

FCC Radio Test Report

FCC ID : YL6-1438852R
Equipment : Wireless Module
Brand Name : ALARM.COM
Model Name : ADC-WM8852-A
Applicant : Alarm.com Incorporated
8281 Greensboro Drive, Suite 100, Tysons,
VA 22102 United States
Manufacturer : Alarm.com Incorporated
8281 Greensboro Drive, Suite 100, Tysons,
VA 22102 United States
Standard : 47 CFR FCC Part 15.247

The product was received on Dec. 07, 2021, and testing was started from Dec. 20, 2021 and completed on Jan. 24, 2022. We, SPORTON INTERNATIONAL INC. Hsinhua Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

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



Approved by: Jackson Tsai

SPORTON INTERNATIONAL INC. Hsinhua Laboratory

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



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PHOTOGRAPHS OF EUT V01



History of this test report

Report No.	Version	Description	Issued Date
FR1D0419AL	01	Initial issue of report	Feb. 24, 2022



Summary of Test Result

Report Clause	Ref.Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
3.1	15.207	AC Power-line Conducted Emissions	PASS	-
3.2	15.247(a)	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: Jenny Yang

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

Note:

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

1.1.2 Antenna Information

Source	Ant.	Brand	Model Name	Antenna Type	Connector	Support
1	1	PSA	WCBN3511L_PCA	Dipole	I-Pex	2.4G+5G
	2	PSA	WCBN3511L_PCA	Dipole	I-Pex	2.4G+5G+BT
2	3	INPAQ	RFFPA301205IMLB401	Dipole	I-Pex	2.4G+5G
	4	INPAQ	RFFPA301213IMLB401	Dipole	I-Pex	2.4G+5G
3	5	LYNwave	ALX18F-222A A4-00	Dipole	I-Pex	2.4G+5G
	6	LYNwave	ALX18F-222A A5-00	Dipole	I-Pex	2.4G+5G
4	7	LITEON	3010001121L7	Dipole	I-Pex	2.4G+5G
	8	LITEON	3010001122L7	Dipole	I-Pex	2.4G+5G



Source	Ant.	Port	Gain (dBi)		
			2.4G	5G	BT
1	1	1	5.3	5.71	-
	2	2	5.3	5.71	5.3
2	3	1	3.94	5.3	-
	4	2	3.78	4.28	-
3	5	1	4.9	5.4	-
	6	2	5.2	4.7	-
4	7	1	5.1	5.6	-
	8	2	3.5	5.5	-

Note 1: The EUT has eight antennas.

Note 2: The EUT can be matched with the above antennas and Source 1 antennas were used to perform the worst configuration and result of that was recorded as the final test result.

For 2.4GHz function:

For IEEE 802.11 b/g/n/VHT/ax mode (2TX/2RX)

Ant. 1 (port 1) and Ant. 2 (port 2) could transmit/receive simultaneously.

Ant. 3 (port 1) and Ant. 4 (port 2) could transmit/receive simultaneously.

Ant. 5 (port 1) and Ant. 6 (port 2) could transmit/receive simultaneously.

Ant. 7 (port 1) and Ant. 8 (port 2) could transmit/receive simultaneously.

For BT function:

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

Only Ant. 2 (port 2) can be used as transmitting/receiving.

For 5GHz function:

For IEEE 802.11 a/n/ac/ax mode (2TX/2RX)

Ant. 1 (port 1) and Ant. 2 (port 2) could transmit/receive simultaneously.

Ant. 3 (port 1) and Ant. 4 (port 2) could transmit/receive simultaneously.

Ant. 5 (port 1) and Ant. 6 (port 2) could transmit/receive simultaneously.

Ant. 7 (port 1) and Ant. 8 (port 2) could transmit/receive simultaneously.



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) ≥ 1/T
BT-LE(1Mbps)	0.632	1.99	394.688u	3k
BT-LE(125kbps)	0.822	0.85	3.107m	1k
BT-LE(500kbps)	0.599	2.23	1.073m	1k
BT-LE(2Mbps)	0.335	4.75	209.688u	10k

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	20.1~21.1°C / 56~58%	08/Jan/2022
RF Conducted	TH06-HY	Alan Chien	20.1~26.9°C / 50~60%	28/Dec/2021~10/Jan/2022
Radiated (below 1G)	03CH02-HY	Jack Tang	21.4~22.6°C / 53~ 54%	24/Jan/2022
<input 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 (above 1G)	03CH09-HY	Daniel Hsu	20.0~26.9°C / 46~60%	20/Dec/2021~27/Dec/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	Bluetooth RF Test Tool
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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	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	Fixture mode
Operating Mode > 1GHz	CTX
Orthogonal Planes of EUT	Z Plane
	



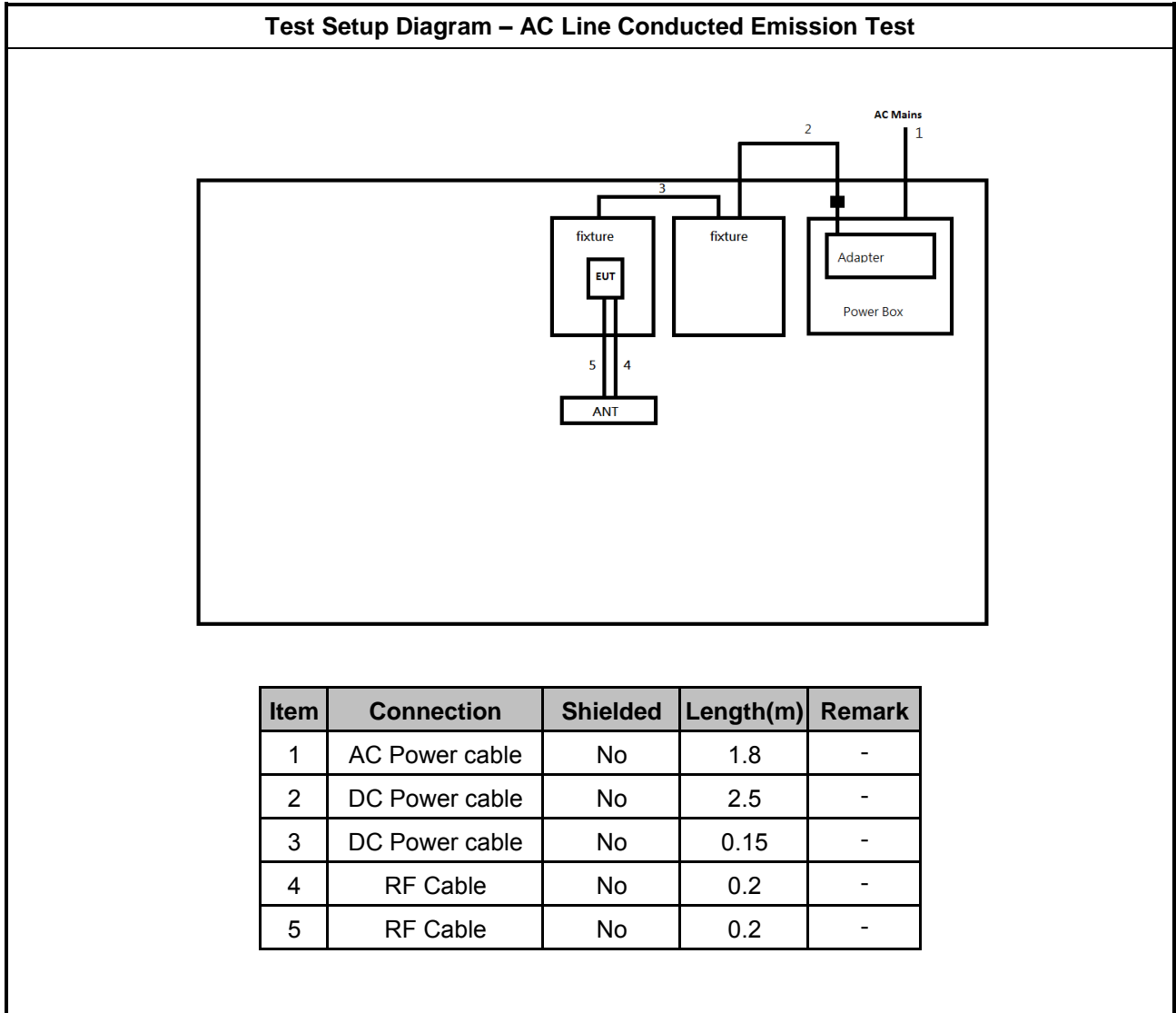
2.3 Support Equipment

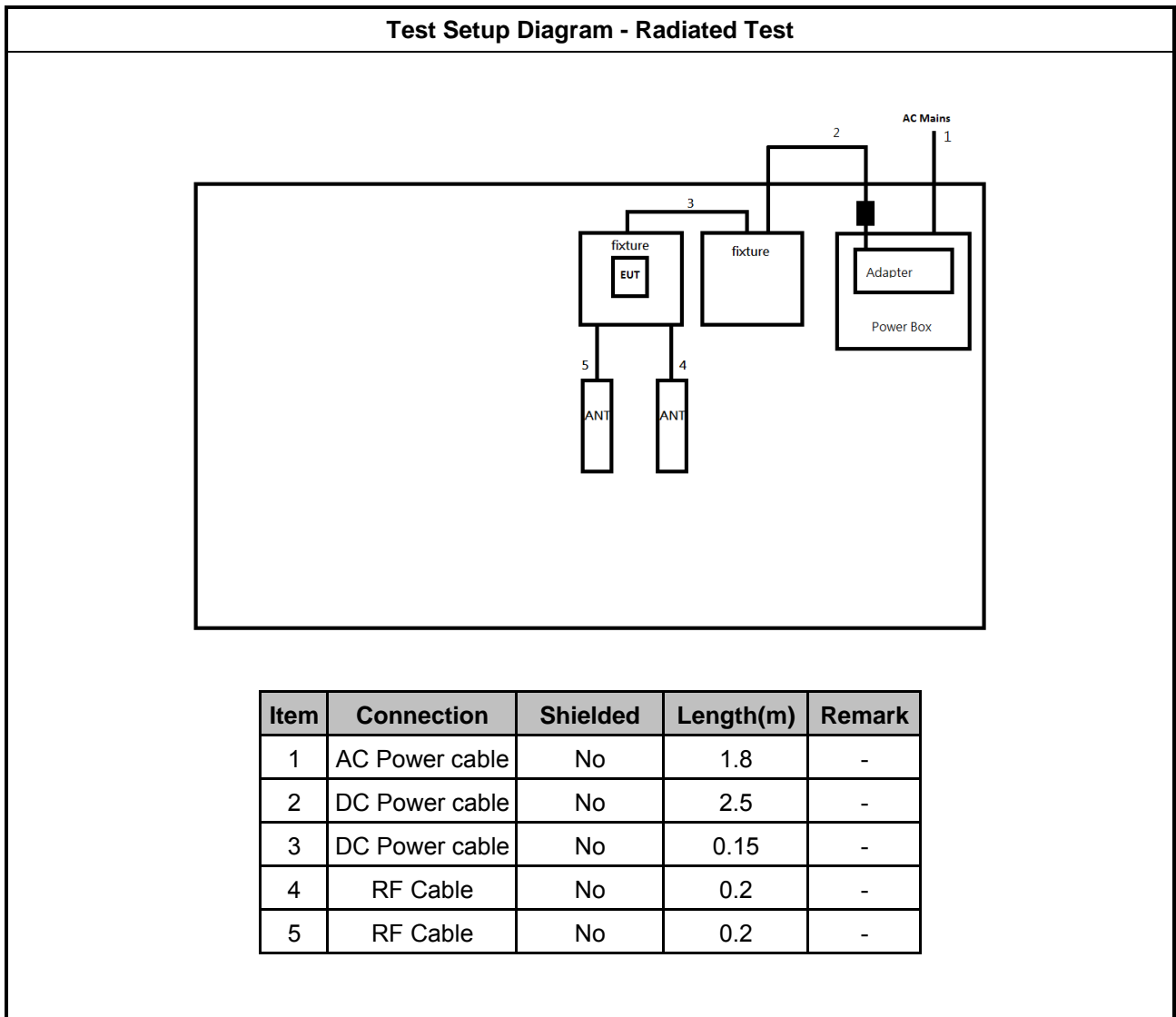
Support Equipment – AC Conduction					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Fixture	-	-	-	Provided by Customer
2	Adapter	APD	WB-12G12FU	-	-

Support Equipment – Conducted					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Notebook	Lenovo	TP0001A	-	-
2	Adapter for NB	Lenovo	42T4432	-	-
3	Fixture	-	-	-	-

Support Equipment – Radiated					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Fixture	-	-	-	Provided by Customer
2	Adapter	APD	WB-12G12FU	-	-

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

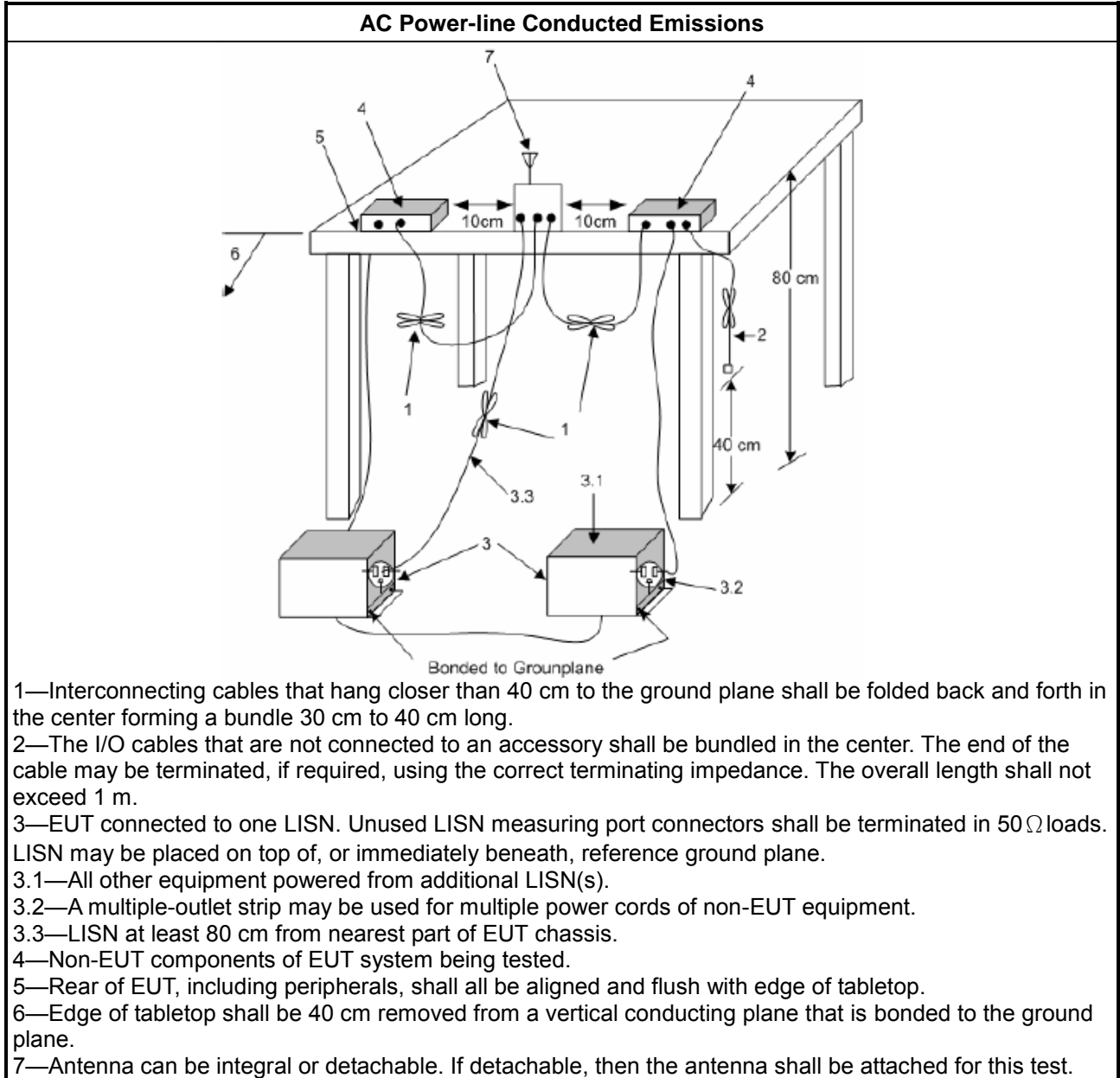
Test Method
▪ Refer as ANSI C63.10-2013, clause 6.2 foray power-line conducted emissions.

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.

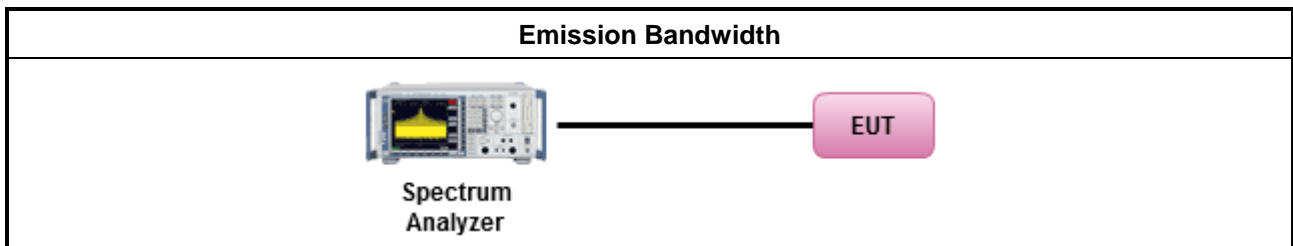
3.2.2 Measuring Instruments

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_{Out} = maximum peak conducted output power or maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.	

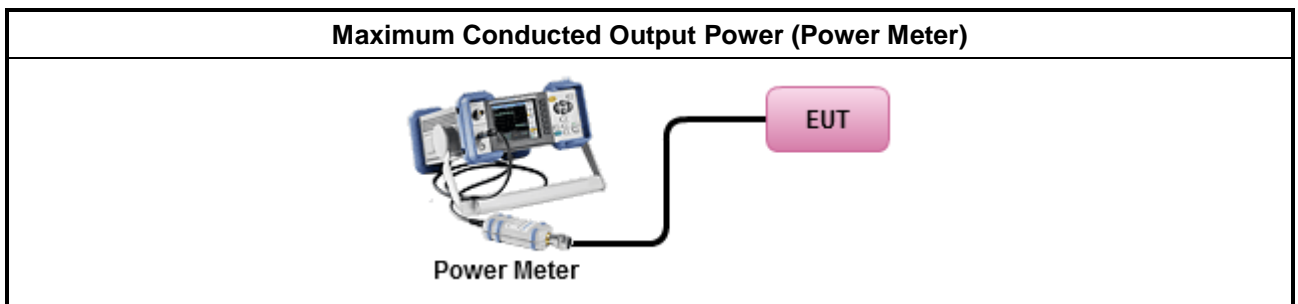
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> ▪ Maximum Peak Conducted Output Power 	
<input type="checkbox"/>	Refer as 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

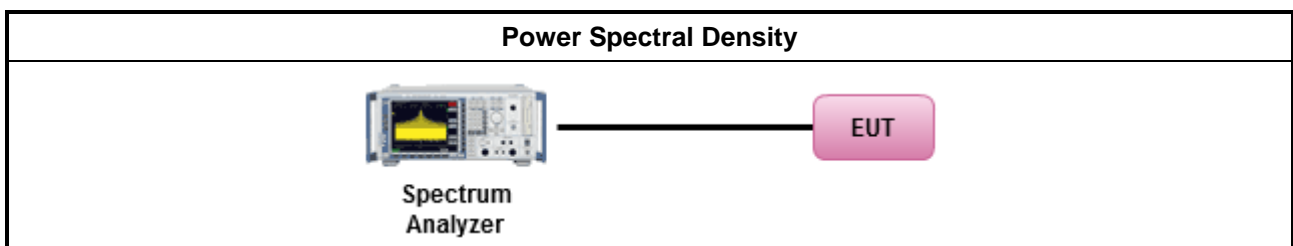
3.4.2 Measuring Instruments

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.

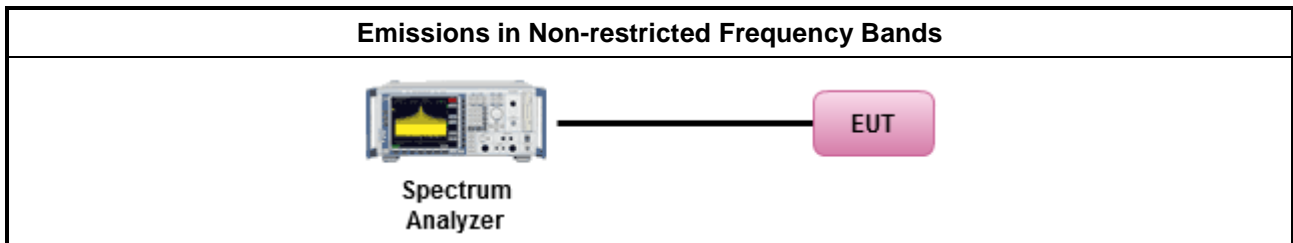
3.5.2 Measuring Instruments

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

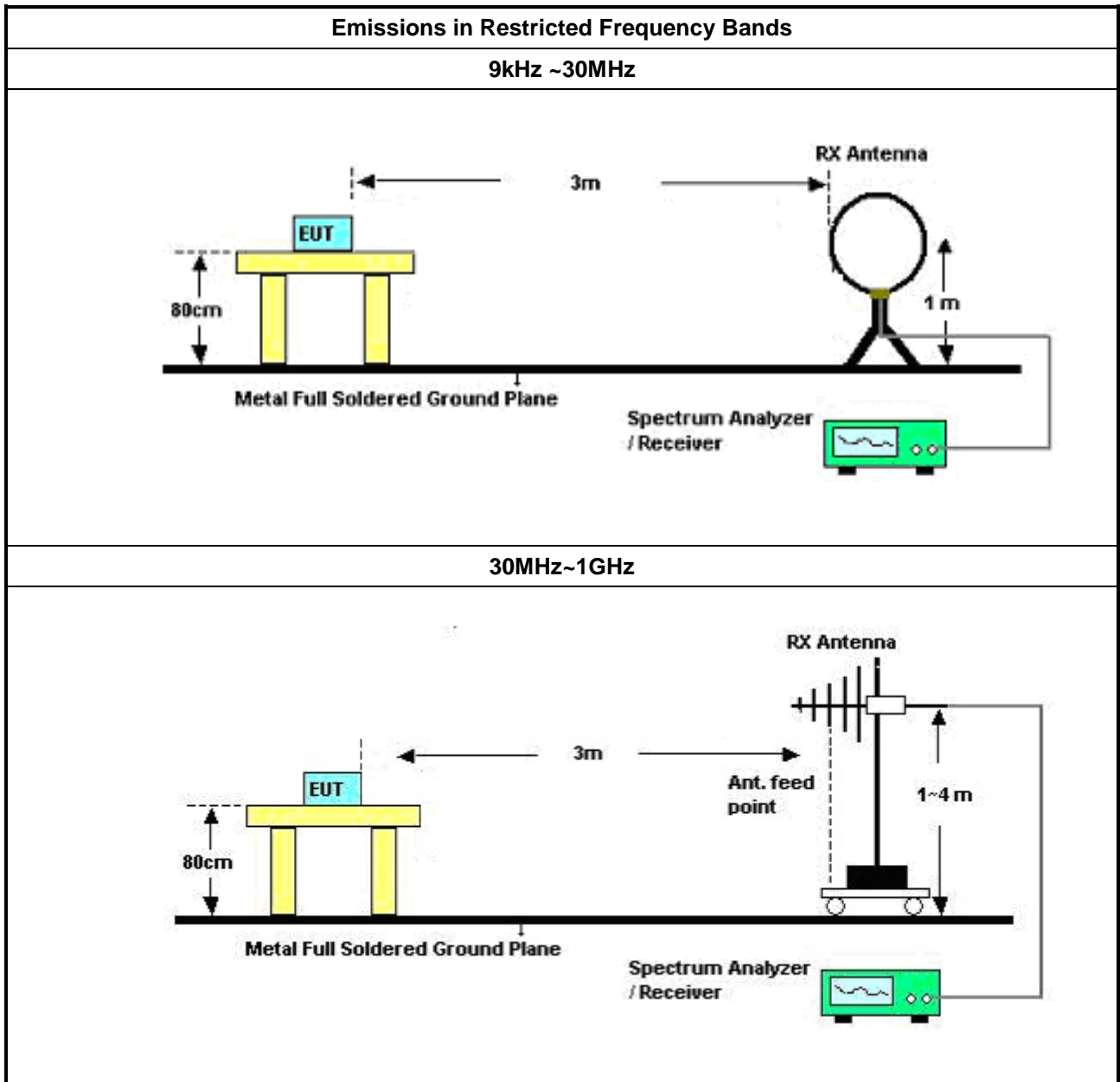
Test Method	
	<ul style="list-style-type: none"> ▪ The average emission levels shall be measured in [duty cycle \geq 98 or duty factor].
	<ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.
	<ul style="list-style-type: none"> ▪ For the transmitter unwanted emissions shall be measured using following options below: <ul style="list-style-type: none"> ▪ Refer as 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 $f \geq 1$ 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.

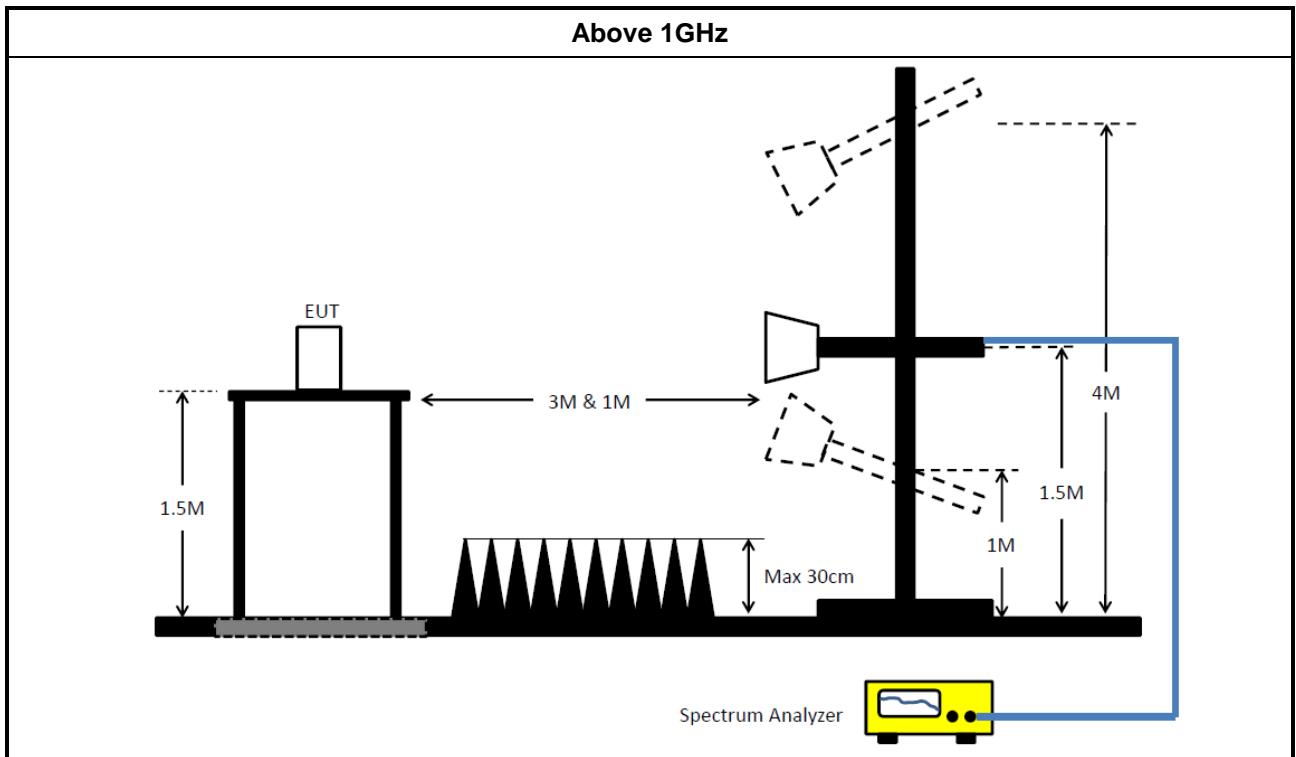
3.6.4 Measurement Results Calculation

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	ESR3	102051	9kHz ~ 3.6GHz	21/May/2021	20/May/2022
Two-Line V-Network	R&S	ENV216	100003	9kHz ~ 30MHz	23/Dec/2021	22/Dec/2022
RF Cable 5m	TITAN	TITAN	CO04-cable-01	9kHz~200MHz	03/Mar/2021	02/Mar/2022
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9kHz ~ 30MHz	26/Oct/2021	25/Oct/2022
SENSE-EMI	Sporton	V5.10.7.14	N/A	N/A	N/A	N/A

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	20/Oct/2021	19/Oct/2022
SMB100A Signal Generator	R&S	SMB100A03	181147	100kHz~40GHz	21/Oct/2021	20/Oct/2022
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
SENSE-15247_FS	Sporton	V5.10.7.13	N/A	N/A	N/A	N/A



Instrument for Radiated Test (03CH02-HY)

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	30MHz~1GHz 3m	02/Aug/2021	01/Aug/2022
Signal Analyzer	R&S	FSP40	100593	9kHz~40GHz	12/Mar/2021	11/Mar/2022
Amplifier	Agilent	8447D	2944A11149	100kHz~1.3GHz	29/Jun/2021	28/Jun/2022
Bilog Antenna & 5dB Attenuator	SCHAFFNER / MTJ	CBL 6112B / MTJ6102-05	2723 / 2	30MHz~1GHz	04/Sep/2021	03/Sep/2022
RF Cable	MVE	400LL	MVE-1-0802	9kHz~30MHz	05/May/2021	04/May/2022
RF Cable	MVE	400LL	MVE-1-0802	30MHz~1GHz	05/May/2021	04/May/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
SENSE-15247_FS	Sporton	V5.10.7.13	N/A	N/A	N/A	N/A

Instrument for Radiated Test (03CH09-HY)

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH09-HY	1GHz~18GHz 3m	18/Mar/2021	17/Mar/2022
EXA Signal Analyer	KEYSIGHT	N9010A	MY54200882	10Hz~44GHz	01/Oct/2021	30/Sep/2022
Microwave Preampplifier	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	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
SENSE-15247_FS	Sporton	V5.10.7.13	N/A	N/A	N/A	N/A



Summary

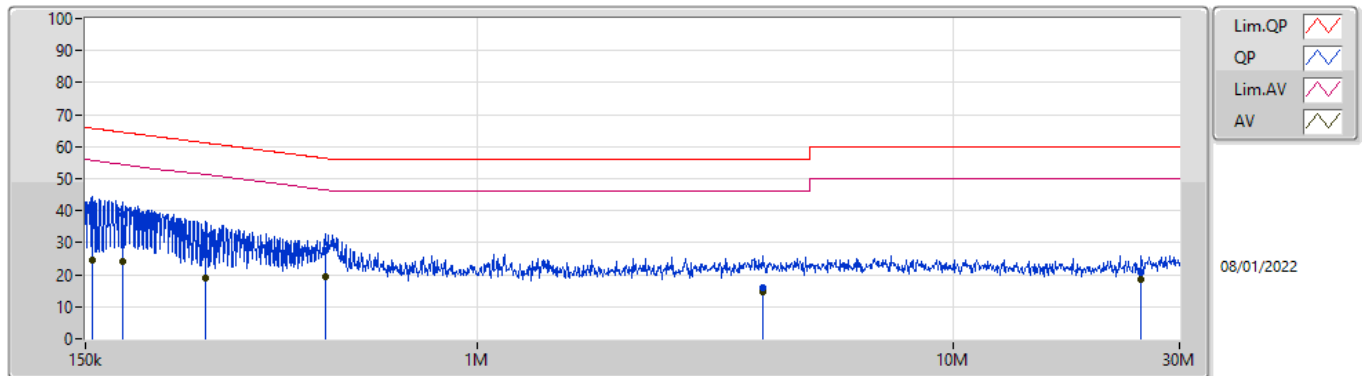
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	492.876k	32.72	46.11	-13.39	Neutral



Result

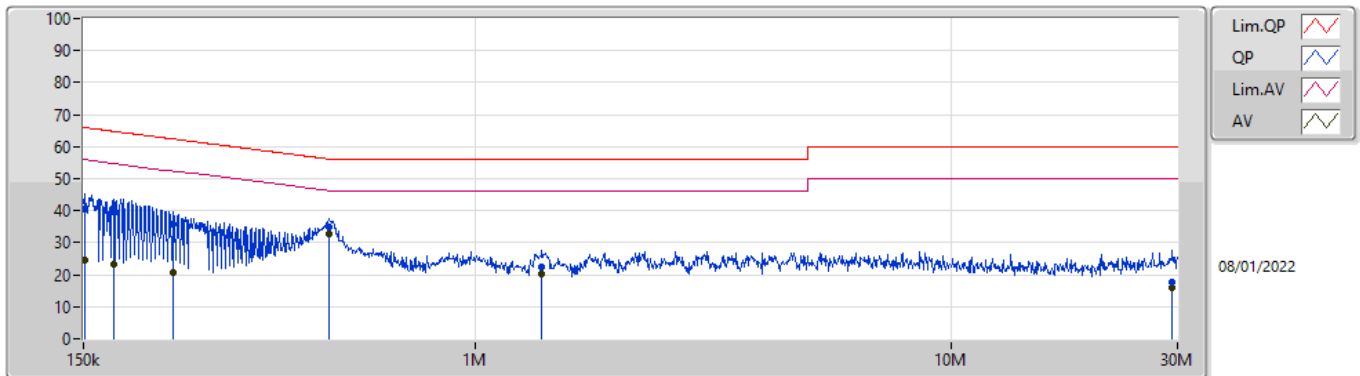
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition	Comments
Mode 1	Pass	QP	155.487k	40.52	65.69	-25.17	Line	-
Mode 1	Pass	AV	155.487k	24.65	55.69	-31.04	Line	-
Mode 1	Pass	QP	180.236k	38.66	64.47	-25.81	Line	-
Mode 1	Pass	AV	180.236k	23.94	54.47	-30.53	Line	-
Mode 1	Pass	QP	267.596k	32.12	61.20	-29.08	Line	-
Mode 1	Pass	AV	267.596k	18.81	51.20	-32.39	Line	-
Mode 1	Pass	QP	481.211k	27.76	56.33	-28.57	Line	-
Mode 1	Pass	AV	481.211k	19.53	46.33	-26.80	Line	-
Mode 1	Pass	QP	3.976M	15.94	56.00	-40.06	Line	-
Mode 1	Pass	AV	3.976M	14.49	46.00	-31.51	Line	-
Mode 1	Pass	QP	24.945M	20.67	60.00	-39.33	Line	-
Mode 1	Pass	AV	24.945M	18.43	50.00	-31.57	Line	-
Mode 1	Pass	QP	150.6k	40.57	65.96	-25.39	Neutral	-
Mode 1	Pass	AV	150.6k	24.61	55.96	-31.35	Neutral	-
Mode 1	Pass	QP	173.876k	39.86	64.78	-24.92	Neutral	-
Mode 1	Pass	AV	173.876k	23.27	54.78	-31.51	Neutral	-
Mode 1	Pass	QP	230.851k	35.66	62.42	-26.76	Neutral	-
Mode 1	Pass	AV	230.851k	20.88	52.42	-31.54	Neutral	-
Mode 1	Pass	QP	492.876k	34.87	56.11	-21.24	Neutral	-
Mode 1	Pass	AV	492.876k	32.72	46.11	-13.39	Neutral	-
Mode 1	Pass	QP	1.38M	22.47	56.00	-33.53	Neutral	-
Mode 1	Pass	AV	1.38M	20.42	46.00	-25.58	Neutral	-
Mode 1	Pass	QP	29.263M	17.56	60.00	-42.44	Neutral	-
Mode 1	Pass	AV	29.263M	16.08	50.00	-33.92	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	155.487k	40.52	65.69	-25.17	19.56	Line	-	20.96	9.61	0.04	9.91
AV	155.487k	24.65	55.69	-31.04	19.56	Line	-	5.09	9.61	0.04	9.91
QP	180.236k	38.66	64.47	-25.81	19.56	Line	-	19.10	9.61	0.04	9.91
AV	180.236k	23.94	54.47	-30.53	19.56	Line	-	4.38	9.61	0.04	9.91
QP	267.596k	32.12	61.20	-29.08	19.57	Line	-	12.55	9.61	0.05	9.91
AV	267.596k	18.81	51.20	-32.39	19.57	Line	-	-0.76	9.61	0.05	9.91
QP	481.211k	27.76	56.33	-28.57	19.57	Line	-	8.19	9.60	0.06	9.91
AV	481.211k	19.53	46.33	-26.80	19.57	Line	-	-0.04	9.60	0.06	9.91
QP	3.976M	15.94	56.00	-40.06	19.70	Line	-	-3.76	9.64	0.14	9.92
AV	3.976M	14.49	46.00	-31.51	19.70	Line	-	-5.21	9.64	0.14	9.92
QP	24.945M	20.67	60.00	-39.33	19.99	Line	-	0.68	9.74	0.32	9.93
AV	24.945M	18.43	50.00	-31.57	19.99	Line	-	-1.56	9.74	0.32	9.93

