

FCC Test Report

Equipment : 802.11ac Tri Band PoE Access Point
Brand Name : LITE-ON, MOJO
Model No. : WP9333, WP9331, O-105, WP9331-FM
FCC ID : PPQ-WP9333
Standard : 47 CFR FCC Part 15.247
Operating Band : 2400 MHz – 2483.5 MHz
Function : ☒ Point-to-multipoint; ☐ Point-to-point
Applicant : LITE-ON Technology Corp.
Bldg. C, 90, Chien 1 Rd., Chung-Ho, New Taipei City,
23585 Taiwan
Manufacturer : Lite-On Network Communication (Dongguan) Limited
30#Keji Rd., Yin Hu Industrial Area, Qingxi
Town, DongGuan City, Guangdong, China

The product sample received on Sep. 07, 2017 and completely tested on Oct. 03, 2017. We, SPORTON, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The 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.



Phoenix Chen / Assistant Manager





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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 Bandedge	15.247(a)	Complied
3.5	15.247(a)	Time of Occupancy (Dwell Time)	15.247(a)	Complied
3.6	15.247(d)	Emissions in Non-restricted Frequency Bands	15.247(d)	Complied
3.7	15.247(d)	Emissions in Restricted Frequency Bands	Restricted Bands: FCC 15.209	Complied



SPORTON INTERNATIONAL INC.
TEL : 886-3-3273456
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FCC ID: PPQ-WP9333

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	Bluetooth Version	Ch. Frequency (MHz)	Channel Number
2400-2483.5	BR / EDR	2402-2480	0-78 [79]

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	BT-BR(1Mbps)	1	1TX
2.4-2.4835GHz	BT-EDR(2Mbps)	1	1TX
2.4-2.4835GHz	BT-EDR(3Mbps)	1	1TX

Note:

- ♦ Bluetooth BR uses a GFSK (1Mbps).
- ♦ Bluetooth EDR uses a combination of $\pi/4$ -DQPSK (2Mbps) and 8DPSK (3Mbps).
- ♦ Bluetooth BR/EDR uses as a system using FHSS modulation.
- ♦ BWch is the nominal channel bandwidth.

1.1.2 Antenna Information

Ant.	Port	Brand	Model Name	Antenna Type	Connector	Radio
1	2	Walsin	RFMTA400809MMLB901	Metal Antenna	MMCX	R1
2	1	Walsin	RFMTA400811MMLB901	Metal Antenna	MMCX	R1
3	2	Walsin	RFMTA400814MM5B901	Metal Antenna	MMCX	R2
4	1	Walsin	RFMTA400816MM5B901	Metal Antenna	MMCX	R2
5	2	Master Wave Technology Co., Ltd	98P7RPIPF000	PCB Antenna	I-PEX	R3
6	1	Master Wave Technology Co., Ltd	98P7RPIPF001	PCB Antenna	I-PEX	R3
7	1	Walsin	RFPCA381017MMAB702	PCB Antenna	MMCX	R4

Ant.	Gain (dBi)						
	Radio 1	Radio 2		Radio 3			Radio 4
	2.4G	5G B1	5G B4	2.4G	5G B1	5G B4	BT
1	5.9	-	-	-	-	-	-
2	5.9	-	-	-	-	-	-
3	-	6.2	6.4	-	-	-	-
4	-	6.2	6.4	-	-	-	-
5	-	-	-	6.5	4.7	6.0	-
6	-	-	-	6.5	4.8	5.5	-
7	-	-	-	-	-	-	8.6

Note 1: The EUT has seven antennas.

Note 2: The EUT contain Radio 3 (2.4G)/(5G) RF module (Model Name: WM862FEMD, FCC ID: PPQ-WM862FEMD)

For 2.4 GHz function:

For IEEE 802.11b/g/n/ac mode (2TX/2RX)

Radio 1

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

Radio 3

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

For 5 GHz function:

For IEEE 802.11a/n/ac mode (2TX/2RX)

Radio 2 (For B1 and B4)

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

Radio 3 (For B1 and B4)

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

For Bluetooth function:

For Bluetooth mode (1TX/1RX)

Radio 4

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

1.1.3 EUT Information

Operational Condition	
EUT Power Type	From AC main / PoE
Type of EUT	
☒	Stand-alone
☐	Combined (EUT where the radio part is fully integrated within another device)
☐	Combined Equipment - Brand Name / Model No.: ...
☐	Plug-in radio (EUT intended for a variety of host systems)
☐	Host System - Brand Name / Model No.: ...
☐	Other:

1.1.4 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
BT-BR(1Mbps)	0.448	3.487	2.899m	1k
BT-EDR(2Mbps)	0.464	3.335	2.906m	1k
BT-EDR(3Mbps)	0.443	3.536	2.907m	1k

1.1.5 Table for Multiple Listing

The brand/model names in the following table are all refer to the identical product.

Brand Name	Model Name	CPU	CPU Brand	DDR	DDR Brand	Flash	Flash Brand/Model
LITE-ON	WP9333	IPQ4029	Qualcomm Atheros	256	Micron	64	1x64 MX25L51245GMI-08G MXIC
						32X2	2x32 25Q256JVFQ WINBOND
		IPQ4019	Qualcomm Atheros	256	Micron	64	1x64 MX25L51245GMI-08G MXIC
						32X2	2x32 25Q256JVFQ WINBOND
	WP9331	IPQ4029	Qualcomm Atheros	256	Micron	64	1x64 MX25L51245GMI-08G MXIC
						32X2	2x32 25Q256JVFQ WINBOND
		IPQ4019	Qualcomm Atheros	256	Micron	64	1x64 MX25L51245GMI-08G MXIC
						32X2	2x32 25Q256JVFQ WINBOND
MOJO	O-105	IPQ4029	Qualcomm Atheros	512	Micron	64	1x64 MX25L51245GMI-08G MXIC
						32X2	2x32 25Q256JVFQ WINBOND
		IPQ4019	Qualcomm Atheros	256	Micron	64	1x64 MX25L51245GMI-08G MXIC
						32X2	2x32 25Q256JVFQ WINBOND

Brand Name	Model Name	Radio 1	Radio 2	Radio 3	Radio 4	EUT Power Type
LITE-ON	WP9333	V	V	V	V	AC main / PoE
	WP9331	V	V	X	V	PoE
	WP9331-FM	V	V	X	V	PoE
MOJO	O-105	V	V	X	V	PoE

Note:

Radio 1: 802.11ac 2.4G only

Radio 2: 802.11ac 5GHz on board

Radio 3: 802.11ac PCIe card, 2.4G+5GB1/B4

Radio 4: Bluetooth (BT LE and BR/EDR) on board

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
- ♦ Public Notice DA 00-705
- ♦ ANSI C63.10-2013

1.3 Testing Location Information

Testing Location			
☒	HWAYA	ADD : No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)	
		TEL : 886-3-327-3456	FAX : 886-3-327-0973
Test site Designation No. TW1190 with FCC.			
☐	JHUBEI	ADD : No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County, Taiwan (R.O.C.)	
		TEL : 886-3-656-9065	FAX : 886-3-656-9085
Test site Designation No. TW0006 with FCC.			

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH01-HY	Tim	22.5°C / 66%	12/Sep/2017
Radiated	03CH02-HY	Jerry	23.5°C / 65%	15/Sep/2017
AC Conduction	CO04-HY	Jeff	23.4°C / 53%	03/Oct/2017

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)	3.6 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	2.1 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	2.6 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	2.9 dB	Confidence levels of 95%
Conducted Emission	1.3 dB	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Condition

RF Conducted	Abbreviation	Remark
TnomVnom	Tnom	20°C
-	Vnom	120V

2.2 Test Channel Mode

Test Software	Dos
---------------	-----

Mode	Power Setting
BT-BR(1Mbps)	-
2402MHz	08
2440MHz	08
2480MHz	08
BT-EDR(2Mbps)	-
2402MHz	08
2440MHz	08
2480MHz	08
BT-EDR(3Mbps)	-
2402MHz	08
2440MHz	08
2480MHz	08

2.3 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral
Operating Mode	CTX
1	PoE mode
2	AC mode
Mode 2 configuration was tested and found to be the worst case and measured during the test.	

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

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

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Operating Mode	1. Radio 1 (2.4G) + Radio 2 (5G) + Radio 3 (2.4G) + Radio 4 (BT)
	2. Radio 1 (2.4G) + Radio 2 (5G) + Radio 3 (5G) + Radio 4 (BT)
Refer to Sporton Test Report No.: FA790613 for Co-location RF Exposure Evaluation.	

2.4 Accessories

Accessories		
Power Cable	Signal Line	6 meter, non-shielded cable, w/o ferrite core
Ground Wire	Signal Line	6.4 meter, non-shielded cable, w/o ferrite core

2.5 Support Equipment

Support Equipment – RF Conducted				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook	DELL	E5410	DoC
2	Adapter for NB	DELL	HA65NM130	DoC
3	AC Source	G.W	APS-9102	-

Support Equipment – Radiated Emission				
No.	Equipment	Brand Name	Model Name	FCC ID
1	PoE	Microsemi	PD-9001G	-

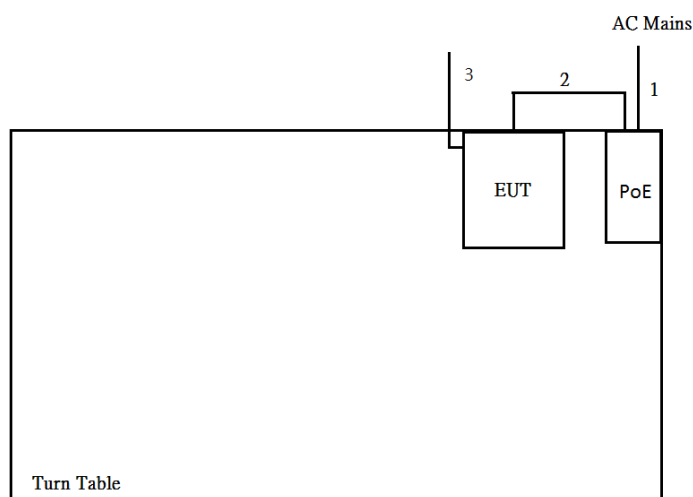
Note: Support equipment No.1 was provided by customer.

Support Equipment – AC Conduction				
No.	Equipment	Brand Name	Model Name	FCC ID
1	PoE	Microsemi	PD-9001G	-

Note: Support equipment No.1 was provided by customer.

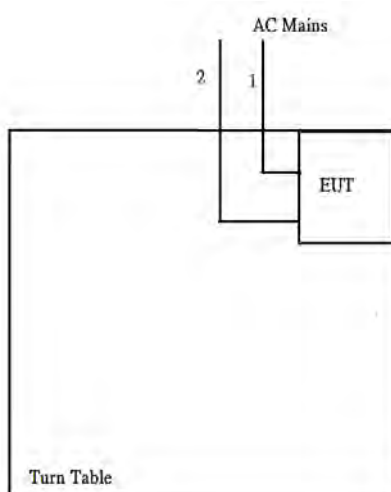
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test (PoE mode)

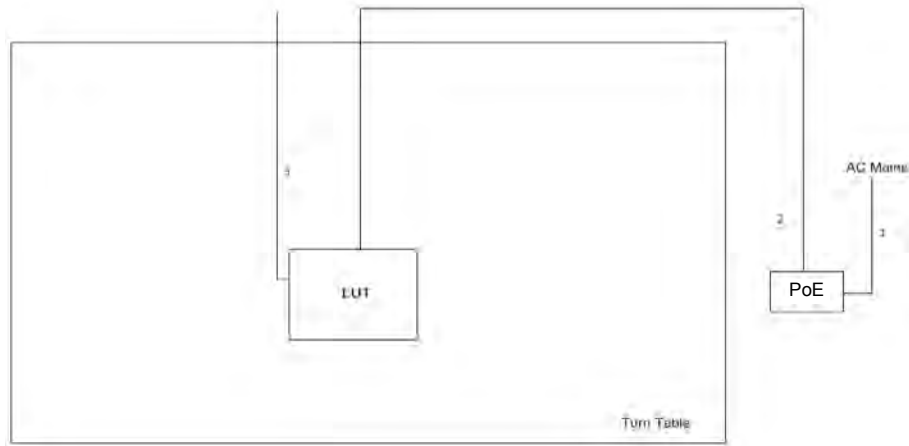


Item	Connection	Shielded	Length
1	AC power line	No	1.2m
2	RJ-45 cable	No	1m
3	Ground wire	No	6.4m

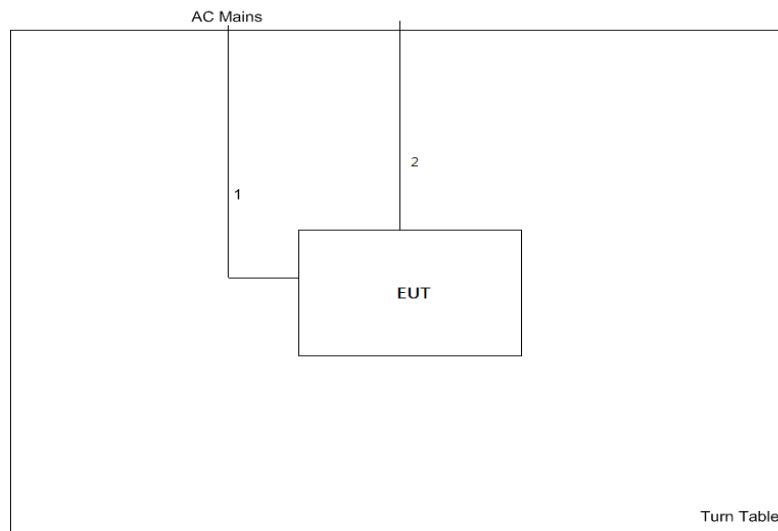
Test Setup Diagram – AC Line Conducted Emission Test (AC mode)



Item	Connection	Shielded	Length
1	AC power line	No	6m
2	Ground wire	No	6.4m

Test Setup Diagram - Radiated Test (PoE mode)


Item	Connection	Shielded	Length
1	AC power line	No	1.2m
2	RJ-45 cable	No	10m
3	Ground wire	No	6.4m

Test Setup Diagram - Radiated Test (AC mode)


Item	Connection	Shielded	Length
1	AC power line	No	6m
2	Ground wire	No	6.4m

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

Note 1: * Decreases with the logarithm of the frequency.

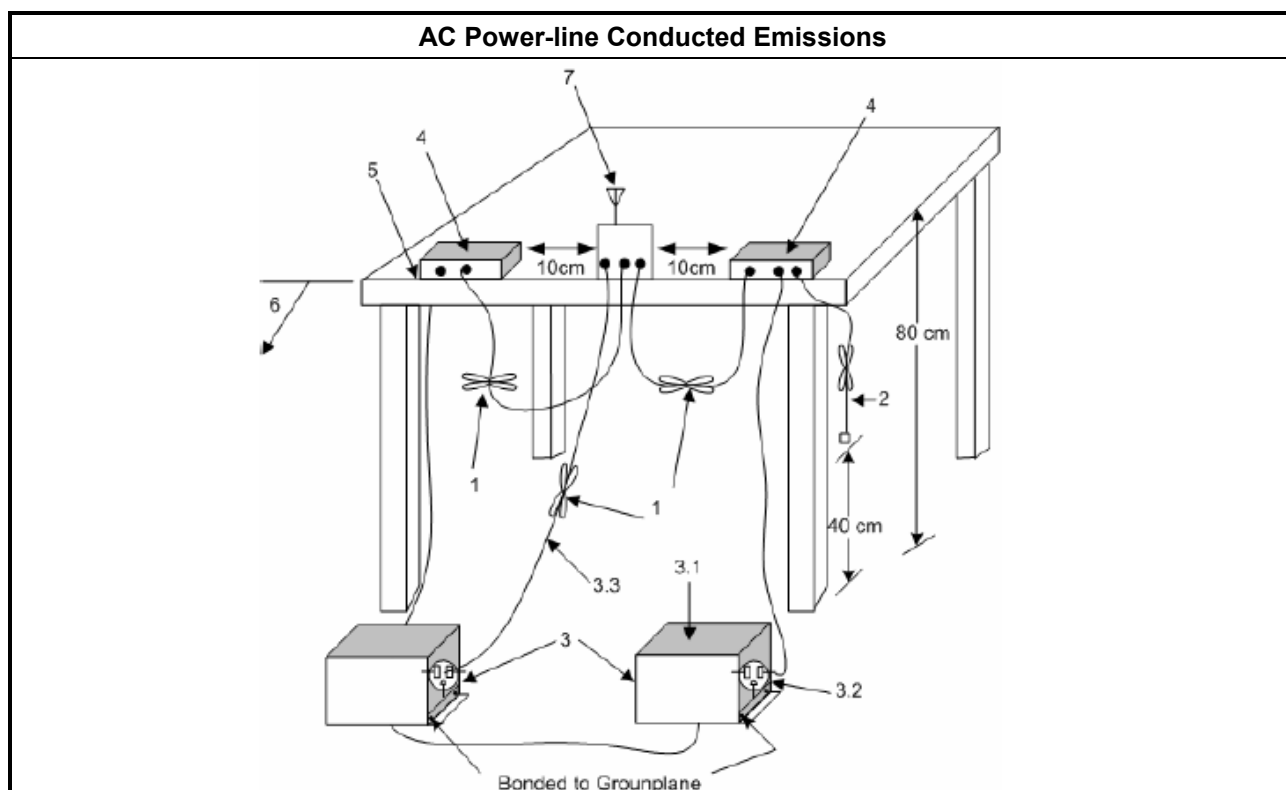
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

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

3.1.4 Test Setup



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	

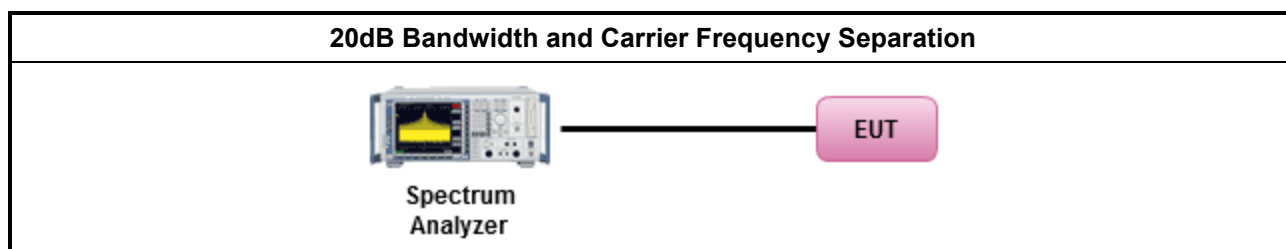
3.2.2 Measuring Instruments

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

3.2.4 Test Setup



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	

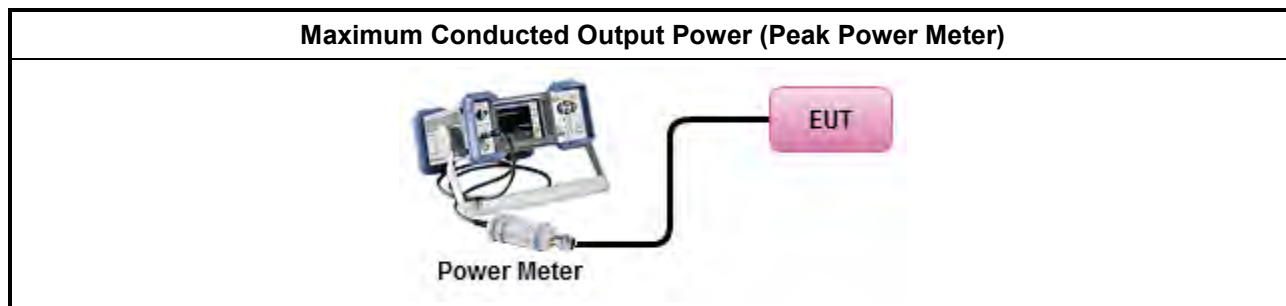
3.3.2 Measuring Instruments

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

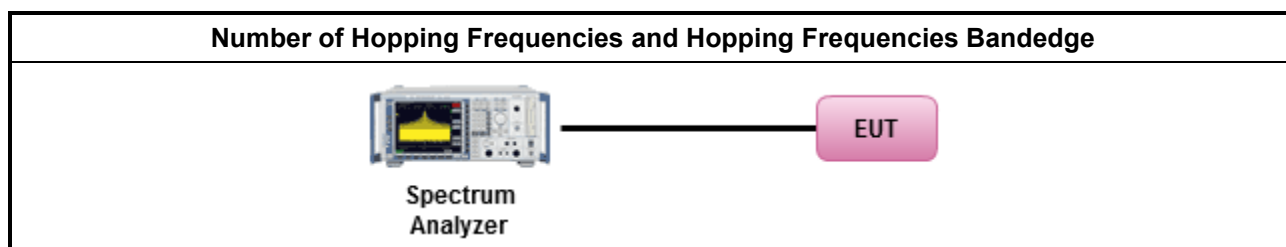
3.4.3 Measuring Instruments

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

Time of Occupancy (Dwell Time) 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	

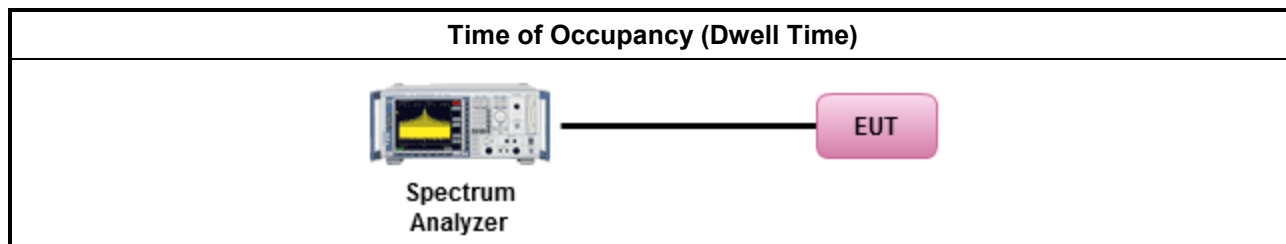
3.5.2 Measuring Instruments

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.	

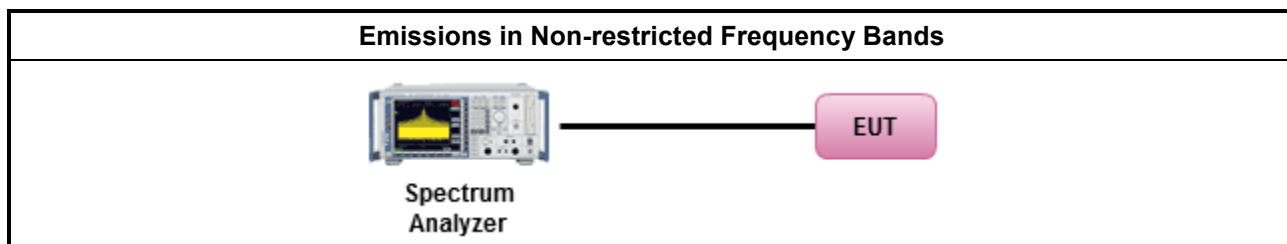
3.6.2 Measuring Instruments

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.

