


# FCC Radio Test Report

**FCC ID** : AL8-CBF60  
**Equipment** : Wireless Charging case  
**Brand Name** : PLANTRONICS  
**Model Name** : CBF60+  
**Applicant** : Plantronics, Inc.  
345 Encinal Street, Santa Cruz, CA 95060 USA  
**Manufacturer** : Plantronics, Inc.  
345 Encinal Street, Santa Cruz, CA 95060 USA  
**Standard** : 47 CFR FCC Part 15.247

The product was received on Aug. 08, 2022, and testing was started from Oct. 18, 2022 and completed on Nov. 01, 2022. 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.



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Approved by: Jackson Tsai

**SPORTON INTERNATIONAL INC. Hsinhua Laboratory**

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



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## History of this test report

Report No.	Version	Description	Issued Date
FR253009AD	01	Initial issue of report	Dec. 08, 2022



### 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	-
3.2	15.247(a)	20dB Bandwidth	PASS	-
3.2	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	-

<b>Declaration of Conformity:</b>
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
<b>Comments and explanations:</b>
None

Reviewed by: Ben Tseng

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
2.4-2.4835GHz	BT-EDR(3Mbps)	1	1TX

Note:

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

### 1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	Toongin	ANT101	Printed Antenna	N/A	-0.29

For BT function:

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

Only Ant. 1 can be used as transmitting/receiving.

### 1.1.3 EUT Information

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



1.1.4 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
BT-BR(1Mbps)	0.765	1.16	2.916m	1k
BT-EDR(2Mbps)	0.769	1.14	2.915m	1k
BT-EDR(3Mbps)	0.769	1.14	2.917m	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				
<input checked="" type="checkbox"/>	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	Bart Chen	23.3~24.2°C / 55~58%	24/Oct/2022
RF Conducted	TH06-HY	Alan Chien	22.6~26.4°C / 51~57%	26/Oct/2022~01/Nov/2022
<input checked="" type="checkbox"/>	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.				
Radiated	03CH09-HY	Lego Lin	23.7~24.12°C / 55~59%	18/Oct/2022~20/Oct/2022

## 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
AC Power-line Conducted Emissions	4.53 dB	Confidence levels of 95%
Bandwidth	3 MHz	Confidence levels of 95%
Maximum Conducted Output Power	2 dB	Confidence levels of 95%
Emissions in Non-restricted Frequency Bands	0.14 dB	Confidence levels of 95%
Emissions in Restricted Frequency Bands	4.8 dB	Confidence levels of 95%
Receiver Radiated Unwanted Emissions	4.8 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 Version	BlueTest3: 3.3.5
-----------------------	------------------




Mode	Power Setting
BT-BR(1Mbps)	-
2402MHz	9
2440MHz	9
2480MHz	9
BT-EDR(2Mbps)	-
2402MHz	9
2440MHz	9
2480MHz	9
BT-EDR(3Mbps)	-
2402MHz	9
2440MHz	9
2480MHz	9



## 2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
<b>Tests Item</b>	AC power-line conducted emissions
<b>Condition</b>	AC power-line conducted measurement for line and neutral Test Voltage: 120Vac / 60Hz
<b>Operating Mode</b>	CTX
1	Adapter Mode
2	USB Mode

The Worst Case Mode for Following Conformance Tests	
<b>Tests Item</b>	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
<b>Test Condition</b>	Conducted measurement at transmit chains <input checked="" type="checkbox"/> Non-adaptive frequency hopping systems (Non-AFH) <input checked="" type="checkbox"/> adaptive frequency hopping systems (AFH)
Non-AFH Mode configuration was found to be the worst case and measured during the test.	

The Worst Case Mode for Following Conformance Tests			
<b>Tests Item</b>	Emissions in Restricted Frequency Bands		
<b>Test Condition</b>	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.		
<b>Operating Mode &lt; 1GHz</b>	CTX		
1	Adapter Mode		
2	USB Mode		
<b>Operating Mode &gt; 1GHz</b>	CTX		
<b>Orthogonal Planes of EUT</b>	<b>X Plane</b>	<b>Y Plane</b>	<b>Z Plane</b>
			
<b>Worst Planes of EUT</b>			V

## 2.3 Accessories

Accessories				
<b>Battery</b>	Brand Name	VDL	Model Name	13315PN3
	Power Rating	3.8Vdc, 580mAh		
	Type	Lithium-ion Polymer Battery Pack		
<b>Earphone (Optional)</b>	Brand Name	PLANTRONICS	Model Name	F60T
<b>USB Cable (Type-C to A) (Optional)</b>	Brand Name	LOT	Model Name	207488-09
	Signal Line	0.3 meter, D-shielded cable, w/o ferrite core		
<b>USB Cable (Type-C to C) (Optional)</b>	Brand Name	LOT	Model Name	207488-10
	Signal Line	0.3 meter, D-shielded cable, w/o ferrite core		
<b>Audio Cable (Type-C to Audio) (Optional)</b>	Brand Name	LOT	Model Name	219266-02
	Signal Line	0.77meter, non-shielded cable, w/o ferrite core		
<b>Bluetooth Dongle (Type-C) (Optional)</b>	Brand Name	Poly	Model Name	BT700C
	Interface	USB Type-C		
<b>Bluetooth Dongle (Type-A) (Optional)</b>	Brand Name	Poly	Model Name	BT700
	Interface	USB Type-A		

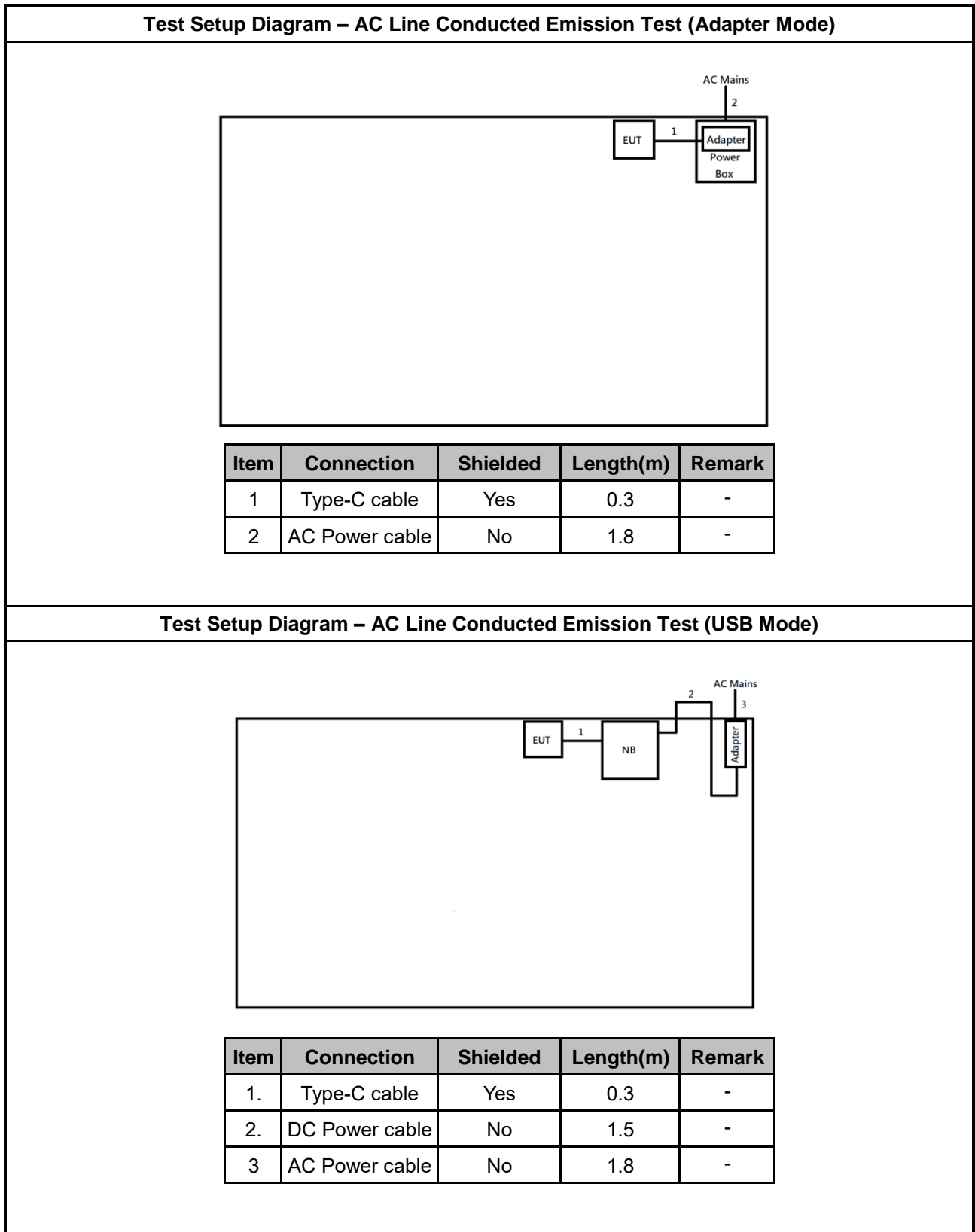
Reminder: Regarding to more detail and other information, please refer to user manual.

## 2.4 Support Equipment

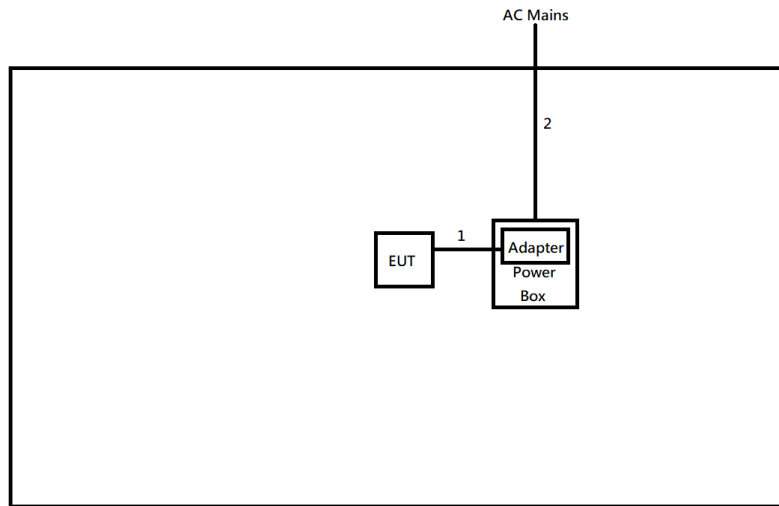
Support Equipment – AC Conduction and Radiated					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Notebook	HP	HP	-	-
2	Adapter for NB	HP	HP	-	-
3	AC power Cable	Power sync	TPCMRN0018	-	-
4	AC Adapter	APPLE	A1385	-	-

Support Equipment – Conducted					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Notebook	HP	HSTNN-I42C	-	-
2	Adapter for NB	HP	HSTNN-CA40	-	-

## 2.5 Test Setup Diagram

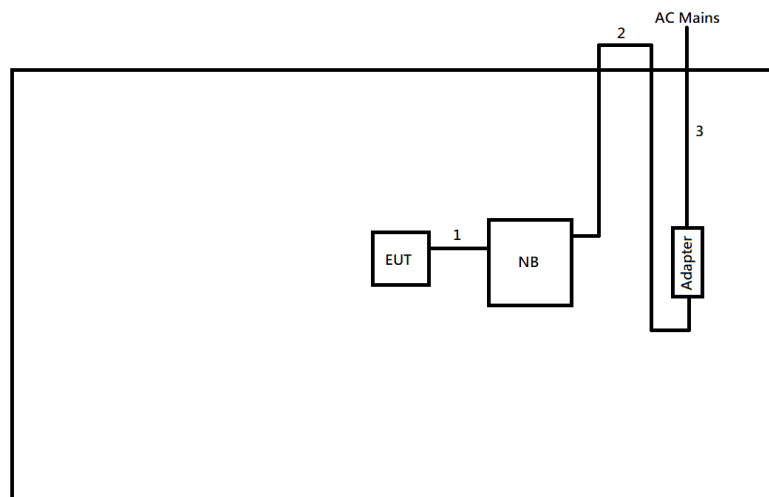


**Test Setup Diagram - Radiated Test (Adapter Mode)**



Item	Connection	Shielded	Length(m)	Remark
1.	Type-C cable	Yes	0.3	-
2.	AC Power cable	No	1.8	-

**Test Setup Diagram - Radiated Test (USB Mode)**



Item	Connection	Shielded	Length(m)	Remark
1.	Type-C cable	Yes	0.3	-
2.	DC Power cable	No	1.5	-
3.	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

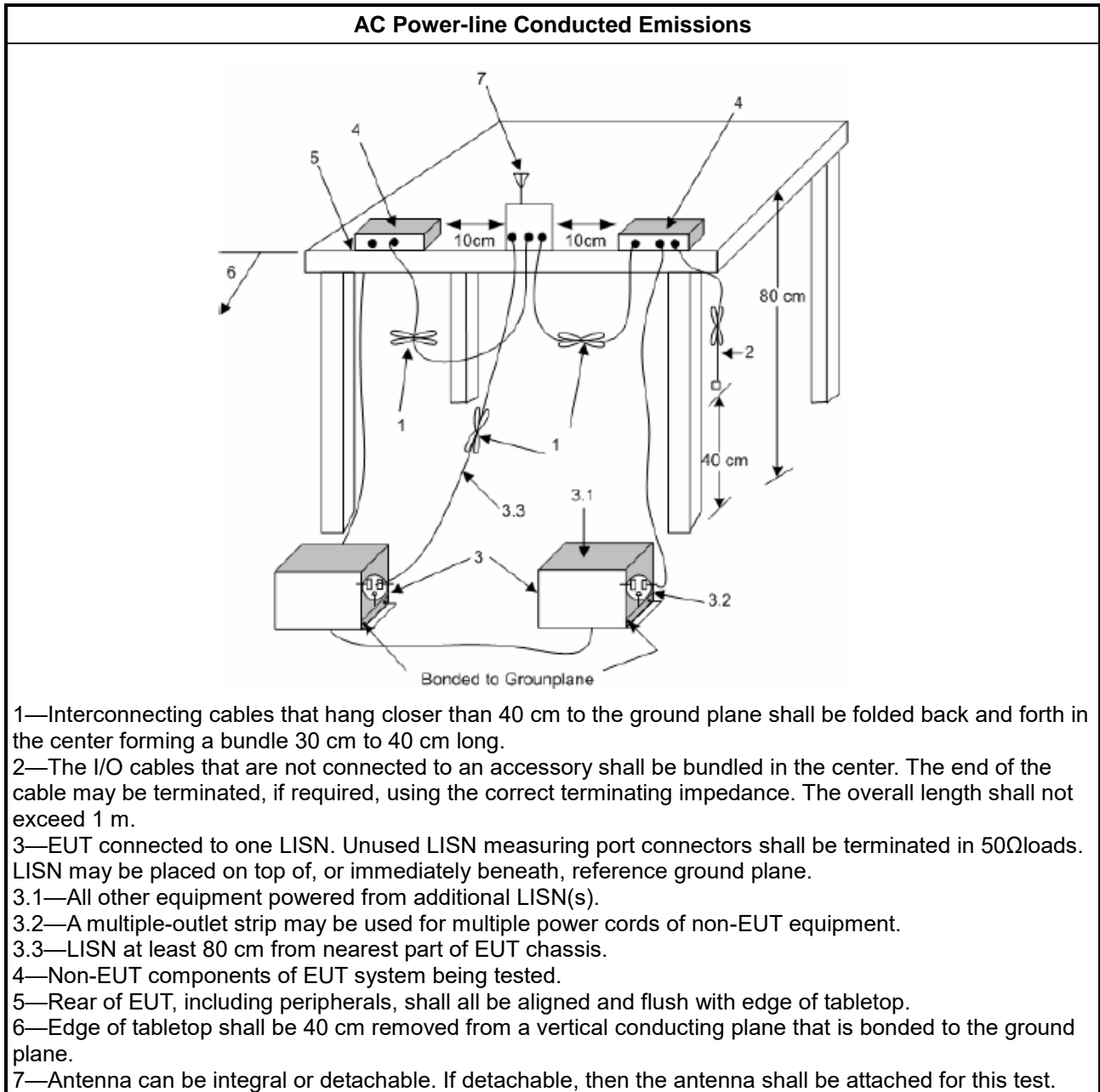
Test Method
<ul style="list-style-type: none"> <li>Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.</li> </ul>

##### 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



### 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	
<ul style="list-style-type: none"> <li>2400-2483.5 MHz Band:</li> </ul>	
	<ul style="list-style-type: none"> <li><math>N \geq 75</math> and <math>ChS \geq MAX</math> (20 dB bandwidth, 25 kHz).</li> </ul>
	<ul style="list-style-type: none"> <li><math>75 &gt; N \geq 15</math> and <math>ChS \geq MAX</math> (20 dB bandwidth 2/3, 25 kHz).</li> </ul>
<b>N:</b> Number of Hopping Frequencies; <b>ChS:</b> Hopping Channel Separation	

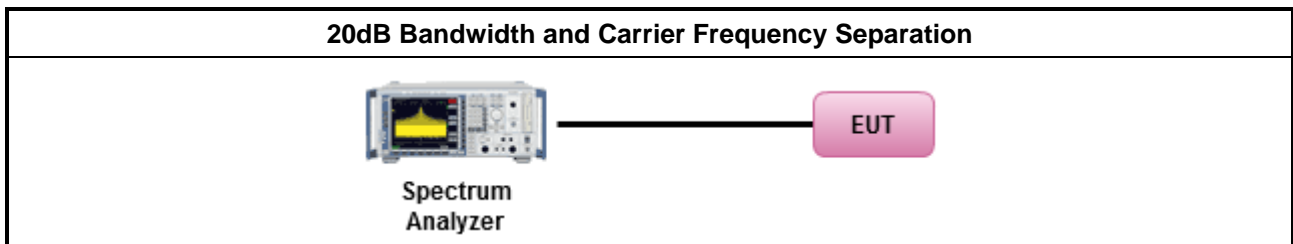
#### 3.2.2 Measuring Instruments

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

#### 3.2.3 Test Procedures

Test Method
<ul style="list-style-type: none"> <li>Refer as ANSI C63.10-2013, clause 6.9.2 for 20 dB bandwidth measurement.</li> </ul>
<ul style="list-style-type: none"> <li>Refer as ANSI C63.10-2013, clause 7.8.2 for carrier frequency separation measurement.</li> </ul>

#### 3.2.4 Test Setup



#### 3.2.5 Test Result of 20dB Bandwidth

Refer as Appendix B

#### 3.2.6 Test Result of Carrier Frequency Separation

Refer as Appendix B

### 3.3 Maximum Conducted Output Power

#### 3.3.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit	
<ul style="list-style-type: none"> <li>2400-2483.5 MHz Band:</li> </ul>	
	<ul style="list-style-type: none"> <li><math>N \geq 75</math>; Power 30dBm; EIRP 36dBm</li> </ul>
	<ul style="list-style-type: none"> <li><math>75 &gt; N \geq 15</math>; Power 21dBm; EIRP 27dBm</li> </ul>
<b>N:</b> Number of Hopping Frequencies	

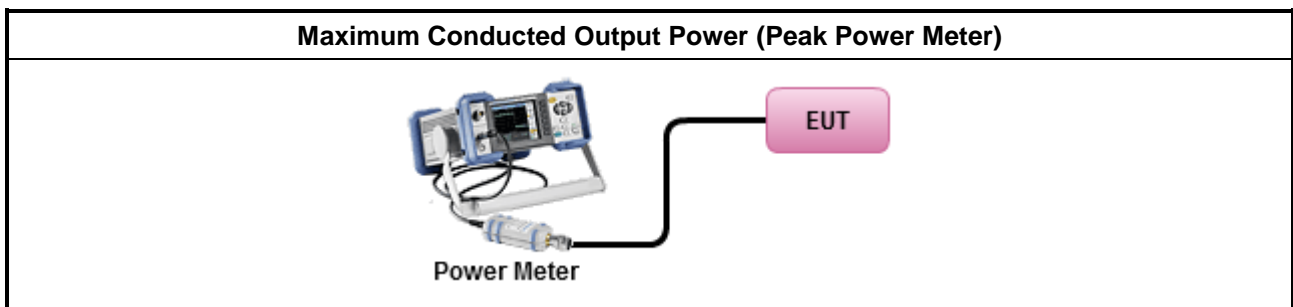
#### 3.3.2 Measuring Instruments

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

#### 3.3.3 Test Procedures

Test Method
<ul style="list-style-type: none"> <li>Refer as ANSI C63.10-2013, clause 7.8.5 for output power measurement.</li> </ul>

#### 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	
<ul style="list-style-type: none"> <li>▪ 2400-2483.5 MHz Band:</li> </ul>	
	<ul style="list-style-type: none"> <li>▪ <math>N \geq 75</math> and <math>ChS \geq MAX</math> (20 dB bandwidth, 25 kHz).</li> </ul>
	<ul style="list-style-type: none"> <li>▪ <math>75 &gt; N \geq 15</math> and <math>ChS \geq MAX</math> (20 dB bandwidth 2/3,25 kHz).</li> </ul>
<p><b>N:</b>Number of Hopping Frequencies; <b>ChS</b> : Hopping Channel Separation</p>	

#### 3.4.2 Hopping Bandedge Limit

Refer clause 3.6.1 and clause 3.7.1

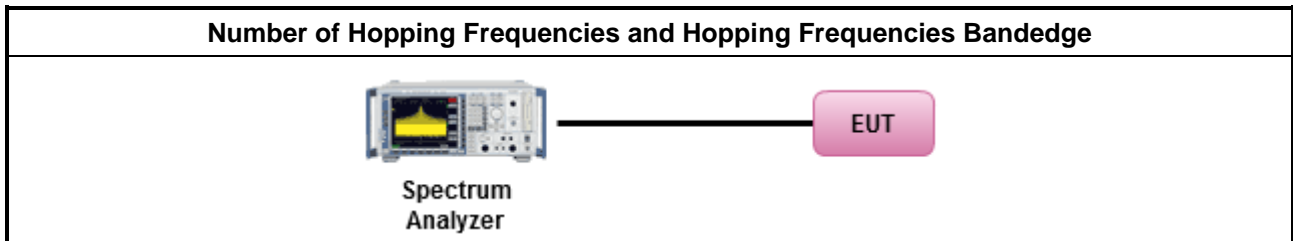
#### 3.4.3 Measuring Instruments

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

#### 3.4.4 Test Procedures

Test Method
<ul style="list-style-type: none"> <li>▪ Refer as ANSI C63.10-2013, clause 7.8.3 for number of hopping frequencies measurement.</li> </ul>
<ul style="list-style-type: none"> <li>▪ Refer as ANSI C63.10-2013, clause 7.8.6 for hopping frequencies Bandedge measurement.</li> </ul>

#### 3.4.5 Test Setup



#### 3.4.6 Test Result of Number of Hopping Frequencies

Refer as Appendix D

#### 3.4.7 Test Result of Number of Hopping Frequencies Bandedge

Refer as Appendix D

### 3.5 Time of Occupancy (Dwell Time)

#### 3.5.1 Time of Occupancy (Dwell Time) Limit

Time of Occupancy (Dwell Time) Limit for Frequency Hopping Systems	
<ul style="list-style-type: none"> <li>2400-2483.5 MHz Band:</li> </ul>	
	<ul style="list-style-type: none"> <li><math>N \geq 75</math>; 0.4s in <math>N \times 0.4</math> period</li> </ul>
	<ul style="list-style-type: none"> <li><math>75 &gt; N \geq 15</math>; 0.4s in <math>N \times 0.4</math> period</li> </ul>
N: Number of Hopping Frequencies	

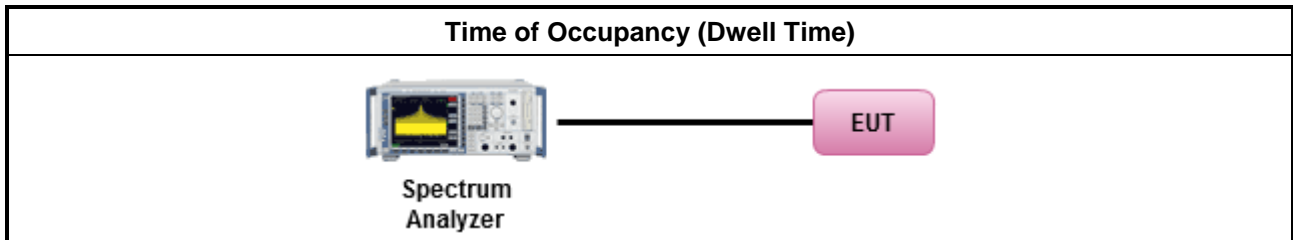
#### 3.5.2 Measuring Instruments

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

#### 3.5.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> <li>Refer as ANSI C63.10-2013, clause 7.8.4 for dwell time measurement.</li> </ul>	
<ul style="list-style-type: none"> <li>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.</li> </ul>	
	<ul style="list-style-type: none"> <li>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 <math>5/1600</math> seconds, or 3.125ms. DH5 Packet permit maximum <math>1600 / 79 / 6 = 3.37</math> hops per second in each channel.</li> </ul>

#### 3.5.4 Test Setup



#### 3.5.5 Test Result of Time of Occupancy (Dwell Time)

Refer as Appendix E

### 3.6 Emissions in Non-restricted Frequency Bands

#### 3.6.1 Emissions in Non-restricted Frequency Bands Limit

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

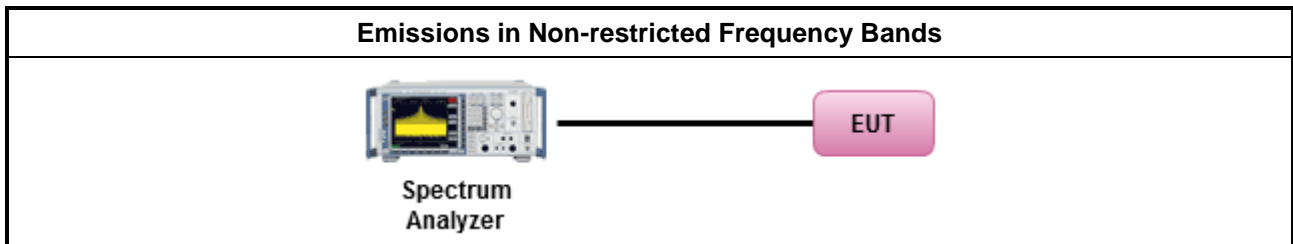
#### 3.6.2 Measuring Instruments

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

#### 3.6.3 Test Procedures

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

#### 3.6.4 Test Setup



#### 3.6.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix F

### 3.7 Emissions in Restricted Frequency Bands

#### 3.7.1 Emissions in Restricted Frequency Bands Limit

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

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

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

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

#### 3.7.2 Measuring Instruments

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

### 3.7.3 Test Procedures

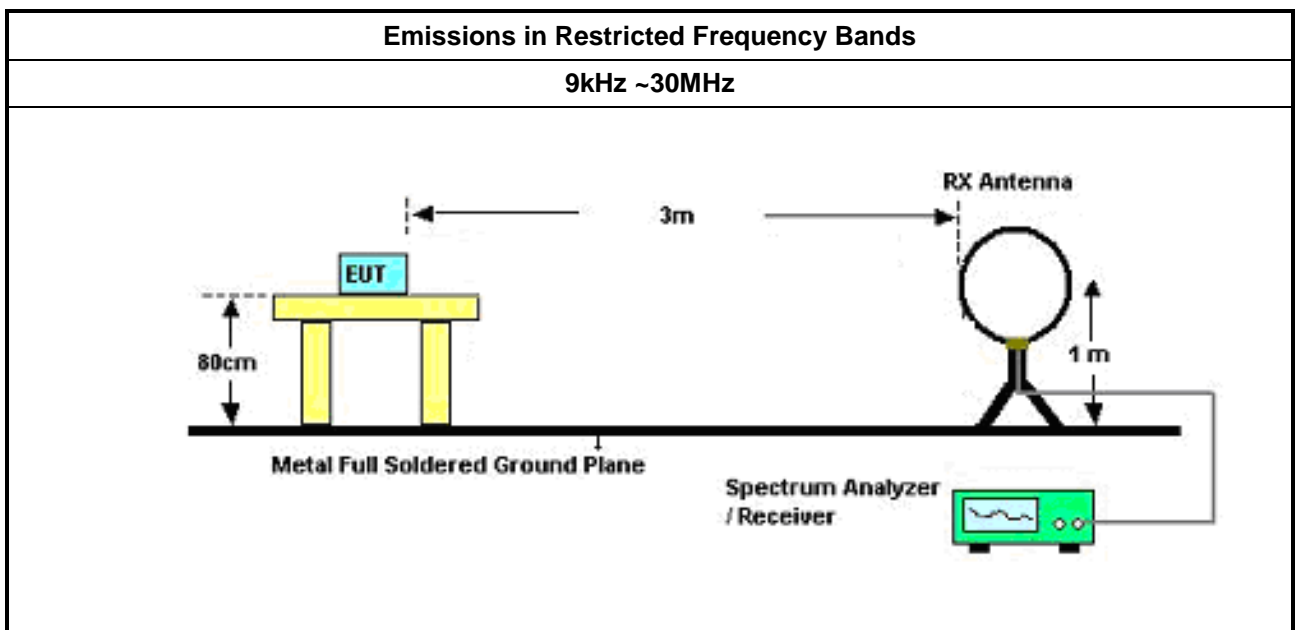
Test Method	
▪	The average emission levels shall be measured in [hopping duty factor].
▪	Refer as ANSI C63.10; clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.
▪	For the transmitter unwanted emissions shall be measured using following options below:
▪	Refer as ANSI C63.10, clause 4.1.4.2.1 QP value.
▪	Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak.
▪	Refer as ANSI C63.10, clause 4.1.4.2.4 average value of hopping pulsed emissions.
▪	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.

