

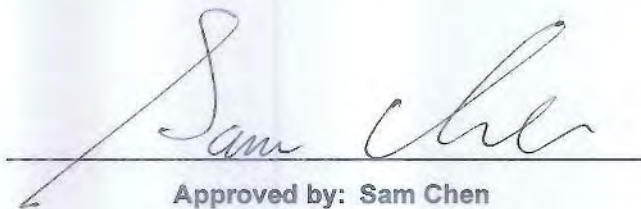


RADIO TEST REPORT

FCC ID : TLZ-AM510
Equipment : IEEE 802.11 1X1 a/b/g/n Wireless LAN + Bluetooth 5.1 Combo 12 x 12 LGA Module
Brand Name : AzureWave
Model Name : AW-AM510 ; AW-AM510-I ; AW-AM510MA
Applicant : AzureWave Technologies, Inc.
8F., No.94, Baozhong Rd. , Xindian Dist., New Taipei City , Taiwan 231
Manufacturer : AzureWave Technologies, Inc.
8F., No.94, Baozhong Rd. , Xindian Dist., New Taipei City , Taiwan 231
Standard : 47 CFR FCC Part 15.247

The product was received on Mar. 15, 2021, and testing was started from Mar. 16, 2021 and completed on Apr. 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: Sam Chen

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 Uncertainty9

2 Test Configuration of EUT10

2.1 Test Channel Mode10

2.2 The Worst Case Measurement Configuration11

2.3 EUT Operation during Test12

2.4 Accessories12

2.5 Support Equipment.....13

2.6 Test Setup Diagram14

3 Transmitter Test Result17

3.1 AC Power-line Conducted Emissions17

3.2 DTS Bandwidth19

3.3 Maximum Conducted Output Power20

3.4 Power Spectral Density23

3.5 Emissions in Non-restricted Frequency Bands25

3.6 Emissions in Restricted Frequency Bands.....26

4 Test Equipment and Calibration Data30

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

Appendix B. Test Results of DTS Bandwidth

Appendix C. Test Results of Maximum Conducted Output Power

Appendix D. Test Results of Power Spectral Density

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

Appendix F. Test Results of Emissions in Restricted Frequency Bands

Appendix G. Test Photos

Photographs of EUT v01



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)	DTS Bandwidth	PASS	-
3.3	15.247(b)	Maximum Conducted Output Power	PASS	-
3.4	15.247(e)	Power Spectral Density	PASS	-
3.5	15.247(d)	Emissions in Non-restricted Frequency Bands	PASS	-
3.6	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: Sandy Chuang



1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	Bluetooth Mode	Ch. Frequency (MHz)	Channel Number
2400-2483.5	LE	2402-2480	0-39 [40]

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	BT-LE(1Mbps)	1.0	1TX
2.4-2.4835GHz	BT-LE(500Kb/s)	1.0	1TX
2.4-2.4835GHz	BT-LE(125Kb/s)	1.0	1TX
2.4-2.4835GHz	BT-LE(2Mbps)	2.0	1TX

Note:

- ♦ Bluetooth LE uses a GFSK modulation.
- ♦ BWch is the nominal channel bandwidth.



1.1.2 Antenna Information

Ant.	Port	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	1	Molex	1461531050	Dipole	I-PEX	Note 1
2	1	MAG. LAYERS	MSA-4008-25GC1-A2	PIFA	I-PEX	Note 1
3	1	LYNwave	5-PP005421	PIFA	I-PEX	Note 1

Note1:

Ant.	Antenna Gain (dBi)		
	WLAN 2.4GHz	WLAN 5GHz	Bluetooth
1	3.20	4.25	3.20
2	2.98	5.16	2.98
3	2.90	4.30	2.90

Note2: The above information was declared by manufacturer.

Note3:

<For conducted test>

2.4GHz and Bluetooth

Only the higher gain antenna “Ant. 1” was tested and recorded in the report.

5GHz

Only the higher gain antenna “Ant. 2” was tested and recorded in the report.

<For AC Power-line Conducted Emissions and Radiated test>

Ant.2 and Ant. 3 are the same type antenna, and only the higher gain antenna “Ant. 1 and Ant. 2” was tested and recorded in the report.

<For WLAN 2.4GHz>

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

Only Port 1 can be used as transmitting/receiving.

<For WLAN 5GHz>

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

Only Port 1 can be used as transmitting/receiving.

<For Bluetooth> (1TX/1RX)

Only Port 1 can be used as transmitting/receiving.



1.1.3 Mode Test Duty Cycle

Mode	DC	DCF (dB)	Mode	DC
BT-LE(1Mbps)	0.629	2.013	BT-LE(1Mbps)	0.629
BT-LE(2Mbps)	0.622	2.062	BT-LE(2Mbps)	0.622

Note:

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

1.1.4 EUT Operational Condition

EUT Power Type	From host system			
Function	<input checked="" type="checkbox"/> Point-to-multipoint	<input type="checkbox"/> Point-to-point		
Test Software Version	Dut labtool 1.0.0.11			
Support Mode	<input checked="" type="checkbox"/> LE 1M PHY: 1 Mb/s			
	<input checked="" type="checkbox"/> LE Coded PHY (S=2): 500 Kb/s			
	<input checked="" type="checkbox"/> LE Coded PHY (S=8): 125 Kb/s			
	<input checked="" type="checkbox"/> LE 2M PHY: 2 Mb/s			

Note: The above information was declared by manufacturer.

1.1.5 Table for Multiple Listing

Model No.	Description
AW-AM510	All the model names are identical, the difference model names served as marketing strategy.
AW-AM510-I	
AW-AM510MA	

Note 1: From the above models, model: AW-AM510 was selected as representative model for the test and its data was recorded in this report.

Note 2: The above information was declared by manufacturer.



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
- ◆ ANSI C63.10-2013

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 (TAF: 3787)	ADD: No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County 302010, Taiwan (R.O.C.) 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	TH01-CB	Lucas Huang	21-22.1 / 57-65	Mar. 24, 2021~ Apr. 06, 2021
Radiated (Below 1GHz)	03CH05-CB	Cola Fan	21.3-22.5 / 55-58	Apr. 20, 2021
Radiated (Above 1GHz)	03CH02-CB	RJ Huang	20.2-21.3 / 56-58	Mar. 16, 2021~ Mar. 24, 2021
AC Conduction	CO02-CB	Peter Wu	23~24 / 57~58	Apr. 08, 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)	3.8 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.6 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	5.0 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.9 dB	Confidence levels of 95%
Conducted Emission	2.8 dB	Confidence levels of 95%
Output Power Measurement	1.4 dB	Confidence levels of 95%
Power Density Measurement	2.8 dB	Confidence levels of 95%
Bandwidth Measurement	0.4%	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

Mode	Power Setting
BT-LE(1Mbps)_Nss1_1TX	-
2402MHz	4
2440MHz	4
2480MHz	4
BT-LE(2Mbps)_Nss1_1TX	-
2402MHz	4
2440MHz	4
2480MHz	4



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
Operating Mode	Normal Link
1	EUT + WLAN 2.4GHz + Bluetooth + Ant. 1
2	EUT + WLAN 5GHz + Bluetooth + Ant. 1
Mode 1 has been evaluated to be the worst case between Mode 1~2, thus measurement for Mode 3 will follow this same test mode.	
3	EUT + WLAN 2.4GHz + Bluetooth + Ant. 2
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	DTS Bandwidth Maximum Conducted Output Power Power Spectral Density Emissions in Non-restricted Frequency Bands
Test Condition	Conducted measurement at transmit chains
1	EUT+ Ant. 1



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	Normal Link
1	EUT in Z axis + WLAN 2.4GHz + Bluetooth + Ant. 1
2	EUT in Y axis + WLAN 2.4GHz + Bluetooth + Ant. 1
Mode 2 has been evaluated to be the worst case between Mode 1~2, thus measurement for Mode 3 will follow this same test mode.	
3	EUT in Y axis + WLAN 5GHz + Bluetooth + Ant. 1
Mode 3 has been evaluated to be the worst case among Mode 1~3, thus measurement for Mode 4 will follow this same test mode.	
4	EUT in Y axis + WLAN 5GHz + Bluetooth + Ant. 2
For operating mode 3 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 as below:	
1	EUT in Y axis + Ant. 1
2	EUT in Z axis + Ant. 2

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	WLAN 2.4GHz + Bluetooth
2	WLAN 5GHz + Bluetooth
Refer to Sporton Test Report No.: FA131001 for Co-location RF Exposure Evaluation.	

2.3 EUT Operation during Test

For CTX Mode:

The EUT was programmed to be in continuously transmitting mode.

For Normal Link:

During the test, the EUT operation to normal function.

2.4 Accessories

N/A



2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	ACER	MS2343	N/A
B	Fixture	AzureWave	AW2510-11	N/A
C	AP Router	ASUS	RP-N53	MSQ-RPN53
D	Earphone	SHYARO CHI	MIC-04	N/A
E	Mouse	HP	FM100	N/A
F	iPad	Apple	A1430	BCGA1430
G	AP Router NB	DELL	E6430	N/A

For Radiated (below 1GHz):

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E4300	N/A
B	NB	DELL	E4300	N/A
C	WLAN AP	D-LINK	DIR860L	KA2IR860LA1
D	iPad	Apple	A1430	BCGA1430
E	Earphone	e-Power	S90W	N/A
F	Mouse	Logitech	M-U0026	N/A
G	Fixture	AzureWave	AW2510-11	N/A

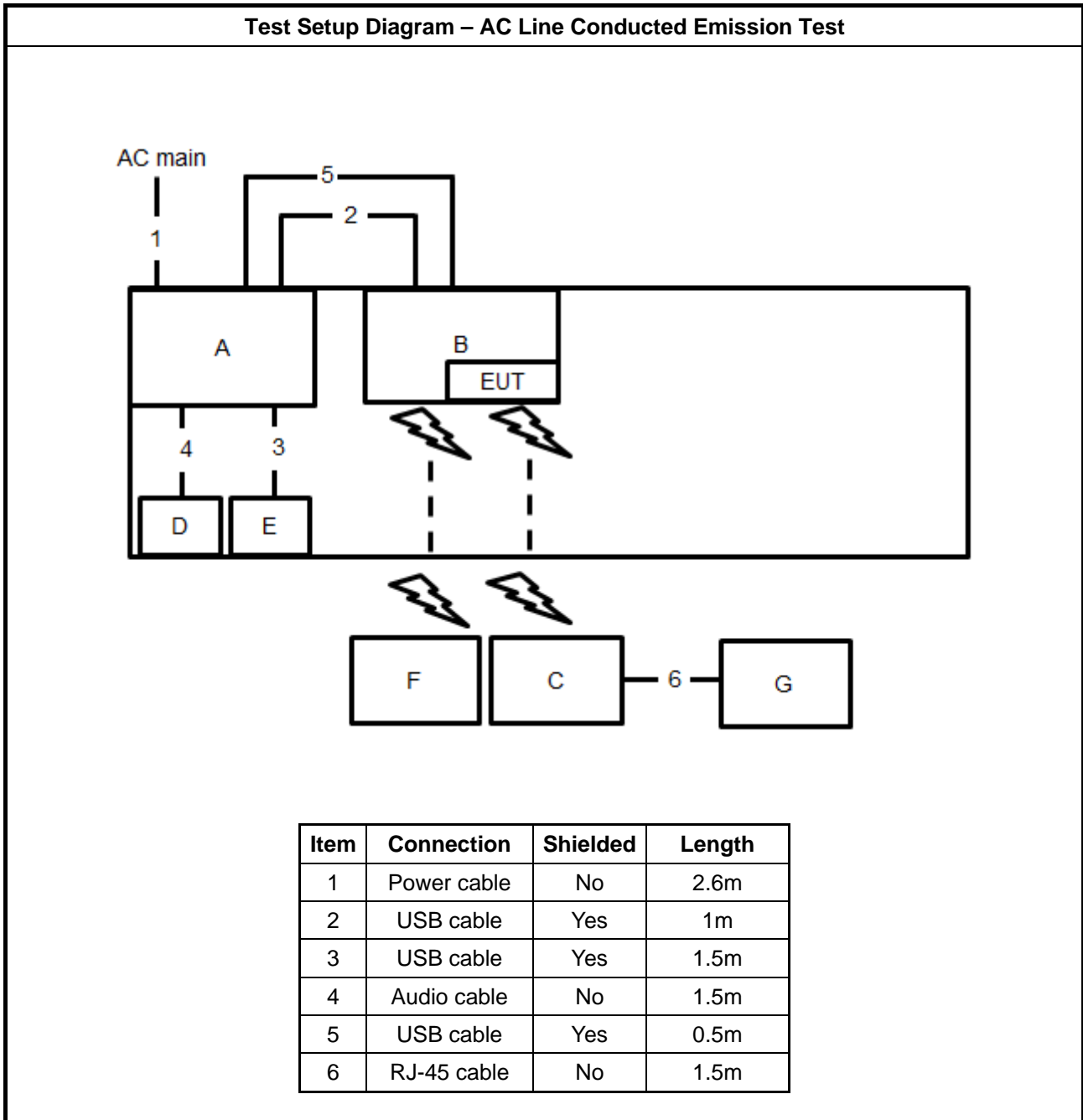
For Radiated (above 1GHz):

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Fixture	AzureWave	AW2510-11	N/A
B	NB	DELL	E4300	N/A
C	NB	DELL	E4300	N/A

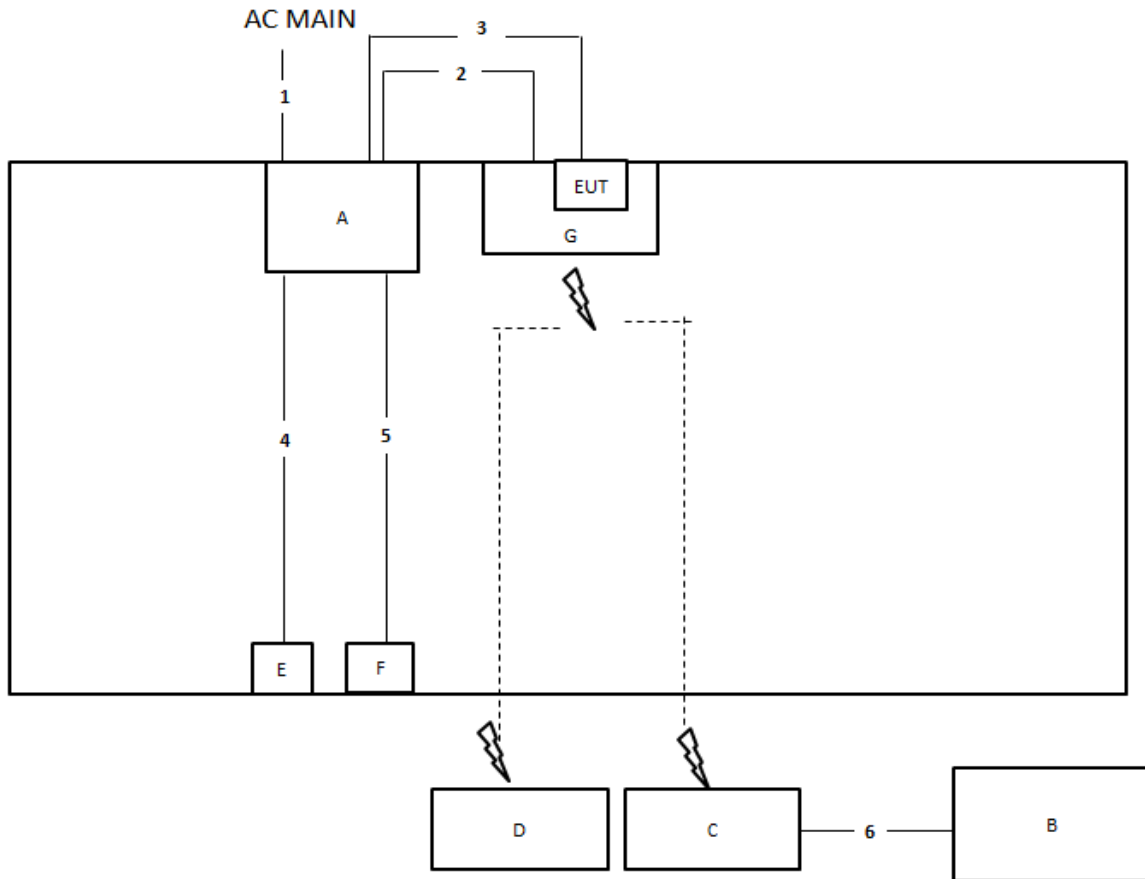
For RF Conducted:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E4300	N/A
B	NB	DELL	E4300	N/A
C	Fixture	AzureWave	AW2510-11	N/A

2.6 Test Setup Diagram

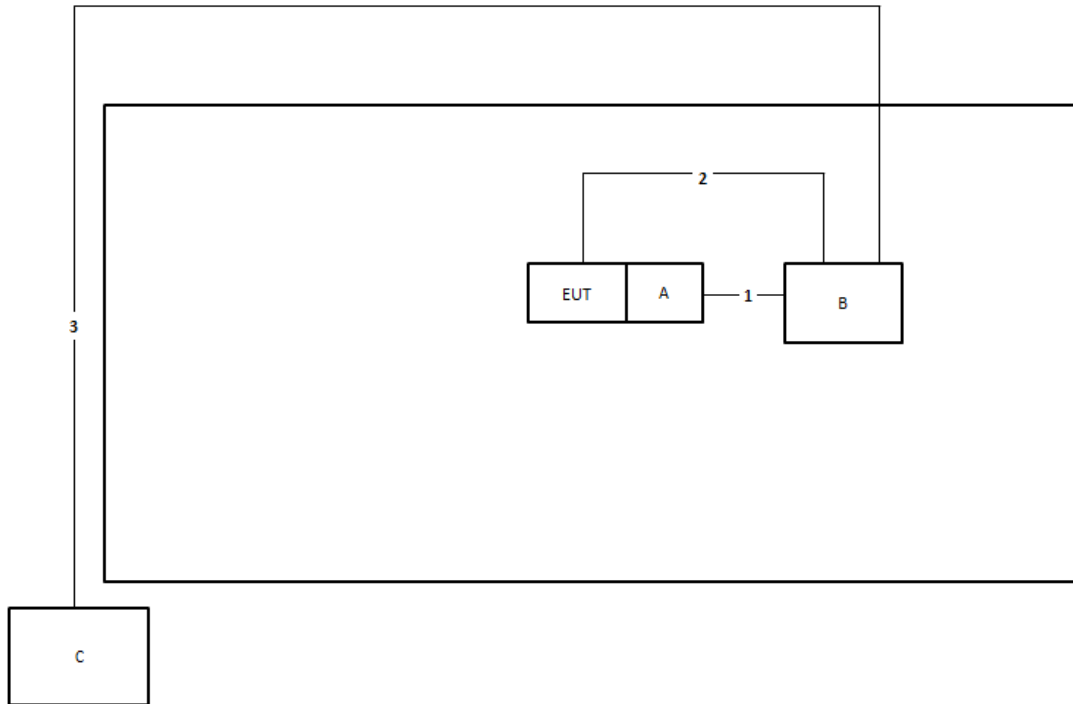


Test Setup Diagram - Radiated Test < 1GHz



Item	Connection	Shielded	Length
1	Power cable	No	2.6m
2	USB cable	Yes	1m
3	USB cable	Yes	2m
4	Audio cable	No	1.1m
5	USB cable	Yes	1.4m
6	RJ-45 cable	No	1.5m

Test Setup Diagram - Radiated Test > 1GHz



Item	Connection	Shielded	Length
1	USB cable	Yes	1m
2	USB cable	Yes	1m
3	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.

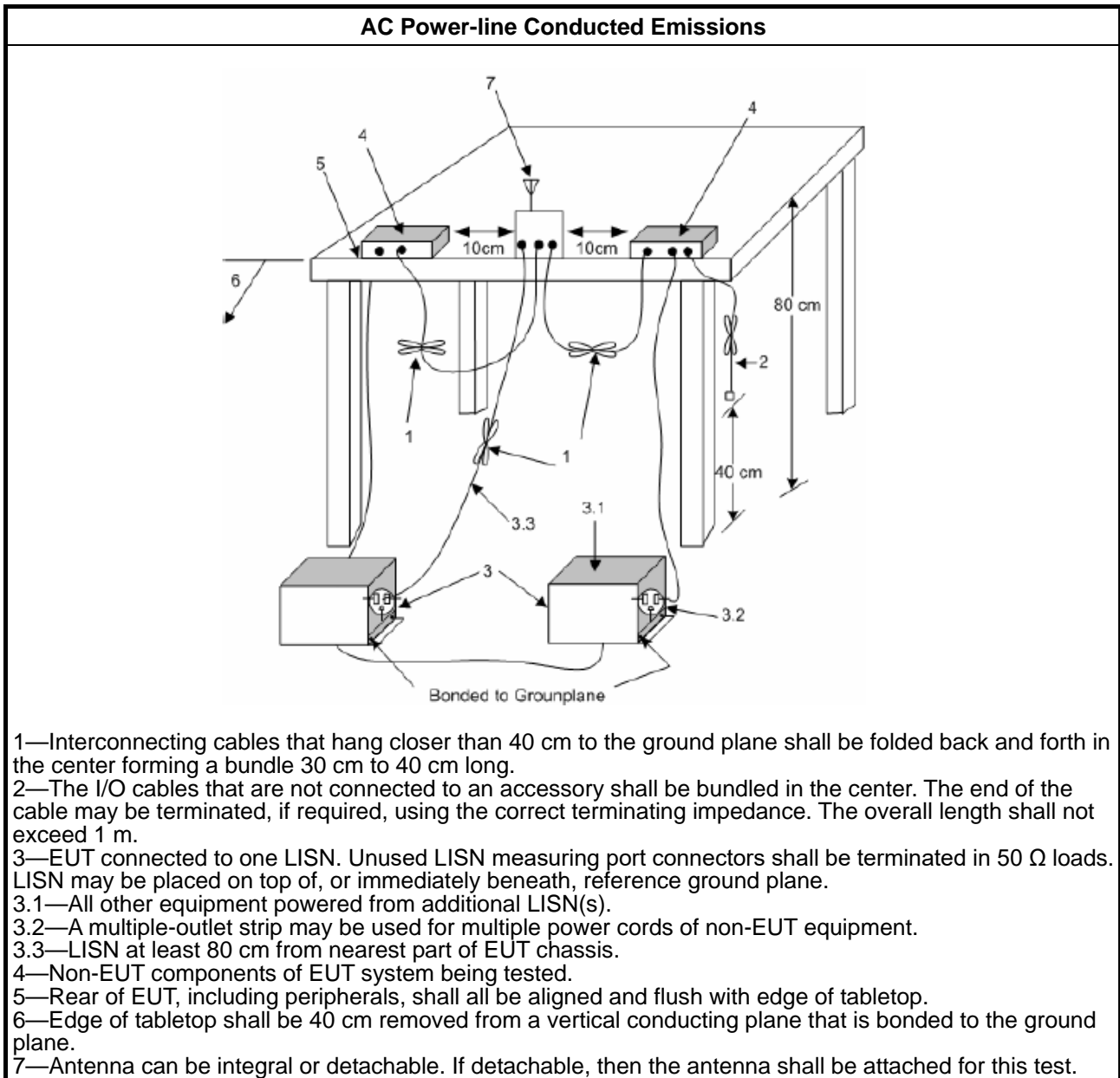
3.1.2 Measuring Instruments

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 DTS Bandwidth

3.2.1 6dB Bandwidth Limit

6dB Bandwidth Limit
Systems using digital modulation techniques:
<ul style="list-style-type: none"> ▪ 6 dB bandwidth \geq 500 kHz.

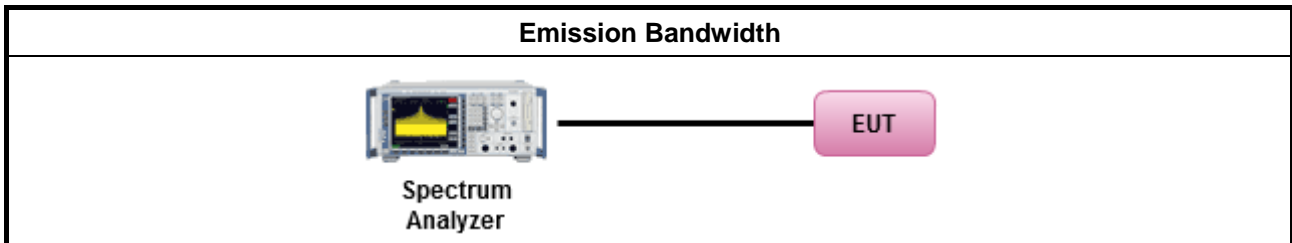
3.2.2 Measuring Instruments

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"> ▪ For the emission bandwidth shall be measured using one of the options below:
<input checked="" type="checkbox"/> Refer as FCC KDB 558074, clause 8.2 & C63.10 clause 11.8.1 Option 1 for 6 dB bandwidth measurement.
<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.2 & C63.10 clause 11.8.2 Option 2 for 6 dB bandwidth measurement.
<input type="checkbox"/> Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

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">▪ If $G_{TX} \leq 6$ dBi, then $P_{Out} \leq 30$ dBm (1 W)
	<ul style="list-style-type: none">▪ Point-to-multipoint systems (P2M): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ dBm
	<ul style="list-style-type: none">▪ Point-to-point systems (P2P): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	<ul style="list-style-type: none">▪ Smart antenna system (SAS):
	<ul style="list-style-type: none">- Single beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	<ul style="list-style-type: none">- Overlap beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	<ul style="list-style-type: none">- Aggregate power on all beams: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3 + 8$ dB dBm
P_{Out} = maximum peak conducted output power or maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.	

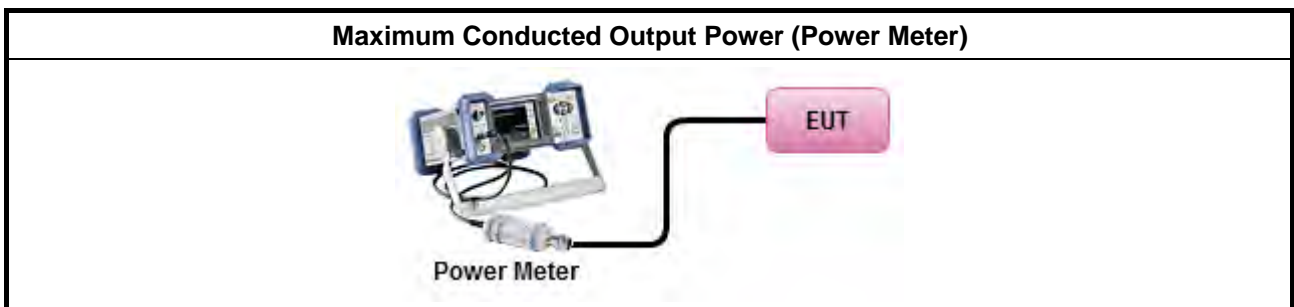
3.3.2 Measuring Instruments

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"> ▪ Maximum Peak Conducted Output Power 	
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.3.1.1 & C63.10 clause 11.9.1.1 (RBW ≥ EBW method).
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.3.1.3 & C63.10 clause 11.9.1.3 (peak power meter).
<ul style="list-style-type: none"> ▪ Maximum Conducted Output Power 	
[duty cycle ≥ 98% or external video / power trigger]	
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.2 Method AVGSA-1.
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.3 Method AVGSA-1A. (alternative)
duty cycle < 98% and average over on/off periods with duty factor	
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.4 Method AVGSA-2.
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.5 Method AVGSA-2A (alternative)
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.6 Method AVGSA-3
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.7 Method AVGSA-3A (alternative)
Measurement using a power meter (PM)	
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.3.2.3 & C63.10 clause 11.9.2.3.1 Method AVGPM (using an RF average power meter).
	<input checked="" type="checkbox"/> Refer as FCC KDB 558074, clause 8.3.2.3 & C63.10 clause 11.9.2.3.2 Method AVGPM-G (using an gate RF average power meter).
<ul style="list-style-type: none"> ▪ For conducted measurement. 	
<ul style="list-style-type: none"> ▪ If the EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them. 	
<ul style="list-style-type: none"> ▪ If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$ 	

3.3.4 Test Setup





3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C



3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

Power Spectral Density Limit
<ul style="list-style-type: none"> Power Spectral Density (PSD) ≤ 8 dBm/3kHz

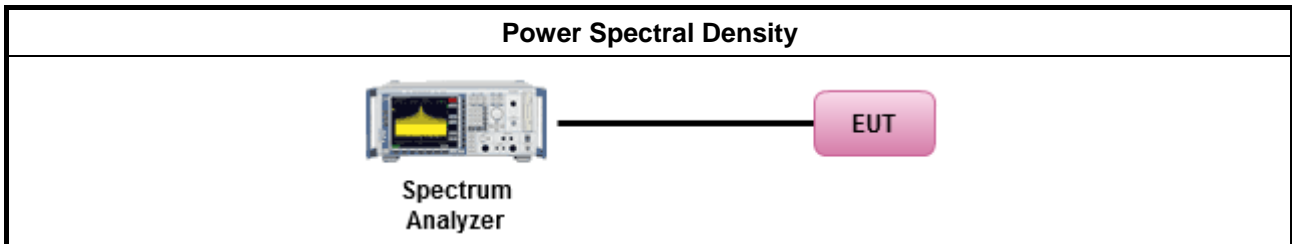
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

Test Method
<ul style="list-style-type: none"> Peak power spectral density procedures that the same method as used to determine the conducted output power. If maximum peak conducted output power was measured to demonstrate compliance to the output power limit, then the peak PSD procedure below (Method PKPSD) shall be used. If maximum conducted output power was measured to demonstrate compliance to the output power limit, then one of the average PSD procedures shall be used, as applicable based on the following criteria (the peak PSD procedure is also an acceptable option).
<input checked="" type="checkbox"/> Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10 Method Max. PSD. [duty cycle ≥ 98% or external video / power trigger]
<ul style="list-style-type: none"> For conducted measurement.
<ul style="list-style-type: none"> If The EUT supports multiple transmit chains using options given below: <ul style="list-style-type: none"> <input type="checkbox"/> Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace. <input type="checkbox"/> Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits, <input type="checkbox"/> Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.

