

FCC Test Report

FCC ID : QYL8265BB1
Equipment : Notebook
Brand Name : Getac
Model Name : B300
Applicant : Getac Technology Corporation.
5F., Building A, No. 209, Sec.1, Nangang Rd., Nangang
Dist., Taipei City 11568, Taiwan, R.O.C.
Manufacturer : Getac Technology(Kunshan)Co., LTD.
No. 269, No. 2 Avenue, Kunshan Comprehensive Free
Trade Zone, Jiangsu Province, P.R.C
Standard : 47 CFR FCC Part 15.247

The product was received on Jul. 17, 2019, and testing was started from Jul. 25, 2019 and completed on Jul. 31, 2019. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, 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 report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.


Approved by: Allen Lin

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)

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PHOTOGRAPHS OF EUT V01	

[illegible]

Summary of Test Result

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

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and explanations:

None

Reviewed by: Sam Tsai

Report Producer: Jenny Yang

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.	Brand	Model Name	Antenna Type	Connector
1 (Main)	-	-	PIFA antenna	I-PEX
2 (Aux)	-	-	PIFA antenna	I-PEX

Ant.	Port	Gain (dBi)					
		2.4G	5G				BT
			U-NII-1	U-NII-2A	U-NII-2C	U-NII-3	
1	1	2.75	-1.01	-1.01	-0.3	-2.43	-
2	2	2.54	3.3	3.3	2.22	3.2	2.54

Note 1: The EUT has two antennas.

For 2.4GHz function:

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

Support diversity function and pre-tested on each single chain.

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

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

For 5GHz function:

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

Support diversity function and pre-tested on each single chain, the worst case was Ant. 2(port 2) and it was record in this test report.

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

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

For BT function:

For IEEE 802.15.1 Bluetooth mode (1TX/1RX)

Ant. 2 (port 2) can be used as transmitting/receiving antenna.

1.1.3 EUT Information

Identify EUT			
WLAN Module	Brand Name: Intel / Model Name: 8265NGW		
Operational Condition			
EUT Power Type	From AC Adapter / Battery		
EUT Function	☒ Point-to-multipoint	☐ Point-to-point	
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) $\geq 1/T$
BT-BR(1Mbps)	0.773	1.12	2.888m	1k
BT-EDR(2Mbps)	0.769	1.14	2.894m	1k
BT-EDR(3Mbps)	0.769	1.14	2.894m	1k

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

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
- ♦ KDB 558074 D01 v05r02
- ♦ ANSI C63.10-2013
- ♦

1.3 Testing Location Information

Testing Location			
☒	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.			
☐	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
AC Conduction	CO04-HY	Jeff	21.8~24.2°C / 51.3~53.1%	31/Jul/2019
RF Conducted	TH06-HY	Dexter	25.0~25.4°C / 57~59%	25/Jul/2019~ 29/Jul/2019
Radiated	03CH09-HY	Lego	22.1~22.3°C / 51.2~51.8%	30/Jul/2019

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)	3.54 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	1.6 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	4.3 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.9 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.3 dB	Confidence levels of 95%
Temperature	0.7 °C	Confidence levels of 95%
Humidity	4 %	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	DRYU 1.9.1-04115
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Mode	Power Setting
BT-BR(1Mbps)	-
2402MHz	12
2441MHz	12
2480MHz	12
BT-EDR(2Mbps)	-
2402MHz	8
2441MHz	8
2480MHz	8
BT-EDR(3Mbps)	-
2402MHz	7
2441MHz	7
2480MHz	7

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	Adapter 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	Adapter mode
Operating Mode > 1GHz	CTX
Orthogonal Planes of EUT	Z Plane
	
Worst Planes of EUT	V

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Operating Mode	CTX
1	WLAN 5GHz Main + Bluetooth Aux
2	WLAN 2.4GHz Main + Bluetooth Aux

Note.

Non-AFH: DH5 Packet permit maximum $1600 / 79 / 6 = 3.37$ hops per second in each channel (5 time slots RX, 1 time slot TX). So, the dwell time is the time duration of the pulse times $3.37 \times 1.185 = 4$ within 1.185 seconds.

AFH: DH5 Packet permit maximum $800 / 20 / 6 = 6.67$ hops per second in each channel (5 time slots RX, 1 time slot TX). So, the dwell time is the time duration of the pulse times $13.33 \times 8 = 106.6$ within 8 seconds.

Under the above conditions, Non-AFH Mode configuration was found to be the worst case and measured during the test.

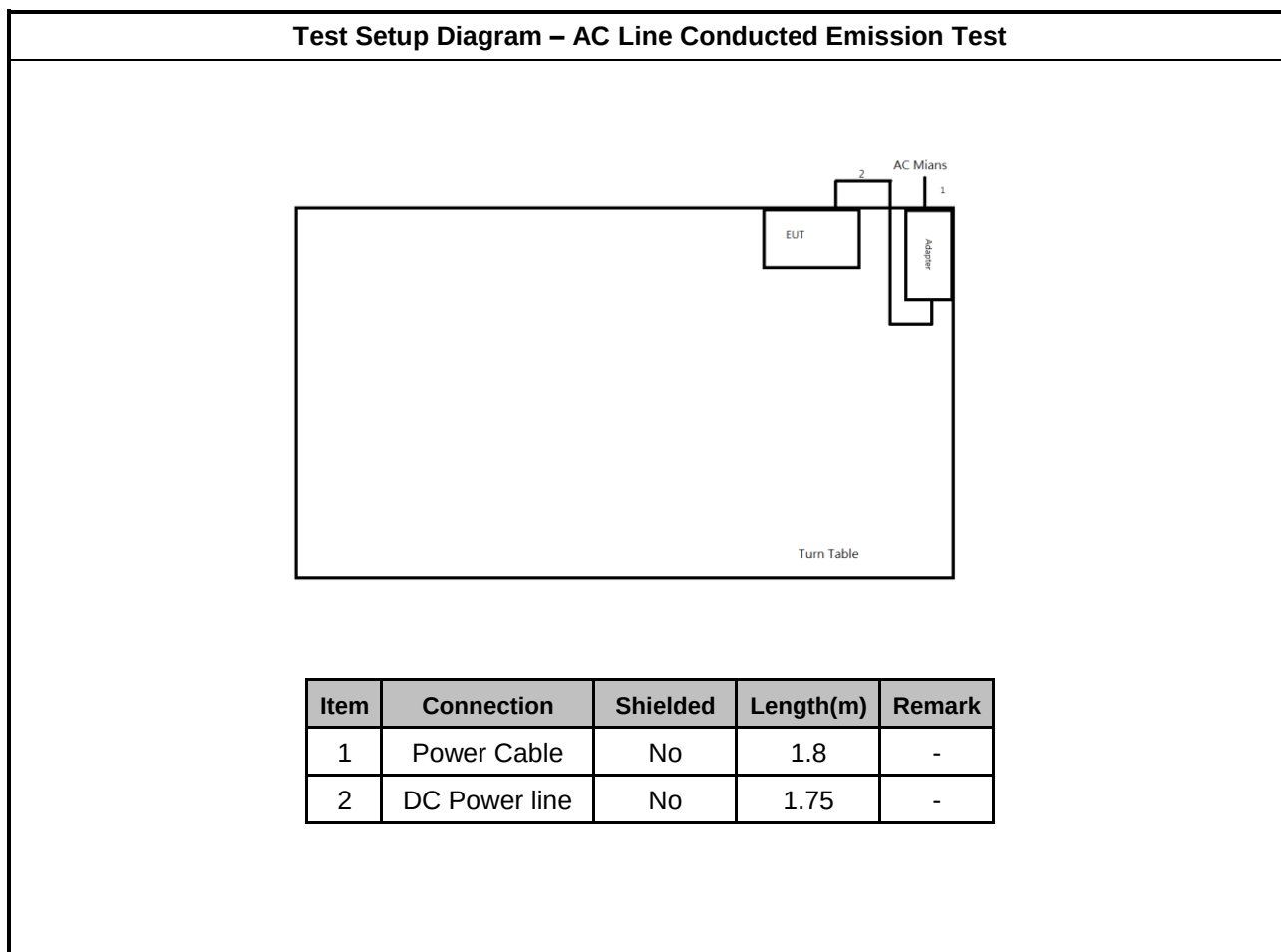
2.4 Accessories and Support Equipment

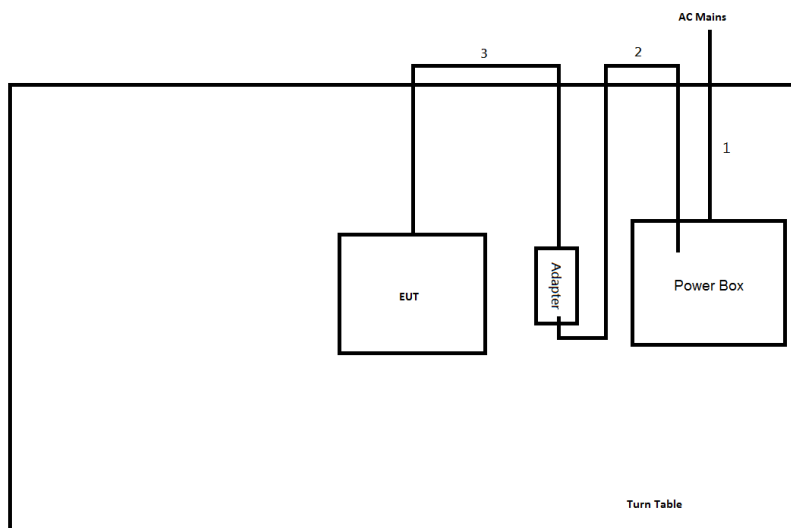
Accessories				
AC Adapter	Brand Name	Chicony	Model Name	A10-090P3A
	Power Rating	I/P: 100-240Vac, 1.5A, O/P: 19Vdc, 4.74 A, 90W		
	AC Power Cord	1.7 meter, non-shielded cable, w/o ferrite core		
	DC Power Cable	1.75 meter, non-shielded cable, with ferrite core		
Battery 1 (Main)	Brand Name	Getac	Model Name	BP3S3P2900
	Power Rating	10.8Vdc, 8100mAh	Type	Li-ion
Battery 2	Brand Name	Getac	Model Name	BP3S3P2900-2
	Power Rating	10.8Vdc, 8700mAh	Type	Li-ion

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

Support Equipment – RF Conducted				
No.	Equipment	Brand Name	Model Name	FCC ID
1	AC Power Source	GW	APS-9102	-

2.5 Test Setup Diagram



Test Setup Diagram - Radiated Test


Item	Connection	Shielded	Length(m)	Remark
1	AC Power line	No	1.5	-
2	AC Power line	No	1.7	-
3	DC Power line	No	1.75	-

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.

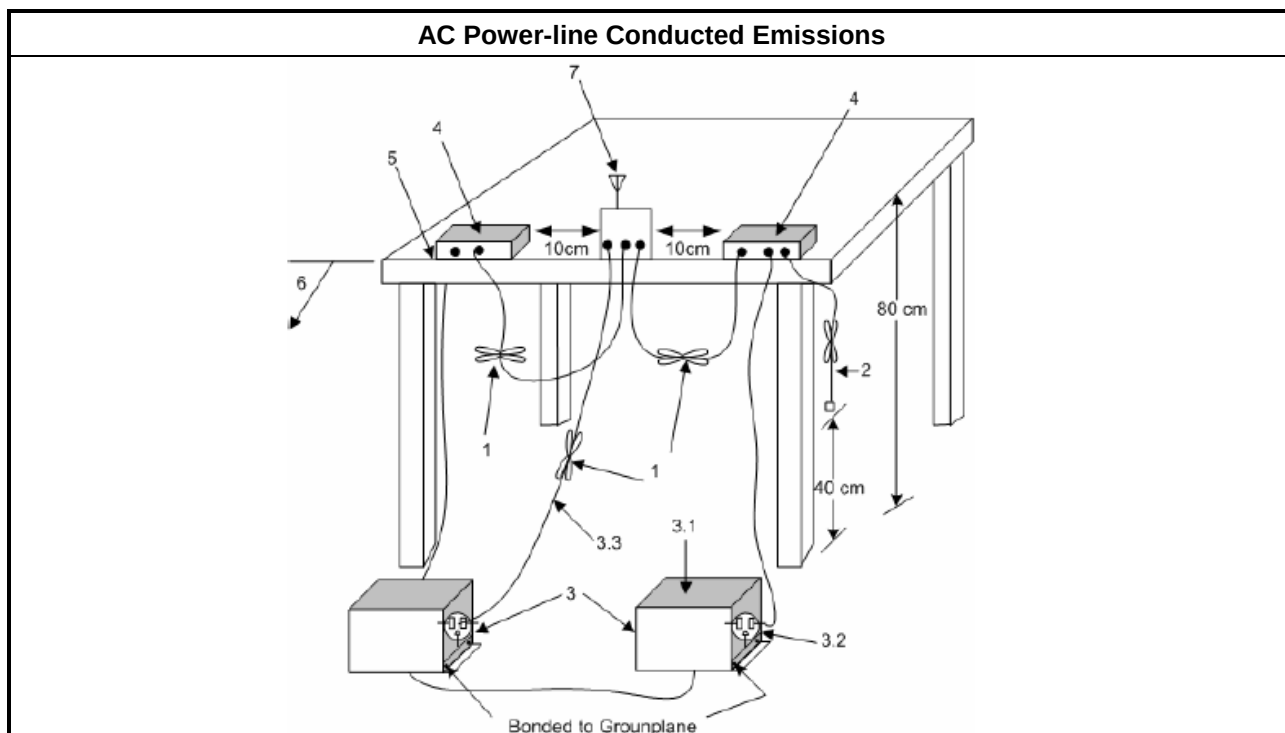
3.1.2 Measuring Instruments

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	
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).
N: Number of Hopping Frequencies; ChS: Hopping Channel Separation	

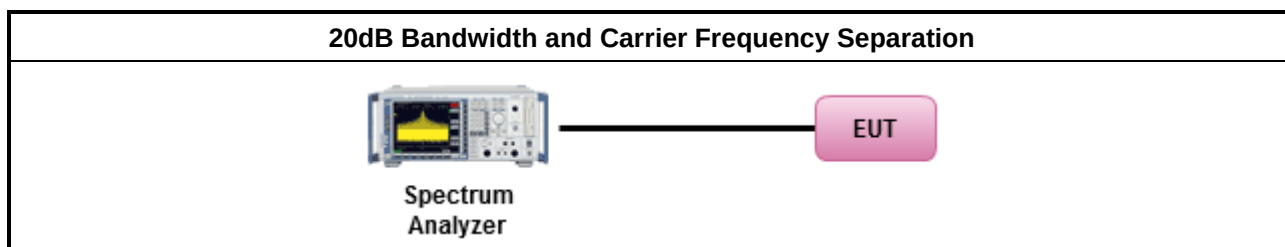
3.2.2 Measuring Instruments

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

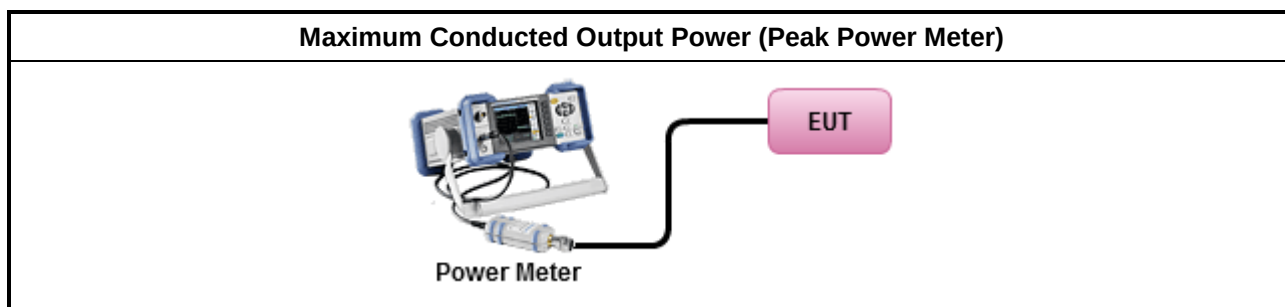
3.3.2 Measuring Instruments

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	
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).
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

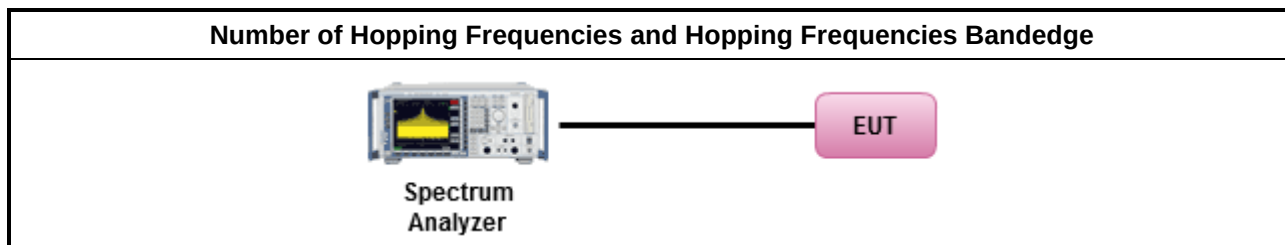
3.4.3 Measuring Instruments

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	
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
N: Number of Hopping Frequencies	

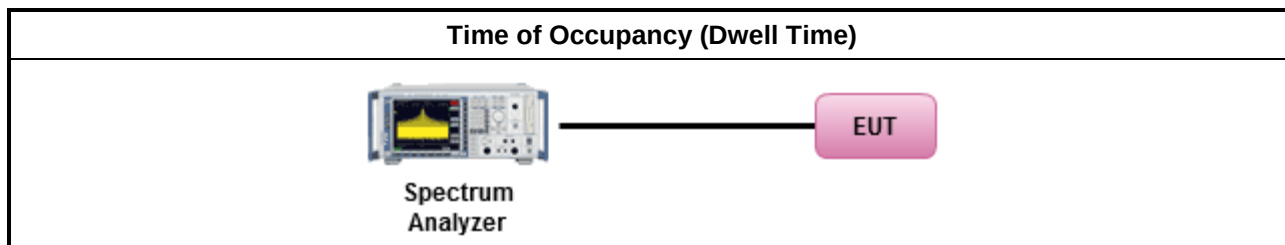
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

Test Method	
Refer as ANSI C63.10-2013, clause 7.8.4 for dwell time measurement.	
Bluetooth ACL packets can be 1, 3, or 5 time slots. Following as dwell time. Operate DH5 at maximum dwell time and maximum duty cycle.	
	The DH5 packet can cover up to 5 time slots. Operate DH5 at maximum dwell time and maximum duty cycle. A maximum length packet has duration of 5 time slots. The hopping rate is 1600 hops/second so the maximum dwell time is $5/1600$ seconds, or 3.125ms. DH5 Packet permit maximum $1600 / 79 / 6 = 3.37$ hops per second in each channel.