Conducted Emissions at Powerline_Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	150.6k	40.57	65.96	-25.39	19.55	Neutral	-	21.02	9.60	0.04	9.91
AV	150.6k	24.61	55.96	-31.35	19.55	Neutral	-	5.06	9.60	0.04	9.91
QP	173.876k	39.86	64.78	-24.92	19.55	Neutral	-	20.31	9.60	0.04	9.91
AV	173.876k	23.27	54.78	-31.51	19.55	Neutral	-	3.72	9.60	0.04	9.91
QP	230.851k	35.66	62.42	-26.76	19.55	Neutral	-	16.11	9.60	0.04	9.91
AV	230.851k	20.88	52.42	-31.54	19.55	Neutral	-	1.33	9.60	0.04	9.91
QP	492.876k	34.87	56.11	-21.24	19.57	Neutral	-	15.30	9.60	0.06	9.91
AV	492.876k	32.72	46.11	-13.39	19.57	Neutral	-	13.15	9.60	0.06	9.91
QP	1.38M	22.47	56.00	-33.53	19.63	Neutral	-	2.84	9.62	0.09	9.92
AV	1.38M	20.42	46.00	-25.58	19.63	Neutral	-	0.79	9.62	0.09	9.92
QP	29.263M	17.56	60.00	-42.44	20.27	Neutral	-	-2.71	9.99	0.34	9.94
AV	29.263M	16.08	50.00	-33.92	20.27	Neutral	-	-4.19	9.99	0.34	9.94



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)	662.5k	1.033M	1M03F1D	651.25k	1.026M
BT-LE(2Mbps)	1.125M	2.066M	2M07F1D	955k	2.039M
BT-LE(125kbps)	597.5k	1.054M	1M05F1D	597.5k	1.047M
BT-LE(500kbps)	660k	1.021M	1M02F1D	657.5k	1.014M

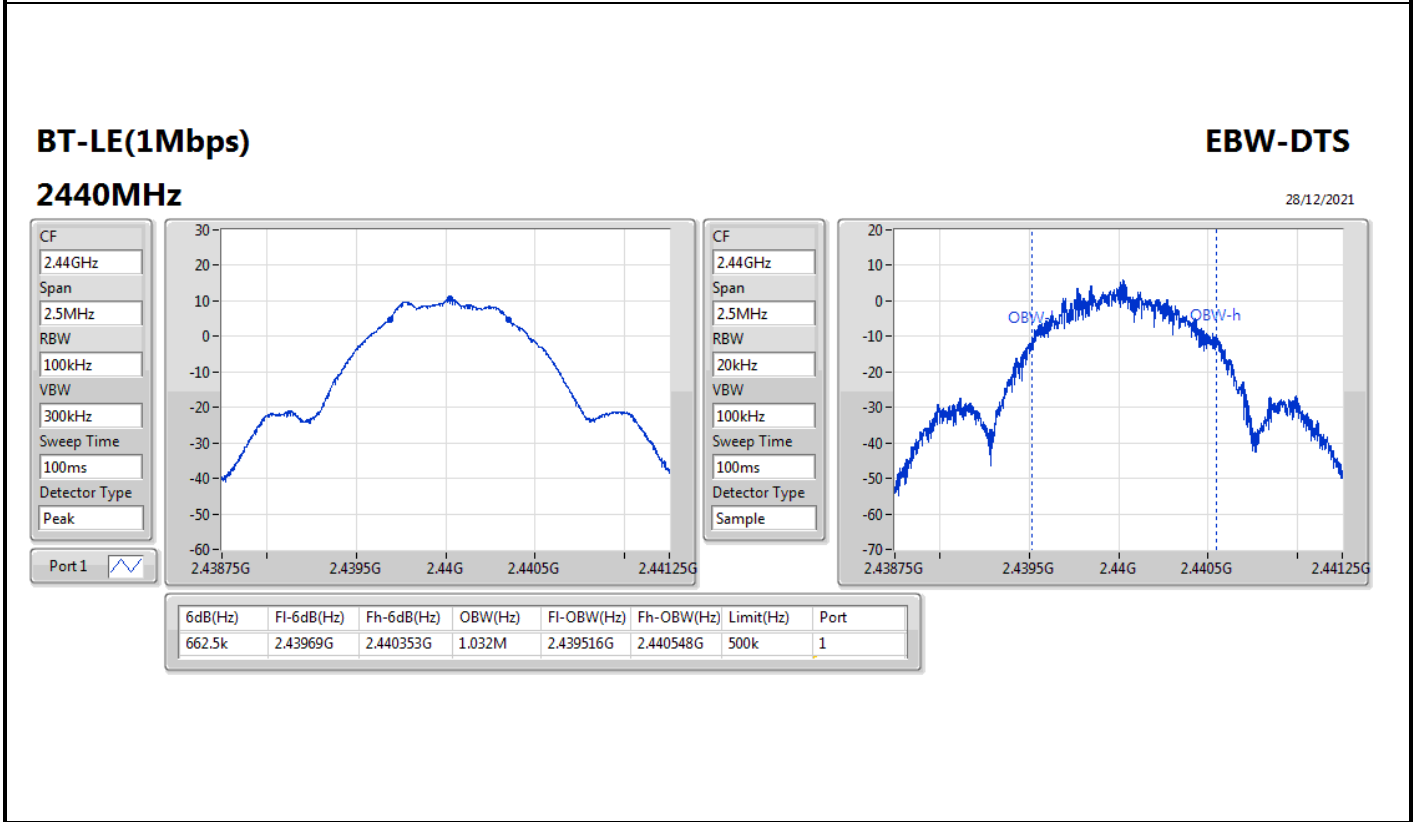
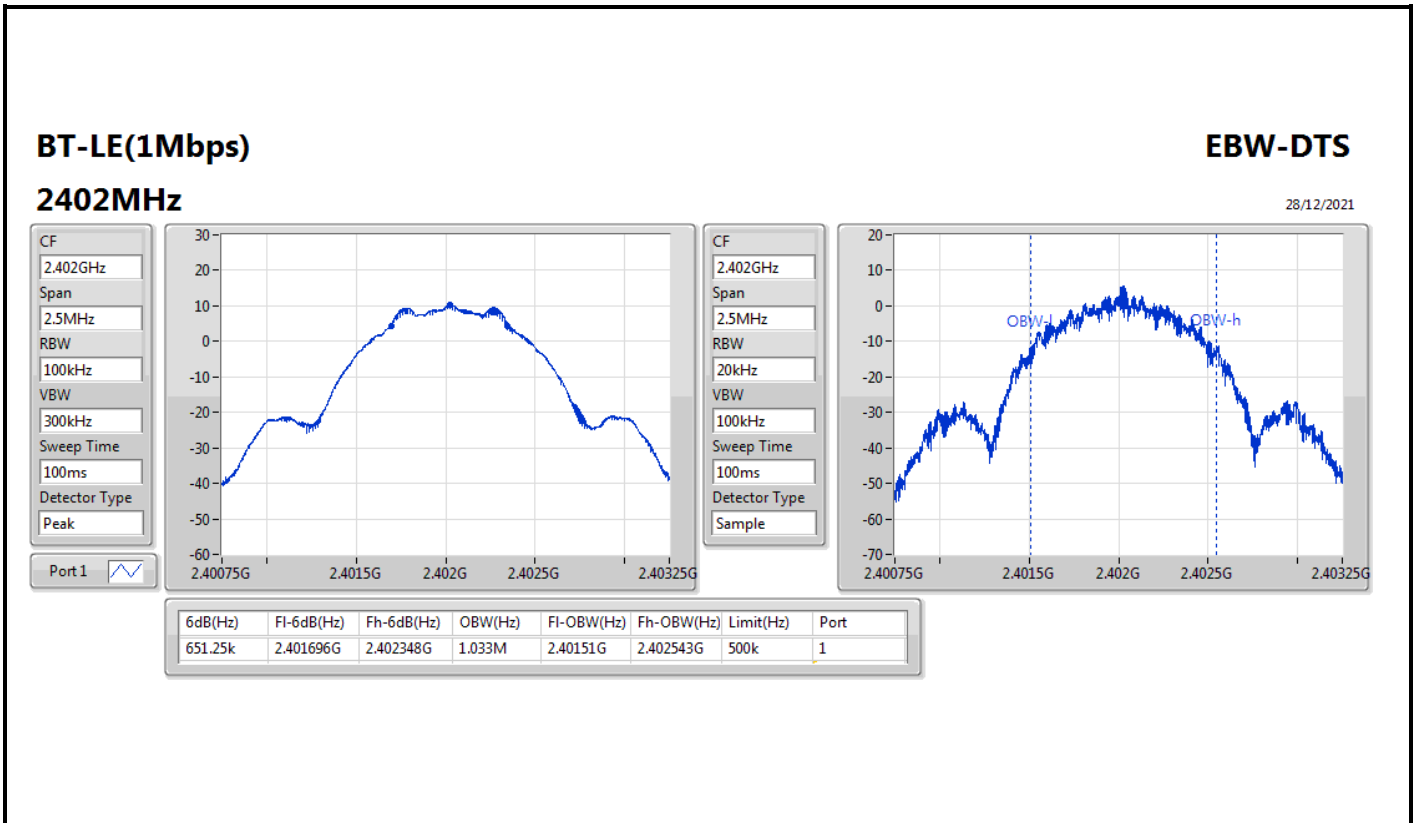
Max-N dB = Maximum 6dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; Min-OBW = Minimum 99% occupied bandwidth



Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	500k	651.25k	1.033M
2440MHz	Pass	500k	662.5k	1.032M
2480MHz	Pass	500k	657.5k	1.026M
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	500k	1.125M	2.066M
2440MHz	Pass	500k	1.098M	2.039M
2480MHz	Pass	500k	955k	2.064M
BT-LE(125kpbs)	-	-	-	-
2402MHz	Pass	500k	597.5k	1.051M
2440MHz	Pass	500k	597.5k	1.047M
2480MHz	Pass	500k	597.5k	1.054M
BT-LE(500kpbs)	-	-	-	-
2402MHz	Pass	500k	660k	1.014M
2440MHz	Pass	500k	660k	1.016M
2480MHz	Pass	500k	657.5k	1.021M

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

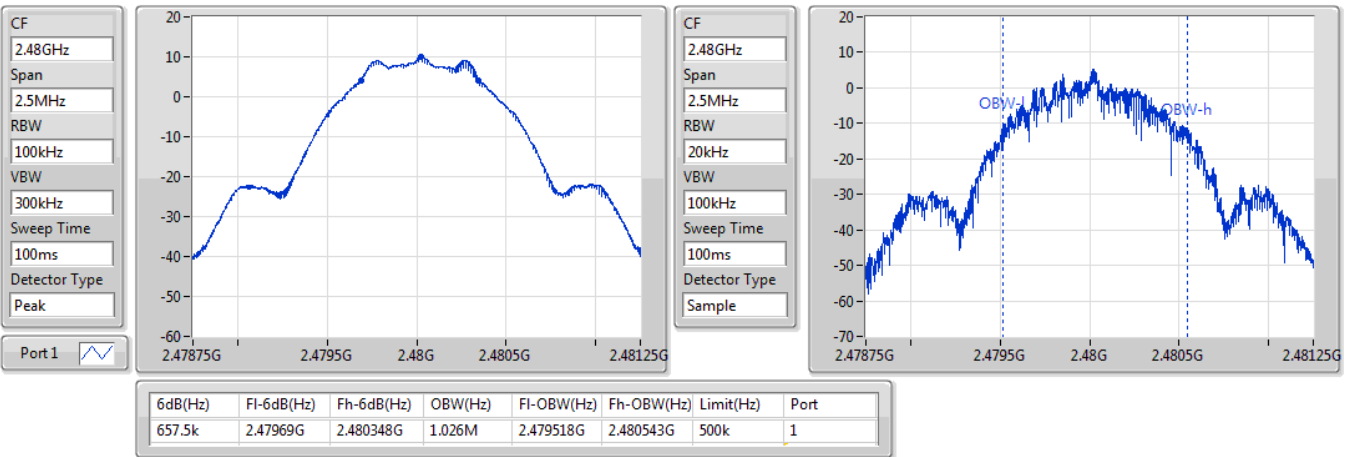


BT-LE(1Mbps)

EBW-DTS

2480MHz

28/12/2021

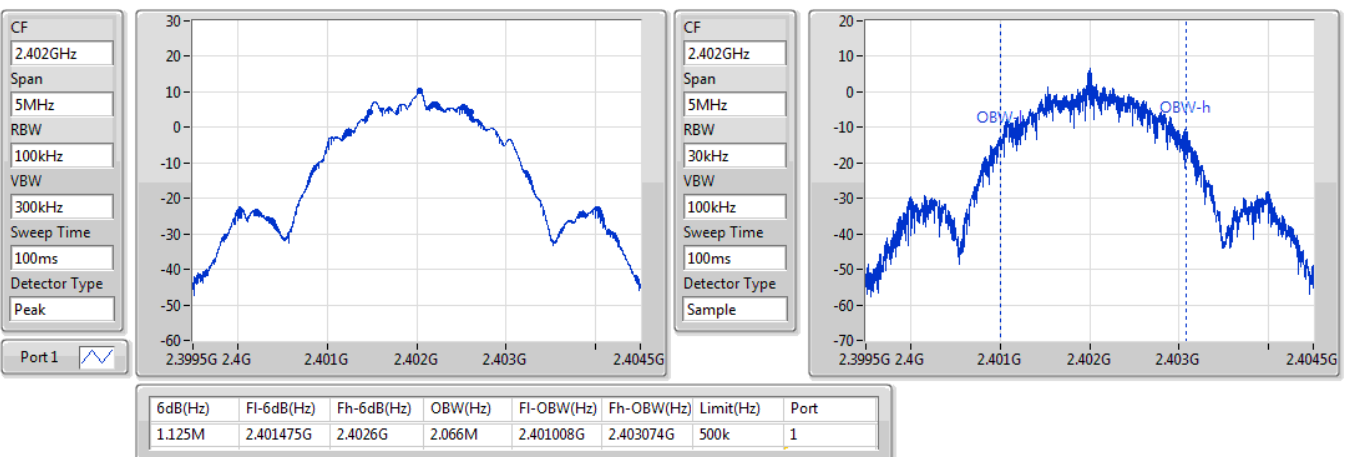


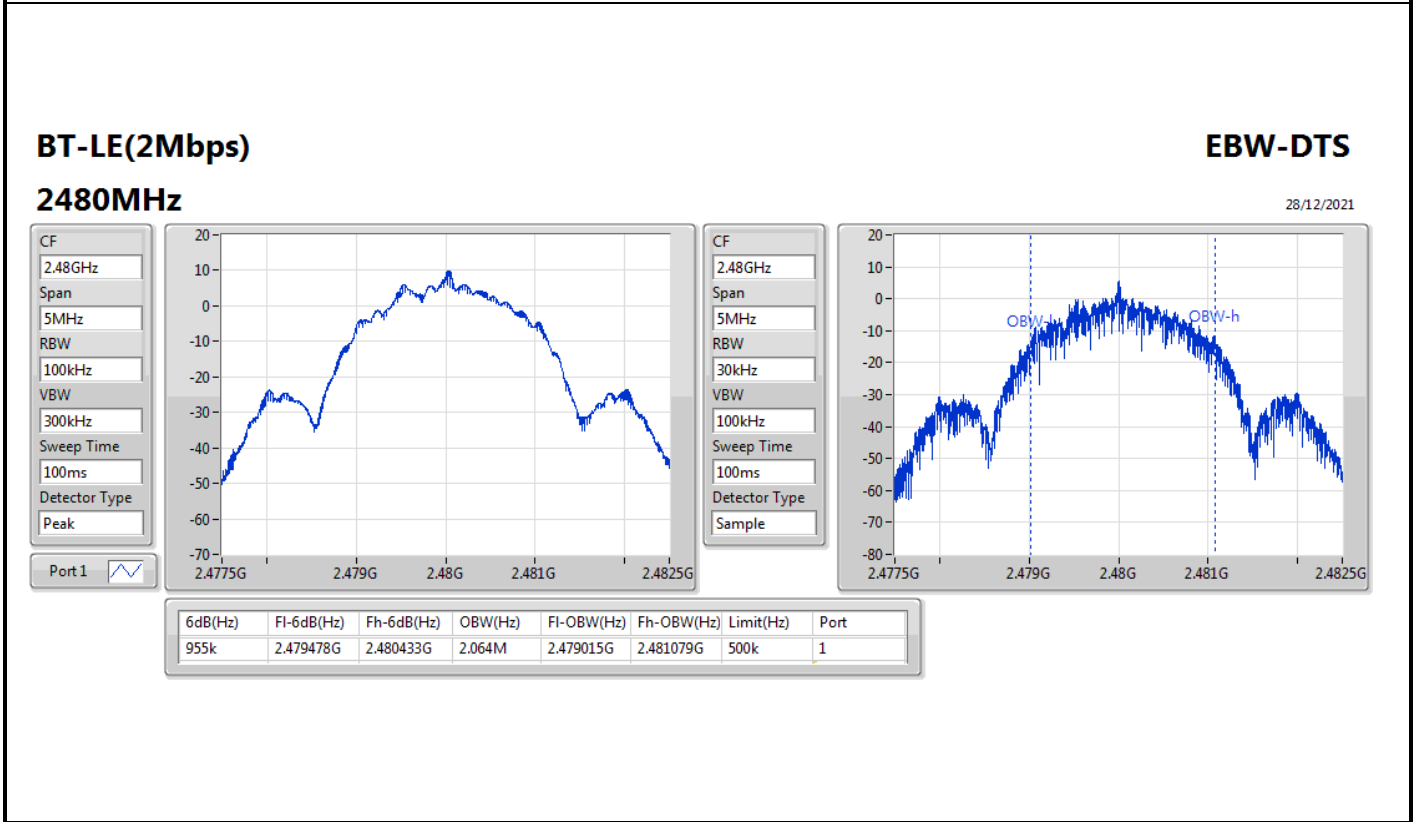
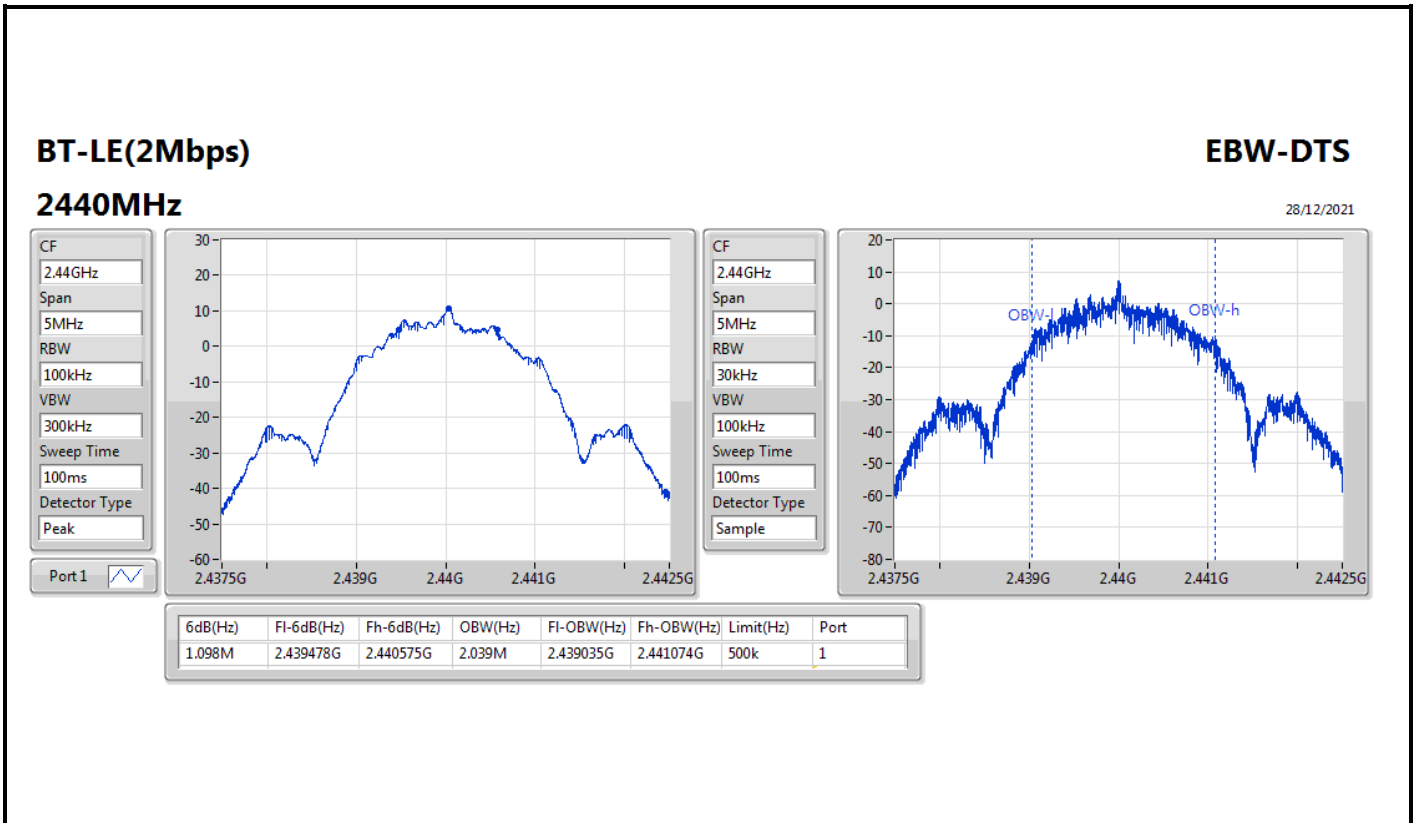
BT-LE(2Mbps)

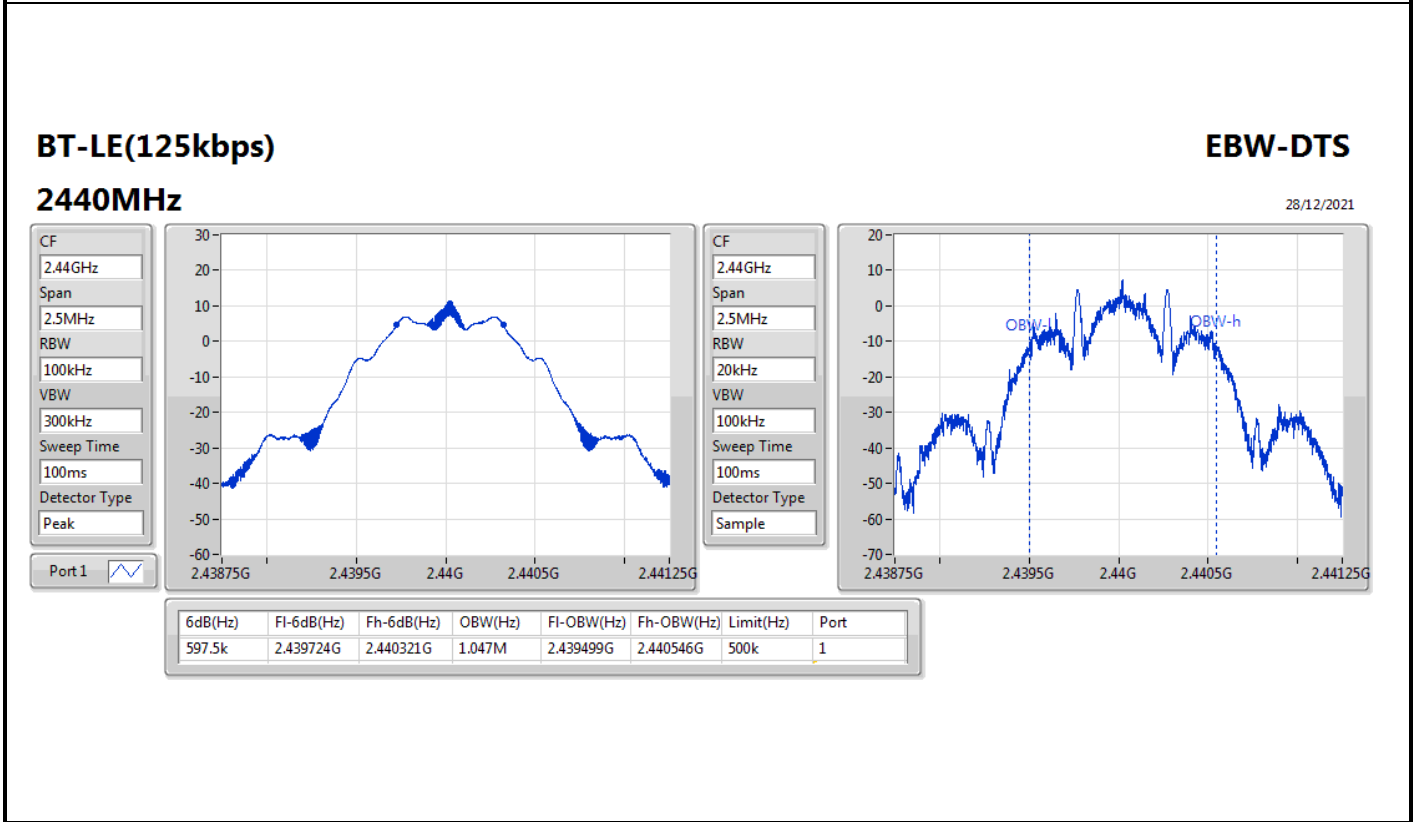
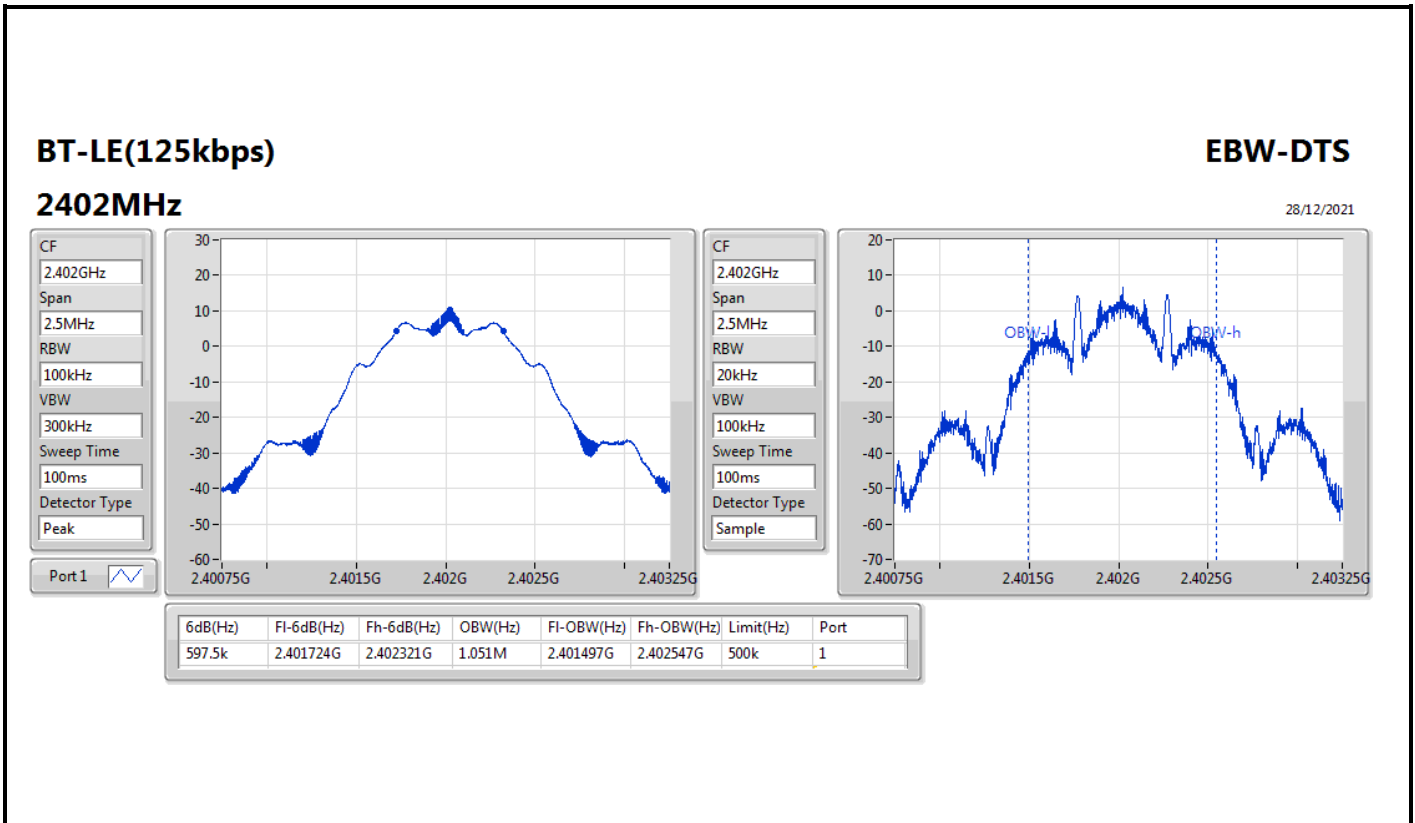
EBW-DTS

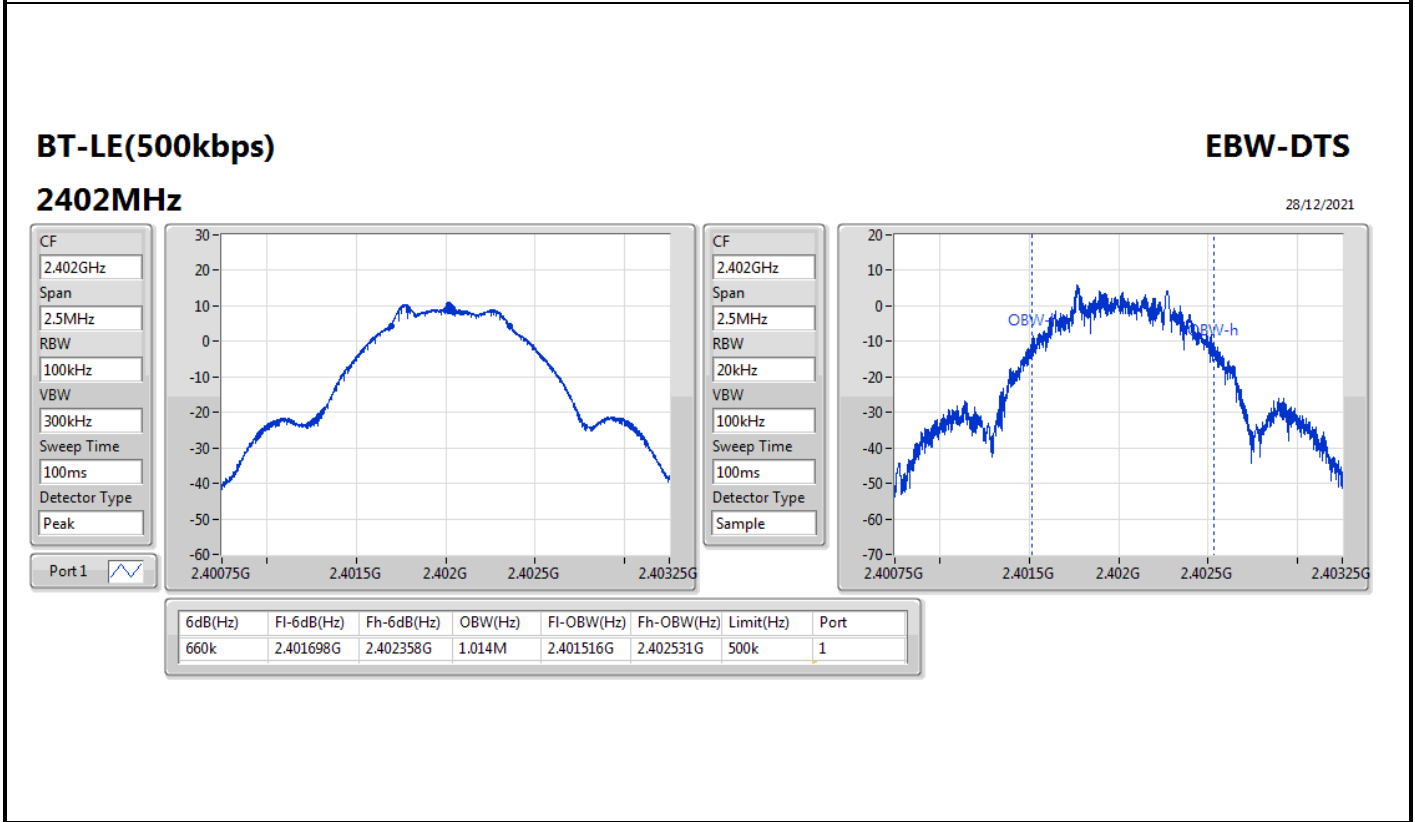
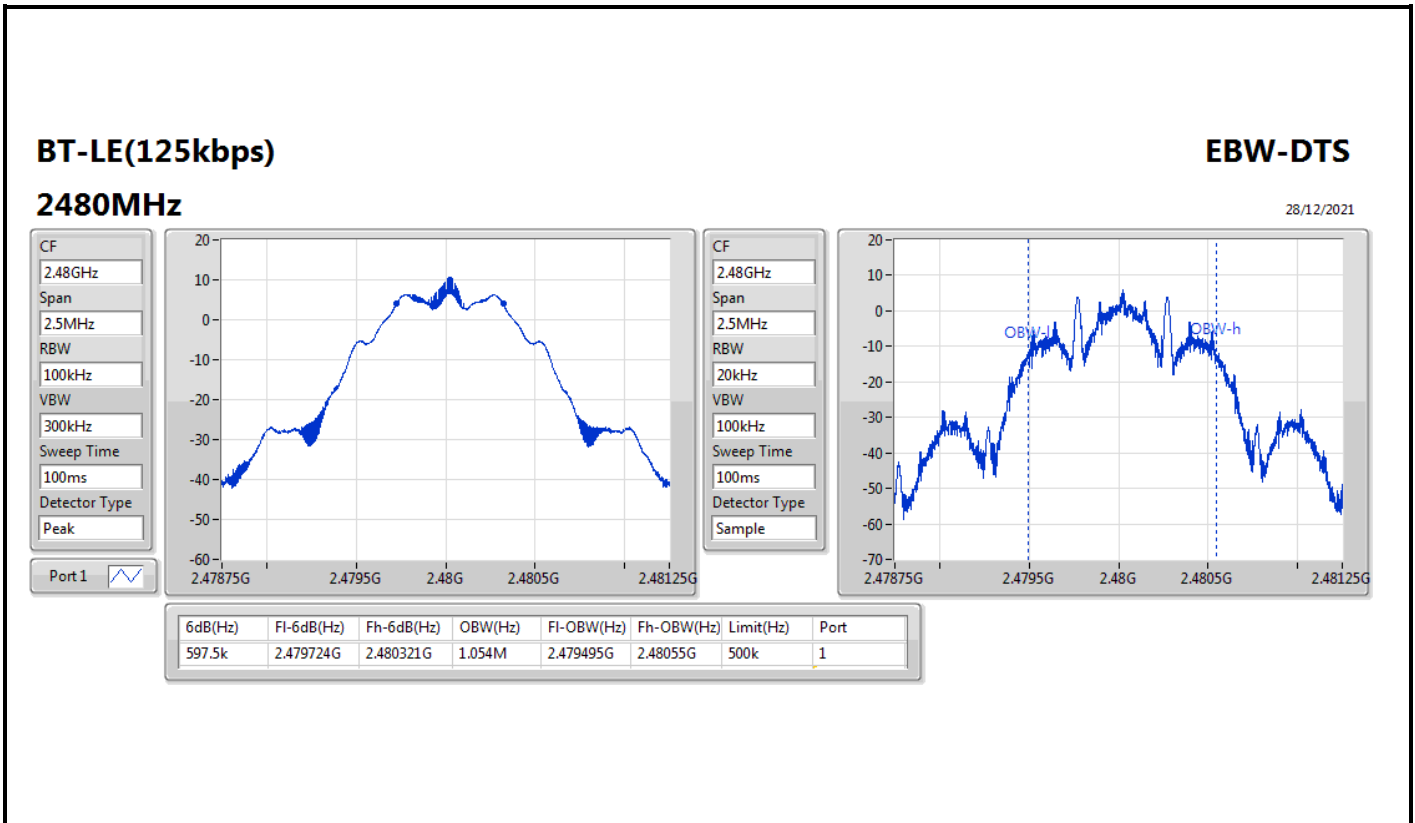
2402MHz

