Testing Laboratory 1190

FCC RADIO TEST REPORT

FCC ID	:	PPQ-V523
Equipment	:	Wi-Fi Indoor Camera
Brand Name	:	ALARM.COM
Model Name	:	ADC-V523
Applicant	:	LITE-ON Technology Corp. Bldg. C, 90, Chien 1 Rd., Chung-Ho, New Taipei City, 23585 Taiwan
Manufacturer	:	Lite-On Network Communication (Dongguan) Limited 30#Keji Rd.,Yin Hu Industrial Area,Qingxi Town,DongGuan City,Guangdong,China
Standard	:	47 CFR FCC Part 15.247

The product was received on Dec. 17, 2018, and testing was started from May 13, 2019 and completed on Aug. 16, 2019. 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: Sam Chen

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

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

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Appendix H. Test Photos

Photographs of EUT v01

History of this test report

Report No.	Version	Description	Issued Date
FR8D1231AB	01	Initial issue of report	Sep. 04, 2019

Summary of Test Result

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

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:
The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Sam Chen
Report Producer: Vicky Huang

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.
- Nss-Min is the minimum number of spatial streams.
- Nant is the number of outputs. e.g., 2(2, 3) means have 2 outputs for port 2 and port 3. 2 means have 2 outputs for port 1 and port 2.

1.1.2 Antenna Information

Ant.	Port			Brand	Model Name	Antenna Type	Connector	Gain (dBi)		
	2.4 GHz	5 GHz	Bluetooth					2.4 GHz	5 GHz	Bluetooth
1	1	1	-	LYNwave	ALX18F-222A A4-00	Dipole Antenna	I-PEX	4.9	5.4	-
2	2	2	1	LYNwave	ALX18F-222A A5-00	Dipole Antenna	I-PEX	5.2	4.7	5.2

Note: The above information was declared by manufacturer.

For 2.4GHz WLAN function
For IEEE 802.11b/g/n mode (2TX, 2RX):
Ant. 1(Port 1) and Ant. 2(Port 2) could transmit/receive simultaneously.
For 5GHz WLAN function
For IEEE 802.11a/n/ac mode (2TX, 2RX):
Ant. 1(Port 1) and Ant. 2(Port 2) could transmit/receive simultaneously.
For Bluetooth function (1TX, 1RX):
Only Ant. 2(Port 1) can be used as transmitting/receiving functions.

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
BT-BR(1Mbps)	0.93	0.32	2.87m	1k
BT-EDR(2Mbps)	0.939	0.27	2.883m	1k
BT-EDR(3Mbps)	0.929	0.32	2.885m	1k

Note:
- DC is Duty Cycle.
- DCF is Duty Cycle Factor.

1.1.4 EUT Operational Condition

EUT Power Type	From Power Adapter
Test Software Version	Tera Term version 4.75

1.2 Applicable Standards

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

- 47 CFR FCC Part 15
- FCC KDB 558074 D01 v05r02
- FCC KDB 414788 D01 v01r01

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
☒	JHUBEI	ADD :	No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C.
		TEL :	886-3-656-9065 FAX : 886-3-656-9085

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH01-CB	Benson Su	24.6~26.5°C / 63~65%	May 14, 2019~Aug. 16, 2019
Radiated (Below 1GHz)	03CH06-CB	KJ Chang	24.3~26°C / 60~63%	Aug. 05, 2019~Aug. 06, 2019
Radiated (Above 1GHz)	03CH06-CB	Mason Chen	25.4~26°C / 63~66%	May 13, 2019~Aug. 16, 2019
AC Conduction	CO01-CB	Deven Huang	24~25°C / 63~65%	Aug. 15, 2019

Test site Designation No. TW0006 with FCC.
Test site registered number IC 4086B with Industry Canada.

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)	2.0 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	5.1 dB	Confidence levels of 95%
Conducted Emission	2.4 dB	Confidence levels of 95%
Output Power Measurement	1.5 dB	Confidence levels of 95%
Bandwidth Measurement	2%	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

Mode	Power Setting
BT-BR(1Mbps)	-
2402MHz	0x23
2440MHz	0x23
2480MHz	0x21
BT-EDR(2Mbps)	-
2402MHz	0x23
2440MHz	0x23
2480MHz	0x23
BT-EDR(3Mbps)	-
2402MHz	0x23
2440MHz	0x23
2480MHz	0x23

2.2 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	Normal Link
1	EUT+Adapter+LAN mode
2	EUT+Adapter+WLAN-2.4GHz mode
3	EUT+Adapter+WLAN-5GHz mode
For operating mode 1 is the worst case and it was record in this test report.	

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	Normal Link
The EUT was performed at X axis, Y axis and Z axis position. The worst case was found at Y axis, so it was selected to perform test and its test result was written in the report.	
1	EUT at Y-axis+Adapter+LAN mode
2	EUT at Y-axis+Adapter+WLAN-2.4GHz mode
3	EUT at Y-axis+Adapter+WLAN-5GHz mode
For operating mode 1 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX
The EUT was performed at X axis, Y axis and Z axis position. The worst case was found at Y axis, so it was selected to perform test and its test result was written in the report.	
1	EUT at Y-axis

2.3 EUT Operation during Test

For CTX Mode:

The EUT was programmed to be in continuously transmitting mode.

For Normal Link:

During the test, the EUT operation to normal function.

2.4 Accessories

Accessories			
Equipment Name	**Brand Name**	**Model Name**	**Rating**
Adapter	APD	WB-12G12FU	INPUT: 100-240V~50-60Hz, 0.3A Max. OUTPUT: 12V, 1A
Other			
Wall-mounted rack*1			

2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	Micro SD Card	Transcend	TS16GUSDHC10	N/A
B	AP Router	ASUS	RP-N53	MSQ-RPN53
C	LAN NB	DELL	E6430	N/A
D	Smart phone	Samsung	Galaxy J2	N/A

For Radiated (below 1GHz):

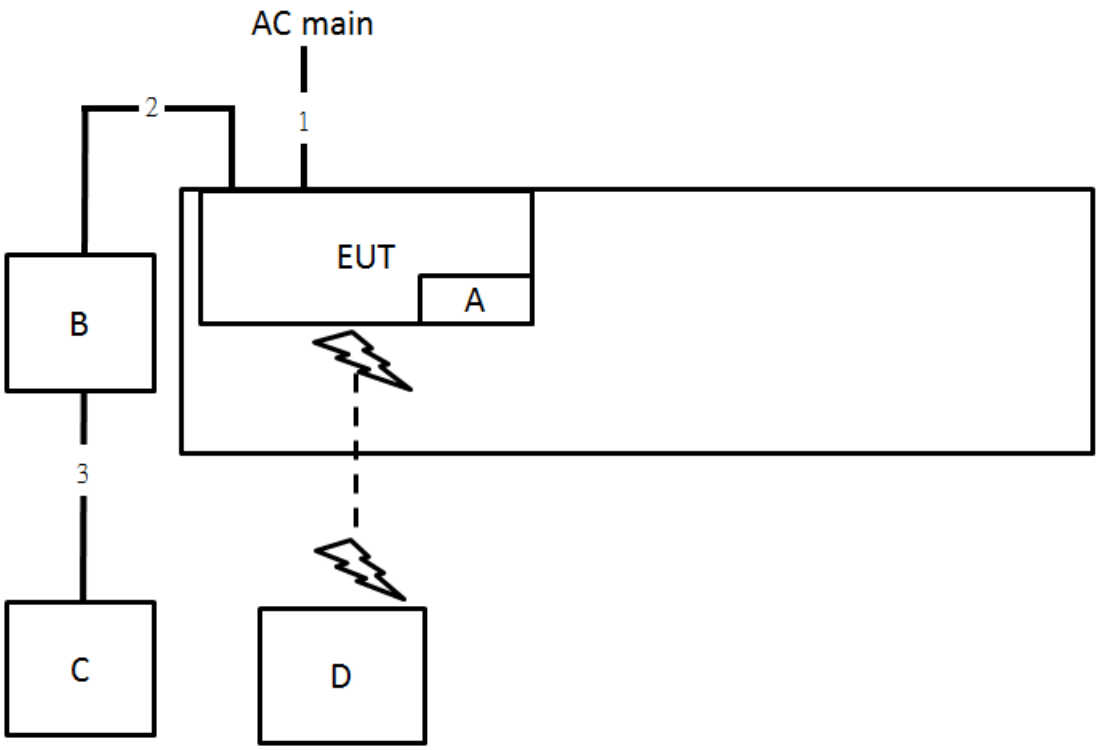
Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	WLAN AP	NETGEAR	WNDR3300v2	PY309300116
B	NB	DELL	E4300	N/A
C	SD Card	Apacer	SD Card	N/A
D	Smart phone	Samsung	Galaxy J2	N/A

For Radiated (above 1GHz) and RF Conducted:

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	NB	DELL	E4300	N/A

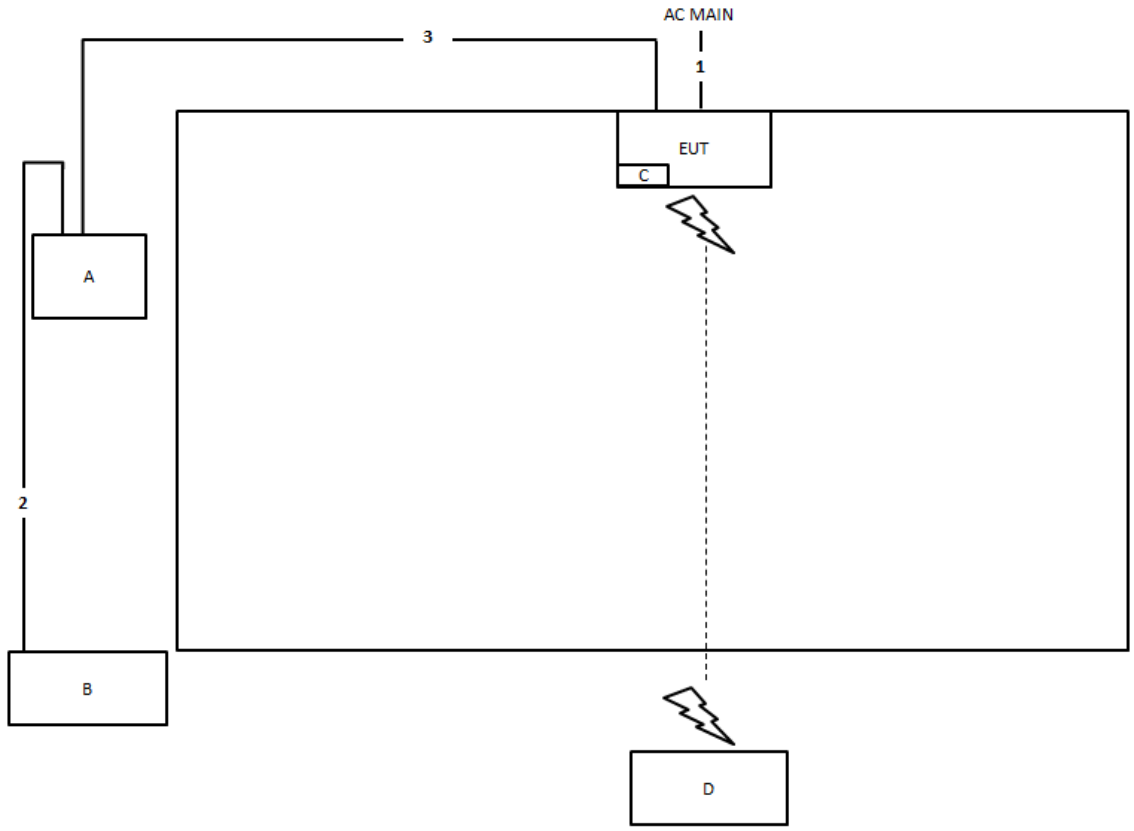
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



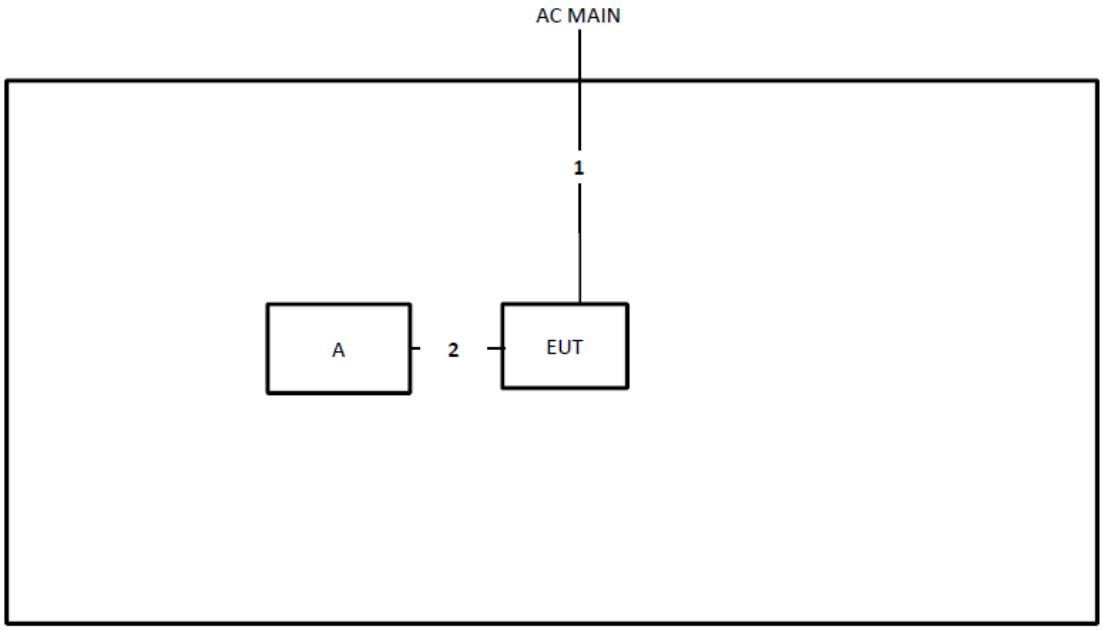
Item	Connection	Shielded	Length
1	Power cable	No	4.5m
2	RJ-45 cable	No	10m
3	RJ-45 cable	No	1.5m

Test Setup Diagram - Radiated Test < 1GHz



Item	Connection	Shielded	Length
1	Power cable	No	4.5m
2	RJ-45 cable	No	1.5m
3	RJ-45 cable	No	10m

Test Setup Diagram - Radiated Test > 1GHz



Item	Connection	Shielded	Length
1	Power cable	No	4.5m
2	Console cable	No	0.35m

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

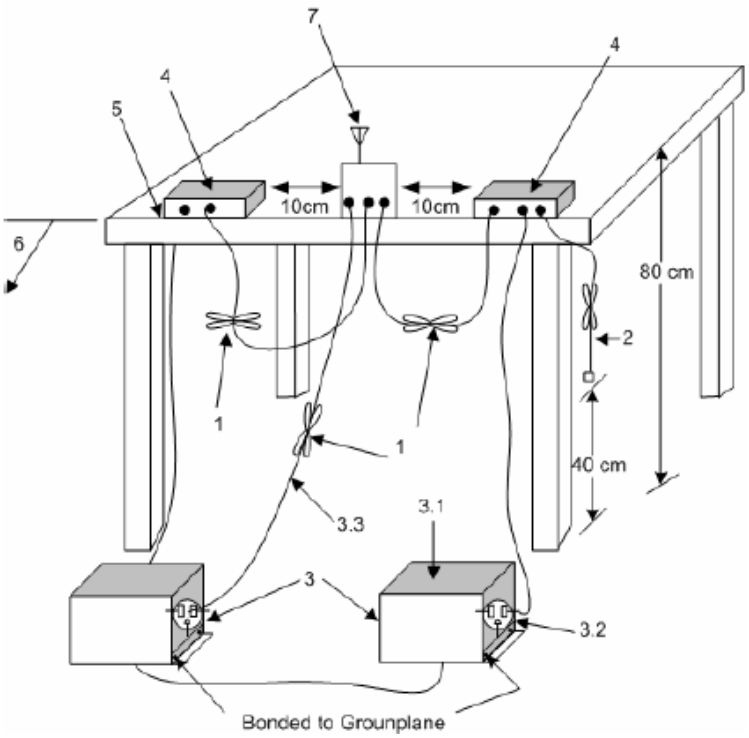
Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

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

3.1.4 Test Setup

AC Power-line Conducted Emissions



1—Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 cm to 40 cm long.
2—The I/O cables that are not connected to an accessory shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
3—EUT connected to one LISN. Unused LISN measuring port connectors shall be terminated in 50 Ω loads. LISN may be placed on top of, or immediately beneath, reference ground plane.
3.1—All other equipment powered from additional LISN(s).
3.2—A multiple-outlet strip may be used for multiple power cords of non-EUT equipment.
3.3—LISN at least 80 cm from nearest part of EUT chassis.
4—Non-EUT components of EUT system being tested.
5—Rear of EUT, including peripherals, shall all be aligned and flush with edge of tabletop.
6—Edge of tabletop shall be 40 cm removed from a vertical conducting plane that is bonded to the ground plane.
7—Antenna can be integral or detachable. If detachable, then the antenna shall be attached for this test.

3.1.5 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 20dB Bandwidth and Carrier Frequency Separation

3.2.1 20dB Bandwidth and Carrier Frequency Separation Limit

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

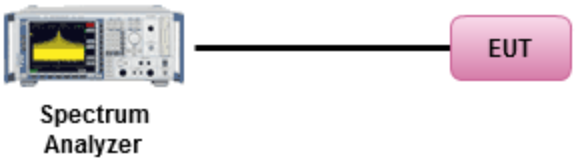
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method
▪ Refer as ANSI C63.10-2013, clause 6.9.1 for 20 dB bandwidth measurement.
▪ Refer as ANSI C63.10-2013, clause 7.8.2 for carrier frequency separation measurement.

3.2.4 Test Setup

20dB Bandwidth and Carrier Frequency Separation


3.2.5 Test Result of 20dB Bandwidth

Refer as Appendix B

3.2.6 Test Result of Carrier Frequency Separation

Refer as Appendix B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

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

3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

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

3.3.4 Test Setup

Maximum Conducted Output Power (Peak Power Meter)


3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Number of Hopping Frequencies and Hopping Bandedge

3.4.1 Number of Hopping Frequencies Limit

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

3.4.2 Hopping Bandedge Limit

Refer clause 3.6.1 and clause 3.7.1

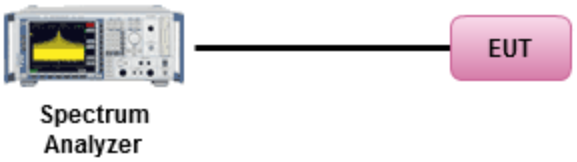
3.4.3 Measuring Instruments

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

3.4.4 Test Procedures

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

3.4.5 Test Setup

Number of Hopping Frequencies and Hopping Frequencies Bandedge


3.4.6 Test Result of Number of Hopping Frequencies

Refer as Appendix D

3.4.7 Test Result of Number of Hopping Frequencies Bandedge

Refer as Appendix D

3.5 Time of Occupancy (Dwell Time)

3.5.1 Time of Occupancy (Dwell Time) Limit

20dB Bandwidth and Carrier Frequency Separation Limit for Frequency Hopping Systems
▪ 902-928 MHz Band:
▪ N ≥50; 0.4s in 20s period
▪ 50 >N≥ 25; 0.4s in 10s period
▪ 2400-2483.5 MHz Band:
▪ N ≥ 75; 0.4s in N x 0.4 period
▪ 75 >N ≥ 15; 0.4s in N x 0.4 period
▪ 5725-5850 MHz Band:
▪ N ≥ 75; 0.4s in 30s period
N:Number of Hopping Frequencies

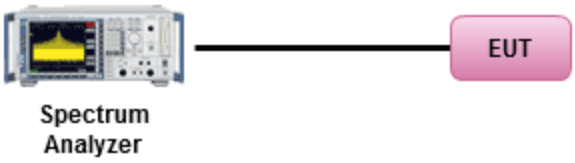
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

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

3.5.4 Test Setup

Time of Occupancy (Dwell Time)


3.5.5 Test Result of Time of Occupancy (Dwell Time)

Refer as Appendix E

3.6 Emissions in Non-restricted Frequency Bands

3.6.1 Emissions in Non-restricted Frequency Bands Limit

Un-restricted Band Emissions Limit	
RF output power procedure	**Limit (dBc)**
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.	

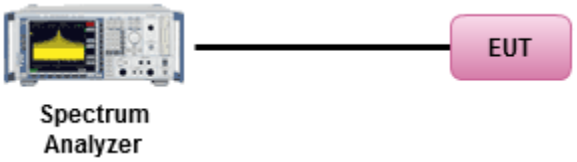
3.6.2 Measuring Instruments

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.

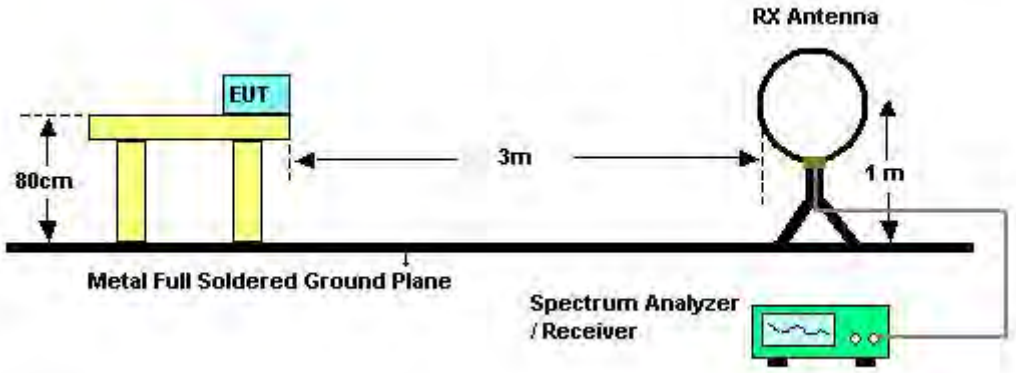
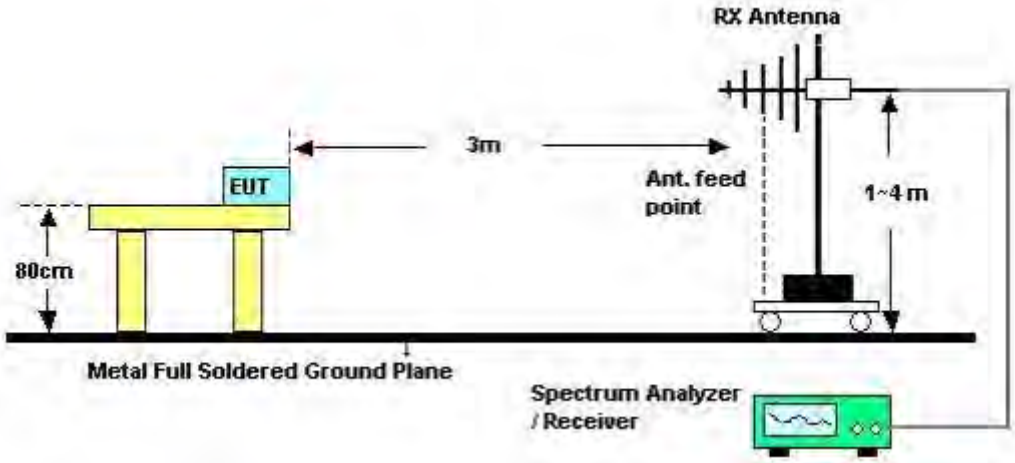
3.7.2 Measuring Instruments

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

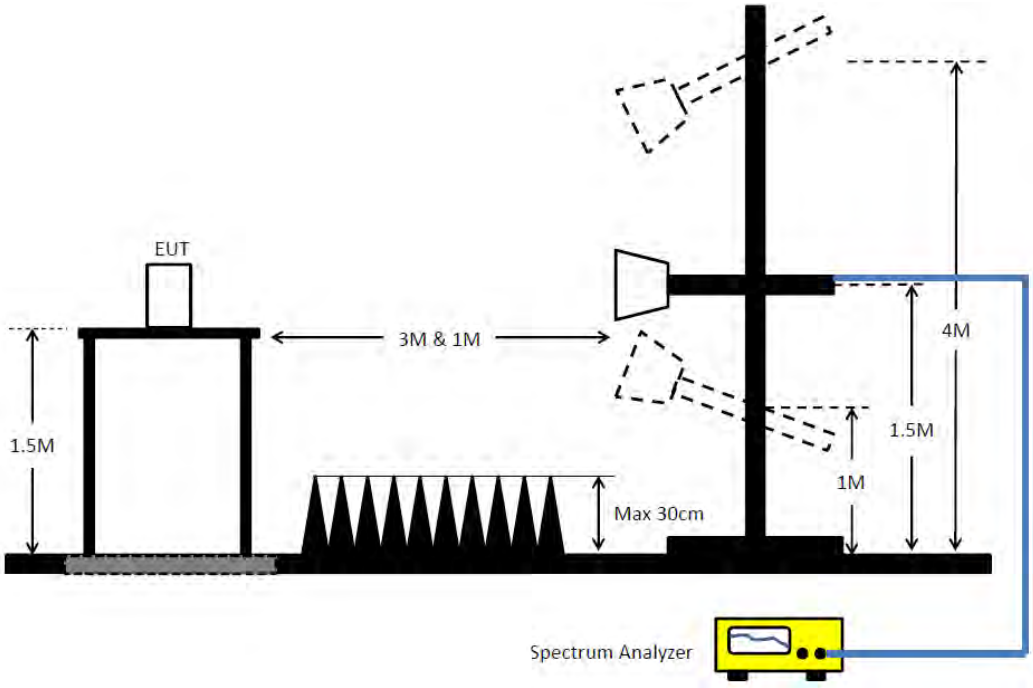
3.7.3 Test Procedures

Test Method	
▪ The average emission levels shall be measured in [hopping duty factor].	
▪ Refer as ANSI C63.10; clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.	
▪ For the transmitter unwanted emissions shall be measured using following options below:	
	▪ Refer as 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 Measurement Results Calculation

The measured Level is calculated using:
Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

3.7.6 Emissions in Restricted Frequency Bands (Below 30MHz)

There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to KDB414788 Radiated Test Site, and the result came out very similar.
All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.
The radiated emissions were investigated from 9 kHz or the lowest frequency generated within the device, up to the 10 harmonic or 40 GHz, whichever is appropriate.

