

NCC Test Report

Equipment : 汽車主機
Brand Name : 戰鬥機汽車音響
Model Name : FLR-T3
Applicant : 戰鬥機汽車音響有限公司
彰化縣秀水鄉安東村民意街 479 巷 16-13 號
Manufacturer : 深圳勝派科技有限公司
深圳市光明新區圳美大道華美工業園 C8 棟 5 樓
Standard : LP0002 Section 3.10 (2018-01-10)

The product was received on Dec. 26, 2018, and testing was started from Jan. 04, 2019 and completed on Jan. 18, 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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TEL : 886-3-327-3456
FAX : 886-3-327-0973
Report Template No.: HE1-C9 Ver3.4

Summary of Test Result

Report Clause	Ref. Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	3.10.1.4	Antenna Requirement	PASS	LP0002-2.2
3.1	2.3	AC Power-line Conducted Emissions	PASS	LP0002-2.3
3.2	3.10.1.6	20dB Bandwidth	PASS	3.10.1.6
3.2	3.10.1.6	Carrier Frequency Separation	PASS	3.10.1.6
3.3	3.10.1.2	Maximum Conducted Output Power	PASS	3.10.1.2
3.4	3.10.1.6	Number of Hopping Frequencies and Hopping Bandedge	PASS	3.10.1.6
3.5	3.10.1.6	Time of Occupancy (Dwell Time)	PASS	3.10.1.6
3.6	3.10.1.5	Emissions in Non-restricted Frequency Bands	PASS	3.10.1.5
3.7	3.10.1.5	Emissions in Restricted Frequency Bands	PASS	Restricted Bands: LP0002-2.8
3.8	2.11	Receiver Radiated Unwanted Emissions	PASS	Restricted Bands: LP0002-2.8

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: Michelle Tsai

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

Note:

- Bluetooth BR uses a GFSK (1Mbps).
- Bluetooth EDR uses a combination of $\pi/4$ -DQPSK (2Mbps).
- 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	揚州上由	XJH-2.4G	Dipole	reserve SMA
2	AFC	YG-WIFI-48-200	PCB	NA

Ant.	Port	Gain (dBi)	
		2.4G	BT
1	1	2	-
2	1	-	2.15

For 2.4GHz function:

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

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

For BT function:

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

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

1.1.3 EUT Information

Operational Condition			
EUT Power Type	From DC Power Supply		
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	T(s)	VBW(Hz) $\geq 1/T$
BT-BR(1Mbps)	1	0	n/a (DC $\geq$ 0.98)
BT-EDR(2Mbps)	1	0	n/a (DC $\geq$ 0.98)

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:

- ♦ LP0002 (2018-01-10)
- ♦ KDB 558074 D01 v05
- ♦ ANSI C63.10-2013
- ♦ ANSI C63.4-2014

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
☐	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 Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH01-HY	Andy	23.5°C / 65%	18/Jan/2019
Radiated	03CH02-HY	Andy	22.8°C / 58%	15/Jan/2019
AC Conduction	CO04-HY	Andy	23.2°C / 60%	04/Jan/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
RF Conducted-FS	Abbreviation	Remark
TnomVnom	Tnom	20°C
-	Vnom	12V

2.2 Test Channel Mode

Test Software Version	WLAN Test Tool Version 1.5.0
-----------------------	------------------------------

Mode	PowerSetting
BT-BR(1Mbps)	-
2402MHz	15
2441MHz	15
2480MHz	15
BT-EDR(2Mbps)	-
2402MHz	15
2441MHz	15
2480MHz	15

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/CRX
1	DC Power Supply 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

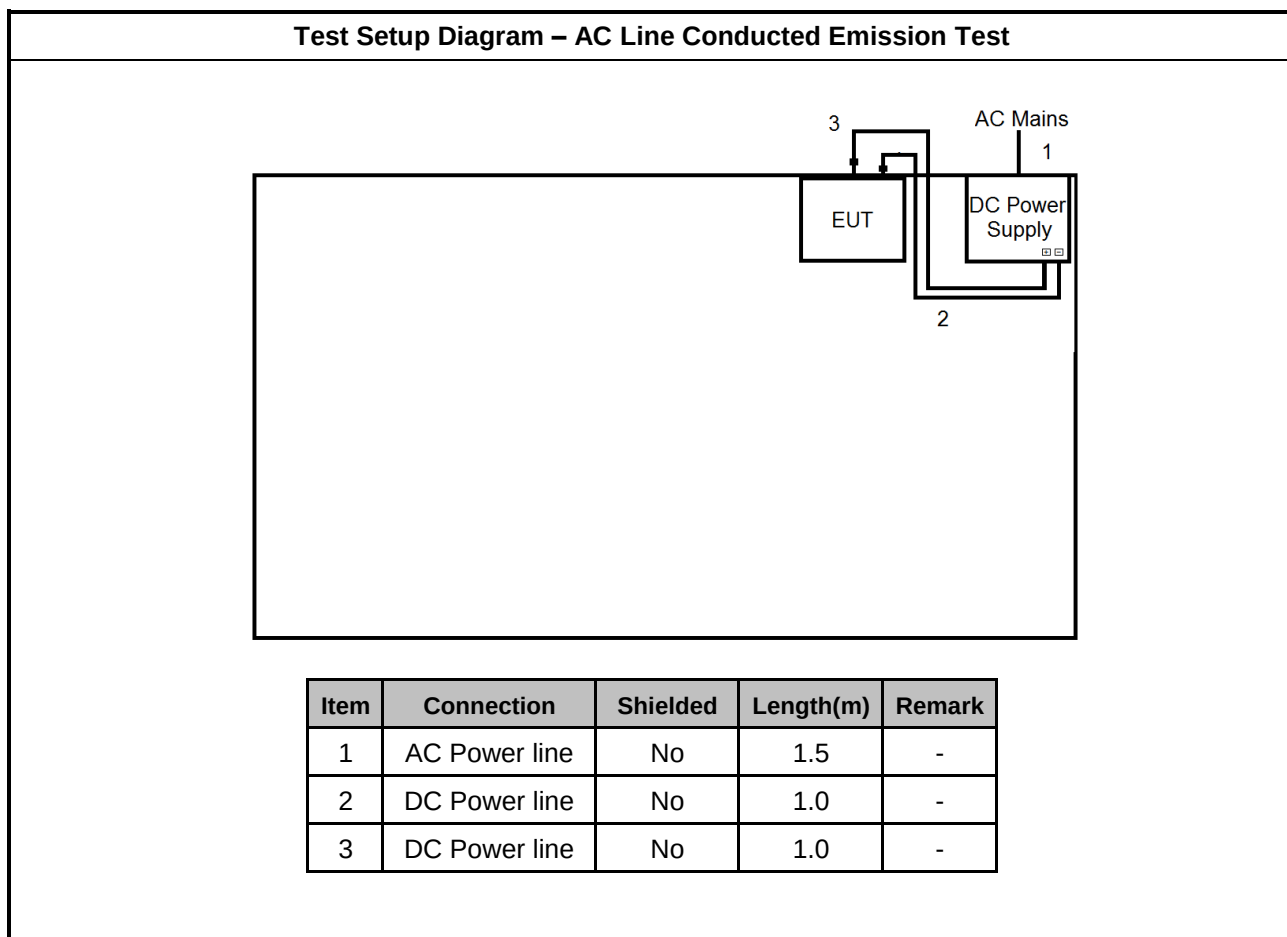
The Worst Case Mode for Following Conformance Tests	
Tests Item	Emissions in Restricted Frequency Bands Receiver Radiated Unwanted Emissions
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode	CTX/CRX
1	DC Power Supply Mode
Orthogonal Planes of EUT	Y Plane
	

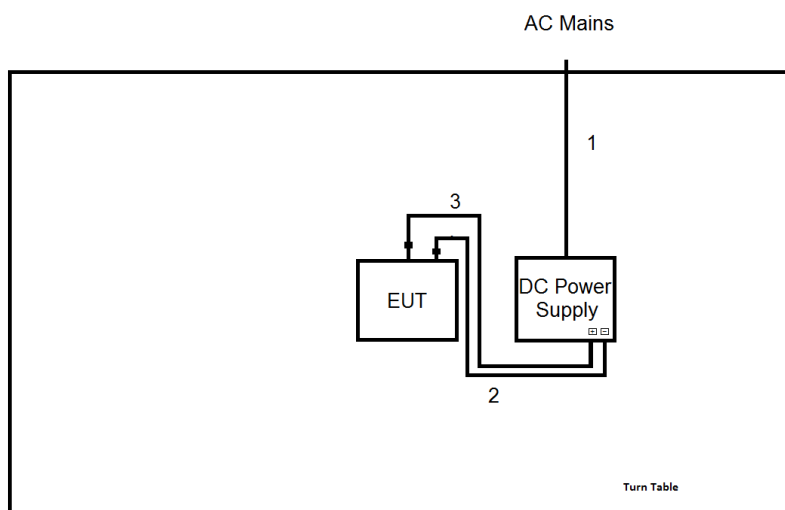
2.4 Support Equipment

Support Equipment – AC Conduction and Radiated Emission				
No.	Equipment	Brand Name	Model Name	FCC ID
1	DC Power Supply	G.W	GPS3030DD	NA

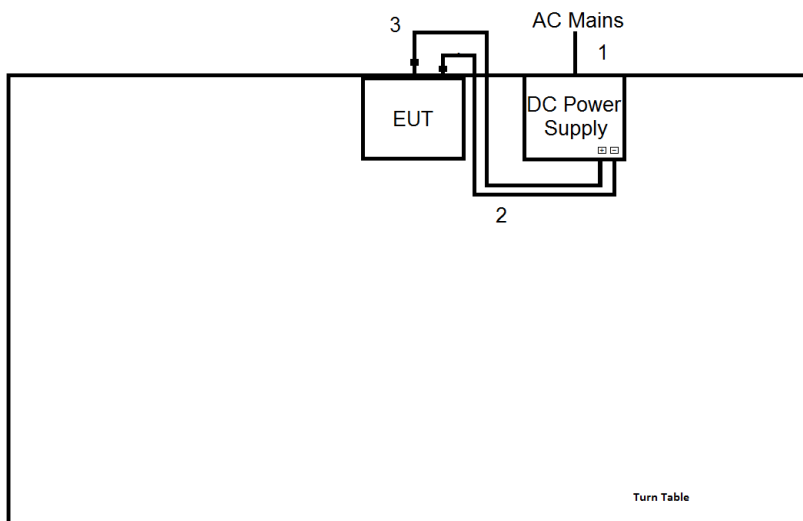
Support Equipment – RF Conducted				
No.	Equipment	Brand Name	Model Name	FCC ID
1	Notebook	DELL	E5410	DoC
2	Adapter for NB	DELL	HA65NM130	DoC
3	DC Power Supply	GW	GPS-3030DD	NA

2.5 Test Setup Diagram



Test Setup Diagram - Radiated Test (TX)


Item	Connection	Shielded	Length(m)	Remark
1	AC Power line	No	1.5	-
2	DC Power line	No	1.0	-
3	DC Power line	No	1.0	-

Test Setup Diagram - Radiated Test (RX)


Item	Connection	Shielded	Length(m)	Remark
1	AC Power line	No	1.5	-
2	DC Power line	No	1.0	-
3	DC Power line	No	1.0	-

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.

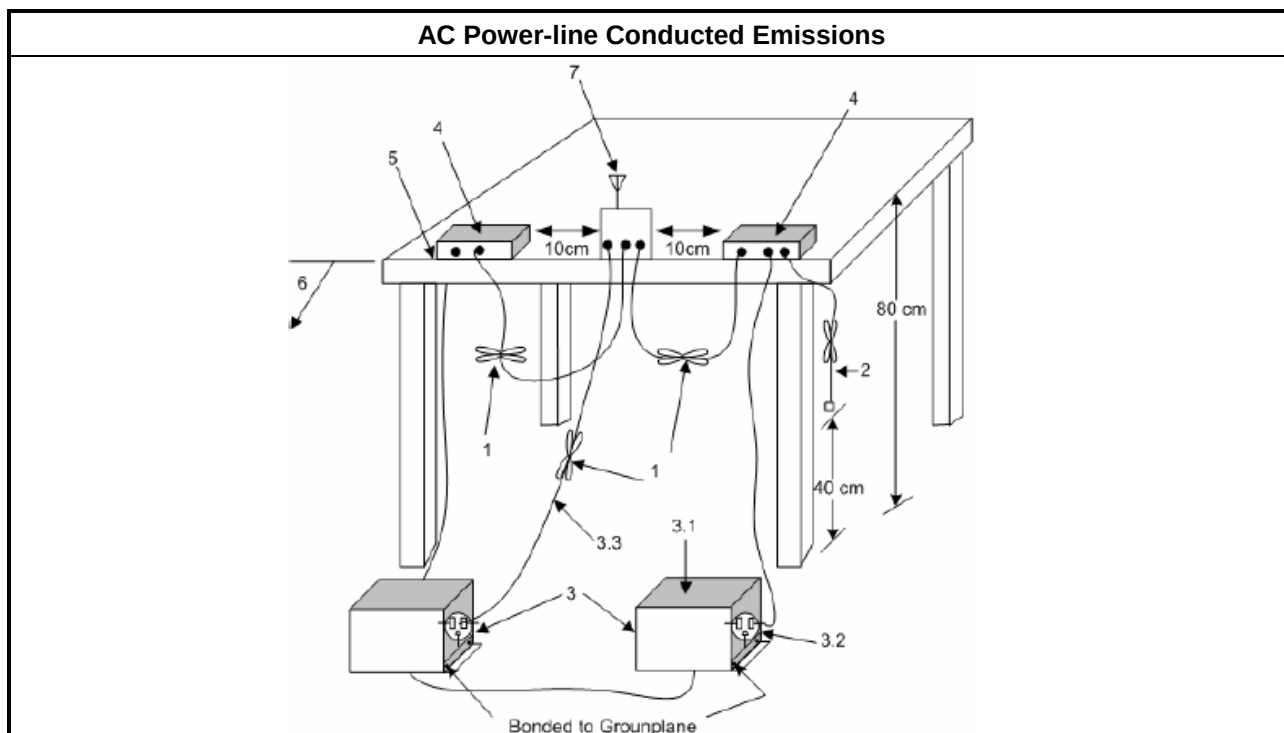
3.1.2 Measuring Instruments

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	

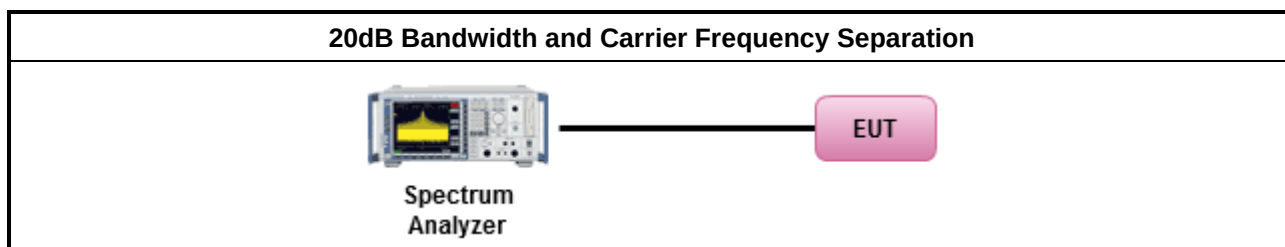
3.2.2 Measuring Instruments

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	

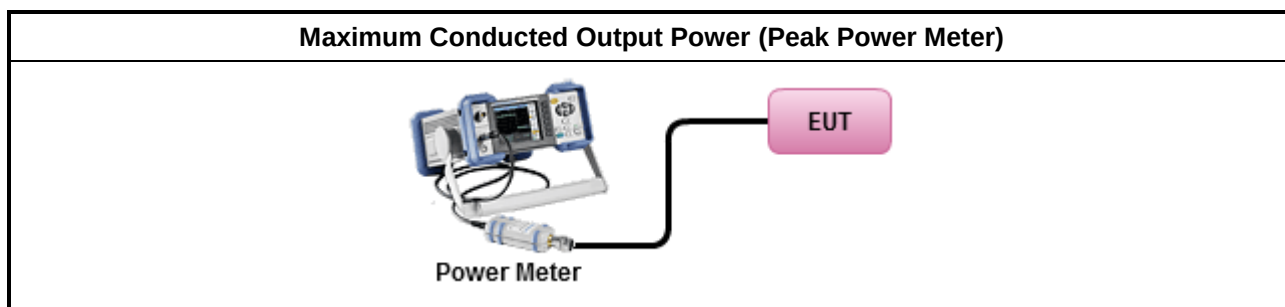
3.3.2 Measuring Instruments

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

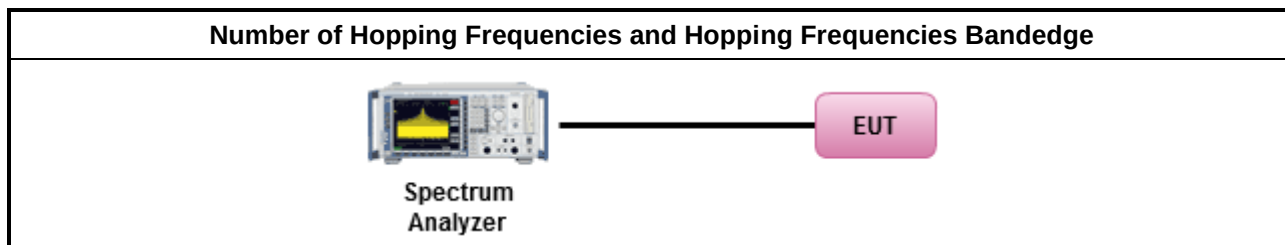
3.4.3 Measuring Instruments

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	

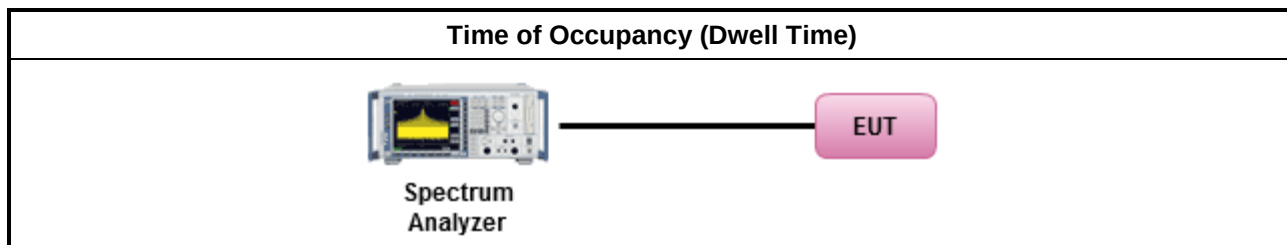
3.5.2 Measuring Instruments

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.	

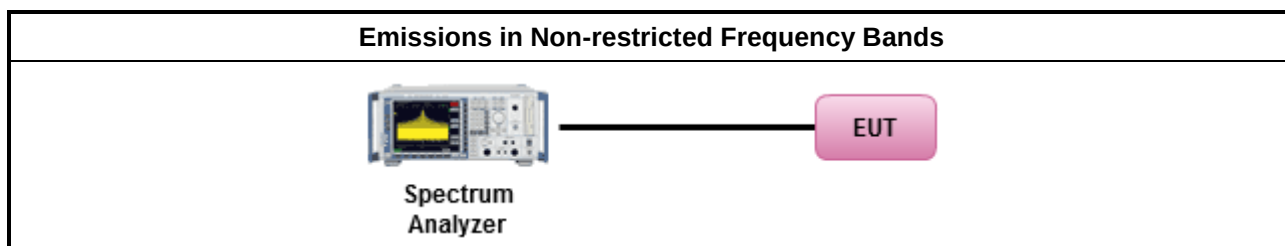
3.6.2 Measuring Instruments

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.