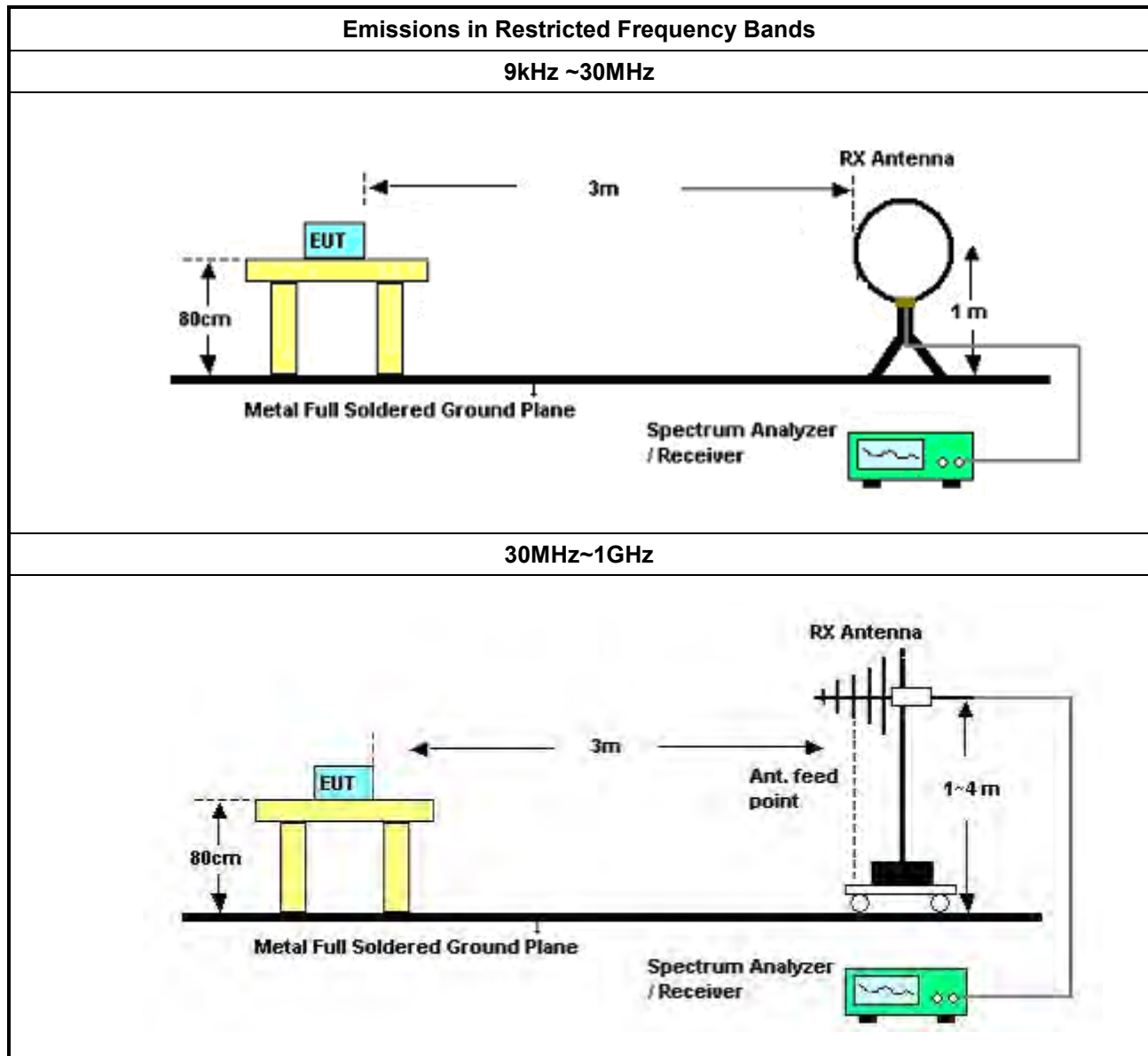
3.7.2 Measuring Instruments

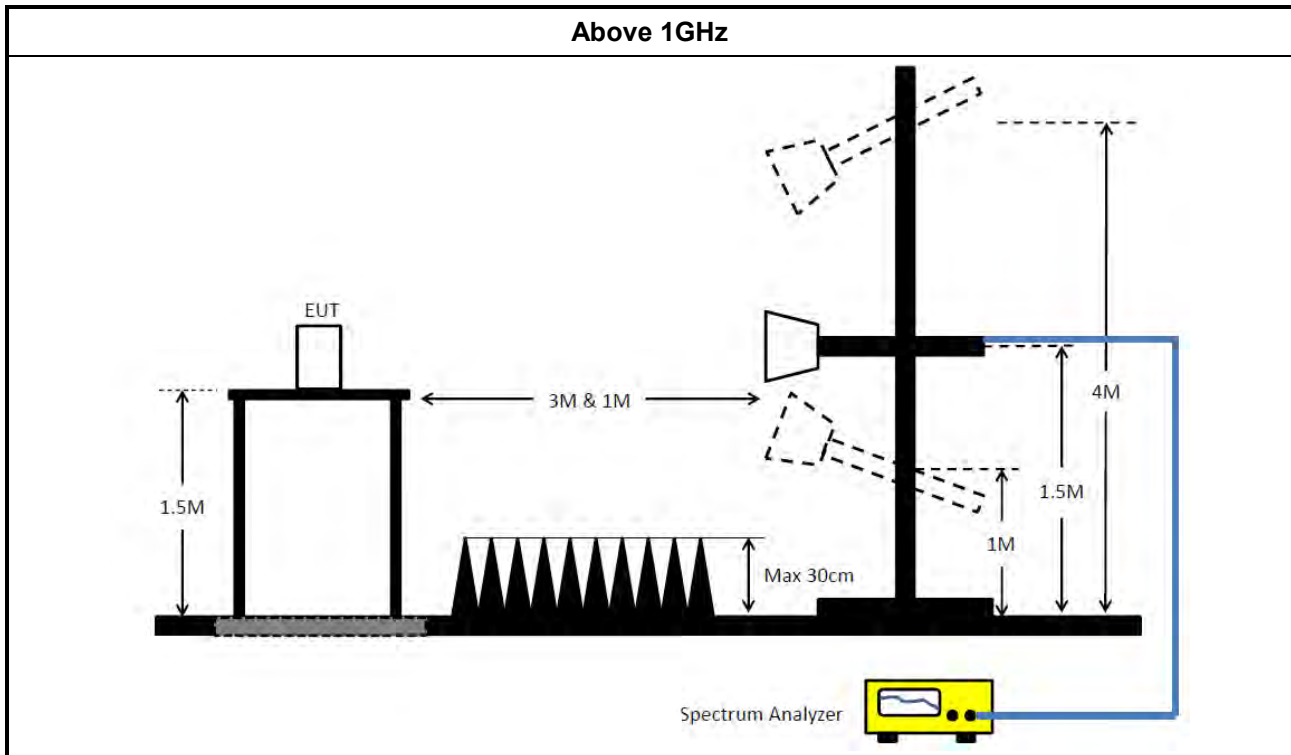
Refer a test equipment and calibration data table in this test report.

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

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

3.7.6 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix G

4 Test Equipment and Calibration Data

Instrument for AC Conduction

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMC Receiver	R&S	ESR3	102052	9KHz ~ 3.6GHz	29/Apr/2017	28/Apr/2018
LISN	R&S	ENV216	101295	9kHz ~ 30MHz	15/Nov/2016	14/Nov/2017
RF Cable-CON	HUBER+SUHNER	RG213/U	07611832020001	9kHz ~ 30MHz	24/Oct/2016	23/Oct/2017
AC POWER	APC	AFC-11005G	F310050055	47Hz~63Hz 5~300V	NCR	NCR
Impuls Begrenzer Pulse Limiter	R&S	ESH3-Z2	100921	10 kHz ~ 30 MHz	21/Oct/2016	20/Oct/2017

NCR : Non-Calibration Require

Instrument for Radiated Test

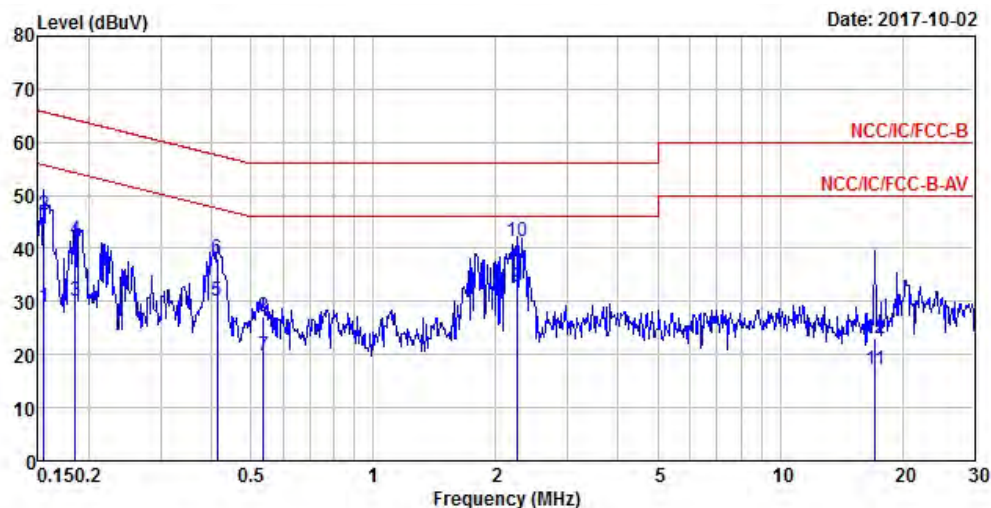
Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSP40	100593	9KHz - 40GHz	26/Oct/2016	25/Oct/2017
3m Semi Anechoic	SIDT FRANKONIA	SAC-3M	03CH02-HY	30MHz-1GHz	21/Oct/2016	20/Oct/2017
3m Semi Anechoic	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz ~ 18GHz	12/Dec/2016	11/Dec/2017
Amplifier	Agilent	8447D	2944A11149	100KHz-1.3GHz	29/Jun/2017	28/Jun/2018
Amplifier	Agilent	8449B	3008A02373	1GHz-26.5GHz	20/Sep/2016	19/Sep/2017
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA9120D 01531	1GHz-18GHz	11/May/2017	10/May/2018
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170154	18GHz-40GHz	06/Feb/2017	05/Feb/2018
Bilog Antenna	SCHAFFNER	CBL6112B	2723	30MHz-1GHz	01/Oct/2016	30/Sep/2017
Amplifier	MITEQ	JS44-18004000-3 3-8P	1840917	18GHz-40GHz	06/Feb/2017	05/Feb/2018
Loop Antenna	TESEQ	HLA 6120	31244	9KHz-30MHz	02/Mar/2017	01/Mar/2018
RF Cable-high	SUHNER	SUCOFLEX104	MY34918/4	1GHz ~ 40GHz	26/Jan/2017	25/Jan/2018
RF Cable-R03m	Jye Bao	RG142	CB017	9kHz ~ 1GHz	26/Jan/2017	25/Jan/2018
Receiver	R&S	ESU-26	100422/026	20Hz ~ 26.5GHz	21/Sep/2016	20/Sep/2017

**Instrument for Conducted Test**

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101013	9kHz~40GHz	30/Dec/2016	29/Dec/2017
Power Sensor	Anritsu	MA2411B	0917017	300MHz ~ 40GHz	10/Feb/2017	09/Feb/2018
Power Meter	Anritsu	ML2495A	0949003	300MHz ~ 40GHz	10/Feb/2017	09/Feb/2018
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	27/Jul/2017	26/Jul/2018
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY10710/4	30MHz~26.5GHz	02/Oct/2016	01/Oct/2017
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY10709/4	30MHz~26.5GHz	02/Oct/2016	01/Oct/2017
RF Cable-0.5m	HUBER+SUHNER	SUCOFLEX_104	MY10713/4	30MHz~26.5GHz	02/Oct/2016	01/Oct/2017

AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Neutral
Operating Function	PoE mode		



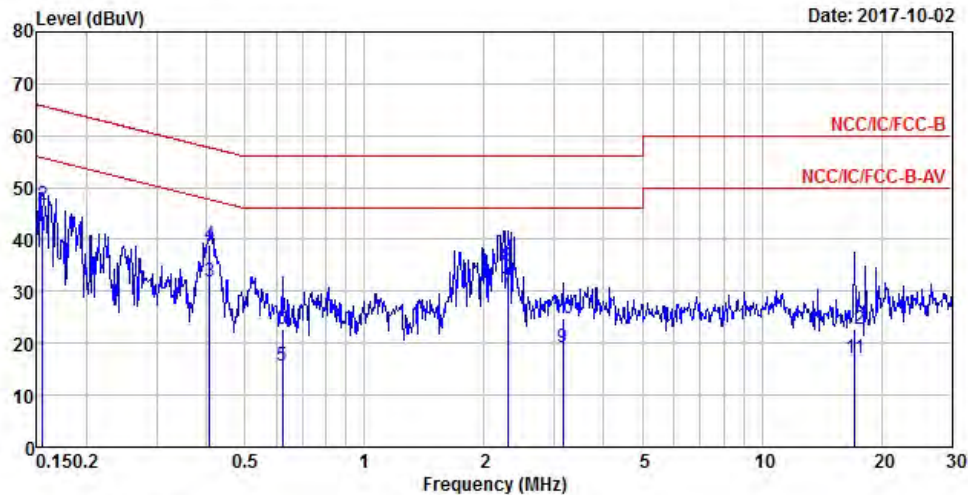
	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.15485	29.02	-26.72	55.74	19.18	9.61	0.23	Average
2	0.15485	46.25	-19.49	65.74	36.41	9.61	0.23	QP
3	0.18541	30.06	-24.18	54.24	20.13	9.65	0.28	Average
4	0.18541	41.72	-22.52	64.24	31.79	9.65	0.28	QP
5	0.41266	30.08	-17.51	47.59	20.35	9.63	0.10	Average
6	0.41266	37.98	-19.61	57.59	28.25	9.63	0.10	QP
7	0.53782	19.75	-26.25	46.00	10.03	9.62	0.10	Average
8	0.53782	27.20	-28.80	56.00	17.48	9.62	0.10	QP
9 MAX	2.26057	32.91	-13.09	46.00	22.98	9.66	0.27	Average
10	2.26057	41.33	-14.67	56.00	31.40	9.66	0.27	QP
11	17.10851	17.21	-32.79	50.00	7.15	9.86	0.20	Average
12	17.10851	22.91	-37.09	60.00	12.85	9.86	0.20	QP

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

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

AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Line
Operating Function	PoE mode		



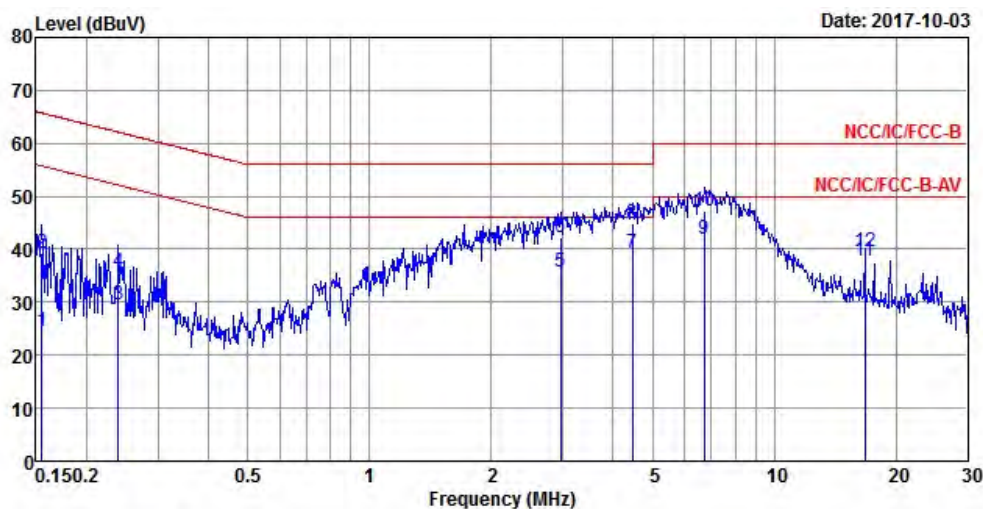
	Freq	Level	Over	Limit	Read	LISN	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1 MAX	0.15485	40.83	-14.91	55.74	30.94	9.66	0.23	Average
2	0.15485	46.74	-19.00	65.74	36.85	9.66	0.23	QP
3	0.40831	31.78	-15.90	47.68	22.00	9.68	0.10	Average
4	0.40831	38.97	-18.71	57.68	29.19	9.68	0.10	QP
5	0.62054	15.72	-30.28	46.00	5.96	9.66	0.10	Average
6	0.62054	22.86	-33.14	56.00	13.10	9.66	0.10	QP
7	2.29679	30.09	-15.91	46.00	20.04	9.79	0.26	Average
8	2.29679	34.80	-21.20	56.00	24.75	9.79	0.26	QP
9	3.15634	19.16	-26.84	46.00	9.21	9.78	0.17	Average
10	3.15634	24.73	-31.27	56.00	14.78	9.78	0.17	QP
11	17.10851	17.26	-32.74	50.00	7.20	9.86	0.20	Average
12	17.10851	22.71	-37.29	60.00	12.65	9.86	0.20	QP

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	2	Power Phase	Neutral
Operating Function	AC mode		



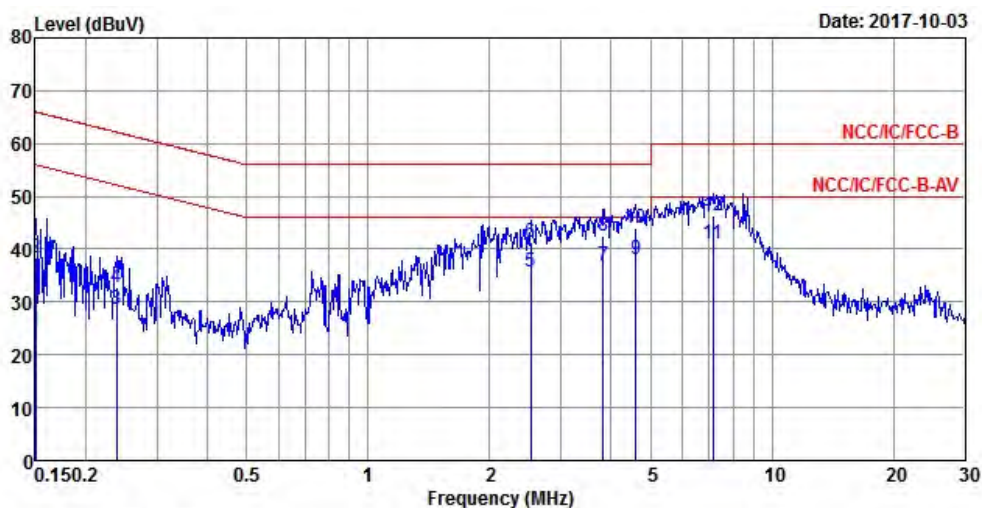
	Freq	Level	Over	Limit	Read	LISN	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.15485	24.60	-31.14	55.74	14.76	9.61	0.23	Average
2	0.15485	39.30	-26.44	65.74	29.46	9.61	0.23	QP
3	0.23910	29.50	-22.63	52.13	19.59	9.66	0.25	Average
4	0.23910	35.77	-26.36	62.13	25.86	9.66	0.25	QP
5	2.96191	35.70	-10.30	46.00	25.83	9.68	0.19	Average
6	2.96191	42.27	-13.73	56.00	32.40	9.68	0.19	QP
7 MAX	4.45400	39.23	-6.77	46.00	29.41	9.71	0.11	Average
8	4.45400	44.93	-11.07	56.00	35.11	9.71	0.11	QP
9	6.69776	41.85	-8.15	50.00	31.96	9.73	0.16	Average
10	6.69776	47.17	-12.83	60.00	37.28	9.73	0.16	QP
11	16.73473	37.83	-12.17	50.00	27.78	9.85	0.20	Average
12	16.73473	39.66	-20.34	60.00	29.61	9.85	0.20	QP

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	2	Power Phase	Line
Operating Function	AC mode		



	Freq	Level	Over	Limit	Read	LISN	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
			dB	dBuV	dBuV	dB	dB	
1	0.15000	24.49	-31.51	56.00	14.61	9.66	0.22	Average
2	0.15000	38.34	-27.66	66.00	28.46	9.66	0.22	QP
3	0.23784	28.50	-23.67	52.17	18.59	9.66	0.25	Average
4	0.23784	32.75	-29.42	62.17	22.84	9.66	0.25	QP
5	2.52662	35.62	-10.38	46.00	25.61	9.78	0.23	Average
6	2.52662	41.48	-14.52	56.00	31.47	9.78	0.23	QP
7	3.81962	36.77	-9.23	46.00	26.89	9.77	0.11	Average
8	3.81962	42.56	-13.44	56.00	32.68	9.77	0.11	QP
9 MAX	4.59787	37.99	-8.01	46.00	28.10	9.77	0.12	Average
10	4.59787	43.89	-12.11	56.00	34.00	9.77	0.12	QP
11	7.13743	41.13	-8.87	50.00	31.22	9.75	0.16	Average
12	7.13743	46.34	-13.66	60.00	36.43	9.75	0.16	QP

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

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

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
BT-BR(1Mbps)	920k	875.812k	876KF1D	920k	869.565k
BT-EDR(2Mbps)	1.315M	1.197M	1M20G1D	1.309M	1.193M
BT-EDR(3Mbps)	1.276M	1.212M	1M21G1D	1.27M	1.197M