3.7.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix G

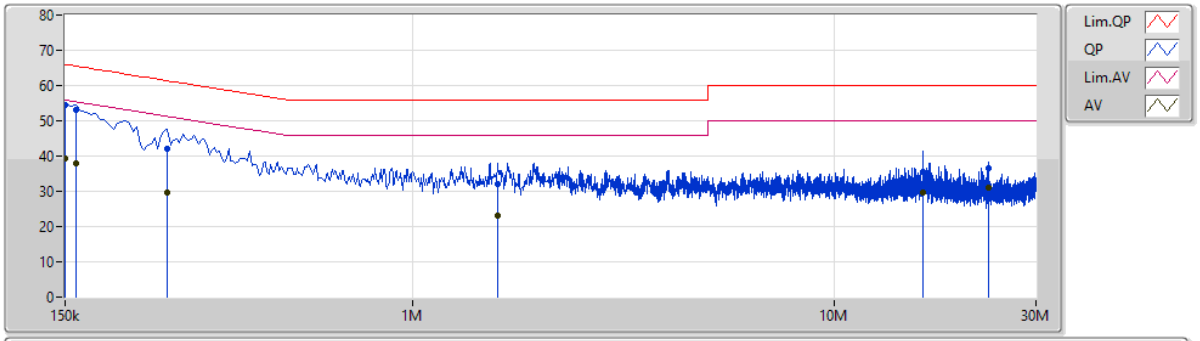
4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.45GHz	Jan. 28, 2019	Jan. 29, 2020	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Dec. 24, 2018	Dec. 23, 2019	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Jan. 11, 2019	Jan. 10, 2020	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	May 21, 2019	May 20, 2020	Conduction (CO01-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
BILOG ANTENNA with 6dB Attenuator	TESEQ & EMCI	CBL6112D & N-6-06	37880 & AT-N0609	20MHz ~ 2GHz	Aug. 27, 2018	Aug. 26, 2019	Radiation (03CH06-CB)
Horn Antenna	SCHWARZBECK	BBHA9120D	9120D-1292	1GHz~18GHz	Jul. 20, 2018	Jul. 19, 2019	Radiation (03CH06-CB)
Horn Antenna	SCHWARZBECK	BBHA9120D	9120D-1292	1GHz~18GHz	Jul. 17, 2019	Jul. 16, 2020	Radiation (03CH06-CB)
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170507	15GHz ~ 40GHz	Jun. 07, 2018	Jun. 06, 2019	Radiation (03CH06-CB)
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170507	15GHz ~ 40GHz	Jun. 12, 2019	Jun. 11, 2020	Radiation (03CH06-CB)
Pre-Amplifier	Agilent	310N	187290	0.1MHz ~ 1GHz	May 07, 2019	May 06, 2020	Radiation (03CH06-CB)
Pre-Amplifier	Agilent	83017A	MY53270064	0.5GHz ~ 26.5GHz	May 08, 2019	May 07, 2020	Radiation (03CH06-CB)
Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 04, 2018	Jul. 03, 2019	Radiation (03CH06-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 03, 2019	Jul. 02, 2020	Radiation (03CH06-CB)
Spectrum analyzer	R&S	FSP40	100080	9kHz~40GHz	Oct. 03, 2018	Oct. 02, 2019	Radiation (03CH06-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	May 15, 2019	May 14, 2020	Radiation (03CH06-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 29, 2019	Mar. 28, 2020	Radiation (03CH06-CB)
RF Cable-low	HUBER+SUHNER	RG402	Low Cable-05+24	30MHz~1GHz	Oct. 08, 2018	Oct. 07, 2019	Radiation (03CH06-CB)
RF Cable-high	HUBER+SUHNER	RG402	High Cable-05	1GHz~18GHz	Oct. 08, 2018	Oct. 07, 2019	Radiation (03CH06-CB)
RF Cable-high	HUBER+SUHNER	RG402	High Cable-05+24	1GHz~18GHz	Oct. 08, 2018	Oct. 07, 2019	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 27, 2018	Jul. 26, 2019	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH06-CB)

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 27, 2018	Jul. 26, 2019	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 24, 2019	Jul. 23, 2020	Radiation (03CH06-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Feb. 25, 2019	Feb. 24, 2020	Conducted (TH01-CB)
Temp. and Humidity Chamber	Ten Billion	TTH-C2SP	TBN-1010206	-20~150 degree	Mar. 04. 2019	Mar. 03. 2020	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-06	1 GHz – 26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-07	1 GHz –26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-08	1 GHz –26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-09	1 GHz –26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz –26.5 GHz	Oct. 08, 2018	Oct. 07, 2019	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-28	1 GHz –26.5 GHz	Nov. 19, 2018	Nov. 18, 2019	Conducted (TH01-CB)
Power Sensor	Agilent	E9327A	US40442088	50MHz~18GHz	Jan. 15, 2019	Jan. 14, 2020	Conducted (TH01-CB)
Power Meter	Agilent	E4416A	GB41291199	50MHz~18GHz	Jan. 15, 2019	Jan. 14, 2020	Conducted (TH01-CB)

Note: Calibration Interval of instruments listed above is one year.
NCR means Non-Calibration required.

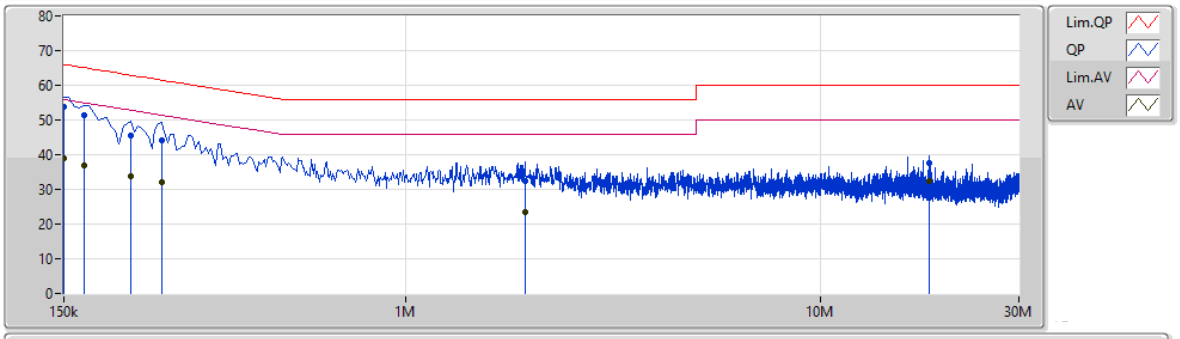
AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	Line
Operating Function	Normal Link		



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	AF	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	150k	54.55	66.00	-11.45	9.90	Line	"Worst"	44.65	0.05	0.06	9.79
AV	150k	39.35	56.00	-16.65	9.90	Line	-	29.45	0.05	0.06	9.79
QP	159k	53.00	65.52	-12.52	9.90	Line	-	43.10	0.05	0.06	9.79
AV	159k	38.09	55.52	-17.43	9.90	Line	-	28.19	0.05	0.06	9.79
QP	262.5k	42.15	61.35	-19.20	9.92	Line	-	32.23	0.06	0.06	9.80
AV	262.5k	29.73	51.35	-21.62	9.92	Line	-	19.81	0.06	0.06	9.80
QP	1.586M	32.10	56.00	-23.90	10.02	Line	-	22.08	0.08	0.11	9.83
AV	1.586M	23.21	46.00	-22.79	10.02	Line	-	13.19	0.08	0.11	9.83
QP	16.17M	35.60	60.00	-24.40	10.44	Line	-	25.16	0.27	0.23	9.94
AV	16.17M	29.82	50.00	-20.18	10.44	Line	-	19.38	0.27	0.23	9.94
QP	23.127M	36.55	60.00	-23.45	10.65	Line	-	25.90	0.32	0.32	10.01
AV	23.127M	31.18	50.00	-18.82	10.65	Line	-	20.53	0.32	0.32	10.01

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

AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	Neutral
Operating Function	Normal Link		



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	AF	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	150k	53.85	66.00	-12.15	9.89	Neutral	"Worst"	43.96	0.04	0.06	9.79
AV	150k	38.98	56.00	-17.02	9.89	Neutral	-	29.09	0.04	0.06	9.79
QP	168k	51.52	65.06	-13.54	9.89	Neutral	-	41.63	0.04	0.06	9.79
AV	168k	37.04	55.06	-18.02	9.89	Neutral	-	27.15	0.04	0.06	9.79
QP	217.5k	45.67	62.92	-17.25	9.89	Neutral	-	35.78	0.04	0.06	9.79
AV	217.5k	33.65	52.92	-19.27	9.89	Neutral	-	23.76	0.04	0.06	9.79
QP	258k	44.24	61.49	-17.25	9.90	Neutral	-	34.34	0.04	0.06	9.80
AV	258k	32.04	51.49	-19.45	9.90	Neutral	-	22.14	0.04	0.06	9.80
QP	1.941M	32.47	56.00	-23.53	10.02	Neutral	-	22.45	0.07	0.12	9.83
AV	1.941M	23.40	46.00	-22.60	10.02	Neutral	-	13.38	0.07	0.12	9.83
QP	18.245M	37.44	60.00	-22.56	10.45	Neutral	-	26.99	0.24	0.24	9.97
AV	18.245M	32.52	50.00	-17.48	10.45	Neutral	-	22.07	0.24	0.24	9.97

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)	933.75k	889.555k	890KF1D	927.5k	887.056k
BT-EDR(2Mbps)	1.336M	1.276M	1M28G1D	1.319M	1.238M
BT-EDR(3Mbps)	1.318M	1.273M	1M27G1D	1.3M	1.234M

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

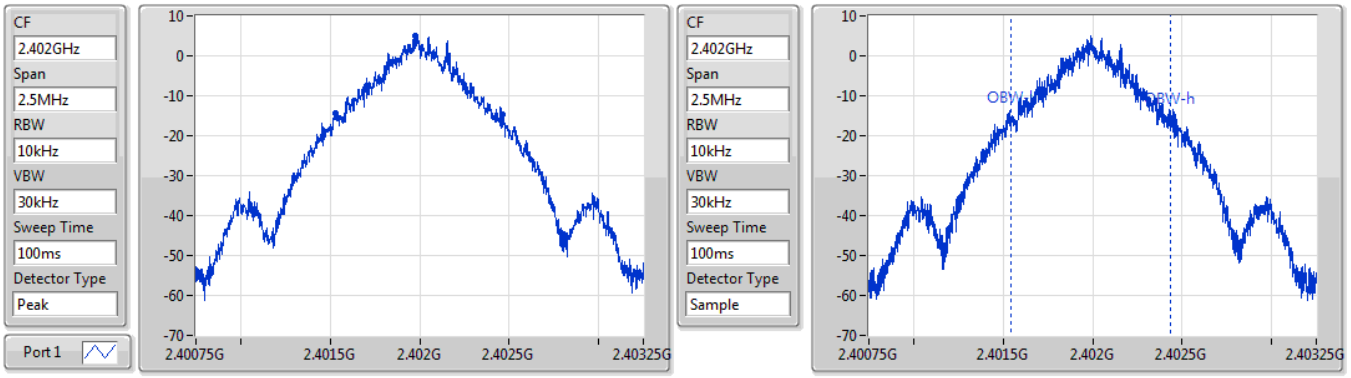
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	Inf	932.5k	889.555k
2440MHz	Pass	Inf	927.5k	887.056k
2480MHz	Pass	Inf	933.75k	889.555k
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	Inf	1.326M	1.276M
2440MHz	Pass	Inf	1.336M	1.264M
2480MHz	Pass	Inf	1.319M	1.238M
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	Inf	1.306M	1.273M
2440MHz	Pass	Inf	1.318M	1.267M
2480MHz	Pass	Inf	1.3M	1.234M

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

BT-BR(1Mbps) EBW

2402MHz

16/08/2019

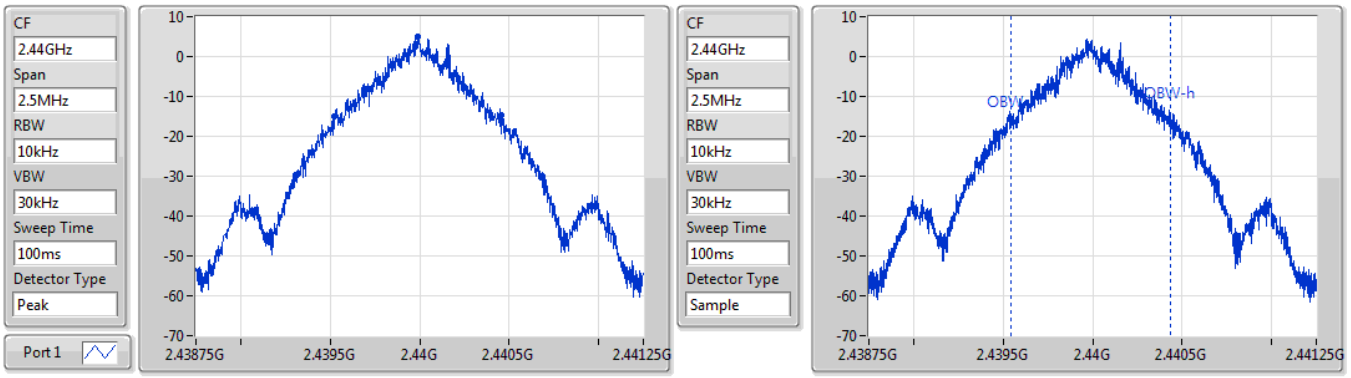


20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
932.5k	2.401529G	2.402461G	889.555k	2.401544G	2.402434G	Inf	1

BT-BR(1Mbps) EBW

2440MHz

16/08/2019

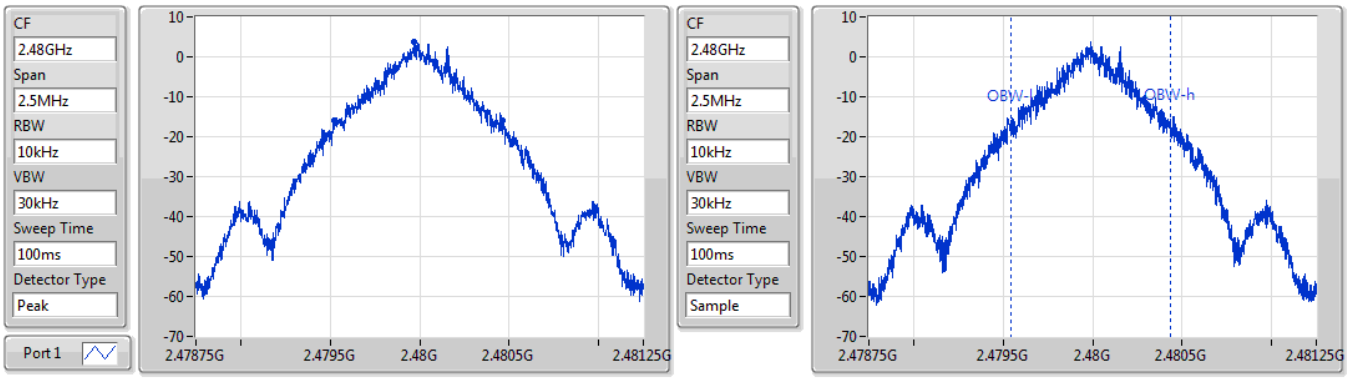


20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
927.5k	2.439526G	2.440454G	887.056k	2.439545G	2.440432G	Inf	1

BT-BR(1Mbps) EBW

2480MHz

16/08/2019

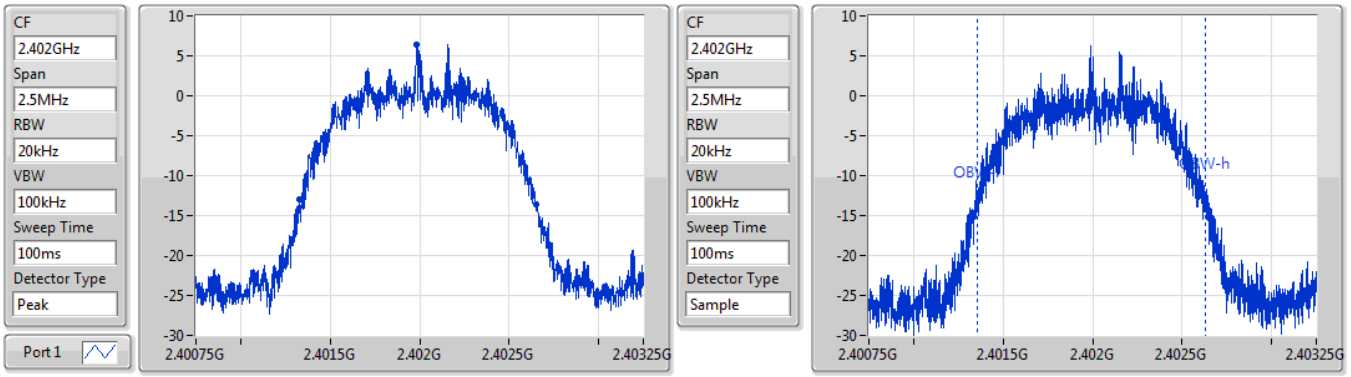


20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
933.75k	2.479526G	2.48046G	889.555k	2.479544G	2.480434G	Inf	1

BT-EDR(2Mbps) EBW

2402MHz

16/08/2019

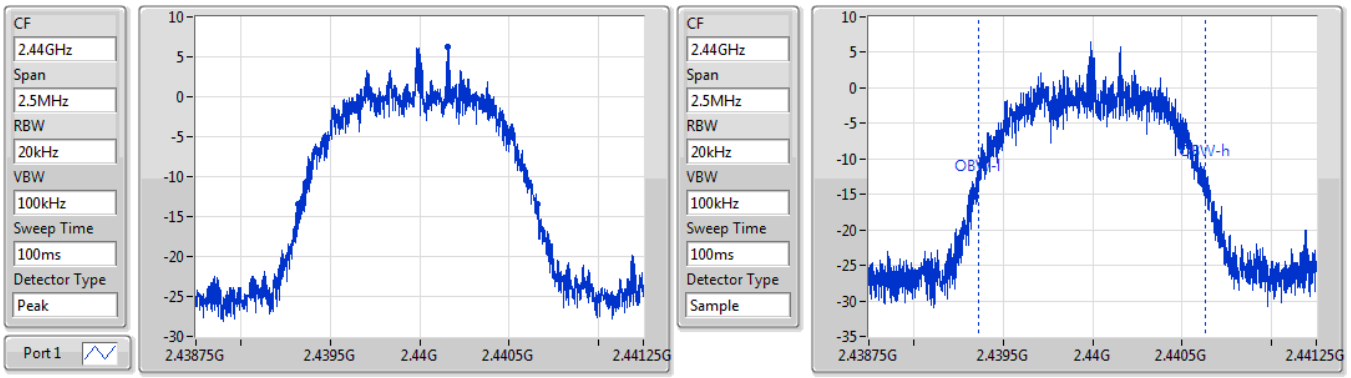


20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.326M	2.401328G	2.402654G	1.276M	2.401358G	2.402633G	Inf	1

BT-EDR(2Mbps) EBW

2440MHz

16/08/2019

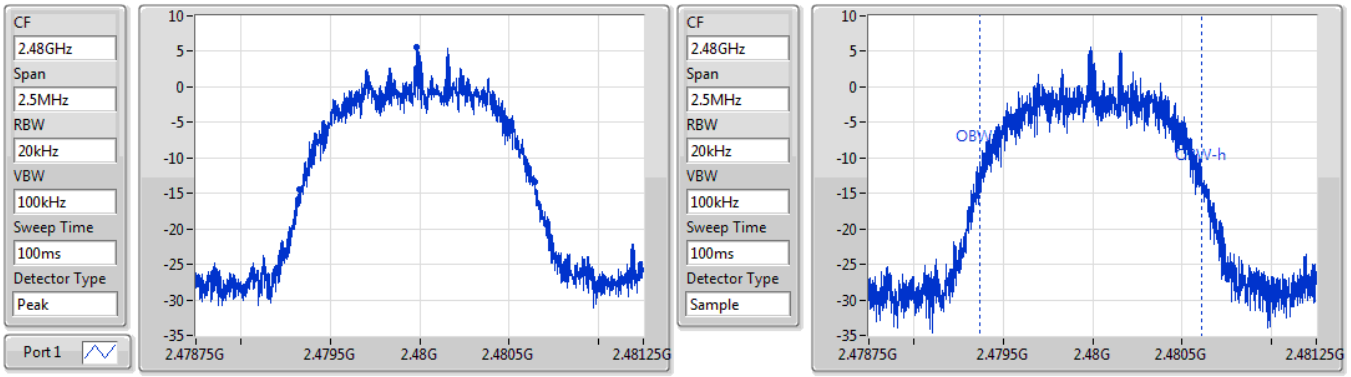


20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.336M	2.439321G	2.440658G	1.264M	2.439363G	2.440627G	Inf	1

BT-EDR(2Mbps) EBW

2480MHz

16/08/2019

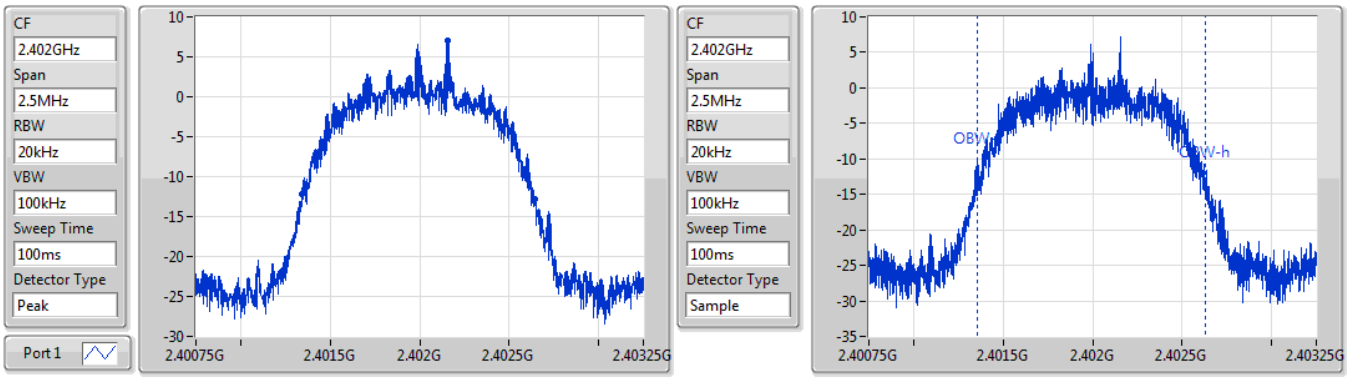


20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.319M	2.479329G	2.480648G	1.238M	2.479372G	2.48061G	Inf	1

BT-EDR(3Mbps) EBW

2402MHz

16/08/2019

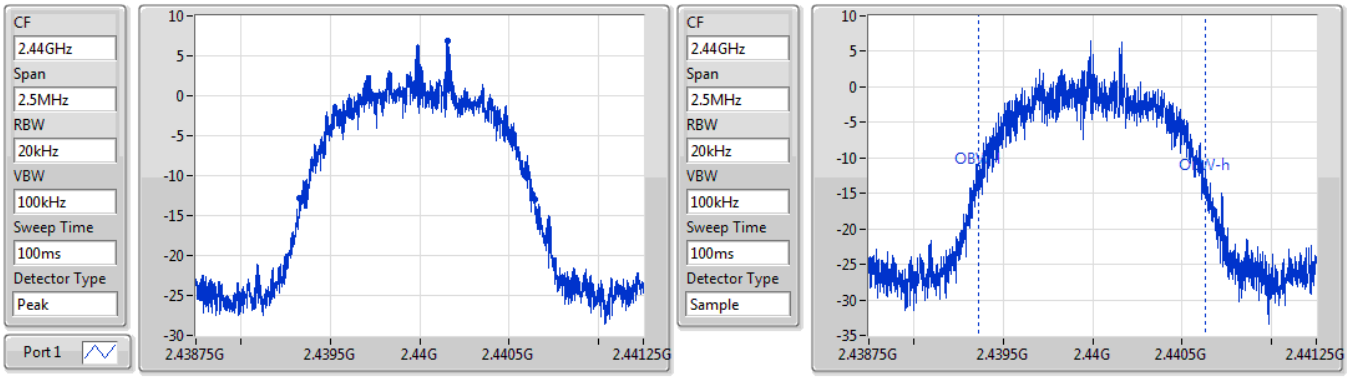


20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.306M	2.401339G	2.402645G	1.273M	2.401358G	2.402631G	Inf	1

