



FCC Test Report

Equipment : AC2200 Smart Whole-Home Wi-Fi System
Brand Name : TP-Link
Model No. : Deco M6
FCC ID : TE7M6
Standard : 47 CFR FCC Part 15.247
Operating Band : 2400 MHz – 2483.5 MHz
Applicant : TP-Link Technologies Co., Ltd.
Building 24 (floors 1,3,4,5) and 28 (floors1-4) Central
Science and Technology Park,Shennan Rd, Nanshan,
Shenzhen,China
Manufacturer : TP-Link Technologies Co., Ltd.
Building 24 (floors 1,3,4,5) and 28 (floors1-4) Central
Science and Technology Park,Shennan Rd, Nanshan,
Shenzhen,China

The product sample received on May 18, 2017 and completely tested on Jul. 04, 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 INTERNATIONAL INC., the test report shall not be reproduced except in full.


Sam Chen
SPORTON INTERNATIONAL INC.



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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



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FCC ID: TE7M6

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 channel separation
- ♦ 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	Product Number	Type	Connector	Gain (dBi)	Remark
1	TP-LINK	3101501303	Omni-Directional	I-PEX	1.2	WLAN 2.4GHz TX/RX
2	TP-LINK	3101501305	Omni-Directional	I-PEX	1.3	WLAN 2.4GHz TX/RX
3	TP-LINK	3101501307	Omni-Directional	I-PEX	0.85	WLAN 5GHz band 1 TX/RX
4	TP-LINK	3101501309	Omni-Directional	I-PEX	0.64	WLAN 5GHz band 1 TX/RX
5	TP-LINK	3101501306	Omni-Directional	I-PEX	0.81	WLAN 5GHz band 4 TX/RX
6	TP-LINK	3101501308	Omni-Directional	I-PEX	0.88	WLAN 5GHz band 4 TX/RX
7	TP-LINK	6035500107	Omni-Directional	N/A	1.4	Bluetooth TX/RX
8	TP-LINK	3101501304	Omni-Directional	I-PEX	1.1	Zigbee TX/RX

Note: The EUT has eight antennas.

For WLAN 2.4GHz b/g/n/ac (2TX/2RX):

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

Ant. 1 (Port 1), and Ant. 2 (Port 2) could transmit/receive simultaneously.

For WLAN 5GHz band 1 a/n/ac (2TX/2RX):

Ant. 3 (Port 1), and Ant. 4 (Port 2) can be used as transmitting/receiving antenna.

Ant. 3 (Port 1), and Ant. 4 (Port 2) could transmit/receive simultaneously.

For WLAN 5GHz band 4 a/n/ac (2TX/2RX):

Ant. 5 (Port 1), and Ant. 6 (Port 2) can be used as transmitting/receiving antenna.

Ant. 5 (Port 1), and Ant. 6 (Port 2) could transmit/receive simultaneously.

For Bluetooth (1TX/1RX):

Only Ant. 7 (Port 1) can be used as transmitting/receiving antenna.

For Zigbee (1TX/1RX):

Only Ant. 8 (Port 1) can be used as transmitting/receiving antenna.

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
BT-BR(1Mbps)	1	0	n/a (DC $\geq$ 0.98)	n/a (DC $\geq$ 0.98)
BT-EDR(2Mbps)	0.828	0.82	2.906m	1k
BT-EDR(3Mbps)	0.97	0.132	0	10

1.1.4 EUT Operational Condition

EUT Power Type	From Power Adapter
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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	Brian Sun	22°C / 54%	Jun. 27, 2017~Jul. 03, 2017
Radiated	03CH01-CB	Paul Chen, Jay Luo, Welson Chen	22°C / 54%	Jun. 20, 2017~Jul. 04, 2017
AC Conduction	CO01-CB	GN Hou	23°C / 53%	Jun. 27, 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	63
2440MHz	63
2480MHz	63
BT-EDR(2Mbps)	-
2402MHz	105
2440MHz	105
2480MHz	105
BT-EDR(3Mbps)	-
2402MHz	105
2440MHz	105
2480MHz	105

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 (Repeater mode)

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

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emissions in Restricted Frequency Bands
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	Normal Link (Repeater mode)
Operating Mode > 1GHz	CTX

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	WLAN 2.4GHz+WLAN 5GHz+Bluetooth+Zigbee
Refer to Sporton Test Report No.: FA751835 for Co-location RF Exposure Evaluation.	

Note: 1. The EUT can only be used at Z axis position.

2. All the specification of test configurations and test modes were based on customer's request.
3. There are two modes of EUT, one is AP mode, and other is Repeater mode, Repeater mode was selected as representative test mode because it equipped with the most complicated functions.

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.

During the test, the following programs under WIN 7 were executed:

The remote notebook executed "ping.exe" to link with the EUT to maintain the connection by LAN, WAN and WLAN.

The remote notebook executed "Telnet" to traffic packet data and sent instruction to another device.

The remote notebook executed "Telnet" to control the EUT continuously transmit Bluetooth and Zigbee signal.

The remote notebook executed "Winthrax.exe" to read and write data from EUT.

2.4 Accessories

Accessories				
No.	Equipment Name	Brand Name	Model Name	Rating
1	Adapter	TP-Link	T120200-2B4	Input: 100-240V ~ 50/60Hz, 0.8A Output: 12V, 2A

2.5 Support Equipment

For Test Site No: CO01-CB

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	NB*6	DELL	E6430	DoC
2	AP	TP-LINK	Deco M6	DoC
3	Device	TP-LINK	Deco M6	DoC
4	Flash disk3.0	Transcend	639205 7755	DoC

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

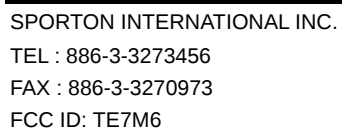
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	NB*4	DELL	E4300	DoC
2	NB*2	Apple	Mac Book	DoC
3	AP	TP-LINK	Deco M6	DoC
4	Device	TP-LINK	Deco M6	DoC
5	Flash disk	Silicon Power	I-Series	DoC

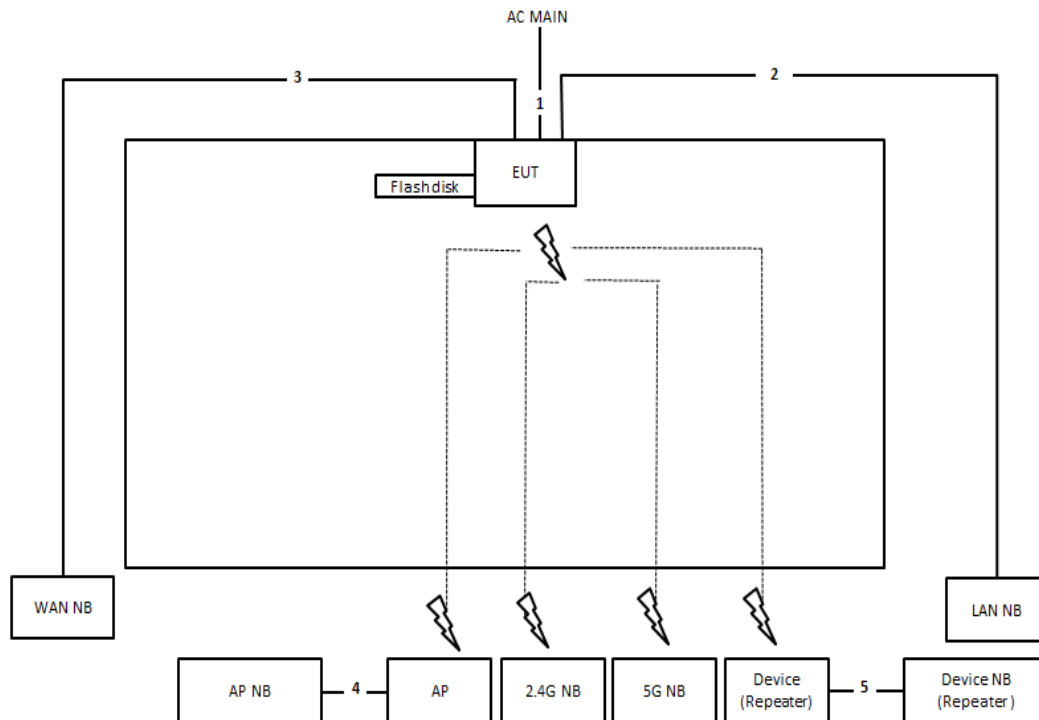
For Test Site No: 03CH01-CB (above 1GHz)

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	NB	DELL	E4300	DoC

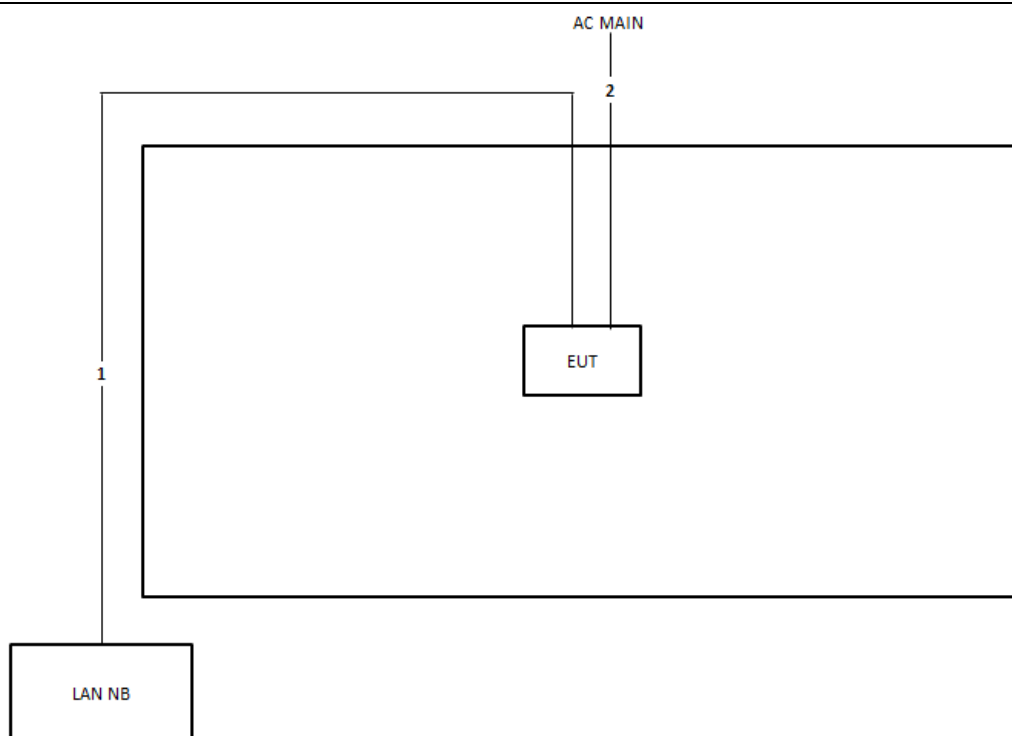
For Test Site No: TH01-CB

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	NB	DELL	E4300	DoC



Test Setup Diagram - Radiated Test < 1GHz


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

Test Setup Diagram - Radiated Test > 1GHz


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

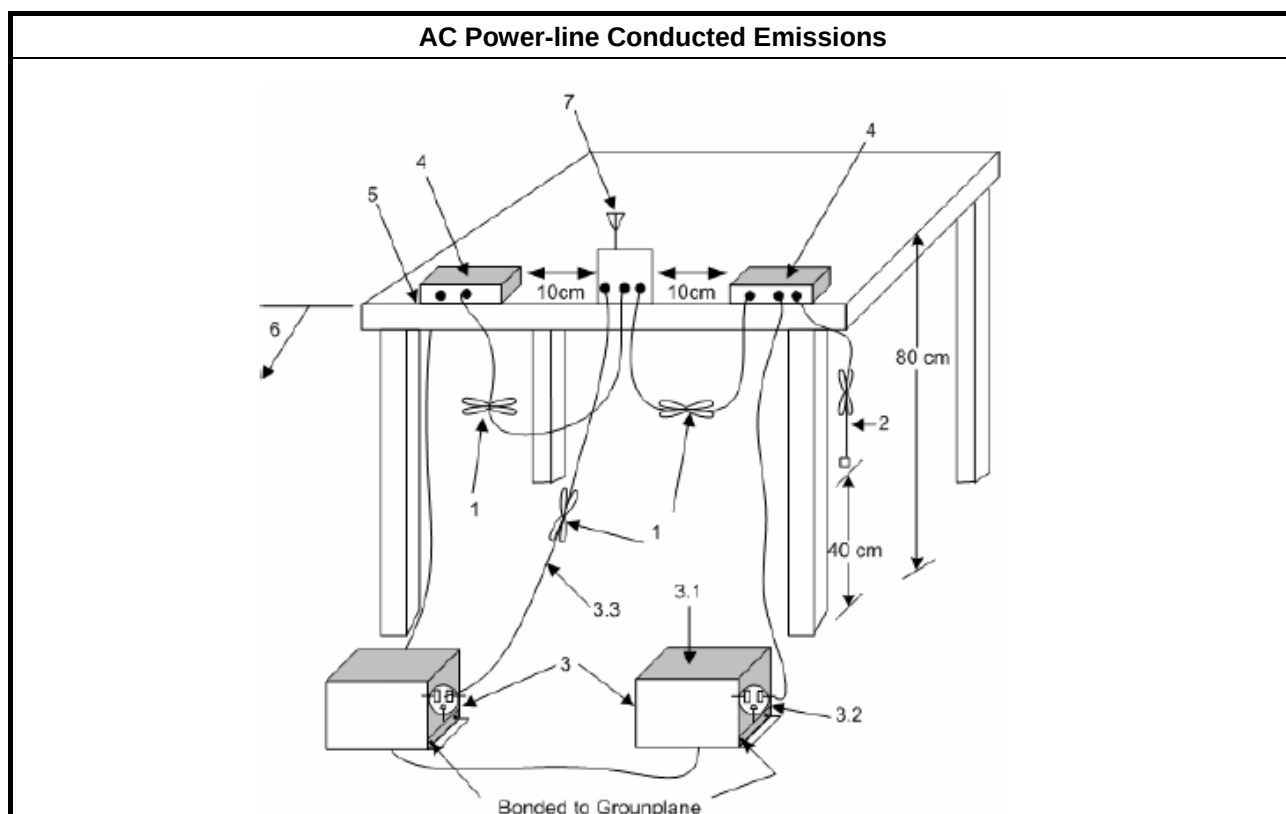
3.1.2 Measuring Instruments

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



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	

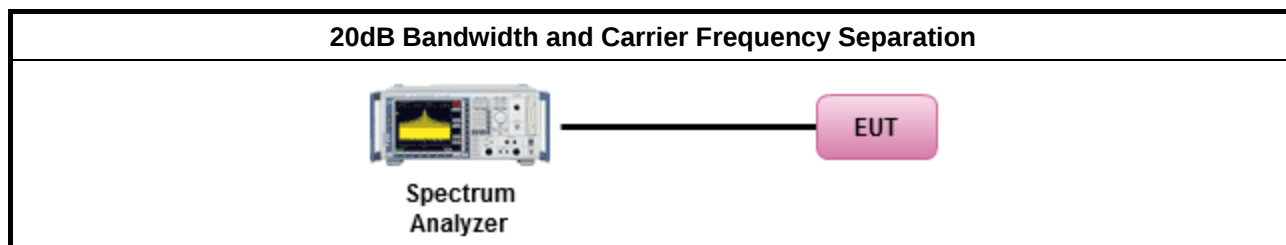
3.2.2 Measuring Instruments

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	

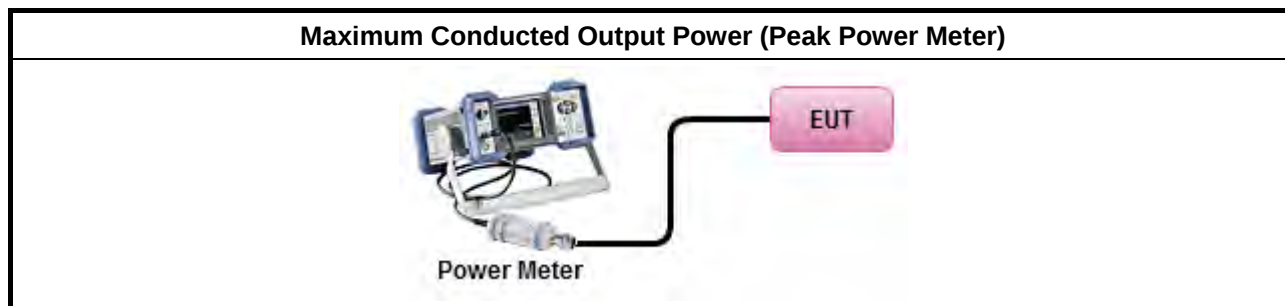
3.3.2 Measuring Instruments

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

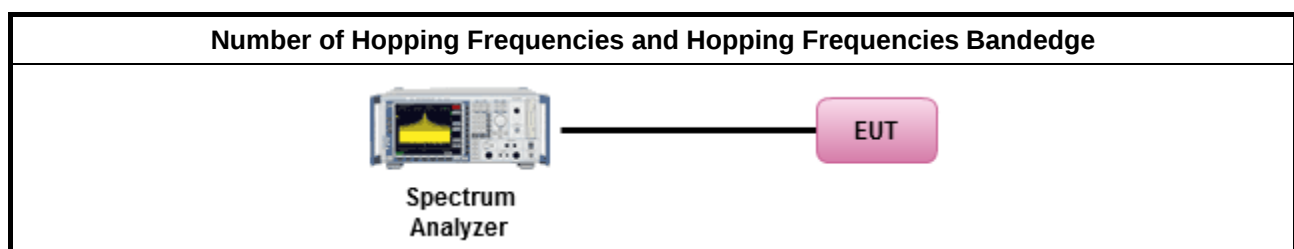
3.4.3 Measuring Instruments

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	

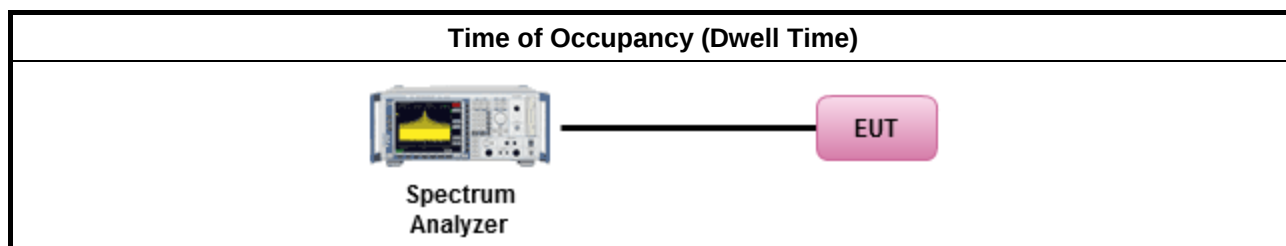
3.5.2 Measuring Instruments

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.	

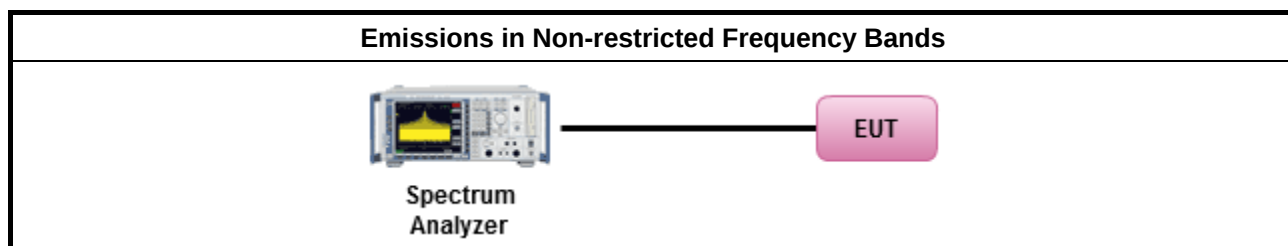
3.6.2 Measuring Instruments

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.

