



RADIO TEST REPORT

FCC ID : UDX-600149010
Equipment : Wi-Fi 6 Access Point
Brand Name : Cisco
Model Name : MR78-HW,GR62-HW
Applicant : Cisco Systems, Inc.
170 West Tasman Drive, San Jose, CA 95134 USA
Manufacturer : Cisco Systems, Inc.
170 West Tasman Drive, San Jose, CA 95134 USA
Standard : 47 CFR FCC Part 15.247

The product was received on Mar. 22, 2022, and testing was started from Apr. 02, 2022 and completed on May 05, 2022. We, Sporton International Inc. Hsinchu Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. Hsinchu Laboratory, the test report shall not be reproduced except in full.



Approved by: Sam Chen

Sporton International Inc. Hsinchu Laboratory

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



Table of Contents

History of this test report.....	3
Summary of Test Result.....	4
1 General Description	5
1.1 Information.....	5
1.2 Applicable Standards	8
1.3 Testing Location Information	8
1.4 Measurement Uncertainty	8
2 Test Configuration of EUT.....	9
2.1 Test Channel Mode	9
2.2 The Worst Case Measurement Configuration.....	10
2.3 EUT Operation during Test	11
2.4 Accessories	11
2.5 Support Equipment.....	12
2.6 Test Setup Diagram	13
3 Transmitter Test Result	16
3.1 AC Power-line Conducted Emissions	16
3.2 DTS Bandwidth	18
3.3 Maximum Conducted Output Power	19
3.4 Power Spectral Density	22
3.5 Emissions in Non-restricted Frequency Bands	24
3.6 Emissions in Restricted Frequency Bands.....	25
4 Test Equipment and Calibration Data	29
Appendix A. Test Results of AC Power-line Conducted Emissions	
Appendix B. Test Results of DTS Bandwidth	
Appendix C. Test Results of Maximum Conducted Output Power	
Appendix D. Test Results of Power Spectral Density	
Appendix E. Test Results of Emissions in Non-restricted Frequency Bands	
Appendix F. Test Results of Emissions in Restricted Frequency Bands	
Appendix G. Test Photos	
Photographs of EUT v01	



History of this test report

TEL : 886-3-656-9065
FAX : 886-3-656-9085
Report Template No.: CB-A10_6 Ver1.3

Page Number : 3 of 31
Issued Date : Jul. 11, 2022
Report Version : 01



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:

1. The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers. It's means measurement values may risk exceeding the limit of regulation standards, if measurement uncertainty is include in test results.
2. The measurement uncertainty please refer to report "Measurement Uncertainty".

Comments and Explanations:

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

Reviewed by: Sam Chen**Report Producer: Penny Kao**



1 General Description

1.1 Information

1.1.1 RF General Information

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

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

Note:

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



1.1.2 Antenna Information

Ant.	Port			Brand	Model Name	Antenna Type	Connector	Gain (dBi)
	WLAN 2.4GHz	WLAN 5GHz	Bluetooth					
1	1	1	-	CISCO	95XEAK15.007	Dipole	I-PEX	Note1
2	2	2	-	CISCO	95XEAK15.006	Dipole	I-PEX	
3	-	-	1	CISCO	95XEAK15.008	Dipole	I-PEX	

Note1:

<Antenna Gain>

Ant.	Port			Gain (dBi)			
	WLAN 2.4GHz	WLAN 5GHz	Bluetooth	WLAN 2.4GHz	WLAN 5GHz		Bluetooth
					UNII 1	UNII 3	
1	1	1	-	3.27	2.14	4.47	-
2	2	2	-	3.25	3.00	3.32	-
3	-	-	1	-	-	-	2.4

< Directional Gain>

Directional Gain (dBi)			
Item	WLAN 2.4GHz	WLAN 5GHz	
		UNII 1	UNII 3
2T1S	4.28	3.72	4.95
2T2S	3.27	3.00	4.47

Note2: The above information was declared by manufacturer.

Note3: WLAN 2.4GHz and WLAN 5GHz directional gain is measured which follows the procedure of KDB 662911 D03. The antenna report is provided in the operational description for this application.

Note4: The EUT has three antennas.

<WLAN 2.4GHz function>

For IEEE 802.11b/g/n/VHT/ax (1TX, 2TX/2RX):

For 1TX

Only Port 1 can be use as transmitting antenna.

For 2TX/2RX

Pot 1, Port 2 can be used as transmitting/receiving antenna.

Pot 1, Port 2 could transmit/receive simultaneously.

<WLAN 5GHz function>

For IEEE 802.11a/n/ac/ax mode (1TX, 2TX/2RX)

For 1TX

Only Port 1 can be use as transmitting antenna.

For 2TX/2RX

Pot 1, Port 2 can be used as transmitting/receiving antenna.

Pot 1, Port 2 could transmit/receive simultaneously.

<For Bluetooth function>

Bluetooth mode (1TX/1RX)

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

**1.1.3 Mode Test Duty Cycle**

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
BT-LE(1Mbps)	0.684	1.65	427.5u	3k
BT-LE(2Mbps)	0.39	4.09	243.75u	10k

Note:

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

1.1.4 EUT Operational Condition

EUT Power Type	From Power Adapter or PoE		
Test Software Version	DOS (ver 6.1.7601)		
Support Mode	☒	LE 1M PHY: 1 Mb/s	
	☒	LE Coded PHY (S=2): 500 Kb/s	
	☒	LE Coded PHY (S=8): 125 Kb/s	
	☒	LE 2M PHY: 2 Mb/s	

Note: The above information was declared by manufacturer.

1.1.5 Table for Multiple Listing

Model Name	Description
MR78-HW	All the models are identical, the difference model for difference brand served as marketing strategy.
GR62-HW	

Note 1: From the above models, model: MR78-HW was selected as representative model for the test and its data was recorded in this report.

Note 2: The above information was declared by manufacturer.

1.1.6 Table for EUT Information

EUT	Item	Source	Brand Name	Model Name
1	LAN Chip	Main	Qualcomm	QCA8081
2		Second	Qualcomm	QCA8080

Note 1: After evaluating, EUT 1 was selected to perform for all tests and EUT 2 was selected to perform Emissions in Restricted Frequency Bands below 1GHz test only.

Note 2: The above information was declared by manufacturer



1.2 Applicable Standards

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

- ♦ 47 CFR FCC Part 15.247
- ♦ ANSI C63.10-2013

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

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

1.3 Testing Location Information

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

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
RF Conducted	TH03-CB	Owen Hsu	23.6-23.9 / 58-69	May 04, 2022~ May 05, 2022
Radiated Below 1GHz test	03CH05-CB	Stim Sung	24.2-26.1 / 55-58	Apr. 02, 2022~ Apr. 12, 2022
	03CH06-CB		23.8-24.9 / 55-58	
Radiated Above 1GHz test	03CH06-CB	Stim Sung	23.5-24.6 / 55-59	Apr. 02, 2022~ Apr. 30, 2022
AC Conduction	CO01-CB	Joe Chu	20~22 / 60~62	Apr. 19, 2022

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)	3.4 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	4.2 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.5 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.7 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.2 dB	Confidence levels of 95%
Conducted Emission	2.5 dB	Confidence levels of 95%
Output Power Measurement	1.3 dB	Confidence levels of 95%
Power Density Measurement	2.5 dB	Confidence levels of 95%
Bandwidth Measurement	0.9%	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

Mode	Power Setting
BT-LE(1Mbps)	-
2402MHz	200
2440MHz	200
2478MHz	200
2480MHz	130
BT-LE(2Mbps)	-
2402MHz	200
2440MHz	200
2478MHz	200
2480MHz	110

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	Normal Link
1	EUT 1 + Adapter 1
2	EUT 1 + Adapter 2
3	EUT 1 + PoE
For operating mode 1 is the worst case and it was record in this test report.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	DTS Bandwidth Maximum Conducted Output Power Power Spectral Density Emissions in Non-restricted Frequency Bands
Test Condition	Conducted measurement at transmit chains
1	EUT 1

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emissions in Restricted Frequency Bands
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	Normal Link
1	EUT 1 in Z axis + Adapter 1
2	EUT 1 in Y axis + Adapter 1
3	EUT 1 in X axis + Adapter 1
Mode 2 has been evaluated to be the worst case among Mode 1~3, thus measurement for Mode 4~5 will follow this same test mode.	
4	EUT 1 in Y axis + Adapter 2
5	EUT 1 in Y axis + PoE
Mode 2 has been evaluated to be the worst case among Mode 1~5, thus measurement for Mode 6 will follow this same test mode.	
6	EUT 2 in Y axis + Adapter 1
For operating mode 2 is the worst case and it was record in this test report.	



Operating Mode > 1GHz	CTX
	The EUT was performed at X axis, Y axis and Z axis position, and the worst case as below:
1	EUT 1 in Y axis

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	WLAN 2.4GHz + WLAN 5GHz + Bluetooth
Refer to Sporton Test Report No.: FA232209 for Co-location RF Exposure Evaluation.	

Note: The PoE is for measurement only, would not be marketed.

The PoE information as below:

Support Unit	Brand	Model Name
PoE	PHIHONG	POEA33U-1ATE

2.3 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

2.4 Accessories

Accessories				
No.	Equipment Name	Brand Name	Model Name	Rating
1	Adapter 1	Meraki	GA-PWR-12W-US	INPUT: 100-240V~ 50/60Hz, 0.4A MAX. OUTPUT: +12.0V, 1.0A, 12.0W MAX.
2	Adapter 2	UMEC	MA-PWR-30WAC	INPUT: 100-240V~0.8A, 50-60Hz OUTPUT: 12.0V, 2.5A, 30.0W
Others				
Wall Bracket*1 RJ-45 cable*1: Non-shielded, 1.8m Grounding wire*1: Non-shielded, 1m				



2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	LAN PC	DELL	T3400	N/A
B	5G NB	DELL	E6430	N/A
C	2.4G NB	DELL	E6430	N/A

For Radiated (below 1GHz):

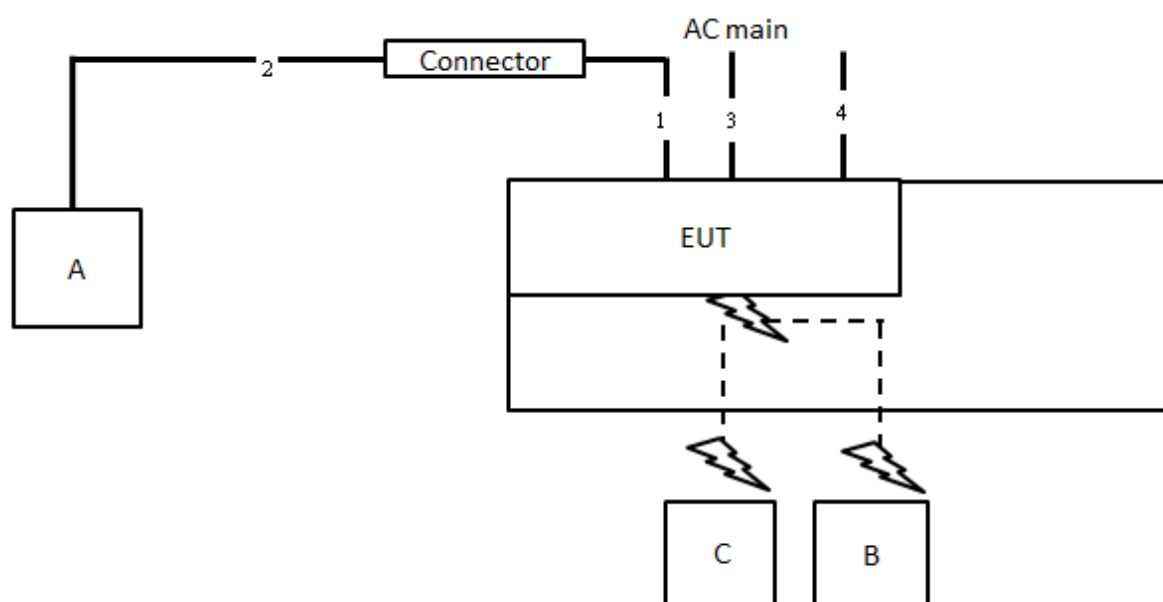
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	LAN Notebook	DELL	E4300	N/A
B	WiFi 2.4G Notebook	DELL	E4300	N/A
C	WiFi 5G Notebook	DELL	E4300	N/A

For Radiated (above 1GHz) and RF Conducted:

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

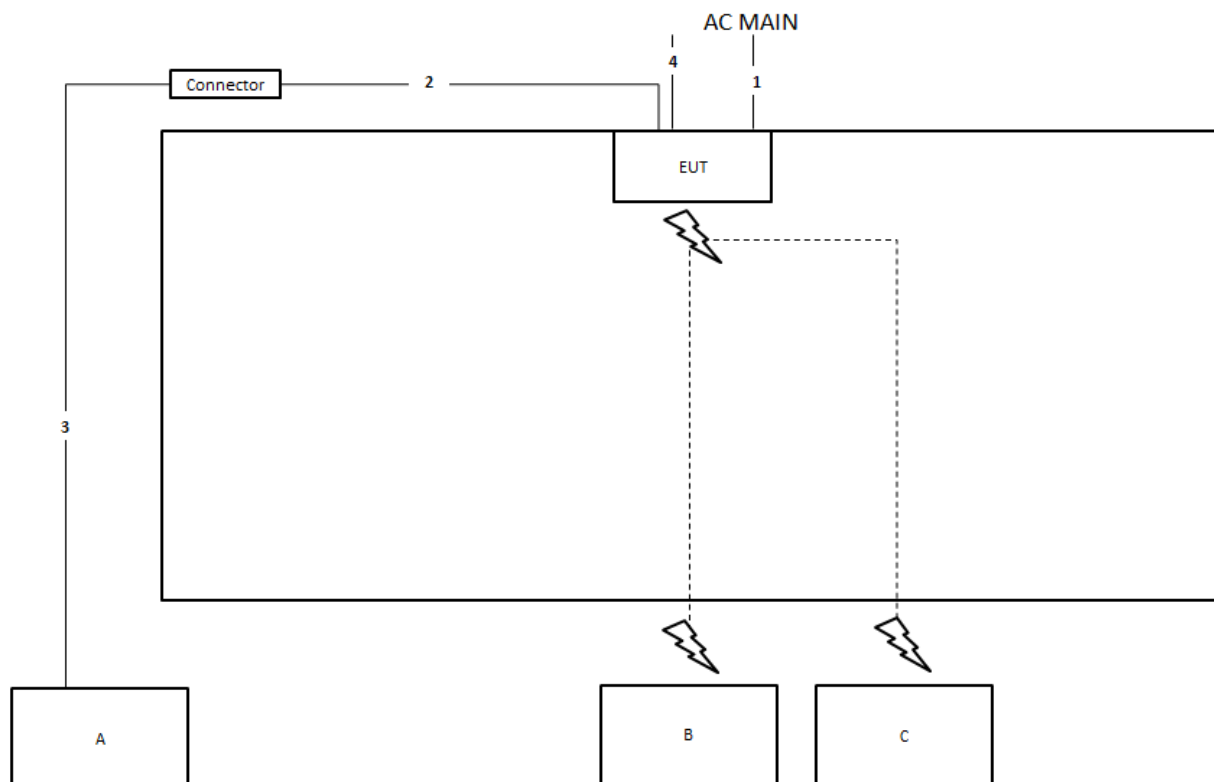
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test

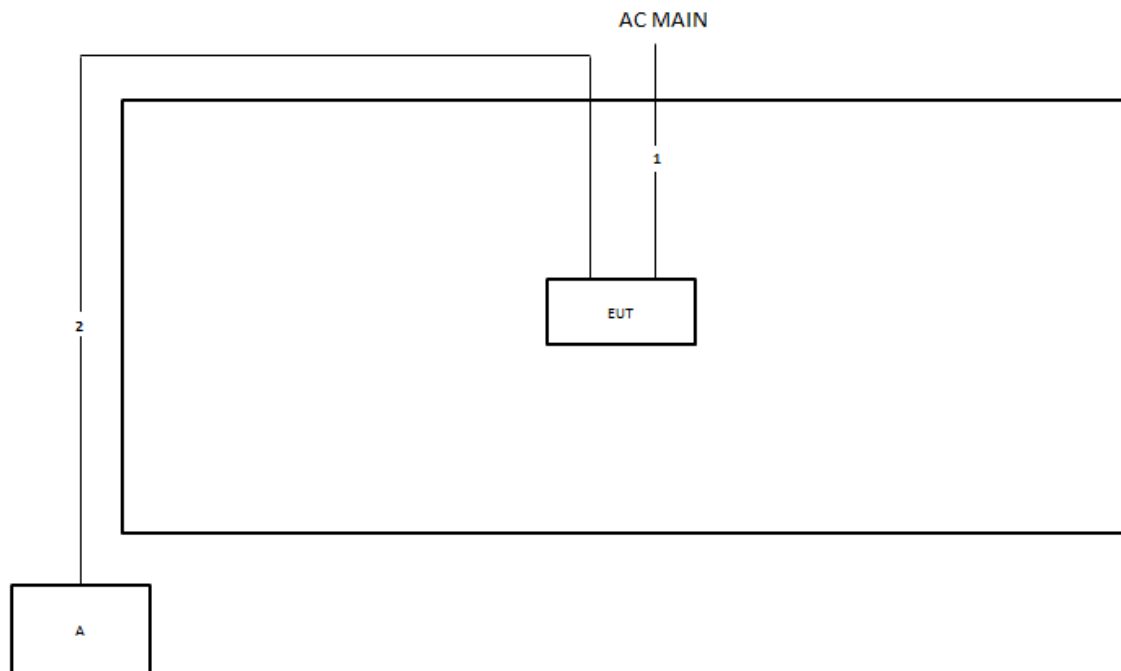


Item	Connection	Shielded	Length
1	RJ-45 cable	No	1.8m
2	RJ-45 cable	No	10m
3	Power cable	No	1.5m
4	GND cable	No	1m

Test Setup Diagram - Radiated Test < 1GHz



Item	Connection	Shielded	Length
1	Power cable	No	1.5m
2	RJ-45 cable	No	1.8m
3	RJ-45 cable	No	10m
4	Ground cable	No	1m

Test Setup Diagram - Radiated Test > 1GHz


Item	Connection	Shielded	Length
1	Power cable	No	1.5m
2	RJ-45 cable	No	10m



3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

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

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

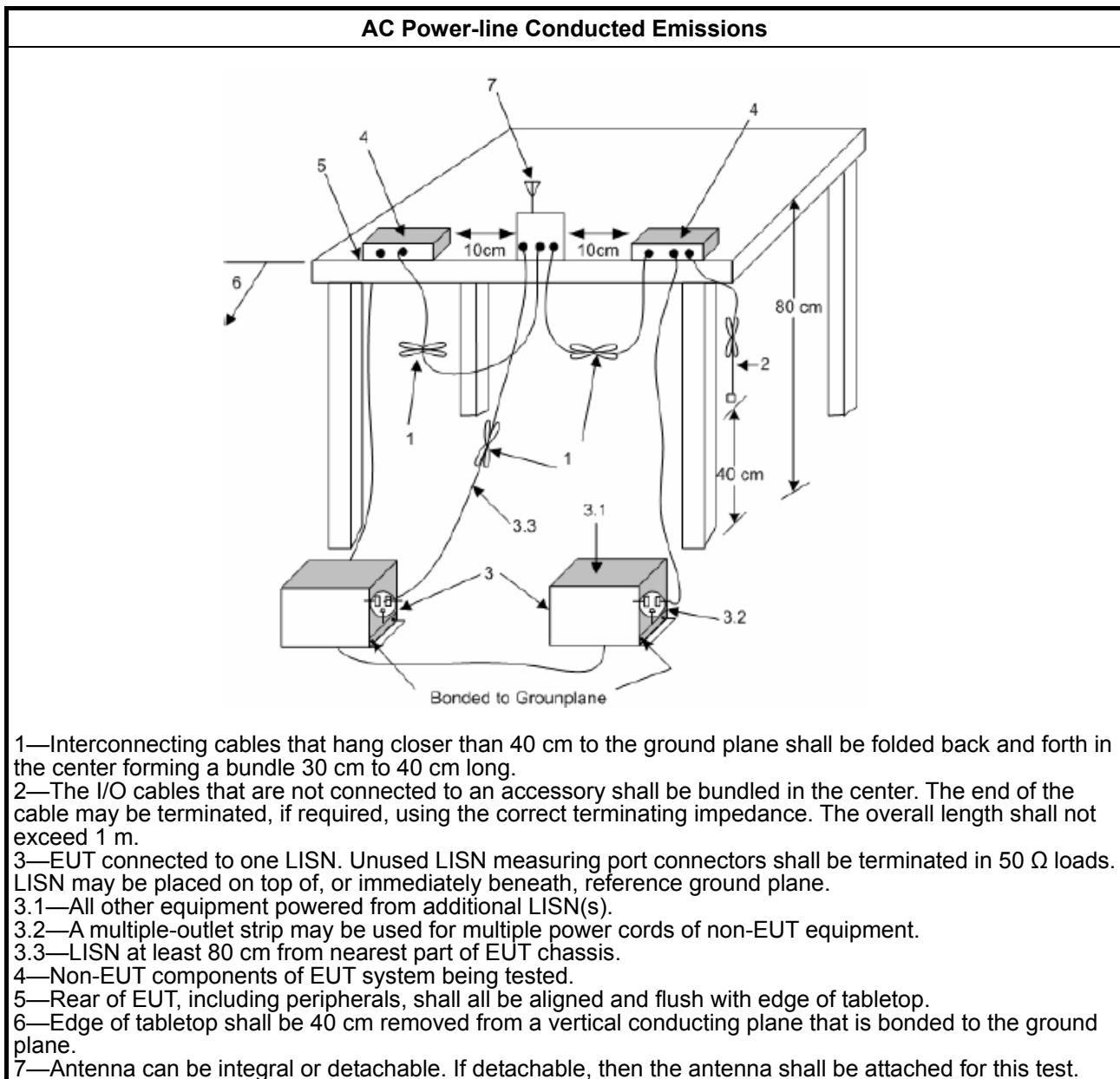
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

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

3.1.4 Test Setup



1.1.1. Measurement Results Calculation

The measured Level is calculated using:

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

3.1.5 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 DTS Bandwidth

3.2.1 6dB Bandwidth Limit

6dB Bandwidth Limit
Systems using digital modulation techniques:
6 dB bandwidth $\geq$ 500 kHz.

