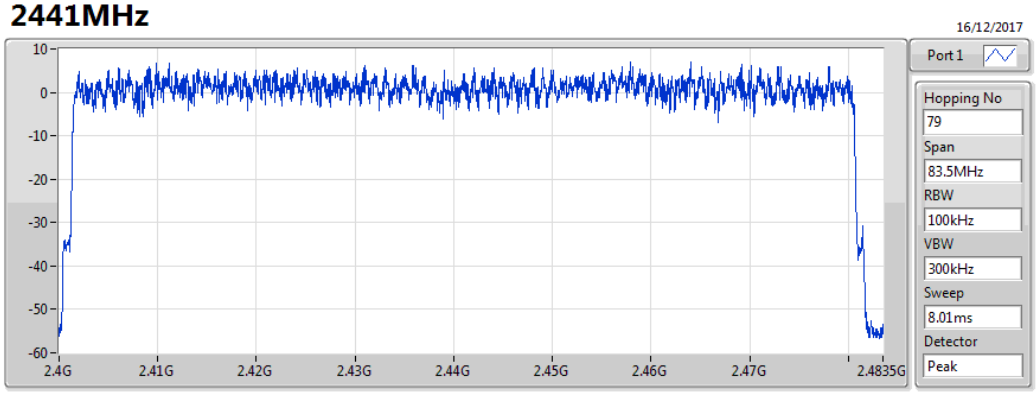
Hopping Ch Bandedge (Restricted Band)



Ref(Hz)	Ref(dBuV/m)	BE-l(Hz)	PK(dBuV/m)	AV(dBuV/m)	BE-h(Hz)	PK(dBuV/m)	AV(dBuV/m)	LimPK(dBuV/	LimAV(dBuV/	Tx On(ms)	DCF(dB)
2.41786G	105.92	2.383375G	53.03	-Inf	2.49232G	53.93	-Inf	74	54	0	-Inf

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

2441MHz

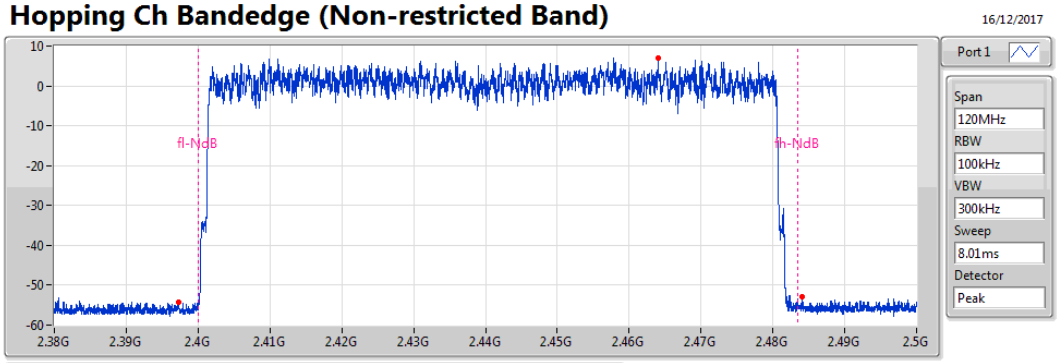


Hopping No	Limit
79	15

BT-EDR(3Mbps)

2441MHz

Hopping Ch Bandedge (Non-restricted Band)

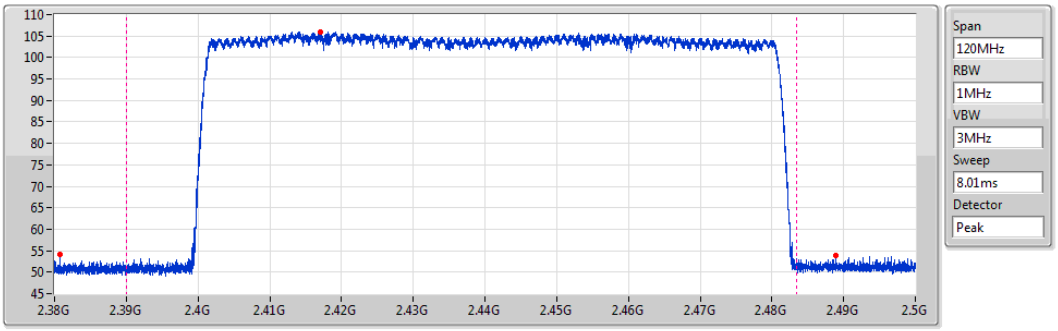


Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-13	2.464015G	7	2.397235G	-54.24	2.484085G	-52.89

BT-EDR(3Mbps)

2441MHz

Hopping Ch Bandedge (Restricted Band)



Ref(Hz)	Ref(dBuV/m)	BE-l(Hz)	PK(dBuV/m)	AV(dBuV/m)	BE-h(Hz)	PK(dBuV/m)	AV(dBuV/m)	LimPK(dBuV/	LimAV(dBuV/	Tx On(ms)	DCF(dB)
2.41708G	105.97	2.380765G	54.06	-Inf	2.488945G	53.8	-Inf	74	54	0	-Inf

Summary

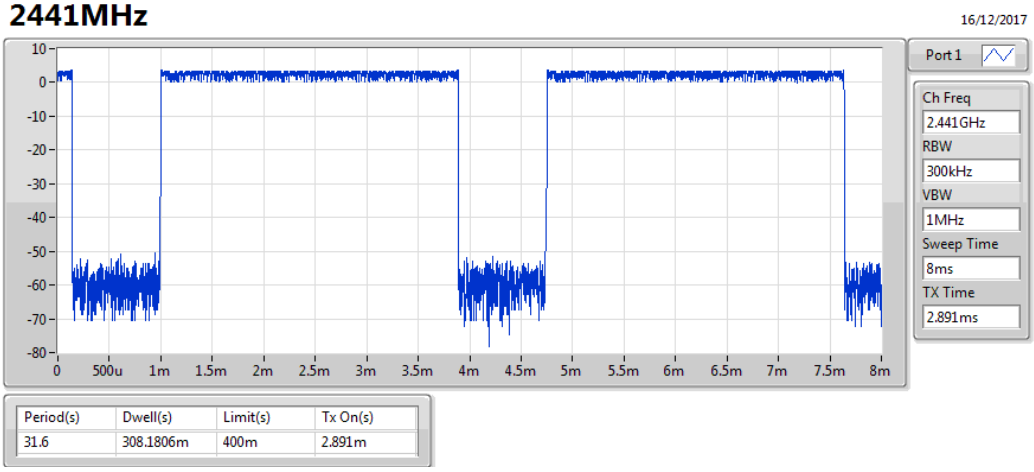
Mode	Max-Dwell (s)
2.4-2.4835GHz	-
BT-BR(1Mbps)	308.1806m
BT-EDR(2Mbps)	308.2872m
BT-EDR(3Mbps)	308.607m

Result

Mode	Result	Period (s)	Dwell (s)	Limit (s)	Tx On (s)
BT-BR(1Mbps)	-	-	-	-	-
2441MHz_TnomVnom	Pass	31.6	308.1806m	400m	2.891m
BT-EDR(2Mbps)	-	-	-	-	-
2441MHz_TnomVnom	Pass	31.6	308.2872m	400m	2.892m
BT-EDR(3Mbps)	-	-	-	-	-
2441MHz_TnomVnom	Pass	31.6	308.607m	400m	2.895m

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

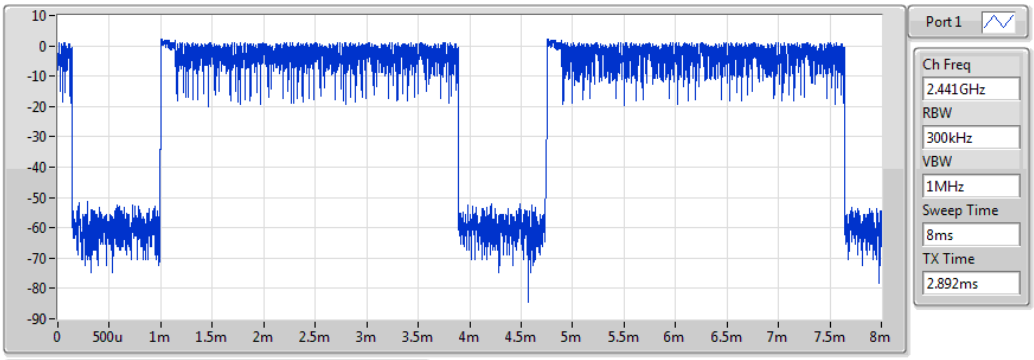
2441MHz



Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	308.1806m	400m	2.891m

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

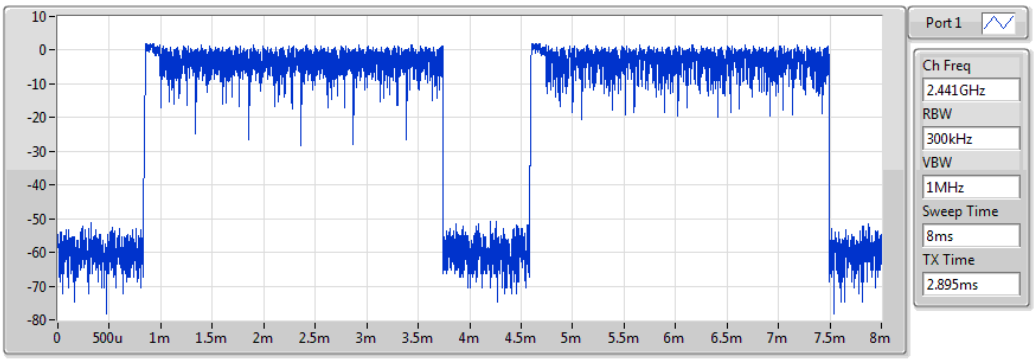
2441MHz



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

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

2441MHz



Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	308.607m	400m	2.895m

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	2.479993G	6.44	-13.56	1.927952G	-54.57	2.39824G	-53.83	2.484932G	-53.22	6.949G	-47.16	1
BT-EDR(2Mbps)	Pass	2.48016G	2.30	-17.70	2.390896G	-54.84	2.399032G	-54.78	2.483664G	-53.94	6.960257G	-47.10	1
BT-EDR(3Mbps)	Pass	2.401837G	3.53	-16.47	1.97176G	-55.21	2.399856G	-49.30	2.48484G	-54.92	6.887085G	-48.61	1

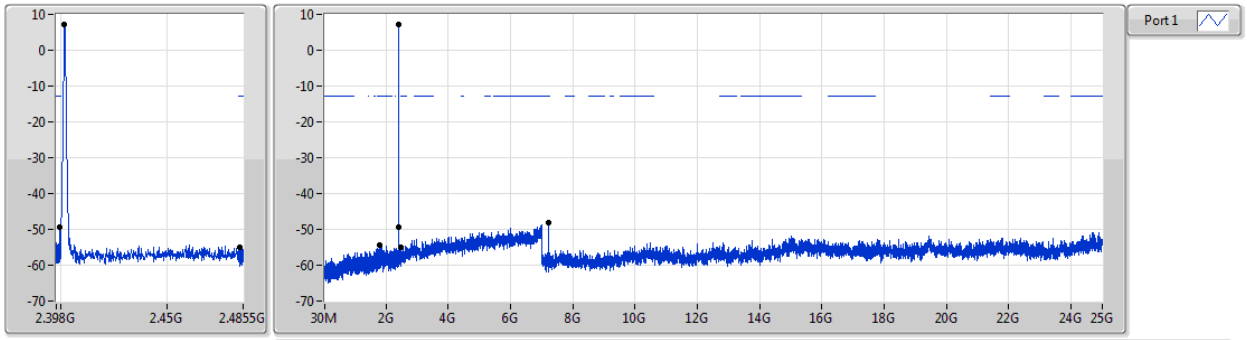
Result

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
BT-BR(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz_TnomVnom	Pass	2.401837G	7.17	-12.83	1.78232G	-54.39	2.399796G	-49.23	2.484088G	-55.12	7.205102G	-47.98	1
2441MHz_TnomVnom	Pass	2.441082G	7.32	-12.68	1.937424G	-54.57	2.398288G	-55.48	2.48514G	-54.39	6.965886G	-48.88	1
2480MHz_TnomVnom	Pass	2.479993G	6.44	-13.56	1.927952G	-54.57	2.39824G	-53.83	2.484932G	-53.22	6.949G	-47.16	1
BT-EDR(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz_TnomVnom	Pass	2.401837G	3.59	-16.41	2.16712G	-54.57	2.399528G	-49.44	2.483512G	-55.12	6.977143G	-48.25	1
2441MHz_TnomVnom	Pass	2.441082G	6.42	-13.58	1.963472G	-55.16	2.39968G	-55.25	2.485068G	-54.11	6.982771G	-48.68	1
2480MHz_TnomVnom	Pass	2.48016G	2.30	-17.70	2.390896G	-54.84	2.399032G	-54.78	2.483664G	-53.94	6.960257G	-47.10	1
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz_TnomVnom	Pass	2.401837G	3.53	-16.47	1.97176G	-55.21	2.399856G	-49.30	2.48484G	-54.92	6.887085G	-48.61	1
2441MHz_TnomVnom	Pass	2.440915G	5.79	-14.21	1.785872G	-54.74	2.39892G	-54.60	2.484308G	-54.14	6.985586G	-47.98	1
2480MHz_TnomVnom	Pass	2.479993G	3.57	-16.43	2.138704G	-54.53	2.398368G	-54.52	2.485036G	-53.08	6.782955G	-48.95	1

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

2402MHz

16/12/2017

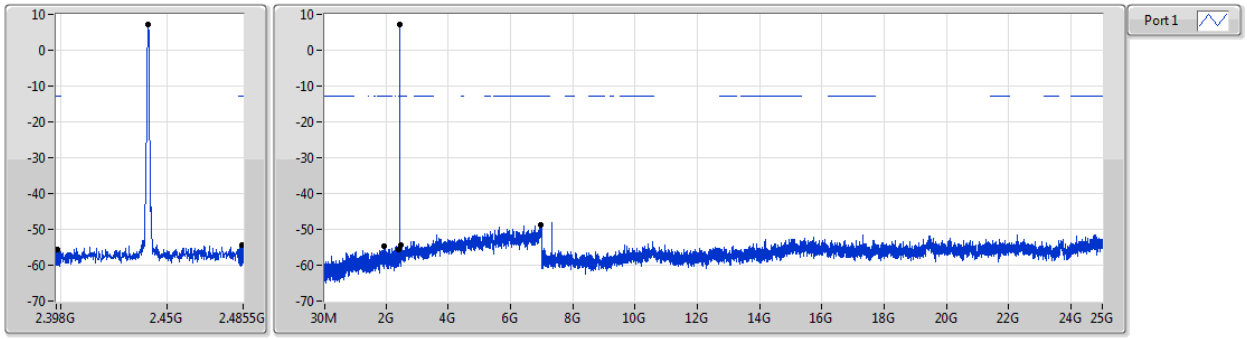


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.401837G	7.17	-12.83	1.78232G	-54.39	2.399796G	-49.23	2.484088G	-55.12	7.205102G	-47.98	1

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

2441MHz

16/12/2017

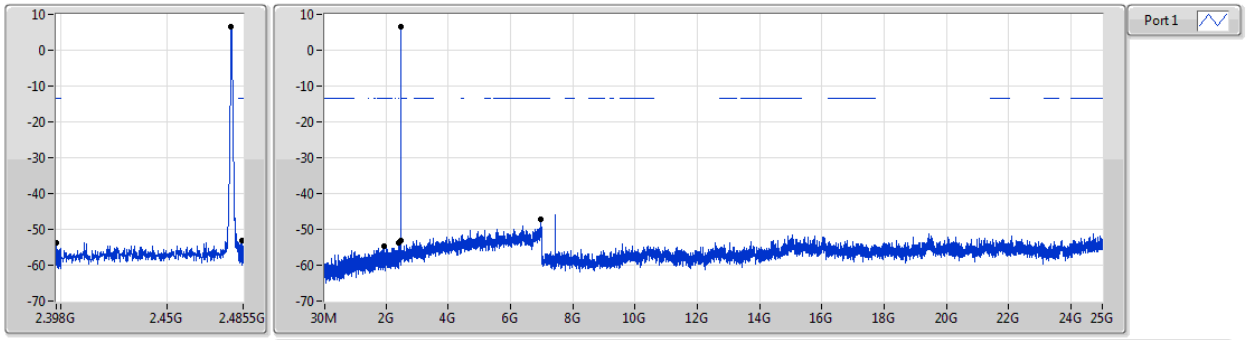


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.441082G	7.32	-12.68	1.937424G	-54.57	2.398288G	-55.48	2.48514G	-54.39	6.965886G	-48.88	1

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

2480MHz

16/12/2017

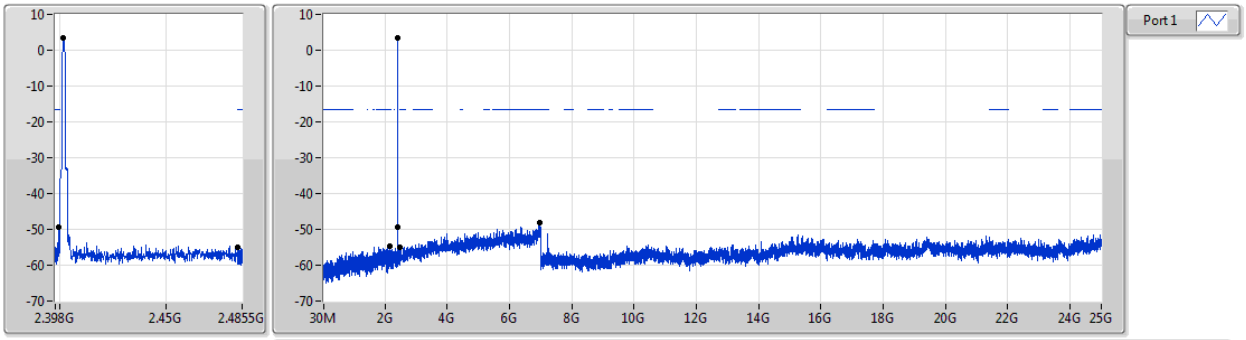


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.479993G	6.44	-13.56	1.927952G	-54.57	2.39824G	-53.83	2.484932G	-53.22	6.949G	-47.16	1

