FCC Radio Test Report

FCC ID	:	**N7NXR90**
Equipment	:	**WiFi / Bluetooth**
Brand Name	:	**Sierra Wireless**
Model Name	:	**XR90**
Applicant	:	**Sierra Wireless Inc. 13811 Wireless Way, Richmond, BC Canada V6V 3A4**
Manufacturer	:	**Sierra Wireless Inc. 13811 Wireless Way, Richmond, BC Canada V6V 3A4**
Standard	:	**47 CFR FCC Part 15.247**

The product was received on Nov. 09, 2020, and testing was started from Jan. 07, 2021 and completed on Jul. 22, 2021. We, SPORTON INTERNATIONAL INC. Hsinhua 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 test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. Hsinhua Laboratory, the test report shall not be reproduced except in full.

Allen Lin

Approved by: Allen Lin

SPORTON INTERNATIONAL INC. Hsinhua Laboratory

No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)

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PHOTOGRAPHS OF EUT V01

History of this test report

Report No.	Version	Description	Issued Date
FR0N0913-03AD	01	Initial issue of report	Jul. 29, 2021

Summary of Test Result

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

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: Ben Tseng

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 π/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
5	PANORAMA	LGMQM4-6-60-24-58	Panel	FAKRA
6	PANORAMA	LGMQM4-6-60-24-58	Panel	FAKRA
7	PANORAMA	LGMQM4-6-60-24-58	Panel	FAKRA
8	PANORAMA	LGMQM4-6-60-24-58	Panel	FAKRA
9	PANORAMA	PWB-24-58	Paddle	FAKRA

Ant.	Port	Gain (dBi)		
		2.4G	5G	BT
5	1	-0.25	0.5	-
6	2	-0.25	0.5	-
7	3	-0.25	0.5	-
8	4	-0.25	0.5	-
9	1	-	-	3

Note 1: The EUT has five antennas.

For 2.4GHz function:

For IEEE 802.11 b/g/n/VHT/ax mode (4TX/4RX)

Ant. 5 (port 1), Ant. 6 (port 2), Ant. 7 (port 3) and Ant. 8 (port 4) could transmit/receive simultaneously.

For BT function:

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

Only Ant. 9 (port 1) can be used as transmitting/receiving antenna.

For 5GHz function:

For IEEE 802.11 a/n/ac/ax mode (4TX/4RX)

Ant. 5 (port 1), Ant. 6 (port 2), Ant. 7 (port 3) and Ant. 8 (port 4) could transmit/receive simultaneously.

1.1.3 EUT Information

Operational Condition					
EUT Power Type	From AC Adapter				
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) ≥ 1/T
BT-BR(1Mbps)	0.744	1.28	2.89m	1k
BT-EDR(2Mbps)	0.744	1.28	2.89m	1k
BT-EDR(3Mbps)	0.801	0.96	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
- ANSI C63.10-2013

The following reference test guidance is not within the scope of accreditation of TAF:

- KDB 558074 D01 v05r02
- KDB 414788 D01 v01r01

1.3 Testing Location Information

Test Lab.：Sporton International Inc. Hsinhua Laboratory				
☒ Hsinhua **(TAF:** 3785**)**	**ADD:** No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)			
	TEL: 886-3-327-3456		**FAX:** 886-3-327-0973	
Test site Designation No. TW3785 with FCC.				
Test Condition	**Test Site No.**	**Test Engineer**	**Test Environment**	**Test Date**
AC Conduction	CO04-HY	Tony Chang	25.1~26.7°C / 50~56%	21/Jul/2021~22/Jul/2021
RF Conducted	TH01-HY	Vivi Jiang	22.1~26.9°C / 52~60%	26/Jan/2021~22/Mar/2021
☒ Wen 33rd.St. **(TAF:** 3785**)**	**ADD:** No.14-1, Ln. 19, Wen 33rd St., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.)			
	TEL: 886-3-318-0787		**FAX:** 886-3-318-0287	
Test site Designation No. TW0008 with FCC.				
Test Condition	**Test Site No.**	**Test Engineer**	**Test Environment**	**Test Date**
Radiated (below 1GHz)	03CH09-HY	Lego Lin	22.5~24.4°C / 42~54%	19/Jul/2021~21/Jul/2021
Radiated (above 1GHz)	03CH09-HY	Lego Lin	21.5~22.3°C / 55~60%	07/Jan/2021~16/Mar/2021

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)	0.9 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	2.4 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.6 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.0 dB	Confidence levels of 95%
Temperature	0.41 °C	Confidence levels of 95%
Humidity	3.4 %	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

Test Software	DOS v6.1

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

2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral Test Voltage: 120Vac / 60Hz
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 ☒ Non-adaptive frequency hopping systems (Non-AFH) ☒ adaptive frequency hopping systems (AFH)
Non-AFH Mode configuration was found to be the worst case and measured during the test.	

Note: From Sporton Project No.: FR0N0913-02AD.

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**
	

Note: From Sporton Project No.: FR0N0913-02AD. (above 1GHz)

2.3 Accessories

Accessories				
RJ45 Cable	Category	5	In/Out door	-
	Signal Line	2.0 meter, non-shielded cable		

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

2.4 Support Equipment

Support Equipment – AC Conduction					
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**	**Remark**
1	Adapter	Tenpao	S090IP2400375	-	Note 1
2	Notebook	HP	HSTNN-Q85C	-	-
3	AC Adapter (for NB)	HP	PPP012L-E	-	-
4	RS232-to-Lan cable	-	-	-	-
5	USB-to-RS232 cable	-	-	-	-
6	AC Adapter (for NB) (Remote)	HP	PPP012H-S	-	-
7	AC Power cable (Remote)	Power Sync	TPCMRN0018	-	-
8	Notebook (Remote)	HP	5220m	-	-

Note 1: Provided by Customer

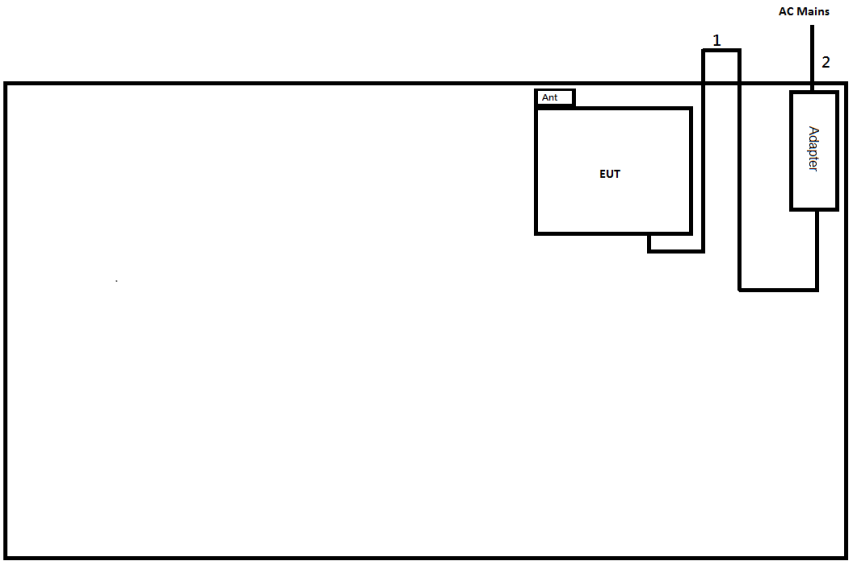
Support Equipment – Conducted					
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**	**Remark**
1	Notebook	DELL	E5410	-	-
2	Adapter for NB	DELL	HA65NM130	-	-
3	Notebook	Acer	Trave Mate P2410	-	-
4	Adapter for NB	HIPRO	HP-A0652R3B	-	-

Support Equipment – Radiated					
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**	**Remark**
1	Adapter	Tenpao	S090IP2400375	-	Note 1
2	Notebook	HP	HSTNN-Q85C	-	-
3	AC Adapter (for NB)	HP	PPP012L-E	-	-
4	USB-to-RS232 cable	-	-	-	-
5	RS232-to-Lan cable	-	-	-	-
6	AC Adapter (for NB) (Remote)	HP	PPP012H-S	-	-
7	AC Power cable (Remote)	Power Sync	TPCMRN0018	-	-
8	Notebook (Remote)	HP	5220m	-	-

Note 1: Provided by Customer

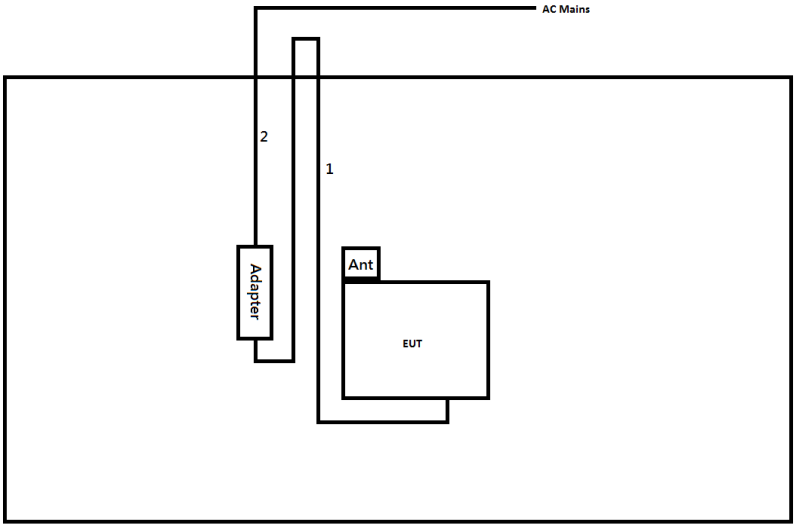
2.5 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



Item	Connection	Shielded	Length(m)	Remark
1	DC Power cable	No	3.0	-
2	AC Power cable	No	1.8	-

Test Setup Diagram - Radiated Test



Item	Connection	Shielded	Length(m)	Remark
1	DC Power cable	No	3.0	-
2	AC Power cable	No	1.8	-

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		
Frequency Emission (MHz)	**Quasi-Peak**	**Average**
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50
Note 1: * Decreases with the logarithm of the frequency.		

3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

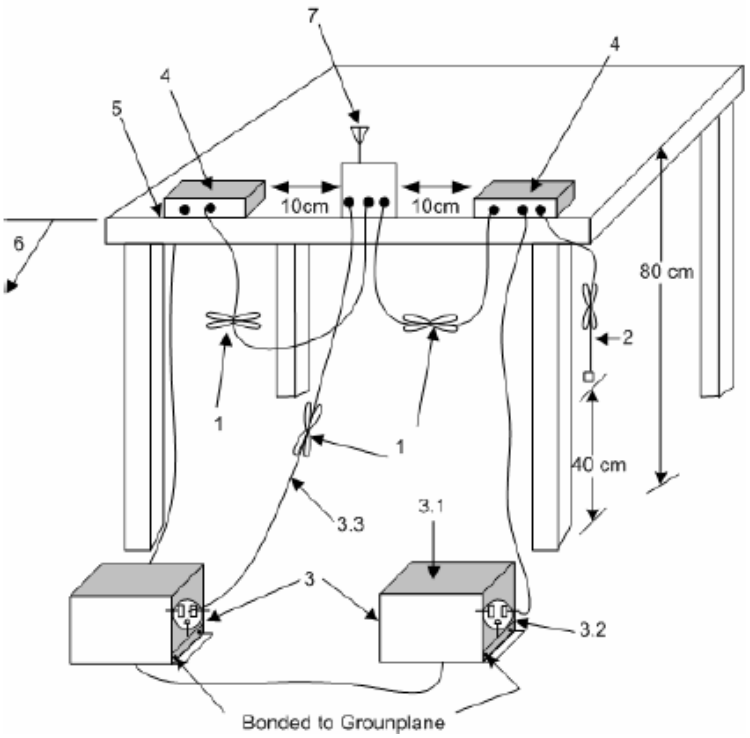
Test Method
▪ Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

3.1.4 Measurement Results Calculation

The measured Level is calculated using:
Corrected Reading: Raw(Read Level) +LISN(LISN Factor) + CL(Cable Loss) + AT(Attenuator).

3.1.5 Test Setup

AC Power-line Conducted Emissions



1—Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 cm to 40 cm long.
2—The I/O cables that are not connected to an accessory shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
3—EUT connected to one LISN. Unused LISN measuring port connectors shall be terminated in 50Ω loads. LISN may be placed on top of, or immediately beneath, reference ground plane.
3.1—All other equipment powered from additional LISN(s).
3.2—A multiple-outlet strip may be used for multiple power cords of non-EUT equipment.
3.3—LISN at least 80 cm from nearest part of EUT chassis.
4—Non-EUT components of EUT system being tested.
5—Rear of EUT, including peripherals, shall all be aligned and flush with edge of tabletop.
6—Edge of tabletop shall be 40 cm removed from a vertical conducting plane that is bonded to the ground plane.
7—Antenna can be integral or detachable. If detachable, then the antenna shall be attached for this test.

3.1.6 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 ≥75 and ChS ≥ MAX (20 dB bandwidth, 25 kHz).
	▪ 75>N ≥ 15 and ChS ≥ MAX (20 dB bandwidth 2/3,25 kHz).
N:Number of Hopping Frequencies; **ChS**: Hopping Channel Separation	

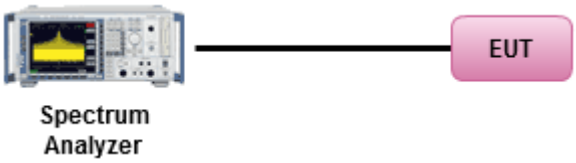
3.2.2 Measuring Instruments

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

20dB Bandwidth and Carrier Frequency Separation


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 ≥ 75; Power 30dBm; EIRP 36dBm
	▪ 75 >N ≥ 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

Maximum Conducted Output Power (Peak Power Meter)


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 ≥ 75 and ChS ≥ MAX (20 dB bandwidth, 25 kHz).
	▪ 75 >N ≥ 15 and ChS ≥ 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

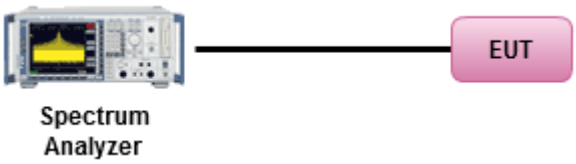
3.4.3 Measuring Instruments

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

Number of Hopping Frequencies and Hopping Frequencies Bandedge


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 ≥ 75; 0.4s in N x 0.4 period
	▪ 75 >N ≥ 15; 0.4s in N x 0.4 period
N:Number of Hopping Frequencies	

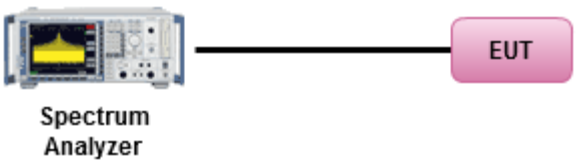
3.5.2 Measuring Instruments

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

Time of Occupancy (Dwell Time)


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.	

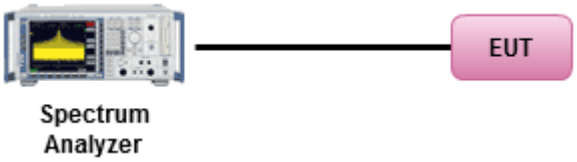
3.6.2 Measuring Instruments

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

Emissions in Non-restricted Frequency Bands


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 below30 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.

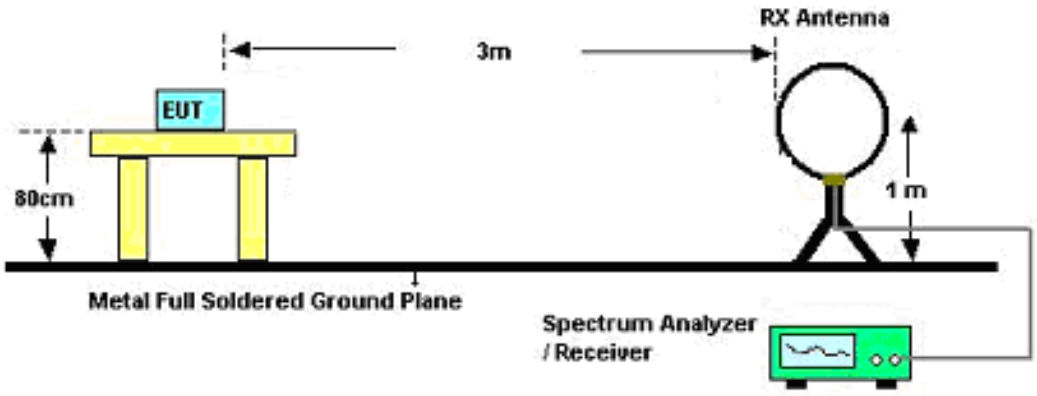
3.7.3 Test Procedures

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.
▪	KDB 414788 Open-Field Test Sites and Chamber Correlation Justification.
	▪ Based on FCC 15.31(f)(2): measurements may be performed at a distance closer than that specified in regulations; however, an attempt should be made to avoid making measurements in the near field.
	▪ Open-field site and chamber correlation testing had been performed and chamber measured test result is the worst case test result.

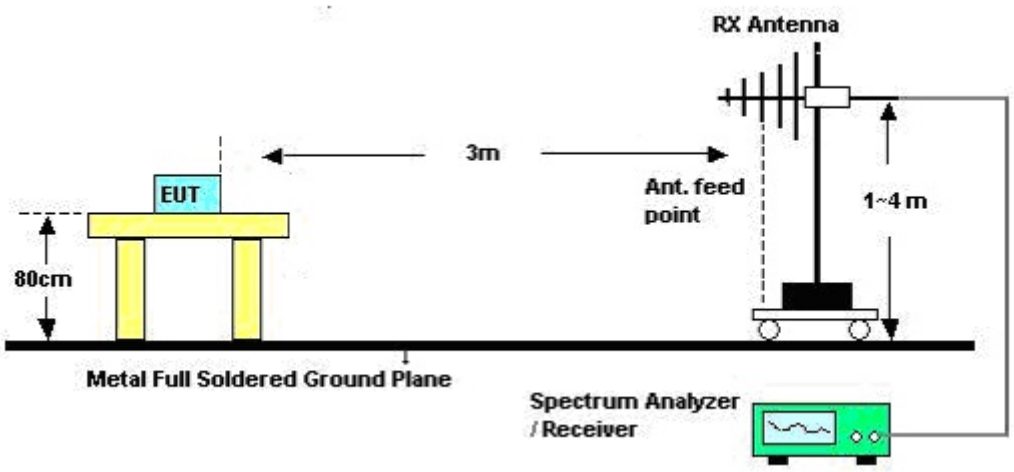
3.7.4 Measurement Results Calculation

The measured Level is calculated using:
Corrected Reading: Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamp Factor)

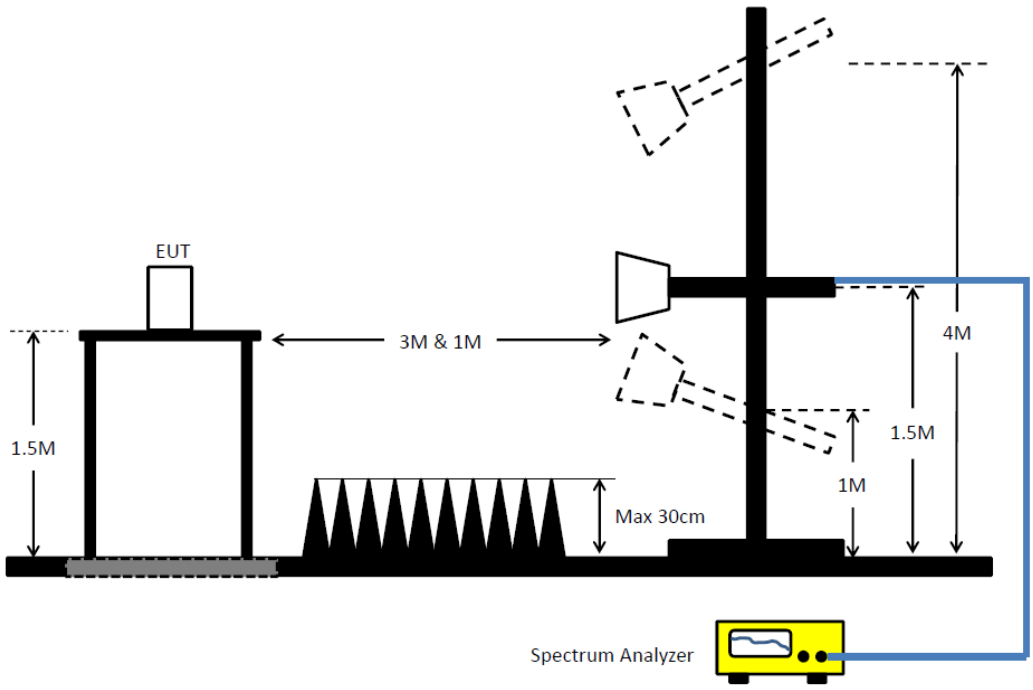
3.7.5 Test Setup

Emissions in Restricted Frequency Bands
9kHz ~30MHz


30MHz~1GHz



Above 1GHz



3.7.6 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.

3.7.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix G

4 Test Equipment and Calibration Data

Instrument for AC Conduction

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMI Test Receiver	R&S	ESR	102052	9kHz ~ 3.6GHz	19/Apr/2021	18/Apr/2022
LISN	R&S	ENV216	101295	9kHz ~ 30MHz	11/Nov/2020	10/Nov/2021
RF Cable 5m	TITAN	TITAN	CO04-cable-01	0.1MHz~200MHz	03/Mar/2021	02/Mar/2022
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9kHz ~ 30MHz	21/Sep/2020	20/Sep/2021

Instrument for Conducted Test

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Signal Analyzer	R&S	FSV 40	101029	10Hz~40GHz	19/Oct/2020	18/Oct/2021
SMB100A Signal Generator	R&S	SMB100A03	181147	100kHz~40GHz	20/Oct/2020	19/Oct/2021
Pulse Sensor	Anritsu	MA2411B	0917017	300MHz~40GHz	23/Feb/2021	22/Feb/2022
Power Meter	Anritsu	ML2495A	0949003	300MHz~40GHz	23/Feb/2021	22/Feb/2022
Pulse Sensor	Anritsu	MA2411B	1027452	300MHz~40GHz	18/Mar/2020	17/Mar/2021
Power Meter	Anritsu	ML2495A	1124009	300MHz~40GHz	18/Mar/2020	17/Mar/2021

Instrument for Radiated Test (below 1GHz)

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	30MHz~1GHz 3m	26/Mar/2021	25/Mar/2022
EXA Signal Analyzer	KEYSIGHT	N9010A	MY54200885	10Hz~44GHz	11/Aug/2020	10/Aug/2021
Amplifier	EMC	EMC9135	980232	9kHz~1GHz	12/Apr/2021	11/Apr/2022
Bilog Antenna & 5dB Attenuator	TESEQ & MTJ	CBL6111D&MT J6102-05	35418 & 3	30MHz~1GHz	06/Sep/2020	05/Sep/2021
RF Cable-low	Jye Bao	RG142	CB031+324530/4	9kHz~30MHz	03/Sep/2020	02/Sep/2021
RF Cable-low	Jye Bao	RG142	CB031+324530/4	30MHz~1GHz	09/Feb/2021	08/Feb/2022
Loop Antenna	TESEQ	HLA 6120	31244	9kHz~30MHz	16/Mar/2021	15/Mar/2022
EMI Test Receiver	R&S	ESR3	102051	9kHz~3.6GHz	21/May/2021	20/May/2022

Instrument for Radiated Test (above 1GHz)

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	1GHz~18GHz 3m	19/Mar/2020	18/Mar/2021
EXA Signal Analyzer	KEYSIGHT	N9010A	MY54200885	10Hz~44GHz	11/Aug/2020	10/Aug/2021
Microwave Preamplifier	Agilent	8449B	3008A02096	1GHz~26.5GHz	24/Jul/2020	23/Jul/2021
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA9120 D 1534	1GHz~18GHz	28/May/2020	27/May/2021
RF CABLE 5m+3m+1m	HUBER+ SUHNER	SUCOFLEX104	SN MY25918/4+ SN MY39478/4 + SN 324530/4	1GHz~40GHz	15/Aug/2020	14/Aug/2021
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170221	18GHz~40GHz	13/Mar/2020	12/Mar/2021
Preamplifier	MITEQ	TTA1840-35-H G	1864481	18GHz~40GHz	10/Mar/2020	09/Mar/2021

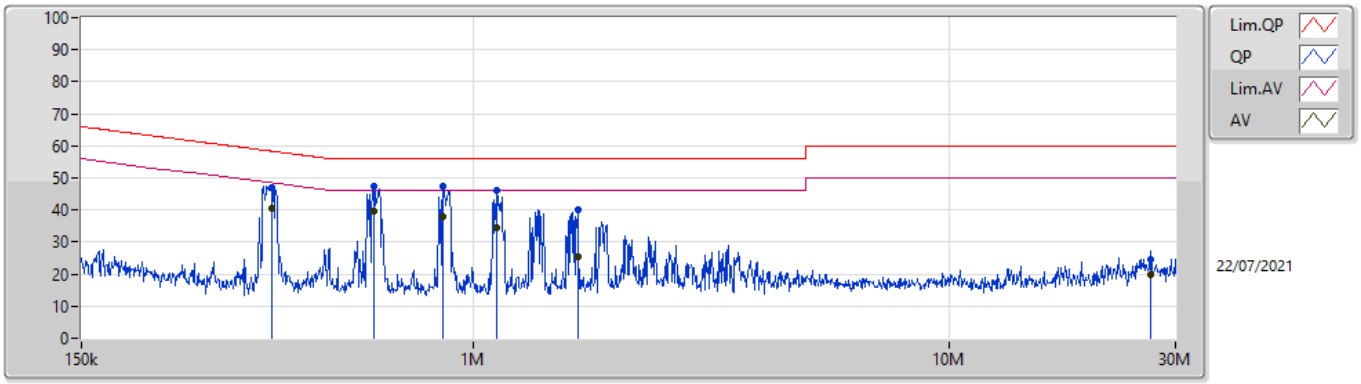
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	616.347k	39.67	46.00	-6.33	Line

