

FCC Radio Test Report

FCC ID : UDX-670138010
Equipment : Bluetooth module
Brand Name : Cisco
Model Name : MT0-HW
Applicant : Cisco Systems, Inc.
170 West Tasman Drive San Jose, CA 95134 USA
Manufacturer : Cisco Systems, Inc.
170 West Tasman Drive San Jose, CA 95134 USA
Standard : 47 CFR FCC Part 15.247

The product was received on Sep. 13, 2021, and testing was started from Sep. 24, 2021 and completed on Sep. 29, 2021. We, SPORTON INTERNATIONAL INC. Hsinhua Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. Hsinhua Laboratory, the test report shall not be reproduced except in full.



Approved by: Allen Lin

SPORTON INTERNATIONAL INC. Hsinhua Laboratory

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



Table of Contents

HISTORY OF THIS TEST REPORT3

SUMMARY OF TEST RESULT4

1 GENERAL DESCRIPTION5

1.1 Information.....5

1.2 Testing Applied Standards7

1.3 Testing Location Information7

1.4 Measurement Uncertainty7

2 TEST CONFIGURATION OF EUT.....8

2.1 Test Channel Mode8

2.2 The Worst Case Measurement Configuration9

2.3 Support Equipment.....10

2.4 Test Setup Diagram11

3 TRANSMITTER TEST RESULT12

3.1 AC Power-line Conducted Emissions12

3.2 DTS Bandwidth.....14

3.3 Maximum Conducted Output Power15

3.4 Power Spectral Density17

3.5 Emissions in Non-restricted Frequency Bands18

3.6 Emissions in Restricted Frequency Bands.....19

4 TEST EQUIPMENT AND CALIBRATION DATA.....23

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



History of this test report

Report No.	Version	Description	Issued Date
FR191302AL	01	Initial issue of report	Oct. 22, 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)	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:
None

Reviewed by: Sam Tsai

Report Producer: Michelle Tsai

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	Bluetooth 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(2Mbps)	2.0	1TX
2.4-2.4835GHz	BT-LE(125kbps)	1.0	1TX
2.4-2.4835GHz	BT-LE(500kbps)	1.0	1TX

Note:

- ♦ Bluetooth LE uses a GFSK (1Mbps/2Mbps/125kbps/500kbps) modulation.
- ♦ BWch is the nominal channel bandwidth.

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	Senao	7016A257300X	PIFA	N/A	2.12

Note 1: The EUT has one antenna.

For BT function:

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

Ant. 1 can be used as transmitting/receiving.

1.1.3 EUT Information

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



1.1.4 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
BT-LE(1Mbps)	1	0	n/a (DC \geq 0.98)	n/a (DC \geq 0.98)
BT-LE(2Mbps)	1	0	n/a (DC \geq 0.98)	n/a (DC \geq 0.98)
BT-LE(125kbps)	1	0	n/a (DC \geq 0.98)	n/a (DC \geq 0.98)
BT-LE(500kbps)	1	0	n/a (DC \geq 0.98)	n/a (DC \geq 0.98)

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

1.2 Testing Applied Standards

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

- ◆ 47 CFR FCC Part 15
- ◆ ANSI C63.10-2013

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

- ◆ KDB 558074 D01 v05r02
- ◆ KDB 414788 D01 v01r01

1.3 Testing Location Information

Test Lab. : Sporton International Inc. Hsinhua Laboratory				
<input checked="" type="checkbox"/>	Hsinhua (TAF: 3785)	ADD: No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)		
		TEL: 886-3-327-3456	FAX: 886-3-327-0973	
Test site Designation No. TW3785 with FCC.				
Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
AC Conduction	CO04-HY	Daniel Lin	20.5~23.6°C / 55~64%	29/Sep/2021
RF Conducted	TH06-HY	Howard Lee	20.1~27°C / 50~62%	28/Sep/2021
<input checked="" type="checkbox"/>	Wen 33rd.St. (TAF: 3785)	ADD: No.14-1, Ln. 19, Wen 33rd St., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.)		
		TEL: 886-3-318-0787	FAX: 886-3-318-0287	
Test site Designation No. TW0008 with FCC.				
Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
Radiated	03CH09-HY	Ryan Hsiao	22.5~24.3°C / 42~57%	24/Sep/2021~27/Sep/2021

1.4 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2))

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	0.9 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	2.4 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.6 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.0 dB	Confidence levels of 95%
Temperature	0.41 °C	Confidence levels of 95%
Humidity	3.4 %	Confidence levels of 95%



2 Test Configuration of EUT




2.1 Test Channel Mode

Test Software Version	Dos 6.1
Mode	Power Setting
BT-LE(1Mbps)	-
2402MHz	8
2440MHz	8
2480MHz	8
BT-LE(2Mbps)	-
2402MHz	8
2440MHz	8
2480MHz	8
BT-LE(125kbps)	-
2402MHz	8
2440MHz	8
2480MHz	8
BT-LE(500kbps)	-
2402MHz	8
2440MHz	8
2480MHz	8

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	Test Fixture Mode

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

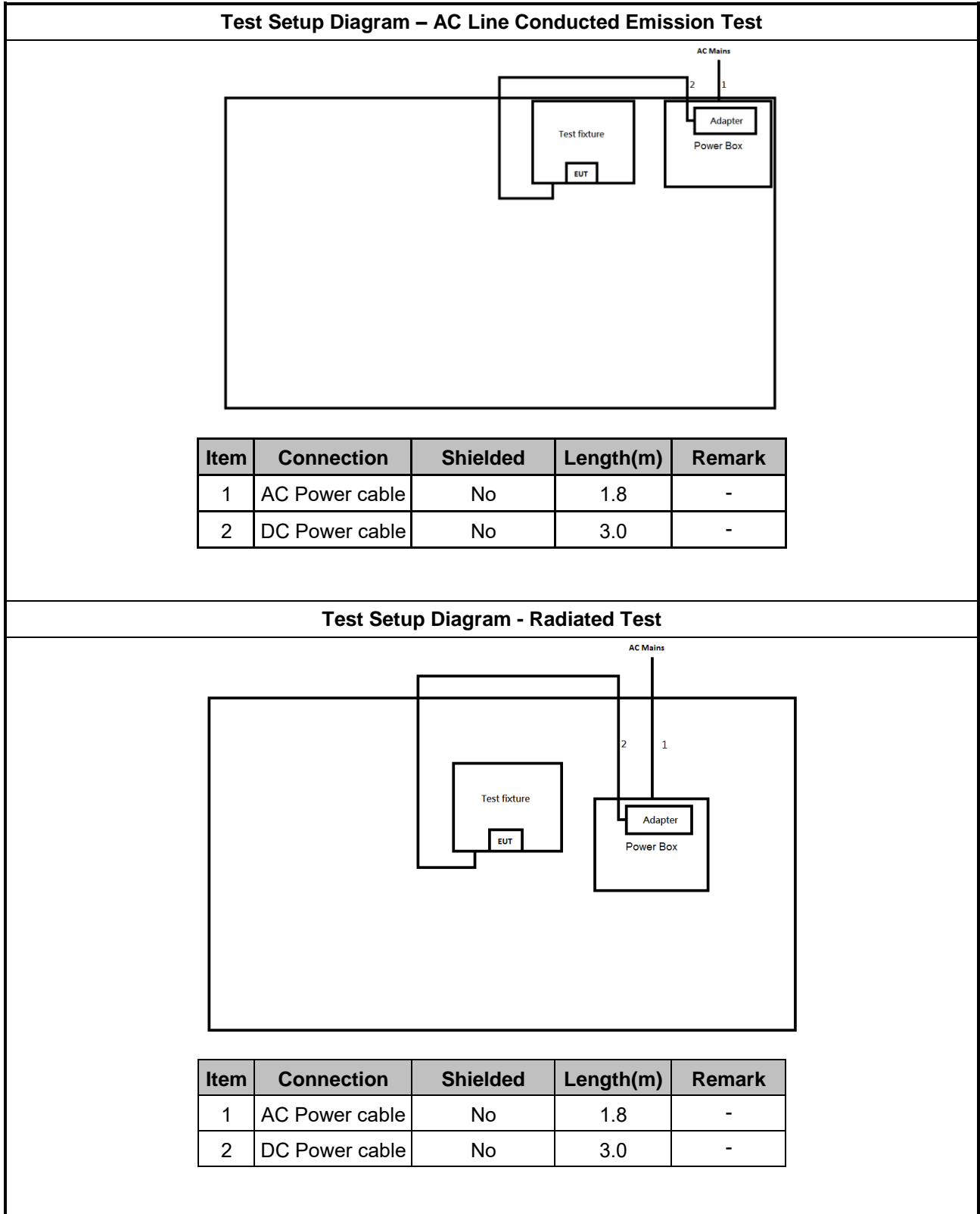
The Worst Case Mode for Following Conformance Tests			
Tests Item	Emissions in Restricted Frequency Bands		
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.		
Operating Mode < 1GHz	CTX		
1	Test Fixture Mode		
Operating Mode > 1GHz	CTX		
Orthogonal Planes of EUT	X Plane	Y Plane	Z Plane
			
Worst Planes of EUT			V

2.3 Support Equipment

Support Equipment – AC Conduction and Radiated					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Test Fixture	Mission (GUANGZHOU)Ltd	7016A257900X	-	Provided by Customer
2	AC Adapter	Cisco	MA-PWR-USB-XX where XX can be -US, -EU, -UK and -AU	-	
3	USB-C cable	Nienyi	USB2.0 Type CM to Type CM L=3M	-	

Support Equipment – Conducted					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Notebook	DELL	E5410	-	-
2	Adapter for NB	DELL	HA65NM130	-	-
3	Test Fixture	Mission (GUANGZHOU)Ltd	7016A257900X	-	Provided by Customer
4	AC Adapter	Cisco	MA-PWR-USB-XX where XX can be -US, -EU, -UK and -AU	-	
5	USB-C cable	Nienyi	USB2.0 Type CM to Type CM L=3M	-	

2.4 Test Setup Diagram



3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

Note 1: * Decreases with the logarithm of the frequency.

3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

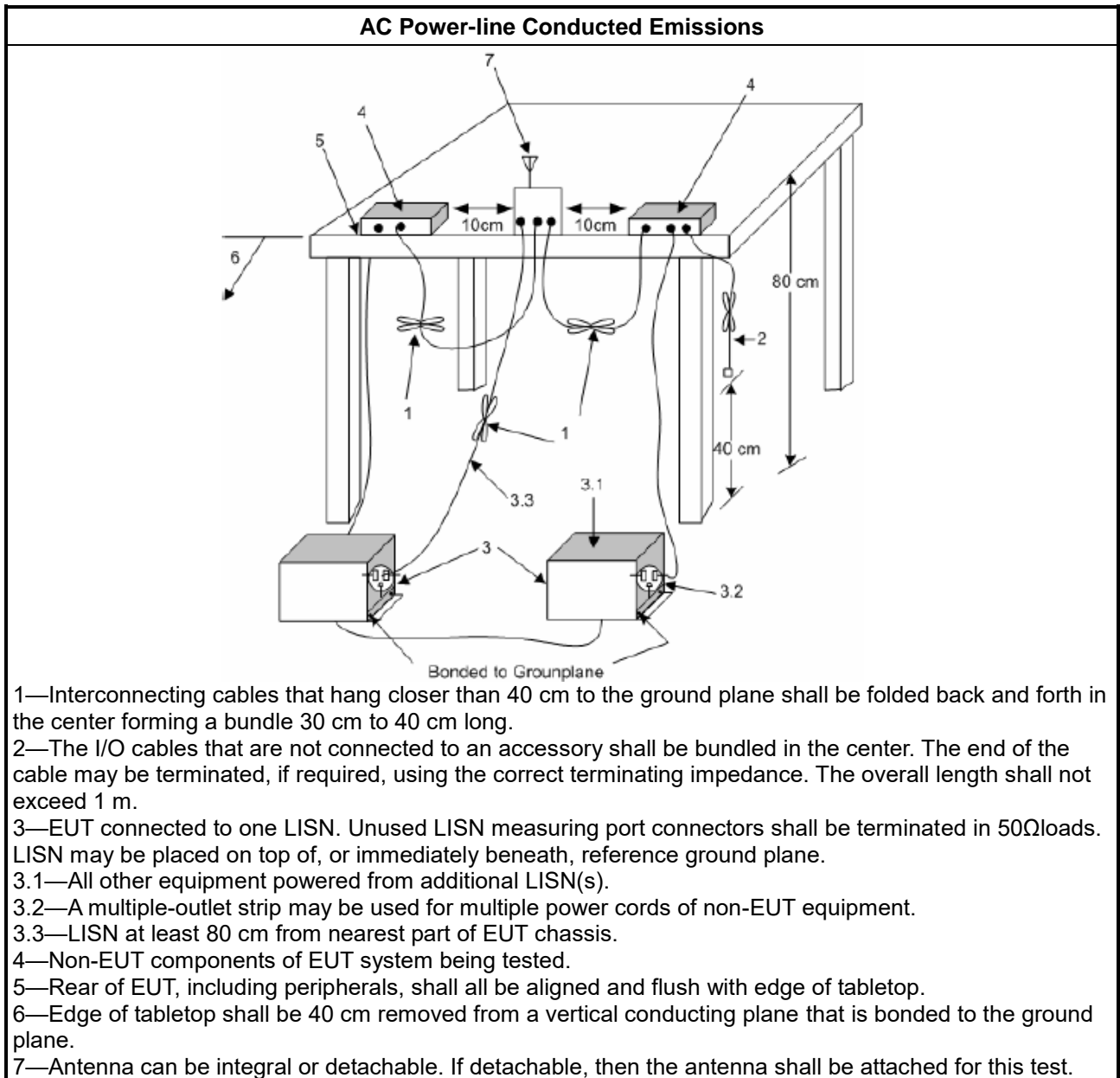
Test Method
<ul style="list-style-type: none"> Refer as ANSI C63.10-2013, clause 6.2 foray power-line conducted emissions.

3.1.4 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Raw(Read Level) +LISN(LISN Factor) + CL(Cable Loss) + AT(Attenuator).

3.1.5 Test Setup



3.1.6 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.

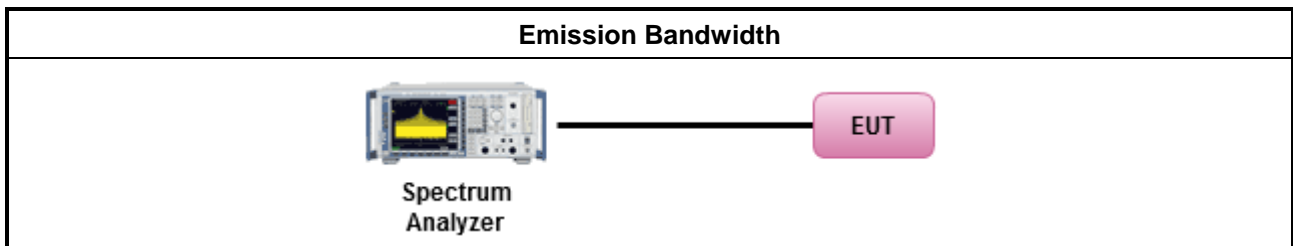
3.2.2 Measuring Instruments

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 KDB 558074, clause 8.2 (11.8 of ANSI C63.10) DTS bandwidth measurement.
<input type="checkbox"/> Refer as RSS-Gen, clause 6.7 for occupied bandwidth testing.
<input type="checkbox"/> Refer as ANSI C63.10, clause 6.9.3 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
e.i.r.p. Power Limit:	
	<ul style="list-style-type: none"> ▪ 2400-2483.5 MHz Band
	<ul style="list-style-type: none"> ▪ Point-to-multipoint systems (P2M): $P_{eirp} \leq 36$ dBm (4 W)
	<ul style="list-style-type: none"> ▪ Point-to-point systems (P2P): $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX}])$ dBm
	<ul style="list-style-type: none"> ▪ Smart antenna system (SAS)
	<ul style="list-style-type: none"> - Single beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm
	<ul style="list-style-type: none"> - Overlap beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm
	<ul style="list-style-type: none"> - Aggregate power on all beams: $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX} + 8])$ dBm
<p>P_{Out} = maximum peak conducted output power or maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.</p>	

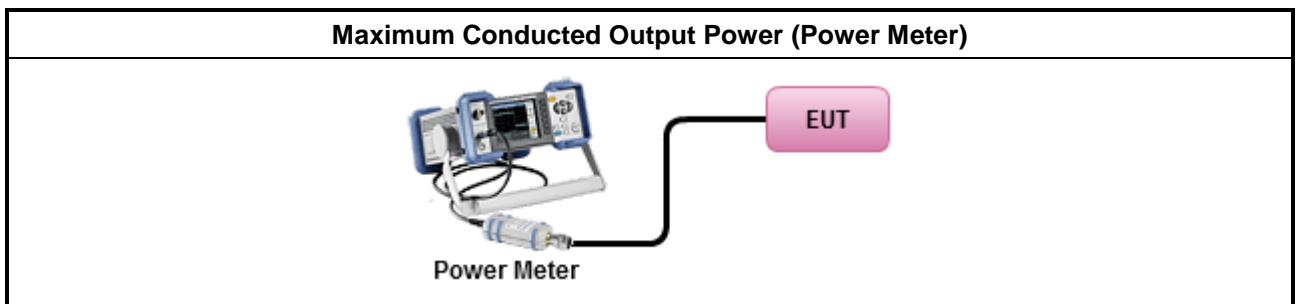
3.3.2 Measuring Instruments

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 KDB 558074, clause 8.3.1.1 (11.9.1.1 of ANSI C63.10) RBW ≥ EBW method.
<input type="checkbox"/>	Refer as KDB 558074, clause 8.3.1.2 (11.9.1.2 of ANSI C63.10) integrated band power method.
<input type="checkbox"/>	Refer as KDB 558074, clause 8.3.1.3 (11.9.1.3 of ANSI C63.10) peak power meter.
<ul style="list-style-type: none"> ▪ Maximum Average Conducted Output Power 	
<input type="checkbox"/>	Refer as KDB 558074, clause 8.3.2.2 (11.9.2.2 of ANSI C63.10) using a spectrum analyzer.
<input checked="" type="checkbox"/>	Refer as KDB 558074, clause 8.3.2.3 (11.9.2.3 of ANSI C63.10) using a 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 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

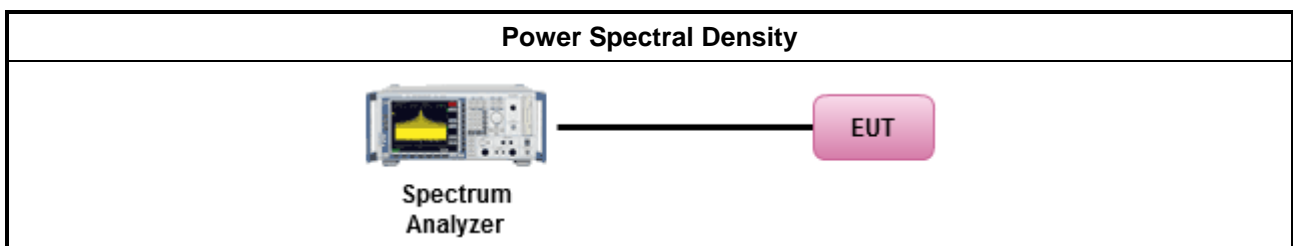
3.4.2 Measuring Instruments

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 KDB 558074, clause 8.4 (11.10 of ANSI C63.10) Max. PSD.
	<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"> Measure and sum the spectra across the outputs. Refer as 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.

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 (dB)
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 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 level.

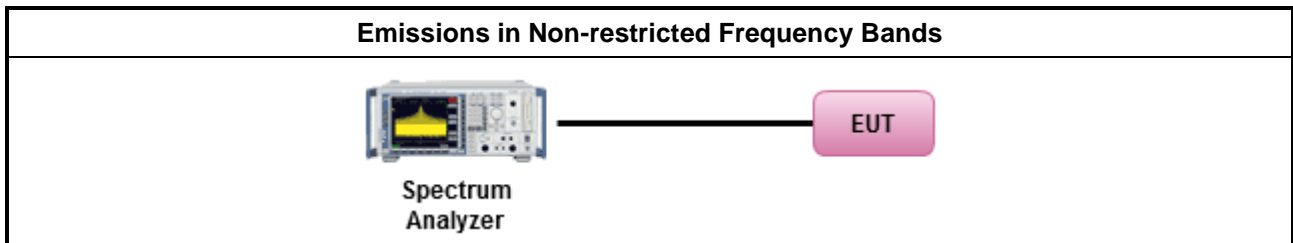
3.5.2 Measuring Instruments

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 KDB 558074, clause 8.5 (11.11 of ANSI C63.10) for non-restricted frequency 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

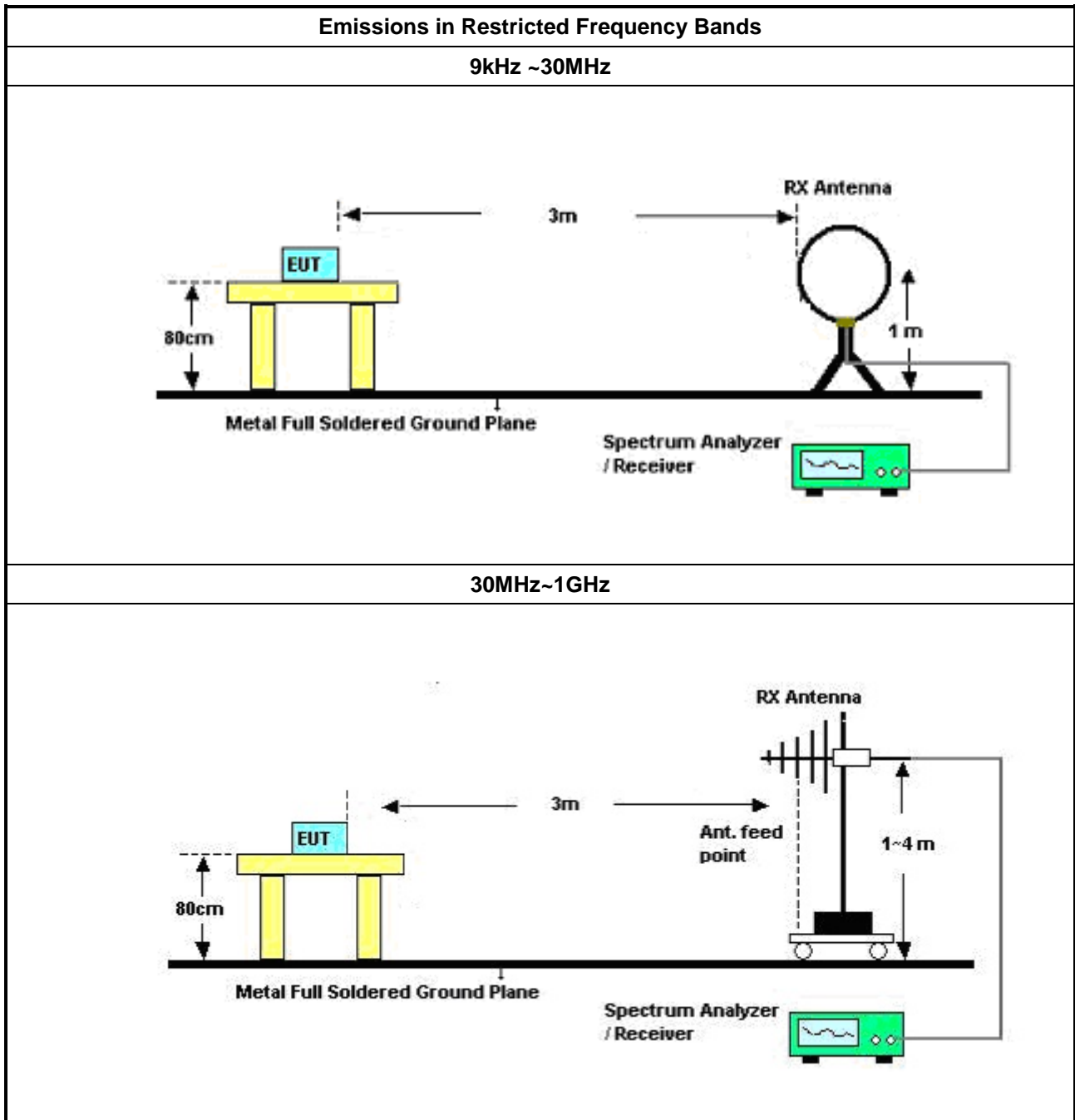
Test Method	
	<ul style="list-style-type: none"> ▪ The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].
	<ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel 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 KDB 558074, clause 8.6 (11.12 of ANSI C63.10) for restricted frequency bands.
	<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 KDB 558074 clause 8.7.1, 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. ▪ Refer as KDB 558074, clause 8.7.2 (6.10.6 of ANSI C63.10) for marker-delta method for band-edge measurements. ▪ Refer as KDB 558074, clause 8.7.3 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels.
	<ul style="list-style-type: none"> ▪ Use the following spectrum analyzer settings: <ul style="list-style-type: none"> ▪ Set RBW=100 kHz for f < 1 GHz; VBW=3 * RBW; Sweep = auto; Detector function = peak; Trace = max hold. ▪ Set RBW = 1 MHz, VBW= 3MHz for f ≥ 1 GHz for peak measurement. For average measurement, refer as 1.1.4.
	<ul style="list-style-type: none"> ▪ KDB 414788 Open-Field Test Sites and Chamber Correlation Justification. <ul style="list-style-type: none"> ▪ Based on FCC 15.31 (f) (2): measurements may be performed at a distance closer than that specified in regulations; however, an attempt should be made to avoid making measurements in the near field. ▪ Open-field site and chamber correlation testing had been performed and chamber measured test result is the worst case test result.

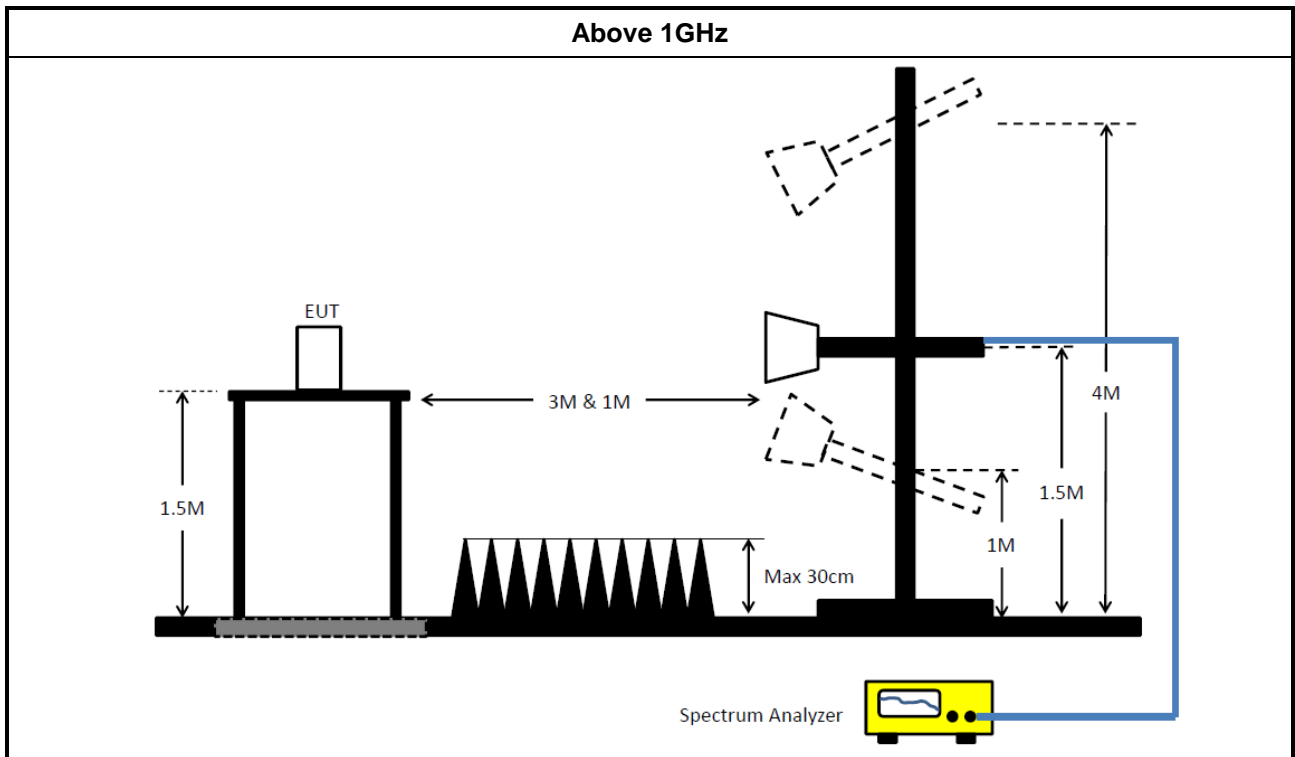
3.6.4 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamplifier Factor)

3.6.5 Test Setup





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

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

3.6.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F



4 Test Equipment and Calibration Data

Instrument for AC Conduction

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMI Test Receiver	R&S	ESR	102052	9kHz ~ 3.6GHz	19/Apr/2021	18/Apr/2022
LISN	R&S	ENV216	101295	9kHz ~ 30MHz	11/Nov/2020	10/Nov/2021
RF Cable 5m	TITAN	TITAN	CO04-cable-01	0.1MHz~200MHz	03/Mar/2021	02/Mar/2022
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9kHz ~ 30MHz	15/Sep/2021	14/Sep/2022

Instrument for Conducted Test

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Signal Analyzer	R&S	FSV 40	101029	10Hz~40GHz	19/Oct/2020	18/Oct/2021
SMB100A Signal Generator	R&S	SMB100A03	181147	100kHz~40GHz	20/Oct/2020	19/Oct/2021
Pulse Sensor	Anritsu	MA2411B	1027452	300MHz~40GHz	25/Mar/2021	24/Mar/2022
Power Meter	Anritsu	ML2495A	1124009	300MHz~40GHz	25/Mar/2021	24/Mar/2022

**Instrument for Radiated Test**

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	30MHz~1GHz 3m	26/Mar/2021	25/Mar/2022
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	1GHz~18GHz 3m	18/Mar/2021	17/Mar/2022
EXA Signal Analyzer	KEYSIGHT	N9010A	MY54200885	10Hz~44GHz	13/Aug/2021	12/Aug/2022
Amplifier	EMC	EMC9135	980232	9kHz~1GHz	12/Apr/2021	11/Apr/2022
Bilog Antenna & 5dB Attenuator	TESEQ & MTJ	CBL6111D&MTJ6 102-05	35418 & 3	30MHz~1GHz	05/Sep/2021	04/Sep/2022
Microwave Preamplifier	Agilent	8449B	3008A02096	1GHz~26.5GHz	23/Jul/2021	22/Jul/2022
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA9120 D 1534	1GHz~18GHz	18/May/2021	17/May/2022
RF Cable-low	Jye Bao	RG142	CB031+324530/4	9kHz~30MHz	30/Aug/2021	29/Aug/2022
RF Cable-low	Jye Bao	RG142	CB031+324530/4	30MHz~1GHz	09/Feb/2021	08/Feb/2022
RF CABLE 5m+3m+1m	HUBER+SUHNER	SUCOFLEX104	CB009	1GHz~40GHz	13/Aug/2021	12/Aug/2022
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170221	18GHz~40GHz	11/Mar/2021	10/Mar/2022
Microwave Prempplier	EMC INSTRUMENTS	EM18G40G	060604	18GHz ~ 40GHz	09/Mar/2021	08/Mar/2022
Loop Antenna	TESEQ	HLA 6120	31244	9kHz~30MHz	16/Mar/2021	15/Mar/2022
EMI Test Receiver	R&S	ESR3	102052	9kHz~3.6GHz	19/Apr/2021	18/Apr/2022



Summary

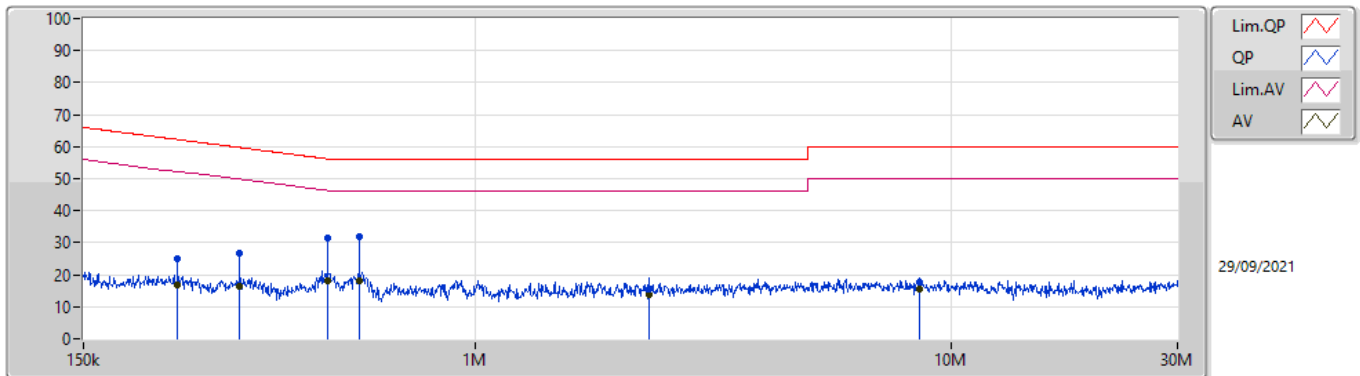
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	573.613k	33.15	56.00	-22.85	Neutral