3.4.4 Test Setup



3.4.5 Test Result of Power Spectral Density

Refer as Appendix D

3.5 Emissions in Non-restricted Frequency Bands

3.5.1 Emissions in Non-restricted Frequency Bands Limit

Un-restricted Band Emissions Limit	
RF output power procedure	Limit (dBc)
Peak output power procedure	20
Average output power procedure	30

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.

Note 2: If the average output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the power in any 100 kHz outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum measured in-band average PSD level.

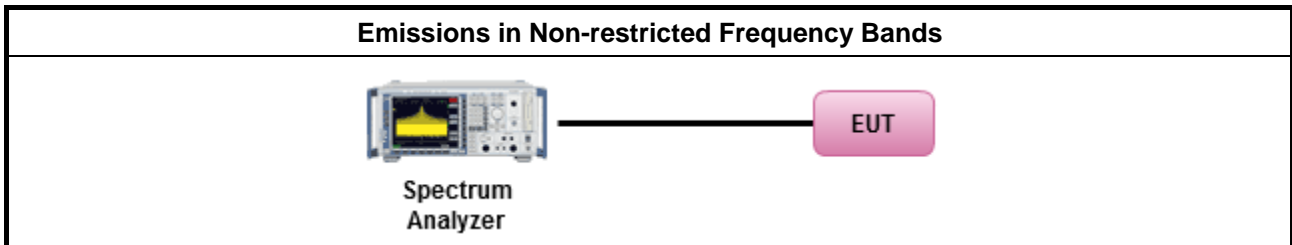
3.5.2 Measuring Instruments

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"> Refer as FCC KDB 558074, clause 8.5 for unwanted emissions into non-restricted bands.

3.5.4 Test Setup



3.5.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix E



3.6 Emissions in Restricted Frequency Bands

3.6.1 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.

3.6.2 Measuring Instruments

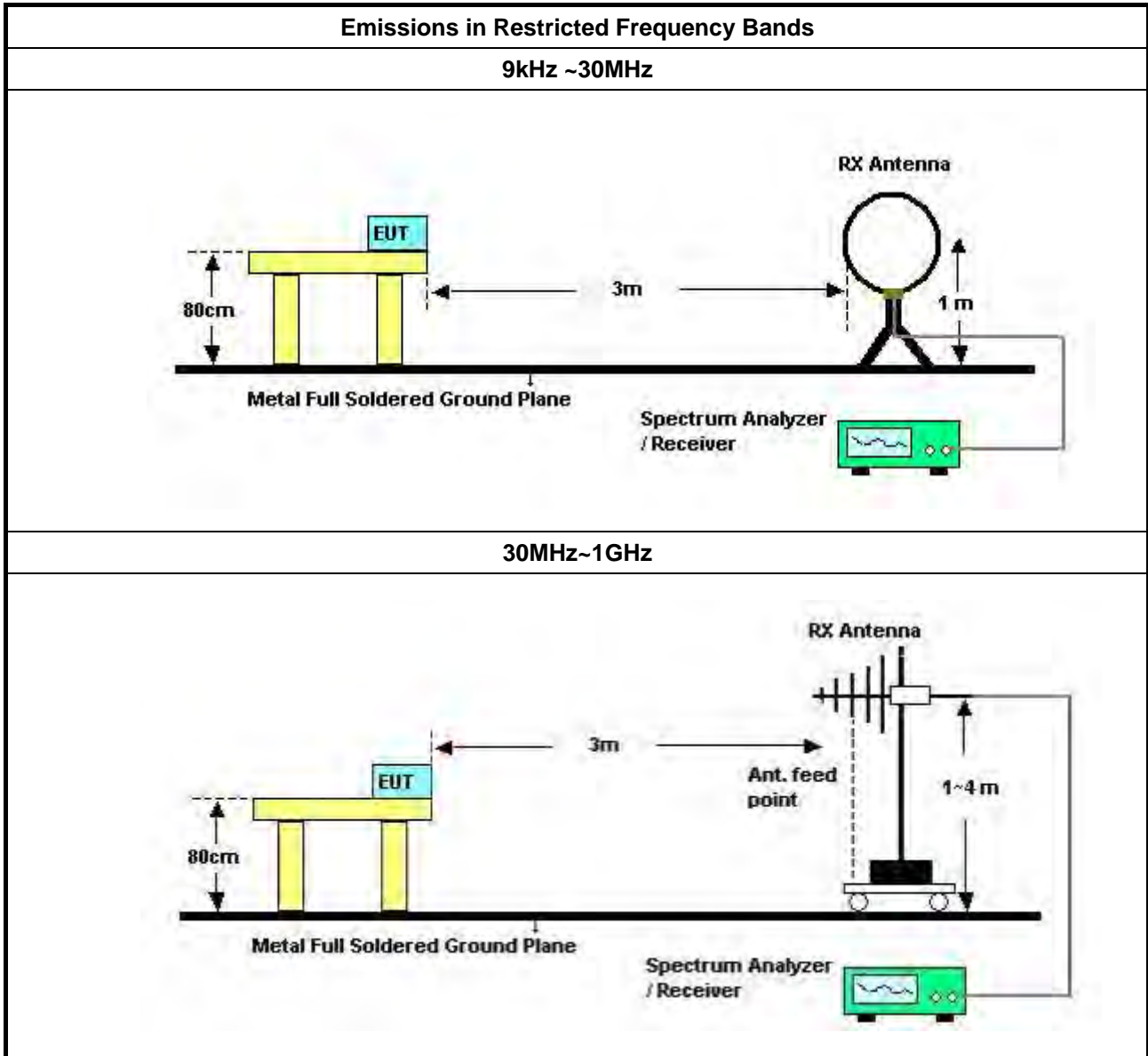
Refer a test equipment and calibration data table in this test report.

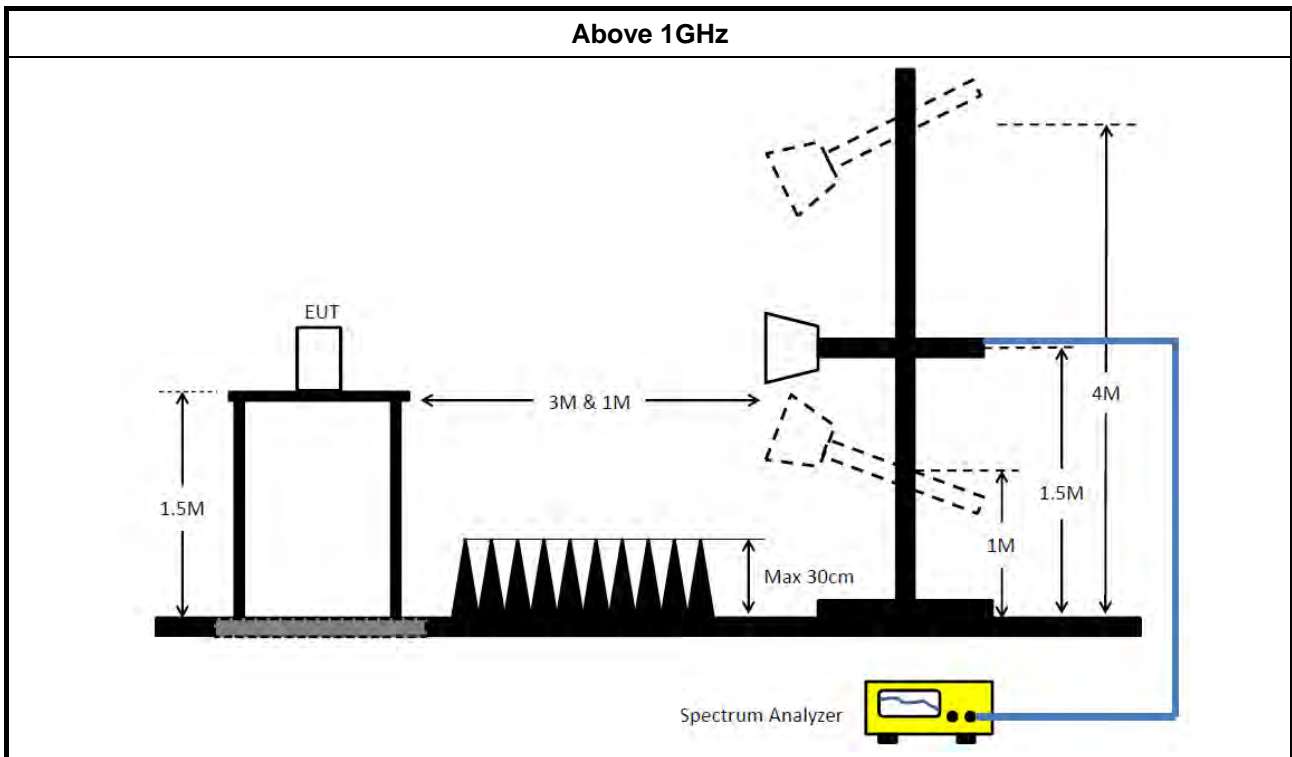


3.6.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> ▪ The average emission levels shall be measured in [duty cycle \geq 98 or 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 FCC KDB 558074, clause 8.6 for unwanted emissions into restricted bands.
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.1(trace averaging for duty cycle \geq 98%).
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.2(trace averaging + duty factor).
	<input checked="" type="checkbox"/> Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.3(Reduced VBW \geq 1/T).
	<input type="checkbox"/> Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW \geq 1/T, where T is pulse time.
	<input type="checkbox"/> Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.
	<input checked="" type="checkbox"/> Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.4 measurement procedure peak limit.
<ul style="list-style-type: none"> ▪ For the transmitter band-edge emissions shall be measured using following options below: 	
	<ul style="list-style-type: none"> ▪ Refer as FCC KDB 558074 clause 8.7 & c63.10 clause 11.13.1, When the performing peak or average radiated measurements, emissions within 2 MHz of the authorized band edge may be measured using the marker-delta method described below.
	<ul style="list-style-type: none"> ▪ Refer as FCC KDB 558074, clause 8.7 (ANSI C63.10, clause 6.10.6) for marker-delta method for band-edge measurements.
	<ul style="list-style-type: none"> ▪ Refer as FCC KDB 558074, clause 8.7 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).
	<ul style="list-style-type: none"> ▪ For conducted unwanted emissions into restricted bands (absolute emission limits). Devices with multiple transmit chains using options given below: (1) Measure and sum the spectra across the outputs or (2) Measure and add 10 log(N) dB
	<ul style="list-style-type: none"> ▪ For FCC KDB 662911 The methodology described here may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance may be demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred.

3.6.4 Test Setup





3.6.5 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.

3.6.6 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.

3.6.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F



4 Test Equipment and Calibration Data

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
LISN	Schwarzbeck	NSLK 8127	8127650	9kHz ~ 30MHz	Dec. 04, 2020	Dec. 03, 2021	Conduction (CO02-CB)
LISN	Schwarzbeck	NSLK 8127	8127478	9kHz ~ 30MHz	Nov. 20, 2020	Nov. 19, 2021	Conduction (CO02-CB)
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.4GHz	Mar. 03, 2021	Mar. 02, 2022	Conduction (CO02-CB)
Pulse Limiter	Schwarzbeck	VTSD 9561F-N	00378	9kHz ~ 30MHz	Mar. 18, 2021	Mar. 17, 2022	Conduction (CO02-CB)
COND Cable	Woken	Cable	2	0.15MHz ~ 30MHz	Oct. 20, 2020	Oct. 19, 2021	Conduction (CO02-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO02-CB)
Loop Antenna	Teseq	HLA 6120	31244	9kHz - 30 MHz	Mar. 16.2021	Mar. 15.2022	Radiation (03CH05-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH05-CB	30 MHz ~ 1 GHz	Aug. 10, 2020	Aug. 09, 2021	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. 28, 2020	Apr. 27, 2021	Radiation (03CH05-CB)
Spectrum Analyzer	R&S	FSP40	100304	9kHz ~ 40GHz	Nov. 10, 2020	Nov. 09, 2021	Radiation (03CH05-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	May 13, 2020	May 12, 2021	Radiation (03CH05-CB)
RF Cable-low	Woken	RG402	Low Cable-04+23	30MHz~1GHz	Oct. 05, 2020	Oct. 04, 2021	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. 28, 2020	Mar. 27, 2021	Radiation (03CH02-CB)
Horn Antenna	EMCO	3115	9610-4976	1GHz ~ 18GHz	Apr. 21, 2020	Apr. 20, 2021	Radiation (03CH02-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 21, 2020	Jul. 20, 2021	Radiation (03CH02-CB)
Pre-Amplifier	Agilent	83017A	MY39501305	1GHz ~ 26.5GHz	Jul. 13, 2020	Jul. 12, 2021	Radiation (03CH02-CB)
Pre-Amplifier	MITEQ	TTA1840-35-H G	1864479	18GHz ~ 40GHz	Jul. 08, 2020	Jul. 07, 2021	Radiation (03CH02-CB)
Spectrum analyzer	R&S	FSU	100015	9kHz~26GHz	Oct. 15, 2020	Oct. 14, 2021	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-18	1GHz ~ 18GHz	Oct. 05, 2020	Oct. 04, 2021	Radiation (03CH02-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-18+19	1GHz ~ 18GHz	Oct. 05, 2020	Oct. 04, 2021	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 16, 2020	Jul. 15, 2021	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 16, 2020	Jul. 15, 2021	Radiation (03CH02-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH02-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	May 05, 2020	May 04, 2021	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-06	1 GHz – 26.5 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-07	1 GHz –26.5 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-08	1 GHz –26.5 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-09	1 GHz –26.5 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz –26.5 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-30	1 GHz –26.5 GHz	Oct. 05, 2020	Oct. 04, 2021	Conducted (TH01-CB)
Power Sensor	Agilent	E9327A	US40442088	50MHz~18GHz	Feb. 23, 2021	Feb. 22, 2022	Conducted (TH01-CB)
Power Meter	Agilent	E4416A	GB41291199	50MHz~18GHz	Feb. 23, 2021	Feb. 22, 2022	Conducted (TH01-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH01-CB)

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

N.C.R. means Non-Calibration required.

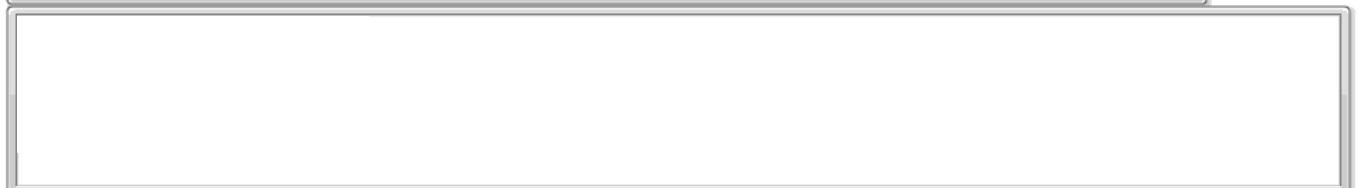
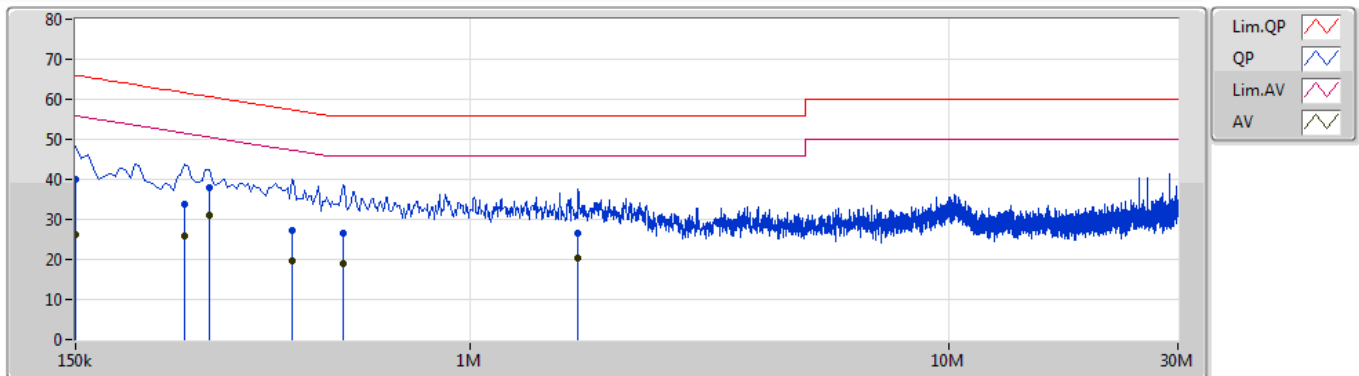


Summary

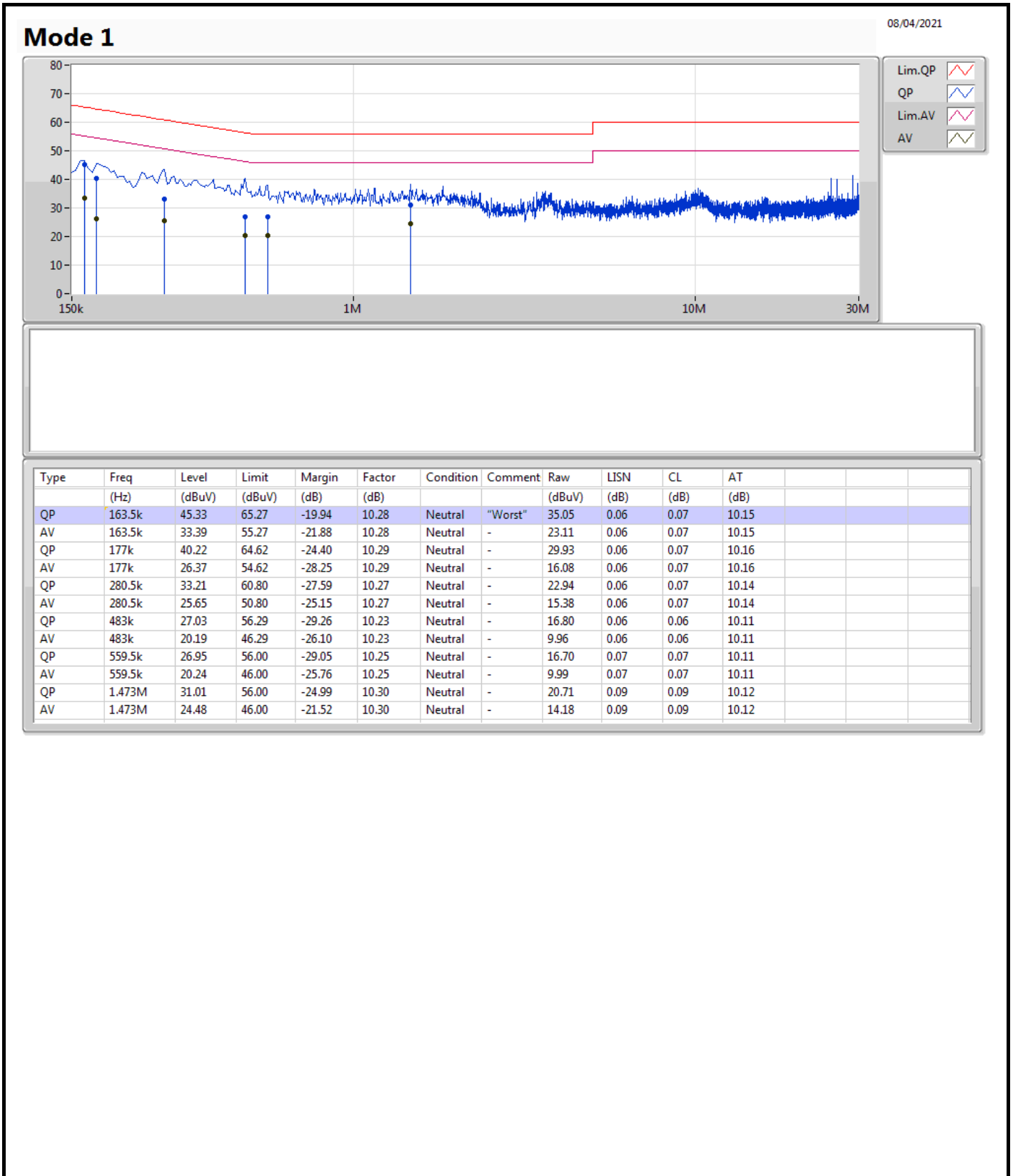
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	285k	31.04	50.67	-19.63	Line

Mode 1

08/04/2021



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	150k	39.92	66.00	-26.08	10.29	Line	-	29.63	0.07	0.07	10.15
AV	150k	26.09	56.00	-29.91	10.29	Line	-	15.80	0.07	0.07	10.15
QP	253.5k	33.74	61.64	-27.90	10.28	Line	-	23.46	0.07	0.07	10.14
AV	253.5k	25.93	51.64	-25.71	10.28	Line	-	15.65	0.07	0.07	10.14
QP	285k	37.77	60.67	-22.90	10.27	Line	-	27.50	0.08	0.06	10.13
AV	285k	31.04	50.67	-19.63	10.27	Line	"Worst"	20.77	0.08	0.06	10.13
QP	424.5k	27.08	57.36	-30.28	10.25	Line	-	16.83	0.08	0.06	10.11
AV	424.5k	19.76	47.36	-27.60	10.25	Line	-	9.51	0.08	0.06	10.11
QP	541.5k	26.47	56.00	-29.53	10.26	Line	-	16.21	0.08	0.07	10.11
AV	541.5k	19.01	46.00	-26.99	10.26	Line	-	8.75	0.08	0.07	10.11
QP	1.68M	26.61	56.00	-29.39	10.31	Line	-	16.30	0.10	0.09	10.12
AV	1.68M	20.20	46.00	-25.80	10.31	Line	-	9.89	0.10	0.09	10.12



Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
BT-LE(1Mbps)	677.5k	1.027M	1M03F1D	671.25k	1.026M
BT-LE(2Mbps)	1.165M	2.044M	2M04F1D	1.16M	2.044M

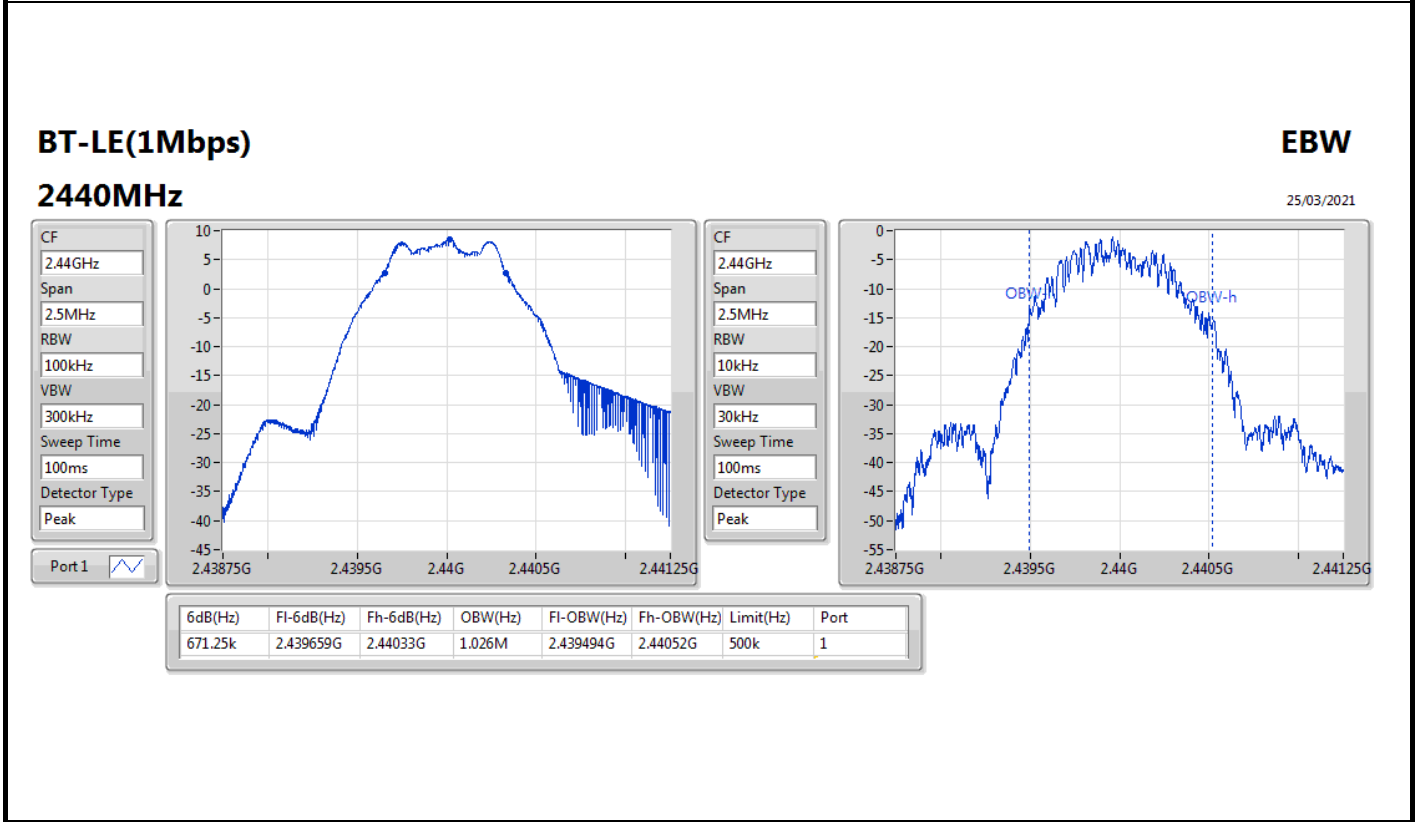
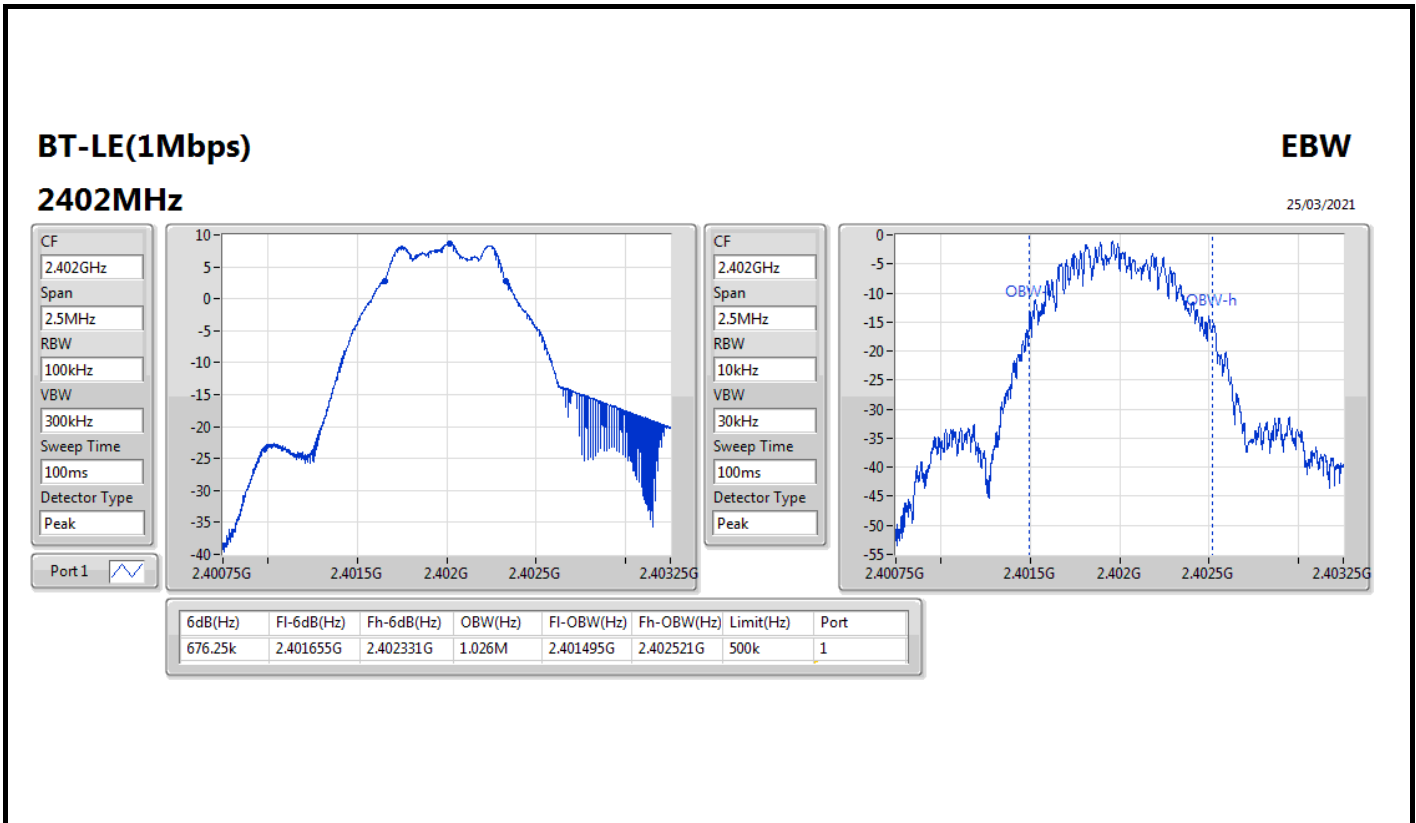
Max-N dB = Maximum 6dB down bandwidth; **Max-OBW** = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; **Min-OBW** = Minimum 99% occupied bandwidth;

