

FCC Test Report

Equipment : Pen Tablet
Brand Name : Wacom
Model No. : CTL-6100WL
FCC ID : HV4CTL6100WL
Standard : 47 CFR FCC Part 15.247
Operating Band : 2400 MHz – 2483.5 MHz
Function : Point-to-multipoint; Point-to-point
Applicant /
Manufacturer : Wacom Co., Ltd.
2-510-1 Toyonodai, Kazo-shi, Saitama 349-1148 Japan

The product sample received on Nov. 16, 2017 and completely tested on Dec. 20, 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





Table of Contents

- 1 GENERAL DESCRIPTION5**
- 1.1 Information.....5
- 1.2 Testing Applied Standards6
- 1.3 Testing Location Information6
- 1.4 Measurement Uncertainty6
- 2 TEST CONFIGURATION OF EUT7**
- 2.1 Test Condition7
- 2.2 Test Channel Mode7
- 2.3 The Worst Case Measurement Configuration.....8
- 2.4 Accessories9
- 2.5 Support Equipment.....9
- 2.6 Test Setup Diagram10
- 3 TRANSMITTER TEST RESULT11**
- 3.1 AC Power-line Conducted Emissions11
- 3.2 20dB Bandwidth and Carrier Frequency Separation12
- 3.3 Maximum Conducted Output Power13
- 3.4 Number of Hopping Frequencies and Hopping Bandedge14
- 3.5 Time of Occupancy (Dwell Time)15
- 3.6 Emissions in Non-restricted Frequency Bands16
- 3.7 Emissions in Restricted Frequency Bands.....17
- 4 TEST EQUIPMENT AND CALIBRATION DATA20**

APPENDIX A. TEST RESULTS OF AC POWER-LINE CONDUCTED EMISSIONS

APPENDIX B. TEST RESULTS OF 20DB BANDWIDTH AND CARRIER FREQUENCY SEPARATION

APPENDIX C. TEST RESULTS OF MAXIMUM CONDUCTED OUTPUT POWER

APPENDIX D. TEST RESULTS OF NUMBER OF HOPPING FREQUENCIES AND HOPPING BANDEDGE

APPENDIX E. TEST RESULTS OF TIME OF OCCUPANCY (DWELL TIME)

APPENDIX F. TEST RESULTS OF EMISSIONS IN NON-RESTRICTED FREQUENCY BANDS

APPENDIX G. TEST RESULTS OF EMISSIONS IN RESTRICTED FREQUENCY BANDS

APPENDIX G. TEST PHOTOS

PHOTOGRAPHS OF EUT V01



Summary of Test Result

Conformance Test Specifications				
Report Clause	Ref. Std. Clause	Description	Limit	Result
1.1.2	15.203	Antenna Requirement	FCC 15.203	Complied
3.1	15.207	AC Power-line Conducted Emissions	FCC 15.207	Complied
3.2	15.247(a)	20dB Bandwidth	15.247(a)	Complied
3.2	15.247(a)	Carrier Frequency Separation	15.247(a)	Complied
3.3	15.247(b)	Maximum Conducted Output Power	15.247(b)	Complied
3.4	15.247(a)	Number of Hopping Frequencies and Hopping 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

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	Gain (dBi)
1	1	-	pcbmonoA2	PCB	I-PEX	0

1.1.3 EUT Information

Operational Condition	
EUT Power Type	From System USB Charger
Type of EUT	
<input checked="" type="checkbox"/>	Stand-alone
<input type="checkbox"/>	Combined (EUT where the radio part is fully integrated within another device)
	Combined Equipment - Brand Name / Model No.: ...
<input type="checkbox"/>	Plug-in radio (EUT intended for a variety of host systems)
	Host System - Brand Name / Model No.: ...
<input type="checkbox"/>	Other:

1.1.4 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
BT-BR(1Mbps)	0.794	1.002	2.924m	1k
BT-EDR(2Mbps)	0.783	1.062	2.931m	1k
BT-EDR(3Mbps)	0.795	0.996	2.933m	1k

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		
<input checked="" type="checkbox"/>	HWA YA	ADD : No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL : 886-3-327-3456 FAX : 886-3-327-0973
Test site Designation No. TW1190 with FCC.		
<input type="checkbox"/>	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	Gary	23.5°C / 65%	20/Dec/2017
Radiated	03CH02-HY	Lynus	23.5°C / 65.1%	28/Nov/2017
AC Conduction	CO04-HY	Thor	23.9°C / 64%	29/Nov/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 Version	Airoha.AB1122 ver 2.0.11.10812
-----------------------	--------------------------------

Mode	Power Setting
BT-BR(1Mbps)	-
2402MHz	47
2441MHz	47
2480MHz	47
BT-EDR(2Mbps)	-
2402MHz	default
2441MHz	default
2480MHz	default
BT-EDR(3Mbps)	-
2402MHz	default
2441MHz	default
2480MHz	default

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	USB 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	CTX		
1	USB Mode		
Operating Mode > 1GHz	CTX		
Orthogonal Planes of EUT	X Plane	Y Plane	Z Plane
			
Worst Planes of EUT		V	



2.4 Accessories

Accessories				
Battery	Brand Name	Wacom	Model Name	PR-234385G
	Manufacturer	TCL Hyperpower Batteries		
	Power Rating	3.8Vdc, 1260mAh	Type	Li-ion
Touch Pen	Brand Name	Wacom	Model Name	LP-1100
Micro USB Cable	Brand Name	Wacom	Model Name	STJ-A393
	signal line	1.5 meter, shielded cable, w/o ferrite core		

Note: Regarding to more detail and other information, please refer to user manual.

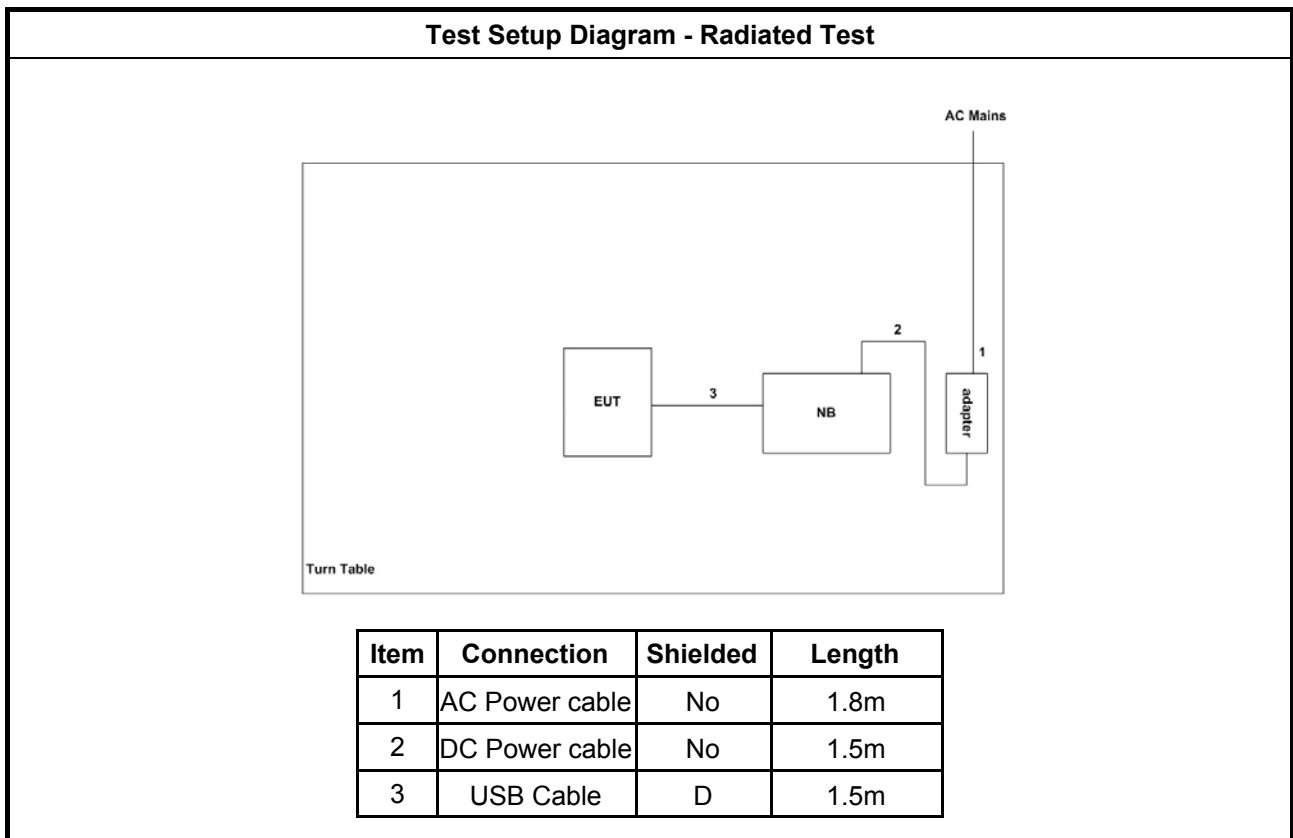
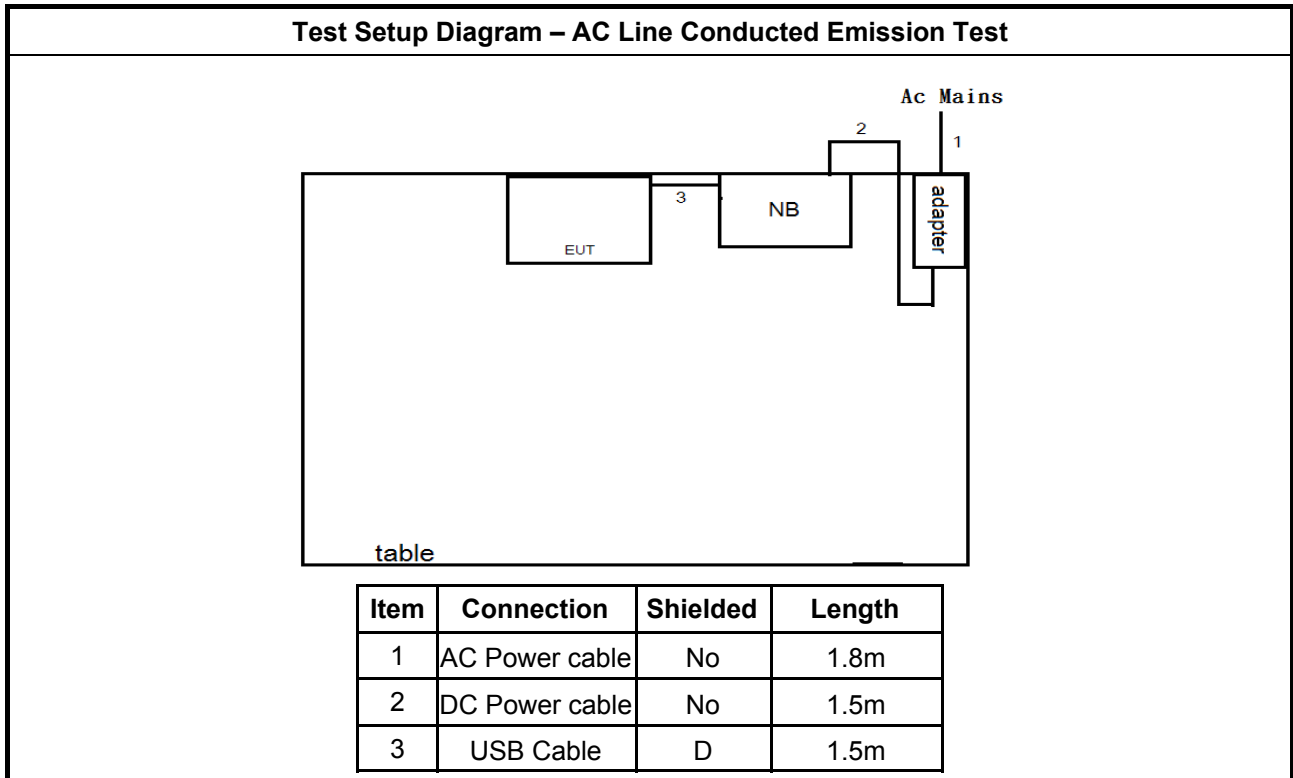
2.5 Support Equipment

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

Support Equipment – Radiated Emission				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook	DELL	E4300	DOC
2	Adapter for Notebook	DELL	LA65NS2-01	N/A

Support Equipment – AC Conduction				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook	DELL	E4300	DOC
2	Adapter for Notebook	DELL	LA65NS2-01	N/A

2.6 Test Setup Diagram



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	
<ul style="list-style-type: none"> 902-928 MHz Band: <ul style="list-style-type: none"> $N \geq 50$ 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. 	
<ul style="list-style-type: none"> 2400-2483.5 MHz Band: <ul style="list-style-type: none"> $N \geq 75$ 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). 	
<ul style="list-style-type: none"> 5725-5850 MHz Band: <ul style="list-style-type: none"> $N \geq 75$ and $ChS \geq \text{MAX}$ (20 dB bandwidth, 25 kHz); 20 dB bandwidth \leq 1 MHz. 	
<p>N:Number of Hopping Frequencies; ChS: Hopping Channel Separation</p>	

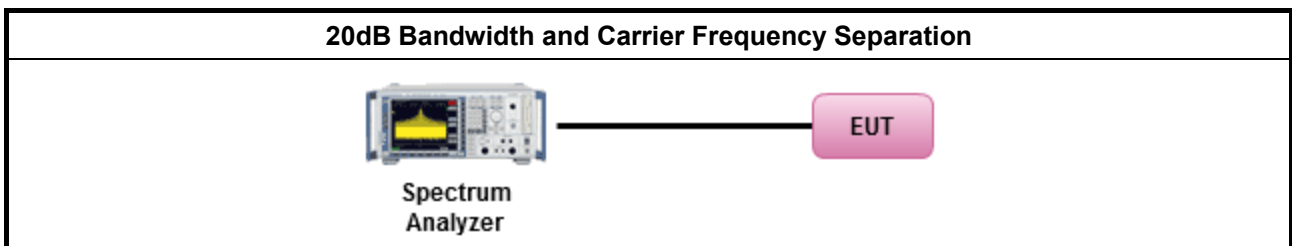
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method
<ul style="list-style-type: none"> Refer as ANSI C63.10-2013, clause 6.9.2 for 20 dB bandwidth measurement.
<ul style="list-style-type: none"> 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	
<ul style="list-style-type: none"> ▪ 902-928 MHz Band: 	
	<ul style="list-style-type: none"> ▪ $N \geq 50$; Power 30dBm; EIRP 36dBm
	<ul style="list-style-type: none"> ▪ $50 > N \geq 25$; Power 24dBm; EIRP 30dBm
<ul style="list-style-type: none"> ▪ 2400-2483.5 MHz Band: 	
	<ul style="list-style-type: none"> ▪ $N \geq 75$; Power 30dBm; EIRP 36dBm
	<ul style="list-style-type: none"> ▪ $75 > N \geq 15$; Power 21dBm; EIRP 27dBm
<ul style="list-style-type: none"> ▪ 5725-5850 MHz Band: 	
	<ul style="list-style-type: none"> ▪ $N \geq 75$; Power 30dBm; EIRP 36dBm
N: Number of Hopping Frequencies	

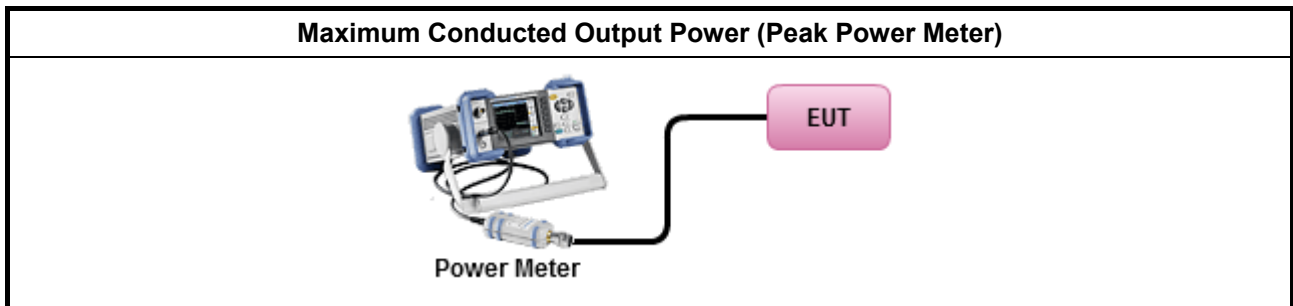
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method
<ul style="list-style-type: none"> ▪ 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

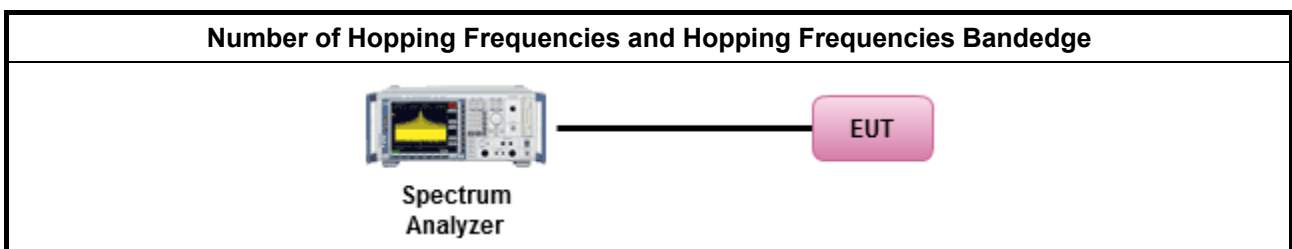
3.4.3 Measuring Instruments

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	
<ul style="list-style-type: none"> 902-928 MHz Band: 	
	<ul style="list-style-type: none"> N ≥ 50; 0.4s in 20s period
	<ul style="list-style-type: none"> 50 > N ≥ 25; 0.4s in 10s period
<ul style="list-style-type: none"> 2400-2483.5 MHz Band: 	
	<ul style="list-style-type: none"> N ≥ 75; 0.4s in N x 0.4 period
	<ul style="list-style-type: none"> 75 > N ≥ 15; 0.4s in N x 0.4 period
<ul style="list-style-type: none"> 5725-5850 MHz Band: 	
	<ul style="list-style-type: none"> N ≥ 75; 0.4s in 30s period
N: Number of Hopping Frequencies	

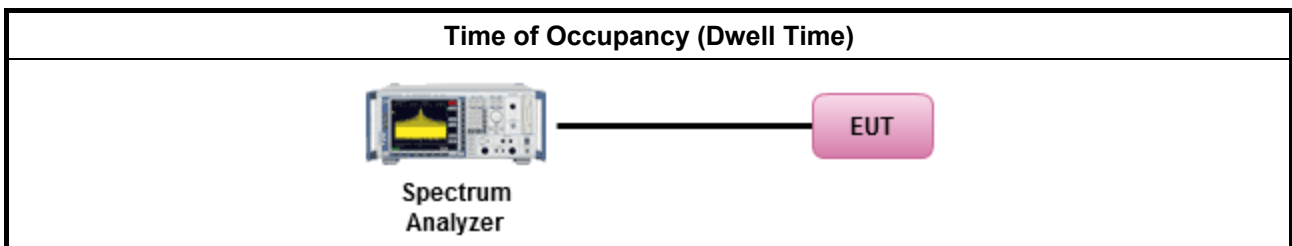
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> Refer as ANSI C63.10-2013, clause 7.8.4 for dwell time measurement. 	
<ul style="list-style-type: none"> 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. 	
	<ul style="list-style-type: none"> 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.	

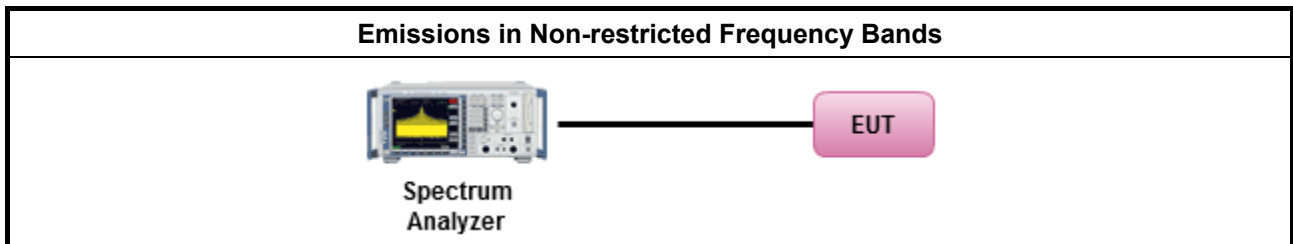
3.6.2 Measuring Instruments

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

3.6.3 Test Procedures

Test Method
<ul style="list-style-type: none"> Refer as ANSI C63.10-2013, clause 7.8.8 for unwanted emissions into non-restricted bands.

3.6.4 Test Setup



3.6.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix F

3.7 Emissions in Restricted Frequency Bands

3.7.1 Emissions in Restricted Frequency Bands Limit

Restricted Band Emissions Limit			
Frequency Range (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m)	Measure Distance (m)
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300
0.490~1.705	24000/F(kHz)	33.8 - 23	30
1.705~30.0	30	29	30
30~88	100	40	3
88~216	150	43.5	3
216~960	200	46	3
Above 960	500	54	3

Note 1: Test distance for frequencies at or above 30 MHz, measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

Note 2: Test distance for frequencies at below 30 MHz, measurements may be performed at a distance closer than the EUT limit distance; however, an attempt should be made to avoid making measurements in the near field. When performing measurements below 30 MHz at a closer distance than the limit distance, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two or more distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB / decade). The test report shall specify the extrapolation method used to determine compliance of the EUT.

Note 3: Using the distance of 1m during the test for above 18 GHz, and the test value to correct for the distance factor at 3m.

