FCC Test Report

FCC ID	:	**VW3DIW362-V2**
Equipment	:	**SET TOP BOX**
Brand Name	:	**SAGEMCOM**
Model Name	:	**DIW362 UHD V2**
Applicant / Manufacturer	:	**Sagemcom Broadband SAS 250, route de l'Empereur 92848 Rueil-Malmaison cedex – France**
Standard	:	**47 CFR FCC Part 15.247**

The product was received on Dec. 14, 2018, and testing was started from Dec. 20, 2018 and completed on Dec. 29, 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
FR862116-02AD	01	Initial issue of report	Mar. 11, 2019

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: Jackson Tsai

Report Producer: Ann Hou

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	-	-	PCB	N/A
2	-	-	PCB	N/A
3	-	-	PCB	I-PEX
4	-	-	PCB	N/A

Ant.	Port	Gain (dBi)		
		2.4G	5G	BT
1	1	3.30	5.36	-
2	2	3.55	5.31	-
3	3	3.93	5.41	-
4	4	-	-	3.54

Note 1: The EUT has four antennas.
Note 2: Higher gain antenna was used to perform the worst configuration and result of that was recorded as the final test result.

For 2.4 GHz function:

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

Support diversity function and pre-tested on each single chain, the worst case was Ant. 2(port 2) and it was record in this test report.

For IEEE 802.11n mode (3TX/3RX)
Ant. 1 (port 1), Ant. 2 (port 2) and Ant. 3 (port 3) could transmit/receive simultaneously.
For 5 GHz function:
For IEEE 802.11a mode (1TX/1RX)
Support diversity function and pre-tested on each single chain, the worst case was Ant. 3(port 3) and it was record in this test report.
For IEEE 802.11n/ac mode (3TX/3RX)
Ant. 1 (port 1), Ant. 2 (port 2) and Ant. 3 (port 3) could transmit/receive simultaneously.
For Bluetooth function:
For Bluetooth mode (1TX/1RX)
Only Ant. 4 (port 4) can be used as transmitting/receiving antenna.

1.1.3 EUT Information

Operational Condition				
EUT Power Type	From AC Adapter			
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)	0.785	1.051	2.888m	1k
BT-EDR(2Mbps)	0.742	1.296	2.89m	1k
BT-EDR(3Mbps)	0.785	1.051	2.893m	1k

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

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
AC Conduction	CO04-HY	Lego	21°C / 55%	26/Dec/2018
RF Conducted	TH06-HY	Streak	23.3°C / 63%	26/Dec/2018
Radiated	03CH03-HY	Terry	25°C / 57%	29/Dec/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)	3.54 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	1.6 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	DoS

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

2.3 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral
Operating Mode	CTX
1	Adapter 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
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	Adapter mode
Operating Mode > 1GHz	CTX
Orthogonal Planes of EUT	**Z Plane**
	
Worst Planes of EUT	V

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Operating Mode	CTX
1	Bluetooth+WLAN 2.4GHz+WLAN 5GHz
Refer to Sporton Test Report No.: FA862116-02 for Co-location RF Exposure Evaluation.	

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 Accessories and Support Equipment

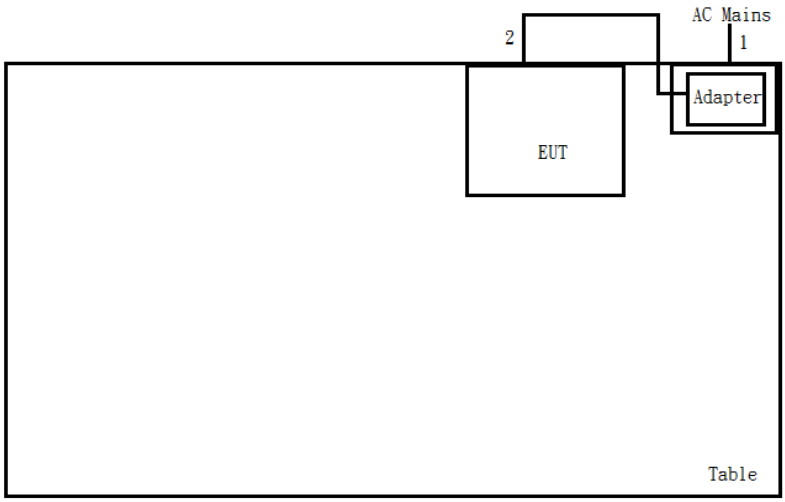
Accessories				
AC Adapter 1	**Brand Name**	SAGEMCOM	**Model Name**	MSA-C2000IS12.0-24N-DE
	Power Rating	I/P: 200-240Vac, 50/60Hz, 0.7A max, O/P: 12Vdc, 2A		
	Power Cord	1.8 meter, non-shielded cable, w/o ferrite core		
AC Adapter 2	**Brand Name**	SAGEMCOM	**Model Name**	MSA-C2000IS12.0-24N-DE
	Manufacturer	MOSO		
	Power Rating	I/P: 200-240Vac, 50/60Hz, 0.7A max, O/P: 12Vdc, 2A		
	Power Cord	1.8 meter, non-shielded cable, w/o ferrite core		
HDMI Cable	**Power Cord**	1.4 meter, shielded cable, w/o ferrite core		

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

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

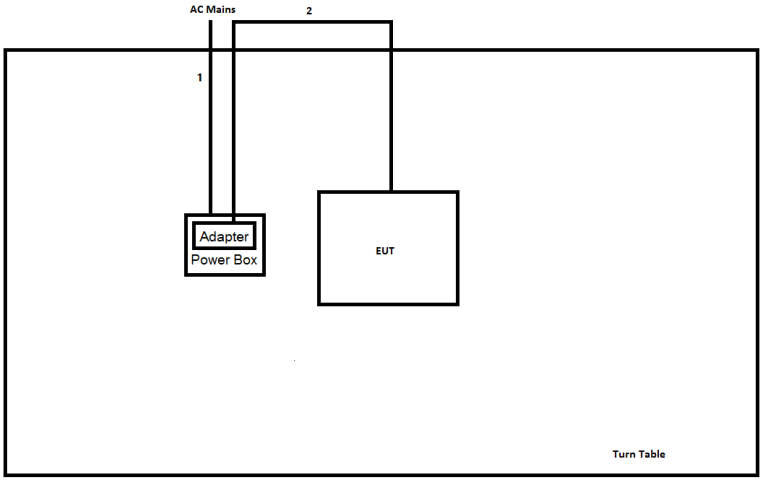
2.5 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



Item	Connection	Shielded	Length
1	AC Power line	No	1.5m
2	DC Power line	No	1.79m

Test Setup Diagram - Radiated Test



Item	Connection	Shielded	Length
1	AC Power line	No	1.8m
2	DC Power line	No	1.79m

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

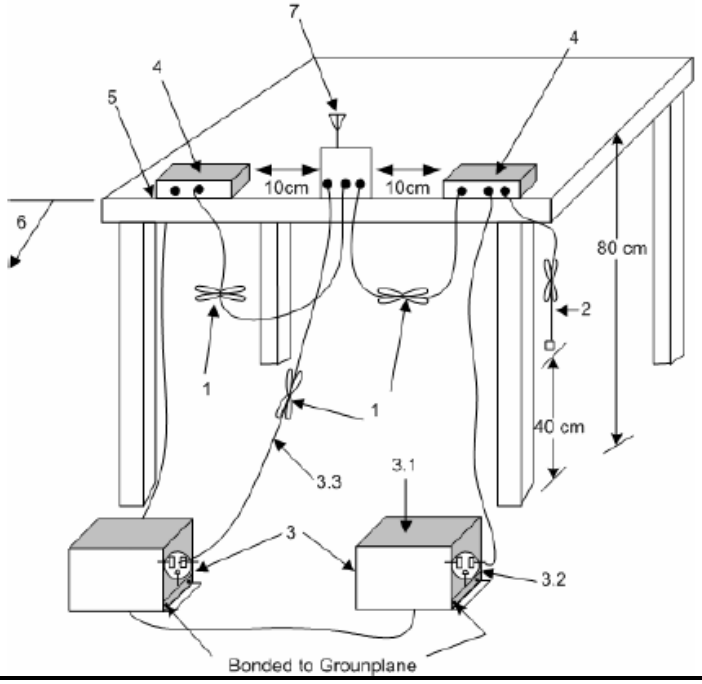
Refer a test equipment and calibration data table in this test report.

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	

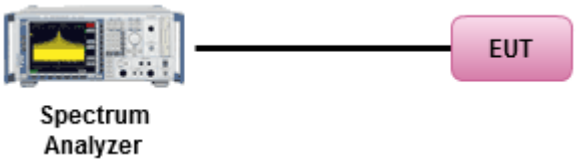
3.2.2 Measuring Instruments

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
 Spectrum Analyzer

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

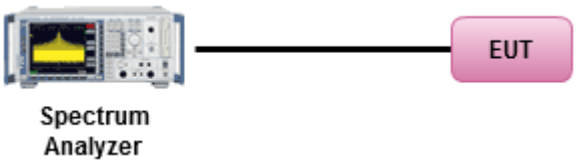
3.4.3 Measuring Instruments

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	

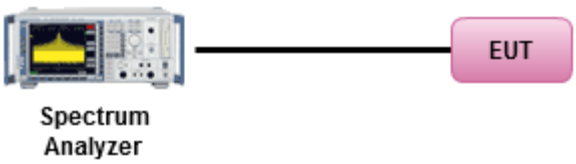
3.5.2 Measuring Instruments

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)


3.5.5 Test Result of Time of Occupancy (Dwell Time)

Refer as Appendix E

3.6 Emissions in Non-restricted Frequency Bands

3.6.1 Emissions in Non-restricted Frequency Bands Limit

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

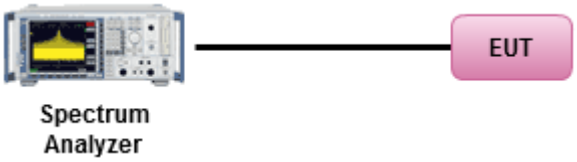
3.6.2 Measuring Instruments

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

3.6.3 Test Procedures

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

3.6.4 Test Setup

Emissions in Non-restricted Frequency Bands


3.6.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix F

3.7 Emissions in Restricted Frequency Bands

3.7.1 Emissions in Restricted Frequency Bands Limit

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

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

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

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

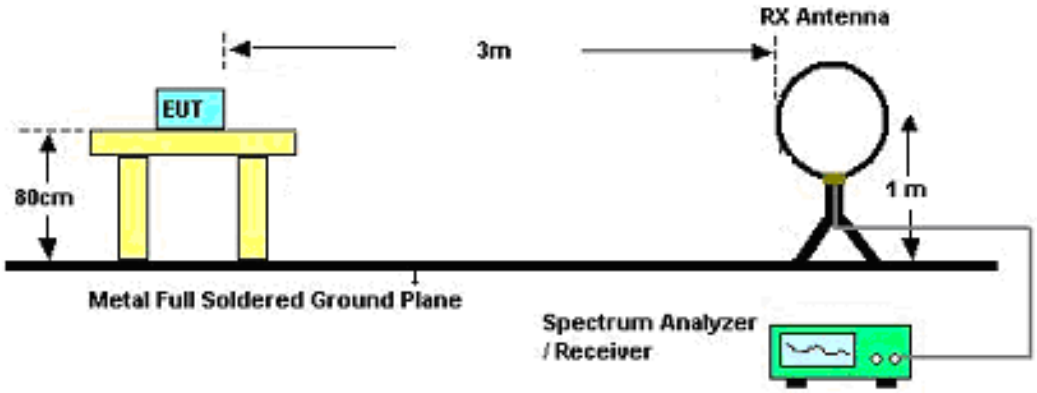
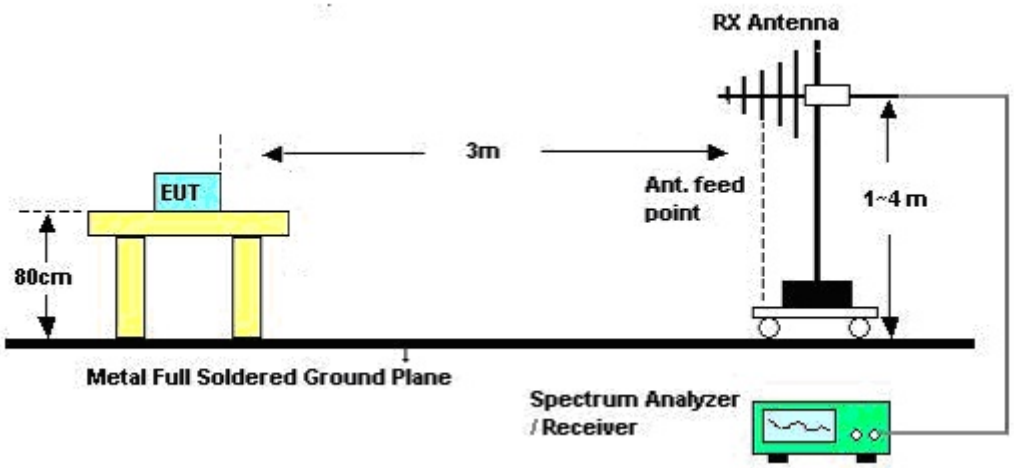
3.7.2 Measuring Instruments

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

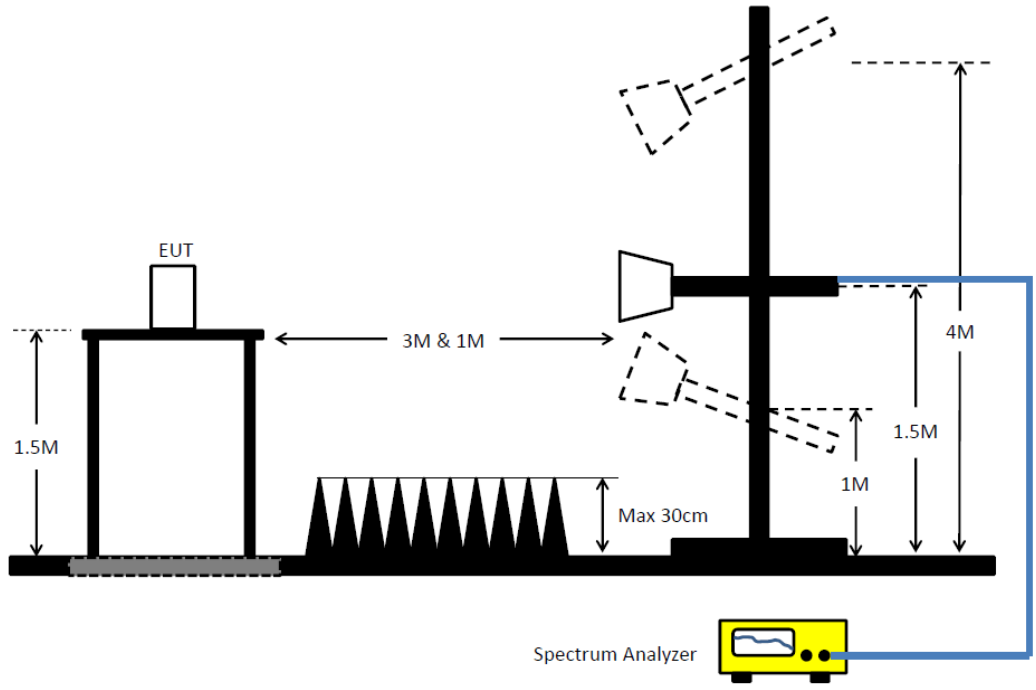
3.7.3 Test Procedures

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

3.7.4 Test Setup

Emissions in Restricted Frequency Bands
9kHz ~30MHz

30MHz~1GHz


Above 1GHz



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

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

3.7.6 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix G

4 Test Equipment and Calibration Data

Instrument for AC Conduction

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMC Receiver	R&S	ESR	102051	9KHz ~ 3.6GHz	03/May/2018	02/May/2019
LISN	R&S	ENV216	101295	9kHz ~ 30MHz	08/Nov/2018	07/Nov/2019
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

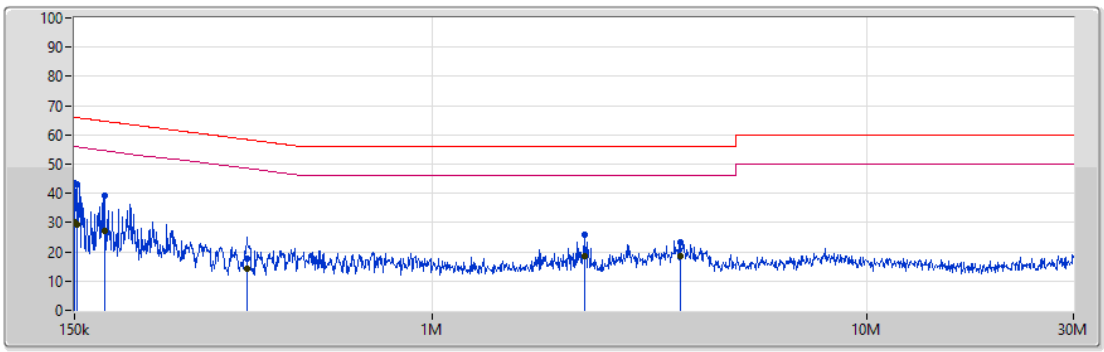
Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30MHz ~ 1GHz 3m	30/Oct/2018	29/Oct/2019
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	1GHz ~ 18GHz 3m	30/Oct/2018	29/Oct/2019
Amplifier	HP	8447D	2944A08033	10kHz ~ 1.3GHz	23/Apr/2018	19/Apr/2019
Microwave System Preamplifier	KEYSIGHT	83017A	MY53270196	1GHz ~ 26.5GHz	05/Sep/2018	04/Sep/2019
Signal Analyzer	R&S	FSV40	101500	10Hz ~ 40GHz	18/Jul/2018	17/Jul/2019
EMI Test Receiver	R&S	ESR3	102052	9kHz ~ 3.6GHz	10/Apr/2018	09/Apr/2019
RF Cable-R03m	Jye Bao	RG142	CB021	9kHz ~ 1GHz	29/Jan/2018	28/Jan/2019
RF Cable-high	SUHNER	SUCOFLEX 106	CB222	1GHz ~ 40GHz	29/Jan/2018	28/Jan/2019
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170154	18GHz ~ 40GHz	06/Feb/ 2018	05/Feb/2019
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1531	1GHz ~ 18GHz	18/Apr/ 2018	17/Apr/2019
Bilog Antenna with 5dB Pad	ETS	3142B & MTJ6102-05	00022055	26 MHz - 3 GHz	19/Nov/2018	18/Nov/2019
Preamplifier	MITEQ	TTA1840-35-HG	1864481	18GHz ~ 40GHz	24/Aug/2018	23/Aug/2019
Loop Antenna	TESEQ	HLA 6120	31244	9kHz ~ 30MHz	28/Mar/2018	27/Mar/2019
RF Cable	HUBER+SUHNER	SUCOFLEX 102	MY2579/2	100 kHz~40 GHz	13/Jun/2018	12/Jun/2019
RF Cable	HUBER+SUHNER	SUCOFLEX 102	MY2580/2	100 kHz~40 GHz	10/May/2018	09/May/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
Signal Generator	R&S	SMB100A	175727	100kHz~40GHz	26/Oct/2018	25/Oct/2019
Power Sensor	Anritsu	MA2411B	0917017	300MHz ~ 40GHz	05/Feb/2018	04/Feb/2019
Power Meter	Anritsu	ML2495A	0949003	300MHz ~ 40GHz	05/Feb/2018	04/Feb/2019
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY10710/4	30MHz ~ 26.5GHz	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
CABLE 0.5m	HUBER	MY39464/4	RF Cable - 23	1GHz~18GHz	26/Jan/2018	25/Jan/2019