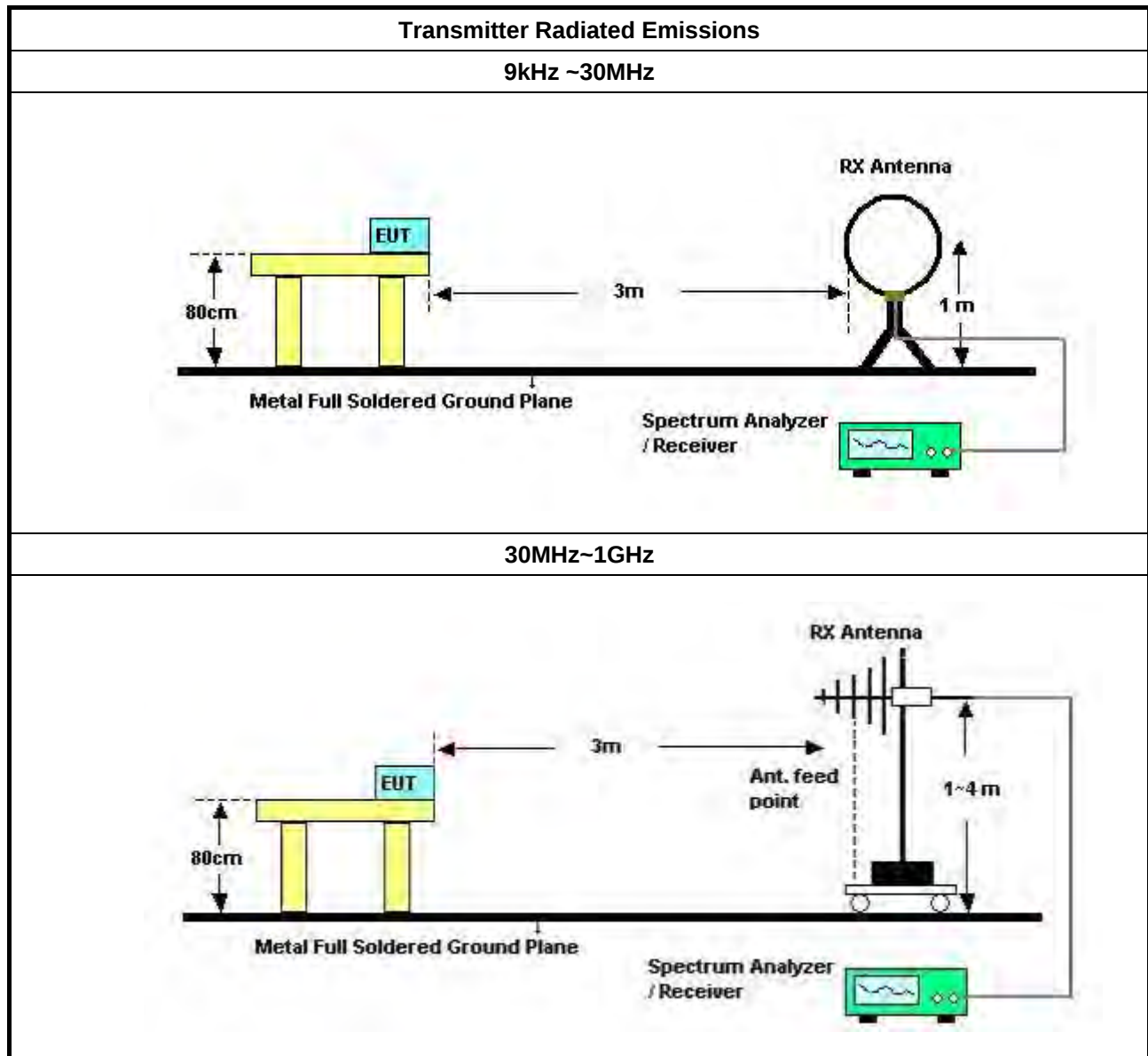
3.7.2 Measuring Instruments

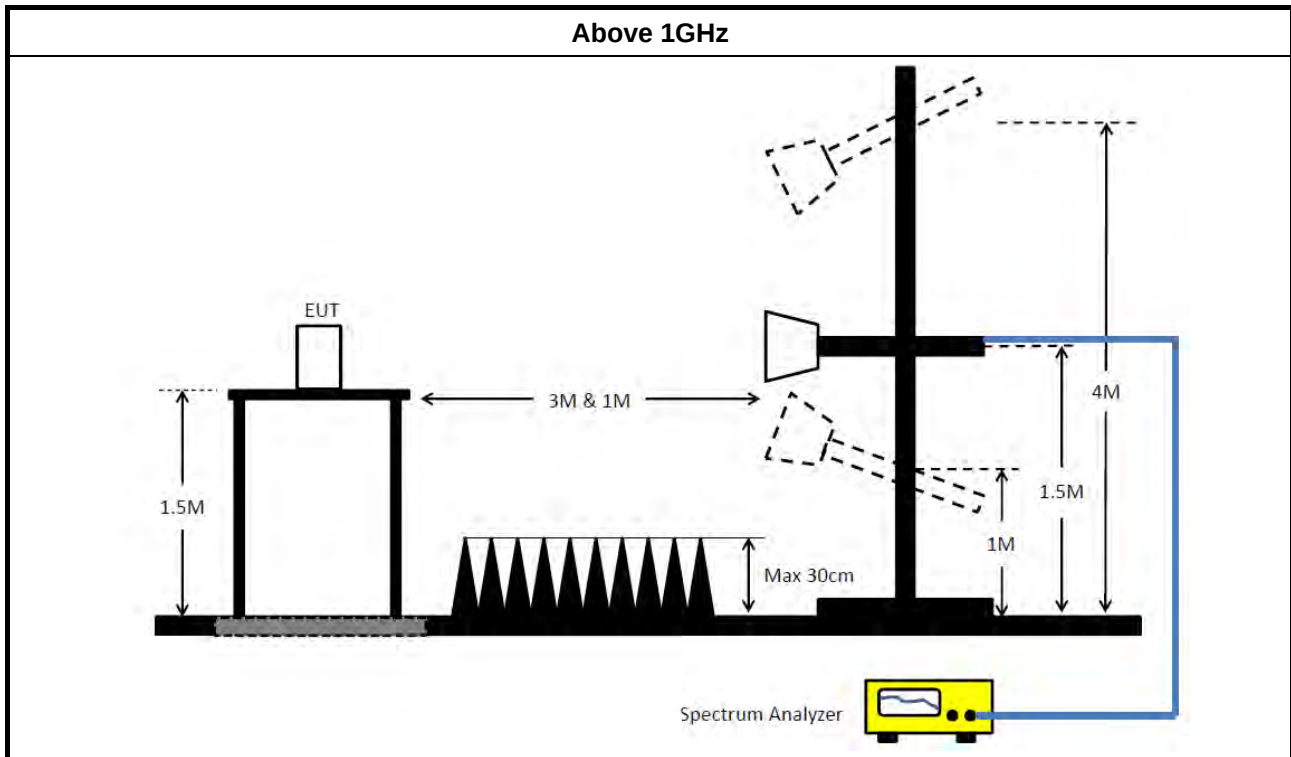
Refer a test equipment and calibration data table in this test report.

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	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.45GHz	Jan. 23, 2017	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Dec. 14, 2016	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Dec. 21, 2016	Conduction (CO01-CB)
COND Cable	Woken	Cable	01	150kHz ~ 30MHz	May 23, 2017	Conduction (CO01-CB)
Software	Audix	E3	6.120210n	-	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	Radiation (03CH01-CB)
Horn Antenna	EMCO	3115	00075790	750MHz ~ 18GHz	Nov. 10, 2016	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 25, 2016	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 05, 2017	Radiation (03CH01-CB)
Pre-Amplifier	EMCI	EMC330N	980332	20MHz ~ 3GHz	May 02, 2017	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 16, 2017	Radiation (03CH01-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jun. 28, 2016	Radiation (03CH01-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 10, 2017	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Nov. 22, 2016	Radiation (03CH01-CB)
EMI Test	R&S	ESCS	100355	9kHz ~ 2.75GHz	May 06, 2017	Radiation (03CH01-CB)
RF Cable-low	Woken	Low Cable-16+17	N/A	30 MHz ~ 1 GHz	Oct. 24, 2016	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16	N/A	1 GHz ~ 18 GHz	Oct. 24, 2016	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16+17	N/A	1 GHz ~ 18 GHz	Oct. 24, 2016	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G#1	N/A	18GHz ~ 40 GHz	Oct. 24, 2016	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G#2	N/A	18GHz ~ 40 GHz	Oct. 24, 2016	Radiation (03CH01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 16, 2016*	Radiation (10CH01-CB)
Test Software	Audix	E3	6.2009-I0-7	N/A	N/A	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Dec. 26, 2016	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-6	1 GHz ~ 26.5 GHz	Oct. 24, 2016	Conducted (TH01-CB)

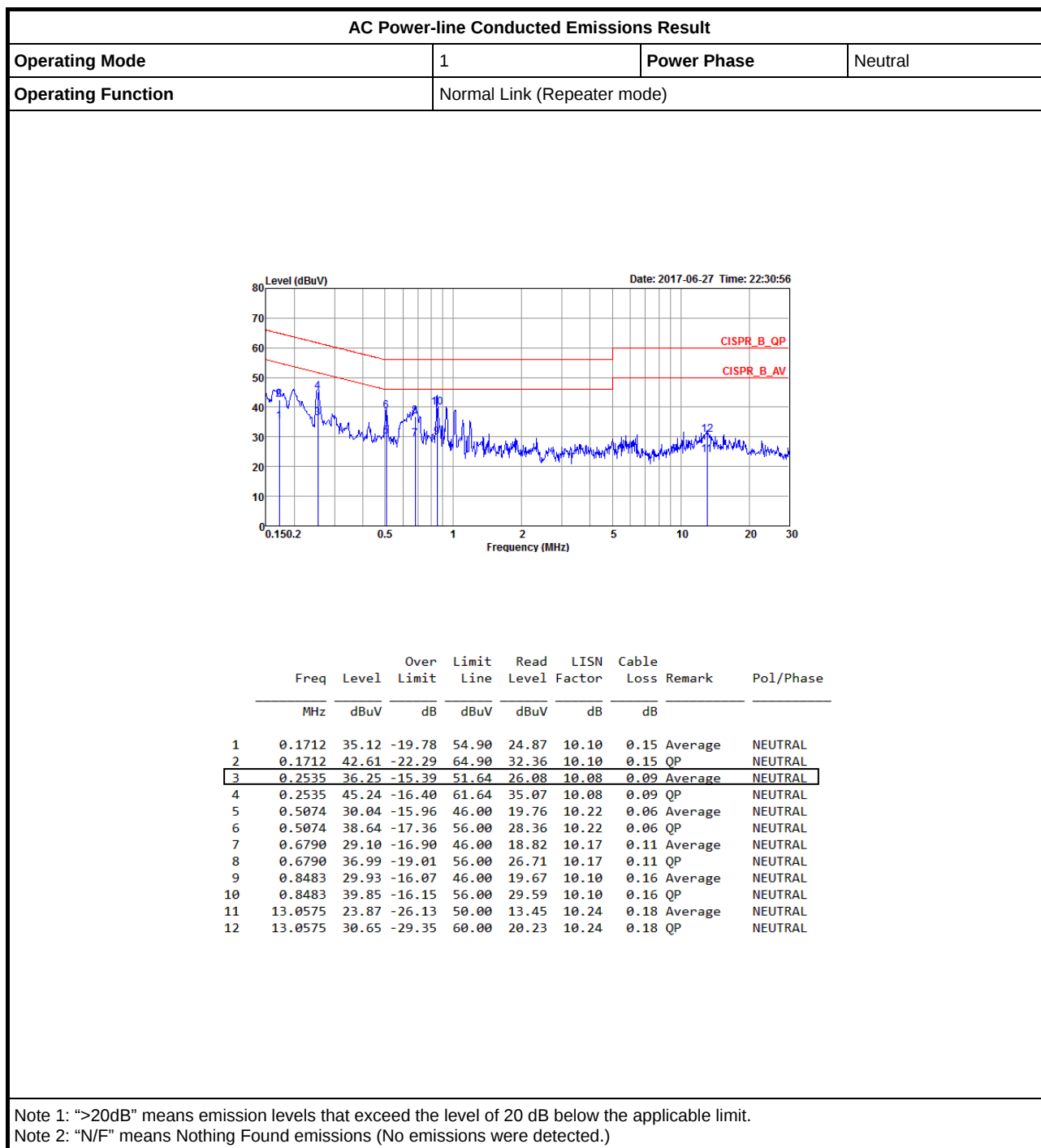


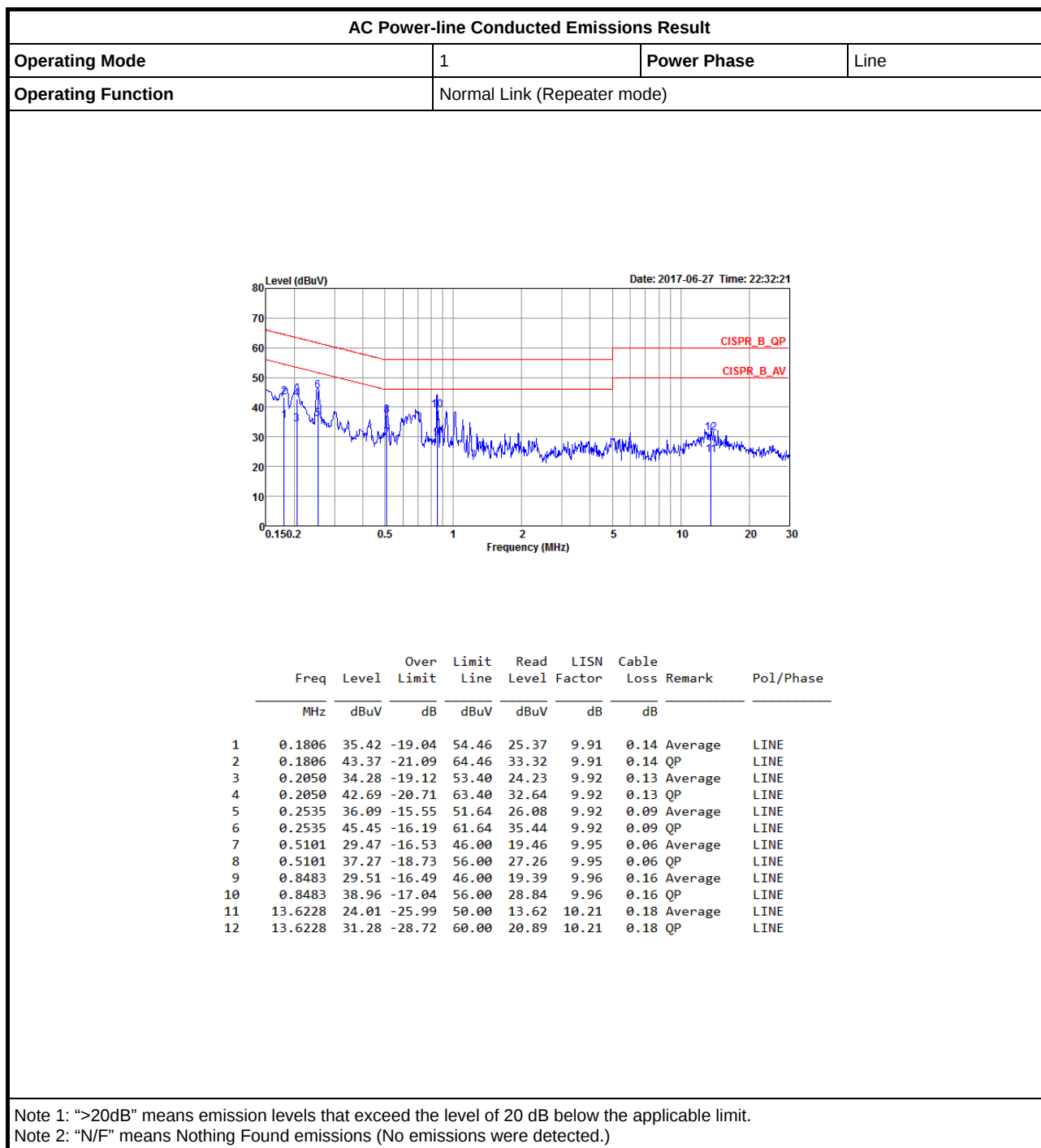
Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
RF Cable-high	Woken	RG402	High Cable-7	1 GHz –26.5 GHz	Oct. 24, 2016	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-8	1 GHz –26.5 GHz	Oct. 24, 2016	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-9	1 GHz –26.5 GHz	Oct. 24, 2016	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz –26.5 GHz	Oct. 24, 2016	Conducted (TH01-CB)
Power Sensor	Agilent	U2021XA	MY53410001	50MHz~18GHz	Nov. 22, 2016	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.





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	930k	857.071k	857kF1D	916.25k	823.338k
BT-EDR(2Mbps)	-	-	-	-	-
2.4-2.4835GHz	1.334M	1.228M	1M23G1D	1.313M	1.176M
BT-EDR(3Mbps)	-	-	-	-	-
2.4-2.4835GHz	1.309M	1.236M	1M24G1D	1.274M	1.213M

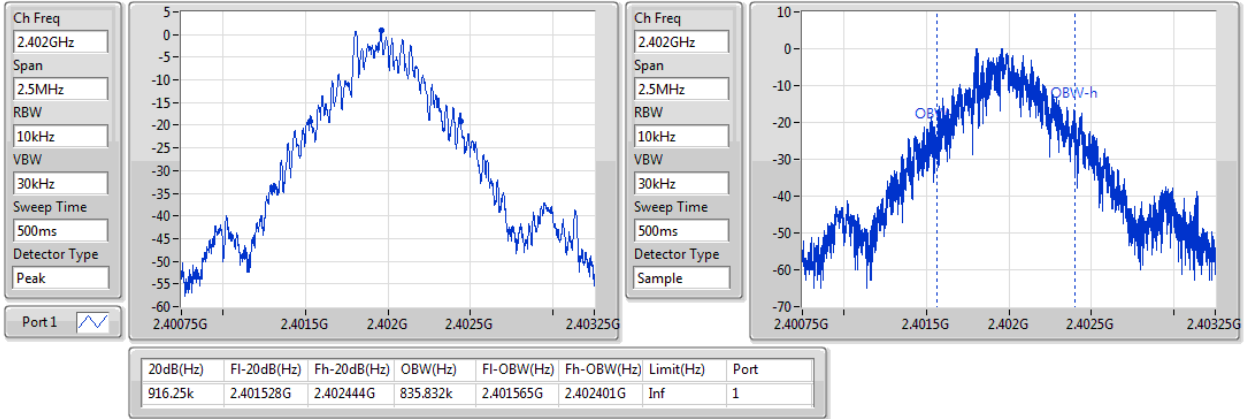
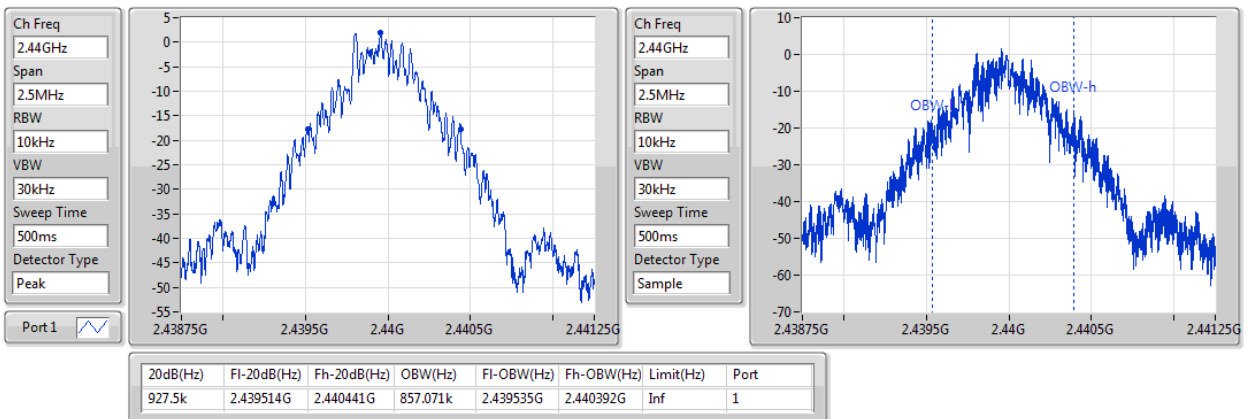
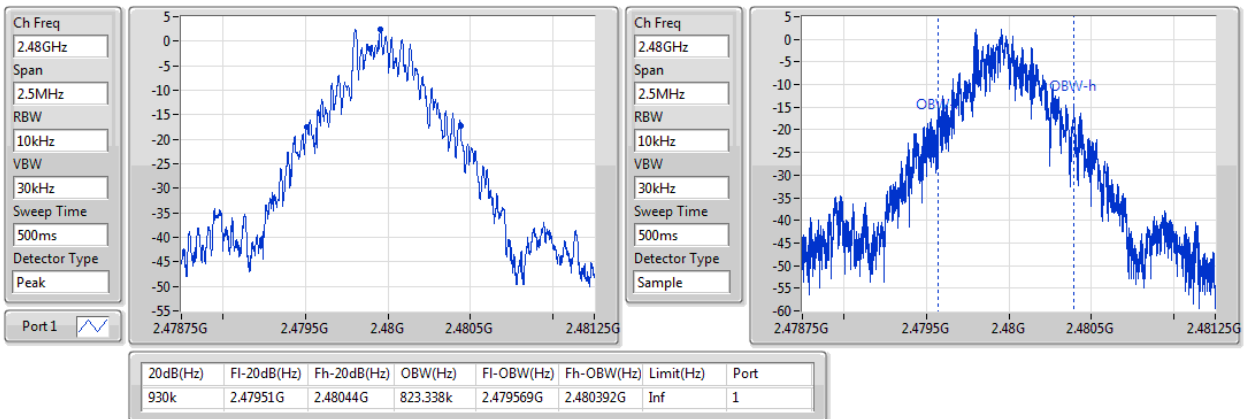
Max-N dB = Maximum 20dB down bandwidth; **Max-OBW** = Maximum 99% occupied bandwidth;

