FCC Test Report

Equipment	:	Wireless LAN Network Module
Brand Name	:	Arcadyan
Model No.	:	WN9711BTAAC-YA
FCC ID	:	RAXWN9711
Standard	:	47 CFR FCC Part 15.247
Operating Band	:	2400 MHz – 2483.5 MHz
Applicant	:	Arcadyan Technology Corporation No.8, Sec.2, Guangfu Rd.,Hsinchu, 30071 Taiwan
Manufacturer	:	Arcadyan Technology Corporation No.8, Sec.2, Guangfu Rd.,Hsinchu, 30071 Taiwan

The product sample received on Jun. 05, 2017 and completely tested on Aug. 29, 2017. 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.

Testing Laboratory
1190

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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

Revision History

Report No.	Version	Description	Issued Date
FR770523AC	Rev. 01	Initial issue of report	Sep. 19, 2017

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.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	
					2.4GHz	5GHz
1	ACON	AEMEE-10000	Dipole Antenna	Reversed-SMA	3.24	4.54
2	ACON	AEMEE-10000	Dipole Antenna	Reversed-SMA	3.24	4.54

Cable	Brand	Model Name	Cable Length (mm)	Cable Loss (dB)		True Gain (dBi)	
				2.4GHz / BT	5GHz	2.4GHz / BT	5GHz
1	ACON	AEC8P-1000000 (Gray) AEC8P-1000001 (Black)	30	0.08	0.12	3.16	4.42
2	ACON	AEC8P-1000002 (Gray) AEC8P-1000003 (Black)	50	0.13	0.19	3.11	4.35
3	ACON	AEC8P-1000004 (Gray) AEC8P-1000005 (Black)	70	0.19	0.27	3.05	4.27
4	ACON	AEC8P-1000006 (Gray) AEC8P-1000007 (Black)	90	0.24	0.35	3.00	4.19
5	ACON	AEC8P-1000008 (Gray) AEC8P-1000009 (Black)	120	0.32	0.46	2.92	4.08
6	ACON	AEC8P-1000010 (Gray) AEC8P-1000011 (Black)	160	0.43	0.62	2.81	3.92
7	ACON	AEC8P-1000012 (Gray) AEC8P-1000013 (Black)	200	0.54	0.77	2.70	3.77
8	ACON	AEC8P-1000014 (Gray) AEC8P-1000015 (Black)	240	0.64	0.93	2.60	3.61
9	ACON	AEC8P-1000016 (Gray) AEC8P-1000017 (Black)	280	0.75	1.08	2.49	3.46
10	ACON	AEC8P-1000018 (Gray) AEC8P-1000019 (Black)	320	0.86	1.24	2.38	3.30
11	ACON	AEC8P-1000020 (Gray) AEC8P-1000021 (Black)	360	0.96	1.39	2.28	3.15
12	ACON	AEC8P-1000022 (Gray) AEC8P-1000023 (Black)	400	1.07	1.54	2.17	3.00
13	ACON	AEC8P-1000024 (Gray) AEC8P-1000025 (Black)	450	1.21	1.74	2.03	2.80
14	ACON	AEC8P-1000026 (Gray) AEC8P-1000027 (Black)	500	1.34	1.93	1.90	2.61

Note: The EUT has two radios, Radio 1 supports WLAN 2.4GHz, WLAN 5GHz and Bluetooth function, Radio 2 supports WLAN 5GHz function only.

The EUT has one sets of antenna and there are two antennas for each set.

Antenna collocate with 14 set cable selling, only the higher gain antenna “cable 1” was tested and recorded in the report.

For Radio 1 (WLAN 2.4GHz, WLAN 5GHz and Bluetooth):

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

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

For Radio 2 (WLAN 5GHz):

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

Only Ant. 2 (Port 1) can be used as transmitting/receiving antenna.

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
BT-BR(1Mbps)	0.785	1.051	2.888m	1k
BT-EDR(2Mbps)	0.382	4.179	1.53m	1k
BT-EDR(3Mbps)	0.312	5.058	1.073m	1k

1.1.4 EUT Operational Condition

EUT Power Type	From host system

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	Serway Li / Peter Lin / Gary Chu	26°C / 62%	Jul. 25, 2017~Aug. 29, 2017
Radiated	03CH01-CB (below 1GHz)	Joy Tseng	23°C / 55%	Jul. 28, 2017
Radiated	03CH01-CB (above1GHz)	Joy Tseng	23°C / 55%	Aug. 28, 2017~Aug. 29, 2017
AC Conduction	CO01-CB	Howard Liu	22°C / 52%	Jul. 18, 2017

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	00
2440MHz	00
2480MHz	00
BT-EDR(2Mbps)	-
2402MHz	00
2440MHz	00
2480MHz	00
BT-EDR(3Mbps)	-
2402MHz	00
2440MHz	00
2480MHz	00

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	Master mode - Radio 1 (2.4GHz + Bluetooth) + Radio 2 (5GHz)
2	Master mode - Radio 1 (5GHz + Bluetooth) + Radio 2 (5GHz)
Mode 1 has been evaluated to be the worst case between Mode 1~2, thus measurement for Mode 3 will follow this same test mode.	
3	Slave mode - Radio 1 (2.4GHz + Bluetooth) + Radio 2 (5GHz)
For operating mode 3 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
1	EUT Y axis Master mode - Radio 1 (2.4GHz + Bluetooth) + Radio 2 (5GHz)
2	EUT Z axis Master mode - Radio 1 (2.4GHz + Bluetooth) + Radio 2 (5GHz)
Mode 2 has been evaluated to be the worst case between Mode 1~2, thus measurement for Mode 3 will follow this same test mode.	
3	EUT Z axis Master mode - Radio 1 (5GHz + Bluetooth) + Radio 2 (5GHz)
Mode 2 has been evaluated to be the worst case between Mode 1~3, thus measurement for Mode 4 will follow this same test mode.	
4	EUT Z axis Slave mode - Radio 1 (2.4GHz + Bluetooth) + Radio 2 (5GHz)
For operating mode 2 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX
1	EUT X axis
2	EUT Y axis
3	EUT Z axis
Mode 3 has been evaluated to be the worst case after evaluating. Consequently, measurement will follow this same test mode.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Radiated Emission Co-location
Test Condition	Radiated measurement
Operating Mode	Normal Link
1	EUT X axis - Radio 1 (2.4GHz + Bluetooth) + Radio 2 (5GHz)
2	EUT Y axis - Radio 1 (2.4GHz + Bluetooth) + Radio 2 (5GHz)
3	EUT Z axis - Radio 1 (2.4GHz + Bluetooth) + Radio 2 (5GHz)
4	EUT X axis - Radio 1 (5GHz + Bluetooth) + Radio 2 (5GHz)
5	EUT Y axis - Radio 1 (5GHz + Bluetooth) + Radio 2 (5GHz)
6	EUT Z axis - Radio 1 (5GHz + Bluetooth) + Radio 2 (5GHz)
For operating mode 1 and mode 3 are the worst case and it was record in this test report.	
Refer to Appendix I for Radiated Emission Co-location.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	Radio 1 (2.4GHz + Bluetooth) + Radio 2 (5GHz)
2	Radio 1 (5GHz + Bluetooth) + Radio 2 (5GHz)
Refer to Sporton Test Report No.: FA770523 for Co-location RF Exposure Evaluation.	

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

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	Bluetooth Speaker	MARUS	MSK06C-RD	DoC
3	AP Router	ASUS	DSL-AC68U	DoC
4	AP Router	Planex	GW-AP54SGX	KA220030603014-1
5	Fixture	Arcadyan	WN9711BTAAC Test jig	N/A

For Test Site No: 03CH01-CB (below 1GHz)

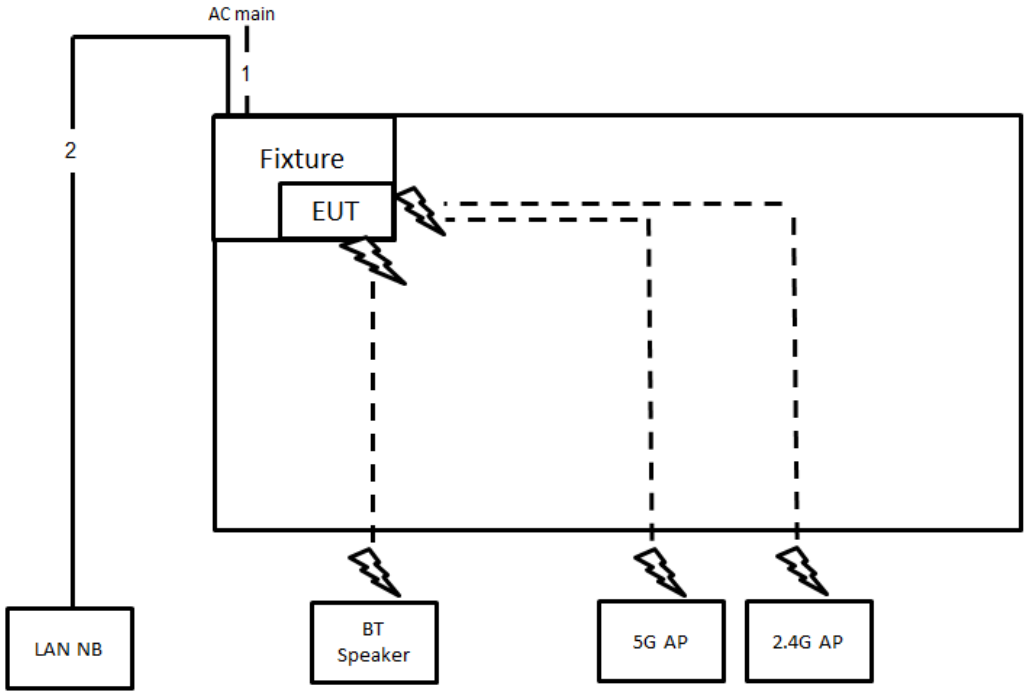
Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	NB	DELL	E4300	DoC
2	NB*2	Apple	Mac Book	DoC
3	Bluetooth Speaker	MARUS	MSK06C-RD	DoC
4	Fixture	Arcadyan	WN9711BTAAC Test jig	N/A

For Test Site No: 03CH01-CB (above 1GHz) and TH01-CB

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	NB	DELL	E4300	DoC
2	Fixture	Arcadyan	WN9711BTAAC Test jig	N/A

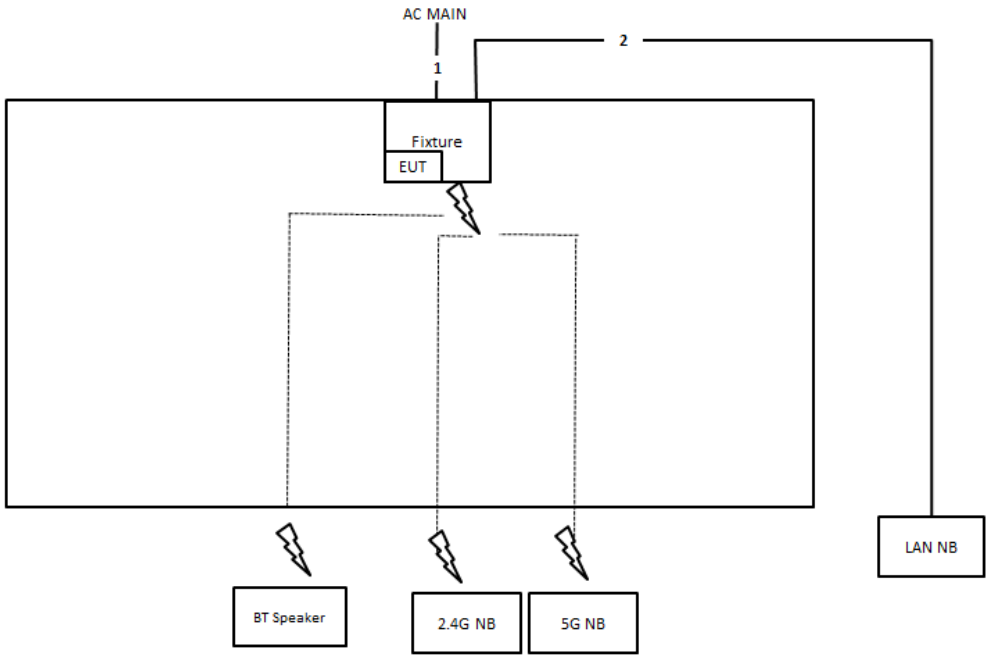
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



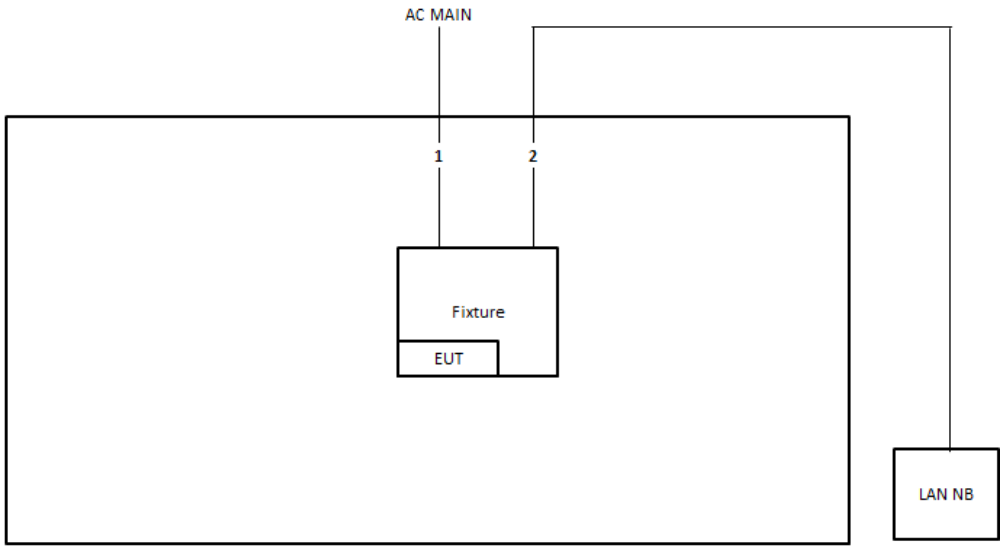
Item	Connection	Shielded	Length
1	Power cable	No	0.8m
2	RJ-45 cable	No	10m

Test Setup Diagram - Radiated Test < 1GHz



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

Test Setup Diagram - Radiated Test > 1GHz



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

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

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

3.1.2 Measuring Instruments

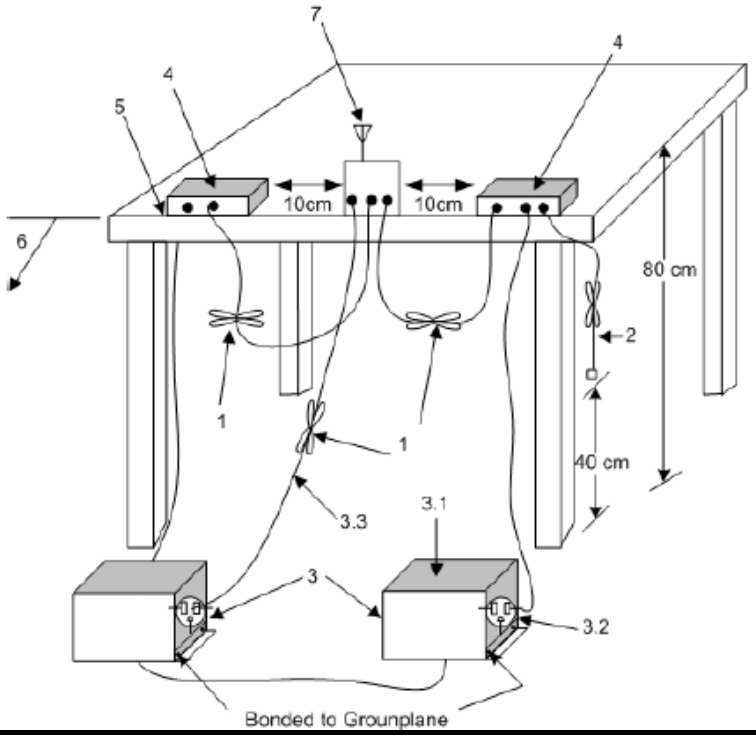
Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

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

3.1.4 Test Setup

AC Power-line Conducted Emissions



3.1.5 Test Result of AC Power-line Conducted Emissions

Refer as Appendix B

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	

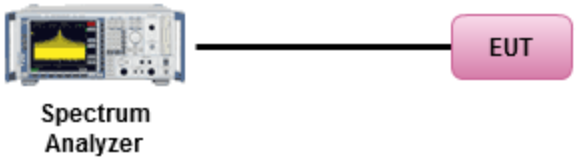
3.2.2 Measuring Instruments

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
 Spectrum Analyzer

3.2.5 Test Result of 20dB Bandwidth

Refer as Appendix C

3.2.6 Test Result of Carrier Frequency Separation

Refer as Appendix C

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 D

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

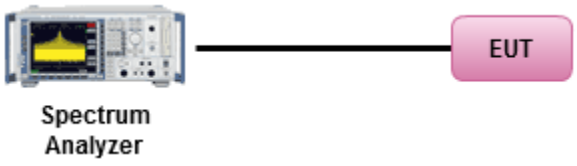
3.4.3 Measuring Instruments

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 E

3.4.7 Test Result of Number of Hopping Frequencies Bandedge

Refer as Appendix E

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

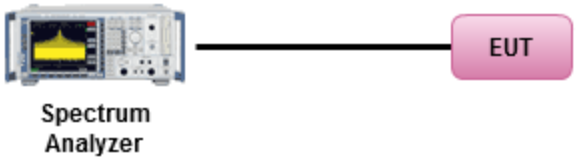
3.5.2 Measuring Instruments

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 F

3.6 Emissions in Non-restricted Frequency Bands

3.6.1 Emissions in Non-restricted Frequency Bands Limit

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

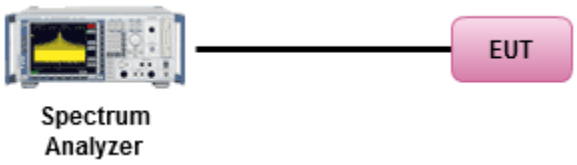
3.6.2 Measuring Instruments

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

3.6.3 Test Procedures

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

3.6.4 Test Setup

Emissions in Non-restricted Frequency Bands


3.6.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix G

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.

3.7.2 Measuring Instruments

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

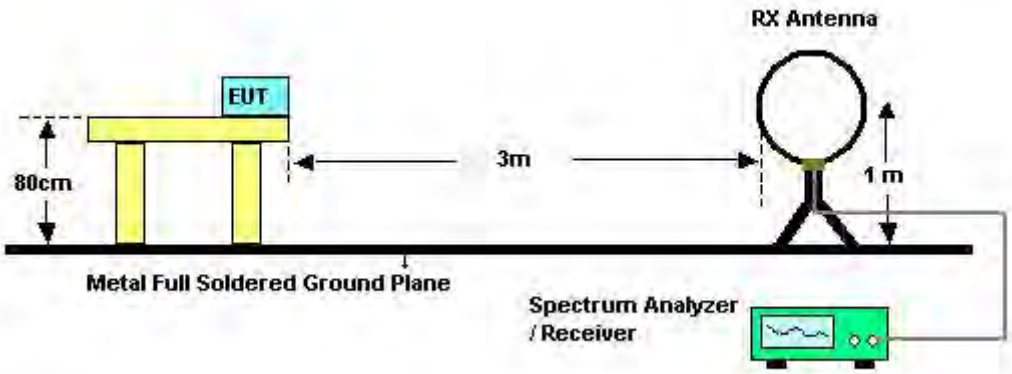
3.7.3 Test Procedures

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.

