FCC Test Report

FCC ID	:	**UDX-60082010**
Equipment	:	**Network Camera**
Brand Name	:	**CISCO**
Model Name	:	**MV32-HW**
Applicant/ Manufacturer	:	**Cisco Systems 170 West Tasman Drive San Jose, California. 95134 United States**
Standard	:	**47 CFR FCC Part 15.247**

The product was received on May 24, 2018, and testing was started from Oct. 24, 2018 and completed on Oct. 26, 2018. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

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

Approved by: Allen Lin

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

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

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History of this test report

Report No.	Version	Description	Issued Date
FR851627AD	01	Initial issue of report	Dec. 14, 2018

Summary of Test Result

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

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and explanations:
None

Reviewed by: Sam Tsai

Report Producer: Michelle Tsai

1 General Description

1.1 Information

1.1.1 RF General Information

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

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

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

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector
1	ARISTOTLE	RFA-25-AP628-P1-U	PIFA Antenna	I-PEX
2	ARISTOTLE	RFA-25-AP628-P2-U	Dipole Antenna	I-PEX

Ant.	Gain (dBi)		
	2.4G	5G	BT
1	-2.22	-1.69	-2.22
2	-1.4	-1.36	-

For 2.4 GHz function:

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

The EUT support diversity function, Ant. 1 or Ant. 2 can be used as transmitting/receiving antenna.

For 5 GHz function:

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

The EUT support diversity function, Ant. 1 or Ant. 2 can be used as transmitting/receiving antenna.

For Bluetooth function:

For Bluetooth mode (1TX/1RX)

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

1.1.3 EUT Information

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

1.1.4 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
BT-BR(1Mbps)	0.754	1.226	2.887m	1k
BT-EDR(2Mbps)	0.756	1.215	2.888m	1k
BT-EDR(3Mbps)	0.785	1.051	2.891m	1k

1.2 Testing Applied Standards

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

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

1.3 Testing Location Information

Testing Location			
☒	HWA YA	ADD : No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)	
		TEL : 886-3-327-3456	FAX : 886-3-327-0973
Test site Designation No. TW1190 with FCC.			
☐	JHUBEI	ADD : No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County, Taiwan (R.O.C.)	
		TEL : 886-3-656-9065	FAX : 886-3-656-9085
Test site Designation No. TW0006 with FCC.			

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH06-HY	Dexter	25°C / 59%	24/Oct/2018
Radiated	03CH09-HY	Andy	23.9°C / 61%	24/Oct/2018
AC Conduction	CO04-HY	Andy	23.7°C / 61%	26/Oct/2018

1.4 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	3.6 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	3.0 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.9 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.3 dB	Confidence levels of 95%
Temperature	0.7 °C	Confidence levels of 95%
Humidity	4 %	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Condition

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

2.2 Test Channel Mode

Test Software Version	QRCT V3.0.93.0

Mode	PowerSetting
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
1	PoE Mode_PIFA Antenna

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

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

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Test Condition	Radiated measurement
Operating Mode	Normal Link
1	Bluetooth+WLAN 2.4GHz
2	Bluetooth+WLAN 5GHz
Refer to Sporton Test Report No.: FA851627 for Co-location RF Exposure Evaluation and Appendix G for Radiated Emission Co-location.	

Note.
Non-AFH: DH5 Packet permit maximum 1600/ 79 / 6 = 3.37 hops per second in each channel (5 time slots RX, 1 time slot TX). So, the dwell time is the time duration of the pulse times 3.37 x 1.185 = 4 within 1.185 seconds.
AFH: DH5 Packet permit maximum 800/ 20 / 6 = 6.67 hops per second in each channel (5 time slots RX, 1 time slot TX). So, the dwell time is the time duration of the pulse times 13.33 x 8 = 106.6 within 8 seconds.
Under the above conditions, Non-AFH Mode configuration was found to be the worst case and measured during the test.

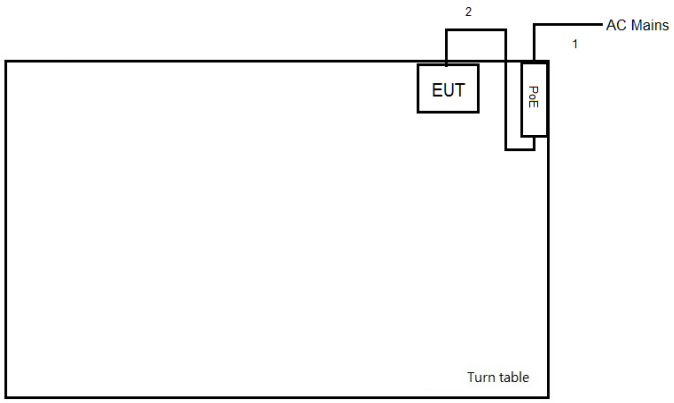
2.4 Support Equipment

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 Power Source	GW	APS-9102	N/A

Support Equipment – Radiated Emission and AC Conduction				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	PoE (Client Provide)	CISCO	MA-INJ-4	N/A

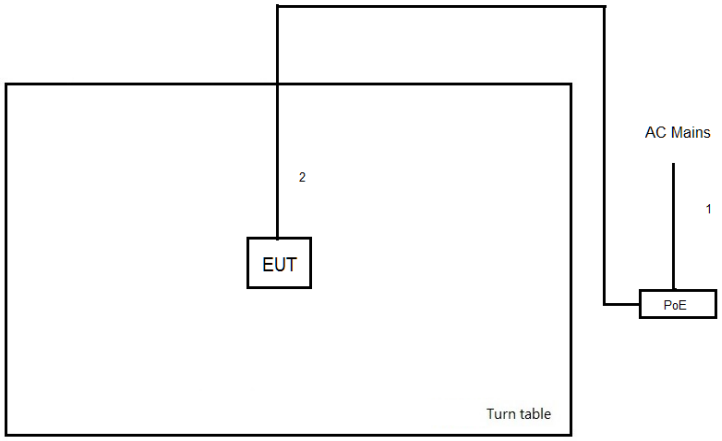
2.5 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



Item	Connection	Shielded	Length(m)	Remark
1	AC Power line	No	1.0	-
2	RJ45 Cable	No	10.0	-

Test Setup Diagram - Radiated Test



Item	Connection	Shielded	Length(m)	Remark
1	AC Power line	No	1.0	-
2	RJ45 Cable	No	10.0	-

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

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

3.1.2 Measuring Instruments

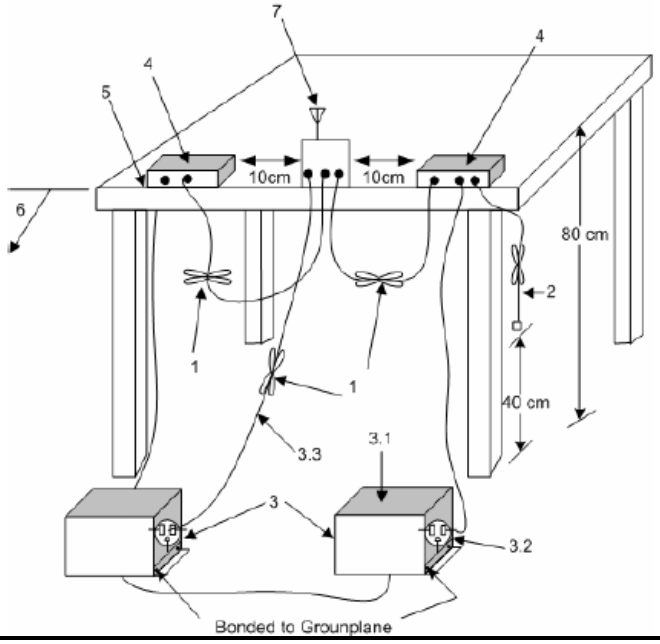
Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

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

3.1.4 Test Setup

AC Power-line Conducted Emissions



3.1.5 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 20dB Bandwidth and Carrier Frequency Separation

3.2.1 20dB Bandwidth and Carrier Frequency Separation Limit

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

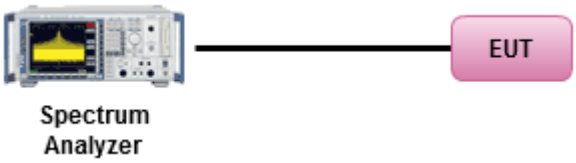
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

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

3.2.4 Test Setup

20dB Bandwidth and Carrier Frequency Separation


3.2.5 Test Result of 20dB Bandwidth

Refer as Appendix B

3.2.6 Test Result of Carrier Frequency Separation

Refer as Appendix B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

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

3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

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

3.3.4 Test Setup

Maximum Conducted Output Power (Peak Power Meter)


3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Number of Hopping Frequencies and Hopping Bandedge

3.4.1 Number of Hopping Frequencies Limit

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

3.4.2 Hopping Bandedge Limit

Refer clause 3.6.1 and clause 3.7.1

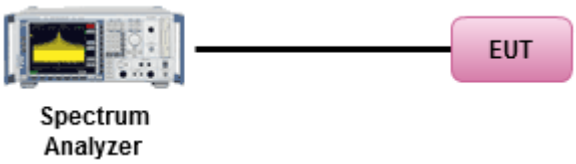
3.4.3 Measuring Instruments

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

3.4.4 Test Procedures

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

3.4.5 Test Setup

Number of Hopping Frequencies and Hopping Frequencies Bandedge


3.4.6 Test Result of Number of Hopping Frequencies

Refer as Appendix D

3.4.7 Test Result of Number of Hopping Frequencies Bandedge

Refer as Appendix D

3.5 Time of Occupancy (Dwell Time)

3.5.1 Time of Occupancy (Dwell Time) Limit

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

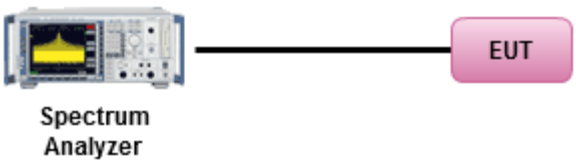
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

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

3.5.4 Test Setup

Time of Occupancy (Dwell Time)
 Spectrum Analyzer

3.5.5 Test Result of Time of Occupancy (Dwell Time)

Refer as Appendix E

3.6 Emissions in Non-restricted Frequency Bands

3.6.1 Emissions in Non-restricted Frequency Bands Limit

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

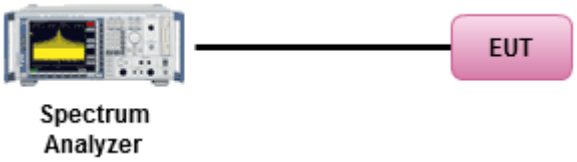
3.6.2 Measuring Instruments

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

3.6.3 Test Procedures

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

3.6.4 Test Setup

Emissions in Non-restricted Frequency Bands


3.6.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix F

3.7 Emissions in Restricted Frequency Bands

3.7.1 Emissions in Restricted Frequency Bands Limit

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

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

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

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

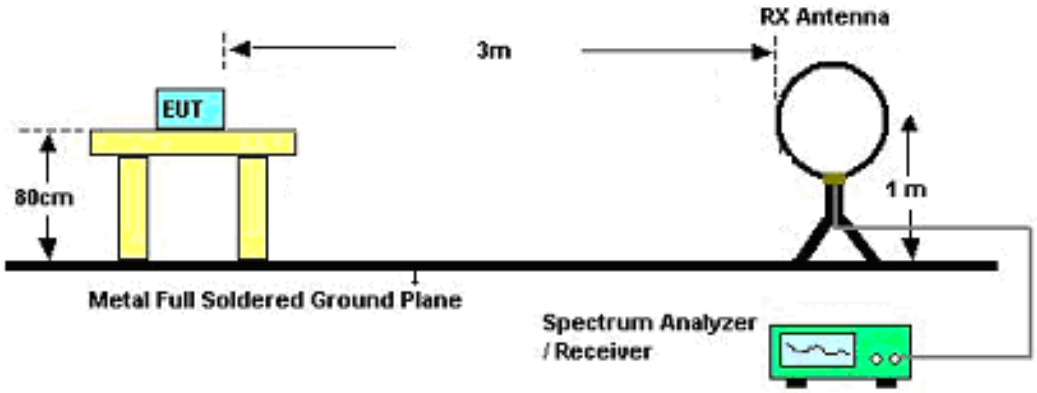
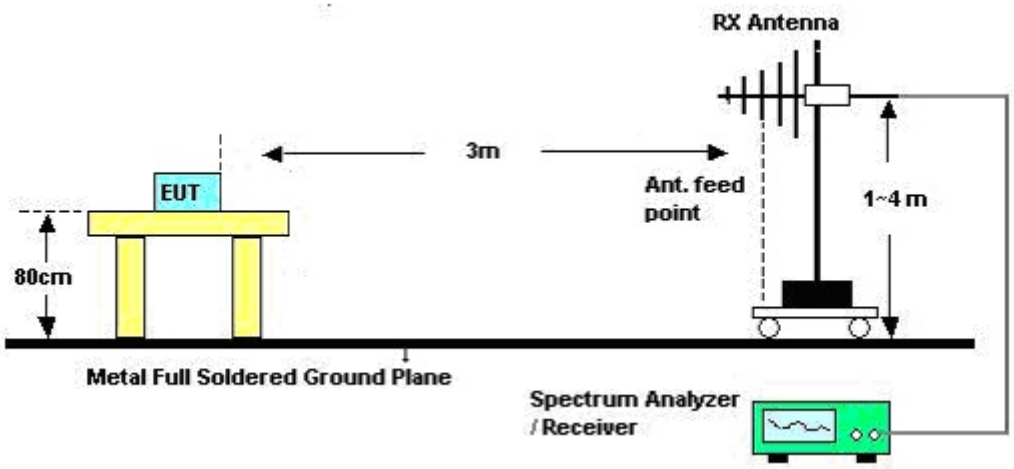
3.7.2 Measuring Instruments

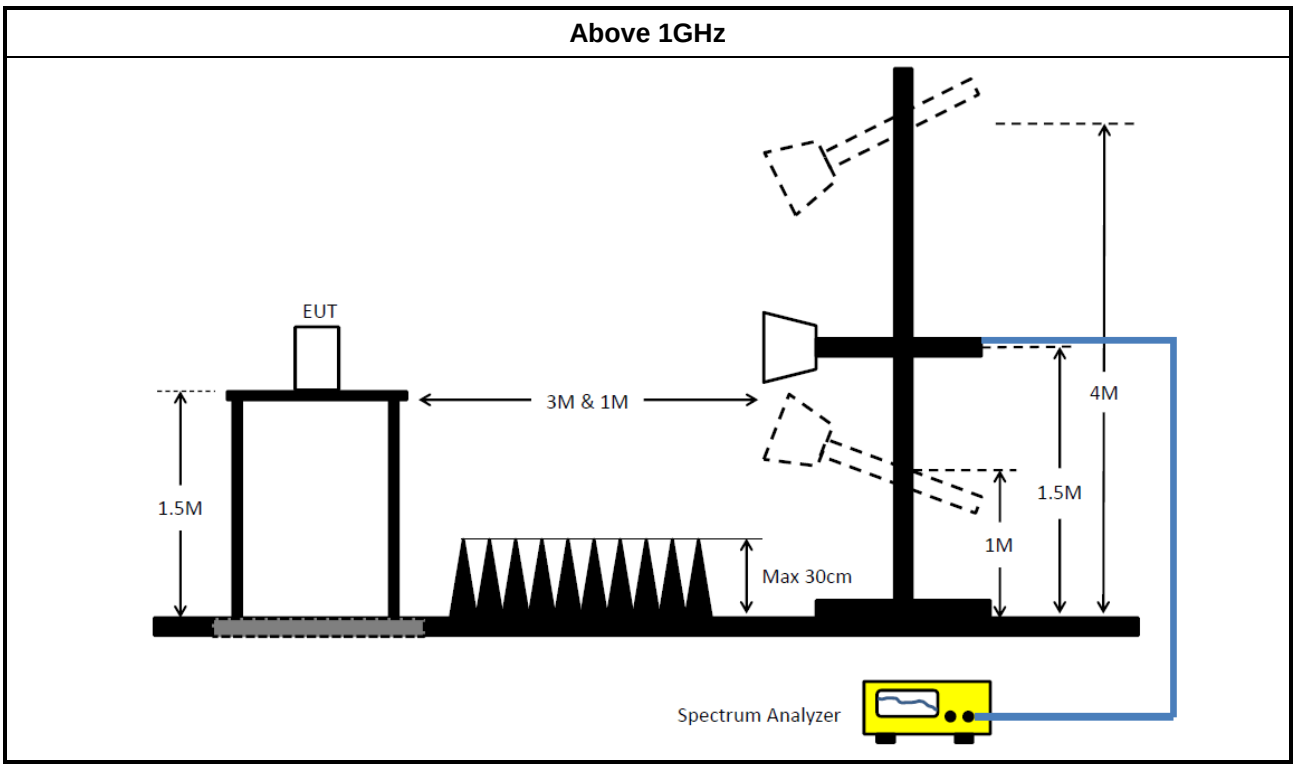
Refer a test equipment and calibration data table in this test report.

