



RADIO TEST REPORT

FCC ID : RAXKVD21
Equipment : 5G Gateway
Brand Name : T-Mobile
Model Name : KVD21
Applicant : Arcadyan Technology Corporation
No.8, Sec.2, Guangfu Rd.,Hsinchu, 30071 Taiwan
Manufacturer : Arcadyan Technology Corporation
No.8, Sec.2, Guangfu Rd.,Hsinchu, 30071 Taiwan
Standard : 47 CFR FCC Part 15.247

The product was received on Sep. 02, 2021, and testing was started from Oct. 05, 2021 and completed on Oct. 20, 2021. We, Sporton International Inc. Hsinchu 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. Hsinchu Laboratory, the test report shall not be reproduced except in full.

Approved by: Cliff Chang

Sporton International Inc. Hsinchu Laboratory

No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County 302010, Taiwan (R.O.C.)



Table of Contents

History of this test report.....3

Summary of Test Result.....4

1 General Description5

1.1 Information.....5

1.2 Applicable Standards8

1.3 Testing Location Information8

1.4 Measurement Uncertainty8

2 Test Configuration of EUT9

2.1 Test Channel Mode9

2.2 The Worst Case Measurement Configuration.....9

2.3 EUT Operation during Test11

2.4 Accessories11

2.5 Support Equipment.....11

2.6 Test Setup Diagram12

3 Transmitter Test Result14

3.1 AC Power-line Conducted Emissions14

3.2 20dB Bandwidth and Carrier Frequency Separation.....16

3.3 Maximum Conducted Output Power17

3.4 Number of Hopping Frequencies and Hopping Bandedge18

3.5 Time of Occupancy (Dwell Time)19

3.6 Emissions in Non-restricted Frequency Bands20

3.7 Emissions in Restricted Frequency Bands.....21

4 Test Equipment and Calibration Data24

Appendix A. Test Results of AC Power-line Conducted Emissions

Appendix B. Test Results of 20dB Bandwidth and Carrier Frequency Separation

Appendix C. Test Results of Maximum Conducted Output Power

Appendix D. Test Results of Number of Hopping Frequencies and Hopping Bandedge

Appendix E. Test Results of Time of Occupancy (Dwell Time)

Appendix F. Test Results of Emissions in Non-restricted Frequency Bands

Appendix G. Test Results of Emissions in Restricted Frequency Bands

Appendix H. Test Photos

Appendix I. Photographs of EUT



History of this test report

Report No.	Version	Description	Issued Date
FR190215AC	01	Initial issue of report	Oct. 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	-
3.2	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 Band edge	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:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Sam Chen**Report Producer: Jessie Wei**



1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	Bluetooth Version	Ch. Frequency (MHz)	Channel Number
2400-2483.5	BR / EDR	2402-2480	0-78 [79]

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	BT-BR(1Mbps)	1	1TX
2.4-2.4835GHz	BT-EDR(2Mbps)	1	1TX
2.4-2.4835GHz	BT-EDR(3Mbps)	1	1TX

Note:

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



1.1.2 Antenna Information

Ant.	Port			Brand	Model Name	Antenna Type	Connector	Gain (dBi)
	WLAN 2.4GHz	WLAN 5GHz	Bluetooth					
1	1	1	-	Maglayers	PCA-2510-25GC6-A1	Dipole	I-PEX	Note1
2	2	2	-	Maglayers	PCA-2510-25GC6-A2	Dipole	I-PEX	
3	3	3	-	Maglayers	PCA-2510-25GC6-A3	Dipole	I-PEX	
4	4	4	-	Maglayers	PCA-2510-25GC6-A4	Dipole	I-PEX	
5	-	-	1	Maglayers	PCA-2510-2G4C6-A1	Dipole	I-PEX	

Note 1:

Ant.	Port			Antenna Gain (dBi)					
	WLAN 2.4GHz	WLAN 5GHz	Bluetooth	WLAN 2.4GHz	WLAN 5GHz UNII 1	WLAN 5GHz UNII 2A	WLAN 5GHz UNII 2C	WLAN 5GHz UNII 3	Bluetooth
1	1	1	-	0.92	2.86	2.91	2.39	1.9	-
2	2	2	-	3.78	3.48	4.07	4.84	5.09	-
3	3	3	-	4.13	3.52	3.1	2.85	2.93	-
4	4	4	-	3.61	1.42	2.74	3.1	2.58	-
5	-	-	1	-	-	-	-	-	4.39

Note 2: The above information was declared by manufacturer.

For WLAN 2.4GHz:

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

Port 1, Port 2, Port 3 and Port 4 can be used as transmitting/receiving antenna.

Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.

For WLAN 5GHz:

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

Port 1, Port 2, Port 3 and Port 4 can be used as transmitting/receiving antenna.

Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.

For Bluetooth (1TX/1RX):

Only Port 1 can be used as transmitting/receiving antenna.



1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
BT-BR(1Mbps)	0.745	1.28	2.883m	1k
BT-EDR(2Mbps)	0.74	1.31	2.885m	1k
BT-EDR(3Mbps)	0.756	1.21	2.888m	1k

Note:

- ◆ DC is Duty Cycle.
- ◆ DCF is Duty Cycle Factor.

1.1.4 EUT Operational Condition

EUT Power Type	From Power Adapter
Test Software Version	MediaTek BT Tool_w2036



1.2 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ 47 CFR FCC Part 15.247

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

- ♦ FCC KDB 558074 D01 v05r02
- ♦ FCC KDB 414788 D01 v01r01

1.3 Testing Location Information

Testing Location Information	
Test Lab. : Sporton International Inc. Hsinchu Laboratory	
Hsinchu	ADD: No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County 302010, Taiwan (R.O.C.)
(TAF: 3787)	TEL: 886-3-656-9065 FAX: 886-3-656-9085
	Test site Designation No. TW3787 with FCC.
	Conformity Assessment Body Identifier (CABID) TW3787 with ISED.

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
RF Conducted	TH02-CB	Jay Lo	23.1~24.6 / 55~57	Oct. 09, 2021~ Oct. 20, 2021
Radiated below 1GHz	03CH05-CB	Kevin Huang	24.5~25.6 / 56~59	Oct. 05, 2021~ Oct. 20, 2021
Radiated above 1GHz	03CH02-CB	Kevin Huang	24.2~26.1 / 55~58	Oct. 05, 2021~ Oct. 20, 2021
AC Conduction	CO01-CB	Peter Wu	21~23 / 55~57	Oct. 20, 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)	2.0 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	4.2 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.5 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.7 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.2 dB	Confidence levels of 95%
Conducted Emission	2.5 dB	Confidence levels of 95%
Output Power Measurement	1.3 dB	Confidence levels of 95%
Bandwidth Measurement	0.9%	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

Mode	Power Setting
BT-BR(1Mbps)	-
2402MHz	7
2440MHz	7
2480MHz	7
BT-EDR(2Mbps)	-
2402MHz	7
2440MHz	7
2480MHz	7
BT-EDR(3Mbps)	-
2402MHz	7
2440MHz	7
2480MHz	7

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	EUT + Adapter – WLAN 2.4GHz
2	EUT + Adapter – WLAN 5GHz
3	EUT + Adapter – Bluetooth
For operating mode 1 is the worst case and it was record in this test report.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	20dB Bandwidth Carrier Frequency Separation Maximum Conducted Output Power Number of Hopping Frequencies Hopping Bandedge Time of Occupancy (Dwell Time) Emissions in Non-restricted Frequency Bands
Test Condition	Conducted measurement at transmit chains



The Worst Case Mode for Following Conformance Tests	
Tests Item	Emissions in Restricted Frequency Bands
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	CTX
	The EUT was performed at X axis, Y axis and Z axis position for Radiated emission above 1GHz test, and the worst case was found at Y axis. So the measurement will follow this same test configuration.
1	EUT in Y axis + Adapter – WLAN 2.4GHz
2	EUT in Y axis + Adapter – WLAN 5GHz
3	EUT in Y axis + Adapter – Bluetooth
For operating mode 2 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX
	The EUT was performed at X axis, Y axis and Z axis position, and the worst case was found at Y axis. So the measurement will follow this same test configuration.
1	EUT in Y axis

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	WLAN 2.4GHz + WLAN 5GHz + Bluetooth + WWAN
Refer to Sporton Test Report No.: FA190215 for Co-location RF Exposure Evaluation.	



2.3 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

2.4 Accessories

Accessories			
Equipment Name	Brand Name	Model Name	Rating
Adapter	LUCENT TRANS	1A78	INPUT: 100-240V~1.2A, 50/60Hz OUTPUT: 5.0V, 3.0A, 15.0W 9.0V, 3.0A, 27.0W 15.0V, 3.0A, 45.0W

2.5 Support Equipment

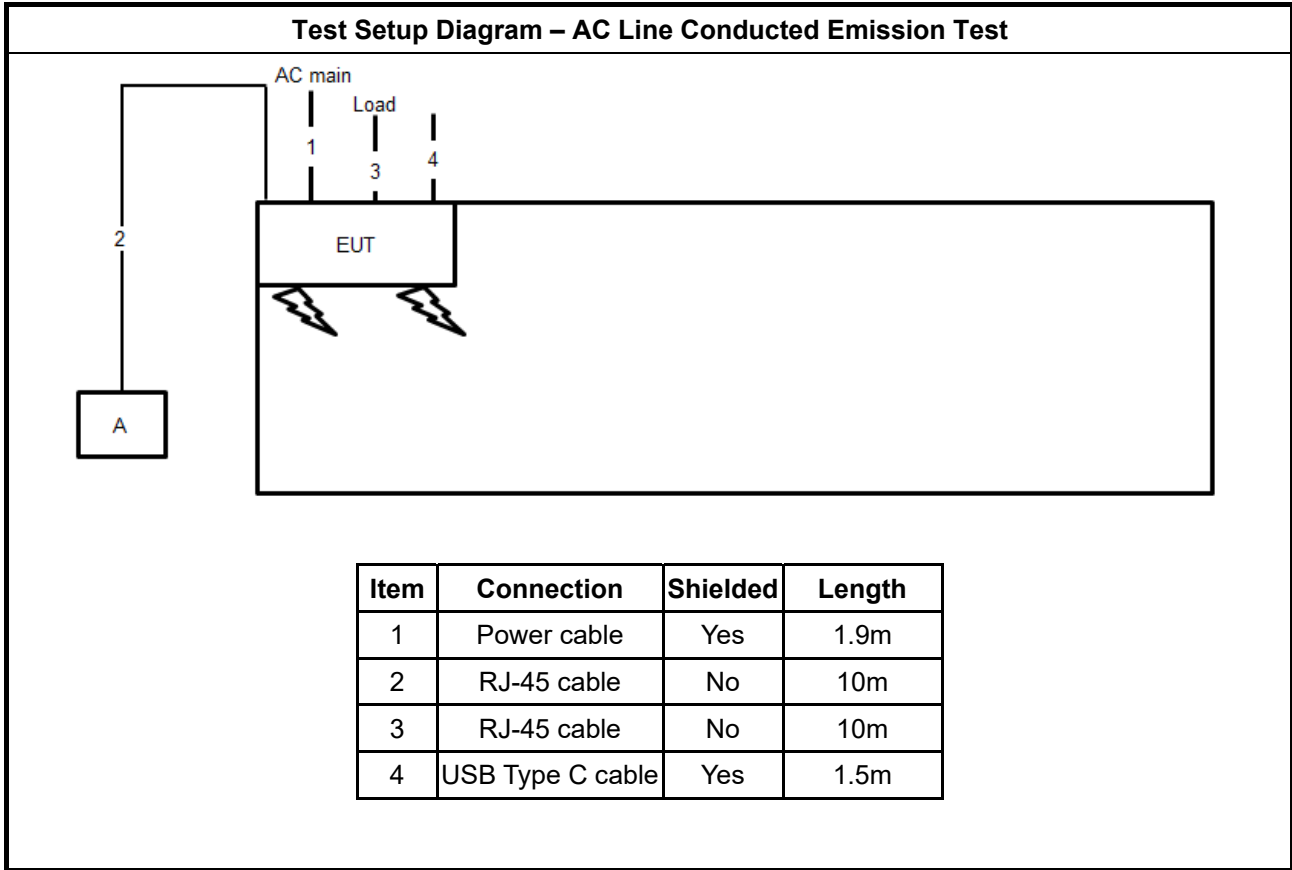
For AC Conduction:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	LAN NB	DELL	E6430	N/A

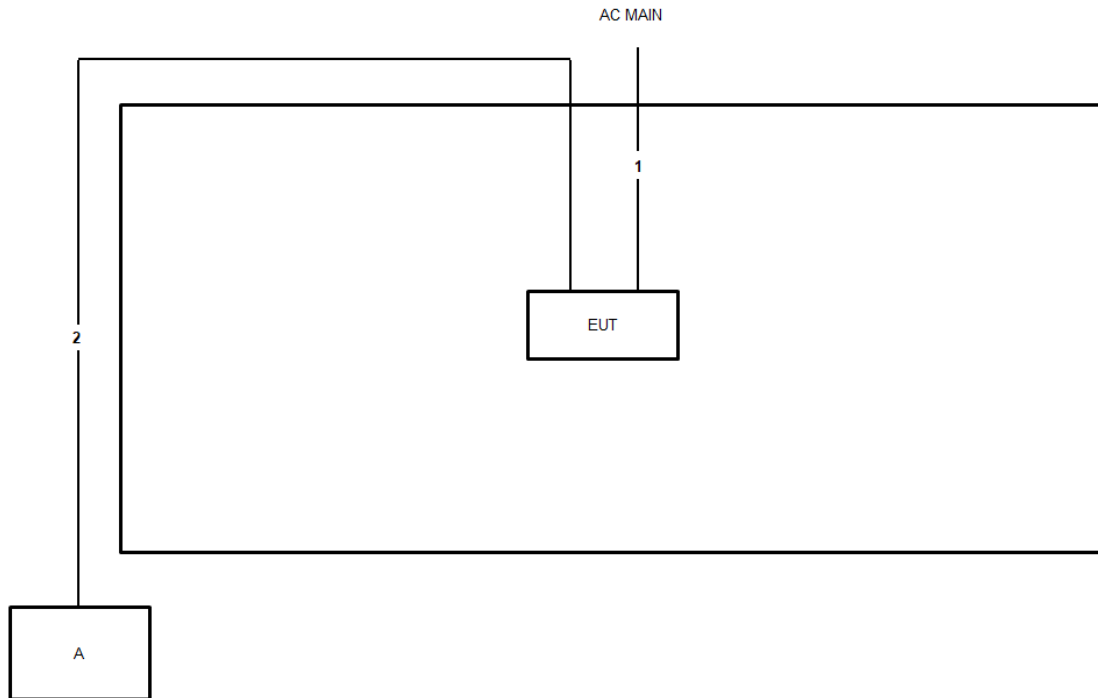
For Radiated and RF Conducted:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A

2.6 Test Setup Diagram



Test Setup Diagram - Radiated Test



Item	Connection	Shielded	Length
1	Power cable	Yes	1.9m
2	RJ-45 cable	No	10m



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.

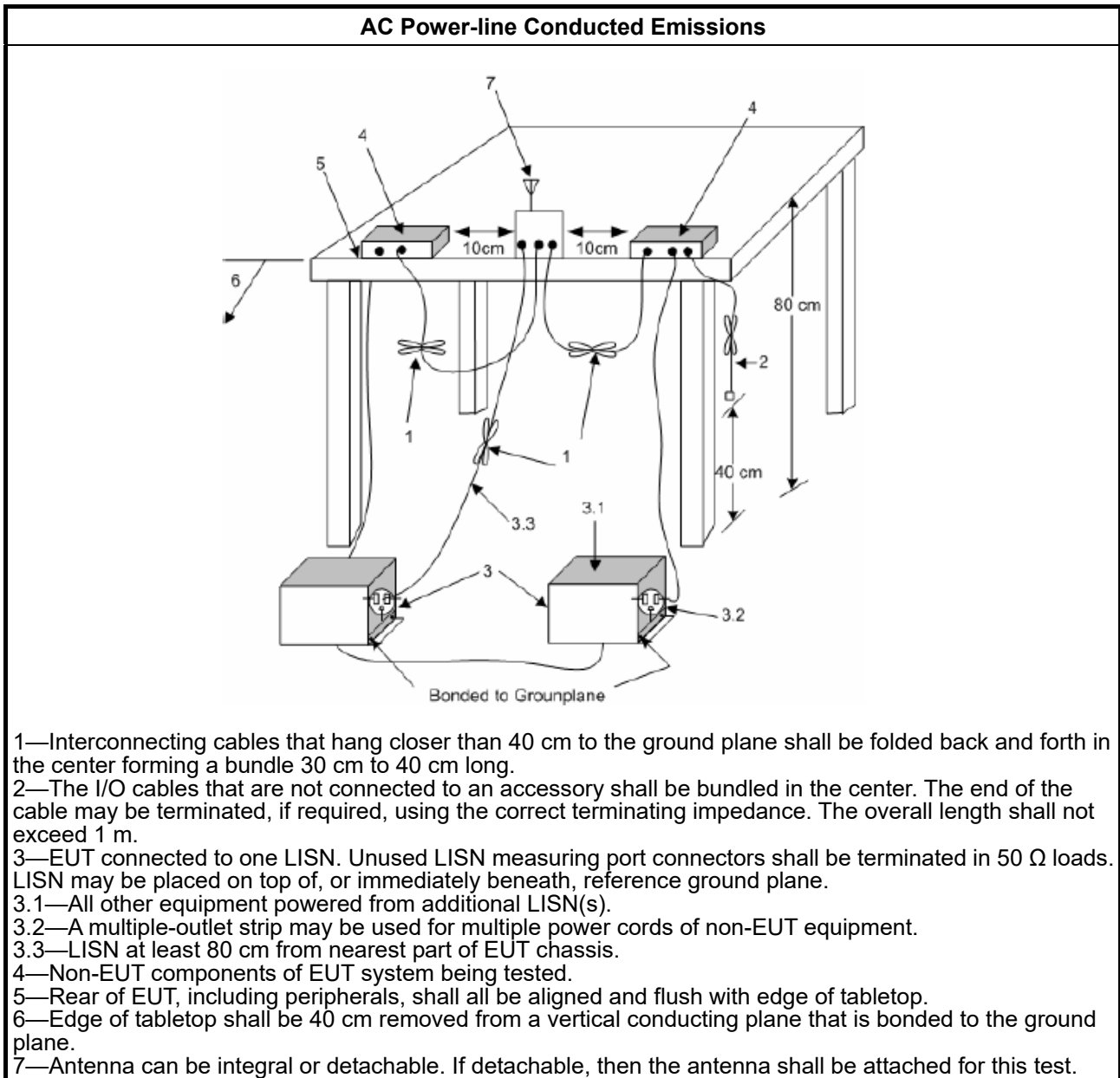
3.1.2 Measuring Instruments

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 Test Setup



1.1.1. Measurement Results Calculation

The measured Level is calculated using:

- a. Corrected Reading: LISN Factor (LISN) + Attenuator (AT/AUX) + Cable Loss (CL) + Read Level (Raw) = Level
- b. Margin = -Limit + Level

3.1.5 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 20dB Bandwidth and Carrier Frequency Separation

3.2.1 20dB Bandwidth and Carrier Frequency Separation Limit

20dB Bandwidth and Carrier Frequency Separation Limit for Frequency Hopping Systems	
▪ 902-928 MHz Band:	
	▪ $N \geq 50$ and $ChS \geq MAX$ (20 dB bandwidth, 25 kHz); 20 dB bandwidth \leq 250 kHz.
	▪ $50 > N \geq 25$ and $ChS \geq MAX$ (20 dB bandwidth, 25 kHz); 20 dB bandwidth $>$ 250 kHz.
▪ 2400-2483.5 MHz Band:	
	▪ $N \geq 75$ and $ChS \geq MAX$ (20 dB bandwidth, 25 kHz).
	▪ $75 > N \geq 15$ and $ChS \geq MAX$ (20 dB bandwidth 2/3, 25 kHz).
▪ 5725-5850 MHz Band:	
	▪ $N \geq 75$ and $ChS \geq MAX$ (20 dB bandwidth, 25 kHz); 20 dB bandwidth \leq 1 MHz.
N: Number of Hopping Frequencies; ChS: Hopping Channel Separation	

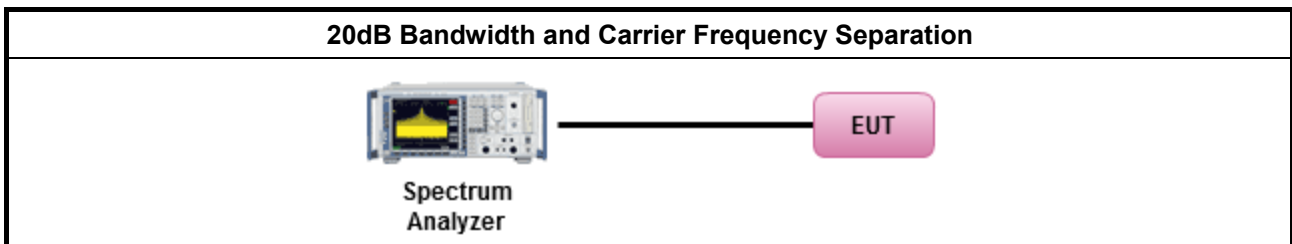
3.2.2 Measuring Instruments

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 6.9.1 for 20 dB bandwidth measurement.
▪ Refer as ANSI C63.10-2013, clause 7.8.2 for carrier frequency separation measurement.

3.2.4 Test Setup



3.2.5 Test Result of 20dB Bandwidth

Refer as Appendix B

3.2.6 Test Result of Carrier Frequency Separation

Refer as Appendix B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit	
<ul style="list-style-type: none"> ▪ 902-928 MHz Band: 	
	<ul style="list-style-type: none"> ▪ $N \geq 50$; Power 30dBm; EIRP 36dBm
	<ul style="list-style-type: none"> ▪ $50 > N \geq 25$; Power 23.98dBm; EIRP 29.98dBm
<ul style="list-style-type: none"> ▪ 2400-2483.5 MHz Band: 	
	<ul style="list-style-type: none"> ▪ $N \geq 75$; Power 30dBm; EIRP 36dBm
	<ul style="list-style-type: none"> ▪ $75 > N \geq 15$; Power 21dBm; EIRP 27dBm
<ul style="list-style-type: none"> ▪ 5725-5850 MHz Band: 	
	<ul style="list-style-type: none"> ▪ $N \geq 75$; Power 30dBm; EIRP 36dBm
N: Number of Hopping Frequencies	

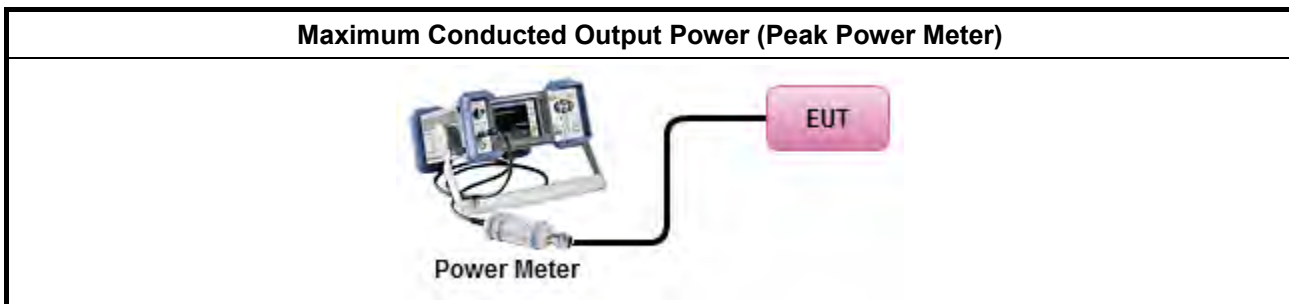
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

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

3.3.4 Test Setup



3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Number of Hopping Frequencies and Hopping Bandedge

3.4.1 Number of Hopping Frequencies Limit

Number of Hopping Frequencies Limit	
▪	902-928 MHz Band:
	▪ $N \geq 50$ and $ChS \geq MAX$ (20 dB bandwidth, 25 kHz); 20 dB bandwidth \leq 250 kHz.
	▪ $50 > N \geq 25$ and $ChS \geq MAX$ (20 dB bandwidth, 25 kHz); 20 dB bandwidth $>$ 250 kHz.
▪	2400-2483.5 MHz Band:
	▪ $N \geq 75$ and $ChS \geq MAX$ (20 dB bandwidth, 25 kHz).
	▪ $75 > N \geq 15$ and $ChS \geq MAX$ (20 dB bandwidth 2/3, 25 kHz).
▪	5725-5850 MHz Band:
	▪ $N \geq 75$ and $ChS \geq MAX$ (20 dB bandwidth, 25 kHz); 20 dB bandwidth \leq 1 MHz.
N: Number of Hopping Frequencies; ChS : Hopping Channel Separation	

3.4.2 Hopping Bandedge Limit

Refer clause 3.6.1 and clause 3.7.1

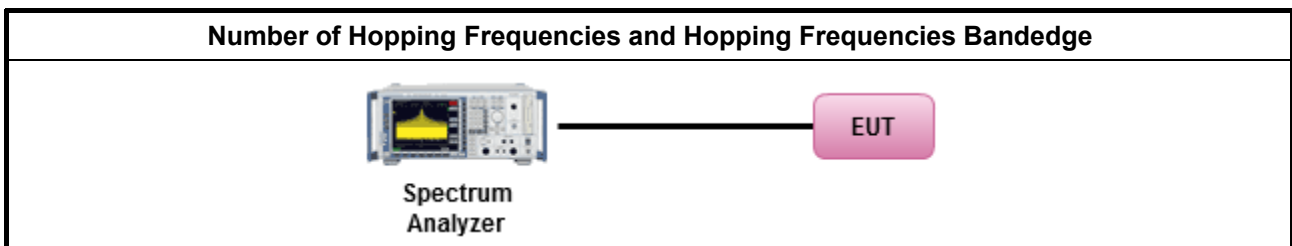
3.4.3 Measuring Instruments

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

3.4.4 Test Procedures

Test Method
▪ Refer as ANSI C63.10-2013, clause 7.8.3 for number of hopping frequencies measurement.
▪ Refer as ANSI C63.10-2013, clause 7.8.6 for hopping frequencies Bandedge measurement.