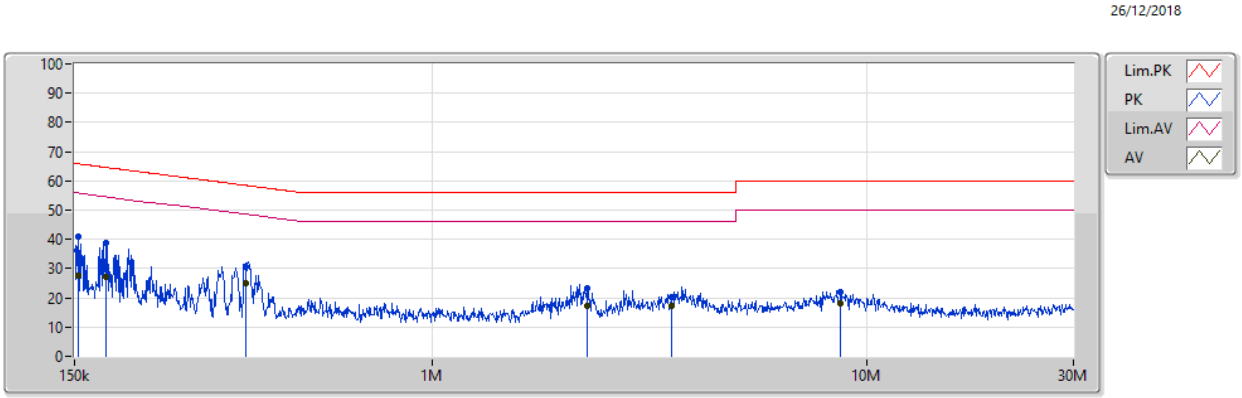
AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	Neutral
Operating Function	Adapter mode		

26/12/2018



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	150.305k	43.60	65.98	-22.38	19.48	Neutral	"Worst"	24.12	9.60	0.01	9.87
AV	150.305k	30.09	55.98	-25.89	19.48	Neutral	-	10.61	9.60	0.01	9.87
QP	151.7k	43.03	65.90	-22.87	19.48	Neutral	-	23.55	9.60	0.01	9.87
AV	151.7k	29.20	55.90	-26.70	19.48	Neutral	-	9.72	9.60	0.01	9.87
QP	176.587k	39.06	64.64	-25.58	19.47	Neutral	-	19.59	9.59	0.01	9.87
AV	176.587k	27.25	54.64	-27.39	19.47	Neutral	-	7.78	9.59	0.01	9.87
QP	374.207k	17.47	58.41	-40.94	19.48	Neutral	-	-2.01	9.59	0.01	9.88
AV	374.207k	14.12	48.41	-34.29	19.48	Neutral	-	-5.36	9.59	0.01	9.88
QP	2.243M	25.93	56.00	-30.07	19.54	Neutral	-	6.39	9.61	0.04	9.89
AV	2.243M	18.50	46.00	-27.50	19.54	Neutral	-	-1.04	9.61	0.04	9.89
QP	3.723M	23.19	56.00	-32.81	19.54	Neutral	-	3.65	9.61	0.04	9.89
AV	3.723M	18.74	46.00	-27.26	19.54	Neutral	-	-0.80	9.61	0.04	9.89

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



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	153.2k	41.11	65.83	-24.72	19.48	Line	-	21.63	9.60	0.01	9.87
AV	153.2k	27.42	55.83	-28.41	19.48	Line	-	7.94	9.60	0.01	9.87
QP	176.722k	38.82	64.64	-25.82	19.48	Line	-	19.34	9.60	0.01	9.87
AV	176.722k	26.97	54.64	-27.67	19.48	Line	-	7.49	9.60	0.01	9.87
QP	370.911k	30.75	58.49	-27.74	19.48	Line	-	11.27	9.59	0.01	9.88
AV	370.911k	25.18	48.49	-23.31	19.48	Line	"Worst"	5.70	9.59	0.01	9.88
QP	2.273M	23.28	56.00	-32.72	19.55	Line	-	3.73	9.62	0.04	9.89
AV	2.273M	17.37	46.00	-28.63	19.55	Line	-	-2.18	9.62	0.04	9.89
QP	3.558M	20.09	56.00	-35.91	19.56	Line	-	0.53	9.63	0.04	9.89
AV	3.558M	17.26	46.00	-28.74	19.56	Line	-	-2.30	9.63	0.04	9.89
QP	8.733M	21.97	60.00	-38.03	19.62	Line	-	2.35	9.66	0.07	9.89
AV	8.733M	18.07	50.00	-31.93	19.62	Line	-	-1.55	9.66	0.07	9.89

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	898.301k	898KF1D	916.25k	895.802k
BT-EDR(2Mbps)	1.336M	1.229M	1M23G1D	1.336M	1.222M
BT-EDR(3Mbps)	1.311M	1.227M	1M23G1D	1.305M	1.222M

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;

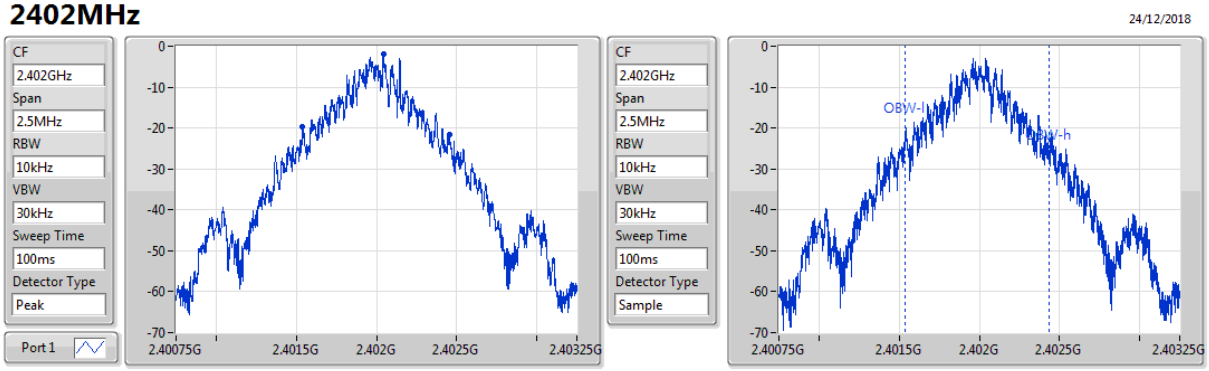
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-BR(1Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	Inf	916.25k	897.051k
2441MHz_TnomVnom	Pass	Inf	920k	895.802k
2480MHz_TnomVnom	Pass	Inf	917.5k	898.301k
BT-EDR(2Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	Inf	1.336M	1.229M
2441MHz_TnomVnom	Pass	Inf	1.336M	1.226M
2480MHz_TnomVnom	Pass	Inf	1.336M	1.222M
BT-EDR(3Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	Inf	1.311M	1.222M
2441MHz_TnomVnom	Pass	Inf	1.308M	1.226M
2480MHz_TnomVnom	Pass	Inf	1.305M	1.227M

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

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

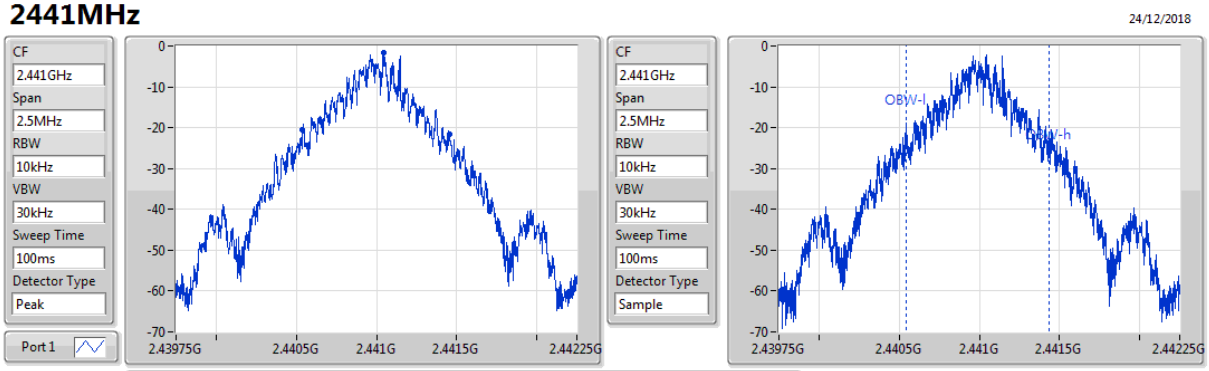
2402MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
916.25k	2.40154G	2.402456G	897.051k	2.401538G	2.402435G	Inf	1

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

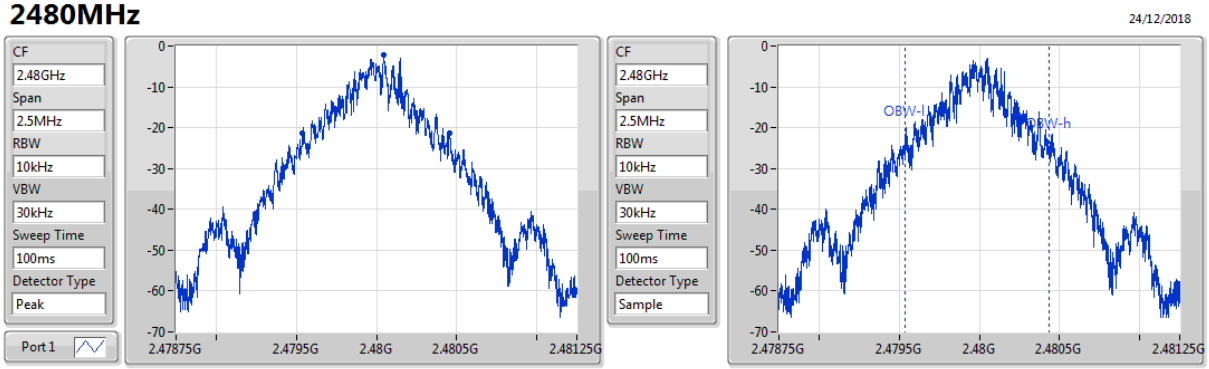
2441MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
920k	2.440538G	2.441458G	895.802k	2.440541G	2.441437G	Inf	1

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

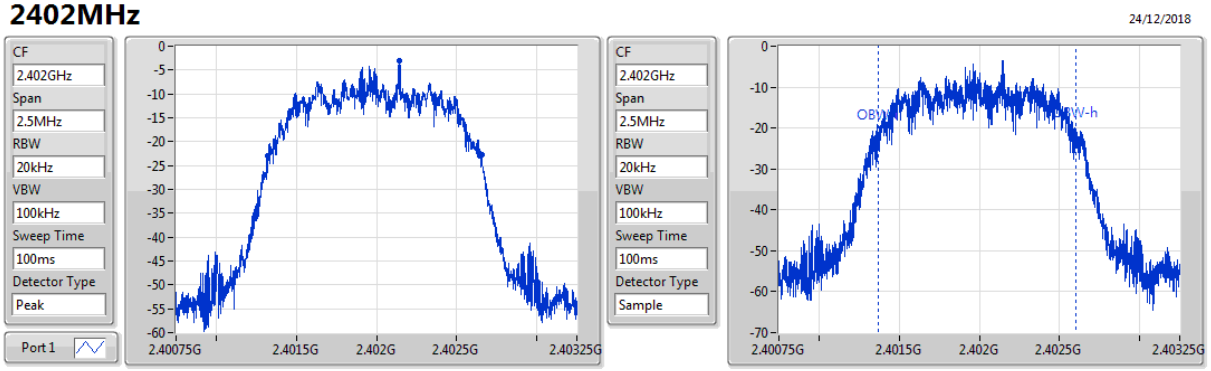
2480MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
917.5k	2.479539G	2.480456G	898.301k	2.47954G	2.480439G	Inf	1

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

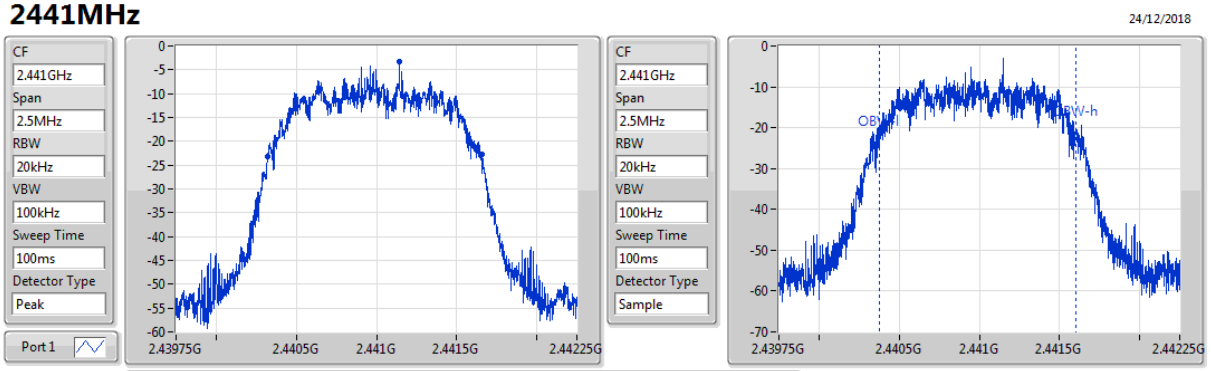
2402MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.336M	2.401321G	2.402658G	1.229M	2.401373G	2.402602G	Inf	1

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

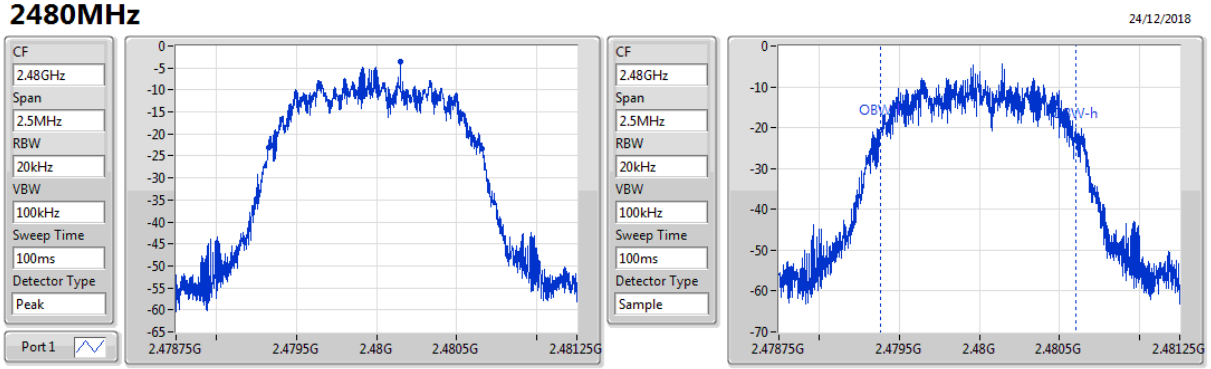
2441MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.336M	2.440323G	2.441659G	1.226M	2.440378G	2.441603G	Inf	1

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

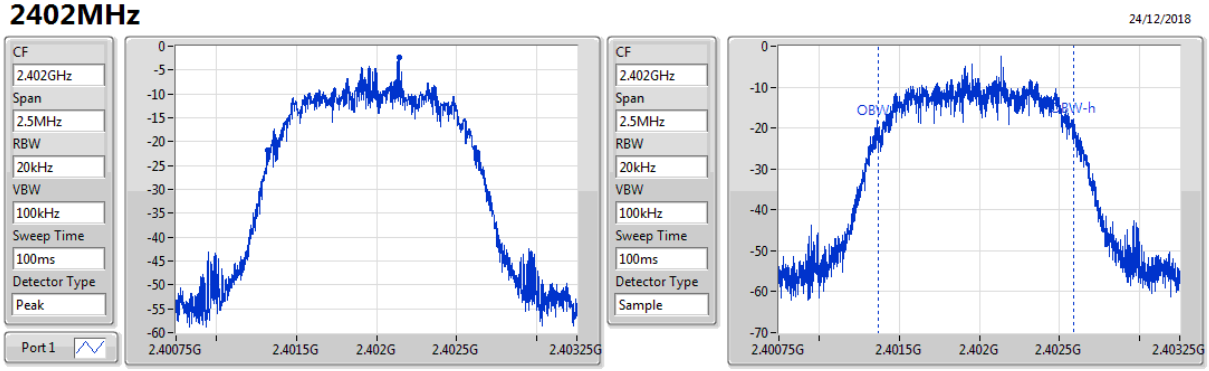
2480MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.336M	2.479325G	2.480661G	1.222M	2.479383G	2.480605G	Inf	1

