



RADIO TEST REPORT

FCC ID : 2AHKM-ARIA3629
Equipment : WiFi7 Tri-Band Router w/SFP+ cage / WiFi7 Tri-Band Router
Brand Name : HITRON
Model Name : ARIA3629 / ARIA3626 / ARIA3625
Applicant : Hitron Technologies Inc.
No. 1-8, Li-Hsin 1st Rd. Hsinchu Science Park, Hsinchu
30078, Taiwan
Manufacturer : Hitron Technologies Inc.
No. 1-8, Li-Hsin 1st Rd. Hsinchu Science Park, Hsinchu
30078, Taiwan
Standard : 47 CFR FCC Part 15.247

The product was received on Aug. 16, 2024, and testing was started from Aug. 21, 2024 and completed on Oct. 09, 2024. 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.)



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History of this test report

Report No.	Version	Description	Issued Date
FR480902AD	01	Initial issue of report	Jan. 02, 2025
FR480902AD	02	1. Revising Photographs of EUT 2. Adding Power core in section 2.4. 3. Revising the length of all Power cable to 2.8m in section 2.6.	Jan. 17, 2025



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	-

Conformity Assessment Condition:

1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacture who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. The measurement uncertainty please refer to each test result in the chapter "Measurement Uncertainty".

Disclaimer:

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

Reviewed by: Sam Chen

Report Producer: Cathy Chiu



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	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 modulation.
- ♦ BWch is the nominal channel bandwidth.



1.1.2 Antenna Information

Ant.	Port			Brand	Model Name	Antenna Type	Connector	Gain (dBi)
	2.4GHz, 5GHz	6GHz	Bluetooth					
1	1	-	-	PSA	RFDPA230505IM6B901	Copper pipes	I-PEX	Note1
2	2	-	-	PSA	RFDPA230511IM6B902	Copper pipes	I-PEX	
3	3	-	-	PSA	RFDPA230510IM6B901	Copper pipes	I-PEX	
4	4	-	-	PSA	RFDPA230515IM6B901	Copper pipes	I-PEX	
5	-	1	-	PSA	RFDPA100512IM6B902	Copper pipes	I-PEX	
6	-	2	-	PSA	RFDPA100515IM6B902	Copper pipes	I-PEX	
7	-	3	-	PSA	RFDPA100505IM6B902	Copper pipes	I-PEX	
8	-	4	-	PSA	RFDPA100505IM6B902	Copper pipes	I-PEX	
9	-	-	1	PSA	RFDPA301419IMAB901	PCB	I-PEX	

Note 1:

Ant.	Antenna Gain (dBi)						
	WLAN 2.4GHz	WLAN 5GHz				WLAN 6GHz UNII 5~UNII 8	Bluetooth
		UNII 1	UNII 2A	UNII 2C	UNII 3		
1	2.74	4.99	4.13	5.28	5.41	-	-
2	2.86	4.41	4.95	5.75	5.75	-	-
3	3.18	4.49	3.38	3.89	4.14	-	-
4	2.54	3.71	3.53	3.36	2.7	-	-
5	-	-	-	-	-	4.62	-
6	-	-	-	-	-	4.95	-
7	-	-	-	-	-	5.01	-
8	-	-	-	-	-	5.14	-
9	-	-	-	-	-	-	3.57

Item	Directional Gain (dBi)				
	WLAN 2.4GHz	WLAN 5GHz			
		UNII 1	UNII 2A	UNII 2C	UNII 3
4T1S	5.83	6.14	6.28	6.81	6.64
4T2S	3.18	4.99	4.95	5.75	5.75
4T4S	3.18	4.99	4.95	5.75	5.75

Note 2: The above information (except gain of Ant. 1~4 and directional gain) was declared by the manufacturer.

Note 3: For 2.4GHz/5GHz, the antenna gain and directional gain are measured which follow the procedure of KDB 662911 D03.

For 2.4GHz function:

For IEEE 802.11 b/g/n/VHT/ax/be (4TX/4RX):

Port 1~4 can be used as transmitting/receiving antenna.

Port 1~4 could transmit/receive simultaneously.

For 5GHz function:

For IEEE 802.11 a/n/ac/ax/be (4TX/4RX):

Port 1~4 can be used as transmitting/receiving antenna.

Port 1~4 could transmit/receive simultaneously.

**For 6GHz function:****For IEEE 802.11 a/ax/be (4TX/4RX):**

Port 1~4 can be used as transmitting/receiving antenna.

Port 1~4 could transmit/receive simultaneously.

For Bluetooth function (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)_1/T
BT-LE(1Mbps)	0.632	1.99	395u	3k
BT-LE(2Mbps)	0.336	4.74	210u	10k

Note:

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

1.1.4 EUT Operational Condition

EUT Power Type	From Power Adapter			
Function	<input checked="" type="checkbox"/>	Point-to-multipoint	<input type="checkbox"/>	Point-to-point
Test Software Version	DOS [ver 10.0.19041.572]			
Support Mode	<input checked="" type="checkbox"/>	LE 1M PHY: 1 Mb/s		
	<input type="checkbox"/>	LE Coded PHY (S=2): 500 Kb/s		
	<input type="checkbox"/>	LE Coded PHY (S=8): 125 Kb/s		
	<input checked="" type="checkbox"/>	LE 2M PHY: 2 Mb/s		

Note: The above information was declared by manufacturer.

1.1.5 Table for Multiple Listing

Equipment Name	EUT	Model Name (Number)	SFP+ cage WAN Port	2*FXS (Option)
WiFi7 Tri-Band Router w/SFP+ cage	1	ARIA3629	With	With
	2	ARIA3626	With	Without
WiFi7 Tri-Band Router	3	ARIA3625	Without	Without

Note 1: From the above models, model: ARIA3629 (EUT 1) was selected as representative model for the test and its data was recorded in this report.

Note 2: The above information was declared by manufacturer.



1.2 Applicable Standards

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

- ♦ 47 CFR FCC Part 15.247
- ♦ 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 (TAF: 3787)	ADD: No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County 302010, Taiwan (R.O.C.) TEL: 886-3-656-9065 FAX: 886-3-656-9085 Test site Designation No. TW3787 with FCC. Conformity Assessment Body Identifier (CABID) TW3787 with ISED.

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
RF Conducted	TH01-CB	Eason Chen	23.4~25 / 59~62	Aug. 30, 2024~ Sep. 19, 2024
Radiated (Below 1GHz)	03CH05-CB	Gordon Hung	22.7-23.8 / 56-59	Sep. 30, 2024~ Oct. 01, 2024
Radiated (Above 1GHz)	03CH04-CB	RJ Huang	21.6-22.7 / 56-59	Aug. 21, 2024~ Sep. 26, 2024
AC Conduction	CO01-CB	Joe Chu	22~23 / 49~50	Oct. 09, 2024



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)	3.8 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	4.1 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	4.2 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.2 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.0 dB	Confidence levels of 95%
Conducted Emission	3.1 dB	Confidence levels of 95%
Output Power Measurement	0.8 dB	Confidence levels of 95%
Power Density Measurement	3.1 dB	Confidence levels of 95%
Bandwidth Measurement	2.1 %	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

Mode
BT-LE(1Mbps)
2402MHz
2440MHz
2478MHz
2480MHz
BT-LE(2Mbps)
2402MHz
2440MHz
2478MHz
2480MHz

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_WAN mode
2	EUT_SFP mode
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

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
After evaluating, and the worst case was found at Y axis, so it was selected to perform test and its test result was written in the report.	
1	EUT in Y axis_WAN mode
2	EUT in Y axis_SFP mode
For operating mode 1 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX
After evaluating, and the worst case was found at Y axis, so it was selected to perform test and its test result was written in the report.	
1	EUT in Y axis



The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	Bluetooth + WLAN 2.4GHz + WLAN 5GHz + WLAN 6GHz
Refer to Sporton Test Report No.: FA480902 for Co-location RF Exposure Evaluation.	