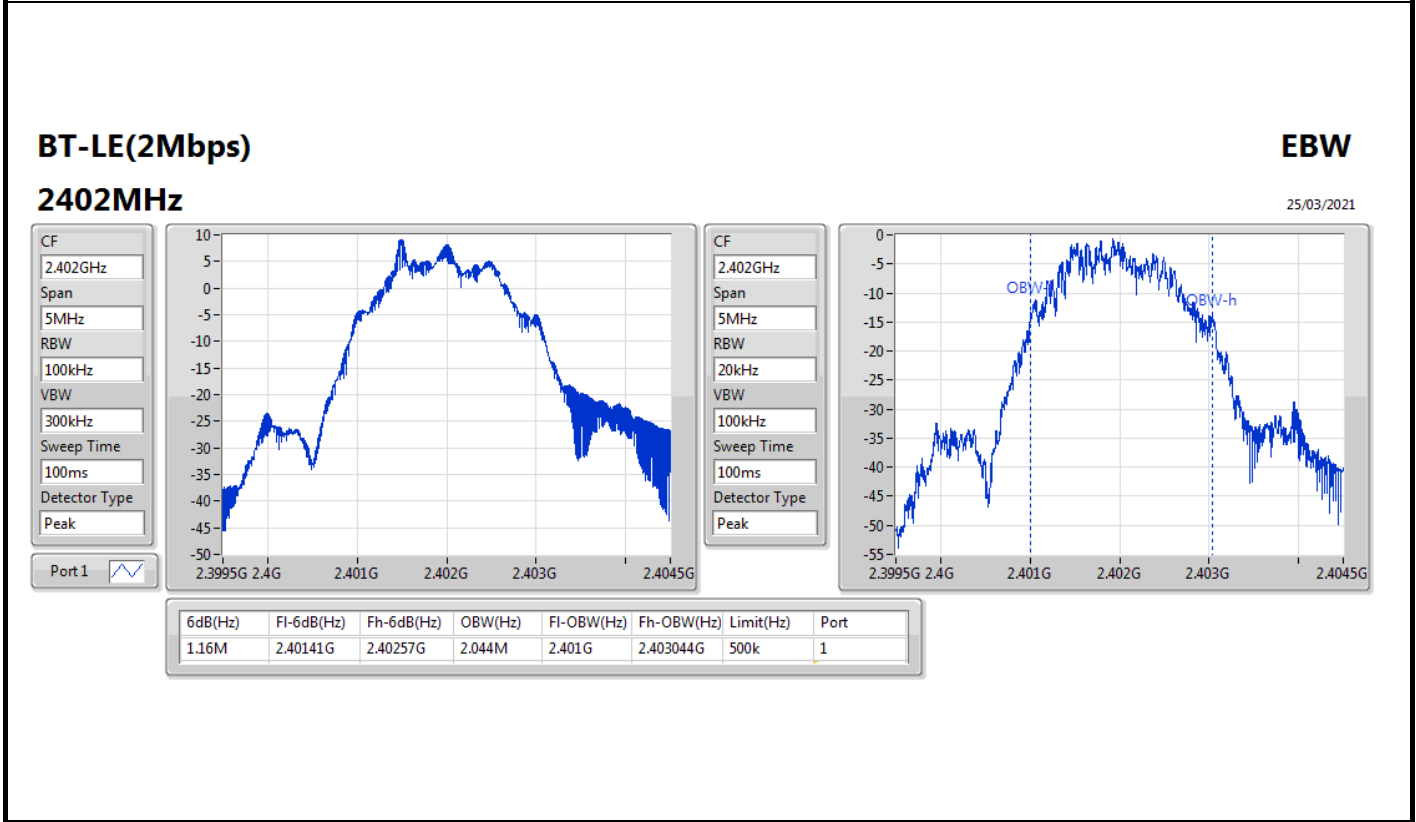
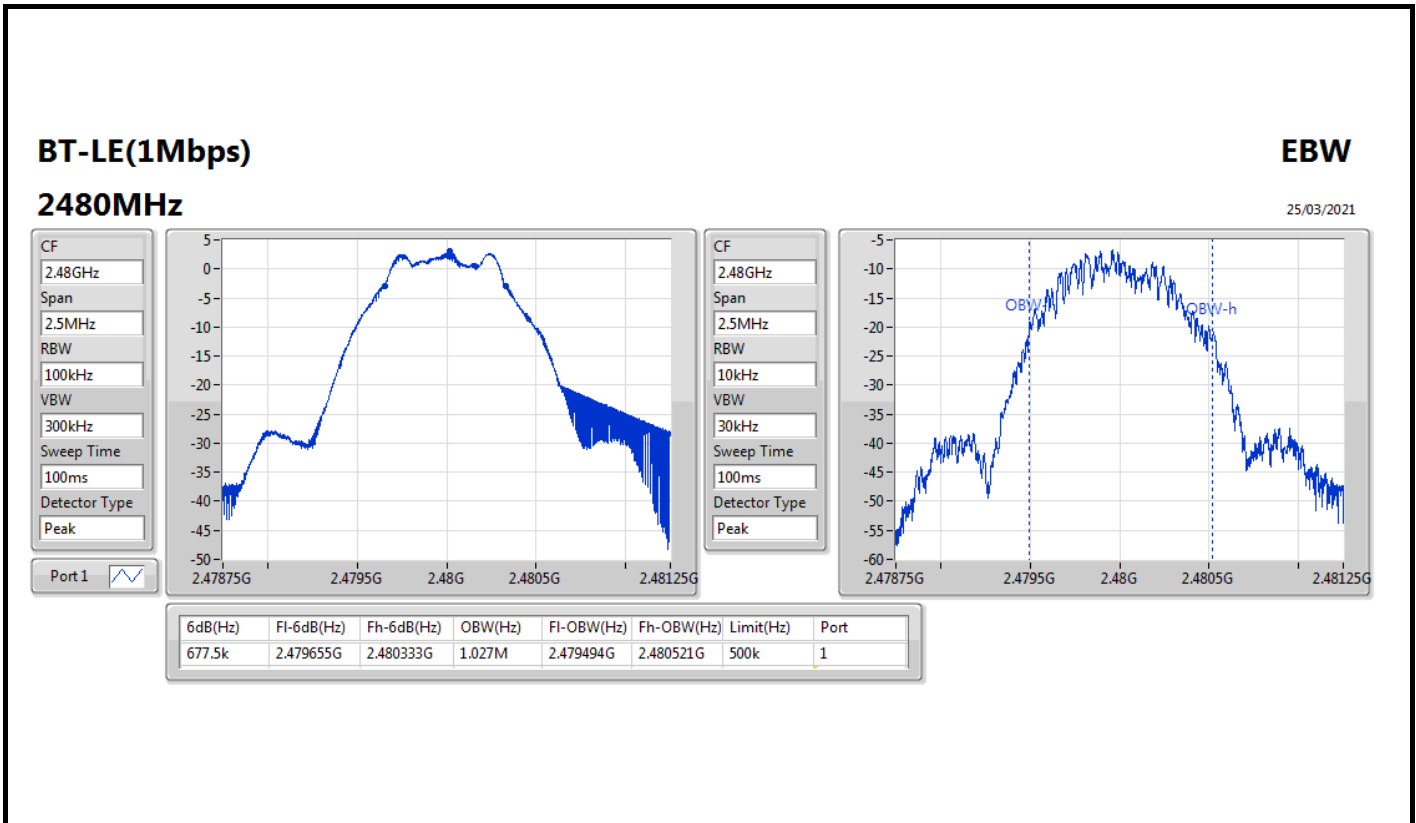


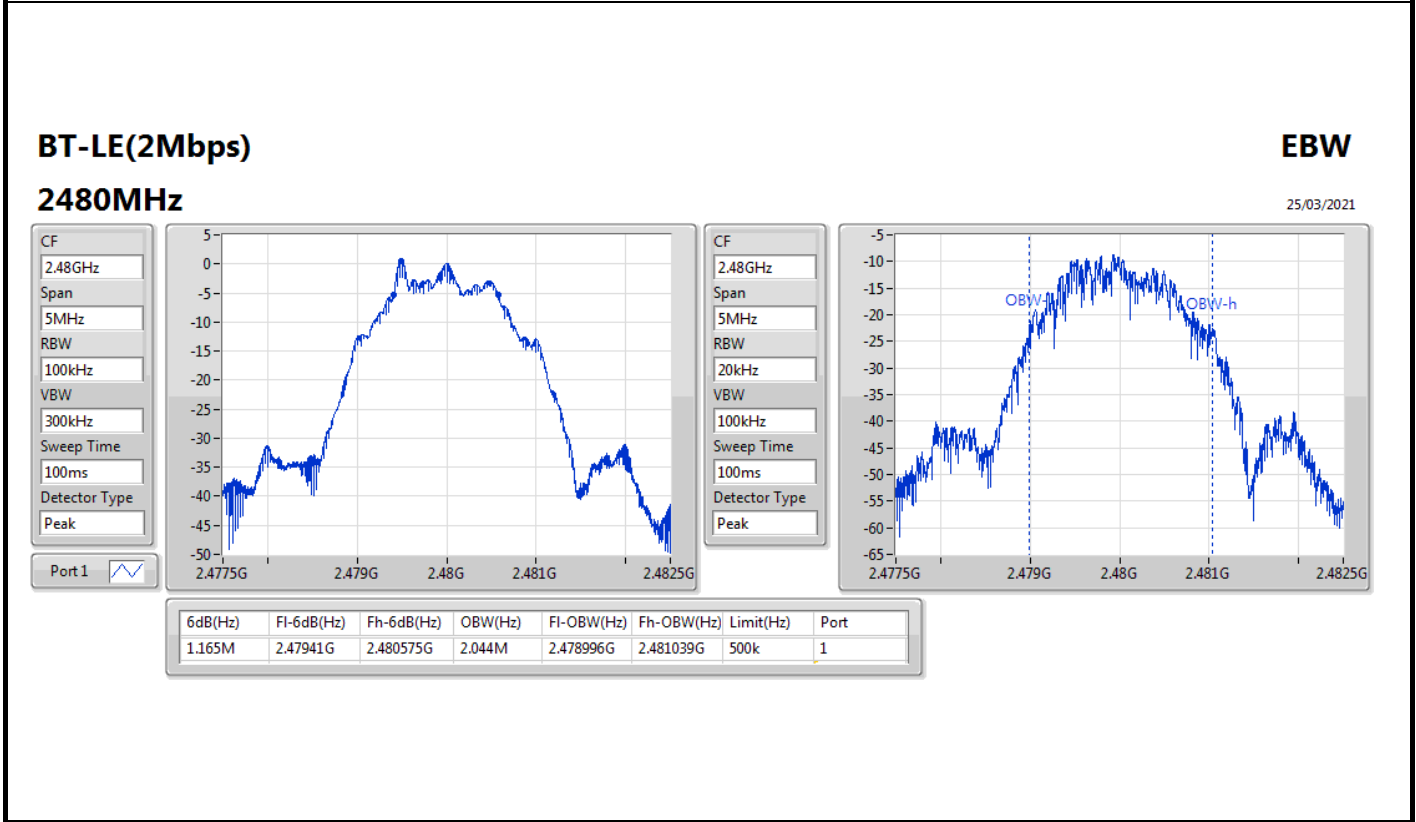
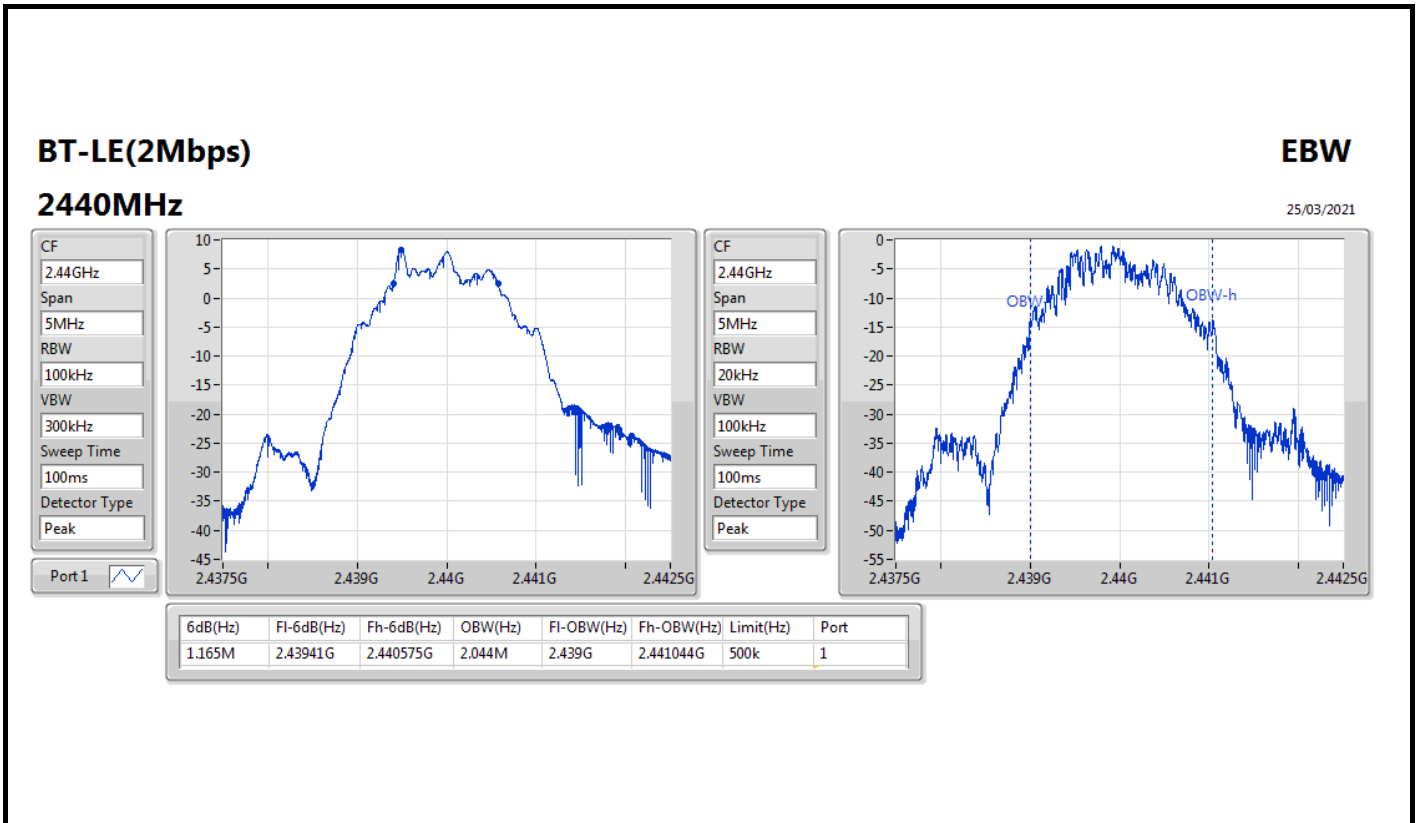
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	500k	676.25k	1.026M
2440MHz	Pass	500k	671.25k	1.026M
2480MHz	Pass	500k	677.5k	1.027M
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	500k	1.16M	2.044M
2440MHz	Pass	500k	1.165M	2.044M
2480MHz	Pass	500k	1.165M	2.044M

Port X-N dB = Port X 6dB down bandwidth; Port X-OBW = Port X 99% occupied bandwidth;









Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-LE(1Mbps)	8.59	0.00723
BT-LE(2Mbps)	8.47	0.00703



Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	3.20	8.42	30.00
2440MHz	Pass	3.20	8.59	30.00
2478MHz	Pass	3.20	8.35	30.00
2480MHz	Pass	3.20	2.92	30.00
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	3.20	8.47	30.00
2440MHz	Pass	3.20	8.16	30.00
2478MHz	Pass	3.20	8.15	30.00
2480MHz	Pass	3.20	0.43	30.00

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



Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
BT-LE(1Mbps)	-6.70
BT-LE(2Mbps)	-9.50

RBW=3 kHz.

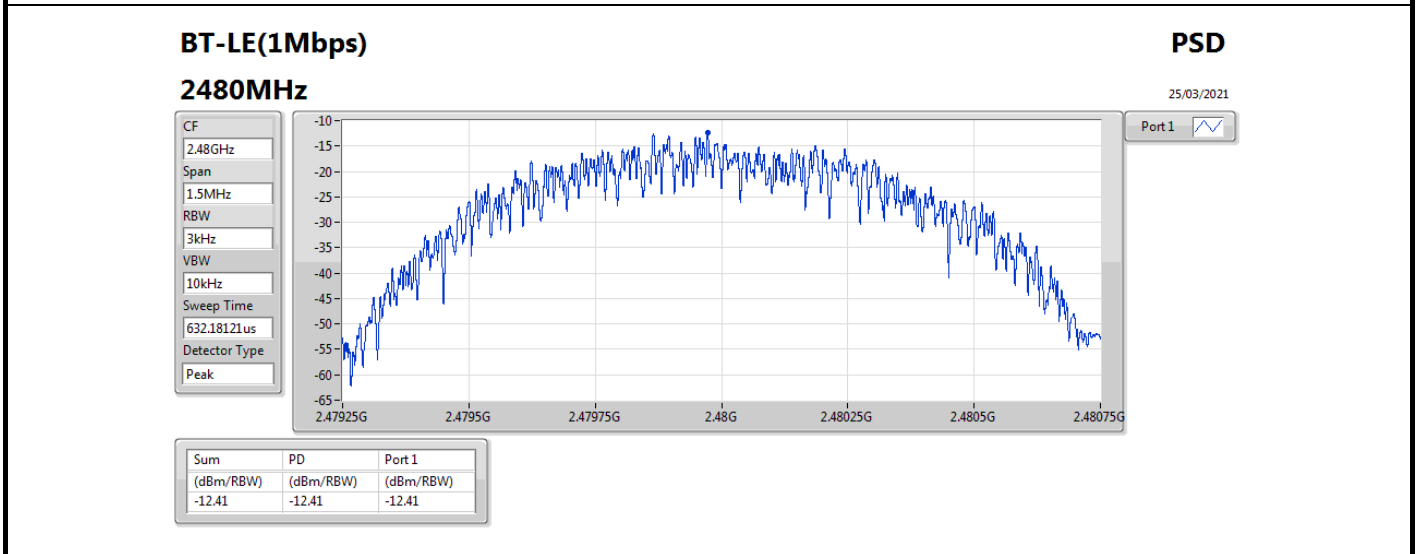
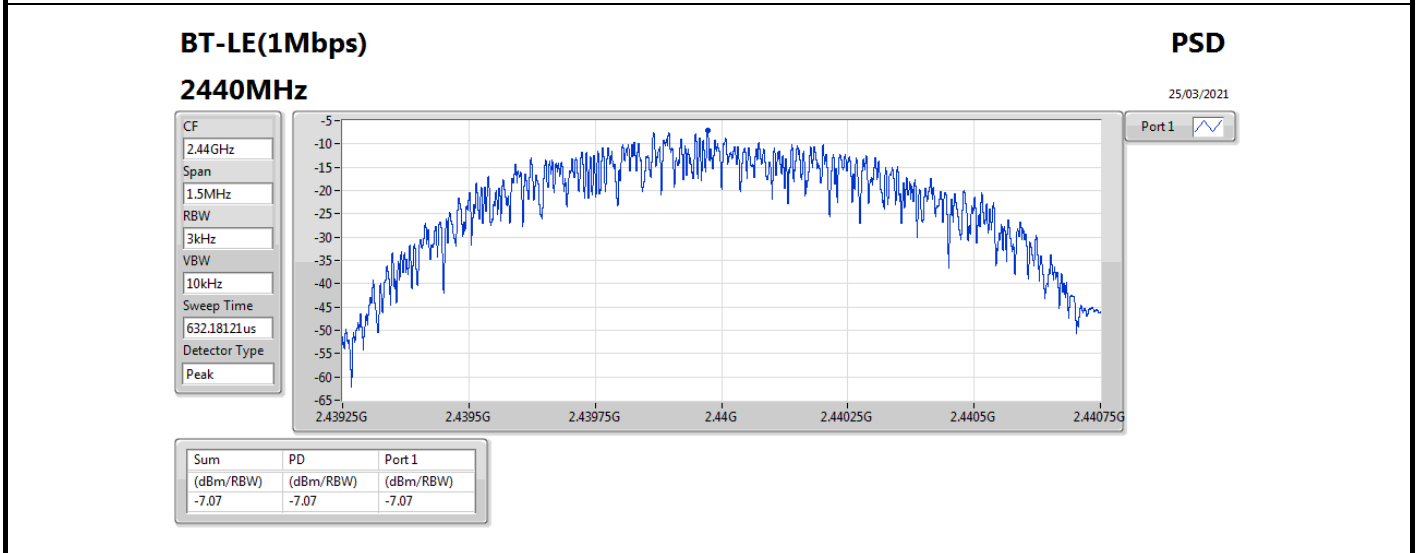
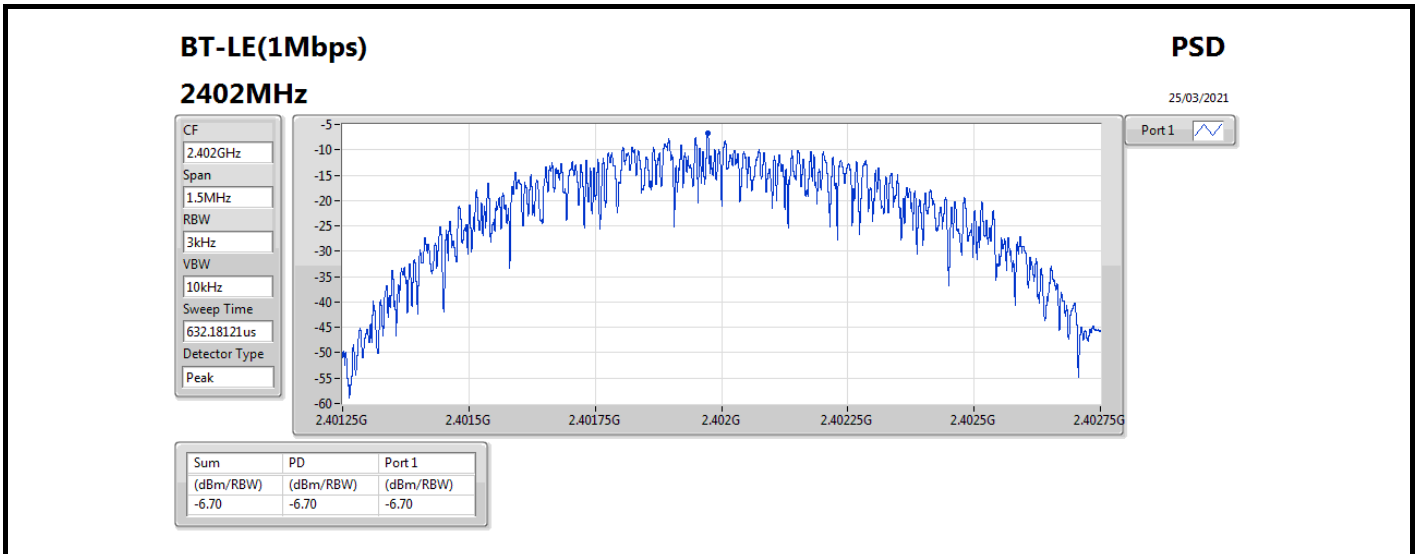


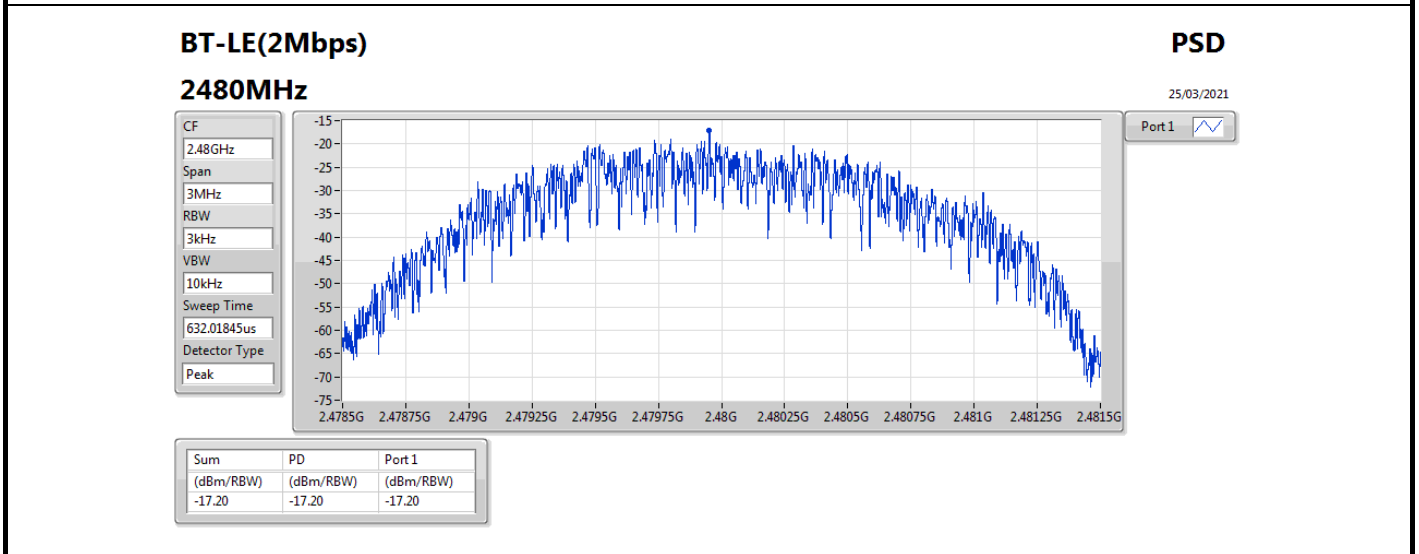
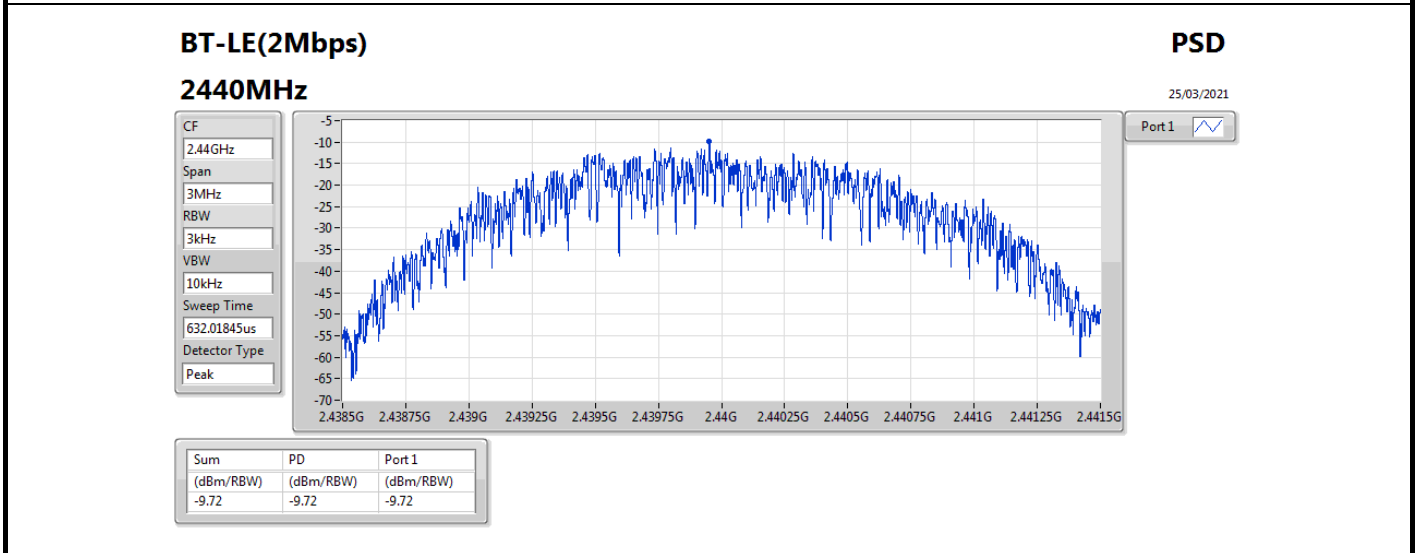
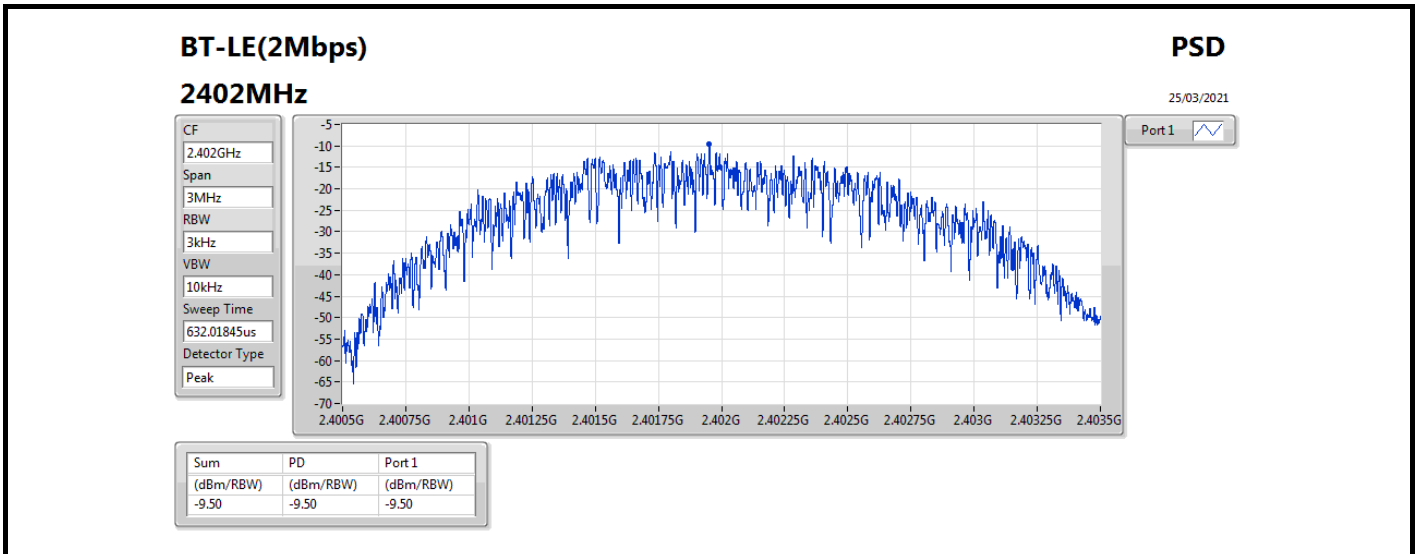
Result