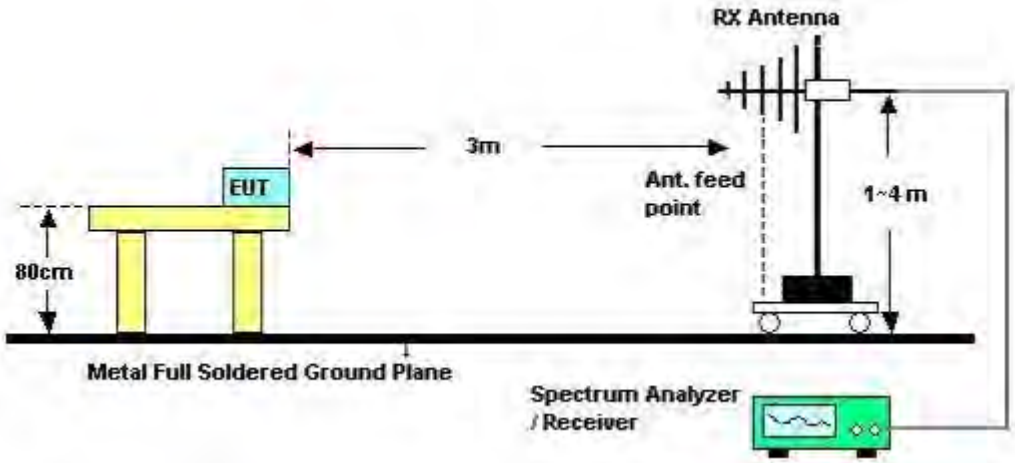
3.7.4 Test Setup

Transmitter Radiated Emissions

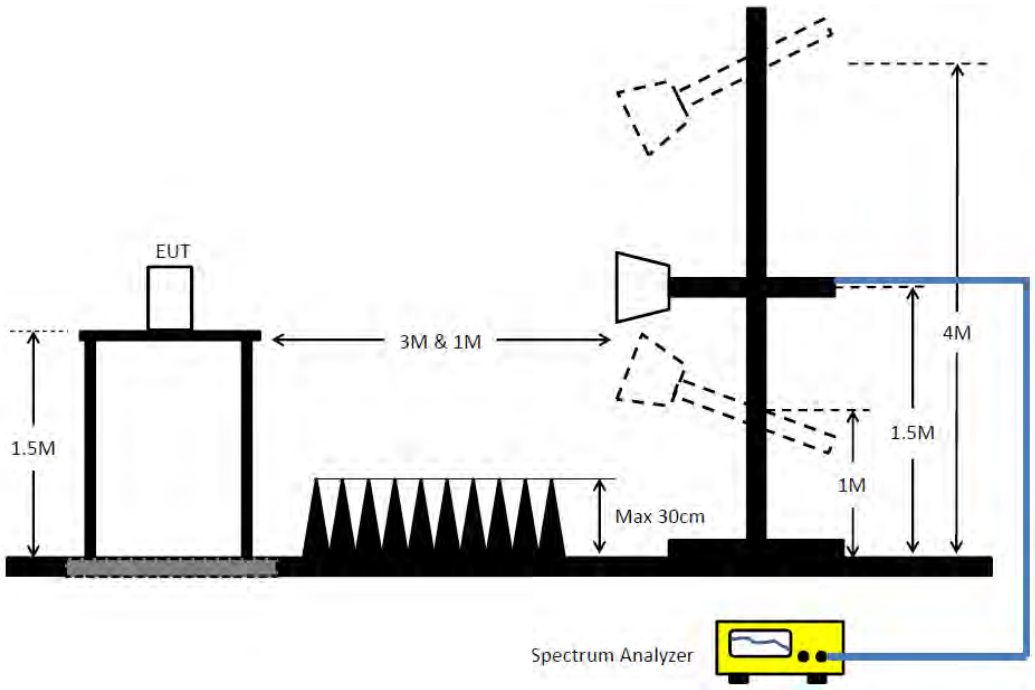
9kHz ~30MHz



30MHz~1GHz



Above 1GHz



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 H

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. 23, 2017	Jan. 22, 2018	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Dec. 14, 2016	Dec. 13, 2017	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Dec. 21, 2016	Dec. 20, 2017	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 & EMCI	CBL6112D & N-6-06	37880 & AT-N0609	20MHz ~ 2GHz	Aug. 30, 2016	Aug. 29, 2017	Radiation (03CH01-CB)
Horn Antenna	EMCO	3115	00075790	750MHz ~ 18GHz	Nov. 10, 2016	Nov. 09, 2017	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	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)
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. 24, 2016	Oct. 23, 2017	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16	N/A	1 GHz ~ 18 GHz	Oct. 24, 2016	Oct. 23, 2017	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16+17	N/A	1 GHz ~ 18 GHz	Oct. 24, 2016	Oct. 23, 2017	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G#1	N/A	18GHz ~ 40 GHz	Oct. 24, 2016	Oct. 23, 2017	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G#2	N/A	18GHz ~ 40 GHz	Oct. 24, 2016	Oct. 23, 2017	Radiation (03CH01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 16, 2016*	Mar. 15, 2018*	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Dec. 26, 2016	Dec. 25, 2017	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-6	1 GHz – 26.5 GHz	Oct. 24, 2016	Oct. 23, 2017	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-7	1 GHz –26.5 GHz	Oct. 24, 2016	Oct. 23, 2017	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-8	1 GHz –26.5 GHz	Oct. 24, 2016	Oct. 23, 2017	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-9	1 GHz –26.5 GHz	Oct. 24, 2016	Oct. 23, 2017	Conducted (TH01-CB)

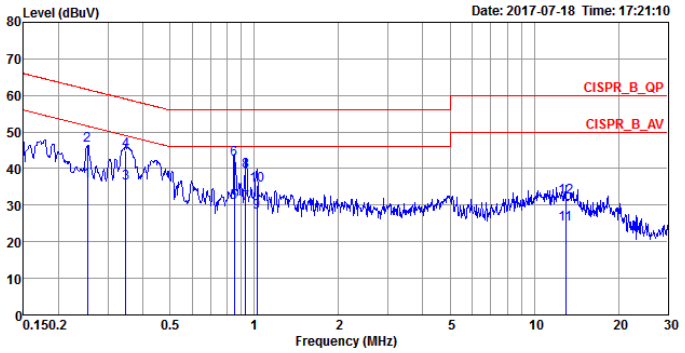
Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-10	1 GHz –26.5 GHz	Oct. 24, 2016	Oct. 23, 2017	Conducted (TH01-CB)
Power Sensor	Agilent	U2021XA	MY53410001	50MHz~18GHz	Nov. 22, 2016	Nov. 21, 2017	Conducted (TH01-CB)

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.

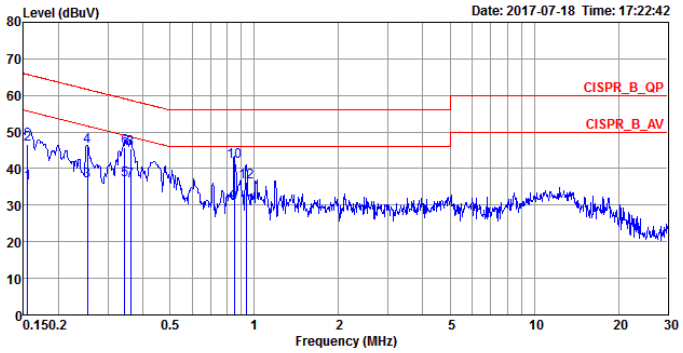
AC Power-line Conducted Emissions Result			
Operating Mode	3	**Power Phase**	Neutral
Operating Function	Normal Link		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark	Pol/Phase
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.2535	36.69	-14.95	51.64	26.52	10.08	0.09	Average	NEUTRAL
2	0.2535	46.23	-15.41	61.64	36.06	10.08	0.09	QP	NEUTRAL
3	0.3483	36.02	-12.98	49.00	25.80	10.19	0.03	Average	NEUTRAL
4	0.3483	44.98	-14.02	59.00	34.76	10.19	0.03	QP	NEUTRAL
5	0.8483	30.83	-15.17	46.00	20.57	10.10	0.16	Average	NEUTRAL
6	0.8483	42.49	-13.51	56.00	32.23	10.10	0.16	QP	NEUTRAL
7	0.9331	30.32	-15.68	46.00	20.07	10.07	0.18	Average	NEUTRAL
8	0.9331	39.23	-16.77	56.00	28.98	10.07	0.18	QP	NEUTRAL
9	1.0211	28.03	-17.97	46.00	17.79	10.05	0.19	Average	NEUTRAL
10	1.0211	35.41	-20.59	56.00	25.17	10.05	0.19	QP	NEUTRAL
11	12.9199	24.89	-25.11	50.00	14.48	10.24	0.17	Average	NEUTRAL
12	12.9199	32.17	-27.83	60.00	21.76	10.24	0.17	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.)

AC Power-line Conducted Emissions Result			
Operating Mode	3	**Power Phase**	Line
Operating Function	Normal Link		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark	Pol/Phase
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.1548	36.13	-19.61	55.74	25.97	10.00	0.16	Average	LINE
2	0.1548	46.69	-19.05	65.74	36.53	10.00	0.16	QP	LINE
3	0.2535	36.72	-14.92	51.64	26.71	9.92	0.09	Average	LINE
4	0.2535	46.20	-15.44	61.64	36.19	9.92	0.09	QP	LINE
5	0.3446	36.95	-12.14	49.09	26.97	9.94	0.04	Average	LINE
6	0.3446	45.83	-13.26	59.09	35.85	9.94	0.04	QP	LINE
7	0.3615	36.49	-12.20	48.69	26.52	9.94	0.03	Average	LINE
8	0.3615	45.50	-13.19	58.69	35.53	9.94	0.03	QP	LINE
9	0.8483	30.53	-15.47	46.00	20.41	9.96	0.16	Average	LINE
10	0.8483	42.02	-13.98	56.00	31.90	9.96	0.16	QP	LINE
11	0.9381	29.47	-16.53	46.00	19.33	9.96	0.18	Average	LINE
12	0.9381	36.35	-19.65	56.00	26.21	9.96	0.18	QP	LINE

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)
BT-BR(1Mbps)	-	-	-	-	-
2.4-2.4835GHz	921.25k	907.046k	907kF1D	918.75k	904.548k
BT-EDR(2Mbps)	-	-	-	-	-
2.4-2.4835GHz	1.341M	1.224M	1M22G1D	1.334M	1.221M
BT-EDR(3Mbps)	-	-	-	-	-
2.4-2.4835GHz	1.338M	1.221M	1M22G1D	1.3M	1.217M

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;

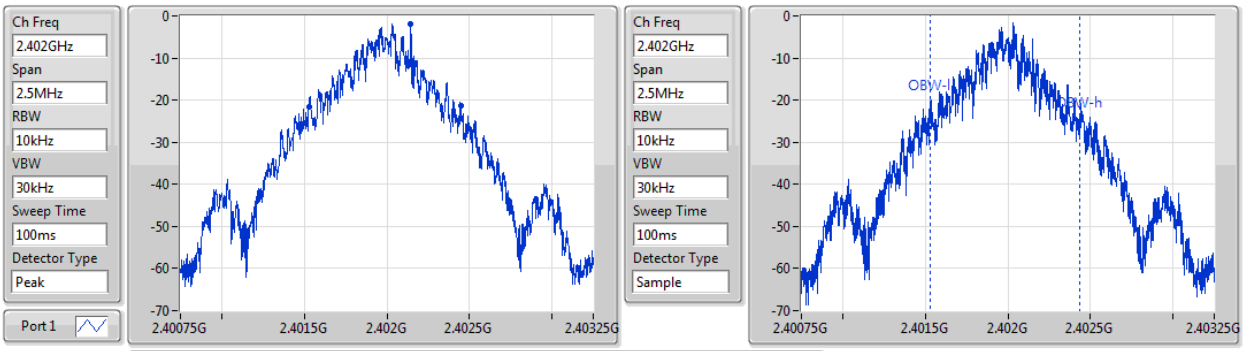
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	Inf	918.75k	907.046k
2440MHz	Pass	Inf	920k	904.548k
2480MHz	Pass	Inf	921.25k	905.797k
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	Inf	1.339M	1.221M
2440MHz	Pass	Inf	1.341M	1.221M
2480MHz	Pass	Inf	1.334M	1.224M
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	Inf	1.3M	1.217M
2440MHz	Pass	Inf	1.338M	1.218M
2480MHz	Pass	Inf	1.314M	1.221M

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

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

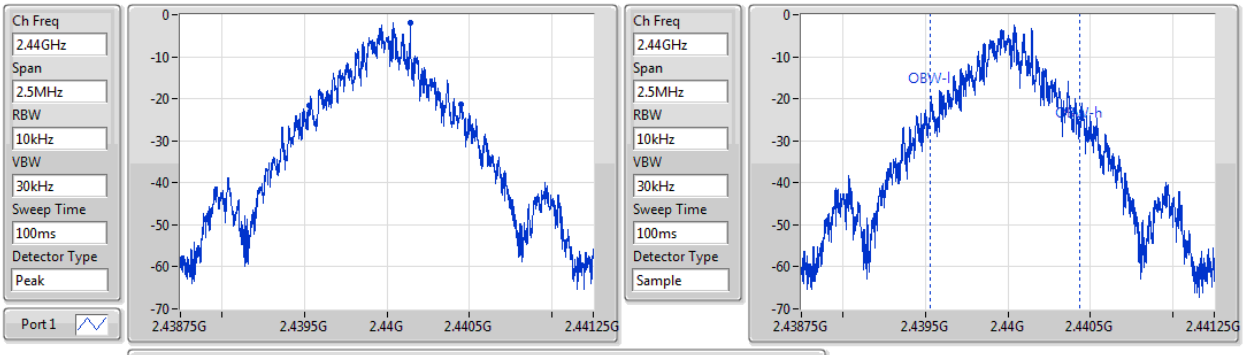
2402MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
918.75k	2.401528G	2.402446G	907.046k	2.401526G	2.402434G	Inf	1

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

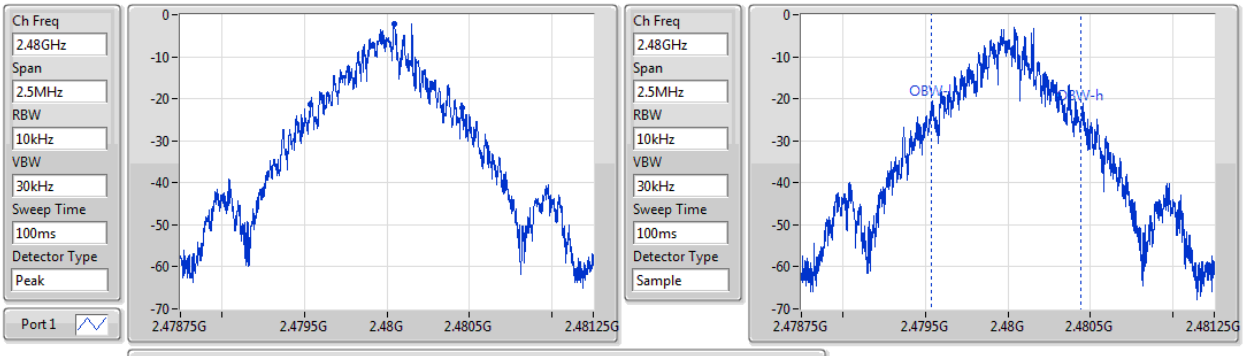
2440MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
920k	2.439531G	2.440451G	904.548k	2.439533G	2.440437G	Inf	1

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

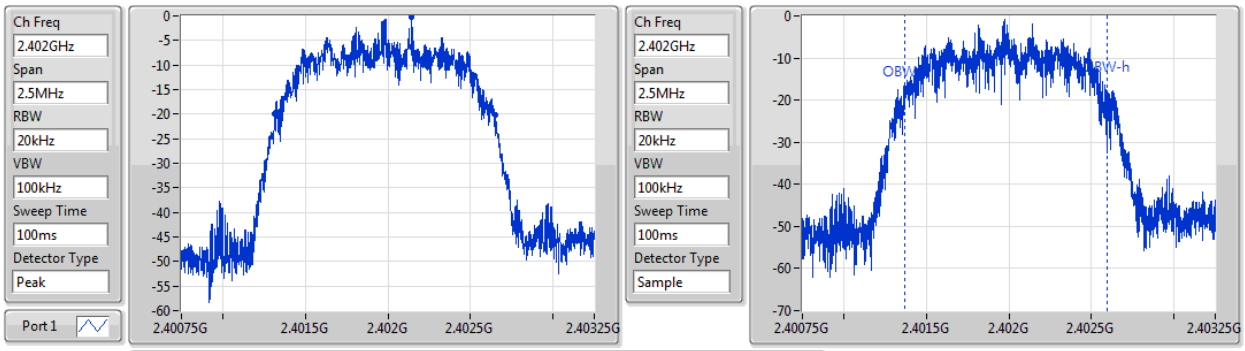
2480MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
921.25k	2.479536G	2.480458G	905.797k	2.479536G	2.480442G	Inf	1

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

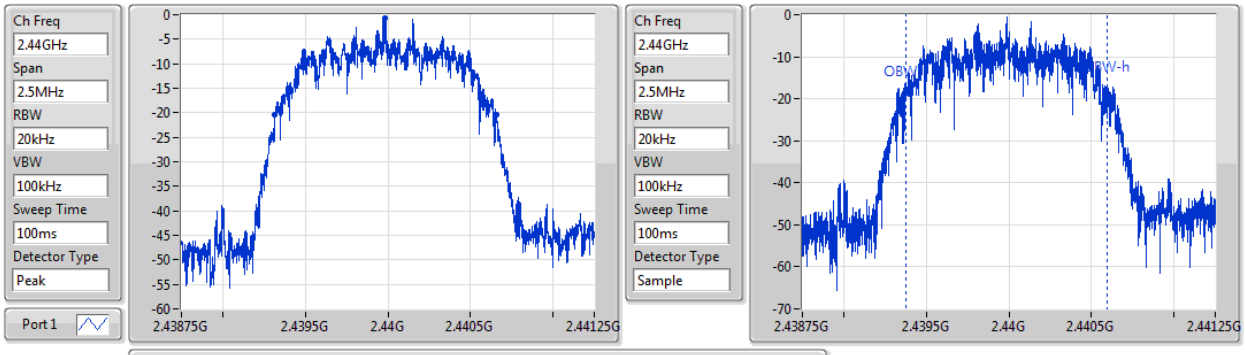
2402MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.339M	2.401315G	2.402654G	1.221M	2.401373G	2.402593G	Inf	1

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

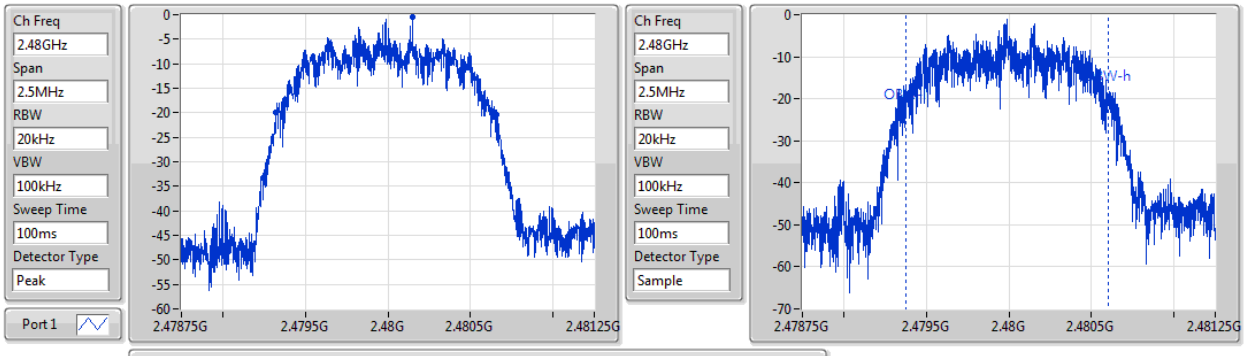
2440MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.341M	2.439318G	2.440659G	1.221M	2.439375G	2.440596G	Inf	1

