



FCC Radio Test Report

FCC ID : 2A753-BTHS20
Equipment : Dragon BT Headset 2.0
Brand Name : Nuance Communications
Model Name : DragonBT2.0
Applicant : Nuance Communications, Inc.
1 Wayside Road, Burlington, Massachusetts 01803,
United States
Manufacturer : Nuance Communications, Inc.
1 Wayside Road, Burlington, Massachusetts 01803,
United States
Standard : 47 CFR FCC Part 15.247

The product was received on Oct. 14, 2021, and testing was started from Nov. 15, 2021 and completed on Dec. 09, 2021. We, SPORTON INTERNATIONAL INC. Hsinhua Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

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



Approved by: Jackson Tsai

SPORTON INTERNATIONAL INC. Hsinhua Laboratory

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

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History of this test report

TEL : 886-3-3273456
FAX : 886-3-3270973
Report Template No.: HE1-C10 Ver4.2
FCC ID: 2A753-BTHS20

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: Ben Tseng

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(2Mbps)	2.0	1TX

Note:

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

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	BAT	BW2.4GFND28-6	PCB	N/A	2

Note 1: The EUT has one antenna.

For BT function:

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

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

1.1.3 EUT Information

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

1.1.4 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
BT-LE(1Mbps)	0.636	1.97	397.813u	3k
BT-LE(2Mbps)	0.341	4.67	213.125u	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				
☒ 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	Jack Tang	21.5~24.7°C / 52~55%	18/Nov/2021~19/Nov/2021
RF Conducted	TH06-HY	Johnny Yu	21.1~24.9°C / 46~63%	22/Nov/2021~09/Dec/2021
Radiated	03CH02-HY	Lego Lin	21.2~24.5°C / 56~60%	15/Nov/2021~16/Nov/2021
☐ 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.				

1.4 Measurement Uncertainty

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

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

2 Test Configuration of EUT

2.1 Test Channel Mode

Test Software Version	BlueTest 3
------------------------------	------------

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

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
1	USB mode (Charging)
2	Adapter mode (Charging)

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			
1	Battery mode, CTX		
2	Adapter mode (Charging)		
3	USB mode (Charging)		
Operating Mode > 1GHz	CTX		
Orthogonal Planes of EUT	X Plane	Y Plane	Z Plane
			
Worst Planes of EUT		V	

2.3 Accessories

Accessories				
Li-ion Battery	Brand Name	A&S Power	Model Name	A&S 601030
	Power Rating	3.7V; 120mAh	Type	Li-ion

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

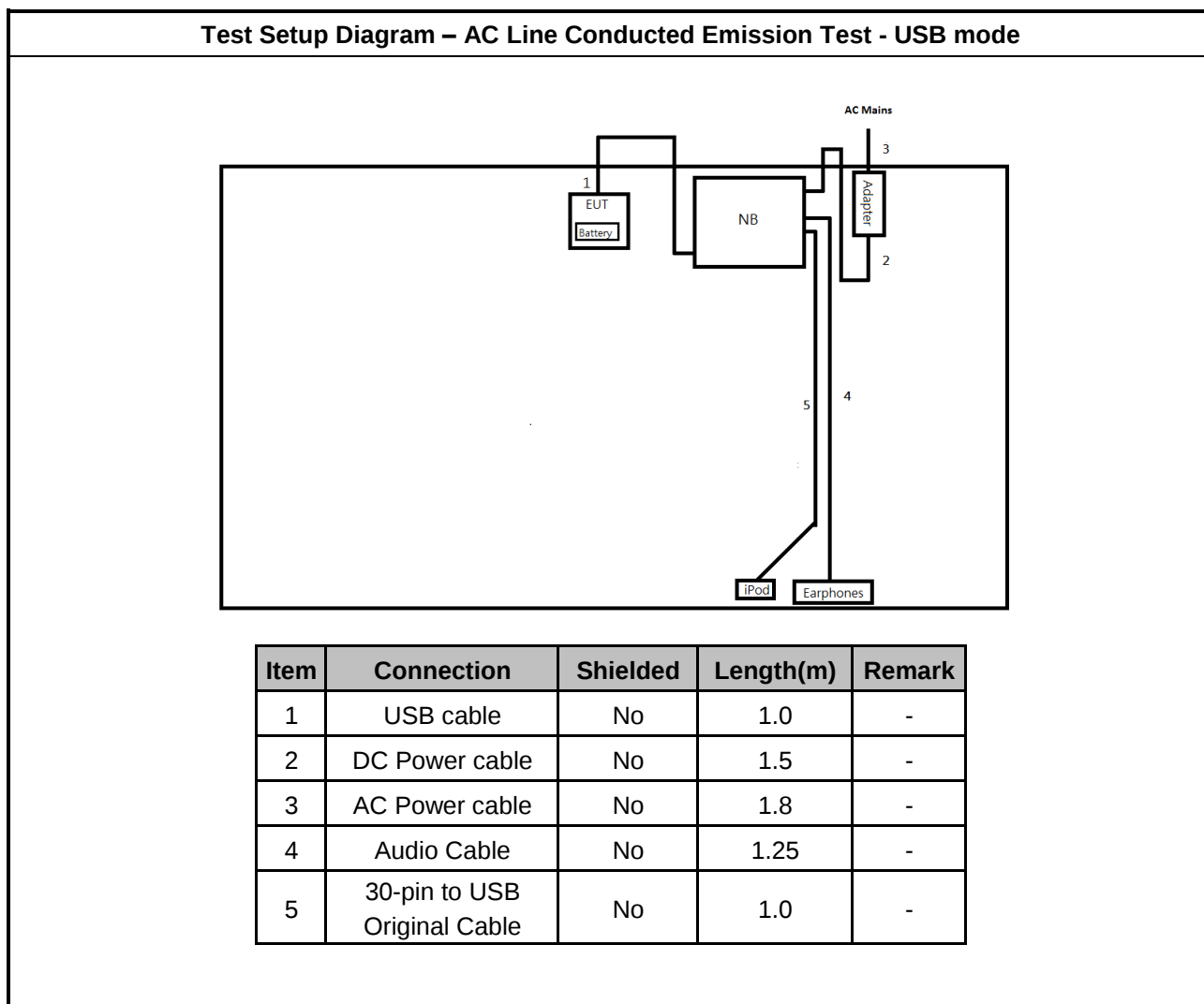
2.4 Support Equipment

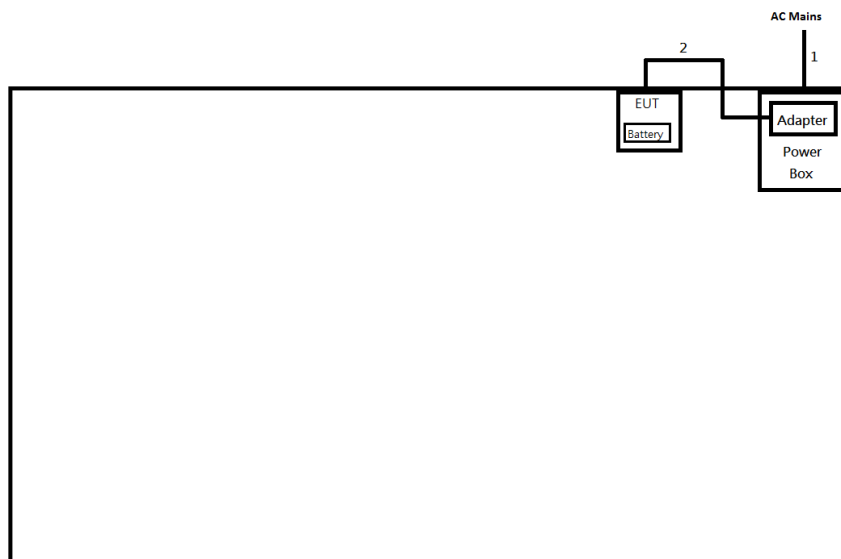
Support Equipment – AC Conduction					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	AC Adapter (for NB)	HP	PPP009D	-	-
2	AC Power cable	Power sync	PW-GPC180-3	-	-
3	Notebook	HP	E5220	-	-
4	Earphone	APPLE	MD827FE/A	-	-
5	iPod	APPLE	A1199	-	-
6	AC adapter	APPLE	A1385	-	-
7	USB cable	Hawk	04-HTE120	-	-

Support Equipment – Conducted					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Notebook	HP	HSTNN-I42C	-	-
2	Adapter for NB	HP	HSTNN-CA40	-	-
3	Debugger	Qualcomm	TRBI200	-	-
4	USB Cable	Customer Provide	Customer Provide	-	-
5	DC Power Supply	GW	GPC-6030D	-	-

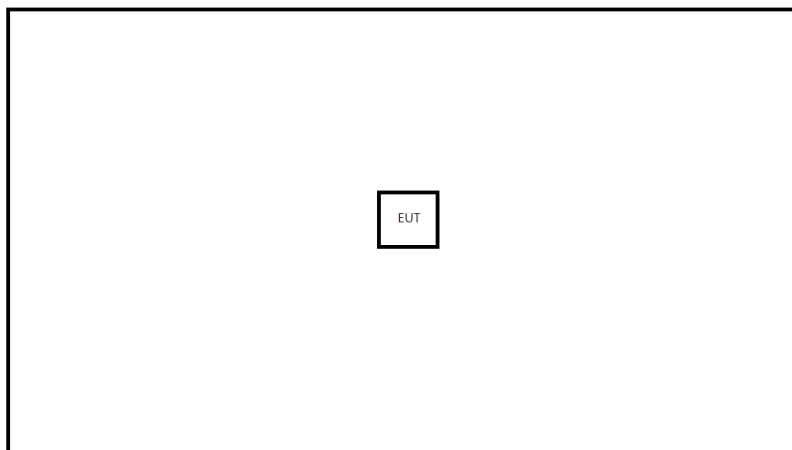
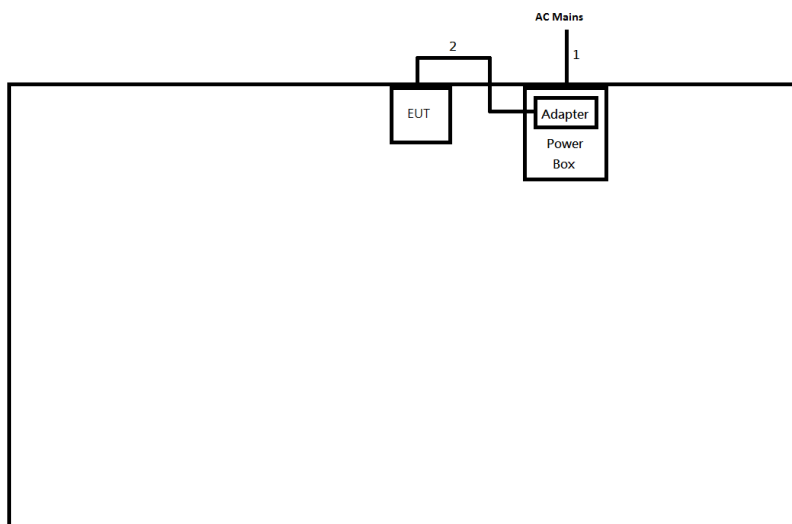
Support Equipment – Radiated					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	AC Adapter (for NB)	HP	PPP009D	-	-
2	AC Power cable	Power sync	PW-GPC180-3	-	-
3	Notebook	HP	E5220	-	-
4	Earphone	APPLE	MD827FE/A	-	-
5	iPod	APPLE	A1199	-	-
6	AC adapter	APPLE	A1385	-	-
7	USB cable	Hawk	04-HTE120	-	-

2.5 Test Setup Diagram

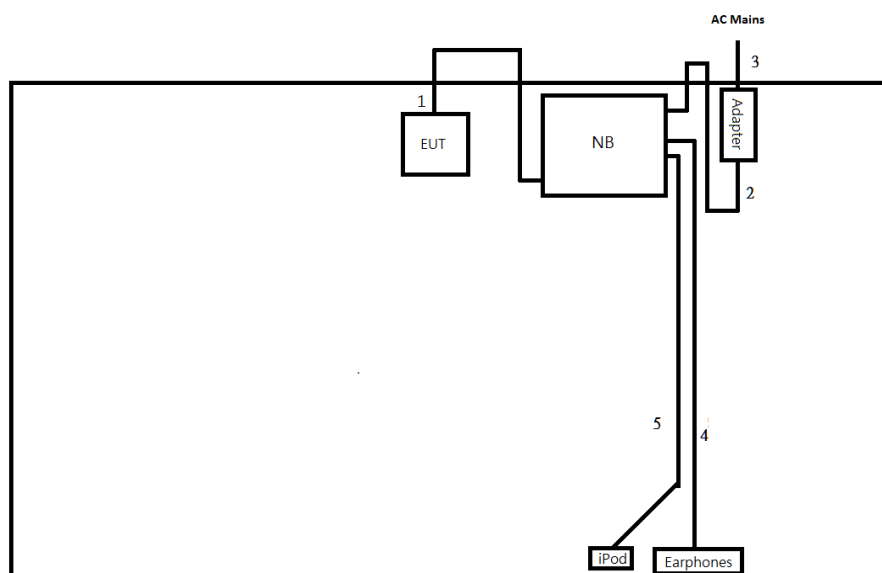


Test Setup Diagram – AC Line Conducted Emission Test - Adapter mode


Item	Connection	Shielded	Length(m)	Remark
1	AC Power cable	No	1.8	-
2	USB cable	No	1.0	-

Test Setup Diagram - Radiated Test – Battery mode

Test Setup Diagram - Radiated Test – Adapter mode


Item	Connection	Shielded	Length(m)	Remark
1	AC Power cable	No	1.8	-
2	USB cable	No	1.0	-

Test Setup Diagram - Radiated Test – USB mode


Item	Connection	Shielded	Length(m)	Remark
1	USB cable	No	1.0	-
2	DC Power cable	No	1.5	-
3	AC Power cable	No	1.8	-
4	Audio Cable	No	1.25	-
5	30-pin to USB Original Cable	No	1.0	-

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

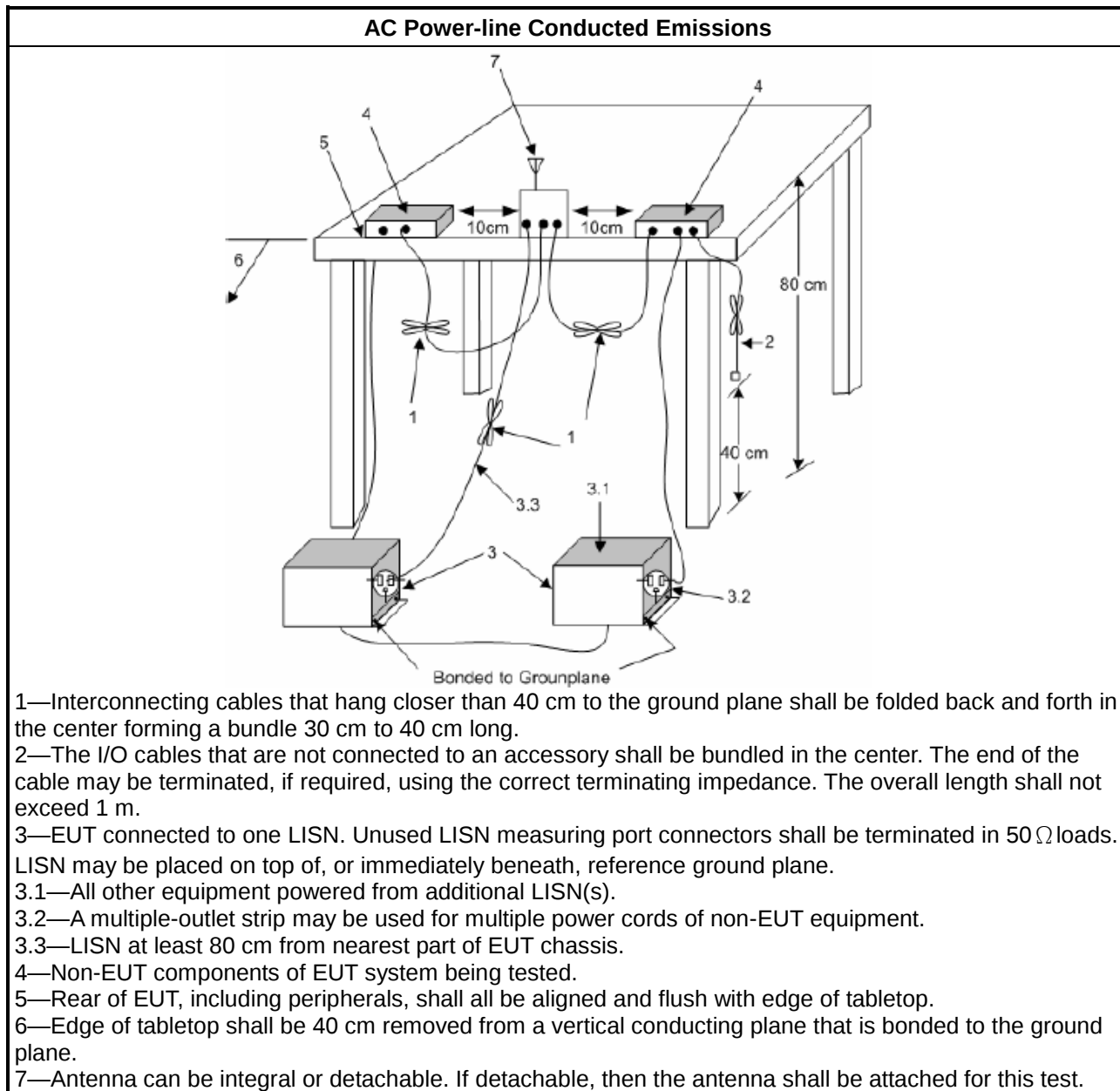
Test Method
▪ Refer as ANSI C63.10-2013, clause 6.2 foray power-line conducted emissions.

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:	
▪	6 dB bandwidth $\geq$ 500 kHz.

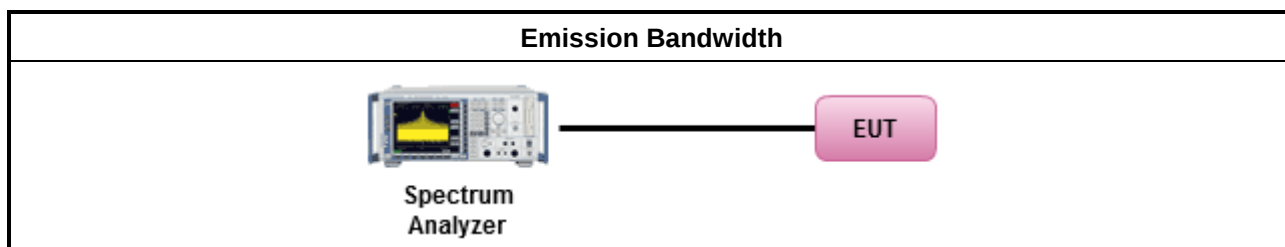
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method	
▪ For the emission bandwidth shall be measured using one of the options below:	
☒	Refer as KDB 558074, clause 8.2 (11.8 of ANSI C63.10) DTS bandwidth measurement.
☐	Refer as RSS-Gen, clause 6.7 for occupied bandwidth testing.
☐	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	
	If $G_{TX} \leq 6$ dBi, then $P_{Out} \leq 30$ dBm (1 W)
	Point-to-multipoint systems (P2M): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ dBm
	Point-to-point systems (P2P): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	Smart antenna system (SAS):
	- Single beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	- Overlap beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	- Aggregate power on all beams: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3 + 8$ dBm
e.i.r.p. Power Limit:	
	2400-2483.5 MHz Band
	Point-to-multipoint systems (P2M): $P_{eirp} \leq 36$ dBm (4 W)
	Point-to-point systems (P2P): $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX}])$ dBm
	Smart antenna system (SAS)
	- Single beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm
	- Overlap beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm
	- 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.	

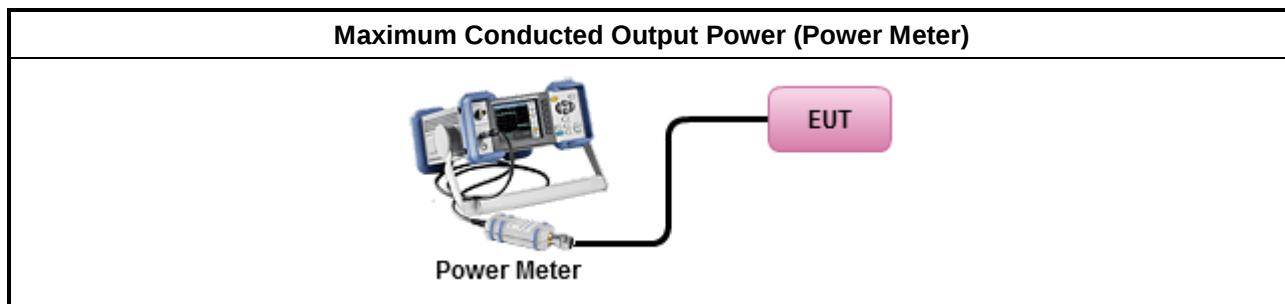
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
Maximum Peak Conducted Output Power	
☐	Refer as KDB 558074, clause 8.3.1.1 (11.9.1.1 of ANSI C63.10) RBW ≥ EBW method.
☐	Refer as KDB 558074, clause 8.3.1.2 (11.9.1.2 of ANSI C63.10) integrated band power method.
☐	Refer as KDB 558074, clause 8.3.1.3 (11.9.1.3 of ANSI C63.10) peak power meter.
Maximum Average Conducted Output Power	
☐	Refer as KDB 558074, clause 8.3.2.2 (11.9.2.2 of ANSI C63.10) using a spectrum analyzer.
☒	Refer as KDB 558074, clause 8.3.2.3 (11.9.2.3 of ANSI C63.10) using a power meter.
For conducted measurement.	
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.	
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	
▪	Power Spectral Density (PSD) ≤ 8 dBm/3kHz

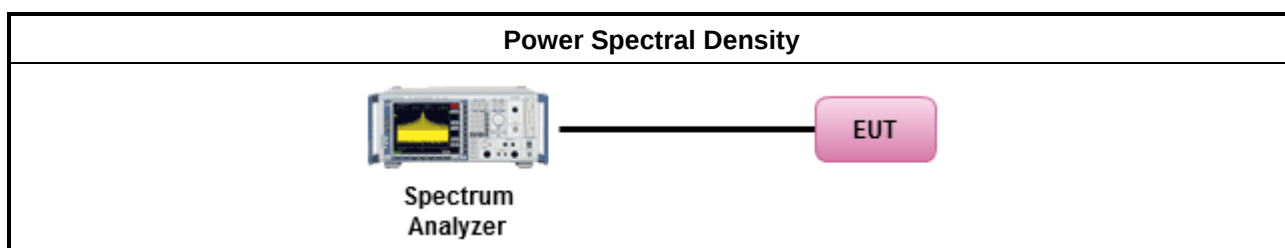
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

Test Method	
▪	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).
☒	Refer as KDB 558074, clause 8.4 (11.10 of ANSI C63.10) Max. PSD.
▪	For conducted measurement.
▪	If The EUT supports multiple transmit chains using options given below:
▪	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.	