Mode Config

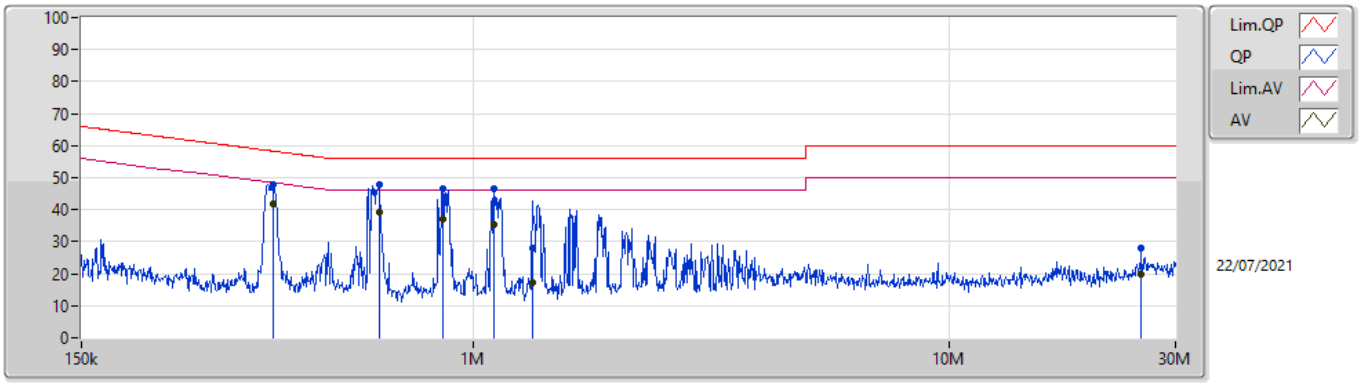
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition	Comments
Mode 1	Pass	QP	377.206k	46.94	58.33	-11.39	Line	-
Mode 1	Pass	AV	377.206k	40.43	48.33	-7.90	Line	-
Mode 1	Pass	QP	616.347k	47.56	56.00	-8.44	Line	-
Mode 1	Pass	AV	616.347k	39.67	46.00	-6.33	Line	-
Mode 1	Pass	QP	861.901k	47.38	56.00	-8.62	Line	-
Mode 1	Pass	AV	861.901k	37.87	46.00	-8.13	Line	-
Mode 1	Pass	QP	1.122M	45.98	56.00	-10.02	Line	-
Mode 1	Pass	AV	1.122M	34.32	46.00	-11.68	Line	-
Mode 1	Pass	QP	1.659M	39.94	56.00	-16.06	Line	-
Mode 1	Pass	AV	1.659M	25.32	46.00	-20.68	Line	-
Mode 1	Pass	QP	26.59M	24.72	60.00	-35.28	Line	-
Mode 1	Pass	AV	26.59M	19.91	50.00	-30.09	Line	-
Mode 1	Pass	QP	380.23k	48.02	58.28	-10.26	Neutral	-
Mode 1	Pass	AV	380.23k	41.60	48.28	-6.68	Neutral	-
Mode 1	Pass	QP	633.814k	47.79	56.00	-8.21	Neutral	-
Mode 1	Pass	AV	633.814k	39.14	46.00	-6.86	Neutral	-
Mode 1	Pass	QP	861.901k	46.68	56.00	-9.32	Neutral	-
Mode 1	Pass	AV	861.901k	37.09	46.00	-8.91	Neutral	-
Mode 1	Pass	QP	1.108M	46.41	56.00	-9.59	Neutral	-
Mode 1	Pass	AV	1.108M	35.54	46.00	-10.46	Neutral	-
Mode 1	Pass	QP	1.332M	27.87	56.00	-28.13	Neutral	-
Mode 1	Pass	AV	1.332M	17.21	46.00	-28.79	Neutral	-
Mode 1	Pass	QP	25.448M	27.83	60.00	-32.17	Neutral	-
Mode 1	Pass	AV	25.448M	19.87	50.00	-30.13	Neutral	-

Conducted Emissions at Powerline_Mode 1



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	377.206k	46.94	58.33	-11.39	19.63	Line	-	27.31	9.67	0.06	9.90
AV	377.206k	40.43	48.33	-7.90	19.63	Line	-	20.80	9.67	0.06	9.90
QP	616.347k	47.56	56.00	-8.44	19.59	Line	-	27.97	9.67	0.07	9.85
AV	616.347k	39.67	46.00	-6.33	19.59	Line	-	20.08	9.67	0.07	9.85
QP	861.901k	47.38	56.00	-8.62	19.57	Line	-	27.81	9.67	0.08	9.82
AV	861.901k	37.87	46.00	-8.13	19.57	Line	-	18.30	9.67	0.08	9.82
QP	1.122M	45.98	56.00	-10.02	19.55	Line	-	26.43	9.67	0.08	9.80
AV	1.122M	34.32	46.00	-11.68	19.55	Line	-	14.77	9.67	0.08	9.80
QP	1.659M	39.94	56.00	-16.06	19.57	Line	-	20.37	9.68	0.09	9.80
AV	1.659M	25.32	46.00	-20.68	19.57	Line	-	5.75	9.68	0.09	9.80
QP	26.59M	24.72	60.00	-35.28	19.80	Line	-	4.92	9.57	0.33	9.90
AV	26.59M	19.91	50.00	-30.09	19.80	Line	-	0.11	9.57	0.33	9.90

Conducted Emissions at Powerline_Mode 1



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	380.23k	48.02	58.28	-10.26	19.63	Neutral	-	28.39	9.67	0.06	9.90
AV	380.23k	41.60	48.28	-6.68	19.63	Neutral	-	21.97	9.67	0.06	9.90
QP	633.814k	47.79	56.00	-8.21	19.59	Neutral	-	28.20	9.67	0.07	9.85
AV	633.814k	39.14	46.00	-6.86	19.59	Neutral	-	19.55	9.67	0.07	9.85
QP	861.901k	46.68	56.00	-9.32	19.57	Neutral	-	27.11	9.67	0.08	9.82
AV	861.901k	37.09	46.00	-8.91	19.57	Neutral	-	17.52	9.67	0.08	9.82
QP	1.108M	46.41	56.00	-9.59	19.55	Neutral	-	26.86	9.67	0.08	9.80
AV	1.108M	35.54	46.00	-10.46	19.55	Neutral	-	15.99	9.67	0.08	9.80
QP	1.332M	27.87	56.00	-28.13	19.56	Neutral	-	8.31	9.67	0.09	9.80
AV	1.332M	17.21	46.00	-28.79	19.56	Neutral	-	-2.35	9.67	0.09	9.80
QP	25.448M	27.83	60.00	-32.17	19.94	Neutral	-	7.89	9.72	0.32	9.90
AV	25.448M	19.87	50.00	-30.13	19.94	Neutral	-	-0.07	9.72	0.32	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)	1.01M	890.805k	891KF1D	927.5k	888.306k
BT-EDR(2Mbps)	975k	902.049k	902KG1D	948.75k	899.55k
BT-EDR(3Mbps)	1.331M	1.223M	1M22G1D	1.315M	1.221M

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

Result

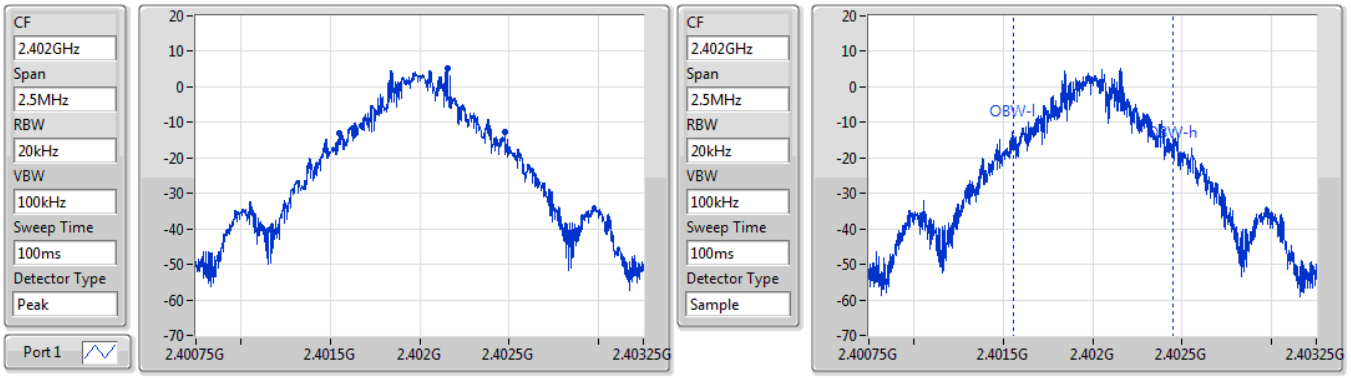
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	Inf	927.5k	890.805k
2440MHz	Pass	Inf	1.003M	888.306k
2480MHz	Pass	Inf	1.01M	888.306k
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	Inf	967.5k	900.8k
2440MHz	Pass	Inf	948.75k	899.55k
2480MHz	Pass	Inf	975k	902.049k
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	Inf	1.318M	1.223M
2440MHz	Pass	Inf	1.331M	1.221M
2480MHz	Pass	Inf	1.315M	1.223M

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

BT-BR(1Mbps) EBW-FS

2402MHz

26/01/2021

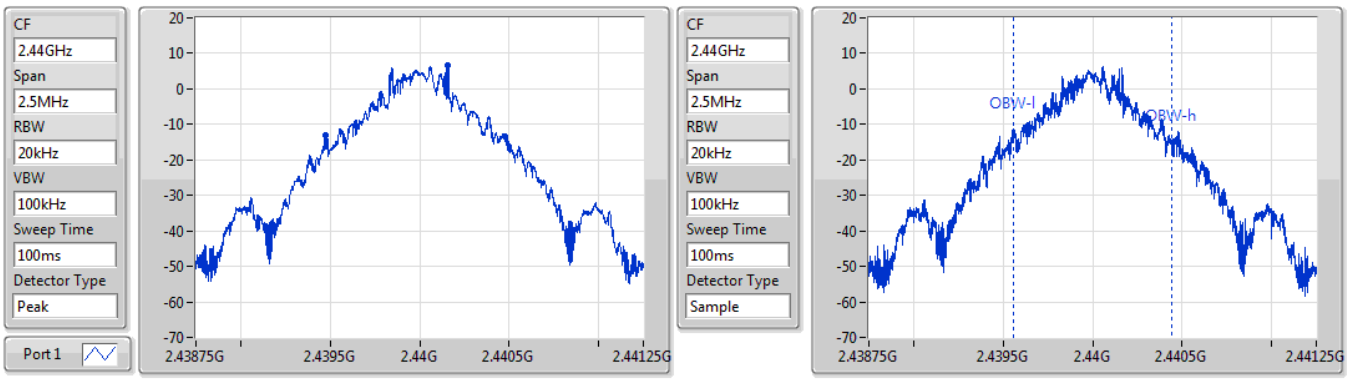


20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
927.5k	2.40155G	2.402478G	890.805k	2.401556G	2.402447G	Inf	1

BT-BR(1Mbps) EBW-FS

2440MHz

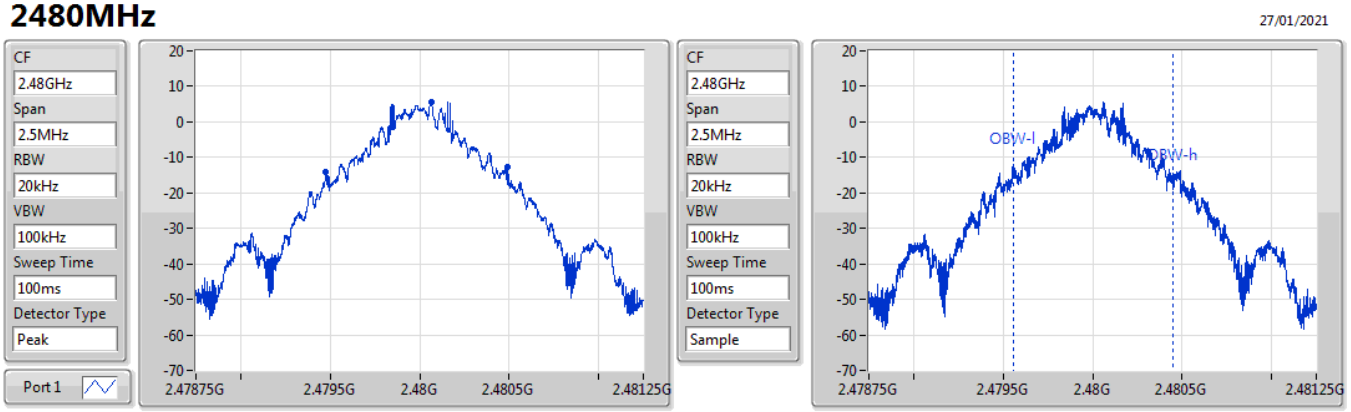
26/01/2021



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.003M	2.439476G	2.440479G	888.306k	2.439556G	2.440445G	Inf	1

BT-BR(1Mbps) EBW-FS

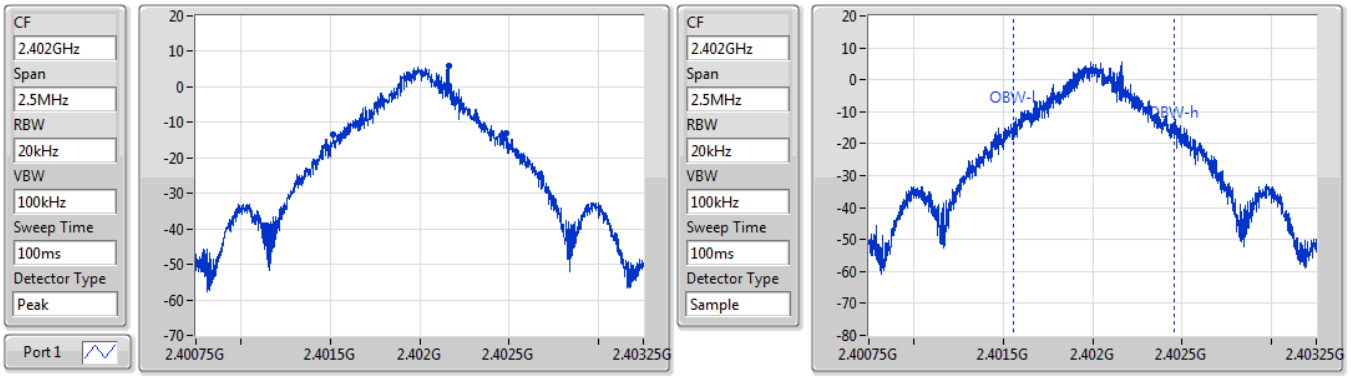
2480MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.01M	2.479478G	2.480488G	888.306k	2.47956G	2.480449G	Inf	1

BT-EDR(2Mbps) EBW-FS

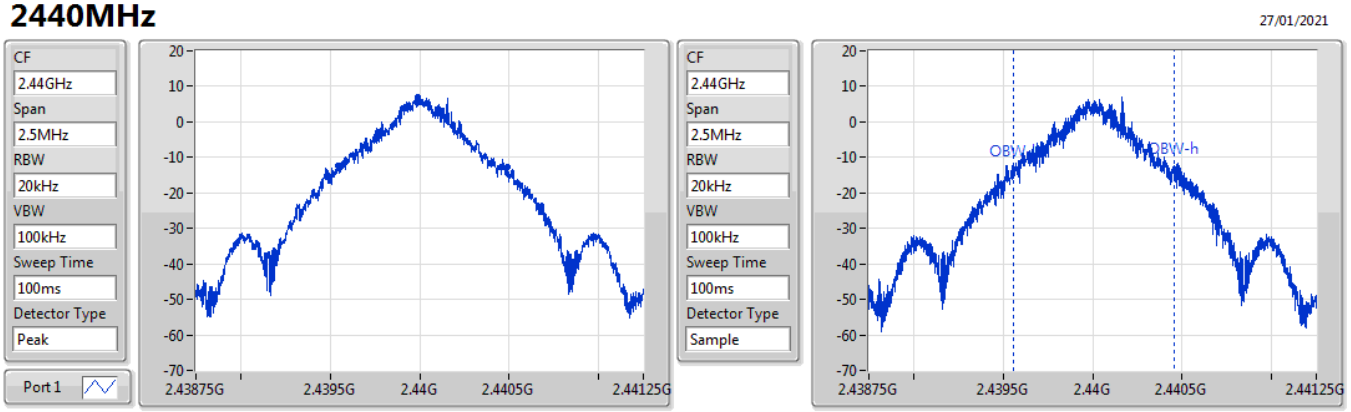
2402MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
967.5k	2.401516G	2.402484G	900.8k	2.401555G	2.402456G	Inf	1

BT-EDR(2Mbps) EBW-FS

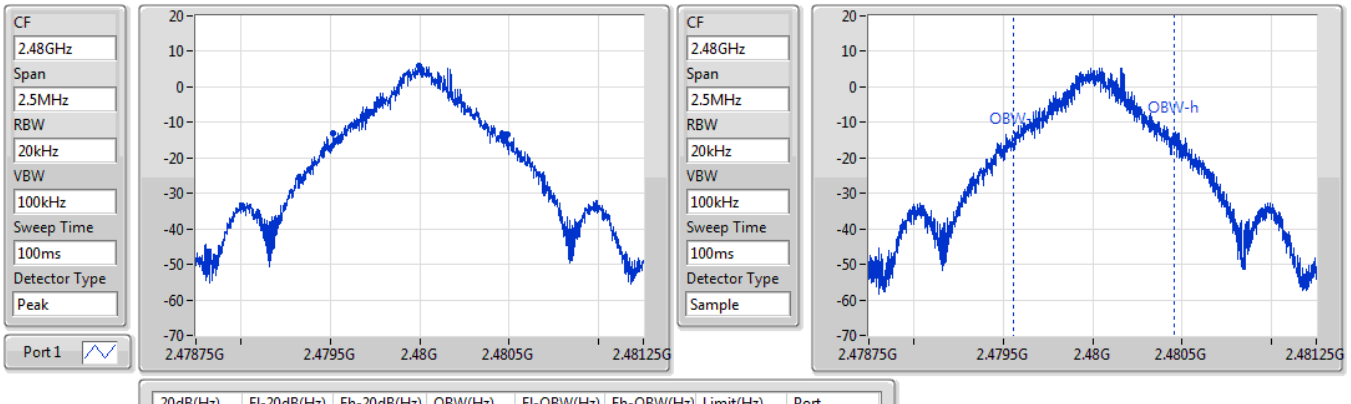
2440MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
948.75k	2.439541G	2.44049G	899.55k	2.439559G	2.440459G	Inf	1

BT-EDR(2Mbps) EBW-FS

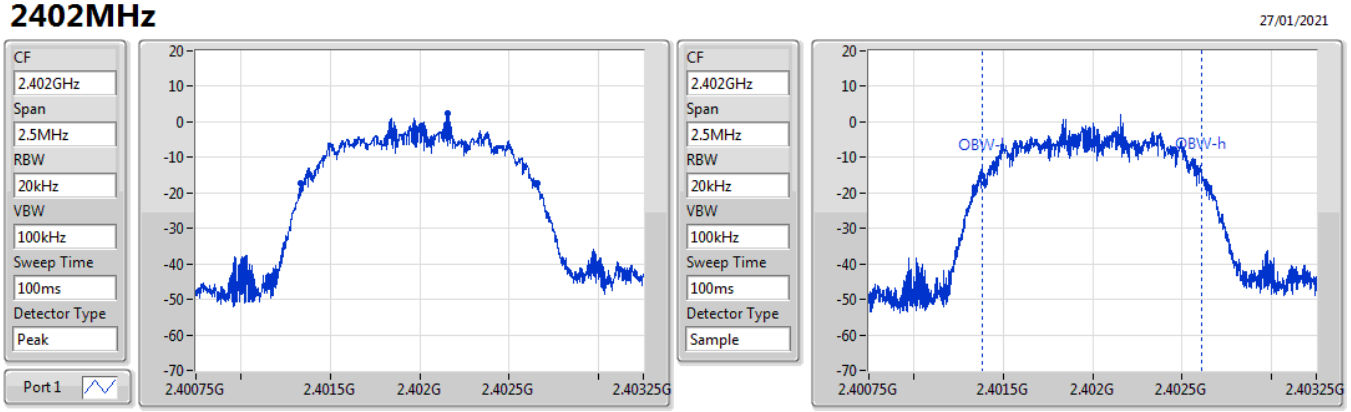
2480MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
975k	2.479516G	2.480491G	902.049k	2.479556G	2.480459G	Inf	1

BT-EDR(3Mbps) EBW-FS

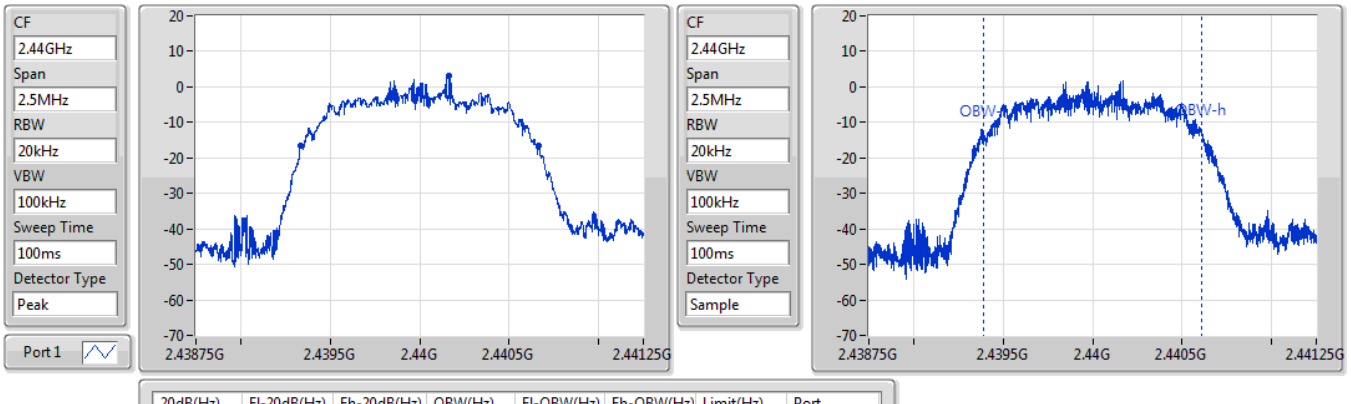
2402MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.318M	2.401338G	2.402655G	1.223M	2.401384G	2.402607G	Inf	1

BT-EDR(3Mbps) EBW-FS

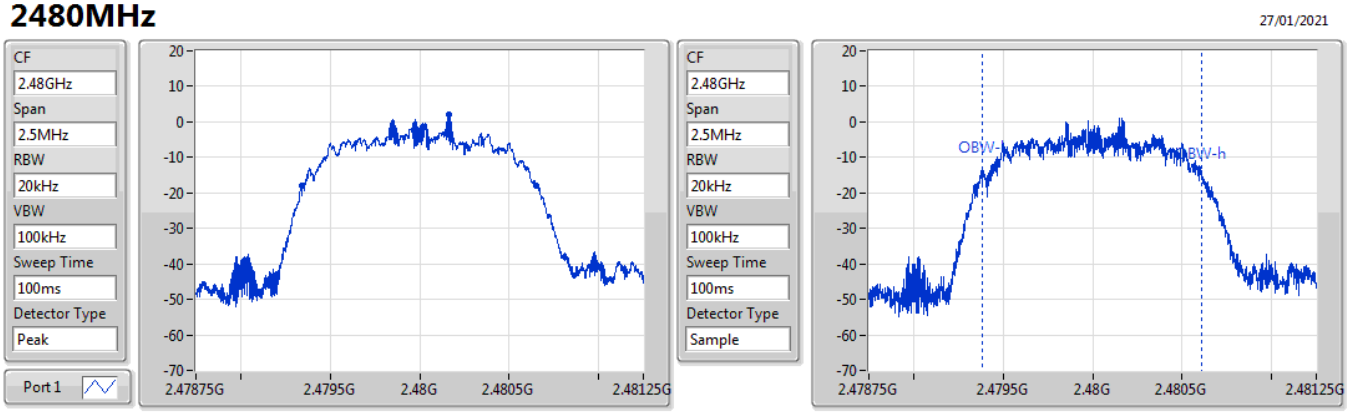
2440MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.331M	2.439335G	2.440666G	1.221M	2.439389G	2.44061G	Inf	1

BT-EDR(3Mbps) **EBW-FS**

2480MHz



20dB(Hz)	Fl-20dB(Hz)	Fh-20dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.315M	2.479339G	2.480654G	1.223M	2.479387G	2.48061G	Inf	1

Summary

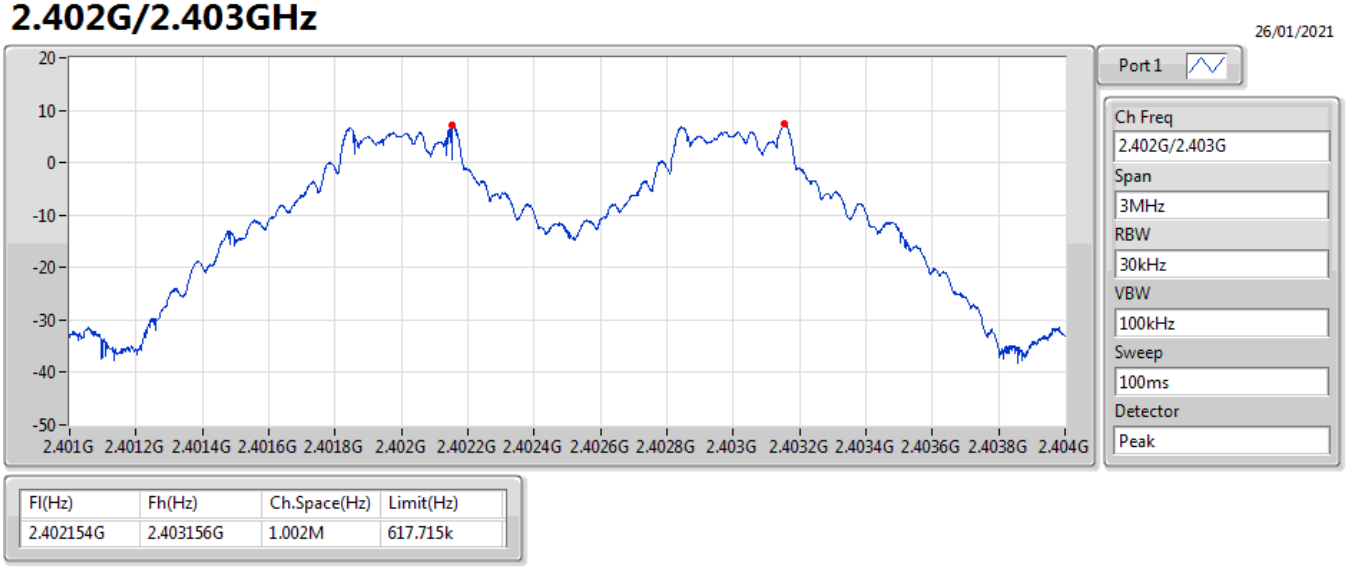
Mode	Max-Space (Hz)	Min-Space (Hz)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	1.002M	999k
BT-EDR(2Mbps)	1.002M	999k
BT-EDR(3Mbps)	1.002M	1.0005M