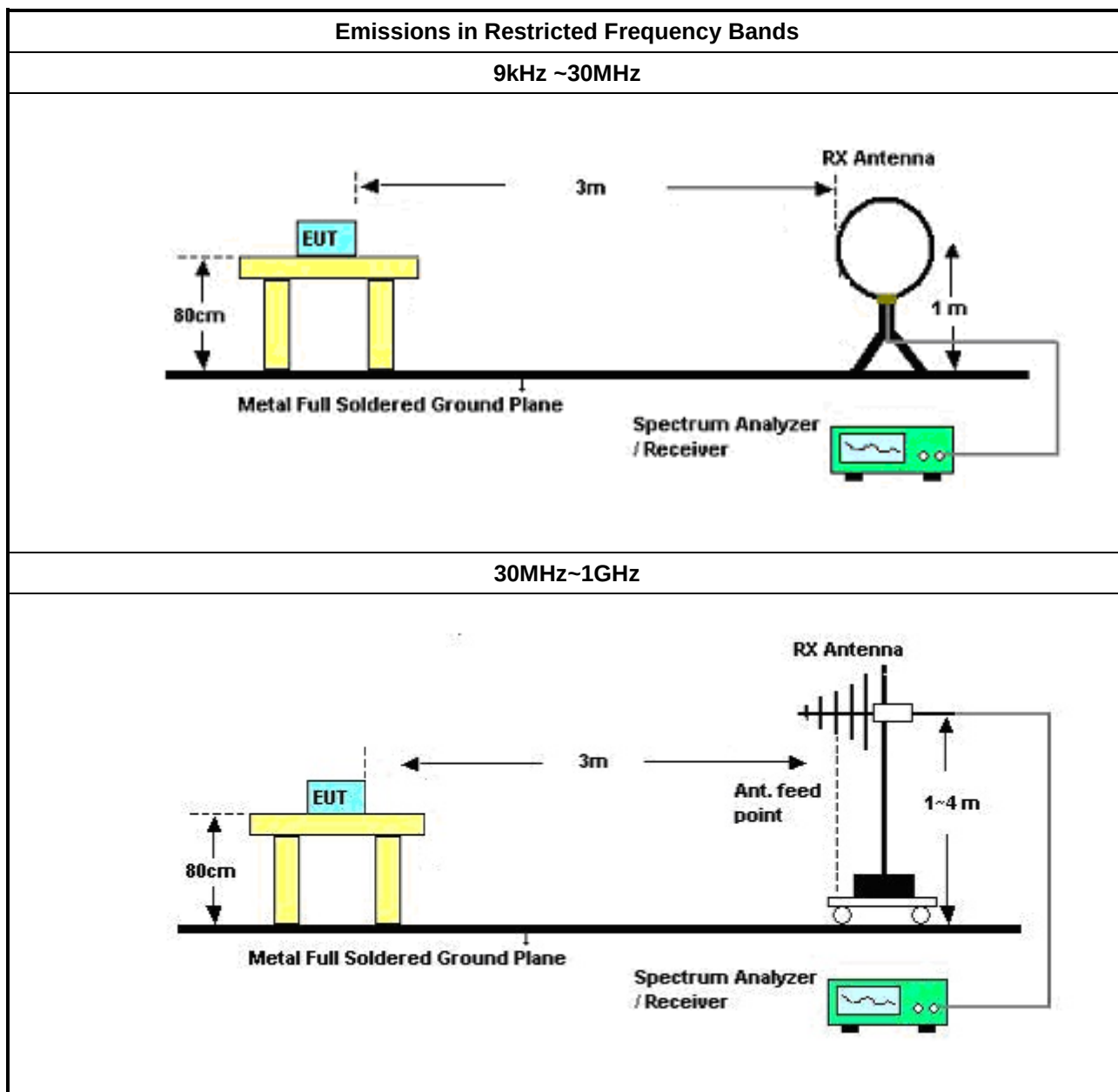
3.7.2 Measuring Instruments

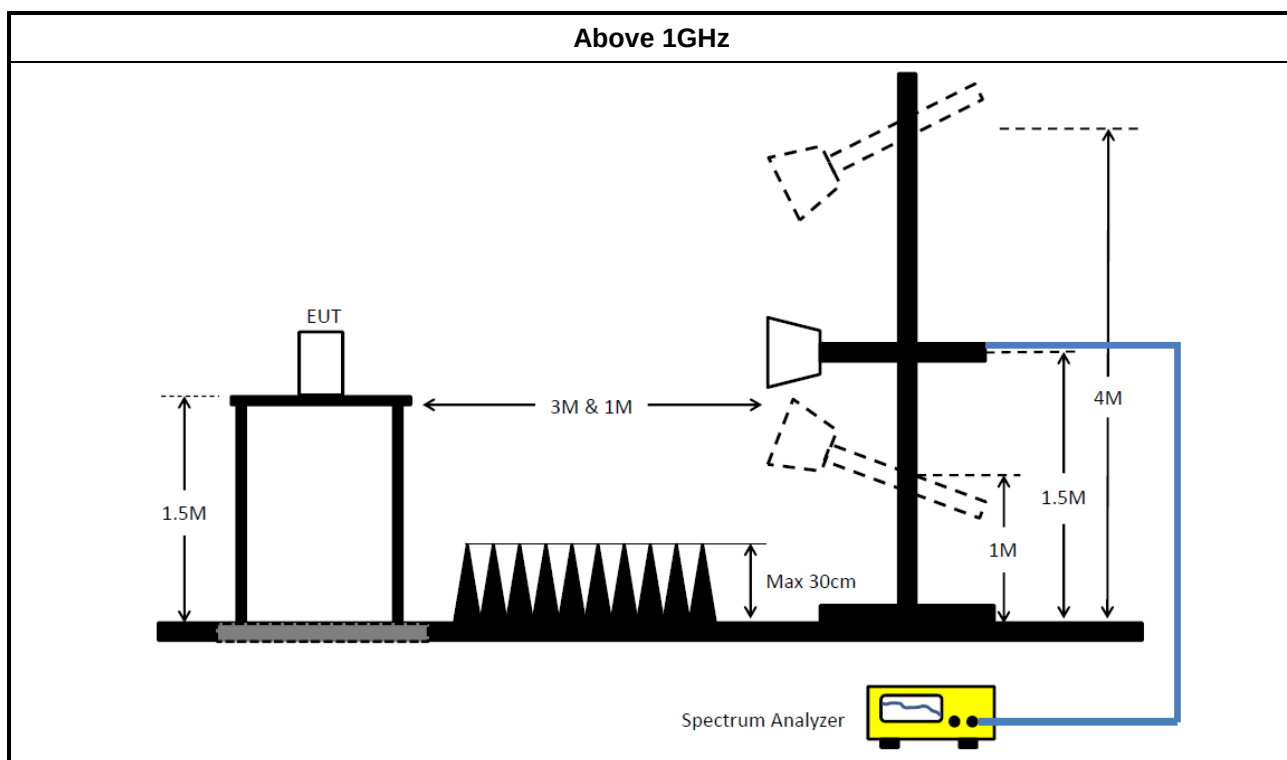
Refer a test equipment and calibration data table in this test report.

3.7.3 Test Procedures

Test Method	
▪ The average emission levels shall be measured in [hopping duty factor].	
▪ Refer as ANSI C63.10; clause 6.9.2.2 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.	
▪ For the transmitter unwanted emissions shall be measured using following options below:	
	▪ Refer as ANSI C63.10, clause 4.1.4.2.1 QP value. ▪ Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak. ▪ Refer as ANSI C63.10, clause 4.1.4.2.4 average value of hopping pulsed emissions.

3.7.4 Test Setup





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

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

3.7.6 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix G

3.8 Receiver Radiated Spurious Emissions

3.8.1 Receiver in Radiated Spurious Emissions Limit

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

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

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

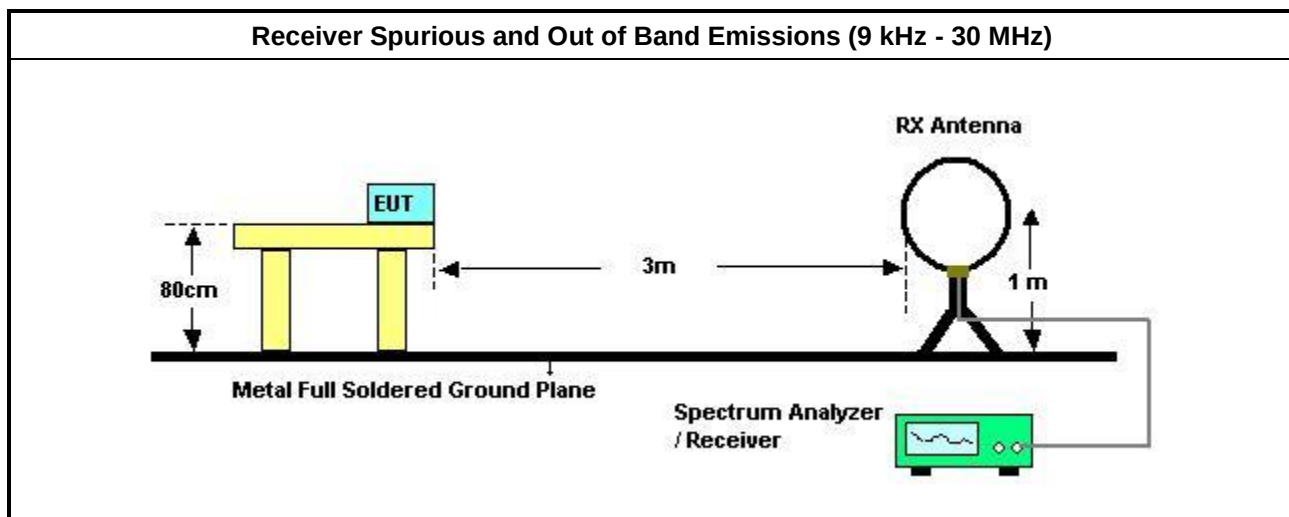
3.8.2 Measuring Instruments

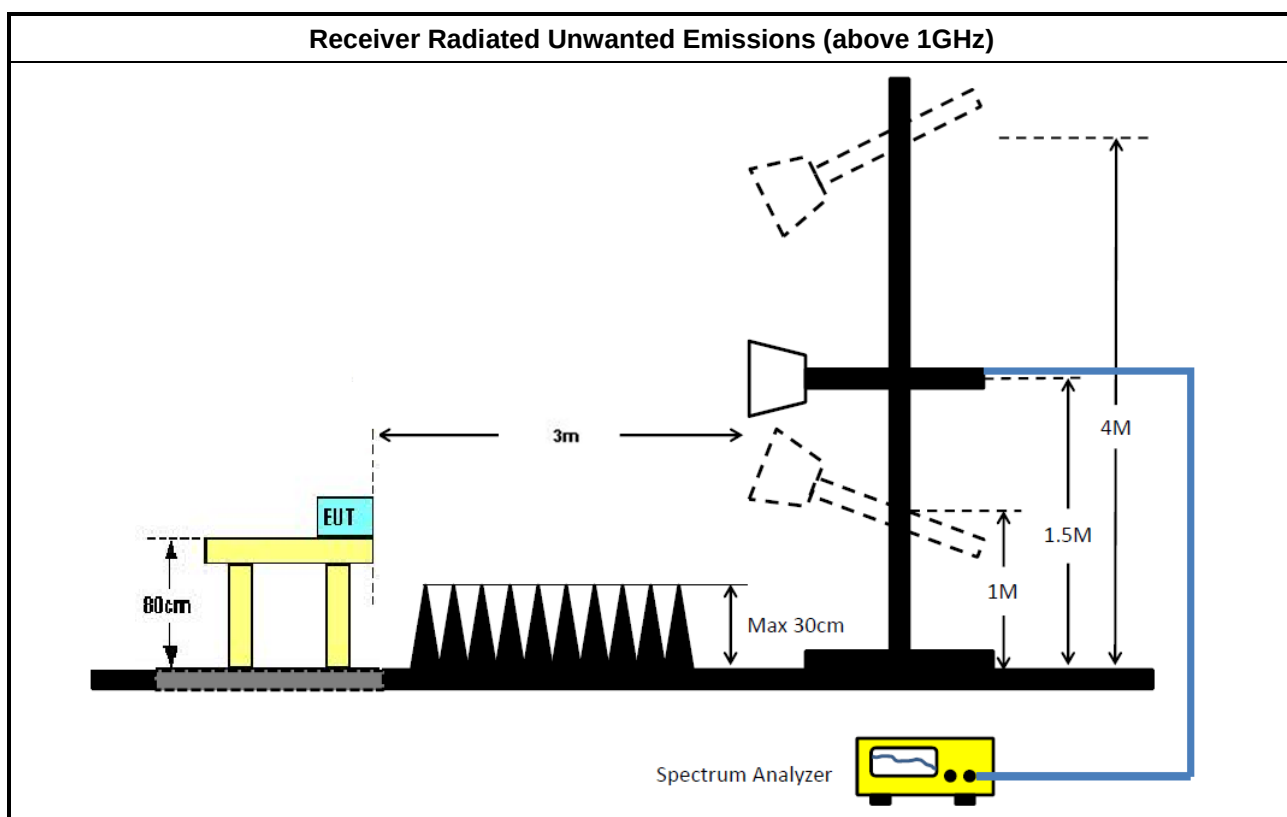
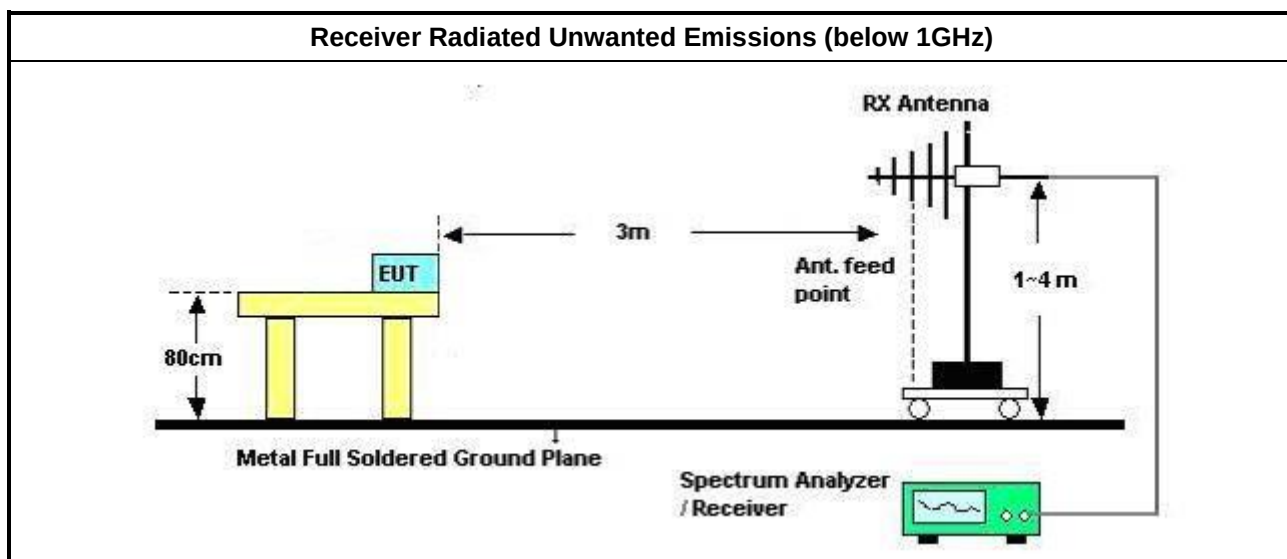
Refer a test equipment and calibration data table in this test report.

3.8.3 Test Procedures

Test Method	
☒	The search for spurious emissions shall be from the lowest frequency internally generated or used in the receiver (e.g. local oscillator, intermediate or carrier frequency), or 30 MHz, whichever is higher, to at least 3 times the highest tuneable or local oscillator frequency, whichever is higher, without exceeding 40 GHz.
☒	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).
☒	For radiated measurement, refer as ANSI C63.4, clause 8.3.
☒	Refer as ANSI C63.4, clause 8.3.1.1 and 8.3.2.1 for radiated emissions from below 30 MHz.
☒	Refer as ANSI C63.4, clause 8.3.1.1 and 8.3.2.1 for radiated emissions from 30 MHz-1 GHz. For the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the QP-Limit so that the QP level does not need to be reported in addition.
☒	Refer as ANSI C63.4, clause 8.3.1.2 and 8.3.2.2 for radiated emissions from above 1 GHz. For the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.
☒	All amplitude of spurious emissions that are attenuated by more than 30 dB below the permissible value has no need to be reported.

3.8.4 Test Setup





3.8.5 Receiver Radiated Unwanted Emissions (Below 30MHz)

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

3.8.6 Test Result of Receiver Radiated Unwanted Emissions

Refer as Appendix H

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	ESR	102051	9KHz ~ 3.6GHz	03/May/2018	02/May/2019
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
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 Radiated Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	30MHz ~ 1GHz 3m	19/Oct/2018	18/Oct/2019
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz ~ 18GHz 3m	17/Oct/2018	16/Oct/2019
Amplifier	Agilent	8447D	2944A11149	100kHz ~ 1.3GHz	27Jul/2018	02/Jul/2019
Microwave Preamplifier	Agilent	8449B	3008A02373	1GHz ~ 26.5GHz	23/Oct/2018	22/Oct/2019
Signal Analyzer	R&S	FSV40	101500	10Hz ~ 40GHz	18/Jul/2018	17/Jul/2019
RF Cable-R03m	Jye Bao	RG142	CB017	9kHz ~ 1GHz	19/Jan/2018	18/Jan/2019
RF Cable-high	SUHNER	SUCOFLEX104	MY34918/4	1GHz ~ 40GHz	19/Jan/2018	18/Jan/2019
Bilog Antenna & 5dB Attenuator	SCHAFFNER / MTJ	CBL 6112B / MTJ6102-05	2723 / 2	30MHz ~ 1GHz	08/Sep/2018	07/Sep/2019
EMI Test Receiver	R&S	ESR3	102052	9kHz ~ 3.6GHz	10/Apr/2018	09/Apr/2019
Loop Antenna	TESEQ	HLA 6120	31244	9k-30MHz	29/Mar/2018	28/Mar/2019
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170221	15GHz ~ 40GHz	12/Mar/2018	11/Mar/2019
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 01543	1GHz ~ 18GHz	11/May/2018	10/May/2019

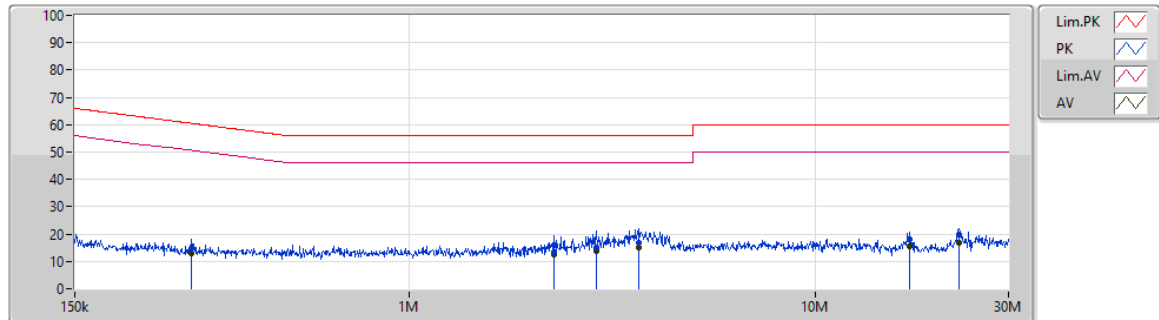
Instrument for Conducted Test

Instrument	Manufacturer	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Signal Analyzer	R&S	FSV40	101500	10Hz ~ 40GHz	18/Jul/2018	17/Jul/2019
Signal Generator	R&S	SMB100A	175727	100kHz~40GHz	26/Oct/2018	25/Oct/2019
Power Sensor	Anritsu	MA2411B	0917017	300MHz ~ 40GHz	05/Feb/2018	04/Feb/2019
Power Meter	Anritsu	ML2495A	0949003	300MHz ~ 40GHz	05/Feb/2018	04/Feb/2019
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY10710/4	30MHz ~ 26.5GHz	26/Jan/2018	25/Jan/2019
RF Cable-0.2m	HUBER+SUHNER	SUCOFLEX_104	MY10709/4	30MHz ~ 26.5GHz	26/Jan/2018	25/Jan/2019

AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Neutral
Operating Function	DC Power Supply Mode ; TX		