2.3 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

2.4 Accessories

Accessories				
Equipment Name	Brand Name	Model Name	Rating	Remark
Adapter	FRECOM	F60X-120450SPA	INPUT: 100-240~50/60Hz, 1.6A OUTPUT: 12.0V, 4.5A, 54.0W	DC power cable: Non-shielded, 1.6m
Others				
RJ-45 cable*1, non-shielded, 1.5m				
Power core*1, non-shielded, 1.2m				

2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	10G WAN PC	DELL	OPTIPLEX 3010	N/A
B	10G LAN PC	DELL	OPTIPLEX 3010	N/A
C	2.5G LAN PC	DELL	OPTIPLEX 3010	N/A
D	2.4G NB	DELL	E6430	N/A
E	5G NB	DELL	E6430	N/A
F	6G NB	DELL	E7240	N/A
G	Phone1	PHILIPS	M20	N/A
H	Phone2	PHILIPS	M20	N/A
I	Smart phone	HTC	HTC One X9 dual sim	N/A

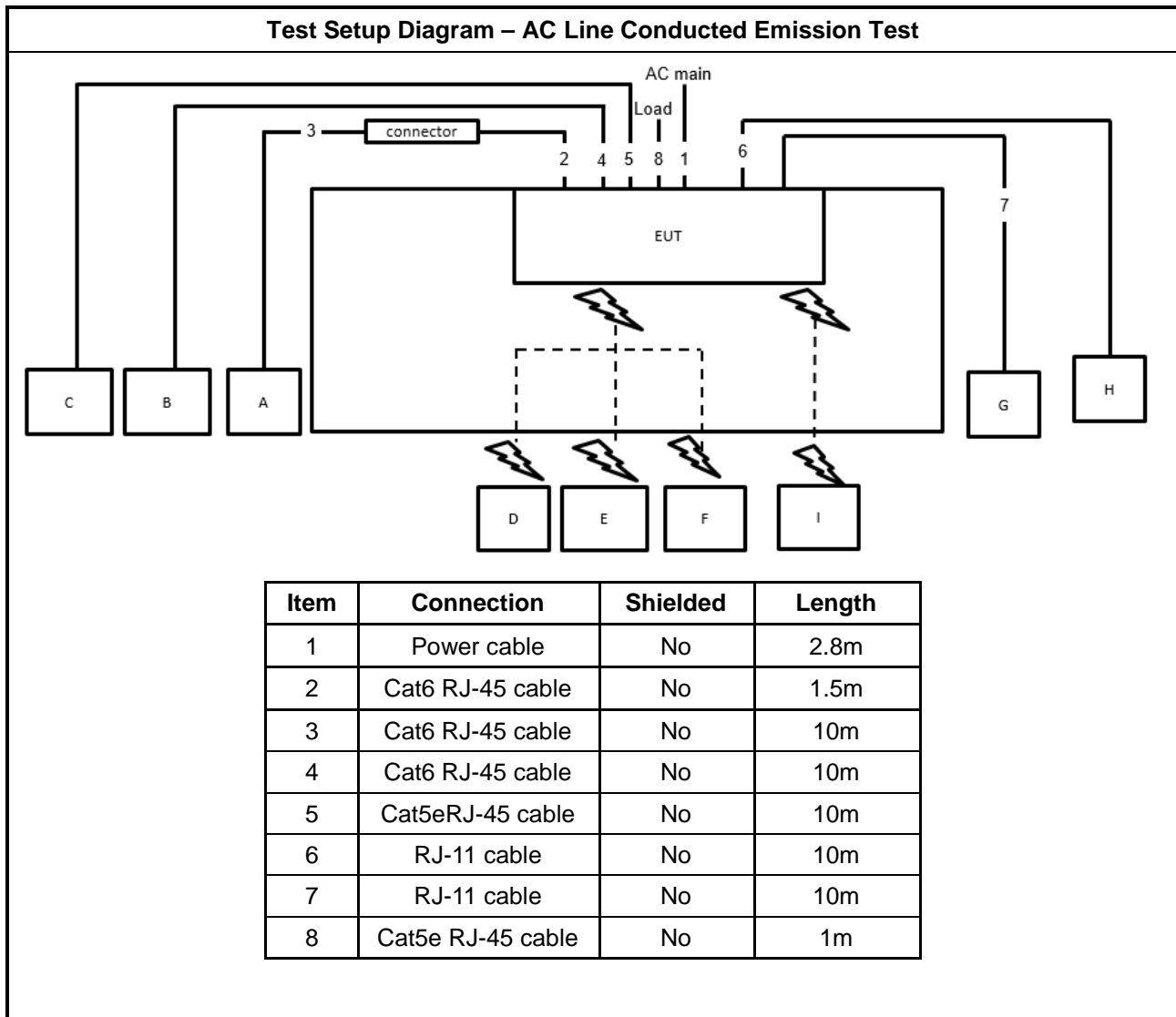
**For Radiated (below 1GHz):**

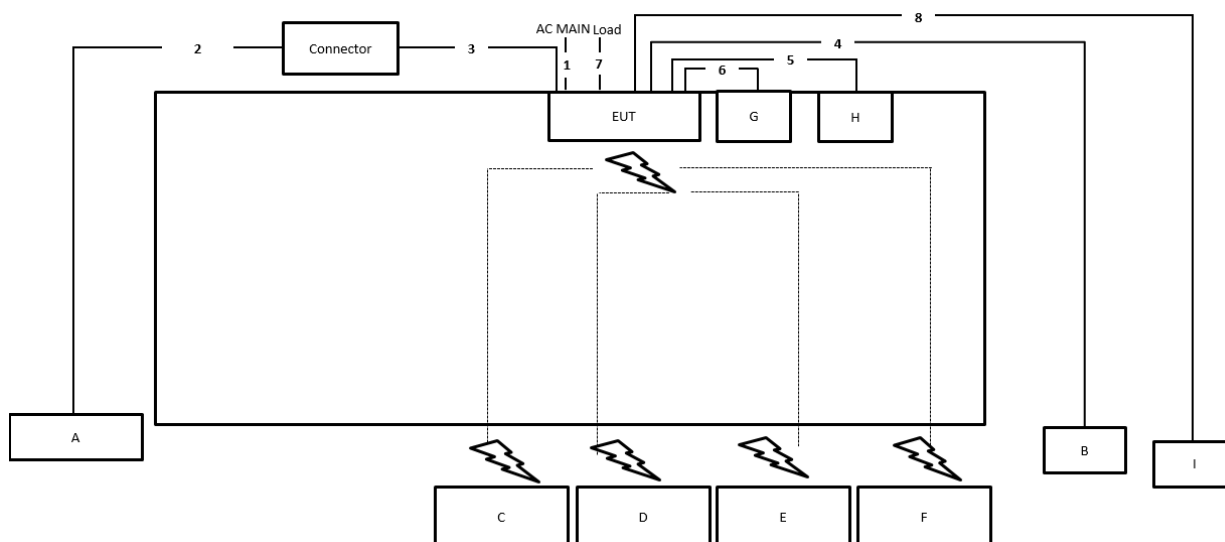
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	10G LAN PC	DELL	T3400	N/A
B	10G WAN PC	DELL	T3400	N/A
C	2.4G NB	DELL	E4300	N/A
D	5G NB	DELL	E4300	N/A
E	6G NB	DELL	E4300	N/A
F	Smart phone	HTC	HTC One X9 dual sim	N/A
G	Phone 1	SAMPO	HT-B 907WL	N/A
H	Phone 2	SAMPO	HT-B 907WL	N/A
I	2.5G LAN PC	DELL	T3400	N/A

For Radiated (above 1GHz) and RF Conducted:

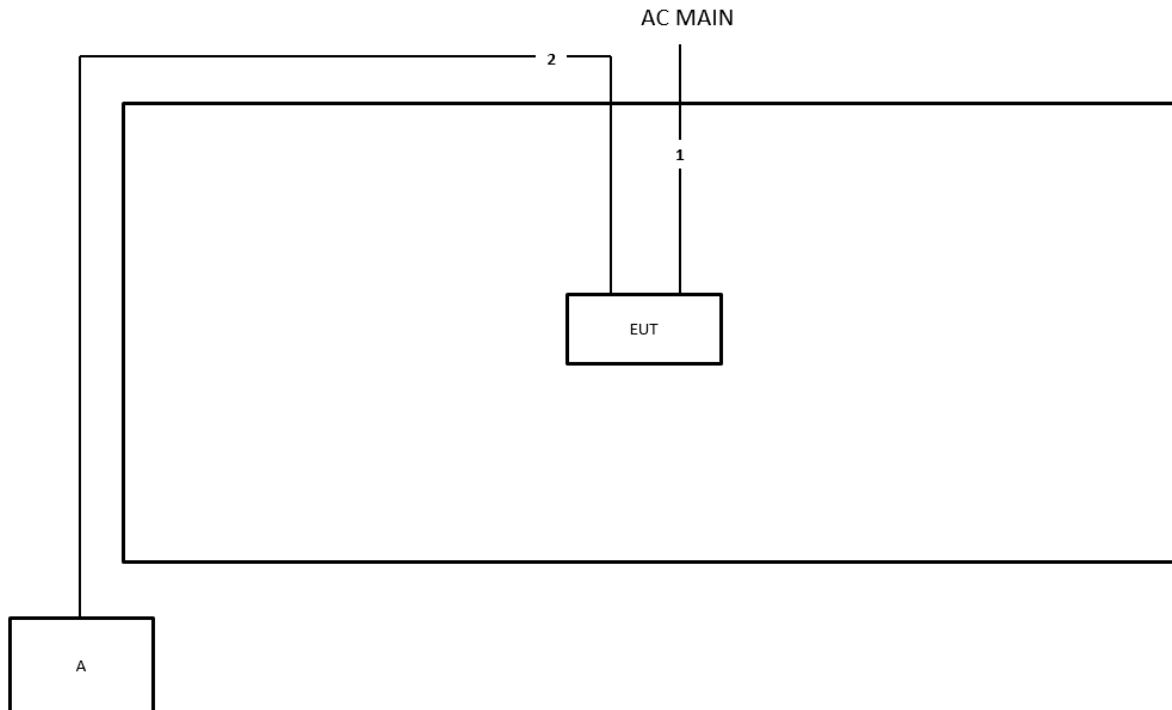
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E4300	N/A

2.6 Test Setup Diagram



Test Setup Diagram - Radiated Test < 1GHz


Item	Connection	Shielded	Length
1	Power cable	No	2.8m
2	RJ-45 cable	No	10m
3	RJ-45 cable	No	1.5m
4	RJ-45 cable	No	10m
5	RJ-11 cable	No	1.5m
6	RJ-11 cable	No	1.5m
7	RJ-45 cable	No	1.5m
8	RJ-45 cable	No	10m

Test Setup Diagram - Radiated Test > 1GHz


Item	Connection	Shielded	Length
1	Power cable	No	2.8m
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.		

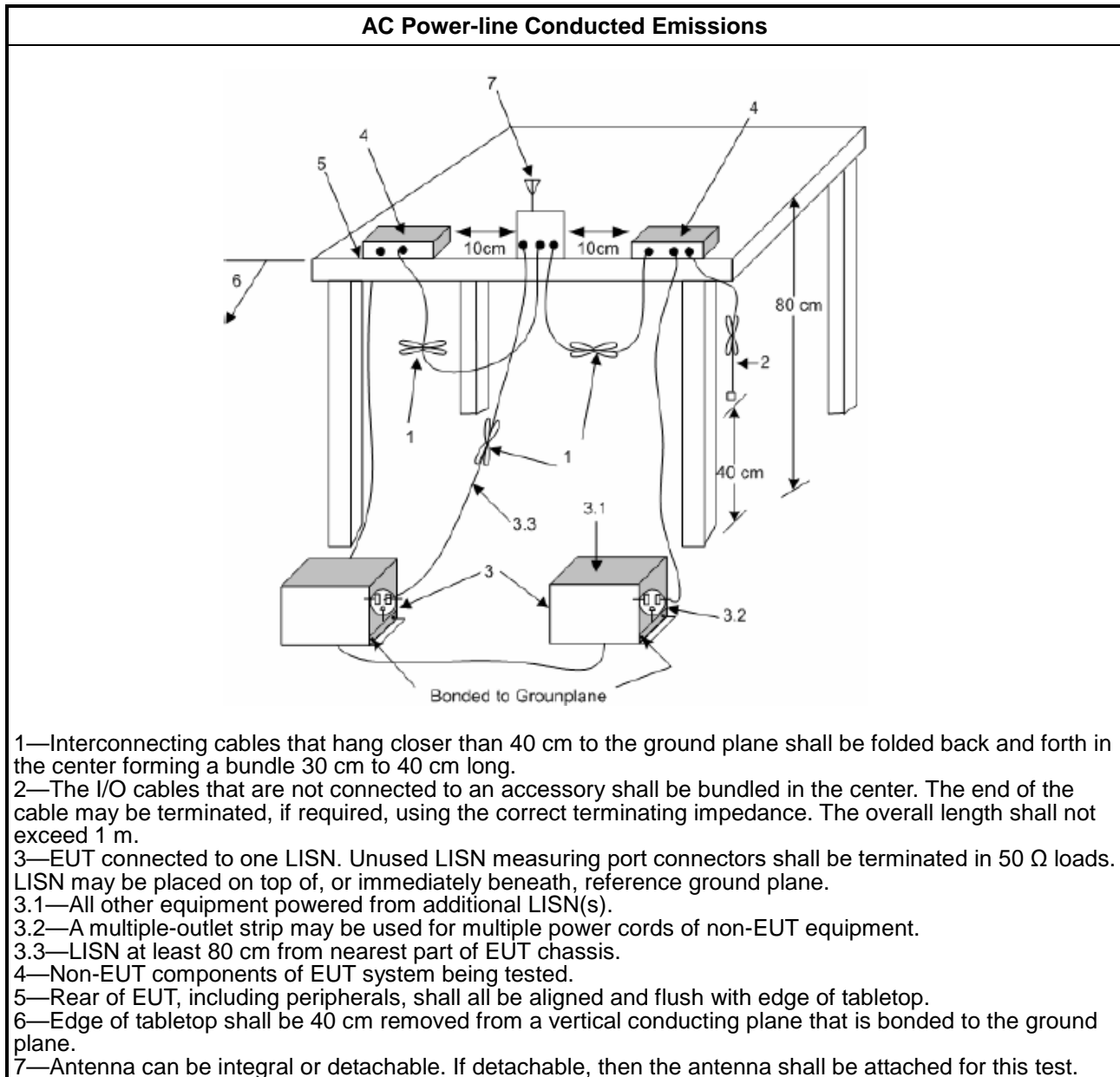
3.1.2 Measuring Instruments

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:
<ul style="list-style-type: none"> 6 dB bandwidth \geq 500 kHz.

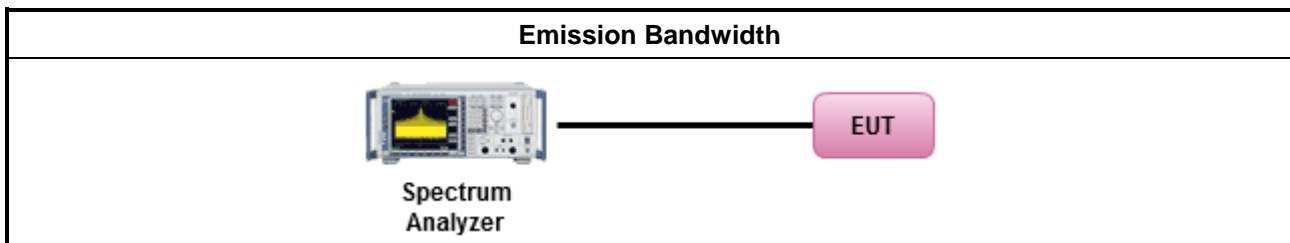
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method
<ul style="list-style-type: none"> For the emission bandwidth shall be measured using one of the options below:
<input checked="" type="checkbox"/> Refer as FCC KDB 558074, clause 8.2 & C63.10 clause 11.8.1 Option 1 for 6 dB bandwidth measurement.
<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.2 & C63.10 clause 11.8.2 Option 2 for 6 dB bandwidth measurement.
<input type="checkbox"/> Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit	
	▪ 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.	