3.5.4 Test Setup



3.5.5 Test Result of Time of Occupancy (Dwell Time)

Refer as Appendix E

3.6 Emissions in Non-restricted Frequency Bands

3.6.1 Emissions in Non-restricted Frequency Bands Limit

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

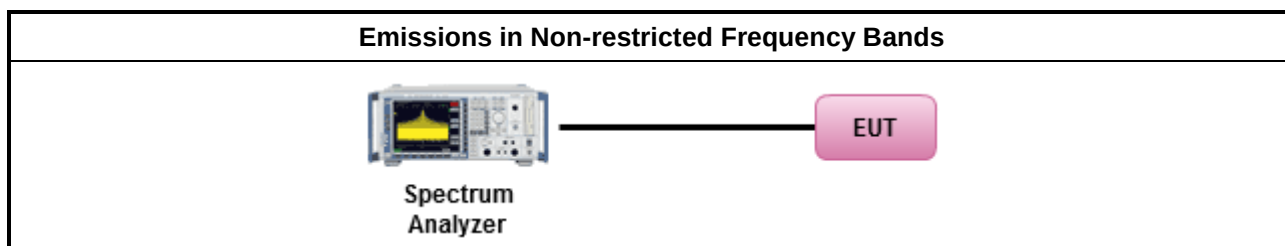
3.6.2 Measuring Instruments

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

3.6.3 Test Procedures

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

3.6.4 Test Setup



3.6.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix F

3.7 Emissions in Restricted Frequency Bands

3.7.1 Emissions in Restricted Frequency Bands Limit

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

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

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

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

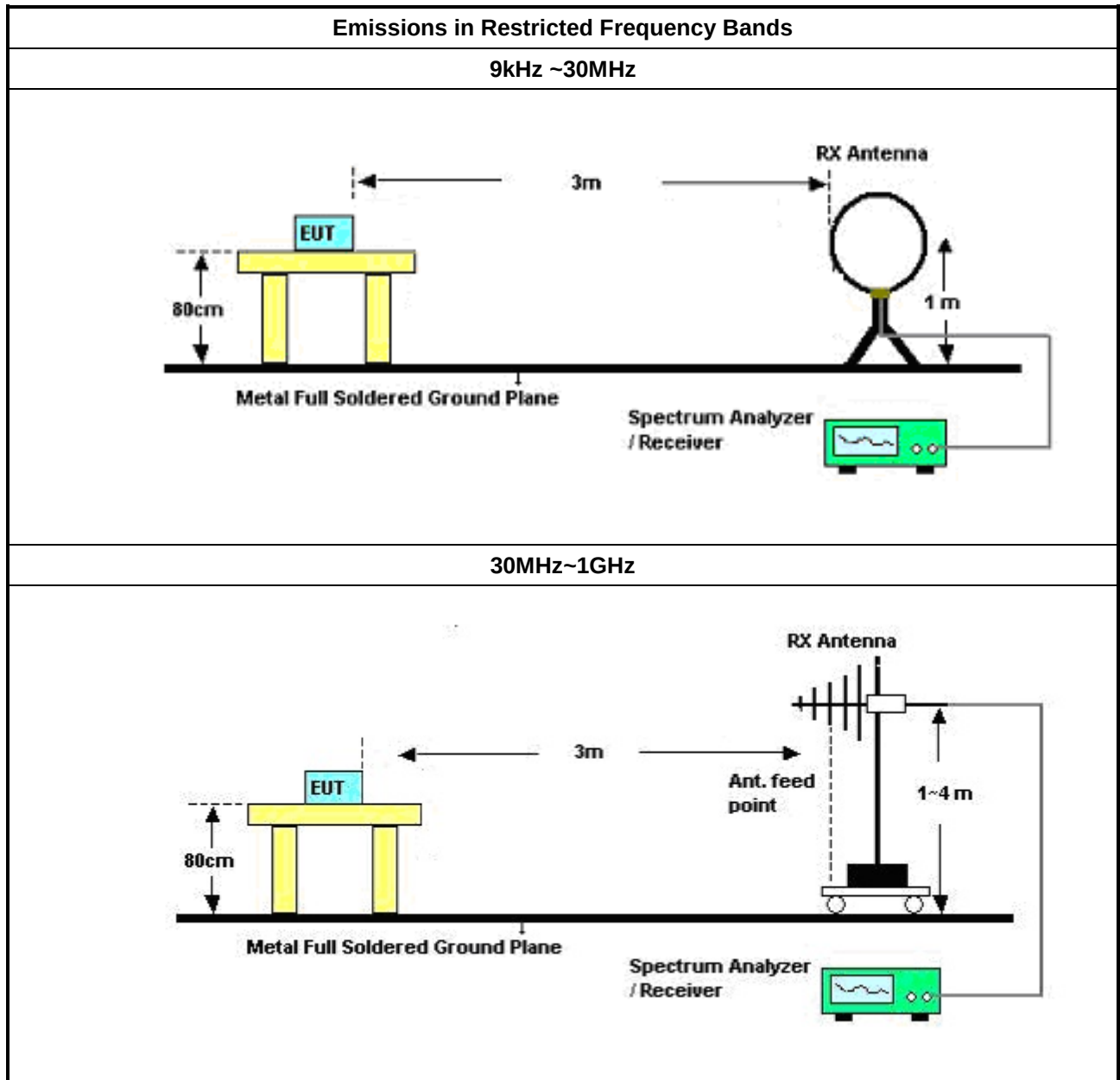
3.7.2 Measuring Instruments

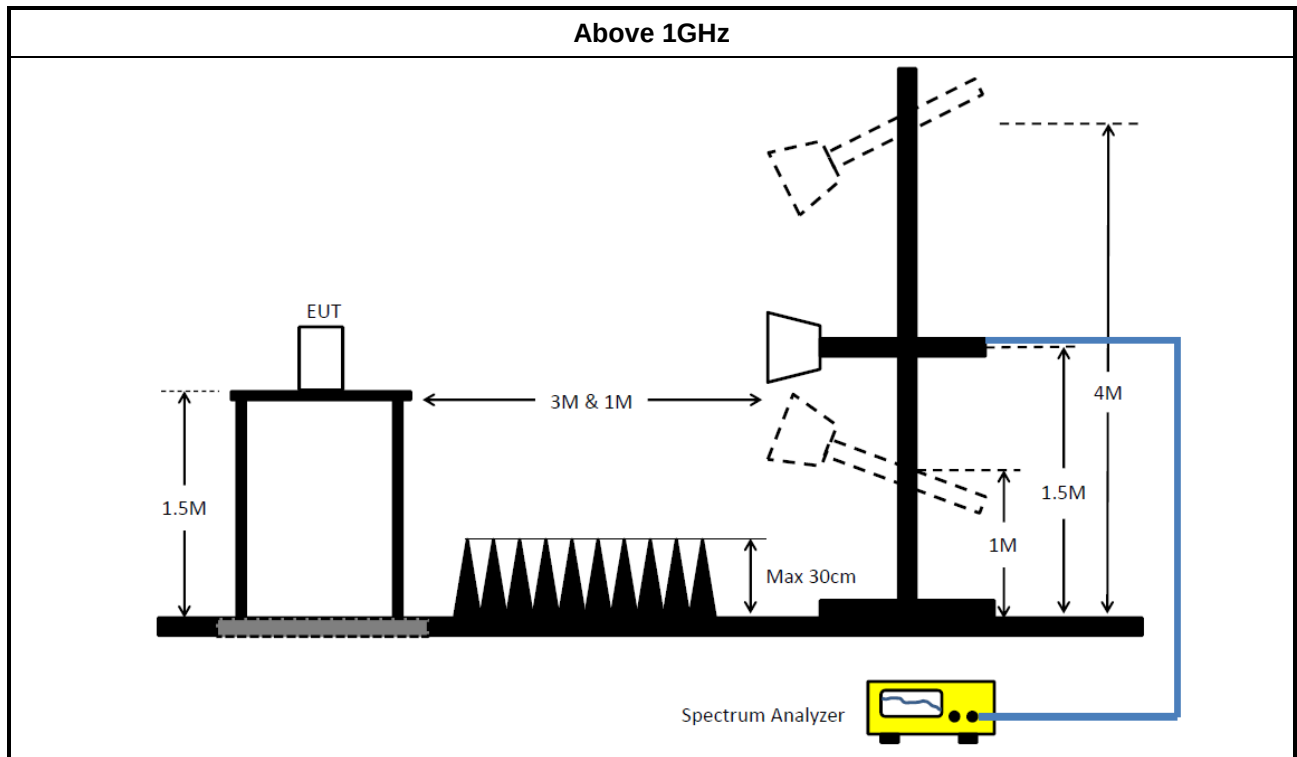
Refer a test equipment and calibration data table in this test report.

3.7.3 Test Procedures

Test Method	
▪ The average emission levels shall be measured in [hopping duty factor].	
▪ Refer as ANSI C63.10; clause 6.10.3 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	09/Apr/2019	08/Apr/2020
LISN	R&S	ENV216	101295	9kHz ~ 30MHz	08/Nov/2018	07/Nov/2019
RF Cable-CON	MTJ	RG142	CB002-CO	9kHz ~ 200MHz	17/Sep/2018	16/Sep/2019
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/2018	11/Oct/2019

NCR : Non-Calibration Require

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	13/Mar/2019	12/Mar/2020
Power Sensor	Anritsu	MA2411B	1339407	300MHz ~ 40GHz	17/Nov/2018	16/Nov/2019
Power Meter	Anritsu	ML2495A	1517010	300MHz ~ 40GHz	17/Nov/2018	16/Nov/2019
Cable 0.2m	HUBER	MY10710/4	RF Cable - 01	30MHz ~18G	10/Jan/2019	09/Jan/2020
Cable 0.2m	HUBER	MY10711/4	RF Cable - 02	30MHz ~18G	10/Jan/2019	09/Jan/2020
Cable 0.5m	HUBER	MY39470/4	RF Cable - 29	30MHz ~18G	10/Jan/2019	09/Jan/2020
SMB100A Signal Generator	R&S	SMB100A03	181147	100kHz~40GHz	12/Nov/2018	10/Nov/2020

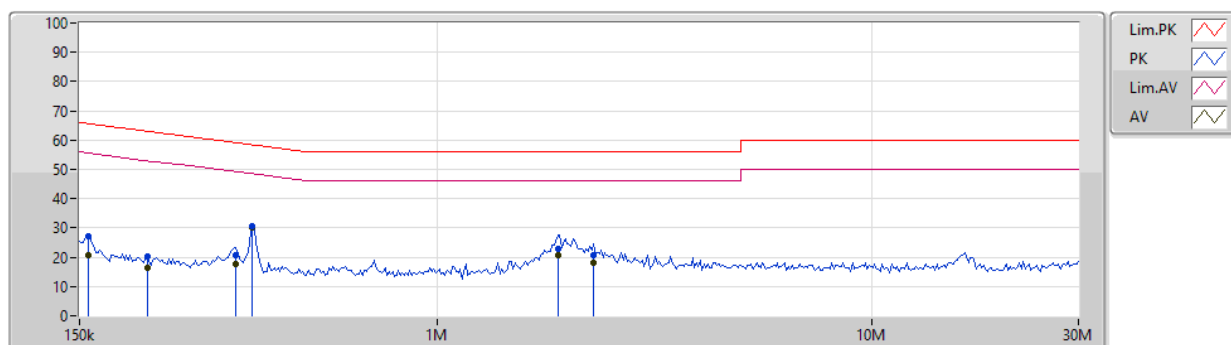
Instrument for Radiated Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	30MHz ~ 1GHz	22/Apr/2019	21/Apr/2020
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	1GHz ~ 18GHz	13/Jun/2019	12/Jun/2020
Microwave System Premplifier	KEYSIGHT	87422A	MY53270197	1GHz ~ 18GHz	30/Nov/2018	29/Nov/2019
Amplifier	EMC	EMC9135	980232	9KHz~1GHz	22/Apr/2019	21/Apr/2020
EMI Test Receiver	R&S	ESR3	102052	9kHz ~ 3.6GHz	09/Apr/2019	08/Apr/2020
EXA Signal Analyzer	KEYSIGHT	N9010A	MY54200885	10Hz ~ 44GHz	30/Jul/2019	29/Jul/2020
Bilog Antenna & 5dB Attenuator	TESEQ & MTJ	CBL6111D & MTJ6102-05	35418 / 3	30MHz~1GHz	02/Oct/2018	03/Oct/2019
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA9120 D 1534	1GHz~18GHz	22/May/2019	21/May/2020
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170614	18GHz~40GHz	22/May/2019	21/May/2020
Preamplifier	MITEQ	TTA1840-35-HG	1864481	18GHz ~ 40GHz	24/Aug/2018	23/Aug/2019
Loop Antenna	TESEQ	HLA 6120	31244	9k-30MHz	15/Mar/2019	14/Mar/2020
LF-CABLE-2019 0218	Jye Bao	RG142	CB028	9kHz ~ 1GHz	18/Feb/2019	17/Feb/2020
RF Cable-high	HUBER+SUHNER	SUCOFLEX104	SN 556626/4 + 556627	1GHz ~ 40GHz	13/Mar/2019	12/Mar/2020
Turn Table	ChainTek	T-200S	1308028	-	NCR	NCR
Antenna Mast	ChainTek	MBS-400	1308049	-	NCR	NCR
Controller	ChainTek	3000	MF780208325	-	NCR	NCR
AC Power Source	G.W	AFC-1KW	F104070001	-	NCR	NCR
Soldering iron	XRTRONIC	1f15	-	-	NCR	NCR
Site V.S.W.R	Riken	3m SAC	03CH09-HY	-	13/Jun/2019	12/Jun/2020

AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Neutral
Operating Function	Adapter Mode		

31/07/2019

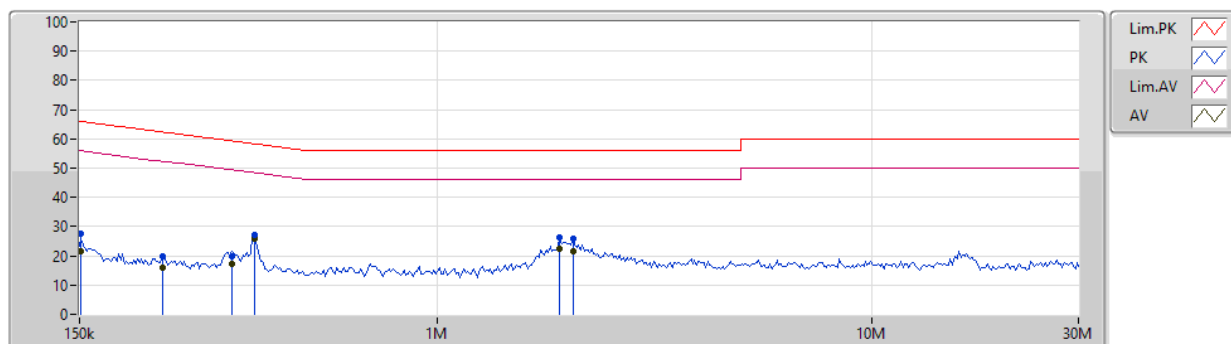


Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	157.652k	27.03	65.58	-38.55	19.48	Neutral	-	7.55	9.60	0.01	9.87			
AV	157.652k	20.58	55.58	-35.00	19.48	Neutral	-	1.10	9.60	0.01	9.87			
QP	214.615k	20.08	63.02	-42.94	19.47	Neutral	-	0.61	9.59	0.01	9.87			
AV	214.615k	16.59	53.02	-36.43	19.47	Neutral	-	-2.88	9.59	0.01	9.87			
QP	342.583k	20.89	59.14	-38.25	19.48	Neutral	-	1.41	9.59	0.01	9.88			
AV	342.583k	17.87	49.14	-31.27	19.48	Neutral	-	-1.61	9.59	0.01	9.88			
QP	374.678k	30.64	58.39	-27.75	19.48	Neutral	-	11.16	9.59	0.01	9.88			
AV	374.678k	30.22	48.39	-18.17	19.48	Neutral	"Worst"	10.74	9.59	0.01	9.88			
QP	1.897M	23.04	56.00	-32.96	19.53	Neutral	-	3.51	9.61	0.03	9.89			
AV	1.897M	20.69	46.00	-25.31	19.53	Neutral	-	1.16	9.61	0.03	9.89			
QP	2.292M	20.73	56.00	-35.27	19.54	Neutral	-	1.19	9.61	0.04	9.89			
AV	2.292M	17.96	46.00	-28.04	19.54	Neutral	-	-1.58	9.61	0.04	9.89			

AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Line
Operating Function	Adapter Mode		

31/07/2019



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	151.5k	27.78	65.92	-38.14	19.48	Line	-	8.30	9.60	0.01	9.87			
AV	151.5k	21.54	55.92	-34.38	19.48	Line	-	2.06	9.60	0.01	9.87			
QP	232.398k	19.76	62.37	-42.61	19.48	Line	-	0.28	9.60	0.01	9.87			
AV	232.398k	16.16	52.37	-36.21	19.48	Line	-	-3.32	9.60	0.01	9.87			
QP	335.832k	19.90	59.31	-39.41	19.48	Line	-	0.42	9.59	0.01	9.88			
AV	335.832k	17.33	49.31	-31.98	19.48	Line	-	-2.15	9.59	0.01	9.88			
QP	378.424k	27.15	58.31	-31.16	19.48	Line	-	7.67	9.59	0.01	9.88			
AV	378.424k	25.87	48.31	-22.44	19.48	Line	"Worst"	6.39	9.59	0.01	9.88			
QP	1.916M	26.31	56.00	-29.69	19.54	Line	-	6.77	9.62	0.03	9.89			
AV	1.916M	22.60	46.00	-23.40	19.54	Line	-	3.06	9.62	0.03	9.89			
QP	2.054M	25.87	56.00	-30.13	19.54	Line	-	6.33	9.62	0.03	9.89			
AV	2.054M	21.60	46.00	-24.40	19.54	Line	-	2.06	9.62	0.03	9.89			

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	874.563k	875KF1D	916.25k	872.064k
BT-EDR(2Mbps)	1.499M	1.368M	1M37G1D	1.456M	1.367M
BT-EDR(3Mbps)	1.429M	1.367M	1M37G1D	1.406M	1.367M

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;

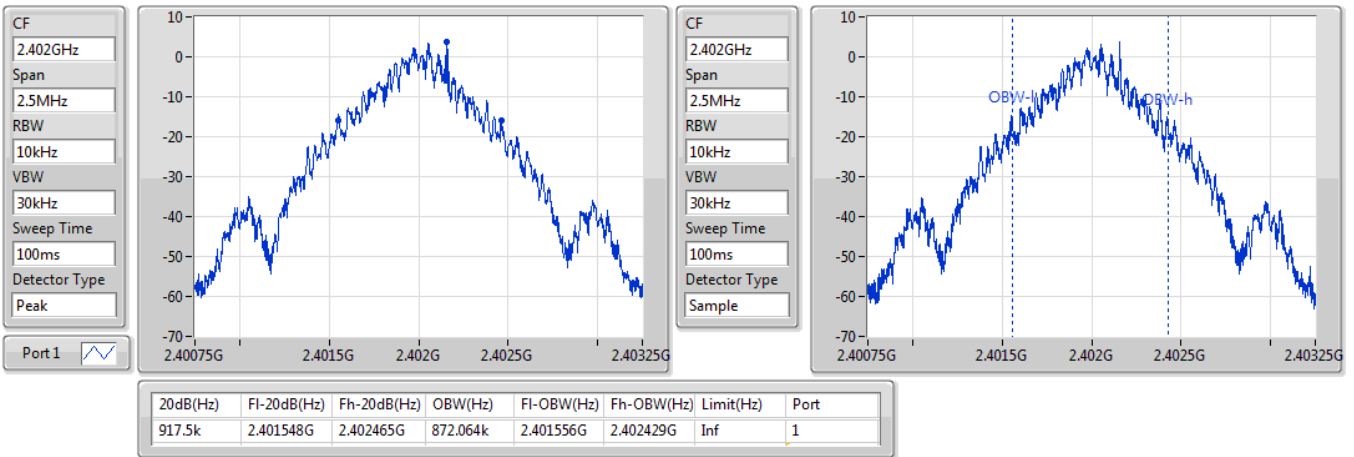
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-BR(1Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	Inf	917.5k	872.064k
2441MHz_TnomVnom	Pass	Inf	920k	873.313k
2480MHz_TnomVnom	Pass	Inf	916.25k	874.563k
BT-EDR(2Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	Inf	1.456M	1.367M
2441MHz_TnomVnom	Pass	Inf	1.46M	1.367M
2480MHz_TnomVnom	Pass	Inf	1.499M	1.368M
BT-EDR(3Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	Inf	1.406M	1.367M
2441MHz_TnomVnom	Pass	Inf	1.406M	1.367M
2480MHz_TnomVnom	Pass	Inf	1.429M	1.367M

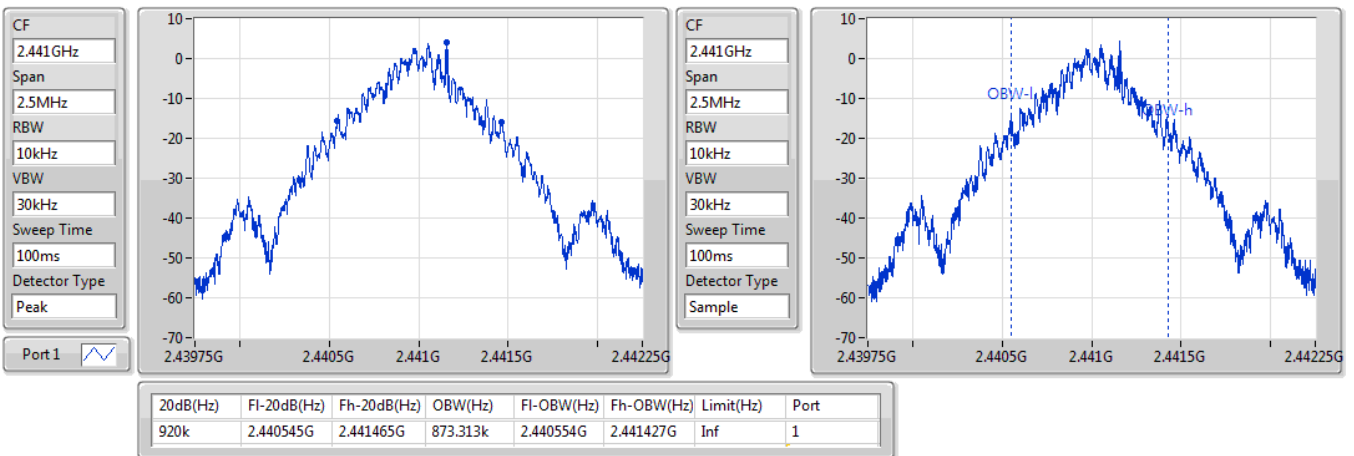
Port X-N dB = Port X 20dB down bandwidth; **Port X-OBW** = Port X 99% occupied bandwidth;