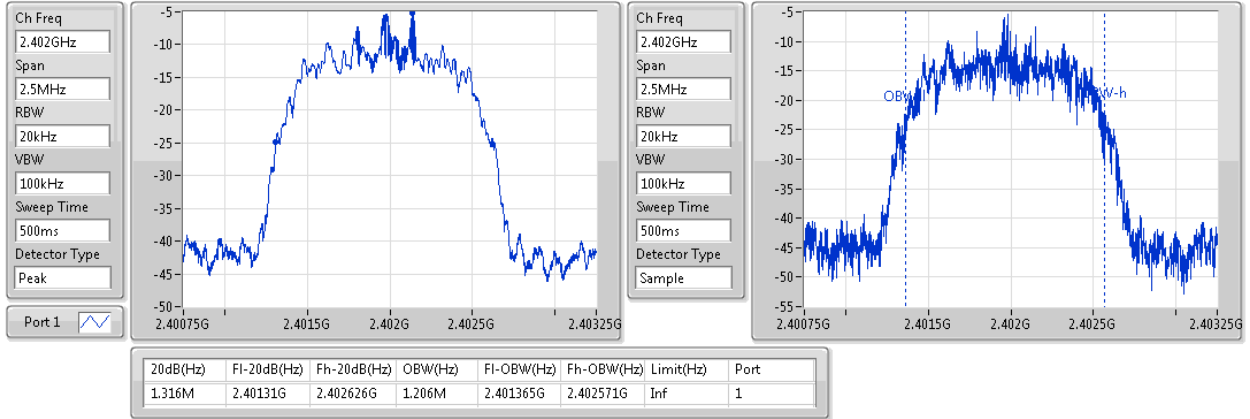
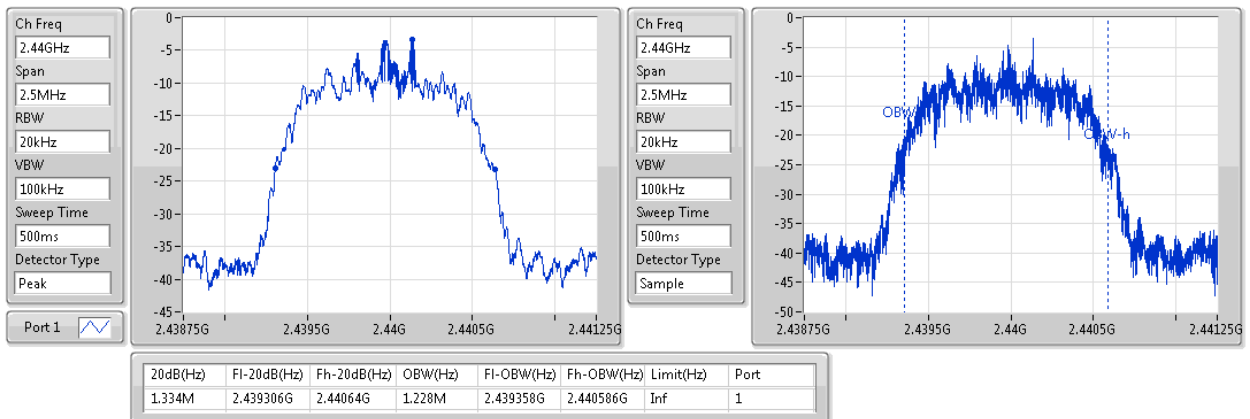
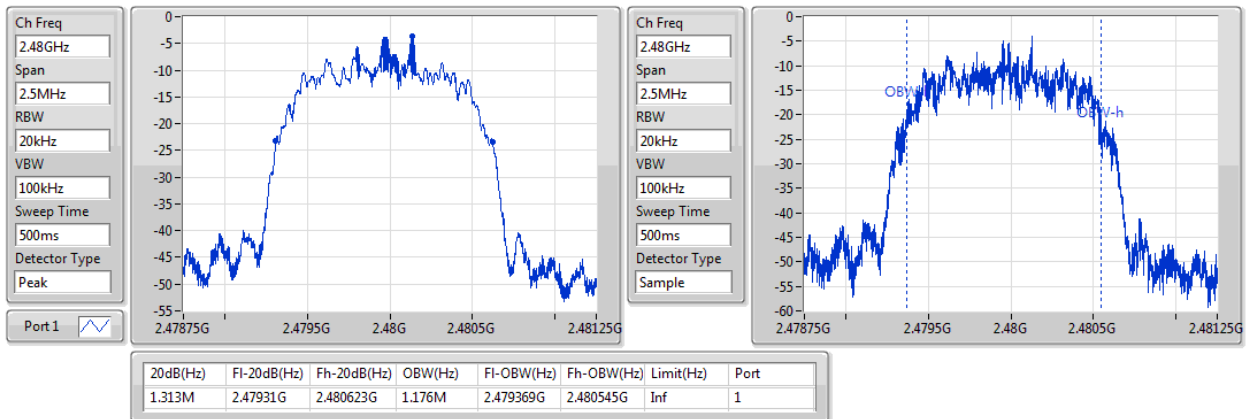
Min-N dB = Minimum 20dB down bandwidth; **Min-OBW** = Minimum 99% occupied bandwidth;

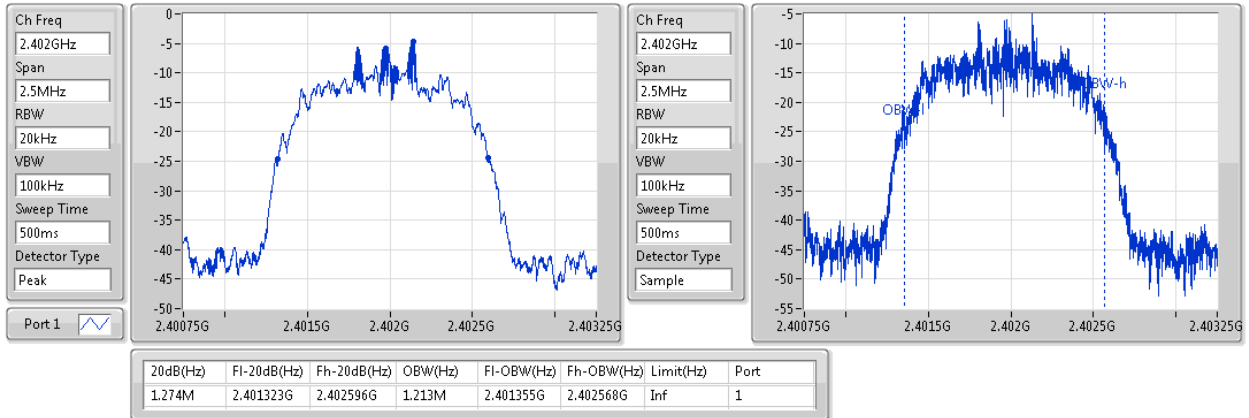
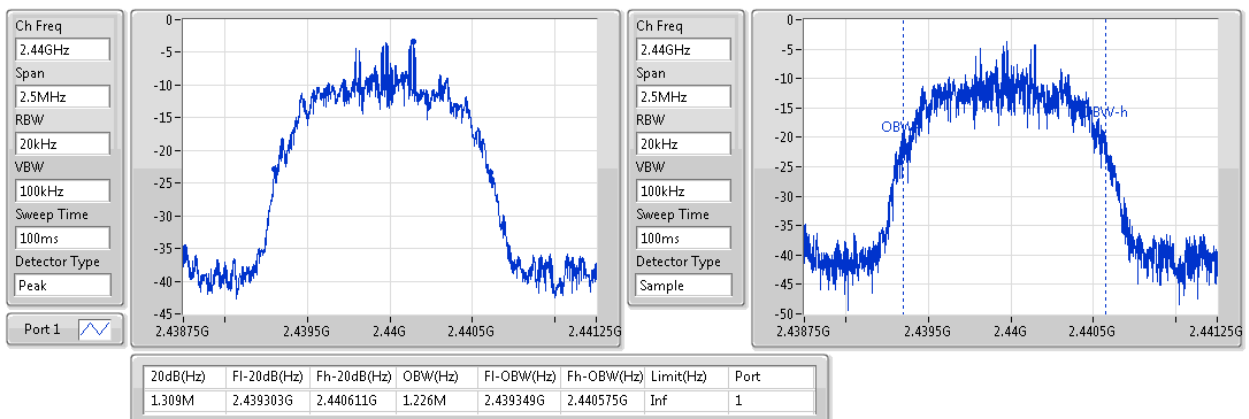
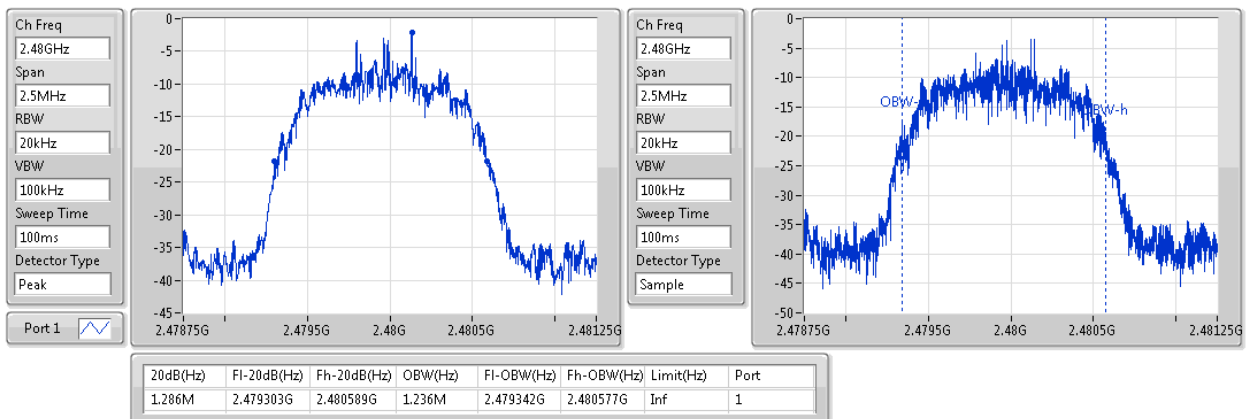
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	Inf	916.25k	835.832k
2440MHz	Pass	Inf	927.5k	857.071k
2480MHz	Pass	Inf	930k	823.338k
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	Inf	1.316M	1.206M
2440MHz	Pass	Inf	1.334M	1.228M
2480MHz	Pass	Inf	1.313M	1.176M
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	Inf	1.274M	1.213M
2440MHz	Pass	Inf	1.309M	1.226M
2480MHz	Pass	Inf	1.286M	1.236M

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

BT-BR(1Mbps)
EBW
2402MHz

BT-BR(1Mbps)
EBW
2440MHz

BT-BR(1Mbps)
EBW
2480MHz


BT-EDR(2Mbps)
EBW
2402MHz

BT-EDR(2Mbps)
EBW
2440MHz

BT-EDR(2Mbps)
EBW
2480MHz


BT-EDR(3Mbps)
EBW
2402MHz

BT-EDR(3Mbps)
EBW
2440MHz

BT-EDR(3Mbps)
EBW
2480MHz


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	1.002M	1.0005M
BT-EDR(3Mbps)	-	-
2.4-2.4835GHz	1.002M	1.0005M

Result

Mode	Result	Fl (Hz)	Fh (Hz)	Ch.Space (Hz)	Limit (Hz)
BT-BR(1Mbps)	-	-	-	-	-
2402MHz	Pass	2.401806G	2.402806G	1.0005M	610.2225k
2440MHz	Pass	2.439803G	2.440805G	1.002M	617.715k
2480MHz	Pass	2.478804G	2.479803G	999k	619.38k
BT-EDR(2Mbps)	-	-	-	-	-
2402MHz	Pass	2.401974G	2.402974G	1.0005M	876.456k
2440MHz	Pass	2.439971G	2.440973G	1.002M	888.444k
2480MHz	Pass	2.478971G	2.479973G	1.002M	874.458k
BT-EDR(3Mbps)	-	-	-	-	-
2402MHz	Pass	2.402133G	2.403133G	1.0005M	848.484k
2440MHz	Pass	2.44013G	2.441132G	1.002M	871.794k
2480MHz	Pass	2.479131G	2.480132G	1.0005M	856.476k

BT-BR(1Mbps)

Channel Separation

2.402G/2.403GHz



BT-BR(1Mbps)

Channel Separation

2.44G/2.441GHz



BT-BR(1Mbps)

Channel Separation

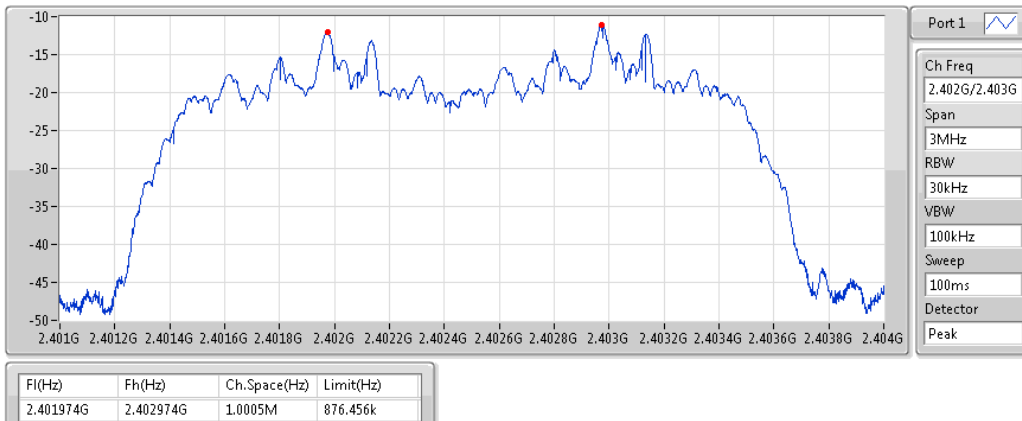
2.48G/2.479GHz



BT-EDR(2Mbps)

Channel Separation

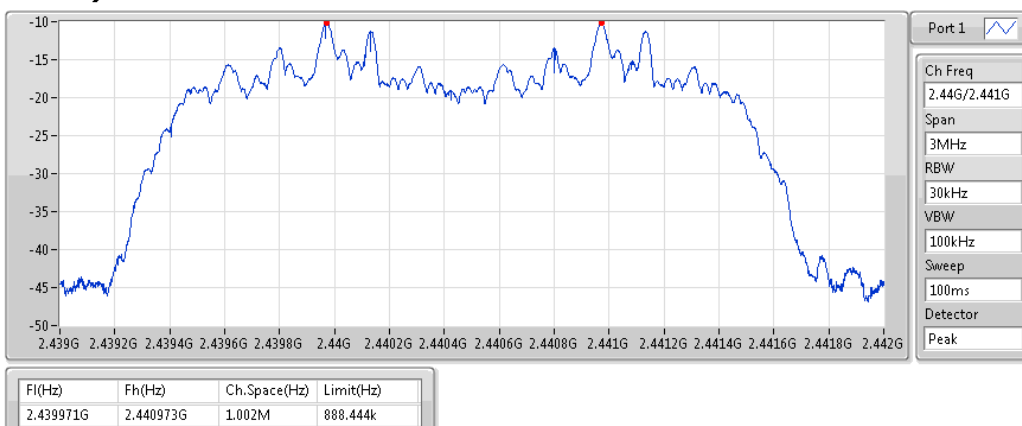
2.402G/2.403GHz



BT-EDR(2Mbps)

Channel Separation

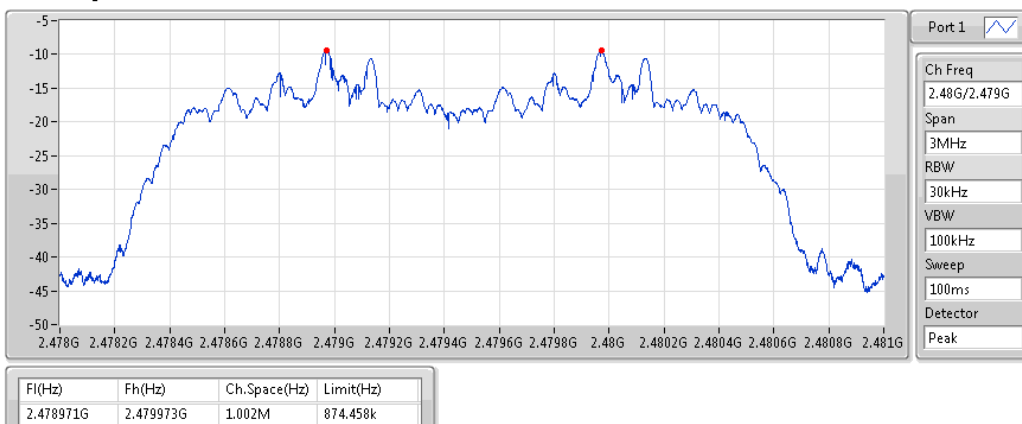
2.44G/2.441GHz



BT-EDR(2Mbps)

Channel Separation

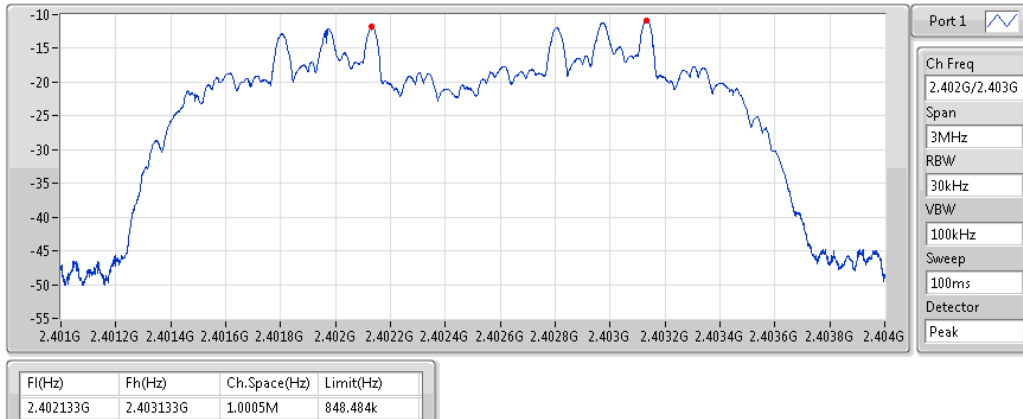
2.48G/2.479GHz



BT-EDR(3Mbps)

Channel Separation

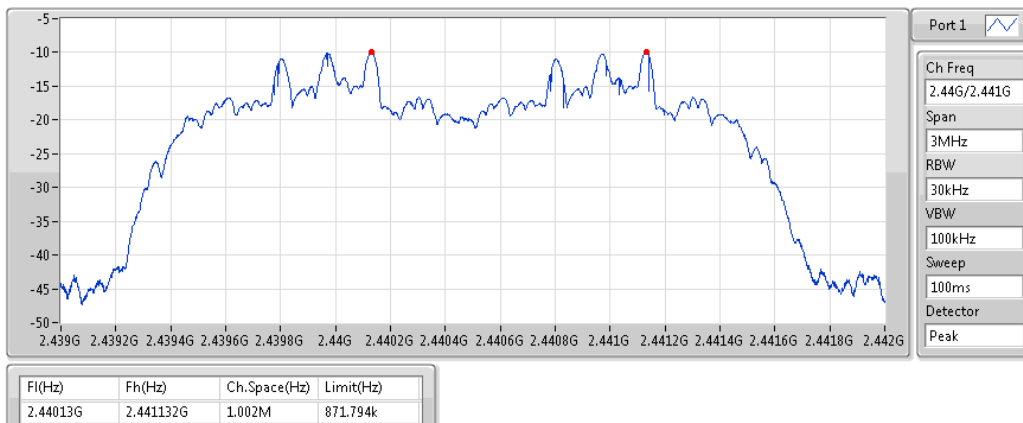
2.402G/2.403GHz



BT-EDR(3Mbps)

Channel Separation

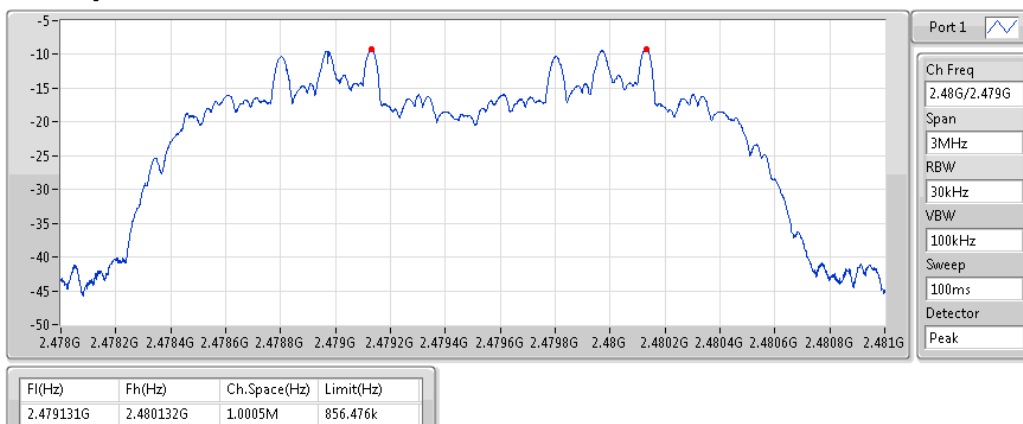
2.44G/2.441GHz



BT-EDR(3Mbps)

Channel Separation

2.48G/2.479GHz



Summary

Mode	Power (dBm)	Power (W)
BT-BR(1Mbps)	-	-
2.4-2.4835GHz	9.23	0.00838
BT-EDR(2Mbps)	-	-
2.4-2.4835GHz	7.03	0.00505
BT-EDR(3Mbps)	-	-
2.4-2.4835GHz	7.02	0.00504