3.4.5 Test Setup



3.4.6 Test Result of Number of Hopping Frequencies

Refer as Appendix D

3.4.7 Test Result of Number of Hopping Frequencies Bandedge

Refer as Appendix D

3.5 Time of Occupancy (Dwell Time)

3.5.1 Time of Occupancy (Dwell Time) Limit

20dB Bandwidth and Carrier Frequency Separation Limit for Frequency Hopping Systems	
▪ 902-928 MHz Band:	
	▪ $N \geq 50$; 0.4s in 20s period
	▪ $50 > N \geq 25$; 0.4s in 10s period
▪ 2400-2483.5 MHz Band:	
	▪ $N \geq 75$; 0.4s in $N \times 0.4$ period
	▪ $75 > N \geq 15$; 0.4s in $N \times 0.4$ period
▪ 5725-5850 MHz Band:	
	▪ $N \geq 75$; 0.4s in 30s period
N: Number of Hopping Frequencies	

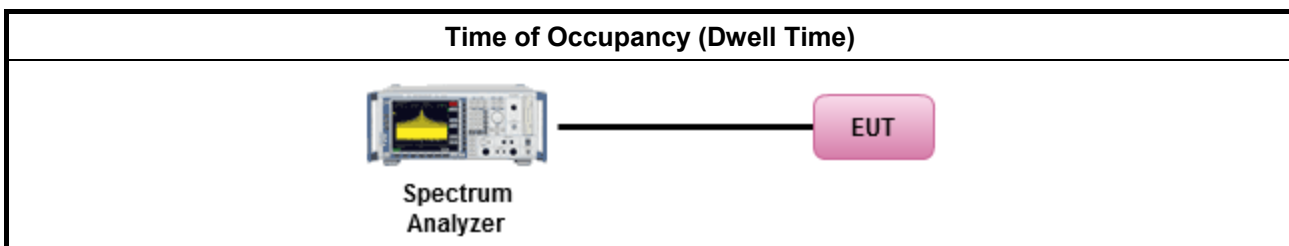
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

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

3.5.4 Test Setup



3.5.5 Test Result of Time of Occupancy (Dwell Time)

Refer as Appendix E

3.6 Emissions in Non-restricted Frequency Bands

3.6.1 Emissions in Non-restricted Frequency Bands Limit

Un-restricted Band Emissions Limit	
RF output power procedure	Limit (dBc)
Peak output power procedure	20

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

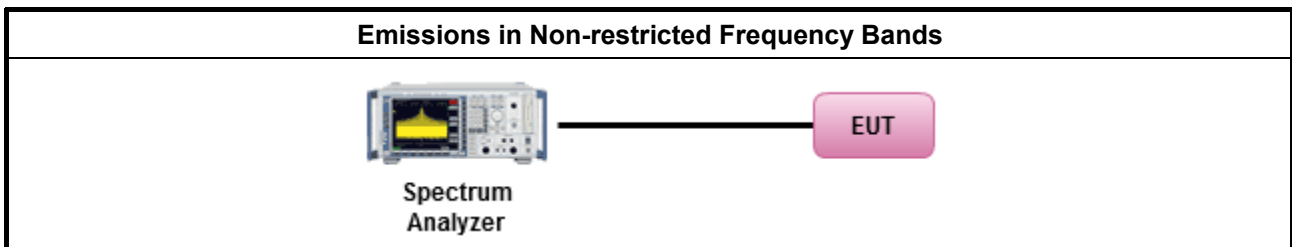
3.6.2 Measuring Instruments

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

3.6.3 Test Procedures

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

3.6.4 Test Setup



3.6.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix F



3.7 Emissions in Restricted Frequency Bands

3.7.1 Emissions in Restricted Frequency Bands Limit

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

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

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

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

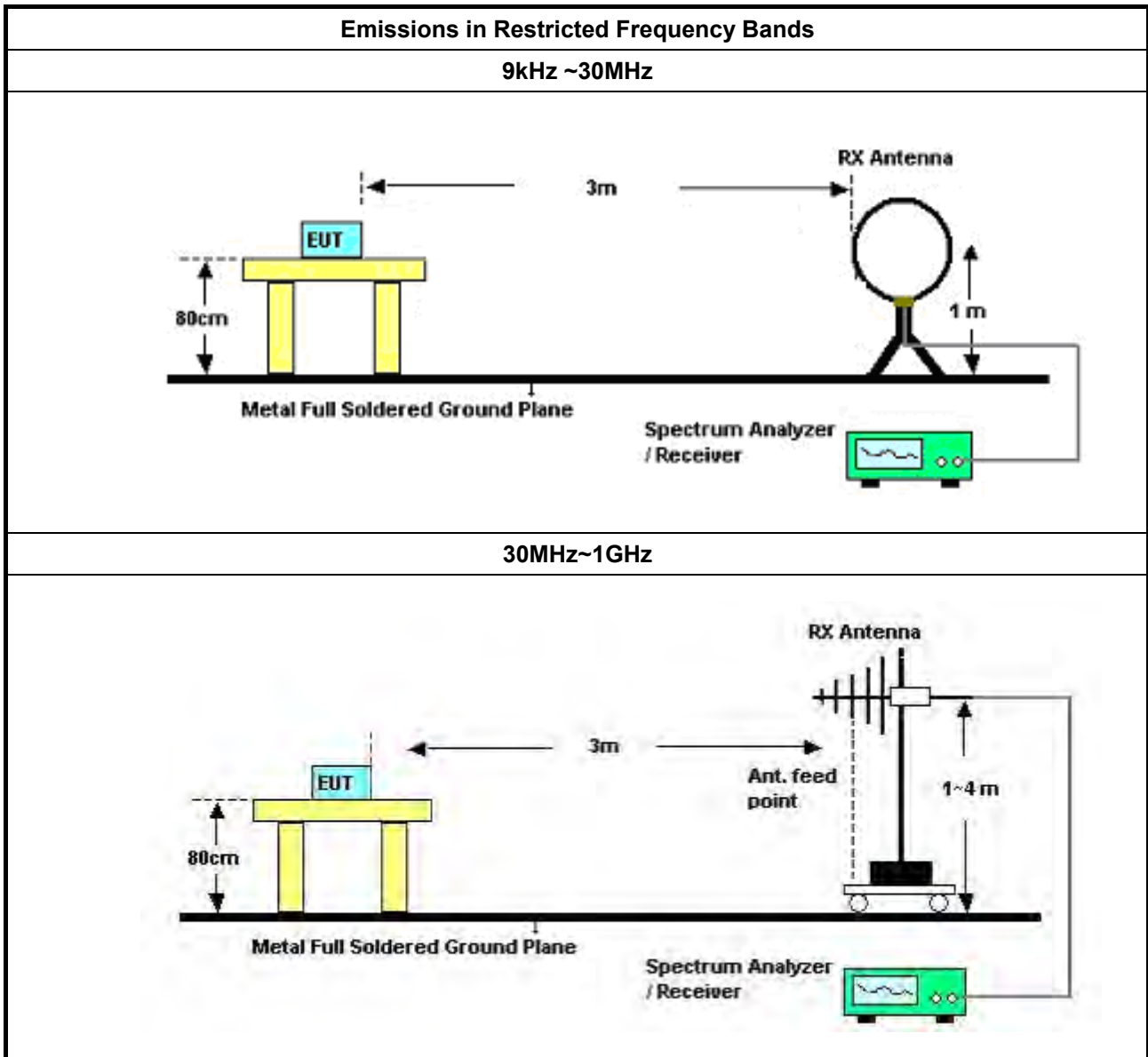
3.7.2 Measuring Instruments

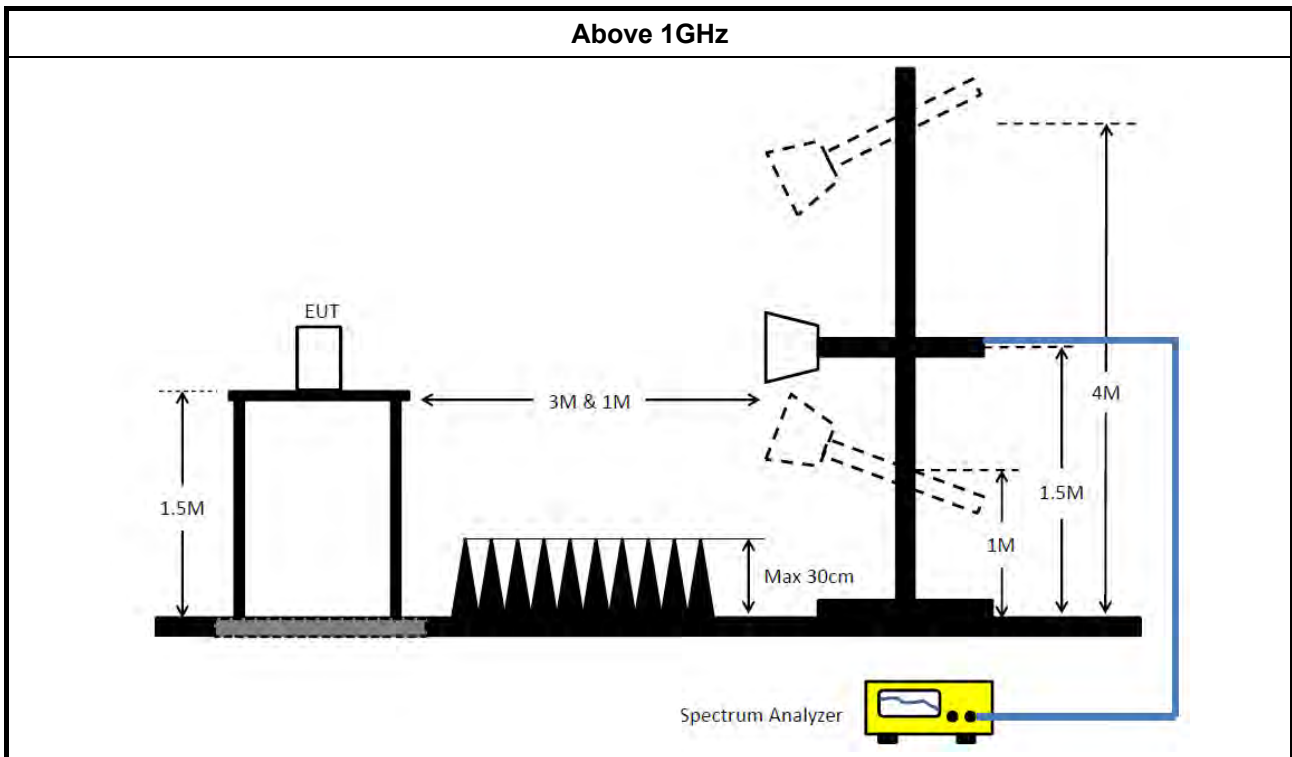
Refer a test equipment and calibration data table in this test report.

3.7.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> The average emission levels shall be measured in [hopping duty factor]. 	
<ul style="list-style-type: none"> Refer as ANSI C63.10; clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band. 	
<ul style="list-style-type: none"> For the transmitter unwanted emissions shall be measured using following options below: <ul style="list-style-type: none"> Refer as ANSI C63.10, clause 4.1.4.2.1 QP value. Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak. Refer as ANSI C63.10, clause 4.1.4.2.4 average value of hopping pulsed emissions. 	

3.7.4 Test Setup





3.7.5 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Antenna factor (AF) + Cable loss (CL) + Read level (Raw) - Preamp factor (PA)(if applicable) = Level.

3.7.6 Emissions in Restricted Frequency Bands (Below 30MHz)

There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to KDB414788 Radiated Test Site, and the result came out very similar.

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

The radiated emissions were investigated from 9 kHz or the lowest frequency generated within the device, up to the 10th harmonic or 40 GHz, whichever is appropriate.

3.7.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix G



4 Test Equipment and Calibration Data

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.4GHz	Mar. 03, 2021	Mar. 02, 2022	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Jan. 06, 2021	Jan. 05, 2022	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Mar. 07, 2021	Mar. 06, 2022	Conduction (CO01-CB)
Pulse Limiter	Rohde&Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Jan. 30, 2021	Jan. 29, 2022	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	May 19, 2021	May 18, 2022	Conduction (CO01-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH05-CB	30 MHz ~ 1 GHz	Aug. 09, 2021	Aug. 08, 2022	Radiation (03CH05-CB)
Bilog Antenna with 6dB Attenuator	TESEQ & EMCI	CBL 6112D & N-6-06	35236 & AT-N0610	30MHz ~ 2GHz	Mar. 26, 2021	Mar. 25, 2022	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC330N	980331	20MHz ~ 3GHz	Apr. 27, 2021	Apr. 26, 2022	Radiation (03CH05-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	Jun. 21, 2021	Jun. 20, 2022	Radiation (03CH05-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Apr. 14, 2021	Apr. 13, 2022	Radiation (03CH05-CB)
RF Cable-low	Woken	RG402	Low Cable-04+23	30MHz~1GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH05-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH05-CB)
3m Semi Anechoic Chamber VSWR	RIKEN	SAC-3M	03CH02-CB	1GHz ~18GHz 3m	Mar. 27, 2021	Mar. 26, 2022	Radiation (03CH02-CB)
Horn Antenna	EMCO	3115	9610-4976	1GHz ~ 18GHz	May 04, 2021	May 03, 2022	Radiation (03CH02-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 05, 2021	Aug. 04, 2022	Radiation (03CH02-CB)
Pre-Amplifier	Agilent	83017A	MY39501305	1GHz ~ 26.5GHz	Jul. 12, 2021	Jul. 11, 2022	Radiation (03CH02-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 13, 2021	Jul. 12, 2022	Radiation (03CH02-CB)
Spectrum analyzer	R&S	FSU	100015	9kHz~26GHz	Oct. 15, 2020	Oct. 14, 2021	Radiation (03CH02-CB)
Signal Analyzer	R&S	FSV40	101903	9kHz ~ 40GHz	Mar. 22, 2021	Mar. 21, 2022	Radiation (03CH02-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-18	1GHz ~ 18GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-18+19	1GHz ~ 18GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH02-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH02-CB)
Spectrum analyzer	R&S	FSV40	101027	9kHz~40GHz	Aug. 02, 2021	Aug. 01, 2022	Conducted (TH02-CB)
Power Sensor	Anritsu	MA2411B	1126203	300MHz~40GHz	Sep. 17, 2020	Sep. 16, 2021	Conducted (TH02-CB)
Power Meter	Anritsu	ML2495A	1210004	300MHz~40GHz	Sep. 17, 2020	Sep. 16, 2021	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-01	1 GHz – 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-02	1 GHz – 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-03	1 GHz – 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-04	1 GHz – 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-05	1 GHz – 18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH02-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH02-CB)

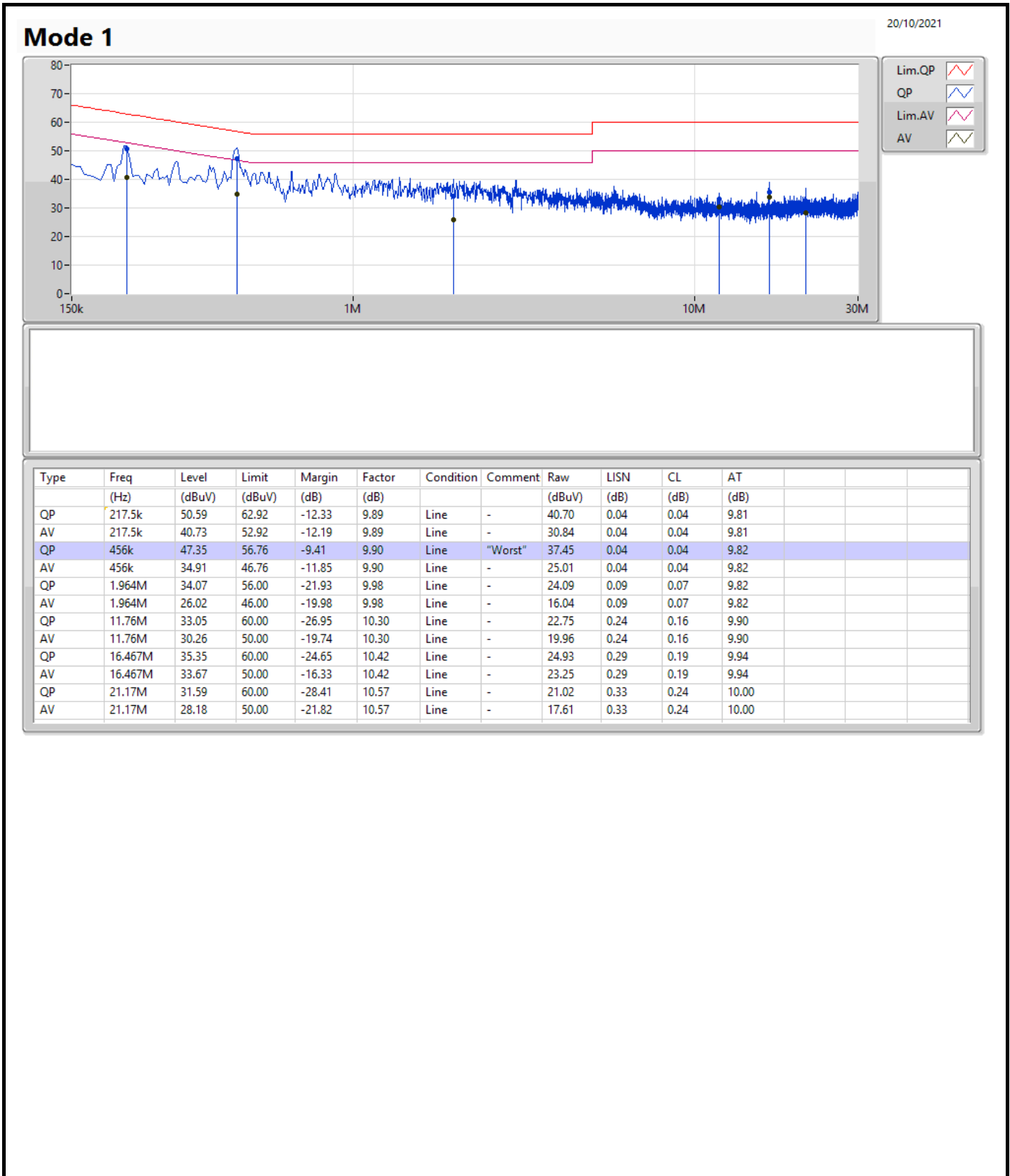
Note: Calibration Interval of instruments listed above is one year.

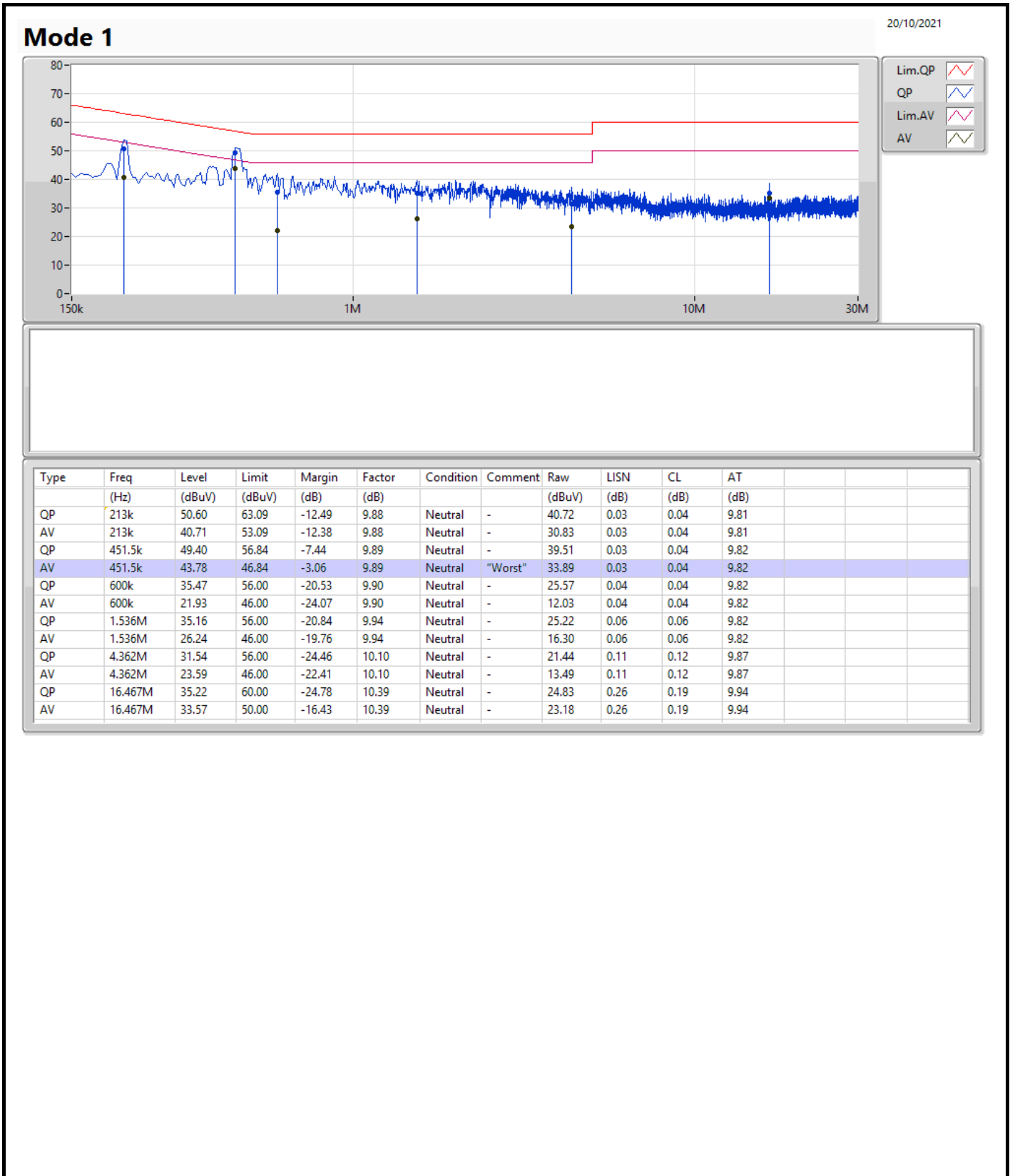
NCR means Non-Calibration required.



Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	451.5k	43.78	46.84	-3.06	Neutral







Summary

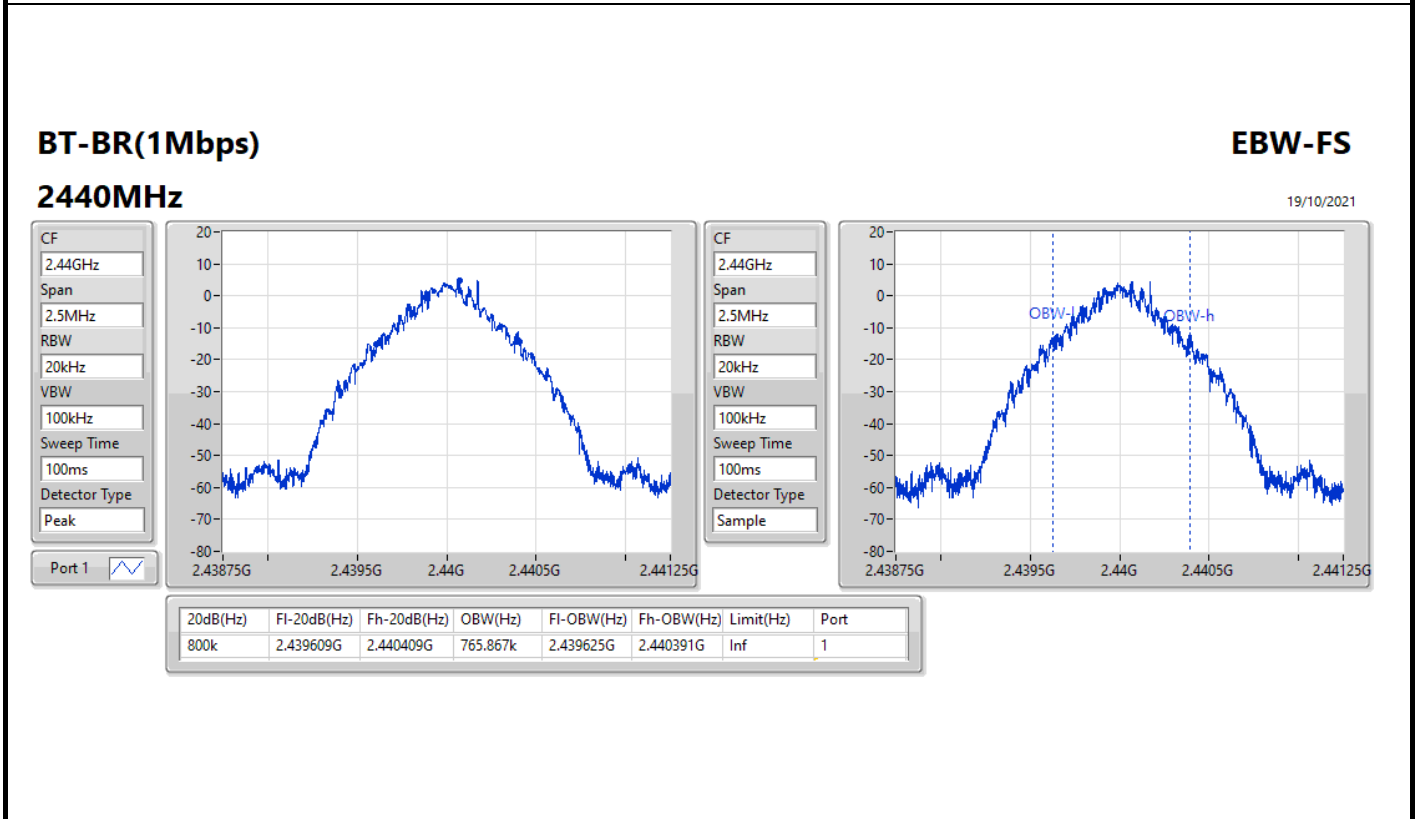
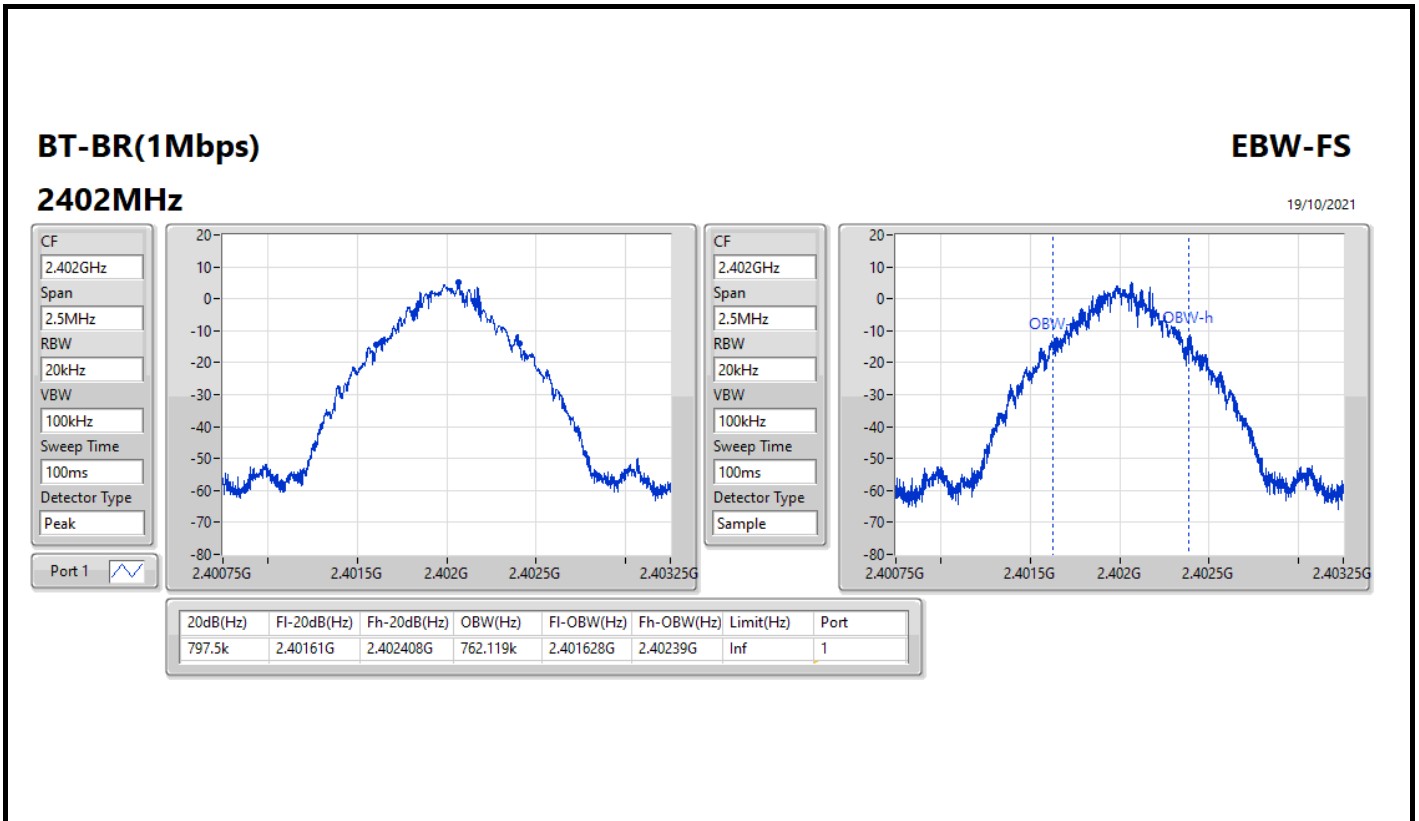
Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
BT-BR(1Mbps)	800k	765.867k	766KF1D	797.5k	757.121k
BT-EDR(2Mbps)	1.253M	1.182M	1M18G1D	1.245M	1.173M
BT-EDR(3Mbps)	1.241M	1.183M	1M18G1D	1.238M	1.178M

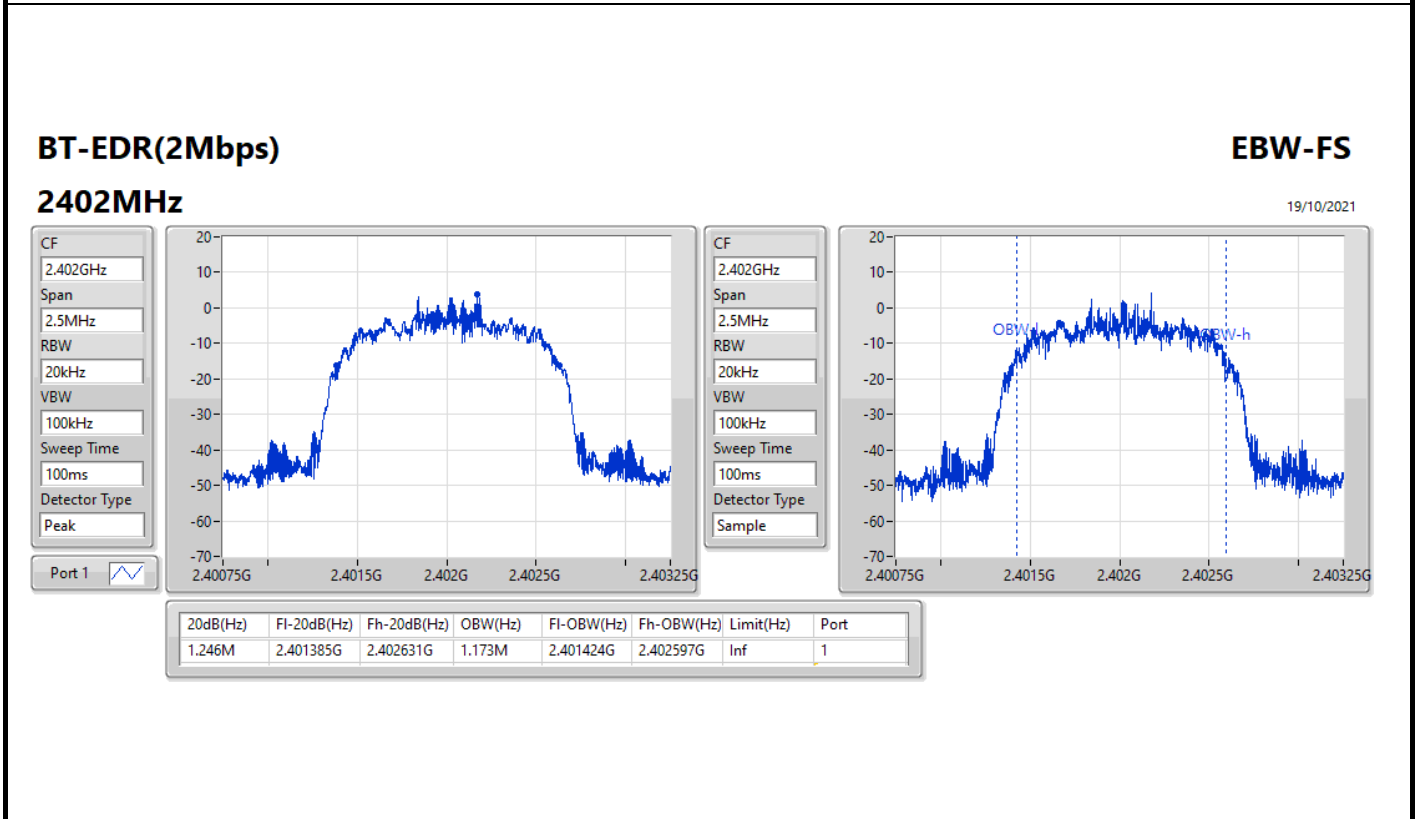
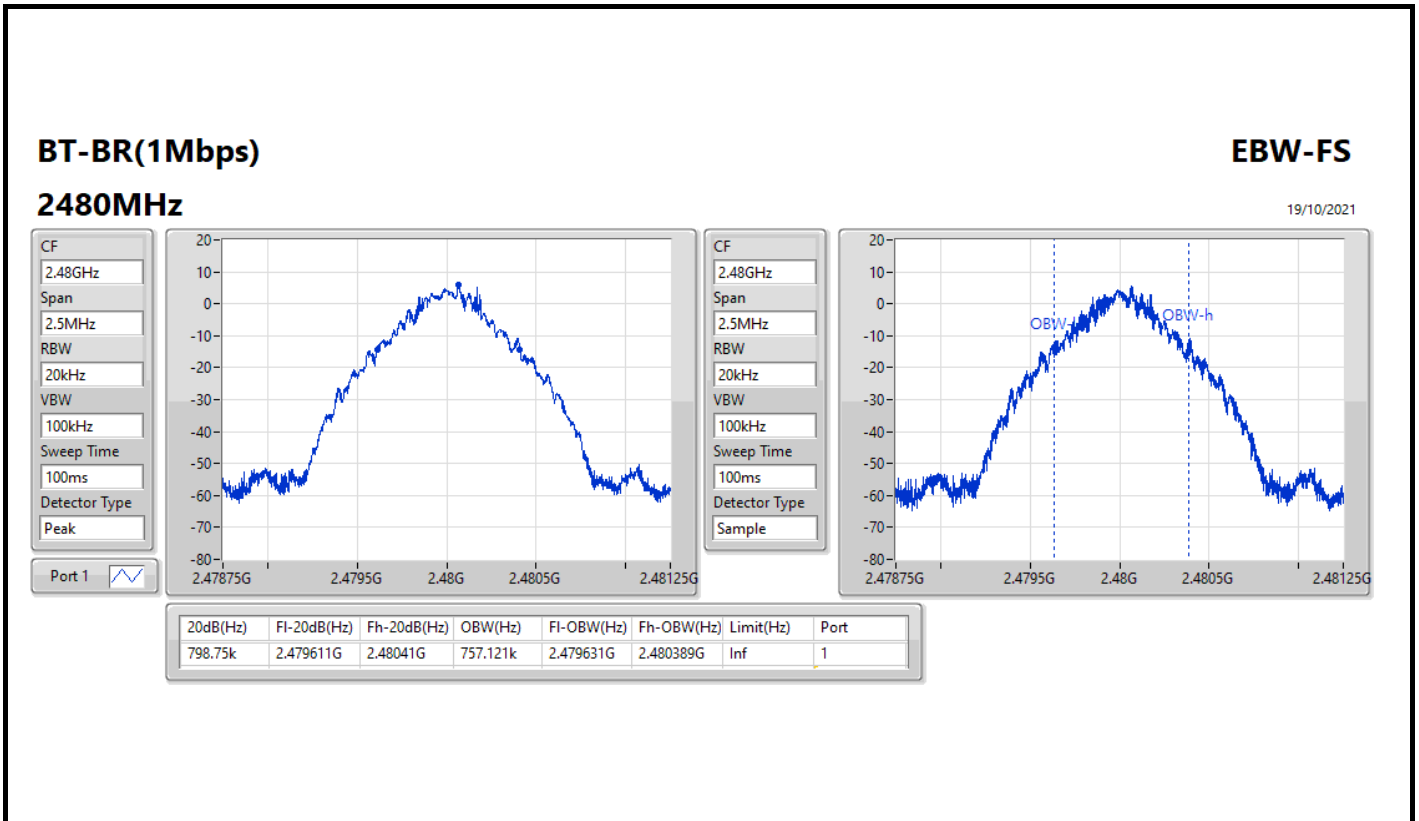
Max-N dB = Maximum 20dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 20dB down bandwidth; Min-OBW = Minimum 99% occupied bandwidth