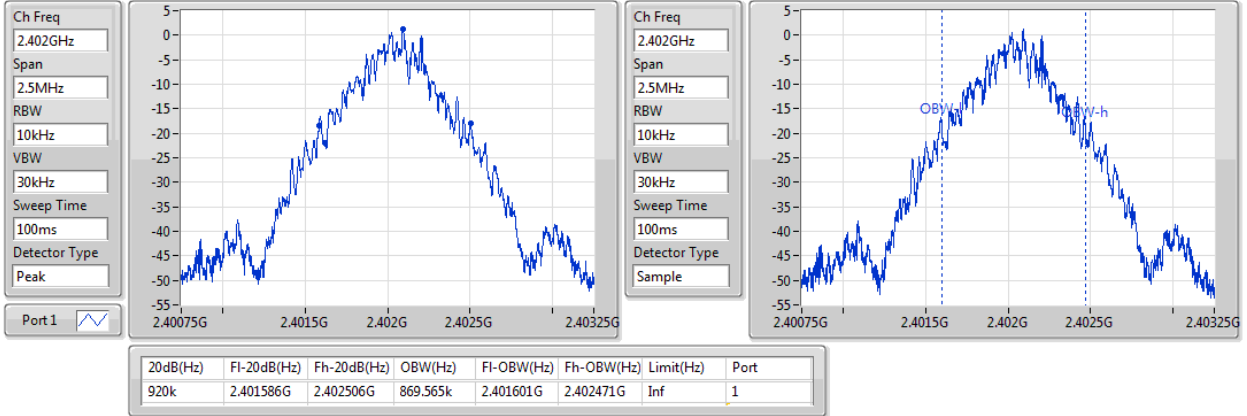
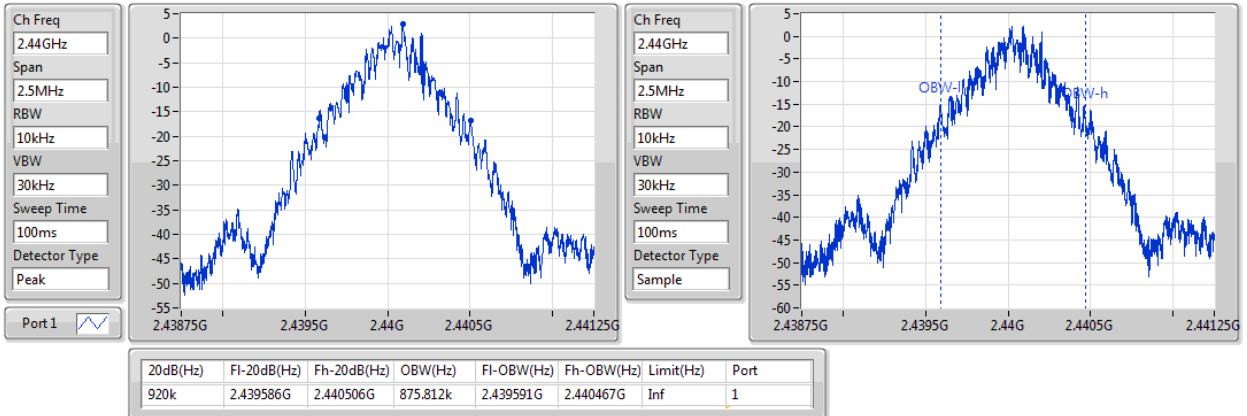
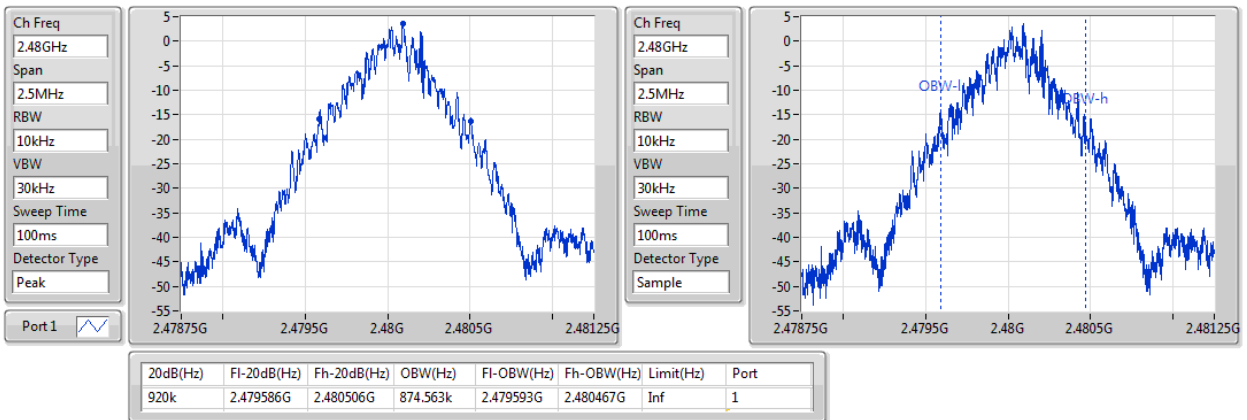
Max-N dB = Maximum 20dB down bandwidth; **Max-OBW** = Maximum 99% occupied bandwidth;

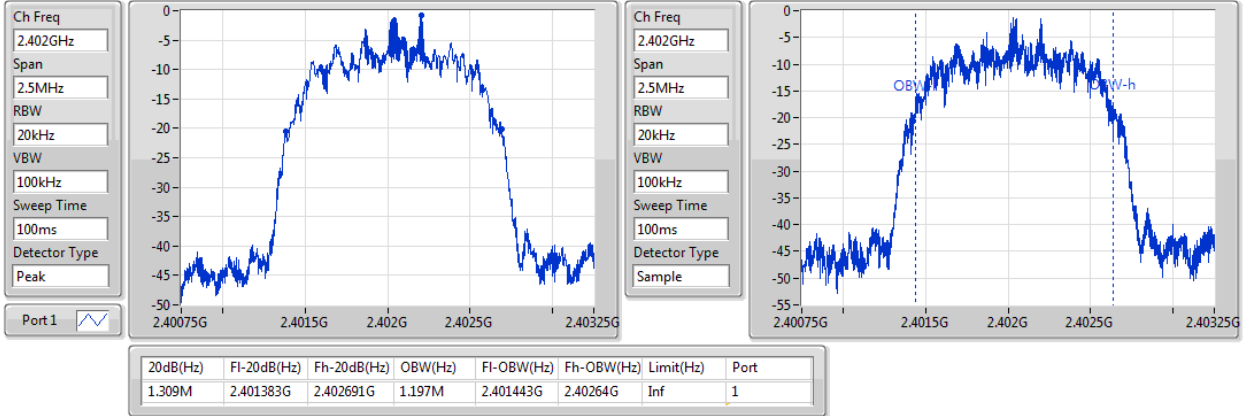
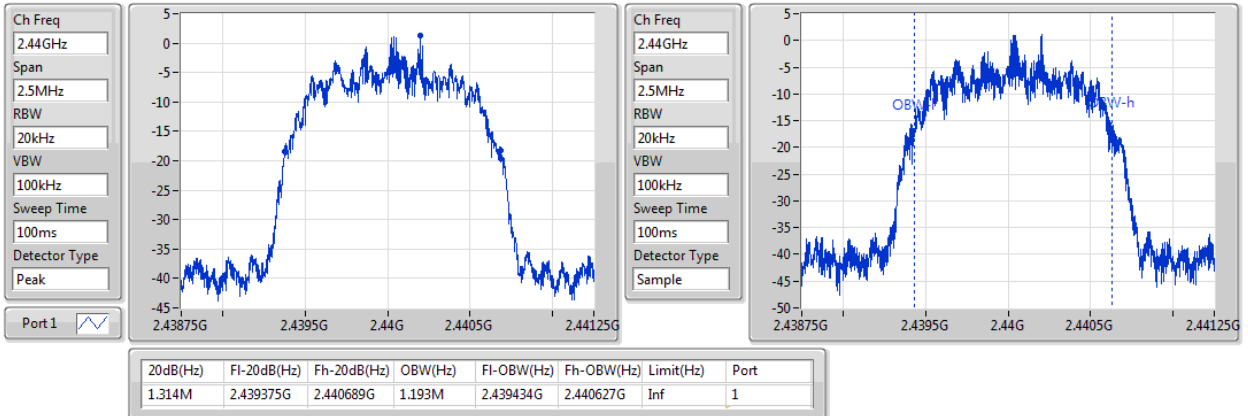
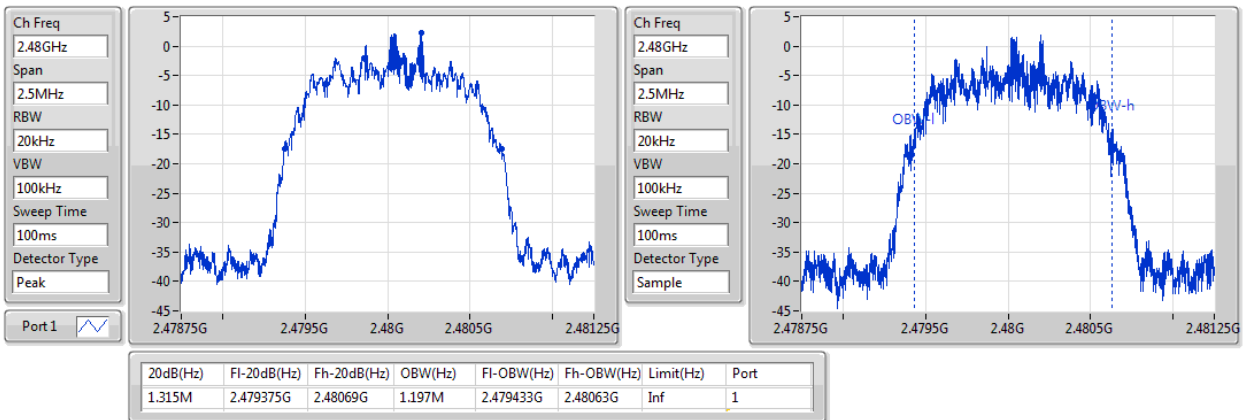
Min-N dB = Minimum 20dB down bandwidth; **Min-OBW** = Minimum 99% occupied bandwidth;

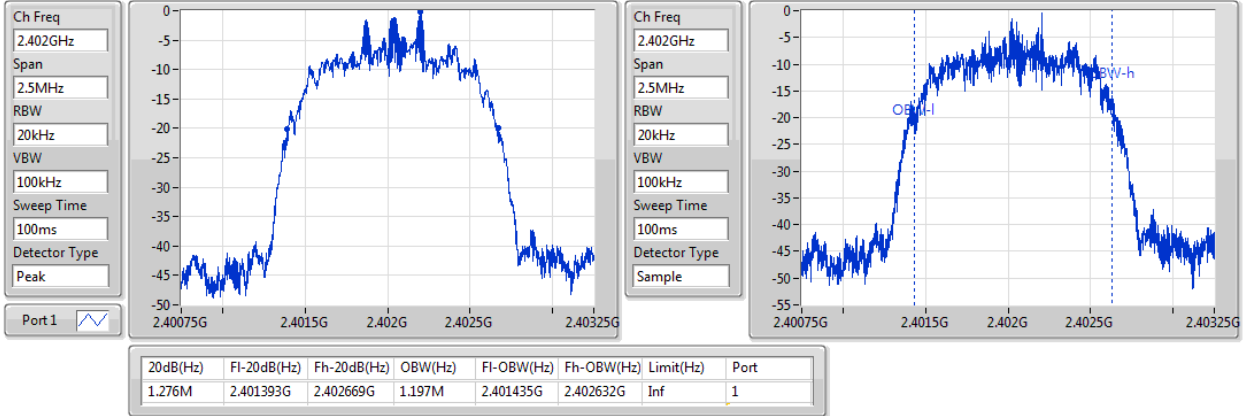
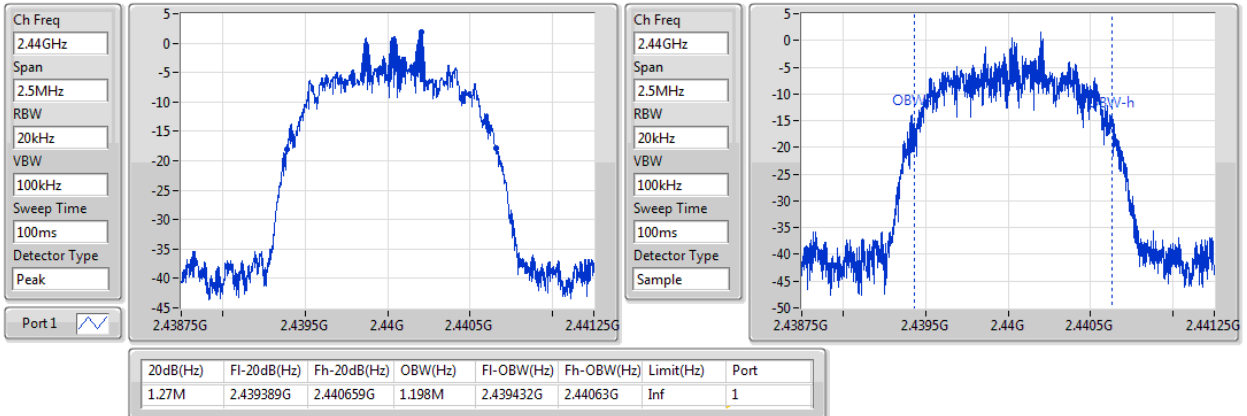
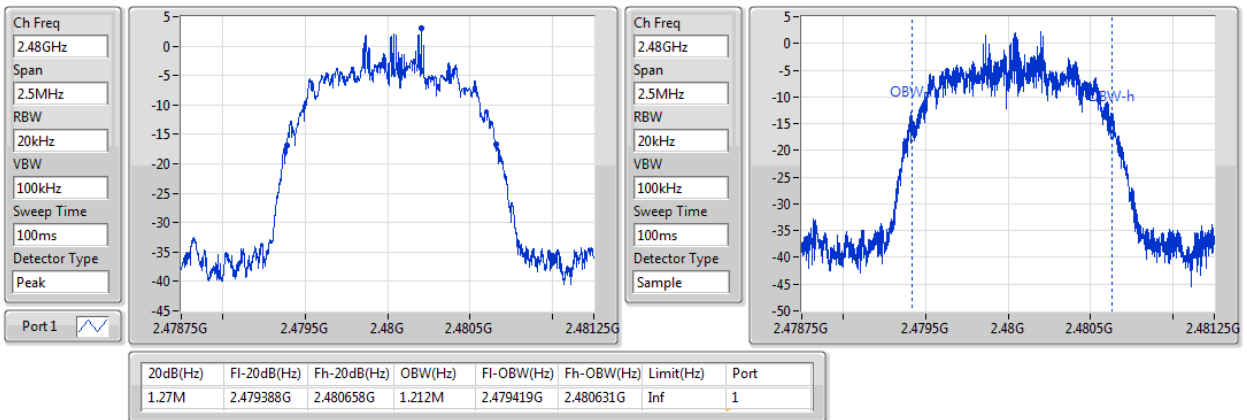
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-BR(1Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	Inf	920k	869.565k
2440MHz_TnomVnom	Pass	Inf	920k	875.812k
2480MHz_TnomVnom	Pass	Inf	920k	874.563k
BT-EDR(2Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	Inf	1.309M	1.197M
2440MHz_TnomVnom	Pass	Inf	1.314M	1.193M
2480MHz_TnomVnom	Pass	Inf	1.315M	1.197M
BT-EDR(3Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	Inf	1.276M	1.197M
2440MHz_TnomVnom	Pass	Inf	1.27M	1.198M
2480MHz_TnomVnom	Pass	Inf	1.27M	1.212M

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)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	1.002M	999k
BT-EDR(2Mbps)	1.002M	997.5k
BT-EDR(3Mbps)	1.0035M	1.0005M

Result

Mode	Result	Fl (Hz)	Fh (Hz)	Ch.Space (Hz)	Limit (Hz)
BT-BR(1Mbps)	-	-	-	-	-
2402MHz	Pass	2.402202G	2.403204G	1.002M	612.72k
2440MHz	Pass	2.440202G	2.441201G	999k	612.72k
2480MHz	Pass	2.479205G	2.480202G	997.5k	612.72k
BT-EDR(2Mbps)	-	-	-	-	-
2402MHz	Pass	2.40204G	2.403037G	997.5k	871.794k
2440MHz	Pass	2.440038G	2.44104G	1.002M	875.124k
2480MHz	Pass	2.479038G	2.480037G	999k	875.79k
BT-EDR(3Mbps)	-	-	-	-	-
2402MHz	Pass	2.402199G	2.403199G	1.0005M	848.484k
2440MHz	Pass	2.440197G	2.441201G	1.0035M	845.82k
2480MHz	Pass	2.479199G	2.480199G	1.0005M	845.82k

BT-BR(1Mbps)

Channel Separation

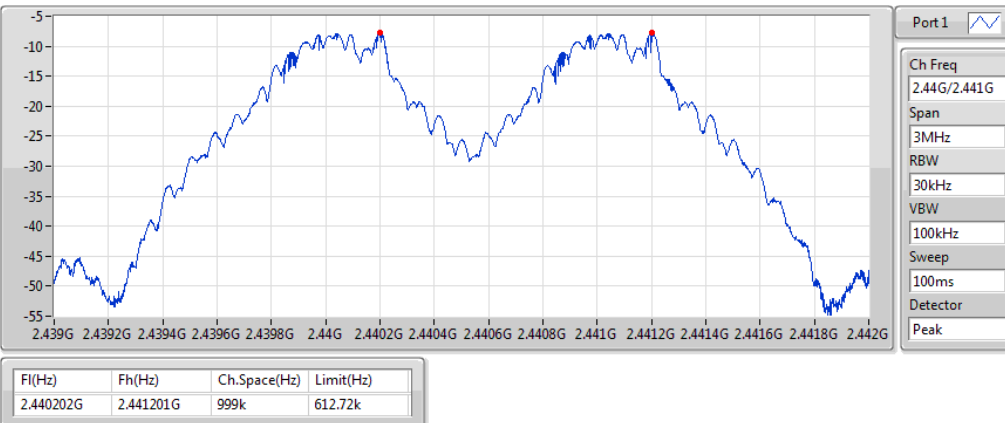
2.402G/2.403GHz



BT-BR(1Mbps)

Channel Separation

2.44G/2.441GHz



BT-BR(1Mbps)

Channel Separation

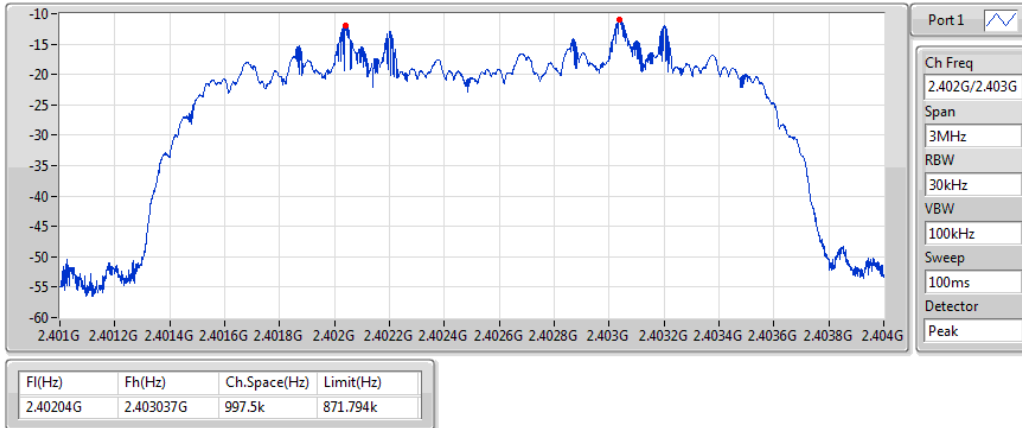
2.48G/2.479GHz



BT-EDR(2Mbps)

Channel Separation

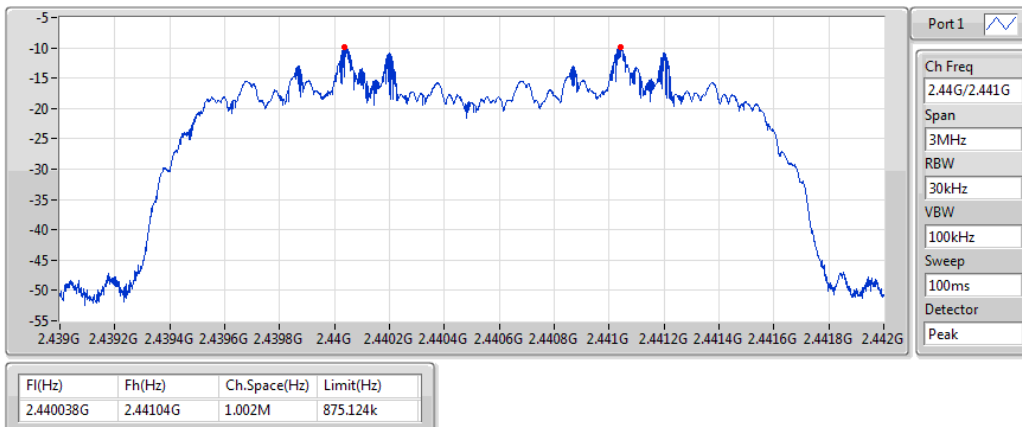
2.402G/2.403GHz



BT-EDR(2Mbps)

Channel Separation

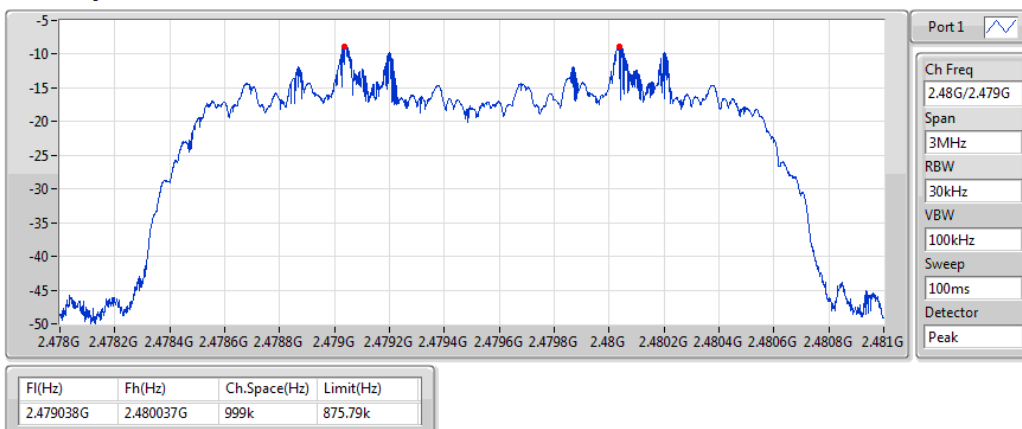
2.44G/2.441GHz



BT-EDR(2Mbps)

Channel Separation

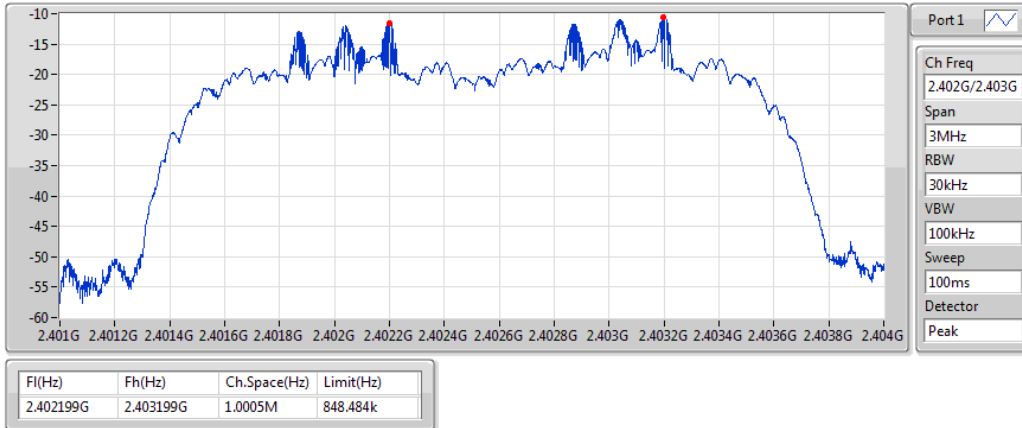
2.48G/2.479GHz



BT-EDR(3Mbps)

Channel Separation

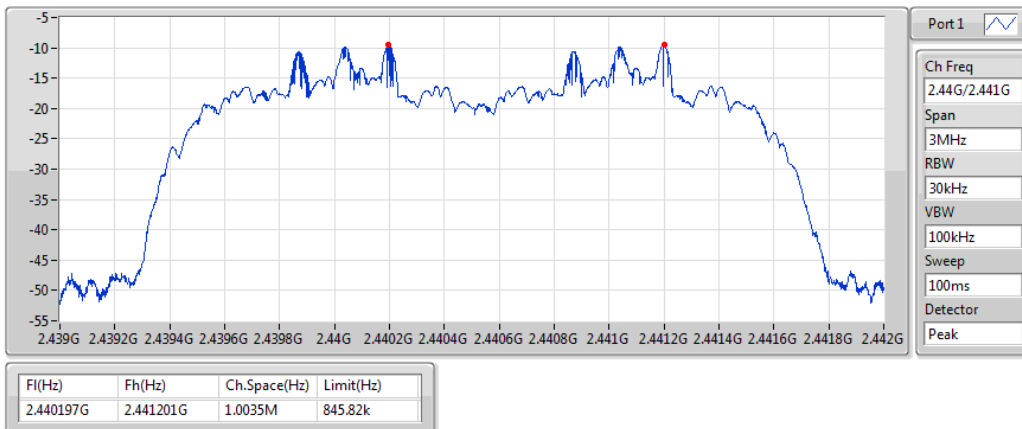
2.402G/2.403GHz



BT-EDR(3Mbps)