3.7.3 Test Procedures

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

3.7.4 Test Setup

Emissions in Restricted Frequency Bands
9kHz ~30MHz

30MHz~1GHz




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

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

3.7.6 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix G

4 Test Equipment and Calibration Data

Instrument for AC Conduction

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMC Receiver	R&S	ESR	102051	9KHz ~ 3.6GHz	03/May/2018	02/May/2019
LISN	R&S	ENV216	101295	9kHz ~ 30MHz	17/Nov/2017	16/Nov/2018
RF Cable-CON	MTJ	RG142	CB002-CO	9kHz ~ 200MHz	17/Sep/2018	16/Sep/2019
AC POWER	APC	AFC-11005G	F310050055	47Hz~63Hz 5~300V	NCR	NCR
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9 kHz ~ 30 MHz	12/Oct/2018	11/Oct/2019

NCR : Non-Calibration Require

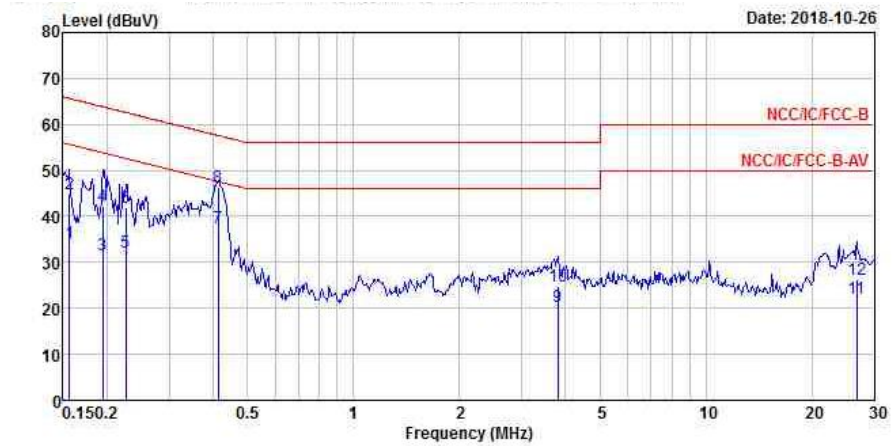
Instrument for Radiated Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	30MHz ~ 1GHz	23/Apr/2018	22/Apr/2019
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	1GHz ~ 18GHz	14/Jun/2018	13/Jun/2019
Microwave Preamplifier	Agilent	8449B	3008A02096	1GHz ~ 26.5GHz	10/May/2018	09/May/2019
Amplifier	EMC	EMC9135	980232	9KHz~1GHz	27/Apr/2018	26/Apr/2019
EXA Signal Analyzer	KEYSIGHT	N9010A	MY54200885	10Hz ~ 44GHz	31/Jul/2018	30/Jul/2019
Bilog Antenna & 5dB Attenuator	TESEQ & MTJ	CBL6111D & MTJ6102-05	35418 / 3	30MHz~1GHz	02/Oct/2018	03/Oct/2019
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA9120 D 1534	1GHz~18GHz	30/Apr/2018	29/Apr/2019
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170614	18GHz~40GHz	09/Feb/2018	08/Feb/2019
Preamplifier	MITEQ	TTA1840-35-HG	1864481	18GHz ~ 40GHz	24/Aug/2018	23/Aug/2019
Loop Antenna	TESEQ	HLA 6120	31244	9k-30MHz	29/Mar/2018	28/Mar/2019
RF Cable-R03m	Jye Bao	RG142	CB031	9kHz ~ 1GHz	1/Feb/2018	31/Jan/2019
RF Cable-high	HUBER+SUHNER	SUCOFLEX104	SN 556626/4 + 556627	1GHz ~ 40GHz	14/Mar/2018	13/Mar/2019

Instrument for Conducted Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Signal Analyzer	R&S	FSV40	101500	10Hz ~ 40GHz	18/Jul/2018	17/Jul/2019
Power Sensor	Anritsu	MA2411B	1339407	300MHz ~ 40GHz	06/Nov/2017	05/Nov/2018
Power Meter	Anritsu	ML2495A	1517010	300MHz ~ 40GHz	06/Nov/2017	05/Nov/2018
RF Cable-1.5m	HUBER+SUHNER	SUCOFLEX_104	MY12585/4	30MHz ~ 26.5GHz	26/Jan/2018	25/Jan/2019
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY10710/4	30MHz ~ 26.5GHz	26/Jan/2018	25/Jan/2019
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY10709/4	30MHz ~ 26.5GHz	26/Jan/2018	25/Jan/2019
Signal Generator	R&S	SMB100A	175727	100kHz~40GHz	26/Oct/2017	25/Oct/2018

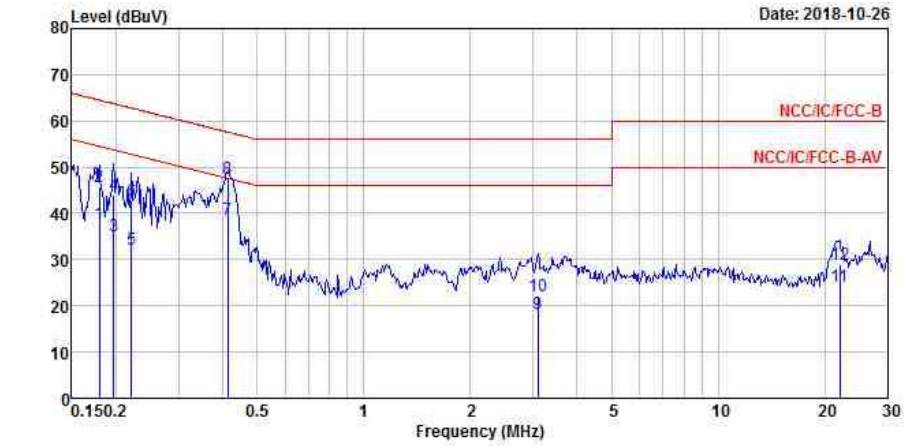
AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	Neutral
Operating Function	PoE Mode_PIFA Antenna		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.16	34.31	-21.34	55.65	24.64	9.63	0.04	Average
2	0.16	44.79	-20.86	65.65	35.12	9.63	0.04	QP
3	0.19	31.64	-22.20	53.84	22.02	9.62	0.00	Average
4	0.19	42.30	-21.54	63.84	32.68	9.62	0.00	QP
5	0.23	32.05	-20.56	52.61	22.41	9.62	0.02	Average
6	0.23	42.02	-20.59	62.61	32.38	9.62	0.02	QP
7 MAX	0.41	37.53	-10.06	47.59	27.82	9.61	0.10	Average
8	0.41	46.30	-11.29	57.59	36.59	9.61	0.10	QP
9	3.80	20.34	-25.66	46.00	10.62	9.64	0.08	Average
10	3.80	24.72	-31.28	56.00	15.00	9.64	0.08	QP
11	26.84	22.21	-27.79	50.00	12.40	9.70	0.11	Average
12	26.84	26.28	-33.72	60.00	16.47	9.70	0.11	QP

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

AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	Line
Operating Function	PoE Mode_PIFA Antenna		



		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1		0.18	37.77	-16.73	54.50	28.13	9.62	0.02	Average
2		0.18	45.67	-18.83	64.50	36.03	9.62	0.02	QP
3		0.20	35.19	-18.57	53.76	25.57	9.62	0.00	Average
4		0.20	43.87	-19.89	63.76	34.25	9.62	0.00	QP
5		0.22	32.14	-20.65	52.79	22.51	9.62	0.01	Average
6		0.22	42.83	-19.96	62.79	33.20	9.62	0.01	QP
7	MAX	0.41	38.79	-8.80	47.59	29.08	9.61	0.10	Average
8		0.41	47.59	-10.00	57.59	37.88	9.61	0.10	QP
9		3.11	18.25	-27.75	46.00	8.57	9.63	0.05	Average
10		3.11	22.08	-33.92	56.00	12.40	9.63	0.05	QP
11		22.06	24.17	-25.83	50.00	14.47	9.59	0.11	Average
12		22.06	28.99	-31.01	60.00	19.29	9.59	0.11	QP

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

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)	918.75k	900.8k	901KF1D	917.5k	893.303k
BT-EDR(2Mbps)	1.3M	1.193M	1M19G1D	1.253M	1.187M
BT-EDR(3Mbps)	1.255M	1.198M	1M20G1D	1.254M	1.191M

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

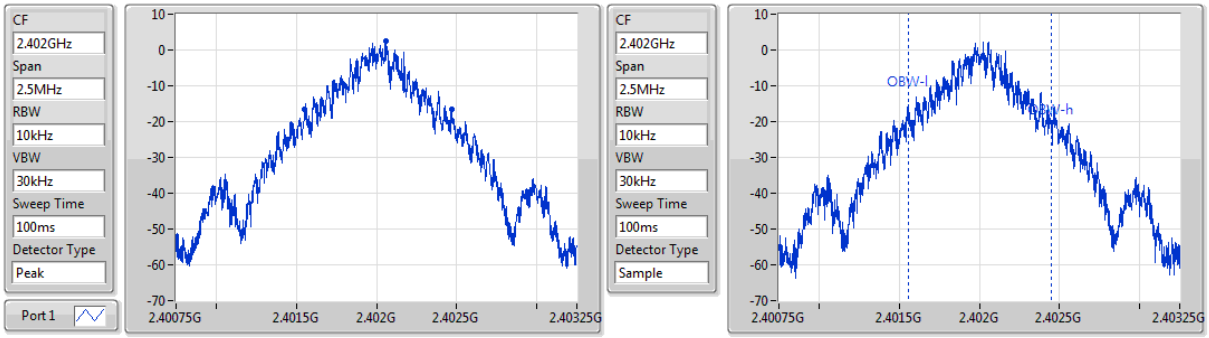
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-BR(1Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	Inf	918.75k	893.303k
2441MHz_TnomVnom	Pass	Inf	917.5k	895.802k
2480MHz_TnomVnom	Pass	Inf	917.5k	900.8k
BT-EDR(2Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	Inf	1.279M	1.187M
2441MHz_TnomVnom	Pass	Inf	1.3M	1.193M
2480MHz_TnomVnom	Pass	Inf	1.253M	1.187M
BT-EDR(3Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	Inf	1.254M	1.191M
2441MHz_TnomVnom	Pass	Inf	1.255M	1.196M
2480MHz_TnomVnom	Pass	Inf	1.255M	1.198M

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

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

2402MHz

22/10/2018

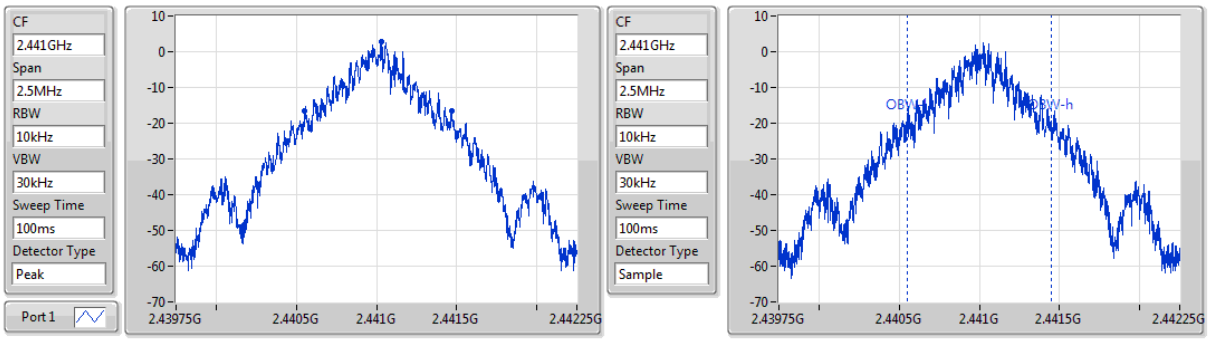


20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
918.75k	2.401551G	2.40247G	893.303k	2.401555G	2.402449G	Inf	1

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

2441MHz

22/10/2018

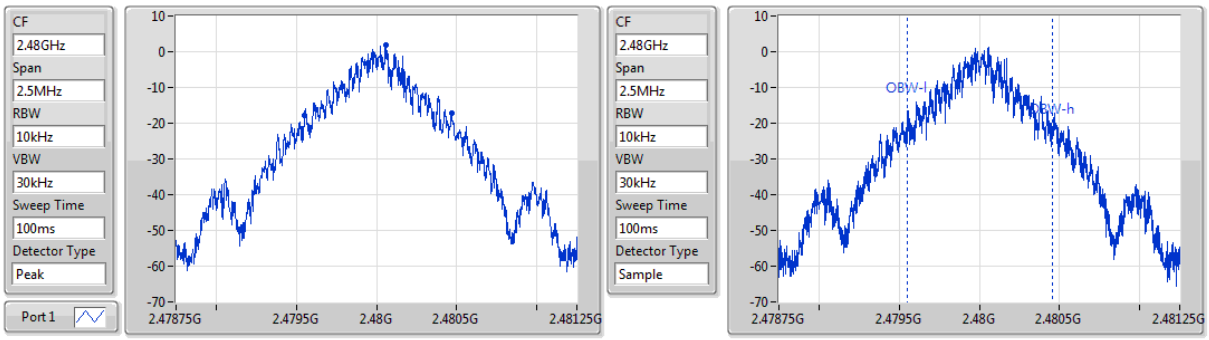


20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
917.5k	2.440553G	2.44147G	895.802k	2.440554G	2.44145G	Inf	1

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

2480MHz

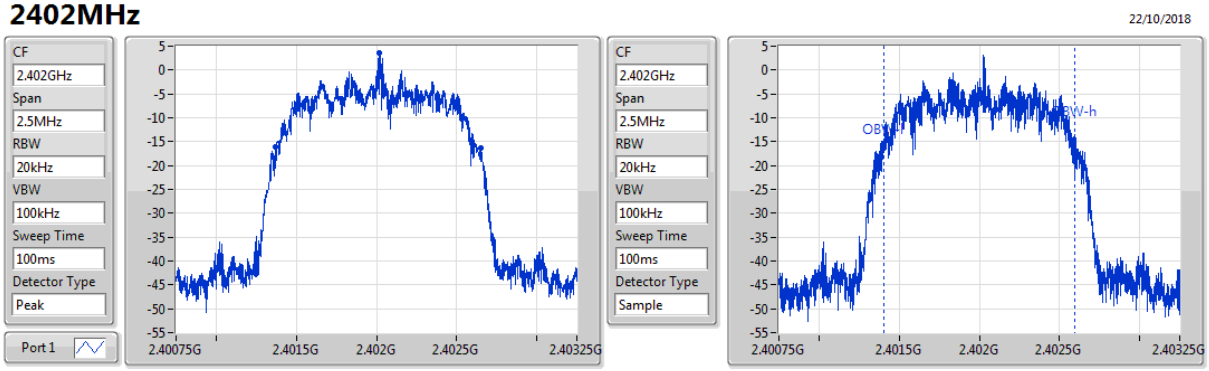
22/10/2018



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
917.5k	2.479551G	2.480469G	900.8k	2.479554G	2.480455G	Inf	1

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

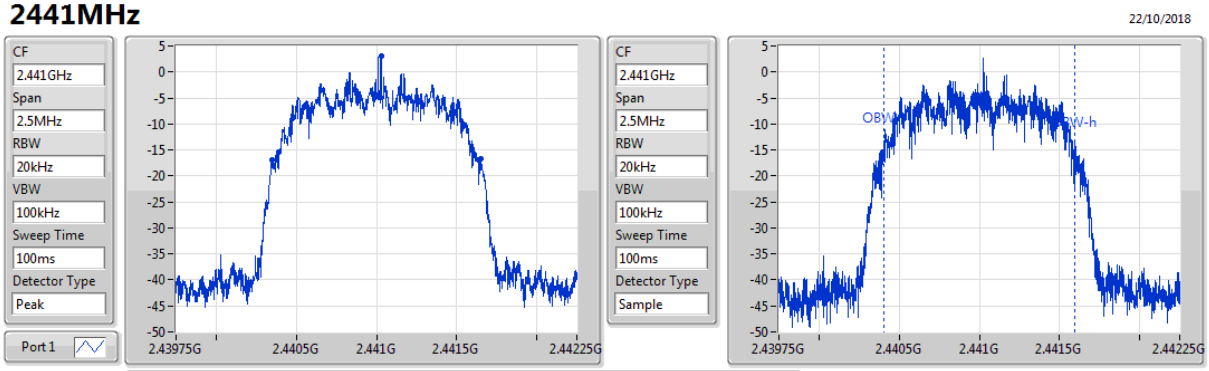
2402MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.279M	2.401373G	2.402651G	1.187M	2.401408G	2.402595G	Inf	1

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

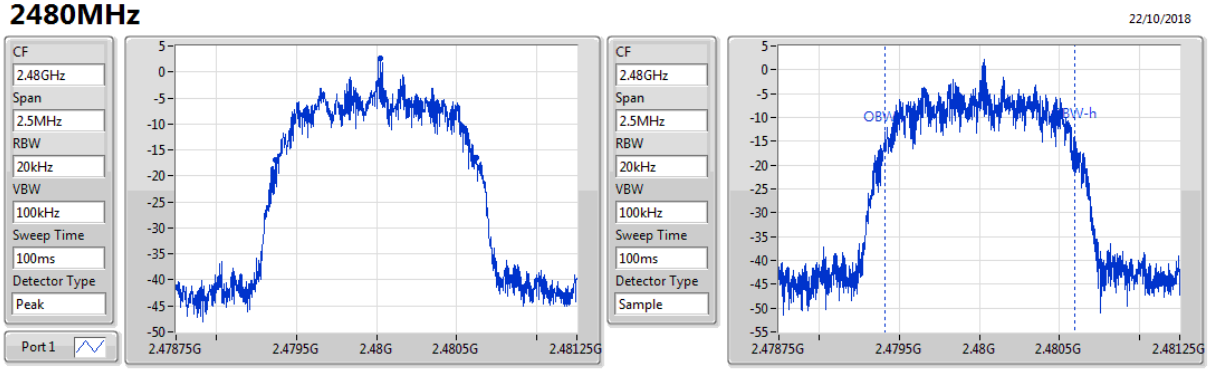
2441MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.3M	2.44035G	2.44165G	1.193M	2.440404G	2.441597G	Inf	1

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

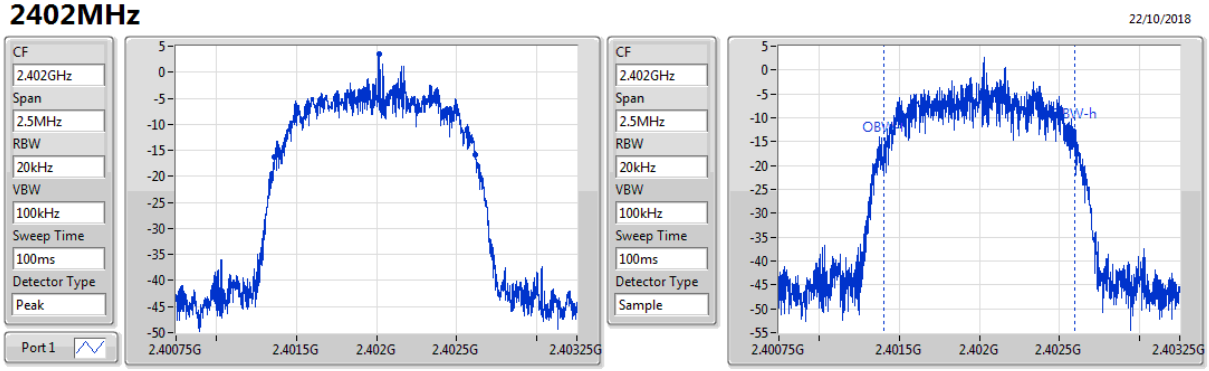
2480MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.253M	2.479373G	2.480625G	1.187M	2.479409G	2.480596G	Inf	1

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

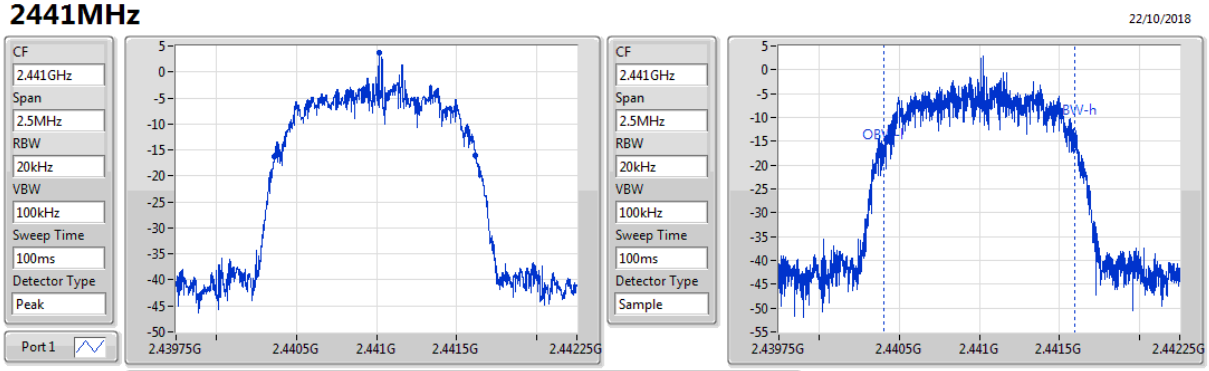
2402MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.254M	2.401363G	2.402616G	1.191M	2.401405G	2.402596G	Inf	1

