

FCC Test Report

Equipment : DHUR-AZ68 11a/b/g/n/ac 2x2 module
Brand Name : WNC
Model No. : DHUR-AZ68
FCC ID : NKR-DHURAZ68
Standard : 47 CFR FCC Part 15.247
Operating Band : 2400 MHz – 2483.5 MHz
Applicant : Wistron NeWeb Corporation
20 Park Avenue II, Hsinchu Science Park, Hsinchu
308, Taiwan
Manufacturer : Wistron NeWeb Corporation
20 Park Avenue II, Hsinchu Science Park, Hsinchu
308, Taiwan

The product sample received on Oct. 20, 2017 and completely tested on Feb. 07, 2018. We, SPORTON, would like to declare that the tested sample has been evaluated in accordance with the procedures given inanes and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONALINC., the test report shall not be reproduced except in full.

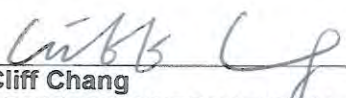

Cliff Chang
SPORTON INTERNATIONAL INC.



Table of Contents

1	GENERAL DESCRIPTION	5
1.1	Information.....	5
1.2	Testing Applied Standards	7
1.3	Testing Location Information	7
1.4	Measurement Uncertainty	8
2	TEST CONFIGURATION OF EUT	9
2.1	Test Channel Mode	9
2.2	The Worst Case Measurement Configuration.....	10
2.3	EUT Operation during Test	12
2.4	Accessories	12
2.5	Support Equipment.....	12
2.6	Test Setup Diagram	13
3	TRANSMITTER TEST RESULT	15
3.1	AC Power-line Conducted Emissions	15
3.2	20dB Bandwidth and Carrier Frequency Separation	17
3.3	Maximum Conducted Output Power	18
3.4	Number of Hopping Frequencies and Hopping Bandedge	19
3.5	Time of Occupancy (Dwell Time)	20
3.6	Emissions in Non-restricted Frequency Bands	21
3.7	Emissions in Restricted Frequency Bands.....	22
4	TEST EQUIPMENT AND CALIBRATION DATA	25
APPENDIX A. TEST RESULTS OF AC POWER-LINE CONDUCTED EMISSIONS		
APPENDIX B. TEST RESULTS OF 20DB BANDWIDTH AND CARRIER FREQUENCY SEPARATION		
APPENDIX C. TEST RESULTS OF MAXIMUM CONDUCTED OUTPUT POWER		
APPENDIX D. TEST RESULTS OF NUMBER OF HOPPING FREQUENCIES AND HOPPING BANDEDGE		
APPENDIX E. TEST RESULTS OF TIME OF OCCUPANCY (DWELL TIME)		
APPENDIX F. TEST RESULTS OF EMISSIONS IN NON-RESTRICTED FREQUENCY BANDS		
APPENDIX G. TEST RESULTS OF EMISSIONS IN RESTRICTED FREQUENCY BANDS		
APPENDIX H. TEST PHOTOS		
PHOTOGRAPHS OF EUT V01		

Summary of Test Result

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



SPORTON INTERNATIONAL INC.
TEL : 886-3-3273456
FAX : 886-3-3270973
FCC ID: NKR-DHURAZ68

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 $\pi/4$ -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

Set	Ant.	Port	Brand	Model Name	Antenna Type	Connector	Gain (dBi)		
							WLAN 2.4GHz	WLAN 5GHz	Bluetooth
1	1	1	WNC	-	Printed Antenna	N/A	5.31	5.92	-
	2	2	WNC	-	Printed Antenna	N/A	5.26	5.91	-
2	3	1	WNC	-	PIFA Antenna	I-PEX	1.54	3.52	-
	4	2	WNC	-	PIFA Antenna	I-PEX	0.15	2.83	-
3	5	1	WNC	-	PIFA Antenna	I-PEX	3.56	5.59	-
	6	2	WNC	-	PIFA Antenna	I-PEX	2.14	5.08	-
4	7	1	WNC	-	PIFA Antenna	I-PEX	-	-	3.90
5	8	1	WNC	-	PIFA Antenna	I-PEX	-	-	1.18
6	9	1	WNC	-	PIFA Antenna	I-PEX	-	-	0.01

Note: The EUT has six set antennas, and they have total of nine antennas.

For 2.4GHz / 5GHz WLAN function (2TX/2RX):

Antenna set 1~3 support 2.4GHz / 5GHz WLAN function.

Port 1 and Port 2 could transmit/receive simultaneously.

For Bluetooth function (1TX/1RX):

Antenna set 4~6 support Bluetooth function.

Antenna set 4~6 are the same type antennas, only the higher gain antenna "Set 4" was tested.

Only Port 1 can be used as transmitting/receiving.

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
BT-BR(1Mbps)	0.575	2.403	2.876m	1k
BT-EDR(2Mbps)	0.576	2.396	2.879m	1k
BT-EDR(3Mbps)	0.576	2.396	2.881m	1k

1.1.4 EUT Operational Condition

EUT Power Type	From host system
Test Software Version	QATool_Dbg.exe

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
- ♦ FCC Public Notice DA 00-705
- ♦ FCC KDB 412172 D01 v01r01

1.3 Testing Location Information

Testing Location				
☐	HWA YA	ADD : No. 52, Hwa Ya 1st Rd., Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.	TEL : 886-3-327-3456	FAX : 886-3-318-0055
☒	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	Stim Sung	25°C / 55%	Dec. 18, 2017~Dec. 27, 2017
Radiated	03CH01-CB (For below 1GHz)	Brain Sun, RJ Huang, Cola Fan, Mason Chen, Justin Lin, DK Chang	22°C / 54%	Feb. 07, 2018
Radiated	03CH01-CB (For above 1GHz)	Brain Sun, RJ Huang, Cola Fan, Mason Chen, Justin Lin, DK Chang	22°C / 54%	Oct. 20, 2017~Jan. 30, 2018
AC Conduction	CO01-CB	Deven Huang	20°C / 60%	Feb. 07, 2018

Test site Designation No. TW0006 with FCC.

Test site registered number IC 4086D 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)	3.2 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	3.6 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.7 dB	Confidence levels of 95%
Output Power Measurement	1.33 dB	Confidence levels of 95%
Bandwidth Measurement	9.74×10^{-8}	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

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

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	CTX
1. For 2.4GHz / 5GHz WLAN function: Antenna set 2~3 are the same type antennas, only the higher gain antenna "Set 3" was tested. 2. For Bluetooth function: Antenna set 4~6 are the same type antennas, only the higher gain antenna "Set 4" was tested.	
1	EUT with Set 1 antennas (2.4GHz WLAN function)
2	EUT with Set 3 antennas (2.4GHz WLAN function)
3	EUT with Set 1 antennas (5GHz WLAN function)
4	EUT with Set 3 antennas (5GHz WLAN function)
5	EUT with Set 4 antennas (Bluetooth function)
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
Operating Mode	CTX
1	EUT with Set 4 antennas

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
The EUT was performed at X axis, Y axis and Z axis position for Emissions in Restricted Frequency Bands above 1GHz test. 1. For Set 1 antennas (2.4GHz WLAN function): the worst case was found at X axis. 2. For Set 2 antennas (2.4GHz WLAN function): the worst case was found at Z axis. 3. For Set 3 antennas (2.4GHz WLAN function): the worst case was found at Y axis. 4. For Set 1 antennas (5GHz WLAN function): the worst case was found at X axis. 5. For Set 2 antennas (5GHz WLAN function): the worst case was found at Y axis. 6. For Set 3 antennas (5GHz WLAN function): the worst case was found at Y axis. 7. For Set 4 antennas (Bluetooth function): the worst case was found at Y axis. From the above, so the measurement will follow this same test configuration.	
1	EUT X axis with Set 1 antennas (2.4GHz WLAN function)
2	EUT Z axis with Set 2 antennas (2.4GHz WLAN function)
3	EUT Y axis with Set 3 antennas (2.4GHz WLAN function)
4	EUT X axis with Set 1 antennas (5GHz WLAN function)
5	EUT Y axis with Set 2 antennas (5GHz WLAN function)
6	EUT Y axis with Set 3 antennas (5GHz WLAN function)
7	EUT Y axis with Set 4 antennas (Bluetooth function)
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 for Emissions in Restricted Frequency Bands above 1GHz test, and the worst case was found at Y axis, so the measurement will follow this same test configuration.	
1	EUT Y axis with Set 4 antennas

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	EUT with Set 1 and Set 4 antennas (2.4GHz WLAN + Bluetooth function)
2	EUT with Set 1 and Set 4 antennas (5GHz WLAN + Bluetooth function)
3	EUT with Set 2 and Set 4 antennas (2.4GHz WLAN + Bluetooth function)
4	EUT with Set 2 and Set 4 antennas (5GHz WLAN + Bluetooth function)
5	EUT with Set 3 and Set 4 antennas (2.4GHz WLAN + Bluetooth function)
6	EUT with Set 3 and Set 4 antennas (5GHz WLAN + Bluetooth function)
Refer to Sporton Test Report No.: FA7D1249 for Co-location RF Exposure Evaluation.	

2.3 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

2.4 Accessories

N/A

2.5 Support Equipment

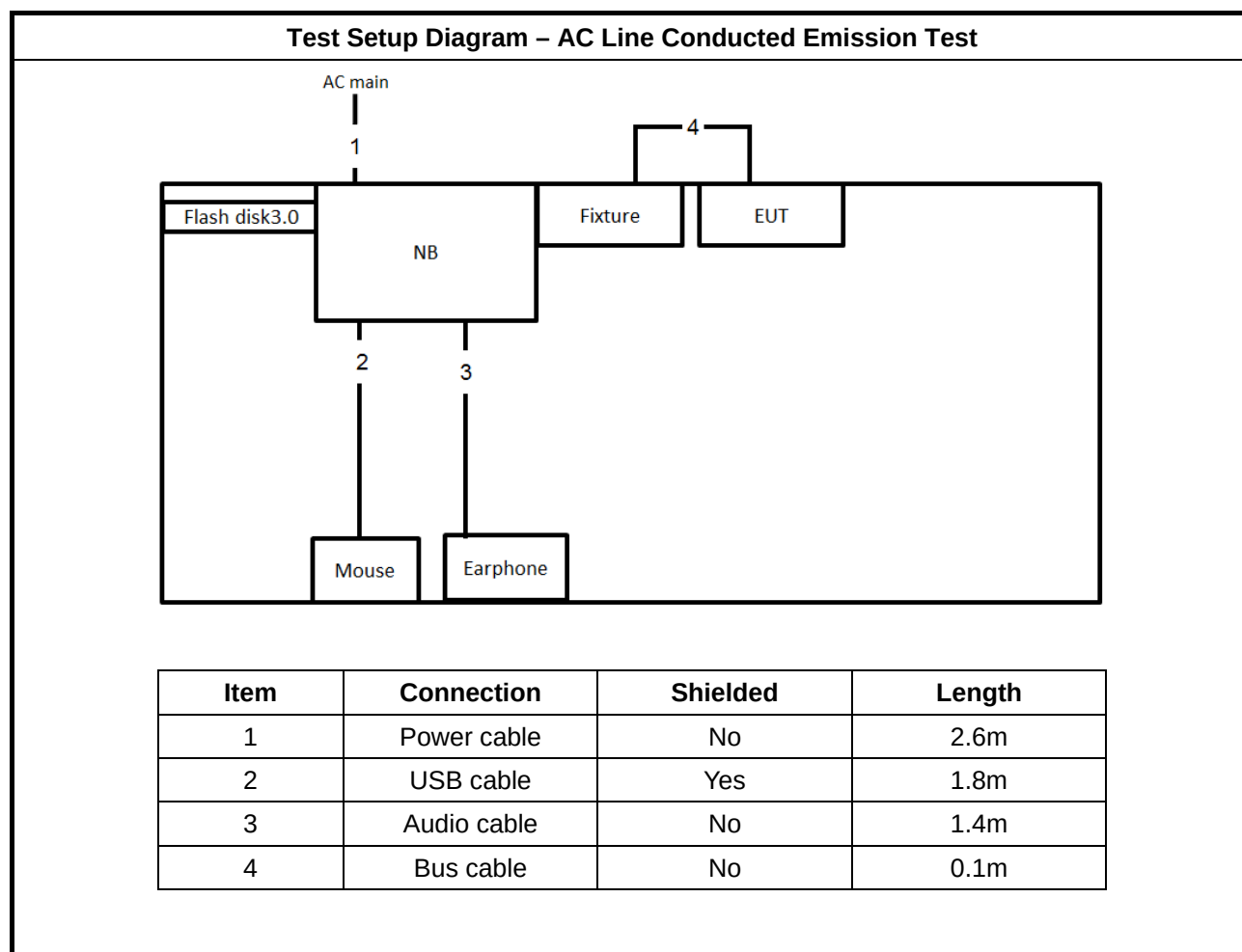
For Test Site No: CO01-CB

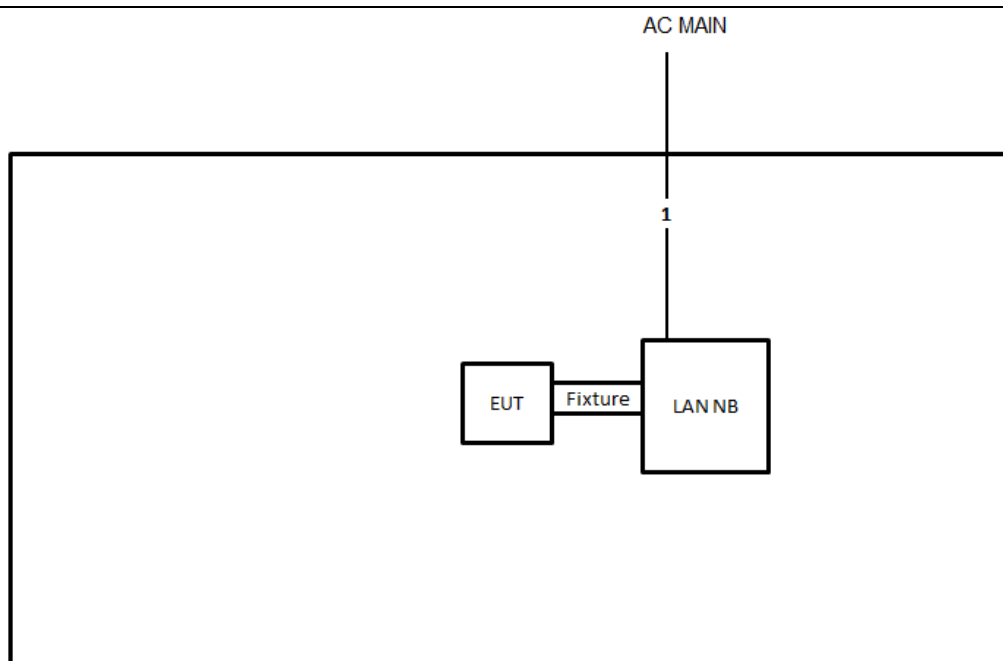
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	NB	DELL	E6430	DoC
2	Earphone	e-Power	S90W	DoC
3	Mouse	Logitech	M-U0026	DoC
4	Fixture	WNC	48DHUR09.SGB	DoC
5	Flash disk3.0	Transcend	JetFlash-760	DoC

For Test Site No: 03CH01-CB and TH01-CB

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	NB	DELL	E4300	DoC
2	Fixture	WNC	48DHUR09.SGB	DoC

2.6 Test Setup Diagram



Test Setup Diagram - Radiated Test


Item	Connection	Shielded	Length
1	Power cable	No	1.5m

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.

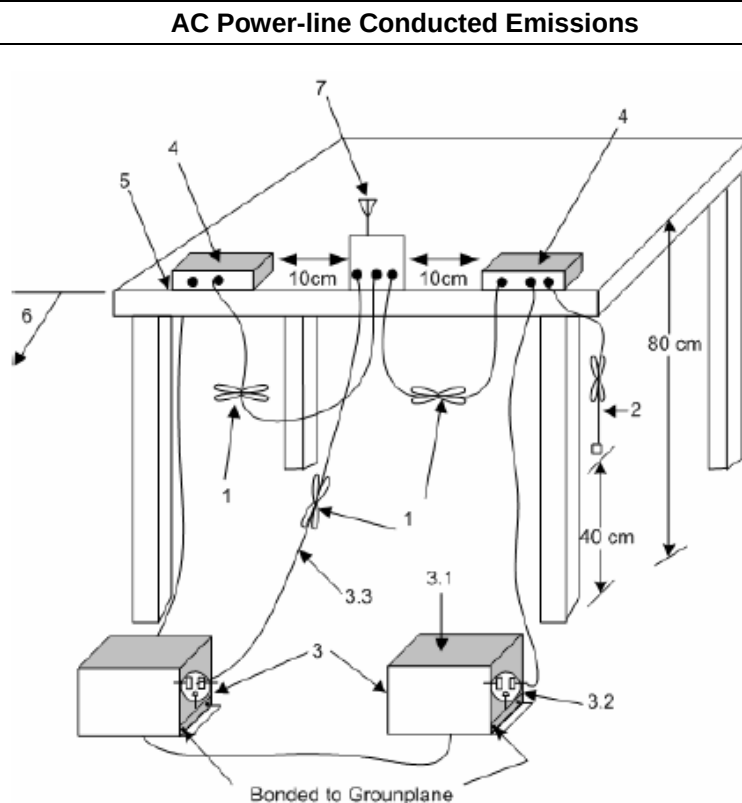
3.1.2 Measuring Instruments

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



- 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:	
	▪ $N \geq 50$ and $ChS \geq \text{MAX}$ (20 dB bandwidth, 25 kHz); 20 dB bandwidth $\leq$ 250 kHz.
	▪ $50 > N \geq 25$ and $ChS \geq \text{MAX}$ (20 dB bandwidth, 25 kHz); 20 dB bandwidth $>$ 250 kHz.
▪ 2400-2483.5 MHz Band:	
	▪ $N \geq 75$ and $ChS \geq \text{MAX}$ (20 dB bandwidth, 25 kHz).
	▪ $75 > N \geq 15$ and $ChS \geq \text{MAX}$ (20 dB bandwidth 2/3, 25 kHz).
▪ 5725-5850 MHz Band:	
	▪ $N \geq 75$ and $ChS \geq \text{MAX}$ (20 dB bandwidth, 25 kHz); 20 dB bandwidth $\leq$ 1 MHz.
N: Number of Hopping Frequencies; ChS: Hopping Channel Separation	

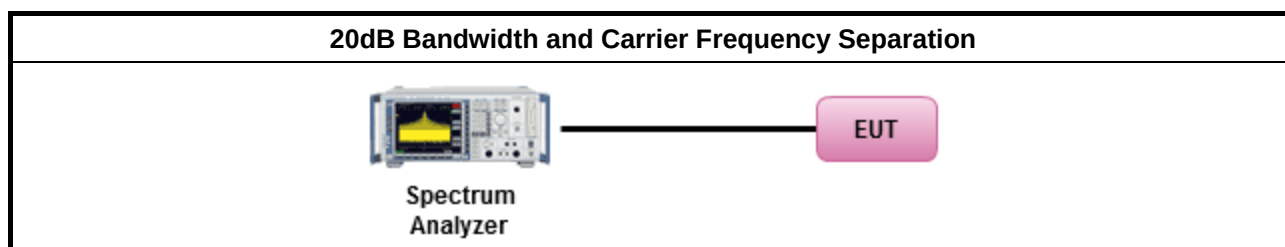
3.2.2 Measuring Instruments

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



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:	
	▪ $N \geq 50$; Power 30dBm; EIRP 36dBm
	▪ $50 > N \geq 25$; Power 24dBm; EIRP 30dBm
▪ 2400-2483.5 MHz Band:	
	▪ $N \geq 75$; Power 30dBm; EIRP 36dBm
	▪ $75 > N \geq 15$; Power 21dBm; EIRP 27dBm
▪ 5725-5850 MHz Band:	
	▪ $N \geq 75$; Power 30dBm; EIRP 36dBm
N: Number of Hopping Frequencies	

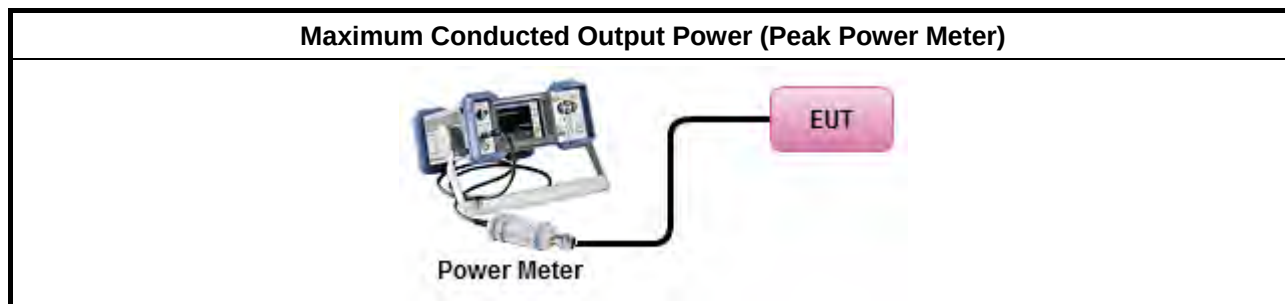
3.3.2 Measuring Instruments

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



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:	
	▪ $N \geq 50$ and $ChS \geq MAX$ (20 dB bandwidth, 25 kHz); 20 dB bandwidth $\leq$ 250 kHz.
	▪ $50 > N \geq 25$ and $ChS \geq MAX$ (20 dB bandwidth, 25 kHz); 20 dB bandwidth $>$ 250 kHz.
▪ 2400-2483.5 MHz Band:	
	▪ $N \geq 75$ and $ChS \geq MAX$ (20 dB bandwidth, 25 kHz).
	▪ $75 > N \geq 15$ and $ChS \geq MAX$ (20 dB bandwidth 2/3, 25 kHz).
▪ 5725-5850 MHz Band:	
	▪ $N \geq 75$ and $ChS \geq MAX$ (20 dB bandwidth, 25 kHz); 20 dB bandwidth $\leq$ 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