BT-EDR(3Mbps) EBW

2440MHz

16/08/2019

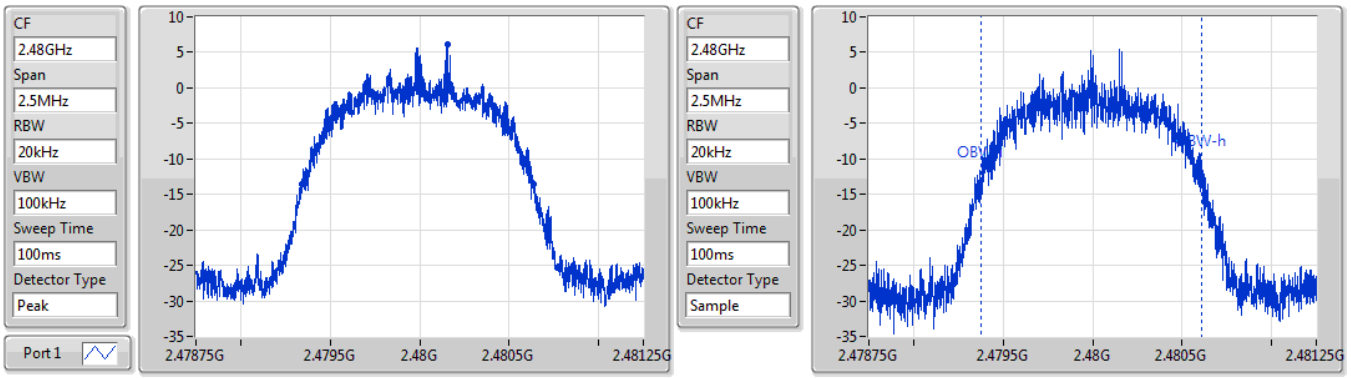


20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.318M	2.439328G	2.440645G	1.267M	2.43936G	2.440627G	Inf	1

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

2480MHz

16/08/2019



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.3M	2.47934G	2.48064G	1.234M	2.479378G	2.480612G	Inf	1

Summary

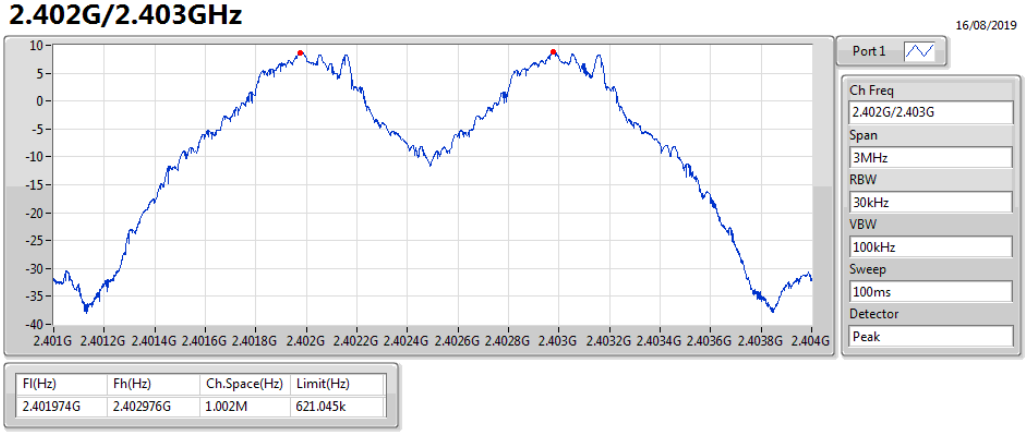
Mode	Max-Space (Hz)	Min-Space (Hz)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	1.005M	996k
BT-EDR(2Mbps)	1.002M	997.5k
BT-EDR(3Mbps)	1.002M	997.5k

Result

Mode	Result	Fl (Hz)	Fh (Hz)	Ch.Space (Hz)	Limit (Hz)
BT-BR(1Mbps)	-	-	-	-	-
2402MHz	Pass	2.401974G	2.402976G	1.002M	621.045k
2440MHz	Pass	2.439971G	2.440976G	1.005M	617.715k
2480MHz	Pass	2.478975G	2.479971G	996k	621.8775k
BT-EDR(2Mbps)	-	-	-	-	-
2402MHz	Pass	2.401986G	2.402983G	997.5k	883.116k
2440MHz	Pass	2.439987G	2.440985G	997.5k	889.776k
2480MHz	Pass	2.478987G	2.479989G	1.002M	878.454k
BT-EDR(3Mbps)	-	-	-	-	-
2402MHz	Pass	2.402158G	2.403156G	997.5k	869.796k
2440MHz	Pass	2.440157G	2.441159G	1.002M	877.788k
2480MHz	Pass	2.479158G	2.480157G	999k	865.8k

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

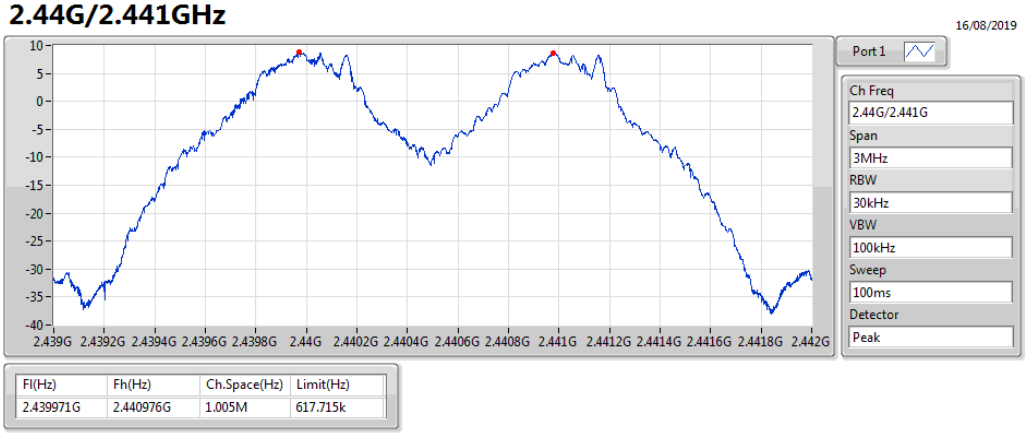
2.402G/2.403GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.401974G	2.402976G	1.002M	621.045k

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

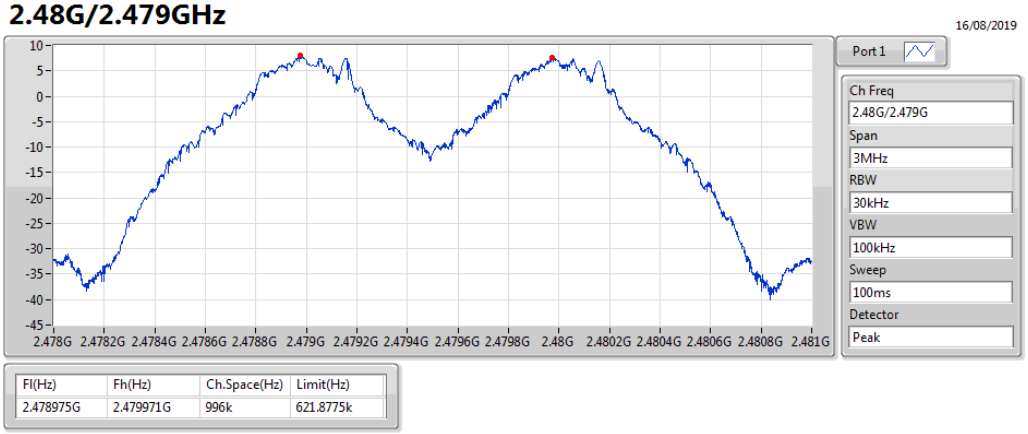
2.44G/2.441GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.439971G	2.440976G	1.005M	617.715k

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

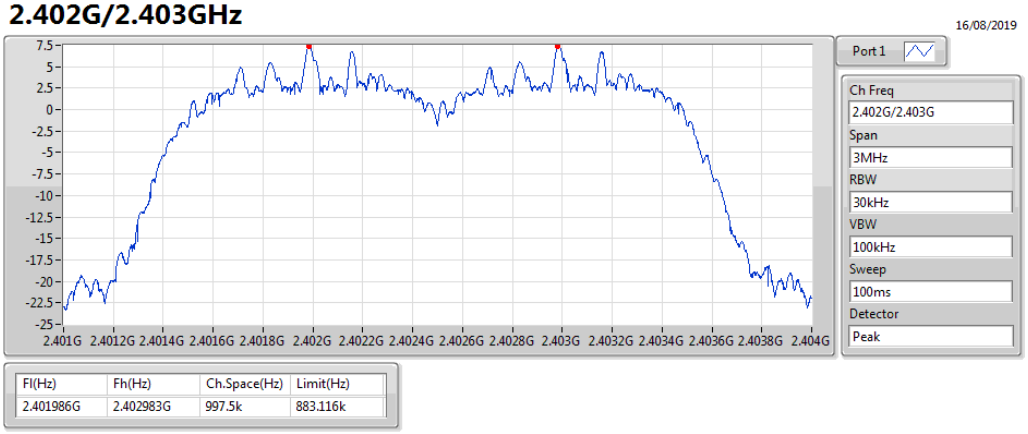
2.48G/2.479GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.478975G	2.479971G	996k	621.8775k

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

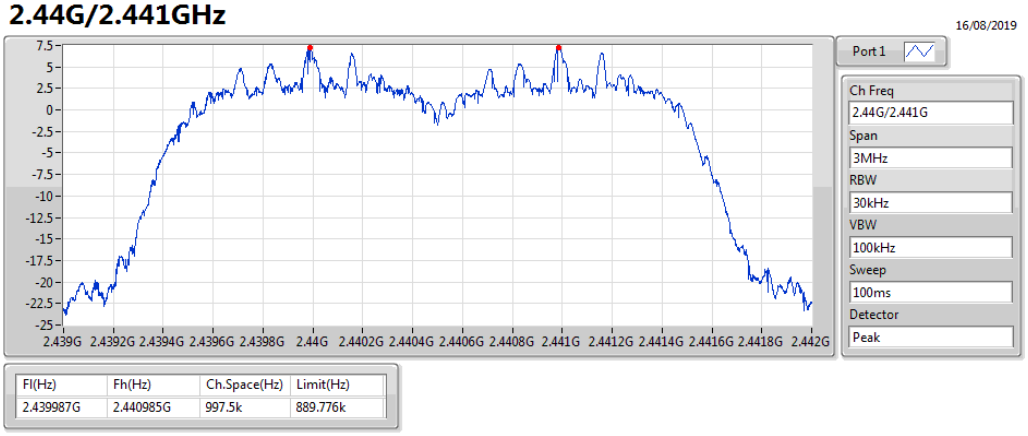
2.402G/2.403GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.401986G	2.402983G	997.5k	883.116k

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

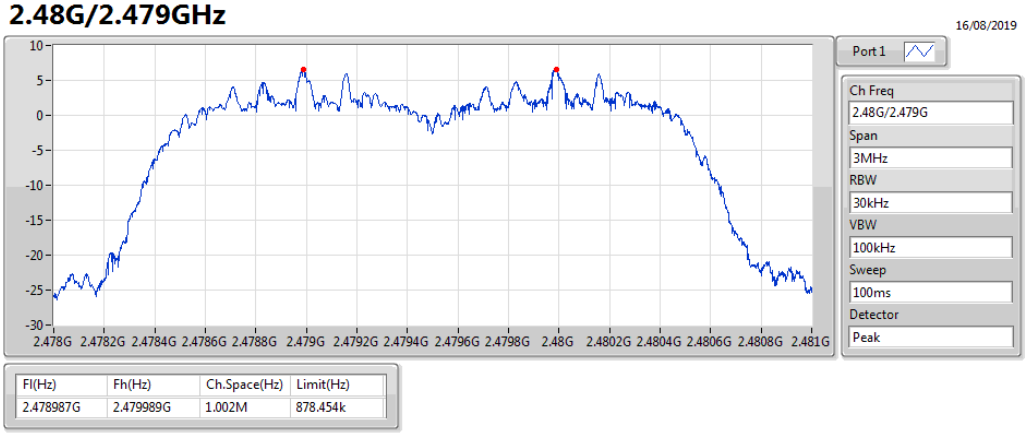
2.44G/2.441GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.439987G	2.440985G	997.5k	889.776k

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

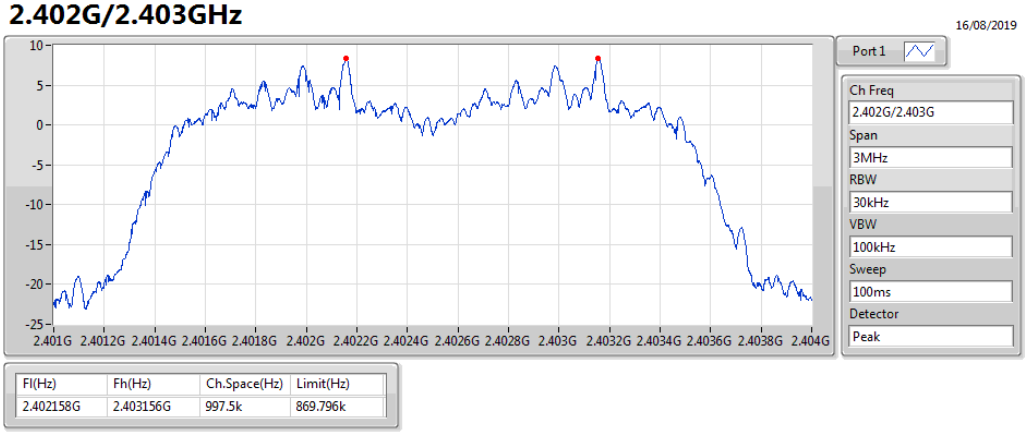
2.48G/2.479GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.478987G	2.479989G	1.002M	878.454k

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

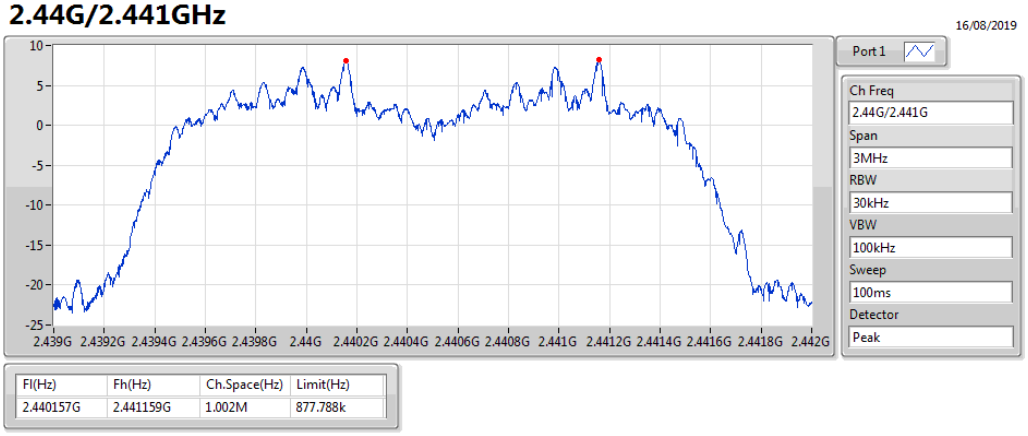
2.402G/2.403GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.402158G	2.403156G	997.5k	869.796k

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

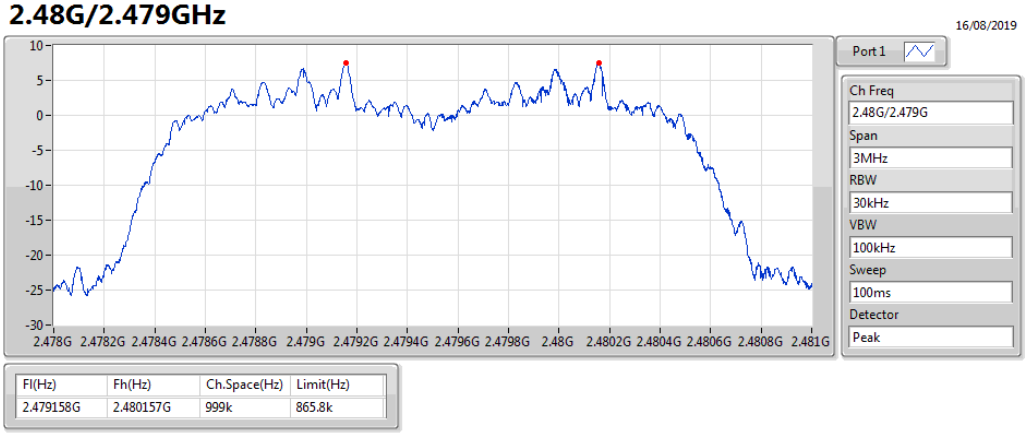
2.44G/2.441GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.440157G	2.441159G	1.002M	877.788k

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

2.48G/2.479GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.479158G	2.480157G	999k	865.8k

Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	10.71	0.01178
BT-EDR(2Mbps)	10.15	0.01035
BT-EDR(3Mbps)	10.11	0.01026

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	5.20	10.71	21.00
2440MHz	Pass	5.20	10.57	21.00
2480MHz	Pass	5.20	9.33	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	5.20	10.15	21.00
2440MHz	Pass	5.20	9.82	21.00
2480MHz	Pass	5.20	9.01	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	5.20	10.11	21.00
2440MHz	Pass	5.20	9.88	21.00
2480MHz	Pass	5.20	9.02	21.00

DG = Directional Gain; **Port X** = Port X output power

Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	10.66	0.01164
BT-EDR(2Mbps)	10.97	0.01250
BT-EDR(3Mbps)	11.09	0.01285

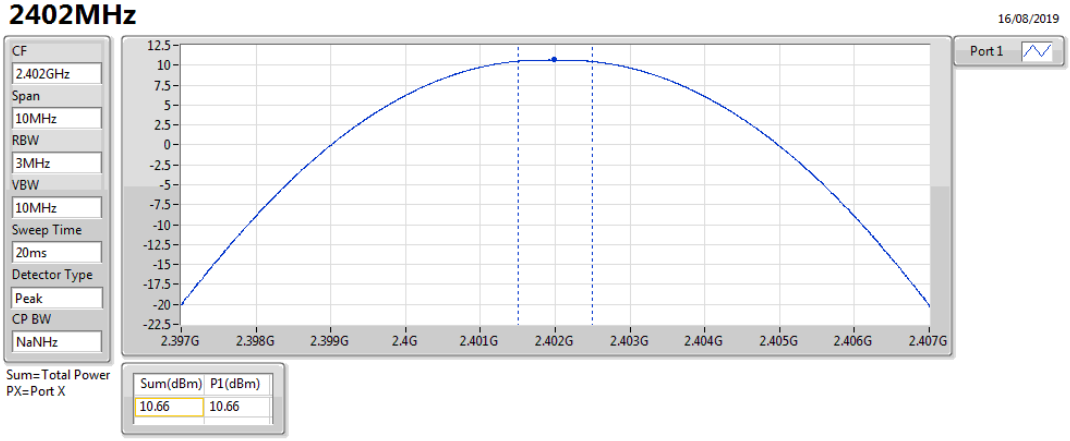
Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	5.20	10.66	21.00
2440MHz	Pass	5.20	10.47	21.00
2480MHz	Pass	5.20	9.33	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	5.20	10.97	21.00
2440MHz	Pass	5.20	10.83	21.00
2480MHz	Pass	5.20	10.30	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	5.20	11.09	21.00
2440MHz	Pass	5.20	10.97	21.00
2480MHz	Pass	5.20	10.44	21.00