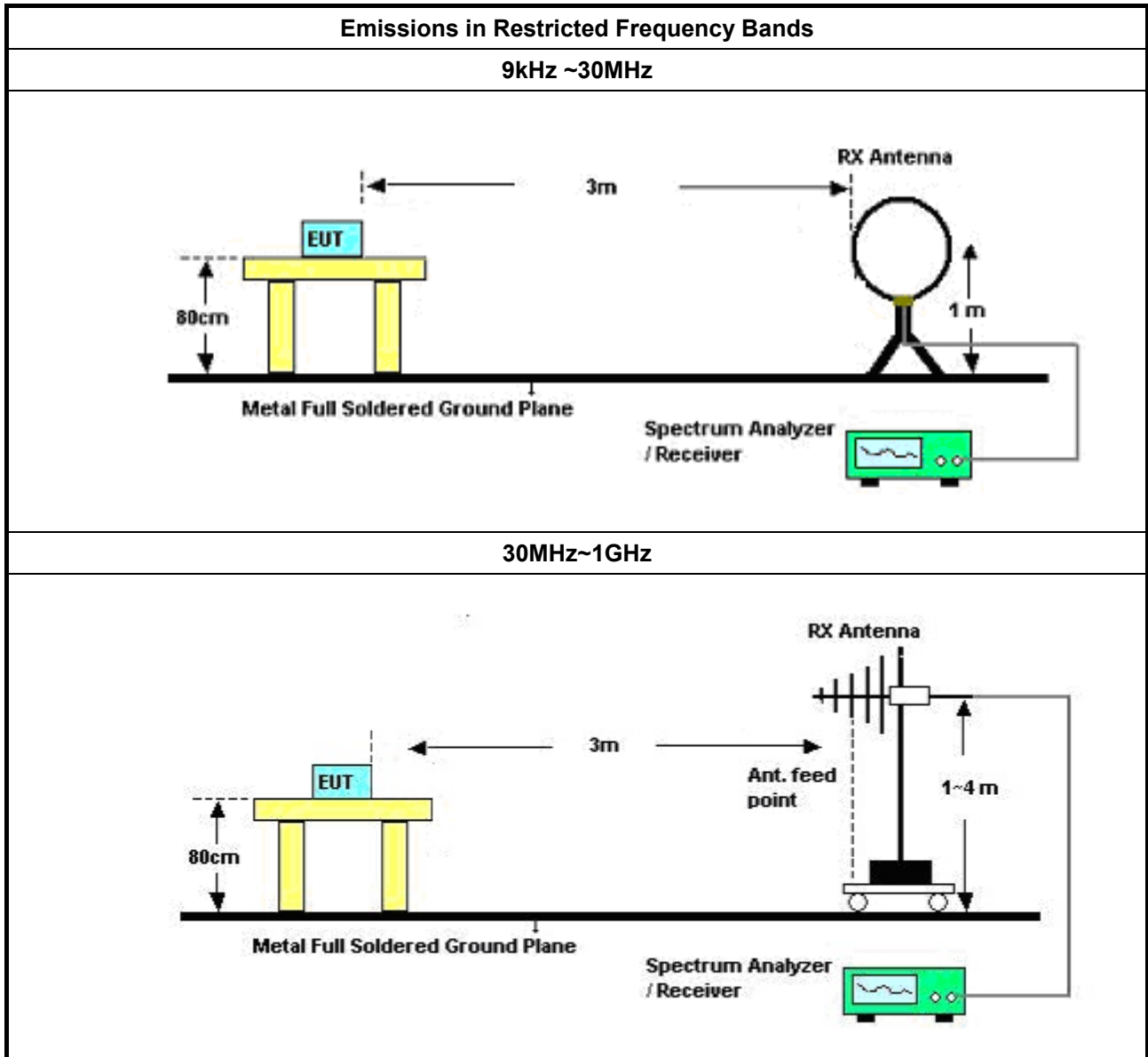
3.7.2 Measuring Instruments

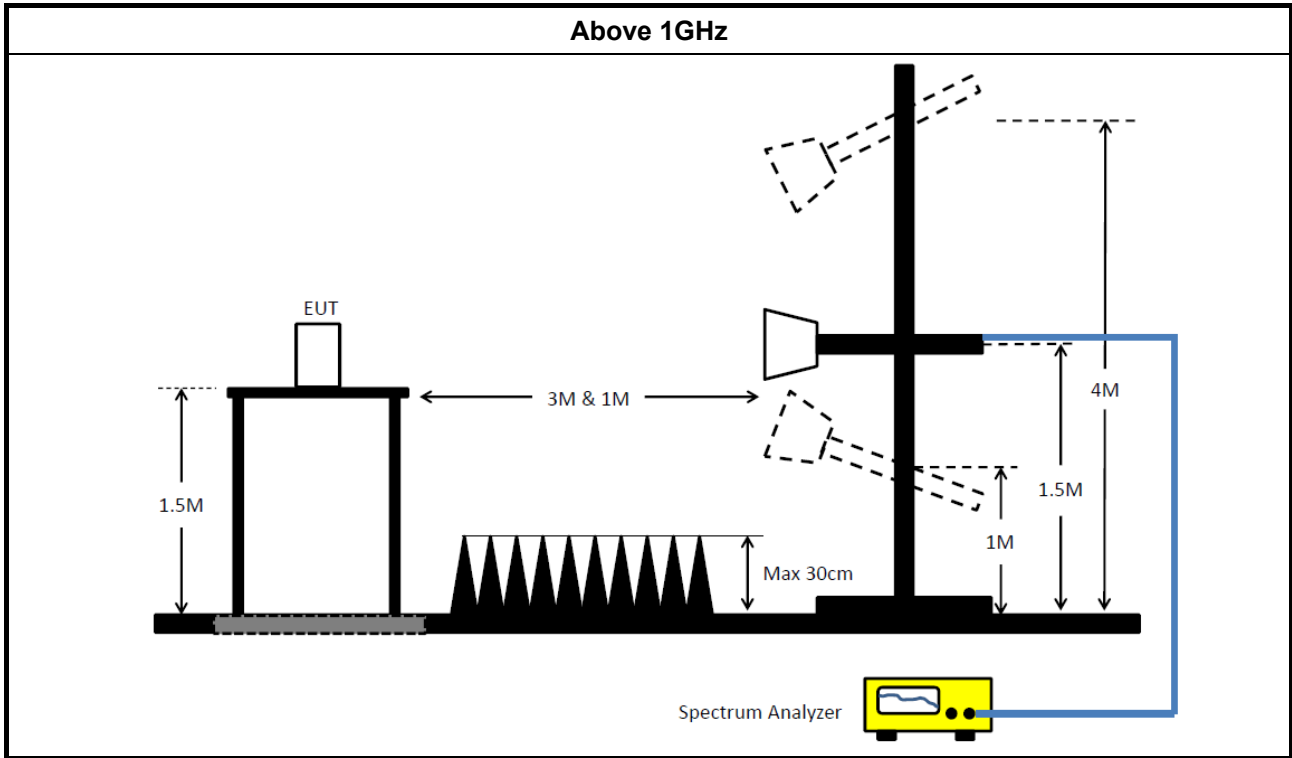
Refer a test equipment and calibration data table in this test report.

3.7.3 Test Procedures

Test Method	
	<ul style="list-style-type: none"> ▪ The average emission levels shall be measured in [hopping duty factor].
	<ul style="list-style-type: none"> ▪ 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.
	<ul style="list-style-type: none"> ▪ For the transmitter unwanted emissions shall be measured using following options below:
	<ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 4.1.4.2.1 QP value.
	<ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak.
	<ul style="list-style-type: none"> ▪ 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
RF Cable-CON	HUBER+SUHNER	RG213/U	07611832020001	9kHz ~ 30MHz	06/Oct/2017	05/Oct/2018
AC POWER	APC	AFC-11005G	F310050055	47Hz~63Hz 5~300V	NCR	NCR
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9 kHz ~ 30 MHz	12/Oct/2017	11/Oct/2018
LISN	R&S	ENV216	101295	9kHz ~ 30MHz	17/Nov/2017	16/Nov/2018

NCR : Non-Calibration Require

Instrument for Radiated Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30MHz ~ 1GHz 3m	27/Nov/2017	26/Nov/2018
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	1GHz ~ 18GHz 3m	27/Nov/2017	26/Nov/2018
Amplifier	HP	8447D	2944A08033	10kHz ~ 1.3GHz	19/Apr/2017	18/Apr/2018
Amplifier	Keysight	83017A	MY53270196	1GHz ~ 26.5GHz	31/Aug/2017	30/Aug/2018
Spectrum	R&S	FSV40	101500	9kHz ~ 40GHz	28/Jun/2017	27/Jun/2018
Receiver	R&S	ESR3	102052	9KHz ~ 3.6GHz	29/Apr/2017	28/Apr/2018
RF Cable-R03m	Jye Bao	RG142	CB021	9kHz ~ 1GHz	26/Jan/2017	25/Jan/2018
RF Cable-high	SUHNER	SUCOFLEX106	CB222	1GHz ~ 40GHz	26/Jan/2017	25/Jan/2018
Bilog Antenna	SCHAFFNER	CBL 6112B	22237	30MHz ~ 1GHz	08/Jul/2017	07/Jul/2018
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170154	18GHz ~ 40GHz	06/Feb/ 2017	05/Feb/2018
Horn Antenna	SCHWARZBECK	BBHA9120D	1531	1GHz ~ 18GHz	25/Apr/ 2017	24/Apr/2018
Loop Antenna	TESEQ	HLA 6120	31244	9 kHz~30 MHz	02/Mar/2017	01/Mar/2018



Instrument for Conducted Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSV 40	101013	10Hz~40GHz	30/Dec/2016	29/Dec/2017
Power Sensor	Anritsu	MA2411B	1027452	300MHz ~ 40GHz	24/Feb/2017	23/Feb/2018
Power Meter	Anritsu	ML2495A	1124009	300MHz ~ 40GHz	24/Feb/2017	23/Feb/2018
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	27/Jul/2017	26/Jul/2018
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY677/3	30MHz~26.5GHz	25/Aug/2017	24/Aug/2018
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY678/3	30MHz~26.5GHz	25/Aug/2017	24/Aug/2018
RF Cable-0.5m	HUBER+SUHNER	SUCOFLEX_104	MY10717/4	30MHz~26.5GHz	25/Aug/2017	24/Aug/2018



AC Power-line Conducted Emissions Result																																																																																																																																	
Operating Mode	1	Power Phase	Neutral																																																																																																																														
Operating Function	USB Mode																																																																																																																																
<div style="display: flex; justify-content: space-between;"> Level (dBuV) Date: 2017-11-29 </div> <p>The graph displays the AC power-line conducted emissions. The y-axis represents the level in dBuV, ranging from 0 to 80. The x-axis represents the frequency in MHz, ranging from 0.150.2 to 30. Two red lines indicate the applicable limits: NCC/IC/FCC-B (upper) and NCC/IC/FCC-B-AV (lower). A blue line shows the measured emission levels, with several peaks labeled 1 through 12. Peak 11 is the maximum value at 3.24 MHz.</p>																																																																																																																																	
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>Freq</th> <th>Level</th> <th>Over Limit</th> <th>Limit Line</th> <th>Read Level</th> <th>LISN Factor</th> <th>Cable Loss</th> <th>Remark</th> </tr> <tr> <th></th> <th>MHz</th> <th>dBuV</th> <th>dB</th> <th>dBuV</th> <th>dBuV</th> <th>dB</th> <th>dB</th> <th></th> </tr> </thead> <tbody> <tr><td>1</td><td>0.17</td><td>30.50</td><td>-24.53</td><td>55.03</td><td>20.85</td><td>9.63</td><td>0.02</td><td>Average</td></tr> <tr><td>2</td><td>0.17</td><td>43.10</td><td>-21.93</td><td>65.03</td><td>33.45</td><td>9.63</td><td>0.02</td><td>QP</td></tr> <tr><td>3</td><td>0.21</td><td>27.56</td><td>-25.71</td><td>53.27</td><td>17.93</td><td>9.62</td><td>0.01</td><td>Average</td></tr> <tr><td>4</td><td>0.21</td><td>38.80</td><td>-24.47</td><td>63.27</td><td>29.17</td><td>9.62</td><td>0.01</td><td>QP</td></tr> <tr><td>5</td><td>0.28</td><td>21.01</td><td>-29.71</td><td>50.72</td><td>11.35</td><td>9.61</td><td>0.05</td><td>Average</td></tr> <tr><td>6</td><td>0.28</td><td>30.94</td><td>-29.78</td><td>60.72</td><td>21.28</td><td>9.61</td><td>0.05</td><td>QP</td></tr> <tr><td>7</td><td>0.44</td><td>19.76</td><td>-27.26</td><td>47.02</td><td>10.06</td><td>9.61</td><td>0.09</td><td>Average</td></tr> <tr><td>8</td><td>0.44</td><td>27.96</td><td>-29.06</td><td>57.02</td><td>18.26</td><td>9.61</td><td>0.09</td><td>QP</td></tr> <tr><td>9</td><td>0.73</td><td>22.62</td><td>-23.38</td><td>46.00</td><td>12.97</td><td>9.62</td><td>0.03</td><td>Average</td></tr> <tr><td>10</td><td>0.73</td><td>30.64</td><td>-25.36</td><td>56.00</td><td>20.99</td><td>9.62</td><td>0.03</td><td>QP</td></tr> <tr><td>11 MAX</td><td>3.24</td><td>28.33</td><td>-17.67</td><td>46.00</td><td>18.63</td><td>9.64</td><td>0.06</td><td>Average</td></tr> <tr><td>12</td><td>3.24</td><td>34.59</td><td>-21.41</td><td>56.00</td><td>24.89</td><td>9.64</td><td>0.06</td><td>QP</td></tr> </tbody> </table>					Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark		MHz	dBuV	dB	dBuV	dBuV	dB	dB		1	0.17	30.50	-24.53	55.03	20.85	9.63	0.02	Average	2	0.17	43.10	-21.93	65.03	33.45	9.63	0.02	QP	3	0.21	27.56	-25.71	53.27	17.93	9.62	0.01	Average	4	0.21	38.80	-24.47	63.27	29.17	9.62	0.01	QP	5	0.28	21.01	-29.71	50.72	11.35	9.61	0.05	Average	6	0.28	30.94	-29.78	60.72	21.28	9.61	0.05	QP	7	0.44	19.76	-27.26	47.02	10.06	9.61	0.09	Average	8	0.44	27.96	-29.06	57.02	18.26	9.61	0.09	QP	9	0.73	22.62	-23.38	46.00	12.97	9.62	0.03	Average	10	0.73	30.64	-25.36	56.00	20.99	9.62	0.03	QP	11 MAX	3.24	28.33	-17.67	46.00	18.63	9.64	0.06	Average	12	3.24	34.59	-21.41	56.00	24.89	9.64	0.06	QP
	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark																																																																																																																									
	MHz	dBuV	dB	dBuV	dBuV	dB	dB																																																																																																																										
1	0.17	30.50	-24.53	55.03	20.85	9.63	0.02	Average																																																																																																																									
2	0.17	43.10	-21.93	65.03	33.45	9.63	0.02	QP																																																																																																																									
3	0.21	27.56	-25.71	53.27	17.93	9.62	0.01	Average																																																																																																																									
4	0.21	38.80	-24.47	63.27	29.17	9.62	0.01	QP																																																																																																																									
5	0.28	21.01	-29.71	50.72	11.35	9.61	0.05	Average																																																																																																																									
6	0.28	30.94	-29.78	60.72	21.28	9.61	0.05	QP																																																																																																																									
7	0.44	19.76	-27.26	47.02	10.06	9.61	0.09	Average																																																																																																																									
8	0.44	27.96	-29.06	57.02	18.26	9.61	0.09	QP																																																																																																																									
9	0.73	22.62	-23.38	46.00	12.97	9.62	0.03	Average																																																																																																																									
10	0.73	30.64	-25.36	56.00	20.99	9.62	0.03	QP																																																																																																																									
11 MAX	3.24	28.33	-17.67	46.00	18.63	9.64	0.06	Average																																																																																																																									
12	3.24	34.59	-21.41	56.00	24.89	9.64	0.06	QP																																																																																																																									
<p>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.)</p>																																																																																																																																	



AC Power-line Conducted Emissions Result																																																																																																																																	
Operating Mode	1	Power Phase	Line																																																																																																																														
Operating Function	USB Mode																																																																																																																																
<div style="display: flex; justify-content: space-between;"> <div> </div> <div style="text-align: right;">Date: 2017-11-29</div> </div>																																																																																																																																	
<table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th></th> <th>Freq</th> <th>Level</th> <th>Over Limit</th> <th>Limit Line</th> <th>Read Level</th> <th>LISN Factor</th> <th>Cable Loss</th> <th>Remark</th> </tr> <tr> <th></th> <th>MHz</th> <th>dBuV</th> <th>dB</th> <th>dBuV</th> <th>dBuV</th> <th>dB</th> <th>dB</th> <th></th> </tr> </thead> <tbody> <tr><td>1</td><td>0.16</td><td>29.29</td><td>-26.36</td><td>55.65</td><td>19.63</td><td>9.62</td><td>0.04</td><td>Average</td></tr> <tr><td>2</td><td>0.16</td><td>44.52</td><td>-21.13</td><td>65.65</td><td>34.86</td><td>9.62</td><td>0.04</td><td>QP</td></tr> <tr><td>3</td><td>0.19</td><td>24.00</td><td>-30.15</td><td>54.15</td><td>14.37</td><td>9.62</td><td>0.01</td><td>Average</td></tr> <tr><td>4</td><td>0.19</td><td>43.61</td><td>-20.54</td><td>64.15</td><td>33.98</td><td>9.62</td><td>0.01</td><td>QP</td></tr> <tr><td>5</td><td>0.25</td><td>19.22</td><td>-32.38</td><td>51.60</td><td>9.57</td><td>9.62</td><td>0.03</td><td>Average</td></tr> <tr><td>6</td><td>0.25</td><td>35.33</td><td>-26.27</td><td>61.60</td><td>25.68</td><td>9.62</td><td>0.03</td><td>QP</td></tr> <tr><td>7</td><td>0.75</td><td>24.31</td><td>-21.69</td><td>46.00</td><td>14.67</td><td>9.61</td><td>0.03</td><td>Average</td></tr> <tr><td>8</td><td>0.75</td><td>37.76</td><td>-18.24</td><td>56.00</td><td>28.12</td><td>9.61</td><td>0.03</td><td>QP</td></tr> <tr style="border: 2px solid black;"><td>9 MAX</td><td>3.07</td><td>28.96</td><td>-17.04</td><td>46.00</td><td>19.28</td><td>9.63</td><td>0.05</td><td>Average</td></tr> <tr><td>10</td><td>3.07</td><td>34.96</td><td>-21.04</td><td>56.00</td><td>25.28</td><td>9.63</td><td>0.05</td><td>QP</td></tr> <tr><td>11</td><td>13.62</td><td>24.83</td><td>-25.17</td><td>50.00</td><td>15.14</td><td>9.64</td><td>0.05</td><td>Average</td></tr> <tr><td>12</td><td>13.62</td><td>30.41</td><td>-29.59</td><td>60.00</td><td>20.72</td><td>9.64</td><td>0.05</td><td>QP</td></tr> </tbody> </table>					Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark		MHz	dBuV	dB	dBuV	dBuV	dB	dB		1	0.16	29.29	-26.36	55.65	19.63	9.62	0.04	Average	2	0.16	44.52	-21.13	65.65	34.86	9.62	0.04	QP	3	0.19	24.00	-30.15	54.15	14.37	9.62	0.01	Average	4	0.19	43.61	-20.54	64.15	33.98	9.62	0.01	QP	5	0.25	19.22	-32.38	51.60	9.57	9.62	0.03	Average	6	0.25	35.33	-26.27	61.60	25.68	9.62	0.03	QP	7	0.75	24.31	-21.69	46.00	14.67	9.61	0.03	Average	8	0.75	37.76	-18.24	56.00	28.12	9.61	0.03	QP	9 MAX	3.07	28.96	-17.04	46.00	19.28	9.63	0.05	Average	10	3.07	34.96	-21.04	56.00	25.28	9.63	0.05	QP	11	13.62	24.83	-25.17	50.00	15.14	9.64	0.05	Average	12	13.62	30.41	-29.59	60.00	20.72	9.64	0.05	QP
	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark																																																																																																																									
	MHz	dBuV	dB	dBuV	dBuV	dB	dB																																																																																																																										
1	0.16	29.29	-26.36	55.65	19.63	9.62	0.04	Average																																																																																																																									
2	0.16	44.52	-21.13	65.65	34.86	9.62	0.04	QP																																																																																																																									
3	0.19	24.00	-30.15	54.15	14.37	9.62	0.01	Average																																																																																																																									
4	0.19	43.61	-20.54	64.15	33.98	9.62	0.01	QP																																																																																																																									
5	0.25	19.22	-32.38	51.60	9.57	9.62	0.03	Average																																																																																																																									
6	0.25	35.33	-26.27	61.60	25.68	9.62	0.03	QP																																																																																																																									
7	0.75	24.31	-21.69	46.00	14.67	9.61	0.03	Average																																																																																																																									
8	0.75	37.76	-18.24	56.00	28.12	9.61	0.03	QP																																																																																																																									
9 MAX	3.07	28.96	-17.04	46.00	19.28	9.63	0.05	Average																																																																																																																									
10	3.07	34.96	-21.04	56.00	25.28	9.63	0.05	QP																																																																																																																									
11	13.62	24.83	-25.17	50.00	15.14	9.64	0.05	Average																																																																																																																									
12	13.62	30.41	-29.59	60.00	20.72	9.64	0.05	QP																																																																																																																									
<p>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.)</p>																																																																																																																																	