04/01/2019

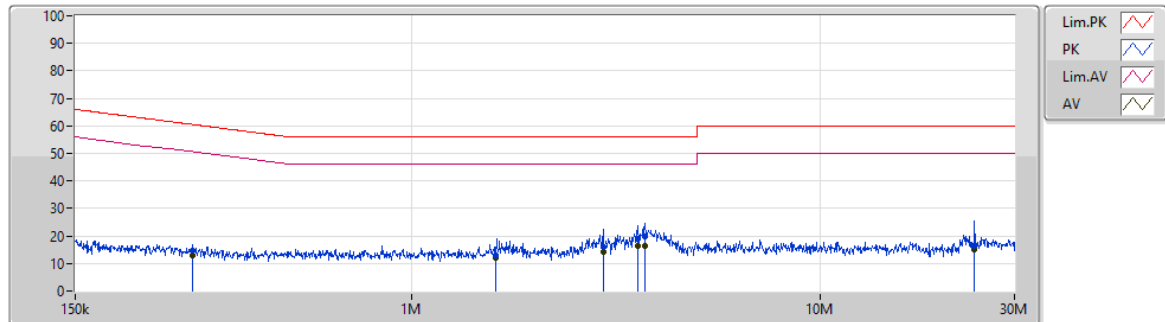


Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	290.996k	14.53	60.49	-45.96	19.48	Line	-	-4.95	9.59	0.01	9.88			
AV	290.996k	12.86	50.49	-37.63	19.48	Line	-	-6.62	9.59	0.01	9.88			
QP	2.274M	13.22	56.00	-42.78	19.55	Line	-	-6.33	9.62	0.04	9.89			
AV	2.274M	12.45	46.00	-33.55	19.55	Line	-	-7.10	9.62	0.04	9.89			
QP	2.901M	15.22	56.00	-40.78	19.56	Line	-	-4.34	9.63	0.04	9.89			
AV	2.901M	13.69	46.00	-32.31	19.56	Line	-	-5.87	9.63	0.04	9.89			
QP	3.671M	16.96	56.00	-39.04	19.56	Line	-	-2.60	9.63	0.04	9.89			
AV	3.671M	15.11	46.00	-30.89	19.56	Line	"Worst"	-4.45	9.63	0.04	9.89			
QP	17.072M	18.03	60.00	-41.97	19.64	Line	-	-1.61	9.64	0.10	9.90			
AV	17.072M	15.63	50.00	-34.37	19.64	Line	-	-4.01	9.64	0.10	9.90			
QP	22.666M	19.81	60.00	-40.19	19.62	Line	-	0.19	9.60	0.12	9.90			
AV	22.666M	16.89	50.00	-33.11	19.62	Line	-	-2.73	9.60	0.12	9.90			

AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Line
Operating Function	DC Power Supply Mode ; TX		

04/01/2019

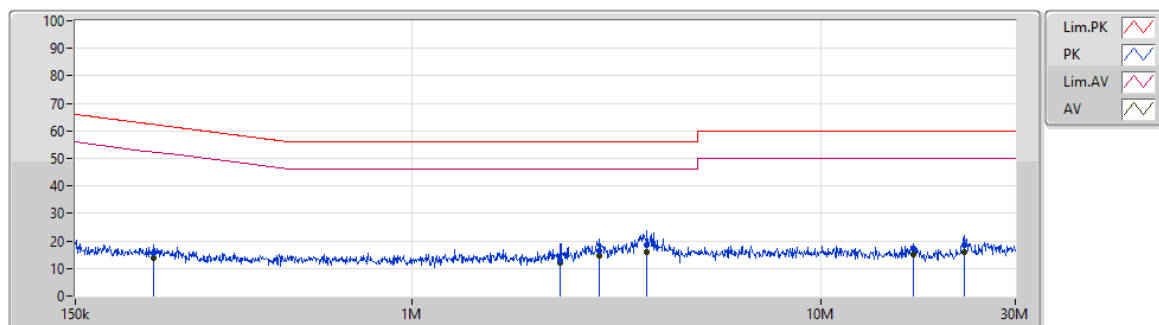


Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	289.837k	14.80	60.53	-45.73	19.48	Neutral	-	-4.68	9.59	0.01	9.88			
AV	289.837k	12.97	50.53	-37.56	19.48	Neutral	-	-6.51	9.59	0.01	9.88			
QP	1.613M	12.95	56.00	-43.05	19.52	Neutral	-	-6.57	9.60	0.03	9.89			
AV	1.613M	12.04	46.00	-33.96	19.52	Neutral	-	-7.48	9.60	0.03	9.89			
QP	2.947M	15.82	56.00	-40.18	19.54	Neutral	-	-3.72	9.61	0.04	9.89			
AV	2.947M	14.04	46.00	-31.96	19.54	Neutral	-	-5.50	9.61	0.04	9.89			
QP	3.584M	18.88	56.00	-37.12	19.54	Neutral	-	-0.66	9.61	0.04	9.89			
AV	3.584M	16.43	46.00	-29.57	19.54	Neutral	-	-3.11	9.61	0.04	9.89			
QP	3.73M	19.83	56.00	-36.17	19.54	Neutral	-	0.29	9.61	0.04	9.89			
AV	3.73M	16.52	46.00	-29.48	19.54	Neutral	"Worst"	-3.02	9.61	0.04	9.89			
QP	23.968M	16.58	60.00	-43.42	19.70	Neutral	-	-3.12	9.68	0.12	9.90			
AV	23.968M	15.12	50.00	-34.88	19.70	Neutral	-	-4.58	9.68	0.12	9.90			

AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Neutral
Operating Function	DC Power Supply Mode ; RX		

04/01/2019

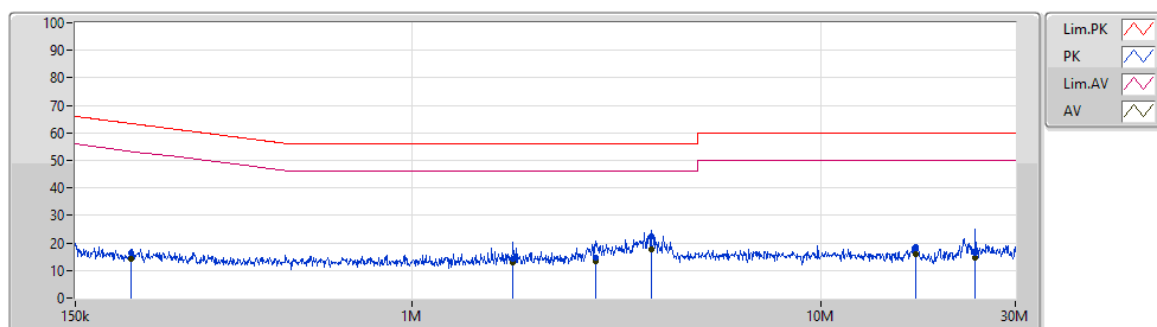


Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	233.633k	15.51	62.31	-46.80	19.48	Line	-	-3.97	9.60	0.01	9.87			
AV	233.633k	13.68	52.31	-38.63	19.48	Line	-	-5.80	9.60	0.01	9.87			
QP	2.301M	12.92	56.00	-43.08	19.55	Line	-	-6.63	9.62	0.04	9.89			
AV	2.301M	12.22	46.00	-33.78	19.55	Line	-	-7.33	9.62	0.04	9.89			
QP	2.878M	16.39	56.00	-39.61	19.56	Line	-	-3.17	9.63	0.04	9.89			
AV	2.878M	14.60	46.00	-31.40	19.56	Line	-	-4.96	9.63	0.04	9.89			
QP	3.76M	18.60	56.00	-37.40	19.56	Line	-	-0.96	9.63	0.04	9.89			
AV	3.76M	15.98	46.00	-30.02	19.56	Line	"Worst"	-3.58	9.63	0.04	9.89			
QP	16.868M	17.35	60.00	-42.65	19.64	Line	-	-2.29	9.64	0.10	9.90			
AV	16.868M	15.18	50.00	-34.82	19.64	Line	-	-4.46	9.64	0.10	9.90			
QP	22.485M	18.71	60.00	-41.29	19.63	Line	-	-0.92	9.61	0.12	9.90			
AV	22.485M	16.05	50.00	-33.95	19.63	Line	-	-3.58	9.61	0.12	9.90			

AC Power-line Conducted Emissions Result

Operating Mode	1	Power Phase	Line
Operating Function	DC Power Supply Mode ; RX		

04/01/2019



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	205.615k	16.17	63.38	-47.21	19.47	Neutral	-	-3.30	9.59	0.01	9.87			
AV	205.615k	14.43	53.38	-38.95	19.47	Neutral	-	-5.04	9.59	0.01	9.87			
QP	1.768M	14.39	56.00	-41.61	19.53	Neutral	-	-5.14	9.61	0.03	9.89			
AV	1.768M	12.90	46.00	-33.10	19.53	Neutral	-	-6.63	9.61	0.03	9.89			
QP	2.81M	14.68	56.00	-41.32	19.54	Neutral	-	-4.86	9.61	0.04	9.89			
AV	2.81M	13.30	46.00	-32.70	19.54	Neutral	-	-6.24	9.61	0.04	9.89			
QP	3.851M	22.34	56.00	-33.66	19.55	Neutral	-	2.79	9.61	0.05	9.89			
AV	3.851M	17.88	46.00	-28.12	19.55	Neutral	"Worst"	-1.67	9.61	0.05	9.89			
QP	17.072M	18.57	60.00	-41.43	19.68	Neutral	-	-1.11	9.68	0.10	9.90			
AV	17.072M	15.83	50.00	-34.17	19.68	Neutral	-	-3.85	9.68	0.10	9.90			
QP	23.968M	16.39	60.00	-43.61	19.70	Neutral	-	-3.31	9.68	0.12	9.90			
AV	23.968M	14.80	50.00	-35.20	19.70	Neutral	-	-4.90	9.68	0.12	9.90			

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)	922.5k	902.049k	902KF1D	918.75k	898.301k
BT-EDR(2Mbps)	1.358M	1.233M	1M23G1D	1.355M	1.223M

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

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

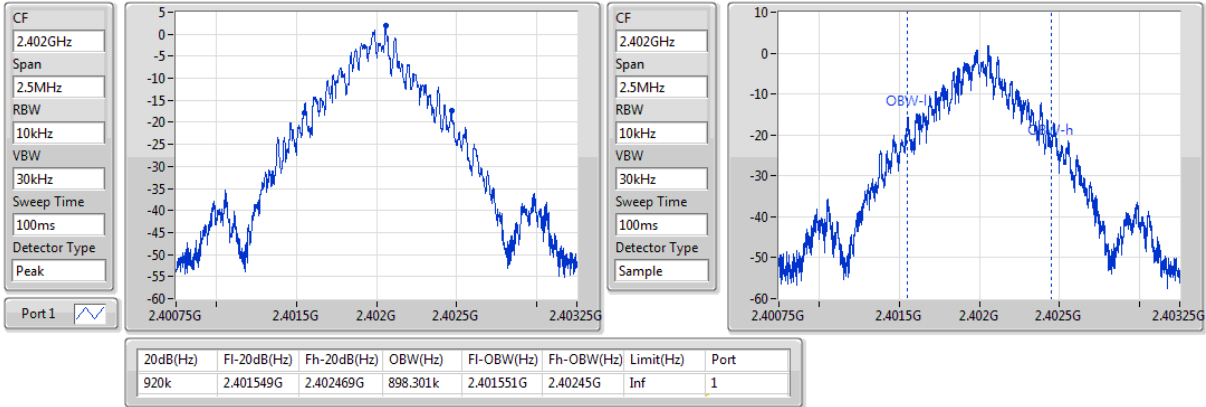
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-BR(1Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	Inf	920k	898.301k
2441MHz_TnomVnom	Pass	Inf	922.5k	900.8k
2480MHz_TnomVnom	Pass	Inf	918.75k	902.049k
BT-EDR(2Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	Inf	1.355M	1.223M
2441MHz_TnomVnom	Pass	Inf	1.358M	1.228M
2480MHz_TnomVnom	Pass	Inf	1.355M	1.233M

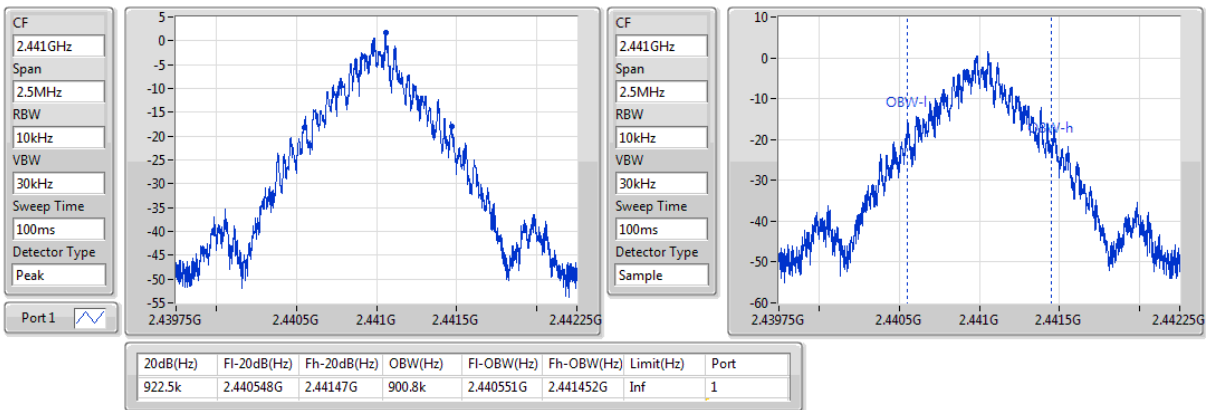
Port X-N dB = Port X 20dB down bandwidth; **Port X-OBW** = Port X 99% occupied bandwidth;

BT-BR(1Mbps)
EBW
2402MHz

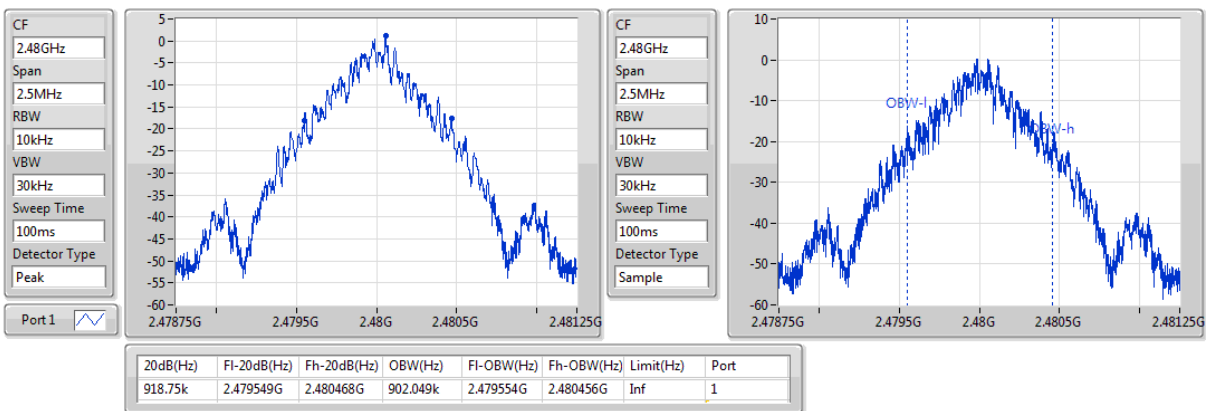
18/01/2019


BT-BR(1Mbps)
EBW
2441MHz

18/01/2019

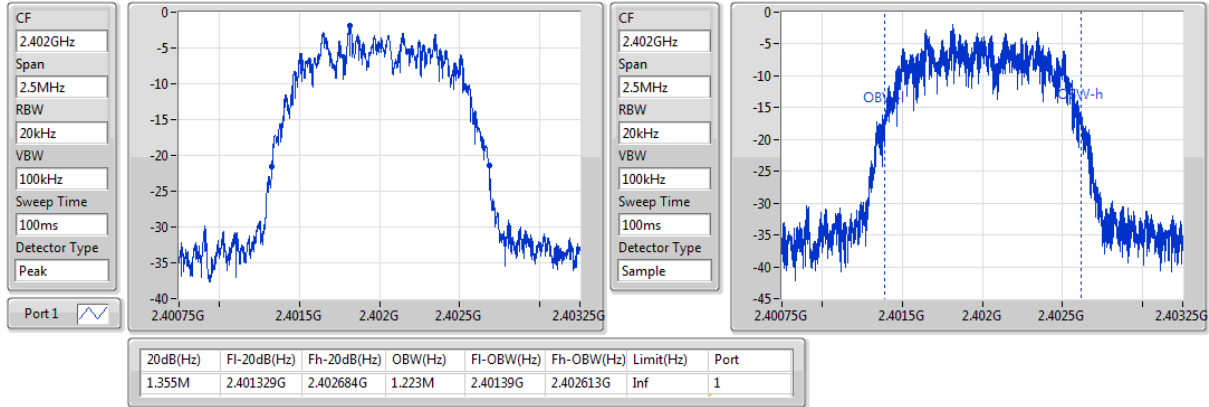

BT-BR(1Mbps)
EBW
2480MHz

18/01/2019

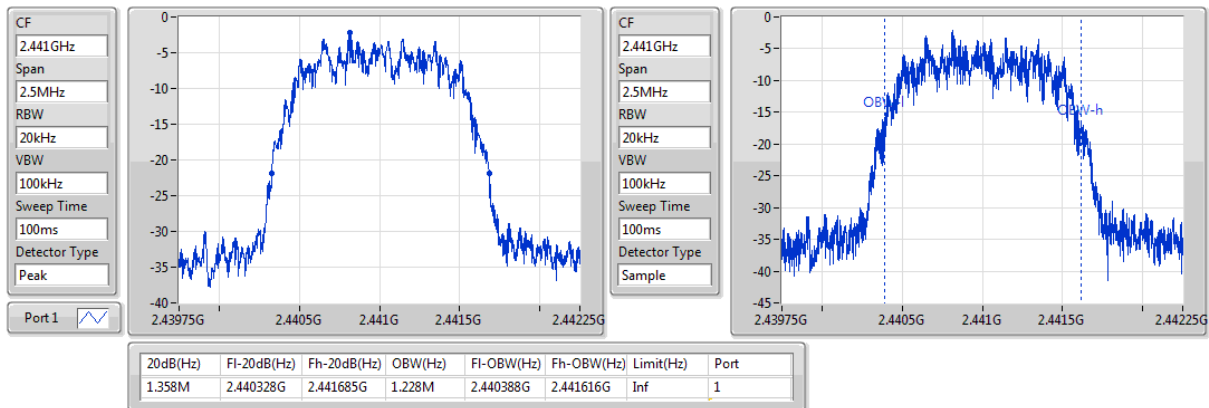


BT-EDR(2Mbps)
EBW
2402MHz

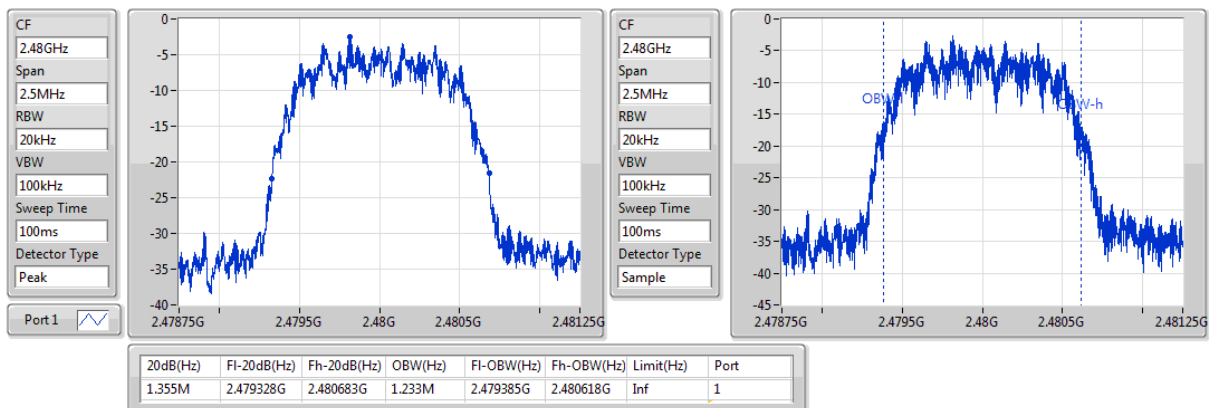
18/01/2019


BT-EDR(2Mbps)
EBW
2441MHz

18/01/2019


BT-EDR(2Mbps)
EBW
2480MHz

18/01/2019



Summary

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

Result

Mode	Result	Fl (Hz)	Fh (Hz)	Ch.Space (Hz)	Limit (Hz)
BT-BR(1Mbps)	-	-	-	-	-
2402MHz_TnomVnom	Pass	2.402056G	2.403057G	1.0005M	612.72k
2441MHz_TnomVnom	Pass	2.441056G	2.44206G	1.0035M	614.385k
2480MHz_TnomVnom	Pass	2.479058G	2.480057G	999k	611.8875k
BT-EDR(2Mbps)	-	-	-	-	-
2402MHz_TnomVnom	Pass	2.401815G	2.402818G	1.0035M	902.43k
2441MHz_TnomVnom	Pass	2.440818G	2.441817G	999k	904.428k
2480MHz_TnomVnom	Pass	2.478815G	2.479818G	1.0035M	902.43k

BT-BR(1Mbps)