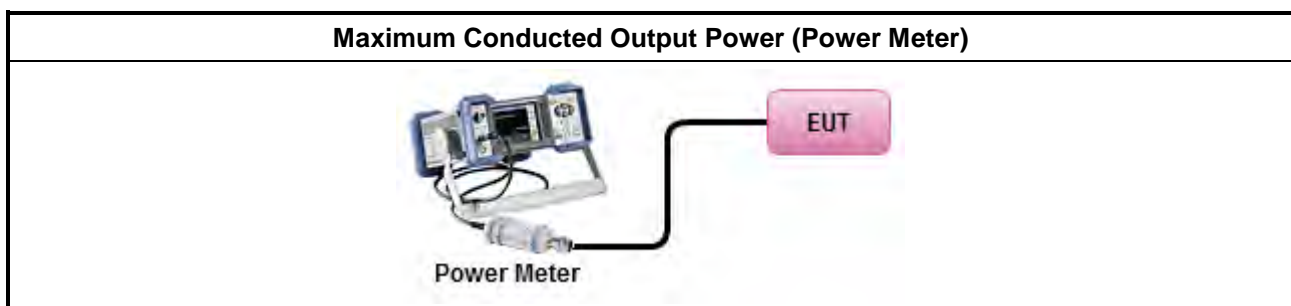
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

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

3.3.4 Test Setup





3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C



3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

Power Spectral Density Limit
▪ Power Spectral Density (PSD) ≤ 8 dBm/3kHz

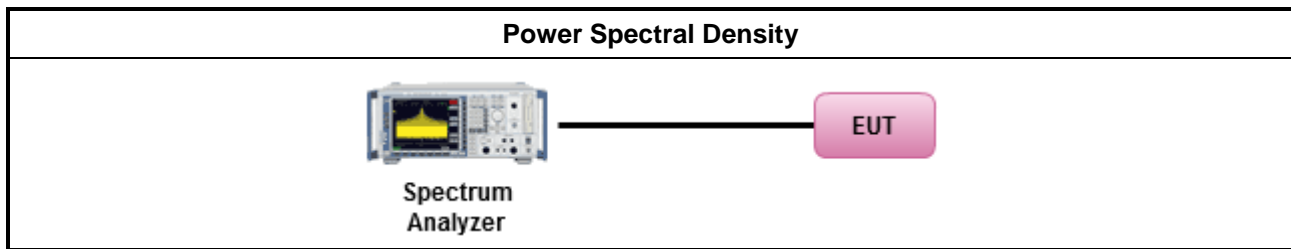
3.4.2 Measuring Instruments

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).	
<input checked="" type="checkbox"/>	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:	
<input type="checkbox"/>	Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.
<input type="checkbox"/>	Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,
<input type="checkbox"/>	Option 3: Measure and add $10 \log(N)$ dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with $10 \log(N)$. Or each transmit chains shall be add $10 \log(N)$ to compared with the limit.

3.4.4 Test Setup



3.4.5 Test Result of Power Spectral Density

Refer as Appendix D

3.5 Emissions in Non-restricted Frequency Bands

3.5.1 Emissions in Non-restricted Frequency Bands Limit

Un-restricted Band Emissions Limit	
RF output power procedure	Limit (dBc)
Peak output power procedure	20
Average output power procedure	30
<p>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.</p> <p>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.</p>	

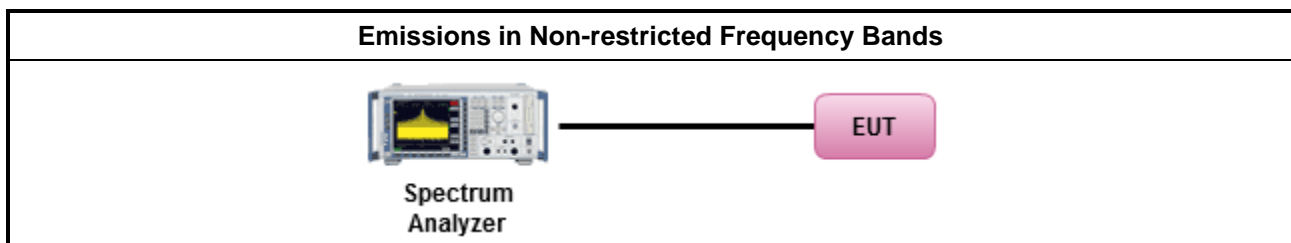
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

Test Method
<ul style="list-style-type: none"> Refer as FCC KDB 558074, clause 8.5 for unwanted emissions into non-restricted bands.

3.5.4 Test Setup



3.5.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix E

3.6 Emissions in Restricted Frequency Bands

3.6.1 Emissions in Restricted Frequency Bands Limit

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

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

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

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

3.6.2 Measuring Instruments

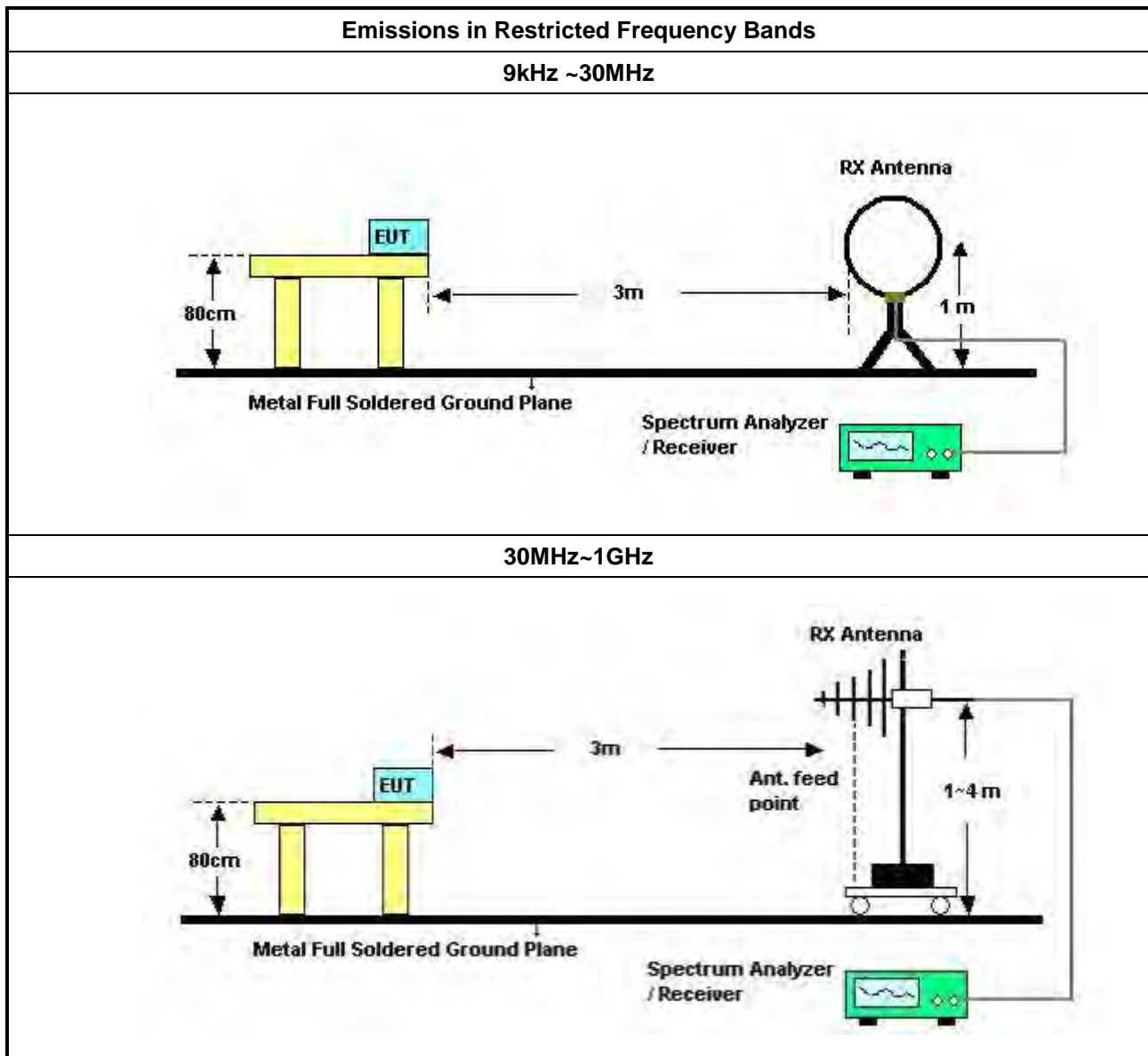
Refer a test equipment and calibration data table in this test report.