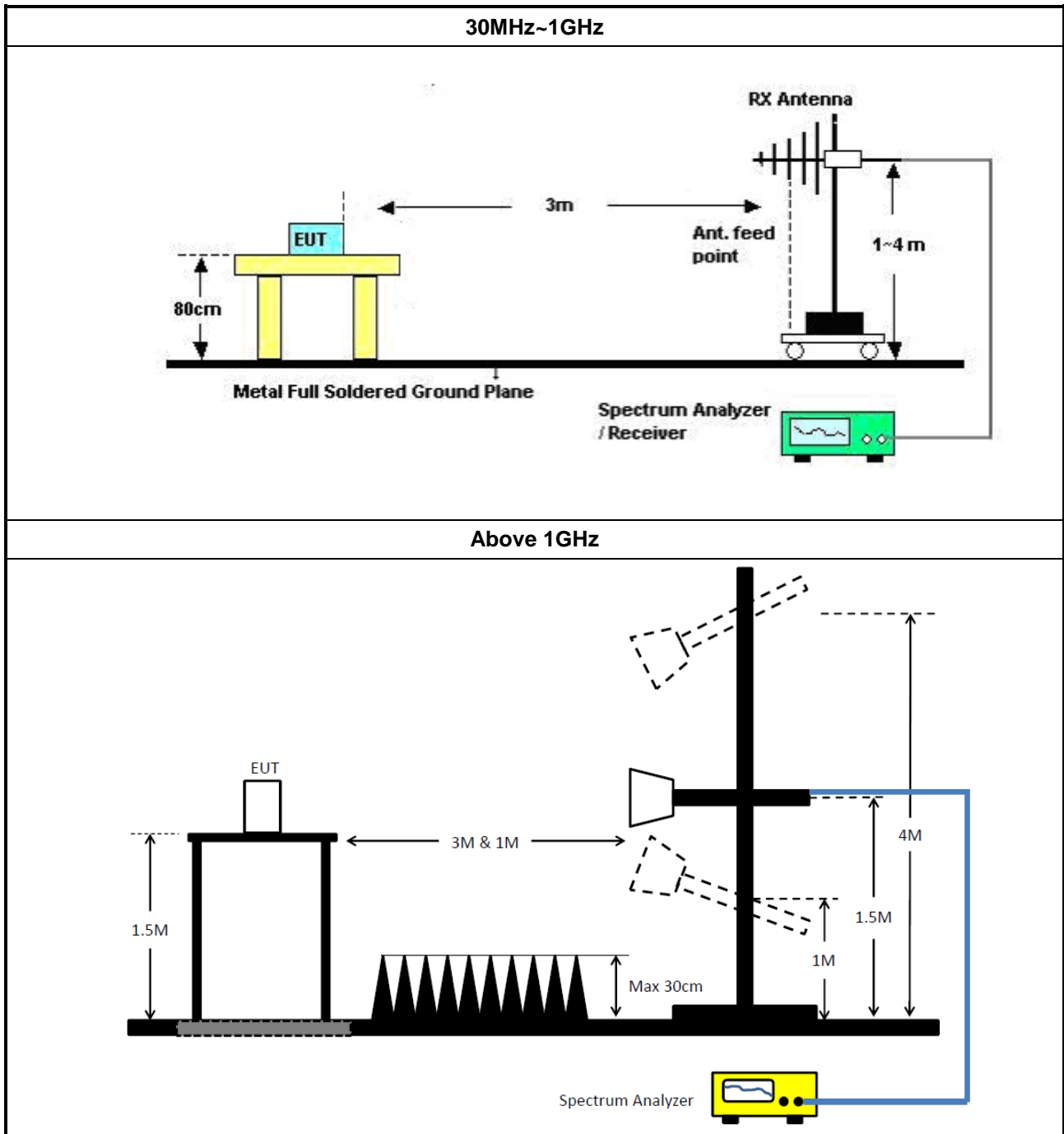
### 3.7.4 Measurement Results Calculation

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





### 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	ESR3	102051	9kHz ~ 3.6GHz	13/May/2022	12/May/2023
Two-Line V-Network	R&S	ENV 216	100003	9kHz ~ 30MHz	18/Feb/2022	17/Feb/2023
RF Cable 5m	TITAN	TITAN	CO04-cable-01	9 kHz~200MHz	01/Mar/2022	28/Feb/2023
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9kHz ~ 30MHz	26/Oct/2021	25/Oct/2022
Software	Sporton	SENSE-EMI	V5.10.8.7	-	NCR	NCR

NCR: No Calibration Required

### Instrument for Radiated Test

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	25/Mar/2022	24/Mar/2023
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	1GHz~18GHz 3m	17/Mar/2022	16/Mar/2023
EXA Signal Analyzer	KEYSIGHT	N9010A	MY54200885	10Hz~44GHz	11/Aug/2022	10/Aug/2023
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1531	1GHz~18GHz	27/Dec/2021	26/Dec/2022
Amplifier	EMC	EMC9135	980232	9kHz~1GHz	08/Apr/2022	07/Apr/2023
Microwave Preamplifier	Agilent	8449B	3008A02096	1GHz~26.5GHz	22/Jul/2022	21/Jul/2023
Bilog Antenna & 5dB Attenuator	TESEQ & MTJ	CBL6111D&M TJ6102-05	35418 & 3	30MHz~1GHz	28/Aug/2022	27/Aug/2023
RF Cable-low	Jye Bao	RG142	CB031+324530/4	9kHz~30MHz	07/Feb/2022	06/Feb/2023
RF Cable-low	Jye Bao	RG142	03CH09-cable-01	30MHz~1GHz	17/Aug/2022	16/Aug/2023
RF CABLE 5m+3m+1m	HUBER+SUHNER	SUCOFLEX1 04	03CH09-cable-02	1GHz~40GHz	17/Aug/2022	16/Aug/2023
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170221	18GHz~40GHz	18/Mar/2022	17/Mar/2023
Microwave Preamplifier	EMC INSTRUMENTS	EM18G40G	060604	18GHz ~ 40GHz	08/Mar/2022	07/Mar/2023
Loop Antenna	TESEQ	HLA 6120	31244	9kHz~30MHz	18/Mar/2022	17/Mar/2023
EMI Test Receiver	R&S	ESR3	102052	9kHz~3.6GHz	13/May/2022	12/May/2023
SENSE-15247_FS	Sporton	V5.10.7.14	N/A	N/A	N/A	N/A



**Instrument for Conducted Test**

<b>Instrument</b>	<b>Manufacturer /Brand</b>	<b>Model No.</b>	<b>Serial No.</b>	<b>Spec.</b>	<b>Calibration Date</b>	<b>Calibration Due Date</b>
Signal Analyzer	R&S	FSV 40	101013	10Hz~40GHz	01/Apr/2022	31/Mar/2023
SMB100A Signal Generator	R&S	SMB100A	181147	100kHz~40GHz	21/Oct/2022	20/Oct/2023
Pulse Sensor	Anritsu	MA2411B	1027452	300MHz~40GHz	25/Mar/2022	24/Mar/2023
Power Meter	Anritsu	ML2495A	1124009	300MHz~40GHz	25/Mar/2022	24/Mar/2023
SENSE-15247_FS	Sporton	V5.10.7.16	N/A	N/A	N/A	N/A





**Summary**

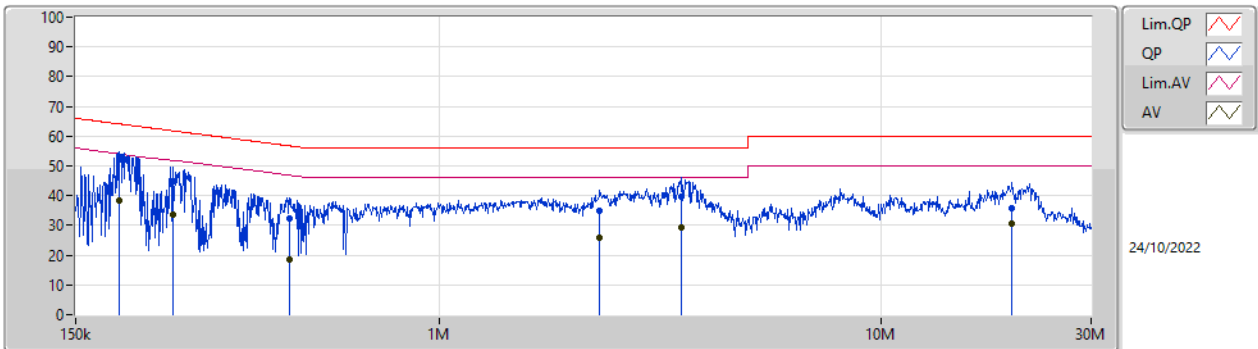
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	188.327k	52.17	64.11	-11.94	Line
Mode 2	Pass	QP	191.358k	48.56	63.97	-15.41	Line



Result

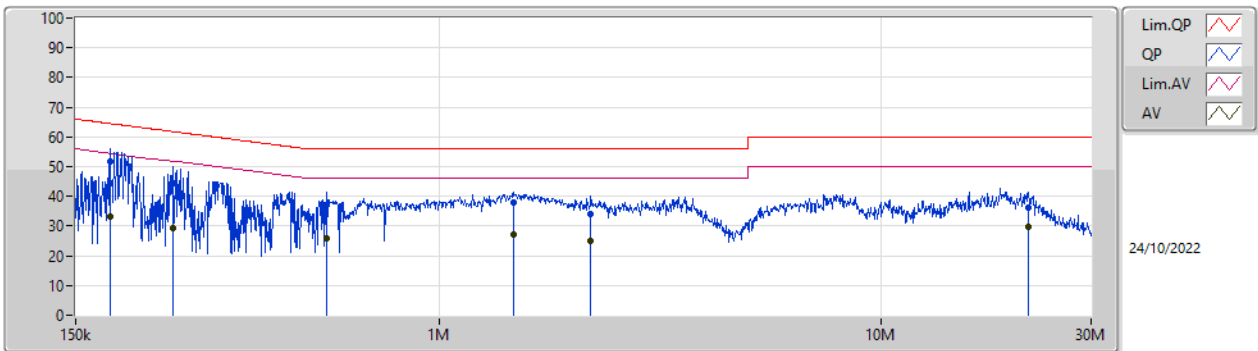
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition	Comments
Mode 1	Pass	QP	188.327k	52.17	64.11	-11.94	Line	-
Mode 1	Pass	AV	188.327k	38.39	54.11	-15.72	Line	-
Mode 1	Pass	QP	249.042k	44.75	61.79	-17.04	Line	-
Mode 1	Pass	AV	249.042k	33.73	51.79	-18.06	Line	-
Mode 1	Pass	QP	456.875k	32.48	56.75	-24.27	Line	-
Mode 1	Pass	AV	456.875k	18.39	46.75	-28.36	Line	-
Mode 1	Pass	QP	2.31M	34.88	56.00	-21.12	Line	-
Mode 1	Pass	AV	2.31M	25.78	46.00	-20.22	Line	-
Mode 1	Pass	QP	3.527M	39.47	56.00	-16.53	Line	-
Mode 1	Pass	AV	3.527M	29.31	46.00	-16.69	Line	-
Mode 1	Pass	QP	19.868M	35.96	60.00	-24.04	Line	-
Mode 1	Pass	AV	19.868M	30.63	50.00	-19.37	Line	-
Mode 1	Pass	QP	179.518k	51.77	64.51	-12.74	Neutral	-
Mode 1	Pass	AV	179.518k	33.17	54.51	-21.34	Neutral	-
Mode 1	Pass	QP	250.038k	44.29	61.76	-17.47	Neutral	-
Mode 1	Pass	AV	250.038k	29.34	51.76	-22.42	Neutral	-
Mode 1	Pass	QP	555.583k	37.08	56.00	-18.92	Neutral	-
Mode 1	Pass	AV	555.583k	25.79	46.00	-20.21	Neutral	-
Mode 1	Pass	QP	1.477M	38.07	56.00	-17.93	Neutral	-
Mode 1	Pass	AV	1.477M	27.17	46.00	-18.83	Neutral	-
Mode 1	Pass	QP	2.202M	34.01	56.00	-21.99	Neutral	-
Mode 1	Pass	AV	2.202M	25.04	46.00	-20.96	Neutral	-
Mode 1	Pass	QP	21.692M	36.09	60.00	-23.91	Neutral	-
Mode 1	Pass	AV	21.692M	29.86	50.00	-20.14	Neutral	-
Mode 2	Pass	QP	191.358k	48.56	63.97	-15.41	Line	-
Mode 2	Pass	AV	191.358k	35.82	53.97	-18.15	Line	-
Mode 2	Pass	QP	252.043k	42.19	61.70	-19.51	Line	-
Mode 2	Pass	AV	252.043k	32.49	51.70	-19.21	Line	-
Mode 2	Pass	QP	746.524k	32.94	56.00	-23.06	Line	-
Mode 2	Pass	AV	746.524k	20.56	46.00	-25.44	Line	-
Mode 2	Pass	QP	2.32M	34.26	56.00	-21.74	Line	-
Mode 2	Pass	AV	2.32M	25.18	46.00	-20.82	Line	-
Mode 2	Pass	QP	3.336M	37.42	56.00	-18.58	Line	-
Mode 2	Pass	AV	3.336M	28.41	46.00	-17.59	Line	-
Mode 2	Pass	QP	19.475M	35.39	60.00	-24.61	Line	-
Mode 2	Pass	AV	19.475M	29.83	50.00	-20.17	Line	-
Mode 2	Pass	QP	261.263k	41.17	61.39	-20.22	Neutral	-
Mode 2	Pass	AV	261.263k	25.92	51.39	-25.47	Neutral	-
Mode 2	Pass	QP	329.331k	39.80	59.46	-19.66	Neutral	-
Mode 2	Pass	AV	329.331k	26.25	49.46	-23.21	Neutral	-
Mode 2	Pass	QP	433.769k	37.26	57.19	-19.93	Neutral	-
Mode 2	Pass	AV	433.769k	26.32	47.19	-20.87	Neutral	-
Mode 2	Pass	QP	1.466M	38.08	56.00	-17.92	Neutral	-
Mode 2	Pass	AV	1.466M	27.53	46.00	-18.47	Neutral	-
Mode 2	Pass	QP	3.701M	34.47	56.00	-21.53	Neutral	-
Mode 2	Pass	AV	3.701M	26.99	46.00	-19.01	Neutral	-
Mode 2	Pass	QP	21.605M	36.82	60.00	-23.18	Neutral	-
Mode 2	Pass	AV	21.605M	30.61	50.00	-19.39	Neutral	-

Conducted Emissions at Powerline\_Mode 1



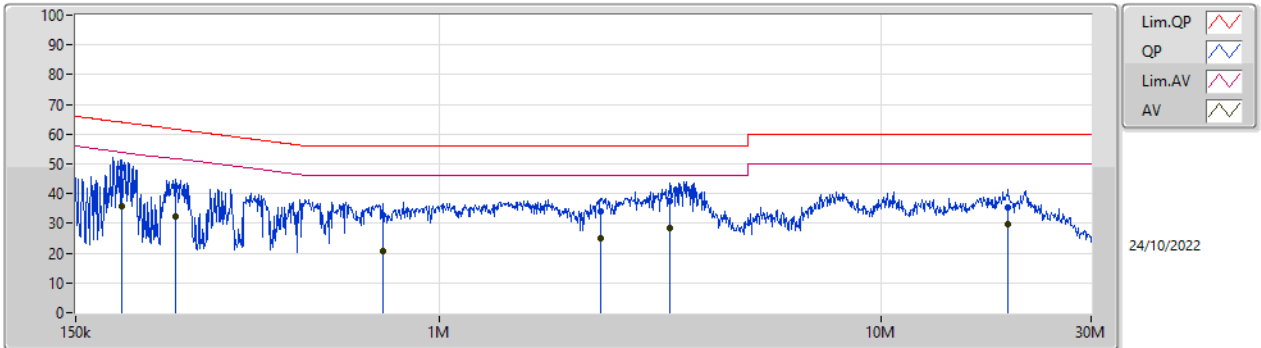
Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	188.327k	52.17	64.11	-11.94	19.63	Line	-	32.54	9.69	0.03	9.91
AV	188.327k	38.39	54.11	-15.72	19.63	Line	-	18.76	9.69	0.03	9.91
QP	249.042k	44.75	61.79	-17.04	19.63	Line	-	25.12	9.69	0.03	9.91
AV	249.042k	33.73	51.79	-18.06	19.63	Line	-	14.10	9.69	0.03	9.91
QP	456.875k	32.48	56.75	-24.27	19.63	Line	-	12.85	9.68	0.04	9.91
AV	456.875k	18.39	46.75	-28.36	19.63	Line	-	-1.24	9.68	0.04	9.91
QP	2.31M	34.88	56.00	-21.12	19.71	Line	-	15.17	9.70	0.09	9.92
AV	2.31M	25.78	46.00	-20.22	19.71	Line	-	6.07	9.70	0.09	9.92
QP	3.527M	39.47	56.00	-16.53	19.75	Line	-	19.72	9.71	0.12	9.92
AV	3.527M	29.31	46.00	-16.69	19.75	Line	-	9.56	9.71	0.12	9.92
QP	19.868M	35.96	60.00	-24.04	19.99	Line	-	15.97	9.79	0.27	9.93
AV	19.868M	30.63	50.00	-19.37	19.99	Line	-	10.64	9.79	0.27	9.93

Conducted Emissions at Powerline\_Mode 1



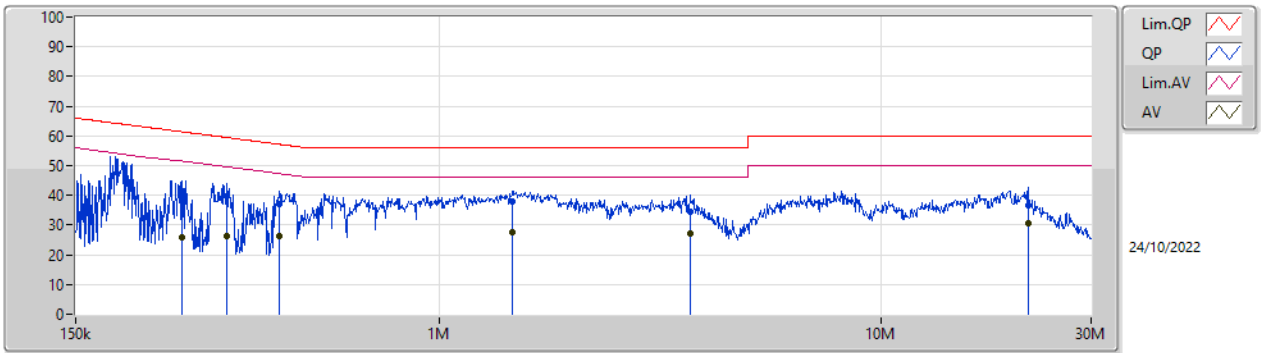
Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	179.518k	51.77	64.51	-12.74	19.66	Neutral	-	32.11	9.72	0.03	9.91
AV	179.518k	33.17	54.51	-21.34	19.66	Neutral	-	13.51	9.72	0.03	9.91
QP	250.038k	44.29	61.76	-17.47	19.66	Neutral	-	24.63	9.72	0.03	9.91
AV	250.038k	29.34	51.76	-22.42	19.66	Neutral	-	9.68	9.72	0.03	9.91
QP	555.583k	37.08	56.00	-18.92	19.67	Neutral	-	17.41	9.72	0.04	9.91
AV	555.583k	25.79	46.00	-20.21	19.67	Neutral	-	6.12	9.72	0.04	9.91
QP	1.477M	38.07	56.00	-17.93	19.73	Neutral	-	18.34	9.74	0.07	9.92
AV	1.477M	27.17	46.00	-18.83	19.73	Neutral	-	7.44	9.74	0.07	9.92
QP	2.202M	34.01	56.00	-21.99	19.75	Neutral	-	14.26	9.74	0.09	9.92
AV	2.202M	25.04	46.00	-20.96	19.75	Neutral	-	5.29	9.74	0.09	9.92
QP	21.692M	36.09	60.00	-23.91	20.23	Neutral	-	15.86	10.02	0.28	9.93
AV	21.692M	29.86	50.00	-20.14	20.23	Neutral	-	9.63	10.02	0.28	9.93

Conducted Emissions at Powerline\_Mode 2



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	191.358k	48.56	63.97	-15.41	19.63	Line	-	28.93	9.69	0.03	9.91
AV	191.358k	35.82	53.97	-18.15	19.63	Line	-	16.19	9.69	0.03	9.91
QP	252.043k	42.19	61.70	-19.51	19.63	Line	-	22.56	9.69	0.03	9.91
AV	252.043k	32.49	51.70	-19.21	19.63	Line	-	12.86	9.69	0.03	9.91
QP	746.524k	32.94	56.00	-23.06	19.65	Line	-	13.29	9.68	0.05	9.92
AV	746.524k	20.56	46.00	-25.44	19.65	Line	-	0.91	9.68	0.05	9.92
QP	2.32M	34.26	56.00	-21.74	19.71	Line	-	14.55	9.70	0.09	9.92
AV	2.32M	25.18	46.00	-20.82	19.71	Line	-	5.47	9.70	0.09	9.92
QP	3.336M	37.42	56.00	-18.58	19.75	Line	-	17.67	9.71	0.12	9.92
AV	3.336M	28.41	46.00	-17.59	19.75	Line	-	8.66	9.71	0.12	9.92
QP	19.475M	35.39	60.00	-24.61	19.99	Line	-	15.40	9.79	0.27	9.93
AV	19.475M	29.83	50.00	-20.17	19.99	Line	-	9.84	9.79	0.27	9.93

Conducted Emissions at Powerline\_Mode 2



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	261.263k	41.17	61.39	-20.22	19.66	Neutral	-	21.51	9.72	0.03	9.91
AV	261.263k	25.92	51.39	-25.47	19.66	Neutral	-	6.26	9.72	0.03	9.91
QP	329.331k	39.80	59.46	-19.66	19.67	Neutral	-	20.13	9.72	0.04	9.91
AV	329.331k	26.25	49.46	-23.21	19.67	Neutral	-	6.58	9.72	0.04	9.91
QP	433.769k	37.26	57.19	-19.93	19.67	Neutral	-	17.59	9.72	0.04	9.91
AV	433.769k	26.32	47.19	-20.87	19.67	Neutral	-	6.65	9.72	0.04	9.91
QP	1.466M	38.08	56.00	-17.92	19.73	Neutral	-	18.35	9.74	0.07	9.92
AV	1.466M	27.53	46.00	-18.47	19.73	Neutral	-	7.80	9.74	0.07	9.92
QP	3.701M	34.47	56.00	-21.53	19.80	Neutral	-	14.67	9.76	0.12	9.92
AV	3.701M	26.99	46.00	-19.01	19.80	Neutral	-	7.19	9.76	0.12	9.92
QP	21.605M	36.82	60.00	-23.18	20.23	Neutral	-	16.59	10.02	0.28	9.93
AV	21.605M	30.61	50.00	-19.39	20.23	Neutral	-	10.38	10.02	0.28	9.93



**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)	936.25k	880.841k	881KF1D	935k	872.975k
BT-EDR(2Mbps)	1.339M	1.232M	1M23G1D	1.338M	1.228M
BT-EDR(3Mbps)	1.305M	1.226M	1M23G1D	1.283M	1.225M

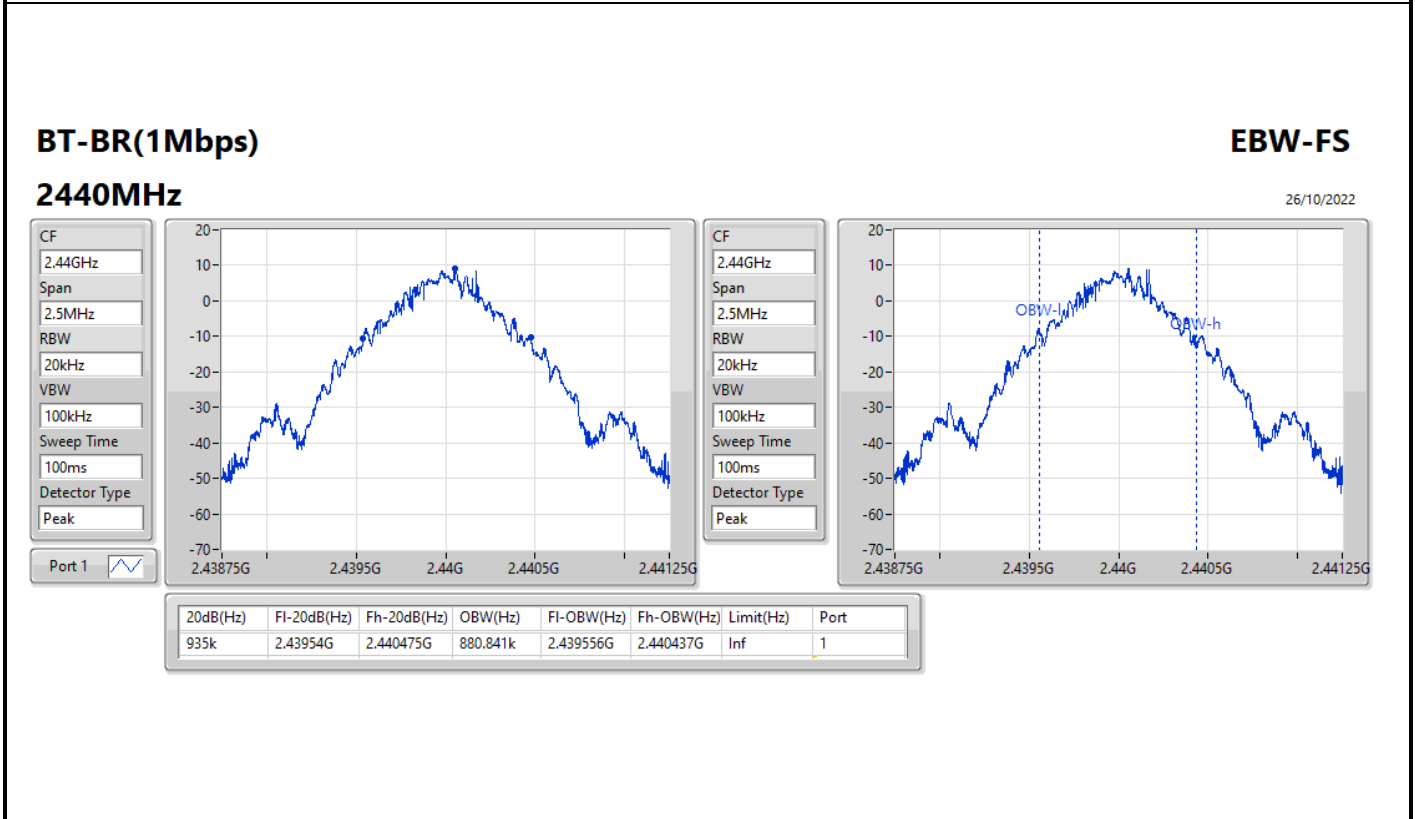
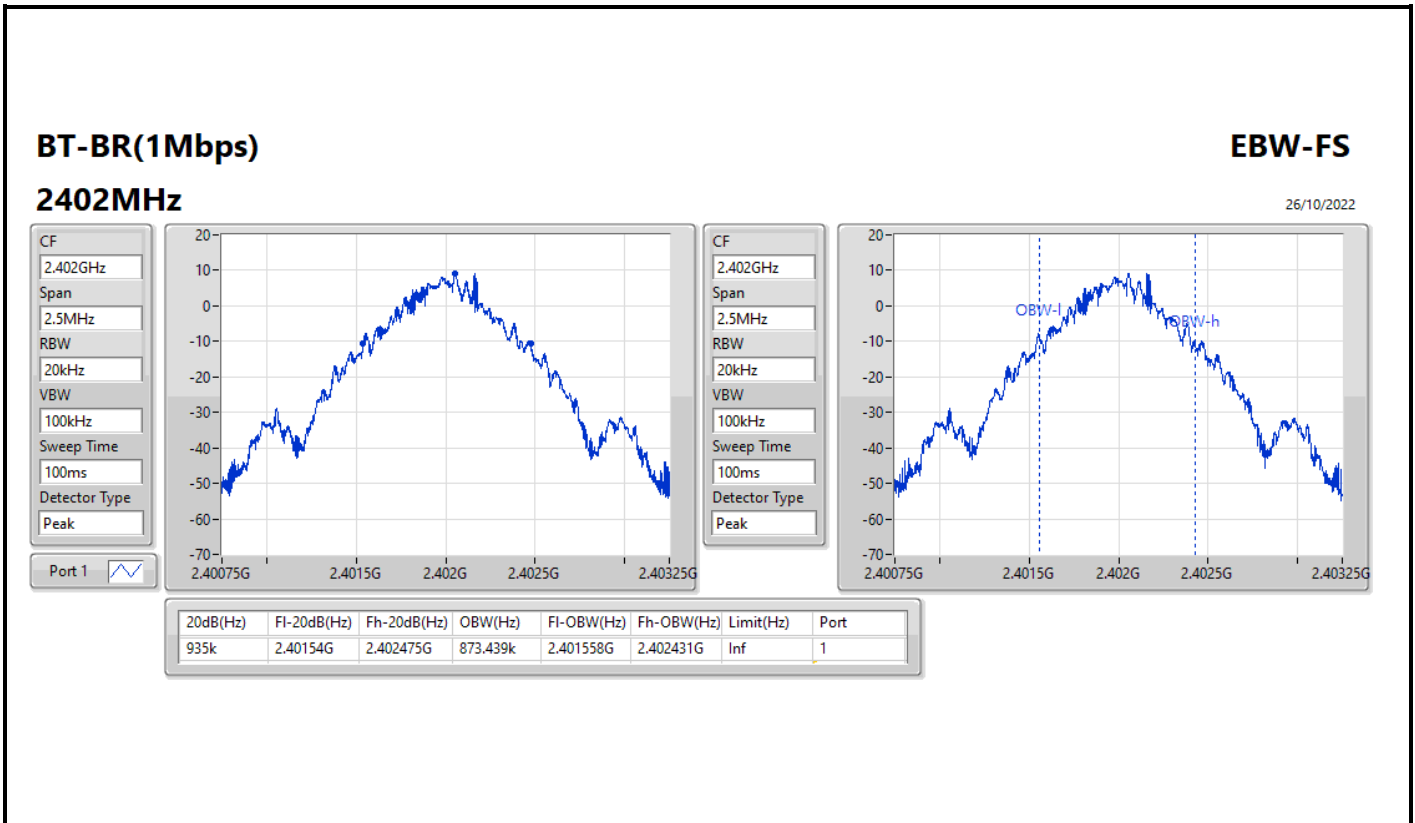
Max-N dB = Maximum 20dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;  
Min-N dB = Minimum 20dB down bandwidth; Min-OBW = Minimum 99% occupied bandwidth

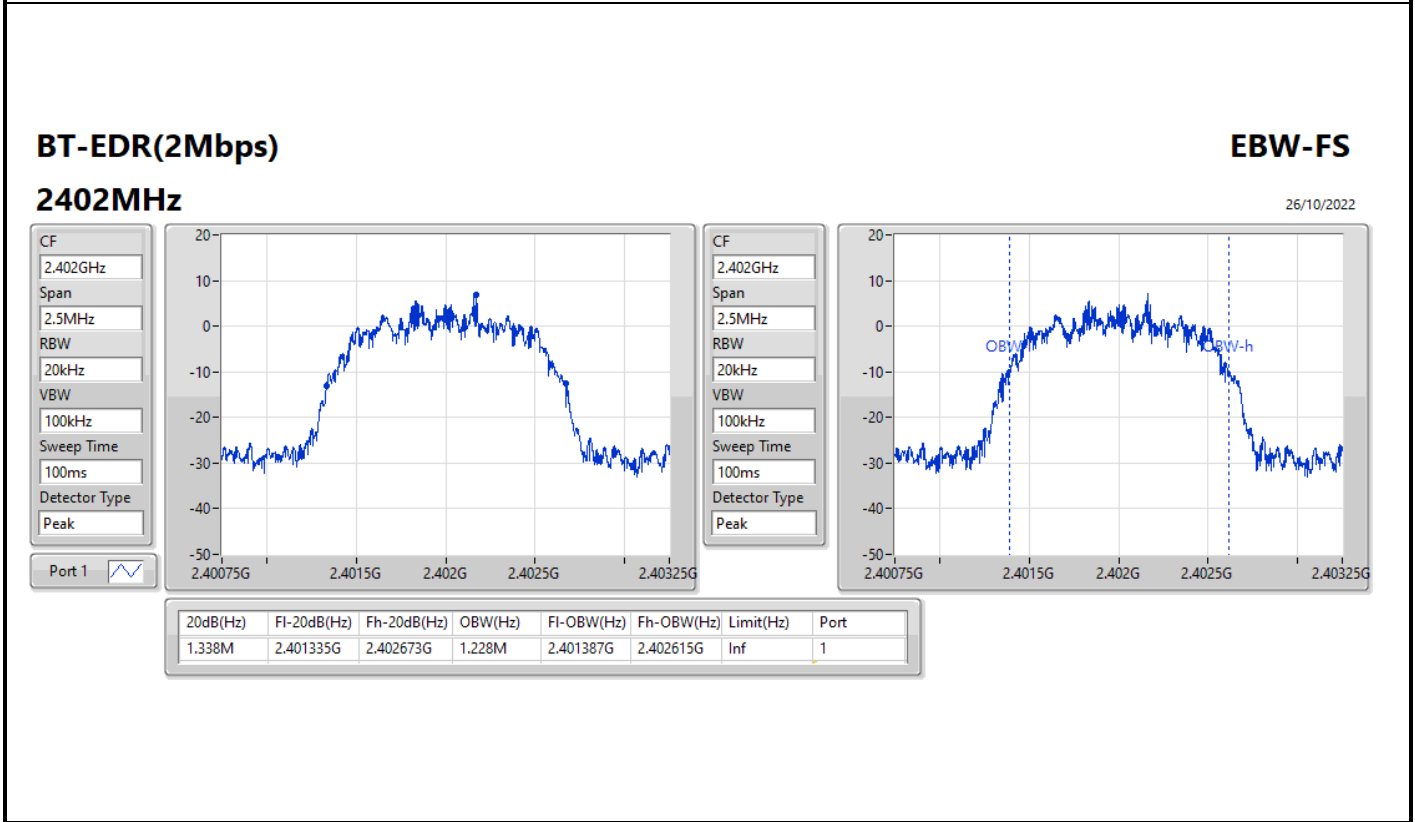
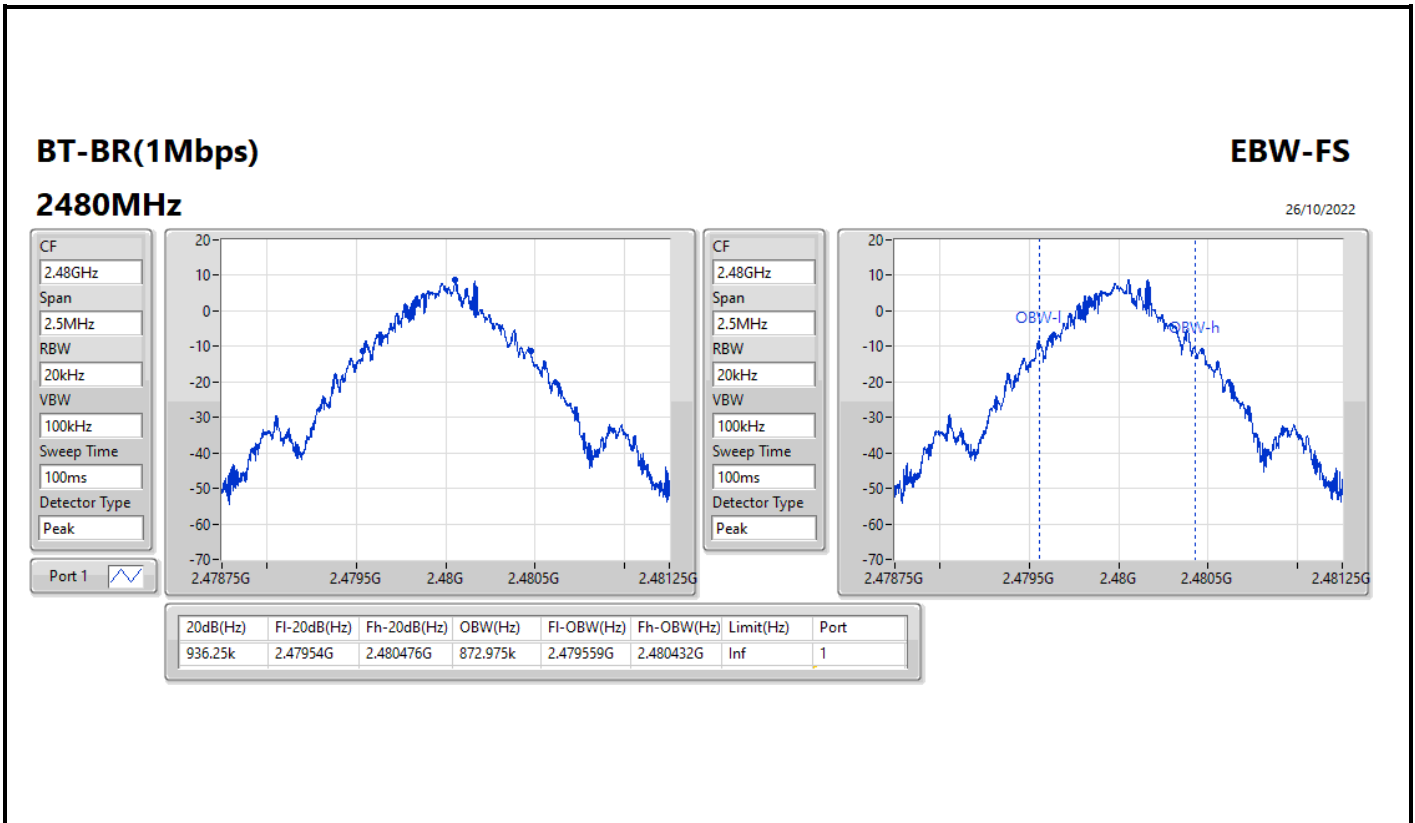