Channel Separation

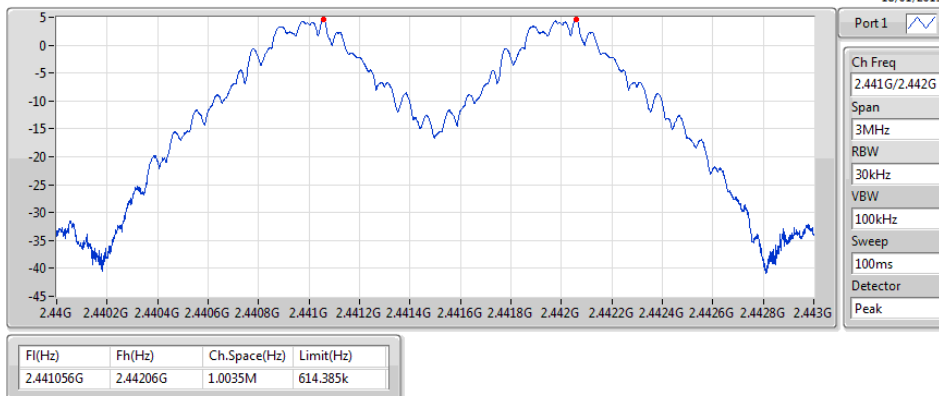
2.402G/2.403GHz



BT-BR(1Mbps)

Channel Separation

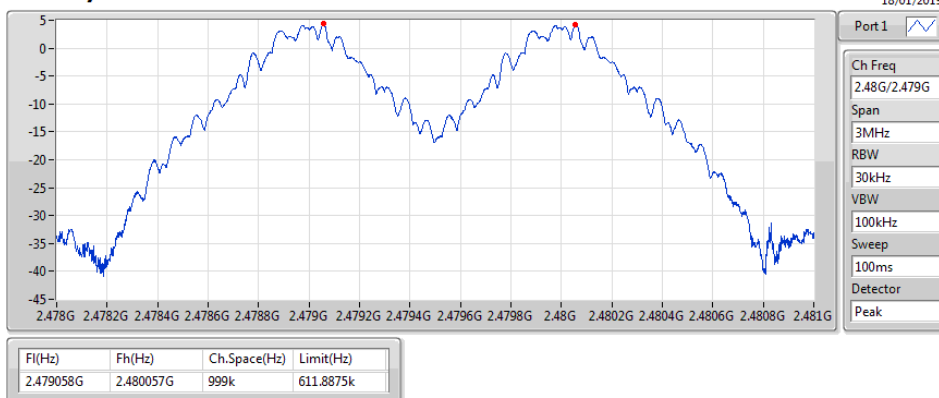
2.441G/2.442GHz



BT-BR(1Mbps)

Channel Separation

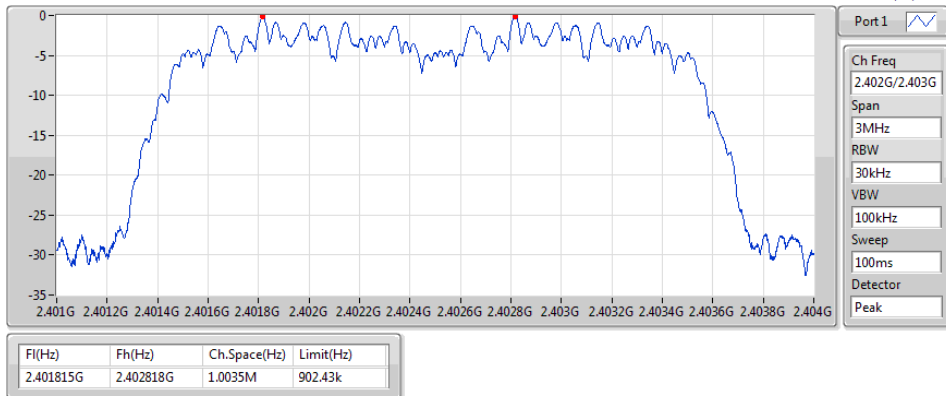
2.48G/2.479GHz



BT-EDR(2Mbps)

Channel Separation

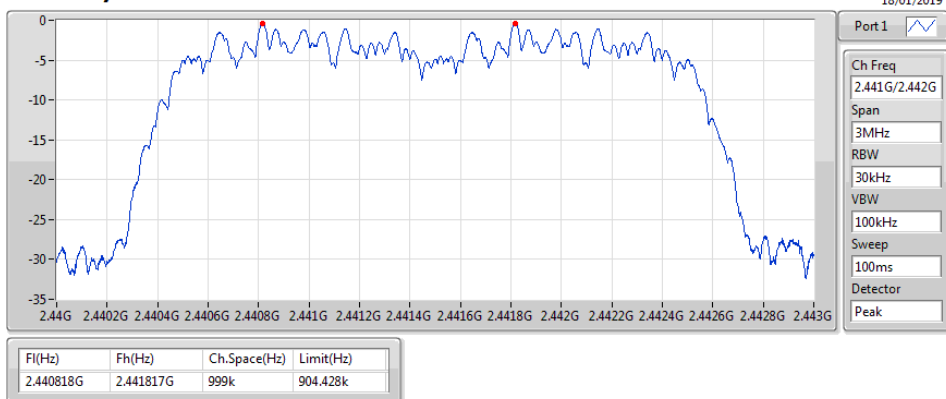
2.402G/2.403GHz



BT-EDR(2Mbps)

Channel Separation

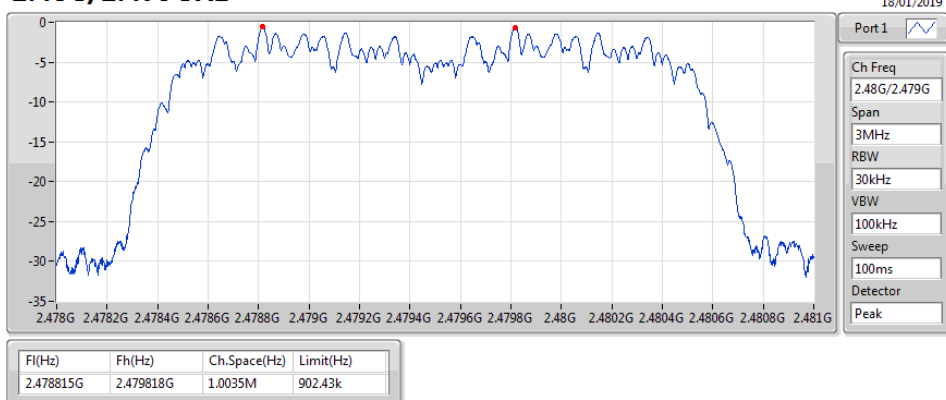
2.441G/2.442GHz



BT-EDR(2Mbps)

Channel Separation

2.48G/2.479GHz



Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	7.68	0.00586
BT-EDR(2Mbps)	7.44	0.00555

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	2.15	7.68	21.00
2441MHz_TnomVnom	Pass	2.15	7.49	21.00
2480MHz_TnomVnom	Pass	2.15	7.20	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	2.15	7.44	21.00
2441MHz_TnomVnom	Pass	2.15	7.23	21.00
2480MHz_TnomVnom	Pass	2.15	6.95	21.00

Summary

Mode	Power	Power
	(dBm)	(W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	7.60	0.00575
BT-EDR(2Mbps)	5.72	0.00373

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	2.15	7.60	21.00
2441MHz_TnomVnom	Pass	2.15	7.40	21.00
2480MHz_TnomVnom	Pass	2.15	7.11	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz_TnomVnom	Pass	2.15	5.72	21.00
2441MHz_TnomVnom	Pass	2.15	5.52	21.00
2480MHz_TnomVnom	Pass	2.15	5.25	21.00

Summary

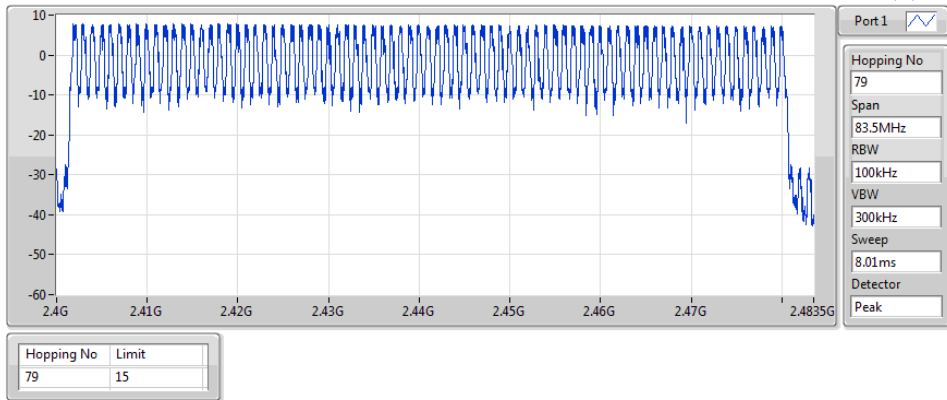
Mode	Max-Hop No
2.4-2.4835GHz	-
BT-BR(1Mbps)	79
BT-EDR(2Mbps)	79

Result

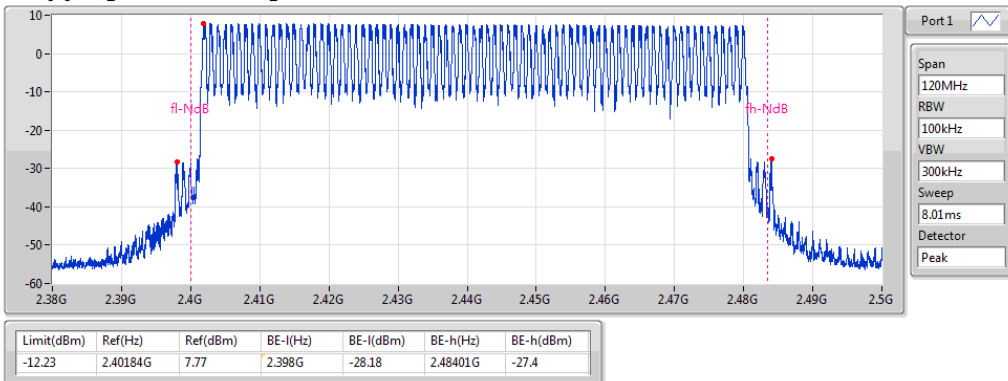
Mode	Result	Hopping No	Limit
BT-BR(1Mbps)	-	-	-
2441MHz_TnomVnom	Pass	79	15
BT-EDR(2Mbps)	-	-	-
2441MHz_TnomVnom	Pass	79	15

BT-BR(1Mbps) 2441MHz

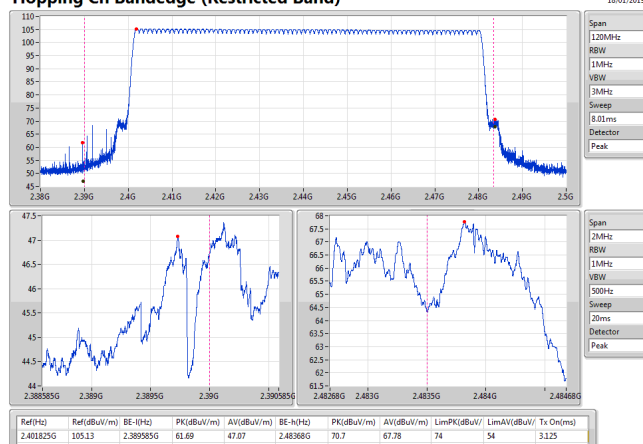
Hopping Ch



BT-BR(1Mbps) 2441MHz Hopping Ch Bandedge (Non-restricted Band)

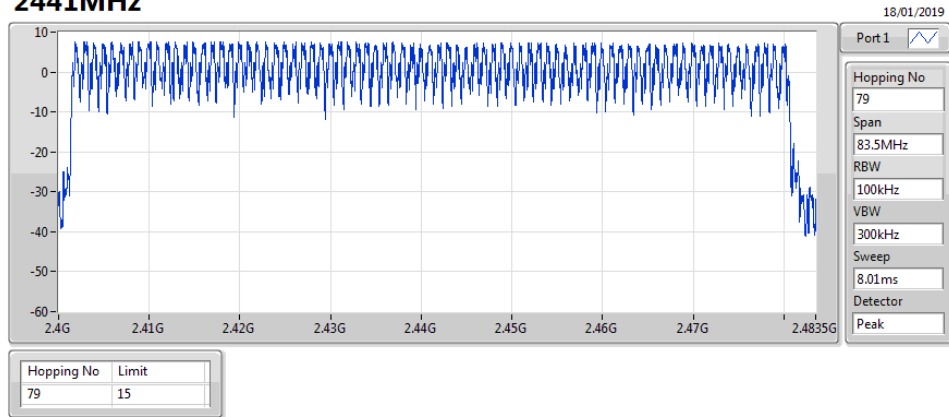


BT-BR(1Mbps) 2441MHz Hopping Ch Bandedge (Restricted Band)



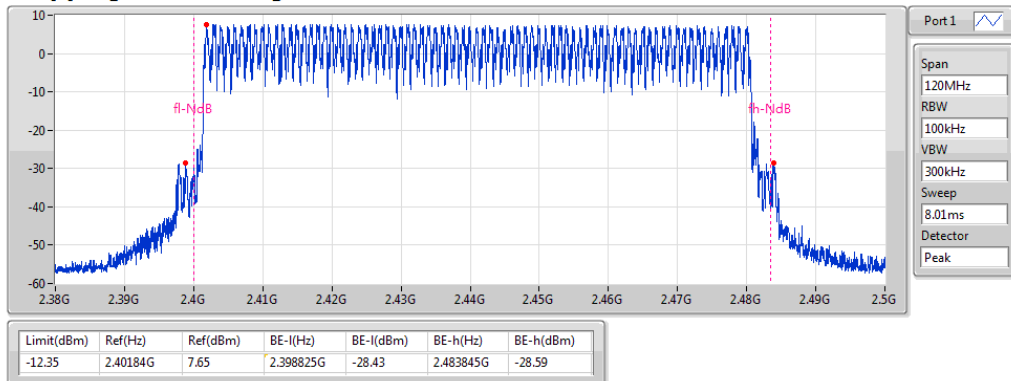
BT-EDR(2Mbps) 2441MHz

Hopping Ch



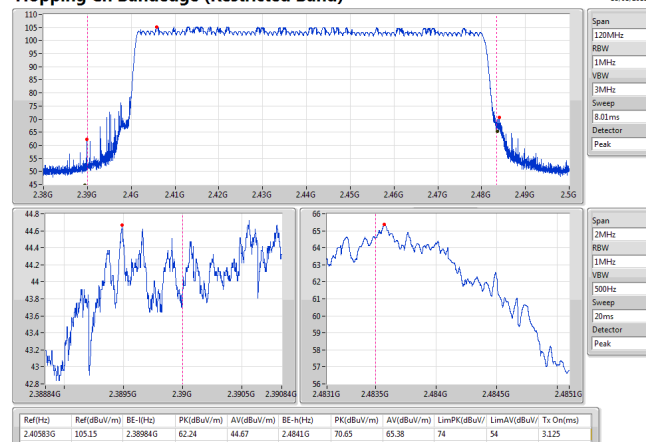
BT-EDR(2Mbps) 2441MHz

Hopping Ch Bandedge (Non-restricted Band)



BT-EDR(2Mbps) 2441MHz

Hopping Ch Bandedge (Restricted Band)



Summary

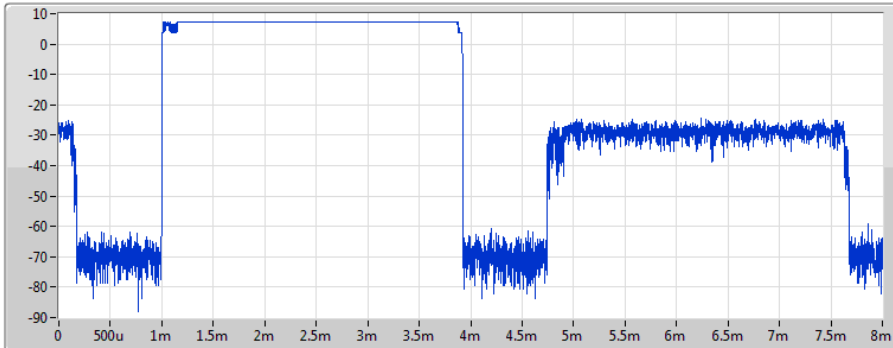
Mode	Max-Dwell (s)
2.4-2.4835GHz	-
BT-BR(1Mbps)	311.4852m
BT-EDR(2Mbps)	310.9522m

Result

Mode	Result	Period (s)	Dwell (s)	Limit (s)	Tx On (s)
BT-BR(1Mbps)	-	-	-	-	-
2441MHz_TnomVnom	Pass	31.6	311.4852m	400m	2.922m
BT-EDR(2Mbps)	-	-	-	-	-
2441MHz_TnomVnom	Pass	31.6	310.9522m	400m	2.917m

BT-BR(1Mbps)

2441MHz



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

Dwell

18/01/2019

Port 1 

Ch Freq
2.441GHz

RBW
300kHz

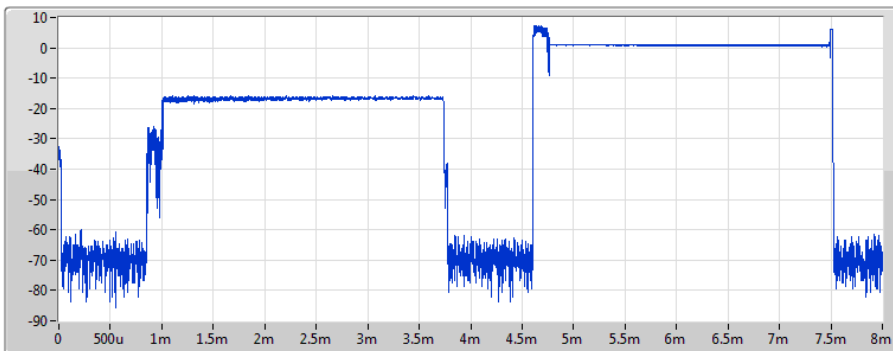
VBW
1MHz

Sweep Time
8ms

TX Time
2.922ms

BT-EDR(2Mbps)

2441MHz



Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	310.9522m	400m	2.917m

Dwell

18/01/2019

Port 1 

Ch Freq
2.441GHz

RBW
300kHz

VBW
1MHz

Sweep Time
8ms

TX Time
2.917ms

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	2.48008G	6.44	-13.56	2.15262G	-43.80	2.39994G	-43.89	2.48393G	-29.00	24.11631G	-29.95	1
BT-EDR(2Mbps)	Pass	2.44096G	3.07	-16.93	2.15321G	-45.25	2.39905G	-44.31	2.485G	-43.46	24.47372G	-29.57	1

Result

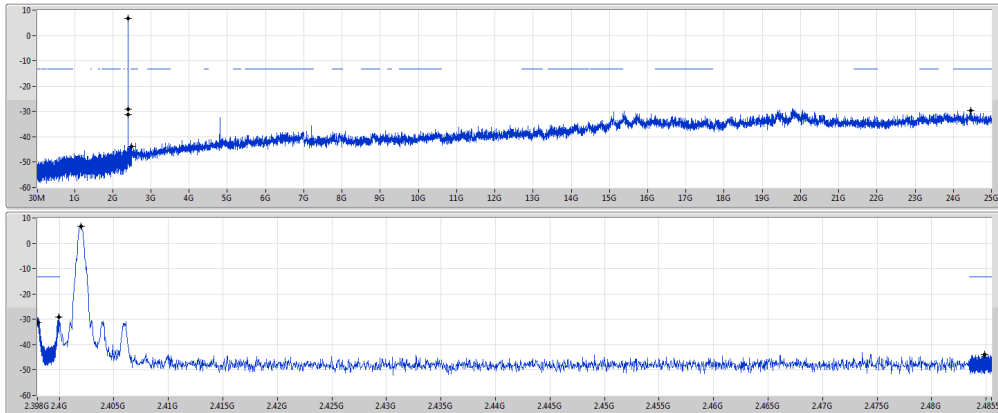
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
BT-BR(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz_TnomVnom	Pass	2.402G	6.71	-13.29	2.398G	-31.27	2.39996G	-29.15	2.48489G	-44.00	24.46247G	-29.78	1
2441MHz_TnomVnom	Pass	2.44104G	6.62	-13.38	2.05967G	-43.80	2.3983G	-43.26	2.48372G	-43.74	24.47935G	-29.62	1
2480MHz_TnomVnom	Pass	2.48008G	6.44	-13.56	2.15262G	-43.80	2.39994G	-43.89	2.48393G	-29.00	24.11631G	-29.95	1
BT-EDR(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz_TnomVnom	Pass	2.402G	3.92	-16.08	2.3977G	-35.62	2.39985G	-32.42	2.48461G	-43.53	24.76078G	-29.55	1
2441MHz_TnomVnom	Pass	2.44096G	3.07	-16.93	2.15321G	-45.25	2.39905G	-44.31	2.485G	-43.46	24.47372G	-29.57	1
2480MHz_TnomVnom	Pass	2.48008G	3.21	-16.79	2.39297G	-44.59	2.39849G	-44.32	2.48406G	-31.96	24.34708G	-30.08	1