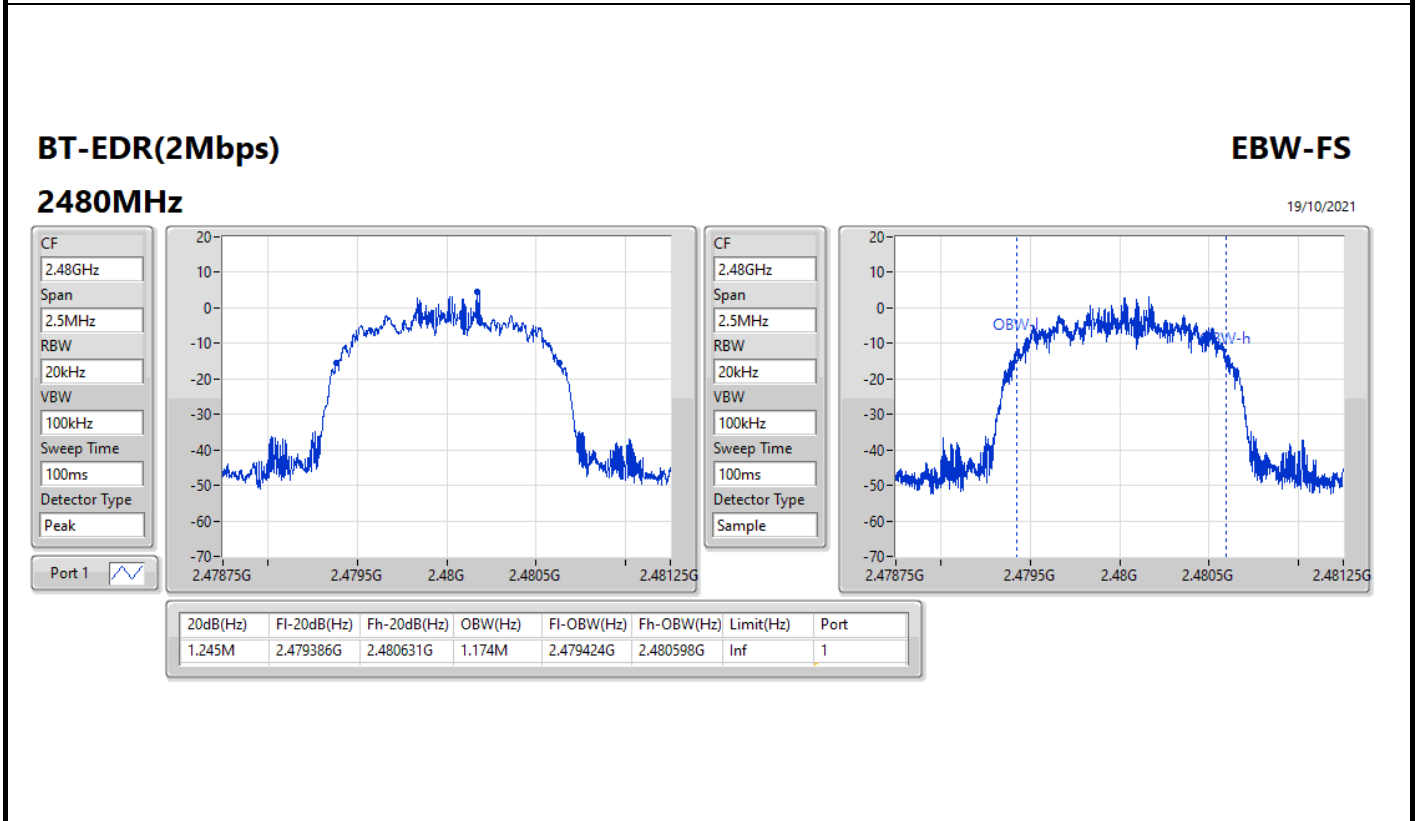
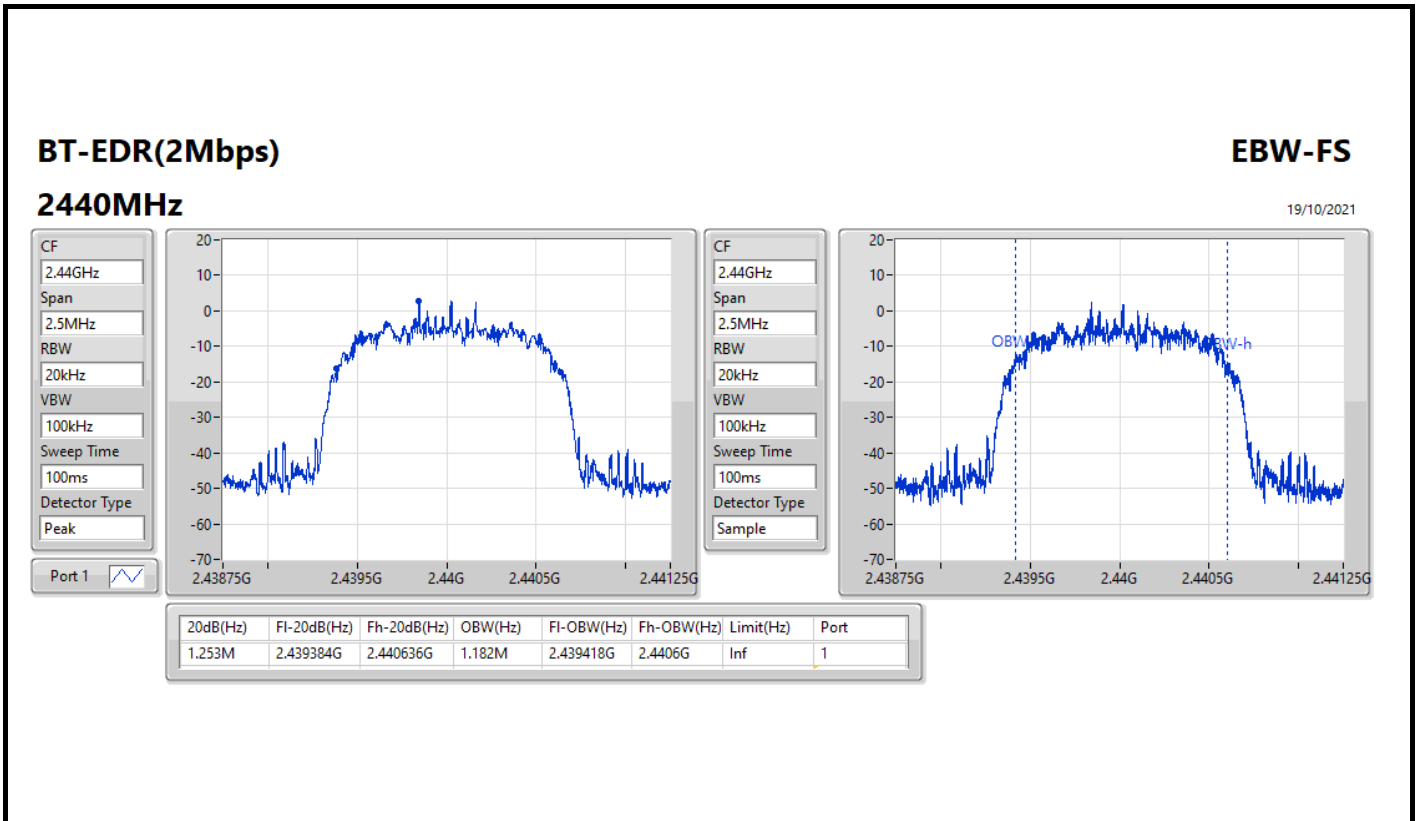
Result

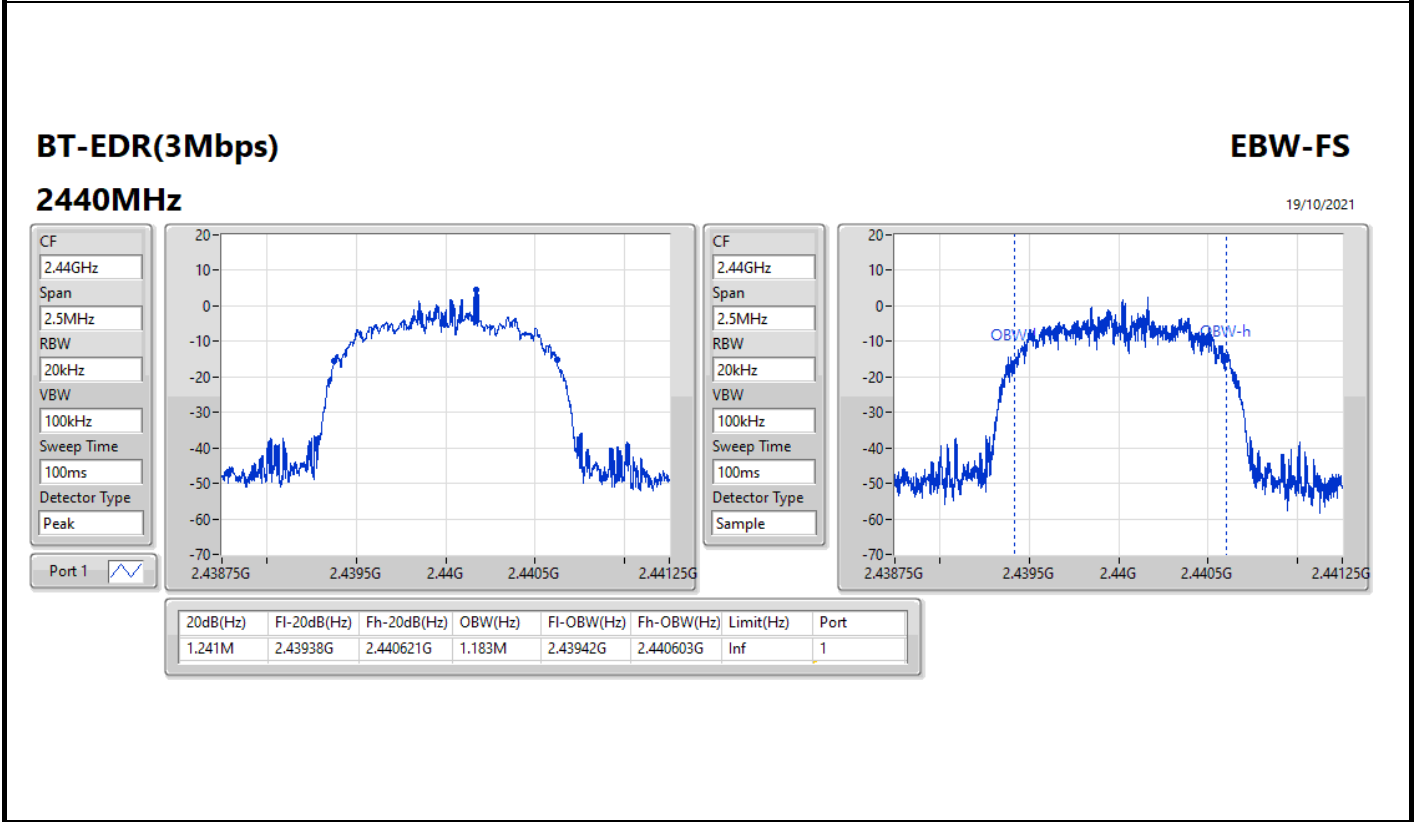
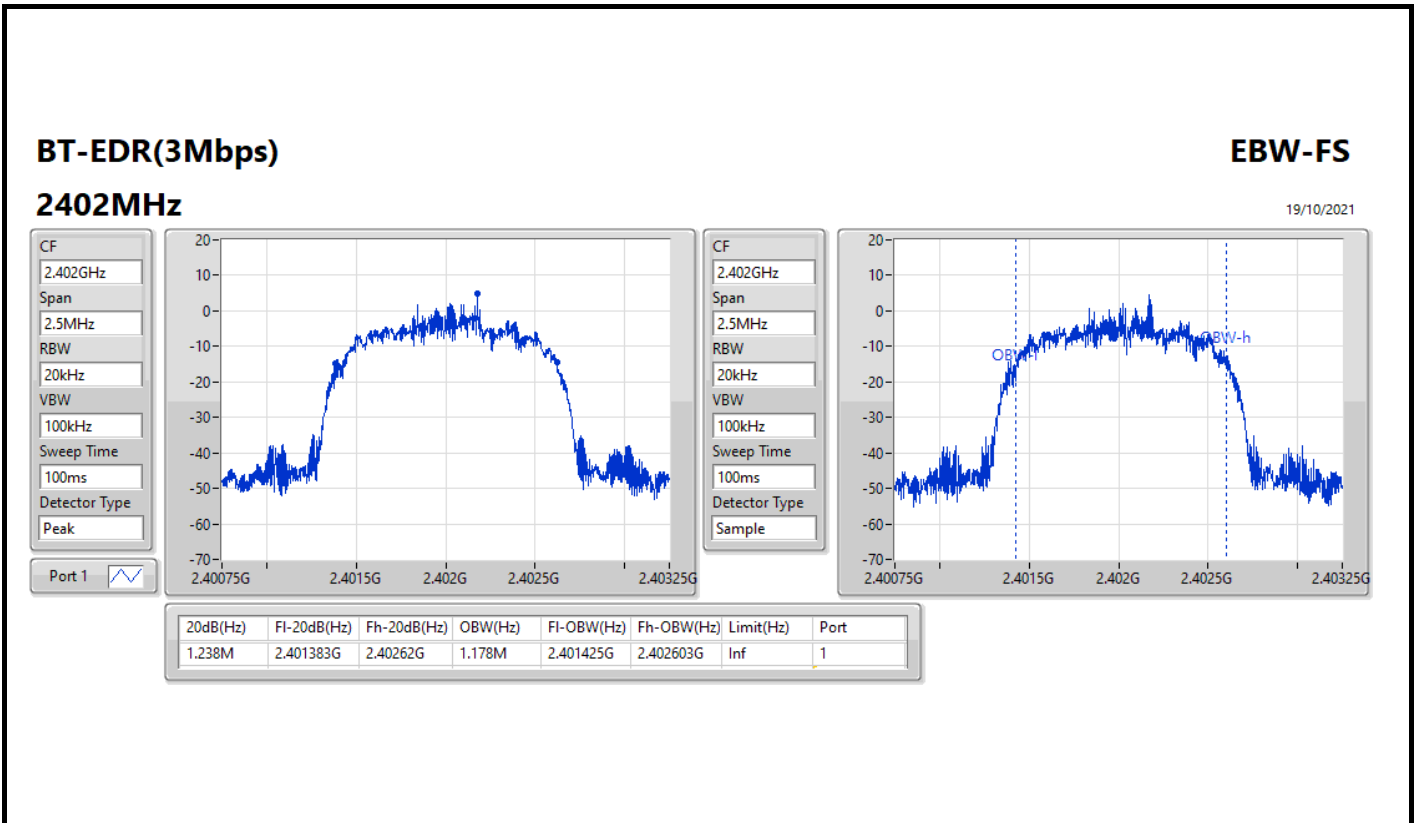
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	Inf	797.5k	762.119k
2440MHz	Pass	Inf	800k	765.867k
2480MHz	Pass	Inf	798.75k	757.121k
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	Inf	1.246M	1.173M
2440MHz	Pass	Inf	1.253M	1.182M
2480MHz	Pass	Inf	1.245M	1.174M
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	Inf	1.238M	1.178M
2440MHz	Pass	Inf	1.241M	1.183M
2480MHz	Pass	Inf	1.241M	1.183M

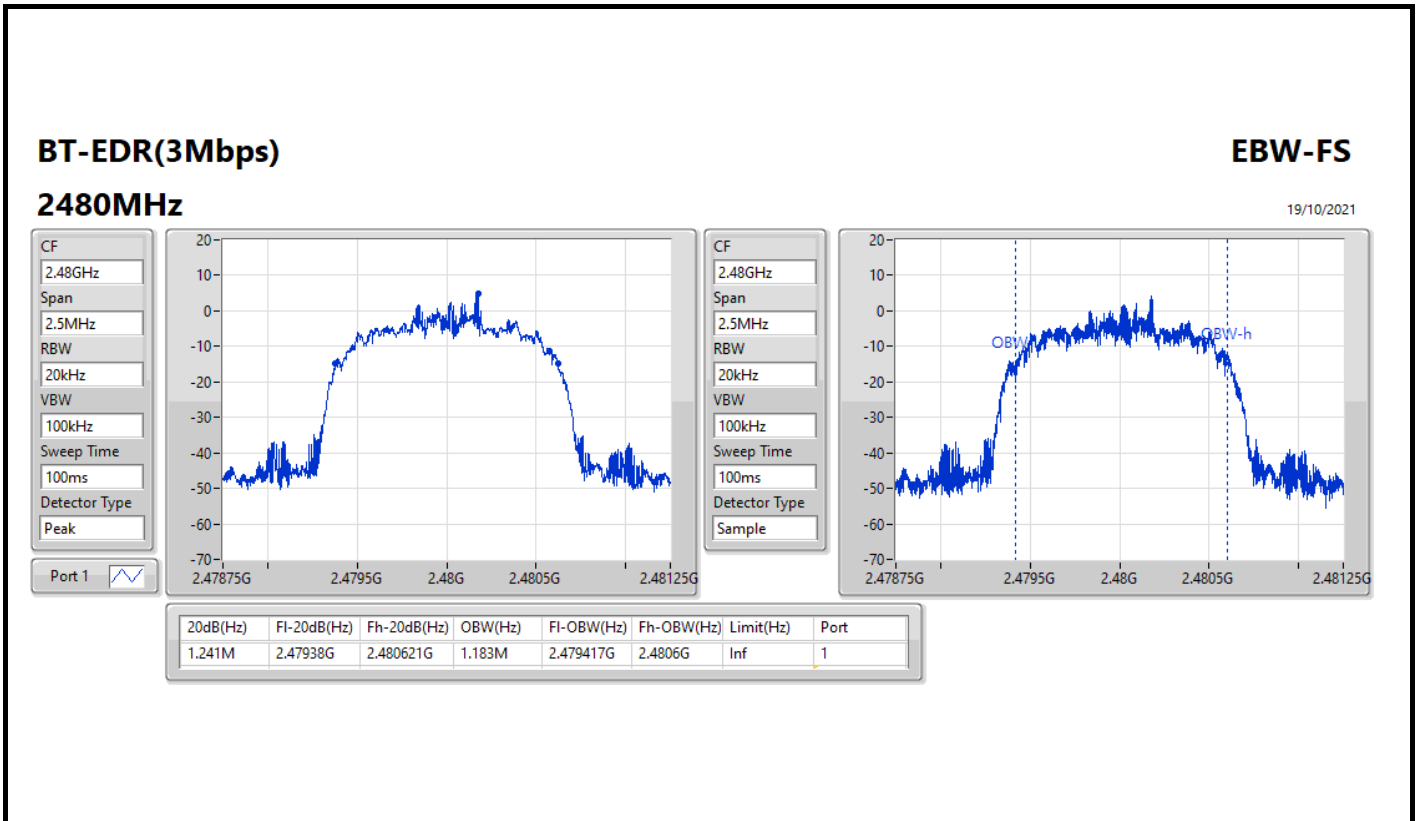
Port X-N dB = Port X 20dB down bandwidth;
 Port X-OBW = Port X 99% occupied bandwidth













Summary

Mode	Max-Space (Hz)	Min-Space (Hz)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	1.107M	996k
BT-EDR(2Mbps)	1.0035M	1.0005M
BT-EDR(3Mbps)	1.0005M	999k

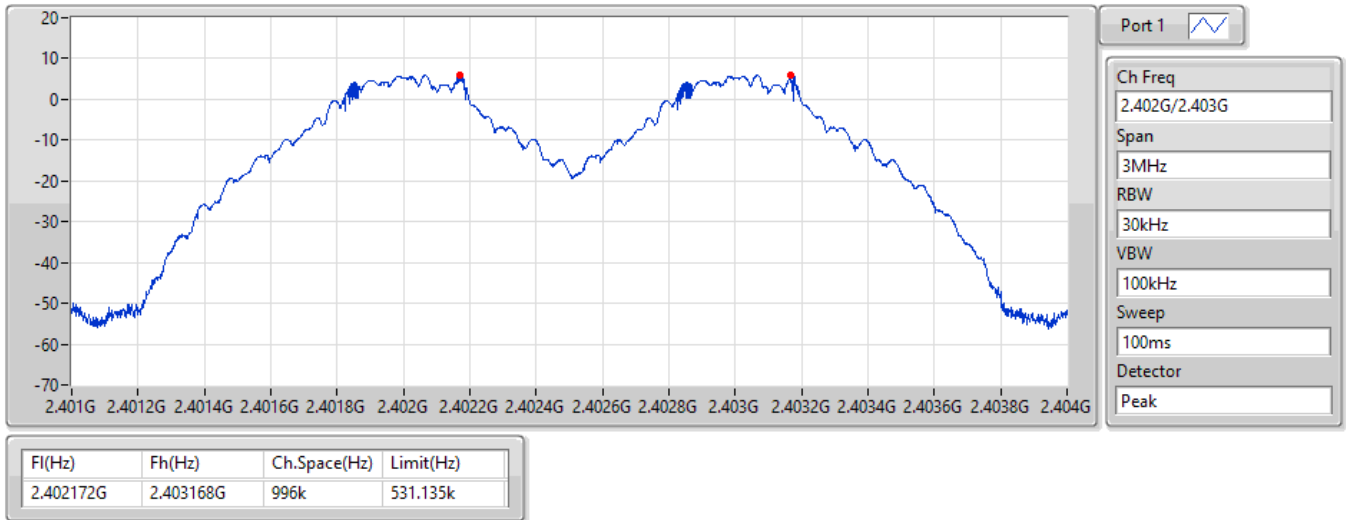
Result

Mode	Result	Fl (Hz)	Fh (Hz)	Ch.Space (Hz)	Limit (Hz)
BT-BR(1Mbps)	-	-	-	-	-
2402MHz	Pass	2.402172G	2.403168G	996k	531.135k
2440MHz	Pass	2.440068G	2.441175G	1.107M	532.8k
2480MHz	Pass	2.47917G	2.480174G	1.0035M	531.9675k
BT-EDR(2Mbps)	-	-	-	-	-
2402MHz	Pass	2.402172G	2.403174G	1.002M	829.836k
2440MHz	Pass	2.440175G	2.441178G	1.0035M	834.498k
2480MHz	Pass	2.479175G	2.480175G	1.0005M	829.17k
BT-EDR(3Mbps)	-	-	-	-	-
2402MHz	Pass	2.402172G	2.403172G	1.0005M	824.508k
2440MHz	Pass	2.440173G	2.441172G	999k	826.506k
2480MHz	Pass	2.479172G	2.480171G	999k	826.506k

BT-BR(1Mbps)

Channel Separation-FS

2.402G/2.403GHz

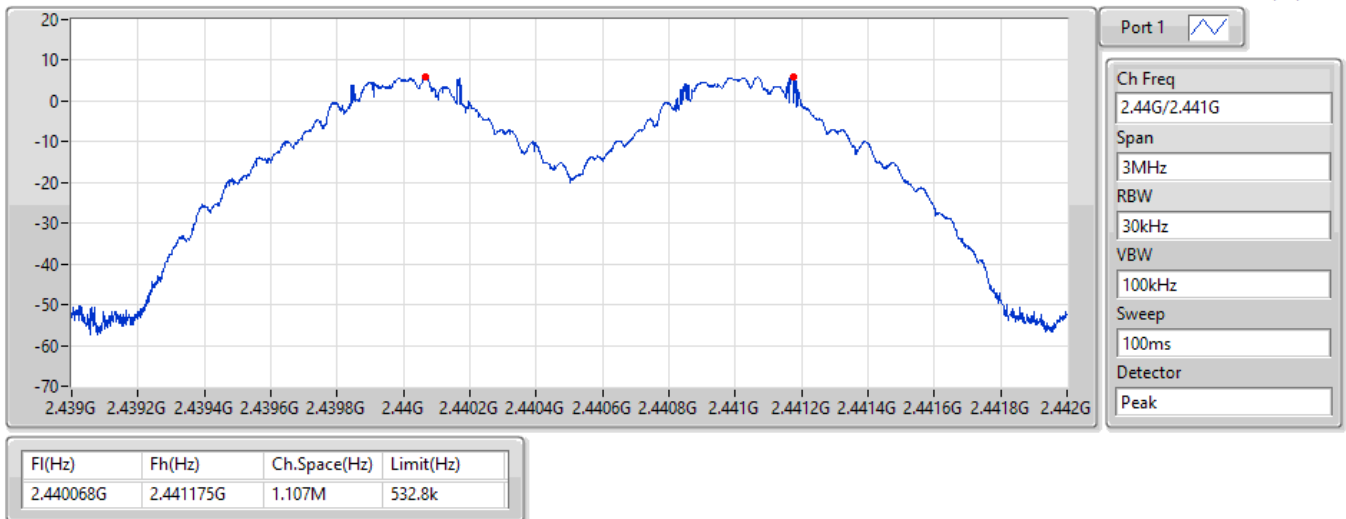


BT-BR(1Mbps)

Channel Separation-FS

2.44G/2.441GHz

19/10/2021




BT-BR(1Mbps)

2.48G/2.479GHz

Channel Separation-FS

19/10/2021



Port 1 

Ch Freq
2.48G/2.479G

Span
3MHz

RBW
30kHz

VBW
100kHz

Sweep
100ms

Detector
Peak

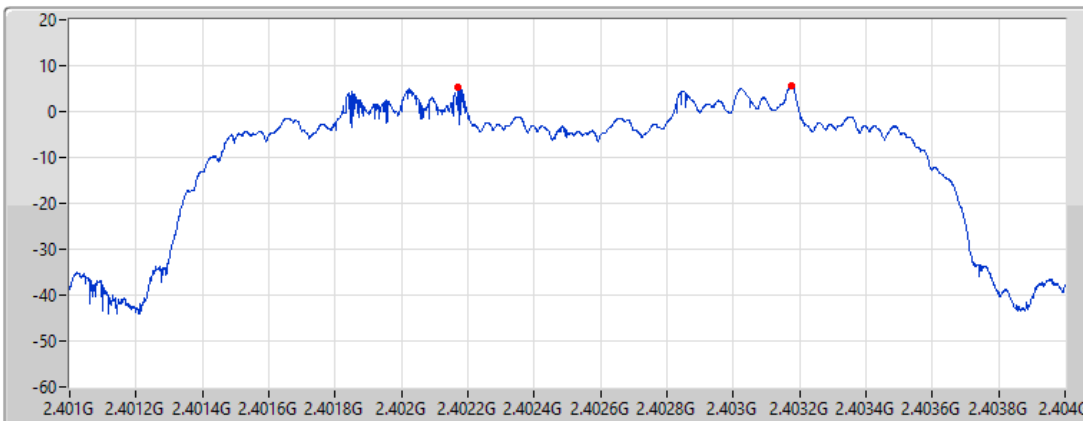
Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.47917G	2.480174G	1.0035M	531.9675k


BT-EDR(2Mbps)

2.402G/2.403GHz

Channel Separation-FS

19/10/2021



Port 1 

Ch Freq
2.402G/2.403G

Span
3MHz

RBW
30kHz

VBW
100kHz

Sweep
100ms

Detector
Peak

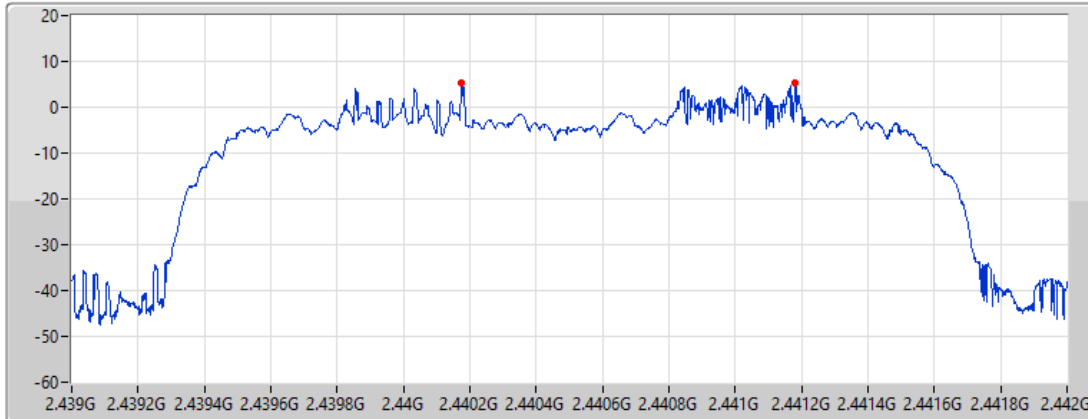
Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.402172G	2.403174G	1.002M	829.836k