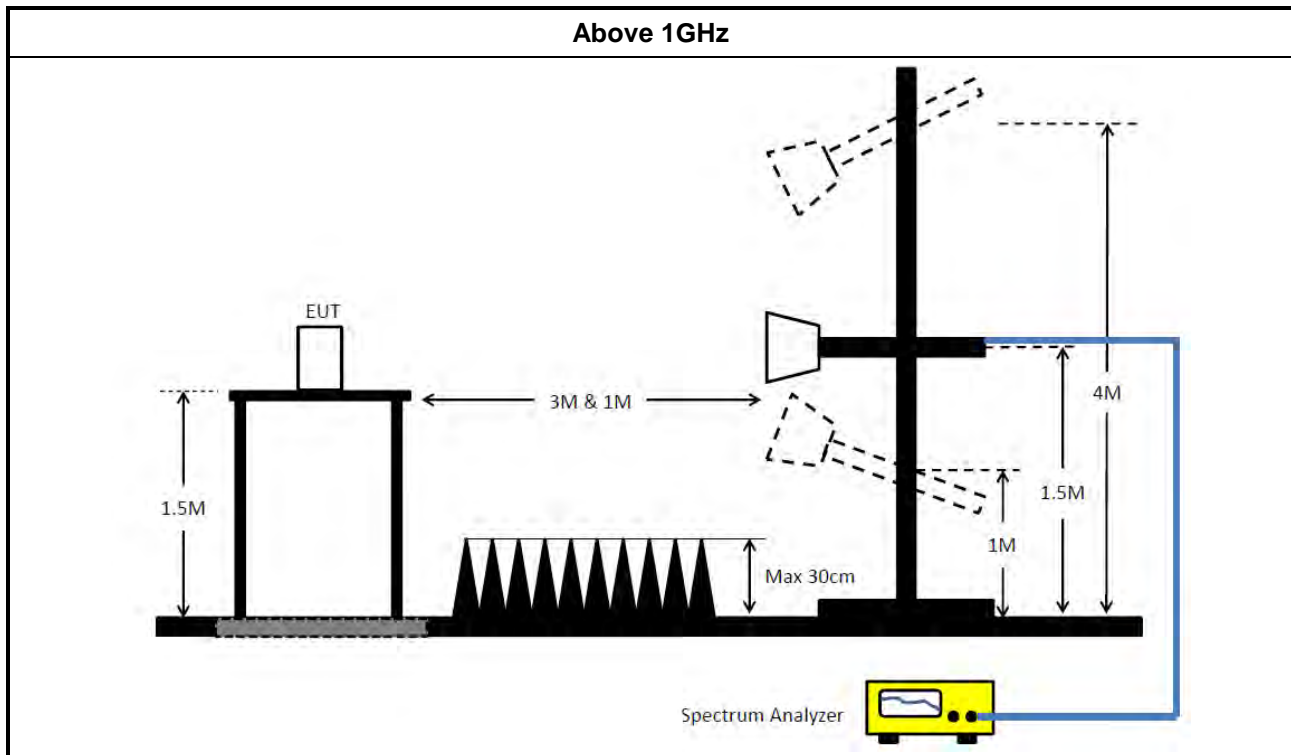


3.6.3 Test Procedures

Test Method	
▪ 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.
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.1(trace averaging for duty cycle $\geq 98\%$).
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.2(trace averaging + duty factor).
	<input checked="" type="checkbox"/> Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.3(Reduced VBW $\geq 1/T$).
	<input type="checkbox"/> Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW $\geq 1/T$, where T is pulse time.
	<input type="checkbox"/> Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.
	<input checked="" type="checkbox"/> Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.4 measurement procedure peak limit.
▪ 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	Mar. 01, 2024	Feb. 28, 2025	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Feb. 19, 2024	Feb. 18, 2025	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Apr. 24, 2024	Apr. 23, 2025	Conduction (CO01-CB)
Pulse Limiter	Rohde&Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Feb. 08, 2024	Feb. 07, 2025	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	Oct. 17, 2023	Oct. 16, 2024	Conduction (CO01-CB)
Test Software	SPORTON	SENSE-EMI	V5.11	150kHz-30MHz	N.C.R.	N.C.R.	Conduction (CO01-CB)
Loop Antenna	Teseq	HLA 6121	65417	9kHz - 30 MHz	Oct. 13, 2023	Oct. 12, 2024	Radiation (03CH05-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH05-CB	30 MHz ~ 1 GHz	Aug. 01, 2024	Jul. 31, 2025	Radiation (03CH05-CB)
Bilog Antenna with 6dB Attenuator	TESEQ & EMCI	CBL 6112D & N-6-06	35236 & AT-N0610	30MHz ~ 2GHz	Mar. 23, 2024	Mar. 22, 2025	Radiation (03CH05-CB)
Amplifier	EMCI	EMC330N	980331	20MHz ~ 3GHz	May 02, 2024	May 01, 2025	Radiation (03CH05-CB)
Spectrum Analyzer	R&S	FSP40	100304	9kHz ~ 40GHz	Apr. 17, 2024	Apr. 16, 2025	Radiation (03CH05-CB)
EMI Test Receiver	R&S	ESR7	102172	9kHz ~ 7GHz	Oct. 20, 2023	Oct. 19, 2024	Radiation (03CH05-CB)
RF Cable-low	Woken	RG402	Low Cable-04+23	30MHz~1GHz	Jul. 27, 2024	Jul. 26, 2025	Radiation (03CH05-CB)
Test Software	SPORTON	SENSE-EMI	V5.11.8	30MHz-40GHz	N.C.R.	N.C.R.	Radiation (03CH05-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH04-CB	1GHz ~18GHz 3m	Feb. 22, 2024	Feb. 21, 2025	Radiation (03CH04-CB)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120D-01816	1GHz~18GHz	Dec. 20, 2023	Dec. 19, 2024	Radiation (03CH04-CB)
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170507	15GHz ~ 40GHz	Jul. 09, 2024	Jul. 08, 2025	Radiation (03CH04-CB)
Pre-Amplifier	SGH	SGH5265	20211115-1	1~ 26.5GHz	Jan. 17, 2024	Jan. 16, 2025	Radiation (03CH04-CB)
Spectrum Analyzer	R&S	FSP40	100142	9kHz~40GHz	Mar. 19, 2024	Mar. 18, 2025	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-21	1GHz - 18GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-21+67	1GHz - 18GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH04-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Jan. 11, 2024	Jan. 10, 2025	Radiation (03CH04-CB)
Test Software	SPORTON	SENSE-15247_FS	V5.11.18	2.4GHz-2.4835GHz	N.C.R.	N.C.R.	Radiation (03CH04-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	May 27, 2024	May 26, 2025	Conducted (TH01-CB)
Switch	SPTCB	SP-SWI	SWI-01	1~26.5 GHz	Oct. 03, 2023	Oct. 02, 2024	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-06	1 GHz – 18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-07	1 GHz – 18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-08	1 GHz – 18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-09	1 GHz – 18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz – 18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-30	1 GHz – 18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH01-CB)
Power Sensor	Agilent	E9327A	US40442088	50MHz~18GHz	Mar. 01, 2024	Feb. 28, 2025	Conducted (TH01-CB)
Power Meter	Agilent	E4416A	MY45100745	50MHz~18GHz	Jul. 12, 2024	Jul. 11, 2025	Conducted (TH01-CB)
Test Software	SPORTON	SENSE-15247_FS	V5.11.18	2.4GHz-2.4835GHz	N.C.R.	N.C.R.	Conducted (TH01-CB)

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

NCR means Non-Calibration required.