Channel Separation

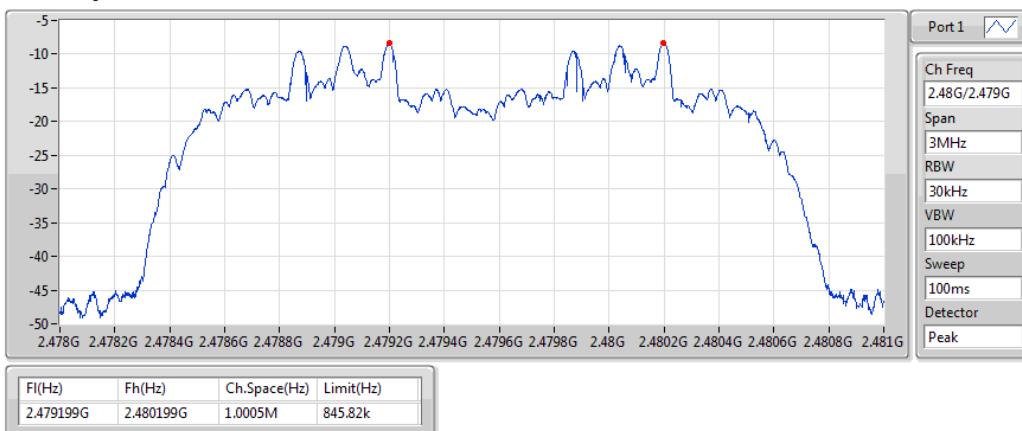
2.44G/2.441GHz



BT-EDR(3Mbps)

Channel Separation

2.48G/2.479GHz



Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	8.95	0.00785
BT-EDR(2Mbps)	7.65	0.00582
BT-EDR(3Mbps)	7.98	0.00628

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	8.60	6.63	18.40
2440MHz_TnomVnom	Pass	8.60	8.24	18.40
2480MHz_TnomVnom	Pass	8.60	8.95	18.40
BT-EDR(2Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	8.60	4.61	18.40
2440MHz_TnomVnom	Pass	8.60	6.63	18.40
2480MHz_TnomVnom	Pass	8.60	7.65	18.40
BT-EDR(3Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	8.60	5.10	18.40
2440MHz_TnomVnom	Pass	8.60	7.03	18.40
2480MHz_TnomVnom	Pass	8.60	7.98	18.40

Summary

Mode	Power	Power
	(dBm)	(W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	8.28	0.00673
BT-EDR(2Mbps)	5.46	0.00352
BT-EDR(3Mbps)	5.48	0.00353

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	8.60	6.28	18.40
2440MHz_TnomVnom	Pass	8.60	7.89	18.40
2480MHz_TnomVnom	Pass	8.60	8.28	18.40
BT-EDR(2Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	8.60	2.16	18.40
2440MHz_TnomVnom	Pass	8.60	4.30	18.40
2480MHz_TnomVnom	Pass	8.60	5.46	18.40
BT-EDR(3Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	8.60	2.04	18.40
2440MHz_TnomVnom	Pass	8.60	4.25	18.40
2480MHz_TnomVnom	Pass	8.60	5.48	18.40

Summary

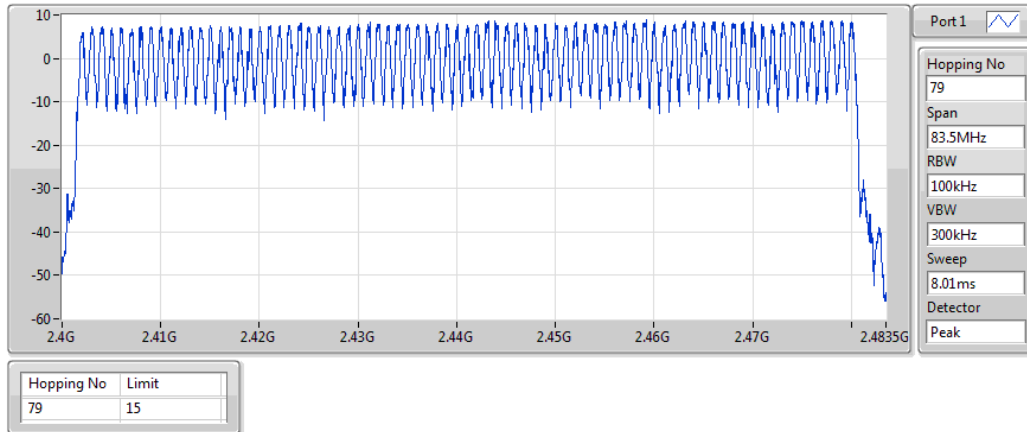
Mode	Max-Hop No
2.4-2.4835GHz	-
BT-BR(1Mbps)	79
BT-EDR(2Mbps)	79
BT-EDR(3Mbps)	79

Result

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

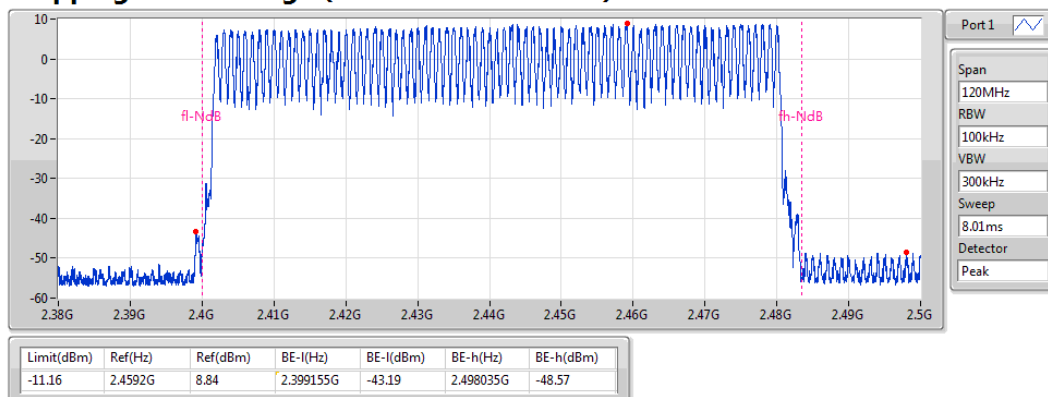
BT-BR(1Mbps) 2440MHz

Hopping Ch



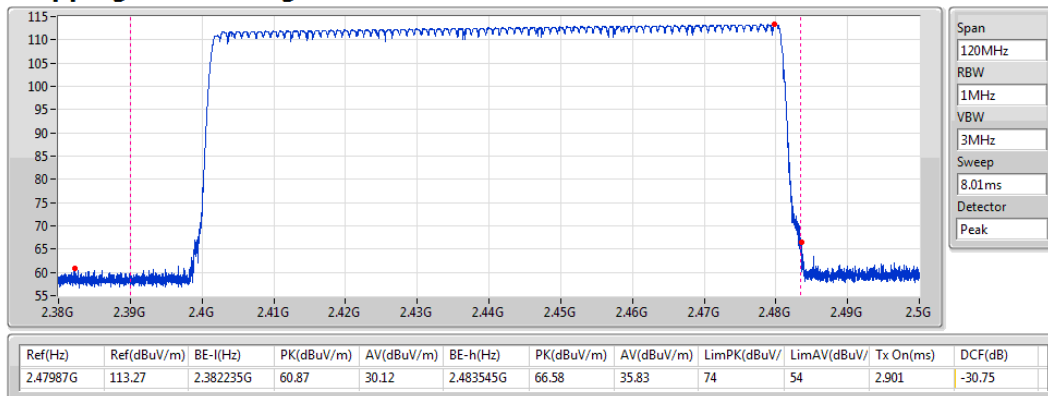
BT-BR(1Mbps) 2440MHz

Hopping Ch Bandedge (Non-restricted Band)



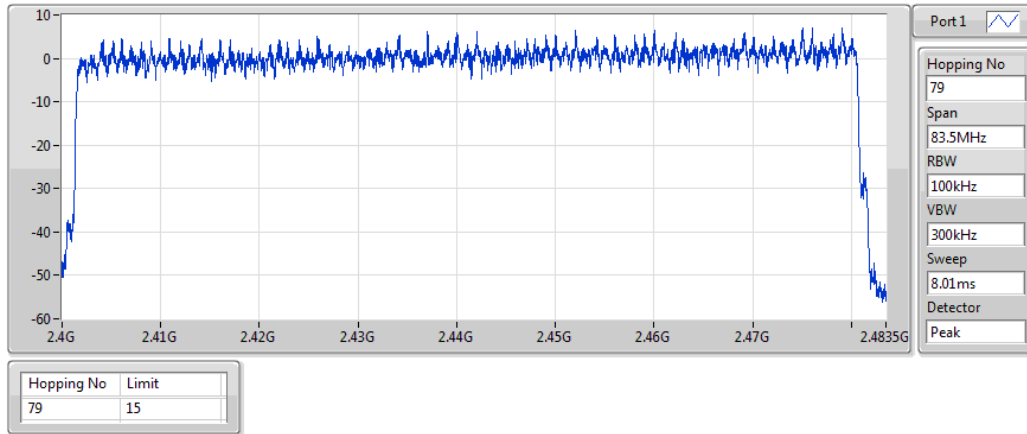
BT-BR(1Mbps) 2440MHz

Hopping Ch Bandedge (Restricted Band)



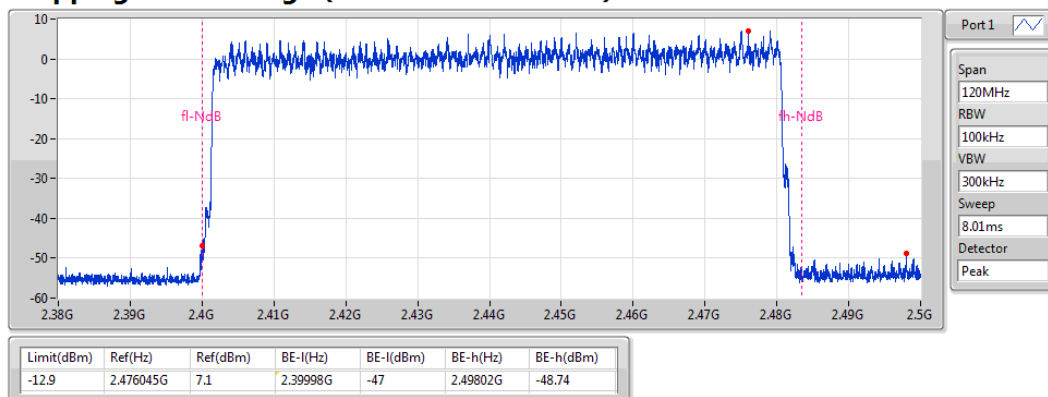
BT-EDR(2Mbps) 2440MHz

Hopping Ch



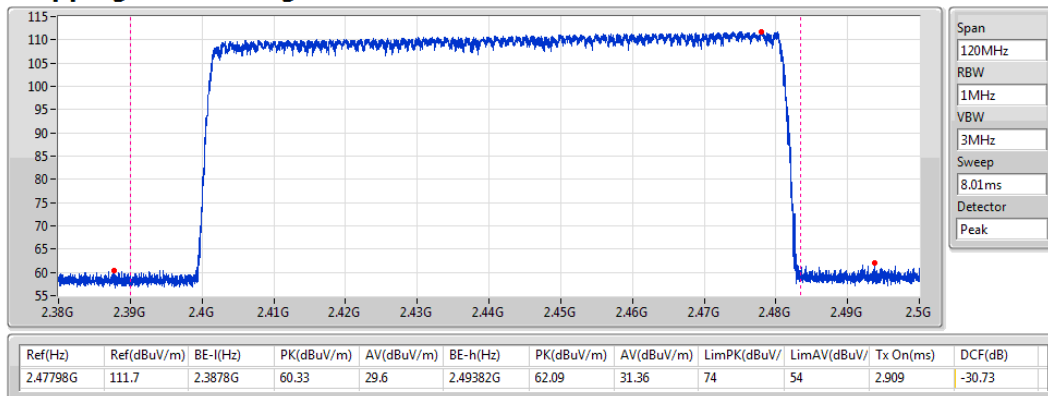
BT-EDR(2Mbps) 2440MHz

Hopping Ch Bandedge (Non-restricted Band)



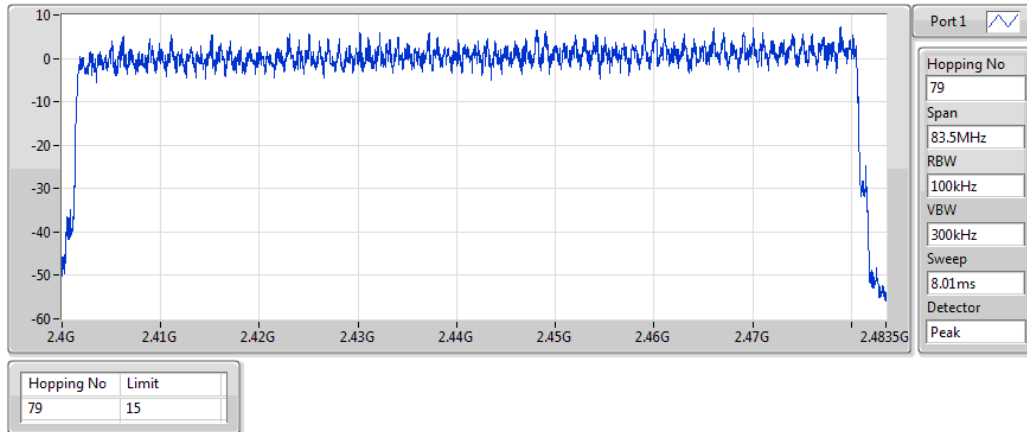
BT-EDR(2Mbps) 2440MHz

Hopping Ch Bandedge (Restricted Band)



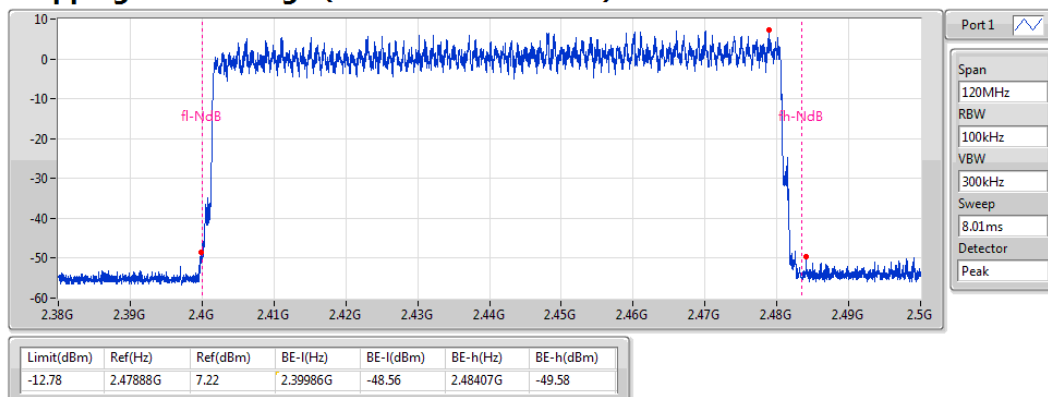
BT-EDR(3Mbps) 2440MHz

Hopping Ch



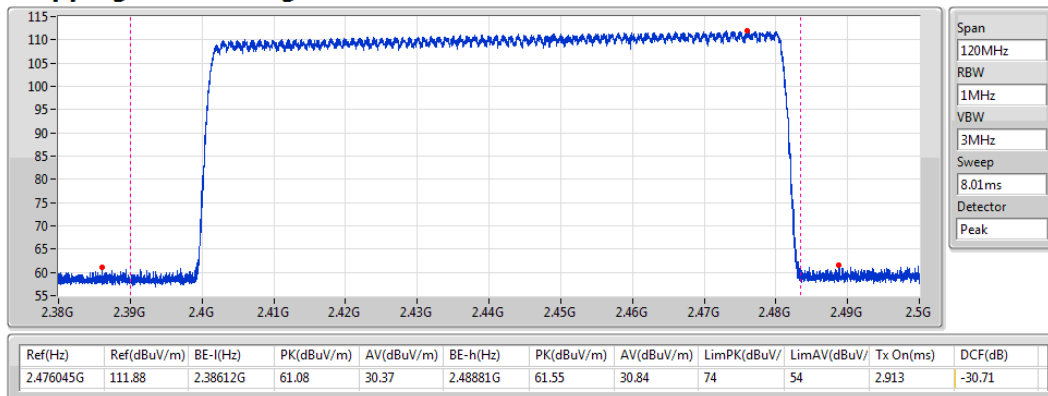
BT-EDR(3Mbps) 2440MHz

Hopping Ch Bandedge (Non-restricted Band)



BT-EDR(3Mbps) 2440MHz

Hopping Ch Bandedge (Restricted Band)



Summary

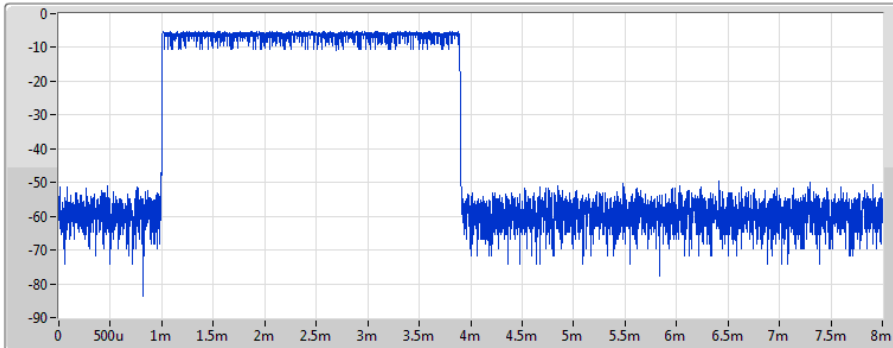
Mode	Max-Dwell (s)
2.4-2.4835GHz	-
BT-BR(1Mbps)	309.2466m
BT-EDR(2Mbps)	310.0994m
BT-EDR(3Mbps)	310.5258m

Result

Mode	Result	Period (s)	Dwell (s)	Limit (s)	Tx On (s)
BT-BR(1Mbps)	-	-	-	-	-
2440MHz_TnomVnom	Pass	31.6	309.2466m	400m	2.901m
BT-EDR(2Mbps)	-	-	-	-	-
2440MHz_TnomVnom	Pass	31.6	310.0994m	400m	2.909m
BT-EDR(3Mbps)	-	-	-	-	-
2440MHz_TnomVnom	Pass	31.6	310.5258m	400m	2.913m

BT-BR(1Mbps)

2440MHz



Dwell

Port 1 

Ch Freq
2.44GHz

RBW
300kHz

VBW
1MHz

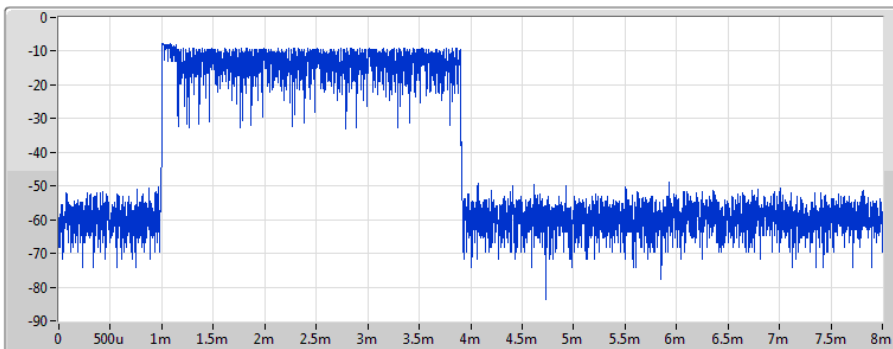
Sweep Time
8ms

TX Time
2.901ms

Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	309.2466m	400m	2.901m

BT-EDR(2Mbps)

2440MHz



Dwell

Port 1 

Ch Freq
2.44GHz

RBW
300kHz

VBW
1MHz

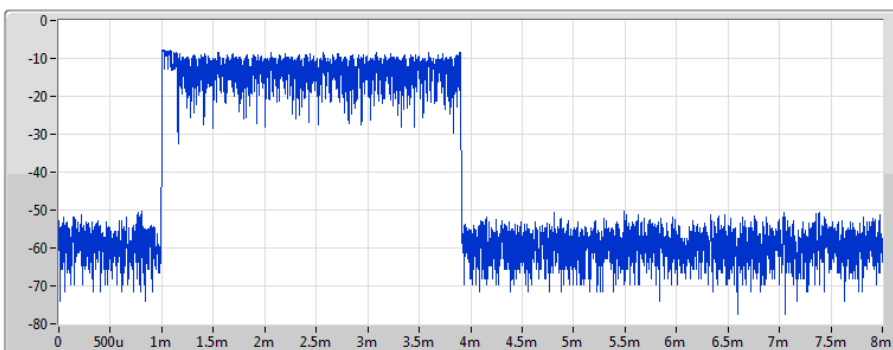
Sweep Time
8ms

TX Time
2.909ms

Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	310.0994m	400m	2.909m

BT-EDR(3Mbps)

2440MHz



Dwell

Port 1 

Ch Freq
2.44GHz

RBW
300kHz

VBW
1MHz

Sweep Time
8ms

TX Time
2.913ms

Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	310.5258m	400m	2.913m

Summary

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-
BT-BR(1Mbps)	Pass	2.401837G	4.13	-15.87	147.216M	-41.52	2.399996G	-42.01	2.483836G	-59.38	2.5052G	-51.29	1
BT-EDR(2Mbps)	Pass	2.402004G	0.64	-19.36	147.216M	-41.56	2.399968G	-49.04	2.484752G	-59.41	15.099249G	-53.94	1
BT-EDR(3Mbps)	Pass	2.44008G	1.41	-18.59	147.216M	-41.68	2.398116G	-59.56	2.48492G	-59.41	24.442766G	-54.29	1