BT-EDR(2Mbps)

Channel Separation-FS

2.44G/2.441GHz

19/10/2021



Port 1 

Ch Freq
2.44G/2.441G

Span
3MHz

RBW
30kHz

VBW
100kHz

Sweep
100ms

Detector
Peak

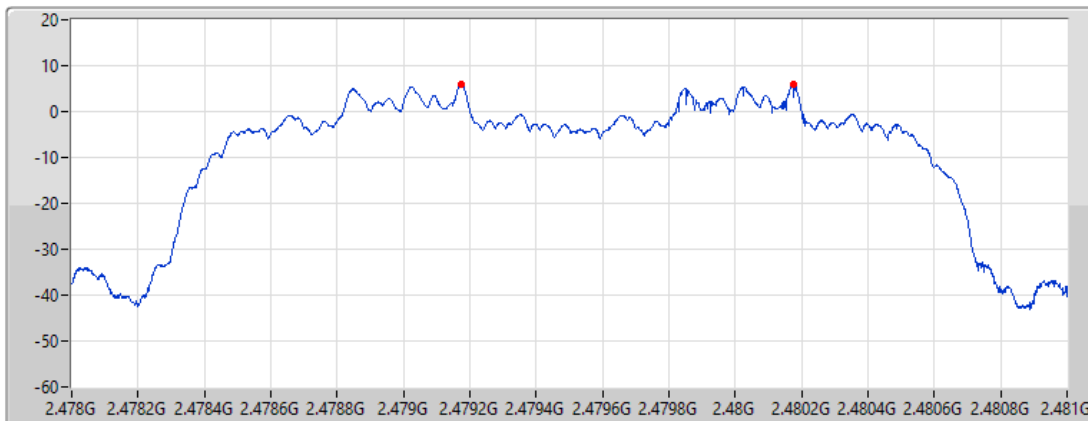
Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.440175G	2.441178G	1.0035M	834.498k


BT-EDR(2Mbps)

Channel Separation-FS

2.48G/2.479GHz

19/10/2021



Port 1 

Ch Freq
2.48G/2.479G

Span
3MHz

RBW
30kHz

VBW
100kHz

Sweep
100ms

Detector
Peak

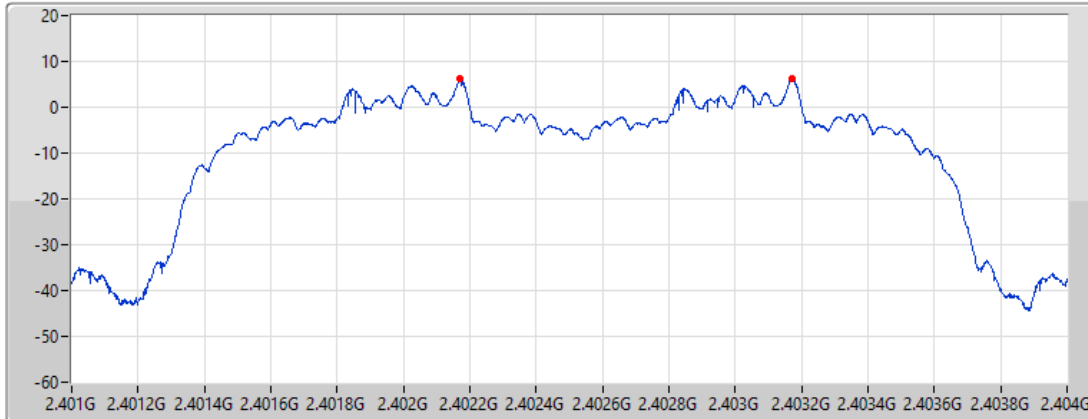
Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.479175G	2.480175G	1.0005M	829.17k


BT-EDR(3Mbps)

Channel Separation-FS

2.402G/2.403GHz

19/10/2021



Port 1 

Ch Freq
2.402G/2.403G

Span
3MHz

RBW
30kHz

VBW
100kHz

Sweep
100ms

Detector
Peak

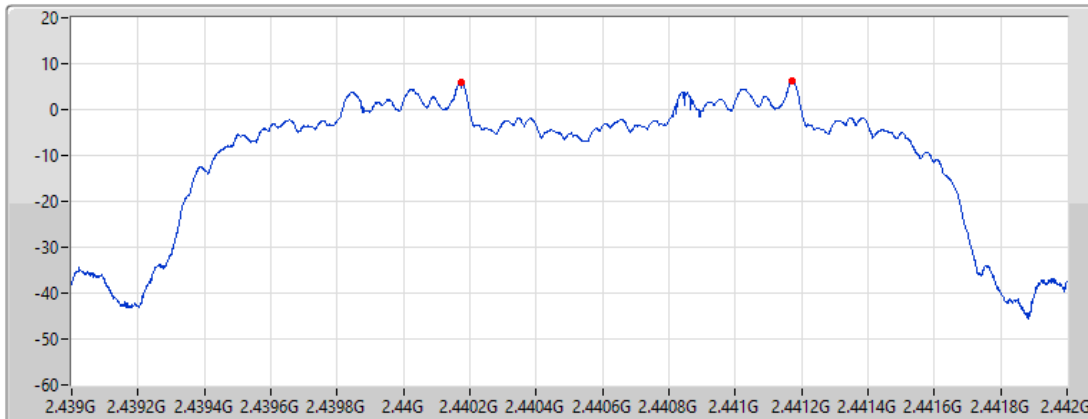
Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.402172G	2.403172G	1.0005M	824.508k


BT-EDR(3Mbps)

Channel Separation-FS

2.44G/2.441GHz

19/10/2021



Port 1 

Ch Freq
2.44G/2.441G

Span
3MHz

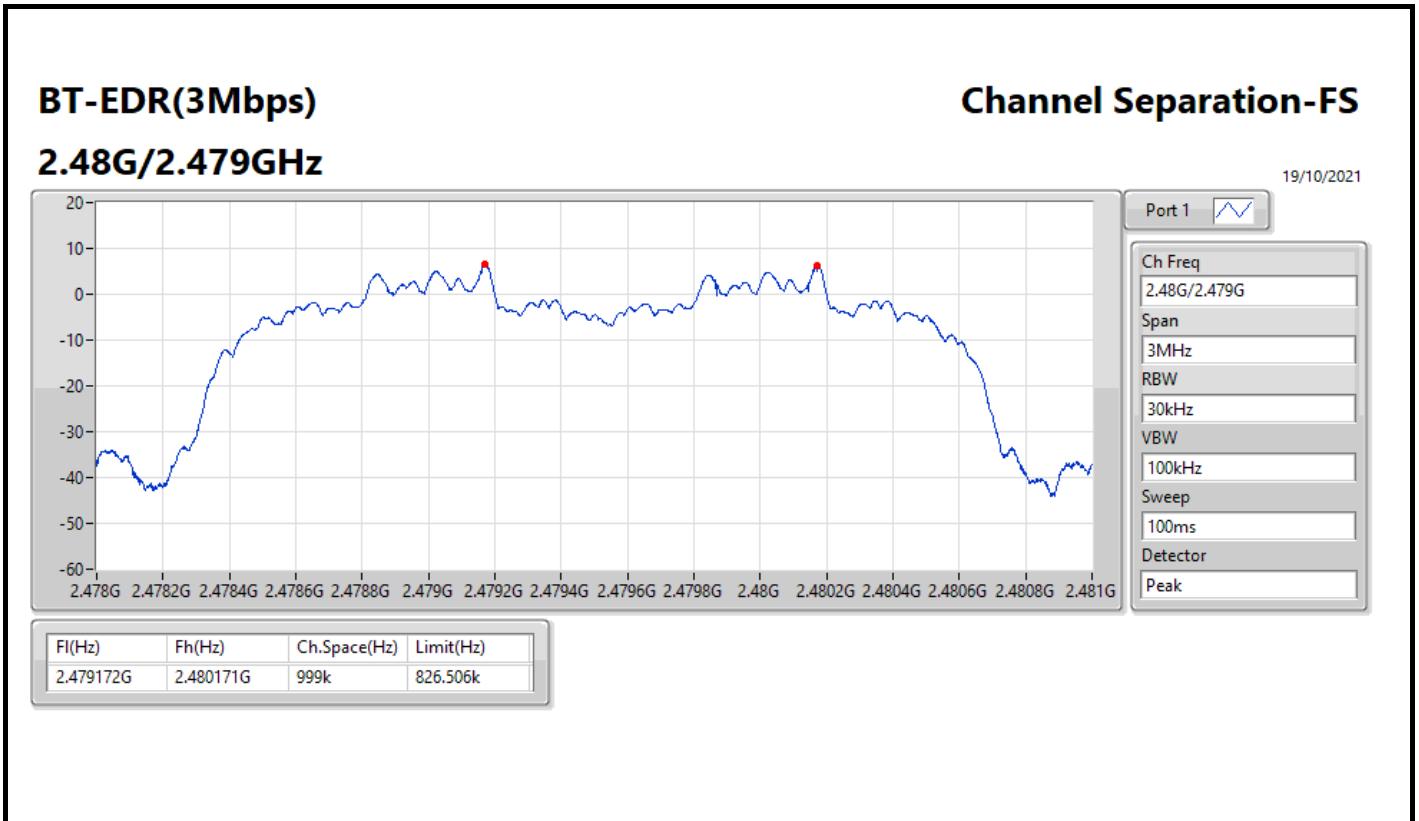
RBW
30kHz

VBW
100kHz

Sweep
100ms

Detector
Peak

Fl(Hz)	Fh(Hz)	Ch.Space(Hz)	Limit(Hz)
2.440173G	2.441172G	999k	826.506k





Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	9.19	0.00830
BT-EDR(2Mbps)	6.62	0.00459
BT-EDR(3Mbps)	6.62	0.00459



Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	4.39	8.81	21.00
2440MHz	Pass	4.39	8.66	21.00
2480MHz	Pass	4.39	9.19	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	4.39	6.36	21.00
2440MHz	Pass	4.39	5.94	21.00
2480MHz	Pass	4.39	6.62	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	4.39	6.21	21.00
2440MHz	Pass	4.39	5.87	21.00
2480MHz	Pass	4.39	6.62	21.00

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



Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-BR(1Mbps)	9.27	0.00845
BT-EDR(2Mbps)	9.12	0.00817
BT-EDR(3Mbps)	9.07	0.00807



Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-BR(1Mbps)	-	-	-	-
2402MHz	Pass	4.39	8.82	21.00
2440MHz	Pass	4.39	8.76	21.00
2480MHz	Pass	4.39	9.27	21.00
BT-EDR(2Mbps)	-	-	-	-
2402MHz	Pass	4.39	8.57	21.00
2440MHz	Pass	4.39	8.34	21.00
2480MHz	Pass	4.39	9.12	21.00
BT-EDR(3Mbps)	-	-	-	-
2402MHz	Pass	4.39	8.90	21.00
2440MHz	Pass	4.39	8.62	21.00
2480MHz	Pass	4.39	9.07	21.00

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



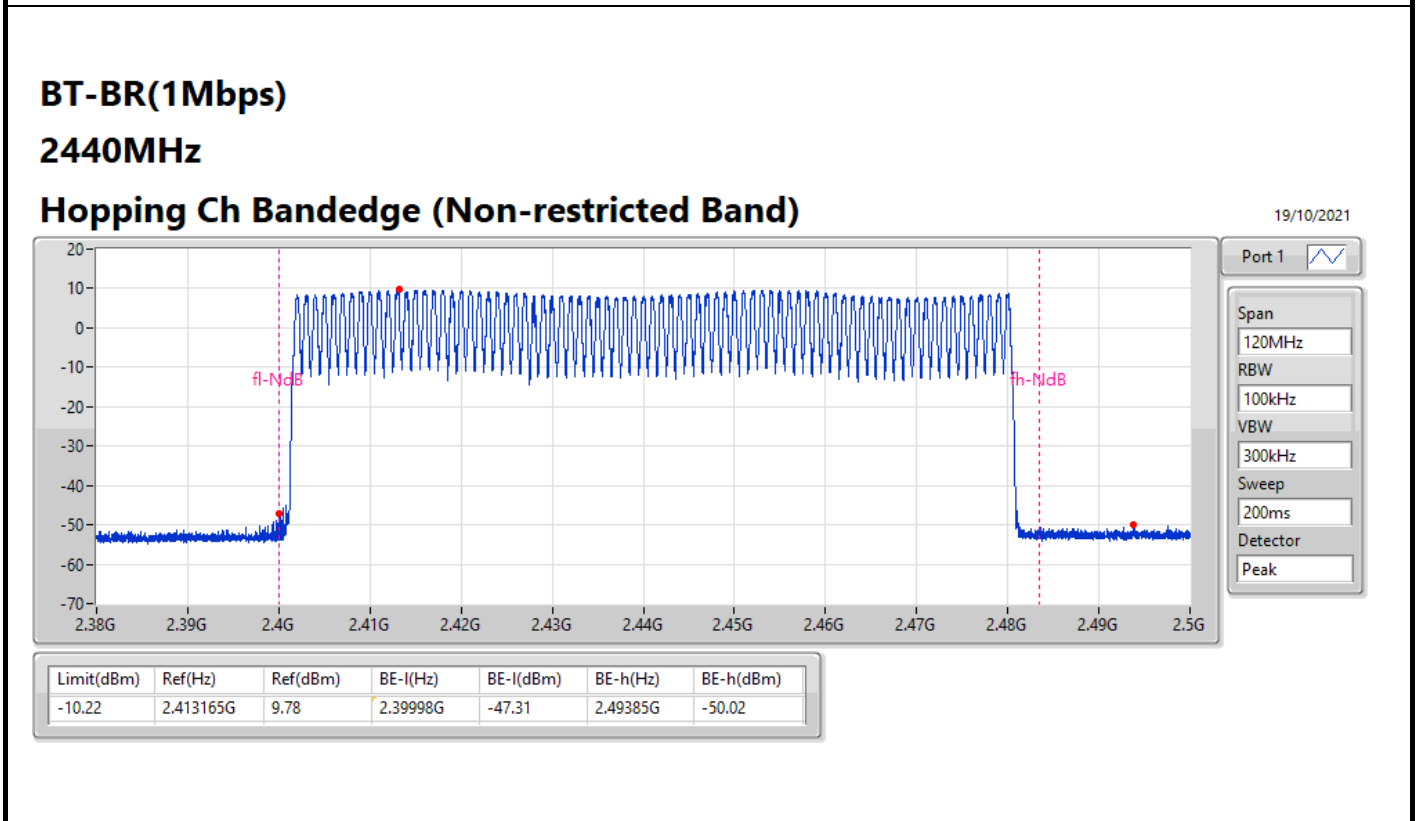
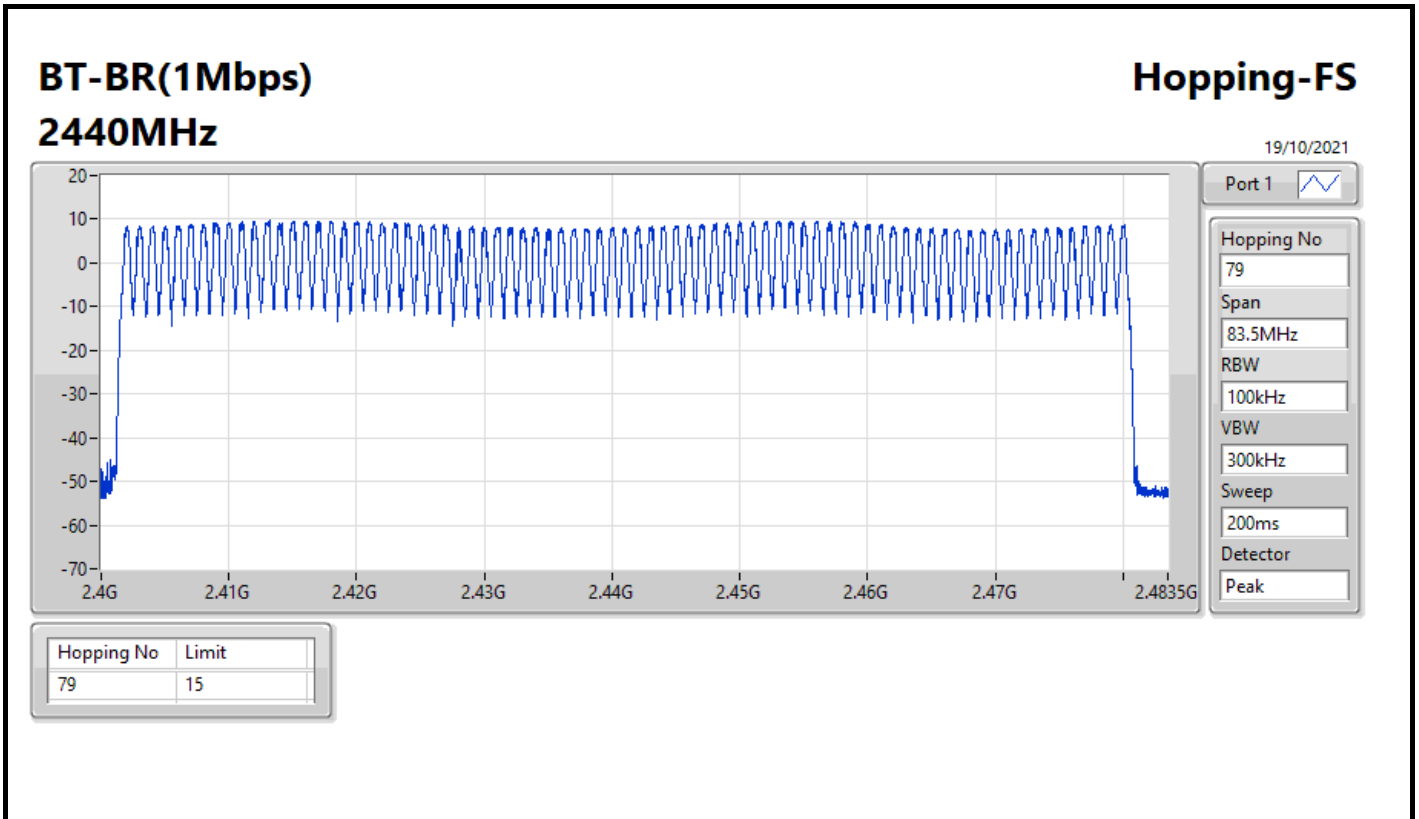
Summary

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



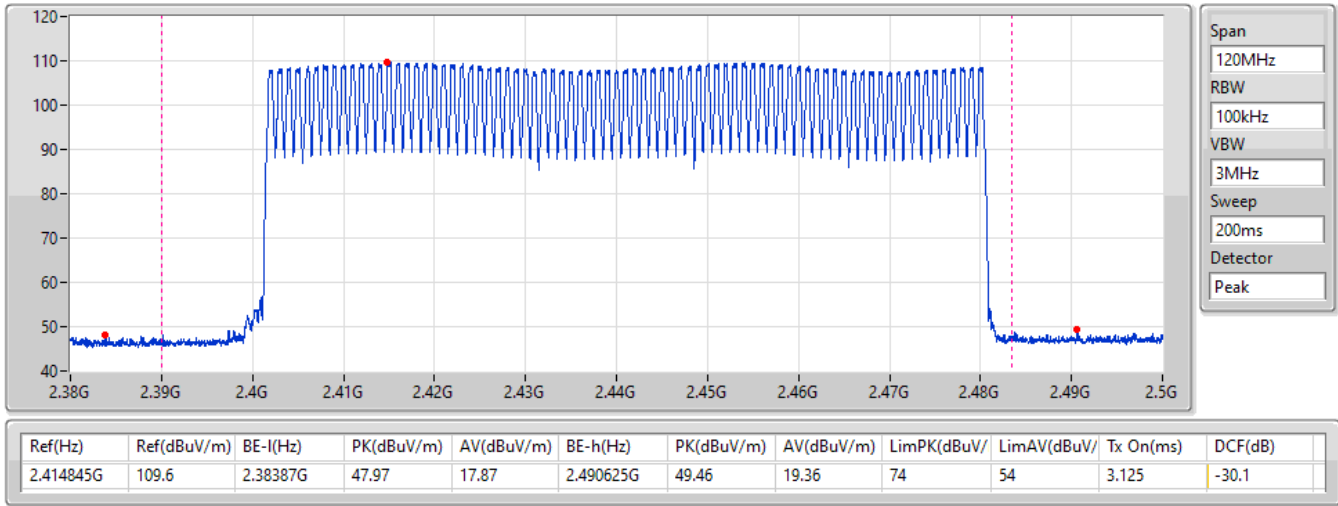
Result

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



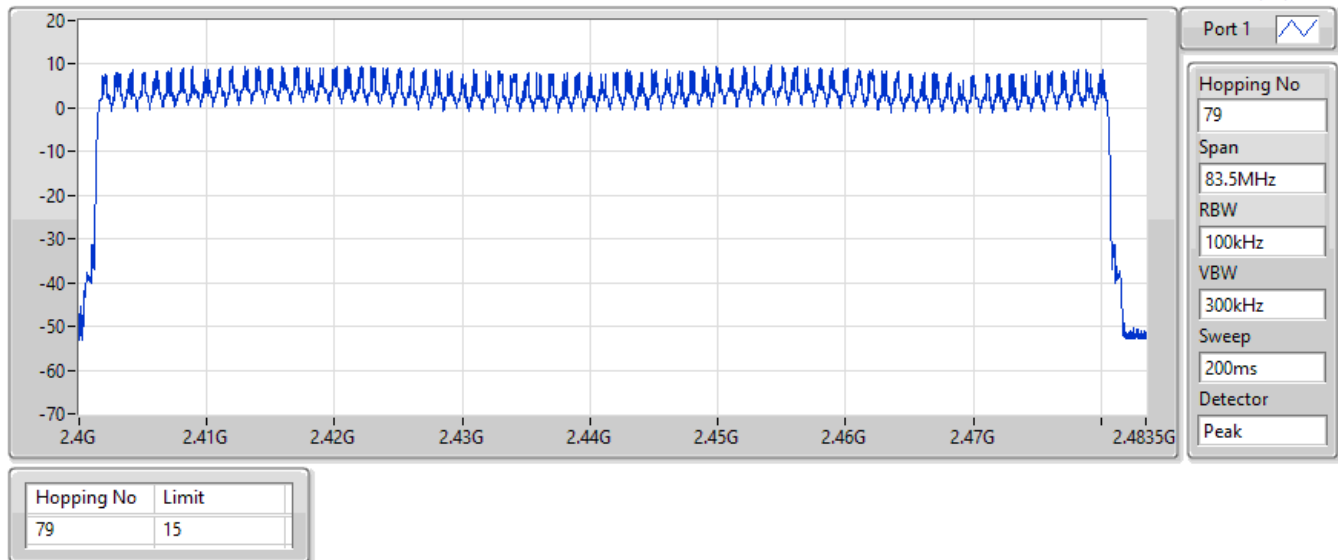
BT-BR(1Mbps)
2440MHz
Hopping Ch Bandedge (Restricted Band)

19/10/2021



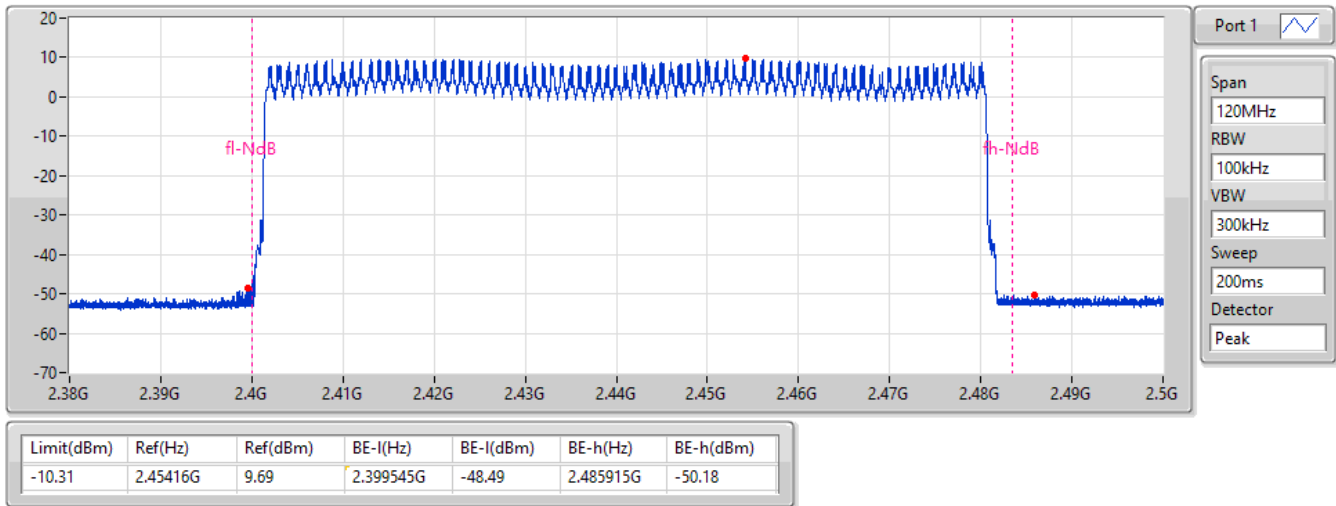
BT-EDR(2Mbps) **Hopping-FS**
2440MHz

19/10/2021



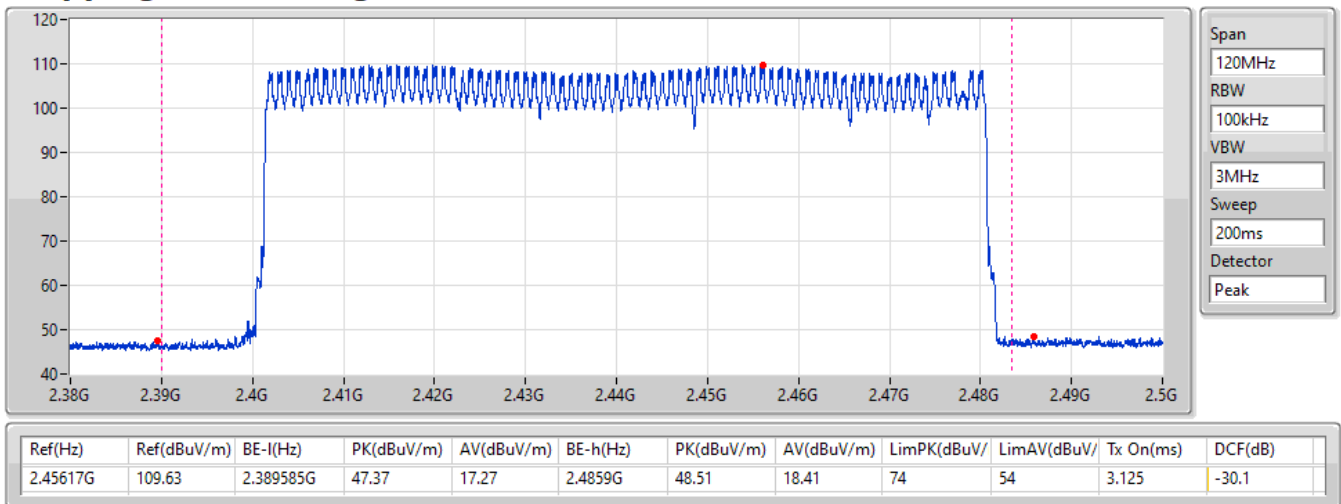
BT-EDR(2Mbps)
2440MHz
Hopping Ch Bandedge (Non-restricted Band)

19/10/2021



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

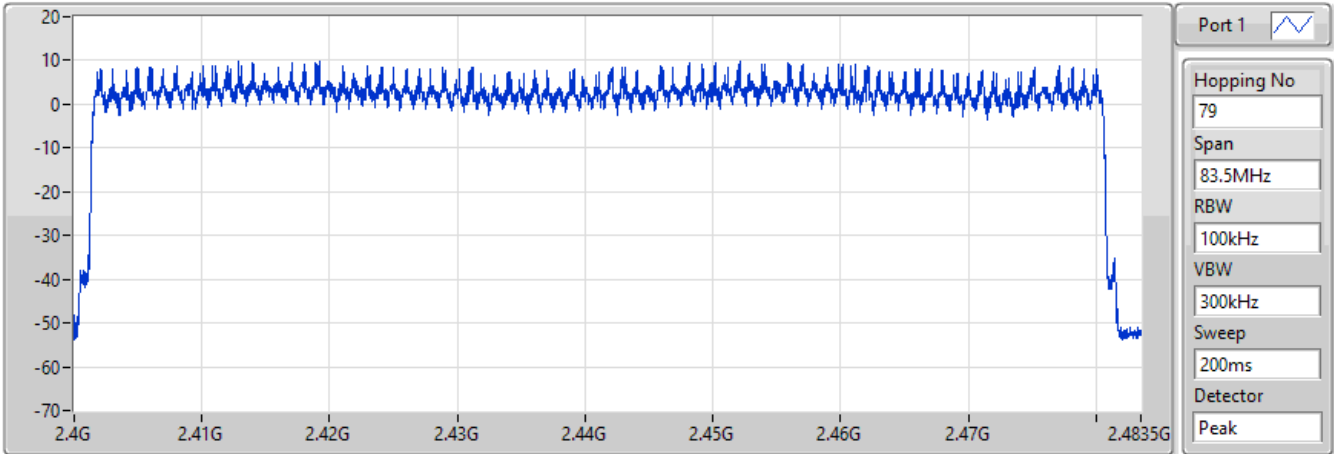
19/10/2021



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

Hopping-FS

19/10/2021

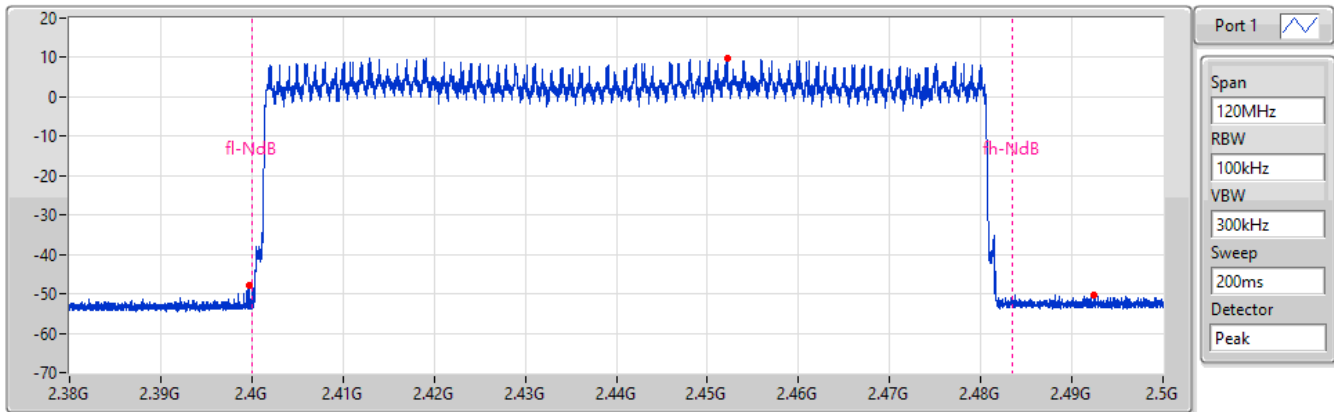


Hopping No	Limit
79	15

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

Hopping Ch Bandedge (Non-restricted Band)