28/12/2021







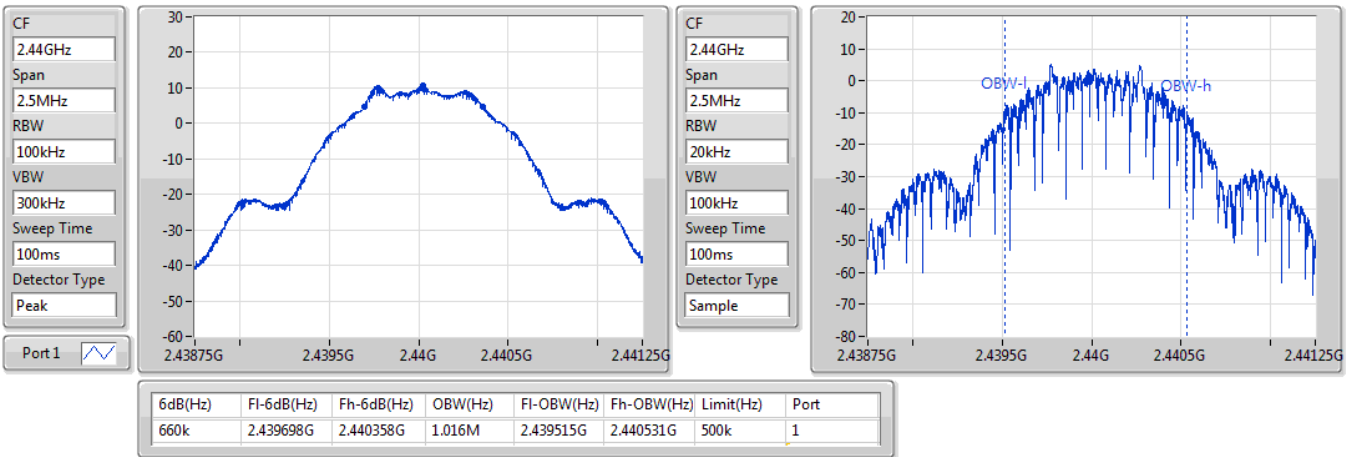


BT-LE(500kbps)

EBW-DTS

2440MHz

28/12/2021

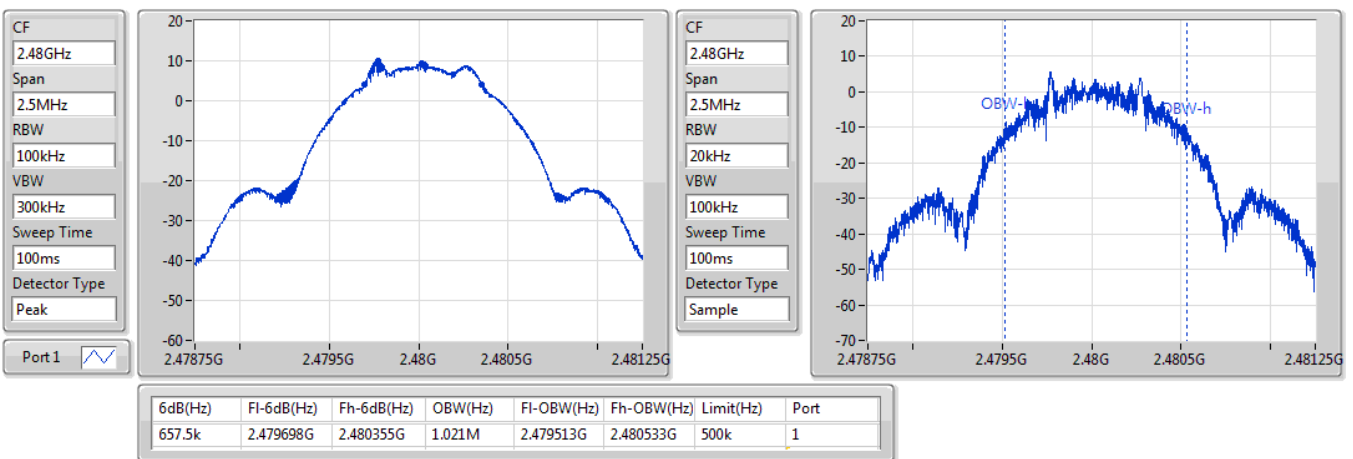


BT-LE(500kbps)

EBW-DTS

2480MHz

28/12/2021





Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-LE(1Mbps)	11.21	0.01321
BT-LE(2Mbps)	11.19	0.01315
BT-LE(125kbps)	11.30	0.01349
BT-LE(500kbps)	11.37	0.01371



Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	5.30	11.05	30.00
2440MHz	Pass	5.30	11.21	30.00
2480MHz	Pass	5.30	10.59	30.00
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	5.30	11.02	30.00
2440MHz	Pass	5.30	11.19	30.00
2480MHz	Pass	5.30	9.73	30.00
BT-LE(125kbps)	-	-	-	-
2402MHz	Pass	5.30	11.14	30.00
2440MHz	Pass	5.30	11.30	30.00
2480MHz	Pass	5.30	10.66	30.00
BT-LE(500kbps)	-	-	-	-
2402MHz	Pass	5.30	11.15	30.00
2440MHz	Pass	5.30	11.37	30.00
2480MHz	Pass	5.30	10.67	30.00

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



Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
BT-LE(1Mbps)	-2.81
BT-LE(2Mbps)	-6.98
BT-LE(125kbps)	4.99
BT-LE(500kbps)	4.83

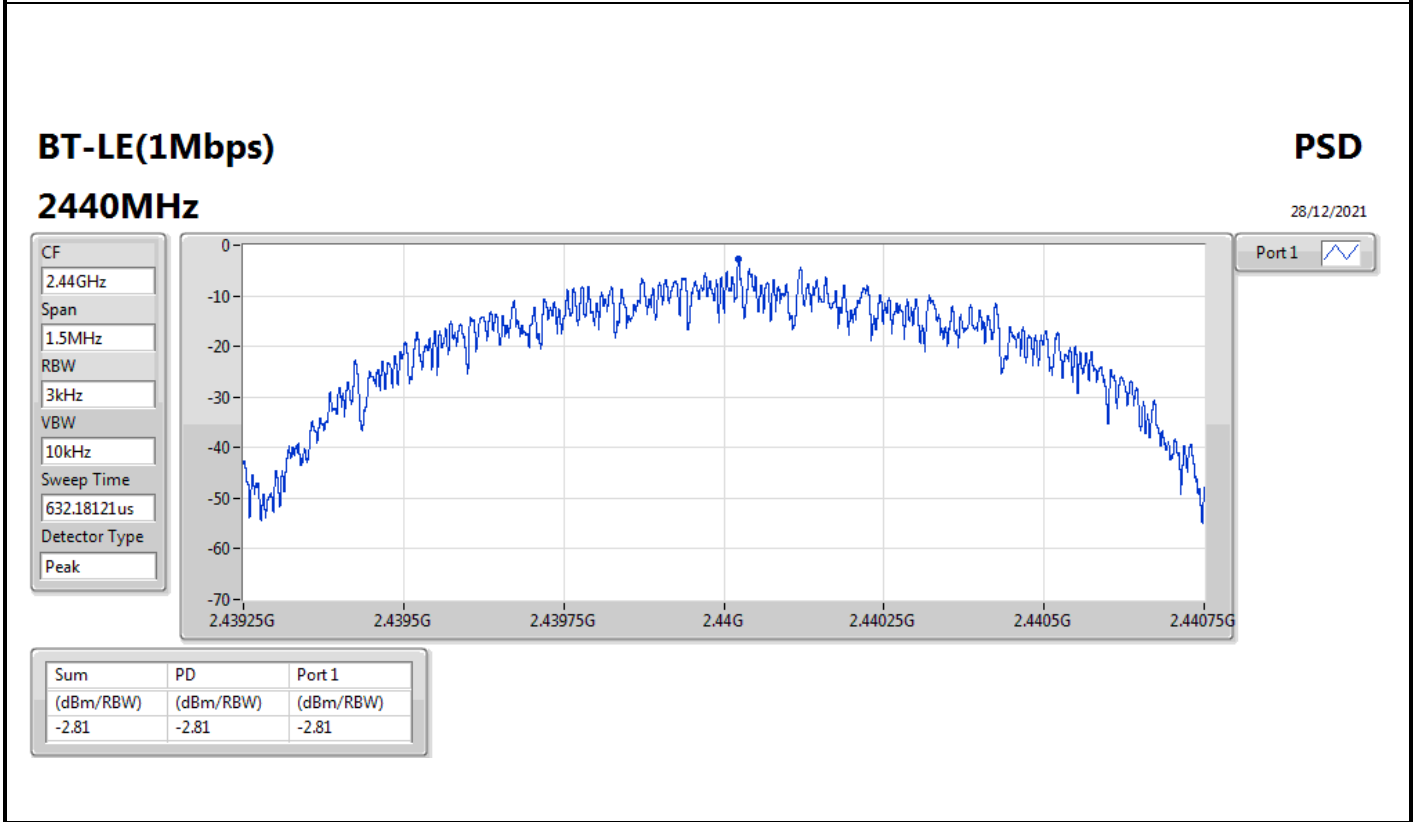
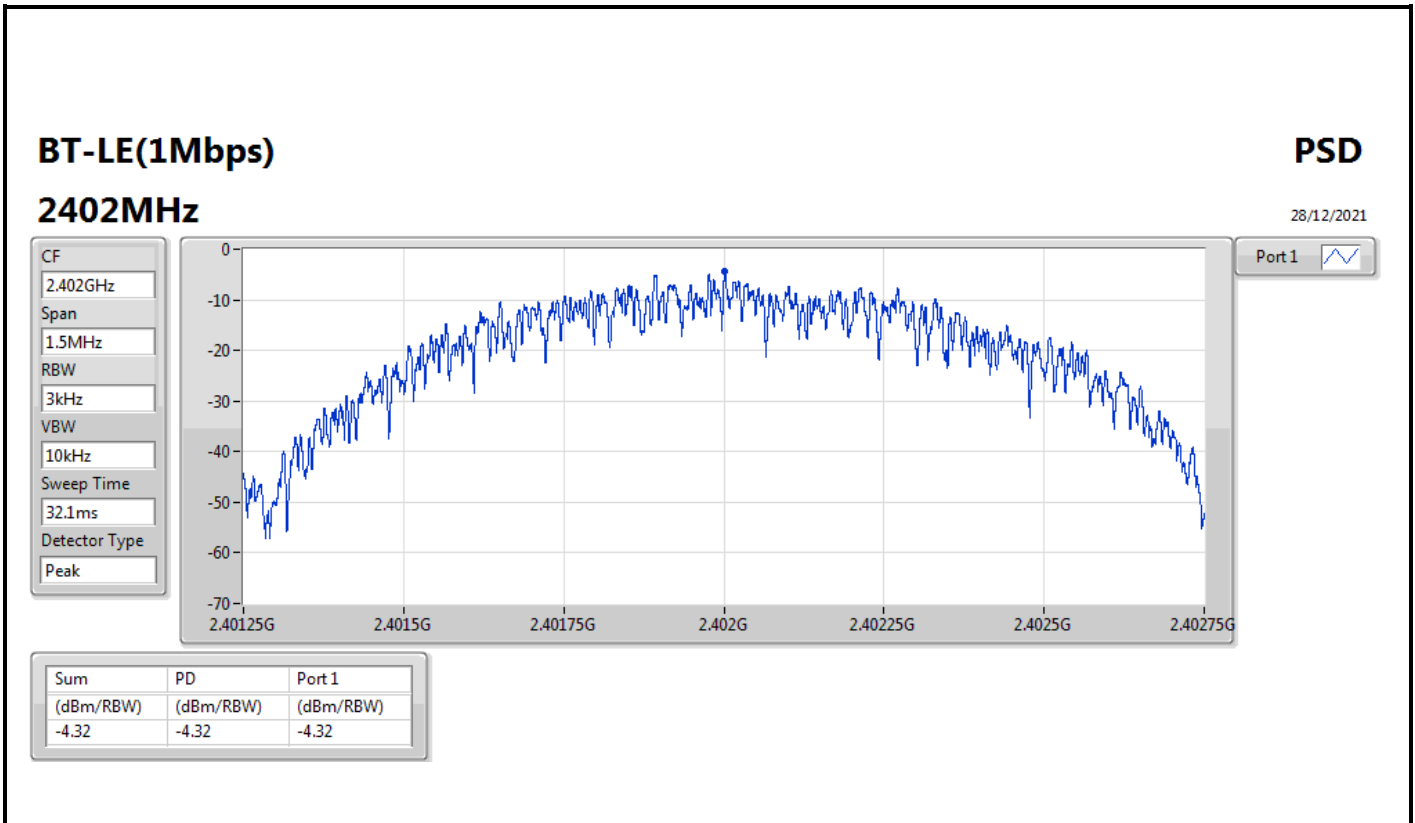
RBW = 3kHz;



Result

Mode	Result	Gain (dBi)	PD (dBm/RBW)	PD Limit (dBm/RBW)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	5.30	-4.32	8.00
2440MHz	Pass	5.30	-2.81	8.00
2480MHz	Pass	5.30	-5.09	8.00
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	5.30	-7.53	8.00
2440MHz	Pass	5.30	-6.98	8.00
2480MHz	Pass	5.30	-9.78	8.00
BT-LE(125kbps)	-	-	-	-
2402MHz	Pass	5.30	4.74	8.00
2440MHz	Pass	5.30	4.99	8.00
2480MHz	Pass	5.30	4.34	8.00
BT-LE(500kbps)	-	-	-	-
2402MHz	Pass	5.30	3.92	8.00
2440MHz	Pass	5.30	4.83	8.00
2480MHz	Pass	5.30	-0.48	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

2480MHz

28/12/2021

CF
2.48GHz

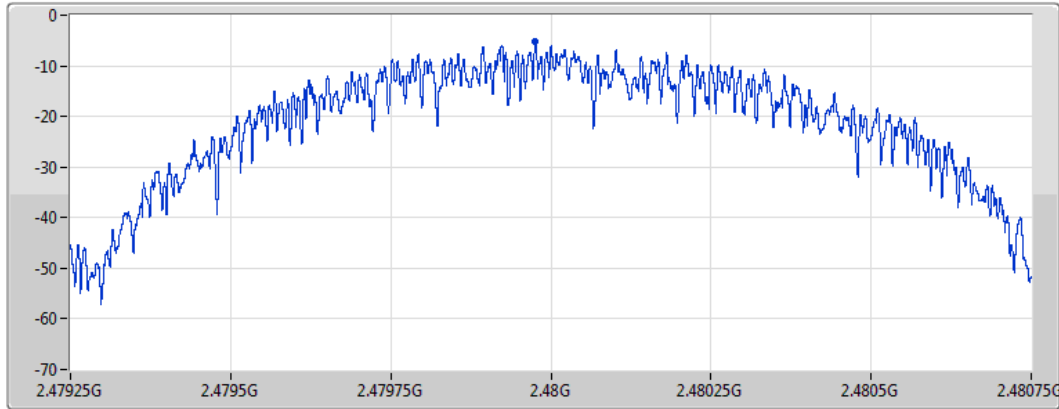
Span
1.5MHz

RBW
3kHz

VBW
10kHz

Sweep Time
632.18121us

Detector Type
Peak



Port 1 

Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-5.09	-5.09	-5.09

BT-LE(2Mbps)

PSD

2402MHz

28/12/2021

CF
2.402GHz

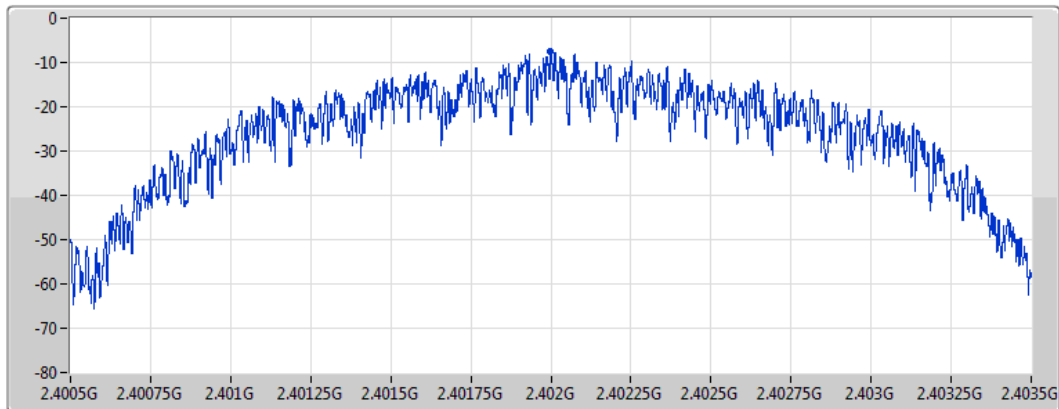
Span
3MHz


RBW
3kHz

VBW
10kHz

Sweep Time
632.01845us

Detector Type
Peak



Port 1 

Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-7.53	-7.53	-7.53

BT-LE(2Mbps)

PSD

2440MHz

28/12/2021

CF
2.44GHz

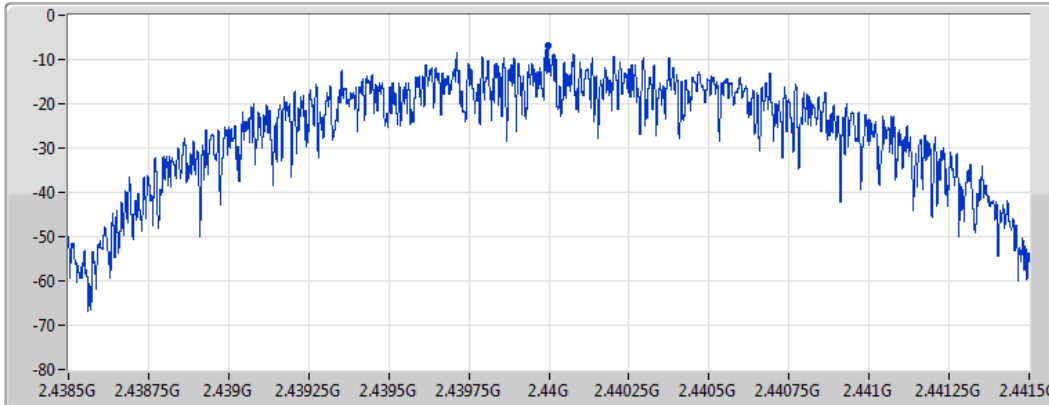
Span
3MHz


RBW
3kHz

VBW
10kHz

Sweep Time
632.01845us

Detector Type
Peak



Port 1 

Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.98	-6.98	-6.98

BT-LE(2Mbps)

PSD

2480MHz

28/12/2021

CF
2.48GHz

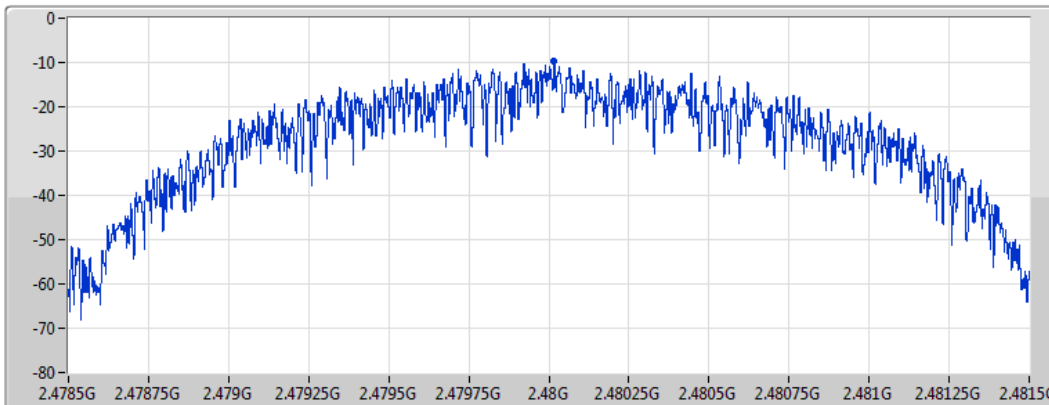
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3MHz


RBW
3kHz

VBW
10kHz

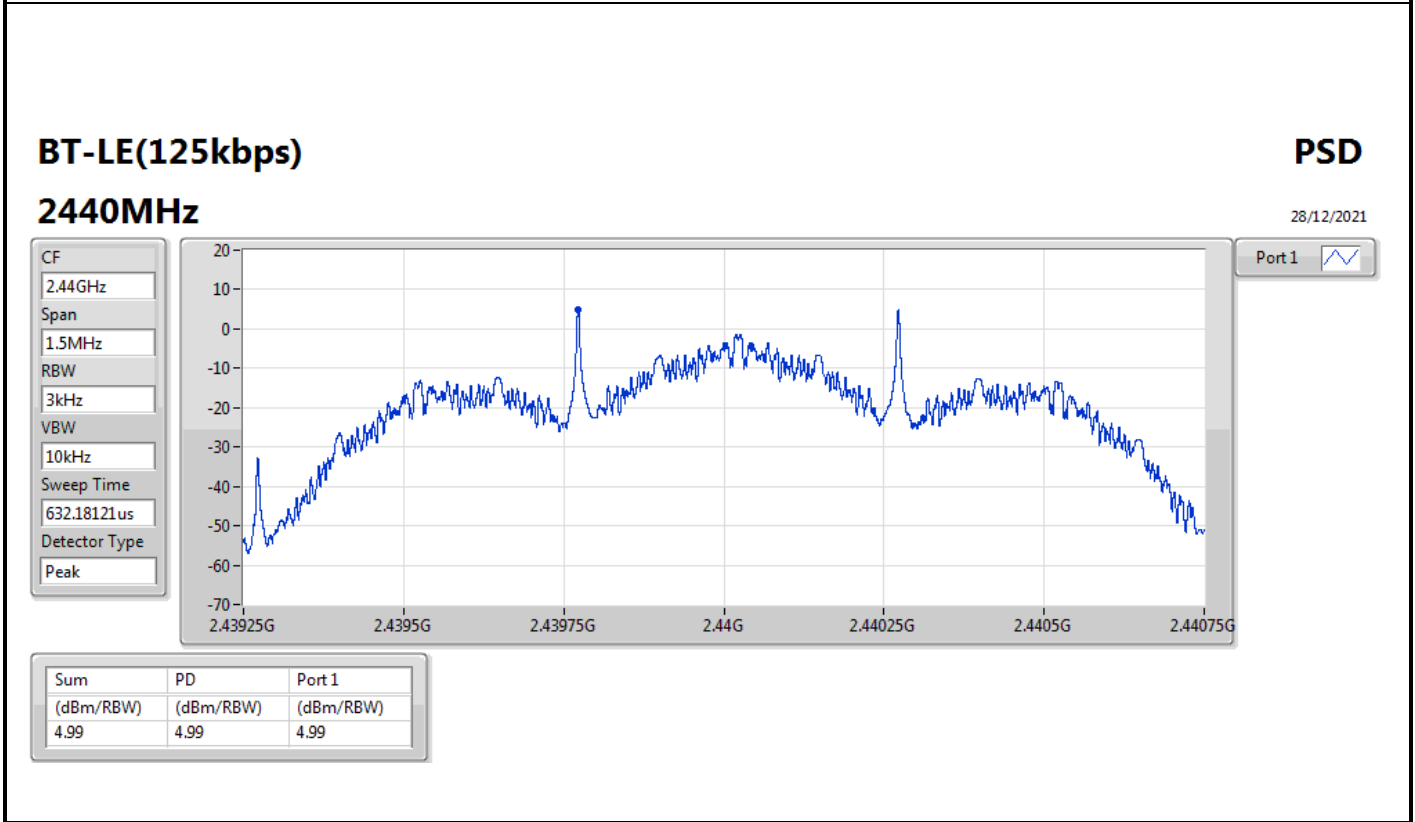
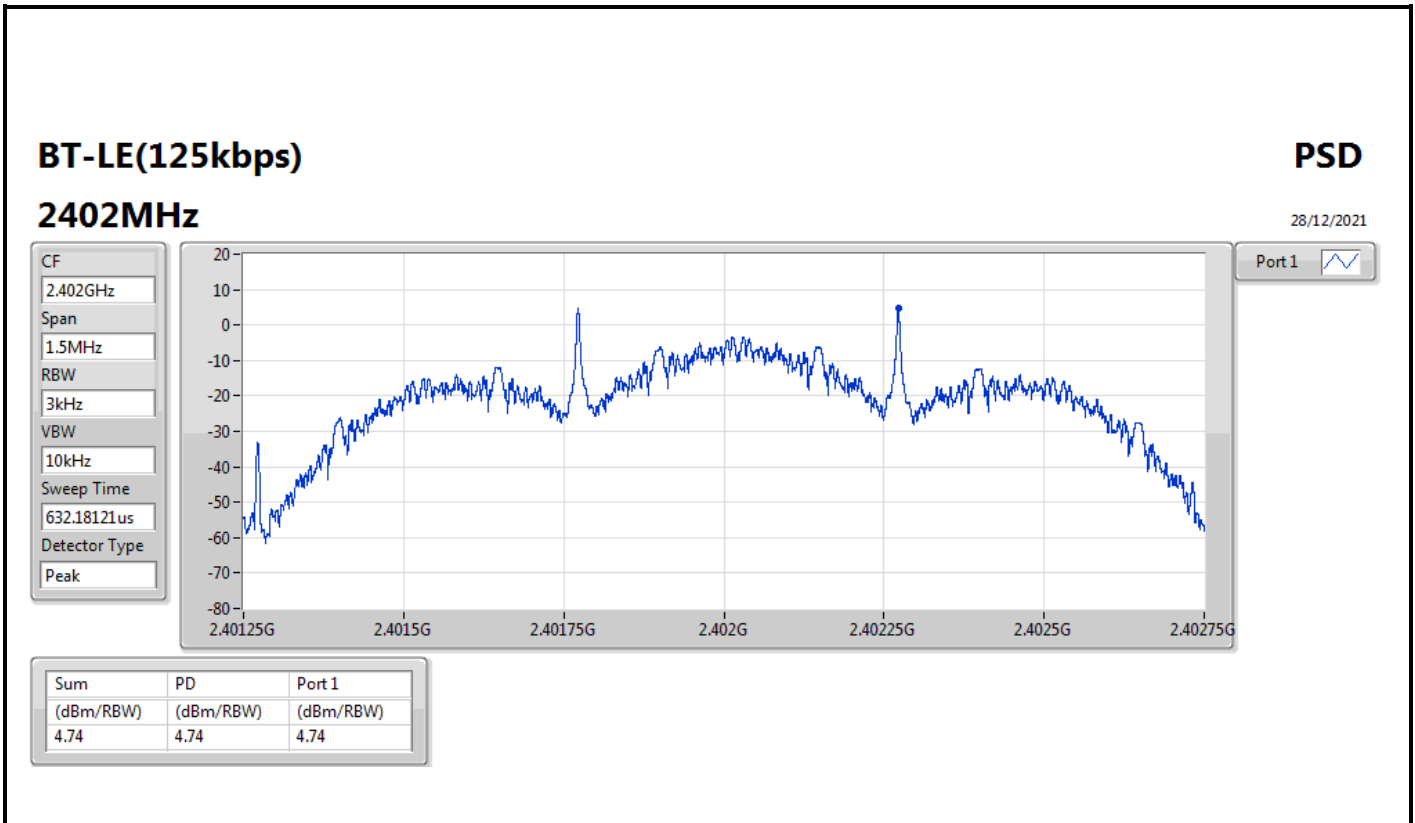
Sweep Time
632.01845us

Detector Type
Peak



Port 1 

Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-9.78	-9.78	-9.78



BT-LE(125kbps)

PSD

2480MHz

28/12/2021

CF
2.48GHz

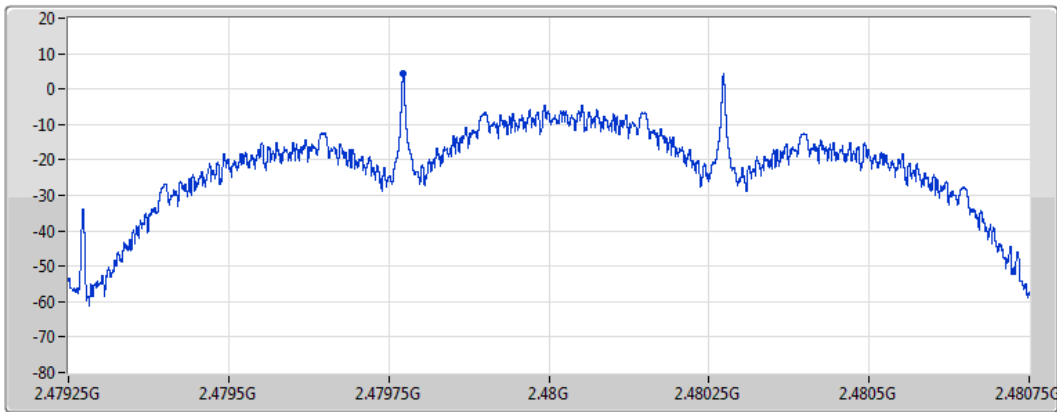
Span
1.5MHz


RBW
3kHz

VBW
10kHz

Sweep Time
632.18121us

Detector Type
Peak



Port 1 

Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.34	4.34	4.34

BT-LE(500kbps)

PSD

2402MHz

28/12/2021

CF
2.402GHz

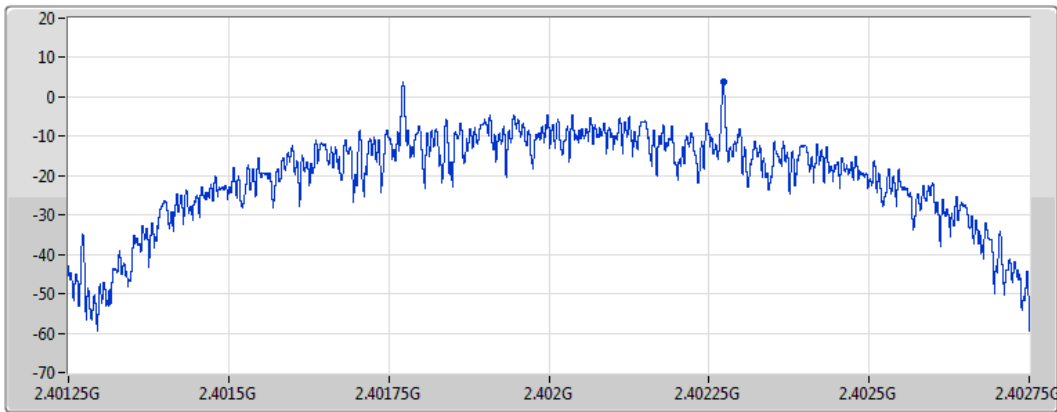
Span
1.5MHz


RBW
3kHz

VBW
10kHz

Sweep Time
632.18121us

Detector Type
Peak



Port 1 

Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.92	3.92	3.92

BT-LE(500kbps)

PSD

2440MHz

28/12/2021

CF
2.44GHz

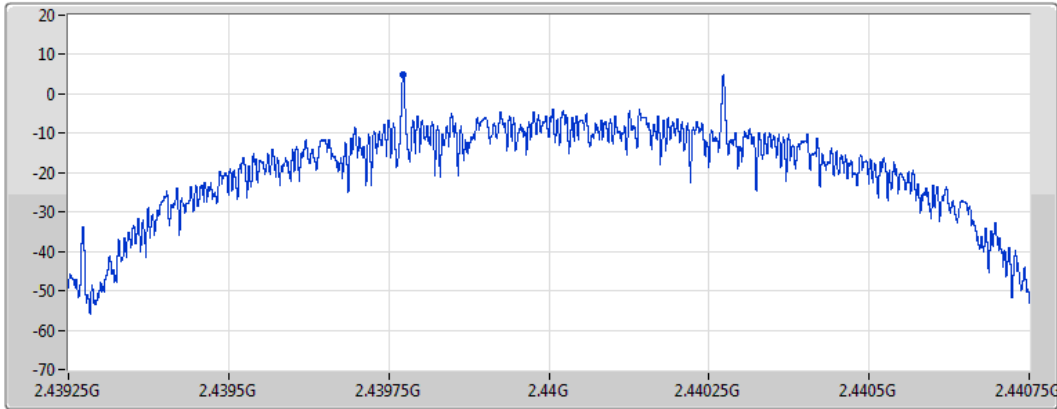
Span
1.5MHz

RBW
3kHz

VBW
10kHz

Sweep Time
632.18121us

Detector Type
Peak



Port 1 

Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.83	4.83	4.83

BT-LE(500kbps)