Result

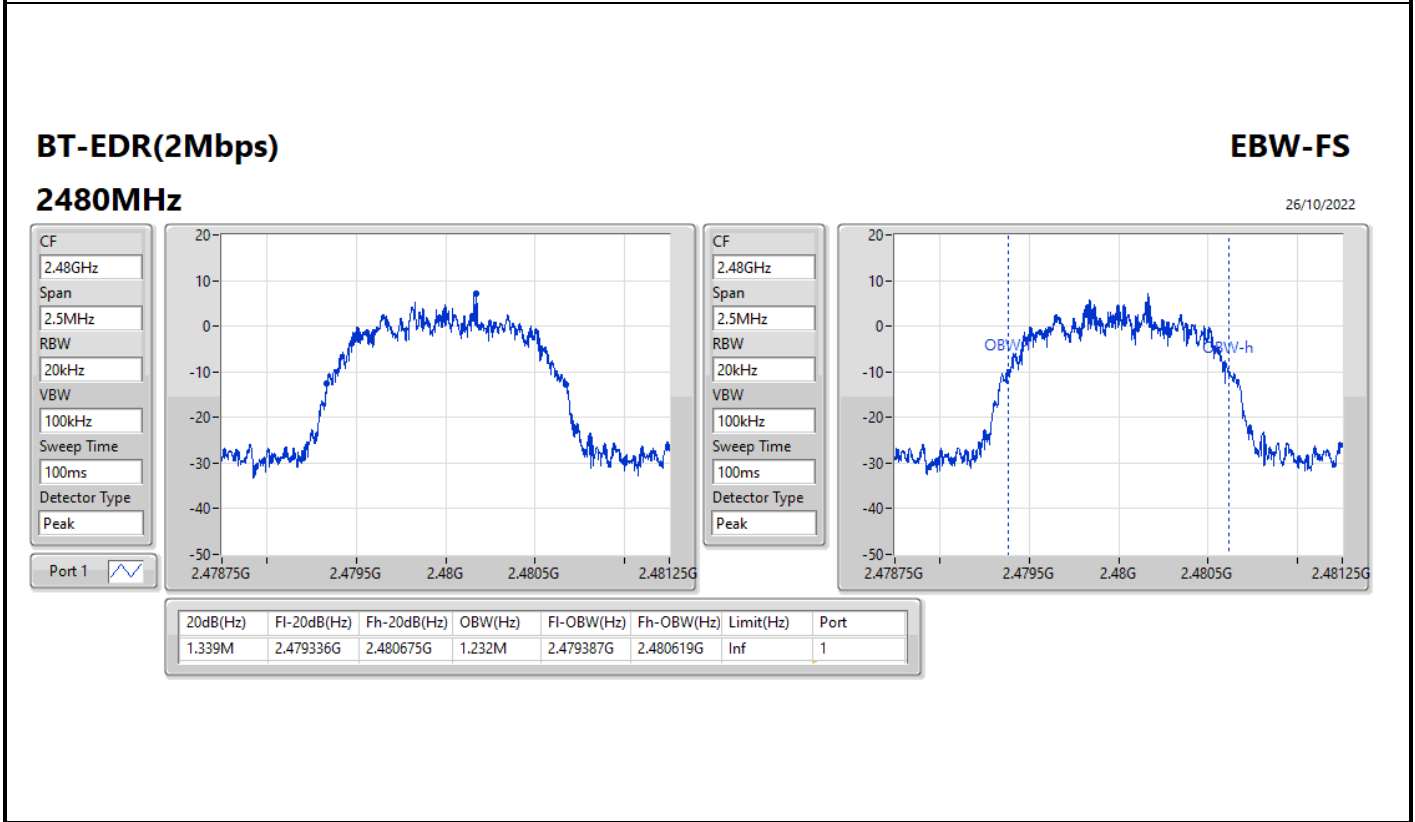
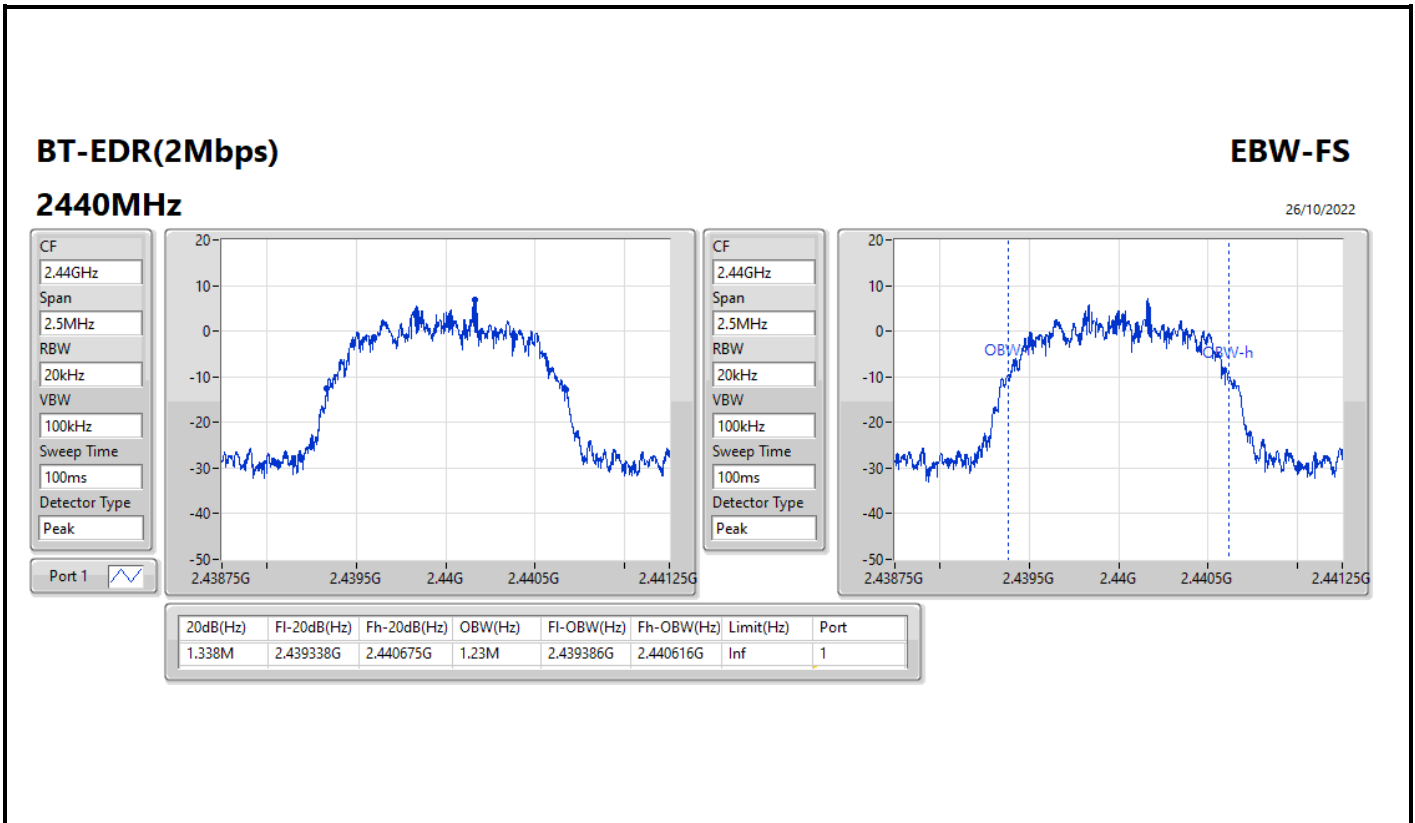
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	Inf	935k	873.439k
2440MHz	Pass	Inf	935k	880.841k
2480MHz	Pass	Inf	936.25k	872.975k
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	Inf	1.338M	1.228M
2440MHz	Pass	Inf	1.338M	1.23M
2480MHz	Pass	Inf	1.339M	1.232M
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	Inf	1.305M	1.225M
2440MHz	Pass	Inf	1.296M	1.226M
2480MHz	Pass	Inf	1.283M	1.226M

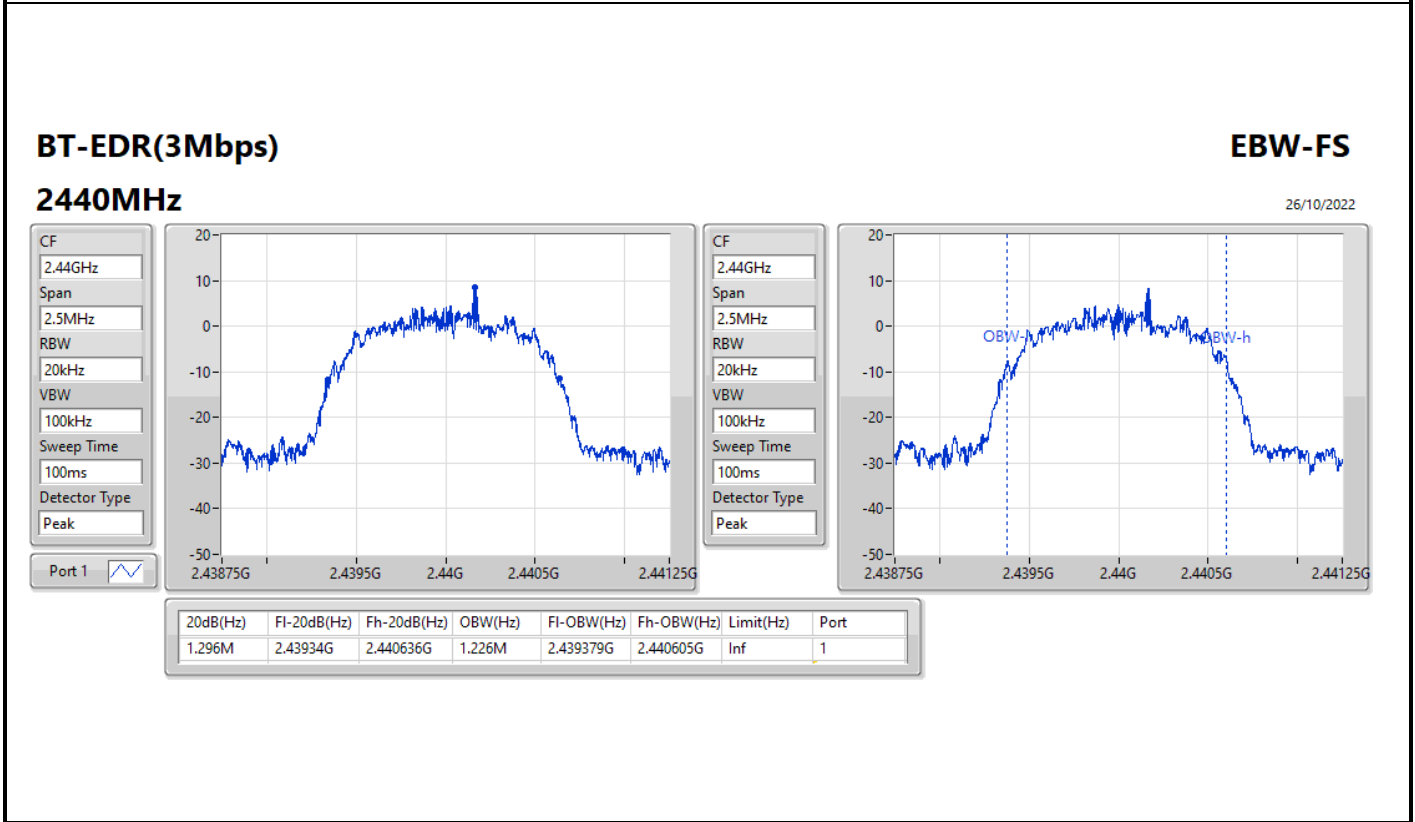
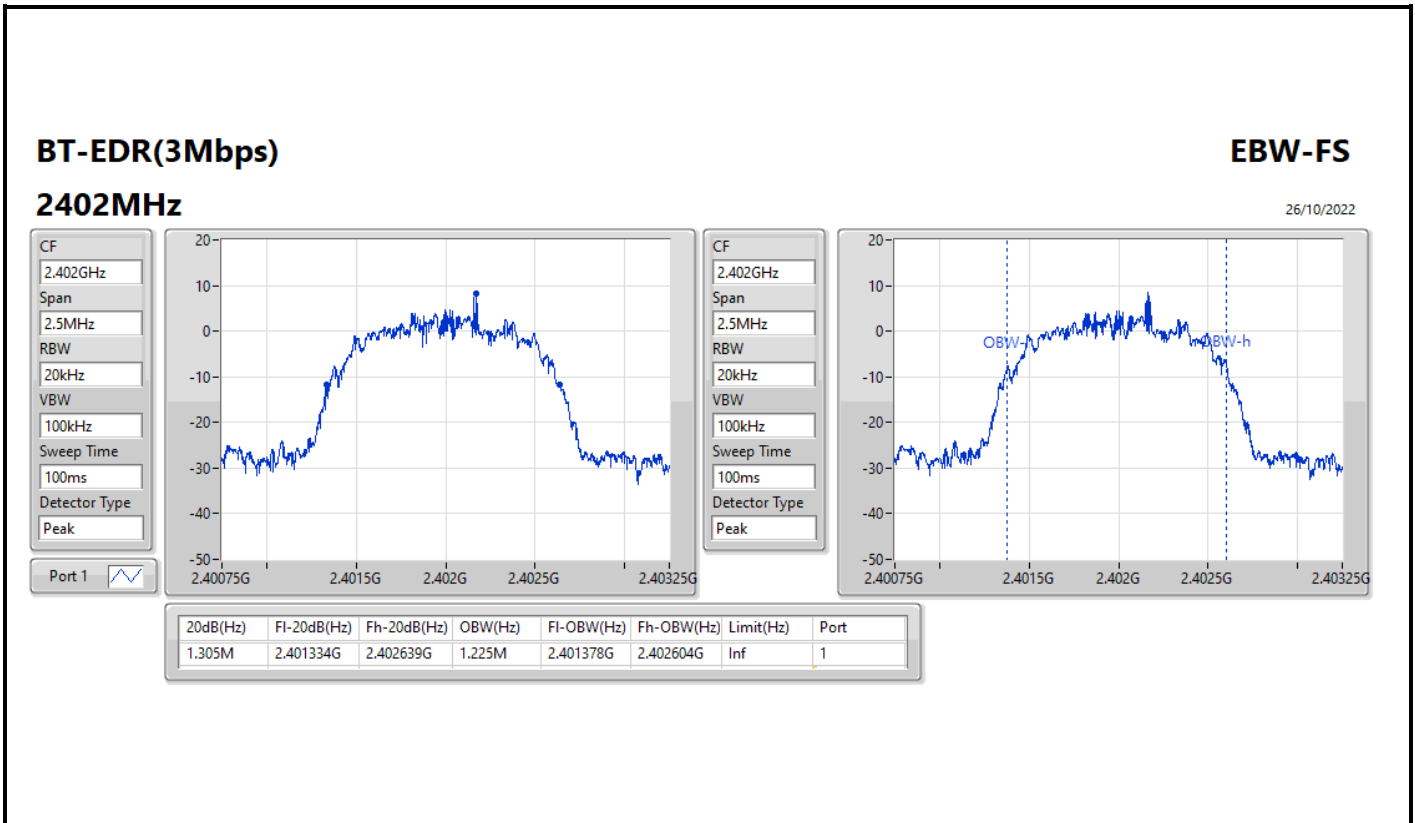
Port X-N dB = Port X 20dB down bandwidth;  
Port X-OBW = Port X 99% occupied bandwidth

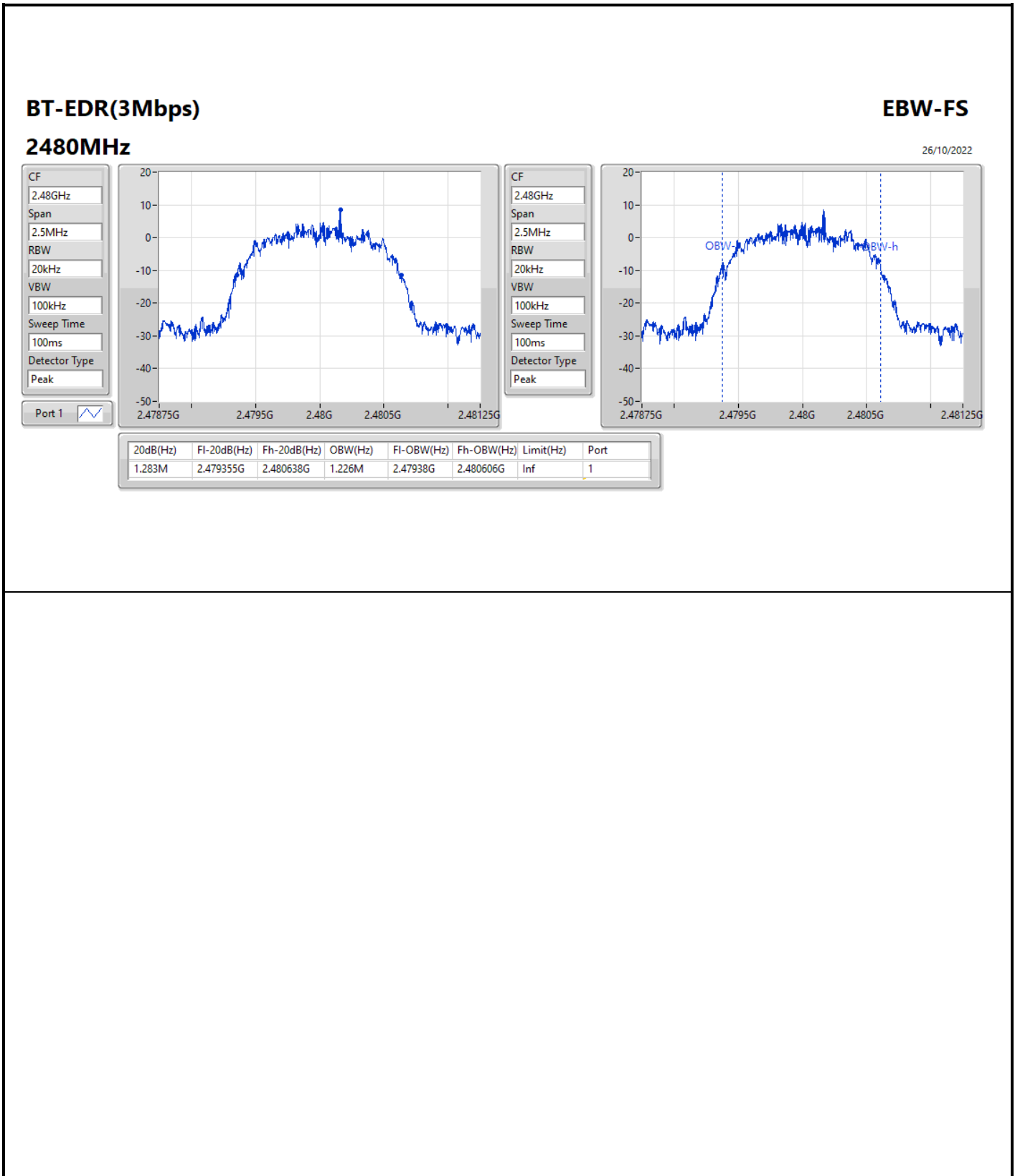














**Summary**

Mode	Max-Space (Hz)	Min-Space (Hz)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	1.0035M	999k
BT-EDR(2Mbps)	1.002M	999k
BT-EDR(3Mbps)	1.0005M	999k



Result

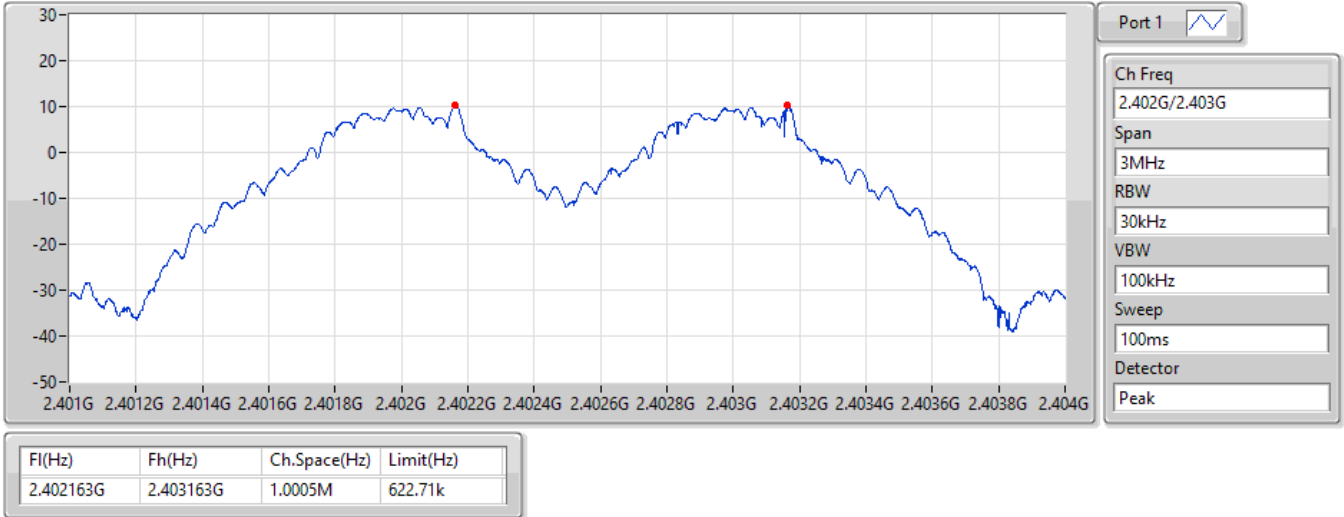
Mode	Result	Fl (Hz)	Fh (Hz)	Ch.Space (Hz)	Limit (Hz)
BT-BR(1Mbps)	-	-	-	-	-
2402MHz	Pass	2.402163G	2.403163G	1.0005M	622.71k
2440MHz	Pass	2.440163G	2.441166G	1.0035M	622.71k
2480MHz	Pass	2.479164G	2.480163G	999k	623.5425k
BT-EDR(2Mbps)	-	-	-	-	-
2402MHz	Pass	2.402164G	2.403163G	999k	891.108k
2440MHz	Pass	2.440164G	2.441165G	1.0005M	891.108k
2480MHz	Pass	2.479163G	2.480165G	1.002M	891.774k
BT-EDR(3Mbps)	-	-	-	-	-
2402MHz	Pass	2.402164G	2.403163G	999k	869.13k
2440MHz	Pass	2.440164G	2.441165G	1.0005M	863.136k
2480MHz	Pass	2.479164G	2.480165G	1.0005M	854.478k

**BT-BR(1Mbps)**

**Channel Separation-FS**

2.402G/2.403GHz

26/10/2022

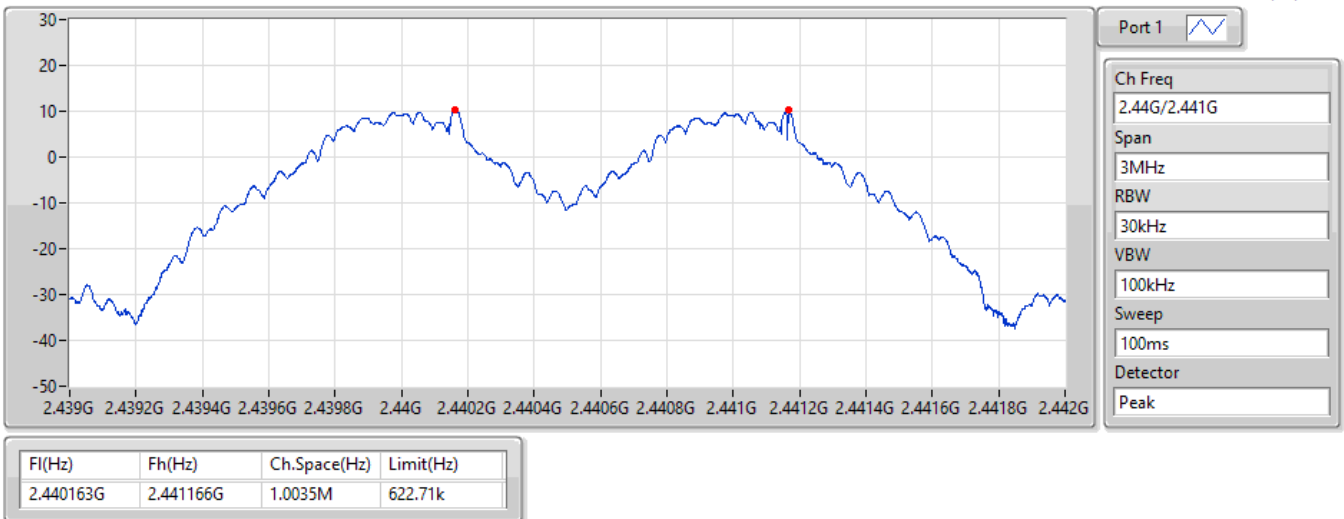


**BT-BR(1Mbps)**

**Channel Separation-FS**

2.44G/2.441GHz

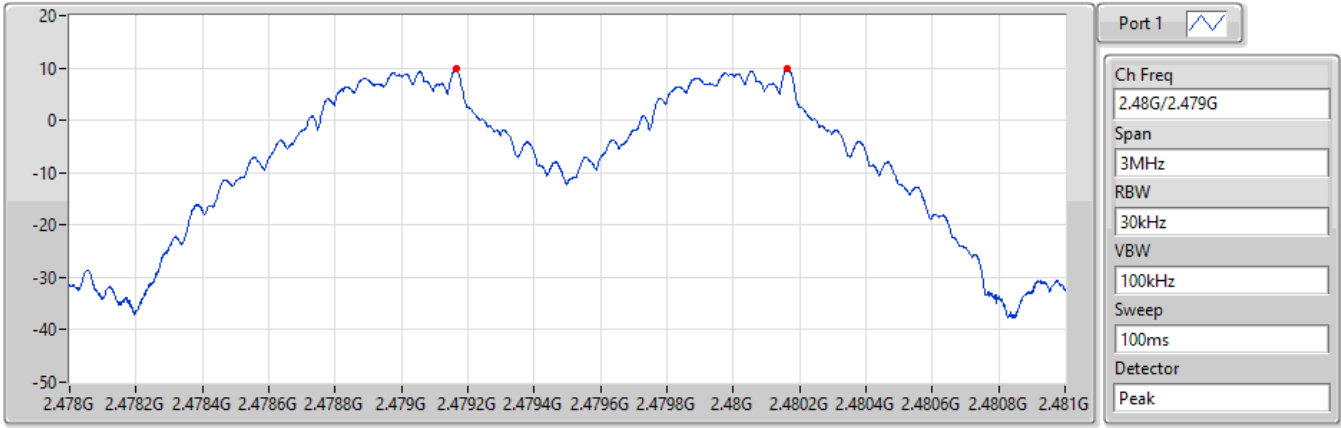
26/10/2022




**BT-BR(1Mbps)**

**2.48G/2.479GHz**

**Channel Separation-FS**



F1(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.479164G	2.480163G	999k	623.5425k

Port 1 

Ch Freq  
2.48G/2.479G

Span  
3MHz

RBW  
30kHz

VBW  
100kHz

Sweep  
100ms

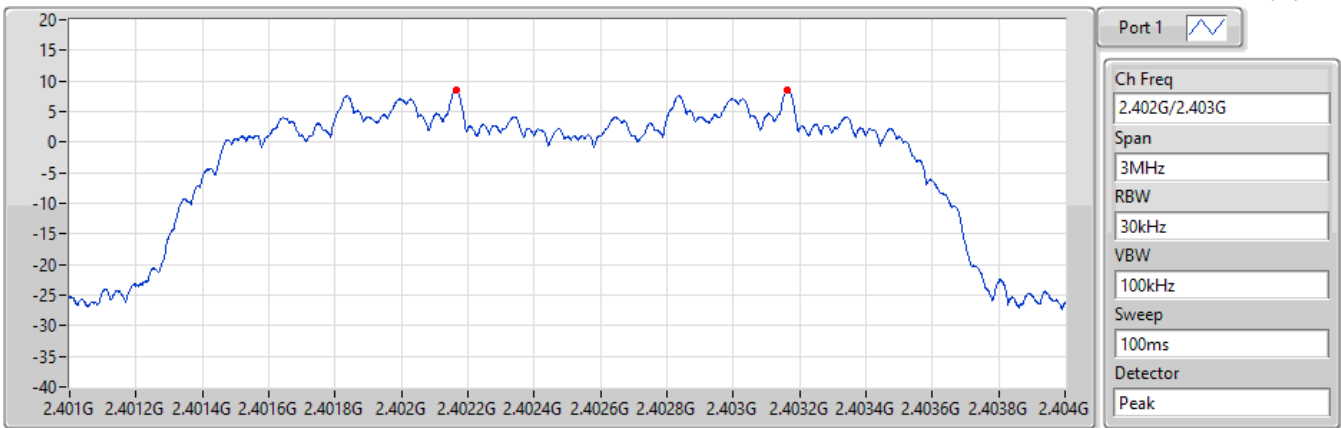
Detector  
Peak

**BT-EDR(2Mbps)**


**2.402G/2.403GHz**

**Channel Separation-FS**

26/10/2022



F1(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.402164G	2.403163G	999k	891.108k