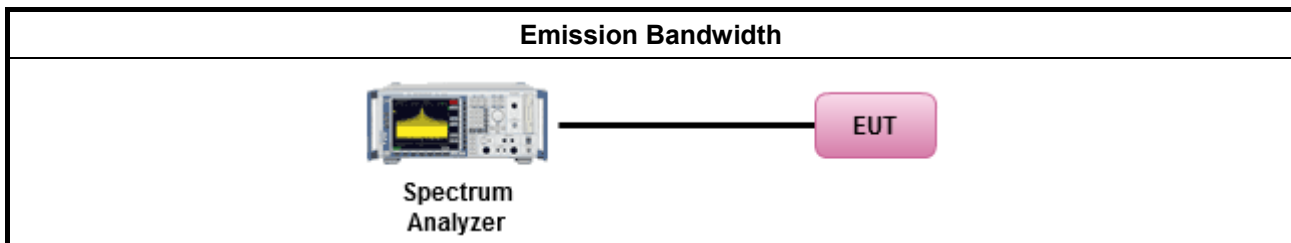
3.2.2 Measuring Instruments

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 FCC KDB 558074, clause 8.2 & C63.10 clause 11.8.1 Option 1 for 6 dB bandwidth measurement.
☐ Refer as FCC KDB 558074, clause 8.2 & C63.10 clause 11.8.2 Option 2 for 6 dB bandwidth measurement.
☐ Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit	
	▪ 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 $P_{Out} = 30 - (G_{TX} - 6)/3 + 8$ dB dBm
P_{Out} = maximum peak conducted output power or maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.	

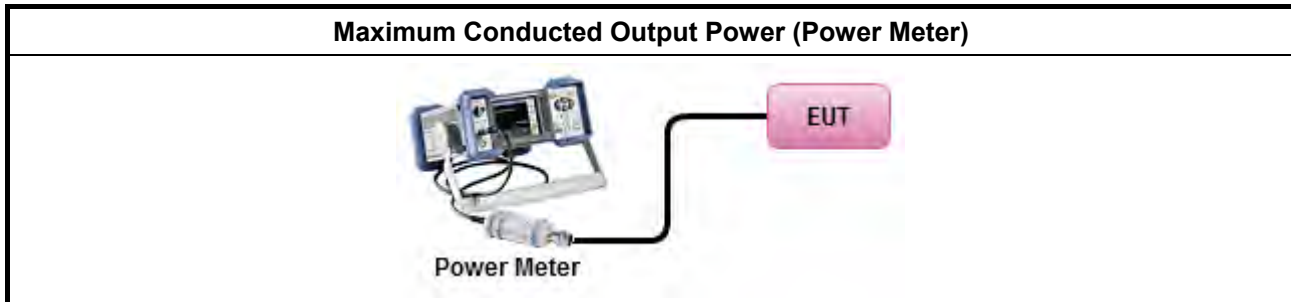
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
Maximum Peak Conducted Output Power	
☐	Refer as FCC KDB 558074, clause 8.3.1.1 & C63.10 clause 11.9.1.1 (RBW ≥ EBW method).
☐	Refer as FCC KDB 558074, clause 8.3.1.3 & C63.10 clause 11.9.1.3 (peak power meter).
Maximum Conducted Output Power	
[duty cycle ≥ 98% or external video / power trigger]	
☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.2 Method AVGSA-1.
☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.3 Method AVGSA-1A. (alternative)
duty cycle < 98% and average over on/off periods with duty factor	
☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.4 Method AVGSA-2.
☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.5 Method AVGSA-2A (alternative)
☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.6 Method AVGSA-3
☐	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.7 Method AVGSA-3A (alternative)
Measurement using a power meter (PM)	
☐	Refer as FCC KDB 558074, clause 8.3.2.3 & C63.10 clause 11.9.2.3.1 Method AVGPM (using an RF average power meter).
☒	Refer as FCC KDB 558074, clause 8.3.2.3 & C63.10 clause 11.9.2.3.2 Method AVGPM-G (using an gate RF average power meter).
For conducted measurement.	
If the EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.	
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

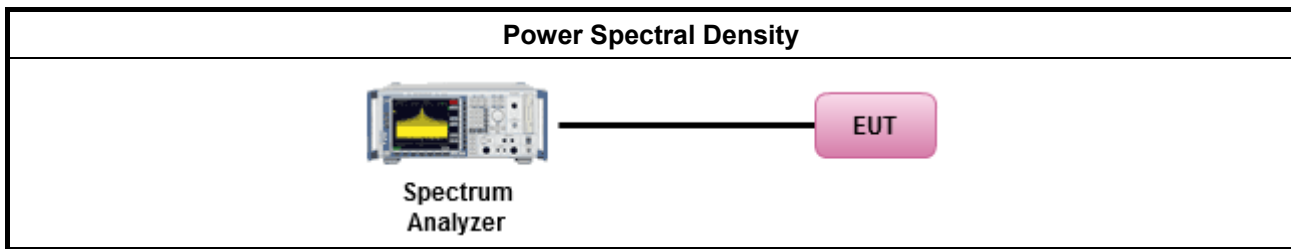
3.4.2 Measuring Instruments

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 FCC KDB 558074, clause 8.4 & C63.10 clause 11.10 Method Max. PSD. [duty cycle $\geq 98\%$ or external video / power trigger]
▪ For conducted measurement.	
▪ If The EUT supports multiple transmit chains using options given below:	
☐	Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.
☐	Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,
☐	Option 3: Measure and add $10 \log(N)$ dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with $10 \log(N)$. Or each transmit chains shall be add $10 \log(N)$ to compared with the limit.

3.4.4 Test Setup



3.4.5 Test Result of Power Spectral Density

Refer as Appendix D

3.5 Emissions in Non-restricted Frequency Bands

3.5.1 Emissions in Non-restricted Frequency Bands Limit

Un-restricted Band Emissions Limit	
RF output power procedure	Limit (dBc)
Peak output power procedure	20
Average output power procedure	30
Note 1: If the peak output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the peak conducted output power measured within any 100 kHz outside the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum measured in-band peak PSD level. Note 2: If the average output power procedure is used to measure the fundamental emission power to demonstrate compliance to requirements, then the power in any 100 kHz outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum measured in-band average PSD level.	

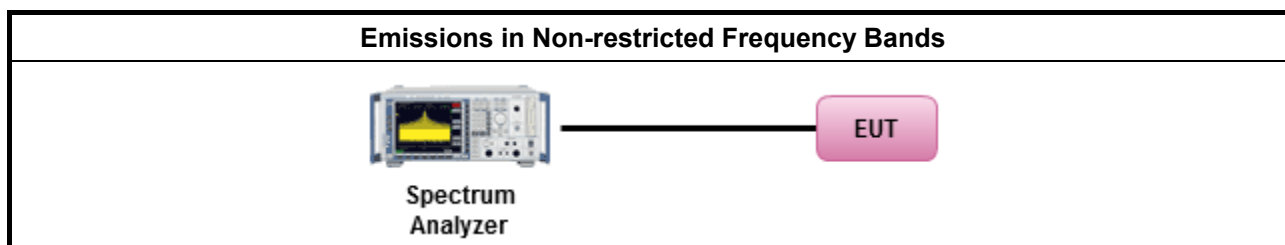
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

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

3.5.4 Test Setup



3.5.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix E

3.6 Emissions in Restricted Frequency Bands

3.6.1 Emissions in Restricted Frequency Bands Limit

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

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

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

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

3.6.2 Measuring Instruments

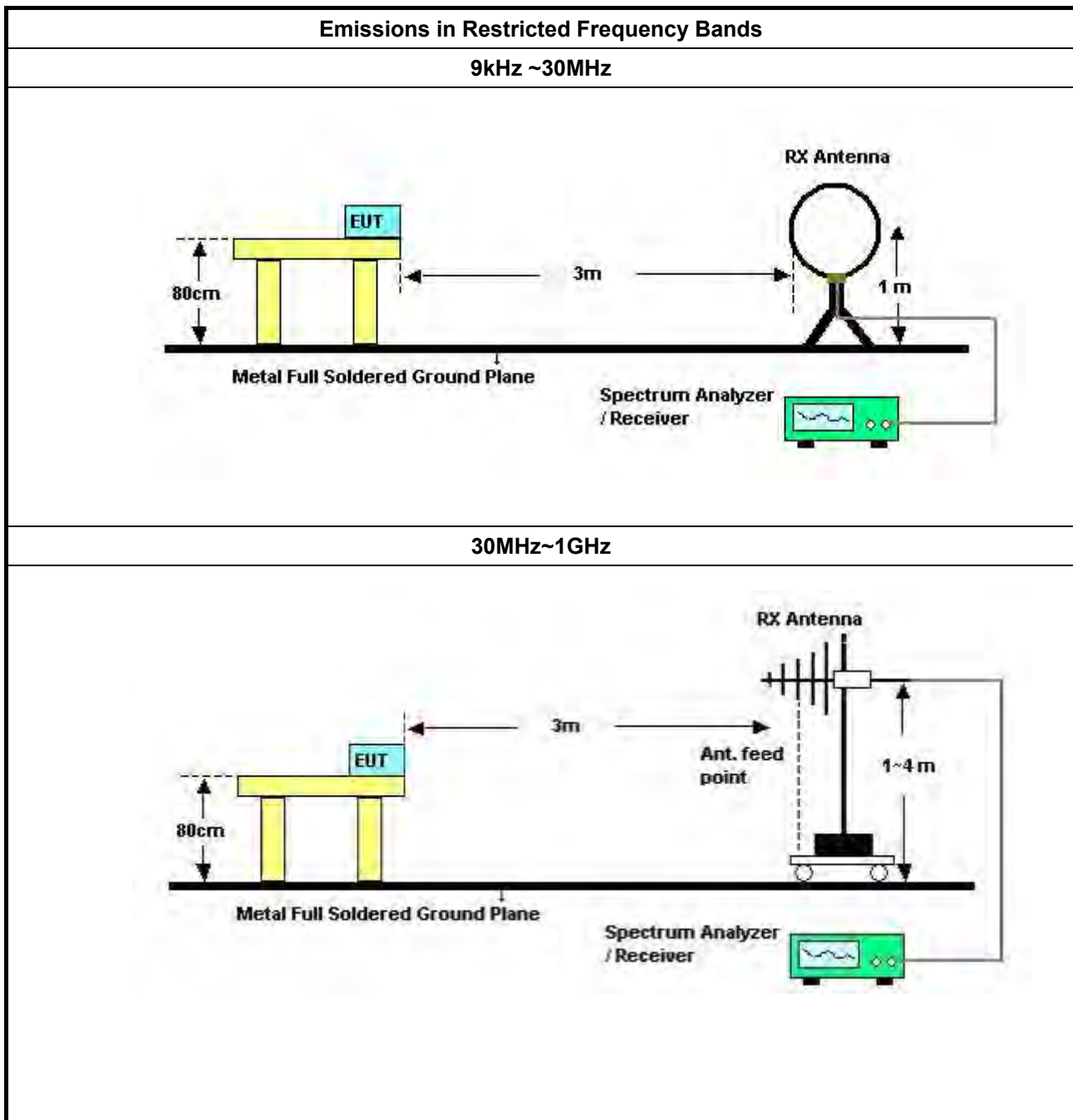
Refer a test equipment and calibration data table in this test report.

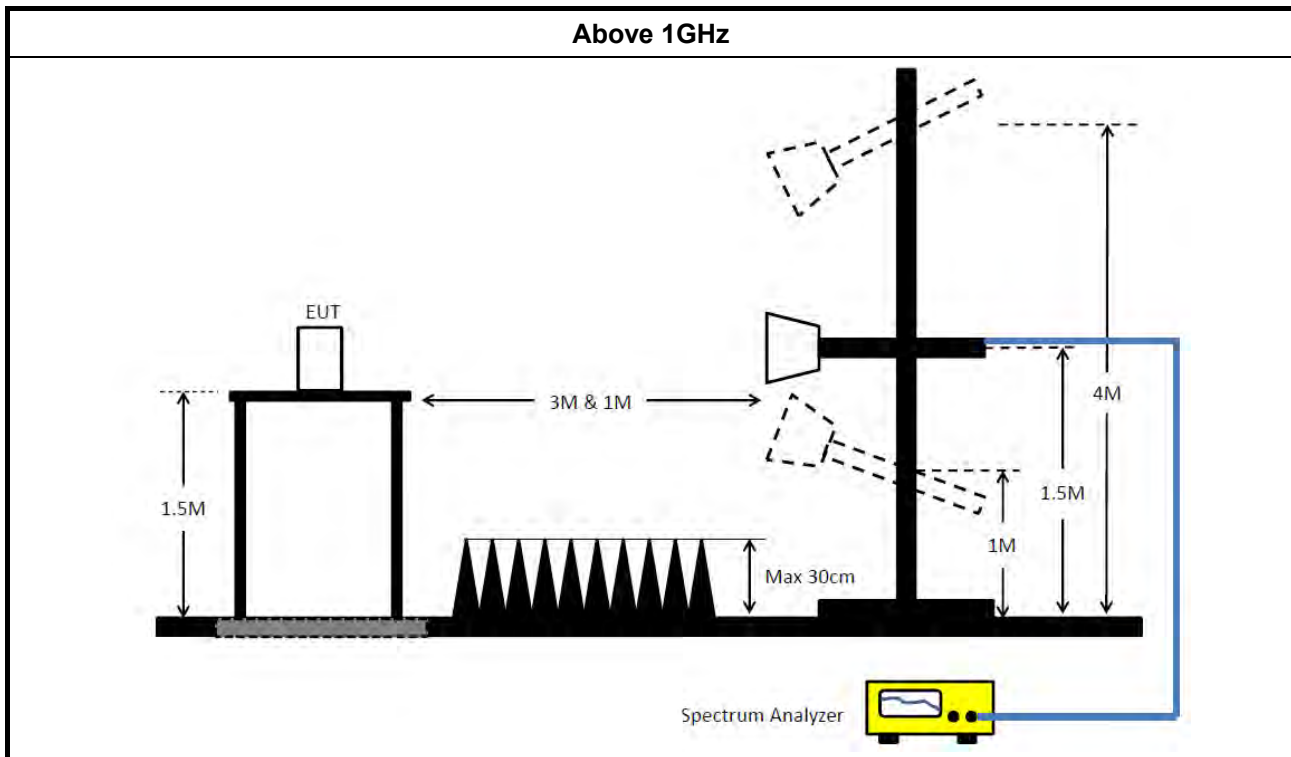


3.6.3 Test Procedures

Test Method	
▪ The average emission levels shall be measured in [duty cycle ≥ 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 FCC KDB 558074, clause 8.6 for unwanted emissions into restricted bands.
	☐ Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.1(trace averaging for duty cycle $\geq 98\%$).
	☐ Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.2(trace averaging + duty factor).
	☒ Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.3(Reduced VBW $\geq 1/T$).
	☐ Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW $\geq 1/T$, where T is pulse time.
	☐ Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.
	☒ Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.4 measurement procedure peak limit.
▪ For the transmitter band-edge emissions shall be measured using following options below:	
	▪ Refer as FCC KDB 558074 clause 8.7 & c63.10 clause 11.13.1, When the performing peak or average radiated measurements, emissions within 2 MHz of the authorized band edge may be measured using the marker-delta method described below.
	▪ Refer as FCC KDB 558074, clause 8.7 (ANSI C63.10, clause 6.10.6) for marker-delta method for band-edge measurements.
	▪ Refer as FCC KDB 558074, clause 8.7 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).
	▪ For conducted unwanted emissions into restricted bands (absolute emission limits). Devices with multiple transmit chains using options given below: (1) Measure and sum the spectra across the outputs or (2) Measure and add 10 log(N) dB
	▪ For FCC KDB 662911 The methodology described here may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance may be demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred.

3.6.4 Test Setup





3.6.5 Measurement Results Calculation

The measured Level is calculated using:

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

3.6.6 Emissions in Restricted Frequency Bands (Below 30MHz)

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

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

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

3.6.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F



4 Test Equipment and Calibration Data

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.4GHz	Feb. 22, 2022	Feb. 21, 2023	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Feb. 09, 2022	Feb. 08, 2023	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Apr. 12, 2022	Apr. 11, 2023	Conduction (CO01-CB)
Pulse Limiter	Rohde&Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Feb. 10, 2022	Feb. 09, 2023	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	May 19, 2021	May 18, 2022	Conduction (CO01-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Apr. 14, 2021	Apr. 13, 2022	Radiation (03CH05-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH05-CB	30 MHz ~ 1 GHz	Aug. 09, 2021	Aug. 08, 2022	Radiation (03CH05-CB)
Bilog Antenna with 6dB Attenuator	TESEQ & EMCI	CBL 6112D & N-6-06	35236 & AT-N0610	30MHz ~ 2GHz	Mar. 25, 2022	Mar. 24, 2023	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC330N	980331	20MHz ~ 3GHz	Apr. 27, 2021	Apr. 26, 2022	Radiation (03CH05-CB)
Spectrum Analyzer	R&S	FSP40	100304	9kHz ~ 40GHz	Mar. 14, 2022	Mar. 13, 2023	Radiation (03CH05-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	Jun. 21, 2021	Jun. 20, 2022	Radiation (03CH05-CB)
RF Cable-low	Woken	RG402	Low Cable-04+23	30MHz~1GHz	Oct. 13, 2021	Oct. 12, 2022	Radiation (03CH05-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH05-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Apr. 14, 2021	Apr. 13, 2022	Radiation (03CH06-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH06-CB	30 MHz ~ 1 GHz	Aug. 09, 2021	Aug. 08, 2022	Radiation (03CH06-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH06-CB	1GHz ~18GHz 3m	Oct. 01, 2021	Sep. 30, 2022	Radiation (03CH06-CB)
Bilog Antenna with 6 dB attenuator	TESEQ & EMCI	CBL6112D & N-6-06	37878 & AT-N0606	20MHz ~ 2GHz	Jul. 31, 2021	Jul. 30, 2022	Radiation (03CH06-CB)
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA 9120D-1292	1GHz~18GHz	Aug. 04, 2021	Aug. 03, 2022	Radiation (03CH06-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 05, 2021	Aug. 04, 2022	Radiation (03CH06-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Pre-Amplifier	Agilent	310N	187290	0.1MHz ~ 1GHz	Nov. 04, 2021	Nov. 03, 2022	Radiation (03CH06-CB)
Pre-Amplifier	Agilent	83017A	MY53270064	0.5GHz ~ 26.5GHz	May 06, 2021	May 05, 2022	Radiation (03CH06-CB)
Pre-Amplifier	MITEQ	TTA1840-35-H G	1864479	18GHz ~ 40GHz	Jul. 13, 2021	Jul. 12, 2022	Radiation (03CH06-CB)
Spectrum analyzer	R&S	FSP40	100080	9kHz~40GHz	Dec. 24, 2021	Dec. 23, 2022	Radiation (03CH06-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	Jun. 21, 2021	Jun. 20, 2022	Radiation (03CH06-CB)
RF Cable-low	Woken	RG402	Low Cable-05+24	30MHz~1GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-67	1GHz~18GHz	Feb. 24, 2022	Feb. 23, 2023	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-05+67	1GHz~18GHz	Feb. 24, 2022	Feb. 23, 2023	Radiation (03CH06-CB)
High Cable	Woken	WCA0929M	40G#5+7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH06-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 08, 2021	Dec. 07, 2022	Radiation (03CH06-CB)
High Cable	Woken	WCA0929M	40G#7	1GHz ~ 40 GHz	Dec. 14, 2021	Dec. 13, 2022	Radiation (03CH06-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH06-CB)
Spectrum analyzer	R&S	FSV40	101028	9kHz~40GHz	Jan. 07, 2022	Jan. 06, 2023	Conducted (TH03-CB)
Power Sensor	Anritsu	MA2411B	1726195	300MHz~40GHz	Aug. 22, 2021	Aug. 21, 2022	Conducted (TH03-CB)
Power Meter	Anritsu	ML2495A	1035008	300MHz~40GHz	Aug. 22, 2021	Aug. 21, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-11	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-12	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-13	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-14	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-15	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
Switch	SPTCB	SP-SWI	SWI-03	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	SWI-03-P1	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	SWI-03-P2	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	SWI-03-P3	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH03-CB)

**RADIO TEST REPORT****Report No. : FR232209AC**

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	SWI-03-P4	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	SWI-03-P5	1 GHz –26.5 GHz	Dec. 13, 2021	Dec. 12, 2022	Conducted (TH03-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH03-CB)

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

NCR means Non-Calibration required.