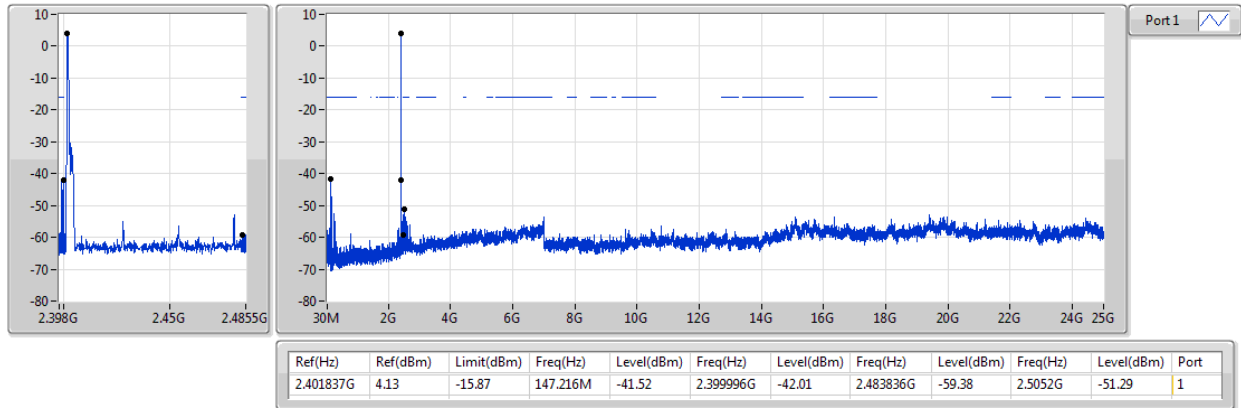
Result

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
BT-BR(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.401837G	4.13	-15.87	147.216M	-41.52	2.399996G	-42.01	2.483836G	-59.38	2.5052G	-51.29	1
2440MHz	Pass	2.439913G	5.78	-14.22	147.216M	-41.62	2.399756G	-59.12	2.48448G	-59.16	2.595258G	-49.43	1
2480MHz	Pass	2.48016G	6.16	-13.84	147.216M	-41.41	2.399524G	-60.78	2.484052G	-55.51	2.634659G	-51.67	1
BT-EDR(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.402004G	0.64	-19.36	147.216M	-41.56	2.399968G	-49.04	2.484752G	-59.41	15.099249G	-53.94	1
2440MHz	Pass	2.439913G	1.66	-18.34	147.216M	-41.64	2.39976G	-60.05	2.483576G	-58.63	15.07392G	-53.57	1
2480MHz	Pass	2.48016G	3.76	-16.24	147.216M	-41.56	2.398112G	-59.60	2.484016G	-57.59	24.65384G	-53.82	1
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.402171G	1.90	-18.10	147.216M	-41.50	2.399972G	-48.85	2.484452G	-60.04	15.107692G	-54.48	1
2440MHz	Pass	2.44008G	1.41	-18.59	147.216M	-41.68	2.398116G	-59.56	2.48492G	-59.41	24.442766G	-54.29	1
2480MHz	Pass	2.479993G	1.91	-18.09	147.216M	-41.68	2.399704G	-59.23	2.4838G	-57.86	2.634659G	-52.48	1

BT-BR(1Mbps)

CSE NdB

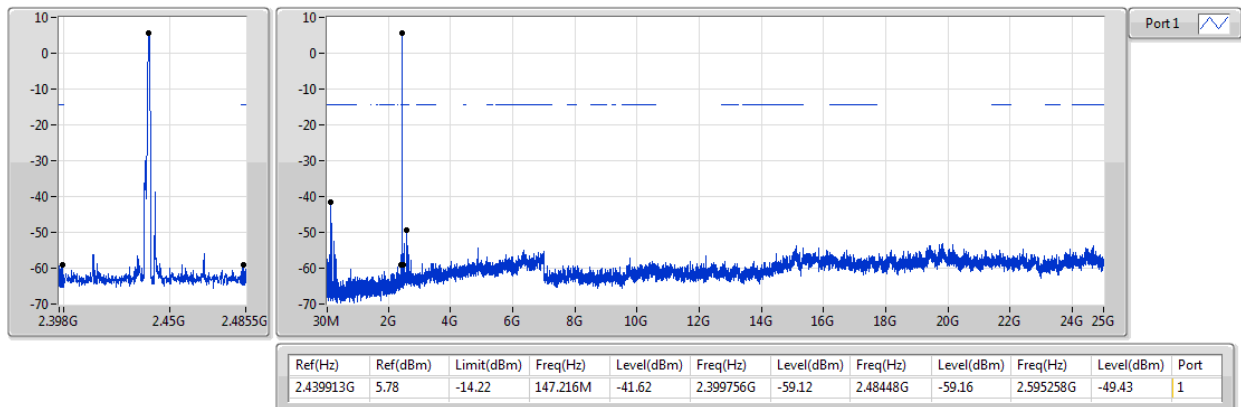
2402MHz



BT-BR(1Mbps)

CSE NdB

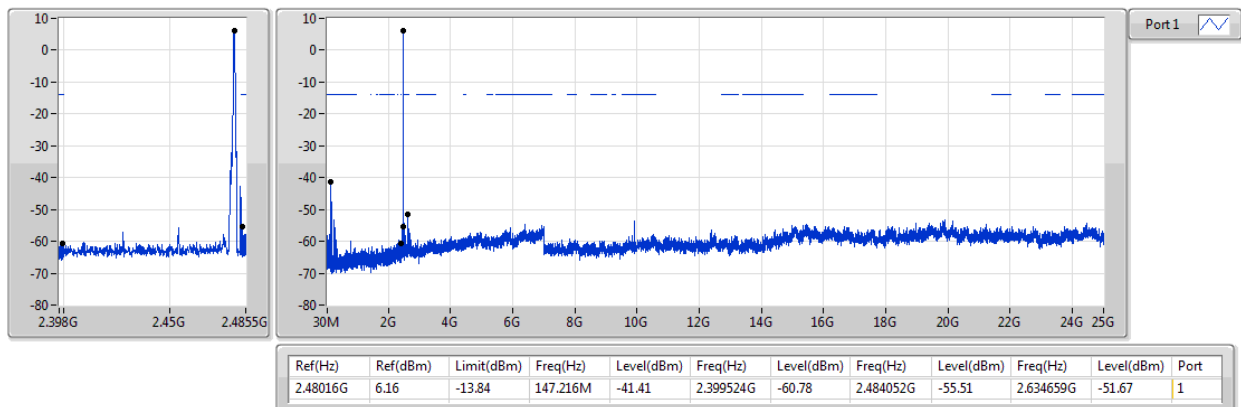
2440MHz



BT-BR(1Mbps)

CSE NdB

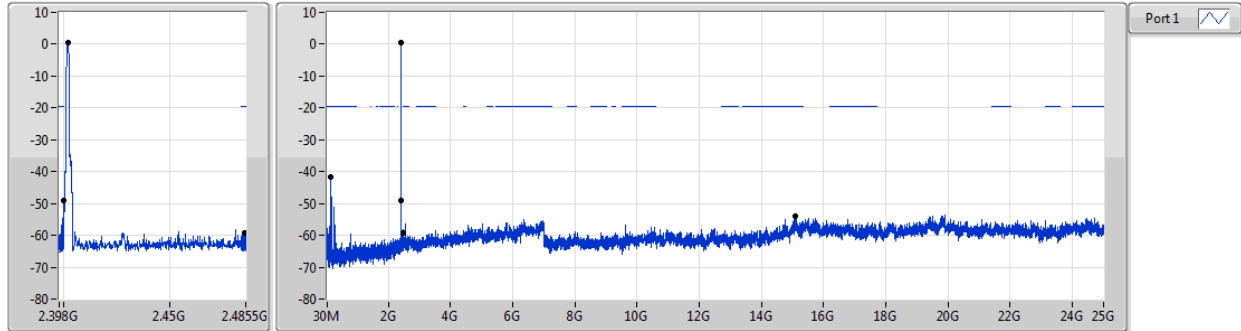
2480MHz



BT-EDR(2Mbps)

CSE NdB

2402MHz

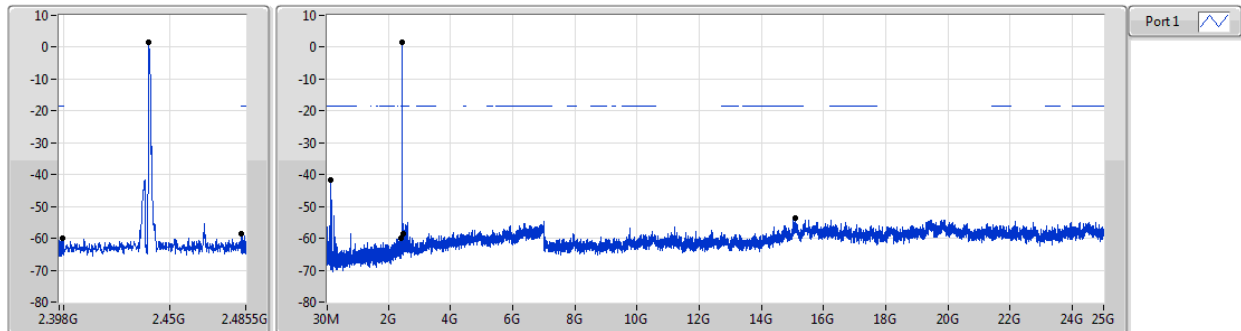


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.402004G	0.64	-19.36	147.216M	-41.56	2.399968G	-49.04	2.484752G	-59.41	15.099249G	-53.94	1

BT-EDR(2Mbps)

CSE NdB

2440MHz

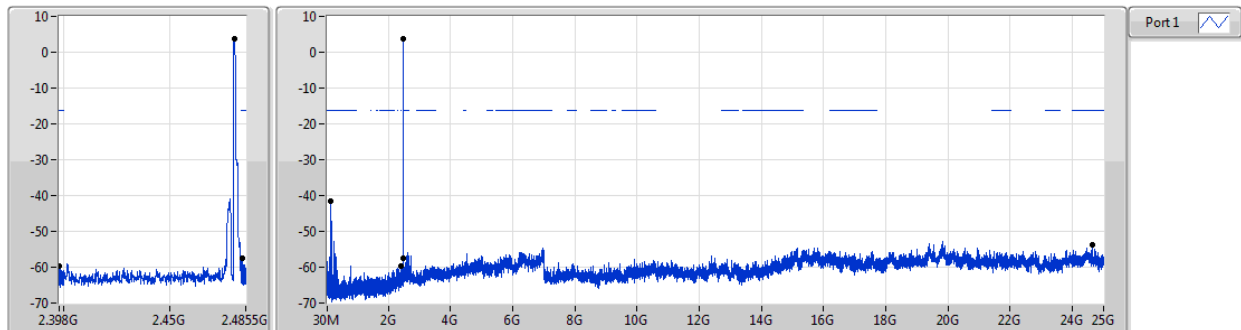


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.439913G	1.66	-18.34	147.216M	-41.64	2.39976G	-60.05	2.483576G	-58.63	15.07392G	-53.57	1

BT-EDR(2Mbps)

CSE NdB

2480MHz

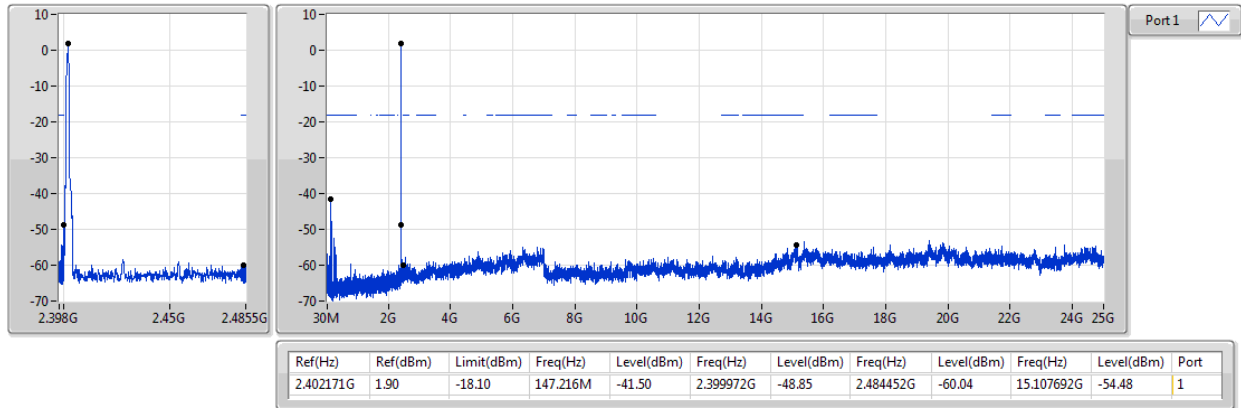


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.48016G	3.76	-16.24	147.216M	-41.56	2.398112G	-59.60	2.484016G	-57.59	24.65384G	-53.82	1

BT-EDR(3Mbps)

CSE NdB

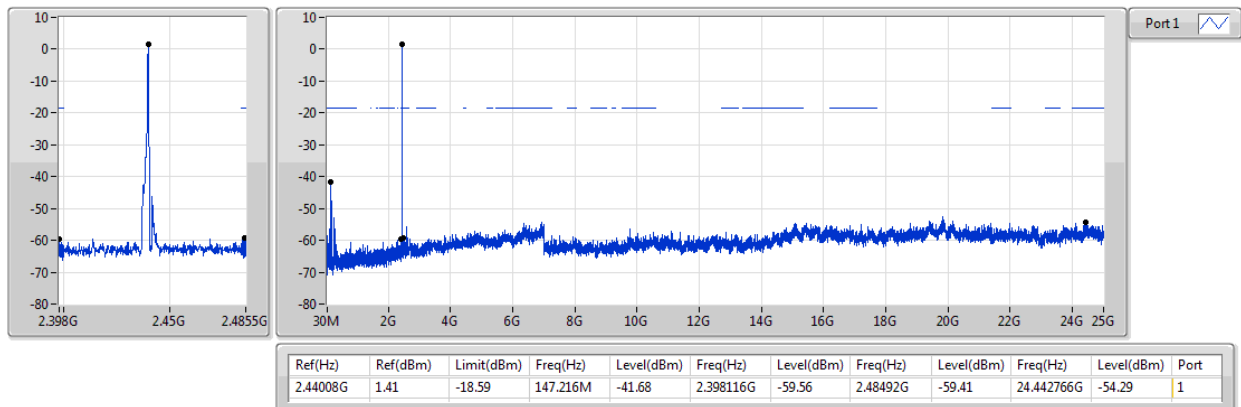
2402MHz



BT-EDR(3Mbps)

CSE NdB

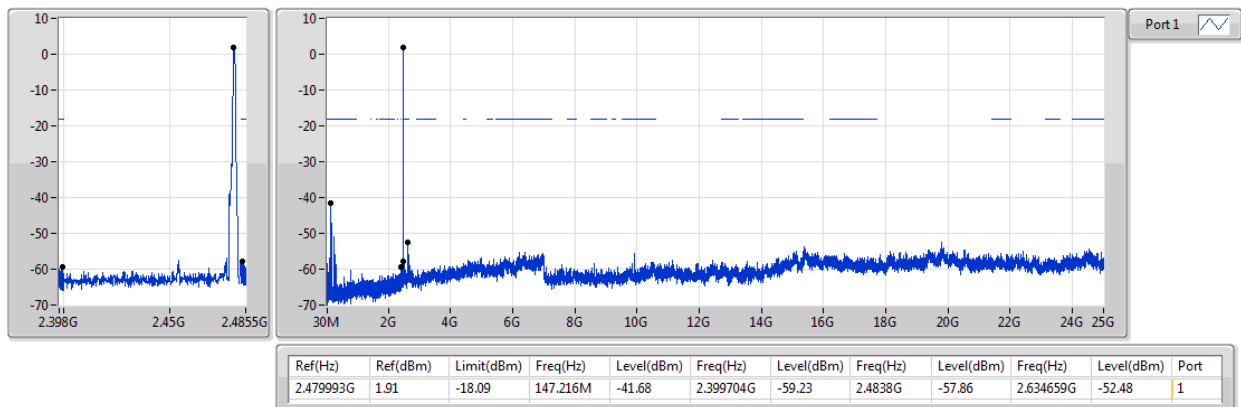
2440MHz



BT-EDR(3Mbps)

CSE NdB

2480MHz



**Summary**

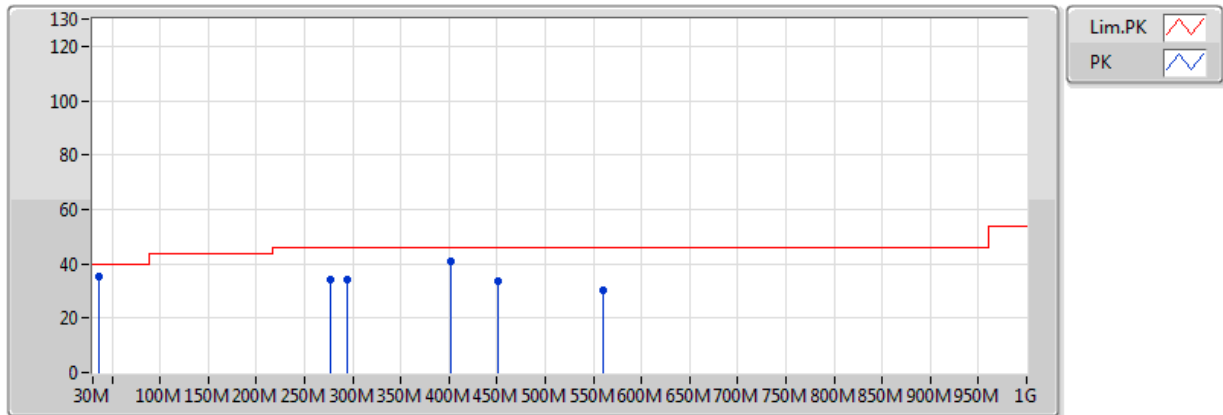
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-
BT-BR(1Mbps)	Pass	PK	35.82M	35.48	40.00	-4.52	-5.85	3	Vertical	360	1.00	-

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-BR(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-
2440MHz_PoE	Pass	PK	31.94M	28.27	40.00	-11.73	-3.57	3	Horizontal	0	1.00	-
2440MHz_PoE	Pass	PK	280.26M	38.26	46.00	-7.74	-6.01	3	Horizontal	0	1.00	-
2440MHz_PoE	Pass	PK	297.72M	38.05	46.00	-7.95	-5.90	3	Horizontal	0	1.00	-
2440MHz_PoE	Pass	PK	400.54M	35.87	46.00	-10.13	-3.38	3	Horizontal	0	1.00	-
2440MHz_PoE	Pass	PK	431.58M	40.67	46.00	-5.33	-2.76	3	Horizontal	0	1.00	-
2440MHz_PoE	Pass	PK	452.92M	32.27	46.00	-13.73	-2.32	3	Horizontal	0	1.00	-
2440MHz_PoE	Pass	PK	35.82M	35.48	40.00	-4.52	-5.85	3	Vertical	360	1.00	-
2440MHz_PoE	Pass	PK	276.38M	34.30	46.00	-11.70	-6.09	3	Vertical	360	1.00	-
2440MHz_PoE	Pass	PK	293.84M	34.17	46.00	-11.83	-6.04	3	Vertical	360	1.00	-
2440MHz_PoE	Pass	PK	402.48M	40.96	46.00	-5.04	-3.29	3	Vertical	360	1.00	-
2440MHz_PoE	Pass	PK	450.98M	33.80	46.00	-12.20	-2.37	3	Vertical	360	1.00	-
2440MHz_PoE	Pass	PK	559.62M	30.44	46.00	-15.56	-0.53	3	Vertical	360	1.00	-
2440MHz_AC	Pass	PK	31.94M	24.51	40.00	-15.49	-5.94	3	Horizontal	360	1.00	-
2440MHz_AC	Pass	PK	115.36M	21.69	43.50	-21.81	-9.04	3	Horizontal	360	1.00	-
2440MHz_AC	Pass	PK	297.72M	25.73	46.00	-20.27	-6.49	3	Horizontal	360	1.00	-
2440MHz_AC	Pass	PK	503.36M	28.57	46.00	-17.43	-2.46	3	Horizontal	360	1.00	-
2440MHz_AC	Pass	PK	741.98M	31.40	46.00	-14.60	0.53	3	Horizontal	360	1.00	-
2440MHz_AC	Pass	PK	934.04M	34.88	46.00	-11.12	3.07	3	Horizontal	360	1.00	-
2440MHz_AC	Pass	PK	33.88M	34.46	40.00	-5.54	-6.70	3	Vertical	0	1.00	-
2440MHz_AC	Pass	PK	123.12M	21.82	43.50	-21.68	-8.90	3	Vertical	0	1.00	-
2440MHz_AC	Pass	PK	260.86M	23.08	46.00	-22.92	-6.41	3	Vertical	0	1.00	-
2440MHz_AC	Pass	PK	322.94M	25.65	46.00	-20.35	-6.11	3	Vertical	0	1.00	-
2440MHz_AC	Pass	PK	606.18M	30.74	46.00	-15.26	-1.16	3	Vertical	0	1.00	-
2440MHz_AC	Pass	PK	934.04M	35.35	46.00	-10.65	3.07	3	Vertical	0	1.00	-

BT-BR(1Mbps)

2440MHz_PoE

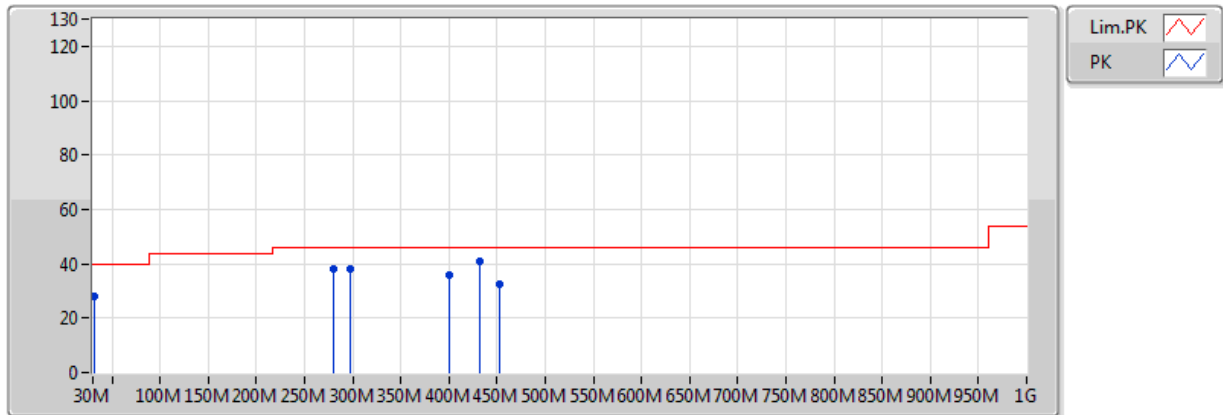


EUT=X

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	35.82M	35.48	40.00	-4.52	-5.85	3	Vertical	360	1.00	-	41.33	19.92	1.81	27.57
PK	276.38M	34.30	46.00	-11.70	-6.09	3	Vertical	360	1.00	-	40.39	18.00	2.65	26.74
PK	293.84M	34.17	46.00	-11.83	-6.04	3	Vertical	360	1.00	-	40.21	18.28	2.38	26.69
PK	402.48M	40.96	46.00	-5.04	-3.29	3	Vertical	360	1.00	-	44.25	20.93	3.08	27.30
PK	450.98M	33.80	46.00	-12.20	-2.37	3	Vertical	360	1.00	-	36.17	21.76	3.43	27.56
PK	559.62M	30.44	46.00	-15.56	-0.53	3	Vertical	360	1.00	-	30.97	23.73	3.67	27.93

BT-BR(1Mbps)