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

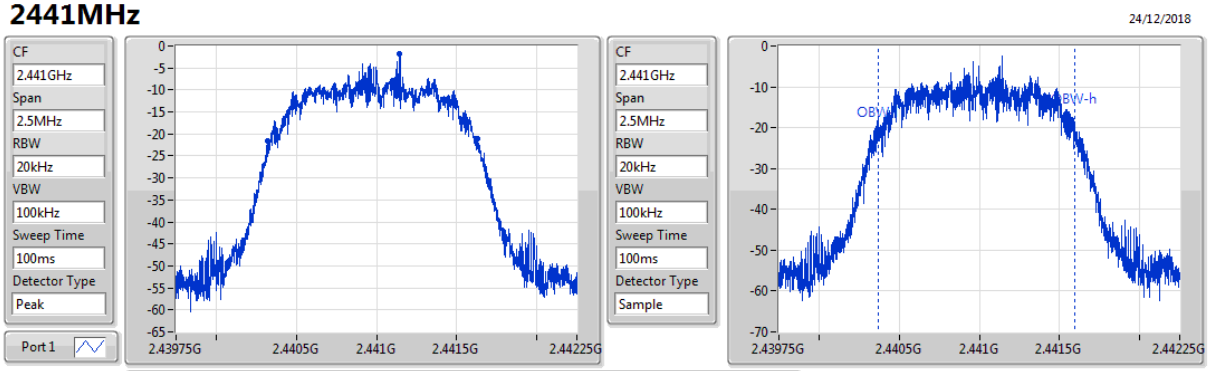
2402MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.311M	2.401319G	2.40263G	1.222M	2.401368G	2.40259G	Inf	1

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

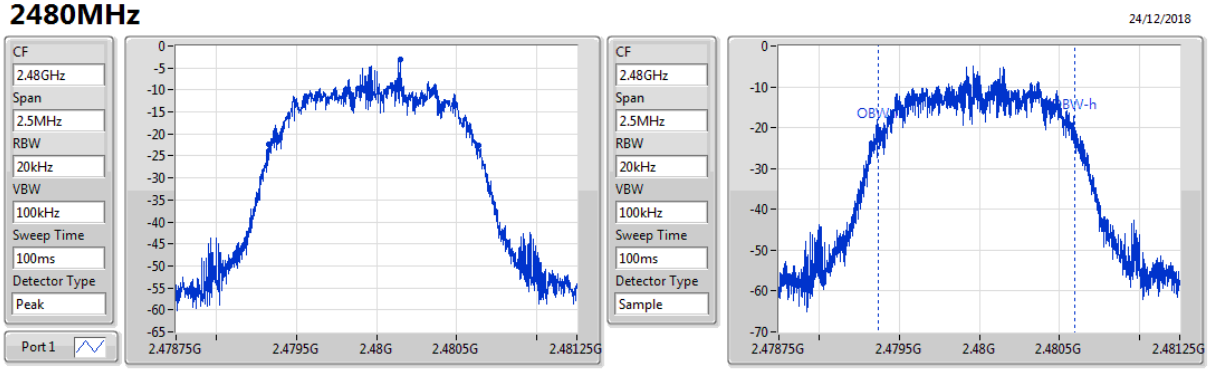
2441MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.308M	2.44032G	2.441628G	1.226M	2.440368G	2.441593G	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
1.305M	2.47933G	2.480635G	1.227M	2.479369G	2.480596G	Inf	1

Summary

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

Result

Mode	Result	Fl (Hz)	Fh (Hz)	Ch.Space (Hz)	Limit (Hz)
BT-BR(1Mbps)	-	-	-	-	-
2402MHz_TnomVnom	Pass	2.402142G	2.403144G	1.002M	610.2225k
2441MHz_TnomVnom	Pass	2.441142G	2.442141G	999k	612.72k
2480MHz_TnomVnom	Pass	2.479145G	2.480145G	1.0005M	611.055k
BT-EDR(2Mbps)	-	-	-	-	-
2402MHz_TnomVnom	Pass	2.402145G	2.403144G	999k	889.776k
2441MHz_TnomVnom	Pass	2.441146G	2.442147G	1.0005M	889.776k
2480MHz_TnomVnom	Pass	2.479148G	2.480148G	1.0005M	889.776k
BT-EDR(3Mbps)	-	-	-	-	-
2402MHz_TnomVnom	Pass	2.402139G	2.403138G	999k	873.126k
2441MHz_TnomVnom	Pass	2.44114G	2.442141G	1.0005M	871.128k
2480MHz_TnomVnom	Pass	2.479142G	2.480145G	1.0035M	869.13k

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

2.402G/2.403GHz

Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.402142G	2.403144G	1.002M	610.2225k

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

2.441G/2.442GHz

Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.441142G	2.442141G	999k	612.72k

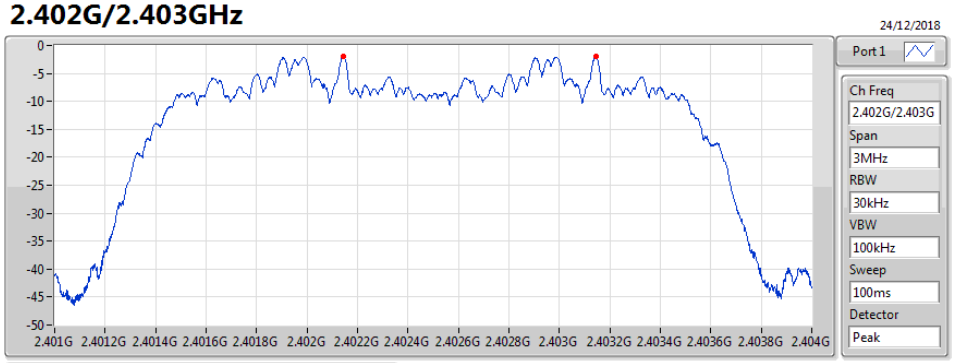
BT-BR(1Mbps) **Channel Separation**

2.48G/2.479GHz

Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.479145G	2.480145G	1.0005M	611.055k

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

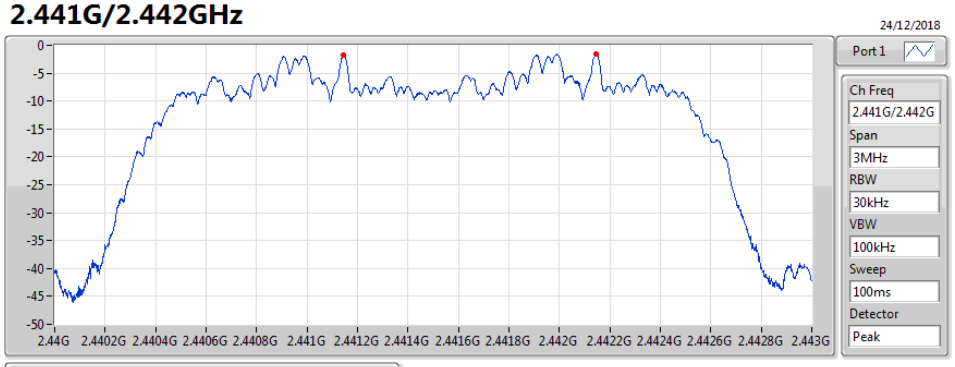
2.402G/2.403GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.402145G	2.403144G	999k	889.776k

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

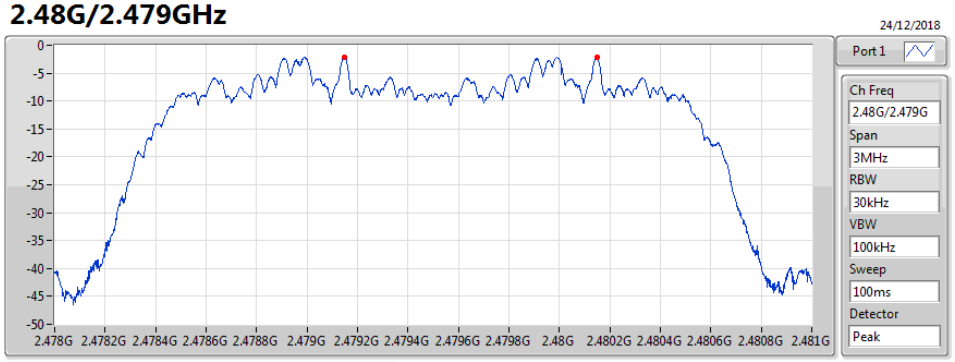
2.441G/2.442GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.441146G	2.442147G	1.0005M	889.776k

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

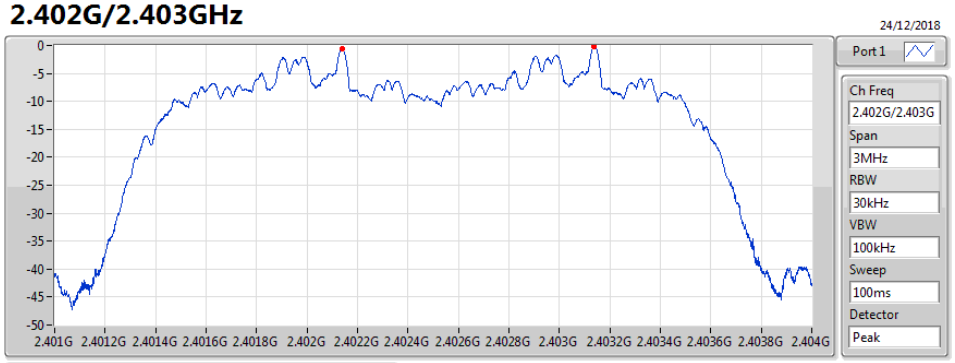
2.48G/2.479GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.479148G	2.480148G	1.0005M	889.776k

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

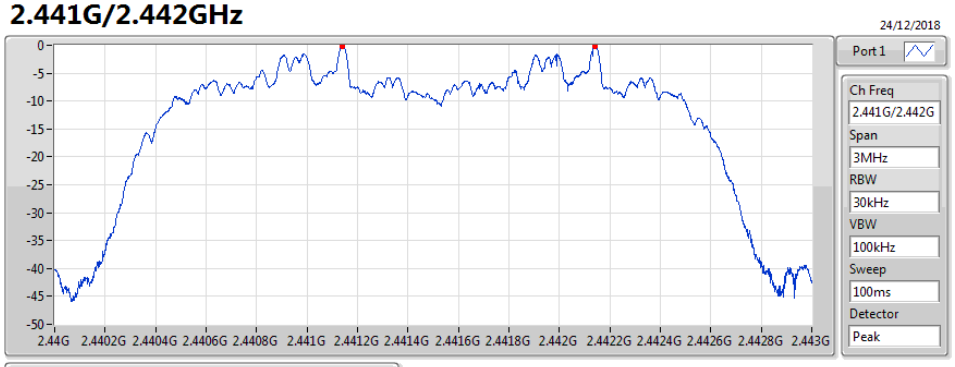
2.402G/2.403GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.402139G	2.403138G	999k	873.126k

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

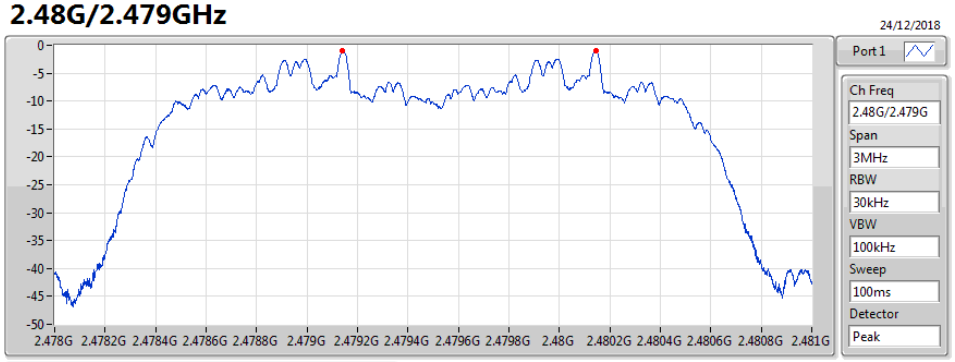
2.441G/2.442GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.44114G	2.442141G	1.0005M	871.128k

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

2.48G/2.479GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.479142G	2.480145G	1.0035M	869.13k

Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	4.16	0.00261
BT-EDR(2Mbps)	3.43	0.00220
BT-EDR(3Mbps)	3.94	0.00248

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	3.54	3.68	21.00
2441MHz_TnomVnom	Pass	3.54	4.16	21.00
2480MHz_TnomVnom	Pass	3.54	3.63	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	3.54	3.33	21.00
2441MHz_TnomVnom	Pass	3.54	3.43	21.00
2480MHz_TnomVnom	Pass	3.54	3.27	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	3.54	3.55	21.00
2441MHz_TnomVnom	Pass	3.54	3.94	21.00
2480MHz_TnomVnom	Pass	3.54	3.14	21.00

Summary

Mode	Power	Power
	(dBm)	(W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	3.89	0.00245
BT-EDR(2Mbps)	0.69	0.00117
BT-EDR(3Mbps)	1.01	0.00126

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	3.54	3.41	21.00
2441MHz_TnomVnom	Pass	3.54	3.89	21.00
2480MHz_TnomVnom	Pass	3.54	3.35	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	3.54	0.60	21.00
2441MHz_TnomVnom	Pass	3.54	0.69	21.00
2480MHz_TnomVnom	Pass	3.54	0.45	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	3.54	0.65	21.00
2441MHz_TnomVnom	Pass	3.54	1.01	21.00
2480MHz_TnomVnom	Pass	3.54	0.16	21.00

Summary

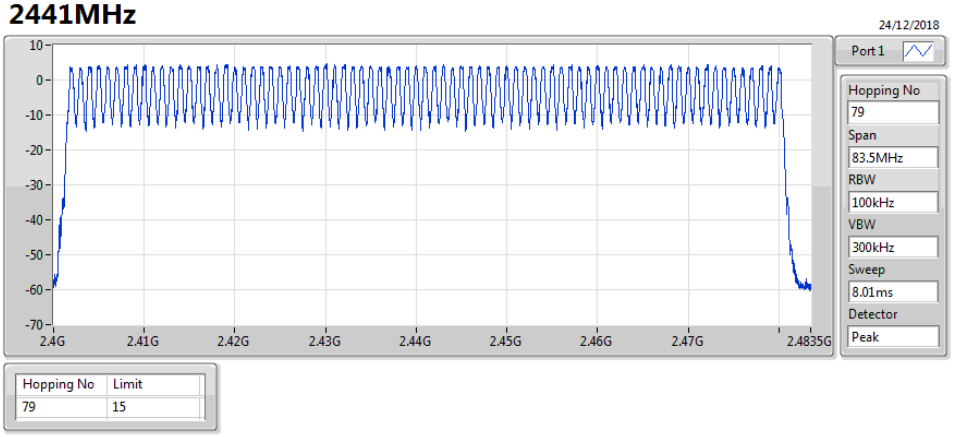
Mode	Max-Hop No
2.4-2.4835GHz	-
BT-BR(1Mbps)	79
BT-EDR(2Mbps)	79
BT-EDR(3Mbps)	79

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

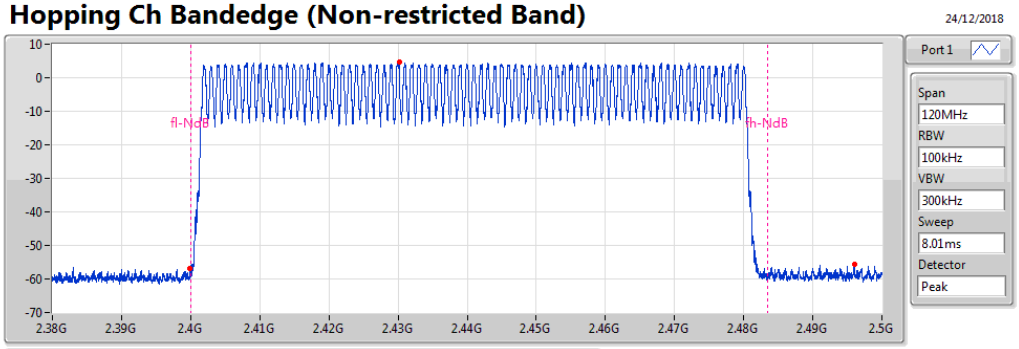


Hopping No	Limit
79	15

BT-BR(1Mbps)

2441MHz

Hopping Ch Bandedge (Non-restricted Band)

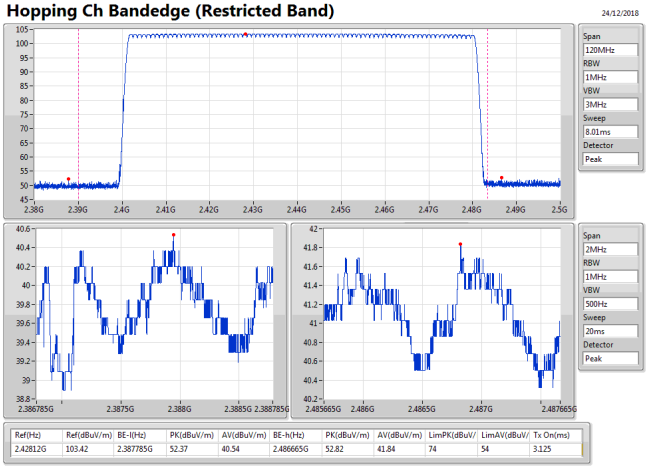


Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-15.4	2.430145G	4.6	2.39992G	-56.82	2.49607G	-55.72

BT-BR(1Mbps)

2441MHz

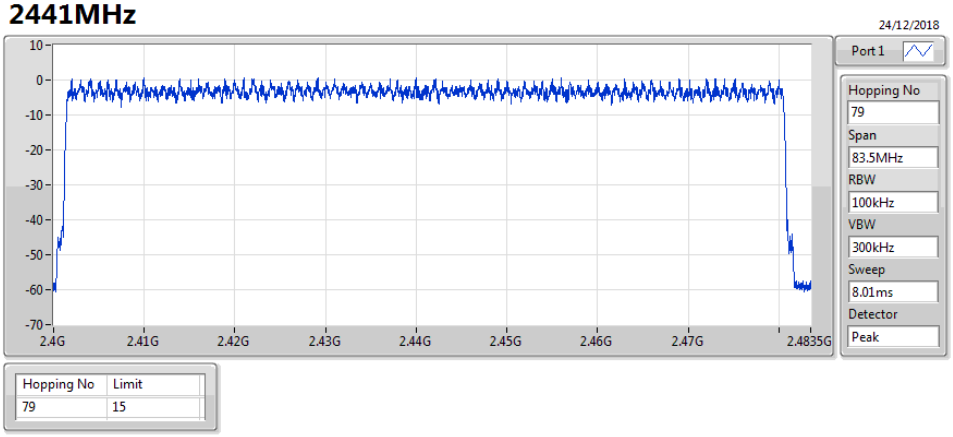
Hopping Ch Bandedge (Restricted Band)



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)
2.42812G	103.42	2.387785G	52.37	40.54	2.486665G	52.82	41.84	74	54	3.125