Conducted Emissions at Powerline

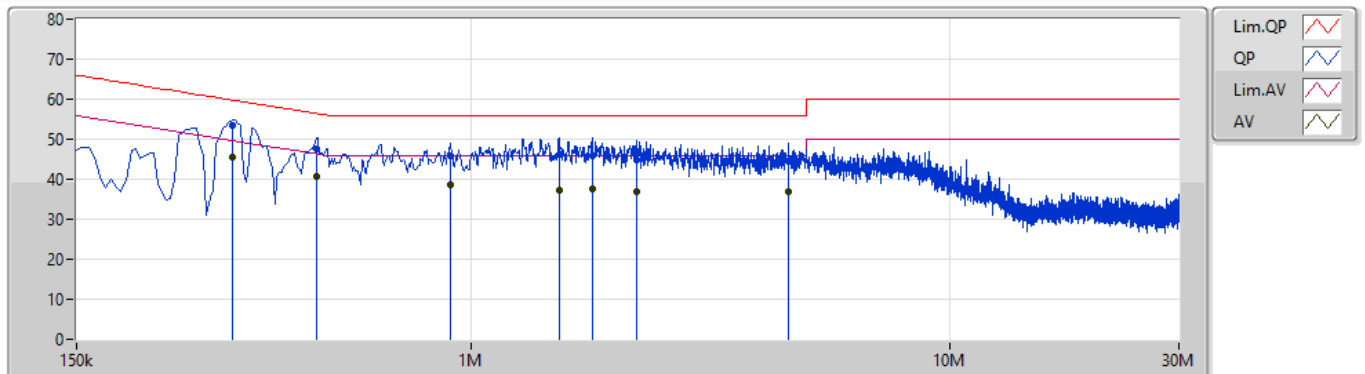
Appendix A

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	316.5k	45.66	49.80	-4.14	Line

Mode 1

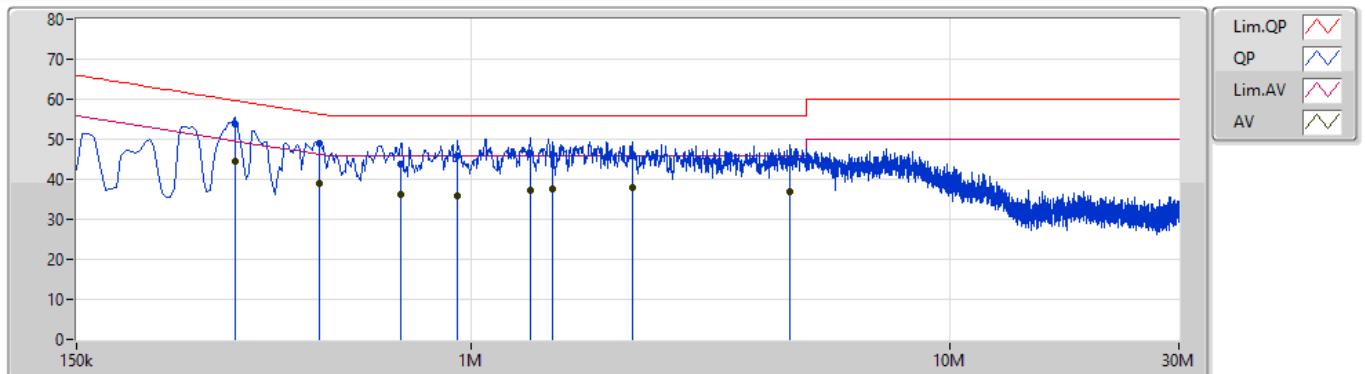
19/04/2022



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	316.5k	53.54	59.80	-6.26	10.03	Line	-	43.51	0.12	0.02	9.89			
AV	316.5k	45.66	49.80	-4.14	10.03	Line	"Worst"	35.63	0.12	0.02	9.89			
QP	474k	47.68	56.44	-8.76	10.03	Line	-	37.65	0.12	0.02	9.89			
AV	474k	40.66	46.44	-5.78	10.03	Line	-	30.63	0.12	0.02	9.89			
QP	906k	45.93	56.00	-10.07	10.05	Line	-	35.88	0.14	0.02	9.89			
AV	906k	38.66	46.00	-7.34	10.05	Line	-	28.61	0.14	0.02	9.89			
QP	1.527M	46.34	56.00	-9.66	10.09	Line	-	36.25	0.16	0.04	9.89			
AV	1.527M	37.28	46.00	-8.72	10.09	Line	-	27.19	0.16	0.04	9.89			
QP	1.788M	45.93	56.00	-10.07	10.11	Line	-	35.82	0.17	0.05	9.89			
AV	1.788M	37.72	46.00	-8.28	10.11	Line	-	27.61	0.17	0.05	9.89			
QP	2.216M	44.74	56.00	-11.26	10.12	Line	-	34.62	0.18	0.05	9.89			
AV	2.216M	36.81	46.00	-9.19	10.12	Line	-	26.69	0.18	0.05	9.89			
QP	4.587M	44.33	56.00	-11.67	10.21	Line	-	34.12	0.25	0.07	9.89			
AV	4.587M	37.06	46.00	-8.94	10.21	Line	-	26.85	0.25	0.07	9.89			

Mode 1

19/04/2022



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	321k	53.92	59.67	-5.75	10.07	Neutral	-	43.85	0.16	0.02	9.89			
AV	321k	44.59	49.67	-5.08	10.07	Neutral	"Worst"	34.52	0.16	0.02	9.89			
QP	483k	48.97	56.29	-7.32	10.07	Neutral	-	38.90	0.16	0.02	9.89			
AV	483k	38.91	46.29	-7.38	10.07	Neutral	-	28.84	0.16	0.02	9.89			
QP	712.5k	43.72	56.00	-12.28	10.08	Neutral	-	33.64	0.17	0.02	9.89			
AV	712.5k	36.33	46.00	-9.67	10.08	Neutral	-	26.25	0.17	0.02	9.89			
QP	933k	45.81	56.00	-10.19	10.08	Neutral	-	35.73	0.17	0.02	9.89			
AV	933k	36.01	46.00	-9.99	10.08	Neutral	-	25.93	0.17	0.02	9.89			
QP	1.329M	46.53	56.00	-9.47	10.10	Neutral	-	36.43	0.18	0.03	9.89			
AV	1.329M	37.15	46.00	-8.85	10.10	Neutral	-	27.05	0.18	0.03	9.89			
QP	1.482M	46.23	56.00	-9.77	10.11	Neutral	-	36.12	0.18	0.04	9.89			
AV	1.482M	37.48	46.00	-8.52	10.11	Neutral	-	27.37	0.18	0.04	9.89			
QP	2.166M	45.92	56.00	-10.08	10.13	Neutral	-	35.79	0.19	0.05	9.89			
AV	2.166M	37.83	46.00	-8.17	10.13	Neutral	-	27.70	0.19	0.05	9.89			
QP	4.614M	44.23	56.00	-11.77	10.19	Neutral	-	34.04	0.23	0.07	9.89			
AV	4.614M	36.98	46.00	-9.02	10.19	Neutral	-	26.79	0.23	0.07	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)	635k	1.029M	1M03F1D	632.5k	1.022M
BT-LE(2Mbps)	1.09M	2.059M	2M06F1D	1.085M	2.046M

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

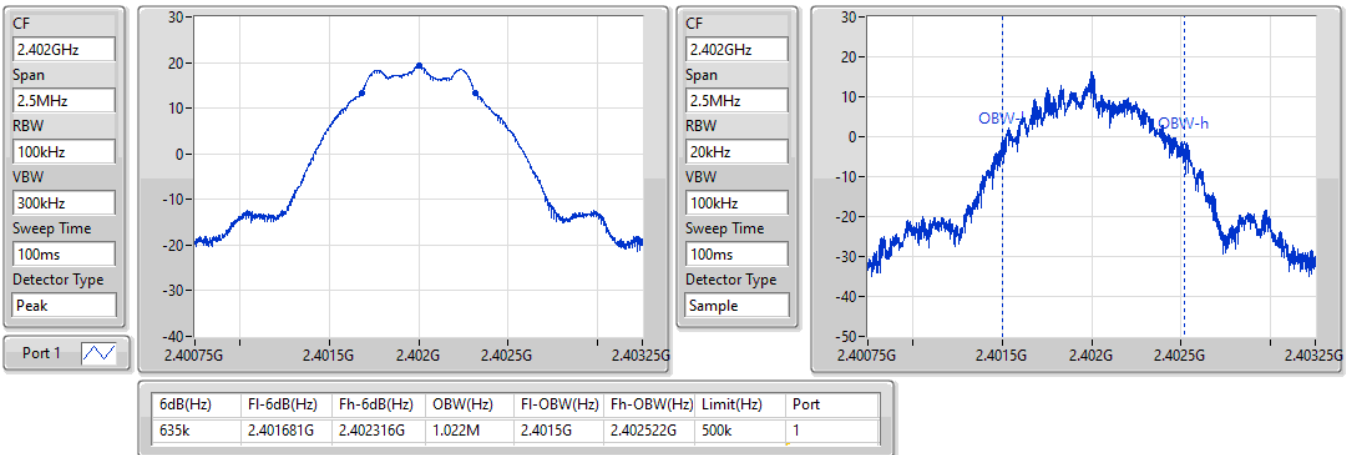
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	500k	635k	1.022M
2440MHz	Pass	500k	635k	1.023M
2478MHz	Pass	500k	632.5k	1.029M
2480MHz	Pass	500k	633.75k	1.024M
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	500k	1.09M	2.054M
2440MHz	Pass	500k	1.088M	2.049M
2478MHz	Pass	500k	1.085M	2.046M
2480MHz	Pass	500k	1.085M	2.059M

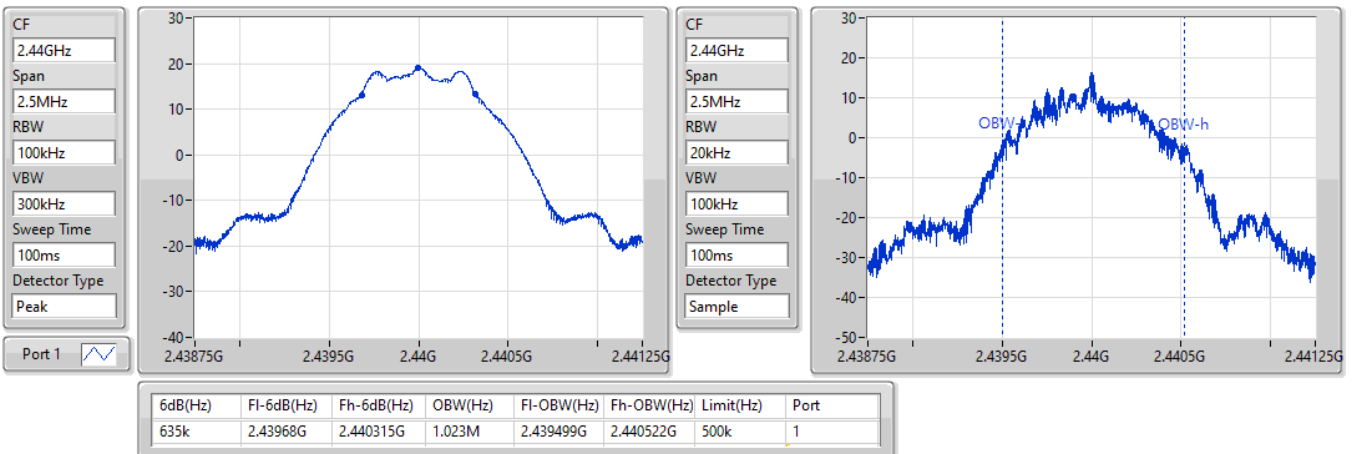
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

BT-LE(1Mbps)
2402MHz
EBW-DTS

05/05/2022

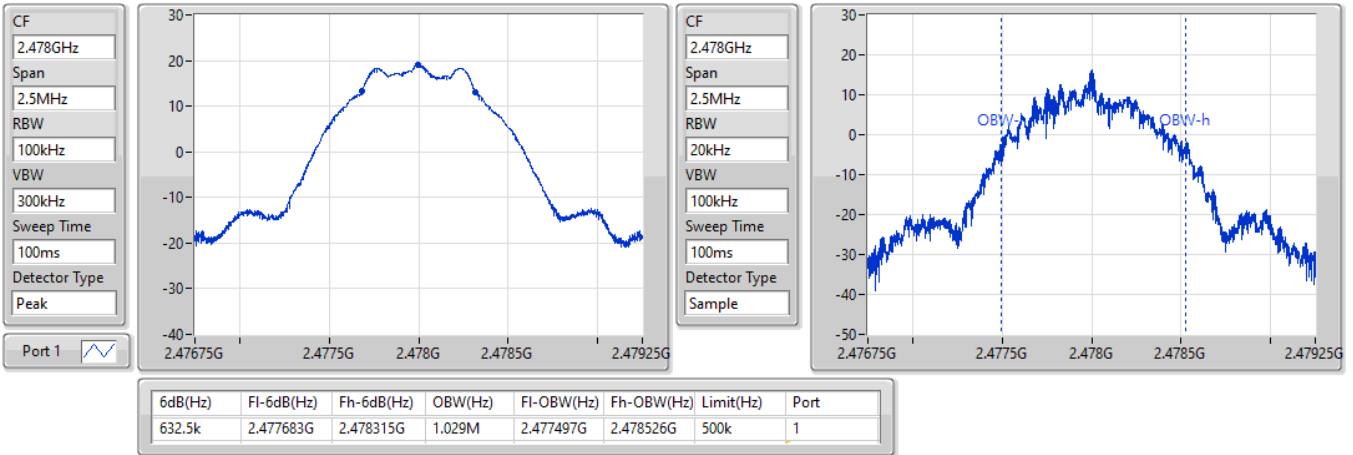

BT-LE(1Mbps)
2440MHz
EBW-DTS

05/05/2022

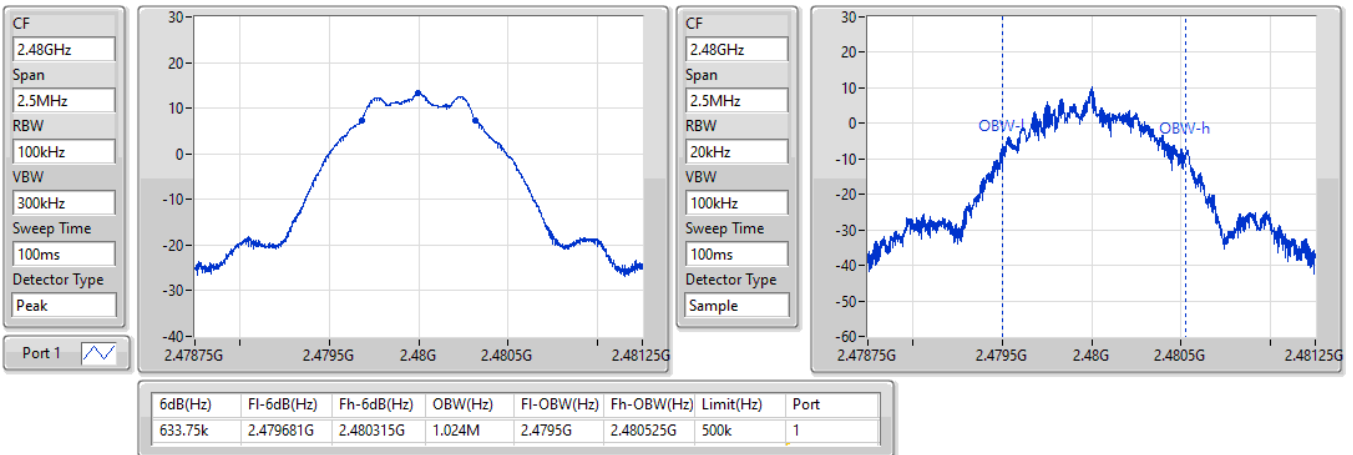


BT-LE(1Mbps)
2478MHz
EBW-DTS

05/05/2022

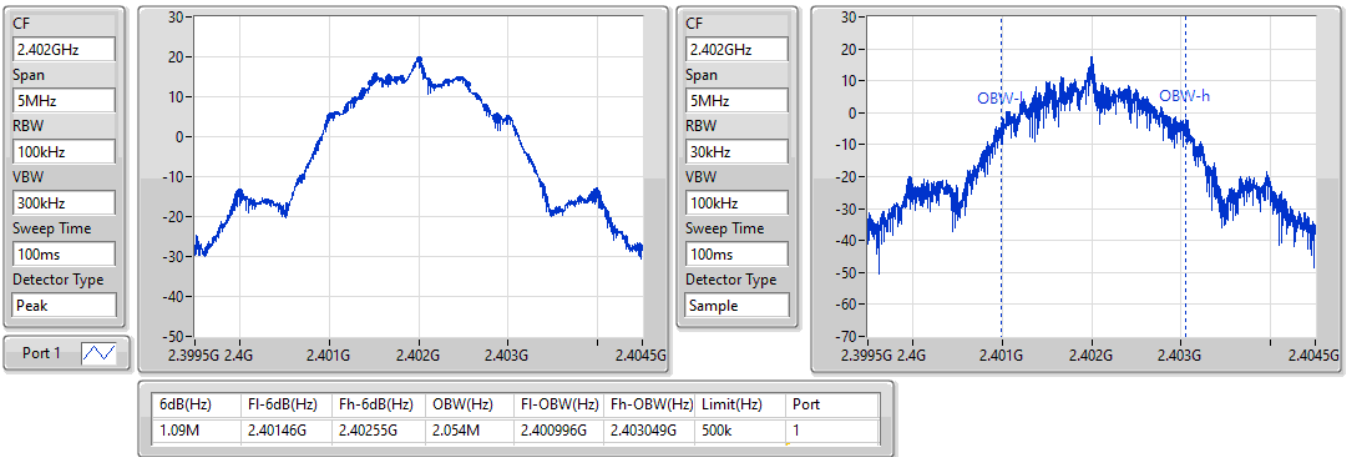

BT-LE(1Mbps)
2480MHz
EBW-DTS

05/05/2022

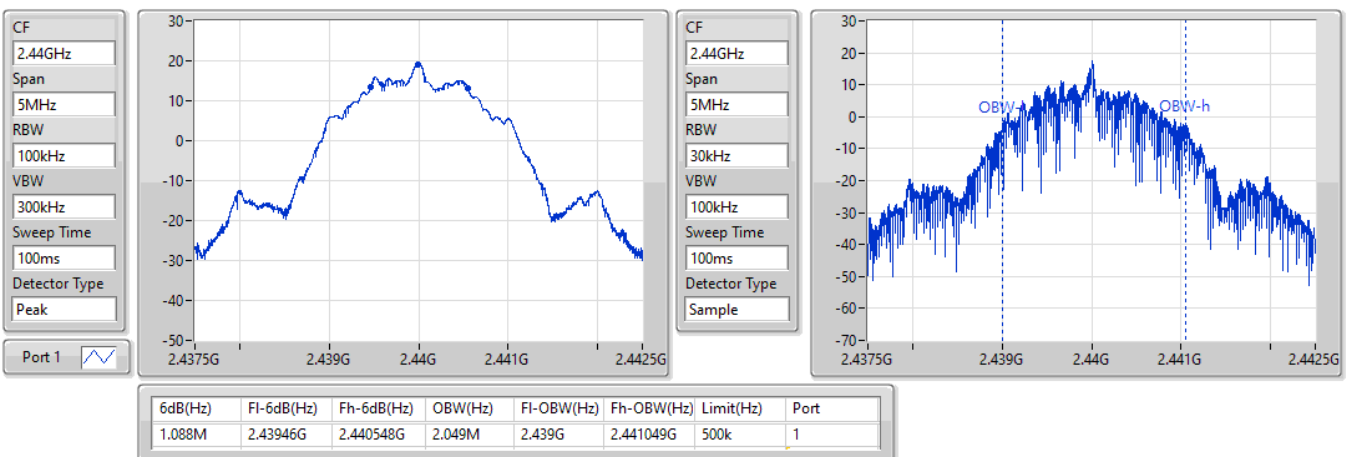


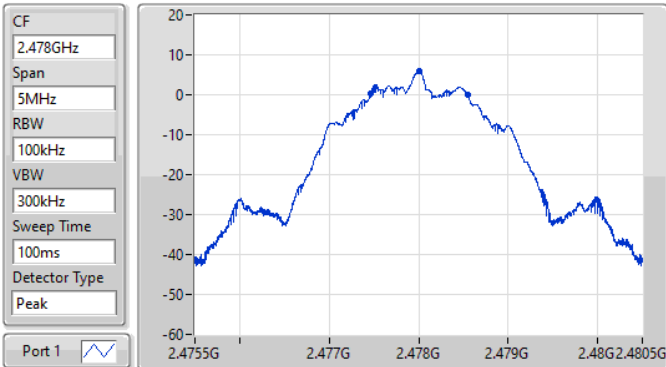
BT-LE(2Mbps)
EBW-DTS
2402MHz

05/05/2022


BT-LE(2Mbps)
EBW-DTS
2440MHz

05/05/2022

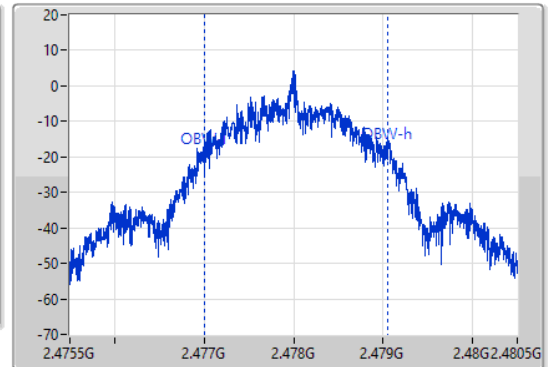
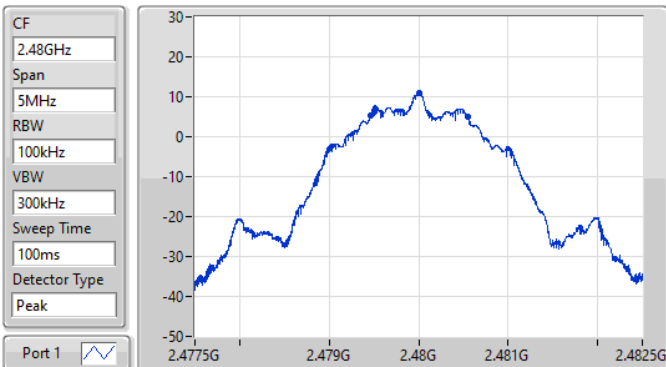


BT-LE(2Mbps)
2478MHz


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.085M	2.477463G	2.478548G	2.046M	2.477008G	2.479054G	500k	1

EBW-DTS

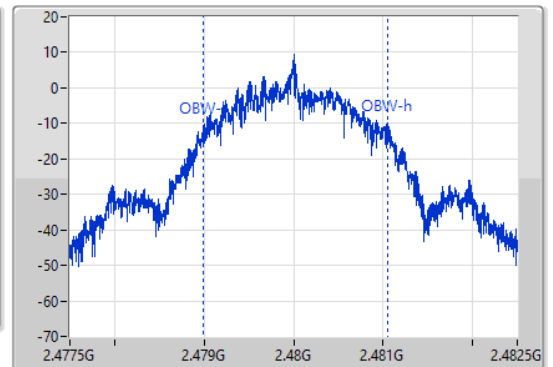
05/05/2022


BT-LE(2Mbps)
2480MHz


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.085M	2.47946G	2.480545G	2.059M	2.478993G	2.481052G	500k	1

EBW-DTS

05/05/2022





Summary

Mode	Power (dBm)	Power (W)
2.4-2.4835GHz	-	-
BT-LE(1Mbps)	18.53	0.07129
BT-LE(2Mbps)	18.44	0.06982

Result

Mode	Result	Gain (dBi)	Power (dBm)	Power Limit (dBm)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	2.40	18.46	30.00
2440MHz	Pass	2.40	18.53	30.00
2478MHz	Pass	2.40	18.47	30.00
2480MHz	Pass	2.40	12.36	30.00
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	2.40	18.44	30.00
2440MHz	Pass	2.40	18.43	30.00
2478MHz	Pass	2.40	5.24	30.00
2480MHz	Pass	2.40	10.14	30.00