Result

Mode	Result	Fl (Hz)	Fh (Hz)	Ch.Space (Hz)	Limit (Hz)
BT-BR(1Mbps)	-	-	-	-	-
2402MHz	Pass	2.402154G	2.403156G	1.002M	617.715k
2440MHz	Pass	2.440157G	2.441157G	1.0005M	667.998k
2480MHz	Pass	2.479163G	2.480162G	999k	672.66k
BT-EDR(2Mbps)	-	-	-	-	-
2402MHz	Pass	2.40199G	2.402989G	999k	644.355k
2440MHz	Pass	2.43999G	2.440992G	1.002M	631.8675k
2480MHz	Pass	2.478995G	2.479995G	1.0005M	649.35k
BT-EDR(3Mbps)	-	-	-	-	-
2402MHz	Pass	2.402155G	2.403156G	1.0005M	877.788k
2440MHz	Pass	2.440158G	2.44116G	1.002M	886.446k
2480MHz	Pass	2.47916G	2.480162G	1.002M	875.79k

BT-BR(1Mbps) Channel Separation-FS

2.402G/2.403GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.402154G	2.403156G	1.002M	617.715k

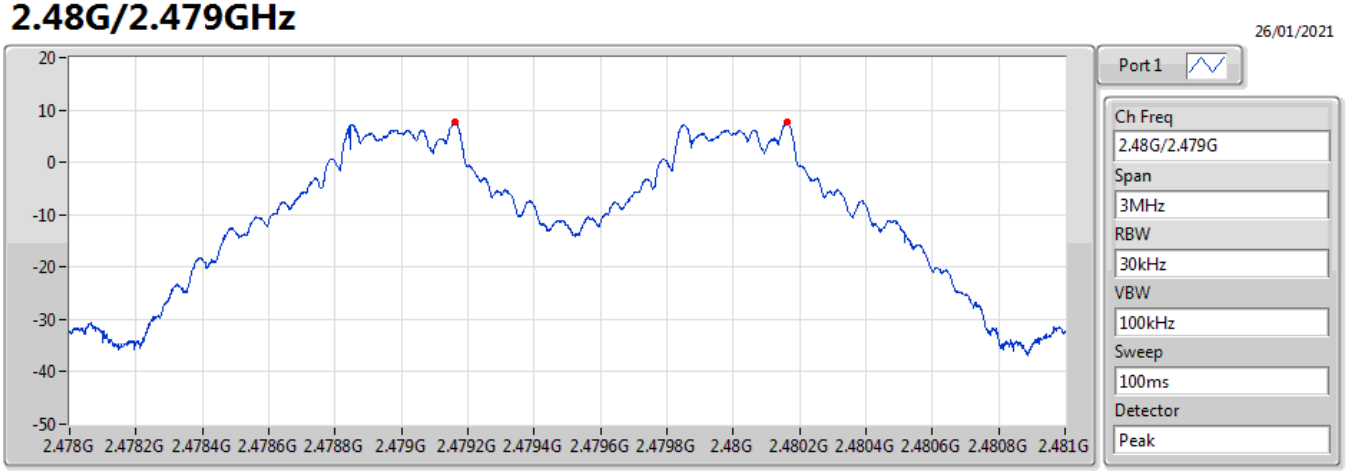
BT-BR(1Mbps) Channel Separation-FS

2.44G/2.441GHz

Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.440157G	2.441157G	1.0005M	667.998k

BT-BR(1Mbps) **Channel Separation-FS**

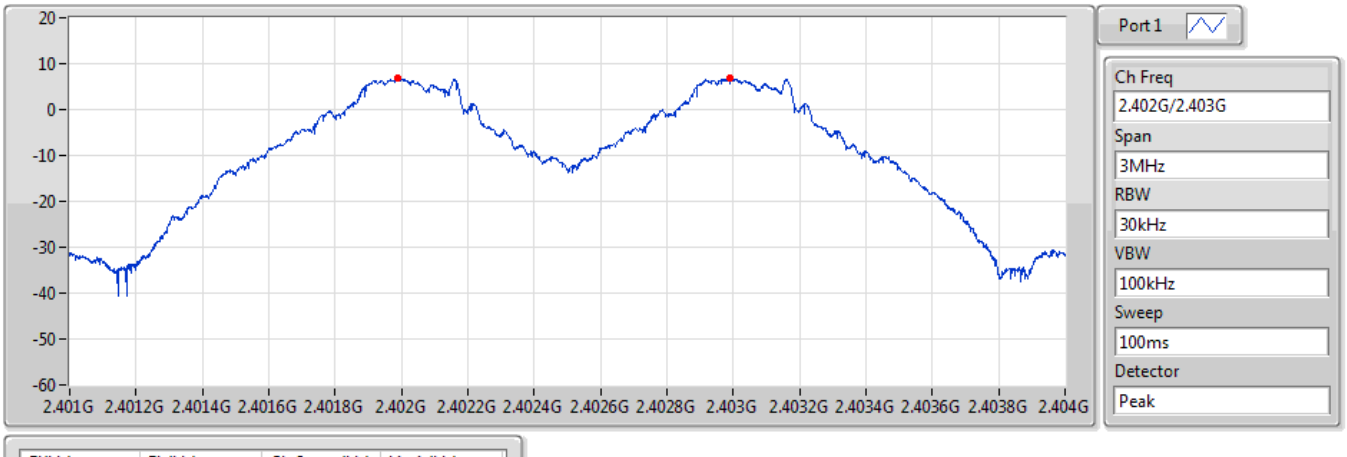
2.48G/2.479GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.479163G	2.480162G	999k	672.66k

BT-EDR(2Mbps) **Channel Separation-FS**

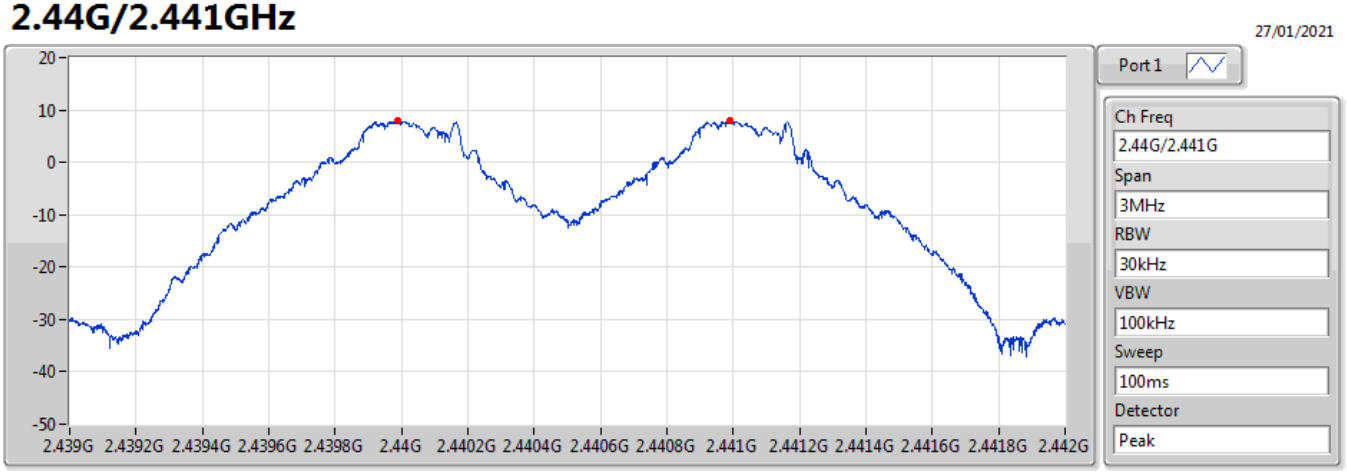
2.402G/2.403GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.40199G	2.402989G	999k	644.355k

BT-EDR(2Mbps) **Channel Separation-FS**

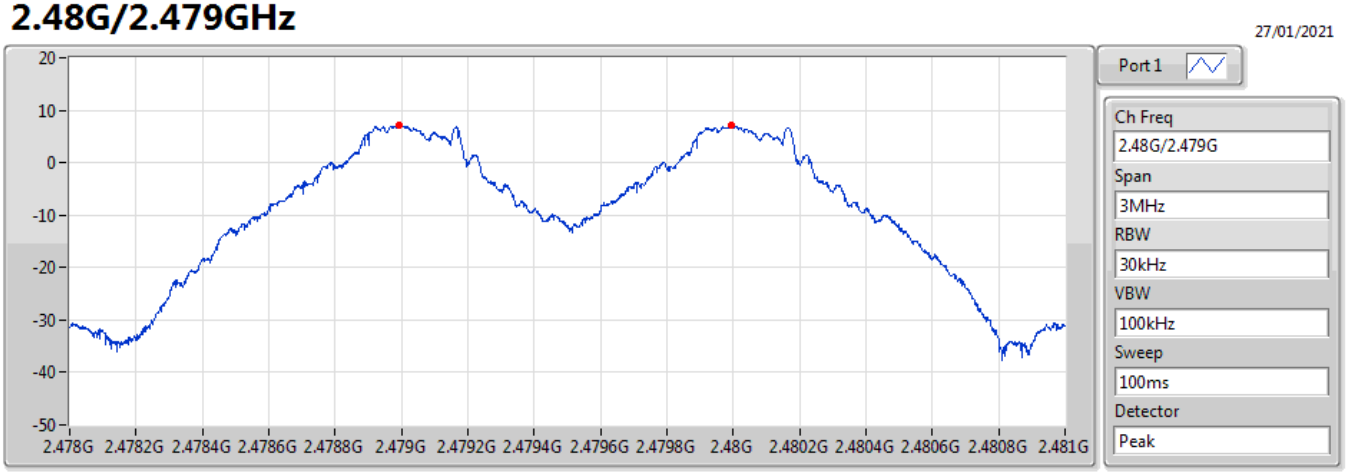
2.44G/2.441GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.43999G	2.440992G	1.002M	631.8675k

BT-EDR(2Mbps) **Channel Separation-FS**

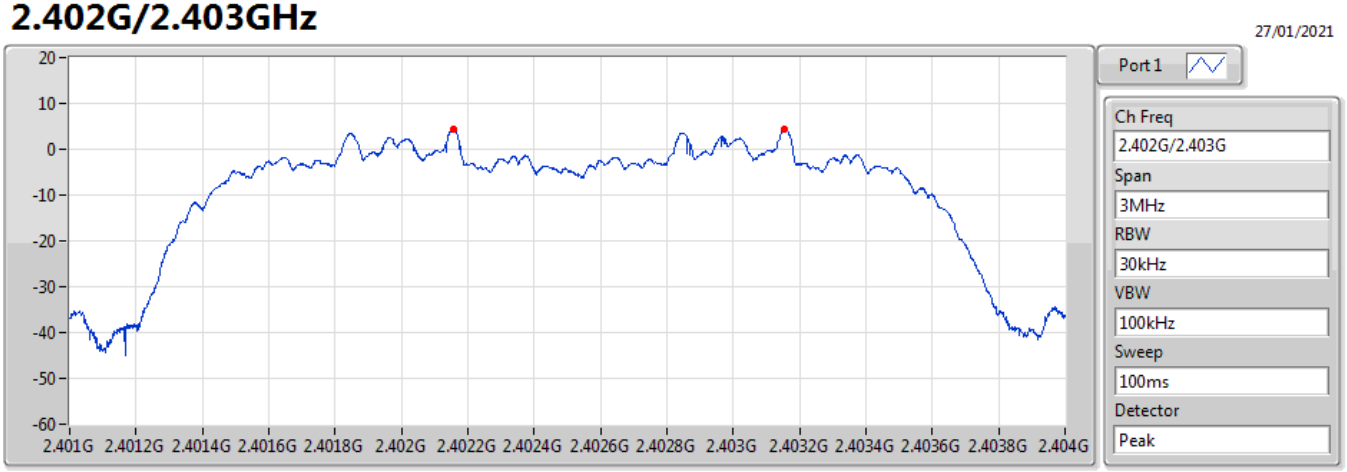
2.48G/2.479GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.478995G	2.479995G	1.0005M	649.35k

BT-EDR(3Mbps) Channel Separation-FS

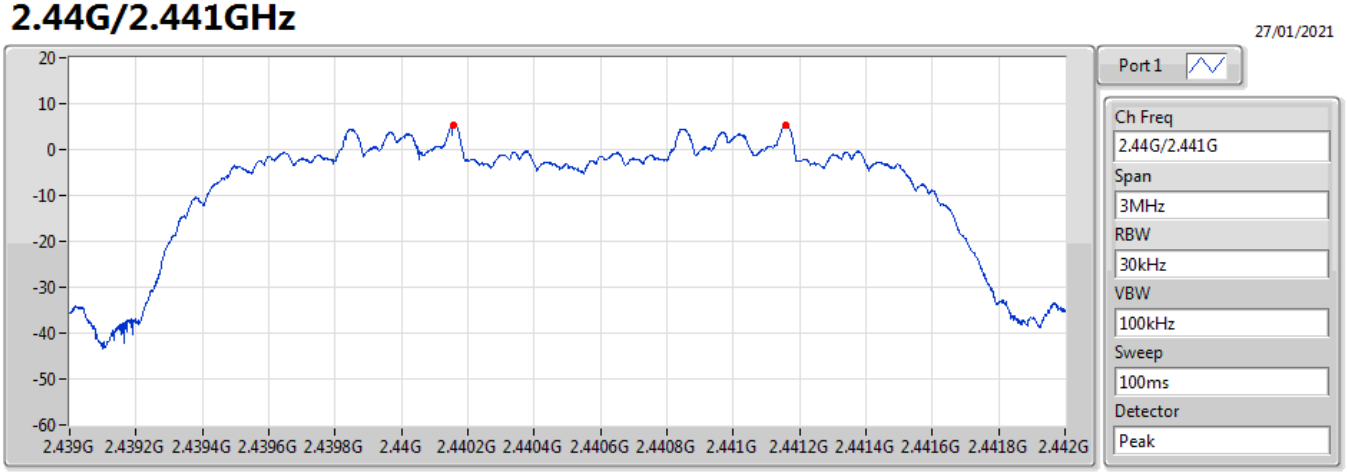
2.402G/2.403GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.402155G	2.403156G	1.0005M	877.788k

BT-EDR(3Mbps) Channel Separation-FS

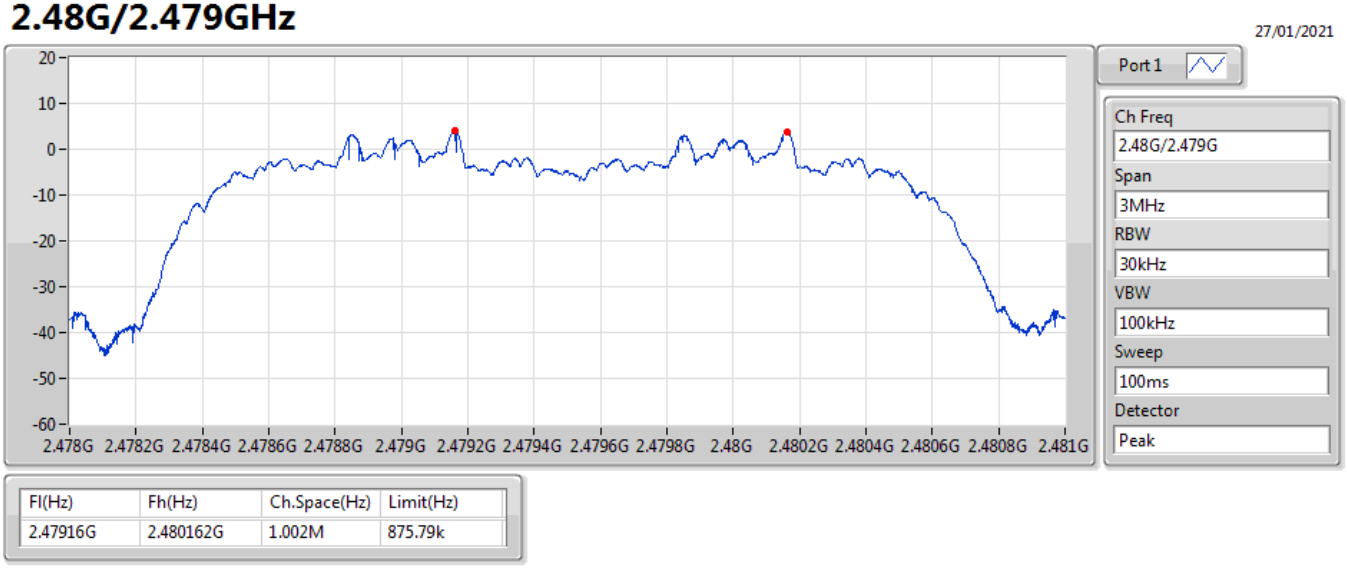
2.44G/2.441GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.440158G	2.44116G	1.002M	886.446k

BT-EDR(3Mbps) **Channel Separation-FS**

2.48G/2.479GHz



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.47916G	2.480162G	1.002M	875.79k

Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	9.90	0.00977
BT-EDR(2Mbps)	9.97	0.00993
BT-EDR(3Mbps)	9.80	0.00955

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	3.00	8.69	21.00
2440MHz	Pass	3.00	9.90	21.00
2480MHz	Pass	3.00	9.11	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	3.00	8.76	21.00
2440MHz	Pass	3.00	9.97	21.00
2480MHz	Pass	3.00	9.08	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	3.00	8.77	21.00
2440MHz	Pass	3.00	9.80	21.00
2480MHz	Pass	3.00	8.24	21.00

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

Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	9.88	0.00973
BT-EDR(2Mbps)	9.95	0.00989
BT-EDR(3Mbps)	7.35	0.00543

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	3.00	8.61	21.00
2440MHz	Pass	3.00	9.88	21.00
2480MHz	Pass	3.00	9.01	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	3.00	8.71	21.00
2440MHz	Pass	3.00	9.95	21.00
2480MHz	Pass	3.00	9.05	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	3.00	6.24	21.00
2440MHz	Pass	3.00	7.35	21.00
2480MHz	Pass	3.00	5.85	21.00

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

Summary

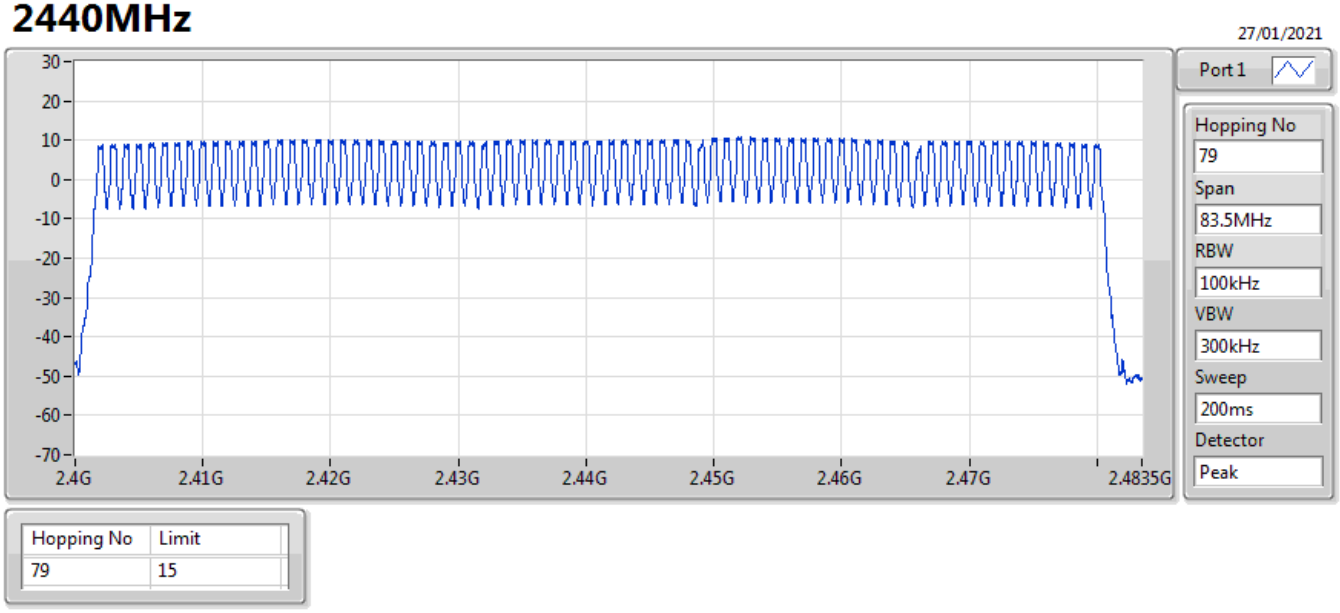
Mode	Max-Hop No
2.4-2.4835GHz	-
BT-BR(1Mbps)	79
BT-EDR(2Mbps)	79
BT-EDR(3Mbps)	79

Result

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

BT-BR(1Mbps) **Hopping-FS**

2440MHz

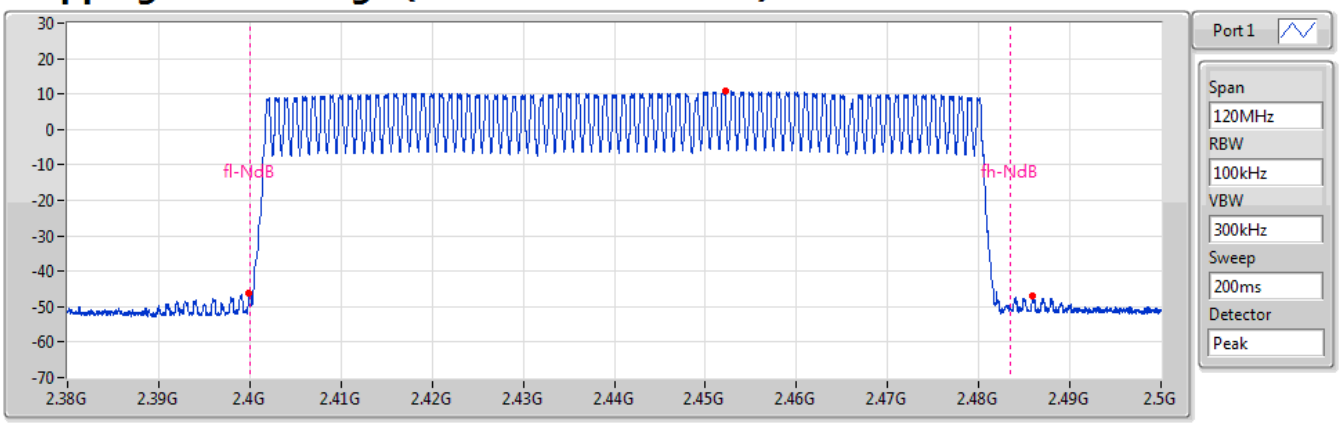


Hopping No	Limit
79	15

BT-BR(1Mbps)

2440MHz

Hopping Ch Bandedge (Non-restricted Band)

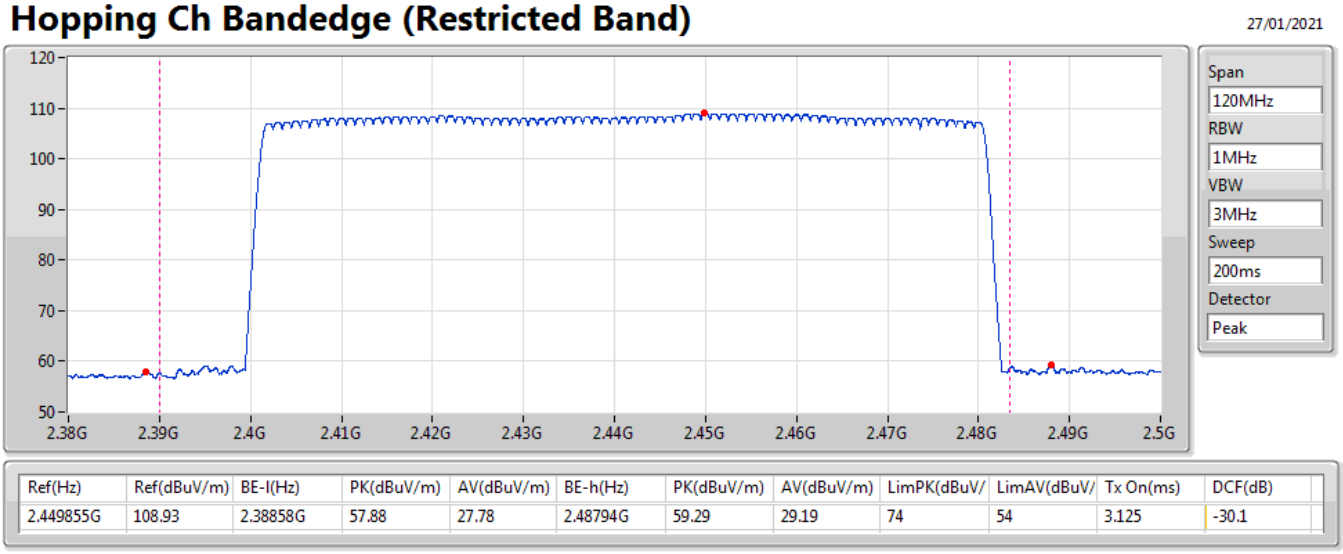


Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-9.3	2.452165G	10.7	2.39992G	-46.11	2.485945G	-46.95

BT-BR(1Mbps)

2440MHz

Hopping Ch Bandedge (Restricted Band)

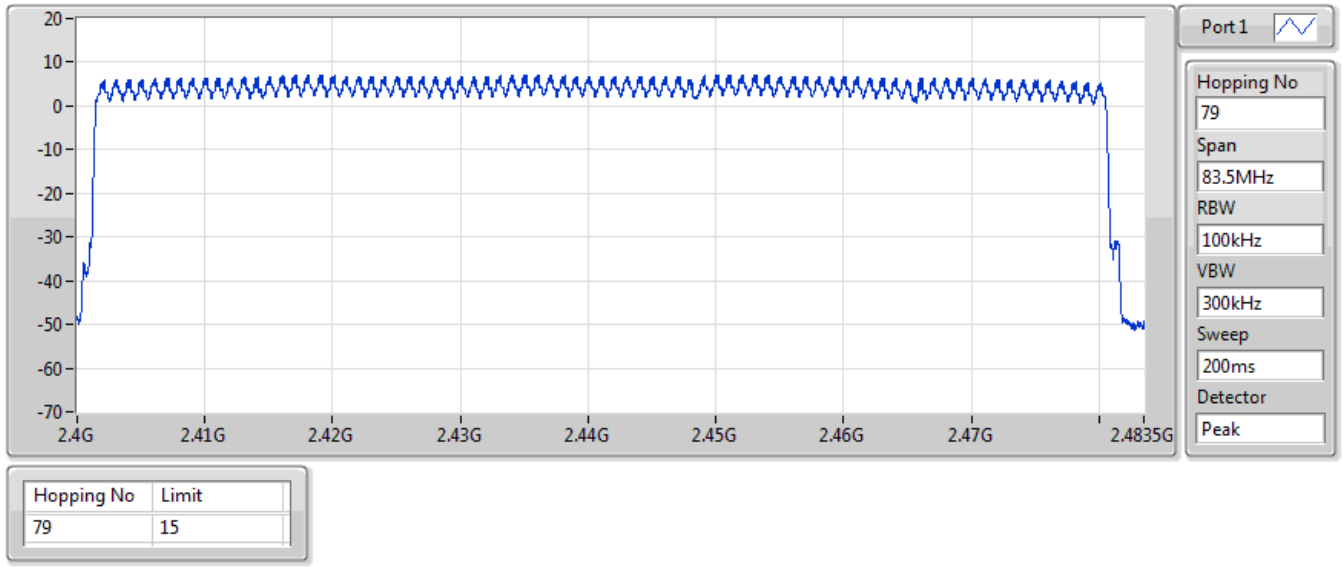


Ref(Hz)	Ref(dBuV/m)	BE-l(Hz)	PK(dBuV/m)	AV(dBuV/m)	BE-h(Hz)	PK(dBuV/m)	AV(dBuV/m)	LimPK(dBuV/	LimAV(dBuV/	Tx On(ms)	DCF(dB)
2.449855G	108.93	2.38858G	57.88	27.78	2.48794G	59.29	29.19	74	54	3.125	-30.1