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

2402MHz

16/12/2017

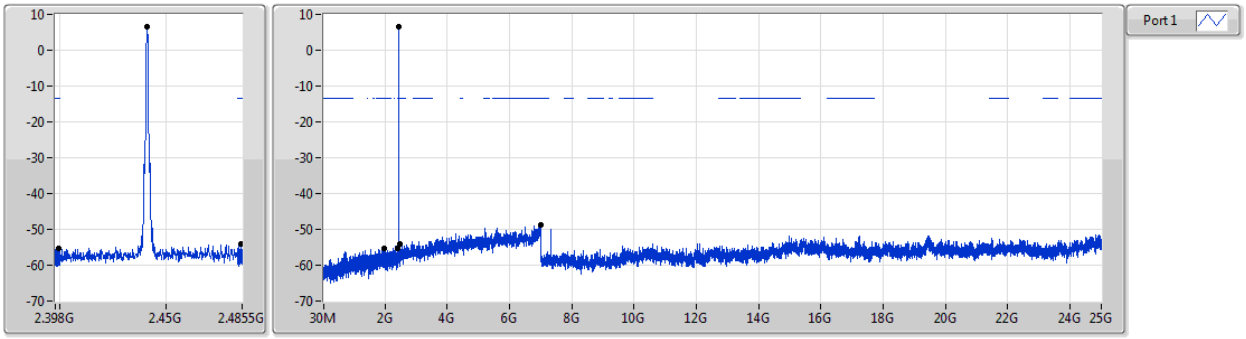


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.401837G	3.59	-16.41	2.16712G	-54.57	2.399528G	-49.44	2.483512G	-55.12	6.977143G	-48.25	1

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

2441MHz

16/12/2017

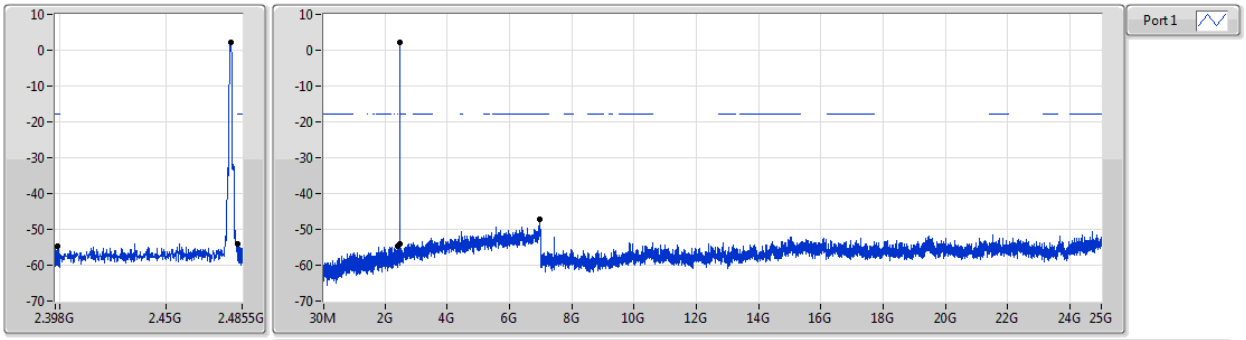


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.441082G	6.42	-13.58	1.963472G	-55.16	2.39968G	-55.25	2.485068G	-54.11	6.982771G	-48.68	1

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

2480MHz

16/12/2017

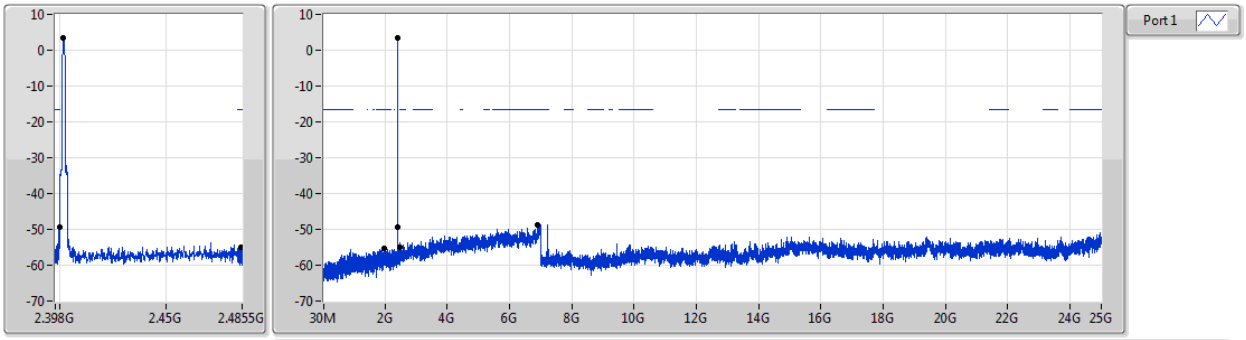


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.48016G	2.30	-17.70	2.390896G	-54.84	2.399032G	-54.78	2.483664G	-53.94	6.960257G	-47.10	1

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

2402MHz

16/12/2017

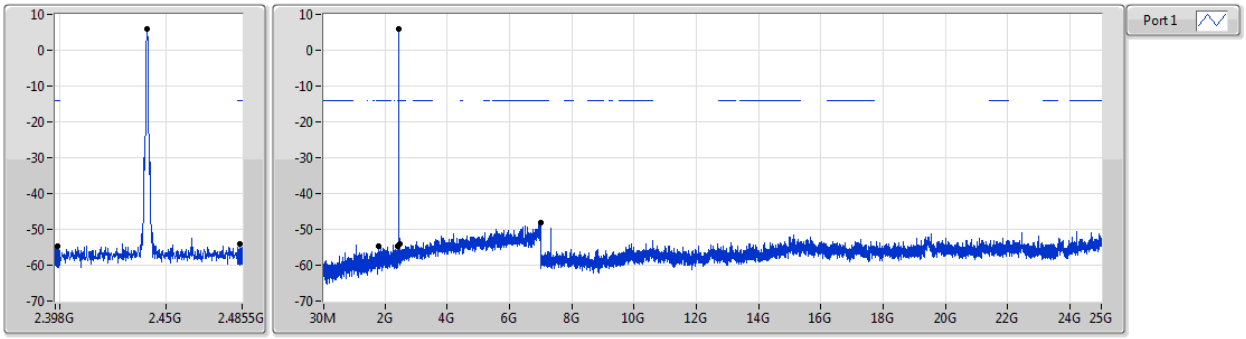


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.401837G	3.53	-16.47	1.97176G	-55.21	2.399856G	-49.30	2.48484G	-54.92	6.887085G	-48.61	1

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

2441MHz

16/12/2017

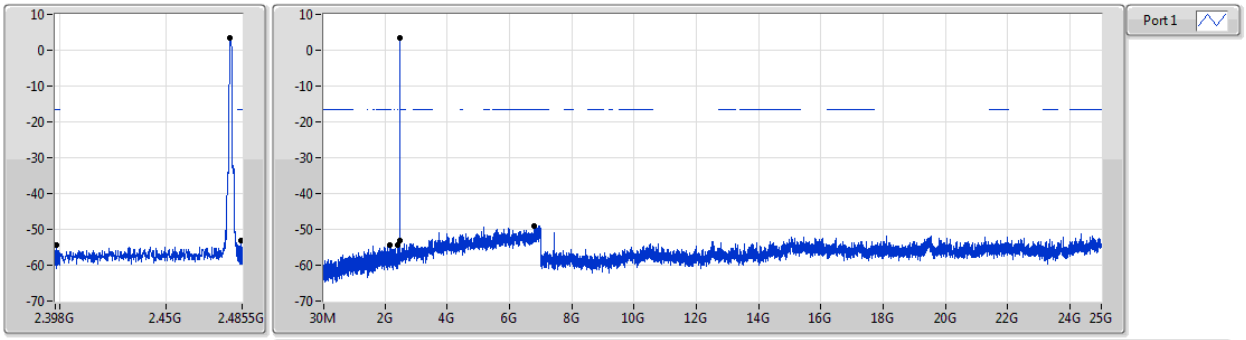


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.440915G	5.79	-14.21	1.785872G	-54.74	2.39892G	-54.60	2.484308G	-54.14	6.985586G	-47.98	1

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

2480MHz

16/12/2017



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	3.57	-16.43	2.138704G	-54.53	2.398368G	-54.52	2.485036G	-53.08	6.782955G	-48.95	1

Summary

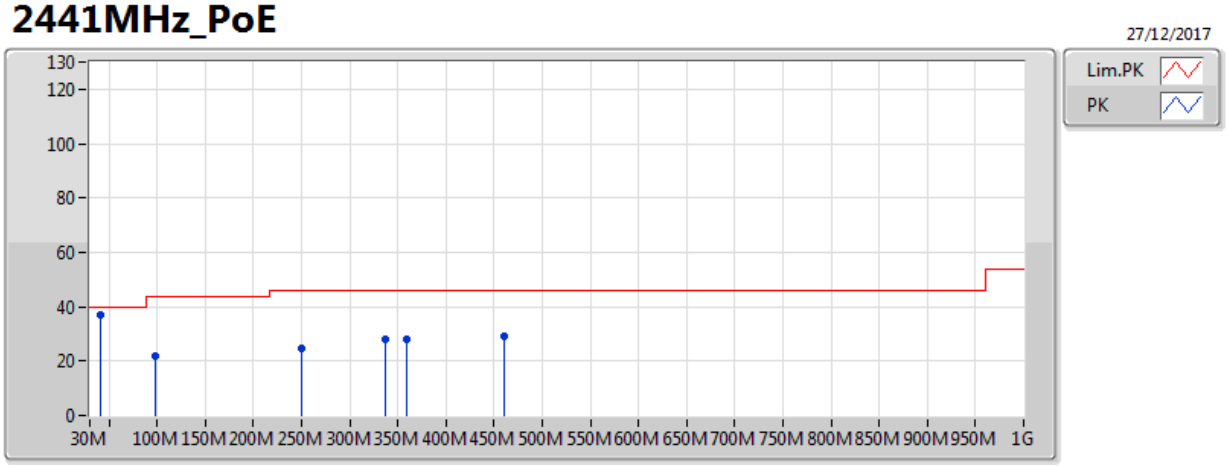
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-
BT-BR(1Mbps)	Pass	PK	41.64M	36.91	40.00	-3.09	-9.98	3	Vertical	0	1.00	-

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-BR(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-
2441MHz	Pass	PK	41.64M	33.19	40.00	-6.81	-9.98	3	Horizontal	360	1.00	-
2441MHz	Pass	PK	97.9M	18.28	43.50	-25.22	-10.70	3	Horizontal	360	1.00	-
2441MHz	Pass	PK	249.22M	26.30	46.00	-19.70	-7.65	3	Horizontal	360	1.00	-
2441MHz	Pass	PK	359.8M	27.97	46.00	-18.03	-5.05	3	Horizontal	360	1.00	-
2441MHz	Pass	PK	383.08M	25.83	46.00	-20.17	-4.64	3	Horizontal	360	1.00	-
2441MHz	Pass	PK	712.88M	28.75	46.00	-17.25	0.09	3	Horizontal	360	1.00	-
2441MHz	Pass	PK	41.64M	36.91	40.00	-3.09	-9.98	3	Vertical	0	1.00	-
2441MHz	Pass	PK	97.9M	21.90	43.50	-21.60	-10.70	3	Vertical	0	1.00	-
2441MHz	Pass	PK	249.22M	24.69	46.00	-21.31	-7.65	3	Vertical	0	1.00	-
2441MHz	Pass	PK	336.52M	28.08	46.00	-17.92	-5.83	3	Vertical	0	1.00	-
2441MHz	Pass	PK	359.8M	27.77	46.00	-18.23	-5.05	3	Vertical	0	1.00	-
2441MHz	Pass	PK	460.68M	29.04	46.00	-16.96	-2.71	3	Vertical	0	1.00	-

BT-BR(1Mbps)

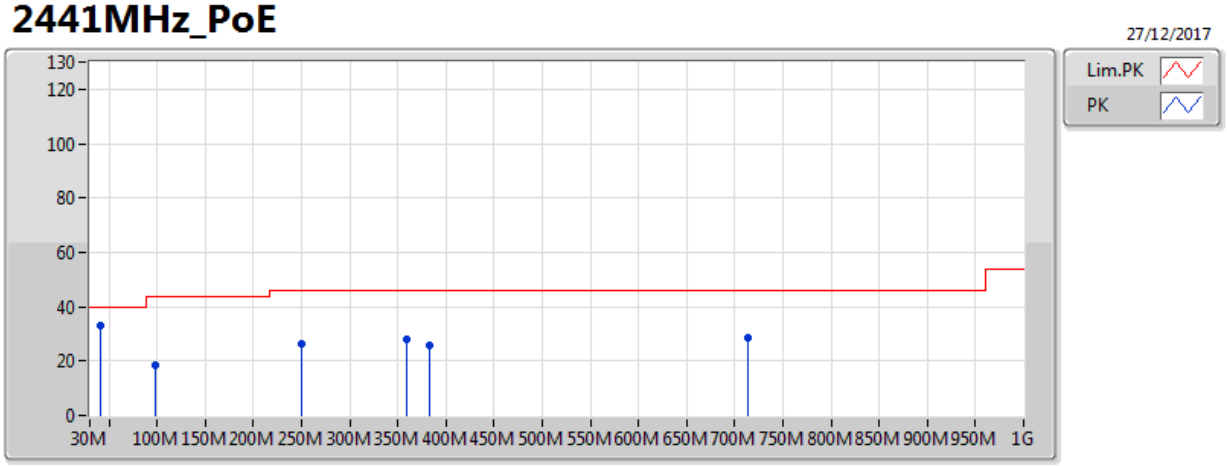
2441MHz_PoE



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	41.64M	36.91	40.00	-3.09	-9.98	3	Vertical	0	1.00	-	46.89	16.76	0.94	27.68
PK	97.9M	21.90	43.50	-21.60	-10.70	3	Vertical	0	1.00	-	32.60	15.64	1.45	27.80
PK	249.22M	24.69	46.00	-21.31	-7.65	3	Vertical	0	1.00	-	32.34	17.47	2.20	27.32
PK	336.52M	28.08	46.00	-17.92	-5.83	3	Vertical	0	1.00	-	33.91	19.07	2.58	27.48
PK	359.8M	27.77	46.00	-18.23	-5.05	3	Vertical	0	1.00	-	32.82	19.93	2.68	27.66
PK	460.68M	29.04	46.00	-16.96	-2.71	3	Vertical	0	1.00	-	31.75	22.29	3.28	28.28

BT-BR(1Mbps)

2441MHz_PoE



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	41.64M	33.19	40.00	-6.81	-9.98	3	Horizontal	360	1.00	-	43.17	16.76	0.94	27.68
PK	97.9M	18.28	43.50	-25.22	-10.70	3	Horizontal	360	1.00	-	28.98	15.64	1.45	27.80
PK	249.22M	26.30	46.00	-19.70	-7.65	3	Horizontal	360	1.00	-	33.95	17.47	2.20	27.32
PK	359.8M	27.97	46.00	-18.03	-5.05	3	Horizontal	360	1.00	-	33.02	19.93	2.68	27.66
PK	383.08M	25.83	46.00	-20.17	-4.64	3	Horizontal	360	1.00	-	30.47	20.33	2.86	27.83
PK	712.88M	28.75	46.00	-17.25	0.09	3	Horizontal	360	1.00	-	28.66	24.32	4.12	28.34

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	2.4922G	48.57	54.00	-5.43	33.13	3	Horizontal	322	3.35	-
BT-EDR(2Mbps)	Pass	AV	2.4838G	48.61	54.00	-5.39	33.10	3	Vertical	200	3.48	-
BT-EDR(3Mbps)	Pass	AV	2.497G	48.54	54.00	-5.46	33.15	3	Horizontal	315	3.49	-