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



Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
BT-LF(1Mbps)	4.07
BT-LF(2Mbps)	3.86

RBW = 3kHz;

Result

Mode	Result	Gain (dBi)	PD (dBm/RBW)	PD Limit (dBm/RBW)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	2.40	4.07	8.00
2440MHz	Pass	2.40	4.02	8.00
2478MHz	Pass	2.40	4.06	8.00
2480MHz	Pass	2.40	-1.85	8.00
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	2.40	3.86	8.00
2440MHz	Pass	2.40	3.79	8.00
2478MHz	Pass	2.40	-9.32	8.00
2480MHz	Pass	2.40	-4.60	8.00

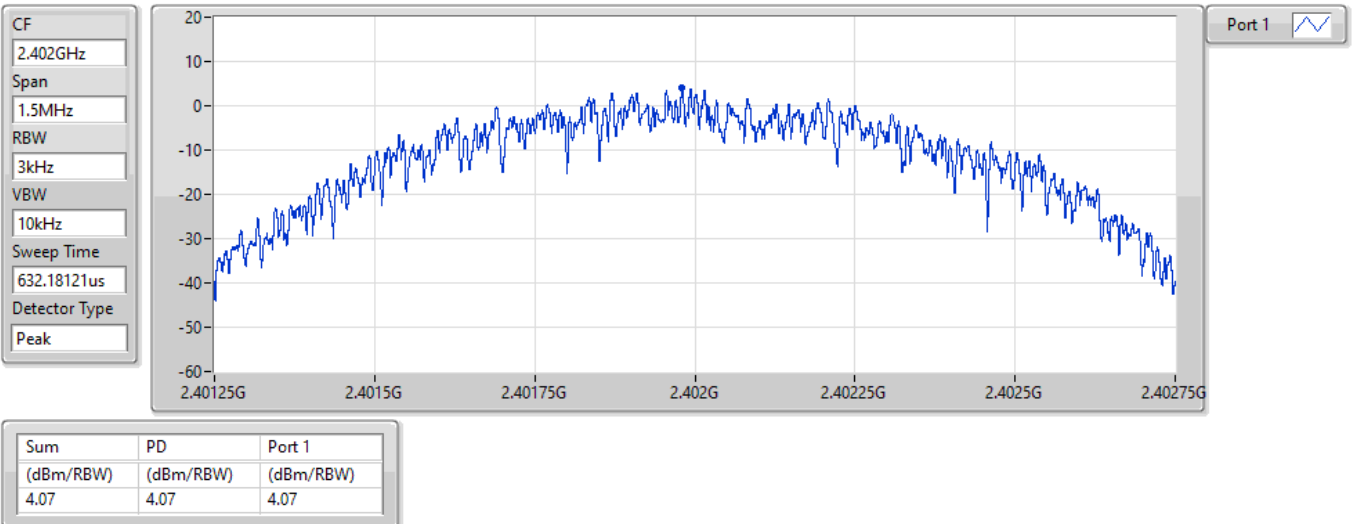
DG = Directional Gain; RBW = 3kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

BT-LE(1Mbps)

PSD

2402MHz

05/05/2022

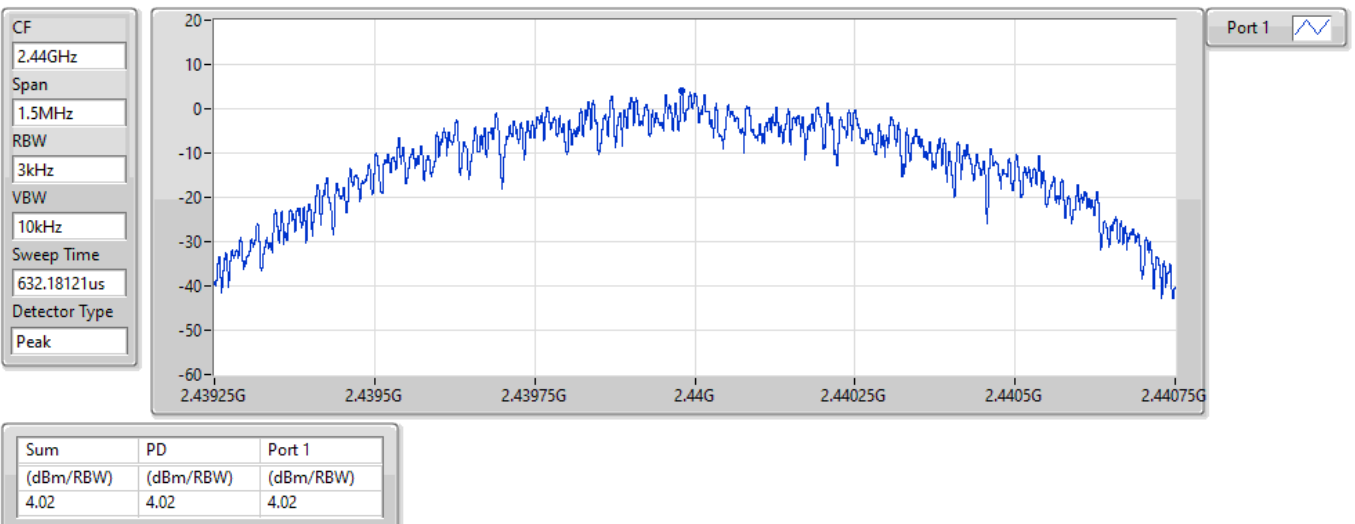


BT-LE(1Mbps)

PSD

2440MHz

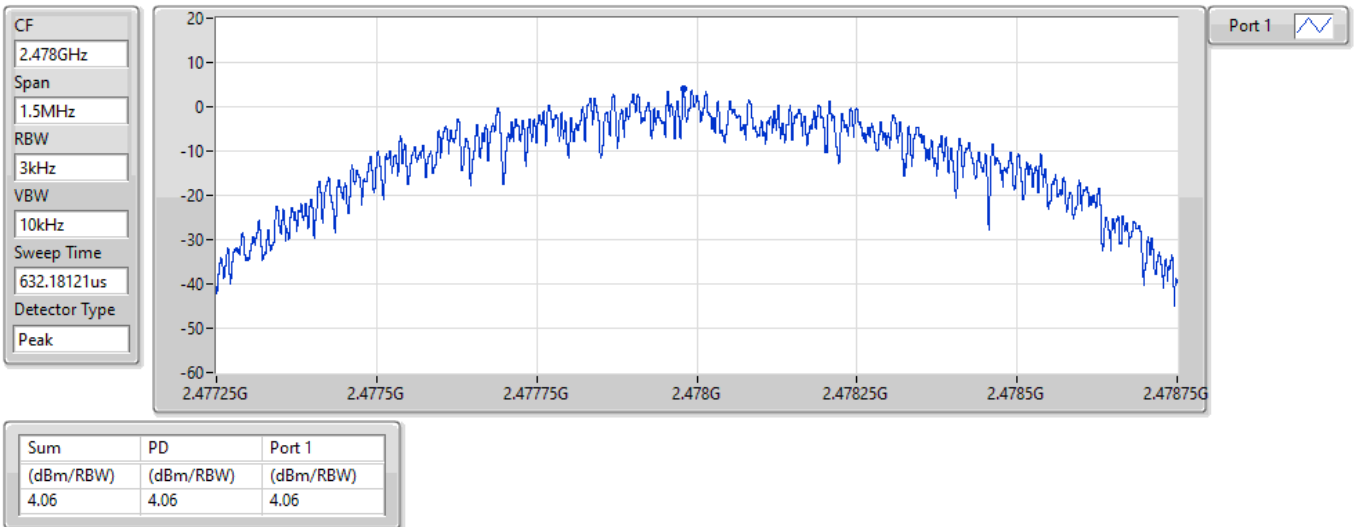
05/05/2022



BT-LE(1Mbps)

2478MHz

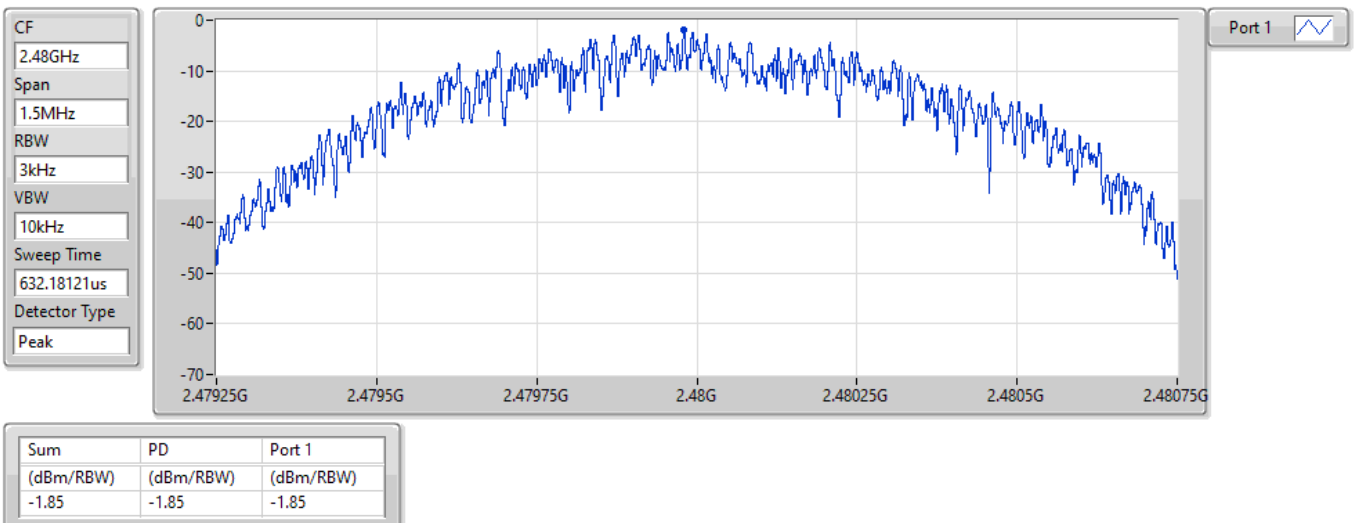
05/05/2022



BT-LE(1Mbps)

2480MHz

05/05/2022

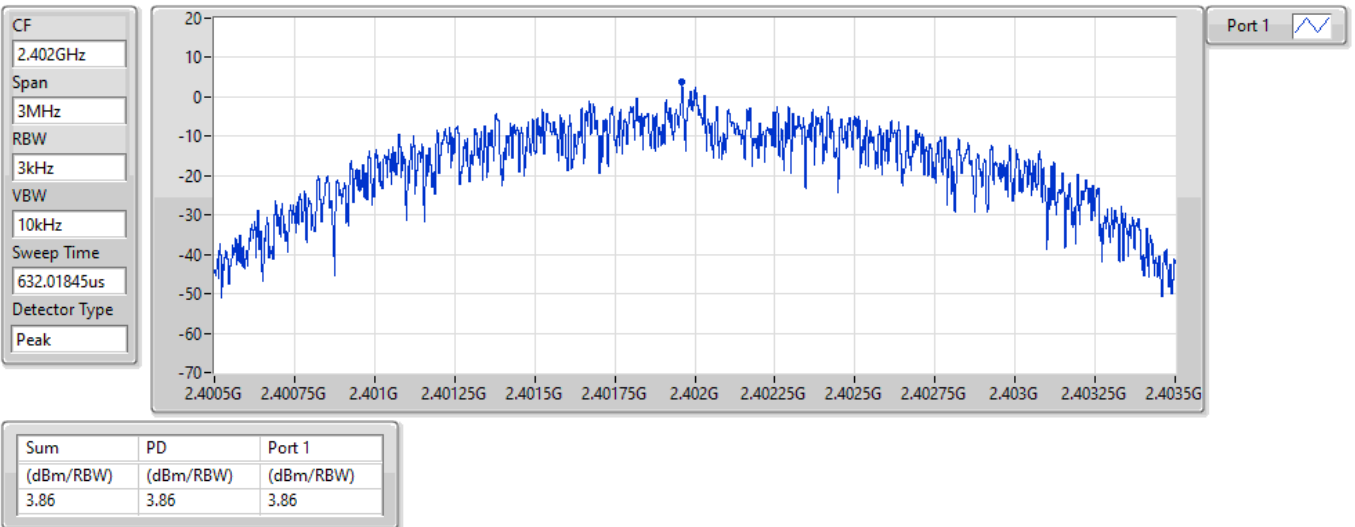


BT-LE(2Mbps)

PSD

2402MHz

05/05/2022

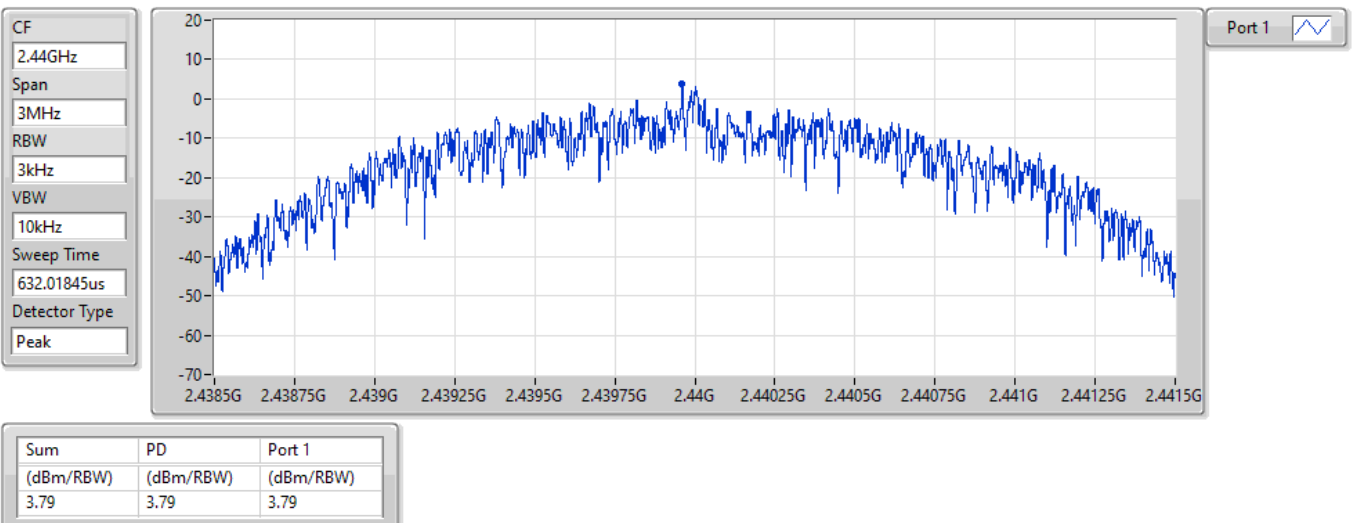


BT-LE(2Mbps)

PSD

2440MHz

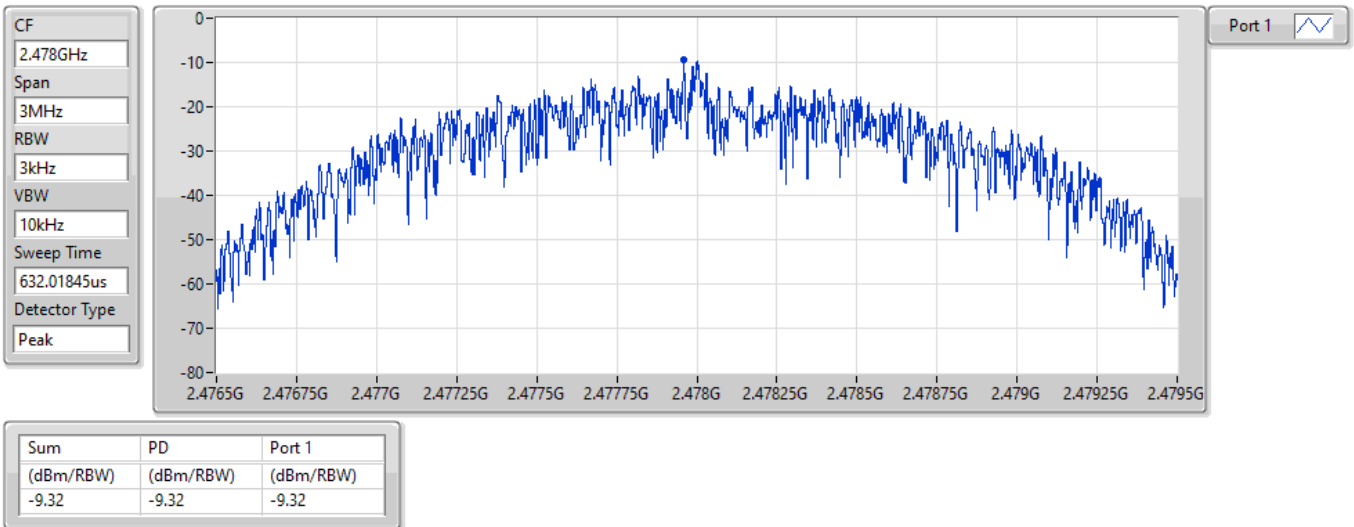
05/05/2022



BT-LE(2Mbps)

2478MHz

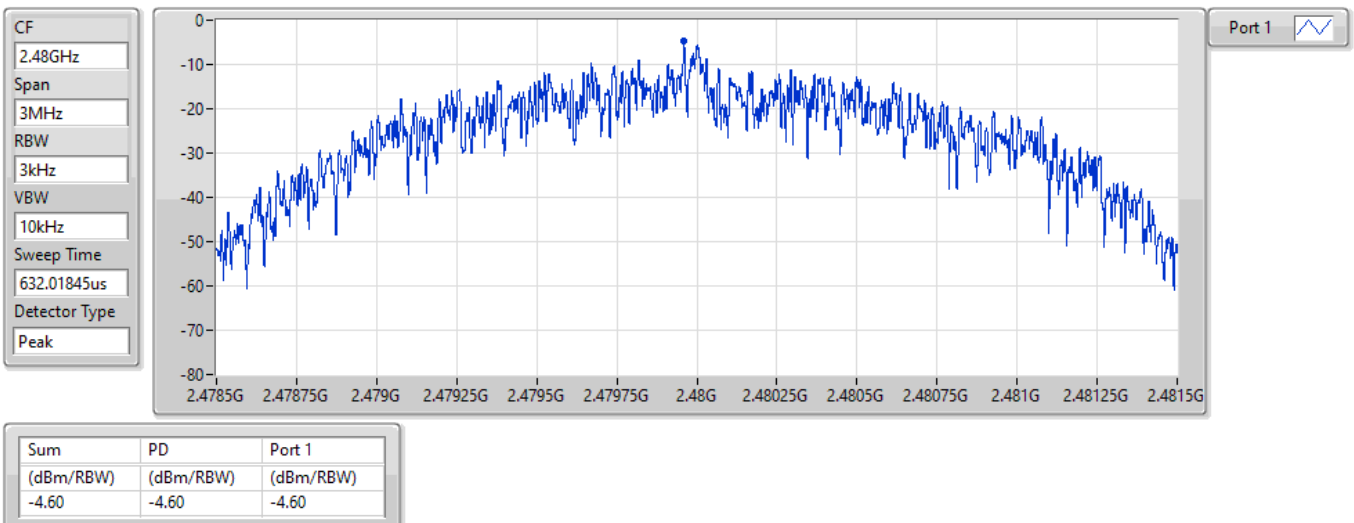
05/05/2022



BT-LE(2Mbps)

2480MHz

05/05/2022





Summary

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BT-LE(1Mbps)	Pass	2.44G	19.07	-10.93	2.12767G	-51.99	2.39986G	-31.97	2.4G	-34.19	2.48998G	-51.33	17.66895G	-46.71	1
BT-LE(2Mbps)	Pass	2.44004G	18.84	-11.16	828.71M	-51.88	2.39999G	-13.06	2.4G	-13.44	2.49795G	-50.86	5.90891G	-46.89	1

Result

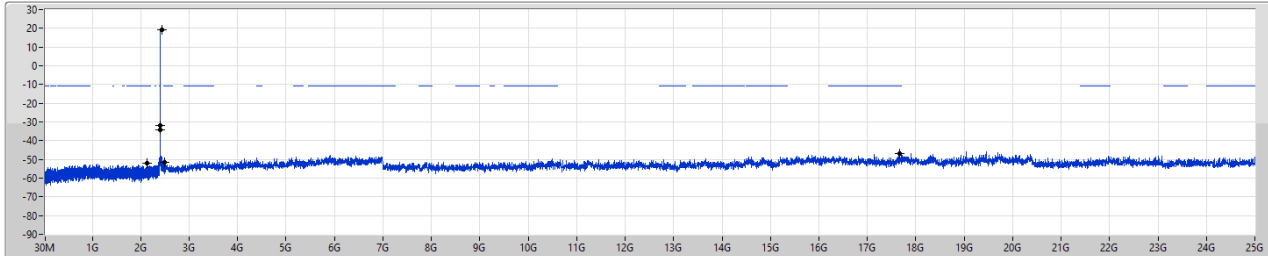
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
BT-LE(1Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.44G	19.07	-10.93	2.12767G	-51.99	2.39986G	-31.97	2.4G	-34.19	2.48998G	-51.33	17.66895G	-46.71	1
2440MHz	Pass	2.44G	19.07	-10.93	2.0463G	-52.10	2.39413G	-51.23	2.4G	-52.87	2.4957G	-50.99	16.47945G	-47.78	1
2478MHz	Pass	2.44G	19.07	-10.93	640.41M	-51.26	2.39461G	-51.69	2.4835G	-44.51	2.484G	-42.15	16.34728G	-47.63	1
2480MHz	Pass	2.44G	19.07	-10.93	1.81718G	-52.51	2.39035G	-51.75	2.4835G	-46.65	2.48373G	-44.98	5.82173G	-46.94	1
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.44004G	18.84	-11.16	828.71M	-51.88	2.39999G	-13.06	2.4G	-13.44	2.49795G	-50.86	5.90891G	-46.89	1
2440MHz	Pass	2.44004G	18.84	-11.16	902.14M	-51.91	2.39205G	-50.94	2.4G	-54.16	2.49108G	-51.28	6.42633G	-46.76	1
2478MHz	Pass	2.44004G	18.84	-11.16	929.46M	-52.51	2.39761G	-51.98	2.4835G	-53.09	2.48849G	-50.76	17.68864G	-47.49	1
2480MHz	Pass	2.44004G	18.84	-11.16	820.48M	-51.74	2.39848G	-50.93	2.4835G	-44.77	2.48354G	-43.58	16.27698G	-47.09	1