Mode Configure

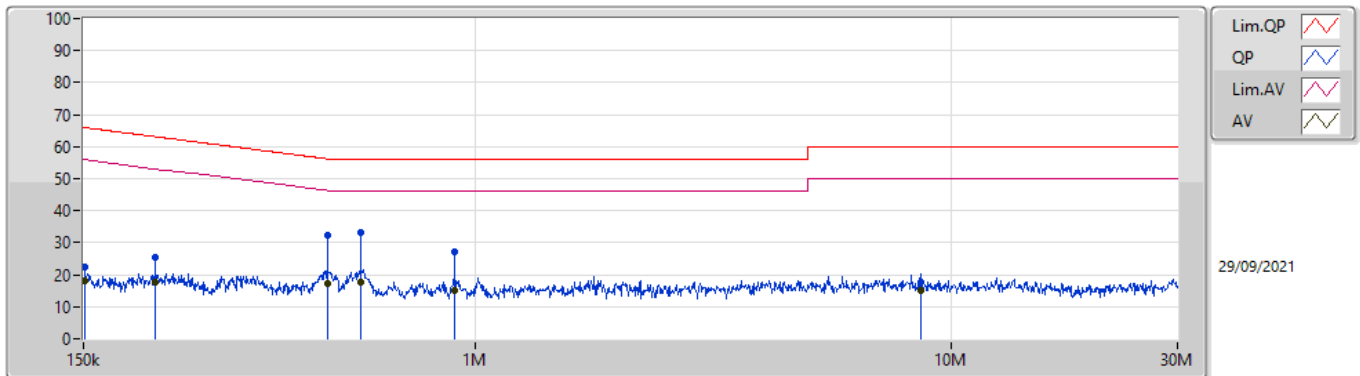
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition	Comments
Mode 1	Pass	QP	236.447k	25.14	62.21	-37.07	Line	-
Mode 1	Pass	AV	236.447k	16.67	52.21	-35.54	Line	-
Mode 1	Pass	QP	318.98k	26.75	59.73	-32.98	Line	-
Mode 1	Pass	AV	318.98k	16.22	49.73	-33.51	Line	-
Mode 1	Pass	QP	488.957k	31.48	56.19	-24.71	Line	-
Mode 1	Pass	AV	488.957k	17.97	46.19	-28.22	Line	-
Mode 1	Pass	QP	569.051k	31.78	56.00	-24.22	Line	-
Mode 1	Pass	AV	569.051k	18.31	46.00	-27.69	Line	-
Mode 1	Pass	QP	2.32M	15.52	56.00	-40.48	Line	-
Mode 1	Pass	AV	2.32M	13.67	46.00	-32.33	Line	-
Mode 1	Pass	QP	8.592M	17.75	60.00	-42.25	Line	-
Mode 1	Pass	AV	8.592M	15.43	50.00	-34.57	Line	-
Mode 1	Pass	QP	151.202k	22.60	65.92	-43.32	Neutral	-
Mode 1	Pass	AV	151.202k	18.28	55.92	-37.64	Neutral	-
Mode 1	Pass	QP	212.287k	25.53	63.11	-37.58	Neutral	-
Mode 1	Pass	AV	212.287k	17.64	53.11	-35.47	Neutral	-
Mode 1	Pass	QP	490.912k	32.31	56.15	-23.84	Neutral	-
Mode 1	Pass	AV	490.912k	17.24	46.15	-28.91	Neutral	-
Mode 1	Pass	QP	573.613k	33.15	56.00	-22.85	Neutral	-
Mode 1	Pass	AV	573.613k	17.68	46.00	-28.32	Neutral	-
Mode 1	Pass	QP	907.812k	27.08	56.00	-28.92	Neutral	-
Mode 1	Pass	AV	907.812k	14.94	46.00	-31.06	Neutral	-
Mode 1	Pass	QP	8.661M	17.76	60.00	-42.24	Neutral	-
Mode 1	Pass	AV	8.661M	15.26	50.00	-34.74	Neutral	-

Conducted Emissions at Powerline_Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)				
QP	236.447k	25.14	62.21	-37.07	19.61	Line	-	5.53	9.68	0.04	9.89				
AV	236.447k	16.67	52.21	-35.54	19.61	Line	-	-2.94	9.68	0.04	9.89				
QP	318.98k	26.75	59.73	-32.98	19.61	Line	-	7.14	9.67	0.05	9.89				
AV	318.98k	16.22	49.73	-33.51	19.61	Line	-	-3.39	9.67	0.05	9.89				
QP	488.957k	31.48	56.19	-24.71	19.62	Line	-	11.86	9.67	0.06	9.89				
AV	488.957k	17.97	46.19	-28.22	19.62	Line	-	-1.65	9.67	0.06	9.89				
QP	569.051k	31.78	56.00	-24.22	19.63	Line	-	12.15	9.67	0.07	9.89				
AV	569.051k	18.31	46.00	-27.69	19.63	Line	-	-1.32	9.67	0.07	9.89				
QP	2.32M	15.52	56.00	-40.48	19.67	Line	-	-4.15	9.68	0.11	9.88				
AV	2.32M	13.67	46.00	-32.33	19.67	Line	-	-6.00	9.68	0.11	9.88				
QP	8.592M	17.75	60.00	-42.25	19.80	Line	-	-2.05	9.72	0.19	9.89				
AV	8.592M	15.43	50.00	-34.57	19.80	Line	-	-4.37	9.72	0.19	9.89				

Conducted Emissions at Powerline_Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	151.202k	22.60	65.92	-43.32	19.62	Neutral	-	2.98	9.69	0.04	9.89			
AV	151.202k	18.28	55.92	-37.64	19.62	Neutral	-	-1.34	9.69	0.04	9.89			
QP	212.287k	25.53	63.11	-37.58	19.61	Neutral	-	5.92	9.68	0.04	9.89			
AV	212.287k	17.64	53.11	-35.47	19.61	Neutral	-	-1.97	9.68	0.04	9.89			
QP	490.912k	32.31	56.15	-23.84	19.62	Neutral	-	12.69	9.67	0.06	9.89			
AV	490.912k	17.24	46.15	-28.91	19.62	Neutral	-	-2.38	9.67	0.06	9.89			
QP	573.613k	33.15	56.00	-22.85	19.63	Neutral	-	13.52	9.67	0.07	9.89			
AV	573.613k	17.68	46.00	-28.32	19.63	Neutral	-	-1.95	9.67	0.07	9.89			
QP	907.812k	27.08	56.00	-28.92	19.64	Neutral	-	7.44	9.67	0.08	9.89			
AV	907.812k	14.94	46.00	-31.06	19.64	Neutral	-	-4.70	9.67	0.08	9.89			
QP	8.661M	17.76	60.00	-42.24	19.80	Neutral	-	-2.04	9.72	0.19	9.89			
AV	8.661M	15.26	50.00	-34.74	19.80	Neutral	-	-4.54	9.72	0.19	9.89			



Summary

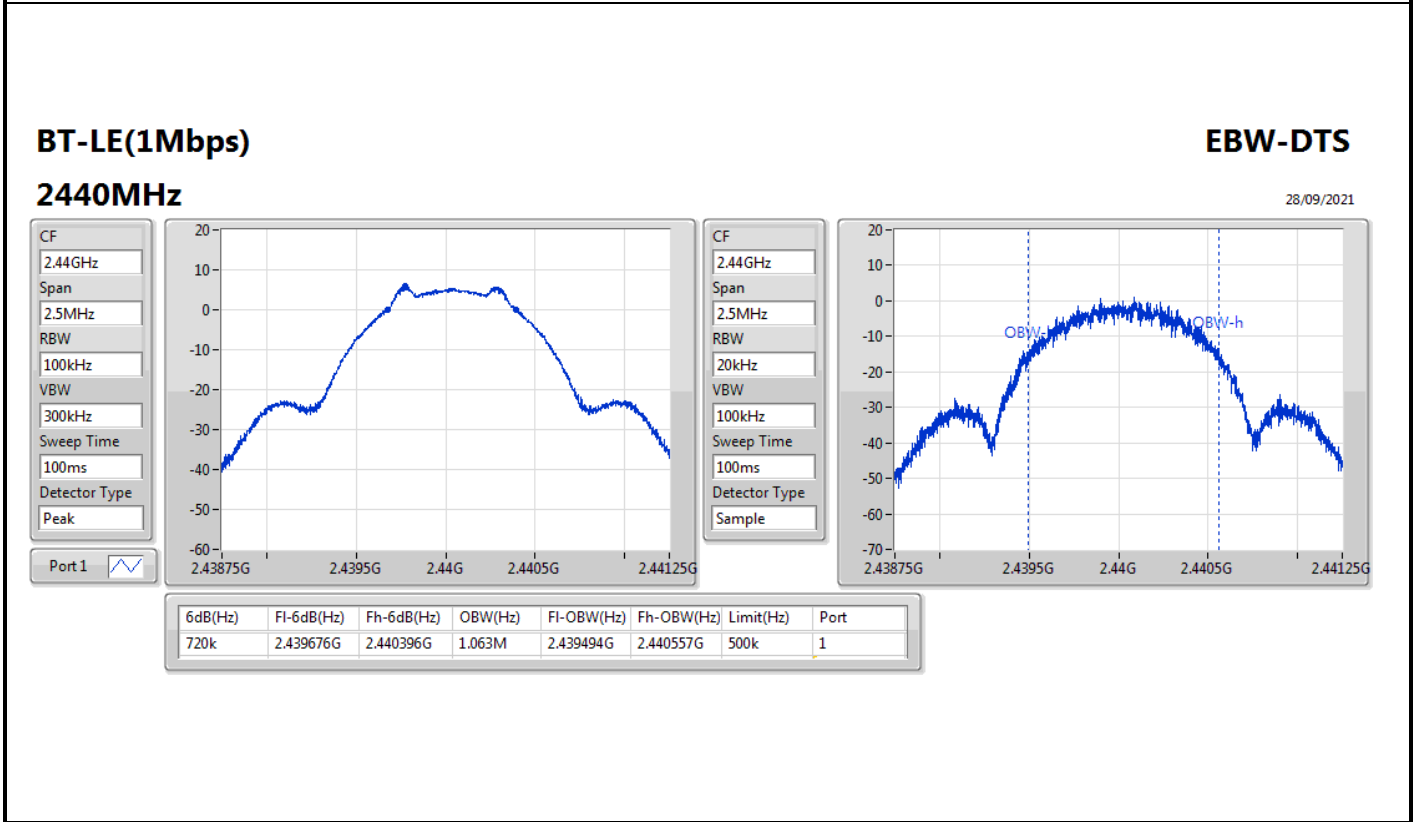
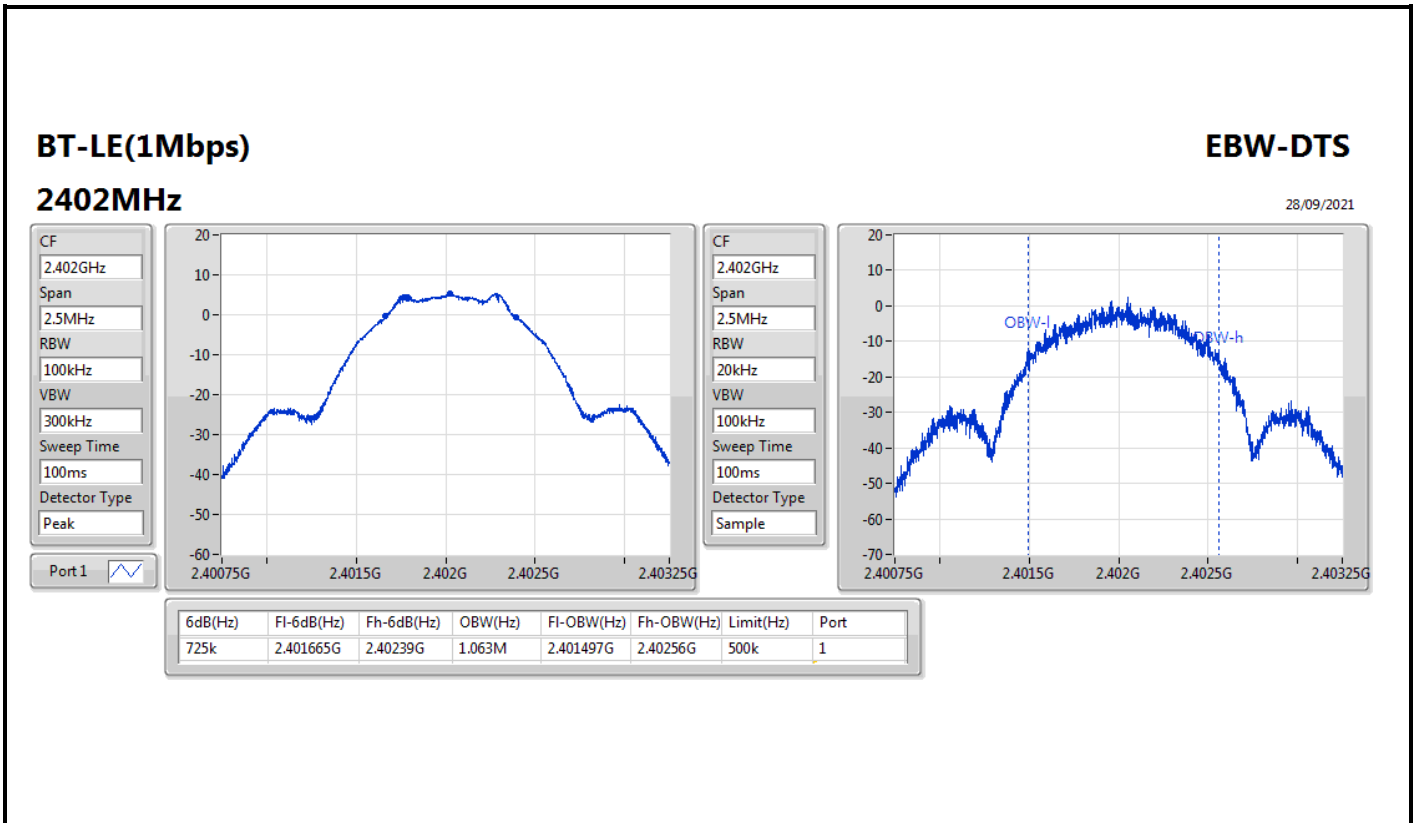
Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
BT-LE(1Mbps)	725k	1.074M	1M07F1D	703.75k	1.063M
BT-LE(2Mbps)	1.405M	2.091M	2M09F1D	1.323M	2.069M
BT-LE(125kbps)	676.25k	1.083M	1M08F1D	660k	1.072M
BT-LE(500kbps)	732.5k	1.057M	1M06F1D	713.75k	1.049M

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	725k	1.063M
2440MHz	Pass	500k	720k	1.063M
2480MHz	Pass	500k	703.75k	1.074M
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	500k	1.405M	2.069M
2440MHz	Pass	500k	1.395M	2.091M
2480MHz	Pass	500k	1.323M	2.086M
BT-LE(125kbps)	-	-	-	-
2402MHz	Pass	500k	676.25k	1.072M
2440MHz	Pass	500k	665k	1.077M
2480MHz	Pass	500k	660k	1.083M
BT-LE(500kbps)	-	-	-	-
2402MHz	Pass	500k	732.5k	1.054M
2440MHz	Pass	500k	721.25k	1.057M
2480MHz	Pass	500k	713.75k	1.049M

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

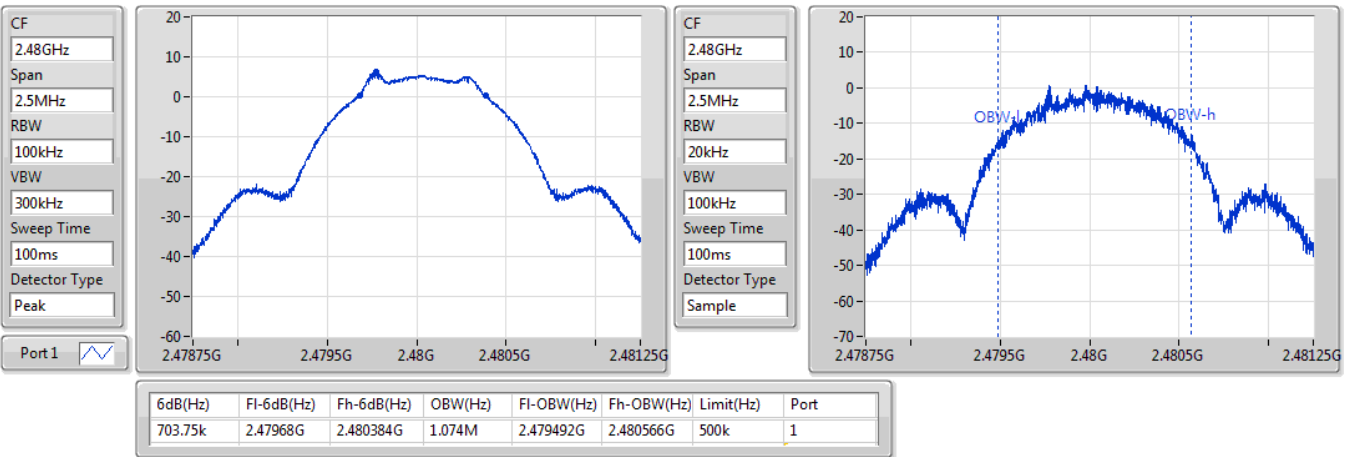


BT-LE(1Mbps)

EBW-DTS

2480MHz

28/09/2021

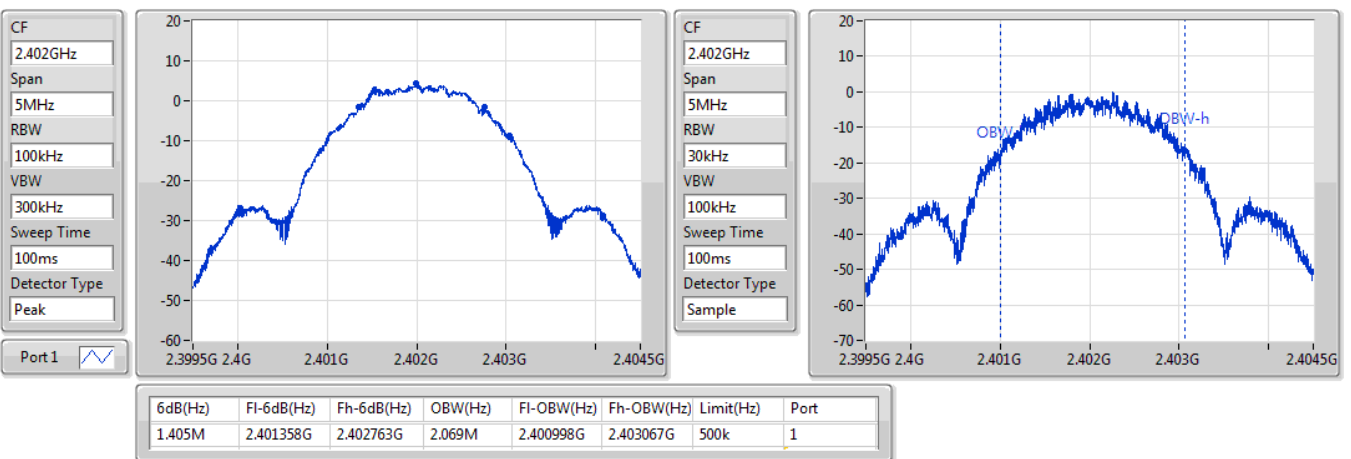


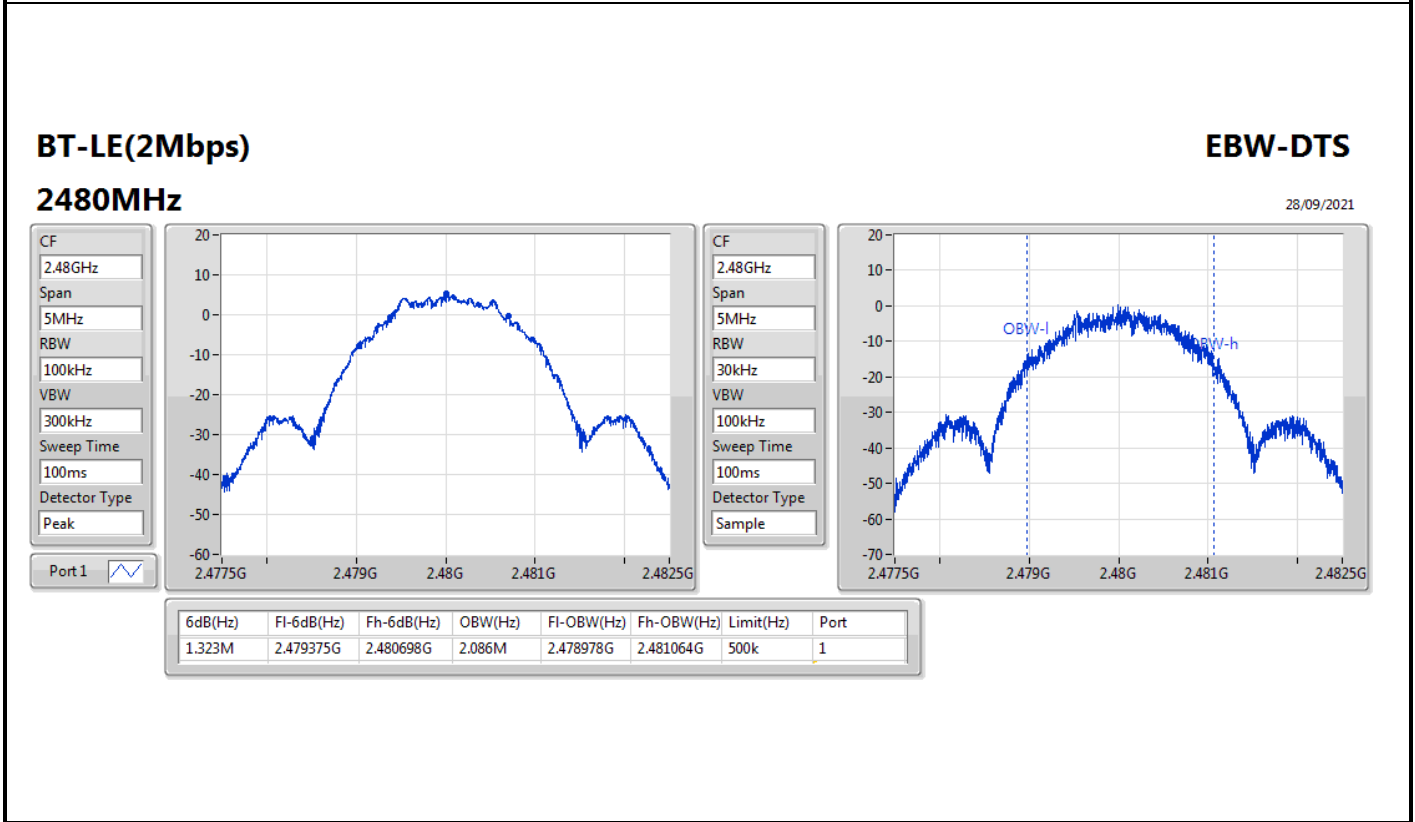
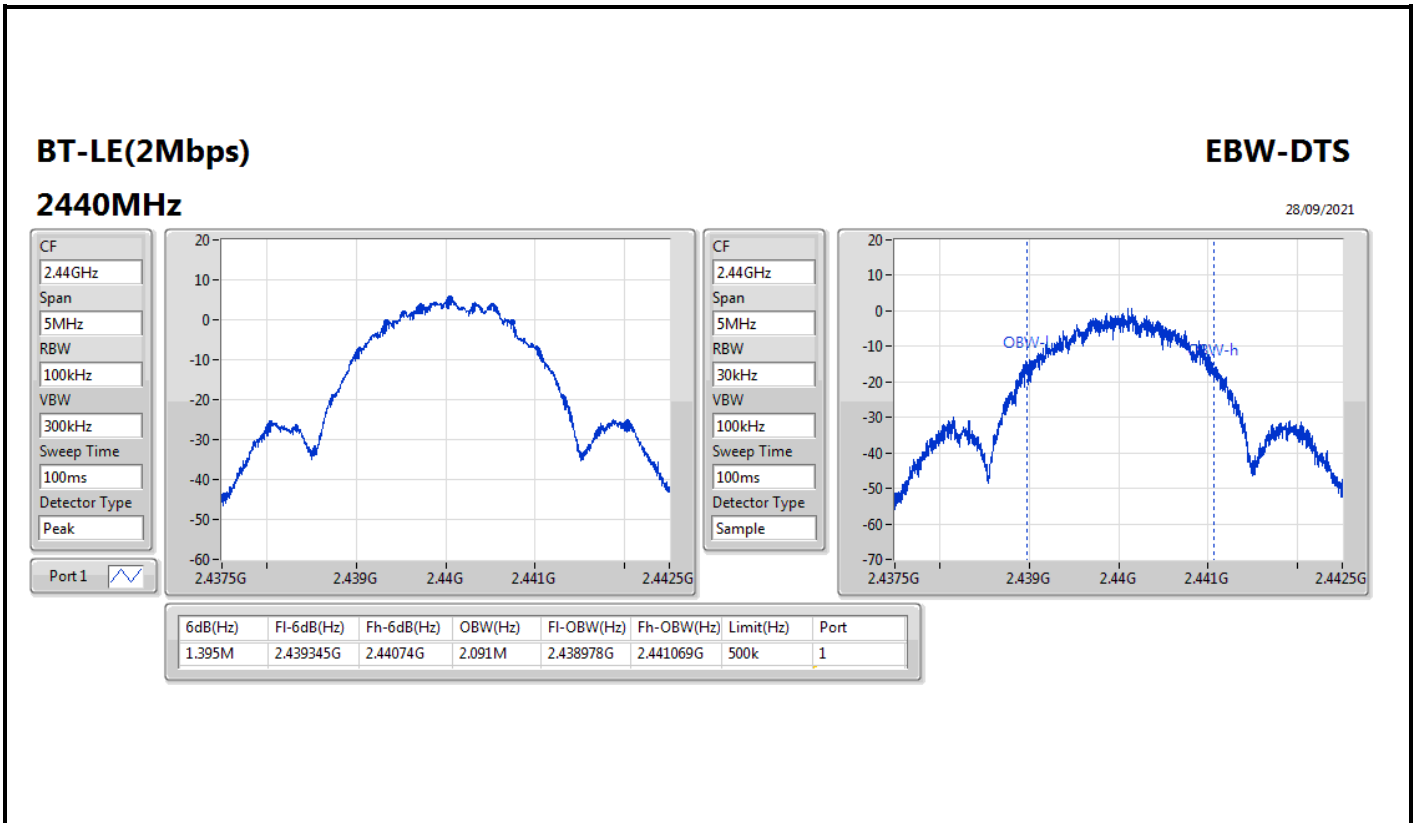
BT-LE(2Mbps)

EBW-DTS

2402MHz

28/09/2021



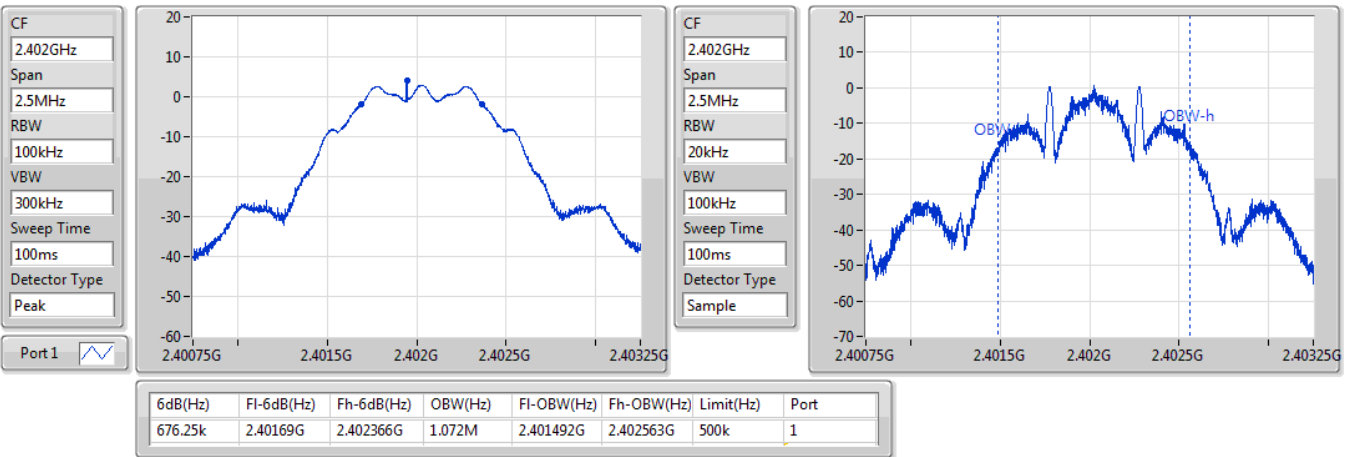


BT-LE(125kbps)

EBW-DTS

2402MHz

28/09/2021

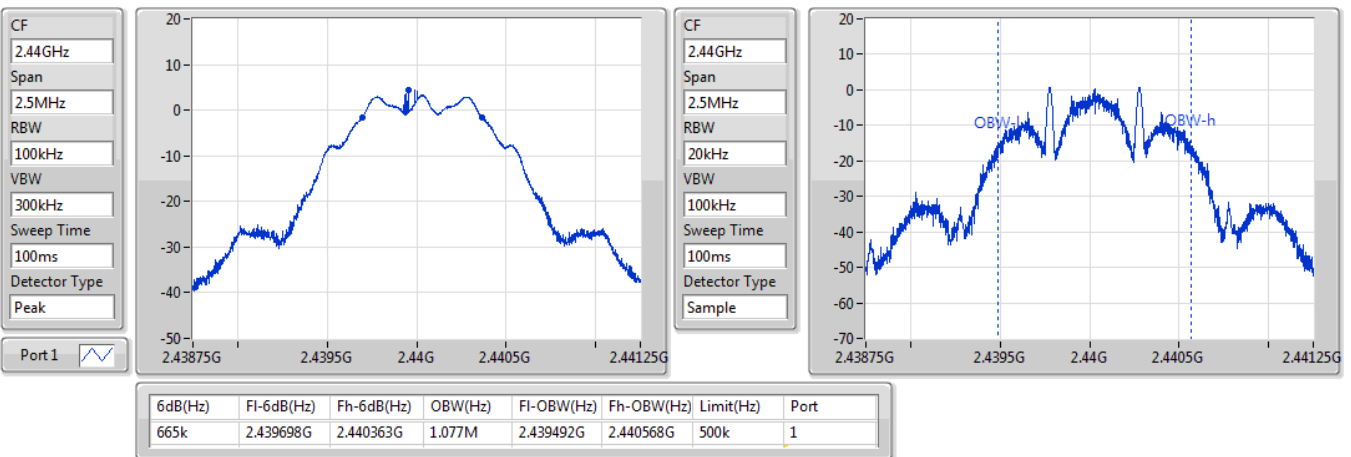


BT-LE(125kbps)

EBW-DTS

2440MHz

28/09/2021

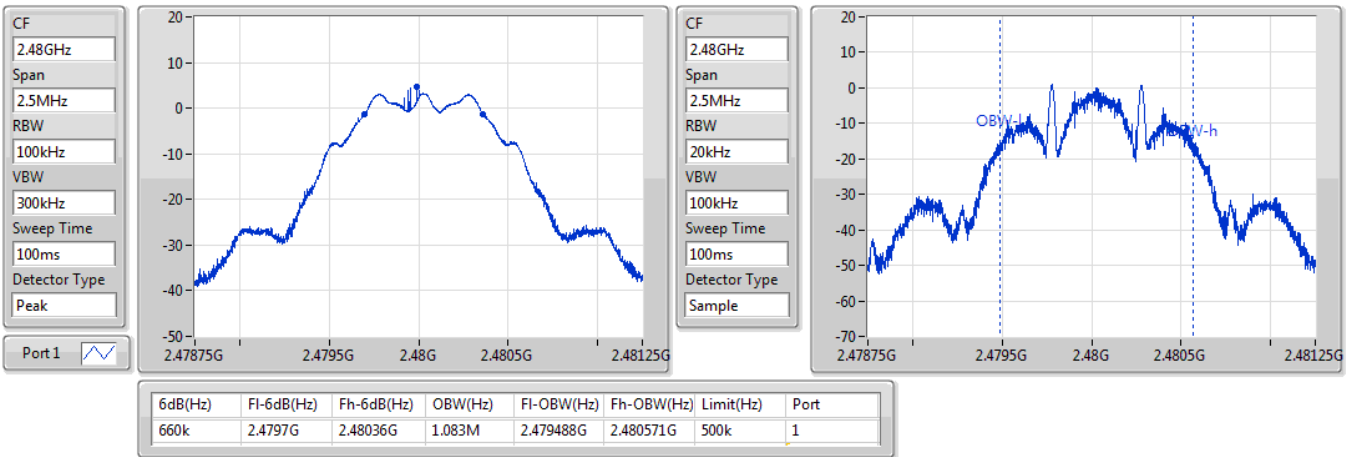


BT-LE(125kbps)

EBW-DTS

2480MHz

28/09/2021

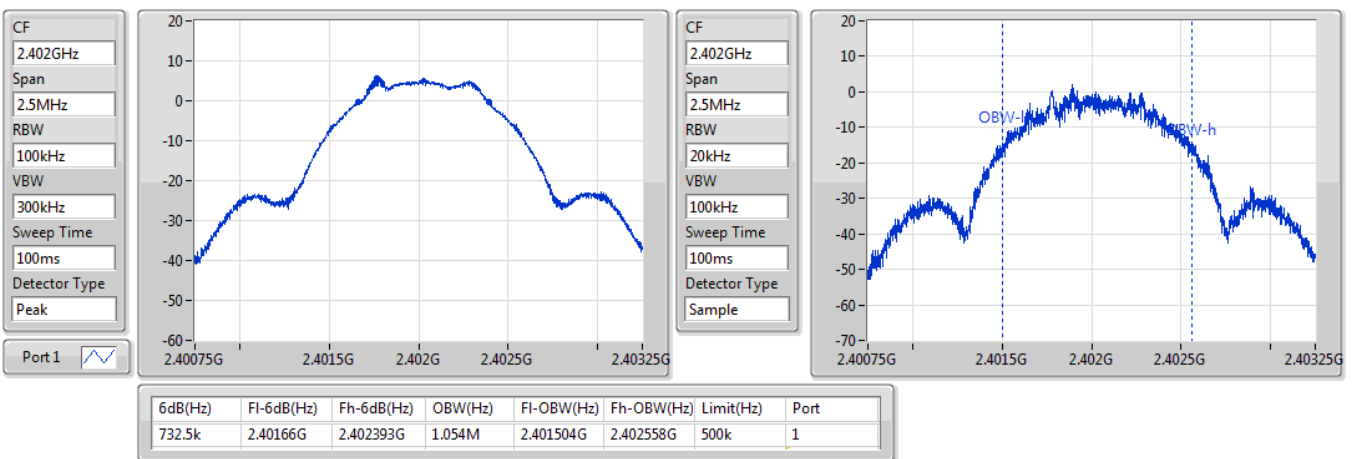


BT-LE(500kbps)