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

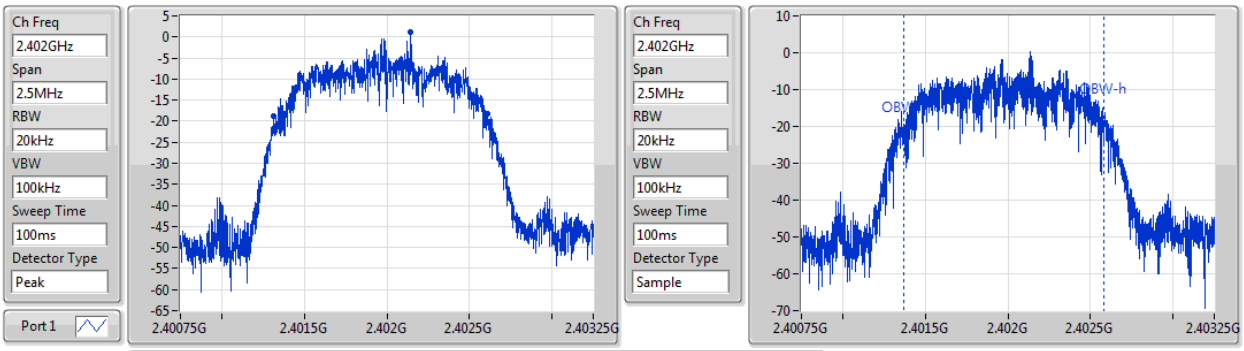
2480MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.334M	2.479324G	2.480658G	1.224M	2.479377G	2.480601G	Inf	1

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

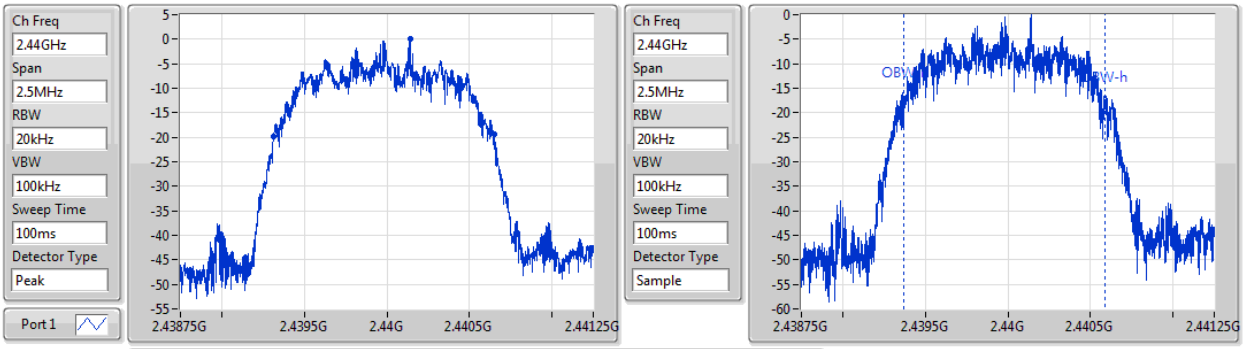
2402MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.3M	2.401313G	2.402613G	1.217M	2.401368G	2.402585G	Inf	1

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

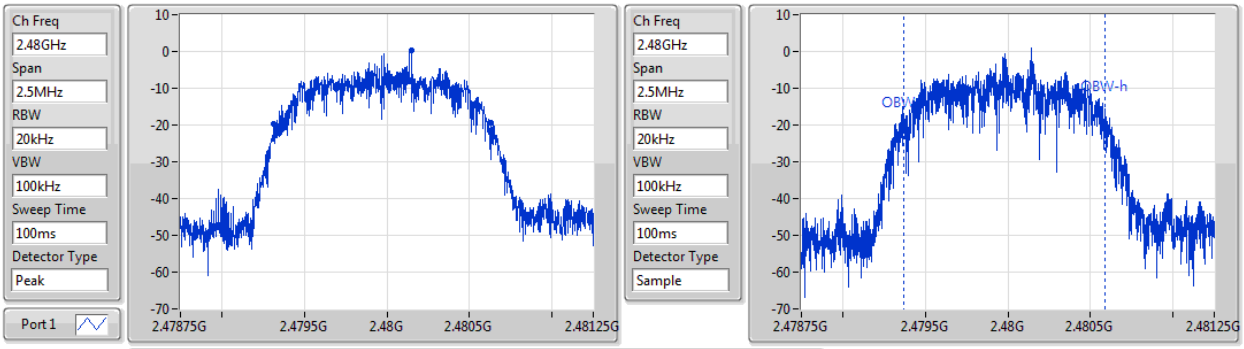
2440MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.338M	2.439315G	2.440653G	1.218M	2.439372G	2.44059G	Inf	1

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

2480MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.314M	2.479315G	2.480629G	1.221M	2.479368G	2.480588G	Inf	1

Summary

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

Result

Mode	Result	Fl (Hz)	Fh (Hz)	Ch.Space (Hz)	Limit (Hz)
BT-BR(1Mbps)	-	-	-	-	-
2402MHz	Pass	2.402137G	2.403139G	1.002M	611.8875k
2440MHz	Pass	2.440142G	2.441142G	1.0005M	612.72k
2480MHz	Pass	2.479148G	2.480147G	999k	613.5525k
BT-EDR(2Mbps)	-	-	-	-	-
2402MHz	Pass	2.401981G	2.40298G	999k	891.774k
2440MHz	Pass	2.439986G	2.440985G	999k	889.11k
2480MHz	Pass	2.478989G	2.479989G	1.0005M	888.444k
BT-EDR(3Mbps)	-	-	-	-	-
2402MHz	Pass	2.402136G	2.403136G	1.0005M	865.8k
2440MHz	Pass	2.440139G	2.441139G	1.0005M	842.49k
2480MHz	Pass	2.47914G	2.480141G	1.0005M	875.124k

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

2.402G/2.403GHz

Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.402137G	2.403139G	1.002M	611.8875k

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

2.44G/2.441GHz

Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.440142G	2.441142G	1.0005M	612.72k

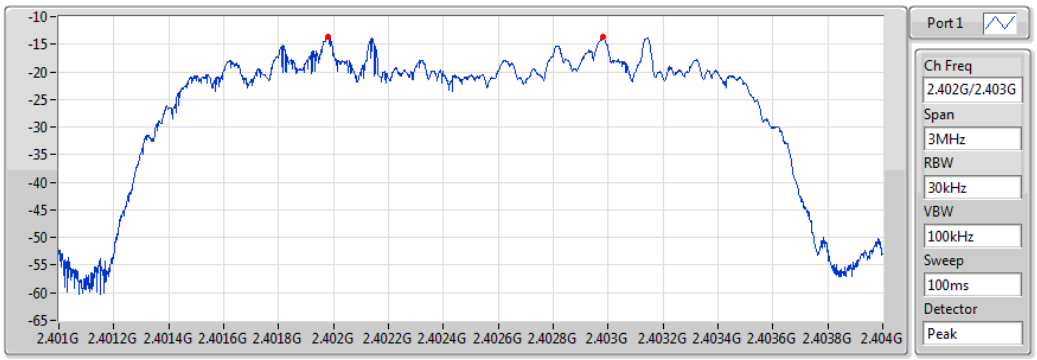
BT-BR(1Mbps) **Channel Separation**

2.48G/2.479GHz

Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.479148G	2.480147G	999k	613.5525k

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

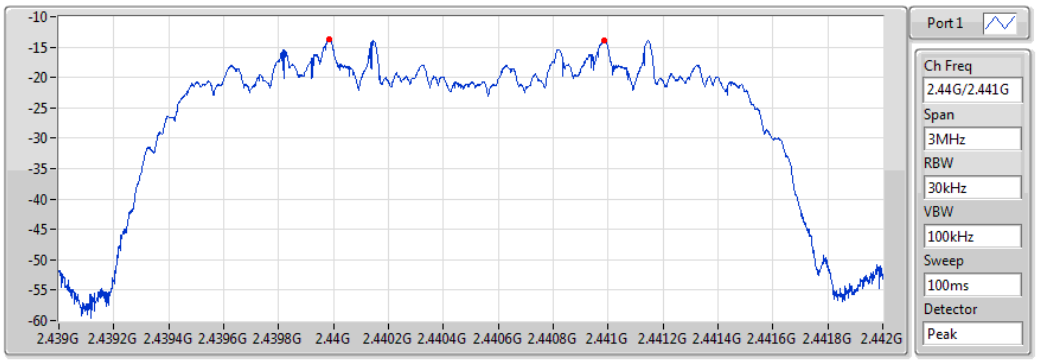
2.402G/2.403GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.401981G	2.40298G	999k	891.774k

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

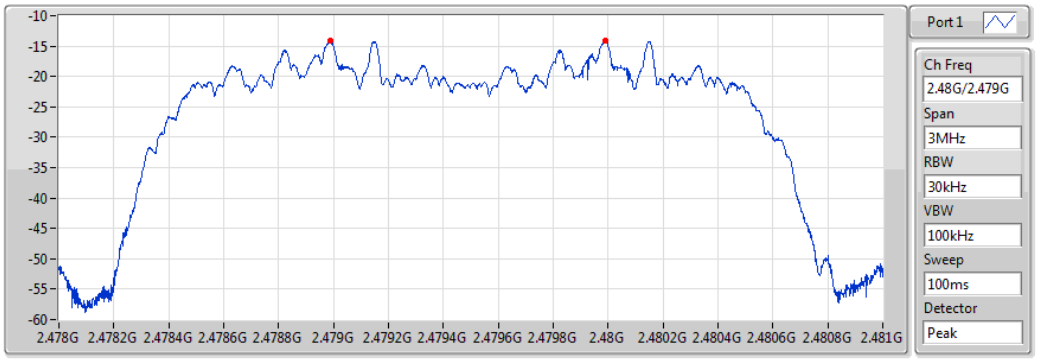
2.44G/2.441GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.439986G	2.440985G	999k	889.11k

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

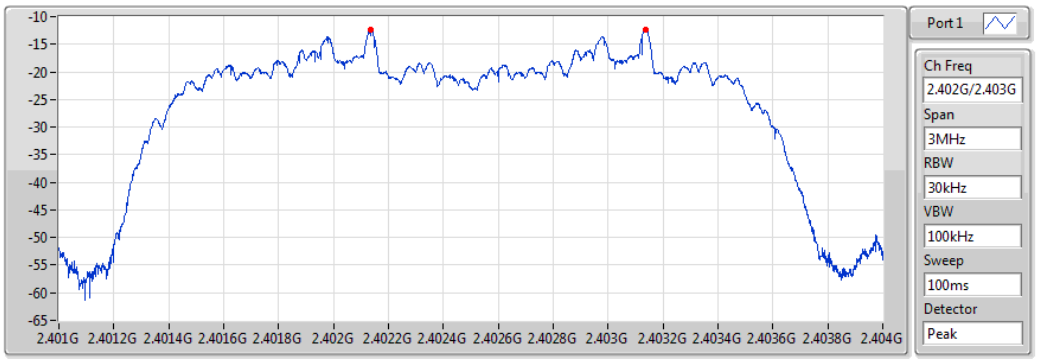
2.48G/2.479GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.478989G	2.479989G	1.0005M	888.444k

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

2.402G/2.403GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.402136G	2.403136G	1.0005M	865.8k

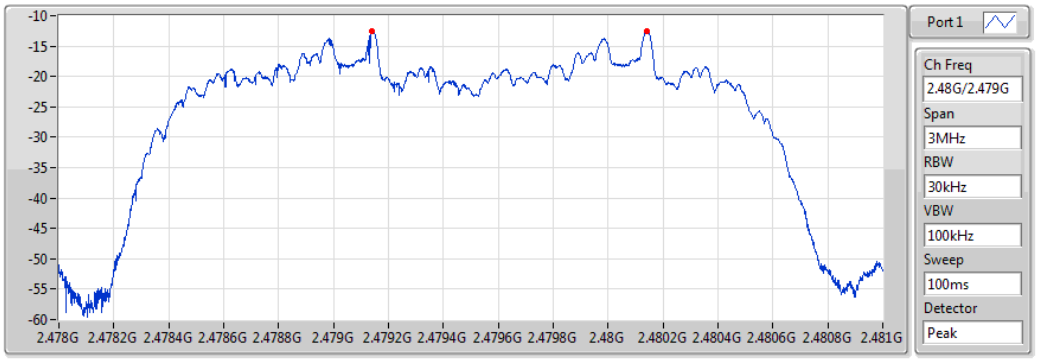
BT-EDR(3Mbps) **Channel Separation**

2.44G/2.441GHz

Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.440139G	2.441139G	1.0005M	842.49k

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

2.48G/2.479GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.47914G	2.480141G	1.0005M	875.124k

Summary

Mode	Power	Power
	(dBm)	(W)
BT-BR(1Mbps)	-	-
2.4-2.4835GHz	4.16	0.00261
BT-EDR(2Mbps)	-	-
2.4-2.4835GHz	4.31	0.00270
BT-EDR(3Mbps)	-	-
2.4-2.4835GHz	4.55	0.00285

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	3.16	4.16	21.00
2440MHz	Pass	3.16	4.05	21.00
2480MHz	Pass	3.16	3.77	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	3.16	4.31	21.00
2440MHz	Pass	3.16	4.26	21.00
2480MHz	Pass	3.16	3.85	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	3.16	4.55	21.00
2440MHz	Pass	3.16	4.32	21.00
2480MHz	Pass	3.16	3.92	21.00

Summary

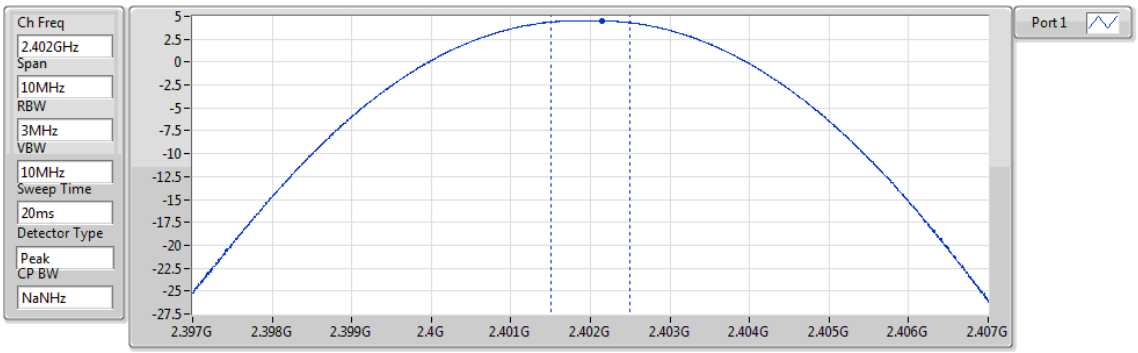
Mode	Power (dBm)	Power (W)
BT-BR(1Mbps)	-	-
2.4-2.4835GHz	4.59	0.00288
BT-EDR(2Mbps)	-	-
2.4-2.4835GHz	6.97	0.00498
BT-EDR(3Mbps)	-	-
2.4-2.4835GHz	7.48	0.0056

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	3.16	4.52	21.00
2440MHz	Pass	3.16	4.59	21.00
2480MHz	Pass	3.16	4.29	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	3.16	6.97	21.00
2440MHz	Pass	3.16	6.94	21.00
2480MHz	Pass	3.16	6.61	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	3.16	7.48	21.00
2440MHz	Pass	3.16	7.44	21.00
2480MHz	Pass	3.16	7.12	21.00