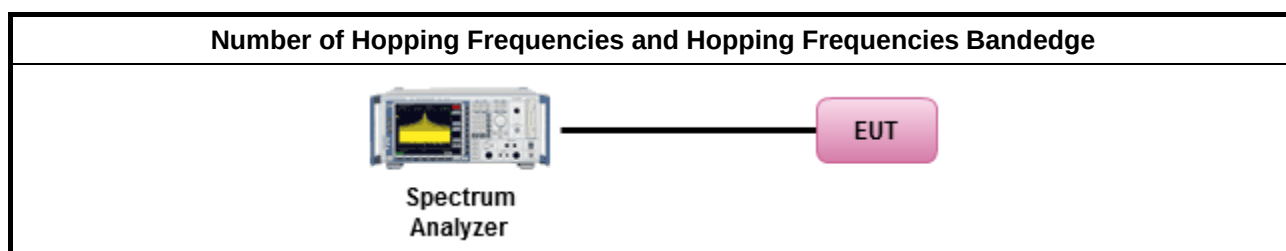
3.4.3 Measuring Instruments

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



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:	
	▪ $N \geq 50$; 0.4s in 20s period
	▪ $50 > N \geq 25$; 0.4s in 10s period
▪ 2400-2483.5 MHz Band:	
	▪ $N \geq 75$; 0.4s in $N \times 0.4$ period
	▪ $75 > N \geq 15$; 0.4s in $N \times 0.4$ period
▪ 5725-5850 MHz Band:	
	▪ $N \geq 75$; 0.4s in 30s period
N: Number of Hopping Frequencies	

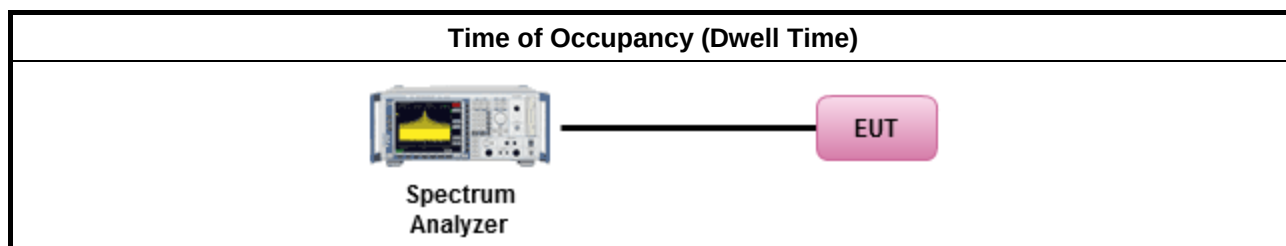
3.5.2 Measuring Instruments

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



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.	

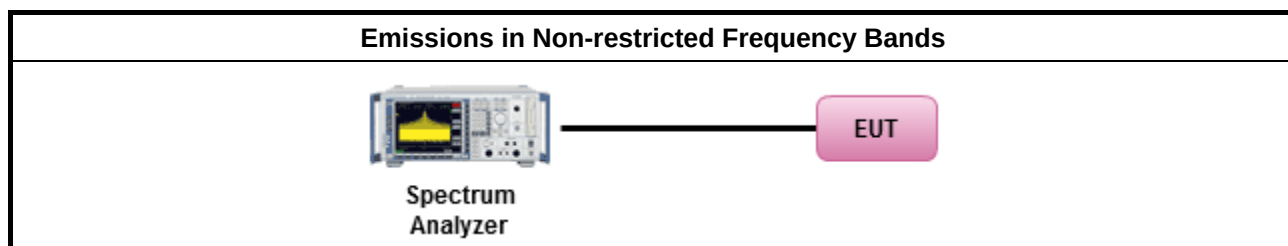
3.6.2 Measuring Instruments

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



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 below 30 MHz at a closer distance than the limit distance, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two or more distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB / decade). The test report shall specify the extrapolation method used to determine compliance of the EUT.

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.

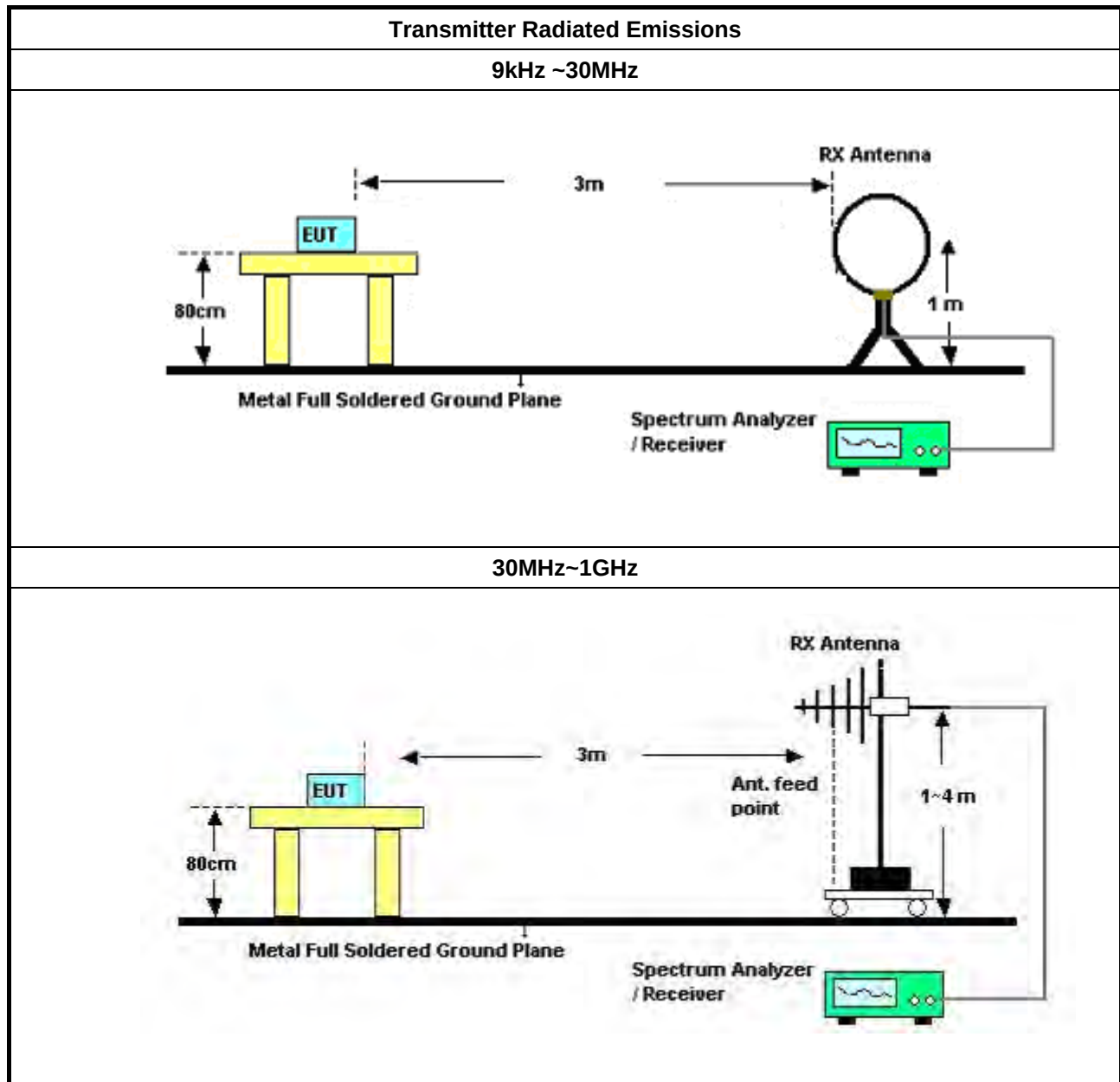
3.7.2 Measuring Instruments

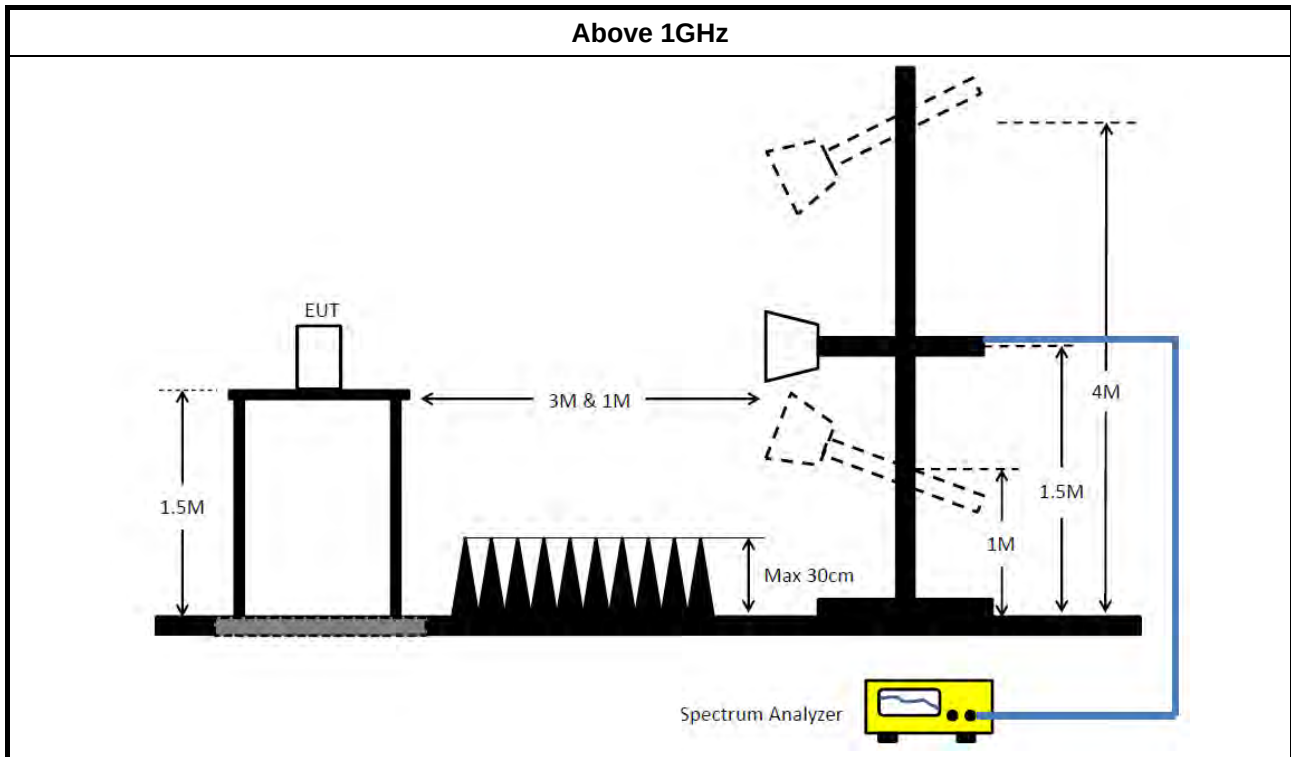
Refer a test equipment and calibration data table in this test report.

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





3.7.5 Transmitter Radiated Unwanted Emissions (Below 30MHz)

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

3.7.6 Transmitter Radiated Unwanted Emissions

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. 31, 2018	Jan. 30, 2019	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Dec. 20, 2017	Dec. 19, 2018	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127650	9kHz ~ 30MHz	Nov. 24, 2017	Nov. 23, 2018	Conduction (CO01-CB)
COND Cable	Woken	Cable	01	150kHz ~ 30MHz	May 23, 2017	May 22, 2018	Conduction (CO01-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
BILOG ANTENNA with 6dB Attenuator	TESEQ & EMC	CBL6112D & N-6-06	37880 & AT-N0609	20MHz ~ 2GHz	Aug. 30, 2017	Aug. 29, 2018	Radiation (03CH01-CB)
Horn Antenna	EMCO	3115	00075790	750MHz ~ 18GHz	Nov. 10, 2016	Nov. 09, 2017	Radiation (03CH01-CB)
Horn Antenna	EMCO	3115	00075790	750MHz ~ 18GHz	Nov. 20, 2017	Nov. 19, 2018	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 05, 2017	Jul. 04, 2018	Radiation (03CH01-CB)
Pre-Amplifier	EMCI	EMC330N	980332	20MHz ~ 3GHz	May 02, 2017	May 01, 2018	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 16, 2017	Jan. 15, 2018	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 09, 2018	Jan. 08, 2019	Radiation (03CH01-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 10, 2017	Jul. 09, 2018	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Nov. 22, 2016	Nov. 21, 2017	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Nov. 23, 2017	Nov. 22, 2018	Radiation (03CH01-CB)
EMI Test	R&S	ESCS	100355	9kHz ~ 2.75GHz	May 06, 2017	May 05, 2018	Radiation (03CH01-CB)
RF Cable-low	Woken	Low Cable-16+17	N/A	30 MHz ~ 1 GHz	Oct. 11, 2017	Oct. 10, 2018	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16	N/A	1 GHz ~ 18 GHz	Oct. 11, 2017	Oct. 10, 2018	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16+17	N/A	1 GHz ~ 18 GHz	Oct. 11, 2017	Oct. 10, 2018	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G#1	N/A	18GHz ~ 40 GHz	Oct. 11, 2017	Oct. 10, 2018	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G#2	N/A	18GHz ~ 40 GHz	Oct. 11, 2017	Oct. 10, 2018	Radiation (03CH01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 16, 2016*	Mar. 15, 2018*	Radiation (03CH01-CB)
Test Software	Audix	E3	6.2009-I0-7	N/A	N/A	N/A	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Dec. 26, 2016	Dec. 25, 2017	Conducted (TH01-CB)



Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Dec. 21, 2017	Dec. 20, 2018	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-06	1 GHz – 26.5 GHz	Oct. 11, 2017	Oct. 10, 2018	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-07	1 GHz –26.5 GHz	Oct. 11, 2017	Oct. 10, 2018	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-08	1 GHz –26.5 GHz	Oct. 11, 2017	Oct. 10, 2018	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-09	1 GHz –26.5 GHz	Oct. 11, 2017	Oct. 10, 2018	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz –26.5 GHz	Oct. 11, 2017	Oct. 10, 2018	Conducted (TH01-CB)
Power Sensor	Agilent	U2021XA	MY53410001	50MHz~18GHz	Nov. 20, 2017	Nov. 19, 2018	Conducted (TH01-CB)

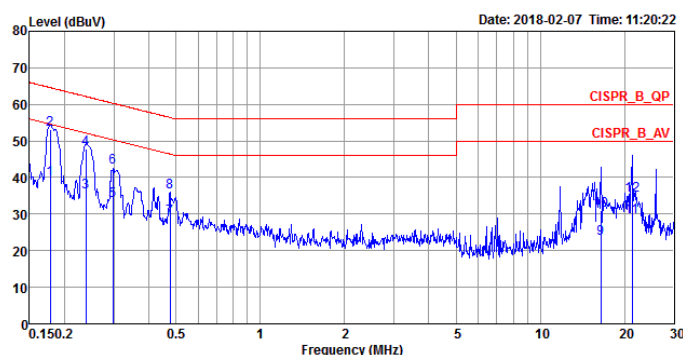
Note: Calibration Interval of instruments listed above is one year.

“*” Calibration Interval of instruments listed above is two years.

N.C.R. means Non-Calibration required.

AC Power-line Conducted Emissions Result

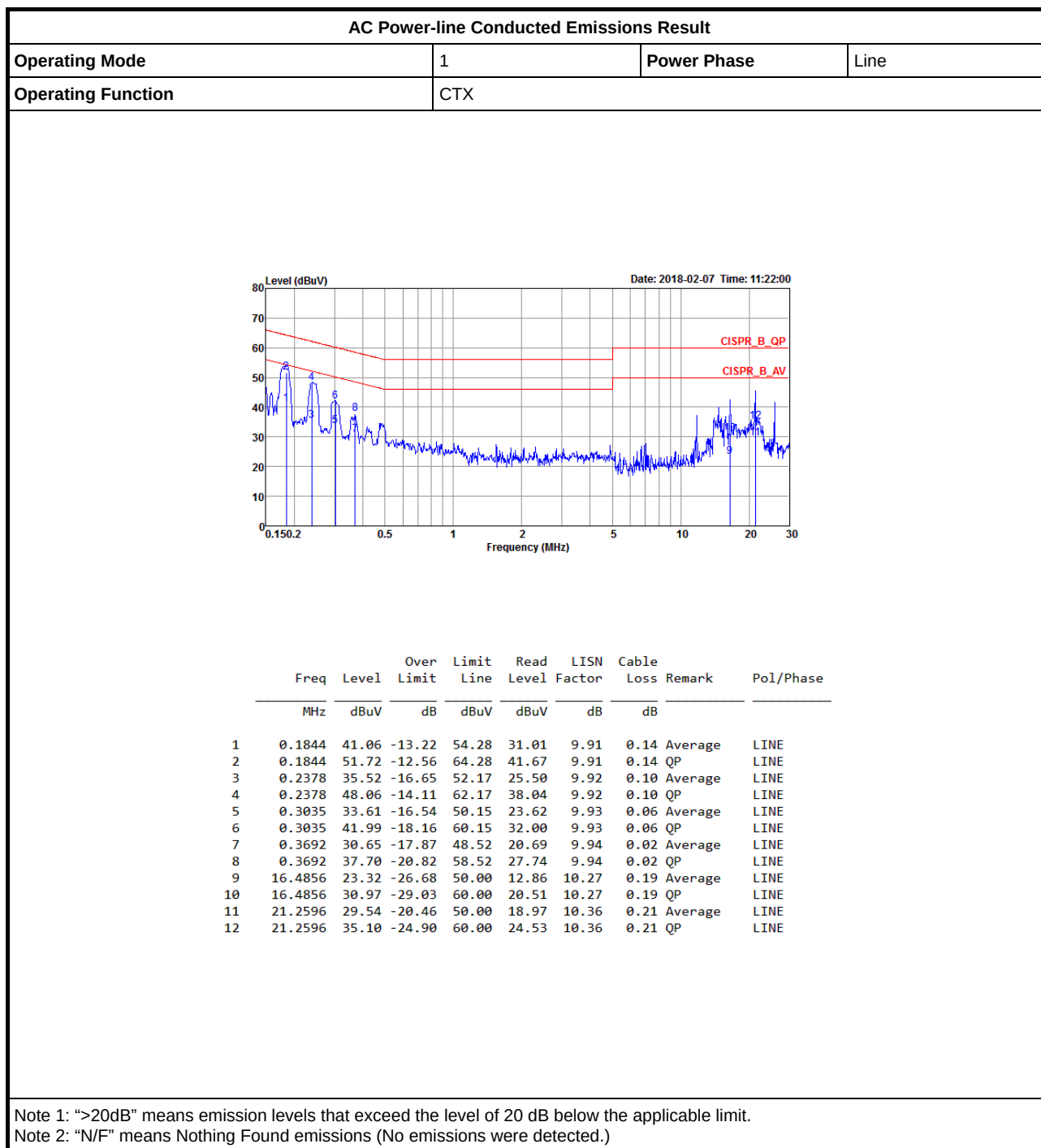
Operating Mode	1	Power Phase	Neutral
Operating Function	CTX		



	Freq	Level	Over	Limit	Read	LISN	Cable		
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark	Pol/Phase
			dB	dBuV	dBuV	dB	dB		
1	0.1777	39.43	-15.16	54.59	29.28	10.01	0.14	Average	NEUTRAL
2	0.1777	53.05	-11.54	64.59	42.90	10.01	0.14	QP	NEUTRAL
3	0.2378	35.89	-16.28	52.17	25.71	10.08	0.10	Average	NEUTRAL
4	0.2378	47.84	-14.33	62.17	37.66	10.08	0.10	QP	NEUTRAL
5	0.2971	33.55	-16.77	50.32	23.34	10.15	0.06	Average	NEUTRAL
6	0.2971	42.73	-17.59	60.32	32.52	10.15	0.06	QP	NEUTRAL
7	0.4761	28.98	-17.43	46.41	18.71	10.23	0.04	Average	NEUTRAL
8	0.4761	36.07	-20.34	56.41	25.80	10.23	0.04	QP	NEUTRAL
9	16.4856	23.29	-26.71	50.00	12.81	10.29	0.19	Average	NEUTRAL
10	16.4856	31.12	-28.88	60.00	20.64	10.29	0.19	QP	NEUTRAL
11	21.2596	29.36	-20.64	50.00	18.78	10.37	0.21	Average	NEUTRAL
12	21.2596	35.08	-24.92	60.00	24.50	10.37	0.21	QP	NEUTRAL