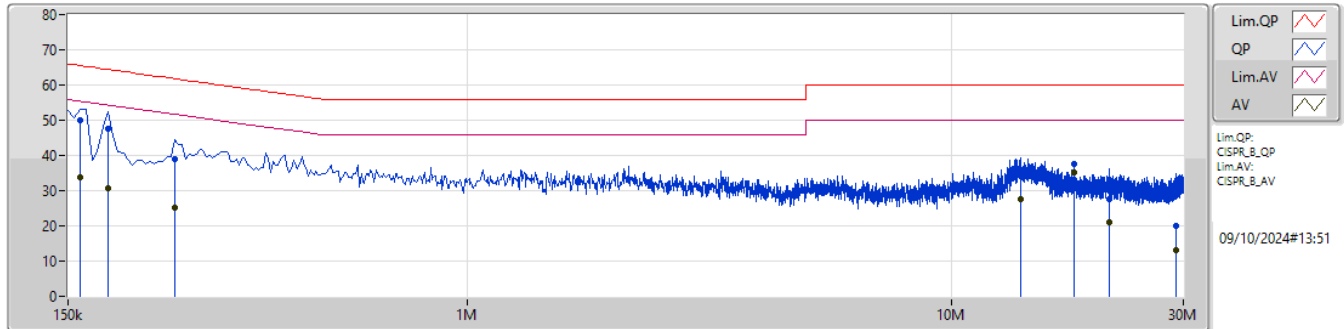
Conducted Emissions at Powerline

Appendix A

Summary

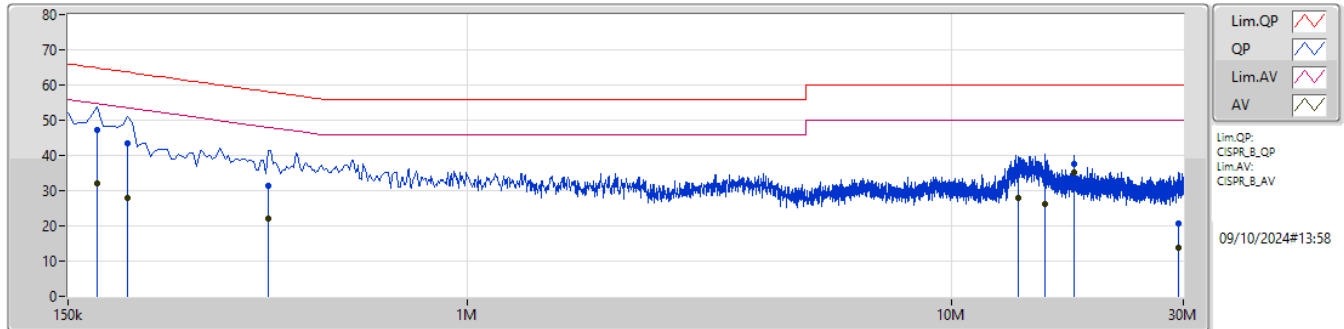
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	17.885M	35.24	50.00	-14.76	Line

Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)						
QP	159k	50.04	65.52	-15.48	9.92	Line	-	40.12	0.04	0.02	9.86						
AV	159k	33.79	55.52	-21.73	9.92	Line	-	23.87	0.04	0.02	9.86						
QP	181.5k	47.48	64.41	-16.93	9.92	Line	-	37.56	0.04	0.02	9.86						
AV	181.5k	30.57	54.41	-23.84	9.92	Line	-	20.65	0.04	0.02	9.86						
QP	249k	38.80	61.79	-22.99	9.92	Line	-	28.88	0.04	0.02	9.86						
AV	249k	25.26	51.79	-26.53	9.92	Line	-	15.34	0.04	0.02	9.86						
QP	13.826M	34.89	60.00	-25.11	10.38	Line	-	24.51	0.27	0.17	9.94						
AV	13.826M	27.42	50.00	-22.58	10.38	Line	-	17.04	0.27	0.17	9.94						
QP	17.885M	37.61	60.00	-22.39	10.50	Line	-	27.11	0.30	0.21	9.99						
AV	17.885M	35.24	50.00	-14.76	10.50	Line	"Worst"	24.74	0.30	0.21	9.99						
QP	21.138M	27.64	60.00	-32.36	10.58	Line	-	17.06	0.32	0.23	10.03						
AV	21.138M	21.07	50.00	-28.93	10.58	Line	-	10.49	0.32	0.23	10.03						
QP	28.95M	19.97	60.00	-40.03	10.76	Line	-	9.21	0.35	0.35	10.06						
AV	28.95M	13.09	50.00	-36.91	10.76	Line	-	2.33	0.35	0.35	10.06						

Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)						
QP	172.5k	47.07	64.83	-17.76	9.94	Neutral	-	37.13	0.06	0.02	9.86						
AV	172.5k	32.09	54.83	-22.74	9.94	Neutral	-	22.15	0.06	0.02	9.86						
QP	199.5k	43.42	63.63	-20.21	9.93	Neutral	-	33.49	0.06	0.02	9.85						
AV	199.5k	27.80	53.63	-25.83	9.93	Neutral	-	17.87	0.06	0.02	9.85						
QP	388.5k	31.41	58.10	-26.69	9.97	Neutral	-	21.44	0.06	0.02	9.89						
AV	388.5k	21.93	48.10	-26.17	9.97	Neutral	-	11.96	0.06	0.02	9.89						
QP	13.731M	35.07	60.00	-24.93	10.38	Neutral	-	24.69	0.27	0.17	9.94						
AV	13.731M	27.88	50.00	-22.12	10.38	Neutral	-	17.50	0.27	0.17	9.94						
QP	15.572M	33.12	60.00	-26.88	10.43	Neutral	-	22.69	0.28	0.19	9.96						
AV	15.572M	26.23	50.00	-23.77	10.43	Neutral	-	15.80	0.28	0.19	9.96						
QP	17.885M	37.62	60.00	-22.38	10.49	Neutral	-	27.13	0.29	0.21	9.99						
AV	17.885M	35.22	50.00	-14.78	10.49	Neutral	"Worst"	24.73	0.29	0.21	9.99						
QP	29.252M	20.68	60.00	-39.32	10.83	Neutral	-	9.85	0.42	0.35	10.06						
AV	29.252M	13.94	50.00	-36.06	10.83	Neutral	-	3.11	0.42	0.35	10.06						

**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
BT-LE(1Mbps)	677.5k	1.011M	1M01F1D	631.25k	974.513k
BT-LE(2Mbps)	1.258M	2.011M	2M01F1D	632.5k	1.904M