EBW-DTS

2402MHz

28/09/2021

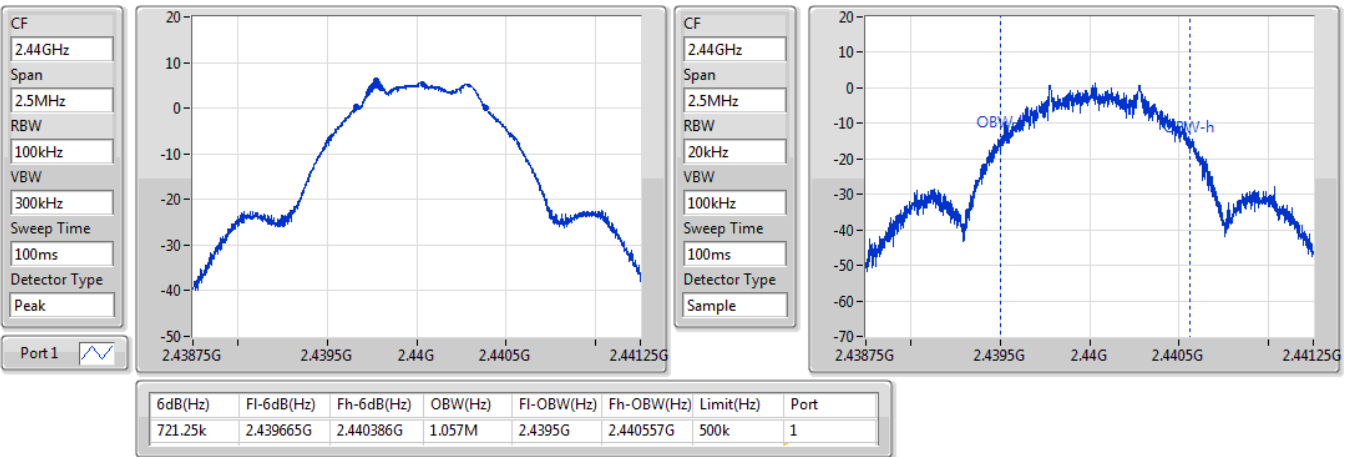


BT-LE(500kbps)

EBW-DTS

2440MHz

28/09/2021

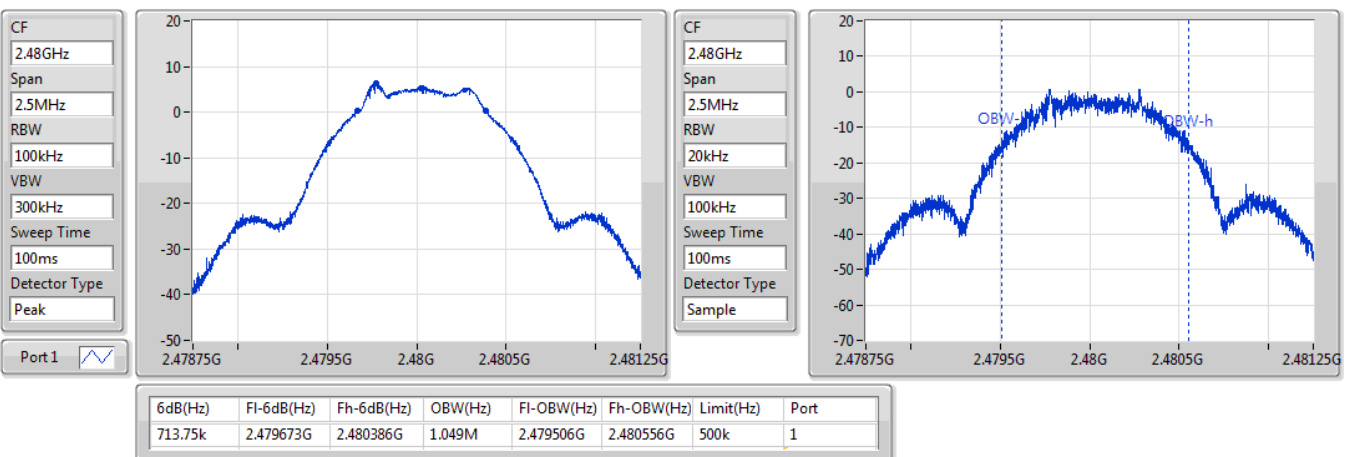


BT-LE(500kbps)

EBW-DTS

2480MHz

28/09/2021





Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-LE(1Mbps)	7.10	0.00513
BT-LE(2Mbps)	7.20	0.00525
BT-LE(125kbps)	7.12	0.00515
BT-LE(500kbps)	7.12	0.00515



Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	2.12	6.69	30.00
2440MHz	Pass	2.12	7.03	30.00
2480MHz	Pass	2.12	7.10	30.00
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	2.12	6.80	30.00
2440MHz	Pass	2.12	7.14	30.00
2480MHz	Pass	2.12	7.20	30.00
BT-LE(125kbps)	-	-	-	-
2402MHz	Pass	2.12	6.71	30.00
2440MHz	Pass	2.12	7.05	30.00
2480MHz	Pass	2.12	7.12	30.00
BT-LE(500kbps)	-	-	-	-
2402MHz	Pass	2.12	6.71	30.00
2440MHz	Pass	2.12	7.05	30.00
2480MHz	Pass	2.12	7.12	30.00

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



Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
BT-LE(1Mbps)	-7.01
BT-LE(2Mbps)	-8.95
BT-LE(125kbps)	0.48
BT-LE(500kbps)	0.23

RBW = 3kHz;



Result

Mode	Result	Gain (dBi)	PD (dBm/RBW)	PD Limit (dBm/RBW)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	2.12	-7.31	8.00
2440MHz	Pass	2.12	-7.01	8.00
2480MHz	Pass	2.12	-8.00	8.00
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	2.12	-8.95	8.00
2440MHz	Pass	2.12	-10.12	8.00
2480MHz	Pass	2.12	-8.97	8.00
BT-LE(125kbps)	-	-	-	-
2402MHz	Pass	2.12	0.06	8.00
2440MHz	Pass	2.12	0.38	8.00
2480MHz	Pass	2.12	0.48	8.00
BT-LE(500kbps)	-	-	-	-
2402MHz	Pass	2.12	-0.48	8.00
2440MHz	Pass	2.12	0.20	8.00
2480MHz	Pass	2.12	0.23	8.00

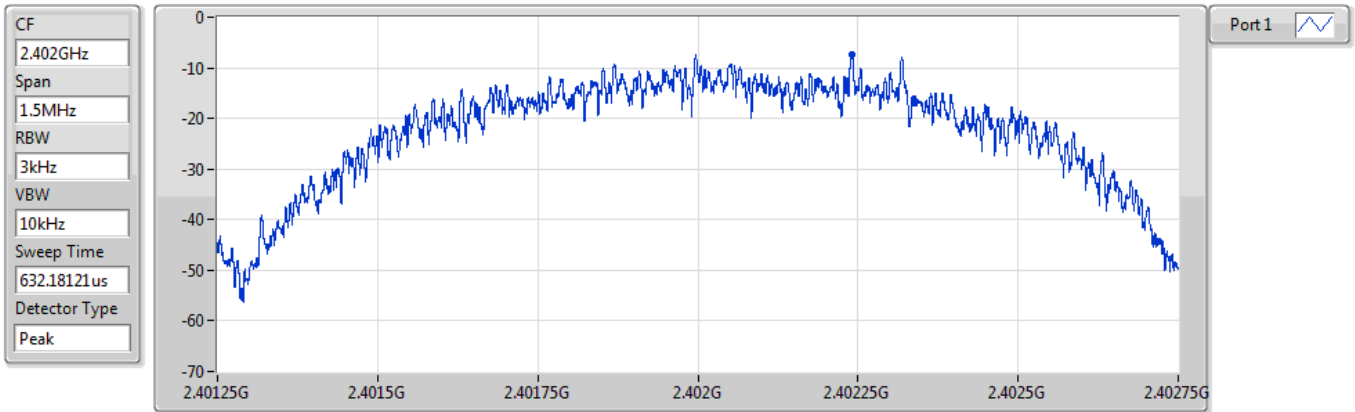
DG = Directional Gain; RBW = 3kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

BT-LE(1Mbps)

PSD

2402MHz

28/09/2021



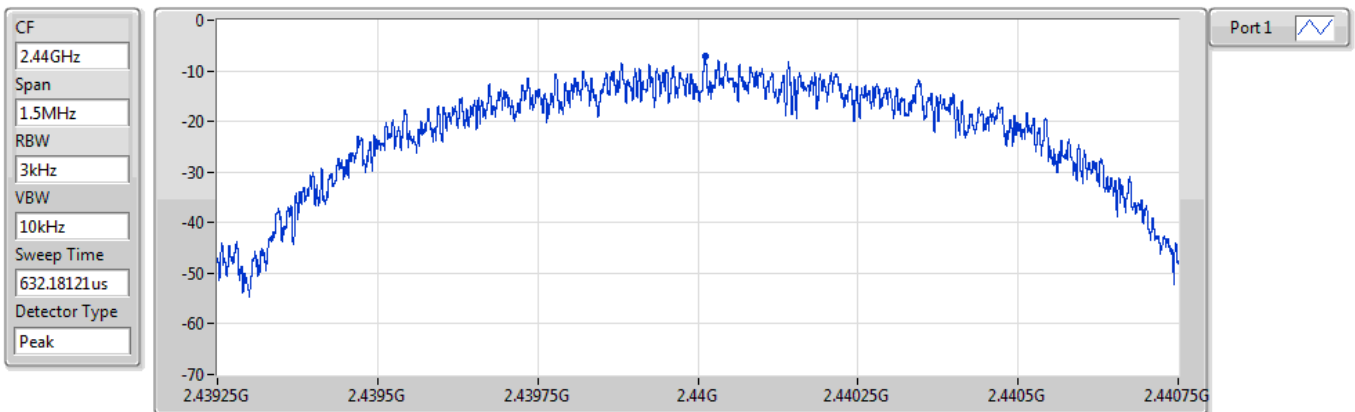
Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.31	-7.31	-7.31

BT-LE(1Mbps)

PSD

2440MHz

28/09/2021



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.01	-7.01	-7.01

BT-LE(1Mbps)

PSD

2480MHz

28/09/2021

CF
2.48GHz

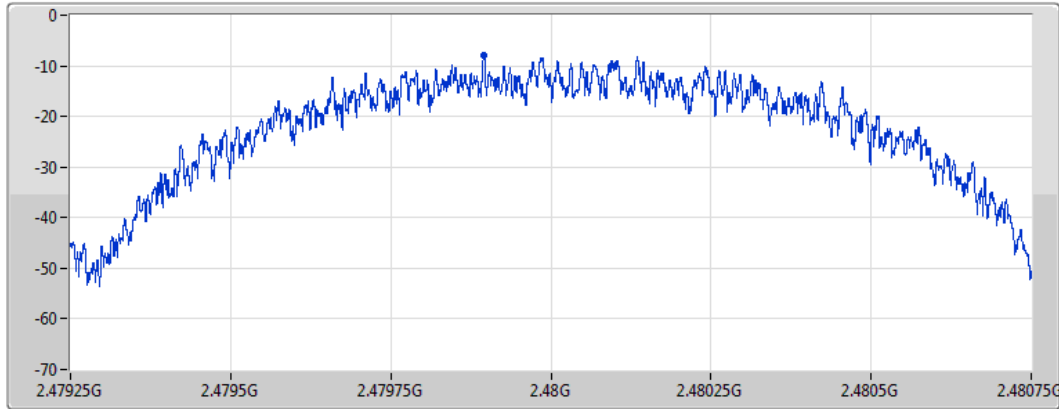
Span
1.5MHz

RBW
3kHz

VBW
10kHz

Sweep Time
632.18121us

Detector Type
Peak



Port 1 

Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.00	-8.00	-8.00

BT-LE(2Mbps)

PSD

2402MHz

28/09/2021

CF
2.402GHz

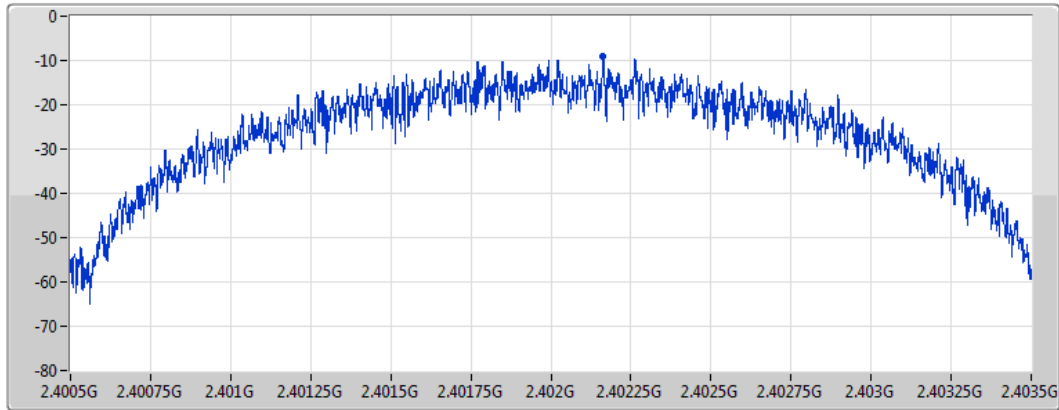
Span
3MHz

RBW
3kHz

VBW
10kHz

Sweep Time
632.01845us

Detector Type
Peak



Port 1 

Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.95	-8.95	-8.95

BT-LE(2Mbps)

PSD

2440MHz

28/09/2021

CF
2.44GHz

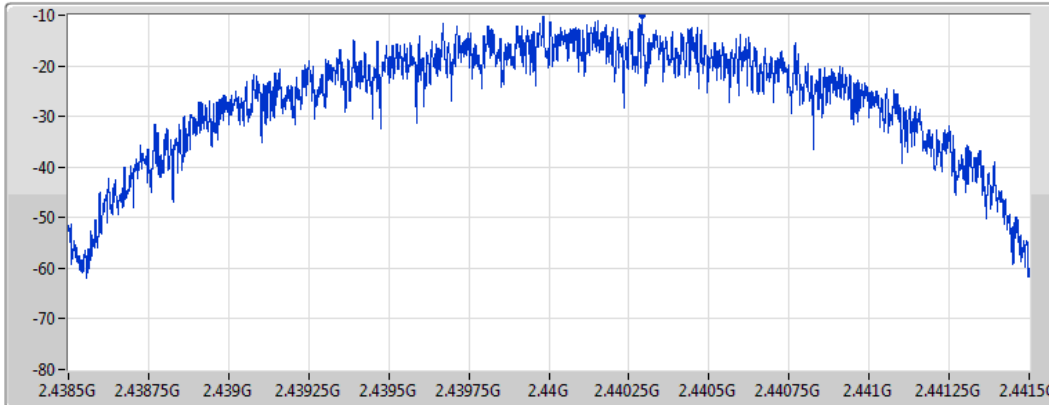
Span
3MHz


RBW
3kHz

VBW
10kHz

Sweep Time
632.01845us

Detector Type
Peak



Port 1 

Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-10.12	-10.12	-10.12

BT-LE(2Mbps)

PSD

2480MHz

28/09/2021

CF
2.48GHz

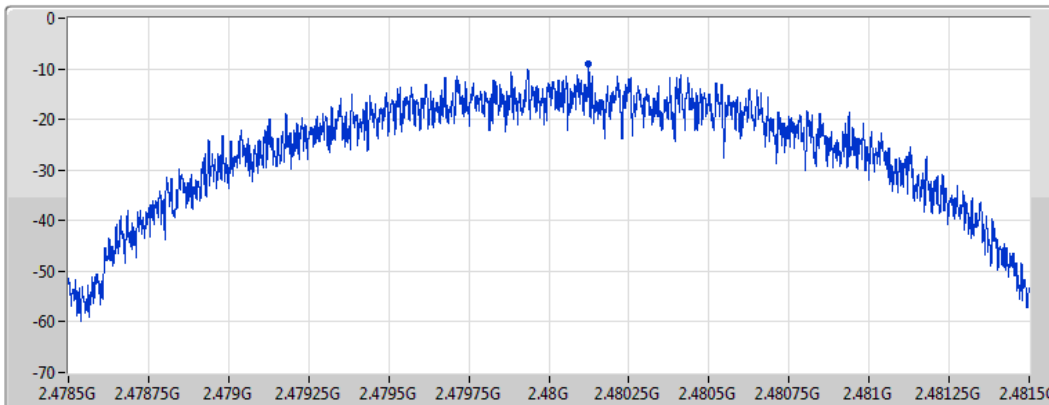
Span
3MHz


RBW
3kHz

VBW
10kHz

Sweep Time
632.01845us

Detector Type
Peak



Port 1 

Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.97	-8.97	-8.97

BT-LE(125kbps)

PSD

2402MHz

28/09/2021

CF
2.402GHz

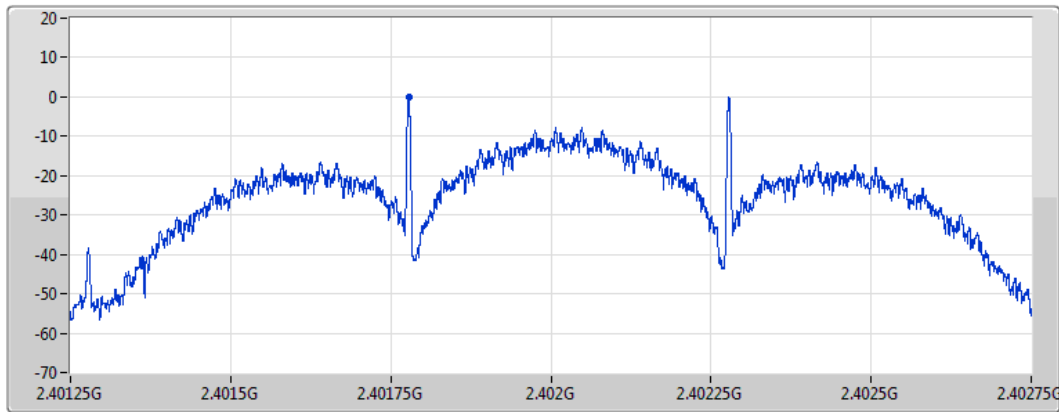
Span
1.5MHz


RBW
3kHz

VBW
10kHz

Sweep Time
632.18121us

Detector Type
Peak



Port 1 

Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.06	0.06	0.06

BT-LE(125kbps)

PSD

2440MHz

28/09/2021

CF
2.44GHz

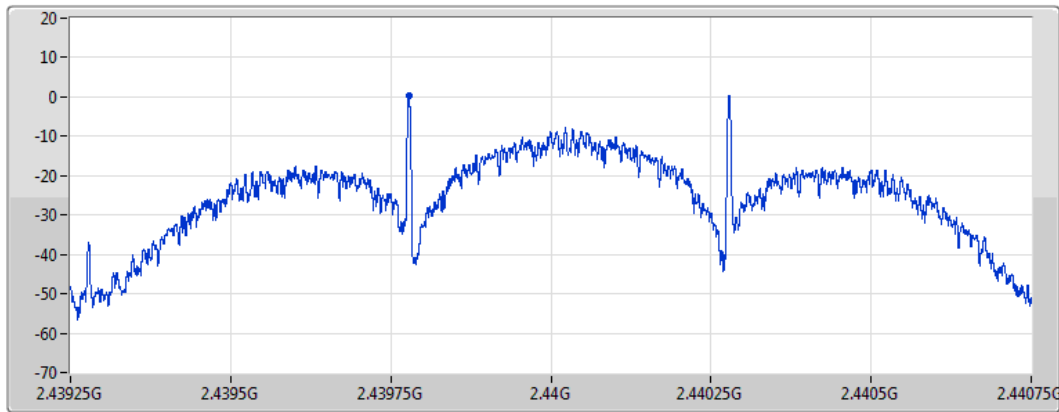
Span
1.5MHz


RBW
3kHz

VBW
10kHz

Sweep Time
632.18121us

Detector Type
Peak



Port 1 

Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.38	0.38	0.38

BT-LE(125kbps)

PSD

2480MHz

28/09/2021

CF
2.48GHz

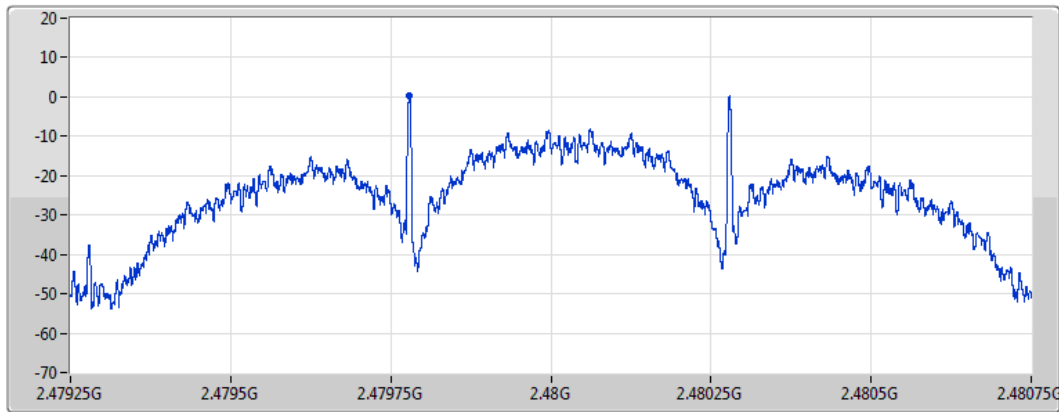
Span
1.5MHz


RBW
3kHz

VBW
10kHz

Sweep Time
632.18121us

Detector Type
Peak



Port 1 

Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.48	0.48	0.48

BT-LE(500kbps)

PSD

2402MHz

28/09/2021

CF
2.402GHz

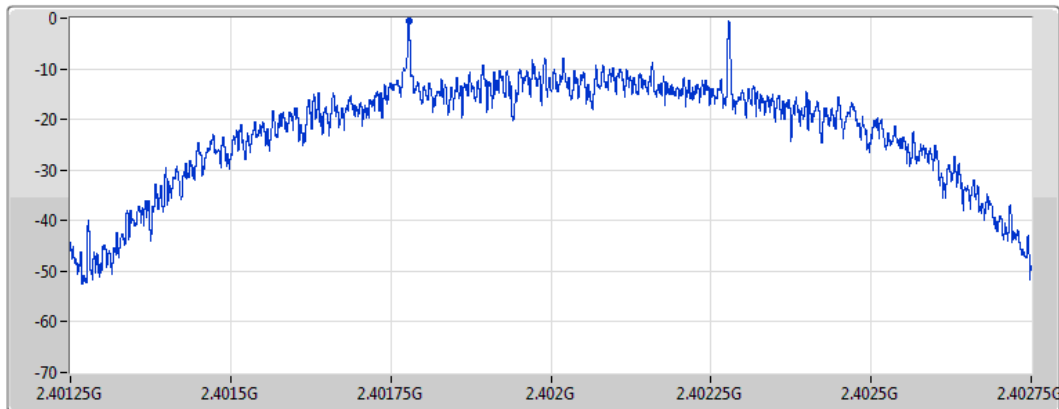
Span
1.5MHz

RBW
3kHz

VBW
10kHz

Sweep Time
632.18121us

Detector Type
Peak



Port 1 

Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.48	-0.48	-0.48

BT-LE(500kbps)

PSD

2440MHz

28/09/2021

CF
2.44GHz

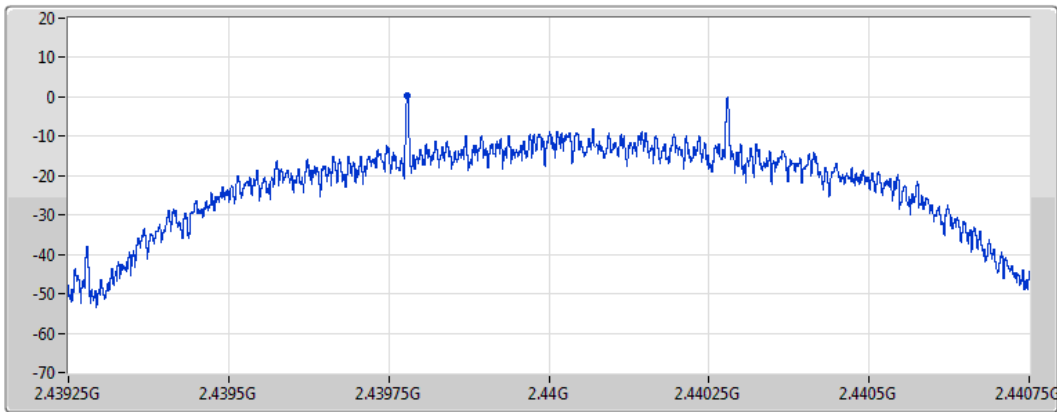
Span
1.5MHz


RBW
3kHz

VBW
10kHz

Sweep Time
632.18121us

Detector Type
Peak



Port 1 

Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.20	0.20	0.20

BT-LE(500kbps)

PSD

2480MHz

28/09/2021

CF
2.48GHz

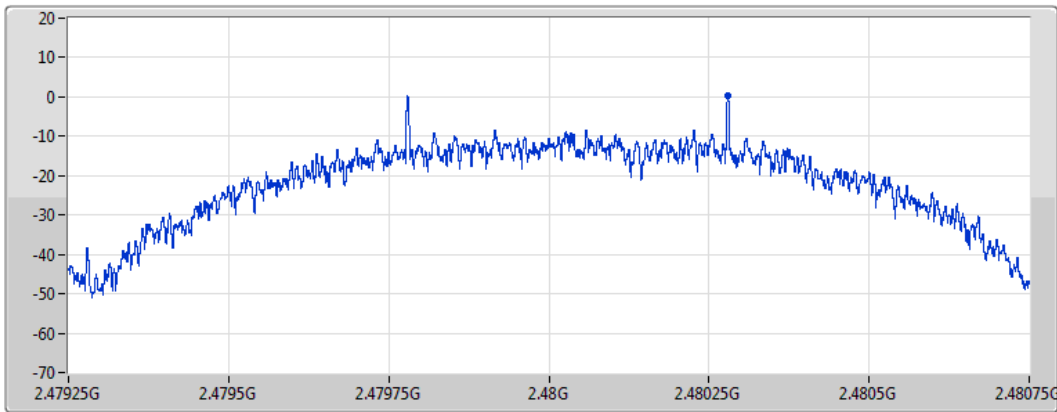
Span
1.5MHz


RBW
3kHz

VBW
10kHz

Sweep Time
632.18121us

Detector Type
Peak



Port 1 

Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.23	0.23	0.23



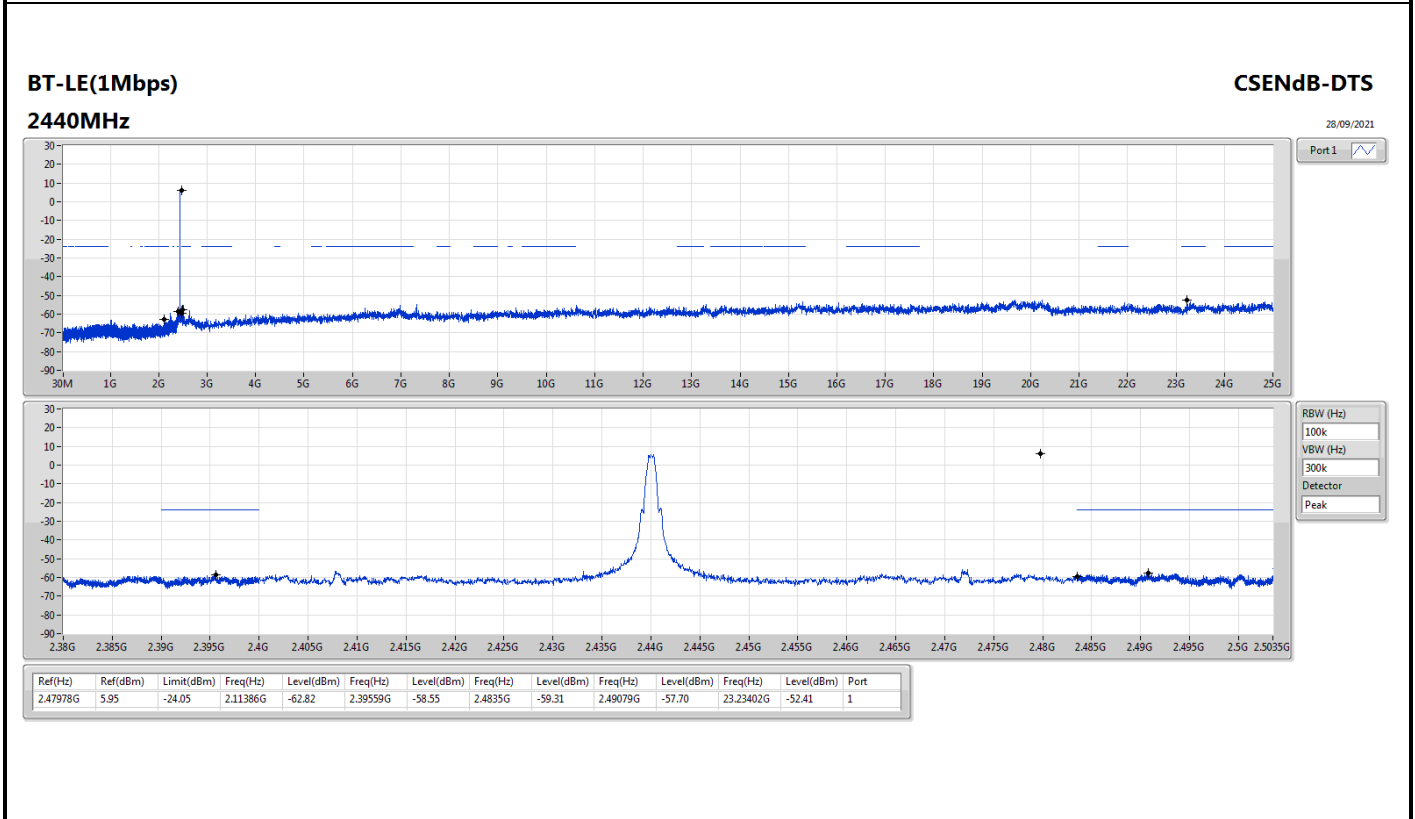
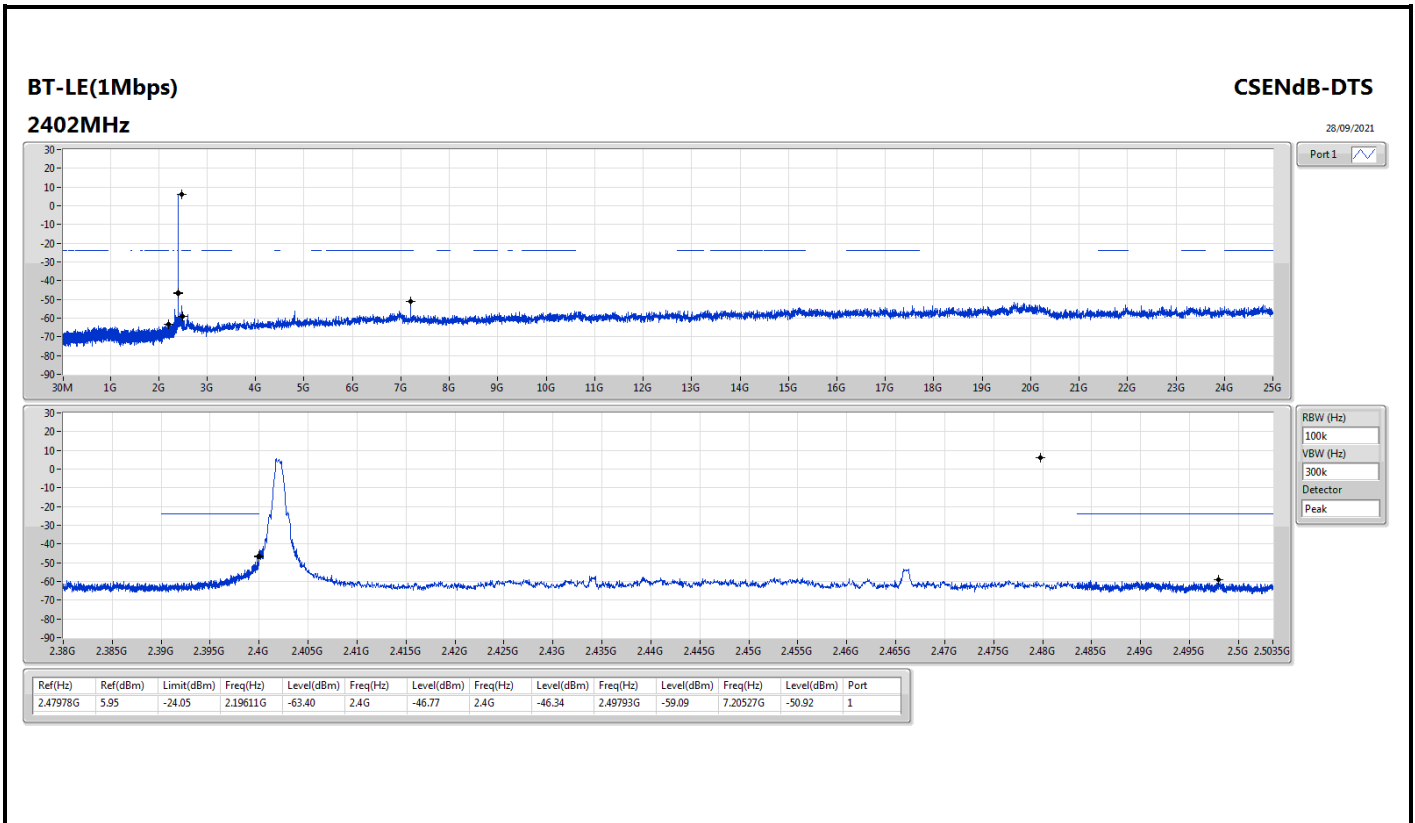
Summary