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)	921.25k	894.553k	895KF1D	920k	870.815k
BT-EDR(2Mbps)	1.281M	1.181M	1M18G1D	1.28M	1.177M
BT-EDR(3Mbps)	1.268M	1.183M	1M18G1D	1.265M	1.182M

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;

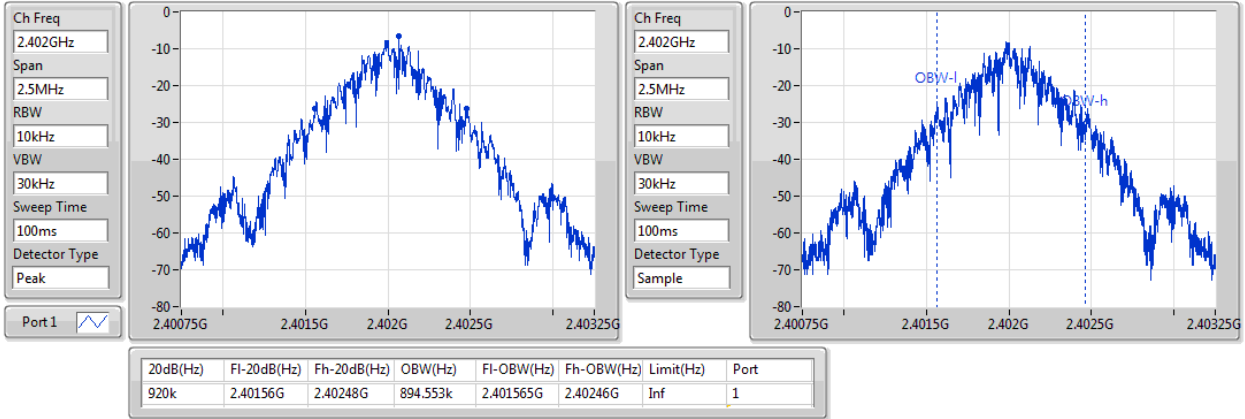
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	Inf	920k	894.553k
2440MHz	Pass	Inf	921.25k	870.815k
2480MHz	Pass	Inf	921.25k	872.064k
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	Inf	1.28M	1.181M
2440MHz	Pass	Inf	1.28M	1.177M
2480MHz	Pass	Inf	1.281M	1.177M
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	Inf	1.265M	1.182M
2440MHz	Pass	Inf	1.265M	1.182M
2480MHz	Pass	Inf	1.268M	1.183M

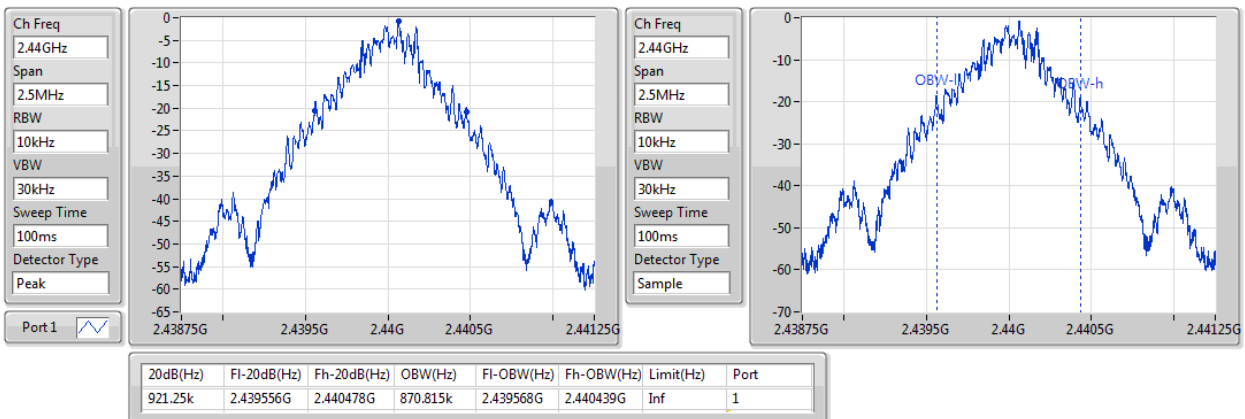
Port X-N dB = Port X 20dB down bandwidth; **Port X-OBW** = Port X 99% occupied bandwidth;

BT-BR(1Mbps)
EBW
2402MHz

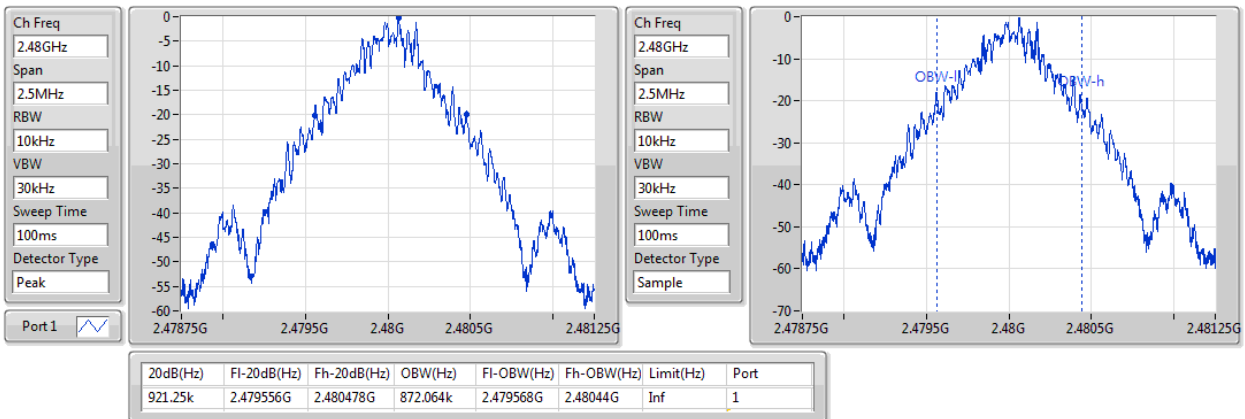
27/12/2017


BT-BR(1Mbps)
EBW
2440MHz

27/12/2017

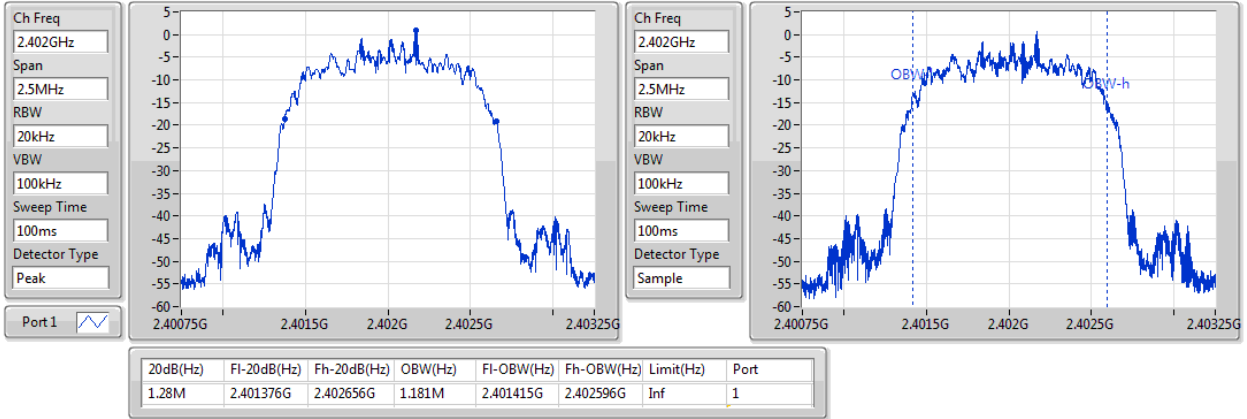

BT-BR(1Mbps)
EBW
2480MHz

27/12/2017

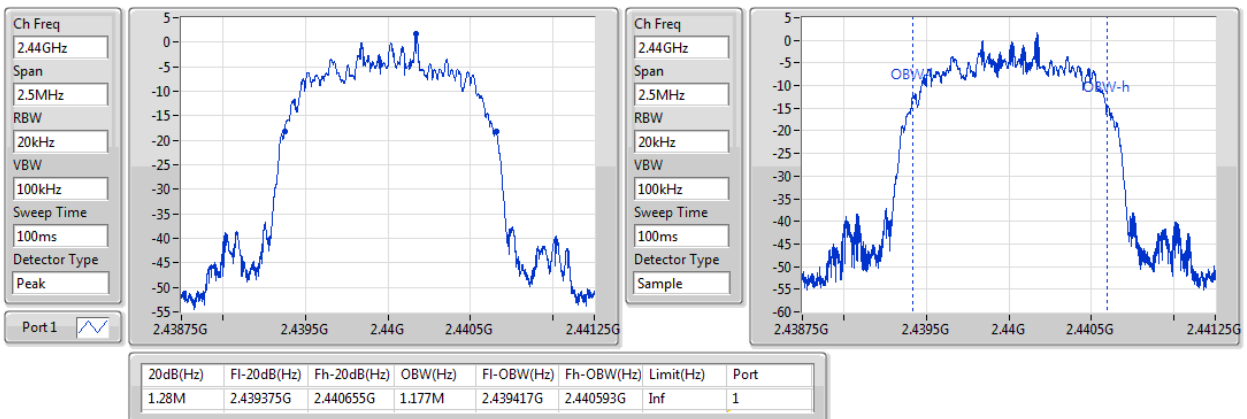


BT-EDR(2Mbps)
EBW
2402MHz

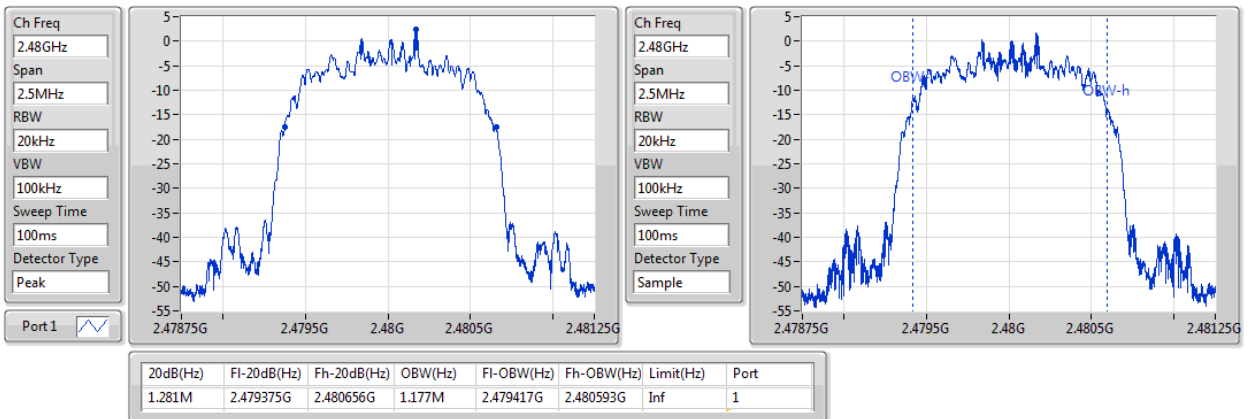
27/12/2017


BT-EDR(2Mbps)
EBW
2440MHz

27/12/2017

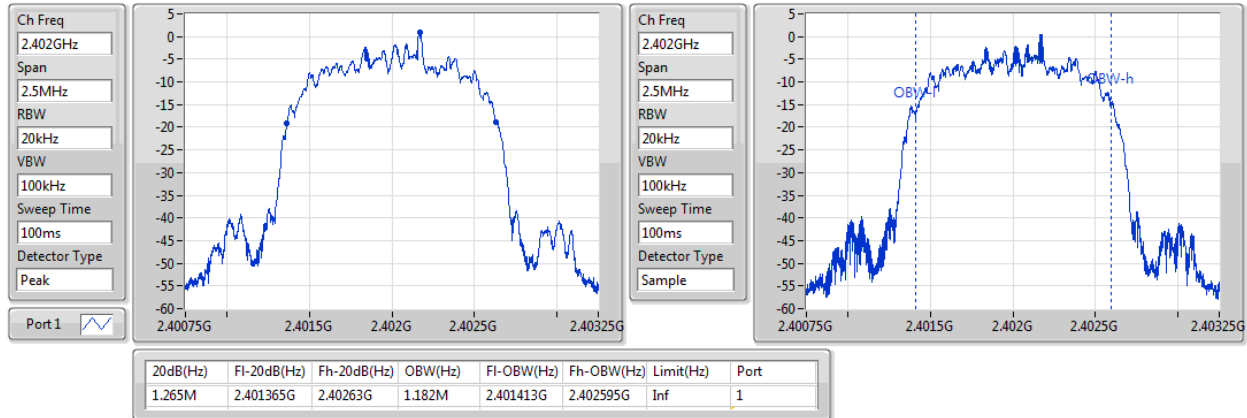

BT-EDR(2Mbps)
EBW
2480MHz

27/12/2017

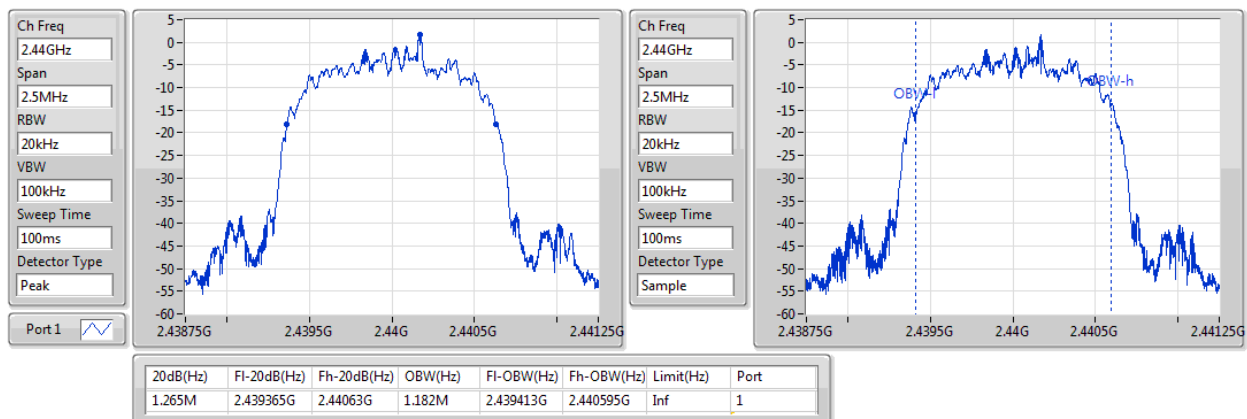


BT-EDR(3Mbps)
EBW
2402MHz

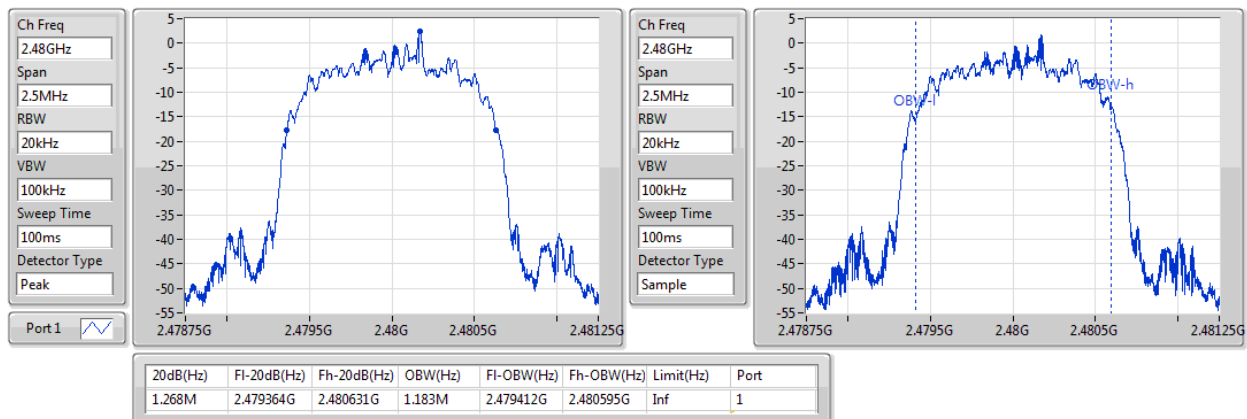
27/12/2017


BT-EDR(3Mbps)
EBW
2440MHz

27/12/2017


BT-EDR(3Mbps)
EBW
2480MHz

27/12/2017



Summary

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

Result

Mode	Result	Fl (Hz)	Fh (Hz)	Ch.Space (Hz)	Limit (Hz)
BT-BR(1Mbps)	-	-	-	-	-
2402MHz	Pass	2.402172G	2.403174G	1.002M	612.72k
2440MHz	Pass	2.440167G	2.441171G	1.0035M	613.5525k
2480MHz	Pass	2.479169G	2.480169G	1.0005M	613.5525k
BT-EDR(2Mbps)	-	-	-	-	-
2402MHz	Pass	2.40217G	2.403171G	1.0005M	852.48k
2440MHz	Pass	2.44017G	2.441171G	1.0005M	852.48k
2480MHz	Pass	2.47917G	2.480171G	1.0005M	853.146k
BT-EDR(3Mbps)	-	-	-	-	-
2402MHz	Pass	2.402169G	2.403169G	1.0005M	842.49k
2440MHz	Pass	2.44017G	2.441169G	999k	842.49k
2480MHz	Pass	2.47917G	2.480169G	999k	844.488k

BT-BR(1Mbps)

Channel Separation

2.402G/2.403GHz



Ff(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.402172G	2.403174G	1.002M	612.72k

BT-BR(1Mbps)

Channel Separation

2.44G/2.441GHz



Ff(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.440167G	2.441171G	1.0035M	613.5525k

BT-BR(1Mbps)

Channel Separation

2.48G/2.479GHz

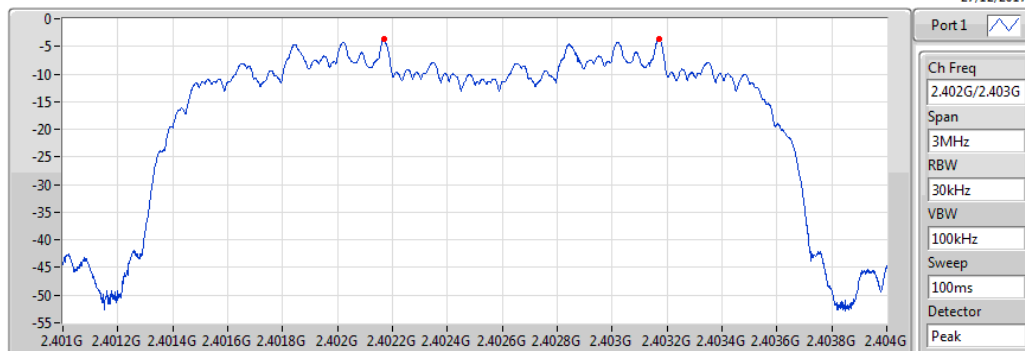


Ff(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.479169G	2.480169G	1.0005M	613.5525k

BT-EDR(2Mbps)

Channel Separation

2.402G/2.403GHz

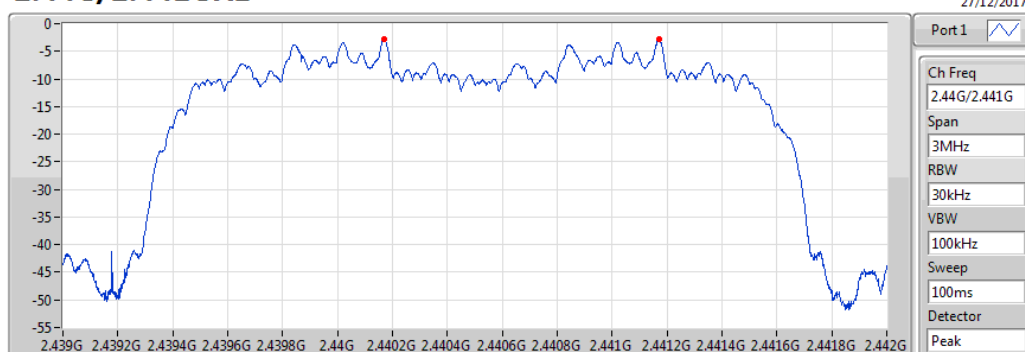


Ff(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.40217G	2.403171G	1.0005M	852.48k

BT-EDR(2Mbps)