BT-BR(1Mbps)
2402MHz

25/07/2019

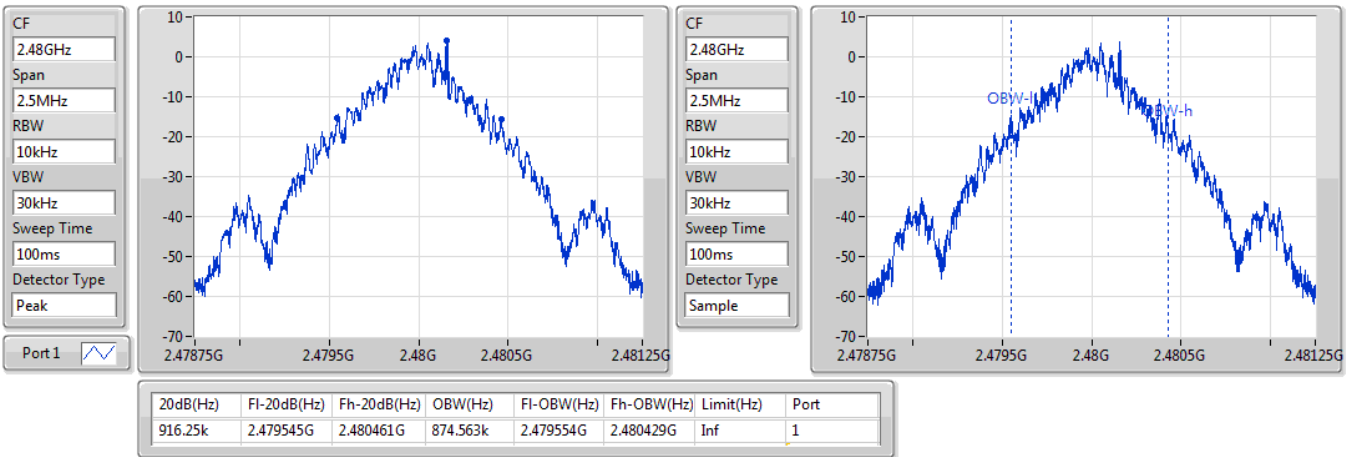

BT-BR(1Mbps)
2441MHz

25/07/2019

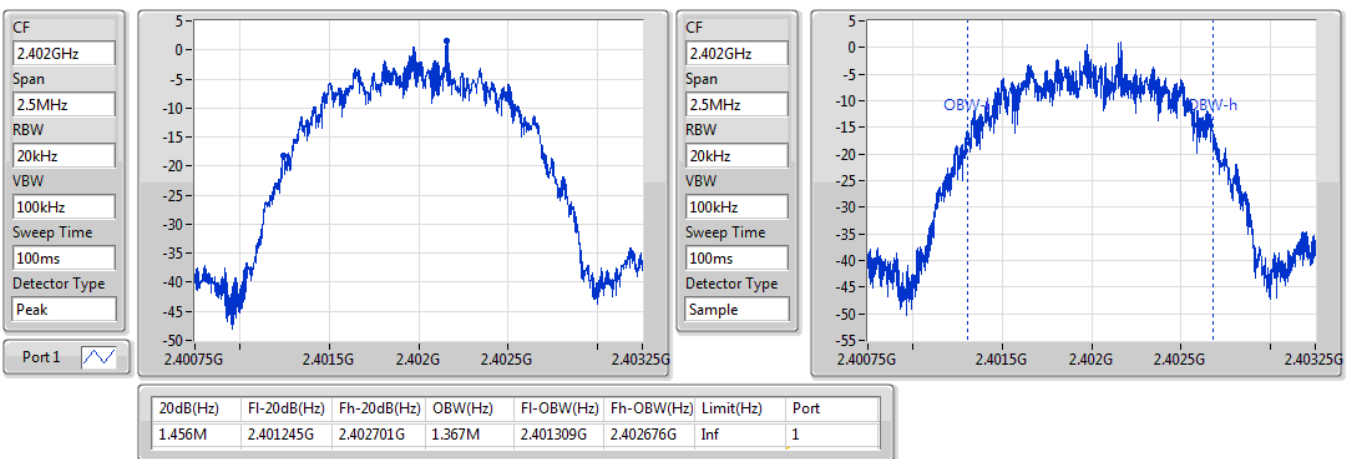


BT-BR(1Mbps)
EBW
2480MHz

25/07/2019

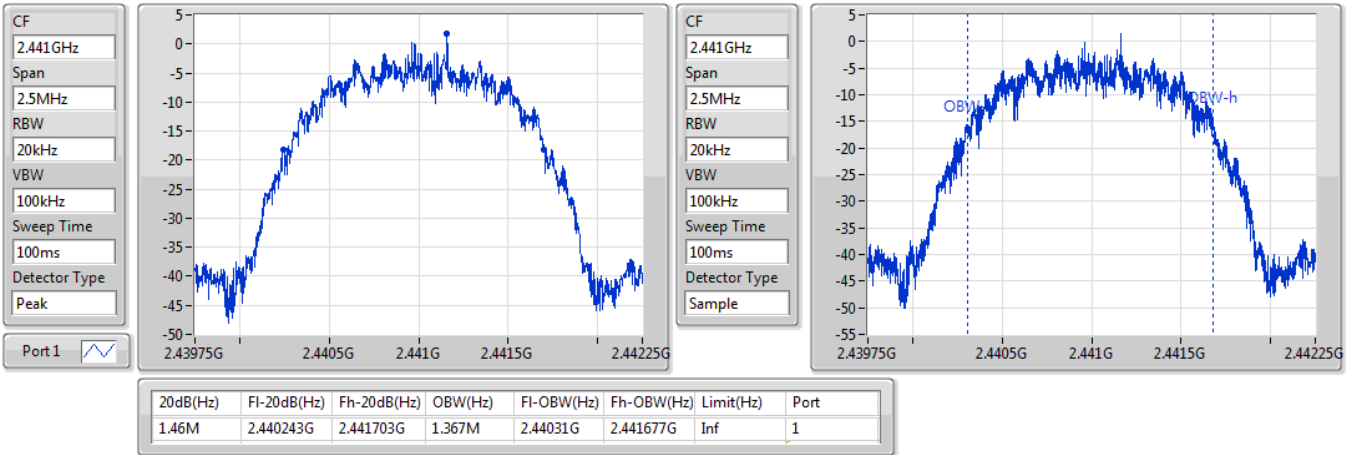

BT-EDR(2Mbps)
EBW
2402MHz

25/07/2019

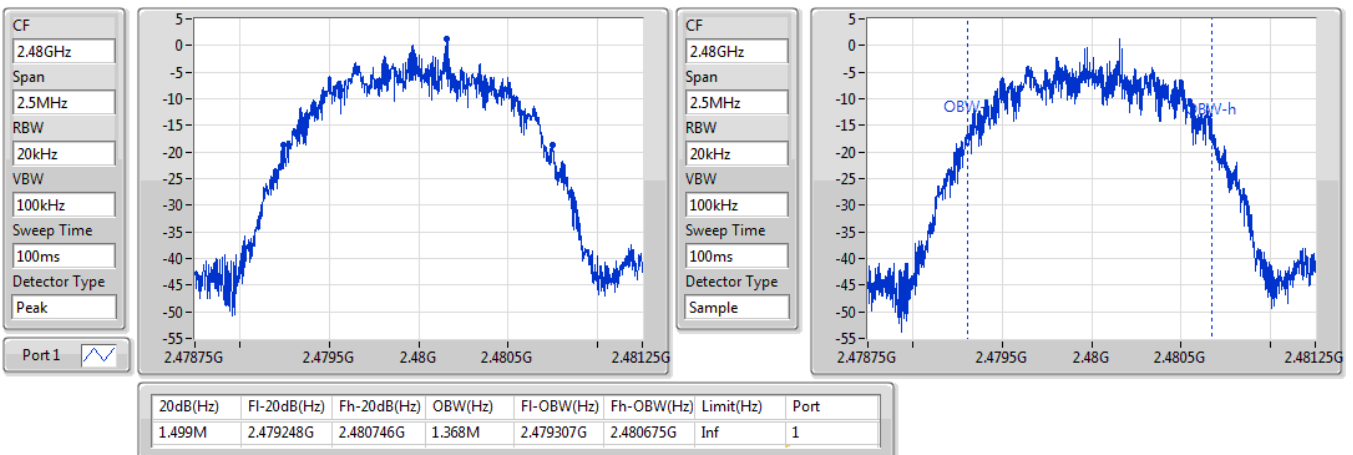


BT-EDR(2Mbps)
2441MHz

25/07/2019

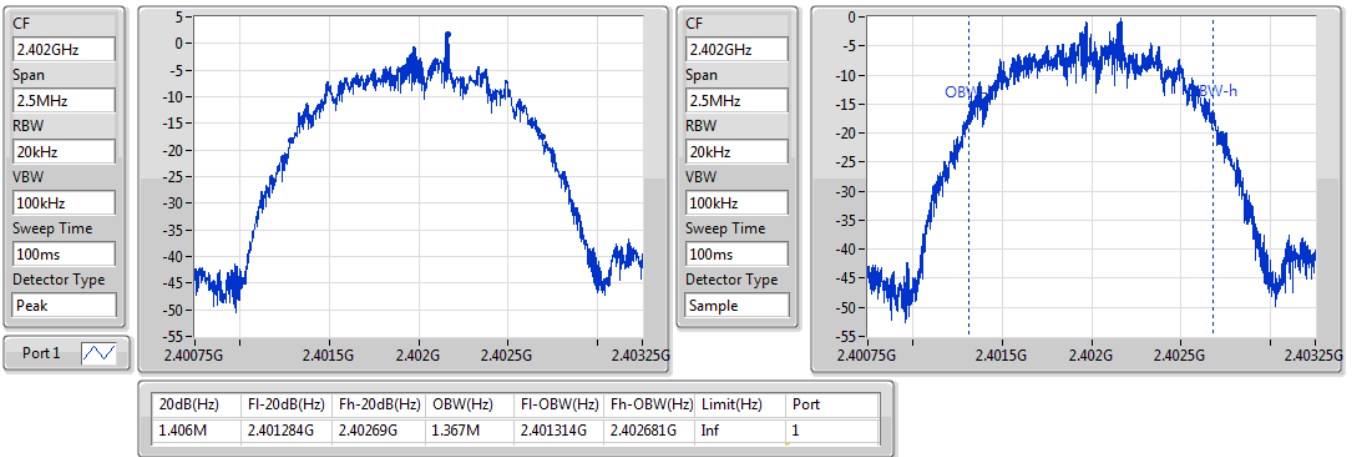

BT-EDR(2Mbps)
2480MHz

25/07/2019

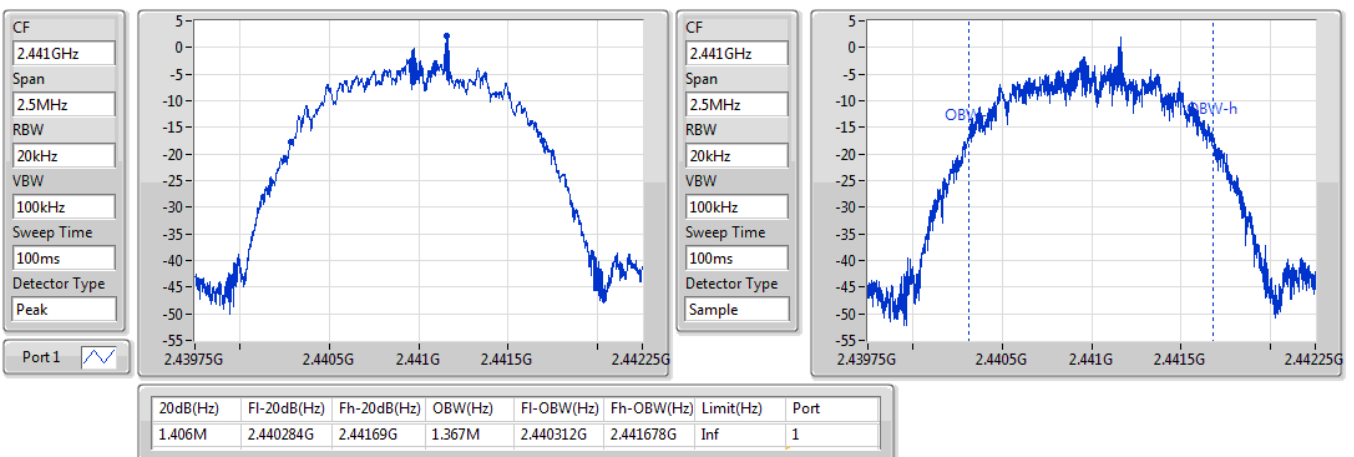


BT-EDR(3Mbps)
EBW
2402MHz

25/07/2019


BT-EDR(3Mbps)
EBW
2441MHz

25/07/2019

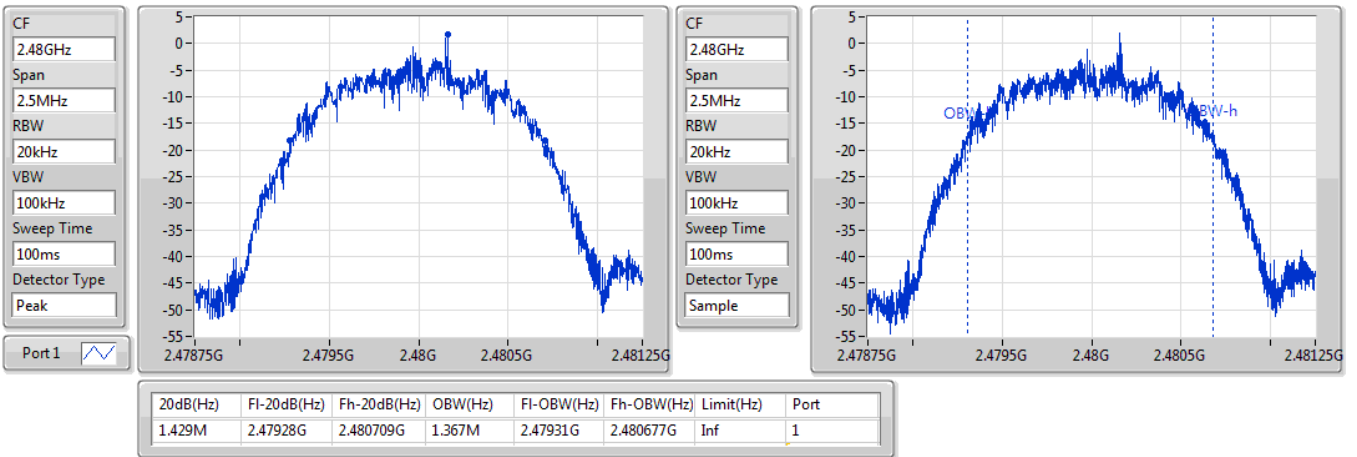


BT-EDR(3Mbps)

2480MHz

EBW

25/07/2019





Summary

Mode	Max-Space (Hz)	Min-Space (Hz)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	1.002M	999k
BT-EDR(2Mbps)	1.0035M	996k
BT-EDR(3Mbps)	999k	996k

Result

Mode	Result	Fl (Hz)	Fh (Hz)	Ch.Space (Hz)	Limit (Hz)
BT-BR(1Mbps)	-	-	-	-	-
2402MHz_TnomVnom	Pass	2.402154G	2.403153G	999k	611.055k
2441MHz_TnomVnom	Pass	2.441154G	2.442156G	1.002M	612.72k
2480MHz_TnomVnom	Pass	2.479155G	2.480154G	999k	610.2225k
BT-EDR(2Mbps)	-	-	-	-	-
2402MHz_TnomVnom	Pass	2.402157G	2.403153G	996k	969.696k
2441MHz_TnomVnom	Pass	2.441157G	2.44216G	1.0035M	972.36k
2480MHz_TnomVnom	Pass	2.479157G	2.480157G	1.0005M	998.334k
BT-EDR(3Mbps)	-	-	-	-	-
2402MHz_TnomVnom	Pass	2.402157G	2.403153G	996k	936.396k
2441MHz_TnomVnom	Pass	2.44116G	2.442159G	999k	936.396k
2480MHz_TnomVnom	Pass	2.479158G	2.480157G	999k	951.714k

BT-BR(1Mbps)

2.402G/2.403GHz

Channel Separation

25/07/2019

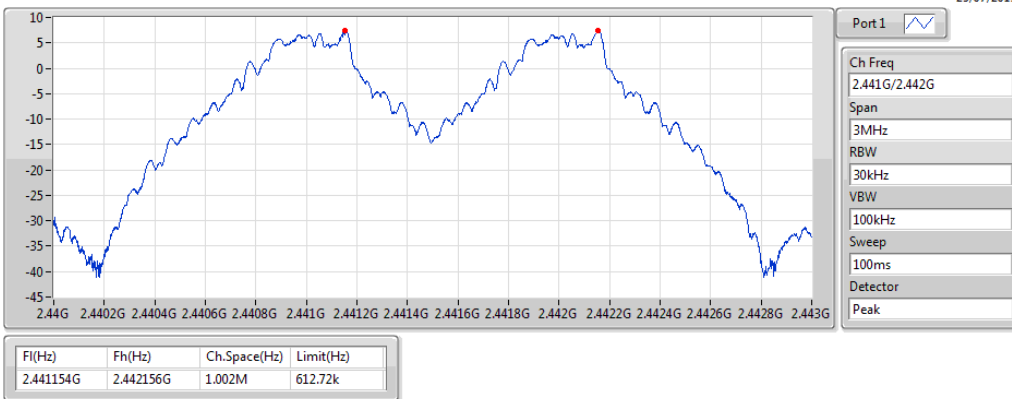


BT-BR(1Mbps)

2.441G/2.442GHz

Channel Separation

25/07/2019

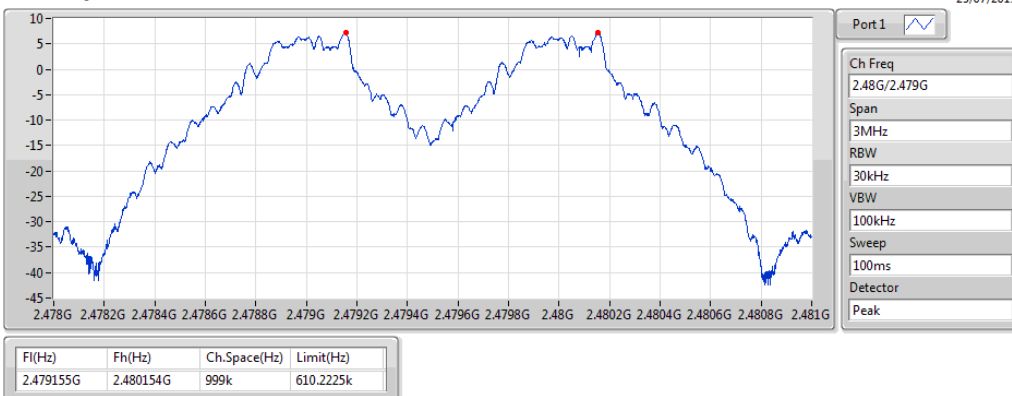


BT-BR(1Mbps)

2.48G/2.479GHz

Channel Separation

25/07/2019

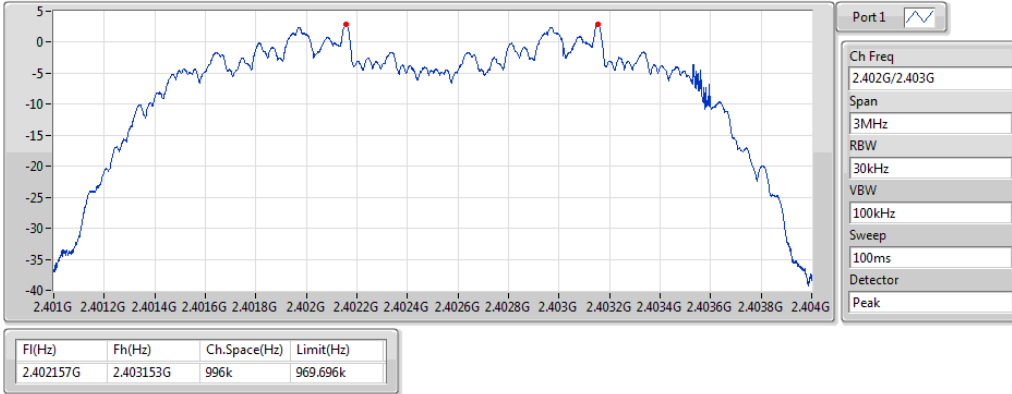


BT-EDR(2Mbps)

2.402G/2.403GHz

Channel Separation

25/07/2019

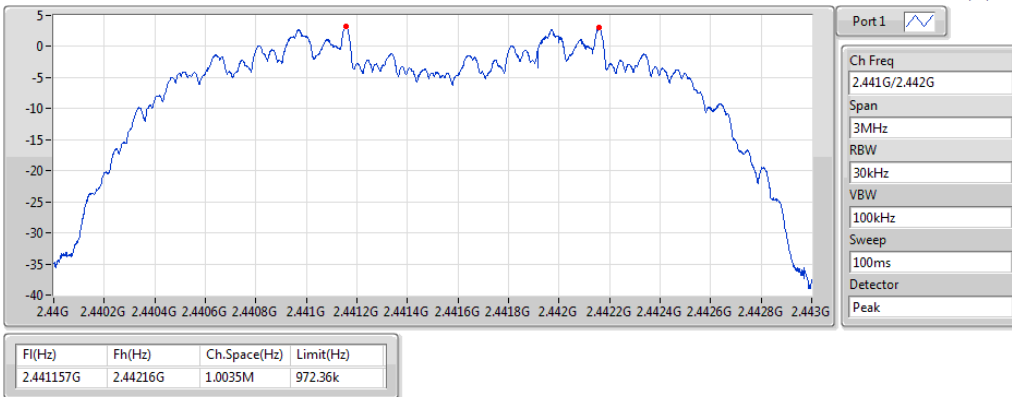


BT-EDR(2Mbps)

2.441G/2.442GHz

Channel Separation

25/07/2019

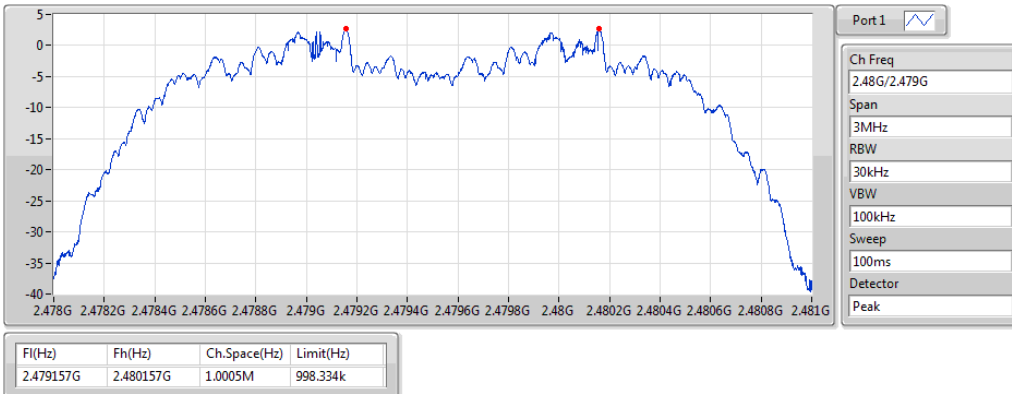


BT-EDR(2Mbps)

2.48G/2.479GHz

Channel Separation

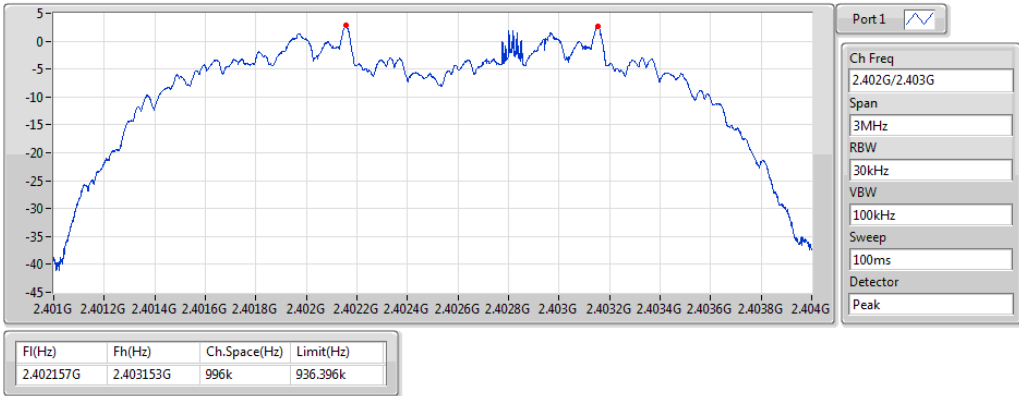
25/07/2019



BT-EDR(3Mbps)

Channel Separation

2.402G/2.403GHz



BT-EDR(3Mbps)

Channel Separation

2.441G/2.442GHz



BT-EDR(3Mbps)

Channel Separation

2.48G/2.479GHz





Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	9.51	0.00893
BT-EDR(2Mbps)	8.04	0.00637
BT-EDR(3Mbps)	7.45	0.00556

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	2.54	9.10	30.00
2441MHz_TnomVnom	Pass	2.54	9.51	30.00
2480MHz_TnomVnom	Pass	2.54	9.28	30.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	2.54	7.76	30.00
2441MHz_TnomVnom	Pass	2.54	8.04	30.00
2480MHz_TnomVnom	Pass	2.54	7.73	30.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	2.54	7.14	30.00
2441MHz_TnomVnom	Pass	2.54	7.45	30.00
2480MHz_TnomVnom	Pass	2.54	7.14	30.00

DG = Directional Gain; **Port X** = Port X output power



Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	9.37	0.00865
BT-EDR(2Mbps)	5.87	0.00386
BT-EDR(3Mbps)	4.96	0.00313

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	2.54	8.95	30.00
2441MHz_TnomVnom	Pass	2.54	9.37	30.00
2480MHz_TnomVnom	Pass	2.54	9.18	30.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	2.54	5.60	30.00
2441MHz_TnomVnom	Pass	2.54	5.87	30.00
2480MHz_TnomVnom	Pass	2.54	5.44	30.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	2.54	4.66	30.00
2441MHz_TnomVnom	Pass	2.54	4.96	30.00
2480MHz_TnomVnom	Pass	2.54	4.64	30.00