Port 1 

Ch Freq  
2.402G/2.403G

Span  
3MHz

RBW  
30kHz

VBW  
100kHz

Sweep  
100ms

Detector  
Peak

**BT-EDR(2Mbps)**

**Channel Separation-FS**

**2.44G/2.441GHz**

26/10/2022



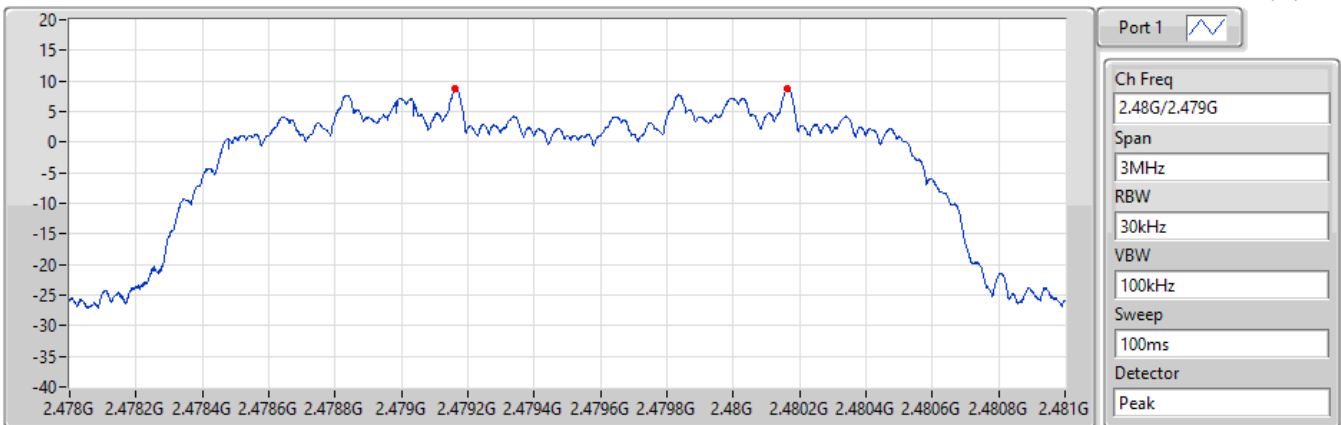
F1(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.440164G	2.441165G	1.0005M	891.108k

**BT-EDR(2Mbps)**

**Channel Separation-FS**

**2.48G/2.479GHz**

26/10/2022



F1(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.479163G	2.480165G	1.002M	891.774k




**BT-EDR(3Mbps)**

**Channel Separation-FS**

**2.402G/2.403GHz**

26/10/2022



Port 1 

Ch Freq  
2.402G/2.403G

Span  
3MHz

RBW  
30kHz

VBW  
100kHz

Sweep  
100ms

Detector  
Peak

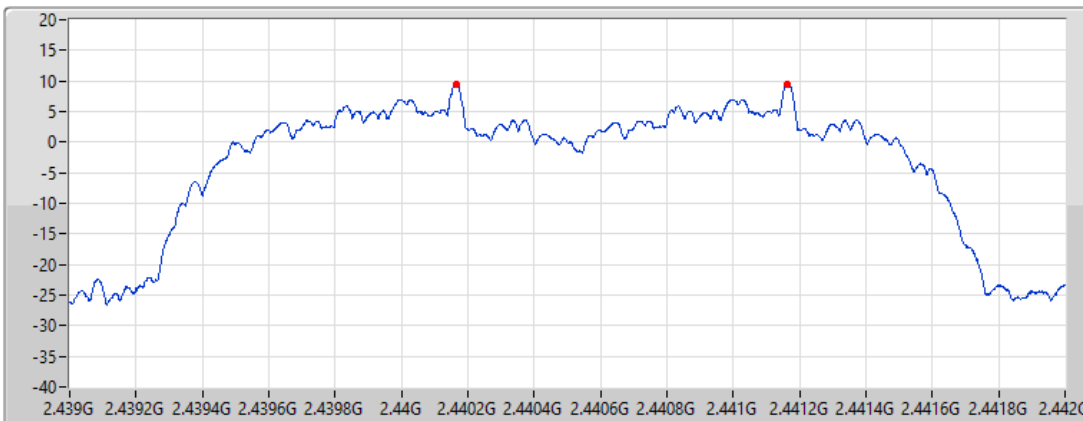
F1(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.402164G	2.403163G	999k	869.13k


**BT-EDR(3Mbps)**

**Channel Separation-FS**

**2.44G/2.441GHz**

26/10/2022



Port 1 

Ch Freq  
2.44G/2.441G

Span  
3MHz

RBW  
30kHz

VBW  
100kHz

Sweep  
100ms

Detector  
Peak

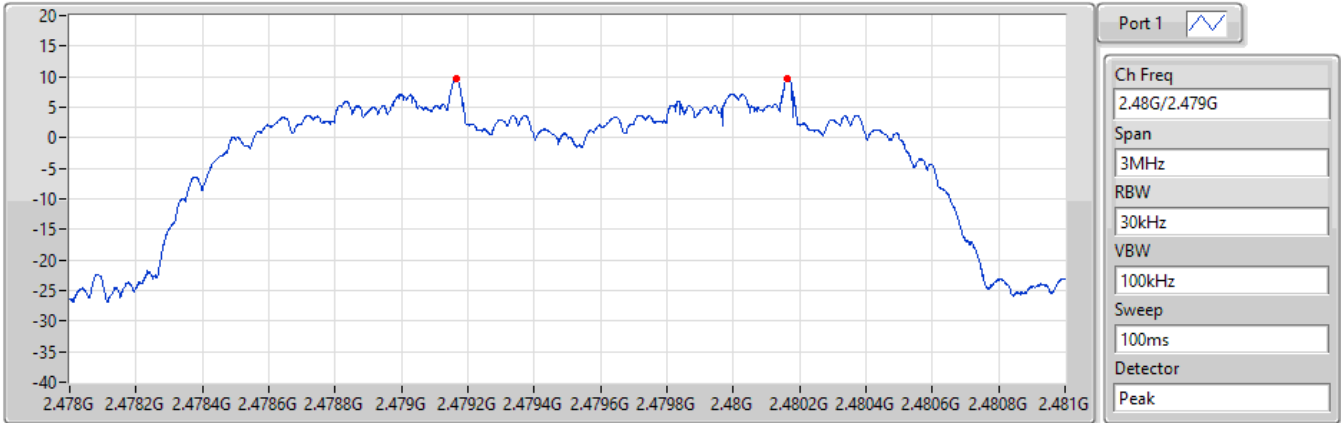
F1(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.440164G	2.441165G	1.0005M	863.136k

**BT-EDR(3Mbps)**


**2.48G/2.479GHz**

**Channel Separation-FS**

26/10/2022



Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.479164G	2.480165G	1.0005M	854.478k

Port 1 

Ch Freq  
2.48G/2.479G

Span  
3MHz

RBW  
30kHz

VBW  
100kHz

Sweep  
100ms

Detector  
Peak



**Summary**

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	12.86	0.01932
BT-EDR(2Mbps)	13.25	0.02113
BT-EDR(3Mbps)	13.21	0.02094



Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	-0.29	12.71	21.00
2440MHz	Pass	-0.29	12.73	21.00
2480MHz	Pass	-0.29	12.86	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	-0.29	13.15	21.00
2440MHz	Pass	-0.29	13.03	21.00
2480MHz	Pass	-0.29	13.25	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	-0.29	13.12	21.00
2440MHz	Pass	-0.29	13.06	21.00
2480MHz	Pass	-0.29	13.21	21.00

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



**Summary**

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	12.70	0.01862
BT-EDR(2Mbps)	12.06	0.01607
BT-EDR(3Mbps)	12.06	0.01607



Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	-0.29	12.50	21.00
2440MHz	Pass	-0.29	12.53	21.00
2480MHz	Pass	-0.29	12.70	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	-0.29	11.97	21.00
2440MHz	Pass	-0.29	11.83	21.00
2480MHz	Pass	-0.29	12.06	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	-0.29	11.93	21.00
2440MHz	Pass	-0.29	11.90	21.00
2480MHz	Pass	-0.29	12.06	21.00

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



**Summary**

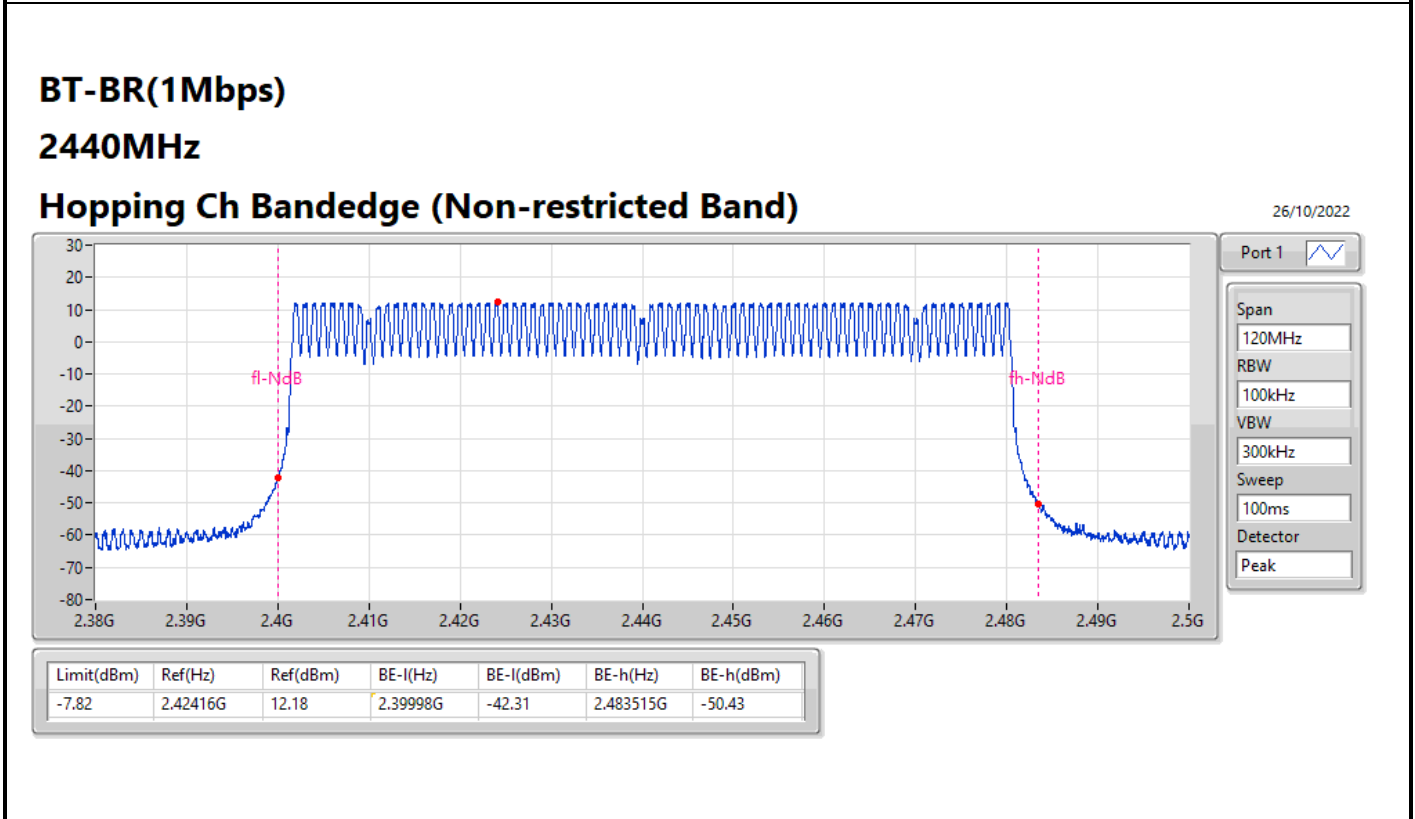
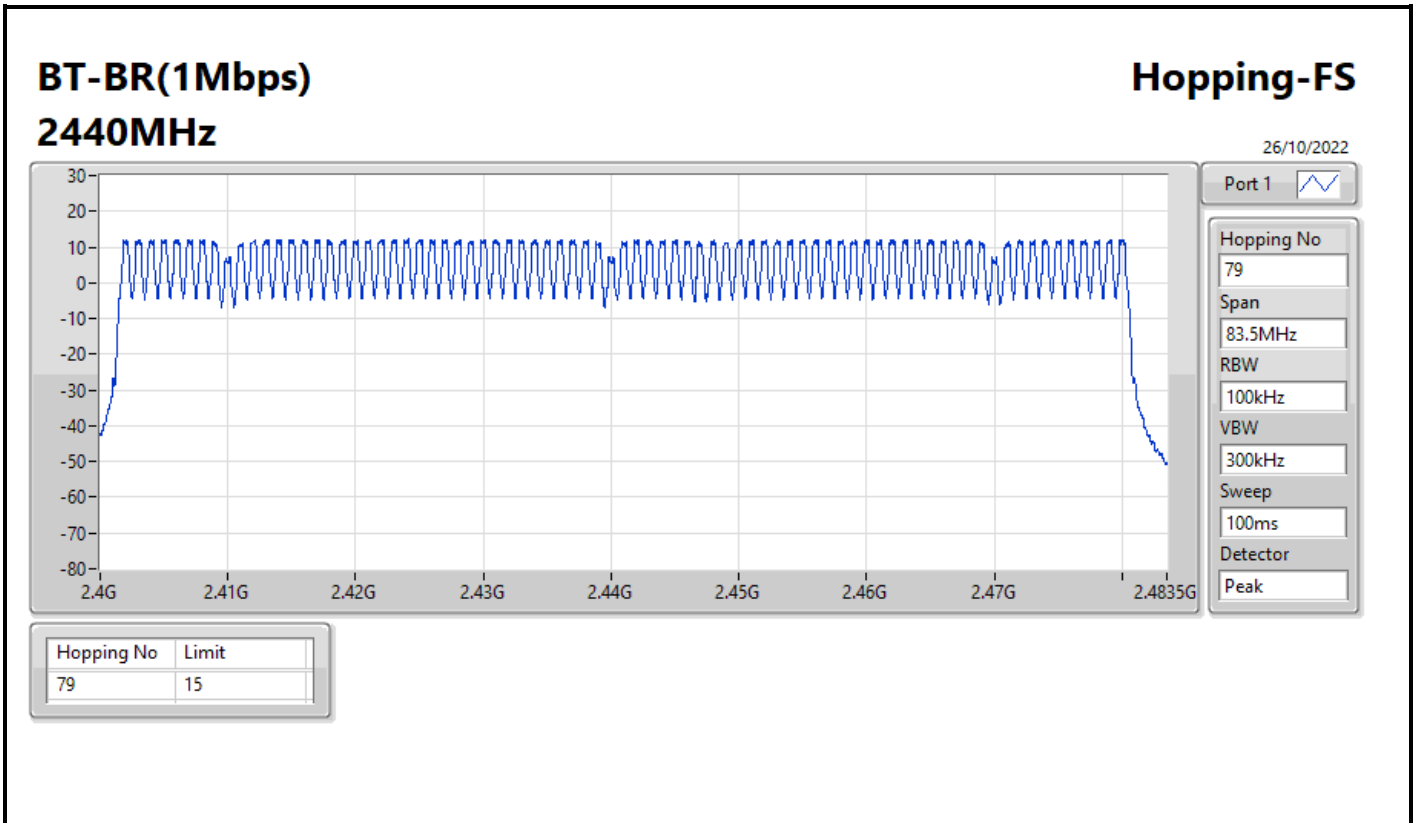
<b>Mode</b>	<b>Max-Hop No</b>
2.4-2.4835GHz	-
BT-BR(1Mbps)	79
BT-EDR(2Mbps)	79
BT-EDR(3Mbps)	79



**Result**

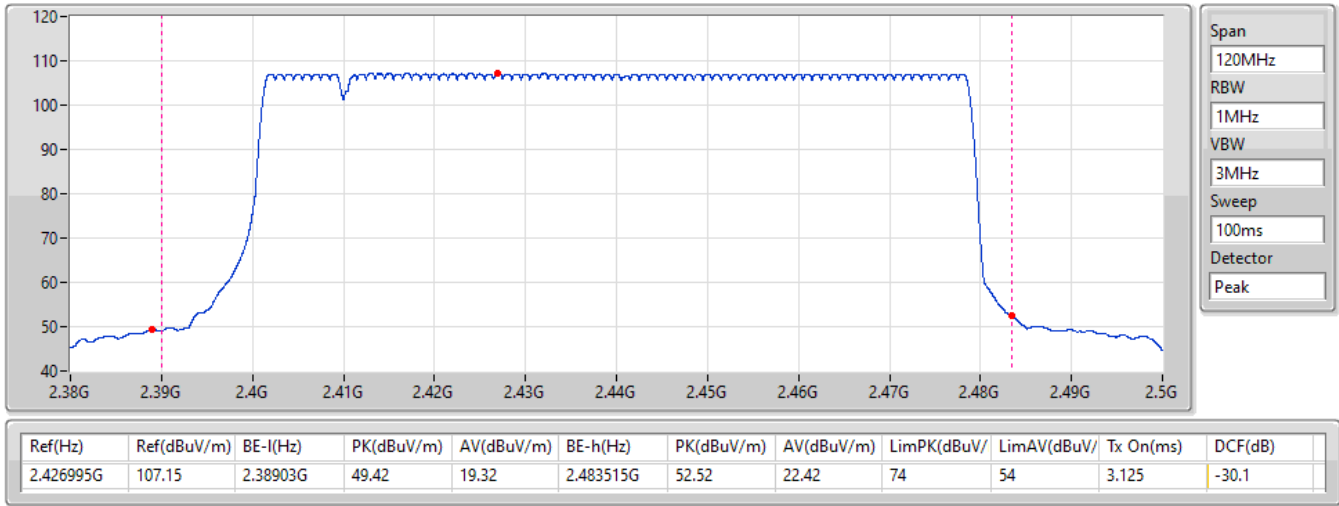
Mode	Result	Hopping No	Limit
BT-BR(1Mbps)	-	-	-
2440MHz	Pass	79	15
BT-EDR(2Mbps)	-	-	-
2440MHz	Pass	79	15
BT-EDR(3Mbps)	-	-	-
2440MHz	Pass	79	15





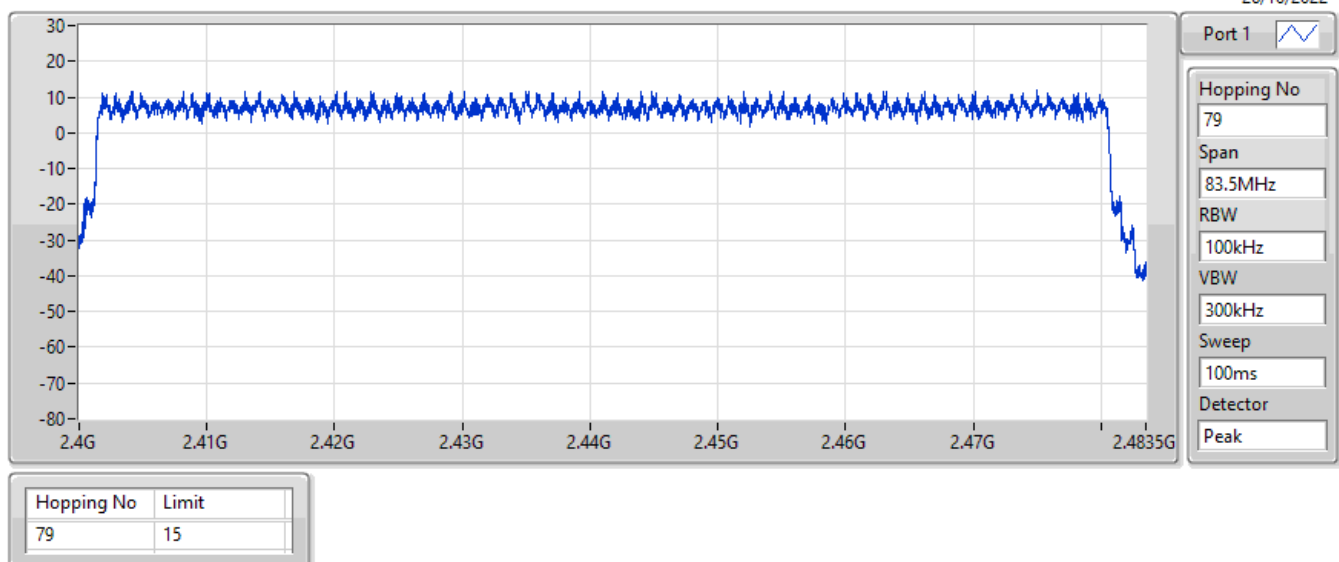
**BT-BR(1Mbps)**  
**2440MHz**  
**Hopping Ch Bandedge (Restricted Band)**

26/10/2022



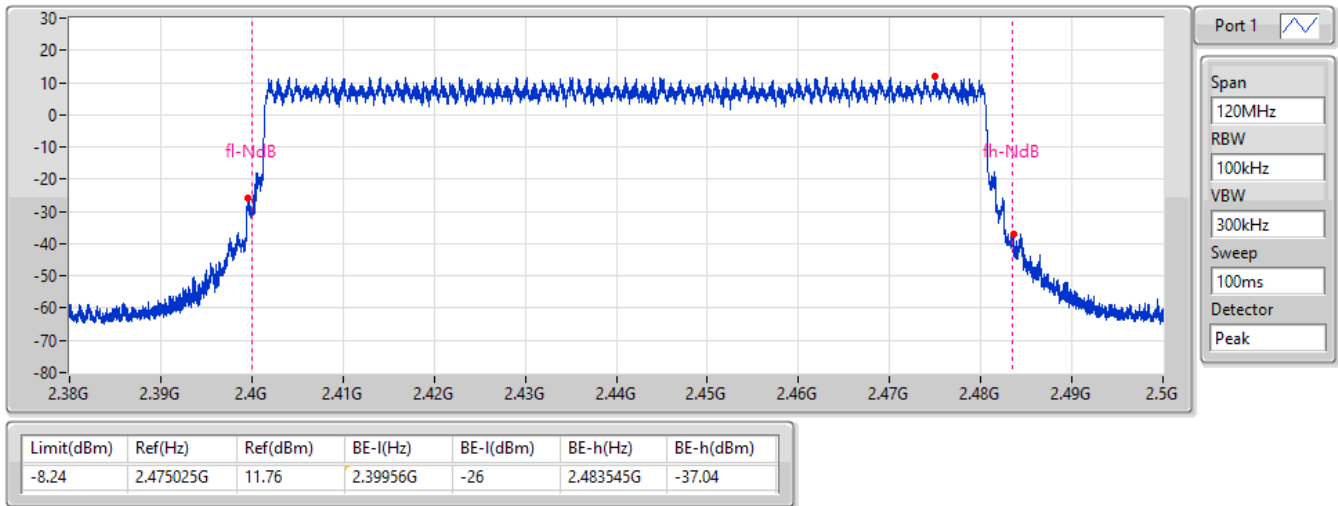
**BT-EDR(2Mbps)** **Hopping-FS**  
**2440MHz**

26/10/2022



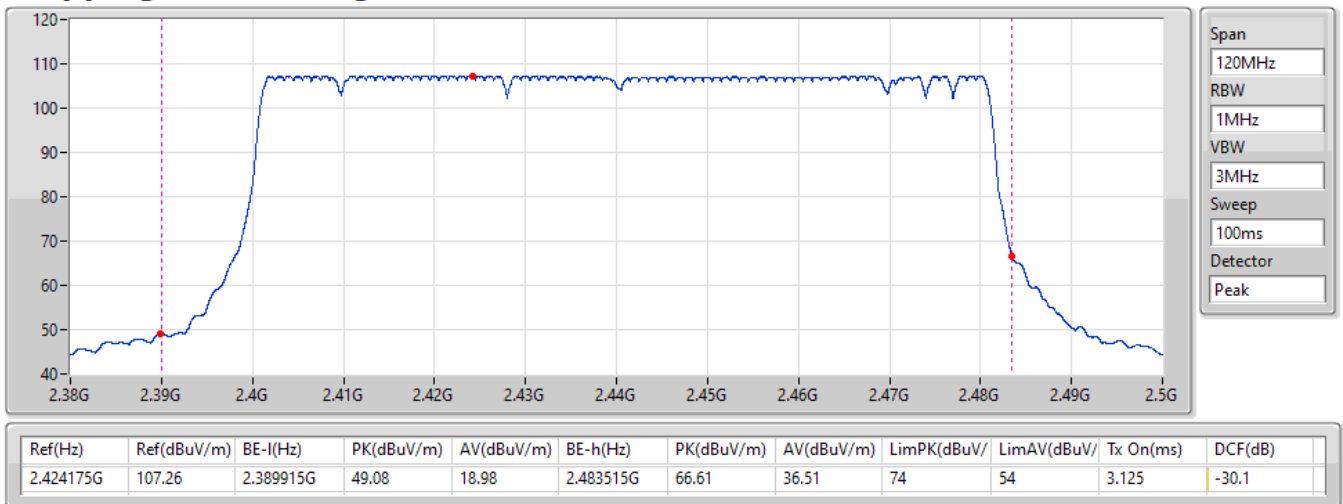
**BT-EDR(2Mbps)**  
**2440MHz**  
**Hopping Ch Bandedge (Non-restricted Band)**

26/10/2022



**BT-EDR(2Mbps)**  
**2440MHz**  
**Hopping Ch Bandedge (Restricted Band)**

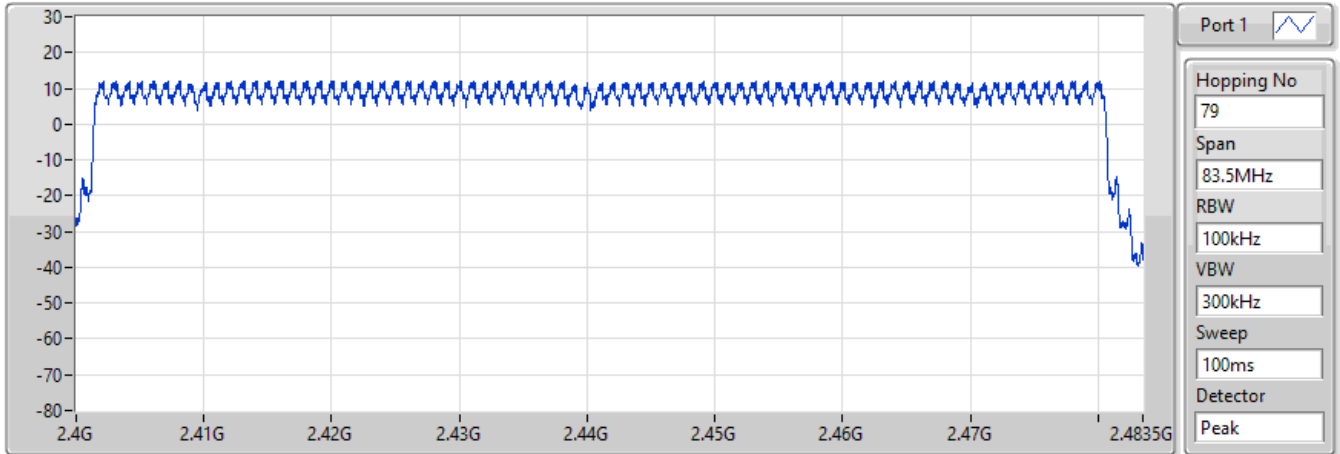
26/10/2022



**BT-EDR(3Mbps)  
2440MHz**

**Hopping-FS**

26/10/2022

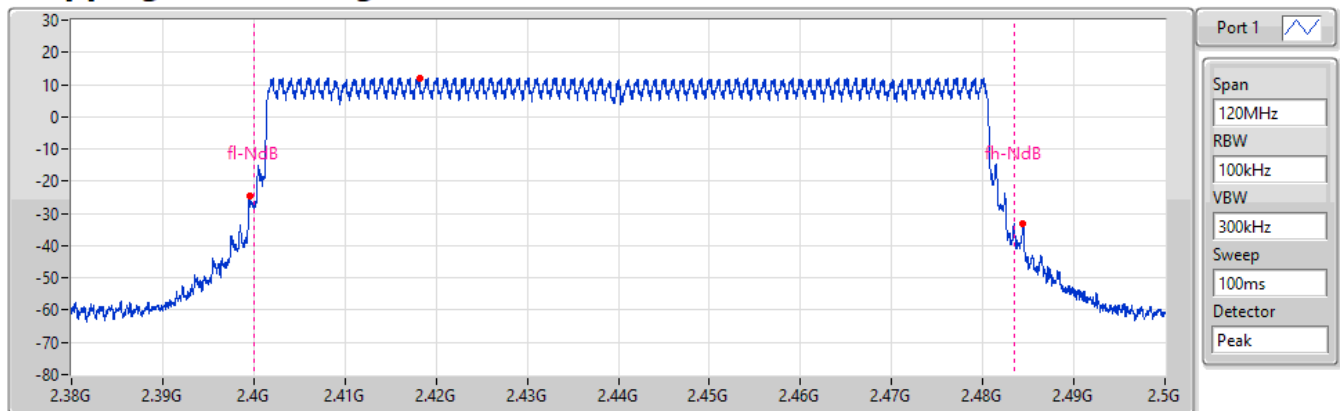


Hopping No	Limit
79	15

**BT-EDR(3Mbps)  
2440MHz**

**Hopping Ch Bandedge (Non-restricted Band)**

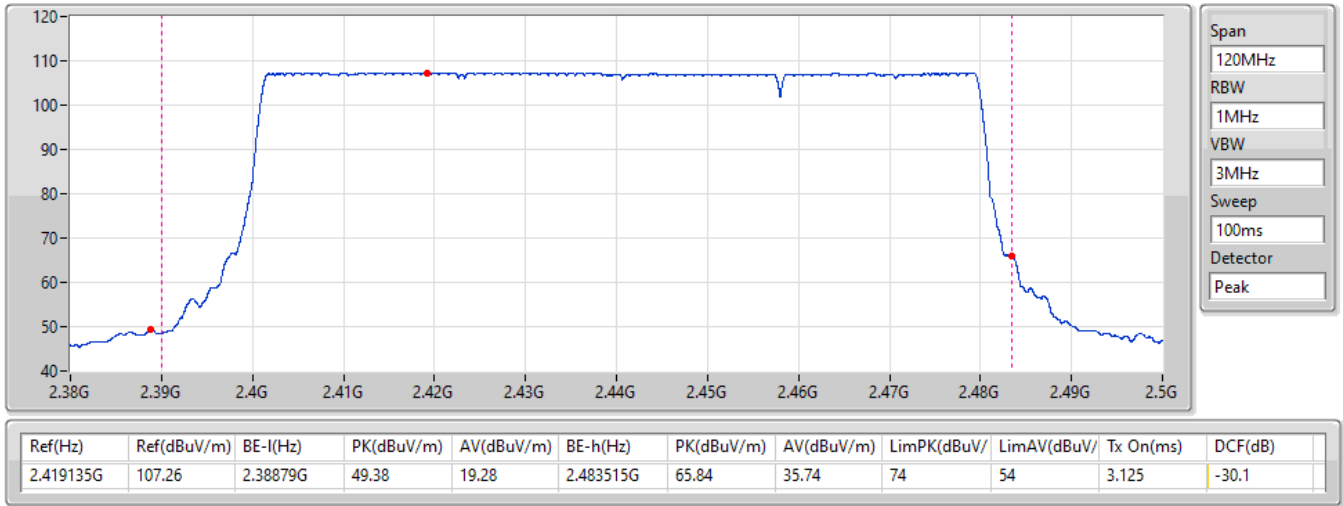
26/10/2022



Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-8.02	2.41816G	11.98	2.399515G	-24.68	2.484415G	-33.32