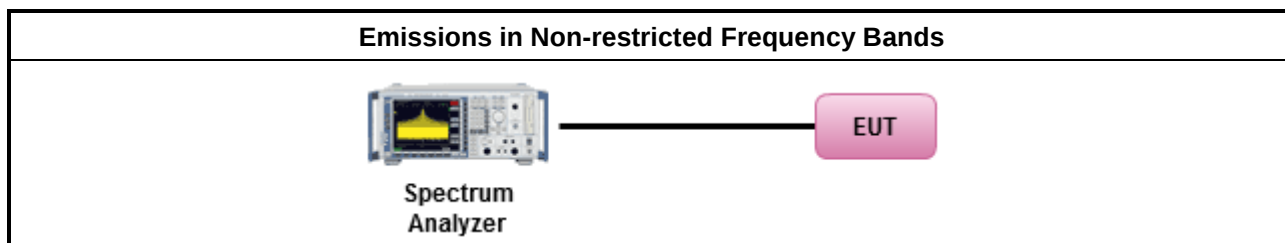
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

Test Method
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

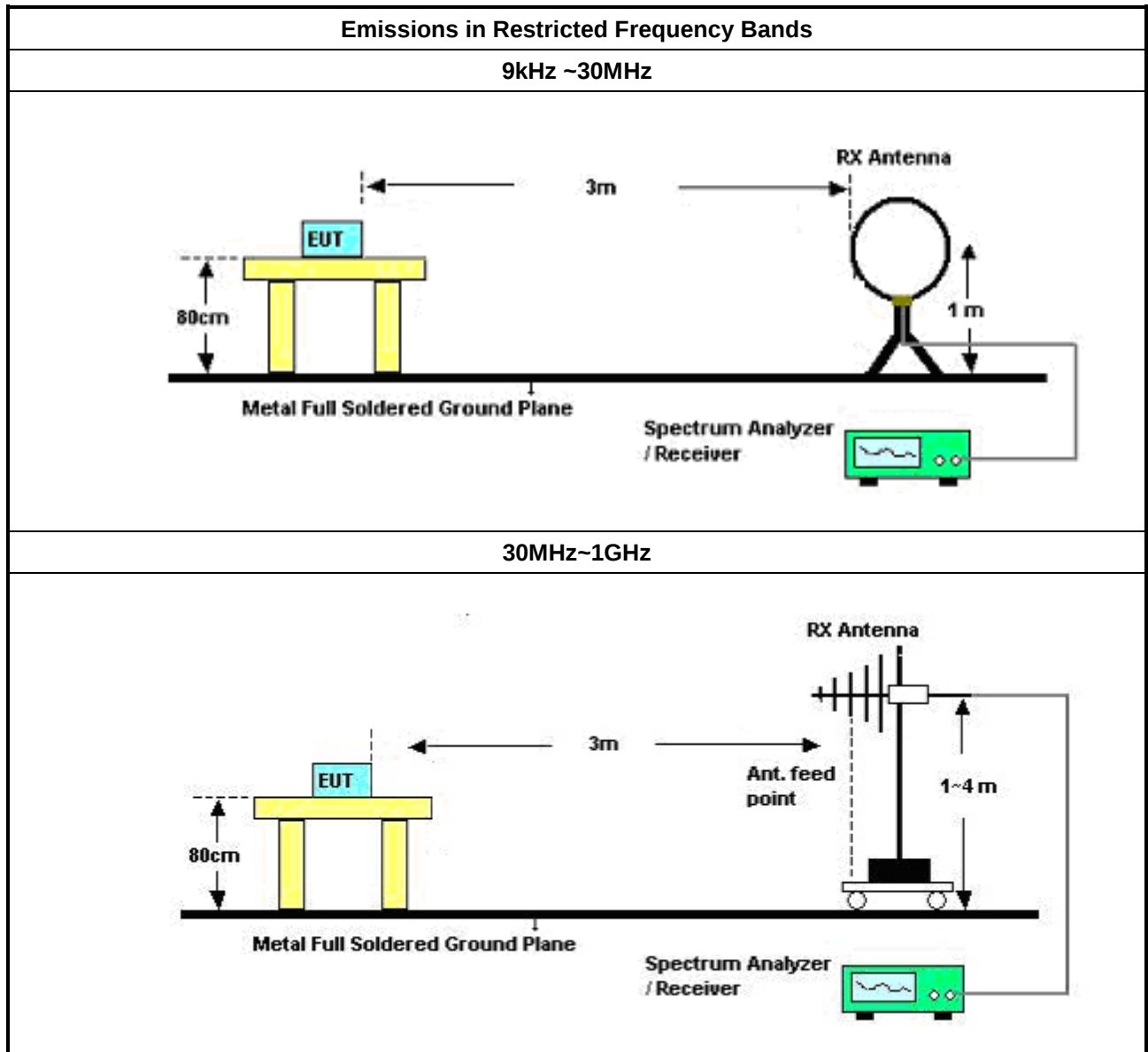
Test Method	
	- The average emission levels shall be measured in [duty cycle $\geq$ 98 or duty factor]. - Refer as ANSI C63.10, clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.
	- For the transmitter unwanted emissions shall be measured using following options below: - Refer as KDB 558074, clause 8.6 (11.12 of ANSI C63.10) for restricted frequency bands.
	- For the transmitter band-edge emissions shall be measured using following options below: - 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.
	- Use the following spectrum analyzer settings: - 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.
	KDB 414788 Open-Field Test Sites and Chamber Correlation Justification.
	- Based on FCC 15.31(f)(2): measurements may be performed at a distance closer than that specified in regulations; however, an attempt should be made to avoid making measurements in the near field. - Open-field site and chamber correlation testing had been performed and chamber measured test result is the worst case test result.

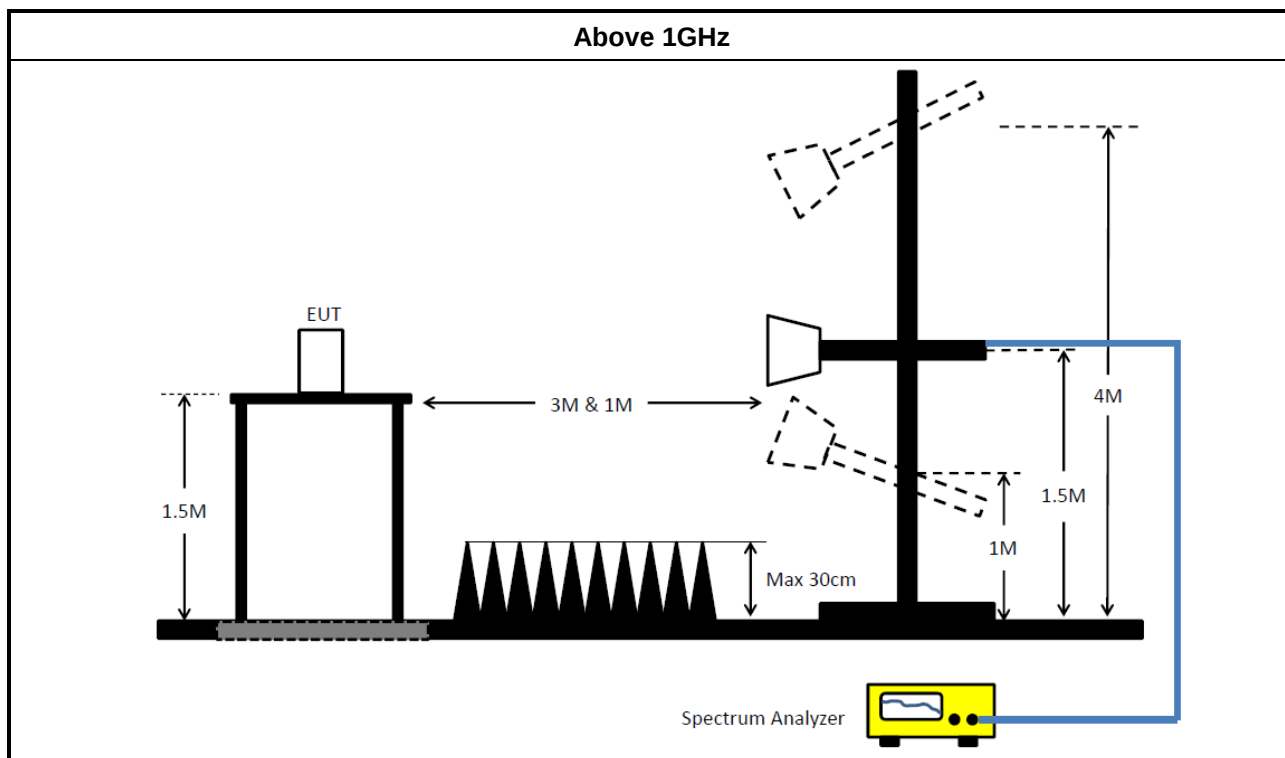
3.6.4 Measurement Results Calculation

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
LISN	R&S	ENV216	100003	9kHz ~ 30MHz	15/Dec/2020	14/Dec/2021
RF Cable 5m	TITAN	TITAN	CO04-cable-01	0.1MHz~200MHz	03/Mar/2021	02/Mar/2022
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9kHz ~ 30MHz	15/Sep/2021	14/Sep/2022

Instrument for Conducted Test

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Signal Analyzer	R&S	FSV 40	101029	10Hz~40GHz	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

Instrument for Radiated Test

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
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz~18GHz 3m	01/Aug/2021	31/Jul/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
Microwave Preamplifier	Agilent	8449B	3008A02373	1GHz~26.5GHz	03/Nov/2021	02/Nov/2022
Bilog Antenna & 5dB Attenuator	SCHAFFNER / MTJ	CBL 6112B / MTJ6102-05	2723 / 2	30MHz~1GHz	04/Sep/2021	03/Sep/2022
Double Ridged Guide Horn Antenna	SCHWARZBEC	BBHA 9120 D	BBHA 9120 D 01543	1GHz~18GHz	04/Jun/2021	03/Jun/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
RF Cable-R03m	HUBER+SUHNER	SUCOFLEX104	805193/4+805192/4	1GHz~40GHz	06/Apr/2021	05/Apr/2022
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170221	15GHz~40GHz	11/Mar/2021	10/Mar/2022
Loop Antenna	TESEQ	HLA 6120	31244	9kHz~30MHz	16/Mar/2021	15/Mar/2022
EMI Test Receiver	R&S	ESR3	102052	9kHz~3.6GHz	19/Apr/2021	18/Apr/2022



Conducted Emissions at Powerline

Appendix A

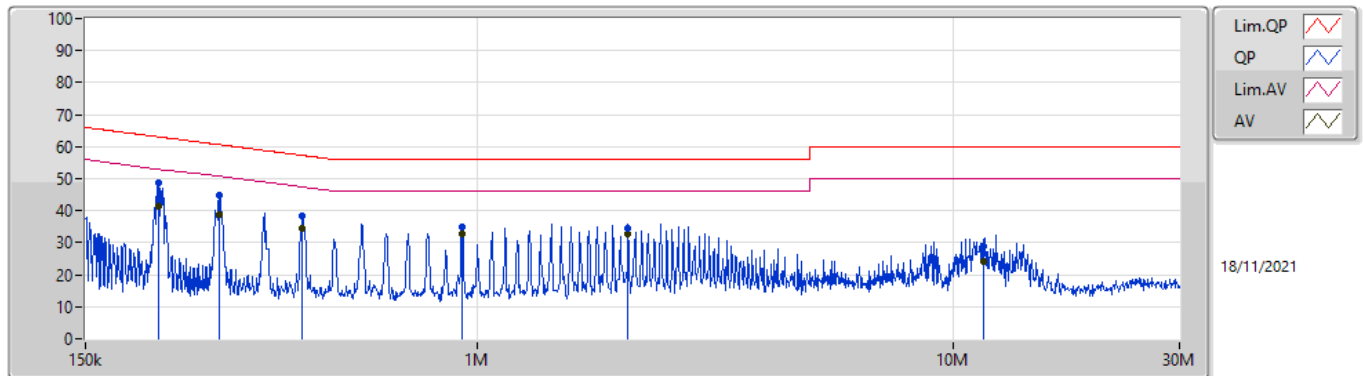
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	286.387k	38.91	50.63	-11.72	Line
Mode 2	Pass	AV	2.211M	15.49	46.00	-30.51	Neutral

Result

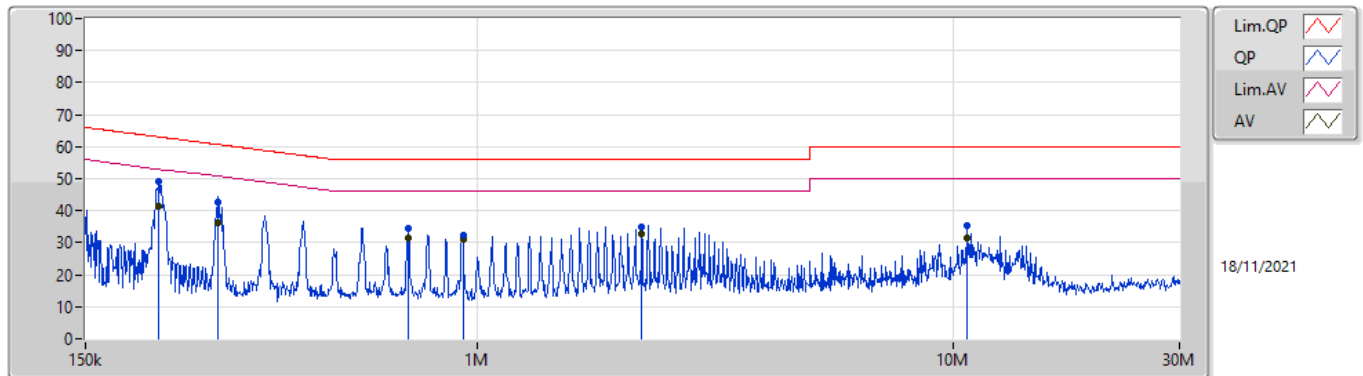
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition	Comments
Mode 1	Pass	QP	213.989k	48.77	63.06	-14.29	Line	-
Mode 1	Pass	AV	213.989k	41.32	53.06	-11.74	Line	-
Mode 1	Pass	QP	286.387k	44.80	60.63	-15.83	Line	-
Mode 1	Pass	AV	286.387k	38.91	50.63	-11.72	Line	-
Mode 1	Pass	QP	428.605k	38.24	57.28	-19.04	Line	-
Mode 1	Pass	AV	428.605k	34.27	47.28	-13.01	Line	-
Mode 1	Pass	QP	929.818k	34.89	56.00	-21.11	Line	-
Mode 1	Pass	AV	929.818k	32.77	46.00	-13.23	Line	-
Mode 1	Pass	QP	2.074M	34.29	56.00	-21.71	Line	-
Mode 1	Pass	AV	2.074M	32.59	46.00	-13.41	Line	-
Mode 1	Pass	QP	11.591M	29.02	60.00	-30.98	Line	-
Mode 1	Pass	AV	11.591M	24.13	50.00	-25.87	Line	-
Mode 1	Pass	QP	213.989k	49.02	63.06	-14.04	Neutral	-
Mode 1	Pass	AV	213.989k	41.27	53.06	-11.79	Neutral	-
Mode 1	Pass	QP	285.246k	42.73	60.67	-17.94	Neutral	-
Mode 1	Pass	AV	285.246k	36.35	50.67	-14.32	Neutral	-
Mode 1	Pass	QP	714.452k	34.67	56.00	-21.33	Neutral	-
Mode 1	Pass	AV	714.452k	31.62	46.00	-14.38	Neutral	-
Mode 1	Pass	QP	933.537k	32.45	56.00	-23.55	Neutral	-
Mode 1	Pass	AV	933.537k	31.03	46.00	-14.97	Neutral	-
Mode 1	Pass	QP	2.22M	35.09	56.00	-20.91	Neutral	-
Mode 1	Pass	AV	2.22M	32.57	46.00	-13.43	Neutral	-
Mode 1	Pass	QP	10.744M	35.33	60.00	-24.67	Neutral	-
Mode 1	Pass	AV	10.744M	31.48	50.00	-18.52	Neutral	-
Mode 2	Pass	QP	159.893k	18.49	65.46	-46.97	Line	-
Mode 2	Pass	AV	159.893k	15.16	55.46	-40.30	Line	-
Mode 2	Pass	QP	213.137k	16.82	63.07	-46.25	Line	-
Mode 2	Pass	AV	213.137k	14.62	53.07	-38.45	Line	-
Mode 2	Pass	QP	349.654k	15.87	58.96	-43.09	Line	-
Mode 2	Pass	AV	349.654k	12.83	48.96	-36.13	Line	-
Mode 2	Pass	QP	798.945k	23.47	56.00	-32.53	Line	-
Mode 2	Pass	AV	798.945k	13.67	46.00	-32.33	Line	-
Mode 2	Pass	QP	2.15M	14.64	56.00	-41.36	Line	-
Mode 2	Pass	AV	2.15M	13.09	46.00	-32.91	Line	-
Mode 2	Pass	QP	17.485M	19.45	60.00	-40.55	Line	-
Mode 2	Pass	AV	17.485M	14.28	50.00	-35.72	Line	-
Mode 2	Pass	QP	167.739k	19.00	65.06	-46.06	Neutral	-
Mode 2	Pass	AV	167.739k	15.66	55.06	-39.40	Neutral	-
Mode 2	Pass	QP	250.038k	16.46	61.76	-45.30	Neutral	-
Mode 2	Pass	AV	250.038k	13.79	51.76	-37.97	Neutral	-
Mode 2	Pass	QP	292.16k	18.19	60.46	-42.27	Neutral	-
Mode 2	Pass	AV	292.16k	15.54	50.46	-34.92	Neutral	-
Mode 2	Pass	QP	758.54k	15.97	56.00	-40.03	Neutral	-
Mode 2	Pass	AV	758.54k	12.31	46.00	-33.69	Neutral	-
Mode 2	Pass	QP	2.211M	20.04	56.00	-35.96	Neutral	-
Mode 2	Pass	AV	2.211M	15.49	46.00	-30.51	Neutral	-
Mode 2	Pass	QP	10.787M	16.59	60.00	-43.41	Neutral	-
Mode 2	Pass	AV	10.787M	14.78	50.00	-35.22	Neutral	-

Conducted Emissions at Powerline_Mode 1



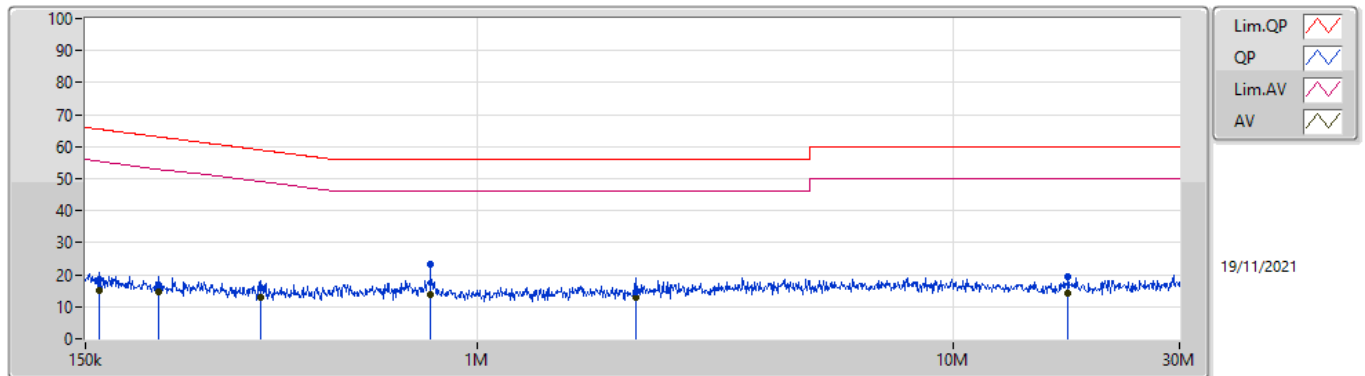
Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	213.989k	48.77	63.06	-14.29	19.61	Line	-	29.16	9.68	0.04	9.89			
AV	213.989k	41.32	53.06	-11.74	19.61	Line	-	21.71	9.68	0.04	9.89			
QP	286.387k	44.80	60.63	-15.83	19.61	Line	-	25.19	9.67	0.05	9.89			
AV	286.387k	38.91	50.63	-11.72	19.61	Line	-	19.30	9.67	0.05	9.89			
QP	428.605k	38.24	57.28	-19.04	19.62	Line	-	18.62	9.67	0.06	9.89			
AV	428.605k	34.27	47.28	-13.01	19.62	Line	-	14.65	9.67	0.06	9.89			
QP	929.818k	34.89	56.00	-21.11	19.65	Line	-	15.24	9.68	0.08	9.89			
AV	929.818k	32.77	46.00	-13.23	19.65	Line	-	13.12	9.68	0.08	9.89			
QP	2.074M	34.29	56.00	-21.71	19.67	Line	-	14.62	9.69	0.10	9.88			
AV	2.074M	32.59	46.00	-13.41	19.67	Line	-	12.92	9.69	0.10	9.88			
QP	11.591M	29.02	60.00	-30.98	19.90	Line	-	9.12	9.79	0.22	9.89			
AV	11.591M	24.13	50.00	-25.87	19.90	Line	-	4.23	9.79	0.22	9.89			