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

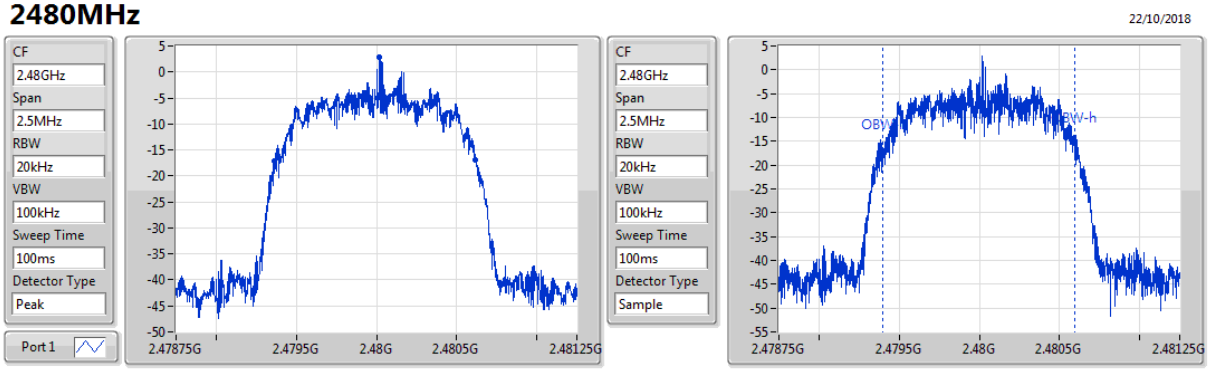
2441MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.255M	2.440361G	2.441616G	1.196M	2.440402G	2.441597G	Inf	1

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

2480MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.255M	2.479361G	2.480616G	1.198M	2.479398G	2.480596G	Inf	1

Summary

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

Result

Mode	Result	Fl (Hz)	Fh (Hz)	Ch.Space (Hz)	Limit (Hz)
BT-BR(1Mbps)	-	-	-	-	-
2402MHz_TnomVnom	Pass	2.402016G	2.403018G	1.002M	611.8875k
2441MHz_TnomVnom	Pass	2.441017G	2.442018G	1.0005M	611.055k
2480MHz_TnomVnom	Pass	2.479016G	2.480016G	1.0005M	611.055k
BT-EDR(2Mbps)	-	-	-	-	-
2402MHz_TnomVnom	Pass	2.402016G	2.403018G	1.002M	851.814k
2441MHz_TnomVnom	Pass	2.441016G	2.442016G	1.0005M	865.8k
2480MHz_TnomVnom	Pass	2.479017G	2.480018G	1.0005M	834.498k
BT-EDR(3Mbps)	-	-	-	-	-
2402MHz_TnomVnom	Pass	2.402017G	2.403016G	999k	835.164k
2441MHz_TnomVnom	Pass	2.441017G	2.442016G	999k	835.83k
2480MHz_TnomVnom	Pass	2.479017G	2.480016G	999k	835.83k

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

2.402G/2.403GHz

Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.402016G	2.403018G	1.002M	611.8875k

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

2.441G/2.442GHz

Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.441017G	2.442018G	1.0005M	611.055k

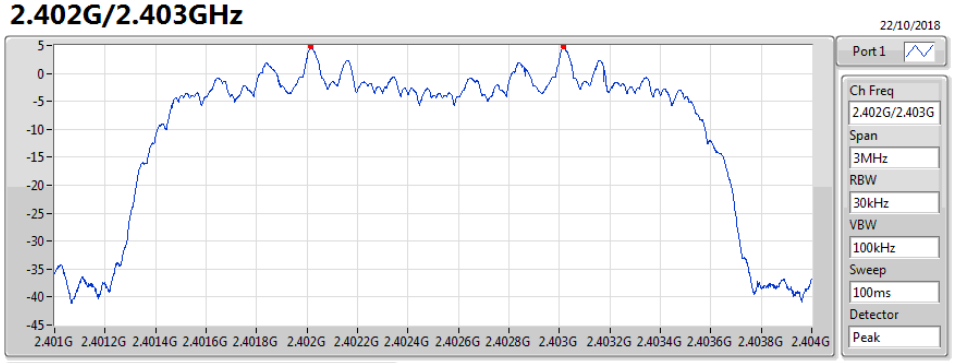
BT-BR(1Mbps) **Channel Separation**

2.48G/2.479GHz

Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.479016G	2.480016G	1.0005M	611.055k

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

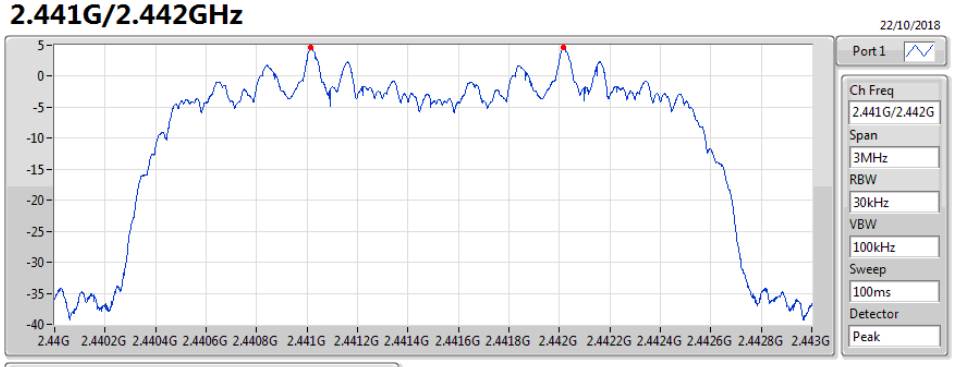
2.402G/2.403GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.402016G	2.403018G	1.002M	851.814k

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

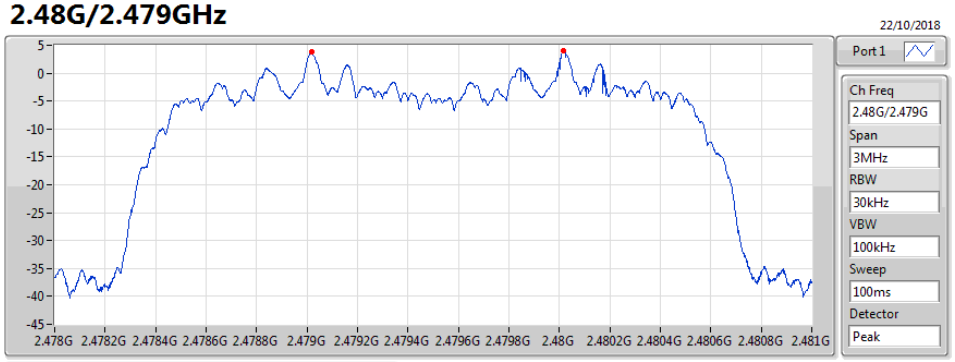
2.441G/2.442GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.441016G	2.442016G	1.0005M	865.8k

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

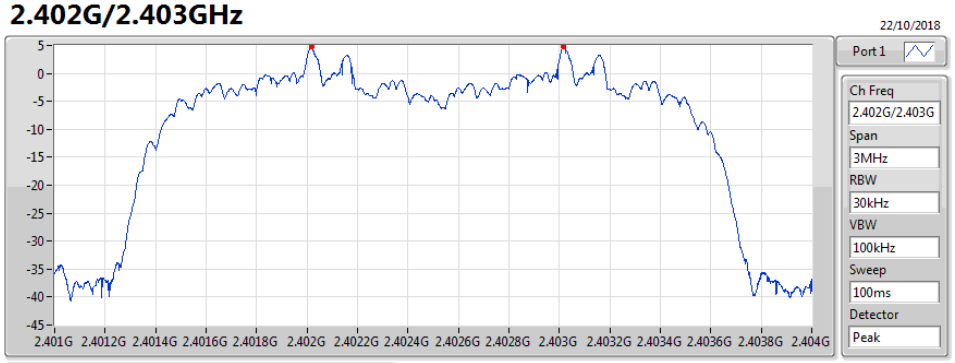
2.48G/2.479GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.479017G	2.480018G	1.0005M	834.498k

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

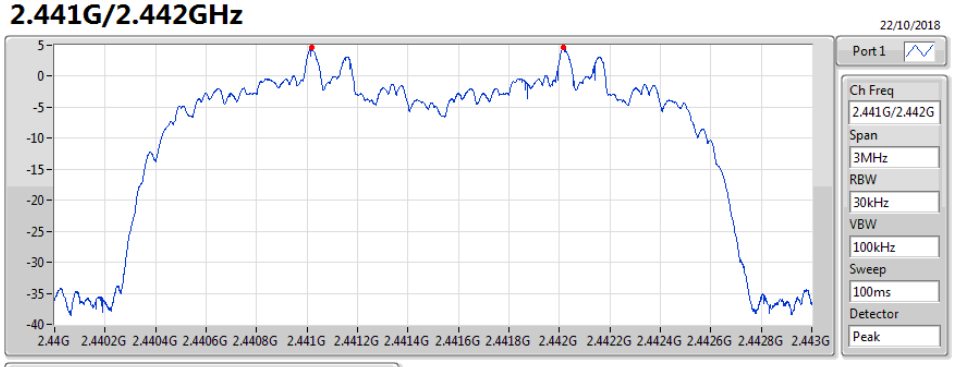
2.402G/2.403GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.402017G	2.403016G	999k	835.164k

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

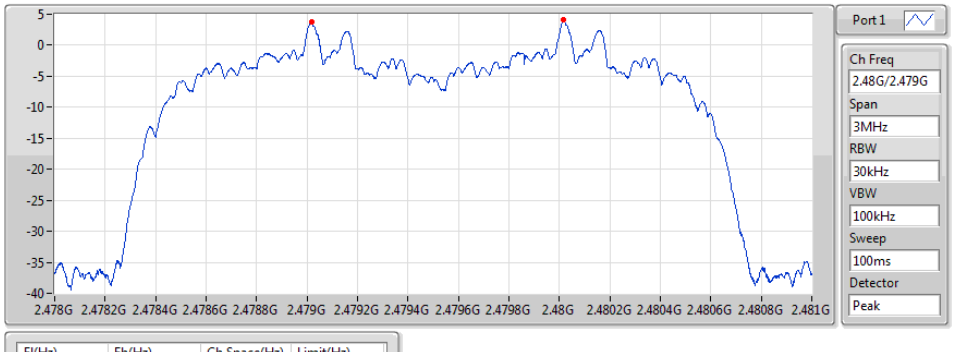
2.441G/2.442GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.441017G	2.442016G	999k	835.83k

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

2.48G/2.479GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.479017G	2.480016G	999k	835.83k

Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	8.65	0.00733
BT-EDR(2Mbps)	8.72	0.00745
BT-EDR(3Mbps)	9.00	0.00794

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	-2.22	8.65	21.00
2441MHz_TnomVnom	Pass	-2.22	8.47	21.00
2480MHz_TnomVnom	Pass	-2.22	7.81	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	-2.22	8.72	21.00
2441MHz_TnomVnom	Pass	-2.22	8.52	21.00
2480MHz_TnomVnom	Pass	-2.22	7.76	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	-2.22	9.00	21.00
2441MHz_TnomVnom	Pass	-2.22	8.78	21.00
2480MHz_TnomVnom	Pass	-2.22	8.04	21.00

Summary

Mode	Power	Power
	(dBm)	(W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	8.91	0.00778
BT-EDR(2Mbps)	6.77	0.00475
BT-EDR(3Mbps)	6.70	0.00468

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	-2.22	8.91	30.00
2441MHz_TnomVnom	Pass	-2.22	8.73	30.00
2480MHz_TnomVnom	Pass	-2.22	8.09	30.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	-2.22	6.77	30.00
2441MHz_TnomVnom	Pass	-2.22	6.58	30.00
2480MHz_TnomVnom	Pass	-2.22	6.00	30.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	-2.22	6.70	30.00
2441MHz_TnomVnom	Pass	-2.22	6.63	30.00
2480MHz_TnomVnom	Pass	-2.22	5.96	30.00

Summary

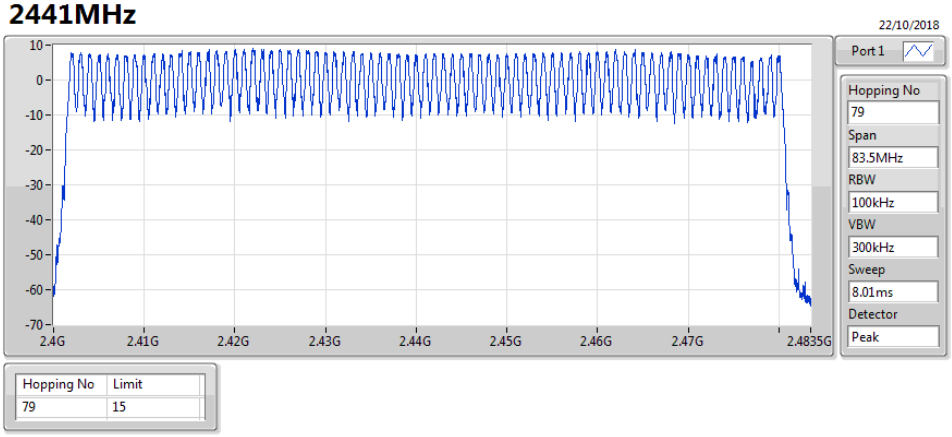
Mode	Max-Hop No
2.4-2.4835GHz	-
BT-BR(1Mbps)	79
BT-EDR(2Mbps)	79
BT-EDR(3Mbps)	79

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

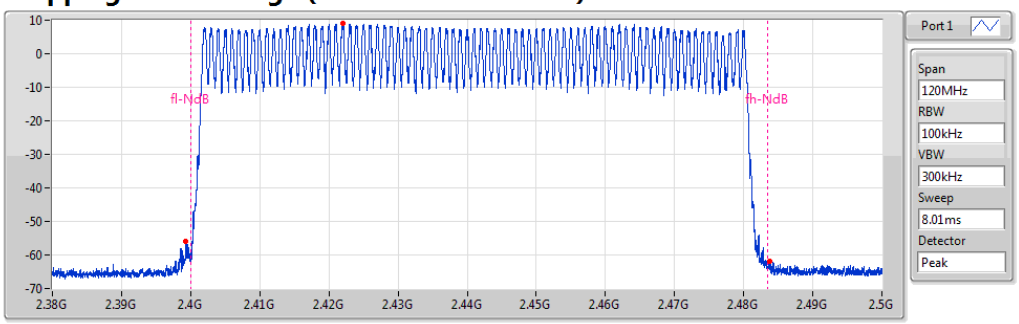


Hopping No	Limit
79	15

BT-BR(1Mbps)

2441MHz

Hopping Ch Bandedge (Non-restricted Band)

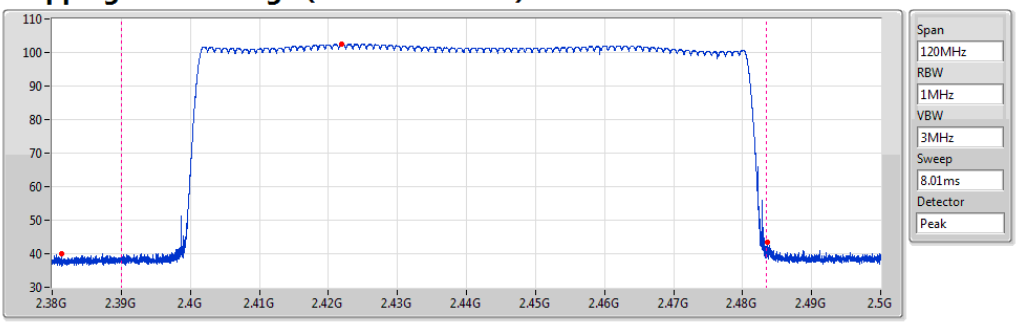


Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-10.81	2.422015G	9.19	2.39932G	-55.79	2.483725G	-61.81

BT-BR(1Mbps)

2441MHz

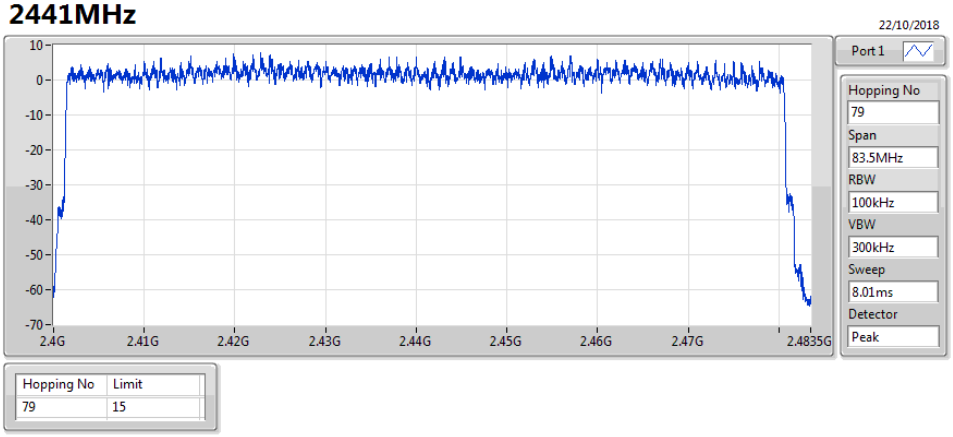
Hopping Ch Bandedge (Restricted Band)



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)
2.421865G	102.53	2.381395G	40.02	9.92	2.483635G	43.35	13.25	74	54	3.125	-30.1

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

2441MHz

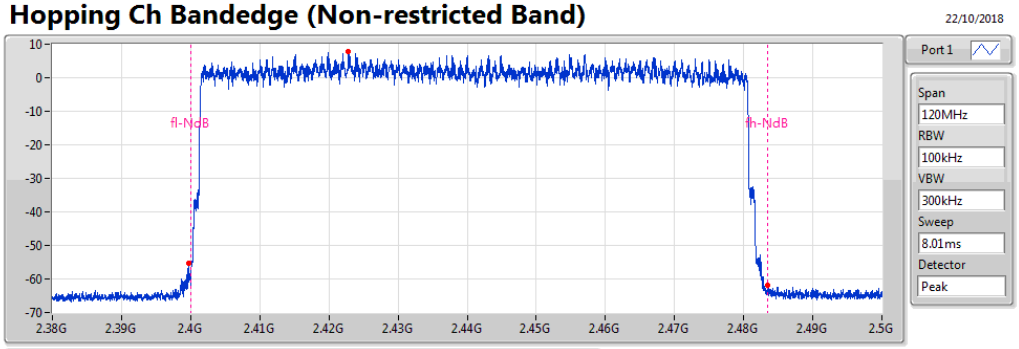


Hopping No	Limit
79	15

BT-EDR(2Mbps)

2441MHz

Hopping Ch Bandedge (Non-restricted Band)

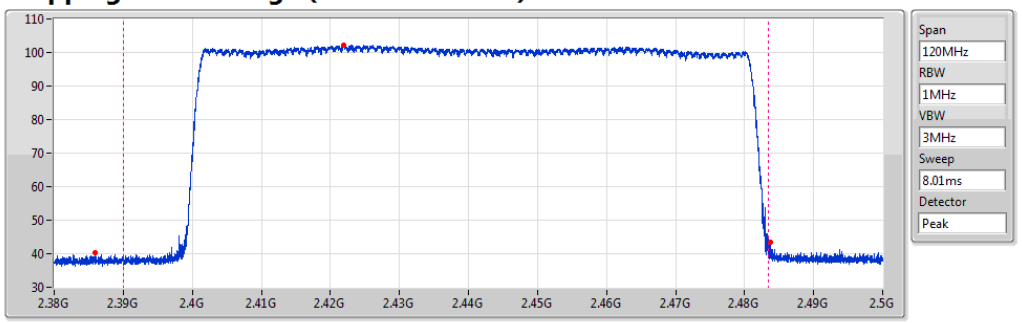


Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-12.32	2.422855G	7.68	2.399665G	-55.42	2.483515G	-61.98

BT-EDR(2Mbps)