Result

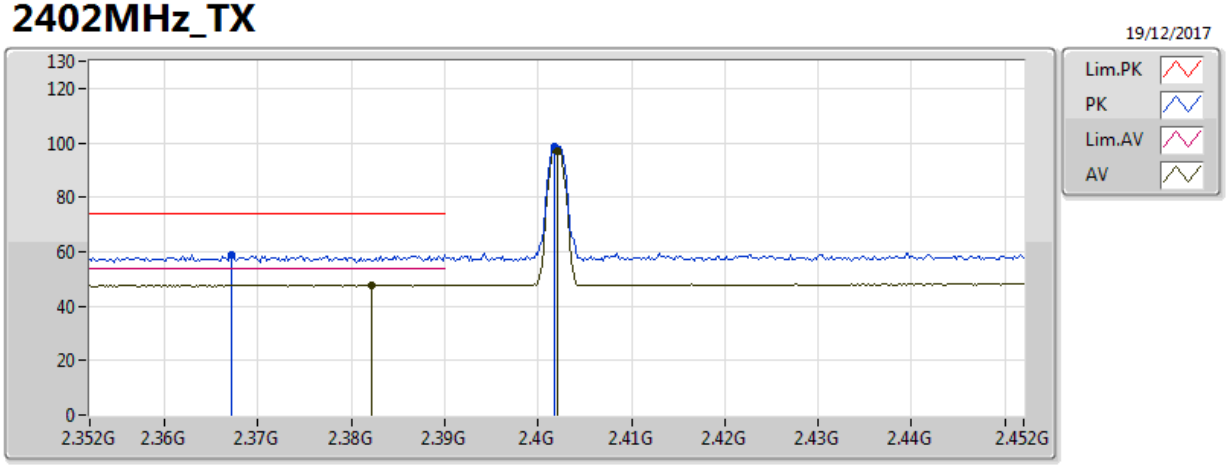
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-BR(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3882G	47.74	54.00	-6.26	32.71	3	Horizontal	315	2.83	-
2402MHz	Pass	AV	2.402G	98.32	Inf	-Inf	32.77	3	Horizontal	315	2.83	-
2402MHz	Pass	PK	2.3606G	57.95	74.00	-16.05	32.61	3	Horizontal	315	2.83	-
2402MHz	Pass	PK	2.4018G	99.50	Inf	-Inf	32.77	3	Horizontal	315	2.83	-
2402MHz	Pass	AV	2.3822G	47.68	54.00	-6.32	32.69	3	Vertical	212	2.68	-
2402MHz	Pass	AV	2.402G	97.15	Inf	-Inf	32.77	3	Vertical	212	2.68	-
2402MHz	Pass	PK	2.3672G	58.83	74.00	-15.17	32.63	3	Vertical	212	2.68	-
2402MHz	Pass	PK	2.4018G	98.44	Inf	-Inf	32.77	3	Vertical	212	2.68	-
2402MHz	Pass	AV	4.88G	35.30	54.00	-18.70	4.29	3	Horizontal	360	1.50	-
2402MHz	Pass	PK	4.88G	44.53	74.00	-29.47	4.29	3	Horizontal	360	1.50	-
2402MHz	Pass	AV	4.88G	34.91	54.00	-19.09	4.29	3	Vertical	0	1.50	-
2402MHz	Pass	PK	4.88G	44.99	74.00	-29.01	4.29	3	Vertical	0	1.50	-
2441MHz	Pass	AV	2.387G	47.72	54.00	-6.28	32.71	3	Horizontal	327	3.49	-
2441MHz	Pass	AV	2.441G	100.55	Inf	-Inf	32.92	3	Horizontal	327	3.49	-
2441MHz	Pass	AV	2.4922G	48.53	54.00	-5.47	33.13	3	Horizontal	327	3.49	-
2441MHz	Pass	PK	2.3886G	58.56	74.00	-15.44	32.72	3	Horizontal	327	3.49	-
2441MHz	Pass	PK	2.4414G	101.71	Inf	-Inf	32.93	3	Horizontal	327	3.49	-
2441MHz	Pass	PK	2.4982G	59.37	74.00	-14.63	33.15	3	Horizontal	327	3.49	-
2441MHz	Pass	AV	2.3878G	47.69	54.00	-6.31	32.71	3	Vertical	212	3.29	-
2441MHz	Pass	AV	2.441G	100.86	Inf	-Inf	32.92	3	Vertical	212	3.29	-
2441MHz	Pass	AV	2.4934G	48.50	54.00	-5.50	33.13	3	Vertical	212	3.29	-
2441MHz	Pass	PK	2.359G	58.06	74.00	-15.94	32.60	3	Vertical	212	3.29	-
2441MHz	Pass	PK	2.4414G	101.98	Inf	-Inf	32.93	3	Vertical	212	3.29	-
2441MHz	Pass	PK	2.4862G	58.92	74.00	-15.08	33.10	3	Vertical	212	3.29	-
2441MHz	Pass	AV	4.882G	33.93	54.00	-20.07	4.29	3	Horizontal	0	1.50	-
2441MHz	Pass	PK	4.882G	45.94	74.00	-28.06	4.29	3	Horizontal	0	1.50	-
2441MHz	Pass	AV	4.882G	33.63	54.00	-20.37	4.29	3	Vertical	360	1.50	-
2441MHz	Pass	PK	4.882G	44.93	74.00	-29.07	4.29	3	Vertical	360	1.50	-
2480MHz	Pass	AV	2.48G	100.65	Inf	-Inf	33.08	3	Horizontal	322	3.35	-
2480MHz	Pass	AV	2.4922G	48.57	54.00	-5.43	33.13	3	Horizontal	322	3.35	-
2480MHz	Pass	PK	2.4798G	101.84	Inf	-Inf	33.08	3	Horizontal	322	3.35	-
2480MHz	Pass	PK	2.4988G	59.46	74.00	-14.54	33.16	3	Horizontal	322	3.35	-
2480MHz	Pass	AV	2.48G	99.20	Inf	-Inf	33.08	3	Vertical	208	3.49	-
2480MHz	Pass	AV	2.4864G	48.56	54.00	-5.44	33.11	3	Vertical	208	3.49	-
2480MHz	Pass	PK	2.4798G	100.39	Inf	-Inf	33.08	3	Vertical	208	3.49	-
2480MHz	Pass	PK	2.4986G	59.54	74.00	-14.46	33.15	3	Vertical	208	3.49	-
2480MHz	Pass	AV	4.96G	34.45	54.00	-19.55	4.49	3	Horizontal	360	1.50	-
2480MHz	Pass	PK	4.96G	45.29	74.00	-28.71	4.49	3	Horizontal	360	1.50	-
2480MHz	Pass	AV	4.96G	34.34	54.00	-19.66	4.49	3	Vertical	0	1.50	-
2480MHz	Pass	PK	4.96G	45.09	74.00	-28.91	4.49	3	Vertical	0	1.50	-
BT-EDR(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3874G	47.66	54.00	-6.34	32.71	3	Horizontal	305	3.49	-
2402MHz	Pass	AV	2.402G	97.14	Inf	-Inf	32.77	3	Horizontal	305	3.49	-
2402MHz	Pass	PK	2.3722G	58.62	74.00	-15.38	32.65	3	Horizontal	305	3.49	-
2402MHz	Pass	PK	2.4018G	100.52	Inf	-Inf	32.77	3	Horizontal	305	3.49	-
2402MHz	Pass	AV	2.3848G	47.69	54.00	-6.31	32.70	3	Vertical	205	3.36	-
2402MHz	Pass	AV	2.402G	97.15	Inf	-Inf	32.77	3	Vertical	205	3.36	-

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	2.38G	58.23	74.00	-15.77	32.68	3	Vertical	205	3.36	-
2402MHz	Pass	PK	2.4022G	100.59	Inf	-Inf	32.77	3	Vertical	205	3.36	-
2441MHz	Pass	AV	2.385G	47.70	54.00	-6.30	32.70	3	Horizontal	320	3.49	-
2441MHz	Pass	AV	2.441G	97.78	Inf	-Inf	32.92	3	Horizontal	320	3.49	-
2441MHz	Pass	AV	2.4858G	48.45	54.00	-5.55	33.10	3	Horizontal	320	3.49	-
2441MHz	Pass	PK	2.3686G	58.50	74.00	-15.50	32.64	3	Horizontal	320	3.49	-
2441MHz	Pass	PK	2.441G	101.25	Inf	-Inf	32.92	3	Horizontal	320	3.49	-
2441MHz	Pass	PK	2.4954G	58.48	74.00	-15.52	33.14	3	Horizontal	320	3.49	-
2441MHz	Pass	AV	2.3862G	47.68	54.00	-6.32	32.71	3	Vertical	205	3.29	-
2441MHz	Pass	AV	2.441G	98.37	Inf	-Inf	32.92	3	Vertical	205	3.29	-
2441MHz	Pass	AV	2.4922G	48.51	54.00	-5.49	33.13	3	Vertical	205	3.29	-
2441MHz	Pass	PK	2.3762G	58.83	74.00	-15.17	32.67	3	Vertical	205	3.29	-
2441MHz	Pass	PK	2.4414G	101.73	Inf	-Inf	32.93	3	Vertical	205	3.29	-
2441MHz	Pass	PK	2.495G	58.67	74.00	-15.33	33.14	3	Vertical	205	3.29	-
2480MHz	Pass	AV	2.48G	98.18	Inf	-Inf	33.08	3	Horizontal	307	3.39	-
2480MHz	Pass	AV	2.4866G	48.60	54.00	-5.40	33.11	3	Horizontal	307	3.39	-
2480MHz	Pass	PK	2.48G	101.62	Inf	-Inf	33.08	3	Horizontal	307	3.39	-
2480MHz	Pass	PK	2.4938G	58.90	74.00	-15.10	33.14	3	Horizontal	307	3.39	-
2480MHz	Pass	AV	2.48G	96.93	Inf	-Inf	33.08	3	Vertical	200	3.48	-
2480MHz	Pass	AV	2.4838G	48.61	54.00	-5.39	33.10	3	Vertical	200	3.48	-
2480MHz	Pass	PK	2.4802G	100.38	Inf	-Inf	33.08	3	Vertical	200	3.48	-
2480MHz	Pass	PK	2.4994G	59.97	74.00	-14.03	33.16	3	Vertical	200	3.48	-
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3866G	47.76	54.00	-6.24	32.71	3	Horizontal	299	3.49	-
2402MHz	Pass	AV	2.402G	96.83	Inf	-Inf	32.77	3	Horizontal	299	3.49	-
2402MHz	Pass	PK	2.3804G	58.37	74.00	-15.63	32.68	3	Horizontal	299	3.49	-
2402MHz	Pass	PK	2.402G	100.60	Inf	-Inf	32.77	3	Horizontal	299	3.49	-
2402MHz	Pass	AV	2.3742G	47.64	54.00	-6.36	32.66	3	Vertical	200	3.39	-
2402MHz	Pass	AV	2.402G	97.15	Inf	-Inf	32.77	3	Vertical	200	3.39	-
2402MHz	Pass	PK	2.3642G	58.60	74.00	-15.40	32.62	3	Vertical	200	3.39	-
2402MHz	Pass	PK	2.402G	100.96	Inf	-Inf	32.77	3	Vertical	200	3.39	-
2441MHz	Pass	AV	2.367G	47.67	54.00	-6.33	32.63	3	Horizontal	315	3.49	-
2441MHz	Pass	AV	2.441G	97.71	Inf	-Inf	32.92	3	Horizontal	315	3.49	-
2441MHz	Pass	AV	2.497G	48.54	54.00	-5.46	33.15	3	Horizontal	315	3.49	-
2441MHz	Pass	PK	2.387G	58.31	74.00	-15.69	32.71	3	Horizontal	315	3.49	-
2441MHz	Pass	PK	2.441G	101.29	Inf	-Inf	32.92	3	Horizontal	315	3.49	-
2441MHz	Pass	PK	2.4958G	58.54	74.00	-15.46	33.14	3	Horizontal	315	3.49	-
2441MHz	Pass	AV	2.379G	47.62	54.00	-6.38	32.68	3	Vertical	200	3.27	-
2441MHz	Pass	AV	2.441G	97.91	Inf	-Inf	32.92	3	Vertical	200	3.27	-
2441MHz	Pass	AV	2.497G	48.53	54.00	-5.47	33.15	3	Vertical	200	3.27	-
2441MHz	Pass	PK	2.3754G	58.83	74.00	-15.17	32.66	3	Vertical	200	3.27	-
2441MHz	Pass	PK	2.441G	101.42	Inf	-Inf	32.92	3	Vertical	200	3.27	-
2441MHz	Pass	PK	2.4958G	58.36	74.00	-15.64	33.14	3	Vertical	200	3.27	-
2480MHz	Pass	AV	2.48G	98.16	Inf	-Inf	33.08	3	Horizontal	309	3.33	-
2480MHz	Pass	AV	2.488G	48.52	54.00	-5.48	33.11	3	Horizontal	309	3.33	-
2480MHz	Pass	PK	2.48G	101.90	Inf	-Inf	33.08	3	Horizontal	309	3.33	-
2480MHz	Pass	PK	2.4942G	58.88	74.00	-15.12	33.14	3	Horizontal	309	3.33	-
2480MHz	Pass	AV	2.48G	96.26	Inf	-Inf	33.08	3	Vertical	200	3.49	-
2480MHz	Pass	AV	2.4912G	48.54	54.00	-5.46	33.12	3	Vertical	200	3.49	-

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2480MHz	Pass	PK	2.48G	100.02	Inf	-Inf	33.08	3	Vertical	200	3.49	-
2480MHz	Pass	PK	2.4856G	59.92	74.00	-14.08	33.10	3	Vertical	200	3.49	-

BT-BR(1Mbps)

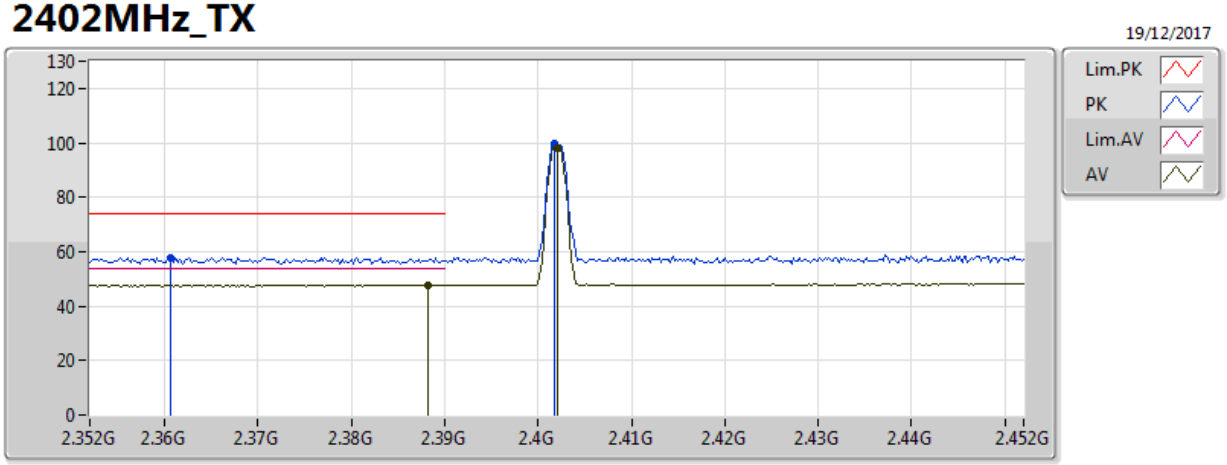
2402MHz_TX



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	2.3822G	47.68	54.00	-6.32	32.69	3	Vertical	212	2.68	-	14.99	26.97	5.72	-
AV	2.402G	97.15	Inf	-Inf	32.77	3	Vertical	212	2.68	-	64.38	27.03	5.74	-
PK	2.3672G	58.83	74.00	-15.17	32.63	3	Vertical	212	2.68	-	26.20	26.93	5.70	-
PK	2.4018G	98.44	Inf	-Inf	32.77	3	Vertical	212	2.68	-	65.68	27.03	5.74	-

BT-BR(1Mbps)

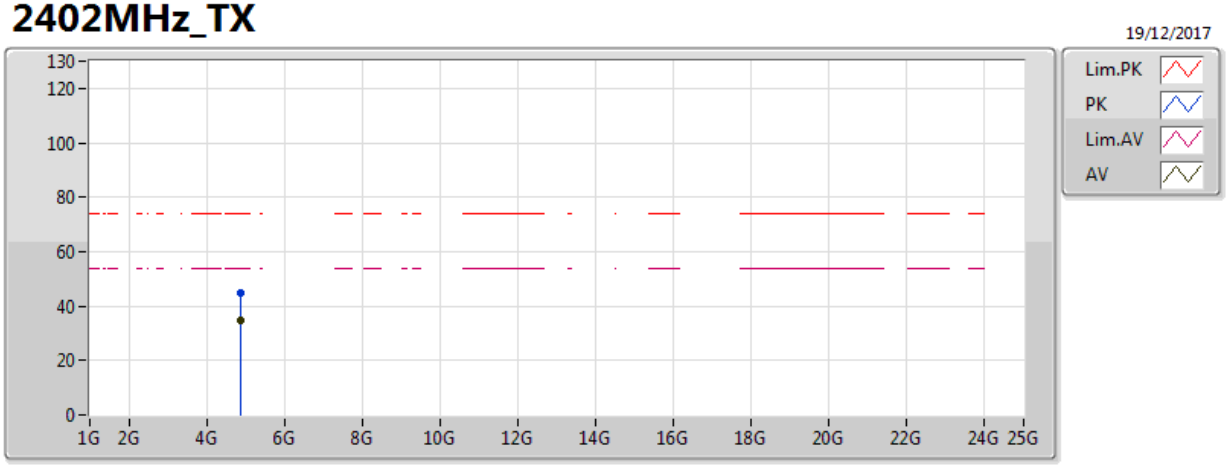
2402MHz_TX



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	2.3882G	47.74	54.00	-6.26	32.71	3	Horizontal	315	2.83	-	15.02	26.99	5.73	-
AV	2.402G	98.32	Inf	-Inf	32.77	3	Horizontal	315	2.83	-	65.55	27.03	5.74	-
PK	2.3606G	57.95	74.00	-16.05	32.61	3	Horizontal	315	2.83	-	25.34	26.91	5.70	-
PK	2.4018G	99.50	Inf	-Inf	32.77	3	Horizontal	315	2.83	-	66.73	27.03	5.74	-

BT-BR(1Mbps)

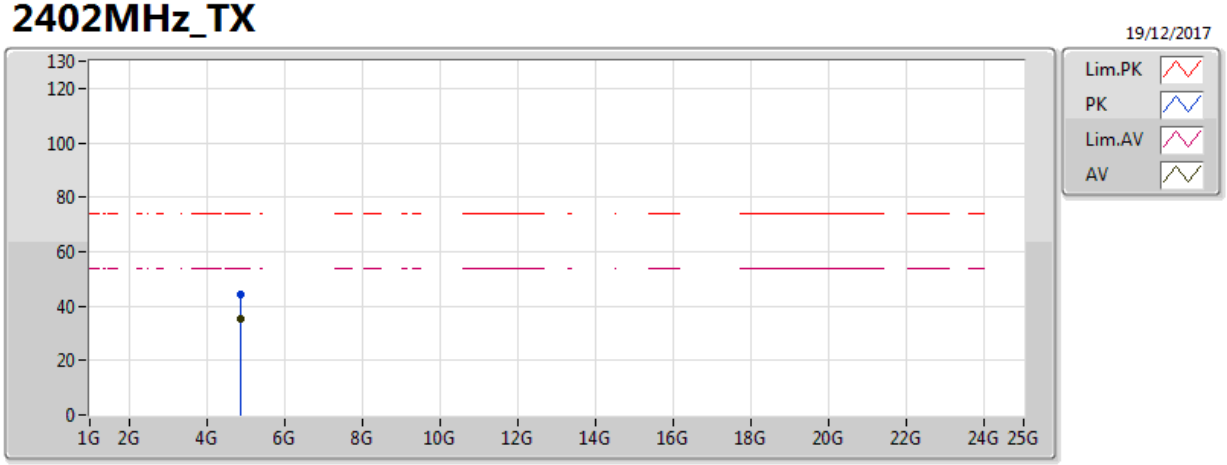
2402MHz_TX



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	4.88G	34.91	54.00	-19.09	4.29	3	Vertical	0	1.50	-	30.62	31.31	8.18	35.19
PK	4.88G	44.99	74.00	-29.01	4.29	3	Vertical	0	1.50	-	40.70	31.31	8.18	35.19