**BT-EDR(3Mbps)**  
**2440MHz**  
**Hopping Ch Bandedge (Restricted Band)**

26/10/2022





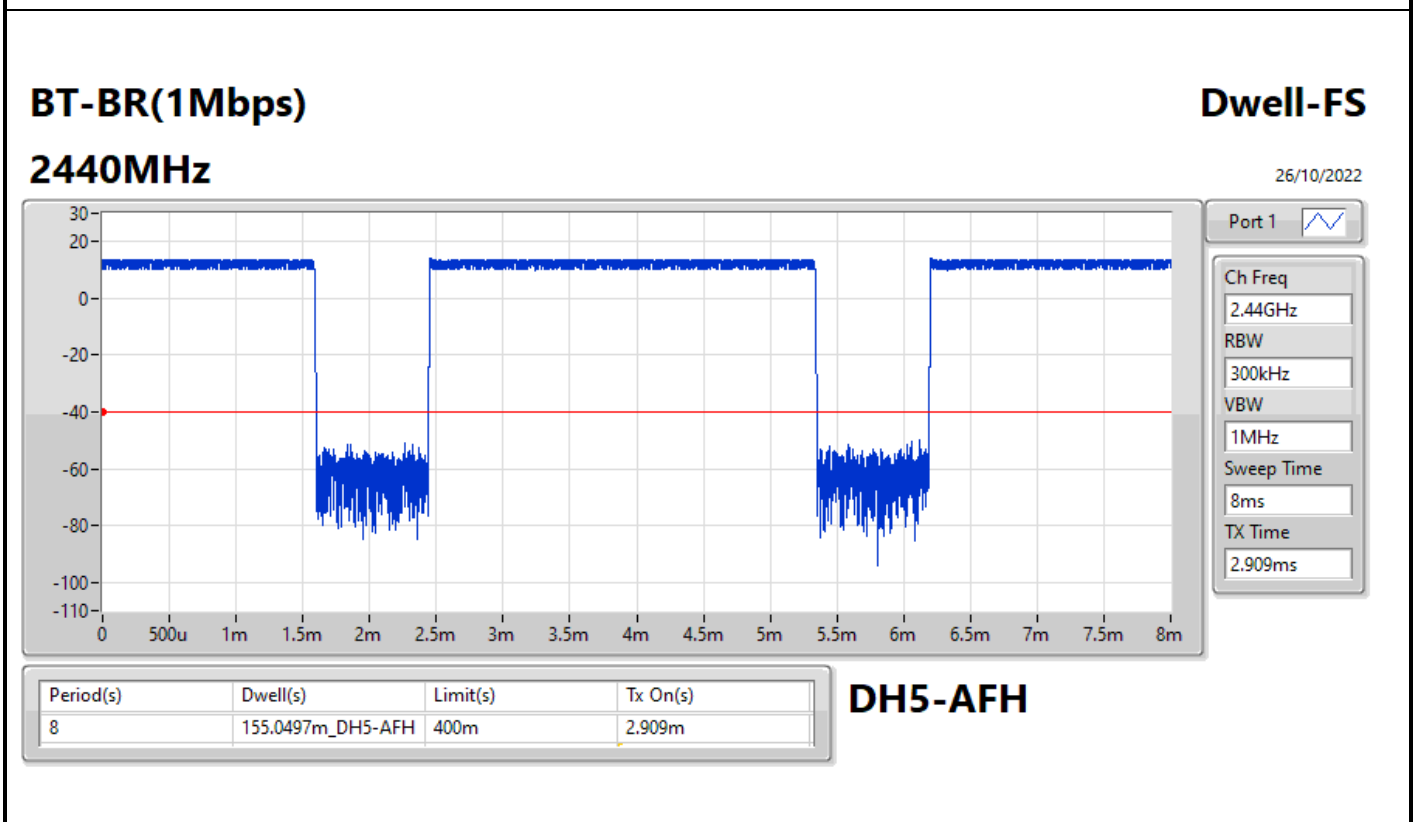
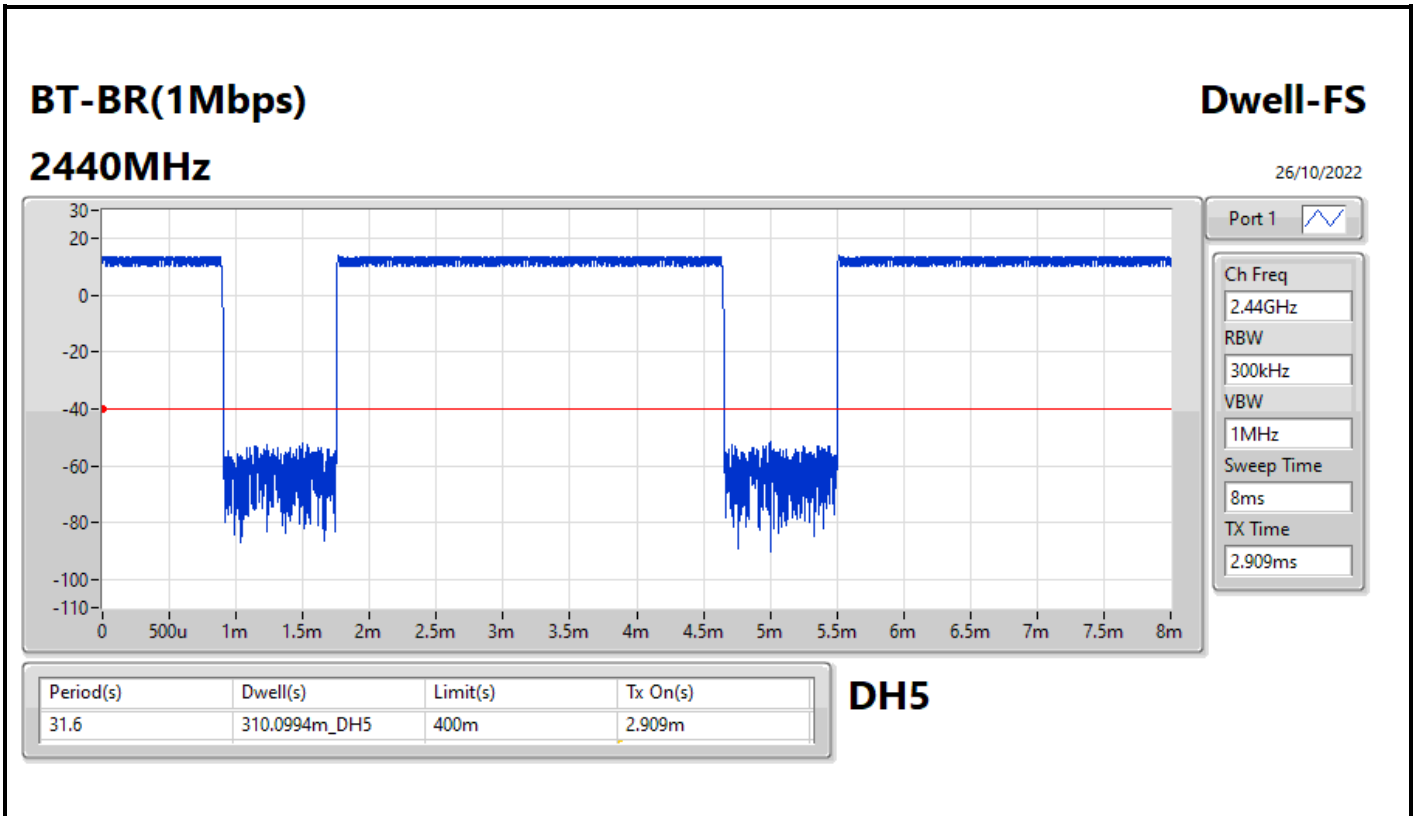
**Summary**

Mode	Max-Dwell (s)
2.4-2.4835GHz	-
BT-BR(1Mbps)	310.0994m_DH5
BT-EDR(2Mbps)	309.80625m_DH5
BT-EDR(3Mbps)	309.9928m_DH5

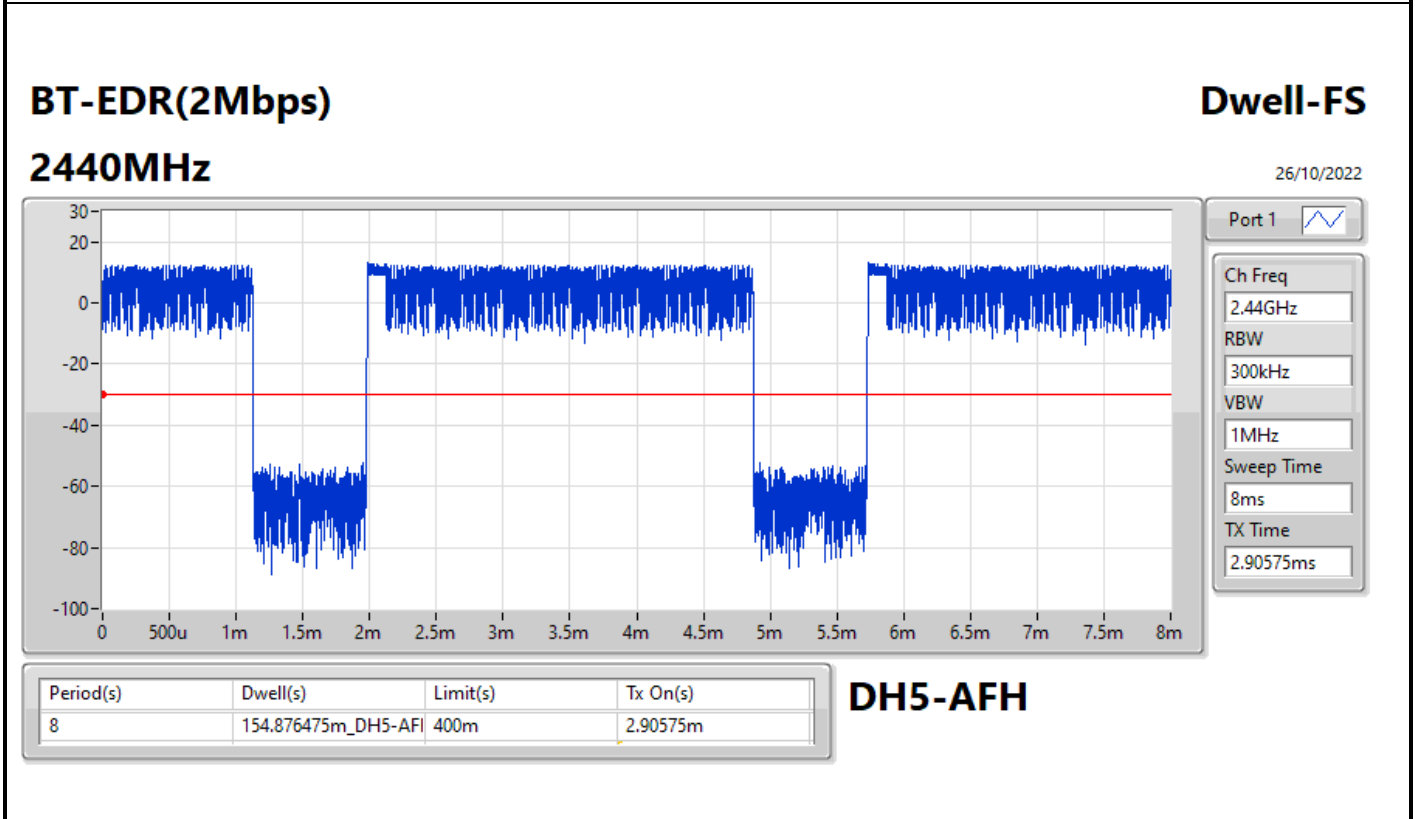
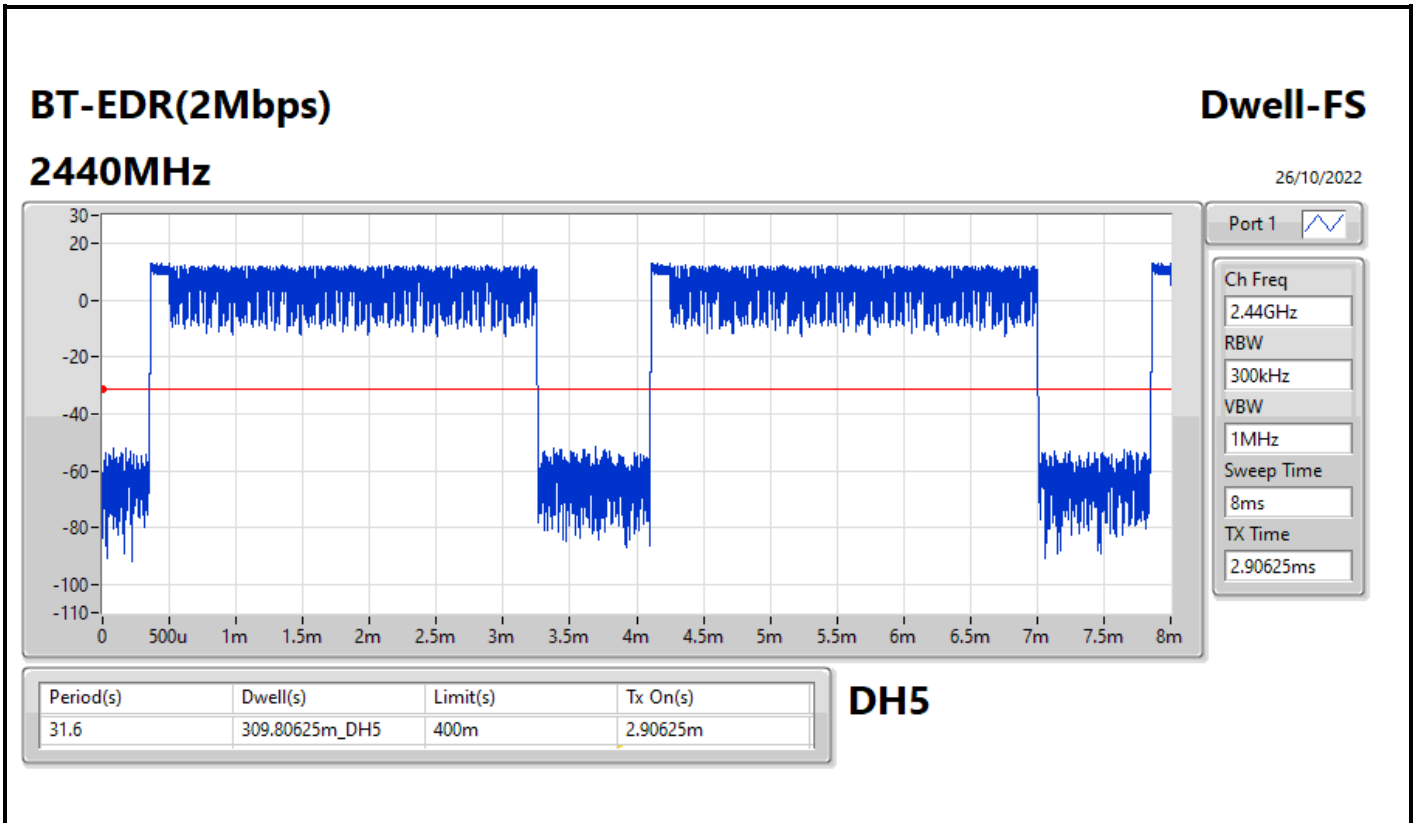


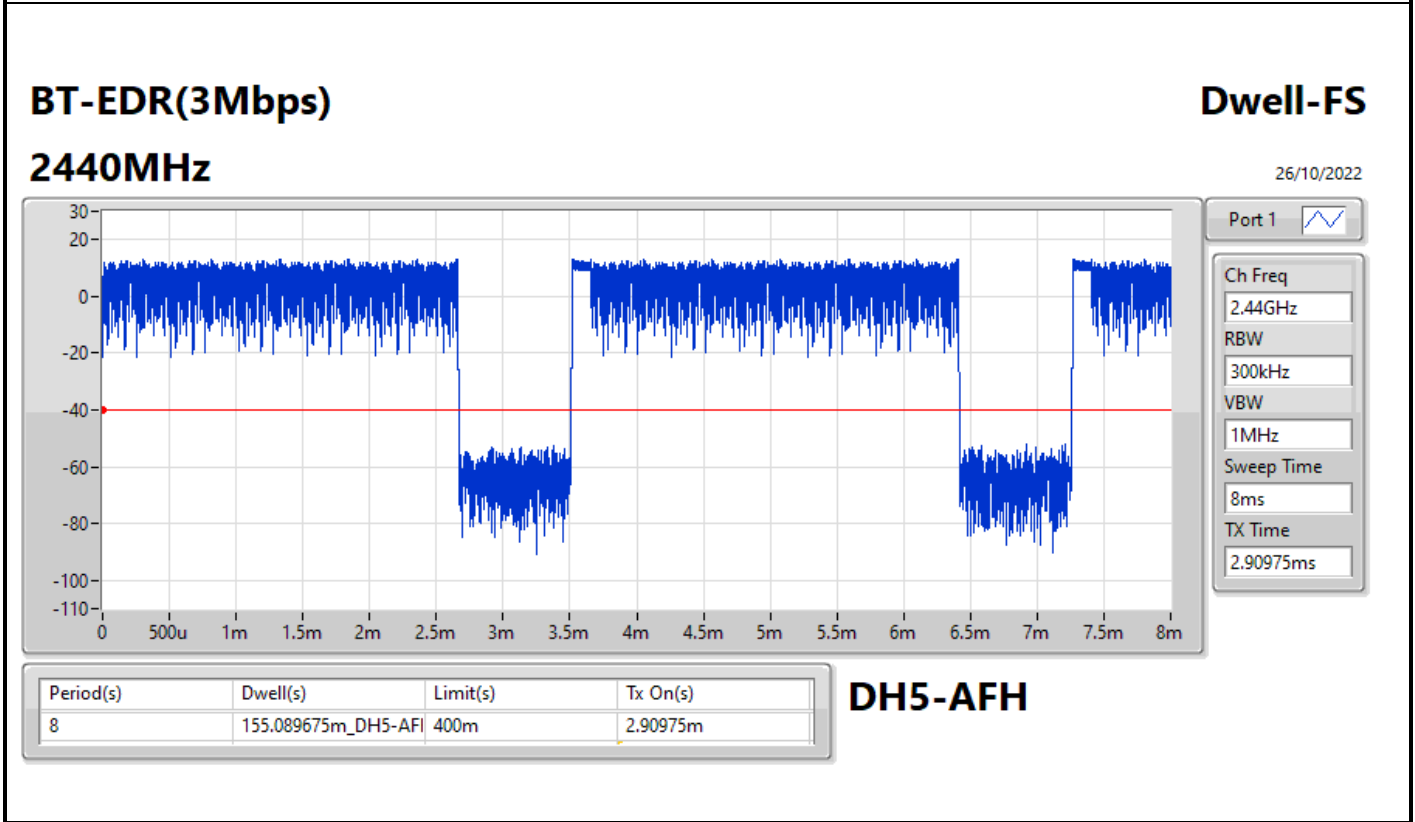
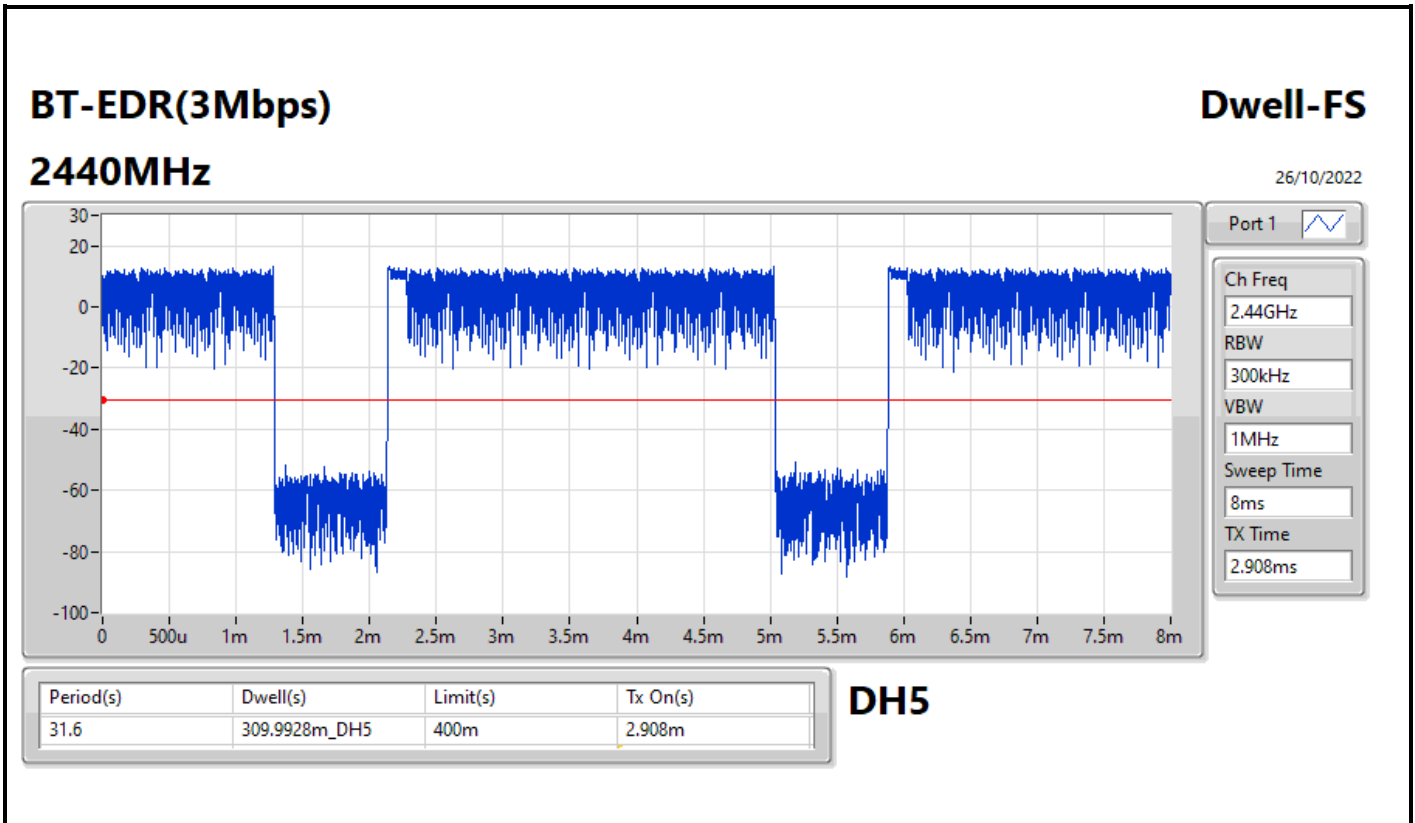
Result

Mode	Result	Period (s)	Dwell (s)	Limit (s)	Tx On (s)
BT-BR(1Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	310.0994m_DH5	400m	2.909m
2440MHz	Pass	8	155.0497m_DH5-AFH	400m	2.909m
BT-EDR(2Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	309.80625m_DH5	400m	2.90625m
2440MHz	Pass	8	154.876475m_DH5-AFH	400m	2.90575m
BT-EDR(3Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	309.9928m_DH5	400m	2.908m
2440MHz	Pass	8	155.089675m_DH5-AFH	400m	2.90975m











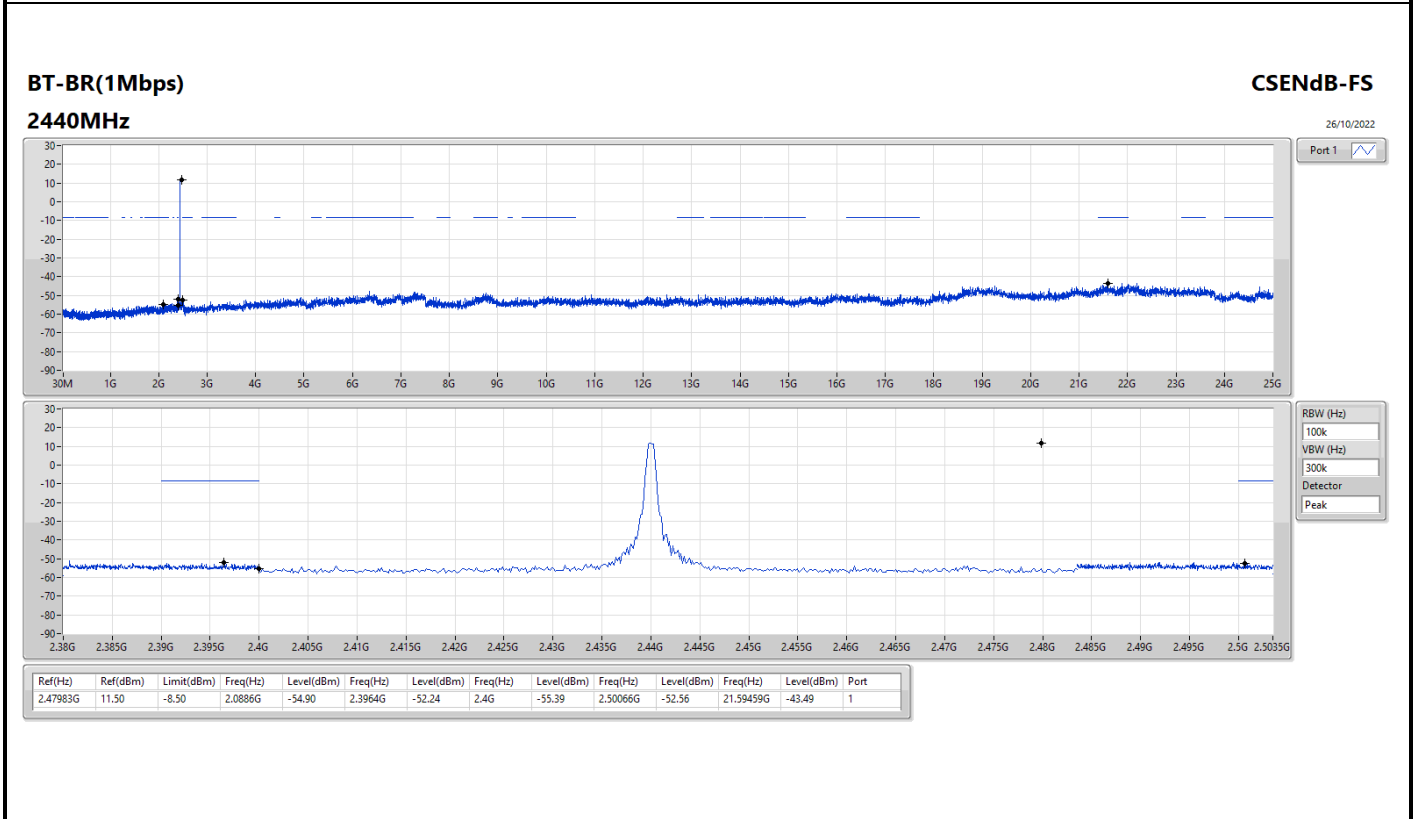
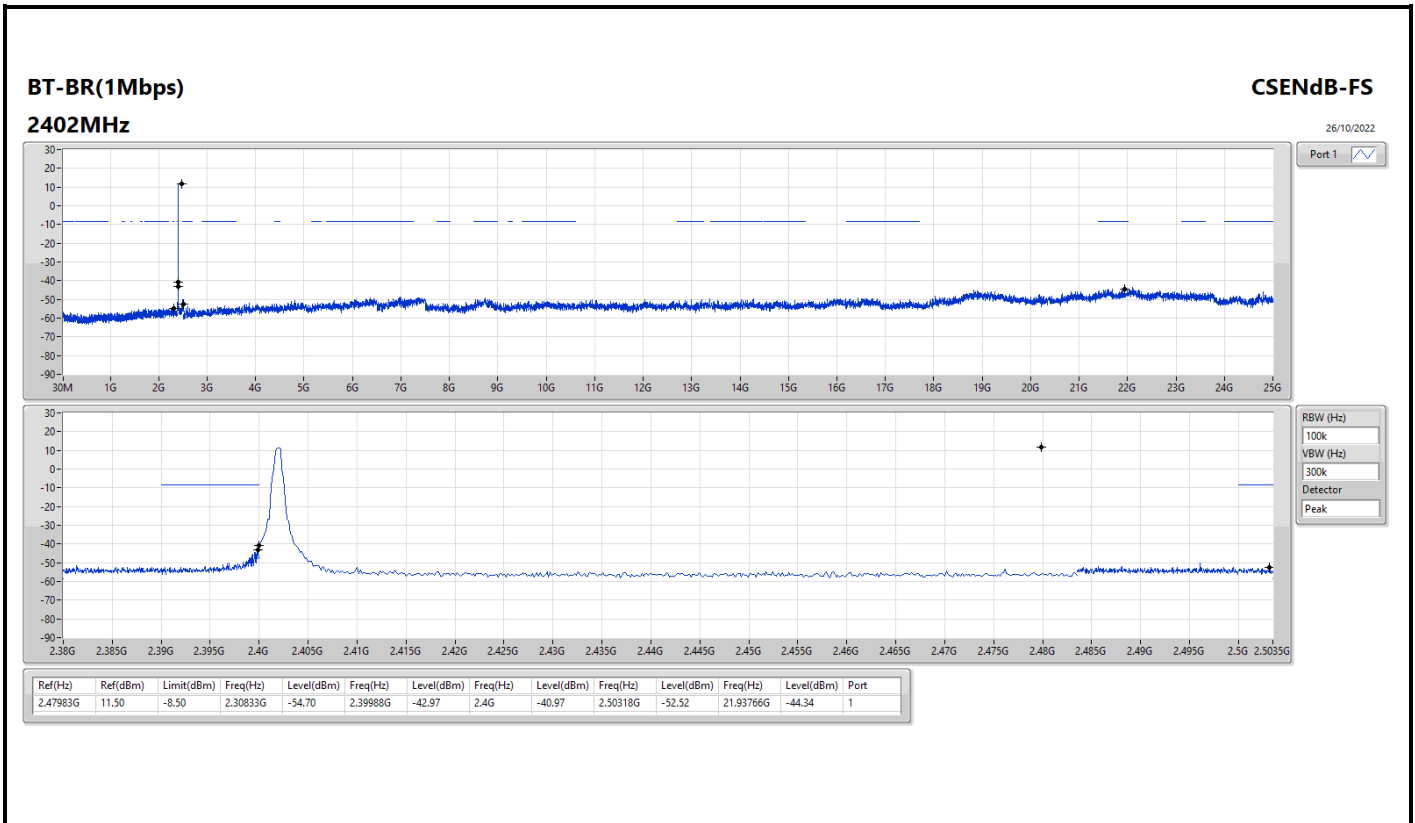
Summary

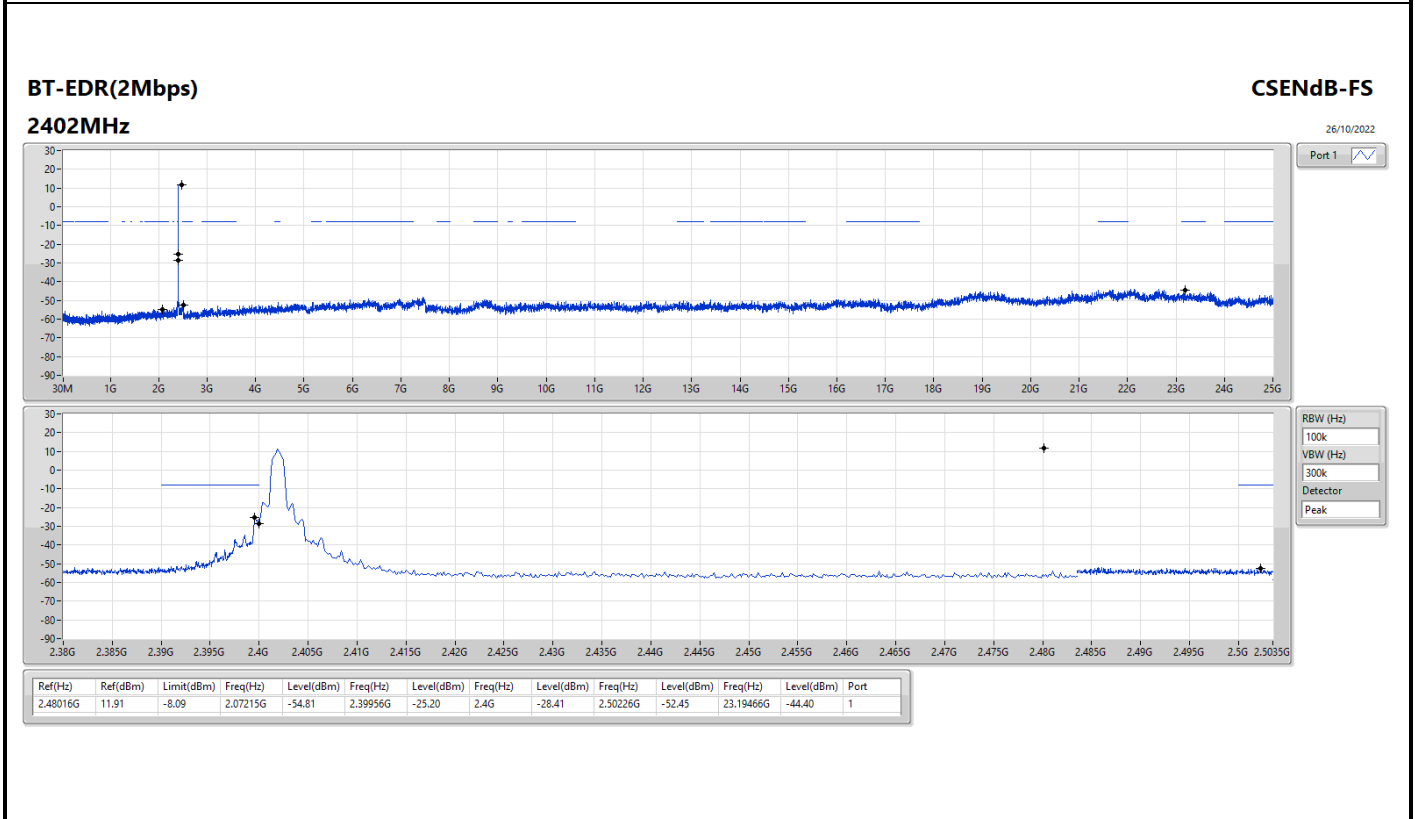
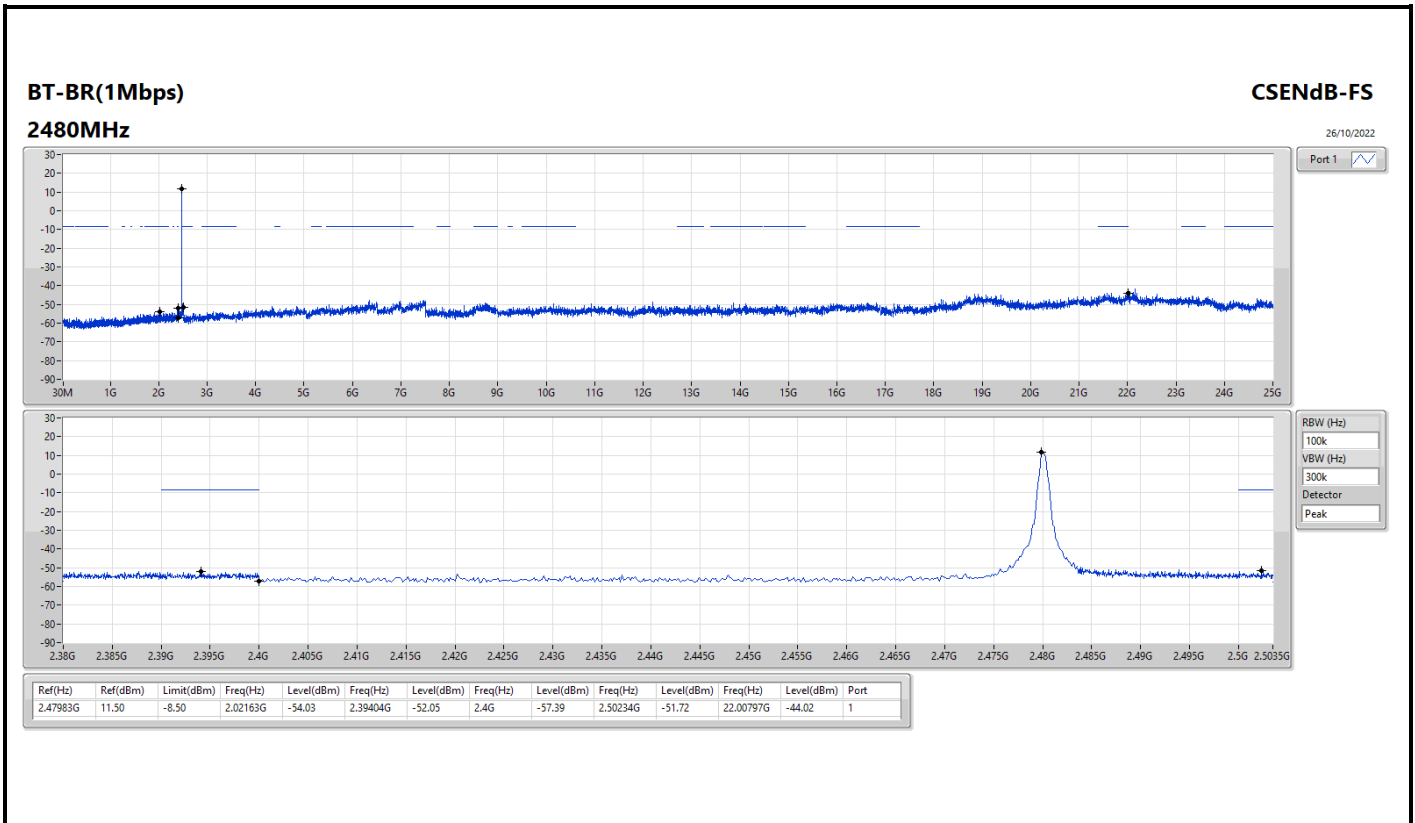
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BT-BR(1Mbps)	Pass	2.47983G	11.50	-8.50	2.30833G	-54.70	2.39988G	-42.97	2.4G	-40.97	2.50318G	-52.52	21.93766G	-44.34	1
BT-EDR(2Mbps)	Pass	2.48016G	11.91	-8.09	2.07215G	-54.81	2.39956G	-25.20	2.4G	-28.41	2.50226G	-52.45	23.19466G	-44.40	1
BT-EDR(3Mbps)	Pass	2.47983G	11.21	-8.79	2.13913G	-54.23	2.39952G	-24.68	2.4G	-26.24	2.50126G	-51.85	21.60584G	-44.52	1