19/10/2021



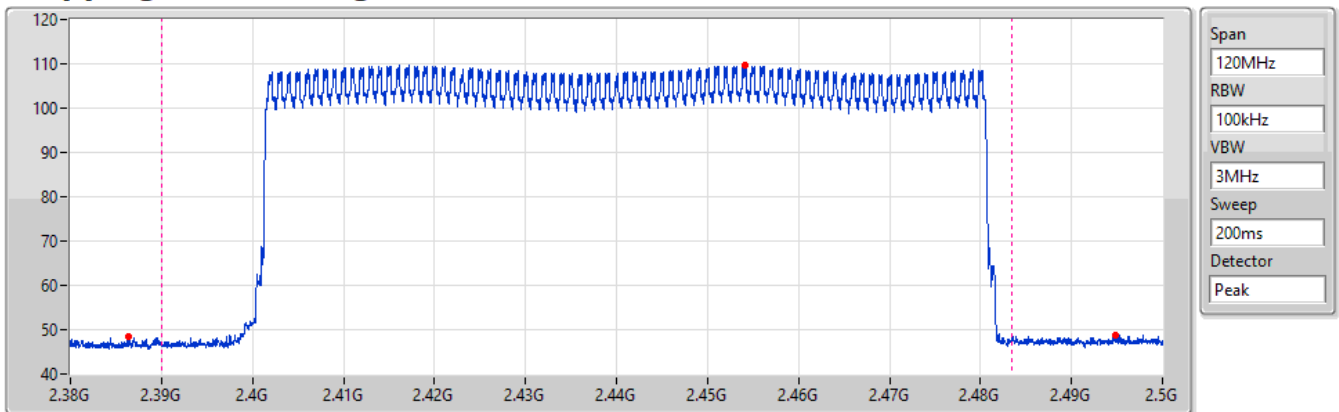
Limit(dBm)	Ref(Hz)	Ref(dBm)	BE-l(Hz)	BE-l(dBm)	BE-h(Hz)	BE-h(dBm)
-10.21	2.45218G	9.79	2.399755G	-47.88	2.492485G	-50.19

BT-EDR(3Mbps)

2440MHz

Hopping Ch Bandedge (Restricted Band)

19/10/2021



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)
2.454175G	109.65	2.38639G	48.44	18.34	2.4949G	48.79	18.69	74	54	3.125	-30.1

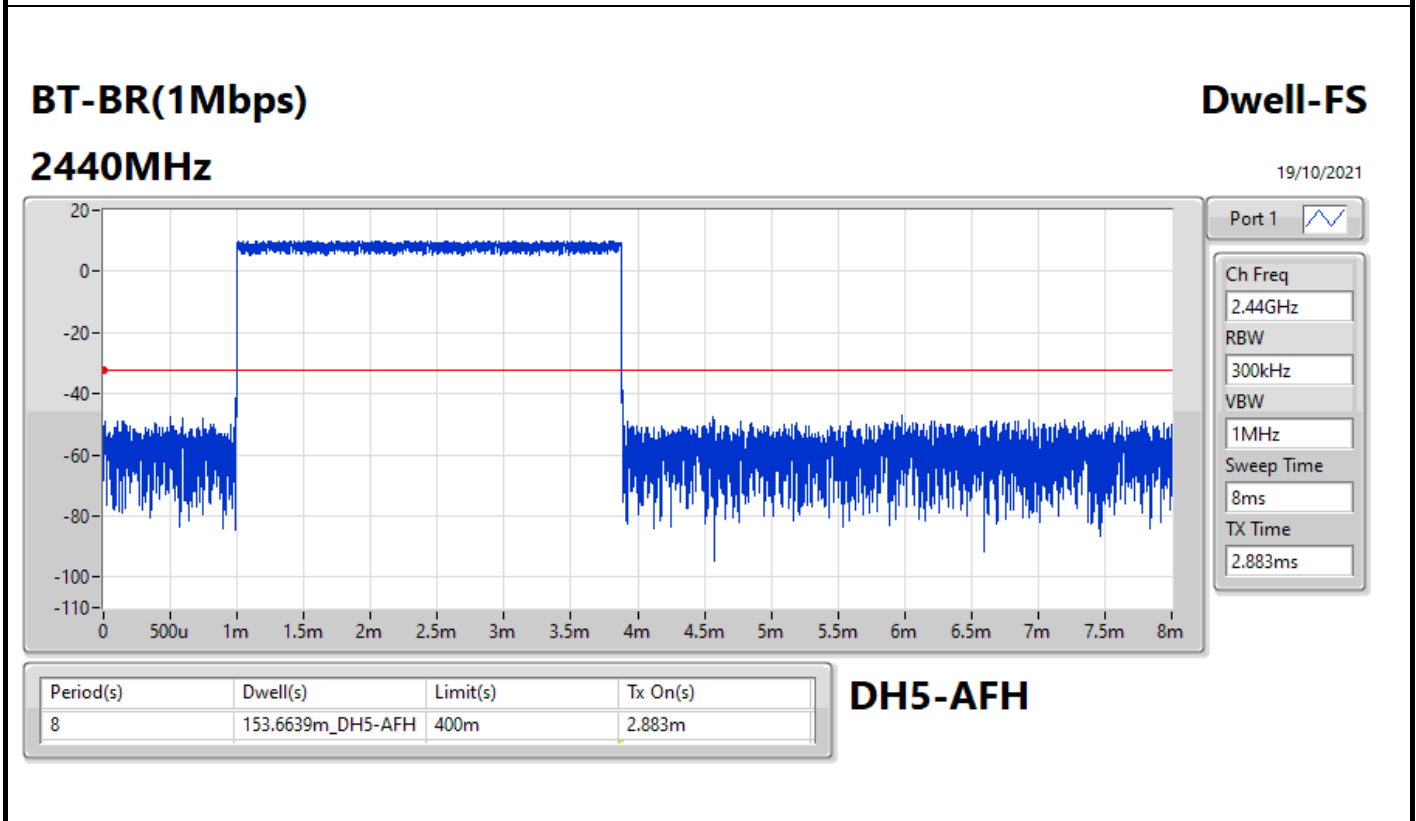
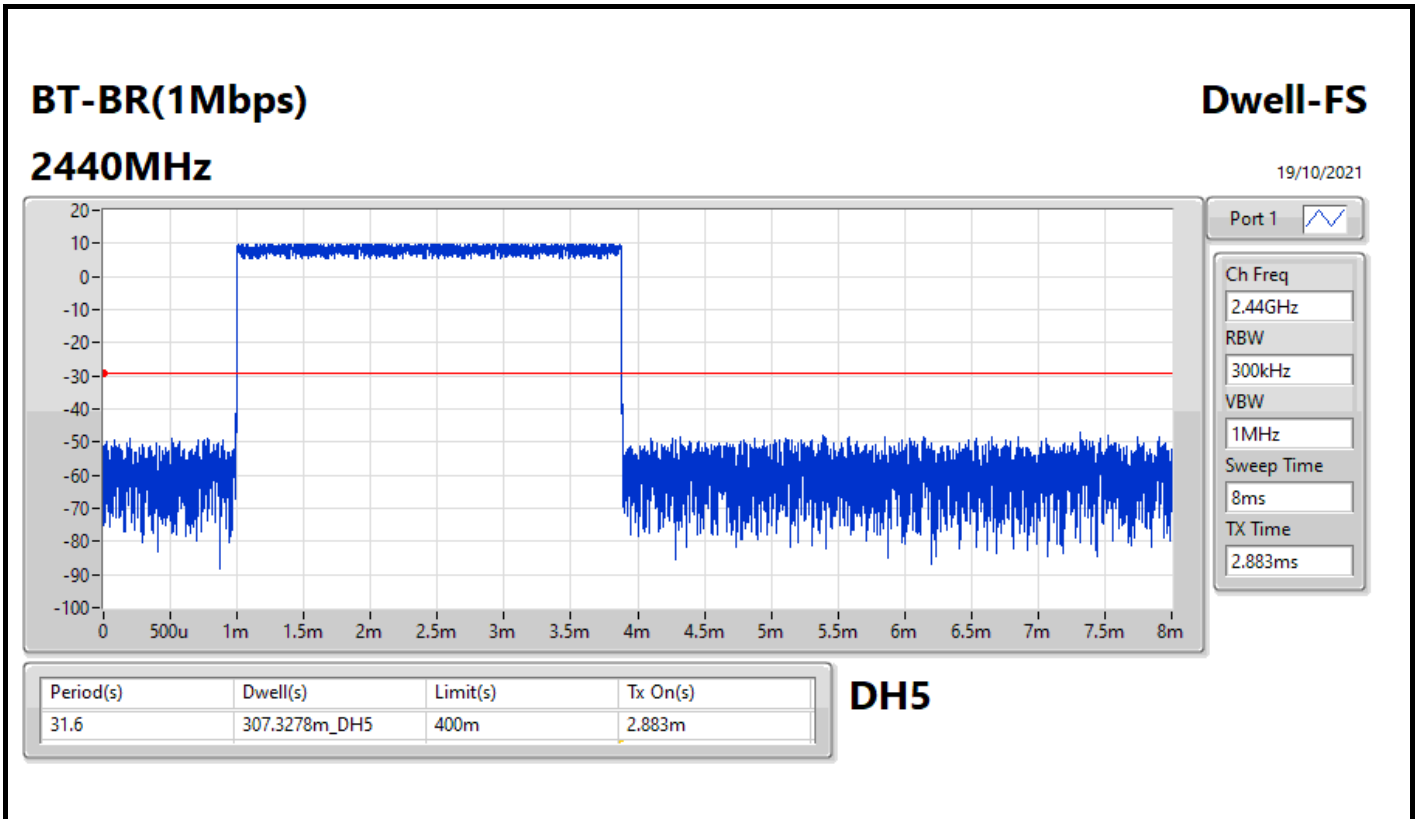


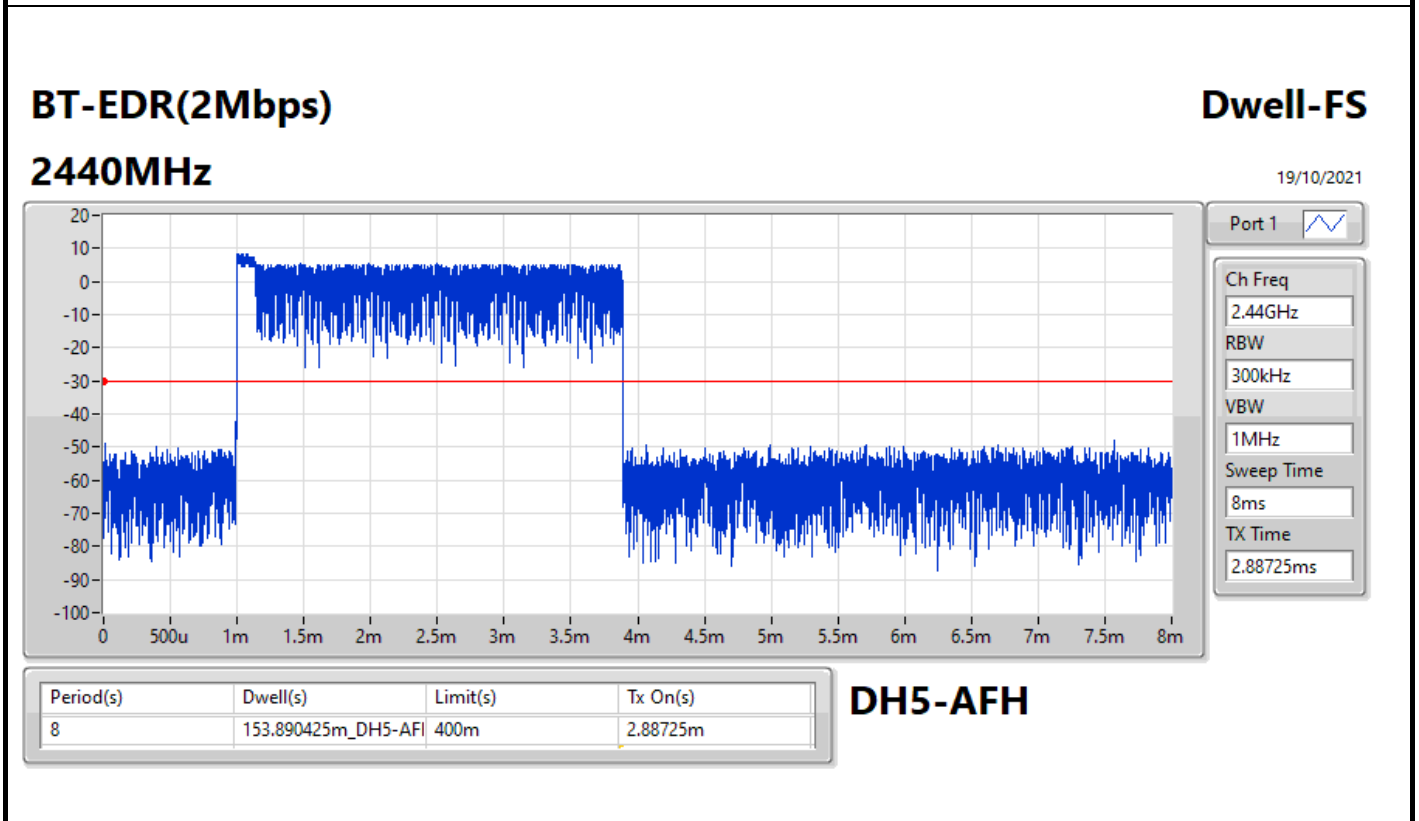
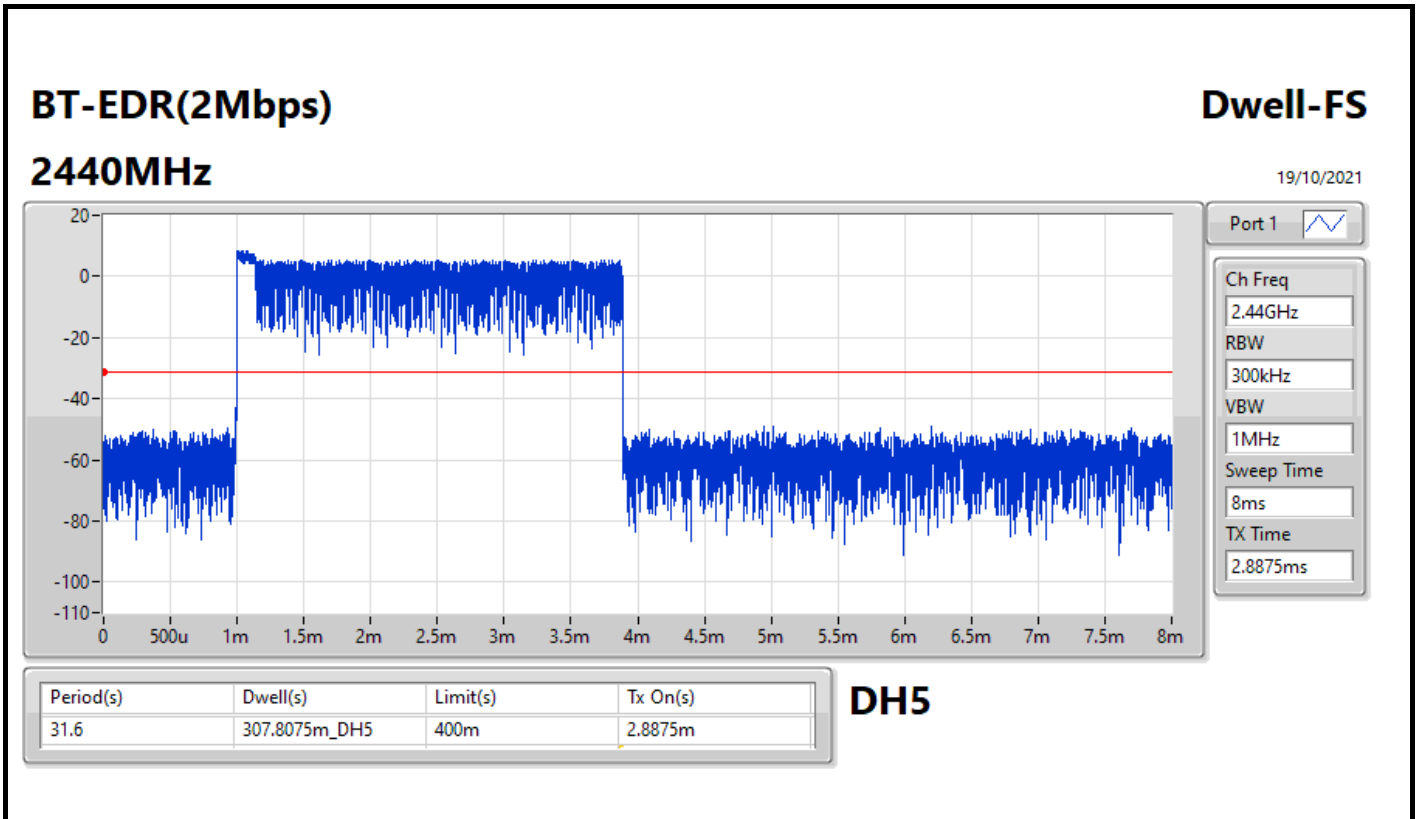
Summary

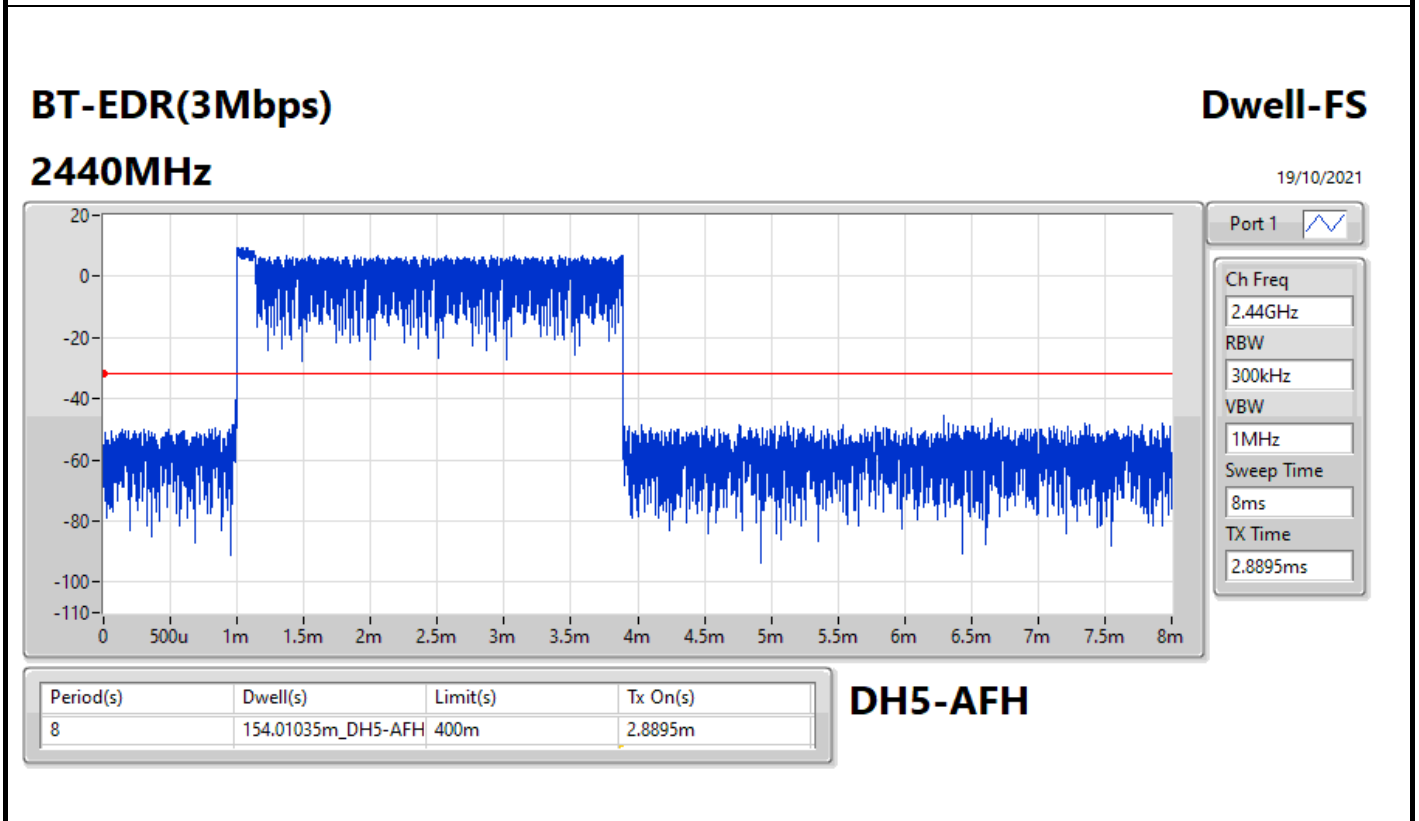
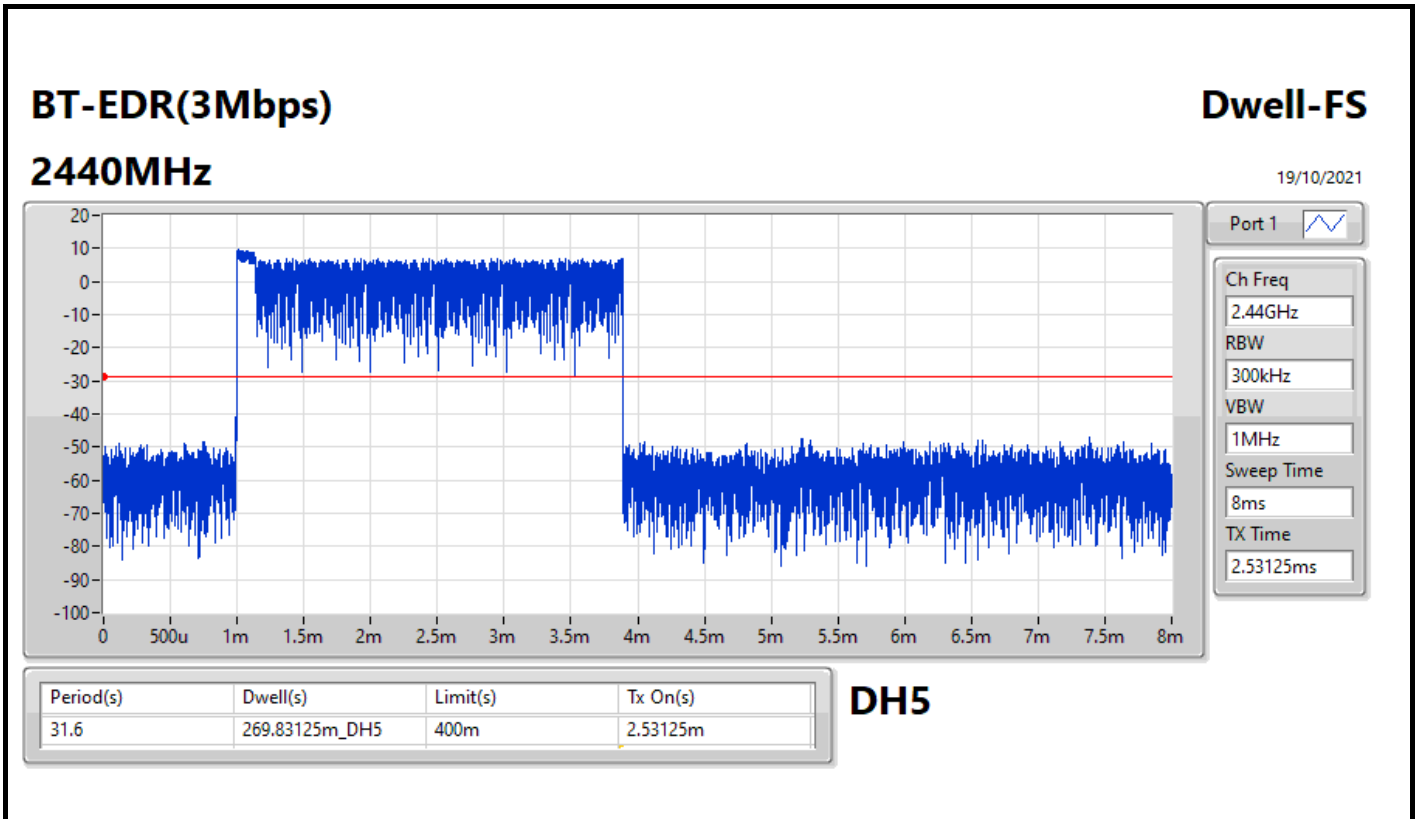
Mode	Max-Dwell (s)
2.4-2.4835GHz	-
BT-BR(1Mbps)	307.3278m_DH5
BT-EDR(2Mbps)	307.8075m_DH5
BT-EDR(3Mbps)	269.83125m_DH5

Result

Mode	Result	Period (s)	Dwell (s)	Limit (s)	Tx On (s)
BT-BR(1Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	307.3278m_DH5	400m	2.883m
2440MHz	Pass	8	153.6639m_DH5-AFH	400m	2.883m
BT-EDR(2Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	307.8075m_DH5	400m	2.8875m
2440MHz	Pass	8	153.890425m_DH5-AFH	400m	2.88725m
BT-EDR(3Mbps)	-	-	-	-	-
2440MHz	Pass	31.6	269.83125m_DH5	400m	2.53125m
2440MHz	Pass	8	154.01035m_DH5-AFH	400m	2.8895m