Conducted Emissions at Powerline_Mode 1



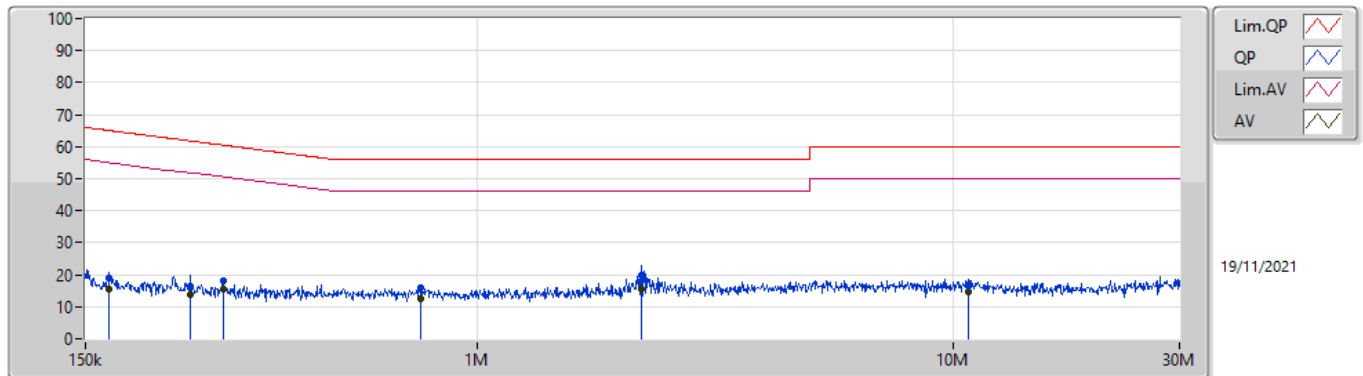
Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	213.989k	49.02	63.06	-14.04	19.61	Neutral	-	29.41	9.68	0.04	9.89			
AV	213.989k	41.27	53.06	-11.79	19.61	Neutral	-	21.66	9.68	0.04	9.89			
QP	285.246k	42.73	60.67	-17.94	19.61	Neutral	-	23.12	9.67	0.05	9.89			
AV	285.246k	36.35	50.67	-14.32	19.61	Neutral	-	16.74	9.67	0.05	9.89			
QP	714.452k	34.67	56.00	-21.33	19.63	Neutral	-	15.04	9.67	0.07	9.89			
AV	714.452k	31.62	46.00	-14.38	19.63	Neutral	-	11.99	9.67	0.07	9.89			
QP	933.537k	32.45	56.00	-23.55	19.64	Neutral	-	12.81	9.67	0.08	9.89			
AV	933.537k	31.03	46.00	-14.97	19.64	Neutral	-	11.39	9.67	0.08	9.89			
QP	2.22M	35.09	56.00	-20.91	19.67	Neutral	-	15.42	9.68	0.11	9.88			
AV	2.22M	32.57	46.00	-13.43	19.67	Neutral	-	12.90	9.68	0.11	9.88			
QP	10.744M	35.33	60.00	-24.67	19.92	Neutral	-	15.41	9.82	0.21	9.89			
AV	10.744M	31.48	50.00	-18.52	19.92	Neutral	-	11.56	9.82	0.21	9.89			

Conducted Emissions at Powerline_Mode 2



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	159.893k	18.49	65.46	-46.97	19.62	Line	-	-1.13	9.69	0.04	9.89			
AV	159.893k	15.16	55.46	-40.30	19.62	Line	-	-4.46	9.69	0.04	9.89			
QP	213.137k	16.82	63.07	-46.25	19.61	Line	-	-2.79	9.68	0.04	9.89			
AV	213.137k	14.62	53.07	-38.45	19.61	Line	-	-4.99	9.68	0.04	9.89			
QP	349.654k	15.87	58.96	-43.09	19.62	Line	-	-3.75	9.67	0.06	9.89			
AV	349.654k	12.83	48.96	-36.13	19.62	Line	-	-6.79	9.67	0.06	9.89			
QP	798.945k	23.47	56.00	-32.53	19.65	Line	-	3.82	9.68	0.08	9.89			
AV	798.945k	13.67	46.00	-32.33	19.65	Line	-	-5.98	9.68	0.08	9.89			
QP	2.15M	14.64	56.00	-41.36	19.67	Line	-	-5.03	9.69	0.10	9.88			
AV	2.15M	13.09	46.00	-32.91	19.67	Line	-	-6.58	9.69	0.10	9.88			
QP	17.485M	19.45	60.00	-40.55	19.95	Line	-	-0.50	9.78	0.28	9.89			
AV	17.485M	14.28	50.00	-35.72	19.95	Line	-	-5.67	9.78	0.28	9.89			

Conducted Emissions at Powerline_Mode 2



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	167.739k	19.00	65.06	-46.06	19.62	Neutral	-	-0.62	9.69	0.04	9.89			
AV	167.739k	15.66	55.06	-39.40	19.62	Neutral	-	-3.96	9.69	0.04	9.89			
QP	250.038k	16.46	61.76	-45.30	19.62	Neutral	-	-3.16	9.68	0.05	9.89			
AV	250.038k	13.79	51.76	-37.97	19.62	Neutral	-	-5.83	9.68	0.05	9.89			
QP	292.16k	18.19	60.46	-42.27	19.61	Neutral	-	-1.42	9.67	0.05	9.89			
AV	292.16k	15.54	50.46	-34.92	19.61	Neutral	-	-4.07	9.67	0.05	9.89			
QP	758.54k	15.97	56.00	-40.03	19.63	Neutral	-	-3.66	9.67	0.07	9.89			
AV	758.54k	12.31	46.00	-33.69	19.63	Neutral	-	-7.32	9.67	0.07	9.89			
QP	2.211M	20.04	56.00	-35.96	19.67	Neutral	-	0.37	9.68	0.11	9.88			
AV	2.211M	15.49	46.00	-30.51	19.67	Neutral	-	-4.18	9.68	0.11	9.88			
QP	10.787M	16.59	60.00	-43.41	19.92	Neutral	-	-3.33	9.82	0.21	9.89			
AV	10.787M	14.78	50.00	-35.22	19.92	Neutral	-	-5.14	9.82	0.21	9.89			

**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
BT-LE(1Mbps)	713.75k	1.041M	1M04F1D	707.5k	1.032M
BT-LE(2Mbps)	1.263M	2.059M	2M06F1D	1.253M	2.054M

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

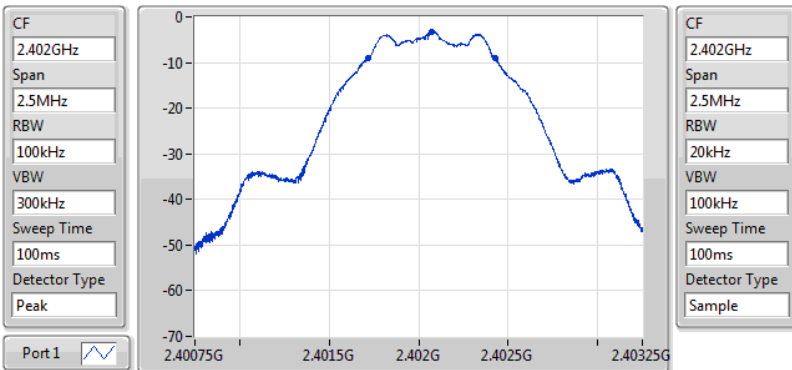
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	500k	707.5k	1.033M
2440MHz	Pass	500k	712.5k	1.041M
2480MHz	Pass	500k	713.75k	1.032M
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	500k	1.253M	2.059M
2440MHz	Pass	500k	1.255M	2.054M
2480MHz	Pass	500k	1.263M	2.054M

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

BT-LE(1Mbps)

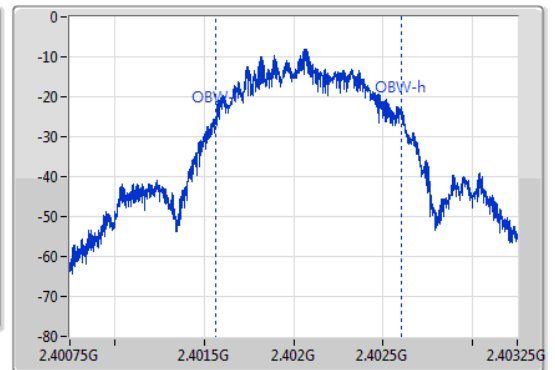
2402MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
707.5k	2.401718G	2.402425G	1.033M	2.401568G	2.402601G	500k	1

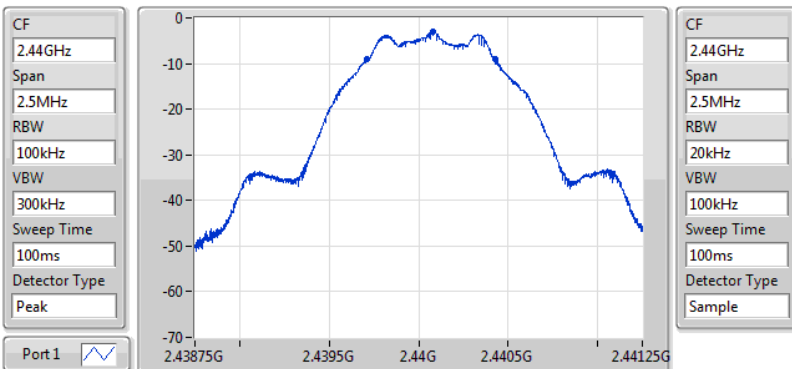
EBW-DTS

09/12/2021



BT-LE(1Mbps)

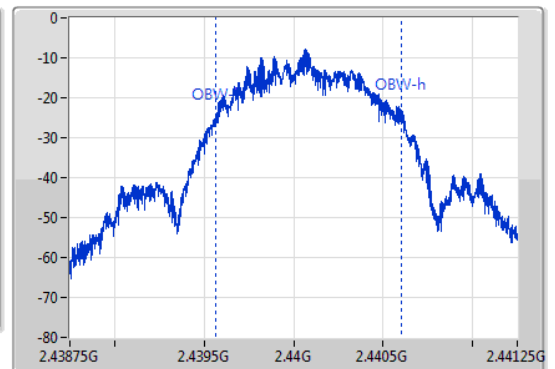
2440MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
712.5k	2.439714G	2.440426G	1.041M	2.439563G	2.440603G	500k	1

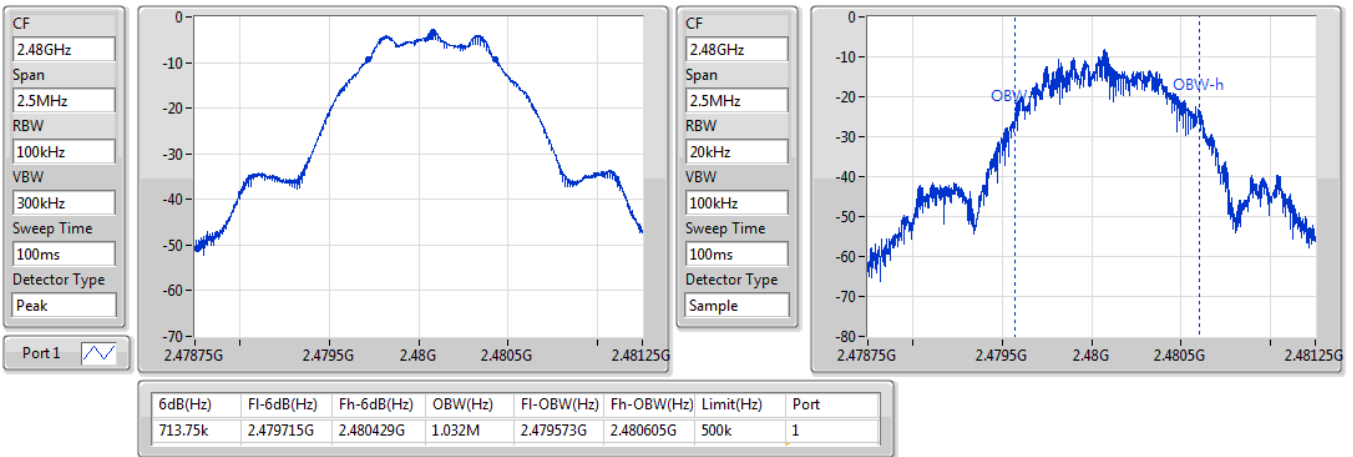
EBW-DTS

09/12/2021

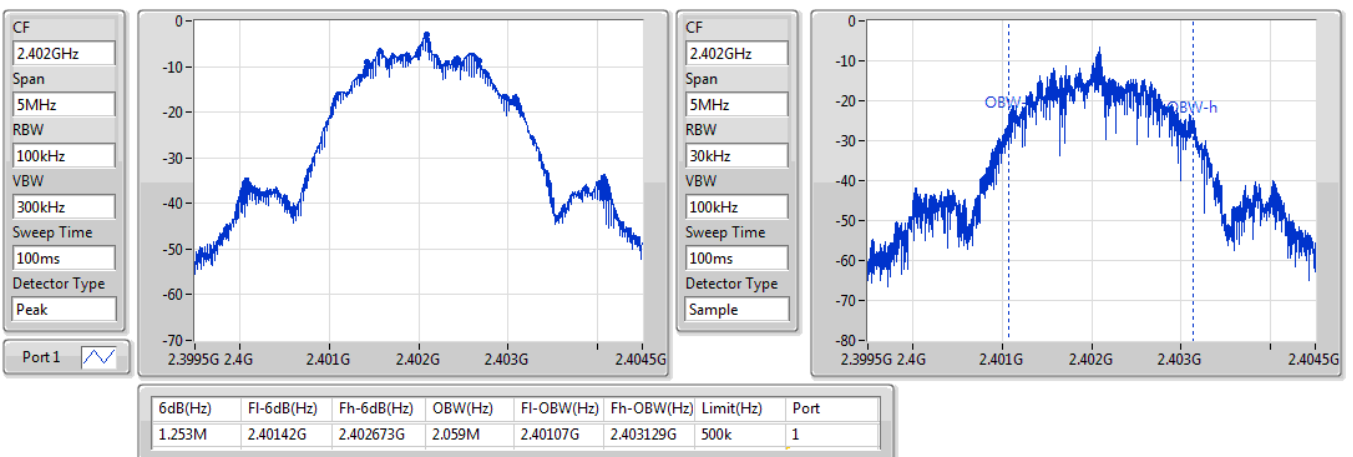


BT-LE(1Mbps)
EBW-DTS
2480MHz

09/12/2021


BT-LE(2Mbps)
EBW-DTS
2402MHz

22/11/2021

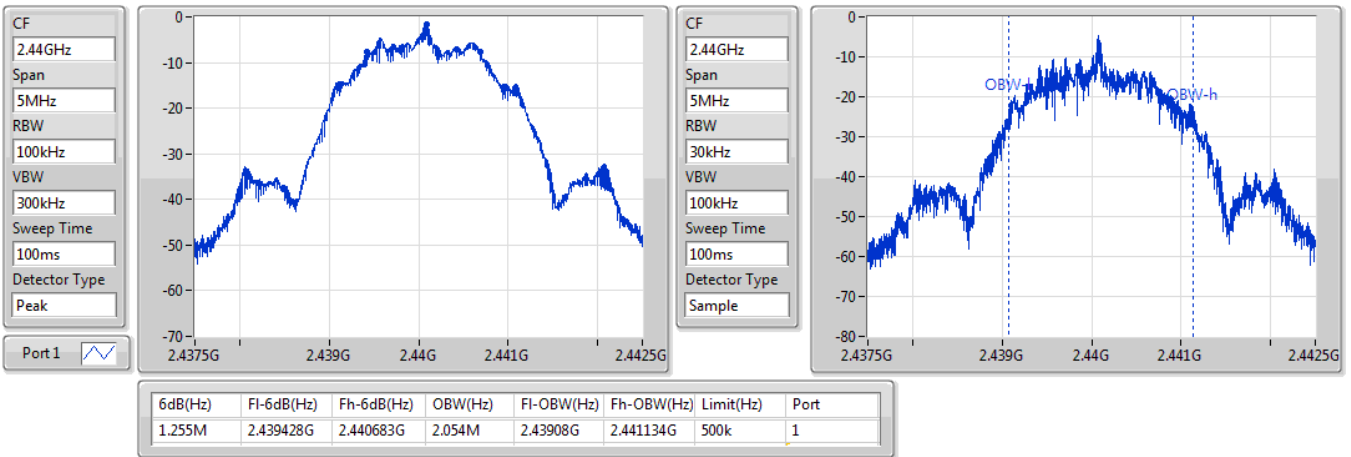


BT-LE(2Mbps)

EBW-DTS

2440MHz

22/11/2021

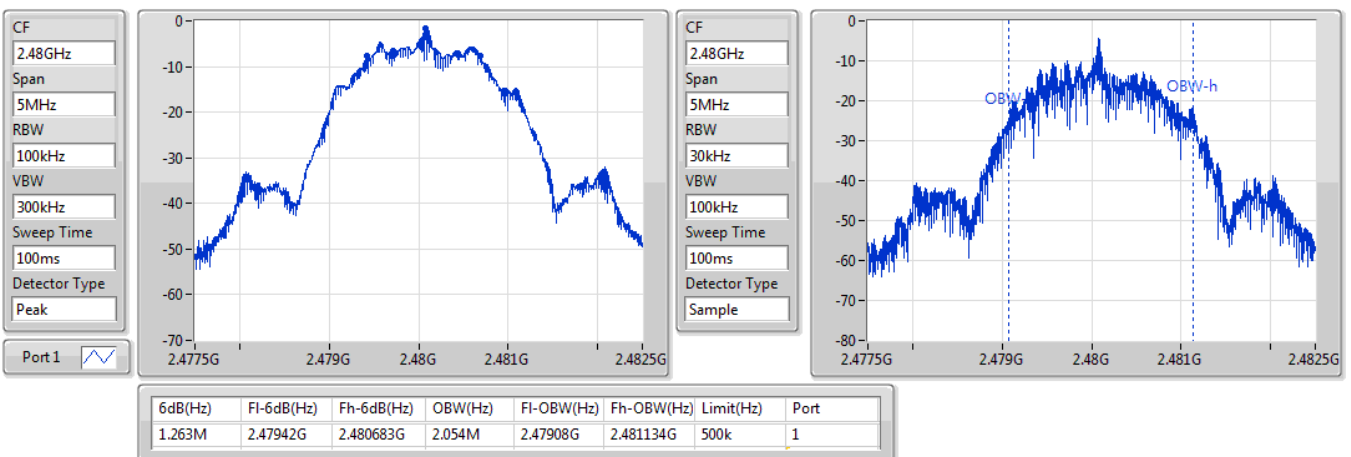


BT-LE(2Mbps)

EBW-DTS

2480MHz

22/11/2021





Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-LF(1Mbps)	-2.79	0.00053
BT-LF(2Mbps)	-1.67	0.00068



Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	2.00	-2.80	30.00
2440MHz	Pass	2.00	-2.79	30.00
2480MHz	Pass	2.00	-3.13	30.00
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	2.00	-2.97	30.00
2440MHz	Pass	2.00	-1.74	30.00
2480MHz	Pass	2.00	-1.67	30.00

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



Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
BT-LE(1Mbps)	-18.26
BT-LE(2Mbps)	-19.69

RBW = 3kHz;

**Result**

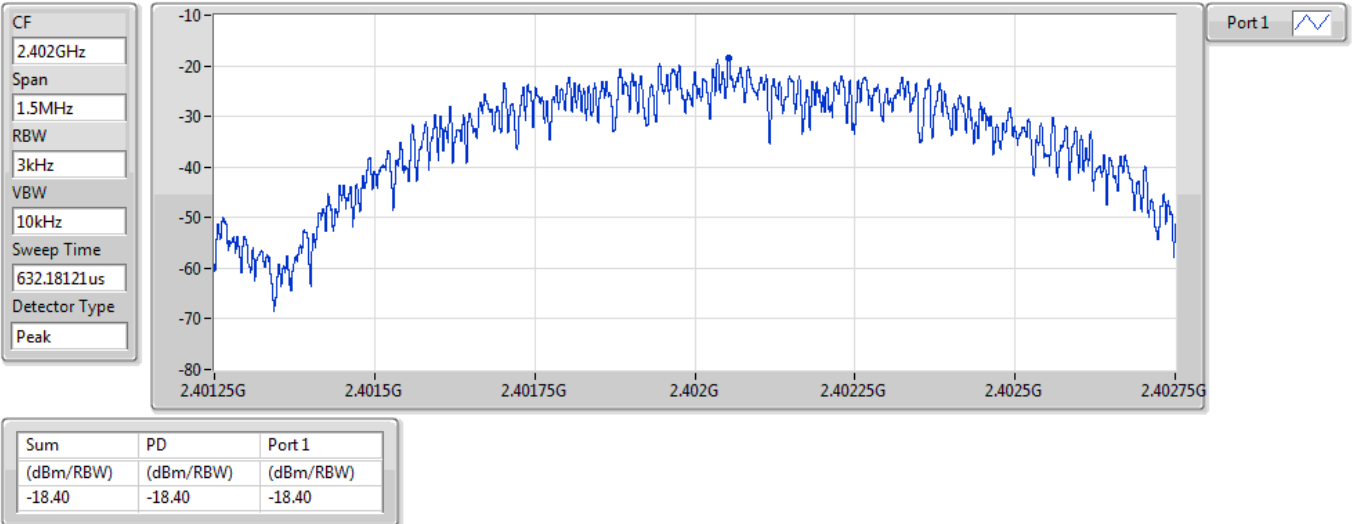
Mode	Result	Gain (dBi)	PD (dBm/RBW)	PD Limit (dBm/RBW)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	2.00	-18.40	8.00
2440MHz	Pass	2.00	-18.26	8.00
2480MHz	Pass	2.00	-19.24	8.00
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	2.00	-20.83	8.00
2440MHz	Pass	2.00	-19.73	8.00
2480MHz	Pass	2.00	-19.69	8.00

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)