Summary

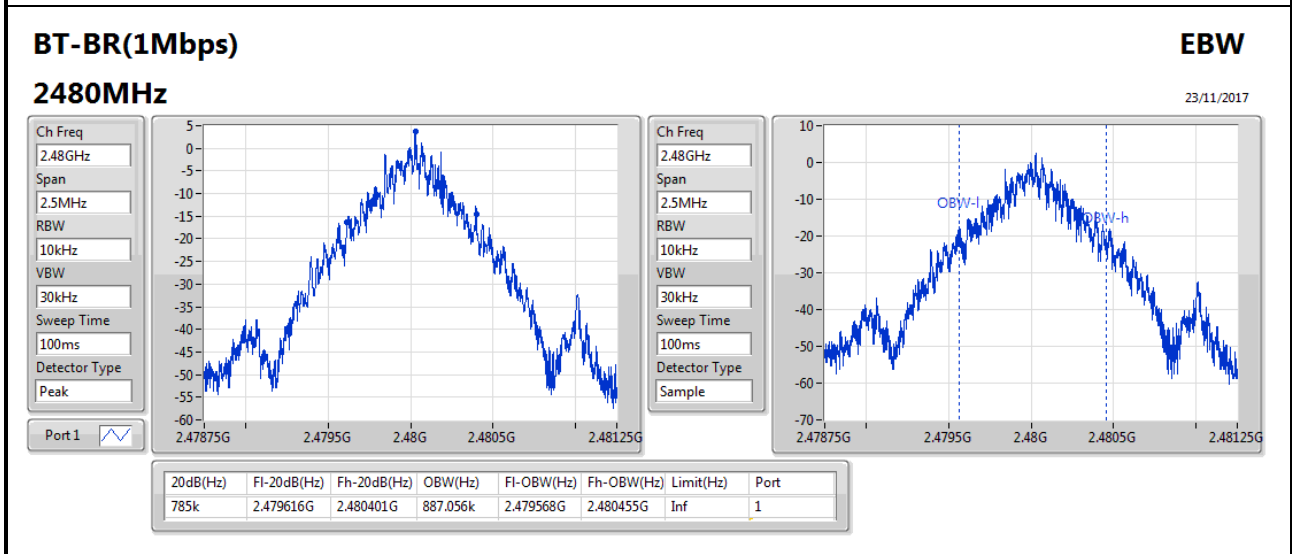
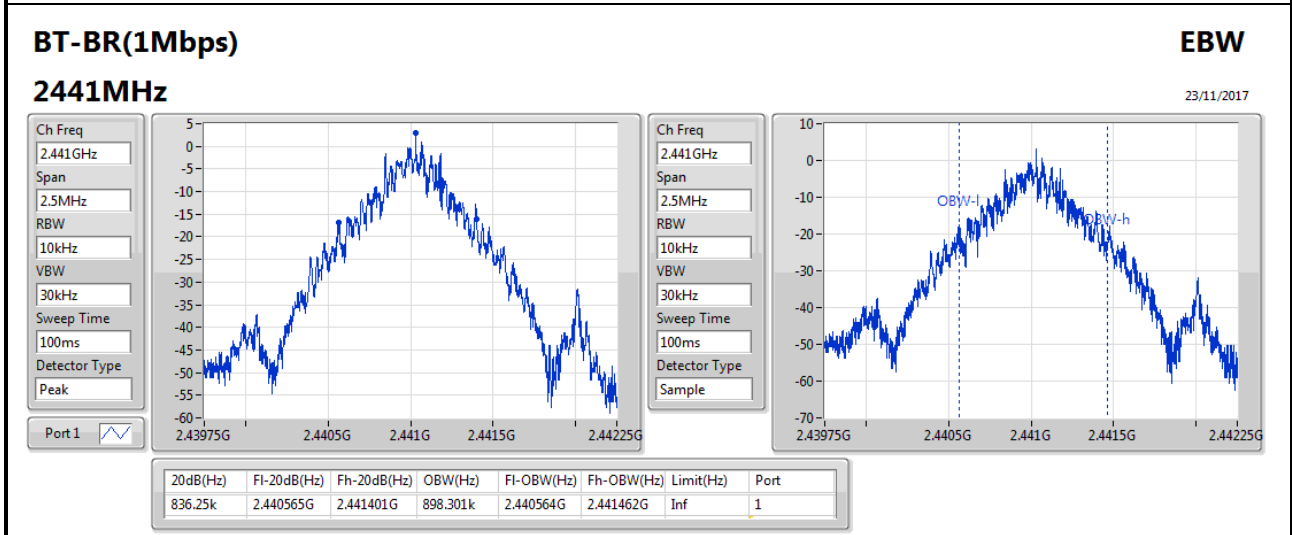
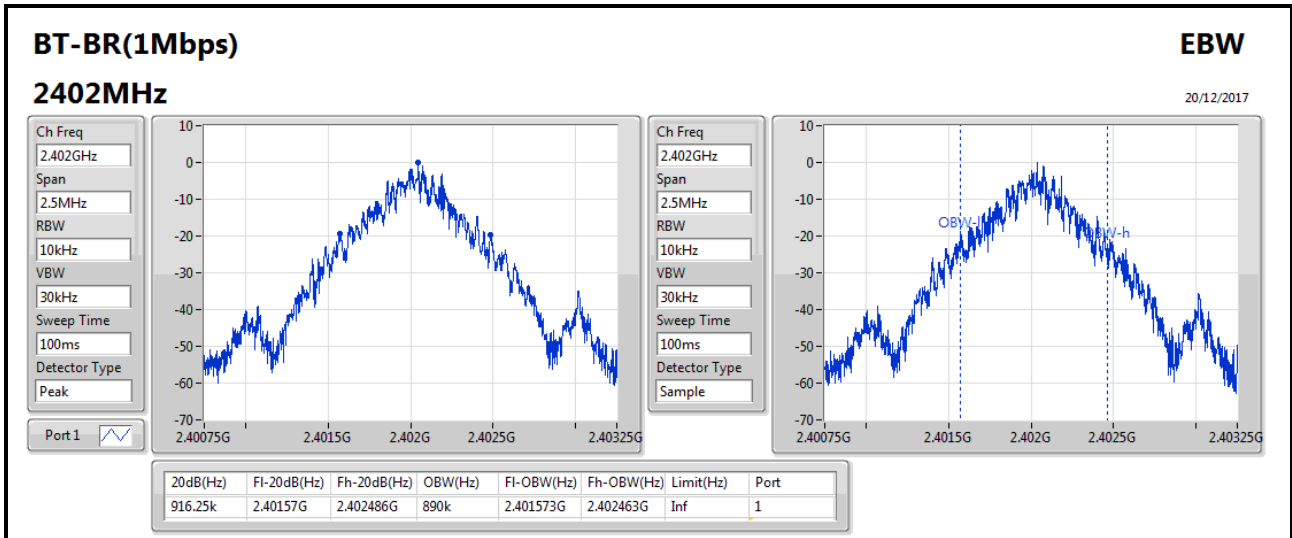
Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
BT-BR(1Mbps)	916.25k	898.301k	898KF1D	785k	887.056k
BT-EDR(2Mbps)	1.201M	1.213M	1M21G1D	1.196M	1.191M
BT-EDR(3Mbps)	1.239M	1.211M	1M21G1D	1.229M	1.201M

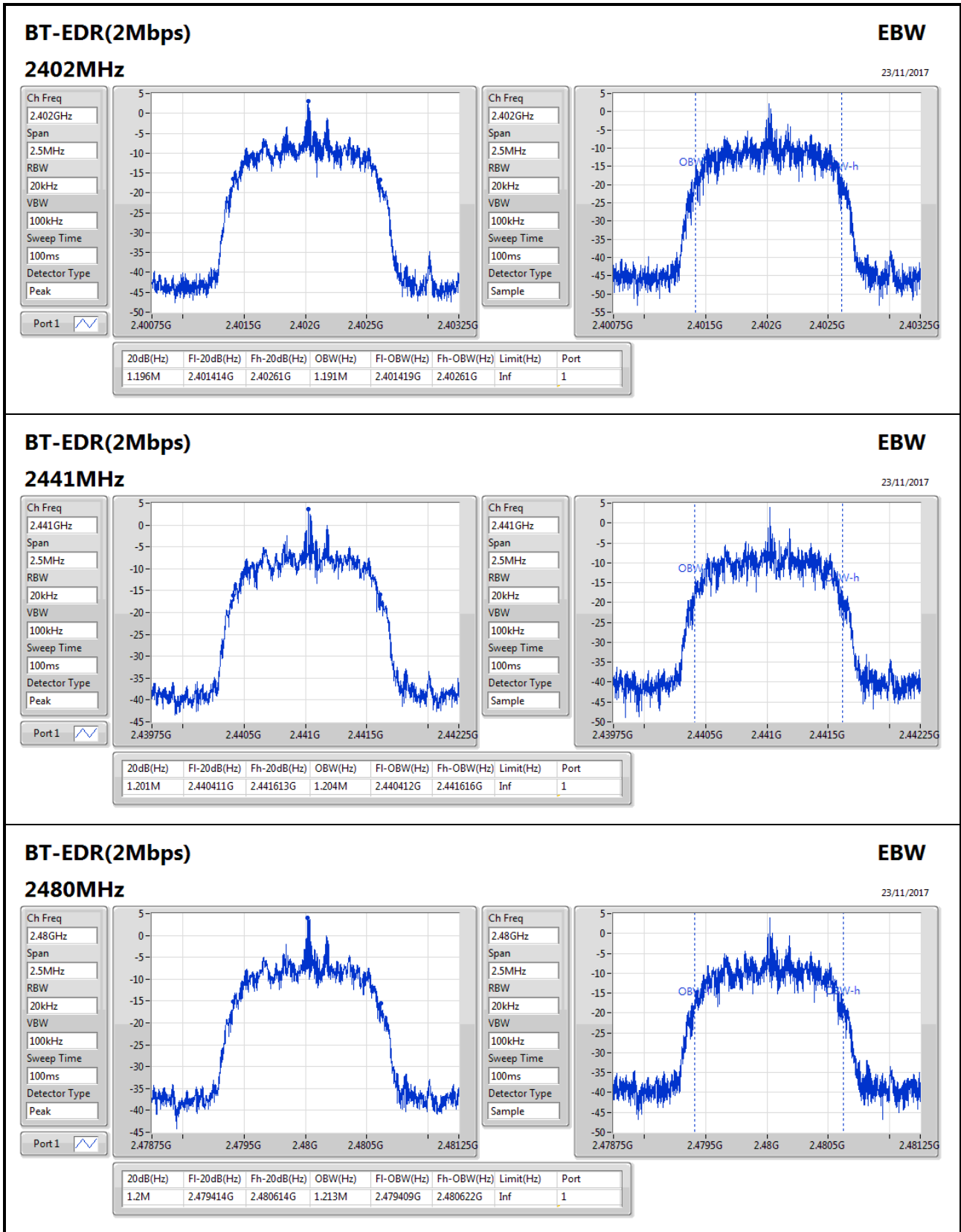
Max-N dB = Maximum 20dB down bandwidth; **Max-OBW** = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 20dB down bandwidth; **Min-OBW** = Minimum 99% occupied bandwidth;

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	Inf	916.25k	890k
2441MHz	Pass	Inf	836.25k	898.301k
2480MHz	Pass	Inf	785k	887.056k
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	Inf	1.196M	1.191M
2441MHz	Pass	Inf	1.201M	1.204M
2480MHz	Pass	Inf	1.2M	1.213M
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	Inf	1.229M	1.201M
2441MHz	Pass	Inf	1.239M	1.209M
2480MHz	Pass	Inf	1.235M	1.211M

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




BT-EDR(2Mbps)
EBW

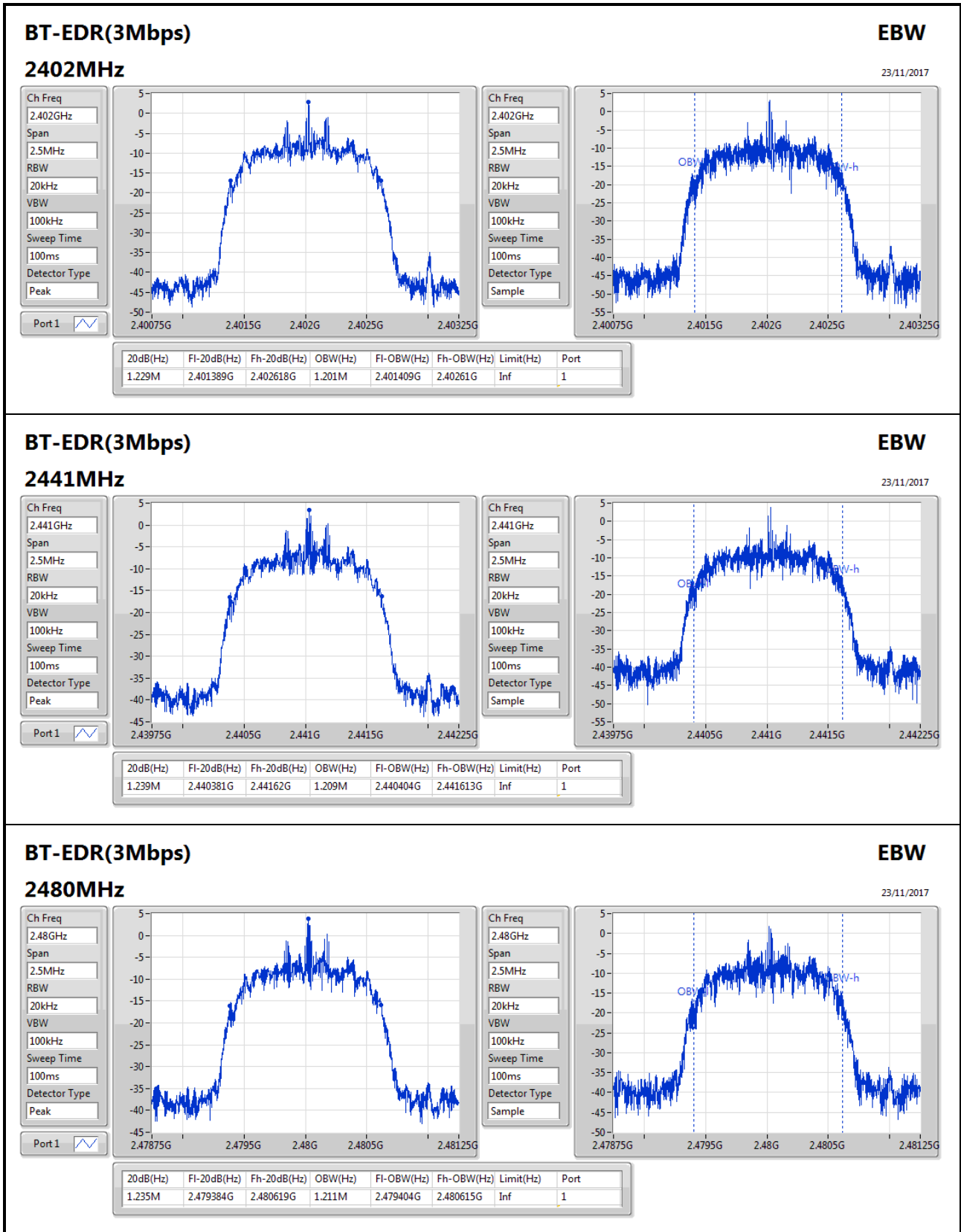
23/11/2017

2480MHz

Ch Freq: 2.48GHz
Span: 2.5MHz
RBW: 20kHz
VBW: 100kHz
Sweep Time: 100ms
Detector Type: Peak

Port 1

Ch Freq: 2.48GHz
Span: 2.5MHz
RBW: 20kHz
VBW: 100kHz
Sweep Time: 100ms
Detector Type: Sample


BT-EDR(3Mbps)
EBW

23/11/2017

2480MHz

Ch Freq: 2.48GHz
Span: 2.5MHz
RBW: 20kHz
VBW: 100kHz
Sweep Time: 100ms
Detector Type: Peak

Port 1

Ch Freq: 2.48GHz
Span: 2.5MHz
RBW: 20kHz
VBW: 100kHz
Sweep Time: 100ms
Detector Type: Sample