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

2441MHz

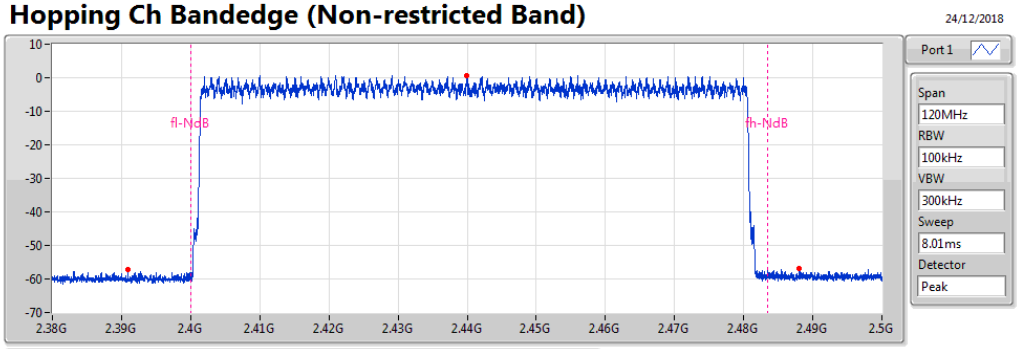


Hopping No	Limit
79	15

BT-EDR(2Mbps)

2441MHz

Hopping Ch Bandedge (Non-restricted Band)

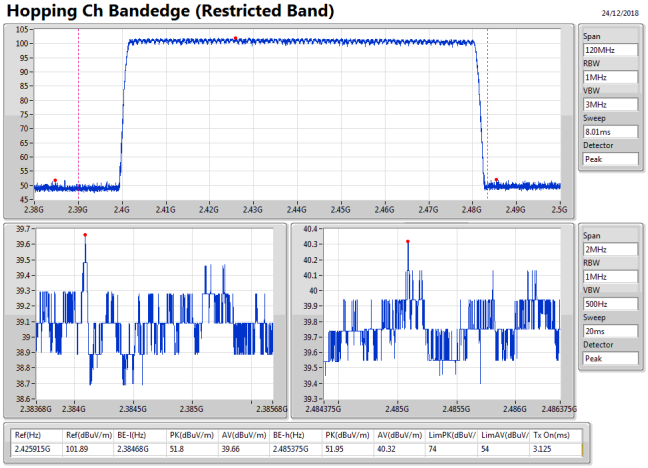


Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-19.34	2.439985G	0.66	2.39095G	-57.31	2.48797G	-56.99

BT-EDR(2Mbps)

2441MHz

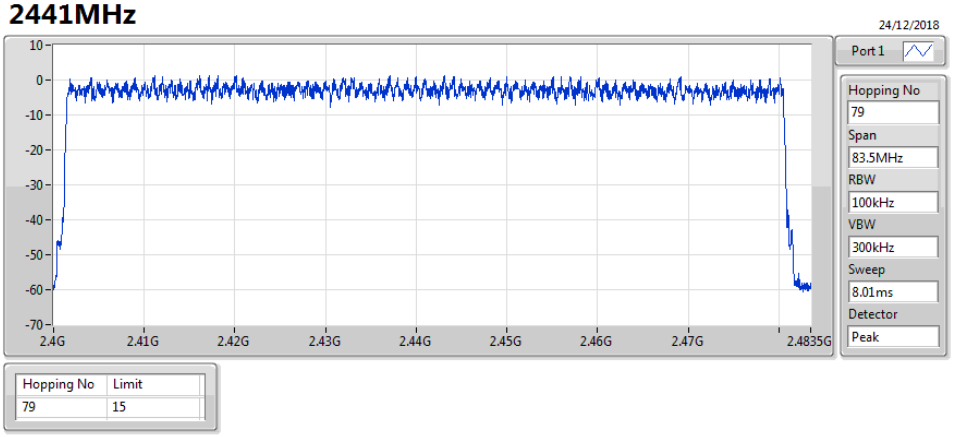
Hopping Ch Bandedge (Restricted Band)



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)
2.425915G	101.89	2.38468G	51.8	39.66	2.485375G	51.95	40.32	74	54	3.125

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

2441MHz

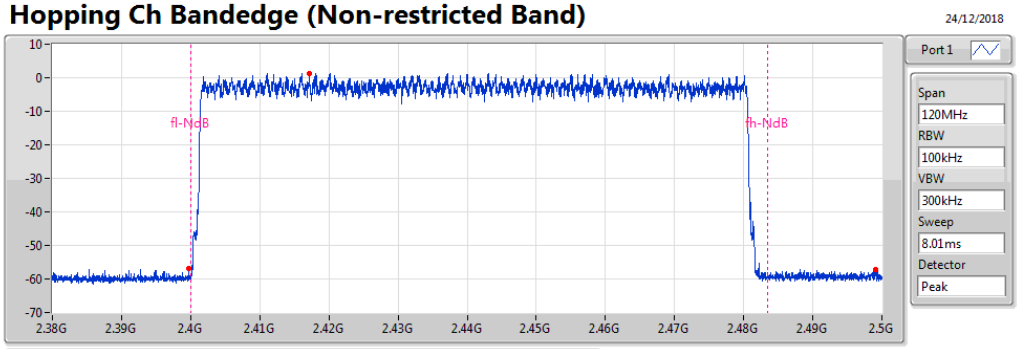


Hopping No	Limit
79	15

BT-EDR(3Mbps)

2441MHz

Hopping Ch Bandedge (Non-restricted Band)

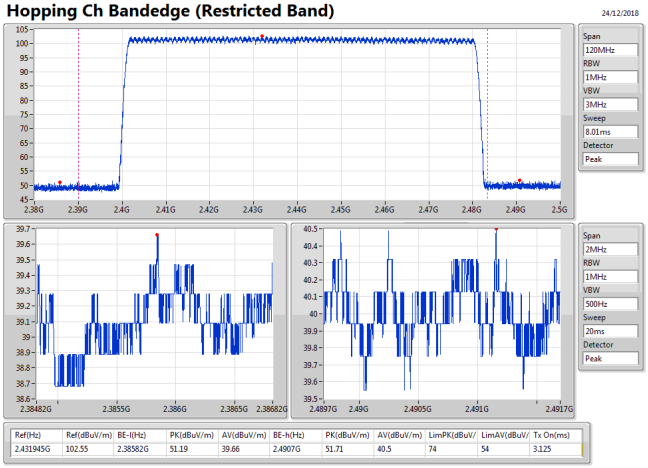


Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-18.79	2.41714G	1.21	2.39974G	-56.98	2.49916G	-57.16

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)
2.431945G	102.55	2.38582G	51.19	39.66	2.4907G	51.71	40.5	74	54	3.125

Summary

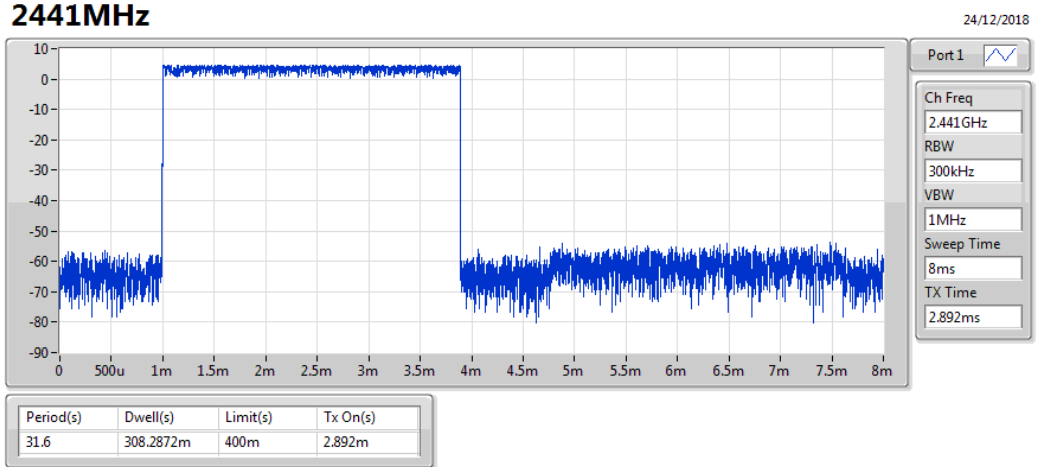
Mode	Max-Dwell (s)
2.4-2.4835GHz	-
BT-BR(1Mbps)	308.2872m
BT-EDR(2Mbps)	308.5004m
BT-EDR(3Mbps)	308.7136m

Result

Mode	Result	Period (s)	Dwell (s)	Limit (s)	Tx On (s)
BT-BR(1Mbps)	-	-	-	-	-
2441MHz_TnomVnom	Pass	31.6	308.2872m	400m	2.892m
BT-EDR(2Mbps)	-	-	-	-	-
2441MHz_TnomVnom	Pass	31.6	308.5004m	400m	2.894m
BT-EDR(3Mbps)	-	-	-	-	-
2441MHz_TnomVnom	Pass	31.6	308.7136m	400m	2.896m

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

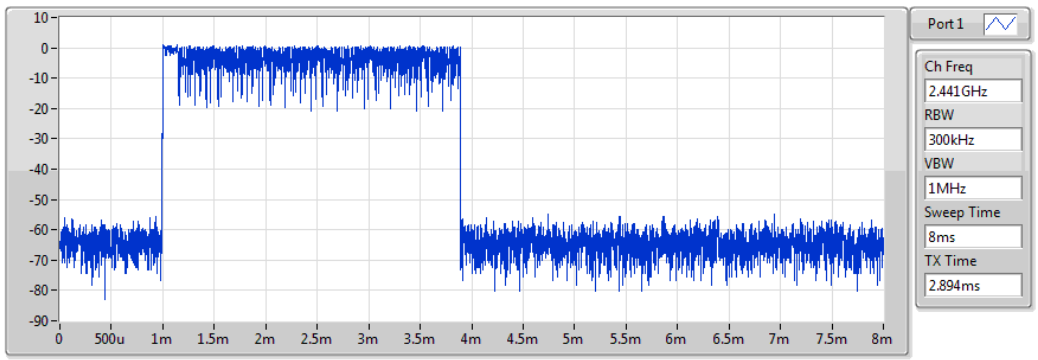
2441MHz



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

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

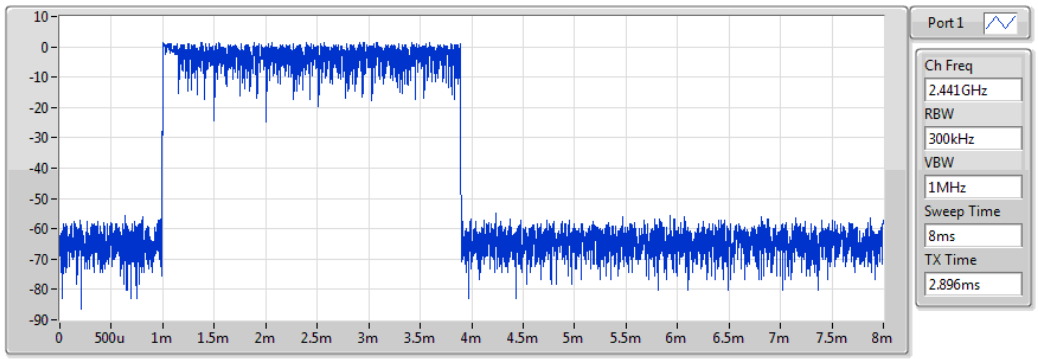
2441MHz



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

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

2441MHz



Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	308.7136m	400m	2.896m

Summary

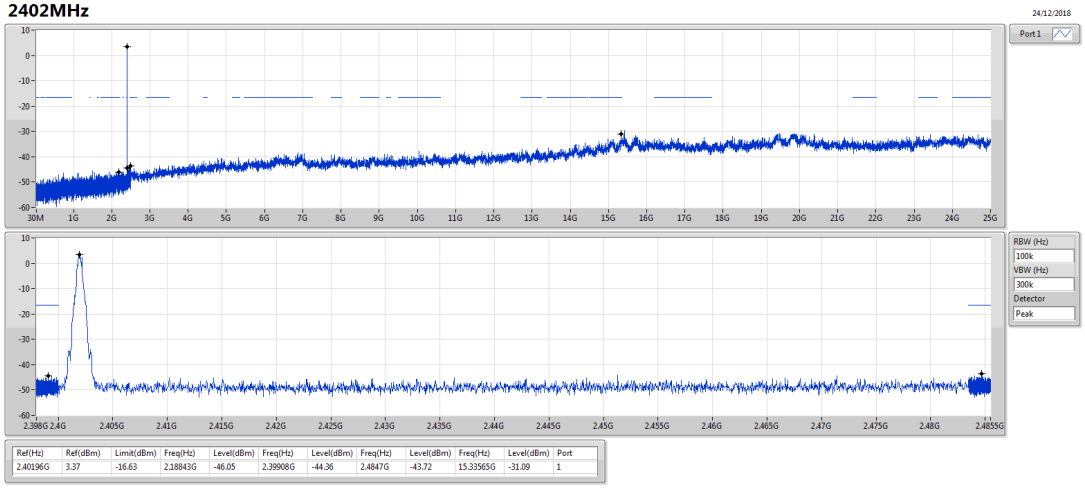
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-
BT-BR(1Mbps)	Pass	2.47999G	2.80	-17.20	1.77196G	-45.40	2.39991G	-45.12	2.48448G	-43.11	15.34972G	-30.52	1
BT-EDR(2Mbps)	Pass	2.47999G	-1.81	-21.81	2.30002G	-45.78	2.39978G	-44.94	2.48371G	-43.68	24.58348G	-31.18	1
BT-EDR(3Mbps)	Pass	2.47995G	-1.58	-21.58	1.97798G	-45.89	2.39861G	-44.17	2.48515G	-44.34	24.13882G	-29.50	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	2.40196G	3.37	-16.63	2.18843G	-46.05	2.39908G	-44.36	2.4847G	-43.72	15.33565G	-31.09	1
2441MHz_TnomVnom	Pass	2.44092G	3.16	-16.84	2.16298G	-44.83	2.39882G	-44.33	2.48404G	-44.40	24.08816G	-31.27	1
2480MHz_TnomVnom	Pass	2.47999G	2.80	-17.20	1.77196G	-45.40	2.39991G	-45.12	2.48448G	-43.11	15.34972G	-30.52	1
BT-EDR(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz_TnomVnom	Pass	2.40196G	-1.25	-21.25	2.11236G	-45.74	2.39888G	-44.63	2.48519G	-43.11	24.53001G	-31.25	1
2441MHz_TnomVnom	Pass	2.441G	-0.93	-20.93	2.30742G	-46.35	2.39803G	-45.21	2.48488G	-43.60	23.13411G	-30.93	1
2480MHz_TnomVnom	Pass	2.47999G	-1.81	-21.81	2.30002G	-45.78	2.39978G	-44.94	2.48371G	-43.68	24.58348G	-31.18	1
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz_TnomVnom	Pass	2.402G	-0.61	-20.61	2.0354G	-45.72	2.39892G	-44.50	2.48467G	-43.63	24.45684G	-30.62	1
2441MHz_TnomVnom	Pass	2.44092G	-1.45	-21.45	1.78942G	-46.42	2.39807G	-43.38	2.48476G	-43.87	24.11631G	-30.39	1
2480MHz_TnomVnom	Pass	2.47995G	-1.58	-21.58	1.97798G	-45.89	2.39861G	-44.17	2.48515G	-44.34	24.13882G	-29.50	1

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

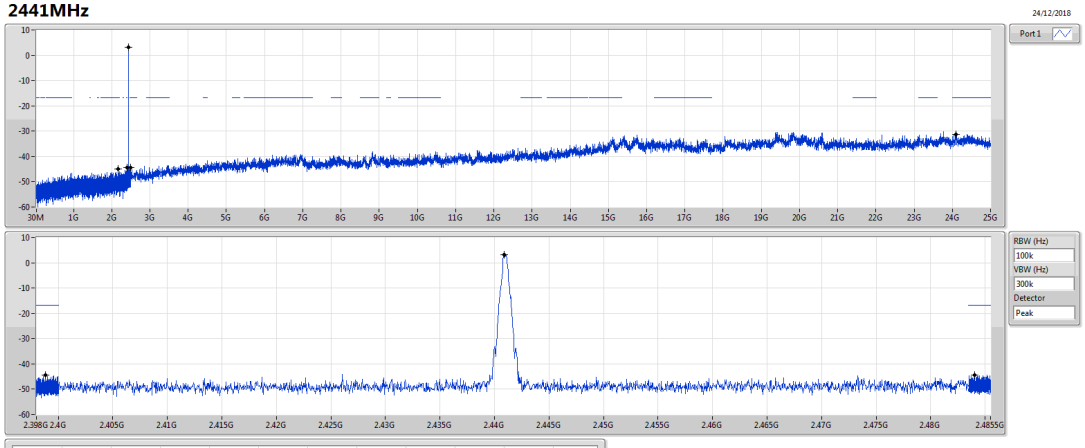
2402MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.40196G	3.37	-16.63	2.18843G	-46.05	2.39908G	-44.36	2.4847G	-43.72	15.33565G	-31.09	1

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

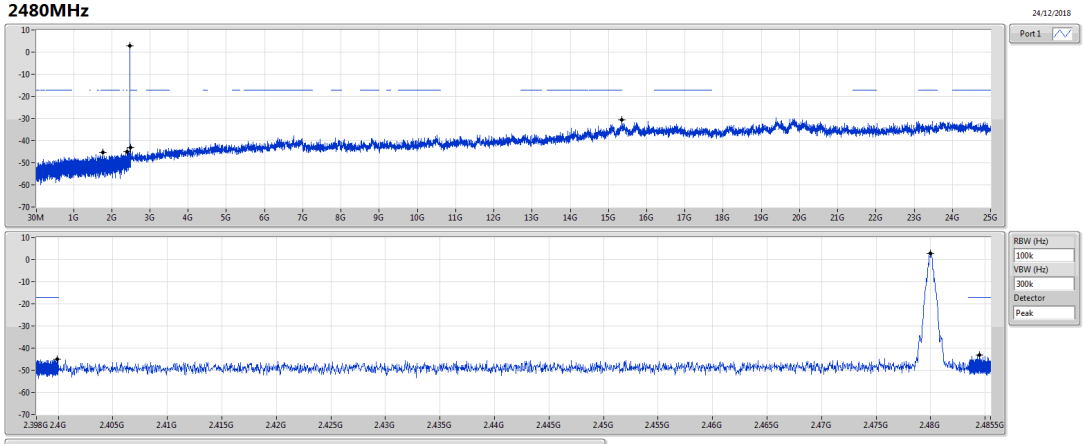
2441MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.44092G	3.16	-16.84	2.16298G	-44.83	2.39882G	-44.33	2.48404G	-44.40	24.08816G	-31.27	1