BT-BR(1Mbps) 2402MHz

CSE NdB

18/01/2019

Port 1



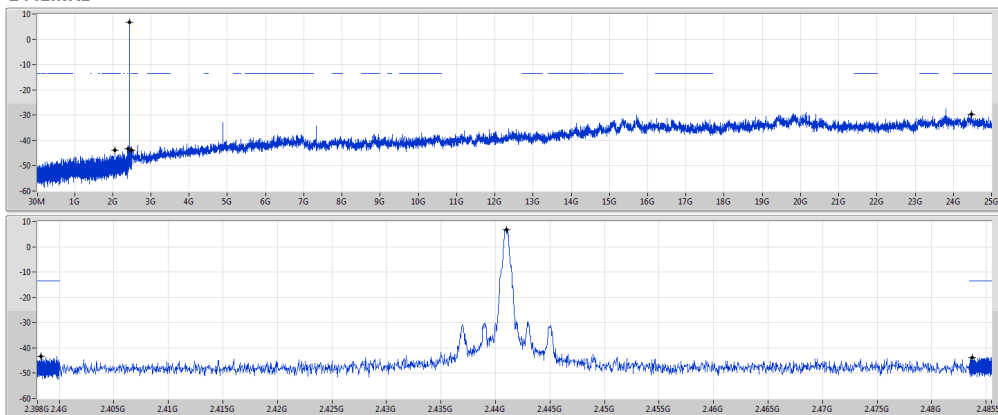
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2402G	6.71	-13.29	2398G	-31.27	239996G	-29.15	248489G	-44.00	244624G	-29.78	1

BT-BR(1Mbps) 2441MHz

CSE NdB

18/01/2019

Port 1



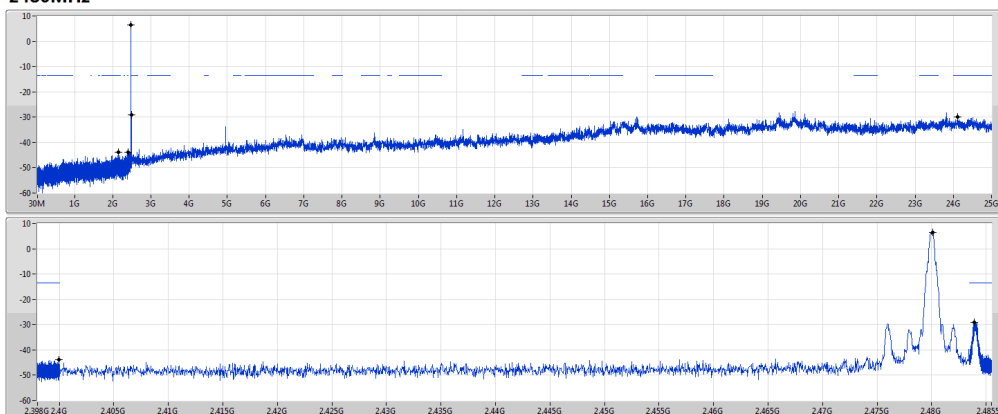
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244104G	6.62	-13.38	205967G	-43.80	23983G	-43.26	248372G	-43.74	2447935G	-29.62	1

BT-BR(1Mbps) 2480MHz

CSE NdB

18/01/2019

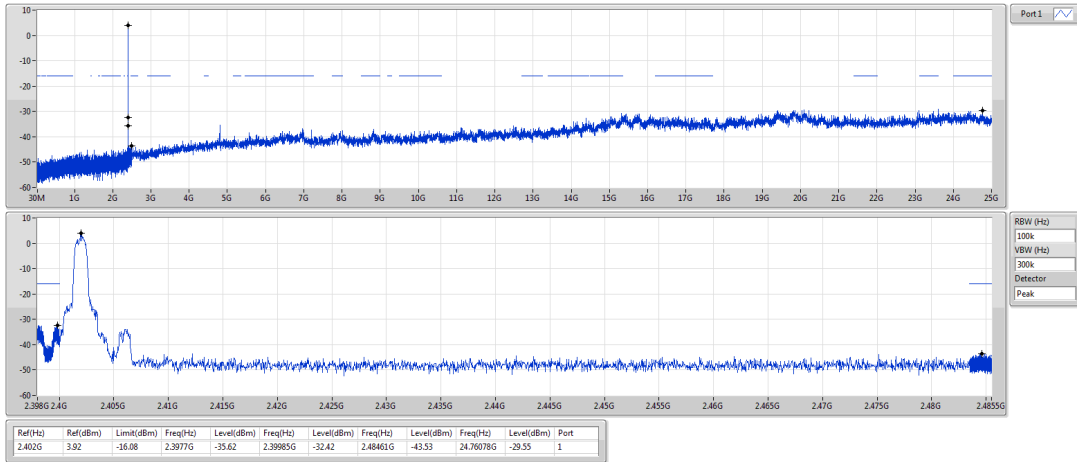
Port 1



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
248006G	6.44	-13.56	215362G	-43.80	239994G	-43.89	248393G	-29.00	2411631G	-29.95	1

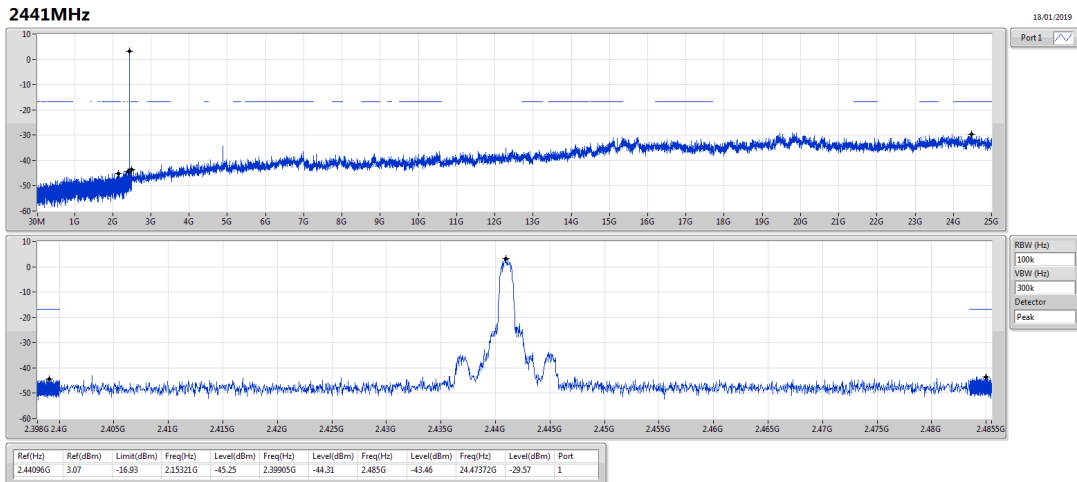
BT-EDR(2Mbps)
2402MHz

CSE NdB



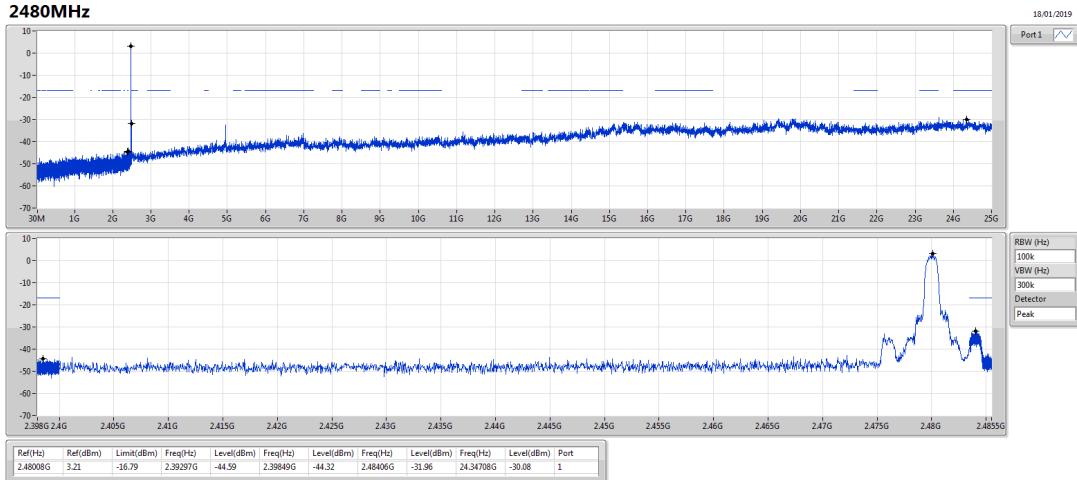
BT-EDR(2Mbps)
2441MHz

CSE NdB



BT-EDR(2Mbps)
2480MHz

CSE NdB



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	QP	885.54M	45.11	46.00	-0.89	2.23	3	Horizontal	45	1.74	-

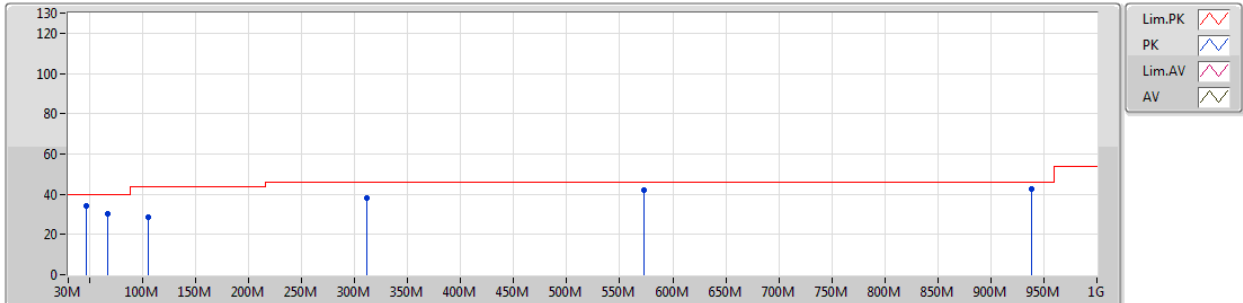
Result

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)	-	-	-	-	-	-	-	-	-	-	-	-
2441MHz	Pass	PK	47.46M	34.16	40.00	-5.84	-12.92	3	Vertical	360	1.00	-
2441MHz	Pass	PK	66.86M	30.53	40.00	-9.47	-15.49	3	Vertical	360	1.00	-
2441MHz	Pass	PK	105.66M	28.59	43.50	-14.91	-9.66	3	Vertical	360	1.00	-
2441MHz	Pass	PK	311.3M	38.34	46.00	-7.66	-5.66	3	Vertical	360	1.00	-
2441MHz	Pass	PK	573.2M	41.98	46.00	-4.02	-1.25	3	Vertical	360	1.00	-
2441MHz	Pass	PK	937.92M	42.65	46.00	-3.35	3.23	3	Vertical	360	1.00	-
2441MHz	Pass	PK	95.96M	40.15	43.50	-3.35	-11.07	3	Horizontal	0	1.00	-
2441MHz	Pass	PK	117.3M	35.50	43.50	-8.00	-8.93	3	Horizontal	0	1.00	-
2441MHz	Pass	PK	208.48M	36.67	43.50	-6.83	-10.52	3	Horizontal	0	1.00	-
2441MHz	Pass	PK	363.68M	42.01	46.00	-3.99	-4.56	3	Horizontal	0	1.00	-
2441MHz	Pass	QP	311.3M	41.66	46.00	-4.34	-5.66	3	Horizontal	256	1.38	-
2441MHz	Pass	QP	885.54M	45.11	46.00	-0.89	2.23	3	Horizontal	45	1.74	-

BT-BR(1Mbps)

15/01/2019

2441MHz_DC Power Supply

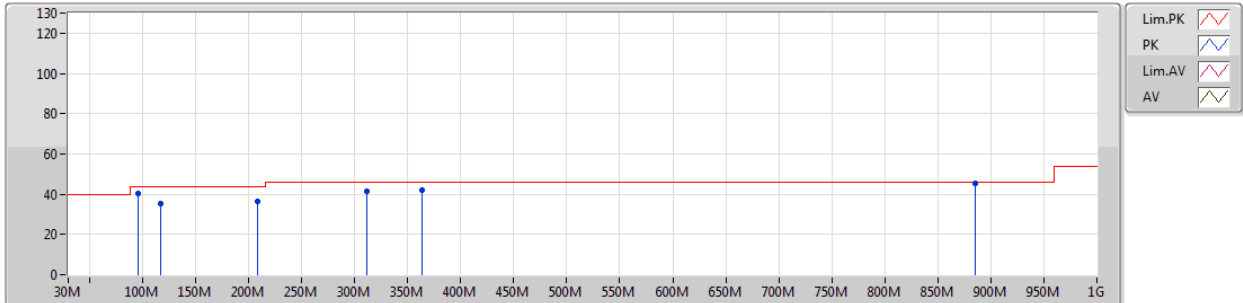


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	47.46M	34.16	40.00	-5.84	-12.92	3	Vertical	360	1.00	-
PK	66.86M	30.53	40.00	-9.47	-15.49	3	Vertical	360	1.00	-
PK	105.66M	28.59	43.50	-14.91	-9.66	3	Vertical	360	1.00	-
PK	311.3M	38.34	46.00	-7.66	-5.66	3	Vertical	360	1.00	-
PK	573.2M	41.98	46.00	-4.02	-1.25	3	Vertical	360	1.00	-
PK	937.92M	42.65	46.00	-3.35	3.23	3	Vertical	360	1.00	-

BT-BR(1Mbps)

15/01/2019

2441MHz_DC Power Supply



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	95.96M	40.15	43.50	-3.35	-11.07	3	Horizontal	0	1.00	-
PK	117.3M	35.50	43.50	-8.00	-8.93	3	Horizontal	0	1.00	-
PK	208.48M	36.67	43.50	-6.83	-10.52	3	Horizontal	0	1.00	-
PK	363.68M	42.01	46.00	-3.99	-4.56	3	Horizontal	0	1.00	-
QP	311.3M	41.66	46.00	-4.34	-5.66	3	Horizontal	256	1.38	-
QP	885.54M	45.11	46.00	-0.89	2.23	3	Horizontal	45	1.74	-

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	2.484G	52.06	54.00	-1.94	31.12	3	Horizontal	188	1.10	-
BT-EDR(2Mbps)	Pass	AV	2.484G	51.65	54.00	-2.35	31.12	3	Horizontal	190	1.10	-

Result

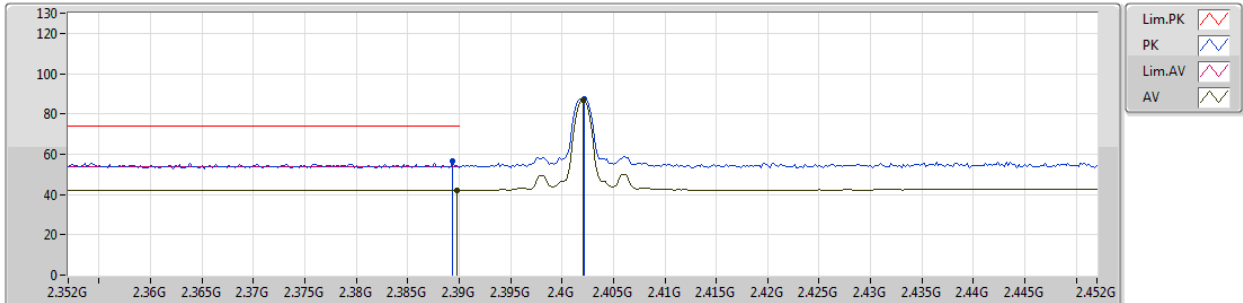
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-BR(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3898G	42.10	54.00	-11.90	30.77	3	Vertical	186	1.47	-
2402MHz	Pass	AV	2.402G	87.09	Inf	-Inf	30.82	3	Vertical	186	1.47	-
2402MHz	Pass	PK	2.3894G	56.50	74.00	-17.50	30.77	3	Vertical	186	1.47	-
2402MHz	Pass	PK	2.4022G	87.63	Inf	-Inf	30.82	3	Vertical	186	1.47	-
2402MHz	Pass	AV	2.3896G	42.16	54.00	-11.84	30.77	3	Horizontal	203	1.17	-
2402MHz	Pass	AV	2.402G	88.70	Inf	-Inf	30.82	3	Horizontal	203	1.17	-
2402MHz	Pass	PK	2.3586G	55.54	74.00	-18.46	30.66	3	Horizontal	203	1.17	-
2402MHz	Pass	PK	2.4018G	89.25	Inf	-Inf	30.82	3	Horizontal	203	1.17	-
2402MHz	Pass	AV	4.804G	42.51	54.00	-11.49	2.08	3	Vertical	174	1.50	-
2402MHz	Pass	PK	4.8037G	49.31	74.00	-24.69	2.08	3	Vertical	174	1.50	-
2402MHz	Pass	AV	4.804G	40.61	54.00	-13.39	2.08	3	Horizontal	201	1.50	-
2402MHz	Pass	PK	4.80388G	47.27	74.00	-26.73	2.08	3	Horizontal	201	1.50	-
2441MHz	Pass	AV	2.3894G	42.02	54.00	-11.98	30.77	3	Vertical	183	1.41	-
2441MHz	Pass	AV	2.441G	87.79	Inf	-Inf	30.95	3	Vertical	183	1.41	-
2441MHz	Pass	AV	2.4958G	42.84	54.00	-11.16	31.16	3	Vertical	183	1.41	-
2441MHz	Pass	PK	2.389G	55.33	74.00	-18.67	30.77	3	Vertical	183	1.41	-
2441MHz	Pass	PK	2.441G	88.28	Inf	-Inf	30.95	3	Vertical	183	1.41	-
2441MHz	Pass	PK	2.495G	56.08	74.00	-17.92	31.16	3	Vertical	183	1.41	-
2441MHz	Pass	AV	2.3878G	42.03	54.00	-11.97	30.77	3	Horizontal	194	1.12	-
2441MHz	Pass	AV	2.441G	86.08	Inf	-Inf	30.95	3	Horizontal	194	1.12	-
2441MHz	Pass	AV	2.499G	42.81	54.00	-11.19	31.17	3	Horizontal	194	1.12	-
2441MHz	Pass	PK	2.3686G	55.43	74.00	-18.57	30.70	3	Horizontal	194	1.12	-
2441MHz	Pass	PK	2.441G	86.60	Inf	-Inf	30.95	3	Horizontal	194	1.12	-
2441MHz	Pass	PK	2.4894G	55.76	74.00	-18.24	31.13	3	Horizontal	194	1.12	-
2441MHz	Pass	AV	4.882G	44.16	54.00	-9.84	2.27	3	Vertical	186	1.53	-
2441MHz	Pass	PK	4.88254G	49.21	74.00	-24.79	2.27	3	Vertical	186	1.53	-
2441MHz	Pass	AV	4.882G	43.11	54.00	-10.89	2.27	3	Horizontal	201	1.87	-
2441MHz	Pass	PK	4.88236G	48.78	74.00	-25.22	2.27	3	Horizontal	201	1.87	-
2480MHz	Pass	AV	2.48G	86.72	Inf	-Inf	31.09	3	Vertical	185	1.39	-
2480MHz	Pass	AV	2.484G	50.15	54.00	-3.85	31.12	3	Vertical	185	1.39	-
2480MHz	Pass	PK	2.4798G	87.32	Inf	-Inf	31.09	3	Vertical	185	1.39	-
2480MHz	Pass	PK	2.4842G	59.65	74.00	-14.35	31.12	3	Vertical	185	1.39	-
2480MHz	Pass	AV	2.48G	88.18	Inf	-Inf	31.09	3	Horizontal	188	1.10	-
2480MHz	Pass	AV	2.484G	52.06	54.00	-1.94	31.12	3	Horizontal	188	1.10	-
2480MHz	Pass	PK	2.4802G	88.73	Inf	-Inf	31.09	3	Horizontal	188	1.10	-
2480MHz	Pass	PK	2.484G	60.35	74.00	-13.65	31.12	3	Horizontal	188	1.10	-
2480MHz	Pass	AV	4.96G	41.88	54.00	-12.12	2.47	3	Vertical	187	1.61	-
2480MHz	Pass	PK	4.95964G	48.00	74.00	-26.00	2.47	3	Vertical	187	1.61	-
2480MHz	Pass	AV	4.96G	44.89	54.00	-9.11	2.47	3	Horizontal	199	1.85	-
2480MHz	Pass	PK	4.96024G	49.88	74.00	-24.12	2.47	3	Horizontal	199	1.85	-
BT-EDR(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3884G	42.08	54.00	-11.92	30.77	3	Vertical	186	1.73	-
2402MHz	Pass	AV	2.402G	86.53	Inf	-Inf	30.82	3	Vertical	186	1.73	-
2402MHz	Pass	PK	2.3654G	55.21	74.00	-18.79	30.69	3	Vertical	186	1.73	-
2402MHz	Pass	PK	2.4018G	87.08	Inf	-Inf	30.82	3	Vertical	186	1.73	-
2402MHz	Pass	AV	2.3898G	42.15	54.00	-11.85	30.77	3	Horizontal	201	1.15	-
2402MHz	Pass	AV	2.402G	88.31	Inf	-Inf	30.82	3	Horizontal	201	1.15	-