PSD

2480MHz

28/12/2021

CF
2.48GHz

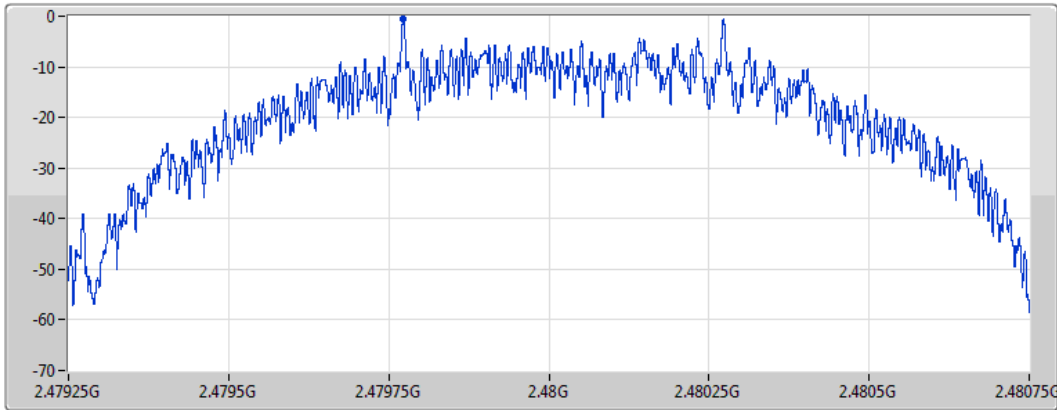
Span
1.5MHz

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



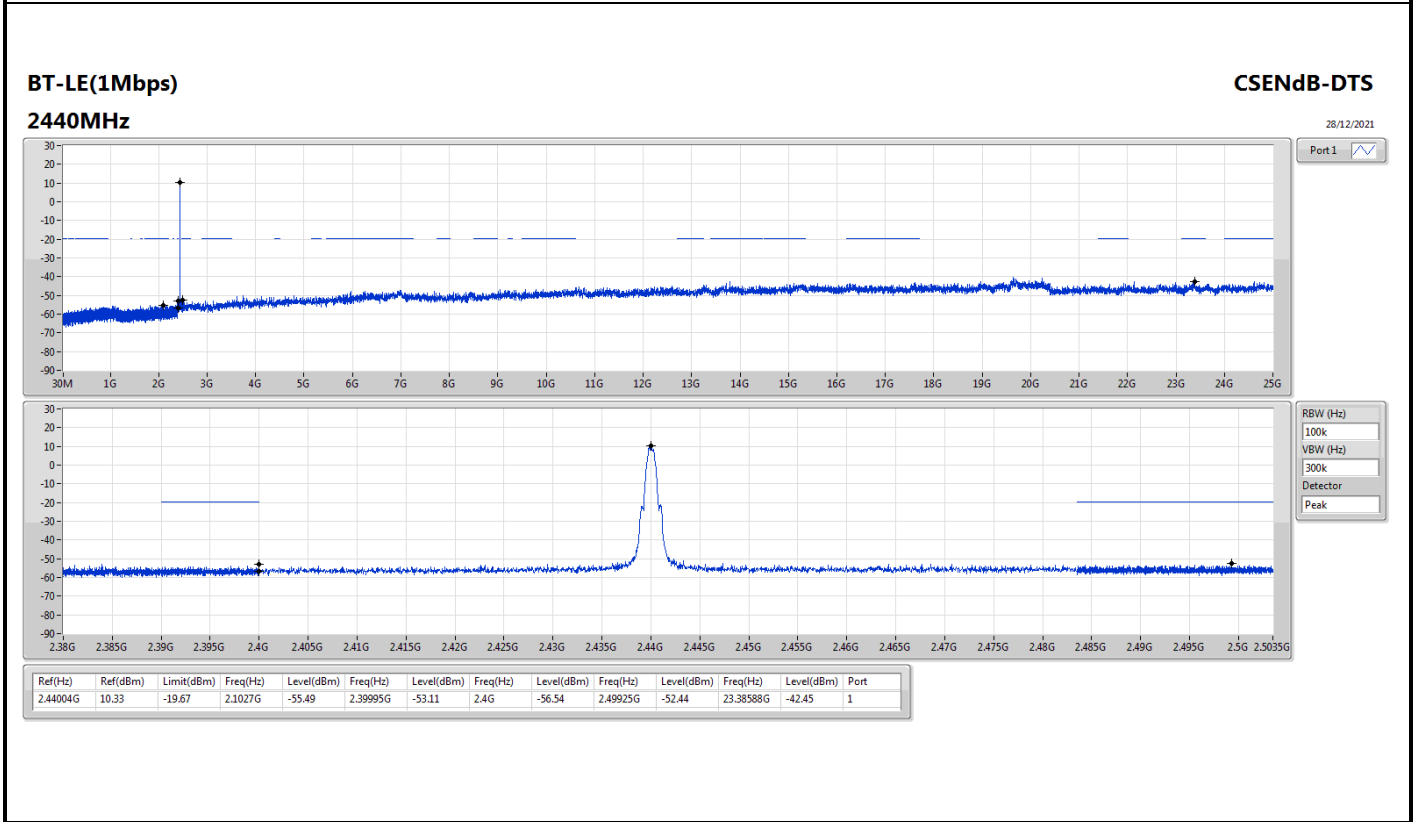
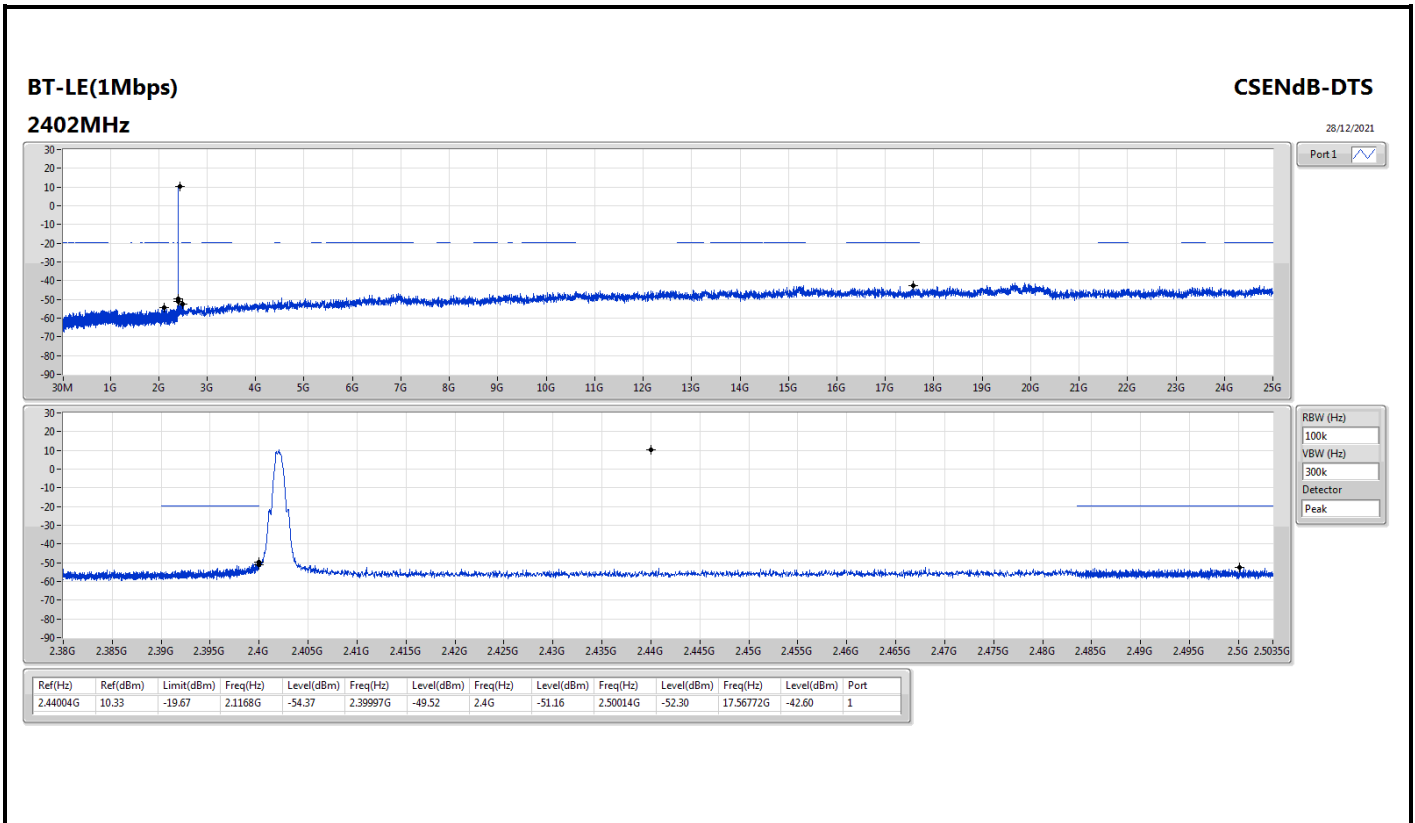
Summary

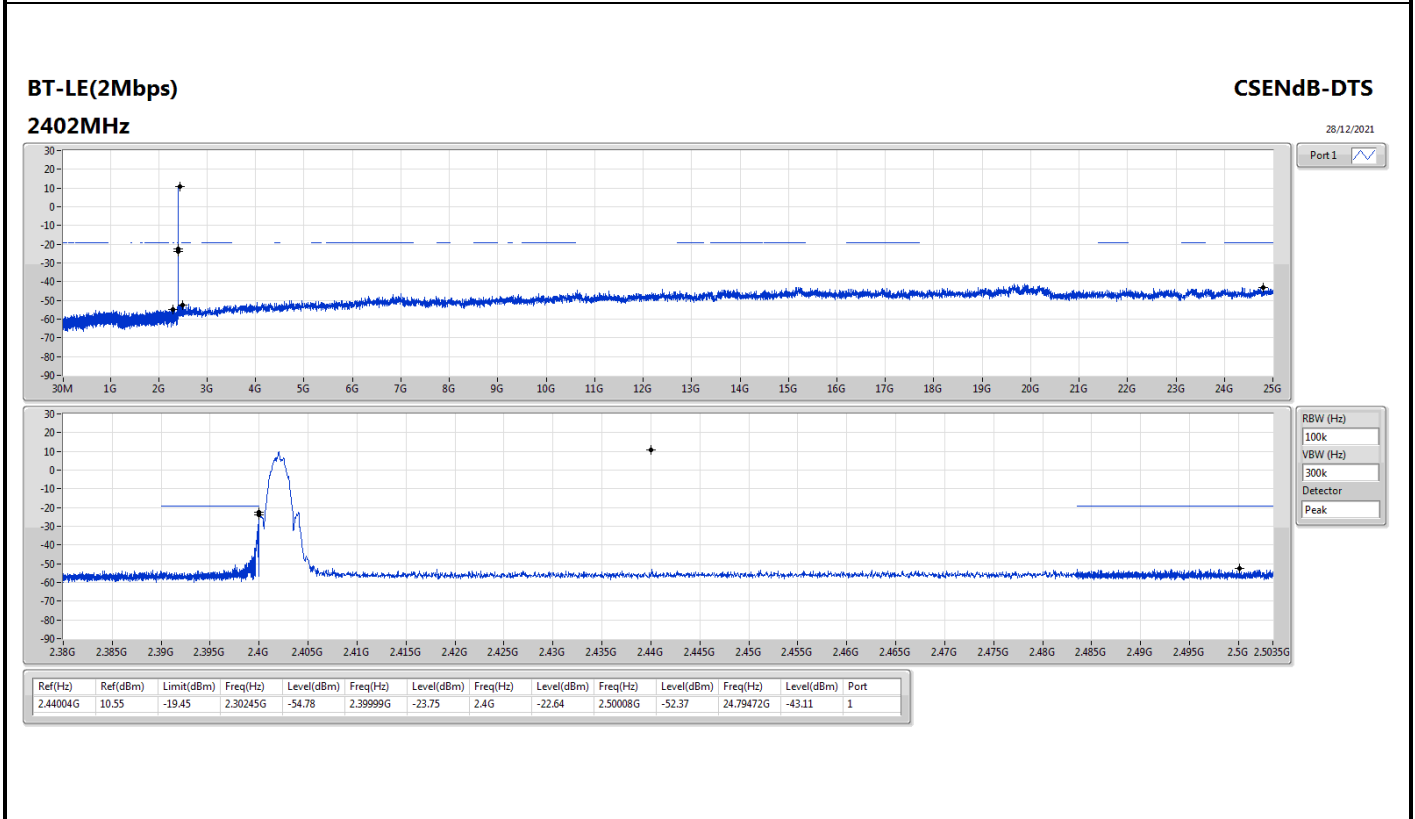
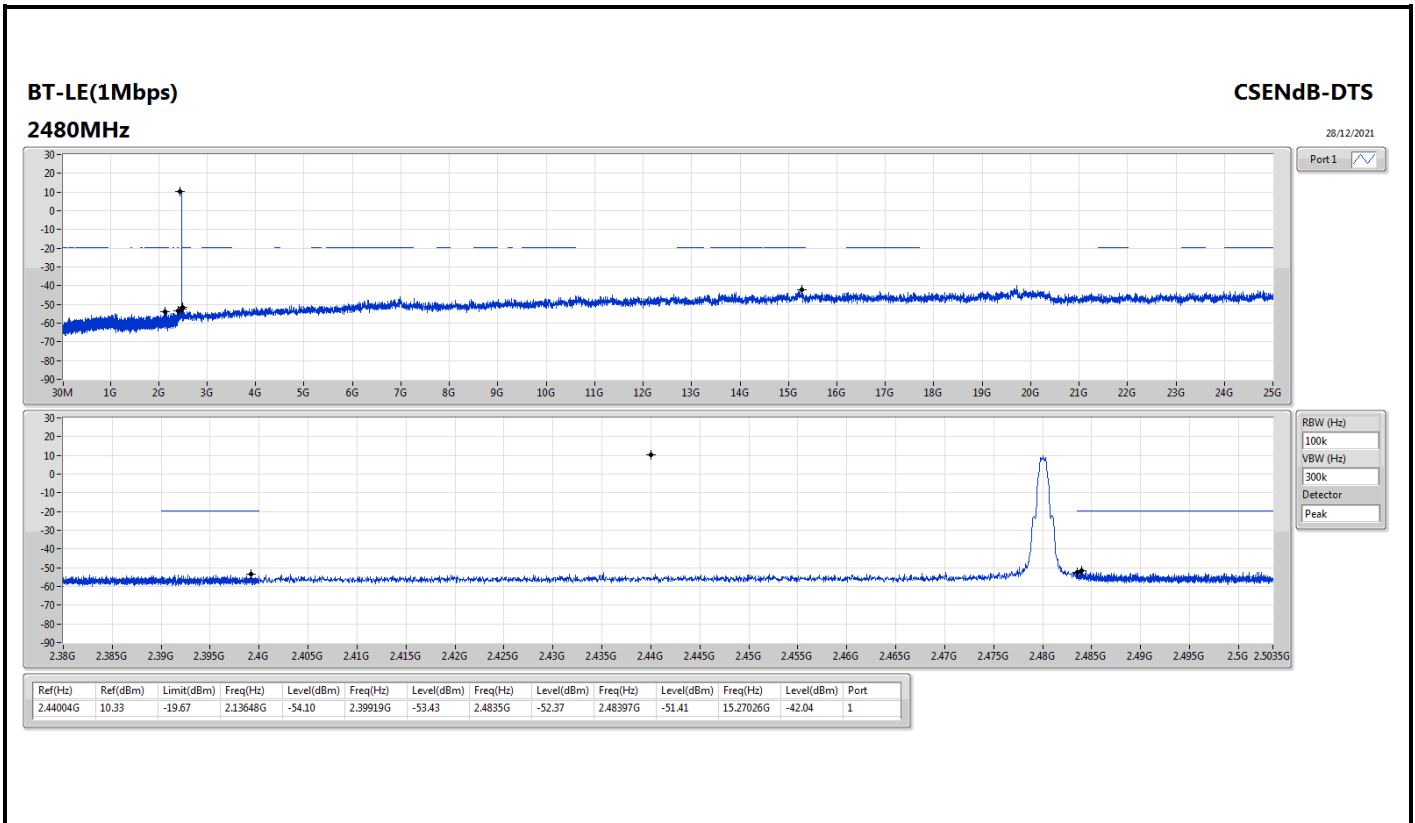
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BT-LE(1Mbps)	Pass	2.44004G	10.33	-19.67	2.1168G	-54.37	2.39997G	-49.52	2.4G	-51.16	2.50014G	-52.30	17.56772G	-42.60	1
BT-LE(2Mbps)	Pass	2.44004G	10.55	-19.45	2.30245G	-54.78	2.39999G	-23.75	2.4G	-22.64	2.50008G	-52.37	24.79472G	-43.11	1
BT-LE(125kbps)	Pass	2.44004G	9.61	-20.39	1.86124G	-54.52	2.39979G	-49.65	2.4G	-51.67	2.50216G	-52.19	15.22527G	-42.14	1
BT-LE(500kbps)	Pass	2.44004G	10.61	-19.39	1.72758G	-55.44	2.3998G	-49.84	2.4G	-52.31	2.49649G	-52.83	24.61194G	-42.48	1

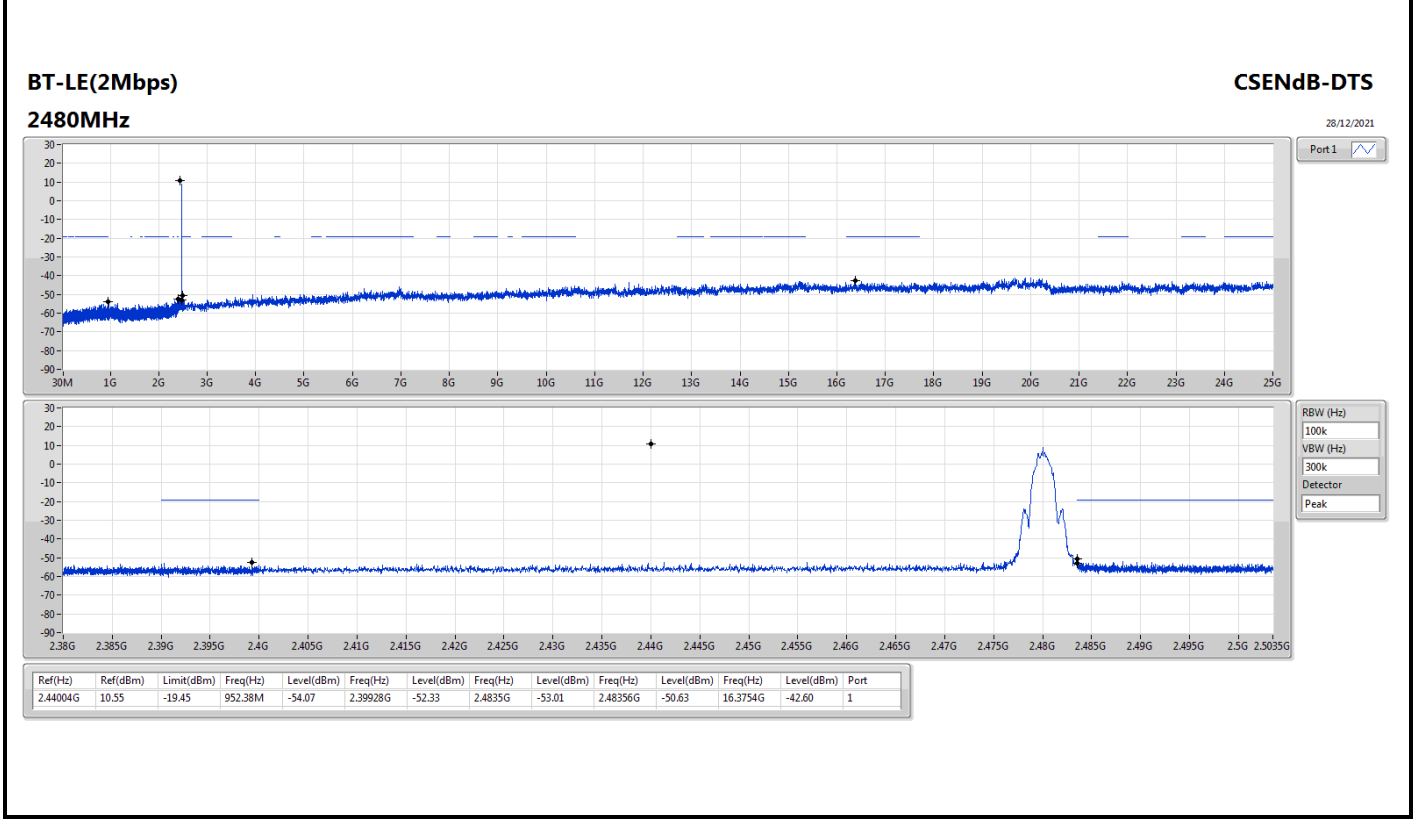
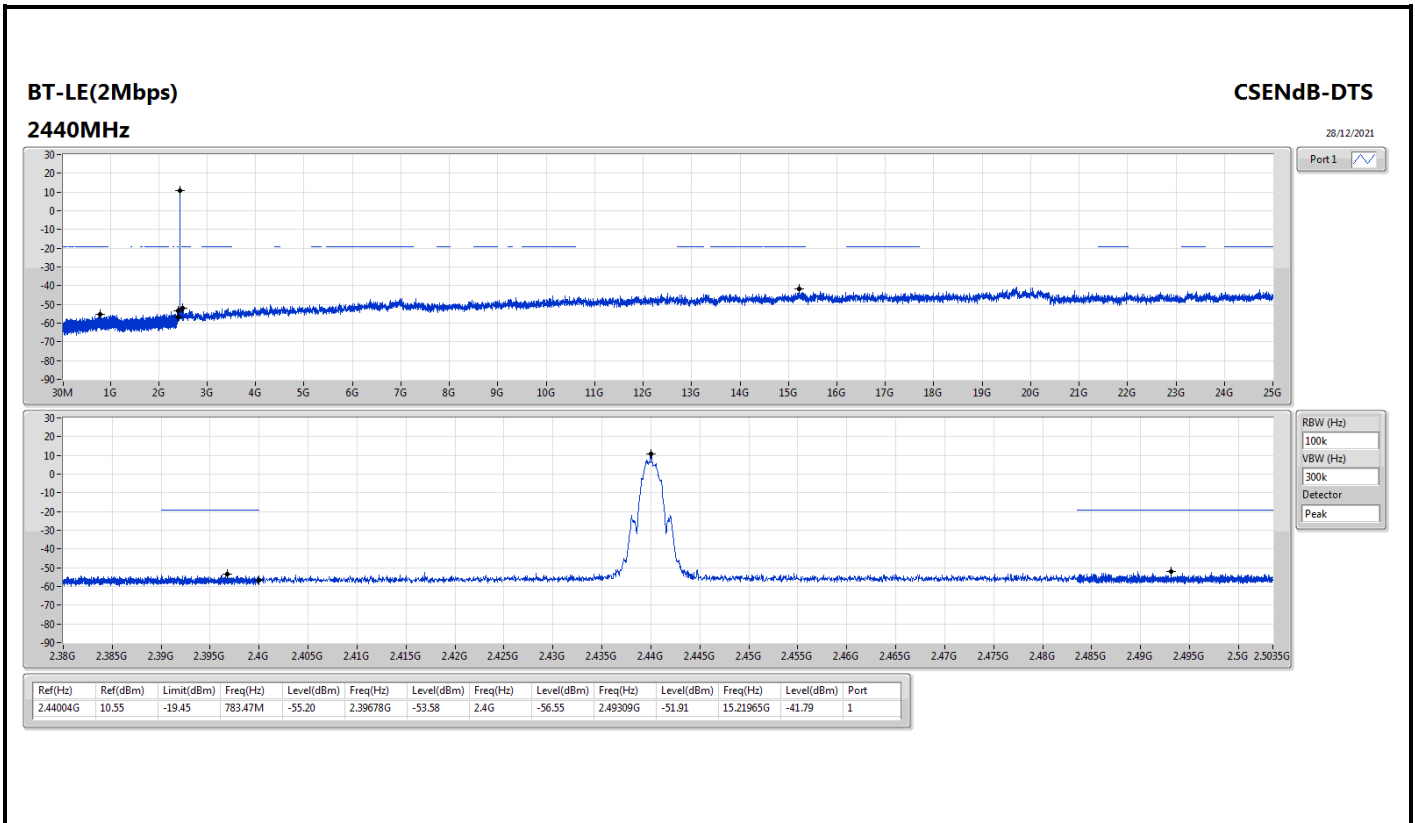


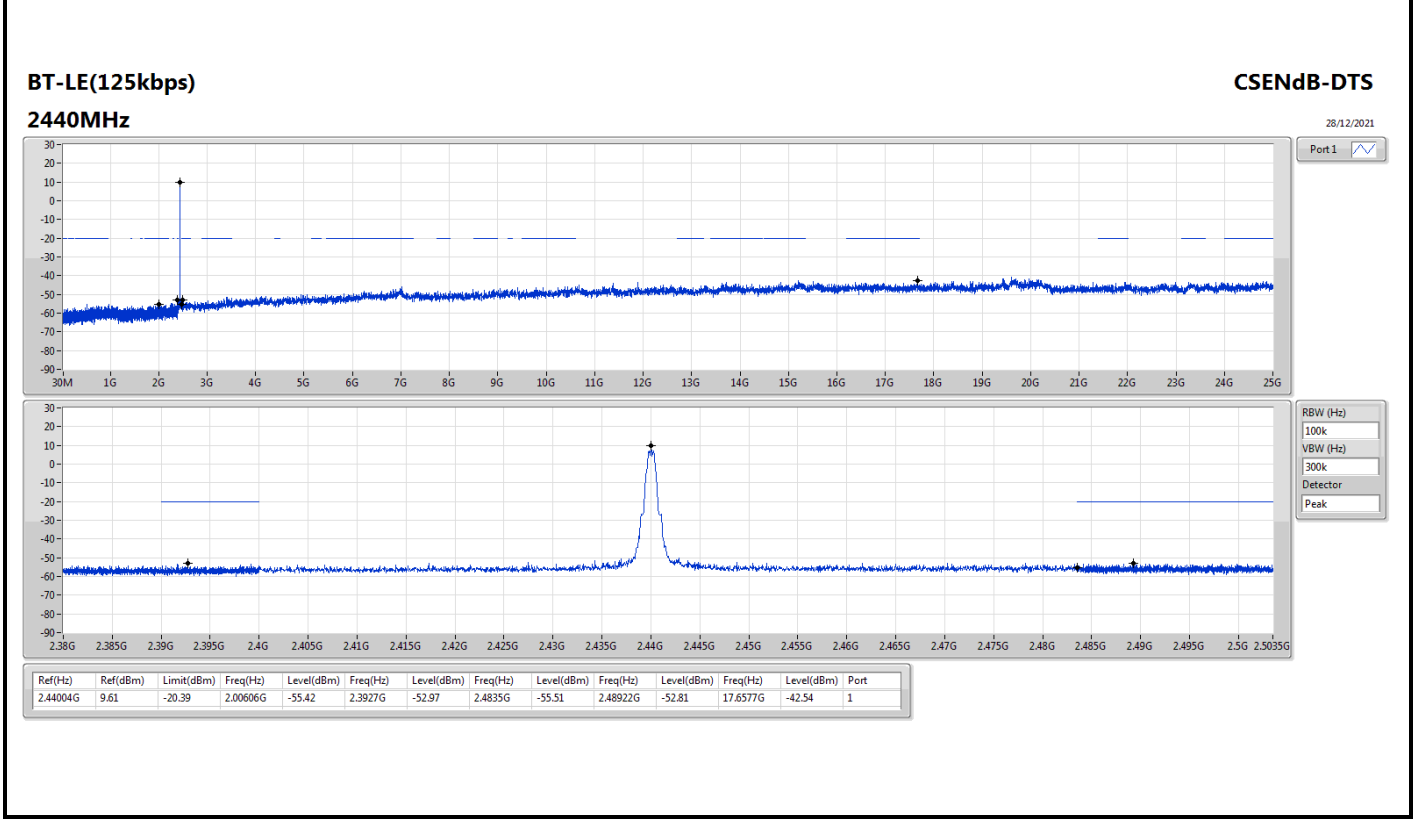
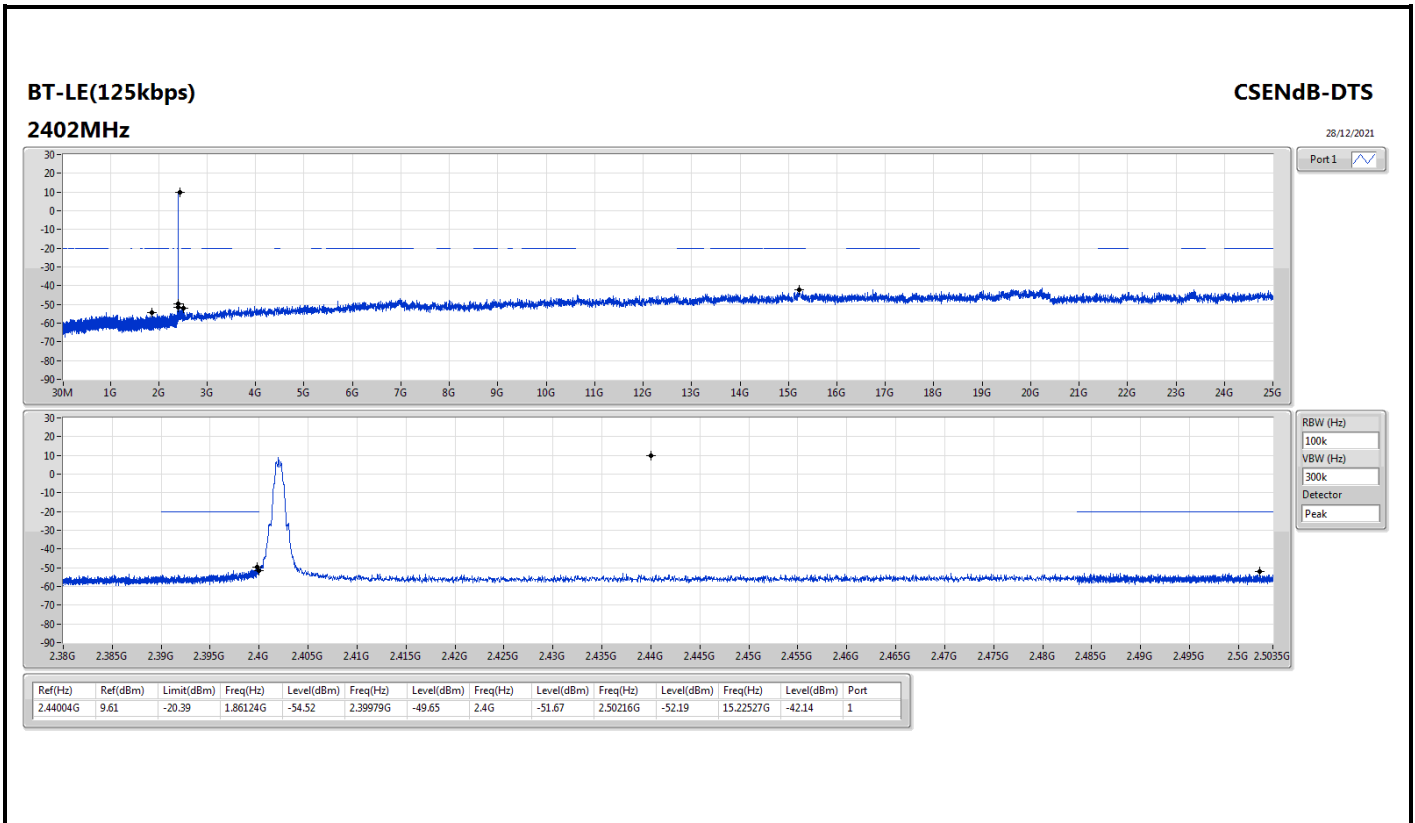
Result