2441MHz

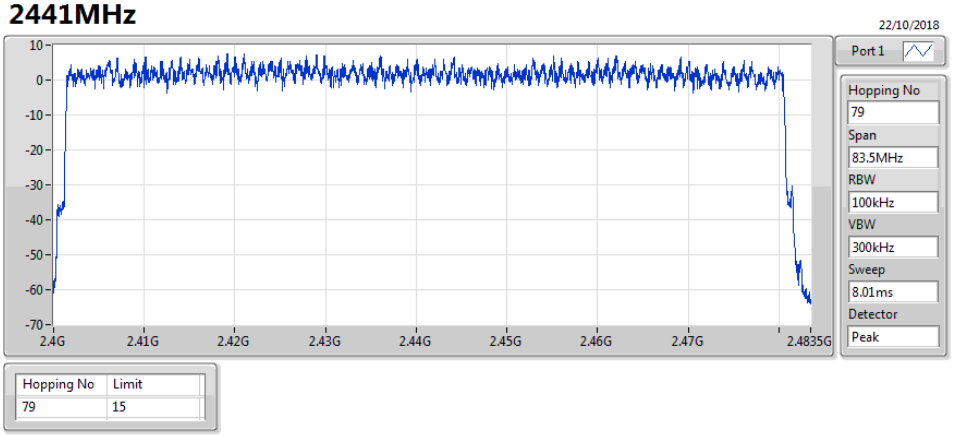
Hopping Ch Bandedge (Restricted Band)



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)
2.42194G	102.15	2.385955G	40.31	10.21	2.48371G	43.39	13.29	74	54	3.125	-30.1

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

2441MHz

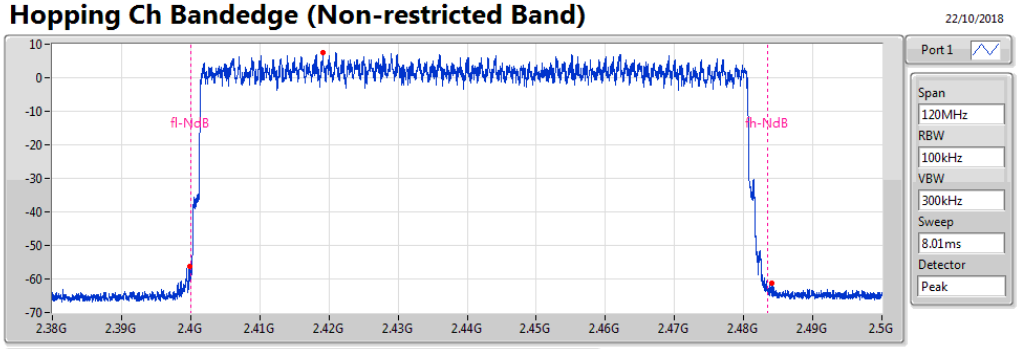


Hopping No	Limit
79	15

BT-EDR(3Mbps)

2441MHz

Hopping Ch Bandedge (Non-restricted Band)

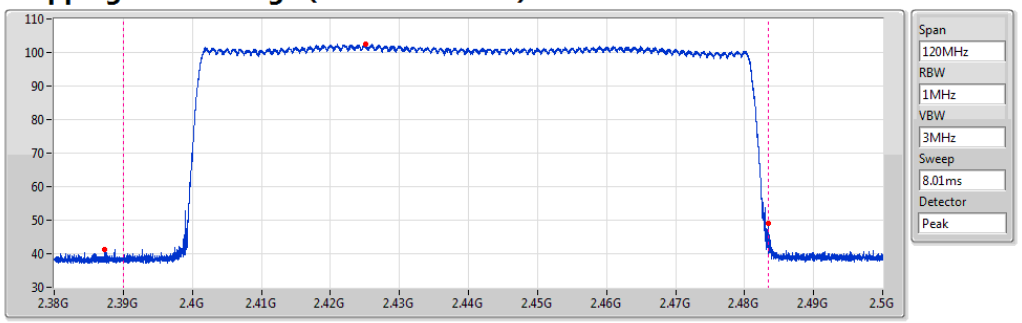


Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-12.36	2.419165G	7.64	2.3998G	-56.33	2.48413G	-61.34

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)
2.425075G	102.36	2.387365G	41.18	11.08	2.483515G	49.15	19.05	74	54	3.125	-30.1

Summary

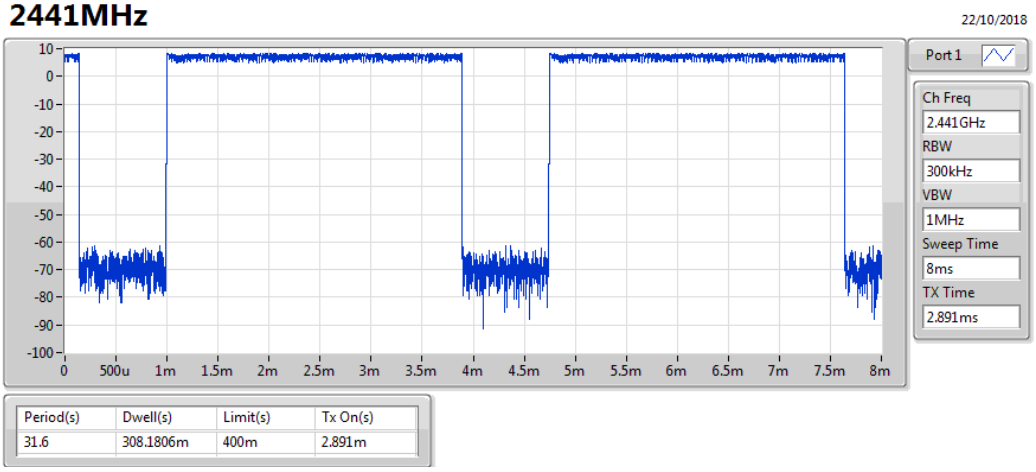
Mode	Max-Dwell (s)
2.4-2.4835GHz	-
BT-BR(1Mbps)	308.1806m
BT-EDR(2Mbps)	308.3938m
BT-EDR(3Mbps)	308.5004m

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	308.3938m	400m	2.893m
BT-EDR(3Mbps)	-	-	-	-	-
2441MHz_TnomVnom	Pass	31.6	308.5004m	400m	2.894m

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

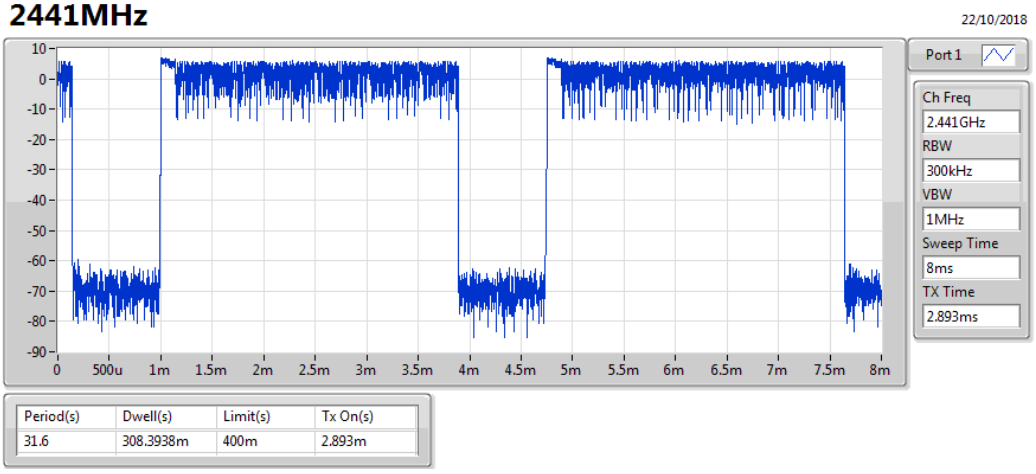
2441MHz



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

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

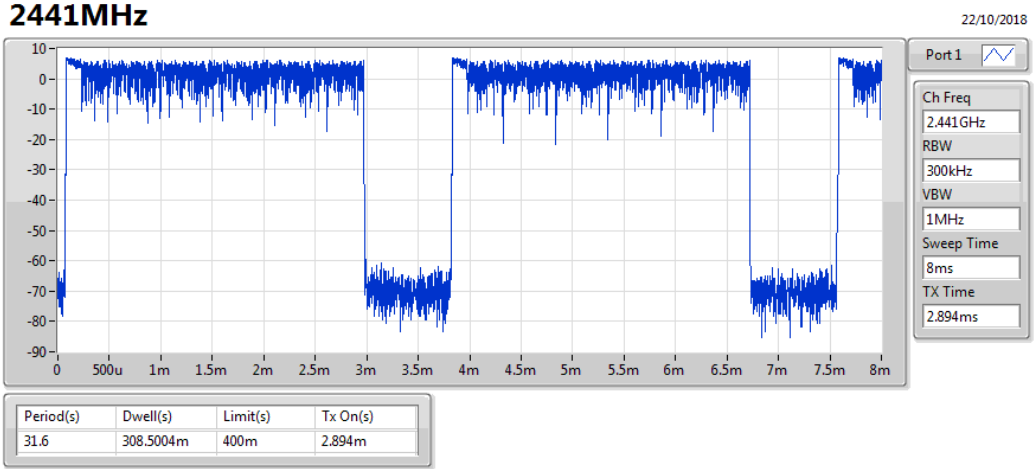
2441MHz



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

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

2441MHz



Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	308.5004m	400m	2.894m

Summary

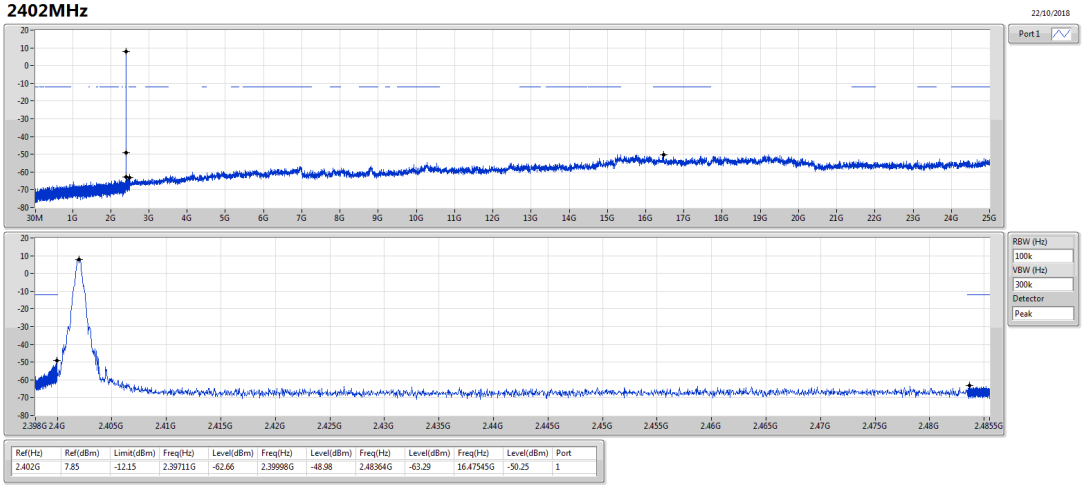
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-
BT-BR(1Mbps)	Pass	2.402G	7.85	-12.15	2.39711G	-62.66	2.39998G	-48.98	2.48364G	-63.29	16.47545G	-50.25	1
BT-EDR(2Mbps)	Pass	2.40188G	5.12	-14.88	2.39652G	-63.48	2.39998G	-50.50	2.4844G	-62.81	17.56177G	-50.75	1
BT-EDR(3Mbps)	Pass	2.4018G	4.15	-15.85	2.39741G	-63.93	2.39997G	-50.78	2.48506G	-62.86	16.77658G	-50.41	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	2.402G	7.85	-12.15	2.39711G	-62.66	2.39998G	-48.98	2.48364G	-63.29	16.47545G	-50.25	1
2441MHz_TnomVnom	Pass	2.44104G	7.98	-12.02	2.14729G	-63.91	2.39936G	-63.80	2.48547G	-62.42	15.26248G	-51.56	1
2480MHz_TnomVnom	Pass	2.48003G	7.09	-12.91	2.11621G	-65.41	2.39958G	-63.80	2.48382G	-58.00	16.43605G	-51.43	1
BT-EDR(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz_TnomVnom	Pass	2.40188G	5.12	-14.88	2.39652G	-63.48	2.39998G	-50.50	2.4844G	-62.81	17.56177G	-50.75	1
2441MHz_TnomVnom	Pass	2.44087G	6.70	-13.30	2.16594G	-64.93	2.39965G	-63.91	2.48454G	-62.66	17.01017G	-51.38	1
2480MHz_TnomVnom	Pass	2.48016G	5.97	-14.03	2.398G	-65.05	2.39988G	-63.73	2.48354G	-59.71	15.27655G	-50.87	1
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz_TnomVnom	Pass	2.4018G	4.15	-15.85	2.39741G	-63.93	2.39997G	-50.78	2.48506G	-62.86	16.77658G	-50.41	1
2441MHz_TnomVnom	Pass	2.44117G	6.80	-13.20	2.39267G	-64.12	2.39887G	-63.22	2.48461G	-63.26	15.21745G	-51.35	1
2480MHz_TnomVnom	Pass	2.4802G	4.01	-15.99	2.16298G	-64.54	2.39856G	-63.44	2.48358G	-58.92	15.26248G	-51.07	1

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

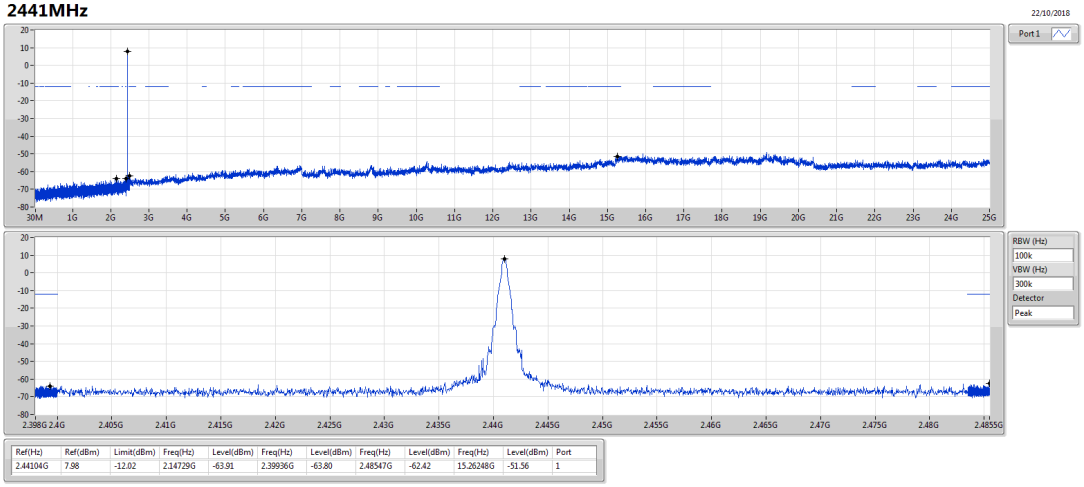
2402MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.402G	7.85	-12.15	2.39711G	-62.66	2.39998G	-48.98	2.48364G	-63.29	16.47545G	-50.25	1

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

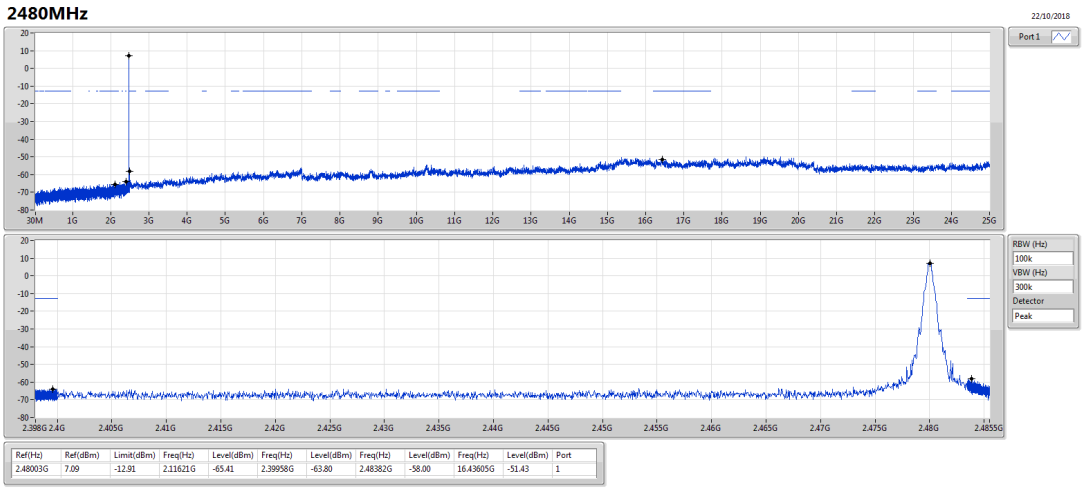
2441MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.44104G	7.98	-12.02	2.14729G	-63.91	2.39936G	-63.80	2.48547G	-62.42	15.26248G	-51.56	1

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

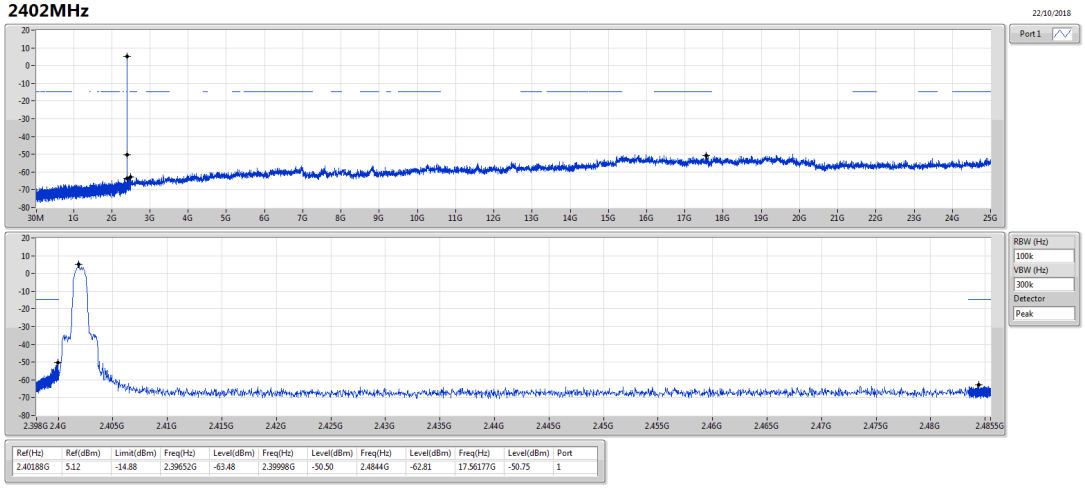
2480MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.48003G	7.09	-12.91	2.11621G	-65.41	2.39958G	-63.80	2.48382G	-58.00	16.43605G	-51.43	1