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	1.40	7.57	21.00
2440MHz	Pass	1.40	8.66	21.00
2480MHz	Pass	1.40	9.23	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	1.40	4.11	21.00
2440MHz	Pass	1.40	6.16	21.00
2480MHz	Pass	1.40	7.03	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	1.40	4.06	21.00
2440MHz	Pass	1.40	6.15	21.00
2480MHz	Pass	1.40	7.02	21.00

Summary

Mode	Power (dBm)	Power (W)
BT-BR(1Mbps)	-	-
2.4-2.4835GHz	9.45	0.00881
BT-EDR(2Mbps)	-	-
2.4-2.4835GHz	8.24	0.00667
BT-EDR(3Mbps)	-	-
2.4-2.4835GHz	8.40	0.00692

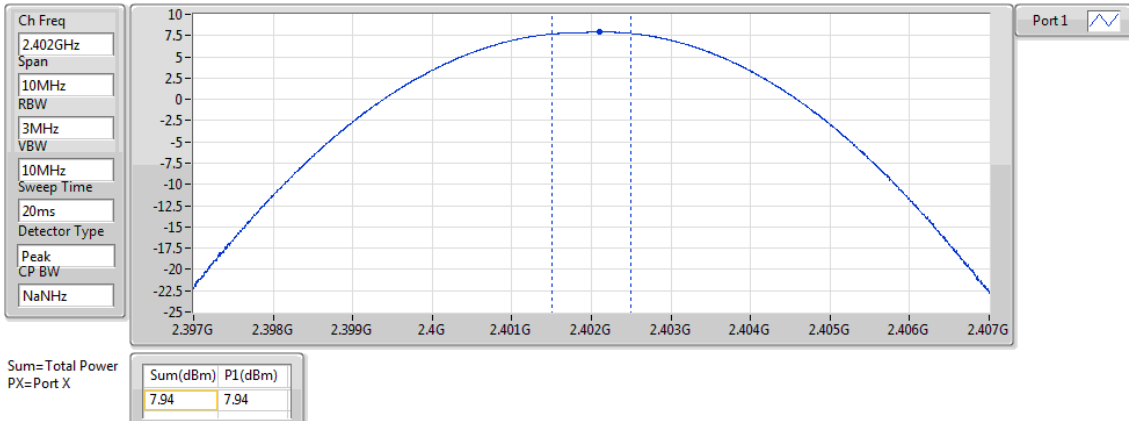
Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	1.40	7.94	21.00
2440MHz	Pass	1.40	8.95	21.00
2480MHz	Pass	1.40	9.45	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	1.40	5.84	21.00
2440MHz	Pass	1.40	7.47	21.00
2480MHz	Pass	1.40	8.24	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	1.40	6.17	21.00
2440MHz	Pass	1.40	7.62	21.00
2480MHz	Pass	1.40	8.40	21.00

BT-BR(1Mbps)

PK Power

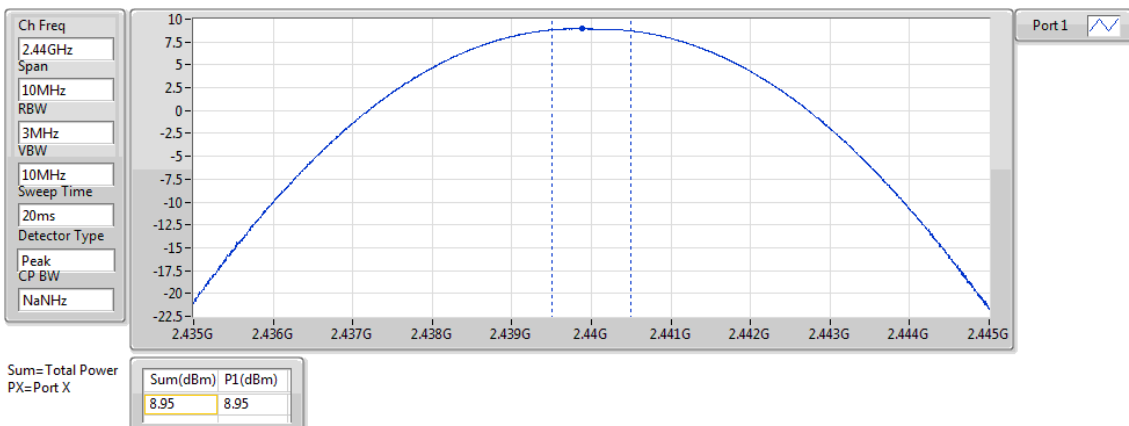
2402MHz



BT-BR(1Mbps)

PK Power

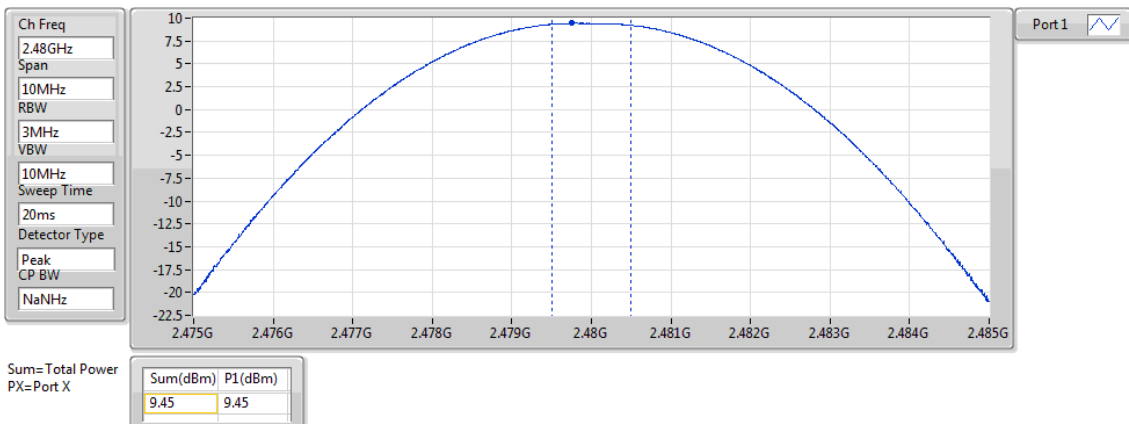
2440MHz



BT-BR(1Mbps)

PK Power

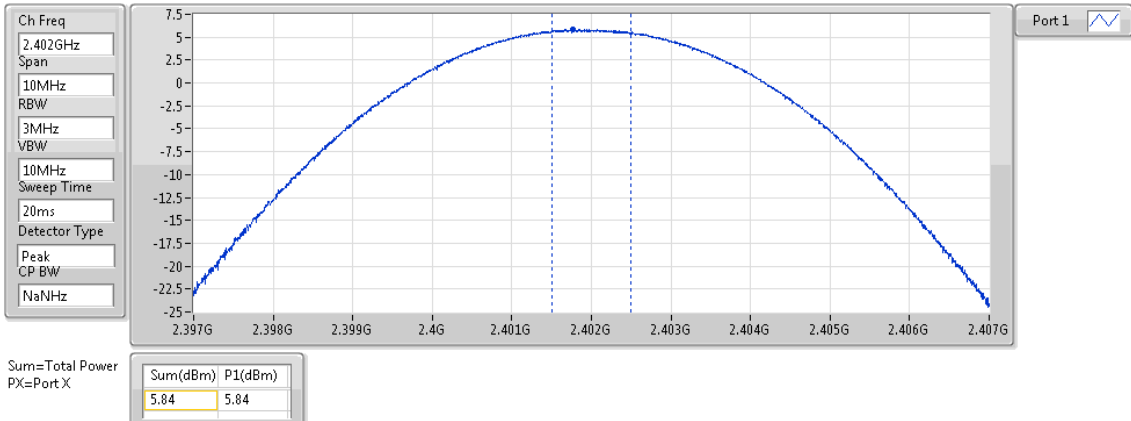
2480MHz



BT-EDR(2Mbps)

PK Power

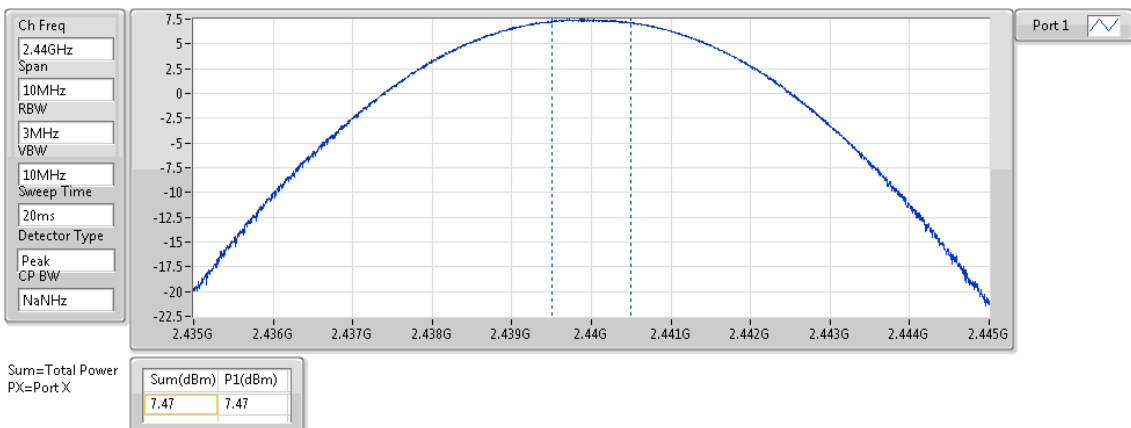
2402MHz



BT-EDR(2Mbps)

PK Power

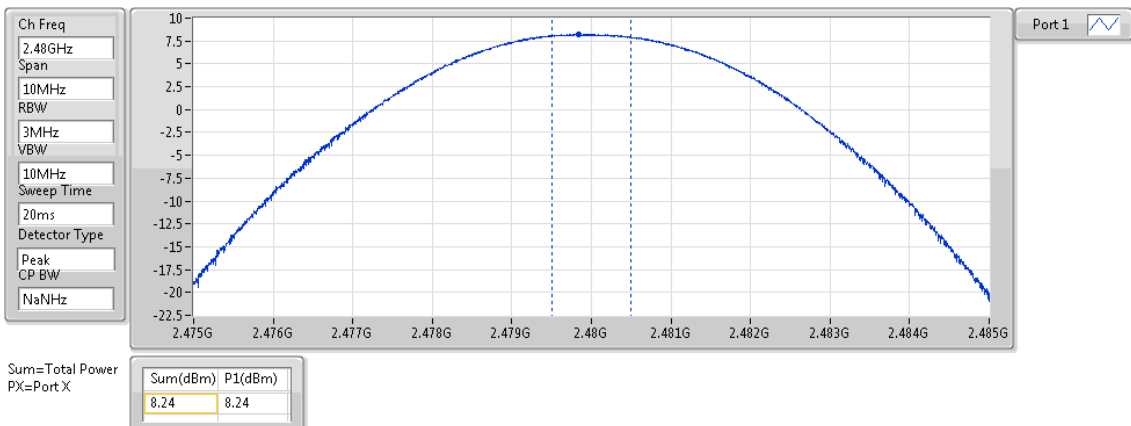
2440MHz



BT-EDR(2Mbps)

PK Power

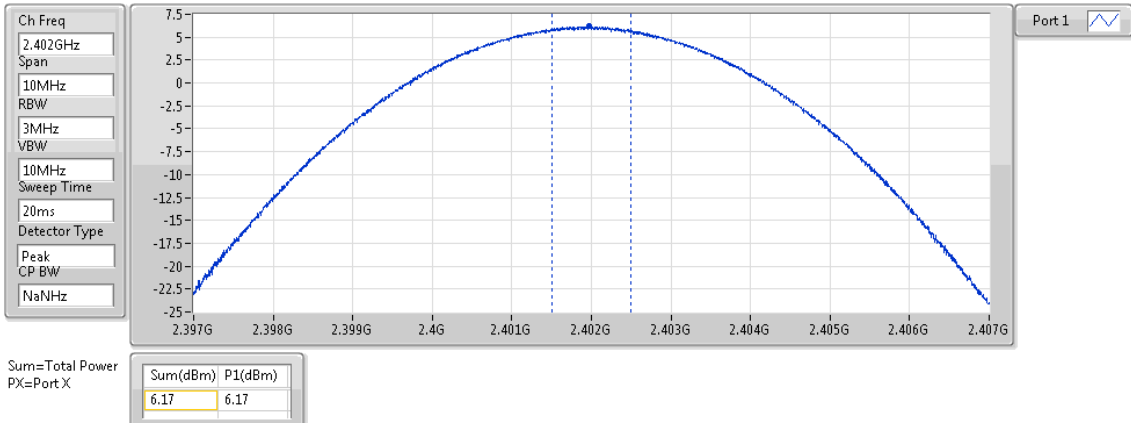
2480MHz



BT-EDR(3Mbps)

PK Power

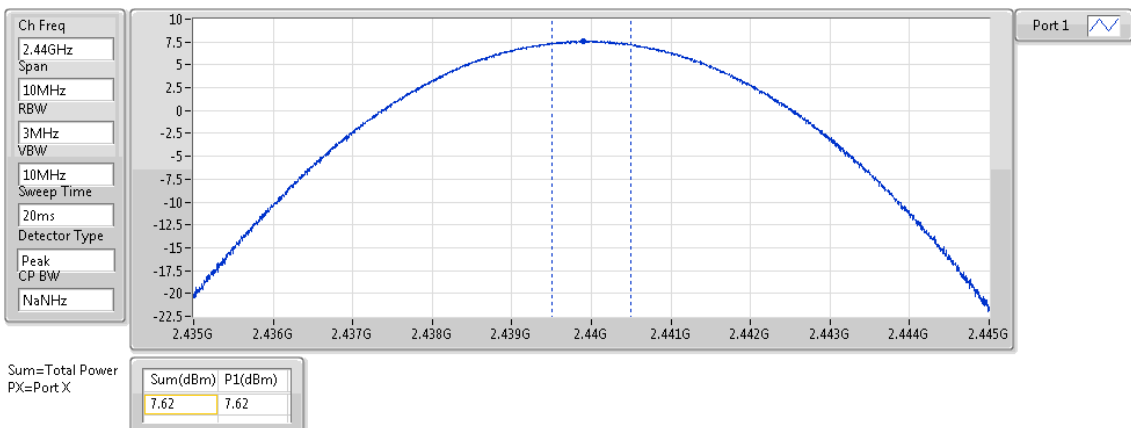
2402MHz



BT-EDR(3Mbps)

PK Power

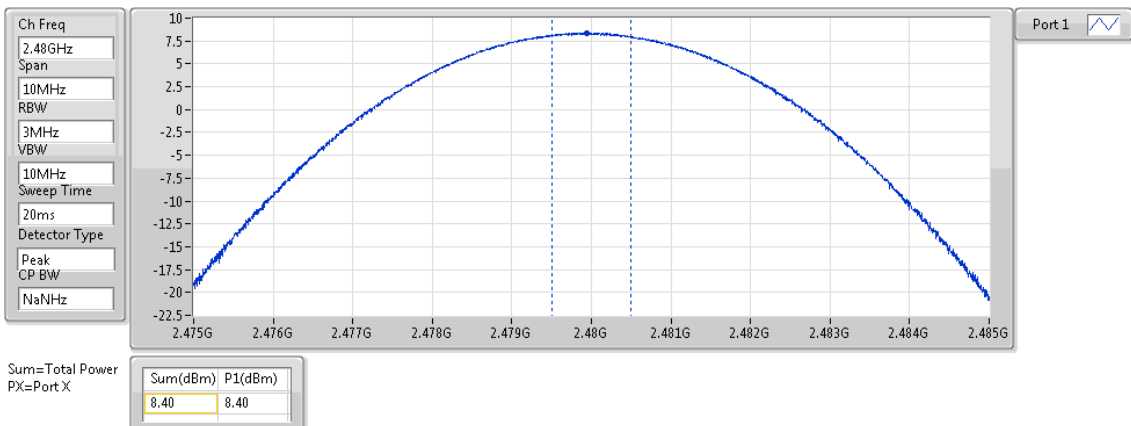
2440MHz



BT-EDR(3Mbps)

PK Power

2480MHz



Summary

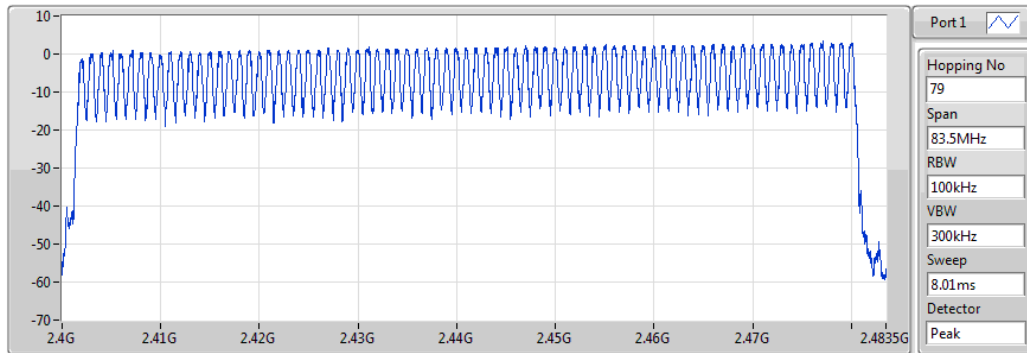
Mode	Max-Hop No
BT-BR(1Mbps)	-
2.4-2.4835GHz	79
BT-EDR(2Mbps)	-
2.4-2.4835GHz	79
BT-EDR(3Mbps)	-
2.4-2.4835GHz	79

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) 2440MHz

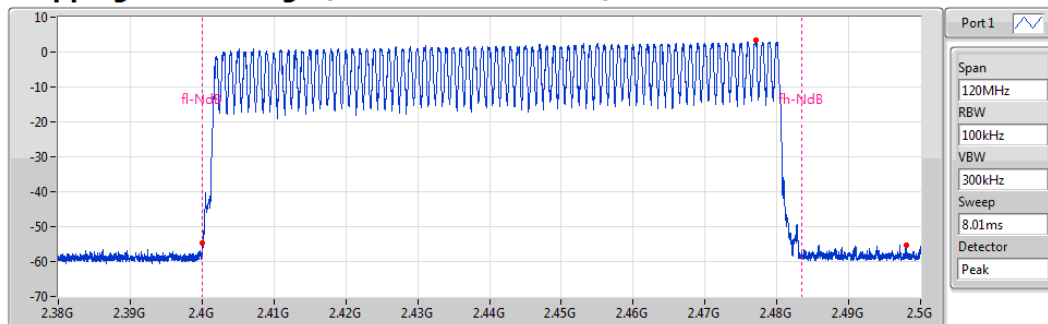
Hopping Ch



Hopping No	Limit
79	15

BT-BR(1Mbps) 2440MHz

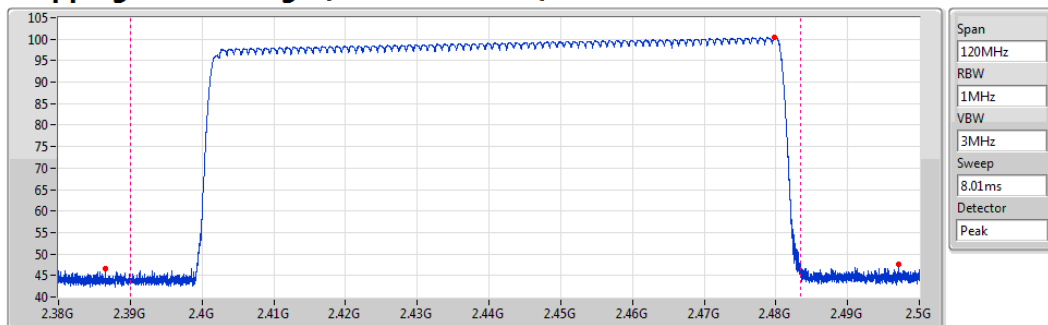
Hopping Ch Bandedge (Non-restricted Band)



Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-16.61	2.47714G	3.39	2.399995G	-54.71	2.497975G	-55.2

BT-BR(1Mbps) 2440MHz

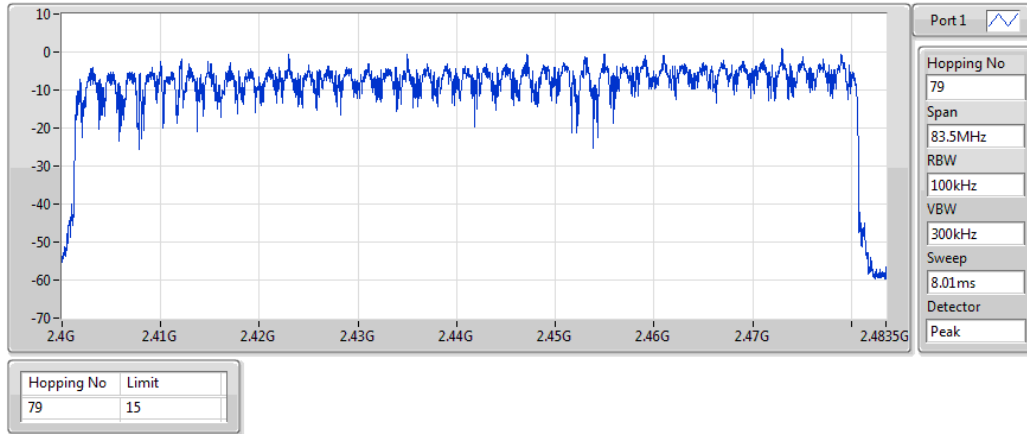
Hopping Ch Bandedge (Restricted Band)