BT-BR(1Mbps)

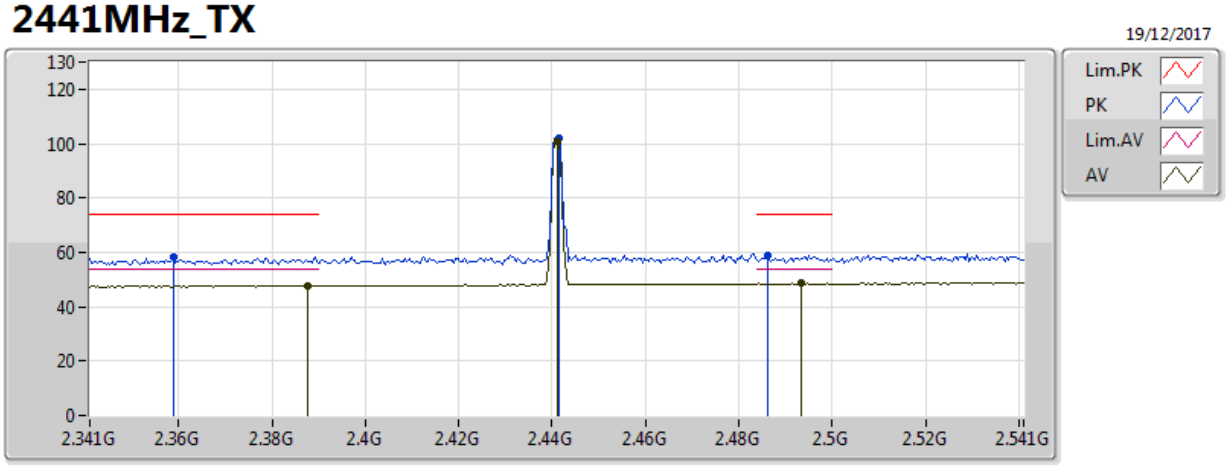
2402MHz_TX



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	4.88G	35.30	54.00	-18.70	4.29	3	Horizontal	360	1.50	-	31.01	31.31	8.18	35.19
PK	4.88G	44.53	74.00	-29.47	4.29	3	Horizontal	360	1.50	-	40.24	31.31	8.18	35.19

BT-BR(1Mbps)

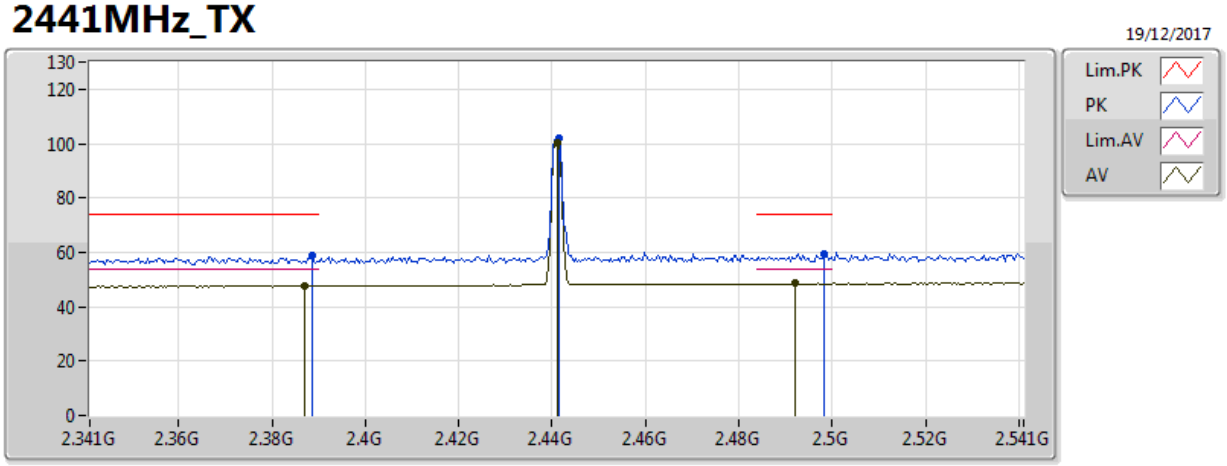
2441MHz_TX



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	2.3878G	47.69	54.00	-6.31	32.71	3	Vertical	212	3.29	-	14.98	26.99	5.73	-
AV	2.441G	100.86	Inf	-Inf	32.92	3	Vertical	212	3.29	-	67.93	27.13	5.79	-
AV	2.4934G	48.50	54.00	-5.50	33.13	3	Vertical	212	3.29	-	15.36	27.28	5.85	-
PK	2.4414G	101.98	Inf	-Inf	32.93	3	Vertical	212	3.29	-	69.06	27.14	5.79	-
PK	2.359G	58.06	74.00	-15.94	32.60	3	Vertical	212	3.29	-	25.45	26.91	5.69	-
PK	2.4862G	58.92	74.00	-15.08	33.10	3	Vertical	212	3.29	-	25.81	27.26	5.84	-

BT-BR(1Mbps)

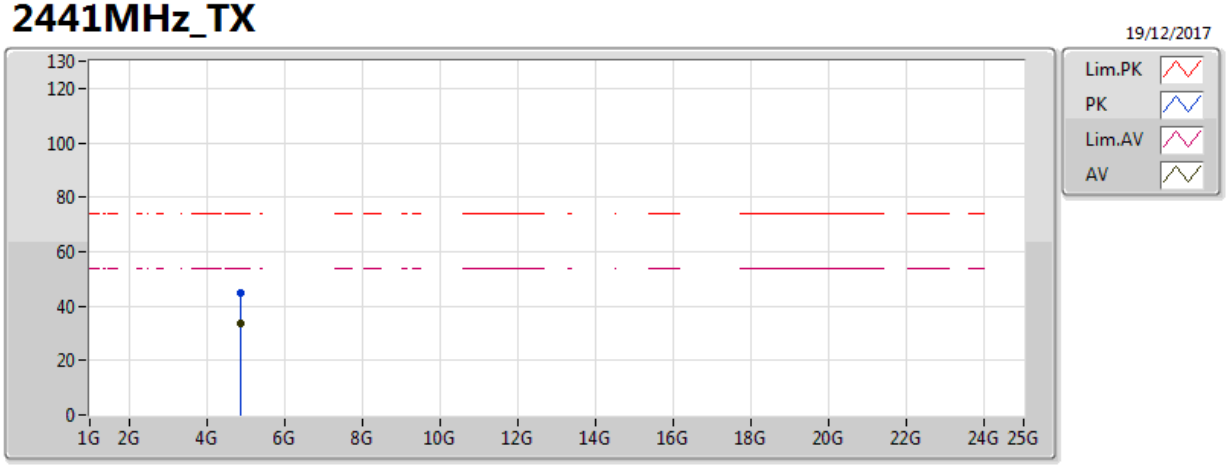
2441MHz_TX



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	2.387G	47.72	54.00	-6.28	32.71	3	Horizontal	327	3.49	-	15.01	26.98	5.73	-
AV	2.441G	100.55	Inf	-Inf	32.92	3	Horizontal	327	3.49	-	67.63	27.13	5.79	-
AV	2.4922G	48.53	54.00	-5.47	33.13	3	Horizontal	327	3.49	-	15.40	27.28	5.85	-
PK	2.4414G	101.71	Inf	-Inf	32.93	3	Horizontal	327	3.49	-	68.78	27.14	5.79	-
PK	2.3886G	58.56	74.00	-15.44	32.72	3	Horizontal	327	3.49	-	25.84	26.99	5.73	-
PK	2.4982G	59.37	74.00	-14.63	33.15	3	Horizontal	327	3.49	-	26.21	27.29	5.86	-

BT-BR(1Mbps)

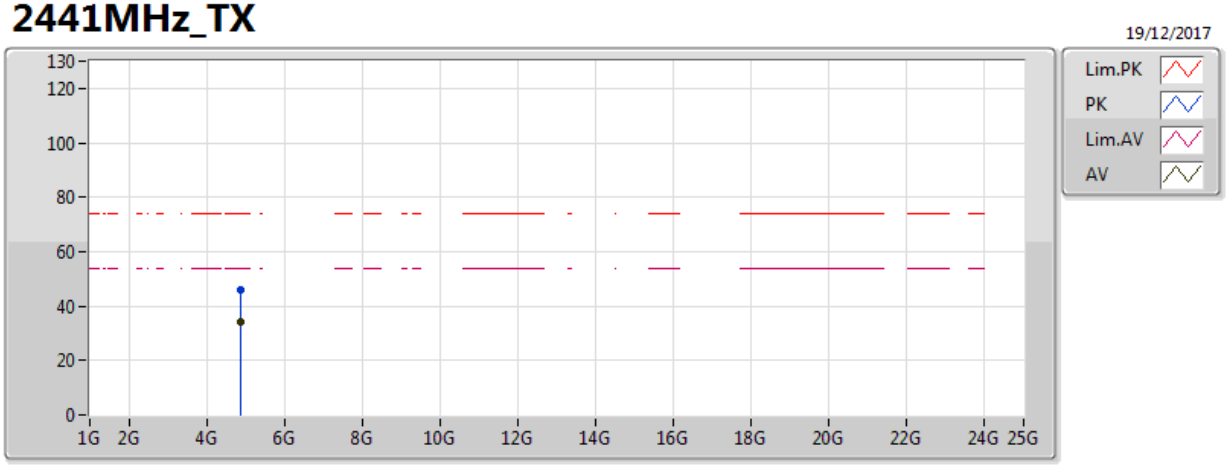
2441MHz_TX



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	4.882G	33.63	54.00	-20.37	4.29	3	Vertical	360	1.50	-	29.34	31.31	8.18	35.19
PK	4.882G	44.93	74.00	-29.07	4.29	3	Vertical	360	1.50	-	40.64	31.31	8.18	35.19

BT-BR(1Mbps)

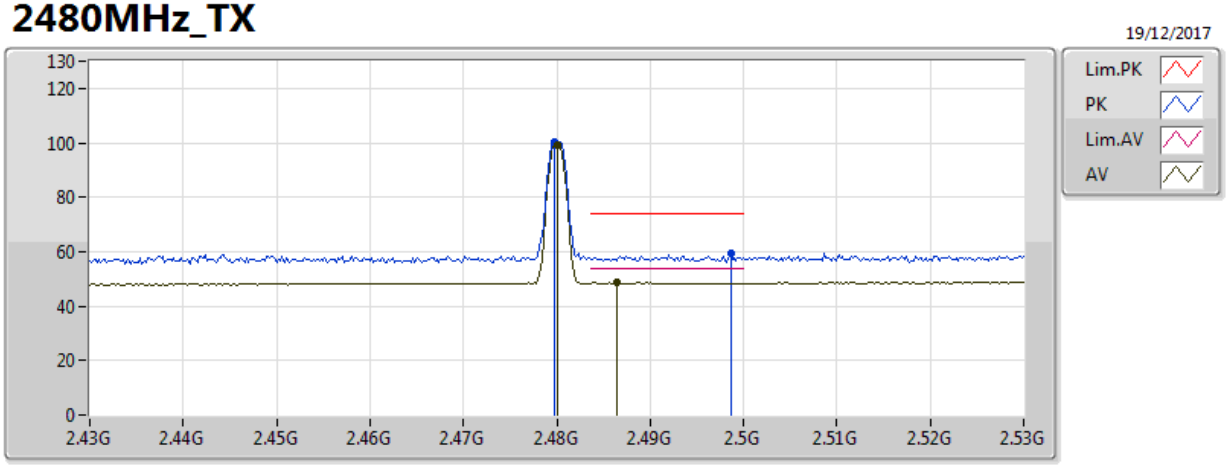
2441MHz_TX



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	4.882G	33.93	54.00	-20.07	4.29	3	Horizontal	0	1.50	-	29.64	31.31	8.18	35.19
PK	4.882G	45.94	74.00	-28.06	4.29	3	Horizontal	0	1.50	-	41.65	31.31	8.18	35.19

BT-BR(1Mbps)

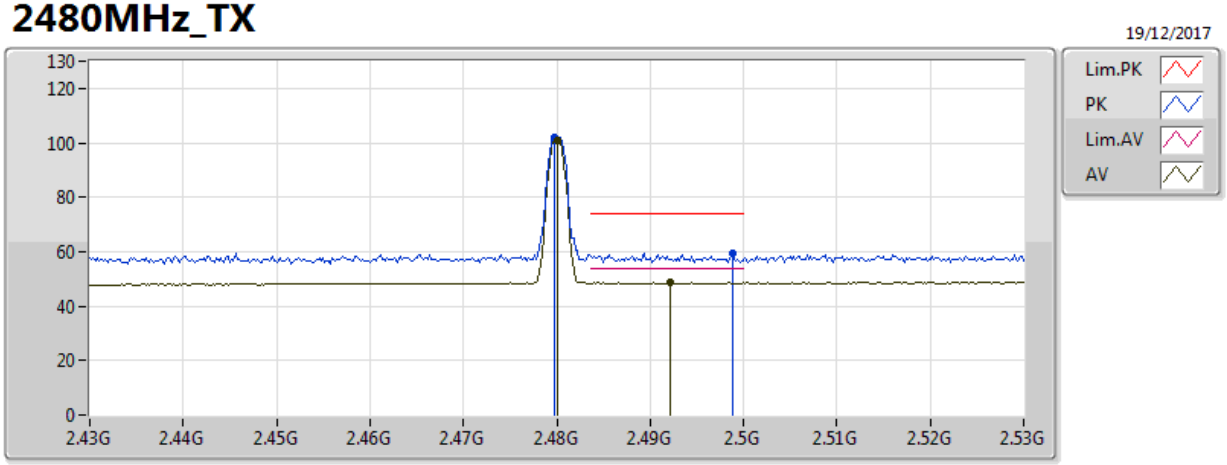
2480MHz_TX



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	2.48G	99.20	Inf	-Inf	33.08	3	Vertical	208	3.49	-	66.12	27.24	5.84	-
AV	2.4864G	48.56	54.00	-5.44	33.11	3	Vertical	208	3.49	-	15.45	27.26	5.84	-
PK	2.4798G	100.39	Inf	-Inf	33.08	3	Vertical	208	3.49	-	67.31	27.24	5.84	-
PK	2.4986G	59.54	74.00	-14.46	33.15	3	Vertical	208	3.49	-	26.38	27.30	5.86	-

BT-BR(1Mbps)

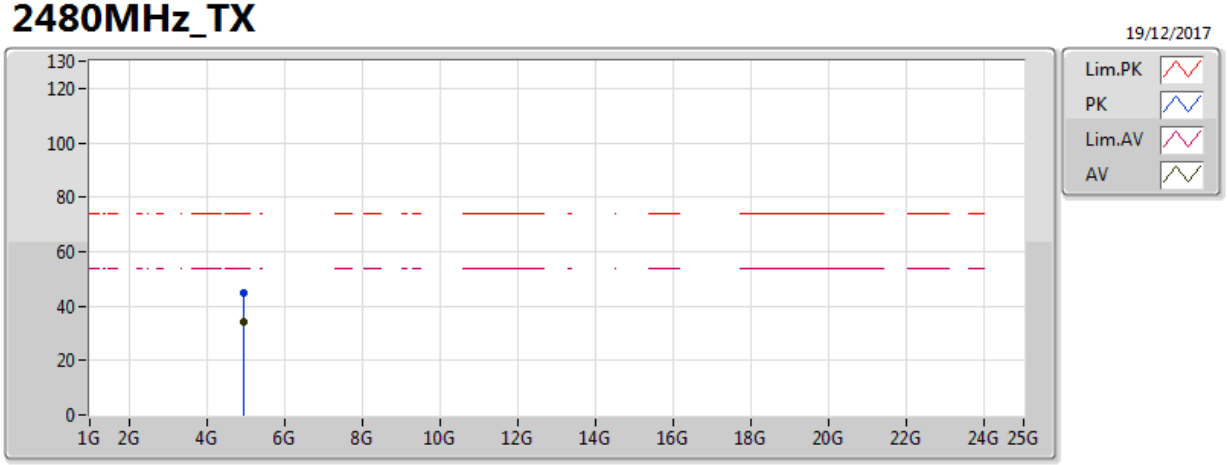
2480MHz_TX



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	2.48G	100.65	Inf	-Inf	33.08	3	Horizontal	322	3.35	-	67.57	27.24	5.84	-
AV	2.4922G	48.57	54.00	-5.43	33.13	3	Horizontal	322	3.35	-	15.44	27.28	5.85	-
PK	2.4798G	101.84	Inf	-Inf	33.08	3	Horizontal	322	3.35	-	68.76	27.24	5.84	-
PK	2.4988G	59.46	74.00	-14.54	33.16	3	Horizontal	322	3.35	-	26.30	27.30	5.86	-

BT-BR(1Mbps)

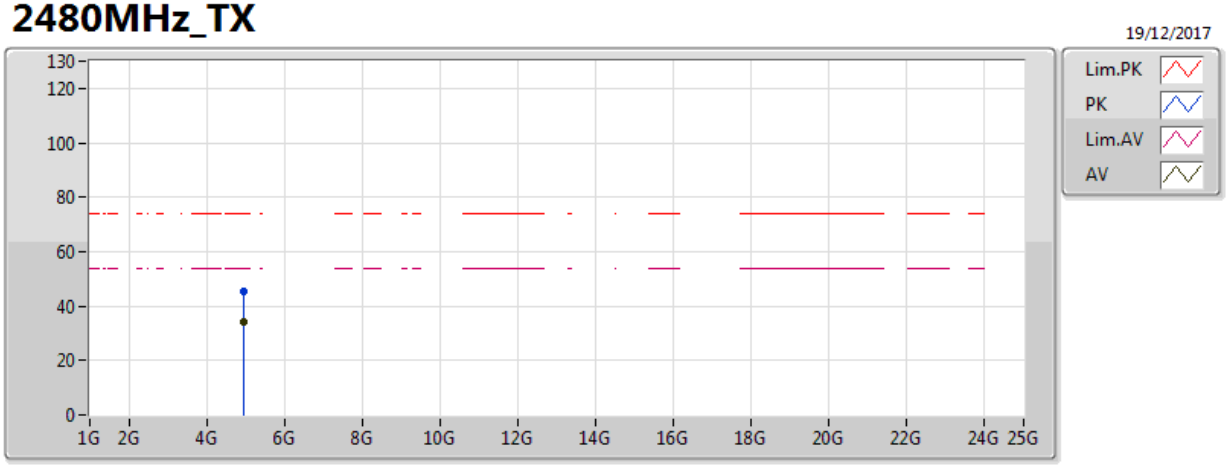
2480MHz_TX



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	4.96G	34.34	54.00	-19.66	4.49	3	Vertical	0	1.50	-	29.85	31.44	8.27	35.21
PK	4.96G	45.09	74.00	-28.91	4.49	3	Vertical	0	1.50	-	40.60	31.44	8.27	35.21