DG = Directional Gain; **Port X** = Port X output power

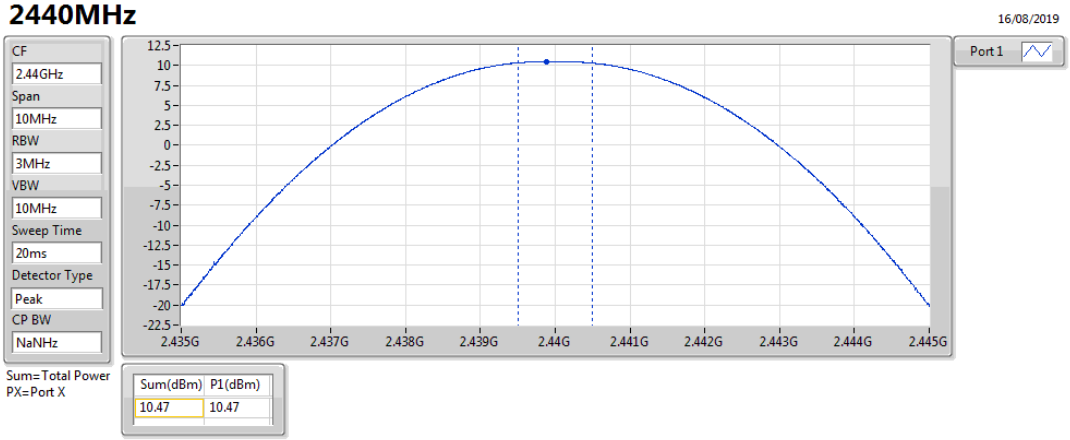
BT-BR(1Mbps) **PK Power**

2402MHz



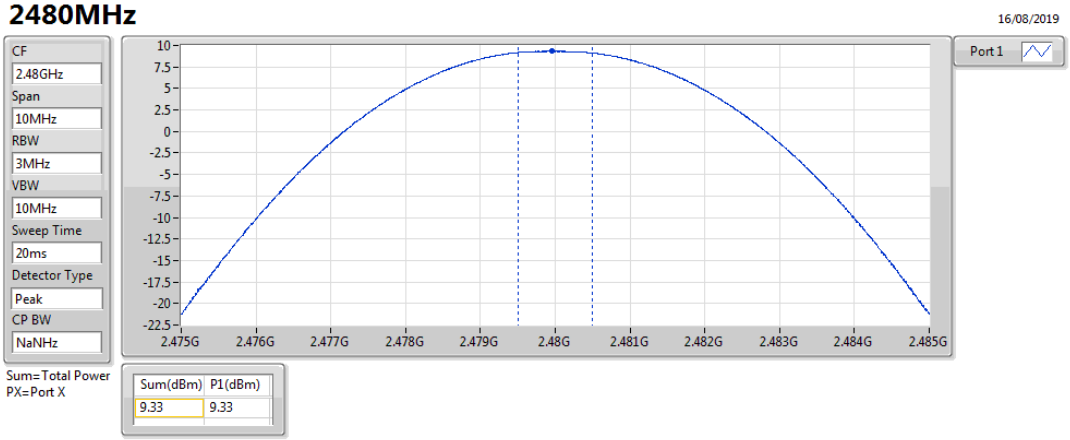
BT-BR(1Mbps) **PK Power**

2440MHz



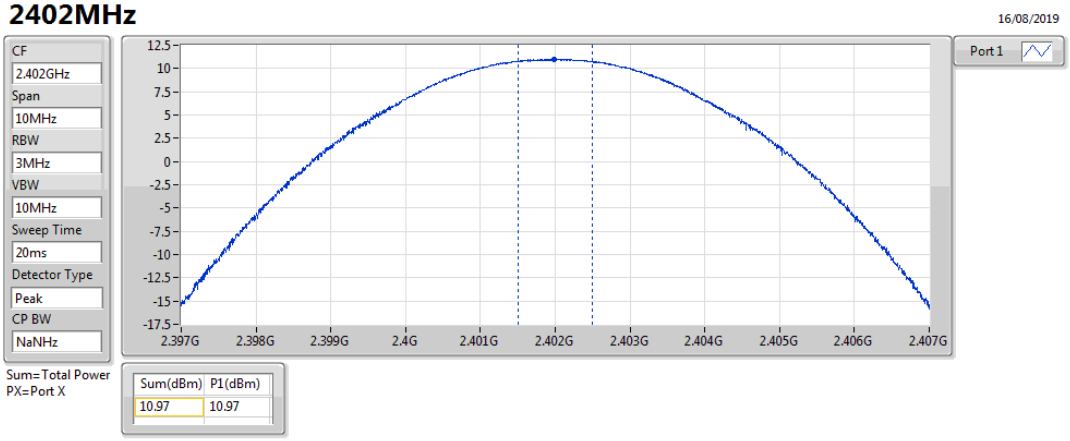
BT-BR(1Mbps) **PK Power**

2480MHz



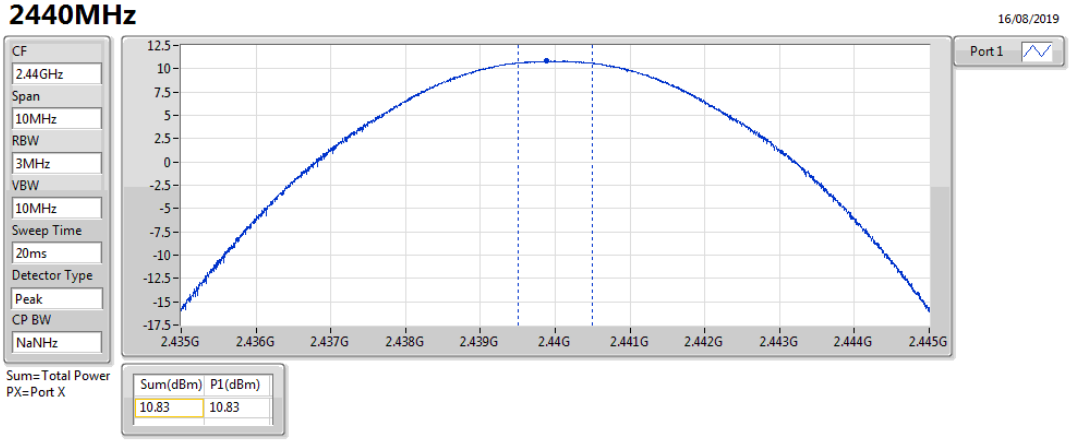
BT-EDR(2Mbps) **PK Power**

2402MHz



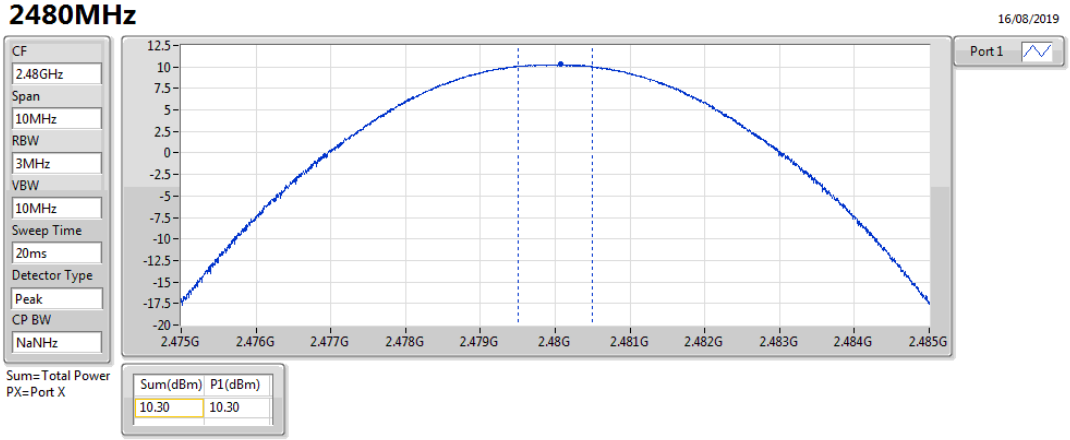
BT-EDR(2Mbps) **PK Power**

2440MHz



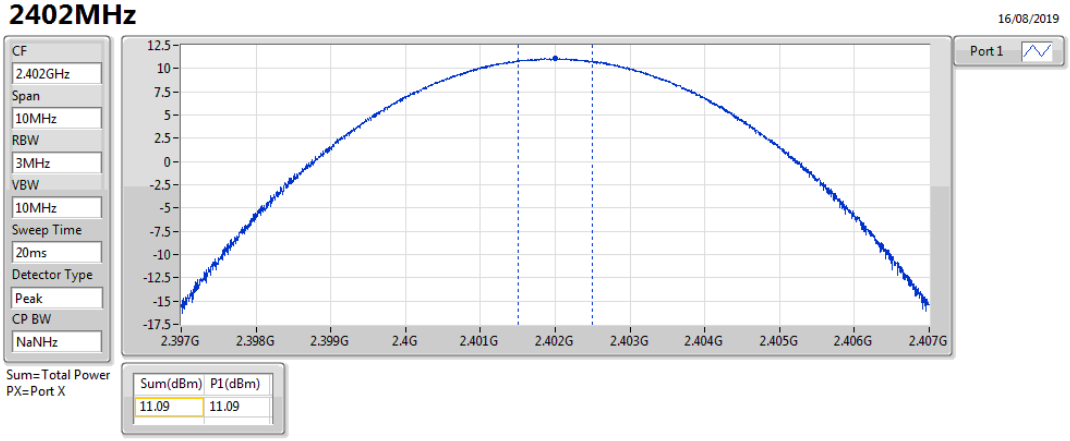
BT-EDR(2Mbps) **PK Power**

2480MHz



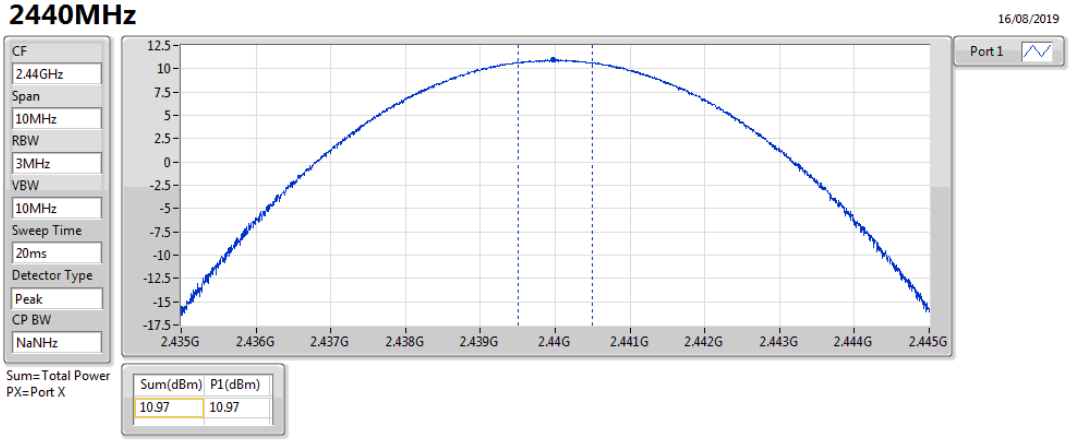
BT-EDR(3Mbps) **PK Power**

2402MHz



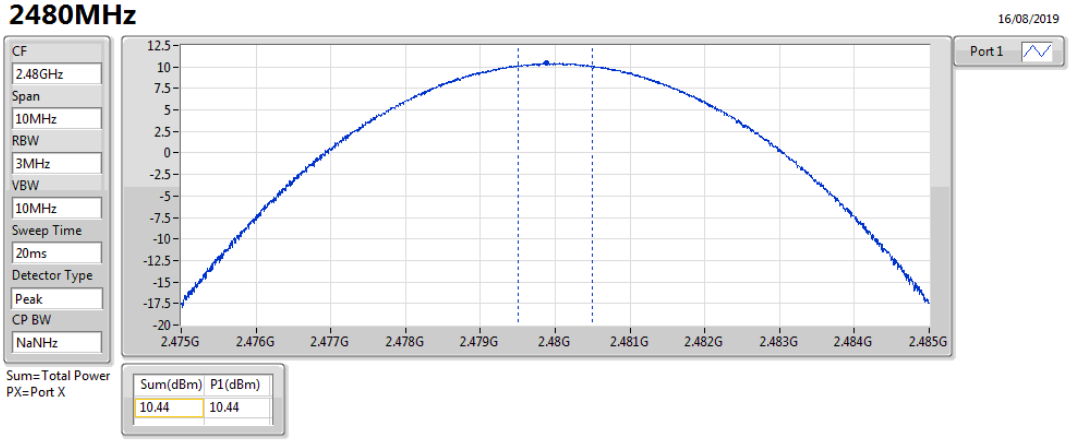
BT-EDR(3Mbps) **PK Power**

2440MHz



BT-EDR(3Mbps) **PK Power**

2480MHz



Summary

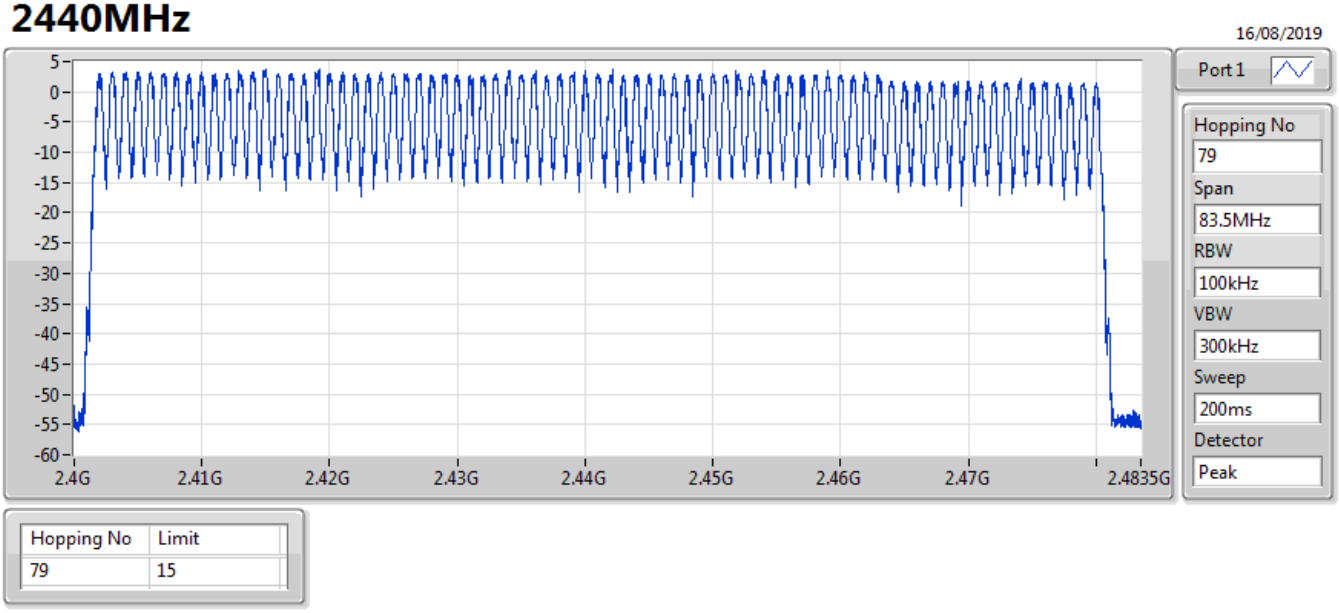
Mode	Max-Hop No
2.4-2.4835GHz	-
BT-BR(1Mbps)	79
BT-EDR(2Mbps)	79
BT-EDR(3Mbps)	79

Result

Mode	Result	Hopping No	Limit
BT-BR(1Mbps)	-	-	-
2440MHz	Pass	79	15
BT-EDR(2Mbps)	-	-	-
2440MHz	Pass	79	15
BT-EDR(3Mbps)	-	-	-
2440MHz	Pass	79	15

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

2440MHz

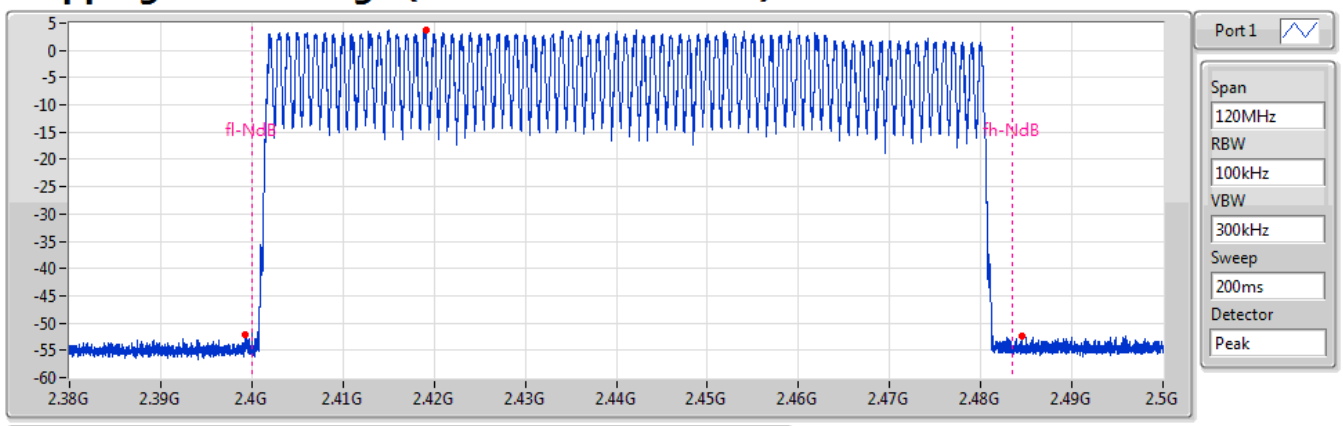


Hopping No	Limit
79	15

BT-BR(1Mbps)

2440MHz

Hopping Ch Bandedge (Non-restricted Band)

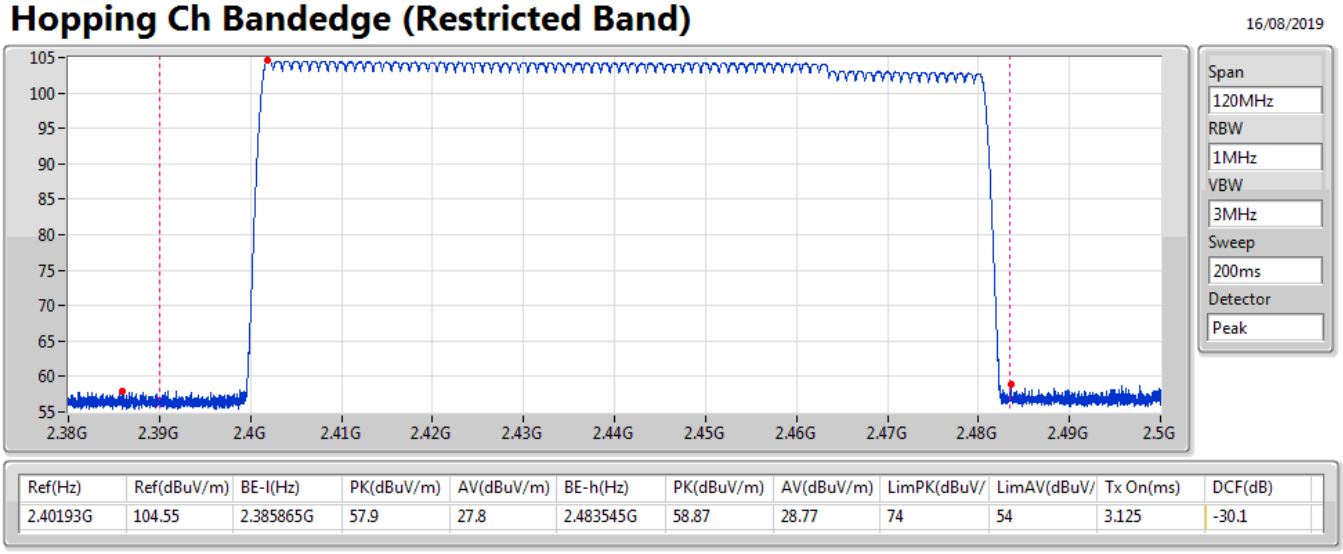


Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-16.26	2.419165G	3.74	2.399335G	-52.23	2.484565G	-52.27

BT-BR(1Mbps)

2440MHz

Hopping Ch Bandedge (Restricted Band)

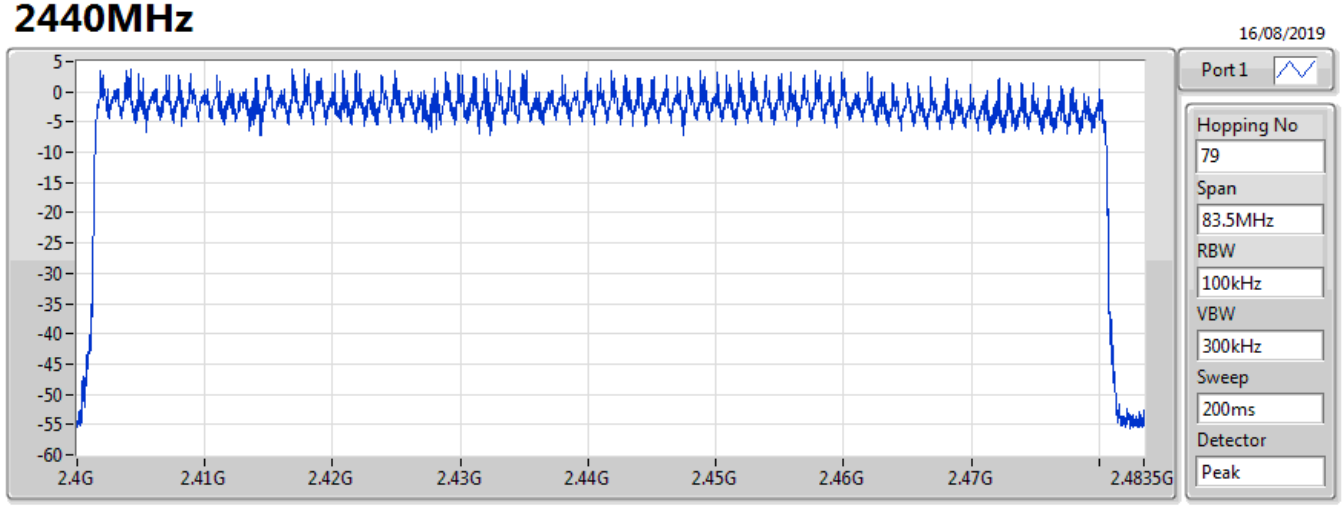


Ref(Hz)	Ref(dBuV/m)	BE-l(Hz)	PK(dBuV/m)	AV(dBuV/m)	BE-h(Hz)	PK(dBuV/m)	AV(dBuV/m)	LimPK(dBuV/	LimAV(dBuV/	Tx On(ms)	DCF(dB)
2.40193G	104.55	2.385865G	57.9	27.8	2.483545G	58.87	28.77	74	54	3.125	-30.1

BT-EDR(2Mbps)

2440MHz

Hopping Ch

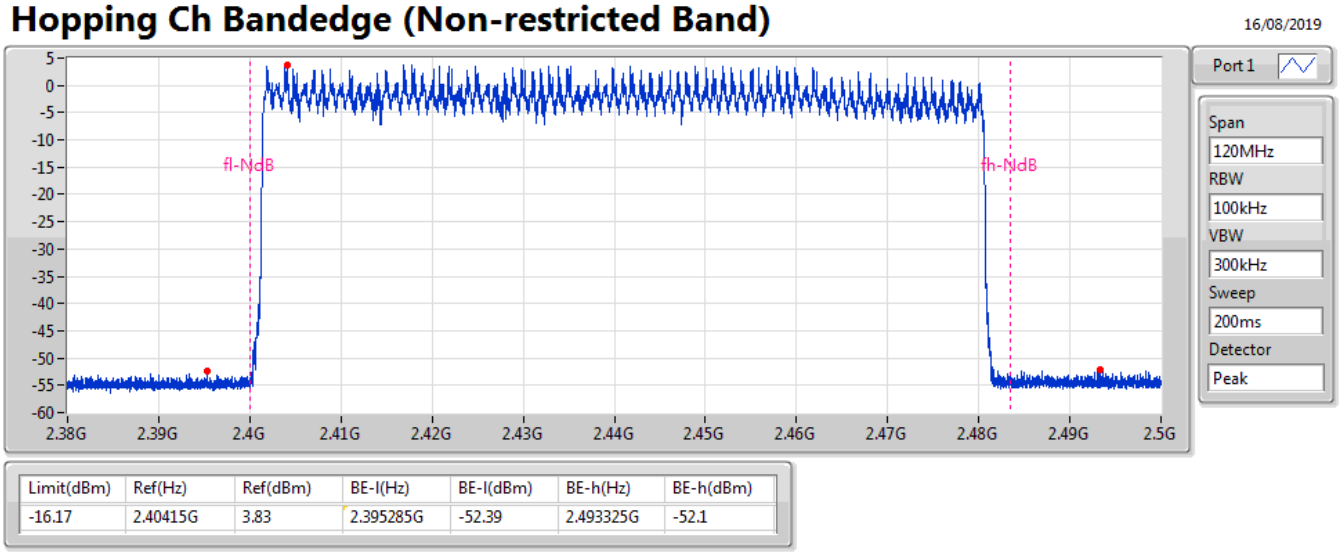


Hopping No	Limit
79	15

BT-EDR(2Mbps)

2440MHz

Hopping Ch Bandedge (Non-restricted Band)

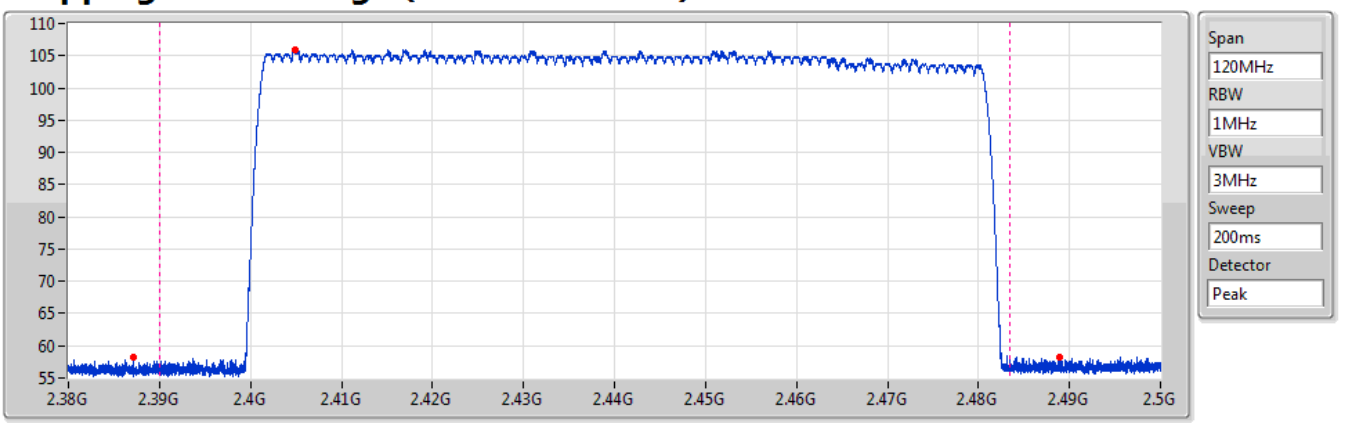


Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-16.17	2.40415G	3.83	2.395285G	-52.39	2.493325G	-52.1

BT-EDR(2Mbps)

2440MHz

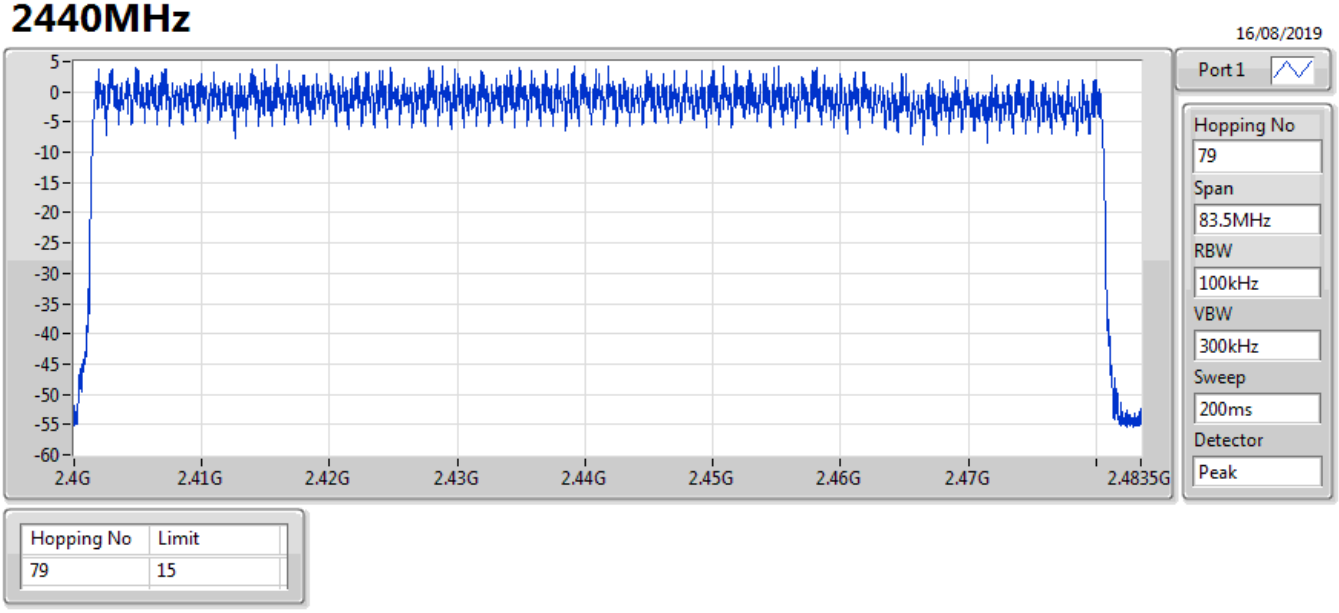
Hopping Ch Bandedge (Restricted Band)