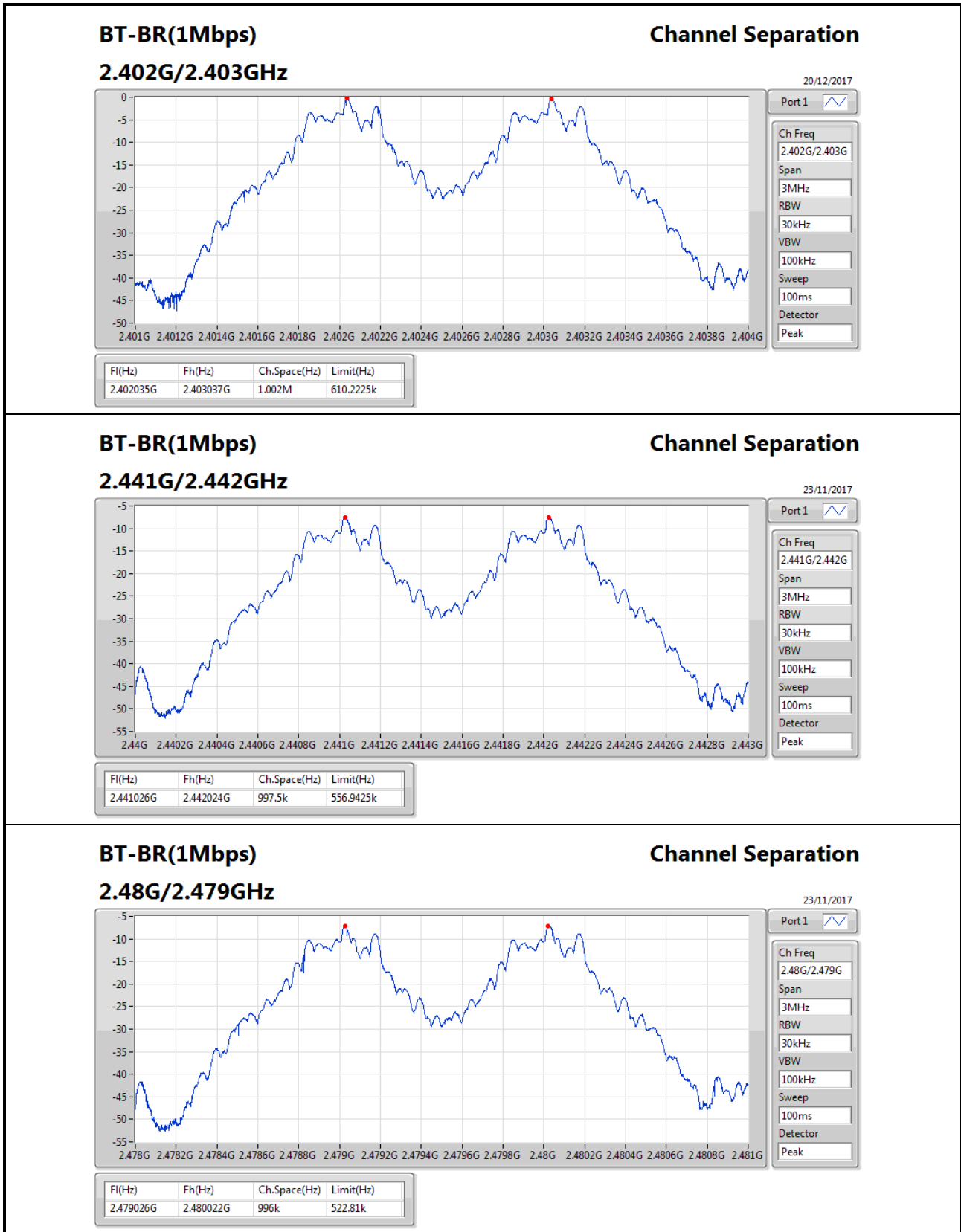


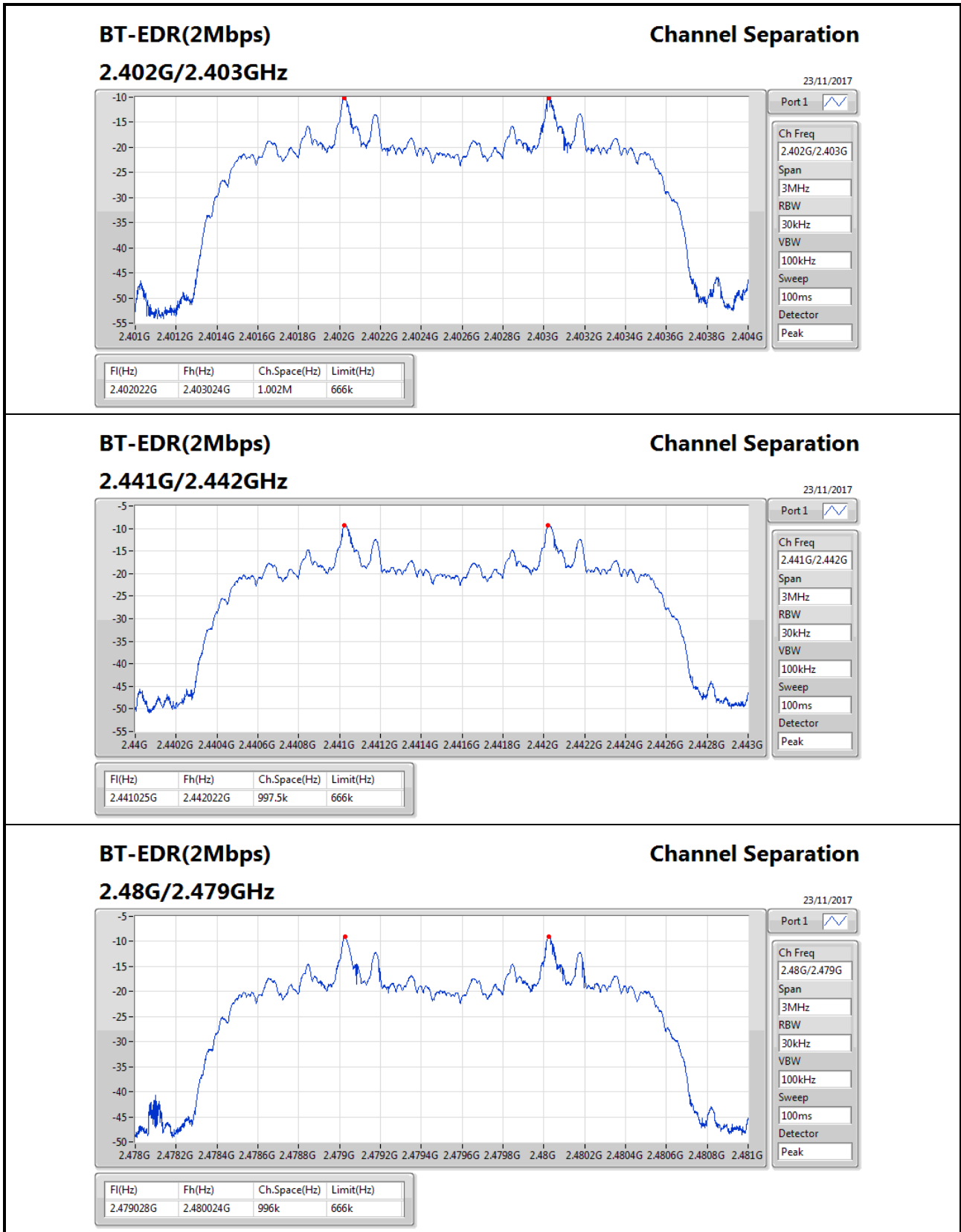
Summary

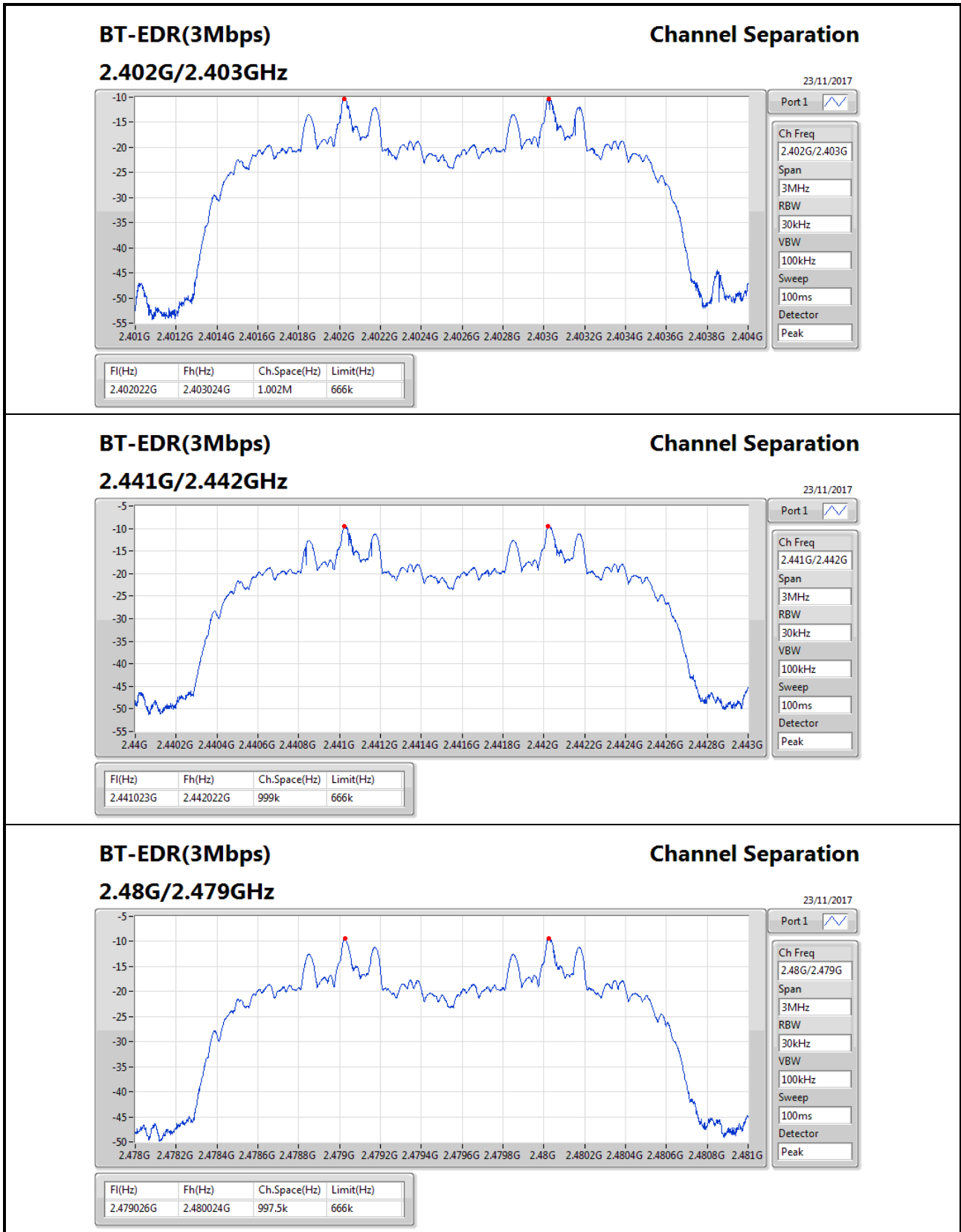
Mode	Max-Space (Hz)	Min-Space (Hz)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	1.002M	996k
BT-EDR(2Mbps)	1.002M	996k
BT-EDR(3Mbps)	1.002M	997.5k

Result

Mode	Result	Fl (Hz)	Fh (Hz)	Ch.Space (Hz)	Limit (Hz)
BT-BR(1Mbps)	-	-	-	-	-
2402MHz	Pass	2.402035G	2.403037G	1.002M	610.2225k
2441MHz	Pass	2.441026G	2.442024G	997.5k	556.9425k
2480MHz	Pass	2.479026G	2.480022G	996k	522.81k
BT-EDR(2Mbps)	-	-	-	-	-
2402MHz	Pass	2.402022G	2.403024G	1.002M	666k
2441MHz	Pass	2.441025G	2.442022G	997.5k	666k
2480MHz	Pass	2.479028G	2.480024G	996k	666k
BT-EDR(3Mbps)	-	-	-	-	-
2402MHz	Pass	2.402022G	2.403024G	1.002M	666k
2441MHz	Pass	2.441023G	2.442022G	999k	666k
2480MHz	Pass	2.479026G	2.480024G	997.5k	666k









Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	5.88	0.00387
BT-EDR(2Mbps)	5.64	0.00366
BT-EDR(3Mbps)	5.79	0.00379

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	0.00	5.24	21.00
2441MHz	Pass	0.00	5.88	21.00
2480MHz	Pass	0.00	5.85	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	0.00	4.99	21.00
2441MHz	Pass	0.00	5.64	21.00
2480MHz	Pass	0.00	5.61	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	0.00	5.18	21.00
2441MHz	Pass	0.00	5.79	21.00
2480MHz	Pass	0.00	5.76	21.00



Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	5.69	0.00371
BT-EDR(2Mbps)	3.30	0.00214
BT-EDR(3Mbps)	3.20	0.00209

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	0.00	5.00	21.00
2441MHz	Pass	0.00	5.69	21.00
2480MHz	Pass	0.00	5.57	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	0.00	2.04	21.00
2441MHz	Pass	0.00	3.08	21.00
2480MHz	Pass	0.00	3.30	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	0.00	2.02	21.00
2441MHz	Pass	0.00	3.00	21.00
2480MHz	Pass	0.00	3.20	21.00

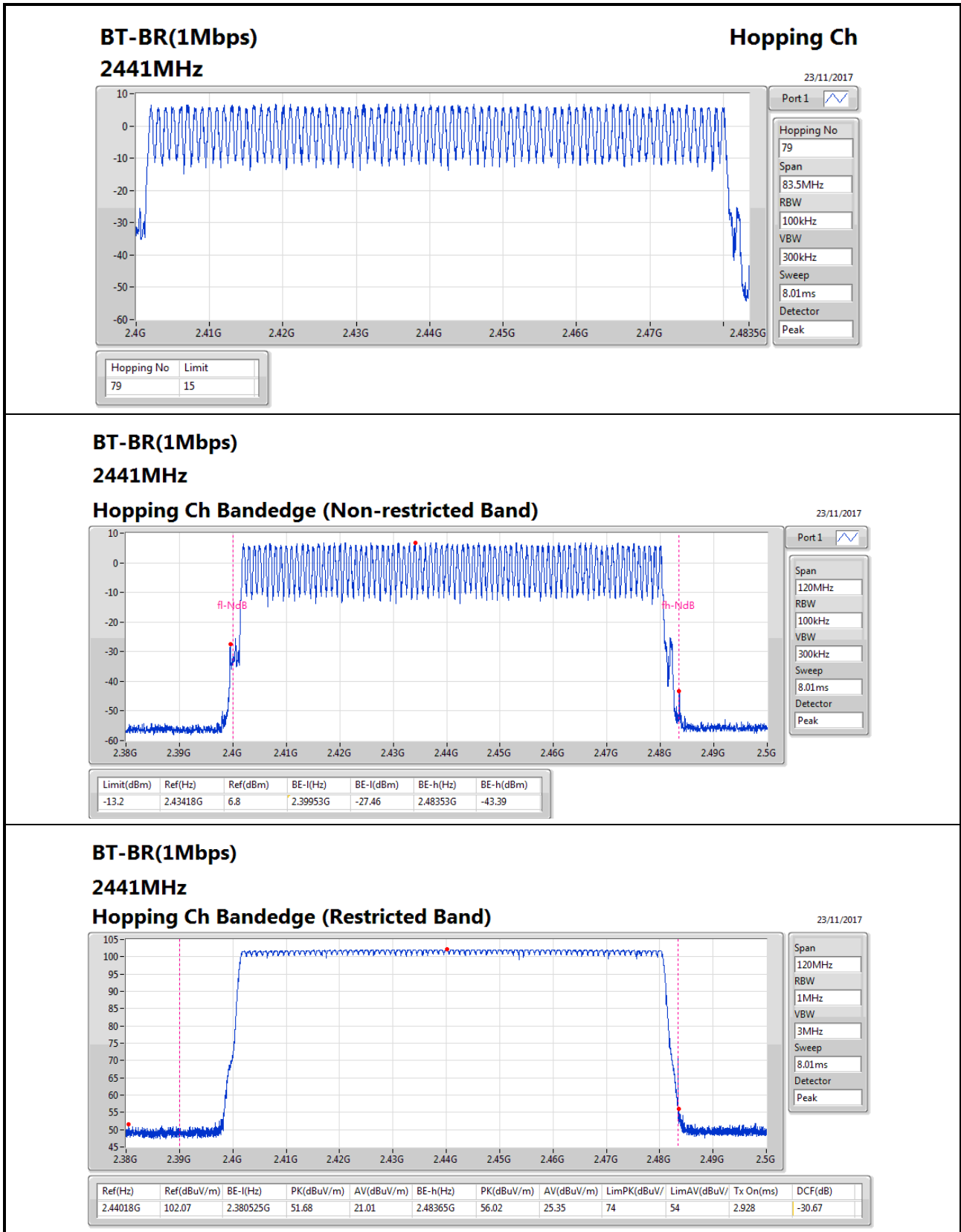


Summary

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)	-	-	-
2441MHz	Pass	79	15
BT-EDR(2Mbps)	-	-	-
2441MHz	Pass	79	15
BT-EDR(3Mbps)	-	-	-
2441MHz	Pass	79	15



BT-BR(1Mbps)

2441MHz

Hopping Ch Bandedge (Restricted Band)

23/11/2017

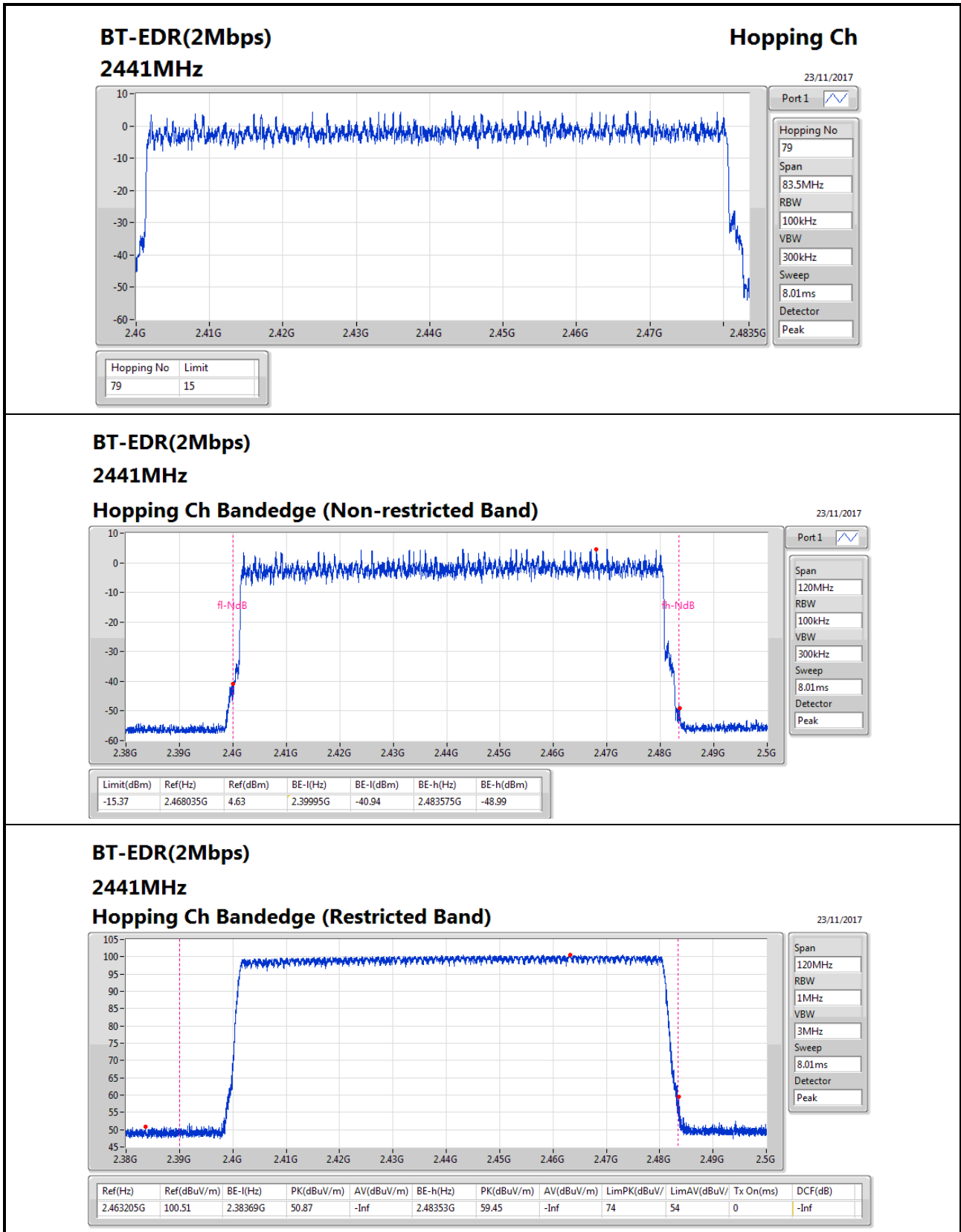
Span: 120MHz

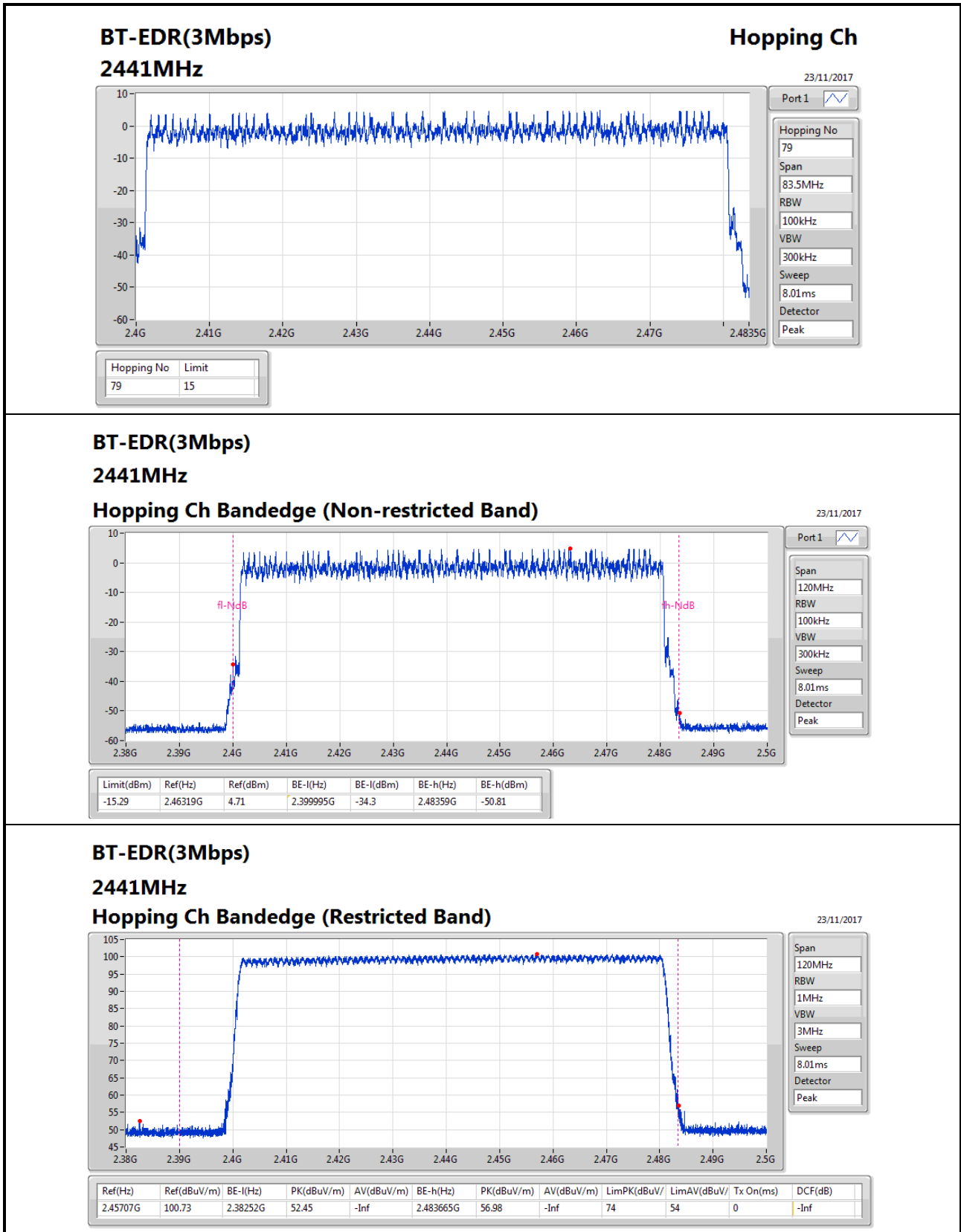
RBW: 1MHz

VBW: 3MHz

Sweep: 8.01ms

Detector: Peak





BT-EDR(3Mbps)

2441MHz

Hopping Ch Bandedge (Restricted Band)

23/11/2017

Span: 120MHz

RBW: 1MHz

VBW: 3MHz

Sweep: 8.01ms

Detector: Peak

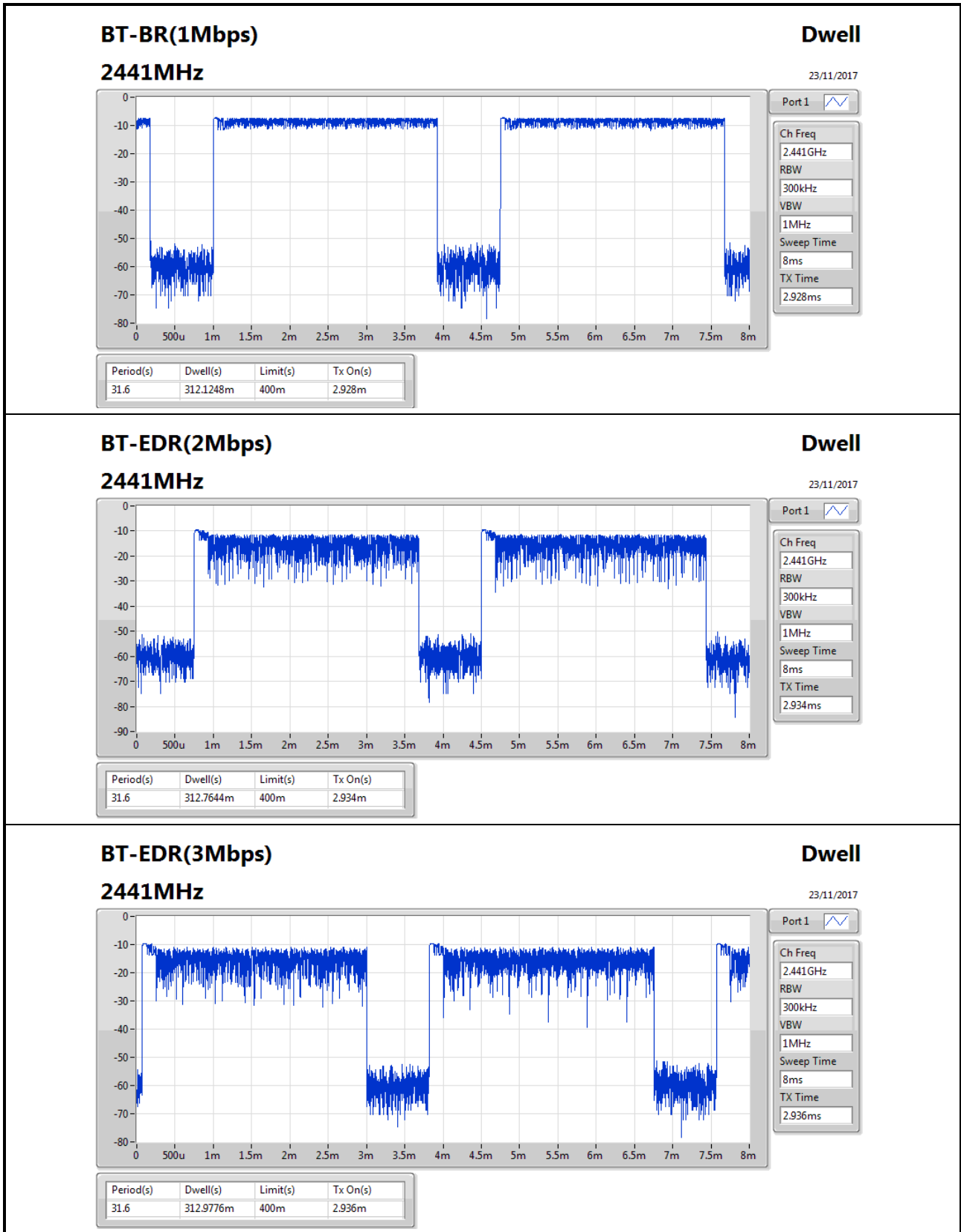


Summary

Mode	Max-Dwell (s)
2.4-2.4835GHz	-
BT-BR(1Mbps)	312.1248m
BT-EDR(2Mbps)	312.7644m
BT-EDR(3Mbps)	312.9776m