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2402MHz	Pass	PK	2.3664G	55.60	74.00	-18.40	30.70	3	Horizontal	201	1.15	-
2402MHz	Pass	PK	2.4018G	88.83	Inf	-Inf	30.82	3	Horizontal	201	1.15	-
2441MHz	Pass	AV	2.3882G	42.02	54.00	-11.98	30.77	3	Vertical	184	1.41	-
2441MHz	Pass	AV	2.441G	86.88	Inf	-Inf	30.95	3	Vertical	184	1.41	-
2441MHz	Pass	AV	2.4914G	42.81	54.00	-11.19	31.14	3	Vertical	184	1.41	-
2441MHz	Pass	PK	2.3418G	55.92	74.00	-18.08	30.61	3	Vertical	184	1.41	-
2441MHz	Pass	PK	2.441G	87.42	Inf	-Inf	30.95	3	Vertical	184	1.41	-
2441MHz	Pass	PK	2.485G	56.04	74.00	-17.96	31.12	3	Vertical	184	1.41	-
2441MHz	Pass	AV	2.3826G	42.07	54.00	-11.93	30.75	3	Horizontal	186	1.12	-
2441MHz	Pass	AV	2.441G	86.41	Inf	-Inf	30.95	3	Horizontal	186	1.12	-
2441MHz	Pass	AV	2.4974G	42.88	54.00	-11.12	31.16	3	Horizontal	186	1.12	-
2441MHz	Pass	PK	2.3778G	56.14	74.00	-17.86	30.73	3	Horizontal	186	1.12	-
2441MHz	Pass	PK	2.441G	86.97	Inf	-Inf	30.95	3	Horizontal	186	1.12	-
2441MHz	Pass	PK	2.4858G	56.08	74.00	-17.92	31.12	3	Horizontal	186	1.12	-
2480MHz	Pass	AV	2.48G	86.68	Inf	-Inf	31.09	3	Vertical	187	1.39	-
2480MHz	Pass	AV	2.484G	50.17	54.00	-3.83	31.12	3	Vertical	187	1.39	-
2480MHz	Pass	PK	2.4802G	87.22	Inf	-Inf	31.09	3	Vertical	187	1.39	-
2480MHz	Pass	PK	2.484G	59.62	74.00	-14.38	31.12	3	Vertical	187	1.39	-
2480MHz	Pass	AV	2.48G	88.14	Inf	-Inf	31.09	3	Horizontal	190	1.10	-
2480MHz	Pass	AV	2.484G	51.65	54.00	-2.35	31.12	3	Horizontal	190	1.10	-
2480MHz	Pass	PK	2.4802G	88.68	Inf	-Inf	31.09	3	Horizontal	190	1.10	-
2480MHz	Pass	PK	2.484G	60.04	74.00	-13.96	31.12	3	Horizontal	190	1.10	-

BT-BR(1Mbps)

2402MHz_TX

03/01/2019

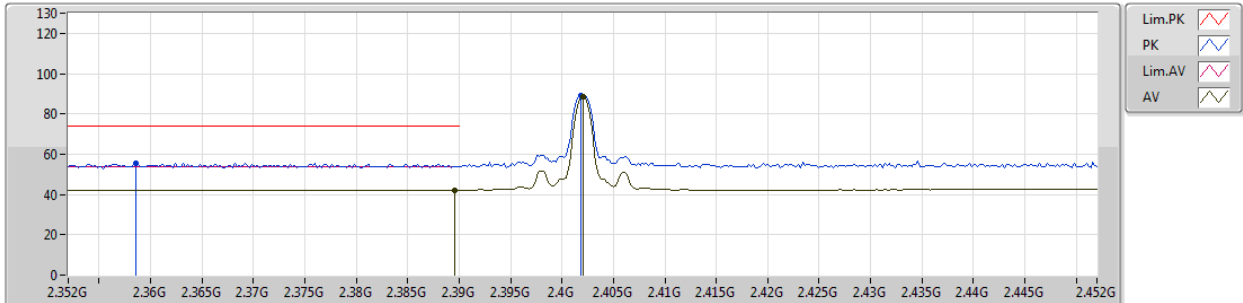


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.3898G	42.10	54.00	-11.90	30.77	3	Vertical	186	1.47	-
AV	2.402G	87.09	Inf	-Inf	30.82	3	Vertical	186	1.47	-
PK	2.3894G	56.50	74.00	-17.50	30.77	3	Vertical	186	1.47	-
PK	2.4022G	87.63	Inf	-Inf	30.82	3	Vertical	186	1.47	-

BT-BR(1Mbps)

2402MHz_TX

03/01/2019

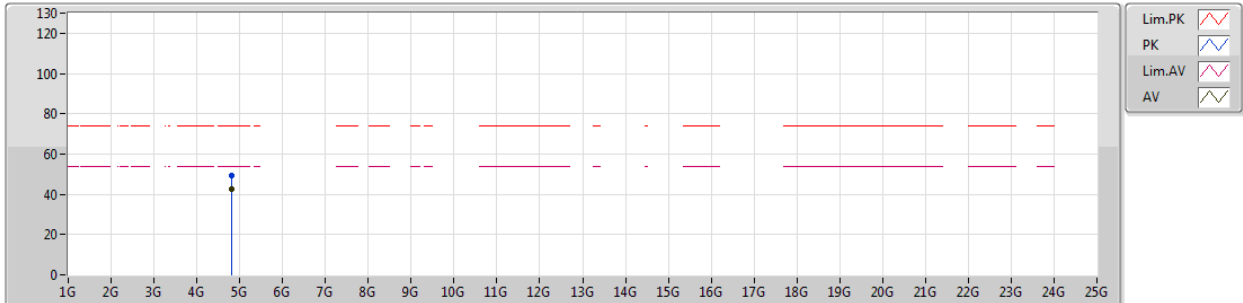


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.3896G	42.16	54.00	-11.84	30.77	3	Horizontal	203	1.17	-
AV	2.402G	88.70	Inf	-Inf	30.82	3	Horizontal	203	1.17	-
PK	2.3586G	55.54	74.00	-18.46	30.66	3	Horizontal	203	1.17	-
PK	2.4018G	89.25	Inf	-Inf	30.82	3	Horizontal	203	1.17	-

BT-BR(1Mbps)

2402MHz_TX

03/01/2019

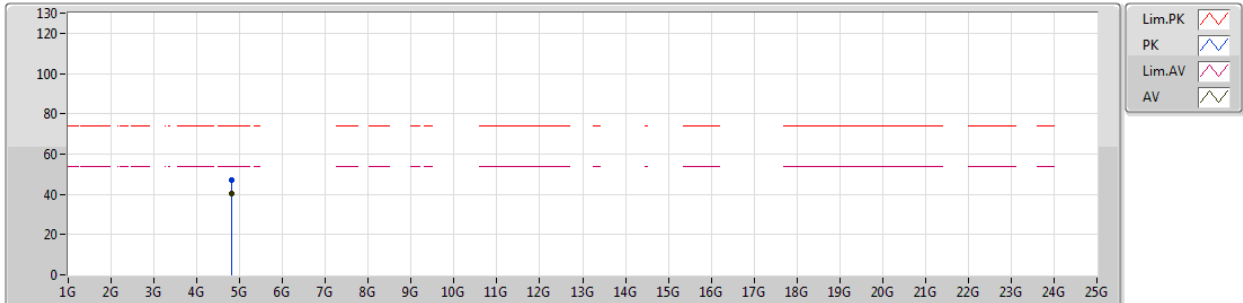


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments								
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)									
AV	4.804G	42.51	54.00	-11.49	2.08	3	Vertical	174	1.50	-								
PK	4.8037G	49.31	74.00	-24.69	2.08	3	Vertical	174	1.50	-								

BT-BR(1Mbps)

2402MHz_TX

03/01/2019

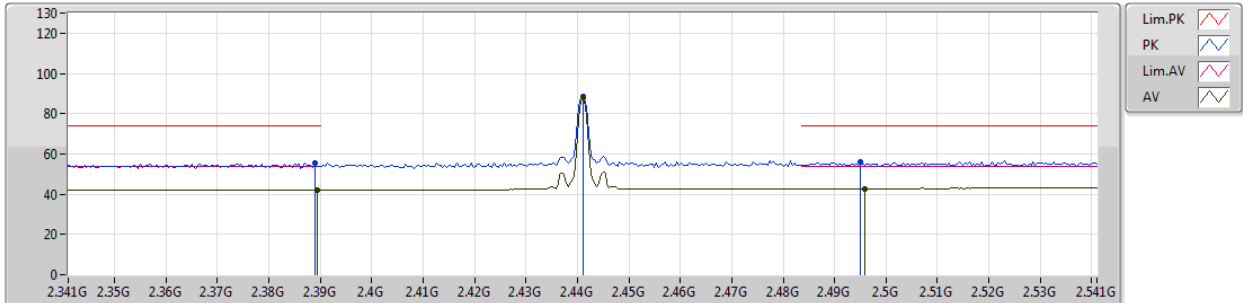


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments								
AV	4.804G	40.61	54.00	-13.39	2.08	3	Horizontal	201	1.50	-								
PK	4.80388G	47.27	74.00	-26.73	2.08	3	Horizontal	201	1.50	-								

BT-BR(1Mbps)

2441MHz_TX

03/01/2019

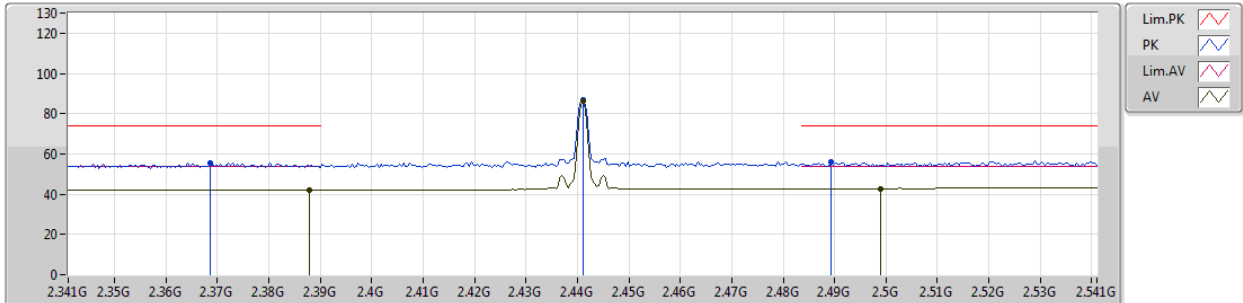


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.3894G	42.02	54.00	-11.98	30.77	3	Vertical	183	1.41	-
AV	2.441G	87.79	Inf	-Inf	30.95	3	Vertical	183	1.41	-
AV	2.4958G	42.84	54.00	-11.16	31.16	3	Vertical	183	1.41	-
PK	2.389G	55.33	74.00	-18.67	30.77	3	Vertical	183	1.41	-
PK	2.441G	88.28	Inf	-Inf	30.95	3	Vertical	183	1.41	-
PK	2.495G	56.08	74.00	-17.92	31.16	3	Vertical	183	1.41	-

BT-BR(1Mbps)

2441MHz_TX

03/01/2019

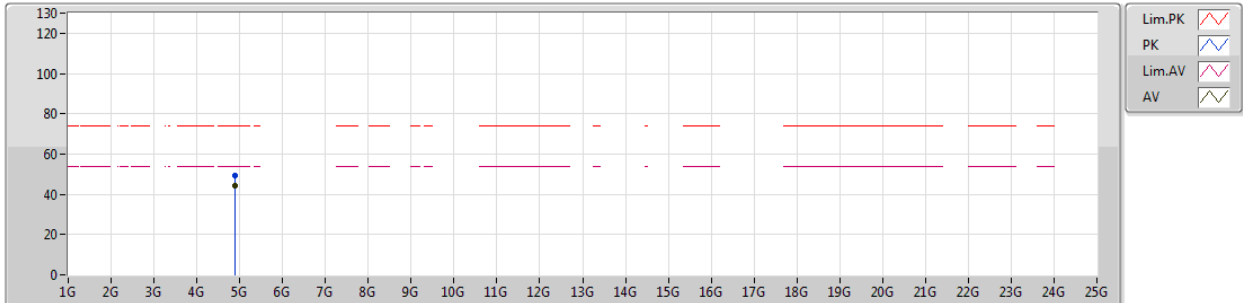


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.3878G	42.03	54.00	-11.97	30.77	3	Horizontal	194	1.12	-
AV	2.441G	86.08	Inf	-Inf	30.95	3	Horizontal	194	1.12	-
AV	2.499G	42.81	54.00	-11.19	31.17	3	Horizontal	194	1.12	-
PK	2.3686G	55.43	74.00	-18.57	30.70	3	Horizontal	194	1.12	-
PK	2.441G	86.60	Inf	-Inf	30.95	3	Horizontal	194	1.12	-
PK	2.4894G	55.76	74.00	-18.24	31.13	3	Horizontal	194	1.12	-

BT-BR(1Mbps)

2441MHz_TX

03/01/2019

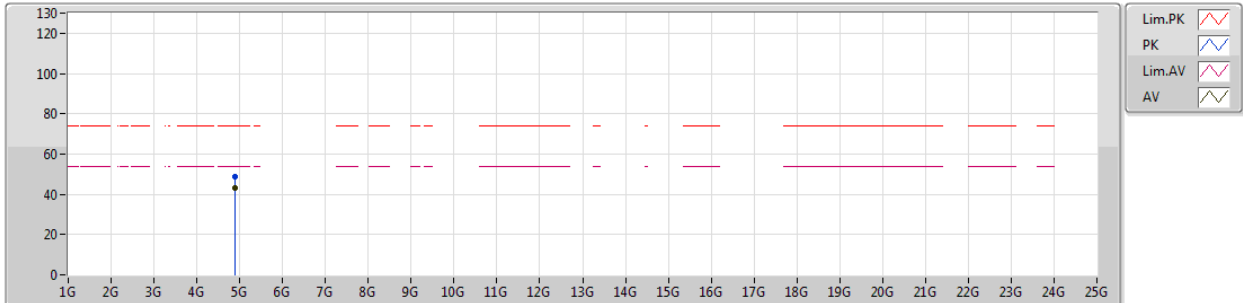


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	4.882G	44.16	54.00	-9.84	2.27	3	Vertical	186	1.53	-
PK	4.88254G	49.21	74.00	-24.79	2.27	3	Vertical	186	1.53	-

BT-BR(1Mbps)

2441MHz_TX

03/01/2019

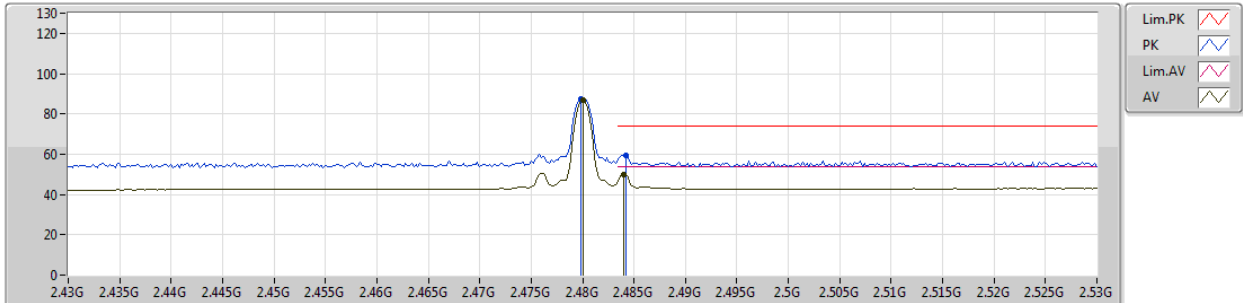


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments								
AV	4.882G	43.11	54.00	-10.89	2.27	3	Horizontal	201	1.87	-								
PK	4.88236G	48.78	74.00	-25.22	2.27	3	Horizontal	201	1.87	-								

BT-BR(1Mbps)

2480MHz_TX

03/01/2019

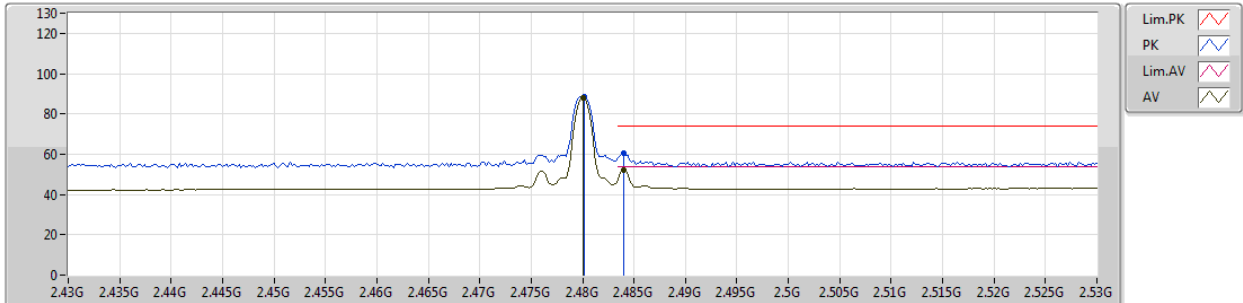


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.48G	86.72	Inf	-Inf	31.09	3	Vertical	185	1.39	-
AV	2.484G	50.15	54.00	-3.85	31.12	3	Vertical	185	1.39	-
PK	2.4798G	87.32	Inf	-Inf	31.09	3	Vertical	185	1.39	-
PK	2.4842G	59.65	74.00	-14.35	31.12	3	Vertical	185	1.39	-

BT-BR(1Mbps)

2480MHz_TX

03/01/2019

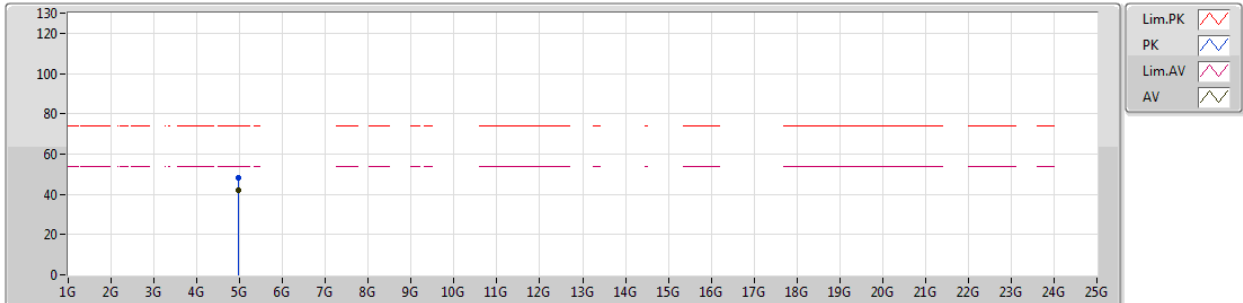


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.48G	88.18	Inf	-Inf	31.09	3	Horizontal	188	1.10	-
AV	2.484G	52.06	54.00	-1.94	31.12	3	Horizontal	188	1.10	-
PK	2.4802G	88.73	Inf	-Inf	31.09	3	Horizontal	188	1.10	-
PK	2.484G	60.35	74.00	-13.65	31.12	3	Horizontal	188	1.10	-

BT-BR(1Mbps)