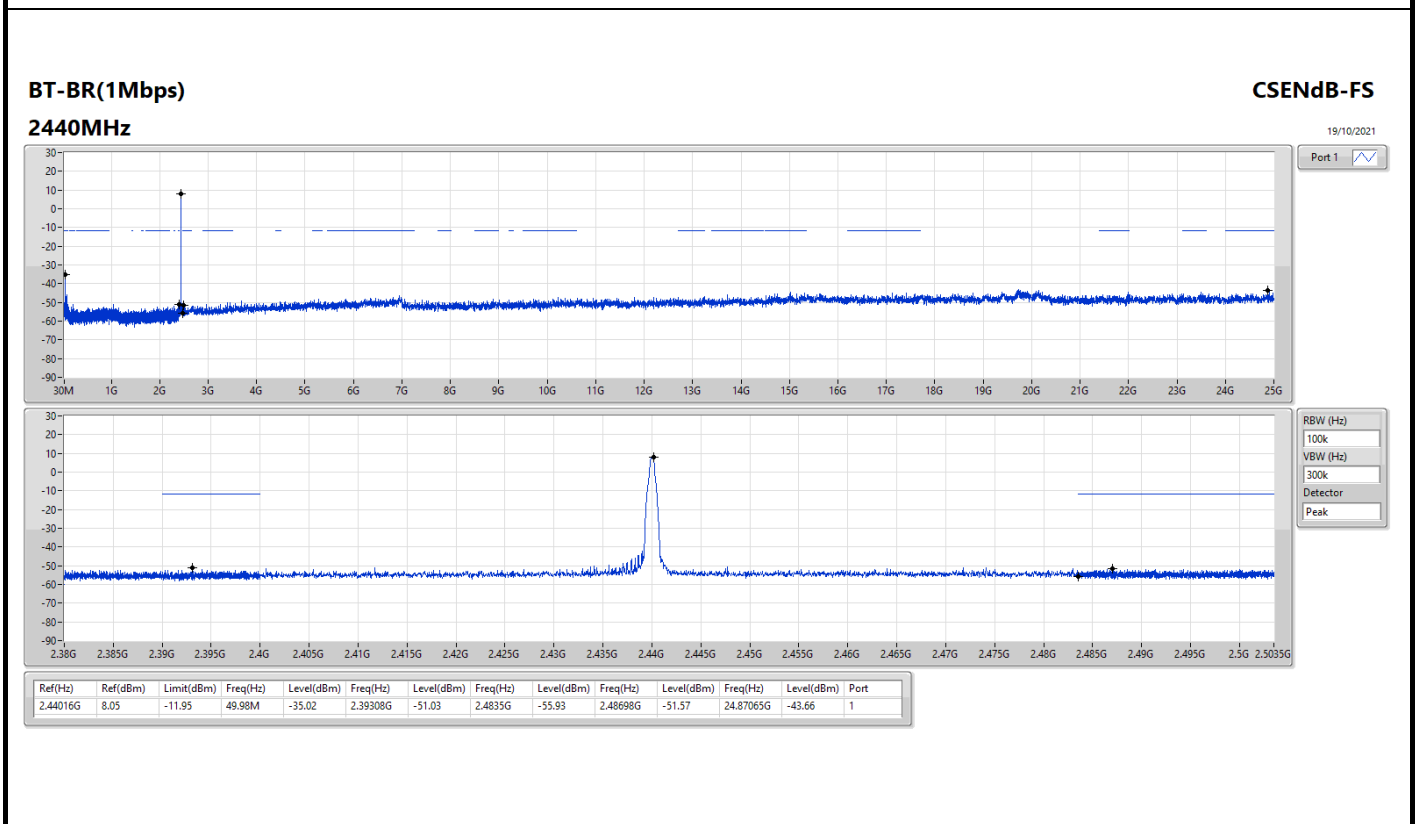
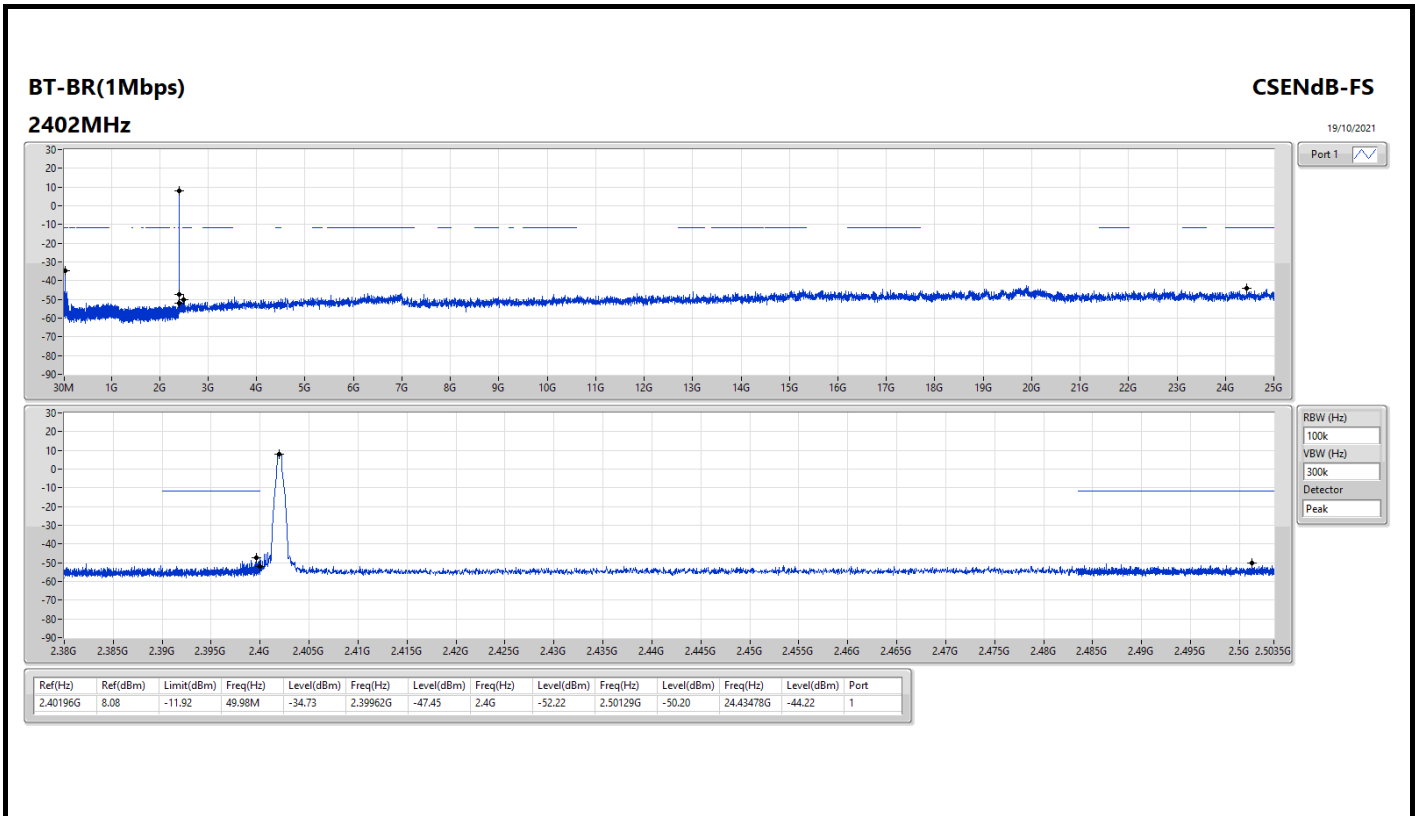
Summary

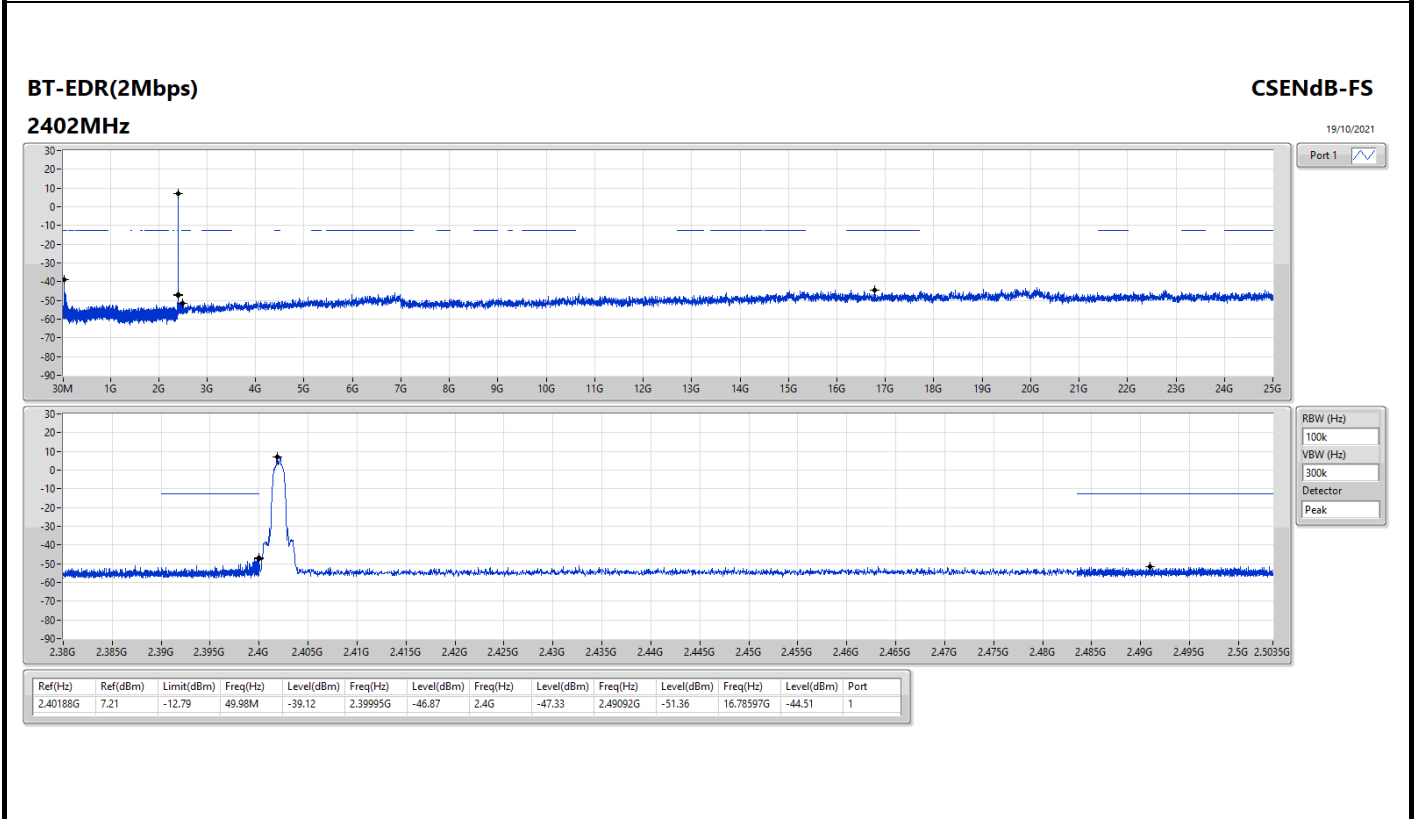
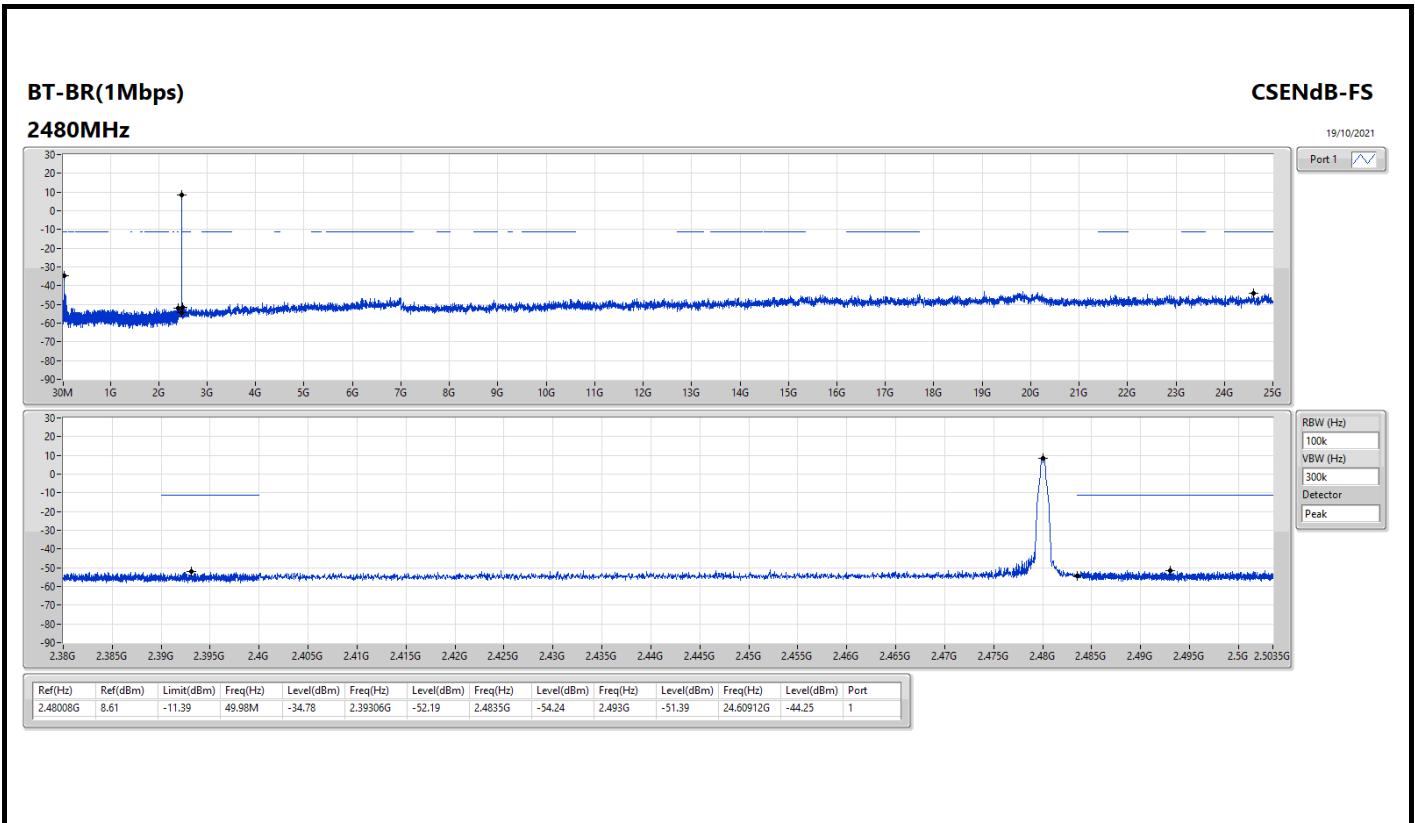
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BT-BR(1Mbps)	Pass	2.40196G	8.08	-11.92	49.98M	-34.73	2.39962G	-47.45	2.4G	-52.22	2.50129G	-50.20	24.43478G	-44.22	1
BT-EDR(2Mbps)	Pass	2.40188G	7.21	-12.79	49.98M	-39.12	2.39995G	-46.87	2.4G	-47.33	2.49092G	-51.36	16.78597G	-44.51	1
BT-EDR(3Mbps)	Pass	2.44016G	7.69	-12.31	49.98M	-38.80	2.39166G	-50.82	2.4835G	-54.39	2.49391G	-51.30	24.89033G	-44.47	1

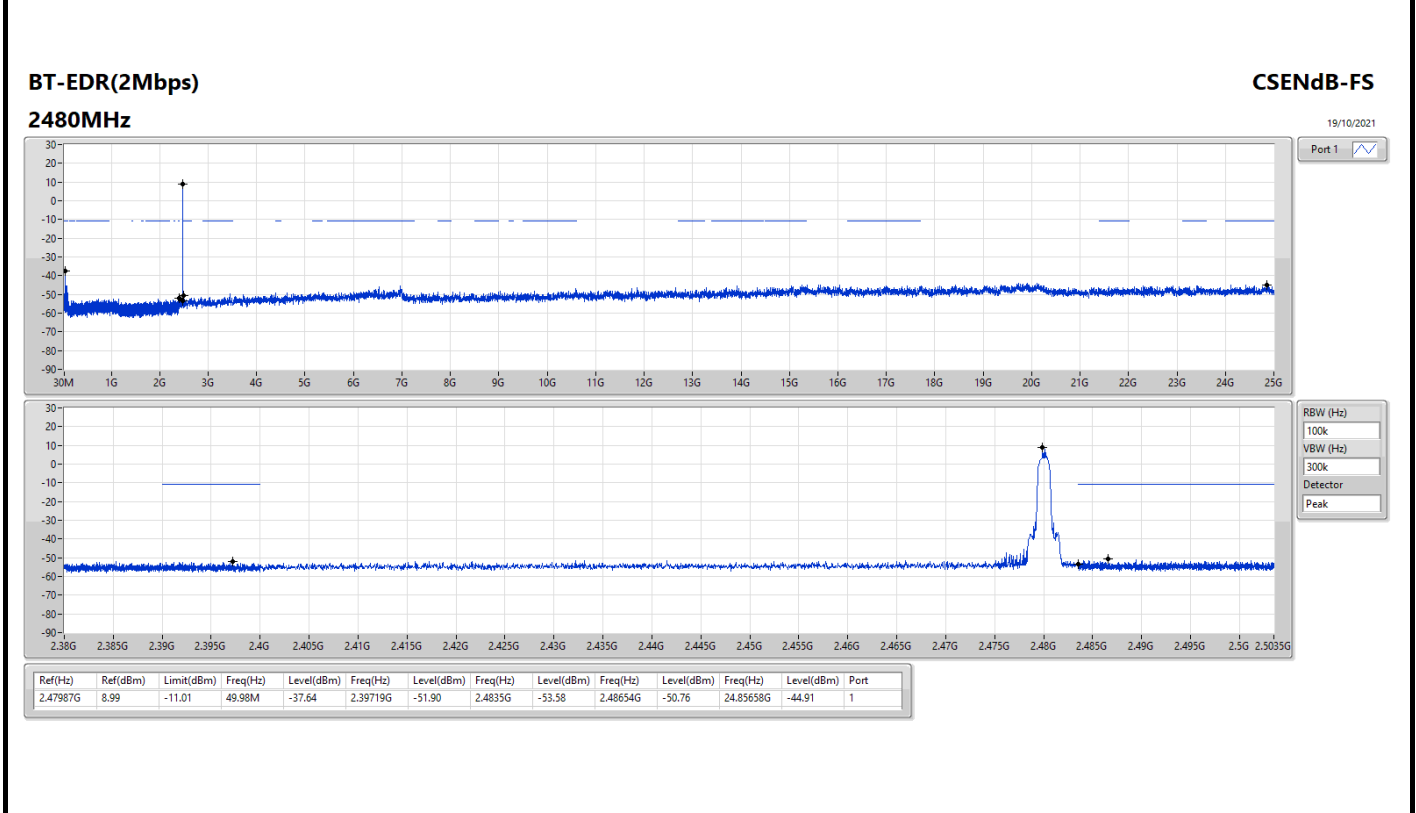
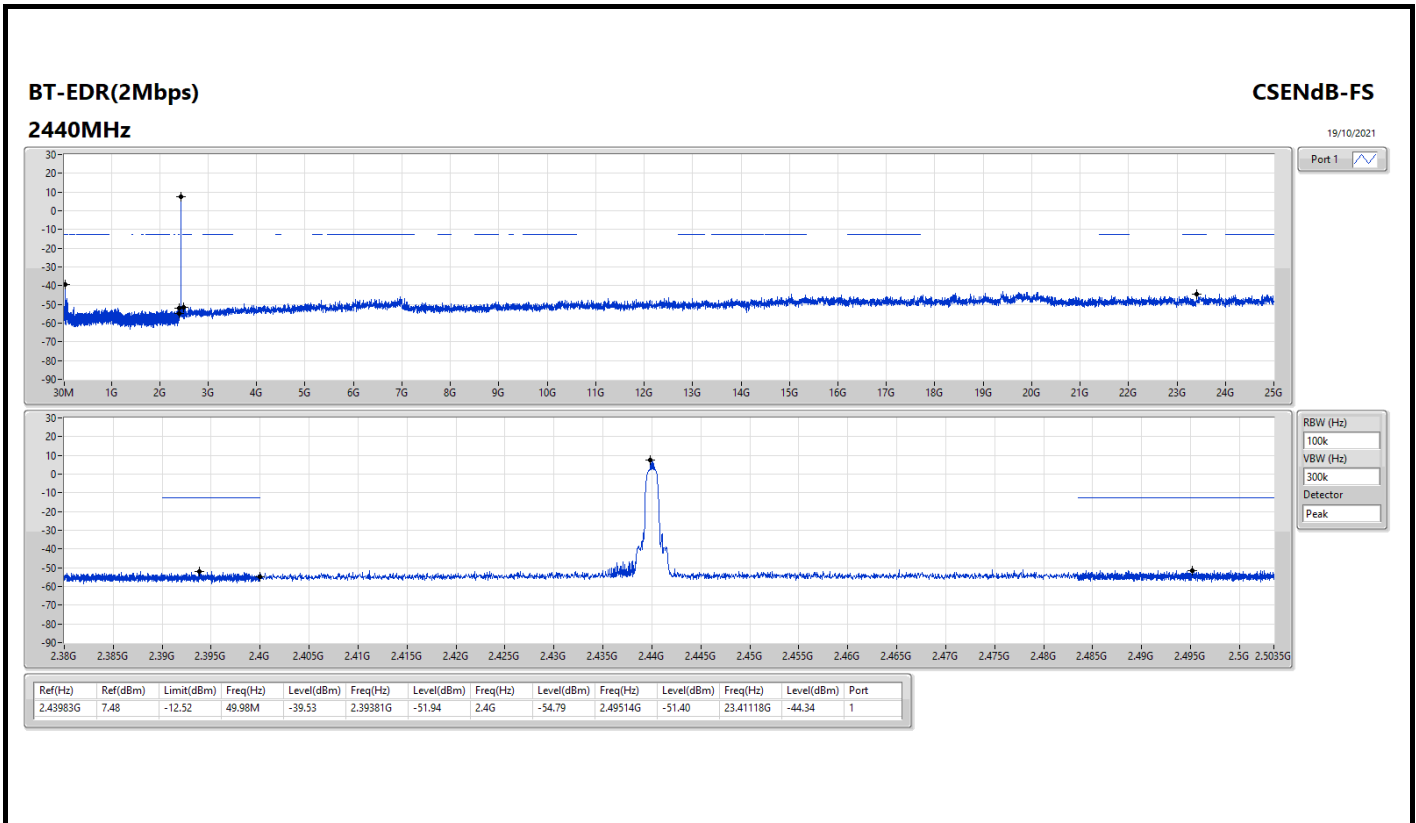


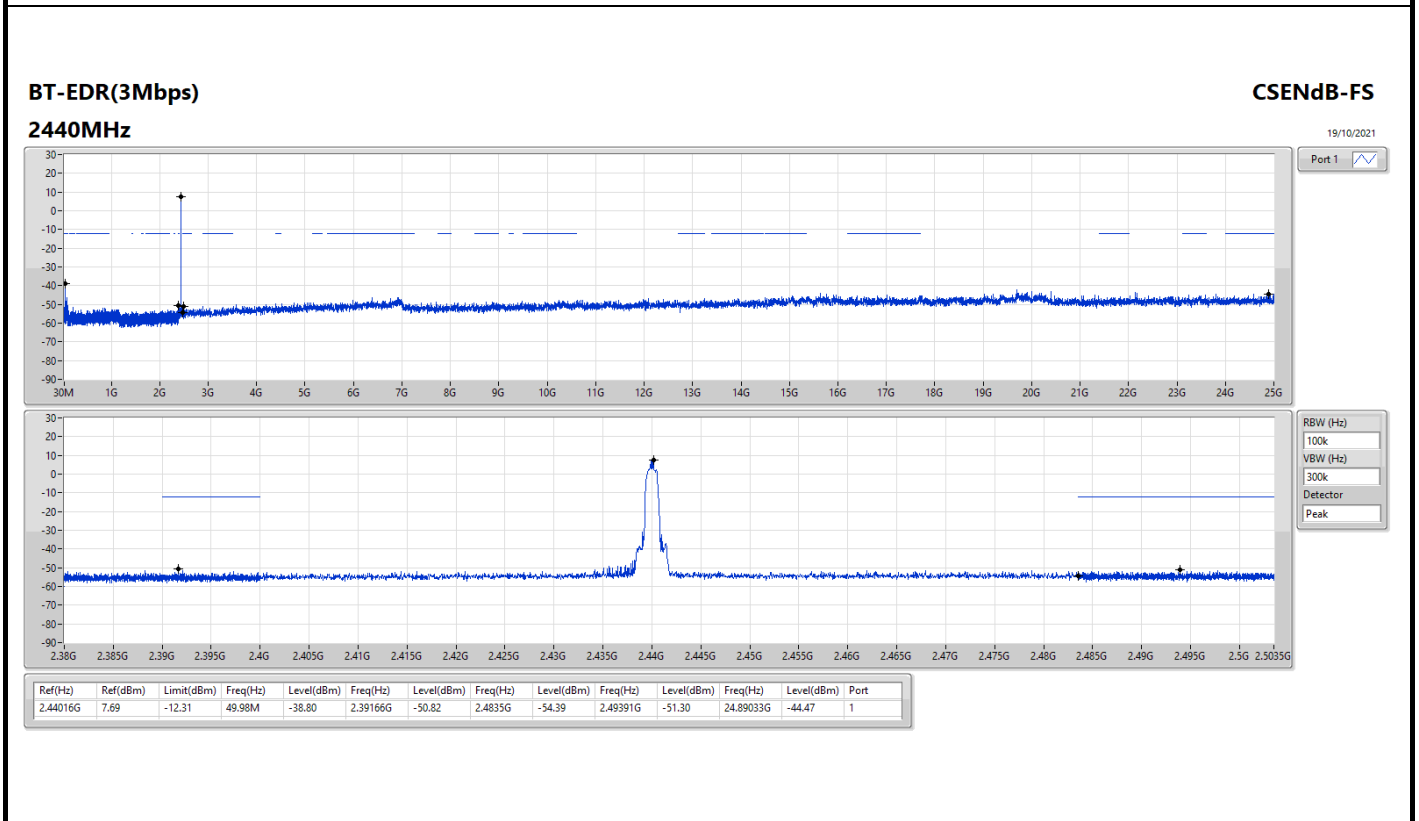
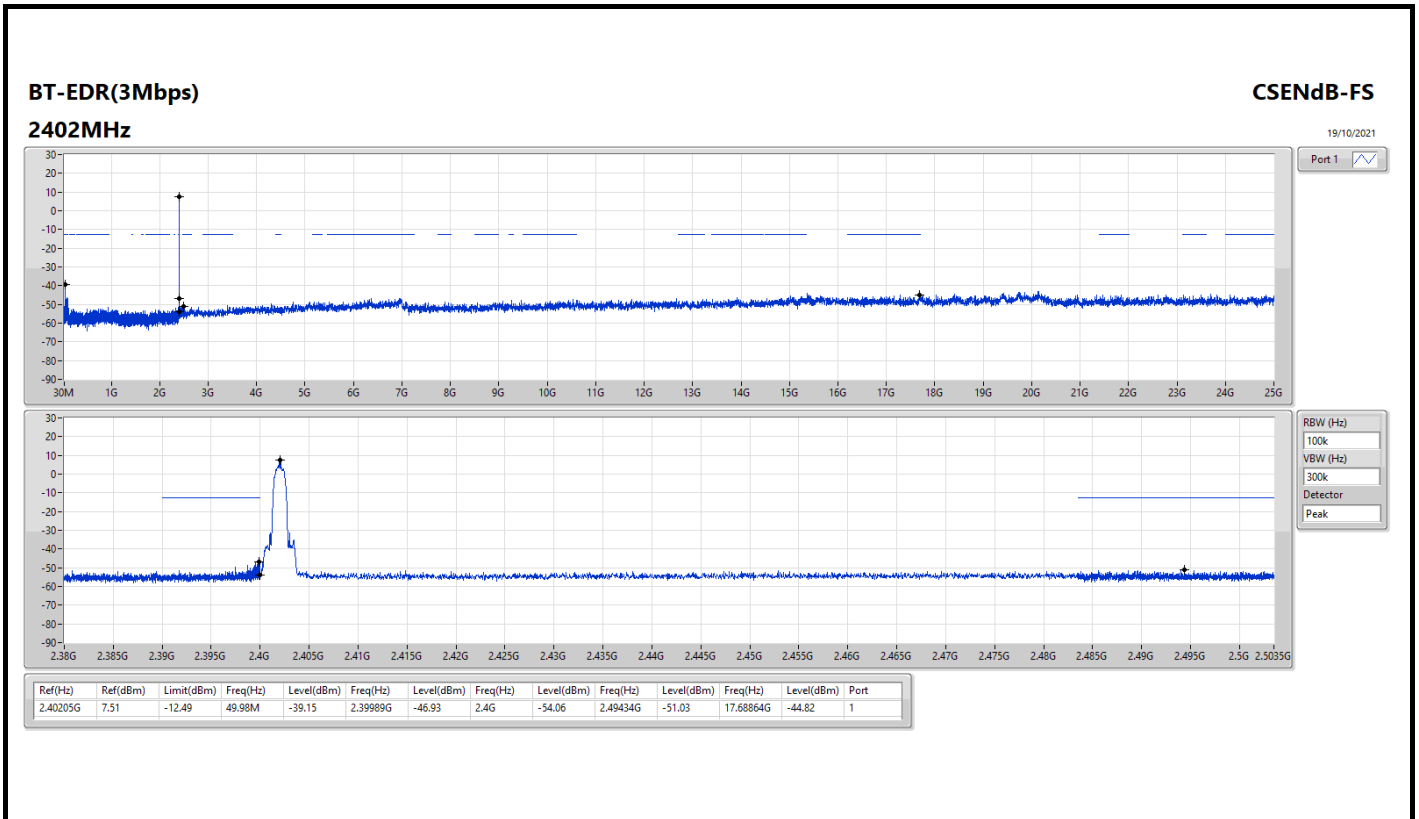
Result

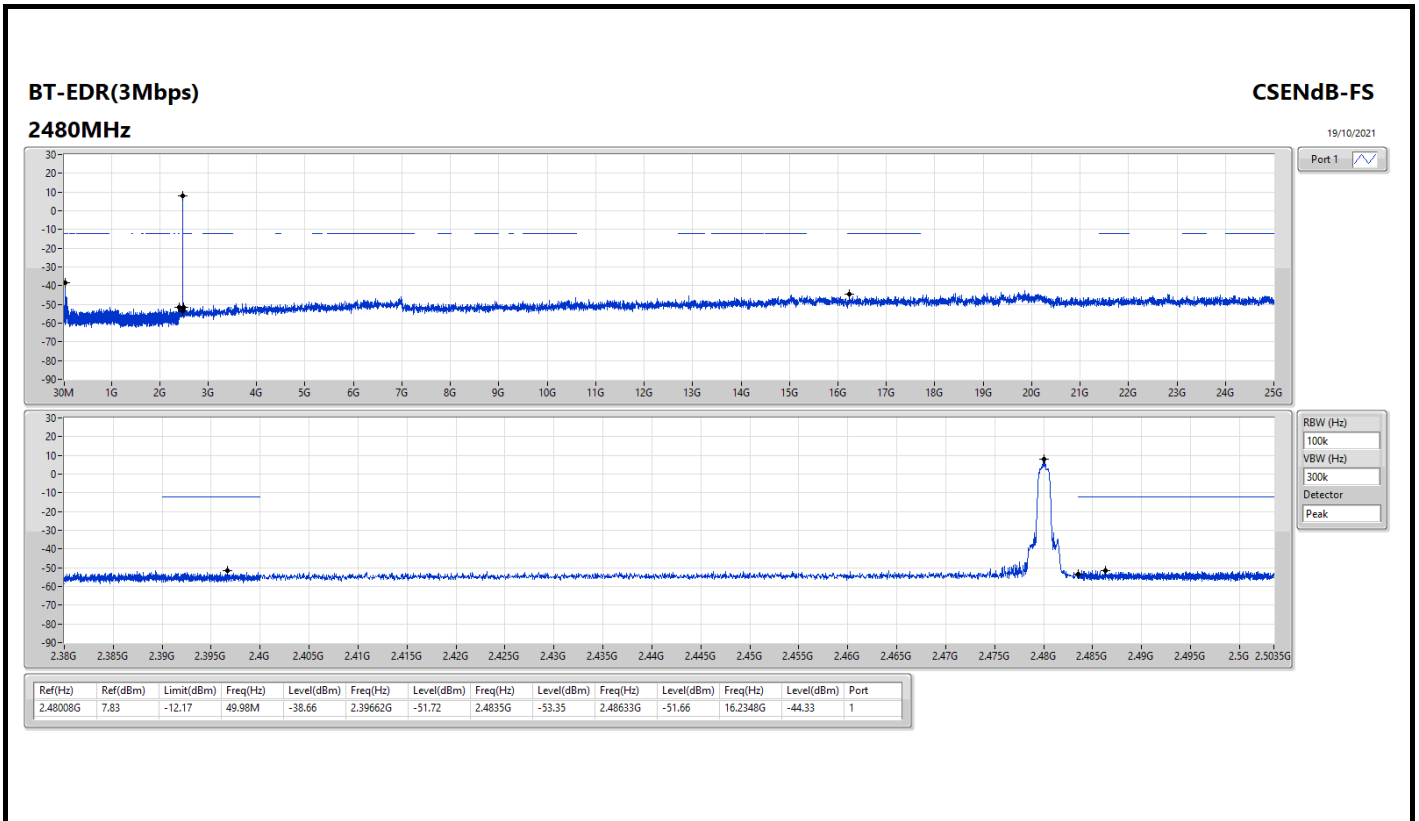
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
BT-BR(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.40196G	8.08	-11.92	49.98M	-34.73	2.39962G	-47.45	2.4G	-52.22	2.50129G	-50.20	24.43478G	-44.22	1
2440MHz	Pass	2.44016G	8.05	-11.95	49.98M	-35.02	2.39308G	-51.03	2.4835G	-55.93	2.48698G	-51.57	24.87065G	-43.66	1
2480MHz	Pass	2.48008G	8.61	-11.39	49.98M	-34.78	2.39306G	-52.19	2.4835G	-54.24	2.493G	-51.39	24.60912G	-44.25	1
BT-EDR(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.40188G	7.21	-12.79	49.98M	-39.12	2.39995G	-46.87	2.4G	-47.33	2.49092G	-51.36	16.78597G	-44.51	1
2440MHz	Pass	2.43983G	7.48	-12.52	49.98M	-39.53	2.39381G	-51.94	2.4G	-54.79	2.49514G	-51.40	23.41118G	-44.34	1
2480MHz	Pass	2.47987G	8.99	-11.01	49.98M	-37.64	2.39719G	-51.90	2.4835G	-53.58	2.48654G	-50.76	24.85658G	-44.91	1
BT-EDR(3Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.40205G	7.51	-12.49	49.98M	-39.15	2.39989G	-46.93	2.4G	-54.06	2.49434G	-51.03	17.68864G	-44.82	1
2440MHz	Pass	2.44016G	7.69	-12.31	49.98M	-38.80	2.39166G	-50.82	2.4835G	-54.39	2.49391G	-51.30	24.89033G	-44.47	1
2480MHz	Pass	2.48008G	7.83	-12.17	49.98M	-38.66	2.39662G	-51.72	2.4835G	-53.35	2.48633G	-51.66	16.2348G	-44.33	1