DG = Directional Gain; **Port X** = Port X output power



Summary

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

Result

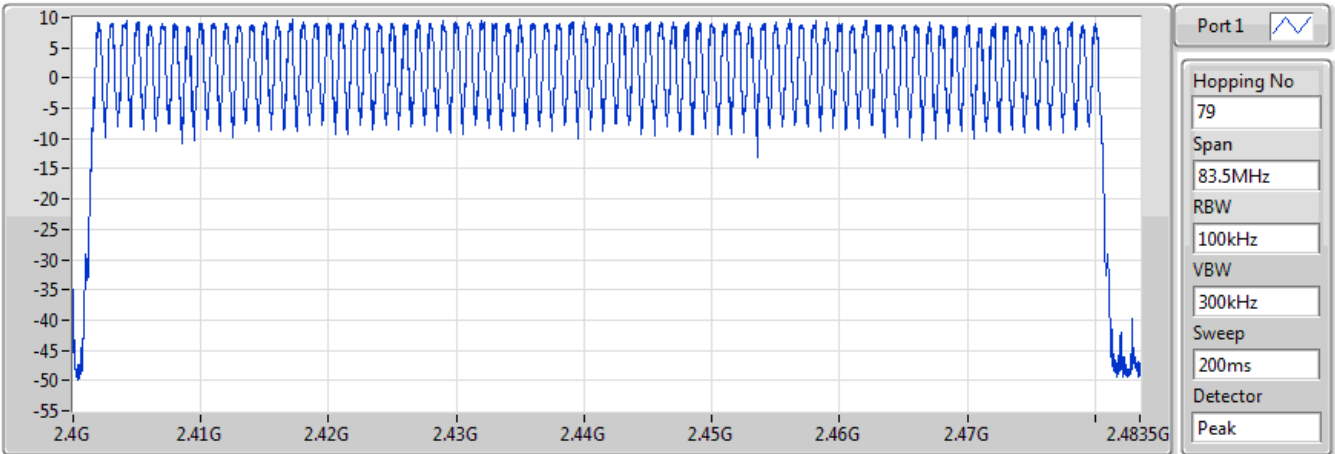
Mode	Result	Hopping No	Limit
BT-BR(1Mbps)	-	-	-
2441MHz_TnomVnom	Pass	79	15
BT-EDR(2Mbps)	-	-	-
2441MHz_TnomVnom	Pass	79	15
BT-EDR(3Mbps)	-	-	-
2441MHz_TnomVnom	Pass	79	15

BT-BR(1Mbps)

2441MHz

Hopping Ch

25/07/2019



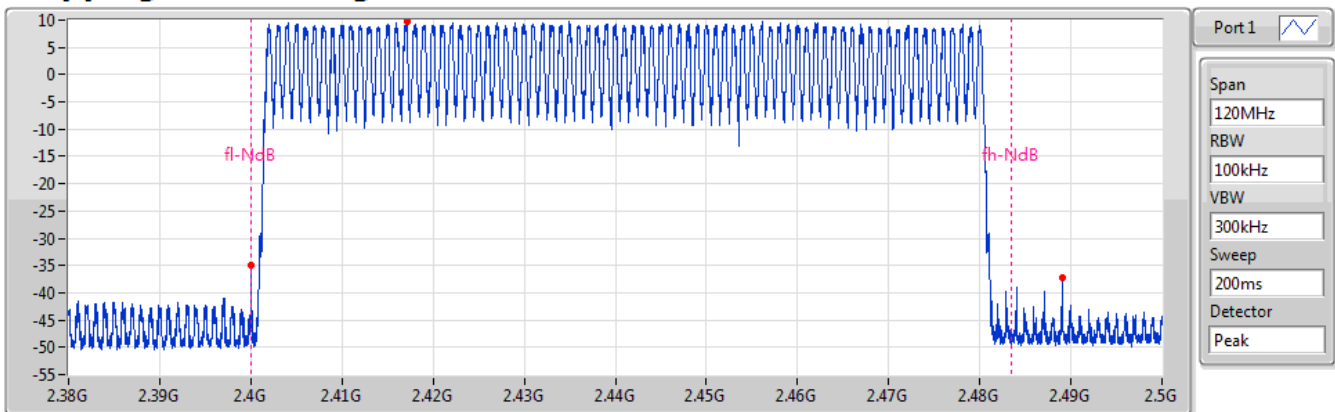
Hopping No	Limit
79	15

BT-BR(1Mbps)

2441MHz

Hopping Ch Bandedge (Non-restricted Band)

25/07/2019



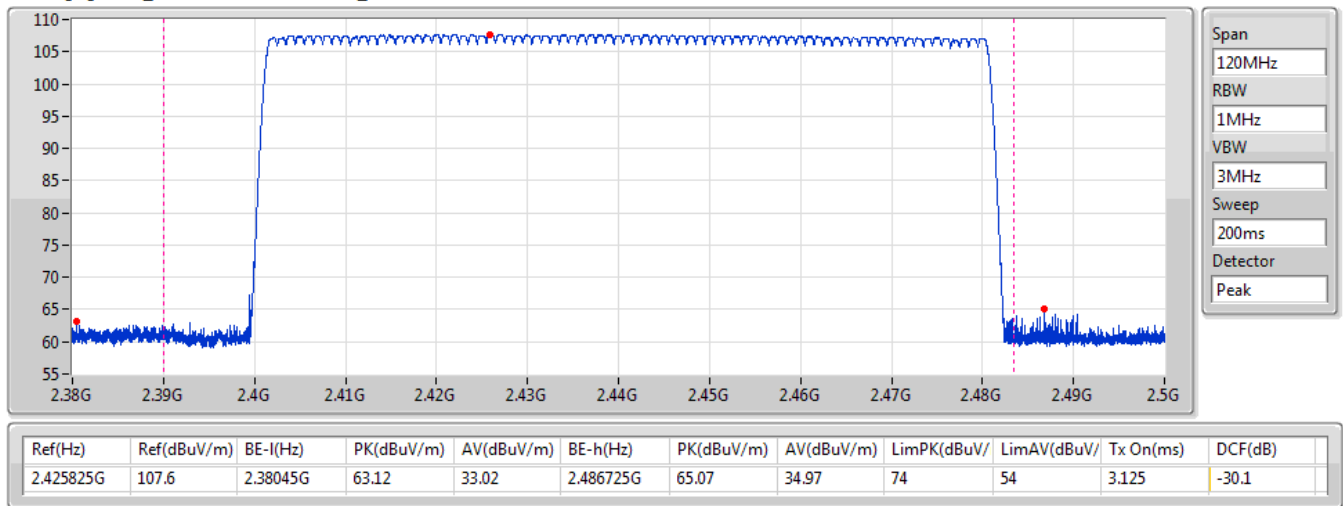
Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-10.25	2.417155G	9.75	2.39998G	-34.97	2.48902G	-37.35

BT-BR(1Mbps)

2441MHz

Hopping Ch Bandedge (Restricted Band)

25/07/2019

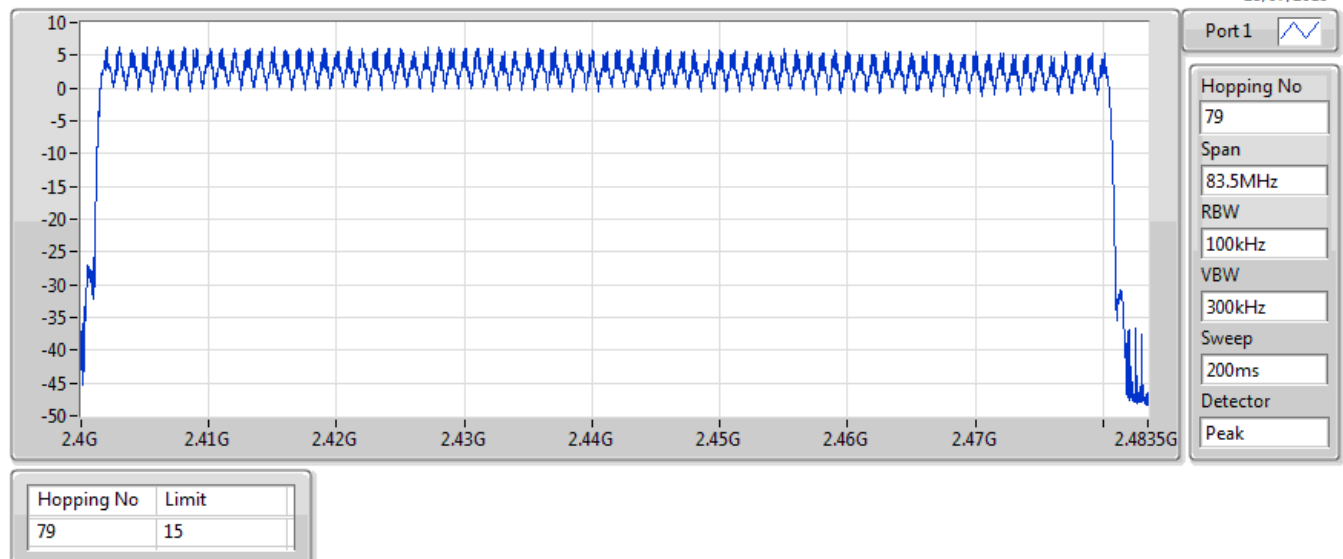


BT-EDR(2Mbps)

2441MHz

Hopping Ch

25/07/2019

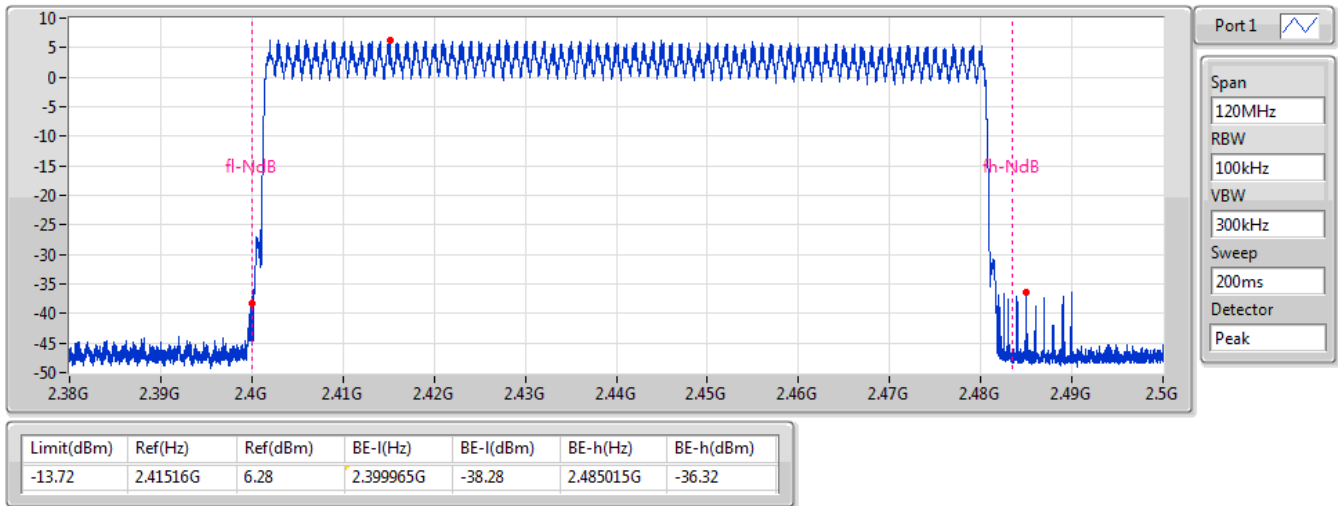


BT-EDR(2Mbps)

2441MHz

Hopping Ch Bandedge (Non-restricted Band)

25/07/2019

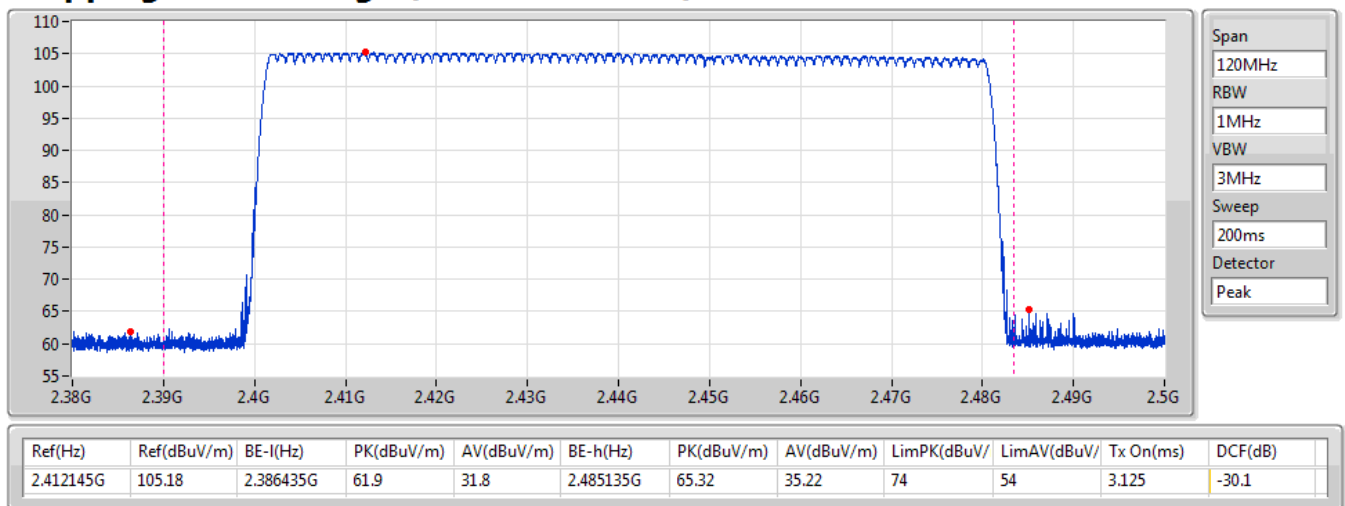


BT-EDR(2Mbps)

2441MHz

Hopping Ch Bandedge (Restricted Band)

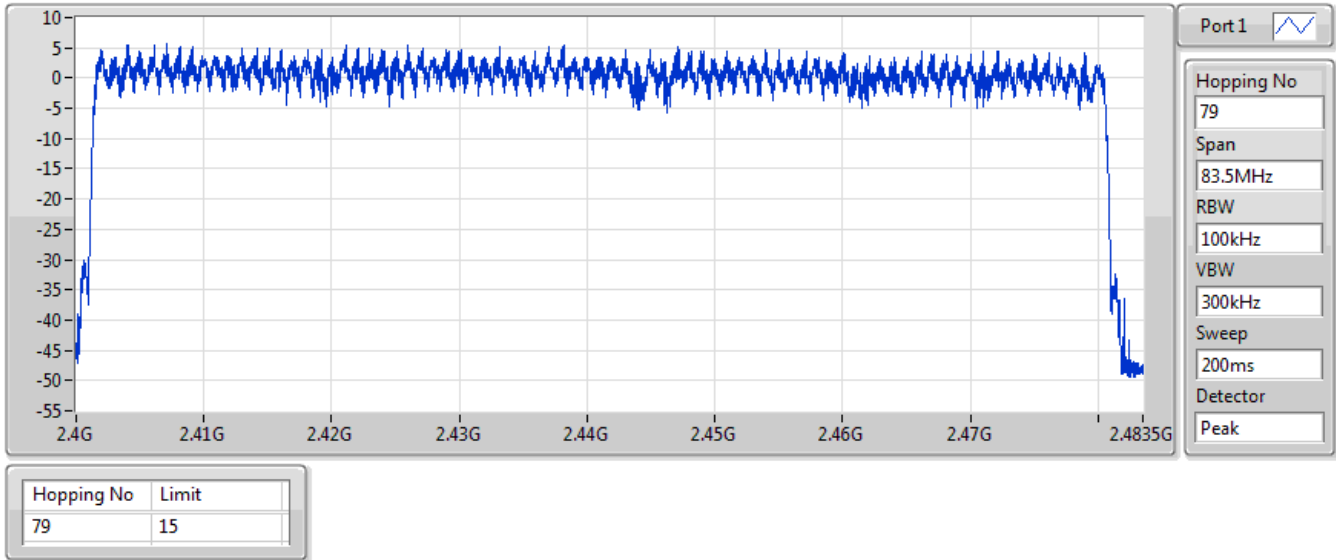
25/07/2019



BT-EDR(3Mbps) 2441MHz

Hopping Ch

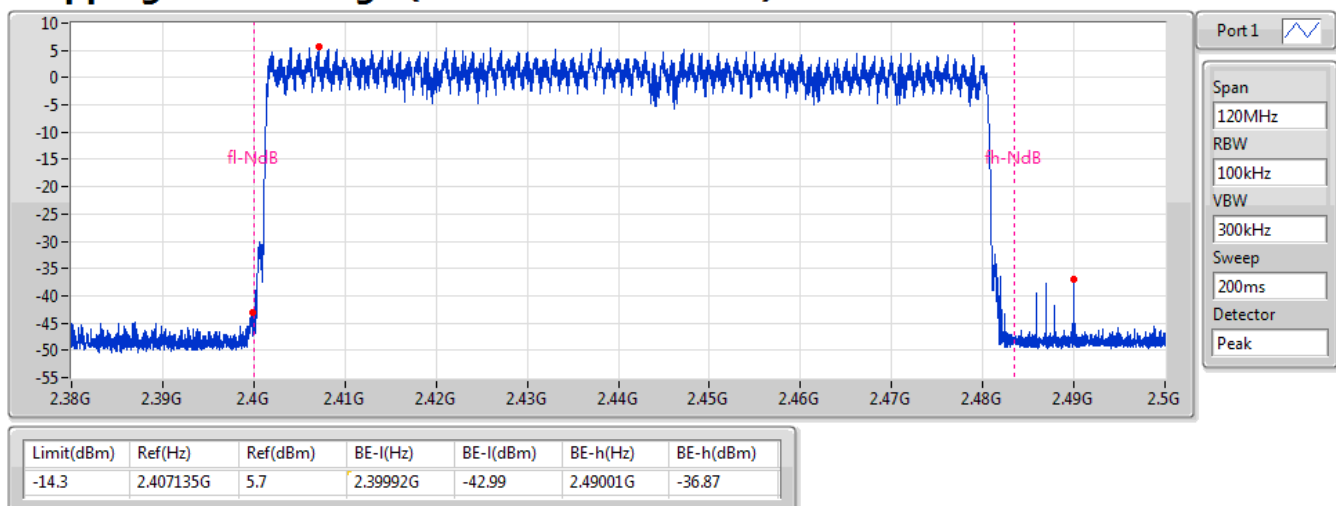
25/07/2019



BT-EDR(3Mbps) 2441MHz

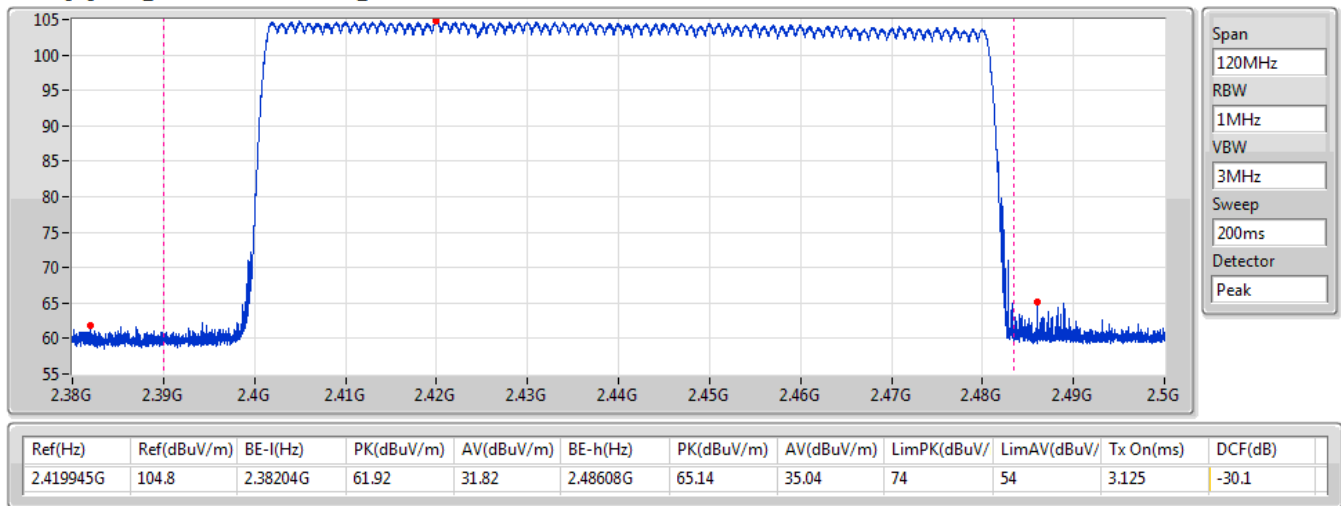
Hopping Ch Bandedge (Non-restricted Band)

25/07/2019



BT-EDR(3Mbps)**2441MHz****Hopping Ch Bandedge (Restricted Band)**

25/07/2019





Summary

Mode	Max-Dwell (s)
2.4-2.4835GHz	-
BT-BR(1Mbps)	307.8608m
BT-EDR(2Mbps)	308.5004m
BT-EDR(3Mbps)	308.607m

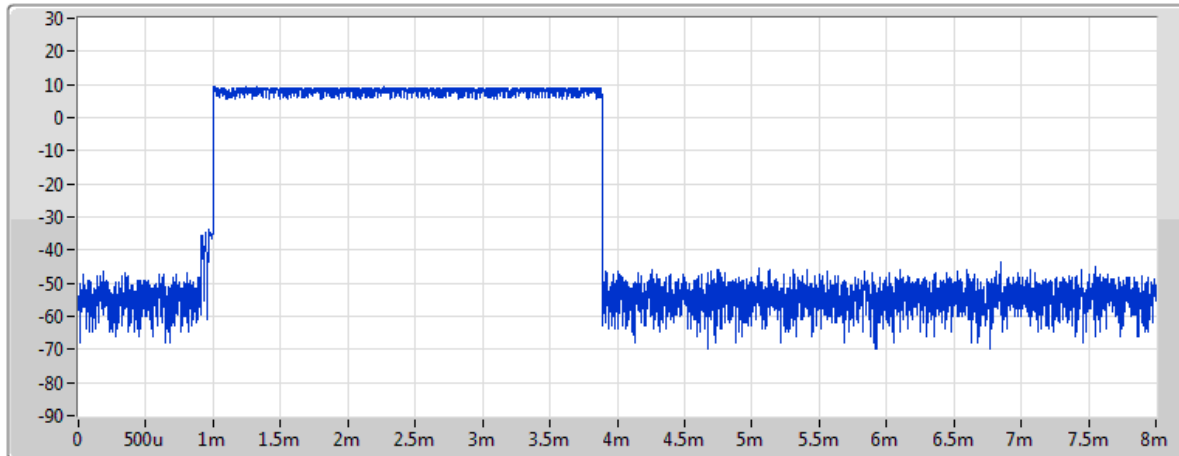
Result

Mode	Result	Period (s)	Dwell (s)	Limit (s)	Tx On (s)
BT-BR(1Mbps)	-	-	-	-	-
2441MHz_TnomVnom	Pass	31.6	307.8608m	400m	2.888m
BT-EDR(2Mbps)	-	-	-	-	-
2441MHz_TnomVnom	Pass	31.6	308.5004m	400m	2.894m
BT-EDR(3Mbps)	-	-	-	-	-
2441MHz_TnomVnom	Pass	31.6	308.607m	400m	2.895m

BT-BR(1Mbps)