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

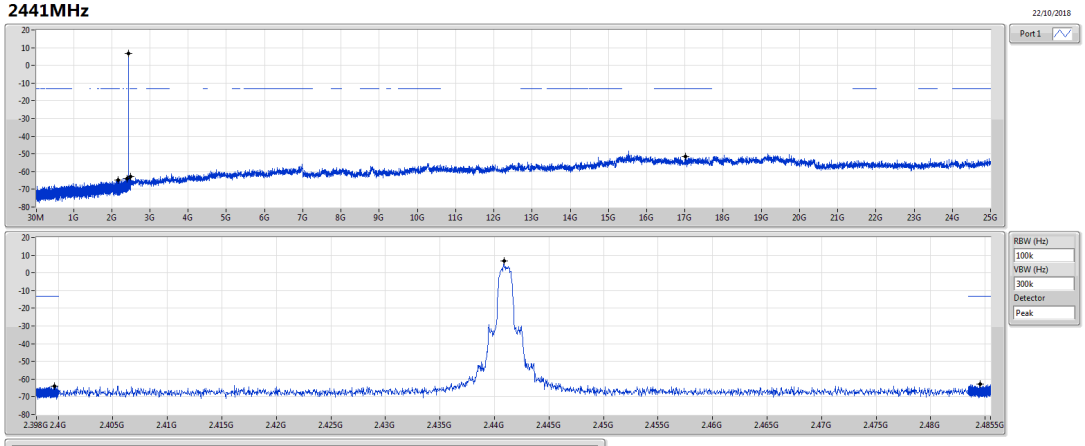
2402MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.40188G	5.12	-14.88	2.39652G	-63.48	2.39998G	-50.50	2.4844G	-62.81	17.56177G	-50.75	1

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

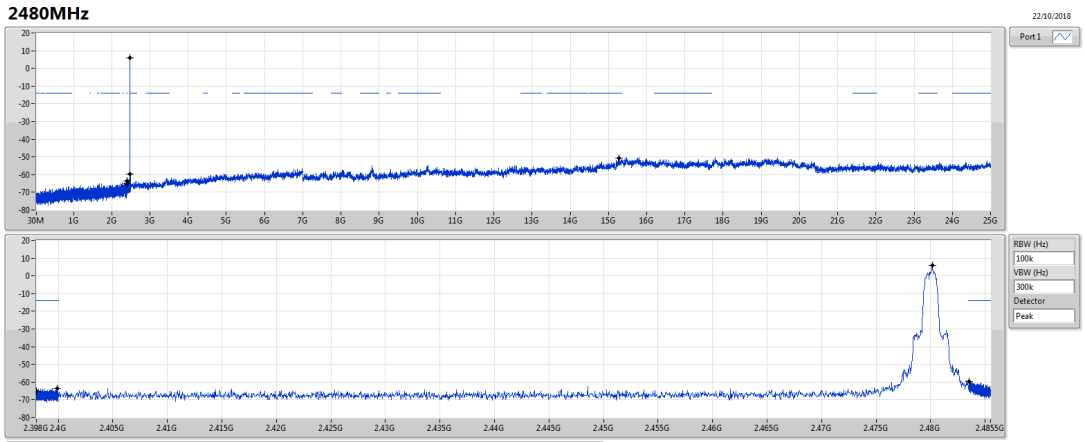
2441MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.44087G	6.70	-13.30	2.16594G	-64.93	2.39965G	-63.91	2.48454G	-62.66	17.01017G	-51.38	1

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

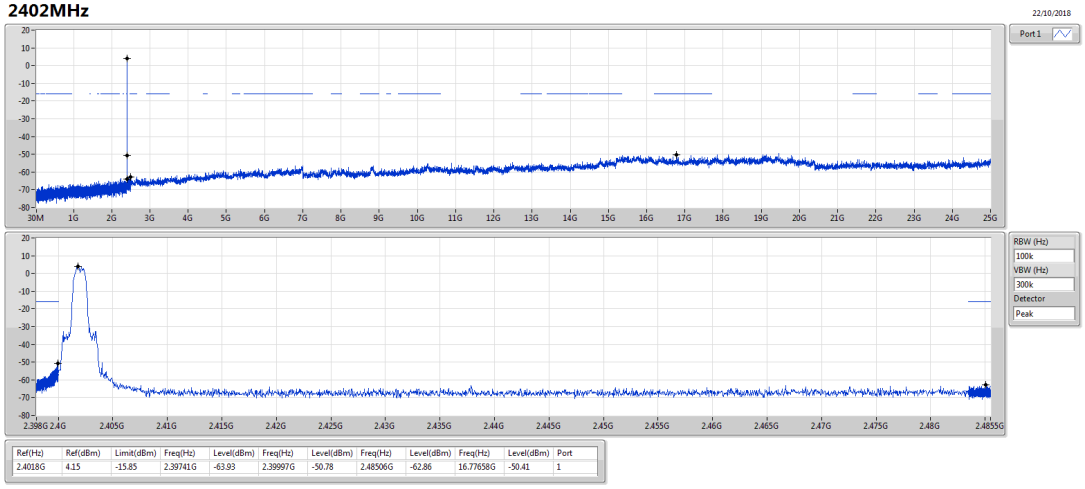
2480MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.48016G	5.97	-14.03	2.398G	-65.05	2.39988G	-63.73	2.48354G	-59.71	15.27655G	-50.87	1

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

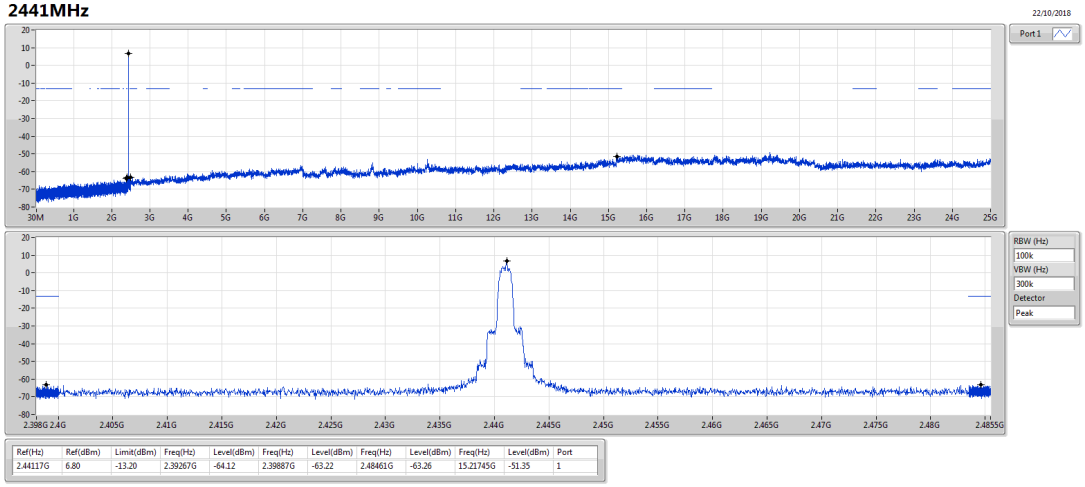
2402MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.4018G	4.15	-15.85	2.39741G	-63.93	2.39997G	-50.78	2.48506G	-62.86	16.77658G	-50.41	1

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

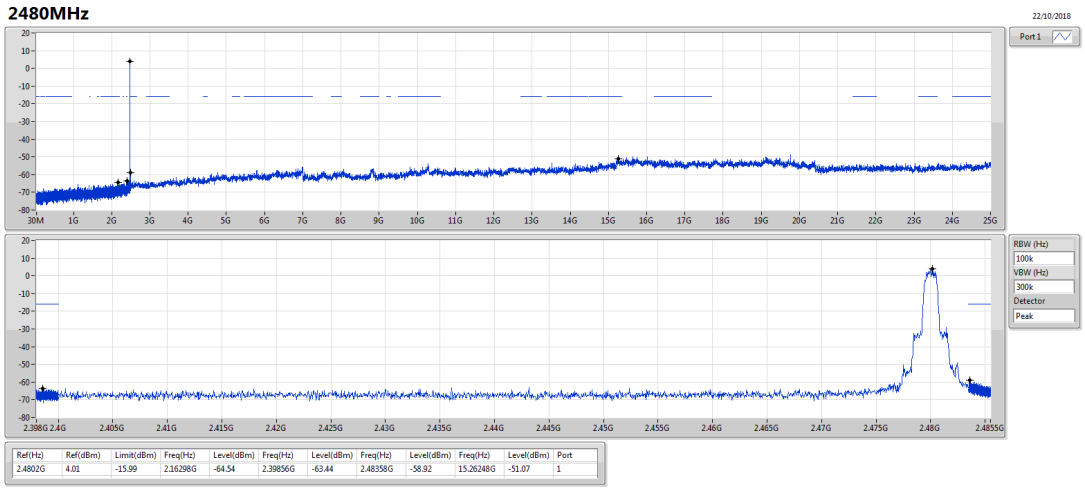
2441MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.44117G	6.80	-13.20	2.39267G	-64.12	2.39887G	-63.22	2.48461G	-63.26	15.21745G	-51.35	1

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

2480MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.4802G	4.01	-15.99	2.16298G	-64.54	2.39856G	-63.44	2.48358G	-58.92	15.26248G	-51.07	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	QP	41.64M	35.91	40.00	-4.09	-19.21	3	Vertical	152	1.42	-

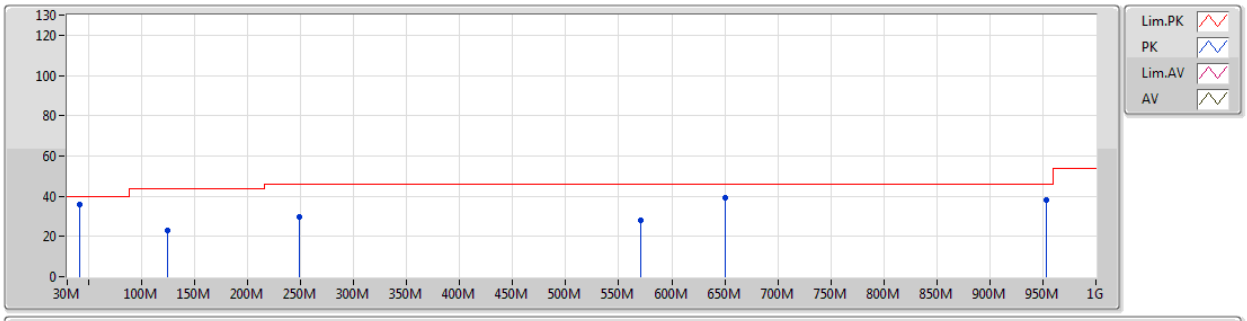
Result

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	125.06M	22.82	43.50	-20.68	-19.21	3	Vertical	360	1.00	-
2441MHz	Pass	PK	249.22M	29.56	46.00	-16.44	-17.26	3	Vertical	360	1.00	-
2441MHz	Pass	PK	571.26M	27.82	46.00	-18.18	-10.68	3	Vertical	360	1.00	-
2441MHz	Pass	PK	650.8M	39.50	46.00	-6.50	-9.96	3	Vertical	360	1.00	-
2441MHz	Pass	PK	953.44M	38.31	46.00	-7.69	-4.71	3	Vertical	360	1.00	-
2441MHz	Pass	QP	41.64M	35.91	40.00	-4.09	-19.21	3	Vertical	152	1.42	-
2441MHz	Pass	PK	43.58M	23.56	40.00	-16.44	-20.25	3	Horizontal	0	1.00	-
2441MHz	Pass	PK	125.06M	23.95	43.50	-19.55	-19.21	3	Horizontal	0	1.00	-
2441MHz	Pass	PK	249.22M	31.17	46.00	-14.83	-17.26	3	Horizontal	0	1.00	-
2441MHz	Pass	PK	319.06M	20.88	46.00	-25.12	-16.42	3	Horizontal	0	1.00	-
2441MHz	Pass	PK	650.8M	41.90	46.00	-4.10	-9.96	3	Horizontal	0	1.00	-
2441MHz	Pass	PK	693.48M	33.35	46.00	-12.65	-9.81	3	Horizontal	0	1.00	-

BT-BR(1Mbps)

2441MHz_PoE

24/10/2018

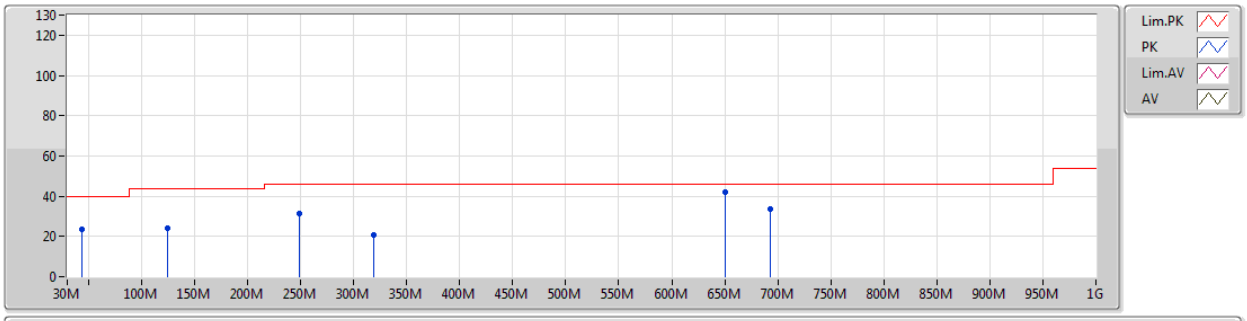


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	125.06M	22.82	43.50	-20.68	-19.21	3	Vertical	360	1.00	-
PK	249.22M	29.56	46.00	-16.44	-17.26	3	Vertical	360	1.00	-
PK	571.26M	27.82	46.00	-18.18	-10.68	3	Vertical	360	1.00	-
PK	650.8M	39.50	46.00	-6.50	-9.96	3	Vertical	360	1.00	-
PK	953.44M	38.31	46.00	-7.69	-4.71	3	Vertical	360	1.00	-
QP	41.64M	35.91	40.00	-4.09	-19.21	3	Vertical	152	1.42	-

BT-BR(1Mbps)

2441MHz_PoE

24/10/2018



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	43.58M	23.56	40.00	-16.44	-20.25	3	Horizontal	0	1.00	-
PK	125.06M	23.95	43.50	-19.55	-19.21	3	Horizontal	0	1.00	-
PK	249.22M	31.17	46.00	-14.83	-17.26	3	Horizontal	0	1.00	-
PK	319.06M	20.88	46.00	-25.12	-16.42	3	Horizontal	0	1.00	-
PK	650.8M	41.90	46.00	-4.10	-9.96	3	Horizontal	0	1.00	-
PK	693.48M	33.35	46.00	-12.65	-9.81	3	Horizontal	0	1.00	-

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-
BT-BR(1Mbps)	Pass	AV	2.4898G	43.93	54.00	-10.07	31.13	3	Vertical	143	1.55	-
BT-EDR(2Mbps)	Pass	AV	2.4894G	44.09	54.00	-9.91	31.13	3	Vertical	144	1.55	-
BT-EDR(3Mbps)	Pass	AV	2.4974G	44.04	54.00	-9.96	31.16	3	Horizontal	49	1.38	-

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	2.3616G	43.24	54.00	-10.76	30.67	3	Vertical	141	1.34	-
2402MHz	Pass	AV	2.402G	99.72	Inf	-Inf	30.82	3	Vertical	141	1.34	-
2402MHz	Pass	PK	2.3688G	56.39	74.00	-17.61	30.70	3	Vertical	141	1.34	-
2402MHz	Pass	PK	2.4018G	100.17	Inf	-Inf	30.82	3	Vertical	141	1.34	-
2402MHz	Pass	AV	2.3842G	43.25	54.00	-10.75	30.76	3	Horizontal	336	2.49	-
2402MHz	Pass	AV	2.402G	100.45	Inf	-Inf	30.82	3	Horizontal	336	2.49	-
2402MHz	Pass	PK	2.36G	55.75	74.00	-18.25	30.67	3	Horizontal	336	2.49	-
2402MHz	Pass	PK	2.4018G	100.88	Inf	-Inf	30.82	3	Horizontal	336	2.49	-
2402MHz	Pass	AV	4.80198G	30.76	54.00	-23.24	2.07	3	Vertical	122	1.85	-
2402MHz	Pass	PK	4.80229G	43.56	74.00	-30.44	2.07	3	Vertical	122	1.85	-
2402MHz	Pass	AV	4.80156G	30.78	54.00	-23.22	2.07	3	Horizontal	1	1.18	-
2402MHz	Pass	PK	4.80312G	43.13	74.00	-30.87	2.07	3	Horizontal	1	1.18	-
2441MHz	Pass	AV	2.3898G	43.19	54.00	-10.81	30.77	3	Vertical	143	1.55	-
2441MHz	Pass	AV	2.441G	96.27	Inf	-Inf	30.95	3	Vertical	143	1.55	-
2441MHz	Pass	AV	2.4898G	43.93	54.00	-10.07	31.13	3	Vertical	143	1.55	-
2441MHz	Pass	PK	2.3742G	55.77	74.00	-18.23	30.72	3	Vertical	143	1.55	-
2441MHz	Pass	PK	2.441G	96.69	Inf	-Inf	30.95	3	Vertical	143	1.55	-
2441MHz	Pass	PK	2.4918G	57.01	74.00	-16.99	31.14	3	Vertical	143	1.55	-
2441MHz	Pass	AV	2.3882G	43.17	54.00	-10.83	30.77	3	Horizontal	47	1.78	-
2441MHz	Pass	AV	2.441G	100.75	Inf	-Inf	30.95	3	Horizontal	47	1.78	-
2441MHz	Pass	AV	2.4874G	43.85	54.00	-10.15	31.12	3	Horizontal	47	1.78	-
2441MHz	Pass	PK	2.3522G	55.82	74.00	-18.18	30.65	3	Horizontal	47	1.78	-
2441MHz	Pass	PK	2.441G	101.49	Inf	-Inf	30.95	3	Horizontal	47	1.78	-
2441MHz	Pass	PK	2.4918G	56.48	74.00	-17.52	31.14	3	Horizontal	47	1.78	-
2441MHz	Pass	AV	4.88188G	32.52	54.00	-21.48	2.27	3	Vertical	3	2.52	-
2441MHz	Pass	PK	4.8814G	43.53	74.00	-30.47	2.27	3	Vertical	3	2.52	-
2441MHz	Pass	AV	4.88206G	35.45	54.00	-18.55	2.27	3	Horizontal	10	2.32	-
2441MHz	Pass	PK	4.88234G	44.70	74.00	-29.30	2.27	3	Horizontal	10	2.32	-
2480MHz	Pass	AV	2.48G	98.17	Inf	-Inf	31.09	3	Vertical	94	1.99	-
2480MHz	Pass	AV	2.4896G	43.81	54.00	-10.19	31.13	3	Vertical	94	1.99	-
2480MHz	Pass	PK	2.4798G	98.56	Inf	-Inf	31.09	3	Vertical	94	1.99	-
2480MHz	Pass	PK	2.4842G	56.25	74.00	-17.75	31.12	3	Vertical	94	1.99	-
2480MHz	Pass	AV	2.48G	102.55	Inf	-Inf	31.09	3	Horizontal	47	1.38	-
2480MHz	Pass	AV	2.4888G	43.90	54.00	-10.10	31.13	3	Horizontal	47	1.38	-
2480MHz	Pass	PK	2.4798G	102.93	Inf	-Inf	31.09	3	Horizontal	47	1.38	-
2480MHz	Pass	PK	2.4852G	56.48	74.00	-17.52	31.12	3	Horizontal	47	1.38	-
2480MHz	Pass	AV	4.96195G	30.29	54.00	-23.71	2.47	3	Vertical	323	1.23	-
2480MHz	Pass	PK	4.9595G	43.69	74.00	-30.31	2.47	3	Vertical	323	1.23	-
2480MHz	Pass	AV	4.95984G	30.53	54.00	-23.47	2.47	3	Horizontal	290	1.54	-
2480MHz	Pass	PK	4.96087G	43.51	74.00	-30.49	2.47	3	Horizontal	290	1.54	-
BT-EDR(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3786G	43.26	54.00	-10.74	30.74	3	Vertical	221	1.70	-
2402MHz	Pass	AV	2.402G	95.28	Inf	-Inf	30.82	3	Vertical	221	1.70	-
2402MHz	Pass	PK	2.3772G	56.23	74.00	-17.77	30.73	3	Vertical	221	1.70	-
2402MHz	Pass	PK	2.4018G	98.81	Inf	-Inf	30.82	3	Vertical	221	1.70	-
2402MHz	Pass	AV	2.377G	43.31	54.00	-10.69	30.73	3	Horizontal	336	2.42	-
2402MHz	Pass	AV	2.402G	96.14	Inf	-Inf	30.82	3	Horizontal	336	2.42	-