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

2402MHz

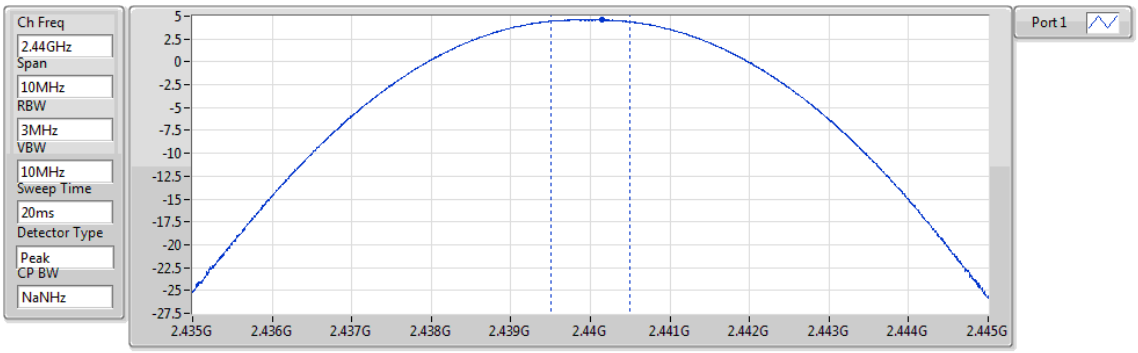


Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)
4.52	4.52

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

2440MHz

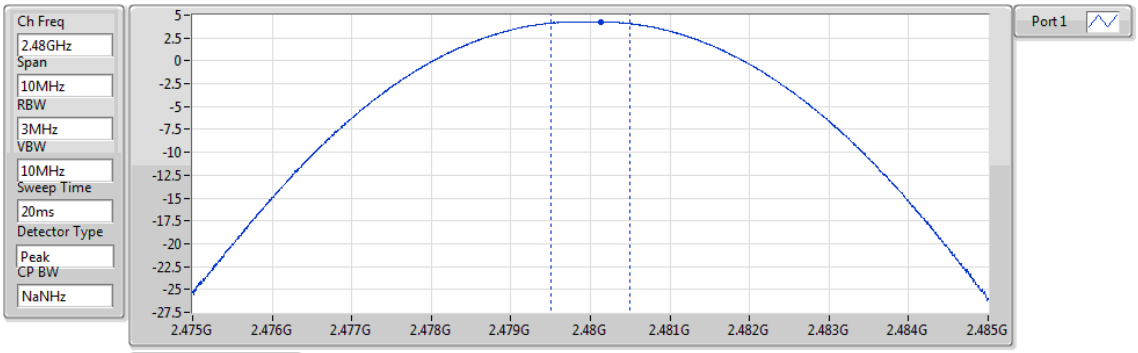


Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)
4.59	4.59

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

2480MHz

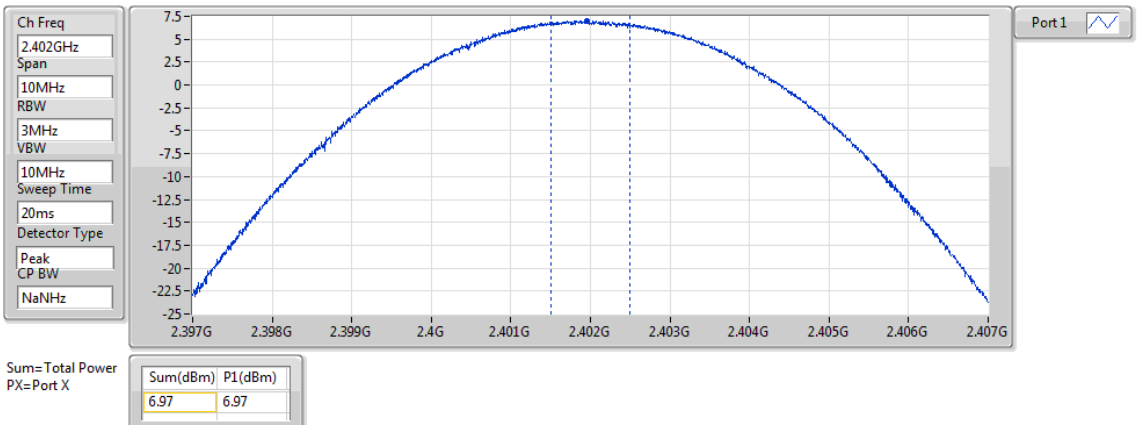


Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)
4.29	4.29

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

2402MHz

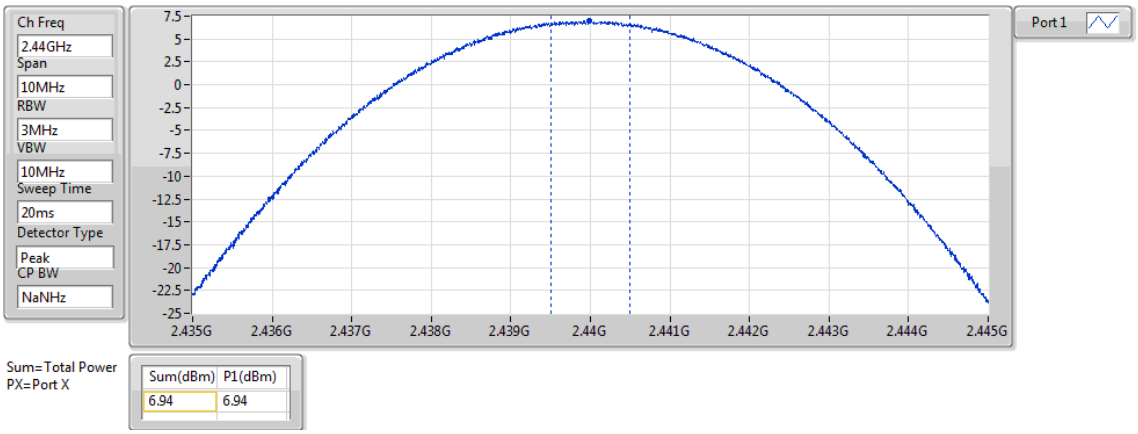


Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)
6.97	6.97

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

2440MHz

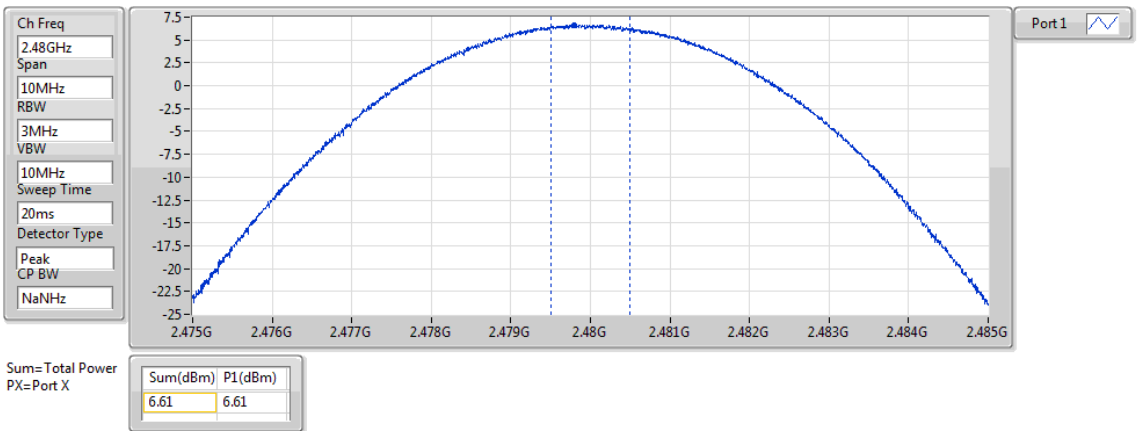


Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)
6.94	6.94

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

2480MHz

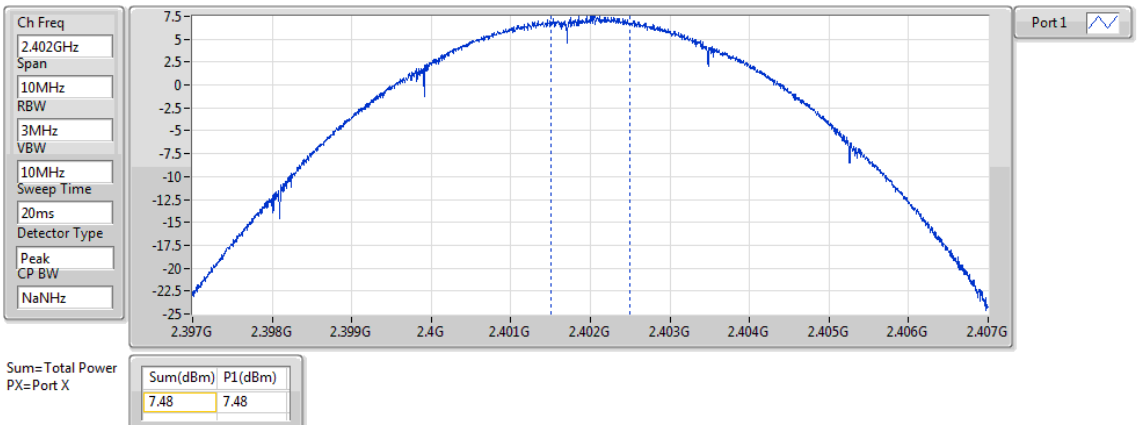


Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)
6.61	6.61

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

2402MHz

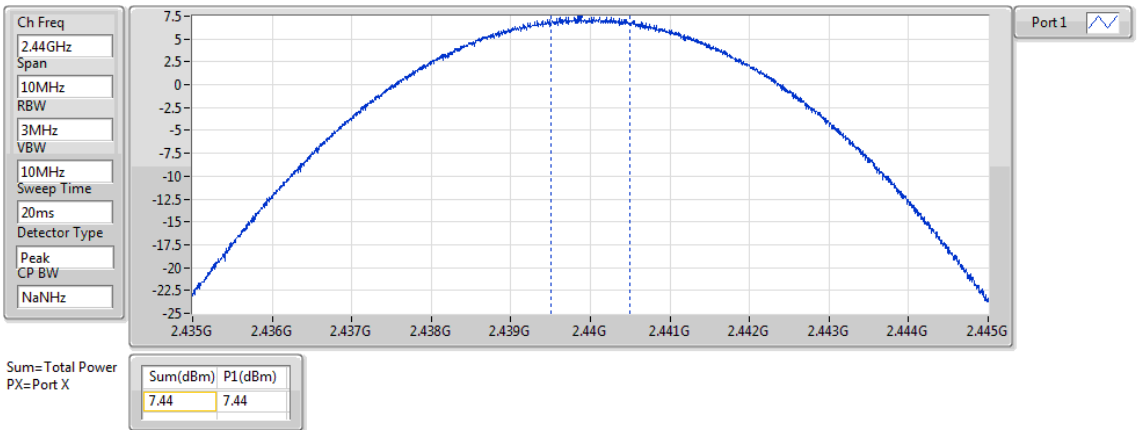


Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)
7.48	7.48

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

2440MHz

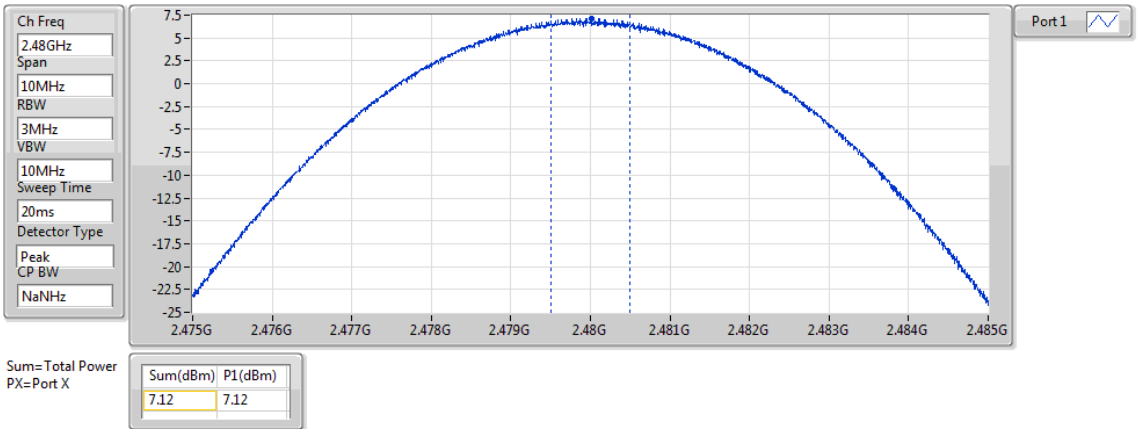


Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)
7.44	7.44

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

2480MHz



Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)
7.12	7.12

Summary

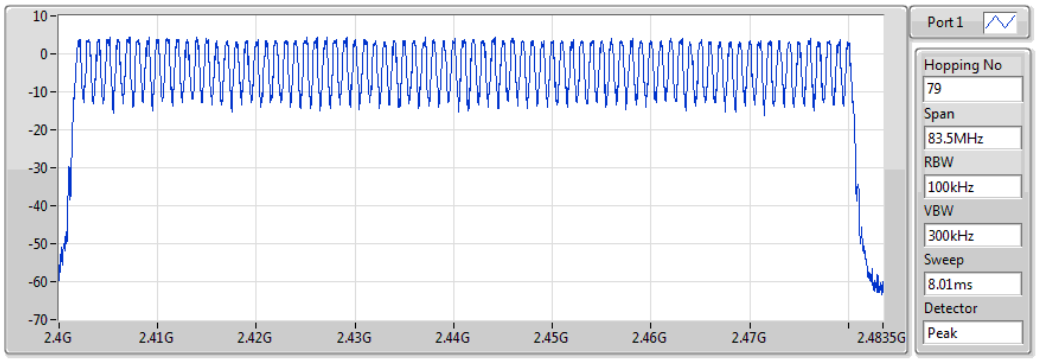
Mode	Max-Hop No
BT-BR(1Mbps)	-
2.4-2.4835GHz	79
BT-EDR(2Mbps)	-
2.4-2.4835GHz	79
BT-EDR(3Mbps)	-
2.4-2.4835GHz	79

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

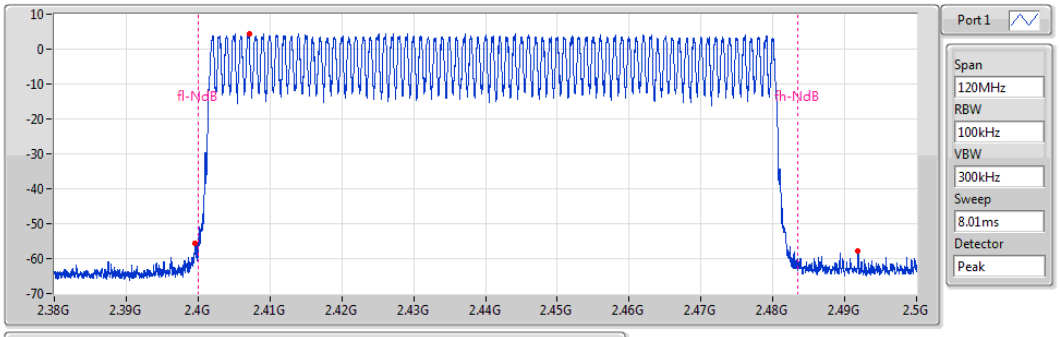


Hopping No	Limit
79	15

BT-BR(1Mbps)

2440MHz

Hopping Ch Bandedge (Non-restricted Band)

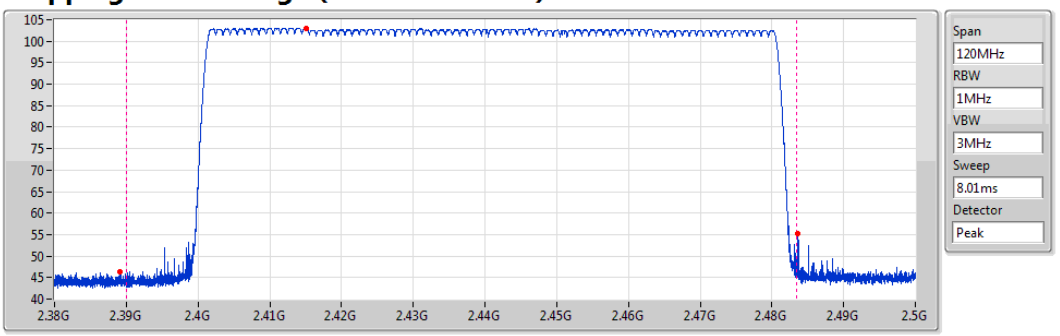


Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-15.55	2.407135G	4.45	2.39962G	-55.55	2.491855G	-57.86

BT-BR(1Mbps)

2440MHz

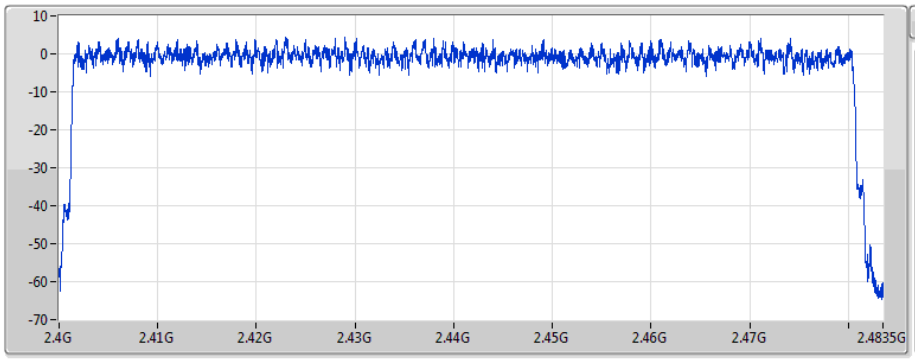
Hopping Ch Bandedge (Restricted Band)



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)
2.41513G	103.07	2.389075G	46.36	15.67	2.48362G	55.27	24.59	74	54	2.922	-30.69

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

2440MHz

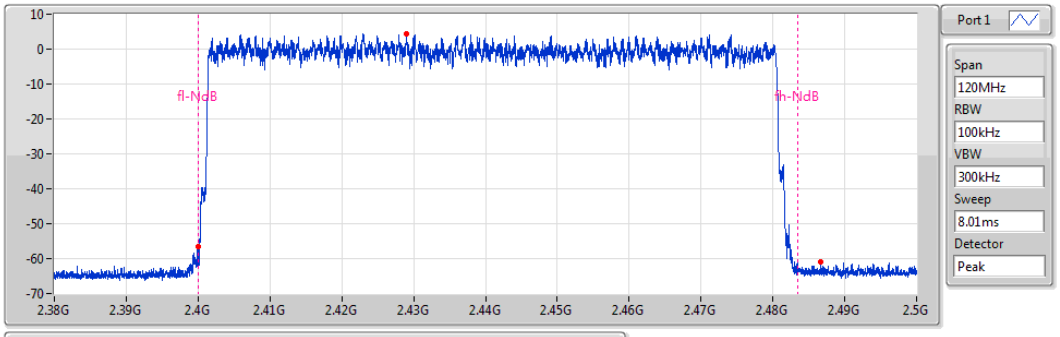


Hopping No	Limit
79	15

BT-EDR(2Mbps)

2440MHz

Hopping Ch Bandedge (Non-restricted Band)

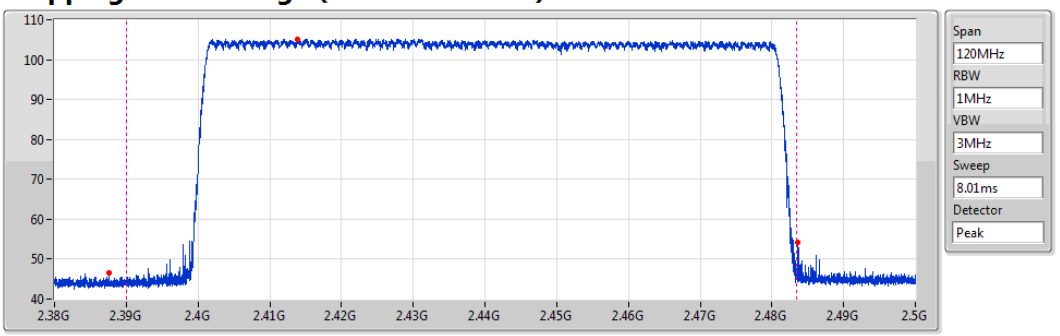


Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-15.59	2.428975G	4.41	2.399965G	-56.52	2.486695G	-60.82

BT-EDR(2Mbps)

2440MHz

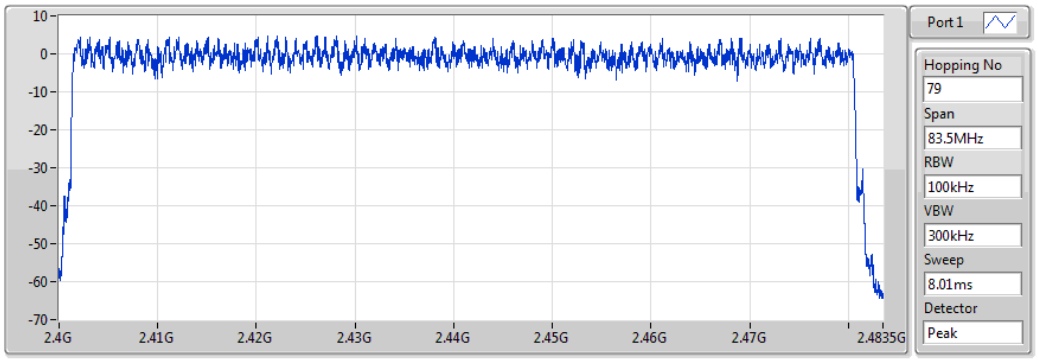
Hopping Ch Bandedge (Restricted Band)



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)
2.41387G	105.15	2.38753G	46.55	10.43	2.483635G	54.34	18.22	74	54	1.564	-36.12

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

2440MHz

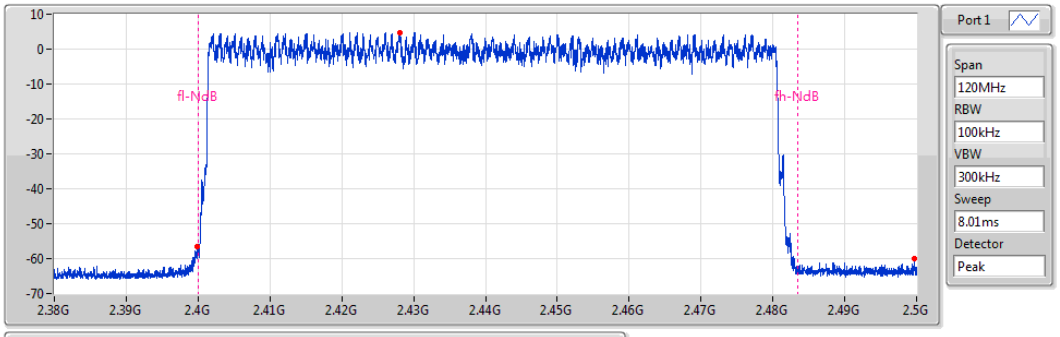


Hopping No	Limit
79	15

BT-EDR(3Mbps)

2440MHz

Hopping Ch Bandedge (Non-restricted Band)

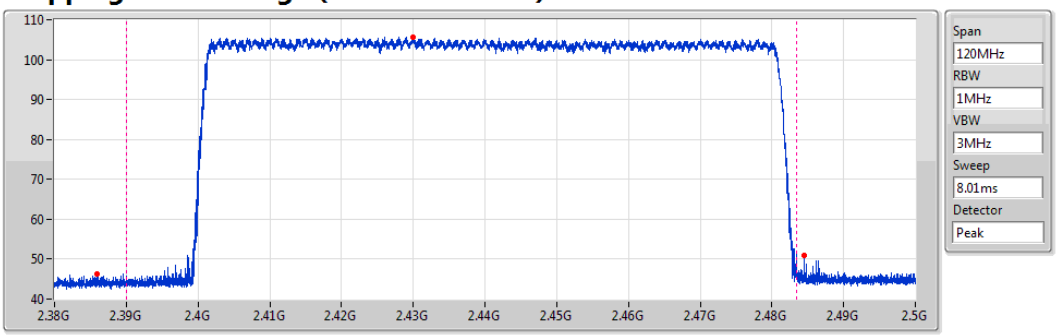


Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-15.32	2.428135G	4.68	2.399905G	-56.62	2.49967G	-60.14

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)
2.42995G	105.61	2.38588G	46.24	7.12	2.48455G	50.81	11.69	74	54	1.107	-39.12

Summary

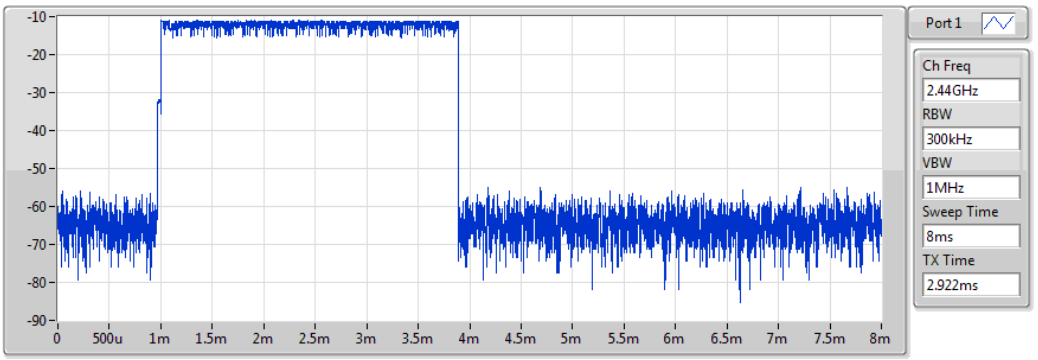
Mode	Max-Dwell (s)
BT-BR(1Mbps)	-
2.4-2.4835GHz	311.4852m
BT-EDR(2Mbps)	-
2.4-2.4835GHz	166.7224m
BT-EDR(3Mbps)	-
2.4-2.4835GHz	118.0062m