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)
2.479795G	100.4	2.386495G	46.49	15.74	2.497165G	47.7	16.95	74	54	2.902	-30.75

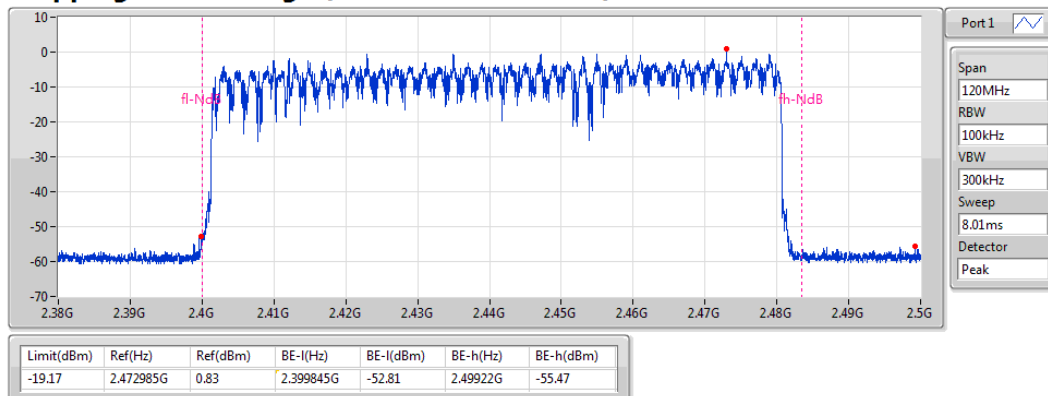
BT-EDR(2Mbps) 2440MHz

Hopping Ch



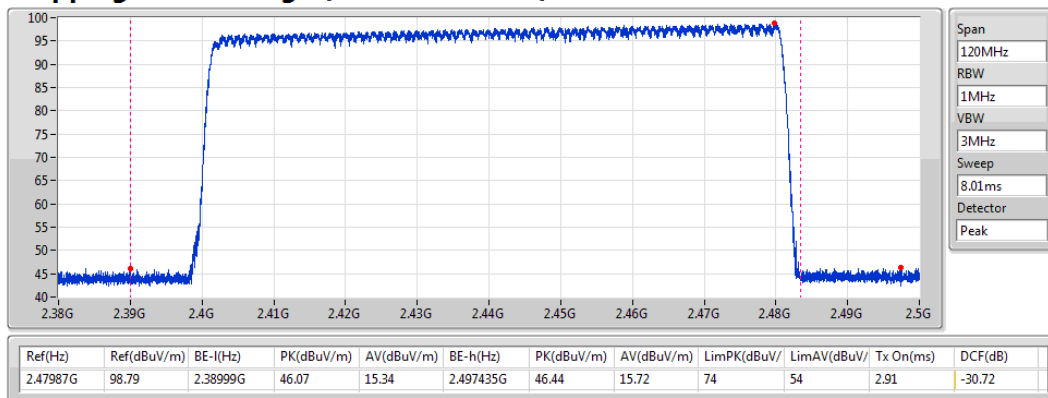
BT-EDR(2Mbps) 2440MHz

Hopping Ch Bandedge (Non-restricted Band)



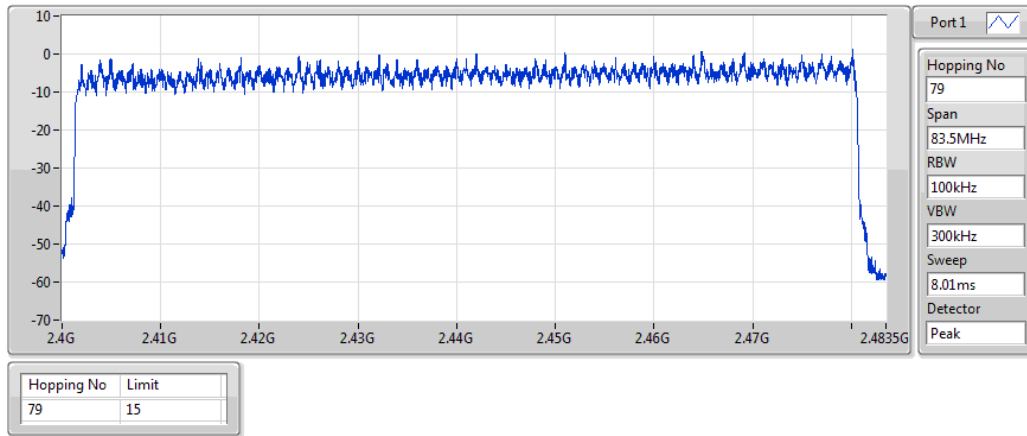
BT-EDR(2Mbps) 2440MHz

Hopping Ch Bandedge (Restricted Band)



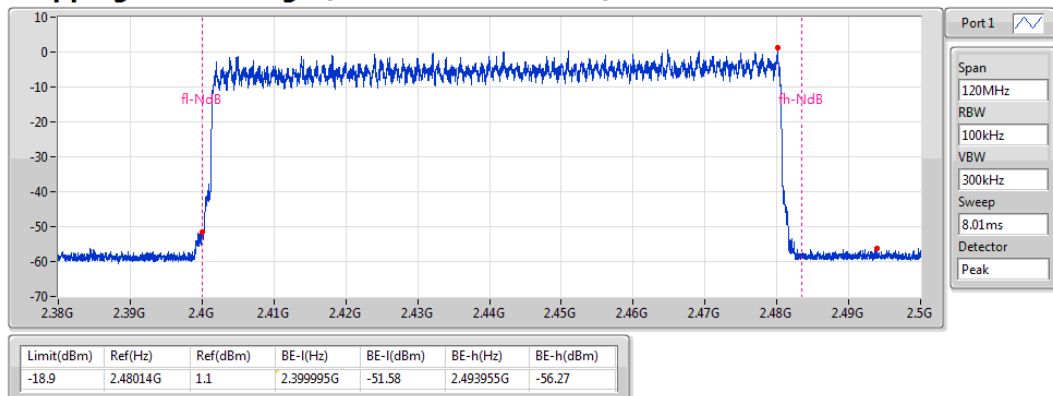
BT-EDR(3Mbps) 2440MHz

Hopping Ch



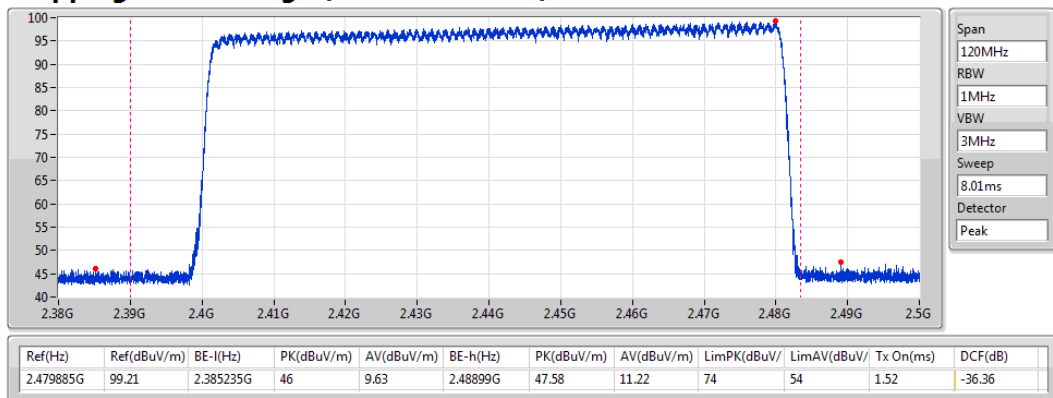
BT-EDR(3Mbps) 2440MHz

Hopping Ch Bandedge (Non-restricted Band)



BT-EDR(3Mbps) 2440MHz

Hopping Ch Bandedge (Restricted Band)



Summary

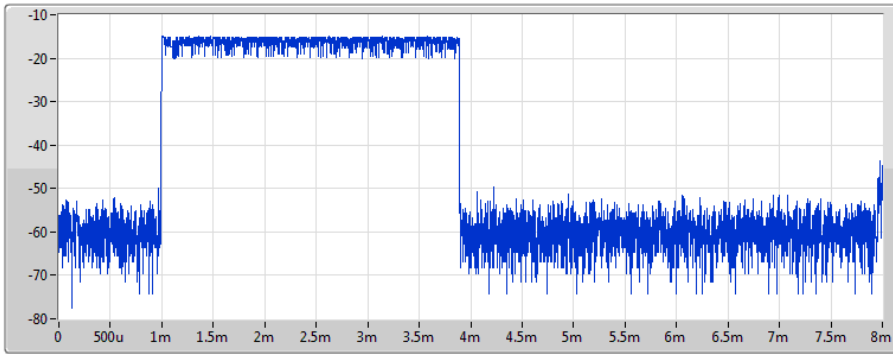
Mode	Max-Dwell (s)
BT-BR(1Mbps)	-
2.4-2.4835GHz	309.3532m
BT-EDR(2Mbps)	-
2.4-2.4835GHz	310.4192m
BT-EDR(3Mbps)	-
2.4-2.4835GHz	162.032m

Result

Mode	Result	Period (s)	Dwell (s)	Limit (s)	Tx On (s)
BT-BR(1Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	309.3532m	400m	2.902m
BT-EDR(2Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	310.4192m	400m	2.912m
BT-EDR(3Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	162.032m	400m	1.52m

BT-BR(1Mbps)

2440MHz



Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	309.3532m	400m	2.902m

Dwell

Port 1 

Ch Freq
2.44GHz

RBW
300kHz

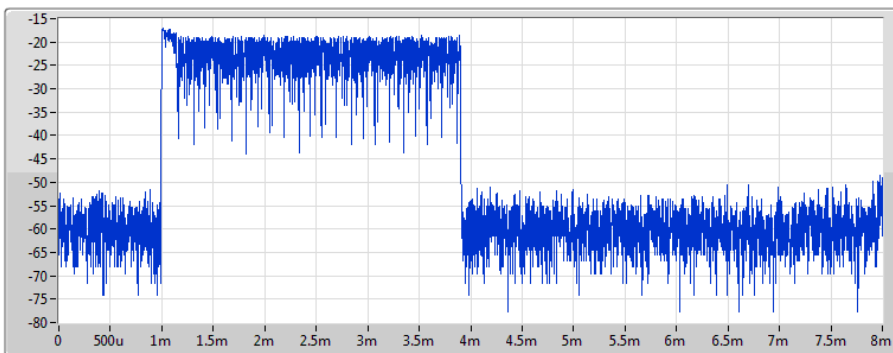
VBW
1MHz

Sweep Time
8ms

TX Time
2.902ms

BT-EDR(2Mbps)

2440MHz



Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	310.4192m	400m	2.912m

Dwell

Port 1 

Ch Freq
2.44GHz

RBW
300kHz

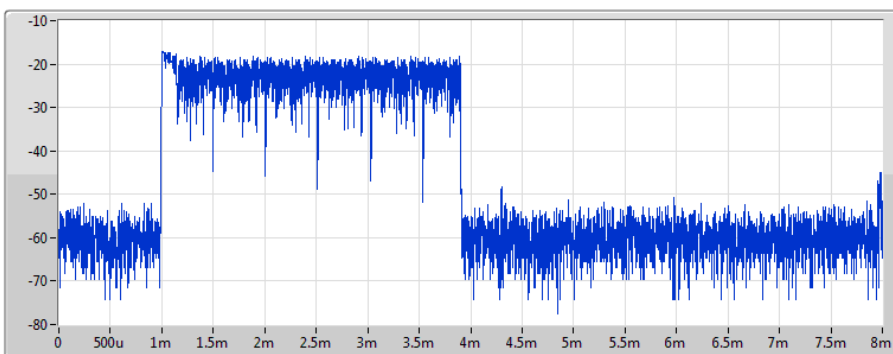
VBW
1MHz

Sweep Time
8ms

TX Time
2.912ms

BT-EDR(3Mbps)

2440MHz



Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	162.032m	400m	1.52m

Dwell

Port 1 

Ch Freq
2.44GHz

RBW
300kHz

VBW
1MHz

Sweep Time
8ms

TX Time
1.52ms

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	2.401837G	6.36	-13.64	828.016M	-58.39	2.399984G	-40.31	2.48414G	-57.62	2.555858G	-41.87	1

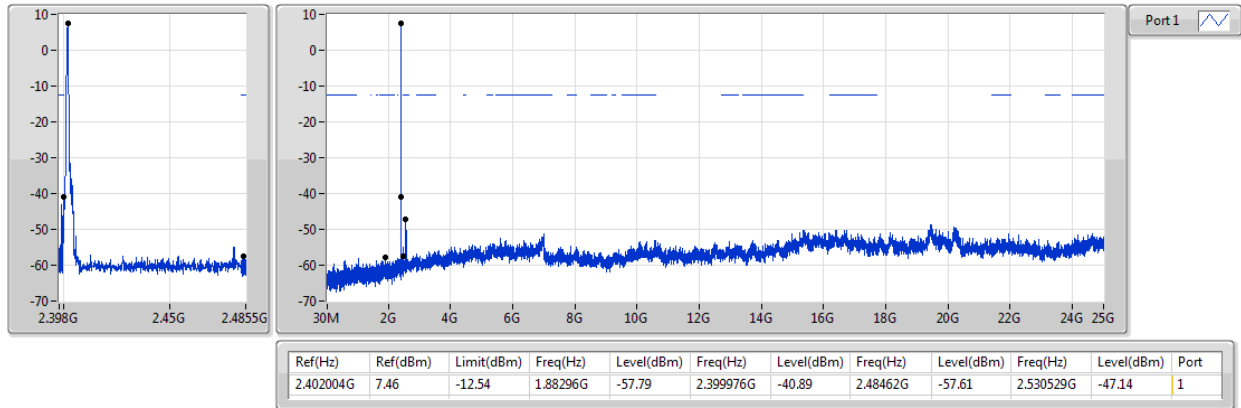
Result

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	7.46	-12.54	1.88296G	-57.79	2.399976G	-40.89	2.48462G	-57.61	2.530529G	-47.14	1
2440MHz	Pass	2.439913G	7.82	-12.18	2.103184G	-58.30	2.39812G	-57.97	2.484464G	-57.79	2.595258G	-46.17	1
2480MHz	Pass	2.479826G	6.50	-13.50	958.256M	-57.69	2.39962G	-57.33	2.48396G	-48.76	2.634659G	-47.34	1
BT-EDR(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.401837G	6.36	-13.64	828.016M	-58.39	2.399984G	-40.31	2.48414G	-57.62	2.555858G	-41.87	1
2440MHz	Pass	2.439913G	8.62	-11.38	1.93624G	-58.09	2.398512G	-57.90	2.485196G	-57.29	2.569929G	-47.54	1
2480MHz	Pass	2.479826G	6.70	-13.30	2.390896G	-57.73	2.39844G	-58.07	2.483968G	-47.48	2.634659G	-47.25	1
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.402004G	7.02	-12.98	1.824944G	-57.49	2.399992G	-41.69	2.48392G	-57.09	2.555858G	-42.23	1
2440MHz	Pass	2.44008G	8.21	-11.79	2.171856G	-58.24	2.398396G	-58.08	2.485472G	-58.05	2.569929G	-48.23	1
2480MHz	Pass	2.479993G	9.15	-10.85	2.170672G	-58.53	2.399016G	-57.42	2.483976G	-48.60	2.634659G	-46.78	1

BT-BR(1Mbps)

CSE NdB

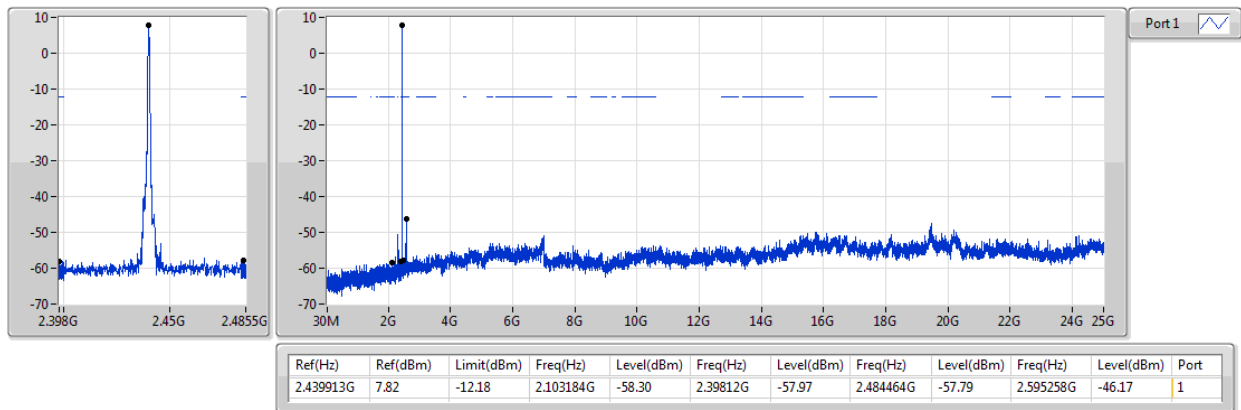
2402MHz



BT-BR(1Mbps)

CSE NdB

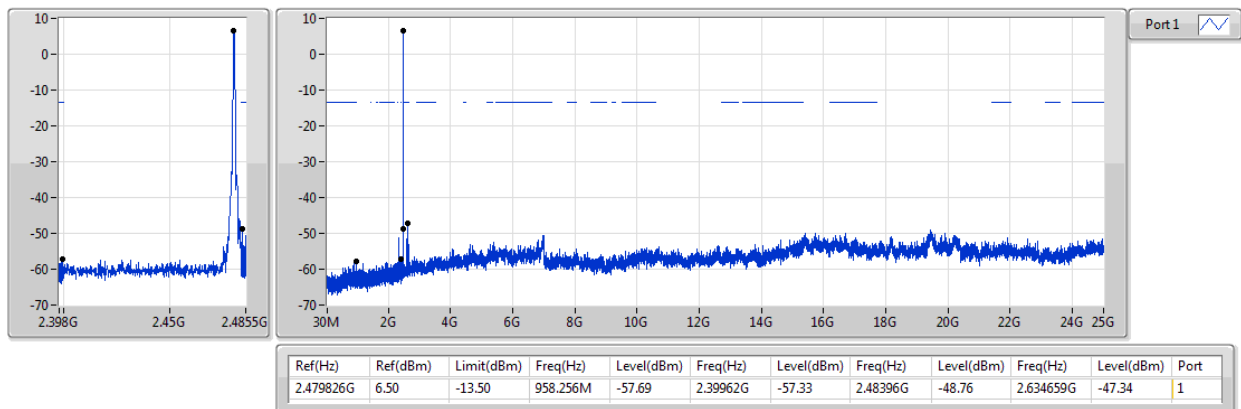
2440MHz



BT-BR(1Mbps)

CSE NdB

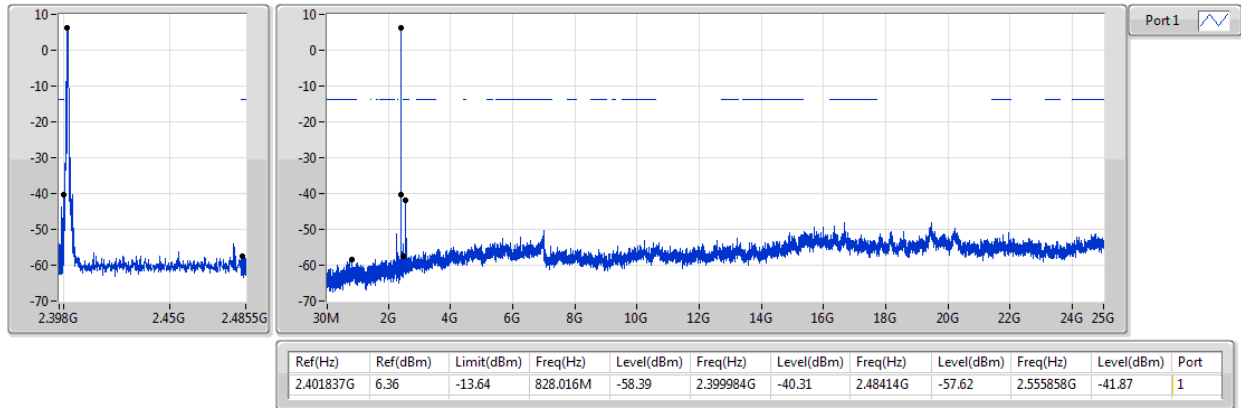
2480MHz



BT-EDR(2Mbps)