2440MHz_PoE

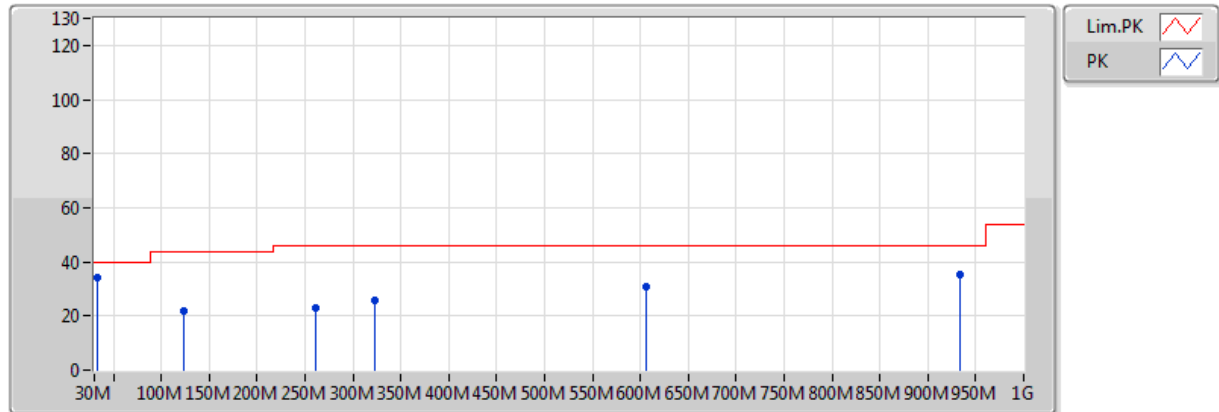


EUT=X

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	31.94M	28.27	40.00	-11.73	-3.57	3	Horizontal	0	1.00	-	31.84	22.27	1.74	27.58
PK	280.26M	38.26	46.00	-7.74	-6.01	3	Horizontal	0	1.00	-	44.27	17.99	2.72	26.73
PK	297.72M	38.05	46.00	-7.95	-5.90	3	Horizontal	0	1.00	-	43.95	18.39	2.39	26.68
PK	400.54M	35.87	46.00	-10.13	-3.38	3	Horizontal	0	1.00	-	39.25	20.84	3.06	27.29
PK	431.58M	40.67	46.00	-5.33	-2.76	3	Horizontal	0	1.00	-	43.43	21.41	3.29	27.46
PK	452.92M	32.27	46.00	-13.73	-2.32	3	Horizontal	0	1.00	-	34.59	21.81	3.44	27.57

BT-BR(1Mbps)

2440MHz_AC

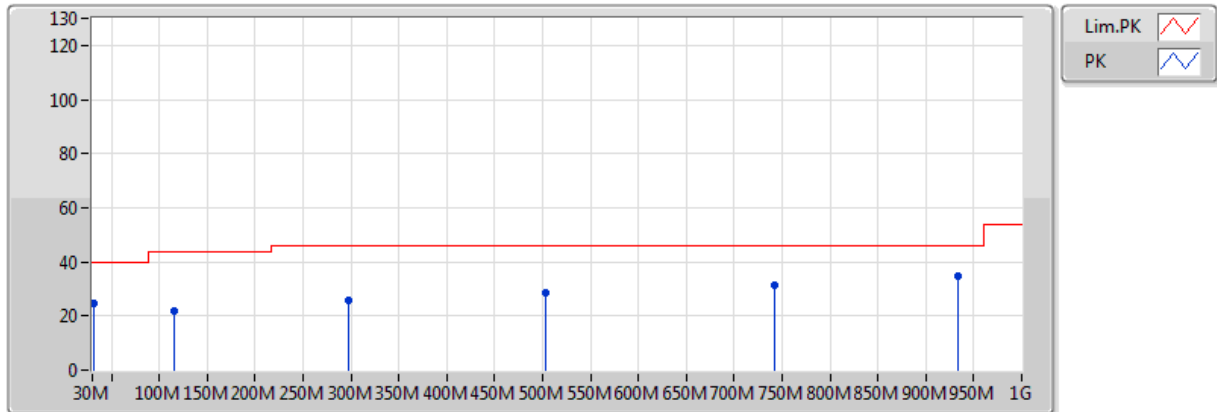


EUT=X

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	33.88M	34.46	40.00	-5.54	-6.70	3	Vertical	0	1.00	-	41.16	20.36	0.74	27.80
PK	123.12M	21.82	43.50	-21.68	-8.90	3	Vertical	0	1.00	-	30.72	17.18	1.64	27.73
PK	260.86M	23.08	46.00	-22.92	-6.41	3	Vertical	0	1.00	-	29.49	18.62	2.28	27.30
PK	322.94M	25.65	46.00	-20.35	-6.11	3	Vertical	0	1.00	-	31.76	18.70	2.56	27.37
PK	606.18M	30.74	46.00	-15.26	-1.16	3	Vertical	0	1.00	-	31.90	23.71	3.67	28.55
PK	934.04M	35.35	46.00	-10.65	3.07	3	Vertical	0	1.00	-	32.28	25.67	4.92	27.51

BT-BR(1Mbps)

2440MHz_AC



EUT=X

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	31.94M	24.51	40.00	-15.49	-5.94	3	Horizontal	360	1.00	-	30.45	21.19	0.71	27.83
PK	115.36M	21.69	43.50	-21.81	-9.04	3	Horizontal	360	1.00	-	30.73	17.18	1.53	27.75
PK	297.72M	25.73	46.00	-20.27	-6.49	3	Horizontal	360	1.00	-	32.22	18.20	2.51	27.20
PK	503.36M	28.57	46.00	-17.43	-2.46	3	Horizontal	360	1.00	-	31.03	22.63	3.40	28.49
PK	741.98M	31.40	46.00	-14.60	0.53	3	Horizontal	360	1.00	-	30.87	24.62	4.16	28.25
PK	934.04M	34.88	46.00	-11.12	3.07	3	Horizontal	360	1.00	-	31.81	25.67	4.92	27.51

**Summary**

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-
BT-BR(1Mbps)	Pass	AV	2.483502G	49.69	54.00	-4.31	31.27	3	Vertical	5	2.22	-
BT-EDR(2Mbps)	Pass	AV	2.483502G	48.25	54.00	-5.75	31.27	3	Vertical	9	2.22	-
BT-EDR(3Mbps)	Pass	AV	2.483502G	48.21	54.00	-5.79	31.27	3	Vertical	12	2.24	-

**Result**

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-BR(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.39G	43.77	54.00	-10.23	30.93	3	Horizontal	357	2.71	-
2402MHz	Pass	AV	2.402G	70.89	Inf	-Inf	30.98	3	Horizontal	357	2.71	-
2402MHz	Pass	PK	2.3666G	54.45	74.00	-19.55	30.85	3	Horizontal	357	2.71	-
2402MHz	Pass	PK	2.4024G	101.37	Inf	-Inf	30.98	3	Horizontal	357	2.71	-
2402MHz	Pass	AV	2.39G	43.77	54.00	-10.23	30.93	3	Vertical	6	2.14	-
2402MHz	Pass	AV	2.402G	71.23	Inf	-Inf	30.98	3	Vertical	6	2.14	-
2402MHz	Pass	PK	2.383G	55.11	74.00	-18.89	30.91	3	Vertical	6	2.14	-
2402MHz	Pass	PK	2.4024G	102.14	Inf	-Inf	30.98	3	Vertical	6	2.14	-
2402MHz	Pass	AV	4.80412G	43.71	54.00	-10.29	2.10	3	Horizontal	9	1.46	-
2402MHz	Pass	PK	4.80383G	49.77	74.00	-24.23	2.10	3	Horizontal	9	1.46	-
2402MHz	Pass	AV	4.8041G	46.17	54.00	-7.83	2.10	3	Vertical	355	1.20	-
2402MHz	Pass	PK	4.80439G	51.37	74.00	-22.63	2.10	3	Vertical	355	1.20	-
2440MHz	Pass	AV	2.388G	43.92	54.00	-10.08	30.93	3	Horizontal	359	2.62	-
2440MHz	Pass	AV	2.44G	71.04	Inf	-Inf	31.11	3	Horizontal	359	2.62	-
2440MHz	Pass	AV	2.492G	44.44	54.00	-9.56	31.30	3	Horizontal	359	2.62	-
2440MHz	Pass	PK	2.3708G	54.87	74.00	-19.13	30.87	3	Horizontal	359	2.62	-
2440MHz	Pass	PK	2.44G	101.72	Inf	-Inf	31.11	3	Horizontal	359	2.62	-
2440MHz	Pass	PK	2.4896G	55.76	74.00	-18.24	31.29	3	Horizontal	359	2.62	-
2440MHz	Pass	AV	2.388G	43.96	54.00	-10.04	30.93	3	Vertical	14	2.09	-
2440MHz	Pass	AV	2.44G	71.72	Inf	-Inf	31.11	3	Vertical	14	2.09	-
2440MHz	Pass	AV	2.492G	44.75	54.00	-9.25	31.30	3	Vertical	14	2.09	-
2440MHz	Pass	PK	2.3732G	54.62	74.00	-19.38	30.88	3	Vertical	14	2.09	-
2440MHz	Pass	PK	2.44G	103.26	Inf	-Inf	31.11	3	Vertical	14	2.09	-
2440MHz	Pass	PK	2.4868G	55.17	74.00	-18.83	31.28	3	Vertical	14	2.09	-
2440MHz	Pass	AV	4.88008G	43.23	54.00	-10.77	2.34	3	Horizontal	8	1.61	-
2440MHz	Pass	PK	4.88027G	49.86	74.00	-24.14	2.34	3	Horizontal	8	1.61	-
2440MHz	Pass	AV	4.88008G	47.79	54.00	-6.21	2.34	3	Vertical	351	1.55	-
2440MHz	Pass	PK	4.87967G	52.65	74.00	-21.35	2.34	3	Vertical	351	1.55	-
2480MHz	Pass	AV	2.48G	71.78	Inf	-Inf	31.26	3	Horizontal	359	2.34	-
2480MHz	Pass	AV	2.483502G	48.65	54.00	-5.35	31.27	3	Horizontal	359	2.34	-
2480MHz	Pass	PK	2.48G	102.96	Inf	-Inf	31.26	3	Horizontal	359	2.34	-
2480MHz	Pass	PK	2.483502G	62.86	74.00	-11.14	31.27	3	Horizontal	359	2.34	-
2480MHz	Pass	AV	2.48G	72.82	Inf	-Inf	31.26	3	Vertical	5	2.22	-
2480MHz	Pass	AV	2.483502G	49.69	54.00	-4.31	31.27	3	Vertical	5	2.22	-
2480MHz	Pass	PK	2.48G	105.41	Inf	-Inf	31.26	3	Vertical	5	2.22	-
2480MHz	Pass	PK	2.483502G	65.63	74.00	-8.37	31.27	3	Vertical	5	2.22	-
2480MHz	Pass	AV	4.96009G	40.82	54.00	-13.18	2.59	3	Horizontal	349	1.28	-
2480MHz	Pass	PK	4.96037G	48.83	74.00	-25.17	2.59	3	Horizontal	349	1.28	-
2480MHz	Pass	AV	4.9601G	44.17	54.00	-9.83	2.59	3	Vertical	26	1.45	-
2480MHz	Pass	PK	4.95977G	50.53	74.00	-23.47	2.59	3	Vertical	26	1.45	-
BT-EDR(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.388G	43.78	54.00	-10.22	30.93	3	Horizontal	359	2.45	-
2402MHz	Pass	AV	2.402G	67.91	Inf	-Inf	30.98	3	Horizontal	359	2.45	-
2402MHz	Pass	PK	2.3802G	55.92	74.00	-18.08	30.90	3	Horizontal	359	2.45	-
2402MHz	Pass	PK	2.4024G	98.45	Inf	-Inf	30.98	3	Horizontal	359	2.45	-
2402MHz	Pass	AV	2.388G	43.78	54.00	-10.22	30.93	3	Vertical	6	2.15	-
2402MHz	Pass	AV	2.402G	68.48	Inf	-Inf	30.98	3	Vertical	6	2.15	-



RSE TX above 1GHz Result

Appendix G.2

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2402MHz	Pass	PK	2.3818G	54.24	74.00	-19.76	30.91	3	Vertical	6	2.15	-
2402MHz	Pass	PK	2.4024G	99.19	Inf	-Inf	30.98	3	Vertical	6	2.15	-
2440MHz	Pass	AV	2.388G	43.80	54.00	-10.20	30.93	3	Horizontal	360	2.65	-
2440MHz	Pass	AV	2.44G	68.36	Inf	-Inf	31.11	3	Horizontal	360	2.65	-
2440MHz	Pass	AV	2.4996G	44.35	54.00	-9.65	31.33	3	Horizontal	360	2.65	-
2440MHz	Pass	PK	2.3836G	54.99	74.00	-19.01	30.91	3	Horizontal	360	2.65	-
2440MHz	Pass	PK	2.44G	98.95	Inf	-Inf	31.11	3	Horizontal	360	2.65	-
2440MHz	Pass	PK	2.4992G	55.08	74.00	-18.92	31.33	3	Horizontal	360	2.65	-
2440MHz	Pass	AV	2.388G	43.84	54.00	-10.16	30.93	3	Vertical	10	1.99	-
2440MHz	Pass	AV	2.44G	69.09	Inf	-Inf	31.11	3	Vertical	10	1.99	-
2440MHz	Pass	AV	2.4924G	44.50	54.00	-9.50	31.30	3	Vertical	10	1.99	-
2440MHz	Pass	PK	2.3736G	54.86	74.00	-19.14	30.88	3	Vertical	10	1.99	-
2440MHz	Pass	PK	2.44G	100.47	Inf	-Inf	31.11	3	Vertical	10	1.99	-
2440MHz	Pass	PK	2.4852G	56.17	74.00	-17.83	31.28	3	Vertical	10	1.99	-
2480MHz	Pass	AV	2.48G	69.79	Inf	-Inf	31.26	3	Horizontal	356	2.32	-
2480MHz	Pass	AV	2.483502G	47.28	54.00	-6.72	31.27	3	Horizontal	356	2.32	-
2480MHz	Pass	PK	2.4802G	101.47	Inf	-Inf	31.26	3	Horizontal	356	2.32	-
2480MHz	Pass	PK	2.483502G	57.50	74.00	-16.50	31.27	3	Horizontal	356	2.32	-
2480MHz	Pass	AV	2.48G	70.82	Inf	-Inf	31.26	3	Vertical	9	2.22	-
2480MHz	Pass	AV	2.483502G	48.25	54.00	-5.75	31.27	3	Vertical	9	2.22	-
2480MHz	Pass	PK	2.4802G	103.83	Inf	-Inf	31.26	3	Vertical	9	2.22	-
2480MHz	Pass	PK	2.483502G	60.31	74.00	-13.69	31.27	3	Vertical	9	2.22	-
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3886G	43.79	54.00	-10.21	30.93	3	Horizontal	0	2.71	-
2402MHz	Pass	AV	2.4022G	68.05	Inf	-Inf	30.98	3	Horizontal	0	2.71	-
2402MHz	Pass	PK	2.3896G	54.79	74.00	-19.21	30.93	3	Horizontal	0	2.71	-
2402MHz	Pass	PK	2.4024G	98.38	Inf	-Inf	30.98	3	Horizontal	0	2.71	-
2402MHz	Pass	AV	2.39G	43.77	54.00	-10.23	30.93	3	Vertical	7	2.17	-
2402MHz	Pass	AV	2.402G	68.32	Inf	-Inf	30.98	3	Vertical	7	2.17	-
2402MHz	Pass	PK	2.375G	54.96	74.00	-19.04	30.88	3	Vertical	7	2.17	-
2402MHz	Pass	PK	2.4022G	99.05	Inf	-Inf	30.98	3	Vertical	7	2.17	-
2440MHz	Pass	AV	2.388G	43.81	54.00	-10.19	30.93	3	Horizontal	359	2.57	-
2440MHz	Pass	AV	2.44G	68.16	Inf	-Inf	31.11	3	Horizontal	359	2.57	-
2440MHz	Pass	AV	2.5G	44.37	54.00	-9.63	31.33	3	Horizontal	359	2.57	-
2440MHz	Pass	PK	2.388G	55.13	74.00	-18.87	30.93	3	Horizontal	359	2.57	-
2440MHz	Pass	PK	2.44G	99.06	Inf	-Inf	31.11	3	Horizontal	359	2.57	-
2440MHz	Pass	PK	2.4976G	55.47	74.00	-18.53	31.32	3	Horizontal	359	2.57	-
2440MHz	Pass	AV	2.388G	43.81	54.00	-10.19	30.93	3	Vertical	12	2.09	-
2440MHz	Pass	AV	2.44G	69.07	Inf	-Inf	31.11	3	Vertical	12	2.09	-
2440MHz	Pass	AV	2.4924G	44.46	54.00	-9.54	31.30	3	Vertical	12	2.09	-
2440MHz	Pass	PK	2.3468G	55.22	74.00	-18.78	30.78	3	Vertical	12	2.09	-
2440MHz	Pass	PK	2.44G	100.71	Inf	-Inf	31.11	3	Vertical	12	2.09	-
2440MHz	Pass	PK	2.496G	55.35	74.00	-18.65	31.32	3	Vertical	12	2.09	-
2480MHz	Pass	AV	2.48G	69.36	Inf	-Inf	31.26	3	Horizontal	357	1.89	-
2480MHz	Pass	AV	2.483502G	47.07	54.00	-6.93	31.27	3	Horizontal	357	1.89	-
2480MHz	Pass	PK	2.4798G	101.09	Inf	-Inf	31.26	3	Horizontal	357	1.89	-
2480MHz	Pass	PK	2.4836G	57.77	74.00	-16.23	31.27	3	Horizontal	357	1.89	-
2480MHz	Pass	AV	2.48G	70.70	Inf	-Inf	31.26	3	Vertical	12	2.24	-
2480MHz	Pass	AV	2.483502G	48.21	54.00	-5.79	31.27	3	Vertical	12	2.24	-



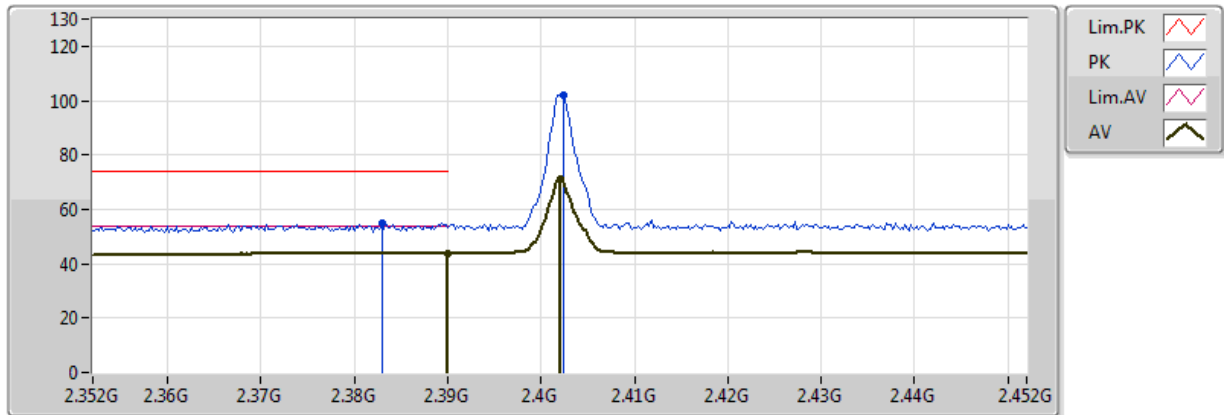
RSE TX above 1GHz Result

Appendix G.2

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2480MHz	Pass	PK	2.4802G	103.59	Inf	-Inf	31.26	3	Vertical	12	2.24	-
2480MHz	Pass	PK	2.483502G	60.74	74.00	-13.26	31.27	3	Vertical	12	2.24	-

BT-BR(1Mbps)

2402MHz_TX

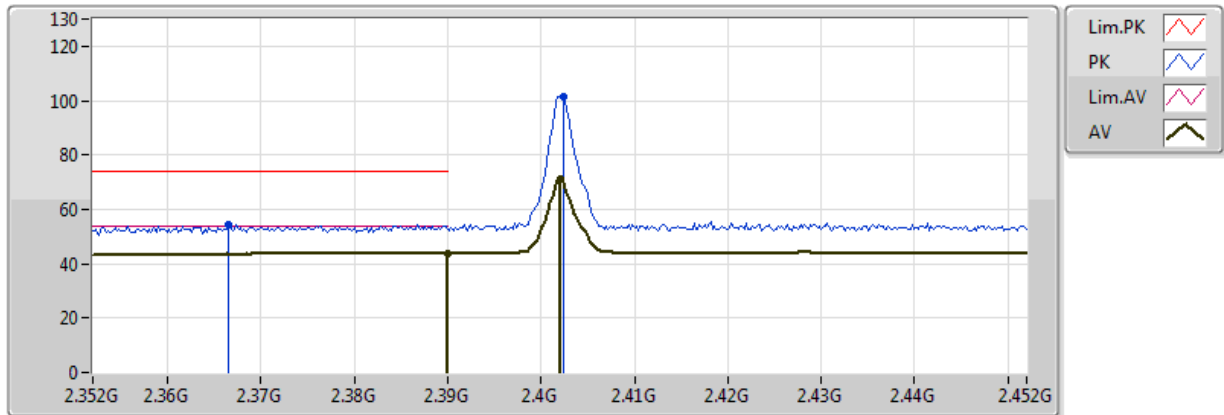


EUT=X

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.39G	43.77	54.00	-10.23	30.93	3	Vertical	6	2.14	-	12.84	27.31	3.62	-
AV	2.402G	71.23	Inf	-Inf	30.98	3	Vertical	6	2.14	-	40.25	27.35	3.63	-
PK	2.383G	55.11	74.00	-18.89	30.91	3	Vertical	6	2.14	-	24.20	27.30	3.61	-
PK	2.4024G	102.14	Inf	-Inf	30.98	3	Vertical	6	2.14	-	71.16	27.35	3.63	-

BT-BR(1Mbps)

2402MHz_TX

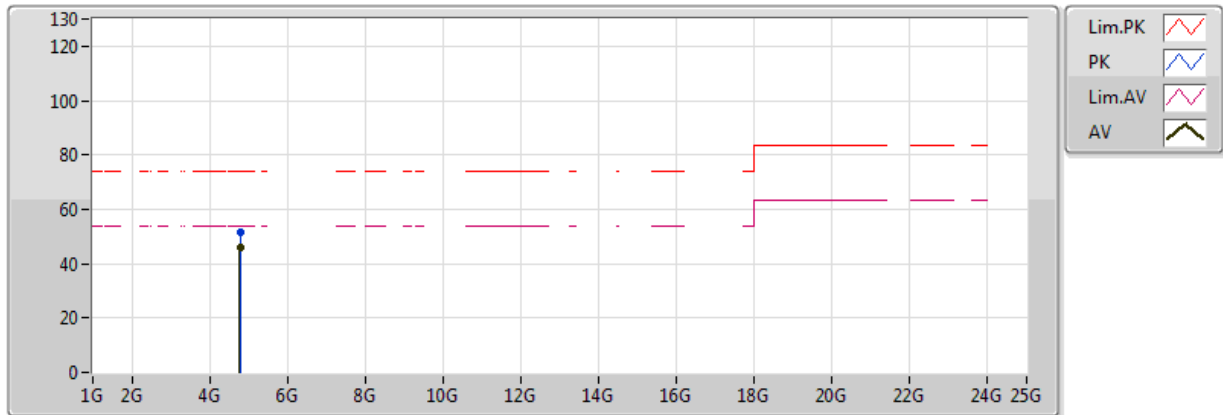


EUT=X

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.39G	43.77	54.00	-10.23	30.93	3	Horizontal	357	2.71	-	12.83	27.31	3.62	-
AV	2.402G	70.89	Inf	-Inf	30.98	3	Horizontal	357	2.71	-	39.91	27.35	3.63	-
PK	2.3666G	54.45	74.00	-19.55	30.85	3	Horizontal	357	2.71	-	23.60	27.25	3.60	-
PK	2.4024G	101.37	Inf	-Inf	30.98	3	Horizontal	357	2.71	-	70.39	27.35	3.63	-

BT-BR(1Mbps)