BT-EDR(2Mbps)

Hopping-FS

2440MHz

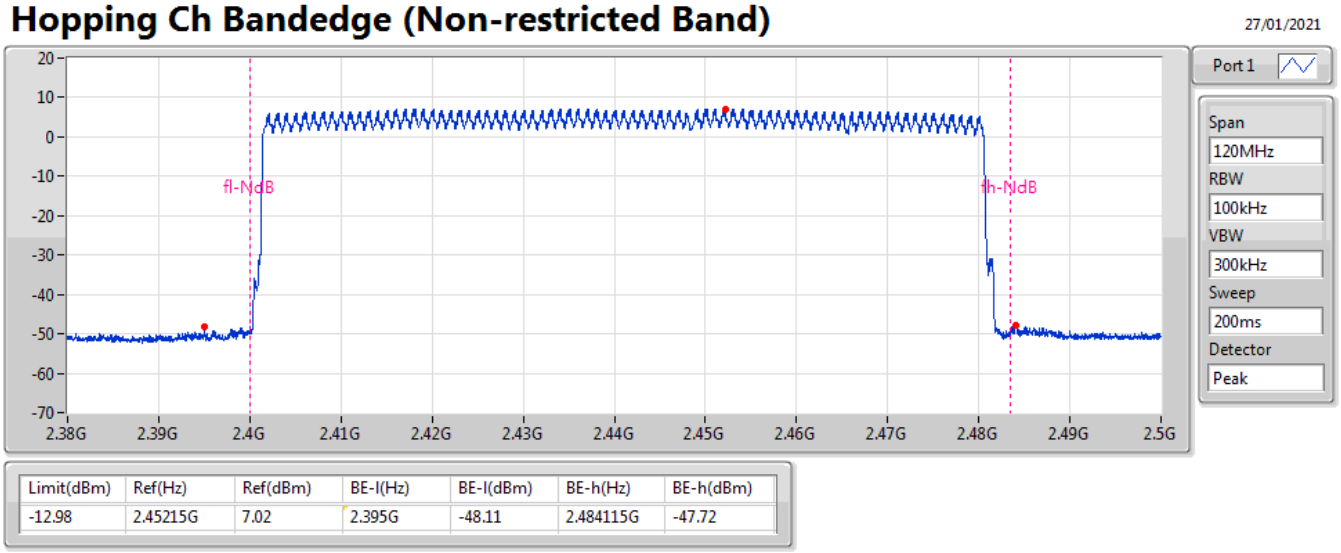


Hopping No	Limit
79	15

BT-EDR(2Mbps)

2440MHz

Hopping Ch Bandedge (Non-restricted Band)

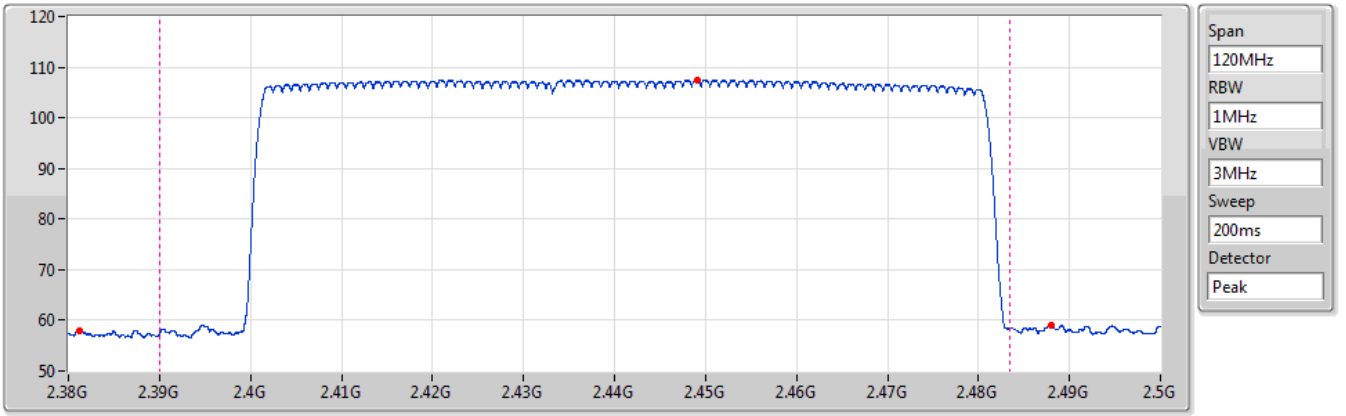


Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-12.98	2.45215G	7.02	2.395G	-48.11	2.484115G	-47.72

BT-EDR(2Mbps)

2440MHz

Hopping Ch Bandedge (Restricted Band)

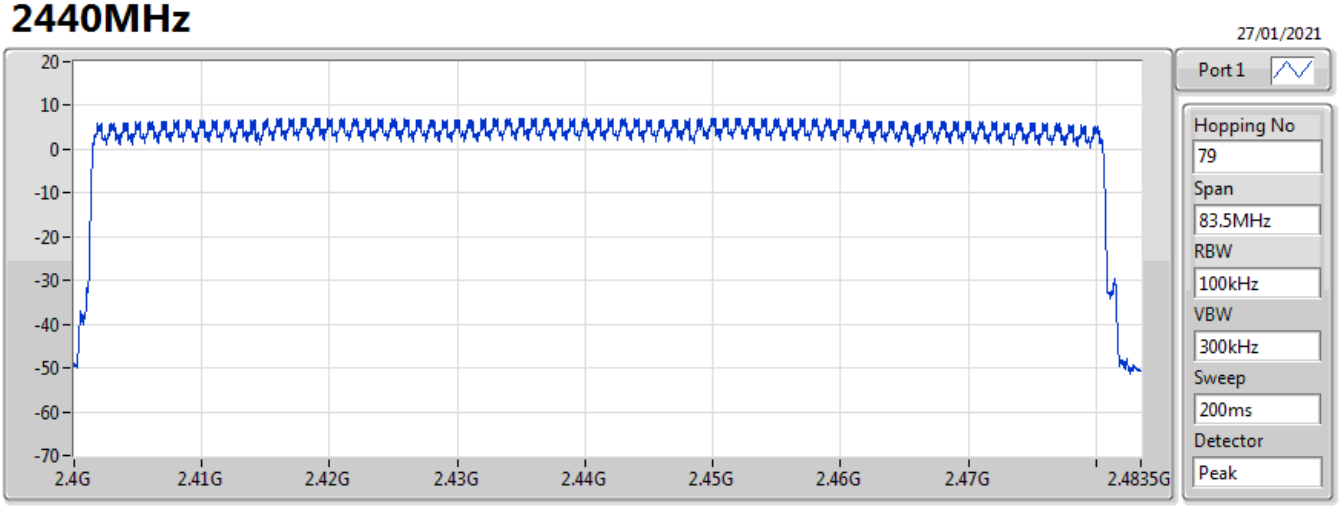


Ref(Hz)	Ref(dBuV/m)	BE-l(Hz)	PK(dBuV/m)	AV(dBuV/m)	BE-h(Hz)	PK(dBuV/m)	AV(dBuV/m)	LimPK(dBuV/	LimAV(dBuV/	Tx On(ms)	DCF(dB)
2.44909G	107.41	2.38117G	58.06	27.96	2.488045G	58.94	28.84	74	54	3.125	-30.1

BT-EDR(3Mbps)

2440MHz

Hopping-FS

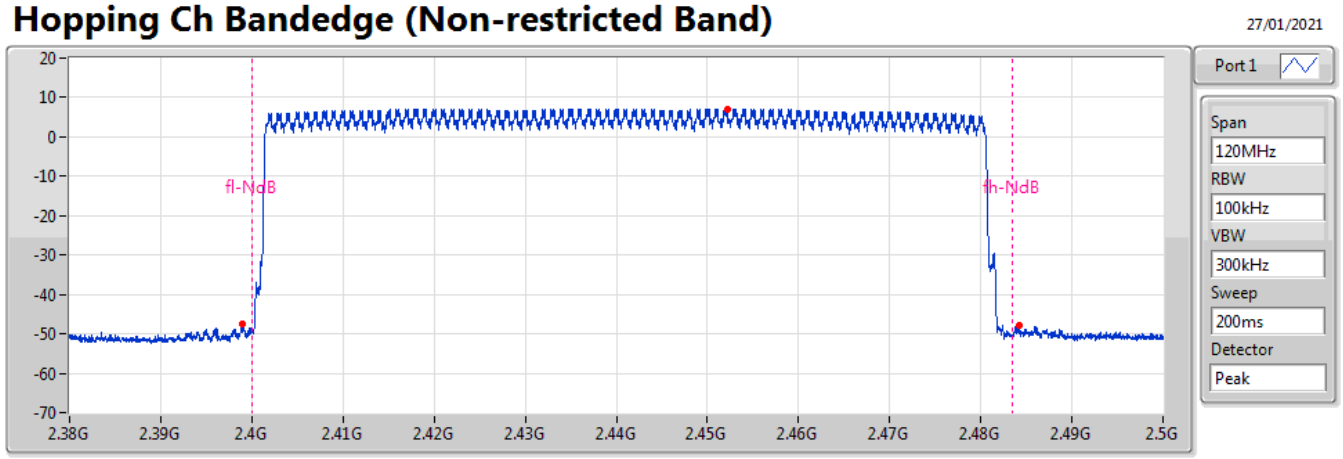


Hopping No	Limit
79	15

BT-EDR(3Mbps)

2440MHz

Hopping Ch Bandedge (Non-restricted Band)

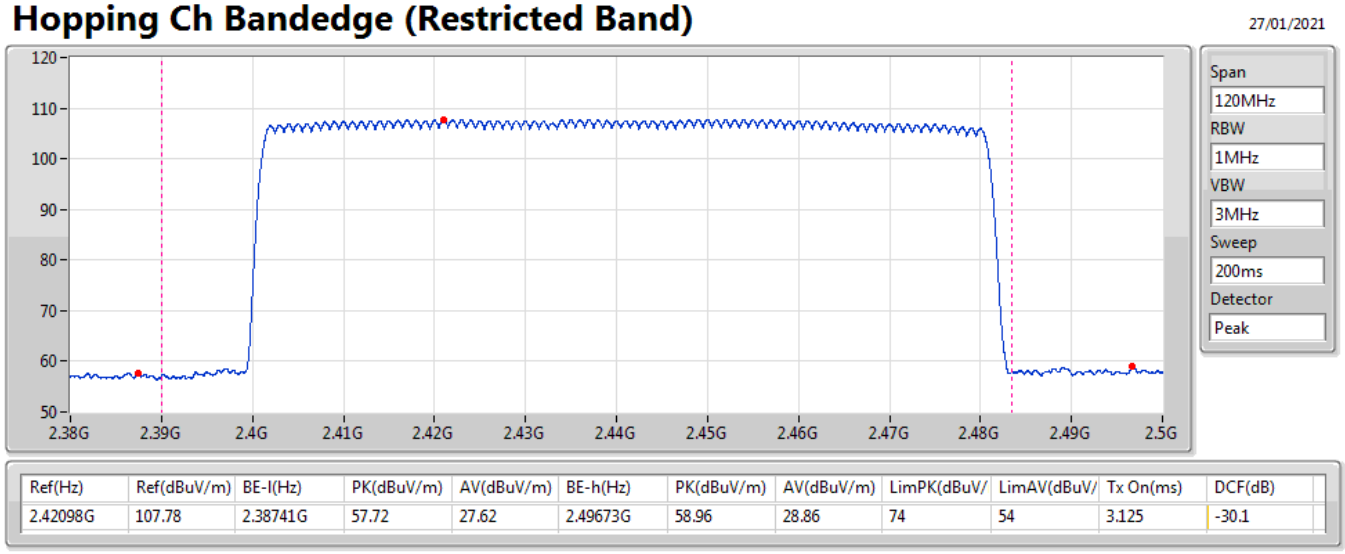


Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-12.87	2.452165G	7.13	2.399005G	-47.55	2.48416G	-47.72

BT-EDR(3Mbps)

2440MHz

Hopping Ch Bandedge (Restricted Band)



Ref(Hz)	Ref(dBuV/m)	BE-l(Hz)	PK(dBuV/m)	AV(dBuV/m)	BE-h(Hz)	PK(dBuV/m)	AV(dBuV/m)	LimPK(dBuV/	LimAV(dBuV/	Tx On(ms)	DCF(dB)
2.42098G	107.78	2.38741G	57.72	27.62	2.49673G	58.96	28.86	74	54	3.125	-30.1

Summary

Mode	Max-Dwell (s)
2.4-2.4835GHz	-
BT-BR(1Mbps)	309.00675m_DH5
BT-EDR(2Mbps)	309.14m_DH5
BT-EDR(3Mbps)	309.53975m_DH5

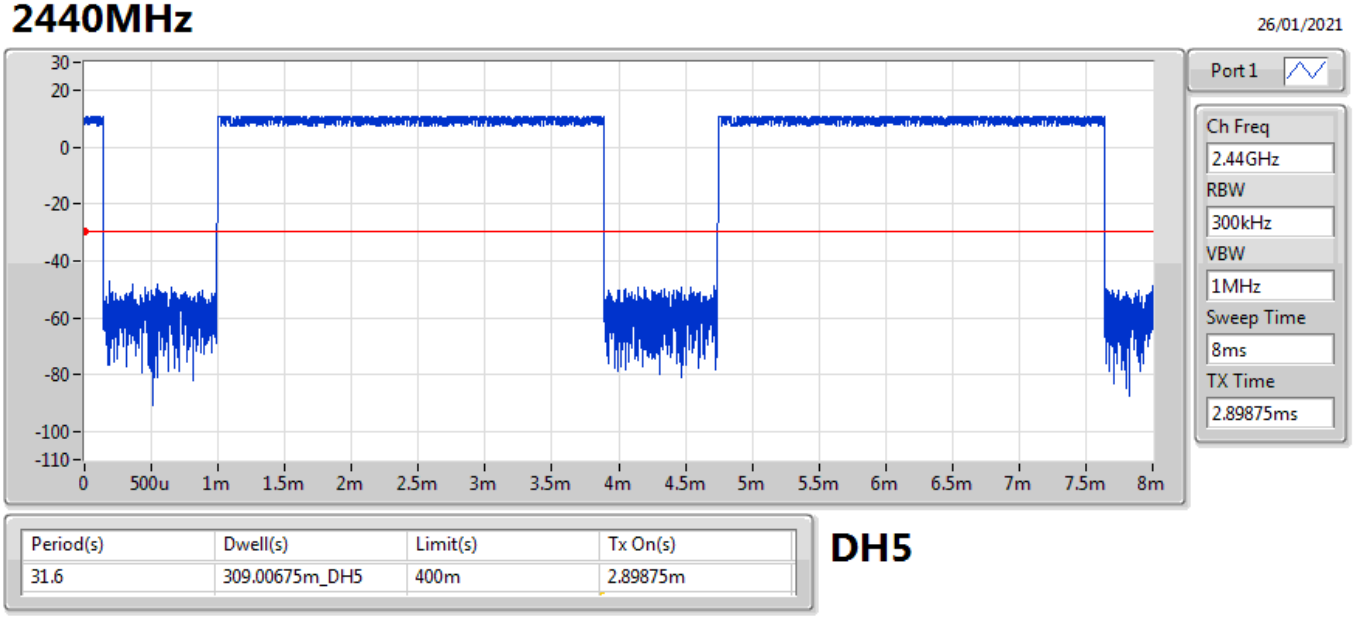
Result

Mode	Result	Period (s)	Dwell (s)	Limit (s)	Tx On (s)
BT-BR(1Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	309.00675m_DH5	400m	2.89875m
BT-EDR(2Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	309.14m_DH5	400m	2.9m
BT-EDR(3Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	309.53975m_DH5	400m	2.90375m

BT-BR(1Mbps)

Dwell-FS

2440MHz



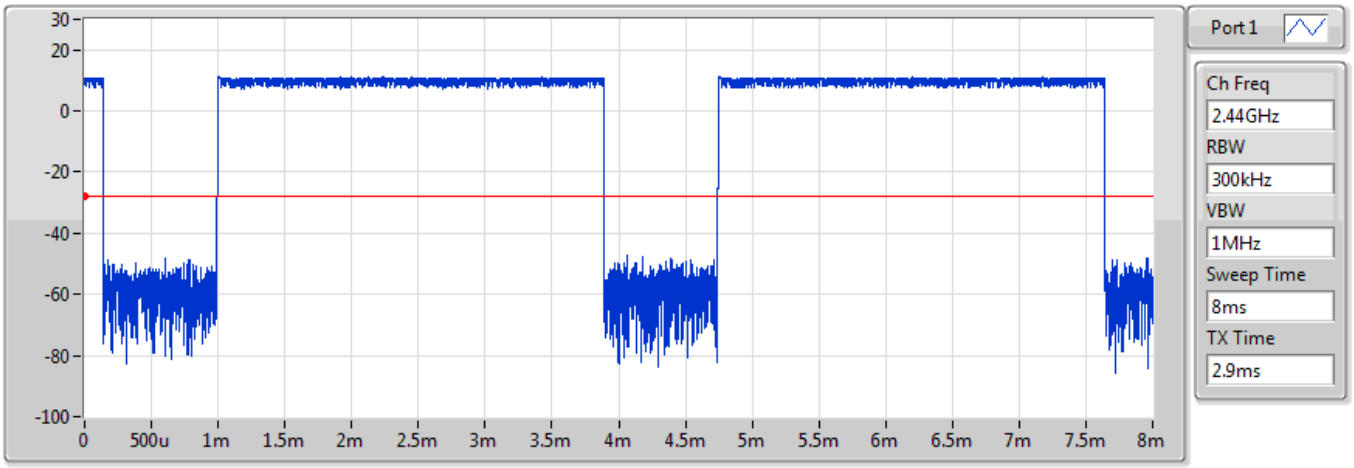
Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	309.00675m_DH5	400m	2.89875m

DH5

BT-EDR(2Mbps)

Dwell-FS

2440MHz

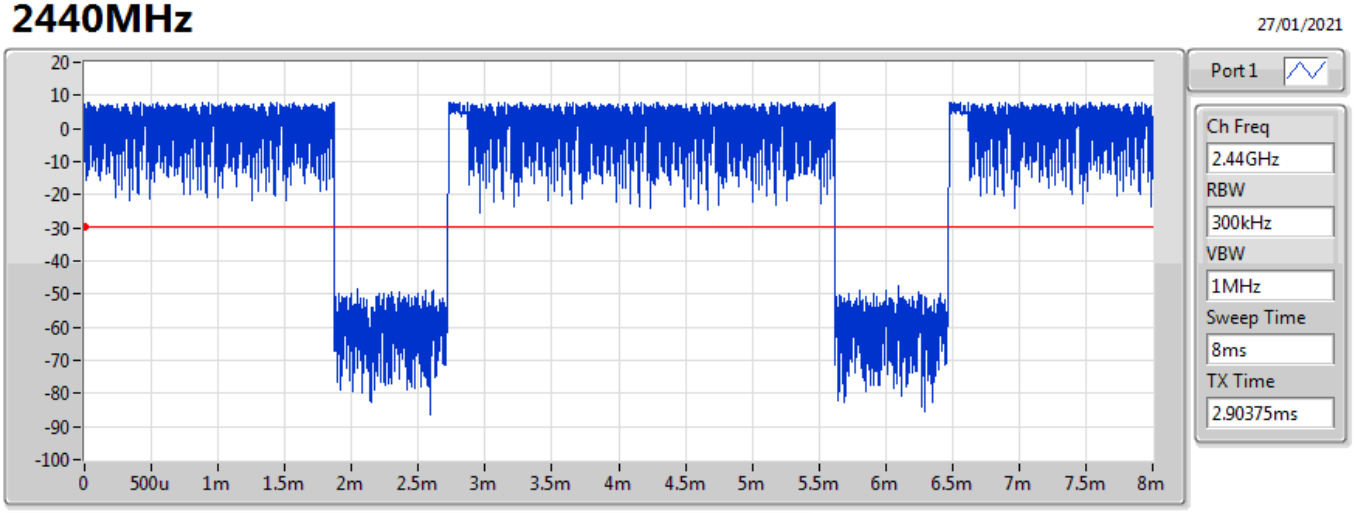


Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	309.14m_DH5	400m	2.9m

DH5

BT-EDR(3Mbps) **Dwell-FS**

2440MHz



Period(s)	Dwell(s)	Limit(s)	Tx On(s)
31.6	309.53975m_DH5	400m	2.90375m

DH5

Summary

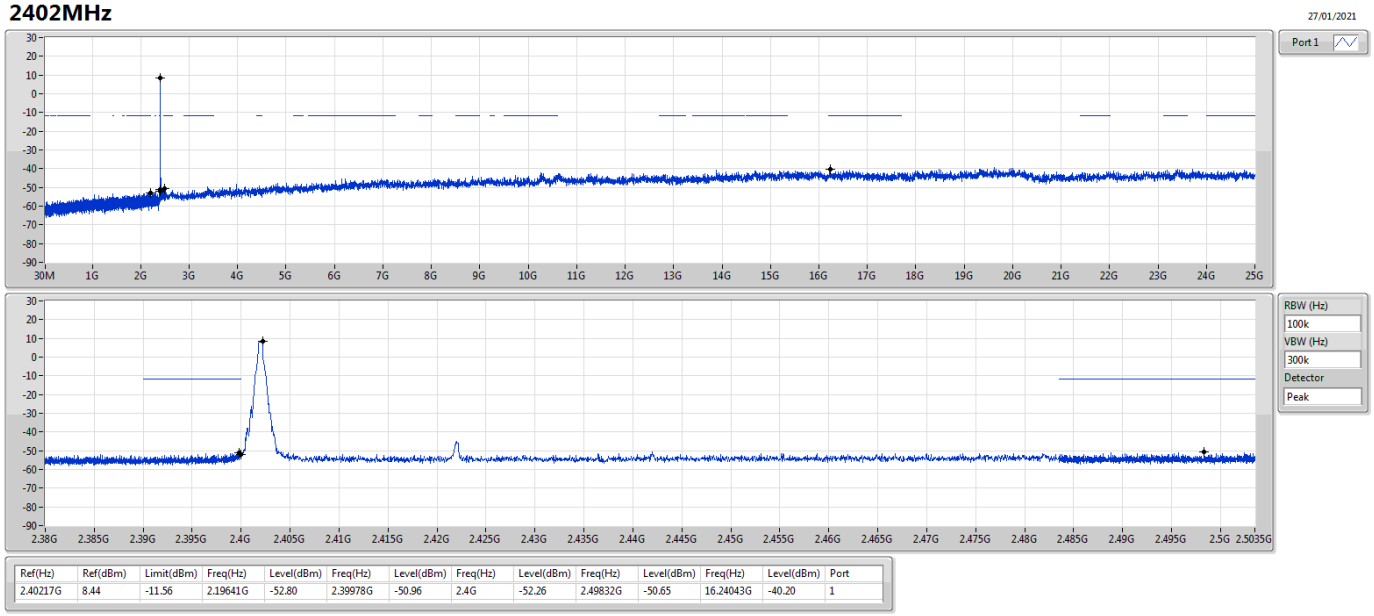
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BT-BR(1Mbps)	Pass	2.48008G	8.38	-11.62	2.14735G	-51.59	2.39136G	-51.10	2.4835G	-51.16	2.48984G	-50.54	24.44321G	-40.22	1
BT-EDR(2Mbps)	Pass	2.40213G	8.37	-11.63	2.00988G	-51.77	2.4G	-50.75	2.4G	-51.41	2.48758G	-51.07	23.43087G	-40.59	1
BT-EDR(3Mbps)	Pass	2.40184G	5.72	-14.28	2.07186G	-51.85	2.39988G	-49.65	2.4G	-51.87	2.48602G	-50.71	23.43649G	-39.67	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)	Freq (Hz)	Level (dBm)	Port
BT-BR(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.40217G	8.44	-11.56	2.19641G	-52.80	2.39978G	-50.96	2.4G	-52.26	2.49832G	-50.65	16.24043G	-40.20	1
2440MHz	Pass	2.44012G	9.47	-10.53	1.86535G	-52.73	2.39345G	-51.69	2.4835G	-53.75	2.48537G	-50.83	14.68254G	-40.42	1
2480MHz	Pass	2.48008G	8.38	-11.62	2.14735G	-51.59	2.39136G	-51.10	2.4835G	-51.16	2.48984G	-50.54	24.44321G	-40.22	1
BT-EDR(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.40213G	8.37	-11.63	2.00988G	-51.77	2.4G	-50.75	2.4G	-51.41	2.48758G	-51.07	23.43087G	-40.59	1
2440MHz	Pass	2.43995G	9.27	-10.73	2.30333G	-53.39	2.39612G	-51.41	2.4835G	-54.13	2.4943G	-50.69	15.33494G	-39.43	1
2480MHz	Pass	2.48016G	8.68	-11.32	2.00782G	-52.81	2.39816G	-52.32	2.4835G	-52.14	2.50239G	-50.57	23.40275G	-39.09	1
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.40184G	5.72	-14.28	2.07186G	-51.85	2.39988G	-49.65	2.4G	-51.87	2.48602G	-50.71	23.43649G	-39.67	1
2440MHz	Pass	2.43983G	6.86	-13.14	2.13443G	-52.51	2.39739G	-51.98	2.4835G	-53.40	2.49275G	-50.76	23.40556G	-39.07	1
2480MHz	Pass	2.48003G	4.97	-15.03	2.0698G	-52.71	2.39959G	-51.50	2.4835G	-53.00	2.48918G	-51.30	23.40837G	-39.90	1