Mode	Result	Gain (dBi)	PD (dBm/RBW)	PD Limit (dBm/RBW)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	3.20	-6.70	8.00
2440MHz	Pass	3.20	-7.07	8.00
2480MHz	Pass	3.20	-12.41	8.00
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	3.20	-9.50	8.00
2440MHz	Pass	3.20	-9.72	8.00
2480MHz	Pass	3.20	-17.20	8.00

DG = Directional Gain; RBW=3 kHz;

PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X power density;







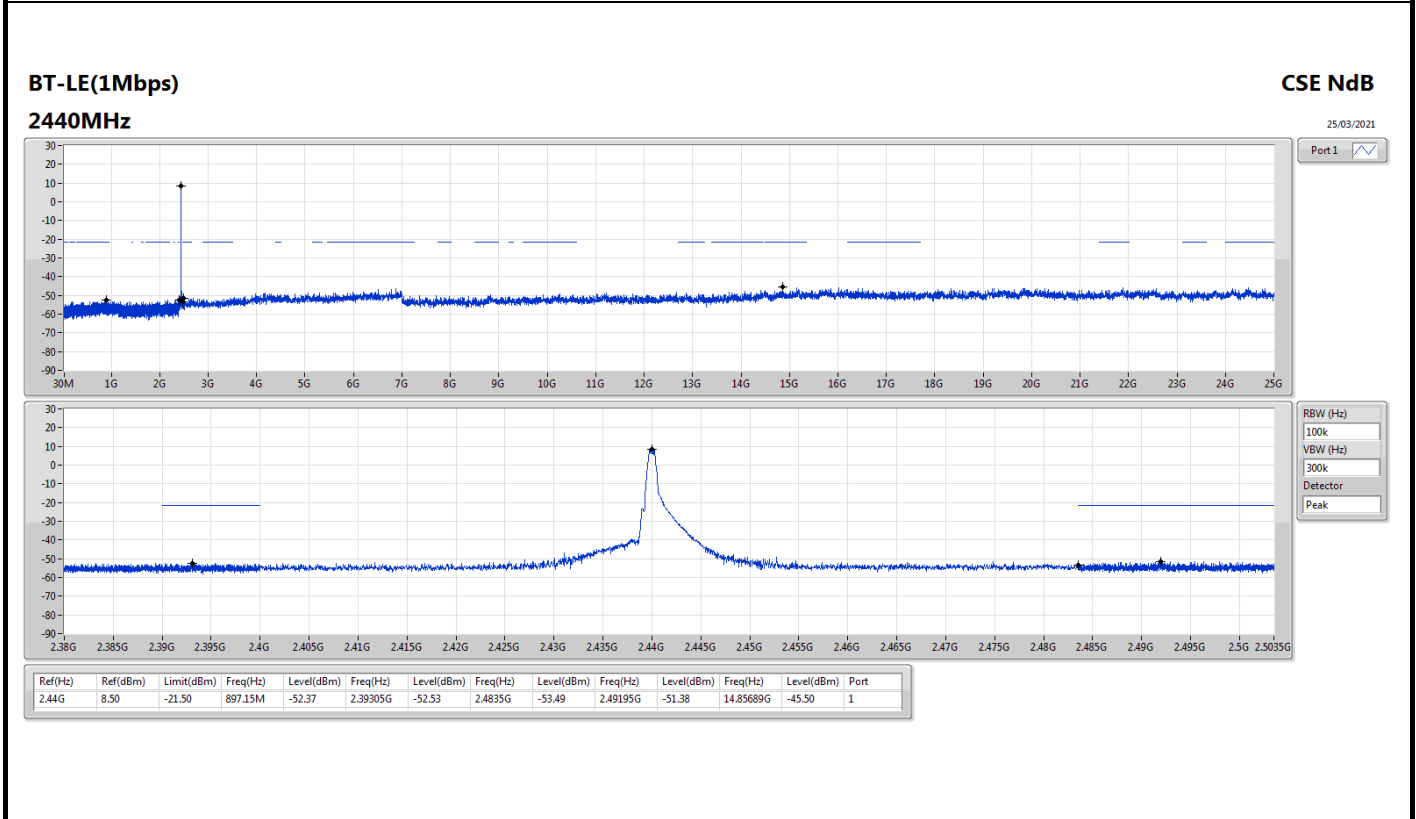
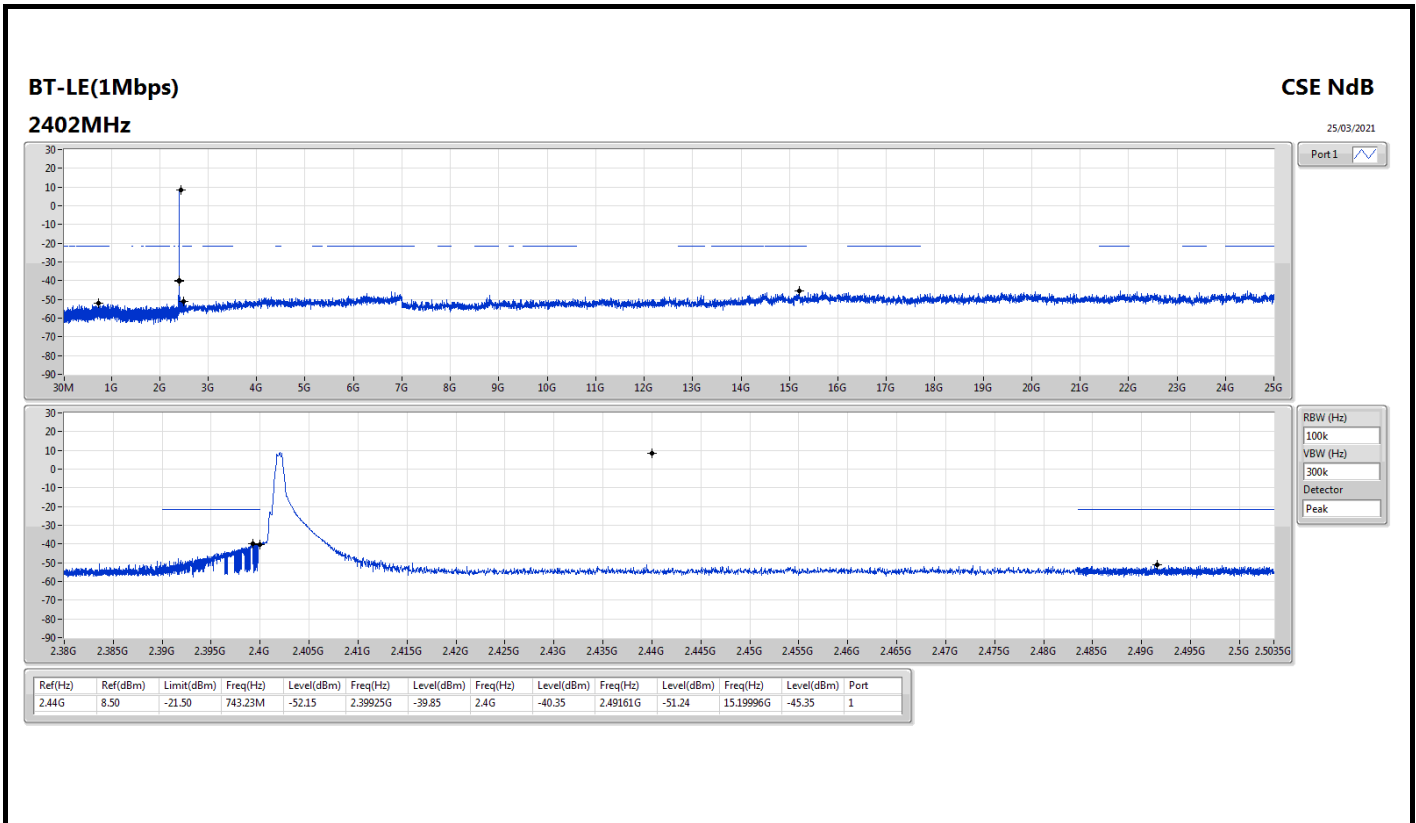
Summary

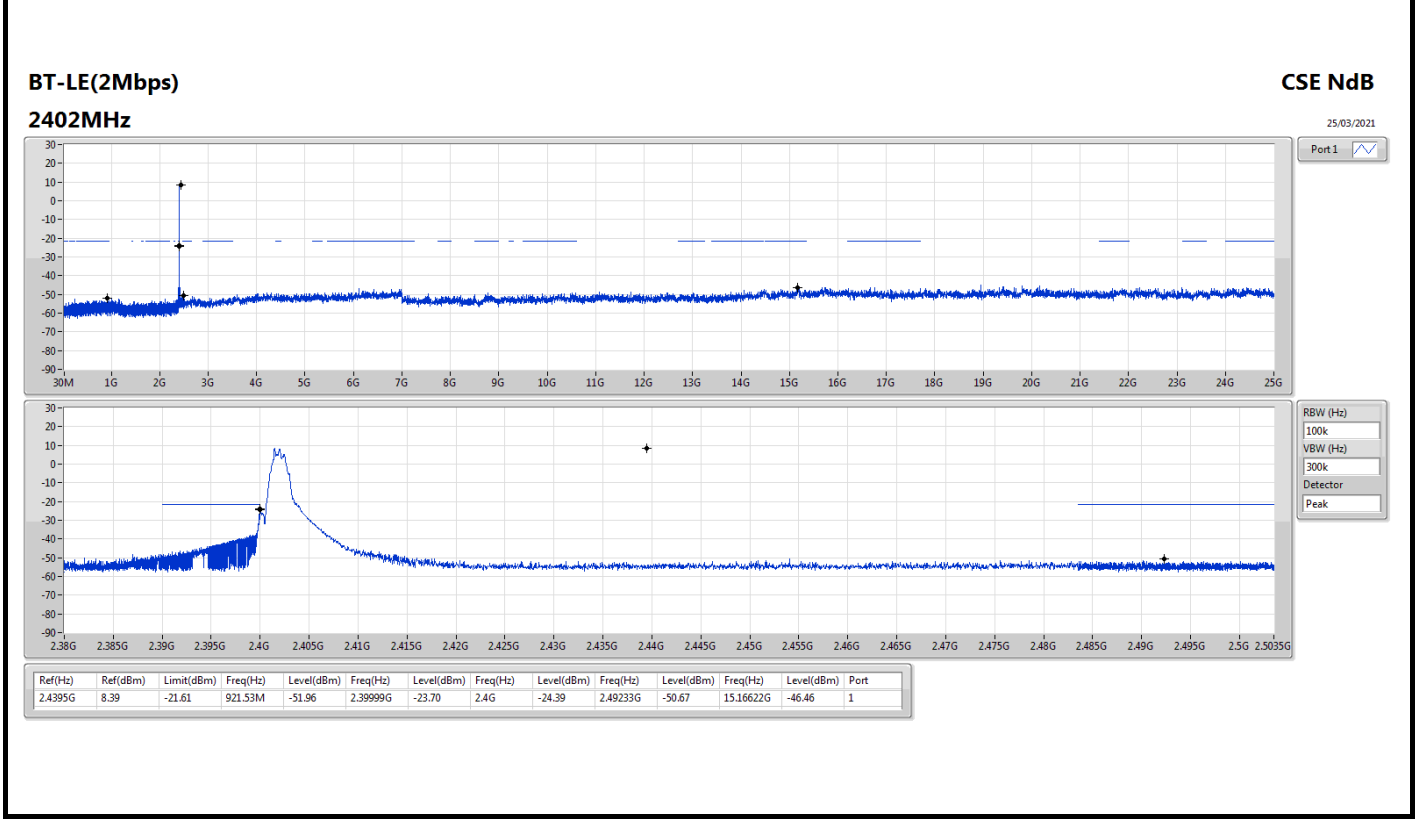
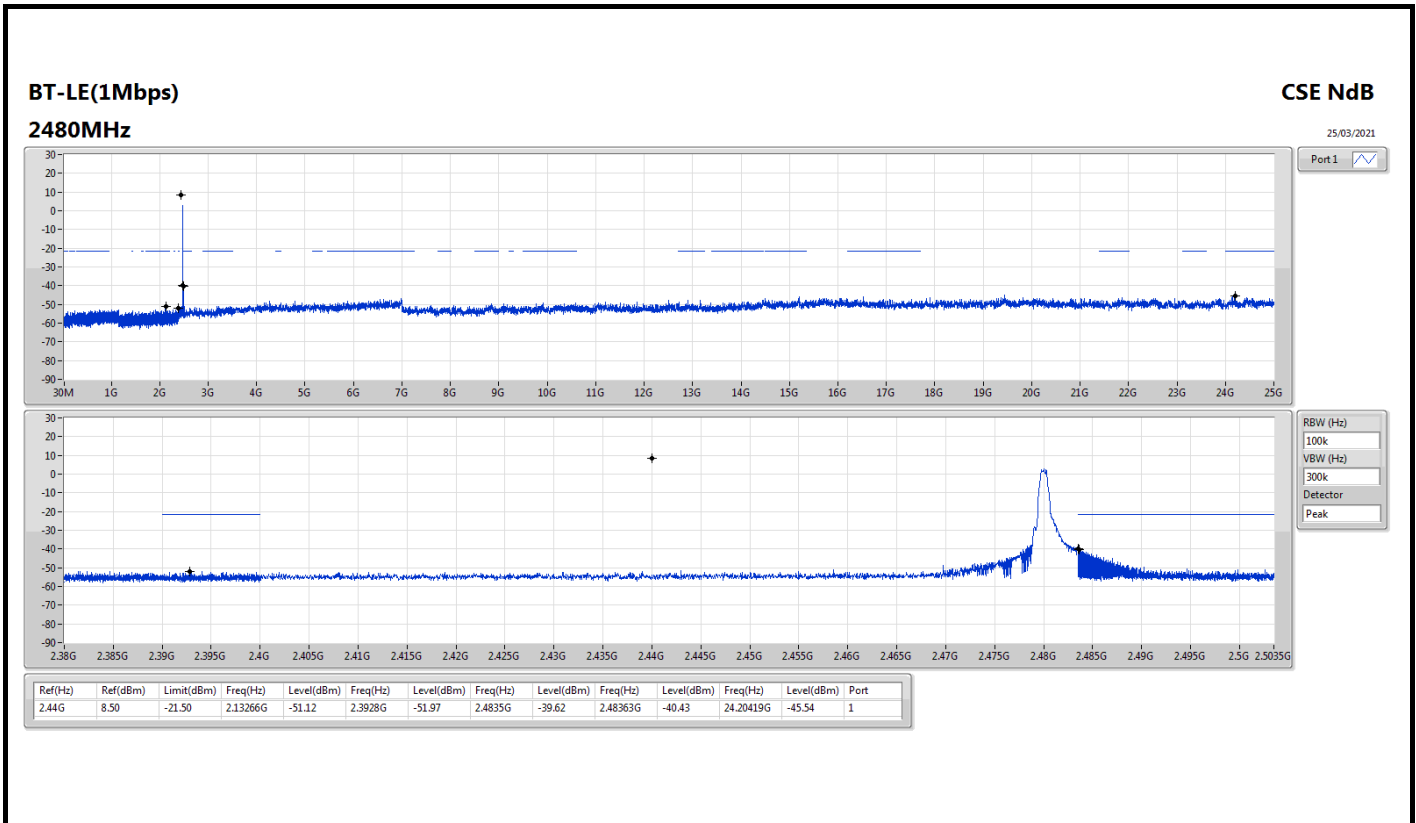
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BT-LE(1Mbps)	Pass	2.44G	8.50	-21.50	2.13266G	-51.12	2.3928G	-51.97	2.4835G	-39.62	2.48363G	-40.43	24.20419G	-45.54	1
BT-LE(2Mbps)	Pass	2.4395G	8.39	-21.61	921.53M	-51.96	2.39999G	-23.70	2.4G	-24.39	2.49233G	-50.67	15.16622G	-46.46	1

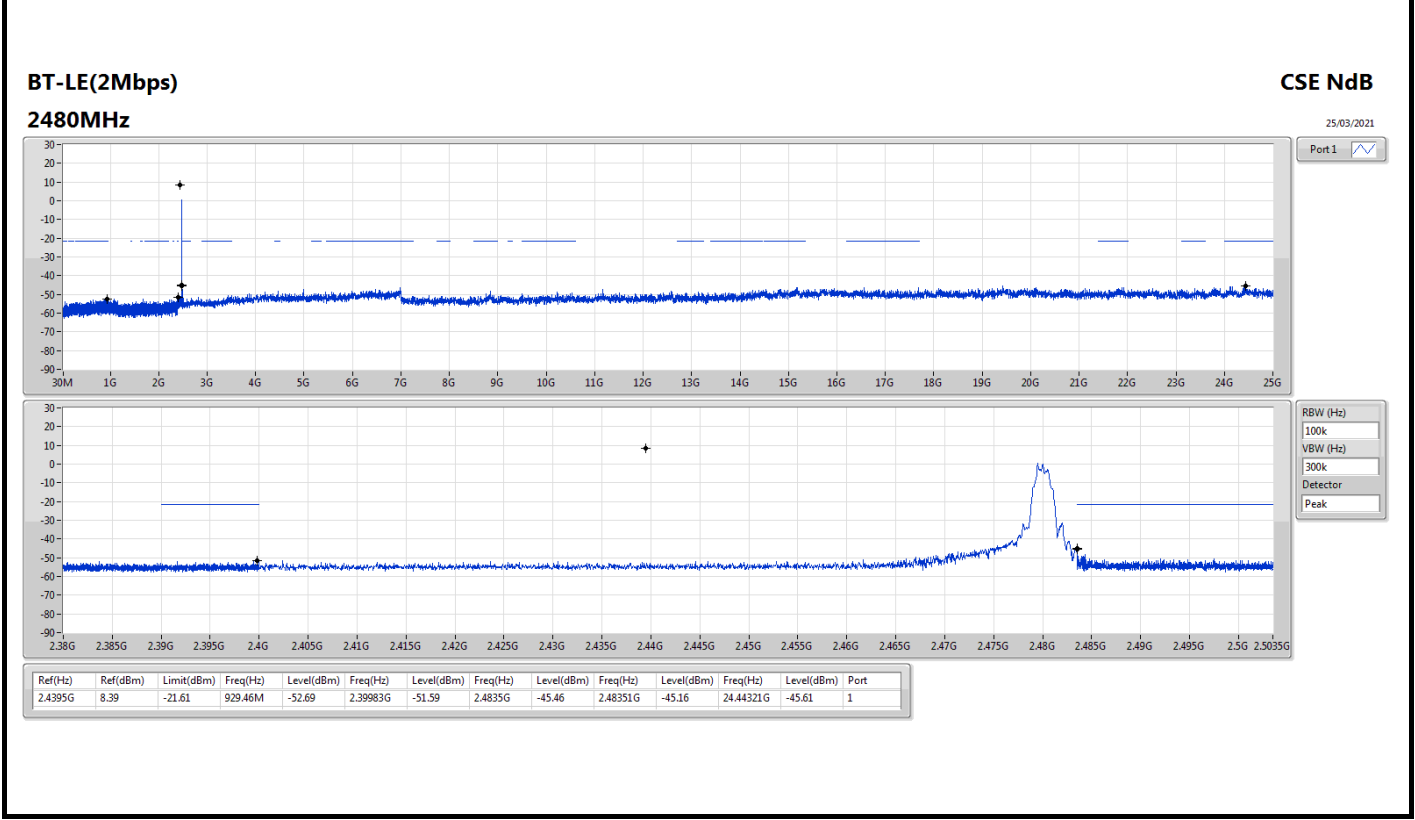
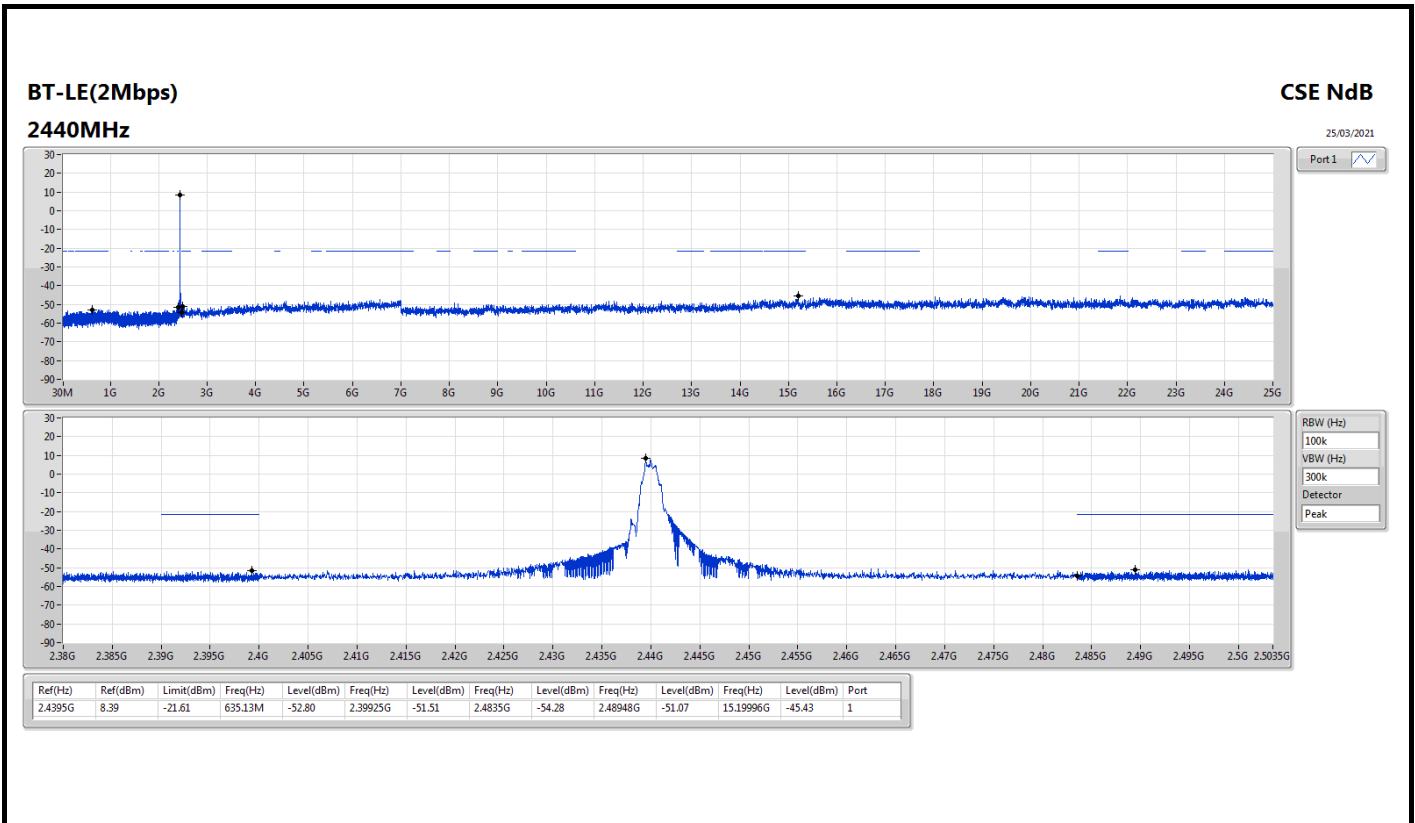


Result

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-LE(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.44G	8.50	-21.50	743.23M	-52.15	2.39925G	-39.85	2.4G	-40.35	2.49161G	-51.24	15.19996G	-45.35	1
2440MHz	Pass	2.44G	8.50	-21.50	897.15M	-52.37	2.39305G	-52.53	2.4835G	-53.49	2.49195G	-51.38	14.85689G	-45.50	1
2480MHz	Pass	2.44G	8.50	-21.50	2.13266G	-51.12	2.3928G	-51.97	2.4835G	-39.62	2.48363G	-40.43	24.20419G	-45.54	1
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.4395G	8.39	-21.61	921.53M	-51.96	2.39999G	-23.70	2.4G	-24.39	2.49233G	-50.67	15.16622G	-46.46	1
2440MHz	Pass	2.4395G	8.39	-21.61	635.13M	-52.80	2.39925G	-51.51	2.4835G	-54.28	2.48948G	-51.07	15.19996G	-45.43	1
2480MHz	Pass	2.4395G	8.39	-21.61	929.46M	-52.69	2.39983G	-51.59	2.4835G	-45.46	2.48351G	-45.16	24.44321G	-45.61	1