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

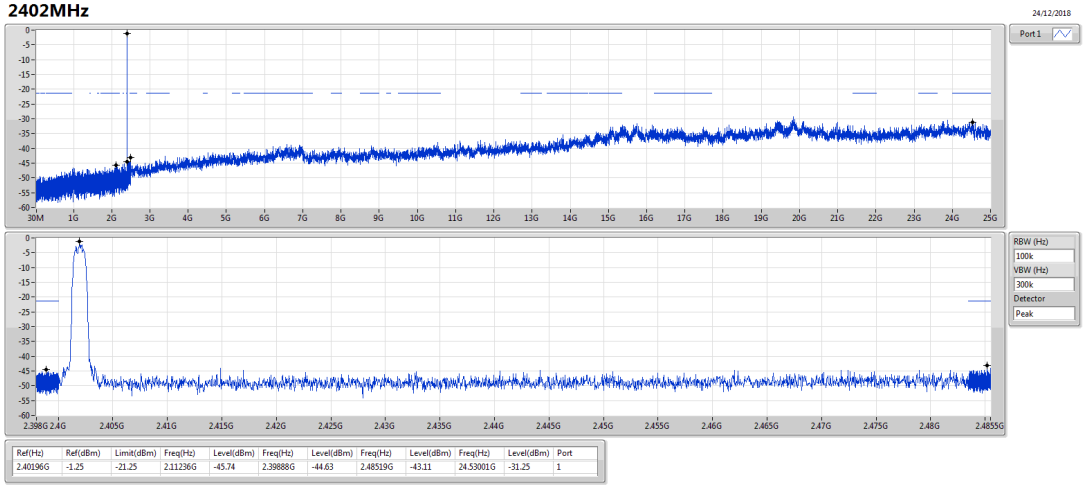
2480MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.47999G	2.80	-17.20	1.77196G	-45.40	2.39991G	-45.12	2.48448G	-43.11	15.34972G	-30.52	1

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

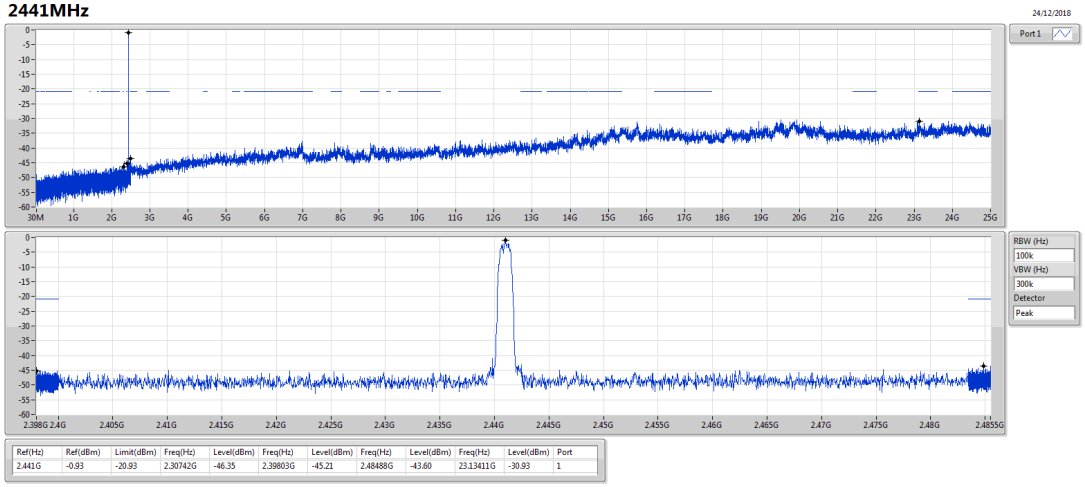
2402MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.40196G	-1.25	-21.25	2.11236G	-45.74	2.39888G	-44.63	2.48519G	-43.11	24.53001G	-31.25	1

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

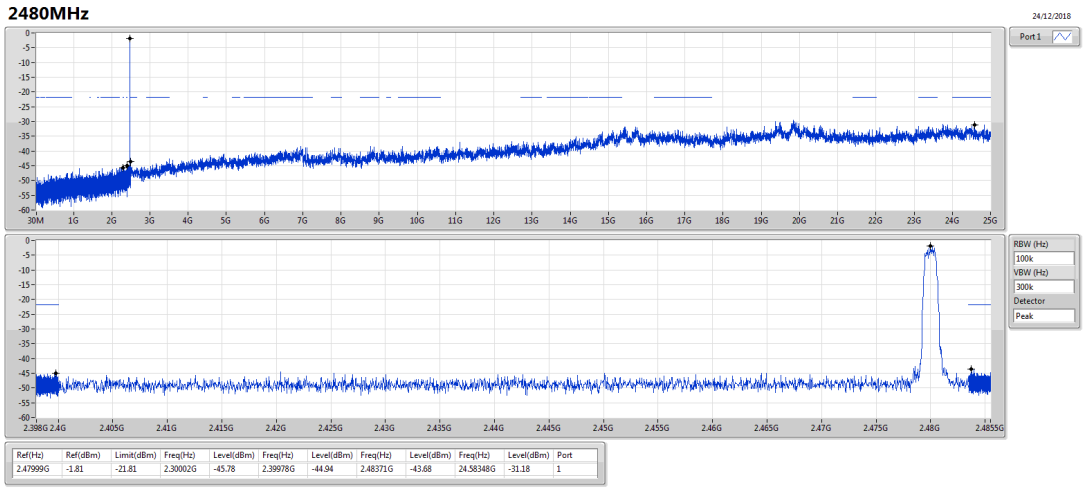
2441MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.441G	-0.93	-20.93	2.30742G	-46.35	2.39803G	-45.21	2.48488G	-43.60	23.13411G	-30.93	1

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

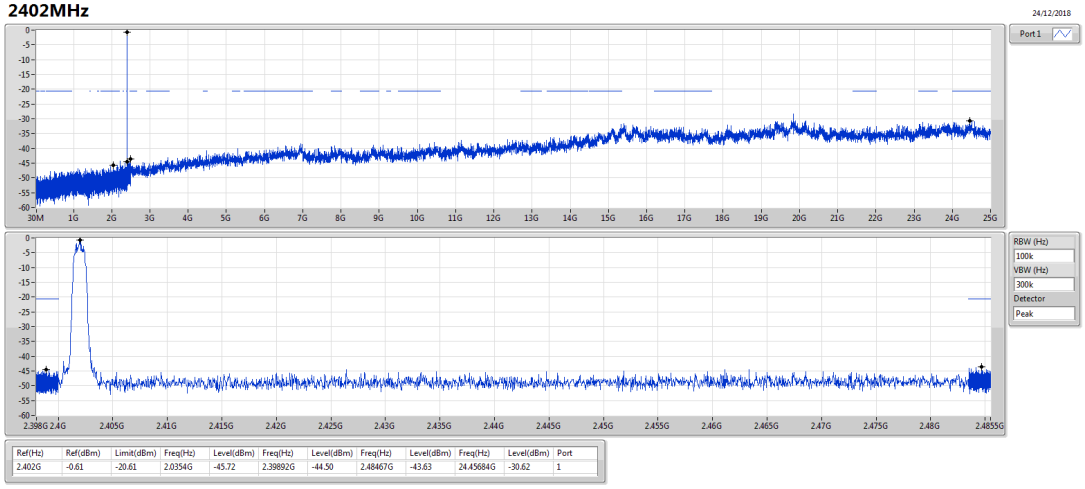
2480MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.47999G	-1.81	-21.81	2.30002G	-45.78	2.39978G	-44.94	2.48371G	-43.68	24.58348G	-31.18	1

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

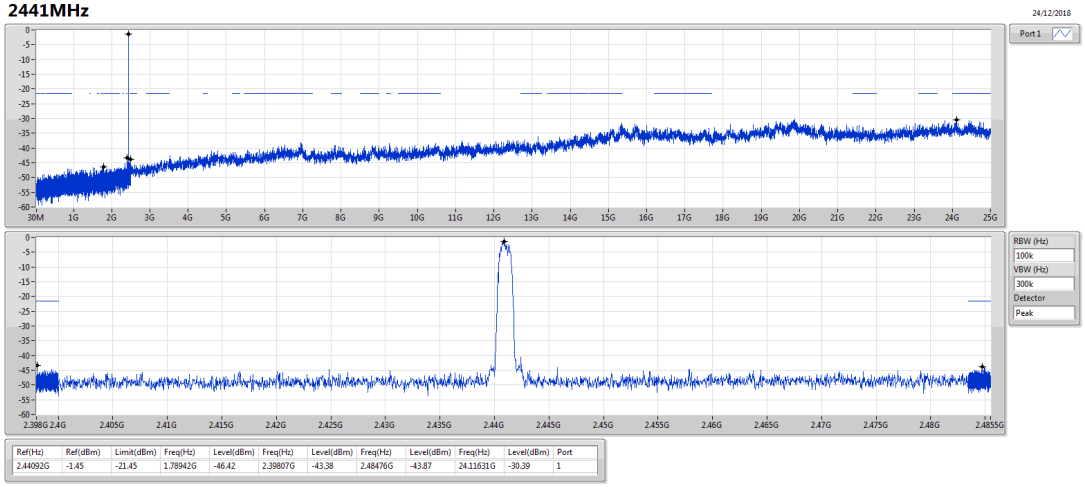
2402MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.402G	-0.61	-20.61	2.0354G	-45.72	2.39892G	-44.50	2.48467G	-43.63	24.45684G	-30.62	1

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

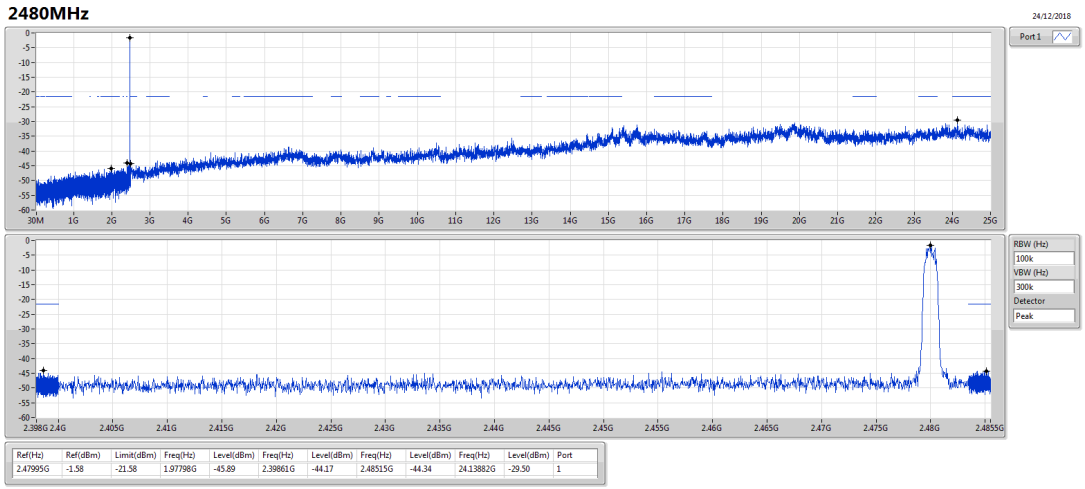
2441MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.44092G	-1.45	-21.45	1.78942G	-46.42	2.39807G	-43.38	2.48476G	-43.87	24.11631G	-30.39	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
2.47995G	-1.58	-21.58	1.97798G	-45.89	2.39861G	-44.17	2.48515G	-44.34	24.13882G	-29.50	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	31.41M	34.61	40.00	-5.39	-5.21	3	Horizontal	360	1.00	-

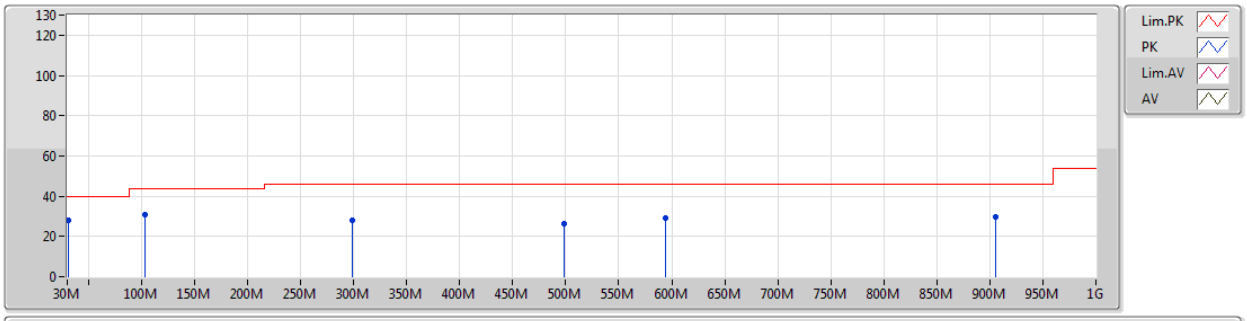
Result

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	31.41M	28.27	40.00	-11.73	-5.21	3	Vertical	0	1.00	-
2441MHz	Pass	PK	103.1M	30.91	43.50	-12.59	-9.93	3	Vertical	0	1.00	-
2441MHz	Pass	PK	298.51M	27.78	46.00	-18.22	-5.73	3	Vertical	0	1.00	-
2441MHz	Pass	PK	498.13M	26.48	46.00	-19.52	-2.32	3	Vertical	0	1.00	-
2441MHz	Pass	PK	593.72M	28.90	46.00	-17.10	-0.92	3	Vertical	0	1.00	-
2441MHz	Pass	PK	905.81M	29.73	46.00	-16.27	2.70	3	Vertical	0	1.00	-
2441MHz	Pass	PK	31.41M	34.61	40.00	-5.39	-5.21	3	Horizontal	360	1.00	-
2441MHz	Pass	PK	249.3M	29.95	46.00	-16.05	-7.05	3	Horizontal	360	1.00	-
2441MHz	Pass	PK	288.67M	34.61	46.00	-11.39	-5.96	3	Horizontal	360	1.00	-
2441MHz	Pass	PK	377.23M	36.20	46.00	-9.80	-4.34	3	Horizontal	360	1.00	-
2441MHz	Pass	PK	498.13M	30.60	46.00	-15.40	-2.32	3	Horizontal	360	1.00	-
2441MHz	Pass	PK	648.55M	31.27	46.00	-14.73	-0.31	3	Horizontal	360	1.00	-

BT-BR(1Mbps)

2441MHz_Adapter

27/12/2018

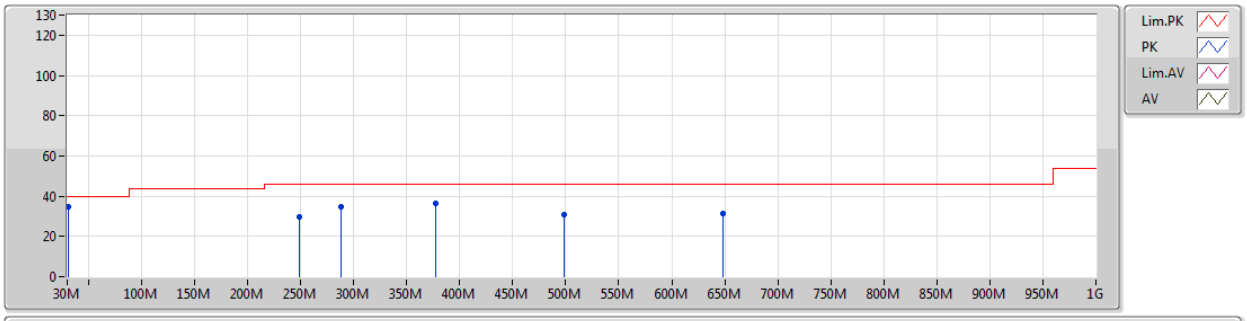


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	31.41M	28.27	40.00	-11.73	-5.21	3	Vertical	0	1.00	-
PK	103.1M	30.91	43.50	-12.59	-9.93	3	Vertical	0	1.00	-
PK	298.51M	27.78	46.00	-18.22	-5.73	3	Vertical	0	1.00	-
PK	498.13M	26.48	46.00	-19.52	-2.32	3	Vertical	0	1.00	-
PK	593.72M	28.90	46.00	-17.10	-0.92	3	Vertical	0	1.00	-
PK	905.81M	29.73	46.00	-16.27	2.70	3	Vertical	0	1.00	-

BT-BR(1Mbps)

2441MHz_Adapter

27/12/2018



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
PK	31.41M	34.61	40.00	-5.39	-5.21	3	Horizontal	360	1.00	-
PK	249.3M	29.95	46.00	-16.05	-7.05	3	Horizontal	360	1.00	-
PK	288.67M	34.61	46.00	-11.39	-5.96	3	Horizontal	360	1.00	-
PK	377.23M	36.20	46.00	-9.80	-4.34	3	Horizontal	360	1.00	-
PK	498.13M	30.60	46.00	-15.40	-2.32	3	Horizontal	360	1.00	-
PK	648.55M	31.27	46.00	-14.73	-0.31	3	Horizontal	360	1.00	-

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-
BT-BR(1Mbps)	Pass	AV	2.4835G	46.82	54.00	-7.18	32.29	3	Horizontal	219	2.11	-
BT-EDR(2Mbps)	Pass	AV	2.4835G	45.95	54.00	-8.05	32.29	3	Horizontal	218	2.11	-
BT-EDR(3Mbps)	Pass	AV	2.4835G	46.03	54.00	-7.97	32.29	3	Horizontal	219	2.11	-