BT-BR(1Mbps)

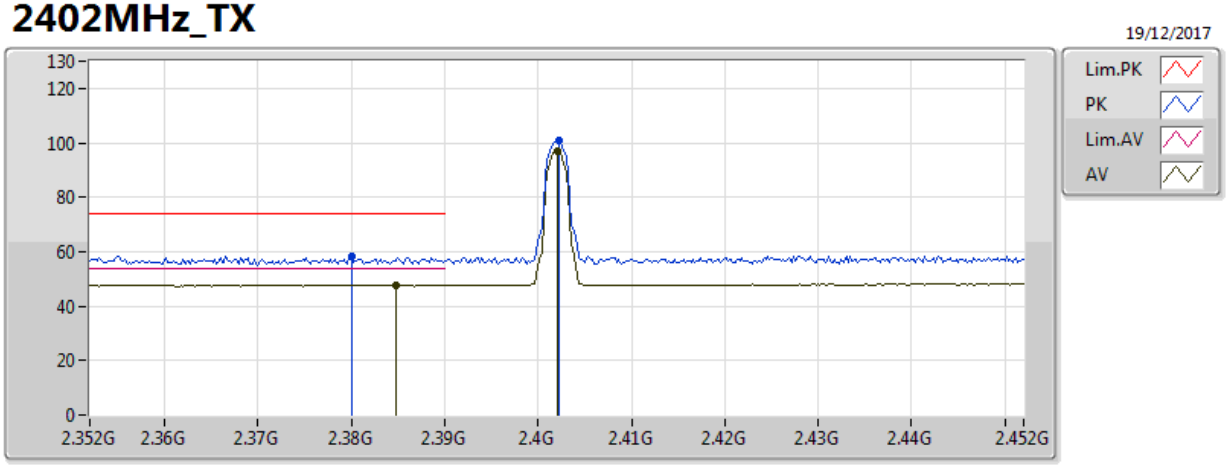
2480MHz_TX



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	4.96G	34.45	54.00	-19.55	4.49	3	Horizontal	360	1.50	-	29.97	31.44	8.27	35.21
PK	4.96G	45.29	74.00	-28.71	4.49	3	Horizontal	360	1.50	-	40.80	31.44	8.27	35.21

BT-EDR(2Mbps)

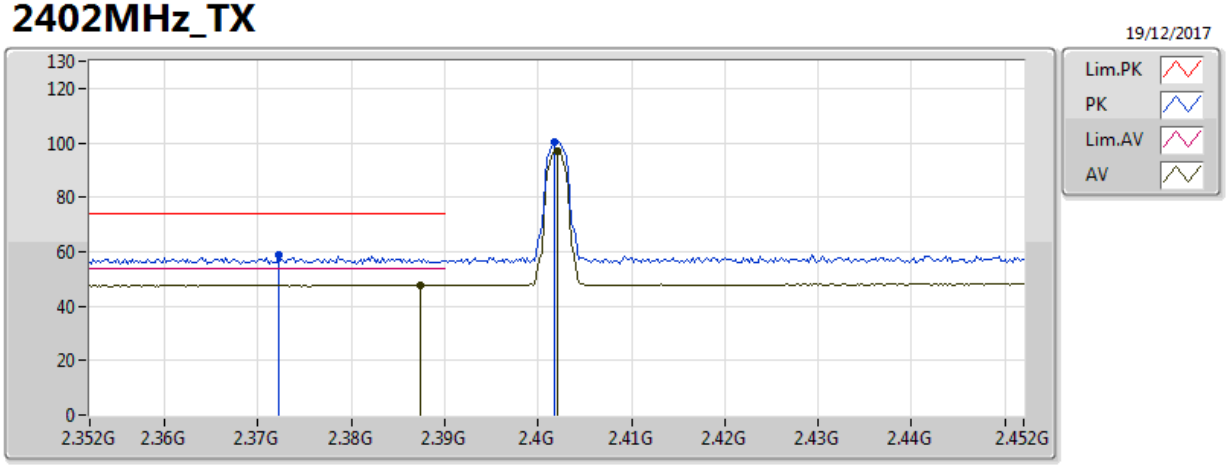
2402MHz_TX



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	2.3848G	47.69	54.00	-6.31	32.70	3	Vertical	205	3.36	-	14.99	26.98	5.72	-
AV	2.402G	97.15	Inf	-Inf	32.77	3	Vertical	205	3.36	-	64.39	27.03	5.74	-
PK	2.38G	58.23	74.00	-15.77	32.68	3	Vertical	205	3.36	-	25.54	26.96	5.72	-
PK	2.4022G	100.59	Inf	-Inf	32.77	3	Vertical	205	3.36	-	67.82	27.03	5.74	-

BT-EDR(2Mbps)

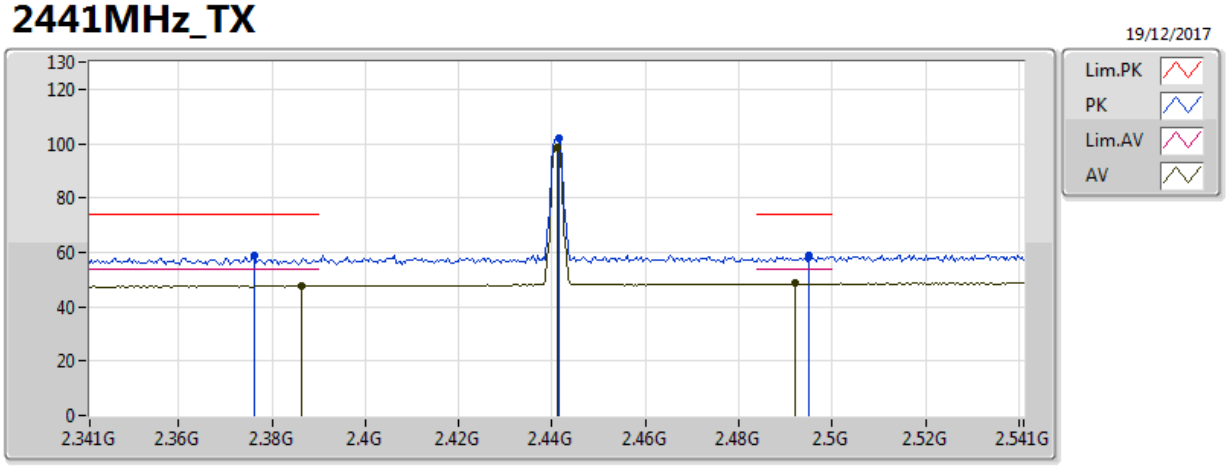
2402MHz_TX



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	2.3874G	47.66	54.00	-6.34	32.71	3	Horizontal	305	3.49	-	14.95	26.98	5.73	-
AV	2.402G	97.14	Inf	-Inf	32.77	3	Horizontal	305	3.49	-	64.37	27.03	5.74	-
PK	2.3722G	58.62	74.00	-15.38	32.65	3	Horizontal	305	3.49	-	25.97	26.94	5.71	-
PK	2.4018G	100.52	Inf	-Inf	32.77	3	Horizontal	305	3.49	-	67.75	27.03	5.74	-

BT-EDR(2Mbps)

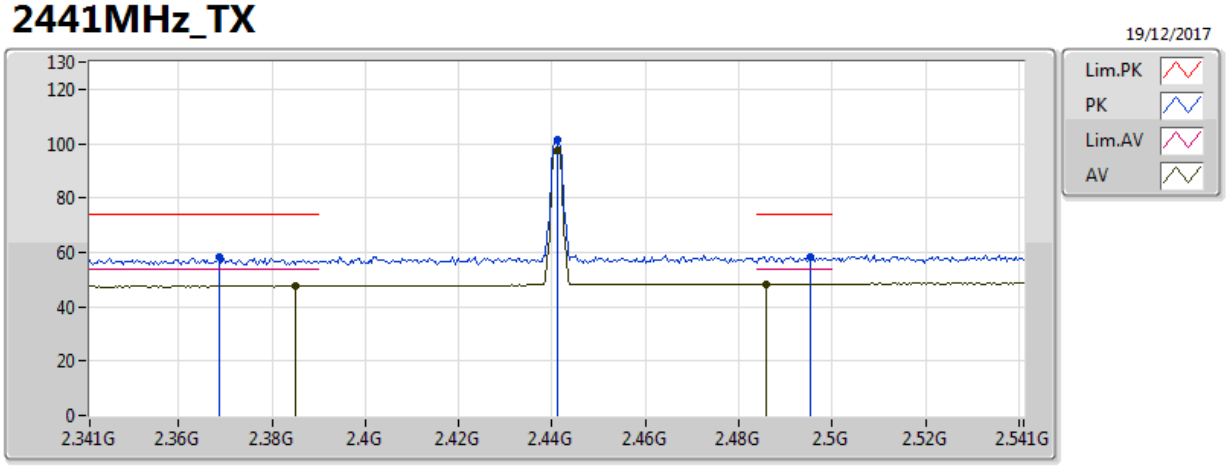
2441MHz_TX



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	2.3862G	47.68	54.00	-6.32	32.71	3	Vertical	205	3.29	-	14.98	26.98	5.72	-
AV	2.441G	98.37	Inf	-Inf	32.92	3	Vertical	205	3.29	-	65.45	27.13	5.79	-
AV	2.4922G	48.51	54.00	-5.49	33.13	3	Vertical	205	3.29	-	15.38	27.28	5.85	-
PK	2.3762G	58.83	74.00	-15.17	32.67	3	Vertical	205	3.29	-	26.16	26.95	5.71	-
PK	2.4414G	101.73	Inf	-Inf	32.93	3	Vertical	205	3.29	-	68.80	27.14	5.79	-
PK	2.495G	58.67	74.00	-15.33	33.14	3	Vertical	205	3.29	-	25.53	27.29	5.85	-

BT-EDR(2Mbps)

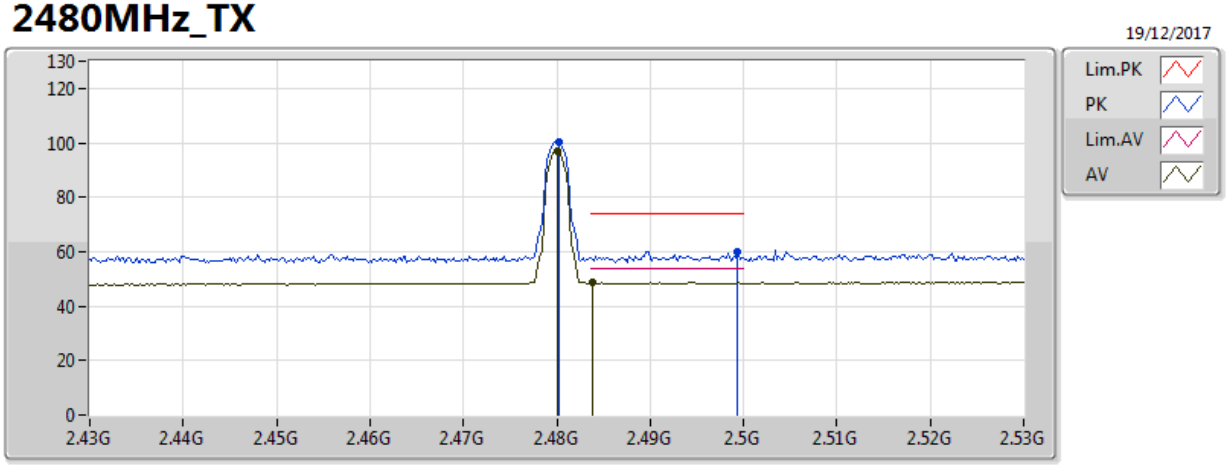
2441MHz_TX



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	2.385G	47.70	54.00	-6.30	32.70	3	Horizontal	320	3.49	-	14.99	26.98	5.72	-
AV	2.441G	97.78	Inf	-Inf	32.92	3	Horizontal	320	3.49	-	64.86	27.13	5.79	-
AV	2.4858G	48.45	54.00	-5.55	33.10	3	Horizontal	320	3.49	-	15.35	27.26	5.84	-
PK	2.3686G	58.50	74.00	-15.50	32.64	3	Horizontal	320	3.49	-	25.86	26.93	5.71	-
PK	2.441G	101.25	Inf	-Inf	32.92	3	Horizontal	320	3.49	-	68.32	27.13	5.79	-
PK	2.4954G	58.48	74.00	-15.52	33.14	3	Horizontal	320	3.49	-	25.34	27.29	5.85	-

BT-EDR(2Mbps)

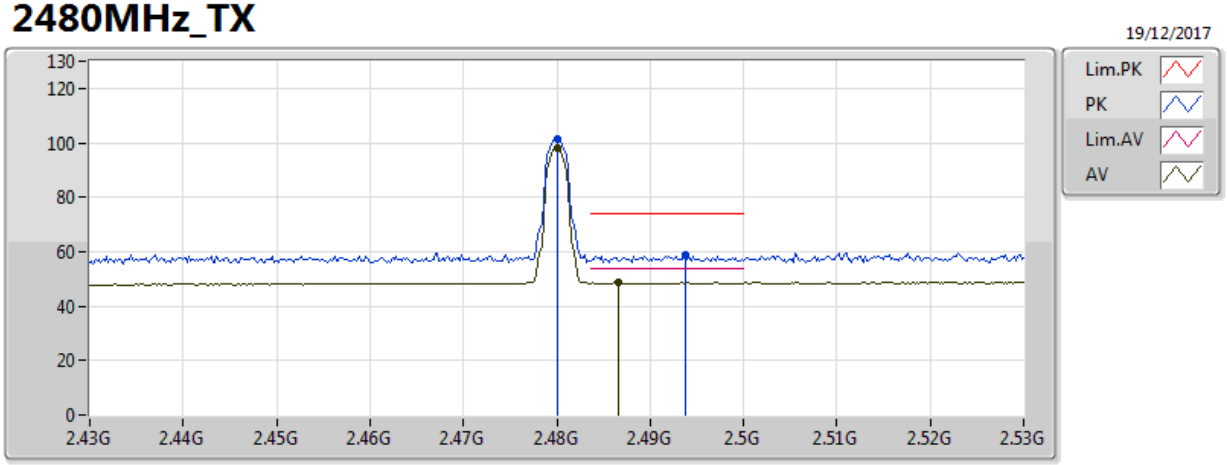
2480MHz_TX



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	2.48G	96.93	Inf	-Inf	33.08	3	Vertical	200	3.48	-	63.85	27.24	5.84	-
AV	2.4838G	48.61	54.00	-5.39	33.10	3	Vertical	200	3.48	-	15.51	27.25	5.84	-
PK	2.4802G	100.38	Inf	-Inf	33.08	3	Vertical	200	3.48	-	67.29	27.24	5.84	-
PK	2.4994G	59.97	74.00	-14.03	33.16	3	Vertical	200	3.48	-	26.81	27.30	5.86	-

BT-EDR(2Mbps)

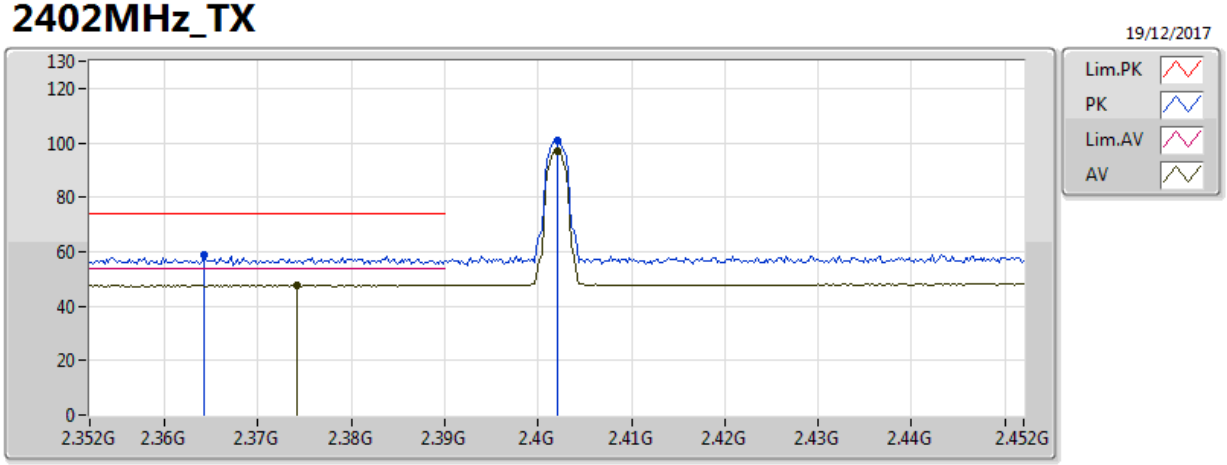
2480MHz_TX



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	2.48G	98.18	Inf	-Inf	33.08	3	Horizontal	307	3.39	-	65.10	27.24	5.84	-
AV	2.4866G	48.60	54.00	-5.40	33.11	3	Horizontal	307	3.39	-	15.50	27.26	5.84	-
PK	2.48G	101.62	Inf	-Inf	33.08	3	Horizontal	307	3.39	-	68.54	27.24	5.84	-
PK	2.4938G	58.90	74.00	-15.10	33.14	3	Horizontal	307	3.39	-	25.76	27.28	5.85	-

BT-EDR(3Mbps)