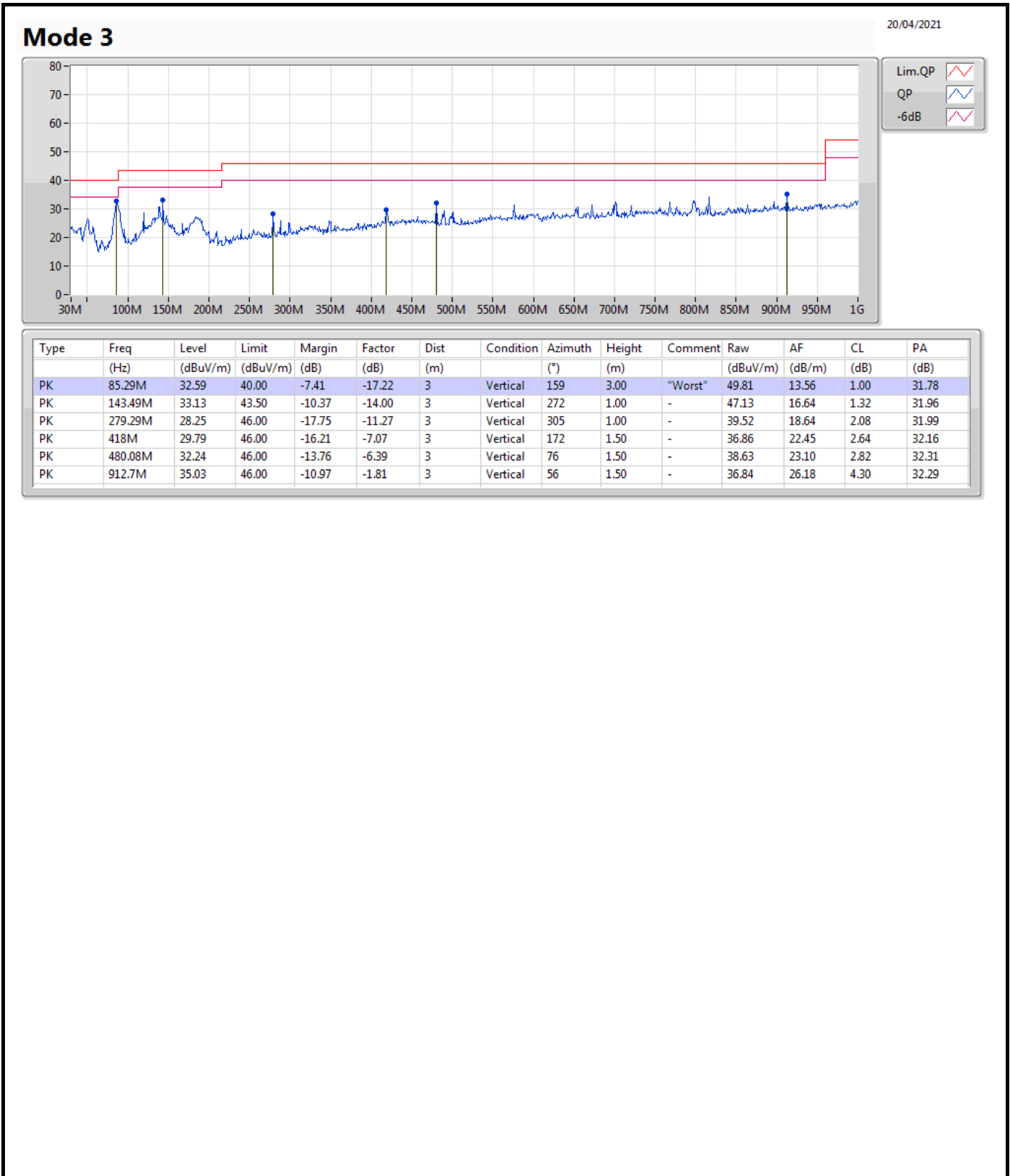


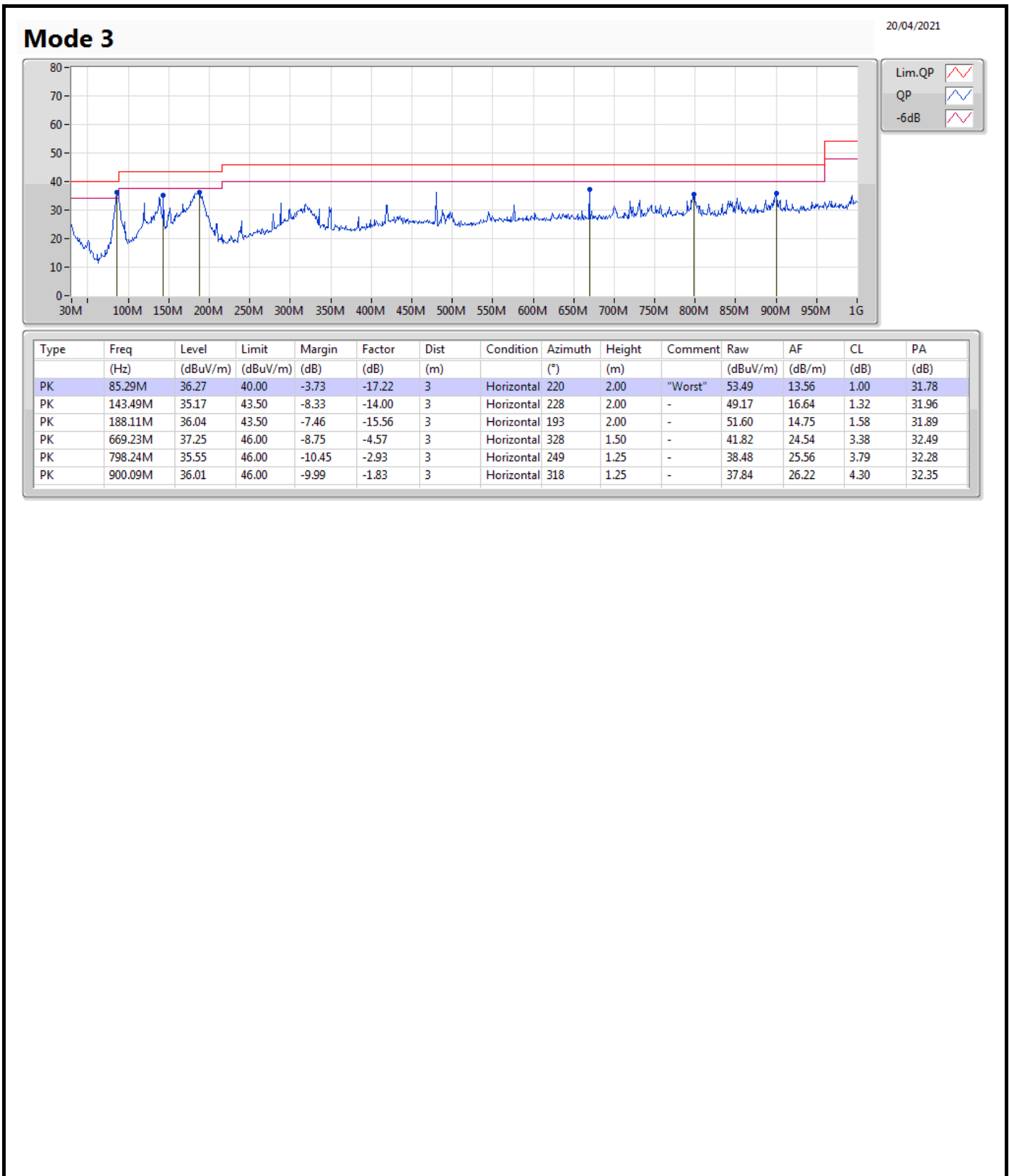




Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 3	Pass	PK	85.29M	36.27	40.00	-3.73	Horizontal







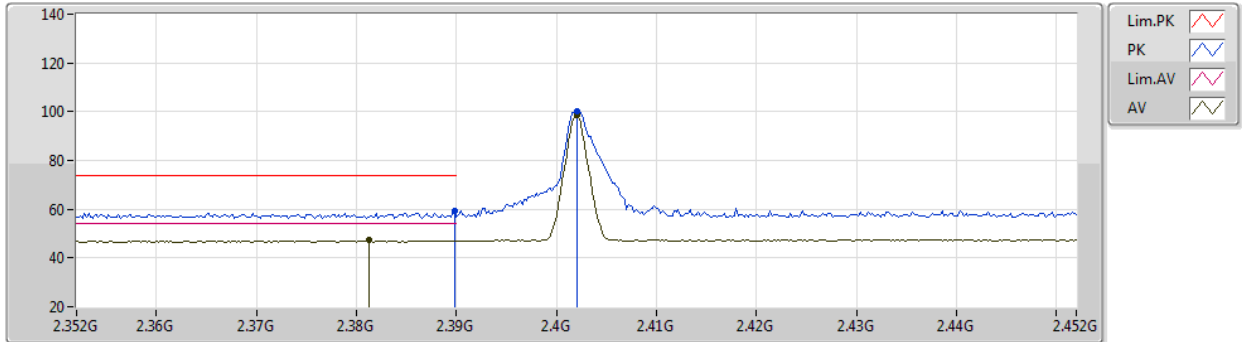
Summary

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-LE(1Mbps)	Pass	PK	2.4835G	72.93	74.00	-1.07	3	Horizontal	159	2.41	-

BT-LE(1Mbps)

16/03/2021

2402MHz_TX



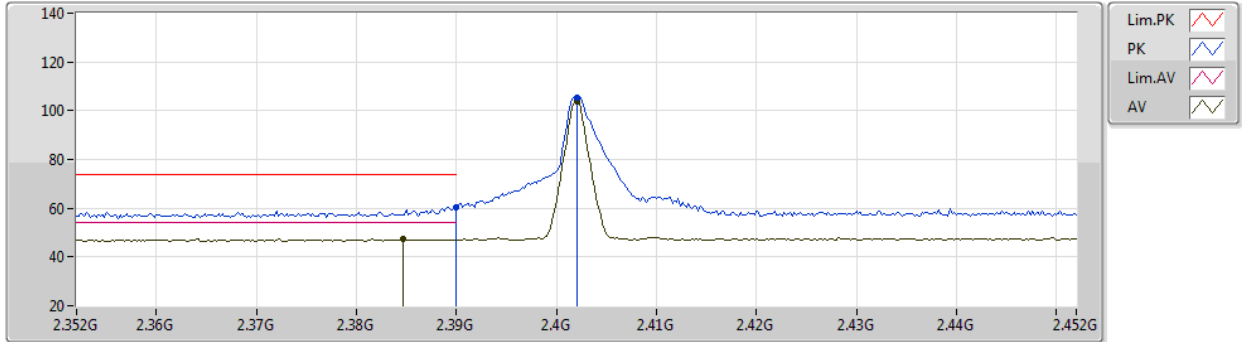
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Setting 10
02-B-R-5

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	2.3898G	59.07	74.00	-14.93	28.36	3	Vertical	73	2.79	-	28.30	2.41	-
AV	2.3812G	47.28	54.00	-6.72	16.57	3	Vertical	73	2.79	-	28.30	2.41	-
PK	2.402G	99.92	Inf	-Inf	69.22	3	Vertical	73	2.79	-	28.30	2.40	-
AV	2.402G	98.44	Inf	-Inf	67.74	3	Vertical	73	2.79	-	28.30	2.40	-

BT-LE(1Mbps)

16/03/2021

2402MHz_TX



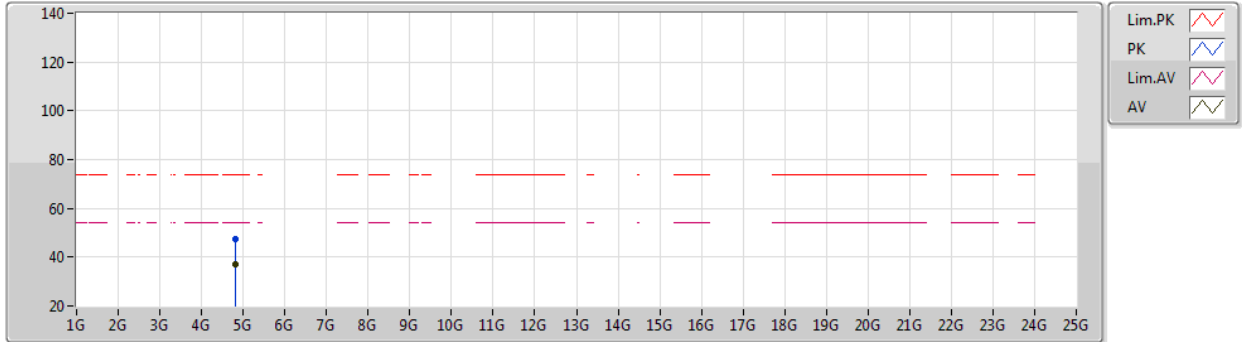
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Setting 10
02-B-R-5

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	60.44	74.00	-13.56	29.73	3	Horizontal	182	2.27	-	28.30	2.41	-
AV	2.3846G	47.59	54.00	-6.41	16.88	3	Horizontal	182	2.27	-	28.30	2.41	-
PK	2.402G	105.39	Inf	-Inf	74.69	3	Horizontal	182	2.27	-	28.30	2.40	-
AV	2.402G	103.93	Inf	-Inf	73.23	3	Horizontal	182	2.27	-	28.30	2.40	-

BT-LE(1Mbps)

16/03/2021

2402MHz_TX



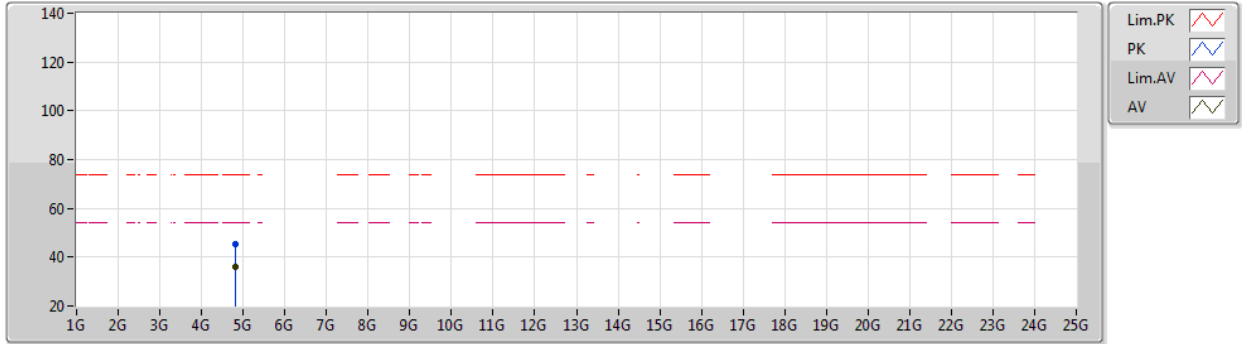
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Setting 10
02-B-R-5

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	4.80408G	47.26	74.00	-26.74	41.51	3	Vertical	336	2.47	-	32.82	4.70	31.77
AV	4.80414G	37.26	54.00	-16.74	31.51	3	Vertical	336	2.47	-	32.82	4.70	31.77

BT-LE(1Mbps)

16/03/2021

2402MHz_TX



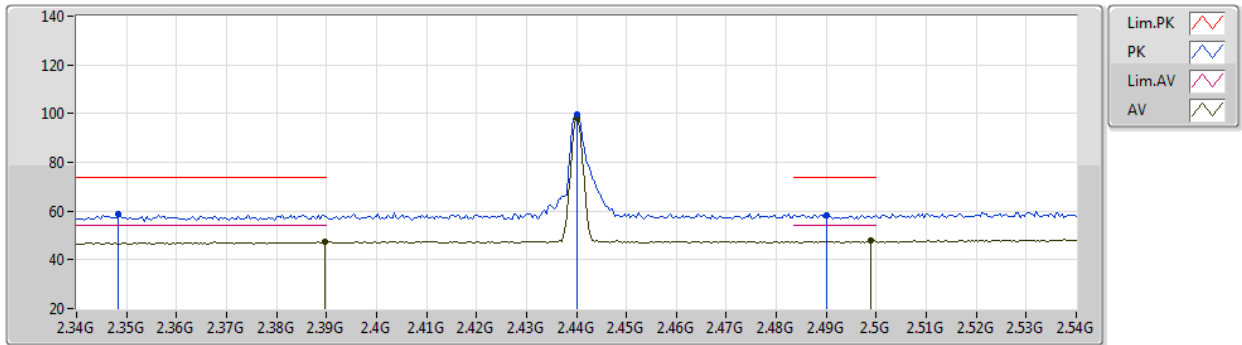
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Setting 10
02-B-R-5

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	4.80454G	45.54	74.00	-28.46	39.79	3	Horizontal	166	2.05	-	32.82	4.70	31.77
AV	4.80398G	35.78	54.00	-18.22	30.03	3	Horizontal	166	2.05	-	32.82	4.70	31.77

BT-LE(1Mbps)

16/03/2021

2440MHz_TX



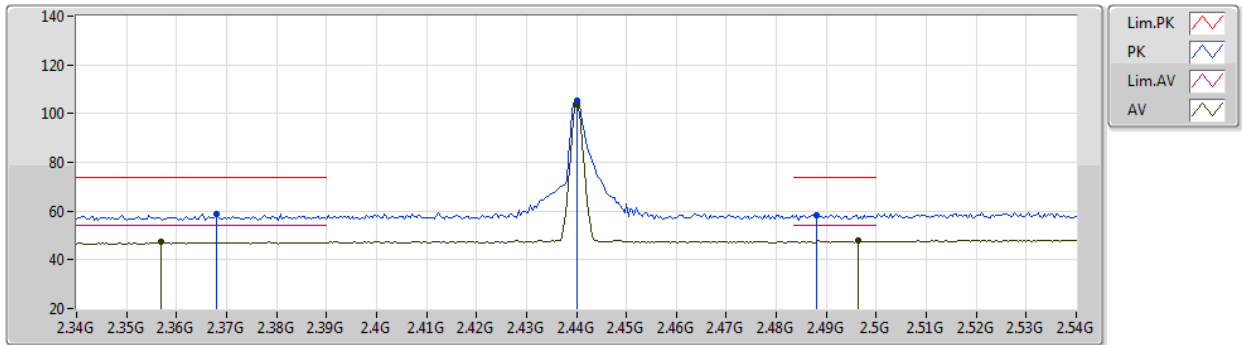
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Setting 10
02-B-R-5

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	2.3484G	58.63	74.00	-15.37	27.91	3	Vertical	85	2.73	-	28.29	2.43	-
AV	2.3896G	47.46	54.00	-6.54	16.75	3	Vertical	85	2.73	-	28.30	2.41	-
PK	2.44G	99.42	Inf	-Inf	68.62	3	Vertical	85	2.73	-	28.38	2.42	-
AV	2.44G	97.91	Inf	-Inf	67.11	3	Vertical	85	2.73	-	28.38	2.42	-
PK	2.49G	58.53	74.00	-15.47	27.53	3	Vertical	85	2.73	-	28.56	2.44	-
AV	2.4988G	47.72	54.00	-6.28	16.67	3	Vertical	85	2.73	-	28.60	2.45	-

BT-LE(1Mbps)

16/03/2021

2440MHz_TX



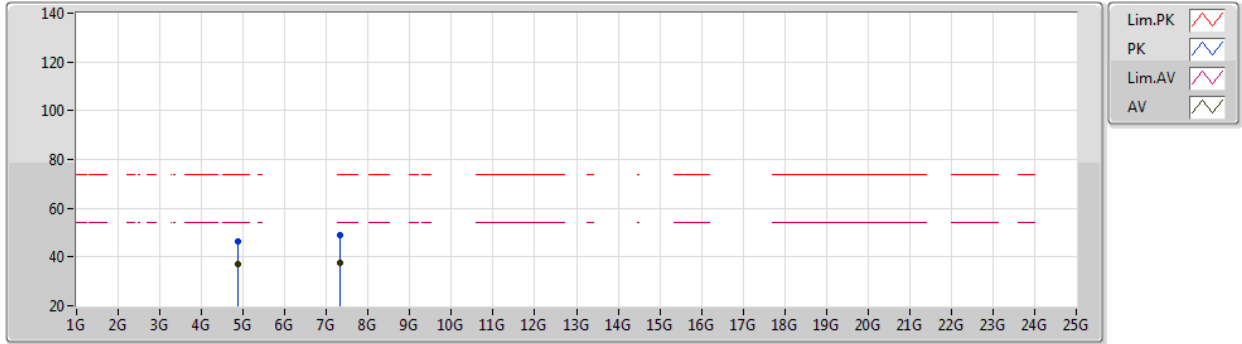
EUT Y_1TX
Setting 10
02-B-R-5

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	2.368G	58.94	74.00	-15.06	28.22	3	Horizontal	197	1.80	-	28.30	2.42	-
AV	2.3568G	47.16	54.00	-6.84	16.44	3	Horizontal	197	1.80	-	28.30	2.42	-
PK	2.44G	105.42	Inf	-Inf	74.62	3	Horizontal	197	1.80	-	28.38	2.42	-
AV	2.44G	103.96	Inf	-Inf	73.16	3	Horizontal	197	1.80	-	28.38	2.42	-
PK	2.488G	58.53	74.00	-15.47	27.54	3	Horizontal	197	1.80	-	28.55	2.44	-
AV	2.4964G	47.77	54.00	-6.23	16.73	3	Horizontal	197	1.80	-	28.59	2.45	-

BT-LE(1Mbps)

16/03/2021

2440MHz_TX



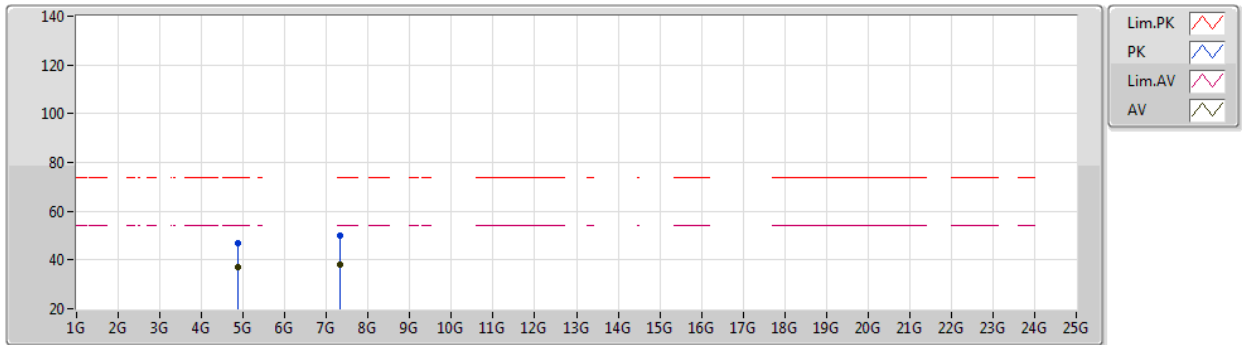
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Setting 10
02-B-R-5

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	4.87966G	46.42	74.00	-27.58	40.40	3	Vertical	146	2.08	-	33.12	4.70	31.80
AV	4.8799G	36.91	54.00	-17.09	30.89	3	Vertical	146	2.08	-	33.12	4.70	31.80
PK	7.31896G	48.82	74.00	-25.18	39.05	3	Vertical	200	1.80	-	36.44	5.76	32.43
AV	7.31922G	37.77	54.00	-16.23	28.00	3	Vertical	200	1.80	-	36.44	5.76	32.43

BT-LE(1Mbps)

16/03/2021

2440MHz_TX



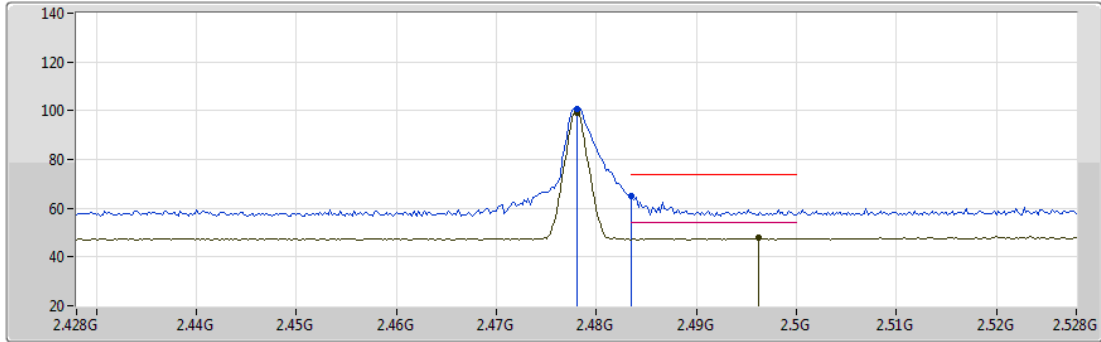
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Setting 10
02-B-R-5

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	4.87954G	46.75	74.00	-27.25	40.73	3	Horizontal	214	1.28	-	33.12	4.70	31.80
AV	4.87976G	37.11	54.00	-16.89	31.09	3	Horizontal	214	1.28	-	33.12	4.70	31.80
PK	7.3191G	49.99	74.00	-24.01	40.22	3	Horizontal	143	1.80	-	36.44	5.76	32.43
AV	7.31924G	38.09	54.00	-15.91	28.32	3	Horizontal	143	1.80	-	36.44	5.76	32.43

BT-LE(1Mbps)

16/03/2021

2478MHz_TX



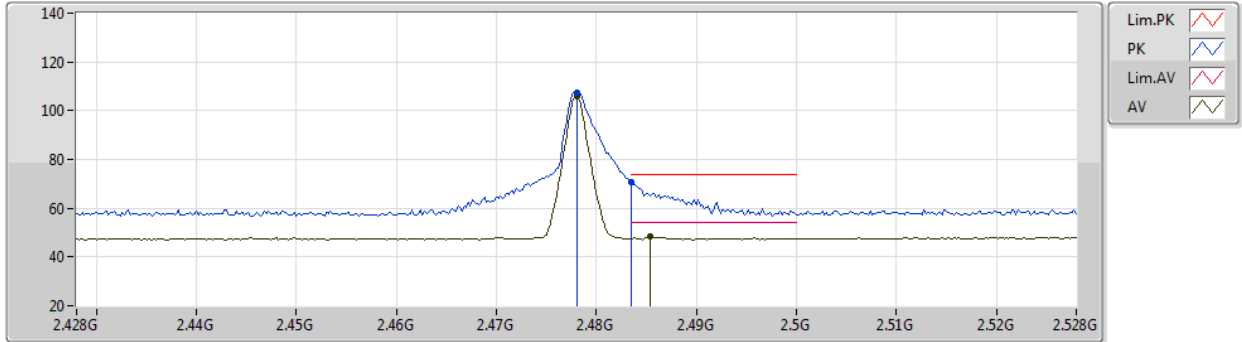
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Setting 10
02-B-R-5

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	2.478G	100.78	Inf	-Inf	69.83	3	Vertical	125	2.86	-	28.51	2.44	-
AV	2.478G	99.33	Inf	-Inf	68.38	3	Vertical	125	2.86	-	28.51	2.44	-
PK	2.4835G	65.01	74.00	-8.99	34.04	3	Vertical	125	2.86	-	28.53	2.44	-
AV	2.4962G	47.75	54.00	-6.25	16.72	3	Vertical	125	2.86	-	28.58	2.45	-

BT-LE(1Mbps)

16/03/2021

2478MHz_TX



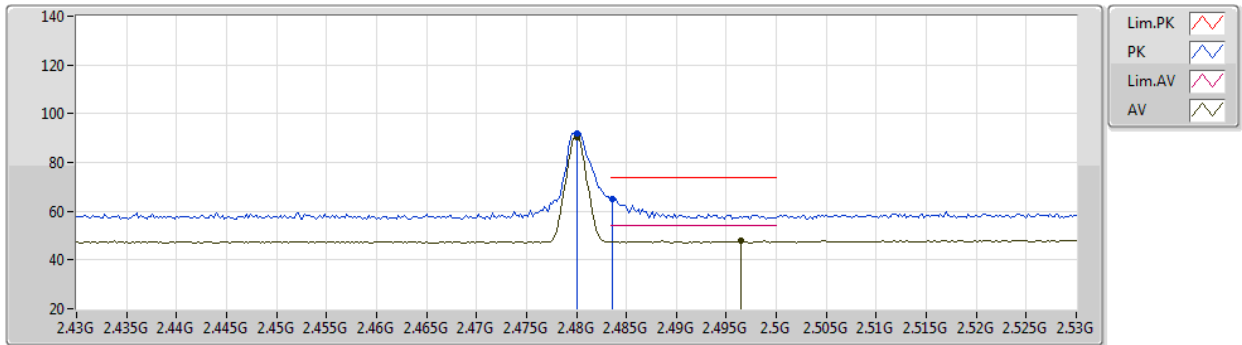
EUT Y_1TX
Setting 10
02-B-R-5

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	2.478G	107.32	Inf	-Inf	76.37	3	Horizontal	349	2.19	-	28.51	2.44	-
AV	2.478G	105.82	Inf	-Inf	74.87	3	Horizontal	349	2.19	-	28.51	2.44	-
PK	2.4835G	70.78	74.00	-3.22	39.81	3	Horizontal	349	2.19	-	28.53	2.44	-
AV	2.4854G	48.52	54.00	-5.48	17.54	3	Horizontal	349	2.19	-	28.54	2.44	-

BT-LE(1Mbps)

16/03/2021

2480MHz_TX



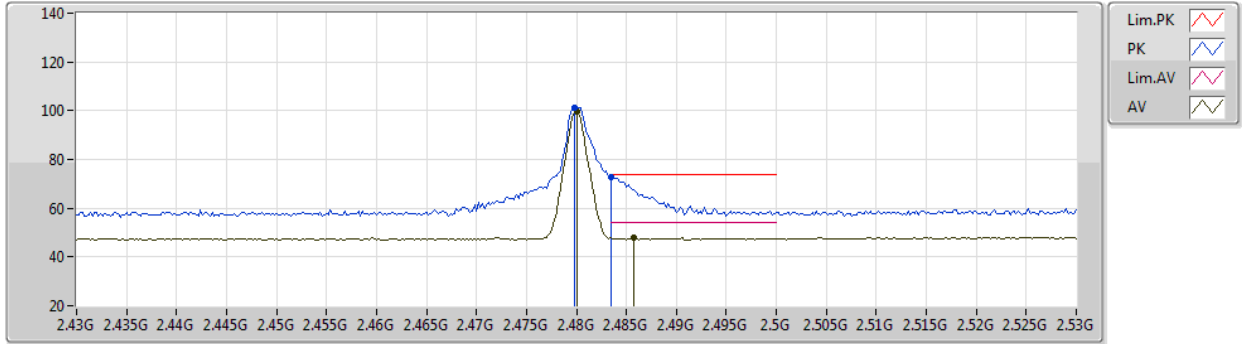
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Setting 4
02-B-R-5

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	92.13	Inf	-Inf	61.17	3	Vertical	134	2.41	-	28.52	2.44	-
AV	2.48G	90.53	Inf	-Inf	59.57	3	Vertical	134	2.41	-	28.52	2.44	-
PK	2.4836G	64.96	74.00	-9.04	33.99	3	Vertical	134	2.41	-	28.53	2.44	-
AV	2.4964G	47.78	54.00	-6.22	16.74	3	Vertical	134	2.41	-	28.59	2.45	-

BT-LE(1Mbps)