Channel Separation

2.44G/2.441GHz

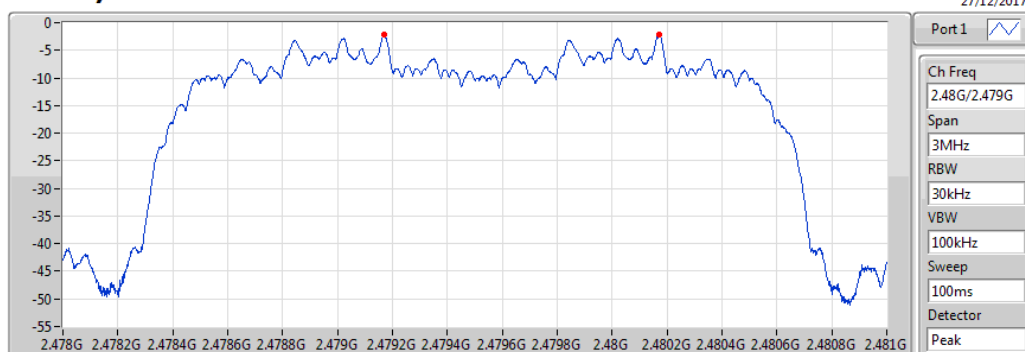


Ff(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.44017G	2.441171G	1.0005M	852.48k

BT-EDR(2Mbps)

Channel Separation

2.48G/2.479GHz

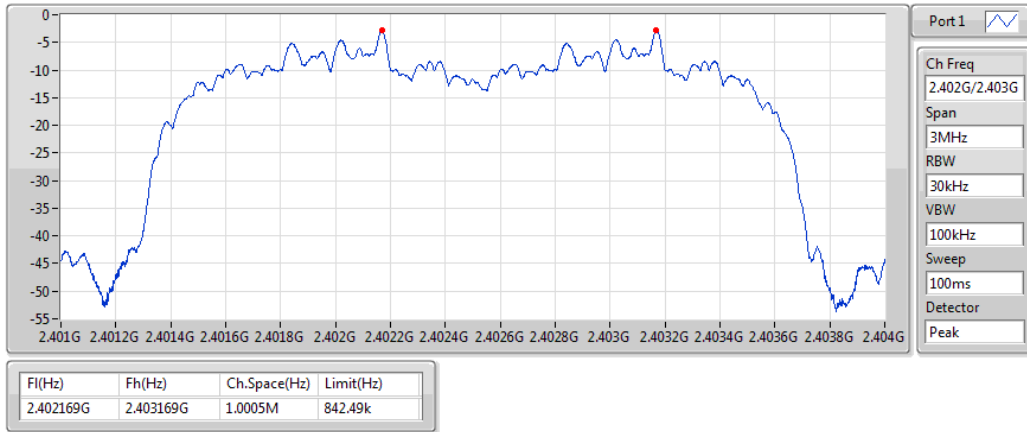


Ff(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.47917G	2.480171G	1.0005M	853.146k

BT-EDR(3Mbps)

Channel Separation

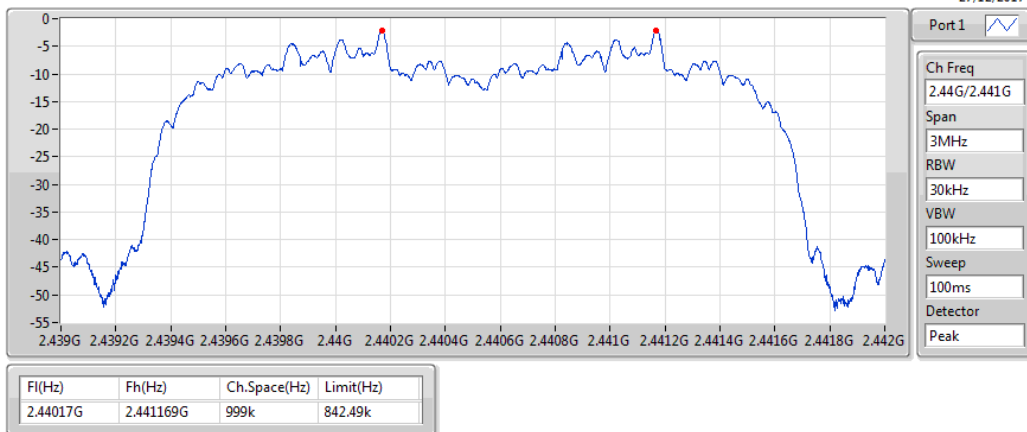
2.402G/2.403GHz



BT-EDR(3Mbps)

Channel Separation

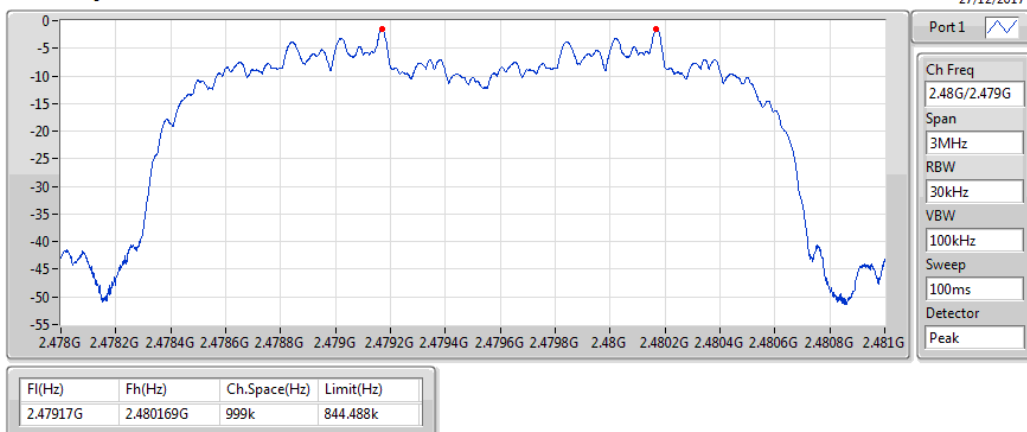
2.44G/2.441GHz



BT-EDR(3Mbps)

Channel Separation

2.48G/2.479GHz



Summary

Mode	Power	Power
	(dBm)	(W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	6.84	0.00483
BT-EDR(2Mbps)	6.92	0.00492
BT-EDR(3Mbps)	6.83	0.00482

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	3.90	5.47	21.00
2440MHz	Pass	3.90	6.20	21.00
2480MHz	Pass	3.90	6.84	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	3.90	5.47	21.00
2440MHz	Pass	3.90	6.28	21.00
2480MHz	Pass	3.90	6.92	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	3.90	5.51	21.00
2440MHz	Pass	3.90	6.27	21.00
2480MHz	Pass	3.90	6.83	21.00

Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	7.07	0.00509
BT-EDR(2Mbps)	8.54	0.00714
BT-EDR(3Mbps)	8.94	0.00783

Result

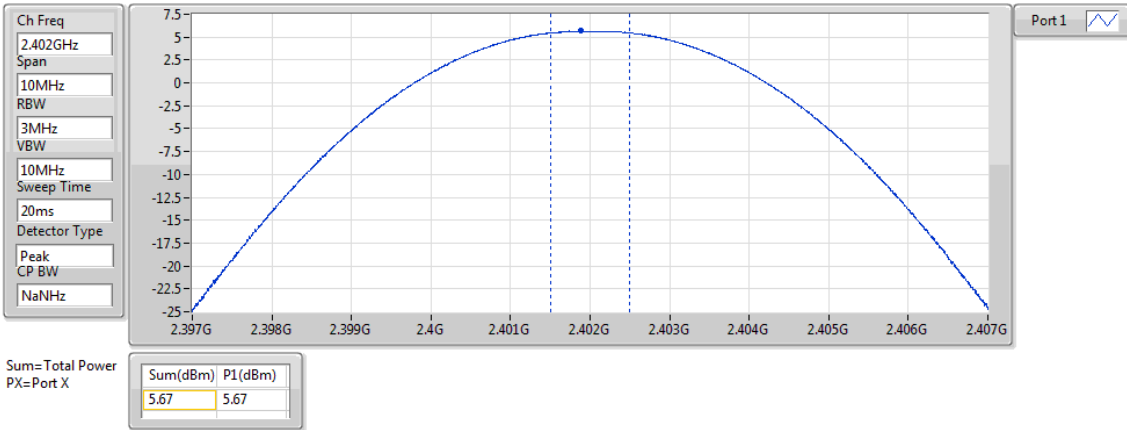
Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	3.90	5.67	21.00
2440MHz	Pass	3.90	6.50	21.00
2480MHz	Pass	3.90	7.07	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	3.90	7.20	21.00
2440MHz	Pass	3.90	7.98	21.00
2480MHz	Pass	3.90	8.54	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	3.90	7.57	21.00
2440MHz	Pass	3.90	8.37	21.00
2480MHz	Pass	3.90	8.94	21.00

BT-BR(1Mbps)

PK Power

2402MHz

28/12/2017

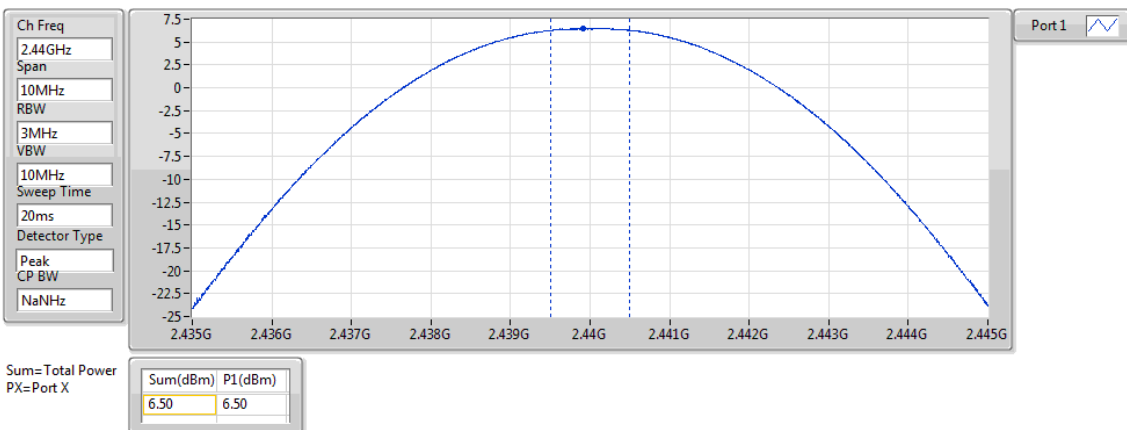


BT-BR(1Mbps)

PK Power

2440MHz

28/12/2017

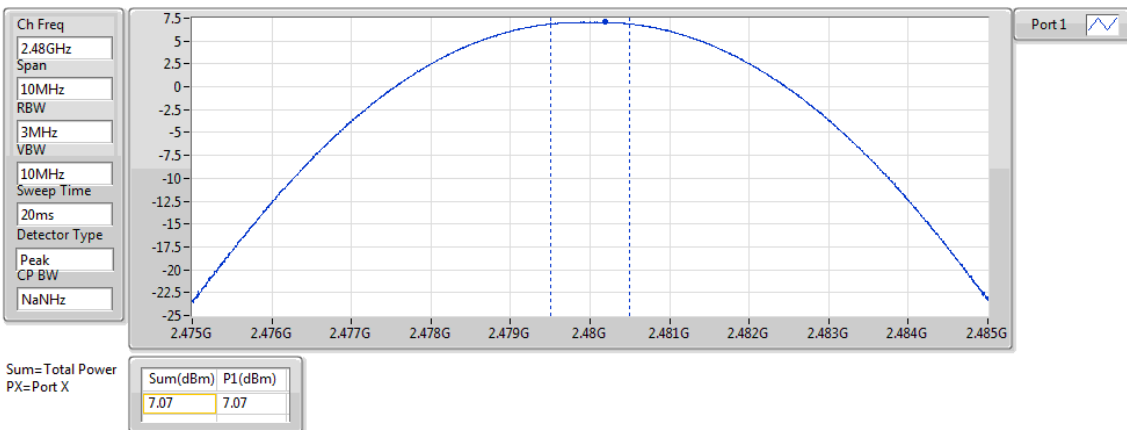


BT-BR(1Mbps)

PK Power

2480MHz

28/12/2017



Summary

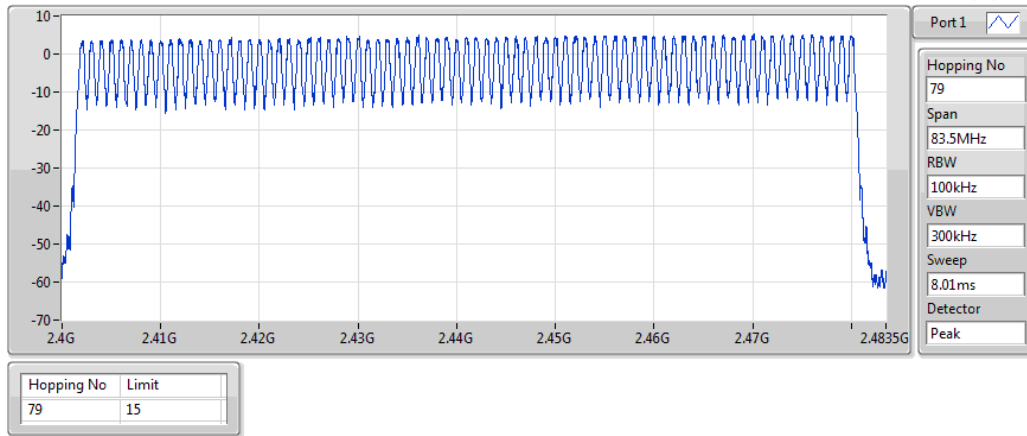
Mode	Max-Hop No
2.4-2.4835GHz	-
BT-BR(1Mbps)	79
BT-EDR(2Mbps)	79
BT-EDR(3Mbps)	79

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

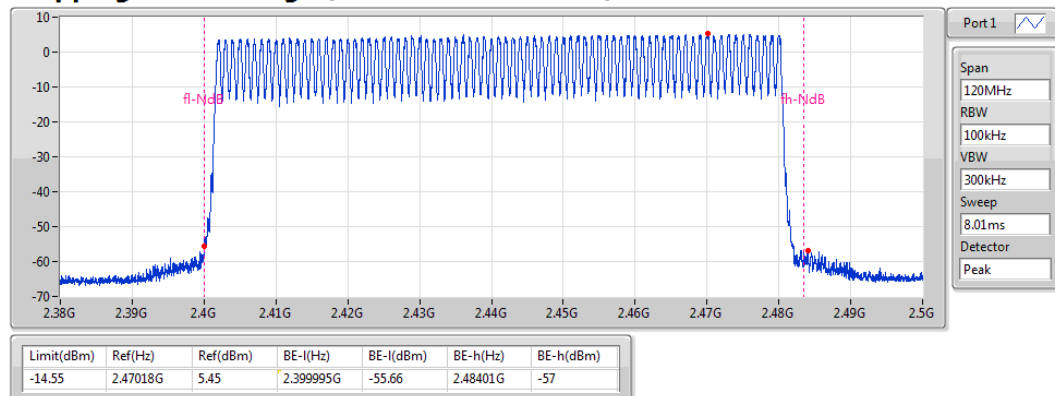
BT-BR(1Mbps) 2440MHz

Hopping Ch



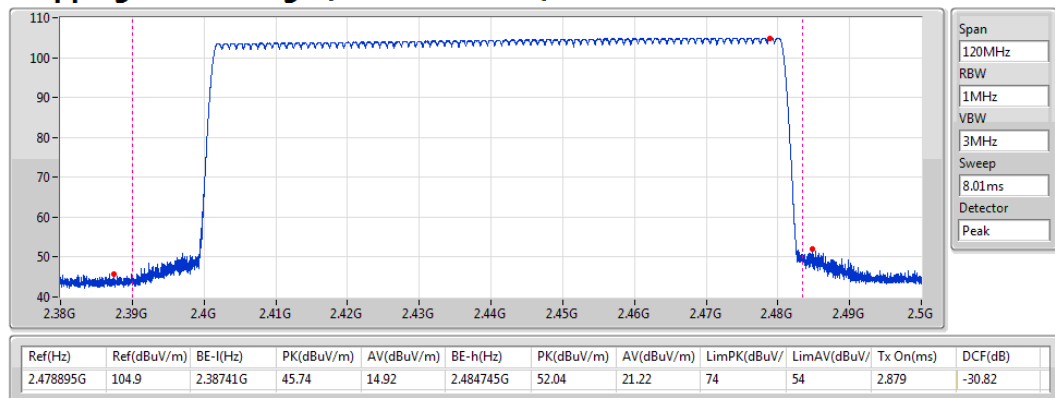
BT-BR(1Mbps) 2440MHz

Hopping Ch Bandedge (Non-restricted Band)



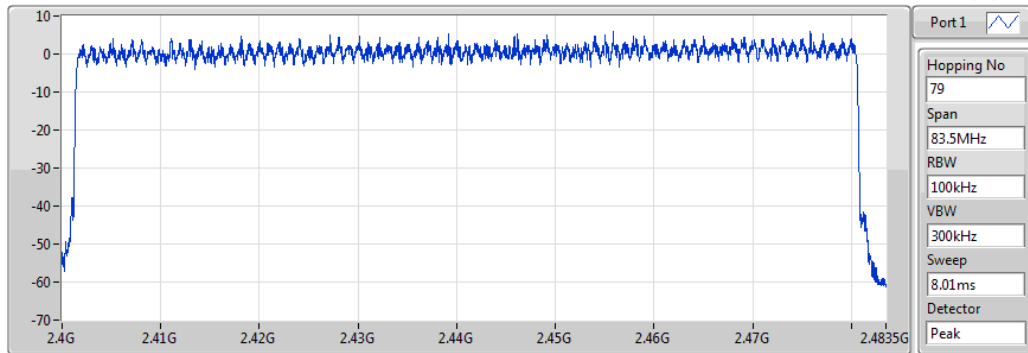
BT-BR(1Mbps) 2440MHz

Hopping Ch Bandedge (Restricted Band)



BT-EDR(2Mbps) 2440MHz

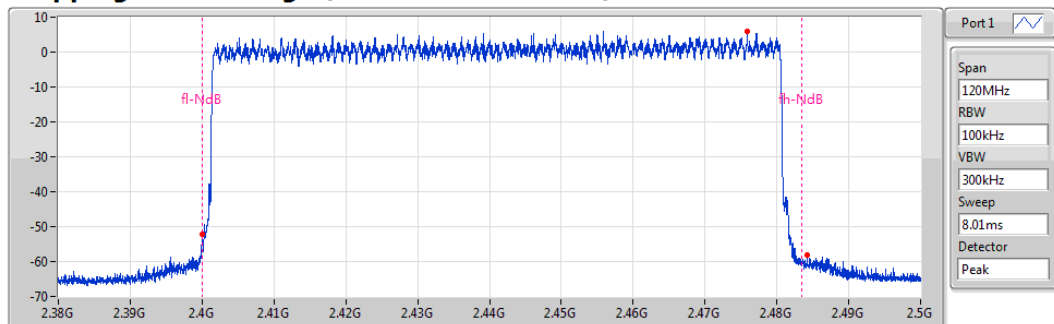
Hopping Ch



Hopping No	Limit
79	15

BT-EDR(2Mbps) 2440MHz

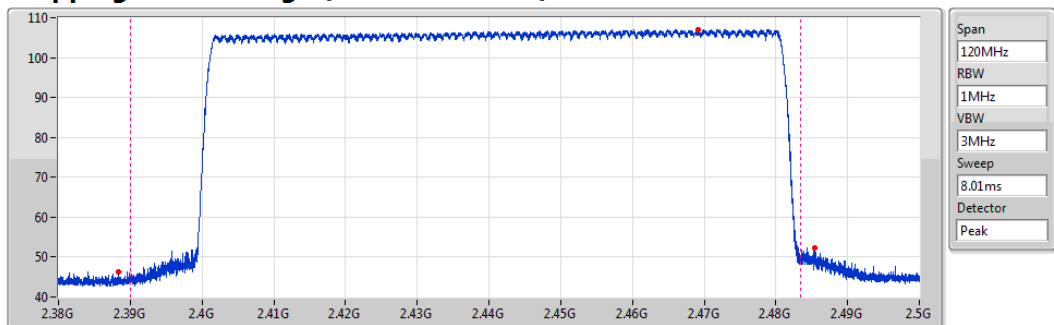
Hopping Ch Bandedge (Non-restricted Band)



Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-14.08	2.47585G	5.92	2.399995G	-52.27	2.48422G	-58.04

BT-EDR(2Mbps) 2440MHz

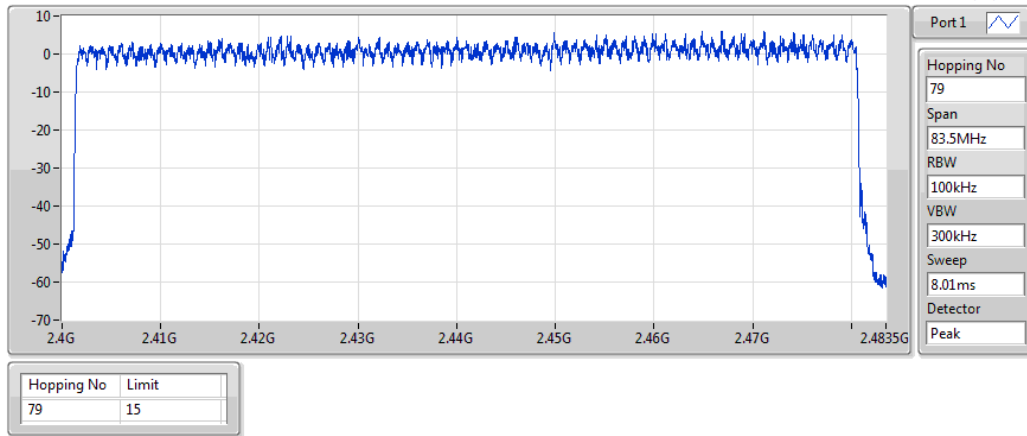
Hopping Ch Bandedge (Restricted Band)