2402MHz

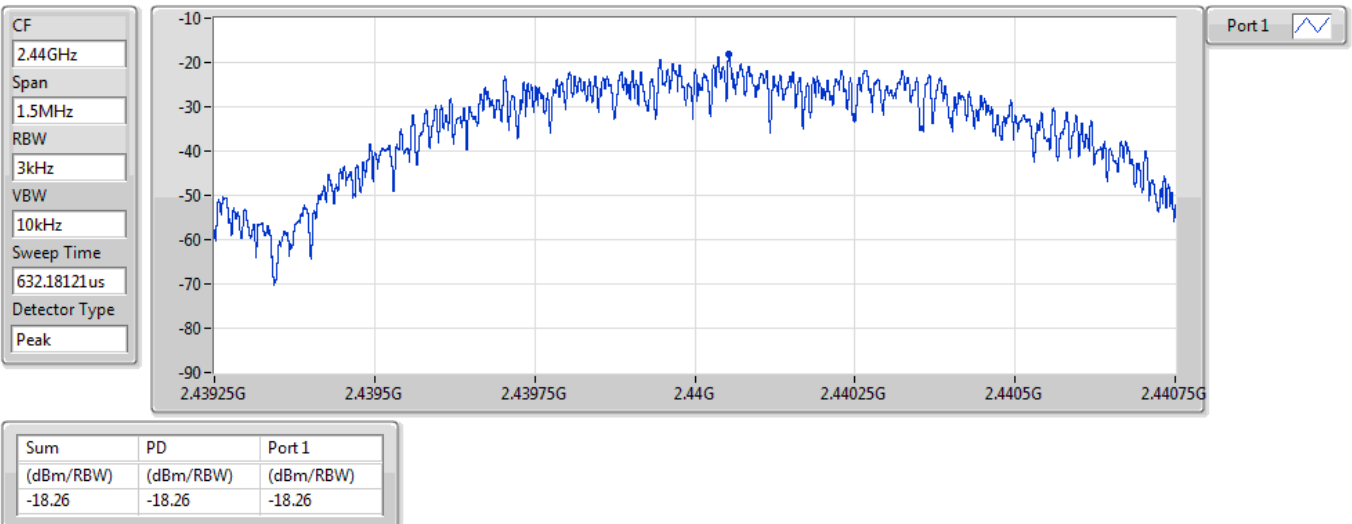
09/12/2021



BT-LE(1Mbps)

2440MHz

09/12/2021

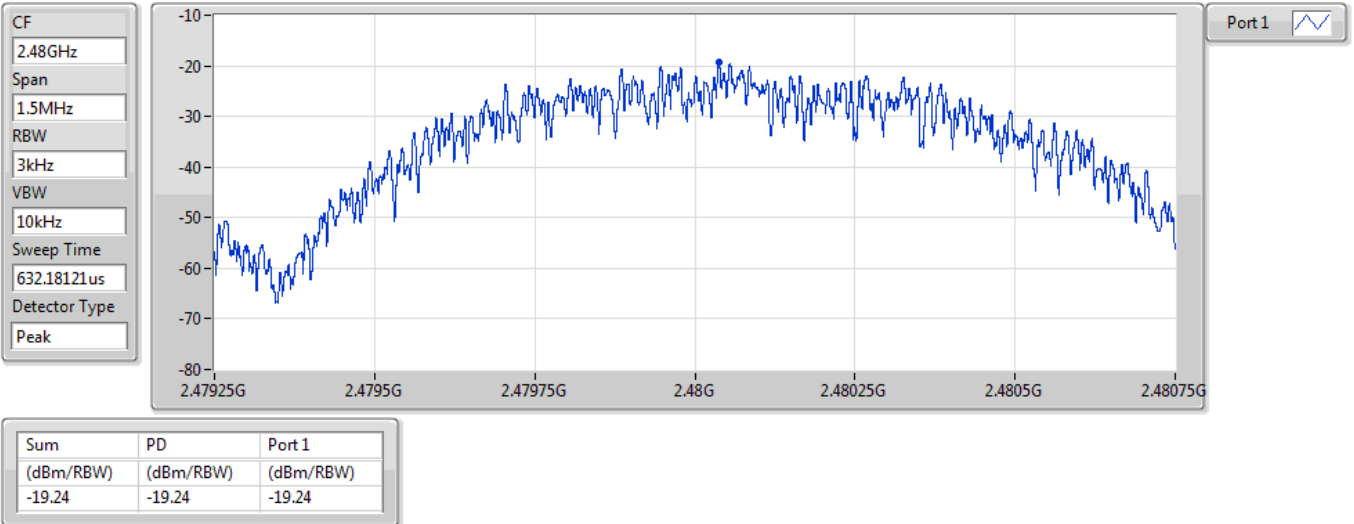


BT-LE(1Mbps)

PSD

2480MHz

09/12/2021

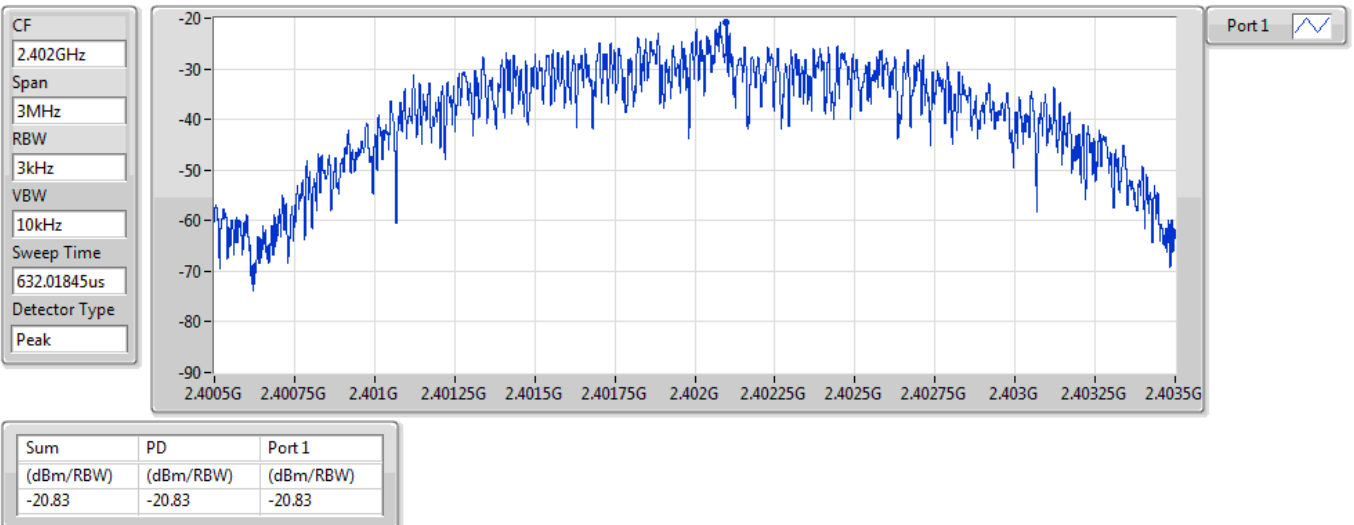


BT-LE(2Mbps)

PSD

2402MHz

22/11/2021

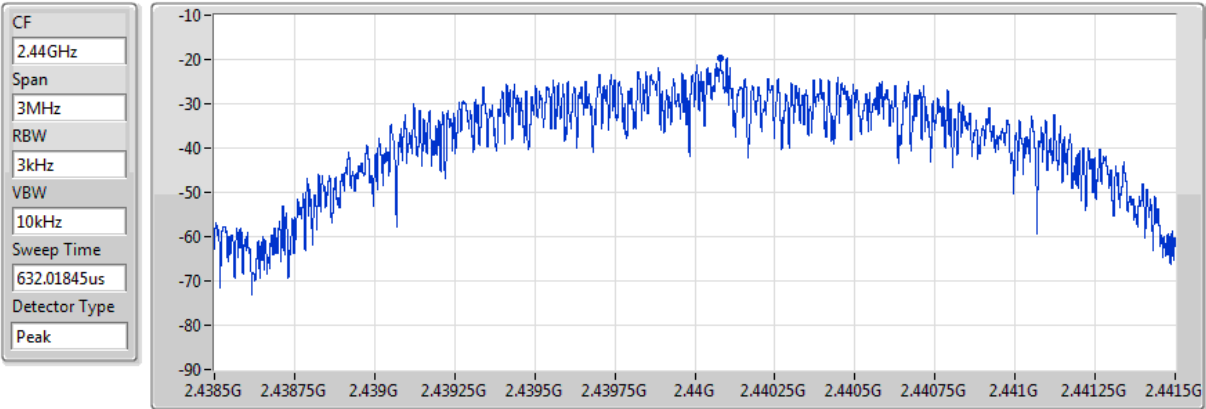


BT-LE(2Mbps)

PSD

2440MHz

22/11/2021



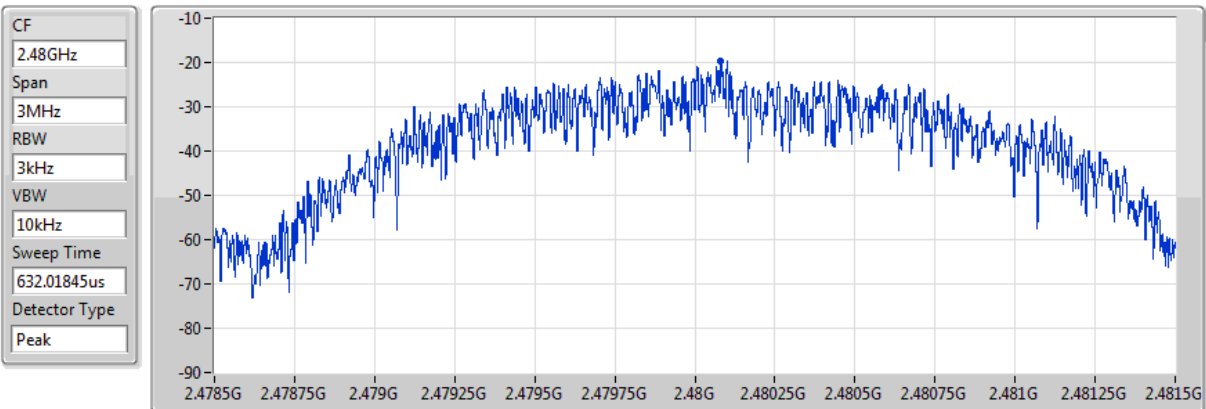
Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-19.73	-19.73	-19.73

BT-LE(2Mbps)

PSD

2480MHz

22/11/2021



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-19.69	-19.69	-19.69



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	-2.34	-32.34	199.79M	-50.64	2.39694G	-52.64	2.4835G	-53.16	2.50151G	-52.47	24.8594G	-41.55	1
BT-LE(2Mbps)	Pass	2.40205G	-3.05	-33.05	439.78M	-50.08	2.39999G	-38.85	2.4G	-36.81	2.4926G	-51.41	15.20277G	-40.52	1

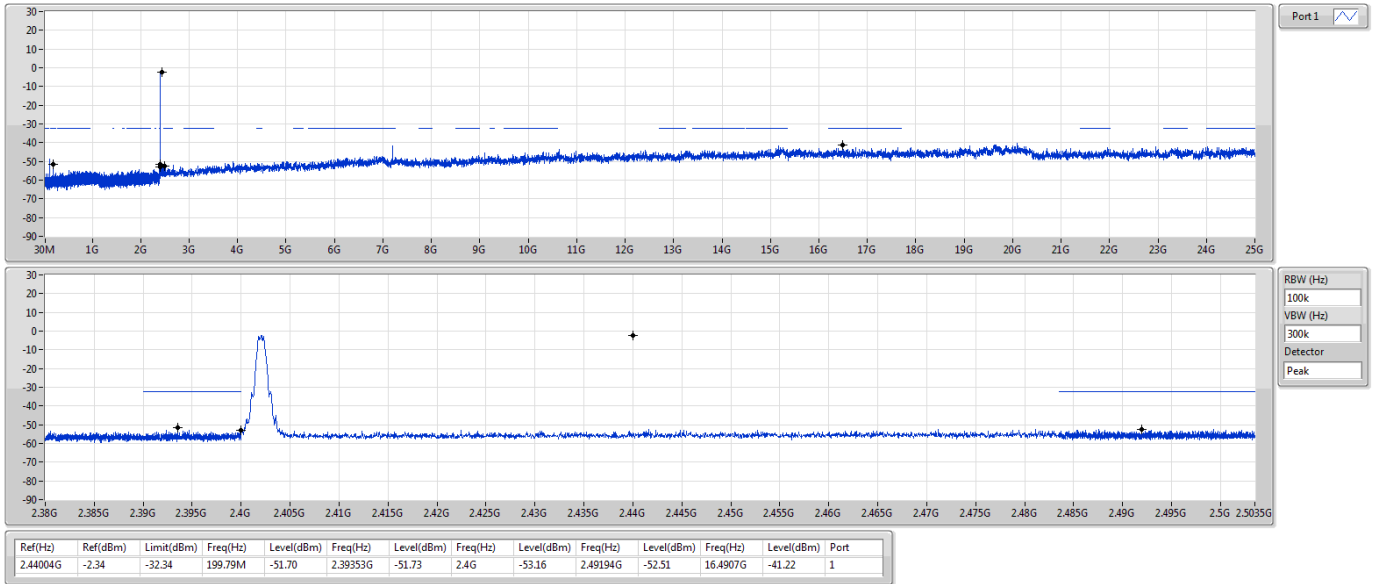
**Result**

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
BT-LE(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.44004G	-2.34	-32.34	199.79M	-51.70	2.39353G	-51.73	2.4G	-53.16	2.49194G	-52.51	16.4907G	-41.22	1
2440MHz	Pass	2.44004G	-2.34	-32.34	199.79M	-50.64	2.39694G	-52.64	2.4835G	-53.16	2.50151G	-52.47	24.8594G	-41.55	1
2480MHz	Pass	2.44004G	-2.34	-32.34	199.79M	-50.64	2.3982G	-52.52	2.4835G	-55.59	2.48503G	-52.25	23.47305G	-42.05	1
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.40205G	-3.05	-33.05	439.78M	-50.08	2.39999G	-38.85	2.4G	-36.81	2.4926G	-51.41	15.20277G	-40.52	1
2440MHz	Pass	2.40205G	-3.05	-33.05	439.78M	-51.67	2.39114G	-51.97	2.4835G	-54.81	2.49899G	-50.46	15.21121G	-40.29	1
2480MHz	Pass	2.40205G	-3.05	-33.05	439.78M	-49.94	2.39351G	-52.15	2.4G	-53.52	2.4981G	-51.29	15.21402G	-40.06	1

BT-LE(1Mbps)

CSEndB-DTS

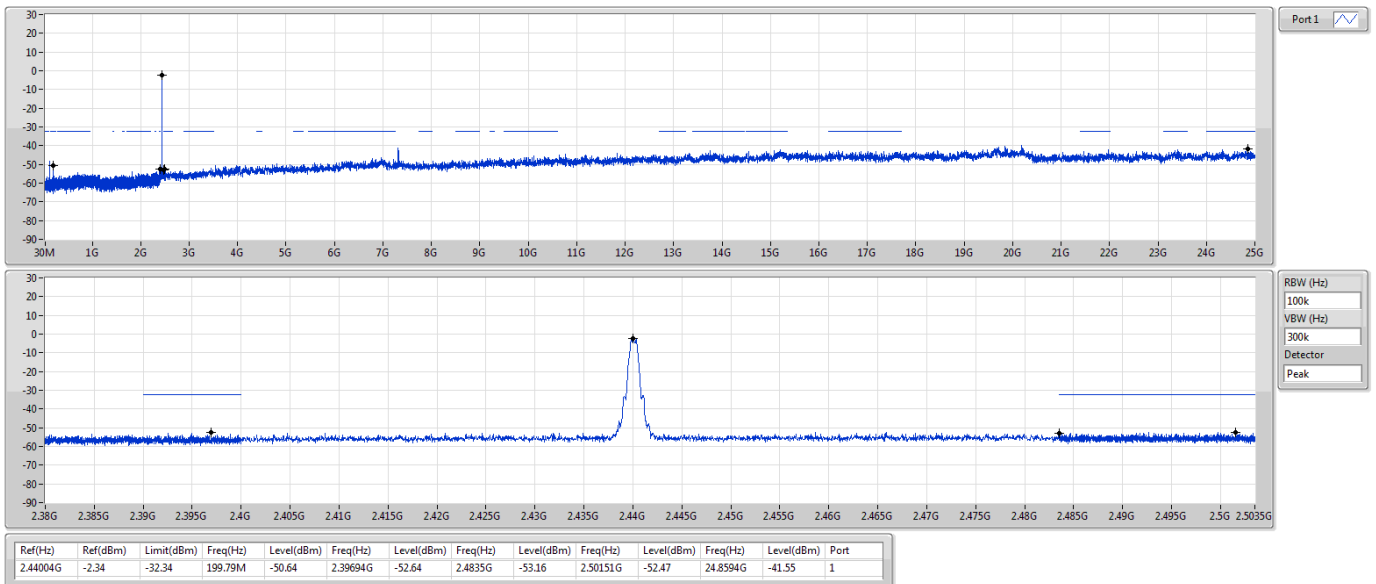
2402MHz



BT-LE(1Mbps)

CSEndB-DTS

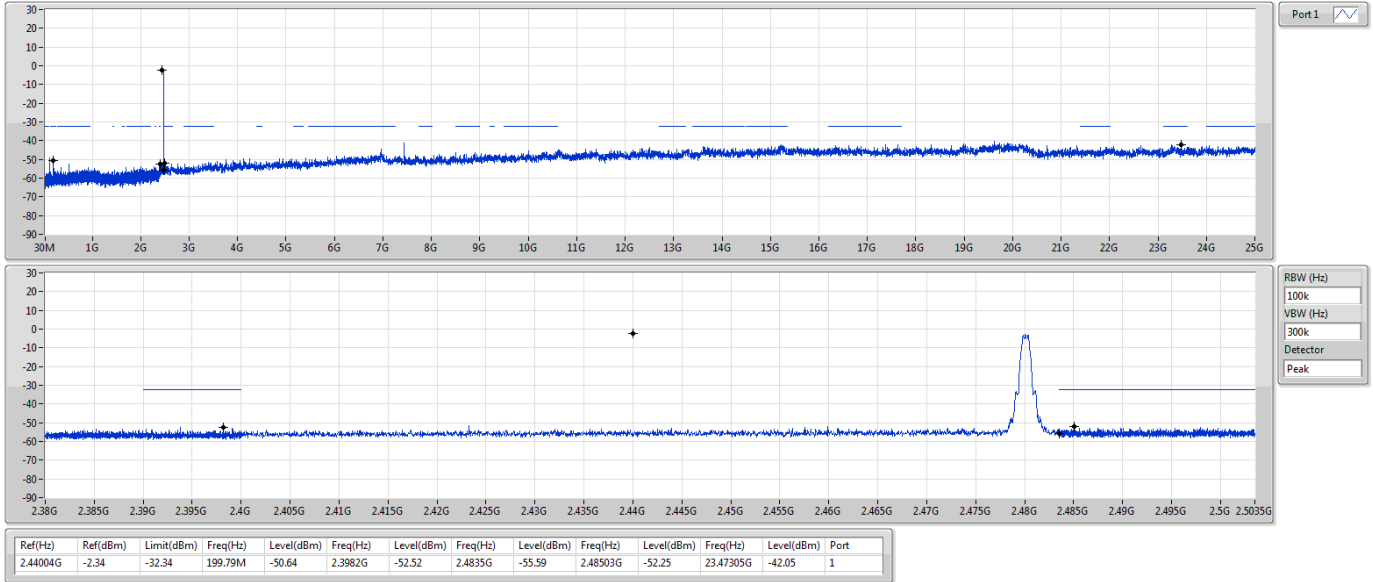
2440MHz



BT-LE(1Mbps)

CSEndB-DTS

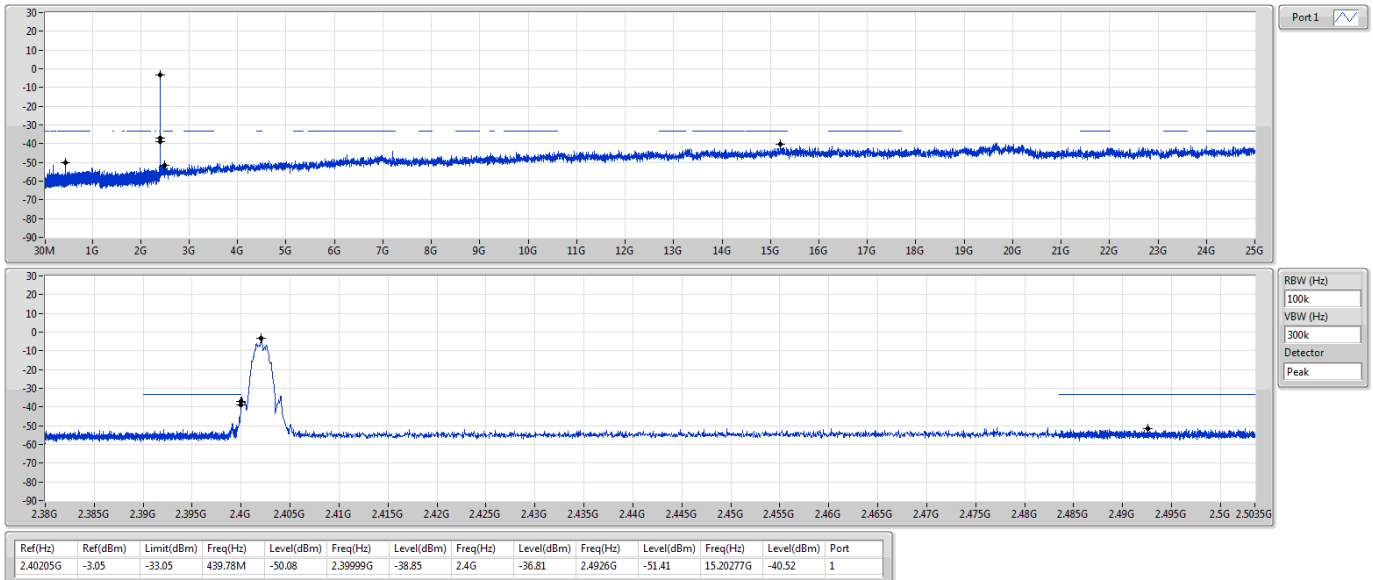
2480MHz



BT-LE(2Mbps)