Result

Mode	Result	Period (s)	Dwell (s)	Limit (s)	Tx On (s)
BT-BR(1Mbps)	-	-	-	-	-
2441MHz	Pass	31.6	312.1248m	400m	2.928m
BT-EDR(2Mbps)	-	-	-	-	-
2441MHz	Pass	31.6	312.7644m	400m	2.934m
BT-EDR(3Mbps)	-	-	-	-	-
2441MHz	Pass	31.6	312.9776m	400m	2.936m



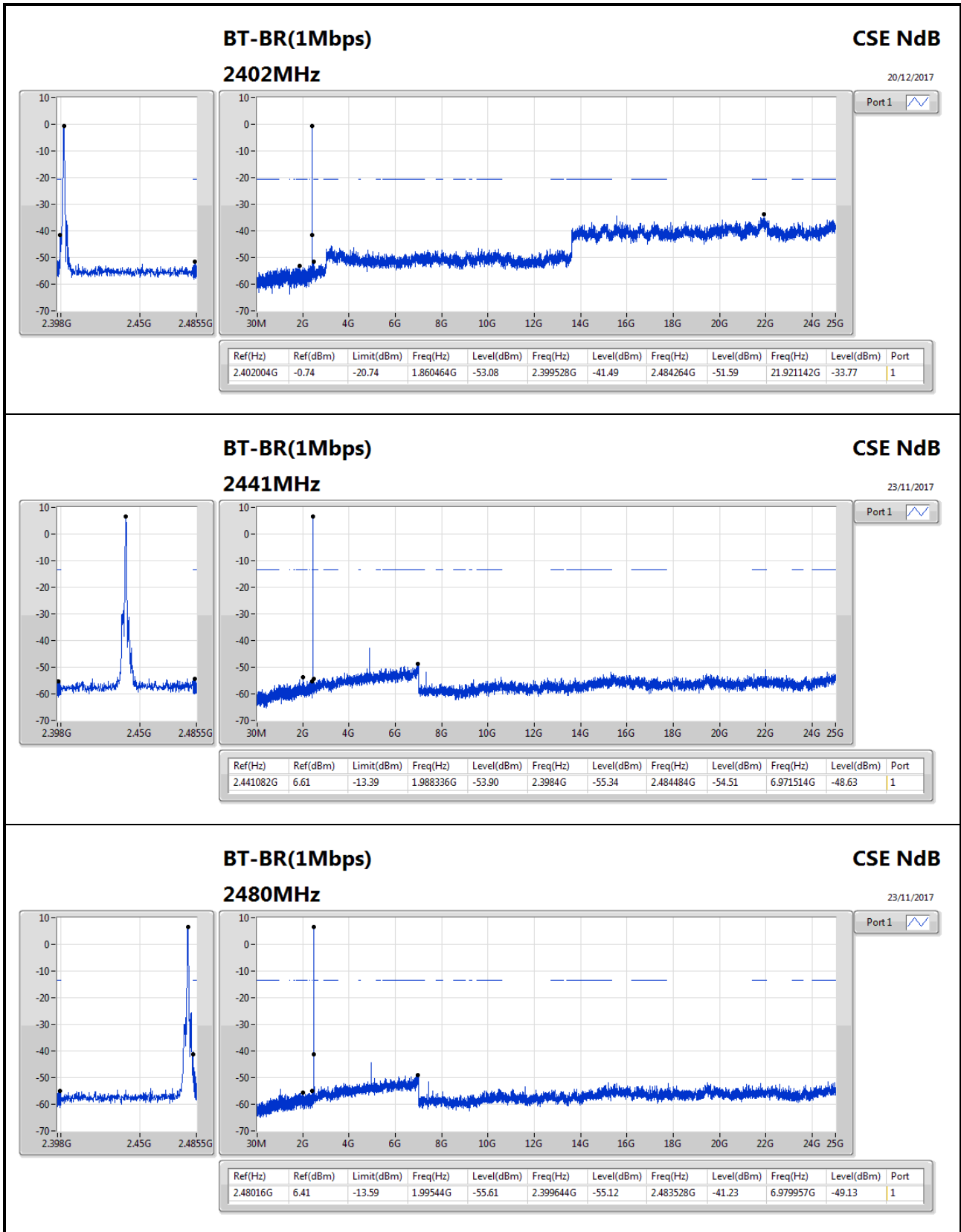


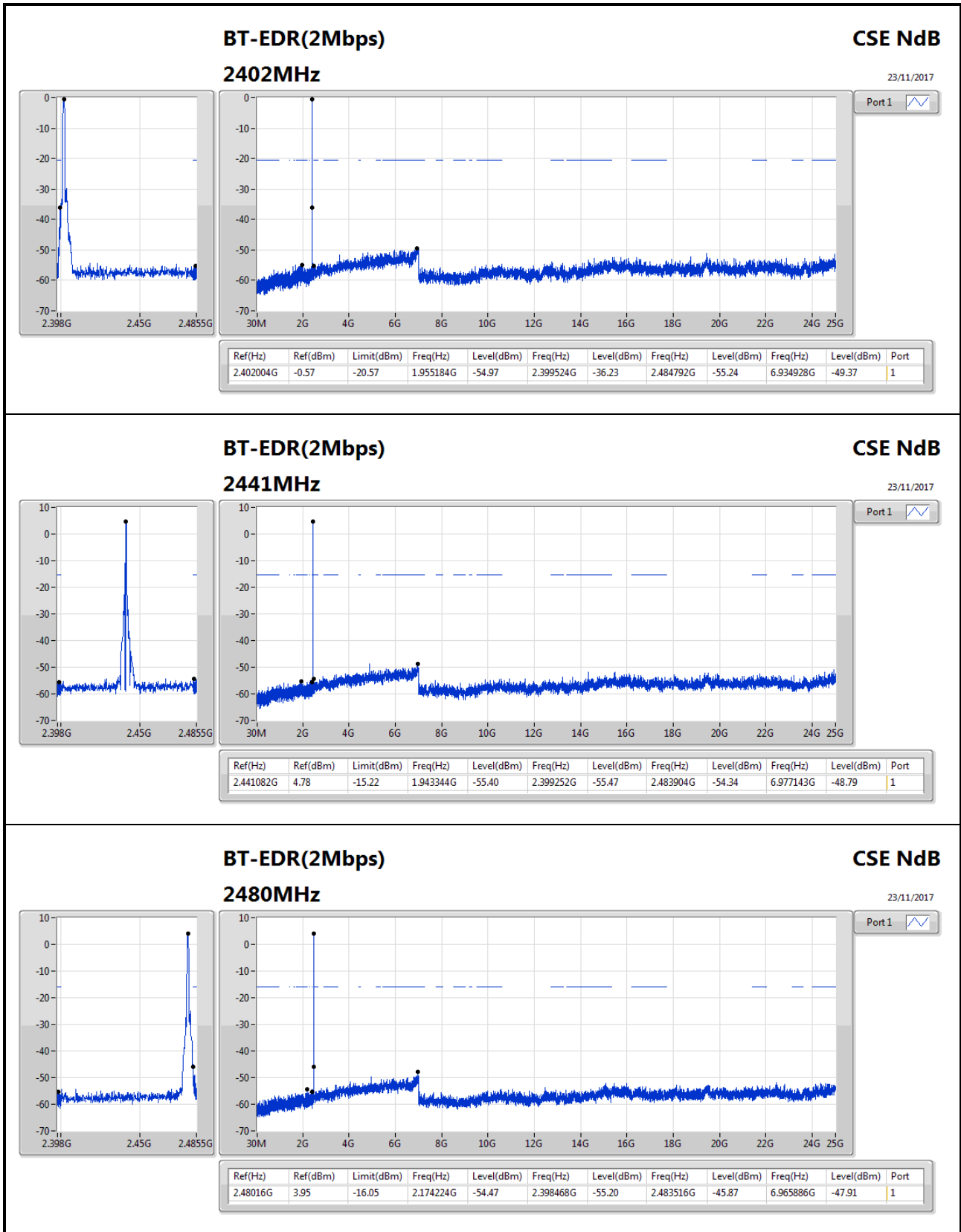
Summary

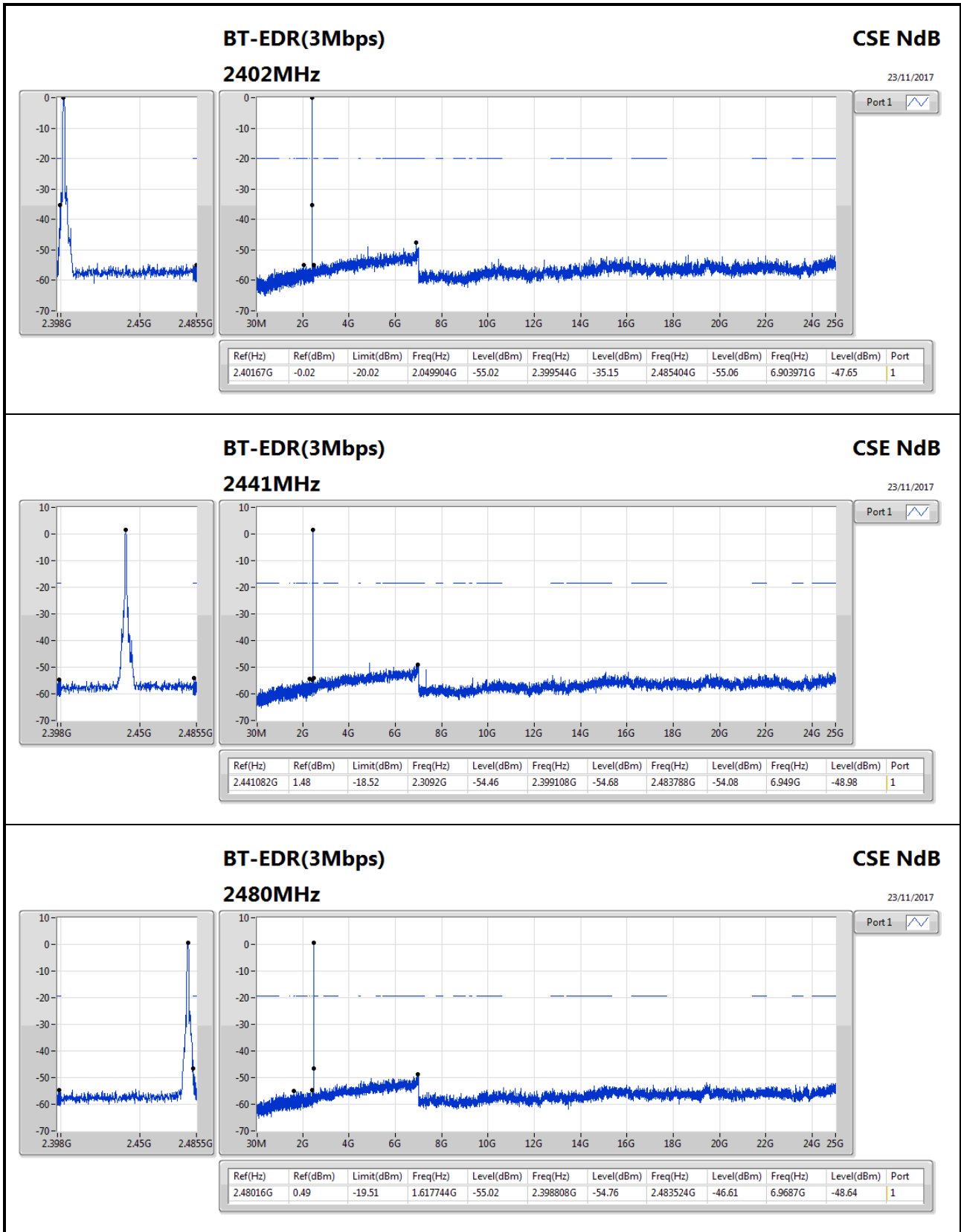
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-
BT-BR(1Mbps)	Pass	2.402004G	-0.74	-20.74	1.860464G	-53.08	2.399528G	-41.49	2.484264G	-51.59	21.921142G	-33.77	1
BT-EDR(2Mbps)	Pass	2.402004G	-0.57	-20.57	1.955184G	-54.97	2.399524G	-36.23	2.484792G	-55.24	6.934928G	-49.37	1
BT-EDR(3Mbps)	Pass	2.40167G	-0.02	-20.02	2.049904G	-55.02	2.399544G	-35.15	2.485404G	-55.06	6.903971G	-47.65	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	-0.74	-20.74	1.860464G	-53.08	2.399528G	-41.49	2.484264G	-51.59	21.921142G	-33.77	1
2441MHz	Pass	2.441082G	6.61	-13.39	1.988336G	-53.90	2.3984G	-55.34	2.484484G	-54.51	6.971514G	-48.63	1
2480MHz	Pass	2.48016G	6.41	-13.59	1.99544G	-55.61	2.399644G	-55.12	2.483528G	-41.23	6.979957G	-49.13	1
BT-EDR(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.402004G	-0.57	-20.57	1.955184G	-54.97	2.399524G	-36.23	2.484792G	-55.24	6.934928G	-49.37	1
2441MHz	Pass	2.441082G	4.78	-15.22	1.943344G	-55.40	2.399252G	-55.47	2.483904G	-54.34	6.977143G	-48.79	1
2480MHz	Pass	2.48016G	3.95	-16.05	2.174224G	-54.47	2.398468G	-55.20	2.483516G	-45.87	6.965886G	-47.91	1
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.40167G	-0.02	-20.02	2.049904G	-55.02	2.399544G	-35.15	2.485404G	-55.06	6.903971G	-47.65	1
2441MHz	Pass	2.441082G	1.48	-18.52	2.3092G	-54.46	2.399108G	-54.68	2.483788G	-54.08	6.949G	-48.98	1
2480MHz	Pass	2.48016G	0.49	-19.51	1.617744G	-55.02	2.398808G	-54.76	2.483524G	-46.61	6.9687G	-48.64	1









Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-
BT-EDR(2Mbps)	Pass	PK	280.26M	42.96	46.00	-3.04	-6.76	3	Horizontal	0	1.00	-



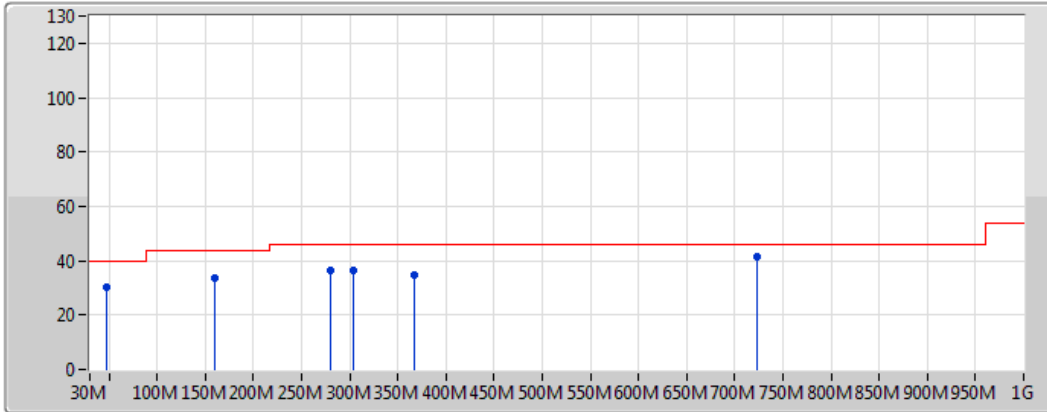
Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-EDR(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-
2441MHz	Pass	PK	175.5M	37.32	43.50	-6.18	-10.94	3	Horizontal	0	1.00	-
2441MHz	Pass	PK	262.8M	42.22	46.00	-3.78	-6.31	3	Horizontal	0	1.00	-
2441MHz	Pass	PK	280.26M	42.96	46.00	-3.04	-6.76	3	Horizontal	0	1.00	-
2441MHz	Pass	PK	328.76M	41.73	46.00	-4.27	-5.97	3	Horizontal	0	1.00	-
2441MHz	Pass	QP	311.3M	42.25	46.00	-3.75	-5.97	3	Horizontal	250	1.00	-
2441MHz	Pass	QP	319.06M	42.79	46.00	-3.21	-5.96	3	Horizontal	273	1.00	-
2441MHz	Pass	PK	47.46M	30.28	40.00	-9.72	-12.51	3	Vertical	360	1.00	-
2441MHz	Pass	PK	159.98M	33.53	43.50	-9.97	-10.40	3	Vertical	360	1.00	-
2441MHz	Pass	PK	280.26M	36.59	46.00	-9.41	-6.76	3	Vertical	360	1.00	-
2441MHz	Pass	PK	303.54M	36.33	46.00	-9.67	-6.14	3	Vertical	360	1.00	-
2441MHz	Pass	PK	367.56M	34.55	46.00	-11.45	-4.93	3	Vertical	360	1.00	-
2441MHz	Pass	PK	722.58M	41.57	46.00	-4.43	0.39	3	Vertical	360	1.00	-

BT-EDR(2Mbps)

2441MHz_USB

28/11/2017

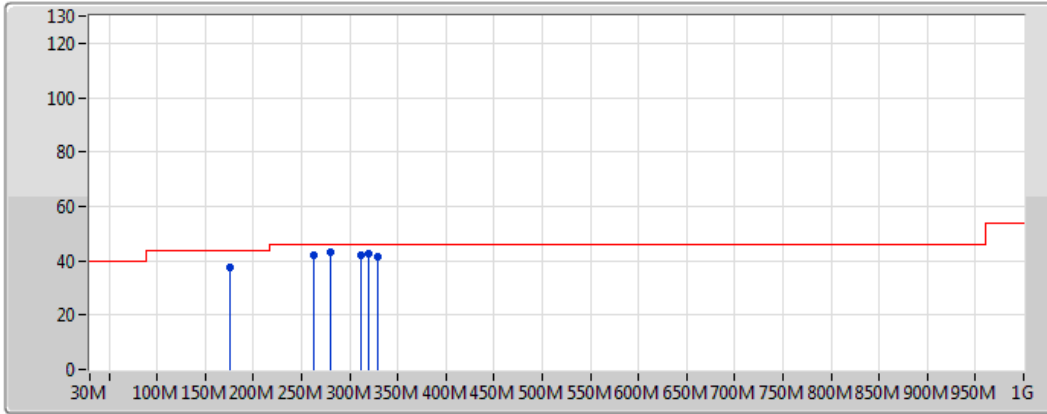


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	47.46M	30.28	40.00	-9.72	-12.51	3	Vertical	360	1.00	-	42.79	14.12	0.97	27.60
PK	159.98M	33.53	43.50	-9.97	-10.40	3	Vertical	360	1.00	-	43.93	15.19	2.00	27.59
PK	280.26M	36.59	46.00	-9.41	-6.76	3	Vertical	360	1.00	-	43.35	18.08	2.40	27.25
PK	303.54M	36.33	46.00	-9.67	-6.14	3	Vertical	360	1.00	-	42.47	18.55	2.53	27.23
PK	367.56M	34.55	46.00	-11.45	-4.93	3	Vertical	360	1.00	-	39.48	20.05	2.74	27.71
PK	722.58M	41.57	46.00	-4.43	0.39	3	Vertical	360	1.00	-	41.18	24.57	4.13	28.31

BT-EDR(2Mbps)

2441MHz_USB

28/11/2017



Legend:

- Lim.PK (Red line)
- PK (Blue line)

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	175.5M	37.32	43.50	-6.18	-10.94	3	Horizontal	0	1.00	-	48.26	14.64	1.94	27.53
PK	262.8M	42.22	46.00	-3.78	-6.31	3	Horizontal	0	1.00	-	48.53	18.70	2.29	27.29
PK	280.26M	42.96	46.00	-3.04	-6.76	3	Horizontal	0	1.00	-	49.72	18.08	2.40	27.25
PK	328.76M	41.73	46.00	-4.27	-5.97	3	Horizontal	0	1.00	-	47.70	18.88	2.57	27.42
QP	311.3M	42.25	46.00	-3.75	-5.97	3	Horizontal	250	1.00	-	48.22	18.78	2.54	27.29
QP	319.06M	42.79	46.00	-3.21	-5.96	3	Horizontal	273	1.00	-	48.75	18.82	2.56	27.34