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)
2.46916G	107	2.388355G	46.32	15.52	2.48548G	52.44	21.64	74	54	2.883	-30.8

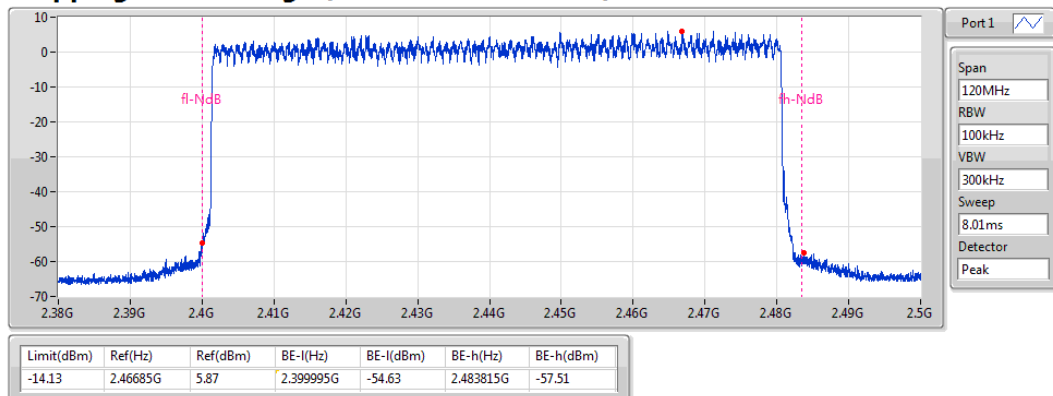
BT-EDR(3Mbps) 2440MHz

Hopping Ch



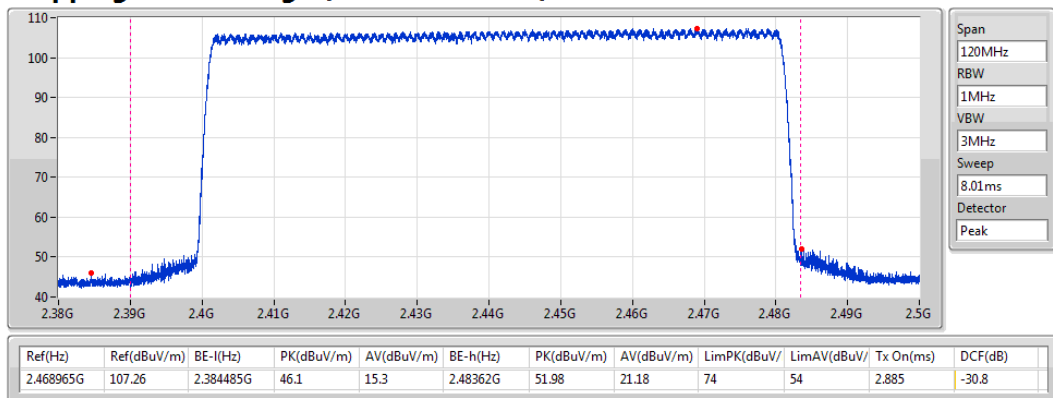
BT-EDR(3Mbps) 2440MHz

Hopping Ch Bandedge (Non-restricted Band)



BT-EDR(3Mbps) 2440MHz

Hopping Ch Bandedge (Restricted Band)



Summary

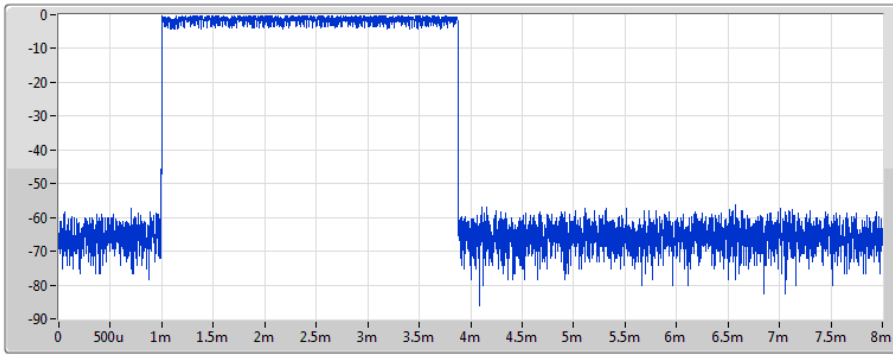
Mode	Max-Dwell (s)
2.4-2.4835GHz	-
BT-BR(1Mbps)	306.9014m
BT-EDR(2Mbps)	307.3278m
BT-EDR(3Mbps)	307.541m

Result

Mode	Result	Period (s)	Dwell (s)	Limit (s)	Tx On (s)
BT-BR(1Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	306.9014m	400m	2.879m
BT-EDR(2Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	307.3278m	400m	2.883m
BT-EDR(3Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	307.541m	400m	2.885m

BT-BR(1Mbps)

2440MHz



Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	306.9014m	400m	2.879m

Dwell

27/12/2017

Port 1 

Ch Freq
2.44GHz

RBW
300kHz

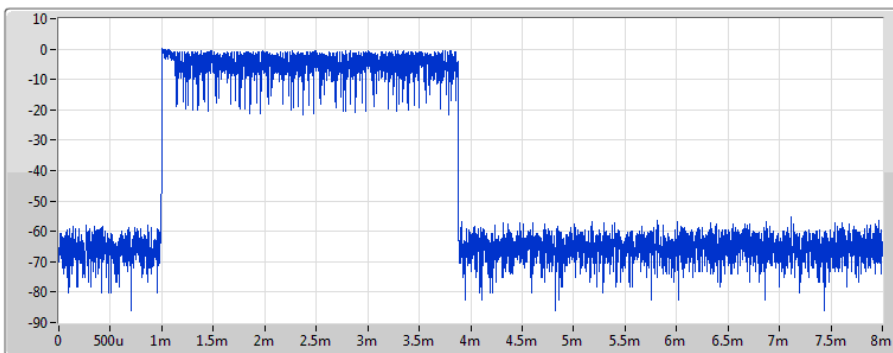
VBW
1MHz

Sweep Time
8ms

TX Time
2.879ms

BT-EDR(2Mbps)

2440MHz



Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	307.3278m	400m	2.883m

Dwell

27/12/2017

Port 1 

Ch Freq
2.44GHz

RBW
300kHz

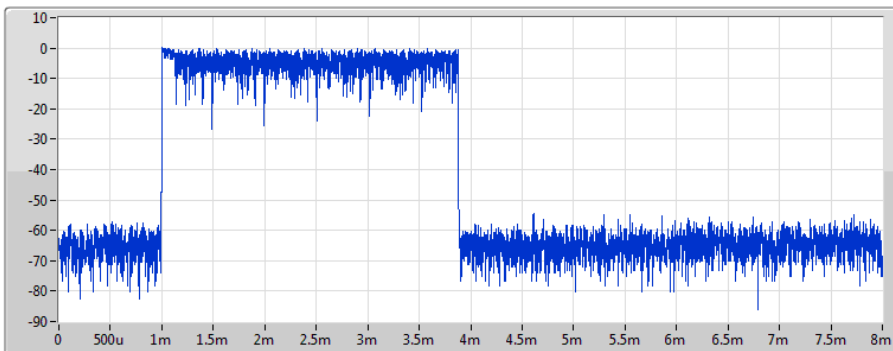
VBW
1MHz

Sweep Time
8ms

TX Time
2.883ms

BT-EDR(3Mbps)

2440MHz



Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	307.541m	400m	2.885m

Dwell

27/12/2017

Port 1 

Ch Freq
2.44GHz

RBW
300kHz

VBW
1MHz

Sweep Time
8ms

TX Time
2.885ms

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	2.401837G	-1.76	-21.76	855.248M	-59.50	2.399924G	-56.83	2.484016G	-58.95	24.698869G	-50.57	1
BT-EDR(2Mbps)	Pass	2.402004G	2.35	-17.65	2.398G	-60.52	2.399992G	-52.41	2.48502G	-63.45	7.205102G	-50.88	1
BT-EDR(3Mbps)	Pass	2.402004G	3.79	-16.21	2.395632G	-62.30	2.399956G	-53.16	2.48444G	-63.91	7.205102G	-46.30	1

Result

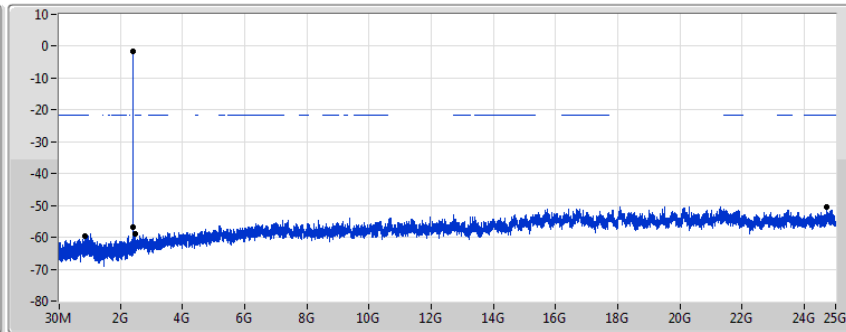
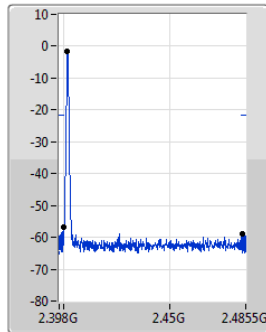
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
BT-BR(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.401837G	-1.76	-21.76	855.248M	-59.50	2.399924G	-56.83	2.484016G	-58.95	24.698869G	-50.57	1
2440MHz	Pass	2.44008G	4.17	-15.83	852.88M	-63.57	2.398932G	-64.31	2.48524G	-63.84	16.652749G	-54.49	1
2480MHz	Pass	2.48016G	4.78	-15.22	629.104M	-64.36	2.399616G	-62.68	2.484528G	-54.02	16.402275G	-55.29	1
BT-EDR(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.402004G	2.35	-17.65	2.398G	-60.52	2.399992G	-52.41	2.48502G	-63.45	7.205102G	-50.88	1
2440MHz	Pass	2.44008G	2.97	-17.03	2.11384G	-63.56	2.399992G	-63.45	2.483852G	-63.48	21.673483G	-54.93	1
2480MHz	Pass	2.480327G	2.67	-17.33	234.832M	-64.81	2.399848G	-63.65	2.484796G	-56.53	16.728736G	-55.25	1
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.402004G	3.79	-16.21	2.395632G	-62.30	2.399956G	-53.16	2.48444G	-63.91	7.205102G	-46.30	1
2440MHz	Pass	2.439913G	5.30	-14.70	791.312M	-64.93	2.399328G	-64.14	2.484936G	-63.22	16.621792G	-55.38	1
2480MHz	Pass	2.479826G	3.58	-16.42	803.152M	-64.00	2.399756G	-63.94	2.48406G	-57.00	16.73155G	-55.04	1

BT-BR(1Mbps)

CSE NdB

2402MHz

27/12/2017



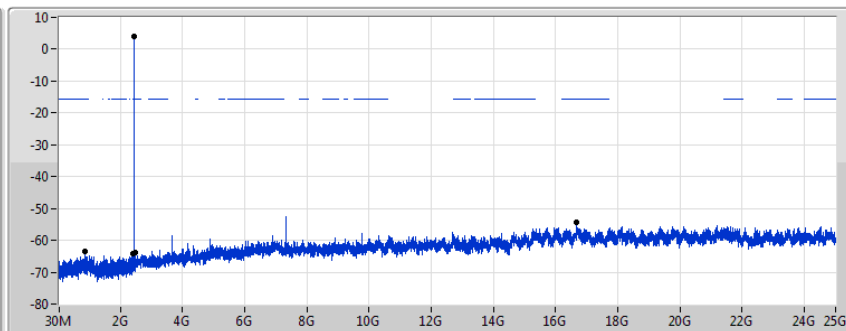
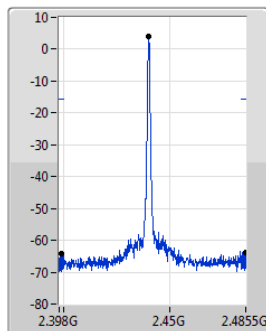
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.401837G	-1.76	-21.76	855.248M	-59.50	2.399924G	-56.83	2.484016G	-58.95	24.698869G	-50.57	1

BT-BR(1Mbps)

CSE NdB

2440MHz

27/12/2017



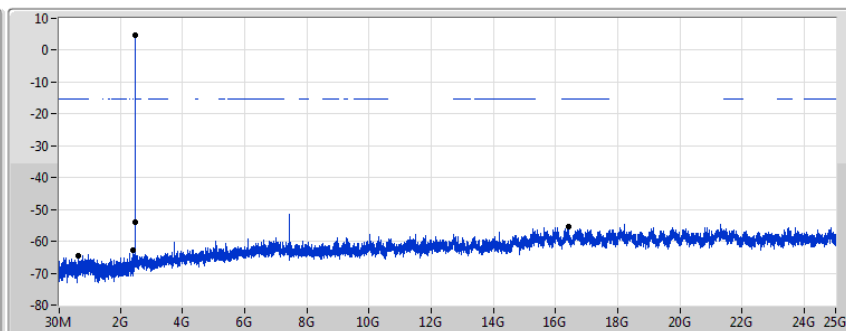
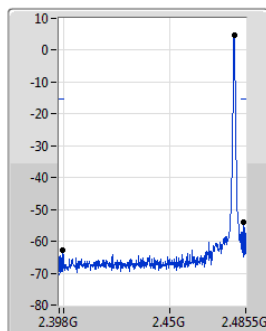
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.44008G	4.17	-15.83	852.88M	-63.57	2.398932G	-64.31	2.48524G	-63.84	16.652749G	-54.49	1

BT-BR(1Mbps)

CSE NdB

2480MHz

27/12/2017



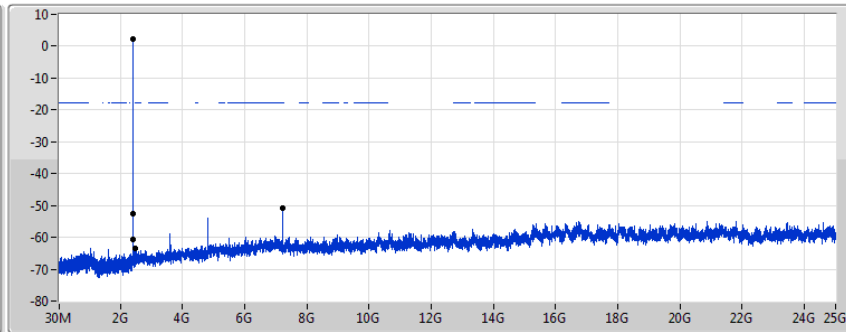
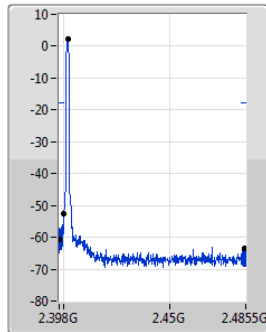
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.48016G	4.78	-15.22	629.104M	-64.36	2.399616G	-62.68	2.484528G	-54.02	16.402275G	-55.29	1

BT-EDR(2Mbps)

CSE NdB

2402MHz

27/12/2017



Port 1

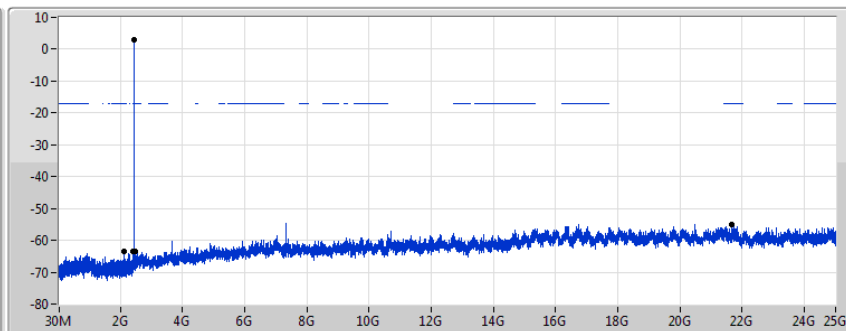
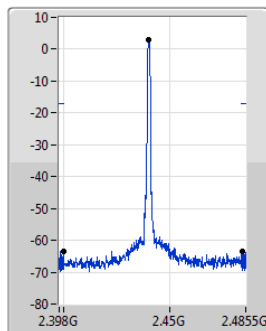
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.402004G	2.35	-17.65	2.398G	-60.52	2.399992G	-52.41	2.48502G	-63.45	7.205102G	-50.88	1

BT-EDR(2Mbps)

CSE NdB

2440MHz

27/12/2017



Port 1

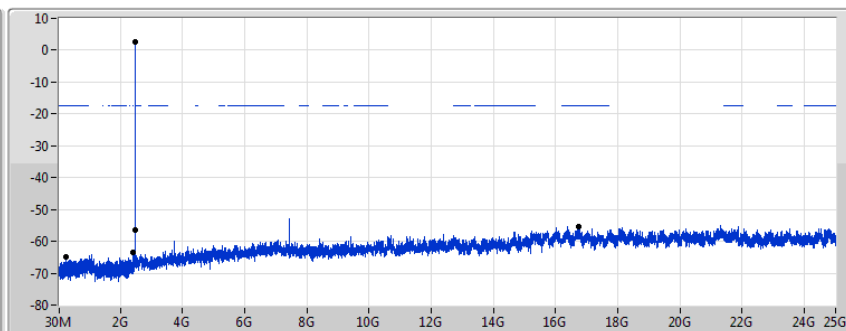
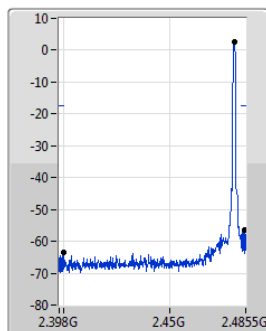
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.44008G	2.97	-17.03	2.11384G	-63.56	2.399992G	-63.45	2.483852G	-63.48	21.673483G	-54.93	1

BT-EDR(2Mbps)

CSE NdB

2480MHz

27/12/2017



Port 1

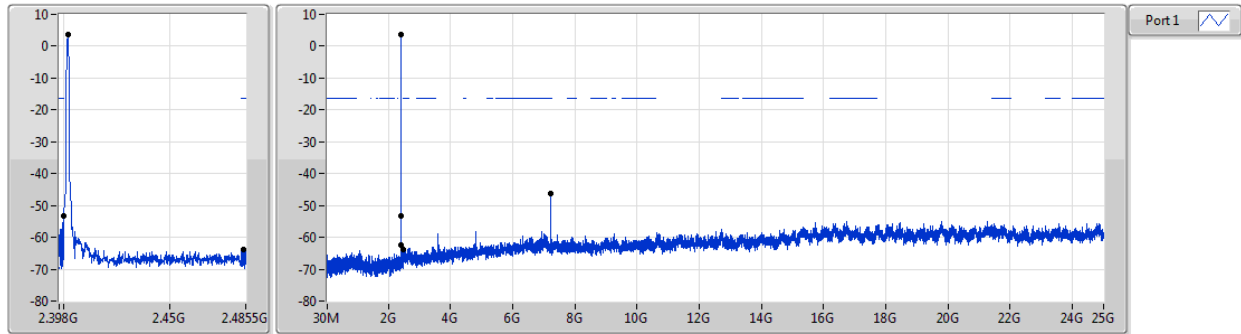
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.480327G	2.67	-17.33	234.832M	-64.81	2.399848G	-63.65	2.484796G	-56.53	16.728736G	-55.25	1

BT-EDR(3Mbps)

CSE NdB

2402MHz

27/12/2017



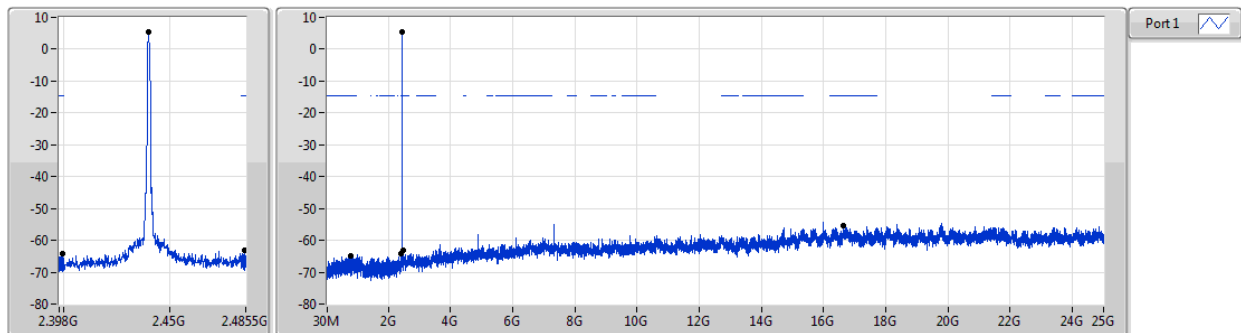
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.402004G	3.79	-16.21	2.395632G	-62.30	2.399956G	-53.16	2.48444G	-63.91	7.205102G	-46.30	1