CSEndB-DTS

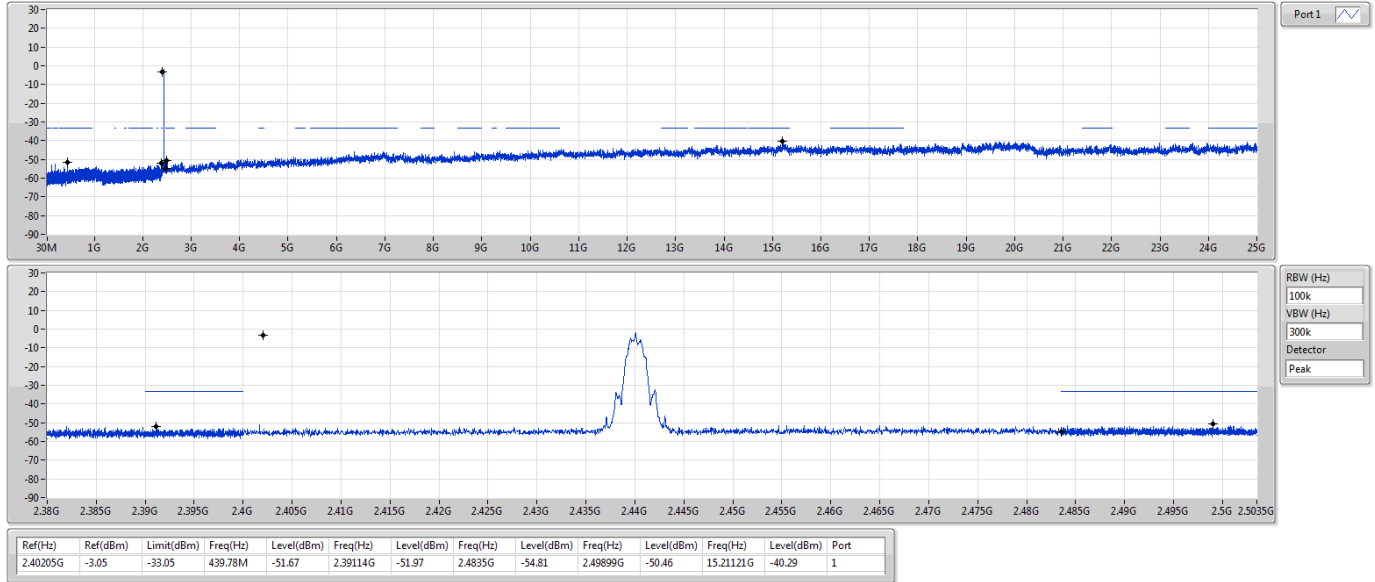
2402MHz



BT-LE(2Mbps)

CSEndB-DTS

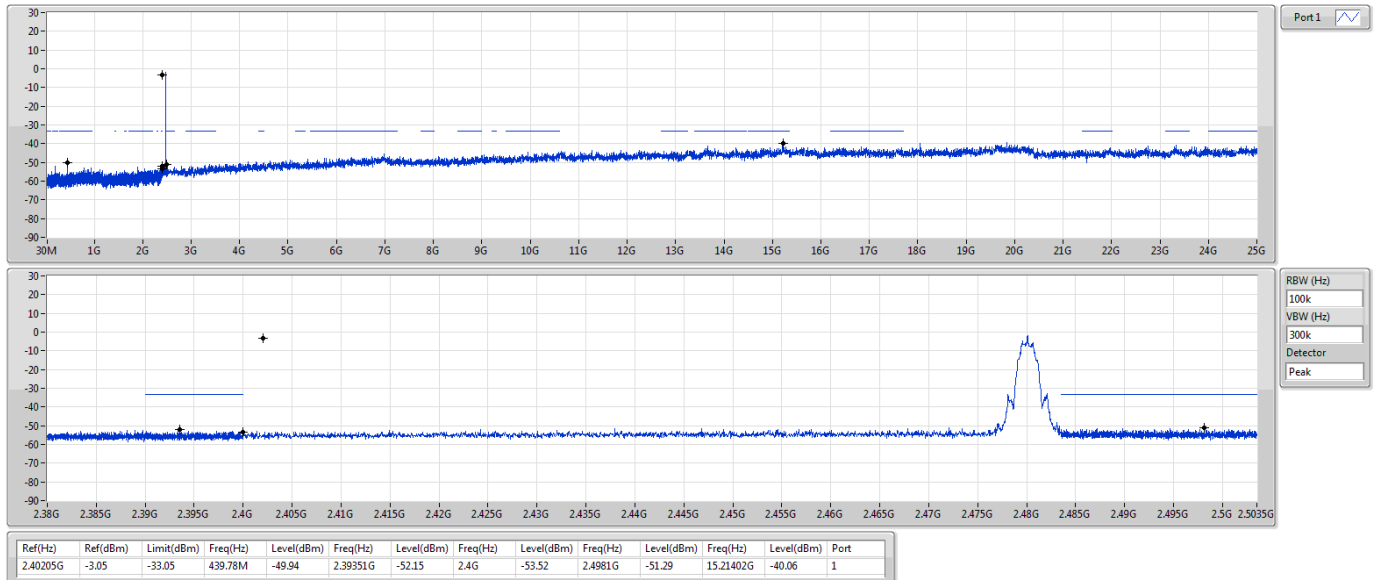
2440MHz



BT-LE(2Mbps)

CSEndB-DTS

2480MHz





Summary

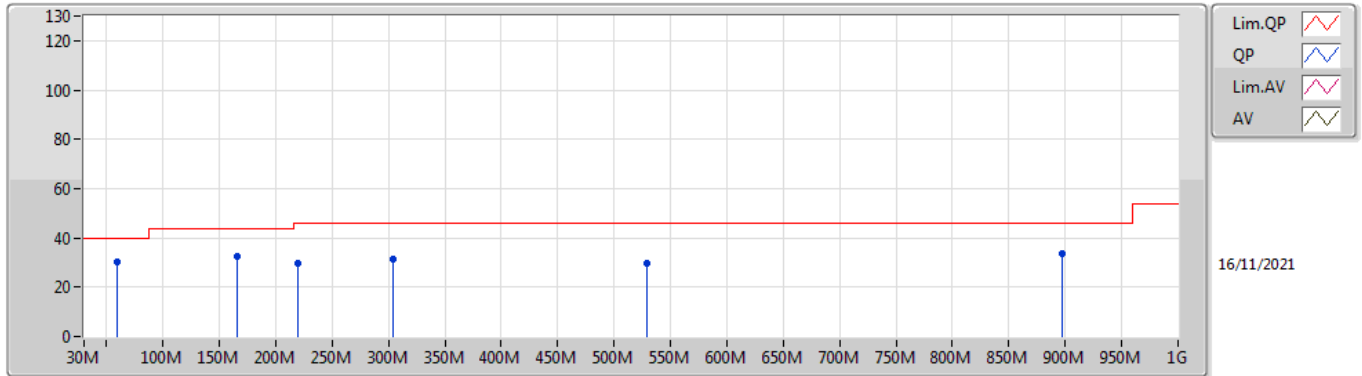
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
BT-LE(2Mbps)	Pass	PK	165.8M	35.00	43.50	-8.50	3	Horizontal	0	1.00	-

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-	-
2440MHz	Pass	PK	59.1M	30.22	40.00	-9.78	3	Vertical	360	1.00	-
2440MHz	Pass	PK	165.8M	32.73	43.50	-10.77	3	Vertical	360	1.00	-
2440MHz	Pass	PK	220.12M	29.46	46.00	-16.54	3	Vertical	360	1.00	-
2440MHz	Pass	PK	303.54M	31.48	46.00	-14.52	3	Vertical	360	1.00	-
2440MHz	Pass	PK	528.58M	29.74	46.00	-16.26	3	Vertical	360	1.00	-
2440MHz	Pass	PK	897.18M	33.75	46.00	-12.25	3	Vertical	360	1.00	-
2440MHz	Pass	PK	165.8M	35.00	43.50	-8.50	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	231.76M	37.27	46.00	-8.73	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	321M	29.61	46.00	-16.39	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	561.56M	30.24	46.00	-15.76	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	738.1M	37.25	46.00	-8.75	3	Horizontal	0	1.00	-
2440MHz	Pass	PK	976.72M	34.87	54.00	-19.13	3	Horizontal	0	1.00	-

BT-LE(2Mbps)

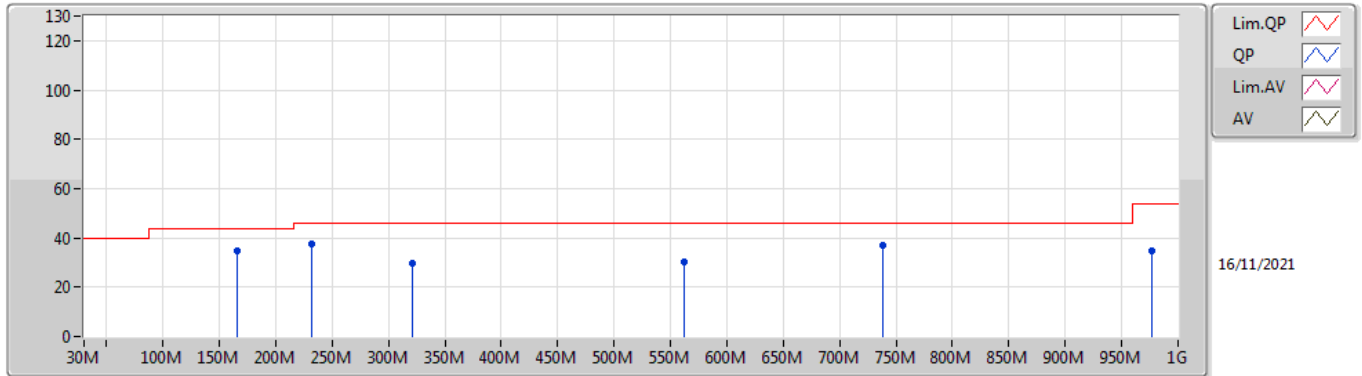
2440MHz_Battery



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	59.1M	30.22	40.00	-9.78	-15.06	3	Vertical	360	1.00	-	45.28	11.57	1.13	27.76
PK	165.8M	32.73	43.50	-10.77	-10.62	3	Vertical	360	1.00	-	43.35	15.08	1.80	27.50
PK	220.12M	29.46	46.00	-16.54	-10.77	3	Vertical	360	1.00	-	40.23	14.39	2.04	27.20
PK	303.54M	31.48	46.00	-14.52	-6.24	3	Vertical	360	1.00	-	37.72	18.47	2.37	27.08
PK	528.58M	29.74	46.00	-16.26	-2.40	3	Vertical	360	1.00	-	32.14	22.79	3.14	28.33
PK	897.18M	33.75	46.00	-12.25	2.23	3	Vertical	360	1.00	-	31.52	25.64	4.10	27.51

BT-LE(2Mbps)

2440MHz_Battery



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	165.8M	35.00	43.50	-8.50	-10.62	3	Horizontal	0	1.00	-	45.62	15.08	1.80	27.50
PK	231.76M	37.27	46.00	-8.73	-9.52	3	Horizontal	0	1.00	-	46.79	15.53	2.08	27.13
PK	321M	29.61	46.00	-16.39	-5.92	3	Horizontal	0	1.00	-	35.53	18.81	2.44	27.17
PK	561.56M	30.24	46.00	-15.76	-1.12	3	Horizontal	0	1.00	-	31.36	24.00	3.23	28.35
PK	738.1M	37.25	46.00	-8.75	0.40	3	Horizontal	0	1.00	-	36.85	24.83	3.68	28.11
PK	976.72M	34.87	54.00	-19.13	3.35	3	Horizontal	0	1.00	-	31.52	26.29	4.25	27.19

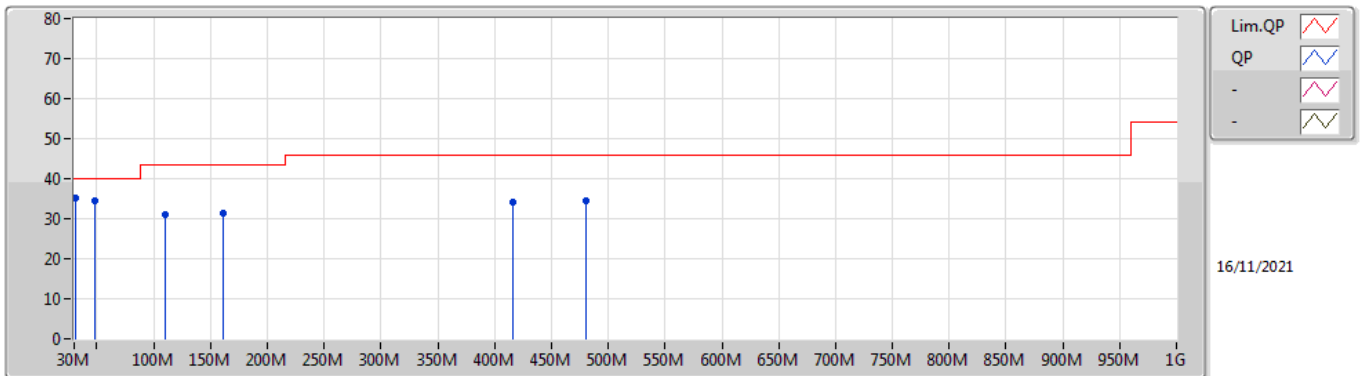
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 2	Pass	PK	30.97M	35.16	40.00	-4.84	Vertical
Mode 3	Pass	PK	265.71M	37.48	46.00	-8.52	Horizontal

Mode Configure

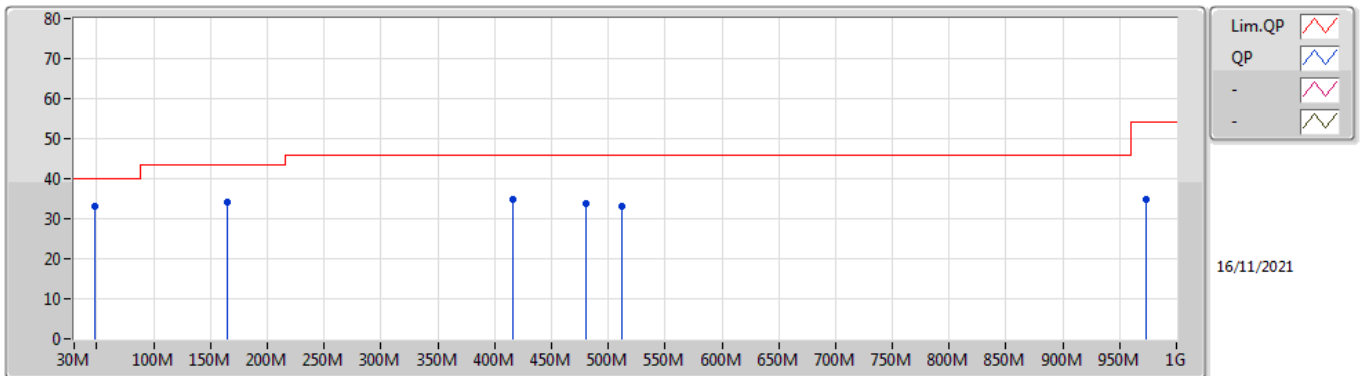
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
Mode 2	Pass	PK	30.97M	35.16	40.00	-4.84	3	Vertical	360	1.00	-
Mode 2	Pass	PK	48.43M	34.38	40.00	-5.62	3	Vertical	360	1.00	-
Mode 2	Pass	PK	109.54M	30.94	43.50	-12.56	3	Vertical	360	1.00	-
Mode 2	Pass	PK	160.95M	31.39	43.50	-12.11	3	Vertical	360	1.00	-
Mode 2	Pass	PK	416.06M	34.26	46.00	-11.74	3	Vertical	360	1.00	-
Mode 2	Pass	PK	480.08M	34.61	46.00	-11.39	3	Vertical	360	1.00	-
Mode 2	Pass	PK	48.43M	32.97	40.00	-7.03	3	Horizontal	0	1.00	-
Mode 2	Pass	PK	164.83M	33.99	43.50	-9.51	3	Horizontal	0	1.00	-
Mode 2	Pass	PK	416.06M	34.95	46.00	-11.05	3	Horizontal	0	1.00	-
Mode 2	Pass	PK	480.08M	33.92	46.00	-12.08	3	Horizontal	0	1.00	-
Mode 2	Pass	PK	512.09M	33.21	46.00	-12.79	3	Horizontal	0	1.00	-
Mode 2	Pass	PK	973.81M	34.83	54.00	-19.17	3	Horizontal	0	1.00	-
Mode 3	Pass	PK	106.63M	30.97	43.50	-12.53	3	Vertical	360	1.00	-
Mode 3	Pass	PK	159.98M	34.20	43.50	-9.30	3	Vertical	360	1.00	-
Mode 3	Pass	PK	304.51M	34.02	46.00	-11.98	3	Vertical	360	1.00	-
Mode 3	Pass	PK	416.06M	33.59	46.00	-12.41	3	Vertical	360	1.00	-
Mode 3	Pass	PK	480.08M	36.14	46.00	-9.86	3	Vertical	360	1.00	-
Mode 3	Pass	PK	799.21M	33.75	46.00	-12.25	3	Vertical	360	1.00	-
Mode 3	Pass	PK	164.83M	33.78	43.50	-9.72	3	Horizontal	0	1.00	-
Mode 3	Pass	PK	242.43M	35.82	46.00	-10.18	3	Horizontal	0	1.00	-
Mode 3	Pass	PK	265.71M	37.48	46.00	-8.52	3	Horizontal	0	1.00	-
Mode 3	Pass	PK	416.06M	36.11	46.00	-9.89	3	Horizontal	0	1.00	-
Mode 3	Pass	PK	480.08M	37.00	46.00	-9.00	3	Horizontal	0	1.00	-
Mode 3	Pass	PK	970.9M	34.57	54.00	-19.43	3	Horizontal	0	1.00	-

Radiated Emissions below 1GHz_Mode 2



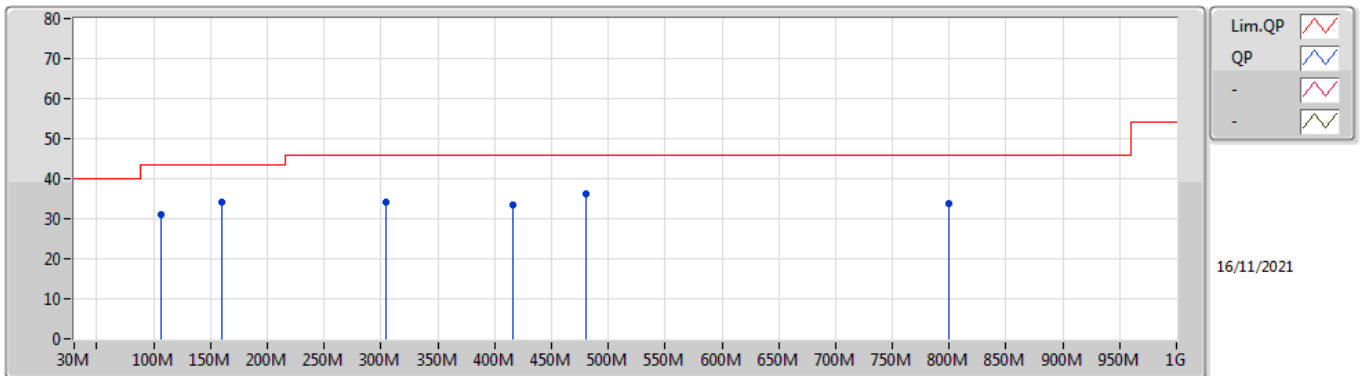
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)
PK	30.97M	35.16	40.00	-4.84	-3.36	3	Vertical	360	1.00	-	38.52	22.79	0.87	27.02
PK	48.43M	34.38	40.00	-5.62	-12.85	3	Vertical	360	1.00	-	47.23	13.77	1.05	27.67
PK	109.54M	30.94	43.50	-12.56	-9.23	3	Vertical	360	1.00	-	40.17	17.07	1.48	27.78
PK	160.95M	31.39	43.50	-12.11	-10.61	3	Vertical	360	1.00	-	42.00	15.14	1.77	27.52
PK	416.06M	34.26	46.00	-11.74	-3.34	3	Vertical	360	1.00	-	37.60	21.74	2.79	27.87
PK	480.08M	34.61	46.00	-11.39	-2.61	3	Vertical	360	1.00	-	37.22	22.62	3.01	28.24

Radiated Emissions below 1GHz_Mode 2



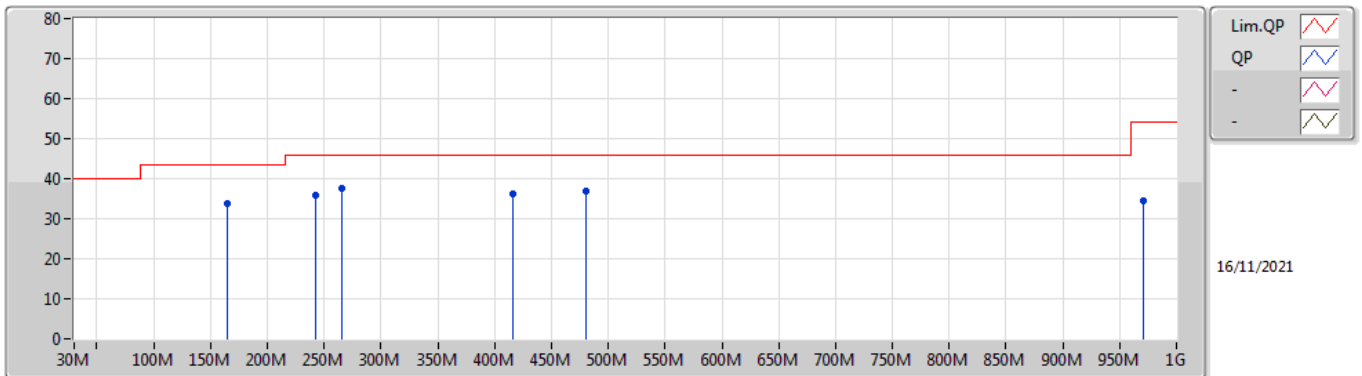
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)
PK	48.43M	32.97	40.00	-7.03	-12.85	3	Horizontal	0	1.00	-	45.82	13.77	1.05	27.67
PK	164.83M	33.99	43.50	-9.51	-10.61	3	Horizontal	0	1.00	-	44.60	15.11	1.79	27.51
PK	416.06M	34.95	46.00	-11.05	-3.34	3	Horizontal	0	1.00	-	38.29	21.74	2.79	27.87
PK	480.08M	33.92	46.00	-12.08	-2.61	3	Horizontal	0	1.00	-	36.53	22.62	3.01	28.24
PK	512.09M	33.21	46.00	-12.79	-2.58	3	Horizontal	0	1.00	-	35.79	22.65	3.11	28.34
PK	973.81M	34.83	54.00	-19.17	3.33	3	Horizontal	0	1.00	-	31.50	26.28	4.25	27.20