BT-LE(1Mbps)

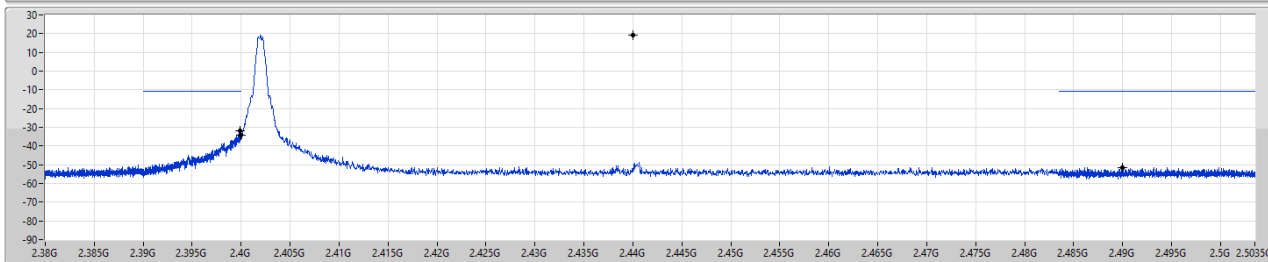
CSEndB-DTS

2402MHz

05/05/2022



Port 1



RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

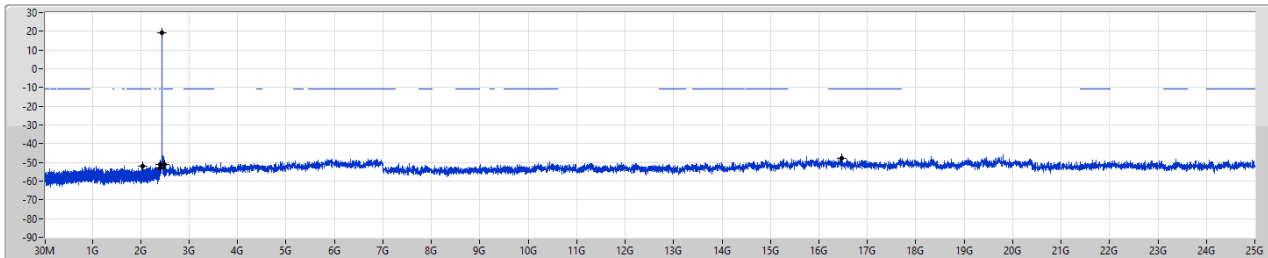
Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.44G	19.07	-10.93	2.12767G	-51.99	2.39986G	-31.97	2.4G	-34.19	2.48998G	-51.33	17.66895G	-46.71	1

BT-LE(1Mbps)

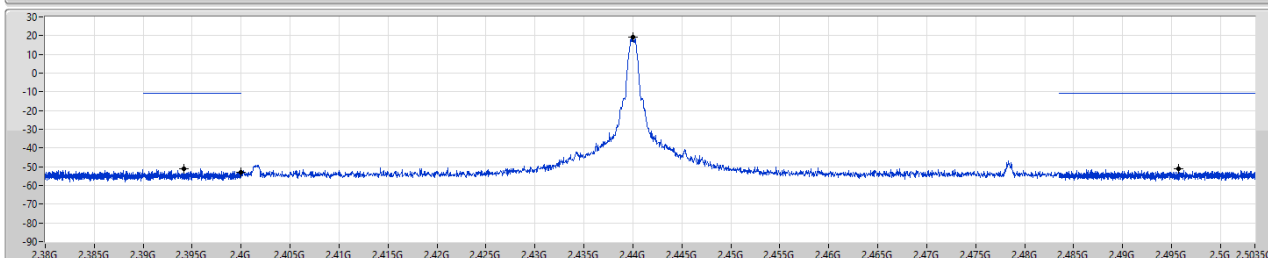
CSEndB-DTS

2440MHz

05/05/2022



Port 1



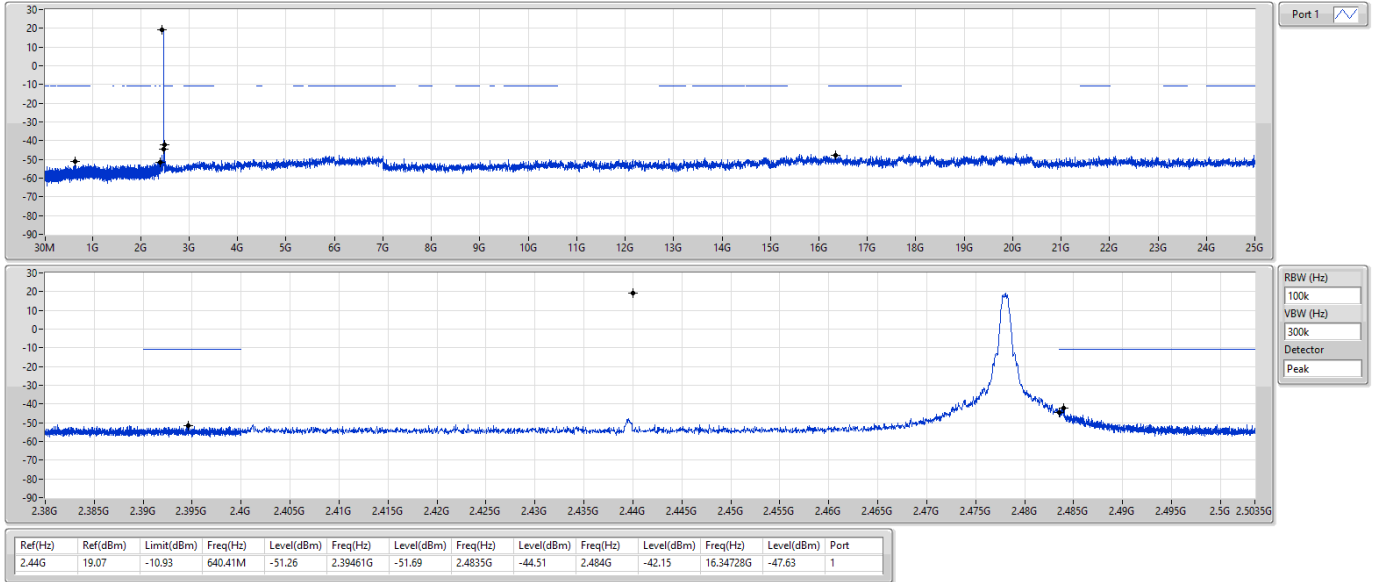
RBW (Hz)
100k
VBW (Hz)
300k
Detector
Peak

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
2.44G	19.07	-10.93	2.0463G	-52.10	2.39413G	-51.23	2.4G	-52.87	2.4957G	-50.99	16.47945G	-47.78	1

BT-LE(1Mbps)

CSEndB-DTS

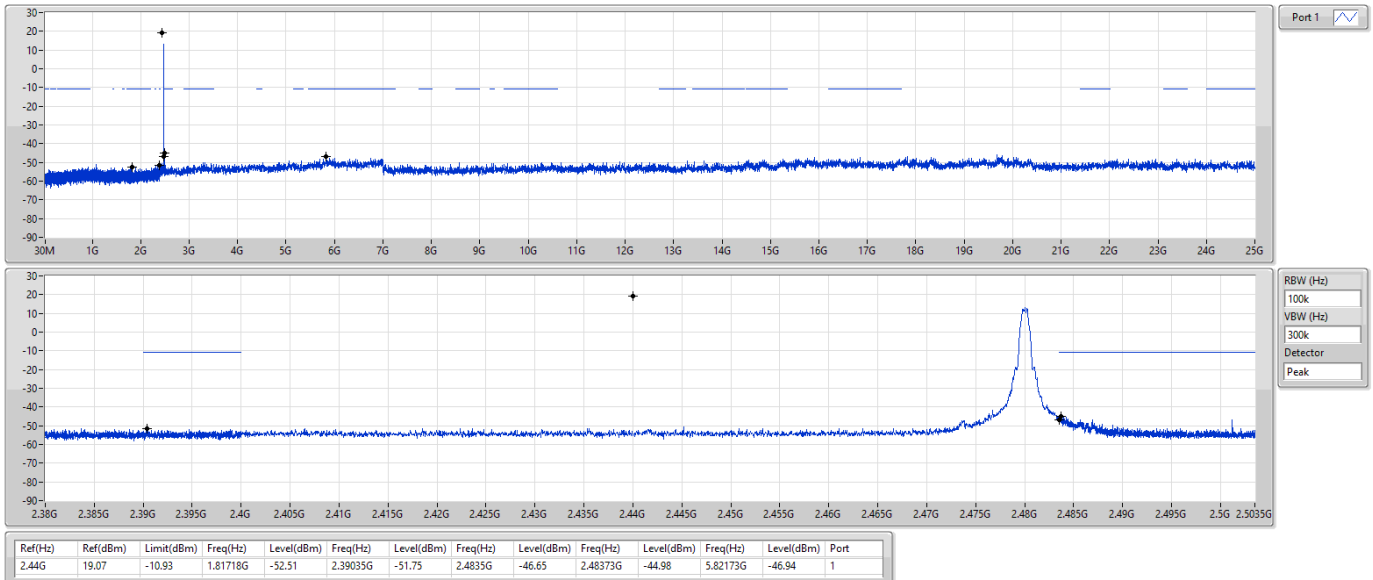
2478MHz



BT-LE(1Mbps)

CSEndB-DTS

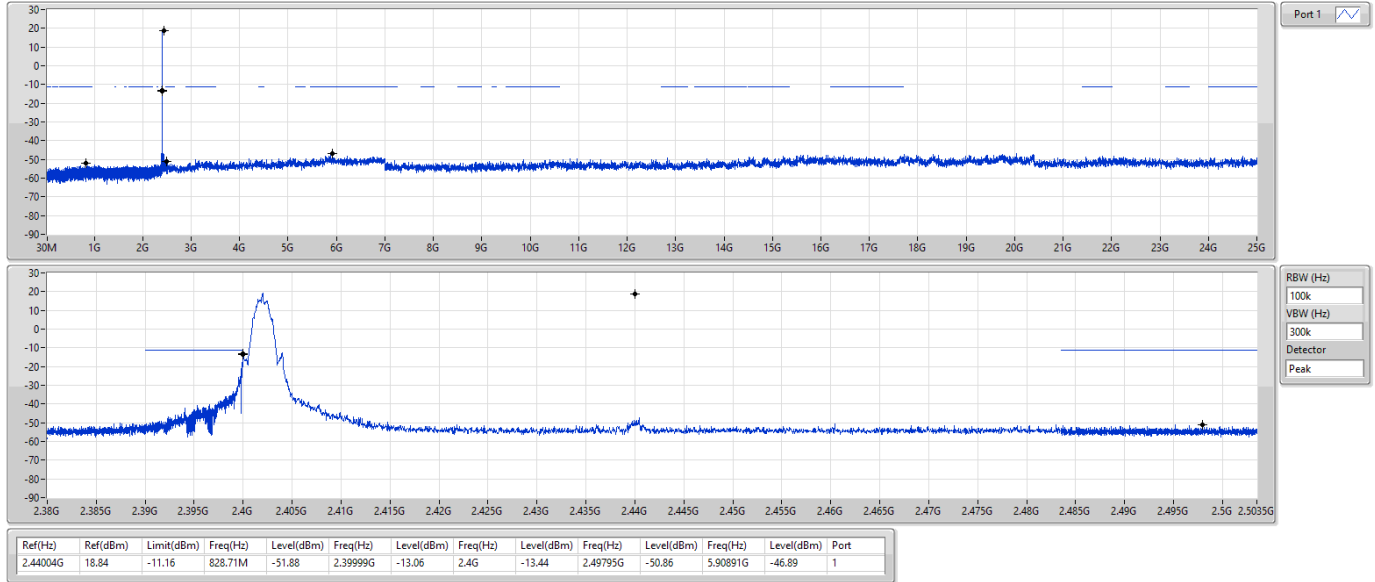
2480MHz



BT-LE(2Mbps)

CSEndB-DTS

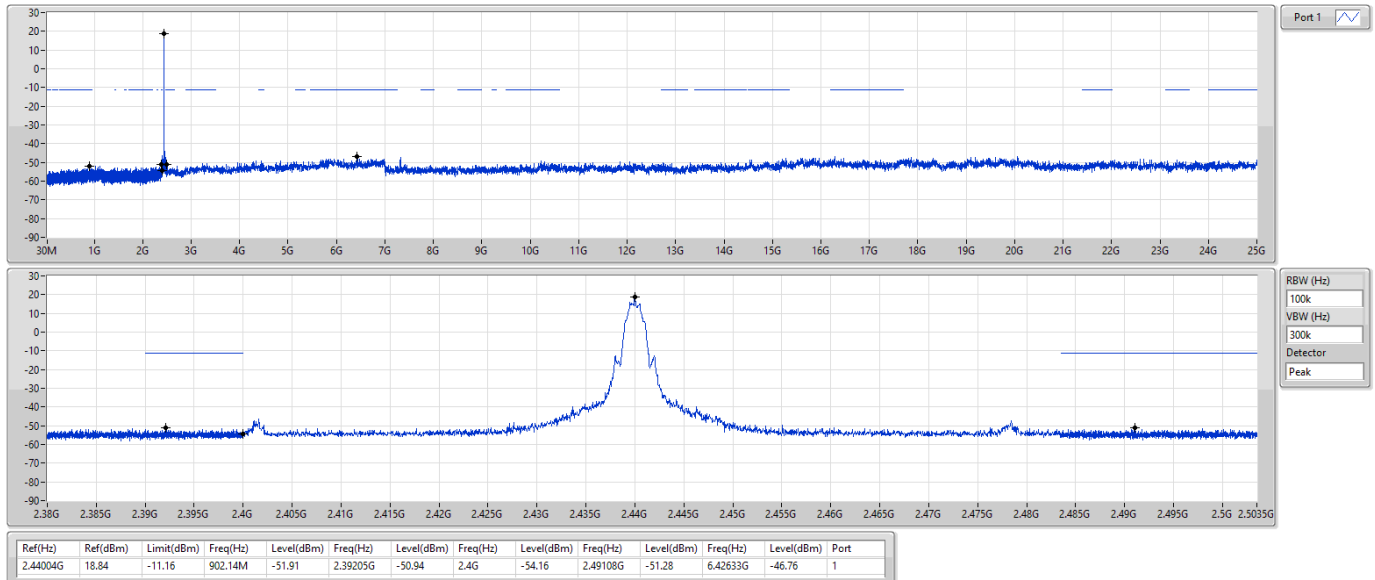
2402MHz



BT-LE(2Mbps)

CSEndB-DTS

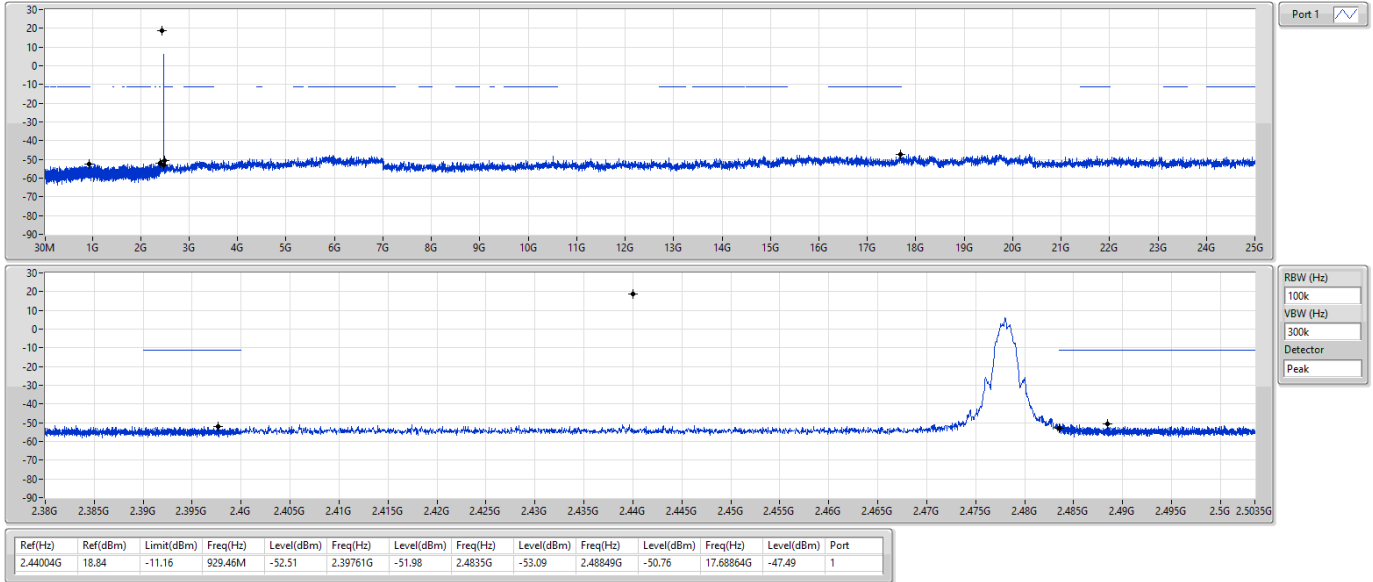
2440MHz



BT-LE(2Mbps)

CSEndB-DTS

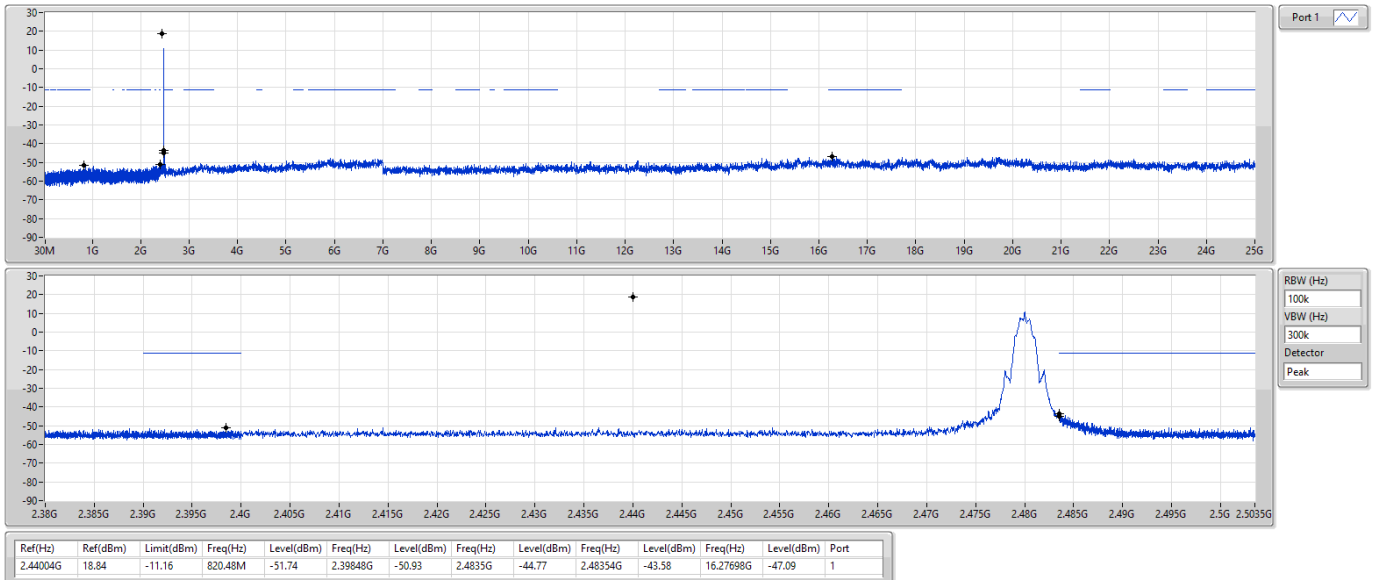
2478MHz



BT-LE(2Mbps)

CSEndB-DTS

2480MHz





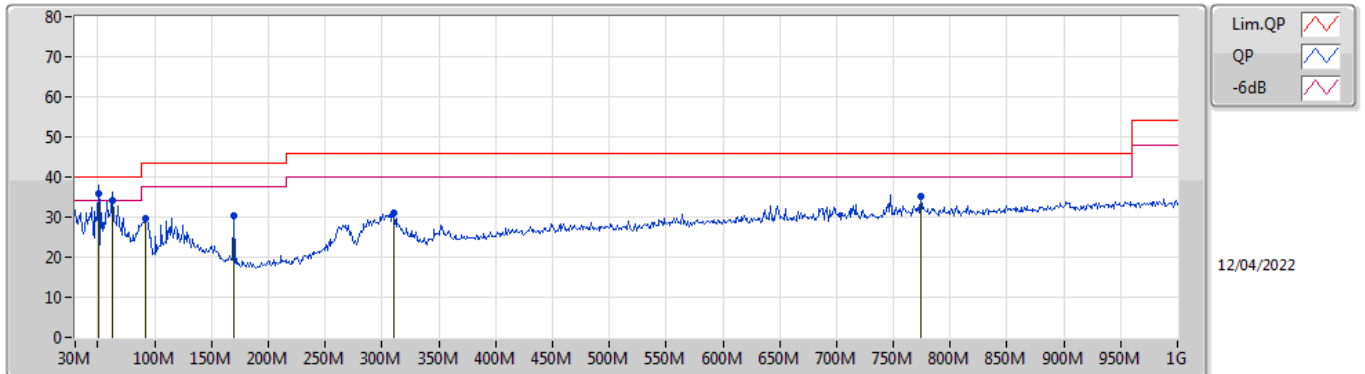
Radiated Emissions below 1GHz

Appendix F.1

Summary

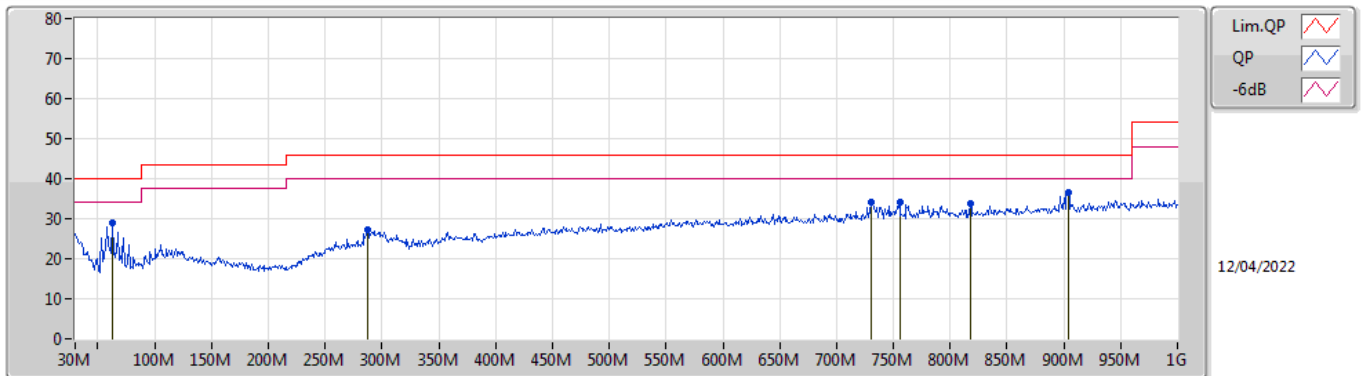
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 2	Pass	QP	50.37M	35.97	40.00	-4.03	Vertical