2441MHz

25/07/2019



Port 1

Ch Freq

2.441GHz

RBW

300kHz

VBW

1MHz

Sweep Time

8ms

TX Time

2.888ms

non AFH Mode

Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	307.8608m	400m	2.888m

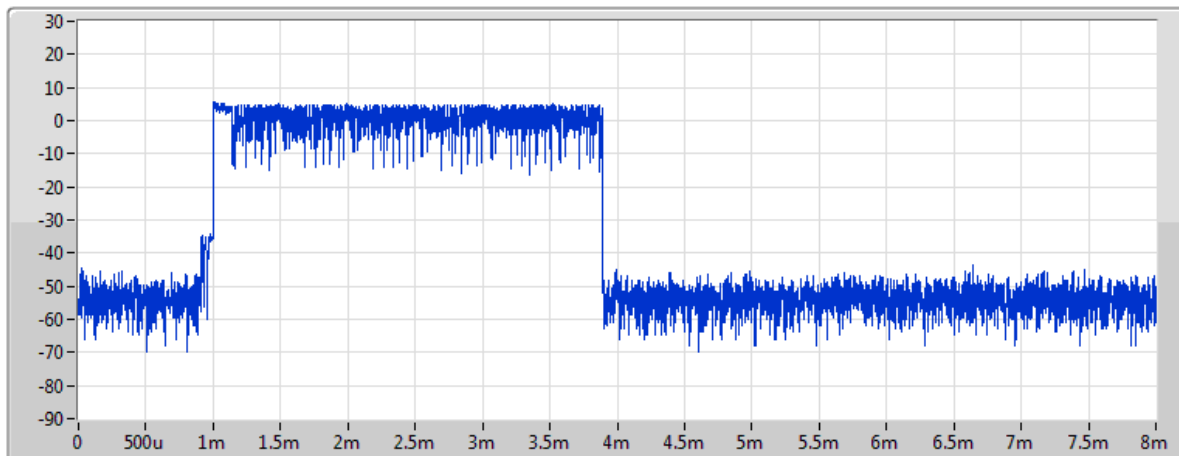
AFH Mode

Period(s)	Dwell(s)	Limit(s)	Tx On(s)
0	153.9304m	400m	2.888m

BT-EDR(2Mbps)

2441MHz

25/07/2019



Port 1

Ch Freq

2.441GHz

RBW

300kHz

VBW

1MHz

Sweep Time

8ms

TX Time

2.894ms

non AFH Mode

Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	308.5004m	400m	2.894m

AFH Mode

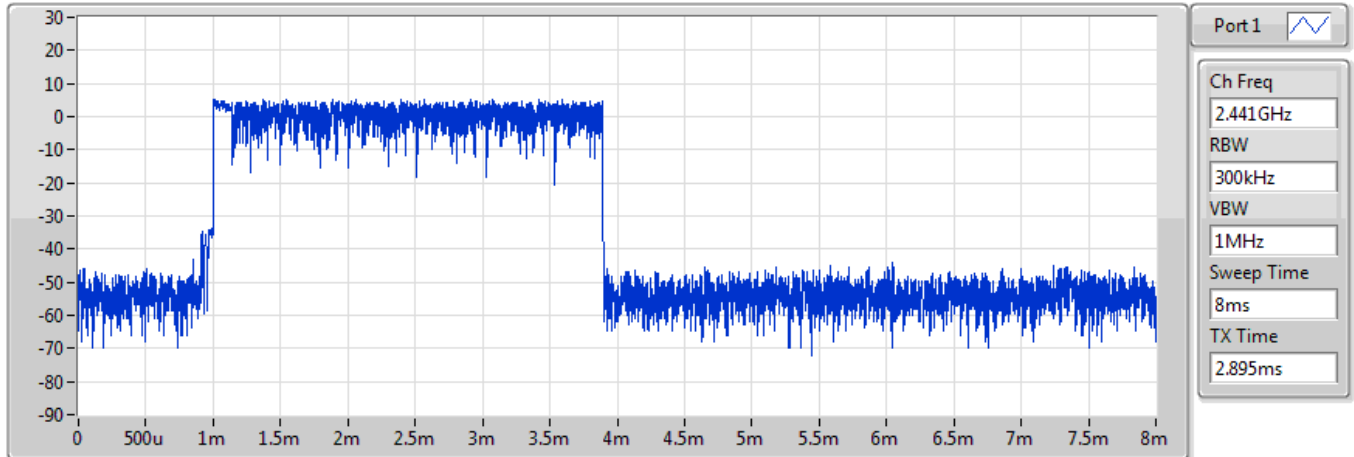
Period(s)	Dwell(s)	Limit(s)	Tx On(s)
0	154.2502m	400m	2.894m

BT-EDR(3Mbps)

2441MHz

25/07/2019

Dwell



non AFH Mode

Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	308.607m	400m	2.895m

AFH Mode

Period(s)	Dwell(s)	Limit(s)	Tx On(s)
0	154.3035m	400m	2.895m

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	2.40205G	8.35	-11.65	1.83205G	-54.64	2.39999G	-34.77	2.48355G	-53.03	7.2051G	-40.06	1
BT-EDR(2Mbps)	Pass	2.40209G	3.97	-16.03	2.3977G	-52.73	2.4G	-37.48	2.48459G	-52.93	24.42025G	-41.33	1
BT-EDR(3Mbps)	Pass	2.44096G	4.31	-15.69	2.10141G	-55.15	2.3987G	-53.53	2.48371G	-53.32	23.42961G	-40.20	1

Result

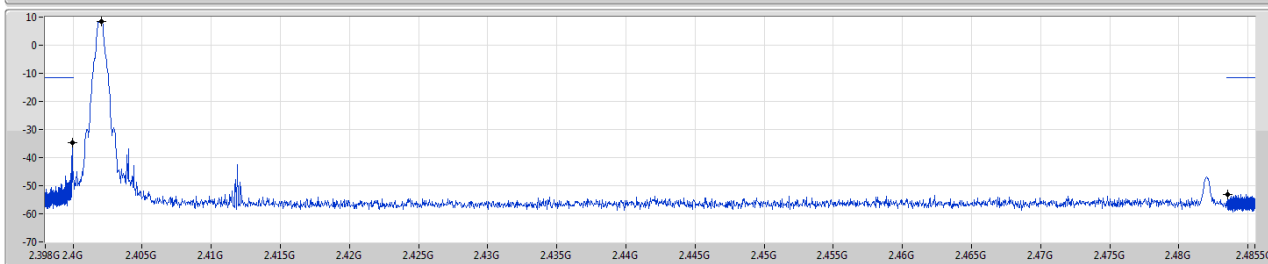
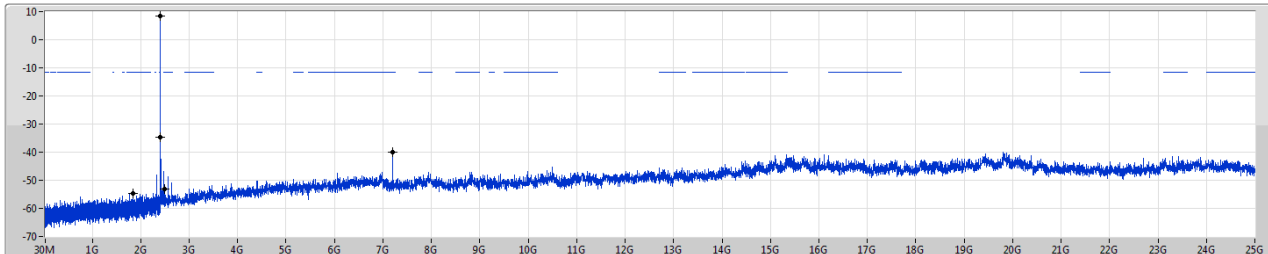
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
BT-BR(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz_TnomVnom	Pass	2.40205G	8.35	-11.65	1.83205G	-54.64	2.39999G	-34.77	2.48355G	-53.03	7.2051G	-40.06	1
2441MHz_TnomVnom	Pass	2.44104G	8.83	-11.17	2.09046G	-54.61	2.3985G	-53.85	2.48534G	-52.91	15.07111G	-40.49	1
2480MHz_TnomVnom	Pass	2.48008G	8.59	-11.41	2.09519G	-54.42	2.39998G	-43.31	2.48378G	-48.78	15.12176G	-40.24	1
BT-EDR(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz_TnomVnom	Pass	2.40209G	3.97	-16.03	2.3977G	-52.73	2.4G	-37.48	2.48459G	-52.93	24.42025G	-41.33	1
2441MHz_TnomVnom	Pass	2.441G	5.87	-14.13	1.96998G	-54.93	2.39853G	-53.54	2.48384G	-52.97	15.06266G	-40.48	1
2480MHz_TnomVnom	Pass	2.48008G	4.33	-15.67	2.14551G	-55.23	2.39998G	-46.87	2.4853G	-48.81	23.5056G	-40.92	1
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz_TnomVnom	Pass	2.40205G	3.60	-16.40	2.398G	-52.54	2.39998G	-40.97	2.48451G	-52.81	16.38258G	-41.45	1
2441MHz_TnomVnom	Pass	2.44096G	4.31	-15.69	2.10141G	-55.15	2.3987G	-53.53	2.48371G	-53.32	23.42961G	-40.20	1
2480MHz_TnomVnom	Pass	2.48016G	3.82	-16.18	1.98804G	-55.27	2.39999G	-46.66	2.48434G	-49.37	24.45402G	-41.62	1

BT-BR(1Mbps)

CSE NdB

2402MHz

25/07/2019



RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

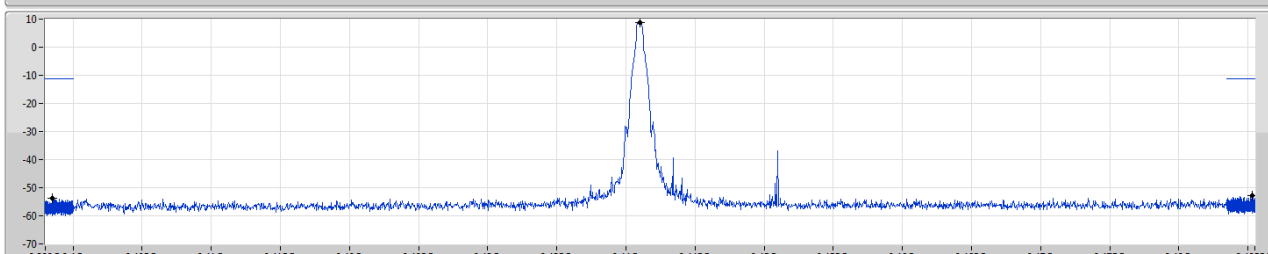
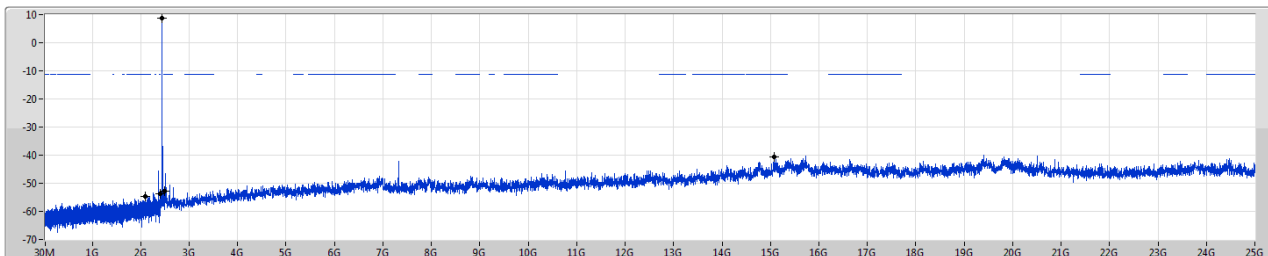
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.40205G	8.35	-11.65	1.83205G	-54.64	2.39999G	-34.77	2.48355G	-53.03	7.2051G	-40.06	1

BT-BR(1Mbps)

CSE NdB

2441MHz

25/07/2019



RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.44104G	8.83	-11.17	2.09046G	-54.61	2.3985G	-53.85	2.48534G	-52.91	15.07111G	-40.49	1

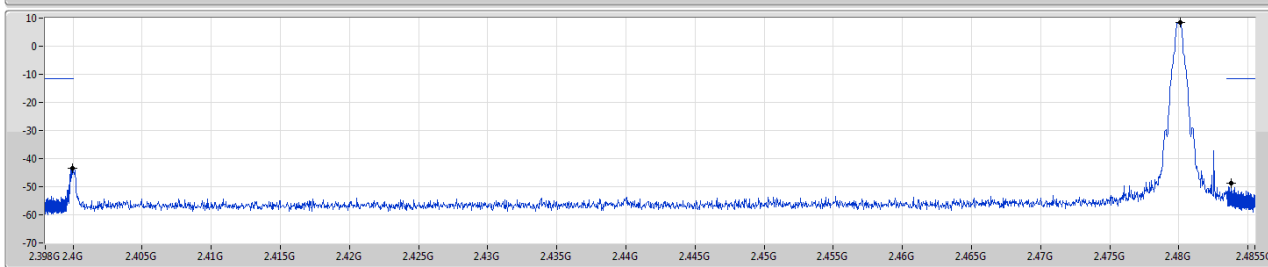
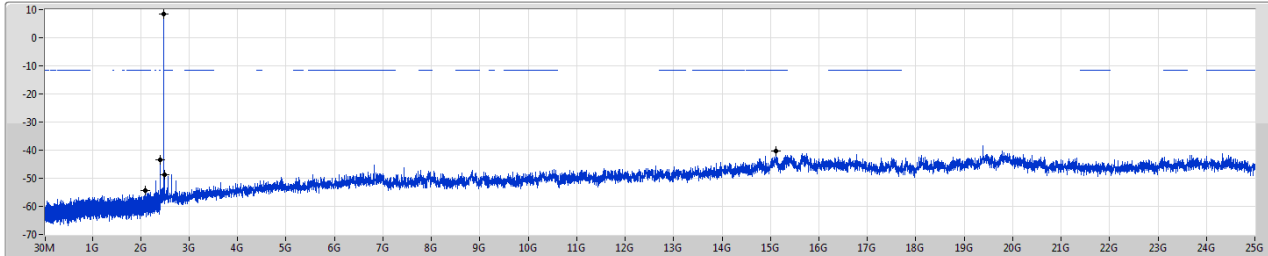
BT-BR(1Mbps)

2480MHz

CSE NdB

25/07/2019

Port1



RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.48008G	8.59	-11.41	2.09519G	-54.42	2.39998G	-43.31	2.48378G	-48.78	15.12176G	-40.24	1

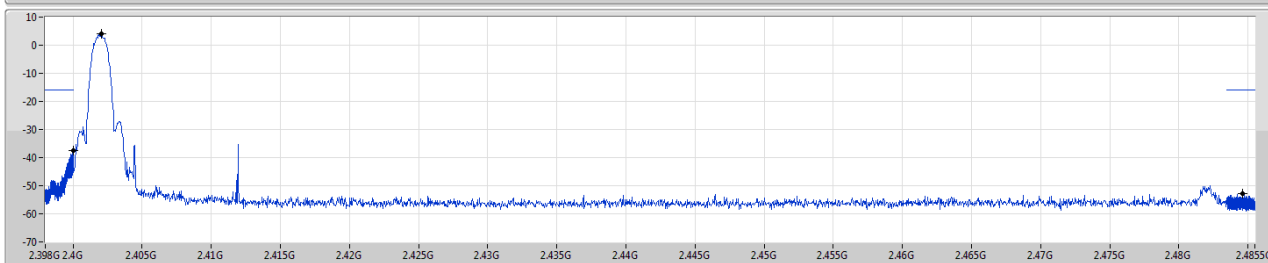
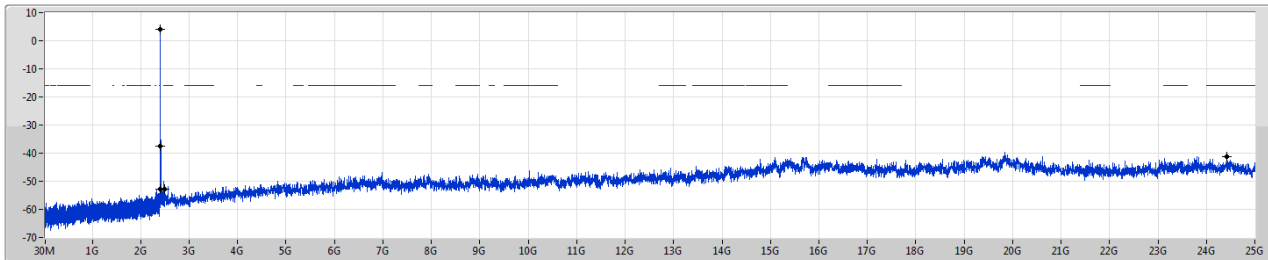
BT-EDR(2Mbps)

2402MHz

CSE NdB

25/07/2019

Port1



RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

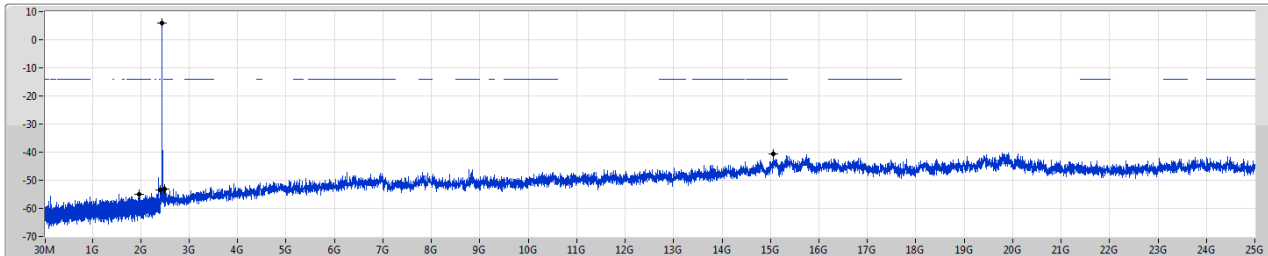
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.40209G	3.97	-16.03	2.3977G	-52.73	2.4G	-37.48	2.48459G	-52.93	24.2025G	-41.33	1

BT-EDR(2Mbps)

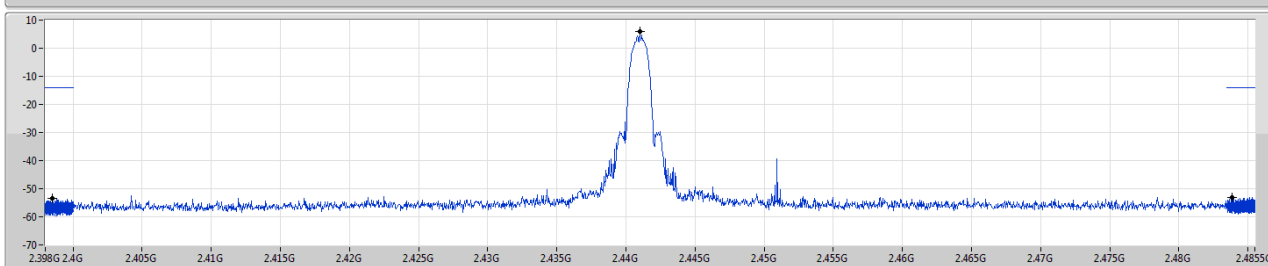
CSE NdB

2441MHz

25/07/2019



Port1



RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

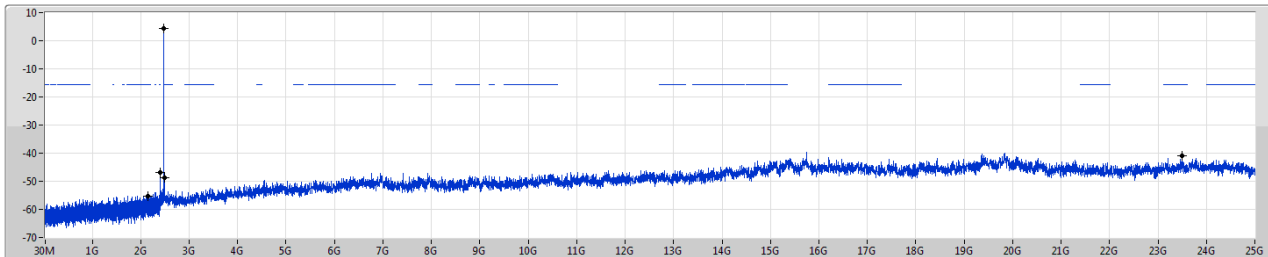
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.441G	5.87	-14.13	1.96998G	-54.93	2.39853G	-53.54	2.48384G	-52.97	15.06266G	-40.48	1

BT-EDR(2Mbps)

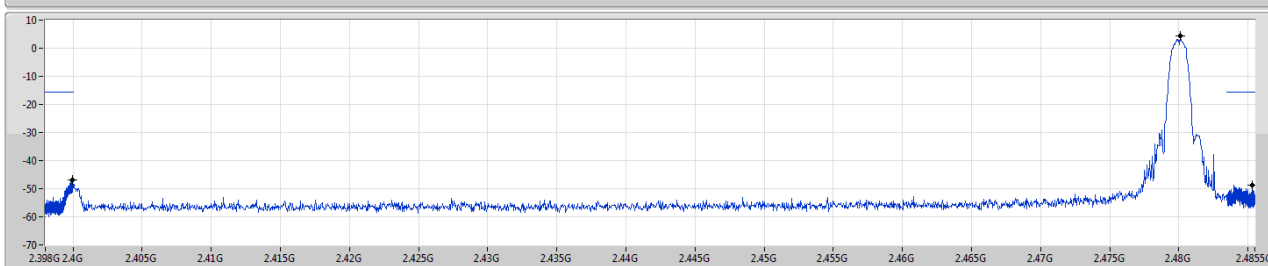
CSE NdB

2480MHz

25/07/2019



Port1



RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.48008G	4.33	-15.67	2.14551G	-55.23	2.39998G	-46.87	2.4853G	-48.81	23.5056G	-40.92	1