Result

Mode	Result	Period (s)	Dwell (s)	Limit (s)	Tx On (s)
BT-BR(1Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	311.4852m	400m	2.922m
BT-EDR(2Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	166.7224m	400m	1.564m
BT-EDR(3Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	118.0062m	400m	1.107m

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

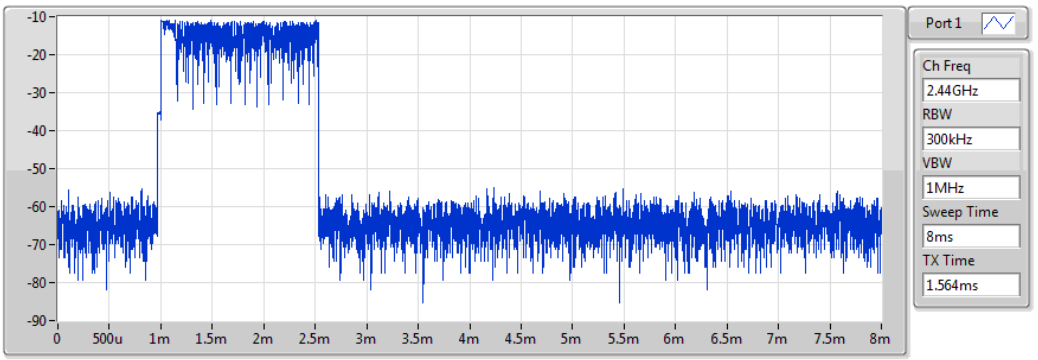
2440MHz



Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	311.4852m	400m	2.922m

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

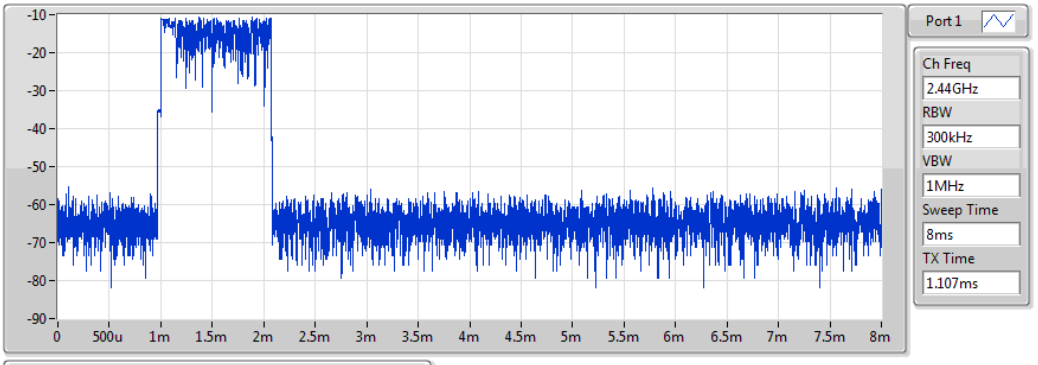
2440MHz



Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	166.7224m	400m	1.564m

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

2440MHz



Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	118.0062m	400m	1.107m

Summary

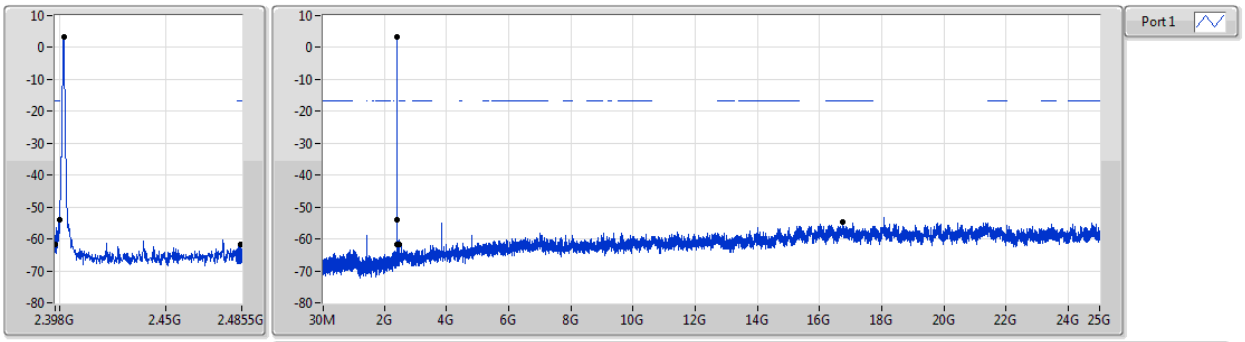
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
BT-EDR(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	2.48016G	0.74	-19.26	1.97176G	-64.31	2.399672G	-63.54	2.483544G	-58.96	24.743898G	-54.68	1

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	2.402004G	3.23	-16.77	2.398G	-61.77	2.399884G	-53.84	2.484736G	-61.56	16.737179G	-54.76	1
2440MHz	Pass	2.439913G	3.36	-16.64	1.95992G	-64.71	2.399192G	-63.52	2.485312G	-62.46	24.090977G	-54.74	1
2480MHz	Pass	2.478991G	2.25	-17.75	955.888M	-62.17	2.398332G	-61.30	2.483704G	-59.28	6.912414G	-55.65	1
BT-EDR(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.40167G	2.75	-17.25	2.394448G	-61.41	2.399544G	-53.95	2.484644G	-61.47	24.833956G	-54.42	1
2440MHz	Pass	2.439746G	1.26	-18.74	2.305648G	-63.06	2.398712G	-62.99	2.48516G	-62.33	15.327208G	-54.30	1
2480MHz	Pass	2.48016G	0.74	-19.26	1.97176G	-64.31	2.399672G	-63.54	2.483544G	-58.96	24.743898G	-54.68	1
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.40167G	1.67	-18.33	798.416M	-63.86	2.399624G	-54.33	2.483944G	-62.75	21.456781G	-53.98	1
2440MHz	Pass	2.439913G	2.15	-17.85	939.312M	-63.21	2.399472G	-63.33	2.485044G	-63.27	16.725921G	-54.37	1
2480MHz	Pass	2.479158G	3.96	-16.04	2.138704G	-63.71	2.399176G	-63.84	2.484844G	-60.89	21.442709G	-54.16	1

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

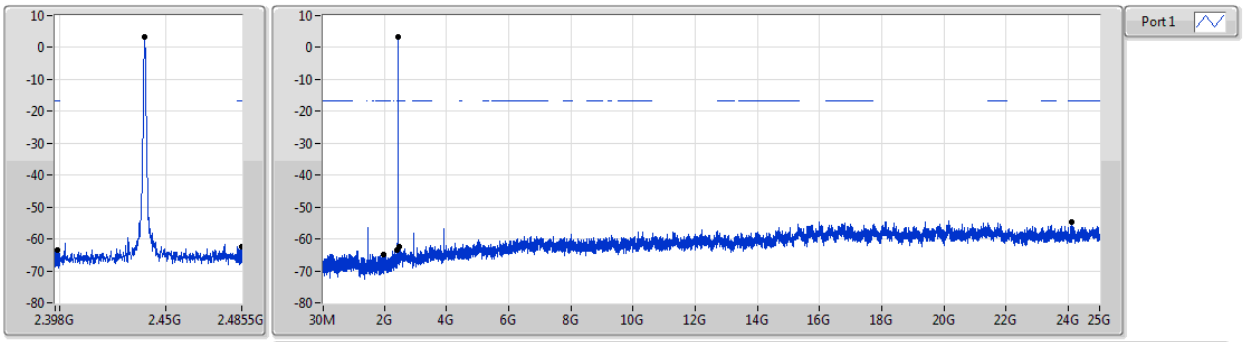
2402MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.402004G	3.23	-16.77	2.398G	-61.77	2.399884G	-53.84	2.484736G	-61.56	16.737179G	-54.76	1

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

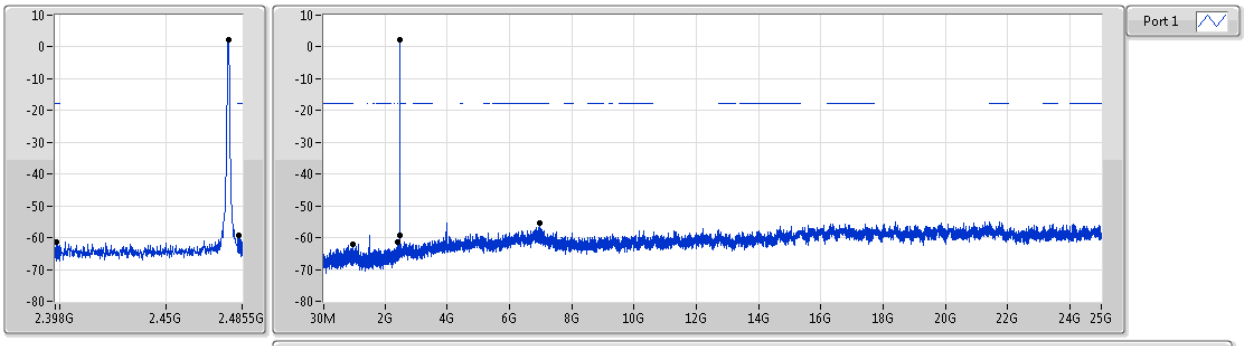
2440MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.439913G	3.36	-16.64	1.95992G	-64.71	2.399192G	-63.52	2.485312G	-62.46	24.090977G	-54.74	1

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

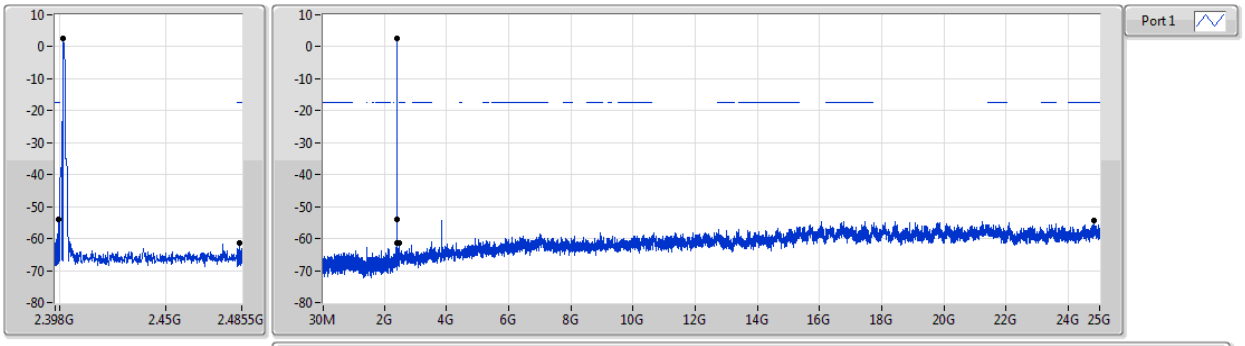
2480MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.478991G	2.25	-17.75	955.888M	-62.17	2.398332G	-61.30	2.483704G	-59.28	6.912414G	-55.65	1

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

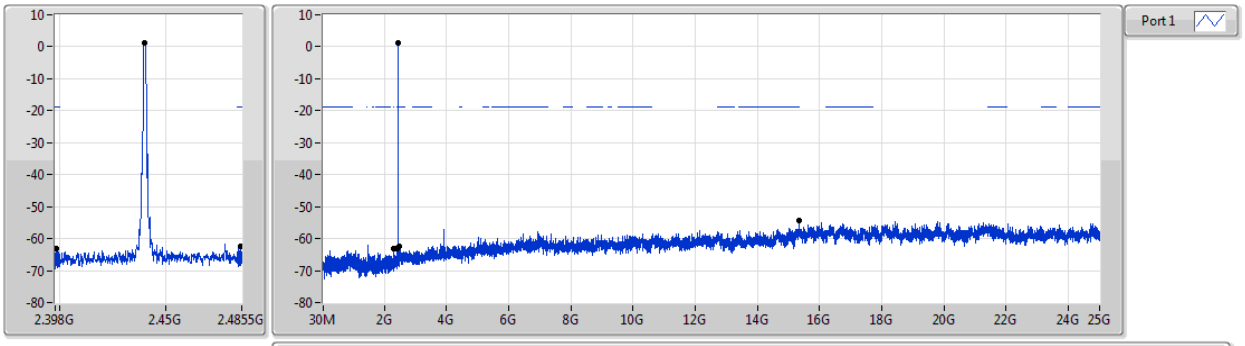
2402MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.40167G	2.75	-17.25	2.394448G	-61.41	2.399544G	-53.95	2.484644G	-61.47	24.833956G	-54.42	1

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

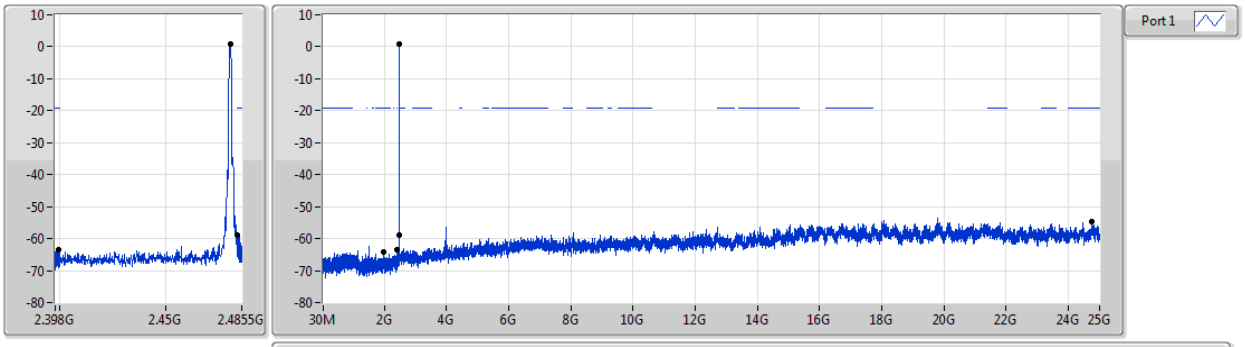
2440MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.439746G	1.26	-18.74	2.305648G	-63.06	2.398712G	-62.99	2.48516G	-62.33	15.327208G	-54.30	1

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

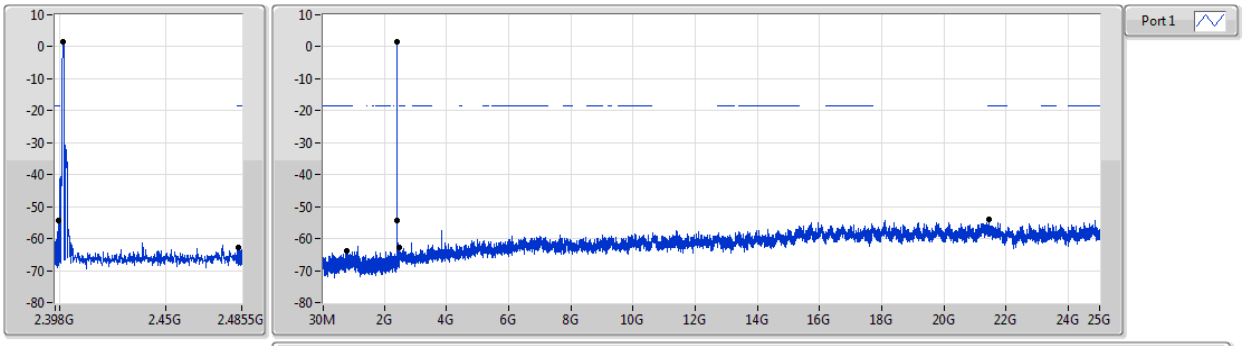
2480MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.48016G	0.74	-19.26	1.97176G	-64.31	2.399672G	-63.54	2.483544G	-58.96	24.743898G	-54.68	1

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

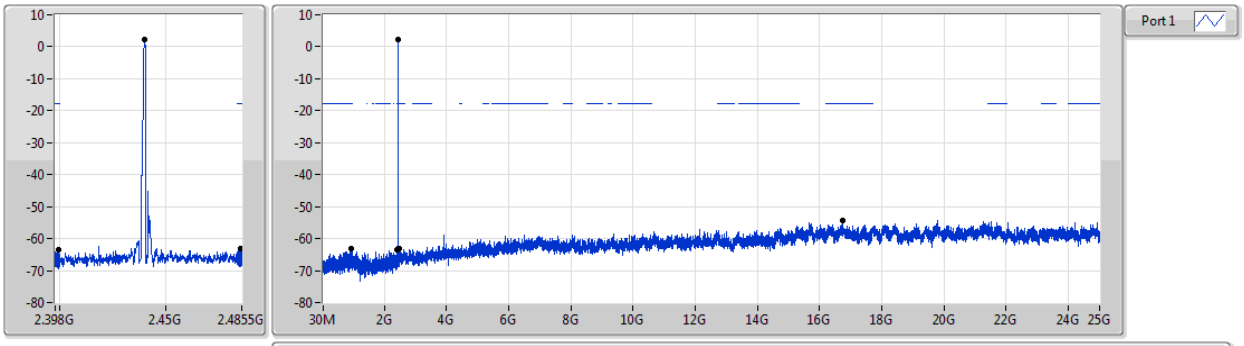
2402MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.40167G	1.67	-18.33	798.416M	-63.86	2.399624G	-54.33	2.483944G	-62.75	21.456781G	-53.98	1

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

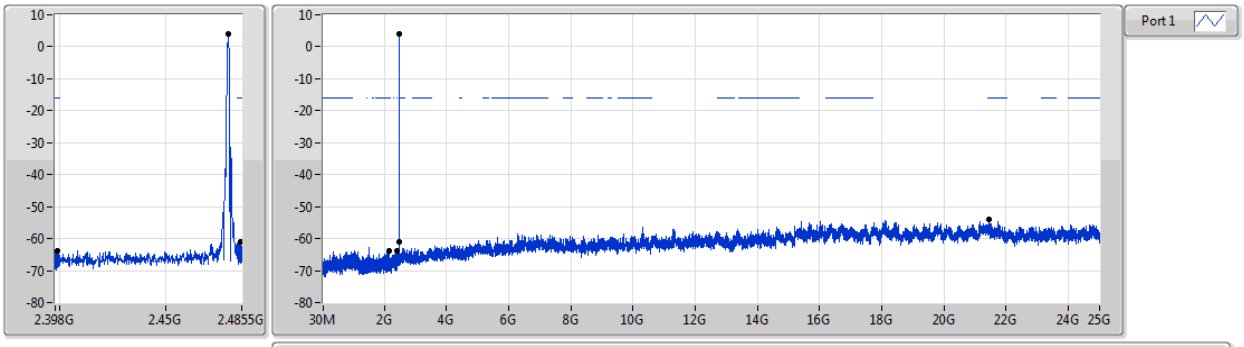
2440MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.439913G	2.15	-17.85	939.312M	-63.21	2.399472G	-63.33	2.485044G	-63.27	16.725921G	-54.37	1

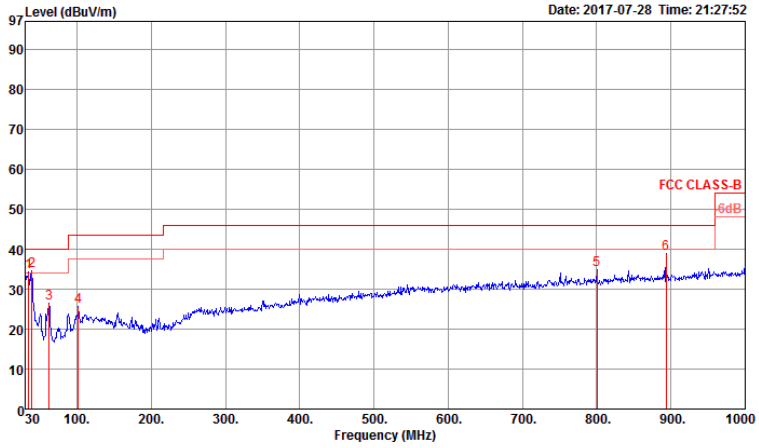
BT-EDR(3Mbps) **CSE NdB**

2480MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.479158G	3.96	-16.04	2.138704G	-63.71	2.399176G	-63.84	2.484844G	-60.89	21.442709G	-54.16	1