2402MHz_TX

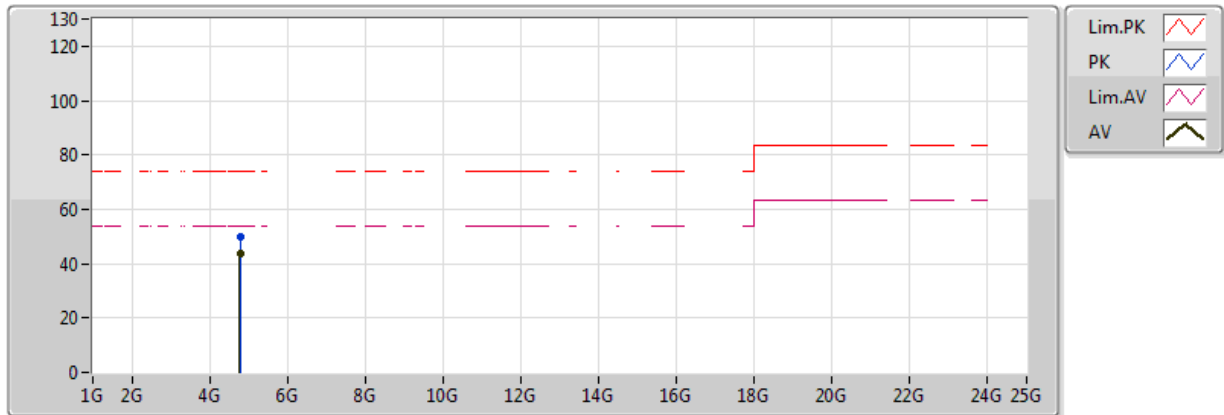


EUT=X

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.8041G	46.17	54.00	-7.83	2.10	3	Vertical	355	1.20	-	44.06	31.25	5.38	34.53
PK	4.80439G	51.37	74.00	-22.63	2.10	3	Vertical	355	1.20	-	49.27	31.25	5.38	34.53

BT-BR(1Mbps)

2402MHz_TX

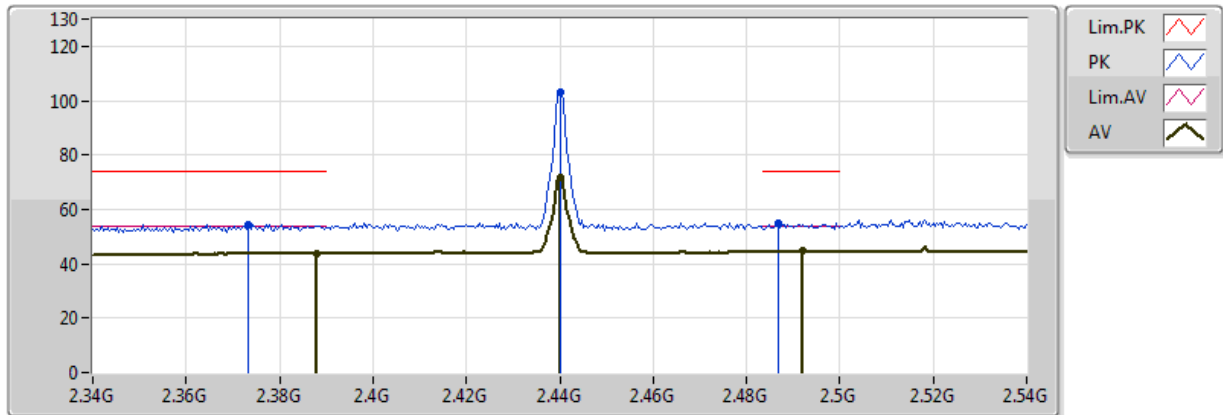


EUT=X

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.80412G	43.71	54.00	-10.29	2.10	3	Horizontal	9	1.46	-	41.60	31.25	5.38	34.53
PK	4.80383G	49.77	74.00	-24.23	2.10	3	Horizontal	9	1.46	-	47.66	31.25	5.38	34.53

BT-BR(1Mbps)

2440MHz_TX

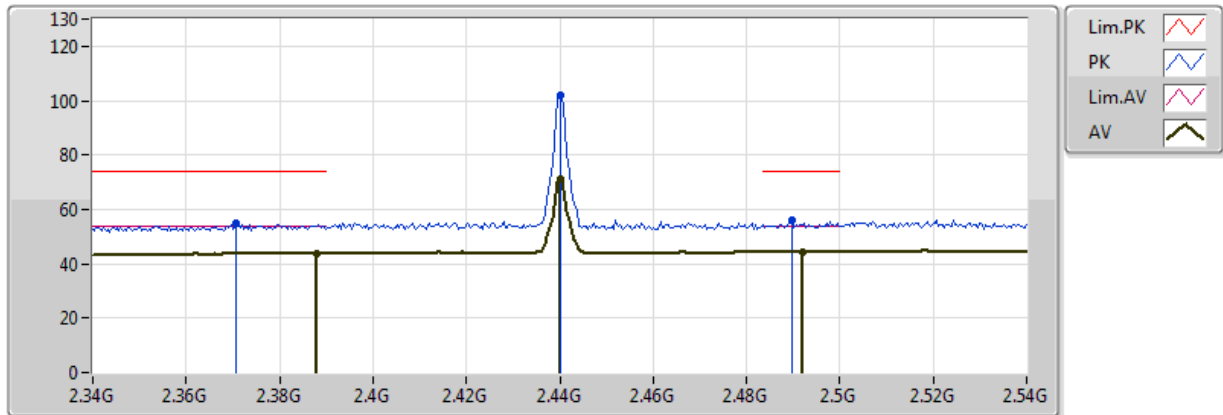


EUT=X

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.388G	43.96	54.00	-10.04	30.93	3	Vertical	14	2.09	-	13.03	27.31	3.62	-
AV	2.492G	44.75	54.00	-9.25	31.30	3	Vertical	14	2.09	-	13.44	27.58	3.72	-
AV	2.44G	71.72	Inf	-Inf	31.11	3	Vertical	14	2.09	-	40.61	27.44	3.67	-
PK	2.3732G	54.62	74.00	-19.38	30.88	3	Vertical	14	2.09	-	23.74	27.27	3.61	-
PK	2.4868G	55.17	74.00	-18.83	31.28	3	Vertical	14	2.09	-	23.89	27.57	3.72	-
PK	2.44G	103.26	Inf	-Inf	31.11	3	Vertical	14	2.09	-	72.15	27.44	3.67	-

BT-BR(1Mbps)

2440MHz_TX

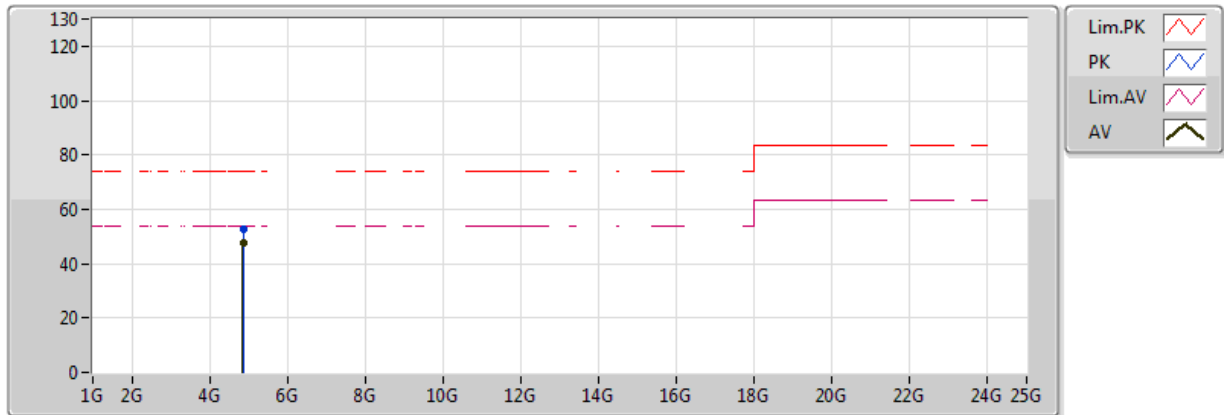


EUT=X

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.388G	43.92	54.00	-10.08	30.93	3	Horizontal	359	2.62	-	12.99	27.31	3.62	-
AV	2.492G	44.44	54.00	-9.56	31.30	3	Horizontal	359	2.62	-	13.13	27.58	3.72	-
AV	2.44G	71.04	Inf	-Inf	31.11	3	Horizontal	359	2.62	-	39.93	27.44	3.67	-
PK	2.3708G	54.87	74.00	-19.13	30.87	3	Horizontal	359	2.62	-	24.00	27.26	3.60	-
PK	2.4896G	55.76	74.00	-18.24	31.29	3	Horizontal	359	2.62	-	24.47	27.57	3.72	-
PK	2.44G	101.72	Inf	-Inf	31.11	3	Horizontal	359	2.62	-	70.61	27.44	3.67	-

BT-BR(1Mbps)

2440MHz_TX

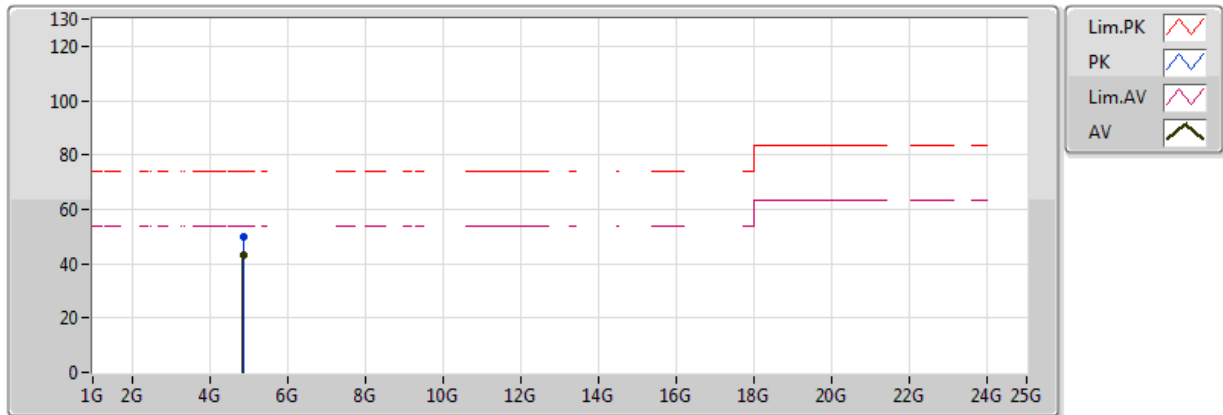


EUT=X

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.88008G	47.79	54.00	-6.21	2.34	3	Vertical	351	1.55	-	45.46	31.38	5.47	34.51
PK	4.87967G	52.65	74.00	-21.35	2.34	3	Vertical	351	1.55	-	50.32	31.38	5.47	34.51

BT-BR(1Mbps)

2440MHz_TX

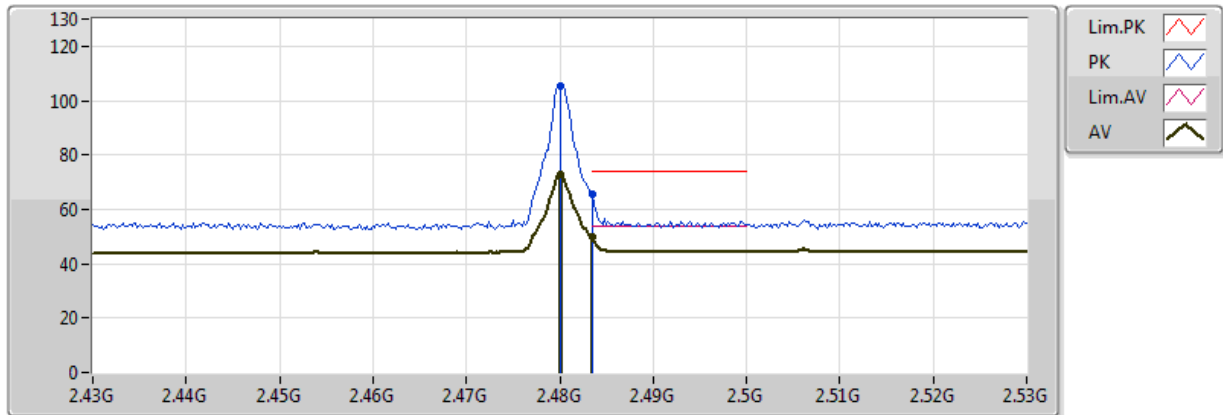


EUT=X

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.88008G	43.23	54.00	-10.77	2.34	3	Horizontal	8	1.61	-	40.90	31.38	5.47	34.51
PK	4.88027G	49.86	74.00	-24.14	2.34	3	Horizontal	8	1.61	-	47.52	31.38	5.47	34.51

BT-BR(1Mbps)

2480MHz_TX

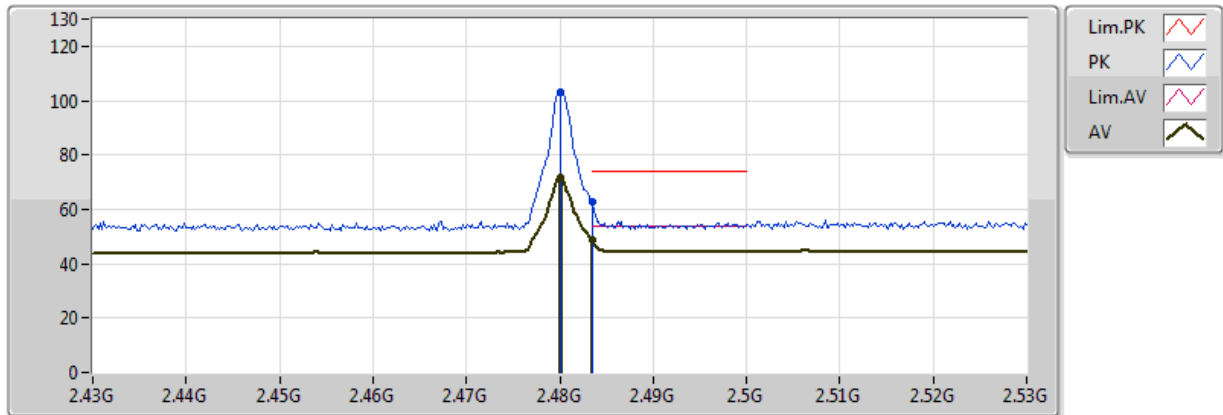


EUT=X

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.483502G	49.69	54.00	-4.31	31.27	3	Vertical	5	2.22	-	18.42	27.56	3.71	-
AV	2.48G	72.82	Inf	-Inf	31.26	3	Vertical	5	2.22	-	41.56	27.55	3.71	-
PK	2.483502G	65.63	74.00	-8.37	31.27	3	Vertical	5	2.22	-	34.36	27.56	3.71	-
PK	2.48G	105.41	Inf	-Inf	31.26	3	Vertical	5	2.22	-	74.15	27.55	3.71	-

BT-BR(1Mbps)

2480MHz_TX

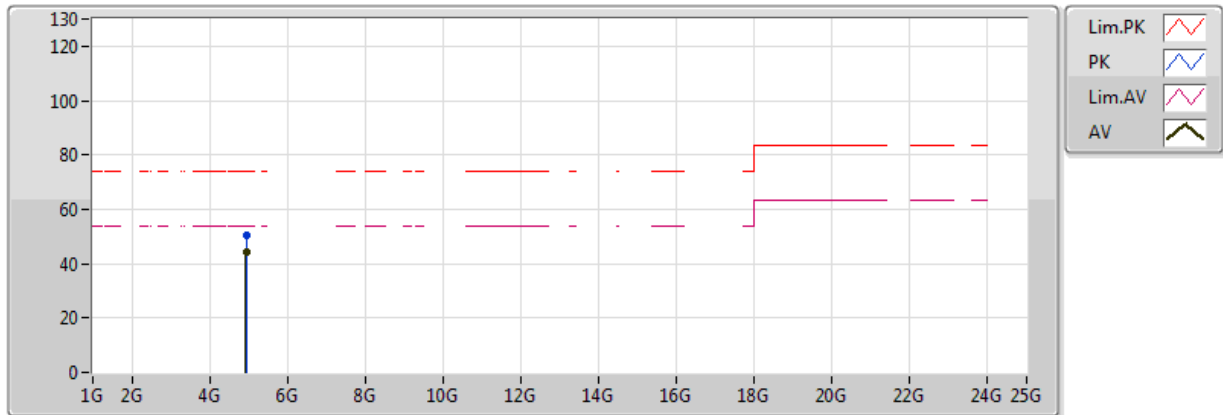


EUT=X

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.483502G	48.65	54.00	-5.35	31.27	3	Horizontal	359	2.34	-	17.38	27.56	3.71	-
AV	2.48G	71.78	Inf	-Inf	31.26	3	Horizontal	359	2.34	-	40.52	27.55	3.71	-
PK	2.483502G	62.86	74.00	-11.14	31.27	3	Horizontal	359	2.34	-	31.59	27.56	3.71	-
PK	2.48G	102.96	Inf	-Inf	31.26	3	Horizontal	359	2.34	-	71.70	27.55	3.71	-

BT-BR(1Mbps)

2480MHz_TX

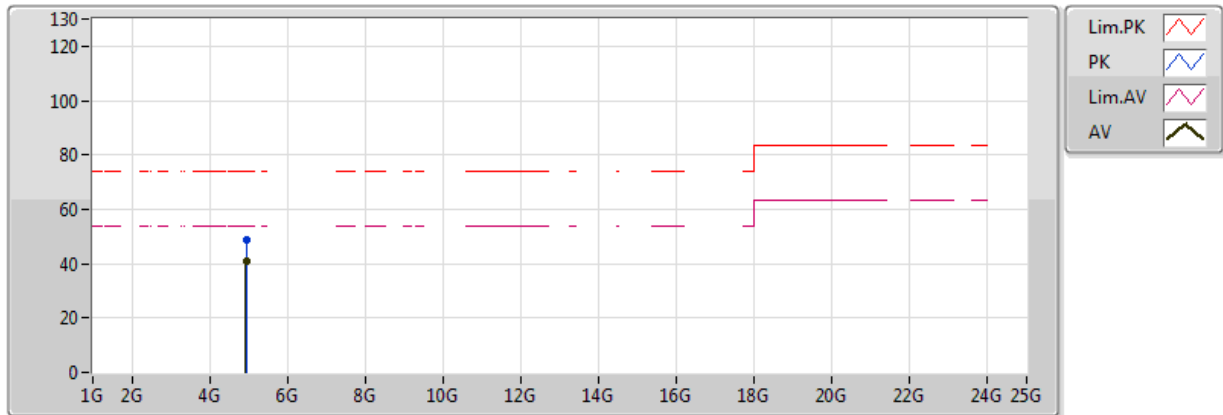


EUT=X

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.9601G	44.17	54.00	-9.83	2.59	3	Vertical	26	1.45	-	41.58	31.53	5.56	34.49
PK	4.95977G	50.53	74.00	-23.47	2.59	3	Vertical	26	1.45	-	47.94	31.53	5.56	34.49

BT-BR(1Mbps)

2480MHz_TX

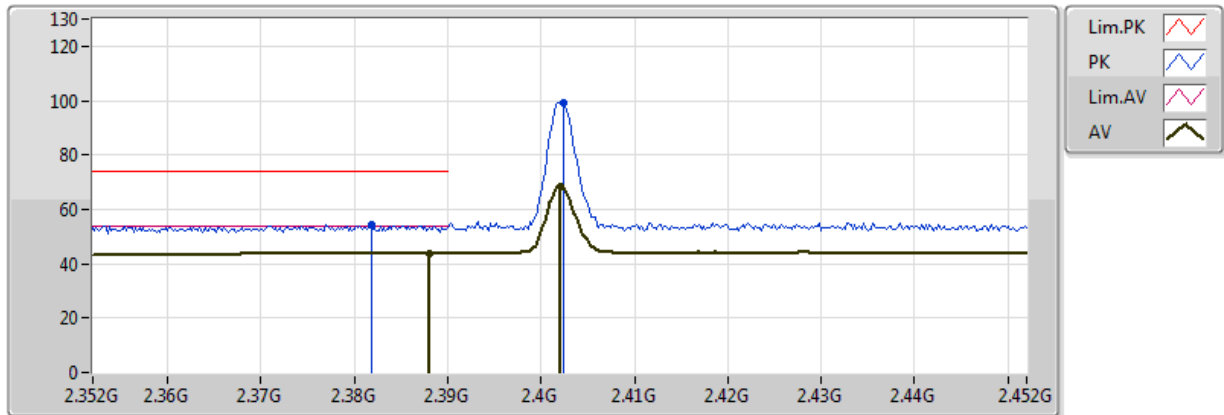


EUT=X

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.96009G	40.82	54.00	-13.18	2.59	3	Horizontal	349	1.28	-	38.22	31.53	5.56	34.49
PK	4.96037G	48.83	74.00	-25.17	2.59	3	Horizontal	349	1.28	-	46.24	31.53	5.56	34.49

BT-EDR(2Mbps)

2402MHz_TX

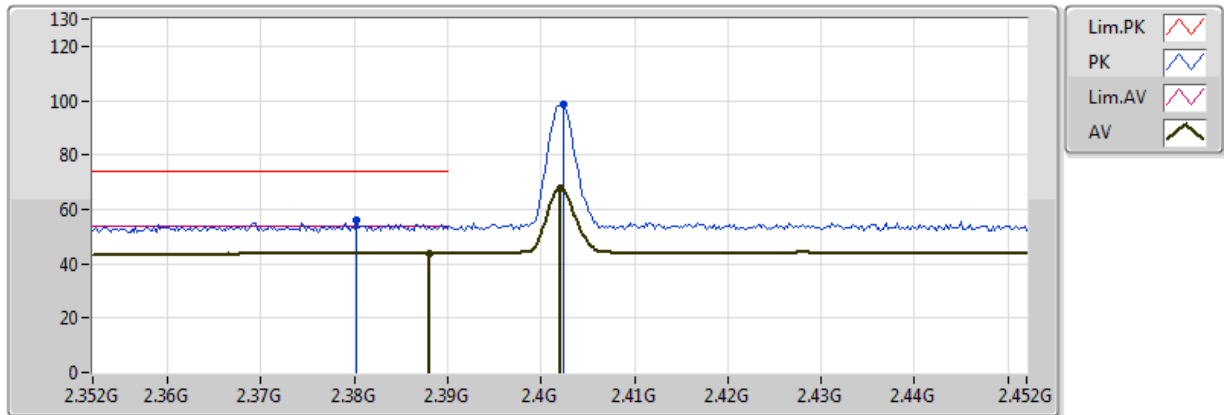


EUT=X

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.388G	43.78	54.00	-10.22	30.93	3	Vertical	6	2.15	-	12.85	27.31	3.62	-
AV	2.402G	68.48	Inf	-Inf	30.98	3	Vertical	6	2.15	-	37.50	27.35	3.63	-
PK	2.3818G	54.24	74.00	-19.76	30.91	3	Vertical	6	2.15	-	23.33	27.29	3.61	-
PK	2.4024G	99.19	Inf	-Inf	30.98	3	Vertical	6	2.15	-	68.21	27.35	3.63	-

BT-EDR(2Mbps)