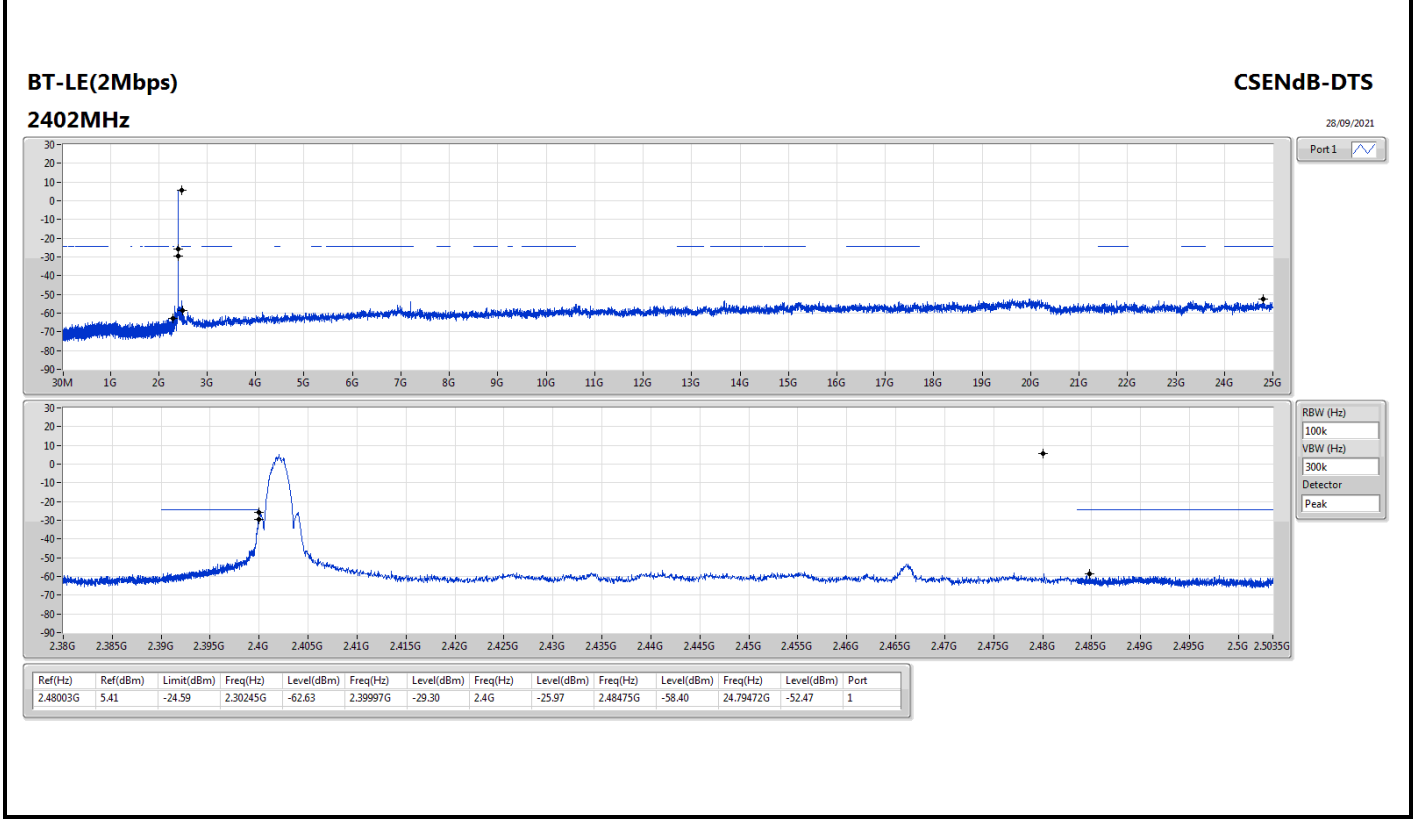
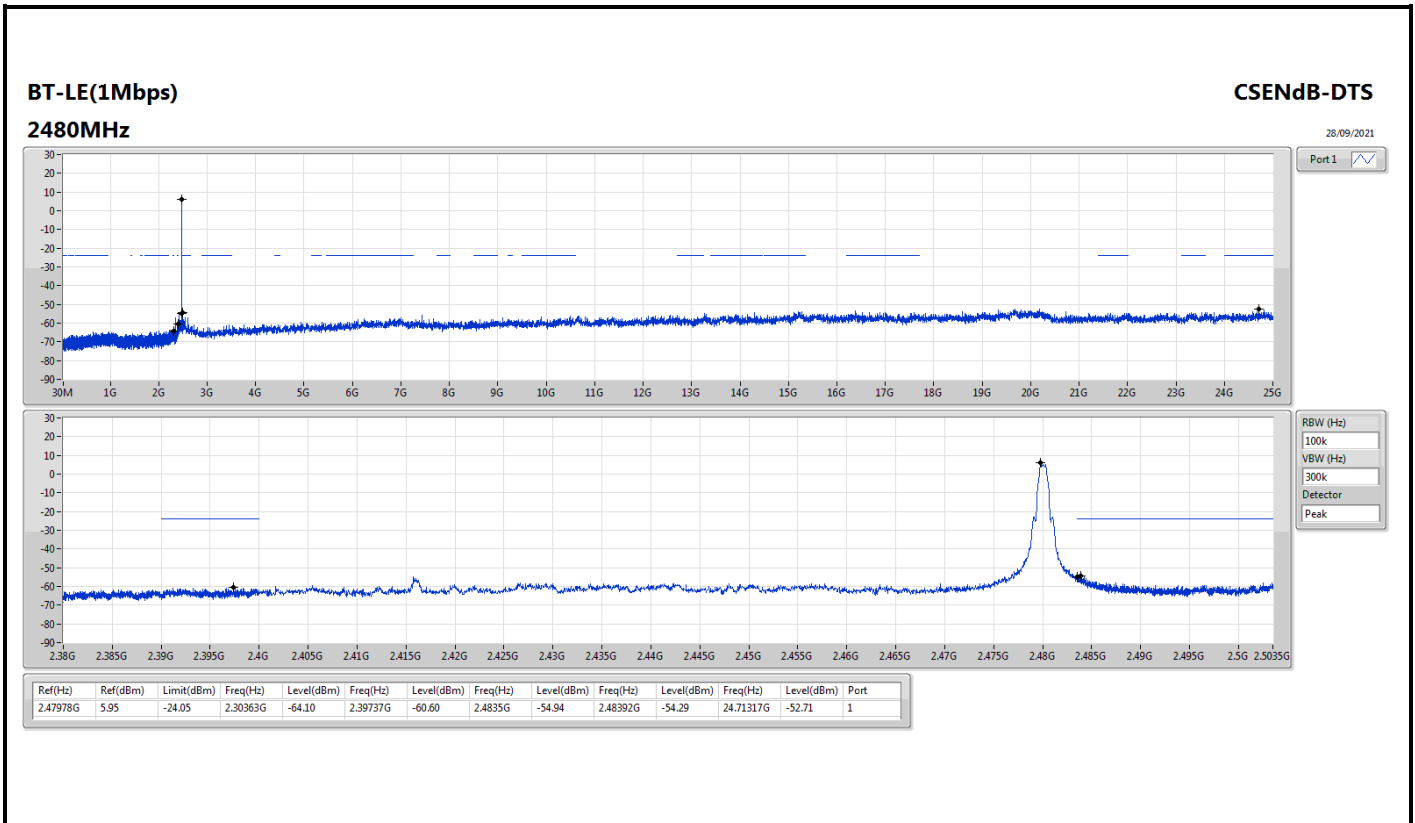
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BT-LE(1Mbps)	Pass	2.47978G	5.95	-24.05	2.19611G	-63.40	2.4G	-46.77	2.4G	-46.34	2.49793G	-59.09	7.20527G	-50.92	1
BT-LE(2Mbps)	Pass	2.48003G	5.41	-24.59	2.30245G	-62.63	2.39997G	-29.30	2.4G	-25.97	2.48475G	-58.40	24.79472G	-52.47	1
BT-LE(125kbps)	Pass	2.48003G	3.08	-26.92	2.30069G	-62.97	2.39998G	-47.95	2.4G	-46.38	2.48945G	-59.85	17.60428G	-52.95	1
BT-LE(500kbps)	Pass	2.47978G	5.65	-24.35	2.30627G	-62.73	2.4G	-46.50	2.4G	-46.35	2.48966G	-59.24	7.20527G	-52.59	1

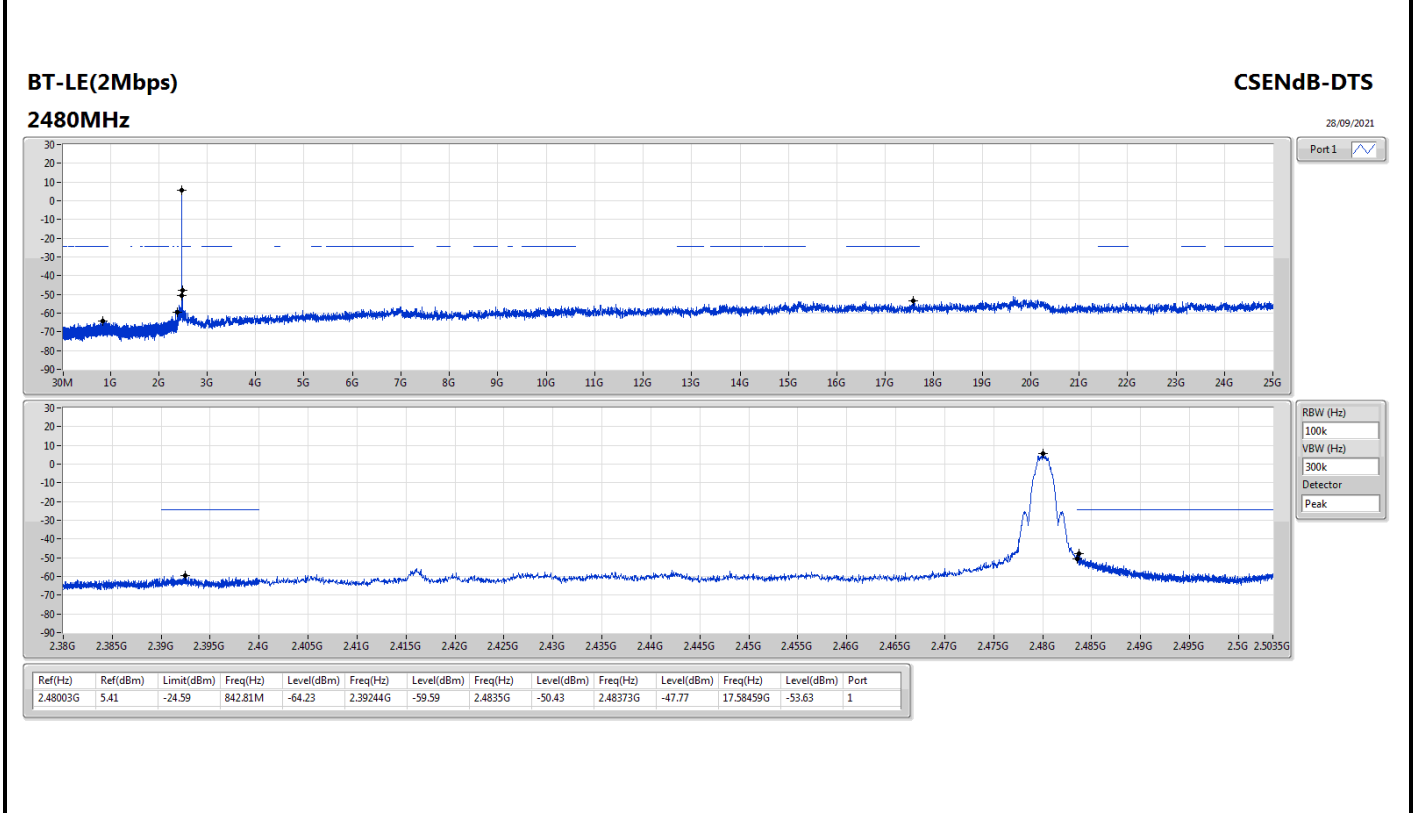
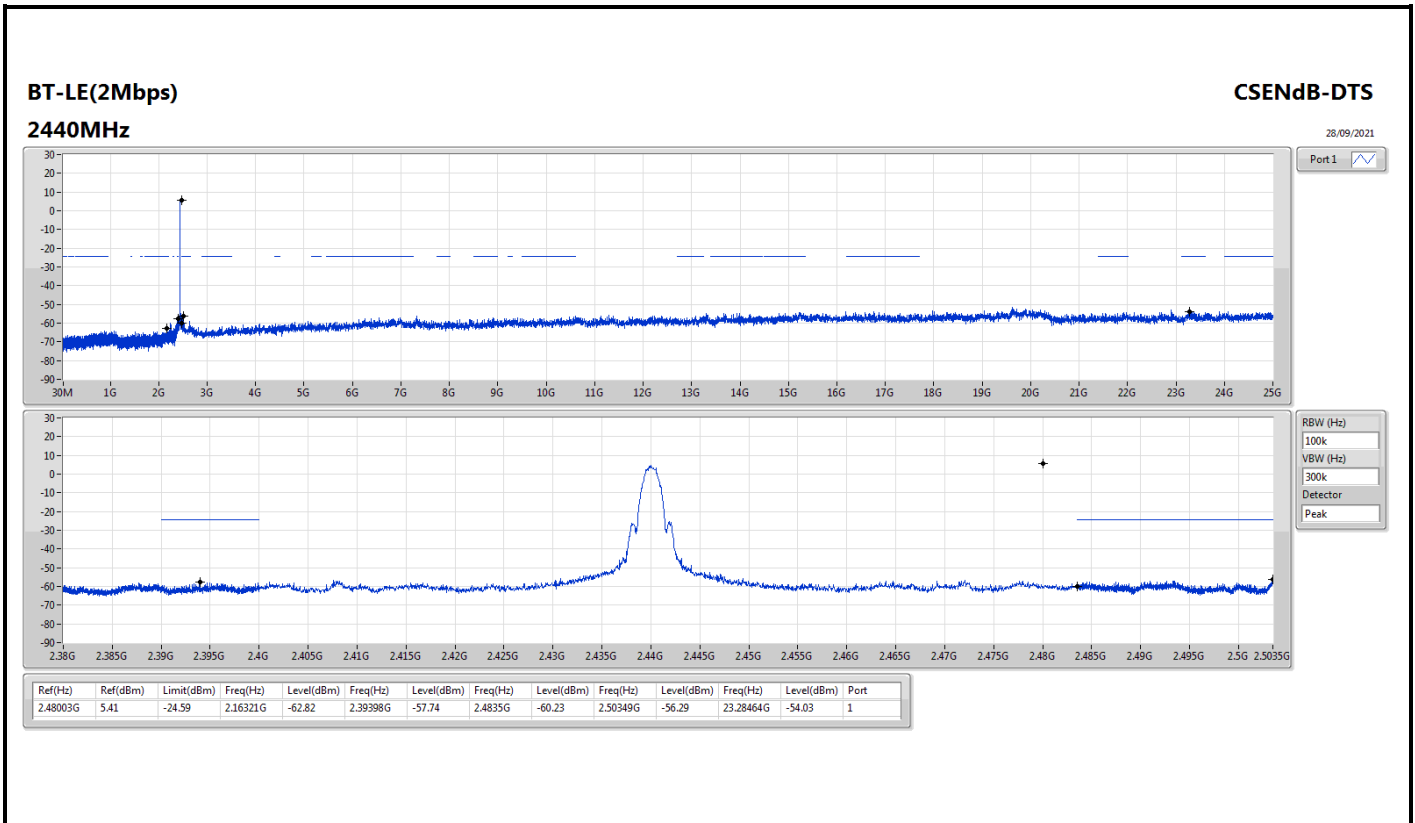


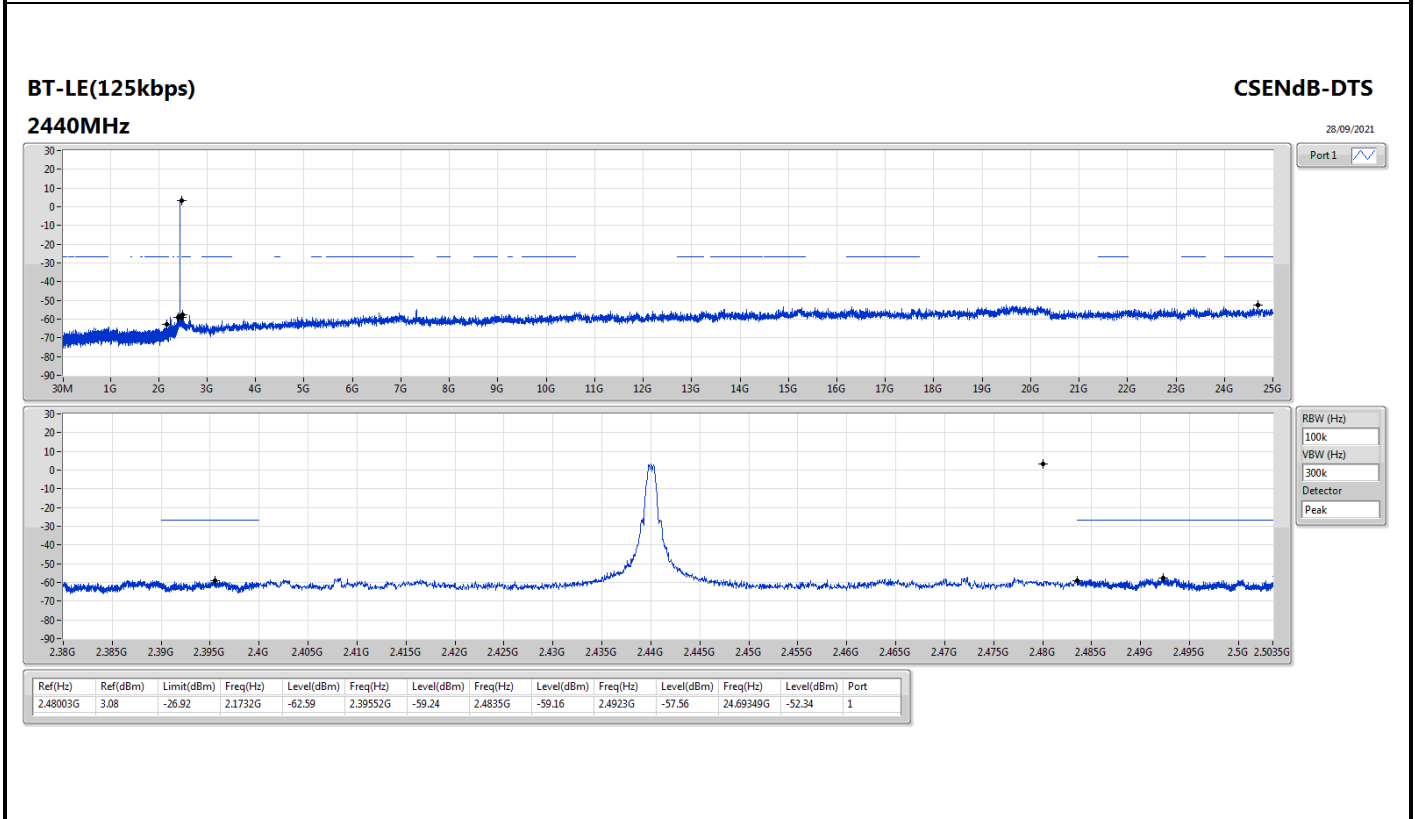
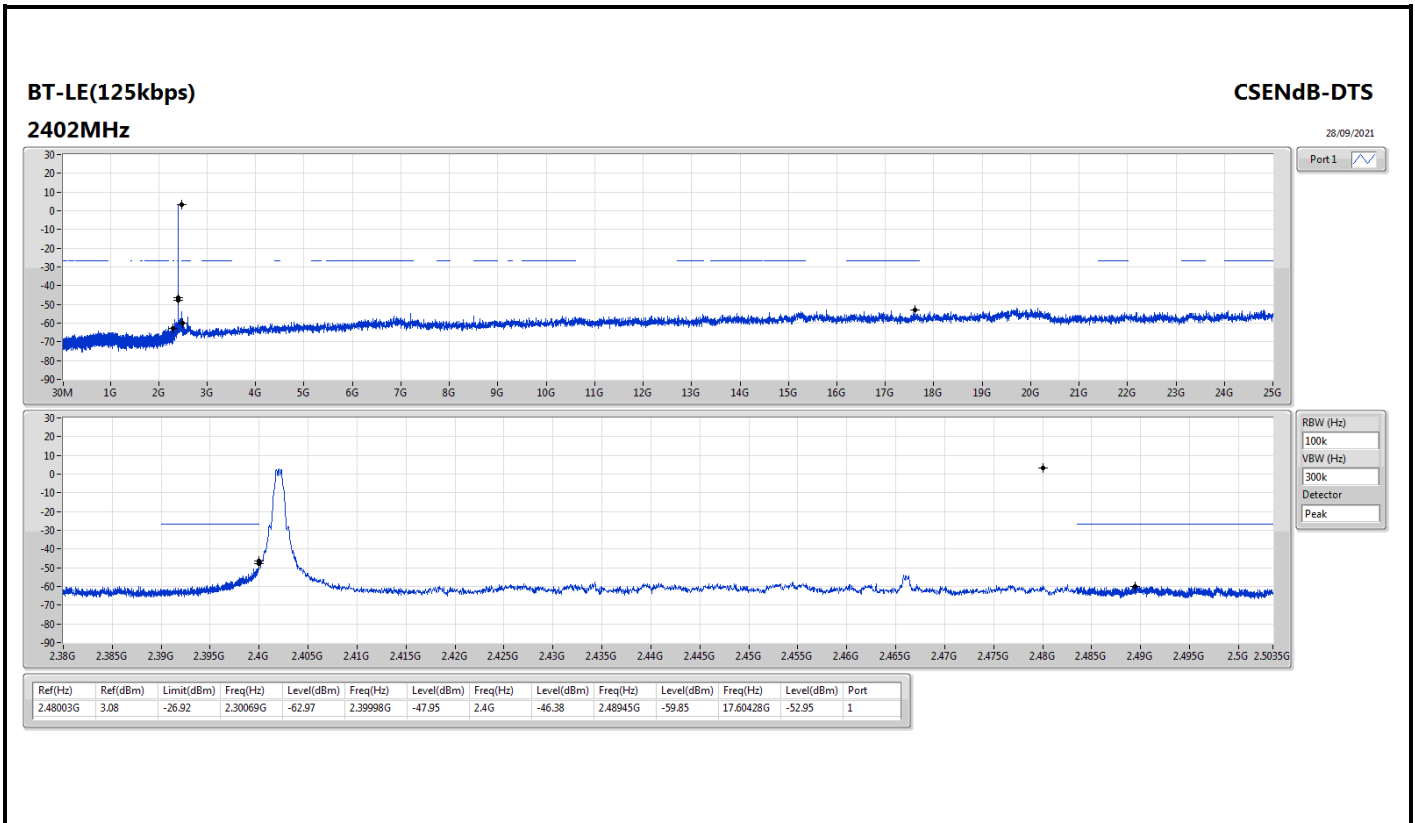
Result

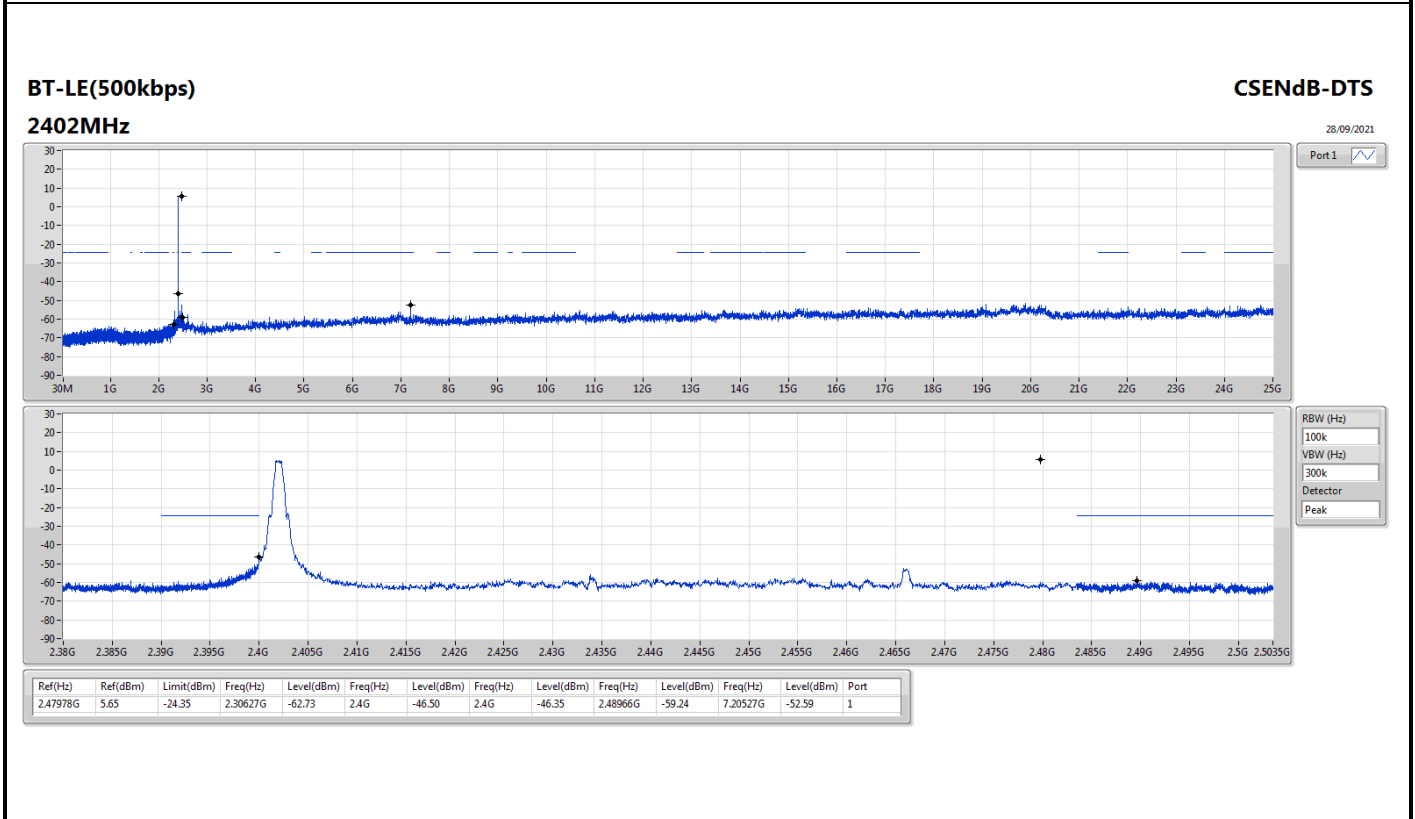
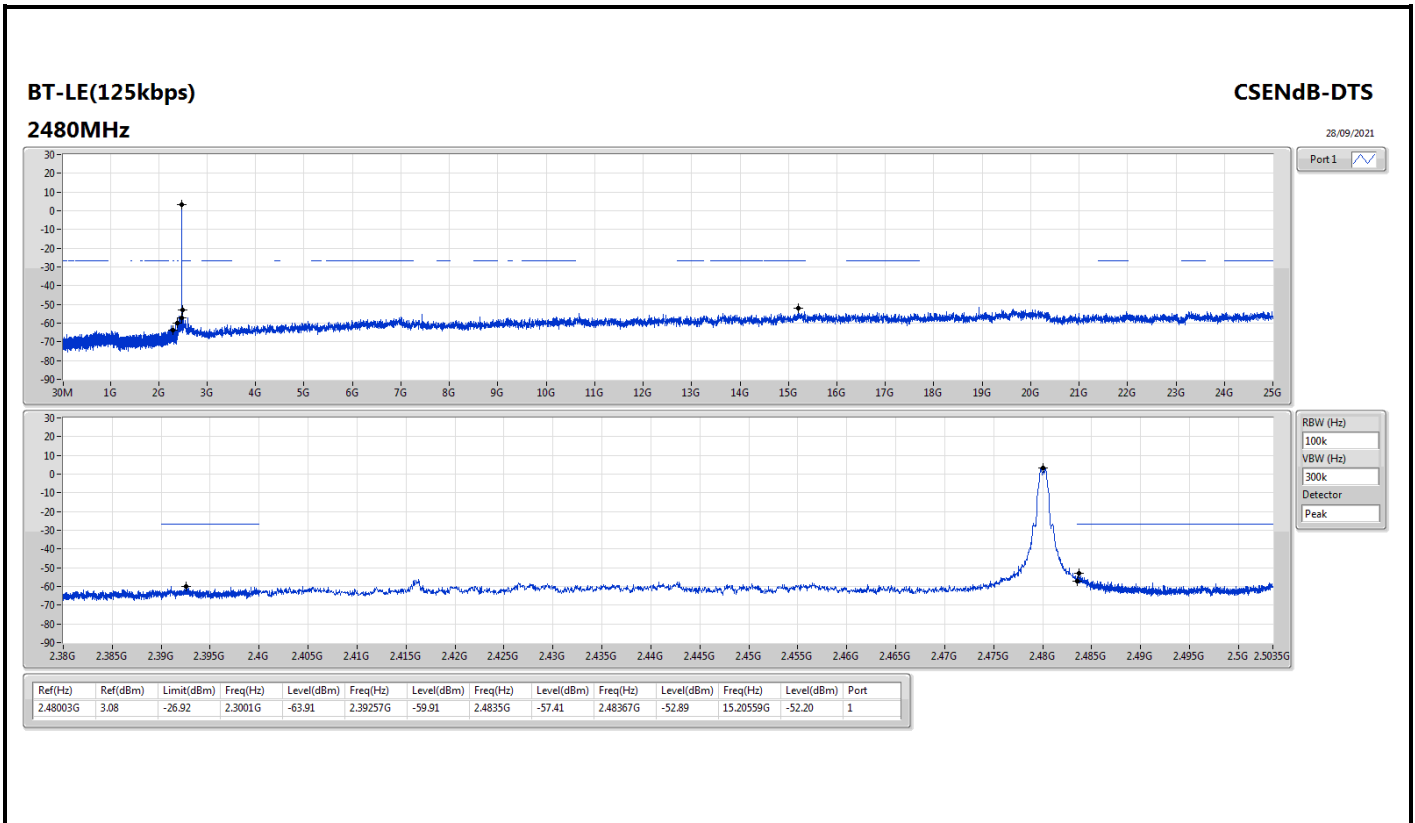
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
BT-LE(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.47978G	5.95	-24.05	2.19611G	-63.40	2.4G	-46.77	2.4G	-46.34	2.49793G	-59.09	7.20527G	-50.92	1
2440MHz	Pass	2.47978G	5.95	-24.05	2.11386G	-62.82	2.39559G	-58.55	2.4835G	-59.31	2.49079G	-57.70	23.23402G	-52.41	1
2480MHz	Pass	2.47978G	5.95	-24.05	2.30363G	-64.10	2.39737G	-60.60	2.4835G	-54.94	2.48392G	-54.29	24.71317G	-52.71	1
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.48003G	5.41	-24.59	2.30245G	-62.63	2.39997G	-29.30	2.4G	-25.97	2.48475G	-58.40	24.79472G	-52.47	1
2440MHz	Pass	2.48003G	5.41	-24.59	2.16321G	-62.82	2.39398G	-57.74	2.4835G	-60.23	2.50349G	-56.29	23.28464G	-54.03	1
2480MHz	Pass	2.48003G	5.41	-24.59	842.81M	-64.23	2.39244G	-59.59	2.4835G	-50.43	2.48373G	-47.77	17.58459G	-53.63	1
BT-LE(125kbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.48003G	3.08	-26.92	2.30069G	-62.97	2.39998G	-47.95	2.4G	-46.38	2.48945G	-59.85	17.60428G	-52.95	1
2440MHz	Pass	2.48003G	3.08	-26.92	2.1732G	-62.59	2.39552G	-59.24	2.4835G	-59.16	2.4923G	-57.56	24.69349G	-52.34	1
2480MHz	Pass	2.48003G	3.08	-26.92	2.3001G	-63.91	2.39257G	-59.91	2.4835G	-57.41	2.48367G	-52.89	15.20559G	-52.20	1
BT-LE(500kbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.47978G	5.65	-24.35	2.30627G	-62.73	2.4G	-46.50	2.4G	-46.35	2.48966G	-59.24	7.20527G	-52.59	1
2440MHz	Pass	2.47978G	5.65	-24.35	2.30421G	-63.24	2.39577G	-58.69	2.4835G	-58.86	2.49232G	-57.48	24.89877G	-53.44	1
2480MHz	Pass	2.47978G	5.65	-24.35	2.3095G	-63.69	2.39838G	-60.50	2.4835G	-55.17	2.4841G	-53.94	15.2562G	-52.67	1

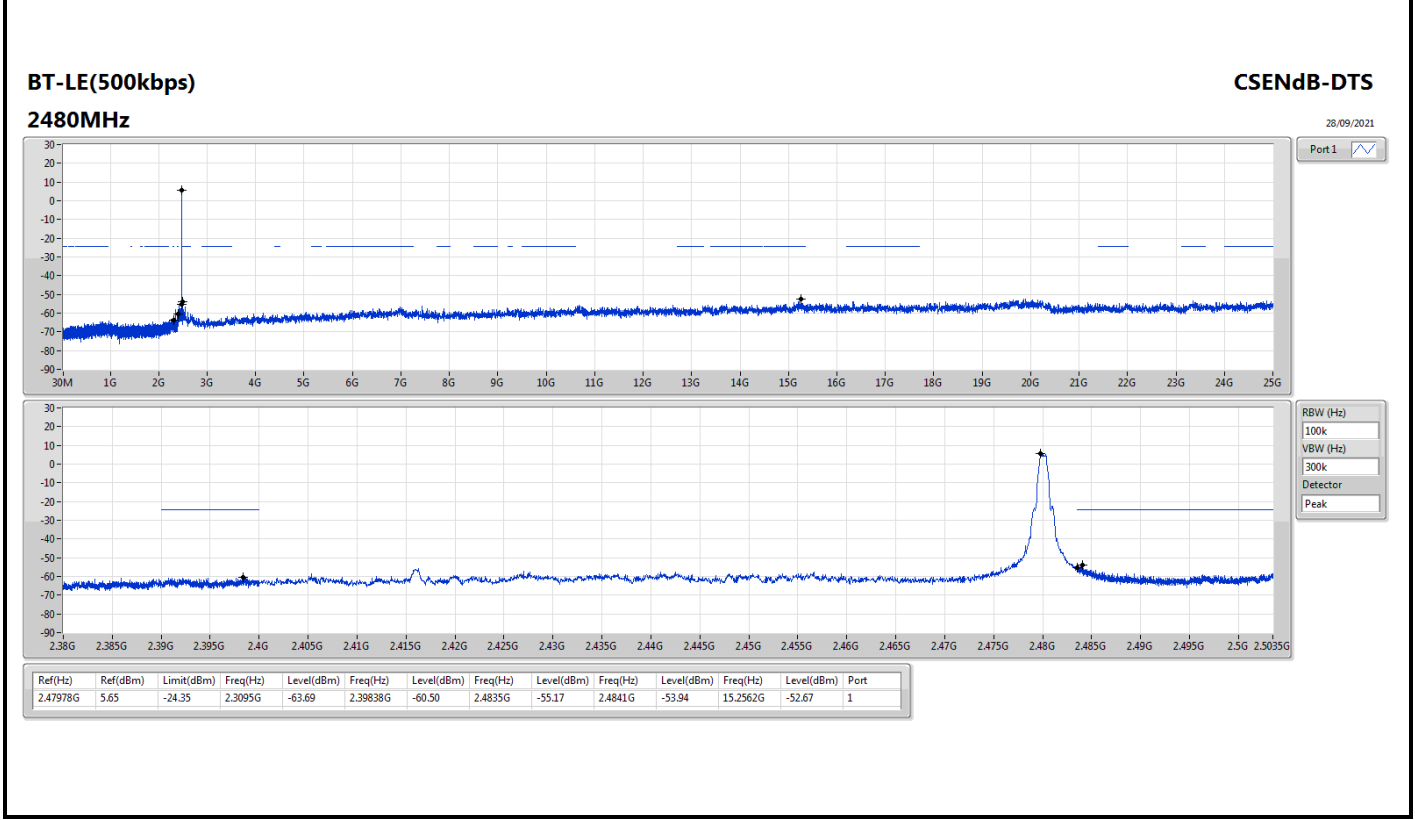
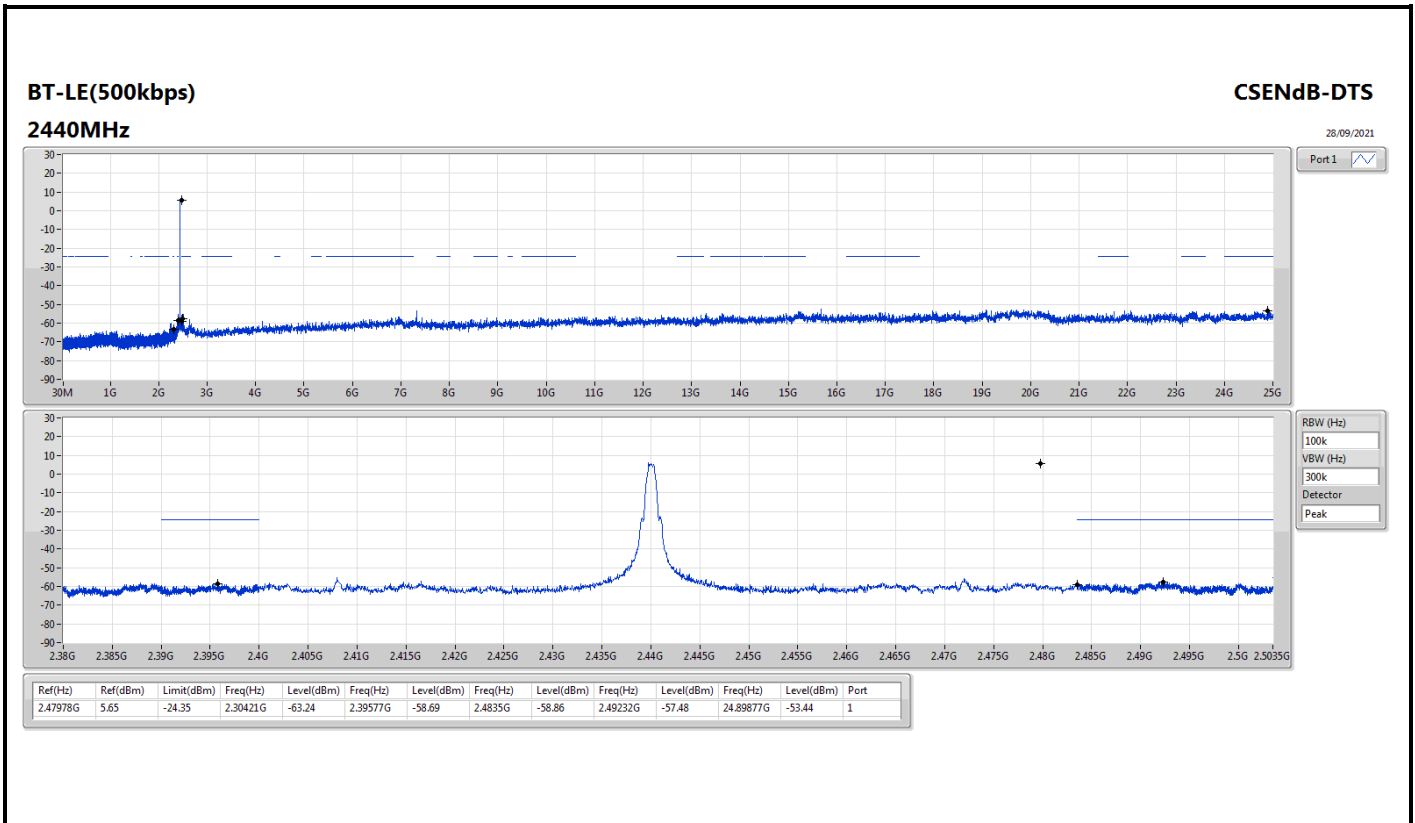














Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
BT-LE(2Mbps)	Pass	PK	30M	27.07	40.00	-12.93	3	Vertical	0	1.00	-

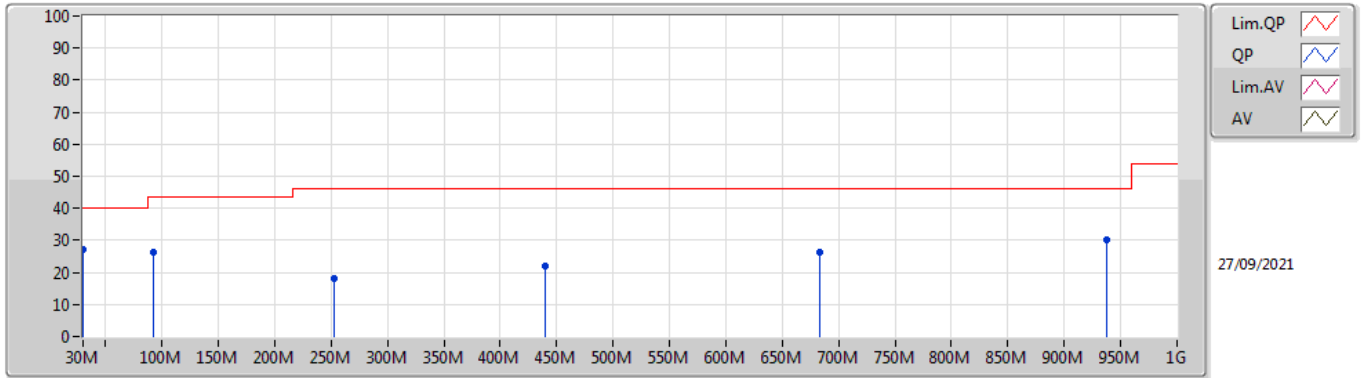


Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-	-
2440MHz	Pass	PK	30M	27.07	40.00	-12.93	3	Vertical	0	1.00	-
2440MHz	Pass	PK	92.08M	26.28	43.50	-17.22	3	Vertical	0	1.00	-
2440MHz	Pass	PK	253.1M	18.19	46.00	-27.81	3	Vertical	0	1.00	-
2440MHz	Pass	PK	439.34M	21.99	46.00	-24.01	3	Vertical	0	1.00	-
2440MHz	Pass	PK	683.78M	26.40	46.00	-19.60	3	Vertical	0	1.00	-
2440MHz	Pass	PK	937.92M	30.15	46.00	-15.85	3	Vertical	0	1.00	-
2440MHz	Pass	PK	41.64M	18.56	40.00	-21.44	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	101.78M	27.28	43.50	-16.22	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	293.84M	17.50	46.00	-28.50	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	427.7M	21.05	46.00	-24.95	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	681.84M	25.63	46.00	-20.37	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	870.02M	29.07	46.00	-16.93	3	Horizontal	360	1.00	-



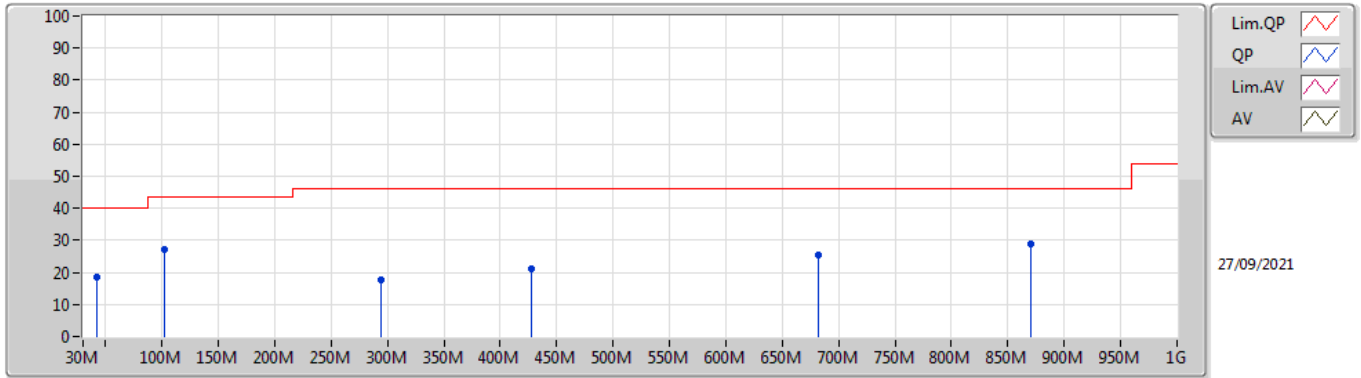
BT-LE(2Mbps)
2440MHz_Test fixture



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	30M	27.07	40.00	-12.93	-12.86	3	Vertical	0	1.00	-	39.93	23.73	0.56	37.15
PK	92.08M	26.28	43.50	-17.22	-21.51	3	Vertical	0	1.00	-	47.79	14.26	0.95	36.72
PK	253.1M	18.19	46.00	-27.81	-16.58	3	Vertical	0	1.00	-	34.77	18.30	1.51	36.39
PK	439.34M	21.99	46.00	-24.01	-12.40	3	Vertical	0	1.00	-	34.39	22.15	2.06	36.61
PK	683.78M	26.40	46.00	-19.60	-8.94	3	Vertical	0	1.00	-	35.34	25.68	2.66	37.28
PK	937.92M	30.15	46.00	-15.85	-5.03	3	Vertical	0	1.00	-	35.18	29.46	3.08	37.57



BT-LE(2Mbps)
2440MHz_Test fixture



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	41.64M	18.56	40.00	-21.44	-18.59	3	Horizontal	360	1.00	-	37.15	17.73	0.75	37.07
PK	101.78M	27.28	43.50	-16.22	-20.14	3	Horizontal	360	1.00	-	47.42	15.51	0.98	36.63
PK	293.84M	17.50	46.00	-28.50	-16.42	3	Horizontal	360	1.00	-	33.92	18.36	1.65	36.43
PK	427.7M	21.05	46.00	-24.95	-12.55	3	Horizontal	360	1.00	-	33.60	22.03	2.02	36.60
PK	681.84M	25.63	46.00	-20.37	-8.98	3	Horizontal	360	1.00	-	34.61	25.64	2.66	37.28
PK	870.02M	29.07	46.00	-16.93	-6.24	3	Horizontal	360	1.00	-	35.31	28.39	2.96	37.59



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	AV	7.32068G	49.85	54.00	-4.15	3	Vertical	305	1.00	-
BT-LE(2Mbps)	Pass	AV	7.32126G	48.44	54.00	-5.56	3	Vertical	213	1.07	-
BT-LE(125kbps)	Pass	AV	7.31959G	48.40	54.00	-5.60	3	Vertical	215	1.00	-
BT-LE(500kbps)	Pass	AV	7.31954G	48.86	54.00	-5.14	3	Vertical	212	1.14	-



Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-LE(1Mbps)	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3652G	43.93	54.00	-10.07	3	Vertical	86	1.55	-
2402MHz	Pass	AV	2.402G	93.27	Inf	-Inf	3	Vertical	86	1.55	-
2402MHz	Pass	PK	2.359G	57.22	74.00	-16.78	3	Vertical	86	1.55	-
2402MHz	Pass	PK	2.4018G	94.43	Inf	-Inf	3	Vertical	86	1.55	-
2402MHz	Pass	AV	2.3698G	44.41	54.00	-9.59	3	Horizontal	134	1.00	-
2402MHz	Pass	AV	2.402G	101.91	Inf	-Inf	3	Horizontal	134	1.00	-
2402MHz	Pass	PK	2.3874G	57.58	74.00	-16.42	3	Horizontal	134	1.00	-
2402MHz	Pass	PK	2.4018G	103.00	Inf	-Inf	3	Horizontal	134	1.00	-
2402MHz	Pass	AV	4.80408G	42.49	54.00	-11.51	3	Vertical	201	2.42	-
2402MHz	Pass	PK	4.80366G	51.65	74.00	-22.35	3	Vertical	201	2.42	-
2402MHz	Pass	AV	4.80407G	38.49	54.00	-15.51	3	Horizontal	147	1.12	-
2402MHz	Pass	PK	4.80371G	49.12	74.00	-24.88	3	Horizontal	147	1.12	-
2440MHz	Pass	AV	2.346G	44.02	54.00	-9.98	3	Vertical	200	2.65	-
2440MHz	Pass	AV	2.44G	84.30	Inf	-Inf	3	Vertical	200	2.65	-
2440MHz	Pass	AV	2.4988G	44.25	54.00	-9.75	3	Vertical	200	2.65	-
2440MHz	Pass	PK	2.3444G	58.87	74.00	-15.13	3	Vertical	200	2.65	-
2440MHz	Pass	PK	2.4396G	85.56	Inf	-Inf	3	Vertical	200	2.65	-
2440MHz	Pass	PK	2.484G	57.04	74.00	-16.96	3	Vertical	200	2.65	-
2440MHz	Pass	AV	2.376G	44.25	54.00	-9.75	3	Horizontal	38	1.01	-
2440MHz	Pass	AV	2.44G	92.83	Inf	-Inf	3	Horizontal	38	1.01	-
2440MHz	Pass	AV	2.492G	44.29	54.00	-9.71	3	Horizontal	38	1.01	-
2440MHz	Pass	PK	2.358G	58.12	74.00	-15.88	3	Horizontal	38	1.01	-
2440MHz	Pass	PK	2.4404G	93.97	Inf	-Inf	3	Horizontal	38	1.01	-
2440MHz	Pass	PK	2.4864G	56.74	74.00	-17.26	3	Horizontal	38	1.01	-
2440MHz	Pass	AV	4.8801G	39.56	54.00	-14.44	3	Vertical	330	2.60	-
2440MHz	Pass	AV	7.32068G	49.85	54.00	-4.15	3	Vertical	305	1.00	-
2440MHz	Pass	PK	4.87973G	49.16	74.00	-24.84	3	Vertical	330	2.60	-
2440MHz	Pass	PK	7.32092G	60.14	74.00	-13.86	3	Vertical	305	1.00	-
2440MHz	Pass	AV	4.88008G	37.94	54.00	-16.06	3	Horizontal	161	1.16	-
2440MHz	Pass	AV	7.32067G	44.58	54.00	-9.42	3	Horizontal	279	1.05	-
2440MHz	Pass	PK	4.87956G	48.33	74.00	-25.67	3	Horizontal	161	1.16	-
2440MHz	Pass	PK	7.31946G	55.73	74.00	-18.27	3	Horizontal	279	1.05	-
2480MHz	Pass	AV	2.48G	82.45	Inf	-Inf	3	Vertical	303	1.19	-
2480MHz	Pass	AV	2.49G	44.05	54.00	-9.95	3	Vertical	303	1.19	-
2480MHz	Pass	PK	2.4798G	83.79	Inf	-Inf	3	Vertical	303	1.19	-
2480MHz	Pass	PK	2.485G	57.38	74.00	-16.62	3	Vertical	303	1.19	-
2480MHz	Pass	AV	2.48G	90.79	Inf	-Inf	3	Horizontal	39	1.50	-
2480MHz	Pass	AV	2.4835G	44.13	54.00	-9.87	3	Horizontal	39	1.50	-
2480MHz	Pass	PK	2.4802G	91.93	Inf	-Inf	3	Horizontal	39	1.50	-
2480MHz	Pass	PK	2.497G	57.43	74.00	-16.57	3	Horizontal	39	1.50	-
2480MHz	Pass	AV	4.96006G	37.50	54.00	-16.50	3	Vertical	56	1.00	-
2480MHz	Pass	AV	7.43954G	47.50	54.00	-6.50	3	Vertical	218	2.73	-
2480MHz	Pass	PK	4.95952G	47.89	74.00	-26.11	3	Vertical	56	1.00	-
2480MHz	Pass	PK	7.44081G	58.61	74.00	-15.39	3	Vertical	218	2.73	-
2480MHz	Pass	AV	4.95992G	32.68	54.00	-21.32	3	Horizontal	63	2.55	-
2480MHz	Pass	AV	7.43954G	45.15	54.00	-8.85	3	Horizontal	53	2.78	-
2480MHz	Pass	PK	4.96058G	46.19	74.00	-27.81	3	Horizontal	63	2.55	-
2480MHz	Pass	PK	7.44096G	55.98	74.00	-18.02	3	Horizontal	53	2.78	-
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3534G	43.86	54.00	-10.14	3	Vertical	298	1.22	-
2402MHz	Pass	AV	2.402G	82.64	Inf	-Inf	3	Vertical	298	1.22	-
2402MHz	Pass	PK	2.3634G	57.48	74.00	-16.52	3	Vertical	298	1.22	-
2402MHz	Pass	PK	2.4016G	85.68	Inf	-Inf	3	Vertical	298	1.22	-
2402MHz	Pass	AV	2.3526G	43.86	54.00	-10.14	3	Horizontal	45	1.40	-
2402MHz	Pass	AV	2.402G	91.76	Inf	-Inf	3	Horizontal	45	1.40	-
2402MHz	Pass	PK	2.381G	57.00	74.00	-17.00	3	Horizontal	45	1.40	-
2402MHz	Pass	PK	2.4016G	94.64	Inf	-Inf	3	Horizontal	45	1.40	-
2402MHz	Pass	AV	4.805G	39.80	54.00	-14.20	3	Vertical	104	2.74	-
2402MHz	Pass	PK	4.80308G	50.75	74.00	-23.25	3	Vertical	104	2.74	-
2402MHz	Pass	AV	4.805G	37.10	54.00	-16.90	3	Horizontal	55	1.00	-



Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2402MHz	Pass	PK	4.8028G	48.67	74.00	-25.33	3	Horizontal	55	1.00	-
2440MHz	Pass	AV	2.3468G	43.85	54.00	-10.15	3	Vertical	201	2.65	-
2440MHz	Pass	AV	2.44G	82.70	Inf	-Inf	3	Vertical	201	2.65	-
2440MHz	Pass	AV	2.5G	44.04	54.00	-9.96	3	Vertical	201	2.65	-
2440MHz	Pass	PK	2.382G	57.32	74.00	-16.68	3	Vertical	201	2.65	-
2440MHz	Pass	PK	2.4396G	85.81	Inf	-Inf	3	Vertical	201	2.65	-
2440MHz	Pass	PK	2.4928G	57.29	74.00	-16.71	3	Vertical	201	2.65	-
2440MHz	Pass	AV	2.3564G	43.89	54.00	-10.11	3	Horizontal	37	2.69	-
2440MHz	Pass	AV	2.44G	90.81	Inf	-Inf	3	Horizontal	37	2.69	-
2440MHz	Pass	AV	2.5036G	44.10	54.00	-9.90	3	Horizontal	37	2.69	-
2440MHz	Pass	PK	2.3772G	57.07	74.00	-16.93	3	Horizontal	37	2.69	-
2440MHz	Pass	PK	2.4404G	93.89	Inf	-Inf	3	Horizontal	37	2.69	-
2440MHz	Pass	PK	2.514G	58.12	74.00	-15.88	3	Horizontal	37	2.69	-
2440MHz	Pass	AV	4.881G	36.58	54.00	-17.42	3	Vertical	238	1.18	-
2440MHz	Pass	AV	7.32126G	48.44	54.00	-5.56	3	Vertical	213	1.07	-
2440MHz	Pass	PK	4.88096G	48.66	74.00	-25.34	3	Vertical	238	1.18	-
2440MHz	Pass	PK	7.32142G	58.49	74.00	-15.51	3	Vertical	213	1.07	-
2440MHz	Pass	AV	4.88096G	37.18	54.00	-16.82	3	Horizontal	58	1.00	-
2440MHz	Pass	AV	7.32127G	43.43	54.00	-10.57	3	Horizontal	37	2.72	-
2440MHz	Pass	PK	4.87904G	48.78	74.00	-25.22	3	Horizontal	58	1.00	-
2440MHz	Pass	PK	7.3217G	54.19	74.00	-19.81	3	Horizontal	37	2.72	-
2480MHz	Pass	AV	2.48G	81.09	Inf	-Inf	3	Vertical	289	1.19	-
2480MHz	Pass	AV	2.4835G	44.08	54.00	-9.92	3	Vertical	289	1.19	-
2480MHz	Pass	PK	2.4796G	84.17	Inf	-Inf	3	Vertical	289	1.19	-
2480MHz	Pass	PK	2.4966G	57.47	74.00	-16.53	3	Vertical	289	1.19	-
2480MHz	Pass	AV	2.48G	88.46	Inf	-Inf	3	Horizontal	39	2.05	-
2480MHz	Pass	AV	2.4835G	44.40	54.00	-9.60	3	Horizontal	39	2.05	-
2480MHz	Pass	PK	2.4796G	91.63	Inf	-Inf	3	Horizontal	39	2.05	-
2480MHz	Pass	PK	2.4994G	57.11	74.00	-16.89	3	Horizontal	39	2.05	-
2480MHz	Pass	AV	4.9592G	36.14	54.00	-17.86	3	Vertical	57	1.00	-
2480MHz	Pass	AV	7.43898G	48.26	54.00	-5.74	3	Vertical	215	2.77	-
2480MHz	Pass	PK	4.95916G	47.93	74.00	-26.07	3	Vertical	57	1.00	-
2480MHz	Pass	PK	7.4386G	58.36	74.00	-15.64	3	Vertical	215	2.77	-
2480MHz	Pass	AV	4.95911G	33.01	54.00	-20.99	3	Horizontal	60	1.04	-
2480MHz	Pass	AV	7.43897G	45.71	54.00	-8.29	3	Horizontal	43	2.73	-
2480MHz	Pass	PK	4.95929G	46.99	74.00	-27.01	3	Horizontal	60	1.04	-
2480MHz	Pass	PK	7.43861G	56.47	74.00	-17.53	3	Horizontal	43	2.73	-
BT-LE(125kbps)	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3536G	44.09	54.00	-9.91	3	Vertical	219	1.39	-
2402MHz	Pass	AV	2.402G	85.57	Inf	-Inf	3	Vertical	219	1.39	-
2402MHz	Pass	PK	2.372G	57.07	74.00	-16.93	3	Vertical	219	1.39	-
2402MHz	Pass	PK	2.4018G	86.97	Inf	-Inf	3	Vertical	219	1.39	-
2402MHz	Pass	AV	2.3576G	44.16	54.00	-9.84	3	Horizontal	45	1.60	-
2402MHz	Pass	AV	2.402G	92.67	Inf	-Inf	3	Horizontal	45	1.60	-
2402MHz	Pass	PK	2.3634G	57.49	74.00	-16.51	3	Horizontal	45	1.60	-
2402MHz	Pass	PK	2.4018G	93.98	Inf	-Inf	3	Horizontal	45	1.60	-
2402MHz	Pass	AV	4.80406G	43.47	54.00	-10.53	3	Vertical	263	1.30	-
2402MHz	Pass	PK	4.80361G	52.31	74.00	-21.69	3	Vertical	263	1.30	-
2402MHz	Pass	AV	4.80404G	42.69	54.00	-11.31	3	Horizontal	56	1.00	-
2402MHz	Pass	PK	4.80354G	51.69	74.00	-22.31	3	Horizontal	56	1.00	-
2440MHz	Pass	AV	2.3456G	44.23	54.00	-9.77	3	Vertical	202	2.65	-
2440MHz	Pass	AV	2.44G	85.41	Inf	-Inf	3	Vertical	202	2.65	-
2440MHz	Pass	AV	2.486G	44.41	54.00	-9.59	3	Vertical	202	2.65	-
2440MHz	Pass	PK	2.3568G	57.46	74.00	-16.54	3	Vertical	202	2.65	-
2440MHz	Pass	PK	2.4404G	86.77	Inf	-Inf	3	Vertical	202	2.65	-
2440MHz	Pass	PK	2.498G	57.03	74.00	-16.97	3	Vertical	202	2.65	-
2440MHz	Pass	AV	2.3508G	44.32	54.00	-9.68	3	Horizontal	32	1.47	-
2440MHz	Pass	AV	2.44G	91.07	Inf	-Inf	3	Horizontal	32	1.47	-
2440MHz	Pass	AV	2.4972G	44.46	54.00	-9.54	3	Horizontal	32	1.47	-
2440MHz	Pass	PK	2.3876G	57.43	74.00	-16.57	3	Horizontal	32	1.47	-
2440MHz	Pass	PK	2.4404G	92.37	Inf	-Inf	3	Horizontal	32	1.47	-
2440MHz	Pass	PK	2.492G	57.27	74.00	-16.73	3	Horizontal	32	1.47	-



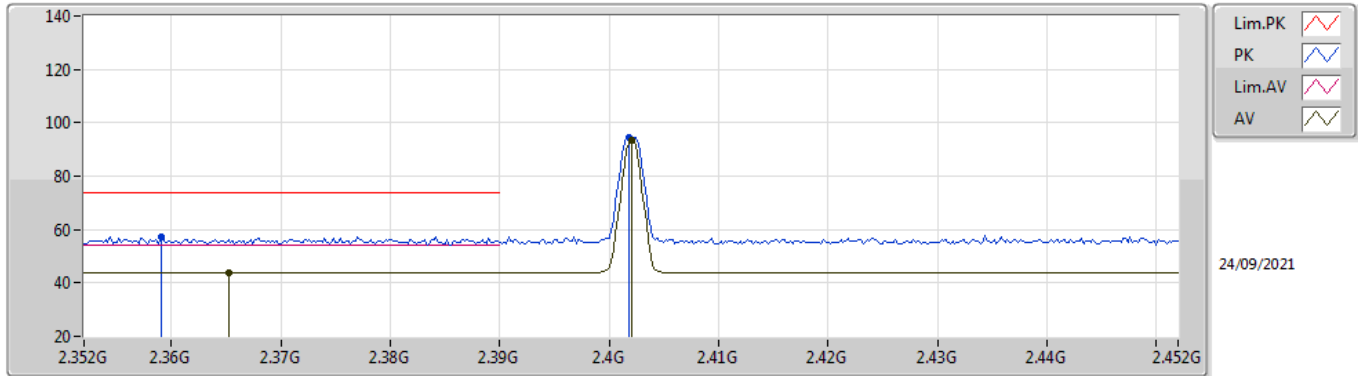
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2440MHz	Pass	AV	4.88006G	36.71	54.00	-17.29	3	Vertical	242	1.37	-
2440MHz	Pass	AV	7.31959G	48.40	54.00	-5.60	3	Vertical	215	1.00	-
2440MHz	Pass	PK	4.88043G	47.85	74.00	-26.15	3	Vertical	242	1.37	-
2440MHz	Pass	PK	7.32093G	59.75	74.00	-14.25	3	Vertical	215	1.00	-
2440MHz	Pass	AV	4.8804G	33.26	54.00	-20.74	3	Horizontal	184	1.50	-
2440MHz	Pass	AV	7.31955G	45.69	54.00	-8.31	3	Horizontal	294	1.08	-
2440MHz	Pass	PK	4.87964G	46.09	74.00	-27.91	3	Horizontal	184	1.50	-
2440MHz	Pass	PK	7.31946G	56.90	74.00	-17.10	3	Horizontal	294	1.08	-
2480MHz	Pass	AV	2.48G	83.02	Inf	-Inf	3	Vertical	286	1.19	-
2480MHz	Pass	AV	2.5G	44.35	54.00	-9.65	3	Vertical	286	1.19	-
2480MHz	Pass	PK	2.4798G	84.47	Inf	-Inf	3	Vertical	286	1.19	-
2480MHz	Pass	PK	2.4982G	57.86	74.00	-16.14	3	Vertical	286	1.19	-
2480MHz	Pass	AV	2.48G	89.23	Inf	-Inf	3	Horizontal	39	1.50	-
2480MHz	Pass	AV	2.4892G	44.36	54.00	-9.64	3	Horizontal	39	1.50	-
2480MHz	Pass	PK	2.4802G	90.59	Inf	-Inf	3	Horizontal	39	1.50	-
2480MHz	Pass	PK	2.4992G	57.81	74.00	-16.19	3	Horizontal	39	1.50	-
2480MHz	Pass	AV	4.96019G	37.16	54.00	-16.84	3	Vertical	58	1.07	-
2480MHz	Pass	AV	7.43954G	46.83	54.00	-7.17	3	Vertical	212	1.29	-
2480MHz	Pass	PK	4.95958G	48.86	74.00	-25.14	3	Vertical	58	1.07	-
2480MHz	Pass	PK	7.44083G	58.15	74.00	-15.85	3	Vertical	212	1.29	-
2480MHz	Pass	AV	4.96036G	32.83	54.00	-21.17	3	Horizontal	58	1.03	-
2480MHz	Pass	AV	7.43954G	46.28	54.00	-7.72	3	Horizontal	52	1.04	-
2480MHz	Pass	PK	4.96059G	46.43	74.00	-27.57	3	Horizontal	58	1.03	-
2480MHz	Pass	PK	7.44081G	57.76	74.00	-16.24	3	Horizontal	52	1.04	-
BT-LE(500kbps)	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.352G	43.90	54.00	-10.10	3	Vertical	300	1.20	-
2402MHz	Pass	AV	2.402G	92.72	Inf	-Inf	3	Vertical	300	1.20	-
2402MHz	Pass	PK	2.3586G	57.43	74.00	-16.57	3	Vertical	300	1.20	-
2402MHz	Pass	PK	2.4018G	93.93	Inf	-Inf	3	Vertical	300	1.20	-
2402MHz	Pass	AV	2.3558G	44.00	54.00	-10.00	3	Horizontal	94	1.50	-
2402MHz	Pass	AV	2.402G	100.07	Inf	-Inf	3	Horizontal	94	1.50	-
2402MHz	Pass	PK	2.352G	57.57	74.00	-16.43	3	Horizontal	94	1.50	-
2402MHz	Pass	PK	2.4024G	101.19	Inf	-Inf	3	Horizontal	94	1.50	-
2402MHz	Pass	AV	4.80406G	42.92	54.00	-11.08	3	Vertical	104	2.75	-
2402MHz	Pass	PK	4.80338G	50.83	74.00	-23.17	3	Vertical	104	2.75	-
2402MHz	Pass	AV	4.80408G	39.57	54.00	-14.43	3	Horizontal	55	1.00	-
2402MHz	Pass	PK	4.80351G	49.72	74.00	-24.28	3	Horizontal	55	1.00	-
2440MHz	Pass	AV	2.3764G	44.04	54.00	-9.96	3	Vertical	101	2.68	-
2440MHz	Pass	AV	2.44G	96.54	Inf	-Inf	3	Vertical	101	2.68	-
2440MHz	Pass	AV	2.494G	44.10	54.00	-9.90	3	Vertical	101	2.68	-
2440MHz	Pass	PK	2.3512G	56.88	74.00	-17.12	3	Vertical	101	2.68	-
2440MHz	Pass	PK	2.4396G	97.68	Inf	-Inf	3	Vertical	101	2.68	-
2440MHz	Pass	PK	2.4835G	57.57	74.00	-16.43	3	Vertical	101	2.68	-
2440MHz	Pass	AV	2.376G	44.80	54.00	-9.20	3	Horizontal	40	2.72	-
2440MHz	Pass	AV	2.44G	100.89	Inf	-Inf	3	Horizontal	40	2.72	-
2440MHz	Pass	AV	2.504G	44.76	54.00	-9.24	3	Horizontal	40	2.72	-
2440MHz	Pass	PK	2.3772G	57.55	74.00	-16.45	3	Horizontal	40	2.72	-
2440MHz	Pass	PK	2.4404G	102.02	Inf	-Inf	3	Horizontal	40	2.72	-
2440MHz	Pass	PK	2.5136G	58.41	74.00	-15.59	3	Horizontal	40	2.72	-
2440MHz	Pass	AV	4.88003G	38.96	54.00	-15.04	3	Vertical	237	1.16	-
2440MHz	Pass	AV	7.31954G	48.86	54.00	-5.14	3	Vertical	212	1.14	-
2440MHz	Pass	PK	4.87948G	48.97	74.00	-25.03	3	Vertical	237	1.16	-
2440MHz	Pass	PK	7.32086G	59.36	74.00	-14.64	3	Vertical	212	1.14	-
2440MHz	Pass	AV	4.88002G	39.79	54.00	-14.21	3	Horizontal	59	1.00	-
2440MHz	Pass	AV	7.31949G	44.16	54.00	-9.84	3	Horizontal	36	2.75	-
2440MHz	Pass	PK	4.87973G	49.12	74.00	-24.88	3	Horizontal	59	1.00	-
2440MHz	Pass	PK	7.32078G	55.68	74.00	-18.32	3	Horizontal	36	2.75	-
2480MHz	Pass	AV	2.48G	92.74	Inf	-Inf	3	Vertical	286	1.00	-
2480MHz	Pass	AV	2.4835G	44.15	54.00	-9.85	3	Vertical	286	1.00	-
2480MHz	Pass	PK	2.4802G	93.93	Inf	-Inf	3	Vertical	286	1.00	-
2480MHz	Pass	PK	2.487G	57.36	74.00	-16.64	3	Vertical	286	1.00	-
2480MHz	Pass	AV	2.48G	99.99	Inf	-Inf	3	Horizontal	48	1.10	-



Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2480MHz	Pass	AV	2.4835G	44.89	54.00	-9.11	3	Horizontal	48	1.10	-
2480MHz	Pass	PK	2.4802G	101.14	Inf	-Inf	3	Horizontal	48	1.10	-
2480MHz	Pass	PK	2.497G	57.65	74.00	-16.35	3	Horizontal	48	1.10	-
2480MHz	Pass	AV	4.9601G	39.59	54.00	-14.41	3	Vertical	236	1.43	-
2480MHz	Pass	AV	7.43957G	48.81	54.00	-5.19	3	Vertical	213	1.07	-
2480MHz	Pass	PK	4.95954G	49.68	74.00	-24.32	3	Vertical	236	1.43	-
2480MHz	Pass	PK	7.44083G	59.53	74.00	-14.47	3	Vertical	213	1.07	-
2480MHz	Pass	AV	4.96004G	40.71	54.00	-13.29	3	Horizontal	57	1.03	-
2480MHz	Pass	AV	7.43955G	44.77	54.00	-9.23	3	Horizontal	25	1.07	-
2480MHz	Pass	PK	4.96018G	50.28	74.00	-23.72	3	Horizontal	57	1.03	-
2480MHz	Pass	PK	7.43928G	56.11	74.00	-17.89	3	Horizontal	25	1.07	-

BT-LE(1Mbps)

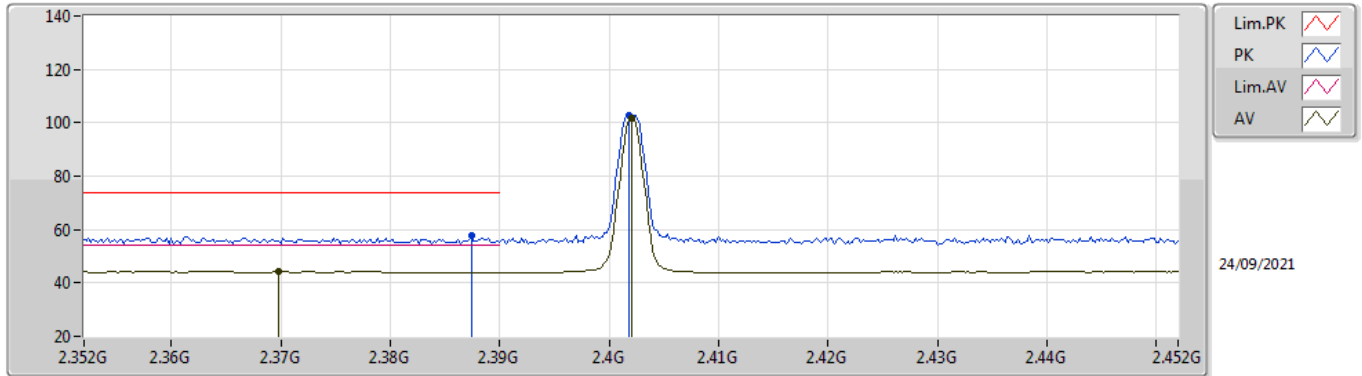
2402MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3652G	43.93	54.00	-10.07	32.29	3	Vertical	86	1.55	-	11.64	27.74	4.55	-
AV	2.402G	93.27	Inf	-Inf	32.18	3	Vertical	86	1.55	-	61.09	27.60	4.58	-
PK	2.359G	57.22	74.00	-16.78	32.30	3	Vertical	86	1.55	-	24.92	27.76	4.54	-
PK	2.4018G	94.43	Inf	-Inf	32.18	3	Vertical	86	1.55	-	62.25	27.60	4.58	-