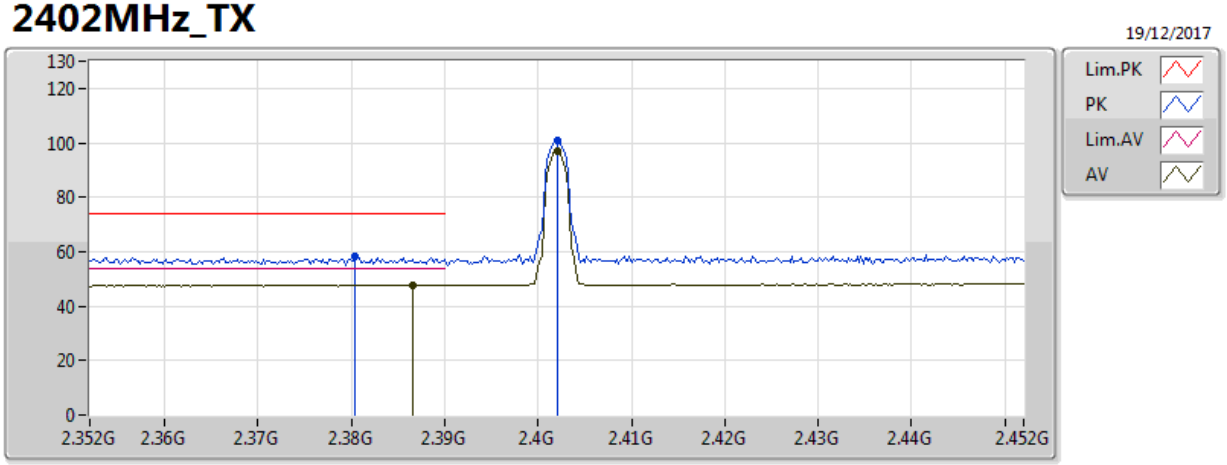
2402MHz_TX



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)
AV	2.3742G	47.64	54.00	-6.36	32.66	3	Vertical	200	3.39	-	14.98	26.95	5.71	-
AV	2.402G	97.15	Inf	-Inf	32.77	3	Vertical	200	3.39	-	64.39	27.03	5.74	-
PK	2.3642G	58.60	74.00	-15.40	32.62	3	Vertical	200	3.39	-	25.98	26.92	5.70	-
PK	2.402G	100.96	Inf	-Inf	32.77	3	Vertical	200	3.39	-	68.19	27.03	5.74	-

BT-EDR(3Mbps)

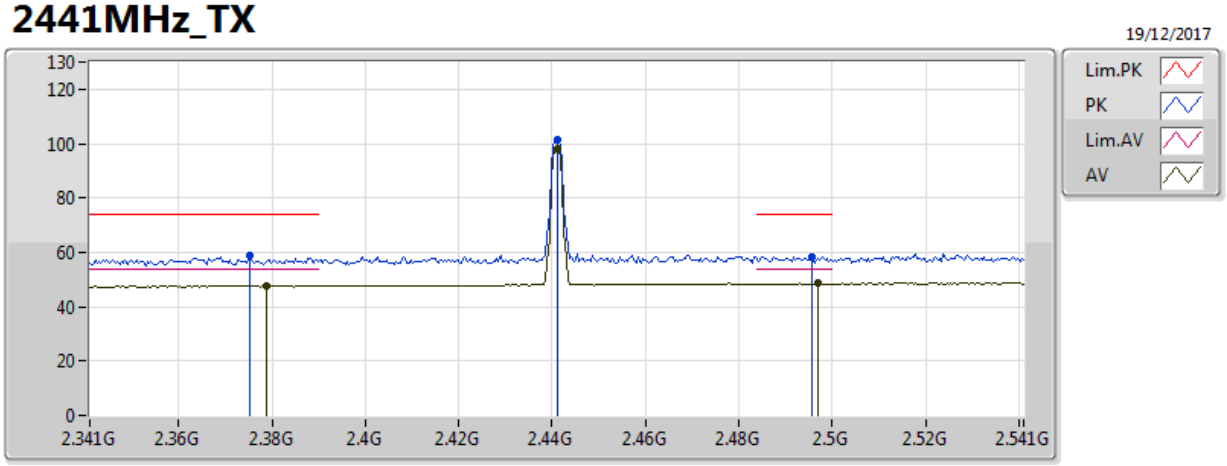
2402MHz_TX



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	2.3866G	47.76	54.00	-6.24	32.71	3	Horizontal	299	3.49	-	15.05	26.98	5.73	-
AV	2.402G	96.83	Inf	-Inf	32.77	3	Horizontal	299	3.49	-	64.06	27.03	5.74	-
PK	2.3804G	58.37	74.00	-15.63	32.68	3	Horizontal	299	3.49	-	25.68	26.97	5.72	-
PK	2.402G	100.60	Inf	-Inf	32.77	3	Horizontal	299	3.49	-	67.83	27.03	5.74	-

BT-EDR(3Mbps)

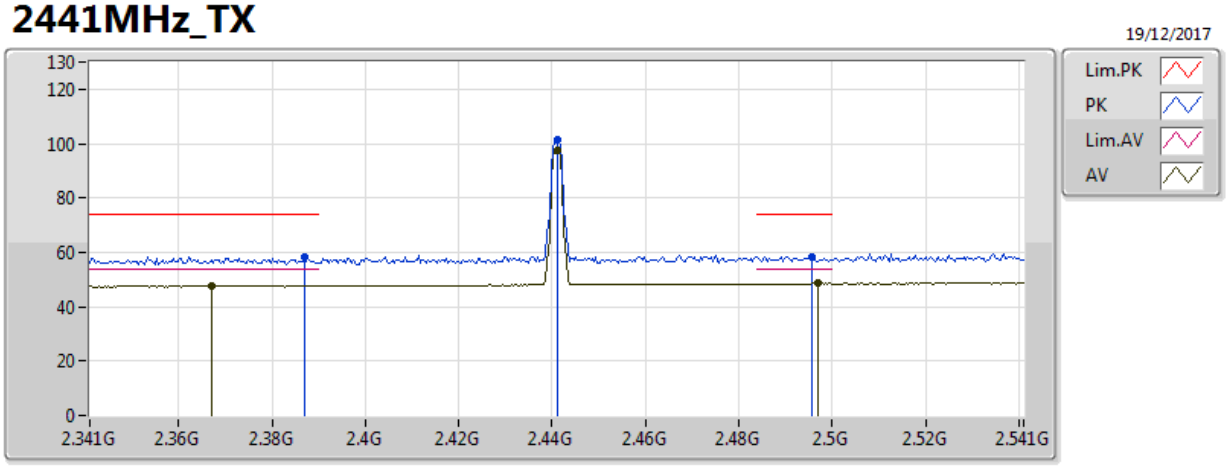
2441MHz_TX



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	2.379G	47.62	54.00	-6.38	32.68	3	Vertical	200	3.27	-	14.94	26.96	5.72	-
AV	2.441G	97.91	Inf	-Inf	32.92	3	Vertical	200	3.27	-	64.98	27.13	5.79	-
AV	2.497G	48.53	54.00	-5.47	33.15	3	Vertical	200	3.27	-	15.38	27.29	5.86	-
PK	2.3754G	58.83	74.00	-15.17	32.66	3	Vertical	200	3.27	-	26.17	26.95	5.71	-
PK	2.441G	101.42	Inf	-Inf	32.92	3	Vertical	200	3.27	-	68.49	27.13	5.79	-
PK	2.4958G	58.36	74.00	-15.64	33.14	3	Vertical	200	3.27	-	25.22	27.29	5.85	-

BT-EDR(3Mbps)

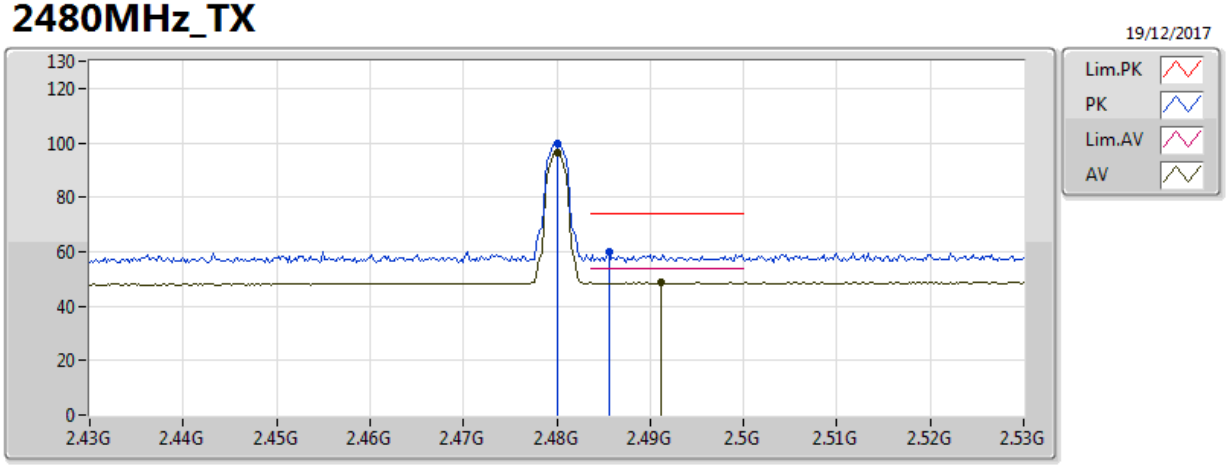
2441MHz_TX



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	2.367G	47.67	54.00	-6.33	32.63	3	Horizontal	315	3.49	-	15.04	26.93	5.70	-
AV	2.441G	97.71	Inf	-Inf	32.92	3	Horizontal	315	3.49	-	64.78	27.13	5.79	-
AV	2.497G	48.54	54.00	-5.46	33.15	3	Horizontal	315	3.49	-	15.40	27.29	5.86	-
PK	2.387G	58.31	74.00	-15.69	32.71	3	Horizontal	315	3.49	-	25.60	26.98	5.73	-
PK	2.441G	101.29	Inf	-Inf	32.92	3	Horizontal	315	3.49	-	68.36	27.13	5.79	-
PK	2.4958G	58.54	74.00	-15.46	33.14	3	Horizontal	315	3.49	-	25.40	27.29	5.85	-

BT-EDR(3Mbps)

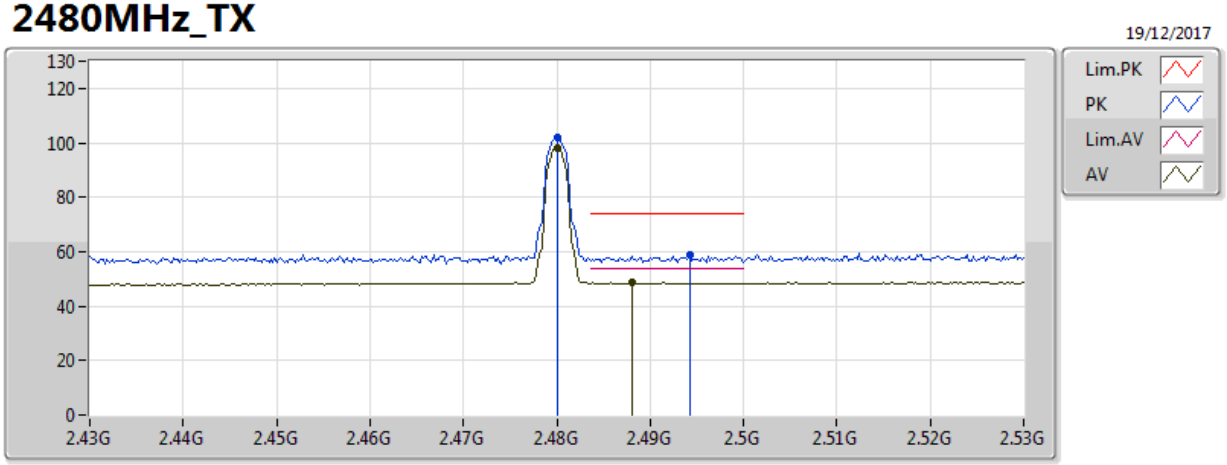
2480MHz_TX



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	2.48G	96.26	Inf	-Inf	33.08	3	Vertical	200	3.49	-	63.18	27.24	5.84	-
AV	2.4912G	48.54	54.00	-5.46	33.12	3	Vertical	200	3.49	-	15.42	27.28	5.85	-
PK	2.48G	100.02	Inf	-Inf	33.08	3	Vertical	200	3.49	-	66.94	27.24	5.84	-
PK	2.4856G	59.92	74.00	-14.08	33.10	3	Vertical	200	3.49	-	26.82	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	2.48G	98.16	Inf	-Inf	33.08	3	Horizontal	309	3.33	-	65.08	27.24	5.84	-
AV	2.488G	48.52	54.00	-5.48	33.11	3	Horizontal	309	3.33	-	15.40	27.27	5.85	-
PK	2.48G	101.90	Inf	-Inf	33.08	3	Horizontal	309	3.33	-	68.82	27.24	5.84	-
PK	2.4942G	58.88	74.00	-15.12	33.14	3	Horizontal	309	3.33	-	25.74	27.28	5.85	-

Summary

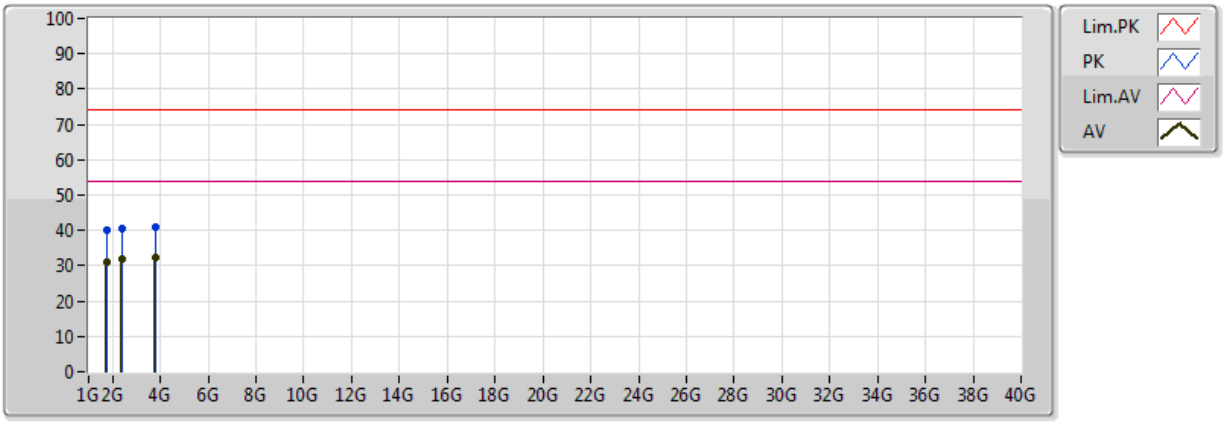
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
Mode 1	Pass	AV	3.774G	32.47	54.00	-21.53	0.33	3	Vertical	360	1.00	-
Mode 2	Pass	AV	3.861G	36.85	54.00	-17.15	0.66	3	Horizontal	0	1.00	-

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
Mode 1	Pass	AV	1.667G	31.10	54.00	-22.90	-4.84	3	Horizontal	0	1.00	-
Mode 1	Pass	AV	2.387G	31.27	54.00	-22.73	-2.48	3	Horizontal	0	1.00	-
Mode 1	Pass	AV	3.337G	31.36	54.00	-22.64	-0.63	3	Horizontal	0	1.00	-
Mode 1	Pass	PK	1.667G	40.12	74.00	-33.88	-4.84	3	Horizontal	0	1.00	-
Mode 1	Pass	PK	2.387G	39.64	74.00	-34.36	-2.48	3	Horizontal	0	1.00	-
Mode 1	Pass	PK	3.337G	40.34	74.00	-33.66	-0.63	3	Horizontal	0	1.00	-
Mode 1	Pass	AV	1.745G	30.88	54.00	-23.12	-4.61	3	Vertical	360	1.00	-
Mode 1	Pass	AV	2.38G	32.05	54.00	-21.95	-2.50	3	Vertical	360	1.00	-
Mode 1	Pass	AV	3.774G	32.47	54.00	-21.53	0.33	3	Vertical	360	1.00	-
Mode 1	Pass	PK	1.745G	39.88	74.00	-34.12	-4.61	3	Vertical	360	1.00	-
Mode 1	Pass	PK	2.38G	40.67	74.00	-33.33	-2.50	3	Vertical	360	1.00	-
Mode 1	Pass	PK	3.774G	40.80	74.00	-33.12	0.33	3	Vertical	360	1.00	-
Mode 2	Pass	AV	1.227G	29.38	54.00	-24.62	-6.79	3	Horizontal	0	1.00	
Mode 2	Pass	AV	2.552G	32.56	54.00	-21.44	-1.91	3	Horizontal	0	1.00	
Mode 2	Pass	AV	3.861G	36.85	54.00	-17.15	0.66	3	Horizontal	0	1.00	
Mode 2	Pass	PK	1.227G	38.48	74.00	-35.52	-6.79	3	Horizontal	0	1.00	
Mode 2	Pass	PK	2.552G	41.15	74.00	-32.85	-1.91	3	Horizontal	0	1.00	
Mode 2	Pass	PK	3.861G	41.21	74.00	-32.79	0.66	3	Horizontal	0	1.00	
Mode 2	Pass	AV	1.174G	28.15	54.00	-25.85	-7.07	3	Vertical	360	1.00	
Mode 2	Pass	AV	2.447G	30.20	54.00	-23.80	-2.26	3	Vertical	360	1.00	
Mode 2	Pass	AV	3.881G	32.84	54.00	-21.16	0.73	3	Vertical	360	1.00	
Mode 2	Pass	PK	1.174G	37.55	74.00	-36.45	-7.07	3	Vertical	360	1.00	
Mode 2	Pass	PK	2.447G	38.31	74.00	-35.69	-2.26	3	Vertical	360	1.00	
Mode 2	Pass	PK	3.881G	41.74	74.00	-32.26	0.73	3	Vertical	360	1.00	