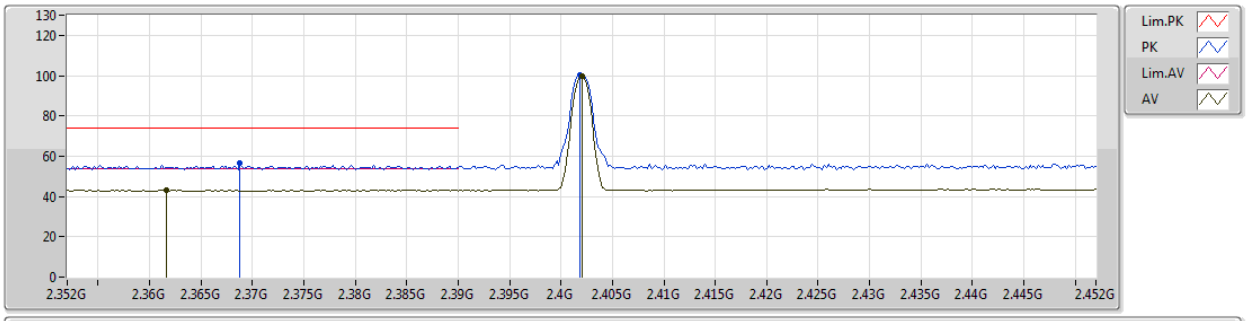
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2402MHz	Pass	PK	2.3846G	56.15	74.00	-17.85	30.76	3	Horizontal	336	2.42	-
2402MHz	Pass	PK	2.4018G	99.62	Inf	-Inf	30.82	3	Horizontal	336	2.42	-
2441MHz	Pass	AV	2.3558G	43.11	54.00	-10.89	30.66	3	Vertical	144	1.55	-
2441MHz	Pass	AV	2.441G	92.44	Inf	-Inf	30.95	3	Vertical	144	1.55	-
2441MHz	Pass	AV	2.4894G	44.09	54.00	-9.91	31.13	3	Vertical	144	1.55	-
2441MHz	Pass	PK	2.3878G	55.73	74.00	-18.27	30.77	3	Vertical	144	1.55	-
2441MHz	Pass	PK	2.441G	95.86	Inf	-Inf	30.95	3	Vertical	144	1.55	-
2441MHz	Pass	PK	2.499G	55.91	74.00	-18.09	31.17	3	Vertical	144	1.55	-
2441MHz	Pass	AV	2.3866G	43.18	54.00	-10.82	30.76	3	Horizontal	47	1.80	-
2441MHz	Pass	AV	2.441G	97.32	Inf	-Inf	30.95	3	Horizontal	47	1.80	-
2441MHz	Pass	AV	2.4866G	43.90	54.00	-10.10	31.12	3	Horizontal	47	1.80	-
2441MHz	Pass	PK	2.3698G	55.50	74.00	-18.50	30.71	3	Horizontal	47	1.80	-
2441MHz	Pass	PK	2.441G	100.73	Inf	-Inf	30.95	3	Horizontal	47	1.80	-
2441MHz	Pass	PK	2.4986G	56.45	74.00	-17.55	31.17	3	Horizontal	47	1.80	-
2480MHz	Pass	AV	2.48G	94.02	Inf	-Inf	31.09	3	Vertical	86	1.33	-
2480MHz	Pass	AV	2.4884G	43.84	54.00	-10.16	31.13	3	Vertical	86	1.33	-
2480MHz	Pass	PK	2.4798G	97.48	Inf	-Inf	31.09	3	Vertical	86	1.33	-
2480MHz	Pass	PK	2.4918G	56.15	74.00	-17.85	31.14	3	Vertical	86	1.33	-
2480MHz	Pass	AV	2.48G	98.35	Inf	-Inf	31.09	3	Horizontal	48	1.37	-
2480MHz	Pass	AV	2.4984G	44.04	54.00	-9.96	31.17	3	Horizontal	48	1.37	-
2480MHz	Pass	PK	2.48G	101.83	Inf	-Inf	31.09	3	Horizontal	48	1.37	-
2480MHz	Pass	PK	2.4946G	55.96	74.00	-18.04	31.15	3	Horizontal	48	1.37	-
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3868G	43.33	54.00	-10.67	30.76	3	Vertical	220	1.70	-
2402MHz	Pass	AV	2.402G	95.13	Inf	-Inf	30.82	3	Vertical	220	1.70	-
2402MHz	Pass	PK	2.388G	56.21	74.00	-17.79	30.77	3	Vertical	220	1.70	-
2402MHz	Pass	PK	2.4018G	98.72	Inf	-Inf	30.82	3	Vertical	220	1.70	-
2402MHz	Pass	AV	2.3828G	43.12	54.00	-10.88	30.75	3	Horizontal	337	2.41	-
2402MHz	Pass	AV	2.402G	95.91	Inf	-Inf	30.82	3	Horizontal	337	2.41	-
2402MHz	Pass	PK	2.3882G	56.14	74.00	-17.86	30.77	3	Horizontal	337	2.41	-
2402MHz	Pass	PK	2.402G	99.49	Inf	-Inf	30.82	3	Horizontal	337	2.41	-
2441MHz	Pass	AV	2.389G	43.12	54.00	-10.88	30.77	3	Vertical	143	1.54	-
2441MHz	Pass	AV	2.441G	91.76	Inf	-Inf	30.95	3	Vertical	143	1.54	-
2441MHz	Pass	AV	2.4858G	43.93	54.00	-10.07	31.12	3	Vertical	143	1.54	-
2441MHz	Pass	PK	2.3818G	56.26	74.00	-17.74	30.75	3	Vertical	143	1.54	-
2441MHz	Pass	PK	2.441G	95.27	Inf	-Inf	30.95	3	Vertical	143	1.54	-
2441MHz	Pass	PK	2.4998G	56.57	74.00	-17.43	31.17	3	Vertical	143	1.54	-
2441MHz	Pass	AV	2.3822G	43.21	54.00	-10.79	30.75	3	Horizontal	52	1.78	-
2441MHz	Pass	AV	2.441G	97.17	Inf	-Inf	30.95	3	Horizontal	52	1.78	-
2441MHz	Pass	AV	2.4902G	43.91	54.00	-10.09	31.13	3	Horizontal	52	1.78	-
2441MHz	Pass	PK	2.3874G	55.87	74.00	-18.13	30.76	3	Horizontal	52	1.78	-
2441MHz	Pass	PK	2.441G	100.70	Inf	-Inf	30.95	3	Horizontal	52	1.78	-
2441MHz	Pass	PK	2.4934G	56.29	74.00	-17.71	31.14	3	Horizontal	52	1.78	-
2480MHz	Pass	AV	2.48G	93.23	Inf	-Inf	31.09	3	Vertical	92	1.30	-
2480MHz	Pass	AV	2.4856G	43.81	54.00	-10.19	31.12	3	Vertical	92	1.30	-
2480MHz	Pass	PK	2.48G	96.81	Inf	-Inf	31.09	3	Vertical	92	1.30	-
2480MHz	Pass	PK	2.496G	56.54	74.00	-17.46	31.16	3	Vertical	92	1.30	-
2480MHz	Pass	AV	2.48G	98.68	Inf	-Inf	31.09	3	Horizontal	49	1.38	-
2480MHz	Pass	AV	2.4974G	44.04	54.00	-9.96	31.16	3	Horizontal	49	1.38	-

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	102.26	Inf	-Inf	31.09	3	Horizontal	49	1.38	-
2480MHz	Pass	PK	2.4854G	56.68	74.00	-17.32	31.12	3	Horizontal	49	1.38	-

BT-BR(1Mbps)

2402MHz_TX

23/10/2018

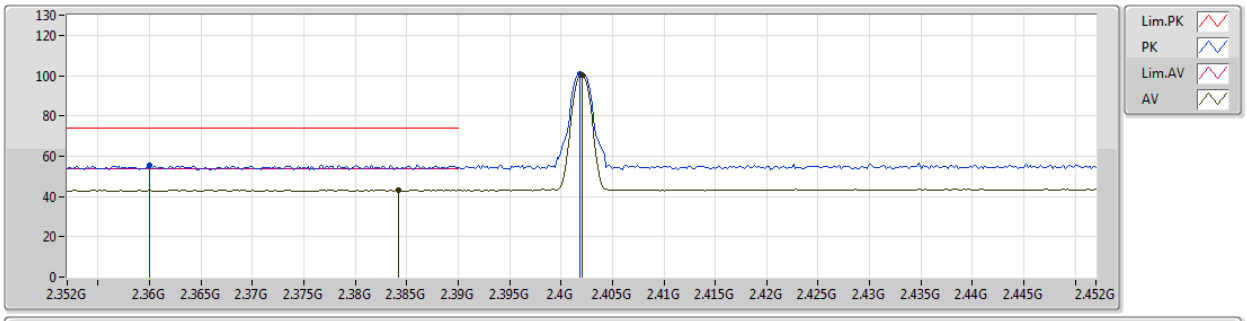


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3616G	43.24	54.00	-10.76	30.67	3	Vertical	141	1.34	-
AV	2.402G	99.72	Inf	-Inf	30.82	3	Vertical	141	1.34	-
PK	2.3688G	56.39	74.00	-17.61	30.70	3	Vertical	141	1.34	-
PK	2.4018G	100.17	Inf	-Inf	30.82	3	Vertical	141	1.34	-

BT-BR(1Mbps)

2402MHz_TX

23/10/2018

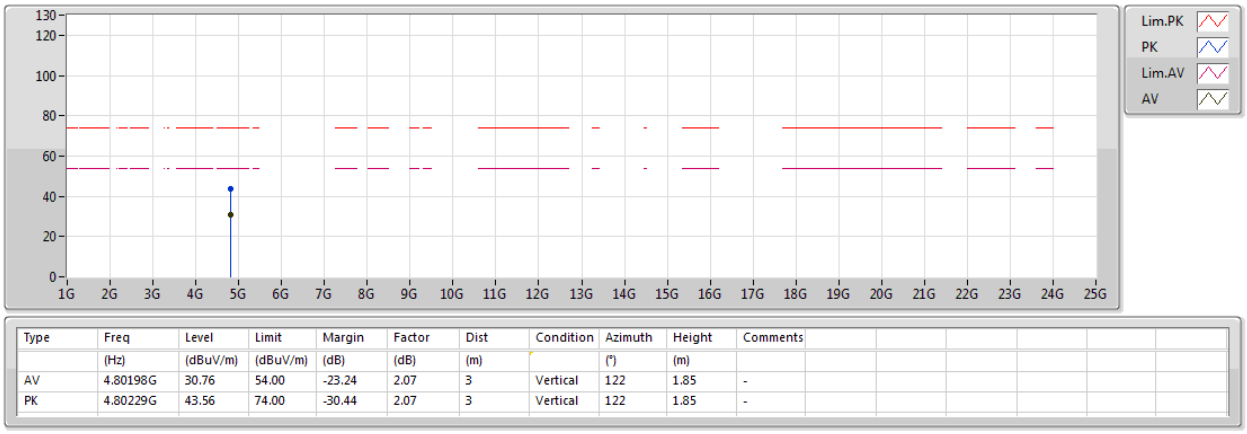


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3842G	43.25	54.00	-10.75	30.76	3	Horizontal	336	2.49	-
AV	2.402G	100.45	Inf	-Inf	30.82	3	Horizontal	336	2.49	-
PK	2.36G	55.75	74.00	-18.25	30.67	3	Horizontal	336	2.49	-
PK	2.4018G	100.88	Inf	-Inf	30.82	3	Horizontal	336	2.49	-

BT-BR(1Mbps)

2402MHz_TX

23/10/2018

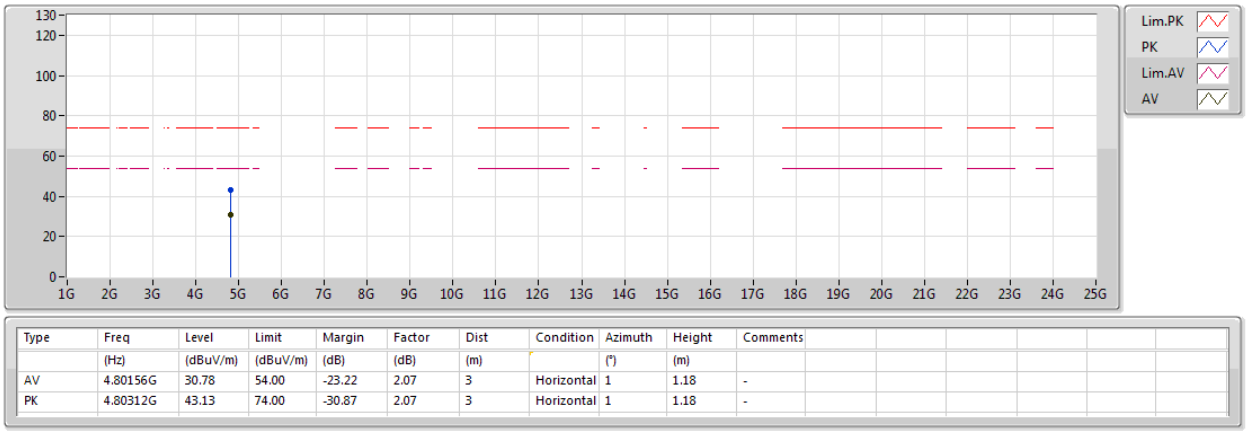


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.80198G	30.76	54.00	-23.24	2.07	3	Vertical	122	1.85	-
PK	4.80229G	43.56	74.00	-30.44	2.07	3	Vertical	122	1.85	-

BT-BR(1Mbps)

2402MHz_TX

23/10/2018

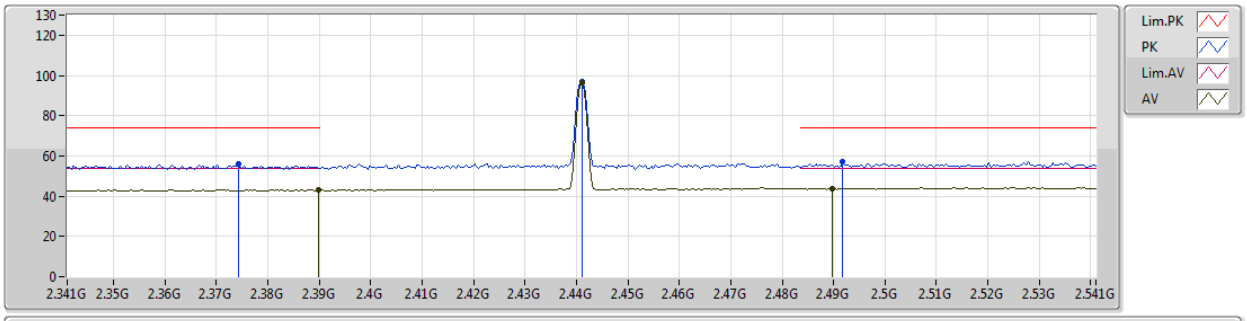


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.80156G	30.78	54.00	-23.22	2.07	3	Horizontal	1	1.18	-
PK	4.80312G	43.13	74.00	-30.87	2.07	3	Horizontal	1	1.18	-

BT-BR(1Mbps)

2441MHz_TX

23/10/2018

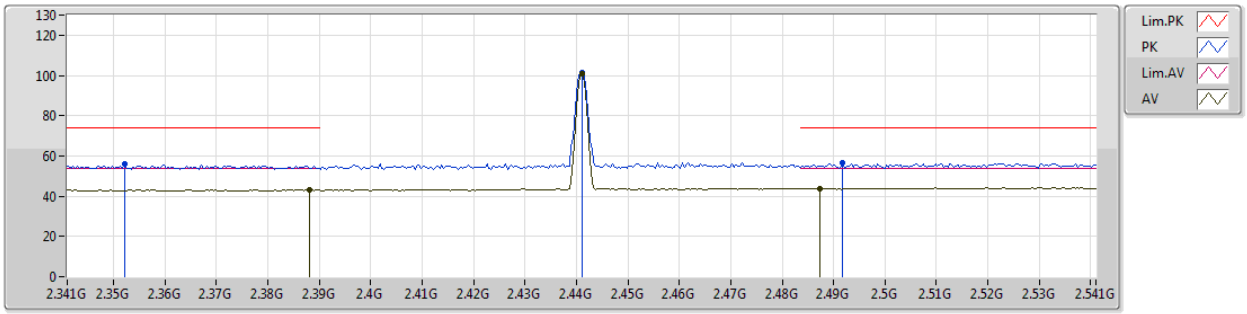


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3898G	43.19	54.00	-10.81	30.77	3	Vertical	143	1.55	-
AV	2.441G	96.27	Inf	-Inf	30.95	3	Vertical	143	1.55	-
AV	2.4898G	43.93	54.00	-10.07	31.13	3	Vertical	143	1.55	-
PK	2.3742G	55.77	74.00	-18.23	30.72	3	Vertical	143	1.55	-
PK	2.441G	96.69	Inf	-Inf	30.95	3	Vertical	143	1.55	-
PK	2.4918G	57.01	74.00	-16.99	31.14	3	Vertical	143	1.55	-

BT-BR(1Mbps)

2441MHz_TX

23/10/2018

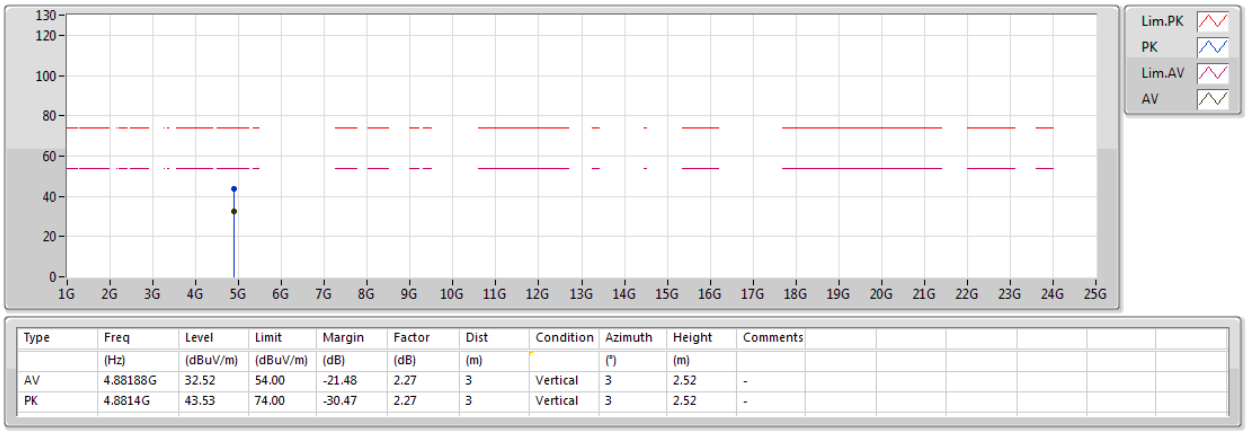


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3882G	43.17	54.00	-10.83	30.77	3	Horizontal	47	1.78	-
AV	2.441G	100.75	Inf	-Inf	30.95	3	Horizontal	47	1.78	-
AV	2.4874G	43.85	54.00	-10.15	31.12	3	Horizontal	47	1.78	-
PK	2.3522G	55.82	74.00	-18.18	30.65	3	Horizontal	47	1.78	-
PK	2.441G	101.49	Inf	-Inf	30.95	3	Horizontal	47	1.78	-
PK	2.4918G	56.48	74.00	-17.52	31.14	3	Horizontal	47	1.78	-