CSE NdB

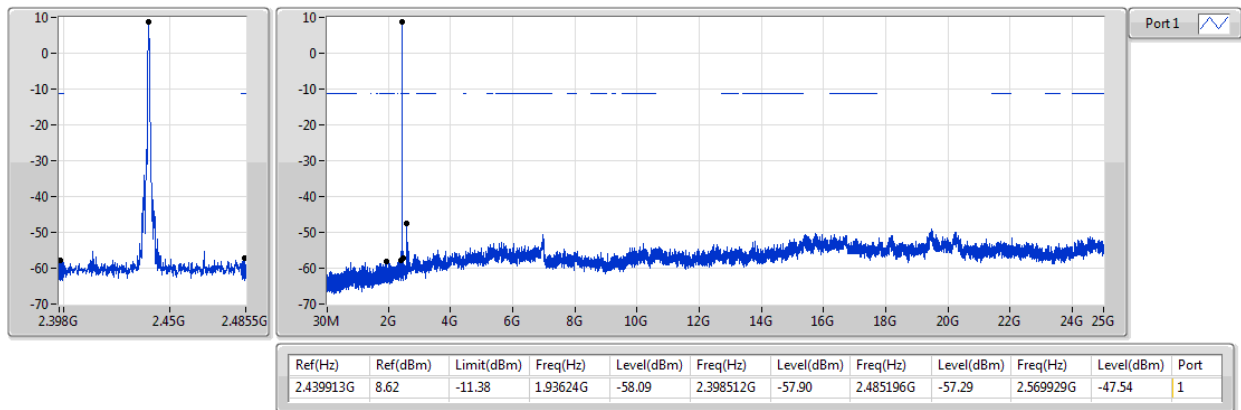
2402MHz



BT-EDR(2Mbps)

CSE NdB

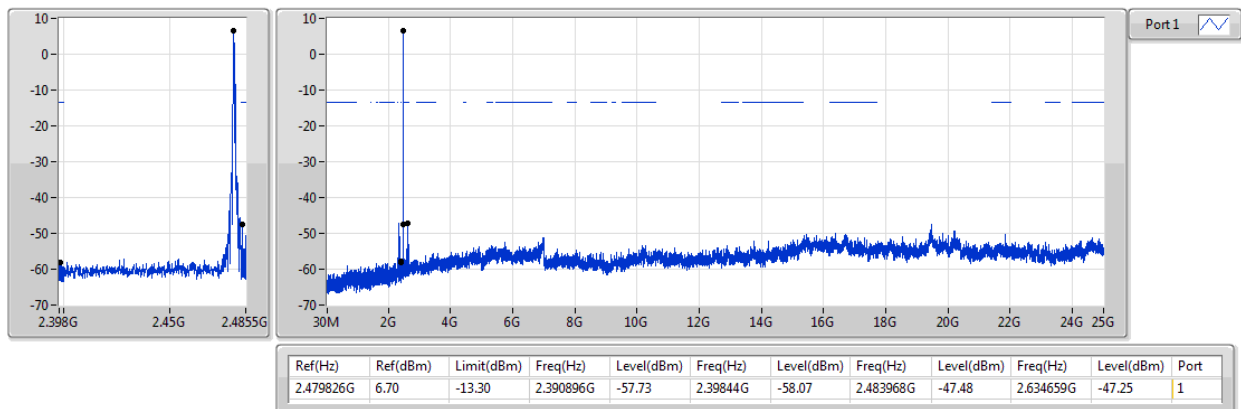
2440MHz



BT-EDR(2Mbps)

CSE NdB

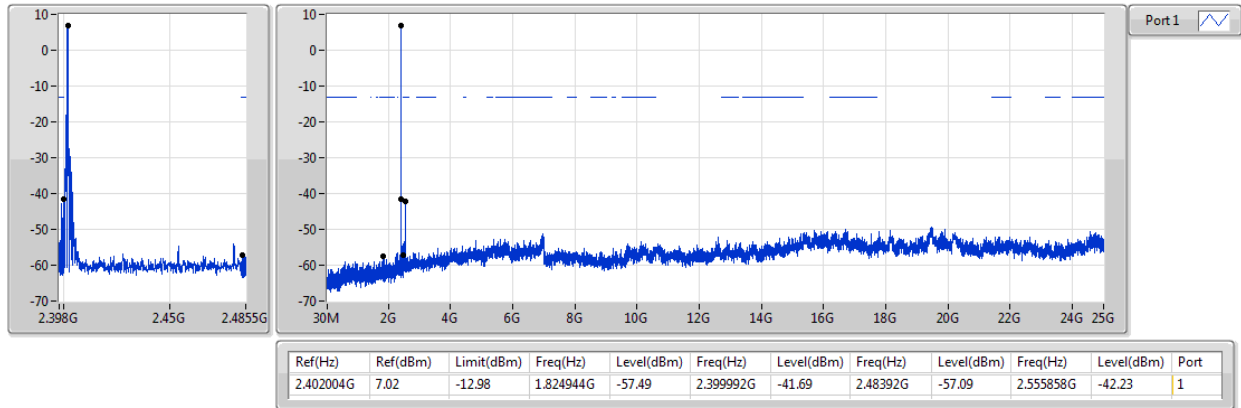
2480MHz



BT-EDR(3Mbps)

CSE NdB

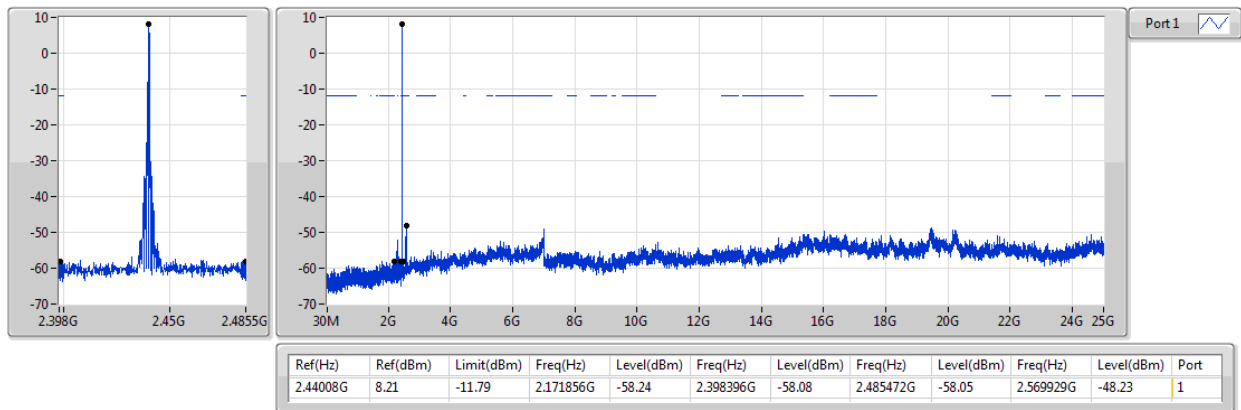
2402MHz



BT-EDR(3Mbps)

CSE NdB

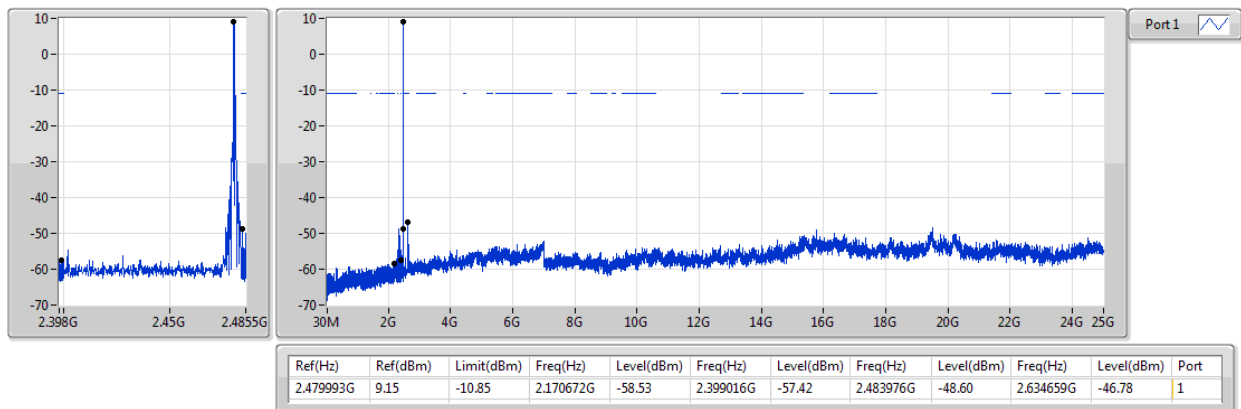
2440MHz



BT-EDR(3Mbps)

CSE NdB

2480MHz



RSE below 1GHz Result																																																																																																									
Operating Mode		1			Polarization			Horizontal																																																																																																	
Operating Function		Normal Link (Repeater mode)																																																																																																							
Level (dBuV/m) 107 100 80 60 40 20 0 30 100. 200. 300. 400. 500. 600. 700. 800. 900. 1000 Frequency (MHz) Date: 2017-06-26 Time: 17:54:32 FCC CLASS-B 5dB 2 3 4 5 6 <table><tr><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>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>30.00</td><td>35.55</td><td>40.00</td><td>-4.45</td><td>43.10</td><td>0.53</td><td>24.45</td><td>32.53</td><td>100</td><td>215 QP</td><td>HORIZONTAL</td></tr><tr><td>2</td><td>434.49</td><td>27.78</td><td>46.00</td><td>-18.22</td><td>36.30</td><td>1.62</td><td>22.32</td><td>32.46</td><td>100</td><td>221 Peak</td><td>HORIZONTAL</td></tr><tr><td>3</td><td>716.76</td><td>33.87</td><td>46.00</td><td>-12.13</td><td>38.91</td><td>2.12</td><td>25.31</td><td>32.47</td><td>100</td><td>125 Peak</td><td>HORIZONTAL</td></tr><tr><td>4</td><td>729.37</td><td>35.99</td><td>46.00</td><td>-10.01</td><td>40.79</td><td>2.15</td><td>25.50</td><td>32.45</td><td>100</td><td>245 Peak</td><td>HORIZONTAL</td></tr><tr><td>5</td><td>746.83</td><td>38.05</td><td>46.00</td><td>-7.95</td><td>42.51</td><td>2.18</td><td>25.78</td><td>32.42</td><td>100</td><td>211 QP</td><td>HORIZONTAL</td></tr><tr><td>6</td><td>951.50</td><td>33.62</td><td>46.00</td><td>-12.38</td><td>35.72</td><td>2.43</td><td>26.82</td><td>31.35</td><td>100</td><td>45 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	30.00	35.55	40.00	-4.45	43.10	0.53	24.45	32.53	100	215 QP	HORIZONTAL	2	434.49	27.78	46.00	-18.22	36.30	1.62	22.32	32.46	100	221 Peak	HORIZONTAL	3	716.76	33.87	46.00	-12.13	38.91	2.12	25.31	32.47	100	125 Peak	HORIZONTAL	4	729.37	35.99	46.00	-10.01	40.79	2.15	25.50	32.45	100	245 Peak	HORIZONTAL	5	746.83	38.05	46.00	-7.95	42.51	2.18	25.78	32.42	100	211 QP	HORIZONTAL	6	951.50	33.62	46.00	-12.38	35.72	2.43	26.82	31.35	100	45 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																																																																																																
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3	716.76	33.87	46.00	-12.13	38.91	2.12	25.31	32.47	100	125 Peak	HORIZONTAL																																																																																														
4	729.37	35.99	46.00	-10.01	40.79	2.15	25.50	32.45	100	245 Peak	HORIZONTAL																																																																																														
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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																																																																																																																								
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Operating Function			Normal Link (Repeater mode)																																																																																																																					
Level (dBuV/m) 107 100 80 60 40 20 0 Date: 2017-06-26 Time: 17:47:46 FCC CLASS-B 5dB 30 100. 200. 300. 400. 500. 600. 700. 800. 900. 1000 Frequency (MHz) <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></th><th></th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>Limit</th><th>Level</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th><th></th><th>Remark</th></tr><tr><th></th><th></th><th></th><th></th><th>dB</th><th>dBuV</th><th>dB</th><th>dB/m</th><th>dB</th><th>cm</th><th>deg</th><th>Pol/Phase</th></tr><tr><td>1</td><td>30.00</td><td>36.95</td><td>40.00</td><td>-3.05</td><td>44.50</td><td>0.53</td><td>24.45</td><td>32.53</td><td>300</td><td>360</td><td>Peak</td></tr><tr><td>2</td><td>32.91</td><td>36.20</td><td>40.00</td><td>-3.80</td><td>45.58</td><td>0.53</td><td>22.62</td><td>32.53</td><td>300</td><td>360</td><td>Peak</td></tr><tr><td>3</td><td>714.82</td><td>37.57</td><td>46.00</td><td>-8.43</td><td>42.66</td><td>2.12</td><td>25.27</td><td>32.48</td><td>100</td><td>248</td><td>Peak</td></tr><tr><td>4</td><td>729.37</td><td>41.90</td><td>46.00</td><td>-4.10</td><td>46.70</td><td>2.15</td><td>25.50</td><td>32.45</td><td>100</td><td>241</td><td>QP</td></tr><tr><td>5</td><td>746.83</td><td>38.98</td><td>46.00</td><td>-7.02</td><td>43.44</td><td>2.18</td><td>25.78</td><td>32.42</td><td>100</td><td>258</td><td>Peak</td></tr><tr><td>6</td><td>951.50</td><td>34.46</td><td>46.00</td><td>-11.54</td><td>36.56</td><td>2.43</td><td>26.82</td><td>31.35</td><td>100</td><td>126</td><td>Peak</td></tr></table>														Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos				MHz	dBuV/m	dBuV/m	Limit	Level	Loss	Factor	Factor			Remark					dB	dBuV	dB	dB/m	dB	cm	deg	Pol/Phase	1	30.00	36.95	40.00	-3.05	44.50	0.53	24.45	32.53	300	360	Peak	2	32.91	36.20	40.00	-3.80	45.58	0.53	22.62	32.53	300	360	Peak	3	714.82	37.57	46.00	-8.43	42.66	2.12	25.27	32.48	100	248	Peak	4	729.37	41.90	46.00	-4.10	46.70	2.15	25.50	32.45	100	241	QP	5	746.83	38.98	46.00	-7.02	43.44	2.18	25.78	32.42	100	258	Peak	6	951.50	34.46	46.00	-11.54	36.56	2.43	26.82	31.35	100	126	Peak
	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos																																																																																																															
	MHz	dBuV/m	dBuV/m	Limit	Level	Loss	Factor	Factor			Remark																																																																																																													
				dB	dBuV	dB	dB/m	dB	cm	deg	Pol/Phase																																																																																																													
1	30.00	36.95	40.00	-3.05	44.50	0.53	24.45	32.53	300	360	Peak																																																																																																													
2	32.91	36.20	40.00	-3.80	45.58	0.53	22.62	32.53	300	360	Peak																																																																																																													
3	714.82	37.57	46.00	-8.43	42.66	2.12	25.27	32.48	100	248	Peak																																																																																																													
4	729.37	41.90	46.00	-4.10	46.70	2.15	25.50	32.45	100	241	QP																																																																																																													
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6	951.50	34.46	46.00	-11.54	36.56	2.43	26.82	31.35	100	126	Peak																																																																																																													

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.)

	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	30.00	36.95	40.00	-3.05	44.50	0.53	24.45	32.53	300	360 Peak	VERTICAL
2	32.91	36.20	40.00	-3.80	45.58	0.53	22.62	32.53	300	360 Peak	VERTICAL
3	714.82	37.57	46.00	-8.43	42.66	2.12	25.27	32.48	100	248 Peak	VERTICAL
4	729.37	41.90	46.00	-4.10	46.70	2.15	25.50	32.45	100	241 QP	VERTICAL
5	746.83	38.98	46.00	-7.02	43.44	2.18	25.78	32.42	100	258 Peak	VERTICAL
6	951.50	34.46	46.00	-11.54	36.56	2.43	26.82	31.35	100	126 Peak	VERTICAL

Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)



RSE TX above 1GHz Result

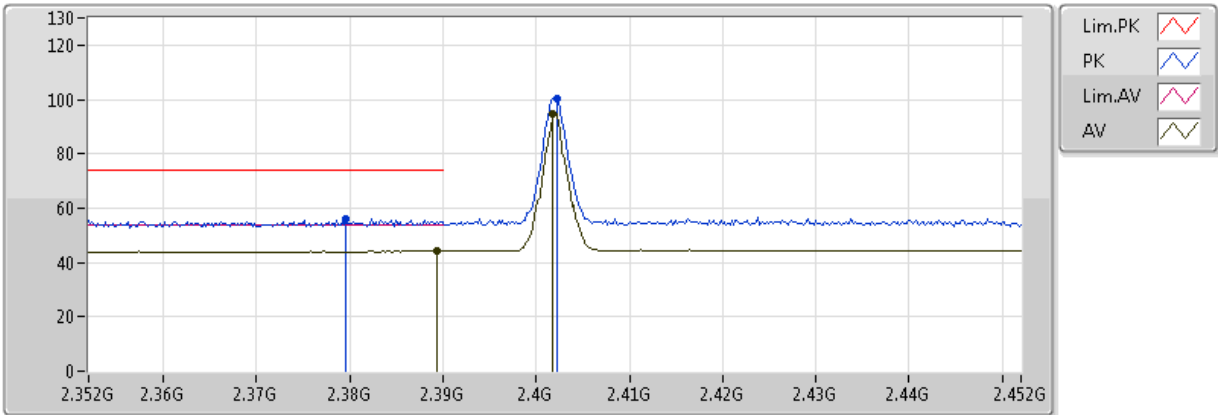
Appendix G.2

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	47.35	54.00	-6.65	32.14	3	V	68	1.56	-

BT-BR(1Mbps)

2402MHz_TX

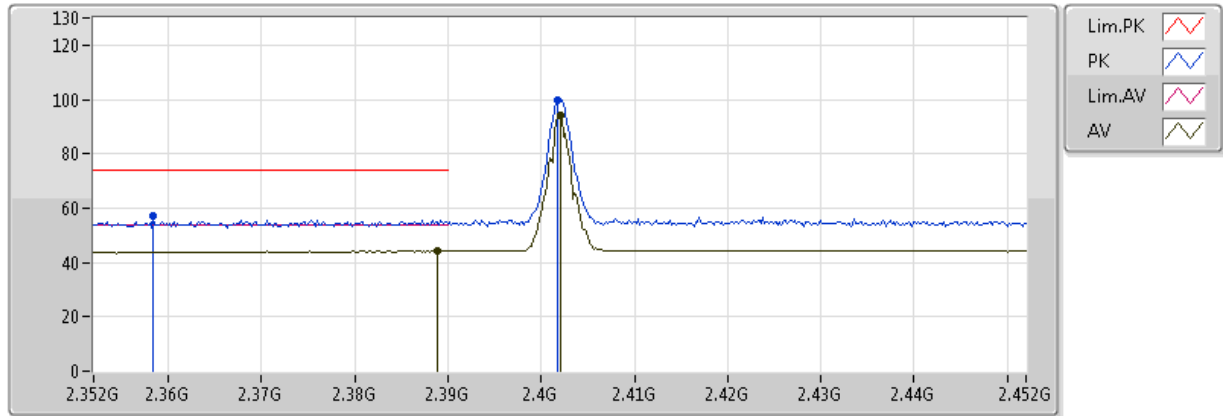


20170701
EUT_Z_1TX
Setting 105
03-G-2
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3894G	44.24	54.00	-9.76	31.91	3	V	83	1.76	-
AV	2.4018G	94.49	Inf	-Inf	31.94	3	V	83	1.76	-
PK	2.3796G	55.90	74.00	-18.10	31.89	3	V	83	1.76	-
PK	2.4022G	100.28	Inf	-Inf	31.95	3	V	83	1.76	-

BT-BR(1Mbps)

2402MHz_TX

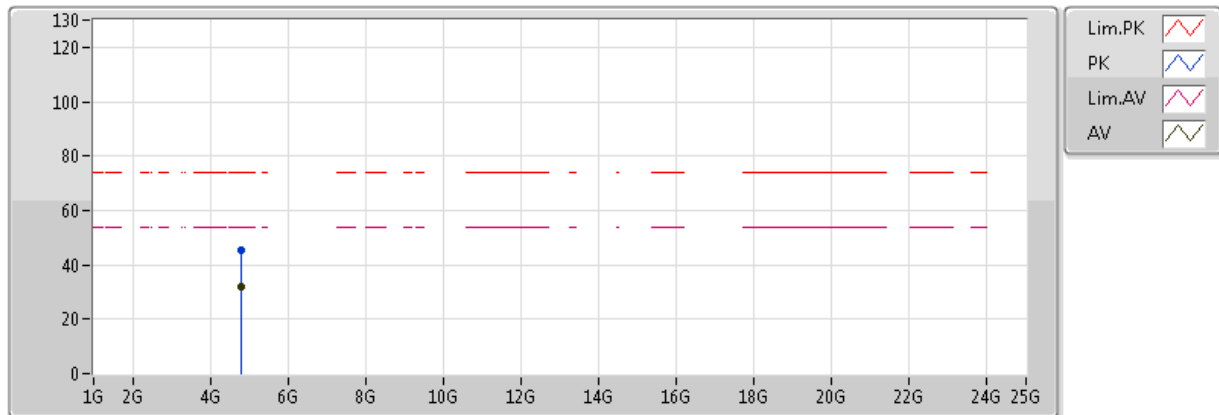


20170701
EUT_Z_1TX
Setting 105
03-G-2
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3888G	44.32	54.00	-9.68	31.91	3	H	333	1.44	-
AV	2.402G	94.40	Inf	-Inf	31.94	3	H	333	1.44	-
PK	2.3584G	56.93	74.00	-17.07	31.83	3	H	333	1.44	-
PK	2.4018G	99.58	Inf	-Inf	31.94	3	H	333	1.44	-

BT-BR(1Mbps)