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)
QP	50.37M	35.97	40.00	-4.03	-16.74	3	Vertical	351	1.00	"Worst"	52.71	13.92	1.10	31.76
QP	62.98M	34.06	40.00	-5.94	-18.44	3	Vertical	360	1.00	-	52.50	12.22	1.20	31.86
PK	92.08M	29.69	43.50	-13.81	-15.30	3	Vertical	106	1.25	-	44.99	15.14	1.46	31.90
PK	169.68M	30.31	43.50	-13.19	-14.41	3	Vertical	3	1.25	-	44.72	15.50	2.05	31.96
PK	310.33M	30.94	46.00	-15.06	-9.96	3	Vertical	232	1.25	-	40.90	19.37	2.76	32.09
PK	773.99M	35.33	46.00	-10.67	-2.50	3	Vertical	26	1.00	-	37.83	25.40	4.80	32.70

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	62.98M	28.82	40.00	-11.18	-18.44	3	Horizontal	142	1.25	-	47.26	12.22	1.20	31.86
PK	287.05M	27.34	46.00	-18.66	-10.57	3	Horizontal	219	1.25	-	37.91	18.84	2.65	32.06
PK	730.34M	34.07	46.00	-11.93	-3.09	3	Horizontal	275	3.00	-	37.16	24.98	4.62	32.69
PK	755.56M	33.98	46.00	-12.02	-2.68	3	Horizontal	195	2.00	-	36.66	25.31	4.72	32.71
PK	817.64M	33.71	46.00	-12.29	-2.17	3	Horizontal	157	1.00	-	35.88	25.53	4.97	32.67
PK	903.97M	36.65	46.00	-9.35	-1.13	3	Horizontal	73	1.00	"Worst"	37.78	26.20	5.32	32.65

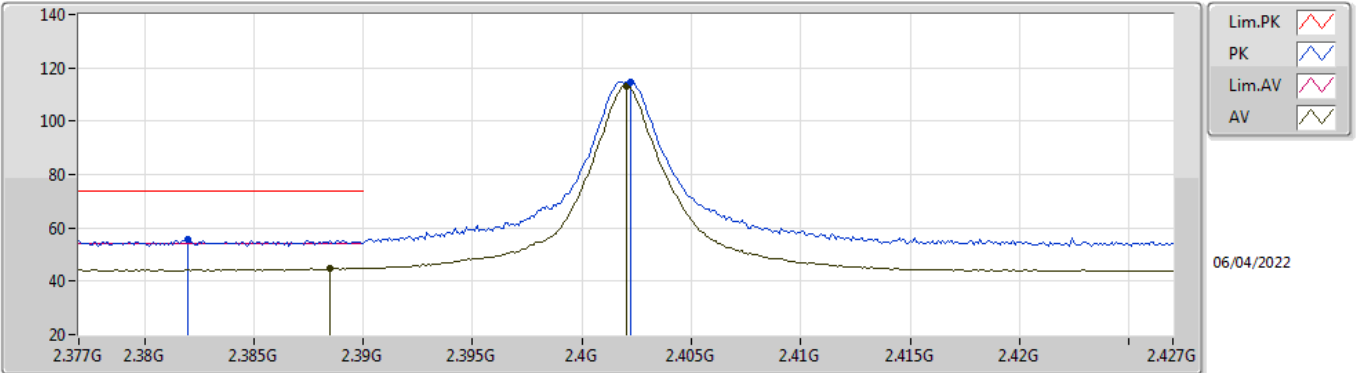


Summary

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	2.4835G	53.86	54.00	-0.14	3	Vertical	162	1.09	-

BT-LE(1Mbps)

2402MHz_TX

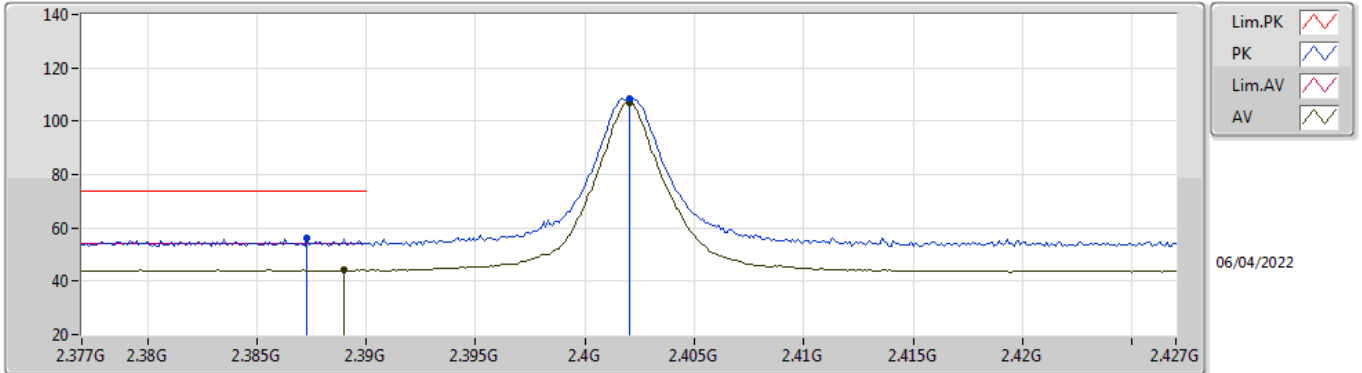


EUT V_1TX
Setting 200
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)	
PK	2.382G	55.55	74.00	-18.45	24.13	3	Vertical	178	2.31	-	27.54	3.88	-	
AV	2.3885G	44.98	54.00	-9.02	13.60	3	Vertical	178	2.31	-	27.49	3.89	-	
PK	2.4022G	114.48	Inf	-Inf	83.19	3	Vertical	178	2.31	-	27.39	3.90	-	
AV	2.402G	113.06	Inf	-Inf	81.77	3	Vertical	178	2.31	-	27.39	3.90	-	

BT-LE(1Mbps)

2402MHz_TX

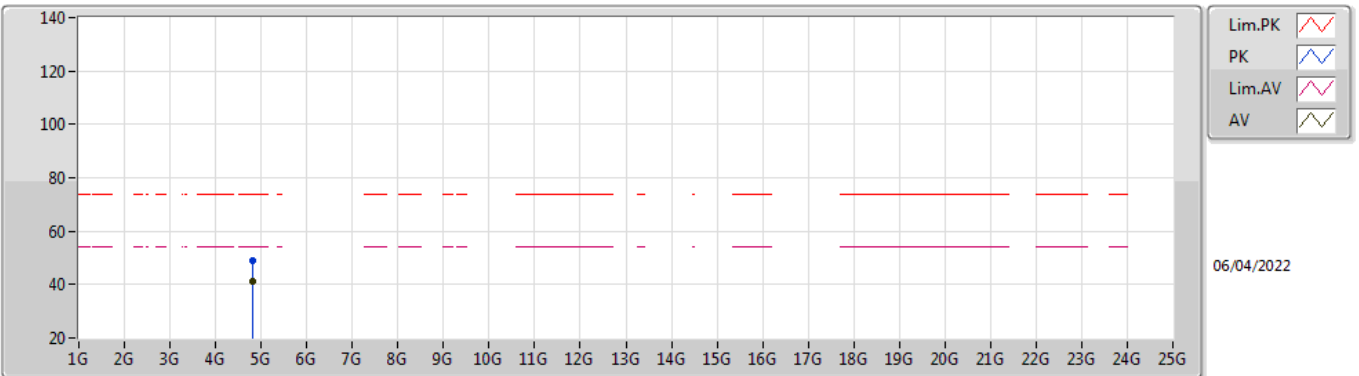


EUT_V_1TX
Setting 200
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)	
PK	2.3873G	56.15	74.00	-17.85	24.77	3	Horizontal	209	2.12	-	27.50	3.88	-	
AV	2.389G	44.21	54.00	-9.79	12.83	3	Horizontal	209	2.12	-	27.49	3.89	-	
PK	2.402G	108.21	Inf	-Inf	76.92	3	Horizontal	209	2.12	-	27.39	3.90	-	
AV	2.402G	106.87	Inf	-Inf	75.58	3	Horizontal	209	2.12	-	27.39	3.90	-	

BT-LE(1Mbps)

2402MHz_TX

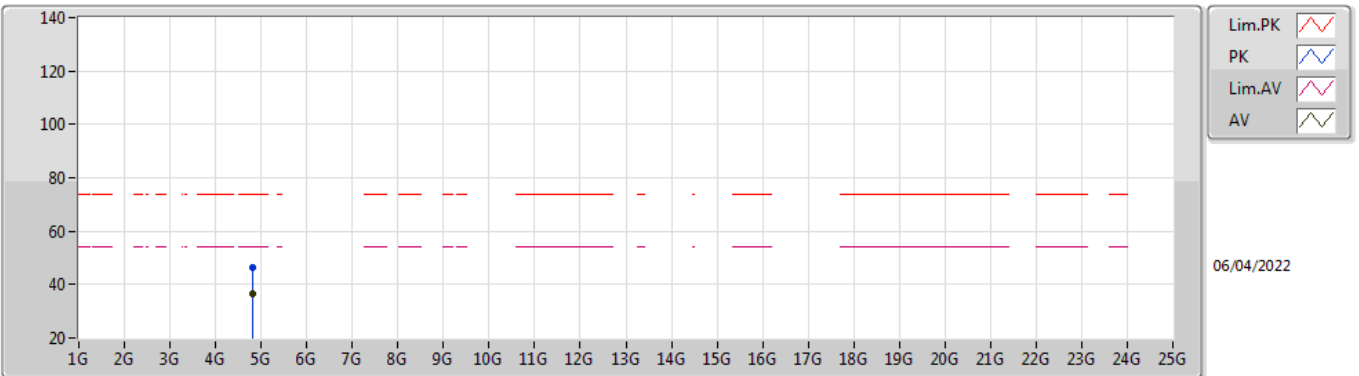


EUT V_1TX
Setting 200
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)	
PK	4.80345G	49.08	74.00	-24.92	44.71	3	Vertical	36	2.85	-	31.09	5.36	32.08	
AV	4.80387G	41.25	54.00	-12.75	36.87	3	Vertical	36	2.85	-	31.09	5.36	32.07	

BT-LE(1Mbps)

2402MHz_TX

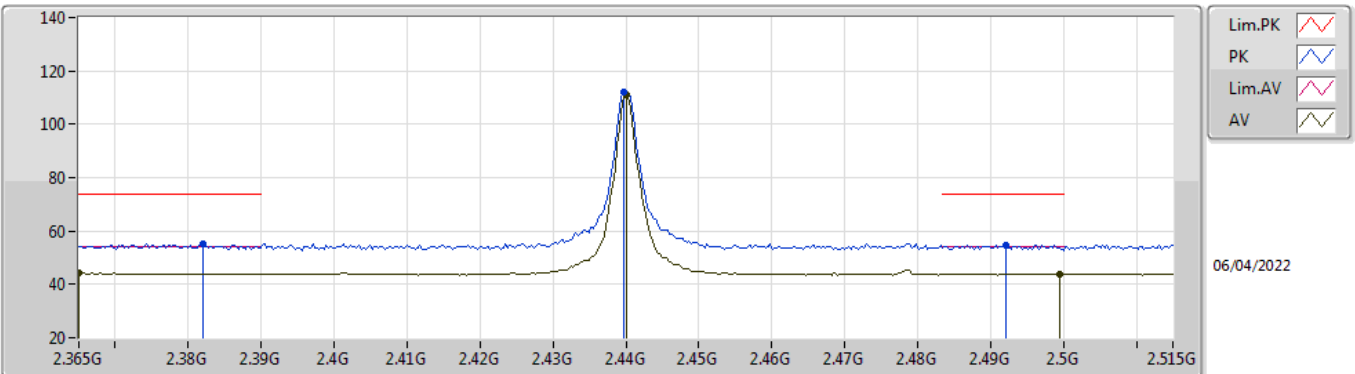


EUT V_1TX
Setting 200
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)	
PK	4.80343G	46.33	74.00	-27.67	41.96	3	Horizontal	303	1.49	-	31.09	5.36	32.08	
AV	4.80379G	36.44	54.00	-17.56	32.06	3	Horizontal	303	1.49	-	31.09	5.36	32.07	

BT-LE(1Mbps)

2440MHz_TX

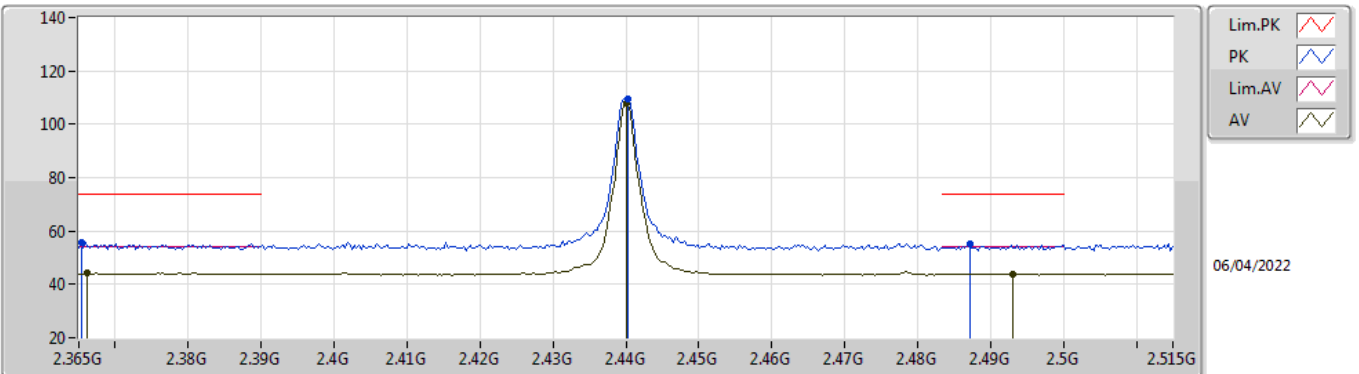


EUT_V_1TX
Setting 200
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3821G	55.29	74.00	-18.71	23.87	3	Vertical	302	1.80	-	27.54	3.88	-
AV	2.365G	44.35	54.00	-9.65	12.81	3	Vertical	302	1.80	-	27.68	3.86	-
PK	2.4397G	112.25	Inf	-Inf	81.10	3	Vertical	302	1.80	-	27.24	3.91	-
AV	2.44G	110.87	Inf	-Inf	79.72	3	Vertical	302	1.80	-	27.24	3.91	-
PK	2.4922G	54.89	74.00	-19.11	23.70	3	Vertical	302	1.80	-	27.28	3.91	-
AV	2.4994G	43.91	54.00	-10.09	12.70	3	Vertical	302	1.80	-	27.30	3.91	-

BT-LE(1Mbps)

2440MHz_TX

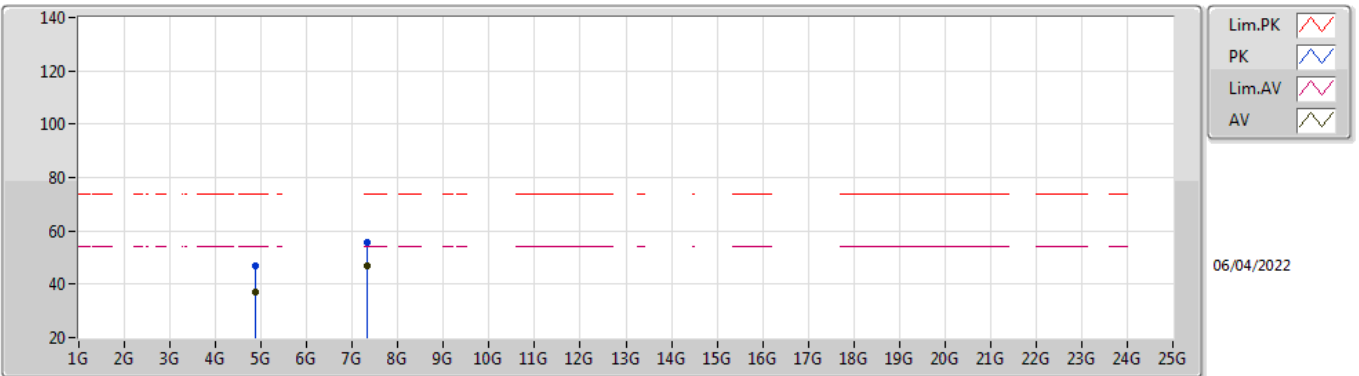


EUT_V_1TX
Setting 200
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3653G	55.68	74.00	-18.32	24.14	3	Horizontal	203	2.45	-	27.68	3.86	-
AV	2.3662G	44.26	54.00	-9.74	12.73	3	Horizontal	203	2.45	-	27.67	3.86	-
PK	2.4403G	109.48	Inf	-Inf	78.33	3	Horizontal	203	2.45	-	27.24	3.91	-
AV	2.44G	108.11	Inf	-Inf	76.96	3	Horizontal	203	2.45	-	27.24	3.91	-
PK	2.4871G	55.39	74.00	-18.61	24.21	3	Horizontal	203	2.45	-	27.27	3.91	-
AV	2.4931G	44.01	54.00	-9.99	12.81	3	Horizontal	203	2.45	-	27.29	3.91	-

BT-LE(1Mbps)

2440MHz_TX

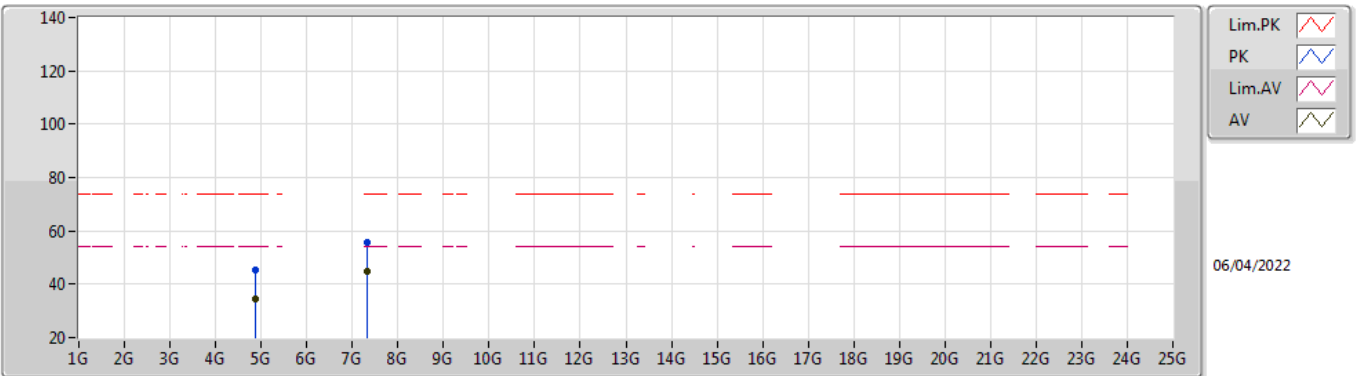


EUT V_1TX
Setting 200
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)	
PK	4.88007G	46.96	74.00	-27.04	42.52	3	Vertical	29	2.70	-	31.06	5.39	32.01	
AV	4.8801G	36.96	54.00	-17.04	32.52	3	Vertical	29	2.70	-	31.06	5.39	32.01	
PK	7.31928G	55.86	74.00	-18.14	46.30	3	Vertical	360	1.00	-	36.32	6.71	33.47	
AV	7.31933G	46.71	54.00	-7.29	37.15	3	Vertical	360	1.00	-	36.32	6.71	33.47	

BT-LE(1Mbps)

2440MHz_TX

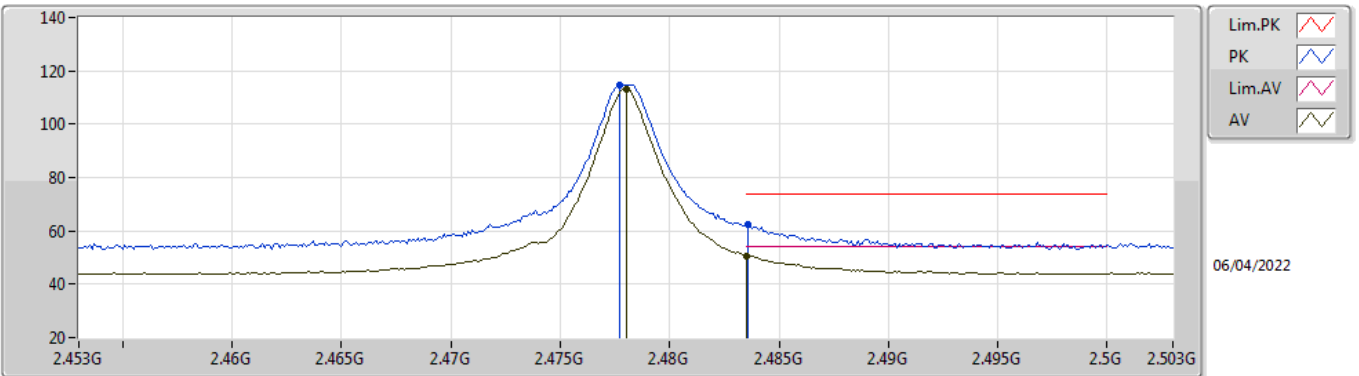


EUT V_1TX
Setting 200
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.87939G	45.51	74.00	-28.49	41.07	3	Horizontal	218	2.04	-	31.06	5.39	32.01
AV	4.87971G	34.74	54.00	-19.26	30.30	3	Horizontal	218	2.04	-	31.06	5.39	32.01
PK	7.31985G	55.52	74.00	-18.48	45.96	3	Horizontal	265.5	2.83	-	36.32	6.71	33.47
AV	7.31928G	45.07	54.00	-8.93	35.51	3	Horizontal	265.5	2.83	-	36.32	6.71	33.47