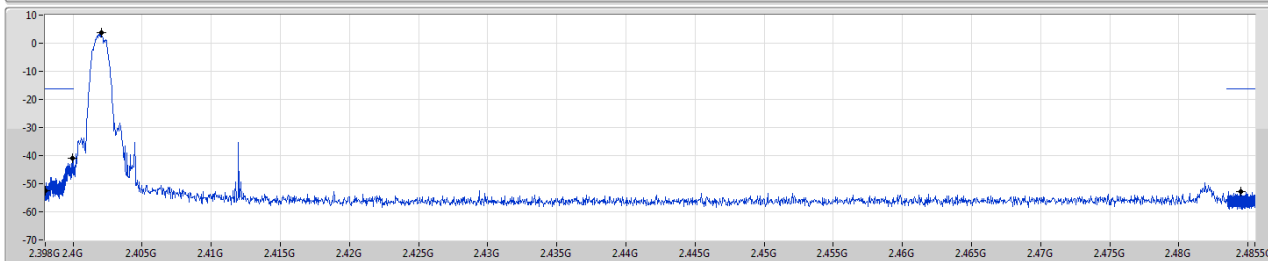
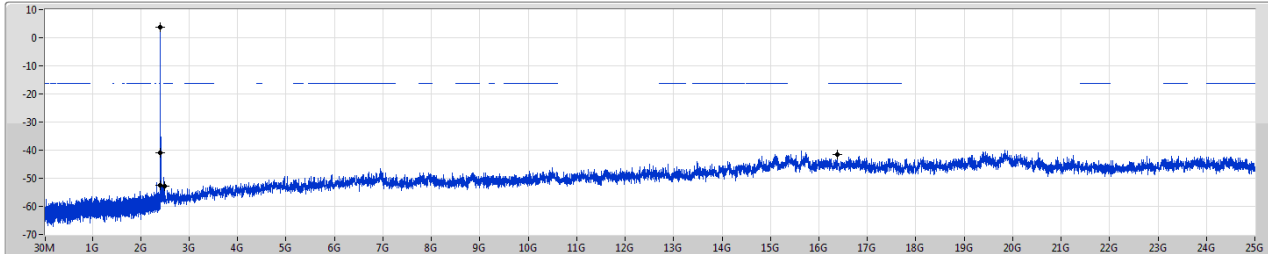
BT-EDR(3Mbps)

2402MHz

CSE NdB

25/07/2019

Port1



RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.40205G	3.60	-16.40	2.398G	-52.54	2.39998G	-40.97	2.48451G	-52.81	16.38258G	-41.45	1

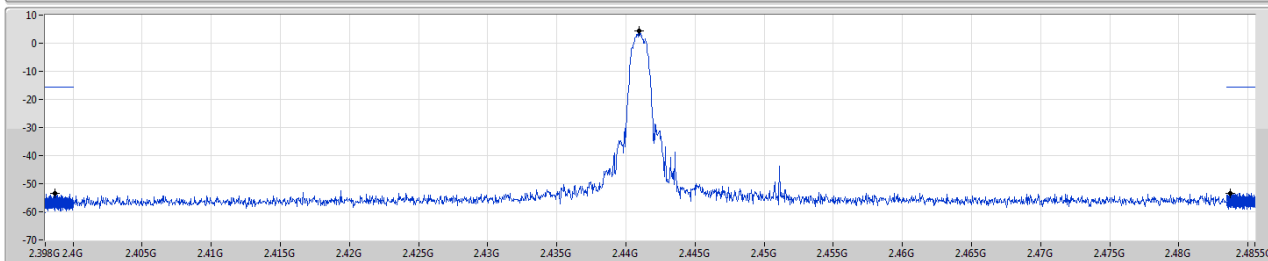
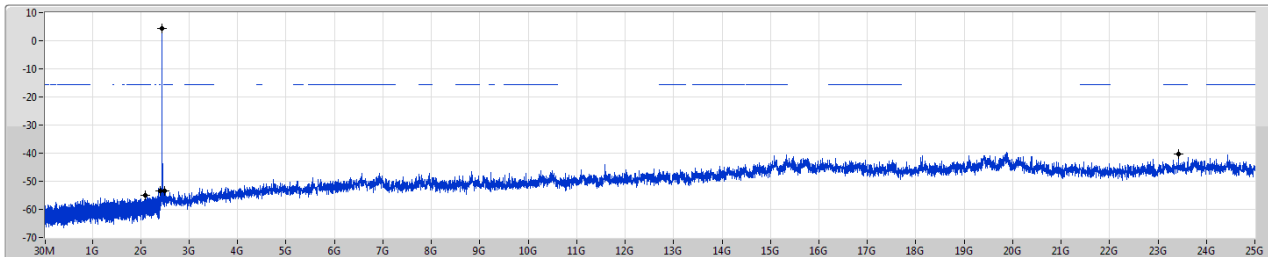
BT-EDR(3Mbps)

2441MHz

CSE NdB

25/07/2019

Port1



RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.44096G	4.31	-15.69	2.10141G	-55.15	2.3987G	-53.53	2.48371G	-53.32	23.42961G	-40.20	1

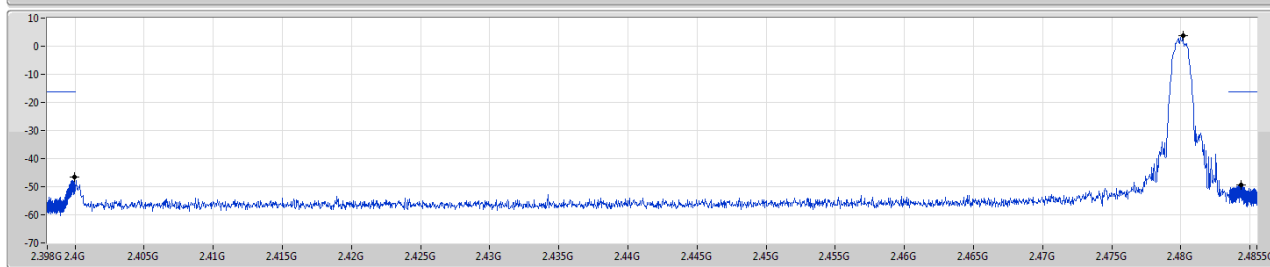
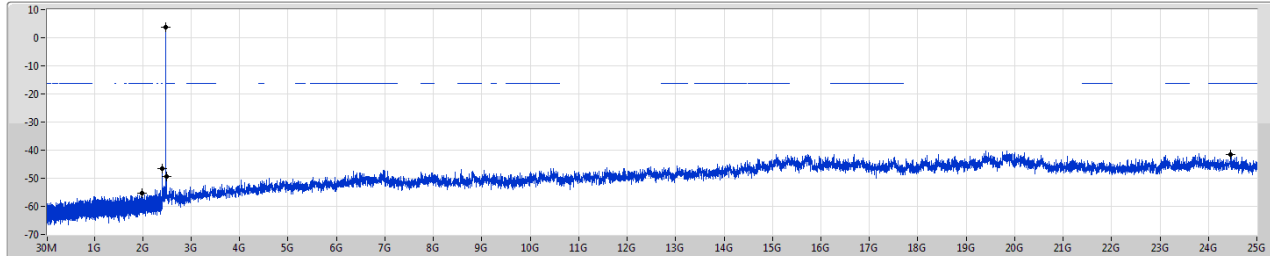
BT-EDR(3Mbps)

2480MHz

CSE NdB

25/07/2019

Port1



RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

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	3.82	-16.18	1.98804G	-55.27	2.39999G	-46.66	2.48434G	-49.37	2.45402G	-41.62	1



Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
BT-BR(1Mbps)	Pass	PK	301.6M	39.92	46.00	-6.08	3	Horizontal	360	1.00	-

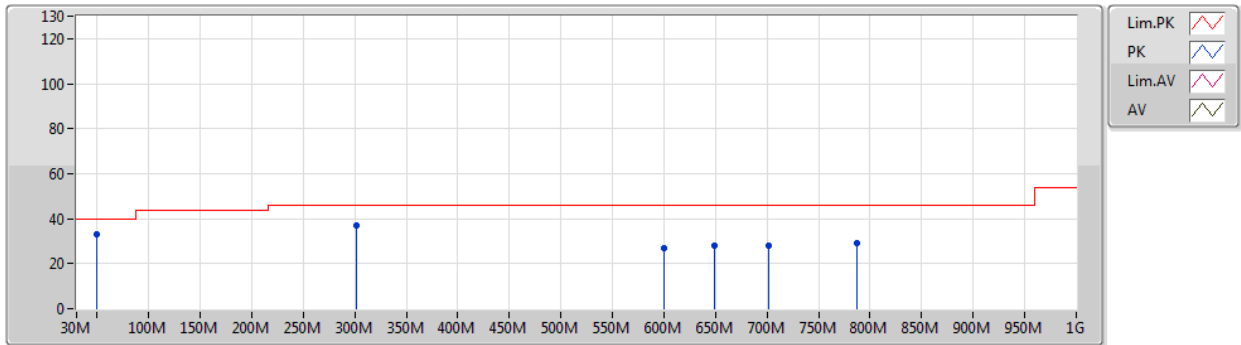
Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-BR(1Mbps)	-	-	-	-	-	-	-	-	-	-	-
2441MHz	Pass	PK	49.4M	33.07	40.00	-6.93	3	Vertical	0	2.00	-
2441MHz	Pass	PK	301.6M	36.89	46.00	-9.11	3	Vertical	0	2.00	-
2441MHz	Pass	PK	600.36M	27.03	46.00	-18.97	3	Vertical	0	2.00	-
2441MHz	Pass	PK	648.86M	28.20	46.00	-17.80	3	Vertical	0	2.00	-
2441MHz	Pass	PK	701.24M	27.94	46.00	-18.06	3	Vertical	0	2.00	-
2441MHz	Pass	PK	786.6M	29.32	46.00	-16.68	3	Vertical	0	2.00	-
2441MHz	Pass	PK	95.96M	27.00	43.50	-16.50	3	Horizontal	360	1.00	-
2441MHz	Pass	PK	243.4M	35.48	46.00	-10.52	3	Horizontal	360	1.00	-
2441MHz	Pass	PK	272.5M	36.90	46.00	-9.10	3	Horizontal	360	1.00	-
2441MHz	Pass	PK	301.6M	39.92	46.00	-6.08	3	Horizontal	360	1.00	-
2441MHz	Pass	PK	505.3M	29.70	46.00	-16.30	3	Horizontal	360	1.00	-
2441MHz	Pass	PK	701.24M	33.20	46.00	-12.80	3	Horizontal	360	1.00	-

BT-BR(1Mbps)

2441MHz_Adapter

30/07/2019

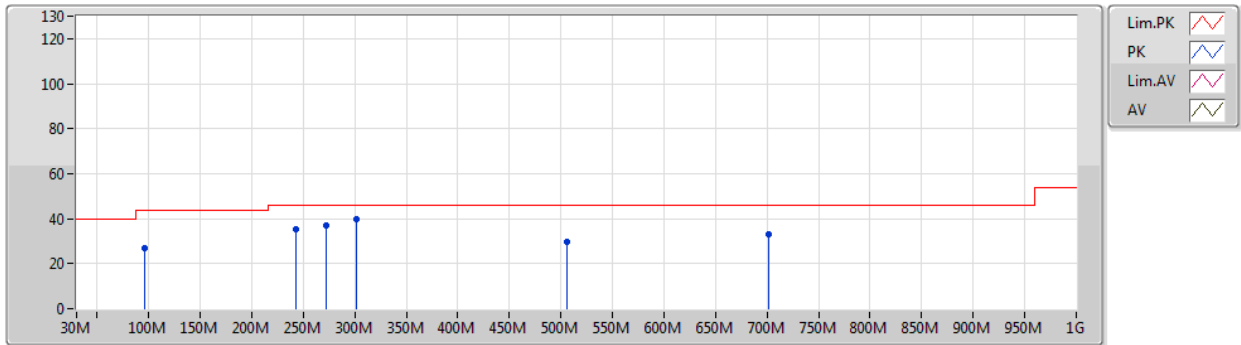


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	49.4M	33.07	40.00	-6.93	-22.99	3	Vertical	0	2.00	-	56.06	13.60	0.58	37.17
PK	301.6M	36.89	46.00	-9.11	-16.64	3	Vertical	0	2.00	-	53.53	18.40	1.44	36.48
PK	600.36M	27.03	46.00	-18.97	-10.43	3	Vertical	0	2.00	-	37.46	24.70	2.09	37.22
PK	648.86M	28.20	46.00	-17.80	-9.48	3	Vertical	0	2.00	-	37.68	25.61	2.20	37.29
PK	701.24M	27.94	46.00	-18.06	-9.27	3	Vertical	0	2.00	-	37.21	25.81	2.28	37.36
PK	786.6M	29.32	46.00	-16.68	-7.70	3	Vertical	0	2.00	-	37.02	27.35	2.43	37.48

BT-BR(1Mbps)

2441MHz_Adapter

30/07/2019



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	95.96M	27.00	43.50	-16.50	-21.39	3	Horizontal	360	1.00	-	48.39	14.63	0.79	36.81
PK	243.4M	35.48	46.00	-10.52	-18.09	3	Horizontal	360	1.00	-	53.57	17.04	1.28	36.41
PK	272.5M	36.90	46.00	-9.10	-16.51	3	Horizontal	360	1.00	-	53.41	18.58	1.36	36.45
PK	301.6M	39.92	46.00	-6.08	-16.64	3	Horizontal	360	1.00	-	56.56	18.40	1.44	36.48
PK	505.3M	29.70	46.00	-16.30	-11.81	3	Horizontal	360	1.00	-	41.51	23.23	1.90	36.94
PK	701.24M	33.20	46.00	-12.80	-9.27	3	Horizontal	360	1.00	-	42.47	25.81	2.28	37.36



Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
BT-BR(1Mbps)	Pass	AV	2.4858G	52.98	54.00	-1.02	3	Vertical	266	2.04	-
BT-EDR(3Mbps)	Pass	AV	2.4856G	48.65	54.00	-5.35	3	Vertical	270	2.05	-

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-BR(1Mbps)	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.39G	47.52	54.00	-6.48	3	Vertical	252	2.13	-
2402MHz	Pass	AV	2.402G	101.19	Inf	-Inf	3	Vertical	252	2.13	-
2402MHz	Pass	PK	2.3774G	58.97	74.00	-15.03	3	Vertical	252	2.13	-
2402MHz	Pass	PK	2.4022G	101.58	Inf	-Inf	3	Vertical	252	2.13	-
2402MHz	Pass	AV	2.3622G	46.89	54.00	-7.11	3	Horizontal	160	2.95	-
2402MHz	Pass	AV	2.402G	100.20	Inf	-Inf	3	Horizontal	160	2.95	-
2402MHz	Pass	PK	2.3574G	59.26	74.00	-14.74	3	Horizontal	160	2.95	-
2402MHz	Pass	PK	2.4018G	100.58	Inf	-Inf	3	Horizontal	160	2.95	-
2402MHz	Pass	AV	4.80412G	34.75	54.00	-19.25	3	Vertical	23	2.34	-
2402MHz	Pass	PK	4.79962G	46.83	74.00	-27.17	3	Vertical	23	2.34	-
2402MHz	Pass	AV	4.8046G	34.46	54.00	-19.54	3	Horizontal	200	1.79	-
2402MHz	Pass	PK	4.80286G	47.24	74.00	-26.76	3	Horizontal	200	1.79	-
2441MHz	Pass	AV	2.361G	47.68	54.00	-6.32	3	Vertical	182	1.50	-
2441MHz	Pass	AV	2.441G	97.90	Inf	-Inf	3	Vertical	182	1.50	-
2441MHz	Pass	AV	2.4966G	46.87	54.00	-7.13	3	Vertical	182	1.50	-
2441MHz	Pass	PK	2.3722G	59.46	74.00	-14.54	3	Vertical	182	1.50	-
2441MHz	Pass	PK	2.441G	98.28	Inf	-Inf	3	Vertical	182	1.50	-
2441MHz	Pass	PK	2.4878G	59.09	74.00	-14.91	3	Vertical	182	1.50	-
2441MHz	Pass	AV	2.361G	48.10	54.00	-5.90	3	Horizontal	180	2.06	-
2441MHz	Pass	AV	2.441G	100.48	Inf	-Inf	3	Horizontal	180	2.06	-
2441MHz	Pass	AV	2.4958G	46.92	54.00	-7.08	3	Horizontal	180	2.06	-
2441MHz	Pass	PK	2.3574G	59.47	74.00	-14.53	3	Horizontal	180	2.06	-
2441MHz	Pass	PK	2.441G	100.87	Inf	-Inf	3	Horizontal	180	2.06	-
2441MHz	Pass	PK	2.4858G	59.25	74.00	-14.75	3	Horizontal	180	2.06	-
2441MHz	Pass	AV	4.88206G	35.32	54.00	-18.68	3	Vertical	127	2.35	-
2441MHz	Pass	PK	4.88188G	46.56	74.00	-27.44	3	Vertical	127	2.35	-
2441MHz	Pass	AV	4.882G	34.16	54.00	-19.84	3	Horizontal	45	1.80	-
2441MHz	Pass	PK	4.88204G	46.55	74.00	-27.45	3	Horizontal	45	1.80	-
2480MHz	Pass	AV	2.48G	100.68	Inf	-Inf	3	Vertical	266	2.04	-
2480MHz	Pass	AV	2.4858G	52.98	54.00	-1.02	3	Vertical	266	2.04	-
2480MHz	Pass	PK	2.4798G	101.05	Inf	-Inf	3	Vertical	266	2.04	-
2480MHz	Pass	PK	2.4856G	61.13	74.00	-12.87	3	Vertical	266	2.04	-
2480MHz	Pass	AV	2.48G	100.95	Inf	-Inf	3	Horizontal	177	2.02	-
2480MHz	Pass	AV	2.4858G	50.63	54.00	-3.37	3	Horizontal	177	2.02	-
2480MHz	Pass	PK	2.4802G	101.32	Inf	-Inf	3	Horizontal	177	2.02	-
2480MHz	Pass	PK	2.49G	61.44	74.00	-12.56	3	Horizontal	177	2.02	-
2480MHz	Pass	AV	4.9681G	34.59	54.00	-19.41	3	Vertical	157	1.71	-
2480MHz	Pass	PK	4.9708G	46.62	74.00	-27.38	3	Vertical	157	1.71	-
2480MHz	Pass	AV	4.97248G	34.47	54.00	-19.53	3	Horizontal	330	1.34	-
2480MHz	Pass	PK	4.96138G	47.11	74.00	-26.89	3	Horizontal	330	1.34	-
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3686G	46.68	54.00	-7.32	3	Vertical	185	1.50	-
2402MHz	Pass	AV	2.402G	92.66	Inf	-Inf	3	Vertical	185	1.50	-
2402MHz	Pass	PK	2.3622G	59.19	74.00	-14.81	3	Vertical	185	1.50	-
2402MHz	Pass	PK	2.402G	95.87	Inf	-Inf	3	Vertical	185	1.50	-
2402MHz	Pass	AV	2.363G	46.77	54.00	-7.23	3	Horizontal	182	1.98	-
2402MHz	Pass	AV	2.402G	94.21	Inf	-Inf	3	Horizontal	182	1.98	-

Remark :

Page No. : G2 of G27

$$\text{Level (dBuV/m)} = \text{Raw(Read Level)} + \text{AF(Antenna Factor)} + \text{CL(Cable Loss)} - \text{PA(Preamp Factor)}$$

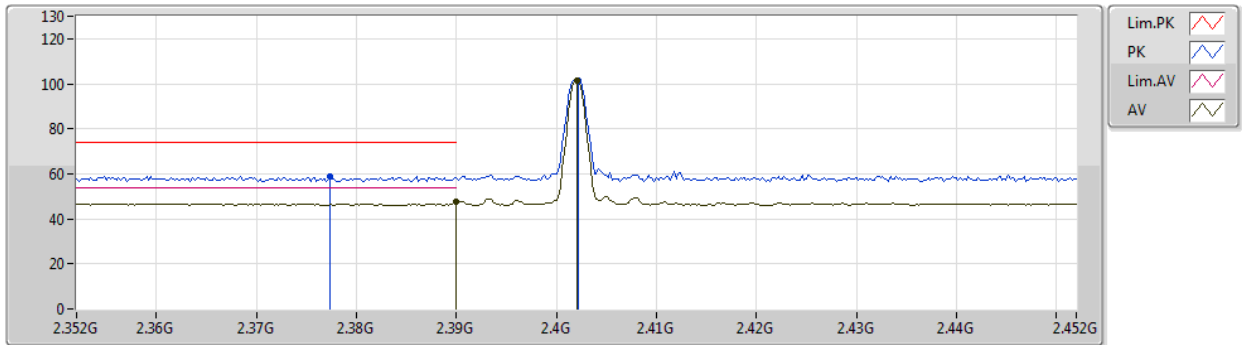
372342-19

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2402MHz	Pass	PK	2.3538G	59.34	74.00	-14.66	3	Horizontal	182	1.98	-
2402MHz	Pass	PK	2.402G	97.39	Inf	-Inf	3	Horizontal	182	1.98	-
2402MHz	Pass	AV	4.79872G	34.58	54.00	-19.42	3	Vertical	28	1.50	-
2402MHz	Pass	PK	4.80628G	47.26	74.00	-26.74	3	Vertical	28	1.50	-
2402MHz	Pass	AV	4.8085G	34.49	54.00	-19.51	3	Horizontal	168	1.19	-
2402MHz	Pass	PK	4.81414G	47.25	74.00	-26.75	3	Horizontal	168	1.19	-
2441MHz	Pass	AV	2.3506G	46.69	54.00	-7.31	3	Vertical	182	1.50	-
2441MHz	Pass	AV	2.441G	91.92	Inf	-Inf	3	Vertical	182	1.50	-
2441MHz	Pass	AV	2.4906G	47.03	54.00	-6.97	3	Vertical	182	1.50	-
2441MHz	Pass	PK	2.3506G	58.82	74.00	-15.18	3	Vertical	182	1.50	-
2441MHz	Pass	PK	2.441G	95.03	Inf	-Inf	3	Vertical	182	1.50	-
2441MHz	Pass	PK	2.4986G	59.67	74.00	-14.33	3	Vertical	182	1.50	-
2441MHz	Pass	AV	2.3606G	46.74	54.00	-7.26	3	Horizontal	182	2.06	-
2441MHz	Pass	AV	2.441G	94.07	Inf	-Inf	3	Horizontal	182	2.06	-
2441MHz	Pass	AV	2.493G	46.76	54.00	-7.24	3	Horizontal	182	2.06	-
2441MHz	Pass	PK	2.361G	59.16	74.00	-14.84	3	Horizontal	182	2.06	-
2441MHz	Pass	PK	2.441G	97.14	Inf	-Inf	3	Horizontal	182	2.06	-
2441MHz	Pass	PK	2.4894G	59.08	74.00	-14.92	3	Horizontal	182	2.06	-
2441MHz	Pass	AV	4.8898G	33.95	54.00	-20.05	3	Vertical	44	2.41	-
2441MHz	Pass	PK	4.87612G	46.86	74.00	-27.14	3	Vertical	44	2.41	-
2441MHz	Pass	AV	4.88228G	34.04	54.00	-19.96	3	Horizontal	275	1.56	-
2441MHz	Pass	PK	4.882G	46.52	74.00	-27.48	3	Horizontal	275	1.56	-
2480MHz	Pass	AV	2.48G	93.55	Inf	-Inf	3	Vertical	270	2.05	-
2480MHz	Pass	AV	2.4856G	48.65	54.00	-5.35	3	Vertical	270	2.05	-
2480MHz	Pass	PK	2.48G	96.73	Inf	-Inf	3	Vertical	270	2.05	-
2480MHz	Pass	PK	2.4898G	60.31	74.00	-13.69	3	Vertical	270	2.05	-
2480MHz	Pass	AV	2.48G	94.36	Inf	-Inf	3	Horizontal	178	2.02	-
2480MHz	Pass	AV	2.4858G	47.85	54.00	-6.15	3	Horizontal	178	2.02	-
2480MHz	Pass	PK	2.48G	97.60	Inf	-Inf	3	Horizontal	178	2.02	-
2480MHz	Pass	PK	2.49G	62.31	74.00	-11.69	3	Horizontal	178	2.02	-
2480MHz	Pass	AV	4.9723G	34.49	54.00	-19.51	3	Vertical	56	1.12	-
2480MHz	Pass	PK	4.97344G	48.09	74.00	-25.91	3	Vertical	56	1.12	-
2480MHz	Pass	AV	4.97236G	34.42	54.00	-19.58	3	Horizontal	182	1.30	-
2480MHz	Pass	PK	4.97164G	47.20	74.00	-26.80	3	Horizontal	182	1.30	-