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)
2.404855G	105.96	2.387125G	58.19	28.09	2.48896G	58.25	28.15	74	54	3.125	-30.1

BT-EDR(3Mbps) Hopping Ch

2440MHz

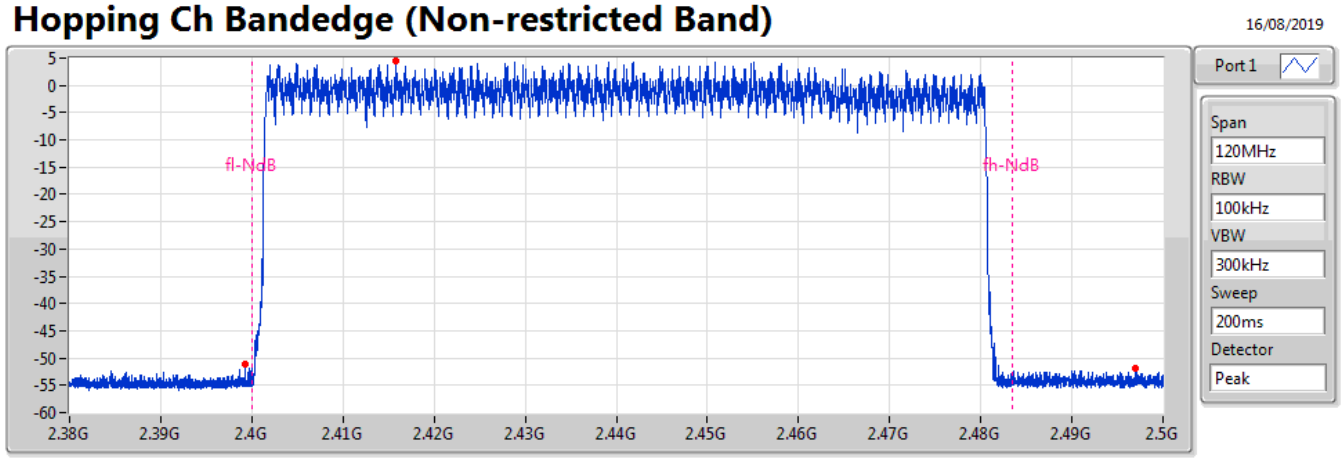


Hopping No	Limit
79	15

BT-EDR(3Mbps)

2440MHz

Hopping Ch Bandedge (Non-restricted Band)

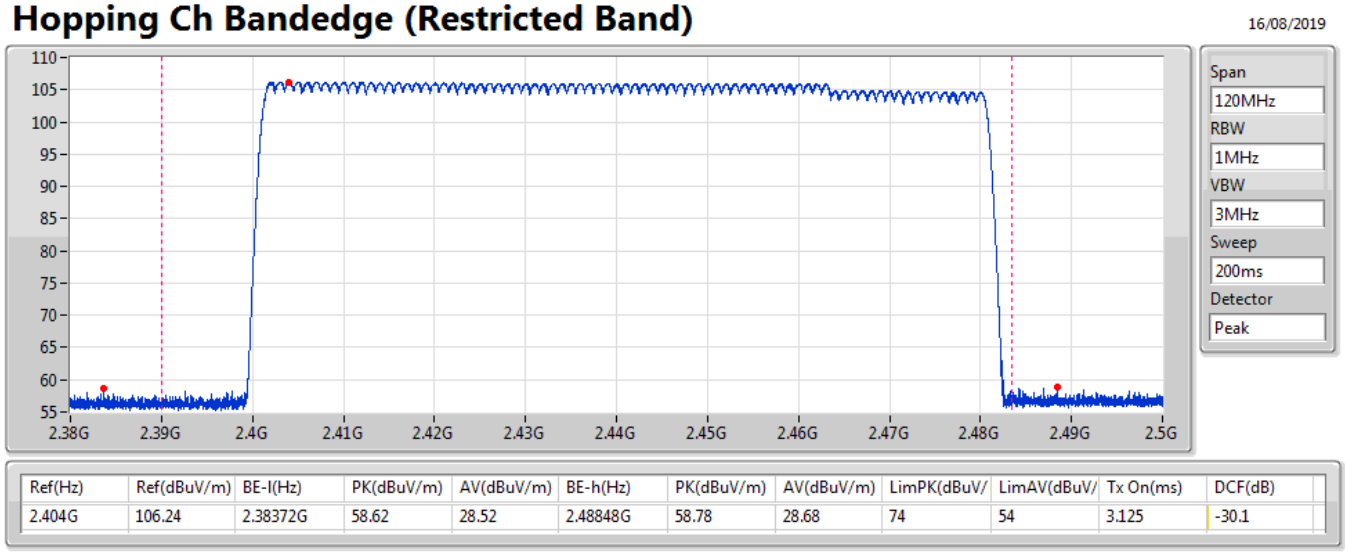


Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-15.54	2.41582G	4.46	2.399305G	-51.08	2.497G	-51.79

BT-EDR(3Mbps)

2440MHz

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)
2.404G	106.24	2.38372G	58.62	28.52	2.48848G	58.78	28.68	74	54	3.125	-30.1

Summary

Mode	Max-Dwell (s)
2.4-2.4835GHz	-
BT-BR(1Mbps)	308.1806m
BT-EDR(2Mbps)	308.7136m
BT-EDR(3Mbps)	308.9268m

Result

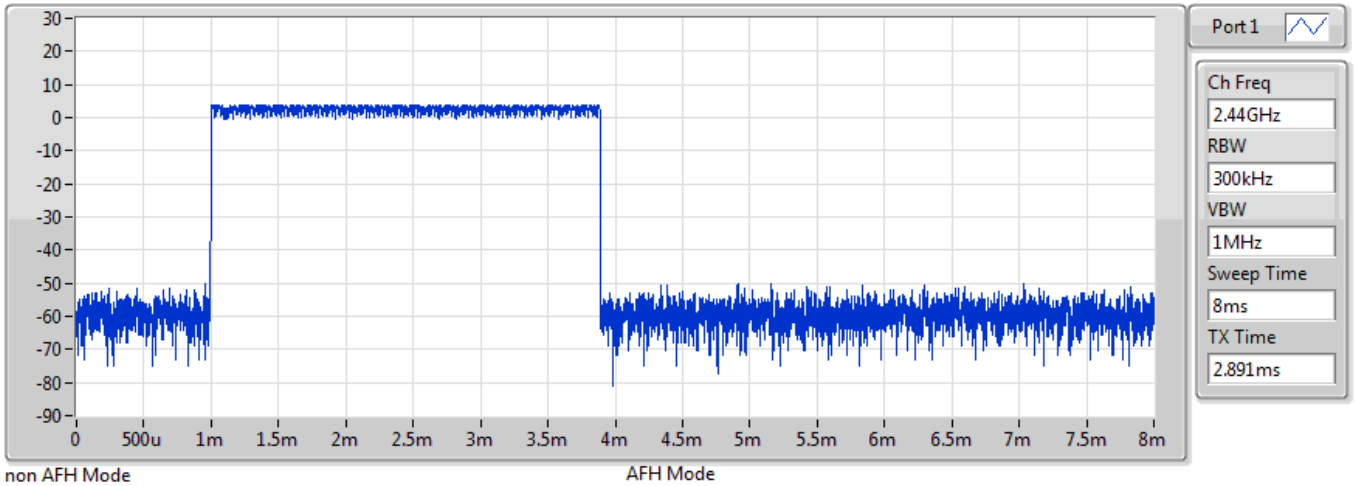
Mode	Result	Period (s)	Dwell (s)	Limit (s)	Tx On (s)
BT-BR(1Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	308.1806m	400m	2.891m
BT-EDR(2Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	308.7136m	400m	2.896m
BT-EDR(3Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	308.9268m	400m	2.898m

BT-BR(1Mbps)

Dwell

2440MHz

16/08/2019



non AFH Mode

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

AFH Mode

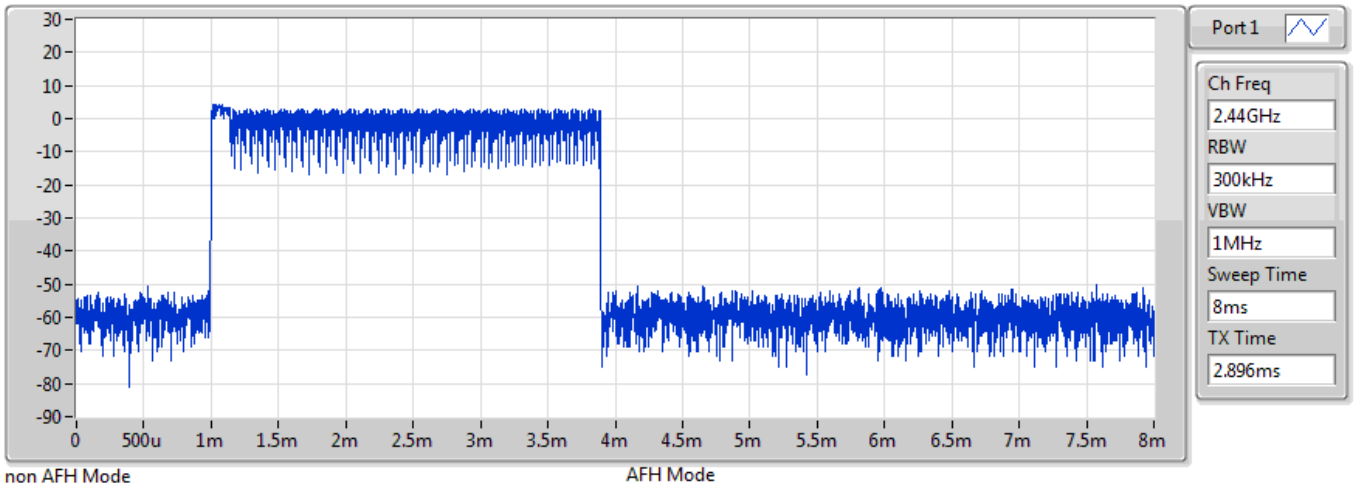
Period(s)	Dwell(s)	Limit(s)	Tx On(s)
0	154.0903m	400m	2.891m

BT-EDR(2Mbps)

Dwell

2440MHz

16/08/2019



non AFH Mode

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

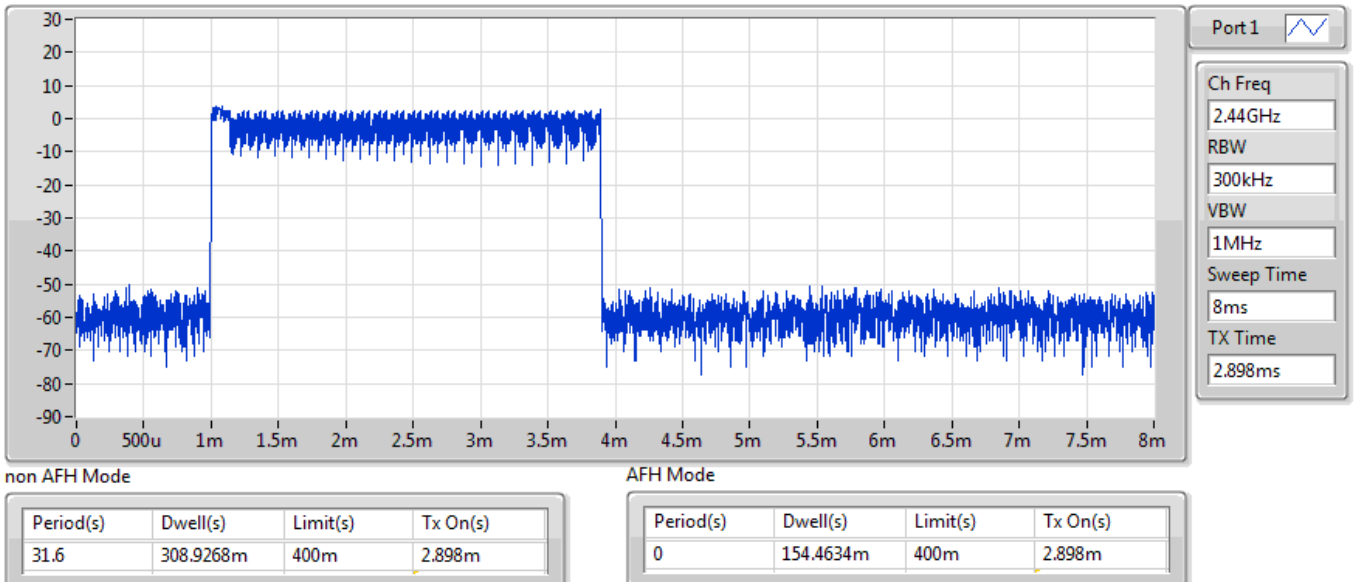
AFH Mode

Period(s)	Dwell(s)	Limit(s)	Tx On(s)
0	154.3568m	400m	2.896m

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

2440MHz

16/08/2019



non AFH Mode

Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	308.9268m	400m	2.898m

AFH Mode

Period(s)	Dwell(s)	Limit(s)	Tx On(s)
0	154.4634m	400m	2.898m

Summary

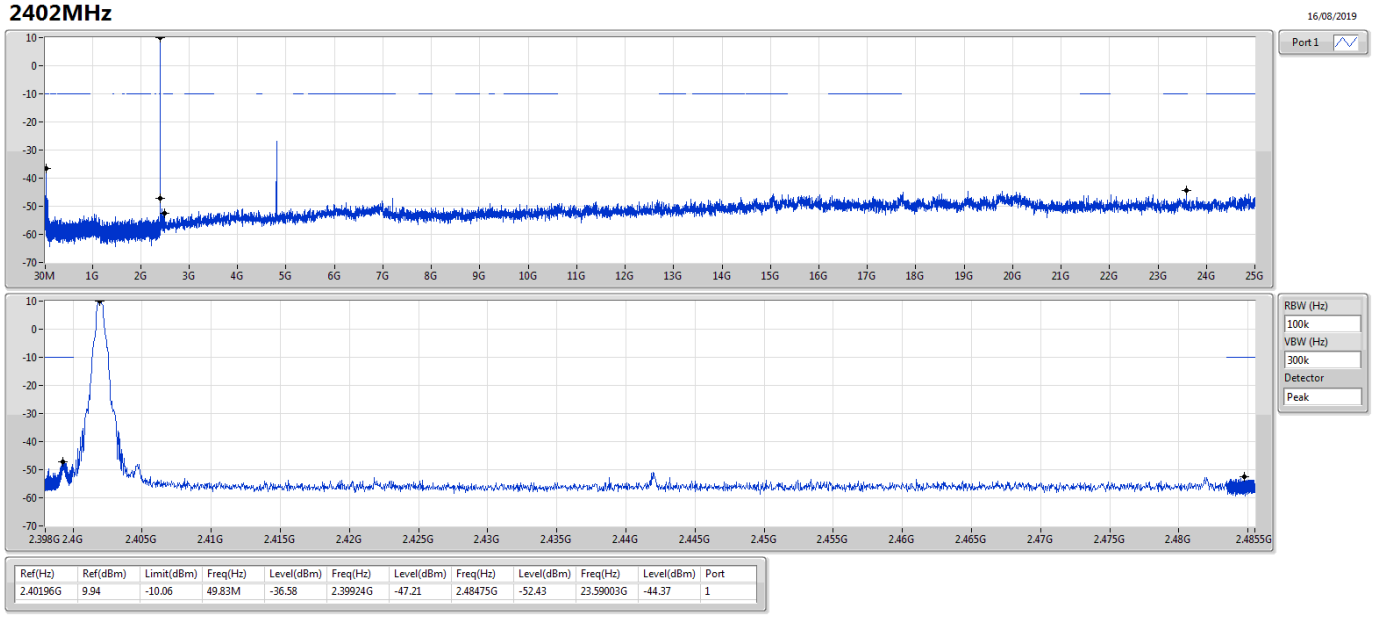
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-
BT-BR(1Mbps)	Pass	2.47999G	8.72	-11.28	49.83M	-35.74	2.39991G	-52.49	2.48354G	-51.03	17.67434G	-45.03	1
BT-EDR(2Mbps)	Pass	2.40196G	9.48	-10.52	49.83M	-35.06	2.39952G	-29.54	2.48352G	-51.96	24.83114G	-45.47	1
BT-EDR(3Mbps)	Pass	2.40192G	8.76	-11.24	49.83M	-40.28	2.39956G	-28.81	2.48353G	-52.62	24.39492G	-46.12	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	Pass	2.40196G	9.94	-10.06	49.83M	-36.58	2.39924G	-47.21	2.48475G	-52.43	23.59003G	-44.37	1
2440MHz	Pass	2.44G	9.85	-10.15	49.83M	-35.54	2.39996G	-51.87	2.48357G	-50.97	24.06283G	-44.92	1
2480MHz	Pass	2.47999G	8.72	-11.28	49.83M	-35.74	2.39991G	-52.49	2.48354G	-51.03	17.67434G	-45.03	1
BT-EDR(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.40196G	9.48	-10.52	49.83M	-35.06	2.39952G	-29.54	2.48352G	-51.96	24.83114G	-45.47	1
2440MHz	Pass	2.43983G	9.87	-10.13	49.83M	-40.09	2.39963G	-52.84	2.48544G	-51.58	15.13021G	-45.97	1
2480MHz	Pass	2.47987G	9.32	-10.68	49.83M	-41.35	2.39999G	-52.32	2.48358G	-50.22	15.25966G	-45.33	1
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.40192G	8.76	-11.24	49.83M	-40.28	2.39956G	-28.81	2.48353G	-52.62	24.39492G	-46.12	1
2440MHz	Pass	2.43979G	9.40	-10.60	49.83M	-40.09	2.39823G	-53.14	2.48499G	-52.73	24.97467G	-46.23	1
2480MHz	Pass	2.48003G	8.64	-11.36	49.83M	-40.51	2.39982G	-52.39	2.48355G	-50.91	23.15663G	-45.66	1

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

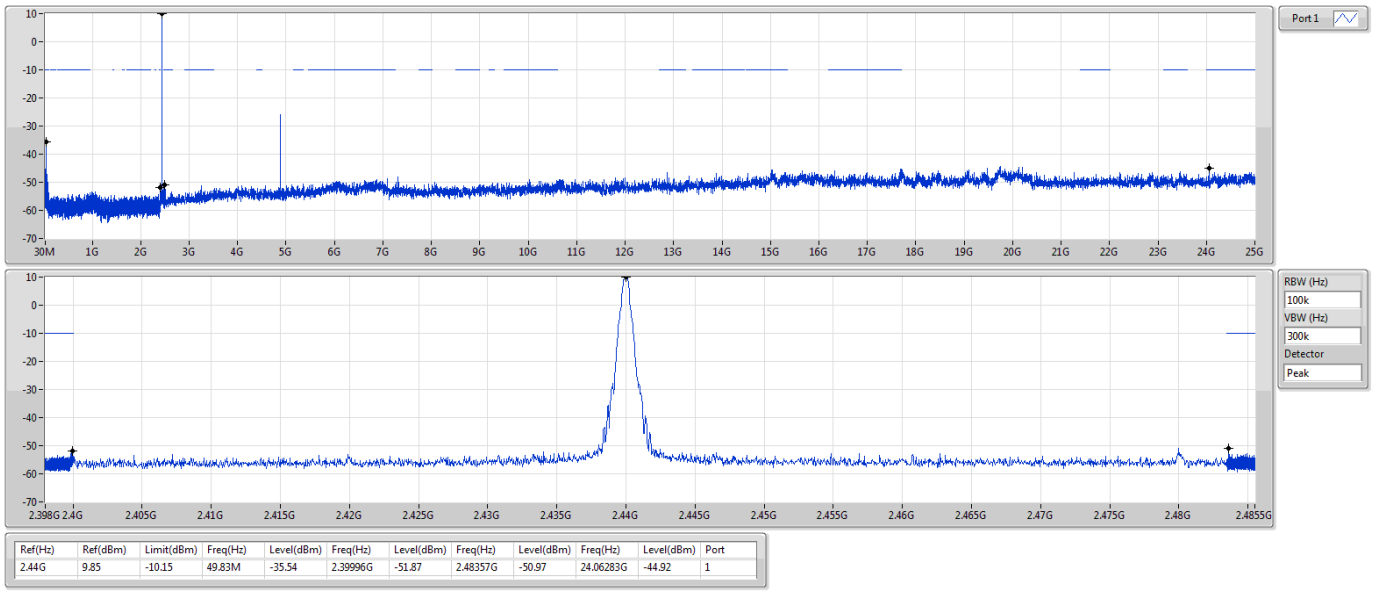
2402MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.40196G	9.94	-10.06	49.83M	-36.58	2.39924G	-47.21	2.48475G	-52.43	23.59003G	-44.37	1

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

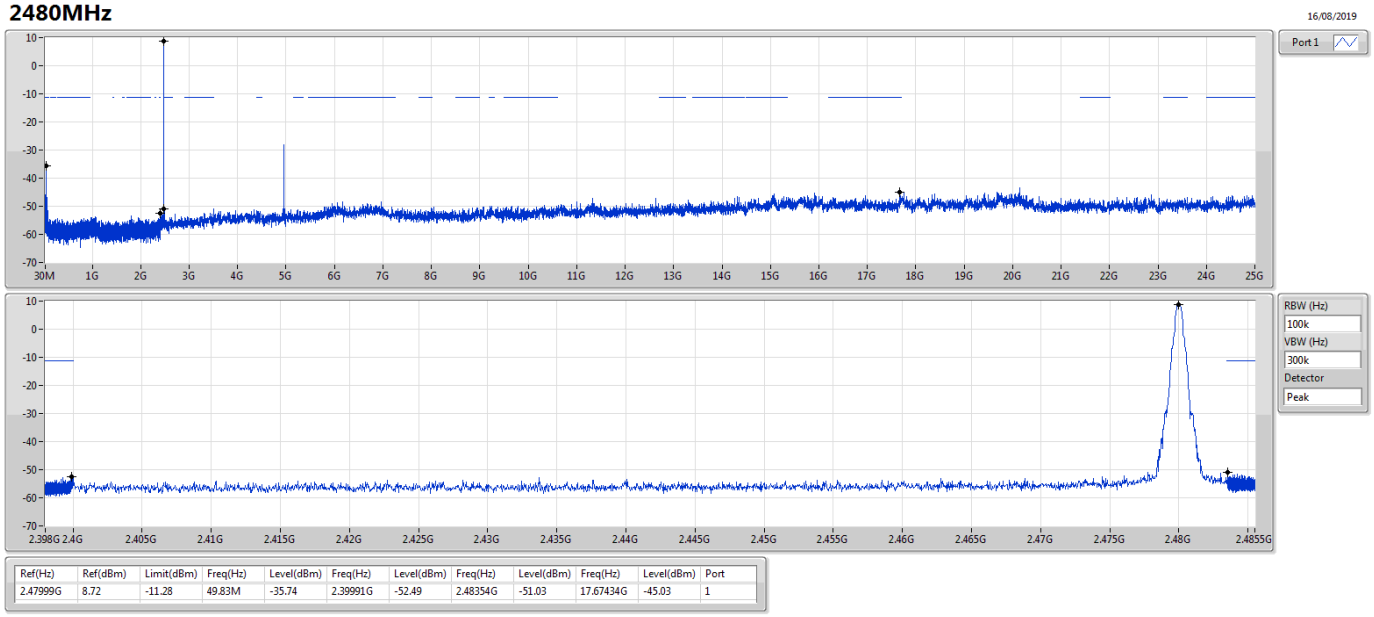
2440MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.44G	9.85	-10.15	49.83M	-35.54	2.39996G	-51.87	2.48357G	-50.97	24.06283G	-44.92	1

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

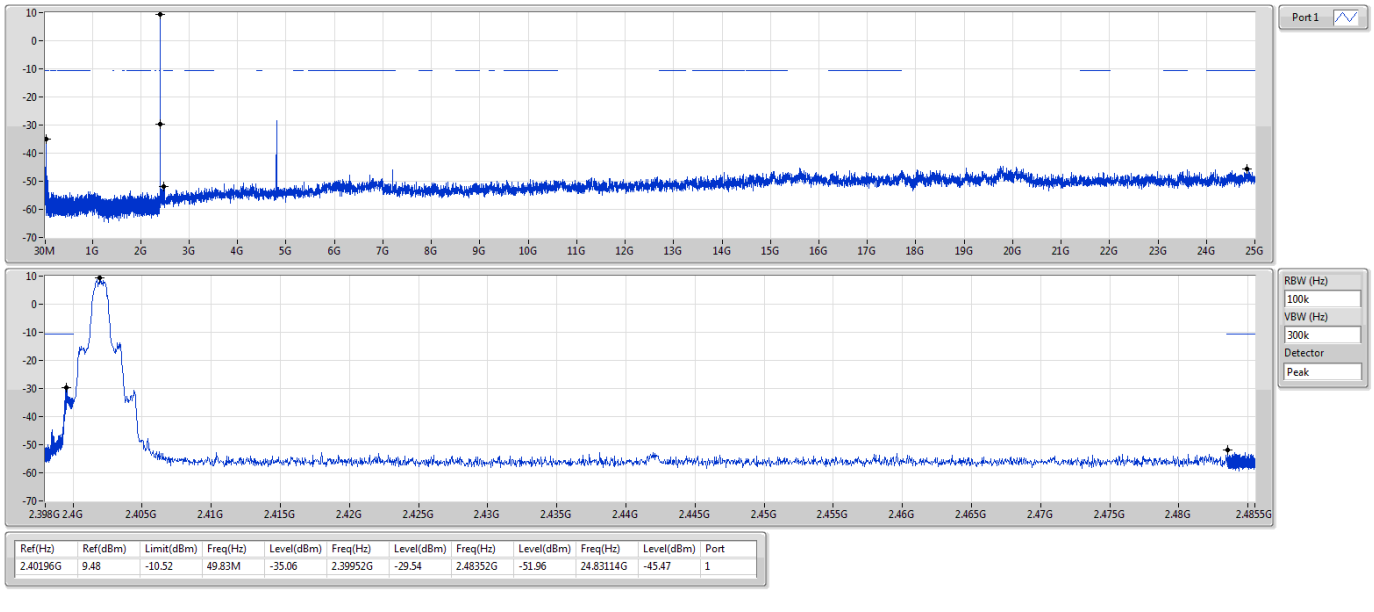
2480MHz



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	8.72	-11.28	49.83M	-35.74	2.39991G	-52.49	2.48354G	-51.03	17.67434G	-45.03	1