BT-LE(1Mbps)

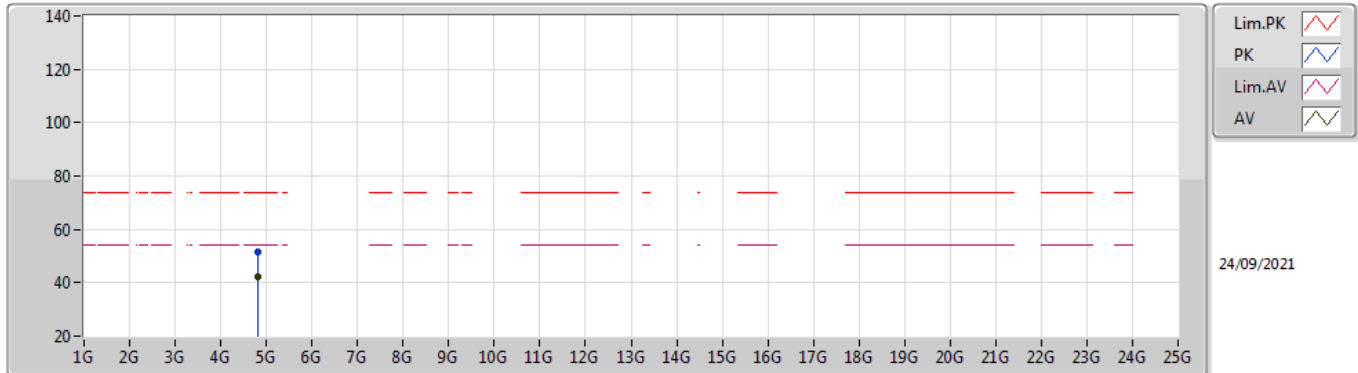
2402MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3698G	44.41	54.00	-9.59	32.27	3	Horizontal	134	1.00	-	12.14	27.72	4.55	-
AV	2.402G	101.91	Inf	-Inf	32.18	3	Horizontal	134	1.00	-	69.73	27.60	4.58	-
PK	2.3874G	57.58	74.00	-16.42	32.22	3	Horizontal	134	1.00	-	25.36	27.65	4.57	-
PK	2.4018G	103.00	Inf	-Inf	32.18	3	Horizontal	134	1.00	-	70.82	27.60	4.58	-

BT-LE(1Mbps)

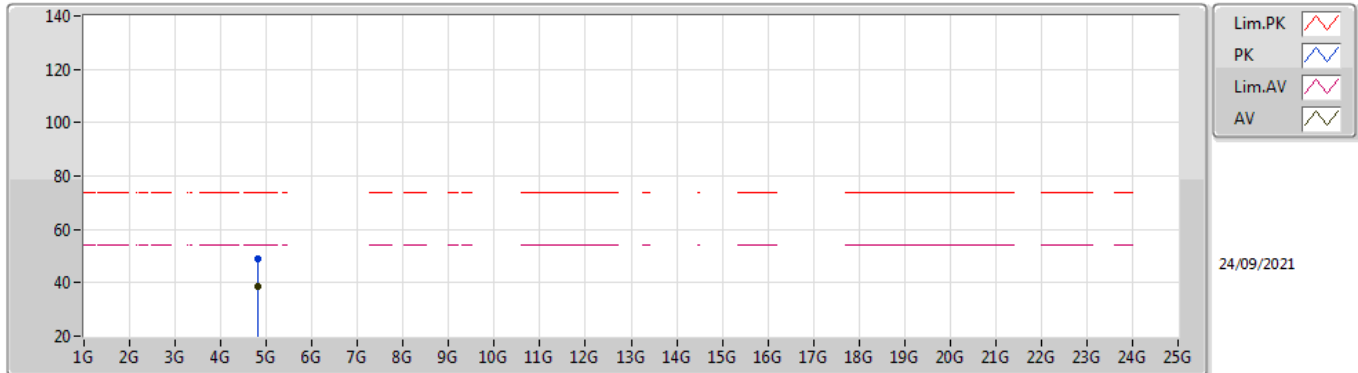
2402MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.80408G	42.49	54.00	-11.51	2.95	3	Vertical	201	2.42	-	39.54	31.10	6.66	34.81
PK	4.80366G	51.65	74.00	-22.35	2.95	3	Vertical	201	2.42	-	48.70	31.10	6.66	34.81

BT-LE(1Mbps)

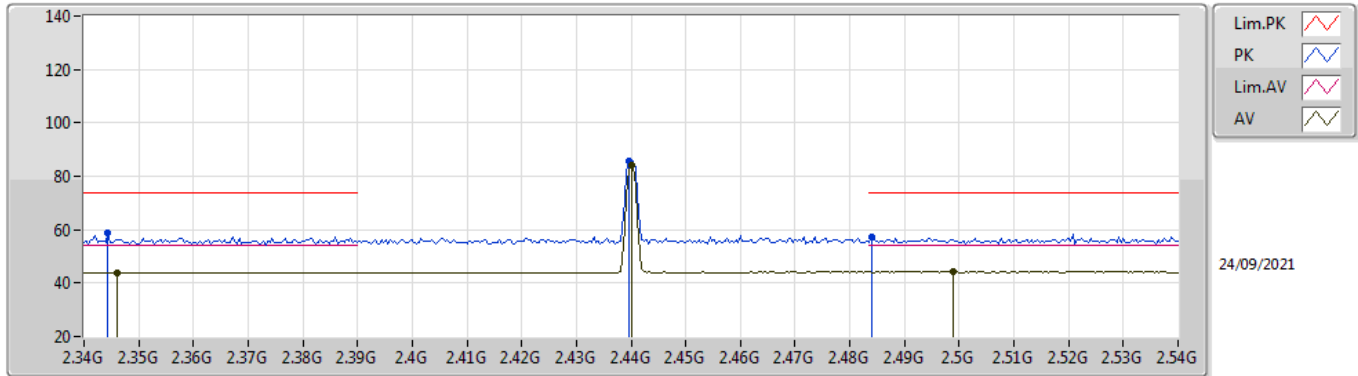
2402MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.80407G	38.49	54.00	-15.51	2.95	3	Horizontal	147	1.12	-	35.54	31.10	6.66	34.81
PK	4.80371G	49.12	74.00	-24.88	2.95	3	Horizontal	147	1.12	-	46.17	31.10	6.66	34.81

BT-LE(1Mbps)

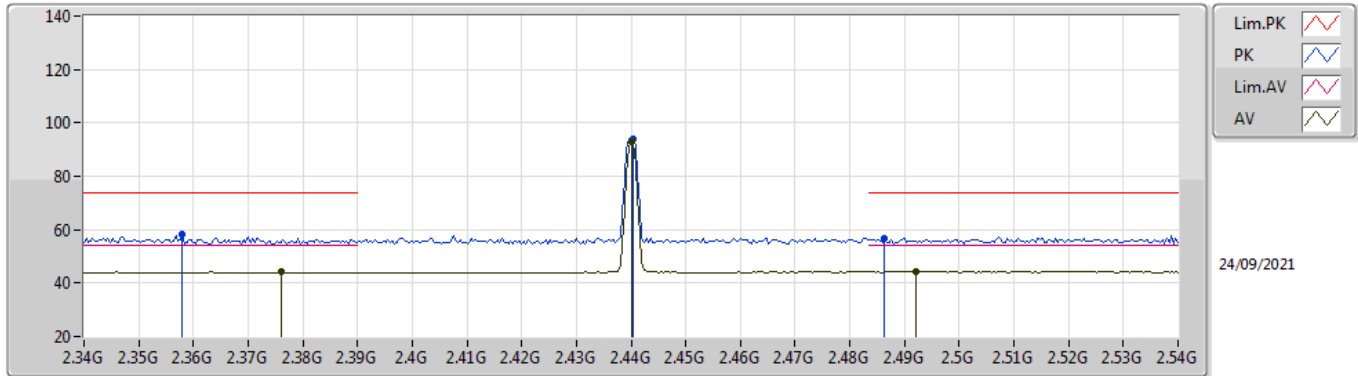
2440MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.346G	44.02	54.00	-9.98	32.33	3	Vertical	200	2.65	-	11.69	27.80	4.53	-
AV	2.44G	84.30	Inf	-Inf	32.12	3	Vertical	200	2.65	-	52.18	27.52	4.60	-
AV	2.4988G	44.25	54.00	-9.75	32.12	3	Vertical	200	2.65	-	12.13	27.50	4.62	-
PK	2.3444G	58.87	74.00	-15.13	32.33	3	Vertical	200	2.65	-	26.54	27.80	4.53	-
PK	2.4396G	85.56	Inf	-Inf	32.12	3	Vertical	200	2.65	-	53.44	27.52	4.60	-
PK	2.484G	57.04	74.00	-16.96	32.11	3	Vertical	200	2.65	-	24.93	27.50	4.61	-

BT-LE(1Mbps)

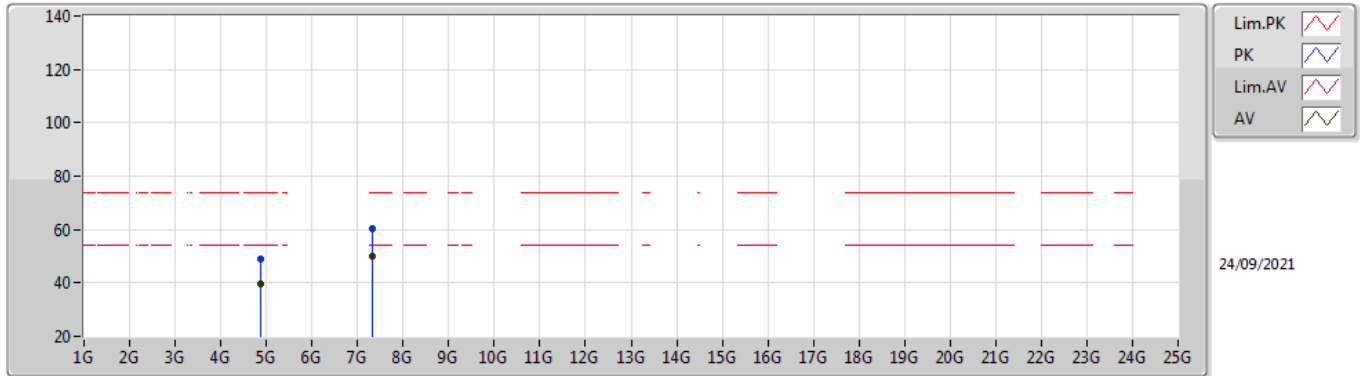
2440MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.376G	44.25	54.00	-9.75	32.26	3	Horizontal	38	1.01	-	11.99	27.70	4.56	-
AV	2.44G	92.83	Inf	-Inf	32.12	3	Horizontal	38	1.01	-	60.71	27.52	4.60	-
AV	2.492G	44.29	54.00	-9.71	32.12	3	Horizontal	38	1.01	-	12.17	27.50	4.62	-
PK	2.358G	58.12	74.00	-15.88	32.31	3	Horizontal	38	1.01	-	25.81	27.77	4.54	-
PK	2.4404G	93.97	Inf	-Inf	32.12	3	Horizontal	38	1.01	-	61.85	27.52	4.60	-
PK	2.4864G	56.74	74.00	-17.26	32.11	3	Horizontal	38	1.01	-	24.63	27.50	4.61	-

BT-LE(1Mbps)

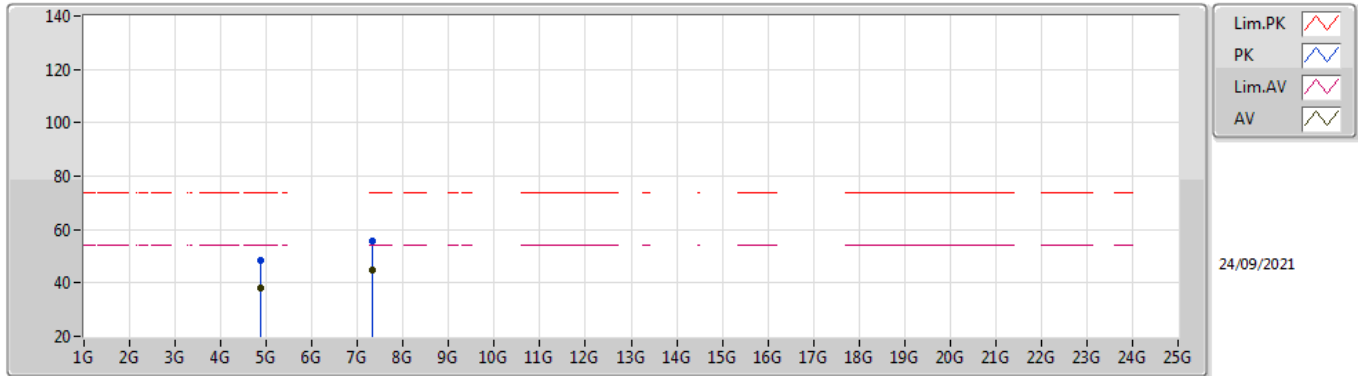
2440MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.8801G	39.56	54.00	-14.44	3.03	3	Vertical	330	2.60	-	36.53	31.10	6.72	34.79
AV	7.32068G	49.85	54.00	-4.15	9.41	3	Vertical	305	1.00	-	40.44	36.36	7.87	34.82
PK	4.87973G	49.16	74.00	-24.84	3.03	3	Vertical	330	2.60	-	46.13	31.10	6.72	34.79
PK	7.32092G	60.14	74.00	-13.86	9.42	3	Vertical	305	1.00	-	50.72	36.36	7.88	34.82

BT-LE(1Mbps)

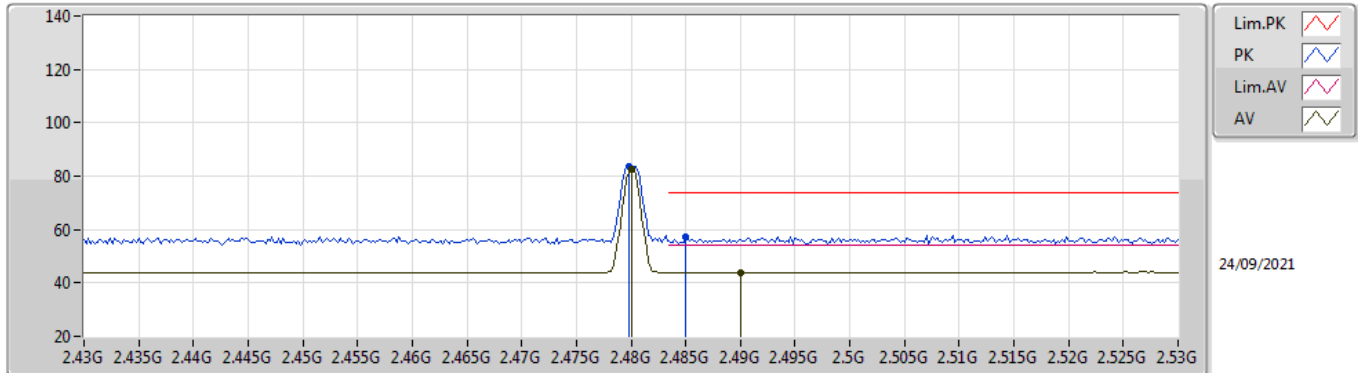
2440MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.88008G	37.94	54.00	-16.06	3.03	3	Horizontal	161	1.16	-	34.91	31.10	6.72	34.79
AV	7.32067G	44.58	54.00	-9.42	9.41	3	Horizontal	279	1.05	-	35.17	36.36	7.87	34.82
PK	4.87956G	48.33	74.00	-25.67	3.03	3	Horizontal	161	1.16	-	45.30	31.10	6.72	34.79
PK	7.31946G	55.73	74.00	-18.27	9.41	3	Horizontal	279	1.05	-	46.32	36.36	7.87	34.82

BT-LE(1Mbps)

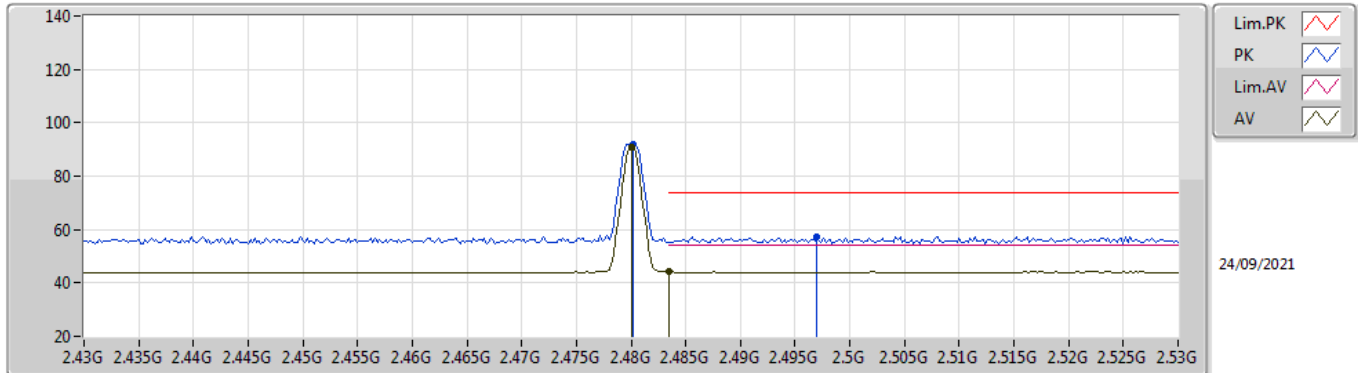
2480MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.48G	82.45	Inf	-Inf	32.11	3	Vertical	303	1.19	-	50.34	27.50	4.61	-
AV	2.49G	44.05	54.00	-9.95	32.12	3	Vertical	303	1.19	-	11.93	27.50	4.62	-
PK	2.4798G	83.79	Inf	-Inf	32.11	3	Vertical	303	1.19	-	51.68	27.50	4.61	-
PK	2.485G	57.38	74.00	-16.62	32.11	3	Vertical	303	1.19	-	25.27	27.50	4.61	-

BT-LE(1Mbps)

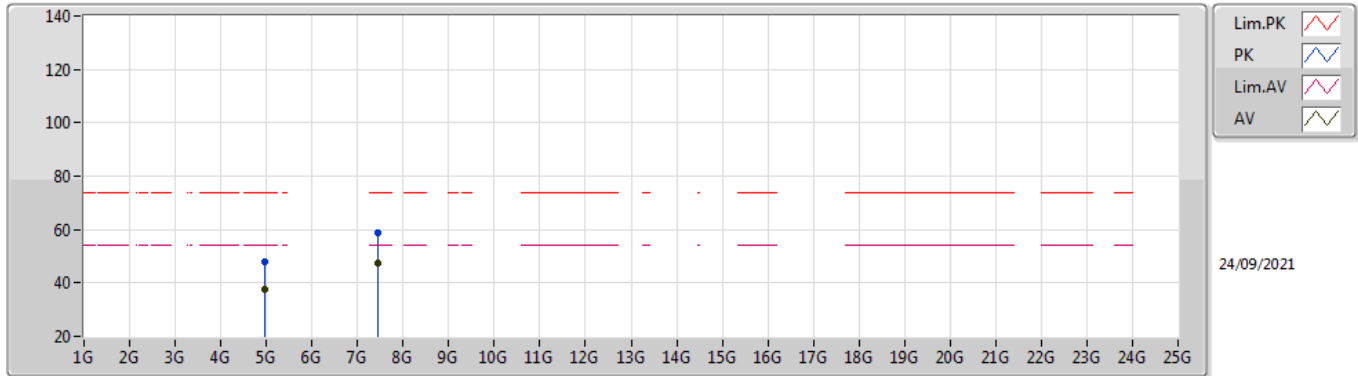
2480MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.48G	90.79	Inf	-Inf	32.11	3	Horizontal	39	1.50	-	58.68	27.50	4.61	-
AV	2.4835G	44.13	54.00	-9.87	32.11	3	Horizontal	39	1.50	-	12.02	27.50	4.61	-
PK	2.4802G	91.93	Inf	-Inf	32.11	3	Horizontal	39	1.50	-	59.82	27.50	4.61	-
PK	2.497G	57.43	74.00	-16.57	32.12	3	Horizontal	39	1.50	-	25.31	27.50	4.62	-

BT-LE(1Mbps)

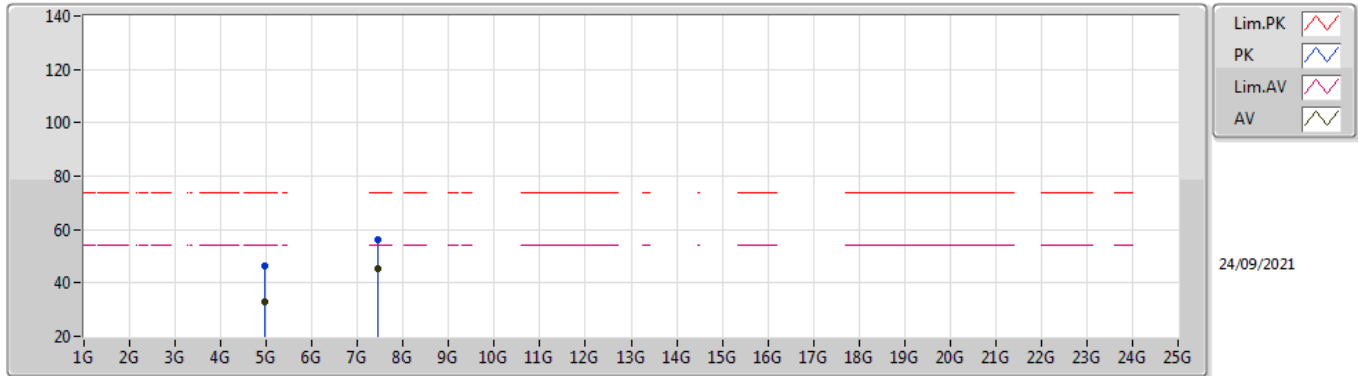
2480MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.96006G	37.50	54.00	-16.50	3.35	3	Vertical	56	1.00	-	34.15	31.34	6.78	34.77
AV	7.43954G	47.50	54.00	-6.50	9.50	3	Vertical	218	2.73	-	38.00	36.28	8.06	34.84
PK	4.95952G	47.89	74.00	-26.11	3.35	3	Vertical	56	1.00	-	44.54	31.34	6.78	34.77
PK	7.44081G	58.61	74.00	-15.39	9.50	3	Vertical	218	2.73	-	49.11	36.28	8.06	34.84

BT-LE(1Mbps)

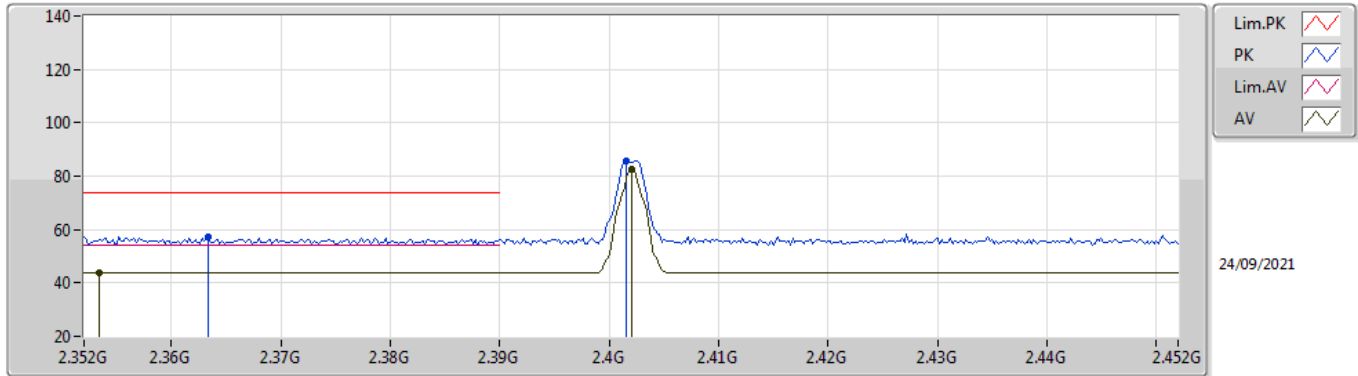
2480MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.95992G	32.68	54.00	-21.32	3.35	3	Horizontal	63	2.55	-	29.33	31.34	6.78	34.77
AV	7.43954G	45.15	54.00	-8.85	9.50	3	Horizontal	53	2.78	-	35.65	36.28	8.06	34.84
PK	4.96058G	46.19	74.00	-27.81	3.35	3	Horizontal	63	2.55	-	42.84	31.34	6.78	34.77
PK	7.44096G	55.98	74.00	-18.02	9.50	3	Horizontal	53	2.78	-	46.48	36.28	8.06	34.84

BT-LE(2Mbps)

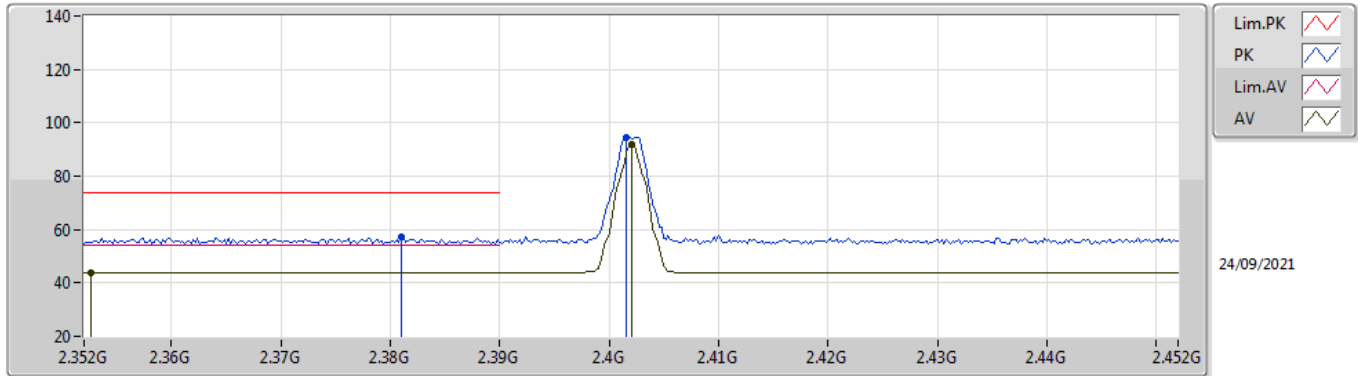
2402MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3534G	43.86	54.00	-10.14	32.33	3	Vertical	298	1.22	-	11.53	27.79	4.54	-
AV	2.402G	82.64	Inf	-Inf	32.18	3	Vertical	298	1.22	-	50.46	27.60	4.58	-
PK	2.3634G	57.48	74.00	-16.52	32.30	3	Vertical	298	1.22	-	25.18	27.75	4.55	-
PK	2.4016G	85.68	Inf	-Inf	32.18	3	Vertical	298	1.22	-	53.50	27.60	4.58	-

BT-LE(2Mbps)

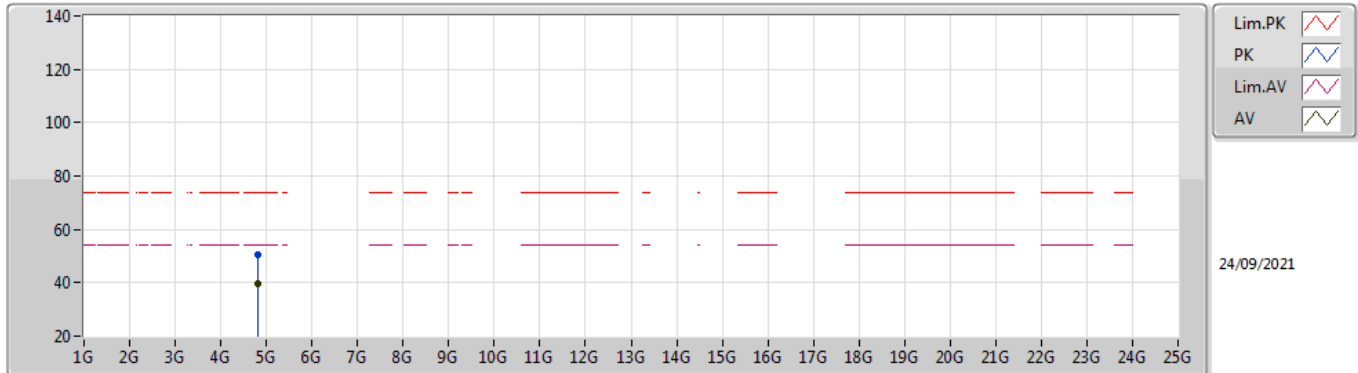
2402MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3526G	43.86	54.00	-10.14	32.32	3	Horizontal	45	1.40	-	11.54	27.79	4.53	-
AV	2.402G	91.76	Inf	-Inf	32.18	3	Horizontal	45	1.40	-	59.58	27.60	4.58	-
PK	2.381G	57.00	74.00	-17.00	32.24	3	Horizontal	45	1.40	-	24.76	27.68	4.56	-
PK	2.4016G	94.64	Inf	-Inf	32.18	3	Horizontal	45	1.40	-	62.46	27.60	4.58	-

BT-LE(2Mbps)

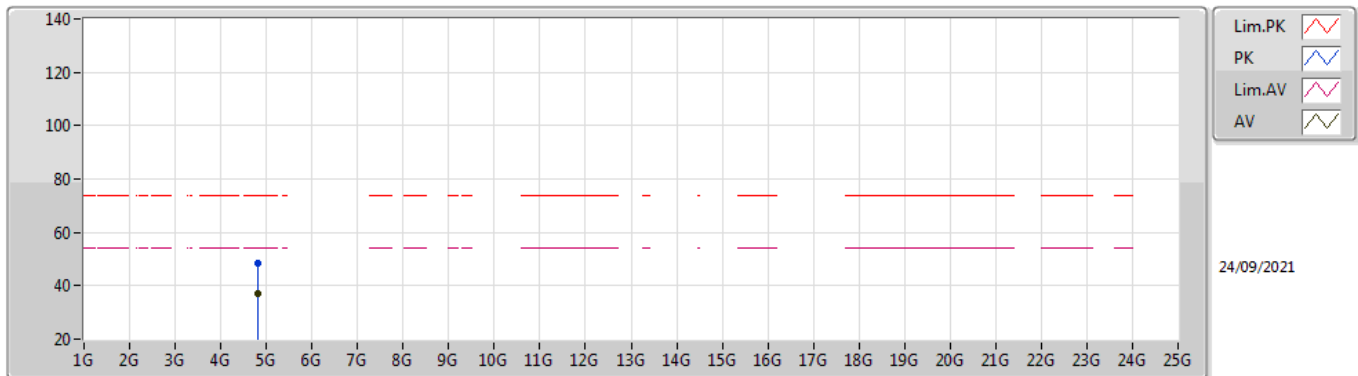
2402MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.805G	39.80	54.00	-14.20	2.95	3	Vertical	104	2.74	-	36.85	31.10	6.66	34.81
PK	4.80308G	50.75	74.00	-23.25	2.95	3	Vertical	104	2.74	-	47.80	31.10	6.66	34.81

BT-LE(2Mbps)

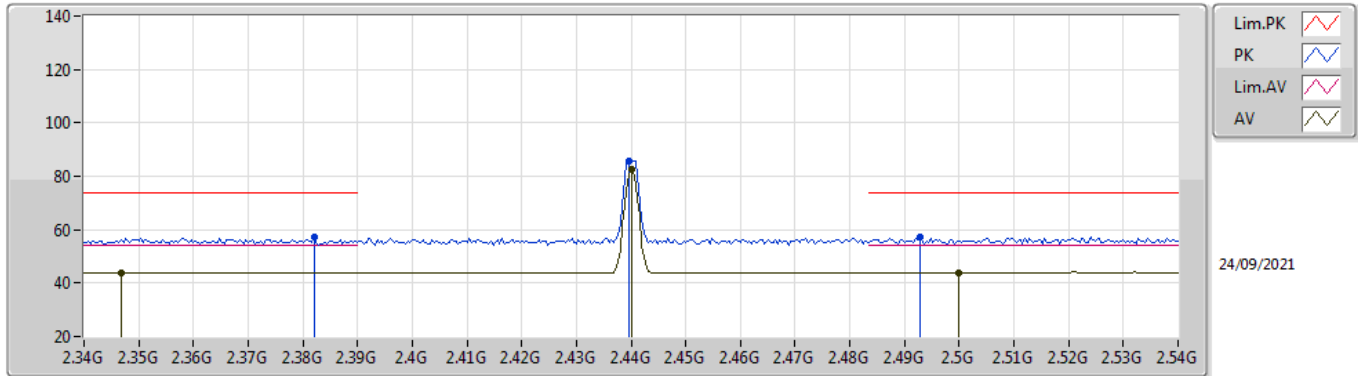
2402MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.805G	37.10	54.00	-16.90	2.95	3	Horizontal	55	1.00	-	34.15	31.10	6.66	34.81
PK	4.8028G	48.67	74.00	-25.33	2.95	3	Horizontal	55	1.00	-	45.72	31.10	6.66	34.81

BT-LE(2Mbps)