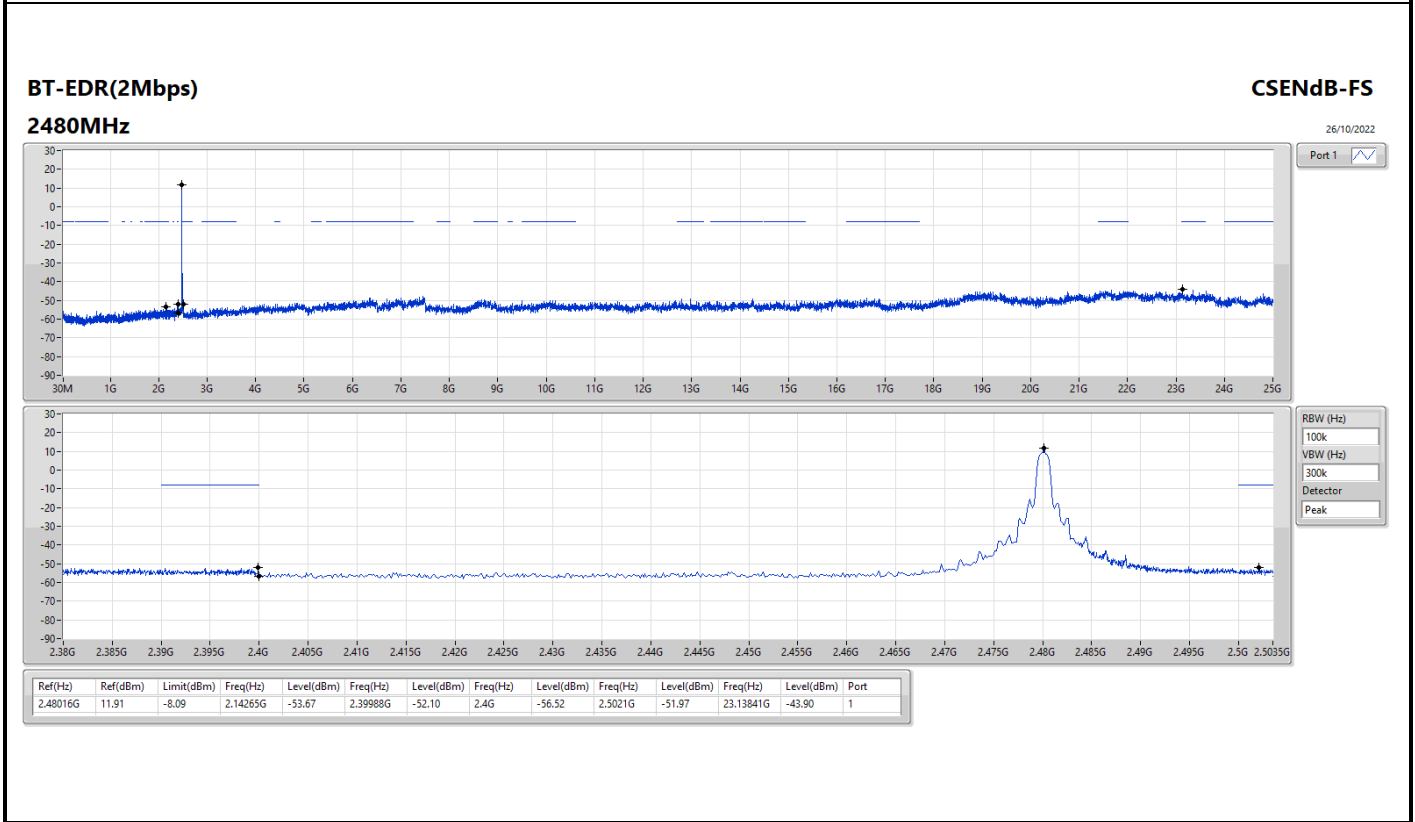
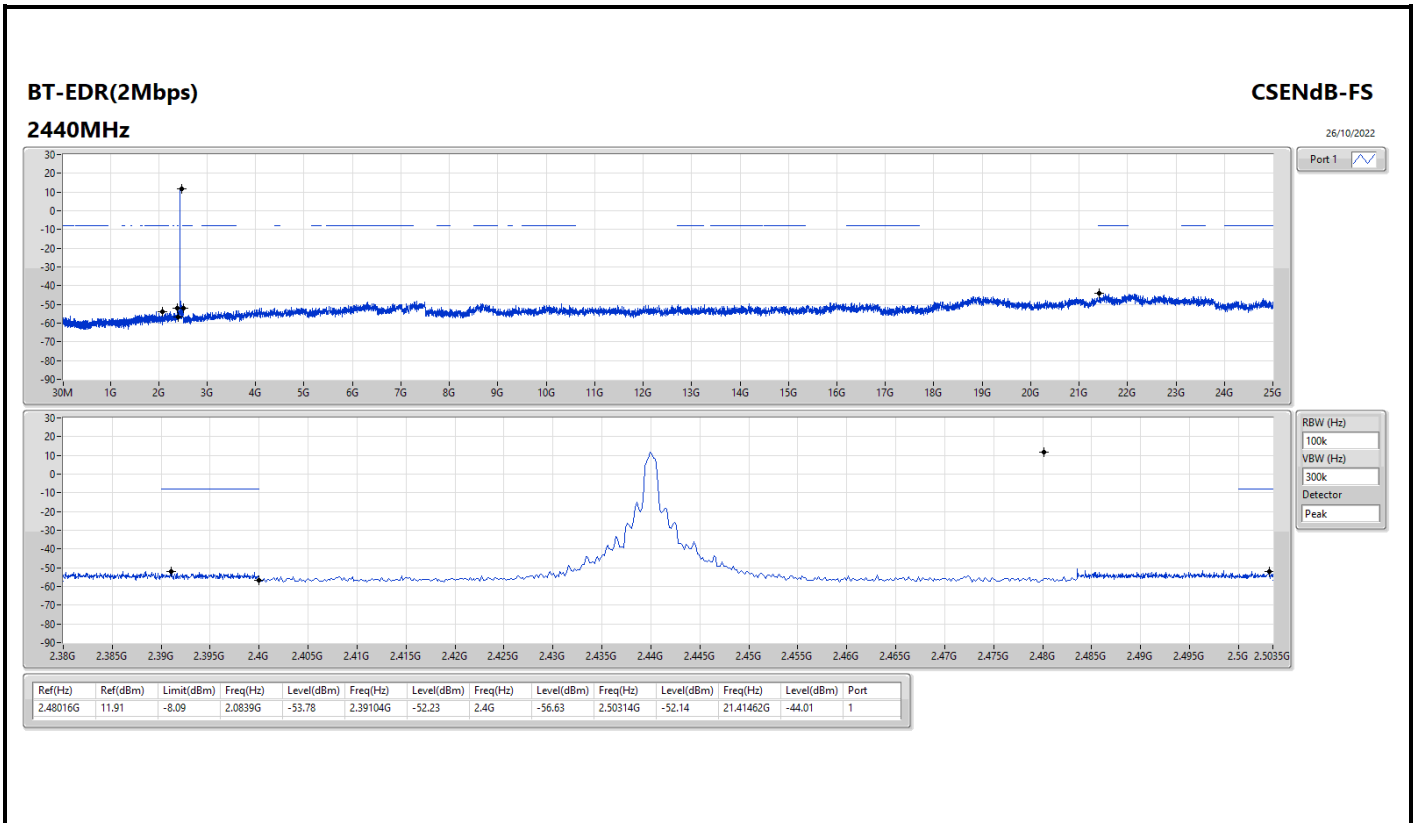


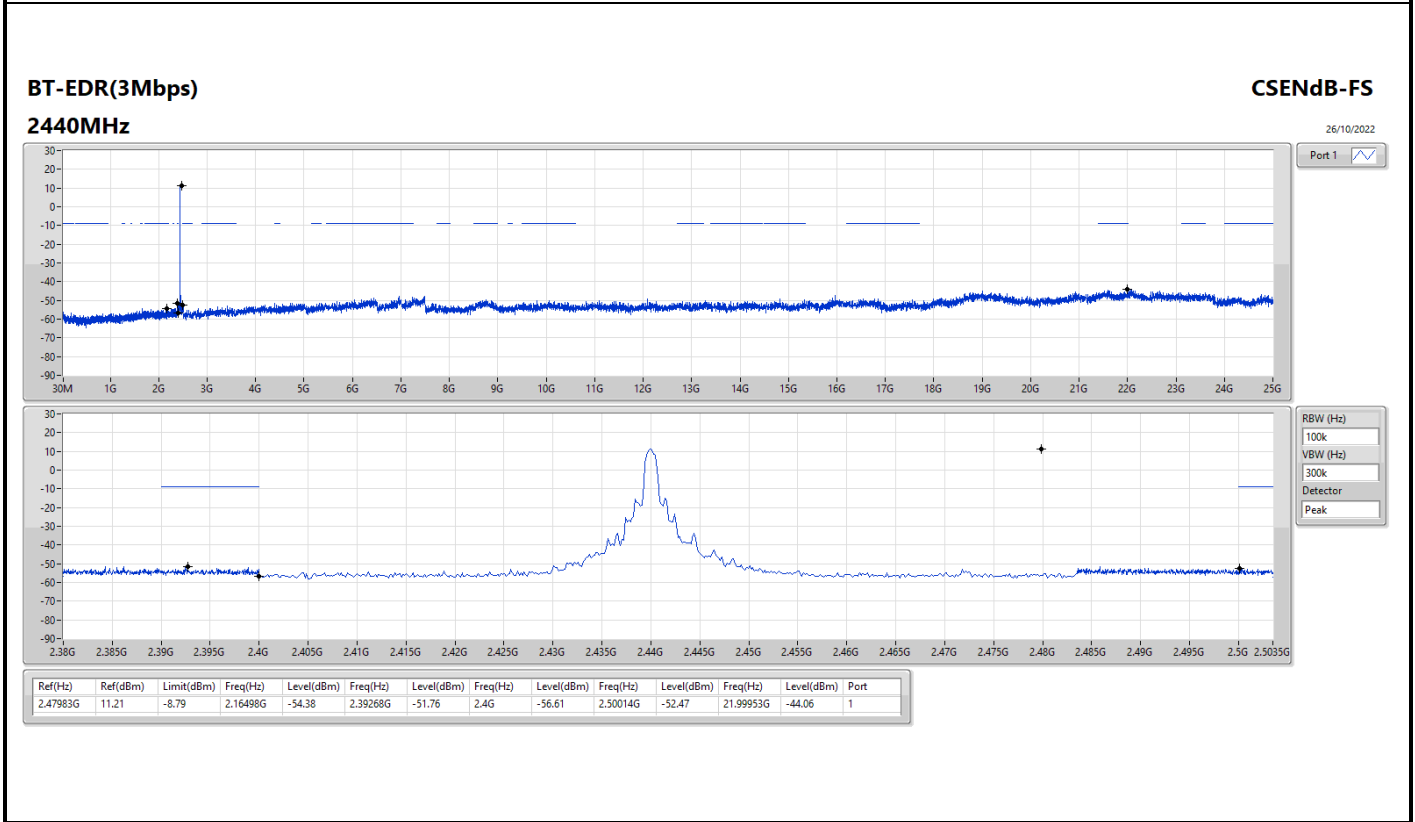
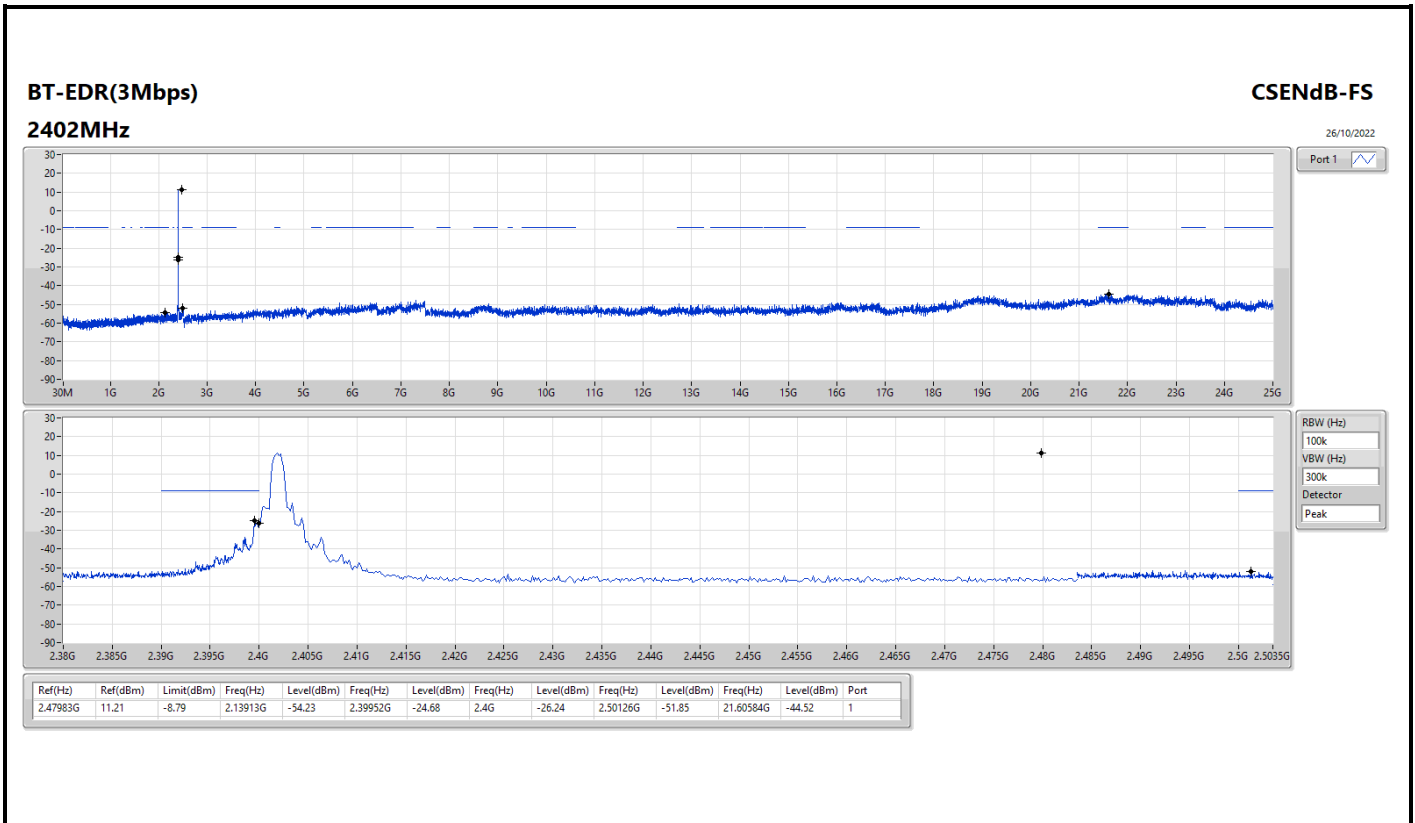
Result

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	2.47983G	11.50	-8.50	2.30833G	-54.70	2.39988G	-42.97	2.4G	-40.97	2.50318G	-52.52	21.93766G	-44.34	1
2440MHz	Pass	2.47983G	11.50	-8.50	2.0886G	-54.90	2.3964G	-52.24	2.4G	-55.39	2.50066G	-52.56	21.59459G	-43.49	1
2480MHz	Pass	2.47983G	11.50	-8.50	2.02163G	-54.03	2.39404G	-52.05	2.4G	-57.39	2.50234G	-51.72	22.00797G	-44.02	1
BT-EDR(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.48016G	11.91	-8.09	2.07215G	-54.81	2.39956G	-25.20	2.4G	-28.41	2.50226G	-52.45	23.19466G	-44.40	1
2440MHz	Pass	2.48016G	11.91	-8.09	2.0839G	-53.78	2.39104G	-52.23	2.4G	-56.63	2.50314G	-52.14	21.41462G	-44.01	1
2480MHz	Pass	2.48016G	11.91	-8.09	2.14265G	-53.67	2.39988G	-52.10	2.4G	-56.52	2.5021G	-51.97	23.13841G	-43.90	1
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.47983G	11.21	-8.79	2.13913G	-54.23	2.39952G	-24.68	2.4G	-26.24	2.50126G	-51.85	21.60584G	-44.52	1
2440MHz	Pass	2.47983G	11.21	-8.79	2.16498G	-54.38	2.39268G	-51.76	2.4G	-56.61	2.50014G	-52.47	21.99953G	-44.06	1
2480MHz	Pass	2.47983G	11.21	-8.79	1.98403G	-54.16	2.3918G	-52.26	2.4G	-56.15	2.50142G	-50.95	21.6424G	-43.62	1

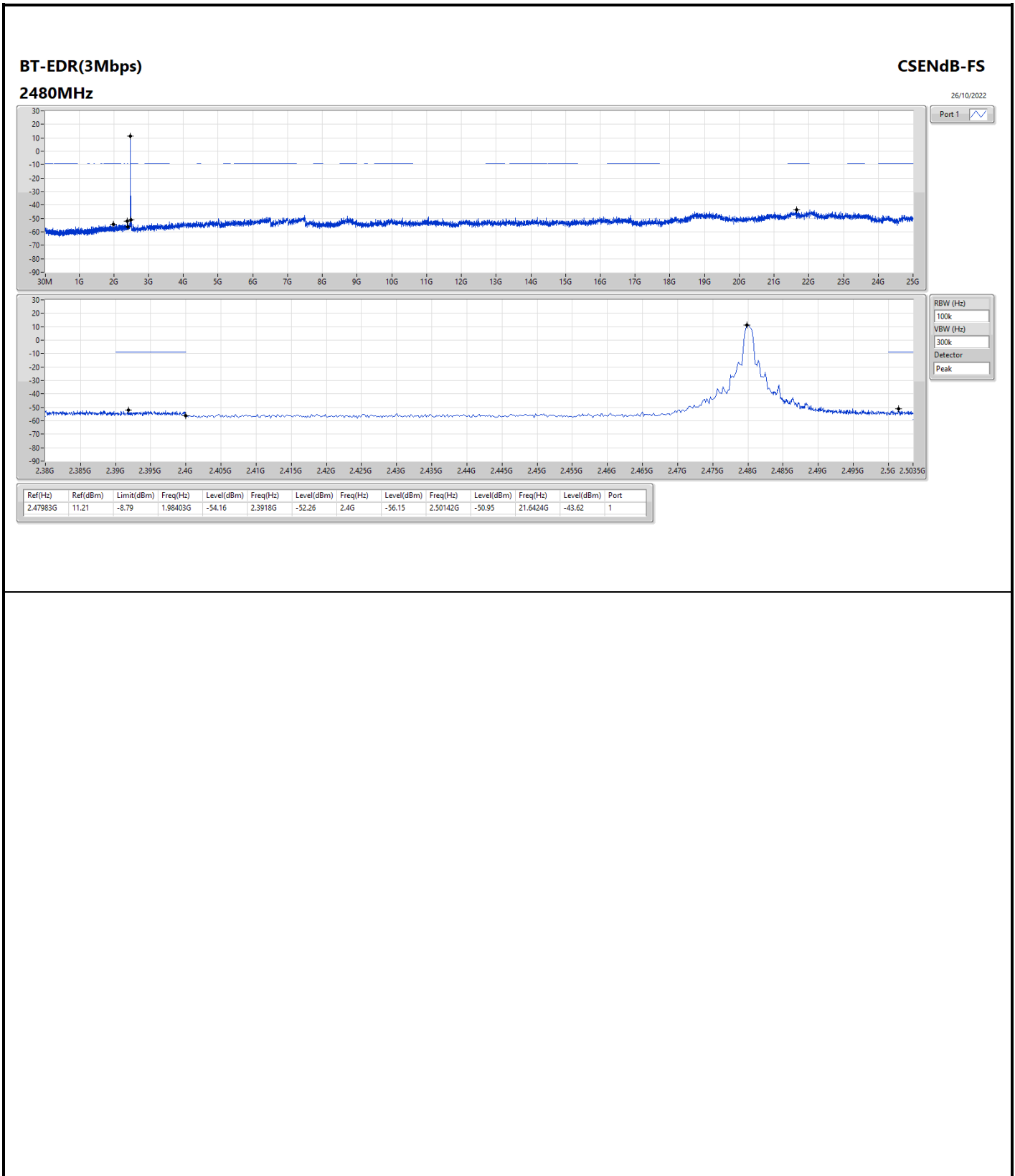














Summary

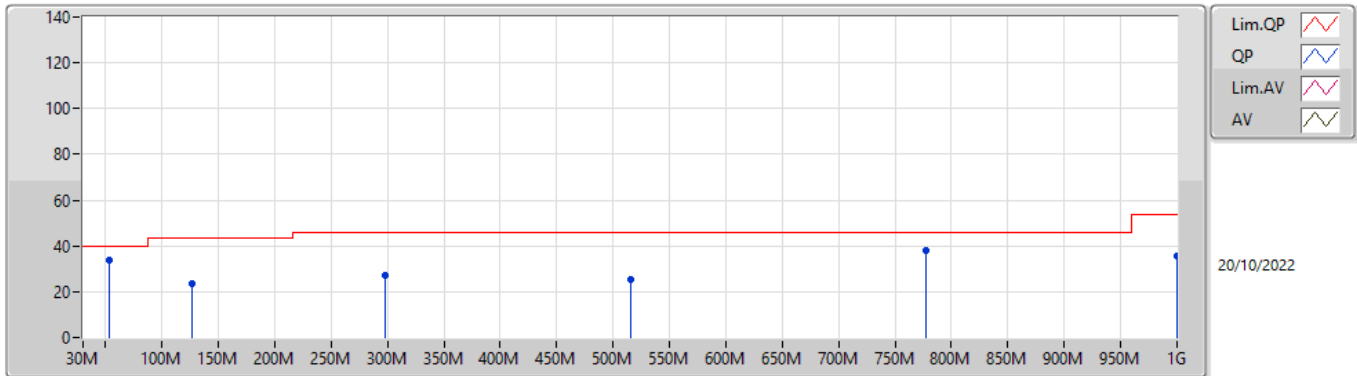
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
BT-BR(1Mbps)	Pass	PK	117.3M	38.09	43.50	-5.41	3	Vertical	360	1.00	-



Result

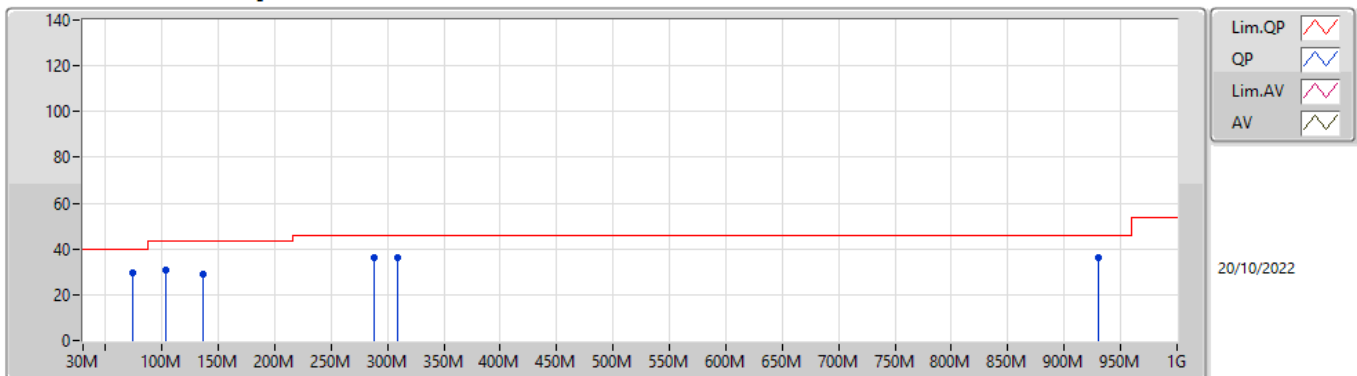
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-BR(1Mbps)	-	-	-	-	-	-	-	-	-	-	-
2440MHz	Pass	PK	53.28M	33.66	40.00	-6.34	3	Vertical	360	1.00	-
2440MHz	Pass	PK	127M	23.82	43.50	-19.68	3	Vertical	360	1.00	-
2440MHz	Pass	PK	297.72M	27.28	46.00	-18.72	3	Vertical	360	1.00	-
2440MHz	Pass	PK	515M	25.20	46.00	-20.80	3	Vertical	360	1.00	-
2440MHz	Pass	PK	776.9M	37.86	46.00	-8.14	3	Vertical	360	1.00	-
2440MHz	Pass	PK	1G	35.67	74.00	-38.33	3	Vertical	360	1.00	-
2440MHz	Pass	PK	74.62M	29.58	40.00	-10.42	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	103.72M	31.01	43.50	-12.49	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	136.7M	28.71	43.50	-14.79	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	288.02M	36.20	46.00	-9.80	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	309.36M	36.07	46.00	-9.93	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	930.16M	35.96	46.00	-10.04	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	33.88M	31.59	40.00	-8.41	3	Vertical	360	1.00	-
2440MHz	Pass	PK	117.3M	38.09	43.50	-5.41	3	Vertical	360	1.00	-
2440MHz	Pass	PK	235.64M	37.95	46.00	-8.05	3	Vertical	360	1.00	-
2440MHz	Pass	PK	303.54M	35.94	46.00	-10.06	3	Vertical	360	1.00	-
2440MHz	Pass	PK	573.2M	36.91	46.00	-9.09	3	Vertical	360	1.00	-
2440MHz	Pass	PK	769.14M	36.68	46.00	-9.32	3	Vertical	360	1.00	-
2440MHz	Pass	PK	66.86M	29.02	40.00	-10.98	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	99.84M	30.13	43.50	-13.37	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	270.56M	40.59	46.00	-5.41	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	491.72M	39.37	46.00	-6.63	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	776.9M	34.66	46.00	-11.34	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	1G	38.89	74.00	-35.11	3	Horizontal	0	1.00	-

**BT-BR(1Mbps)**  
**2440MHz\_Adapter**



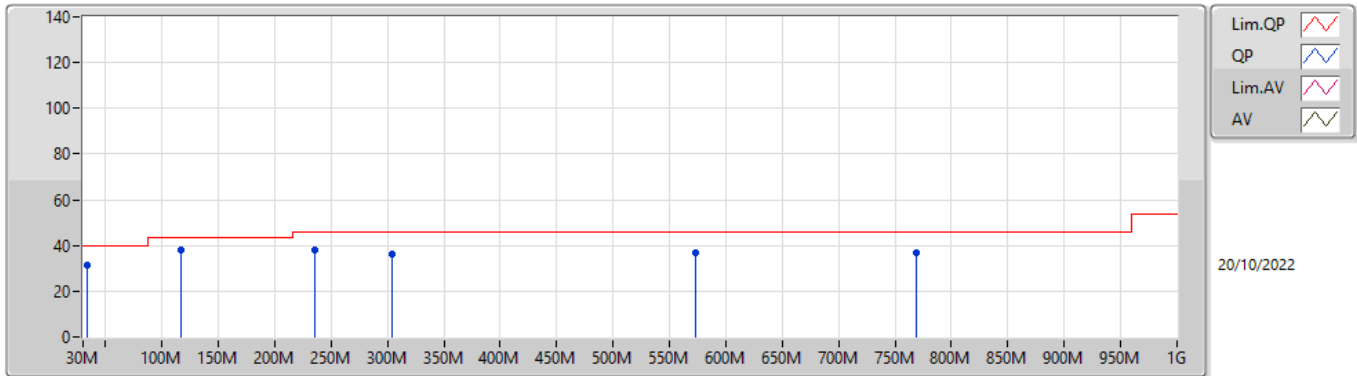
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	53.28M	33.66	40.00	-6.34	-24.46	3	Vertical	360	1.00	-	58.12	11.90	0.74	37.10
PK	127M	23.82	43.50	-19.68	-18.68	3	Vertical	360	1.00	-	42.50	16.74	1.14	36.56
PK	297.72M	27.28	46.00	-18.72	-16.29	3	Vertical	360	1.00	-	43.57	18.34	1.78	36.41
PK	515M	25.20	46.00	-20.80	-11.43	3	Vertical	360	1.00	-	36.63	23.14	2.45	37.02
PK	776.9M	37.86	46.00	-8.14	-7.06	3	Vertical	360	1.00	-	44.92	27.37	3.03	37.46
PK	1G	35.67	74.00	-38.33	-4.03	3	Vertical	360	1.00	-	39.70	29.69	3.43	37.15