Radiation-above 1GHz_Mode 1

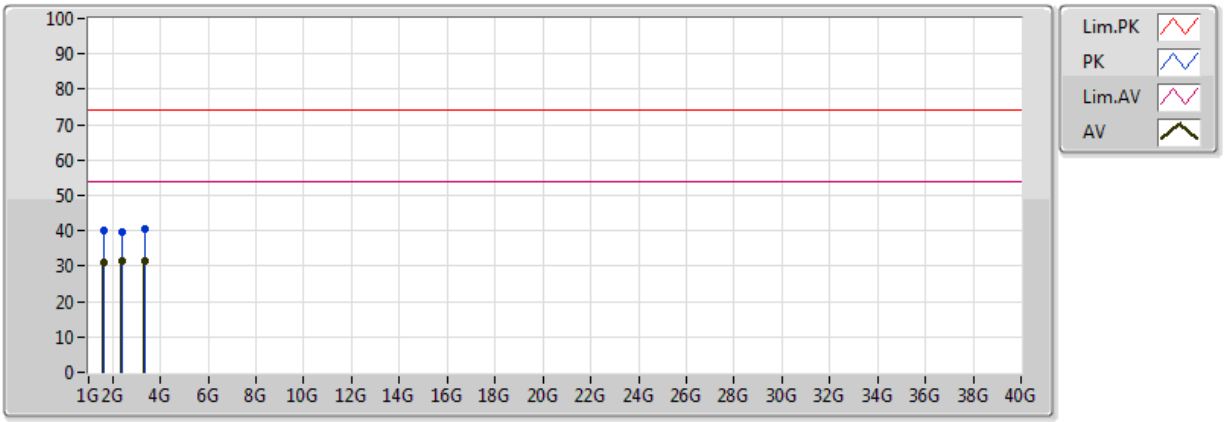
31/01/2018



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	1.745G	30.88	54.00	-23.12	-4.61	3	Vertical	360	1.00	-	35.49	25.64	4.91	35.16
AV	2.38G	32.05	54.00	-21.95	-2.50	3	Vertical	360	1.00	-	34.55	26.96	5.72	35.18
AV	3.774G	32.47	54.00	-21.53	0.33	3	Vertical	360	1.00	-	32.14	29.15	6.44	35.26
PK	1.745G	39.88	74.00	-34.12	-4.61	3	Vertical	360	1.00	-	44.49	25.64	4.91	35.16
PK	2.38G	40.67	74.00	-33.33	-2.50	3	Vertical	360	1.00	-	43.17	26.96	5.72	35.18
PK	3.774G	40.88	74.00	-33.12	0.33	3	Vertical	360	1.00	-	40.55	29.15	6.44	35.26

Radiation-above 1GHz_Mode 1

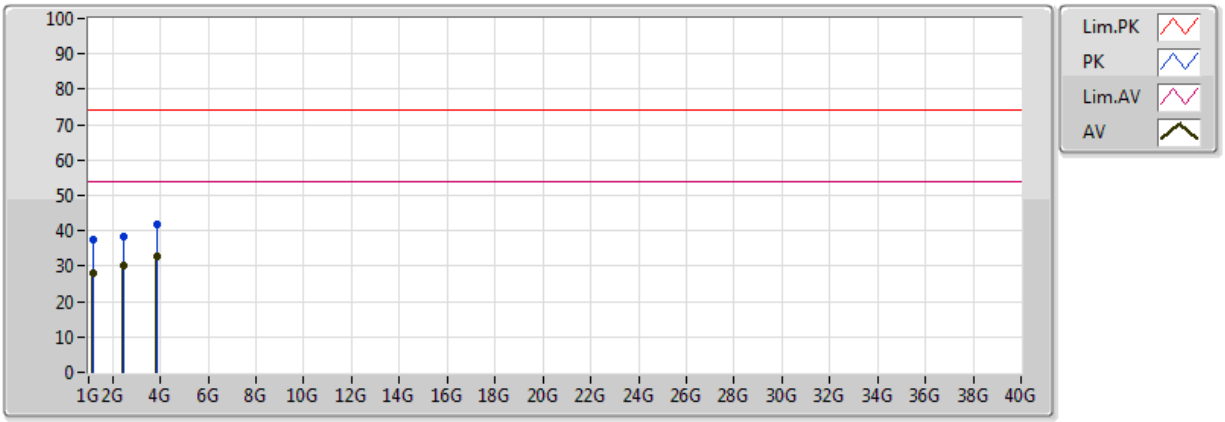
31/01/2018



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	1.667G	31.10	54.00	-22.90	-4.84	3	Horizontal	0	1.00	-	35.94	25.57	4.79	35.20
AV	2.387G	31.27	54.00	-22.73	-2.48	3	Horizontal	0	1.00	-	33.75	26.98	5.73	35.19
AV	3.337G	31.36	54.00	-22.64	-0.63	3	Horizontal	0	1.00	-	31.99	28.60	6.09	35.33
PK	1.667G	40.12	74.00	-33.88	-4.84	3	Horizontal	0	1.00	-	44.96	25.57	4.79	35.20
PK	2.387G	39.64	74.00	-34.36	-2.48	3	Horizontal	0	1.00	-	42.12	26.98	5.73	35.19
PK	3.337G	40.34	74.00	-33.66	-0.63	3	Horizontal	0	1.00	-	40.97	28.60	6.09	35.33

Radiation-above 1GHz_Mode 2

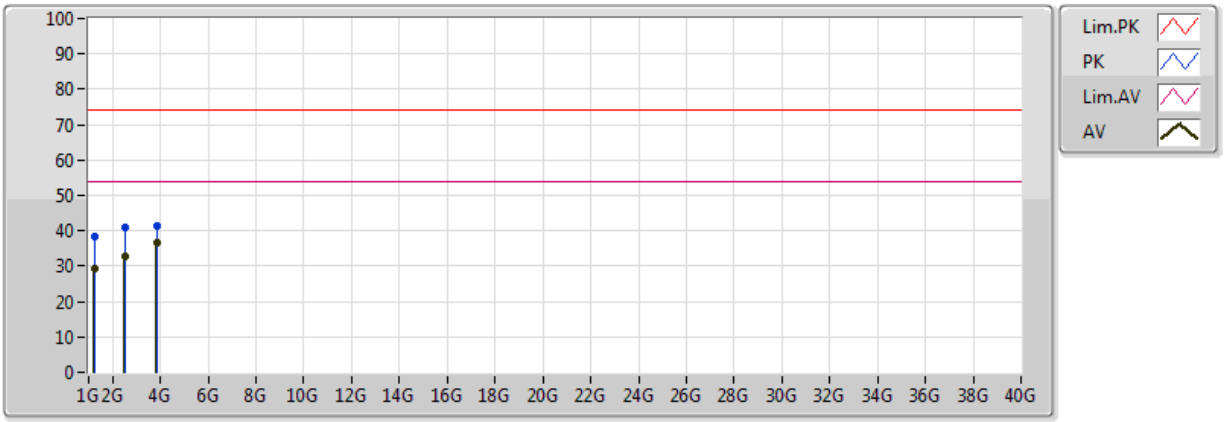
31/01/2018



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	1.174G	28.15	54.00	-25.85	-7.07	3	Vertical	360	1.00	-	35.22	24.75	4.06	35.88
AV	2.447G	30.20	54.00	-23.80	-2.26	3	Vertical	360	1.00	-	32.46	27.15	5.80	35.21
AV	3.881G	32.84	54.00	-21.16	0.73	3	Vertical	360	1.00	-	32.11	29.36	6.60	35.23
PK	1.174G	37.55	74.00	-36.45	-7.07	3	Vertical	360	1.00	-	44.62	24.75	4.06	35.88
PK	2.447G	38.31	74.00	-35.69	-2.26	3	Vertical	360	1.00	-	40.57	27.15	5.80	35.21
PK	3.881G	41.74	74.00	-32.26	0.73	3	Vertical	360	1.00	-	41.01	29.36	6.60	35.23

Radiation-above 1GHz_Mode 2

31/01/2018



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	1.227G	29.38	54.00	-24.62	-6.79	3	Horizontal	0	1.00	-	36.17	24.85	4.14	35.78
AV	2.552G	32.56	54.00	-21.44	-1.91	3	Horizontal	0	1.00	-	34.47	27.44	5.90	35.25
AV	3.861G	36.85	54.00	-17.15	0.66	3	Horizontal	0	1.00	-	36.19	29.32	6.57	35.24
PK	1.227G	38.48	74.00	-35.52	-6.79	3	Horizontal	0	1.00	-	45.27	24.85	4.14	35.78
PK	2.552G	41.15	74.00	-32.85	-1.91	3	Horizontal	0	1.00	-	43.06	27.44	5.90	35.25
PK	3.861G	41.21	74.00	-32.79	0.66	3	Horizontal	0	1.00	-	40.55	29.32	6.57	35.24

Summary

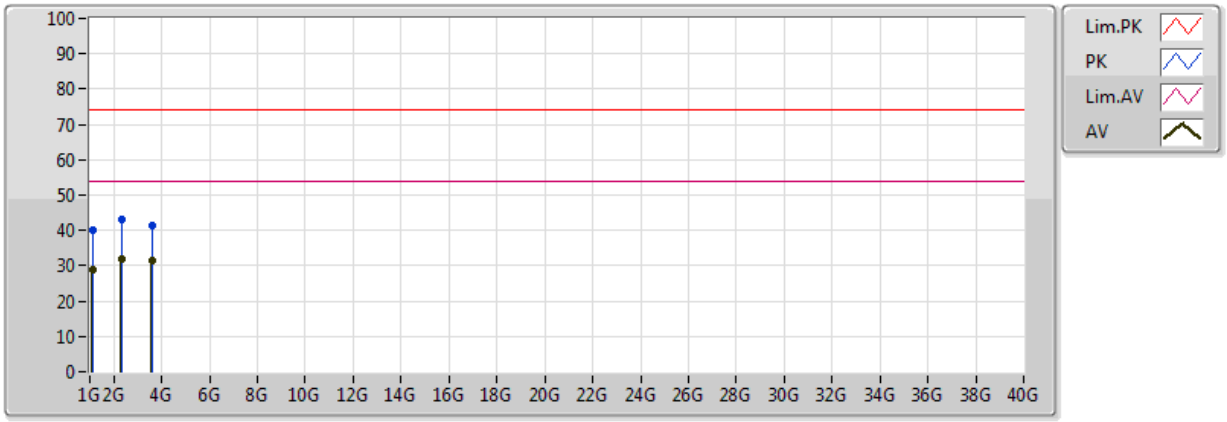
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
Mode 1.	Pass	AV	4.031G	33.02	54.00	-20.98	1.31	3	Horizontal	0	1.00	-
Mode 2.	Pass	AV	3.951G	33.18	54.00	-20.82	0.99	3	Vertical	360	1.00	-

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
Mode 1	Pass	AV	1.21G	28.59	54.00	-25.41	-6.88	3	Horizontal	0	1.00	-
Mode 1	Pass	AV	2.23G	31.04	54.00	-22.96	-3.04	3	Horizontal	0	1.00	-
Mode 1	Pass	AV	4.031G	33.02	54.00	-20.98	1.31	3	Horizontal	0	1.00	-
Mode 1	Pass	PK	1.21G	38.55	74.00	-35.45	-6.88	3	Horizontal	0	1.00	-
Mode 1	Pass	PK	2.23G	40.43	74.00	-33.57	-3.04	3	Horizontal	0	1.00	-
Mode 1	Pass	PK	4.031G	42.09	74.00	-31.91	1.31	3	Horizontal	0	1.00	-
Mode 1	Pass	AV	1.135G	28.80	54.00	-25.20	-7.28	3	Vertical	360	1.00	-
Mode 1	Pass	AV	2.307G	31.70	54.00	-22.30	-2.76	3	Vertical	360	1.00	-
Mode 1	Pass	AV	3.595G	31.39	54.00	-22.61	-0.34	3	Vertical	360	1.00	-
Mode 1	Pass	PK	1.135G	40.10	74.00	-33.90	-7.28	3	Vertical	360	1.00	-
Mode 1	Pass	PK	2.307G	43.17	74.00	-30.83	-2.76	3	Vertical	360	1.00	-
Mode 1	Pass	PK	3.595G	41.55	74.00	-32.45	-0.34	3	Vertical	360	1.00	-
Mode 2	Pass	AV	1.165G	29.57	54.00	-24.43	-7.12	3	Horizontal	0	1.00	
Mode 2	Pass	AV	2.28G	31.97	54.00	-22.03	-2.86	3	Horizontal	0	1.00	
Mode 2	Pass	AV	3.695G	32.27	54.00	-21.73	0.03	3	Horizontal	0	1.00	
Mode 2	Pass	PK	1.165G	38.58	74.00	-35.42	-7.12	3	Horizontal	0	1.00	
Mode 2	Pass	PK	2.28G	40.74	74.00	-33.26	-2.86	3	Horizontal	0	1.00	
Mode 2	Pass	PK	3.695G	40.79	74.00	-33.21	0.03	3	Horizontal	0	1.00	
Mode 2	Pass	AV	1.189G	29.13	54.00	-24.87	-6.99	3	Vertical	360	1.00	
Mode 2	Pass	AV	2.427G	30.53	54.00	-23.47	-2.33	3	Vertical	360	1.00	
Mode 2	Pass	AV	3.951G	33.18	54.00	-20.82	0.99	3	Vertical	360	1.00	
Mode 2	Pass	PK	1.189G	38.74	74.00	-35.26	-6.99	3	Vertical	360	1.00	
Mode 2	Pass	PK	2.427G	38.54	74.00	-35.46	-2.33	3	Vertical	360	1.00	
Mode 2	Pass	PK	3.951G	42.60	74.00	-31.40	0.99	3	Vertical	360	1.00	

Radiation-above 1GHz_Mode 1

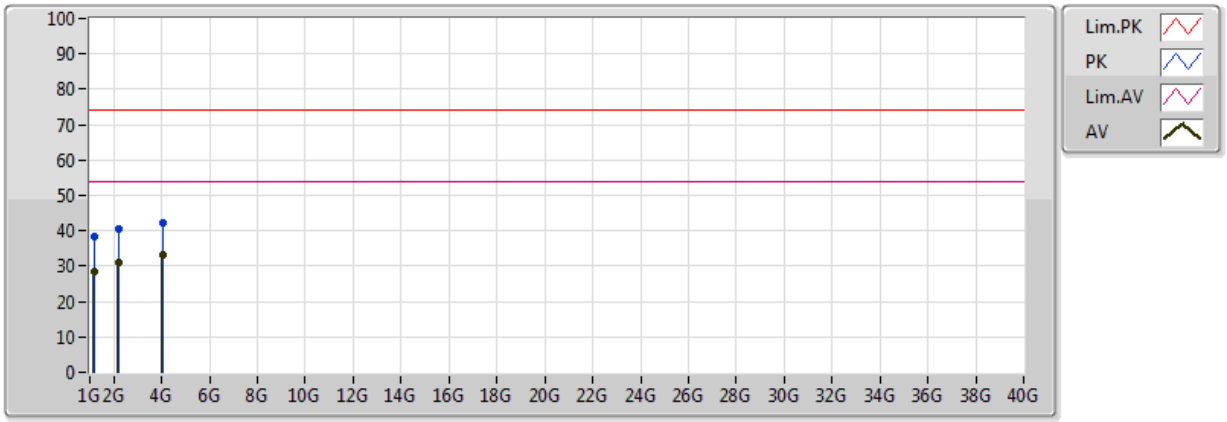
24/01/2018



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	1.135G	28.80	54.00	-25.20	-7.28	3	Vertical	360	1.00	-	36.08	24.67	4.00	35.95
AV	2.307G	31.70	54.00	-22.30	-2.76	3	Vertical	360	1.00	-	34.46	26.76	5.64	35.16
AV	3.595G	31.39	54.00	-22.61	-0.34	3	Vertical	360	1.00	-	31.73	28.79	6.16	35.29
PK	1.135G	40.10	74.00	-33.90	-7.28	3	Vertical	360	1.00	-	47.38	24.67	4.00	35.95
PK	2.307G	43.17	74.00	-30.83	-2.76	3	Vertical	360	1.00	-	45.94	26.76	5.64	35.16
PK	3.595G	41.55	74.00	-32.45	-0.34	3	Vertical	360	1.00	-	41.89	28.79	6.16	35.29

Radiation-above 1GHz_Mode 1

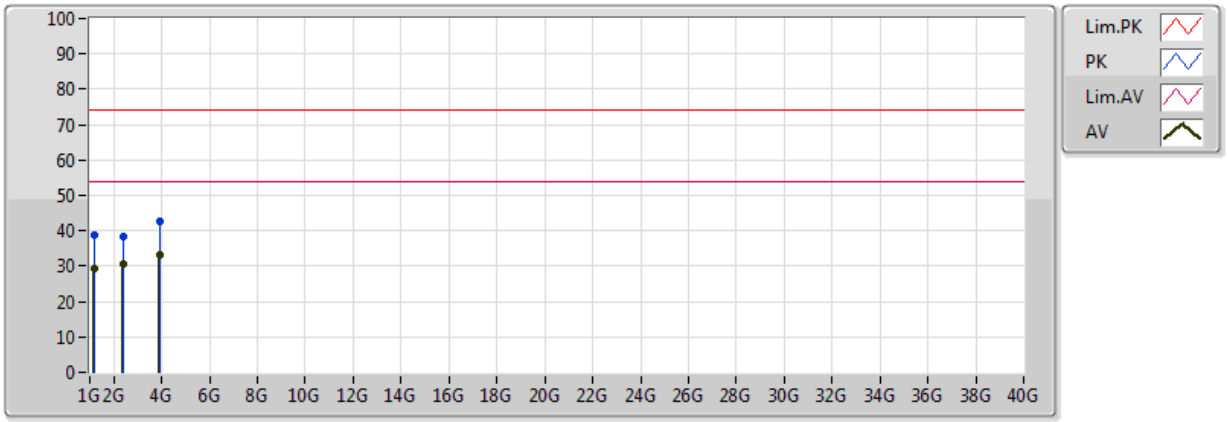
24/01/2018



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	1.21G	28.59	54.00	-25.41	-6.88	3	Horizontal	0	1.00	-	35.47	24.82	4.11	35.81
AV	2.23G	31.04	54.00	-22.96	-3.04	3	Horizontal	0	1.00	-	34.08	26.54	5.55	35.13
AV	4.031G	33.02	54.00	-20.98	1.31	3	Horizontal	0	1.00	-	31.71	29.67	6.85	35.20
PK	1.21G	38.55	74.00	-35.45	-6.88	3	Horizontal	0	1.00	-	45.43	24.82	4.11	35.81
PK	2.23G	40.43	74.00	-33.57	-3.04	3	Horizontal	0	1.00	-	43.47	26.54	5.55	35.13
PK	4.031G	42.09	74.00	-31.91	1.31	3	Horizontal	0	1.00	-	40.77	29.67	6.85	35.20