2402MHz_TX

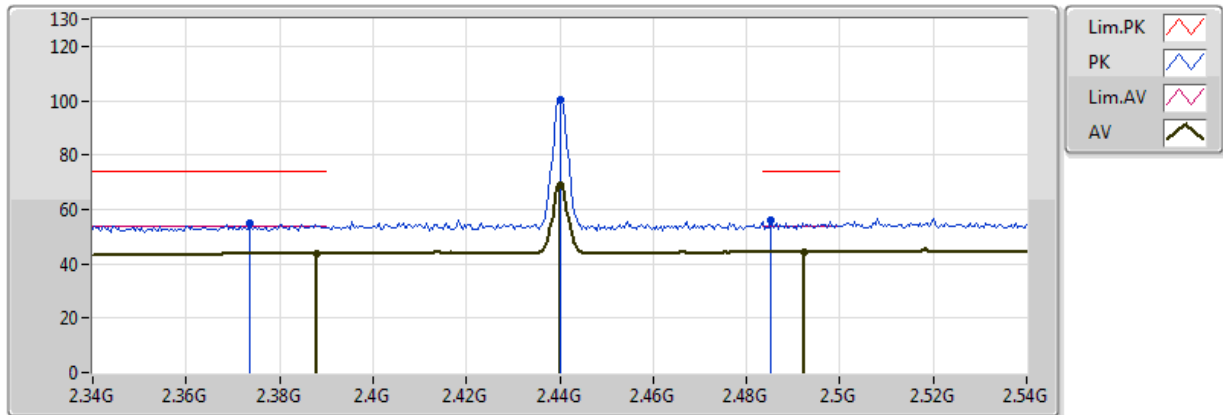


EUT=X

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.388G	43.78	54.00	-10.22	30.93	3	Horizontal	359	2.45	-	12.85	27.31	3.62	-
AV	2.402G	67.91	Inf	-Inf	30.98	3	Horizontal	359	2.45	-	36.94	27.35	3.63	-
PK	2.3802G	55.92	74.00	-18.08	30.90	3	Horizontal	359	2.45	-	25.02	27.29	3.61	-
PK	2.4024G	98.45	Inf	-Inf	30.98	3	Horizontal	359	2.45	-	67.47	27.35	3.63	-

BT-EDR(2Mbps)

2440MHz_TX

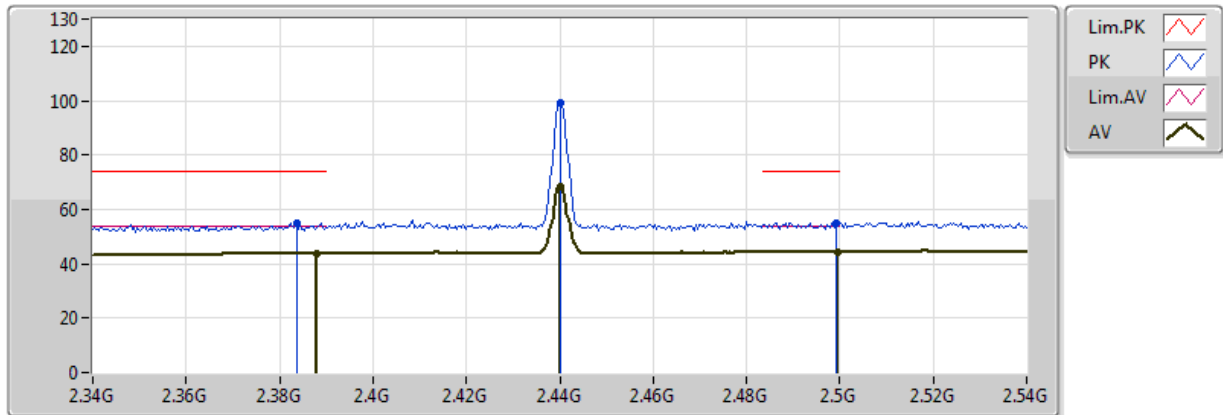


EUT=X

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.388G	43.84	54.00	-10.16	30.93	3	Vertical	10	1.99	-	12.91	27.31	3.62	-
AV	2.4924G	44.50	54.00	-9.50	31.30	3	Vertical	10	1.99	-	13.20	27.58	3.72	-
AV	2.44G	69.09	Inf	-Inf	31.11	3	Vertical	10	1.99	-	37.97	27.44	3.67	-
PK	2.3736G	54.86	74.00	-19.14	30.88	3	Vertical	10	1.99	-	23.98	27.27	3.61	-
PK	2.4852G	56.17	74.00	-17.83	31.28	3	Vertical	10	1.99	-	24.89	27.56	3.72	-
PK	2.44G	100.47	Inf	-Inf	31.11	3	Vertical	10	1.99	-	69.36	27.44	3.67	-

BT-EDR(2Mbps)

2440MHz_TX

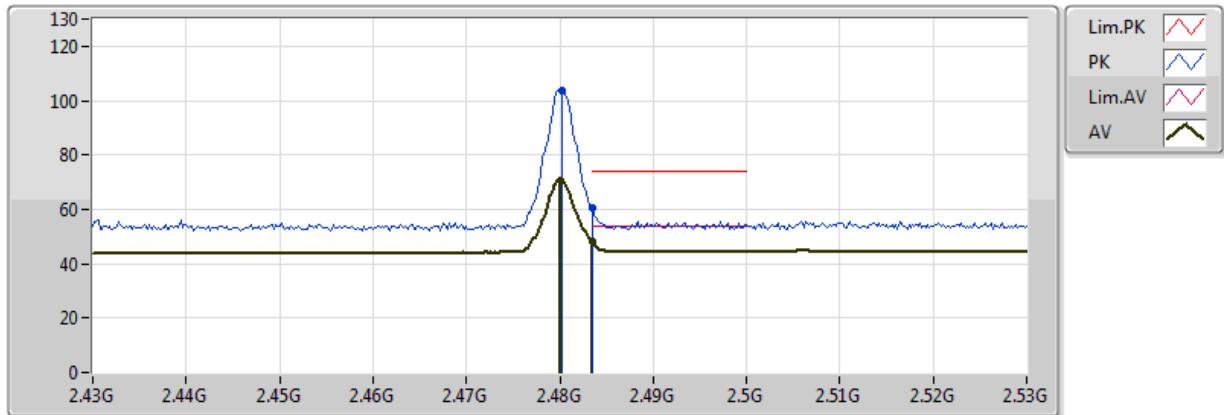


EUT=X

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.388G	43.80	54.00	-10.20	30.93	3	Horizontal	360	2.65	-	12.87	27.31	3.62	-
AV	2.4996G	44.35	54.00	-9.65	31.33	3	Horizontal	360	2.65	-	13.02	27.60	3.73	-
AV	2.44G	68.36	Inf	-Inf	31.11	3	Horizontal	360	2.65	-	37.24	27.44	3.67	-
PK	2.3836G	54.99	74.00	-19.01	30.91	3	Horizontal	360	2.65	-	24.07	27.30	3.62	-
PK	2.4992G	55.08	74.00	-18.92	31.33	3	Horizontal	360	2.65	-	23.75	27.60	3.73	-
PK	2.44G	98.95	Inf	-Inf	31.11	3	Horizontal	360	2.65	-	67.84	27.44	3.67	-

BT-EDR(2Mbps)

2480MHz_TX

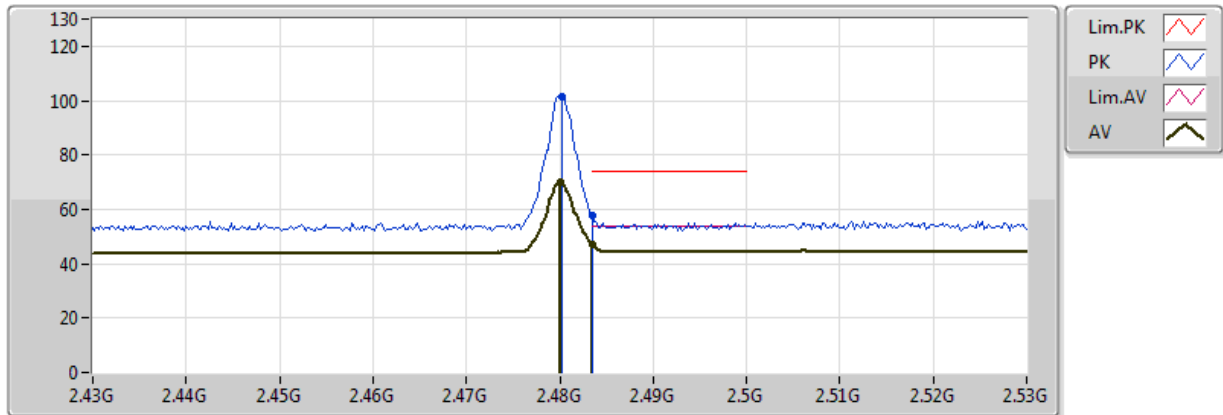


EUT=X

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.483502G	48.25	54.00	-5.75	31.27	3	Vertical	9	2.22	-	16.98	27.56	3.71	-
AV	2.48G	70.82	Inf	-Inf	31.26	3	Vertical	9	2.22	-	39.57	27.55	3.71	-
PK	2.483502G	60.31	74.00	-13.69	31.27	3	Vertical	9	2.22	-	29.03	27.56	3.71	-
PK	2.4802G	103.83	Inf	-Inf	31.26	3	Vertical	9	2.22	-	72.58	27.55	3.71	-

BT-EDR(2Mbps)

2480MHz_TX

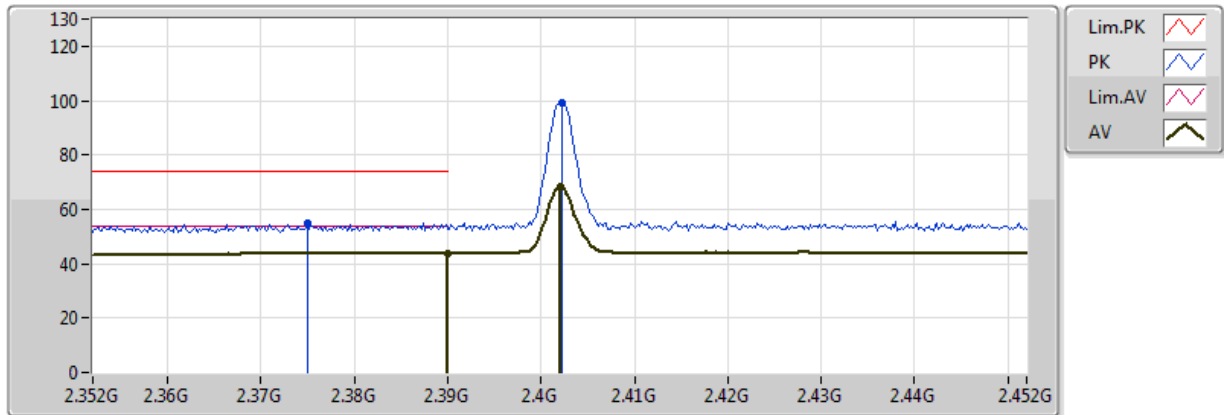


EUT=X

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.483502G	47.28	54.00	-6.72	31.27	3	Horizontal	356	2.32	-	16.01	27.56	3.71	-
AV	2.48G	69.79	Inf	-Inf	31.26	3	Horizontal	356	2.32	-	38.53	27.55	3.71	-
PK	2.483502G	57.50	74.00	-16.50	31.27	3	Horizontal	356	2.32	-	26.23	27.56	3.71	-
PK	2.4802G	101.47	Inf	-Inf	31.26	3	Horizontal	356	2.32	-	70.21	27.55	3.71	-

BT-EDR(3Mbps)

2402MHz_TX

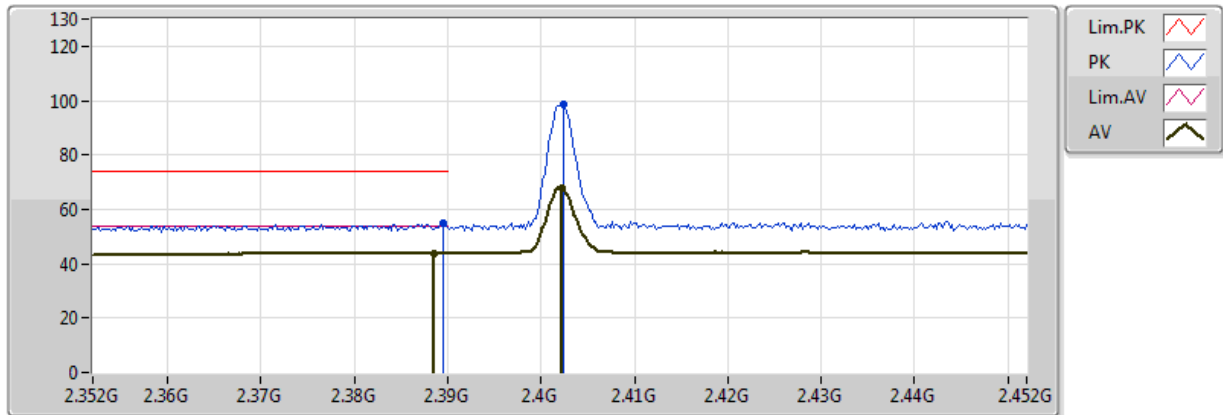


EUT=X

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.39G	43.77	54.00	-10.23	30.93	3	Vertical	7	2.17	-	12.83	27.31	3.62	-
AV	2.402G	68.32	Inf	-Inf	30.98	3	Vertical	7	2.17	-	37.34	27.35	3.63	-
PK	2.375G	54.96	74.00	-19.04	30.88	3	Vertical	7	2.17	-	24.08	27.27	3.61	-
PK	2.4022G	99.05	Inf	-Inf	30.98	3	Vertical	7	2.17	-	68.08	27.35	3.63	-

BT-EDR(3Mbps)

2402MHz_TX

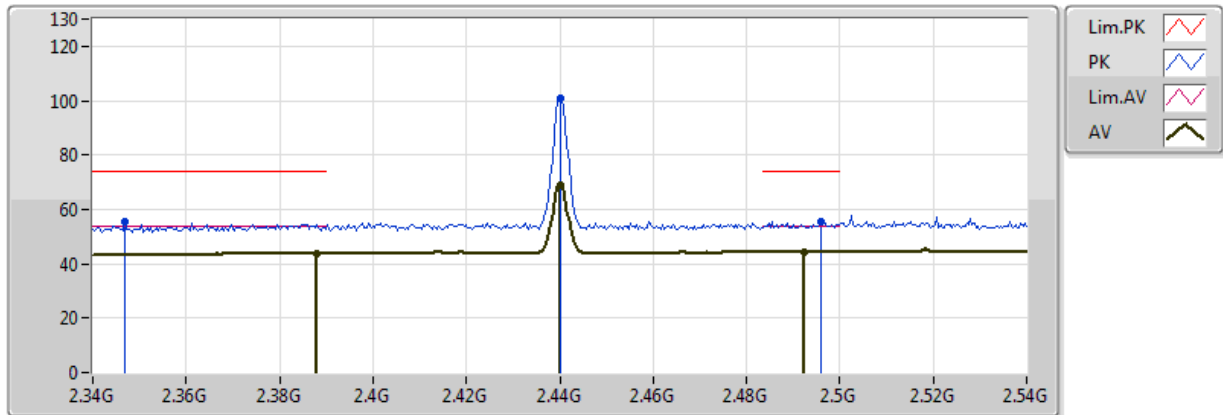


EUT=X

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3886G	43.79	54.00	-10.21	30.93	3	Horizontal	0	2.71	-	12.86	27.31	3.62	-
AV	2.4022G	68.05	Inf	-Inf	30.98	3	Horizontal	0	2.71	-	37.07	27.35	3.63	-
PK	2.3896G	54.79	74.00	-19.21	30.93	3	Horizontal	0	2.71	-	23.85	27.31	3.62	-
PK	2.4024G	98.38	Inf	-Inf	30.98	3	Horizontal	0	2.71	-	67.40	27.35	3.63	-

BT-EDR(3Mbps)

2440MHz_TX

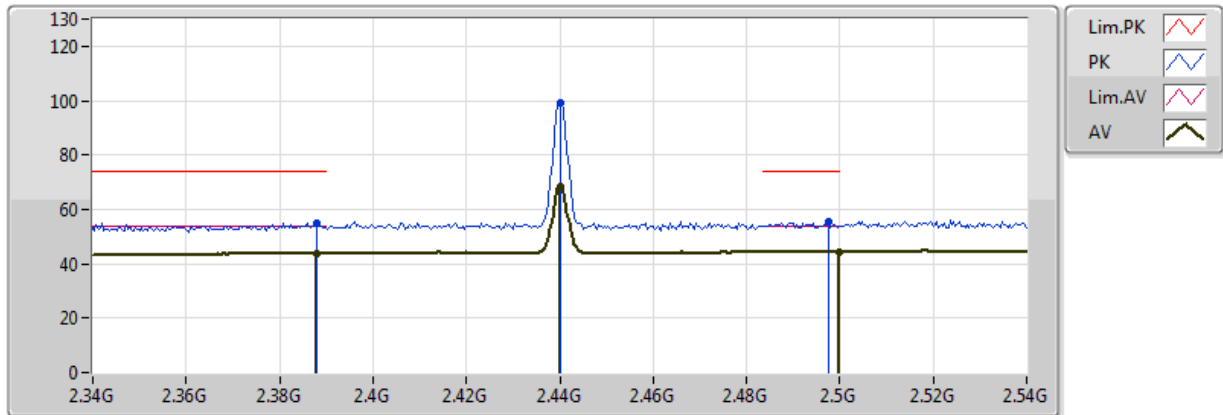


EUT=X

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.388G	43.81	54.00	-10.19	30.93	3	Vertical	12	2.09	-	12.88	27.31	3.62	-
AV	2.4924G	44.46	54.00	-9.54	31.30	3	Vertical	12	2.09	-	13.15	27.58	3.72	-
AV	2.44G	69.07	Inf	-Inf	31.11	3	Vertical	12	2.09	-	37.95	27.44	3.67	-
PK	2.3468G	55.22	74.00	-18.78	30.78	3	Vertical	12	2.09	-	24.44	27.20	3.58	-
PK	2.496G	55.35	74.00	-18.65	31.32	3	Vertical	12	2.09	-	24.03	27.59	3.73	-
PK	2.44G	100.71	Inf	-Inf	31.11	3	Vertical	12	2.09	-	69.59	27.44	3.67	-

BT-EDR(3Mbps)

2440MHz_TX

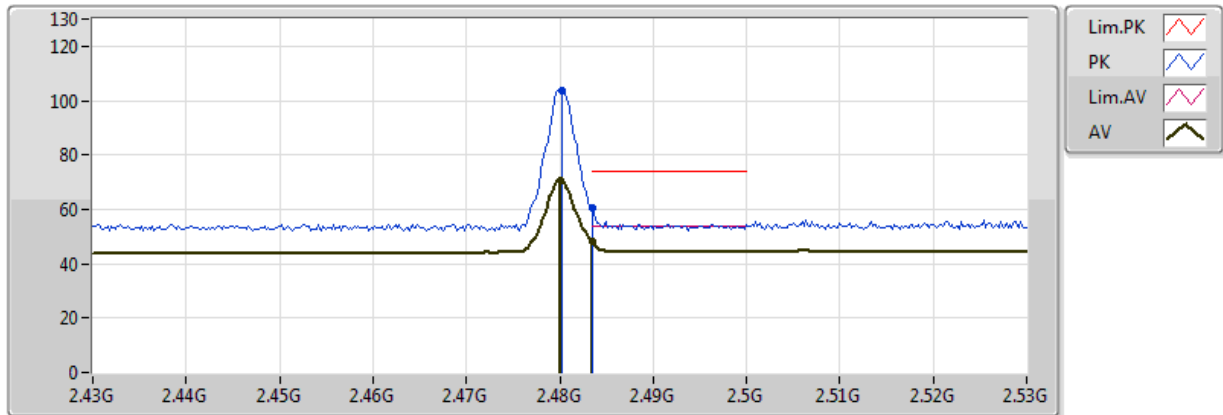


EUT=X

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.388G	43.81	54.00	-10.19	30.93	3	Horizontal	359	2.57	-	12.88	27.31	3.62	-
AV	2.5G	44.37	54.00	-9.63	31.33	3	Horizontal	359	2.57	-	13.04	27.60	3.73	-
AV	2.44G	68.16	Inf	-Inf	31.11	3	Horizontal	359	2.57	-	37.04	27.44	3.67	-
PK	2.388G	55.13	74.00	-18.87	30.93	3	Horizontal	359	2.57	-	24.20	27.31	3.62	-
PK	2.4976G	55.47	74.00	-18.53	31.32	3	Horizontal	359	2.57	-	24.15	27.59	3.73	-
PK	2.44G	99.06	Inf	-Inf	31.11	3	Horizontal	359	2.57	-	67.95	27.44	3.67	-

BT-EDR(3Mbps)

2480MHz_TX

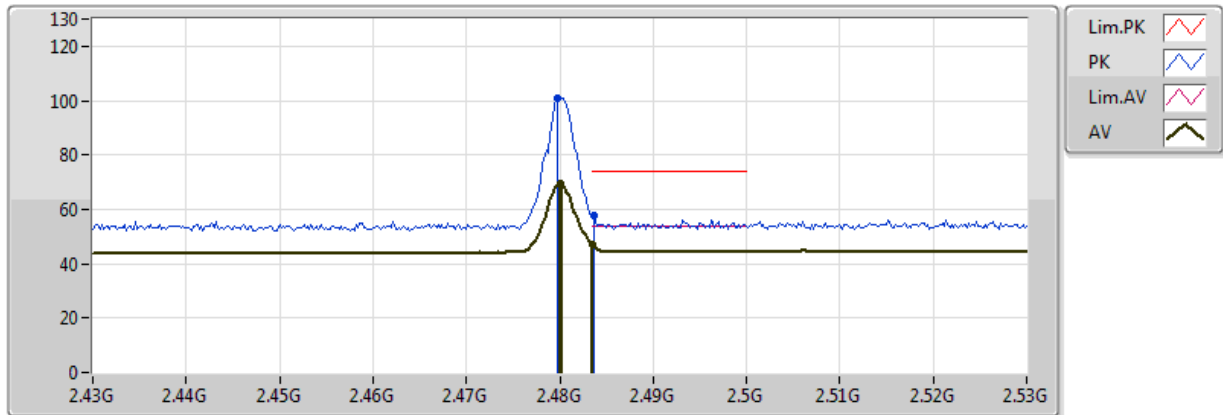


EUT=X

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.483502G	48.21	54.00	-5.79	31.27	3	Vertical	12	2.24	-	16.94	27.56	3.71	-
AV	2.48G	70.70	Inf	-Inf	31.26	3	Vertical	12	2.24	-	39.44	27.55	3.71	-
PK	2.483502G	60.74	74.00	-13.26	31.27	3	Vertical	12	2.24	-	29.47	27.56	3.71	-
PK	2.4802G	103.59	Inf	-Inf	31.26	3	Vertical	12	2.24	-	72.33	27.55	3.71	-

BT-EDR(3Mbps)

2480MHz_TX



EUT=X

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.483502G	47.07	54.00	-6.93	31.27	3	Horizontal	357	1.89	-	15.80	27.56	3.71	-
AV	2.48G	69.36	Inf	-Inf	31.26	3	Horizontal	357	1.89	-	38.10	27.55	3.71	-
PK	2.4836G	57.77	74.00	-16.23	31.27	3	Horizontal	357	1.89	-	26.50	27.56	3.71	-
PK	2.4798G	101.09	Inf	-Inf	31.26	3	Horizontal	357	1.89	-	69.83	27.55	3.71	-