BT-LE(1Mbps)

2478MHz_TX

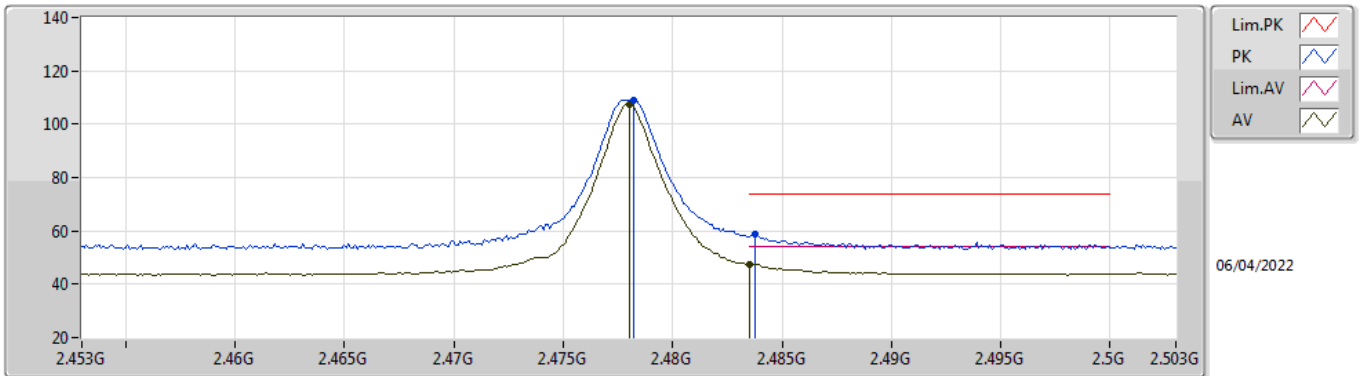


EUT V_1TX
Setting 200
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)	
PK	2.4777G	114.60	Inf	-Inf	83.43	3	Vertical	187	2.54	-	27.26	3.91	-	
AV	2.478G	113.23	Inf	-Inf	82.06	3	Vertical	187	2.54	-	27.26	3.91	-	
PK	2.4836G	62.28	74.00	-11.72	31.10	3	Vertical	187	2.54	-	27.27	3.91	-	
AV	2.4835G	50.68	54.00	-3.32	19.50	3	Vertical	187	2.54	-	27.27	3.91	-	

BT-LE(1Mbps)

2478MHz_TX

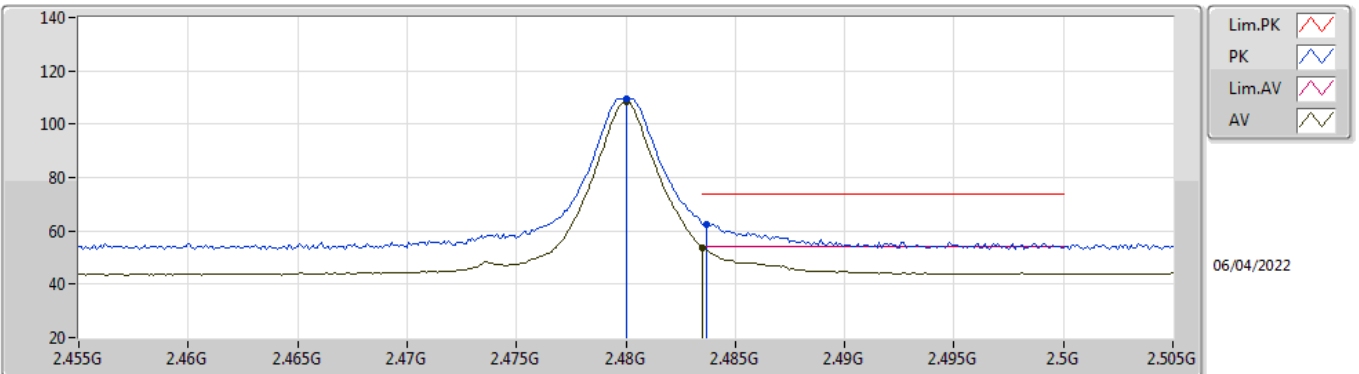


EUT_V_1TX
Setting 200
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)	
PK	2.4782G	108.92	Inf	-Inf	77.75	3	Horizontal	323	3.00	-	27.26	3.91	-	
AV	2.478G	107.52	Inf	-Inf	76.35	3	Horizontal	323	3.00	-	27.26	3.91	-	
PK	2.4838G	58.60	74.00	-15.40	27.42	3	Horizontal	323	3.00	-	27.27	3.91	-	
AV	2.4835G	47.48	54.00	-6.52	16.30	3	Horizontal	323	3.00	-	27.27	3.91	-	

BT-LE(1Mbps)

2480MHz_TX

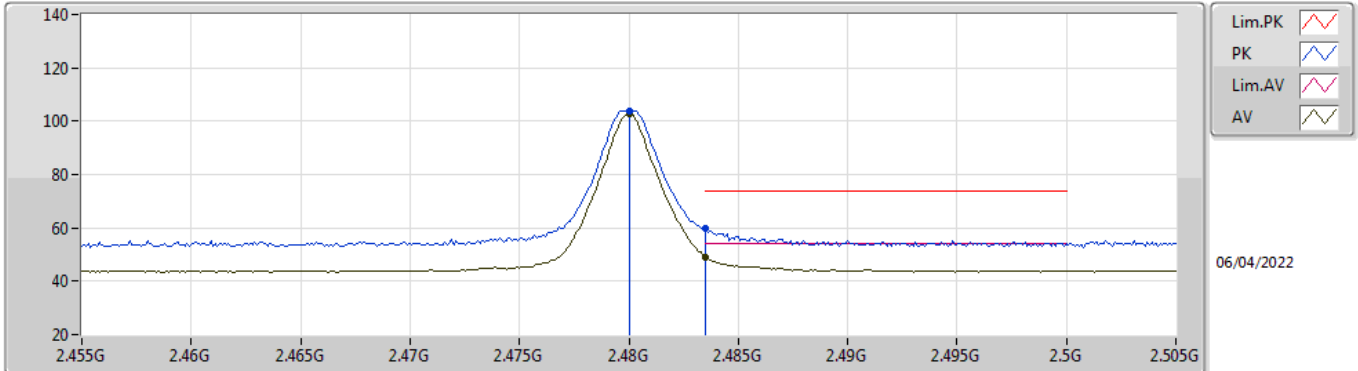


EUT_V_1TX
Setting 130
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)	
PK	2.48G	109.62	Inf	-Inf	78.45	3	Vertical	162	1.09	-	27.26	3.91	-	
AV	2.48G	108.24	Inf	-Inf	77.07	3	Vertical	162	1.09	-	27.26	3.91	-	
PK	2.4837G	62.62	74.00	-11.38	31.44	3	Vertical	162	1.09	-	27.27	3.91	-	
AV	2.4835G	53.86	54.00	-0.14	22.68	3	Vertical	162	1.09	-	27.27	3.91	-	

BT-LE(1Mbps)

2480MHz_TX

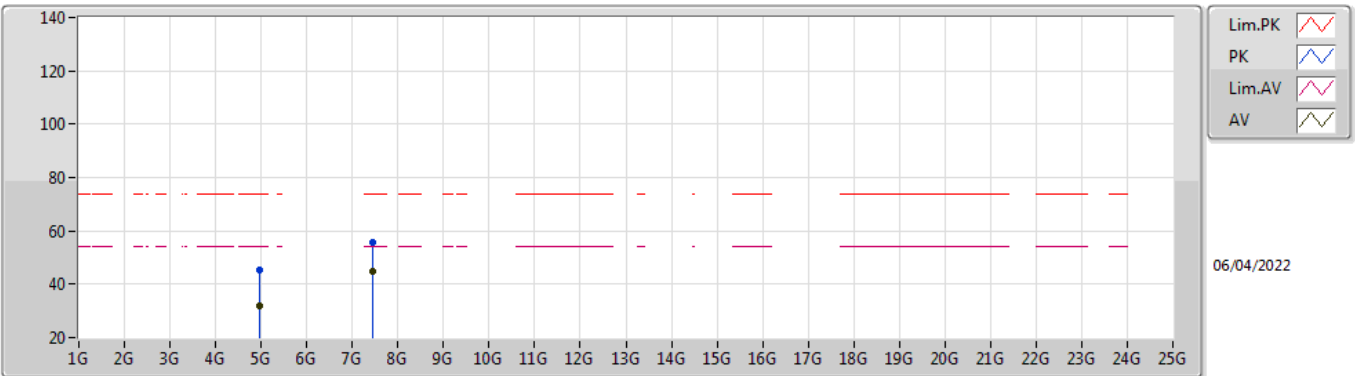


EUT_V_1TX
Setting 130
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.48G	104.00	Inf	-Inf	72.83	3	Horizontal	327	1.18	-	27.26	3.91	-
AV	2.48G	102.64	Inf	-Inf	71.47	3	Horizontal	327	1.18	-	27.26	3.91	-
PK	2.4835G	59.65	74.00	-14.35	28.47	3	Horizontal	327	1.18	-	27.27	3.91	-
AV	2.4835G	49.15	54.00	-4.85	17.97	3	Horizontal	327	1.18	-	27.27	3.91	-

BT-LE(1Mbps)

2480MHz_TX

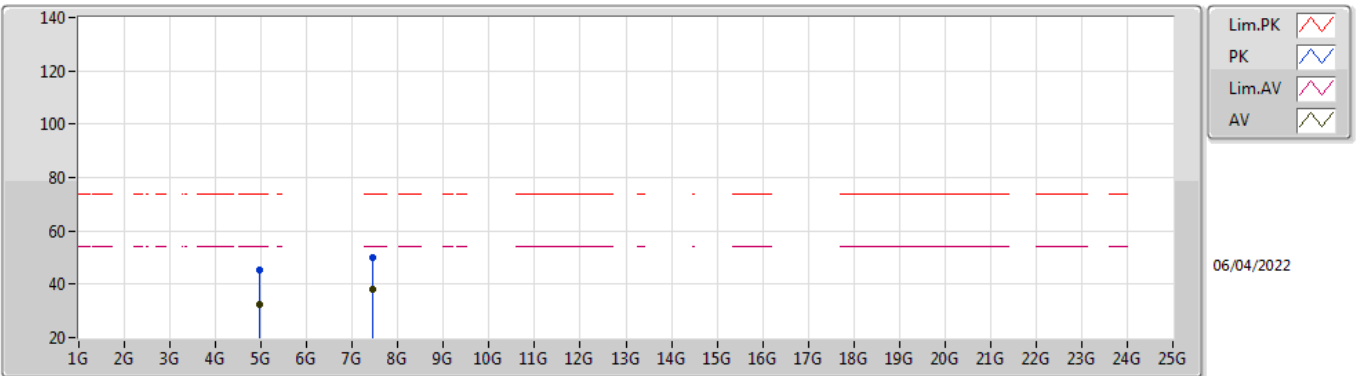


EUT V_1TX
Setting 130
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.9601G	45.18	74.00	-28.82	40.40	3	Vertical	343	1.78	-	31.30	5.42	31.94
AV	4.95984G	32.04	54.00	-21.96	27.26	3	Vertical	343	1.78	-	31.30	5.42	31.94
PK	7.44068G	55.61	74.00	-18.39	46.19	3	Vertical	360	1.00	-	36.16	6.79	33.53
AV	7.43918G	44.96	54.00	-9.04	35.54	3	Vertical	360	1.00	-	36.16	6.79	33.53

BT-LE(1Mbps)

2480MHz_TX

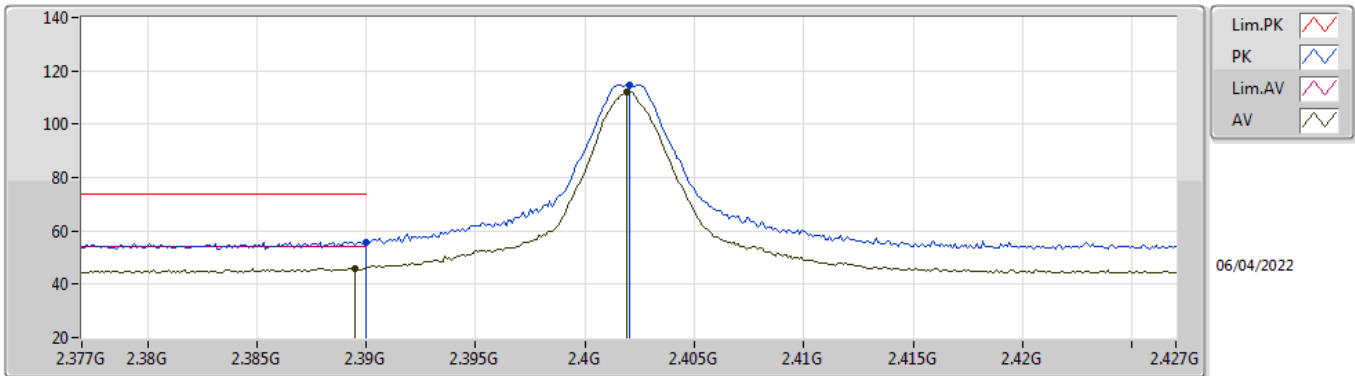


EUT_V_1TX
Setting 130
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.9601G	45.14	74.00	-28.86	40.36	3	Horizontal	291	2.35	-	31.30	5.42	31.94
AV	4.95988G	32.29	54.00	-21.71	27.51	3	Horizontal	291	2.35	-	31.30	5.42	31.94
PK	7.43638G	50.00	74.00	-24.00	40.59	3	Horizontal	307	1.26	-	36.15	6.79	33.53
AV	7.43928G	37.97	54.00	-16.03	28.55	3	Horizontal	307	1.26	-	36.16	6.79	33.53

BT-LE(2Mbps)

2402MHz_TX

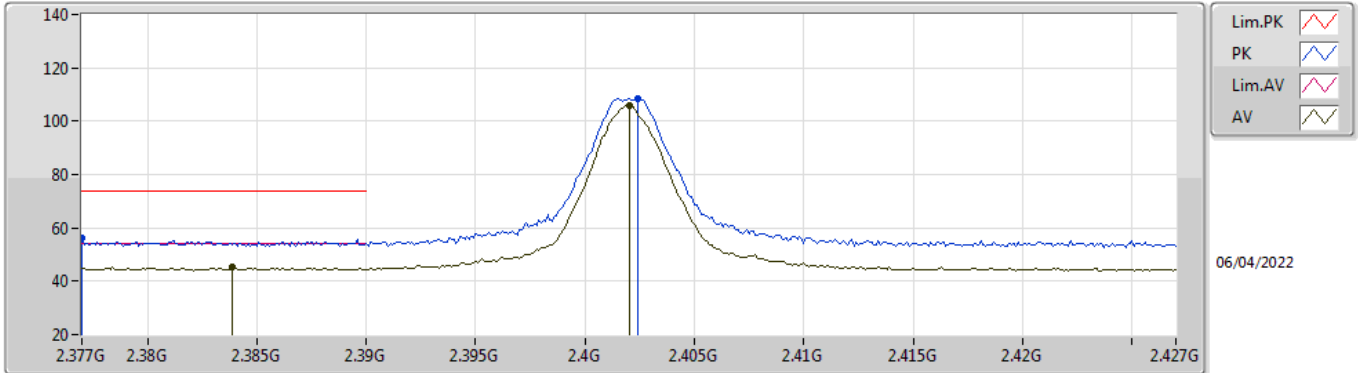


EUT V_1TX
Setting 200
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)	
PK	2.39G	55.90	74.00	-18.10	24.53	3	Vertical	178	2.37	-	27.48	3.89	-	
AV	2.3895G	46.09	54.00	-7.91	14.72	3	Vertical	178	2.37	-	27.48	3.89	-	
PK	2.402G	114.53	Inf	-Inf	83.24	3	Vertical	178	2.37	-	27.39	3.90	-	
AV	2.4019G	112.23	Inf	-Inf	80.94	3	Vertical	178	2.37	-	27.39	3.90	-	

BT-LE(2Mbps)

2402MHz_TX

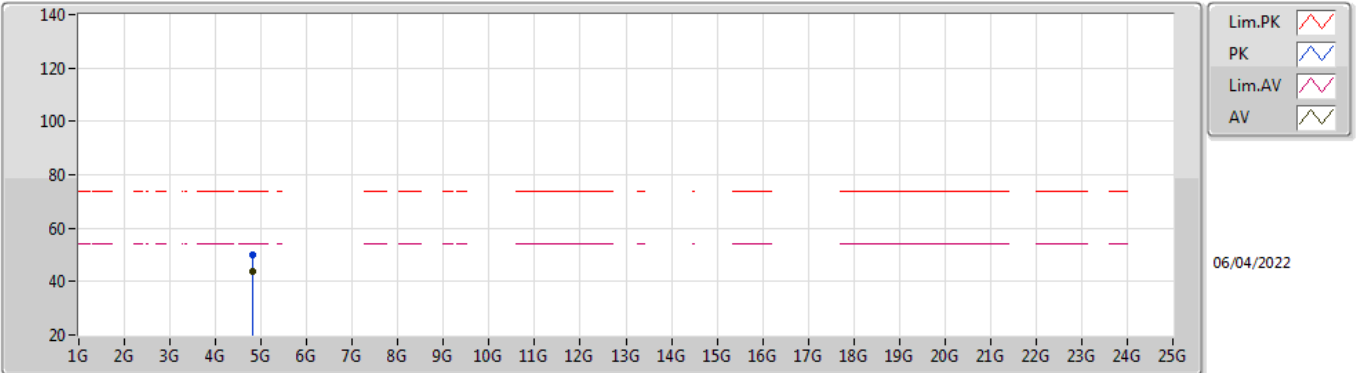


EUT V_1TX
Setting 200
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)	
PK	2.377G	56.14	74.00	-17.86	24.69	3	Horizontal	208	1.60	-	27.58	3.87	-	
AV	2.3839G	45.24	54.00	-8.76	13.83	3	Horizontal	208	1.60	-	27.53	3.88	-	
PK	2.4024G	108.25	Inf	-Inf	76.96	3	Horizontal	208	1.60	-	27.39	3.90	-	
AV	2.402G	105.91	Inf	-Inf	74.62	3	Horizontal	208	1.60	-	27.39	3.90	-	

BT-LE(2Mbps)

2402MHz_TX

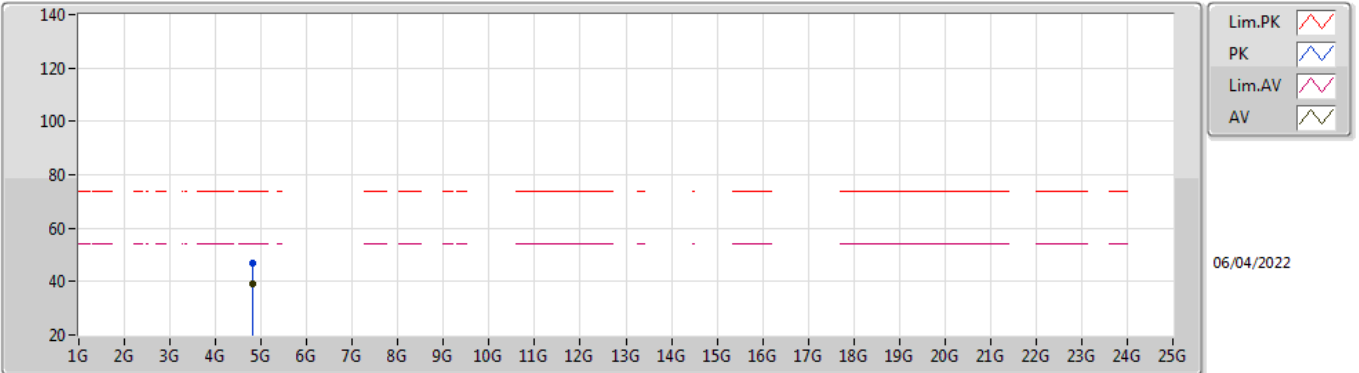


EUT V_1TX
Setting 200
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)	
PK	4.80391G	50.00	74.00	-24.00	45.62	3	Vertical	40	2.86	-	31.09	5.36	32.07	
AV	4.80393G	43.64	54.00	-10.36	39.26	3	Vertical	40	2.86	-	31.09	5.36	32.07	

BT-LE(2Mbps)

2402MHz_TX

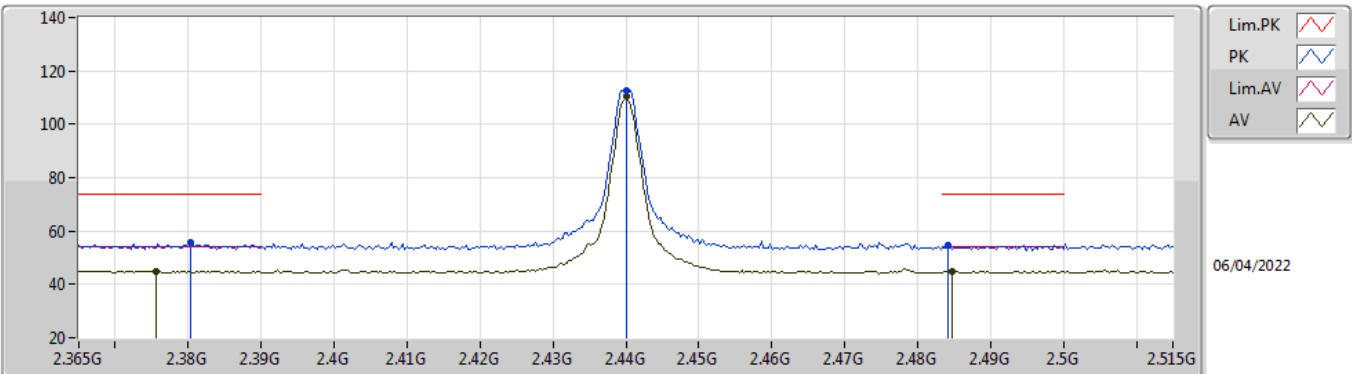


EUT V_1TX
Setting 200
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)	
PK	4.80392G	46.97	74.00	-27.03	42.59	3	Horizontal	296	1.34	-	31.09	5.36	32.07	
AV	4.80407G	39.34	54.00	-14.66	34.96	3	Horizontal	296	1.34	-	31.09	5.36	32.07	