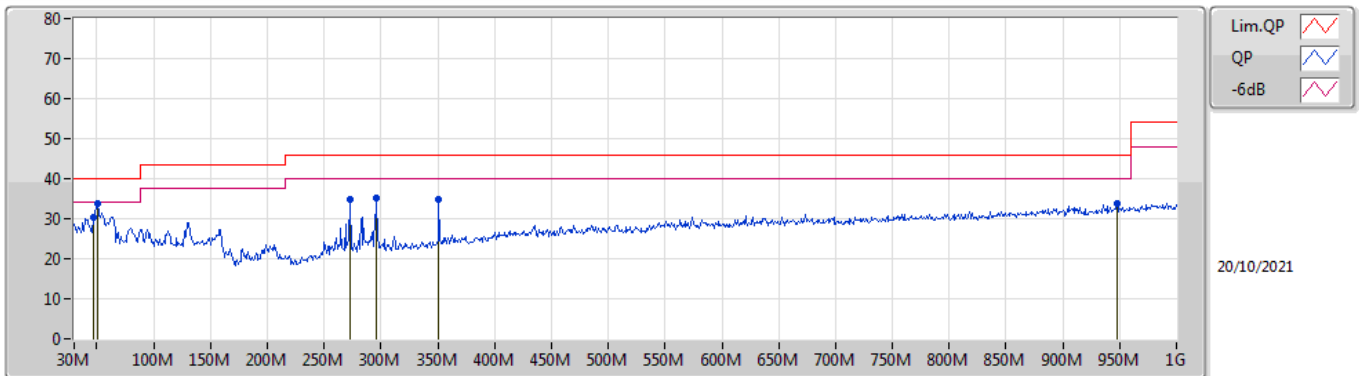




Summary

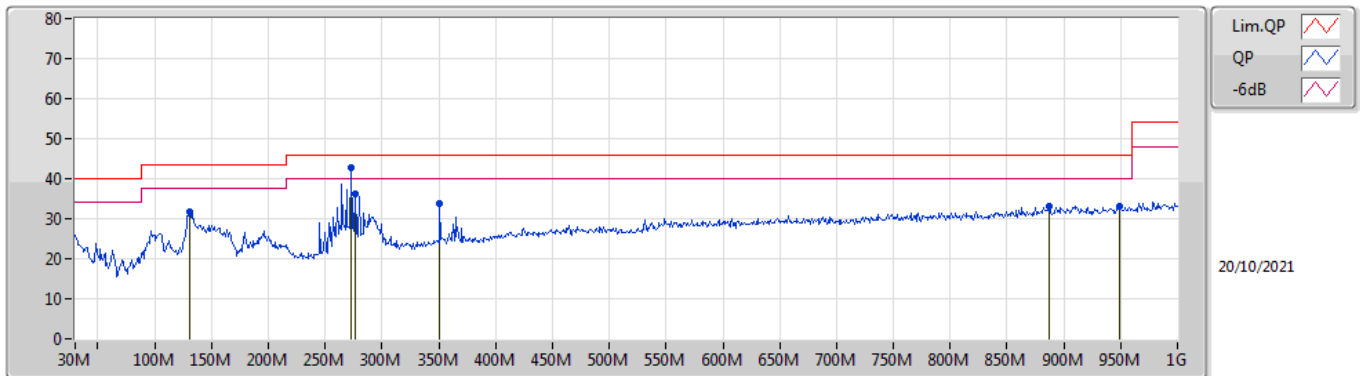
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 2	Pass	PK	272.5M	42.66	46.00	-3.34	Horizontal

Mode 2



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)
PK	46.49M	30.39	40.00	-9.61	-15.38	3	Vertical	359	1.00	-	45.77	15.35	1.00	31.73
PK	50.37M	33.87	40.00	-6.13	-16.92	3	Vertical	359	1.00	"Worst"	50.79	13.83	1.01	31.76
PK	272.5M	34.82	46.00	-11.18	-10.95	3	Vertical	123	2.00	-	45.77	18.56	2.53	32.04
PK	295.78M	35.15	46.00	-10.85	-10.53	3	Vertical	240	2.00	-	45.68	18.87	2.67	32.07
PK	351.07M	34.69	46.00	-11.31	-8.88	3	Vertical	280	2.00	-	43.57	20.33	2.90	32.11
PK	947.62M	33.68	46.00	-12.32	-1.15	3	Vertical	9	1.50	-	34.83	26.42	5.00	32.57

Mode 2



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)
PK	130.88M	31.89	43.50	-11.61	-12.58	3	Horizontal	272	1.50	-	44.47	17.66	1.71	31.95
PK	272.5M	42.66	46.00	-3.34	-10.95	3	Horizontal	207	1.25	"Worst"	53.61	18.56	2.53	32.04
PK	276.38M	36.30	46.00	-9.70	-10.91	3	Horizontal	245	1.25	-	47.21	18.58	2.56	32.05
PK	351.07M	33.75	46.00	-12.25	-8.88	3	Horizontal	326	1.25	-	42.63	20.33	2.90	32.11
PK	887.48M	33.08	46.00	-12.92	-1.54	3	Horizontal	0	2.00	-	34.62	26.19	4.92	32.65
PK	949.56M	33.11	46.00	-12.89	-1.12	3	Horizontal	344	2.00	-	34.23	26.45	5.00	32.57

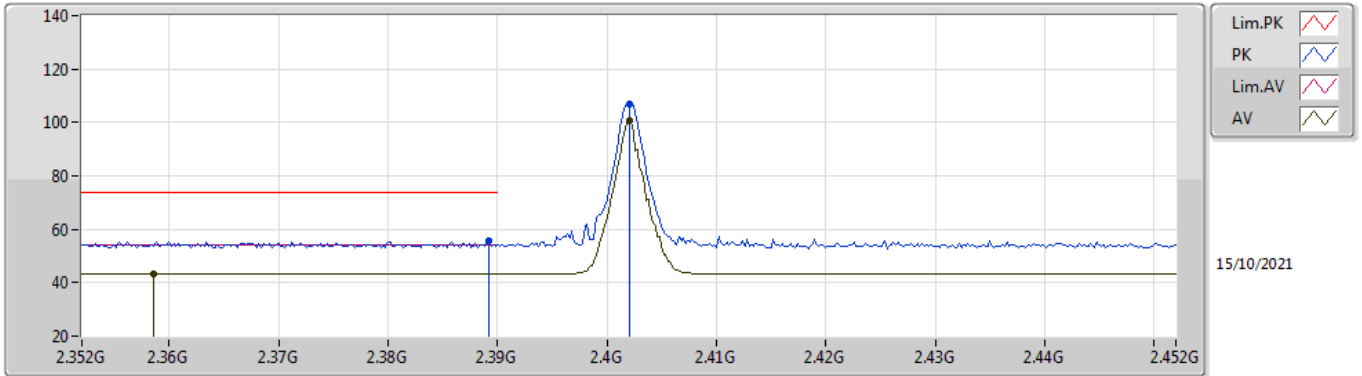


Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
BT-BR(1Mbps)	Pass	AV	2.4835G	52.45	54.00	-1.55	3	Vertical	79	1.22	-

BT-BR(1Mbps)

2402MHz_TX

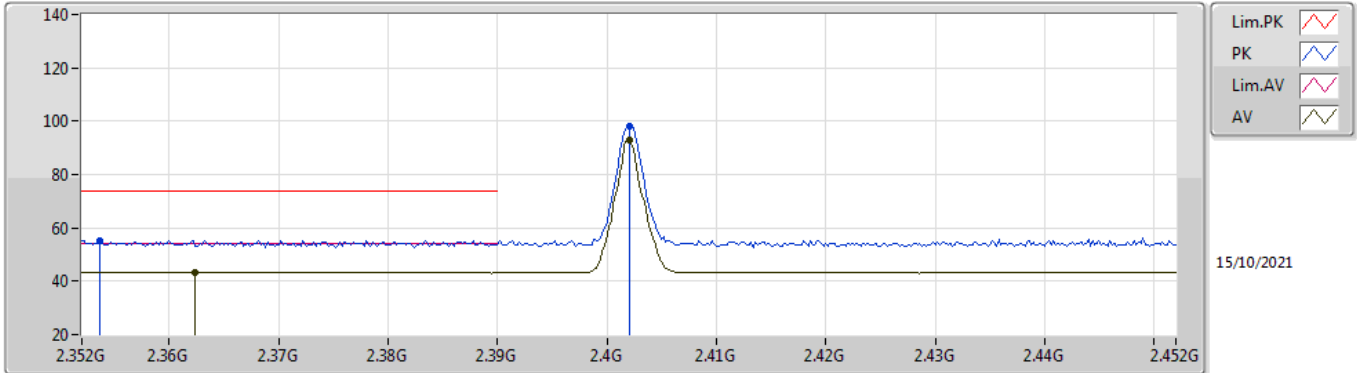


EUT Y_1TX
Setting 7
02-C-K-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3892G	55.53	74.00	-18.47	24.36	3	Vertical	67	1.01	-	28.38	2.79	-
AV	2.3586G	43.25	54.00	-10.75	12.15	3	Vertical	67	1.01	-	28.32	2.78	-
PK	2.402G	107.11	Inf	-Inf	75.91	3	Vertical	67	1.01	-	28.40	2.80	-
AV	2.402G	100.71	Inf	-Inf	69.51	3	Vertical	67	1.01	-	28.40	2.80	-

BT-BR(1Mbps)

2402MHz_TX

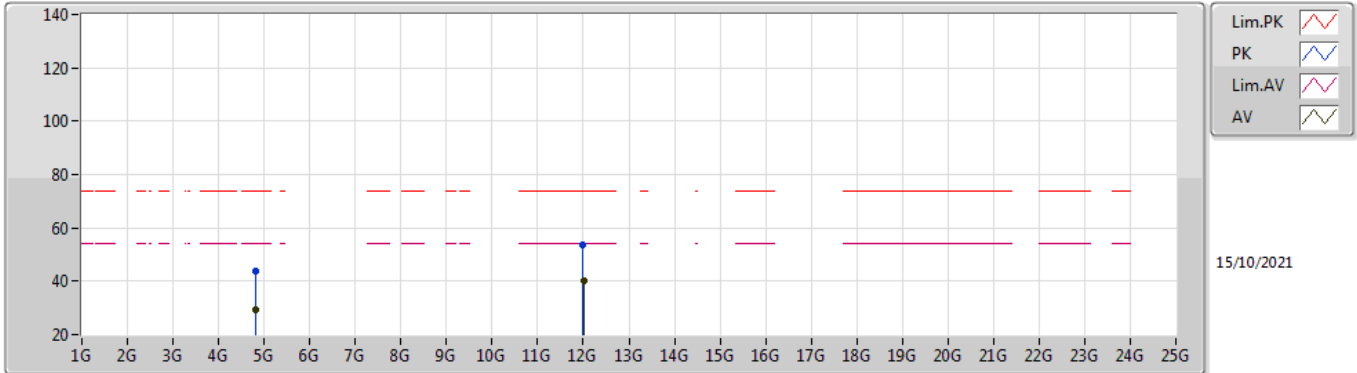


EUT_V_1TX
Setting 7
02-C-K-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3536G	55.41	74.00	-18.59	24.32	3	Horizontal	145	1.80	-	28.31	2.78	-
AV	2.3624G	43.24	54.00	-10.76	12.14	3	Horizontal	145	1.80	-	28.32	2.78	-
PK	2.402G	98.10	Inf	-Inf	66.90	3	Horizontal	145	1.80	-	28.40	2.80	-
AV	2.402G	93.11	Inf	-Inf	61.91	3	Horizontal	145	1.80	-	28.40	2.80	-

BT-BR(1Mbps)

2402MHz_TX

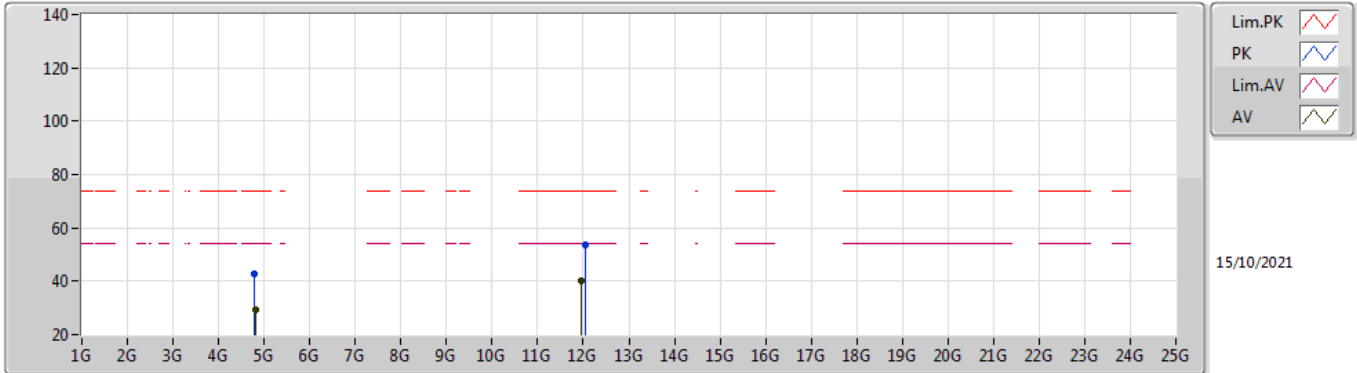


EUT Y_1TX
Setting 7
02-C-K-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.8172G	43.54	74.00	-30.46	37.90	3	Vertical	198	2.47	-	32.77	5.10	32.23
AV	4.8157G	29.39	54.00	-24.61	23.76	3	Vertical	198	2.47	-	32.76	5.10	32.23
PK	11.99704G	53.40	74.00	-20.60	39.44	3	Vertical	356	1.72	-	39.21	8.10	33.35
AV	12.00784G	40.27	54.00	-13.73	26.34	3	Vertical	356	1.72	-	39.18	8.10	33.35

BT-BR(1Mbps)

2402MHz_TX

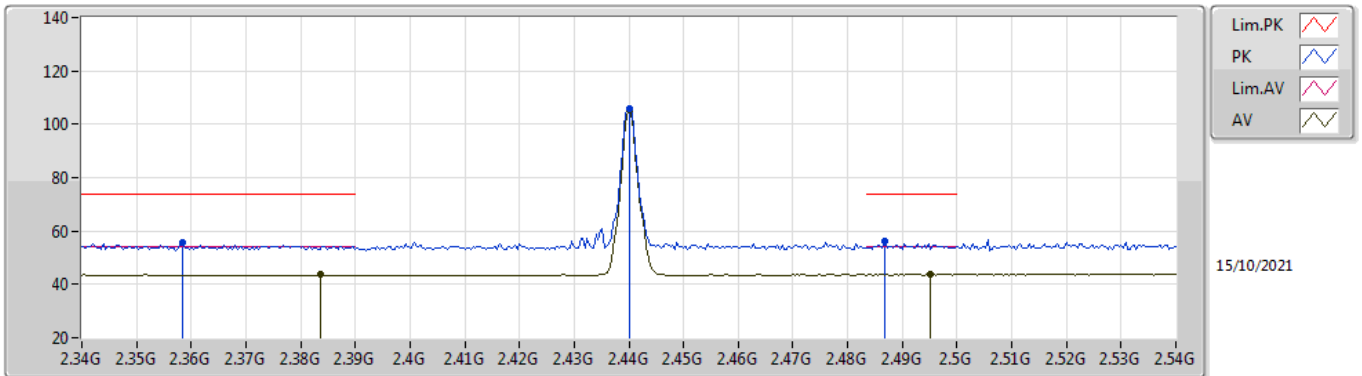


EUT Y_1TX
Setting 7
02-C-K-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.79344G	42.56	74.00	-31.44	37.00	3	Horizontal	98	1.29	-	32.69	5.10	32.23
AV	4.8166G	29.32	54.00	-24.68	23.68	3	Horizontal	98	1.29	-	32.77	5.10	32.23
PK	12.057G	53.48	74.00	-20.52	39.62	3	Horizontal	29	1.76	-	39.09	8.13	33.36
AV	11.9706G	40.33	54.00	-13.67	26.32	3	Horizontal	29	1.76	-	39.26	8.09	33.34

BT-BR(1Mbps)

2440MHz_TX

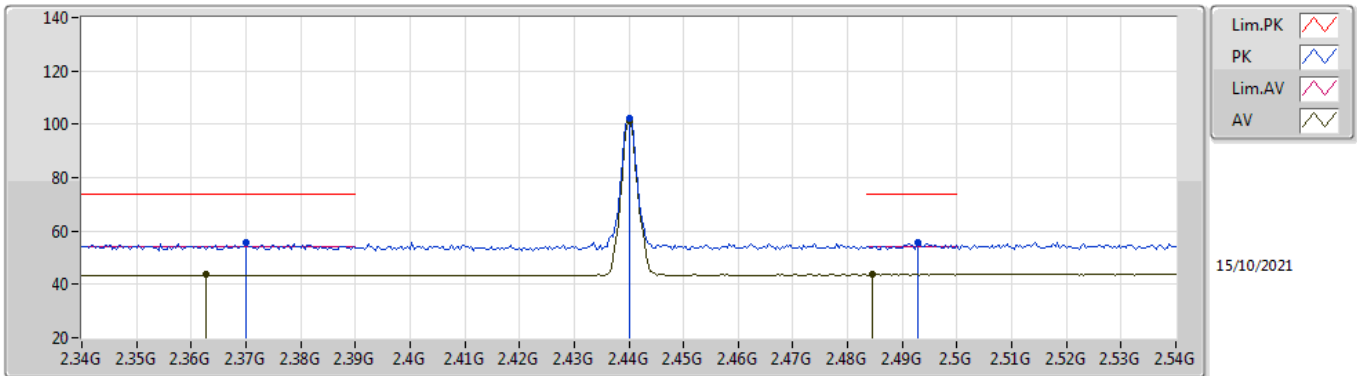


EUT_V_1TX
Setting 7
02-C-K-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3584G	55.47	74.00	-18.53	24.37	3	Vertical	357	2.70	-	28.32	2.78	-
AV	2.3836G	43.58	54.00	-10.42	12.42	3	Vertical	357	2.70	-	28.37	2.79	-
PK	2.44G	106.11	Inf	-Inf	74.87	3	Vertical	357	2.70	-	28.40	2.84	-
AV	2.44G	105.12	Inf	-Inf	73.88	3	Vertical	357	2.70	-	28.40	2.84	-
PK	2.4868G	55.97	74.00	-18.03	24.53	3	Vertical	357	2.70	-	28.55	2.89	-
AV	2.4952G	43.78	54.00	-10.22	12.30	3	Vertical	357	2.70	-	28.58	2.90	-

BT-BR(1Mbps)

2440MHz_TX

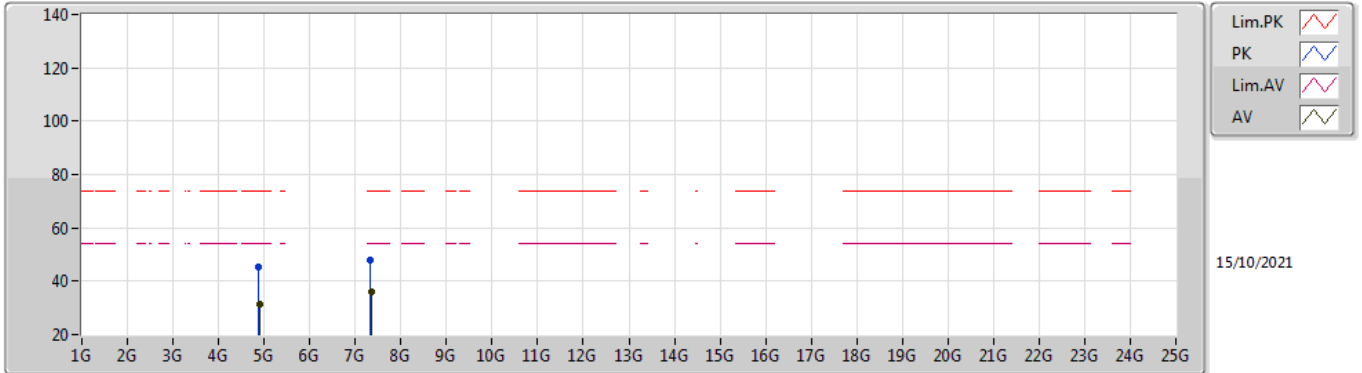


EUT_V_1TX
Setting 7
02-C-K-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.37G	55.54	74.00	-18.46	24.42	3	Horizontal	90	1.21	-	28.34	2.78	-
AV	2.3628G	43.61	54.00	-10.39	12.50	3	Horizontal	90	1.21	-	28.33	2.78	-
PK	2.44G	102.13	Inf	-Inf	70.89	3	Horizontal	90	1.21	-	28.40	2.84	-
AV	2.44G	101.28	Inf	-Inf	70.04	3	Horizontal	90	1.21	-	28.40	2.84	-
PK	2.4928G	55.48	74.00	-18.52	24.02	3	Horizontal	90	1.21	-	28.57	2.89	-
AV	2.4844G	43.89	54.00	-10.11	12.47	3	Horizontal	90	1.21	-	28.54	2.88	-

BT-BR(1Mbps)

2440MHz_TX

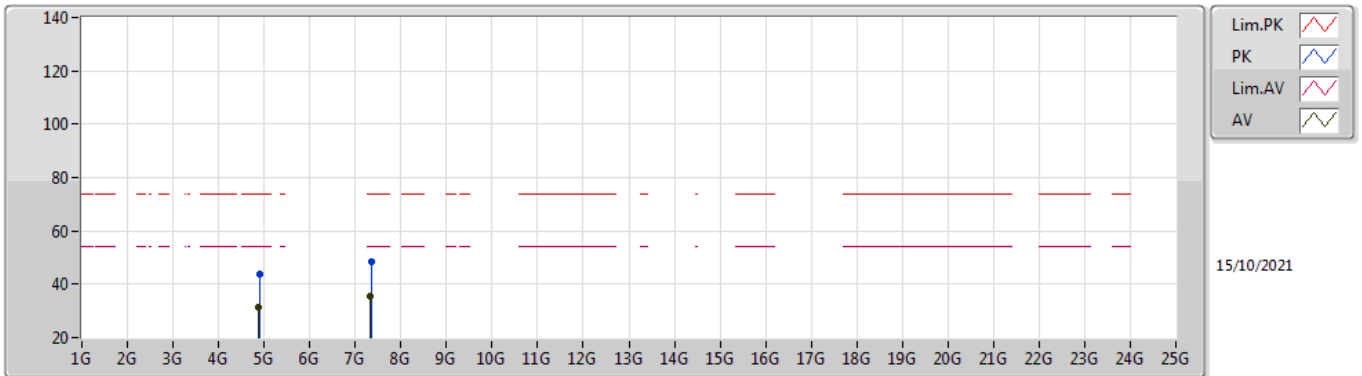


EUT Y_1TX
Setting 7
02-C-K-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.86608G	45.46	74.00	-28.54	39.64	3	Vertical	201	1.26	-	32.93	5.10	32.21
AV	4.89416G	31.52	54.00	-22.48	25.63	3	Vertical	201	1.26	-	32.99	5.10	32.20
PK	7.336G	48.15	74.00	-25.85	38.37	3	Vertical	143	1.01	-	36.47	6.17	32.86
AV	7.3456G	35.98	54.00	-18.02	26.20	3	Vertical	143	1.01	-	36.49	6.17	32.88

BT-BR(1Mbps)

2440MHz_TX

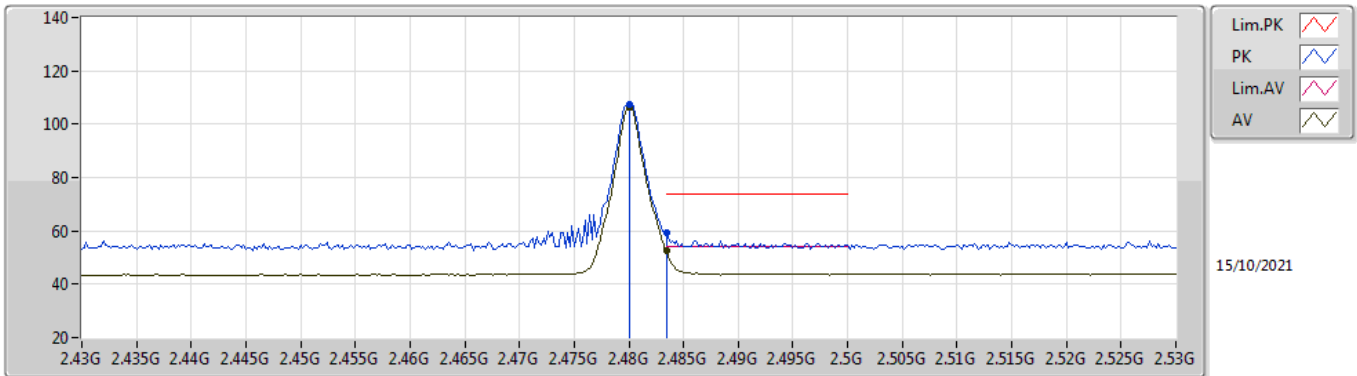


EUT Y_1TX
Setting 7
02-C-K-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.8892G	43.85	74.00	-30.15	37.97	3	Horizontal	304	2.96	-	32.98	5.10	32.20
AV	4.8614G	31.30	54.00	-22.70	25.49	3	Horizontal	304	2.96	-	32.92	5.10	32.21
PK	7.362G	48.39	74.00	-25.61	38.60	3	Horizontal	307	1.79	-	36.52	6.18	32.91
AV	7.3374G	35.72	54.00	-18.28	25.95	3	Horizontal	307	1.79	-	36.47	6.17	32.87

BT-BR(1Mbps)

2480MHz_TX

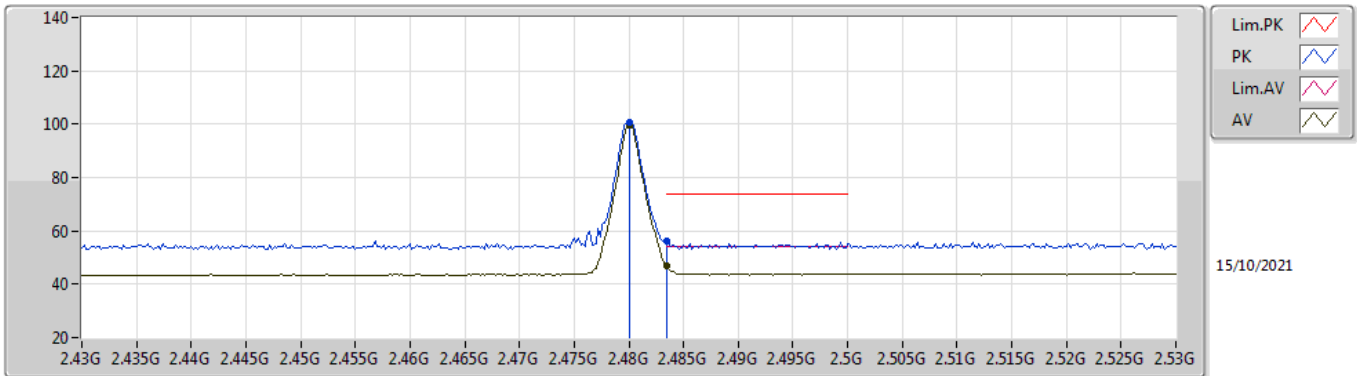


EUT Y_1TX
Setting 7
02-C-K-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.48G	107.59	Inf	-Inf	76.19	3	Vertical	79	1.22	-	28.52	2.88	-
AV	2.48G	106.48	Inf	-Inf	75.08	3	Vertical	79	1.22	-	28.52	2.88	-
PK	2.4835G	59.07	74.00	-14.93	27.66	3	Vertical	79	1.22	-	28.53	2.88	-
AV	2.4835G	52.45	54.00	-1.55	21.04	3	Vertical	79	1.22	-	28.53	2.88	-

BT-BR(1Mbps)