16/03/2021

2480MHz_TX



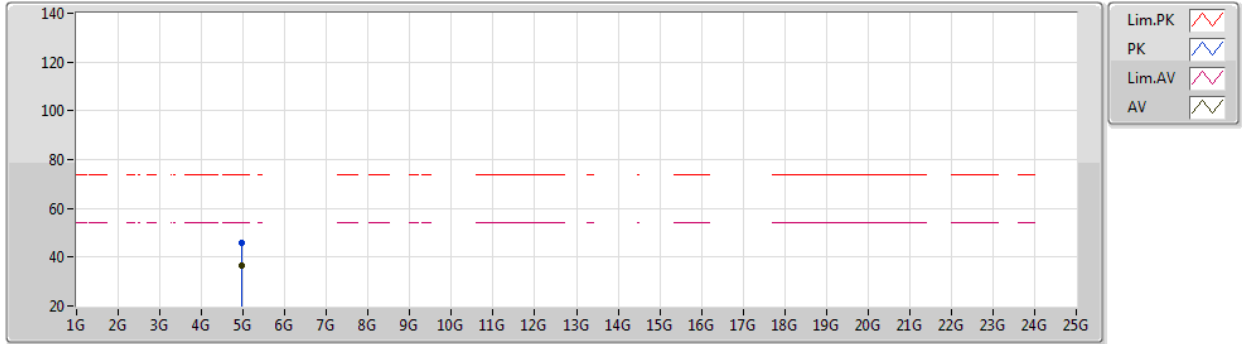
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Setting 4
02-B-R-5

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	101.09	Inf	-Inf	70.13	3	Horizontal	159	2.41	-	28.52	2.44	-
AV	2.48G	99.69	Inf	-Inf	68.73	3	Horizontal	159	2.41	-	28.52	2.44	-
PK	2.4835G	72.93	74.00	-1.07	41.96	3	Horizontal	159	2.41	-	28.53	2.44	-
AV	2.4858G	47.86	54.00	-6.14	16.88	3	Horizontal	159	2.41	-	28.54	2.44	-

BT-LE(1Mbps)

16/03/2021

2480MHz_TX



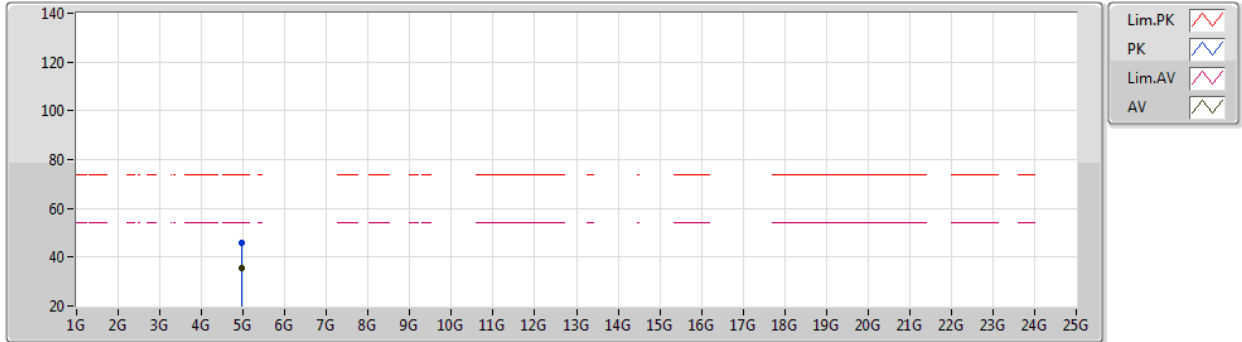
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Setting 4
02-B-R-5

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	4.95976G	46.00	74.00	-28.00	39.91	3	Vertical	337	2.63	-	33.22	4.70	31.83
AV	4.95998G	36.46	54.00	-17.54	30.37	3	Vertical	337	2.63	-	33.22	4.70	31.83

BT-LE(1Mbps)

16/03/2021

2480MHz_TX



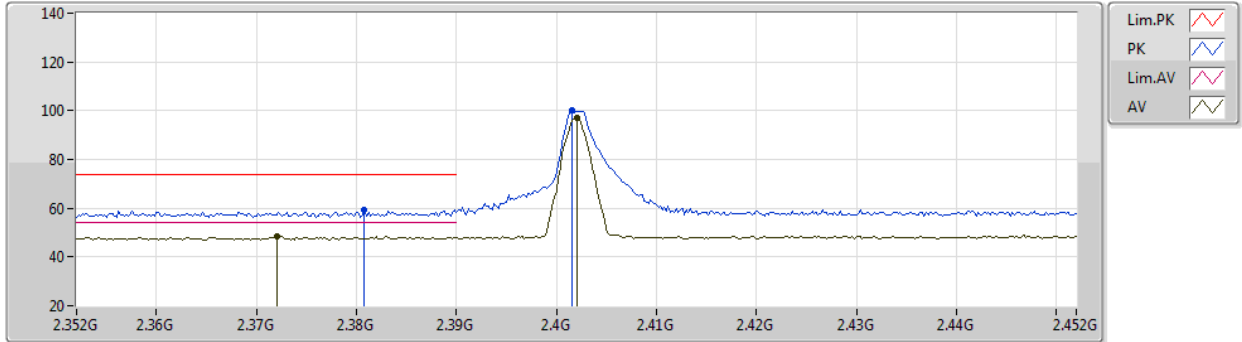
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Setting 4
02-B-R-5

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	4.96036G	46.06	74.00	-27.94	39.97	3	Horizontal	35	1.98	-	33.22	4.70	31.83
AV	4.96012G	35.37	54.00	-18.63	29.28	3	Horizontal	35	1.98	-	33.22	4.70	31.83

BT-LE(2Mbps)

16/03/2021

2402MHz_TX



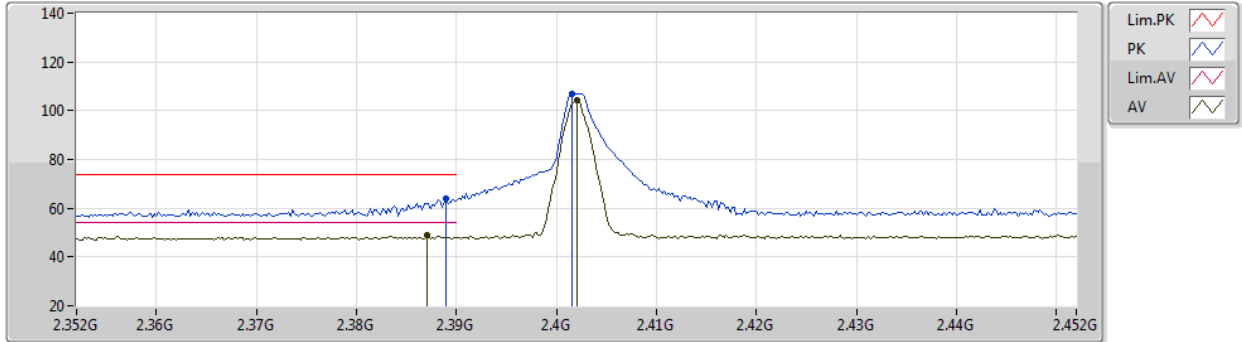
EUT Y_1TX
Setting 10
02-B-E-2

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	2.3808G	59.52	74.00	-14.48	28.81	3	Vertical	75	2.78	-	28.30	2.41	-
AV	2.372G	48.56	54.00	-5.44	17.85	3	Vertical	75	2.78	-	28.30	2.41	-
PK	2.4016G	99.93	Inf	-Inf	69.23	3	Vertical	75	2.78	-	28.30	2.40	-
AV	2.402G	97.07	Inf	-Inf	66.37	3	Vertical	75	2.78	-	28.30	2.40	-

BT-LE(2Mbps)

16/03/2021

2402MHz_TX



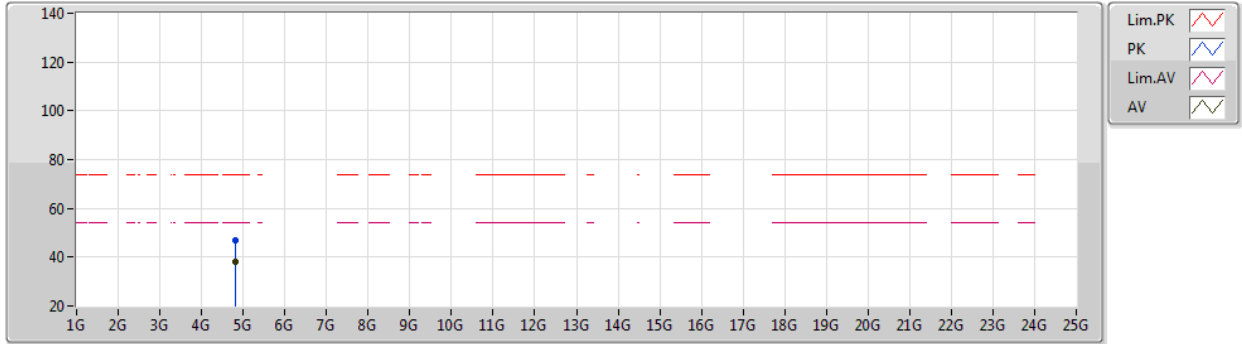
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Setting 10
02-B-E-2

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	2.389G	63.77	74.00	-10.23	33.06	3	Horizontal	161	2.28	-	28.30	2.41	-
AV	2.387G	48.81	54.00	-5.19	18.10	3	Horizontal	161	2.28	-	28.30	2.41	-
PK	2.4016G	106.95	Inf	-Inf	76.25	3	Horizontal	161	2.28	-	28.30	2.40	-
AV	2.402G	104.18	Inf	-Inf	73.48	3	Horizontal	161	2.28	-	28.30	2.40	-

BT-LE(2Mbps)

16/03/2021

2402MHz_TX



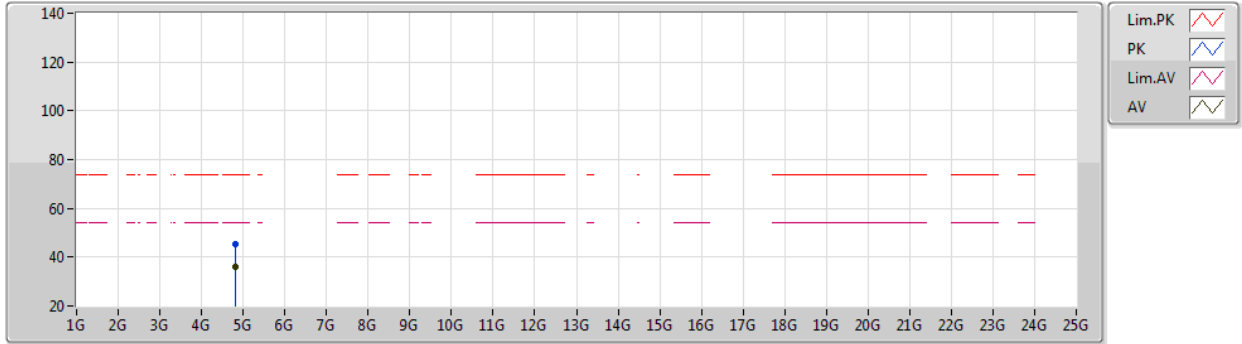
EUT Y_1TX
Setting 10
02-B-E-2

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	4.804G	46.83	74.00	-27.17	41.08	3	Vertical	342	2.48	-	32.82	4.70	31.77
AV	4.80302G	38.14	54.00	-15.86	32.40	3	Vertical	342	2.48	-	32.81	4.70	31.77

BT-LE(2Mbps)

16/03/2021

2402MHz_TX



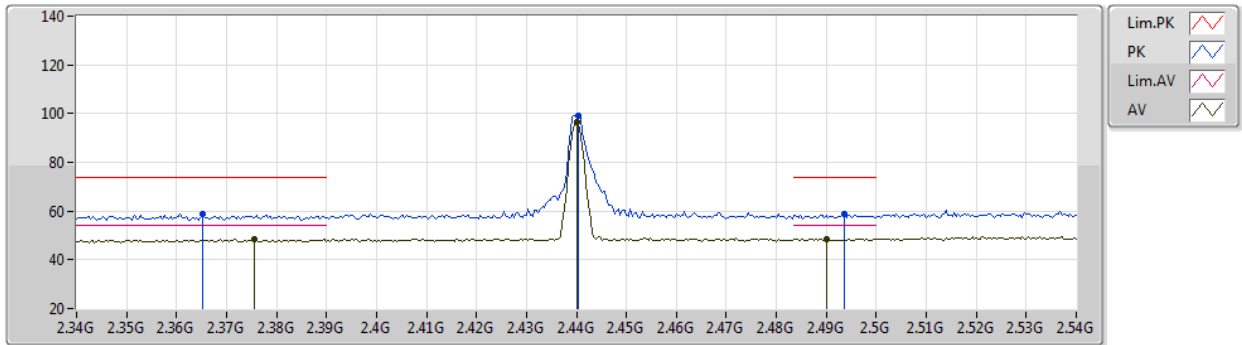
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Setting 10
02-B-E-2

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	4.80286G	45.49	74.00	-28.51	39.75	3	Horizontal	172	1.16	-	32.81	4.70	31.77
AV	4.80296G	35.90	54.00	-18.10	30.16	3	Horizontal	172	1.16	-	32.81	4.70	31.77

BT-LE(2Mbps)

16/03/2021

2440MHz_TX



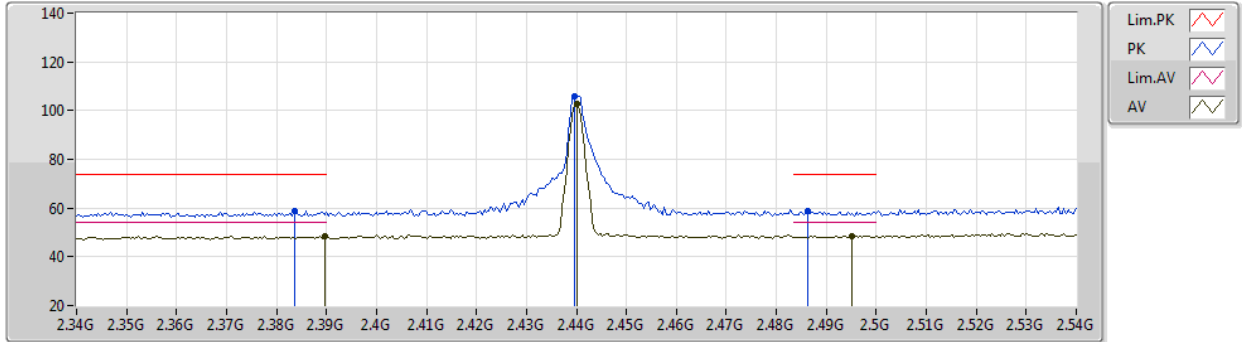
EUT Y_1TX
Setting 10
02-B-E-2

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	2.3652G	58.67	74.00	-15.33	27.95	3	Vertical	88	2.75	-	28.30	2.42	-
AV	2.3756G	48.42	54.00	-5.58	17.71	3	Vertical	88	2.75	-	28.30	2.41	-
PK	2.4404G	99.25	Inf	-Inf	68.45	3	Vertical	88	2.75	-	28.38	2.42	-
AV	2.44G	96.32	Inf	-Inf	65.52	3	Vertical	88	2.75	-	28.38	2.42	-
PK	2.4936G	58.65	74.00	-15.35	27.63	3	Vertical	88	2.75	-	28.57	2.45	-
AV	2.49G	48.51	54.00	-5.49	17.51	3	Vertical	88	2.75	-	28.56	2.44	-

BT-LE(2Mbps)

16/03/2021

2440MHz_TX



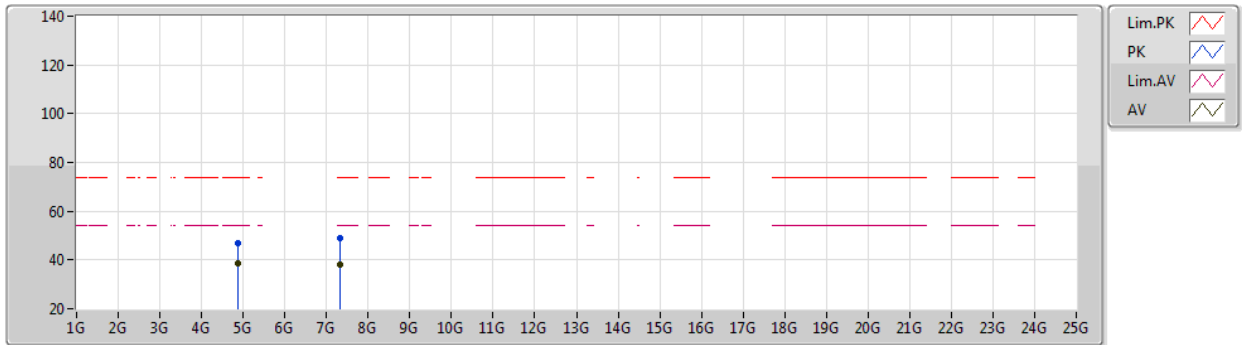
EUT Y_1TX
Setting 10
02-B-E-2

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	2.3836G	58.97	74.00	-15.03	28.26	3	Horizontal	196	1.80	-	28.30	2.41	-
AV	2.3896G	48.42	54.00	-5.58	17.71	3	Horizontal	196	1.80	-	28.30	2.41	-
PK	2.4396G	105.74	Inf	-Inf	74.94	3	Horizontal	196	1.80	-	28.38	2.42	-
AV	2.44G	102.91	Inf	-Inf	72.11	3	Horizontal	196	1.80	-	28.38	2.42	-
PK	2.4864G	58.92	74.00	-15.08	27.93	3	Horizontal	196	1.80	-	28.55	2.44	-
AV	2.4952G	48.63	54.00	-5.37	17.60	3	Horizontal	196	1.80	-	28.58	2.45	-

BT-LE(2Mbps)

16/03/2021

2440MHz_TX



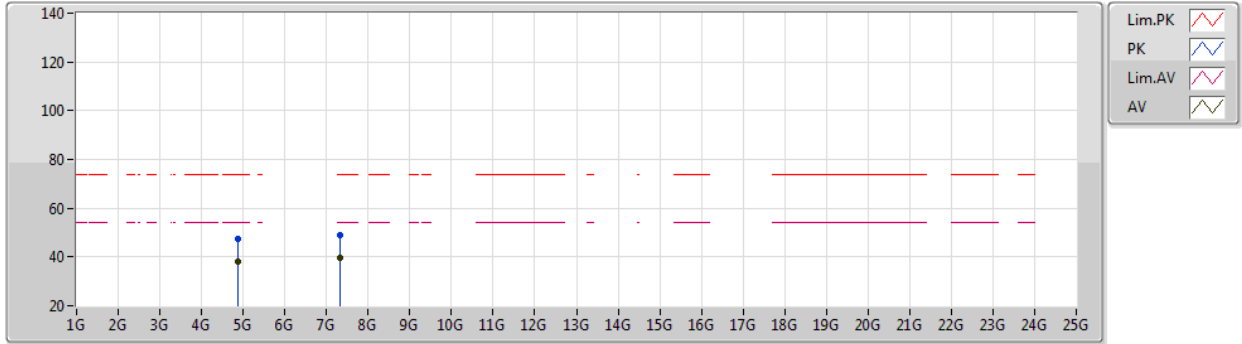
EUT Y_1TX
Setting 10
02-B-E-2

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	4.8791G	46.97	74.00	-27.03	40.95	3	Vertical	144	2.08	-	33.12	4.70	31.80
AV	4.879G	38.58	54.00	-15.42	32.56	3	Vertical	144	2.08	-	33.12	4.70	31.80
PK	7.32058G	49.01	74.00	-24.99	39.24	3	Vertical	147	2.18	-	36.44	5.76	32.43
AV	7.31876G	38.36	54.00	-15.64	28.59	3	Vertical	147	2.18	-	36.44	5.76	32.43

BT-LE(2Mbps)

16/03/2021

2440MHz_TX



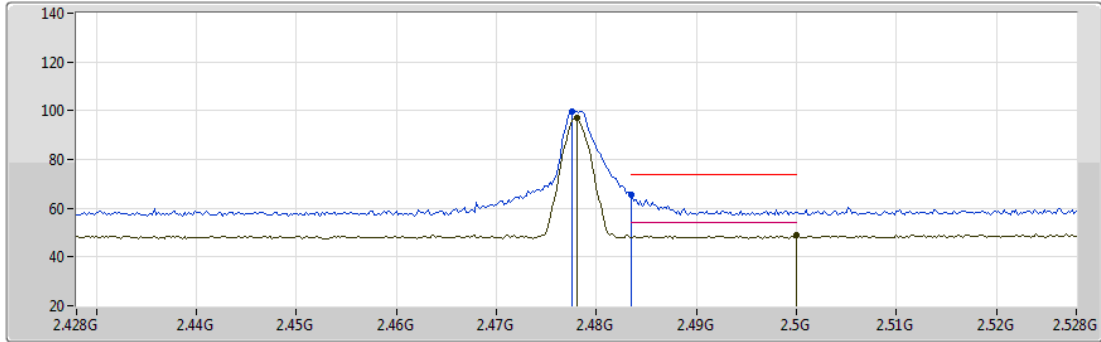
EUT Y_1TX
Setting 10
02-B-E-2

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	4.88024G	47.47	74.00	-26.53	41.45	3	Horizontal	212	1.28	-	33.12	4.70	31.80
AV	4.879G	37.93	54.00	-16.07	31.91	3	Horizontal	212	1.28	-	33.12	4.70	31.80
PK	7.32112G	48.96	74.00	-25.04	39.19	3	Horizontal	143	1.86	-	36.44	5.76	32.43
AV	7.31844G	39.82	54.00	-14.18	30.05	3	Horizontal	143	1.86	-	36.44	5.76	32.43

BT-LE(2Mbps)

16/03/2021

2478MHz_TX



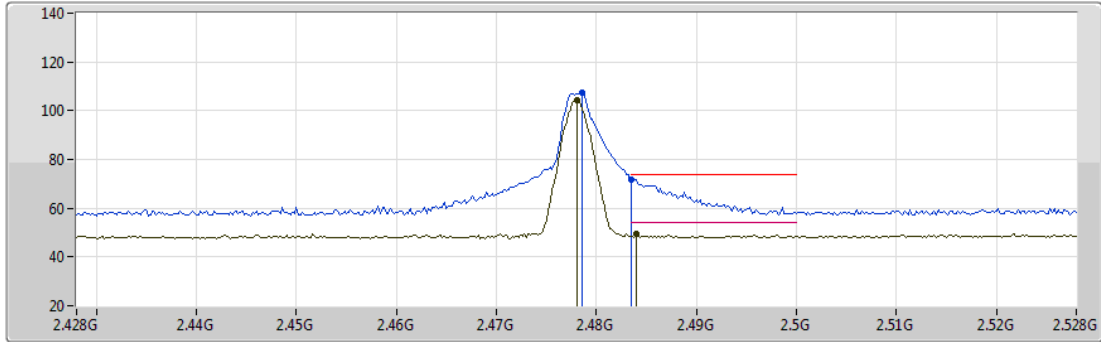
EUT Y_1TX
Setting 10
02-B-E-2

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	2.4776G	99.71	Inf	-Inf	68.76	3	Vertical	121	2.90	-	28.51	2.44	-
AV	2.478G	96.92	Inf	-Inf	65.97	3	Vertical	121	2.90	-	28.51	2.44	-
PK	2.4835G	65.51	74.00	-8.49	34.54	3	Vertical	121	2.90	-	28.53	2.44	-
AV	2.5G	49.10	54.00	-4.90	18.05	3	Vertical	121	2.90	-	28.60	2.45	-

BT-LE(2Mbps)

16/03/2021

2478MHz_TX



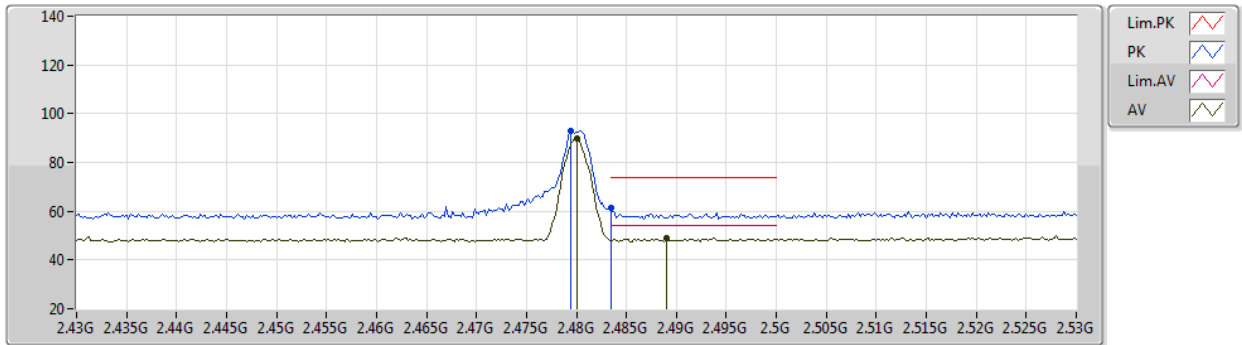
EUT Y_1TX
Setting 10
02-B-E-2

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	2.4786G	107.18	Inf	-Inf	76.23	3	Horizontal	189	1.98	-	28.51	2.44	-
AV	2.478G	104.39	Inf	-Inf	73.44	3	Horizontal	189	1.98	-	28.51	2.44	-
PK	2.4835G	71.94	74.00	-2.06	40.97	3	Horizontal	189	1.98	-	28.53	2.44	-
AV	2.484G	49.28	54.00	-4.72	18.30	3	Horizontal	189	1.98	-	28.54	2.44	-

BT-LE(2Mbps)

16/03/2021

2480MHz_TX



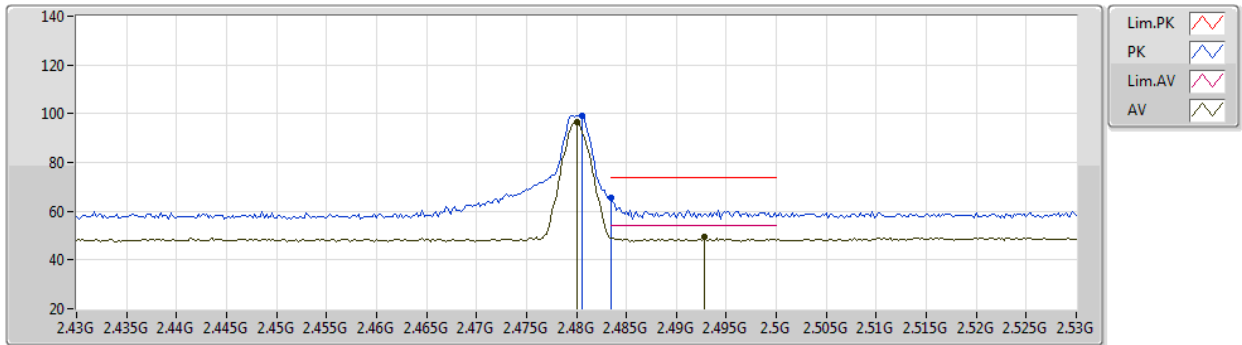
EUT Y_1TX
Setting 2
02-B-E-2

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	2.4794G	92.79	Inf	-Inf	61.83	3	Vertical	127	2.86	-	28.52	2.44	-
AV	2.48G	89.95	Inf	-Inf	58.99	3	Vertical	127	2.86	-	28.52	2.44	-
PK	2.4835G	61.46	74.00	-12.54	30.49	3	Vertical	127	2.86	-	28.53	2.44	-
AV	2.489G	48.82	54.00	-5.18	17.82	3	Vertical	127	2.86	-	28.56	2.44	-

BT-LE(2Mbps)

16/03/2021

2480MHz_TX



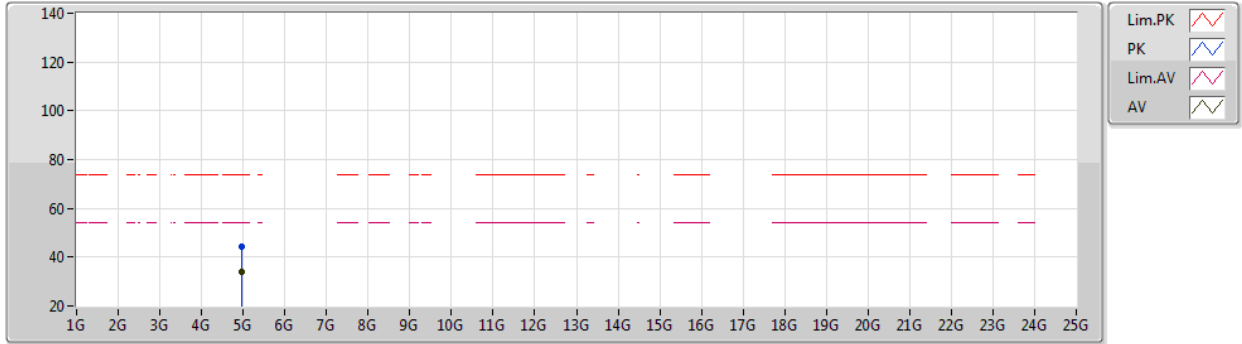
EUT Y_1TX
Setting 2
02-B-E-2

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	2.4806G	99.36	Inf	-Inf	68.40	3	Horizontal	190	2.00	-	28.52	2.44	-
AV	2.48G	96.51	Inf	-Inf	65.55	3	Horizontal	190	2.00	-	28.52	2.44	-
PK	2.4835G	65.39	74.00	-8.61	34.42	3	Horizontal	190	2.00	-	28.53	2.44	-
AV	2.4928G	49.26	54.00	-4.74	18.24	3	Horizontal	190	2.00	-	28.57	2.45	-

BT-LE(2Mbps)