Radiation-above 1GHz_Mode 2

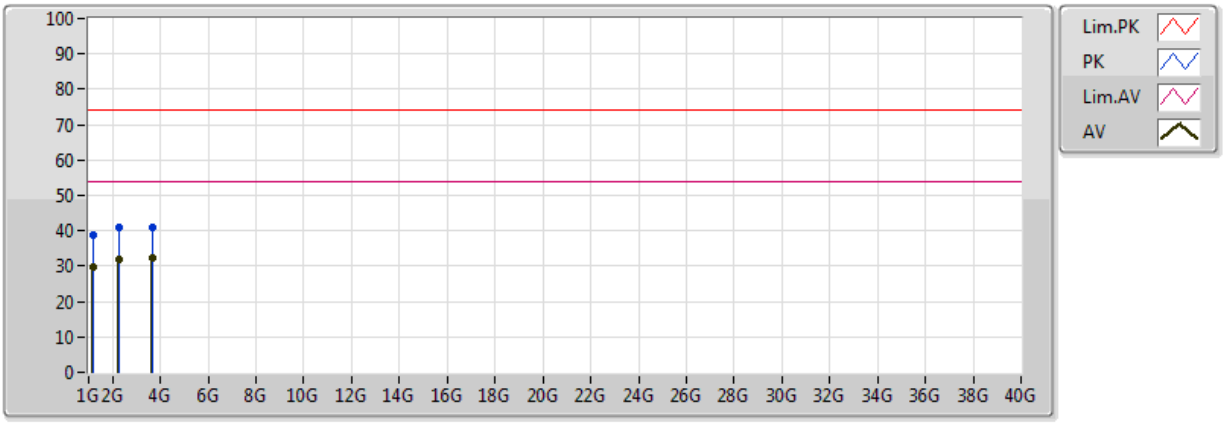
24/01/2018



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	1.189G	29.13	54.00	-24.87	-6.99	3	Vertical	360	1.00	-	36.12	24.78	4.08	35.85
AV	2.427G	30.53	54.00	-23.47	-2.33	3	Vertical	360	1.00	-	32.86	27.10	5.77	35.20
AV	3.951G	33.18	54.00	-20.82	0.99	3	Vertical	360	1.00	-	32.19	29.50	6.71	35.22
PK	1.189G	38.74	74.00	-35.26	-6.99	3	Vertical	360	1.00	-	45.73	24.78	4.08	35.85
PK	2.427G	38.54	74.00	-35.46	-2.33	3	Vertical	360	1.00	-	40.87	27.10	5.77	35.20
PK	3.951G	42.60	74.00	-31.40	0.99	3	Vertical	360	1.00	-	41.61	29.50	6.71	35.22

Radiation-above 1GHz_Mode 2

24/01/2018



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	1.165G	29.57	54.00	-24.43	-7.12	3	Horizontal	0	1.00	-	36.69	24.73	4.05	35.90
AV	2.28G	31.97	54.00	-22.03	-2.86	3	Horizontal	0	1.00	-	34.84	26.68	5.61	35.15
AV	3.695G	32.27	54.00	-21.73	0.03	3	Horizontal	0	1.00	-	32.24	28.99	6.31	35.27
PK	1.165G	38.58	74.00	-35.42	-7.12	3	Horizontal	0	1.00	-	45.70	24.73	4.05	35.90
PK	2.28G	40.74	74.00	-33.26	-2.86	3	Horizontal	0	1.00	-	43.60	26.68	5.61	35.15
PK	3.695G	40.79	74.00	-33.21	0.03	3	Horizontal	0	1.00	-	40.75	28.99	6.31	35.27

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-
BT-BR(1Mbps)	Pass	PK	41.64M	36.56	40.00	-3.44	-9.98	3	Vertical	360	1.00	-

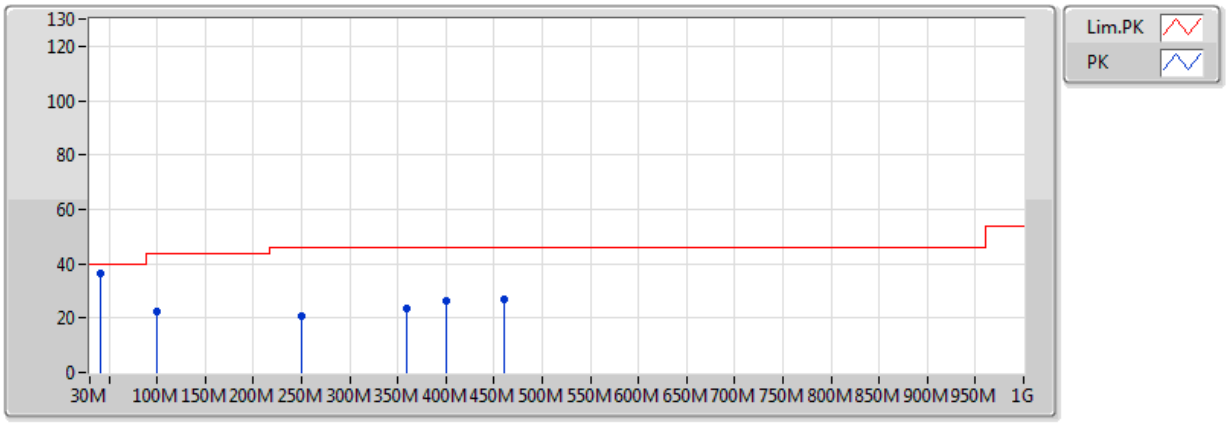
Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-BR(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-
2441MHz	Pass	PK	41.64M	36.22	40.00	-3.78	-9.98	3	Horizontal	0	1.00	-
2441MHz	Pass	PK	249.22M	27.90	46.00	-18.10	-7.65	3	Horizontal	0	1.00	-
2441MHz	Pass	PK	336.52M	28.52	46.00	-17.48	-5.83	3	Horizontal	0	1.00	-
2441MHz	Pass	PK	359.8M	32.31	46.00	-13.69	-5.05	3	Horizontal	0	1.00	-
2441MHz	Pass	PK	460.68M	28.23	46.00	-17.77	-2.71	3	Horizontal	0	1.00	-
2441MHz	Pass	PK	658.56M	30.04	46.00	-15.96	-0.44	3	Horizontal	0	1.00	-
2441MHz	Pass	PK	41.64M	36.56	40.00	-3.44	-9.98	3	Vertical	360	1.00	-
2441MHz	Pass	PK	99.84M	22.27	43.50	-21.23	-10.40	3	Vertical	360	1.00	-
2441MHz	Pass	PK	249.22M	20.77	46.00	-25.23	-7.65	3	Vertical	360	1.00	-
2441MHz	Pass	PK	359.8M	23.50	46.00	-22.50	-5.05	3	Vertical	360	1.00	-
2441MHz	Pass	PK	400.54M	26.40	46.00	-19.60	-3.85	3	Vertical	360	1.00	-
2441MHz	Pass	PK	460.68M	27.12	46.00	-18.88	-2.71	3	Vertical	360	1.00	-

BT-BR(1Mbps)RX

2441MHz_PoE

28/12/2017

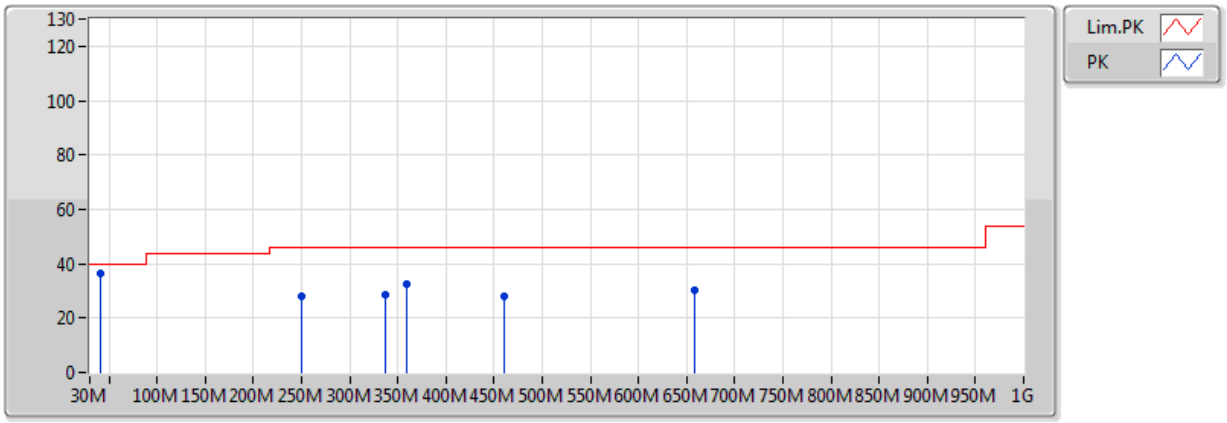


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	41.64M	36.56	40.00	-3.44	-9.98	3	Vertical	360	1.00	-	46.54	16.76	0.94	27.68
PK	99.84M	22.27	43.50	-21.23	-10.40	3	Vertical	360	1.00	-	32.67	15.97	1.44	27.81
PK	249.22M	20.77	46.00	-25.23	-7.65	3	Vertical	360	1.00	-	28.42	17.47	2.20	27.32
PK	359.8M	23.50	46.00	-22.50	-5.05	3	Vertical	360	1.00	-	28.55	19.93	2.68	27.66
PK	400.54M	26.40	46.00	-19.60	-3.85	3	Vertical	360	1.00	-	30.25	21.11	3.00	27.96
PK	460.68M	27.12	46.00	-18.88	-2.71	3	Vertical	360	1.00	-	29.83	22.29	3.28	28.28

BT-BR(1Mbps)RX

2441MHz_PoE

28/12/2017



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	41.64M	36.22	40.00	-3.78	-9.98	3	Horizontal	0	1.00	-	46.20	16.76	0.94	27.68
PK	249.22M	27.90	46.00	-18.10	-7.65	3	Horizontal	0	1.00	-	35.55	17.47	2.20	27.32
PK	336.52M	28.52	46.00	-17.48	-5.83	3	Horizontal	0	1.00	-	34.35	19.07	2.58	27.48
PK	359.8M	32.31	46.00	-13.69	-5.05	3	Horizontal	0	1.00	-	37.36	19.93	2.68	27.66
PK	460.68M	28.23	46.00	-17.77	-2.71	3	Horizontal	0	1.00	-	30.94	22.29	3.28	28.28
PK	658.56M	30.04	46.00	-15.96	-0.44	3	Horizontal	0	1.00	-	30.48	24.21	3.81	28.45

Summary

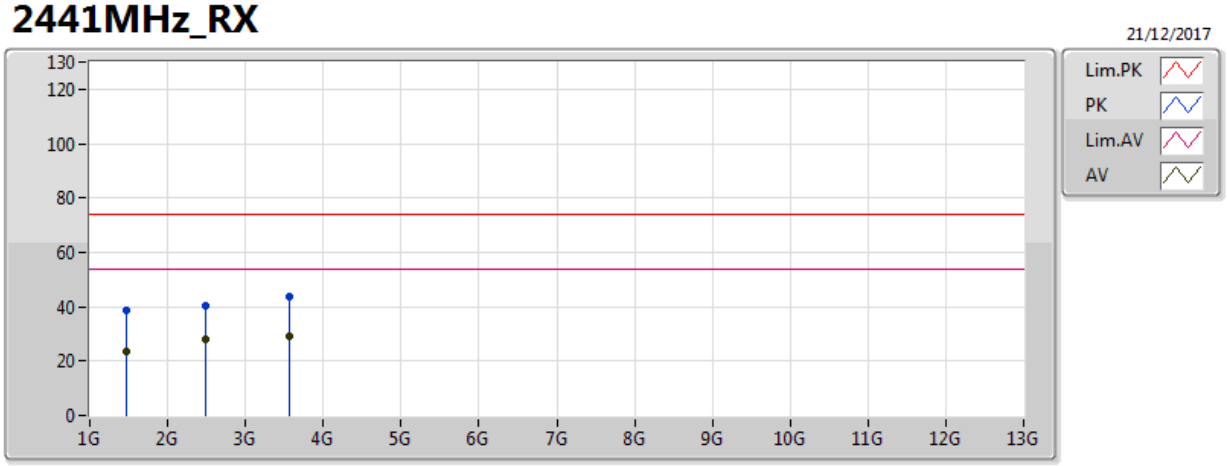
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-
BT-BR(1Mbps)	Pass	AV	3.56G	28.93	54.00	-25.07	-1.31	3	Vertical	157	1.22	-

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-BR(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-
2441MHz	Pass	AV	2.38G	26.60	54.00	-27.40	-3.67	3	Vertical	124	2.05	-
2441MHz	Pass	AV	2.48G	27.92	54.00	-26.08	-3.36	3	Vertical	8	1.45	-
2441MHz	Pass	PK	2.38G	39.87	74.00	-34.13	-3.67	3	Vertical	124	2.05	-
2441MHz	Pass	PK	2.48G	40.49	74.00	-33.51	-3.36	3	Vertical	8	1.45	-
2441MHz	Pass	AV	1.464G	23.41	54.00	-30.59	-6.42	3	Vertical	264	2.47	-
2441MHz	Pass	AV	1.73G	24.04	54.00	-29.96	-5.59	3	Vertical	143	1.68	-
2441MHz	Pass	AV	3.28G	28.16	54.00	-25.84	-1.69	3	Vertical	205	2.50	-
2441MHz	Pass	AV	3.56G	28.93	54.00	-25.07	-1.31	3	Vertical	157	1.22	-
2441MHz	Pass	PK	1.464G	38.88	74.00	-35.12	-6.42	3	Vertical	264	2.47	-
2441MHz	Pass	PK	1.73G	38.69	74.00	-35.31	-5.59	3	Vertical	143	1.68	-
2441MHz	Pass	PK	3.28G	43.16	74.00	-30.84	-1.69	3	Vertical	205	2.50	-
2441MHz	Pass	PK	3.56G	43.97	74.00	-30.03	-1.31	3	Vertical	157	1.22	-

BT-BR(1Mbps)RX

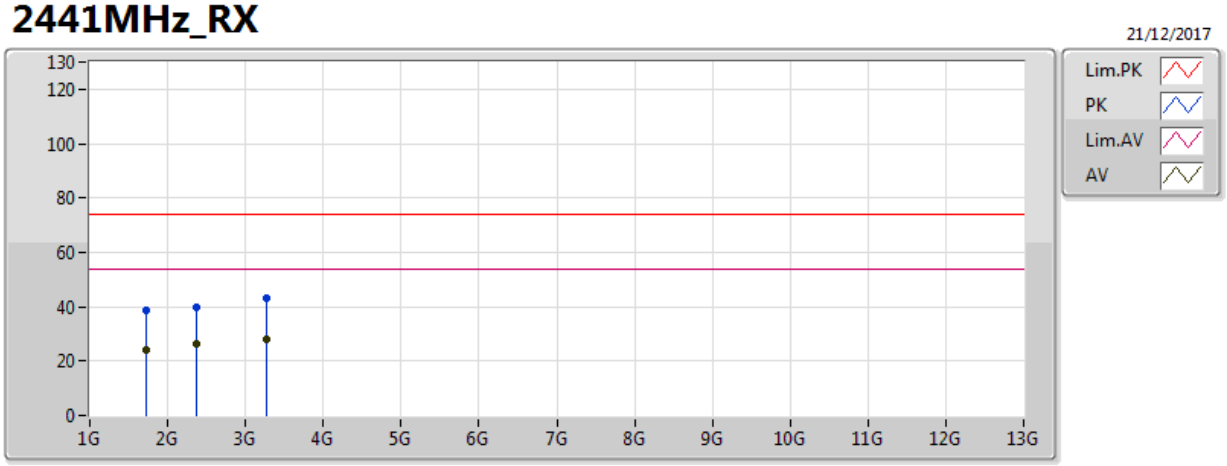
2441MHz_RX



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	1.464G	23.41	54.00	-30.59	-6.42	3	Vertical	264	2.47	-	29.83	25.41	2.77	34.60
AV	2.48G	27.92	54.00	-26.08	-3.36	3	Vertical	8	1.45	-	31.28	27.55	3.71	34.62
AV	3.56G	28.93	54.00	-25.07	-1.31	3	Vertical	157	1.22	-	30.24	28.81	4.58	34.69
PK	1.464G	38.88	74.00	-35.12	-6.42	3	Vertical	264	2.47	-	45.30	25.41	2.77	34.60
PK	2.48G	40.49	74.00	-33.51	-3.36	3	Vertical	8	1.45	-	43.85	27.55	3.71	34.62
PK	3.56G	43.97	74.00	-30.03	-1.31	3	Vertical	157	1.22	-	45.28	28.81	4.58	34.69

BT-BR(1Mbps)RX

2441MHz_RX



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	1.73G	24.04	54.00	-29.96	-5.59	3	Horizontal	143	1.68	-	29.63	25.87	3.01	34.47
AV	2.38G	26.60	54.00	-27.40	-3.67	3	Horizontal	124	2.05	-	30.27	27.29	3.61	34.57
AV	3.28G	28.16	54.00	-25.84	-1.69	3	Horizontal	205	2.50	-	29.85	28.70	4.32	34.71
PK	1.73G	38.69	74.00	-35.31	-5.59	3	Horizontal	143	1.68	-	44.28	25.87	3.01	34.47
PK	2.38G	39.87	74.00	-34.13	-3.67	3	Horizontal	124	2.05	-	43.54	27.29	3.61	34.57
PK	3.28G	43.16	74.00	-30.84	-1.69	3	Horizontal	205	2.50	-	44.85	28.70	4.32	34.71