2402MHz_TX

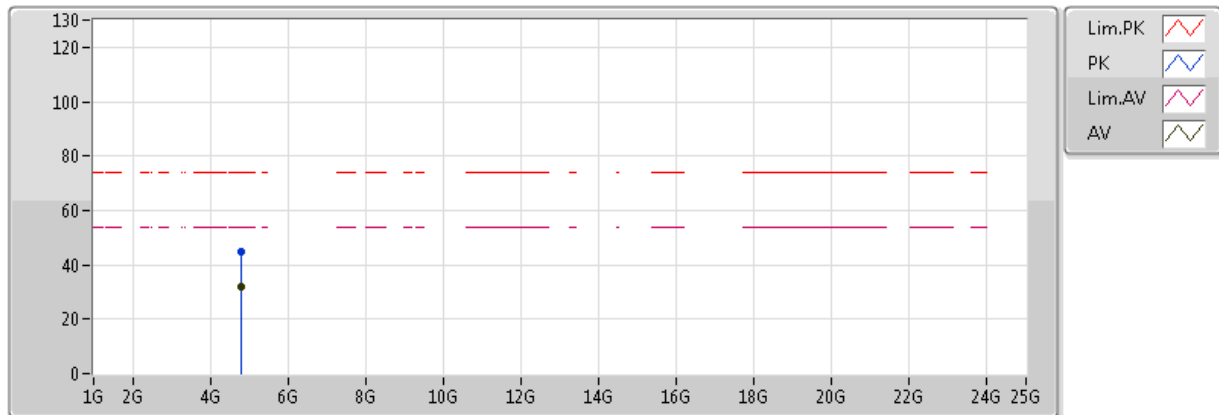


20170701
EUT_Z_1TX
Setting 105
03-G-2
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.80616G	31.97	54.00	-22.03	3.98	3	V	180	2.40	-
PK	4.80371G	45.21	74.00	-28.79	3.98	3	V	180	2.40	-

BT-BR(1Mbps)

2402MHz_TX

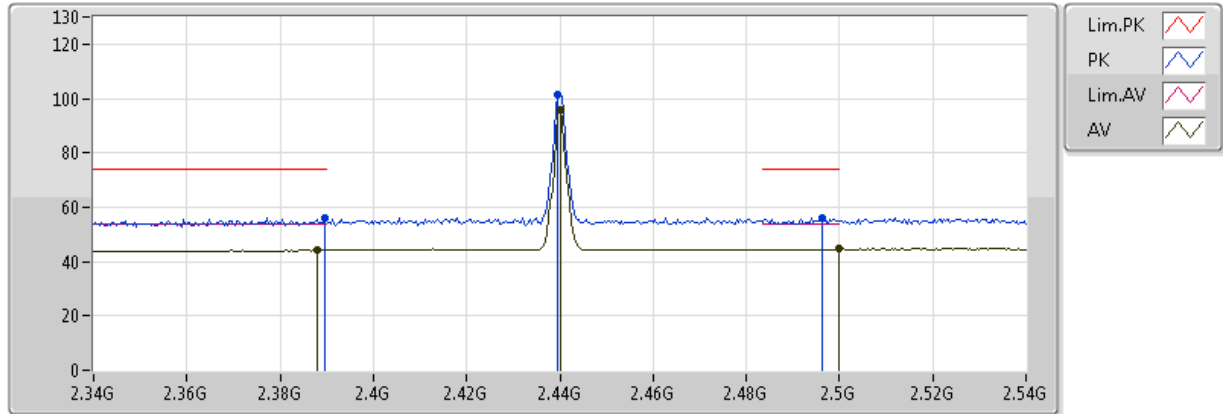


20170701
EUT_Z_1TX
Setting 105
03-G-2
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.8031G	31.94	54.00	-22.06	3.98	3	V	328	2.25	-
PK	4.80535G	44.89	74.00	-29.11	3.98	3	V	328	2.25	-

BT-BR(1Mbps)

2440MHz_TX

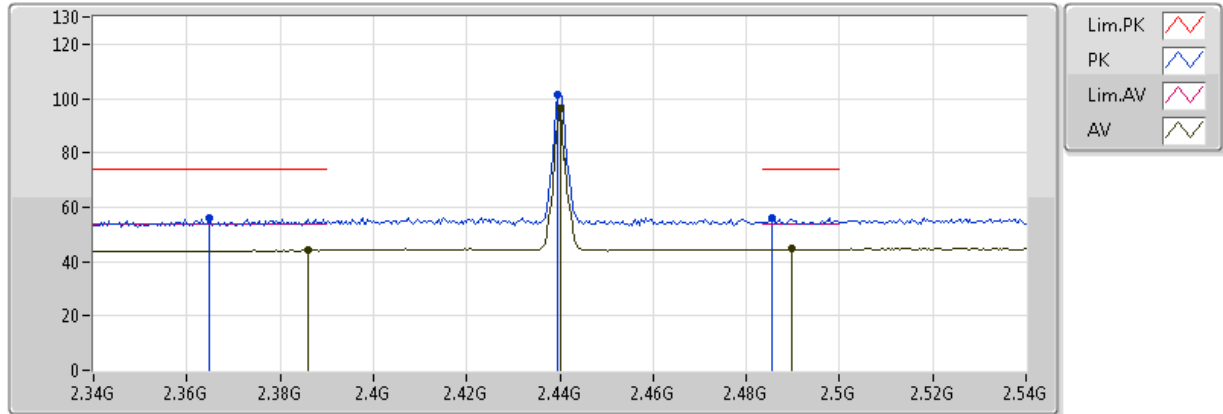


20170701
EUT_Z_1TX
Setting 105
03-G-2
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.388G	44.23	54.00	-9.77	31.91	3	V	70	1.61	-
AV	2.44G	96.00	Inf	-Inf	32.04	3	V	70	1.61	-
AV	2.5G	44.74	54.00	-9.26	32.18	3	V	70	1.61	-
PK	2.3896G	56.02	74.00	-17.98	31.91	3	V	70	1.61	-
PK	2.4396G	101.37	Inf	-Inf	32.04	3	V	70	1.61	-
PK	2.4964G	56.30	74.00	-17.70	32.17	3	V	70	1.61	-

BT-BR(1Mbps)

2440MHz_TX

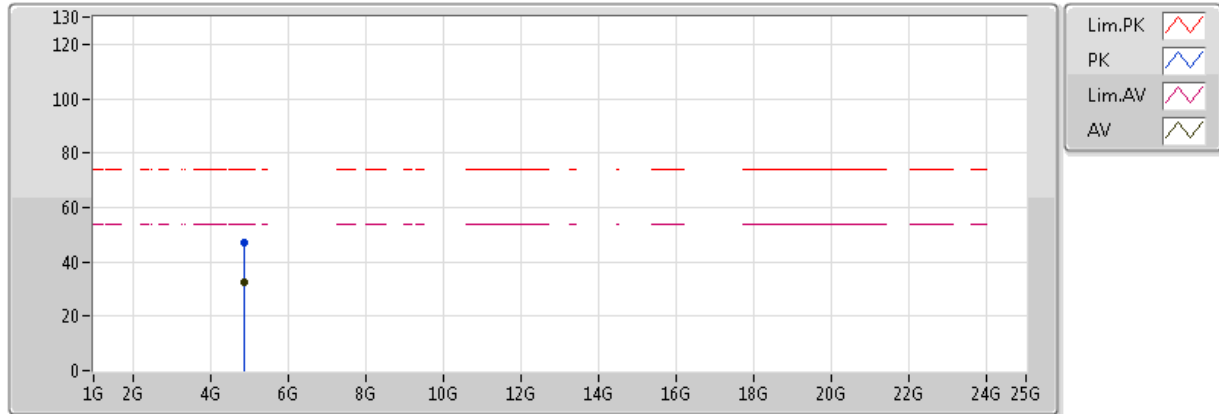


20170701
EUT_Z_1TX
Setting 105
03-G-2
FSP(100142)

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	44.27	54.00	-9.73	31.90	3	H	333	1.15	-
AV	2.44G	96.11	Inf	-Inf	32.04	3	H	333	1.15	-
AV	2.4896G	44.57	54.00	-9.43	32.16	3	H	333	1.15	-
PK	2.3648G	55.94	74.00	-18.06	31.85	3	H	333	1.15	-
PK	2.4396G	101.22	Inf	-Inf	32.04	3	H	333	1.15	-
PK	2.4856G	55.95	74.00	-18.05	32.15	3	H	333	1.15	-

BT-BR(1Mbps)

2440MHz_TX

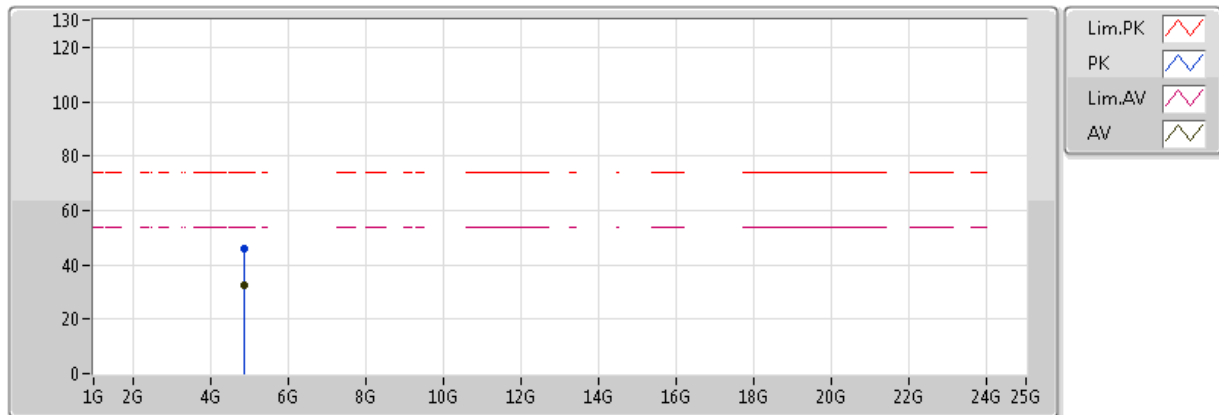


20170701
EUT_Z_1TX
Setting 105
03-G-2
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87751G	32.48	54.00	-21.52	4.15	3	V	174	2.23	-
PK	4.87835G	47.28	74.00	-26.72	4.15	3	V	174	2.23	-

BT-BR(1Mbps)

2440MHz_TX

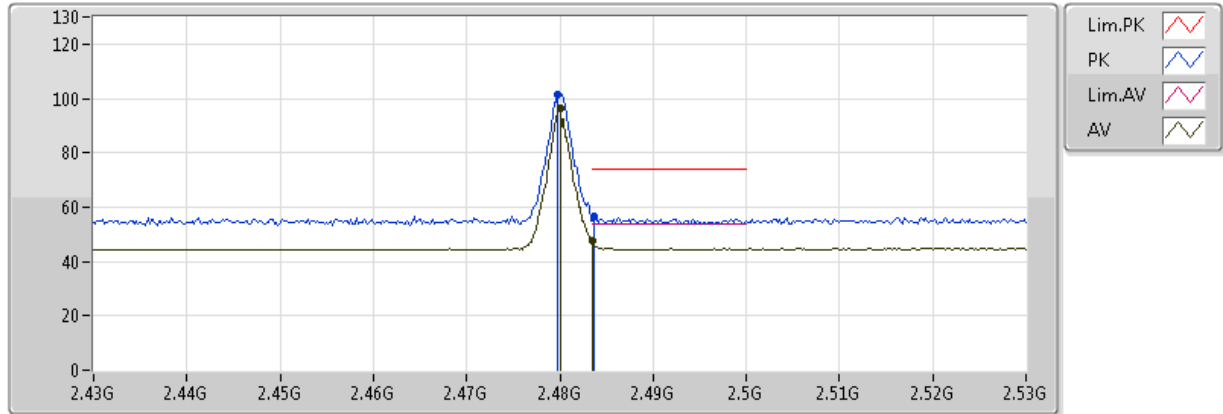


20170701
EUT_Z_1TX
Setting 105
03-G-2
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87817G	32.48	54.00	-21.52	4.15	3	V	188	2.08	-
PK	4.881G	45.91	74.00	-28.09	4.16	3	V	188	2.08	-

BT-BR(1Mbps)

2480MHz_TX

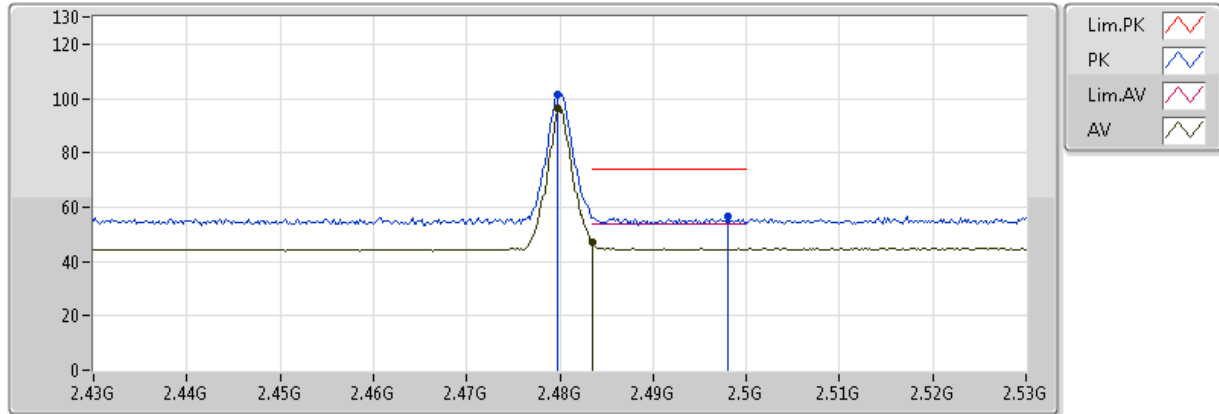


20170701
EUT_Z_1TX
Setting 105
03-G-2
FSP(100142)

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	96.43	Inf	-Inf	32.13	3	V	68	1.56	-
AV	2.483502G	47.35	54.00	-6.65	32.14	3	V	68	1.56	-
PK	2.4798G	101.70	Inf	-Inf	32.13	3	V	68	1.56	-
PK	2.4836G	56.38	74.00	-17.62	32.14	3	V	68	1.56	-

BT-BR(1Mbps)

2480MHz_TX

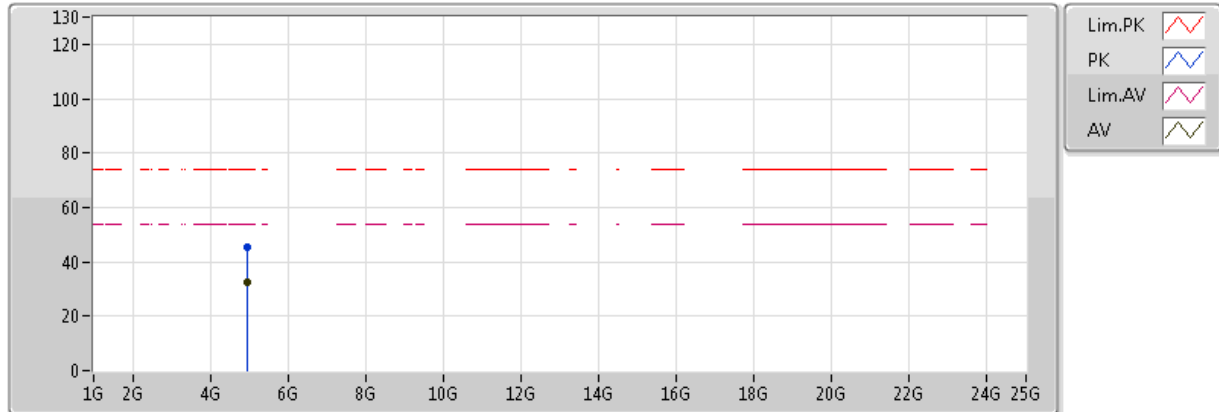


20170701
EUT_Z_1TX
Setting 105
03-G-2
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4798G	96.34	Inf	-Inf	32.13	3	H	343	1.16	-
AV	2.483502G	47.26	54.00	-6.74	32.14	3	H	343	1.16	-
PK	2.4798G	101.65	Inf	-Inf	32.13	3	H	343	1.16	-
PK	2.498G	56.44	74.00	-17.56	32.18	3	H	343	1.16	-

BT-BR(1Mbps)

2480MHz_TX

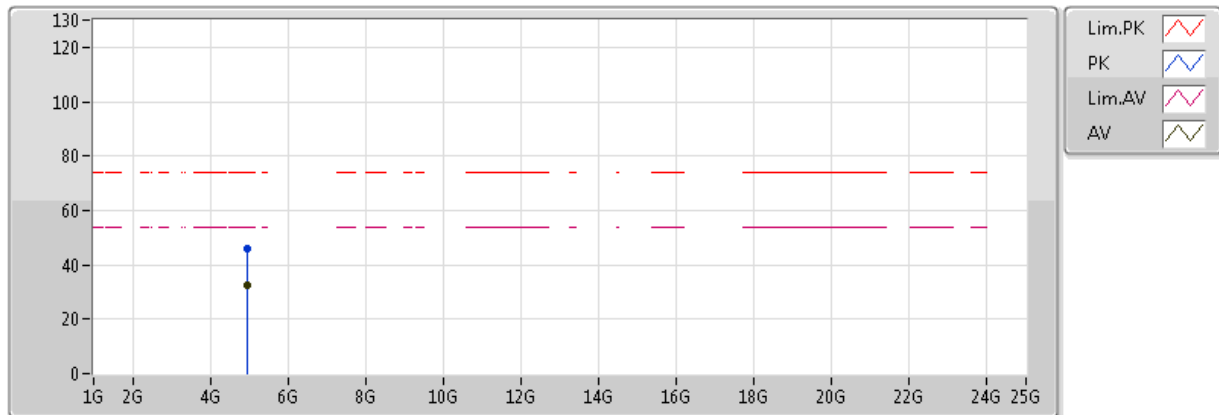


20170701
EUT_Z_1TX
Setting 105
03-G-2
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.95997G	32.35	54.00	-21.65	4.34	3	V	93	1.69	-
PK	4.95981G	45.20	74.00	-28.80	4.34	3	V	93	1.69	-

BT-BR(1Mbps)

2480MHz_TX

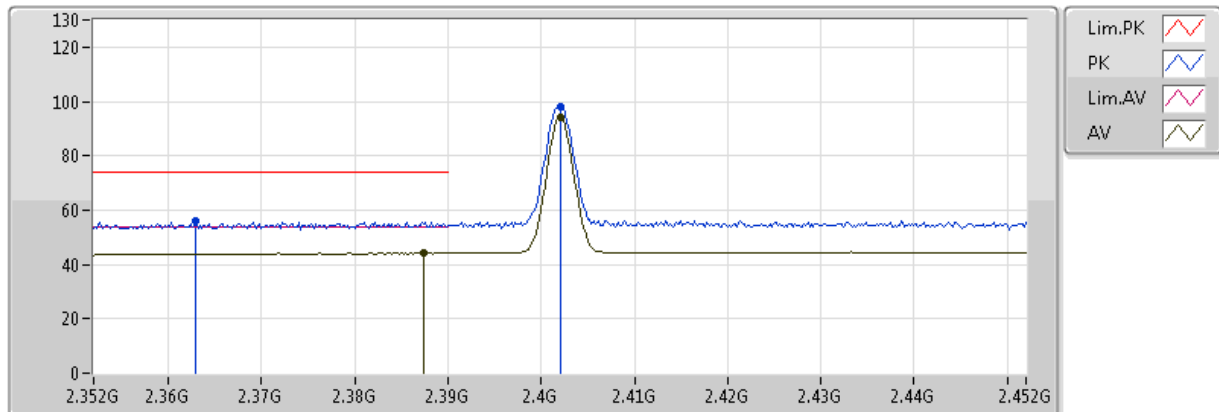


20170701
EUT_Z_1TX
Setting 105
03-G-2
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.96022G	32.44	54.00	-21.56	4.34	3	V	35	1.05	-
PK	4.95967G	46.21	74.00	-27.79	4.34	3	V	35	1.05	-

BT-EDR(3Mbps)

2402MHz_TX

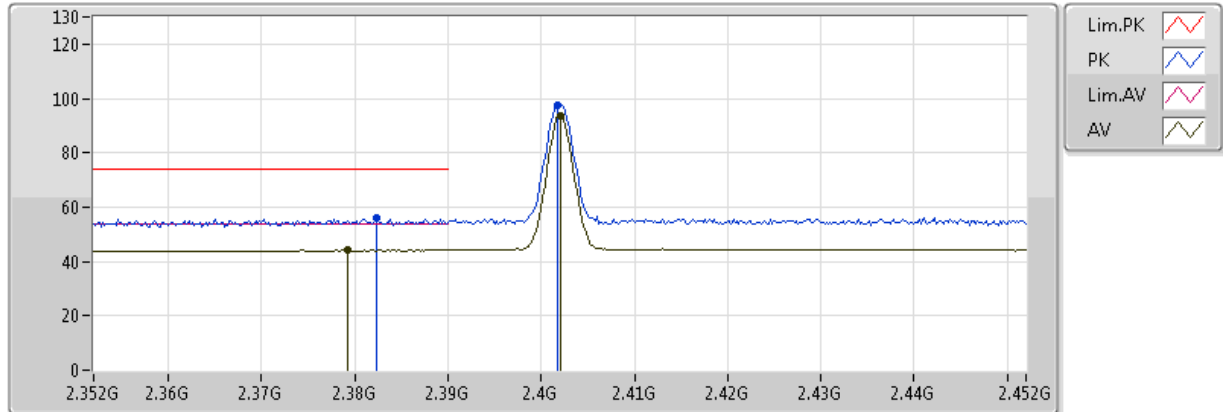


20170701
EUT_Z_1TX
Setting 105
03-G-2
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3874G	44.22	54.00	-9.78	31.91	3	V	80	1.41	-
AV	2.402G	93.98	Inf	-Inf	31.94	3	V	80	1.41	-
PK	2.363G	56.06	74.00	-17.94	31.84	3	V	80	1.41	-
PK	2.402G	98.12	Inf	-Inf	31.94	3	V	80	1.41	-