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

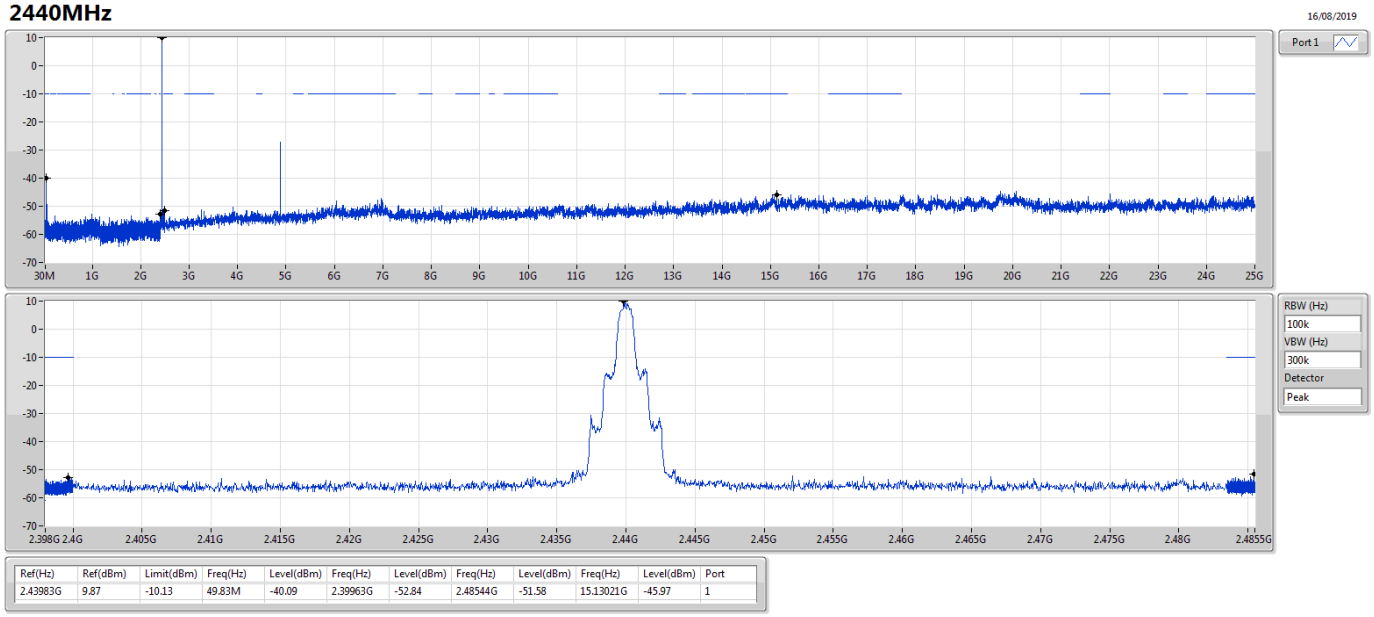
2402MHz



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	9.48	-10.52	49.83M	-35.06	2.39952G	-29.54	2.48352G	-51.96	24.83114G	-45.47	1

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

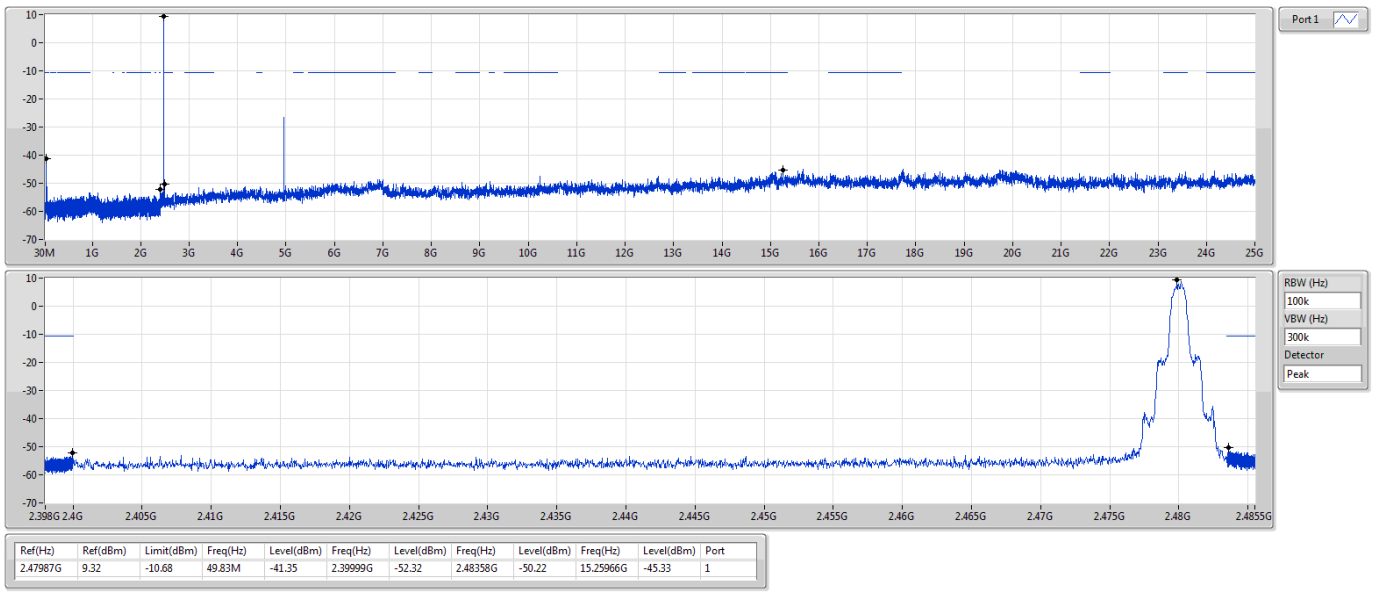
2440MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43983G	9.87	-10.13	49.83M	-40.09	2.39963G	-52.84	2.48544G	-51.58	15.13021G	-45.97	1

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

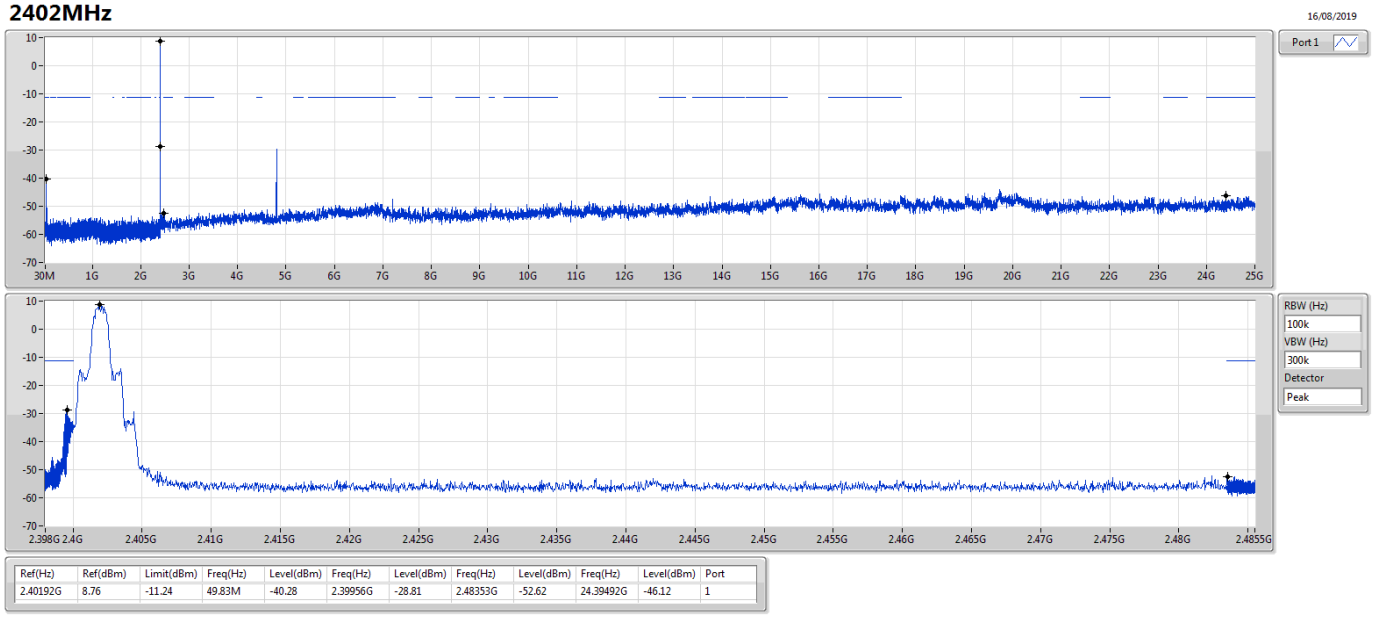
2480MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.47987G	9.32	-10.68	49.83M	-41.35	2.39999G	-52.32	2.48358G	-50.22	15.25966G	-45.33	1

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

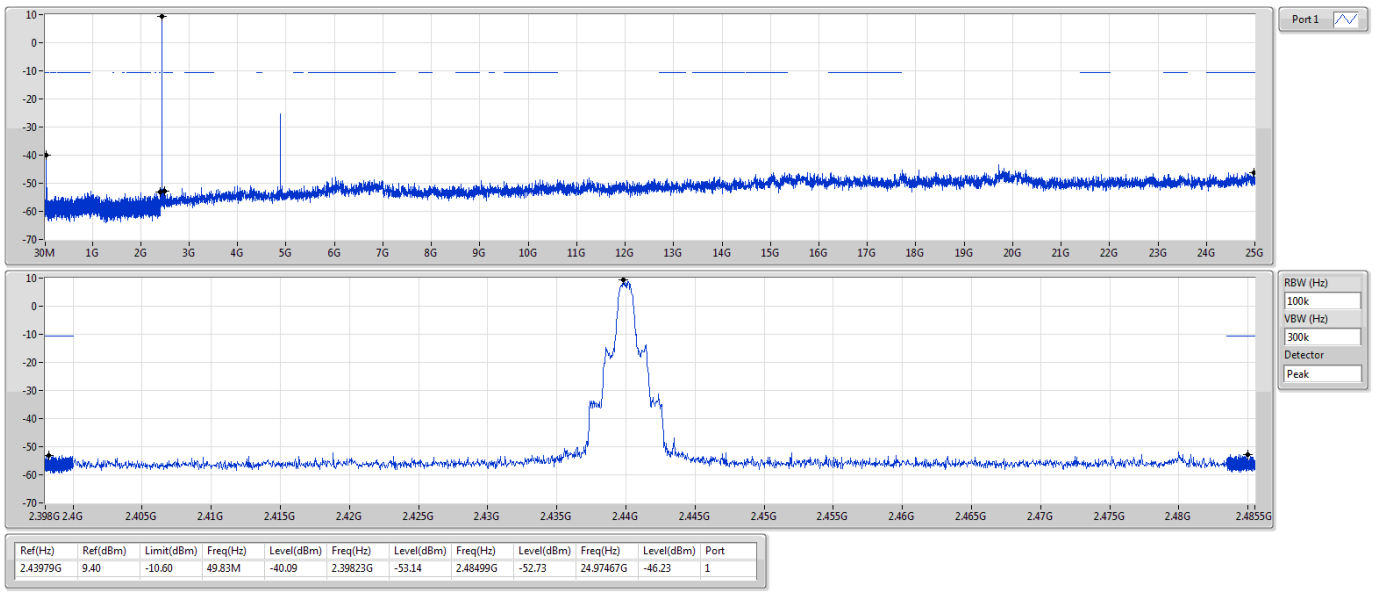
2402MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.40192G	8.76	-11.24	49.83M	-40.28	2.39956G	-28.81	2.48353G	-52.62	24.39492G	-46.12	1

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

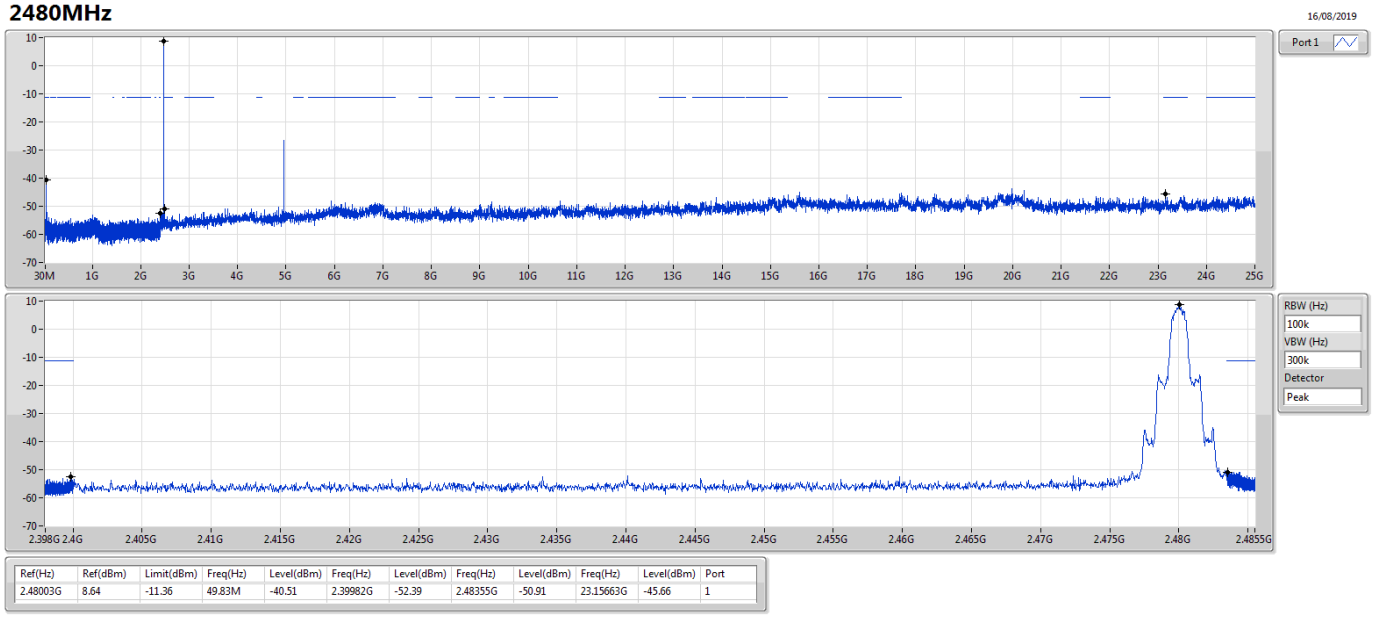
2440MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43979G	9.40	-10.60	49.83M	-40.09	2.39823G	-53.14	2.48499G	-52.73	24.97467G	-46.23	1

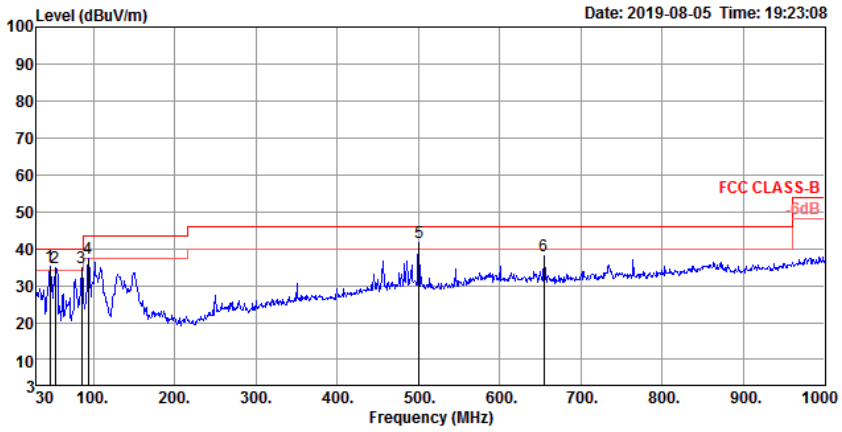
BT-EDR(3Mbps) **CSE NdB**

2480MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.48003G	8.64	-11.36	49.83M	-40.51	2.39982G	-52.39	2.48355G	-50.91	23.15663G	-45.66	1

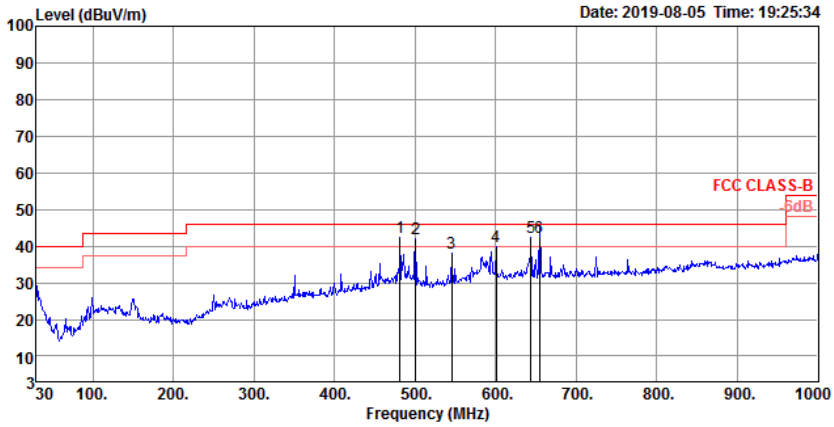
RSE below 1GHz Result			
Operating Mode	1	**Polarization**	Vertical
Operating Function	Normal Link		



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	46.49	35.28	40.00	-4.72	51.31	1.27	15.40	32.70	100	15	Peak	VERTICAL
2	53.28	34.88	40.00	-5.12	53.19	1.36	13.00	32.67	100	104	Peak	VERTICAL
3	85.29	34.80	40.00	-5.20	51.92	1.72	13.61	32.45	150	57	Peak	VERTICAL
4	94.02	37.49	43.50	-6.01	52.43	1.82	15.57	32.33	100	80	Peak	VERTICAL
5	500.45	41.73	46.00	-4.27	46.35	4.38	23.19	32.19	100	350	Peak	VERTICAL
6	654.68	38.09	46.00	-7.91	40.74	5.09	24.78	32.52	100	266	Peak	VERTICAL

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.)

RSE below 1GHz Result			
Operating Mode	1	**Polarization**	Horizontal
Operating Function	Normal Link		



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	481.05	42.54	46.00	-3.46	47.31	4.30	23.09	32.16	100	1	Peak	HORIZONTAL
2	500.45	42.09	46.00	-3.91	46.71	4.38	23.19	32.19	200	84	Peak	HORIZONTAL
3	545.07	37.90	46.00	-8.10	41.81	4.60	23.96	32.47	150	195	Peak	HORIZONTAL
4	600.36	40.03	46.00	-5.97	43.11	4.84	24.29	32.21	200	14	Peak	HORIZONTAL
5	644.01	42.40	46.00	-3.60	45.16	5.04	24.70	32.50	150	157	Peak	HORIZONTAL
6	654.68	42.43	46.00	-3.57	45.08	5.09	24.78	32.52	150	157	QP	HORIZONTAL

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.)

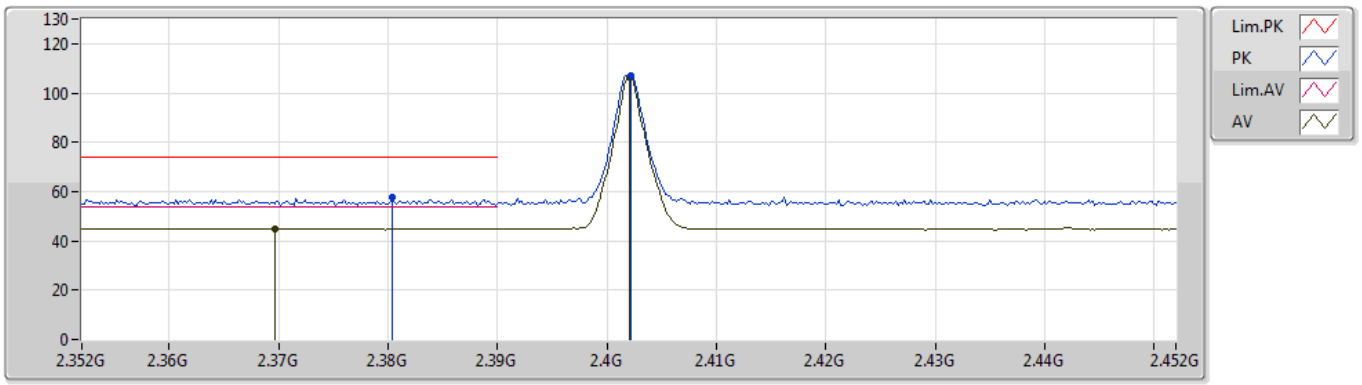
Summary

Mode	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-EDR(3Mbps)	Pass	AV	2.4835G	53.93	54.00	-0.07	31.39	3	Vertical	45	1.32	-

BT-BR(1Mbps)

16/08/2019

2402MHz_TX



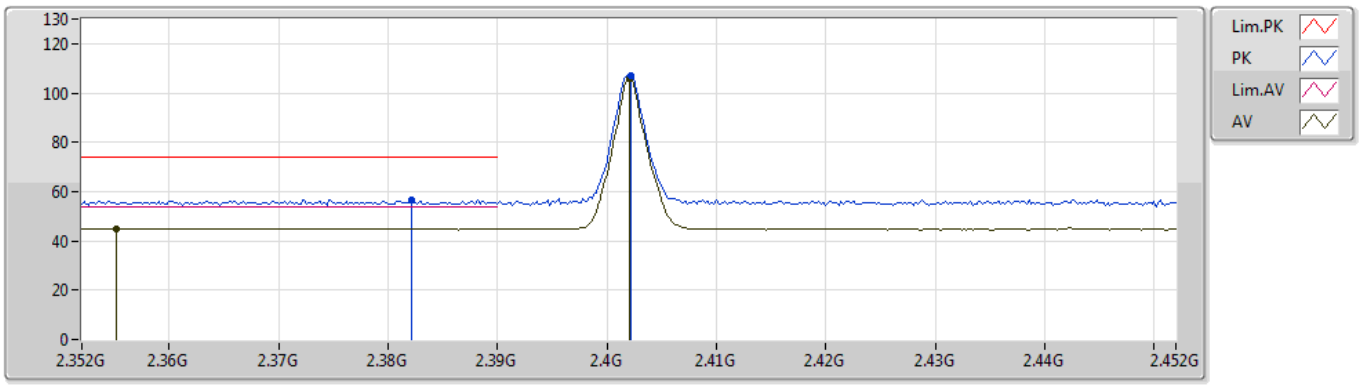
EUT Y_1TX
Setting 0x23
02-G-3
FSP(100056)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)
PK	2.3804G	57.59	74.00	-16.41	32.65	3	Vertical	61	1.29	-	24.94
AV	2.3696G	45.00	54.00	-9.00	32.69	3	Vertical	61	1.29	-	12.31
PK	2.4022G	107.30	Inf	-Inf	32.58	3	Vertical	61	1.29	-	74.72
AV	2.402G	106.36	Inf	-Inf	32.58	3	Vertical	61	1.29	-	73.78

BT-BR(1Mbps)