BT-BR(1Mbps)

2441MHz_TX

23/10/2018

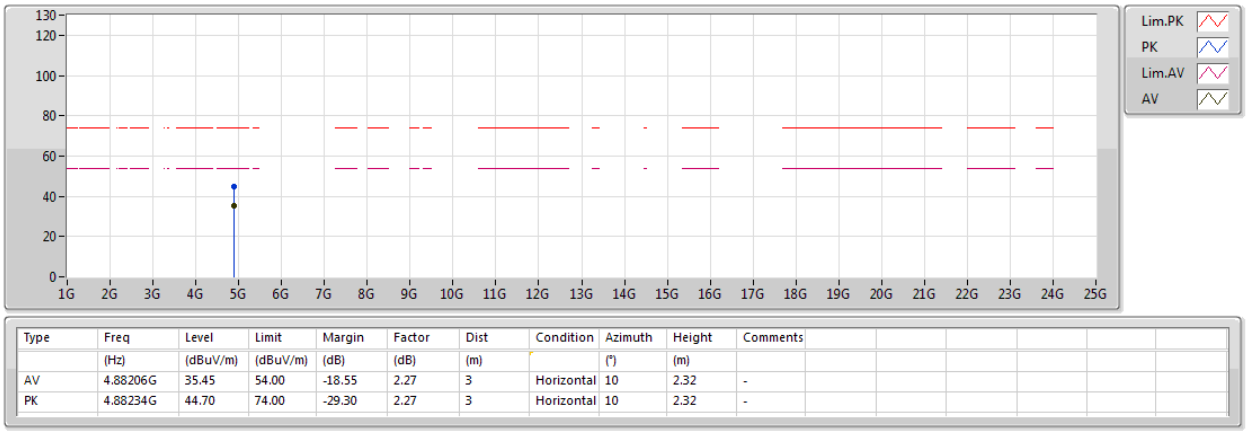


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.88188G	32.52	54.00	-21.48	2.27	3	Vertical	3	2.52	-
PK	4.8814G	43.53	74.00	-30.47	2.27	3	Vertical	3	2.52	-

BT-BR(1Mbps)

2441MHz_TX

23/10/2018

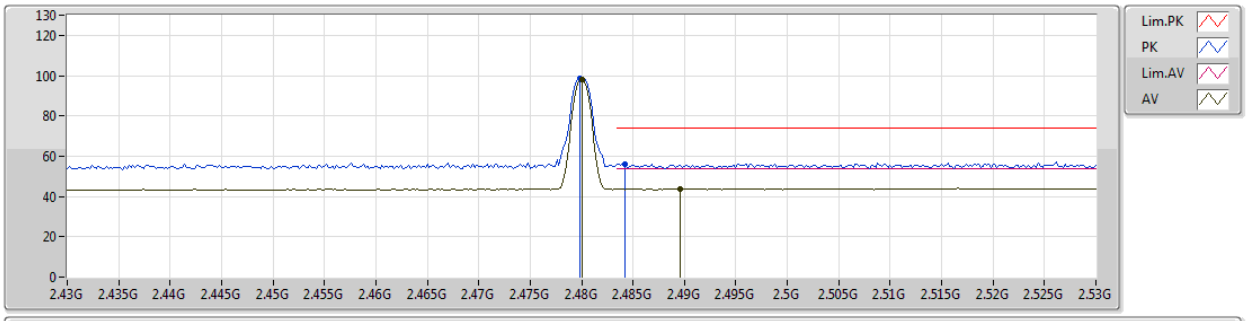


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.88206G	35.45	54.00	-18.55	2.27	3	Horizontal	10	2.32	-
PK	4.88234G	44.70	74.00	-29.30	2.27	3	Horizontal	10	2.32	-

BT-BR(1Mbps)

2480MHz_TX

23/10/2018

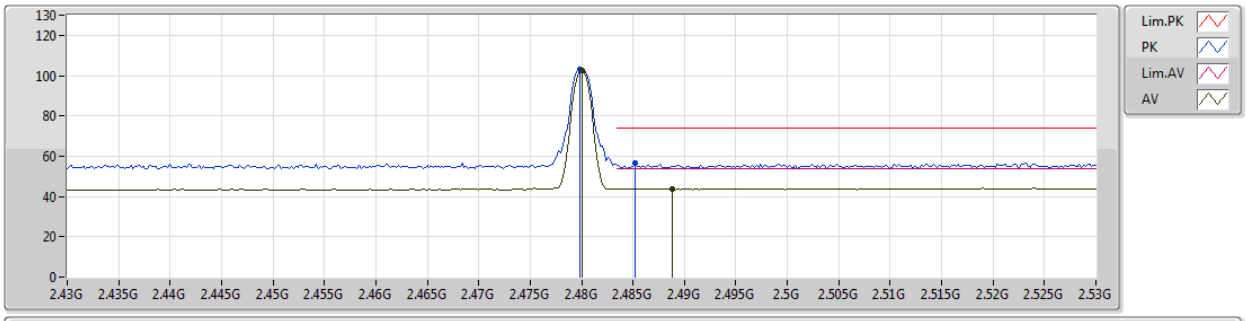


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.48G	98.17	Inf	-Inf	31.09	3	Vertical	94	1.99	-
AV	2.4896G	43.81	54.00	-10.19	31.13	3	Vertical	94	1.99	-
PK	2.4798G	98.56	Inf	-Inf	31.09	3	Vertical	94	1.99	-
PK	2.4842G	56.25	74.00	-17.75	31.12	3	Vertical	94	1.99	-

BT-BR(1Mbps)

2480MHz_TX

23/10/2018

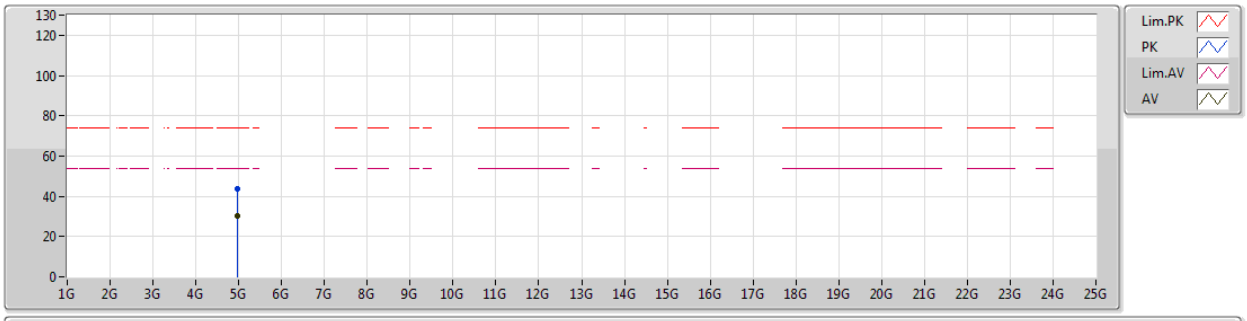


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.48G	102.55	Inf	-Inf	31.09	3	Horizontal	47	1.38	-
AV	2.4888G	43.90	54.00	-10.10	31.13	3	Horizontal	47	1.38	-
PK	2.4798G	102.93	Inf	-Inf	31.09	3	Horizontal	47	1.38	-
PK	2.4852G	56.48	74.00	-17.52	31.12	3	Horizontal	47	1.38	-

BT-BR(1Mbps)

2480MHz_TX

23/10/2018

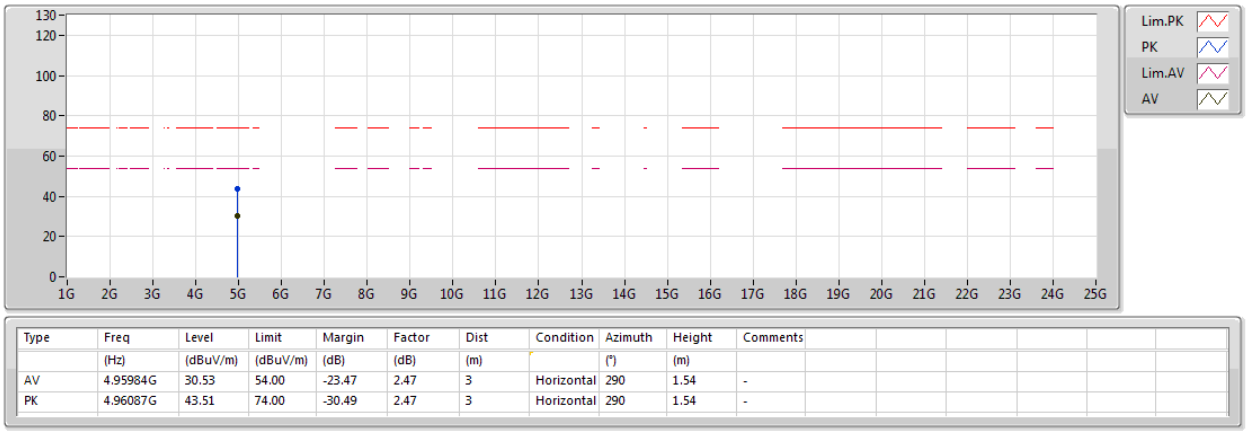


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.96195G	30.29	54.00	-23.71	2.47	3	Vertical	323	1.23	-
PK	4.9595G	43.69	74.00	-30.31	2.47	3	Vertical	323	1.23	-

BT-BR(1Mbps)

2480MHz_TX

23/10/2018

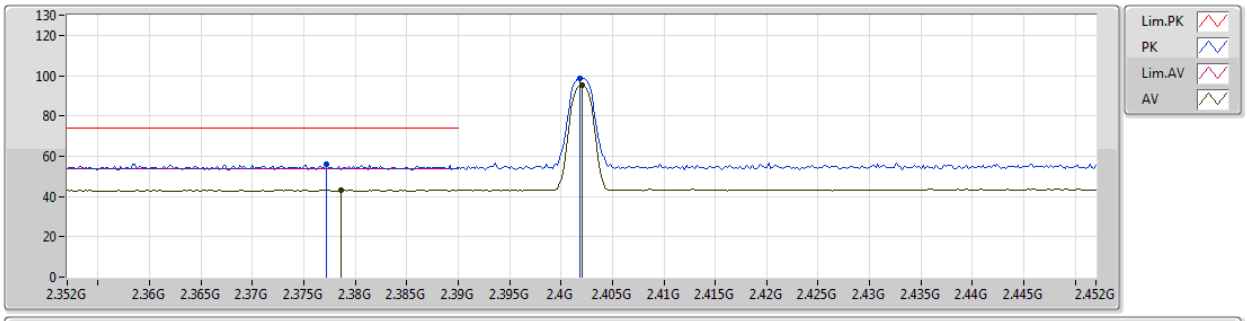


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.95984G	30.53	54.00	-23.47	2.47	3	Horizontal	290	1.54	-
PK	4.96087G	43.51	74.00	-30.49	2.47	3	Horizontal	290	1.54	-

BT-EDR(2Mbps)

2402MHz_TX

23/10/2018

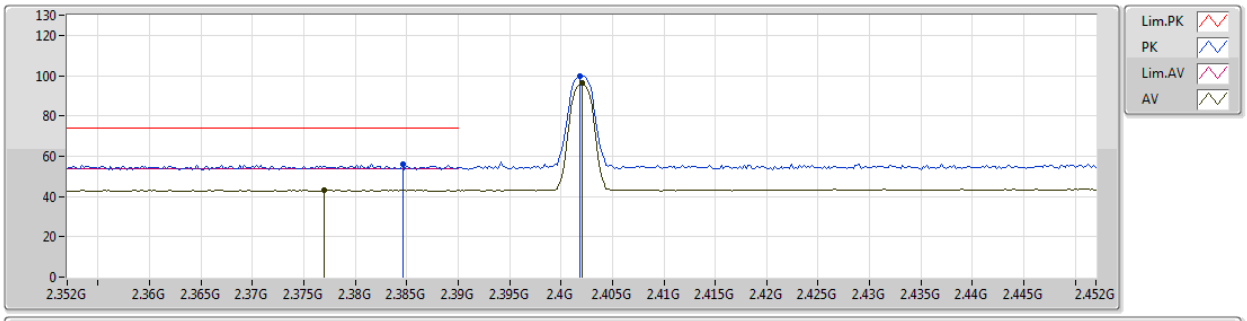


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3786G	43.26	54.00	-10.74	30.74	3	Vertical	221	1.70	-
AV	2.402G	95.28	Inf	-Inf	30.82	3	Vertical	221	1.70	-
PK	2.3772G	56.23	74.00	-17.77	30.73	3	Vertical	221	1.70	-
PK	2.4018G	98.81	Inf	-Inf	30.82	3	Vertical	221	1.70	-

BT-EDR(2Mbps)

2402MHz_TX

23/10/2018

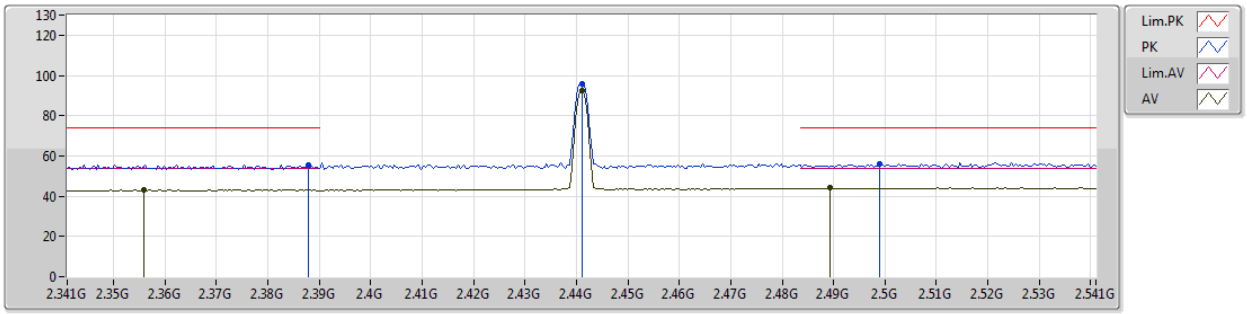


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.377G	43.31	54.00	-10.69	30.73	3	Horizontal	336	2.42	-
AV	2.402G	96.14	Inf	-Inf	30.82	3	Horizontal	336	2.42	-
PK	2.3846G	56.15	74.00	-17.85	30.76	3	Horizontal	336	2.42	-
PK	2.4018G	99.62	Inf	-Inf	30.82	3	Horizontal	336	2.42	-

BT-EDR(2Mbps)

2441MHz_TX

23/10/2018

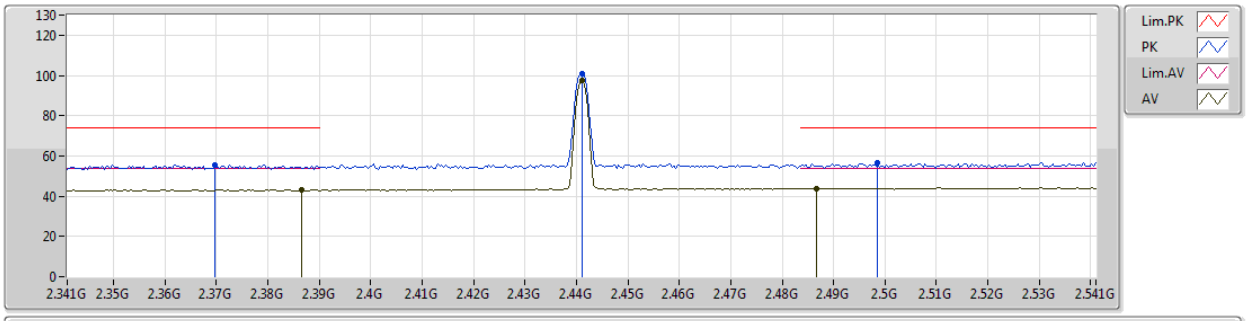


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3558G	43.11	54.00	-10.89	30.66	3	Vertical	144	1.55	-
AV	2.441G	92.44	Inf	-Inf	30.95	3	Vertical	144	1.55	-
AV	2.4894G	44.09	54.00	-9.91	31.13	3	Vertical	144	1.55	-
PK	2.3878G	55.73	74.00	-18.27	30.77	3	Vertical	144	1.55	-
PK	2.441G	95.86	Inf	-Inf	30.95	3	Vertical	144	1.55	-
PK	2.499G	55.91	74.00	-18.09	31.17	3	Vertical	144	1.55	-

BT-EDR(2Mbps)

2441MHz_TX

23/10/2018

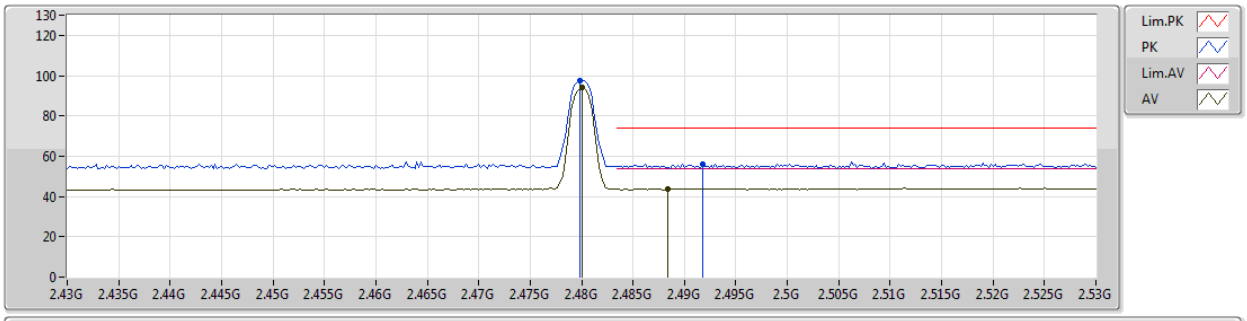


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3866G	43.18	54.00	-10.82	30.76	3	Horizontal	47	1.80	-
AV	2.441G	97.32	Inf	-Inf	30.95	3	Horizontal	47	1.80	-
AV	2.4866G	43.90	54.00	-10.10	31.12	3	Horizontal	47	1.80	-
PK	2.3698G	55.50	74.00	-18.50	30.71	3	Horizontal	47	1.80	-
PK	2.441G	100.73	Inf	-Inf	30.95	3	Horizontal	47	1.80	-
PK	2.4986G	56.45	74.00	-17.55	31.17	3	Horizontal	47	1.80	-

BT-EDR(2Mbps)