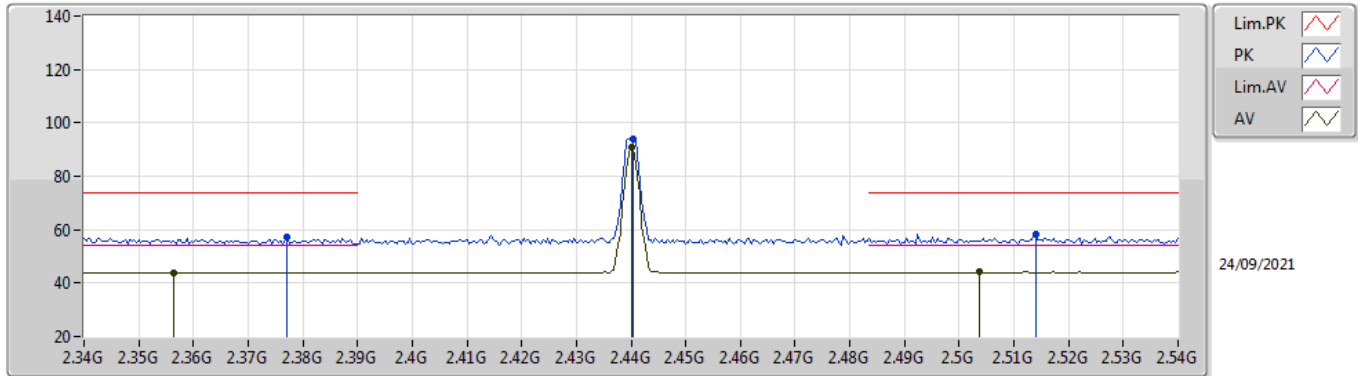
2440MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3468G	43.85	54.00	-10.15	32.33	3	Vertical	201	2.65	-	11.52	27.80	4.53	-
AV	2.44G	82.70	Inf	-Inf	32.12	3	Vertical	201	2.65	-	50.58	27.52	4.60	-
AV	2.5G	44.04	54.00	-9.96	32.12	3	Vertical	201	2.65	-	11.92	27.50	4.62	-
PK	2.382G	57.32	74.00	-16.68	32.23	3	Vertical	201	2.65	-	25.09	27.67	4.56	-
PK	2.4396G	85.81	Inf	-Inf	32.12	3	Vertical	201	2.65	-	53.69	27.52	4.60	-
PK	2.4928G	57.29	74.00	-16.71	32.12	3	Vertical	201	2.65	-	25.17	27.50	4.62	-

BT-LE(2Mbps)

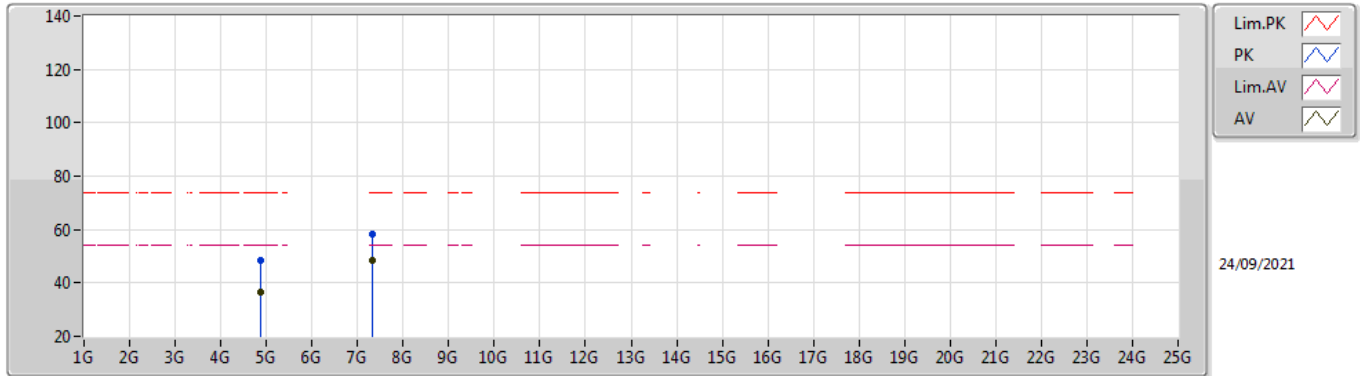
2440MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3564G	43.89	54.00	-10.11	32.31	3	Horizontal	37	2.69	-	11.58	27.77	4.54	-
AV	2.44G	90.81	Inf	-Inf	32.12	3	Horizontal	37	2.69	-	58.69	27.52	4.60	-
AV	2.5036G	44.10	54.00	-9.90	32.11	3	Horizontal	37	2.69	-	11.99	27.49	4.62	-
PK	2.3772G	57.07	74.00	-16.93	32.25	3	Horizontal	37	2.69	-	24.82	27.69	4.56	-
PK	2.4404G	93.89	Inf	-Inf	32.12	3	Horizontal	37	2.69	-	61.77	27.52	4.60	-
PK	2.514G	58.12	74.00	-15.88	32.10	3	Horizontal	37	2.69	-	26.02	27.47	4.63	-

BT-LE(2Mbps)

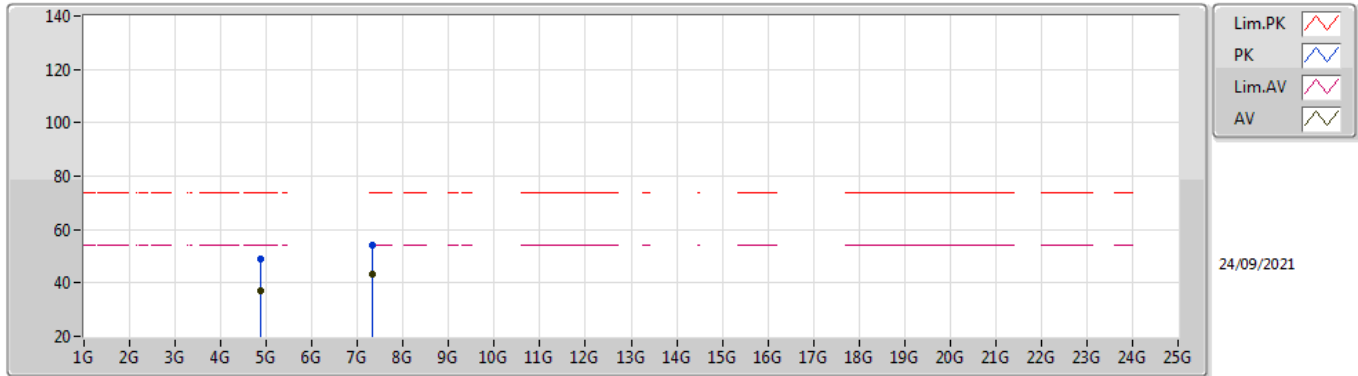
2440MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.881G	36.58	54.00	-17.42	3.03	3	Vertical	238	1.18	-	33.55	31.10	6.72	34.79
AV	7.32126G	48.44	54.00	-5.56	9.42	3	Vertical	213	1.07	-	39.02	36.36	7.88	34.82
PK	4.88096G	48.66	74.00	-25.34	3.03	3	Vertical	238	1.18	-	45.63	31.10	6.72	34.79
PK	7.32142G	58.49	74.00	-15.51	9.42	3	Vertical	213	1.07	-	49.07	36.36	7.88	34.82

BT-LE(2Mbps)

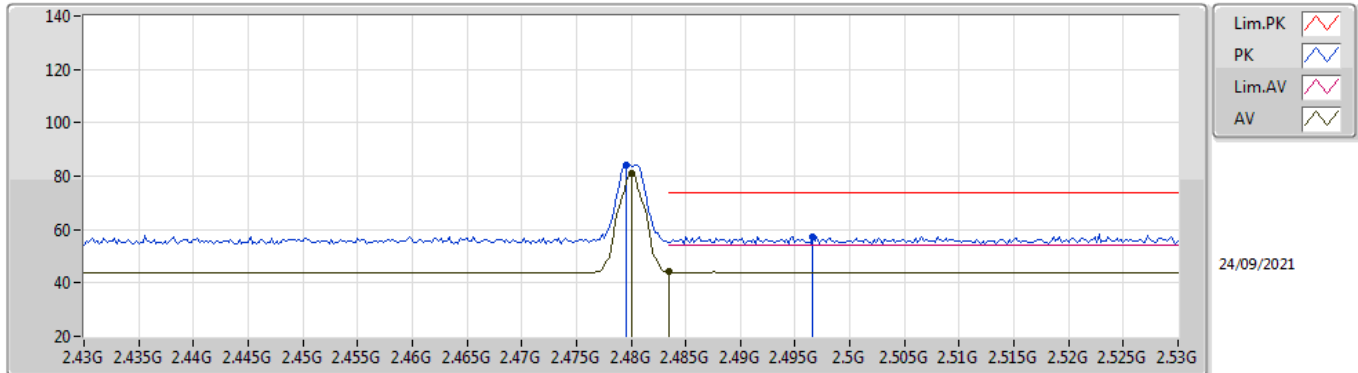
2440MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.88096G	37.18	54.00	-16.82	3.03	3	Horizontal	58	1.00	-	34.15	31.10	6.72	34.79
AV	7.32127G	43.43	54.00	-10.57	9.42	3	Horizontal	37	2.72	-	34.01	36.36	7.88	34.82
PK	4.87904G	48.78	74.00	-25.22	3.03	3	Horizontal	58	1.00	-	45.75	31.10	6.72	34.79
PK	7.3217G	54.19	74.00	-19.81	9.41	3	Horizontal	37	2.72	-	44.78	36.36	7.88	34.83

BT-LE(2Mbps)

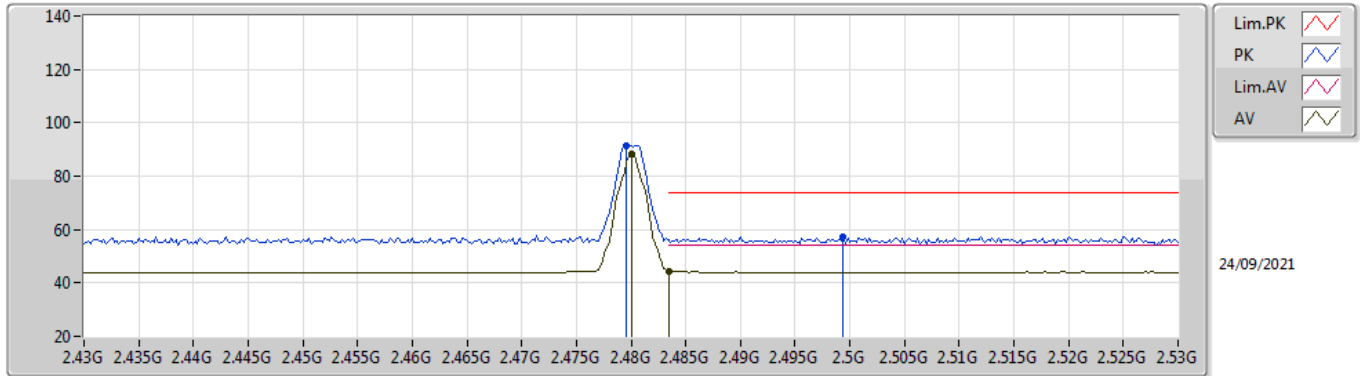
2480MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.48G	81.09	Inf	-Inf	32.11	3	Vertical	289	1.19	-	48.98	27.50	4.61	-
AV	2.4835G	44.08	54.00	-9.92	32.11	3	Vertical	289	1.19	-	11.97	27.50	4.61	-
PK	2.4796G	84.17	Inf	-Inf	32.11	3	Vertical	289	1.19	-	52.06	27.50	4.61	-
PK	2.4966G	57.47	74.00	-16.53	32.12	3	Vertical	289	1.19	-	25.35	27.50	4.62	-

BT-LE(2Mbps)

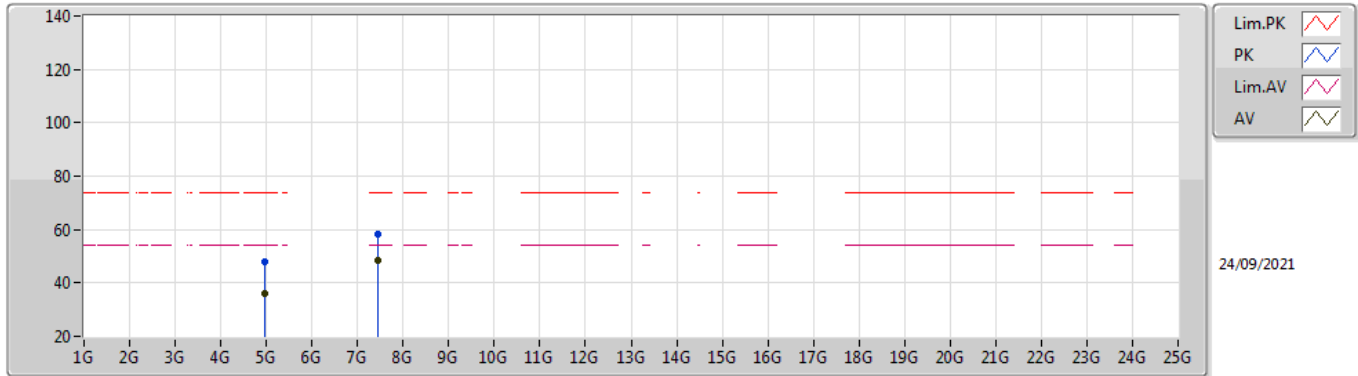
2480MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.48G	88.46	Inf	-Inf	32.11	3	Horizontal	39	2.05	-	56.35	27.50	4.61	-
AV	2.4835G	44.40	54.00	-9.60	32.11	3	Horizontal	39	2.05	-	12.29	27.50	4.61	-
PK	2.4796G	91.63	Inf	-Inf	32.11	3	Horizontal	39	2.05	-	59.52	27.50	4.61	-
PK	2.4994G	57.11	74.00	-16.89	32.12	3	Horizontal	39	2.05	-	24.99	27.50	4.62	-

BT-LE(2Mbps)

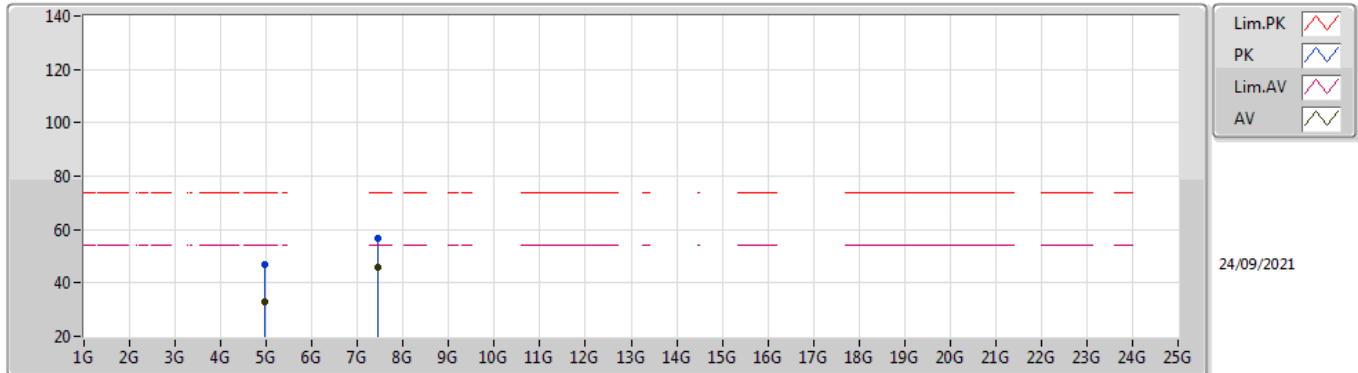
2480MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.9592G	36.14	54.00	-17.86	3.35	3	Vertical	57	1.00	-	32.79	31.34	6.78	34.77
AV	7.43898G	48.26	54.00	-5.74	9.49	3	Vertical	215	2.77	-	38.77	36.28	8.05	34.84
PK	4.95916G	47.93	74.00	-26.07	3.35	3	Vertical	57	1.00	-	44.58	31.34	6.78	34.77
PK	7.4386G	58.36	74.00	-15.64	9.49	3	Vertical	215	2.77	-	48.87	36.28	8.05	34.84

BT-LE(2Mbps)

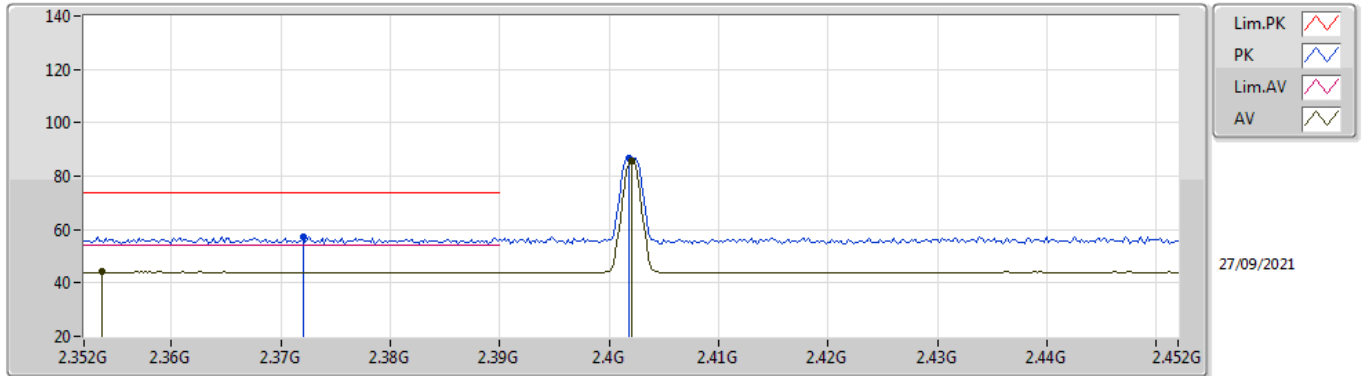
2480MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.95911G	33.01	54.00	-20.99	3.35	3	Horizontal	60	1.04	-	29.66	31.34	6.78	34.77
AV	7.43897G	45.71	54.00	-8.29	9.49	3	Horizontal	43	2.73	-	36.22	36.28	8.05	34.84
PK	4.95929G	46.99	74.00	-27.01	3.35	3	Horizontal	60	1.04	-	43.64	31.34	6.78	34.77
PK	7.43861G	56.47	74.00	-17.53	9.49	3	Horizontal	43	2.73	-	46.98	36.28	8.05	34.84

BT-LE(125kbps)

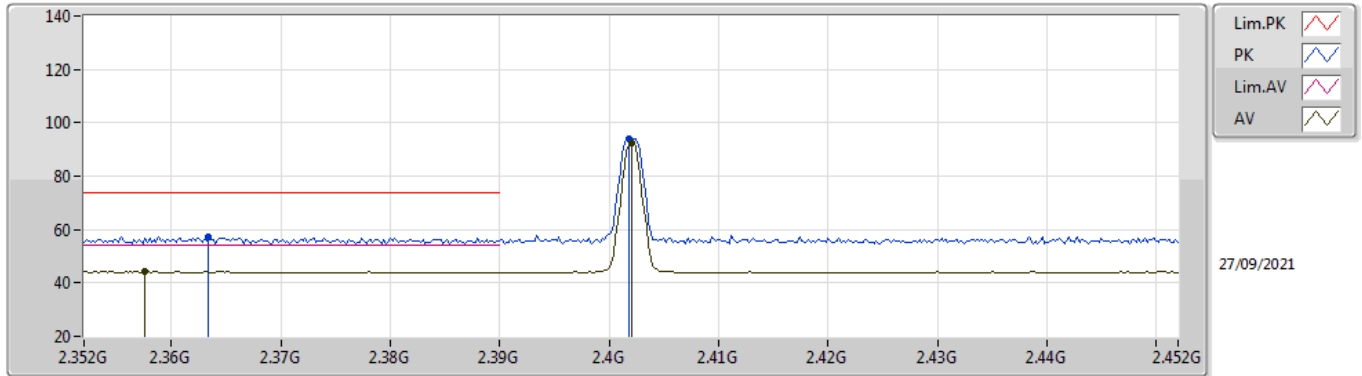
2402MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3536G	44.09	54.00	-9.91	32.33	3	Vertical	219	1.39	-	11.76	27.79	4.54	-
AV	2.402G	85.57	Inf	-Inf	32.18	3	Vertical	219	1.39	-	53.39	27.60	4.58	-
PK	2.372G	57.07	74.00	-16.93	32.26	3	Vertical	219	1.39	-	24.81	27.71	4.55	-
PK	2.4018G	86.97	Inf	-Inf	32.18	3	Vertical	219	1.39	-	54.79	27.60	4.58	-

BT-LE(125kbps)

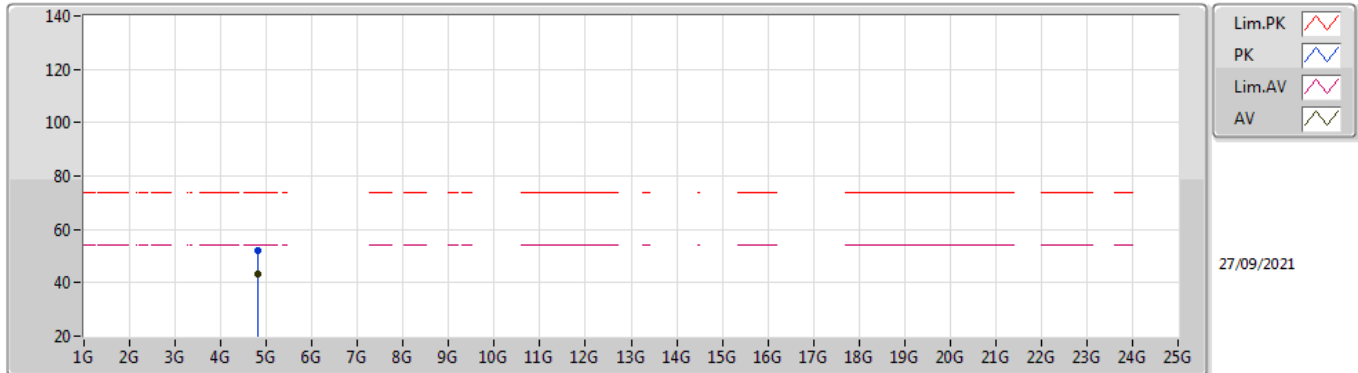
2402MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3576G	44.16	54.00	-9.84	32.31	3	Horizontal	45	1.60	-	11.85	27.77	4.54	-
AV	2.402G	92.67	Inf	-Inf	32.18	3	Horizontal	45	1.60	-	60.49	27.60	4.58	-
PK	2.3634G	57.49	74.00	-16.51	32.30	3	Horizontal	45	1.60	-	25.19	27.75	4.55	-
PK	2.4018G	93.98	Inf	-Inf	32.18	3	Horizontal	45	1.60	-	61.80	27.60	4.58	-

BT-LE(125kbps)

2402MHz_TX

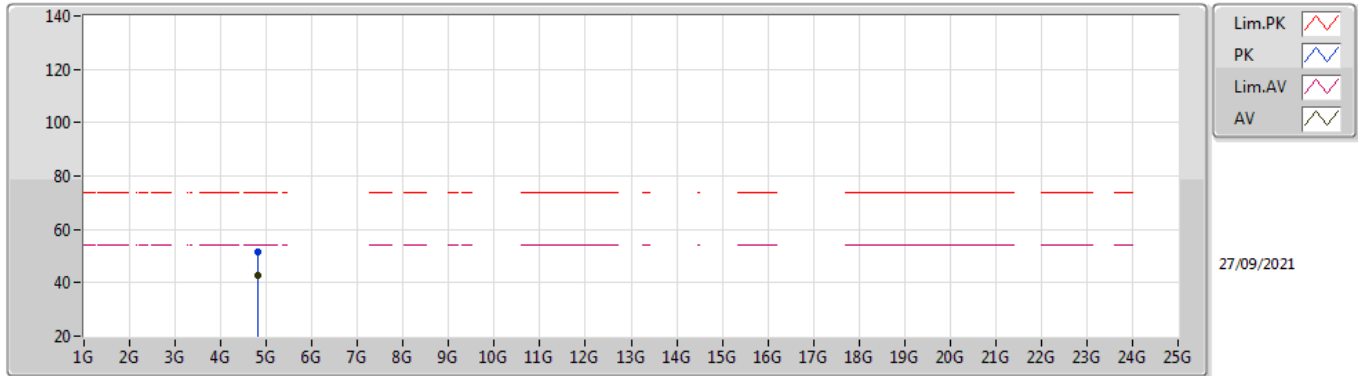


27/09/2021

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.80406G	43.47	54.00	-10.53	2.95	3	Vertical	263	1.30	-	40.52	31.10	6.66	34.81
PK	4.80361G	52.31	74.00	-21.69	2.95	3	Vertical	263	1.30	-	49.36	31.10	6.66	34.81

BT-LE(125kbps)

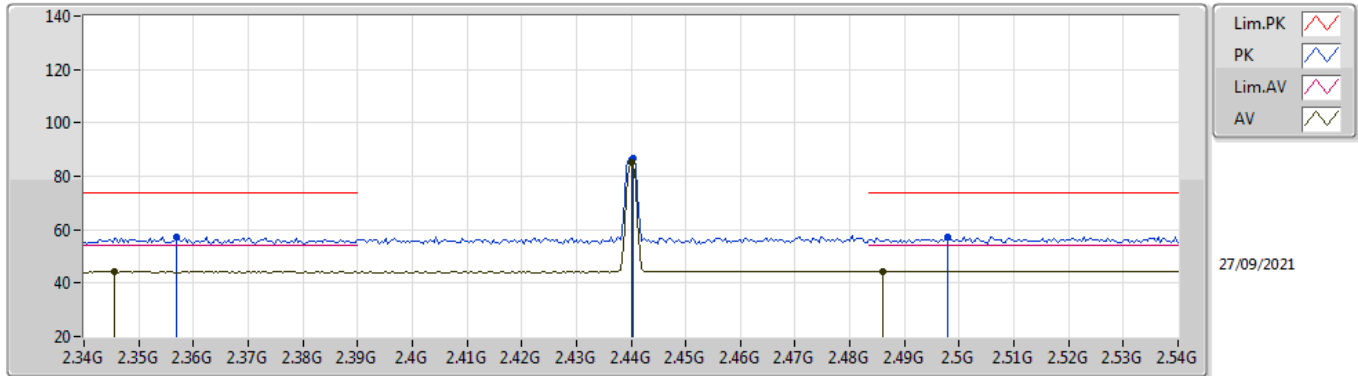
2402MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.80404G	42.69	54.00	-11.31	2.95	3	Horizontal	56	1.00	-	39.74	31.10	6.66	34.81
PK	4.80354G	51.69	74.00	-22.31	2.95	3	Horizontal	56	1.00	-	48.74	31.10	6.66	34.81

BT-LE(125kbps)

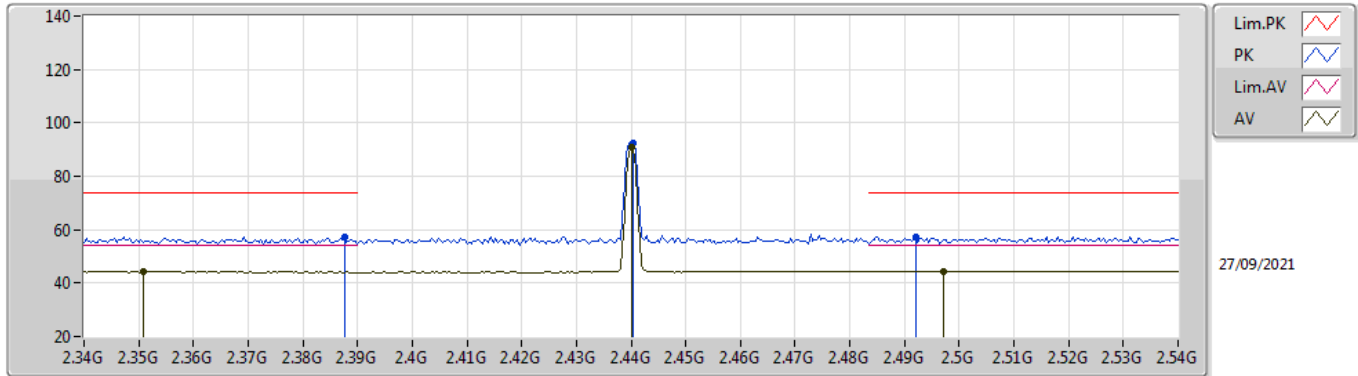
2440MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3456G	44.23	54.00	-9.77	32.33	3	Vertical	202	2.65	-	11.90	27.80	4.53	-
AV	2.44G	85.41	Inf	-Inf	32.12	3	Vertical	202	2.65	-	53.29	27.52	4.60	-
AV	2.486G	44.41	54.00	-9.59	32.11	3	Vertical	202	2.65	-	12.30	27.50	4.61	-
PK	2.3568G	57.46	74.00	-16.54	32.31	3	Vertical	202	2.65	-	25.15	27.77	4.54	-
PK	2.4404G	86.77	Inf	-Inf	32.12	3	Vertical	202	2.65	-	54.65	27.52	4.60	-
PK	2.498G	57.03	74.00	-16.97	32.12	3	Vertical	202	2.65	-	24.91	27.50	4.62	-

BT-LE(125kbps)

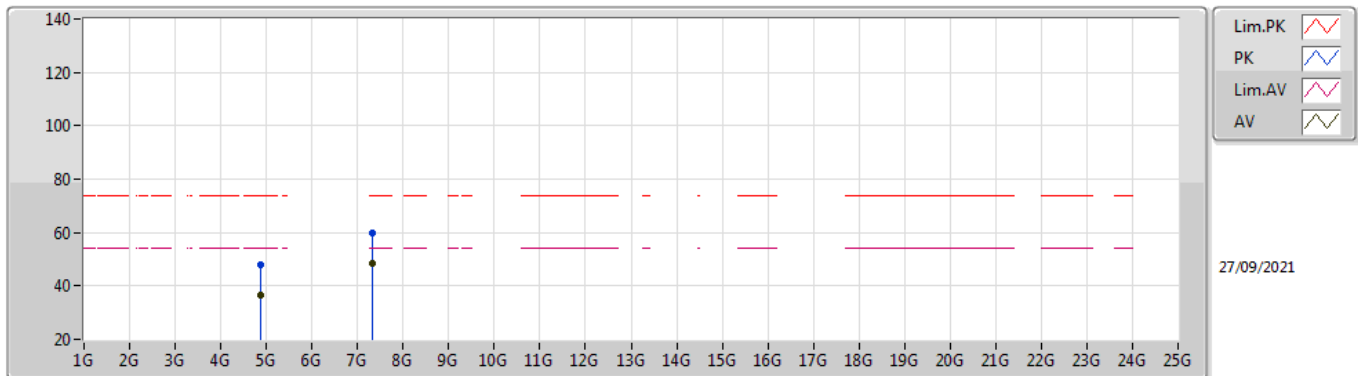
2440MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3508G	44.32	54.00	-9.68	32.33	3	Horizontal	32	1.47	-	11.99	27.80	4.53	-
AV	2.44G	91.07	Inf	-Inf	32.12	3	Horizontal	32	1.47	-	58.95	27.52	4.60	-
AV	2.4972G	44.46	54.00	-9.54	32.12	3	Horizontal	32	1.47	-	12.34	27.50	4.62	-
PK	2.3876G	57.43	74.00	-16.57	32.22	3	Horizontal	32	1.47	-	25.21	27.65	4.57	-
PK	2.4404G	92.37	Inf	-Inf	32.12	3	Horizontal	32	1.47	-	60.25	27.52	4.60	-
PK	2.492G	57.27	74.00	-16.73	32.12	3	Horizontal	32	1.47	-	25.15	27.50	4.62	-

BT-LE(125kbps)

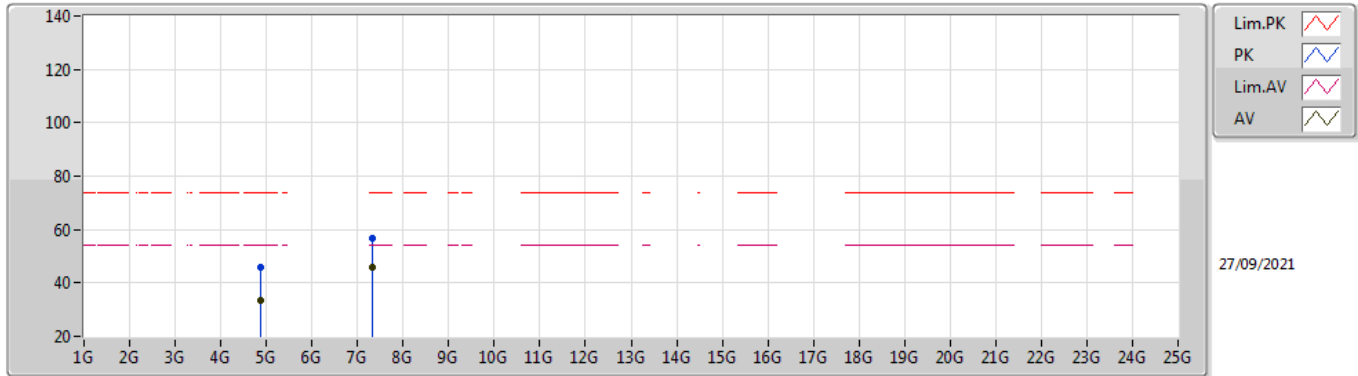
2440MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.88006G	36.71	54.00	-17.29	3.03	3	Vertical	242	1.37	-	33.68	31.10	6.72	34.79
AV	7.31959G	48.40	54.00	-5.60	9.41	3	Vertical	215	1.00	-	38.99	36.36	7.87	34.82
PK	4.88043G	47.85	74.00	-26.15	3.03	3	Vertical	242	1.37	-	44.82	31.10	6.72	34.79
PK	7.32093G	59.75	74.00	-14.25	9.42	3	Vertical	215	1.00	-	50.33	36.36	7.88	34.82

BT-LE(125kbps)

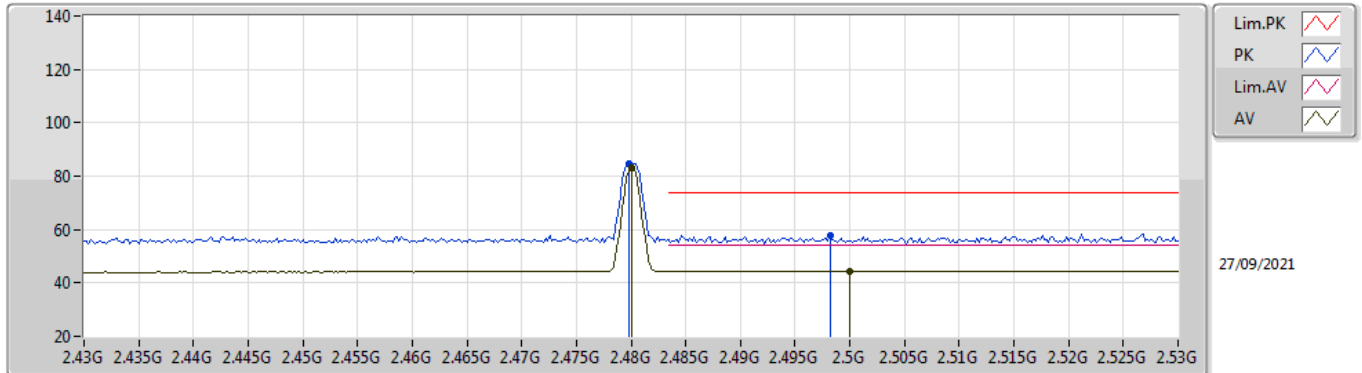
2440MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.8804G	33.26	54.00	-20.74	3.03	3	Horizontal	184	1.50	-	30.23	31.10	6.72	34.79
AV	7.31955G	45.69	54.00	-8.31	9.41	3	Horizontal	294	1.08	-	36.28	36.36	7.87	34.82
PK	4.87964G	46.09	74.00	-27.91	3.03	3	Horizontal	184	1.50	-	43.06	31.10	6.72	34.79
PK	7.31946G	56.90	74.00	-17.10	9.41	3	Horizontal	294	1.08	-	47.49	36.36	7.87	34.82