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	44.72	54.00	-9.28	31.27	3	Vertical	334	1.89	-
BT-EDR(2Mbps)	Pass	AV	4.88404G	50.03	54.00	-3.97	2.29	3	Horizontal	209	1.66	-
BT-EDR(3Mbps)	Pass	AV	2.483502G	44.88	54.00	-9.12	31.27	3	Vertical	282	2.12	-



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	42.48	54.00	-11.52	30.93	3	Horizontal	72	2.55	-
2402MHz	Pass	AV	2.402G	84.22	Inf	-Inf	30.98	3	Horizontal	72	2.55	-
2402MHz	Pass	PK	2.3668G	53.55	74.00	-20.45	30.85	3	Horizontal	72	2.55	-
2402MHz	Pass	PK	2.4022G	96.38	Inf	-Inf	30.98	3	Horizontal	72	2.55	-
2402MHz	Pass	AV	2.39G	42.44	54.00	-11.56	30.93	3	Vertical	160	1.58	-
2402MHz	Pass	AV	2.402G	84.75	Inf	-Inf	30.98	3	Vertical	160	1.58	-
2402MHz	Pass	PK	2.3636G	53.51	74.00	-20.49	30.84	3	Vertical	160	1.58	-
2402MHz	Pass	PK	2.4022G	96.97	Inf	-Inf	30.98	3	Vertical	160	1.58	-
2441MHz	Pass	AV	2.389998G	42.44	54.00	-11.56	30.93	3	Horizontal	70	1.59	-
2441MHz	Pass	AV	2.441G	82.25	Inf	-Inf	31.12	3	Horizontal	70	1.59	-
2441MHz	Pass	AV	2.499998G	43.16	54.00	-10.84	31.33	3	Horizontal	70	1.59	-
2441MHz	Pass	PK	2.375G	52.98	74.00	-21.02	30.88	3	Horizontal	70	1.59	-
2441MHz	Pass	PK	2.4414G	94.00	Inf	-Inf	31.12	3	Horizontal	70	1.59	-
2441MHz	Pass	PK	2.499998G	53.89	74.00	-20.11	31.33	3	Horizontal	70	1.59	-
2441MHz	Pass	AV	2.389998G	42.46	54.00	-11.54	30.93	3	Vertical	333	1.93	-
2441MHz	Pass	AV	2.441G	84.64	Inf	-Inf	31.12	3	Vertical	333	1.93	-
2441MHz	Pass	AV	2.4994G	43.14	54.00	-10.86	31.33	3	Vertical	333	1.93	-
2441MHz	Pass	PK	2.369G	53.38	74.00	-20.62	30.86	3	Vertical	333	1.93	-
2441MHz	Pass	PK	2.441G	96.97	Inf	-Inf	31.12	3	Vertical	333	1.93	-
2441MHz	Pass	PK	2.489G	54.53	74.00	-19.47	31.29	3	Vertical	333	1.93	-
2480MHz	Pass	AV	2.48G	81.01	Inf	-Inf	31.26	3	Horizontal	69	1.35	-
2480MHz	Pass	AV	2.483502G	44.02	54.00	-9.98	31.27	3	Horizontal	69	1.35	-
2480MHz	Pass	PK	2.4802G	92.43	Inf	-Inf	31.26	3	Horizontal	69	1.35	-
2480MHz	Pass	PK	2.4838G	59.03	74.00	-14.97	31.27	3	Horizontal	69	1.35	-
2480MHz	Pass	AV	2.48G	83.03	Inf	-Inf	31.26	3	Vertical	334	1.89	-
2480MHz	Pass	AV	2.483502G	44.72	54.00	-9.28	31.27	3	Vertical	334	1.89	-
2480MHz	Pass	PK	2.4802G	95.02	Inf	-Inf	31.26	3	Vertical	334	1.89	-
2480MHz	Pass	PK	2.4838G	58.72	74.00	-15.28	31.27	3	Vertical	334	1.89	-
BT-EDR(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.39G	42.45	54.00	-11.55	30.93	3	Horizontal	69	1.42	-
2402MHz	Pass	AV	2.402G	80.15	Inf	-Inf	30.98	3	Horizontal	69	1.42	-
2402MHz	Pass	PK	2.3886G	53.63	74.00	-20.37	30.93	3	Horizontal	69	1.42	-
2402MHz	Pass	PK	2.4022G	93.85	Inf	-Inf	30.98	3	Horizontal	69	1.42	-
2402MHz	Pass	AV	2.39G	42.46	54.00	-11.54	30.93	3	Vertical	330	1.80	-
2402MHz	Pass	AV	2.402G	82.76	Inf	-Inf	30.98	3	Vertical	330	1.80	-
2402MHz	Pass	PK	2.377G	54.19	74.00	-19.81	30.89	3	Vertical	330	1.80	-
2402MHz	Pass	PK	2.4022G	97.34	Inf	-Inf	30.98	3	Vertical	330	1.80	-
2402MHz	Pass	AV	4.80598G	49.56	54.00	-4.44	2.05	3	Horizontal	211	1.52	-
2402MHz	Pass	PK	4.80598G	56.51	74.00	-17.49	2.05	3	Horizontal	211	1.52	-
2402MHz	Pass	AV	4.80598G	45.22	54.00	-8.78	2.05	3	Vertical	319	1.53	-
2402MHz	Pass	PK	4.80436G	53.84	74.00	-20.16	2.04	3	Vertical	319	1.53	-
2441MHz	Pass	AV	2.389998G	42.43	54.00	-11.57	30.93	3	Horizontal	68	1.58	-
2441MHz	Pass	AV	2.441G	78.22	Inf	-Inf	31.12	3	Horizontal	68	1.58	-
2441MHz	Pass	AV	2.4994G	43.14	54.00	-10.86	31.33	3	Horizontal	68	1.58	-
2441MHz	Pass	PK	2.3726G	53.93	74.00	-20.07	30.87	3	Horizontal	68	1.58	-
2441MHz	Pass	PK	2.4414G	91.72	Inf	-Inf	31.12	3	Horizontal	68	1.58	-
2441MHz	Pass	PK	2.4882G	54.20	74.00	-19.80	31.29	3	Horizontal	68	1.58	-



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
2441MHz	Pass	AV	2.389998G	42.46	54.00	-11.54	30.93	3	Vertical	288	1.70	-
2441MHz	Pass	AV	2.441G	81.12	Inf	-Inf	31.12	3	Vertical	288	1.70	-
2441MHz	Pass	AV	2.4994G	43.15	54.00	-10.85	31.33	3	Vertical	288	1.70	-
2441MHz	Pass	PK	2.387G	53.25	74.00	-20.75	30.92	3	Vertical	288	1.70	-
2441MHz	Pass	PK	2.441G	95.33	Inf	-Inf	31.12	3	Vertical	288	1.70	-
2441MHz	Pass	PK	2.485G	54.26	74.00	-19.74	31.28	3	Vertical	288	1.70	-
2441MHz	Pass	AV	4.88404G	50.03	54.00	-3.97	2.29	3	Horizontal	209	1.66	-
2441MHz	Pass	PK	4.88404G	56.65	74.00	-17.35	2.29	3	Horizontal	209	1.66	-
2441MHz	Pass	AV	4.88404G	45.98	54.00	-8.02	2.29	3	Vertical	320	1.56	-
2441MHz	Pass	PK	4.88242G	53.76	74.00	-20.24	2.29	3	Vertical	320	1.56	-
2480MHz	Pass	AV	2.48G	77.72	Inf	-Inf	31.26	3	Horizontal	69	1.36	-
2480MHz	Pass	AV	2.483502G	44.18	54.00	-9.82	31.27	3	Horizontal	69	1.36	-
2480MHz	Pass	PK	2.4802G	90.81	Inf	-Inf	31.26	3	Horizontal	69	1.36	-
2480MHz	Pass	PK	2.4836G	57.63	74.00	-16.37	31.27	3	Horizontal	69	1.36	-
2480MHz	Pass	AV	2.48G	79.63	Inf	-Inf	31.26	3	Vertical	281	2.13	-
2480MHz	Pass	AV	2.483502G	44.84	54.00	-9.16	31.27	3	Vertical	281	2.13	-
2480MHz	Pass	PK	2.4802G	93.25	Inf	-Inf	31.26	3	Vertical	281	2.13	-
2480MHz	Pass	PK	2.4836G	55.51	74.00	-18.49	31.27	3	Vertical	281	2.13	-
2480MHz	Pass	AV	4.96204G	48.46	54.00	-5.54	2.53	3	Horizontal	203	1.68	-
2480MHz	Pass	PK	4.96198G	54.87	74.00	-19.13	2.53	3	Horizontal	203	1.68	-
2480MHz	Pass	AV	4.96204G	48.20	54.00	-5.80	2.53	3	Vertical	210	1.14	-
2480MHz	Pass	PK	4.96198G	54.83	74.00	-19.17	2.53	3	Vertical	210	1.14	-
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3896G	42.45	54.00	-11.55	30.93	3	Horizontal	70	1.41	-
2402MHz	Pass	AV	2.402G	79.82	Inf	-Inf	30.98	3	Horizontal	70	1.41	-
2402MHz	Pass	PK	2.3898G	54.57	74.00	-19.43	30.93	3	Horizontal	70	1.41	-
2402MHz	Pass	PK	2.4024G	93.75	Inf	-Inf	30.98	3	Horizontal	70	1.41	-
2402MHz	Pass	AV	2.39G	42.45	54.00	-11.55	30.93	3	Vertical	331	1.80	-
2402MHz	Pass	AV	2.402G	82.88	Inf	-Inf	30.98	3	Vertical	331	1.80	-
2402MHz	Pass	PK	2.3892G	53.54	74.00	-20.46	30.93	3	Vertical	331	1.80	-
2402MHz	Pass	PK	2.402G	97.36	Inf	-Inf	30.98	3	Vertical	331	1.80	-
2441MHz	Pass	AV	2.3894G	42.45	54.00	-11.55	30.93	3	Horizontal	69	1.57	-
2441MHz	Pass	AV	2.441G	78.21	Inf	-Inf	31.12	3	Horizontal	69	1.57	-
2441MHz	Pass	AV	2.4994G	43.14	54.00	-10.86	31.33	3	Horizontal	69	1.57	-
2441MHz	Pass	PK	2.389G	53.26	74.00	-20.74	30.93	3	Horizontal	69	1.57	-
2441MHz	Pass	PK	2.4414G	91.57	Inf	-Inf	31.12	3	Horizontal	69	1.57	-
2441MHz	Pass	PK	2.4894G	53.91	74.00	-20.09	31.29	3	Horizontal	69	1.57	-
2441MHz	Pass	AV	2.389998G	42.44	54.00	-11.56	30.93	3	Vertical	288	1.70	-
2441MHz	Pass	AV	2.441G	81.24	Inf	-Inf	31.12	3	Vertical	288	1.70	-
2441MHz	Pass	AV	2.499G	43.14	54.00	-10.86	31.33	3	Vertical	288	1.70	-
2441MHz	Pass	PK	2.383G	54.10	74.00	-19.90	30.91	3	Vertical	288	1.70	-
2441MHz	Pass	PK	2.4414G	95.36	Inf	-Inf	31.12	3	Vertical	288	1.70	-
2441MHz	Pass	PK	2.483502G	54.31	74.00	-19.69	31.27	3	Vertical	288	1.70	-
2480MHz	Pass	AV	2.48G	77.48	Inf	-Inf	31.26	3	Horizontal	70	1.37	-
2480MHz	Pass	AV	2.483502G	44.15	54.00	-9.85	31.27	3	Horizontal	70	1.37	-
2480MHz	Pass	PK	2.4802G	90.73	Inf	-Inf	31.26	3	Horizontal	70	1.37	-
2480MHz	Pass	PK	2.4838G	55.12	74.00	-18.88	31.27	3	Horizontal	70	1.37	-
2480MHz	Pass	AV	2.48G	79.61	Inf	-Inf	31.26	3	Vertical	282	2.12	-
2480MHz	Pass	AV	2.483502G	44.88	54.00	-9.12	31.27	3	Vertical	282	2.12	-



RSE TX above 1GHz Result

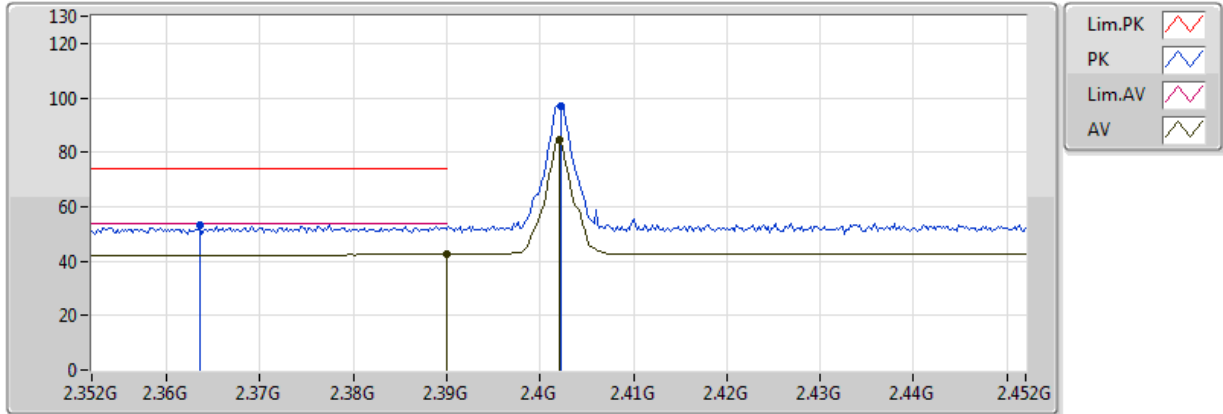
Appendix G.2

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	93.18	Inf	-Inf	31.26	3	Vertical	282	2.12	-
2480MHz	Pass	PK	2.4836G	56.36	74.00	-17.64	31.27	3	Vertical	282	2.12	-

BT-BR(1Mbps)

2402MHz_TX

28/11/2017

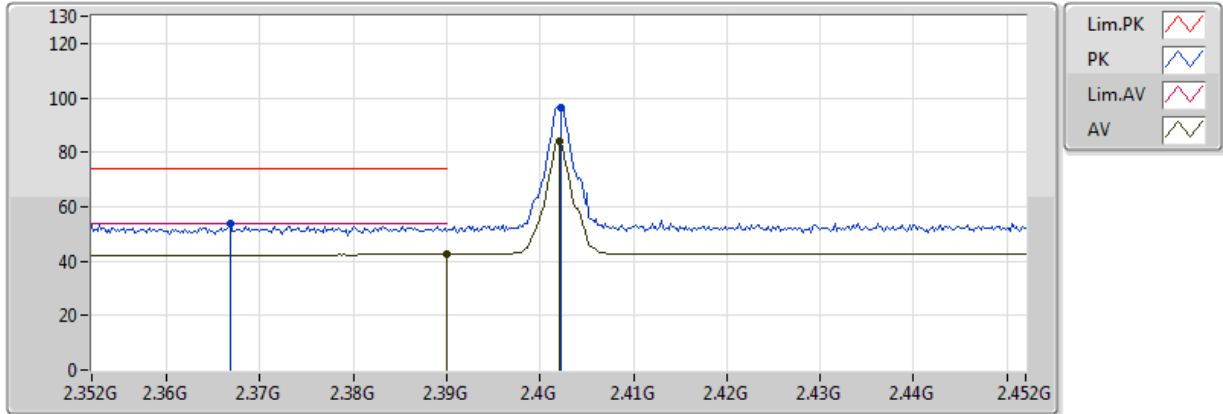


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.39G	42.44	54.00	-11.56	30.93	3	Vertical	160	1.58	-	11.51	27.31	3.62	-
AV	2.402G	84.75	Inf	-Inf	30.98	3	Vertical	160	1.58	-	53.77	27.35	3.63	-
PK	2.3636G	53.51	74.00	-20.49	30.84	3	Vertical	160	1.58	-	22.67	27.25	3.60	-
PK	2.4022G	96.97	Inf	-Inf	30.98	3	Vertical	160	1.58	-	65.99	27.35	3.63	-

BT-BR(1Mbps)

2402MHz_TX

28/11/2017

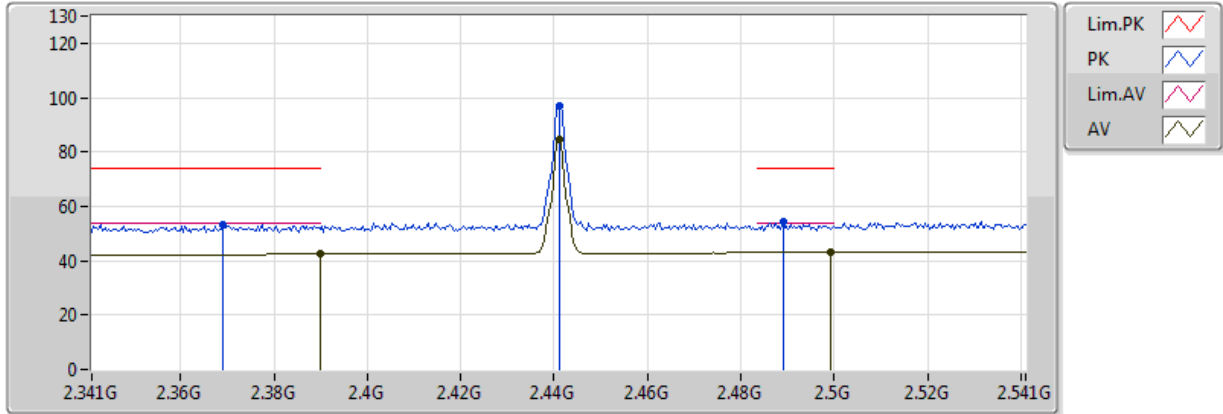


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.39G	42.48	54.00	-11.52	30.93	3	Horizontal	72	2.55	-	11.55	27.31	3.62	-
AV	2.402G	84.22	Inf	-Inf	30.98	3	Horizontal	72	2.55	-	53.24	27.35	3.63	-
PK	2.3668G	53.55	74.00	-20.45	30.85	3	Horizontal	72	2.55	-	22.70	27.25	3.60	-
PK	2.4022G	96.38	Inf	-Inf	30.98	3	Horizontal	72	2.55	-	65.40	27.35	3.63	-

BT-BR(1Mbps)

2441MHz_TX

28/11/2017

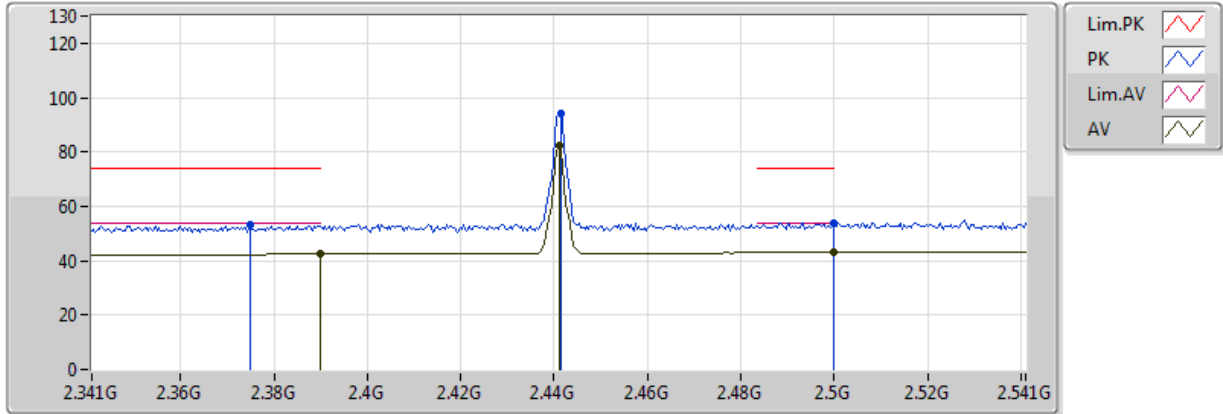


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.389998G	42.46	54.00	-11.54	30.93	3	Vertical	333	1.93	-	11.52	27.31	3.62	-
AV	2.441G	84.64	Inf	-Inf	31.12	3	Vertical	333	1.93	-	53.53	27.45	3.67	-
AV	2.4994G	43.14	54.00	-10.86	31.33	3	Vertical	333	1.93	-	11.81	27.60	3.73	-
PK	2.369G	53.38	74.00	-20.62	30.86	3	Vertical	333	1.93	-	22.52	27.26	3.60	-
PK	2.441G	96.97	Inf	-Inf	31.12	3	Vertical	333	1.93	-	65.85	27.45	3.67	-
PK	2.489G	54.53	74.00	-19.47	31.29	3	Vertical	333	1.93	-	23.24	27.57	3.72	-

BT-BR(1Mbps)