**BT-BR(1Mbps)**  
**2440MHz\_Adapter**



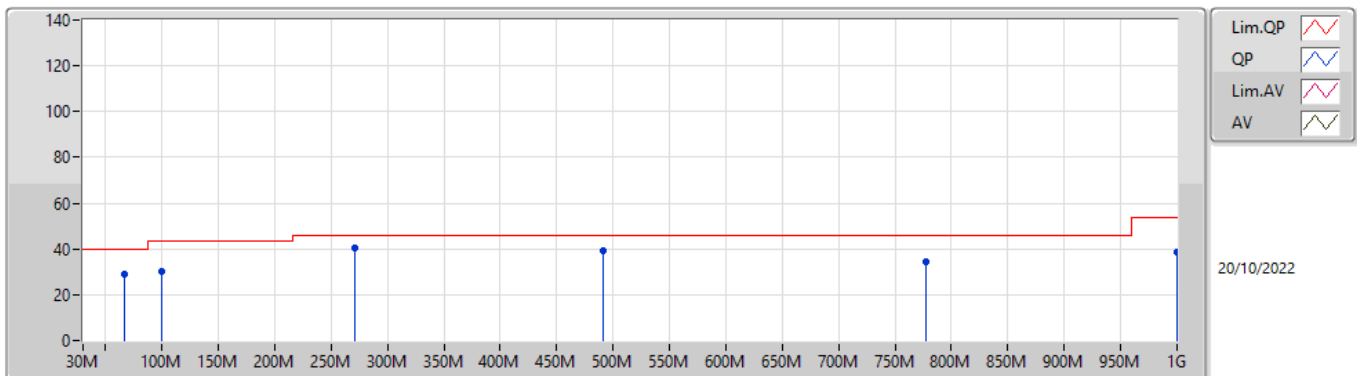
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	74.62M	29.58	40.00	-10.42	-24.10	3	Horizontal	0	1.00	-	53.68	11.95	0.87	36.92
PK	103.72M	31.01	43.50	-12.49	-19.97	3	Horizontal	0	1.00	-	50.98	15.65	1.02	36.64
PK	136.7M	28.71	43.50	-14.79	-18.54	3	Horizontal	0	1.00	-	47.25	16.74	1.20	36.48
PK	288.02M	36.20	46.00	-9.80	-16.54	3	Horizontal	0	1.00	-	52.74	18.14	1.75	36.43
PK	309.36M	36.07	46.00	-9.93	-16.18	3	Horizontal	0	1.00	-	52.25	18.42	1.83	36.43
PK	930.16M	35.96	46.00	-10.04	-5.08	3	Horizontal	0	1.00	-	41.04	29.06	3.31	37.45

**BT-BR(1Mbps)**  
**2440MHz\_USB**



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	33.88M	31.59	40.00	-8.41	-14.80	3	Vertical	360	1.00	-	46.39	21.76	0.59	37.15
PK	117.3M	38.09	43.50	-5.41	-18.98	3	Vertical	360	1.00	-	57.07	16.55	1.09	36.62
PK	235.64M	37.95	46.00	-8.05	-18.93	3	Vertical	360	1.00	-	56.88	15.91	1.58	36.42
PK	303.54M	35.94	46.00	-10.06	-16.23	3	Vertical	360	1.00	-	52.17	18.39	1.80	36.42
PK	573.2M	36.91	46.00	-9.09	-9.53	3	Vertical	360	1.00	-	46.44	25.01	2.57	37.11
PK	769.14M	36.68	46.00	-9.32	-7.09	3	Vertical	360	1.00	-	43.77	27.35	3.01	37.45

**BT-BR(1Mbps)**  
**2440MHz\_USB**



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	66.86M	29.02	40.00	-10.98	-24.91	3	Horizontal	0	1.00	-	53.93	11.27	0.82	37.00
PK	99.84M	30.13	43.50	-13.37	-20.43	3	Horizontal	0	1.00	-	50.56	15.21	1.00	36.64
PK	270.56M	40.59	46.00	-5.41	-16.59	3	Horizontal	0	1.00	-	57.18	18.16	1.70	36.45
PK	491.72M	39.37	46.00	-6.63	-11.55	3	Horizontal	0	1.00	-	50.92	23.00	2.38	36.93
PK	776.9M	34.66	46.00	-11.34	-7.06	3	Horizontal	0	1.00	-	41.72	27.37	3.03	37.46
PK	1G	38.89	74.00	-35.11	-4.03	3	Horizontal	0	1.00	-	42.92	29.69	3.43	37.15



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	2.4835G	58.93	74.00	-15.07	3	Horizontal	165	1.18	-
BT-EDR(3Mbps)	Pass	PK	2.4835G	62.29	74.00	-11.71	3	Horizontal	165	1.18	-



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	2.3866G	34.48	54.00	-19.52	3	Vertical	79	1.38	-
2402MHz	Pass	AV	2.4022G	75.46	Inf	-Inf	3	Vertical	79	1.38	-
2402MHz	Pass	PK	2.3866G	56.98	74.00	-17.02	3	Vertical	79	1.38	-
2402MHz	Pass	PK	2.4022G	97.96	Inf	-Inf	3	Vertical	79	1.38	-
2402MHz	Pass	AV	2.3844G	34.56	54.00	-19.44	3	Horizontal	154	1.40	-
2402MHz	Pass	AV	2.402G	79.46	Inf	-Inf	3	Horizontal	154	1.40	-
2402MHz	Pass	PK	2.3844G	57.06	74.00	-16.94	3	Horizontal	154	1.40	-
2402MHz	Pass	PK	2.402G	101.96	Inf	-Inf	3	Horizontal	154	1.40	-
2402MHz	Pass	AV	4.80388G	27.51	54.00	-26.49	3	Vertical	95	1.00	-
2402MHz	Pass	PK	4.80388G	50.01	74.00	-23.99	3	Vertical	95	1.00	-
2402MHz	Pass	AV	4.80414G	25.34	54.00	-28.66	3	Horizontal	199	1.09	-
2402MHz	Pass	PK	4.80414G	47.84	74.00	-26.16	3	Horizontal	199	1.09	-
2440MHz	Pass	AV	2.3404G	34.87	54.00	-19.13	3	Vertical	76	1.00	-
2440MHz	Pass	AV	2.44G	76.85	Inf	-Inf	3	Vertical	76	1.00	-
2440MHz	Pass	AV	2.486G	34.53	54.00	-19.47	3	Vertical	76	1.00	-
2440MHz	Pass	PK	2.3404G	57.37	74.00	-16.63	3	Vertical	76	1.00	-
2440MHz	Pass	PK	2.44G	99.35	Inf	-Inf	3	Vertical	76	1.00	-
2440MHz	Pass	PK	2.486G	57.03	74.00	-16.97	3	Vertical	76	1.00	-
2440MHz	Pass	AV	2.3508G	34.43	54.00	-19.57	3	Horizontal	166	1.57	-
2440MHz	Pass	AV	2.44G	79.40	Inf	-Inf	3	Horizontal	166	1.57	-
2440MHz	Pass	AV	2.4948G	35.10	54.00	-18.90	3	Horizontal	166	1.57	-
2440MHz	Pass	PK	2.3508G	56.93	74.00	-17.07	3	Horizontal	166	1.57	-
2440MHz	Pass	PK	2.44G	101.90	Inf	-Inf	3	Horizontal	166	1.57	-
2440MHz	Pass	PK	2.4948G	57.60	74.00	-16.40	3	Horizontal	166	1.57	-
2440MHz	Pass	AV	4.87971G	28.07	54.00	-25.93	3	Vertical	95	1.00	-
2440MHz	Pass	PK	4.87971G	50.57	74.00	-23.43	3	Vertical	95	1.00	-
2440MHz	Pass	AV	4.8797G	26.62	54.00	-27.38	3	Horizontal	194	1.01	-
2440MHz	Pass	PK	4.8797G	49.12	74.00	-24.88	3	Horizontal	194	1.01	-
2480MHz	Pass	AV	2.4802G	76.21	Inf	-Inf	3	Vertical	78	1.00	-
2480MHz	Pass	AV	2.4892G	35.19	54.00	-18.81	3	Vertical	78	1.00	-
2480MHz	Pass	PK	2.4802G	98.71	Inf	-Inf	3	Vertical	78	1.00	-
2480MHz	Pass	PK	2.4892G	57.69	74.00	-16.31	3	Vertical	78	1.00	-
2480MHz	Pass	AV	2.4802G	79.32	Inf	-Inf	3	Horizontal	165	1.18	-
2480MHz	Pass	AV	2.4835G	36.43	54.00	-17.57	3	Horizontal	165	1.18	-
2480MHz	Pass	PK	2.4802G	101.82	Inf	-Inf	3	Horizontal	165	1.18	-
2480MHz	Pass	PK	2.4835G	58.93	74.00	-15.07	3	Horizontal	165	1.18	-
2480MHz	Pass	AV	4.95993G	28.37	54.00	-25.63	3	Vertical	107	1.16	-
2480MHz	Pass	PK	4.95993G	50.87	74.00	-23.13	3	Vertical	107	1.16	-
2480MHz	Pass	AV	4.96018G	28.06	54.00	-25.94	3	Horizontal	194	1.09	-
2480MHz	Pass	PK	4.96018G	50.56	74.00	-23.44	3	Horizontal	194	1.09	-
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3896G	33.85	54.00	-20.15	3	Vertical	74	1.00	-
2402MHz	Pass	AV	2.4018G	76.43	Inf	-Inf	3	Vertical	74	1.00	-
2402MHz	Pass	PK	2.3896G	56.35	74.00	-17.65	3	Vertical	74	1.00	-
2402MHz	Pass	PK	2.4018G	98.93	Inf	-Inf	3	Vertical	74	1.00	-
2402MHz	Pass	AV	2.3792G	34.49	54.00	-19.51	3	Horizontal	156	1.40	-
2402MHz	Pass	AV	2.4018G	79.78	Inf	-Inf	3	Horizontal	156	1.40	-
2402MHz	Pass	PK	2.3792G	56.99	74.00	-17.01	3	Horizontal	156	1.40	-
2402MHz	Pass	PK	2.4018G	102.28	Inf	-Inf	3	Horizontal	156	1.40	-
2402MHz	Pass	AV	4.8042G	27.64	54.00	-26.36	3	Vertical	104	1.00	-
2402MHz	Pass	PK	4.8042G	50.14	74.00	-23.86	3	Vertical	104	1.00	-
2402MHz	Pass	AV	4.80381G	26.19	54.00	-27.81	3	Horizontal	197	1.16	-
2402MHz	Pass	PK	4.80381G	48.69	74.00	-25.31	3	Horizontal	197	1.16	-
2440MHz	Pass	AV	2.3892G	34.10	54.00	-19.90	3	Vertical	77	1.00	-
2440MHz	Pass	AV	2.4396G	76.97	Inf	-Inf	3	Vertical	77	1.00	-
2440MHz	Pass	AV	2.4968G	34.40	54.00	-19.60	3	Vertical	77	1.00	-
2440MHz	Pass	PK	2.3892G	56.60	74.00	-17.40	3	Vertical	77	1.00	-
2440MHz	Pass	PK	2.4396G	99.47	Inf	-Inf	3	Vertical	77	1.00	-
2440MHz	Pass	PK	2.4968G	56.90	74.00	-17.10	3	Vertical	77	1.00	-
2440MHz	Pass	AV	2.3512G	34.32	54.00	-19.68	3	Horizontal	167	1.55	-

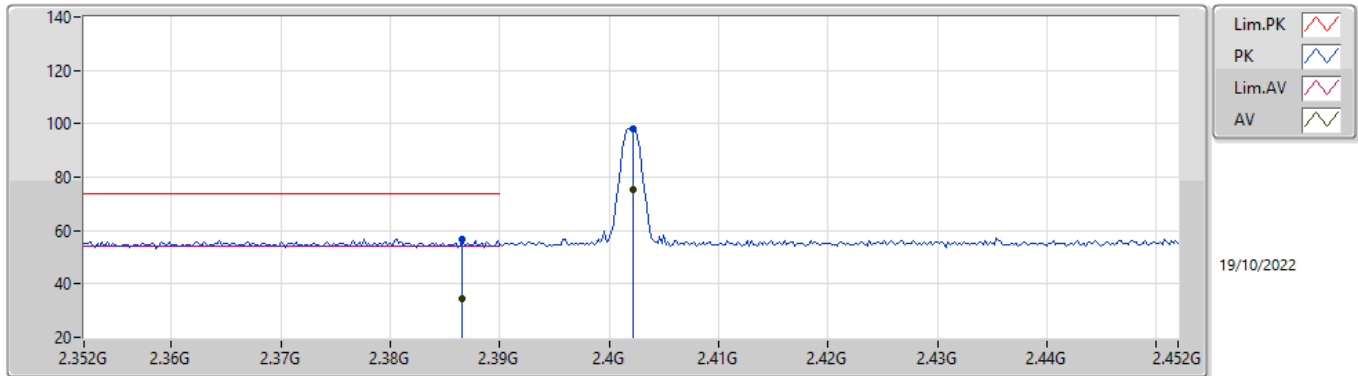


Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2440MHz	Pass	AV	2.44G	79.67	Inf	-Inf	3	Horizontal	167	1.55	-
2440MHz	Pass	AV	2.492G	35.75	54.00	-18.25	3	Horizontal	167	1.55	-
2440MHz	Pass	PK	2.3512G	56.82	74.00	-17.18	3	Horizontal	167	1.55	-
2440MHz	Pass	PK	2.44G	102.17	Inf	-Inf	3	Horizontal	167	1.55	-
2440MHz	Pass	PK	2.492G	58.25	74.00	-15.75	3	Horizontal	167	1.55	-
2440MHz	Pass	AV	4.87961G	28.13	54.00	-25.87	3	Vertical	96	1.00	-
2440MHz	Pass	PK	4.87961G	50.63	74.00	-23.37	3	Vertical	96	1.00	-
2440MHz	Pass	AV	4.88051G	26.24	54.00	-27.76	3	Horizontal	194	1.01	-
2440MHz	Pass	PK	4.88051G	48.74	74.00	-25.26	3	Horizontal	194	1.01	-
2480MHz	Pass	AV	2.4802G	76.60	Inf	-Inf	3	Vertical	78	1.00	-
2480MHz	Pass	AV	2.4835G	37.10	54.00	-16.90	3	Vertical	78	1.00	-
2480MHz	Pass	PK	2.4802G	99.10	Inf	-Inf	3	Vertical	78	1.00	-
2480MHz	Pass	PK	2.4835G	59.60	74.00	-14.40	3	Vertical	78	1.00	-
2480MHz	Pass	AV	2.4798G	79.80	Inf	-Inf	3	Horizontal	165	1.18	-
2480MHz	Pass	AV	2.4835G	39.79	54.00	-14.21	3	Horizontal	165	1.18	-
2480MHz	Pass	PK	2.4798G	102.30	Inf	-Inf	3	Horizontal	165	1.18	-
2480MHz	Pass	PK	2.4835G	62.29	74.00	-11.71	3	Horizontal	165	1.18	-
2480MHz	Pass	AV	4.95986G	27.09	54.00	-26.91	3	Vertical	185	1.15	-
2480MHz	Pass	PK	4.95986G	49.59	74.00	-24.41	3	Vertical	185	1.15	-
2480MHz	Pass	AV	4.95937G	27.70	54.00	-26.30	3	Horizontal	200	1.01	-
2480MHz	Pass	PK	4.95937G	50.20	74.00	-23.80	3	Horizontal	200	1.01	-



**BT-BR(1Mbps)**

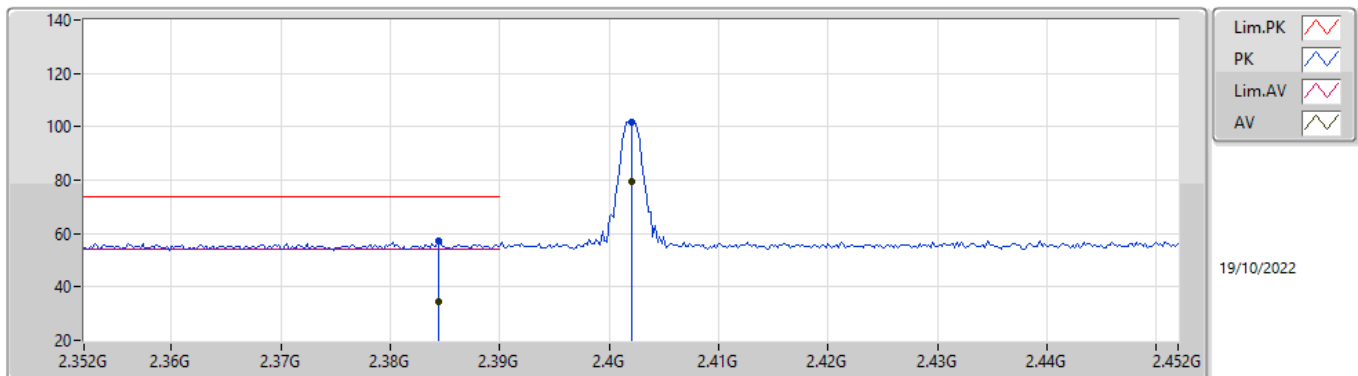
**2402MHz\_TX**



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3866G	34.48	54.00	-19.52	31.58	3	Vertical	79	1.38	-	2.90	27.42	4.16	-
AV	2.4022G	75.46	Inf	-Inf	31.67	3	Vertical	79	1.38	-	43.79	27.50	4.17	-
PK	2.3866G	56.98	74.00	-17.02	31.58	3	Vertical	79	1.38	-	25.40	27.42	4.16	-
PK	2.4022G	97.96	Inf	-Inf	31.67	3	Vertical	79	1.38	-	66.29	27.50	4.17	-

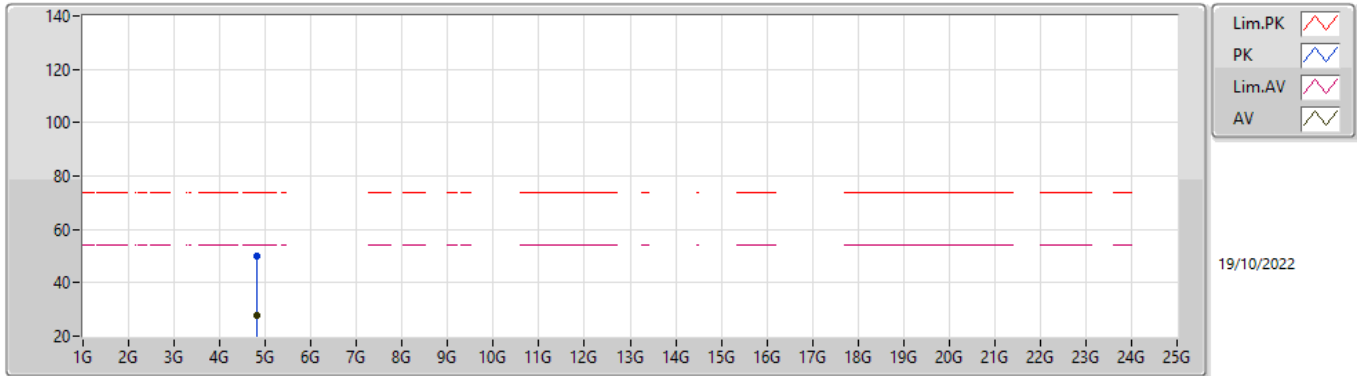
**BT-BR(1Mbps)**

**2402MHz\_TX**



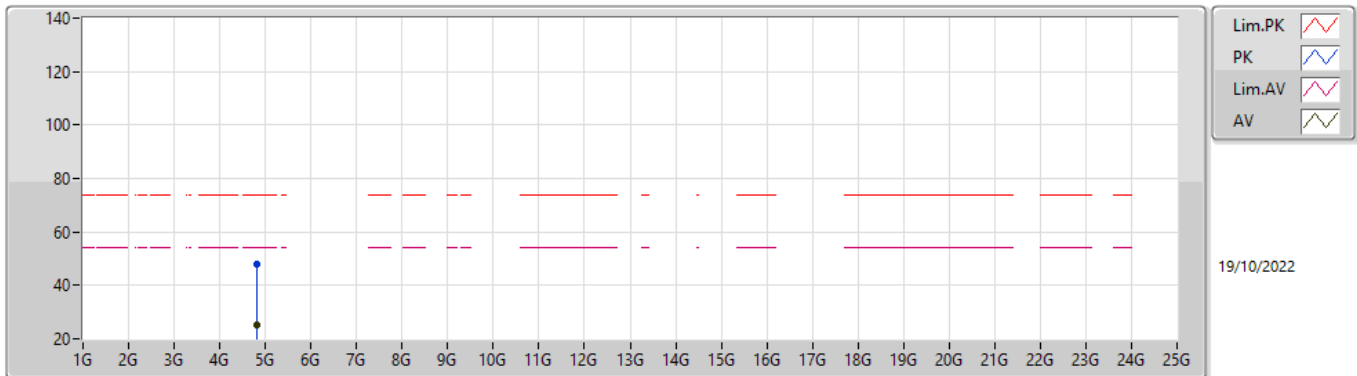
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3844G	34.56	54.00	-19.44	31.57	3	Horizontal	154	1.40	-	2.99	27.41	4.16	-
AV	2.402G	79.46	Inf	-Inf	31.67	3	Horizontal	154	1.40	-	47.79	27.50	4.17	-
PK	2.3844G	57.06	74.00	-16.94	31.57	3	Horizontal	154	1.40	-	25.49	27.41	4.16	-
PK	2.402G	101.96	Inf	-Inf	31.67	3	Horizontal	154	1.40	-	70.29	27.50	4.17	-

**BT-BR(1Mbps)**  
**2402MHz\_TX**



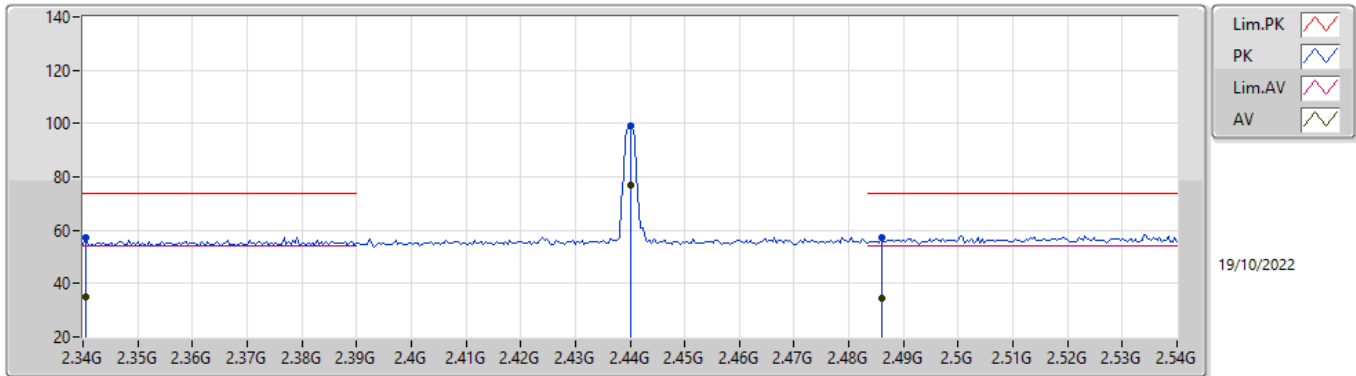
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.80388G	27.51	54.00	-26.49	3.33	3	Vertical	95	1.00	-	24.18	32.32	5.67	34.66
PK	4.80388G	50.01	74.00	-23.99	3.33	3	Vertical	95	1.00	-	46.68	32.32	5.67	34.66

**BT-BR(1Mbps)**  
**2402MHz\_TX**



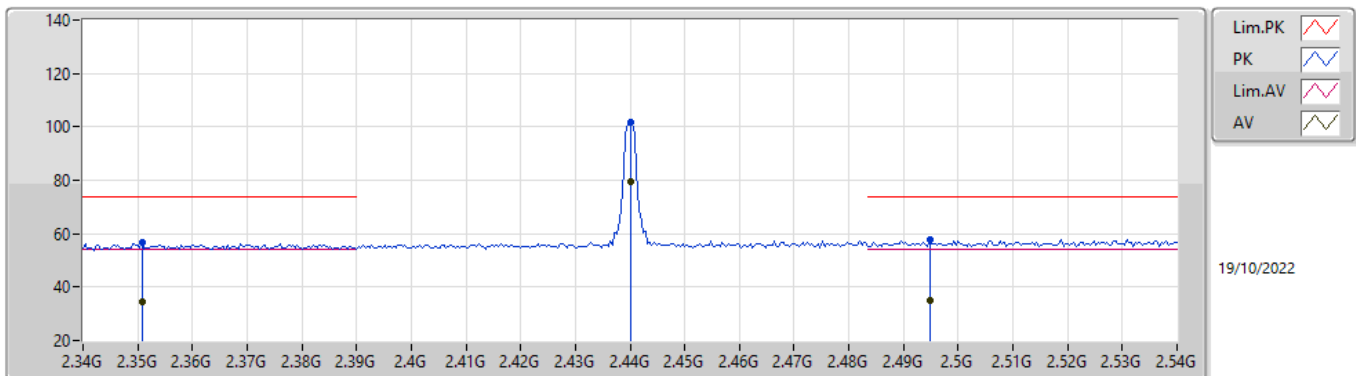
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.80414G	25.34	54.00	-28.66	3.33	3	Horizontal	199	1.09	-	22.01	32.32	5.67	34.66
PK	4.80414G	47.84	74.00	-26.16	3.33	3	Horizontal	199	1.09	-	44.51	32.32	5.67	34.66

**BT-BR(1Mbps)**  
**2440MHz\_TX**



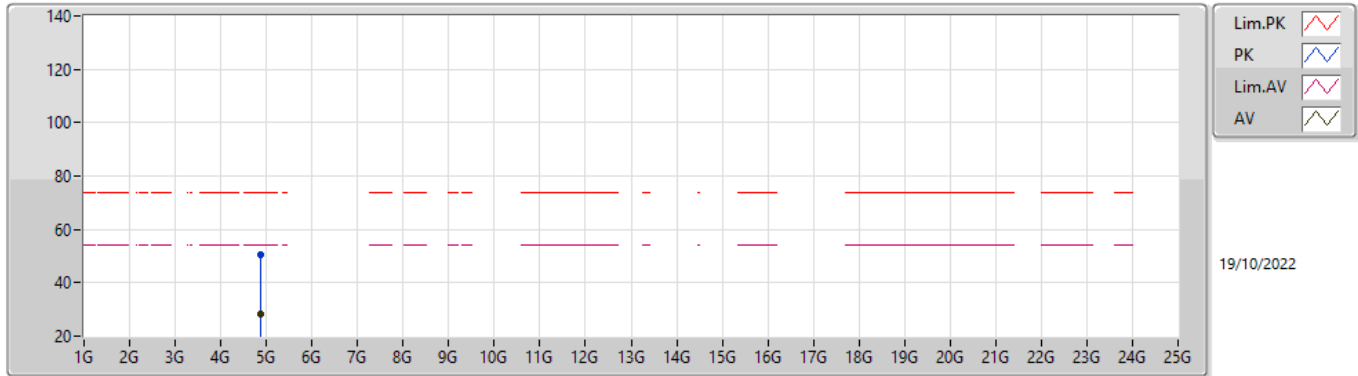
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3404G	34.87	54.00	-19.13	31.27	3	Vertical	76	1.00	-	3.60	27.16	4.11	-
AV	2.44G	76.85	Inf	-Inf	31.77	3	Vertical	76	1.00	-	45.08	27.58	4.19	-
AV	2.486G	34.53	54.00	-19.47	32.04	3	Vertical	76	1.00	-	2.49	27.82	4.22	-
PK	2.3404G	57.37	74.00	-16.63	31.27	3	Vertical	76	1.00	-	26.10	27.16	4.11	-
PK	2.44G	99.35	Inf	-Inf	31.77	3	Vertical	76	1.00	-	67.58	27.58	4.19	-
PK	2.486G	57.03	74.00	-16.97	32.04	3	Vertical	76	1.00	-	24.99	27.82	4.22	-

**BT-BR(1Mbps)**  
**2440MHz\_TX**



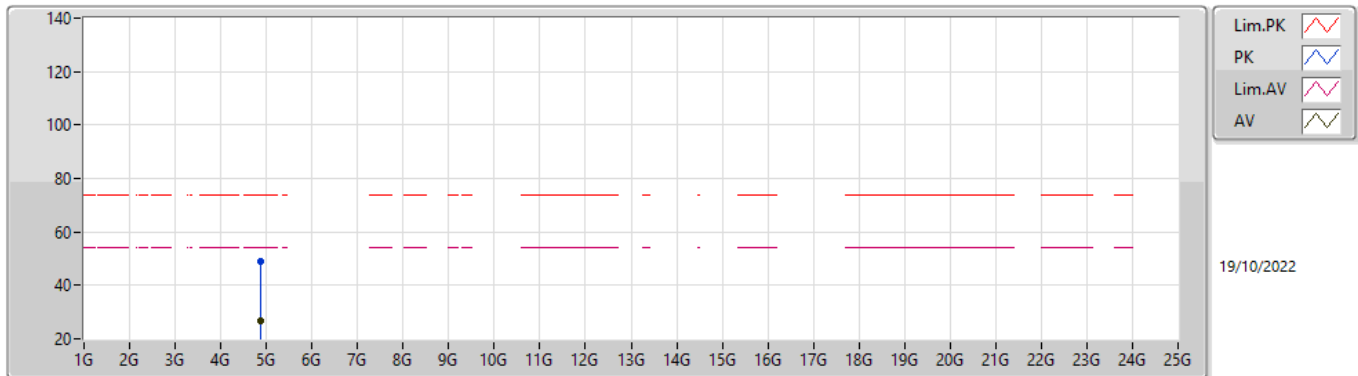
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3508G	34.43	54.00	-19.57	31.32	3	Horizontal	166	1.57	-	3.11	27.20	4.12	-
AV	2.44G	79.40	Inf	-Inf	31.77	3	Horizontal	166	1.57	-	47.63	27.58	4.19	-
AV	2.4948G	35.10	54.00	-18.90	32.10	3	Horizontal	166	1.57	-	3.00	27.87	4.23	-
PK	2.3508G	56.93	74.00	-17.07	31.32	3	Horizontal	166	1.57	-	25.61	27.20	4.12	-
PK	2.44G	101.90	Inf	-Inf	31.77	3	Horizontal	166	1.57	-	70.13	27.58	4.19	-
PK	2.4948G	57.60	74.00	-16.40	32.10	3	Horizontal	166	1.57	-	25.50	27.87	4.23	-

**BT-BR(1Mbps)**  
**2440MHz\_TX**



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.87971G	28.07	54.00	-25.93	3.79	3	Vertical	95	1.00	-	24.28	32.72	5.72	34.65
PK	4.87971G	50.57	74.00	-23.43	3.79	3	Vertical	95	1.00	-	46.78	32.72	5.72	34.65

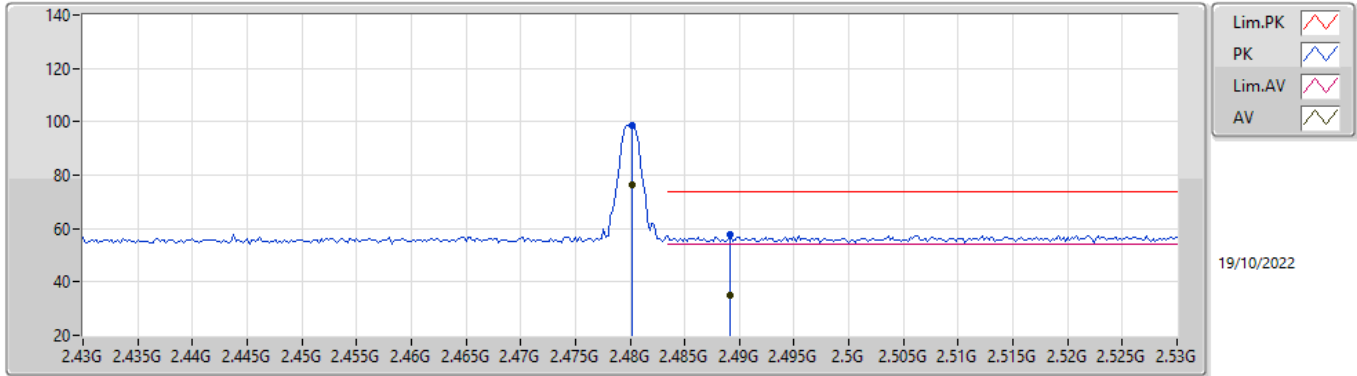
**BT-BR(1Mbps)**  
**2440MHz\_TX**



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.8797G	26.62	54.00	-27.38	3.79	3	Horizontal	194	1.01	-	22.83	32.72	5.72	34.65
PK	4.8797G	49.12	74.00	-24.88	3.79	3	Horizontal	194	1.01	-	45.33	32.72	5.72	34.65