Result

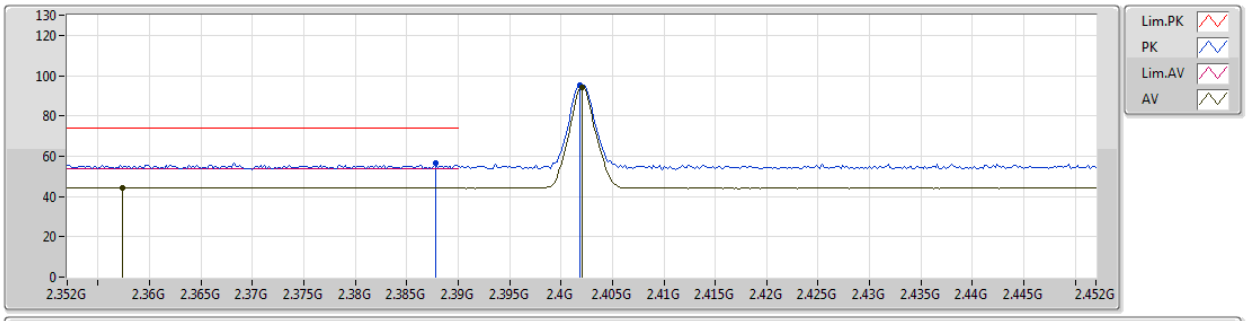
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-BR(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3574G	44.38	54.00	-9.62	31.90	3	Vertical	173	2.48	-
2402MHz	Pass	AV	2.402G	94.28	Inf	-Inf	32.04	3	Vertical	173	2.48	-
2402MHz	Pass	PK	2.3878G	56.86	74.00	-17.14	32.00	3	Vertical	173	2.48	-
2402MHz	Pass	PK	2.4018G	95.16	Inf	-Inf	32.04	3	Vertical	173	2.48	-
2402MHz	Pass	AV	2.3868G	44.37	54.00	-9.63	32.00	3	Horizontal	357	1.50	-
2402MHz	Pass	AV	2.402G	95.79	Inf	-Inf	32.04	3	Horizontal	357	1.50	-
2402MHz	Pass	PK	2.3622G	57.08	74.00	-16.92	31.91	3	Horizontal	357	1.50	-
2402MHz	Pass	PK	2.4022G	96.66	Inf	-Inf	32.05	3	Horizontal	357	1.50	-
2441MHz	Pass	AV	2.3434G	44.43	54.00	-9.57	31.84	3	Vertical	174	2.71	-
2441MHz	Pass	AV	2.441G	96.21	Inf	-Inf	32.16	3	Vertical	174	2.71	-
2441MHz	Pass	AV	2.487G	44.49	54.00	-9.51	32.30	3	Vertical	174	2.71	-
2441MHz	Pass	PK	2.3626G	56.19	74.00	-17.81	31.91	3	Vertical	174	2.71	-
2441MHz	Pass	PK	2.441G	97.09	Inf	-Inf	32.16	3	Vertical	174	2.71	-
2441MHz	Pass	PK	2.4906G	55.50	74.00	-18.50	32.31	3	Vertical	174	2.71	-
2441MHz	Pass	AV	2.3566G	44.41	54.00	-9.59	31.90	3	Horizontal	218	1.45	-
2441MHz	Pass	AV	2.441G	96.87	Inf	-Inf	32.16	3	Horizontal	218	1.45	-
2441MHz	Pass	AV	2.4862G	44.41	54.00	-9.59	32.30	3	Horizontal	218	1.45	-
2441MHz	Pass	PK	2.3682G	56.60	74.00	-17.40	31.93	3	Horizontal	218	1.45	-
2441MHz	Pass	PK	2.441G	97.72	Inf	-Inf	32.16	3	Horizontal	218	1.45	-
2441MHz	Pass	PK	2.493G	55.40	74.00	-18.60	32.32	3	Horizontal	218	1.45	-
2441MHz	Pass	AV	4.88944G	32.14	54.00	-21.86	3.73	3	Vertical	261	1.17	-
2441MHz	Pass	PK	4.87048G	44.94	74.00	-29.06	3.69	3	Vertical	261	1.17	-
2441MHz	Pass	AV	4.8766G	32.21	54.00	-21.79	3.70	3	Horizontal	229	1.41	-
2441MHz	Pass	PK	4.8904G	45.31	74.00	-28.69	3.73	3	Horizontal	229	1.41	-
2480MHz	Pass	AV	2.48G	91.27	Inf	-Inf	32.28	3	Vertical	129	2.45	-
2480MHz	Pass	AV	2.4835G	44.92	54.00	-9.08	32.29	3	Vertical	129	2.45	-
2480MHz	Pass	PK	2.4798G	92.13	Inf	-Inf	32.28	3	Vertical	129	2.45	-
2480MHz	Pass	PK	2.4968G	55.98	74.00	-18.02	32.33	3	Vertical	129	2.45	-
2480MHz	Pass	AV	2.48G	98.08	Inf	-Inf	32.28	3	Horizontal	219	2.11	-
2480MHz	Pass	AV	2.4835G	46.82	54.00	-7.18	32.29	3	Horizontal	219	2.11	-
2480MHz	Pass	PK	2.4802G	98.95	Inf	-Inf	32.28	3	Horizontal	219	2.11	-
2480MHz	Pass	PK	2.4964G	56.24	74.00	-17.76	32.33	3	Horizontal	219	2.11	-
2480MHz	Pass	AV	4.97044G	32.73	54.00	-21.27	3.91	3	Vertical	169	1.54	-
2480MHz	Pass	PK	4.95748G	45.89	74.00	-28.11	3.87	3	Vertical	169	1.54	-
2480MHz	Pass	AV	4.95046G	32.59	54.00	-21.41	3.86	3	Horizontal	245	1.56	-
2480MHz	Pass	PK	4.9744G	46.25	74.00	-27.75	3.91	3	Horizontal	245	1.56	-
BT-EDR(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.358G	44.43	54.00	-9.57	31.90	3	Vertical	174	2.85	-
2402MHz	Pass	AV	2.402G	89.82	Inf	-Inf	32.04	3	Vertical	174	2.85	-
2402MHz	Pass	PK	2.3898G	56.35	74.00	-17.65	32.01	3	Vertical	174	2.85	-
2402MHz	Pass	PK	2.4022G	93.83	Inf	-Inf	32.05	3	Vertical	174	2.85	-
2402MHz	Pass	AV	2.357G	44.52	54.00	-9.48	31.90	3	Horizontal	353	1.22	-
2402MHz	Pass	AV	2.402G	91.83	Inf	-Inf	32.04	3	Horizontal	353	1.22	-
2402MHz	Pass	PK	2.3536G	56.28	74.00	-17.72	31.88	3	Horizontal	353	1.22	-
2402MHz	Pass	PK	2.4022G	95.89	Inf	-Inf	32.05	3	Horizontal	353	1.22	-
2441MHz	Pass	AV	2.3414G	44.37	54.00	-9.63	31.84	3	Vertical	182	2.99	-
2441MHz	Pass	AV	2.441G	92.04	Inf	-Inf	32.16	3	Vertical	182	2.99	-

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2441MHz	Pass	AV	2.495G	44.58	54.00	-9.42	32.33	3	Vertical	182	2.99	-
2441MHz	Pass	PK	2.3526G	56.20	74.00	-17.80	31.88	3	Vertical	182	2.99	-
2441MHz	Pass	PK	2.4414G	96.05	Inf	-Inf	32.16	3	Vertical	182	2.99	-
2441MHz	Pass	PK	2.4862G	55.74	74.00	-18.26	32.30	3	Vertical	182	2.99	-
2441MHz	Pass	AV	2.3562G	44.41	54.00	-9.59	31.89	3	Horizontal	218	1.04	-
2441MHz	Pass	AV	2.441G	93.07	Inf	-Inf	32.16	3	Horizontal	218	1.04	-
2441MHz	Pass	AV	2.4954G	44.76	54.00	-9.24	32.33	3	Horizontal	218	1.04	-
2441MHz	Pass	PK	2.3546G	56.52	74.00	-17.48	31.88	3	Horizontal	218	1.04	-
2441MHz	Pass	PK	2.4414G	97.09	Inf	-Inf	32.16	3	Horizontal	218	1.04	-
2441MHz	Pass	PK	2.4994G	55.88	74.00	-18.12	32.34	3	Horizontal	218	1.04	-
2480MHz	Pass	AV	2.48G	86.17	Inf	-Inf	32.28	3	Vertical	129	2.46	-
2480MHz	Pass	AV	2.4978G	44.67	54.00	-9.33	32.33	3	Vertical	129	2.46	-
2480MHz	Pass	PK	2.4802G	90.24	Inf	-Inf	32.28	3	Vertical	129	2.46	-
2480MHz	Pass	PK	2.484G	56.53	74.00	-17.47	32.29	3	Vertical	129	2.46	-
2480MHz	Pass	AV	2.48G	92.95	Inf	-Inf	32.28	3	Horizontal	218	2.11	-
2480MHz	Pass	AV	2.4835G	45.95	54.00	-8.05	32.29	3	Horizontal	218	2.11	-
2480MHz	Pass	PK	2.4802G	96.92	Inf	-Inf	32.28	3	Horizontal	218	2.11	-
2480MHz	Pass	PK	2.4835G	55.94	74.00	-18.06	32.29	3	Horizontal	218	2.11	-
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.355G	44.36	54.00	-9.64	31.88	3	Vertical	173	2.83	-
2402MHz	Pass	AV	2.402G	89.66	Inf	-Inf	32.04	3	Vertical	173	2.83	-
2402MHz	Pass	PK	2.3568G	56.75	74.00	-17.25	31.90	3	Vertical	173	2.83	-
2402MHz	Pass	PK	2.4022G	93.76	Inf	-Inf	32.05	3	Vertical	173	2.83	-
2402MHz	Pass	AV	2.3576G	44.48	54.00	-9.52	31.90	3	Horizontal	357	1.50	-
2402MHz	Pass	AV	2.402G	90.54	Inf	-Inf	32.04	3	Horizontal	357	1.50	-
2402MHz	Pass	PK	2.3742G	55.84	74.00	-18.16	31.95	3	Horizontal	357	1.50	-
2402MHz	Pass	PK	2.402G	94.65	Inf	-Inf	32.04	3	Horizontal	357	1.50	-
2441MHz	Pass	AV	2.347G	44.41	54.00	-9.59	31.86	3	Vertical	182	2.99	-
2441MHz	Pass	AV	2.441G	91.60	Inf	-Inf	32.16	3	Vertical	182	2.99	-
2441MHz	Pass	AV	2.4898G	44.49	54.00	-9.51	32.31	3	Vertical	182	2.99	-
2441MHz	Pass	PK	2.3622G	57.44	74.00	-16.56	31.91	3	Vertical	182	2.99	-
2441MHz	Pass	PK	2.441G	95.69	Inf	-Inf	32.16	3	Vertical	182	2.99	-
2441MHz	Pass	PK	2.4946G	55.48	74.00	-18.52	32.33	3	Vertical	182	2.99	-
2441MHz	Pass	AV	2.359G	44.34	54.00	-9.66	31.90	3	Horizontal	219	1.02	-
2441MHz	Pass	AV	2.441G	92.76	Inf	-Inf	32.16	3	Horizontal	219	1.02	-
2441MHz	Pass	AV	2.4974G	44.50	54.00	-9.50	32.33	3	Horizontal	219	1.02	-
2441MHz	Pass	PK	2.3802G	56.29	74.00	-17.71	31.97	3	Horizontal	219	1.02	-
2441MHz	Pass	PK	2.441G	96.88	Inf	-Inf	32.16	3	Horizontal	219	1.02	-
2441MHz	Pass	PK	2.4926G	55.90	74.00	-18.10	32.32	3	Horizontal	219	1.02	-
2480MHz	Pass	AV	2.48G	86.30	Inf	-Inf	32.28	3	Vertical	129	2.45	-
2480MHz	Pass	AV	2.4835G	44.71	54.00	-9.29	32.29	3	Vertical	129	2.45	-
2480MHz	Pass	PK	2.48G	90.49	Inf	-Inf	32.28	3	Vertical	129	2.45	-
2480MHz	Pass	PK	2.484G	56.01	74.00	-17.99	32.29	3	Vertical	129	2.45	-
2480MHz	Pass	AV	2.48G	93.05	Inf	-Inf	32.28	3	Horizontal	219	2.11	-
2480MHz	Pass	AV	2.4835G	46.03	54.00	-7.97	32.29	3	Horizontal	219	2.11	-
2480MHz	Pass	PK	2.48G	97.17	Inf	-Inf	32.28	3	Horizontal	219	2.11	-
2480MHz	Pass	PK	2.4856G	55.97	74.00	-18.03	32.30	3	Horizontal	219	2.11	-

BT-BR(1Mbps)

2402MHz_TX

27/12/2018

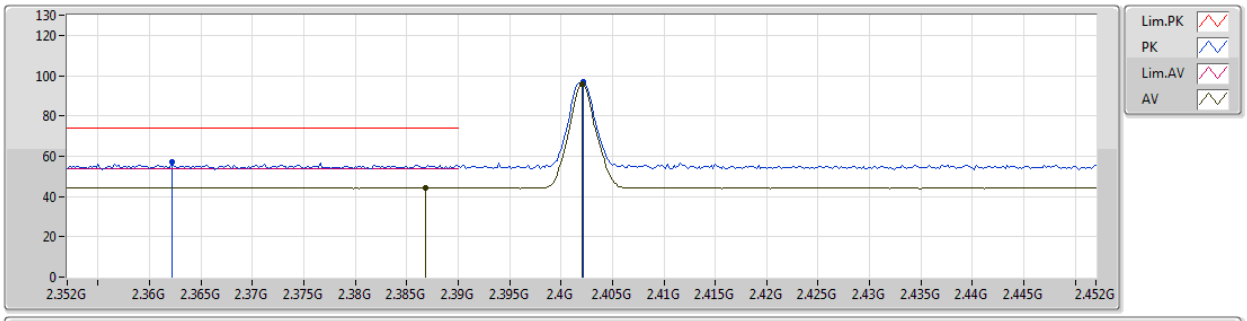


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3574G	44.38	54.00	-9.62	31.90	3	Vertical	173	2.48	-
AV	2.402G	94.28	Inf	-Inf	32.04	3	Vertical	173	2.48	-
PK	2.3878G	56.86	74.00	-17.14	32.00	3	Vertical	173	2.48	-
PK	2.4018G	95.16	Inf	-Inf	32.04	3	Vertical	173	2.48	-

BT-BR(1Mbps)

2402MHz_TX

27/12/2018

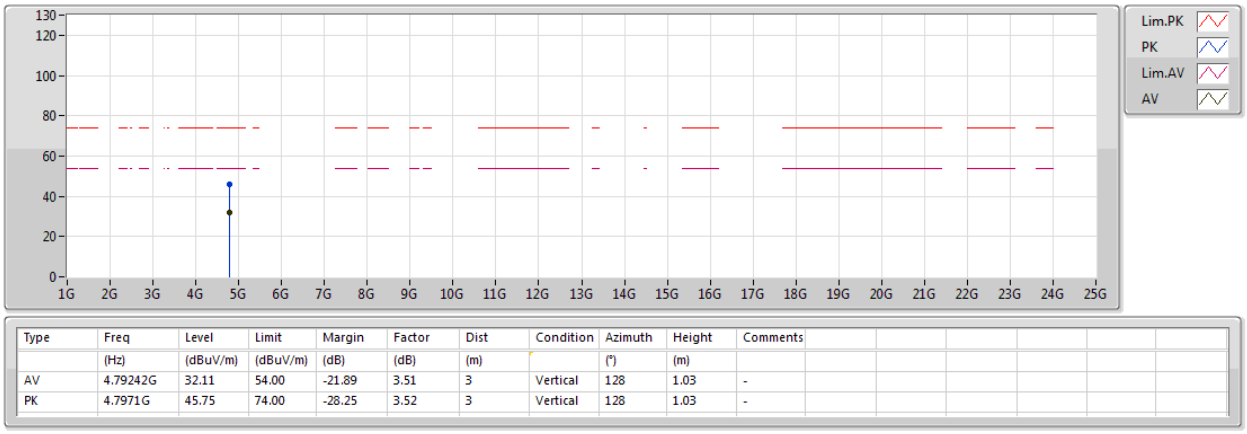


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3868G	44.37	54.00	-9.63	32.00	3	Horizontal	357	1.50	-
AV	2.402G	95.79	Inf	-Inf	32.04	3	Horizontal	357	1.50	-
PK	2.3622G	57.08	74.00	-16.92	31.91	3	Horizontal	357	1.50	-
PK	2.4022G	96.66	Inf	-Inf	32.05	3	Horizontal	357	1.50	-

BT-BR(1Mbps)

2402MHz_TX

27/12/2018

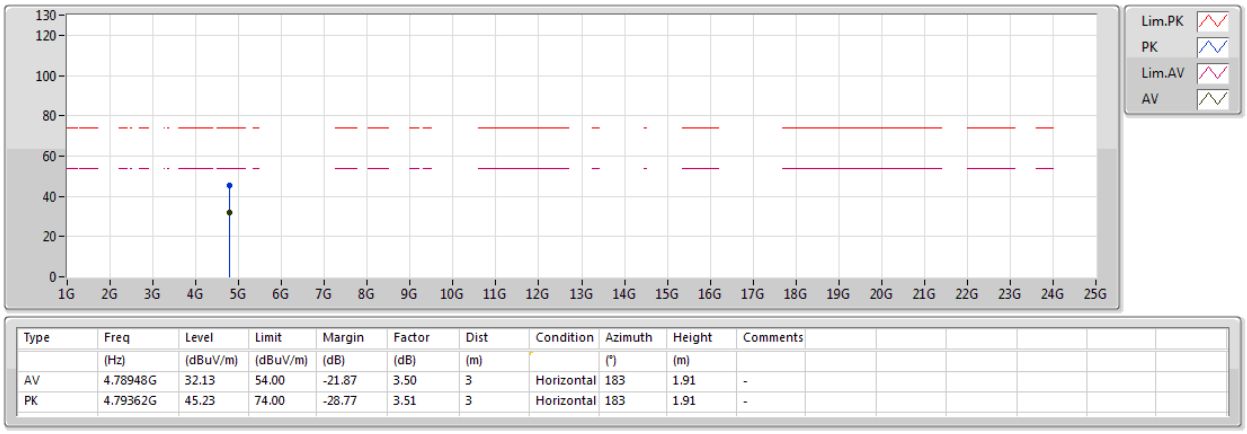


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.79242G	32.11	54.00	-21.89	3.51	3	Vertical	128	1.03	-
PK	4.7971G	45.75	74.00	-28.25	3.52	3	Vertical	128	1.03	-

BT-BR(1Mbps)