Radiated Emissions below 1GHz_Mode 3



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)
PK	106.63M	30.97	43.50	-12.53	-9.46	3	Vertical	360	1.00	-	40.43	16.86	1.46	27.78
PK	159.98M	34.20	43.50	-9.30	-10.53	3	Vertical	360	1.00	-	44.73	15.22	1.77	27.52
PK	304.51M	34.02	46.00	-11.98	-6.19	3	Vertical	360	1.00	-	40.21	18.51	2.38	27.08
PK	416.06M	33.59	46.00	-12.41	-3.34	3	Vertical	360	1.00	-	36.93	21.74	2.79	27.87
PK	480.08M	36.14	46.00	-9.86	-2.61	3	Vertical	360	1.00	-	38.75	22.62	3.01	28.24
PK	799.21M	33.75	46.00	-12.25	1.05	3	Vertical	360	1.00	-	32.70	25.05	3.88	27.88

Radiated Emissions below 1GHz_Mode 3



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)
PK	164.83M	33.78	43.50	-9.72	-10.61	3	Horizontal	0	1.00	-	44.39	15.11	1.79	27.51
PK	242.43M	35.82	46.00	-10.18	-8.23	3	Horizontal	0	1.00	-	44.05	16.72	2.12	27.07
PK	265.71M	37.48	46.00	-8.52	-6.30	3	Horizontal	0	1.00	-	43.78	18.51	2.22	27.03
PK	416.06M	36.11	46.00	-9.89	-3.34	3	Horizontal	0	1.00	-	39.45	21.74	2.79	27.87
PK	480.08M	37.00	46.00	-9.00	-2.61	3	Horizontal	0	1.00	-	39.61	22.62	3.01	28.24
PK	970.9M	34.57	54.00	-19.43	3.30	3	Horizontal	0	1.00	-	31.27	26.27	4.24	27.21



Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
BT-LE(1Mbps)	Pass	AV	7.43969G	52.35	54.00	-1.65	3	Vertical	194	1.32	-
BT-LE(2Mbps)	Pass	AV	7.43886G	52.96	54.00	-1.04	3	Vertical	194	1.12	-

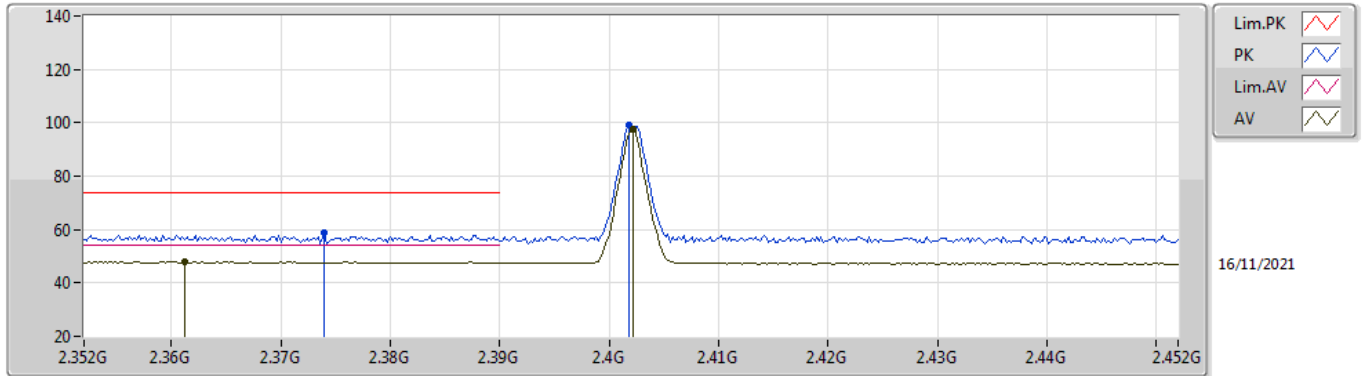
Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
BT-LE(1Mbps)	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3612G	48.00	54.00	-6.00	3	Vertical	216	1.47	-
2402MHz	Pass	AV	2.4022G	97.40	Inf	-Inf	3	Vertical	216	1.47	-
2402MHz	Pass	PK	2.374G	58.65	74.00	-15.35	3	Vertical	216	1.47	-
2402MHz	Pass	PK	2.4018G	98.88	Inf	-Inf	3	Vertical	216	1.47	-
2402MHz	Pass	AV	2.3582G	47.96	54.00	-6.04	3	Horizontal	12	1.15	-
2402MHz	Pass	AV	2.4022G	92.38	Inf	-Inf	3	Horizontal	12	1.15	-
2402MHz	Pass	PK	2.3788G	59.59	74.00	-14.41	3	Horizontal	12	1.15	-
2402MHz	Pass	PK	2.4018G	94.00	Inf	-Inf	3	Horizontal	12	1.15	-
2402MHz	Pass	AV	4.80431G	38.86	54.00	-15.14	3	Vertical	201	1.45	-
2402MHz	Pass	PK	4.80453G	47.71	74.00	-26.29	3	Vertical	201	1.45	-
2402MHz	Pass	AV	4.80398G	39.87	54.00	-14.13	3	Horizontal	165	1.01	-
2402MHz	Pass	PK	4.80457G	48.40	74.00	-25.60	3	Horizontal	165	1.01	-
2440MHz	Pass	AV	2.3448G	48.01	54.00	-5.99	3	Vertical	178	1.02	-
2440MHz	Pass	AV	2.4404G	96.75	Inf	-Inf	3	Vertical	178	1.02	-
2440MHz	Pass	AV	2.4944G	47.46	54.00	-6.54	3	Vertical	178	1.02	-
2440MHz	Pass	PK	2.3728G	58.82	74.00	-15.18	3	Vertical	178	1.02	-
2440MHz	Pass	PK	2.44G	98.26	Inf	-Inf	3	Vertical	178	1.02	-
2440MHz	Pass	PK	2.4932G	57.57	74.00	-16.43	3	Vertical	178	1.02	-
2440MHz	Pass	AV	2.3716G	48.09	54.00	-5.91	3	Horizontal	352	1.29	-
2440MHz	Pass	AV	2.4404G	91.13	Inf	-Inf	3	Horizontal	352	1.29	-
2440MHz	Pass	AV	2.4996G	47.56	54.00	-6.44	3	Horizontal	352	1.29	-
2440MHz	Pass	PK	2.3648G	58.33	74.00	-15.67	3	Horizontal	352	1.29	-
2440MHz	Pass	PK	2.44G	92.56	Inf	-Inf	3	Horizontal	352	1.29	-
2440MHz	Pass	PK	2.4996G	57.67	74.00	-16.33	3	Horizontal	352	1.29	-
2440MHz	Pass	AV	4.87989G	39.70	54.00	-14.30	3	Vertical	360	1.27	-
2440MHz	Pass	AV	7.31967G	50.47	54.00	-3.53	3	Vertical	12	1.00	-
2440MHz	Pass	PK	4.87975G	47.97	74.00	-26.03	3	Vertical	360	1.27	-
2440MHz	Pass	PK	7.32099G	58.70	74.00	-15.30	3	Vertical	12	1.00	-
2440MHz	Pass	AV	4.88009G	39.54	54.00	-14.46	3	Horizontal	191	1.50	-
2440MHz	Pass	AV	7.31956G	46.89	54.00	-7.11	3	Horizontal	243	1.82	-
2440MHz	Pass	PK	4.87957G	48.16	74.00	-25.84	3	Horizontal	191	1.50	-
2440MHz	Pass	PK	7.31949G	55.64	74.00	-18.36	3	Horizontal	243	1.82	-
2480MHz	Pass	AV	2.48G	95.78	Inf	-Inf	3	Vertical	187	1.12	-
2480MHz	Pass	AV	2.4835G	48.16	54.00	-5.84	3	Vertical	187	1.12	-
2480MHz	Pass	PK	2.4804G	97.23	Inf	-Inf	3	Vertical	187	1.12	-
2480MHz	Pass	PK	2.4835G	57.54	74.00	-16.46	3	Vertical	187	1.12	-
2480MHz	Pass	AV	2.48G	91.19	Inf	-Inf	3	Horizontal	194	2.74	-
2480MHz	Pass	AV	2.4974G	47.63	54.00	-6.37	3	Horizontal	194	2.74	-
2480MHz	Pass	PK	2.4804G	92.64	Inf	-Inf	3	Horizontal	194	2.74	-
2480MHz	Pass	PK	2.4982G	58.16	74.00	-15.84	3	Horizontal	194	2.74	-
2480MHz	Pass	AV	4.96023G	42.90	54.00	-11.10	3	Vertical	357	1.37	-
2480MHz	Pass	AV	7.43969G	52.35	54.00	-1.65	3	Vertical	194	1.32	-
2480MHz	Pass	PK	4.95955G	50.52	74.00	-23.48	3	Vertical	357	1.37	-
2480MHz	Pass	PK	7.44105G	60.11	74.00	-13.89	3	Vertical	194	1.32	-
2480MHz	Pass	AV	4.96005G	42.88	54.00	-11.12	3	Horizontal	190	1.50	-
2480MHz	Pass	AV	7.43965G	50.32	54.00	-3.68	3	Horizontal	240	1.89	-
2480MHz	Pass	PK	4.95966G	50.34	74.00	-23.66	3	Horizontal	190	1.50	-
2480MHz	Pass	PK	7.43954G	58.47	74.00	-15.53	3	Horizontal	240	1.89	-
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	AV	2.3718G	48.89	54.00	-5.11	3	Vertical	233	1.20	-
2402MHz	Pass	AV	2.402G	92.58	Inf	-Inf	3	Vertical	233	1.20	-
2402MHz	Pass	PK	2.3594G	58.17	74.00	-15.83	3	Vertical	233	1.20	-
2402MHz	Pass	PK	2.4016G	96.19	Inf	-Inf	3	Vertical	233	1.20	-
2402MHz	Pass	AV	2.358G	49.16	54.00	-4.84	3	Horizontal	358	1.37	-
2402MHz	Pass	AV	2.4022G	92.03	Inf	-Inf	3	Horizontal	358	1.37	-
2402MHz	Pass	PK	2.3574G	59.54	74.00	-14.46	3	Horizontal	358	1.37	-
2402MHz	Pass	PK	2.402G	95.30	Inf	-Inf	3	Horizontal	358	1.37	-
2402MHz	Pass	AV	4.80321G	40.72	54.00	-13.28	3	Vertical	193	1.07	-
2402MHz	Pass	PK	4.80322G	47.98	74.00	-26.02	3	Vertical	193	1.07	-
2402MHz	Pass	AV	4.8031G	39.92	54.00	-14.08	3	Horizontal	134	2.09	-

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2402MHz	Pass	PK	4.80313G	47.34	74.00	-26.66	3	Horizontal	134	2.09	-
2440MHz	Pass	AV	2.3728G	49.07	54.00	-4.93	3	Vertical	218	1.01	-
2440MHz	Pass	AV	2.44G	93.27	Inf	-Inf	3	Vertical	218	1.01	-
2440MHz	Pass	AV	2.4864G	48.48	54.00	-5.52	3	Vertical	218	1.01	-
2440MHz	Pass	PK	2.362G	58.31	74.00	-15.69	3	Vertical	218	1.01	-
2440MHz	Pass	PK	2.44G	96.31	Inf	-Inf	3	Vertical	218	1.01	-
2440MHz	Pass	PK	2.492G	57.95	74.00	-16.05	3	Vertical	218	1.01	-
2440MHz	Pass	AV	2.3404G	49.09	54.00	-4.91	3	Horizontal	-0	2.04	-
2440MHz	Pass	AV	2.44G	90.66	Inf	-Inf	3	Horizontal	-0	2.04	-
2440MHz	Pass	AV	2.4956G	48.52	54.00	-5.48	3	Horizontal	-0	2.04	-
2440MHz	Pass	PK	2.3496G	58.51	74.00	-15.49	3	Horizontal	-0	2.04	-
2440MHz	Pass	PK	2.4408G	93.78	Inf	-Inf	3	Horizontal	-0	2.04	-
2440MHz	Pass	PK	2.4884G	57.53	74.00	-16.47	3	Horizontal	-0	2.04	-
2440MHz	Pass	AV	4.87921G	40.57	54.00	-13.43	3	Vertical	0	1.27	-
2440MHz	Pass	AV	7.31903G	51.14	54.00	-2.86	3	Vertical	351	1.04	-
2440MHz	Pass	PK	4.88117G	47.79	74.00	-26.21	3	Vertical	0	1.27	-
2440MHz	Pass	PK	7.32194G	58.57	74.00	-15.43	3	Vertical	351	1.04	-
2440MHz	Pass	AV	4.87926G	40.10	54.00	-13.90	3	Horizontal	190	1.46	-
2440MHz	Pass	AV	7.31891G	47.16	54.00	-6.84	3	Horizontal	230	1.69	-
2440MHz	Pass	PK	4.87909G	47.58	74.00	-26.42	3	Horizontal	190	1.46	-
2440MHz	Pass	PK	7.32195G	55.45	74.00	-18.55	3	Horizontal	230	1.69	-
2480MHz	Pass	AV	2.4802G	92.64	Inf	-Inf	3	Vertical	218	1.14	-
2480MHz	Pass	AV	2.4835G	49.36	54.00	-4.64	3	Vertical	218	1.14	-
2480MHz	Pass	PK	2.4796G	95.58	Inf	-Inf	3	Vertical	218	1.14	-
2480MHz	Pass	PK	2.4964G	58.27	74.00	-15.73	3	Vertical	218	1.14	-
2480MHz	Pass	AV	2.4802G	89.34	Inf	-Inf	3	Horizontal	1	1.41	-
2480MHz	Pass	AV	2.4835G	48.72	54.00	-5.28	3	Horizontal	1	1.41	-
2480MHz	Pass	PK	2.4796G	92.37	Inf	-Inf	3	Horizontal	1	1.41	-
2480MHz	Pass	PK	2.4886G	57.88	74.00	-16.12	3	Horizontal	1	1.41	-
2480MHz	Pass	AV	4.95915G	42.42	54.00	-11.58	3	Vertical	356	1.34	-
2480MHz	Pass	AV	7.43886G	52.96	54.00	-1.04	3	Vertical	194	1.12	-
2480MHz	Pass	PK	4.9613G	49.92	74.00	-24.08	3	Vertical	356	1.34	-
2480MHz	Pass	PK	7.44026G	59.92	74.00	-14.08	3	Vertical	194	1.12	-
2480MHz	Pass	AV	4.95923G	43.26	54.00	-10.74	3	Horizontal	191	1.50	-
2480MHz	Pass	AV	7.43901G	52.14	54.00	-1.86	3	Horizontal	245	2.01	-
2480MHz	Pass	PK	4.96118G	50.52	74.00	-23.48	3	Horizontal	191	1.50	-
2480MHz	Pass	PK	7.43882G	59.31	74.00	-14.69	3	Horizontal	245	2.01	-

BT-LE(1Mbps)

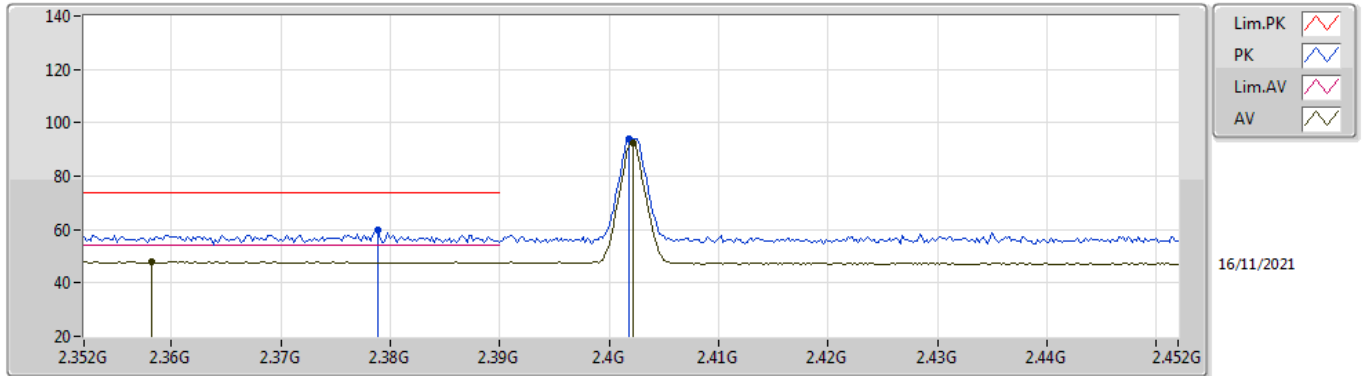
2402MHz_TX



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	2.3612G	48.00	54.00	-6.00	35.02	3	Vertical	216	1.47	-	12.98	27.78	7.24	-
AV	2.4022G	97.40	Inf	-Inf	34.95	3	Vertical	216	1.47	-	62.45	27.69	7.26	-
PK	2.374G	58.65	74.00	-15.35	35.00	3	Vertical	216	1.47	-	23.65	27.75	7.25	-
PK	2.4018G	98.88	Inf	-Inf	34.95	3	Vertical	216	1.47	-	63.93	27.69	7.26	-

BT-LE(1Mbps)

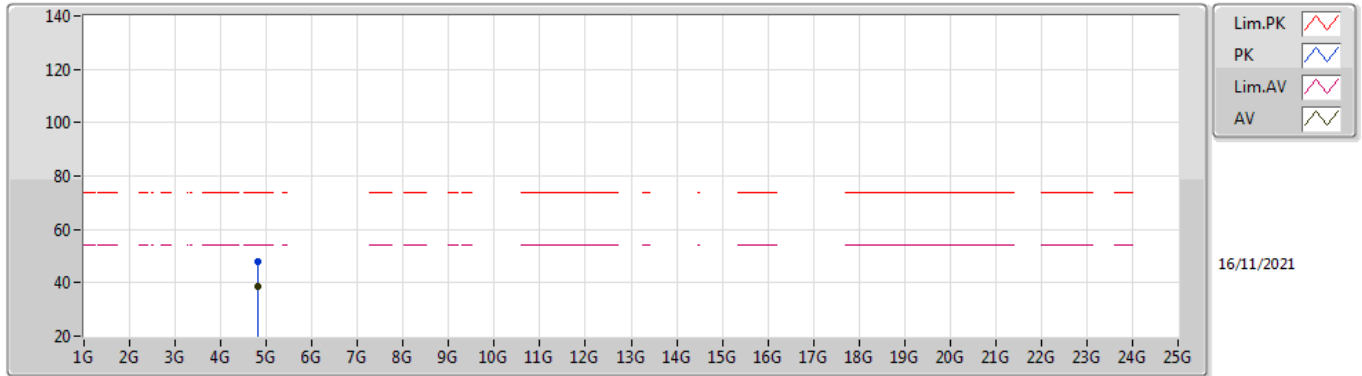
2402MHz_TX



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	2.3582G	47.96	54.00	-6.04	35.02	3	Horizontal	12	1.15	-	12.94	27.78	7.24	-
AV	2.4022G	92.38	Inf	-Inf	34.95	3	Horizontal	12	1.15	-	57.43	27.69	7.26	-
PK	2.3788G	59.59	74.00	-14.41	34.99	3	Horizontal	12	1.15	-	24.60	27.74	7.25	-
PK	2.4018G	94.00	Inf	-Inf	34.95	3	Horizontal	12	1.15	-	59.05	27.69	7.26	-

BT-LE(1Mbps)

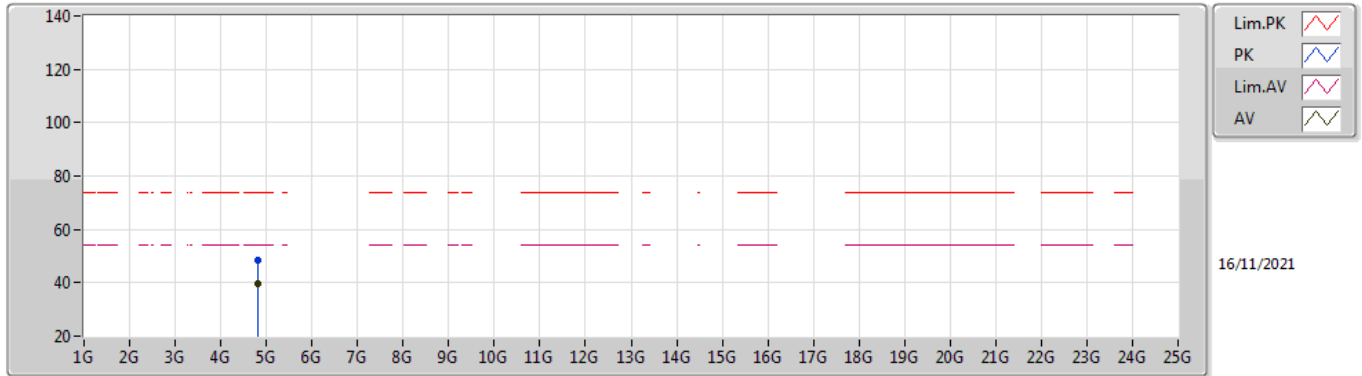
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.80431G	38.86	54.00	-15.14	5.82	3	Vertical	201	1.45	-	33.04	31.11	8.90	34.19
PK	4.80453G	47.71	74.00	-26.29	5.82	3	Vertical	201	1.45	-	41.89	31.11	8.90	34.19

BT-LE(1Mbps)

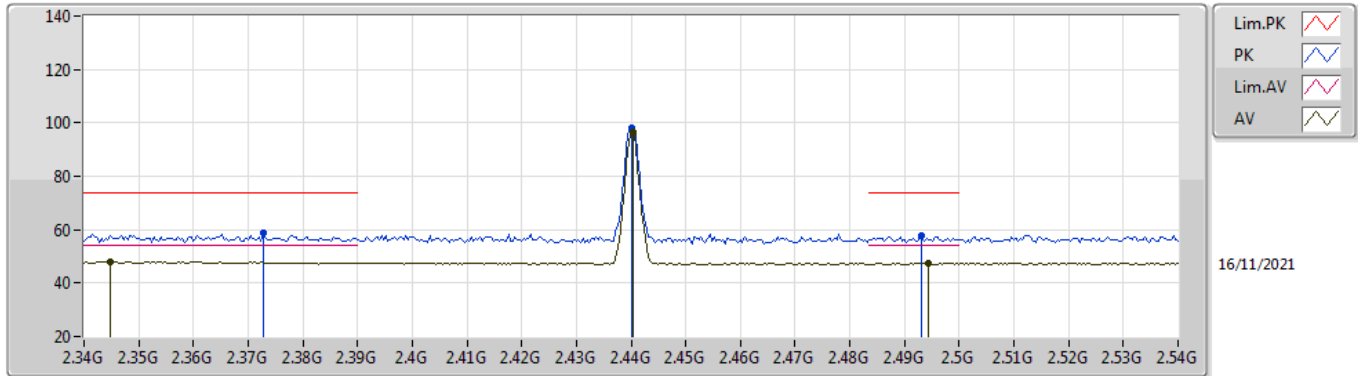
2402MHz_TX



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	4.80398G	39.87	54.00	-14.13	5.82	3	Horizontal	165	1.01	-	34.05	31.11	8.90	34.19
PK	4.80457G	48.40	74.00	-25.60	5.82	3	Horizontal	165	1.01	-	42.58	31.11	8.90	34.19