BT-EDR(3Mbps)

2402MHz_TX

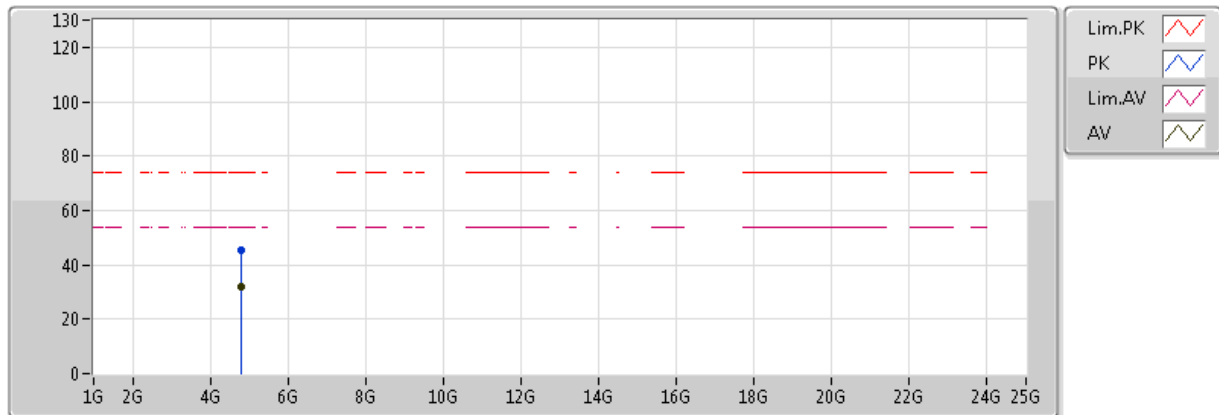


20170701
EUT_Z_1TX
Setting 105
03-G-2
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.3792G	44.28	54.00	-9.72	31.89	3	H	331	1.44	-
AV	2.402G	93.40	Inf	-Inf	31.94	3	H	331	1.44	-
PK	2.3824G	55.85	74.00	-18.15	31.89	3	H	331	1.44	-
PK	2.4018G	97.59	Inf	-Inf	31.94	3	H	331	1.44	-

BT-EDR(3Mbps)

2402MHz_TX

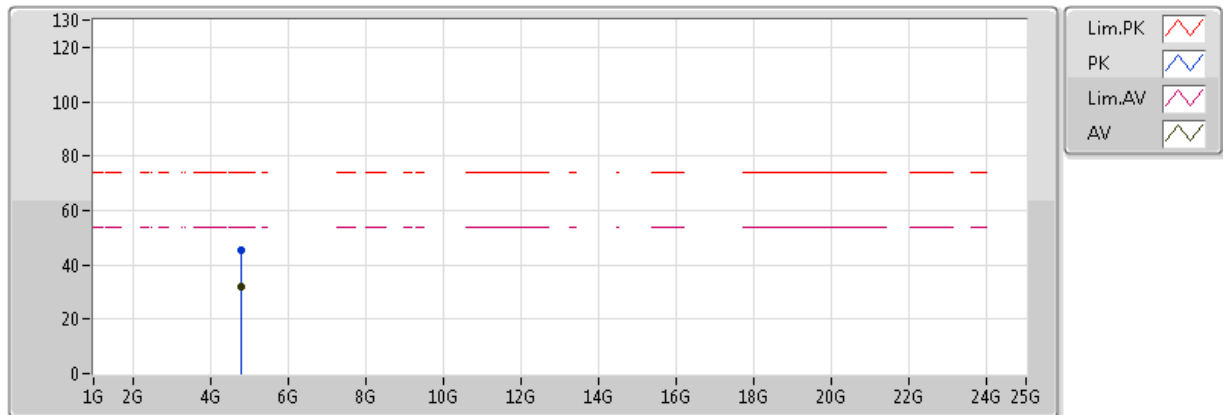


20170701
EUT_Z_1TX
Setting 105
03-G-2
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.8061G	32.06	54.00	-21.94	3.98	3	V	205	2.05	-
PK	4.80269G	45.32	74.00	-28.68	3.98	3	V	205	2.05	-

BT-EDR(3Mbps)

2402MHz_TX

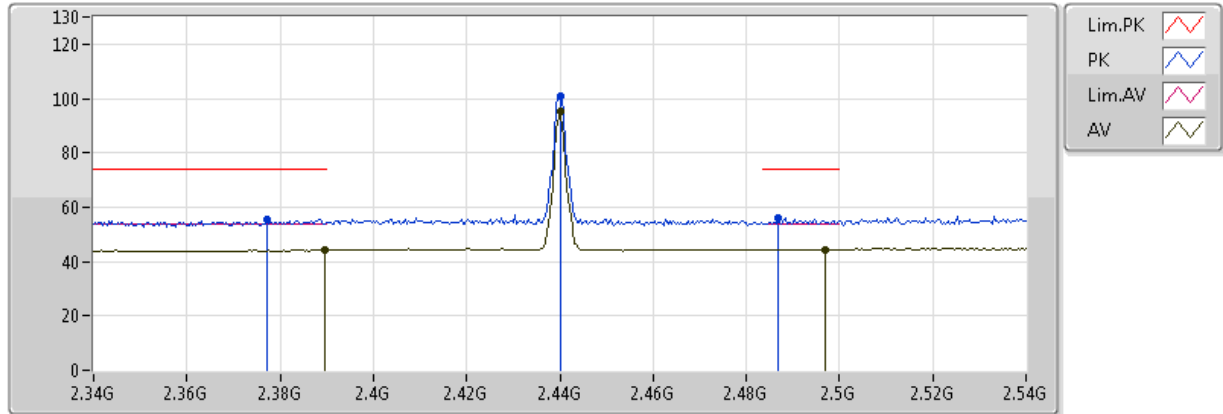


20170701
EUT_Z_1TX
Setting 105
03-G-2
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.80602G	31.93	54.00	-22.07	3.98	3	V	53	1.23	-
PK	4.80289G	45.34	74.00	-28.66	3.98	3	V	53	1.23	-

BT-EDR(3Mbps)

2440MHz_TX

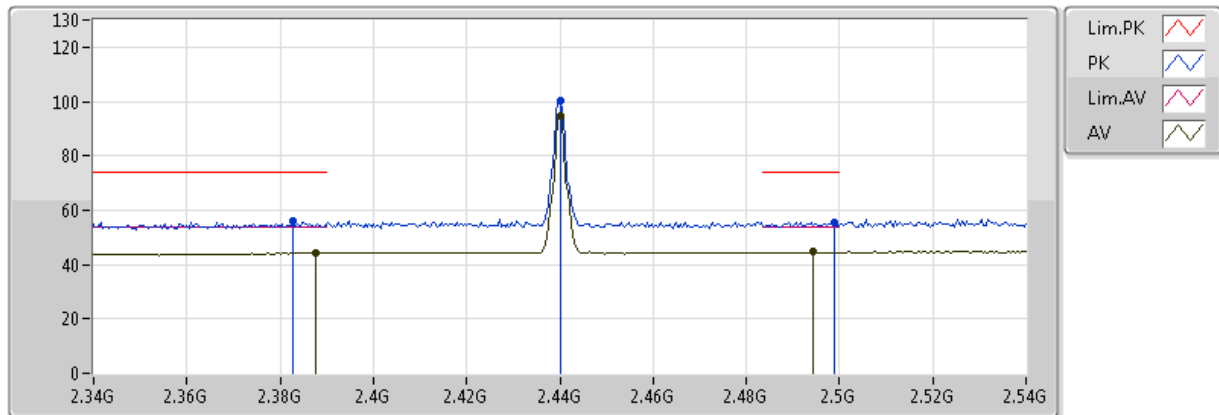


20170701
EUT_Z_1TX
Setting 105
03-G-2
FSP(100142)

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	44.19	54.00	-9.81	31.91	3	V	81	1.61	-
AV	2.44G	95.34	Inf	-Inf	32.04	3	V	81	1.61	-
AV	2.4968G	44.51	54.00	-9.49	32.17	3	V	81	1.61	-
PK	2.3772G	55.70	74.00	-18.30	31.88	3	V	81	1.61	-
PK	2.44G	100.84	Inf	-Inf	32.04	3	V	81	1.61	-
PK	2.4868G	55.91	74.00	-18.09	32.15	3	V	81	1.61	-

BT-EDR(3Mbps)

2440MHz_TX

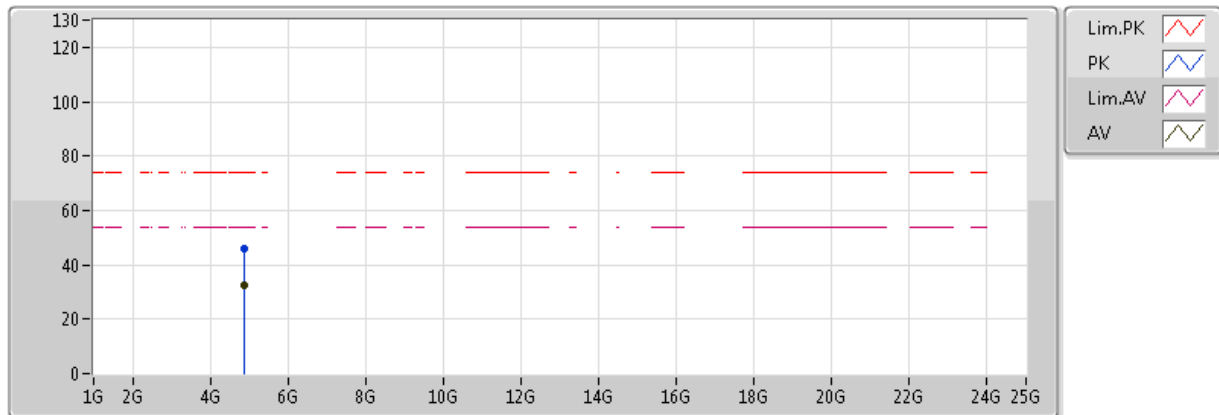


20170701
EUT_Z_1TX
Setting 105
03-G-2
FSP(100142)

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	44.23	54.00	-9.77	31.91	3	H	333	1.13	-
AV	2.44G	94.57	Inf	-Inf	32.04	3	H	333	1.13	-
AV	2.4944G	44.55	54.00	-9.45	32.17	3	H	333	1.13	-
PK	2.3828G	55.89	74.00	-18.11	31.90	3	H	333	1.13	-
PK	2.44G	100.19	Inf	-Inf	32.04	3	H	333	1.13	-
PK	2.4988G	55.72	74.00	-18.28	32.18	3	H	333	1.13	-

BT-EDR(3Mbps)

2440MHz_TX

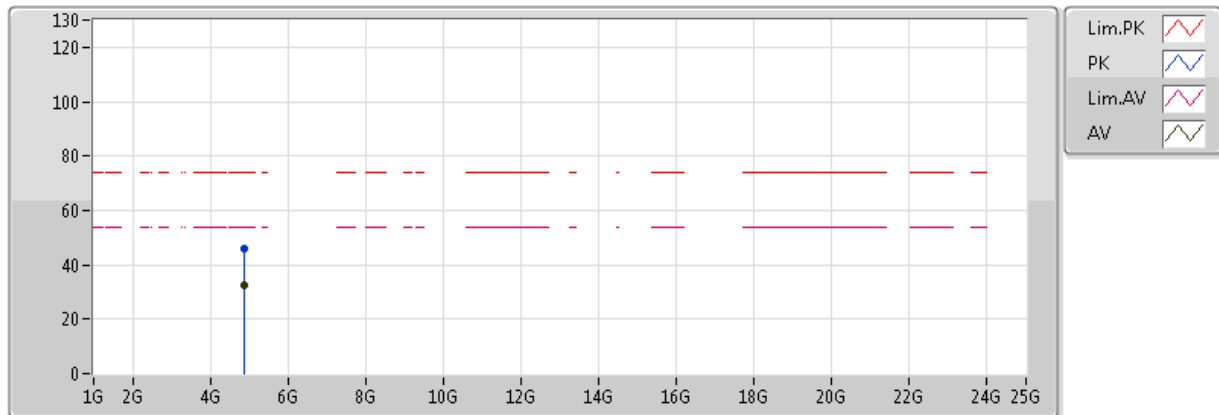


20170701
EUT_Z_1TX
Setting 105
03-G-2
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87854G	32.51	54.00	-21.49	4.15	3	V	239	1.83	-
PK	4.88098G	45.98	74.00	-28.02	4.16	3	V	239	1.83	-

BT-EDR(3Mbps)

2440MHz_TX

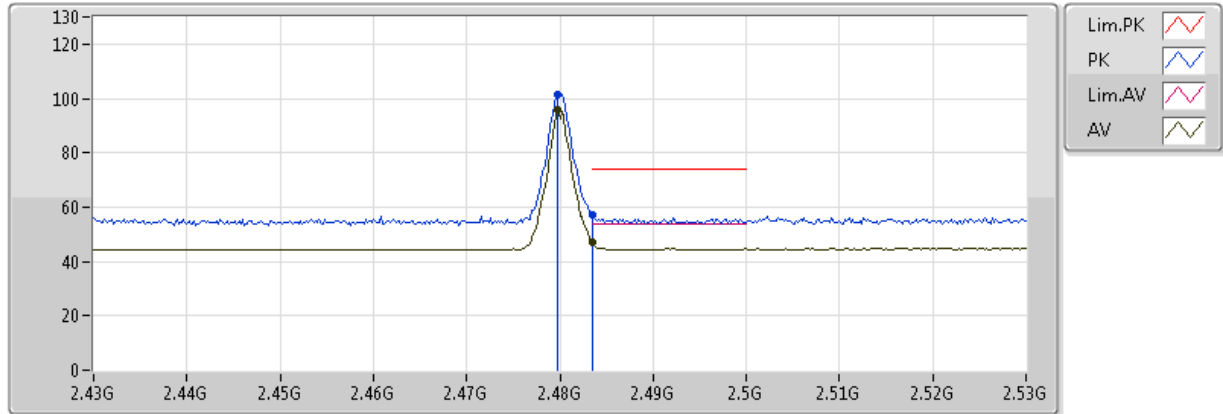


20170701
EUT_Z_1TX
Setting 105
03-G-2
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.87754G	32.46	54.00	-21.54	4.15	3	V	69	1.48	-
PK	4.88179G	45.97	74.00	-28.03	4.16	3	V	69	1.48	-

BT-EDR(3Mbps)

2480MHz_TX

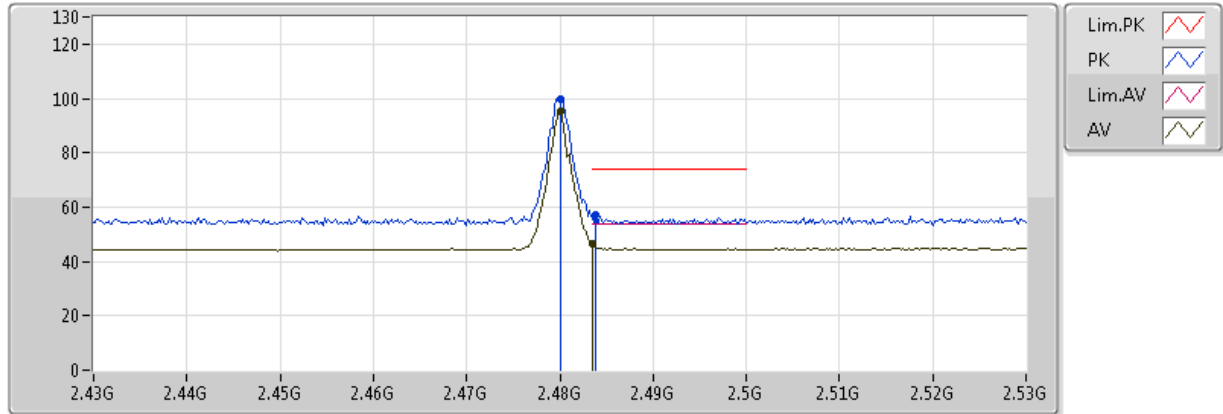


20170701
EUT_Z_1TX
Setting 105
03-G-2
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	2.4798G	95.95	Inf	-Inf	32.13	3	V	66	1.33	-
AV	2.483502G	47.23	54.00	-6.77	32.14	3	V	66	1.33	-
PK	2.4798G	101.43	Inf	-Inf	32.13	3	V	66	1.33	-
PK	2.483502G	57.15	74.00	-16.85	32.14	3	V	66	1.33	-

BT-EDR(3Mbps)

2480MHz_TX

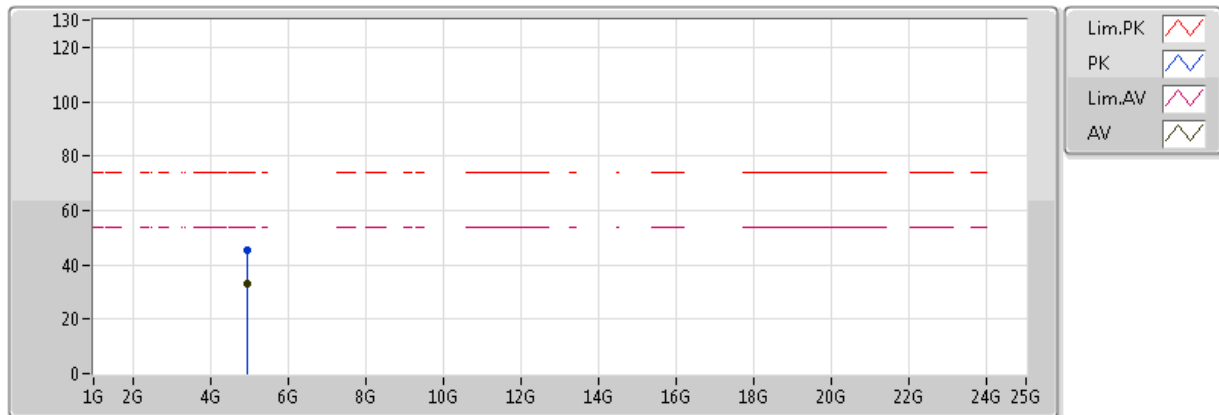


20170701
EUT_Z_1TX
Setting 105
03-G-2
FSP(100142)

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	94.99	Inf	-Inf	32.13	3	H	161	1.48	-
AV	2.483502G	46.37	54.00	-7.63	32.14	3	H	161	1.48	-
PK	2.48G	99.85	Inf	-Inf	32.13	3	H	161	1.48	-
PK	2.4838G	56.88	74.00	-17.12	32.14	3	H	161	1.48	-

BT-EDR(3Mbps)

2480MHz_TX

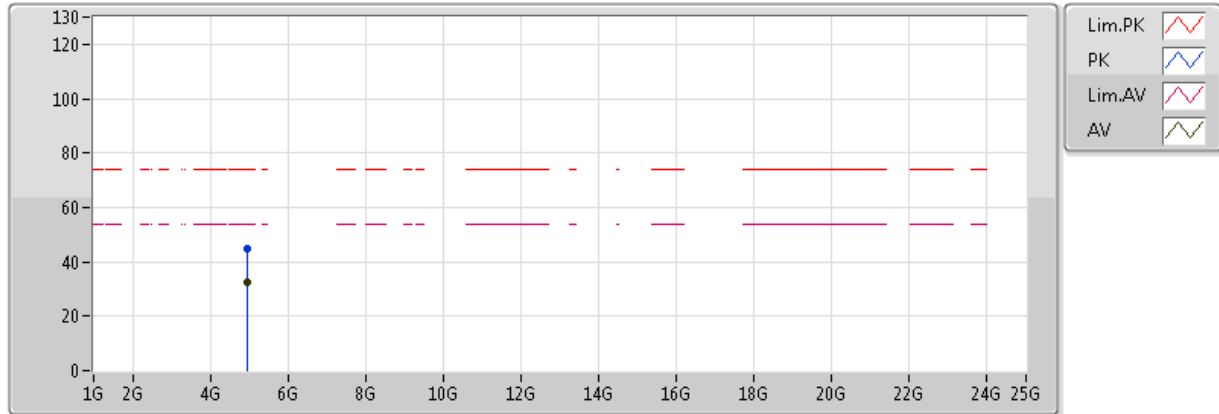


20170701
EUT_Z_1TX
Setting 105
03-G-2
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.95993G	32.97	54.00	-21.03	4.34	3	V	100	1.66	-
PK	4.96004G	45.37	74.00	-28.63	4.34	3	V	100	1.66	-

BT-EDR(3Mbps)

2480MHz_TX



20170701
EUT_Z_1TX
Setting 105
03-G-2
FSP(100142)

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	4.96006G	32.59	54.00	-21.41	4.34	3	V	217	1.44	-
PK	4.95969G	44.87	74.00	-29.13	4.34	3	V	217	1.44	-