2402MHz_TX

27/12/2018

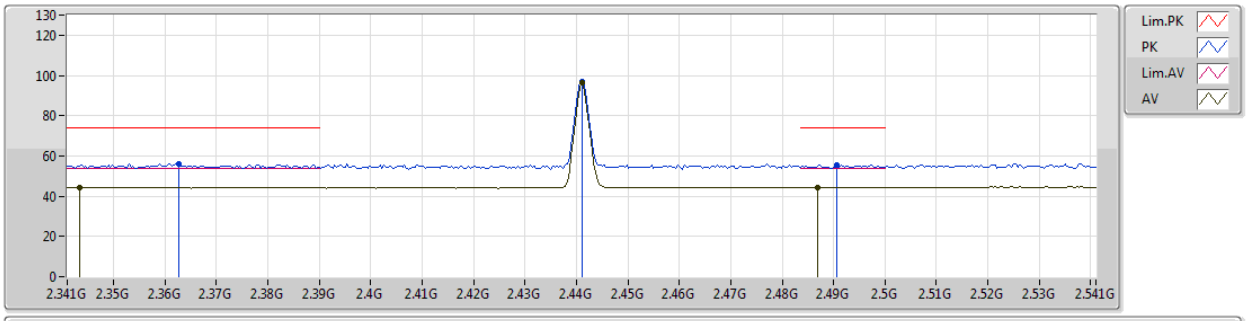


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.78948G	32.13	54.00	-21.87	3.50	3	Horizontal	183	1.91	-
PK	4.79362G	45.23	74.00	-28.77	3.51	3	Horizontal	183	1.91	-

BT-BR(1Mbps)

2441MHz_TX

27/12/2018

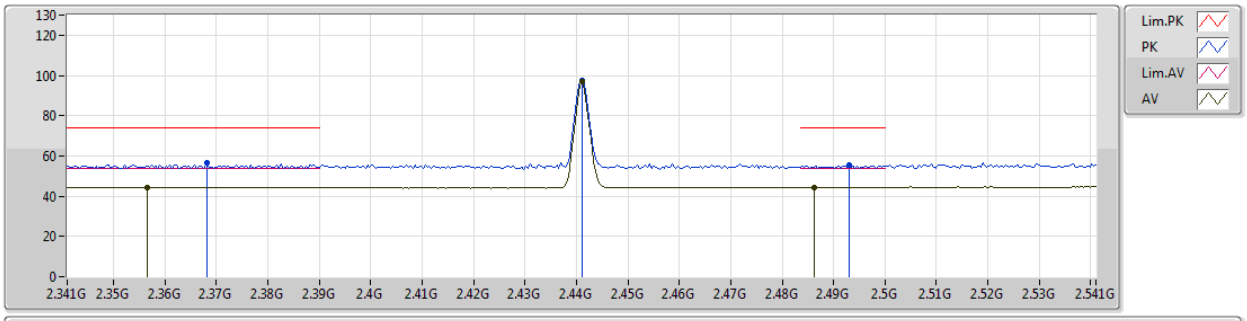


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3434G	44.43	54.00	-9.57	31.84	3	Vertical	174	2.71	-
AV	2.441G	96.21	Inf	-Inf	32.16	3	Vertical	174	2.71	-
AV	2.487G	44.49	54.00	-9.51	32.30	3	Vertical	174	2.71	-
PK	2.3626G	56.19	74.00	-17.81	31.91	3	Vertical	174	2.71	-
PK	2.441G	97.09	Inf	-Inf	32.16	3	Vertical	174	2.71	-
PK	2.4906G	55.50	74.00	-18.50	32.31	3	Vertical	174	2.71	-

BT-BR(1Mbps)

2441MHz_TX

27/12/2018

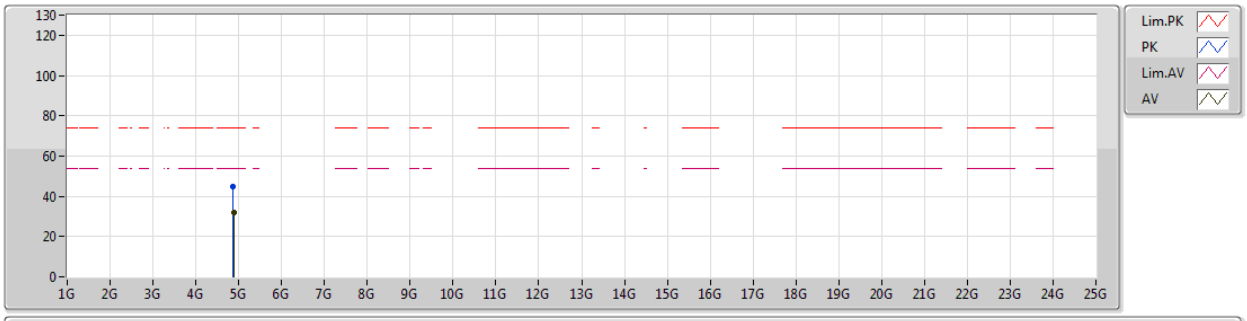


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3566G	44.41	54.00	-9.59	31.90	3	Horizontal	218	1.45	-
AV	2.441G	96.87	Inf	-Inf	32.16	3	Horizontal	218	1.45	-
AV	2.4862G	44.41	54.00	-9.59	32.30	3	Horizontal	218	1.45	-
PK	2.3682G	56.60	74.00	-17.40	31.93	3	Horizontal	218	1.45	-
PK	2.441G	97.72	Inf	-Inf	32.16	3	Horizontal	218	1.45	-
PK	2.493G	55.40	74.00	-18.60	32.32	3	Horizontal	218	1.45	-

BT-BR(1Mbps)

2441MHz_TX

27/12/2018

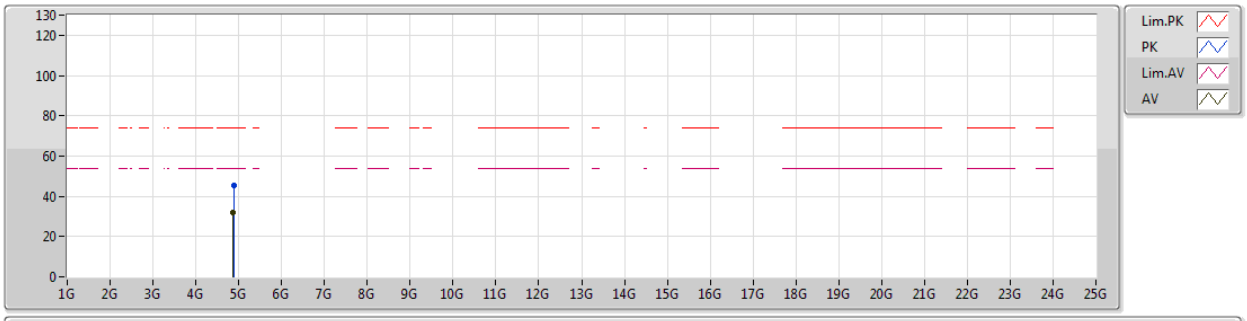


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.88944G	32.14	54.00	-21.86	3.73	3	Vertical	261	1.17	-
PK	4.87048G	44.94	74.00	-29.06	3.69	3	Vertical	261	1.17	-

BT-BR(1Mbps)

2441MHz_TX

27/12/2018

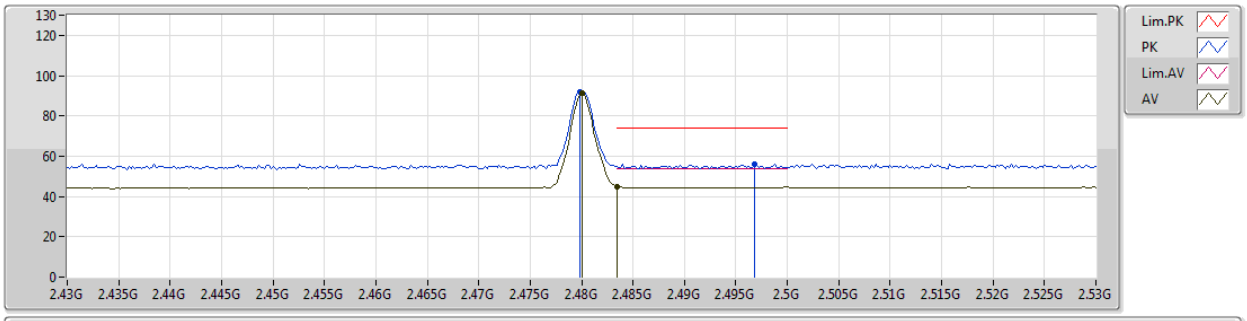


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.8766G	32.21	54.00	-21.79	3.70	3	Horizontal	229	1.41	-
PK	4.8904G	45.31	74.00	-28.69	3.73	3	Horizontal	229	1.41	-

BT-BR(1Mbps)

2480MHz_TX

27/12/2018

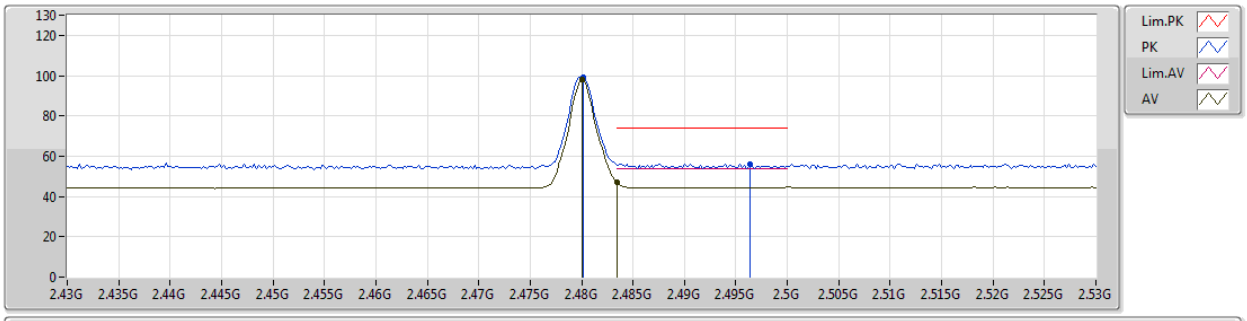


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.48G	91.27	Inf	-Inf	32.28	3	Vertical	129	2.45	-
AV	2.4835G	44.92	54.00	-9.08	32.29	3	Vertical	129	2.45	-
PK	2.4798G	92.13	Inf	-Inf	32.28	3	Vertical	129	2.45	-
PK	2.4968G	55.98	74.00	-18.02	32.33	3	Vertical	129	2.45	-

BT-BR(1Mbps)

2480MHz_TX

27/12/2018

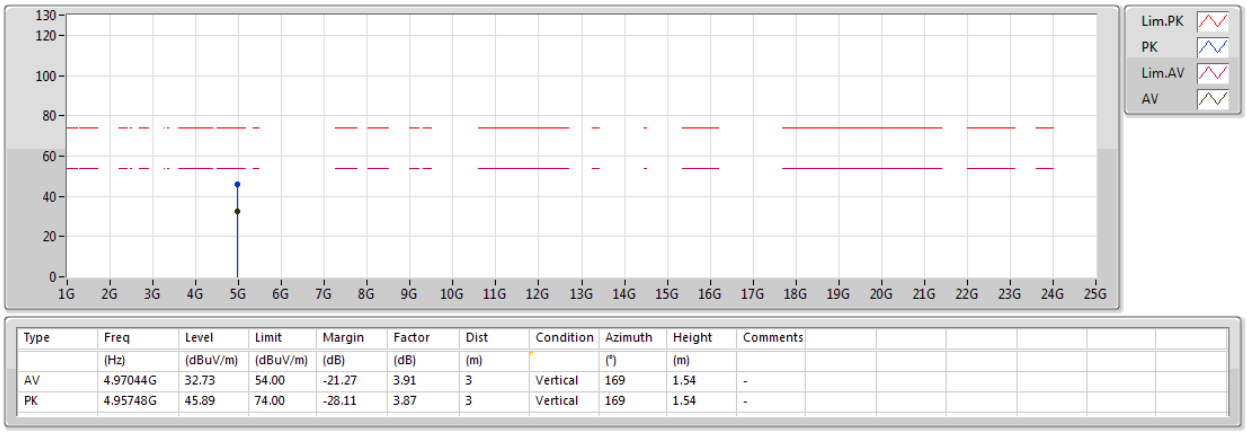


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.48G	98.08	Inf	-Inf	32.28	3	Horizontal	219	2.11	-
AV	2.4835G	46.82	54.00	-7.18	32.29	3	Horizontal	219	2.11	-
PK	2.4802G	98.95	Inf	-Inf	32.28	3	Horizontal	219	2.11	-
PK	2.4964G	56.24	74.00	-17.76	32.33	3	Horizontal	219	2.11	-

BT-BR(1Mbps)

2480MHz_TX

27/12/2018

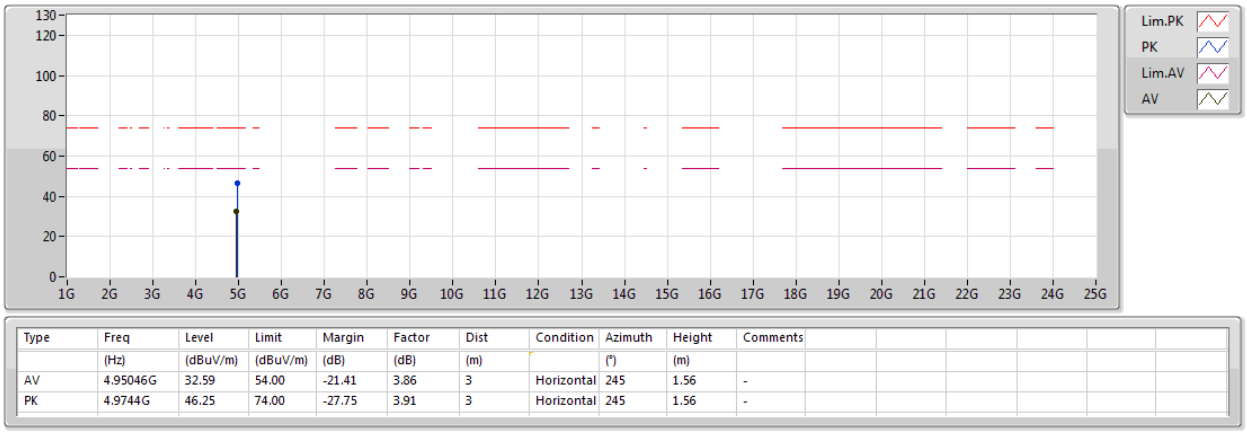


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.97044G	32.73	54.00	-21.27	3.91	3	Vertical	169	1.54	-
PK	4.95748G	45.89	74.00	-28.11	3.87	3	Vertical	169	1.54	-

BT-BR(1Mbps)

2480MHz_TX

27/12/2018

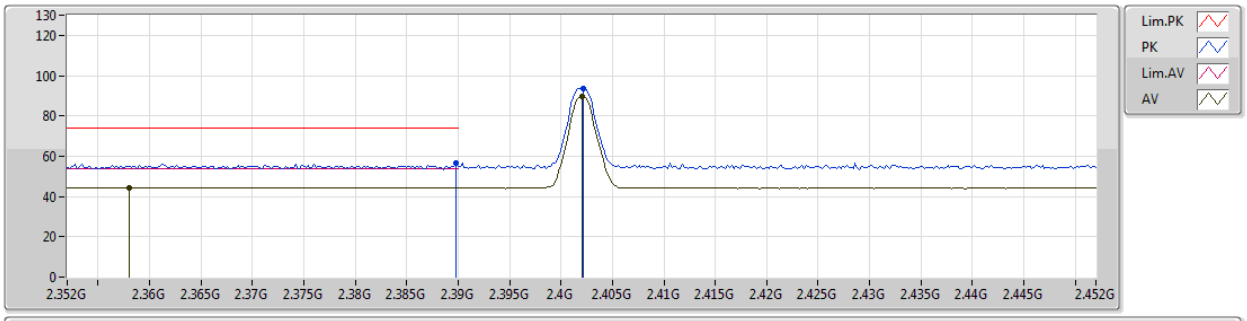


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.95046G	32.59	54.00	-21.41	3.86	3	Horizontal	245	1.56	-
PK	4.9744G	46.25	74.00	-27.75	3.91	3	Horizontal	245	1.56	-

BT-EDR(2Mbps)

2402MHz_TX

26/12/2018

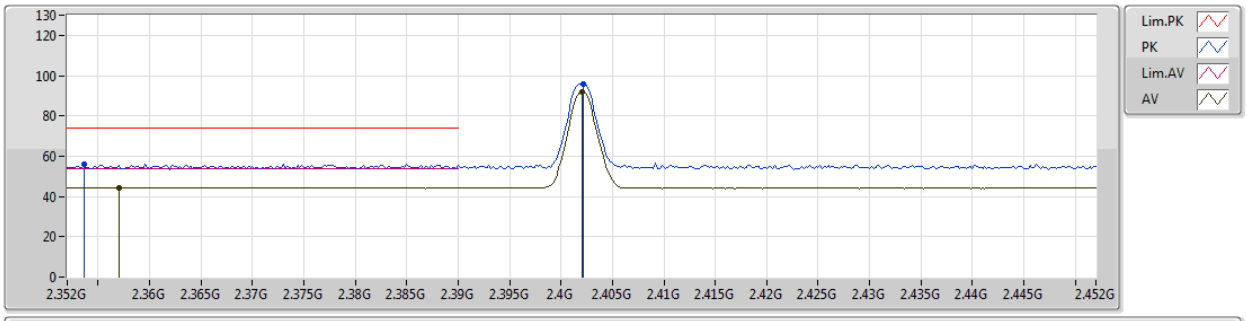


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.358G	44.43	54.00	-9.57	31.90	3	Vertical	174	2.85	-
AV	2.402G	89.82	Inf	-Inf	32.04	3	Vertical	174	2.85	-
PK	2.3898G	56.35	74.00	-17.65	32.01	3	Vertical	174	2.85	-
PK	2.4022G	93.83	Inf	-Inf	32.05	3	Vertical	174	2.85	-

BT-EDR(2Mbps)