2480MHz_TX

03/01/2019

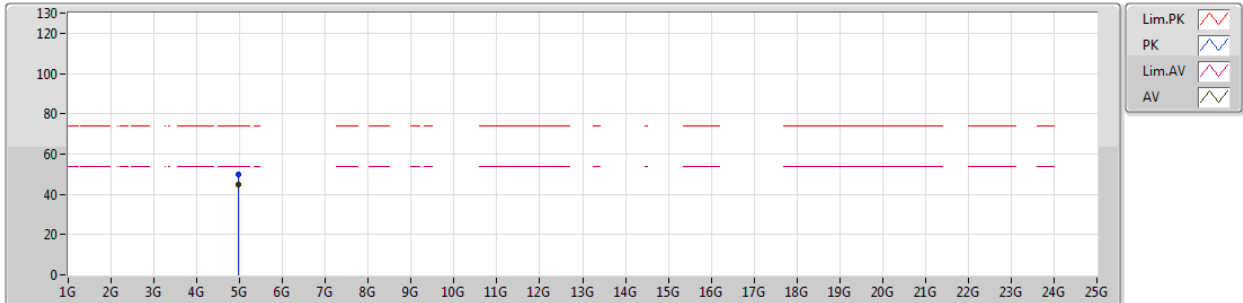


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	4.96 G	41.88	54.00	-12.12	2.47	3	Vertical	187	1.61	-
PK	4.95964 G	48.00	74.00	-26.00	2.47	3	Vertical	187	1.61	-

BT-BR(1Mbps)

2480MHz_TX

03/01/2019

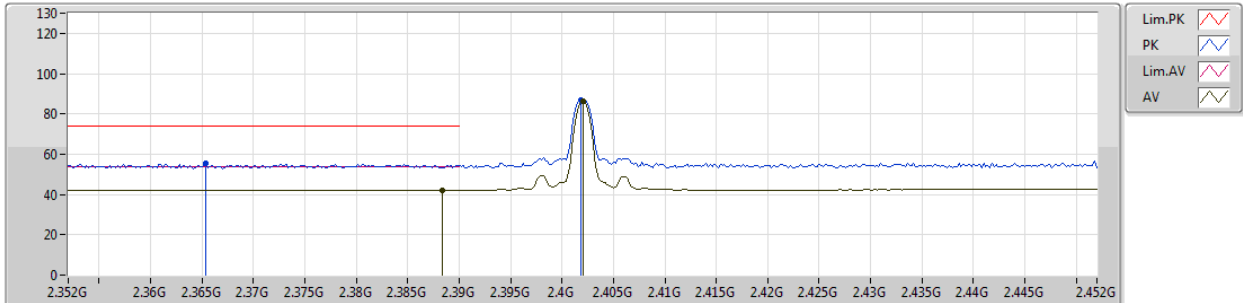


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	4.96G	44.89	54.00	-9.11	2.47	3	Horizontal	199	1.85	-
PK	4.96024G	49.88	74.00	-24.12	2.47	3	Horizontal	199	1.85	-

BT-EDR(2Mbps)

2402MHz_TX

03/01/2019

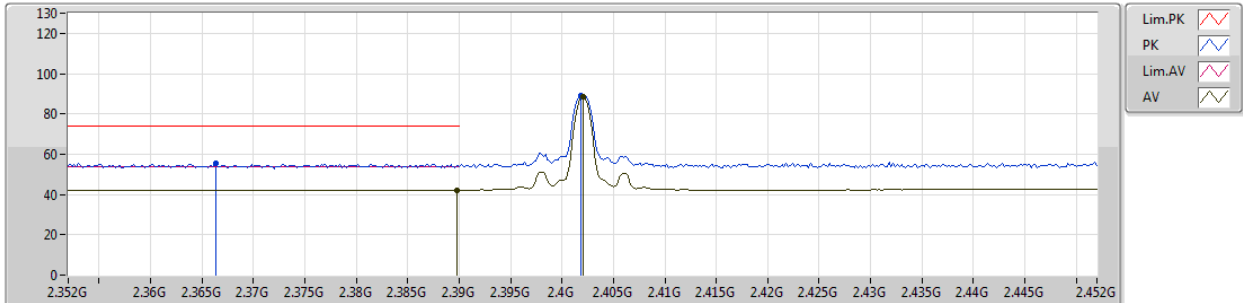


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments							
AV	2.3884G	42.08	54.00	-11.92	30.77	3	Vertical	186	1.73	-							
AV	2.402G	86.53	Inf	-Inf	30.82	3	Vertical	186	1.73	-							
PK	2.3654G	55.21	74.00	-18.79	30.69	3	Vertical	186	1.73	-							
PK	2.4018G	87.08	Inf	-Inf	30.82	3	Vertical	186	1.73	-							

BT-EDR(2Mbps)

2402MHz_TX

03/01/2019

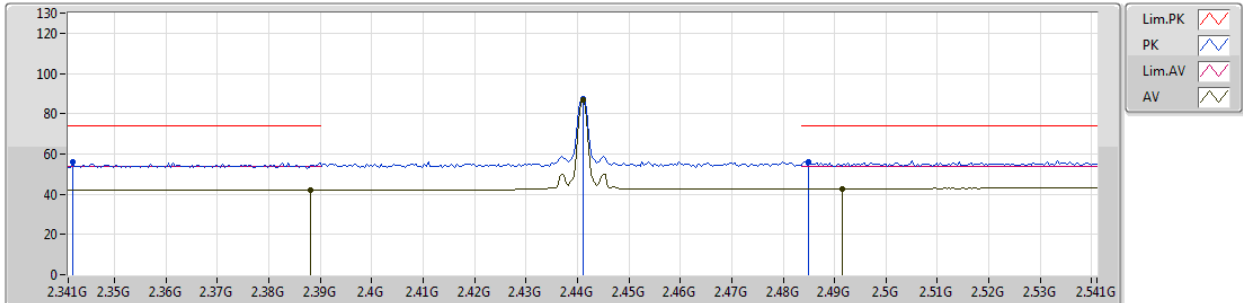


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.3898G	42.15	54.00	-11.85	30.77	3	Horizontal	201	1.15	-
AV	2.402G	88.31	Inf	-Inf	30.82	3	Horizontal	201	1.15	-
PK	2.3664G	55.60	74.00	-18.40	30.70	3	Horizontal	201	1.15	-
PK	2.4018G	88.83	Inf	-Inf	30.82	3	Horizontal	201	1.15	-

BT-EDR(2Mbps)

2441MHz_TX

03/01/2019

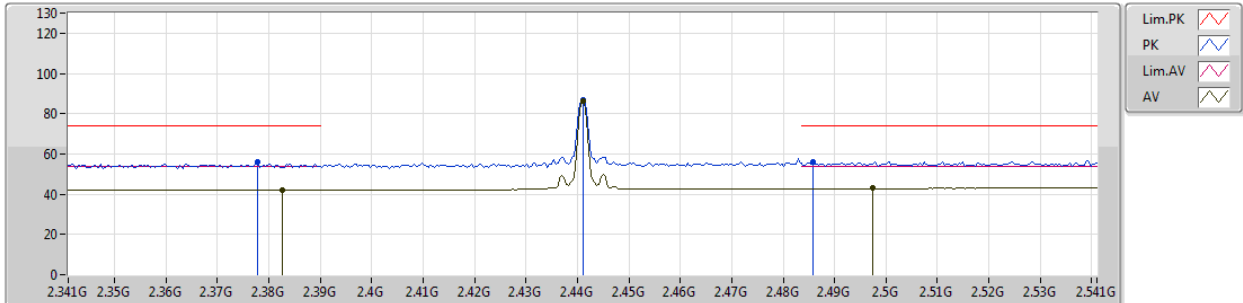


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.3882G	42.02	54.00	-11.98	30.77	3	Vertical	184	1.41	-
AV	2.441G	86.88	Inf	-Inf	30.95	3	Vertical	184	1.41	-
AV	2.4914G	42.81	54.00	-11.19	31.14	3	Vertical	184	1.41	-
PK	2.3418G	55.92	74.00	-18.08	30.61	3	Vertical	184	1.41	-
PK	2.441G	87.42	Inf	-Inf	30.95	3	Vertical	184	1.41	-
PK	2.485G	56.04	74.00	-17.96	31.12	3	Vertical	184	1.41	-

BT-EDR(2Mbps)

2441MHz_TX

03/01/2019

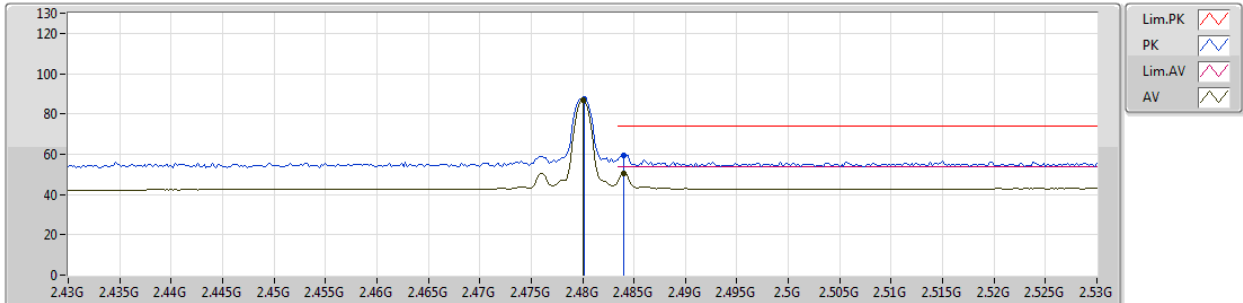


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.3826G	42.07	54.00	-11.93	30.75	3	Horizontal	186	1.12	-
AV	2.441G	86.41	Inf	-Inf	30.95	3	Horizontal	186	1.12	-
AV	2.4974G	42.88	54.00	-11.12	31.16	3	Horizontal	186	1.12	-
PK	2.3778G	56.14	74.00	-17.86	30.73	3	Horizontal	186	1.12	-
PK	2.441G	86.97	Inf	-Inf	30.95	3	Horizontal	186	1.12	-
PK	2.4858G	56.08	74.00	-17.92	31.12	3	Horizontal	186	1.12	-

BT-EDR(2Mbps)

2480MHz_TX

03/01/2019

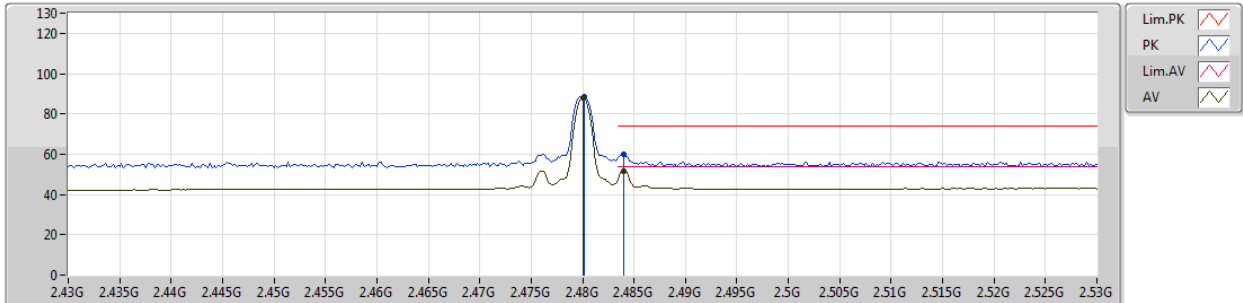


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.48G	86.68	Inf	-Inf	31.09	3	Vertical	187	1.39	-
AV	2.484G	50.17	54.00	-3.83	31.12	3	Vertical	187	1.39	-
PK	2.4802G	87.22	Inf	-Inf	31.09	3	Vertical	187	1.39	-
PK	2.484G	59.62	74.00	-14.38	31.12	3	Vertical	187	1.39	-

BT-EDR(2Mbps)

2480MHz_TX

03/01/2019



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	2.48G	88.14	Inf	-Inf	31.09	3	Horizontal	190	1.10	-
AV	2.484G	51.65	54.00	-2.35	31.12	3	Horizontal	190	1.10	-
PK	2.4802G	88.68	Inf	-Inf	31.09	3	Horizontal	190	1.10	-
PK	2.484G	60.04	74.00	-13.96	31.12	3	Horizontal	190	1.10	-

**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	QP	309.36M	42.12	46.00	-3.88	-5.69	3	Horizontal	267	1.14	-

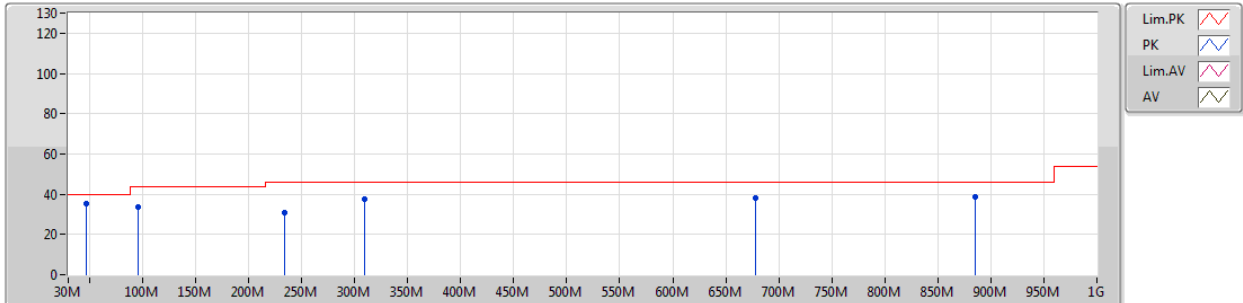
Result

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)	-	-	-	-	-	-	-	-	-	-	-	-
2441MHz	Pass	PK	47.46M	35.23	40.00	-4.77	-12.92	3	Vertical	360	1.00	-
2441MHz	Pass	PK	95.96M	33.79	43.50	-9.71	-11.07	3	Vertical	360	1.00	-
2441MHz	Pass	PK	233.7M	30.81	46.00	-15.19	-8.93	3	Vertical	360	1.00	-
2441MHz	Pass	PK	309.36M	37.64	46.00	-8.36	-5.69	3	Vertical	360	1.00	-
2441MHz	Pass	PK	677.96M	38.16	46.00	-7.84	-0.27	3	Vertical	360	1.00	-
2441MHz	Pass	PK	885.54M	38.94	46.00	-7.06	2.23	3	Vertical	360	1.00	-
2441MHz	Pass	PK	95.96M	39.03	43.50	-4.47	-11.07	3	Horizontal	0	1.00	-
2441MHz	Pass	PK	144.46M	33.95	43.50	-9.55	-9.91	3	Horizontal	0	1.00	-
2441MHz	Pass	PK	239.52M	34.50	46.00	-11.50	-8.23	3	Horizontal	0	1.00	-
2441MHz	Pass	PK	456.8M	40.64	46.00	-5.36	-2.81	3	Horizontal	0	1.00	-
2441MHz	Pass	PK	885.54M	39.16	46.00	-6.84	2.23	3	Horizontal	0	1.00	-
2441MHz	Pass	QP	309.36M	42.12	46.00	-3.88	-5.69	3	Horizontal	267	1.14	-

BT-BR(1Mbps)RX

15/01/2019

2441MHz_DC Power Supply

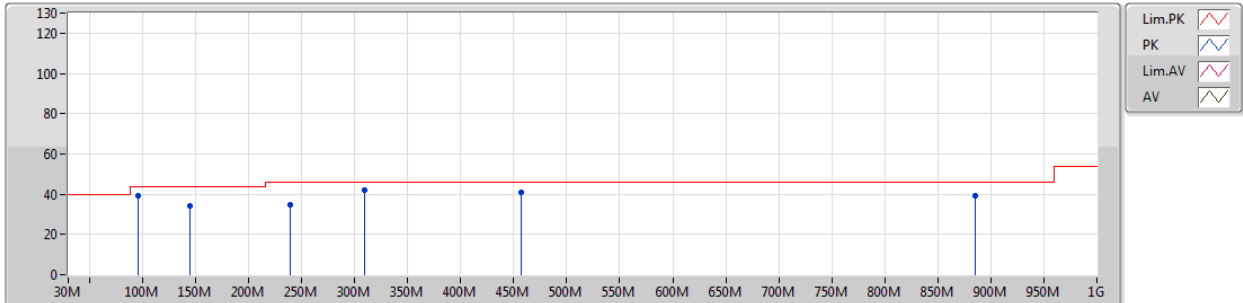


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	47.46M	35.23	40.00	-4.77	-12.92	3	Vertical	360	1.00	-
PK	95.96M	33.79	43.50	-9.71	-11.07	3	Vertical	360	1.00	-
PK	233.7M	30.81	46.00	-15.19	-8.93	3	Vertical	360	1.00	-
PK	309.36M	37.64	46.00	-8.36	-5.69	3	Vertical	360	1.00	-
PK	677.96M	38.16	46.00	-7.84	-0.27	3	Vertical	360	1.00	-
PK	885.54M	38.94	46.00	-7.06	2.23	3	Vertical	360	1.00	-

BT-BR(1Mbps)RX

15/01/2019

2441MHz_DC Power Supply



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
PK	95.96M	39.03	43.50	-4.47	-11.07	3	Horizontal	0	1.00	-
PK	144.46M	33.95	43.50	-9.55	-9.91	3	Horizontal	0	1.00	-
PK	239.52M	34.50	46.00	-11.50	-8.23	3	Horizontal	0	1.00	-
PK	456.8M	40.64	46.00	-5.36	-2.81	3	Horizontal	0	1.00	-
PK	885.54M	39.16	46.00	-6.84	2.23	3	Horizontal	0	1.00	-
QP	309.36M	42.12	46.00	-3.88	-5.69	3	Horizontal	267	1.14	-

**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	1.36G	39.56	54.00	-14.44	-6.61	3	Vertical	185	1.16	-

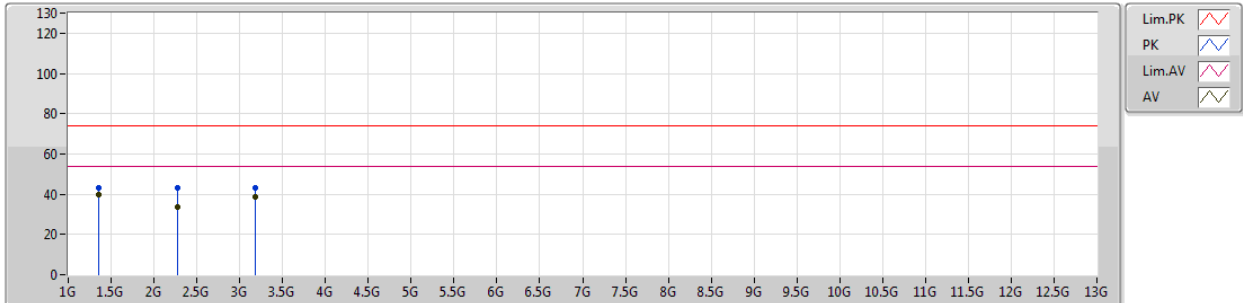
Result

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)	-	-	-	-	-	-	-	-	-	-	-	-
2441MHz	Pass	AV	1.36G	39.56	54.00	-14.44	-6.61	3	Vertical	185	1.16	-
2441MHz	Pass	AV	2.272G	33.84	54.00	-20.16	-4.02	3	Vertical	139	1.86	-
2441MHz	Pass	AV	3.184G	38.75	54.00	-15.25	-1.81	3	Vertical	189	1.00	-
2441MHz	Pass	PK	1.36G	43.21	74.00	-30.79	-6.61	3	Vertical	185	1.16	-
2441MHz	Pass	PK	2.272G	43.30	74.00	-30.70	-4.02	3	Vertical	139	1.86	-
2441MHz	Pass	PK	3.184G	42.89	74.00	-31.11	-1.81	3	Vertical	189	1.00	-
2441MHz	Pass	AV	1.144G	39.40	54.00	-14.60	-7.76	3	Horizontal	224	1.97	-
2441MHz	Pass	AV	1.36G	37.87	54.00	-16.13	-6.56	3	Horizontal	211	2.91	-
2441MHz	Pass	AV	3.184G	37.54	54.00	-16.46	-1.81	3	Horizontal	206	1.10	-
2441MHz	Pass	PK	1.144G	43.72	74.00	-30.28	-7.76	3	Horizontal	224	1.97	-
2441MHz	Pass	PK	1.36G	43.19	74.00	-30.81	-6.61	3	Horizontal	211	2.91	-
2441MHz	Pass	PK	3.184G	43.33	74.00	-30.67	-1.81	3	Horizontal	206	1.10	-