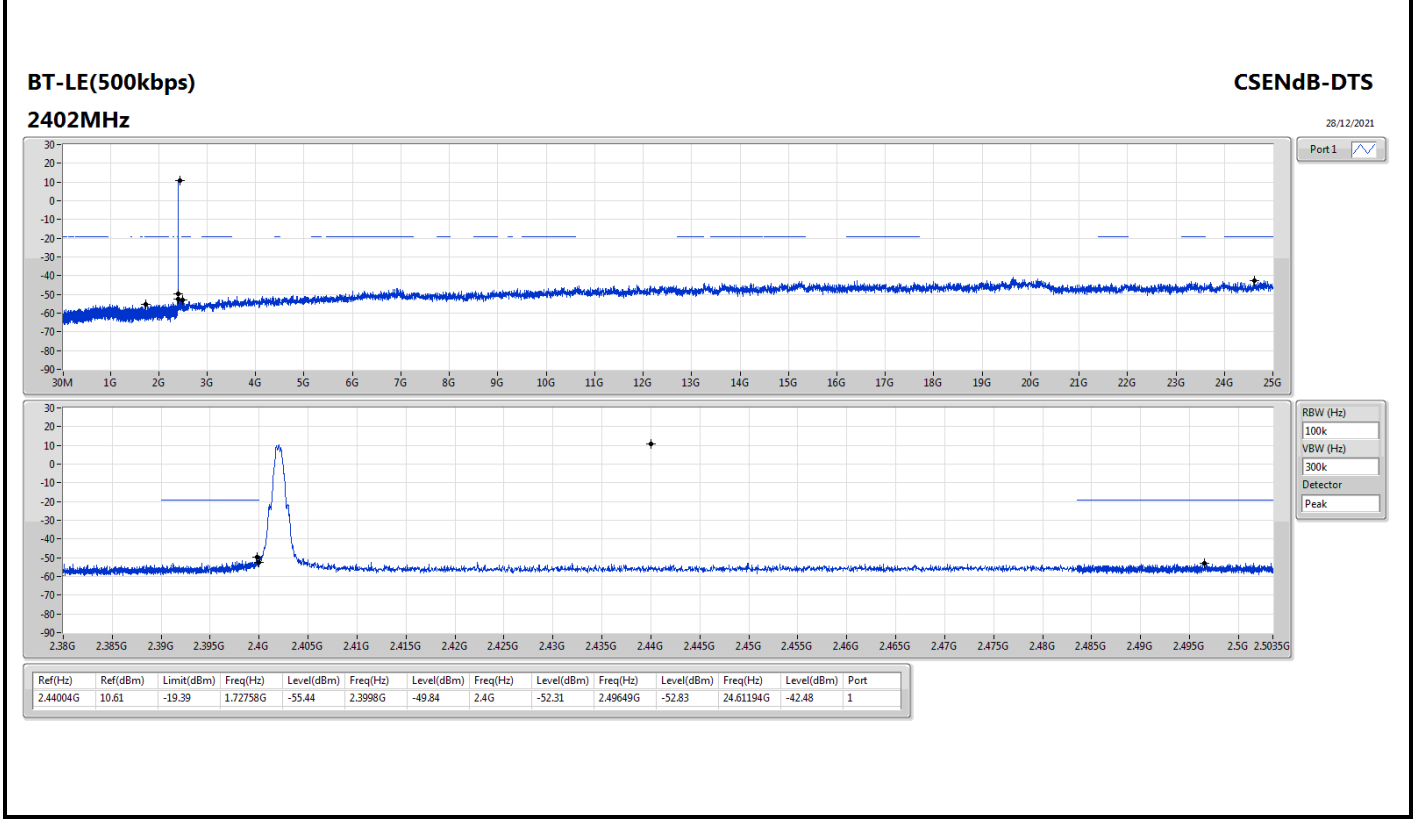
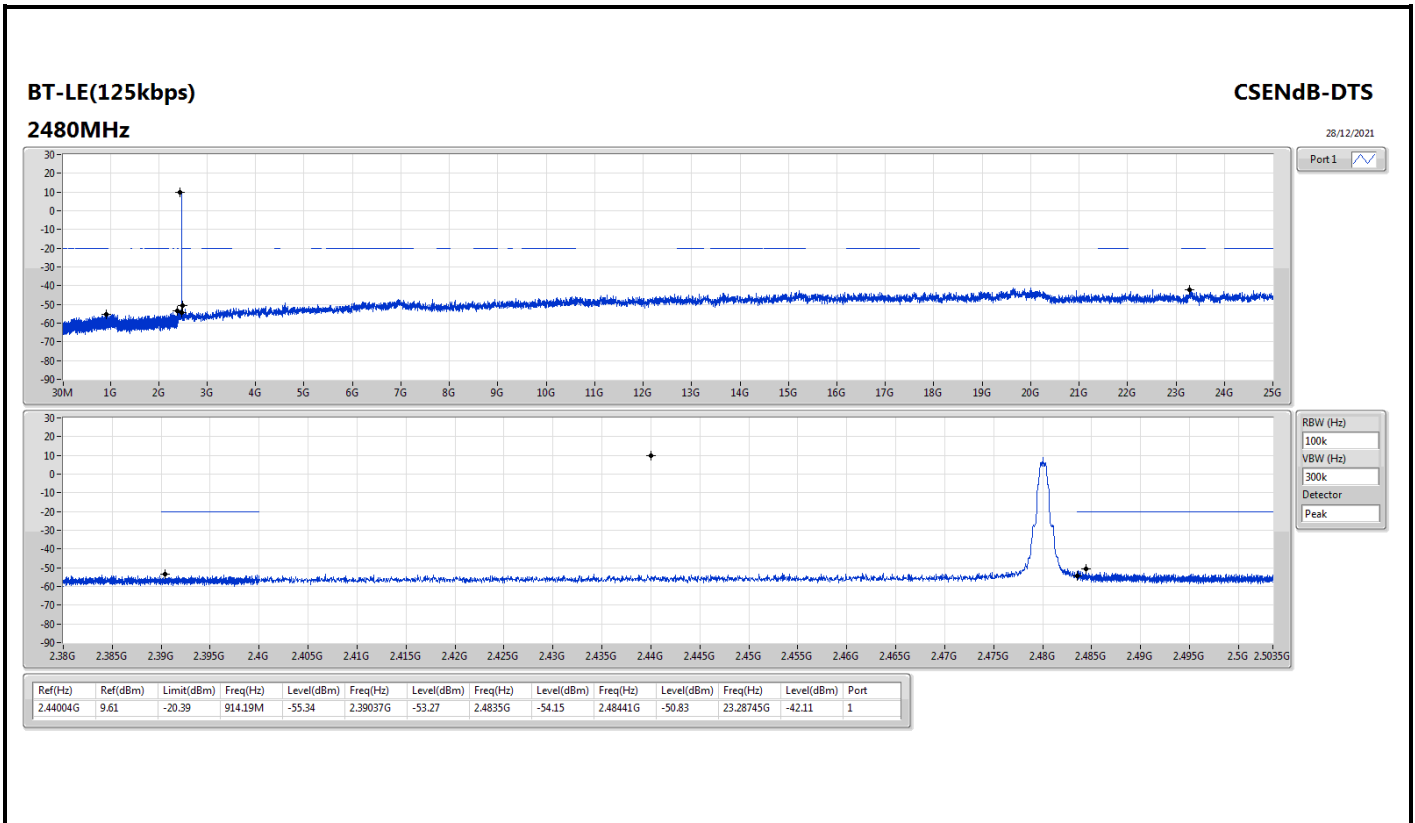
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
BT-LE(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.44004G	10.33	-19.67	2.1168G	-54.37	2.39997G	-49.52	2.4G	-51.16	2.50014G	-52.30	17.56772G	-42.60	1
2440MHz	Pass	2.44004G	10.33	-19.67	2.1027G	-55.49	2.39995G	-53.11	2.4G	-56.54	2.49925G	-52.44	23.38588G	-42.45	1
2480MHz	Pass	2.44004G	10.33	-19.67	2.13648G	-54.10	2.39919G	-53.43	2.4835G	-52.37	2.48397G	-51.41	15.27026G	-42.04	1
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.44004G	10.55	-19.45	2.30245G	-54.78	2.39999G	-23.75	2.4G	-22.64	2.50008G	-52.37	24.79472G	-43.11	1
2440MHz	Pass	2.44004G	10.55	-19.45	783.47M	-55.20	2.39678G	-53.58	2.4G	-56.55	2.49309G	-51.91	15.21965G	-41.79	1
2480MHz	Pass	2.44004G	10.55	-19.45	952.38M	-54.07	2.39928G	-52.33	2.4835G	-53.01	2.48356G	-50.63	16.3754G	-42.60	1
BT-LE(125kbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.44004G	9.61	-20.39	1.86124G	-54.52	2.39979G	-49.65	2.4G	-51.67	2.50216G	-52.19	15.22527G	-42.14	1
2440MHz	Pass	2.44004G	9.61	-20.39	2.00606G	-55.42	2.3927G	-52.97	2.4835G	-55.51	2.48922G	-52.81	17.6577G	-42.54	1
2480MHz	Pass	2.44004G	9.61	-20.39	914.19M	-55.34	2.39037G	-53.27	2.4835G	-54.15	2.48441G	-50.83	23.28745G	-42.11	1
BT-LE(500kbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.44004G	10.61	-19.39	1.72758G	-55.44	2.3998G	-49.84	2.4G	-52.31	2.49649G	-52.83	24.61194G	-42.48	1
2440MHz	Pass	2.44004G	10.61	-19.39	853.68M	-55.01	2.39713G	-53.51	2.4G	-56.00	2.49256G	-52.84	24.68224G	-43.24	1
2480MHz	Pass	2.44004G	10.61	-19.39	2.13707G	-55.27	2.39954G	-53.43	2.4835G	-54.06	2.48369G	-50.40	15.23371G	-41.64	1

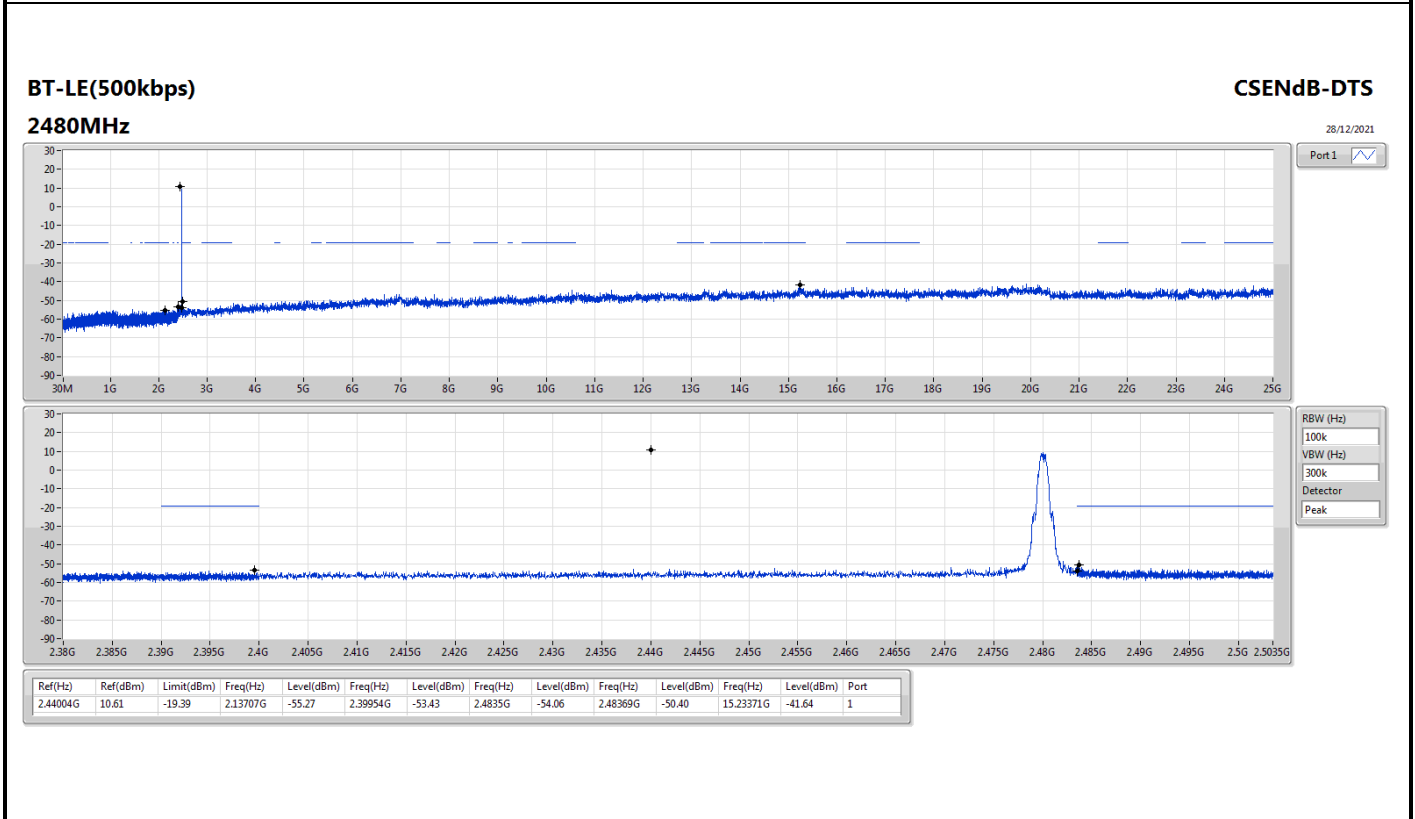
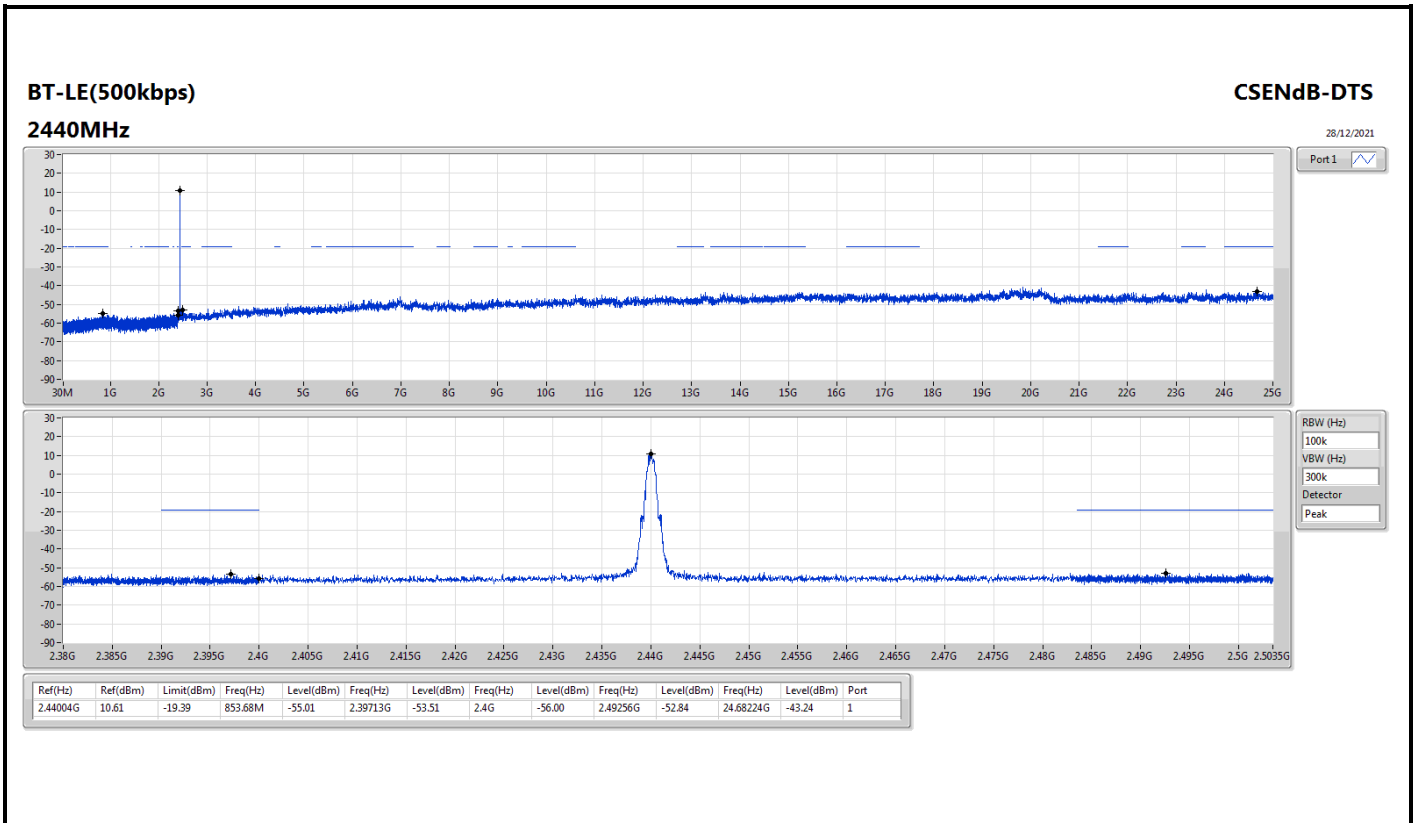














Summary

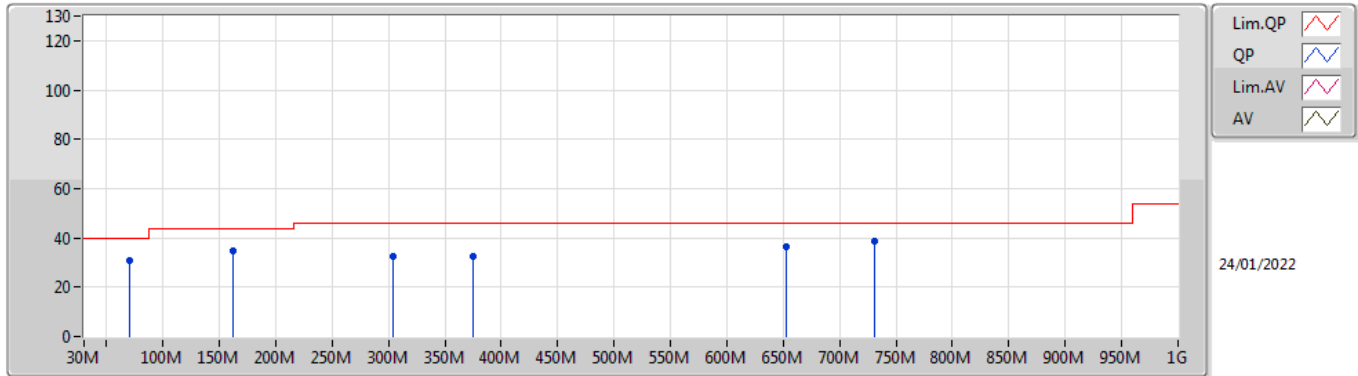
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
BT-LE(2Mbps)	Pass	PK	743.92M	40.71	46.00	-5.29	3	Horizontal	360	1.00	-



Result

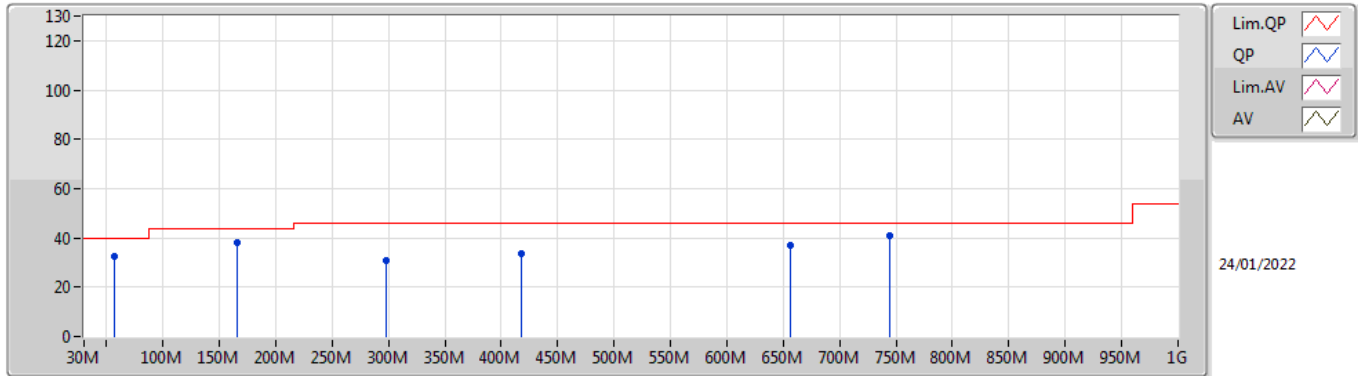
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-	-
2440MHz	Pass	PK	70.74M	30.96	40.00	-9.04	3	Vertical	0	1.00	-
2440MHz	Pass	PK	161.92M	34.83	43.50	-8.67	3	Vertical	0	1.00	-
2440MHz	Pass	PK	303.54M	32.28	46.00	-13.72	3	Vertical	0	1.00	-
2440MHz	Pass	PK	375.32M	32.77	46.00	-13.23	3	Vertical	0	1.00	-
2440MHz	Pass	PK	652.74M	36.18	46.00	-9.82	3	Vertical	0	1.00	-
2440MHz	Pass	PK	730.34M	38.64	46.00	-7.36	3	Vertical	0	1.00	-
2440MHz	Pass	PK	57.16M	32.54	40.00	-7.46	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	165.8M	38.20	43.50	-5.30	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	297.72M	30.74	46.00	-15.26	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	418M	33.53	46.00	-12.47	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	656.62M	36.90	46.00	-9.10	3	Horizontal	360	1.00	-
2440MHz	Pass	PK	743.92M	40.71	46.00	-5.29	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	70.74M	30.96	40.00	-9.04	-15.29	3	Vertical	0	1.00	-	46.25	11.35	1.23	27.87
PK	161.92M	34.83	43.50	-8.67	-10.63	3	Vertical	0	1.00	-	45.46	15.10	1.78	27.51
PK	303.54M	32.28	46.00	-13.72	-6.24	3	Vertical	0	1.00	-	38.52	18.47	2.37	27.08
PK	375.32M	32.77	46.00	-13.23	-4.84	3	Vertical	0	1.00	-	37.61	20.07	2.65	27.56
PK	652.74M	36.18	46.00	-9.82	-0.56	3	Vertical	0	1.00	-	36.74	24.18	3.46	28.20
PK	730.34M	38.64	46.00	-7.36	0.20	3	Vertical	0	1.00	-	38.44	24.68	3.66	28.14

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	57.16M	32.54	40.00	-7.46	-14.80	3	Horizontal	360	1.00	-	47.34	11.83	1.12	27.75
PK	165.8M	38.20	43.50	-5.30	-10.62	3	Horizontal	360	1.00	-	48.82	15.08	1.80	27.50
PK	297.72M	30.74	46.00	-15.26	-6.42	3	Horizontal	360	1.00	-	37.16	18.29	2.35	27.06
PK	418M	33.53	46.00	-12.47	-3.31	3	Horizontal	360	1.00	-	36.84	21.77	2.80	27.88
PK	656.62M	36.90	46.00	-9.10	-0.56	3	Horizontal	360	1.00	-	37.46	24.18	3.47	28.21
PK	743.92M	40.71	46.00	-5.29	0.46	3	Horizontal	360	1.00	-	40.25	24.86	3.69	28.09



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(125kbps)	Pass	AV	2.4835G	48.27	54.00	-5.73	3	Vertical	333	1.34	-
BT-LE(500kbps)	Pass	AV	2.4836G	48.32	54.00	-5.68	3	Vertical	332	1.35	-
BT-LE(1Mbps)	Pass	AV	2.4838G	48.96	54.00	-5.04	3	Vertical	332	1.35	-
BT-LE(2Mbps)	Pass	AV	2.4835G	52.29	54.00	-1.71	3	Vertical	333	1.34	-



Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-LE(125kbps)	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3892G	46.83	54.00	-7.17	3	Vertical	12	1.08	-
2402MHz	Pass	AV	2.402G	109.01	Inf	-Inf	3	Vertical	12	1.08	-
2402MHz	Pass	PK	2.3862G	56.91	74.00	-17.09	3	Vertical	12	1.08	-
2402MHz	Pass	PK	2.402G	109.87	Inf	-Inf	3	Vertical	12	1.08	-
2402MHz	Pass	AV	2.353G	47.00	54.00	-7.00	3	Horizontal	263	1.12	-
2402MHz	Pass	AV	2.402G	102.73	Inf	-Inf	3	Horizontal	263	1.12	-
2402MHz	Pass	PK	2.3786G	57.41	74.00	-16.59	3	Horizontal	263	1.12	-
2402MHz	Pass	PK	2.4022G	103.61	Inf	-Inf	3	Horizontal	263	1.12	-
2402MHz	Pass	AV	4.80429G	37.13	54.00	-16.87	3	Vertical	308	1.50	-
2402MHz	Pass	PK	4.80419G	46.67	74.00	-27.33	3	Vertical	308	1.50	-
2402MHz	Pass	AV	4.80377G	35.01	54.00	-18.99	3	Horizontal	165	1.50	-
2402MHz	Pass	PK	4.80218G	45.26	74.00	-28.74	3	Horizontal	165	1.50	-
2440MHz	Pass	AV	2.3812G	46.78	54.00	-7.22	3	Vertical	334	1.40	-
2440MHz	Pass	AV	2.44G	108.97	Inf	-Inf	3	Vertical	334	1.40	-
2440MHz	Pass	AV	2.492G	47.04	54.00	-6.96	3	Vertical	334	1.40	-
2440MHz	Pass	PK	2.3708G	57.71	74.00	-16.29	3	Vertical	334	1.40	-
2440MHz	Pass	PK	2.4396G	109.80	Inf	-Inf	3	Vertical	334	1.40	-
2440MHz	Pass	PK	2.4884G	57.17	74.00	-16.83	3	Vertical	334	1.40	-
2440MHz	Pass	AV	2.3704G	46.76	54.00	-7.24	3	Horizontal	262	1.32	-
2440MHz	Pass	AV	2.44G	102.90	Inf	-Inf	3	Horizontal	262	1.32	-
2440MHz	Pass	AV	2.5G	46.98	54.00	-7.02	3	Horizontal	262	1.32	-
2440MHz	Pass	PK	2.3816G	56.34	74.00	-17.66	3	Horizontal	262	1.32	-
2440MHz	Pass	PK	2.4396G	103.76	Inf	-Inf	3	Horizontal	262	1.32	-
2440MHz	Pass	PK	2.4864G	56.85	74.00	-17.15	3	Horizontal	262	1.32	-
2440MHz	Pass	AV	4.87969G	38.33	54.00	-15.67	3	Vertical	19	1.74	-
2440MHz	Pass	PK	4.87944G	46.89	74.00	-27.11	3	Vertical	19	1.74	-
2440MHz	Pass	AV	4.88238G	34.50	54.00	-19.50	3	Horizontal	125	2.28	-
2440MHz	Pass	PK	4.87786G	44.95	74.00	-29.05	3	Horizontal	125	2.28	-
2480MHz	Pass	AV	2.48G	108.99	Inf	-Inf	3	Vertical	333	1.34	-
2480MHz	Pass	AV	2.4835G	48.27	54.00	-5.73	3	Vertical	333	1.34	-
2480MHz	Pass	PK	2.4798G	109.82	Inf	-Inf	3	Vertical	333	1.34	-
2480MHz	Pass	PK	2.4836G	57.19	74.00	-16.81	3	Vertical	333	1.34	-
2480MHz	Pass	AV	2.48G	103.40	Inf	-Inf	3	Horizontal	261	1.06	-
2480MHz	Pass	AV	2.4846G	47.43	54.00	-6.57	3	Horizontal	261	1.06	-
2480MHz	Pass	PK	2.4802G	104.24	Inf	-Inf	3	Horizontal	261	1.06	-
2480MHz	Pass	PK	2.4888G	57.33	74.00	-16.67	3	Horizontal	261	1.06	-
2480MHz	Pass	AV	4.96027G	39.91	54.00	-14.09	3	Vertical	285	2.04	-
2480MHz	Pass	PK	4.96046G	48.43	74.00	-25.57	3	Vertical	285	2.04	-
2480MHz	Pass	AV	4.96027G	34.59	54.00	-19.41	3	Horizontal	166	1.50	-
2480MHz	Pass	PK	4.96012G	44.62	74.00	-29.38	3	Horizontal	166	1.50	-
BT-LE(500kbps)	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3728G	46.85	54.00	-7.15	3	Vertical	14	1.50	-
2402MHz	Pass	AV	2.402G	108.67	Inf	-Inf	3	Vertical	14	1.50	-
2402MHz	Pass	PK	2.3762G	56.87	74.00	-17.13	3	Vertical	14	1.50	-
2402MHz	Pass	PK	2.402G	109.65	Inf	-Inf	3	Vertical	14	1.50	-
2402MHz	Pass	AV	2.357G	46.83	54.00	-7.17	3	Horizontal	263	1.17	-
2402MHz	Pass	AV	2.402G	102.54	Inf	-Inf	3	Horizontal	263	1.17	-
2402MHz	Pass	PK	2.3744G	57.93	74.00	-16.07	3	Horizontal	263	1.17	-
2402MHz	Pass	PK	2.4022G	103.30	Inf	-Inf	3	Horizontal	263	1.17	-
2402MHz	Pass	AV	4.8038G	37.42	54.00	-16.58	3	Vertical	8	1.58	-
2402MHz	Pass	PK	4.80351G	47.16	74.00	-26.84	3	Vertical	8	1.58	-
2402MHz	Pass	AV	4.80348G	34.86	54.00	-19.14	3	Horizontal	309	1.32	-
2402MHz	Pass	PK	4.80306G	45.10	74.00	-28.90	3	Horizontal	309	1.32	-
2440MHz	Pass	AV	2.3592G	46.77	54.00	-7.23	3	Vertical	17	1.42	-
2440MHz	Pass	AV	2.44G	108.96	Inf	-Inf	3	Vertical	17	1.42	-
2440MHz	Pass	AV	2.4944G	47.08	54.00	-6.92	3	Vertical	17	1.42	-
2440MHz	Pass	PK	2.3584G	56.95	74.00	-17.05	3	Vertical	17	1.42	-
2440MHz	Pass	PK	2.4396G	109.89	Inf	-Inf	3	Vertical	17	1.42	-
2440MHz	Pass	PK	2.4912G	56.14	74.00	-17.86	3	Vertical	17	1.42	-
2440MHz	Pass	AV	2.3512G	46.83	54.00	-7.17	3	Horizontal	263	1.31	-



RSE TX above 1GHz

Appendix F.2

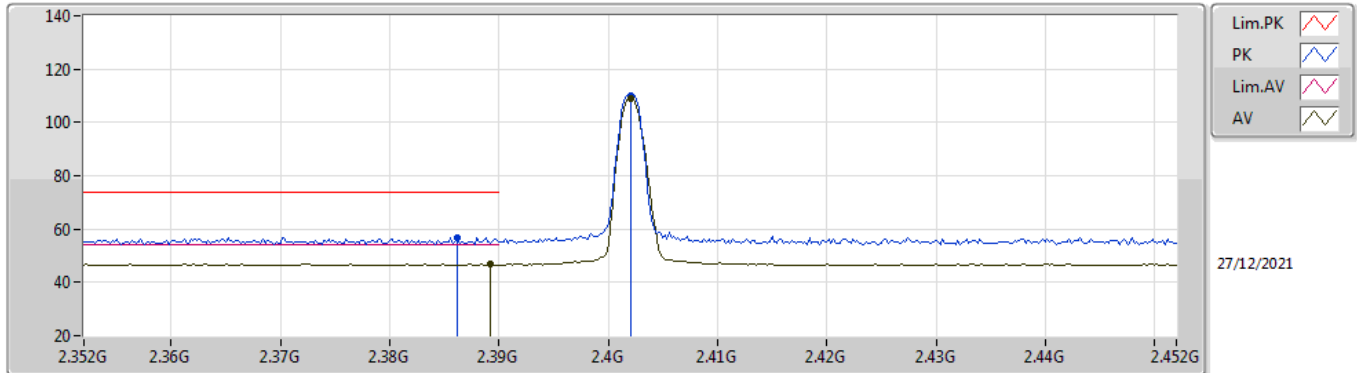
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2440MHz	Pass	AV	2.44G	102.97	Inf	-Inf	3	Horizontal	263	1.31	-
2440MHz	Pass	AV	2.4964G	47.17	54.00	-6.83	3	Horizontal	263	1.31	-
2440MHz	Pass	PK	2.3556G	57.35	74.00	-16.65	3	Horizontal	263	1.31	-
2440MHz	Pass	PK	2.4396G	103.71	Inf	-Inf	3	Horizontal	263	1.31	-
2440MHz	Pass	PK	2.4852G	57.24	74.00	-16.76	3	Horizontal	263	1.31	-
2440MHz	Pass	AV	4.87974G	39.01	54.00	-14.99	3	Vertical	324	1.39	-
2440MHz	Pass	PK	4.87957G	47.33	74.00	-26.67	3	Vertical	324	1.39	-
2440MHz	Pass	AV	4.87923G	34.05	54.00	-19.95	3	Horizontal	305	2.65	-
2440MHz	Pass	PK	4.87962G	44.42	74.00	-29.58	3	Horizontal	305	2.65	-
2480MHz	Pass	AV	2.48G	109.32	Inf	-Inf	3	Vertical	332	1.35	-
2480MHz	Pass	AV	2.4836G	48.32	54.00	-5.68	3	Vertical	332	1.35	-
2480MHz	Pass	PK	2.4798G	109.98	Inf	-Inf	3	Vertical	332	1.35	-
2480MHz	Pass	PK	2.4898G	57.22	74.00	-16.78	3	Vertical	332	1.35	-
2480MHz	Pass	AV	2.48G	103.70	Inf	-Inf	3	Horizontal	261	1.06	-
2480MHz	Pass	AV	2.4838G	47.34	54.00	-6.66	3	Horizontal	261	1.06	-
2480MHz	Pass	PK	2.4802G	104.35	Inf	-Inf	3	Horizontal	261	1.06	-
2480MHz	Pass	PK	2.4878G	56.61	74.00	-17.39	3	Horizontal	261	1.06	-
2480MHz	Pass	AV	4.96041G	39.68	54.00	-14.32	3	Vertical	355	1.55	-
2480MHz	Pass	PK	4.96046G	48.13	74.00	-25.87	3	Vertical	355	1.55	-
2480MHz	Pass	AV	4.96083G	34.86	54.00	-19.14	3	Horizontal	316	1.50	-
2480MHz	Pass	PK	4.96052G	45.51	74.00	-28.49	3	Horizontal	316	1.50	-
BT-LE(1Mbps)	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3566G	47.88	54.00	-6.12	3	Vertical	326	1.06	-
2402MHz	Pass	AV	2.402G	108.87	Inf	-Inf	3	Vertical	326	1.06	-
2402MHz	Pass	PK	2.3832G	57.45	74.00	-16.55	3	Vertical	326	1.06	-
2402MHz	Pass	PK	2.4022G	109.49	Inf	-Inf	3	Vertical	326	1.06	-
2402MHz	Pass	AV	2.3664G	47.56	54.00	-6.44	3	Horizontal	270	2.75	-
2402MHz	Pass	AV	2.4022G	103.23	Inf	-Inf	3	Horizontal	270	2.75	-
2402MHz	Pass	PK	2.3552G	56.64	74.00	-17.36	3	Horizontal	270	2.75	-
2402MHz	Pass	PK	2.4022G	103.76	Inf	-Inf	3	Horizontal	270	2.75	-
2402MHz	Pass	AV	4.8039G	38.05	54.00	-15.95	3	Vertical	308	2.12	-
2402MHz	Pass	PK	4.8045G	46.40	74.00	-27.60	3	Vertical	308	2.12	-
2402MHz	Pass	AV	4.80264G	35.76	54.00	-18.24	3	Horizontal	167	1.50	-
2402MHz	Pass	PK	4.80551G	45.34	74.00	-28.66	3	Horizontal	167	1.50	-
2440MHz	Pass	AV	2.3668G	47.71	54.00	-6.29	3	Vertical	158	1.37	-
2440MHz	Pass	AV	2.44G	108.92	Inf	-Inf	3	Vertical	158	1.37	-
2440MHz	Pass	AV	2.4948G	47.73	54.00	-6.27	3	Vertical	158	1.37	-
2440MHz	Pass	PK	2.356G	56.90	74.00	-17.10	3	Vertical	158	1.37	-
2440MHz	Pass	PK	2.4396G	109.47	Inf	-Inf	3	Vertical	158	1.37	-
2440MHz	Pass	PK	2.4936G	56.84	74.00	-17.16	3	Vertical	158	1.37	-
2440MHz	Pass	AV	2.3548G	47.54	54.00	-6.46	3	Horizontal	271	3.00	-
2440MHz	Pass	AV	2.44G	102.25	Inf	-Inf	3	Horizontal	271	3.00	-
2440MHz	Pass	AV	2.486G	47.76	54.00	-6.24	3	Horizontal	271	3.00	-
2440MHz	Pass	PK	2.3604G	56.80	74.00	-17.20	3	Horizontal	271	3.00	-
2440MHz	Pass	PK	2.4396G	102.78	Inf	-Inf	3	Horizontal	271	3.00	-
2440MHz	Pass	PK	2.494G	57.03	74.00	-16.97	3	Horizontal	271	3.00	-
2440MHz	Pass	AV	4.87983G	40.01	54.00	-13.99	3	Vertical	348	1.28	-
2440MHz	Pass	PK	4.87959G	47.81	74.00	-26.19	3	Vertical	348	1.28	-
2440MHz	Pass	AV	4.8795G	34.56	54.00	-19.44	3	Horizontal	291	3.00	-
2440MHz	Pass	PK	4.88088G	45.06	74.00	-28.94	3	Horizontal	291	3.00	-
2480MHz	Pass	AV	2.48G	109.30	Inf	-Inf	3	Vertical	332	1.35	-
2480MHz	Pass	AV	2.4838G	48.96	54.00	-5.04	3	Vertical	332	1.35	-
2480MHz	Pass	PK	2.4798G	109.89	Inf	-Inf	3	Vertical	332	1.35	-
2480MHz	Pass	PK	2.4838G	57.59	74.00	-16.41	3	Vertical	332	1.35	-
2480MHz	Pass	AV	2.4802G	103.65	Inf	-Inf	3	Horizontal	261	1.06	-
2480MHz	Pass	AV	2.484G	47.79	54.00	-6.21	3	Horizontal	261	1.06	-
2480MHz	Pass	PK	2.4802G	104.26	Inf	-Inf	3	Horizontal	261	1.06	-
2480MHz	Pass	PK	2.4864G	57.24	74.00	-16.76	3	Horizontal	261	1.06	-
2480MHz	Pass	AV	4.96023G	40.53	54.00	-13.47	3	Vertical	286	2.04	-
2480MHz	Pass	PK	4.96025G	48.47	74.00	-25.53	3	Vertical	286	2.04	-
2480MHz	Pass	AV	4.9605G	35.31	54.00	-18.69	3	Horizontal	265	1.40	-
2480MHz	Pass	PK	4.96029G	45.53	74.00	-28.47	3	Horizontal	265	1.40	-



Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.373G	49.22	54.00	-4.78	3	Vertical	140	1.08	-
2402MHz	Pass	AV	2.402G	108.16	Inf	-Inf	3	Vertical	140	1.08	-
2402MHz	Pass	PK	2.3586G	57.50	74.00	-16.50	3	Vertical	140	1.08	-
2402MHz	Pass	PK	2.4026G	107.45	Inf	-Inf	3	Vertical	140	1.08	-
2402MHz	Pass	AV	2.3874G	49.40	54.00	-4.60	3	Horizontal	264	1.13	-
2402MHz	Pass	AV	2.402G	102.45	Inf	-Inf	3	Horizontal	264	1.13	-
2402MHz	Pass	PK	2.365G	57.47	74.00	-16.53	3	Horizontal	264	1.13	-
2402MHz	Pass	PK	2.4026G	103.67	Inf	-Inf	3	Horizontal	264	1.13	-
2402MHz	Pass	AV	4.80493G	38.38	54.00	-15.62	3	Vertical	13	1.50	-
2402MHz	Pass	PK	4.804G	45.84	74.00	-28.16	3	Vertical	13	1.50	-
2402MHz	Pass	AV	4.80217G	36.80	54.00	-17.20	3	Horizontal	172	1.50	-
2402MHz	Pass	PK	4.80213G	45.12	74.00	-28.88	3	Horizontal	172	1.50	-
2440MHz	Pass	AV	2.3472G	49.05	54.00	-4.95	3	Vertical	333	1.40	-
2440MHz	Pass	AV	2.44G	108.82	Inf	-Inf	3	Vertical	333	1.40	-
2440MHz	Pass	AV	2.4964G	48.88	54.00	-5.12	3	Vertical	333	1.40	-
2440MHz	Pass	PK	2.3864G	56.53	74.00	-17.47	3	Vertical	333	1.40	-
2440MHz	Pass	PK	2.44G	110.05	Inf	-Inf	3	Vertical	333	1.40	-
2440MHz	Pass	PK	2.4835G	56.94	74.00	-17.06	3	Vertical	333	1.40	-
2440MHz	Pass	AV	2.3452G	49.19	54.00	-4.81	3	Horizontal	263	1.29	-
2440MHz	Pass	AV	2.44G	102.15	Inf	-Inf	3	Horizontal	263	1.29	-
2440MHz	Pass	AV	2.4844G	49.24	54.00	-4.76	3	Horizontal	263	1.29	-
2440MHz	Pass	PK	2.368G	56.84	74.00	-17.16	3	Horizontal	263	1.29	-
2440MHz	Pass	PK	2.4396G	103.32	Inf	-Inf	3	Horizontal	263	1.29	-
2440MHz	Pass	PK	2.4856G	57.65	74.00	-16.35	3	Horizontal	263	1.29	-
2440MHz	Pass	AV	4.87915G	39.65	54.00	-14.35	3	Vertical	350	1.40	-
2440MHz	Pass	PK	4.88114G	47.63	74.00	-26.37	3	Vertical	350	1.40	-
2440MHz	Pass	AV	4.87815G	36.13	54.00	-17.87	3	Horizontal	189	2.76	-
2440MHz	Pass	PK	4.88246G	44.50	74.00	-29.50	3	Horizontal	189	2.76	-
2480MHz	Pass	AV	2.48G	107.98	Inf	-Inf	3	Vertical	333	1.34	-
2480MHz	Pass	AV	2.4835G	52.29	54.00	-1.71	3	Vertical	333	1.34	-
2480MHz	Pass	PK	2.4796G	108.83	Inf	-Inf	3	Vertical	333	1.34	-
2480MHz	Pass	PK	2.4835G	58.60	74.00	-15.40	3	Vertical	333	1.34	-
2480MHz	Pass	AV	2.48G	102.28	Inf	-Inf	3	Horizontal	262	1.06	-
2480MHz	Pass	AV	2.4835G	49.74	54.00	-4.26	3	Horizontal	262	1.06	-
2480MHz	Pass	PK	2.48G	103.51	Inf	-Inf	3	Horizontal	262	1.06	-
2480MHz	Pass	PK	2.4874G	56.61	74.00	-17.39	3	Horizontal	262	1.06	-
2480MHz	Pass	AV	4.95909G	39.94	54.00	-14.06	3	Vertical	354	1.64	-
2480MHz	Pass	PK	4.95908G	47.44	74.00	-26.56	3	Vertical	354	1.64	-
2480MHz	Pass	AV	4.95942G	36.46	54.00	-17.54	3	Horizontal	86	1.73	-
2480MHz	Pass	PK	4.95984G	44.90	74.00	-29.10	3	Horizontal	86	1.73	-

BT-LE(125kbps)

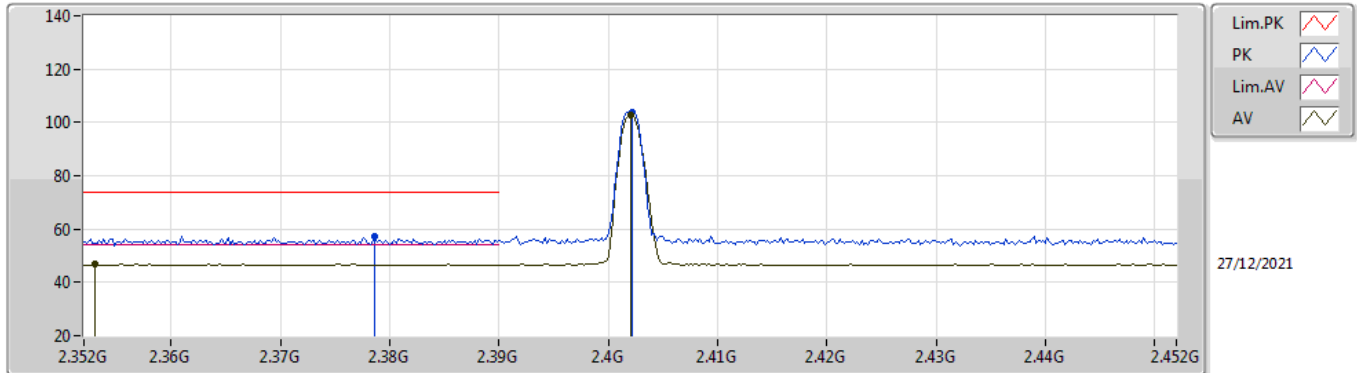
2402MHz_TX



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	2.3892G	46.83	54.00	-7.17	32.21	3	Vertical	12	1.08	-	14.62	27.64	4.57	-
AV	2.402G	109.01	Inf	-Inf	32.18	3	Vertical	12	1.08	-	76.83	27.60	4.58	-
PK	2.3862G	56.91	74.00	-17.09	32.23	3	Vertical	12	1.08	-	24.68	27.66	4.57	-
PK	2.402G	109.87	Inf	-Inf	32.18	3	Vertical	12	1.08	-	77.69	27.60	4.58	-

BT-LE(125kbps)

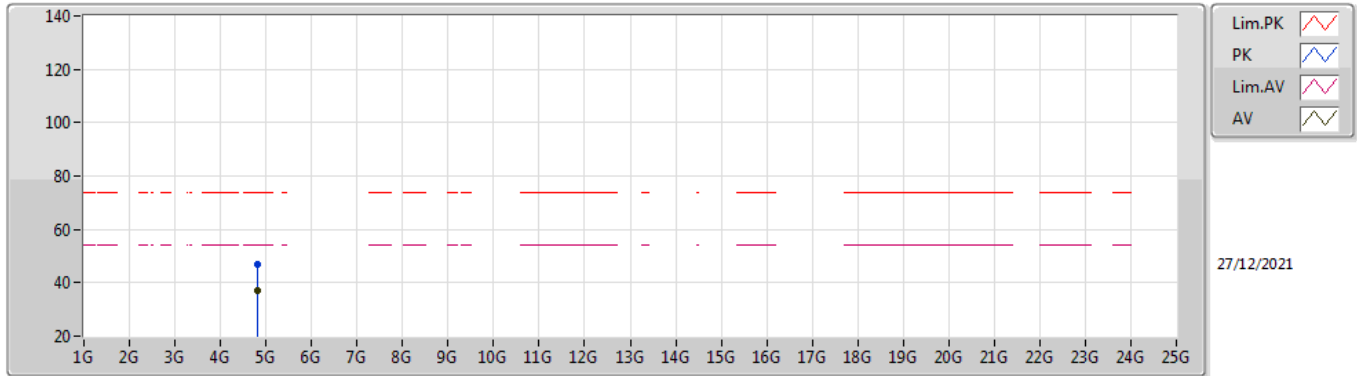
2402MHz_TX



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	2.353G	47.00	54.00	-7.00	32.33	3	Horizontal	263	1.12	-	14.67	27.79	4.54	-
AV	2.402G	102.73	Inf	-Inf	32.18	3	Horizontal	263	1.12	-	70.55	27.60	4.58	-
PK	2.3786G	57.41	74.00	-16.59	32.25	3	Horizontal	263	1.12	-	25.16	27.69	4.56	-
PK	2.4022G	103.61	Inf	-Inf	32.18	3	Horizontal	263	1.12	-	71.43	27.60	4.58	-

BT-LE(125kbps)

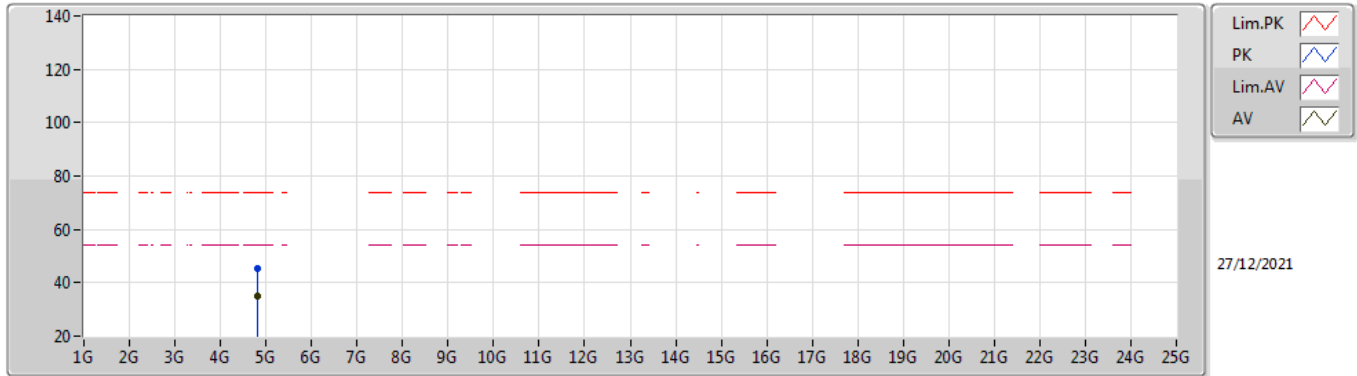
2402MHz_TX



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	4.80429G	37.13	54.00	-16.87	2.95	3	Vertical	308	1.50	-	34.18	31.10	6.66	34.81
PK	4.80419G	46.67	74.00	-27.33	2.95	3	Vertical	308	1.50	-	43.72	31.10	6.66	34.81

BT-LE(125kbps)

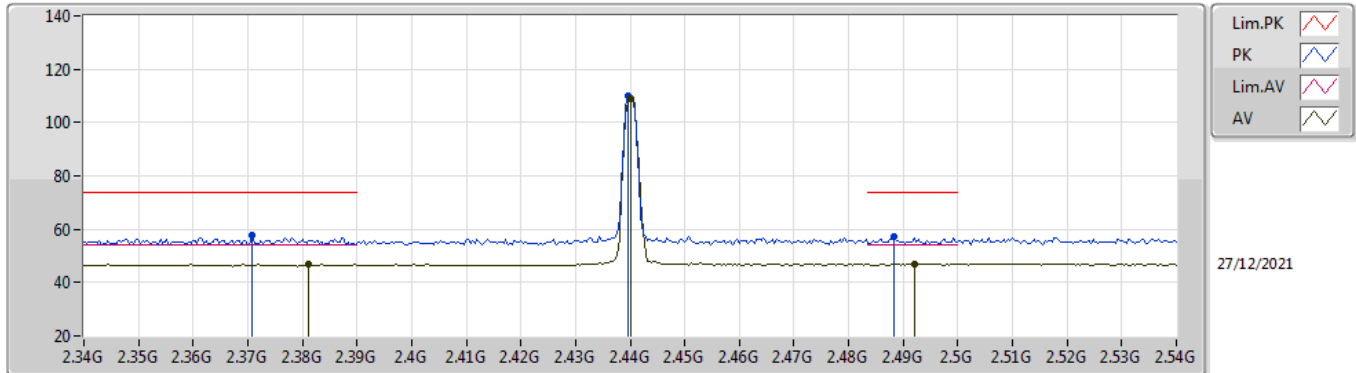
2402MHz_TX



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	4.80377G	35.01	54.00	-18.99	2.95	3	Horizontal	165	1.50	-	32.06	31.10	6.66	34.81
PK	4.80218G	45.26	74.00	-28.74	2.95	3	Horizontal	165	1.50	-	42.31	31.10	6.66	34.81

BT-LE(125kbps)

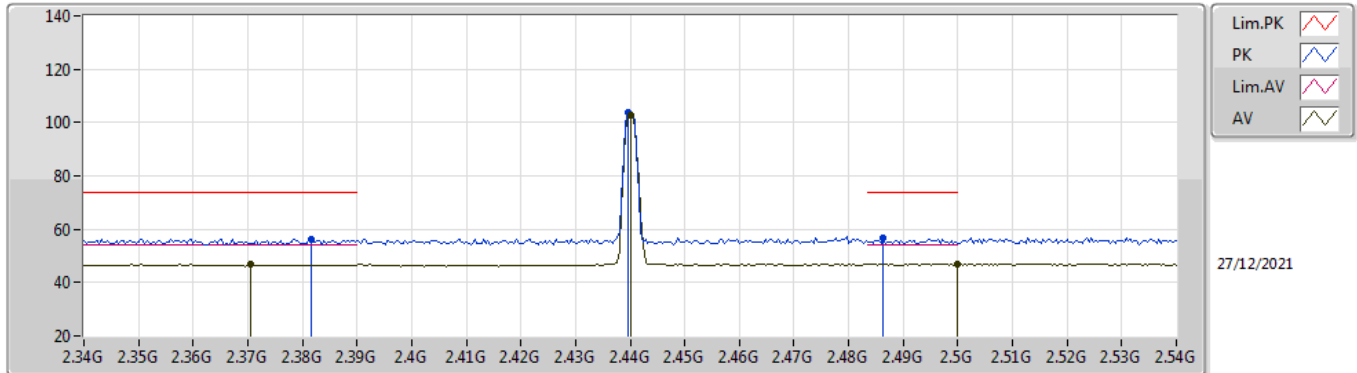
2440MHz_TX



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	2.3812G	46.78	54.00	-7.22	32.24	3	Vertical	334	1.40	-	14.54	27.68	4.56	-
AV	2.44G	108.97	Inf	-Inf	32.12	3	Vertical	334	1.40	-	76.85	27.52	4.60	-
AV	2.492G	47.04	54.00	-6.96	32.12	3	Vertical	334	1.40	-	14.92	27.50	4.62	-
PK	2.3708G	57.71	74.00	-16.29	32.27	3	Vertical	334	1.40	-	25.44	27.72	4.55	-
PK	2.4396G	109.80	Inf	-Inf	32.12	3	Vertical	334	1.40	-	77.68	27.52	4.60	-
PK	2.4884G	57.17	74.00	-16.83	32.12	3	Vertical	334	1.40	-	25.05	27.50	4.62	-

BT-LE(125kbps)

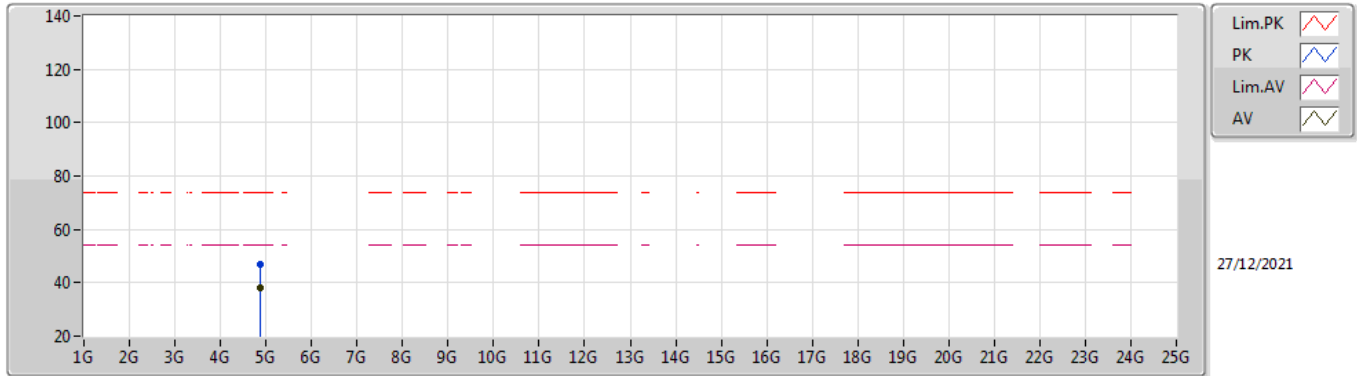
2440MHz_TX



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	2.3704G	46.76	54.00	-7.24	32.27	3	Horizontal	262	1.32	-	14.49	27.72	4.55	-
AV	2.44G	102.90	Inf	-Inf	32.12	3	Horizontal	262	1.32	-	70.78	27.52	4.60	-
AV	2.5G	46.98	54.00	-7.02	32.12	3	Horizontal	262	1.32	-	14.86	27.50	4.62	-
PK	2.3816G	56.34	74.00	-17.66	32.23	3	Horizontal	262	1.32	-	24.11	27.67	4.56	-
PK	2.4396G	103.76	Inf	-Inf	32.12	3	Horizontal	262	1.32	-	71.64	27.52	4.60	-
PK	2.4864G	56.85	74.00	-17.15	32.11	3	Horizontal	262	1.32	-	24.74	27.50	4.61	-

BT-LE(125kbps)

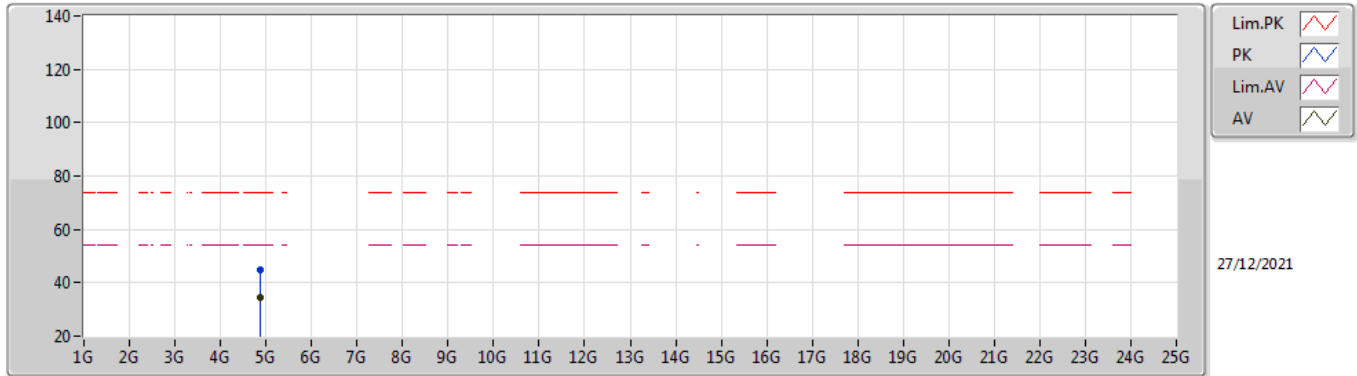
2440MHz_TX



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	4.87969G	38.33	54.00	-15.67	3.03	3	Vertical	19	1.74	-	35.30	31.10	6.72	34.79
PK	4.87944G	46.89	74.00	-27.11	3.03	3	Vertical	19	1.74	-	43.86	31.10	6.72	34.79

BT-LE(125kbps)

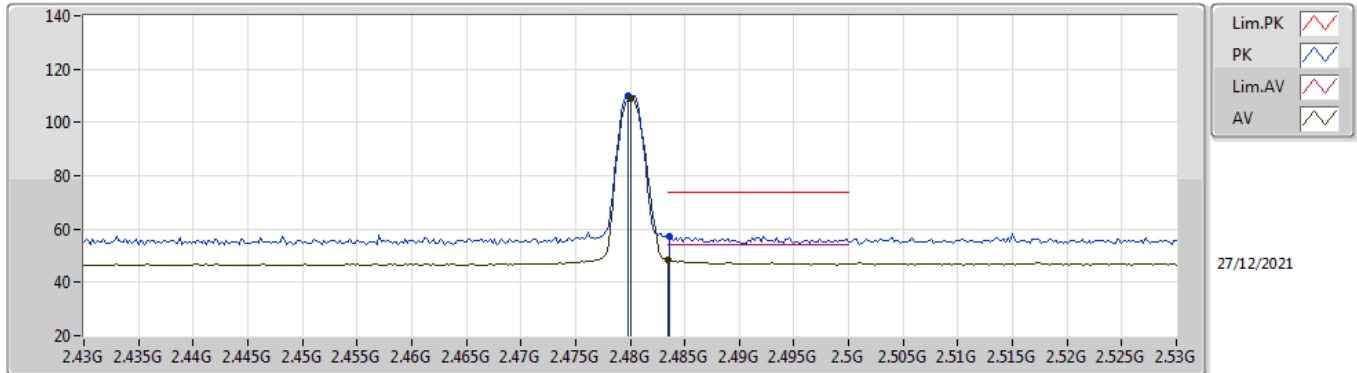
2440MHz_TX



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	4.88238G	34.50	54.00	-19.50	3.03	3	Horizontal	125	2.28	-	31.47	31.10	6.72	34.79
PK	4.87786G	44.95	74.00	-29.05	3.03	3	Horizontal	125	2.28	-	41.92	31.10	6.72	34.79

BT-LE(125kbps)

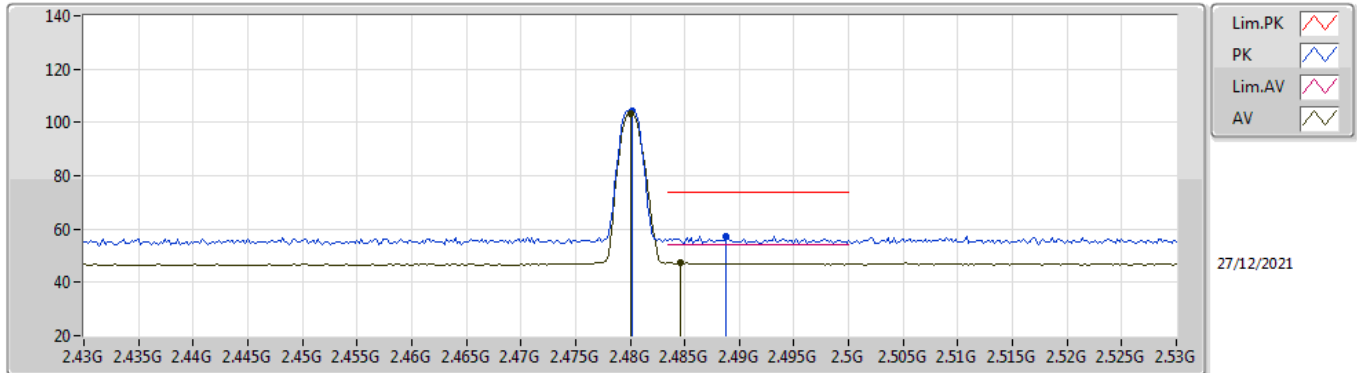
2480MHz_TX



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	108.99	Inf	-Inf	32.11	3	Vertical	333	1.34	-	76.88	27.50	4.61	-
AV	2.4835G	48.27	54.00	-5.73	32.11	3	Vertical	333	1.34	-	16.16	27.50	4.61	-
PK	2.4798G	109.82	Inf	-Inf	32.11	3	Vertical	333	1.34	-	77.71	27.50	4.61	-
PK	2.4836G	57.19	74.00	-16.81	32.11	3	Vertical	333	1.34	-	25.08	27.50	4.61	-

BT-LE(125kbps)

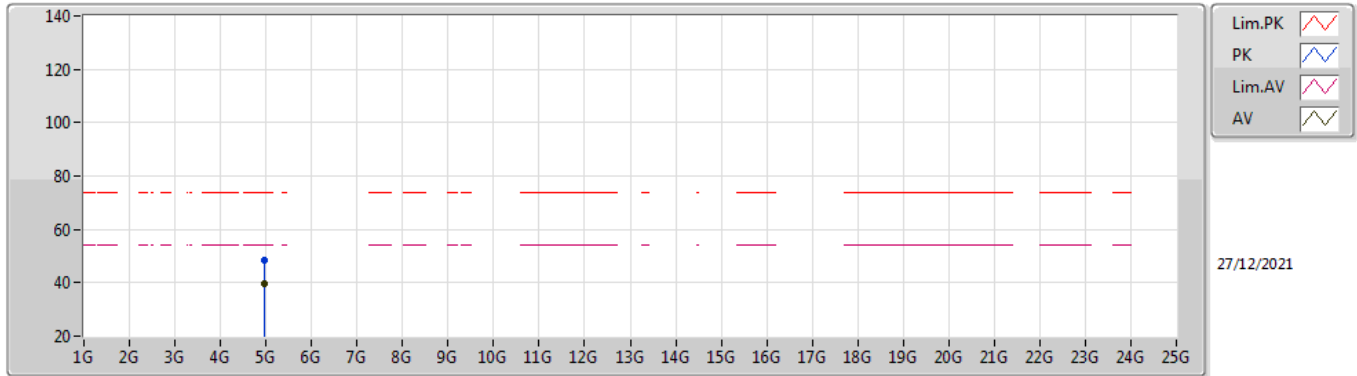
2480MHz_TX



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	103.40	Inf	-Inf	32.11	3	Horizontal	261	1.06	-	71.29	27.50	4.61	-
AV	2.4846G	47.43	54.00	-6.57	32.11	3	Horizontal	261	1.06	-	15.32	27.50	4.61	-
PK	2.4802G	104.24	Inf	-Inf	32.11	3	Horizontal	261	1.06	-	72.13	27.50	4.61	-
PK	2.4888G	57.33	74.00	-16.67	32.12	3	Horizontal	261	1.06	-	25.21	27.50	4.62	-

BT-LE(125kbps)

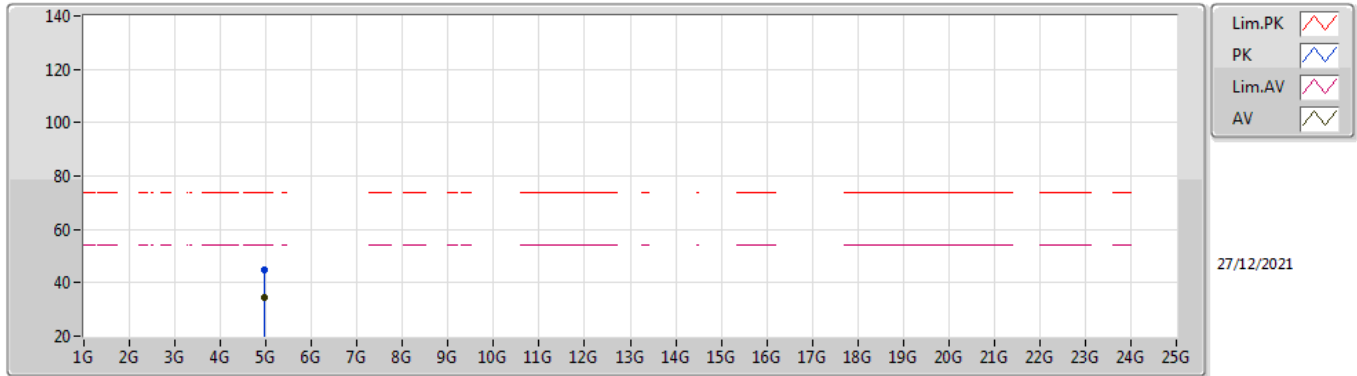
2480MHz_TX



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	4.96027G	39.91	54.00	-14.09	3.35	3	Vertical	285	2.04	-	36.56	31.34	6.78	34.77
PK	4.96046G	48.43	74.00	-25.57	3.35	3	Vertical	285	2.04	-	45.08	31.34	6.78	34.77

BT-LE(125kbps)

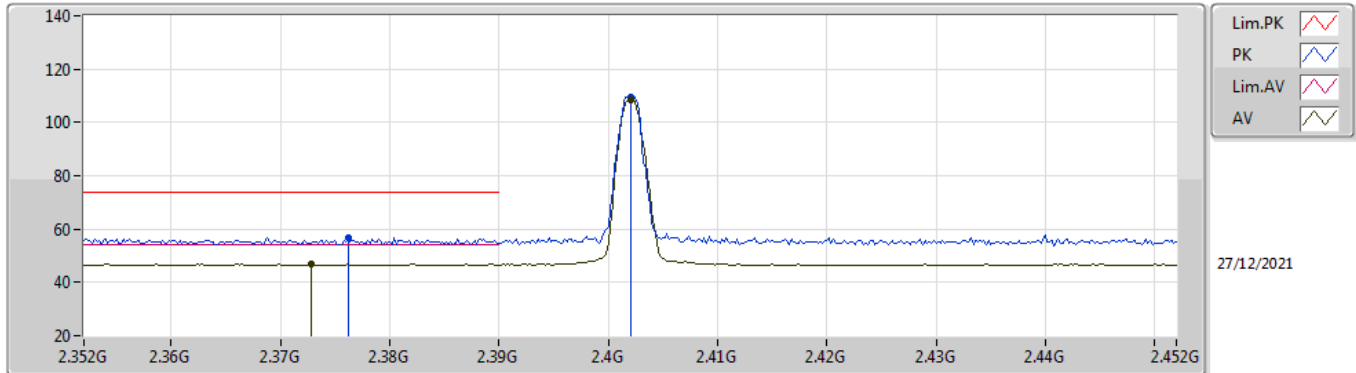
2480MHz_TX



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	4.96027G	34.59	54.00	-19.41	3.35	3	Horizontal	166	1.50	-	31.24	31.34	6.78	34.77
PK	4.96012G	44.62	74.00	-29.38	3.35	3	Horizontal	166	1.50	-	41.27	31.34	6.78	34.77

BT-LE(500kbps)

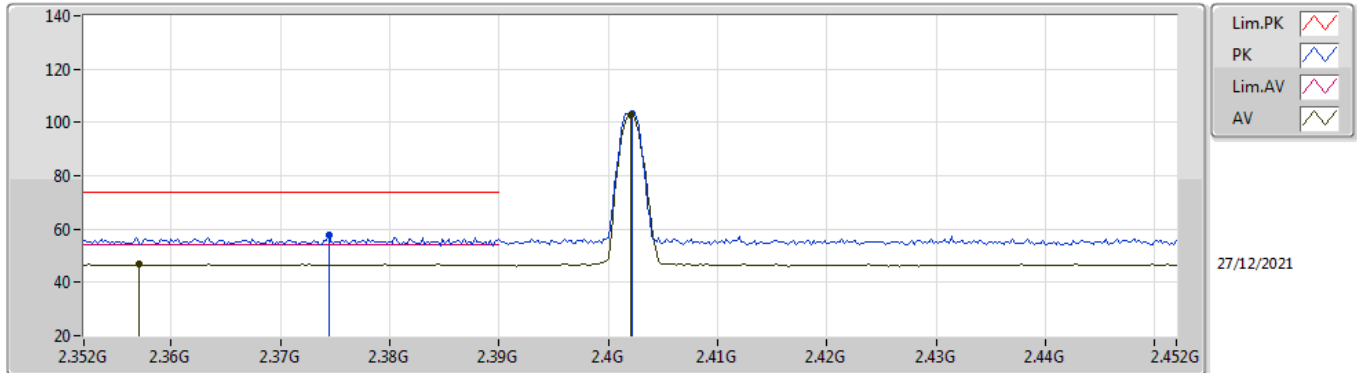
2402MHz_TX



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	2.3728G	46.85	54.00	-7.15	32.26	3	Vertical	14	1.50	-	14.59	27.71	4.55	-
AV	2.402G	108.67	Inf	-Inf	32.18	3	Vertical	14	1.50	-	76.49	27.60	4.58	-
PK	2.3762G	56.87	74.00	-17.13	32.26	3	Vertical	14	1.50	-	24.61	27.70	4.56	-
PK	2.402G	109.65	Inf	-Inf	32.18	3	Vertical	14	1.50	-	77.47	27.60	4.58	-

BT-LE(500kbps)

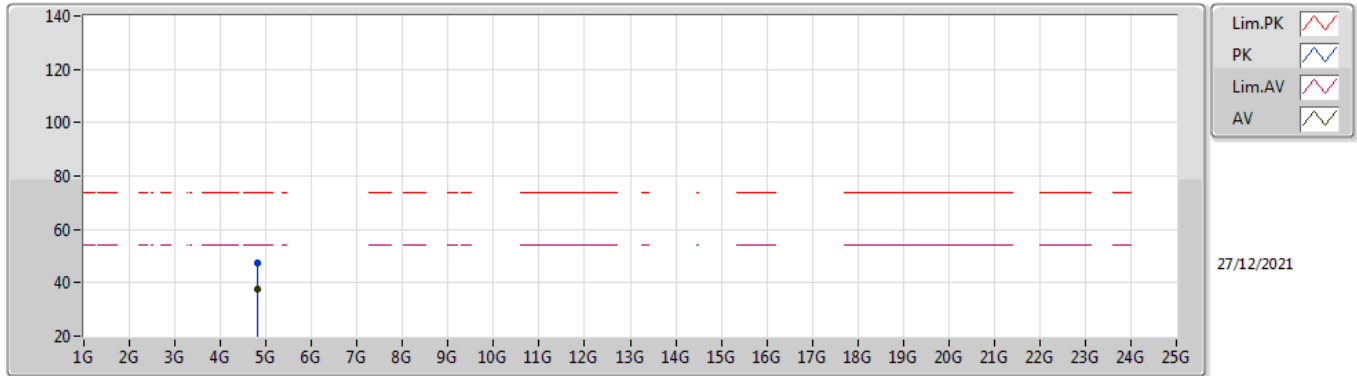
2402MHz_TX



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	2.357G	46.83	54.00	-7.17	32.31	3	Horizontal	263	1.17	-	14.52	27.77	4.54	-
AV	2.402G	102.54	Inf	-Inf	32.18	3	Horizontal	263	1.17	-	70.36	27.60	4.58	-
PK	2.3744G	57.93	74.00	-16.07	32.26	3	Horizontal	263	1.17	-	25.67	27.70	4.56	-
PK	2.4022G	103.30	Inf	-Inf	32.18	3	Horizontal	263	1.17	-	71.12	27.60	4.58	-

BT-LE(500kbps)