2402MHz_TX

26/12/2018

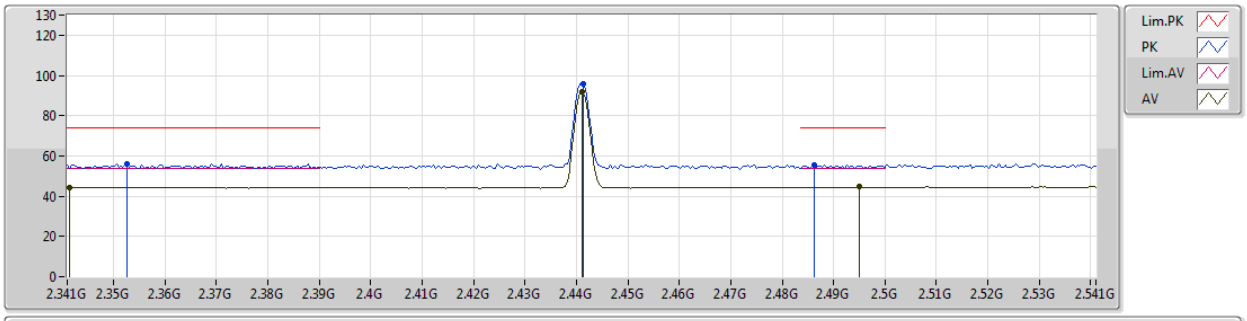


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.357G	44.52	54.00	-9.48	31.90	3	Horizontal	353	1.22	-
AV	2.402G	91.83	Inf	-Inf	32.04	3	Horizontal	353	1.22	-
PK	2.3536G	56.28	74.00	-17.72	31.88	3	Horizontal	353	1.22	-
PK	2.4022G	95.89	Inf	-Inf	32.05	3	Horizontal	353	1.22	-

BT-EDR(2Mbps)

2441MHz_TX

26/12/2018

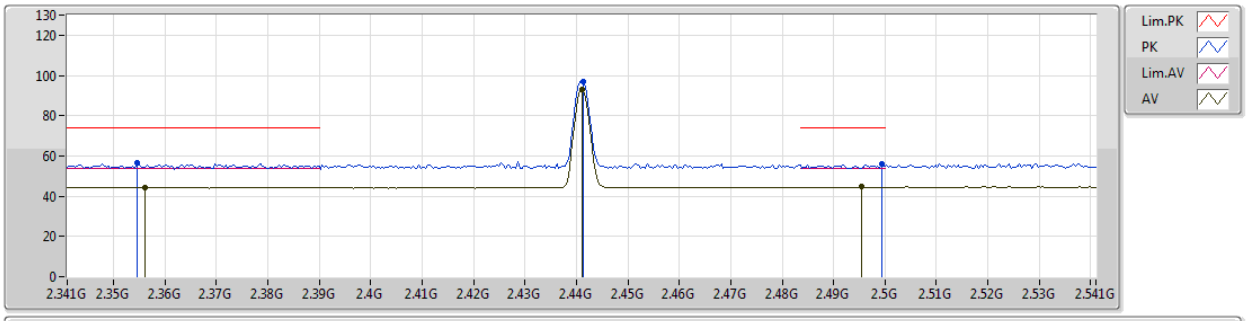


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3414G	44.37	54.00	-9.63	31.84	3	Vertical	182	2.99	-
AV	2.441G	92.04	Inf	-Inf	32.16	3	Vertical	182	2.99	-
AV	2.495G	44.58	54.00	-9.42	32.33	3	Vertical	182	2.99	-
PK	2.3526G	56.20	74.00	-17.80	31.88	3	Vertical	182	2.99	-
PK	2.4414G	96.05	Inf	-Inf	32.16	3	Vertical	182	2.99	-
PK	2.4862G	55.74	74.00	-18.26	32.30	3	Vertical	182	2.99	-

BT-EDR(2Mbps)

2441MHz_TX

26/12/2018

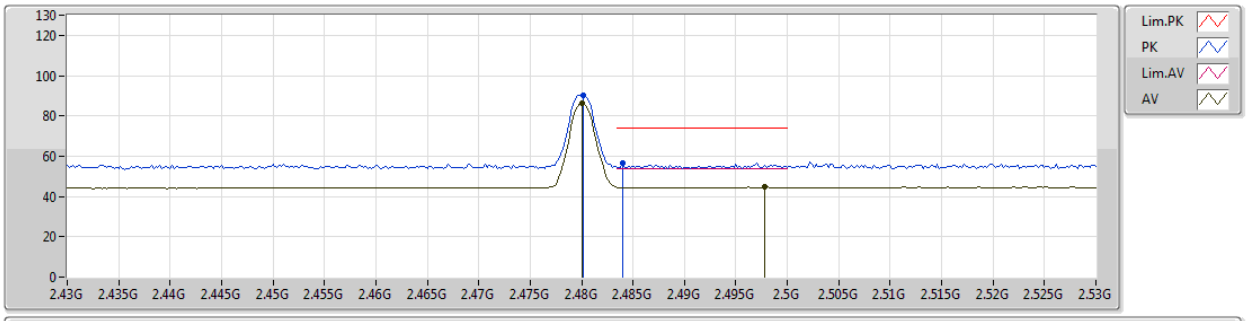


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3562G	44.41	54.00	-9.59	31.89	3	Horizontal	218	1.04	-
AV	2.441G	93.07	Inf	-Inf	32.16	3	Horizontal	218	1.04	-
AV	2.4954G	44.76	54.00	-9.24	32.33	3	Horizontal	218	1.04	-
PK	2.3546G	56.52	74.00	-17.48	31.88	3	Horizontal	218	1.04	-
PK	2.4414G	97.09	Inf	-Inf	32.16	3	Horizontal	218	1.04	-
PK	2.4994G	55.88	74.00	-18.12	32.34	3	Horizontal	218	1.04	-

BT-EDR(2Mbps)

2480MHz_TX

26/12/2018

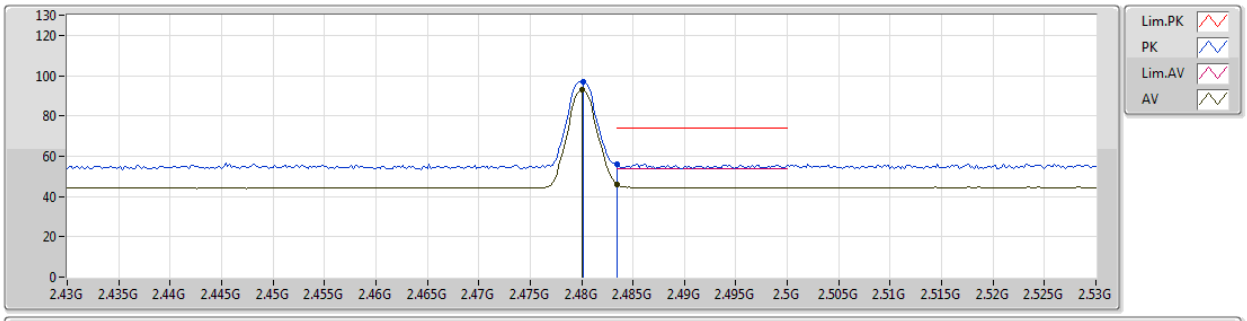


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.48G	86.17	Inf	-Inf	32.28	3	Vertical	129	2.46	-
AV	2.4978G	44.67	54.00	-9.33	32.33	3	Vertical	129	2.46	-
PK	2.4802G	90.24	Inf	-Inf	32.28	3	Vertical	129	2.46	-
PK	2.484G	56.53	74.00	-17.47	32.29	3	Vertical	129	2.46	-

BT-EDR(2Mbps)

2480MHz_TX

26/12/2018

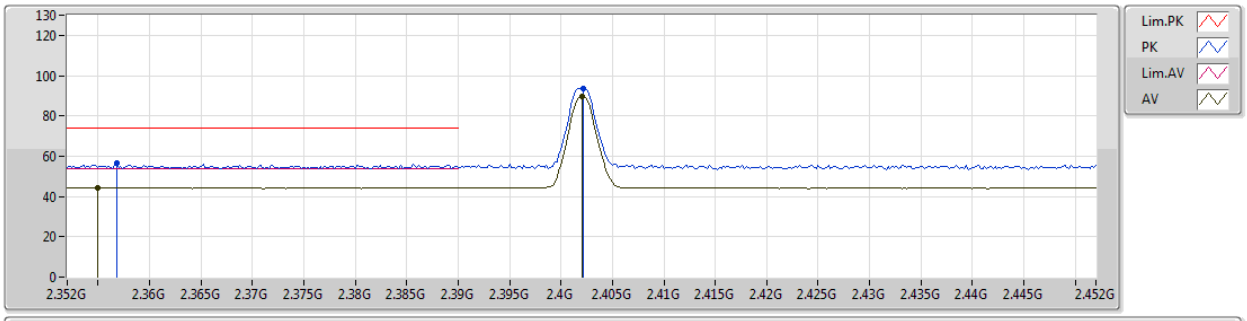


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.48G	92.95	Inf	-Inf	32.28	3	Horizontal	218	2.11	-
AV	2.4835G	45.95	54.00	-8.05	32.29	3	Horizontal	218	2.11	-
PK	2.4802G	96.92	Inf	-Inf	32.28	3	Horizontal	218	2.11	-
PK	2.4835G	55.94	74.00	-18.06	32.29	3	Horizontal	218	2.11	-

BT-EDR(3Mbps)

2402MHz_TX

26/12/2018

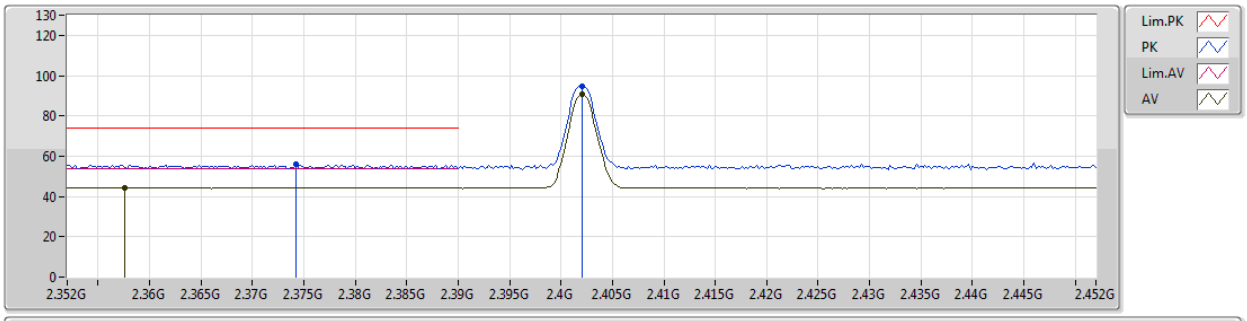


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.355G	44.36	54.00	-9.64	31.88	3	Vertical	173	2.83	-
AV	2.402G	89.66	Inf	-Inf	32.04	3	Vertical	173	2.83	-
PK	2.3568G	56.75	74.00	-17.25	31.90	3	Vertical	173	2.83	-
PK	2.4022G	93.76	Inf	-Inf	32.05	3	Vertical	173	2.83	-

BT-EDR(3Mbps)

2402MHz_TX

26/12/2018

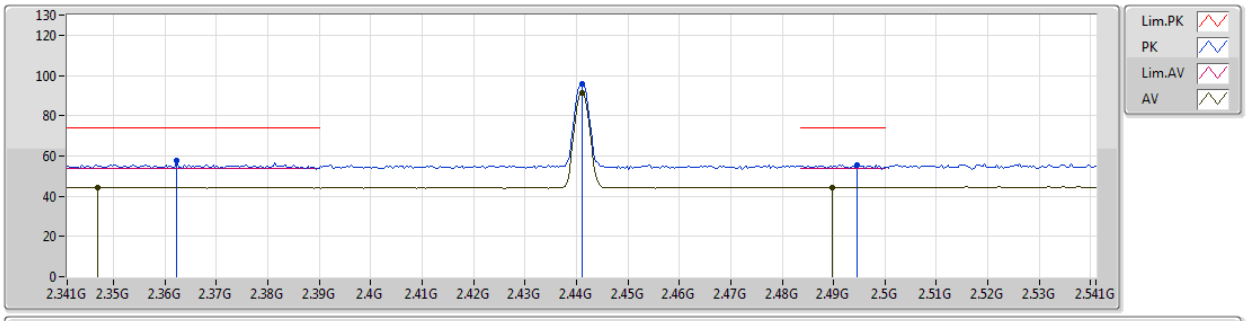


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3576G	44.48	54.00	-9.52	31.90	3	Horizontal	357	1.50	-
AV	2.402G	90.54	Inf	-Inf	32.04	3	Horizontal	357	1.50	-
PK	2.3742G	55.84	74.00	-18.16	31.95	3	Horizontal	357	1.50	-
PK	2.402G	94.65	Inf	-Inf	32.04	3	Horizontal	357	1.50	-

BT-EDR(3Mbps)

2441MHz_TX

26/12/2018

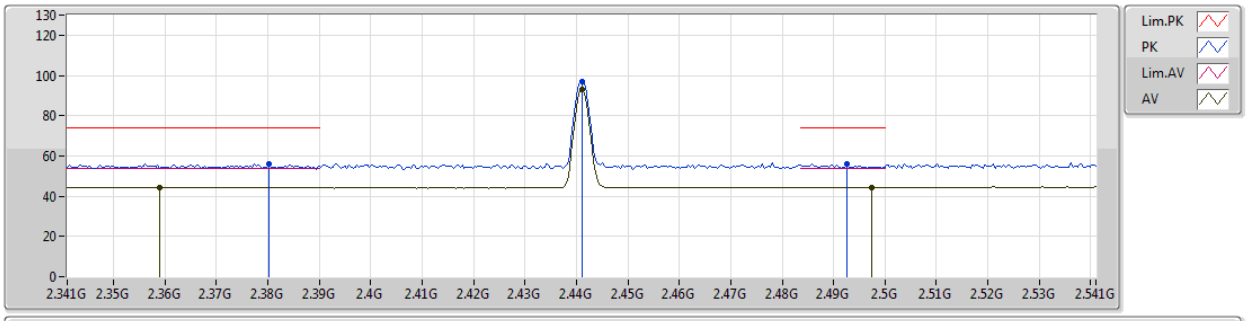


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.347G	44.41	54.00	-9.59	31.86	3	Vertical	182	2.99	-
AV	2.441G	91.60	Inf	-Inf	32.16	3	Vertical	182	2.99	-
AV	2.4898G	44.49	54.00	-9.51	32.31	3	Vertical	182	2.99	-
PK	2.3622G	57.44	74.00	-16.56	31.91	3	Vertical	182	2.99	-
PK	2.441G	95.69	Inf	-Inf	32.16	3	Vertical	182	2.99	-
PK	2.4946G	55.48	74.00	-18.52	32.33	3	Vertical	182	2.99	-

BT-EDR(3Mbps)

2441MHz_TX

26/12/2018

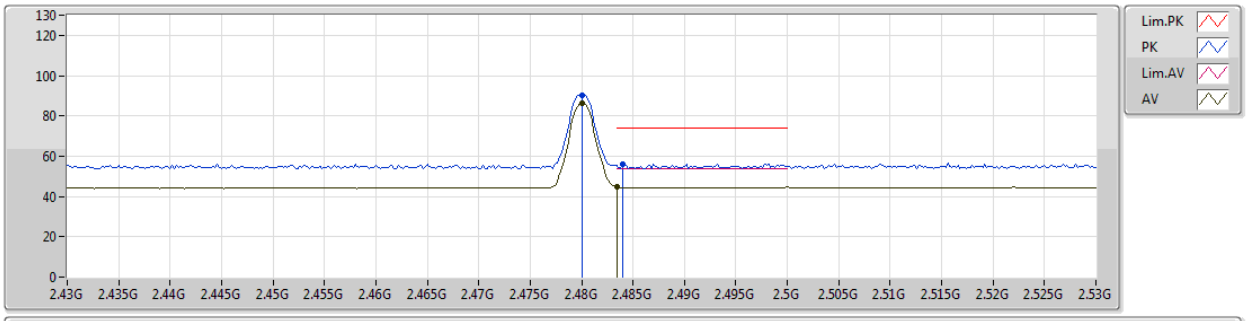


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.359G	44.34	54.00	-9.66	31.90	3	Horizontal	219	1.02	-
AV	2.441G	92.76	Inf	-Inf	32.16	3	Horizontal	219	1.02	-
AV	2.4974G	44.50	54.00	-9.50	32.33	3	Horizontal	219	1.02	-
PK	2.3802G	56.29	74.00	-17.71	31.97	3	Horizontal	219	1.02	-
PK	2.441G	96.88	Inf	-Inf	32.16	3	Horizontal	219	1.02	-
PK	2.4926G	55.90	74.00	-18.10	32.32	3	Horizontal	219	1.02	-

BT-EDR(3Mbps)

2480MHz_TX

26/12/2018

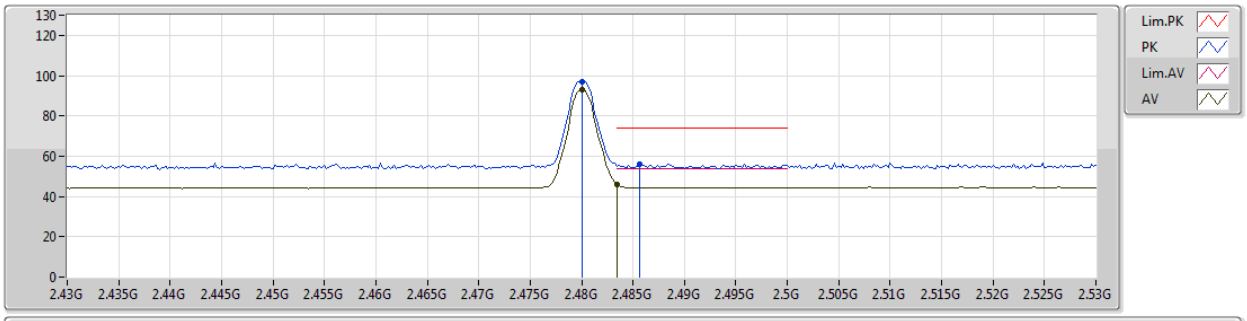


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.48G	86.30	Inf	-Inf	32.28	3	Vertical	129	2.45	-
AV	2.4835G	44.71	54.00	-9.29	32.29	3	Vertical	129	2.45	-
PK	2.48G	90.49	Inf	-Inf	32.28	3	Vertical	129	2.45	-
PK	2.484G	56.01	74.00	-17.99	32.29	3	Vertical	129	2.45	-

BT-EDR(3Mbps)

2480MHz_TX

26/12/2018



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.48G	93.05	Inf	-Inf	32.28	3	Horizontal	219	2.11	-
AV	2.4835G	46.03	54.00	-7.97	32.29	3	Horizontal	219	2.11	-
PK	2.48G	97.17	Inf	-Inf	32.28	3	Horizontal	219	2.11	-
PK	2.4856G	55.97	74.00	-18.03	32.30	3	Horizontal	219	2.11	-