BT-LE(125kbps)

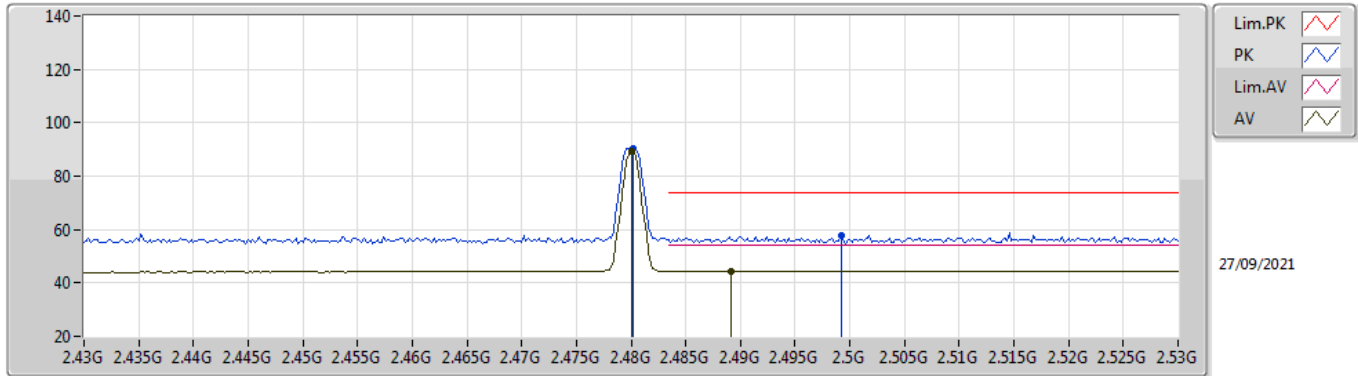
2480MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.48G	83.02	Inf	-Inf	32.11	3	Vertical	286	1.19	-	50.91	27.50	4.61	-
AV	2.5G	44.35	54.00	-9.65	32.12	3	Vertical	286	1.19	-	12.23	27.50	4.62	-
PK	2.4798G	84.47	Inf	-Inf	32.11	3	Vertical	286	1.19	-	52.36	27.50	4.61	-
PK	2.4982G	57.86	74.00	-16.14	32.12	3	Vertical	286	1.19	-	25.74	27.50	4.62	-

BT-LE(125kbps)

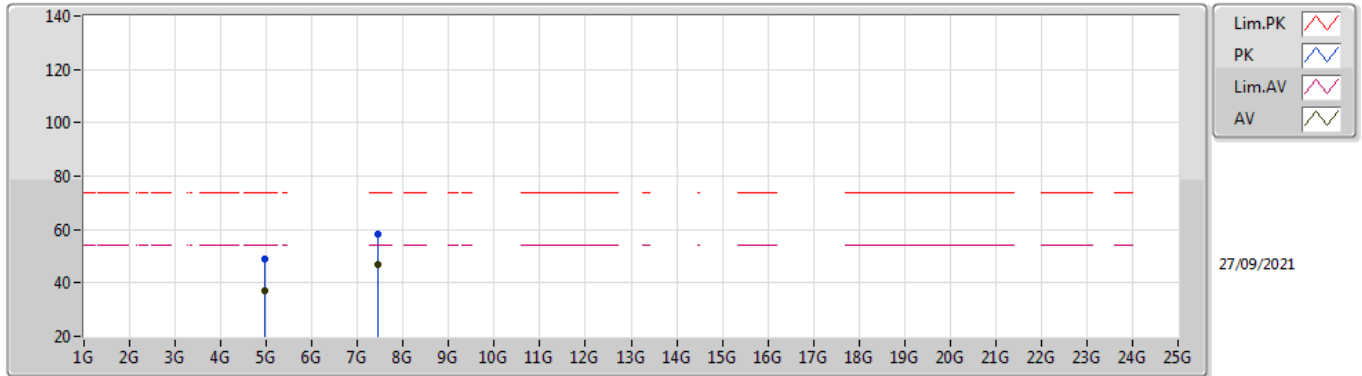
2480MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.48G	89.23	Inf	-Inf	32.11	3	Horizontal	39	1.50	-	57.12	27.50	4.61	-
AV	2.4892G	44.36	54.00	-9.64	32.12	3	Horizontal	39	1.50	-	12.24	27.50	4.62	-
PK	2.4802G	90.59	Inf	-Inf	32.11	3	Horizontal	39	1.50	-	58.48	27.50	4.61	-
PK	2.4992G	57.81	74.00	-16.19	32.12	3	Horizontal	39	1.50	-	25.69	27.50	4.62	-

BT-LE(125kbps)

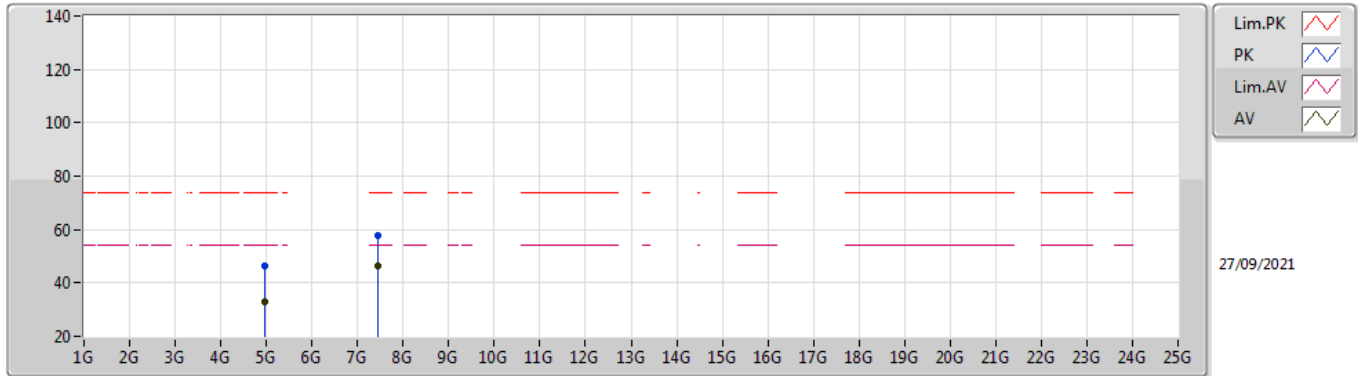
2480MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.96019G	37.16	54.00	-16.84	3.35	3	Vertical	58	1.07	-	33.81	31.34	6.78	34.77
AV	7.43954G	46.83	54.00	-7.17	9.50	3	Vertical	212	1.29	-	37.33	36.28	8.06	34.84
PK	4.95958G	48.86	74.00	-25.14	3.35	3	Vertical	58	1.07	-	45.51	31.34	6.78	34.77
PK	7.44083G	58.15	74.00	-15.85	9.50	3	Vertical	212	1.29	-	48.65	36.28	8.06	34.84

BT-LE(125kbps)

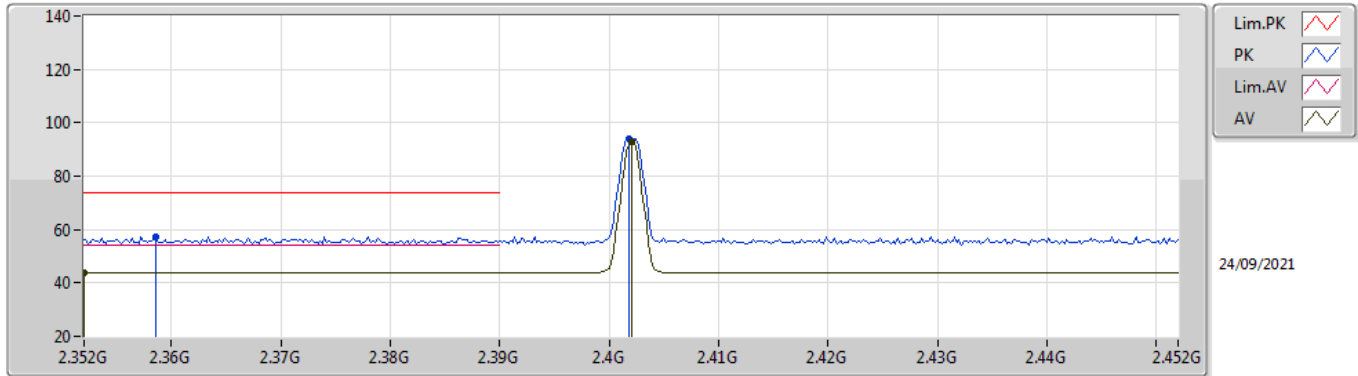
2480MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.96036G	32.83	54.00	-21.17	3.35	3	Horizontal	58	1.03	-	29.48	31.34	6.78	34.77
AV	7.43954G	46.28	54.00	-7.72	9.50	3	Horizontal	52	1.04	-	36.78	36.28	8.06	34.84
PK	4.96059G	46.43	74.00	-27.57	3.35	3	Horizontal	58	1.03	-	43.08	31.34	6.78	34.77
PK	7.44081G	57.76	74.00	-16.24	9.50	3	Horizontal	52	1.04	-	48.26	36.28	8.06	34.84

BT-LE(500kbps)

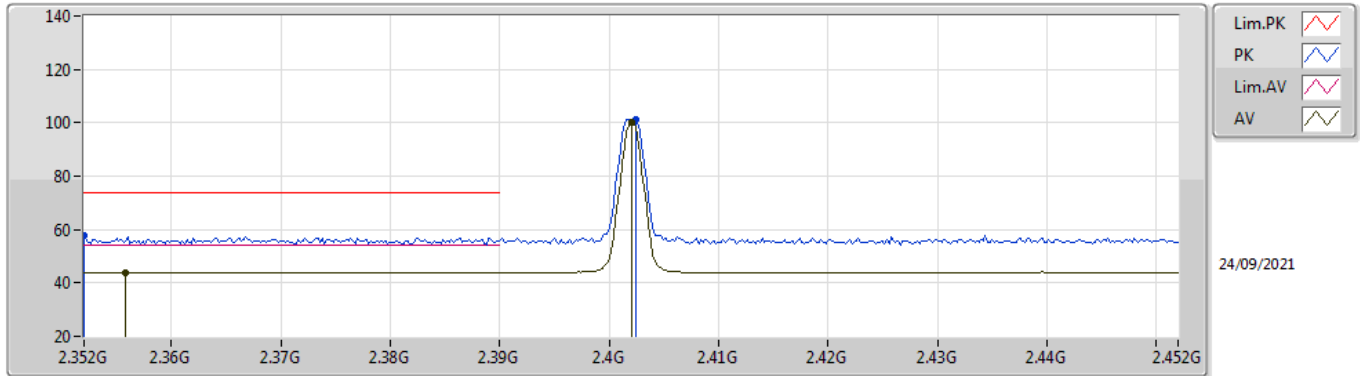
2402MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.352G	43.90	54.00	-10.10	32.32	3	Vertical	300	1.20	-	11.58	27.79	4.53	-
AV	2.402G	92.72	Inf	-Inf	32.18	3	Vertical	300	1.20	-	60.54	27.60	4.58	-
PK	2.3586G	57.43	74.00	-16.57	32.31	3	Vertical	300	1.20	-	25.12	27.77	4.54	-
PK	2.4018G	93.93	Inf	-Inf	32.18	3	Vertical	300	1.20	-	61.75	27.60	4.58	-

BT-LE(500kbps)

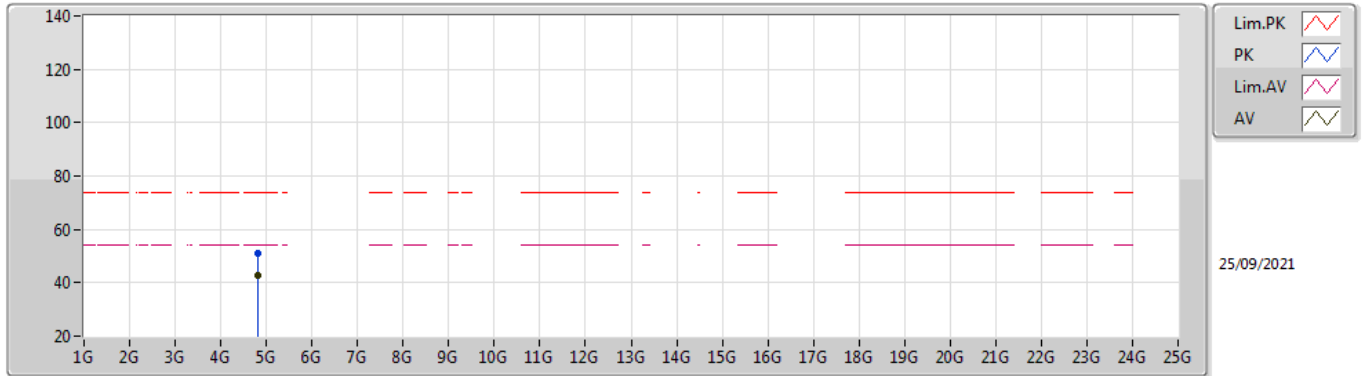
2402MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3558G	44.00	54.00	-10.00	32.32	3	Horizontal	94	1.50	-	11.68	27.78	4.54	-
AV	2.402G	100.07	Inf	-Inf	32.18	3	Horizontal	94	1.50	-	67.89	27.60	4.58	-
PK	2.352G	57.57	74.00	-16.43	32.32	3	Horizontal	94	1.50	-	25.25	27.79	4.53	-
PK	2.4024G	101.19	Inf	-Inf	32.18	3	Horizontal	94	1.50	-	69.01	27.60	4.58	-

BT-LE(500kbps)

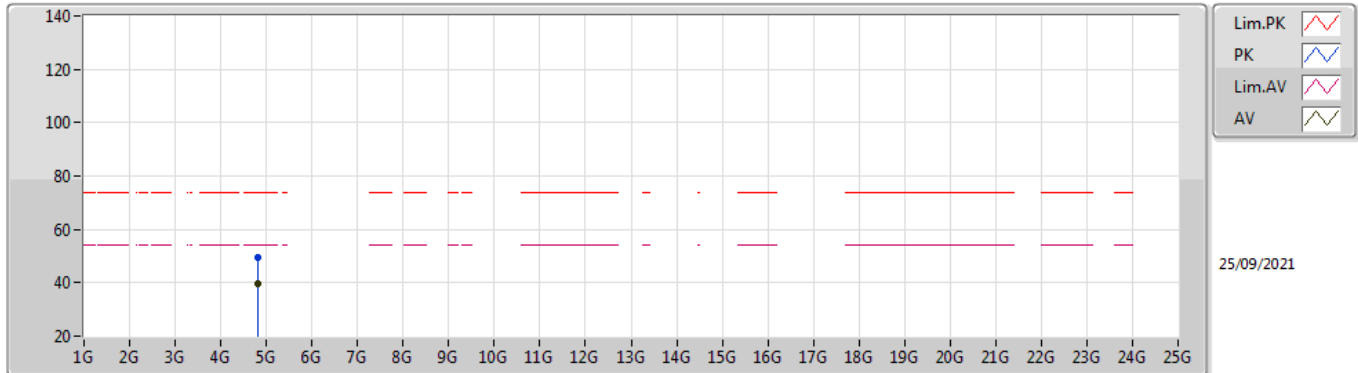
2402MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.80406G	42.92	54.00	-11.08	2.95	3	Vertical	104	2.75	-	39.97	31.10	6.66	34.81
PK	4.80338G	50.83	74.00	-23.17	2.95	3	Vertical	104	2.75	-	47.88	31.10	6.66	34.81

BT-LE(500kbps)

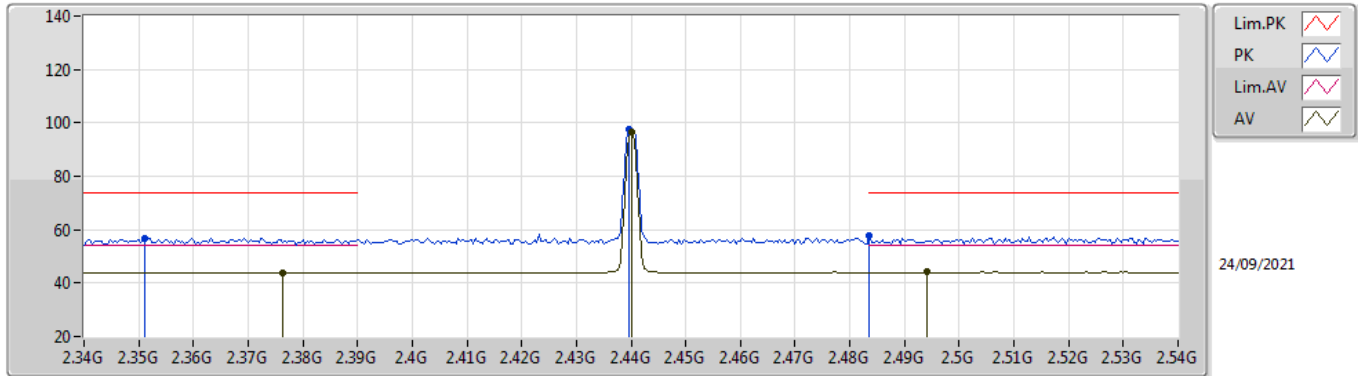
2402MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.80408G	39.57	54.00	-14.43	2.95	3	Horizontal	55	1.00	-	36.62	31.10	6.66	34.81
PK	4.80351G	49.72	74.00	-24.28	2.95	3	Horizontal	55	1.00	-	46.77	31.10	6.66	34.81

BT-LE(500kbps)

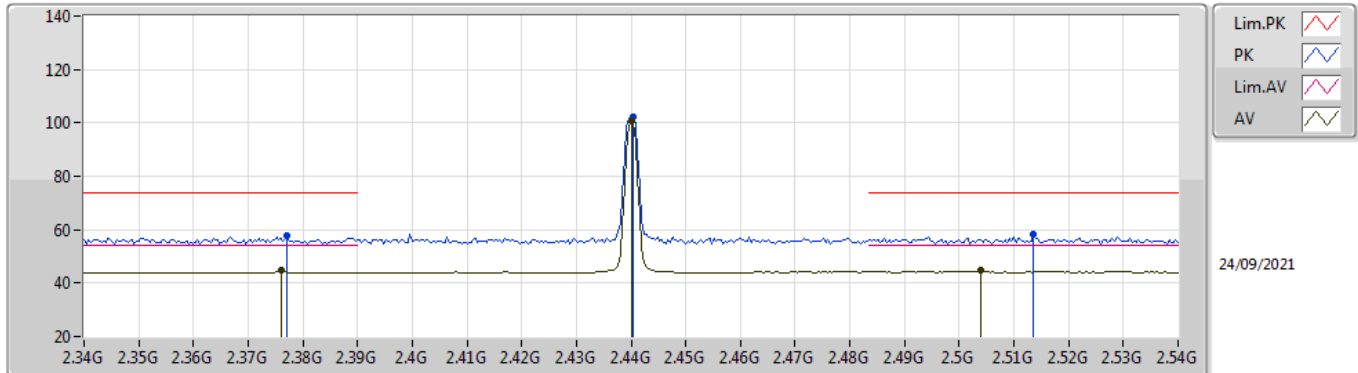
2440MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3764G	44.04	54.00	-9.96	32.25	3	Vertical	101	2.68	-	11.79	27.69	4.56	-
AV	2.44G	96.54	Inf	-Inf	32.12	3	Vertical	101	2.68	-	64.42	27.52	4.60	-
AV	2.494G	44.10	54.00	-9.90	32.12	3	Vertical	101	2.68	-	11.98	27.50	4.62	-
PK	2.3512G	56.88	74.00	-17.12	32.33	3	Vertical	101	2.68	-	24.55	27.80	4.53	-
PK	2.4396G	97.68	Inf	-Inf	32.12	3	Vertical	101	2.68	-	65.56	27.52	4.60	-
PK	2.4835G	57.57	74.00	-16.43	32.11	3	Vertical	101	2.68	-	25.46	27.50	4.61	-

BT-LE(500kbps)

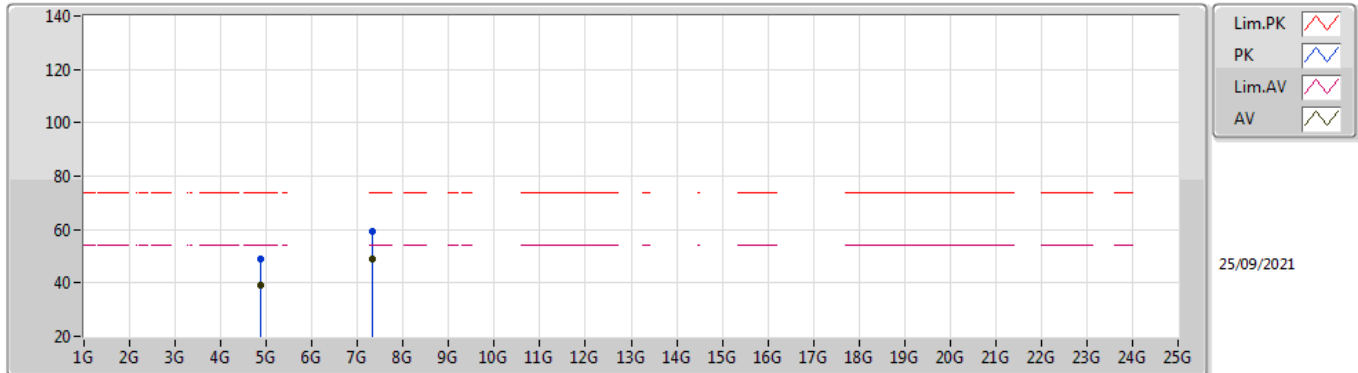
2440MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.376G	44.80	54.00	-9.20	32.26	3	Horizontal	40	2.72	-	12.54	27.70	4.56	-
AV	2.44G	100.89	Inf	-Inf	32.12	3	Horizontal	40	2.72	-	68.77	27.52	4.60	-
AV	2.504G	44.76	54.00	-9.24	32.11	3	Horizontal	40	2.72	-	12.65	27.49	4.62	-
PK	2.3772G	57.55	74.00	-16.45	32.25	3	Horizontal	40	2.72	-	25.30	27.69	4.56	-
PK	2.4404G	102.02	Inf	-Inf	32.12	3	Horizontal	40	2.72	-	69.90	27.52	4.60	-
PK	2.5136G	58.41	74.00	-15.59	32.10	3	Horizontal	40	2.72	-	26.31	27.47	4.63	-

BT-LE(500kbps)

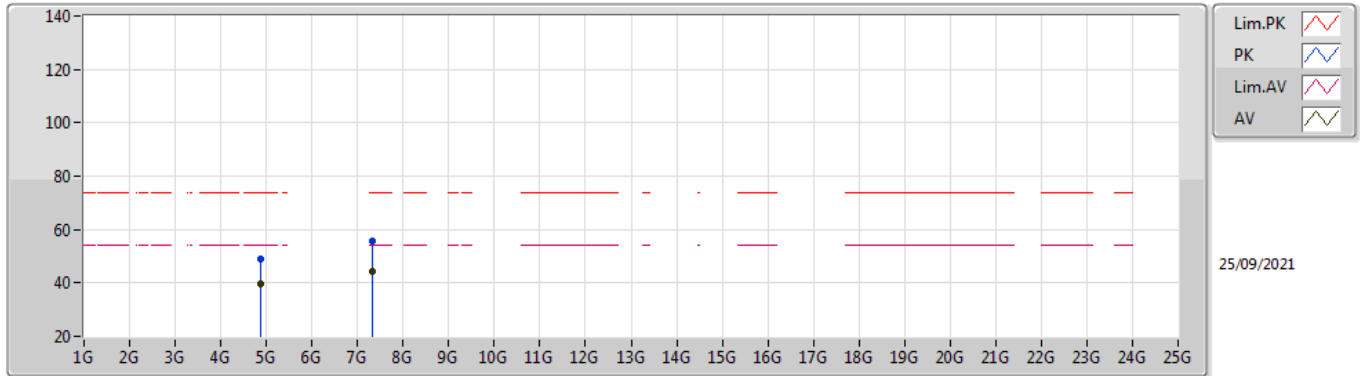
2440MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.88003G	38.96	54.00	-15.04	3.03	3	Vertical	237	1.16	-	35.93	31.10	6.72	34.79
AV	7.31954G	48.86	54.00	-5.14	9.41	3	Vertical	212	1.14	-	39.45	36.36	7.87	34.82
PK	4.87948G	48.97	74.00	-25.03	3.03	3	Vertical	237	1.16	-	45.94	31.10	6.72	34.79
PK	7.32086G	59.36	74.00	-14.64	9.42	3	Vertical	212	1.14	-	49.94	36.36	7.88	34.82

BT-LE(500kbps)

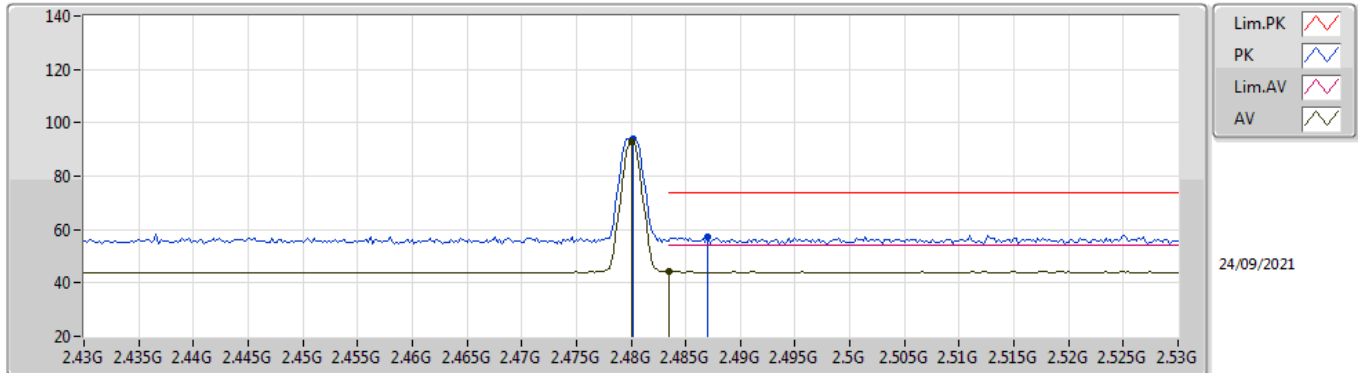
2440MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.88002G	39.79	54.00	-14.21	3.03	3	Horizontal	59	1.00	-	36.76	31.10	6.72	34.79
AV	7.31949G	44.16	54.00	-9.84	9.41	3	Horizontal	36	2.75	-	34.75	36.36	7.87	34.82
PK	4.87973G	49.12	74.00	-24.88	3.03	3	Horizontal	59	1.00	-	46.09	31.10	6.72	34.79
PK	7.32078G	55.68	74.00	-18.32	9.41	3	Horizontal	36	2.75	-	46.27	36.36	7.87	34.82

BT-LE(500kbps)

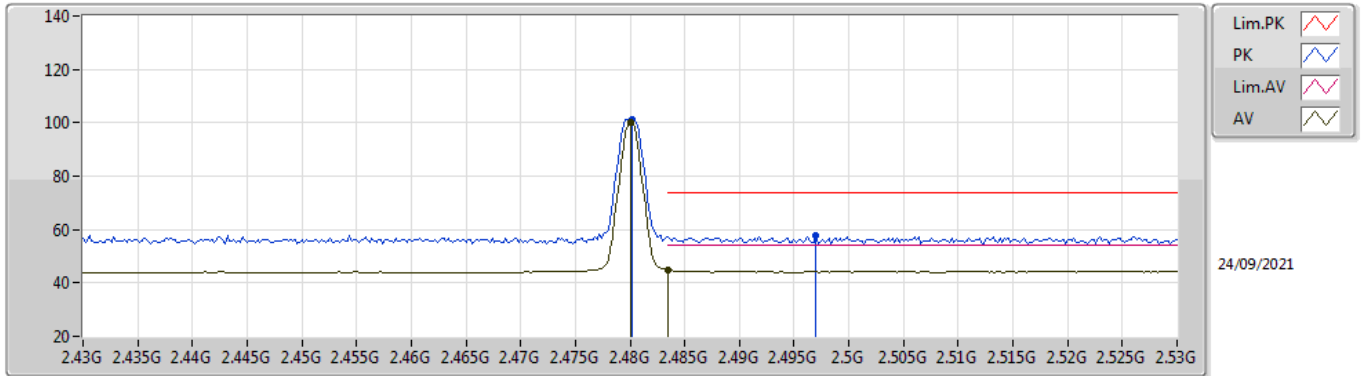
2480MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.48G	92.74	Inf	-Inf	32.11	3	Vertical	286	1.00	-	60.63	27.50	4.61	-
AV	2.4835G	44.15	54.00	-9.85	32.11	3	Vertical	286	1.00	-	12.04	27.50	4.61	-
PK	2.4802G	93.93	Inf	-Inf	32.11	3	Vertical	286	1.00	-	61.82	27.50	4.61	-
PK	2.487G	57.36	74.00	-16.64	32.11	3	Vertical	286	1.00	-	25.25	27.50	4.61	-

BT-LE(500kbps)

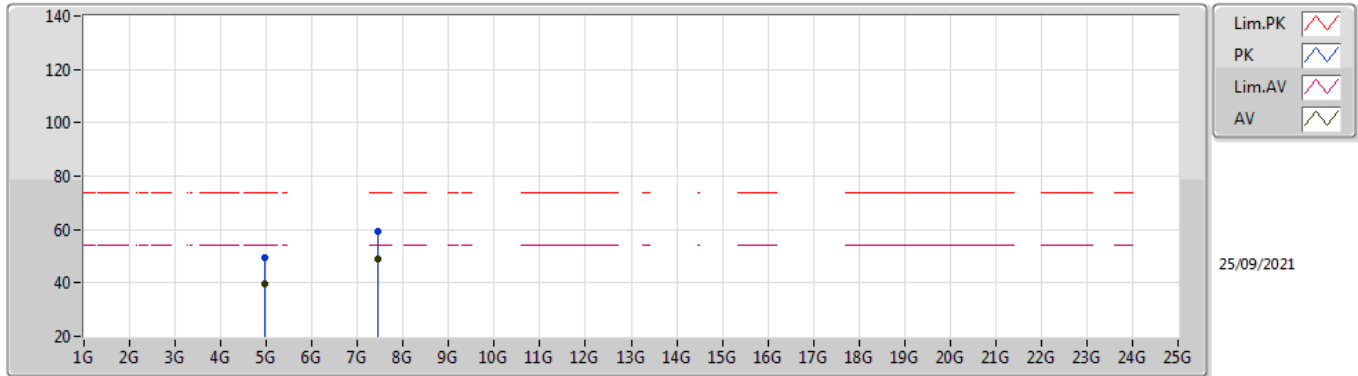
2480MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.48G	99.99	Inf	-Inf	32.11	3	Horizontal	48	1.10	-	67.88	27.50	4.61	-
AV	2.4835G	44.89	54.00	-9.11	32.11	3	Horizontal	48	1.10	-	12.78	27.50	4.61	-
PK	2.4802G	101.14	Inf	-Inf	32.11	3	Horizontal	48	1.10	-	69.03	27.50	4.61	-
PK	2.497G	57.65	74.00	-16.35	32.12	3	Horizontal	48	1.10	-	25.53	27.50	4.62	-

BT-LE(500kbps)

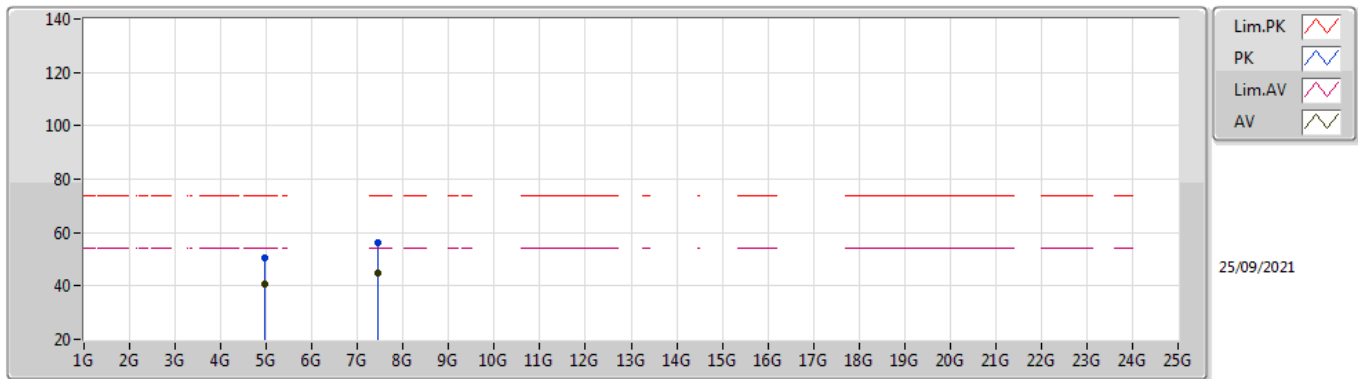
2480MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.9601G	39.59	54.00	-14.41	3.35	3	Vertical	236	1.43	-	36.24	31.34	6.78	34.77
AV	7.43957G	48.81	54.00	-5.19	9.50	3	Vertical	213	1.07	-	39.31	36.28	8.06	34.84
PK	4.95954G	49.68	74.00	-24.32	3.35	3	Vertical	236	1.43	-	46.33	31.34	6.78	34.77
PK	7.44083G	59.53	74.00	-14.47	9.50	3	Vertical	213	1.07	-	50.03	36.28	8.06	34.84

BT-LE(500kbps)

2480MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.96004G	40.71	54.00	-13.29	3.35	3	Horizontal	57	1.03	-	37.36	31.34	6.78	34.77
AV	7.43955G	44.77	54.00	-9.23	9.50	3	Horizontal	25	1.07	-	35.27	36.28	8.06	34.84
PK	4.96018G	50.28	74.00	-23.72	3.35	3	Horizontal	57	1.03	-	46.93	31.34	6.78	34.77
PK	7.43928G	56.11	74.00	-17.89	9.49	3	Horizontal	25	1.07	-	46.62	36.28	8.05	34.84