BT-LE(1Mbps)

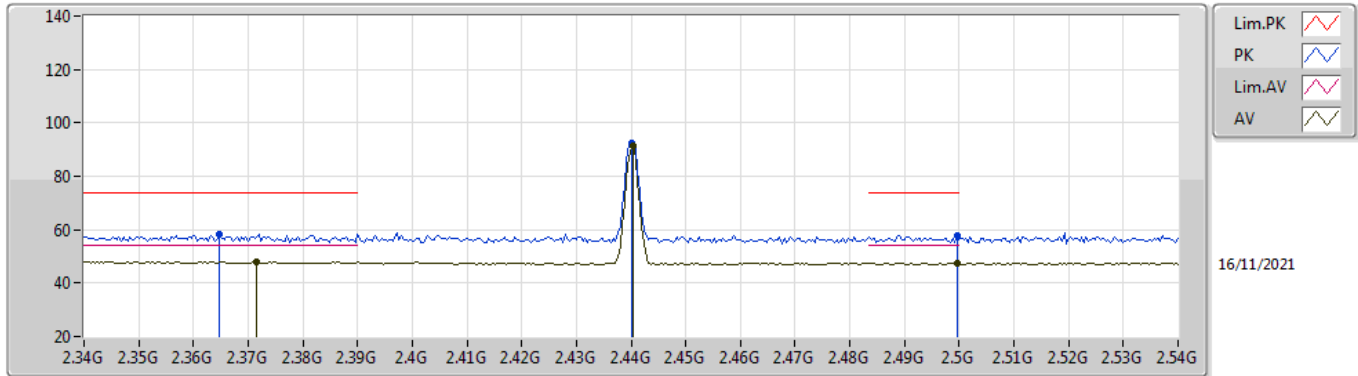
2440MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3448G	48.01	54.00	-5.99	35.05	3	Vertical	178	1.02	-	12.96	27.81	7.24	-
AV	2.4404G	96.75	Inf	-Inf	34.75	3	Vertical	178	1.02	-	62.00	27.46	7.29	-
AV	2.4944G	47.46	54.00	-6.54	34.74	3	Vertical	178	1.02	-	12.72	27.40	7.34	-
PK	2.3728G	58.82	74.00	-15.18	35.00	3	Vertical	178	1.02	-	23.82	27.75	7.25	-
PK	2.44G	98.26	Inf	-Inf	34.75	3	Vertical	178	1.02	-	63.51	27.46	7.29	-
PK	2.4932G	57.57	74.00	-16.43	34.73	3	Vertical	178	1.02	-	22.84	27.40	7.33	-

BT-LE(1Mbps)

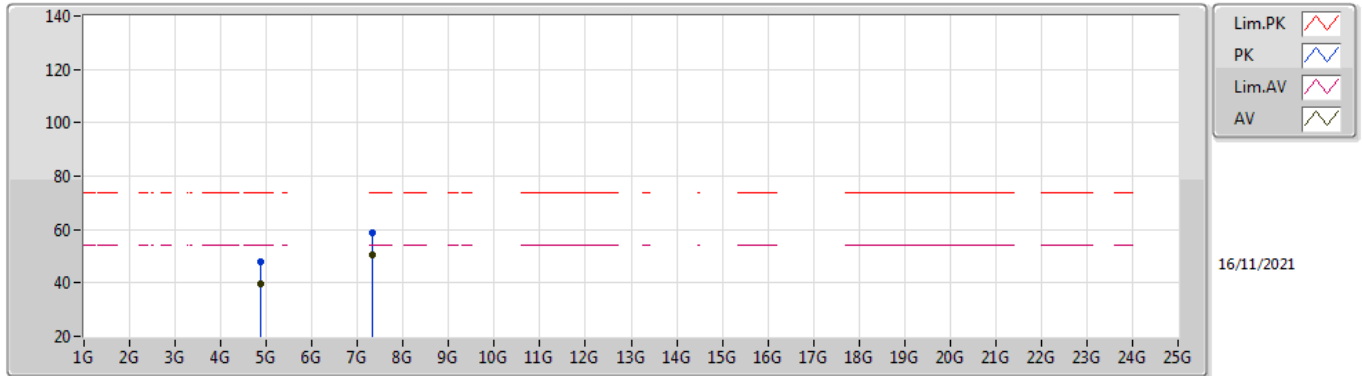
2440MHz_TX



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	2.3716G	48.09	54.00	-5.91	35.01	3	Horizontal	352	1.29	-	13.08	27.76	7.25	-
AV	2.4404G	91.13	Inf	-Inf	34.75	3	Horizontal	352	1.29	-	56.38	27.46	7.29	-
AV	2.4996G	47.56	54.00	-6.44	34.74	3	Horizontal	352	1.29	-	12.82	27.40	7.34	-
PK	2.3648G	58.33	74.00	-15.67	35.01	3	Horizontal	352	1.29	-	23.32	27.77	7.24	-
PK	2.44G	92.56	Inf	-Inf	34.75	3	Horizontal	352	1.29	-	57.81	27.46	7.29	-
PK	2.4996G	57.67	74.00	-16.33	34.74	3	Horizontal	352	1.29	-	22.93	27.40	7.34	-

BT-LE(1Mbps)

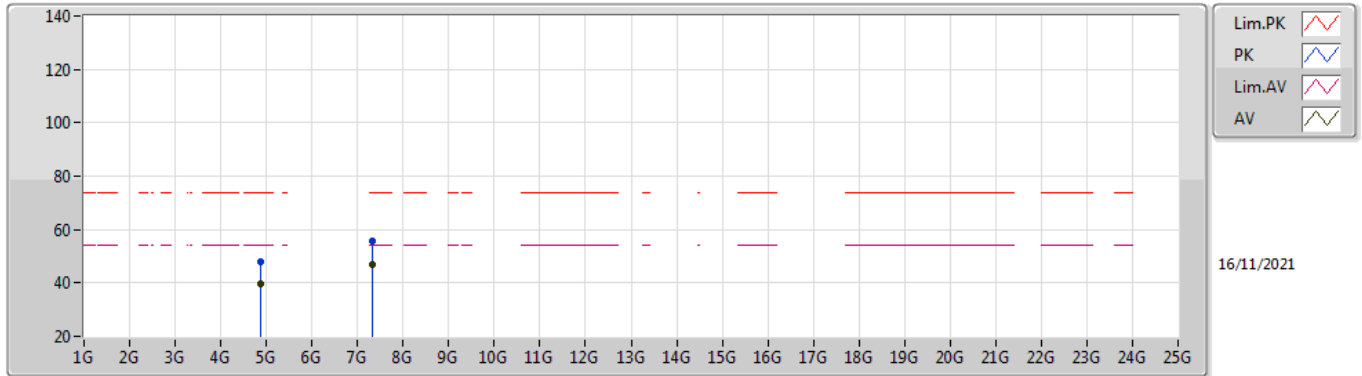
2440MHz_TX



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	4.87989G	39.70	54.00	-14.30	6.00	3	Vertical	360	1.27	-	33.70	31.20	8.96	34.16
AV	7.31967G	50.47	54.00	-3.53	12.49	3	Vertical	12	1.00	-	37.98	36.36	10.63	34.50
PK	4.87975G	47.97	74.00	-26.03	6.00	3	Vertical	360	1.27	-	41.97	31.20	8.96	34.16
PK	7.32099G	58.70	74.00	-15.30	12.49	3	Vertical	12	1.00	-	46.21	36.36	10.63	34.50

BT-LE(1Mbps)

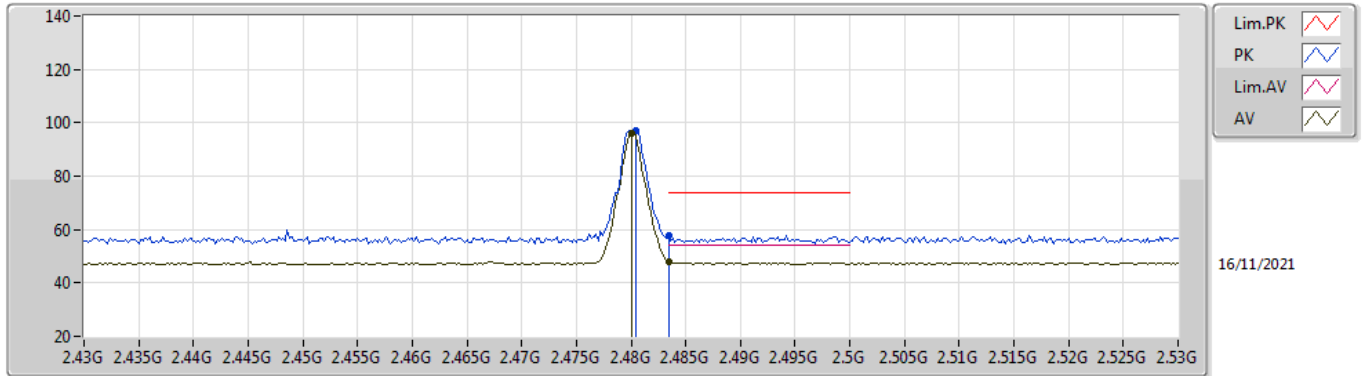
2440MHz_TX



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	4.88009G	39.54	54.00	-14.46	6.00	3	Horizontal	191	1.50	-	33.54	31.20	8.96	34.16
AV	7.31956G	46.89	54.00	-7.11	12.49	3	Horizontal	243	1.82	-	34.40	36.36	10.63	34.50
PK	4.87957G	48.16	74.00	-25.84	6.00	3	Horizontal	191	1.50	-	42.16	31.20	8.96	34.16
PK	7.31949G	55.64	74.00	-18.36	12.49	3	Horizontal	243	1.82	-	43.15	36.36	10.63	34.50

BT-LE(1Mbps)

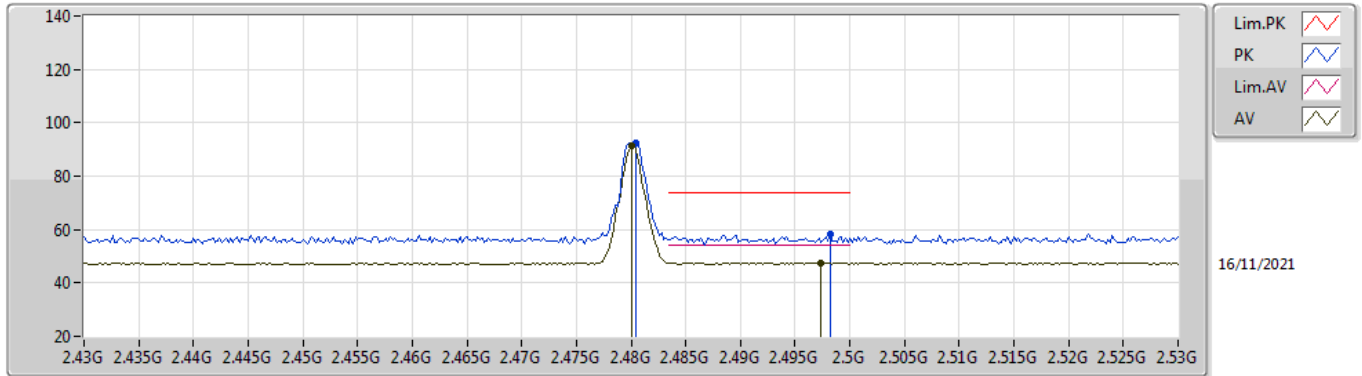
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.48G	95.78	Inf	-Inf	34.72	3	Vertical	187	1.12	-	61.06	27.40	7.32	-
AV	2.4835G	48.16	54.00	-5.84	34.73	3	Vertical	187	1.12	-	13.43	27.40	7.33	-
PK	2.4804G	97.23	Inf	-Inf	34.72	3	Vertical	187	1.12	-	62.51	27.40	7.32	-
PK	2.4835G	57.54	74.00	-16.46	34.73	3	Vertical	187	1.12	-	22.81	27.40	7.33	-

BT-LE(1Mbps)

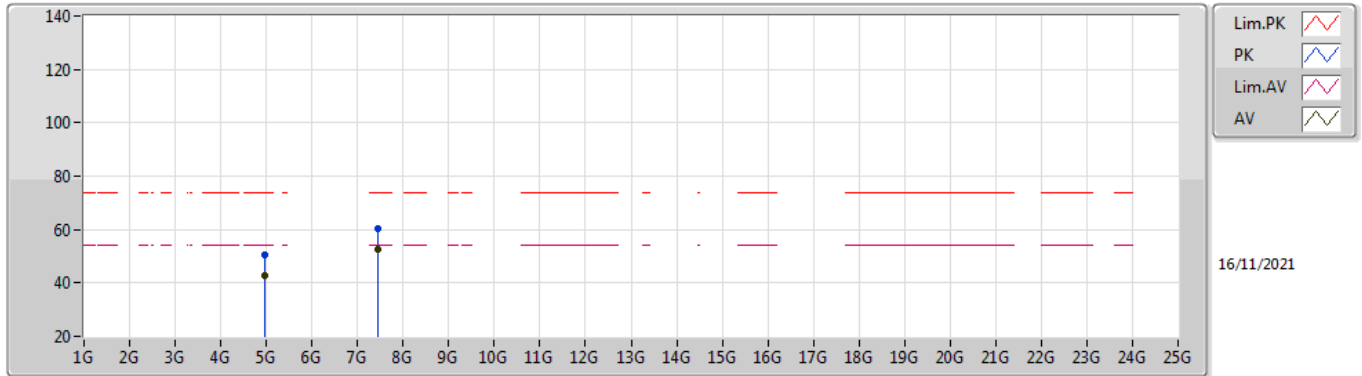
2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.48G	91.19	Inf	-Inf	34.72	3	Horizontal	194	2.74	-	56.47	27.40	7.32	-
AV	2.4974G	47.63	54.00	-6.37	34.74	3	Horizontal	194	2.74	-	12.89	27.40	7.34	-
PK	2.4804G	92.64	Inf	-Inf	34.72	3	Horizontal	194	2.74	-	57.92	27.40	7.32	-
PK	2.4982G	58.16	74.00	-15.84	34.74	3	Horizontal	194	2.74	-	23.42	27.40	7.34	-

BT-LE(1Mbps)

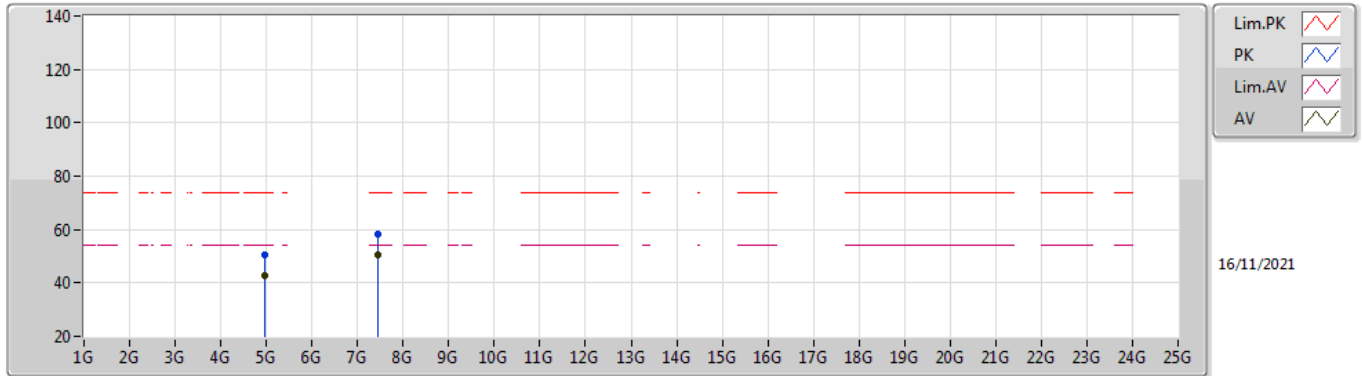
2480MHz_TX



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	42.90	54.00	-11.10	6.32	3	Vertical	357	1.37	-	36.58	31.42	9.02	34.12
AV	7.43969G	52.35	54.00	-1.65	12.51	3	Vertical	194	1.32	-	39.84	36.28	10.72	34.49
PK	4.95955G	50.52	74.00	-23.48	6.32	3	Vertical	357	1.37	-	44.20	31.42	9.02	34.12
PK	7.44105G	60.11	74.00	-13.89	12.51	3	Vertical	194	1.32	-	47.60	36.28	10.72	34.49

BT-LE(1Mbps)

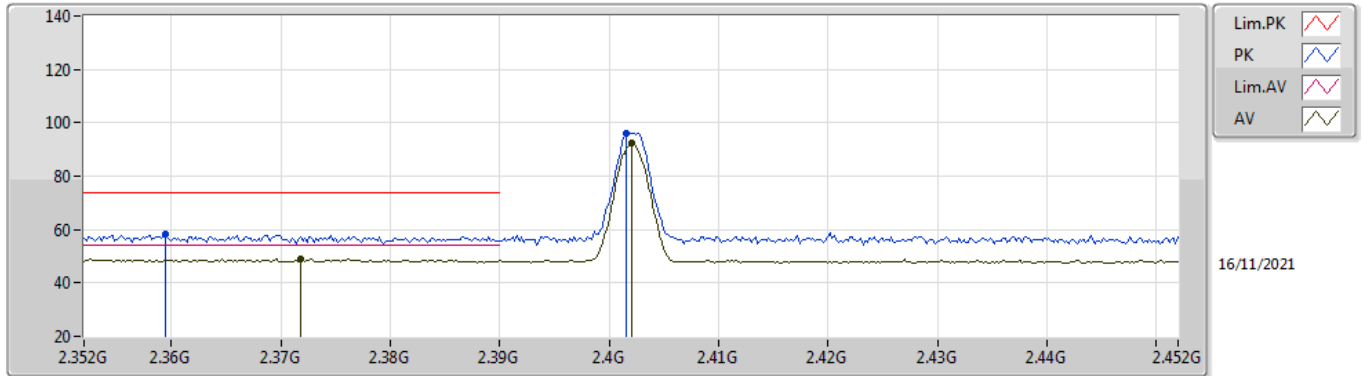
2480MHz_TX



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	4.96005G	42.88	54.00	-11.12	6.32	3	Horizontal	190	1.50	-	36.56	31.42	9.02	34.12
AV	7.43965G	50.32	54.00	-3.68	12.51	3	Horizontal	240	1.89	-	37.81	36.28	10.72	34.49
PK	4.95966G	50.34	74.00	-23.66	6.32	3	Horizontal	190	1.50	-	44.02	31.42	9.02	34.12
PK	7.43954G	58.47	74.00	-15.53	12.51	3	Horizontal	240	1.89	-	45.96	36.28	10.72	34.49

BT-LE(2Mbps)

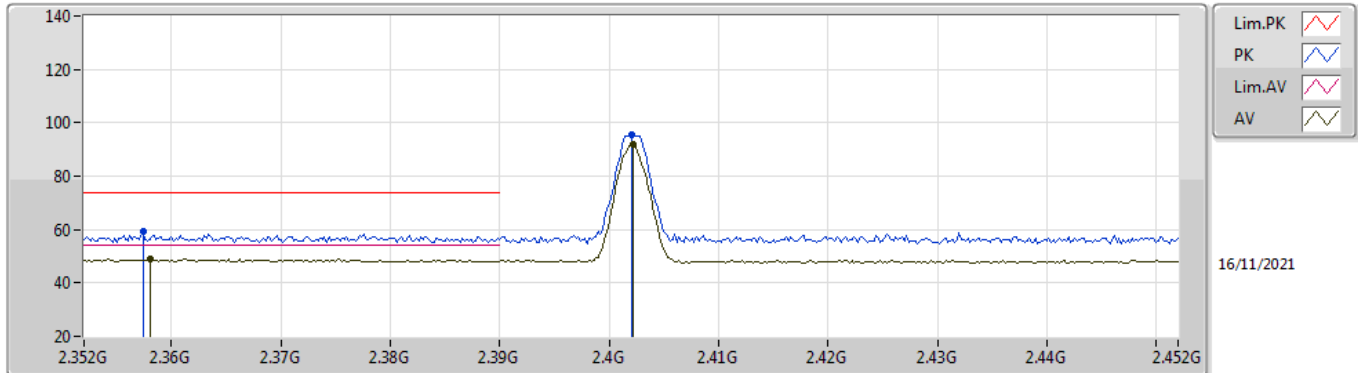
2402MHz_TX



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	2.3718G	48.89	54.00	-5.11	35.01	3	Vertical	233	1.20	-	13.88	27.76	7.25	-
AV	2.402G	92.58	Inf	-Inf	34.95	3	Vertical	233	1.20	-	57.63	27.69	7.26	-
PK	2.3594G	58.17	74.00	-15.83	35.02	3	Vertical	233	1.20	-	23.15	27.78	7.24	-
PK	2.4016G	96.19	Inf	-Inf	34.95	3	Vertical	233	1.20	-	61.24	27.69	7.26	-

BT-LE(2Mbps)