2402MHz_TX

16/08/2019



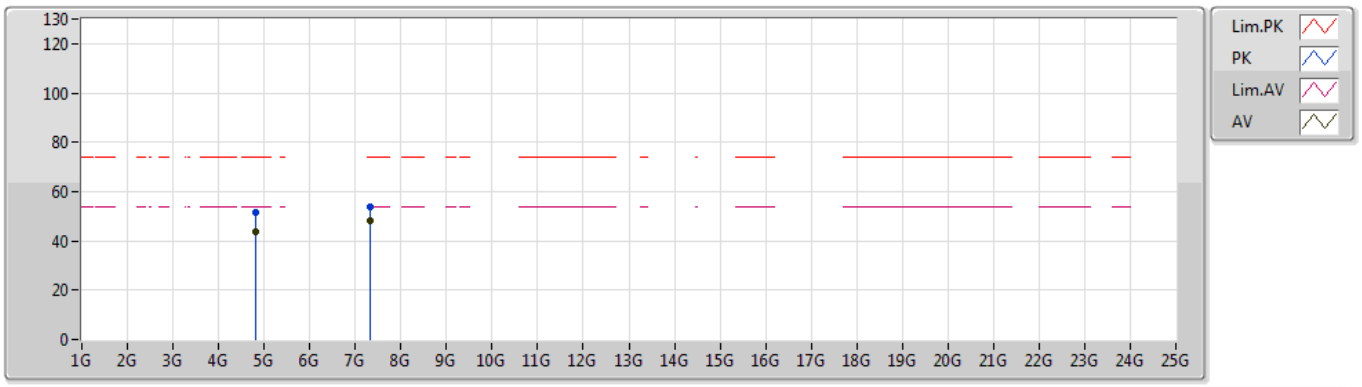
EUT Y_1TX
Setting 0x23
02-G-3
FSP(100056)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)
PK	2.3822G	56.69	74.00	-17.31	32.65	3	Horizontal	102	2.90	-	24.04
AV	2.3552G	44.97	54.00	-9.03	32.74	3	Horizontal	102	2.90	-	12.23
PK	2.4022G	106.82	Inf	-Inf	32.58	3	Horizontal	102	2.90	-	74.24
AV	2.402G	105.95	Inf	-Inf	32.58	3	Horizontal	102	2.90	-	73.37

BT-BR(1Mbps)

16/08/2019

2402MHz_TX



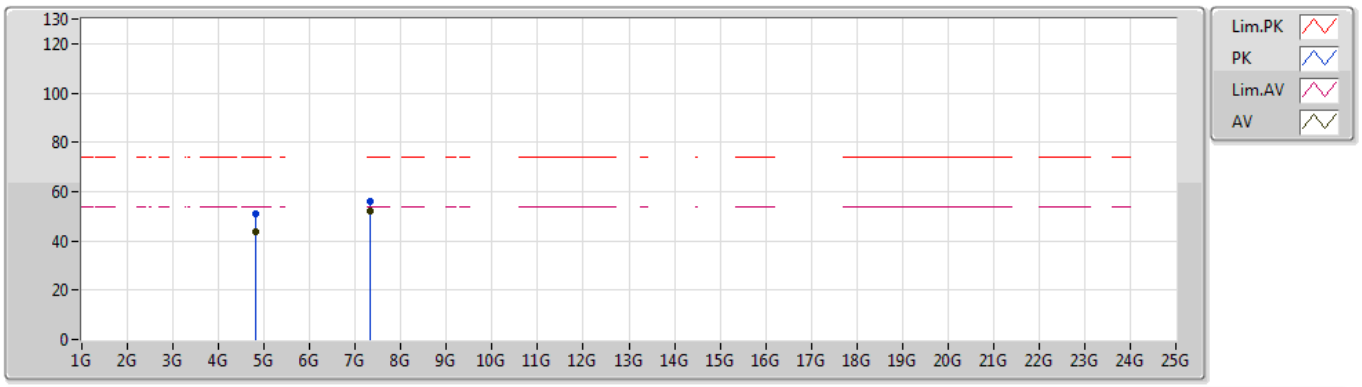
EUT Y_1TX
Setting 0x23
02-G-3
FSP(100056)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)
PK	4.80394G	51.58	74.00	-22.42	7.12	3	Vertical	127	1.12	-	44.46
AV	4.80393G	43.67	54.00	-10.33	7.12	3	Vertical	127	1.12	-	36.55
PK	7.33342G	53.64	74.00	-20.36	10.61	3	Vertical	133	2.11	-	43.03
AV	7.33335G	47.95	54.00	-6.05	10.61	3	Vertical	133	2.11	-	37.34

BT-BR(1Mbps)

16/08/2019

2402MHz_TX



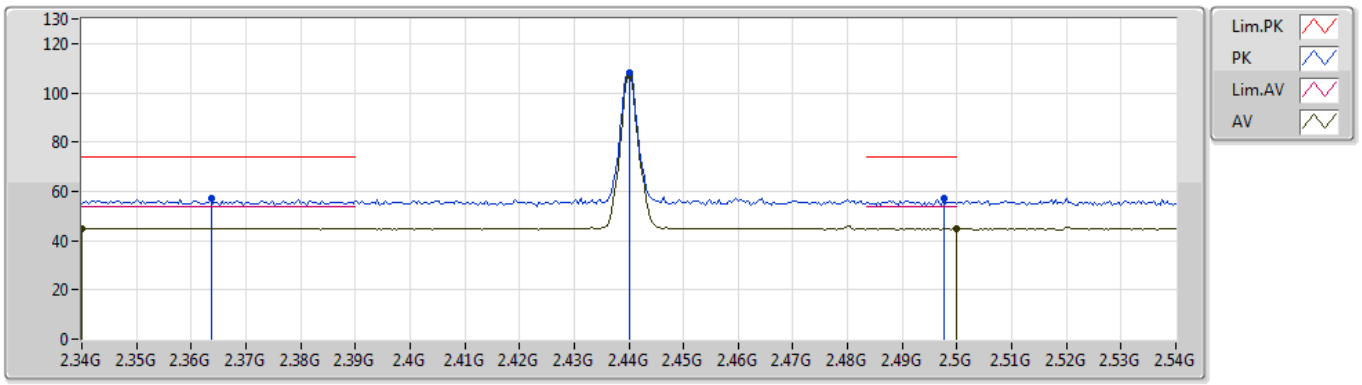
EUT Y_1TX
Setting 0x23
02-G-3
FSP(100056)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)
PK	4.80423G	51.27	74.00	-22.73	7.12	3	Horizontal	64	1.01	-	44.15
AV	4.80399G	43.78	54.00	-10.22	7.12	3	Horizontal	64	1.01	-	36.66
PK	7.33331G	56.09	74.00	-17.91	10.61	3	Horizontal	156	2.83	-	45.48
AV	7.33328G	51.97	54.00	-2.03	10.61	3	Horizontal	156	2.83	-	41.36

BT-BR(1Mbps)

16/08/2019

2440MHz_TX



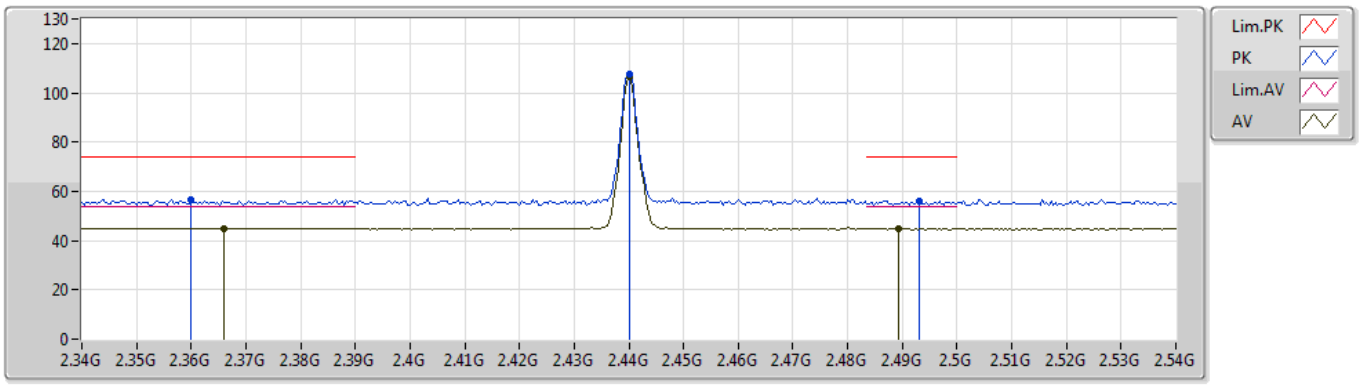
EUT Y_1TX
Setting 0x23
02-G-3
FSP(100056)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)
PK	2.3636G	56.99	74.00	-17.01	32.71	3	Vertical	63	1.00	-	24.28
AV	2.34G	45.01	54.00	-8.99	32.80	3	Vertical	63	1.00	-	12.21
PK	2.44G	108.09	Inf	-Inf	32.53	3	Vertical	63	1.00	-	75.56
AV	2.44G	107.16	Inf	-Inf	32.53	3	Vertical	63	1.00	-	74.63
PK	2.4976G	57.23	74.00	-16.77	32.46	3	Vertical	63	1.00	-	24.77
AV	2.5G	44.79	54.00	-9.21	32.46	3	Vertical	63	1.00	-	12.33

BT-BR(1Mbps)

16/08/2019

2440MHz_TX



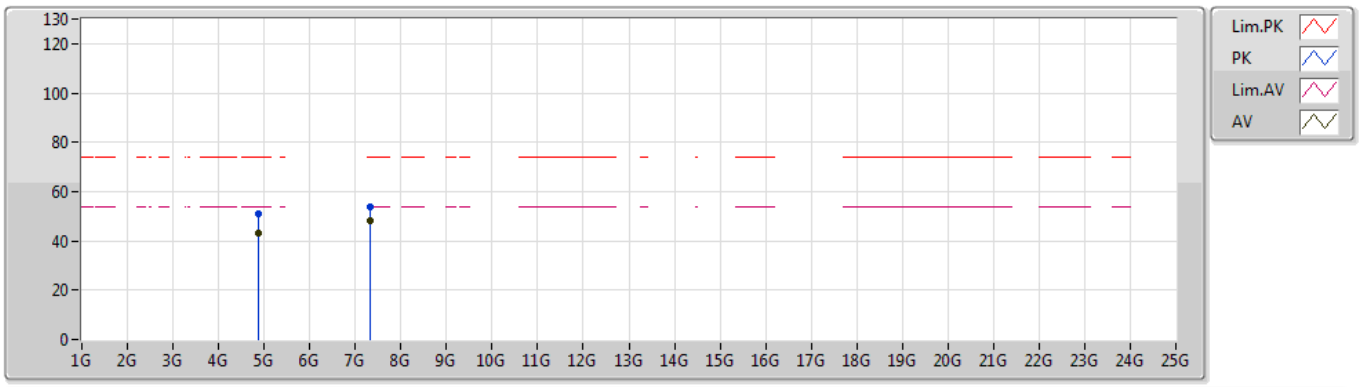
EUT Y_1TX
Setting 0x23
02-G-3
FSP(100056)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)
PK	2.36G	56.86	74.00	-17.14	32.73	3	Horizontal	97	2.86	-	24.13
AV	2.366G	45.04	54.00	-8.96	32.71	3	Horizontal	97	2.86	-	12.33
PK	2.44G	107.50	Inf	-Inf	32.53	3	Horizontal	97	2.86	-	74.97
AV	2.44G	106.62	Inf	-Inf	32.53	3	Horizontal	97	2.86	-	74.09
PK	2.4932G	56.27	74.00	-17.73	32.46	3	Horizontal	97	2.86	-	23.81
AV	2.4892G	44.71	54.00	-9.29	32.47	3	Horizontal	97	2.86	-	12.24

BT-BR(1Mbps)

2440MHz_TX

16/08/2019



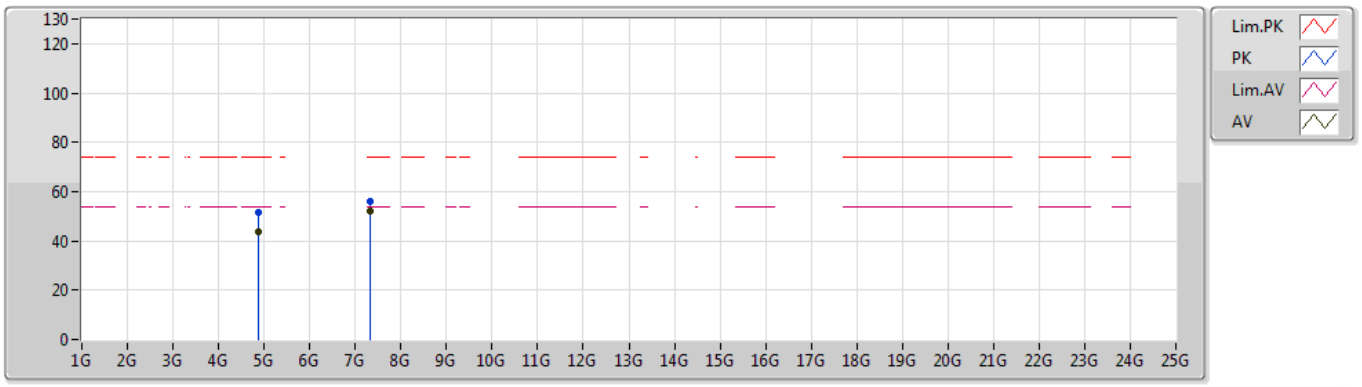
EUT Y_1TX
Setting 0x23
02-G-3
FSP(100056)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)
PK	4.87982G	50.95	74.00	-23.05	7.30	3	Vertical	118	2.24	-	43.65
AV	4.87999G	43.22	54.00	-10.78	7.30	3	Vertical	118	2.24	-	35.92
PK	7.33343G	53.68	74.00	-20.32	10.61	3	Vertical	103	2.18	-	43.07
AV	7.33328G	47.92	54.00	-6.08	10.61	3	Vertical	103	2.18	-	37.31

BT-BR(1Mbps)

2440MHz_TX

16/08/2019



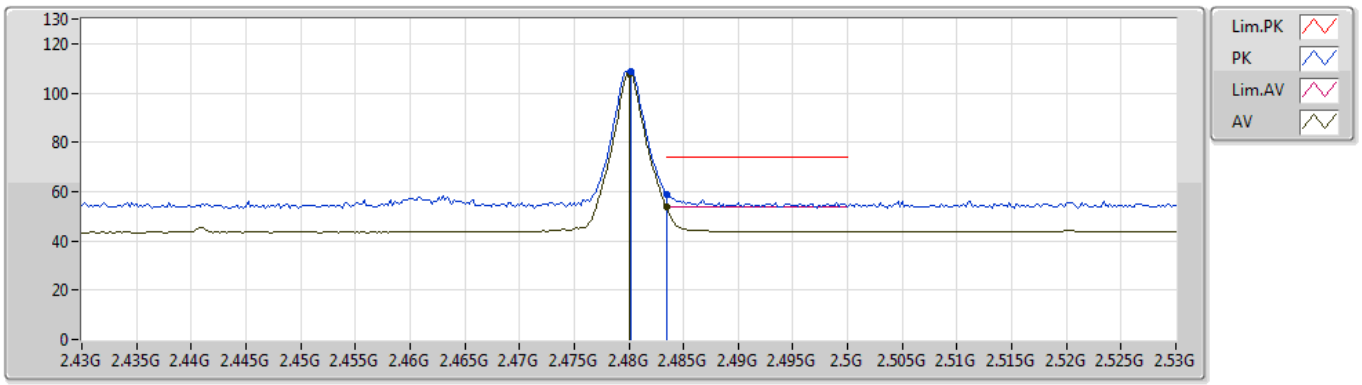
EUT Y_1TX
Setting 0x23
02-G-3
FSP(100056)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)
PK	4.87967G	51.36	74.00	-22.64	7.30	3	Horizontal	143	2.20	-	44.06
AV	4.88003G	43.58	54.00	-10.42	7.30	3	Horizontal	143	2.20	-	36.28
PK	7.33332G	55.82	74.00	-18.18	10.61	3	Horizontal	149	2.85	-	45.21
AV	7.33334G	52.02	54.00	-1.98	10.61	3	Horizontal	149	2.85	-	41.41

BT-BR(1Mbps)

16/08/2019

2480MHz_TX



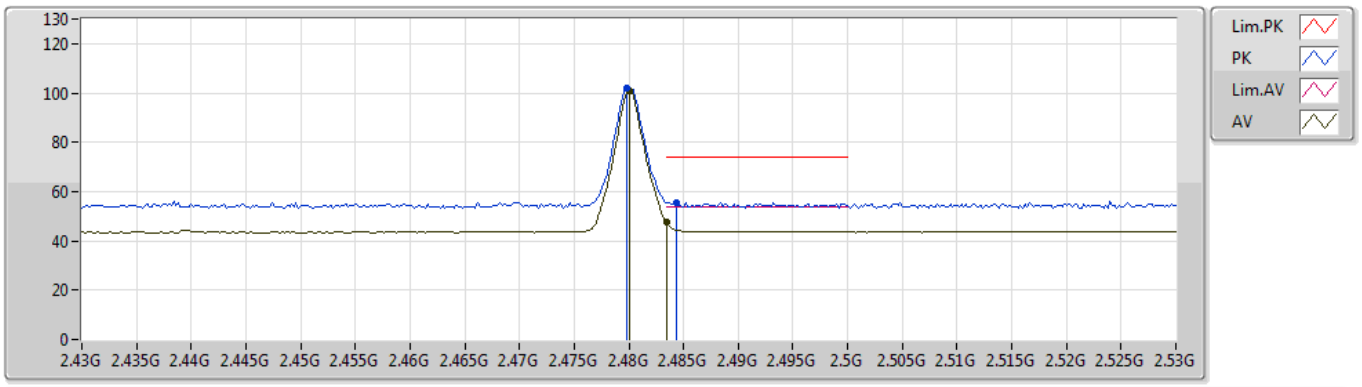
EUT Y_1TX
Setting 0x21
02-G-3
FSP(100065)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)
PK	2.4802G	108.69	Inf	-Inf	31.39	3	Vertical	51	1.32	-	77.30
AV	2.48G	107.84	Inf	-Inf	31.39	3	Vertical	51	1.32	-	76.45
PK	2.4835G	59.08	74.00	-14.92	31.39	3	Vertical	51	1.32	-	27.69
AV	2.4835G	53.85	54.00	-0.15	31.39	3	Vertical	51	1.32	-	22.46

BT-BR(1Mbps)

16/08/2019

2480MHz_TX



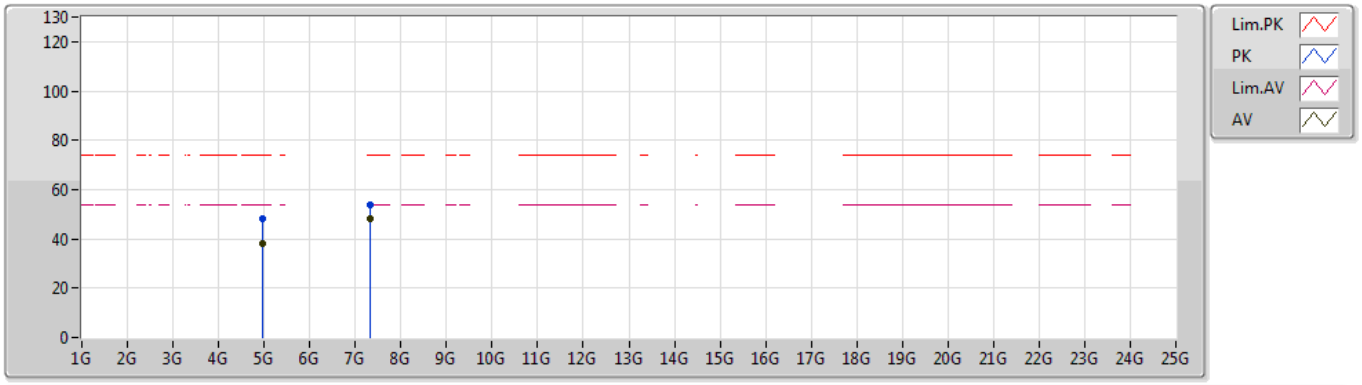
EUT Y_1TX
Setting 0x21
02-G-3
FSP(100065)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)
PK	2.4798G	101.72	Inf	-Inf	31.39	3	Horizontal	231	1.50	-	70.33
AV	2.48G	100.81	Inf	-Inf	31.39	3	Horizontal	231	1.50	-	69.42
PK	2.4844G	55.63	74.00	-18.37	31.40	3	Horizontal	231	1.50	-	24.23
AV	2.4835G	47.68	54.00	-6.32	31.39	3	Horizontal	231	1.50	-	16.29

BT-BR(1Mbps)

2480MHz_TX

16/08/2019



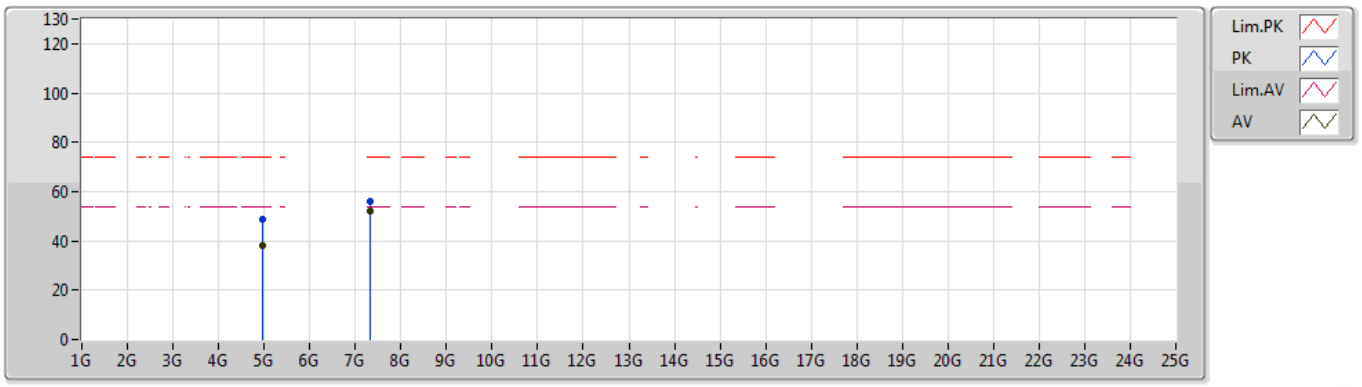
EUT Y_1TX
Setting 0x21
02-G-3
FSP(100065)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)
PK	4.95986G	48.38	74.00	-25.62	7.48	3	Vertical	123	2.40	-	40.90
AV	4.95994G	38.20	54.00	-15.80	7.48	3	Vertical	123	2.40	-	30.72
PK	7.33326G	53.67	74.00	-20.33	10.61	3	Vertical	129	1.99	-	43.06
AV	7.3333G	47.95	54.00	-6.05	10.61	3	Vertical	129	1.99	-	37.34

BT-BR(1Mbps)

16/08/2019

2480MHz_TX



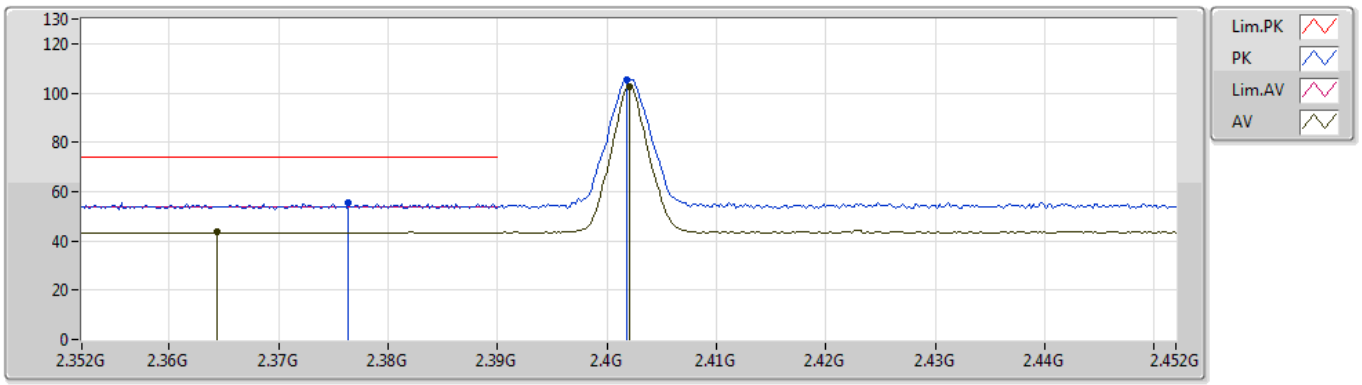
EUT Y_1TX
Setting 0x21
02-G-3
FSP(100065)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)
PK	4.9597G	48.65	74.00	-25.35	7.48	3	Horizontal	175	2.26	-	41.17
AV	4.96008G	38.28	54.00	-15.72	7.48	3	Horizontal	175	2.26	-	30.80
PK	7.33331G	55.90	74.00	-18.10	10.61	3	Horizontal	168	2.79	-	45.29
AV	7.3333G	51.91	54.00	-2.09	10.61	3	Horizontal	168	2.79	-	41.30

BT-EDR(3Mbps)