BT-BR(1Mbps)

2402MHz_TX

30/07/2019

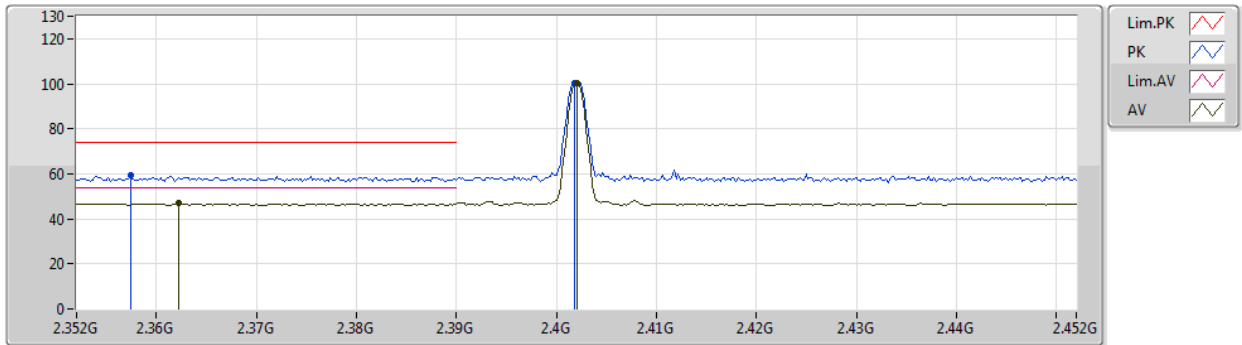


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.39G	47.52	54.00	-6.48	33.75	3	Vertical	252	2.13	-	13.77	27.64	6.11	-
AV	2.402G	101.19	Inf	-Inf	33.71	3	Vertical	252	2.13	-	67.48	27.60	6.11	-
PK	2.3774G	58.97	74.00	-15.03	33.81	3	Vertical	252	2.13	-	25.16	27.69	6.12	-
PK	2.4022G	101.58	Inf	-Inf	33.71	3	Vertical	252	2.13	-	67.87	27.60	6.11	-

BT-BR(1Mbps)

2402MHz_TX

30/07/2019

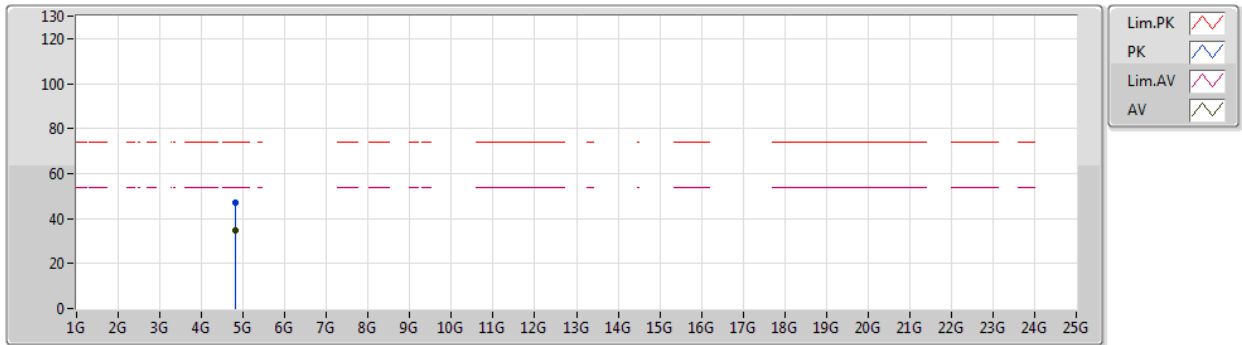


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3622G	46.89	54.00	-7.11	33.87	3	Horizontal	160	2.95	-	13.02	27.75	6.12	-
AV	2.402G	100.20	Inf	-Inf	33.71	3	Horizontal	160	2.95	-	66.49	27.60	6.11	-
PK	2.3574G	59.26	74.00	-14.74	33.89	3	Horizontal	160	2.95	-	25.37	27.77	6.12	-
PK	2.4018G	100.58	Inf	-Inf	33.71	3	Horizontal	160	2.95	-	66.87	27.60	6.11	-

BT-BR(1Mbps)

30/07/2019

2402MHz_TX

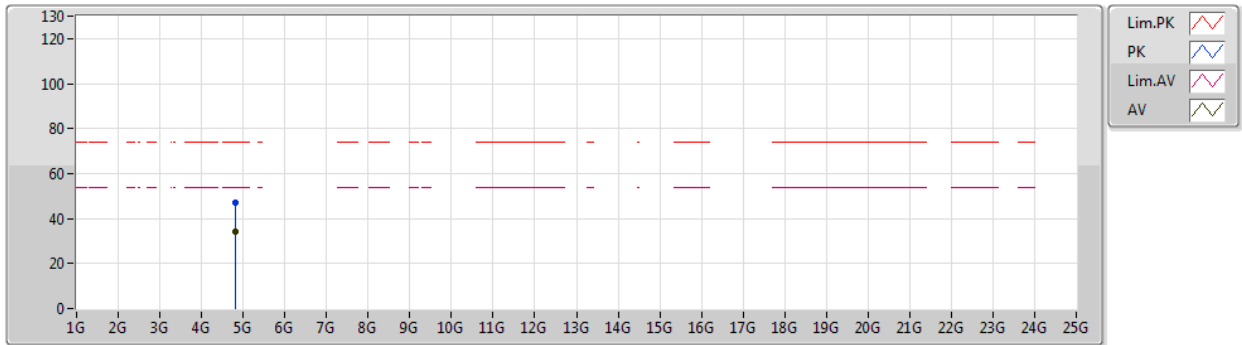


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.80412G	34.75	54.00	-19.25	5.70	3	Vertical	23	2.34	-	29.05	31.10	8.90	34.30
PK	4.79962G	46.83	74.00	-27.17	5.70	3	Vertical	23	2.34	-	41.13	31.10	8.90	34.30

BT-BR(1Mbps)

30/07/2019

2402MHz_TX

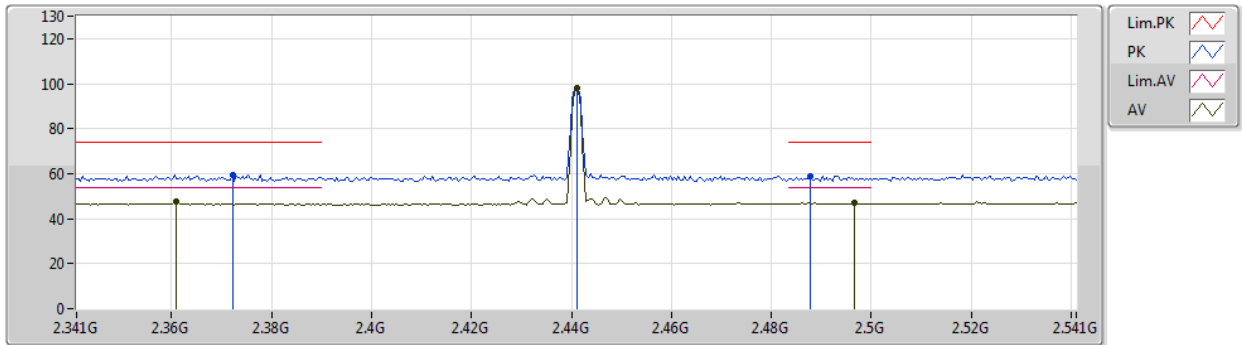


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.8046G	34.46	54.00	-19.54	5.70	3	Horizontal	200	1.79	-	28.76	31.10	8.90	34.30
PK	4.80286G	47.24	74.00	-26.76	5.70	3	Horizontal	200	1.79	-	41.54	31.10	8.90	34.30

BT-BR(1Mbps)

2441MHz_TX

30/07/2019

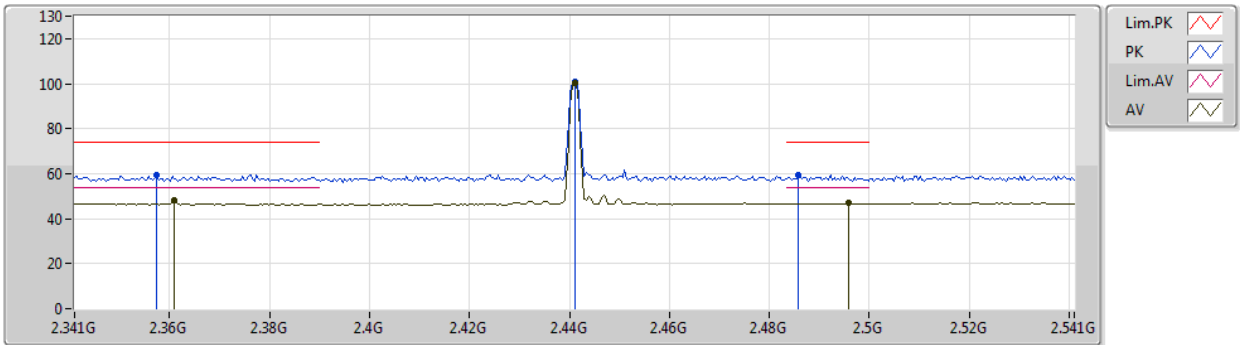


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.361G	47.68	54.00	-6.32	33.88	3	Vertical	182	1.50	-	13.80	27.76	6.12	-
AV	2.441G	97.90	Inf	-Inf	33.69	3	Vertical	182	1.50	-	64.21	27.56	6.13	-
AV	2.4966G	46.87	54.00	-7.13	33.65	3	Vertical	182	1.50	-	13.22	27.50	6.15	-
PK	2.3722G	59.46	74.00	-14.54	33.83	3	Vertical	182	1.50	-	25.63	27.71	6.12	-
PK	2.441G	98.28	Inf	-Inf	33.69	3	Vertical	182	1.50	-	64.59	27.56	6.13	-
PK	2.4878G	59.09	74.00	-14.91	33.66	3	Vertical	182	1.50	-	25.43	27.51	6.15	-

BT-BR(1Mbps)

2441MHz_TX

30/07/2019

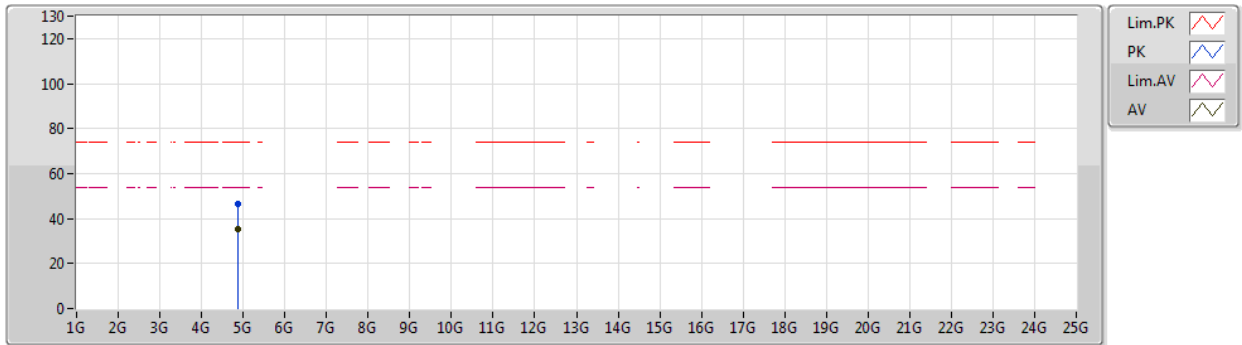


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.361G	48.10	54.00	-5.90	33.88	3	Horizontal	180	2.06	-	14.22	27.76	6.12	-
AV	2.441G	100.48	Inf	-Inf	33.69	3	Horizontal	180	2.06	-	66.79	27.56	6.13	-
AV	2.4958G	46.92	54.00	-7.08	33.65	3	Horizontal	180	2.06	-	13.27	27.50	6.15	-
PK	2.3574G	59.47	74.00	-14.53	33.89	3	Horizontal	180	2.06	-	25.58	27.77	6.12	-
PK	2.441G	100.87	Inf	-Inf	33.69	3	Horizontal	180	2.06	-	67.18	27.56	6.13	-
PK	2.4858G	59.25	74.00	-14.75	33.66	3	Horizontal	180	2.06	-	25.59	27.51	6.15	-

BT-BR(1Mbps)

2441MHz_TX

30/07/2019

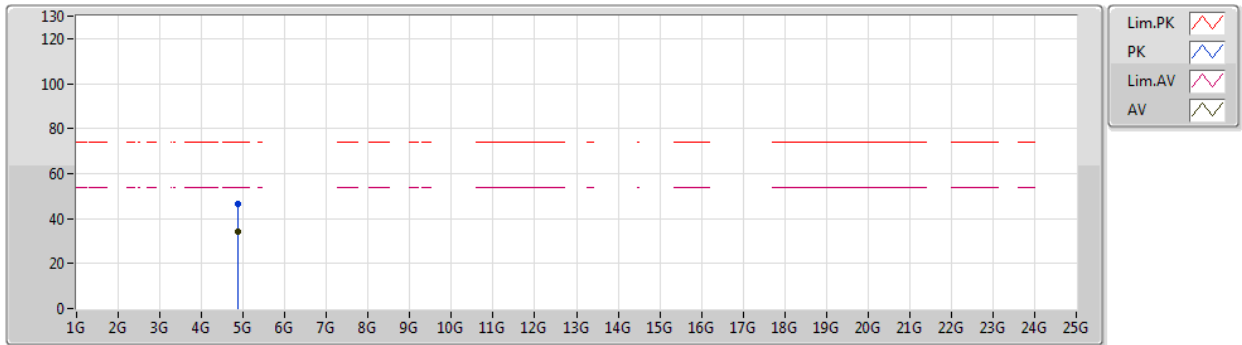


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.88206G	35.32	54.00	-18.68	5.78	3	Vertical	127	2.35	-	29.54	31.10	8.96	34.28
PK	4.88188G	46.56	74.00	-27.44	5.78	3	Vertical	127	2.35	-	40.78	31.10	8.96	34.28

BT-BR(1Mbps)

2441MHz_TX

30/07/2019

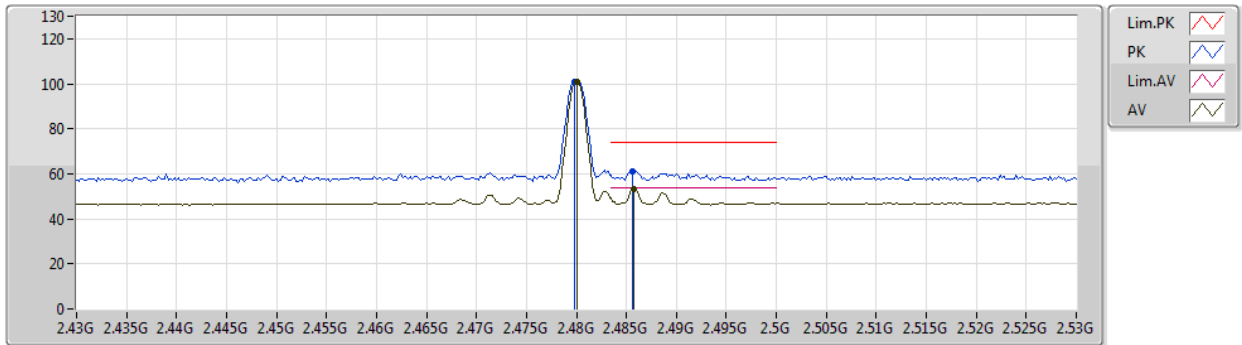


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.882G	34.16	54.00	-19.84	5.78	3	Horizontal	45	1.80	-	28.38	31.10	8.96	34.28
PK	4.88204G	46.55	74.00	-27.45	5.78	3	Horizontal	45	1.80	-	40.77	31.10	8.96	34.28

BT-BR(1Mbps)

2480MHz_TX

30/07/2019

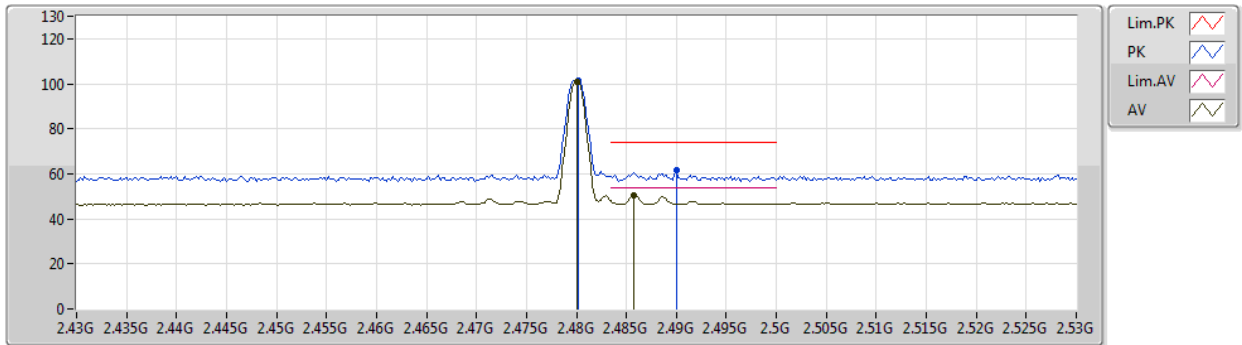


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.48G	100.68	Inf	-Inf	33.67	3	Vertical	266	2.04	-	67.01	27.52	6.15	-
AV	2.4858G	52.98	54.00	-1.02	33.66	3	Vertical	266	2.04	-	19.32	27.51	6.15	-
PK	2.4798G	101.05	Inf	-Inf	33.66	3	Vertical	266	2.04	-	67.39	27.52	6.14	-
PK	2.4856G	61.13	74.00	-12.87	33.66	3	Vertical	266	2.04	-	27.47	27.51	6.15	-

BT-BR(1Mbps)

2480MHz_TX

30/07/2019

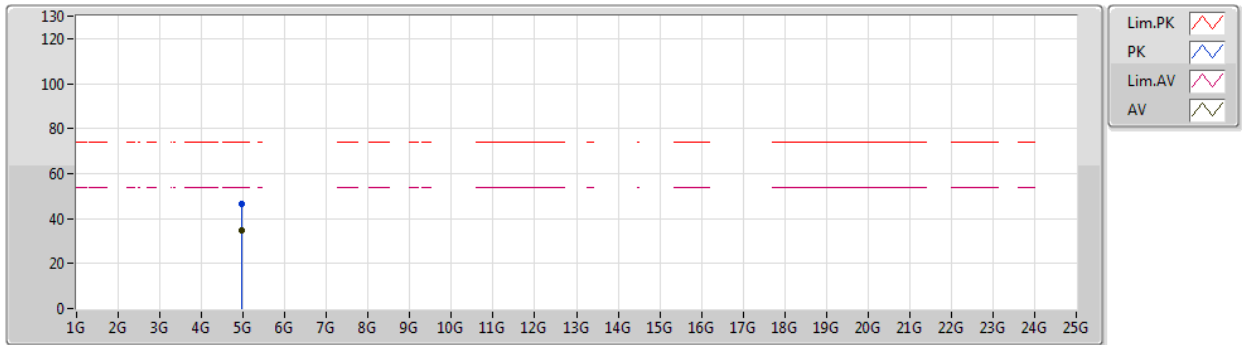


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.48G	100.95	Inf	-Inf	33.67	3	Horizontal	177	2.02	-	67.28	27.52	6.15	-
AV	2.4858G	50.63	54.00	-3.37	33.66	3	Horizontal	177	2.02	-	16.97	27.51	6.15	-
PK	2.4802G	101.32	Inf	-Inf	33.67	3	Horizontal	177	2.02	-	67.65	27.52	6.15	-
PK	2.49G	61.44	74.00	-12.56	33.66	3	Horizontal	177	2.02	-	27.78	27.51	6.15	-

BT-BR(1Mbps)

2480MHz_TX

30/07/2019

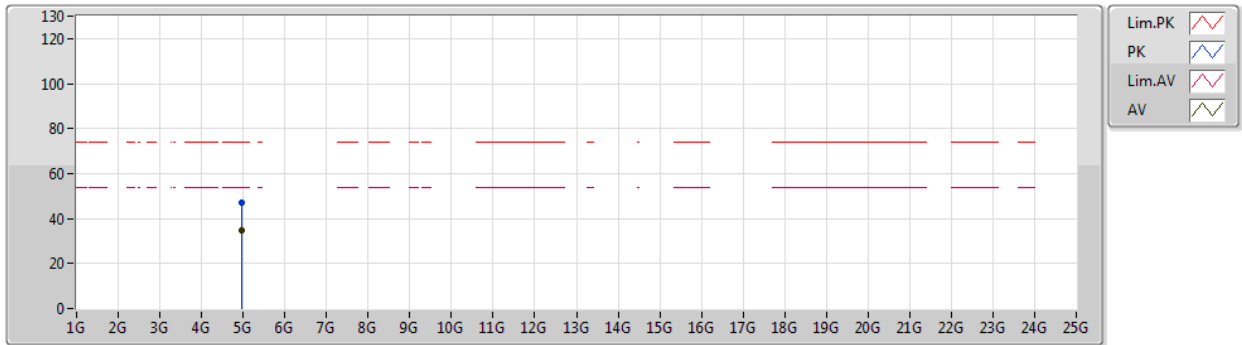


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.9681G	34.59	54.00	-19.41	6.26	3	Vertical	157	1.71	-	28.33	31.37	9.03	34.14
PK	4.9708G	46.62	74.00	-27.38	6.27	3	Vertical	157	1.71	-	40.35	31.38	9.03	34.14

BT-BR(1Mbps)