16/03/2021

2480MHz_TX



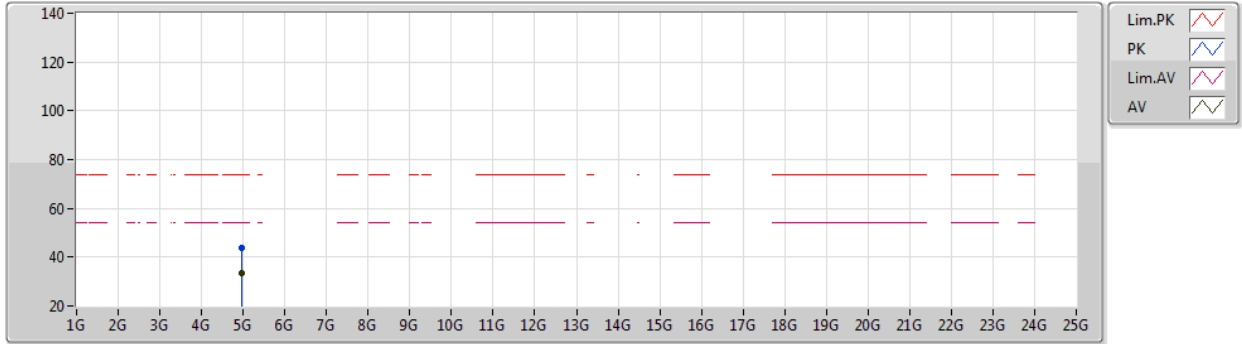
EUT Y_1TX
Setting 2
02-B-E-2

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	4.95676G	44.16	74.00	-29.84	38.07	3	Vertical	0	1.05	-	33.21	4.70	31.82
AV	4.9587G	33.84	54.00	-20.16	27.75	3	Vertical	0	1.05	-	33.22	4.70	31.83

BT-LE(2Mbps)

16/03/2021

2480MHz_TX



EUT Y_1TX
Setting 2
02-B-E-2

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	4.96034G	44.00	74.00	-30.00	37.91	3	Horizontal	109	1.80	-	33.22	4.70	31.83
AV	4.95916G	33.34	54.00	-20.66	27.25	3	Horizontal	109	1.80	-	33.22	4.70	31.83



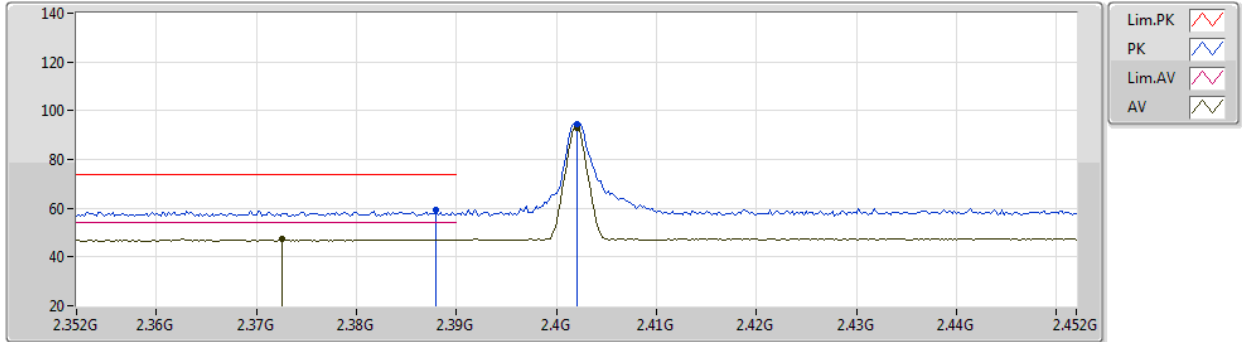
Summary

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-LE(2Mbps)	Pass	PK	2.4835G	72.72	74.00	-1.28	3	Horizontal	263	2.59	-

BT-LE(1Mbps)

23/03/2021

2402MHz_TX



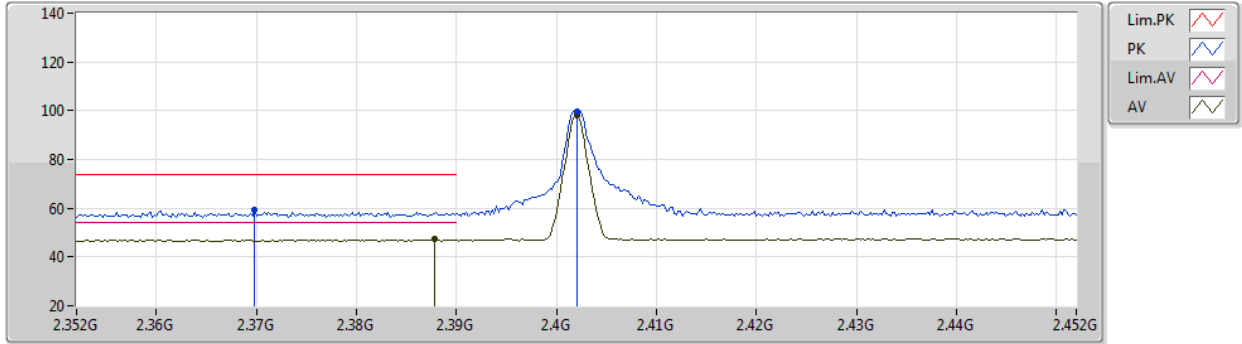
EUT Z_1TX
Setting 10
02-B-E-2

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	2.388G	59.51	74.00	-14.49	28.80	3	Vertical	45	2.51	-	28.30	2.41	-
AV	2.3726G	47.23	54.00	-6.77	16.52	3	Vertical	45	2.51	-	28.30	2.41	-
PK	2.402G	94.46	Inf	-Inf	63.76	3	Vertical	45	2.51	-	28.30	2.40	-
AV	2.402G	93.00	Inf	-Inf	62.30	3	Vertical	45	2.51	-	28.30	2.40	-

BT-LE(1Mbps)

23/03/2021

2402MHz_TX



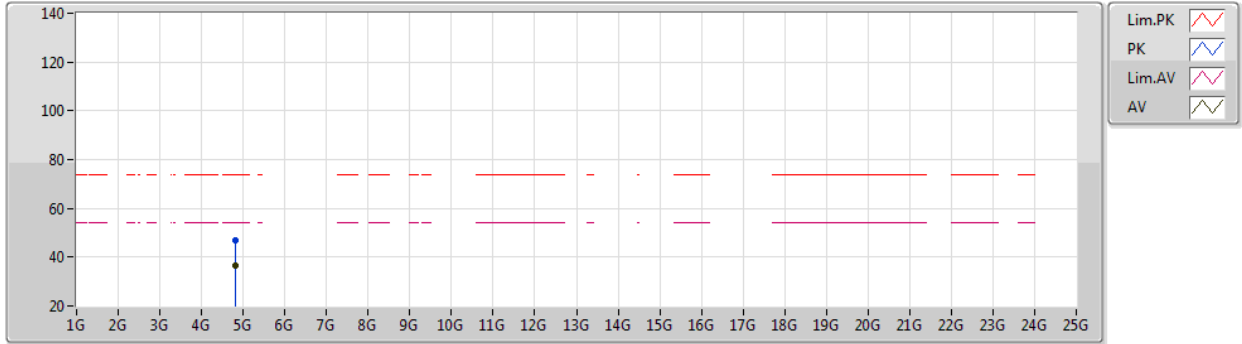
EUT Z_1TX
Setting 10
02-B-E-2

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	2.3698G	59.14	74.00	-14.86	28.42	3	Horizontal	270	2.20	-	28.30	2.42	-
AV	2.3878G	47.22	54.00	-6.78	16.51	3	Horizontal	270	2.20	-	28.30	2.41	-
PK	2.402G	99.55	Inf	-Inf	68.85	3	Horizontal	270	2.20	-	28.30	2.40	-
AV	2.402G	98.14	Inf	-Inf	67.44	3	Horizontal	270	2.20	-	28.30	2.40	-

BT-LE(1Mbps)

23/03/2021

2402MHz_TX



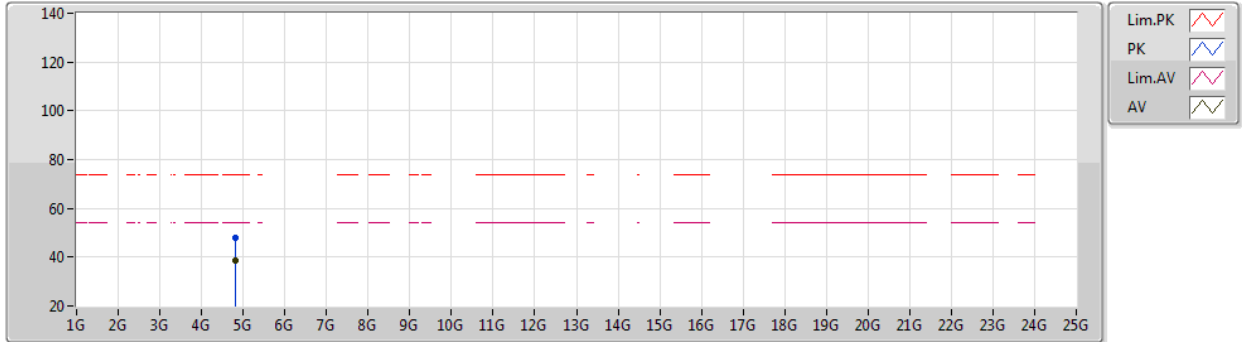
EUT_Z_1TX
Setting 10
02-B-E-2

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	4.8047G	46.76	74.00	-27.24	41.01	3	Vertical	247	2.33	-	32.82	4.70	31.77
AV	4.80389G	36.58	54.00	-17.42	30.83	3	Vertical	247	2.33	-	32.82	4.70	31.77

BT-LE(1Mbps)

23/03/2021

2402MHz_TX



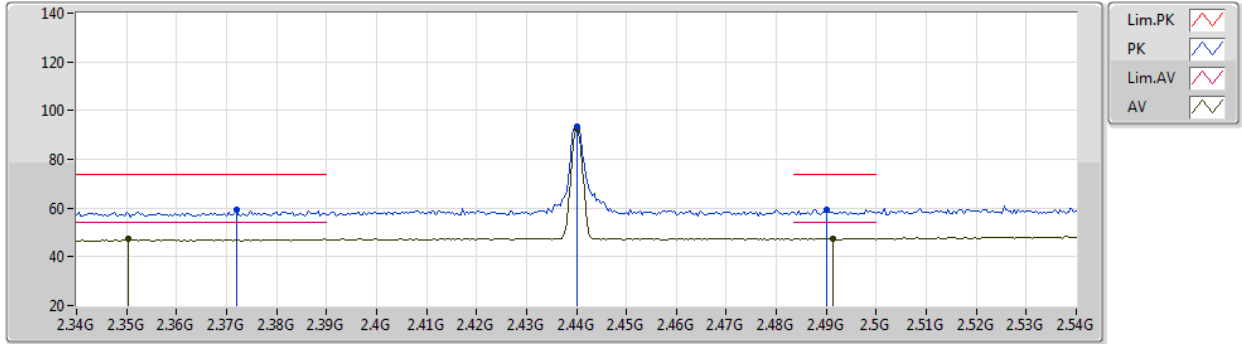
EUT Z_1TX
Setting 10
02-B-E-2

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	4.80367G	47.97	74.00	-26.03	42.23	3	Horizontal	285	2.48	-	32.81	4.70	31.77
AV	4.8038G	38.42	54.00	-15.58	32.67	3	Horizontal	285	2.48	-	32.82	4.70	31.77

BT-LE(1Mbps)

23/03/2021

2440MHz_TX



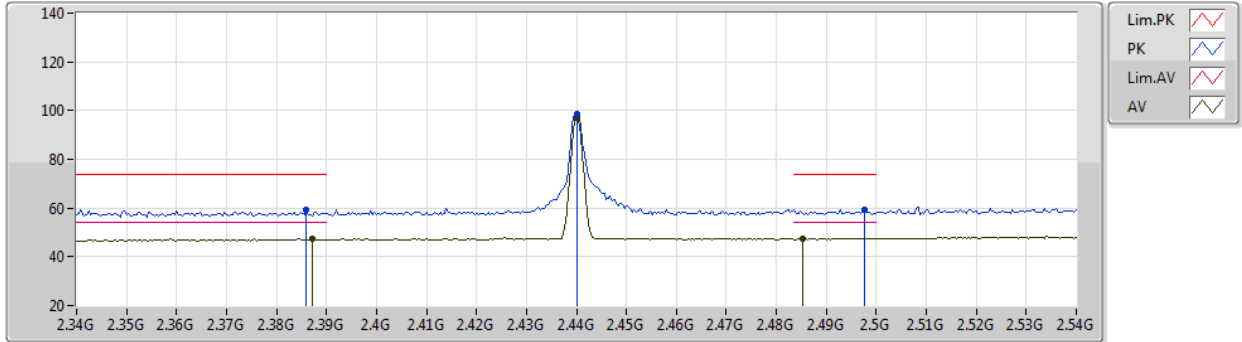
EUT Z_1TX
Setting 10
02-B-E-2

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	2.372G	59.19	74.00	-14.81	28.48	3	Vertical	245	1.77	-	28.30	2.41	-
AV	2.3504G	47.17	54.00	-6.83	16.45	3	Vertical	245	1.77	-	28.30	2.42	-
PK	2.44G	93.53	Inf	-Inf	62.73	3	Vertical	245	1.77	-	28.38	2.42	-
AV	2.44G	92.17	Inf	-Inf	61.37	3	Vertical	245	1.77	-	28.38	2.42	-
PK	2.49G	59.30	74.00	-14.70	28.30	3	Vertical	245	1.77	-	28.56	2.44	-
AV	2.4912G	47.54	54.00	-6.46	16.53	3	Vertical	245	1.77	-	28.56	2.45	-

BT-LE(1Mbps)

23/03/2021

2440MHz_TX



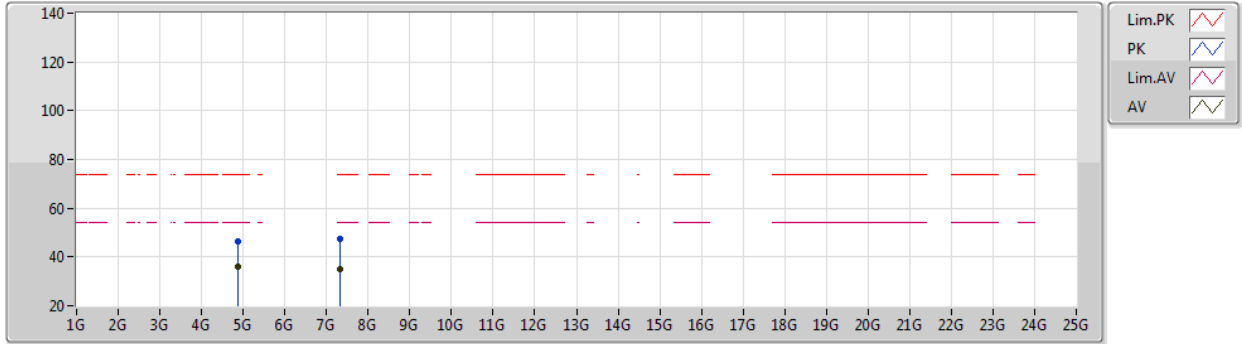
EUT Z_1TX
Setting 10
02-B-E-2

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	2.386G	59.13	74.00	-14.87	28.42	3	Horizontal	242	1.00	-	28.30	2.41	-
AV	2.3872G	47.37	54.00	-6.63	16.66	3	Horizontal	242	1.00	-	28.30	2.41	-
PK	2.44G	98.62	Inf	-Inf	67.82	3	Horizontal	242	1.00	-	28.38	2.42	-
AV	2.44G	97.20	Inf	-Inf	66.40	3	Horizontal	242	1.00	-	28.38	2.42	-
PK	2.4976G	59.42	74.00	-14.58	28.38	3	Horizontal	242	1.00	-	28.59	2.45	-
AV	2.4852G	47.59	54.00	-6.41	16.61	3	Horizontal	242	1.00	-	28.54	2.44	-

BT-LE(1Mbps)

23/03/2021

2440MHz_TX



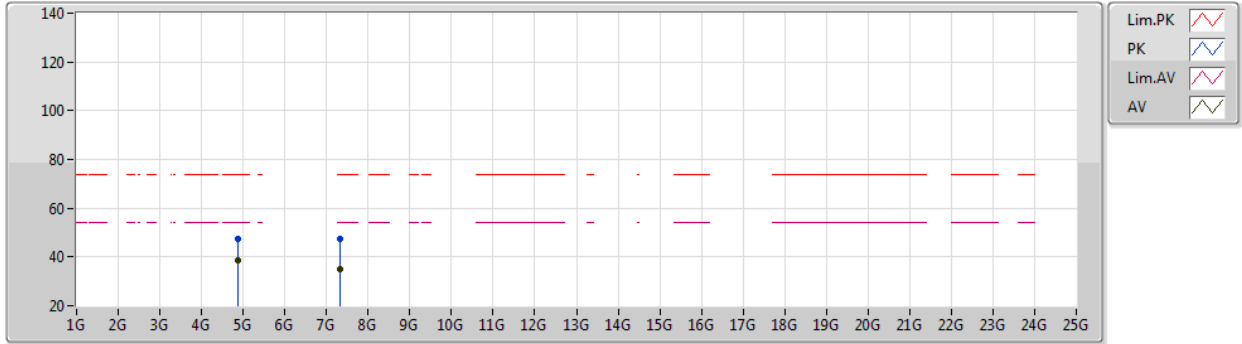
EUT_Z_1TX
Setting 10
02-B-E-2

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	4.88066G	46.40	74.00	-27.60	40.38	3	Vertical	238	2.08	-	33.12	4.70	31.80
AV	4.87971G	36.27	54.00	-17.73	30.25	3	Vertical	238	2.08	-	33.12	4.70	31.80
PK	7.32154G	47.49	74.00	-26.51	37.72	3	Vertical	229	1.74	-	36.44	5.76	32.43
AV	7.3224G	35.06	54.00	-18.94	25.29	3	Vertical	229	1.74	-	36.44	5.76	32.43

BT-LE(1Mbps)

23/03/2021

2440MHz_TX



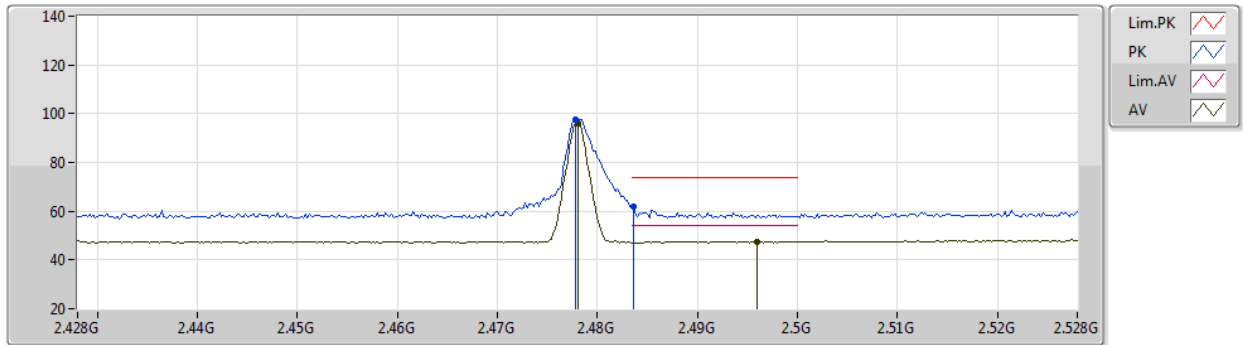
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Setting 10
02-B-E-2

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	4.87938G	47.30	74.00	-26.70	41.28	3	Horizontal	282	2.54	-	33.12	4.70	31.80
AV	4.87984G	38.40	54.00	-15.60	32.38	3	Horizontal	282	2.54	-	33.12	4.70	31.80
PK	7.31816G	47.49	74.00	-26.51	37.72	3	Horizontal	312	1.80	-	36.44	5.76	32.43
AV	7.318G	34.89	54.00	-19.11	25.12	3	Horizontal	312	1.80	-	36.44	5.76	32.43

BT-LE(1Mbps)

23/03/2021

2478MHz_TX



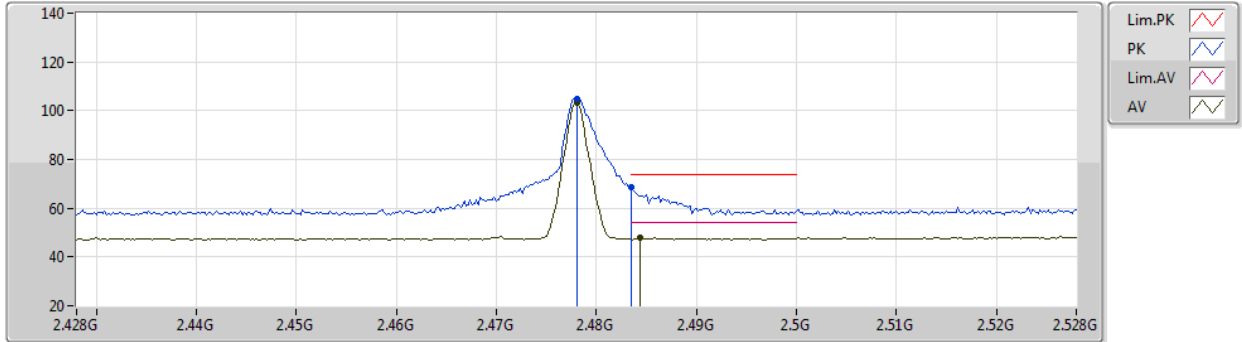
EUT_Z_1TX
Setting 10
02-B-R-5

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	2.4778G	97.62	Inf	-Inf	66.67	3	Vertical	40	2.72	-	28.51	2.44	-
AV	2.478G	96.28	Inf	-Inf	65.33	3	Vertical	40	2.72	-	28.51	2.44	-
PK	2.4836G	61.74	74.00	-12.26	30.77	3	Vertical	40	2.72	-	28.53	2.44	-
AV	2.496G	47.60	54.00	-6.40	16.57	3	Vertical	40	2.72	-	28.58	2.45	-

BT-LE(1Mbps)

23/03/2021

2478MHz_TX



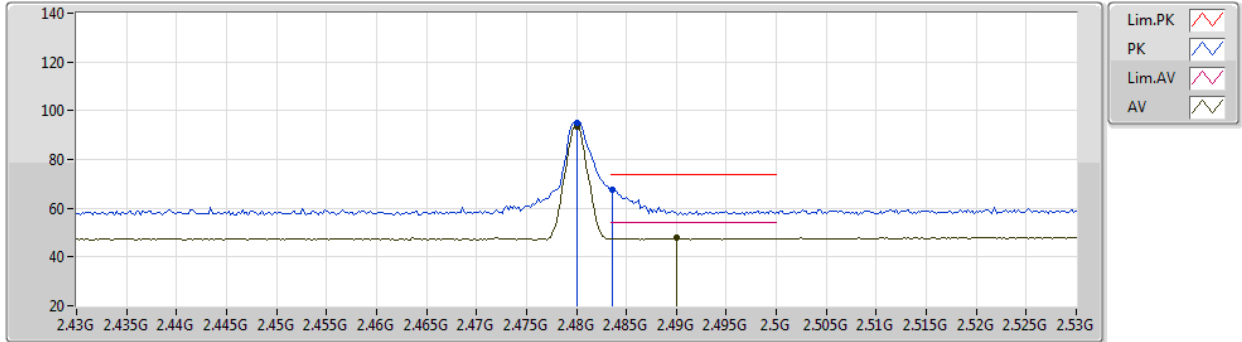
EUT Z_1TX
Setting 10
02-B-R-5

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	2.478G	104.74	Inf	-Inf	73.79	3	Horizontal	266	2.86	-	28.51	2.44	-
AV	2.478G	103.29	Inf	-Inf	72.34	3	Horizontal	266	2.86	-	28.51	2.44	-
PK	2.4835G	68.60	74.00	-5.40	37.63	3	Horizontal	266	2.86	-	28.53	2.44	-
AV	2.4844G	47.68	54.00	-6.32	16.70	3	Horizontal	266	2.86	-	28.54	2.44	-

BT-LE(1Mbps)

23/03/2021

2480MHz_TX



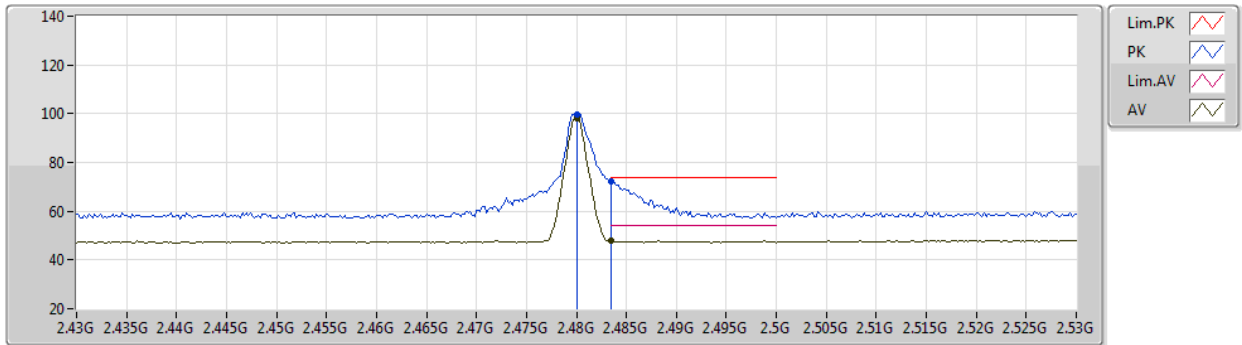
EUT Z_1TX
Setting 4
02-B-R-5

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	94.96	Inf	-Inf	64.00	3	Vertical	239	2.73	-	28.52	2.44	-
AV	2.48G	93.57	Inf	-Inf	62.61	3	Vertical	239	2.73	-	28.52	2.44	-
PK	2.4836G	67.66	74.00	-6.34	36.69	3	Vertical	239	2.73	-	28.53	2.44	-
AV	2.49G	47.72	54.00	-6.28	16.72	3	Vertical	239	2.73	-	28.56	2.44	-

BT-LE(1Mbps)

23/03/2021

2480MHz_TX



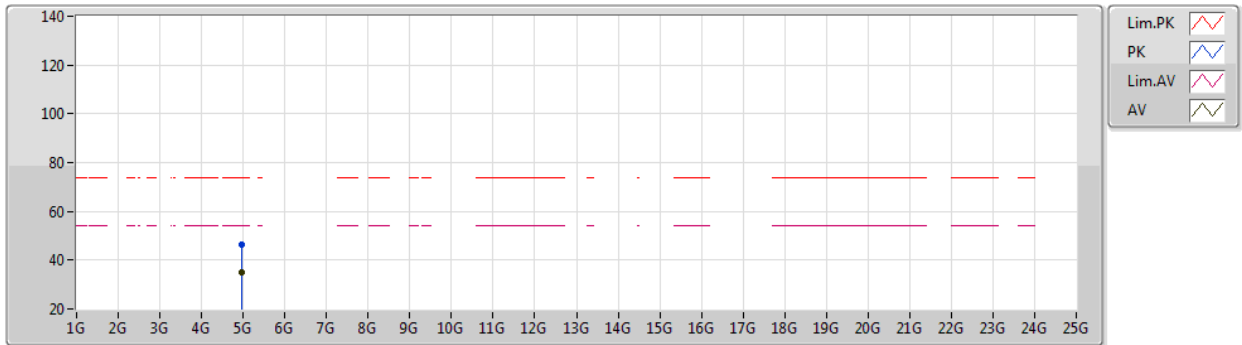
EUT_Z_1TX
Setting 4
02-B-R-5

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	99.69	Inf	-Inf	68.73	3	Horizontal	260	2.86	-	28.52	2.44	-
AV	2.48G	98.27	Inf	-Inf	67.31	3	Horizontal	260	2.86	-	28.52	2.44	-
PK	2.4835G	72.32	74.00	-1.68	41.35	3	Horizontal	260	2.86	-	28.53	2.44	-
AV	2.4835G	47.84	54.00	-6.16	16.87	3	Horizontal	260	2.86	-	28.53	2.44	-

BT-LE(1Mbps)

23/03/2021

2480MHz_TX



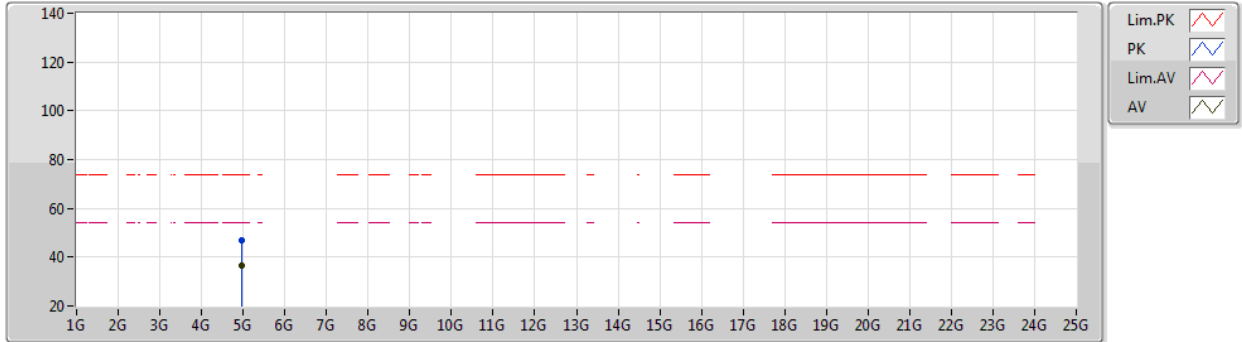
EUT Z_1TX
Setting 4
02-B-E-2

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	4.96048G	46.22	74.00	-27.78	40.13	3	Vertical	239	2.24	-	33.22	4.70	31.83
AV	4.96003G	35.12	54.00	-18.88	29.03	3	Vertical	239	2.24	-	33.22	4.70	31.83