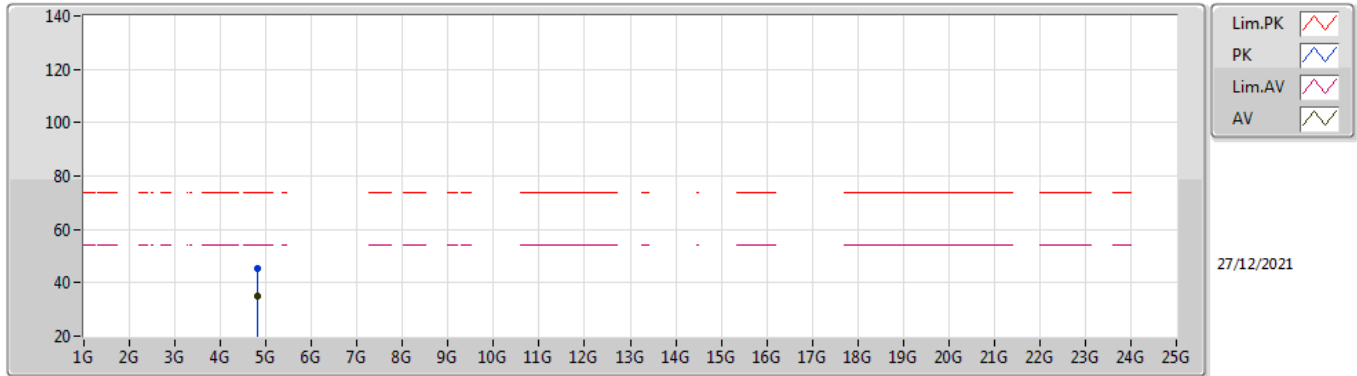
2402MHz_TX



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	4.8038G	37.42	54.00	-16.58	2.95	3	Vertical	8	1.58	-	34.47	31.10	6.66	34.81
PK	4.80351G	47.16	74.00	-26.84	2.95	3	Vertical	8	1.58	-	44.21	31.10	6.66	34.81

BT-LE(500kbps)

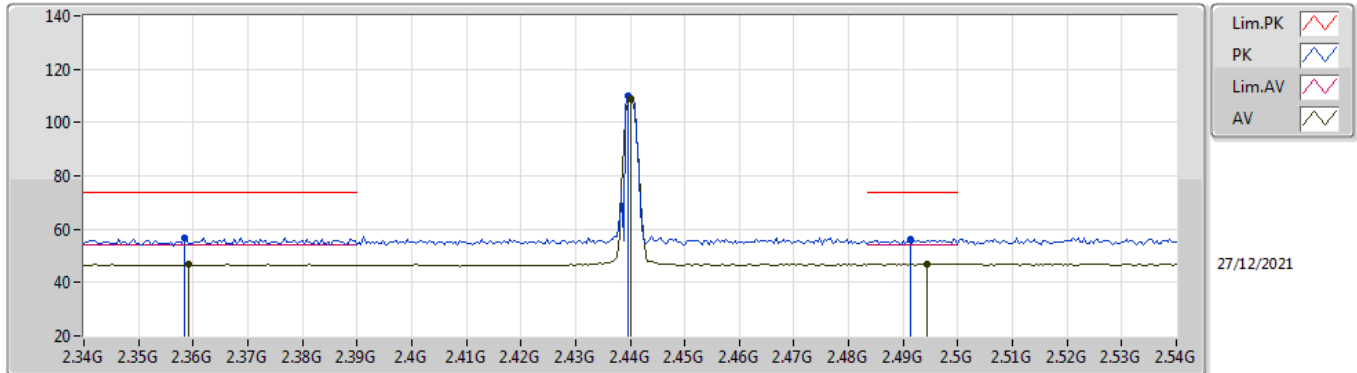
2402MHz_TX



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	4.80348G	34.86	54.00	-19.14	2.95	3	Horizontal	309	1.32	-	31.91	31.10	6.66	34.81
PK	4.80306G	45.10	74.00	-28.90	2.95	3	Horizontal	309	1.32	-	42.15	31.10	6.66	34.81

BT-LE(500kbps)

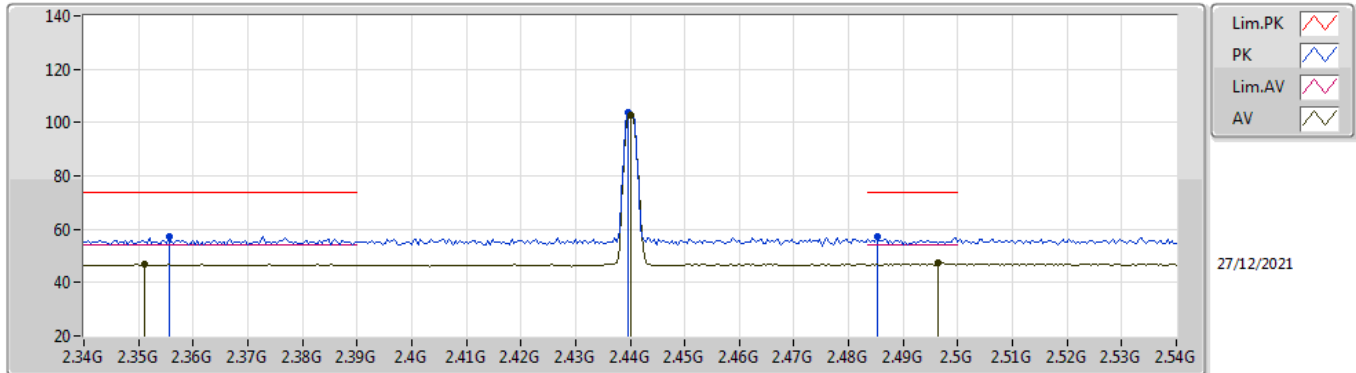
2440MHz_TX



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	2.3592G	46.77	54.00	-7.23	32.30	3	Vertical	17	1.42	-	14.47	27.76	4.54	-
AV	2.44G	108.96	Inf	-Inf	32.12	3	Vertical	17	1.42	-	76.84	27.52	4.60	-
AV	2.4944G	47.08	54.00	-6.92	32.12	3	Vertical	17	1.42	-	14.96	27.50	4.62	-
PK	2.3584G	56.95	74.00	-17.05	32.31	3	Vertical	17	1.42	-	24.64	27.77	4.54	-
PK	2.4396G	109.89	Inf	-Inf	32.12	3	Vertical	17	1.42	-	77.77	27.52	4.60	-
PK	2.4912G	56.14	74.00	-17.86	32.12	3	Vertical	17	1.42	-	24.02	27.50	4.62	-

BT-LE(500kbps)

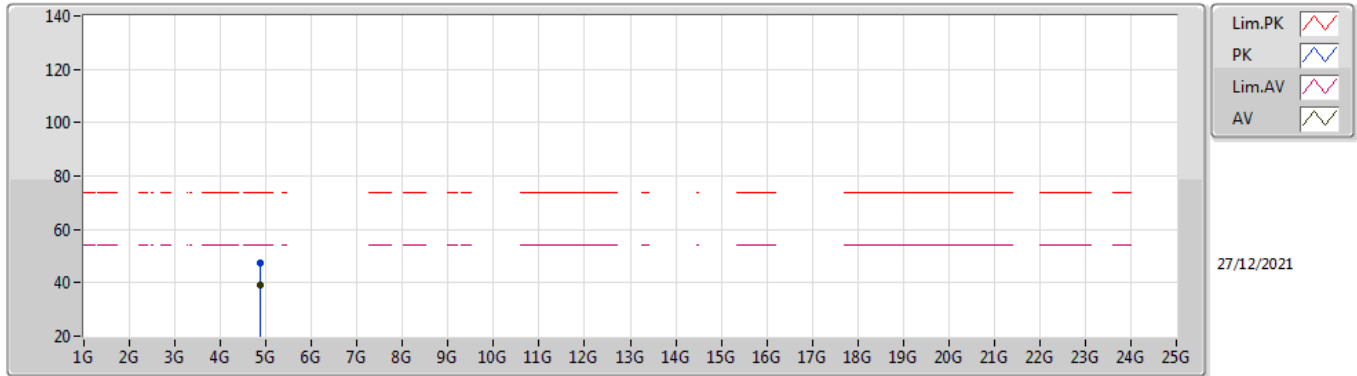
2440MHz_TX



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	2.3512G	46.83	54.00	-7.17	32.33	3	Horizontal	263	1.31	-	14.50	27.80	4.53	-
AV	2.44G	102.97	Inf	-Inf	32.12	3	Horizontal	263	1.31	-	70.85	27.52	4.60	-
AV	2.4964G	47.17	54.00	-6.83	32.12	3	Horizontal	263	1.31	-	15.05	27.50	4.62	-
PK	2.3556G	57.35	74.00	-16.65	32.32	3	Horizontal	263	1.31	-	25.03	27.78	4.54	-
PK	2.4396G	103.71	Inf	-Inf	32.12	3	Horizontal	263	1.31	-	71.59	27.52	4.60	-
PK	2.4852G	57.24	74.00	-16.76	32.11	3	Horizontal	263	1.31	-	25.13	27.50	4.61	-

BT-LE(500kbps)

2440MHz_TX

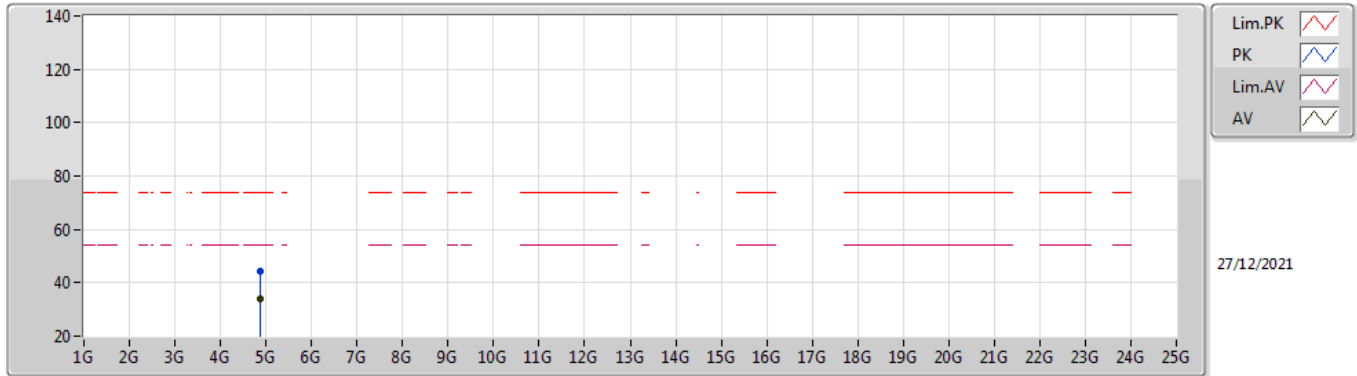


27/12/2021

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	4.87974G	39.01	54.00	-14.99	3.03	3	Vertical	324	1.39	-	35.98	31.10	6.72	34.79
PK	4.87957G	47.33	74.00	-26.67	3.03	3	Vertical	324	1.39	-	44.30	31.10	6.72	34.79

BT-LE(500kbps)

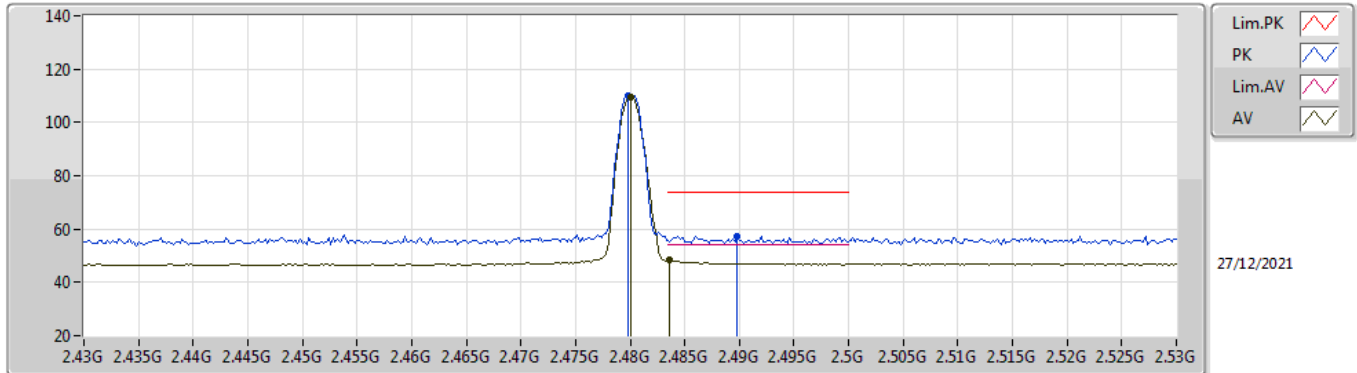
2440MHz_TX



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	4.87923G	34.05	54.00	-19.95	3.03	3	Horizontal	305	2.65	-	31.02	31.10	6.72	34.79
PK	4.87962G	44.42	74.00	-29.58	3.03	3	Horizontal	305	2.65	-	41.39	31.10	6.72	34.79

BT-LE(500kbps)

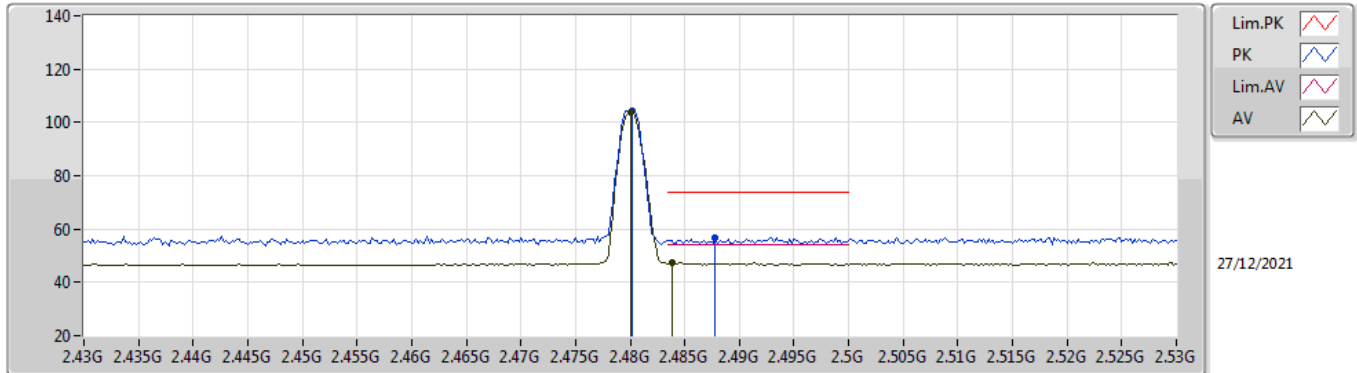
2480MHz_TX



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	109.32	Inf	-Inf	32.11	3	Vertical	332	1.35	-	77.21	27.50	4.61	-
AV	2.4836G	48.32	54.00	-5.68	32.11	3	Vertical	332	1.35	-	16.21	27.50	4.61	-
PK	2.4798G	109.98	Inf	-Inf	32.11	3	Vertical	332	1.35	-	77.87	27.50	4.61	-
PK	2.4898G	57.22	74.00	-16.78	32.12	3	Vertical	332	1.35	-	25.10	27.50	4.62	-

BT-LE(500kbps)

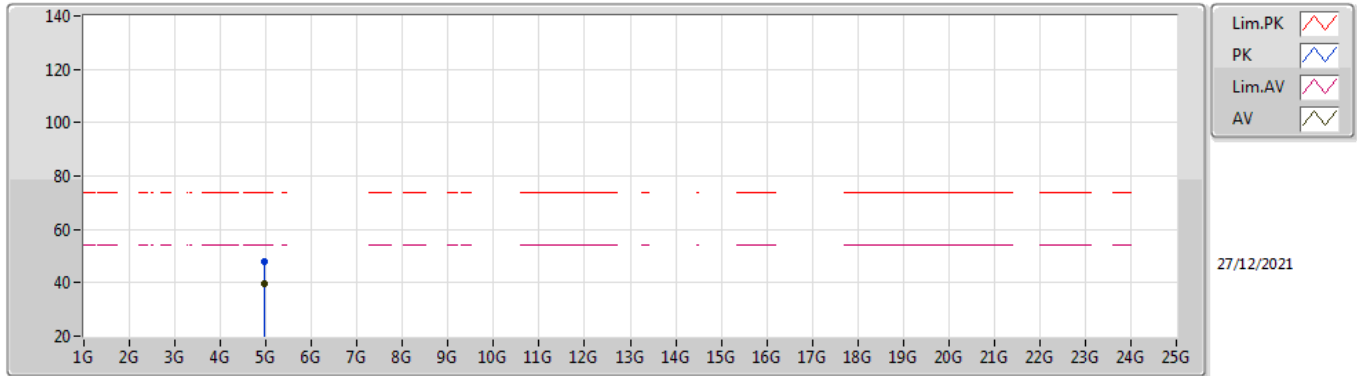
2480MHz_TX



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	2.48G	103.70	Inf	-Inf	32.11	3	Horizontal	261	1.06	-	71.59	27.50	4.61	-
AV	2.4838G	47.34	54.00	-6.66	32.11	3	Horizontal	261	1.06	-	15.23	27.50	4.61	-
PK	2.4802G	104.35	Inf	-Inf	32.11	3	Horizontal	261	1.06	-	72.24	27.50	4.61	-
PK	2.4878G	56.61	74.00	-17.39	32.12	3	Horizontal	261	1.06	-	24.49	27.50	4.62	-

BT-LE(500kbps)

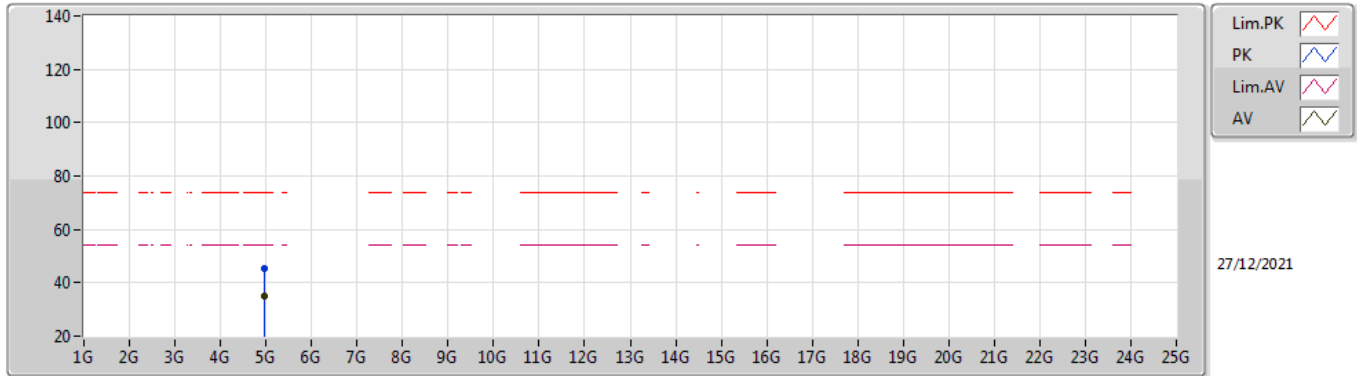
2480MHz_TX



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	4.96041G	39.68	54.00	-14.32	3.35	3	Vertical	355	1.55	-	36.33	31.34	6.78	34.77
PK	4.96046G	48.13	74.00	-25.87	3.35	3	Vertical	355	1.55	-	44.78	31.34	6.78	34.77

BT-LE(500kbps)

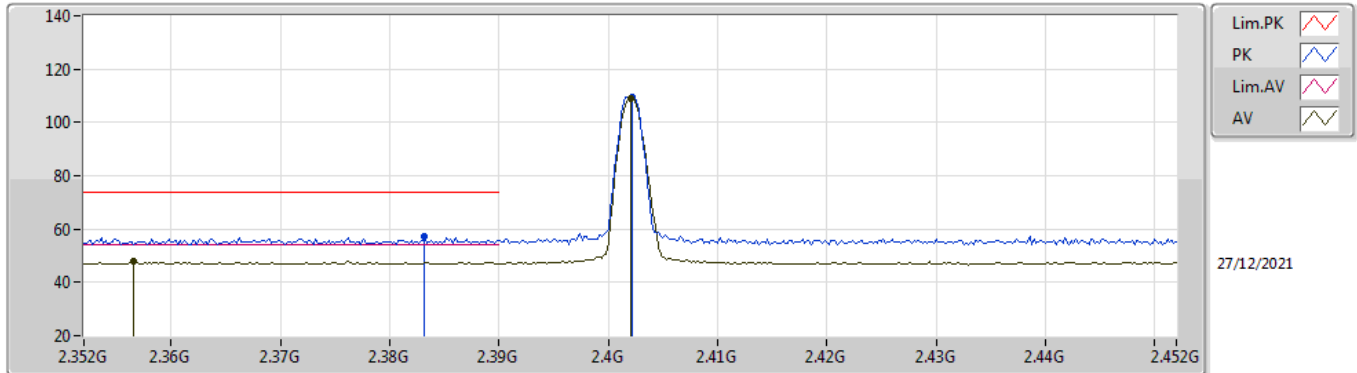
2480MHz_TX



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	4.96083G	34.86	54.00	-19.14	3.35	3	Horizontal	316	1.50	-	31.51	31.34	6.78	34.77
PK	4.96052G	45.51	74.00	-28.49	3.35	3	Horizontal	316	1.50	-	42.16	31.34	6.78	34.77

BT-LE(1Mbps)

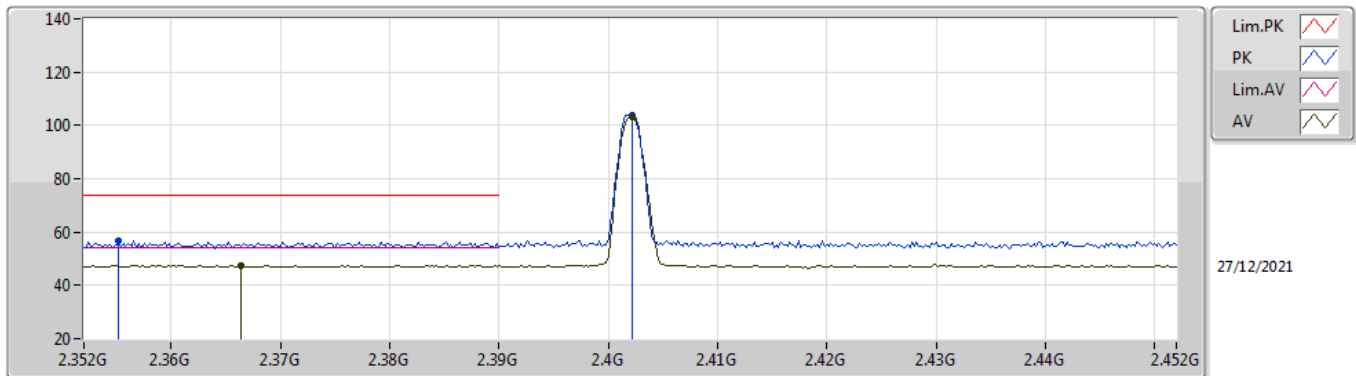
2402MHz_TX



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	2.3566G	47.88	54.00	-6.12	32.31	3	Vertical	326	1.06	-	15.57	27.77	4.54	-
AV	2.402G	108.87	Inf	-Inf	32.18	3	Vertical	326	1.06	-	76.69	27.60	4.58	-
PK	2.3832G	57.45	74.00	-16.55	32.23	3	Vertical	326	1.06	-	25.22	27.67	4.56	-
PK	2.4022G	109.49	Inf	-Inf	32.18	3	Vertical	326	1.06	-	77.31	27.60	4.58	-

BT-LE(1Mbps)

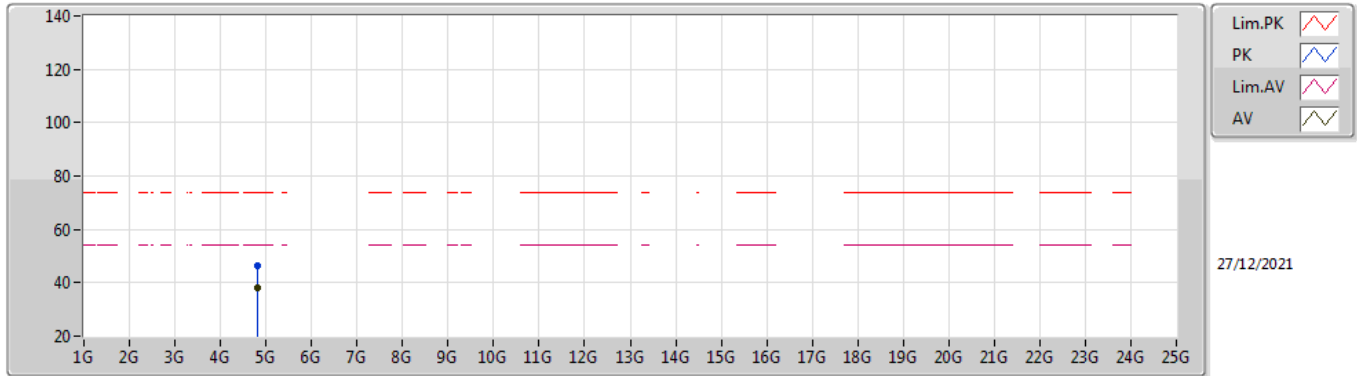
2402MHz_TX



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	2.3664G	47.56	54.00	-6.44	32.28	3	Horizontal	270	2.75	-	15.28	27.73	4.55	-
AV	2.4022G	103.23	Inf	-Inf	32.18	3	Horizontal	270	2.75	-	71.05	27.60	4.58	-
PK	2.3552G	56.64	74.00	-17.36	32.32	3	Horizontal	270	2.75	-	24.32	27.78	4.54	-
PK	2.4022G	103.76	Inf	-Inf	32.18	3	Horizontal	270	2.75	-	71.58	27.60	4.58	-

BT-LE(1Mbps)

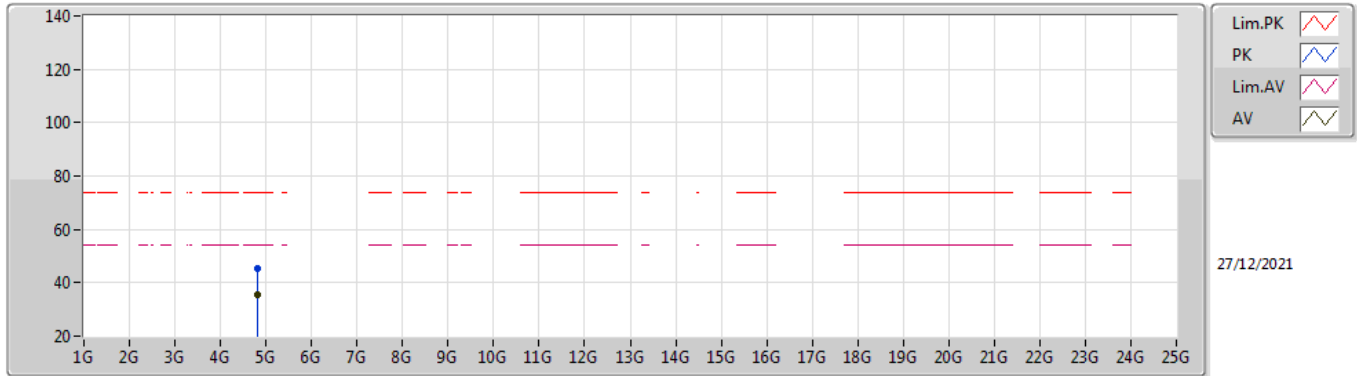
2402MHz_TX



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	4.8039G	38.05	54.00	-15.95	2.95	3	Vertical	308	2.12	-	35.10	31.10	6.66	34.81
PK	4.8045G	46.40	74.00	-27.60	2.95	3	Vertical	308	2.12	-	43.45	31.10	6.66	34.81

BT-LE(1Mbps)

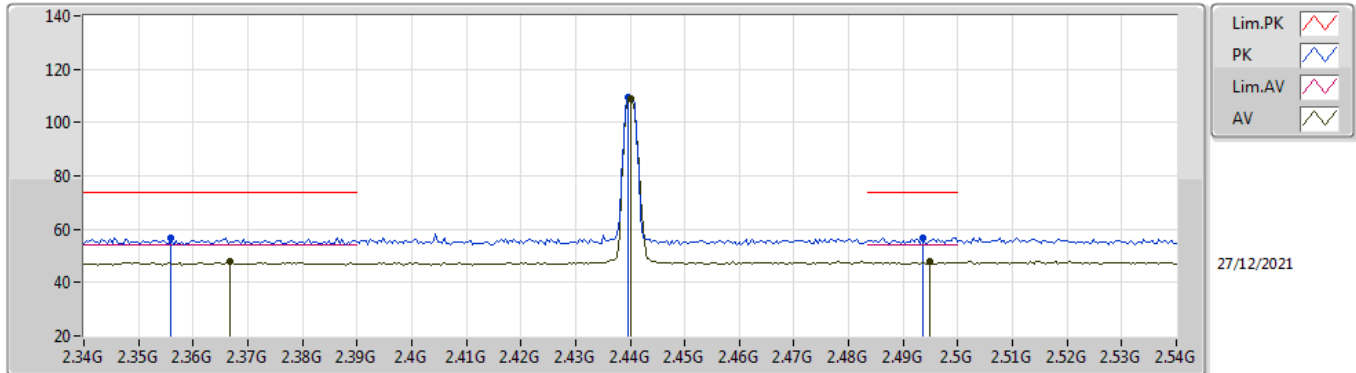
2402MHz_TX



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	4.80264G	35.76	54.00	-18.24	2.95	3	Horizontal	167	1.50	-	32.81	31.10	6.66	34.81
PK	4.80551G	45.34	74.00	-28.66	2.95	3	Horizontal	167	1.50	-	42.39	31.10	6.66	34.81

BT-LE(1Mbps)

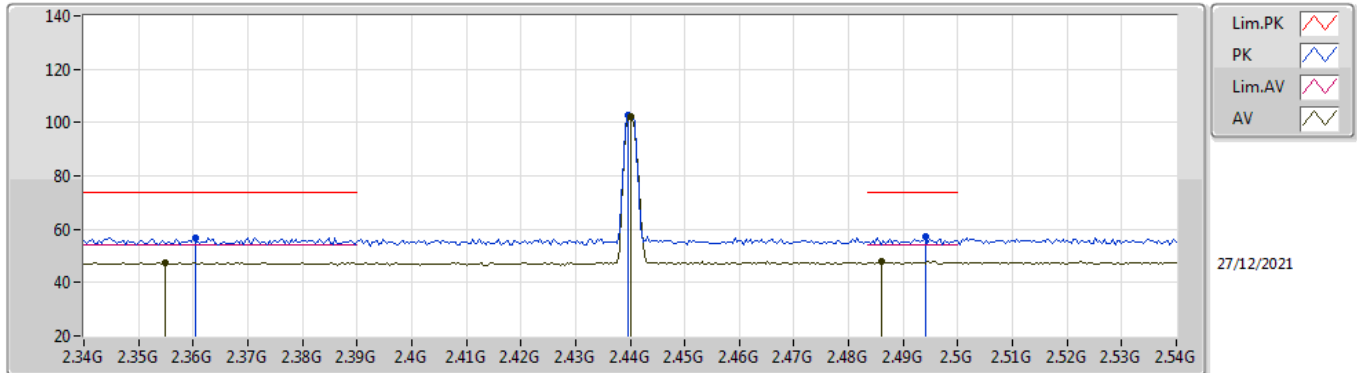
2440MHz_TX



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	2.3668G	47.71	54.00	-6.29	32.28	3	Vertical	158	1.37	-	15.43	27.73	4.55	-
AV	2.44G	108.92	Inf	-Inf	32.12	3	Vertical	158	1.37	-	76.80	27.52	4.60	-
AV	2.4948G	47.73	54.00	-6.27	32.12	3	Vertical	158	1.37	-	15.61	27.50	4.62	-
PK	2.356G	56.90	74.00	-17.10	32.32	3	Vertical	158	1.37	-	24.58	27.78	4.54	-
PK	2.4396G	109.47	Inf	-Inf	32.12	3	Vertical	158	1.37	-	77.35	27.52	4.60	-
PK	2.4936G	56.84	74.00	-17.16	32.12	3	Vertical	158	1.37	-	24.72	27.50	4.62	-

BT-LE(1Mbps)

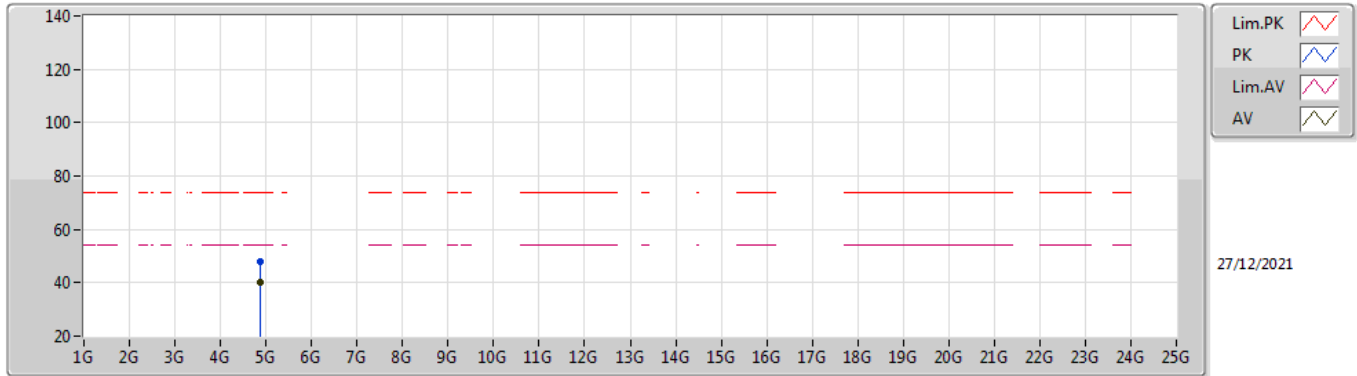
2440MHz_TX



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	2.3548G	47.54	54.00	-6.46	32.32	3	Horizontal	271	3.00	-	15.22	27.78	4.54	-
AV	2.44G	102.25	Inf	-Inf	32.12	3	Horizontal	271	3.00	-	70.13	27.52	4.60	-
AV	2.486G	47.76	54.00	-6.24	32.11	3	Horizontal	271	3.00	-	15.65	27.50	4.61	-
PK	2.3604G	56.80	74.00	-17.20	32.30	3	Horizontal	271	3.00	-	24.50	27.76	4.54	-
PK	2.4396G	102.78	Inf	-Inf	32.12	3	Horizontal	271	3.00	-	70.66	27.52	4.60	-
PK	2.494G	57.03	74.00	-16.97	32.12	3	Horizontal	271	3.00	-	24.91	27.50	4.62	-

BT-LE(1Mbps)

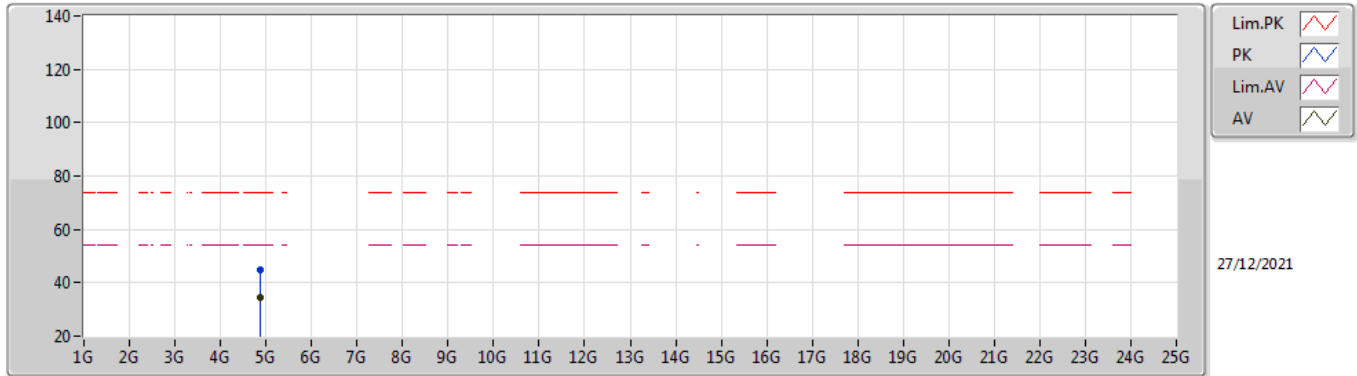
2440MHz_TX



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	4.87983G	40.01	54.00	-13.99	3.03	3	Vertical	348	1.28	-	36.98	31.10	6.72	34.79
PK	4.87959G	47.81	74.00	-26.19	3.03	3	Vertical	348	1.28	-	44.78	31.10	6.72	34.79