BT-BR(1Mbps) **CSENdB-FS**

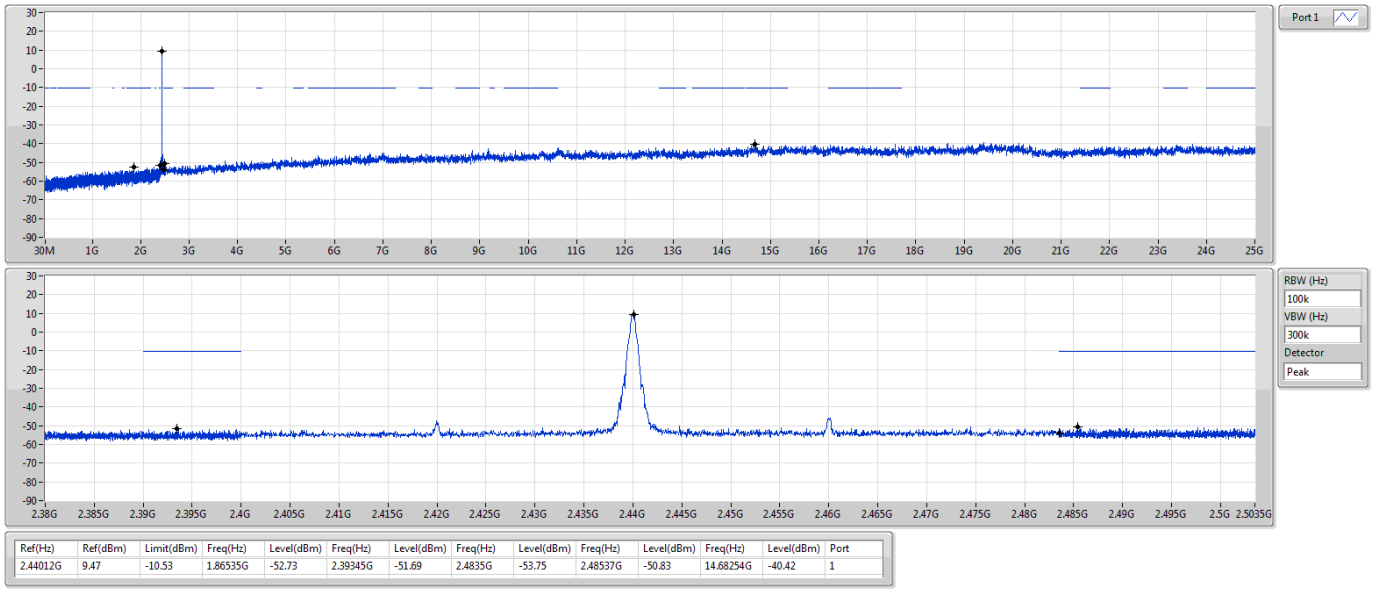
2402MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.40217G	8.44	-11.56	2.19641G	-52.80	2.39978G	-50.96	2.4G	-52.26	2.49832G	-50.65	16.24043G	-40.20	1

BT-BR(1Mbps) **CSENdB-FS**

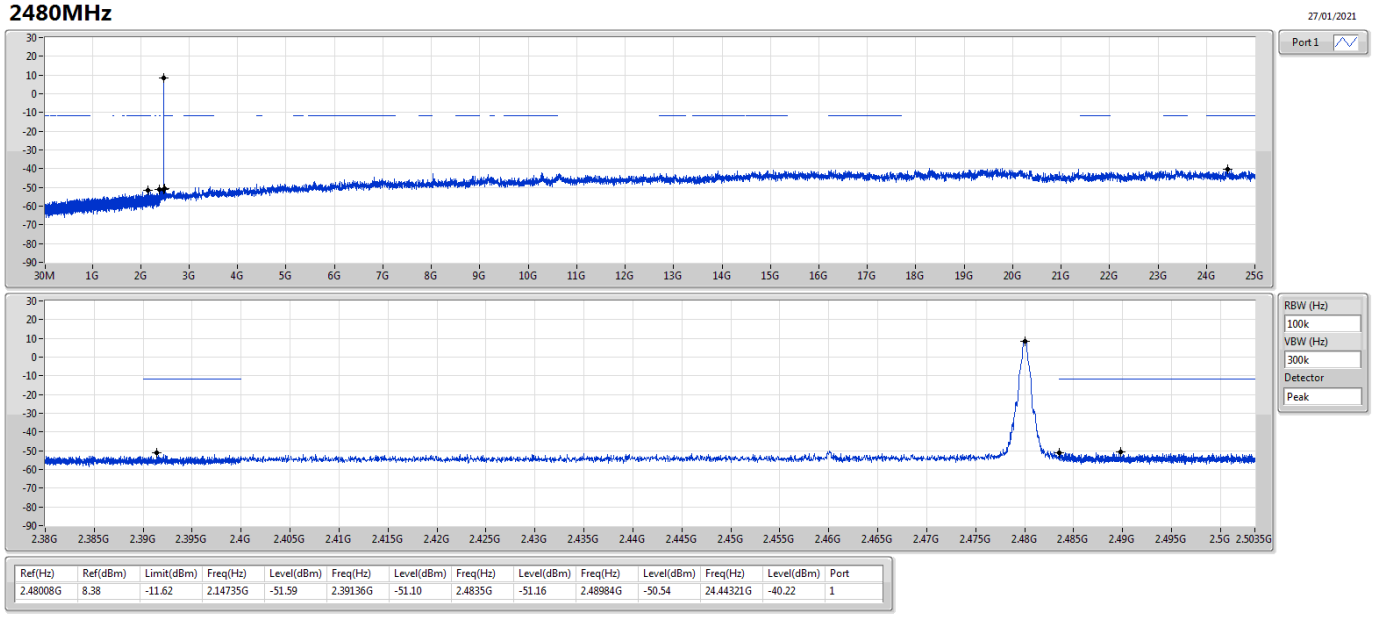
2440MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.44012G	9.47	-10.53	1.86535G	-52.73	2.39345G	-51.69	2.4835G	-53.75	2.48537G	-50.83	14.68254G	-40.42	1

BT-BR(1Mbps) **CSENdB-FS**

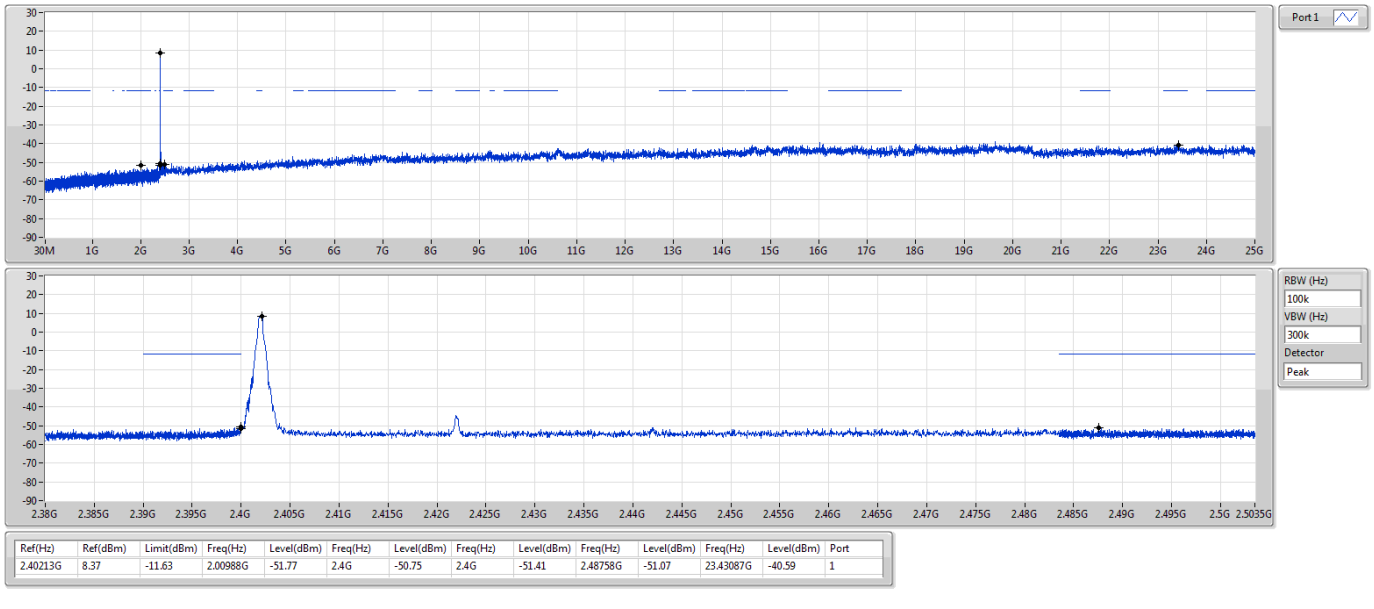
2480MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.48008G	8.38	-11.62	2.14735G	-51.59	2.39136G	-51.10	2.4835G	-51.16	2.48984G	-50.54	24.44321G	-40.22	1

BT-EDR(2Mbps) **CSENdB-FS**

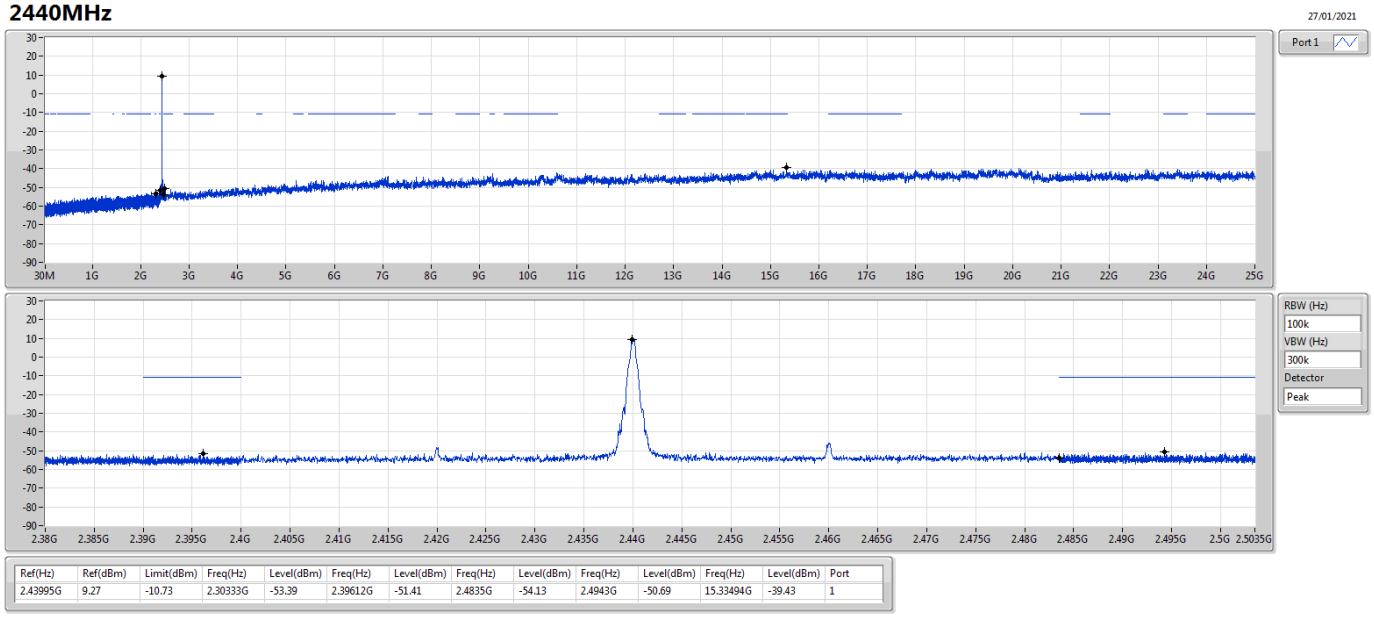
2402MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.40213G	8.37	-11.63	2.00988G	-51.77	2.4G	-50.75	2.4G	-51.41	2.48758G	-51.07	23.43087G	-40.59	1

BT-EDR(2Mbps) **CSENdB-FS**

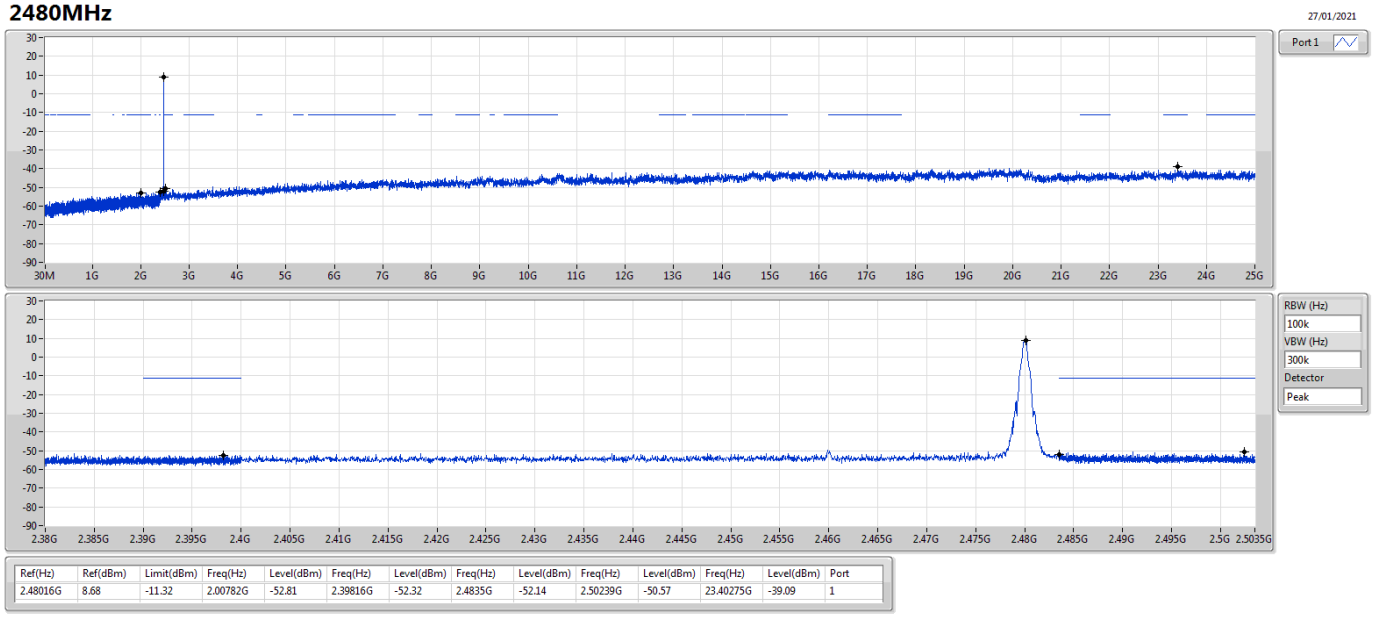
2440MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43995G	9.27	-10.73	2.30333G	-53.39	2.39612G	-51.41	2.4835G	-54.13	2.4943G	-50.69	15.33494G	-39.43	1

BT-EDR(2Mbps) **CSENdB-FS**

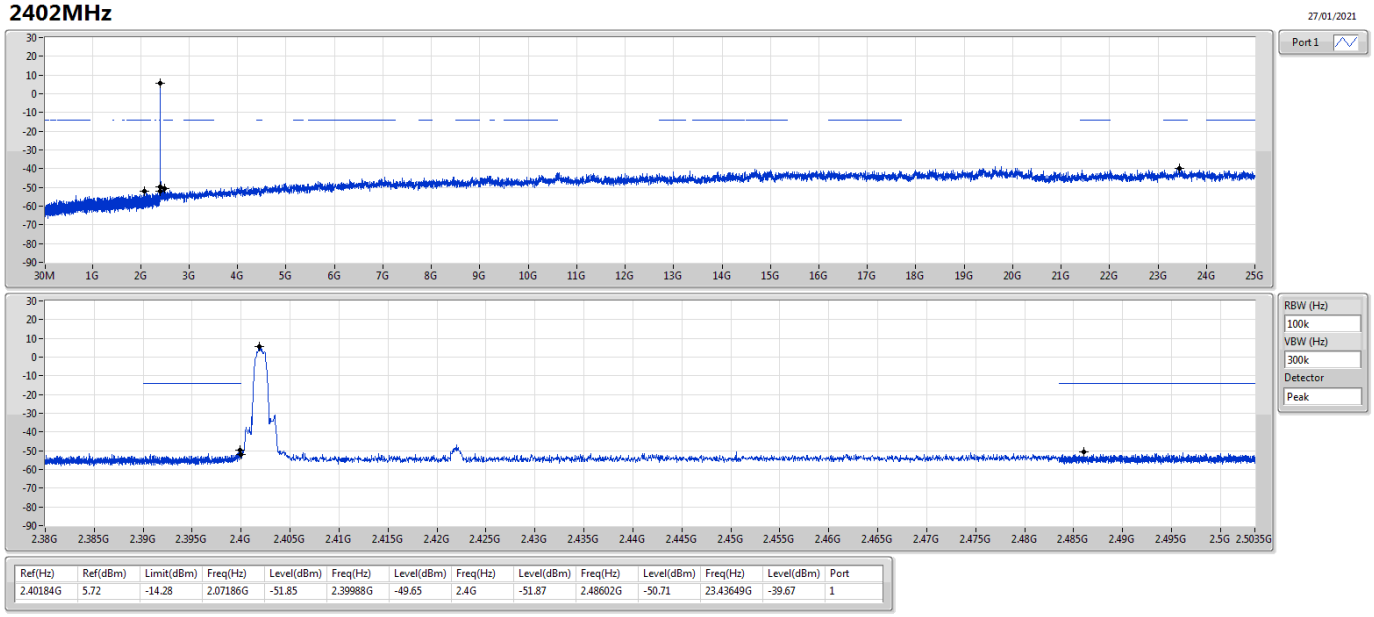
2480MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.48016G	8.68	-11.32	2.00782G	-52.81	2.39816G	-52.32	2.4835G	-52.14	2.50239G	-50.57	23.40275G	-39.09	1

BT-EDR(3Mbps) **CSENdB-FS**

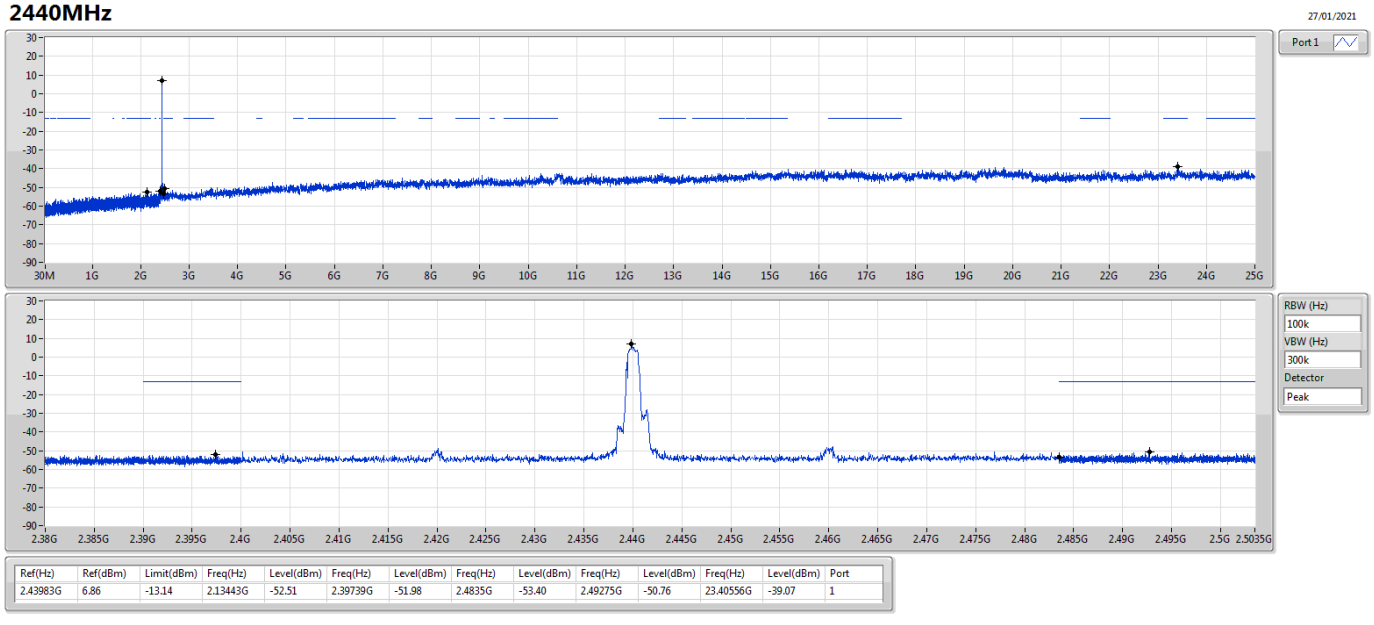
2402MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.40184G	5.72	-14.28	2.07186G	-51.85	2.39988G	-49.65	2.4G	-51.87	2.48602G	-50.71	23.43649G	-39.67	1

BT-EDR(3Mbps) **CSENdB-FS**

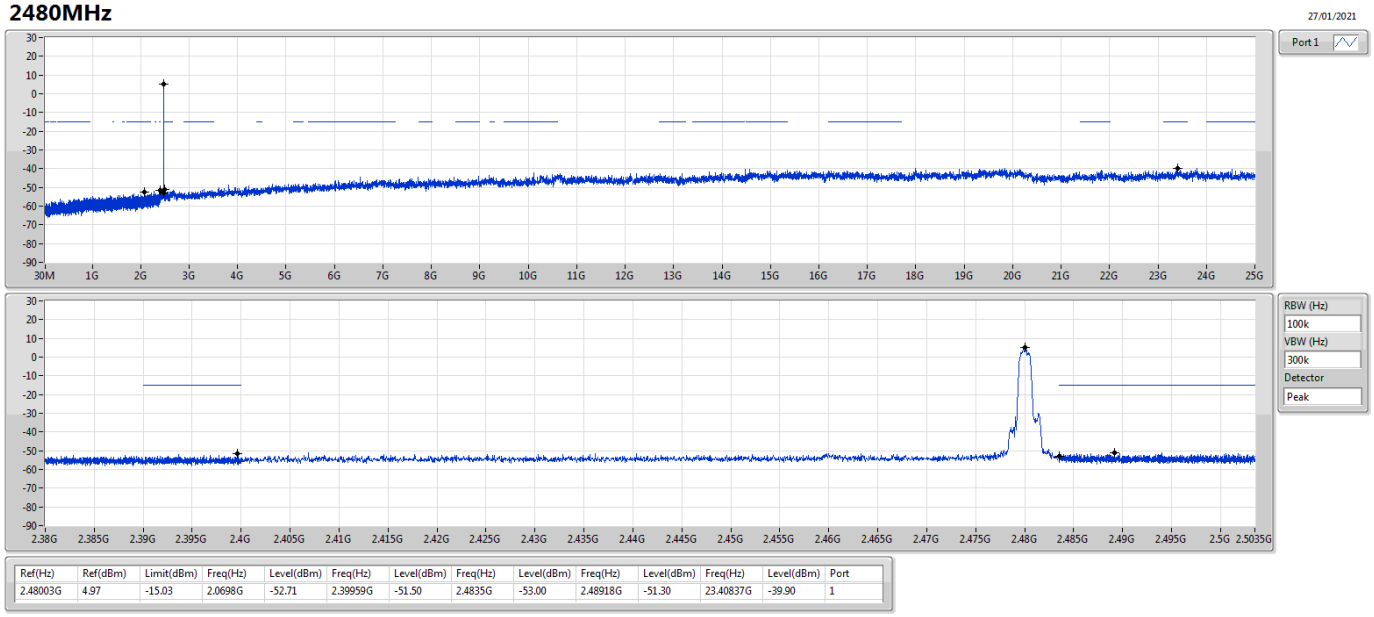
2440MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43983G	6.86	-13.14	2.13443G	-52.51	2.39739G	-51.98	2.4835G	-53.40	2.49275G	-50.76	23.40556G	-39.07	1

BT-EDR(3Mbps) **CSENdB-FS**

2480MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.48003G	4.97	-15.03	2.0698G	-52.71	2.39959G	-51.50	2.4835G	-53.00	2.48918G	-51.30	23.40837G	-39.90	1

Summary

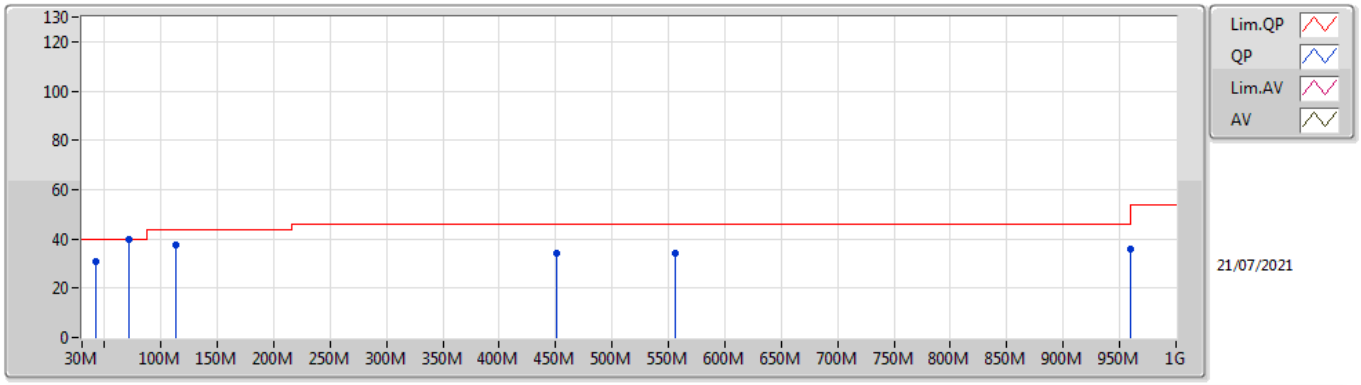
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
BT-BR(1Mbps)	Pass	QP	71.69M	39.87	40.00	-0.13	3	Vertical	173	1.10	-