2441MHz_TX

28/11/2017

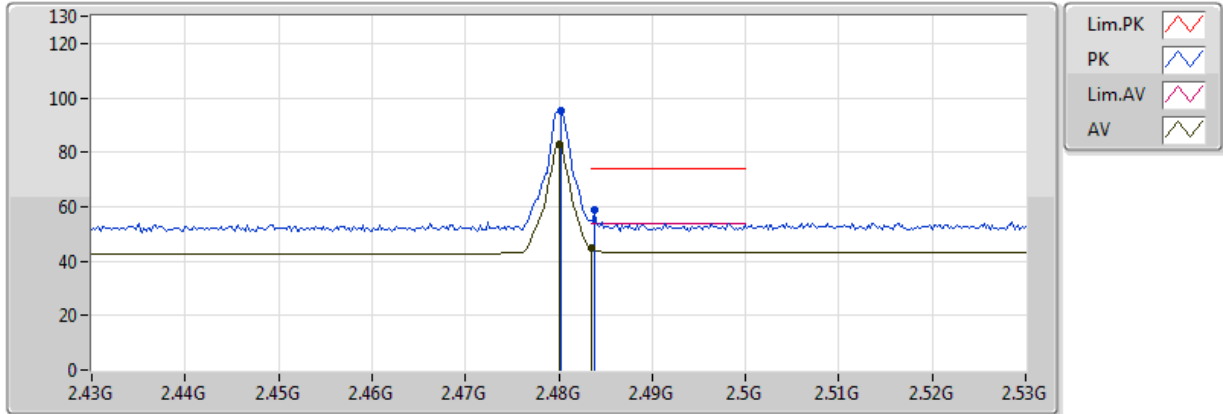


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.389998G	42.44	54.00	-11.56	30.93	3	Horizontal	70	1.59	-	11.51	27.31	3.62	-
AV	2.441G	82.25	Inf	-Inf	31.12	3	Horizontal	70	1.59	-	51.13	27.45	3.67	-
AV	2.499998G	43.16	54.00	-10.84	31.33	3	Horizontal	70	1.59	-	11.83	27.60	3.73	-
PK	2.375G	52.98	74.00	-21.02	30.88	3	Horizontal	70	1.59	-	22.10	27.27	3.61	-
PK	2.4414G	94.00	Inf	-Inf	31.12	3	Horizontal	70	1.59	-	62.88	27.45	3.67	-
PK	2.499998G	53.89	74.00	-20.11	31.33	3	Horizontal	70	1.59	-	22.56	27.60	3.73	-

BT-BR(1Mbps)

2480MHz_TX

28/11/2017



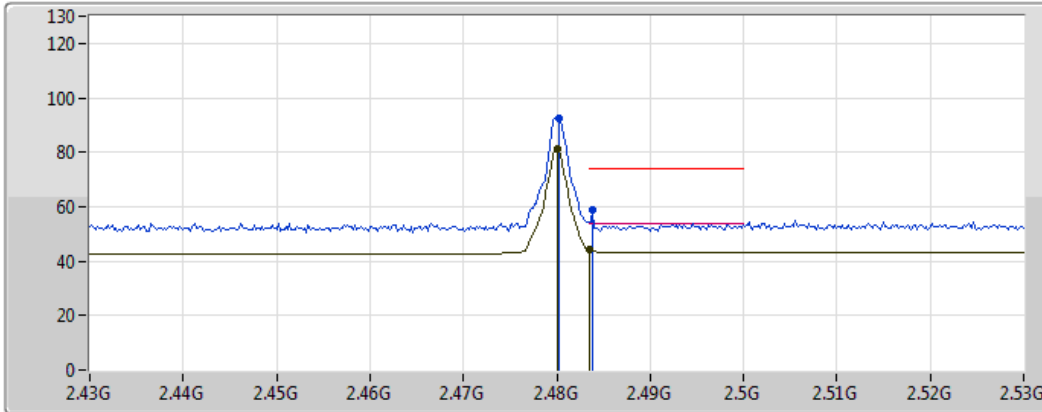
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.48G	83.03	Inf	-Inf	31.26	3	Vertical	334	1.89	-	51.78	27.55	3.71	-
AV	2.483502G	44.72	54.00	-9.28	31.27	3	Vertical	334	1.89	-	13.45	27.56	3.71	-
PK	2.4802G	95.02	Inf	-Inf	31.26	3	Vertical	334	1.89	-	63.76	27.55	3.71	-
PK	2.4838G	58.72	74.00	-15.28	31.27	3	Vertical	334	1.89	-	27.45	27.56	3.71	-



BT-BR(1Mbps)

2480MHz_TX

28/11/2017



Legend for plot:

- Lim.PK (Red line)
- PK (Blue line)
- Lim.AV (Pink line)
- AV (Green line)

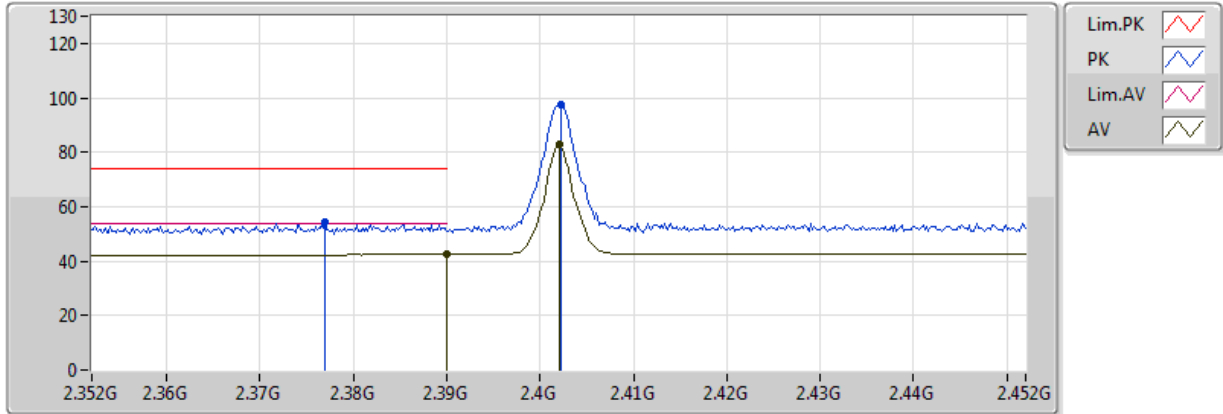
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.48G	81.01	Inf	-Inf	31.26	3	Horizontal	69	1.35	-	49.75	27.55	3.71	-
AV	2.483502G	44.02	54.00	-9.98	31.27	3	Horizontal	69	1.35	-	12.75	27.56	3.71	-
PK	2.4802G	92.43	Inf	-Inf	31.26	3	Horizontal	69	1.35	-	61.17	27.55	3.71	-
PK	2.4838G	59.03	74.00	-14.97	31.27	3	Horizontal	69	1.35	-	27.76	27.56	3.71	-



BT-EDR(2Mbps)

2402MHz_TX

28/11/2017

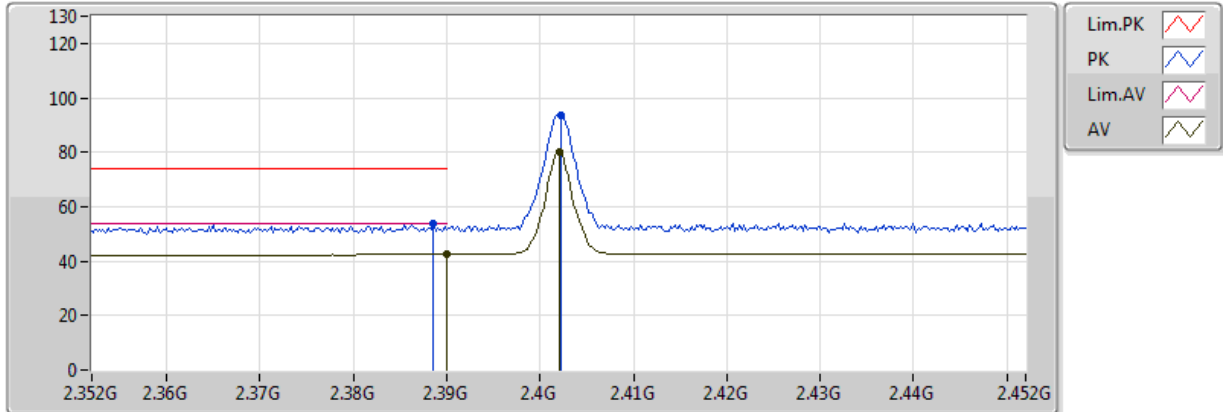


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.39G	42.46	54.00	-11.54	30.93	3	Vertical	330	1.80	-	11.52	27.31	3.62	-
AV	2.402G	82.76	Inf	-Inf	30.98	3	Vertical	330	1.80	-	51.78	27.35	3.63	-
PK	2.377G	54.19	74.00	-19.81	30.89	3	Vertical	330	1.80	-	23.30	27.28	3.61	-
PK	2.4022G	97.34	Inf	-Inf	30.98	3	Vertical	330	1.80	-	66.36	27.35	3.63	-

BT-EDR(2Mbps)

2402MHz_TX

28/11/2017

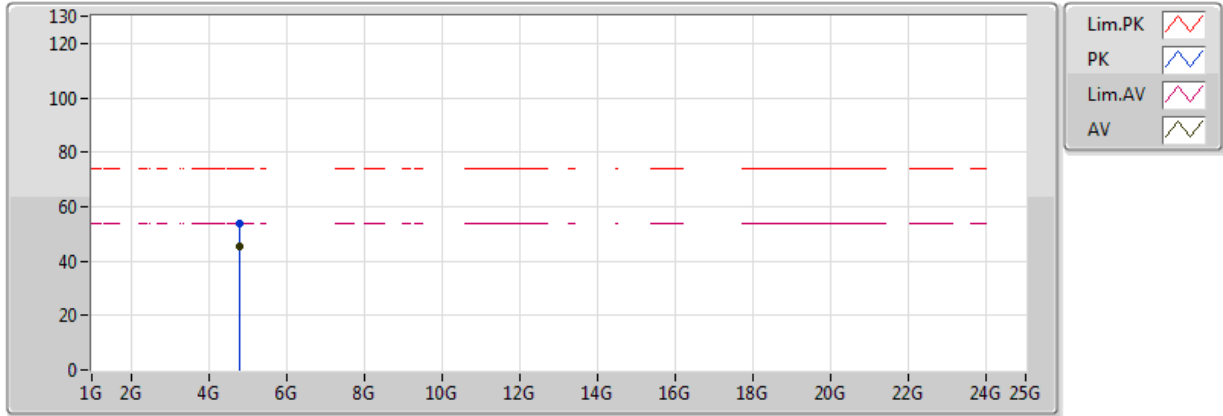


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.39G	42.45	54.00	-11.55	30.93	3	Horizontal	69	1.42	-	11.52	27.31	3.62	-
AV	2.402G	80.15	Inf	-Inf	30.98	3	Horizontal	69	1.42	-	49.18	27.35	3.63	-
PK	2.3886G	53.63	74.00	-20.37	30.93	3	Horizontal	69	1.42	-	22.70	27.31	3.62	-
PK	2.4022G	93.85	Inf	-Inf	30.98	3	Horizontal	69	1.42	-	62.88	27.35	3.63	-

BT-EDR(2Mbps)

2402MHz_TX

28/11/2017

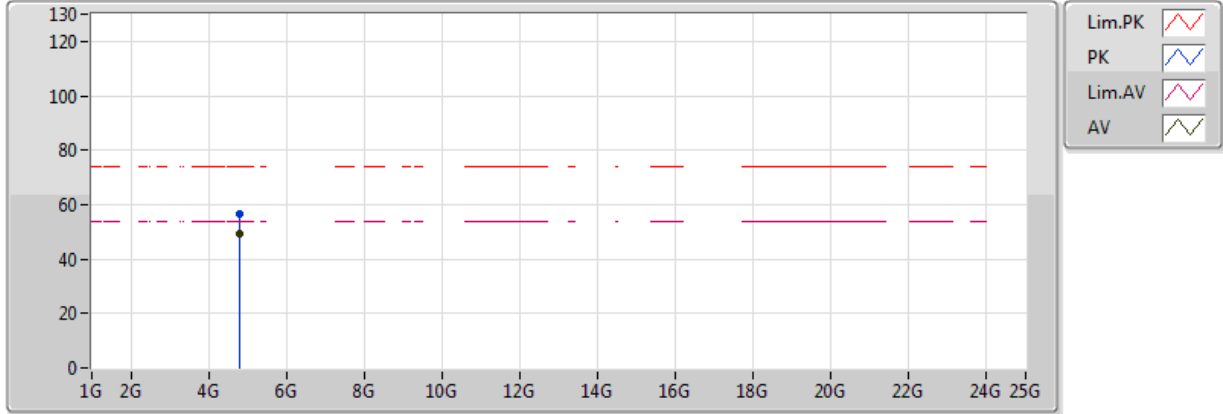


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.80598G	45.22	54.00	-8.78	2.05	3	Vertical	319	1.53	-	43.17	31.25	5.39	34.59
PK	4.80436G	53.84	74.00	-20.16	2.04	3	Vertical	319	1.53	-	51.80	31.25	5.38	34.59

BT-EDR(2Mbps)

2402MHz_TX

28/11/2017

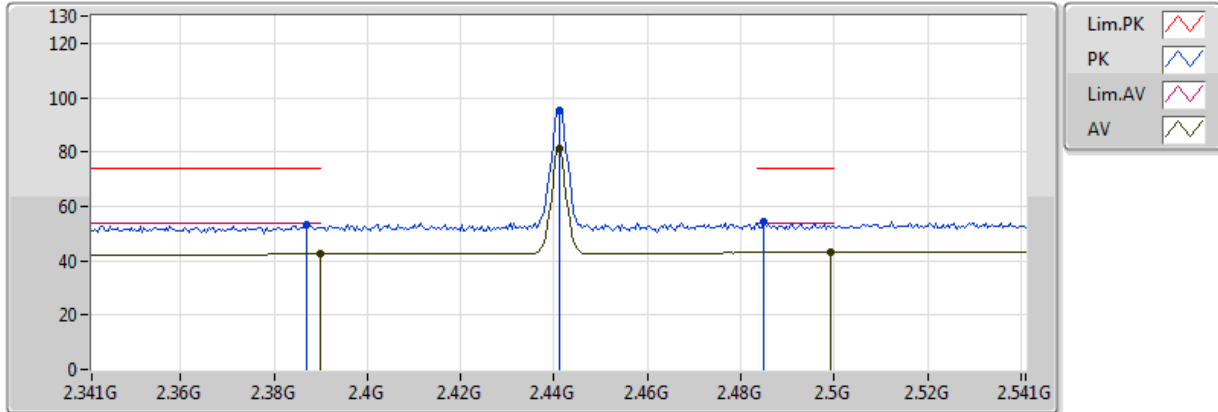


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.80598G	49.56	54.00	-4.44	2.05	3	Horizontal	211	1.52	-	47.51	31.25	5.39	34.59
PK	4.80598G	56.51	74.00	-17.49	2.05	3	Horizontal	211	1.52	-	54.46	31.25	5.39	34.59

BT-EDR(2Mbps)

2441MHz_TX

28/11/2017



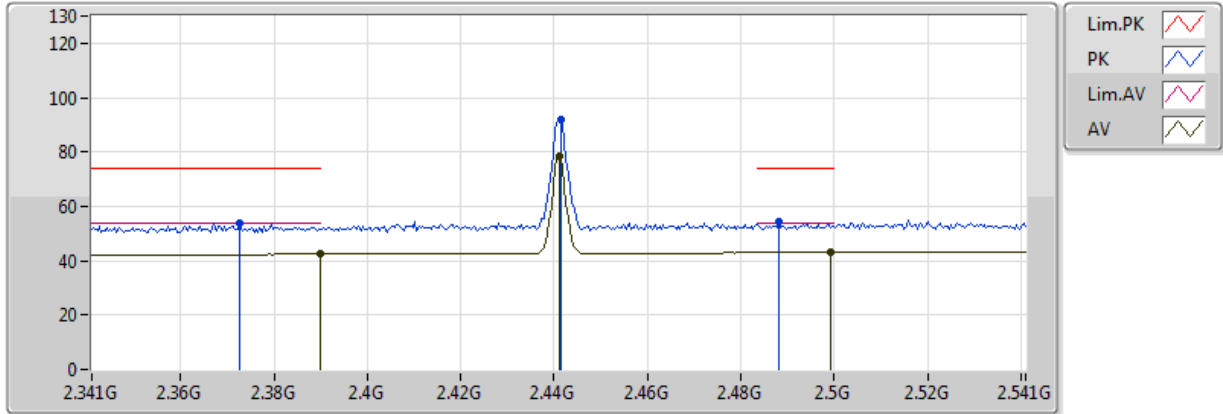
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.389998G	42.46	54.00	-11.54	30.93	3	Vertical	288	1.70	-	11.53	27.31	3.62	-
AV	2.441G	81.12	Inf	-Inf	31.12	3	Vertical	288	1.70	-	50.00	27.45	3.67	-
AV	2.4994G	43.15	54.00	-10.85	31.33	3	Vertical	288	1.70	-	11.82	27.60	3.73	-
PK	2.387G	53.25	74.00	-20.75	30.92	3	Vertical	288	1.70	-	22.32	27.31	3.62	-
PK	2.441G	95.33	Inf	-Inf	31.12	3	Vertical	288	1.70	-	64.22	27.45	3.67	-
PK	2.485G	54.26	74.00	-19.74	31.28	3	Vertical	288	1.70	-	22.98	27.56	3.71	-



BT-EDR(2Mbps)

2441MHz_TX

28/11/2017

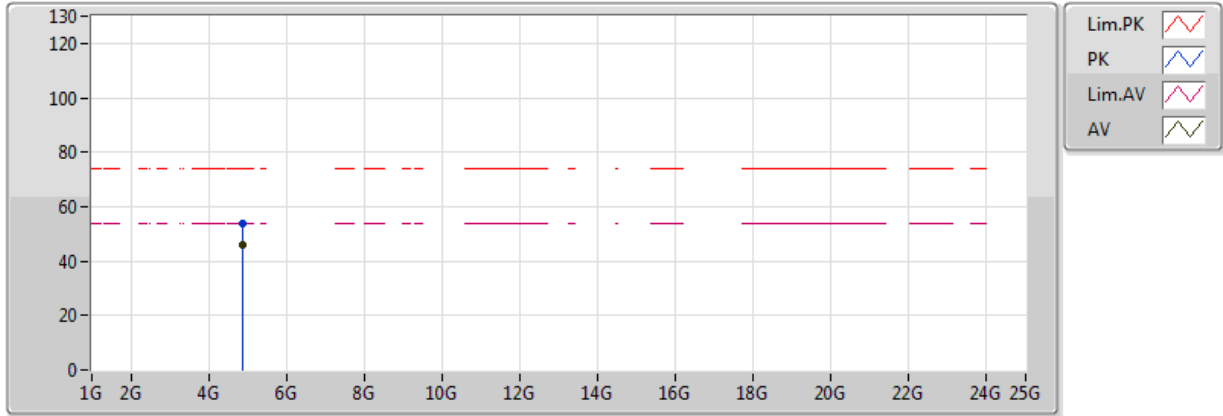


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.389998G	42.43	54.00	-11.57	30.93	3	Horizontal	68	1.58	-	11.50	27.31	3.62	-
AV	2.441G	78.22	Inf	-Inf	31.12	3	Horizontal	68	1.58	-	47.10	27.45	3.67	-
AV	2.4994G	43.14	54.00	-10.86	31.33	3	Horizontal	68	1.58	-	11.81	27.60	3.73	-
PK	2.3726G	53.93	74.00	-20.07	30.87	3	Horizontal	68	1.58	-	23.06	27.27	3.61	-
PK	2.4414G	91.72	Inf	-Inf	31.12	3	Horizontal	68	1.58	-	60.60	27.45	3.67	-
PK	2.4882G	54.20	74.00	-19.80	31.29	3	Horizontal	68	1.58	-	22.91	27.57	3.72	-

BT-EDR(2Mbps)

2441MHz_TX

28/11/2017

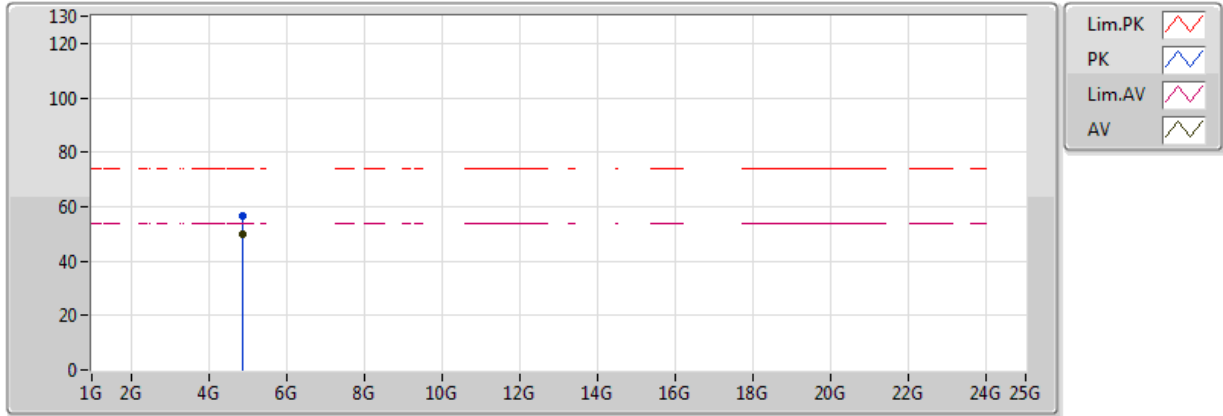


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.88404G	45.98	54.00	-8.02	2.29	3	Vertical	320	1.56	-	43.69	31.39	5.47	34.57
PK	4.88242G	53.76	74.00	-20.24	2.29	3	Vertical	320	1.56	-	51.48	31.39	5.47	34.57

BT-EDR(2Mbps)