BT-LE(1Mbps)

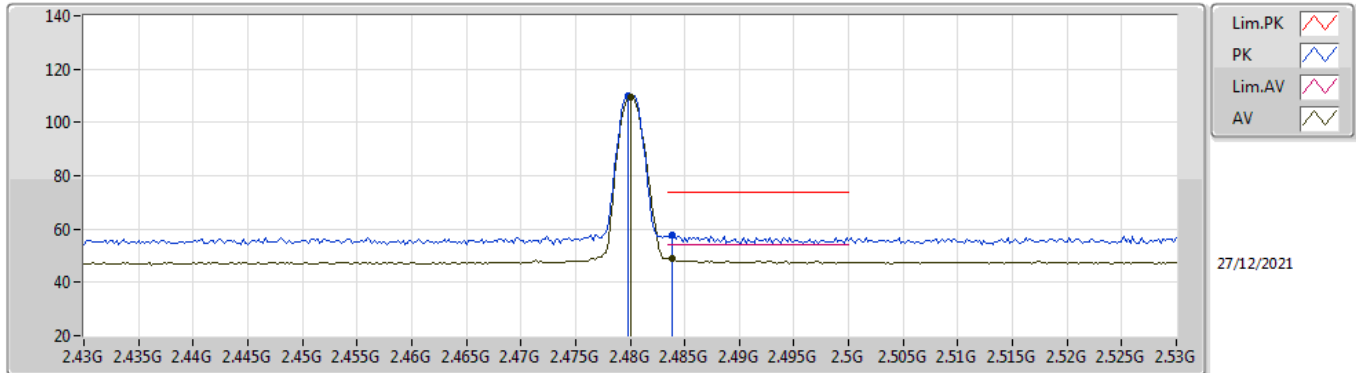
2440MHz_TX



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	4.8795G	34.56	54.00	-19.44	3.03	3	Horizontal	291	3.00	-	31.53	31.10	6.72	34.79
PK	4.88088G	45.06	74.00	-28.94	3.03	3	Horizontal	291	3.00	-	42.03	31.10	6.72	34.79

BT-LE(1Mbps)

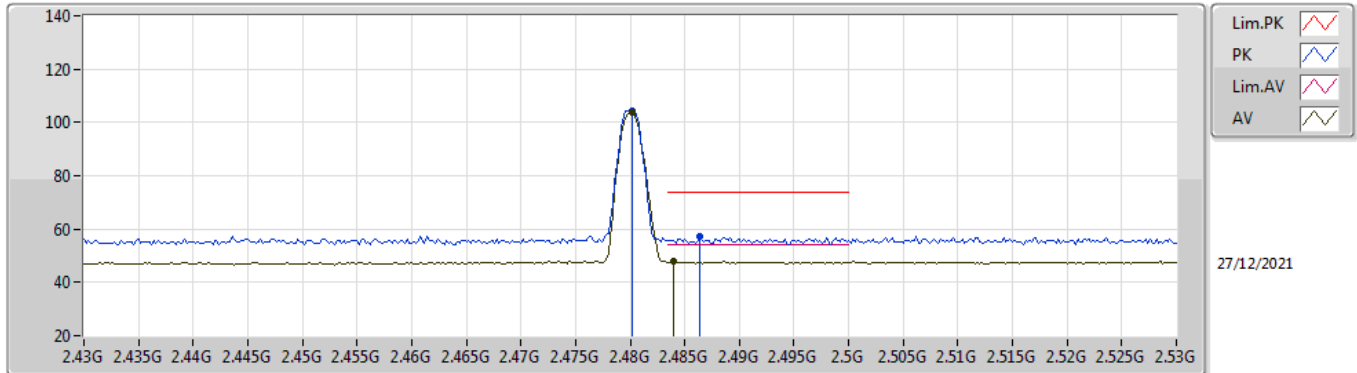
2480MHz_TX



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	109.30	Inf	-Inf	32.11	3	Vertical	332	1.35	-	77.19	27.50	4.61	-
AV	2.4838G	48.96	54.00	-5.04	32.11	3	Vertical	332	1.35	-	16.85	27.50	4.61	-
PK	2.4798G	109.89	Inf	-Inf	32.11	3	Vertical	332	1.35	-	77.78	27.50	4.61	-
PK	2.4838G	57.59	74.00	-16.41	32.11	3	Vertical	332	1.35	-	25.48	27.50	4.61	-

BT-LE(1Mbps)

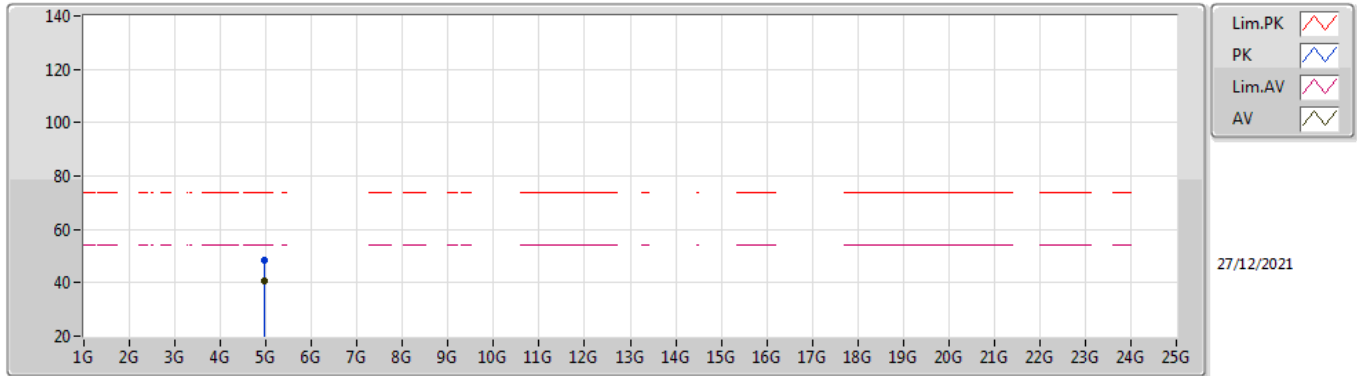
2480MHz_TX



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	2.4802G	103.65	Inf	-Inf	32.11	3	Horizontal	261	1.06	-	71.54	27.50	4.61	-
AV	2.484G	47.79	54.00	-6.21	32.11	3	Horizontal	261	1.06	-	15.68	27.50	4.61	-
PK	2.4802G	104.26	Inf	-Inf	32.11	3	Horizontal	261	1.06	-	72.15	27.50	4.61	-
PK	2.4864G	57.24	74.00	-16.76	32.11	3	Horizontal	261	1.06	-	25.13	27.50	4.61	-

BT-LE(1Mbps)

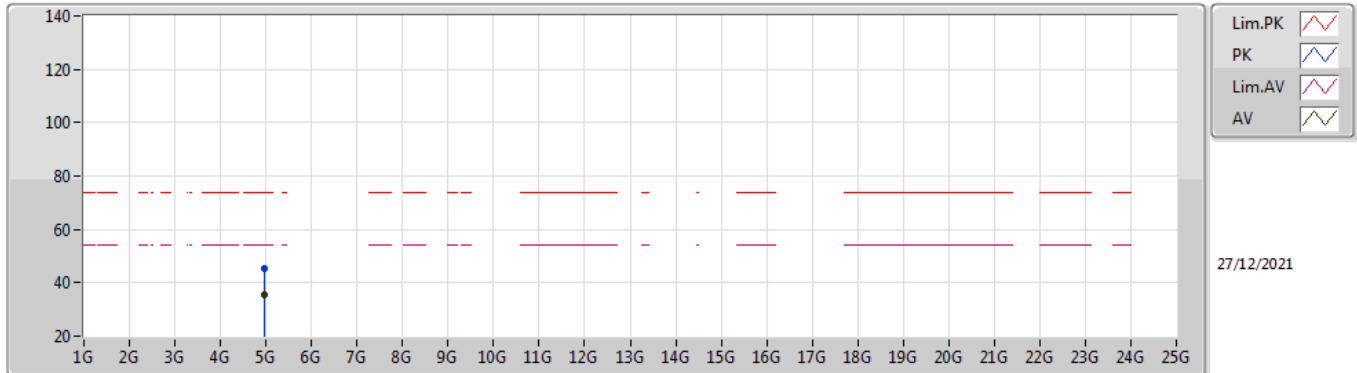
2480MHz_TX



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	4.96023G	40.53	54.00	-13.47	3.35	3	Vertical	286	2.04	-	37.18	31.34	6.78	34.77
PK	4.96025G	48.47	74.00	-25.53	3.35	3	Vertical	286	2.04	-	45.12	31.34	6.78	34.77

BT-LE(1Mbps)

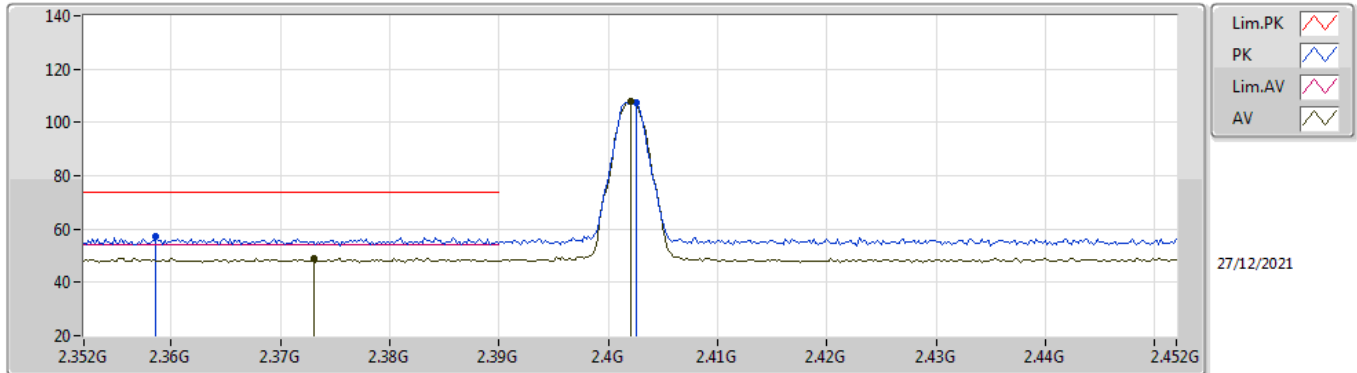
2480MHz_TX



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	4.9605G	35.31	54.00	-18.69	3.35	3	Horizontal	265	1.40	-	31.96	31.34	6.78	34.77
PK	4.96029G	45.53	74.00	-28.47	3.35	3	Horizontal	265	1.40	-	42.18	31.34	6.78	34.77

BT-LE(2Mbps)

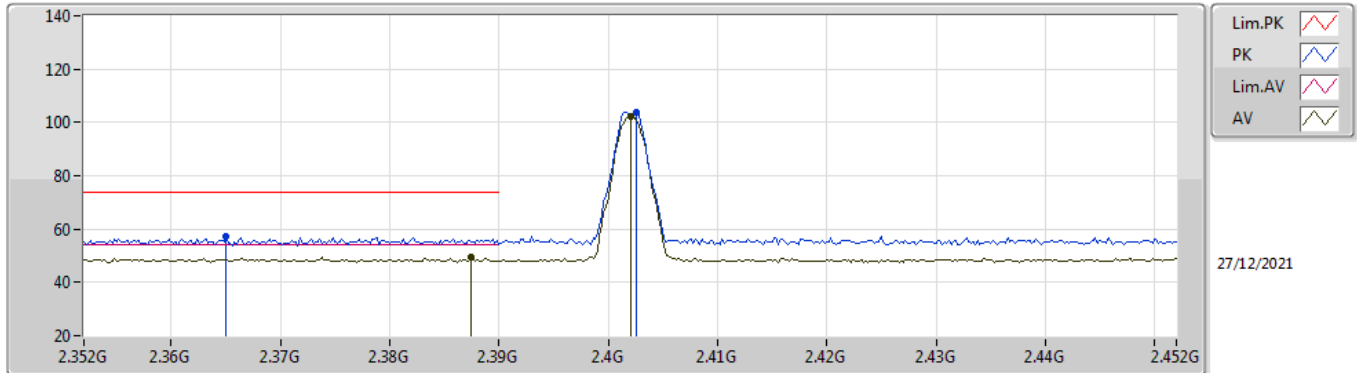
2402MHz_TX



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	2.373G	49.22	54.00	-4.78	32.26	3	Vertical	140	1.08	-	16.96	27.71	4.55	-
AV	2.402G	108.16	Inf	-Inf	32.18	3	Vertical	140	1.08	-	75.98	27.60	4.58	-
PK	2.3586G	57.50	74.00	-16.50	32.31	3	Vertical	140	1.08	-	25.19	27.77	4.54	-
PK	2.4026G	107.45	Inf	-Inf	32.17	3	Vertical	140	1.08	-	75.28	27.59	4.58	-

BT-LE(2Mbps)

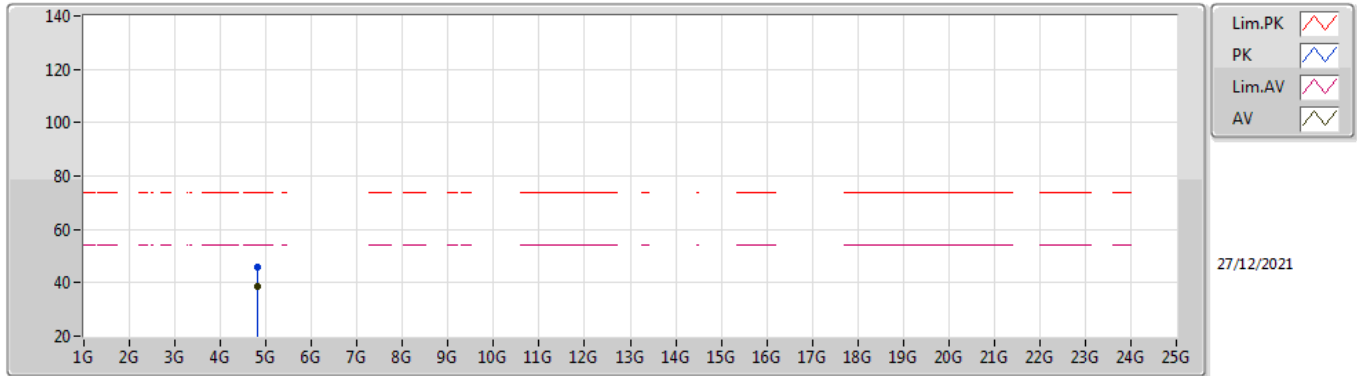
2402MHz_TX



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	2.3874G	49.40	54.00	-4.60	32.22	3	Horizontal	264	1.13	-	17.18	27.65	4.57	-
AV	2.402G	102.45	Inf	-Inf	32.18	3	Horizontal	264	1.13	-	70.27	27.60	4.58	-
PK	2.365G	57.47	74.00	-16.53	32.29	3	Horizontal	264	1.13	-	25.18	27.74	4.55	-
PK	2.4026G	103.67	Inf	-Inf	32.17	3	Horizontal	264	1.13	-	71.50	27.59	4.58	-

BT-LE(2Mbps)

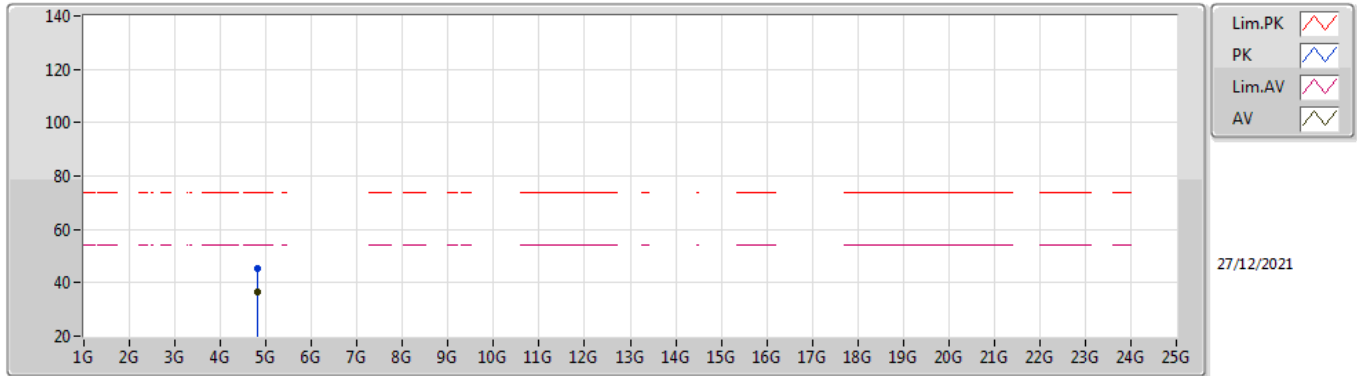
2402MHz_TX



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	4.80493G	38.38	54.00	-15.62	2.95	3	Vertical	13	1.50	-	35.43	31.10	6.66	34.81
PK	4.804G	45.84	74.00	-28.16	2.95	3	Vertical	13	1.50	-	42.89	31.10	6.66	34.81

BT-LE(2Mbps)

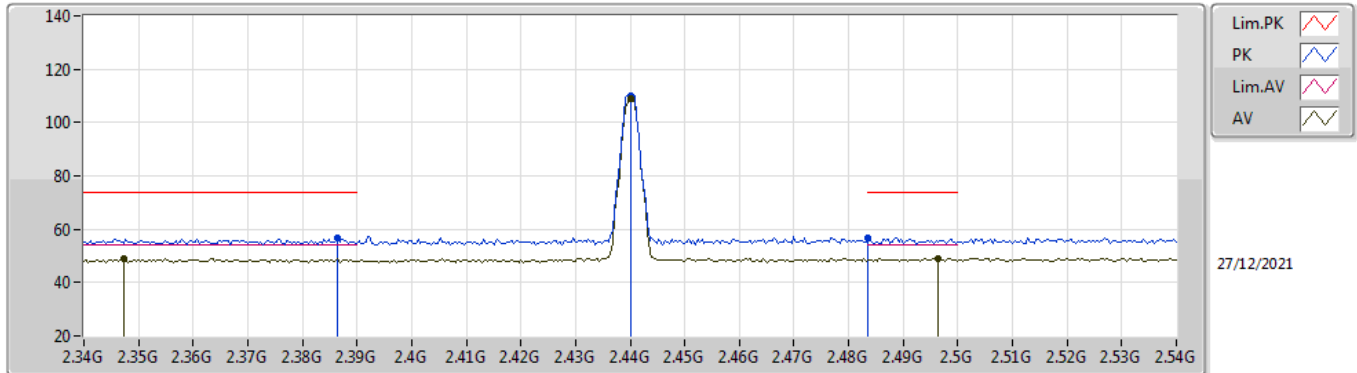
2402MHz_TX



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	4.80217G	36.80	54.00	-17.20	2.95	3	Horizontal	172	1.50	-	33.85	31.10	6.66	34.81
PK	4.80213G	45.12	74.00	-28.88	2.95	3	Horizontal	172	1.50	-	42.17	31.10	6.66	34.81

BT-LE(2Mbps)

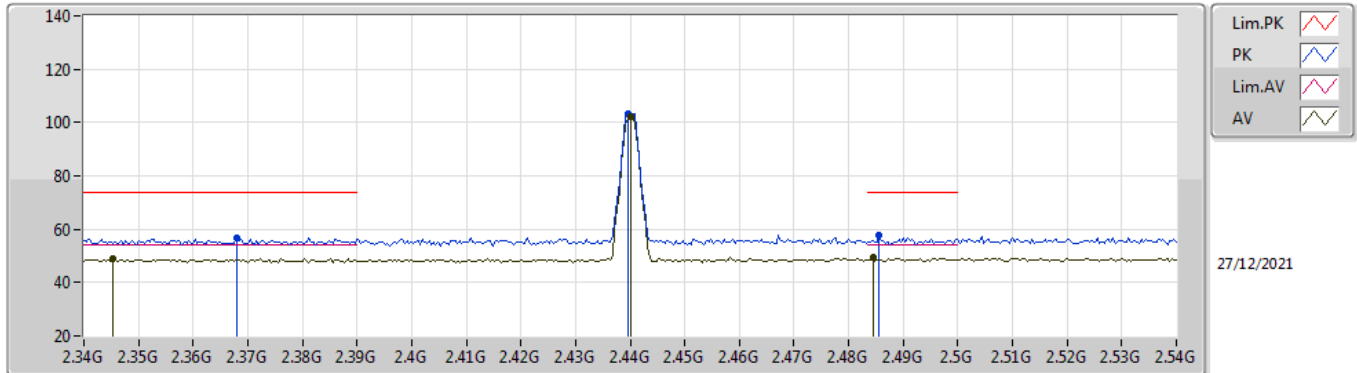
2440MHz_TX



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	2.3472G	49.05	54.00	-4.95	32.33	3	Vertical	333	1.40	-	16.72	27.80	4.53	-
AV	2.44G	108.82	Inf	-Inf	32.12	3	Vertical	333	1.40	-	76.70	27.52	4.60	-
AV	2.4964G	48.88	54.00	-5.12	32.12	3	Vertical	333	1.40	-	16.76	27.50	4.62	-
PK	2.3864G	56.53	74.00	-17.47	32.22	3	Vertical	333	1.40	-	24.31	27.65	4.57	-
PK	2.44G	110.05	Inf	-Inf	32.12	3	Vertical	333	1.40	-	77.93	27.52	4.60	-
PK	2.4835G	56.94	74.00	-17.06	32.11	3	Vertical	333	1.40	-	24.83	27.50	4.61	-

BT-LE(2Mbps)

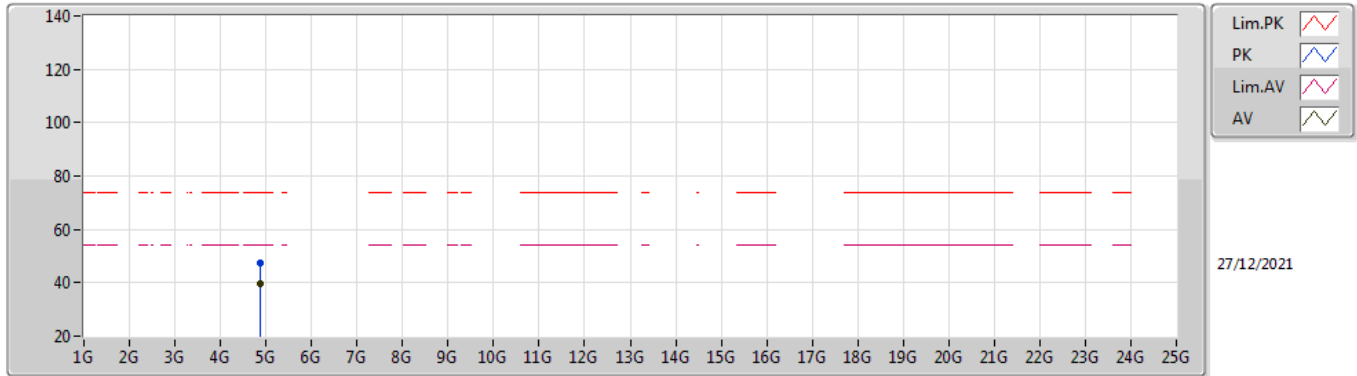
2440MHz_TX



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	2.3452G	49.19	54.00	-4.81	32.33	3	Horizontal	263	1.29	-	16.86	27.80	4.53	-
AV	2.44G	102.15	Inf	-Inf	32.12	3	Horizontal	263	1.29	-	70.03	27.52	4.60	-
AV	2.4844G	49.24	54.00	-4.76	32.11	3	Horizontal	263	1.29	-	17.13	27.50	4.61	-
PK	2.368G	56.84	74.00	-17.16	32.28	3	Horizontal	263	1.29	-	24.56	27.73	4.55	-
PK	2.4396G	103.32	Inf	-Inf	32.12	3	Horizontal	263	1.29	-	71.20	27.52	4.60	-
PK	2.4856G	57.65	74.00	-16.35	32.11	3	Horizontal	263	1.29	-	25.54	27.50	4.61	-

BT-LE(2Mbps)

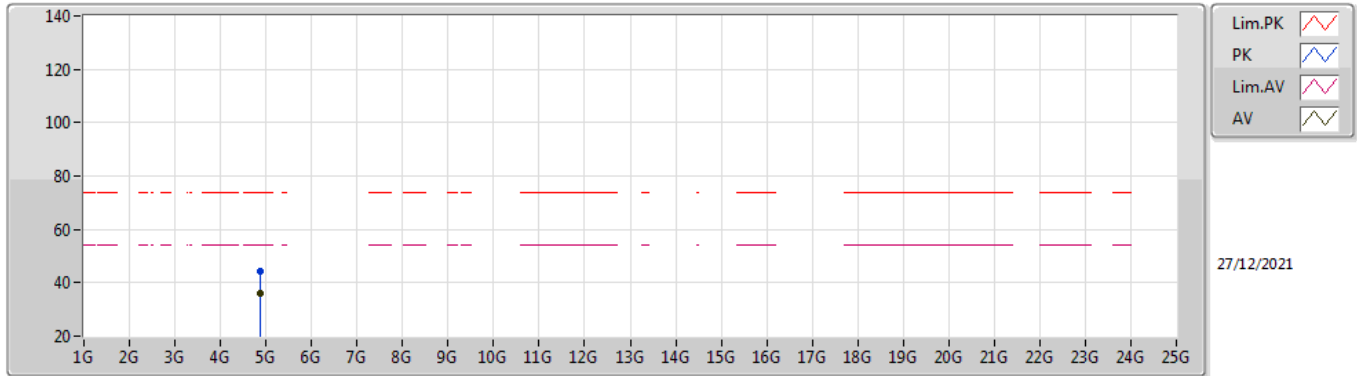
2440MHz_TX



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	4.87915G	39.65	54.00	-14.35	3.03	3	Vertical	350	1.40	-	36.62	31.10	6.72	34.79
PK	4.88114G	47.63	74.00	-26.37	3.03	3	Vertical	350	1.40	-	44.60	31.10	6.72	34.79

BT-LE(2Mbps)

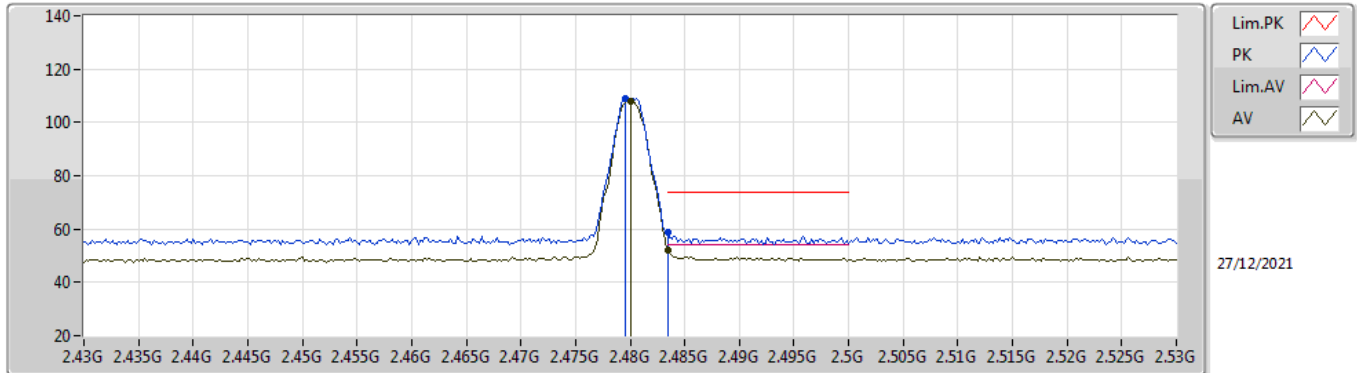
2440MHz_TX



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	4.87815G	36.13	54.00	-17.87	3.03	3	Horizontal	189	2.76	-	33.10	31.10	6.72	34.79
PK	4.88246G	44.50	74.00	-29.50	3.03	3	Horizontal	189	2.76	-	41.47	31.10	6.72	34.79

BT-LE(2Mbps)

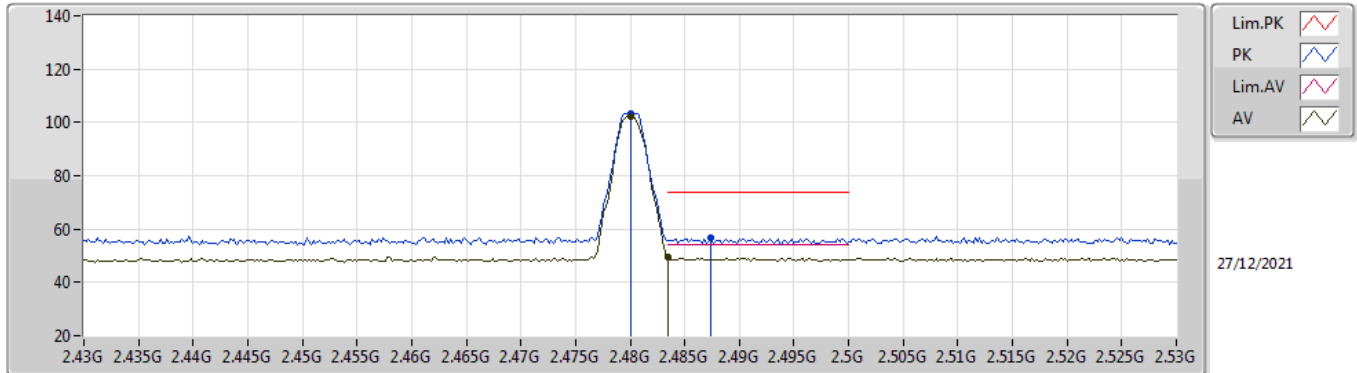
2480MHz_TX



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	107.98	Inf	-Inf	32.11	3	Vertical	333	1.34	-	75.87	27.50	4.61	-
AV	2.4835G	52.29	54.00	-1.71	32.11	3	Vertical	333	1.34	-	20.18	27.50	4.61	-
PK	2.4796G	108.83	Inf	-Inf	32.11	3	Vertical	333	1.34	-	76.72	27.50	4.61	-
PK	2.4835G	58.60	74.00	-15.40	32.11	3	Vertical	333	1.34	-	26.49	27.50	4.61	-

BT-LE(2Mbps)

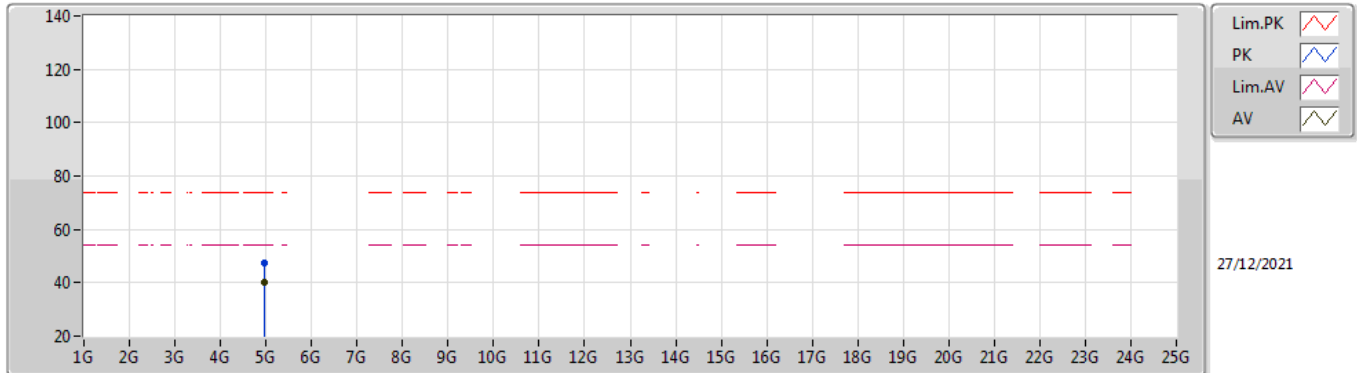
2480MHz_TX



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	102.28	Inf	-Inf	32.11	3	Horizontal	262	1.06	-	70.17	27.50	4.61	-
AV	2.4835G	49.74	54.00	-4.26	32.11	3	Horizontal	262	1.06	-	17.63	27.50	4.61	-
PK	2.48G	103.51	Inf	-Inf	32.11	3	Horizontal	262	1.06	-	71.40	27.50	4.61	-
PK	2.4874G	56.61	74.00	-17.39	32.11	3	Horizontal	262	1.06	-	24.50	27.50	4.61	-

BT-LE(2Mbps)

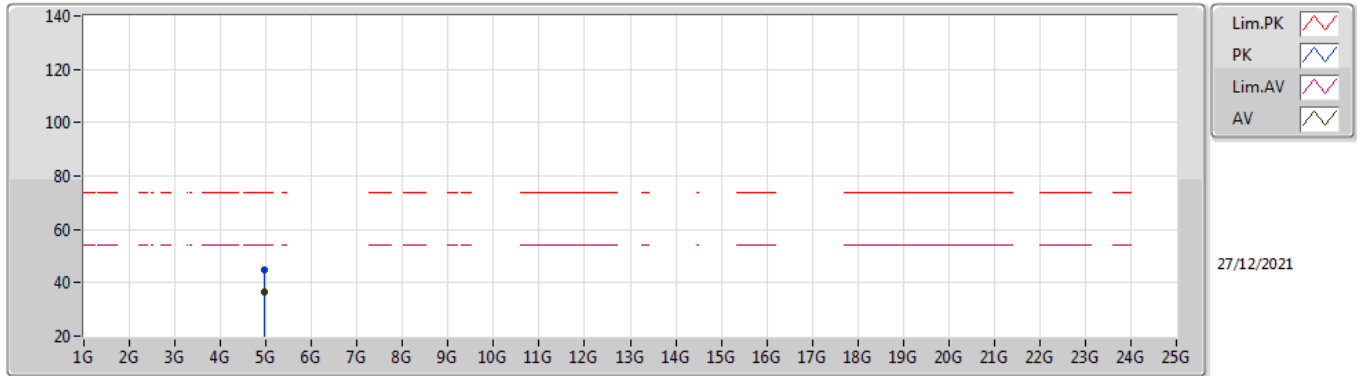
2480MHz_TX



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	4.95909G	39.94	54.00	-14.06	3.35	3	Vertical	354	1.64	-	36.59	31.34	6.78	34.77
PK	4.95908G	47.44	74.00	-26.56	3.35	3	Vertical	354	1.64	-	44.09	31.34	6.78	34.77

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	4.95942G	36.46	54.00	-17.54	3.35	3	Horizontal	86	1.73	-	33.11	31.34	6.78	34.77
PK	4.95984G	44.90	74.00	-29.10	3.35	3	Horizontal	86	1.73	-	41.55	31.34	6.78	34.77