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

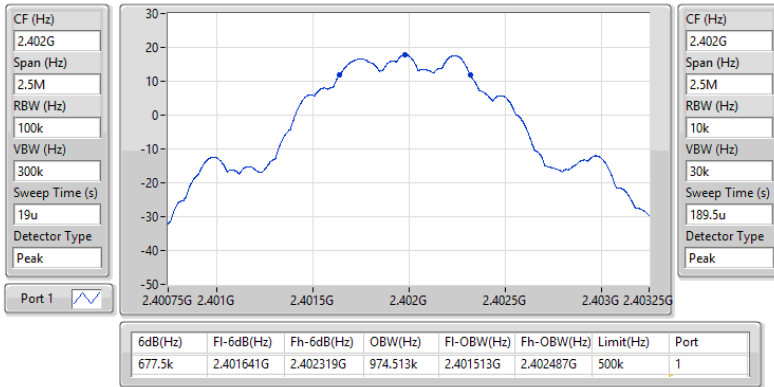
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	500k	677.5k	974.513k
2440MHz	Pass	500k	631.25k	997.001k
2478MHz	Pass	500k	657.5k	990.755k
2480MHz	Pass	500k	662.5k	1.011M
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	500k	1.258M	1.909M
2440MHz	Pass	500k	632.5k	1.992M
2478MHz	Pass	500k	1.238M	2.011M
2480MHz	Pass	500k	975k	1.904M

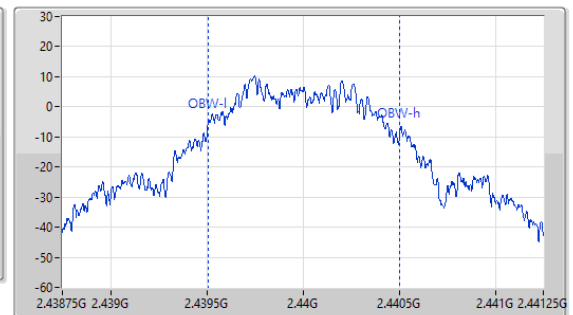
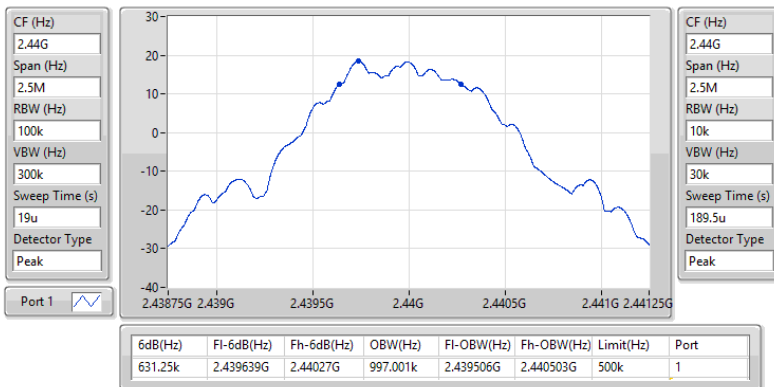
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

2.4-2.4835GHz_BT-LE(1Mbps)
EBW-DTS
2402MHz

31/08/2024

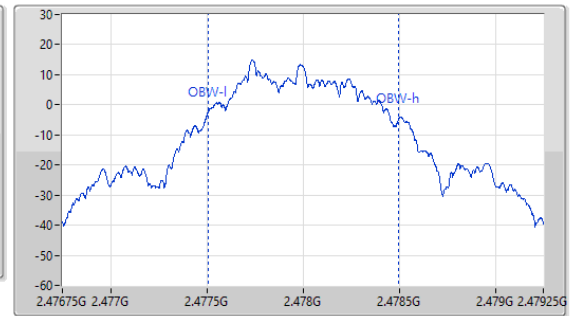
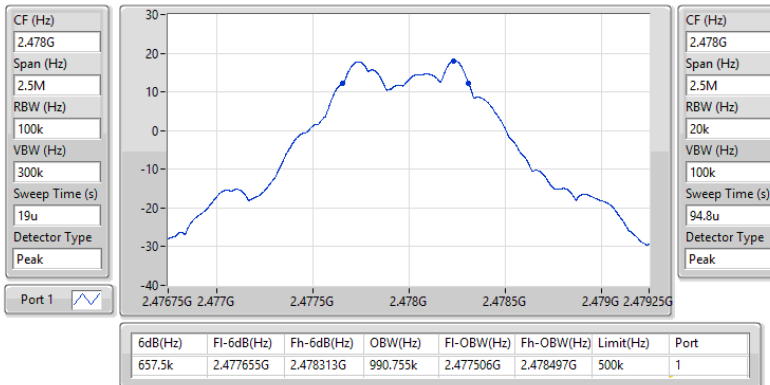

2.4-2.4835GHz_BT-LE(1Mbps)
EBW-DTS
2440MHz

31/08/2024

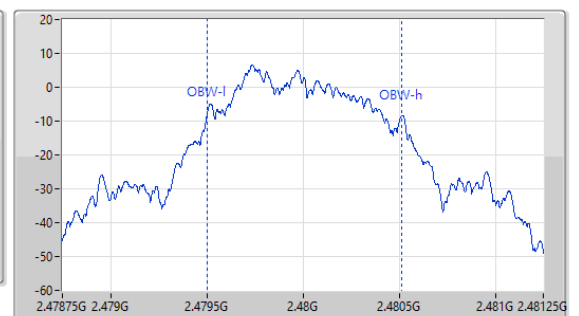
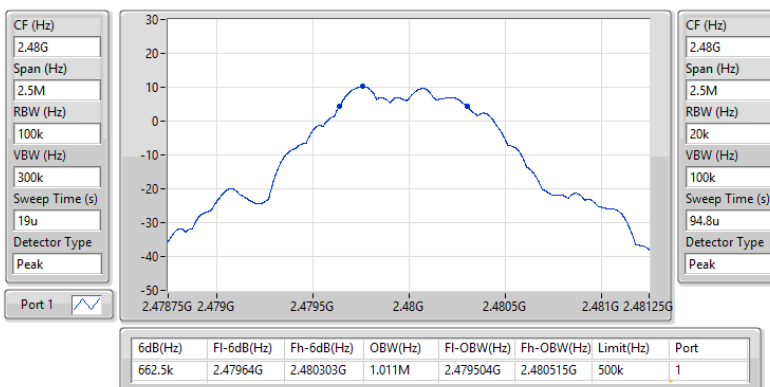


2.4-2.4835GHz_BT-LE(1Mbps)
EBW-DTS
2478MHz

31/08/2024

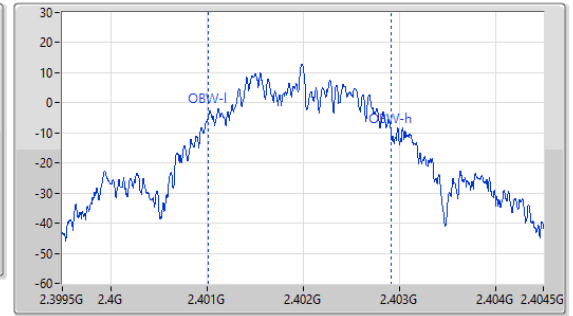
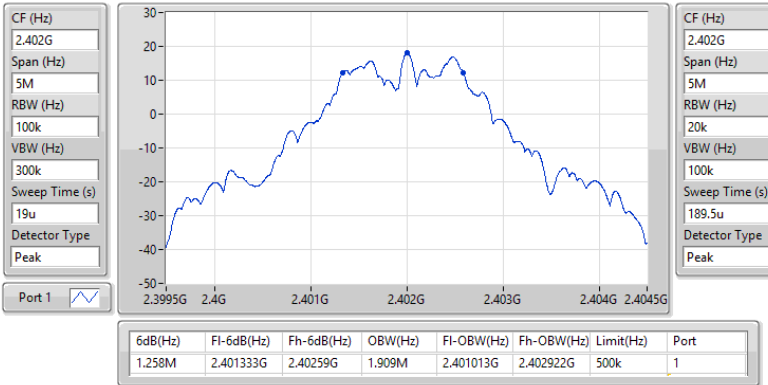