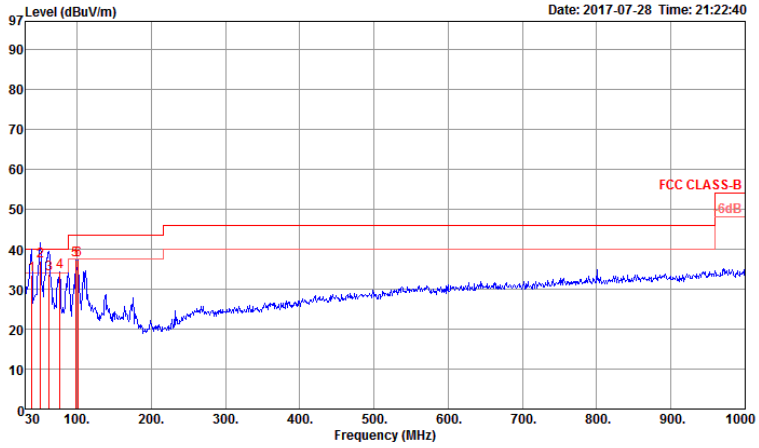
RSE below 1GHz Result			
Operating Mode	2	**Polarization**	Horizontal
Operating Function	Normal Link		



	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	34.85	34.44	40.00	-5.56	37.75	2.16	23.11	28.58	100	77	Peak	HORIZONTAL
2	38.73	34.56	40.00	-5.44	40.47	2.12	20.55	28.58	100	30	Peak	HORIZONTAL
3	62.01	26.55	40.00	-13.45	40.79	2.17	12.11	28.52	125	100	Peak	HORIZONTAL
4	101.78	25.69	43.50	-17.81	35.13	2.22	16.75	28.41	100	301	Peak	HORIZONTAL
5	800.18	34.91	46.00	-11.09	33.68	4.24	26.06	29.07	100	333	Peak	HORIZONTAL
6	893.30	38.77	46.00	-7.23	36.64	4.53	26.43	28.83	125	11	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	2	**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	38.73	33.40	40.00	-6.60	39.31	2.12	20.55	28.58	120	45	QP	VERTICAL
2	50.37	36.99	40.00	-3.01	49.34	2.16	14.06	28.57	104	3	QP	VERTICAL
3	62.01	33.86	40.00	-6.14	48.10	2.17	12.11	28.52	168	172	QP	VERTICAL
4	76.56	34.20	40.00	-5.80	47.83	2.20	12.65	28.48	150	31	Peak	VERTICAL
5	97.90	37.17	43.50	-6.33	47.18	2.21	16.20	28.42	125	301	Peak	VERTICAL
6	101.78	37.21	43.50	-6.29	46.65	2.22	16.75	28.41	100	101	Peak	VERTICAL

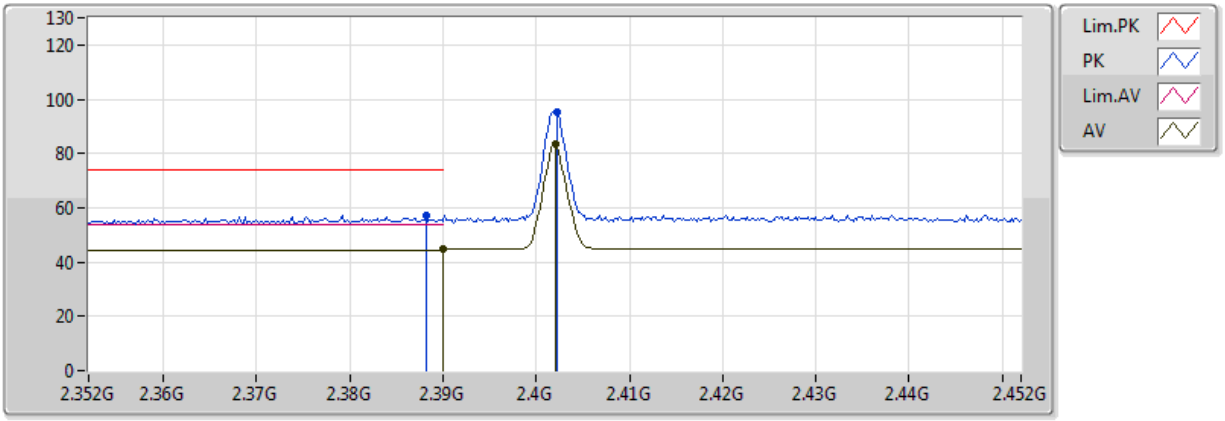
Note 1: “>20dB” means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found emissions (No emissions were detected.)

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-BR(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-
2.4-2.4835GHz	Pass	AV	2.483502G	47.89	54.00	-6.11	32.71	3	V	269	1.93	-

BT-BR(1Mbps)

2402MHz_TX

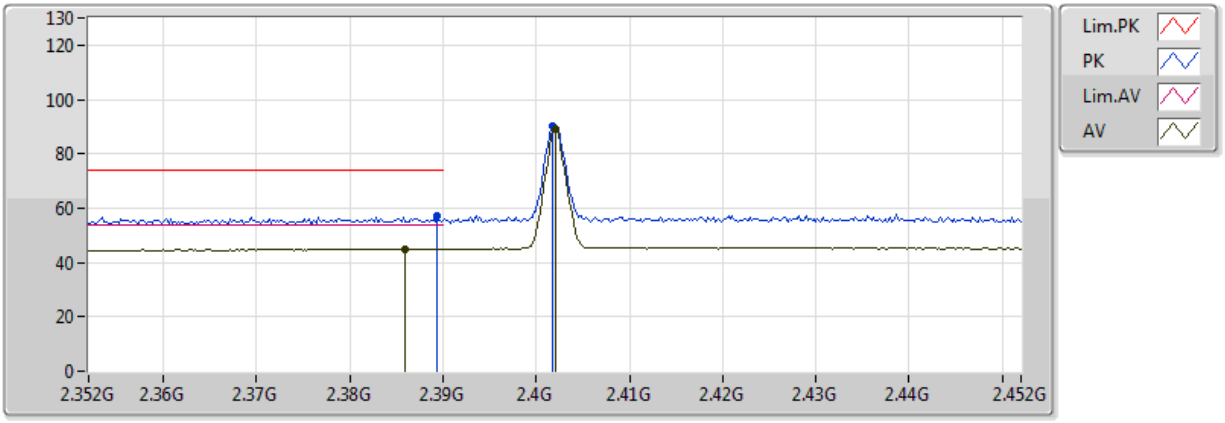


20170828
EUT Z_1TX
Setting 00
05-E-2
FSP(100304)

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	44.55	54.00	-9.45	32.37	3	V	270	1.82	-
AV	2.402G	83.68	Inf	-Inf	32.42	3	V	270	1.82	-
PK	2.3882G	57.37	74.00	-16.63	32.37	3	V	270	1.82	-
PK	2.4022G	95.38	Inf	-Inf	32.42	3	V	270	1.82	-

BT-BR(1Mbps)

2402MHz_TX

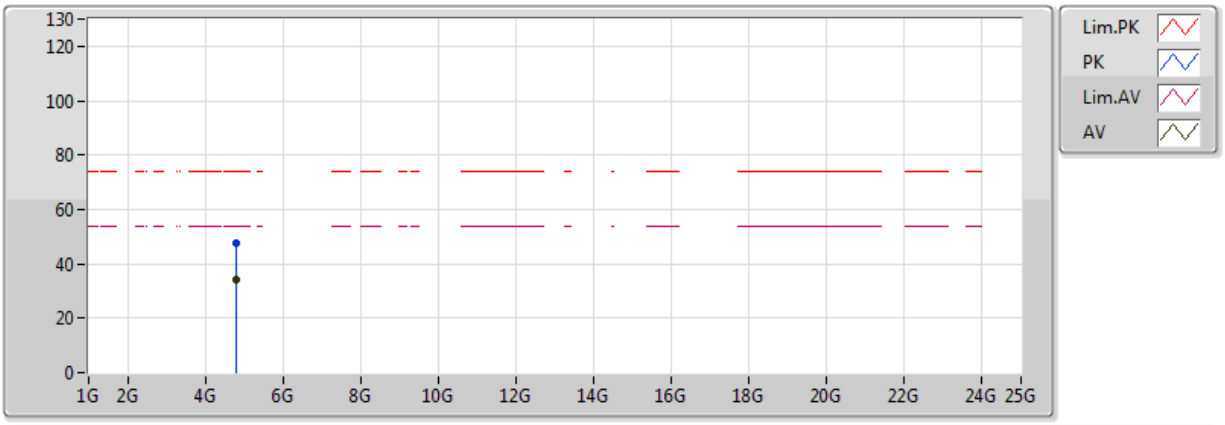


20170828
EUT Z_1TX
Setting 00
05-E-2
FSP(100304)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.386G	45.02	54.00	-8.98	32.36	3	H	252	1.80	-
AV	2.402G	89.11	Inf	-Inf	32.42	3	H	252	1.80	-
PK	2.3894G	56.92	74.00	-17.08	32.37	3	H	252	1.80	-
PK	2.4018G	90.02	Inf	-Inf	32.42	3	H	252	1.80	-

BT-BR(1Mbps)

2402MHz_TX

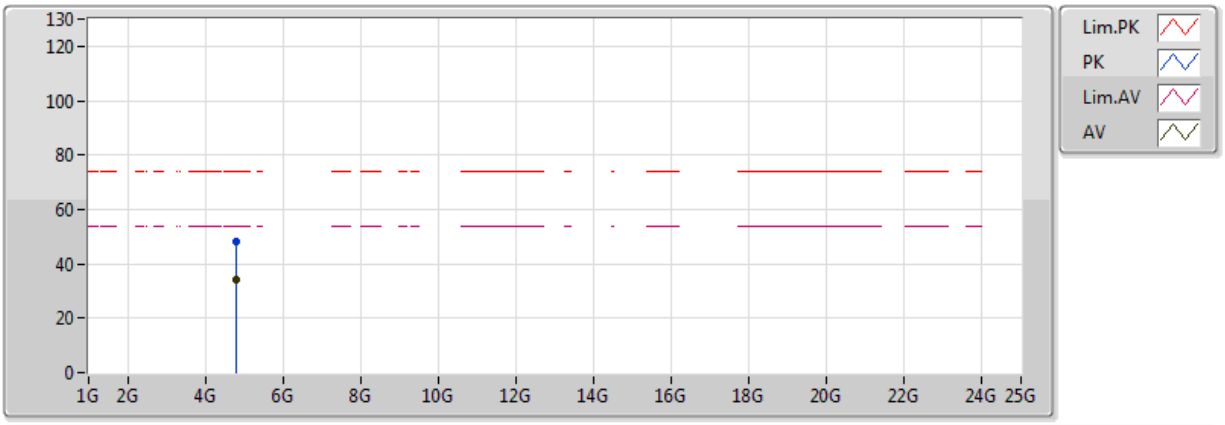


20170828
EUT Z_1TX
Setting 00
05-E-2
FSP(100304)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.8052G	34.21	54.00	-19.79	6.54	3	V	33	1.71	-
PK	4.81486G	47.60	74.00	-26.40	6.57	3	V	33	1.71	-

BT-BR(1Mbps)

2402MHz_TX

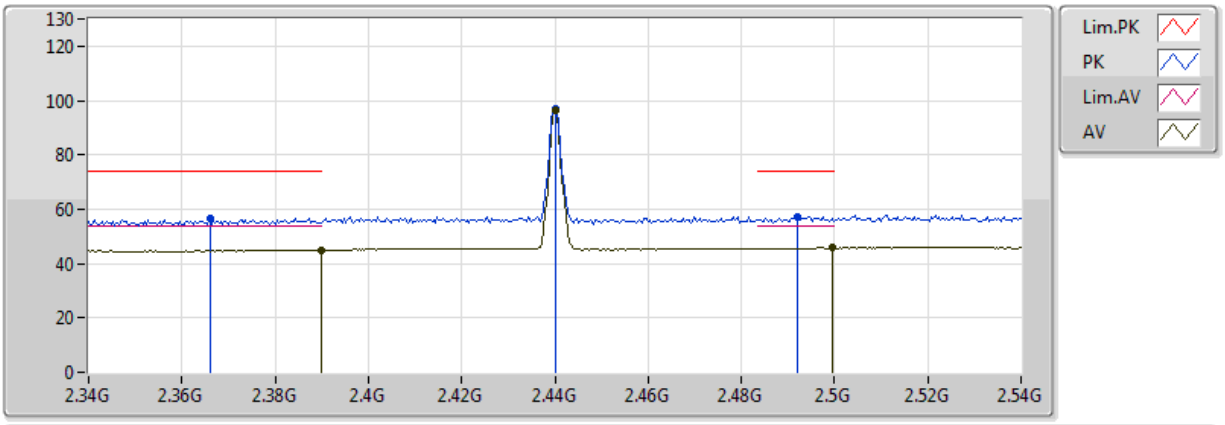


20170828
EUT Z_1TX
Setting 00
05-E-2
FSP(100304)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.8037G	34.35	54.00	-19.65	6.54	3	H	16	1.95	-
PK	4.81606G	48.16	74.00	-25.84	6.57	3	H	16	1.95	-

BT-BR(1Mbps)

2440MHz_TX

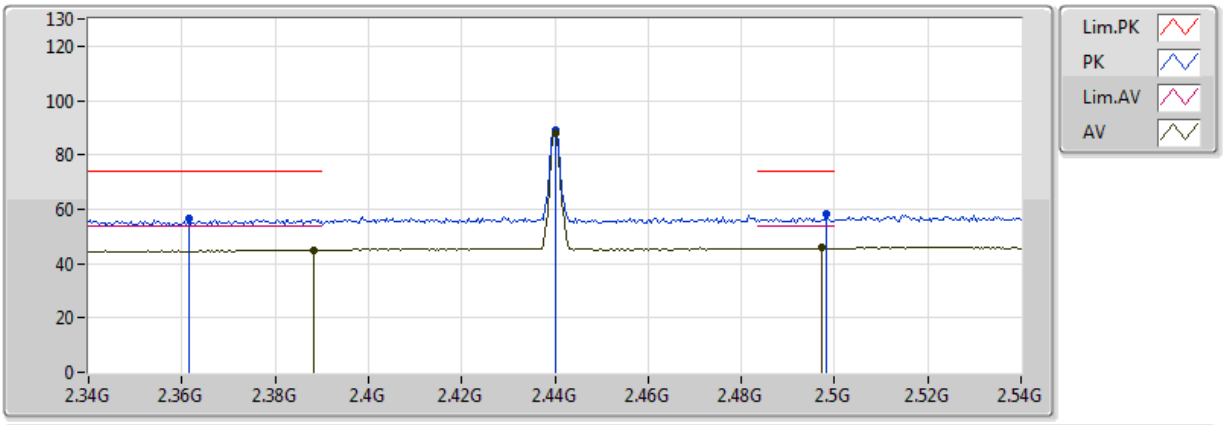


20170828
EUT Z_1TX
Setting 00
05-E-2
FSP(100304)

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	45.09	54.00	-8.91	32.37	3	V	264	1.28	-
AV	2.44G	96.18	Inf	-Inf	32.55	3	V	264	1.28	-
AV	2.4996G	45.77	54.00	-8.23	32.77	3	V	264	1.28	-
PK	2.366G	56.71	74.00	-17.29	32.28	3	V	264	1.28	-
PK	2.44G	97.04	Inf	-Inf	32.55	3	V	264	1.28	-
PK	2.492G	57.13	74.00	-16.87	32.74	3	V	264	1.28	-

BT-BR(1Mbps)

2440MHz_TX

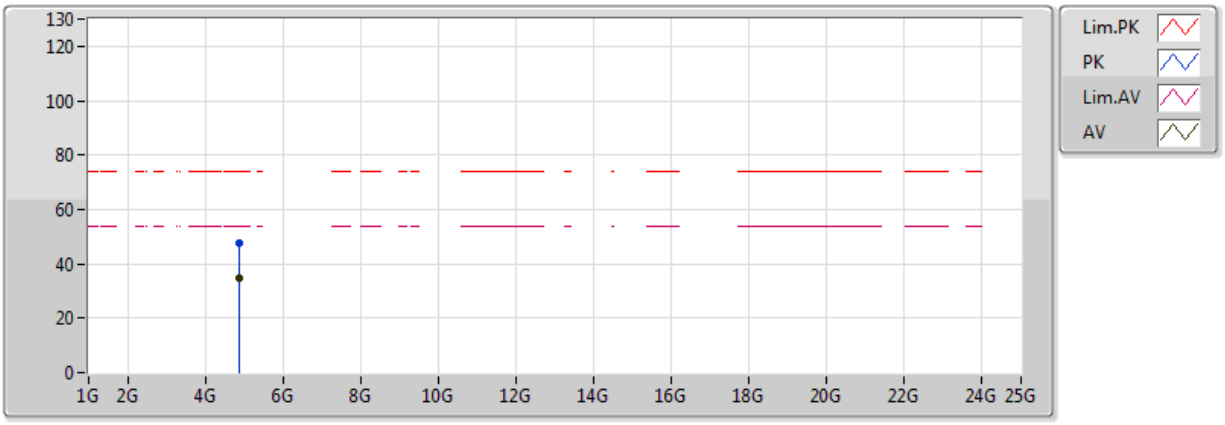


20170828
EUT Z_1TX
Setting 00
05-E-2
FSP(100304)

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	45.10	54.00	-8.90	32.37	3	H	253	1.66	-
AV	2.44G	88.05	Inf	-Inf	32.55	3	H	253	1.66	-
AV	2.4972G	45.76	54.00	-8.24	32.76	3	H	253	1.66	-
PK	2.3616G	56.73	74.00	-17.27	32.27	3	H	253	1.66	-
PK	2.44G	88.99	Inf	-Inf	32.55	3	H	253	1.66	-
PK	2.4984G	58.01	74.00	-15.99	32.76	3	H	253	1.66	-

BT-BR(1Mbps)

2440MHz_TX

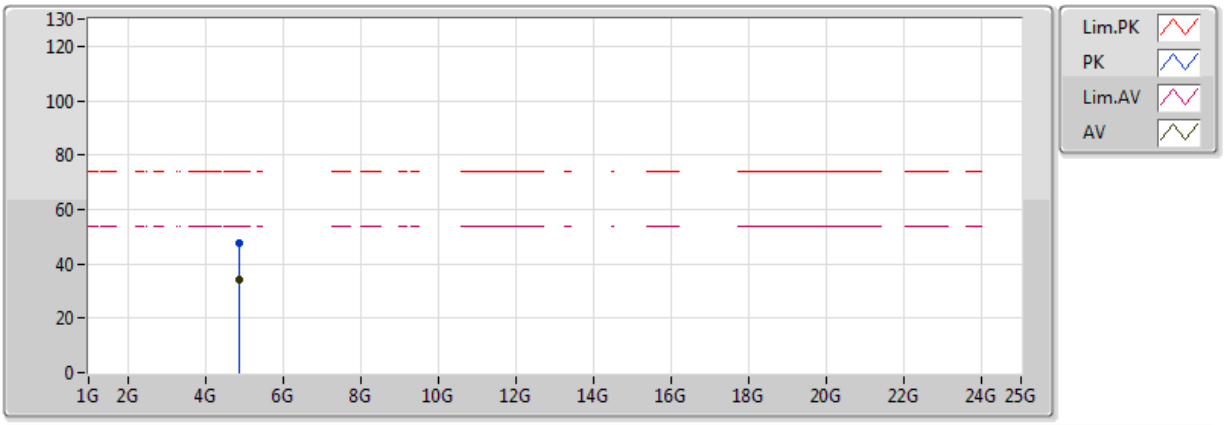


20170828
EUT Z_1TX
Setting 00
05-E-2
FSP(100304)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.89116G	34.51	54.00	-19.49	6.78	3	V	183	1.92	-
PK	4.88042G	47.62	74.00	-26.38	6.75	3	V	183	1.92	-