2441MHz_TX

28/11/2017

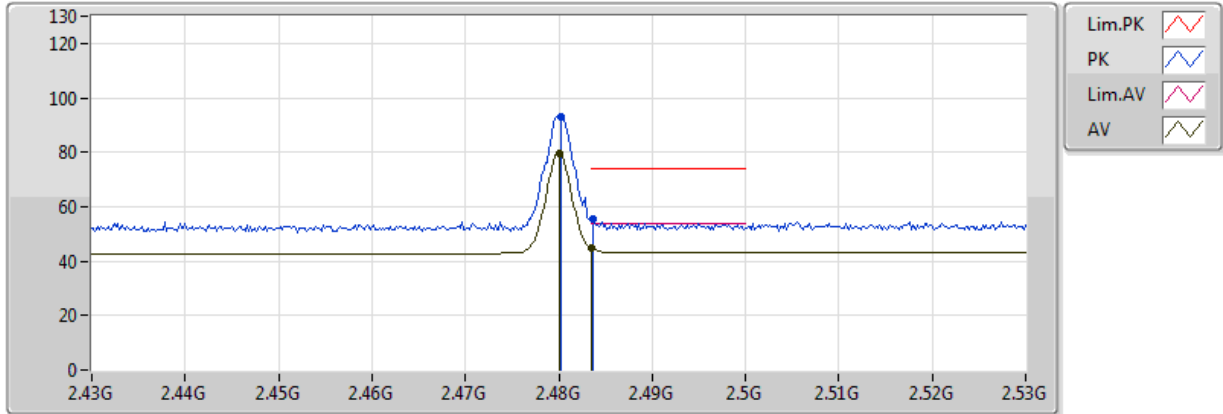


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.88404G	50.03	54.00	-3.97	2.29	3	Horizontal	209	1.66	-	47.74	31.39	5.47	34.57
PK	4.88404G	56.65	74.00	-17.35	2.29	3	Horizontal	209	1.66	-	54.36	31.39	5.47	34.57

BT-EDR(2Mbps)

2480MHz_TX

28/11/2017



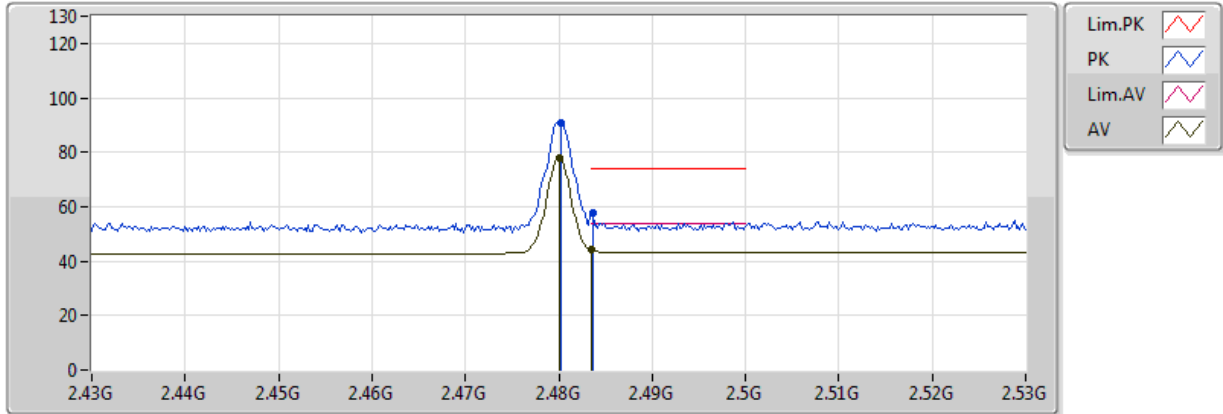
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.48G	79.63	Inf	-Inf	31.26	3	Vertical	281	2.13	-	48.38	27.55	3.71	-
AV	2.483502G	44.84	54.00	-9.16	31.27	3	Vertical	281	2.13	-	13.57	27.56	3.71	-
PK	2.4802G	93.25	Inf	-Inf	31.26	3	Vertical	281	2.13	-	61.99	27.55	3.71	-
PK	2.4836G	55.51	74.00	-18.49	31.27	3	Vertical	281	2.13	-	24.24	27.56	3.71	-



BT-EDR(2Mbps)

2480MHz_TX

28/11/2017

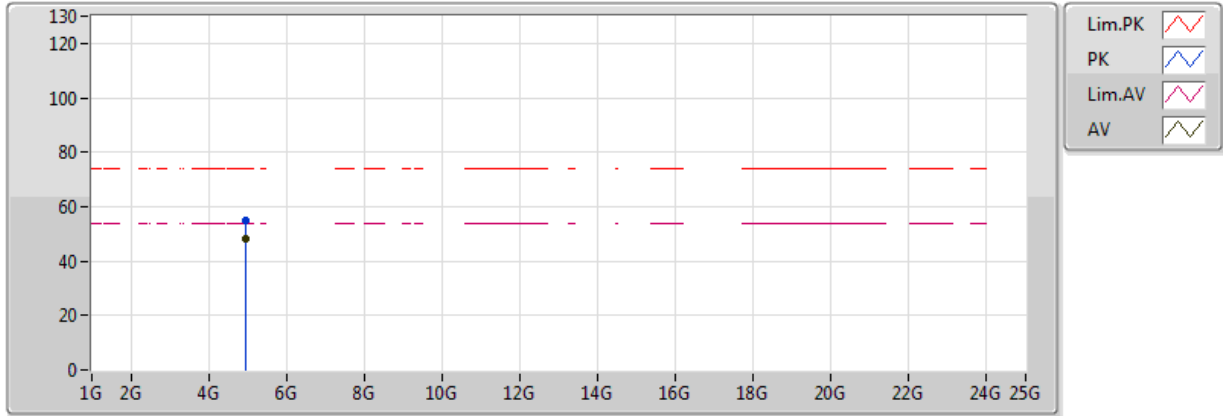


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.48G	77.72	Inf	-Inf	31.26	3	Horizontal	69	1.36	-	46.46	27.55	3.71	-
AV	2.483502G	44.18	54.00	-9.82	31.27	3	Horizontal	69	1.36	-	12.91	27.56	3.71	-
PK	2.4802G	90.81	Inf	-Inf	31.26	3	Horizontal	69	1.36	-	59.56	27.55	3.71	-
PK	2.4836G	57.63	74.00	-16.37	31.27	3	Horizontal	69	1.36	-	26.36	27.56	3.71	-

BT-EDR(2Mbps)

2480MHz_TX

28/11/2017

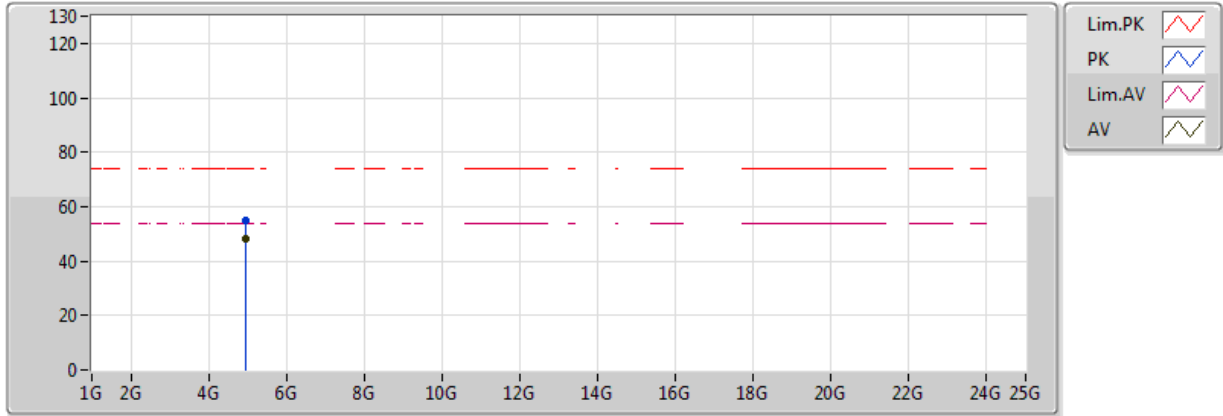


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.96204G	48.20	54.00	-5.80	2.53	3	Vertical	210	1.14	-	45.67	31.53	5.56	34.56
PK	4.96198G	54.83	74.00	-19.17	2.53	3	Vertical	210	1.14	-	52.30	31.53	5.56	34.56

BT-EDR(2Mbps)

2480MHz_TX

28/11/2017

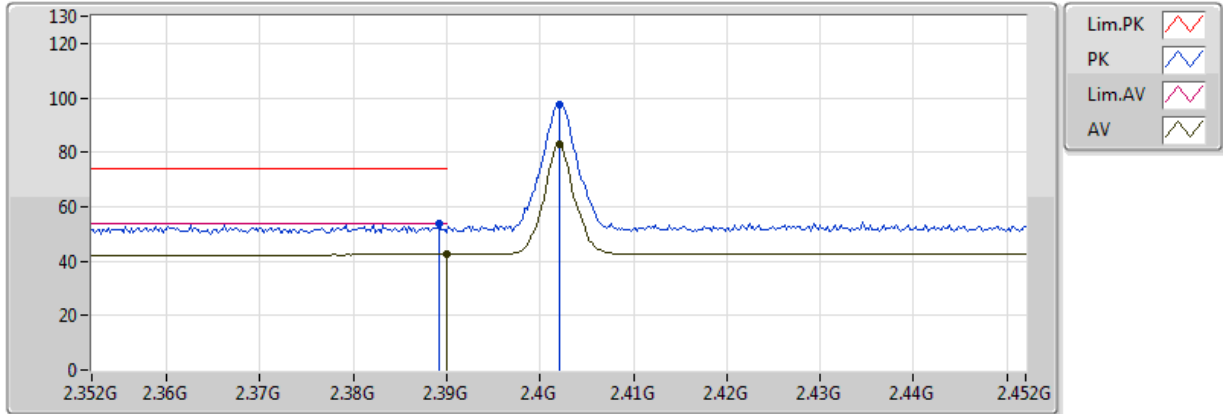


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.96204G	48.46	54.00	-5.54	2.53	3	Horizontal	203	1.68	-	45.93	31.53	5.56	34.56
PK	4.96198G	54.87	74.00	-19.13	2.53	3	Horizontal	203	1.68	-	52.33	31.53	5.56	34.56

BT-EDR(3Mbps)

2402MHz_TX

28/11/2017



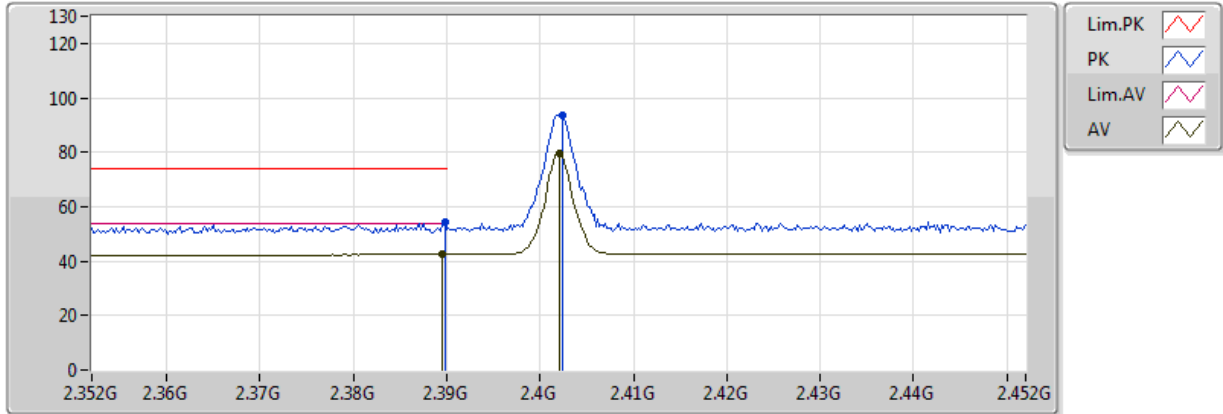
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.39G	42.45	54.00	-11.55	30.93	3	Vertical	331	1.80	-	11.52	27.31	3.62	-
AV	2.402G	82.88	Inf	-Inf	30.98	3	Vertical	331	1.80	-	51.90	27.35	3.63	-
PK	2.3892G	53.54	74.00	-20.46	30.93	3	Vertical	331	1.80	-	22.60	27.31	3.62	-
PK	2.402G	97.36	Inf	-Inf	30.98	3	Vertical	331	1.80	-	66.38	27.35	3.63	-



BT-EDR(3Mbps)

2402MHz_TX

28/11/2017

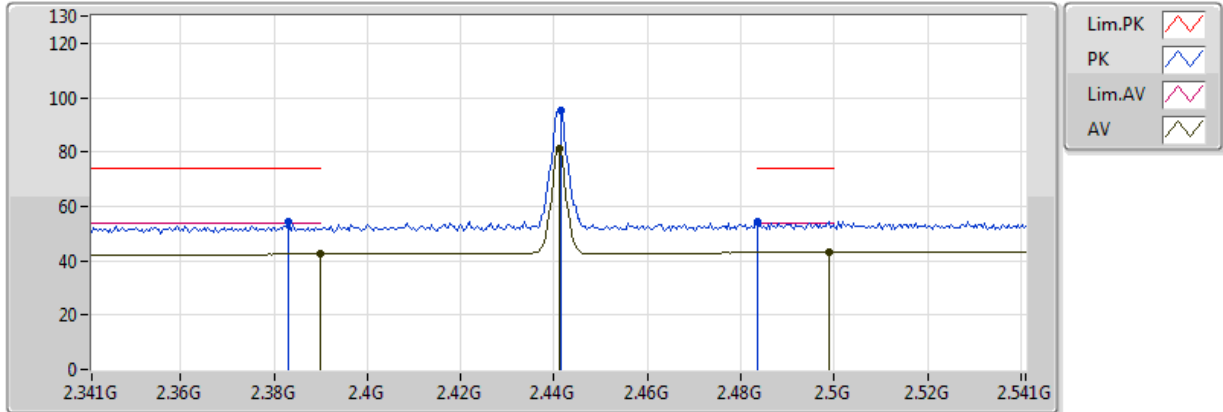


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3896G	42.45	54.00	-11.55	30.93	3	Horizontal	70	1.41	-	11.52	27.31	3.62	-
AV	2.402G	79.82	Inf	-Inf	30.98	3	Horizontal	70	1.41	-	48.85	27.35	3.63	-
PK	2.3898G	54.57	74.00	-19.43	30.93	3	Horizontal	70	1.41	-	23.64	27.31	3.62	-
PK	2.4024G	93.75	Inf	-Inf	30.98	3	Horizontal	70	1.41	-	62.77	27.35	3.63	-

BT-EDR(3Mbps)

2441MHz_TX

28/11/2017



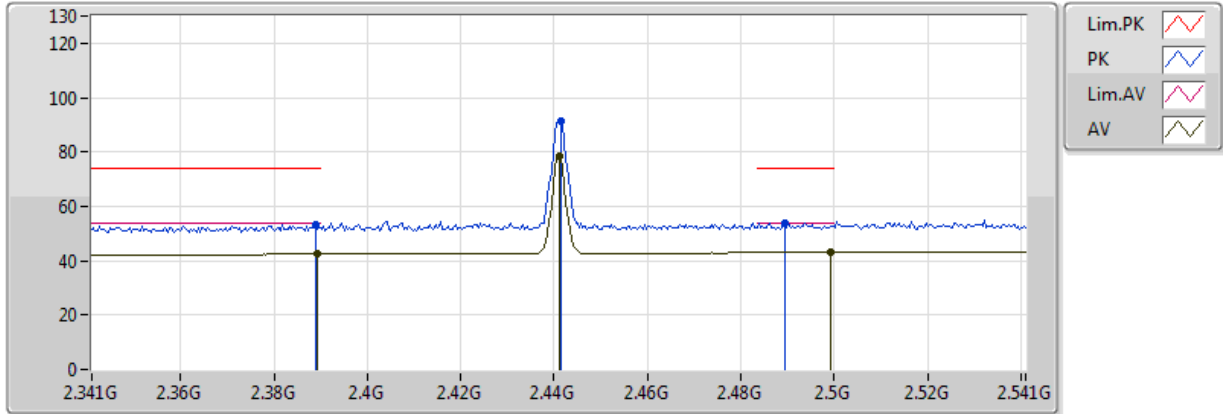
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.389998G	42.44	54.00	-11.56	30.93	3	Vertical	288	1.70	-	11.51	27.31	3.62	-
AV	2.441G	81.24	Inf	-Inf	31.12	3	Vertical	288	1.70	-	50.13	27.45	3.67	-
AV	2.499G	43.14	54.00	-10.86	31.33	3	Vertical	288	1.70	-	11.81	27.60	3.73	-
PK	2.383G	54.10	74.00	-19.90	30.91	3	Vertical	288	1.70	-	23.19	27.30	3.61	-
PK	2.4414G	95.36	Inf	-Inf	31.12	3	Vertical	288	1.70	-	64.24	27.45	3.67	-
PK	2.483502G	54.31	74.00	-19.69	31.27	3	Vertical	288	1.70	-	23.04	27.56	3.71	-



BT-EDR(3Mbps)

2441MHz_TX

28/11/2017



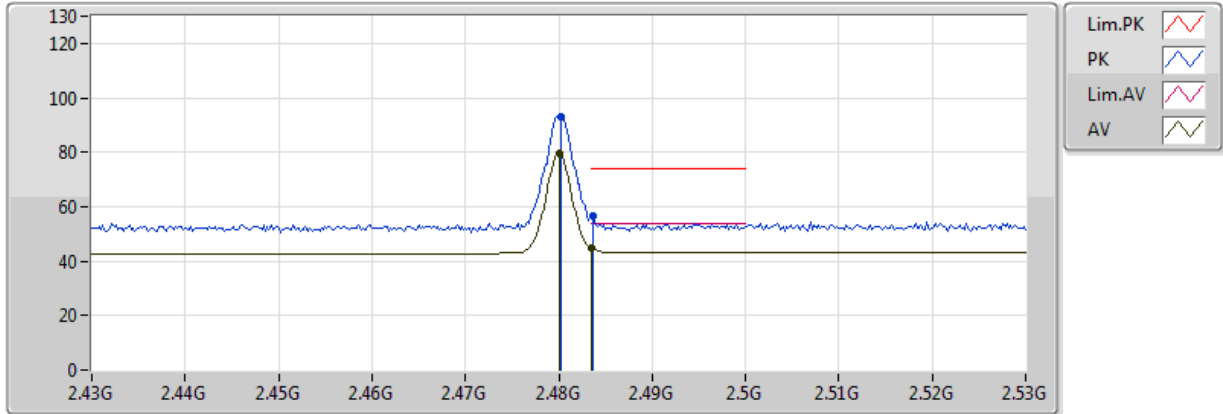
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3894G	42.45	54.00	-11.55	30.93	3	Horizontal	69	1.57	-	11.52	27.31	3.62	-
AV	2.441G	78.21	Inf	-Inf	31.12	3	Horizontal	69	1.57	-	47.09	27.45	3.67	-
AV	2.4994G	43.14	54.00	-10.86	31.33	3	Horizontal	69	1.57	-	11.81	27.60	3.73	-
PK	2.389G	53.26	74.00	-20.74	30.93	3	Horizontal	69	1.57	-	22.32	27.31	3.62	-
PK	2.4414G	91.57	Inf	-Inf	31.12	3	Horizontal	69	1.57	-	60.45	27.45	3.67	-
PK	2.4894G	53.91	74.00	-20.09	31.29	3	Horizontal	69	1.57	-	22.61	27.57	3.72	-



BT-EDR(3Mbps)

2480MHz_TX

28/11/2017



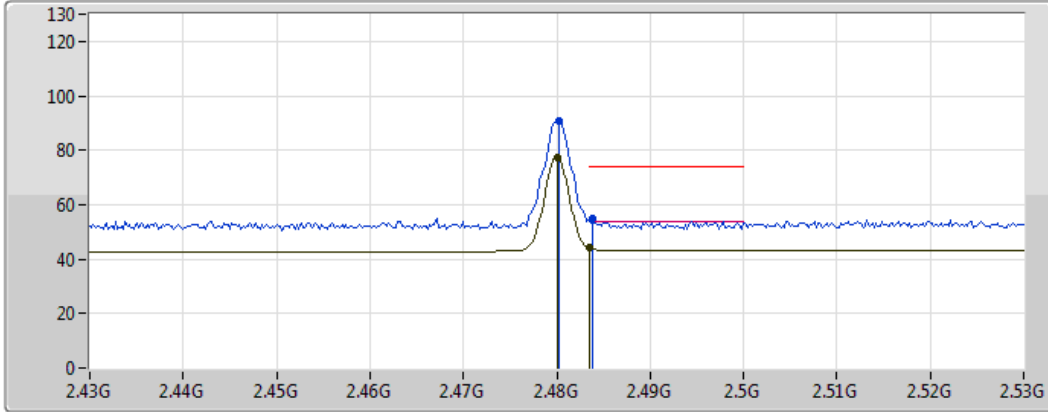
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.48G	79.61	Inf	-Inf	31.26	3	Vertical	282	2.12	-	48.35	27.55	3.71	-
AV	2.483502G	44.88	54.00	-9.12	31.27	3	Vertical	282	2.12	-	13.61	27.56	3.71	-
PK	2.4802G	93.18	Inf	-Inf	31.26	3	Vertical	282	2.12	-	61.92	27.55	3.71	-
PK	2.4836G	56.36	74.00	-17.64	31.27	3	Vertical	282	2.12	-	25.09	27.56	3.71	-



BT-EDR(3Mbps)

2480MHz_TX

28/11/2017



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	2.48G	77.48	Inf	-Inf	31.26	3	Horizontal	70	1.37	-	46.22	27.55	3.71	-
AV	2.483502G	44.15	54.00	-9.85	31.27	3	Horizontal	70	1.37	-	12.88	27.56	3.71	-
PK	2.4802G	90.73	Inf	-Inf	31.26	3	Horizontal	70	1.37	-	59.47	27.55	3.71	-
PK	2.4838G	55.12	74.00	-18.88	31.27	3	Horizontal	70	1.37	-	23.84	27.56	3.71	-