2480MHz_TX

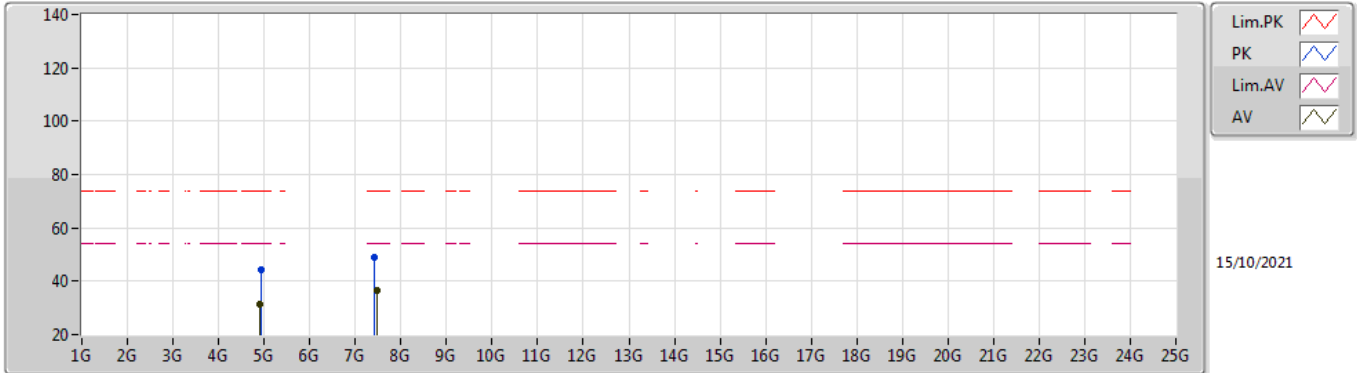


EUT_V_1TX
Setting 7
02-C-K-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.48G	100.55	Inf	-Inf	69.15	3	Horizontal	126	2.30	-	28.52	2.88	-
AV	2.48G	99.64	Inf	-Inf	68.24	3	Horizontal	126	2.30	-	28.52	2.88	-
PK	2.4835G	56.40	74.00	-17.60	24.99	3	Horizontal	126	2.30	-	28.53	2.88	-
AV	2.4835G	46.95	54.00	-7.05	15.54	3	Horizontal	126	2.30	-	28.53	2.88	-

BT-BR(1Mbps)

2480MHz_TX

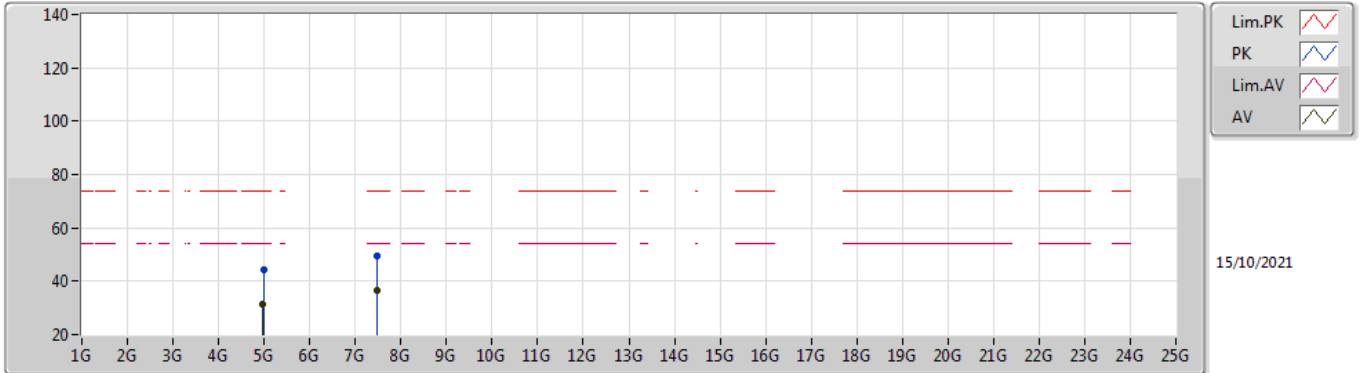


EUT V_1TX
Setting 7
02-C-K-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.9474G	44.28	74.00	-29.72	38.08	3	Vertical	193	2.29	-	33.28	5.10	32.18
AV	4.9146G	31.52	54.00	-22.48	25.52	3	Vertical	193	2.29	-	33.09	5.10	32.19
PK	7.4234G	49.12	74.00	-24.88	39.39	3	Vertical	212	2.16	-	36.55	6.20	33.02
AV	7.4822G	36.58	54.00	-17.42	27.00	3	Vertical	212	2.16	-	36.50	6.20	33.12

BT-BR(1Mbps)

2480MHz_TX

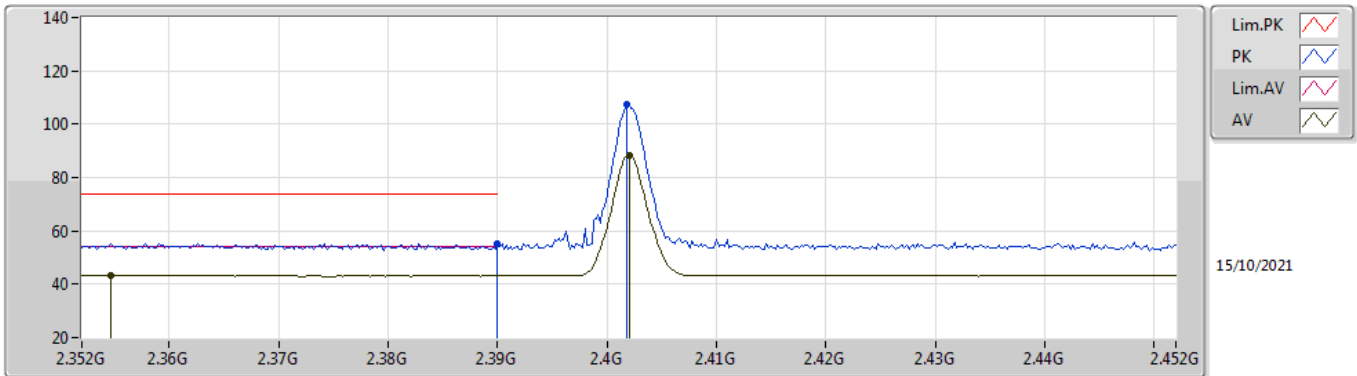


EUT Y_1TX
Setting 7
02-C-K-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.9892G	44.06	74.00	-29.94	37.90	3	Horizontal	100	2.94	-	33.22	5.10	32.16
AV	4.9774G	31.57	54.00	-22.43	25.39	3	Horizontal	100	2.94	-	33.25	5.10	32.17
PK	7.4882G	49.69	74.00	-24.31	40.12	3	Horizontal	57	2.75	-	36.50	6.20	33.13
AV	7.4882G	36.67	54.00	-17.33	27.10	3	Horizontal	57	2.75	-	36.50	6.20	33.13

BT-EDR(3Mbps)

2402MHz_TX

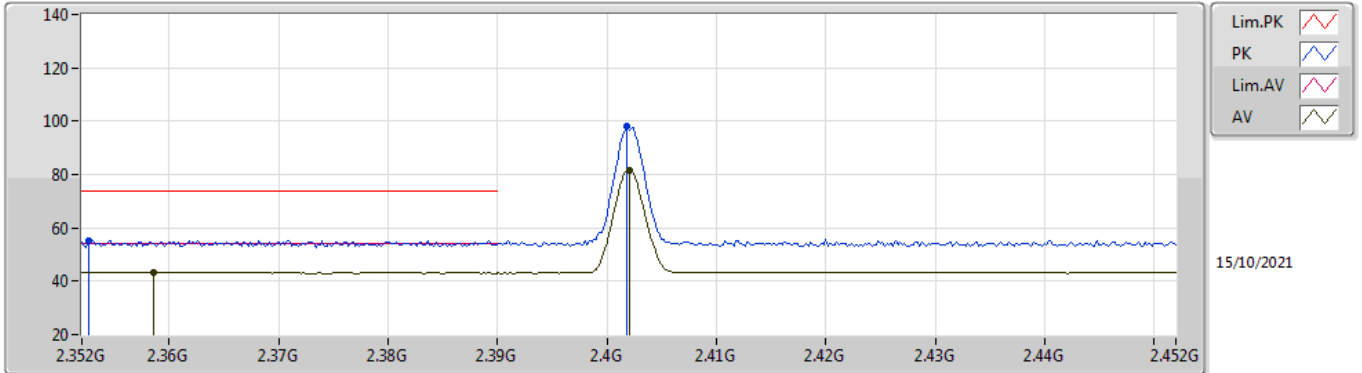


EUT_V_1TX
Setting 7
02-C-K-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.39G	55.43	74.00	-18.57	24.26	3	Vertical	67	1.02	-	28.38	2.79	-
AV	2.3546G	43.15	54.00	-10.85	12.06	3	Vertical	67	1.02	-	28.31	2.78	-
PK	2.4018G	107.21	Inf	-Inf	76.01	3	Vertical	67	1.02	-	28.40	2.80	-
AV	2.402G	88.44	Inf	-Inf	57.24	3	Vertical	67	1.02	-	28.40	2.80	-

BT-EDR(3Mbps)

2402MHz_TX

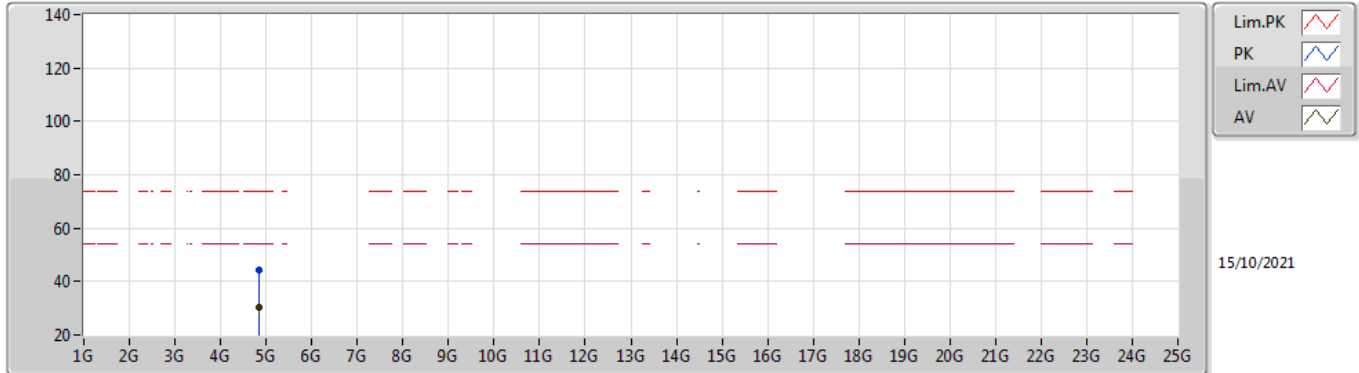


EUT_V_1TX
Setting 7
02-C-K-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3526G	55.43	74.00	-18.57	24.34	3	Horizontal	148	2.22	-	28.31	2.78	-
AV	2.3586G	43.14	54.00	-10.86	12.04	3	Horizontal	148	2.22	-	28.32	2.78	-
PK	2.4018G	97.99	Inf	-Inf	66.79	3	Horizontal	148	2.22	-	28.40	2.80	-
AV	2.402G	81.49	Inf	-Inf	50.29	3	Horizontal	148	2.22	-	28.40	2.80	-

BT-EDR(3Mbps)

2402MHz_TX

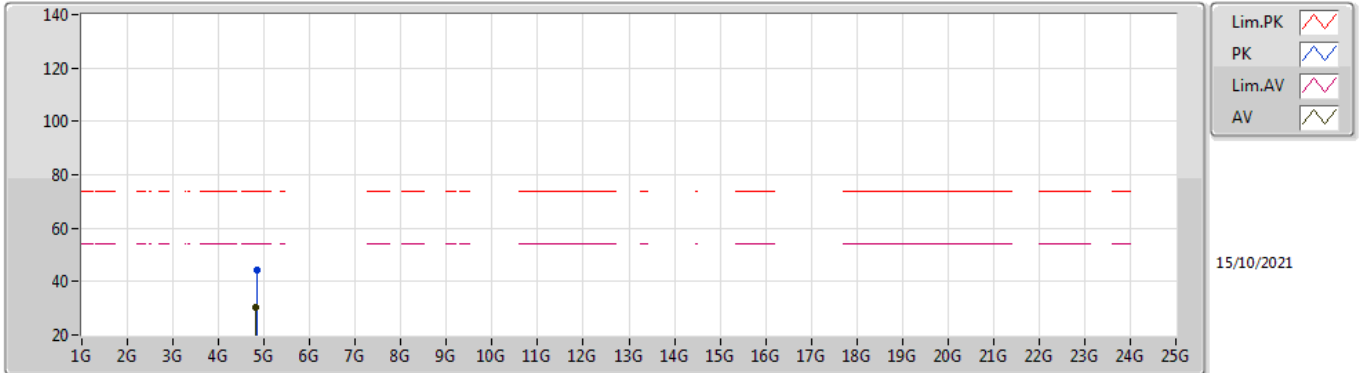


EUT Y_1TX
Setting 7
02-C-K-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.8476G	44.30	74.00	-29.70	38.52	3	Vertical	176	2.11	-	32.89	5.10	32.21
AV	4.8346G	30.58	54.00	-23.42	24.86	3	Vertical	176	2.11	-	32.84	5.10	32.22

BT-EDR(3Mbps)

2402MHz_TX

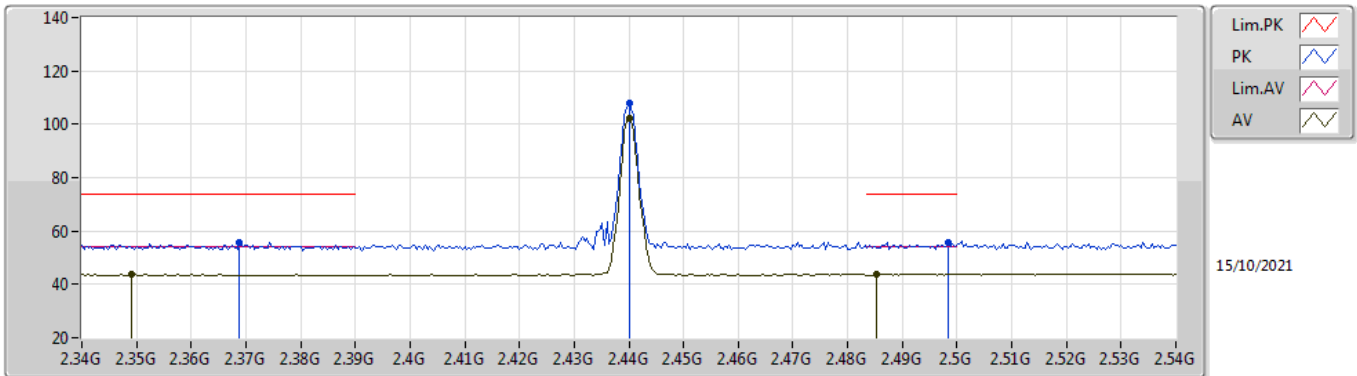


EUT Y_1TX
Setting 7
02-C-K-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.8438G	44.35	74.00	-29.65	38.59	3	Horizontal	243	1.03	-	32.88	5.10	32.22
AV	4.8236G	30.38	54.00	-23.62	24.71	3	Horizontal	243	1.03	-	32.79	5.10	32.22

BT-EDR(3Mbps)

2440MHz_TX

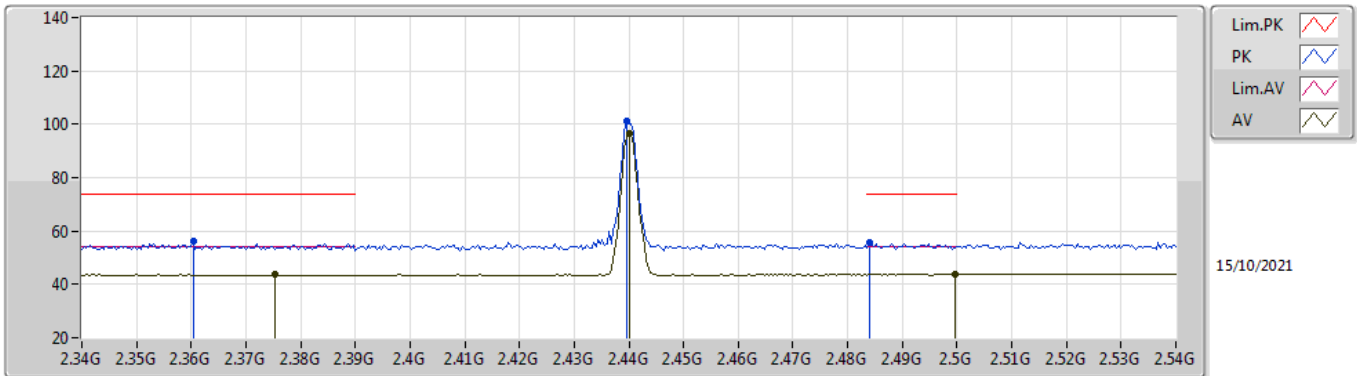


EUT_V_1TX
Setting 7
02-C-K-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3688G	55.45	74.00	-18.55	24.33	3	Vertical	74	1.01	-	28.34	2.78	-
AV	2.3492G	43.83	54.00	-10.17	12.76	3	Vertical	74	1.01	-	28.30	2.77	-
PK	2.44G	107.87	Inf	-Inf	76.63	3	Vertical	74	1.01	-	28.40	2.84	-
AV	2.44G	102.11	Inf	-Inf	70.87	3	Vertical	74	1.01	-	28.40	2.84	-
PK	2.4984G	55.91	74.00	-18.09	24.42	3	Vertical	74	1.01	-	28.59	2.90	-
AV	2.4852G	43.92	54.00	-10.08	12.49	3	Vertical	74	1.01	-	28.54	2.89	-

BT-EDR(3Mbps)

2440MHz_TX

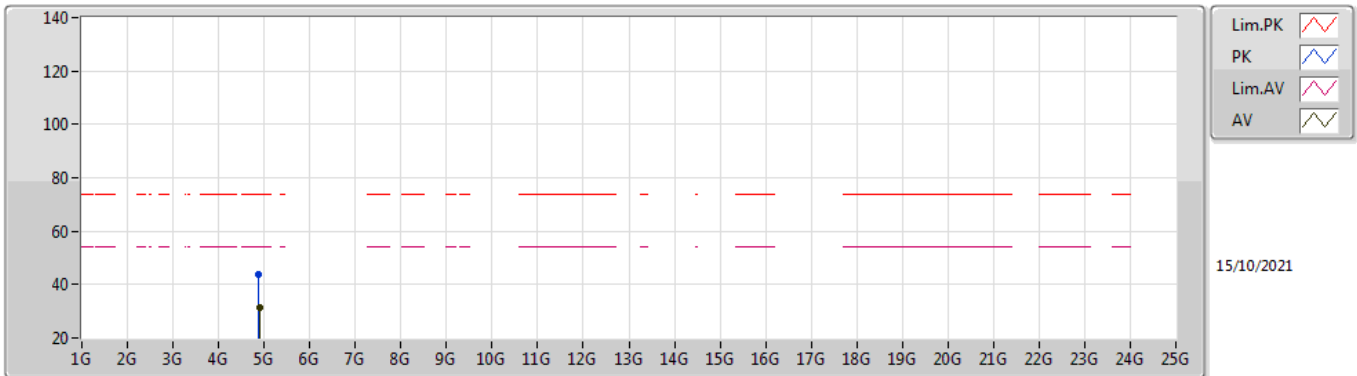


EUT_V_1TX
Setting 7
02-C-K-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3604G	56.21	74.00	-17.79	25.11	3	Horizontal	91	1.27	-	28.32	2.78	-
AV	2.3752G	43.70	54.00	-10.30	12.56	3	Horizontal	91	1.27	-	28.35	2.79	-
PK	2.4396G	101.24	Inf	-Inf	70.00	3	Horizontal	91	1.27	-	28.40	2.84	-
AV	2.44G	96.43	Inf	-Inf	65.19	3	Horizontal	91	1.27	-	28.40	2.84	-
PK	2.484G	55.51	74.00	-18.49	24.09	3	Horizontal	91	1.27	-	28.54	2.88	-
AV	2.4996G	44.00	54.00	-10.00	12.50	3	Horizontal	91	1.27	-	28.60	2.90	-

BT-EDR(3Mbps)

2440MHz_TX

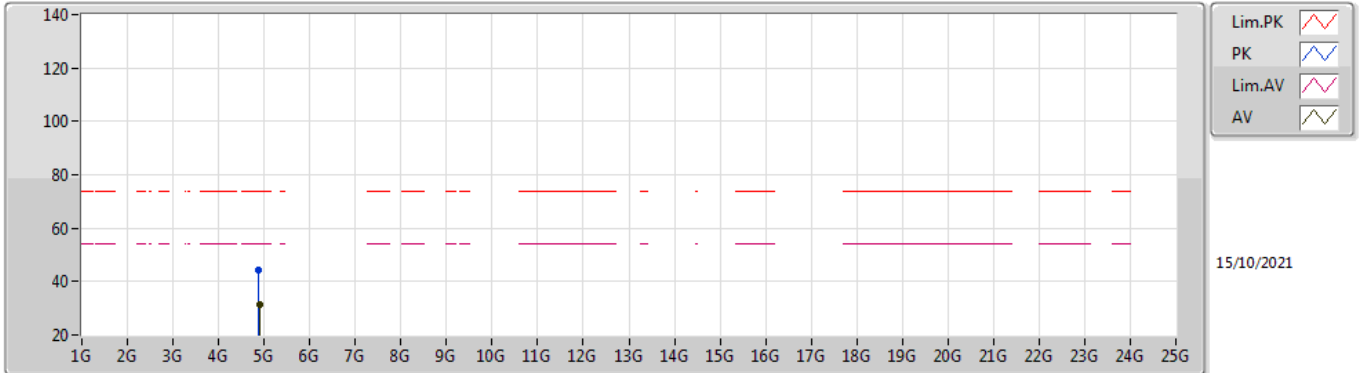


EUT V_1TX
Setting 7
02-C-K-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.87666G	43.99	74.00	-30.01	38.14	3	Vertical	293	1.80	-	32.95	5.10	32.20
AV	4.897G	31.59	54.00	-22.41	25.70	3	Vertical	293	1.80	-	32.99	5.10	32.20

BT-EDR(3Mbps)

2440MHz_TX

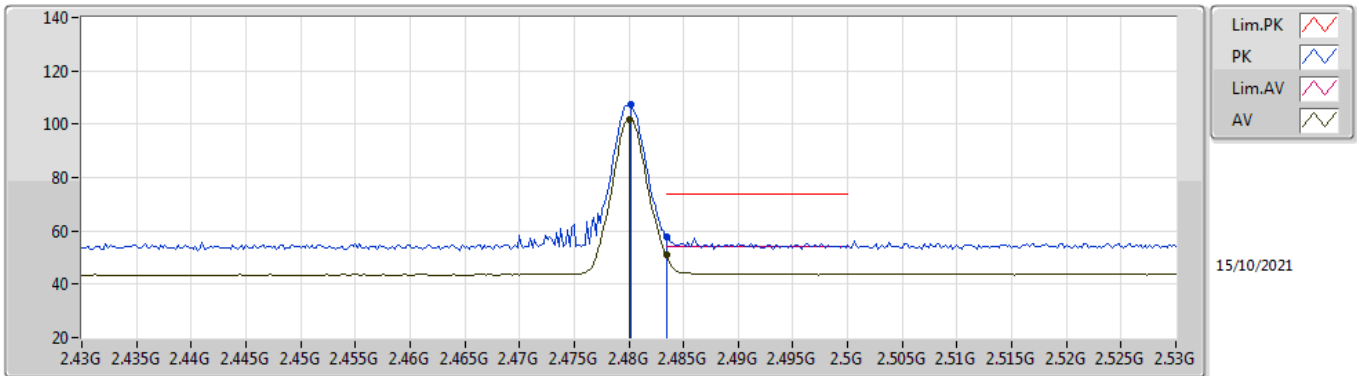


EUT_V_1TX
Setting 7
02-C-K-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.8636G	44.43	74.00	-29.57	38.61	3	Horizontal	337	2.92	-	32.93	5.10	32.21
AV	4.9058G	31.27	54.00	-22.73	25.33	3	Horizontal	337	2.92	-	33.03	5.10	32.19

BT-EDR(3Mbps)

2480MHz_TX

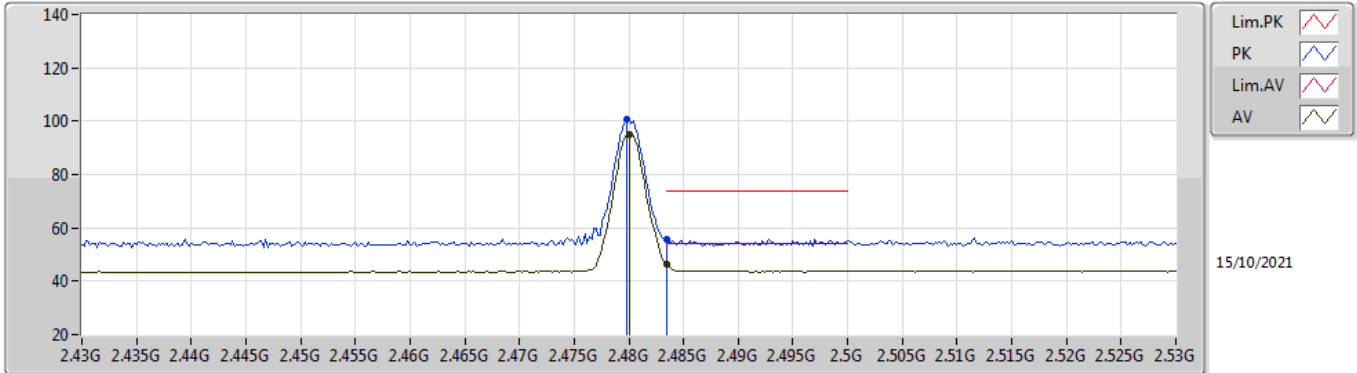


EUT_V_1TX
Setting 7
02-C-K-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.4802G	107.33	Inf	-Inf	75.93	3	Vertical	78	1.22	-	28.52	2.88	-
AV	2.48G	101.63	Inf	-Inf	70.23	3	Vertical	78	1.22	-	28.52	2.88	-
PK	2.4835G	57.79	74.00	-16.21	26.38	3	Vertical	78	1.22	-	28.53	2.88	-
AV	2.4835G	50.93	54.00	-3.07	19.52	3	Vertical	78	1.22	-	28.53	2.88	-

BT-EDR(3Mbps)

2480MHz_TX

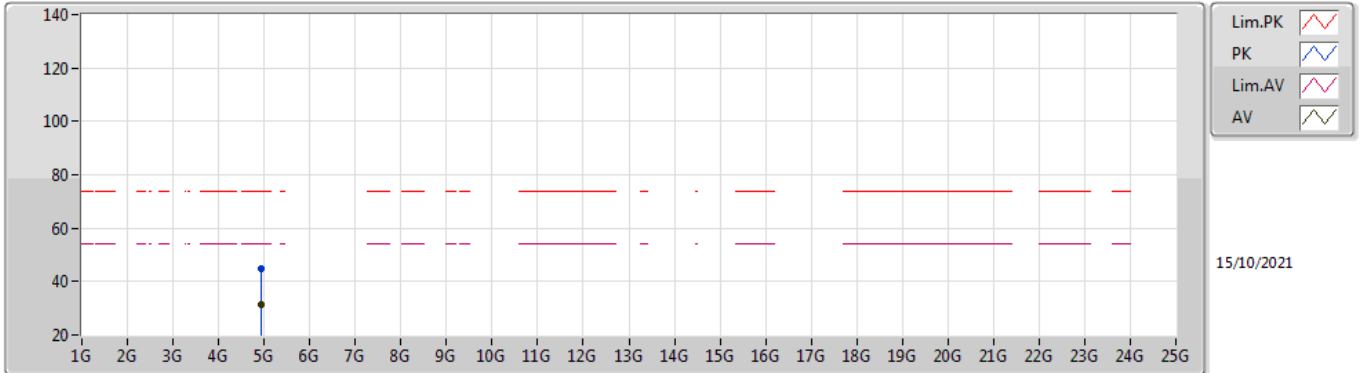


EUT_V_1TX
Setting 7
02-C-K-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.4798G	100.83	Inf	-Inf	69.43	3	Horizontal	108	2.30	-	28.52	2.88	-
AV	2.48G	95.19	Inf	-Inf	63.79	3	Horizontal	108	2.30	-	28.52	2.88	-
PK	2.4835G	55.81	74.00	-18.19	24.40	3	Horizontal	108	2.30	-	28.53	2.88	-
AV	2.4835G	46.22	54.00	-7.78	14.81	3	Horizontal	108	2.30	-	28.53	2.88	-

BT-EDR(3Mbps)

2480MHz_TX

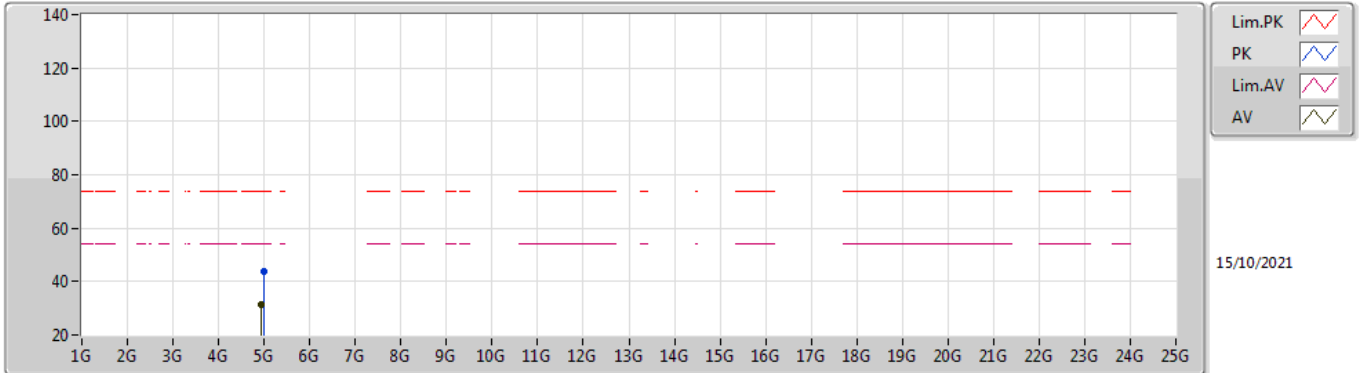


EUT Y_1TX
Setting 7
02-C-K-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.9214G	44.71	74.00	-29.29	38.67	3	Vertical	135	2.63	-	33.13	5.10	32.19
AV	4.9256G	31.57	54.00	-22.43	25.51	3	Vertical	135	2.63	-	33.15	5.10	32.19

BT-EDR(3Mbps)

2480MHz_TX



EUT V_1TX
Setting 7
02-C-K-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.9906G	43.80	74.00	-30.20	37.64	3	Horizontal	305	2.14	-	33.22	5.10	32.16
AV	4.9466G	31.35	54.00	-22.65	25.15	3	Horizontal	305	2.14	-	33.28	5.10	32.18