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-BR(1Mbps)	-	-	-	-	-	-	-	-	-	-	-
2440MHz	Pass	PK	113.42M	37.77	43.50	-5.73	3	Vertical	0	1.00	-
2440MHz	Pass	PK	450.98M	33.96	46.00	-12.04	3	Vertical	0	1.00	-
2440MHz	Pass	PK	555.74M	34.20	46.00	-11.80	3	Vertical	0	1.00	-
2440MHz	Pass	PK	960M	35.79	46.00	-10.21	3	Vertical	0	1.00	-
2440MHz	Pass	QP	42.83M	30.95	40.00	-9.05	3	Vertical	179	1.05	-
2440MHz	Pass	QP	71.69M	39.87	40.00	-0.13	3	Vertical	173	1.10	-
2440MHz	Pass	PK	134.76M	39.79	43.50	-3.71	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	425.76M	38.38	46.00	-7.62	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	561.56M	39.43	46.00	-6.57	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	689.6M	37.03	46.00	-8.97	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	953.44M	34.10	46.00	-11.90	3	Horizontal	360	1.00	-
2440MHz	Pass	QP	79.23M	39.53	40.00	-0.47	3	Horizontal	0	2.14	-

BT-BR(1Mbps)

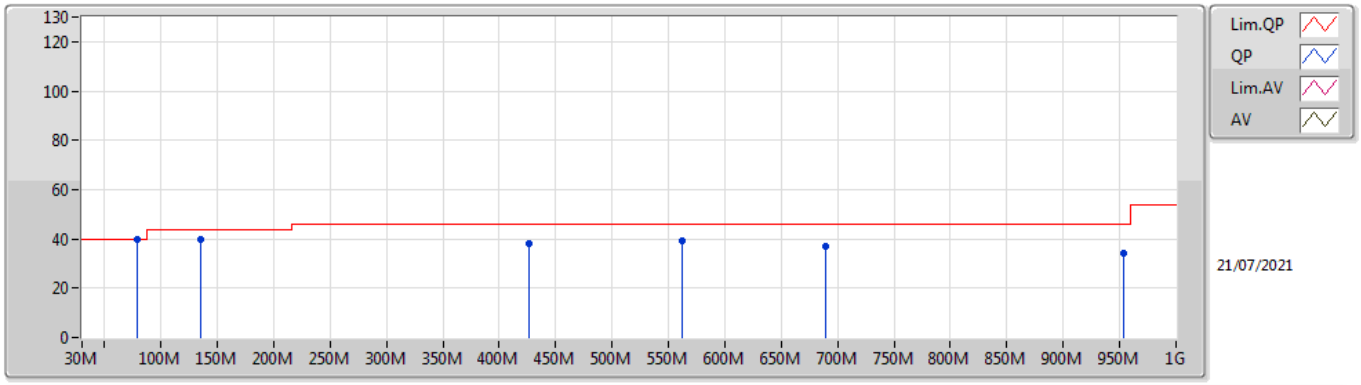
2440MHz_Adapter



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	113.42M	37.77	43.50	-5.73	-19.21	3	Vertical	0	1.00	-	56.98	16.41	1.04	36.66
PK	450.98M	33.96	46.00	-12.04	-12.08	3	Vertical	0	1.00	-	46.04	22.45	2.10	36.63
PK	555.74M	34.20	46.00	-11.80	-9.57	3	Vertical	0	1.00	-	43.77	25.12	2.39	37.08
PK	960M	35.79	46.00	-10.21	-4.11	3	Vertical	0	1.00	-	39.90	30.25	3.11	37.47
QP	42.83M	30.95	40.00	-9.05	-19.33	3	Vertical	179	1.05	-	50.28	16.98	0.76	37.07
QP	71.69M	39.87	40.00	-0.13	-24.66	3	Vertical	173	1.10	-	64.53	11.45	0.85	36.96

BT-BR(1Mbps)

2440MHz_Adapter



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	134.76M	39.79	43.50	-3.71	-18.53	3	Horizontal	360	1.00	-	58.32	16.80	1.15	36.48
PK	425.76M	38.38	46.00	-7.62	-12.47	3	Horizontal	360	1.00	-	50.85	22.12	2.01	36.60
PK	561.56M	39.43	46.00	-6.57	-9.30	3	Horizontal	360	1.00	-	48.73	25.39	2.40	37.09
PK	689.6M	37.03	46.00	-8.97	-8.97	3	Horizontal	360	1.00	-	46.00	25.64	2.67	37.28
PK	953.44M	34.10	46.00	-11.90	-4.32	3	Horizontal	360	1.00	-	38.42	30.12	3.10	37.54
QP	79.23M	39.53	40.00	-0.47	-23.67	3	Horizontal	0	2.14	-	63.20	12.31	0.89	36.87

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	2.367G	56.92	74.00	-17.08	3	Vertical	212	1.50	-
BT-EDR(3Mbps)	Pass	PK	2.4908G	57.10	74.00	-16.90	3	Vertical	212	1.38	-

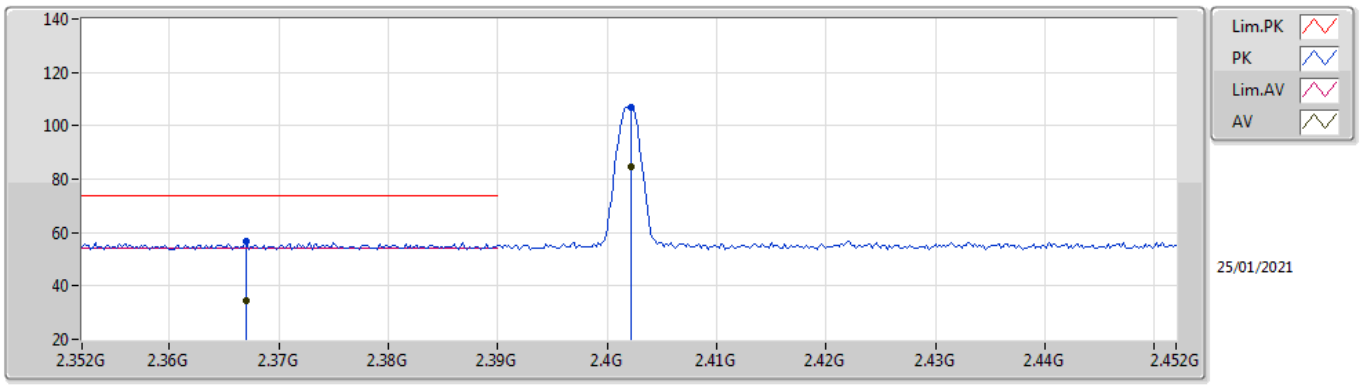
Result

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	2.367G	34.42	54.00	-19.58	3	Vertical	212	1.50	-
2402MHz	Pass	AV	2.4022G	84.42	Inf	-Inf	3	Vertical	212	1.50	-
2402MHz	Pass	PK	2.367G	56.92	74.00	-17.08	3	Vertical	212	1.50	-
2402MHz	Pass	PK	2.4022G	106.92	Inf	-Inf	3	Vertical	212	1.50	-
2402MHz	Pass	AV	2.3756G	33.62	54.00	-20.38	3	Horizontal	106	1.24	-
2402MHz	Pass	AV	2.4022G	75.55	Inf	-Inf	3	Horizontal	106	1.24	-
2402MHz	Pass	PK	2.3756G	56.12	74.00	-17.88	3	Horizontal	106	1.24	-
2402MHz	Pass	PK	2.4022G	98.05	Inf	-Inf	3	Horizontal	106	1.24	-
2402MHz	Pass	AV	4.80349G	20.92	54.00	-33.08	3	Vertical	161	1.50	-
2402MHz	Pass	PK	4.80349G	43.42	74.00	-30.58	3	Vertical	161	1.50	-
2402MHz	Pass	AV	4.80424G	20.85	54.00	-33.15	3	Horizontal	207	1.50	-
2402MHz	Pass	PK	4.80424G	43.35	74.00	-30.65	3	Horizontal	207	1.50	-
2440MHz	Pass	AV	2.3624G	33.85	54.00	-20.15	3	Vertical	211	1.38	-
2440MHz	Pass	AV	2.44G	86.69	Inf	-Inf	3	Vertical	211	1.38	-
2440MHz	Pass	AV	2.498G	33.56	54.00	-20.44	3	Vertical	211	1.38	-
2440MHz	Pass	PK	2.3624G	56.35	74.00	-17.65	3	Vertical	211	1.38	-
2440MHz	Pass	PK	2.44G	109.19	Inf	-Inf	3	Vertical	211	1.38	-
2440MHz	Pass	PK	2.498G	56.06	74.00	-17.94	3	Vertical	211	1.38	-
2440MHz	Pass	AV	2.39G	33.66	54.00	-20.34	3	Horizontal	106	1.24	-
2440MHz	Pass	AV	2.44G	77.87	Inf	-Inf	3	Horizontal	106	1.24	-
2440MHz	Pass	AV	2.4964G	33.86	54.00	-20.14	3	Horizontal	106	1.24	-
2440MHz	Pass	PK	2.39G	56.16	74.00	-17.84	3	Horizontal	106	1.24	-
2440MHz	Pass	PK	2.44G	100.37	Inf	-Inf	3	Horizontal	106	1.24	-
2440MHz	Pass	PK	2.4964G	56.36	74.00	-17.64	3	Horizontal	106	1.24	-
2440MHz	Pass	AV	4.87972G	21.57	54.00	-32.43	3	Vertical	206	1.12	-
2440MHz	Pass	PK	4.87972G	44.07	74.00	-29.93	3	Vertical	206	1.12	-
2440MHz	Pass	AV	4.87923G	20.08	54.00	-33.92	3	Horizontal	321	1.62	-
2440MHz	Pass	PK	4.87923G	42.58	74.00	-31.42	3	Horizontal	321	1.62	-
2480MHz	Pass	AV	2.4798G	85.74	Inf	-Inf	3	Vertical	208	1.50	-
2480MHz	Pass	AV	2.4928G	33.95	54.00	-20.05	3	Vertical	208	1.50	-
2480MHz	Pass	PK	2.4798G	108.24	Inf	-Inf	3	Vertical	208	1.50	-
2480MHz	Pass	PK	2.4928G	56.45	74.00	-17.55	3	Vertical	208	1.50	-
2480MHz	Pass	AV	2.4798G	75.48	Inf	-Inf	3	Horizontal	107	1.25	-
2480MHz	Pass	AV	2.4848G	34.23	54.00	-19.77	3	Horizontal	107	1.25	-
2480MHz	Pass	PK	2.4798G	97.98	Inf	-Inf	3	Horizontal	107	1.25	-
2480MHz	Pass	PK	2.4848G	56.73	74.00	-17.27	3	Horizontal	107	1.25	-
2480MHz	Pass	AV	4.95978G	21.04	54.00	-32.96	3	Vertical	178	1.46	-
2480MHz	Pass	PK	4.95978G	43.54	74.00	-30.46	3	Vertical	178	1.46	-
2480MHz	Pass	AV	4.95948G	20.99	54.00	-33.01	3	Horizontal	147	1.50	-
2480MHz	Pass	PK	4.95948G	43.49	74.00	-30.51	3	Horizontal	147	1.50	-
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3566G	33.61	54.00	-20.39	3	Vertical	214	1.16	-
2402MHz	Pass	AV	2.402G	83.34	Inf	-Inf	3	Vertical	214	1.16	-
2402MHz	Pass	PK	2.3566G	56.11	74.00	-17.89	3	Vertical	214	1.16	-
2402MHz	Pass	PK	2.402G	105.84	Inf	-Inf	3	Vertical	214	1.16	-
2402MHz	Pass	AV	2.372G	34.01	54.00	-19.99	3	Horizontal	108	1.00	-
2402MHz	Pass	AV	2.402G	73.79	Inf	-Inf	3	Horizontal	108	1.00	-
2402MHz	Pass	PK	2.372G	56.51	74.00	-17.49	3	Horizontal	108	1.00	-
2402MHz	Pass	PK	2.402G	96.29	Inf	-Inf	3	Horizontal	108	1.00	-
2402MHz	Pass	AV	4.80315G	21.10	54.00	-32.90	3	Vertical	29	1.50	-
2402MHz	Pass	PK	4.80315G	43.60	74.00	-30.40	3	Vertical	29	1.50	-
2402MHz	Pass	AV	4.80379G	20.68	54.00	-33.32	3	Horizontal	231	1.50	-
2402MHz	Pass	PK	4.80379G	43.18	74.00	-30.82	3	Horizontal	231	1.50	-
2440MHz	Pass	AV	2.366G	34.56	54.00	-19.44	3	Vertical	212	1.38	-
2440MHz	Pass	AV	2.44G	85.00	Inf	-Inf	3	Vertical	212	1.38	-
2440MHz	Pass	AV	2.4908G	34.60	54.00	-19.40	3	Vertical	212	1.38	-
2440MHz	Pass	PK	2.366G	57.06	74.00	-16.94	3	Vertical	212	1.38	-
2440MHz	Pass	PK	2.44G	107.50	Inf	-Inf	3	Vertical	212	1.38	-
2440MHz	Pass	PK	2.4908G	57.10	74.00	-16.90	3	Vertical	212	1.38	-
2440MHz	Pass	AV	2.3424G	33.99	54.00	-20.01	3	Horizontal	106	1.25	-

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2440MHz	Pass	AV	2.44G	76.29	Inf	-Inf	3	Horizontal	106	1.25	-
2440MHz	Pass	AV	2.4944G	33.50	54.00	-20.50	3	Horizontal	106	1.25	-
2440MHz	Pass	PK	2.3424G	56.49	74.00	-17.51	3	Horizontal	106	1.25	-
2440MHz	Pass	PK	2.44G	98.79	Inf	-Inf	3	Horizontal	106	1.25	-
2440MHz	Pass	PK	2.4944G	56.00	74.00	-18.00	3	Horizontal	106	1.25	-
2440MHz	Pass	AV	4.88007G	20.82	54.00	-33.18	3	Vertical	207	1.19	-
2440MHz	Pass	PK	4.88007G	43.32	74.00	-30.68	3	Vertical	207	1.19	-
2440MHz	Pass	AV	4.8796G	21.19	54.00	-32.81	3	Horizontal	8	1.50	-
2440MHz	Pass	PK	4.8796G	43.69	74.00	-30.31	3	Horizontal	8	1.50	-
2480MHz	Pass	AV	2.48G	83.14	Inf	-Inf	3	Vertical	210	1.50	-
2480MHz	Pass	AV	2.4962G	34.29	54.00	-19.71	3	Vertical	210	1.50	-
2480MHz	Pass	PK	2.48G	105.64	Inf	-Inf	3	Vertical	210	1.50	-
2480MHz	Pass	PK	2.4962G	56.79	74.00	-17.21	3	Vertical	210	1.50	-
2480MHz	Pass	AV	2.48G	73.22	Inf	-Inf	3	Horizontal	107	1.24	-
2480MHz	Pass	AV	2.4942G	33.68	54.00	-20.32	3	Horizontal	107	1.24	-
2480MHz	Pass	PK	2.48G	95.72	Inf	-Inf	3	Horizontal	107	1.24	-
2480MHz	Pass	PK	2.4942G	56.18	74.00	-17.82	3	Horizontal	107	1.24	-
2480MHz	Pass	AV	4.95907G	21.27	54.00	-32.73	3	Vertical	229	1.50	-
2480MHz	Pass	PK	4.95907G	43.77	74.00	-30.23	3	Vertical	229	1.50	-
2480MHz	Pass	AV	4.96095G	20.70	54.00	-33.30	3	Horizontal	303	2.54	-
2480MHz	Pass	PK	4.96095G	43.20	74.00	-30.80	3	Horizontal	303	2.54	-

BT-BR(1Mbps)

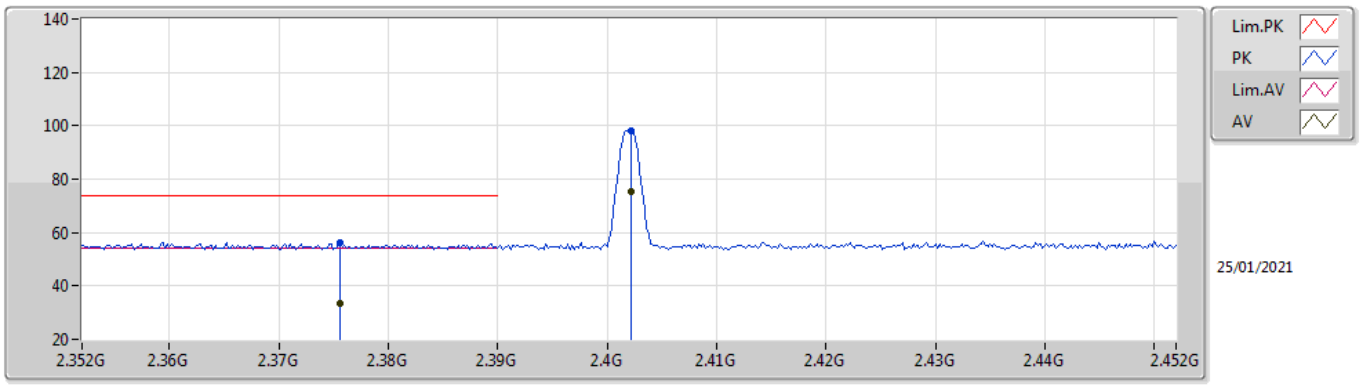
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.367G	34.42	54.00	-19.58	31.58	3	Vertical	212	1.50	-	2.84	27.73	3.85	-
AV	2.4022G	84.42	Inf	-Inf	31.50	3	Vertical	212	1.50	-	52.92	27.60	3.90	-
PK	2.367G	56.92	74.00	-17.08	31.58	3	Vertical	212	1.50	-	25.34	27.73	3.85	-
PK	2.4022G	106.92	Inf	-Inf	31.50	3	Vertical	212	1.50	-	75.42	27.60	3.90	-

BT-BR(1Mbps)

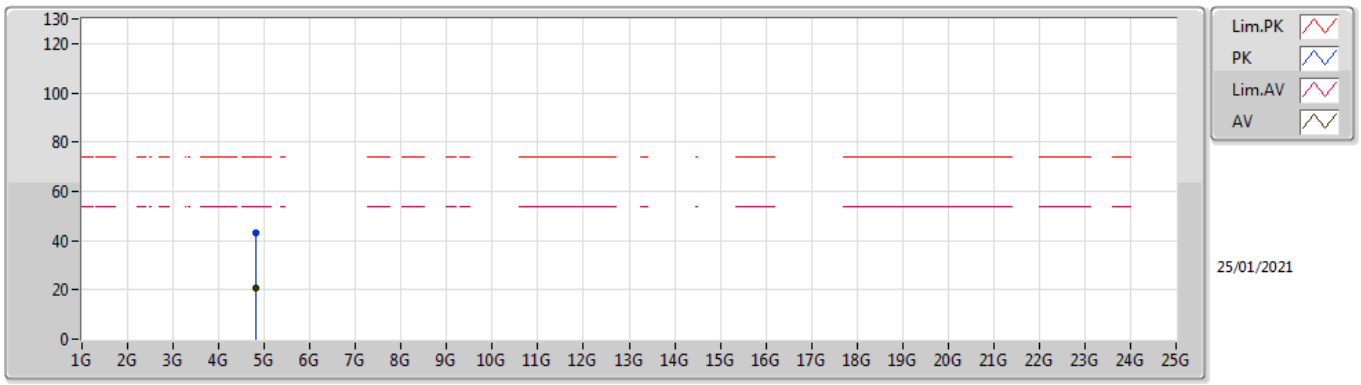
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3756G	33.62	54.00	-20.38	31.56	3	Horizontal	106	1.24	-	2.06	27.70	3.86	-
AV	2.4022G	75.55	Inf	-Inf	31.50	3	Horizontal	106	1.24	-	44.05	27.60	3.90	-
PK	2.3756G	56.12	74.00	-17.88	31.56	3	Horizontal	106	1.24	-	24.56	27.70	3.86	-
PK	2.4022G	98.05	Inf	-Inf	31.50	3	Horizontal	106	1.24	-	66.55	27.60	3.90	-

BT-BR(1Mbps)

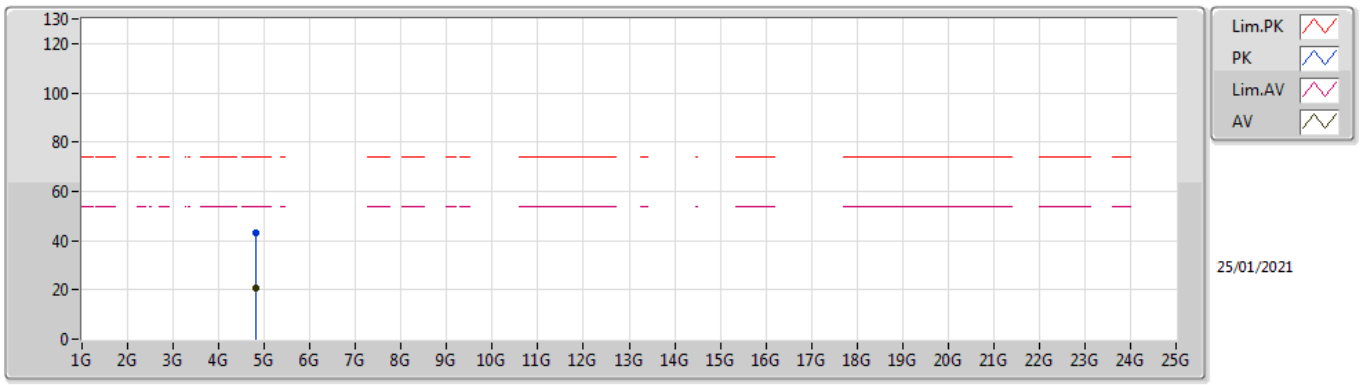
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.80349G	20.92	54.00	-33.08	1.48	3	Vertical	161	1.50	-	19.44	31.11	5.30	34.93
PK	4.80349G	43.42	74.00	-30.58	1.48	3	Vertical	161	1.50	-	41.94	31.11	5.30	34.93

BT-BR(1Mbps)

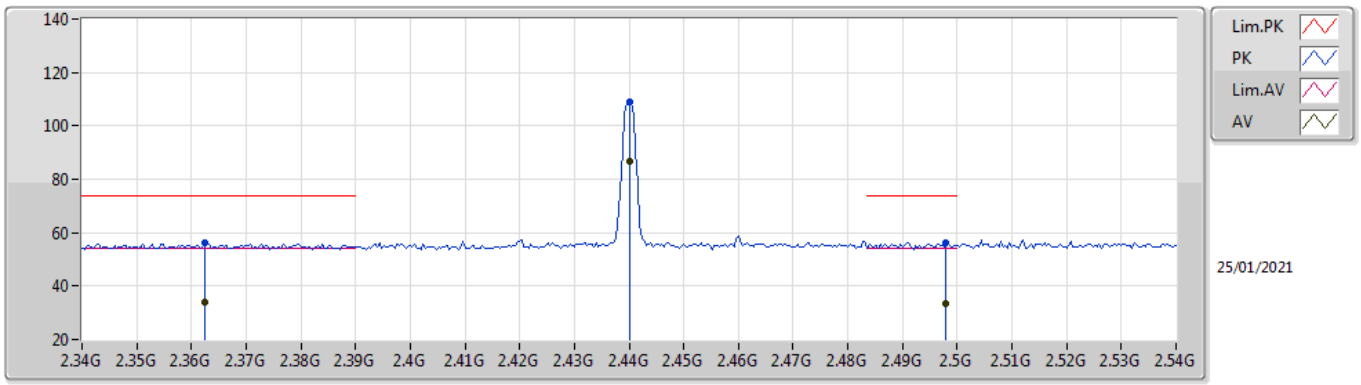
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.80424G	20.85	54.00	-33.15	1.49	3	Horizontal	207	1.50	-	19.36	31.12	5.30	34.93
PK	4.80424G	43.35	74.00	-30.65	1.49	3	Horizontal	207	1.50	-	41.86	31.12	5.30	34.93

BT-BR(1Mbps)

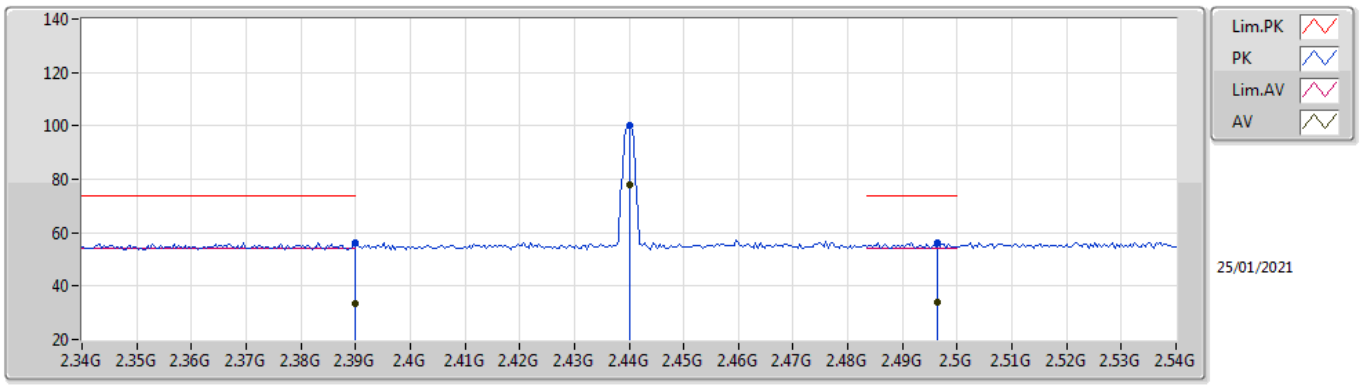
2440MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3624G	33.85	54.00	-20.15	31.59	3	Vertical	211	1.38	-	2.26	27.75	3.84	-
AV	2.44G	86.69	Inf	-Inf	31.56	3	Vertical	211	1.38	-	55.13	27.60	3.96	-
AV	2.498G	33.56	54.00	-20.44	31.65	3	Vertical	211	1.38	-	1.91	27.60	4.05	-
PK	2.3624G	56.35	74.00	-17.65	31.59	3	Vertical	211	1.38	-	24.76	27.75	3.84	-
PK	2.44G	109.19	Inf	-Inf	31.56	3	Vertical	211	1.38	-	77.63	27.60	3.96	-
PK	2.498G	56.06	74.00	-17.94	31.65	3	Vertical	211	1.38	-	24.41	27.60	4.05	-

BT-BR(1Mbps)