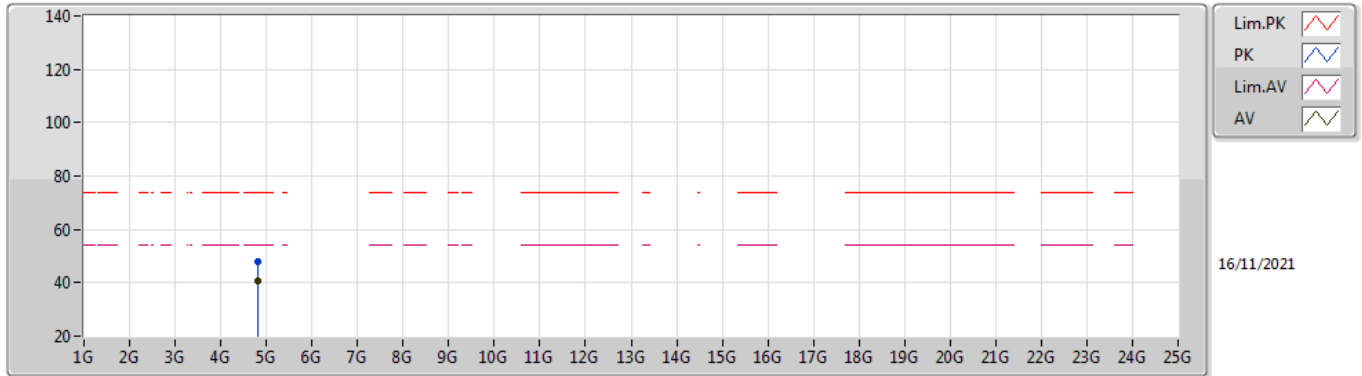
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.358G	49.16	54.00	-4.84	35.02	3	Horizontal	358	1.37	-	14.14	27.78	7.24	-
AV	2.4022G	92.03	Inf	-Inf	34.95	3	Horizontal	358	1.37	-	57.08	27.69	7.26	-
PK	2.3574G	59.54	74.00	-14.46	35.03	3	Horizontal	358	1.37	-	24.51	27.79	7.24	-
PK	2.402G	95.30	Inf	-Inf	34.95	3	Horizontal	358	1.37	-	60.35	27.69	7.26	-

BT-LE(2Mbps)

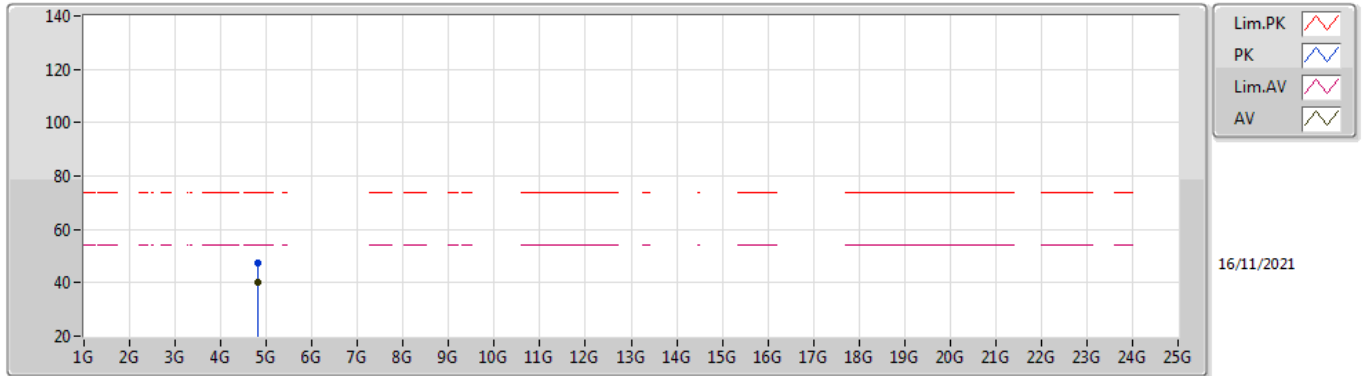
2402MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.80321G	40.72	54.00	-13.28	5.82	3	Vertical	193	1.07	-	34.90	31.11	8.90	34.19
PK	4.80322G	47.98	74.00	-26.02	5.82	3	Vertical	193	1.07	-	42.16	31.11	8.90	34.19

BT-LE(2Mbps)

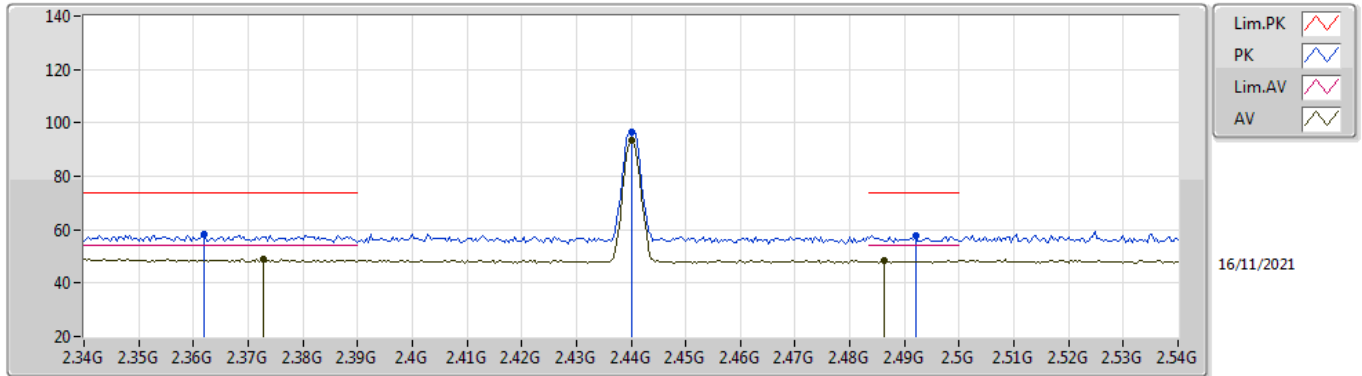
2402MHz_TX



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	4.8031G	39.92	54.00	-14.08	5.82	3	Horizontal	134	2.09	-	34.10	31.11	8.90	34.19
PK	4.80313G	47.34	74.00	-26.66	5.82	3	Horizontal	134	2.09	-	41.52	31.11	8.90	34.19

BT-LE(2Mbps)

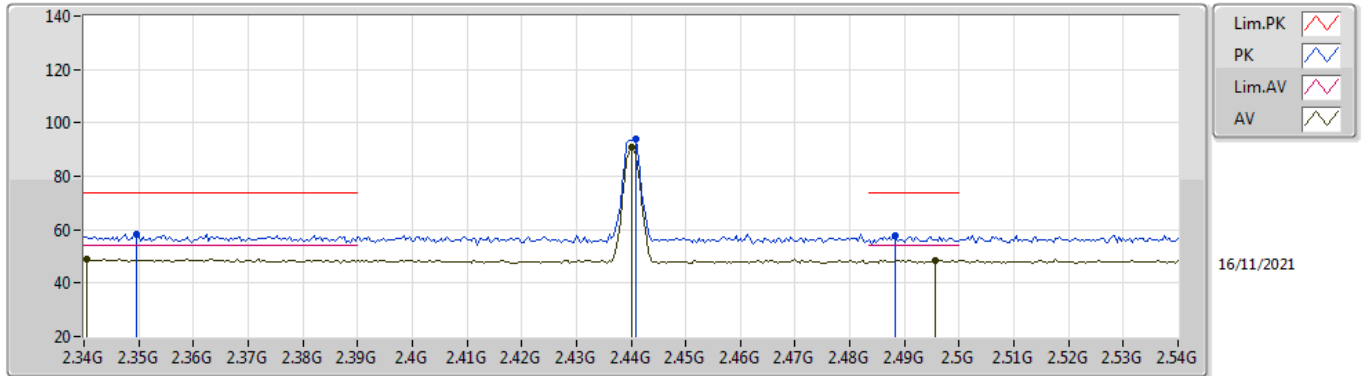
2440MHz_TX



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	2.3728G	49.07	54.00	-4.93	35.00	3	Vertical	218	1.01	-	14.07	27.75	7.25	-
AV	2.44G	93.27	Inf	-Inf	34.75	3	Vertical	218	1.01	-	58.52	27.46	7.29	-
AV	2.4864G	48.48	54.00	-5.52	34.73	3	Vertical	218	1.01	-	13.75	27.40	7.33	-
PK	2.362G	58.31	74.00	-15.69	35.02	3	Vertical	218	1.01	-	23.29	27.78	7.24	-
PK	2.44G	96.31	Inf	-Inf	34.75	3	Vertical	218	1.01	-	61.56	27.46	7.29	-
PK	2.492G	57.95	74.00	-16.05	34.73	3	Vertical	218	1.01	-	23.22	27.40	7.33	-

BT-LE(2Mbps)

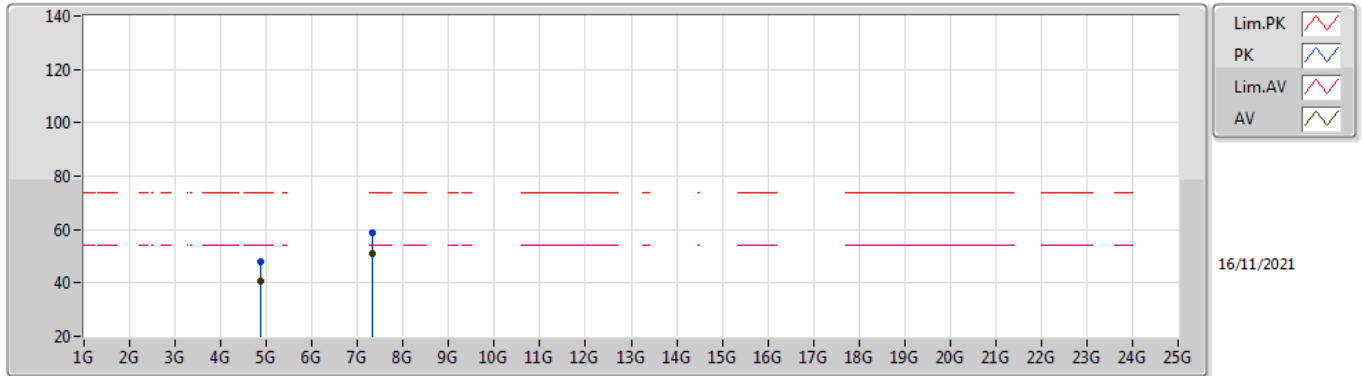
2440MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	2.3404G	49.09	54.00	-4.91	35.05	3	Horizontal	-0	2.04	-	14.04	27.82	7.23	-
AV	2.44G	90.66	Inf	-Inf	34.75	3	Horizontal	-0	2.04	-	55.91	27.46	7.29	-
AV	2.4956G	48.52	54.00	-5.48	34.74	3	Horizontal	-0	2.04	-	13.78	27.40	7.34	-
PK	2.3496G	58.51	74.00	-15.49	35.04	3	Horizontal	-0	2.04	-	23.47	27.80	7.24	-
PK	2.4408G	93.78	Inf	-Inf	34.75	3	Horizontal	-0	2.04	-	59.03	27.46	7.29	-
PK	2.4884G	57.53	74.00	-16.47	34.73	3	Horizontal	-0	2.04	-	22.80	27.40	7.33	-

BT-LE(2Mbps)

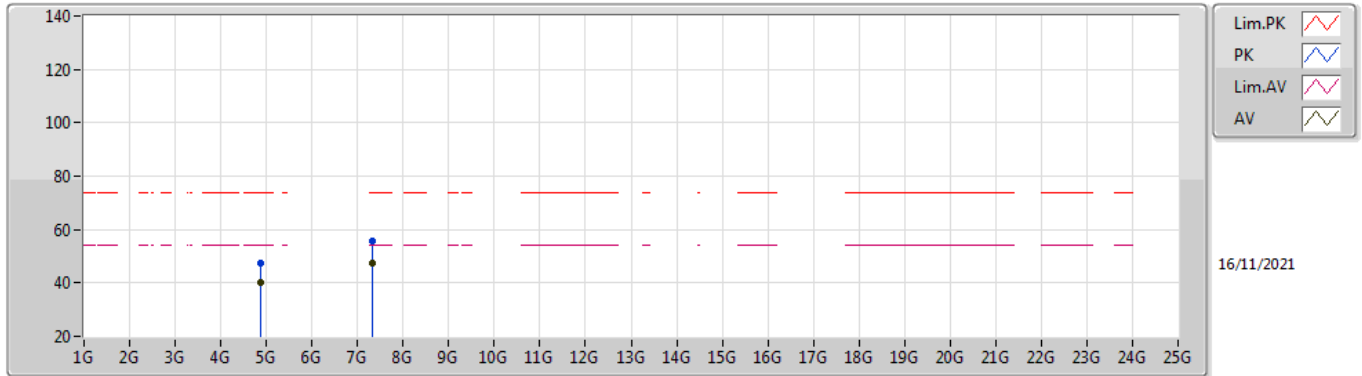
2440MHz_TX



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	4.87921G	40.57	54.00	-13.43	6.00	3	Vertical	0	1.27	-	34.57	31.20	8.96	34.16
AV	7.31903G	51.14	54.00	-2.86	12.49	3	Vertical	351	1.04	-	38.65	36.36	10.63	34.50
PK	4.88117G	47.79	74.00	-26.21	6.00	3	Vertical	0	1.27	-	41.79	31.20	8.96	34.16
PK	7.32194G	58.57	74.00	-15.43	12.49	3	Vertical	351	1.04	-	46.08	36.36	10.63	34.50

BT-LE(2Mbps)

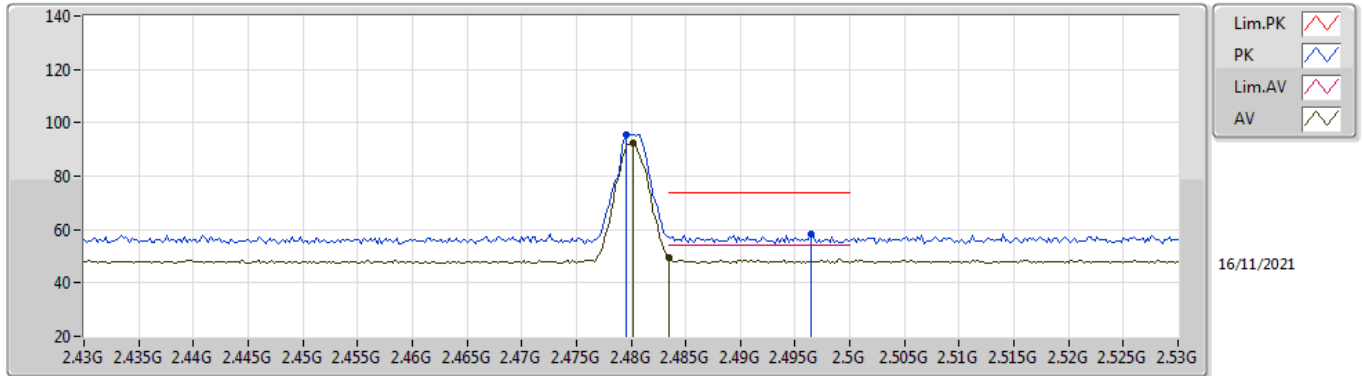
2440MHz_TX



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	4.87926G	40.10	54.00	-13.90	6.00	3	Horizontal	190	1.46	-	34.10	31.20	8.96	34.16
AV	7.31891G	47.16	54.00	-6.84	12.49	3	Horizontal	230	1.69	-	34.67	36.36	10.63	34.50
PK	4.87909G	47.58	74.00	-26.42	6.00	3	Horizontal	190	1.46	-	41.58	31.20	8.96	34.16
PK	7.32195G	55.45	74.00	-18.55	12.49	3	Horizontal	230	1.69	-	42.96	36.36	10.63	34.50

BT-LE(2Mbps)

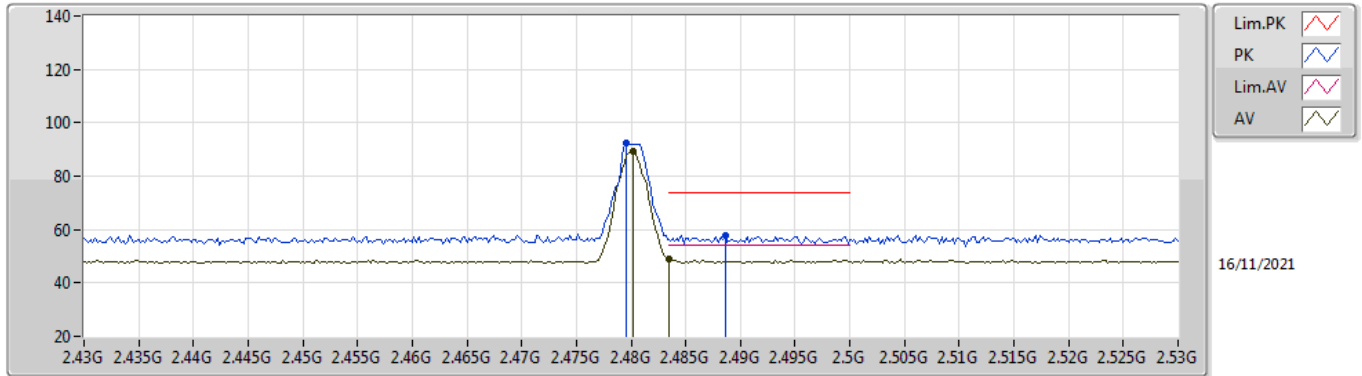
2480MHz_TX



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	2.4802G	92.64	Inf	-Inf	34.72	3	Vertical	218	1.14	-	57.92	27.40	7.32	-
AV	2.4835G	49.36	54.00	-4.64	34.73	3	Vertical	218	1.14	-	14.63	27.40	7.33	-
PK	2.4796G	95.58	Inf	-Inf	34.72	3	Vertical	218	1.14	-	60.86	27.40	7.32	-
PK	2.4964G	58.27	74.00	-15.73	34.74	3	Vertical	218	1.14	-	23.53	27.40	7.34	-

BT-LE(2Mbps)

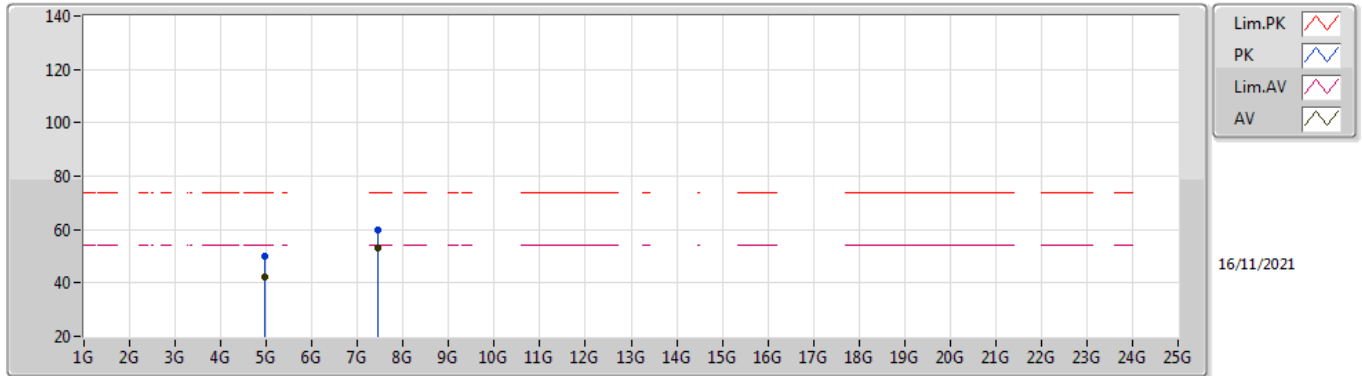
2480MHz_TX



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	2.4802G	89.34	Inf	-Inf	34.72	3	Horizontal	1	1.41	-	54.62	27.40	7.32	-
AV	2.4835G	48.72	54.00	-5.28	34.73	3	Horizontal	1	1.41	-	13.99	27.40	7.33	-
PK	2.4796G	92.37	Inf	-Inf	34.72	3	Horizontal	1	1.41	-	57.65	27.40	7.32	-
PK	2.4886G	57.88	74.00	-16.12	34.73	3	Horizontal	1	1.41	-	23.15	27.40	7.33	-

BT-LE(2Mbps)

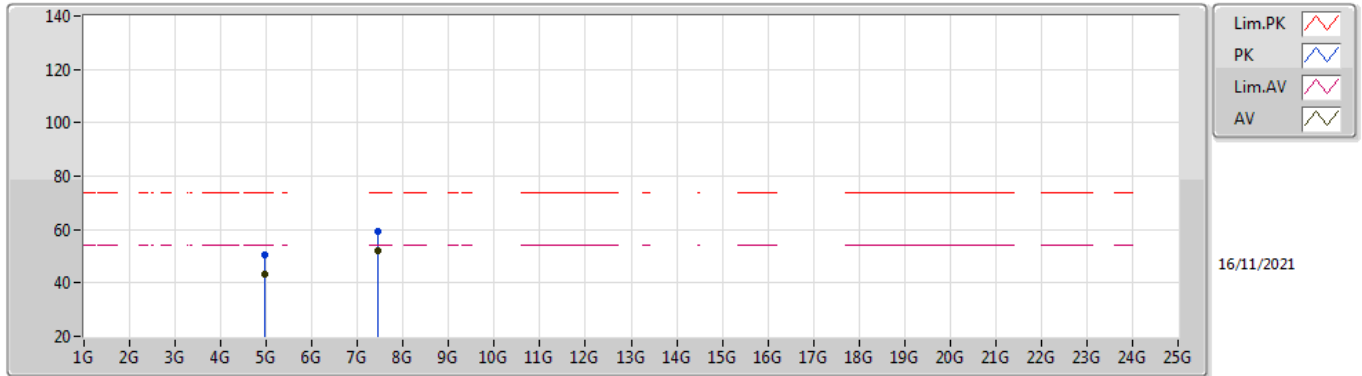
2480MHz_TX



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	4.95915G	42.42	54.00	-11.58	6.32	3	Vertical	356	1.34	-	36.10	31.42	9.02	34.12
AV	7.43886G	52.96	54.00	-1.04	12.51	3	Vertical	194	1.12	-	40.45	36.28	10.72	34.49
PK	4.9613G	49.92	74.00	-24.08	6.32	3	Vertical	356	1.34	-	43.60	31.42	9.02	34.12
PK	7.44026G	59.92	74.00	-14.08	12.51	3	Vertical	194	1.12	-	47.41	36.28	10.72	34.49

BT-LE(2Mbps)

2480MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
AV	4.95923G	43.26	54.00	-10.74	6.32	3	Horizontal	191	1.50	-	36.94	31.42	9.02	34.12
AV	7.43901G	52.14	54.00	-1.86	12.51	3	Horizontal	245	2.01	-	39.63	36.28	10.72	34.49
PK	4.96118G	50.52	74.00	-23.48	6.32	3	Horizontal	191	1.50	-	44.20	31.42	9.02	34.12
PK	7.43882G	59.31	74.00	-14.69	12.51	3	Horizontal	245	2.01	-	46.80	36.28	10.72	34.49