BT-LE(1Mbps)

23/03/2021

2480MHz_TX



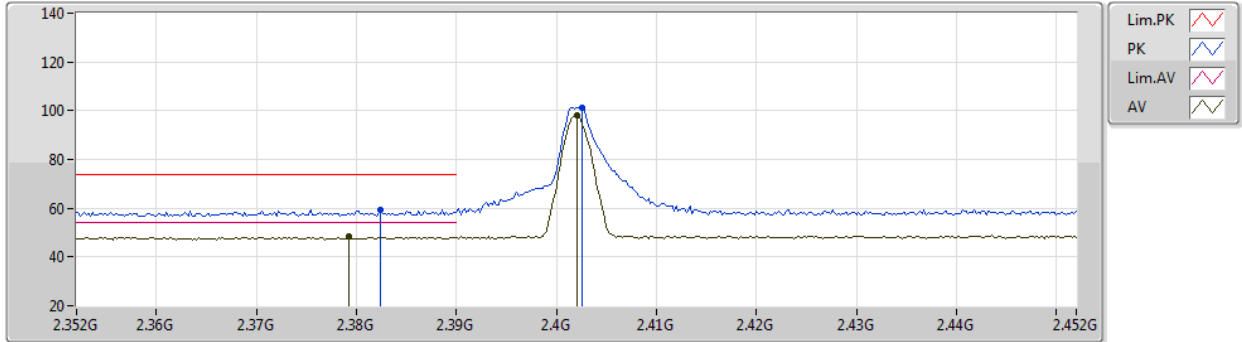
EUT_Z_1TX
Setting 4
02-B-E-2

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	4.96007G	47.02	74.00	-26.98	40.93	3	Horizontal	282	2.36	-	33.22	4.70	31.83
AV	4.96011G	36.35	54.00	-17.65	30.26	3	Horizontal	282	2.36	-	33.22	4.70	31.83

BT-LE(2Mbps)

23/03/2021

2402MHz_TX



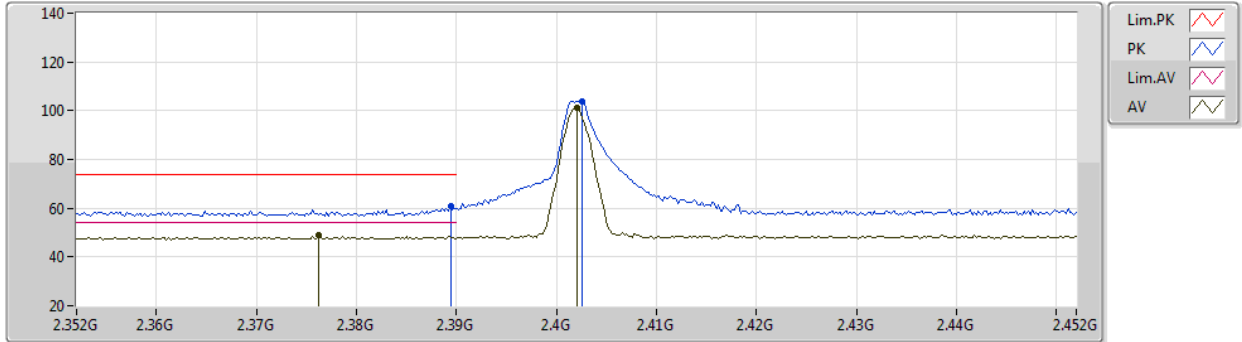
EUT Z_1TX
Setting 10
02-B-E-2

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	2.3824G	59.48	74.00	-14.52	28.77	3	Vertical	23	2.60	-	28.30	2.41	-
AV	2.3792G	48.32	54.00	-5.68	17.61	3	Vertical	23	2.60	-	28.30	2.41	-
PK	2.4026G	101.13	Inf	-Inf	70.42	3	Vertical	23	2.60	-	28.31	2.40	-
AV	2.402G	98.35	Inf	-Inf	67.65	3	Vertical	23	2.60	-	28.30	2.40	-

BT-LE(2Mbps)

23/03/2021

2402MHz_TX



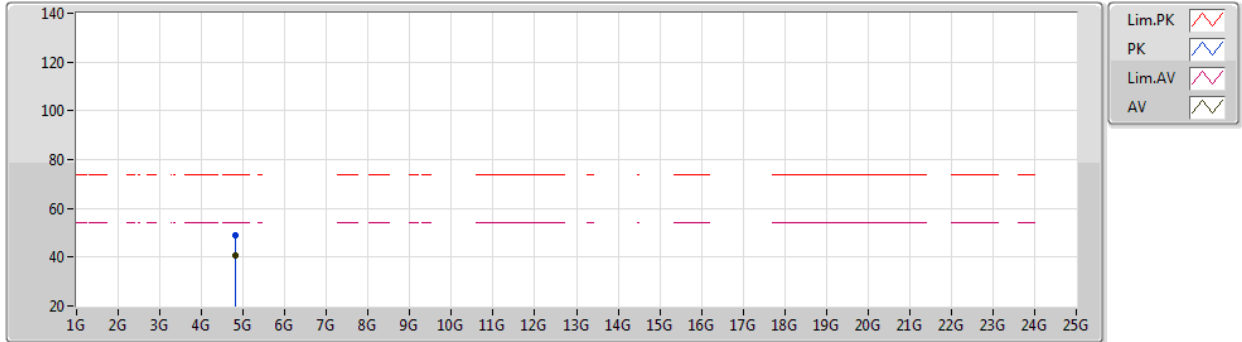
EUT_Z_1TX
Setting 10
02-B-E-2

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	2.3894G	60.78	74.00	-13.22	30.07	3	Horizontal	0	2.20	-	28.30	2.41	-
AV	2.3762G	48.73	54.00	-5.27	18.02	3	Horizontal	0	2.20	-	28.30	2.41	-
PK	2.4026G	103.98	Inf	-Inf	73.27	3	Horizontal	0	2.20	-	28.31	2.40	-
AV	2.402G	101.18	Inf	-Inf	70.48	3	Horizontal	0	2.20	-	28.30	2.40	-

BT-LE(2Mbps)

23/03/2021

2402MHz_TX



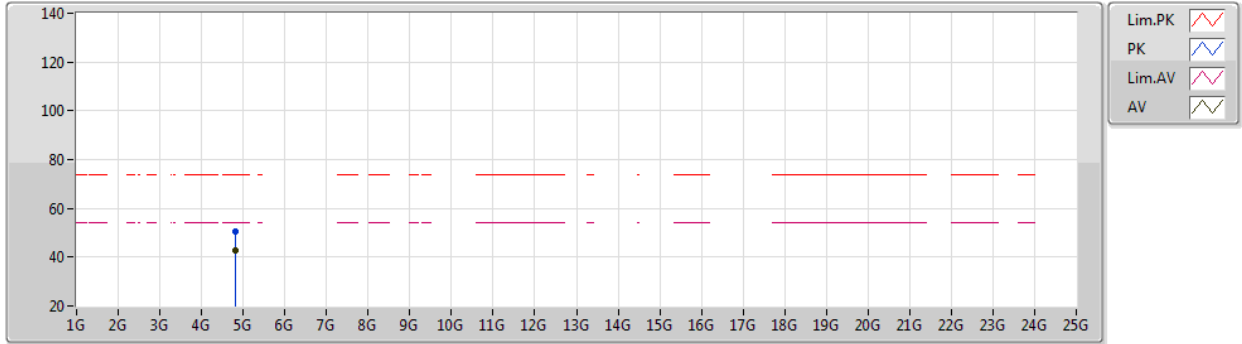
EUT Z_1TX
Setting 10
02-B-E-2

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	4.80503G	48.92	74.00	-25.08	43.17	3	Vertical	245	2.46	-	32.82	4.70	31.77
AV	4.80303G	40.44	54.00	-13.56	34.70	3	Vertical	245	2.46	-	32.81	4.70	31.77

BT-LE(2Mbps)

23/03/2021

2402MHz_TX



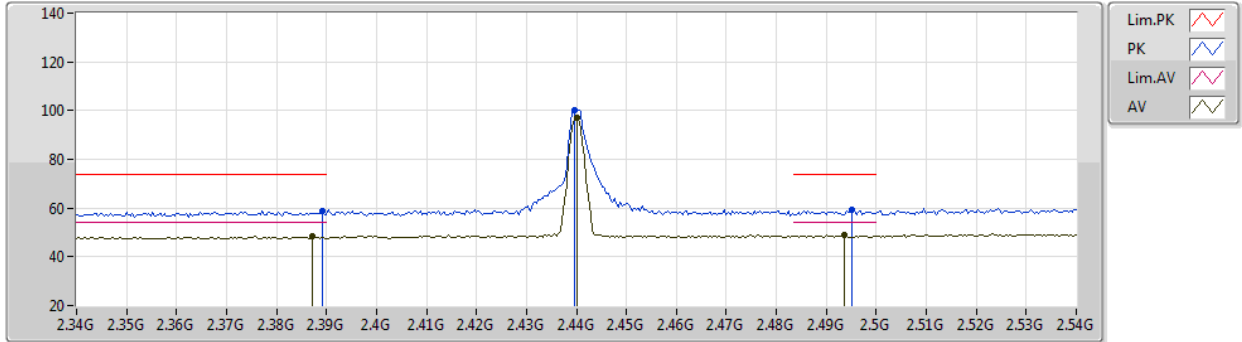
EUT Z_1TX
Setting 10
02-B-E-2

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	4.80301G	50.40	74.00	-23.60	44.66	3	Horizontal	285	2.75	-	32.81	4.70	31.77
AV	4.80304G	42.99	54.00	-11.01	37.25	3	Horizontal	285	2.75	-	32.81	4.70	31.77

BT-LE(2Mbps)

23/03/2021

2440MHz_TX



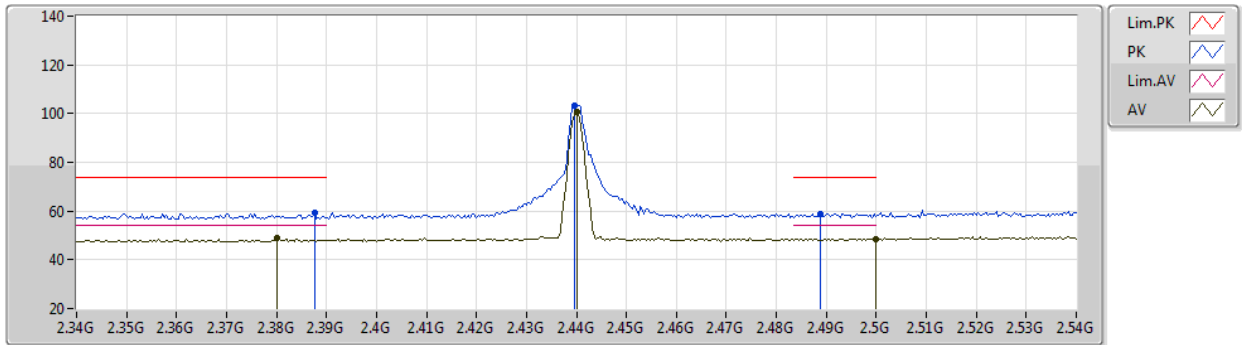
EUT Z_1TX
Setting 10
02-B-E-2

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	58.95	74.00	-15.05	28.24	3	Vertical	242	2.82	-	28.30	2.41	-
AV	2.3872G	48.27	54.00	-5.73	17.56	3	Vertical	242	2.82	-	28.30	2.41	-
PK	2.4396G	100.18	Inf	-Inf	69.38	3	Vertical	242	2.82	-	28.38	2.42	-
AV	2.44G	97.29	Inf	-Inf	66.49	3	Vertical	242	2.82	-	28.38	2.42	-
PK	2.4952G	59.30	74.00	-14.70	28.27	3	Vertical	242	2.82	-	28.58	2.45	-
AV	2.4936G	48.84	54.00	-5.16	17.82	3	Vertical	242	2.82	-	28.57	2.45	-

BT-LE(2Mbps)

23/03/2021

2440MHz_TX



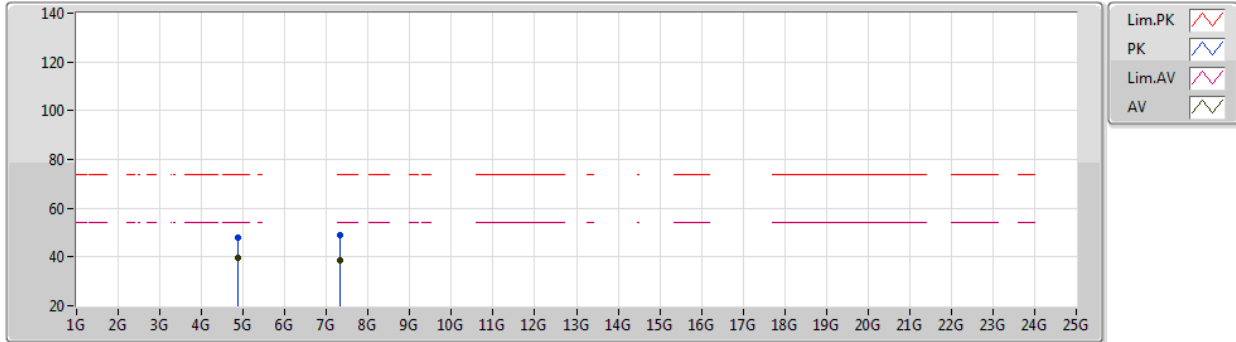
EUT Z_1TX
Setting 10
02-B-E-2

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	2.3876G	59.06	74.00	-14.94	28.35	3	Horizontal	0	1.76	-	28.30	2.41	-
AV	2.38G	48.71	54.00	-5.29	18.00	3	Horizontal	0	1.76	-	28.30	2.41	-
PK	2.4396G	103.40	Inf	-Inf	72.60	3	Horizontal	0	1.76	-	28.38	2.42	-
AV	2.44G	100.54	Inf	-Inf	69.74	3	Horizontal	0	1.76	-	28.38	2.42	-
PK	2.4888G	58.93	74.00	-15.07	27.93	3	Horizontal	0	1.76	-	28.56	2.44	-
AV	2.5G	48.67	54.00	-5.33	17.62	3	Horizontal	0	1.76	-	28.60	2.45	-

BT-LE(2Mbps)

23/03/2021

2440MHz_TX



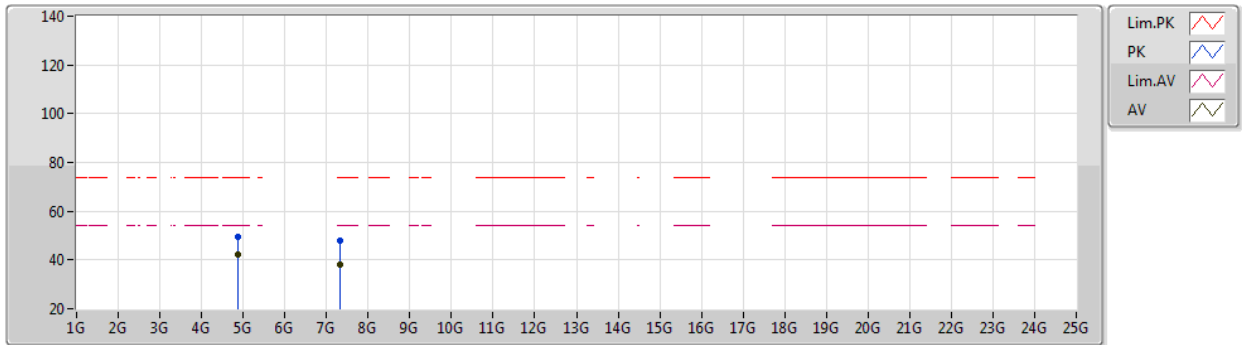
EUT_Z_1TX
Setting 10
02-B-E-2

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	4.88094G	47.76	74.00	-26.24	41.74	3	Vertical	240	2.09	-	33.12	4.70	31.80
AV	4.879G	39.83	54.00	-14.17	33.81	3	Vertical	240	2.09	-	33.12	4.70	31.80
PK	7.32123G	48.82	74.00	-25.18	39.05	3	Vertical	354	2.63	-	36.44	5.76	32.43
AV	7.31833G	38.65	54.00	-15.35	28.88	3	Vertical	354	2.63	-	36.44	5.76	32.43

BT-LE(2Mbps)

23/03/2021

2440MHz_TX



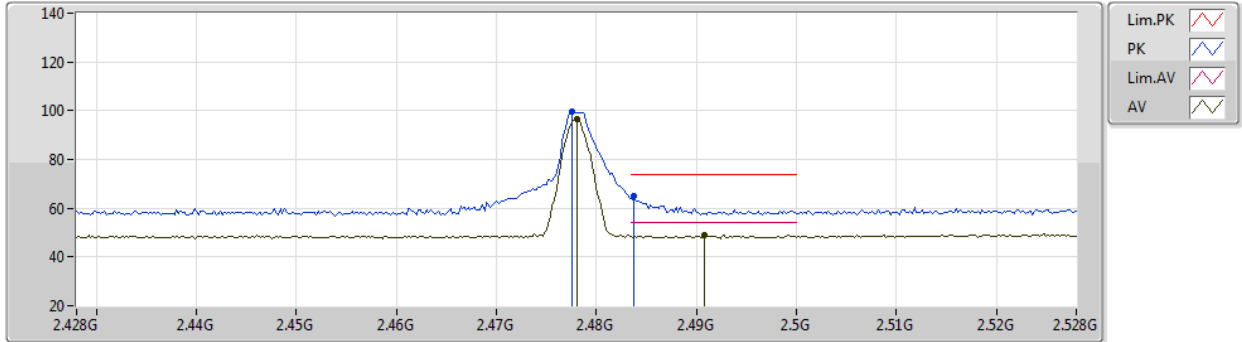
EUT_Z_1TX
Setting 10
02-B-E-2

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	4.88093G	49.68	74.00	-24.32	43.66	3	Horizontal	282	2.54	-	33.12	4.70	31.80
AV	4.87894G	42.24	54.00	-11.76	36.22	3	Horizontal	282	2.54	-	33.12	4.70	31.80
PK	7.32145G	48.00	74.00	-26.00	38.23	3	Horizontal	218	2.18	-	36.44	5.76	32.43
AV	7.31841G	38.28	54.00	-15.72	28.51	3	Horizontal	218	2.18	-	36.44	5.76	32.43

BT-LE(2Mbps)

23/03/2021

2478MHz_TX



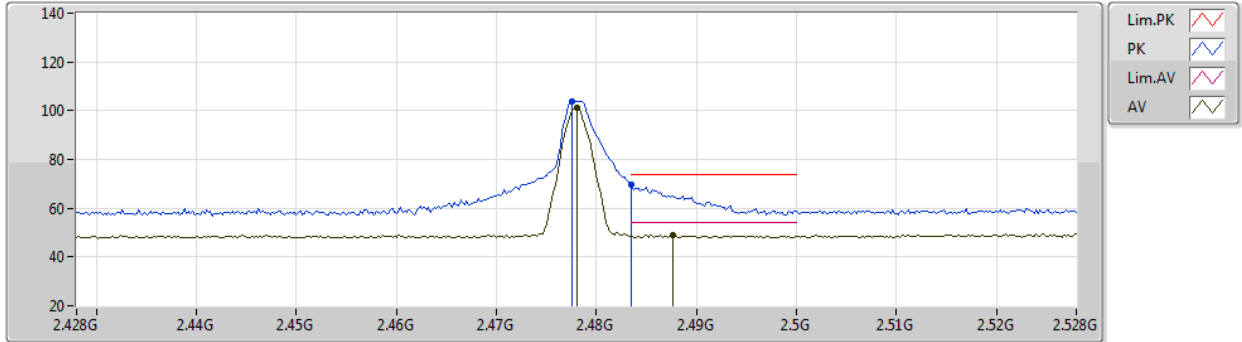
EUT Z_1TX
Setting 10
02-B-E-2

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	2.4776G	99.59	Inf	-Inf	68.64	3	Vertical	235	1.87	-	28.51	2.44	-
AV	2.478G	96.70	Inf	-Inf	65.75	3	Vertical	235	1.87	-	28.51	2.44	-
PK	2.4838G	64.88	74.00	-9.12	33.90	3	Vertical	235	1.87	-	28.54	2.44	-
AV	2.4908G	48.98	54.00	-5.02	17.97	3	Vertical	235	1.87	-	28.56	2.45	-

BT-LE(2Mbps)

23/03/2021

2478MHz_TX



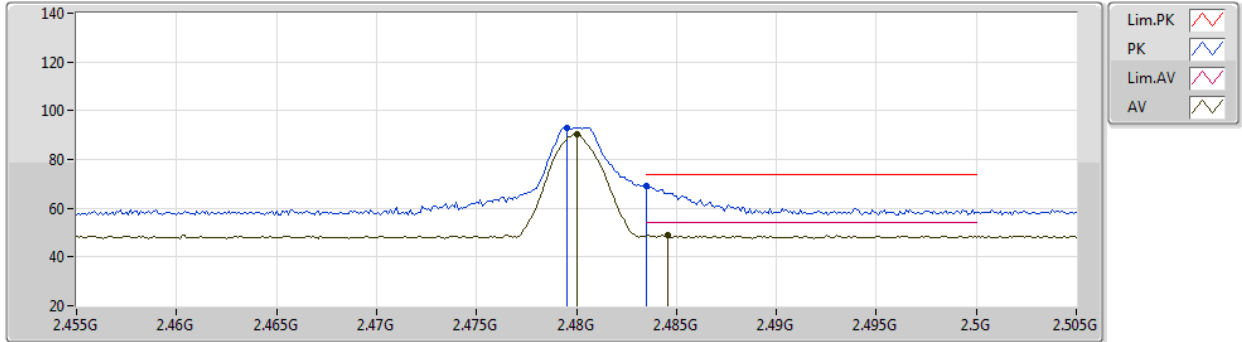
EUT Z_1TX
Setting 10
02-B-E-2

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	2.4776G	103.89	Inf	-Inf	72.94	3	Horizontal	254	2.80	-	28.51	2.44	-
AV	2.478G	101.15	Inf	-Inf	70.20	3	Horizontal	254	2.80	-	28.51	2.44	-
PK	2.4835G	69.49	74.00	-4.51	38.52	3	Horizontal	254	2.80	-	28.53	2.44	-
AV	2.4876G	48.88	54.00	-5.12	17.89	3	Horizontal	254	2.80	-	28.55	2.44	-

BT-LE(2Mbps)

23/03/2021

2480MHz_TX



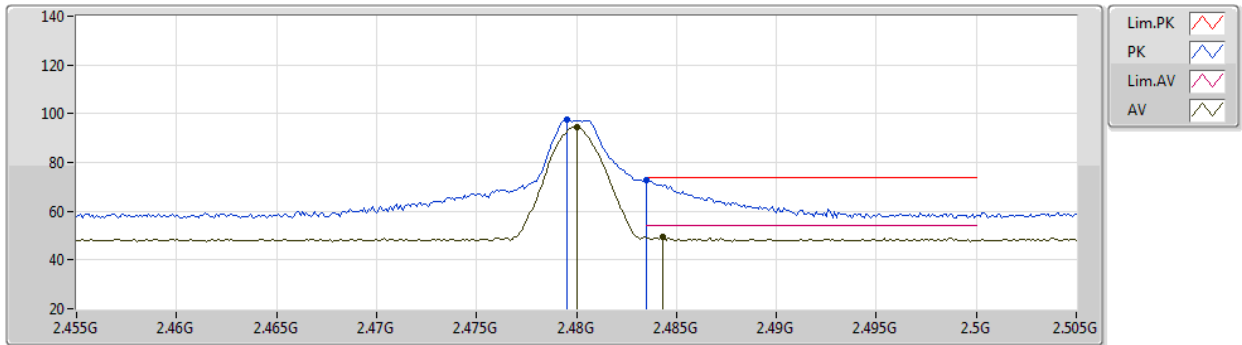
EUT_Z_1TX
Setting 3
02-B-E-2

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	2.4795G	93.14	Inf	-Inf	62.18	3	Vertical	235	2.76	-	28.52	2.44	-
AV	2.48G	90.32	Inf	-Inf	59.36	3	Vertical	235	2.76	-	28.52	2.44	-
PK	2.4835G	69.39	74.00	-4.61	38.42	3	Vertical	235	2.76	-	28.53	2.44	-
AV	2.4846G	48.89	54.00	-5.11	17.91	3	Vertical	235	2.76	-	28.54	2.44	-

BT-LE(2Mbps)

23/03/2021

2480MHz_TX



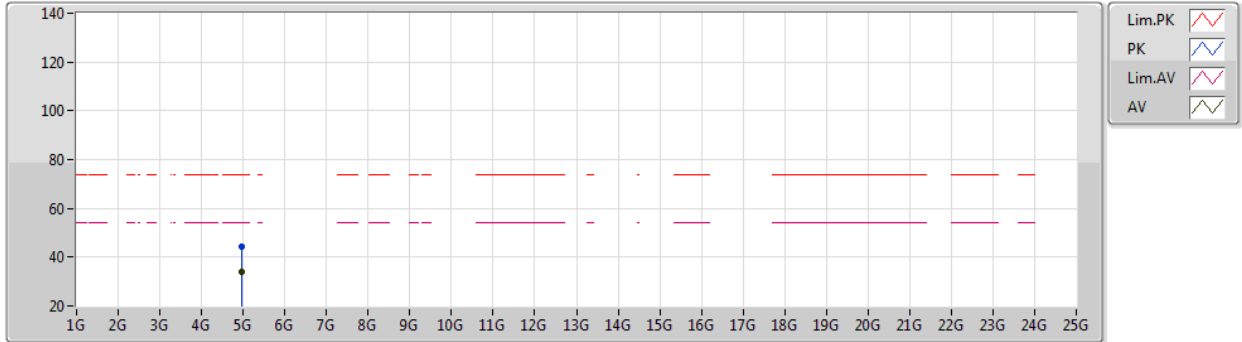
EUT Z_1TX
Setting 3
02-B-E-2

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	2.4795G	97.46	Inf	-Inf	66.50	3	Horizontal	263	2.59	-	28.52	2.44	-
AV	2.48G	94.59	Inf	-Inf	63.63	3	Horizontal	263	2.59	-	28.52	2.44	-
PK	2.4835G	72.72	74.00	-1.28	41.75	3	Horizontal	263	2.59	-	28.53	2.44	-
AV	2.4843G	49.36	54.00	-4.64	18.38	3	Horizontal	263	2.59	-	28.54	2.44	-

BT-LE(2Mbps)

23/03/2021

2480MHz_TX



EUT Z_1TX
Setting 3
02-B-E-2

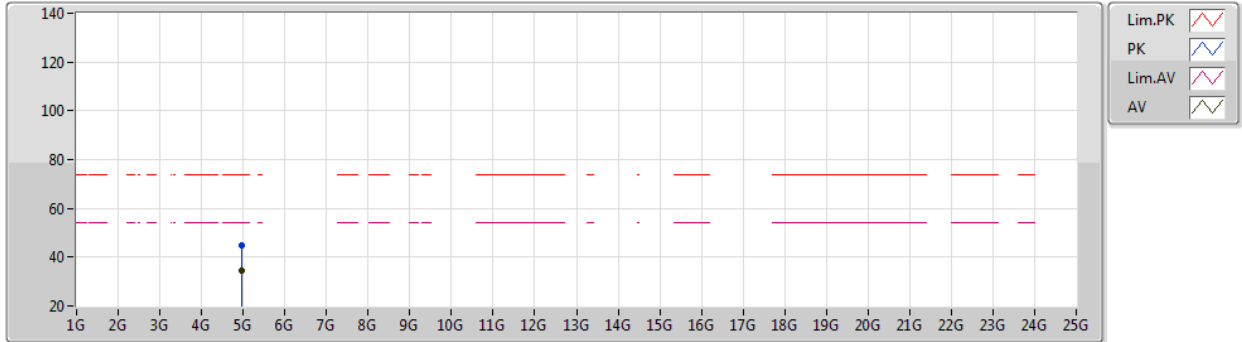
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.95949G	44.38	74.00	-29.62	38.29	3	Vertical	236	2.56	-	33.22	4.70	31.83
AV	4.96094G	33.92	54.00	-20.08	27.83	3	Vertical	236	2.56	-	33.22	4.70	31.83



BT-LE(2Mbps)

23/03/2021

2480MHz_TX



EUT Z_1TX
Setting 3
02-B-E-2

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	4.96189G	44.71	74.00	-29.29	38.62	3	Horizontal	283	2.37	-	33.22	4.70	31.83
AV	4.95899G	34.47	54.00	-19.53	28.38	3	Horizontal	283	2.37	-	33.22	4.70	31.83