BT-BR(1Mbps)

2440MHz_TX

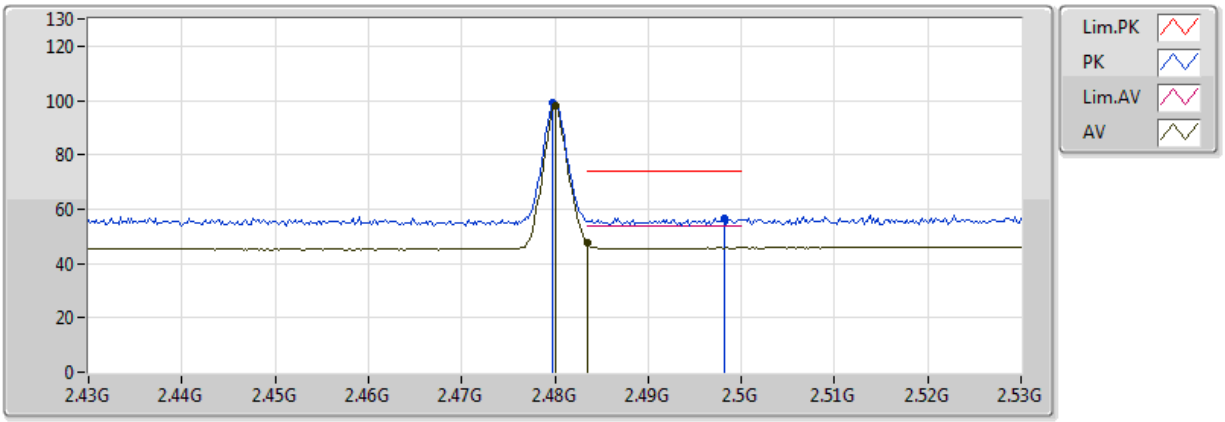


20170828
EUT Z_1TX
Setting 00
05-E-2
FSP(100304)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.89398G	34.44	54.00	-19.56	6.78	3	H	157	2.42	-
PK	4.89002G	47.44	74.00	-26.56	6.77	3	H	157	2.42	-

BT-BR(1Mbps)

2480MHz_TX

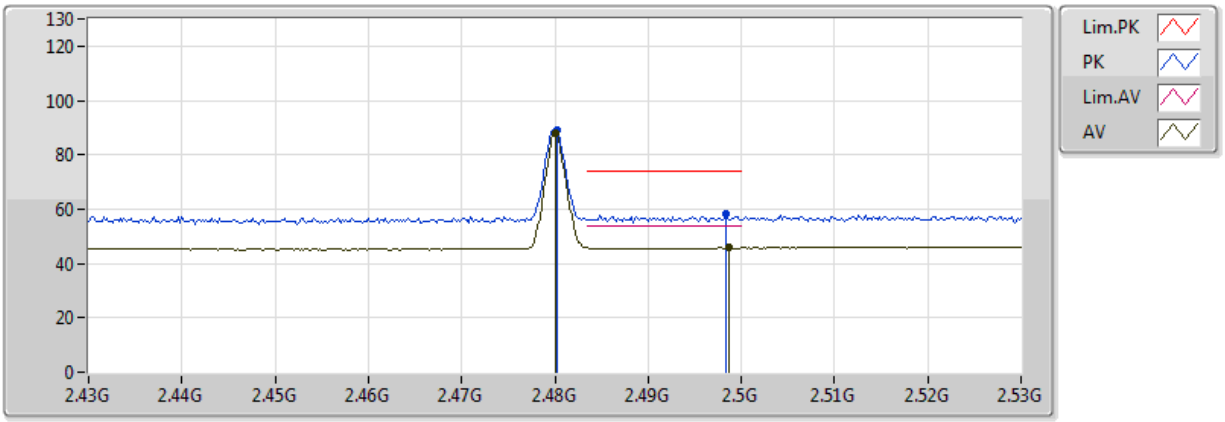


20170828
EUT Z_1TX
Setting 00
05-E-2
FSP(100304)

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	98.06	Inf	-Inf	32.70	3	V	274	1.93	-
AV	2.483502G	47.47	54.00	-6.53	32.71	3	V	274	1.93	-
PK	2.4798G	98.91	Inf	-Inf	32.70	3	V	274	1.93	-
PK	2.4982G	56.83	74.00	-17.17	32.76	3	V	274	1.93	-

BT-BR(1Mbps)

2480MHz_TX

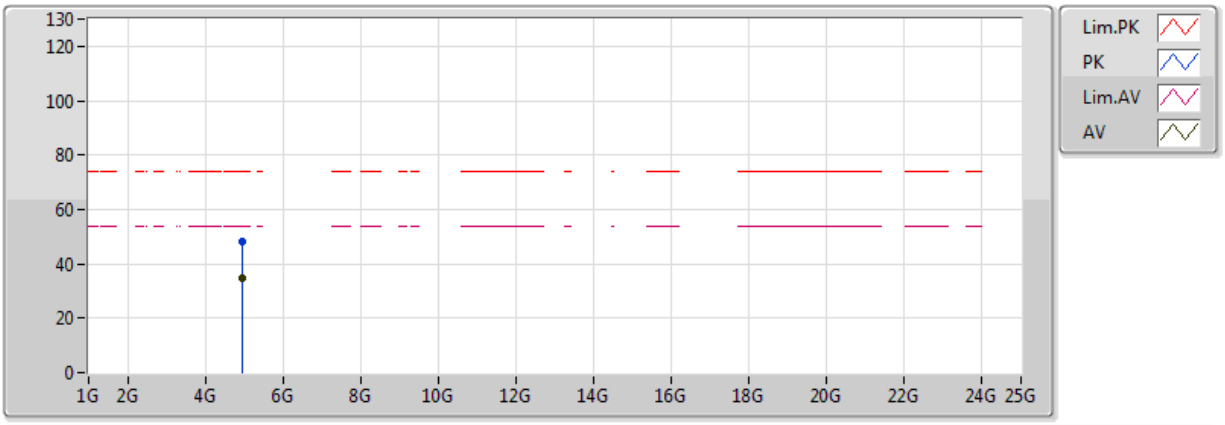


20170828
EUT Z_1TX
Setting 00
05-E-2
FSP(100304)

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	88.19	Inf	-Inf	32.70	3	H	94	1.50	-
AV	2.4986G	45.75	54.00	-8.25	32.76	3	H	94	1.50	-
PK	2.4802G	89.15	Inf	-Inf	32.70	3	H	94	1.50	-
PK	2.4984G	58.00	74.00	-16.00	32.76	3	H	94	1.50	-

BT-BR(1Mbps)

2480MHz_TX

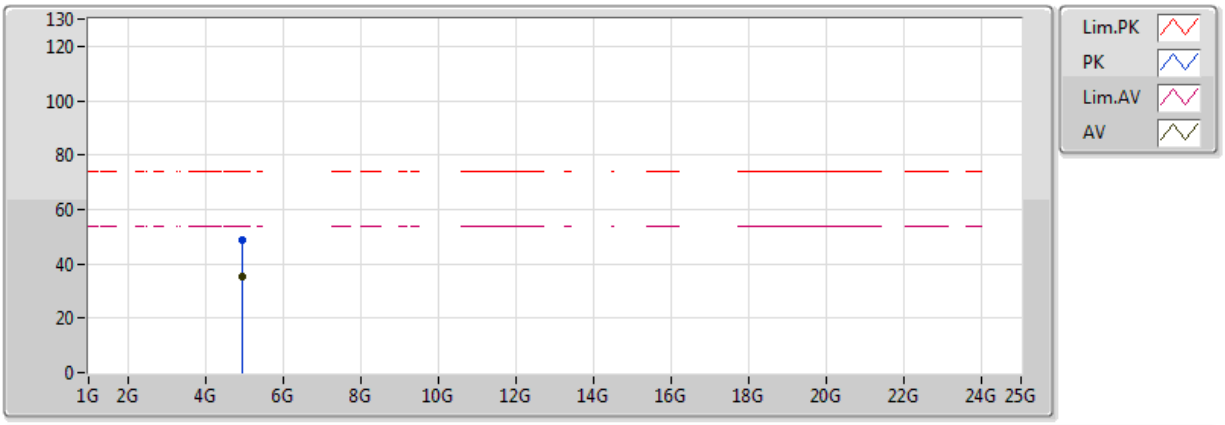


20170828
EUT Z_1TX
Setting 00
05-E-2
FSP(100304)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.9726G	35.01	54.00	-18.99	6.99	3	V	190	1.14	-
PK	4.95724G	48.07	74.00	-25.93	6.95	3	V	190	1.14	-

BT-BR(1Mbps)

2480MHz_TX

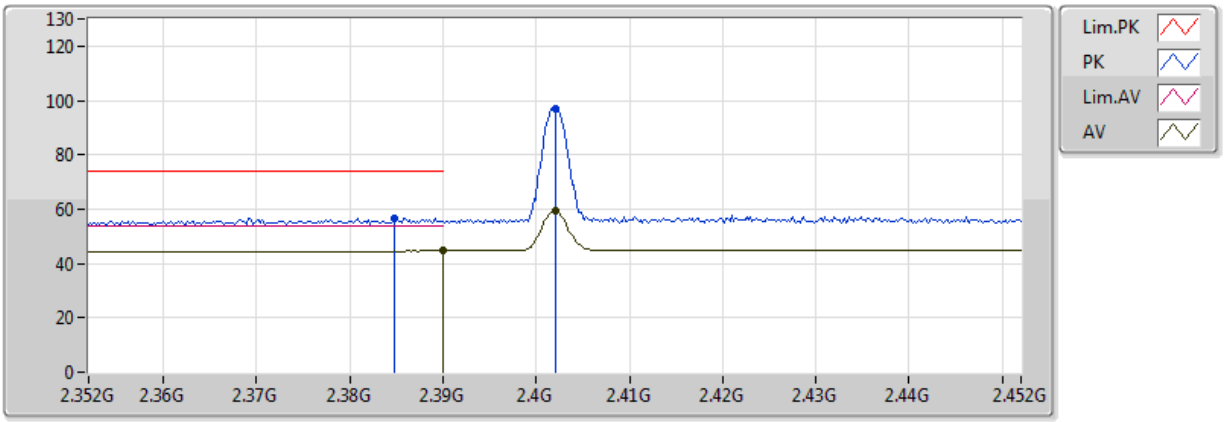


20170828
EUT Z_1TX
Setting 00
05-E-2
FSP(100304)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.97386G	35.16	54.00	-18.84	6.99	3	H	340	2.06	-
PK	4.96102G	48.48	74.00	-25.52	6.96	3	H	340	2.06	-

BT-EDR(3Mbps)

2402MHz_TX

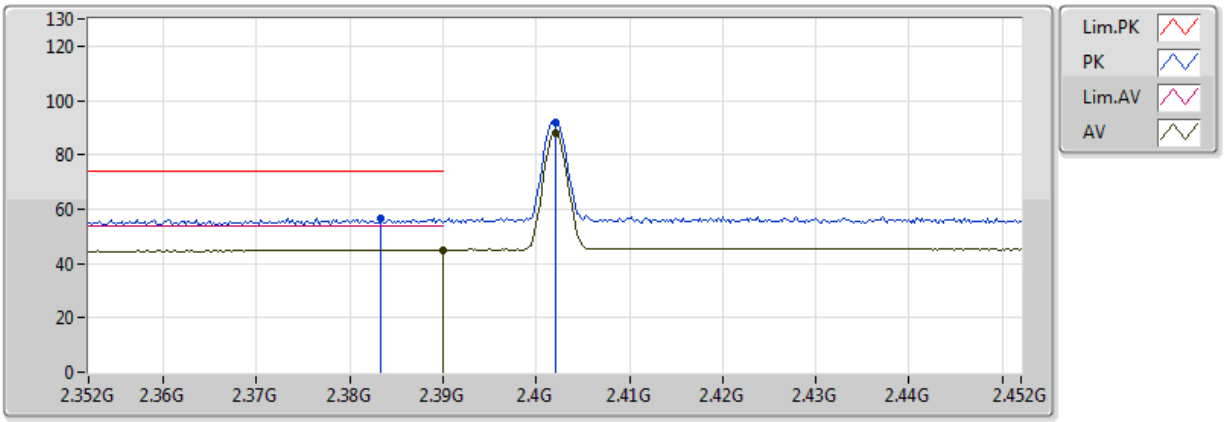


20170828
EUT Z_1TX
Setting 00
05-E-2
FSP(100304)

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	44.62	54.00	-9.38	32.37	3	V	312	1.99	-
AV	2.402G	59.43	Inf	-Inf	32.42	3	V	312	1.99	-
PK	2.3848G	56.54	74.00	-17.46	32.35	3	V	312	1.99	-
PK	2.402G	97.21	Inf	-Inf	32.42	3	V	312	1.99	-

BT-EDR(3Mbps)

2402MHz_TX

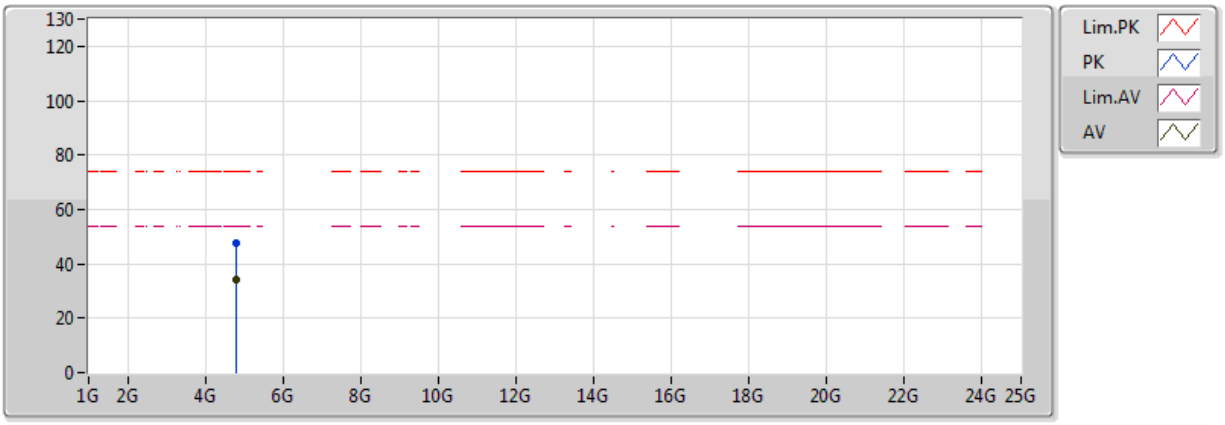


20170828
EUT Z_1TX
Setting 00
05-E-2
FSP(100304)

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	45.10	54.00	-8.90	32.37	3	H	250	1.80	-
AV	2.402G	87.76	Inf	-Inf	32.42	3	H	250	1.80	-
PK	2.3834G	56.67	74.00	-17.33	32.35	3	H	250	1.80	-
PK	2.402G	91.94	Inf	-Inf	32.42	3	H	250	1.80	-

BT-EDR(3Mbps)

2402MHz_TX

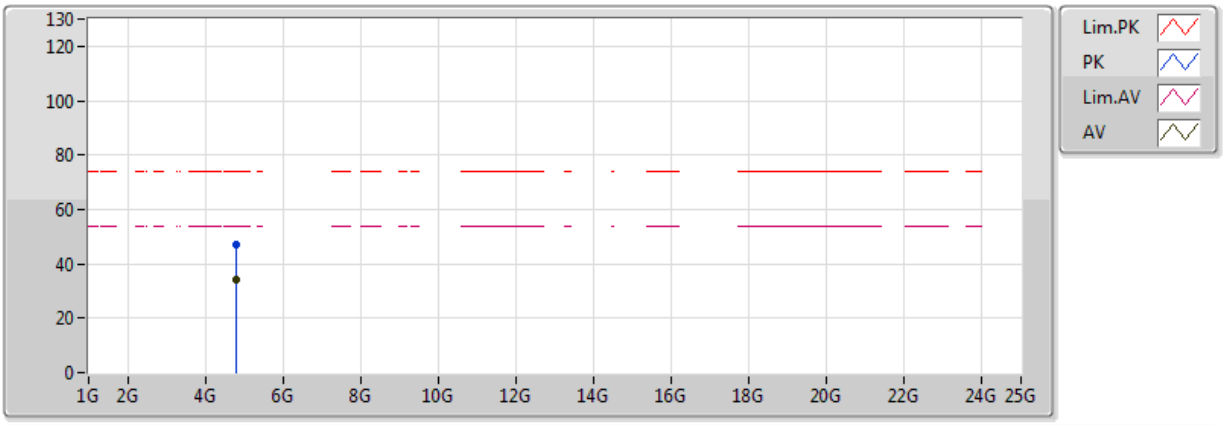


20170828
EUT Z_1TX
Setting 00
05-E-2
FSP(100304)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.8037G	34.44	54.00	-19.56	6.54	3	V	98	1.26	-
PK	4.7923G	47.38	74.00	-26.62	6.50	3	V	98	1.26	-

BT-EDR(3Mbps)

2402MHz_TX

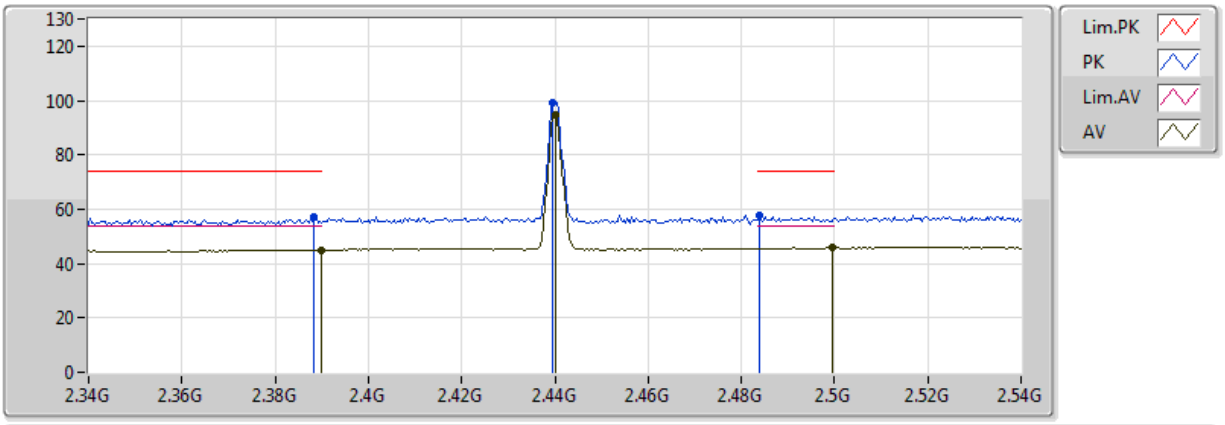


20170828
EUT Z_1TX
Setting 00
05-E-2
FSP(100304)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.79002G	34.45	54.00	-19.55	6.50	3	H	14	1.99	-
PK	4.81354G	47.27	74.00	-26.73	6.57	3	H	14	1.99	-

BT-EDR(3Mbps)