BT-EDR(3Mbps)

CSE NdB

2440MHz

27/12/2017



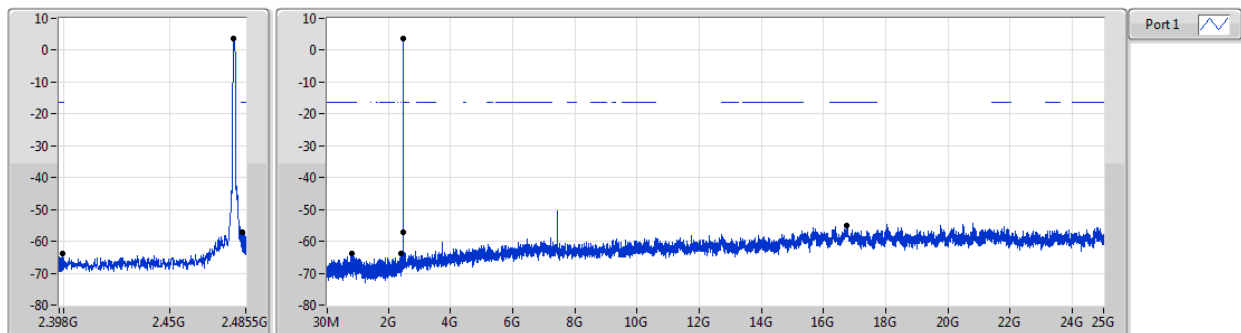
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.439913G	5.30	-14.70	791.312M	-64.93	2.399328G	-64.14	2.484936G	-63.22	16.621792G	-55.38	1

BT-EDR(3Mbps)

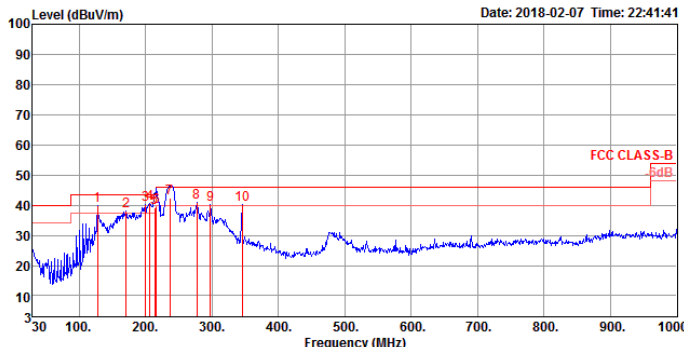
CSE NdB

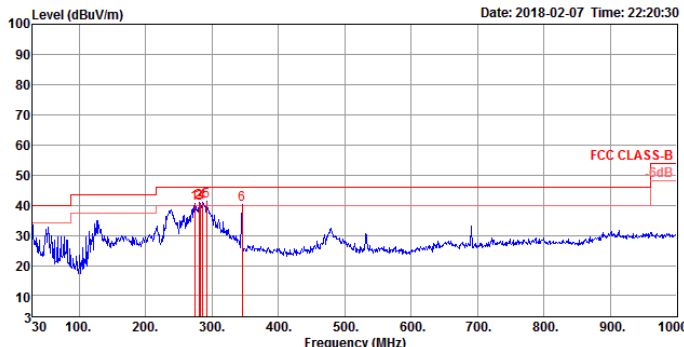
2480MHz

27/12/2017



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.479826G	3.58	-16.42	803.152M	-64.00	2.399756G	-63.94	2.48406G	-57.00	16.73155G	-55.04	1

RSE below 1GHz Result																																																																																																																																																																					
Operating Mode	1				Polarization			Horizontal																																																																																																																																																													
Operating Function	CTX																																																																																																																																																																				
Level (dBuV/m)  Date: 2018-02-07 Time: 22:41:41 <table><tr><th></th><th>Freq</th><th>Level</th><th>Limit</th><th>Over</th><th>Read</th><th>CableAntenna</th><th>Preamp</th><th>A/Pos</th><th>T/Pos</th><th>Remark</th><th>Pol/Phase</th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB</th><th>dB/m</th><th>dB</th><th>cm</th><th>deg</th><th></th></tr><tr><td>1</td><td>127.97</td><td>39.81</td><td>43.50</td><td>-3.69</td><td>52.48</td><td>1.15</td><td>18.53</td><td>32.35</td><td>100</td><td>97</td><td>Peak</td><td>HORIZONTAL</td></tr><tr><td>2</td><td>170.65</td><td>38.24</td><td>43.50</td><td>-5.26</td><td>53.32</td><td>1.27</td><td>15.98</td><td>32.33</td><td>150</td><td>173</td><td>Peak</td><td>HORIZONTAL</td></tr><tr><td>3</td><td>199.75</td><td>40.05</td><td>43.50</td><td>-3.45</td><td>54.11</td><td>1.95</td><td>16.30</td><td>32.31</td><td>100</td><td>175</td><td>Peak</td><td>HORIZONTAL</td></tr><tr><td>4</td><td>206.54</td><td>40.47</td><td>43.50</td><td>-3.03</td><td>54.41</td><td>2.01</td><td>16.36</td><td>32.31</td><td>150</td><td>3</td><td>Peak</td><td>HORIZONTAL</td></tr><tr><td>5</td><td>214.30</td><td>39.28</td><td>43.50</td><td>-4.22</td><td>53.10</td><td>2.08</td><td>16.40</td><td>32.30</td><td>195</td><td>359</td><td>QP</td><td>HORIZONTAL</td></tr><tr><td>6</td><td>216.24</td><td>39.40</td><td>46.00</td><td>-6.60</td><td>53.20</td><td>2.10</td><td>16.40</td><td>32.30</td><td>156</td><td>13</td><td>QP</td><td>HORIZONTAL</td></tr><tr><td>7</td><td>236.61</td><td>42.48</td><td>46.00</td><td>-3.52</td><td>54.80</td><td>2.27</td><td>17.70</td><td>32.29</td><td>146</td><td>33</td><td>QP</td><td>HORIZONTAL</td></tr><tr><td>8</td><td>277.35</td><td>41.06</td><td>46.00</td><td>-4.94</td><td>51.52</td><td>2.52</td><td>19.30</td><td>32.28</td><td>150</td><td>248</td><td>Peak</td><td>HORIZONTAL</td></tr><tr><td>9</td><td>297.72</td><td>40.21</td><td>46.00</td><td>-5.79</td><td>50.22</td><td>2.62</td><td>19.64</td><td>32.27</td><td>100</td><td>137</td><td>Peak</td><td>HORIZONTAL</td></tr><tr><td>10</td><td>345.25</td><td>40.21</td><td>46.00</td><td>-5.79</td><td>50.04</td><td>1.48</td><td>20.97</td><td>32.28</td><td>100</td><td>360</td><td>Peak</td><td>HORIZONTAL</td></tr></table>													Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		1	127.97	39.81	43.50	-3.69	52.48	1.15	18.53	32.35	100	97	Peak	HORIZONTAL	2	170.65	38.24	43.50	-5.26	53.32	1.27	15.98	32.33	150	173	Peak	HORIZONTAL	3	199.75	40.05	43.50	-3.45	54.11	1.95	16.30	32.31	100	175	Peak	HORIZONTAL	4	206.54	40.47	43.50	-3.03	54.41	2.01	16.36	32.31	150	3	Peak	HORIZONTAL	5	214.30	39.28	43.50	-4.22	53.10	2.08	16.40	32.30	195	359	QP	HORIZONTAL	6	216.24	39.40	46.00	-6.60	53.20	2.10	16.40	32.30	156	13	QP	HORIZONTAL	7	236.61	42.48	46.00	-3.52	54.80	2.27	17.70	32.29	146	33	QP	HORIZONTAL	8	277.35	41.06	46.00	-4.94	51.52	2.52	19.30	32.28	150	248	Peak	HORIZONTAL	9	297.72	40.21	46.00	-5.79	50.22	2.62	19.64	32.27	100	137	Peak	HORIZONTAL	10	345.25	40.21	46.00	-5.79	50.04	1.48	20.97	32.28	100	360	Peak	HORIZONTAL
	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase																																																																																																																																																										
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg																																																																																																																																																											
1	127.97	39.81	43.50	-3.69	52.48	1.15	18.53	32.35	100	97	Peak	HORIZONTAL																																																																																																																																																									
2	170.65	38.24	43.50	-5.26	53.32	1.27	15.98	32.33	150	173	Peak	HORIZONTAL																																																																																																																																																									
3	199.75	40.05	43.50	-3.45	54.11	1.95	16.30	32.31	100	175	Peak	HORIZONTAL																																																																																																																																																									
4	206.54	40.47	43.50	-3.03	54.41	2.01	16.36	32.31	150	3	Peak	HORIZONTAL																																																																																																																																																									
5	214.30	39.28	43.50	-4.22	53.10	2.08	16.40	32.30	195	359	QP	HORIZONTAL																																																																																																																																																									
6	216.24	39.40	46.00	-6.60	53.20	2.10	16.40	32.30	156	13	QP	HORIZONTAL																																																																																																																																																									
7	236.61	42.48	46.00	-3.52	54.80	2.27	17.70	32.29	146	33	QP	HORIZONTAL																																																																																																																																																									
8	277.35	41.06	46.00	-4.94	51.52	2.52	19.30	32.28	150	248	Peak	HORIZONTAL																																																																																																																																																									
9	297.72	40.21	46.00	-5.79	50.22	2.62	19.64	32.27	100	137	Peak	HORIZONTAL																																																																																																																																																									
10	345.25	40.21	46.00	-5.79	50.04	1.48	20.97	32.28	100	360	Peak	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.)																																																																																																																																																																					

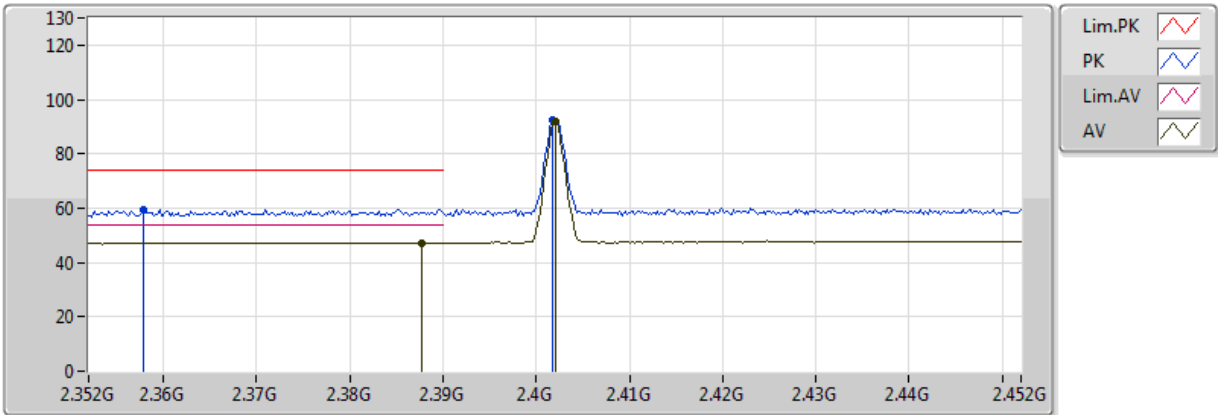
RSE below 1GHz Result																																																																																																											
Operating Mode	1				Polarization				Vertical																																																																																																		
Operating Function	CTX																																																																																																										
Level (dBuV/m) 100 90 80 70 60 50 40 30 20 10 0 Date: 2018-02-07 Time: 22:20:30  <table><tr><th></th><th>Freq</th><th>Level</th><th>Limit</th><th>Over</th><th>Read</th><th>CableAntenna</th><th>Preamp</th><th>A/Pos</th><th>T/Pos</th><th>Remark</th><th>Pol/Phase</th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB</th><th>dB/m</th><th>dB</th><th>cm</th><th>deg</th><th></th></tr><tr><td>1</td><td>274.44</td><td>40.56</td><td>46.00</td><td>-5.44</td><td>51.03</td><td>2.51</td><td>19.30</td><td>32.28</td><td>200</td><td>358 Peak</td><td>VERTICAL</td></tr><tr><td>2</td><td>280.26</td><td>40.95</td><td>46.00</td><td>-5.05</td><td>51.40</td><td>2.53</td><td>19.30</td><td>32.28</td><td>150</td><td>148 Peak</td><td>VERTICAL</td></tr><tr><td>3</td><td>282.20</td><td>40.47</td><td>46.00</td><td>-5.53</td><td>50.87</td><td>2.54</td><td>19.34</td><td>32.28</td><td>150</td><td>359 Peak</td><td>VERTICAL</td></tr><tr><td>4</td><td>285.11</td><td>40.98</td><td>46.00</td><td>-5.02</td><td>51.29</td><td>2.56</td><td>19.40</td><td>32.27</td><td>200</td><td>4 Peak</td><td>VERTICAL</td></tr><tr><td>5</td><td>291.90</td><td>41.38</td><td>46.00</td><td>-4.62</td><td>51.52</td><td>2.59</td><td>19.54</td><td>32.27</td><td>200</td><td>0 Peak</td><td>VERTICAL</td></tr><tr><td>6</td><td>345.25</td><td>40.09</td><td>46.00</td><td>-5.91</td><td>49.92</td><td>1.48</td><td>20.97</td><td>32.28</td><td>150</td><td>359 Peak</td><td>VERTICAL</td></tr></table>													Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		1	274.44	40.56	46.00	-5.44	51.03	2.51	19.30	32.28	200	358 Peak	VERTICAL	2	280.26	40.95	46.00	-5.05	51.40	2.53	19.30	32.28	150	148 Peak	VERTICAL	3	282.20	40.47	46.00	-5.53	50.87	2.54	19.34	32.28	150	359 Peak	VERTICAL	4	285.11	40.98	46.00	-5.02	51.29	2.56	19.40	32.27	200	4 Peak	VERTICAL	5	291.90	41.38	46.00	-4.62	51.52	2.59	19.54	32.27	200	0 Peak	VERTICAL	6	345.25	40.09	46.00	-5.91	49.92	1.48	20.97	32.28	150	359 Peak	VERTICAL
	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase																																																																																																
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg																																																																																																	
1	274.44	40.56	46.00	-5.44	51.03	2.51	19.30	32.28	200	358 Peak	VERTICAL																																																																																																
2	280.26	40.95	46.00	-5.05	51.40	2.53	19.30	32.28	150	148 Peak	VERTICAL																																																																																																
3	282.20	40.47	46.00	-5.53	50.87	2.54	19.34	32.28	150	359 Peak	VERTICAL																																																																																																
4	285.11	40.98	46.00	-5.02	51.29	2.56	19.40	32.27	200	4 Peak	VERTICAL																																																																																																
5	291.90	41.38	46.00	-4.62	51.52	2.59	19.54	32.27	200	0 Peak	VERTICAL																																																																																																
6	345.25	40.09	46.00	-5.91	49.92	1.48	20.97	32.28	150	359 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.)																																																																																																											

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Pol. (H/V)	Azimuth (°)	Height (m)	Comments
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	AV	2.4892G	48.12	54.00	-5.88	32.46	3	H	154	2.59	-

BT-BR(1Mbps)

2402MHz_TX

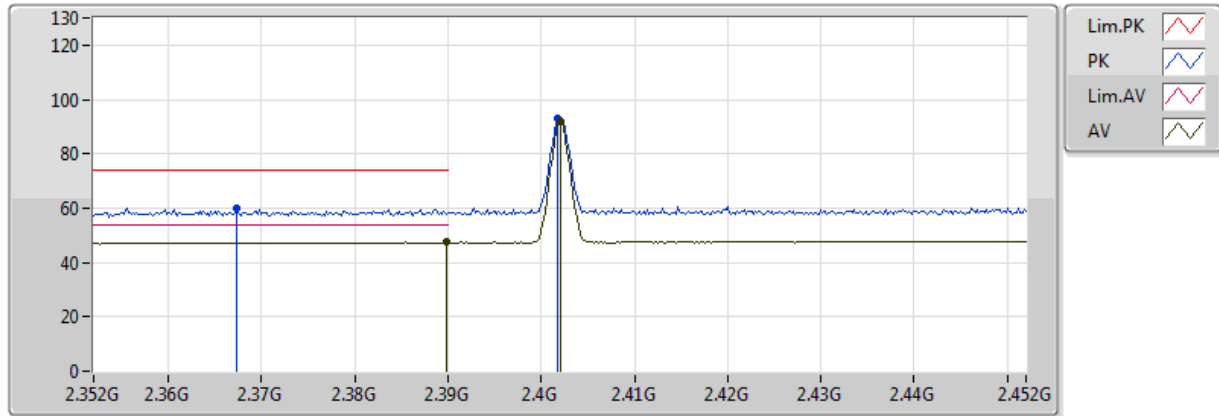


20171226
EUT_Y_1TX
Setting Default
02-R-5
FSV

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3878G	47.33	54.00	-6.67	32.13	3	V	171	2.02	-
AV	2.402G	91.66	Inf	-Inf	32.18	3	V	171	2.02	-
PK	2.3578G	59.55	74.00	-14.45	32.04	3	V	171	2.02	-
PK	2.4018G	92.70	Inf	-Inf	32.18	3	V	171	2.02	-

BT-BR(1Mbps)

2402MHz_TX

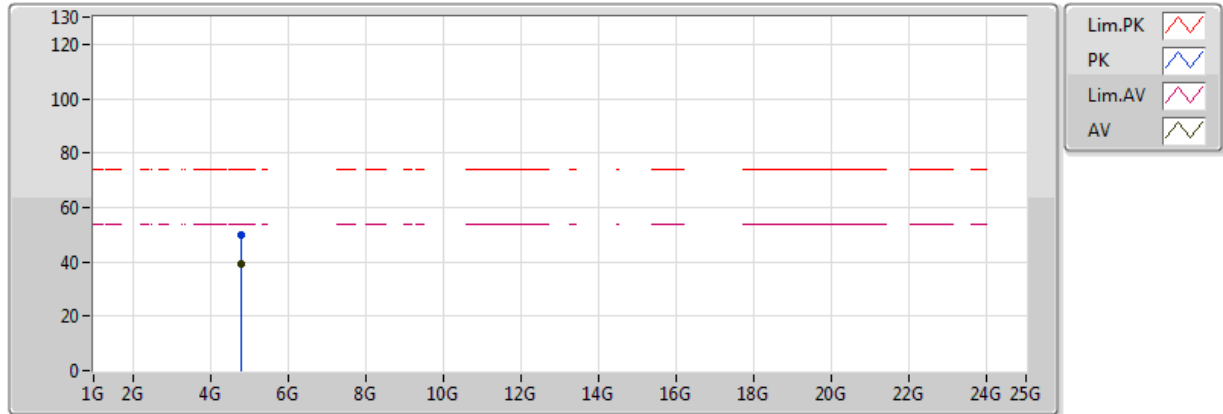


20171226
EUT_Y_1TX
Setting Default
02-R-5
FSV

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3898G	47.39	54.00	-6.61	32.14	3	H	359	1.00	-
AV	2.402G	91.72	Inf	-Inf	32.18	3	H	359	1.00	-
PK	2.3674G	59.88	74.00	-14.12	32.07	3	H	359	1.00	-
PK	2.4018G	92.81	Inf	-Inf	32.18	3	H	359	1.00	-

BT-BR(1Mbps)

2402MHz_TX

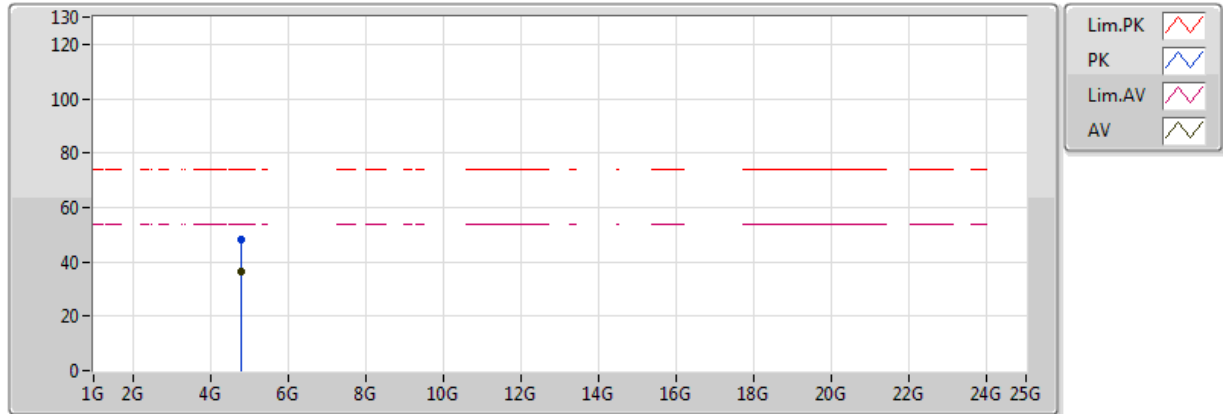


20171226
EUT_Y_1TX
Setting Default
02-R-5
FSV

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.80402G	39.19	54.00	-14.81	9.15	3	V	246	2.17	-
PK	4.80378G	50.05	74.00	-23.95	9.15	3	V	246	2.17	-