BT-LE(2Mbps)

2440MHz_TX

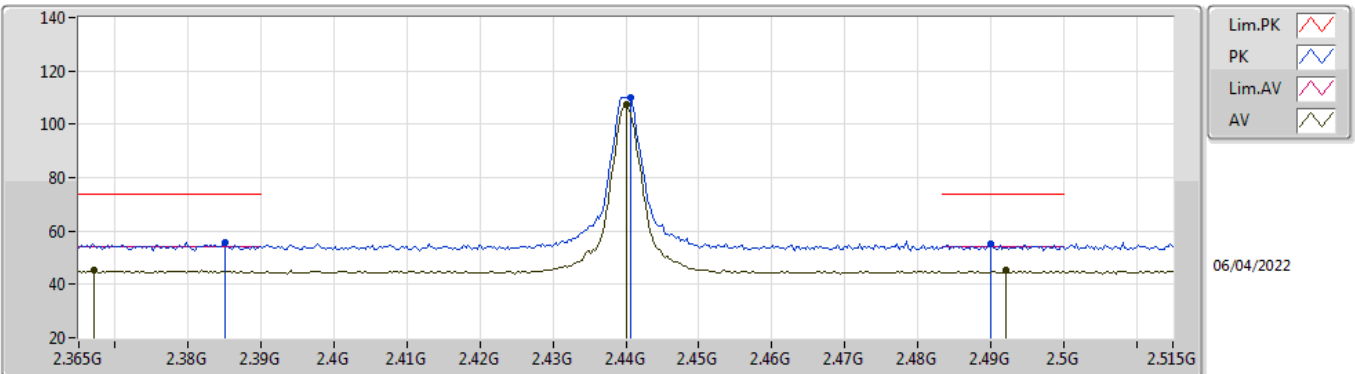


EUT V_1TX
Setting 200
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3803G	55.84	74.00	-18.16	24.40	3	Vertical	304	1.80	-	27.56	3.88	-
AV	2.3755G	45.07	54.00	-8.93	13.60	3	Vertical	304	1.80	-	27.60	3.87	-
PK	2.44G	112.70	Inf	-Inf	81.55	3	Vertical	304	1.80	-	27.24	3.91	-
AV	2.44G	110.30	Inf	-Inf	79.15	3	Vertical	304	1.80	-	27.24	3.91	-
PK	2.4841G	54.75	74.00	-19.25	23.57	3	Vertical	304	1.80	-	27.27	3.91	-
AV	2.4847G	45.00	54.00	-9.00	13.82	3	Vertical	304	1.80	-	27.27	3.91	-

BT-LE(2Mbps)

2440MHz_TX

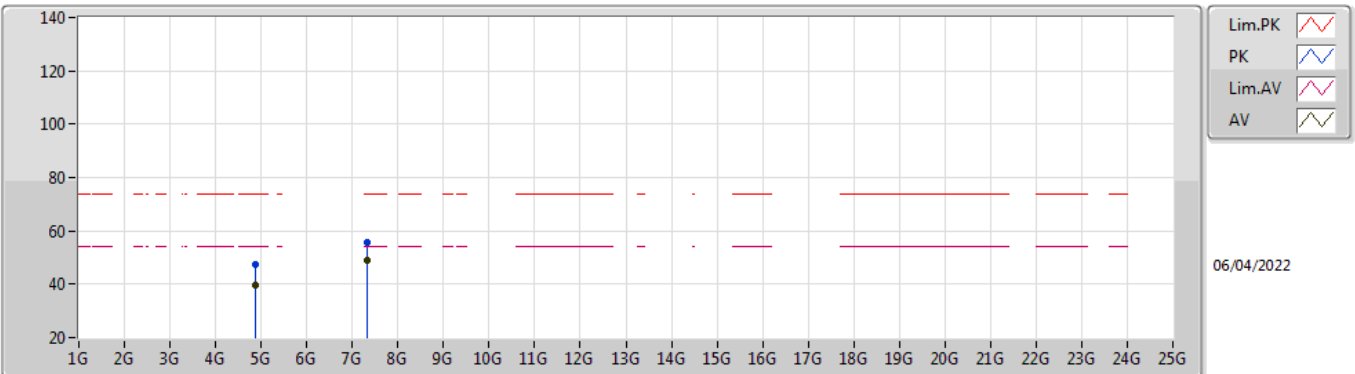


EUT_V_1TX
Setting 200
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3851G	55.45	74.00	-18.55	24.05	3	Horizontal	327	2.25	-	27.52	3.88	-
AV	2.3671G	45.14	54.00	-8.86	13.62	3	Horizontal	327	2.25	-	27.66	3.86	-
PK	2.4406G	109.91	Inf	-Inf	78.76	3	Horizontal	327	2.25	-	27.24	3.91	-
AV	2.44G	107.47	Inf	-Inf	76.32	3	Horizontal	327	2.25	-	27.24	3.91	-
PK	2.4901G	54.95	74.00	-19.05	23.76	3	Horizontal	327	2.25	-	27.28	3.91	-
AV	2.4922G	45.36	54.00	-8.64	14.17	3	Horizontal	327	2.25	-	27.28	3.91	-

BT-LE(2Mbps)

2440MHz_TX

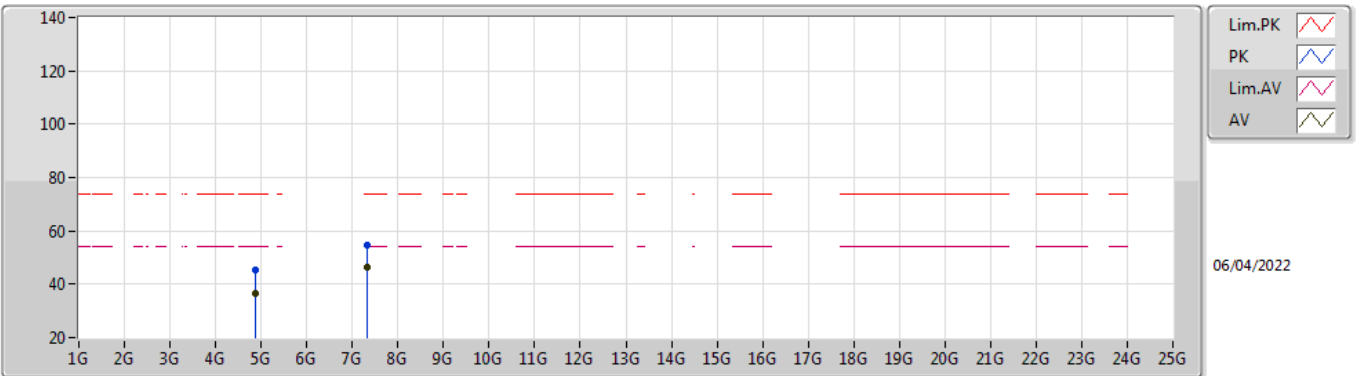


EUT V_1TX
Setting 200
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)	
PK	4.87897G	47.24	74.00	-26.76	42.80	3	Vertical	39	2.95	-	31.06	5.39	32.01	
AV	4.87987G	39.76	54.00	-14.24	35.32	3	Vertical	39	2.95	-	31.06	5.39	32.01	
PK	7.32138G	55.94	74.00	-18.06	46.39	3	Vertical	14	1.00	-	36.31	6.71	33.47	
AV	7.31987G	48.78	54.00	-5.22	39.22	3	Vertical	14	1.00	-	36.32	6.71	33.47	

BT-LE(2Mbps)

2440MHz_TX

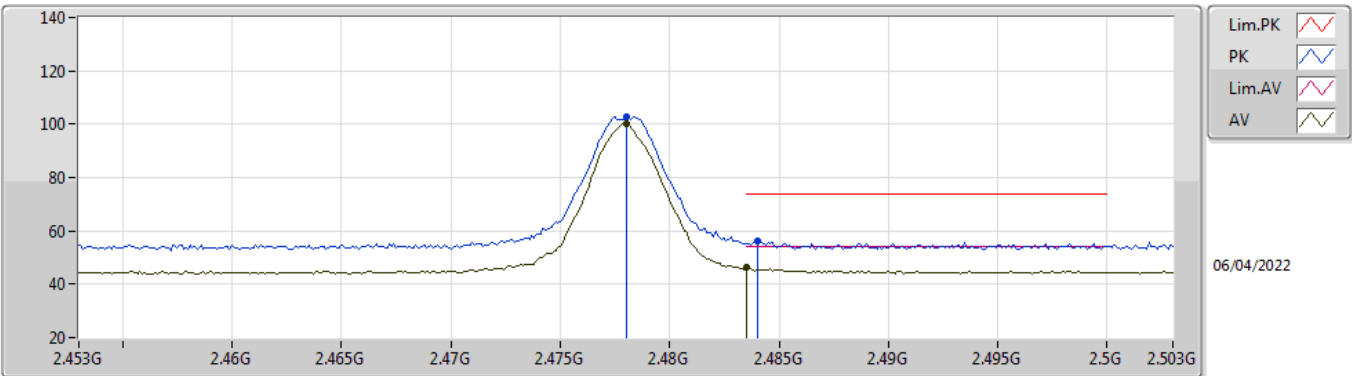


EUT V_1TX
Setting 200
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)	
PK	4.87887G	45.56	74.00	-28.44	41.12	3	Horizontal	161	1.09	-	31.06	5.39	32.01	
AV	4.88003G	36.35	54.00	-17.65	31.91	3	Horizontal	161	1.09	-	31.06	5.39	32.01	
PK	7.31846G	54.58	74.00	-19.42	45.02	3	Horizontal	270	2.83	-	36.33	6.70	33.47	
AV	7.31986G	46.41	54.00	-7.59	36.85	3	Horizontal	270	2.83	-	36.32	6.71	33.47	

BT-LE(2Mbps)

2478MHz_TX

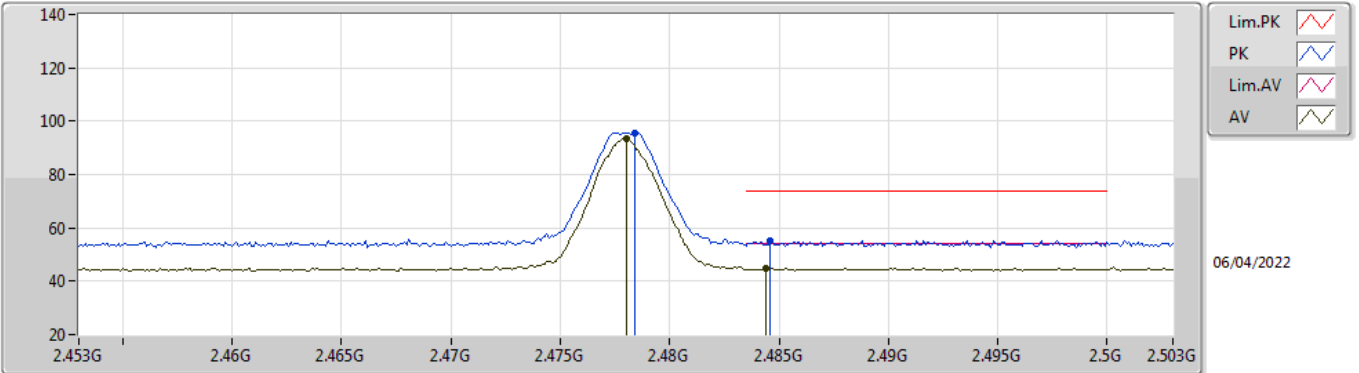


EUT_V_1TX
Setting 200
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)	
PK	2.478G	102.55	Inf	-Inf	71.38	3	Vertical	186	2.49	-	27.26	3.91	-	
AV	2.478G	100.07	Inf	-Inf	68.90	3	Vertical	186	2.49	-	27.26	3.91	-	
PK	2.484G	56.17	74.00	-17.83	24.99	3	Vertical	186	2.49	-	27.27	3.91	-	
AV	2.4835G	46.16	54.00	-7.84	14.98	3	Vertical	186	2.49	-	27.27	3.91	-	

BT-LE(2Mbps)

2478MHz_TX

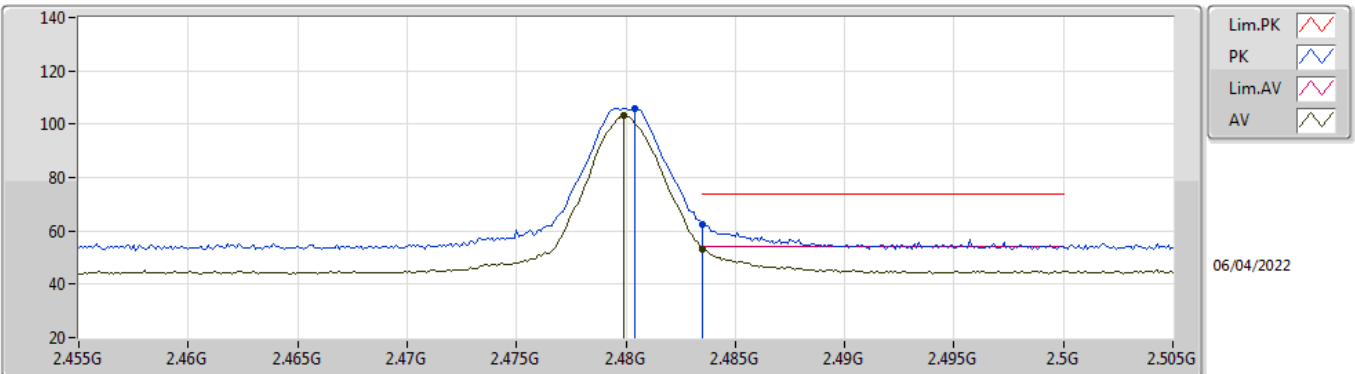


EUT V_1TX
Setting 200
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)	
PK	2.4784G	95.59	Inf	-Inf	64.42	3	Horizontal	314	2.24	-	27.26	3.91	-	
AV	2.478G	93.68	Inf	-Inf	62.51	3	Horizontal	314	2.24	-	27.26	3.91	-	
PK	2.4846G	55.39	74.00	-18.61	24.21	3	Horizontal	314	2.24	-	27.27	3.91	-	
AV	2.4844G	45.07	54.00	-8.93	13.89	3	Horizontal	314	2.24	-	27.27	3.91	-	

BT-LE(2Mbps)

2480MHz_TX

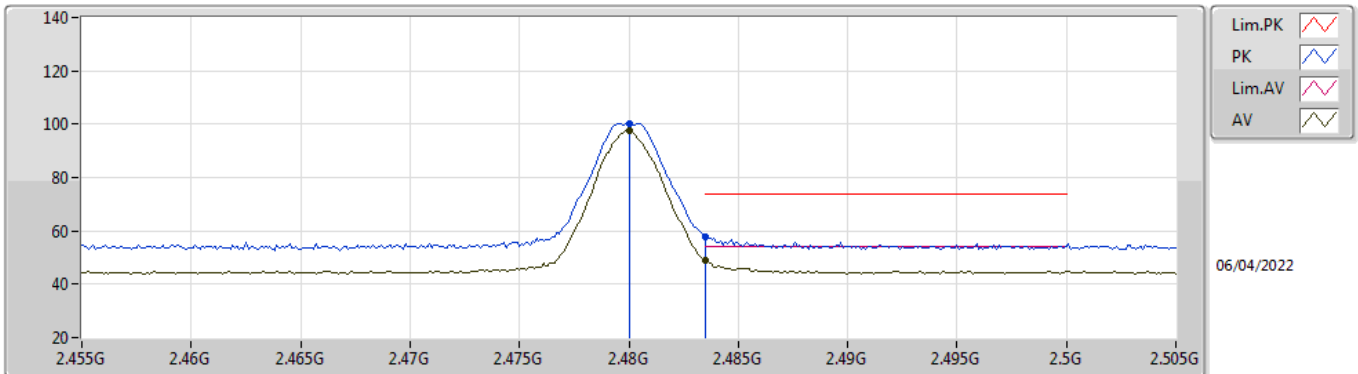


EUT_V_1TX
Setting 110
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)	
PK	2.4804G	105.78	Inf	-Inf	74.61	3	Vertical	214	2.22	-	27.26	3.91	-	
AV	2.4799G	103.32	Inf	-Inf	72.15	3	Vertical	214	2.22	-	27.26	3.91	-	
PK	2.4835G	62.65	74.00	-11.35	31.47	3	Vertical	214	2.22	-	27.27	3.91	-	
AV	2.4835G	53.22	54.00	-0.78	22.04	3	Vertical	214	2.22	-	27.27	3.91	-	

BT-LE(2Mbps)

2480MHz_TX

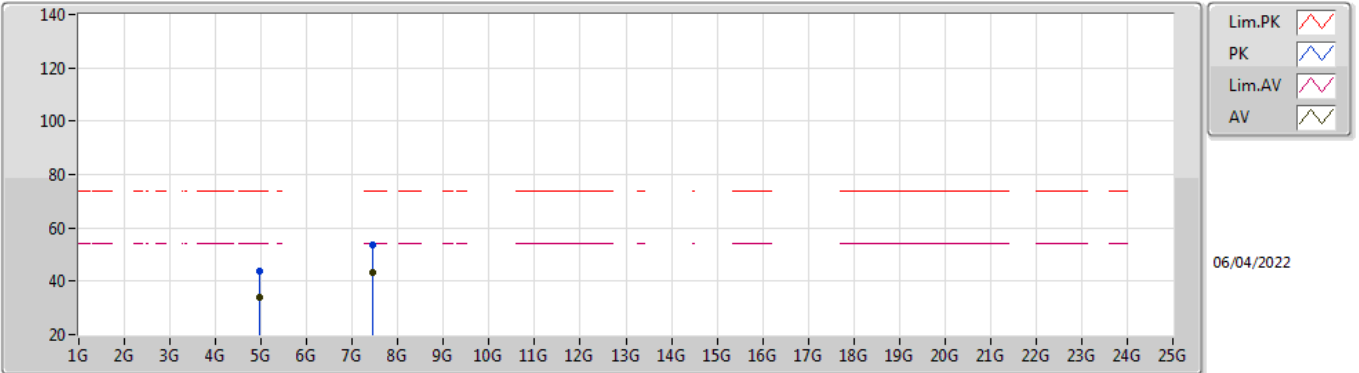


EUT_V_1TX
Setting 110
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)	
PK	2.48G	100.01	Inf	-Inf	68.84	3	Horizontal	317	2.58	-	27.26	3.91	-	
AV	2.48G	97.61	Inf	-Inf	66.44	3	Horizontal	317	2.58	-	27.26	3.91	-	
PK	2.4835G	57.54	74.00	-16.46	26.36	3	Horizontal	317	2.58	-	27.27	3.91	-	
AV	2.4835G	48.98	54.00	-5.02	17.80	3	Horizontal	317	2.58	-	27.27	3.91	-	

BT-LE(2Mbps)

2480MHz_TX

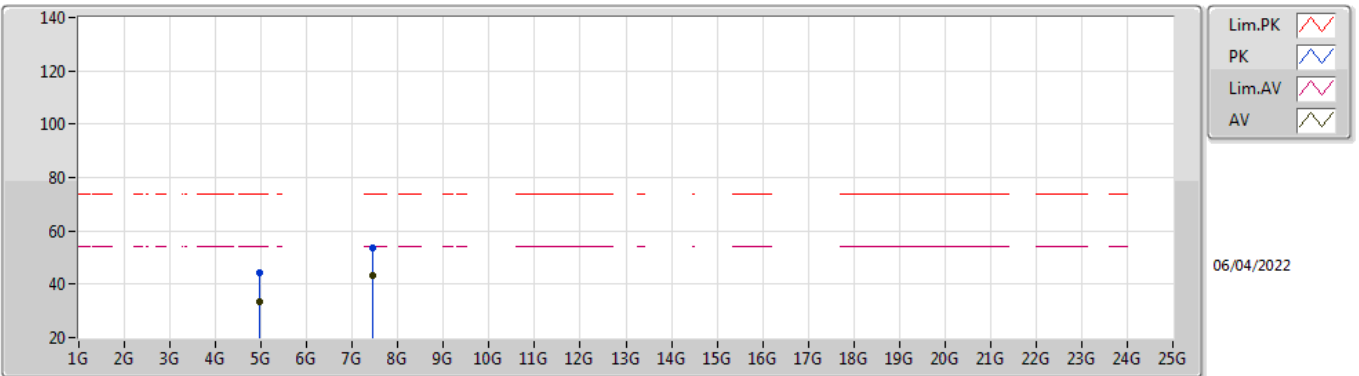


EUT_V_1TX
Setting 110
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.96184G	43.87	74.00	-30.13	39.09	3	Vertical	289	2.52	-	31.30	5.42	31.94
AV	4.95815G	33.78	54.00	-20.22	29.01	3	Vertical	289	2.52	-	31.30	5.42	31.95
PK	7.43892G	53.86	74.00	-20.14	44.44	3	Vertical	52	2.84	-	36.16	6.79	33.53
AV	7.4395G	43.36	54.00	-10.64	33.94	3	Vertical	52	2.84	-	36.16	6.79	33.53

BT-LE(2Mbps)

2480MHz_TX



EUT_V_1TX
Setting 110
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.95931G	44.24	74.00	-29.76	39.46	3	Horizontal	123	2.69	-	31.30	5.42	31.94
AV	4.95995G	33.39	54.00	-20.61	28.61	3	Horizontal	123	2.69	-	31.30	5.42	31.94
PK	7.43926G	53.84	74.00	-20.16	44.42	3	Horizontal	250	2.02	-	36.16	6.79	33.53
AV	7.44093G	43.30	54.00	-10.70	33.88	3	Horizontal	250	2.02	-	36.16	6.79	33.53