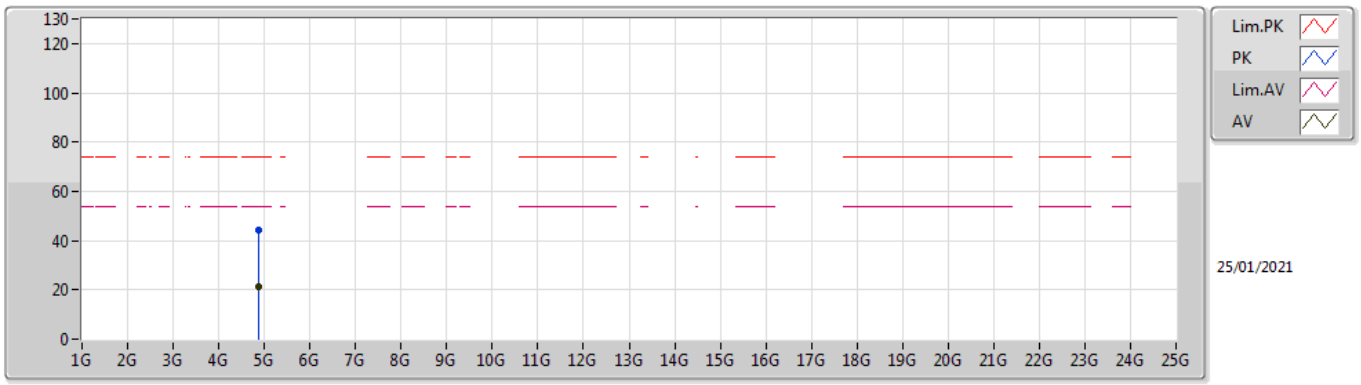
2440MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.39G	33.66	54.00	-20.34	31.52	3	Horizontal	106	1.24	-	2.14	27.64	3.88	-
AV	2.44G	77.87	Inf	-Inf	31.56	3	Horizontal	106	1.24	-	46.31	27.60	3.96	-
AV	2.4964G	33.86	54.00	-20.14	31.64	3	Horizontal	106	1.24	-	2.22	27.60	4.04	-
PK	2.39G	56.16	74.00	-17.84	31.52	3	Horizontal	106	1.24	-	24.64	27.64	3.88	-
PK	2.44G	100.37	Inf	-Inf	31.56	3	Horizontal	106	1.24	-	68.81	27.60	3.96	-
PK	2.4964G	56.36	74.00	-17.64	31.64	3	Horizontal	106	1.24	-	24.72	27.60	4.04	-

BT-BR(1Mbps)

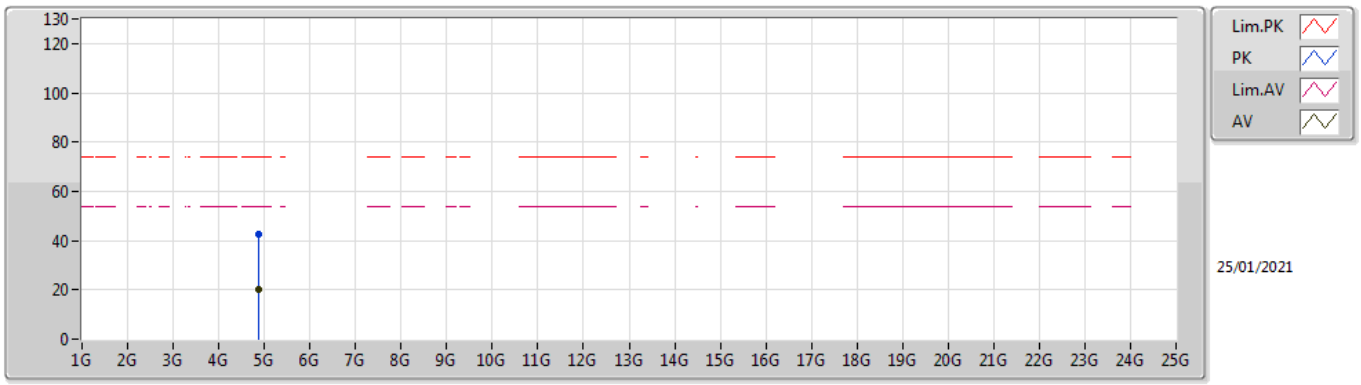
2440MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.87972G	21.57	54.00	-32.43	1.65	3	Vertical	206	1.12	-	19.92	31.24	5.34	34.93
PK	4.87972G	44.07	74.00	-29.93	1.65	3	Vertical	206	1.12	-	42.42	31.24	5.34	34.93

BT-BR(1Mbps)

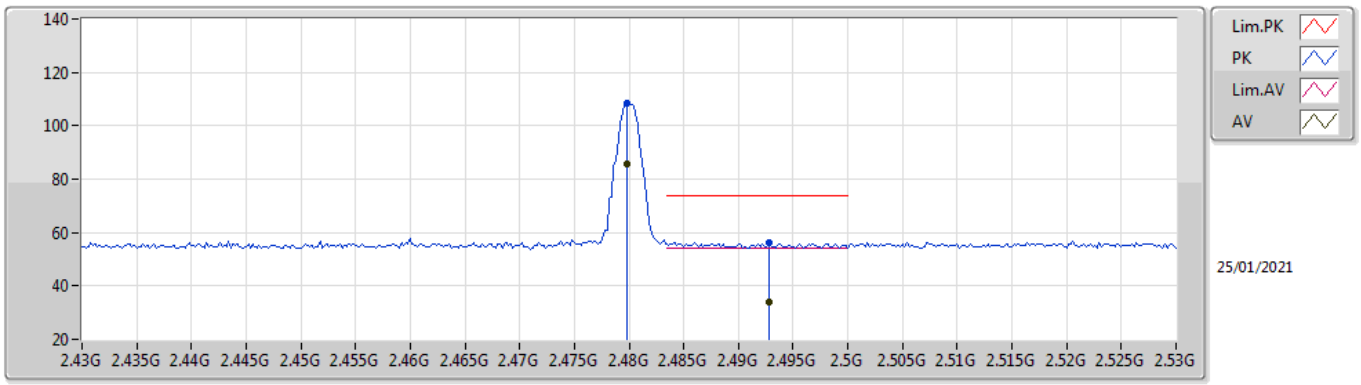
2440MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.87923G	20.08	54.00	-33.92	1.65	3	Horizontal	321	1.62	-	18.43	31.24	5.34	34.93
PK	4.87923G	42.58	74.00	-31.42	1.65	3	Horizontal	321	1.62	-	40.93	31.24	5.34	34.93

BT-BR(1Mbps)

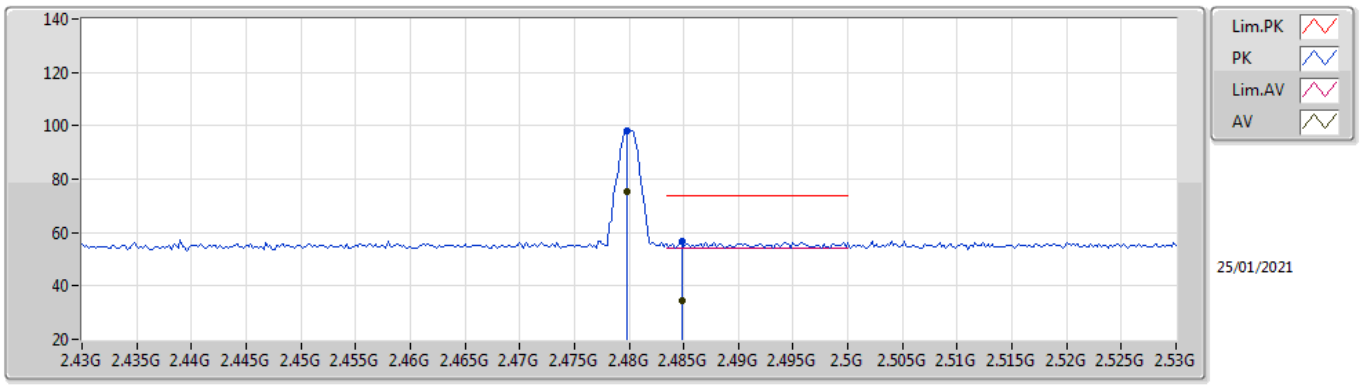
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.4798G	85.74	Inf	-Inf	31.62	3	Vertical	208	1.50	-	54.12	27.60	4.02	-
AV	2.4928G	33.95	54.00	-20.05	31.64	3	Vertical	208	1.50	-	2.31	27.60	4.04	-
PK	2.4798G	108.24	Inf	-Inf	31.62	3	Vertical	208	1.50	-	76.62	27.60	4.02	-
PK	2.4928G	56.45	74.00	-17.55	31.64	3	Vertical	208	1.50	-	24.81	27.60	4.04	-

BT-BR(1Mbps)

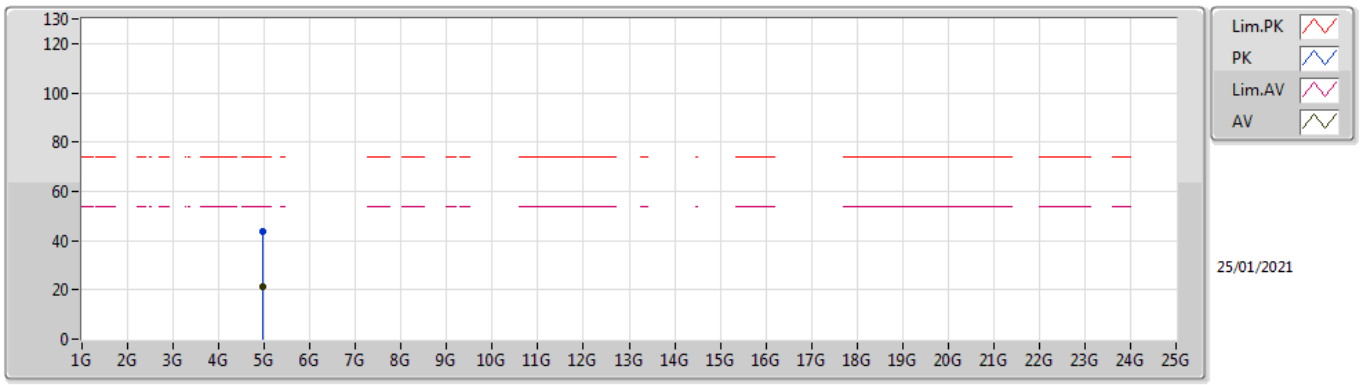
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.4798G	75.48	Inf	-Inf	31.62	3	Horizontal	107	1.25	-	43.86	27.60	4.02	-
AV	2.4848G	34.23	54.00	-19.77	31.63	3	Horizontal	107	1.25	-	2.60	27.60	4.03	-
PK	2.4798G	97.98	Inf	-Inf	31.62	3	Horizontal	107	1.25	-	66.36	27.60	4.02	-
PK	2.4848G	56.73	74.00	-17.27	31.63	3	Horizontal	107	1.25	-	25.10	27.60	4.03	-

BT-BR(1Mbps)

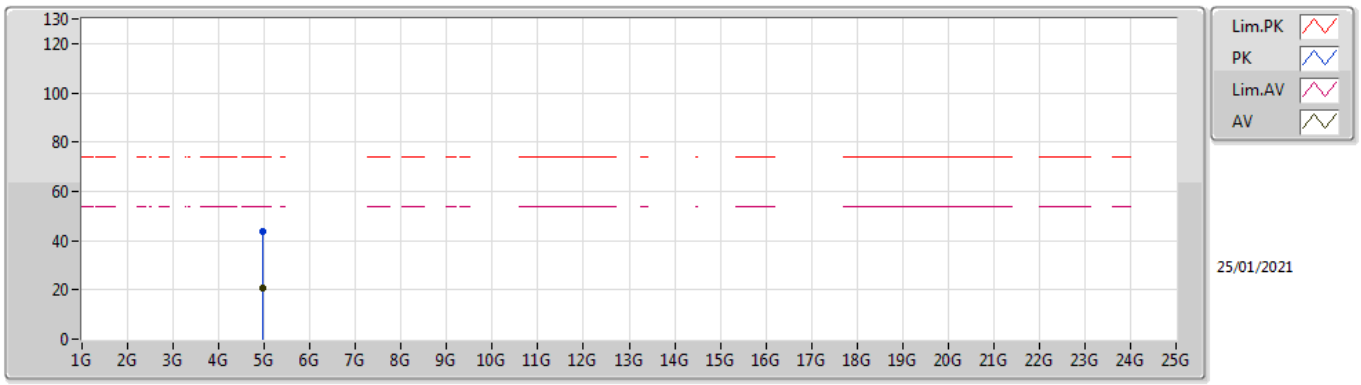
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.95978G	21.04	54.00	-32.96	1.86	3	Vertical	178	1.46	-	19.18	31.42	5.38	34.94
PK	4.95978G	43.54	74.00	-30.46	1.86	3	Vertical	178	1.46	-	41.68	31.42	5.38	34.94

BT-BR(1Mbps)

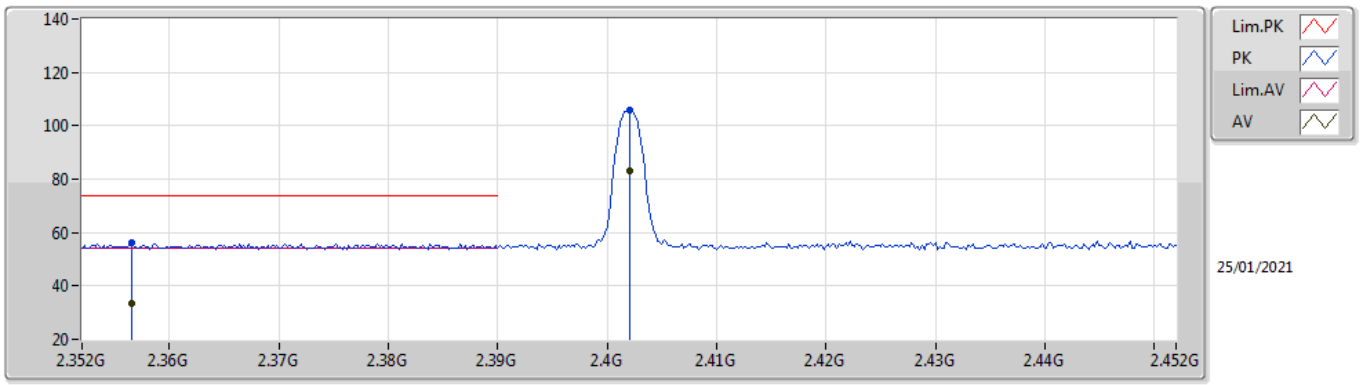
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.95948G	20.99	54.00	-33.01	1.86	3	Horizontal	147	1.50	-	19.13	31.42	5.38	34.94
PK	4.95948G	43.49	74.00	-30.51	1.86	3	Horizontal	147	1.50	-	41.63	31.42	5.38	34.94

BT-EDR(3Mbps)

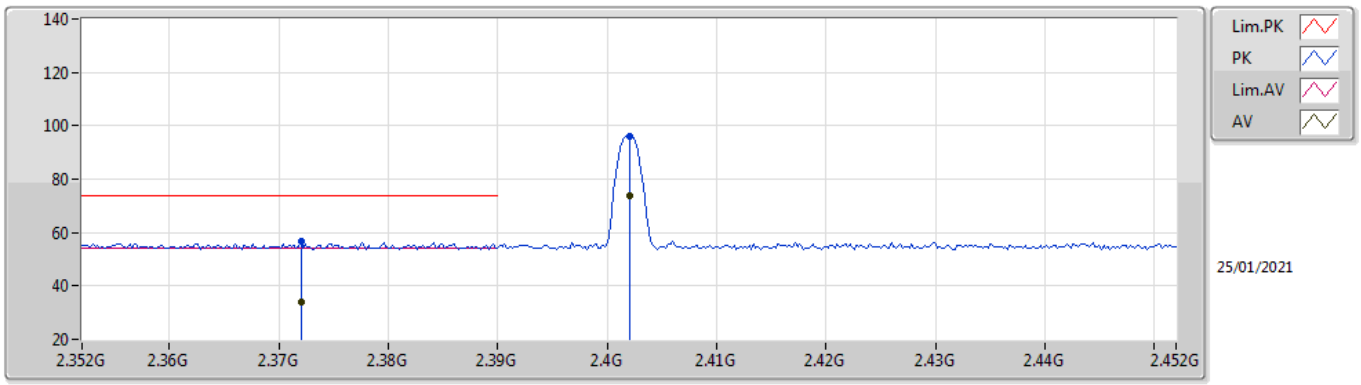
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3566G	33.61	54.00	-20.39	31.60	3	Vertical	214	1.16	-	2.01	27.77	3.83	-
AV	2.402G	83.34	Inf	-Inf	31.50	3	Vertical	214	1.16	-	51.84	27.60	3.90	-
PK	2.3566G	56.11	74.00	-17.89	31.60	3	Vertical	214	1.16	-	24.51	27.77	3.83	-
PK	2.402G	105.84	Inf	-Inf	31.50	3	Vertical	214	1.16	-	74.34	27.60	3.90	-

BT-EDR(3Mbps)

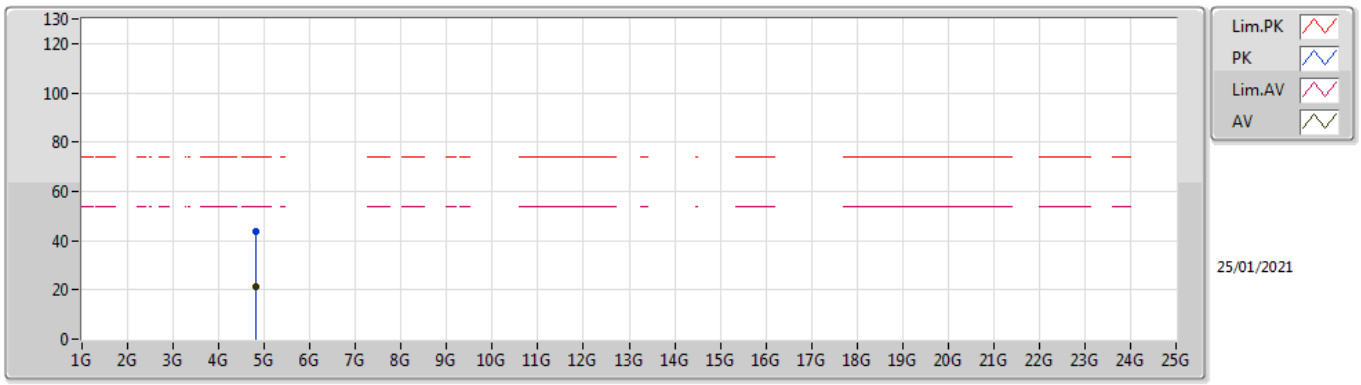
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.372G	34.01	54.00	-19.99	31.57	3	Horizontal	108	1.00	-	2.44	27.71	3.86	-
AV	2.402G	73.79	Inf	-Inf	31.50	3	Horizontal	108	1.00	-	42.29	27.60	3.90	-
PK	2.372G	56.51	74.00	-17.49	31.57	3	Horizontal	108	1.00	-	24.94	27.71	3.86	-
PK	2.402G	96.29	Inf	-Inf	31.50	3	Horizontal	108	1.00	-	64.79	27.60	3.90	-

BT-EDR(3Mbps)

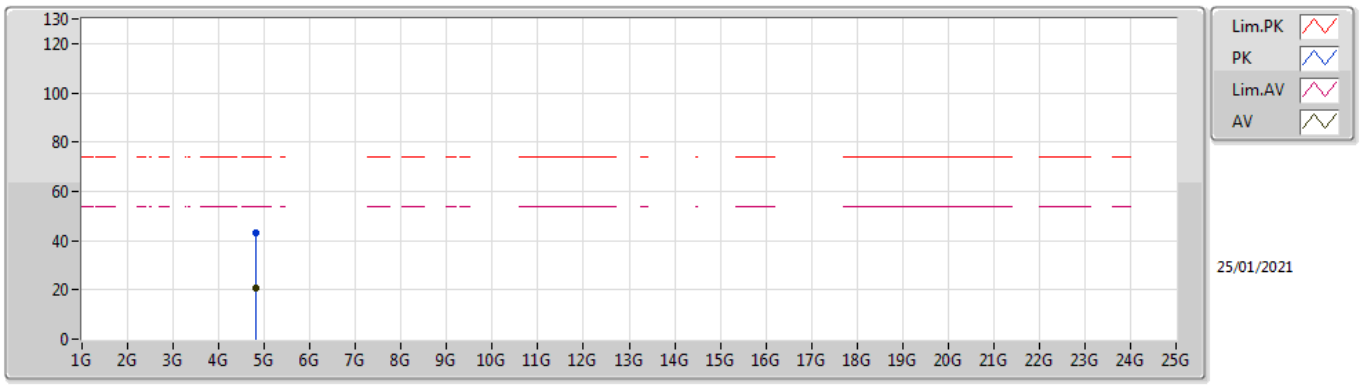
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.80315G	21.10	54.00	-32.90	1.48	3	Vertical	29	1.50	-	19.62	31.11	5.30	34.93
PK	4.80315G	43.60	74.00	-30.40	1.48	3	Vertical	29	1.50	-	42.12	31.11	5.30	34.93

BT-EDR(3Mbps)

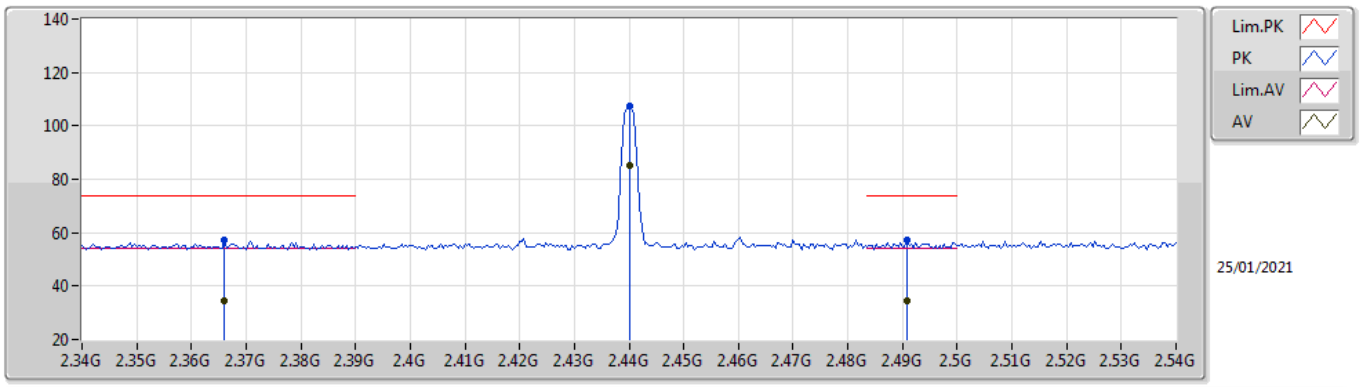
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.80379G	20.68	54.00	-33.32	1.49	3	Horizontal	231	1.50	-	19.19	31.12	5.30	34.93
PK	4.80379G	43.18	74.00	-30.82	1.49	3	Horizontal	231	1.50	-	41.69	31.12	5.30	34.93

BT-EDR(3Mbps)

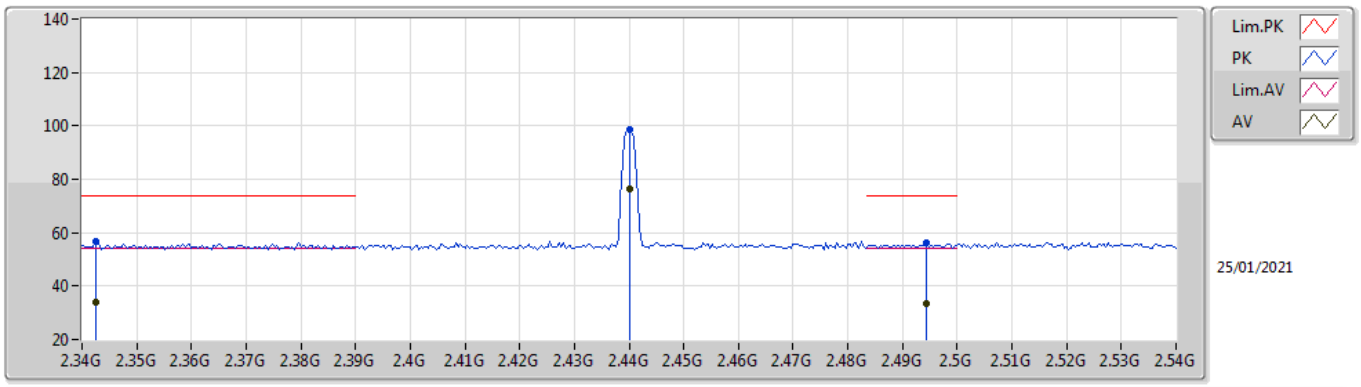
2440MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.366G	34.56	54.00	-19.44	31.59	3	Vertical	212	1.38	-	2.97	27.74	3.85	-
AV	2.44G	85.00	Inf	-Inf	31.56	3	Vertical	212	1.38	-	53.44	27.60	3.96	-
AV	2.4908G	34.60	54.00	-19.40	31.64	3	Vertical	212	1.38	-	2.96	27.60	4.04	-
PK	2.366G	57.06	74.00	-16.94	31.59	3	Vertical	212	1.38	-	25.47	27.74	3.85	-
PK	2.44G	107.50	Inf	-Inf	31.56	3	Vertical	212	1.38	-	75.94	27.60	3.96	-
PK	2.4908G	57.10	74.00	-16.90	31.64	3	Vertical	212	1.38	-	25.46	27.60	4.04	-

BT-EDR(3Mbps)

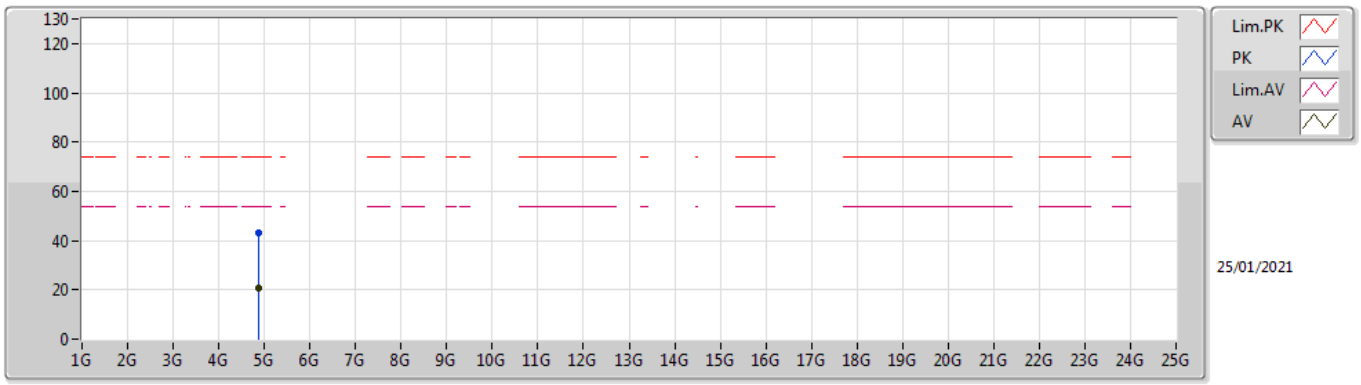
2440MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3424G	33.99	54.00	-20.01	31.63	3	Horizontal	106	1.25	-	2.36	27.82	3.81	-
AV	2.44G	76.29	Inf	-Inf	31.56	3	Horizontal	106	1.25	-	44.73	27.60	3.96	-
AV	2.4944G	33.50	54.00	-20.50	31.64	3	Horizontal	106	1.25	-	1.86	27.60	4.04	-
PK	2.3424G	56.49	74.00	-17.51	31.63	3	Horizontal	106	1.25	-	24.86	27.82	3.81	-
PK	2.44G	98.79	Inf	-Inf	31.56	3	Horizontal	106	1.25	-	67.23	27.60	3.96	-
PK	2.4944G	56.00	74.00	-18.00	31.64	3	Horizontal	106	1.25	-	24.36	27.60	4.04	-