2480MHz_TX

23/10/2018

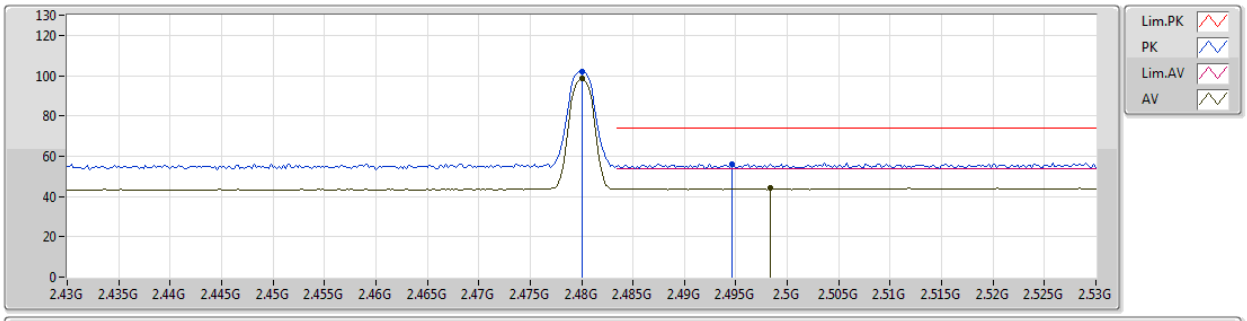


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.48G	94.02	Inf	-Inf	31.09	3	Vertical	86	1.33	-
AV	2.4884G	43.84	54.00	-10.16	31.13	3	Vertical	86	1.33	-
PK	2.4798G	97.48	Inf	-Inf	31.09	3	Vertical	86	1.33	-
PK	2.4918G	56.15	74.00	-17.85	31.14	3	Vertical	86	1.33	-

BT-EDR(2Mbps)

2480MHz_TX

23/10/2018

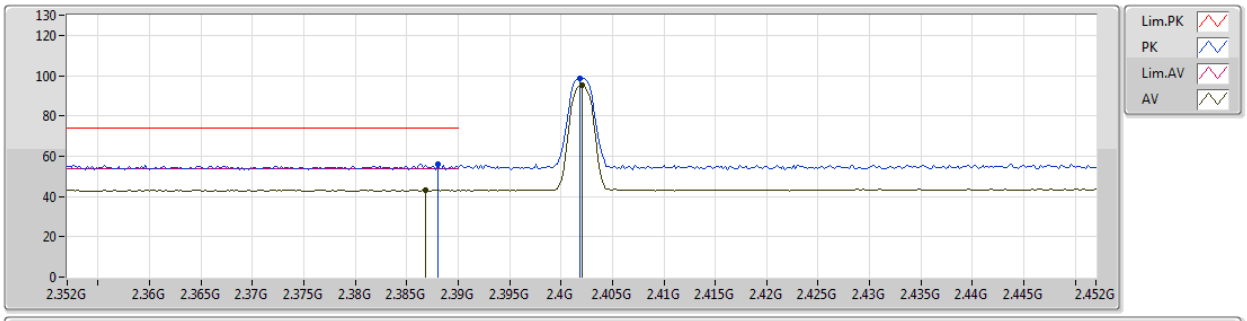


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.48G	98.35	Inf	-Inf	31.09	3	Horizontal	48	1.37	-
AV	2.4984G	44.04	54.00	-9.96	31.17	3	Horizontal	48	1.37	-
PK	2.48G	101.83	Inf	-Inf	31.09	3	Horizontal	48	1.37	-
PK	2.4946G	55.96	74.00	-18.04	31.15	3	Horizontal	48	1.37	-

BT-EDR(3Mbps)

2402MHz_TX

23/10/2018

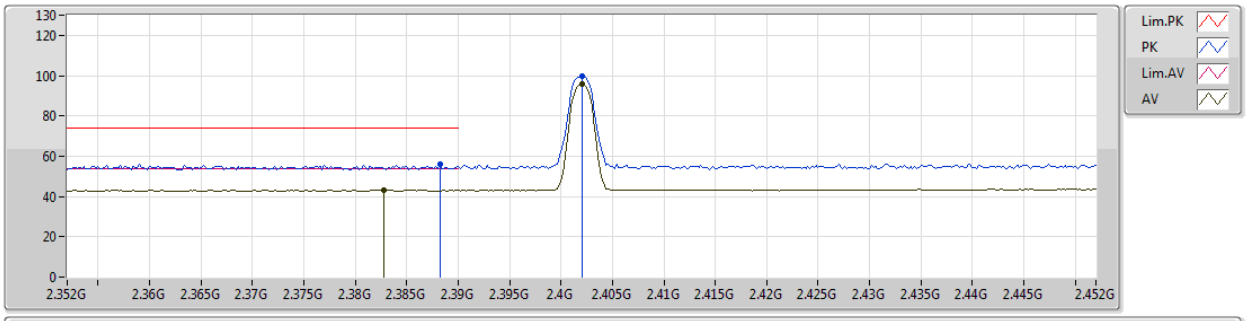


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3868G	43.33	54.00	-10.67	30.76	3	Vertical	220	1.70	-
AV	2.402G	95.13	Inf	-Inf	30.82	3	Vertical	220	1.70	-
PK	2.388G	56.21	74.00	-17.79	30.77	3	Vertical	220	1.70	-
PK	2.4018G	98.72	Inf	-Inf	30.82	3	Vertical	220	1.70	-

BT-EDR(3Mbps)

2402MHz_TX

23/10/2018

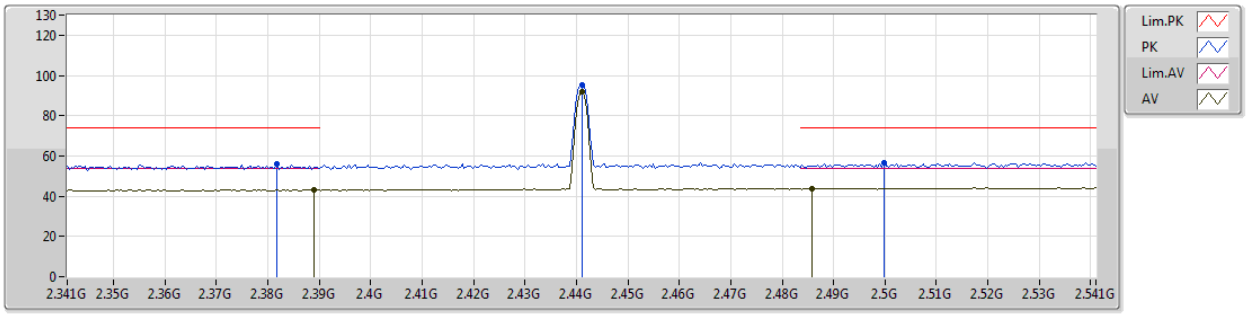


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3828G	43.12	54.00	-10.88	30.75	3	Horizontal	337	2.41	-
AV	2.402G	95.91	Inf	-Inf	30.82	3	Horizontal	337	2.41	-
PK	2.3882G	56.14	74.00	-17.86	30.77	3	Horizontal	337	2.41	-
PK	2.402G	99.49	Inf	-Inf	30.82	3	Horizontal	337	2.41	-

BT-EDR(3Mbps)

2441MHz_TX

23/10/2018

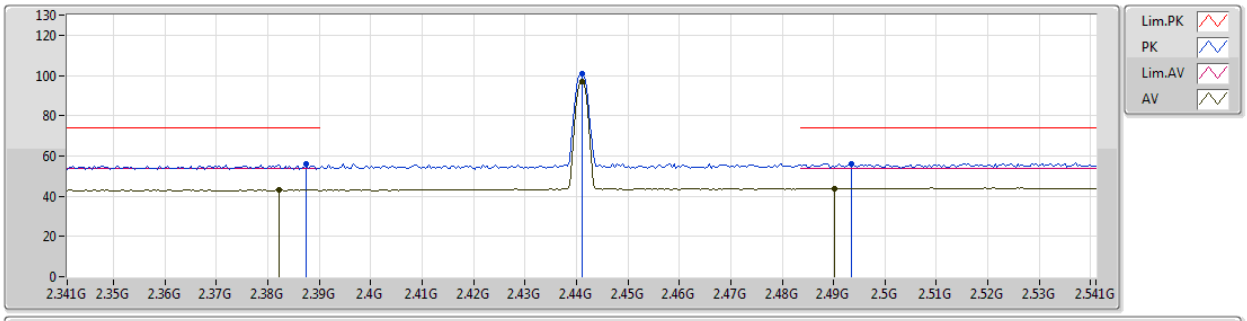


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.389G	43.12	54.00	-10.88	30.77	3	Vertical	143	1.54	-
AV	2.441G	91.76	Inf	-Inf	30.95	3	Vertical	143	1.54	-
AV	2.4858G	43.93	54.00	-10.07	31.12	3	Vertical	143	1.54	-
PK	2.3818G	56.26	74.00	-17.74	30.75	3	Vertical	143	1.54	-
PK	2.441G	95.27	Inf	-Inf	30.95	3	Vertical	143	1.54	-
PK	2.4998G	56.57	74.00	-17.43	31.17	3	Vertical	143	1.54	-

BT-EDR(3Mbps)

2441MHz_TX

23/10/2018

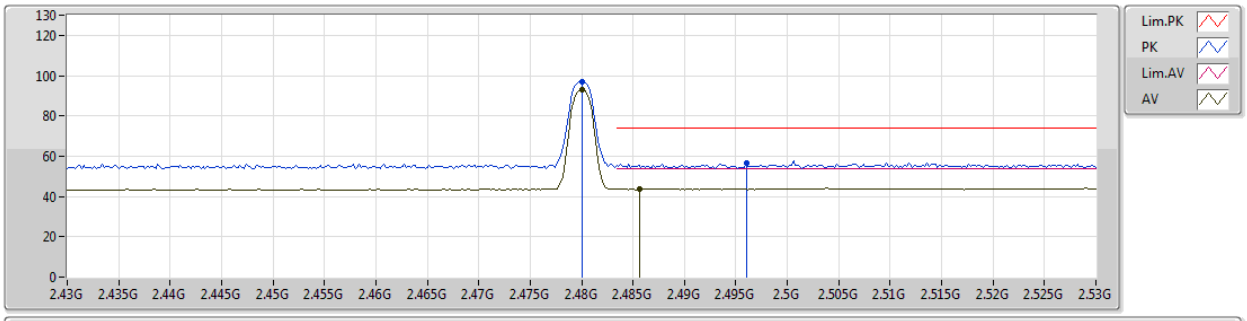


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3822G	43.21	54.00	-10.79	30.75	3	Horizontal	52	1.78	-
AV	2.441G	97.17	Inf	-Inf	30.95	3	Horizontal	52	1.78	-
AV	2.4902G	43.91	54.00	-10.09	31.13	3	Horizontal	52	1.78	-
PK	2.3874G	55.87	74.00	-18.13	30.76	3	Horizontal	52	1.78	-
PK	2.441G	100.70	Inf	-Inf	30.95	3	Horizontal	52	1.78	-
PK	2.4934G	56.29	74.00	-17.71	31.14	3	Horizontal	52	1.78	-

BT-EDR(3Mbps)

2480MHz_TX

23/10/2018

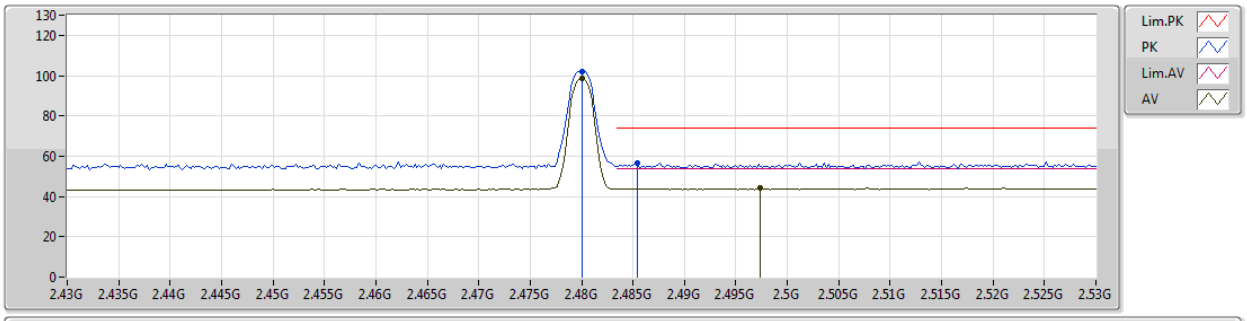


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.48G	93.23	Inf	-Inf	31.09	3	Vertical	92	1.30	-
AV	2.4856G	43.81	54.00	-10.19	31.12	3	Vertical	92	1.30	-
PK	2.48G	96.81	Inf	-Inf	31.09	3	Vertical	92	1.30	-
PK	2.496G	56.54	74.00	-17.46	31.16	3	Vertical	92	1.30	-

BT-EDR(3Mbps)

2480MHz_TX

23/10/2018



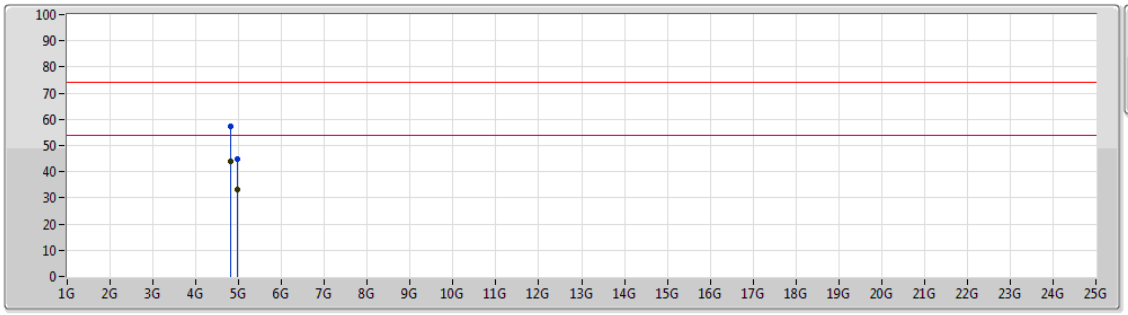
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.48G	98.68	Inf	-Inf	31.09	3	Horizontal	49	1.38	-
AV	2.4974G	44.04	54.00	-9.96	31.16	3	Horizontal	49	1.38	-
PK	2.48G	102.26	Inf	-Inf	31.09	3	Horizontal	49	1.38	-
PK	2.4854G	56.68	74.00	-17.32	31.12	3	Horizontal	49	1.38	-

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
Mode 1	Pass	AV	4.8224G	44.12	54.00	-9.88	2.13	3	Vertical	357	2.20
Mode 2	Pass	AV	10.35995G	47.61	54.00	-6.39	12.63	3	Vertical	17	2.44

Mode 1

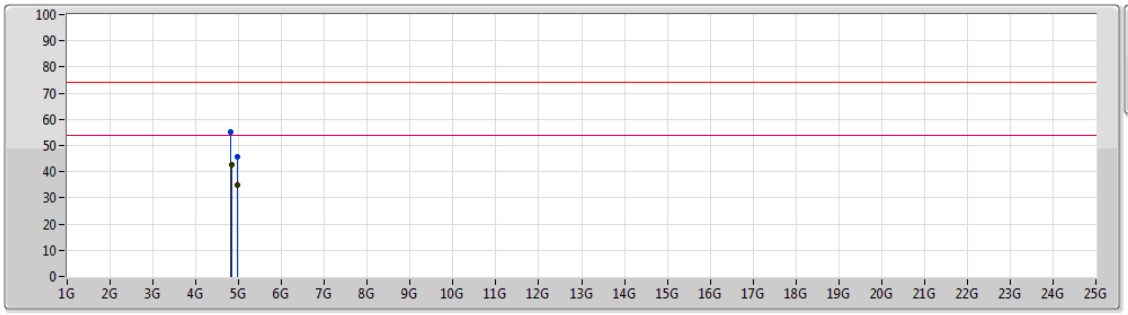
24/10/2018



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.8224G	44.12	54.00	-9.88	2.13	3	Vertical	357	2.20	-
AV	4.95988G	33.39	54.00	-20.61	2.47	3	Vertical	358	2.34	-
PK	4.82G	57.52	74.00	-16.48	2.12	3	Vertical	357	2.20	-
PK	4.96004G	44.64	74.00	-29.36	2.47	3	Vertical	358	2.34	-

Mode 1

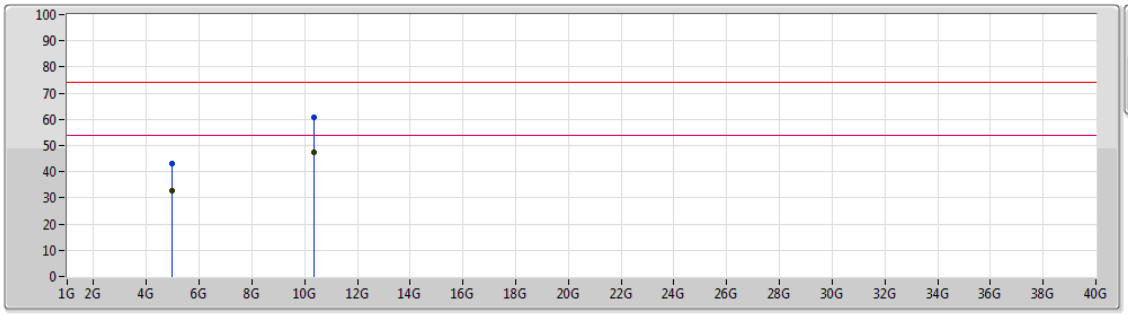
24/10/2018



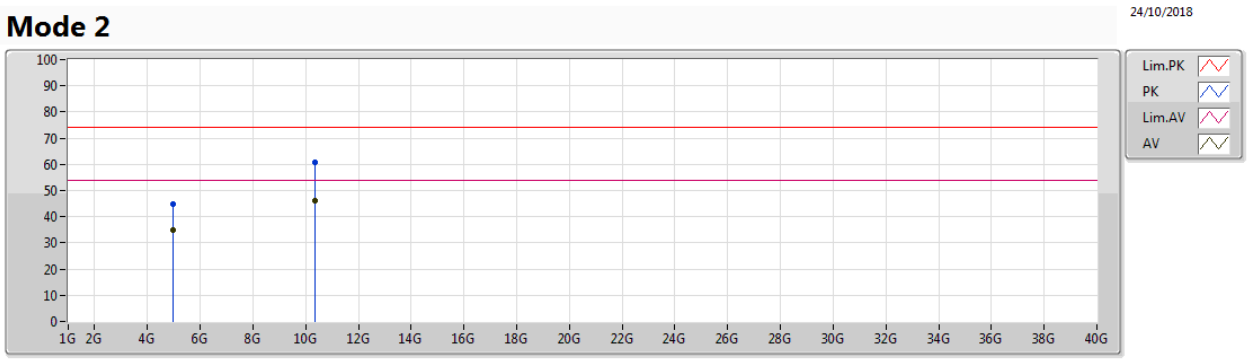
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.8256G	42.74	54.00	-11.26	2.14	3	Horizontal	357	1.17	-
AV	4.96G	34.78	54.00	-19.22	2.47	3	Horizontal	6	2.32	-
PK	4.8234G	55.34	74.00	-18.66	2.13	3	Horizontal	357	1.17	-
PK	4.96002G	45.56	74.00	-28.44	2.47	3	Horizontal	6	2.32	-

Mode 2

24/10/2018



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.95964G	32.68	54.00	-21.32	2.47	3	Vertical	320	1.05	-
AV	10.35995G	47.61	54.00	-6.39	12.63	3	Vertical	17	2.44	-
PK	4.95964G	43.05	74.00	-30.95	2.47	3	Vertical	320	1.05	-
PK	10.3612G	60.99	74.00	-13.01	12.64	3	Vertical	17	2.44	-



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.95877G	35.04	54.00	-18.96	2.46	3	Horizontal	146	1.21	-
AV	10.36025G	46.04	54.00	-7.96	12.63	3	Horizontal	32	2.82	-
PK	4.95877G	45.04	74.00	-28.96	2.46	3	Horizontal	146	1.21	-
PK	10.3612G	60.93	74.00	-13.07	12.64	3	Horizontal	32	2.82	-