BT-BR(1Mbps)

2402MHz_TX

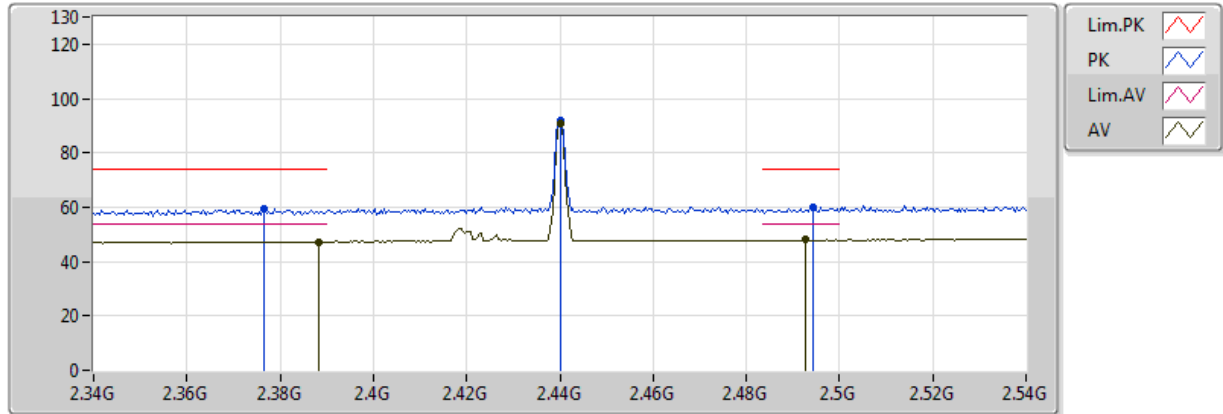


20171226
EUT_Y_1TX
Setting Default
02-R-5
FSV

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.80398G	36.36	54.00	-17.64	9.15	3	H	358	1.85	-
PK	4.80414G	48.01	74.00	-25.99	9.15	3	H	358	1.85	-

BT-BR(1Mbps)

2440MHz_TX

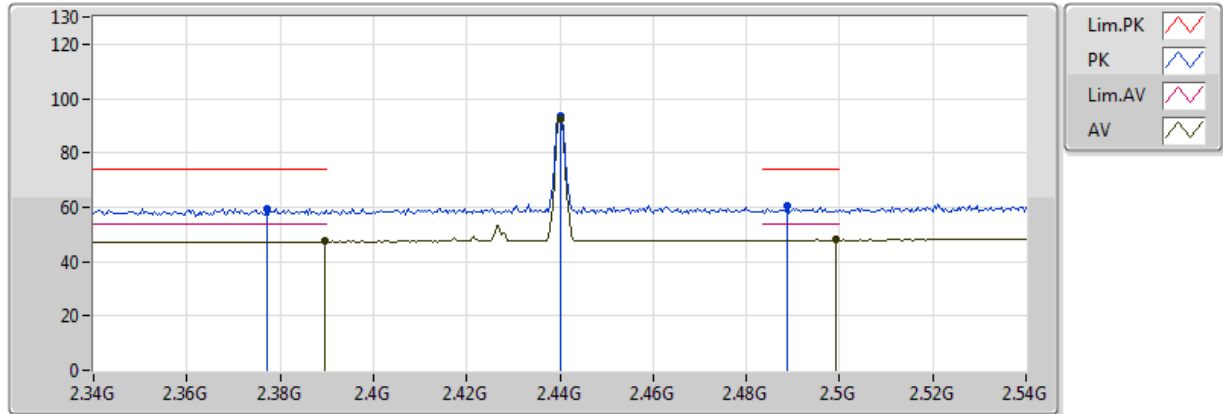


20171226
EUT_Y_1TX
Setting Default
02-R-5
FSV

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3884G	47.33	54.00	-6.67	32.14	3	V	151	2.00	-
AV	2.44G	90.53	Inf	-Inf	32.30	3	V	151	2.00	-
AV	2.4928G	47.95	54.00	-6.05	32.48	3	V	151	2.00	-
PK	2.3764G	59.63	74.00	-14.37	32.10	3	V	151	2.00	-
PK	2.44G	91.64	Inf	-Inf	32.30	3	V	151	2.00	-
PK	2.4944G	60.22	74.00	-13.78	32.48	3	V	151	2.00	-

BT-BR(1Mbps)

2440MHz_TX

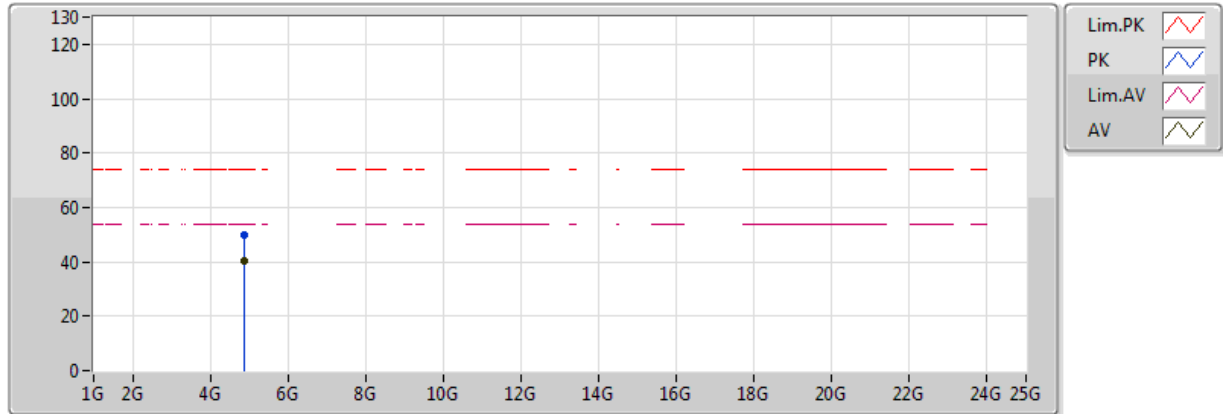


20171226
EUT_Y_1TX
Setting Default
02-R-5
FSV

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3896G	47.47	54.00	-6.53	32.14	3	H	309	1.05	-
AV	2.44G	92.63	Inf	-Inf	32.30	3	H	309	1.05	-
AV	2.4992G	48.03	54.00	-5.97	32.50	3	H	309	1.05	-
PK	2.3772G	59.62	74.00	-14.38	32.10	3	H	309	1.05	-
PK	2.44G	93.81	Inf	-Inf	32.30	3	H	309	1.05	-
PK	2.4888G	60.28	74.00	-13.72	32.46	3	H	309	1.05	-

BT-BR(1Mbps)

2440MHz_TX

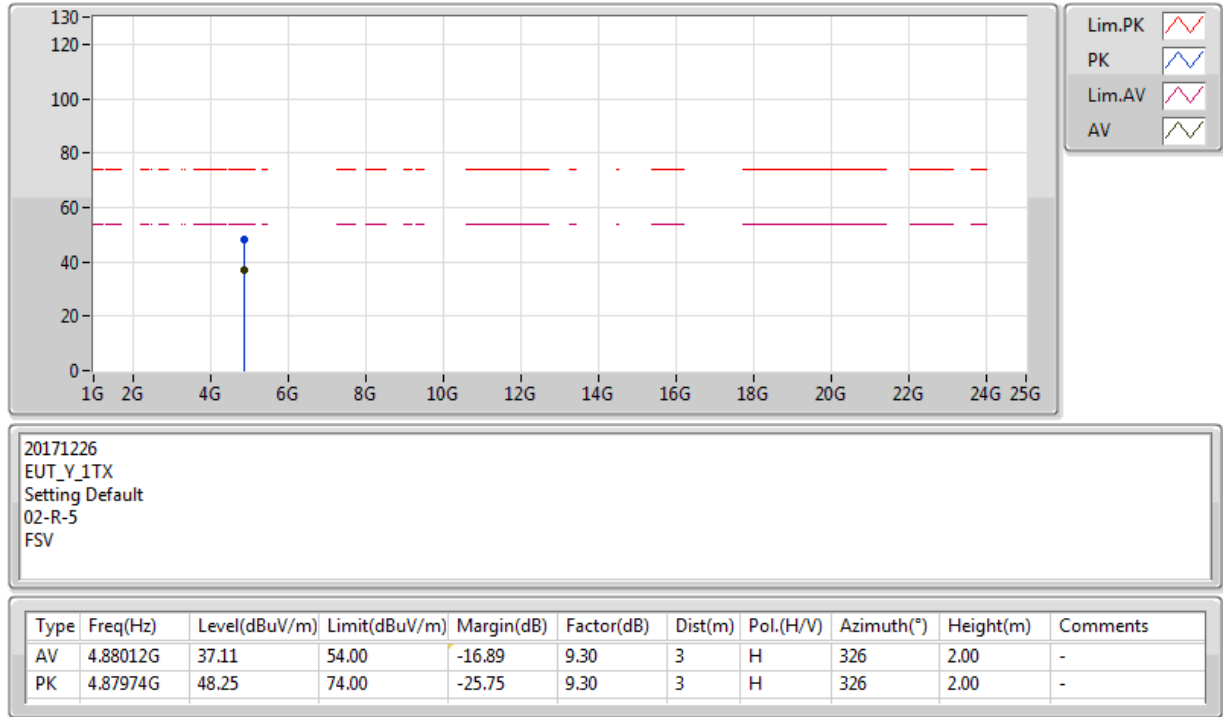


20171226
EUT_Y_1TX
Setting Default
02-R-5
FSV

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.88006G	40.17	54.00	-13.83	9.30	3	V	217	2.01	-
PK	4.8797G	49.68	74.00	-24.32	9.30	3	V	217	2.01	-

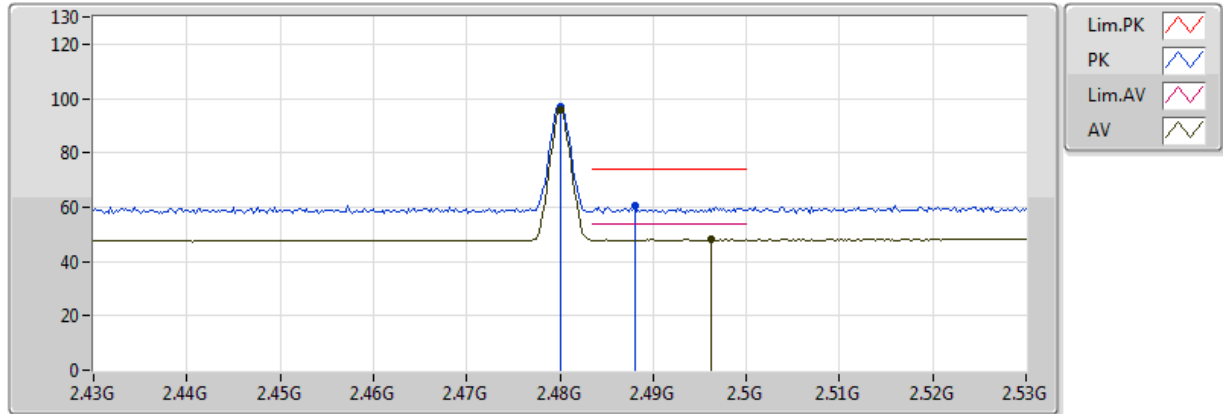
BT-BR(1Mbps)

2440MHz_TX



BT-BR(1Mbps)

2480MHz_TX

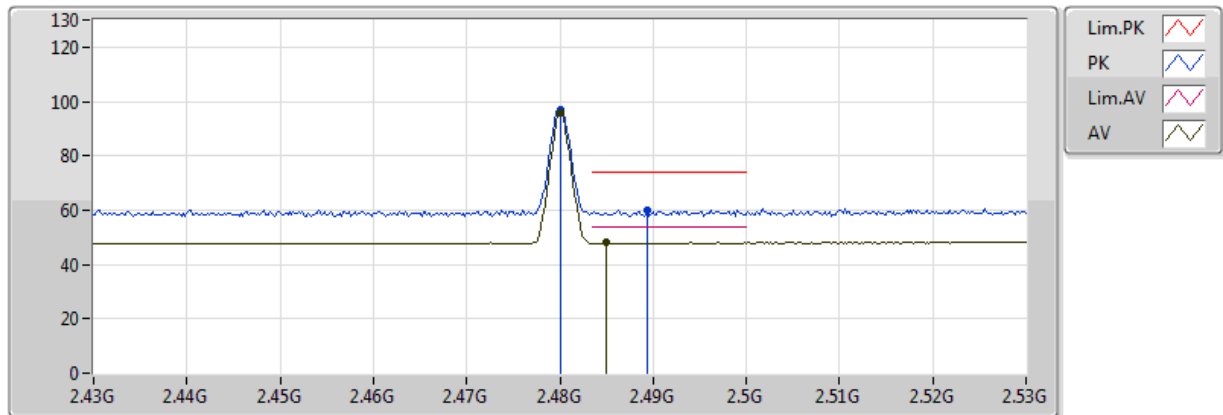


20171226
EUT_Y_1TX
Setting Default
02-R-5
FSV

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.48G	95.83	Inf	-Inf	32.43	3	V	94	2.31	-
AV	2.4962G	48.07	54.00	-5.93	32.49	3	V	94	2.31	-
PK	2.48G	96.97	Inf	-Inf	32.43	3	V	94	2.31	-
PK	2.488G	60.48	74.00	-13.52	32.46	3	V	94	2.31	-

BT-BR(1Mbps)

2480MHz_TX

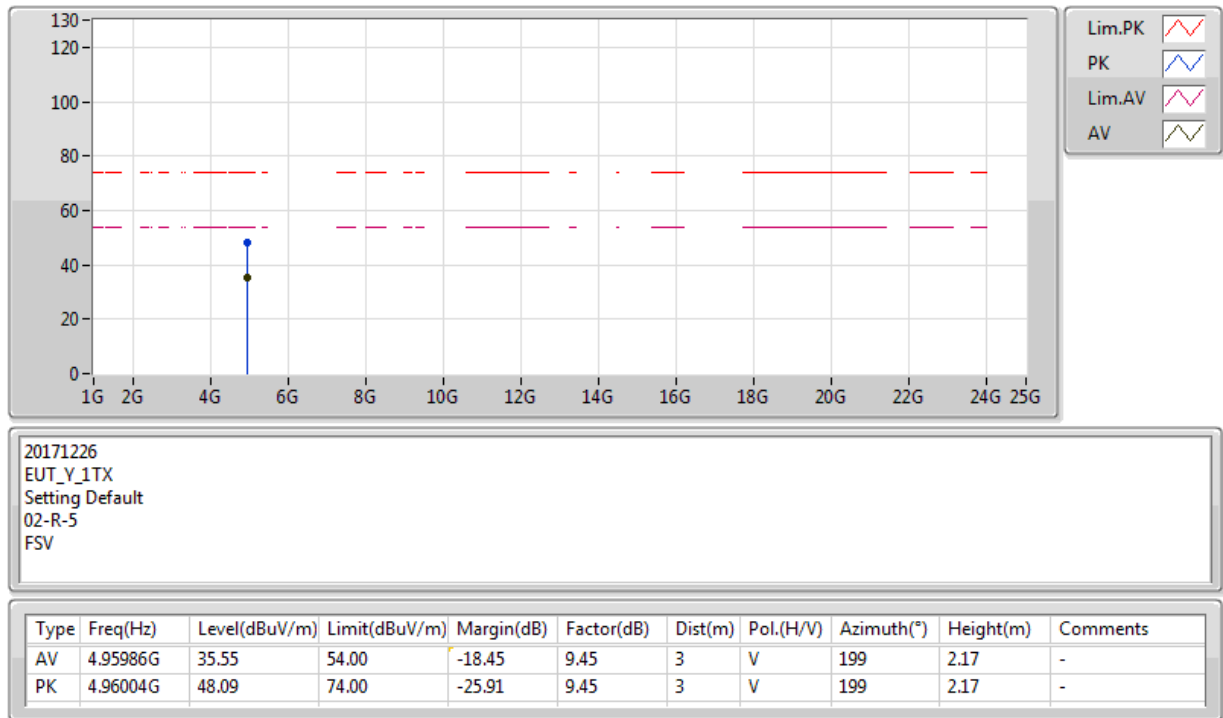


20171226
EUT_Y_1TX
Setting Default
02-R-5
FSV

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.48G	95.77	Inf	-Inf	32.43	3	H	288	1.33	-
AV	2.485G	47.95	54.00	-6.05	32.45	3	H	288	1.33	-
PK	2.48G	96.91	Inf	-Inf	32.43	3	H	288	1.33	-
PK	2.4894G	59.78	74.00	-14.22	32.47	3	H	288	1.33	-

BT-BR(1Mbps)

2480MHz_TX



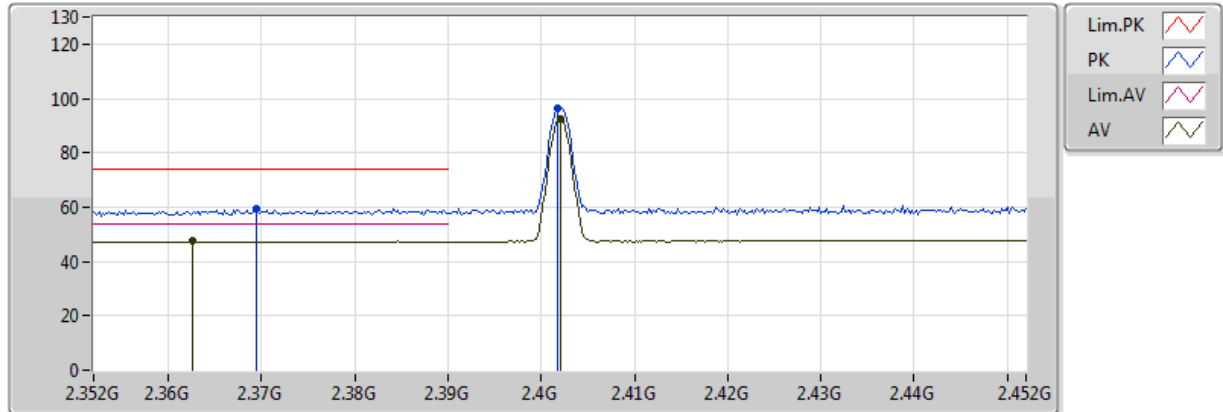
BT-BR(1Mbps)

2480MHz_TX



BT-EDR(3Mbps)

2402MHz_TX

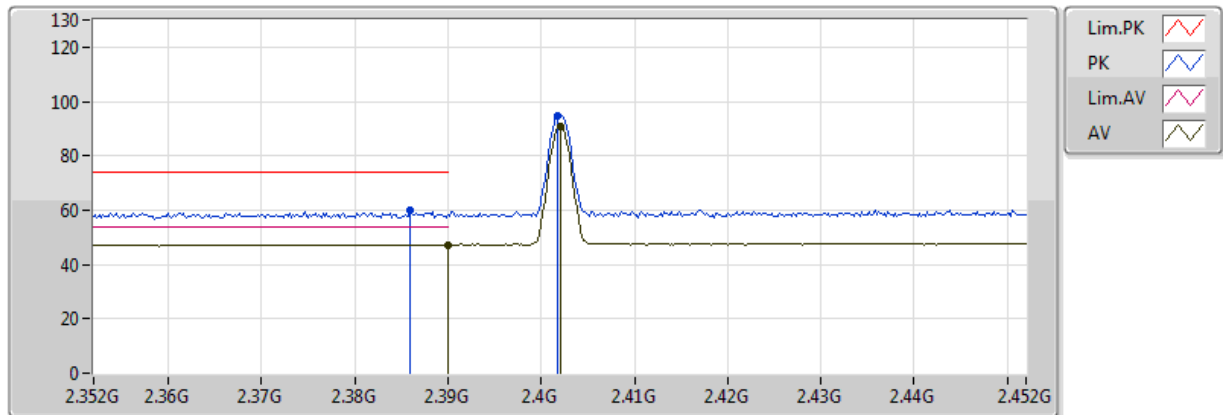


20171226
EUT_Y_1TX
Setting Default
02-R-5
FSV

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3626G	47.40	54.00	-6.60	32.06	3	V	312	2.44	-
AV	2.402G	92.21	Inf	-Inf	32.18	3	V	312	2.44	-
PK	2.3694G	59.39	74.00	-14.61	32.08	3	V	312	2.44	-
PK	2.4018G	96.52	Inf	-Inf	32.18	3	V	312	2.44	-

BT-EDR(3Mbps)