30/07/2019

2480MHz_TX

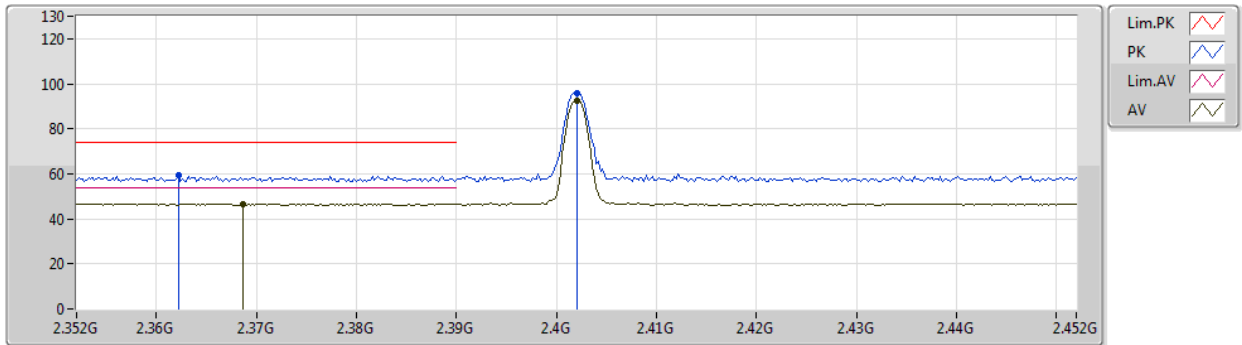


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.97248G	34.47	54.00	-19.53	6.30	3	Horizontal	330	1.34	-	28.17	31.39	9.04	34.13
PK	4.96138G	47.11	74.00	-26.89	6.23	3	Horizontal	330	1.34	-	40.88	31.35	9.03	34.15

BT-EDR(3Mbps)

2402MHz_TX

30/07/2019

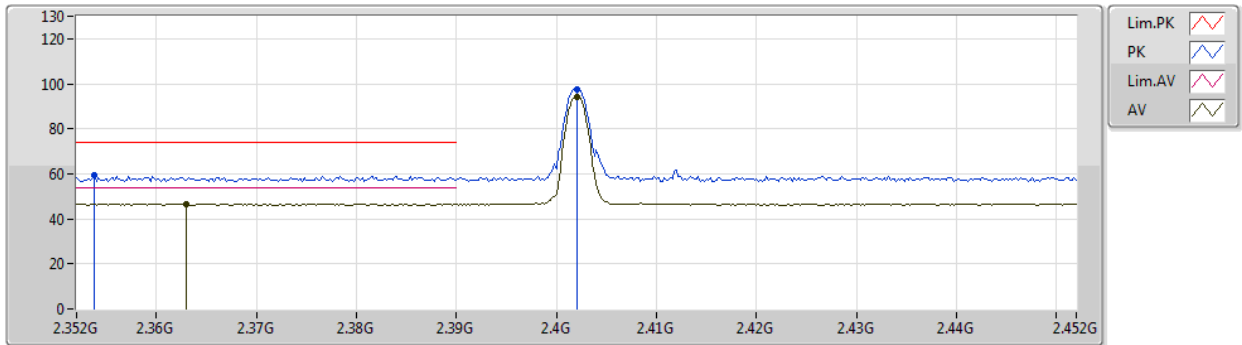


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3686G	46.68	54.00	-7.32	33.85	3	Vertical	185	1.50	-	12.83	27.73	6.12	-
AV	2.402G	92.66	Inf	-Inf	33.71	3	Vertical	185	1.50	-	58.95	27.60	6.11	-
PK	2.3622G	59.19	74.00	-14.81	33.87	3	Vertical	185	1.50	-	25.32	27.75	6.12	-
PK	2.402G	95.87	Inf	-Inf	33.71	3	Vertical	185	1.50	-	62.16	27.60	6.11	-

BT-EDR(3Mbps)

2402MHz_TX

30/07/2019

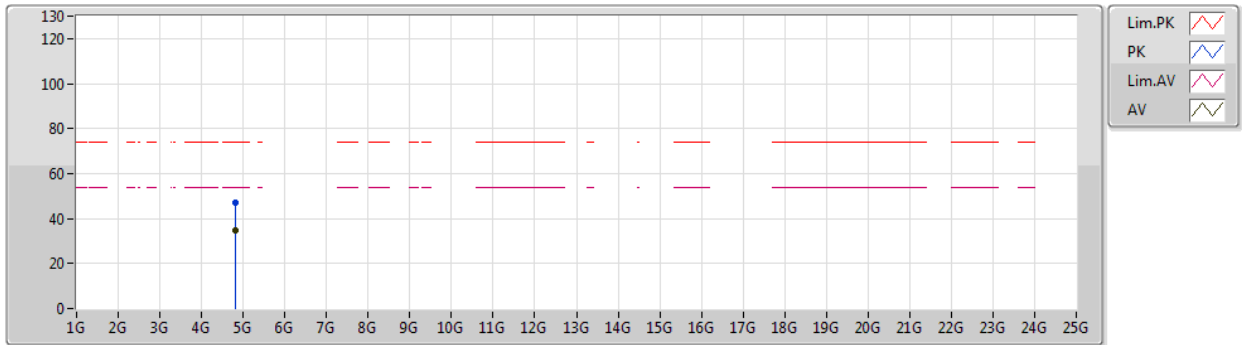


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.363G	46.77	54.00	-7.23	33.87	3	Horizontal	182	1.98	-	12.90	27.75	6.12	-
AV	2.402G	94.21	Inf	-Inf	33.71	3	Horizontal	182	1.98	-	60.50	27.60	6.11	-
PK	2.3538G	59.34	74.00	-14.66	33.90	3	Horizontal	182	1.98	-	25.44	27.78	6.12	-
PK	2.402G	97.39	Inf	-Inf	33.71	3	Horizontal	182	1.98	-	63.68	27.60	6.11	-

BT-EDR(3Mbps)

30/07/2019

2402MHz_TX

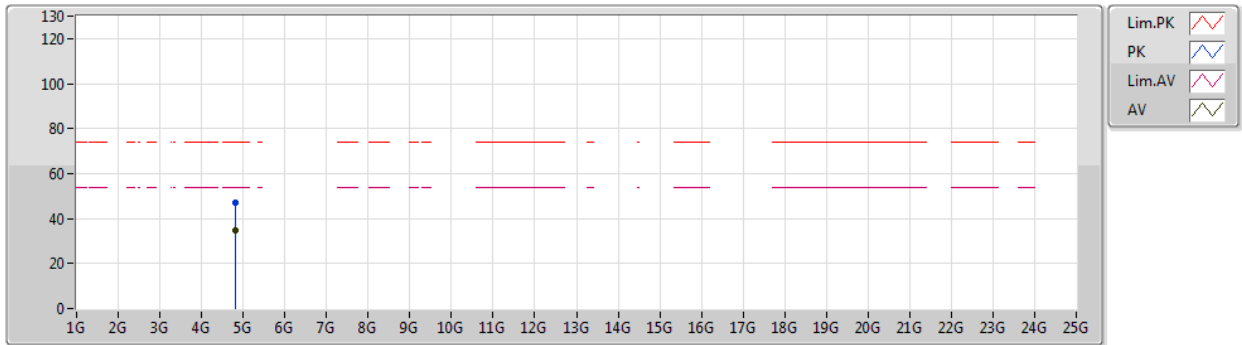


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.79872G	34.58	54.00	-19.42	5.70	3	Vertical	28	1.50	-	28.88	31.10	8.90	34.30
PK	4.80628G	47.26	74.00	-26.74	5.70	3	Vertical	28	1.50	-	41.56	31.10	8.90	34.30

BT-EDR(3Mbps)

30/07/2019

2402MHz_TX

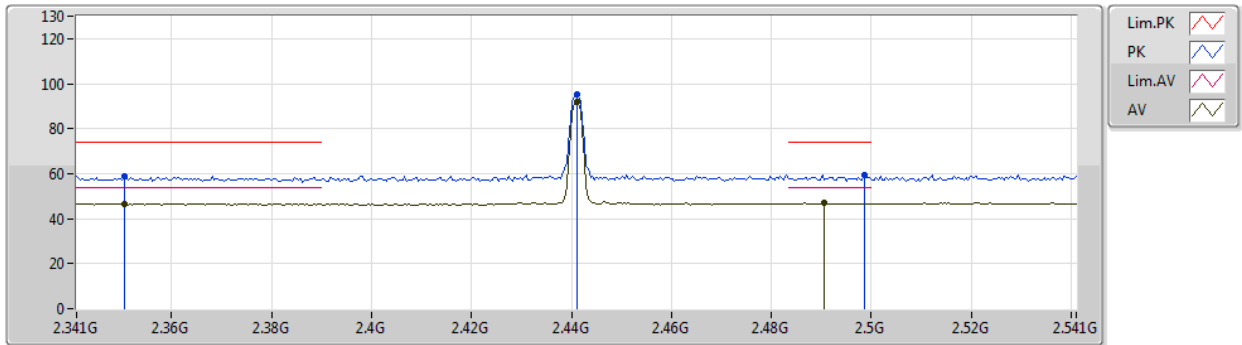


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.8085G	34.49	54.00	-19.51	5.70	3	Horizontal	168	1.19	-	28.79	31.10	8.90	34.30
PK	4.81414G	47.25	74.00	-26.75	5.71	3	Horizontal	168	1.19	-	41.54	31.10	8.91	34.30

BT-EDR(3Mbps)

2441MHz_TX

30/07/2019

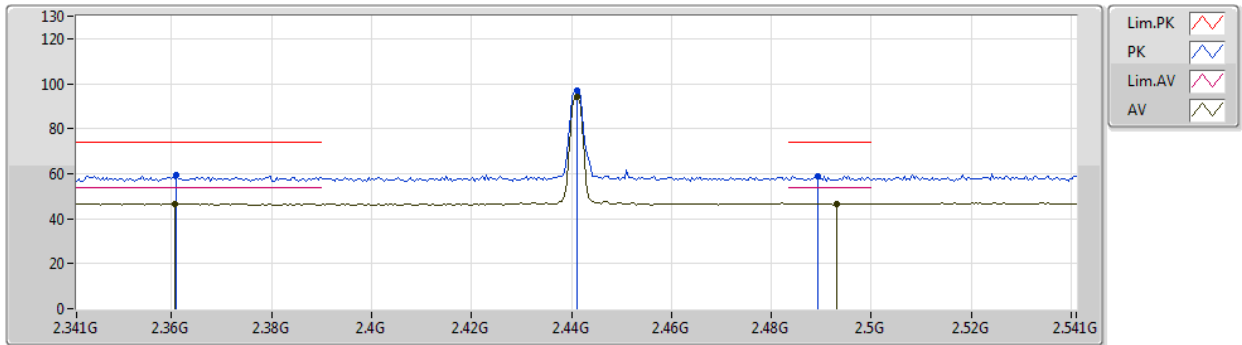


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3506G	46.69	54.00	-7.31	33.92	3	Vertical	182	1.50	-	12.77	27.80	6.12	-
AV	2.441G	91.92	Inf	-Inf	33.69	3	Vertical	182	1.50	-	58.23	27.56	6.13	-
AV	2.4906G	47.03	54.00	-6.97	33.66	3	Vertical	182	1.50	-	13.37	27.51	6.15	-
PK	2.3506G	58.82	74.00	-15.18	33.92	3	Vertical	182	1.50	-	24.90	27.80	6.12	-
PK	2.441G	95.03	Inf	-Inf	33.69	3	Vertical	182	1.50	-	61.34	27.56	6.13	-
PK	2.4986G	59.67	74.00	-14.33	33.65	3	Vertical	182	1.50	-	26.02	27.50	6.15	-

BT-EDR(3Mbps)

2441MHz_TX

30/07/2019

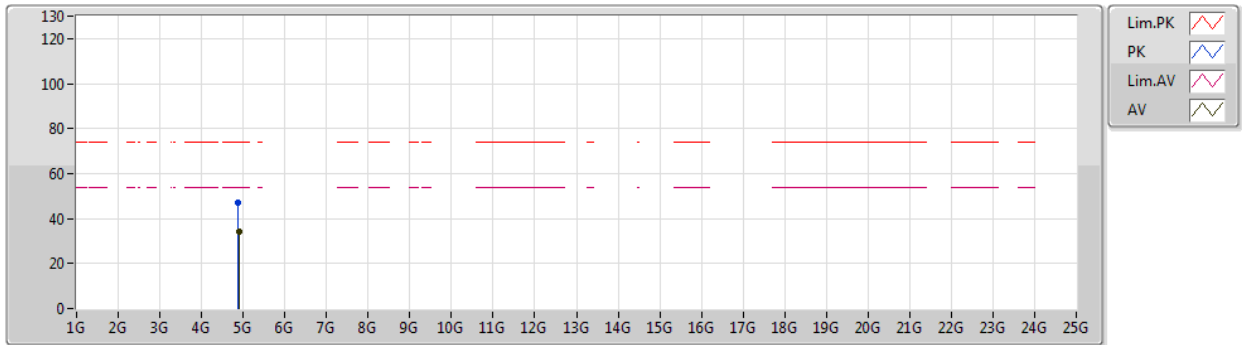


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3606G	46.74	54.00	-7.26	33.88	3	Horizontal	182	2.06	-	12.86	27.76	6.12	-
AV	2.441G	94.07	Inf	-Inf	33.69	3	Horizontal	182	2.06	-	60.38	27.56	6.13	-
AV	2.493G	46.76	54.00	-7.24	33.66	3	Horizontal	182	2.06	-	13.10	27.51	6.15	-
PK	2.361G	59.16	74.00	-14.84	33.88	3	Horizontal	182	2.06	-	25.28	27.76	6.12	-
PK	2.441G	97.14	Inf	-Inf	33.69	3	Horizontal	182	2.06	-	63.45	27.56	6.13	-
PK	2.4894G	59.08	74.00	-14.92	33.66	3	Horizontal	182	2.06	-	25.42	27.51	6.15	-

BT-EDR(3Mbps)

30/07/2019

2441MHz_TX

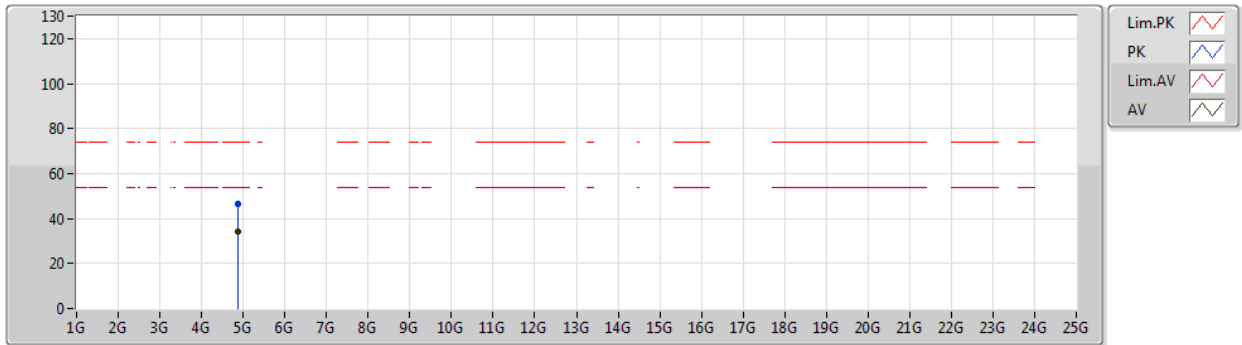


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.8898G	33.95	54.00	-20.05	5.80	3	Vertical	44	2.41	-	28.15	31.10	8.97	34.27
PK	4.87612G	46.86	74.00	-27.14	5.78	3	Vertical	44	2.41	-	41.08	31.10	8.96	34.28

BT-EDR(3Mbps)

30/07/2019

2441MHz_TX

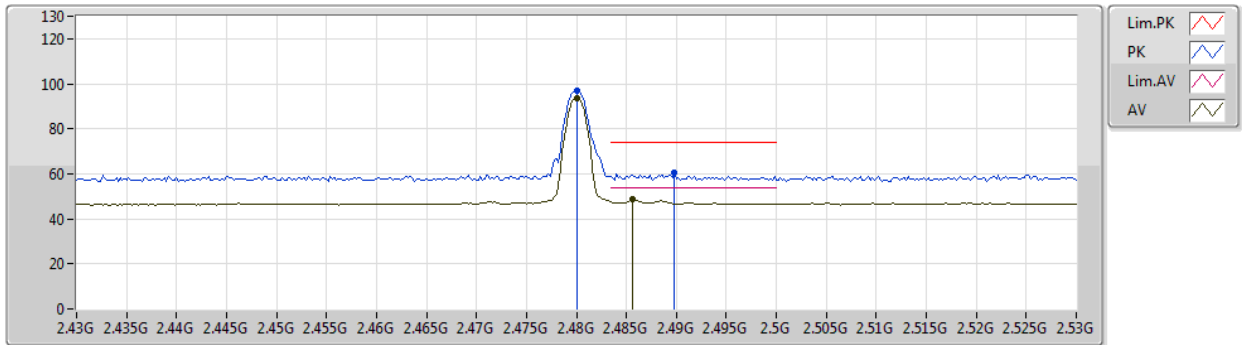


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.88228G	34.04	54.00	-19.96	5.78	3	Horizontal	275	1.56	-	28.26	31.10	8.96	34.28
PK	4.882G	46.52	74.00	-27.48	5.78	3	Horizontal	275	1.56	-	40.74	31.10	8.96	34.28

BT-EDR(3Mbps)

2480MHz_TX

30/07/2019

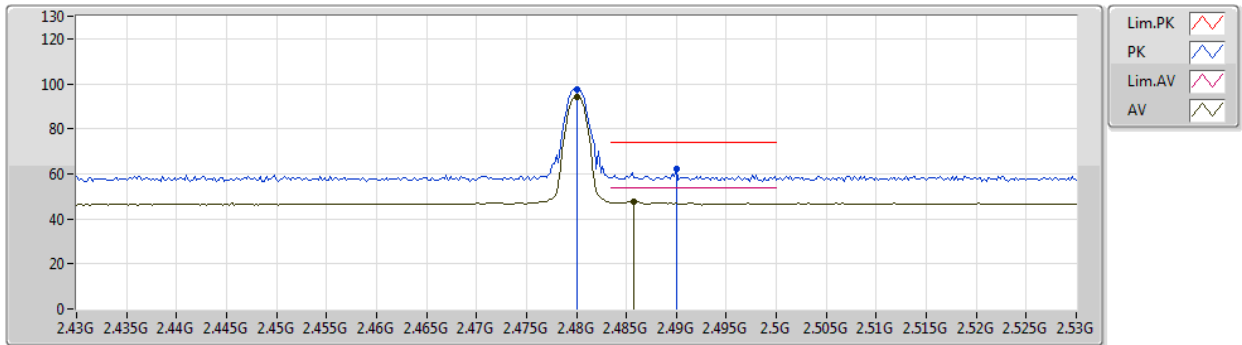


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.48G	93.55	Inf	-Inf	33.67	3	Vertical	270	2.05	-	59.88	27.52	6.15	-
AV	2.4856G	48.65	54.00	-5.35	33.66	3	Vertical	270	2.05	-	14.99	27.51	6.15	-
PK	2.48G	96.73	Inf	-Inf	33.67	3	Vertical	270	2.05	-	63.06	27.52	6.15	-
PK	2.4898G	60.31	74.00	-13.69	33.66	3	Vertical	270	2.05	-	26.65	27.51	6.15	-

BT-EDR(3Mbps)

2480MHz_TX

30/07/2019

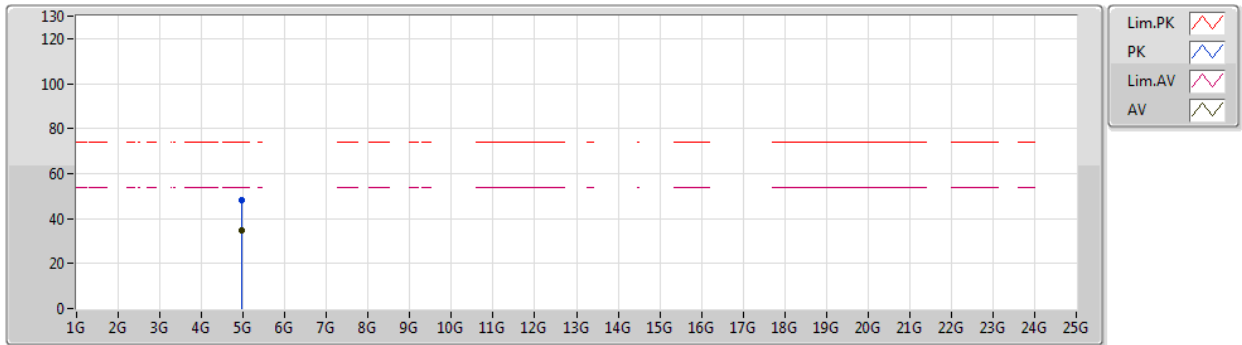


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.48G	94.36	Inf	-Inf	33.67	3	Horizontal	178	2.02	-	60.69	27.52	6.15	-
AV	2.4858G	47.85	54.00	-6.15	33.66	3	Horizontal	178	2.02	-	14.19	27.51	6.15	-
PK	2.48G	97.60	Inf	-Inf	33.67	3	Horizontal	178	2.02	-	63.93	27.52	6.15	-
PK	2.49G	62.31	74.00	-11.69	33.66	3	Horizontal	178	2.02	-	28.65	27.51	6.15	-

BT-EDR(3Mbps)

30/07/2019

2480MHz_TX

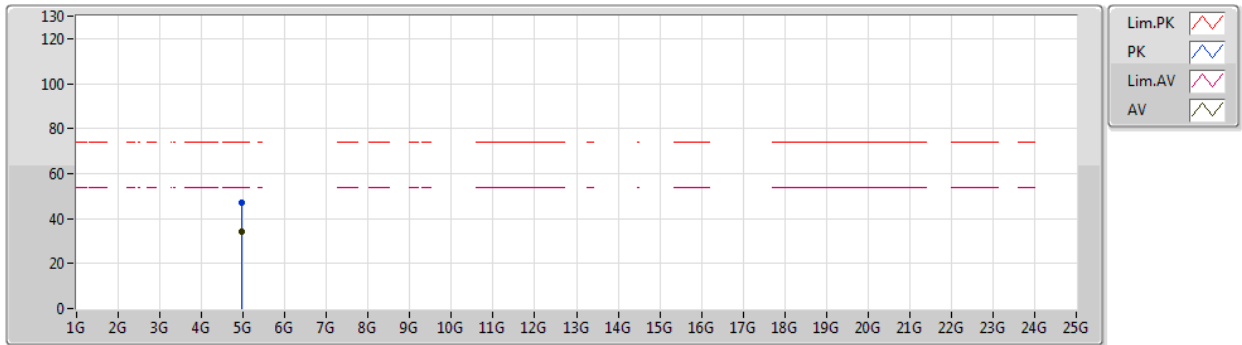


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.9723G	34.49	54.00	-19.51	6.30	3	Vertical	56	1.12	-	28.19	31.39	9.04	34.13
PK	4.97344G	48.09	74.00	-25.91	6.30	3	Vertical	56	1.12	-	41.79	31.39	9.04	34.13

BT-EDR(3Mbps)

30/07/2019

2480MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.97236G	34.42	54.00	-19.58	6.30	3	Horizontal	182	1.30	-	28.12	31.39	9.04	34.13
PK	4.97164G	47.20	74.00	-26.80	6.30	3	Horizontal	182	1.30	-	40.90	31.39	9.04	34.13