2440MHz_TX

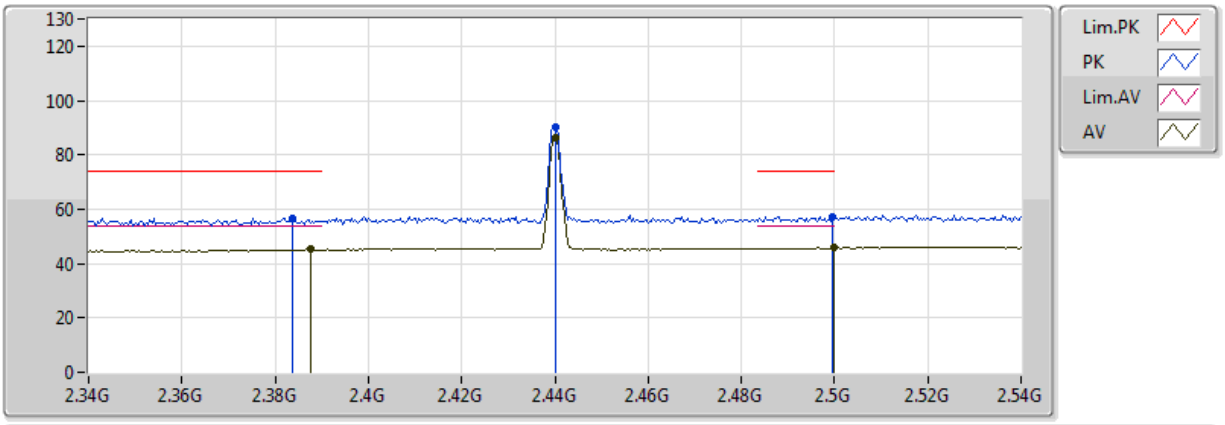


20170828
EUT Z_1TX
Setting 00
05-E-2
FSP(100304)

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	44.97	54.00	-9.03	32.37	3	V	272	1.81	-
AV	2.44G	94.96	Inf	-Inf	32.55	3	V	272	1.81	-
AV	2.4996G	45.73	54.00	-8.27	32.77	3	V	272	1.81	-
PK	2.3884G	57.04	74.00	-16.96	32.37	3	V	272	1.81	-
PK	2.4396G	99.21	Inf	-Inf	32.55	3	V	272	1.81	-
PK	2.484G	57.64	74.00	-16.36	32.71	3	V	272	1.81	-

BT-EDR(3Mbps)

2440MHz_TX

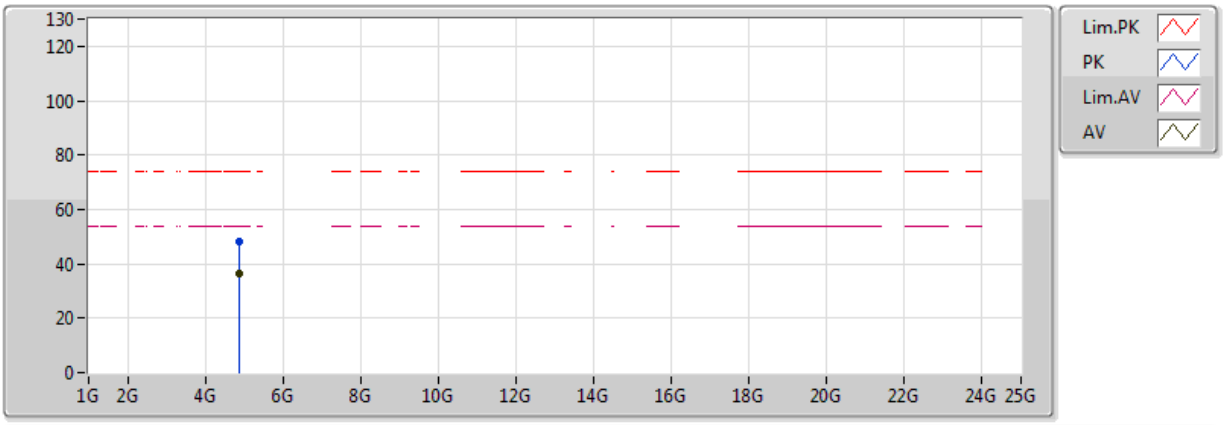


20170828
EUT Z_1TX
Setting 00
05-E-2
FSP(100304)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3876G	45.15	54.00	-8.85	32.36	3	H	253	1.50	-
AV	2.44G	86.21	Inf	-Inf	32.55	3	H	253	1.50	-
AV	2.5G	45.69	54.00	-8.31	32.77	3	H	253	1.50	-
PK	2.3836G	56.64	74.00	-17.36	32.35	3	H	253	1.50	-
PK	2.44G	90.33	Inf	-Inf	32.55	3	H	253	1.50	-
PK	2.4996G	57.27	74.00	-16.73	32.77	3	H	253	1.50	-

BT-EDR(3Mbps)

2440MHz_TX

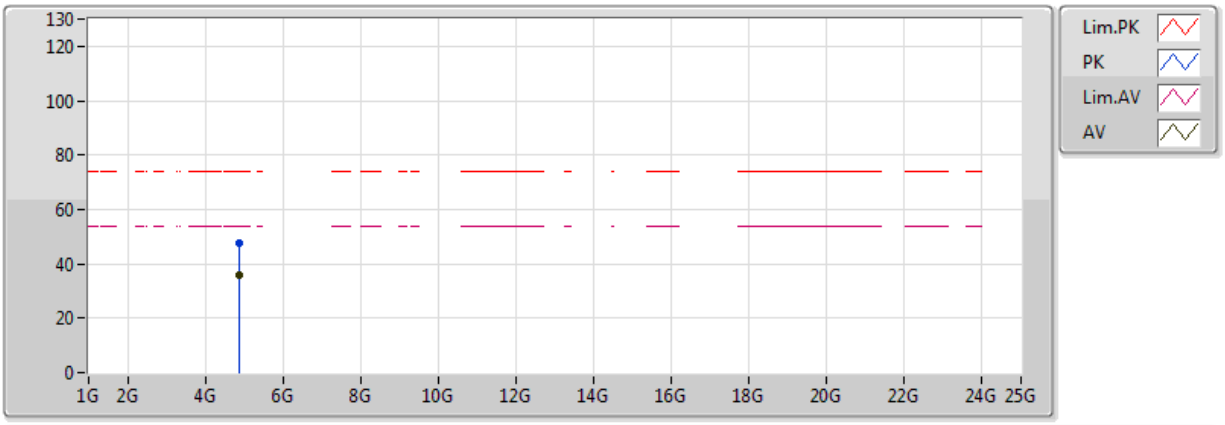


20170828
EUT Z_1TX
Setting 00
05-E-2
FSP(100304)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87988G	36.26	54.00	-17.74	6.75	3	V	314	1.94	-
PK	4.87982G	48.15	74.00	-25.85	6.75	3	V	314	1.94	-

BT-EDR(3Mbps)

2440MHz_TX

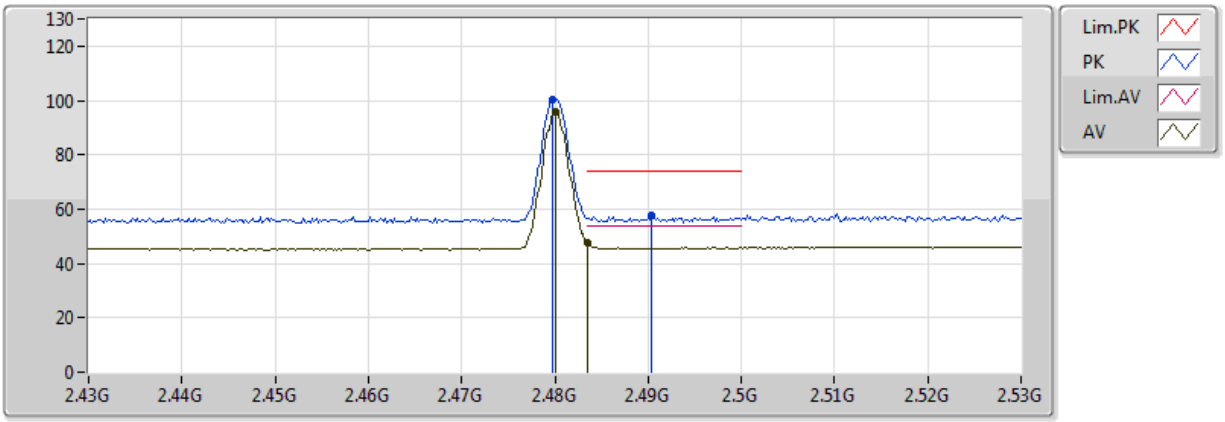


20170828
EUT Z_1TX
Setting 00
05-E-2
FSP(100304)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.88G	36.05	54.00	-17.95	6.75	3	H	358	2.34	-
PK	4.88006G	47.89	74.00	-26.11	6.75	3	H	358	2.34	-

BT-EDR(3Mbps)

2480MHz_TX

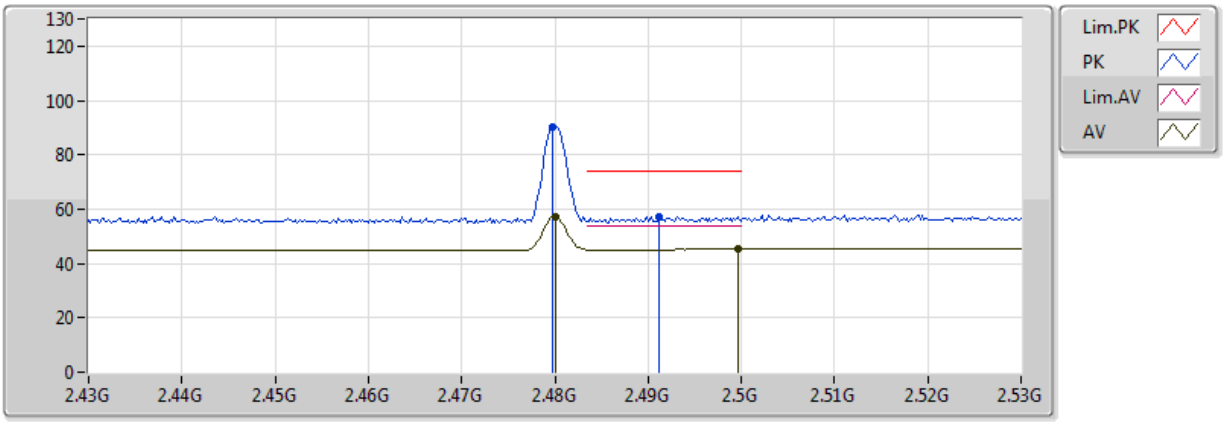


20170828
EUT Z_1TX
Setting 00
05-E-2
FSP(100304)

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	95.95	Inf	-Inf	32.70	3	V	269	1.93	-
AV	2.483502G	47.89	54.00	-6.11	32.71	3	V	269	1.93	-
PK	2.4798G	100.20	Inf	-Inf	32.70	3	V	269	1.93	-
PK	2.4904G	57.67	74.00	-16.33	32.74	3	V	269	1.93	-

BT-EDR(3Mbps)

2480MHz_TX

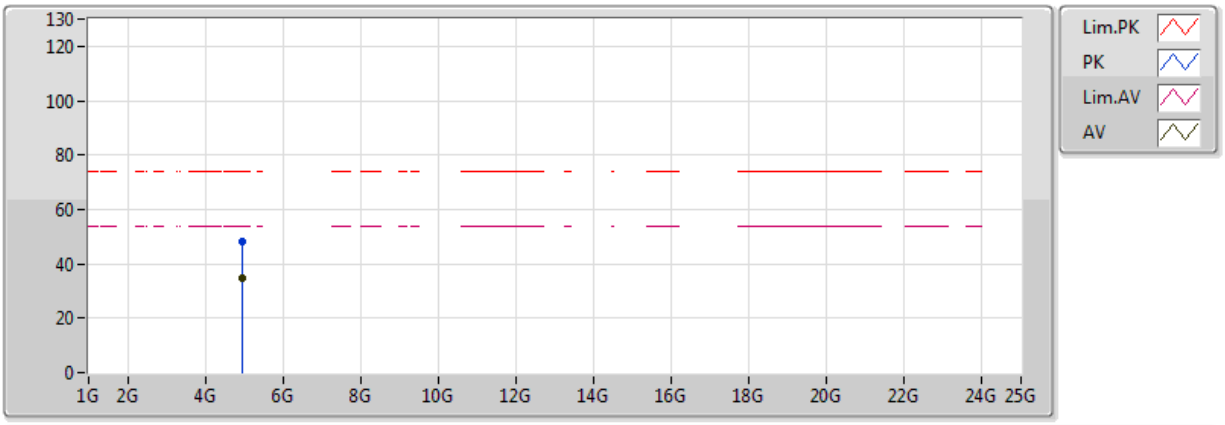


20170828
EUT Z_1TX
Setting 00
05-E-2
FSP(100304)

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	57.43	Inf	-Inf	32.70	3	H	92	1.50	-
AV	2.4996G	45.24	54.00	-8.76	32.77	3	H	92	1.50	-
PK	2.4798G	90.16	Inf	-Inf	32.70	3	H	92	1.50	-
PK	2.4912G	57.26	74.00	-16.74	32.74	3	H	92	1.50	-

BT-EDR(3Mbps)

2480MHz_TX

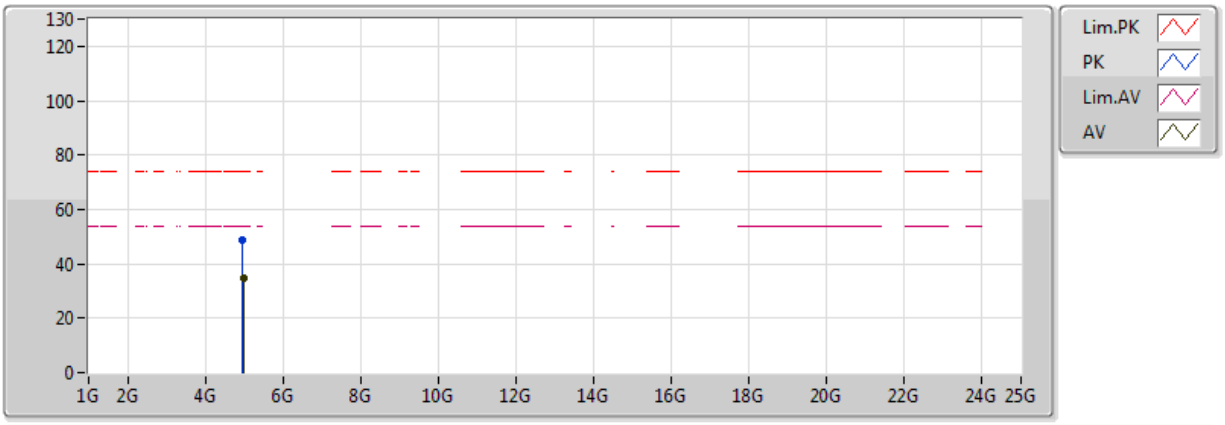


20170828
EUT Z_1TX
Setting 00
05-E-2
FSP(100304)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.97074G	34.96	54.00	-19.04	6.98	3	V	360	1.63	-
PK	4.97212G	48.25	74.00	-25.75	6.99	3	V	360	1.63	-

BT-EDR(3Mbps)

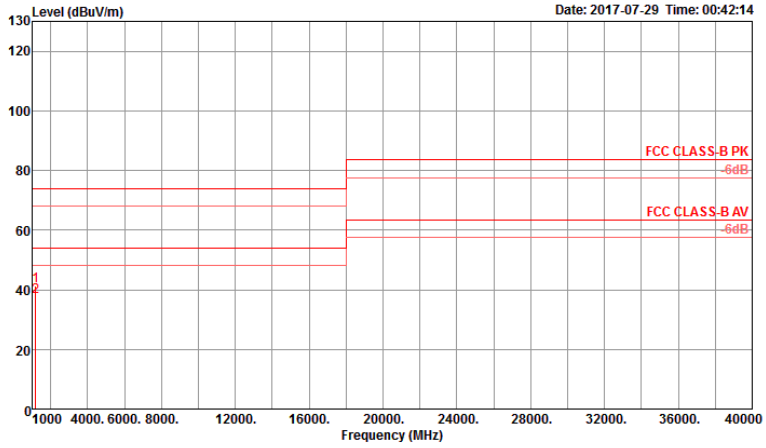
2480MHz_TX



20170828
EUT Z_1TX
Setting 00
05-E-2
FSP(100304)

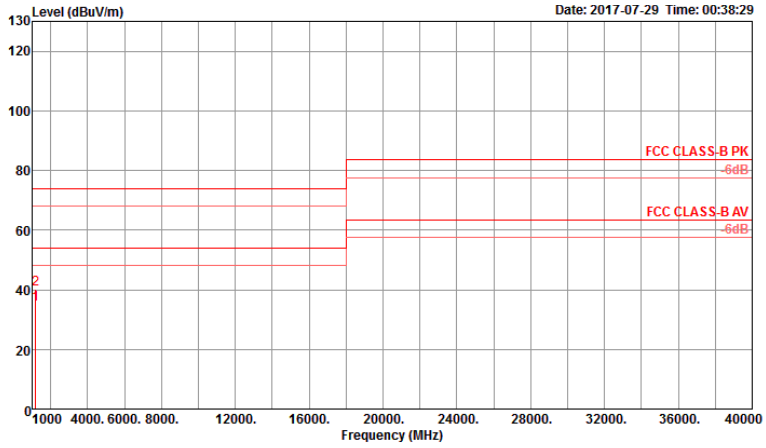
Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.9747G	35.02	54.00	-18.98	6.99	3	H	50	1.09	-
PK	4.97218G	48.59	74.00	-25.41	6.99	3	H	50	1.09	-

RSE Co-location Result			
Operating Mode	1	**Polarization**	Horizontal
Operating Function	Normal Link		



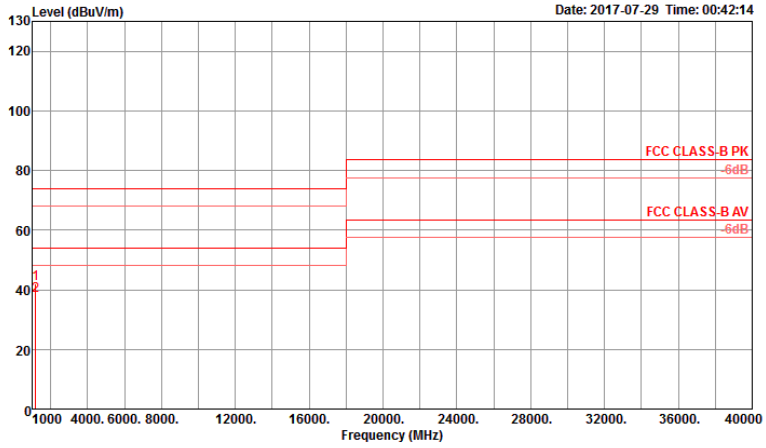
	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	1199.83	41.31	74.00	-32.69	48.19	3.01	24.43	34.32	113	56	Peak	HORIZONTAL
2	1199.98	37.58	54.00	-16.42	44.46	3.01	24.43	34.32	113	56	Average	HORIZONTAL

RSE Co-location Result			
Operating Mode	1	**Polarization**	Vertical
Operating Function	Normal Link		



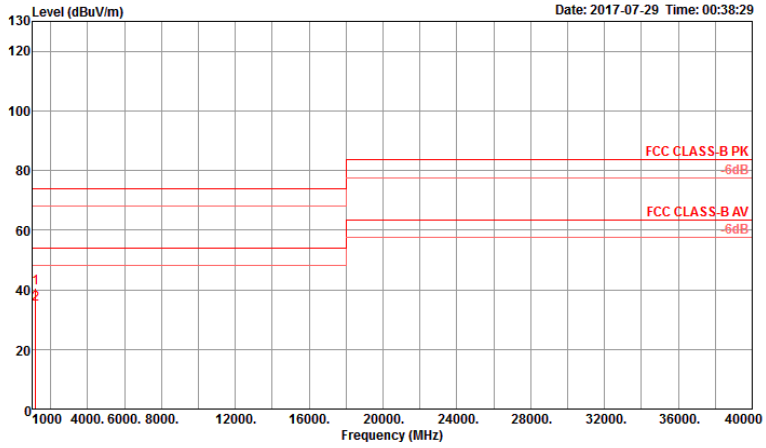
	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	1200.03	35.09	54.00	-18.91	41.97	3.01	24.43	34.32	151	125	Average	VERTICAL
2	1200.15	40.12	74.00	-33.88	47.00	3.01	24.43	34.32	151	125	Peak	VERTICAL

RSE Co-location Result			
Operating Mode	3	**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	1199.93	42.10	74.00	-31.90	48.98	3.01	24.43	34.32	116	90	Peak	HORIZONTAL
2	1200.01	37.95	54.00	-16.05	44.83	3.01	24.43	34.32	116	90	Average	HORIZONTAL

RSE Co-location Result			
Operating Mode	3	**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	1200.09	40.71	74.00	-33.29	47.59	3.01	24.43	34.32	140	207	Peak	VERTICAL
2	1200.13	35.21	54.00	-18.79	42.09	3.01	24.43	34.32	140	207	Average	VERTICAL