**BT-BR(1Mbps)**

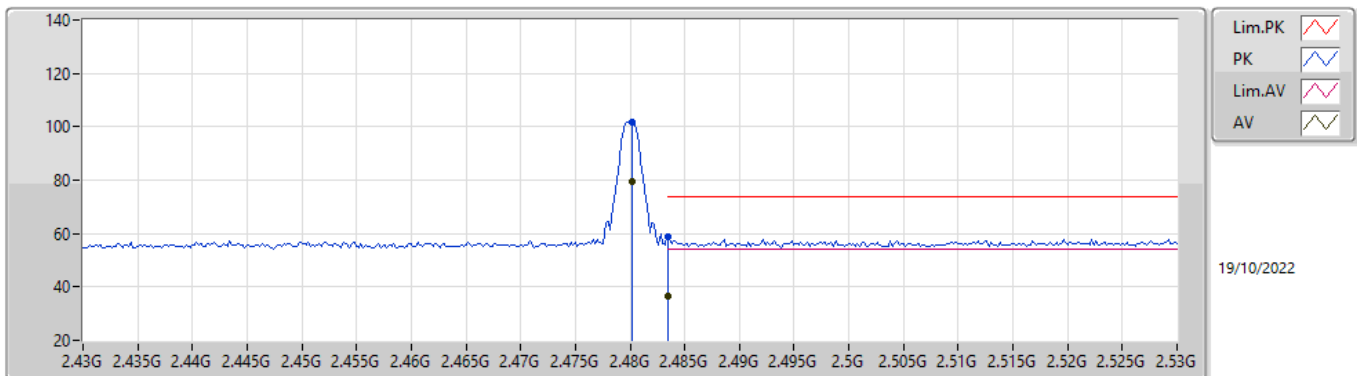
**2480MHz\_TX**



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.4802G	76.21	Inf	-Inf	32.00	3	Vertical	78	1.00	-	44.21	27.78	4.22	-
AV	2.4892G	35.19	54.00	-18.81	32.06	3	Vertical	78	1.00	-	3.13	27.84	4.22	-
PK	2.4802G	98.71	Inf	-Inf	32.00	3	Vertical	78	1.00	-	66.71	27.78	4.22	-
PK	2.4892G	57.69	74.00	-16.31	32.06	3	Vertical	78	1.00	-	25.63	27.84	4.22	-

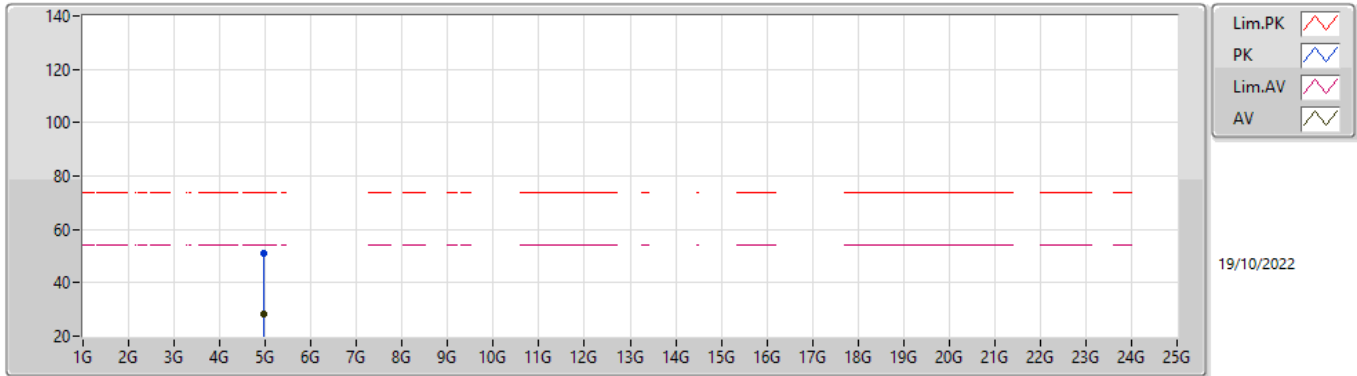
**BT-BR(1Mbps)**

**2480MHz\_TX**



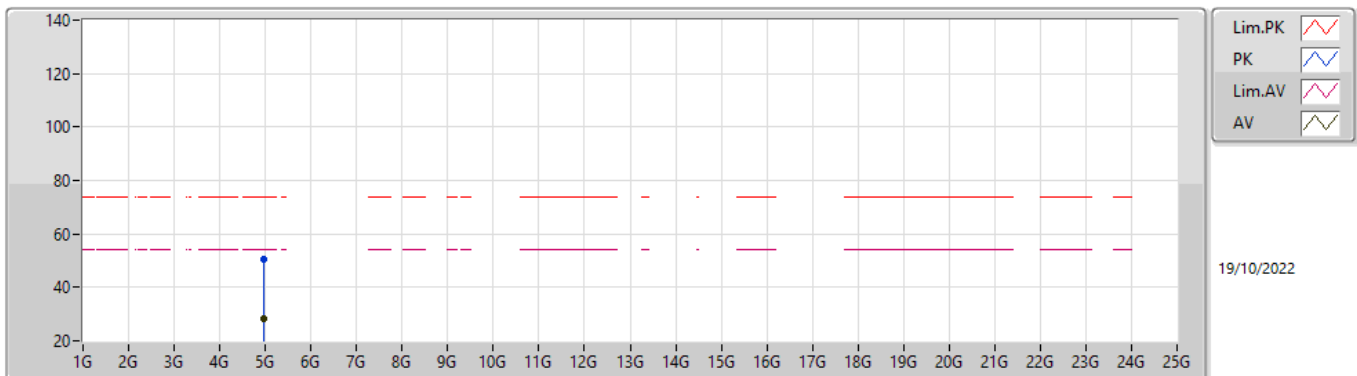
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.4802G	79.32	Inf	-Inf	32.00	3	Horizontal	165	1.18	-	47.32	27.78	4.22	-
AV	2.4835G	36.43	54.00	-17.57	32.02	3	Horizontal	165	1.18	-	4.41	27.80	4.22	-
PK	2.4802G	101.82	Inf	-Inf	32.00	3	Horizontal	165	1.18	-	69.82	27.78	4.22	-
PK	2.4835G	58.93	74.00	-15.07	32.02	3	Horizontal	165	1.18	-	26.91	27.80	4.22	-

**BT-BR(1Mbps)**  
**2480MHz\_TX**



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.95993G	28.37	54.00	-25.63	4.15	3	Vertical	107	1.16	-	24.22	33.02	5.77	34.64
PK	4.95993G	50.87	74.00	-23.13	4.15	3	Vertical	107	1.16	-	46.72	33.02	5.77	34.64

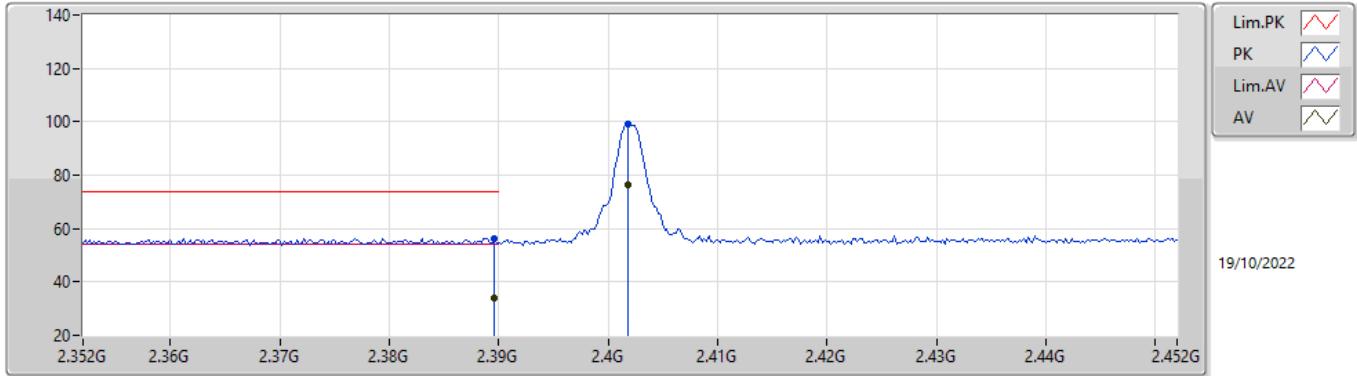
**BT-BR(1Mbps)**  
**2480MHz\_TX**



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.96018G	28.06	54.00	-25.94	4.15	3	Horizontal	194	1.09	-	23.91	33.02	5.77	34.64
PK	4.96018G	50.56	74.00	-23.44	4.15	3	Horizontal	194	1.09	-	46.41	33.02	5.77	34.64

**BT-EDR(3Mbps)**

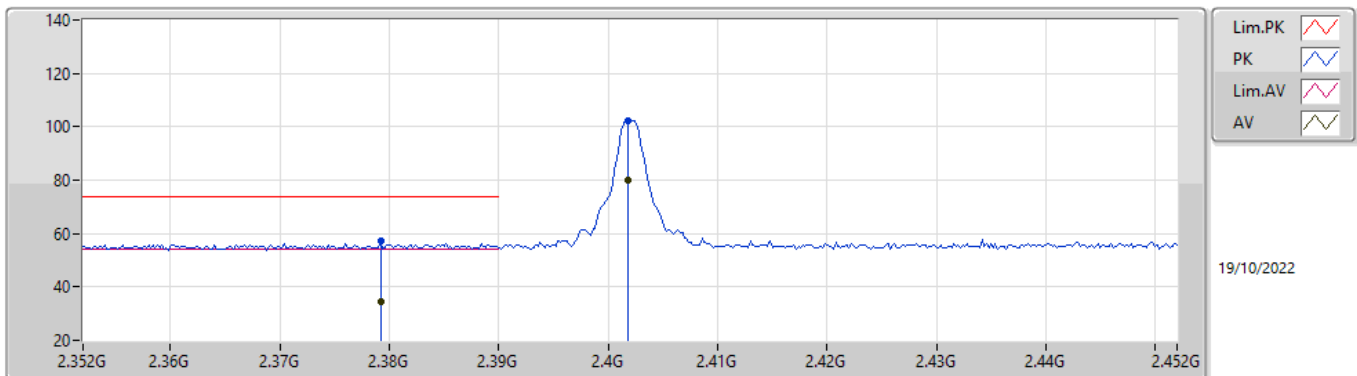
**2402MHz\_TX**



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3896G	33.85	54.00	-20.15	31.60	3	Vertical	74	1.00	-	2.25	27.44	4.16	-
AV	2.4018G	76.43	Inf	-Inf	31.67	3	Vertical	74	1.00	-	44.76	27.50	4.17	-
PK	2.3896G	56.35	74.00	-17.65	31.60	3	Vertical	74	1.00	-	24.75	27.44	4.16	-
PK	2.4018G	98.93	Inf	-Inf	31.67	3	Vertical	74	1.00	-	67.26	27.50	4.17	-

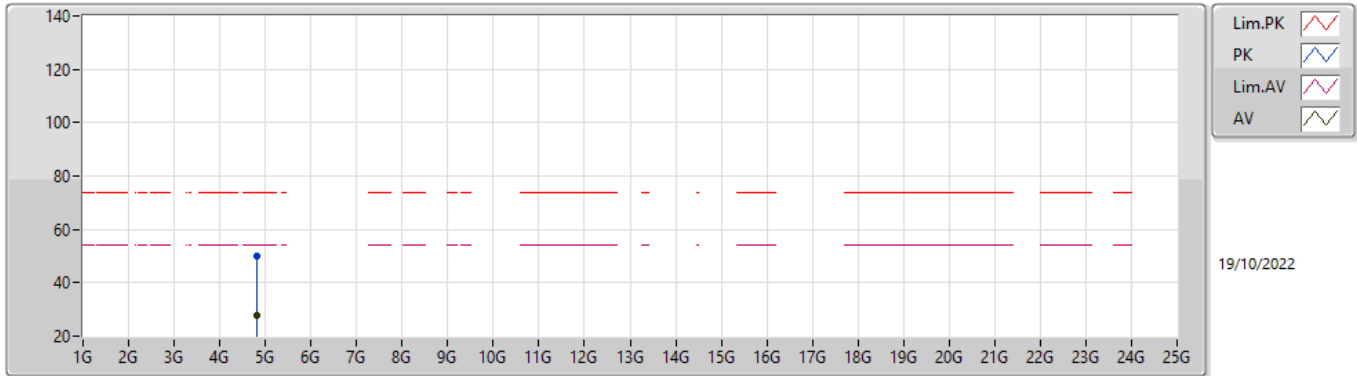
**BT-EDR(3Mbps)**

**2402MHz\_TX**



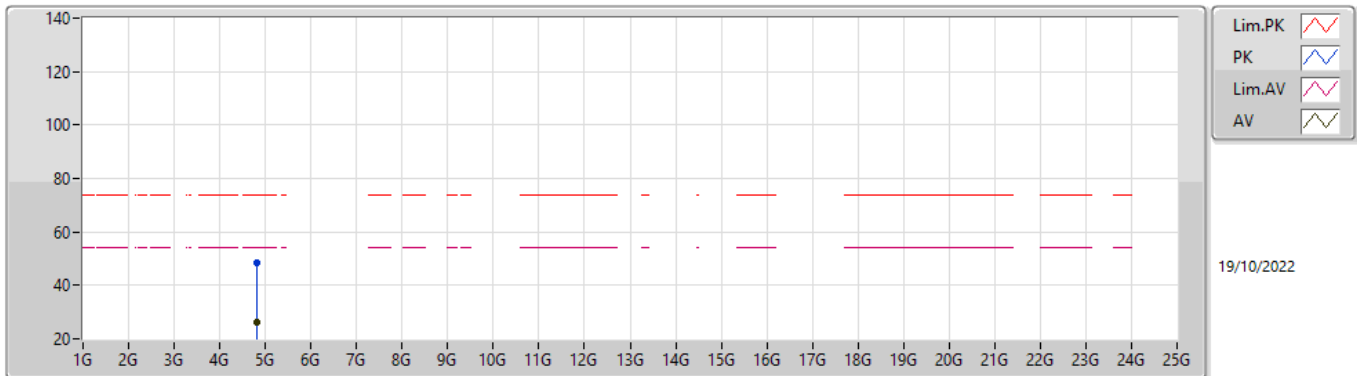
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3792G	34.49	54.00	-19.51	31.53	3	Horizontal	156	1.40	-	2.96	27.38	4.15	-
AV	2.4018G	79.78	Inf	-Inf	31.67	3	Horizontal	156	1.40	-	48.11	27.50	4.17	-
PK	2.3792G	56.99	74.00	-17.01	31.53	3	Horizontal	156	1.40	-	25.46	27.38	4.15	-
PK	2.4018G	102.28	Inf	-Inf	31.67	3	Horizontal	156	1.40	-	70.61	27.50	4.17	-

**BT-EDR(3Mbps)**  
**2402MHz\_TX**



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.8042G	27.64	54.00	-26.36	3.34	3	Vertical	104	1.00	-	24.30	32.33	5.67	34.66
PK	4.8042G	50.14	74.00	-23.86	3.34	3	Vertical	104	1.00	-	46.80	32.33	5.67	34.66

**BT-EDR(3Mbps)**  
**2402MHz\_TX**

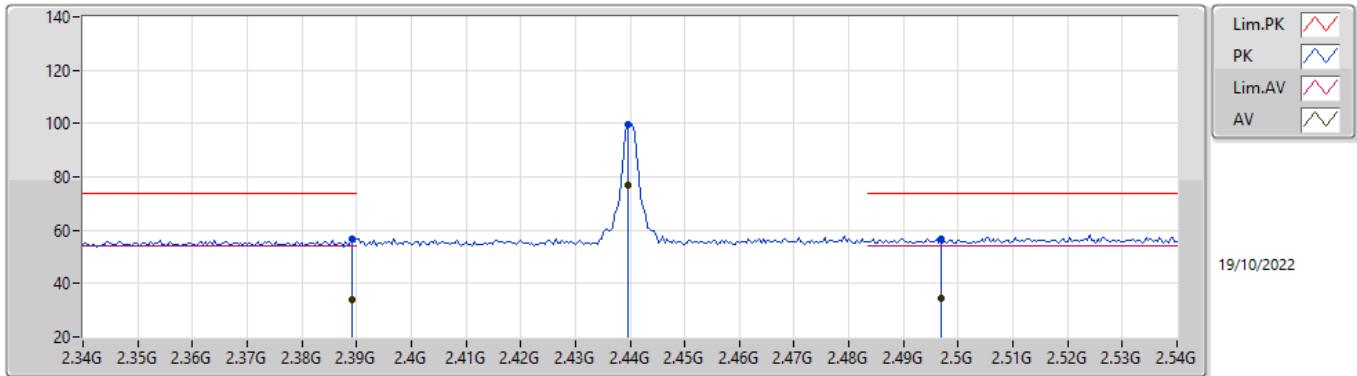


Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.80381G	26.19	54.00	-27.81	3.33	3	Horizontal	197	1.16	-	22.86	32.32	5.67	34.66
PK	4.80381G	48.69	74.00	-25.31	3.33	3	Horizontal	197	1.16	-	45.36	32.32	5.67	34.66



**BT-EDR(3Mbps)**

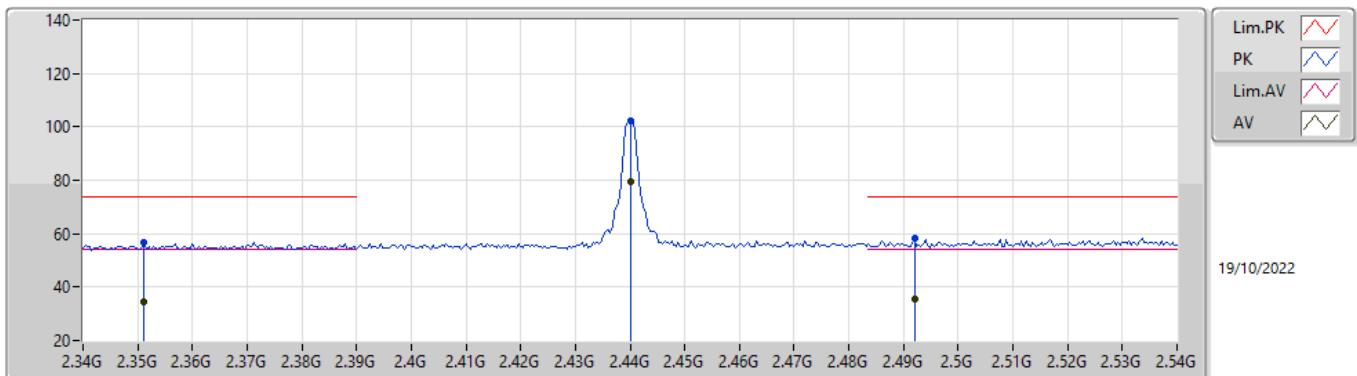
**2440MHz\_TX**



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3892G	34.10	54.00	-19.90	31.60	3	Vertical	77	1.00	-	2.50	27.44	4.16	-
AV	2.4396G	76.97	Inf	-Inf	31.77	3	Vertical	77	1.00	-	45.20	27.58	4.19	-
AV	2.4968G	34.40	54.00	-19.60	32.11	3	Vertical	77	1.00	-	2.29	27.88	4.23	-
PK	2.3892G	56.60	74.00	-17.40	31.60	3	Vertical	77	1.00	-	25.00	27.44	4.16	-
PK	2.4396G	99.47	Inf	-Inf	31.77	3	Vertical	77	1.00	-	67.70	27.58	4.19	-
PK	2.4968G	56.90	74.00	-17.10	32.11	3	Vertical	77	1.00	-	24.79	27.88	4.23	-

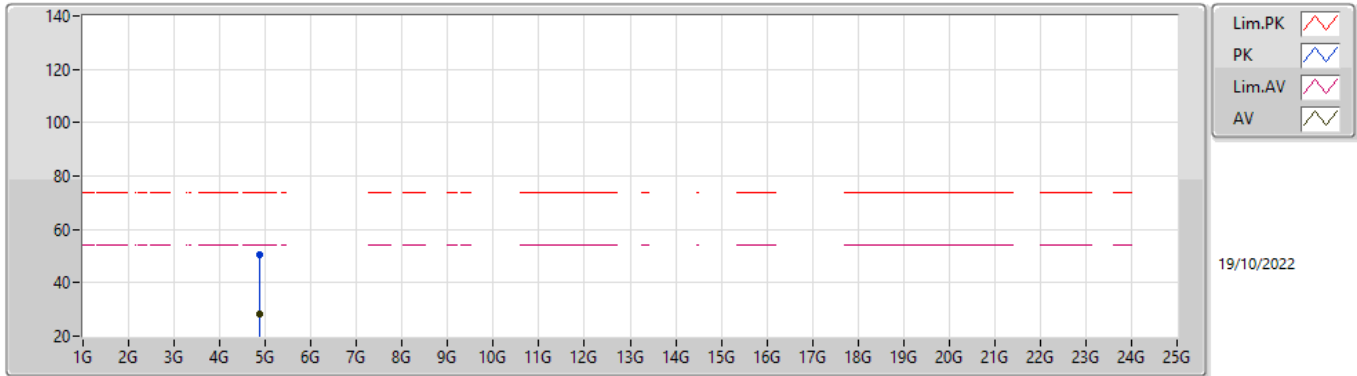
**BT-EDR(3Mbps)**

**2440MHz\_TX**



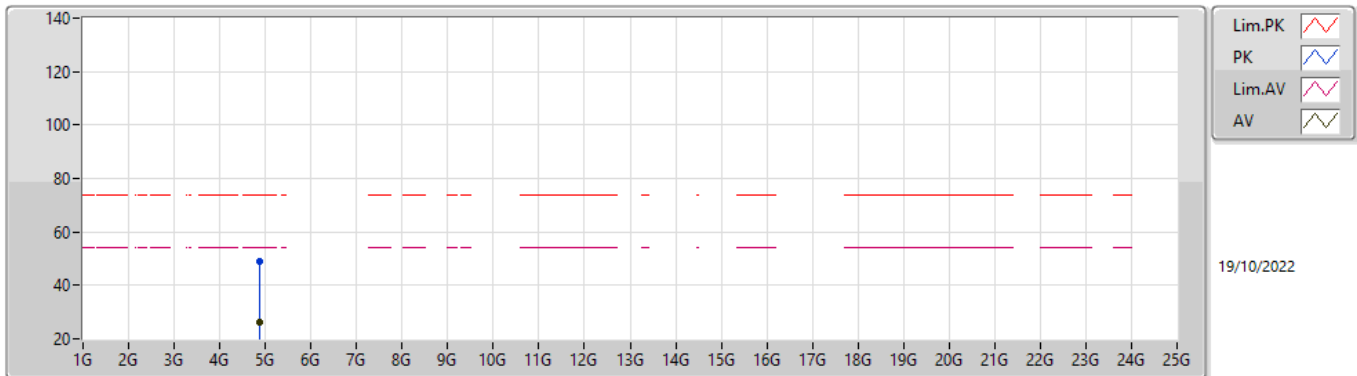
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3512G	34.32	54.00	-19.68	31.33	3	Horizontal	167	1.55	-	2.99	27.21	4.12	-
AV	2.44G	79.67	Inf	-Inf	31.77	3	Horizontal	167	1.55	-	47.90	27.58	4.19	-
AV	2.492G	35.75	54.00	-18.25	32.08	3	Horizontal	167	1.55	-	3.67	27.85	4.23	-
PK	2.3512G	56.82	74.00	-17.18	31.33	3	Horizontal	167	1.55	-	25.49	27.21	4.12	-
PK	2.44G	102.17	Inf	-Inf	31.77	3	Horizontal	167	1.55	-	70.40	27.58	4.19	-
PK	2.492G	58.25	74.00	-15.75	32.08	3	Horizontal	167	1.55	-	26.17	27.85	4.23	-

**BT-EDR(3Mbps)**  
**2440MHz\_TX**



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.87961G	28.13	54.00	-25.87	3.79	3	Vertical	96	1.00	-	24.34	32.72	5.72	34.65
PK	4.87961G	50.63	74.00	-23.37	3.79	3	Vertical	96	1.00	-	46.84	32.72	5.72	34.65

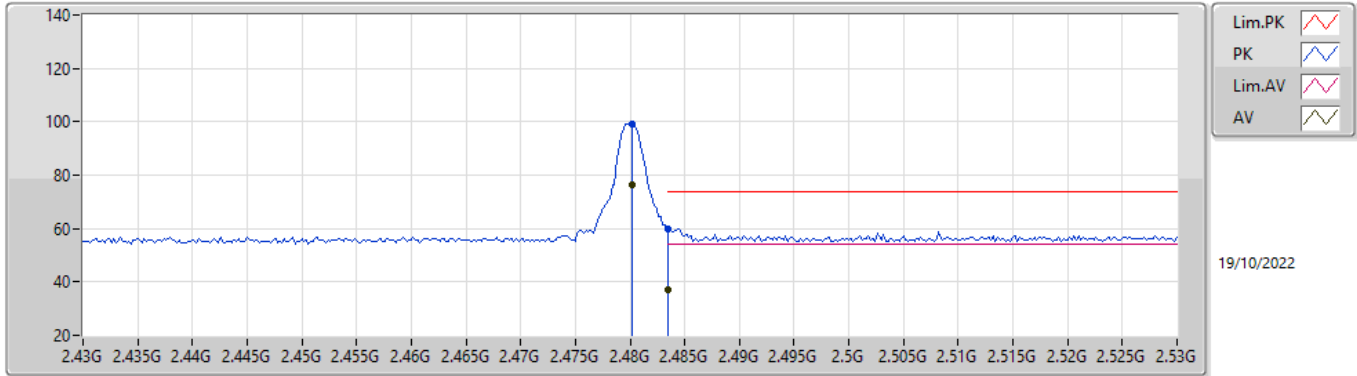
**BT-EDR(3Mbps)**  
**2440MHz\_TX**



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.88051G	26.24	54.00	-27.76	3.79	3	Horizontal	194	1.01	-	22.45	32.72	5.72	34.65
PK	4.88051G	48.74	74.00	-25.26	3.79	3	Horizontal	194	1.01	-	44.95	32.72	5.72	34.65

**BT-EDR(3Mbps)**

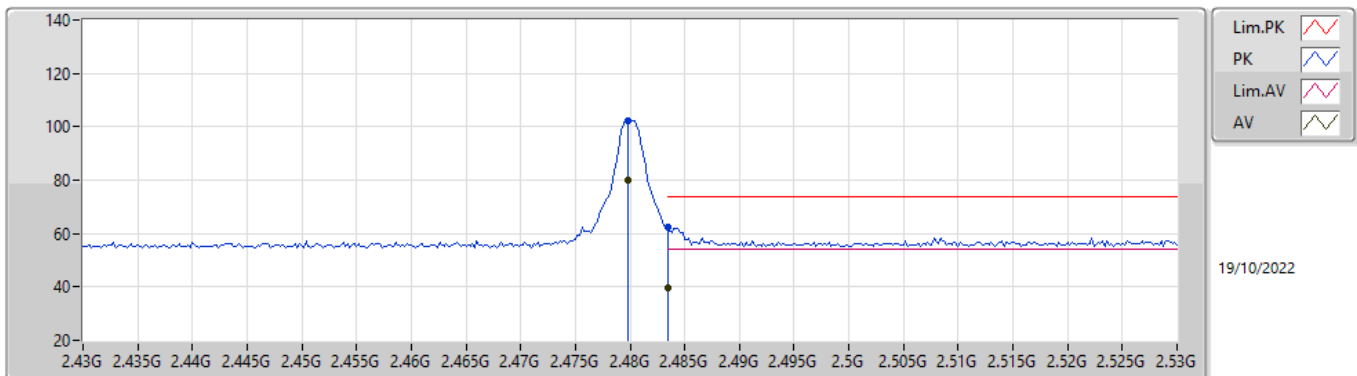
**2480MHz\_TX**



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.4802G	76.60	Inf	-Inf	32.00	3	Vertical	78	1.00	-	44.60	27.78	4.22	-
AV	2.4835G	37.10	54.00	-16.90	32.02	3	Vertical	78	1.00	-	5.08	27.80	4.22	-
PK	2.4802G	99.10	Inf	-Inf	32.00	3	Vertical	78	1.00	-	67.10	27.78	4.22	-
PK	2.4835G	59.60	74.00	-14.40	32.02	3	Vertical	78	1.00	-	27.58	27.80	4.22	-

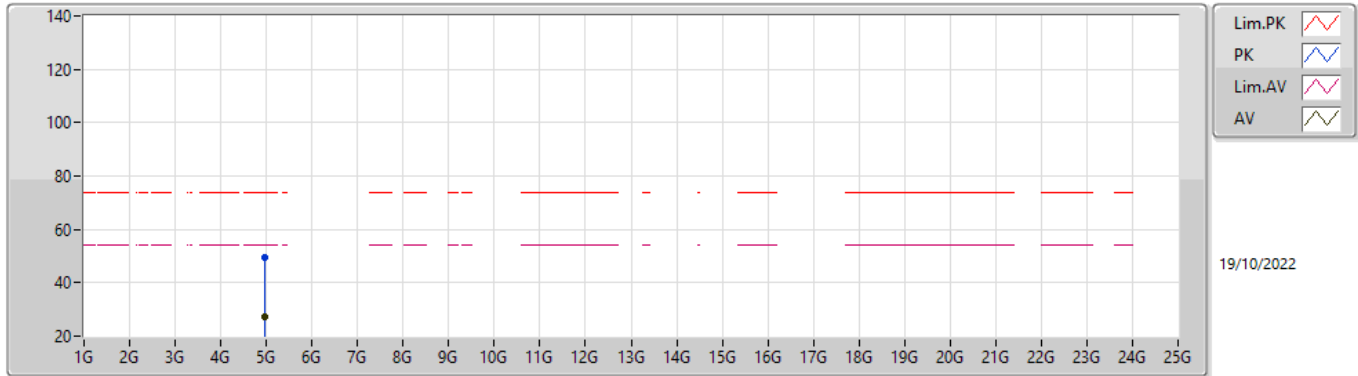
**BT-EDR(3Mbps)**

**2480MHz\_TX**



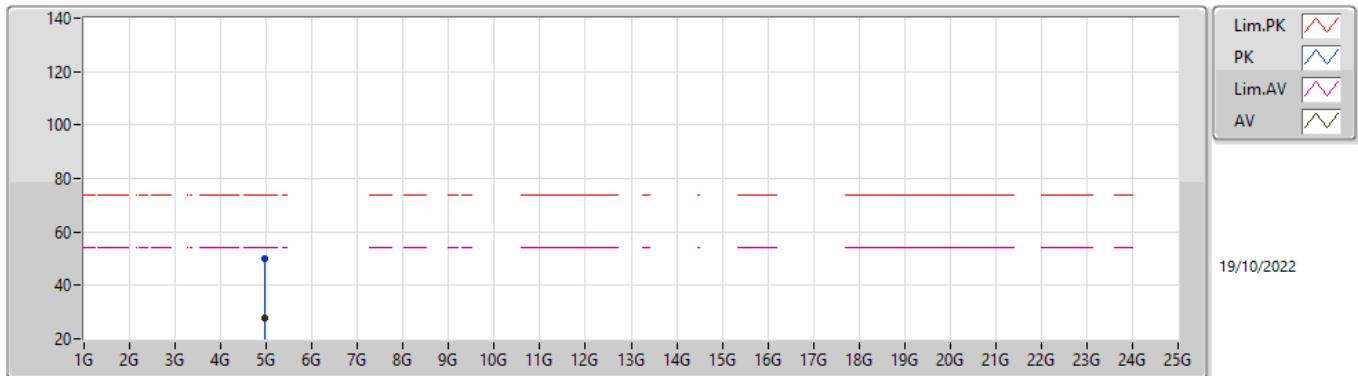
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.4798G	79.80	Inf	-Inf	32.00	3	Horizontal	165	1.18	-	47.80	27.78	4.22	-
AV	2.4835G	39.79	54.00	-14.21	32.02	3	Horizontal	165	1.18	-	7.77	27.80	4.22	-
PK	2.4798G	102.30	Inf	-Inf	32.00	3	Horizontal	165	1.18	-	70.30	27.78	4.22	-
PK	2.4835G	62.29	74.00	-11.71	32.02	3	Horizontal	165	1.18	-	30.27	27.80	4.22	-

**BT-EDR(3Mbps)**  
**2480MHz\_TX**



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.95986G	27.09	54.00	-26.91	4.15	3	Vertical	185	1.15	-	22.94	33.02	5.77	34.64
PK	4.95986G	49.59	74.00	-24.41	4.15	3	Vertical	185	1.15	-	45.44	33.02	5.77	34.64

**BT-EDR(3Mbps)**  
**2480MHz\_TX**



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.95937G	27.70	54.00	-26.30	4.15	3	Horizontal	200	1.01	-	23.55	33.02	5.77	34.64
PK	4.95937G	50.20	74.00	-23.80	4.15	3	Horizontal	200	1.01	-	46.05	33.02	5.77	34.64