BT-EDR(3Mbps)

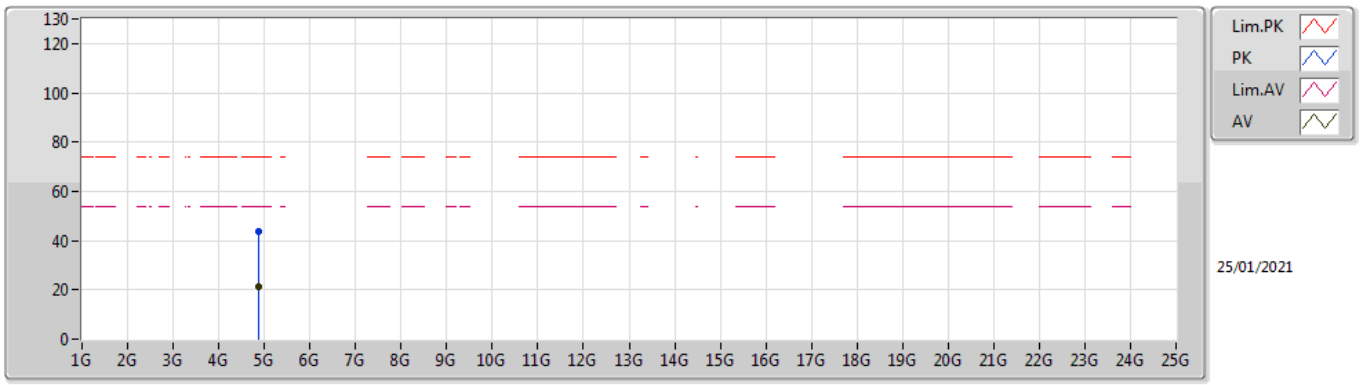
2440MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.88007G	20.82	54.00	-33.18	1.65	3	Vertical	207	1.19	-	19.17	31.24	5.34	34.93
PK	4.88007G	43.32	74.00	-30.68	1.65	3	Vertical	207	1.19	-	41.67	31.24	5.34	34.93

BT-EDR(3Mbps)

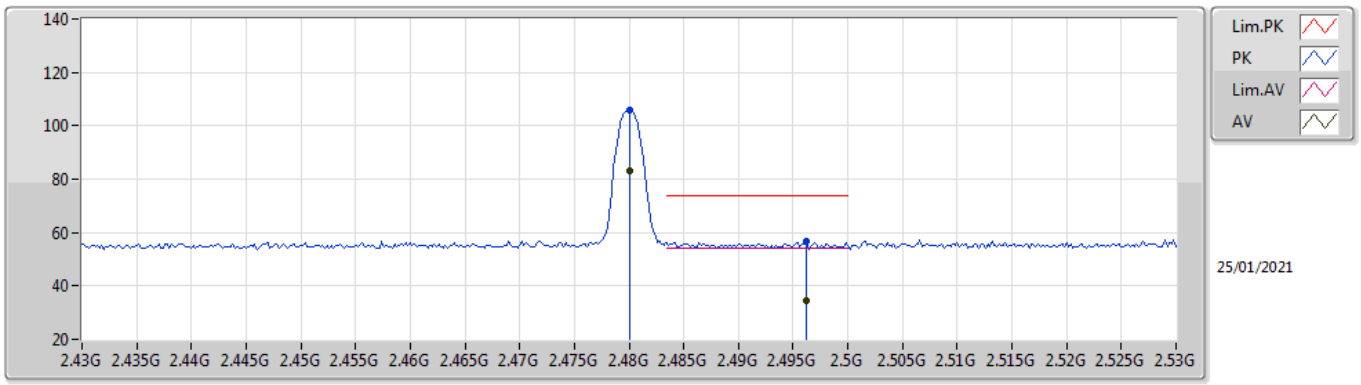
2440MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.8796G	21.19	54.00	-32.81	1.65	3	Horizontal	8	1.50	-	19.54	31.24	5.34	34.93
PK	4.8796G	43.69	74.00	-30.31	1.65	3	Horizontal	8	1.50	-	42.04	31.24	5.34	34.93

BT-EDR(3Mbps)

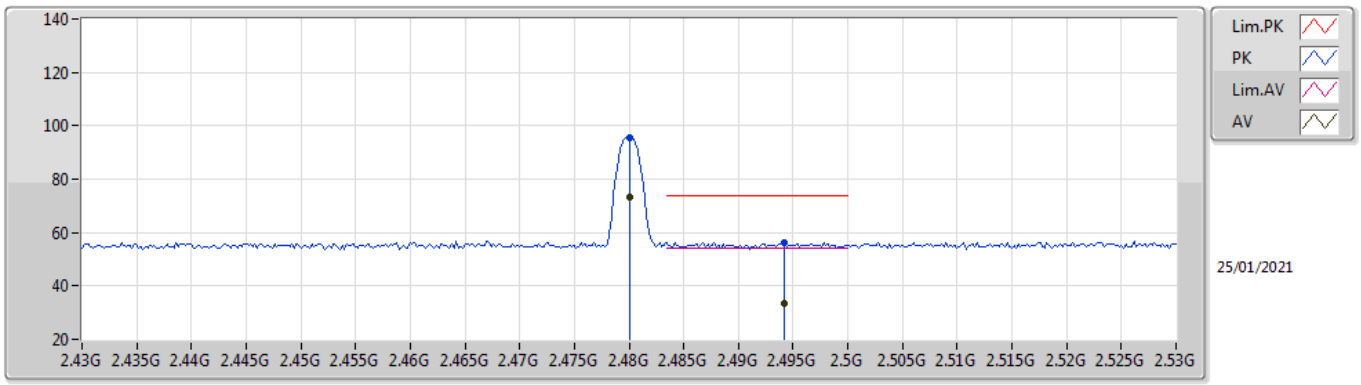
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.48G	83.14	Inf	-Inf	31.62	3	Vertical	210	1.50	-	51.52	27.60	4.02	-
AV	2.4962G	34.29	54.00	-19.71	31.64	3	Vertical	210	1.50	-	2.65	27.60	4.04	-
PK	2.48G	105.64	Inf	-Inf	31.62	3	Vertical	210	1.50	-	74.02	27.60	4.02	-
PK	2.4962G	56.79	74.00	-17.21	31.64	3	Vertical	210	1.50	-	25.15	27.60	4.04	-

BT-EDR(3Mbps)

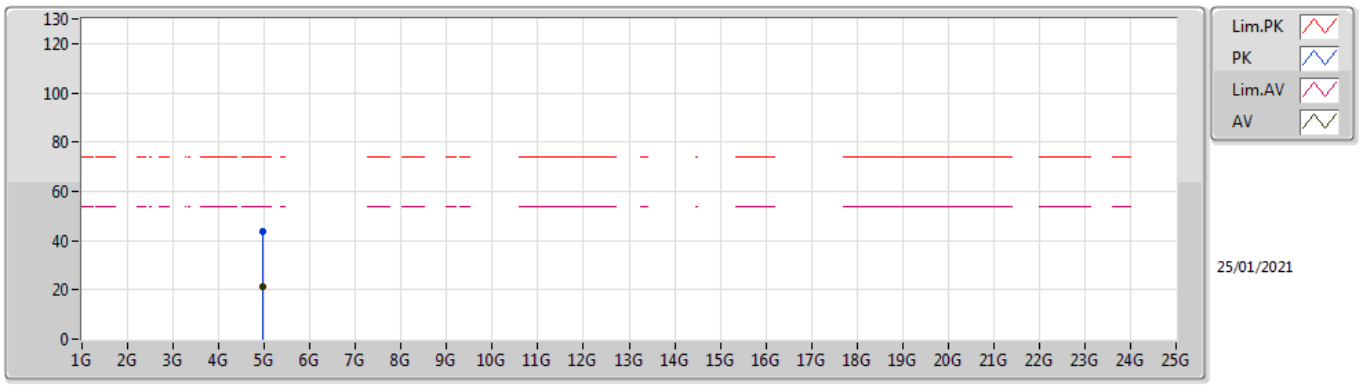
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.48G	73.22	Inf	-Inf	31.62	3	Horizontal	107	1.24	-	41.60	27.60	4.02	-
AV	2.4942G	33.68	54.00	-20.32	31.64	3	Horizontal	107	1.24	-	2.04	27.60	4.04	-
PK	2.48G	95.72	Inf	-Inf	31.62	3	Horizontal	107	1.24	-	64.10	27.60	4.02	-
PK	2.4942G	56.18	74.00	-17.82	31.64	3	Horizontal	107	1.24	-	24.54	27.60	4.04	-

BT-EDR(3Mbps)

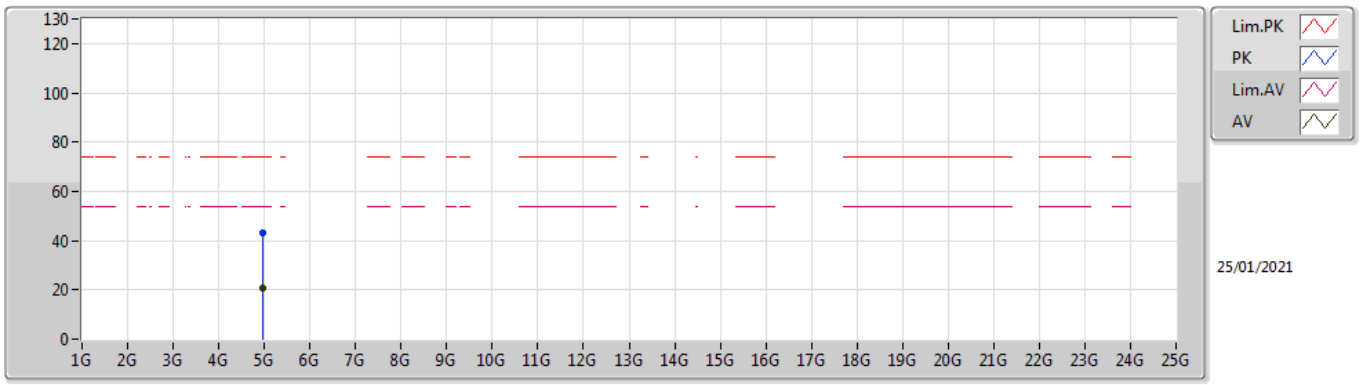
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.95907G	21.27	54.00	-32.73	1.86	3	Vertical	229	1.50	-	19.41	31.42	5.38	34.94
PK	4.95907G	43.77	74.00	-30.23	1.86	3	Vertical	229	1.50	-	41.91	31.42	5.38	34.94

BT-EDR(3Mbps)

2480MHz_TX

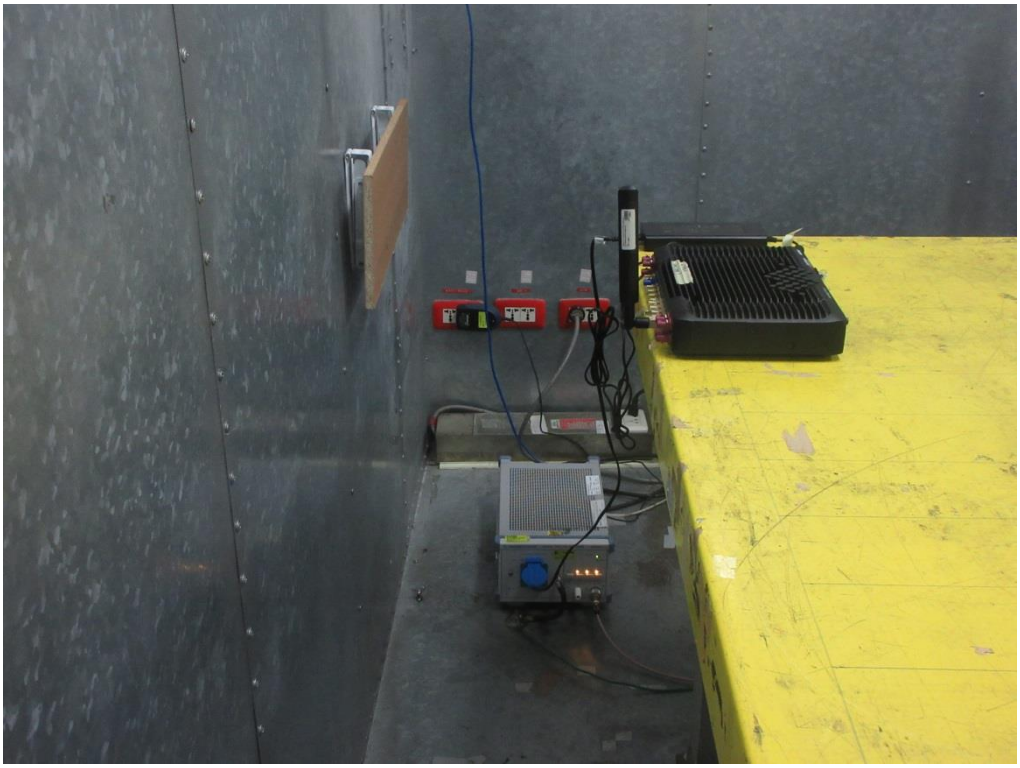


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.96095G	20.70	54.00	-33.30	1.86	3	Horizontal	303	2.54	-	18.84	31.42	5.38	34.94
PK	4.96095G	43.20	74.00	-30.80	1.86	3	Horizontal	303	2.54	-	41.34	31.42	5.38	34.94

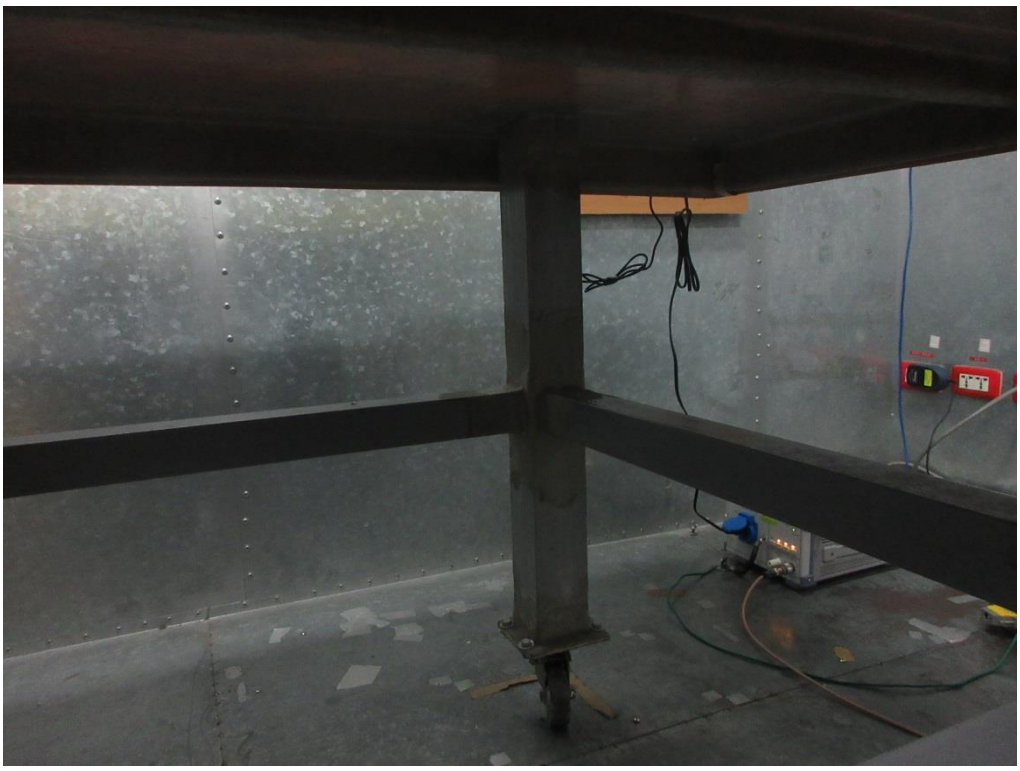
1. Photographs of Conducted Emissions Test Configuration

Front view

Side view



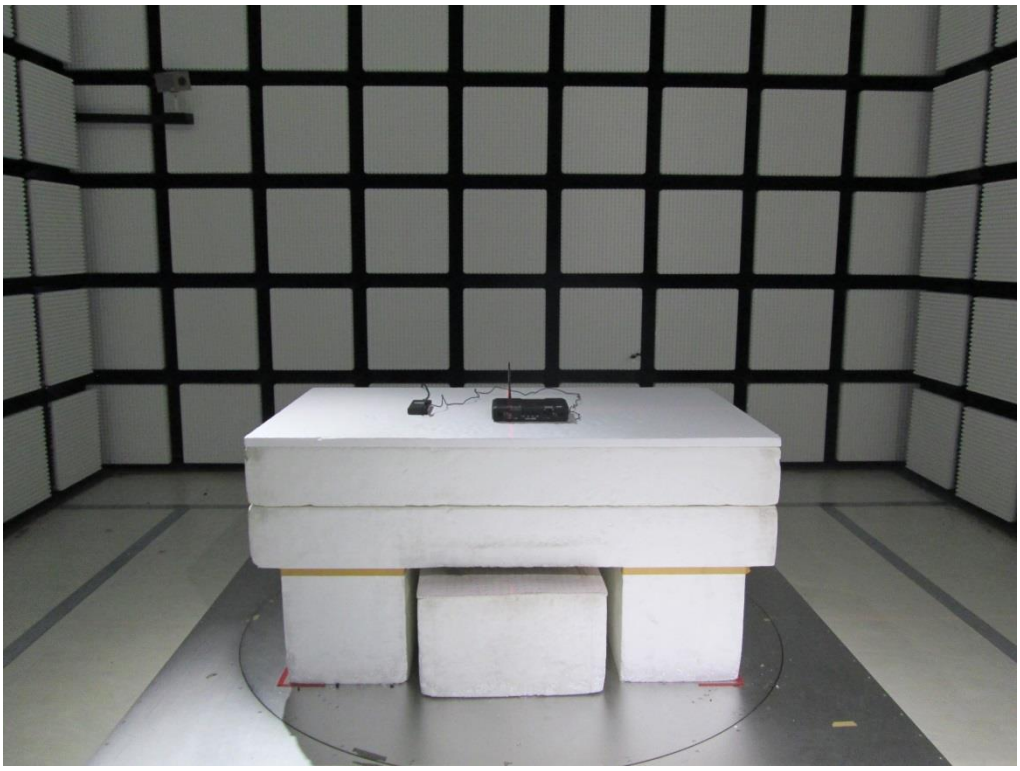
Under table view



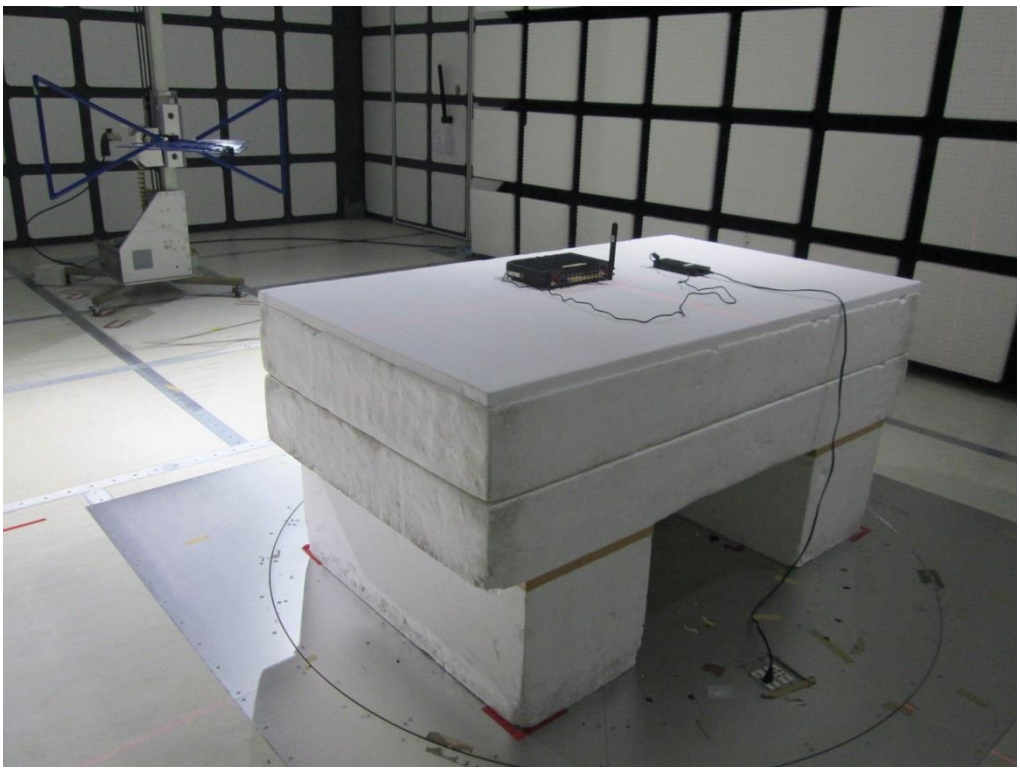
2. Photographs of Radiated Emissions Test Configuration

For radiated emissions 30MHz~1GHz

Front view

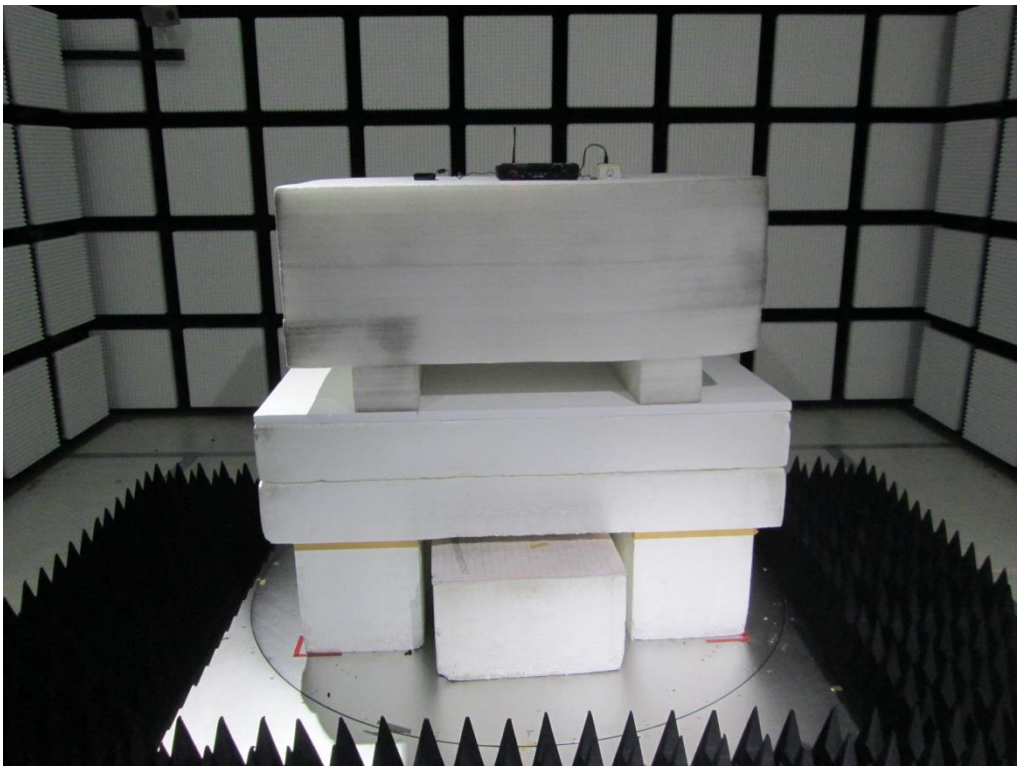


Rear view

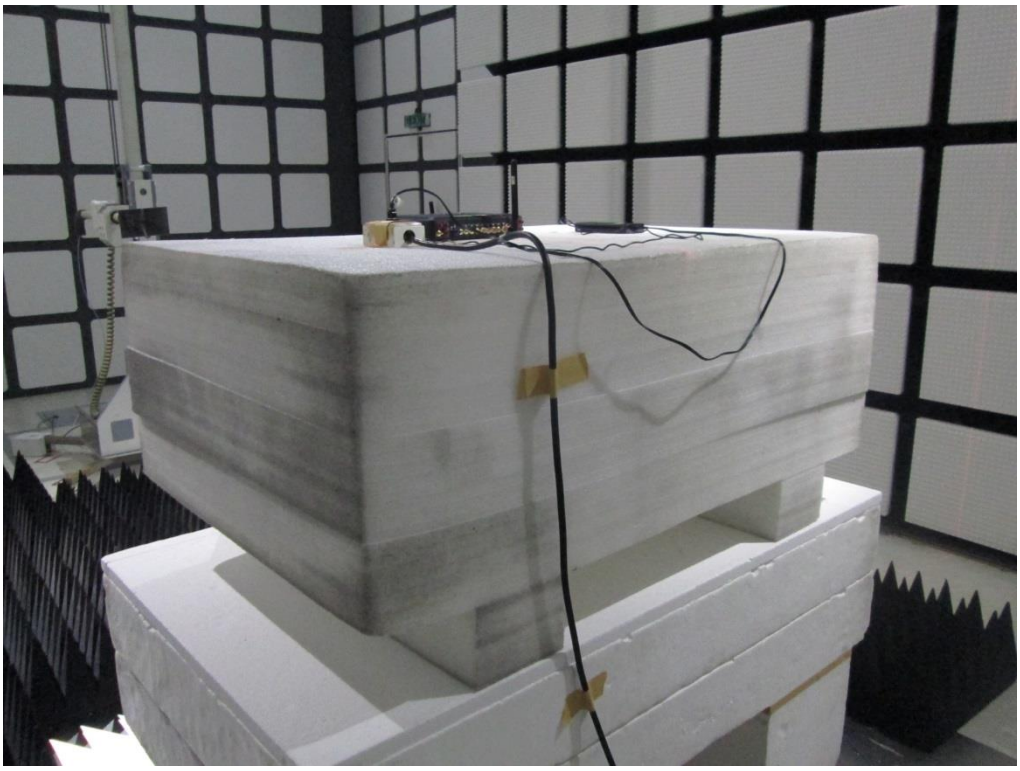


For radiated emissions above 1GHz

Front view



Rear view



———THE END———