16/08/2019

2402MHz_TX



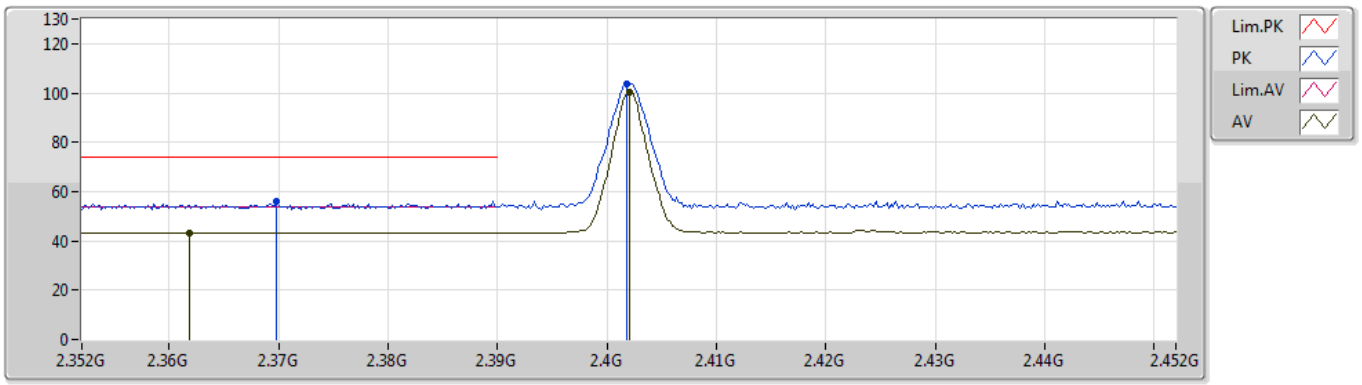
EUT Y_1TX
Setting 0x23
02-B-4
FSP(100065)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)
PK	2.3764G	55.63	74.00	-18.37	31.17	3	Vertical	67	1.53	-	24.46
AV	2.3644G	43.49	54.00	-10.51	31.15	3	Vertical	67	1.53	-	12.34
PK	2.4018G	105.28	Inf	-Inf	31.23	3	Vertical	67	1.53	-	74.05
AV	2.402G	102.34	Inf	-Inf	31.23	3	Vertical	67	1.53	-	71.11

BT-EDR(3Mbps)

16/08/2019

2402MHz_TX



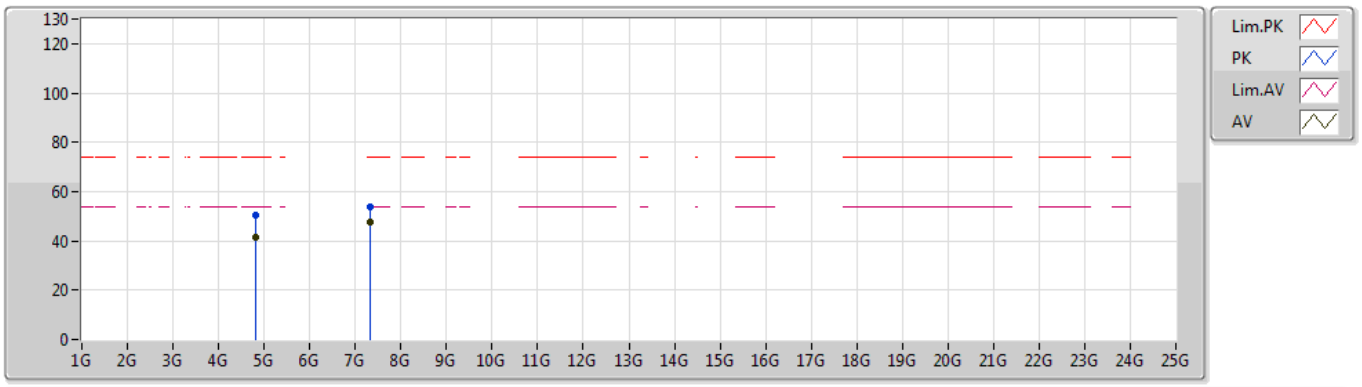
EUT Y_1TX
Setting 0x23
02-B-4
FSP(100065)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)
PK	2.3698G	56.24	74.00	-17.76	31.16	3	Horizontal	323	1.20	-	25.08
AV	2.3618G	43.42	54.00	-10.58	31.13	3	Horizontal	323	1.20	-	12.29
PK	2.4018G	103.61	Inf	-Inf	31.23	3	Horizontal	323	1.20	-	72.38
AV	2.402G	100.11	Inf	-Inf	31.23	3	Horizontal	323	1.20	-	68.88

BT-EDR(3Mbps)

16/08/2019

2402MHz_TX



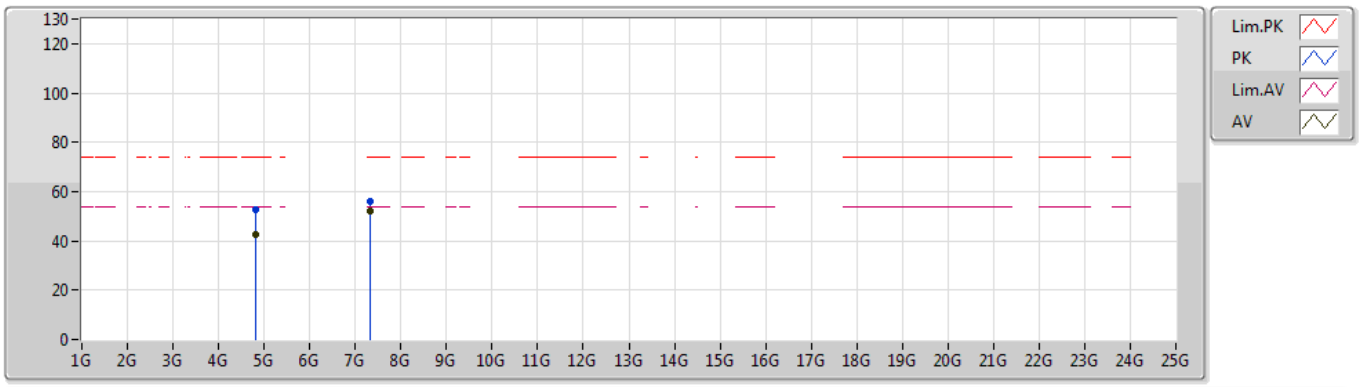
EUT Y_1TX
Setting 0x23
02-B-4
FSP(100065)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)
PK	4.804G	50.56	74.00	-23.44	7.12	3	Vertical	144	1.93	-	43.44
AV	4.8038G	41.26	54.00	-12.74	7.12	3	Vertical	144	1.93	-	34.14
PK	7.33327G	54.07	74.00	-19.93	10.61	3	Vertical	140	2.07	-	43.46
AV	7.33331G	47.86	54.00	-6.14	10.61	3	Vertical	140	2.07	-	37.25

BT-EDR(3Mbps)

16/08/2019

2402MHz_TX



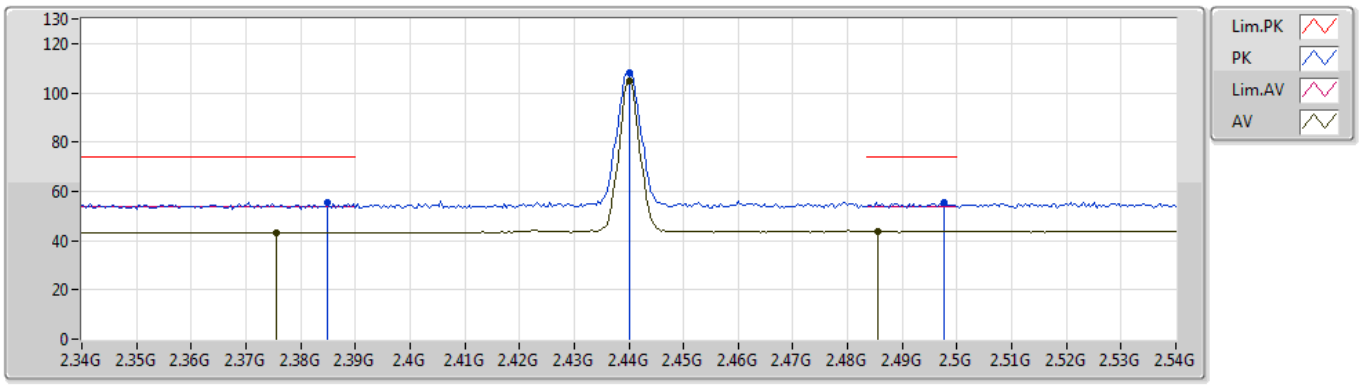
EUT Y_1TX
Setting 0x23
02-B-4
FSP(100065)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)
PK	4.8042G	52.68	74.00	-21.32	7.12	3	Horizontal	213	1.00	-	45.56
AV	4.804G	42.74	54.00	-11.26	7.12	3	Horizontal	213	1.00	-	35.62
PK	7.33329G	55.95	74.00	-18.05	10.61	3	Horizontal	132	2.77	-	45.34
AV	7.33332G	51.95	54.00	-2.05	10.61	3	Horizontal	132	2.77	-	41.34

BT-EDR(3Mbps)

16/08/2019

2440MHz_TX



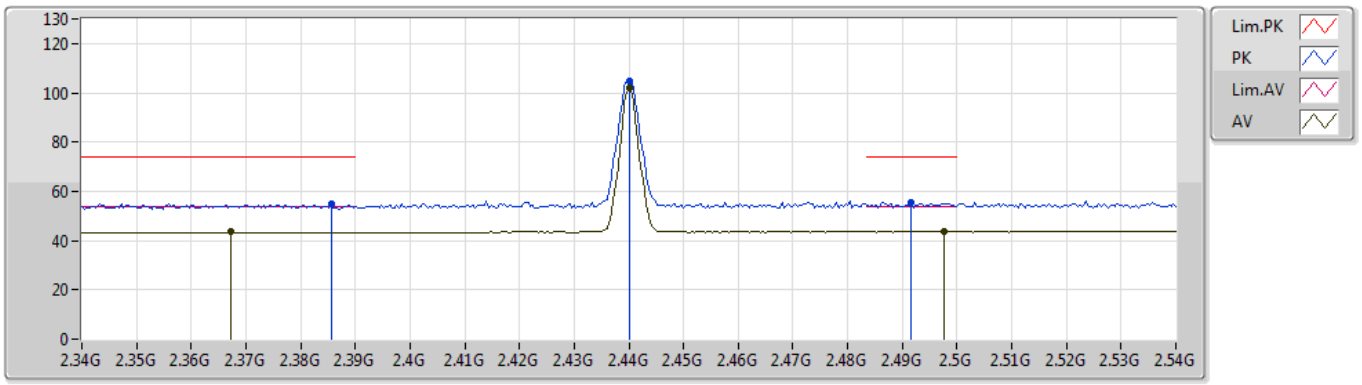
EUT Y_1TX
Setting 0x23
02-B-4
FSP(100065)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)
PK	2.3848G	55.43	74.00	-18.57	31.19	3	Vertical	52	1.15	-	24.24
AV	2.3756G	43.37	54.00	-10.63	31.17	3	Vertical	52	1.15	-	12.20
PK	2.44G	108.29	Inf	-Inf	31.31	3	Vertical	52	1.15	-	76.98
AV	2.44G	104.99	Inf	-Inf	31.31	3	Vertical	52	1.15	-	73.68
PK	2.4976G	55.53	74.00	-18.47	31.43	3	Vertical	52	1.15	-	24.10
AV	2.4856G	43.67	54.00	-10.33	31.40	3	Vertical	52	1.15	-	12.27

BT-EDR(3Mbps)

16/08/2019

2440MHz_TX



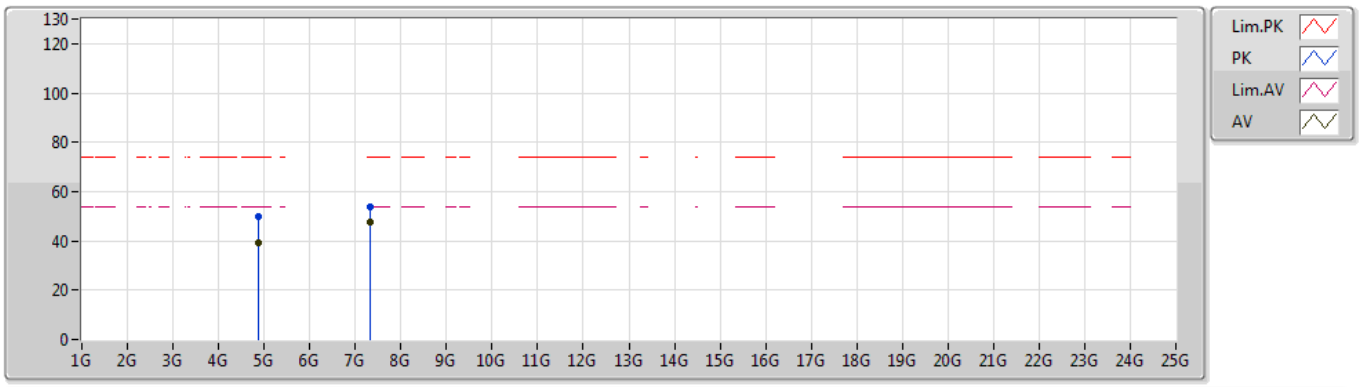
EUT Y_1TX
Setting 0x23
02-B-4
FSP(100065)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)
PK	2.3856G	55.04	74.00	-18.96	31.19	3	Horizontal	117	1.85	-	23.85
AV	2.3672G	43.44	54.00	-10.56	31.15	3	Horizontal	117	1.85	-	12.29
PK	2.44G	104.87	Inf	-Inf	31.31	3	Horizontal	117	1.85	-	73.56
AV	2.44G	101.84	Inf	-Inf	31.31	3	Horizontal	117	1.85	-	70.53
PK	2.4916G	55.40	74.00	-18.60	31.42	3	Horizontal	117	1.85	-	23.98
AV	2.4976G	43.68	54.00	-10.32	31.43	3	Horizontal	117	1.85	-	12.25

BT-EDR(3Mbps)

16/08/2019

2440MHz_TX



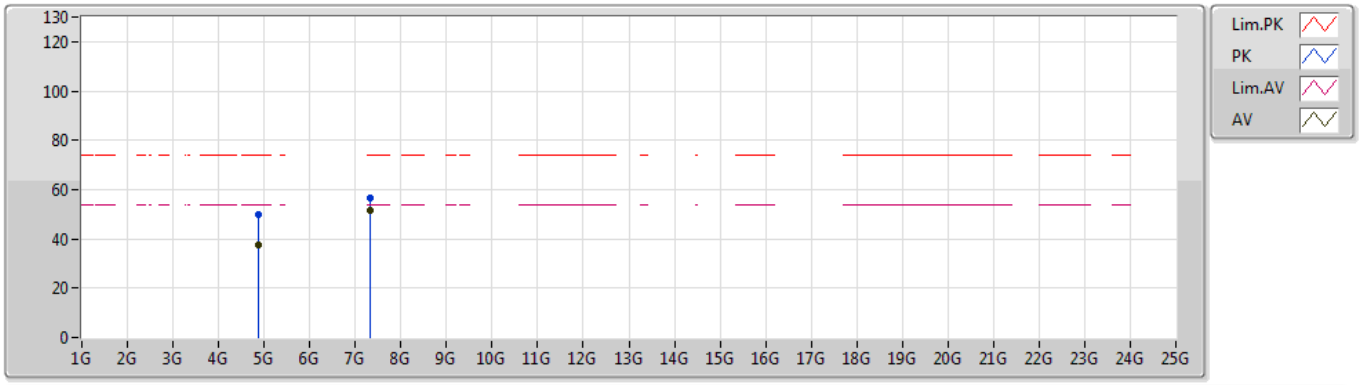
EUT Y_1TX
Setting 0x23
02-G-3
FSP(100065)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)
PK	4.87985G	49.98	74.00	-24.02	7.30	3	Vertical	115	2.33	-	42.68
AV	4.87995G	39.09	54.00	-14.91	7.30	3	Vertical	115	2.33	-	31.79
PK	7.33342G	53.68	74.00	-20.32	10.61	3	Vertical	121	2.21	-	43.07
AV	7.33336G	47.84	54.00	-6.16	10.61	3	Vertical	121	2.21	-	37.23

BT-EDR(3Mbps)

2440MHz_TX

16/08/2019



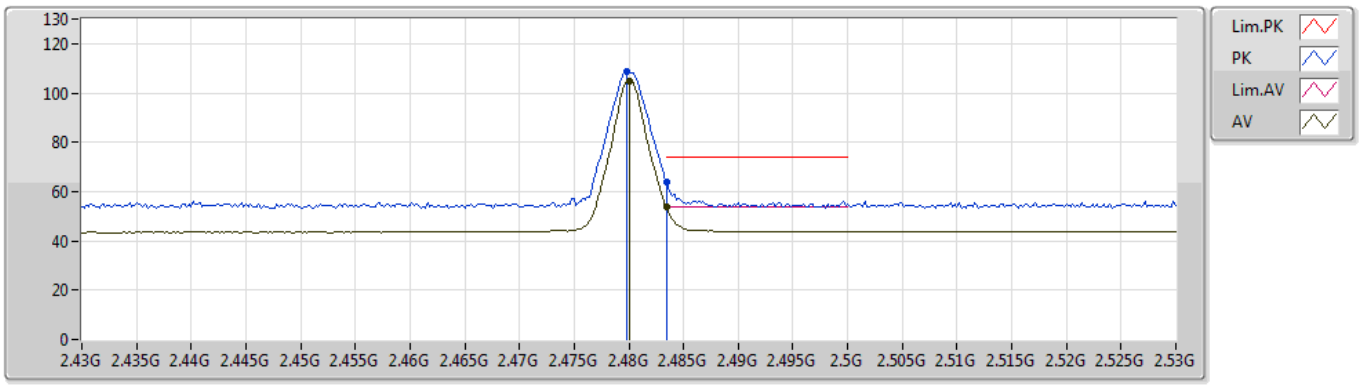
EUT Y_1TX
Setting 0x23
02-G-3
FSP(100065)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)
PK	4.87964G	50.02	74.00	-23.98	7.30	3	Horizontal	173	2.99	-	42.72
AV	4.87998G	37.36	54.00	-16.64	7.30	3	Horizontal	173	2.99	-	30.06
PK	7.33336G	56.73	74.00	-17.27	10.61	3	Horizontal	203	2.04	-	46.12
AV	7.3333G	51.74	54.00	-2.26	10.61	3	Horizontal	203	2.04	-	41.13

BT-EDR(3Mbps)

2480MHz_TX

16/08/2019



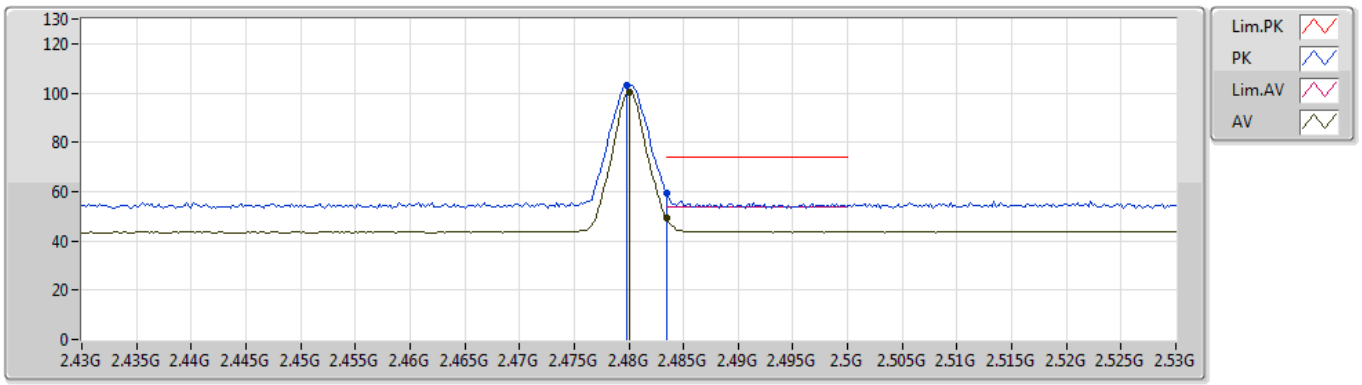
EUT Y_1TX
Setting 0x23
02-B-4
FSP(100065)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)
PK	2.4798G	108.46	Inf	-Inf	31.39	3	Vertical	45	1.32	-	77.07
AV	2.48G	104.91	Inf	-Inf	31.39	3	Vertical	45	1.32	-	73.52
PK	2.4835G	63.76	74.00	-10.24	31.39	3	Vertical	45	1.32	-	32.37
AV	2.4835G	53.93	54.00	-0.07	31.39	3	Vertical	45	1.32	-	22.54

BT-EDR(3Mbps)

16/08/2019

2480MHz_TX



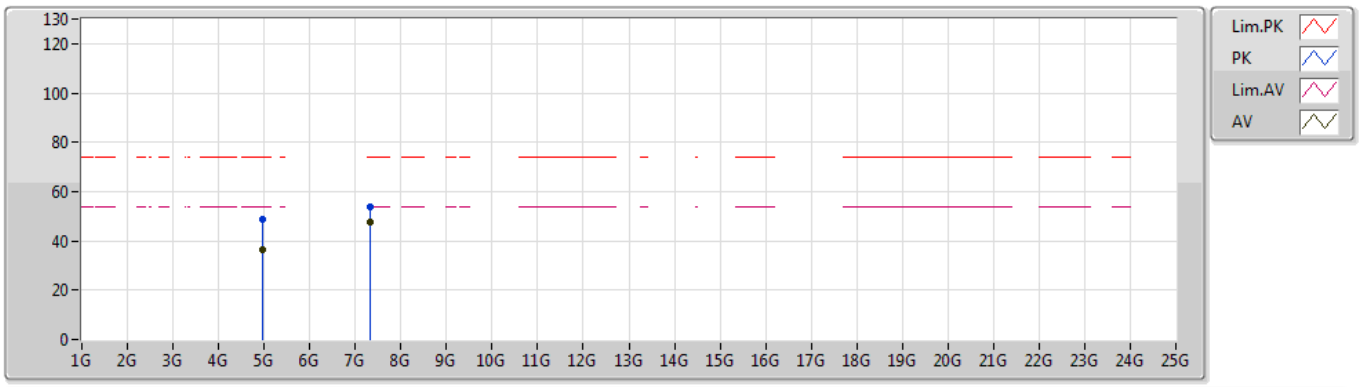
EUT Y_1TX
Setting 0x23
02-B-4
FSP(100065)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)
PK	2.4798G	103.16	Inf	-Inf	31.39	3	Horizontal	242	1.31	-	71.77
AV	2.48G	100.03	Inf	-Inf	31.39	3	Horizontal	242	1.31	-	68.64
PK	2.4835G	59.59	74.00	-14.41	31.39	3	Horizontal	242	1.31	-	28.20
AV	2.4835G	49.30	54.00	-4.70	31.39	3	Horizontal	242	1.31	-	17.91

BT-EDR(3Mbps)

16/08/2019

2480MHz_TX



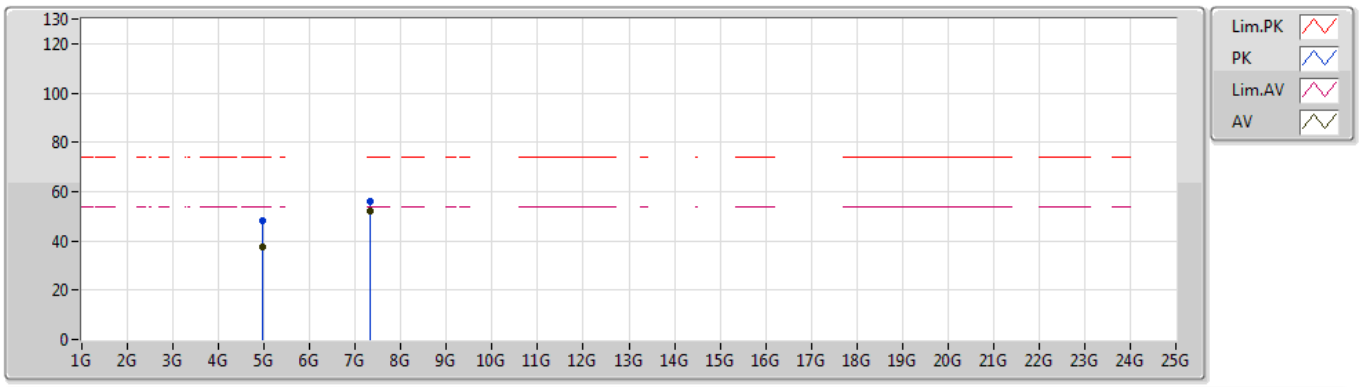
EUT Y_1TX
Setting 0x23
02-B-4
FSP(100065)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)
PK	4.95972G	48.75	74.00	-25.25	7.48	3	Vertical	142	2.03	-	41.27
AV	4.95996G	36.61	54.00	-17.39	7.48	3	Vertical	142	2.03	-	29.13
PK	7.33325G	53.73	74.00	-20.27	10.61	3	Vertical	133	2.14	-	43.12
AV	7.33333G	47.79	54.00	-6.21	10.61	3	Vertical	133	2.14	-	37.18

BT-EDR(3Mbps)

2480MHz_TX

16/08/2019



EUT Y_1TX
Setting 0x23
02-B-4
FSP(100065)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)
PK	4.96004G	48.43	74.00	-25.57	7.48	3	Horizontal	216	1.19	-	40.95
AV	4.96008G	37.37	54.00	-16.63	7.48	3	Horizontal	216	1.19	-	29.89
PK	7.33335G	55.85	74.00	-18.15	10.61	3	Horizontal	159	2.77	-	45.24
AV	7.3333G	51.88	54.00	-2.12	10.61	3	Horizontal	159	2.77	-	41.27