BT-BR(1Mbps)RX

2441MHz_RX

03/01/2019

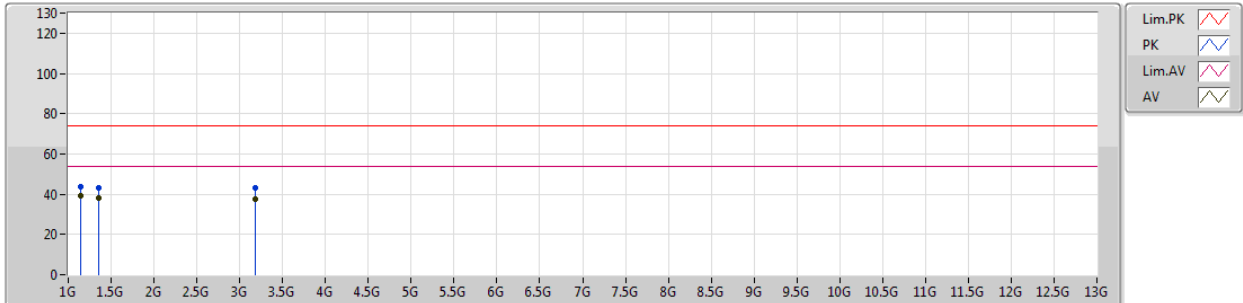


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	1.36G	39.56	54.00	-14.44	-6.61	3	Vertical	185	1.16	-
AV	2.272G	33.84	54.00	-20.16	-4.02	3	Vertical	139	1.86	-
AV	3.184G	38.75	54.00	-15.25	-1.81	3	Vertical	189	1.00	-
PK	1.36G	43.21	74.00	-30.79	-6.61	3	Vertical	185	1.16	-
PK	2.272G	43.30	74.00	-30.70	-4.02	3	Vertical	139	1.86	-
PK	3.184G	42.89	74.00	-31.11	-1.81	3	Vertical	189	1.00	-

BT-BR(1Mbps)RX

2441MHz_RX

03/01/2019



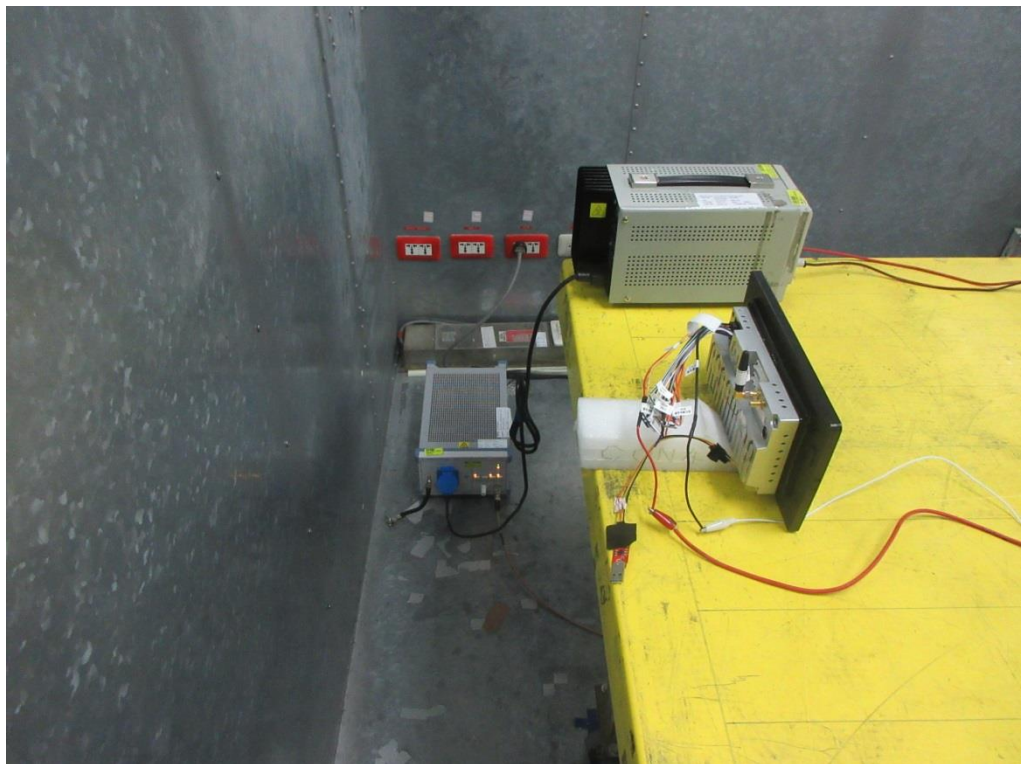
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
AV	1.144G	39.40	54.00	-14.60	-7.76	3	Horizontal	224	1.97	-
AV	1.36G	37.87	54.00	-16.13	-6.56	3	Horizontal	211	2.91	-
AV	3.184G	37.54	54.00	-16.46	-1.81	3	Horizontal	206	1.10	-
PK	1.144G	43.72	74.00	-30.28	-7.76	3	Horizontal	224	1.97	-
PK	1.36G	43.19	74.00	-30.81	-6.61	3	Horizontal	211	2.91	-
PK	3.184G	43.33	74.00	-30.67	-1.81	3	Horizontal	206	1.10	-

1. Photographs of Conducted Emissions Test Configuration

Front View



Side View



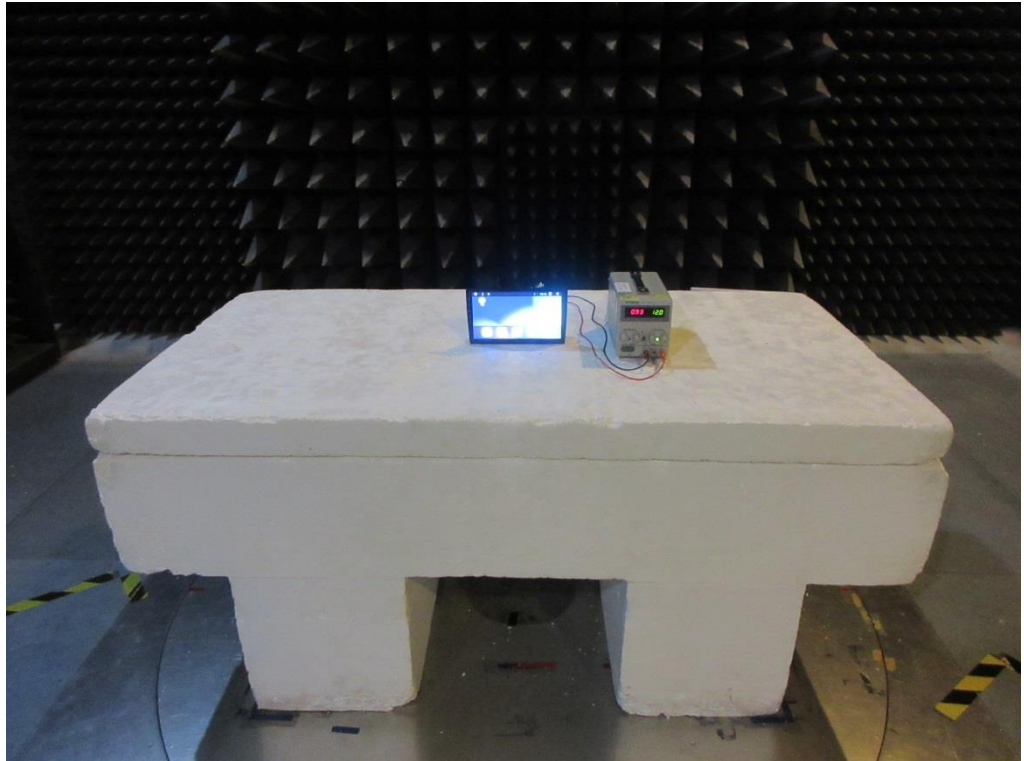
Under Table View



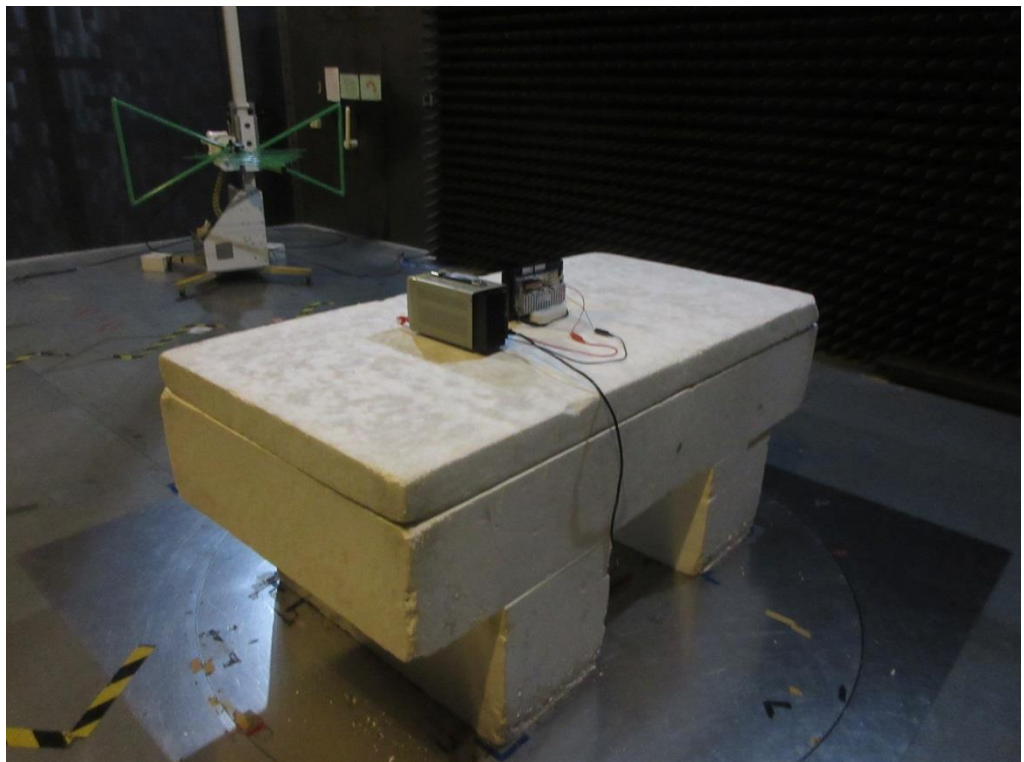
2. Photographs of Radiated Emissions Test Configuration-TX Mode

For radiated emissions 30MHz~1GHz

Front View

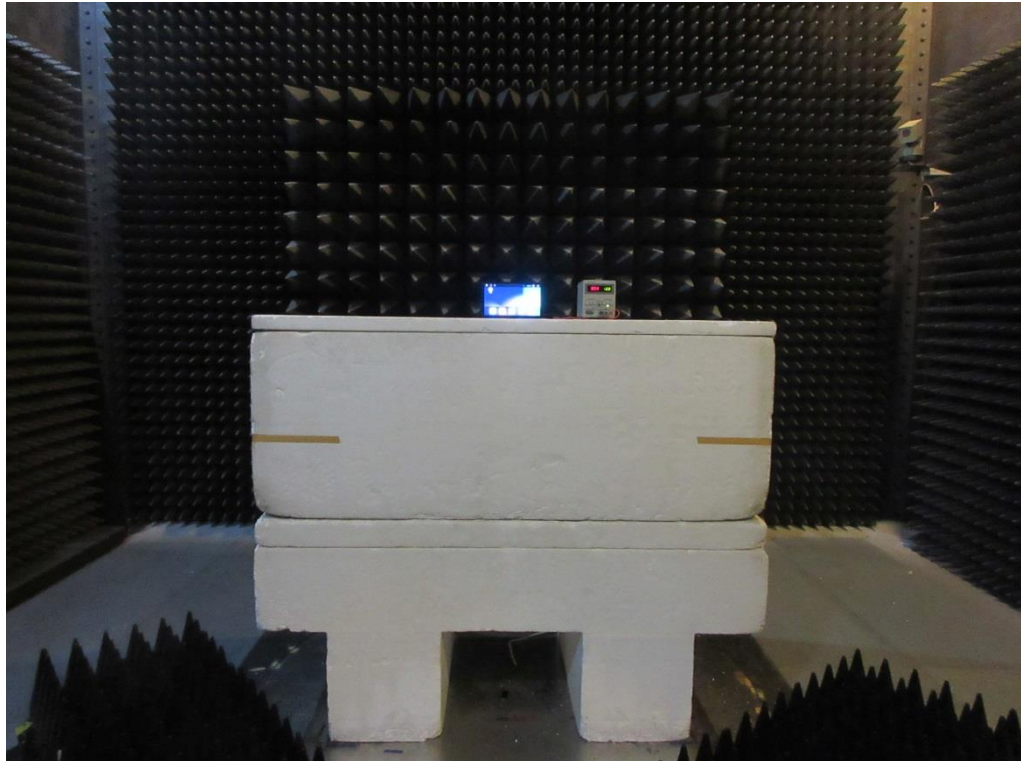


Rear View



For radiated emissions above 1GHz

Front View



Rear View



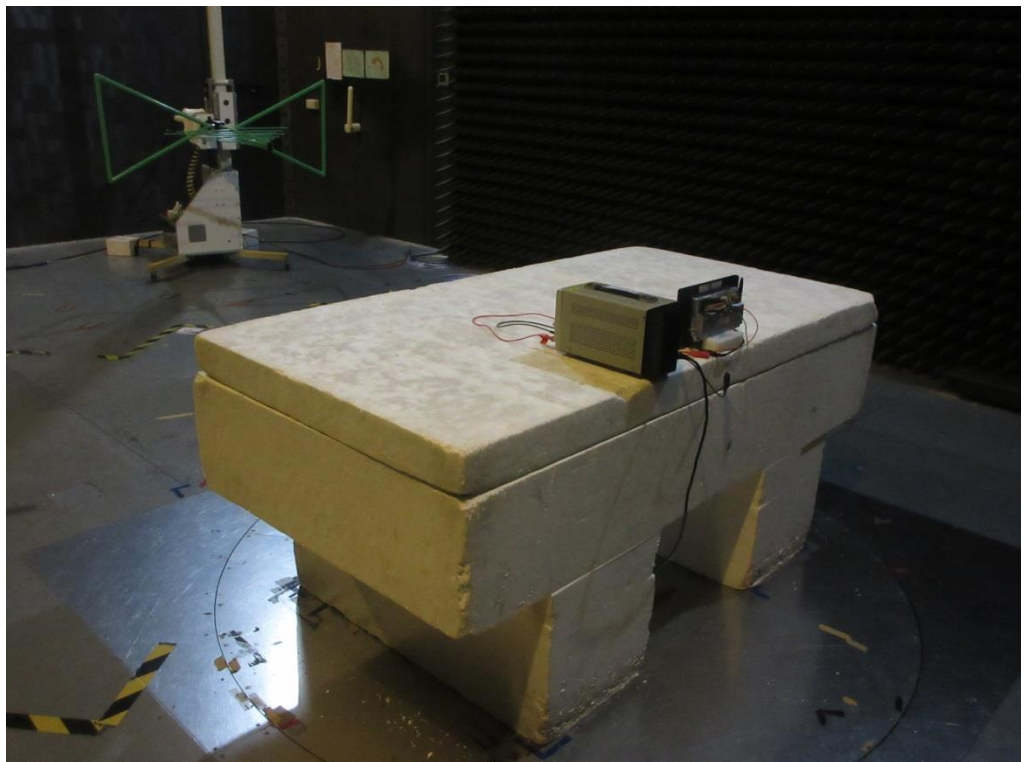
3. Photographs of Radiated Emissions Test Configuration-RX mode

For radiated emissions 30MHz~1GHz

Front view

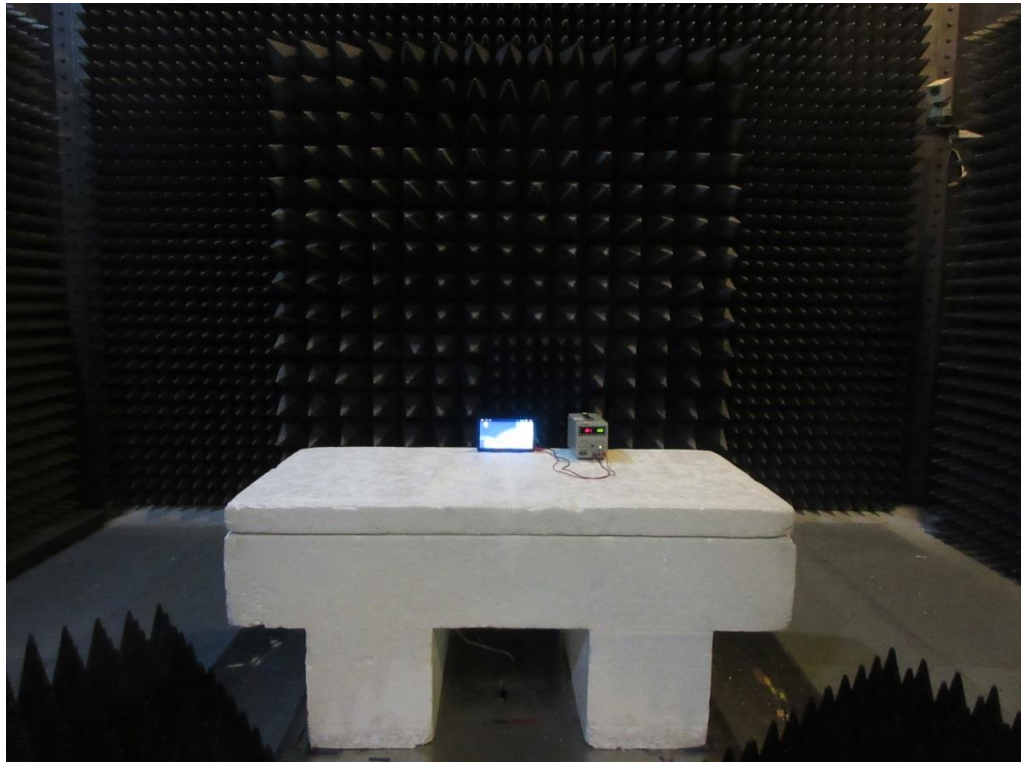


Rear view

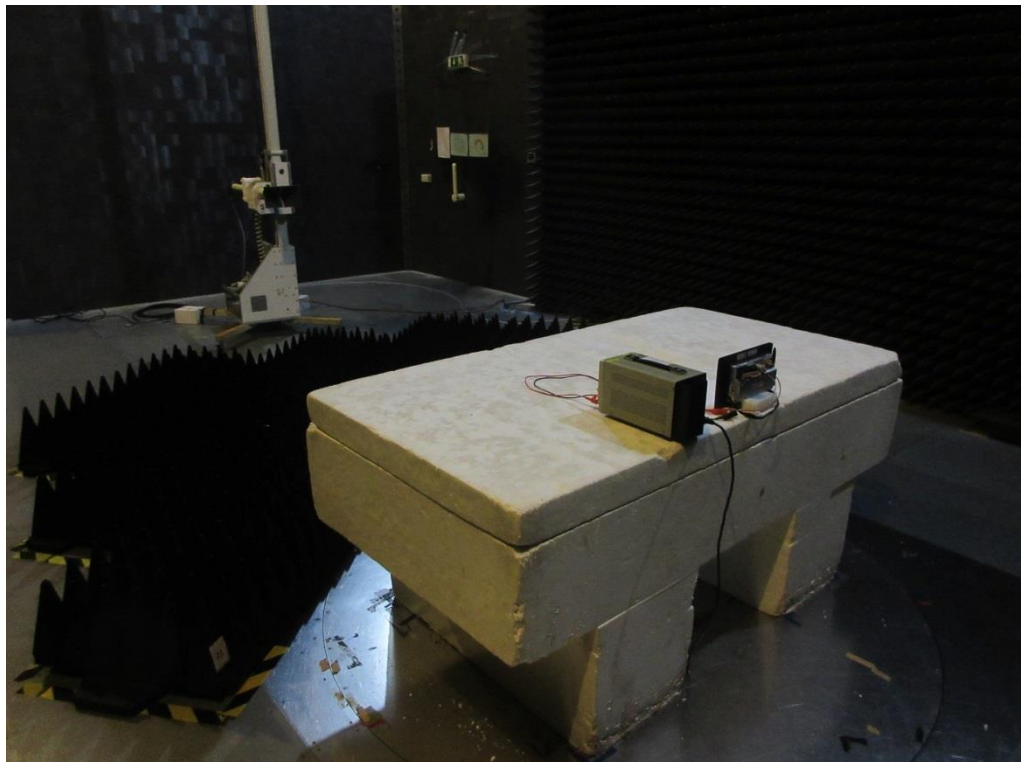


For radiated emissions above 1GHz

Front view



Rear view



————THE END————