2402MHz_TX

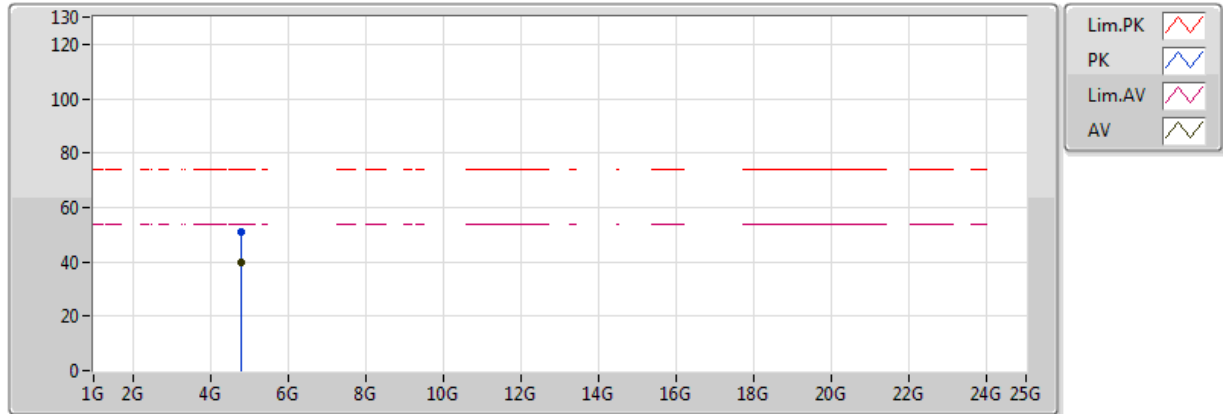


20171226
EUT_Y_1TX
Setting Default
02-R-5
FSV

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.39G	47.34	54.00	-6.66	32.14	3	H	222	2.57	-
AV	2.402G	90.55	Inf	-Inf	32.18	3	H	222	2.57	-
PK	2.386G	59.74	74.00	-14.26	32.13	3	H	222	2.57	-
PK	2.4018G	94.85	Inf	-Inf	32.18	3	H	222	2.57	-

BT-EDR(3Mbps)

2402MHz_TX

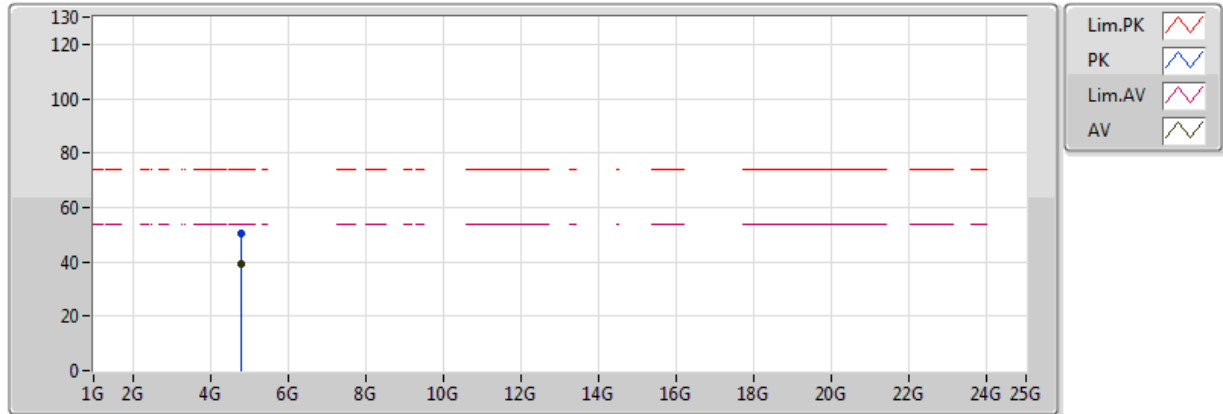


20171226
EUT_Y_1TX
Setting Default
02-R-5
FSV

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.80404G	39.91	54.00	-14.09	9.15	3	V	252	2.19	-
PK	4.80384G	50.83	74.00	-23.17	9.15	3	V	252	2.19	-

BT-EDR(3Mbps)

2402MHz_TX

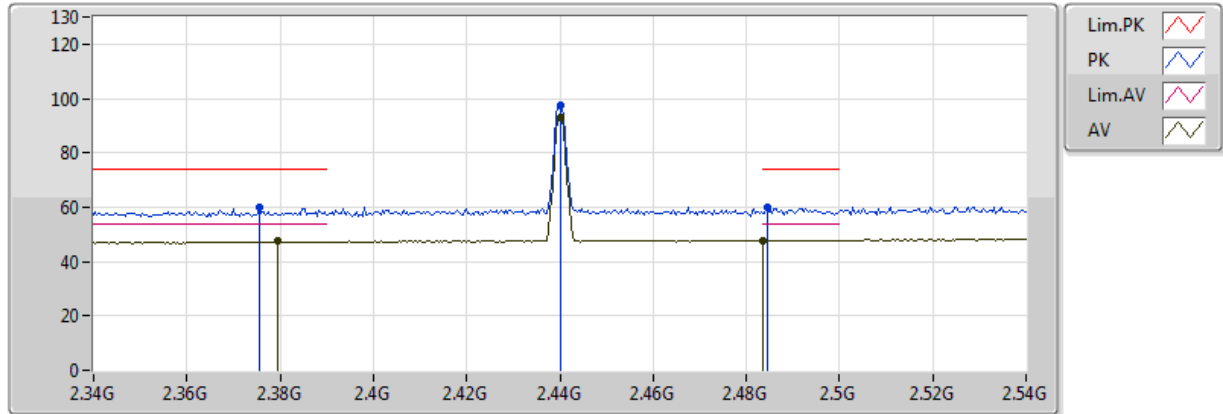


20171226
EUT_Y_1TX
Setting Default
02-R-5
FSV

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.804G	39.19	54.00	-14.81	9.15	3	H	140	2.54	-
PK	4.80392G	50.58	74.00	-23.42	9.15	3	H	140	2.54	-

BT-EDR(3Mbps)

2440MHz_TX

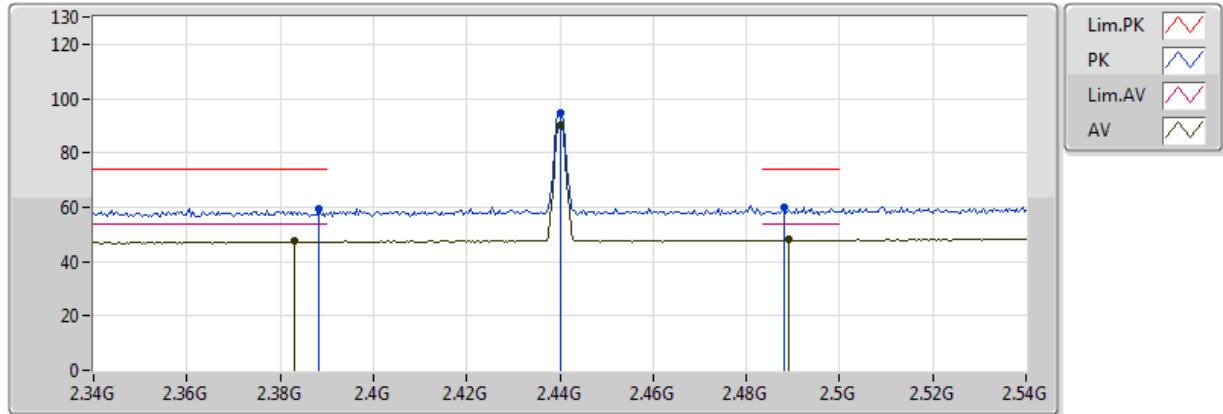


20171226
EUT_Y_1TX
Setting Default
02-R-5
FSV

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3796G	47.39	54.00	-6.61	32.11	3	V	115	2.58	-
AV	2.44G	92.93	Inf	-Inf	32.30	3	V	115	2.58	-
AV	2.4836G	47.88	54.00	-6.12	32.45	3	V	115	2.58	-
PK	2.3756G	59.79	74.00	-14.21	32.10	3	V	115	2.58	-
PK	2.44G	97.30	Inf	-Inf	32.30	3	V	115	2.58	-
PK	2.4844G	59.71	74.00	-14.29	32.45	3	V	115	2.58	-

BT-EDR(3Mbps)

2440MHz_TX

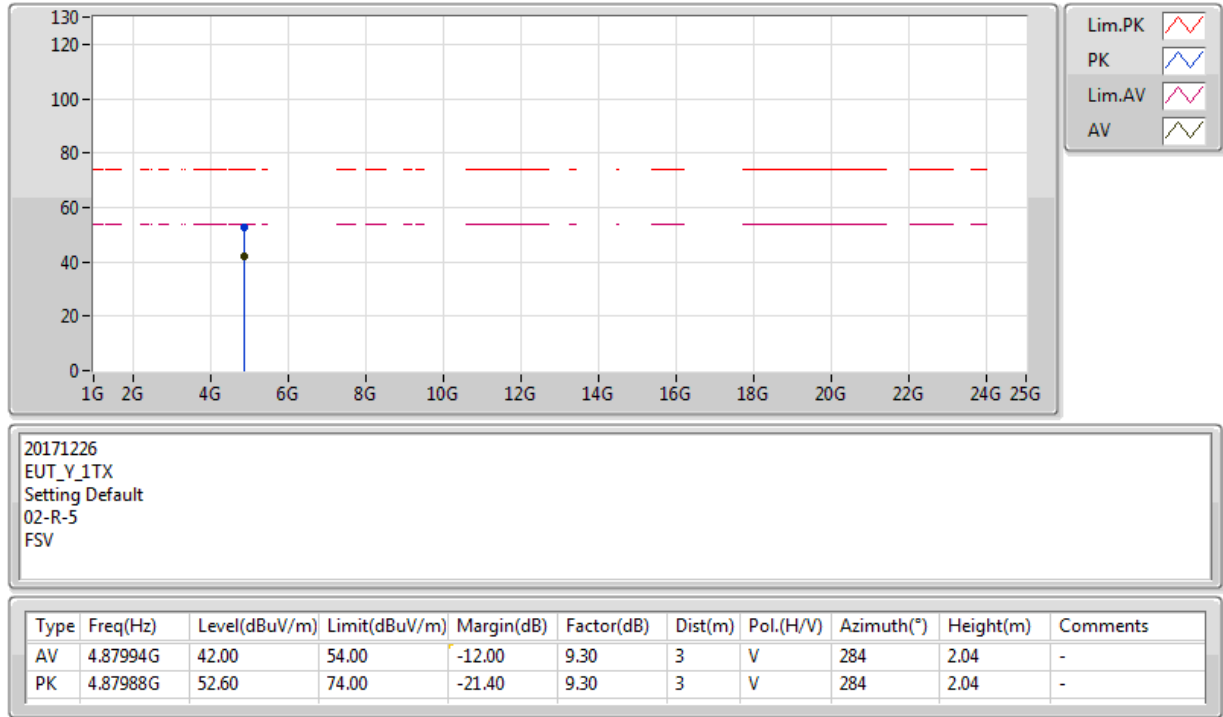


20171226
EUT_Y_1TX
Setting Default
02-R-5
FSV

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3832G	47.40	54.00	-6.60	32.12	3	H	154	2.59	-
AV	2.44G	90.28	Inf	-Inf	32.30	3	H	154	2.59	-
AV	2.4892G	48.12	54.00	-5.88	32.46	3	H	154	2.59	-
PK	2.3884G	59.54	74.00	-14.46	32.14	3	H	154	2.59	-
PK	2.44G	94.56	Inf	-Inf	32.30	3	H	154	2.59	-
PK	2.488G	60.08	74.00	-13.92	32.46	3	H	154	2.59	-

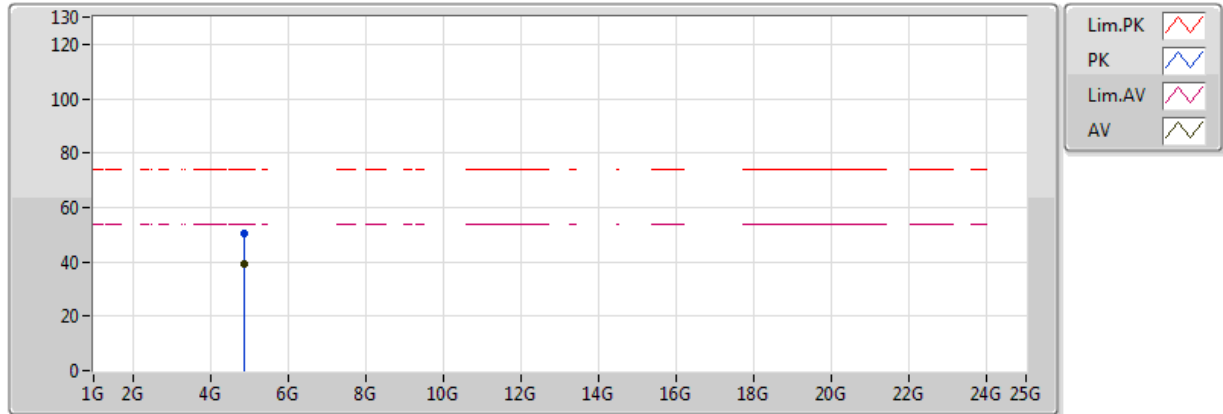
BT-EDR(3Mbps)

2440MHz_TX



BT-EDR(3Mbps)

2440MHz_TX

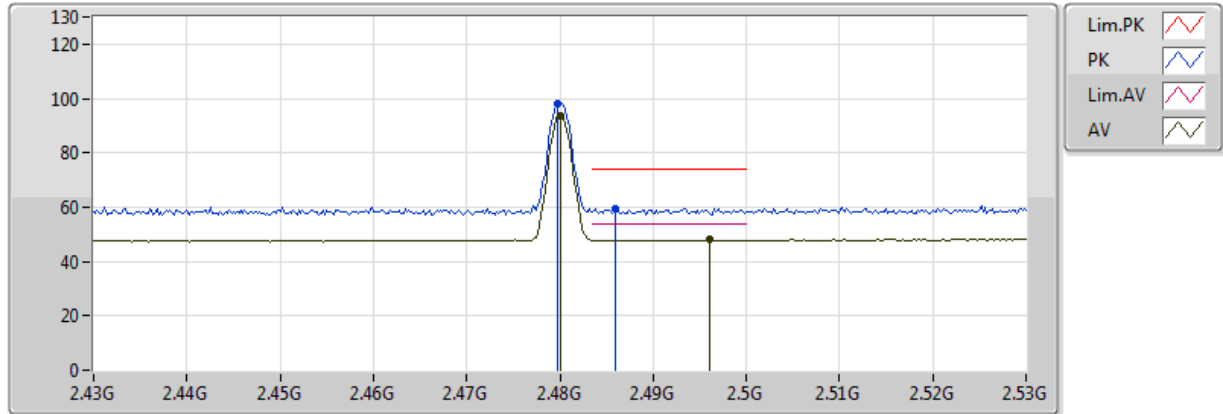


20171226
EUT_Y_1TX
Setting Default
02-R-5
FSV

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.8799G	39.38	54.00	-14.62	9.30	3	H	193	1.50	-
PK	4.87994G	50.31	74.00	-23.69	9.30	3	H	193	1.50	-

BT-EDR(3Mbps)

2480MHz_TX

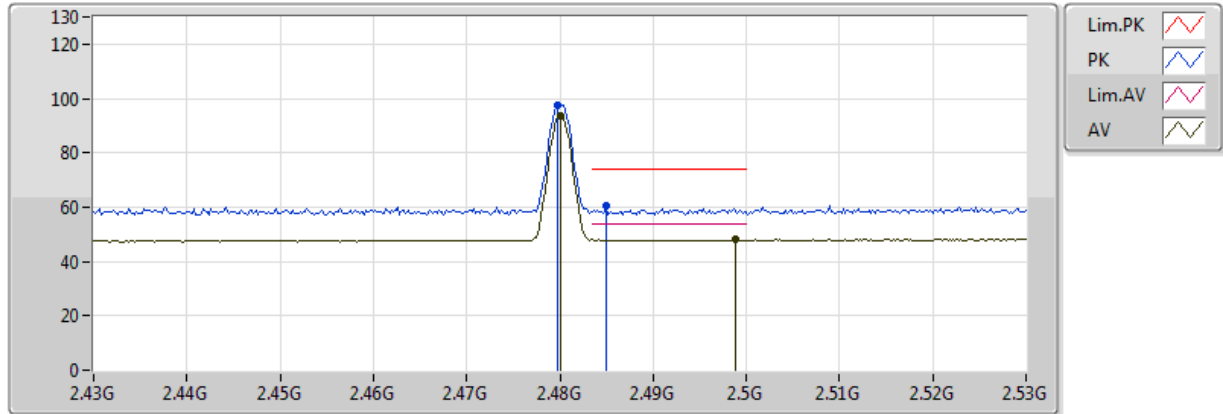


20171226
EUT_Y_1TX
Setting Default
02-R-5
FSV

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.48G	93.70	Inf	-Inf	32.43	3	V	91	2.05	-
AV	2.496G	47.98	54.00	-6.02	32.49	3	V	91	2.05	-
PK	2.4798G	98.13	Inf	-Inf	32.43	3	V	91	2.05	-
PK	2.486G	59.48	74.00	-14.52	32.45	3	V	91	2.05	-

BT-EDR(3Mbps)

2480MHz_TX

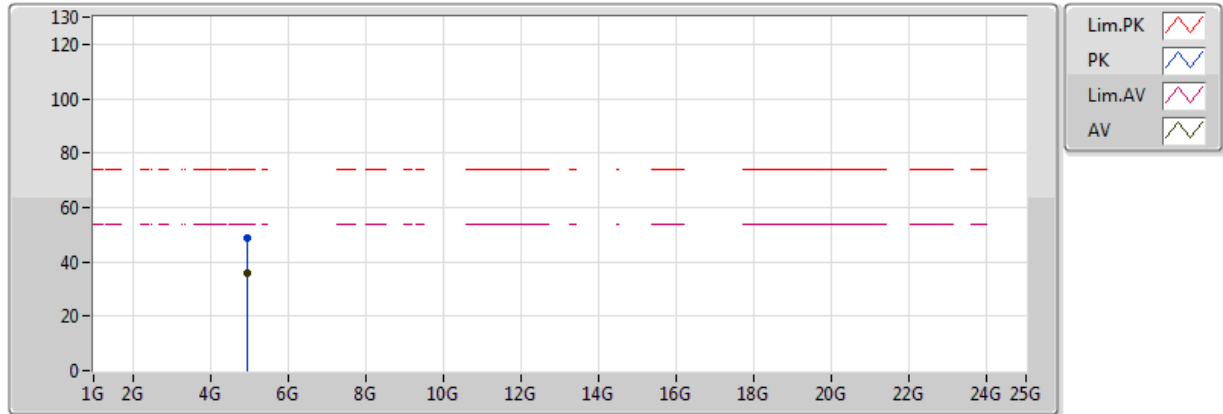


20171226
EUT_Y_1TX
Setting Default
02-R-5
FSV

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.48G	93.49	Inf	-Inf	32.43	3	H	130	2.29	-
AV	2.4988G	48.05	54.00	-5.95	32.50	3	H	130	2.29	-
PK	2.4798G	97.70	Inf	-Inf	32.43	3	H	130	2.29	-
PK	2.485G	60.35	74.00	-13.65	32.45	3	H	130	2.29	-

BT-EDR(3Mbps)

2480MHz_TX

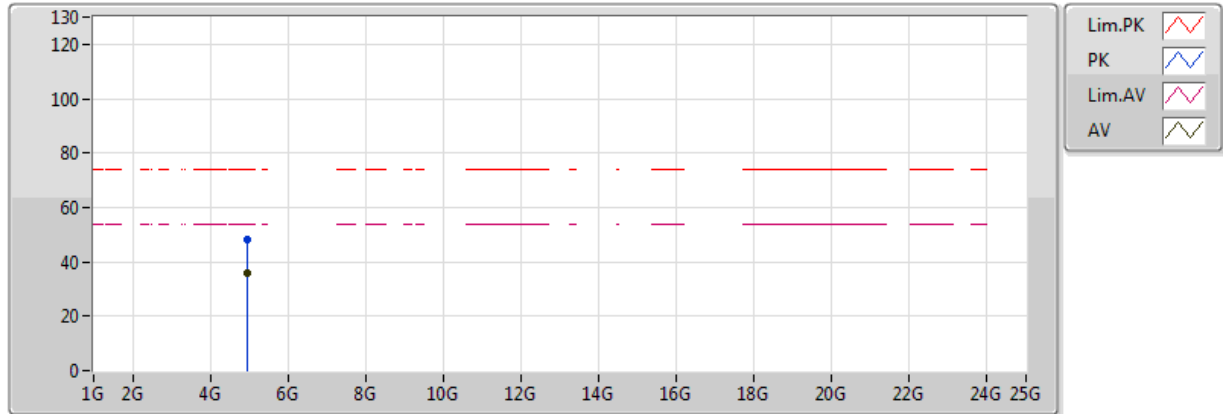


20171226
EUT_Y_1TX
Setting Default
02-R-5
FSV

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.96004G	36.04	54.00	-17.96	9.45	3	V	248	2.32	-
PK	4.9596G	48.66	74.00	-25.34	9.45	3	V	248	2.32	-

BT-EDR(3Mbps)

2480MHz_TX



20171226
EUT_Y_1TX
Setting Default
02-R-5
FSV

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.96012G	35.66	54.00	-18.34	9.45	3	H	148	2.32	-
PK	4.96046G	48.39	74.00	-25.61	9.45	3	H	148	2.32	-