2.4-2.4835GHz_BT-LE(1Mbps)
EBW-DTS
2480MHz

31/08/2024

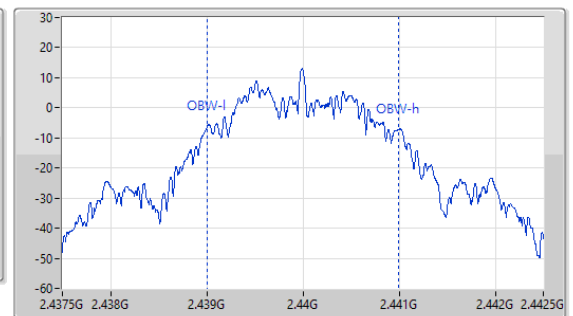
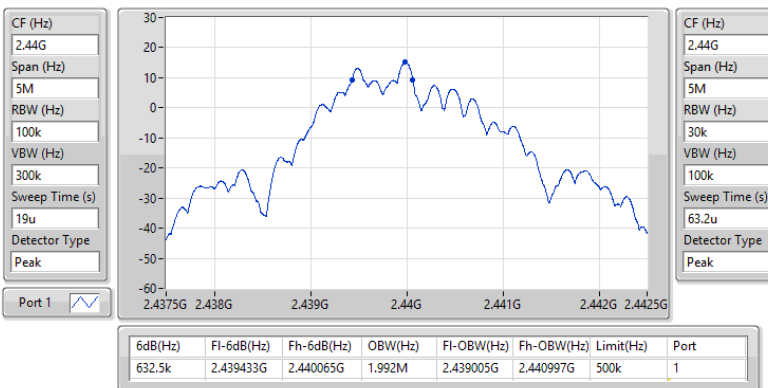


2.4-2.4835GHz_BT-LE(2Mbps)
EBW-DTS
2402MHz

31/08/2024

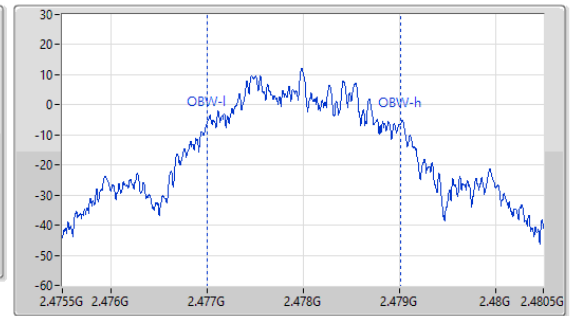
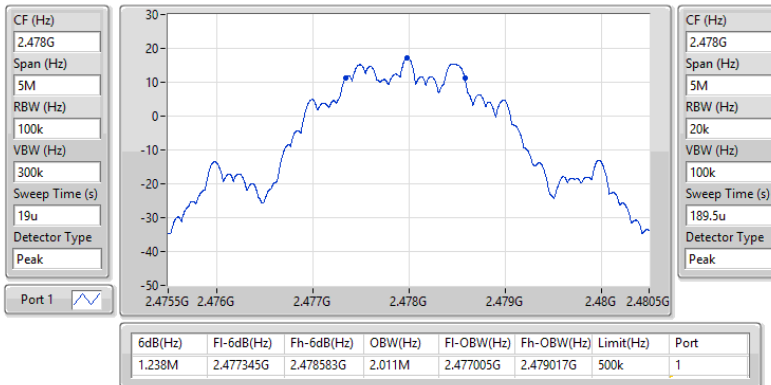

2.4-2.4835GHz_BT-LE(2Mbps)
EBW-DTS
2440MHz

31/08/2024

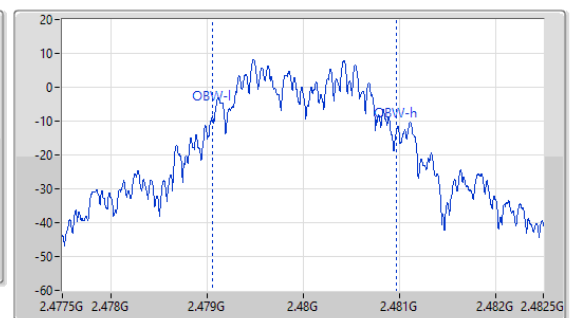
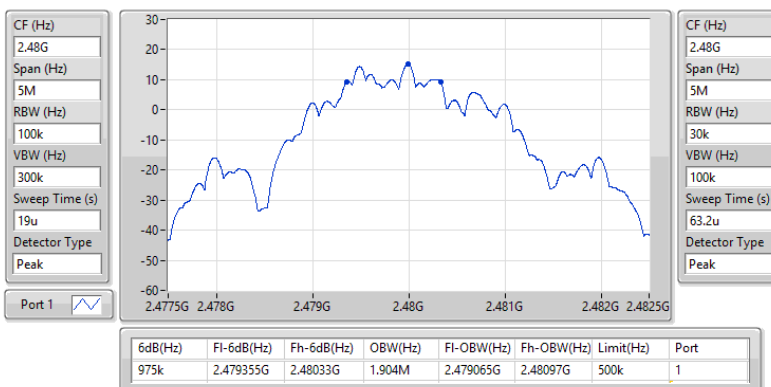


2.4-2.4835GHz_BT-LE(2Mbps)
EBW-DTS
2478MHz

31/08/2024


2.4-2.4835GHz_BT-LE(2Mbps)
EBW-DTS
2480MHz

31/08/2024





Average Power-DTS

Appendix C

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
BT-LE(1Mbps)	18.98	0.07907
BT-LE(2Mbps)	18.52	0.07112

Result

Mode	Result	DG (dBi)	Total Power (dBm)	Power Limit (dBm)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	3.57	18.98	30.00
2440MHz	Pass	3.57	18.88	30.00
2478MHz	Pass	3.57	18.51	30.00
2480MHz	Pass	3.57	12.81	30.00
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	3.57	18.52	30.00
2440MHz	Pass	3.57	18.37	30.00
2478MHz	Pass	3.57	18.11	30.00
2480MHz	Pass	3.57	15.20	30.00

DG = Directional Gain; Port X = Port X output power;
Inf = There's no restriction for the limit.



Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
BT-LE(1Mbps)	5.17
BT-LE(2Mbps)	1.33

RBW = 3kHz;

Result

Mode	Result	DG (dBi)	PD (dBm/RBW)	PD Limit (dBm/RBW)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	3.57	5.17	8.00
2440MHz	Pass	3.57	4.98	8.00
2478MHz	Pass	3.57	4.86	8.00
2480MHz	Pass	3.57	-1.36	8.00
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	3.57	1.29	8.00
2440MHz	Pass	3.57	1.33	8.00
2478MHz	Pass	3.57	0.98	8.00
2480MHz	Pass	3.57	-1.55	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;
 Inf = There's no restriction for the limit.

2.4-2.4835GHz_BT-LE(1Mbps)

PSD

2402MHz

31/08/2024

CF (Hz)
2.402G

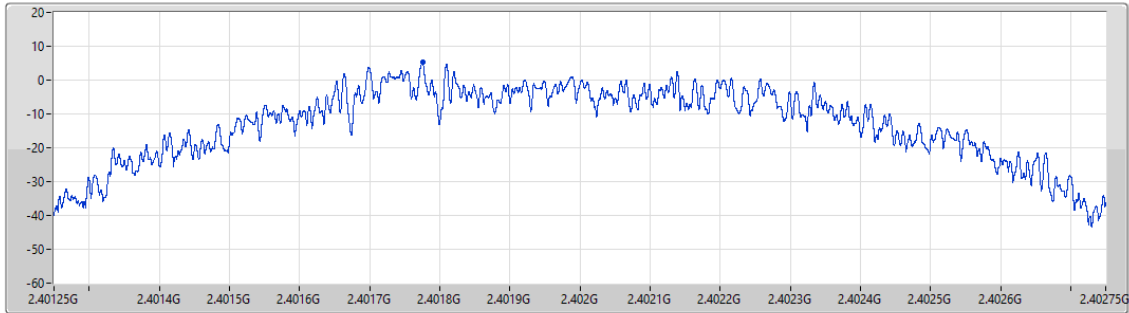
Span (Hz)
1.5M

RBW (Hz)
3k

VBW (Hz)
10k

Sweep Time (s)
1m

Detector Type
Peak



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.17	5.17	5.17

2.4-2.4835GHz_BT-LE(1Mbps)

PSD

2440MHz

31/08/2024

CF (Hz)
2.44G

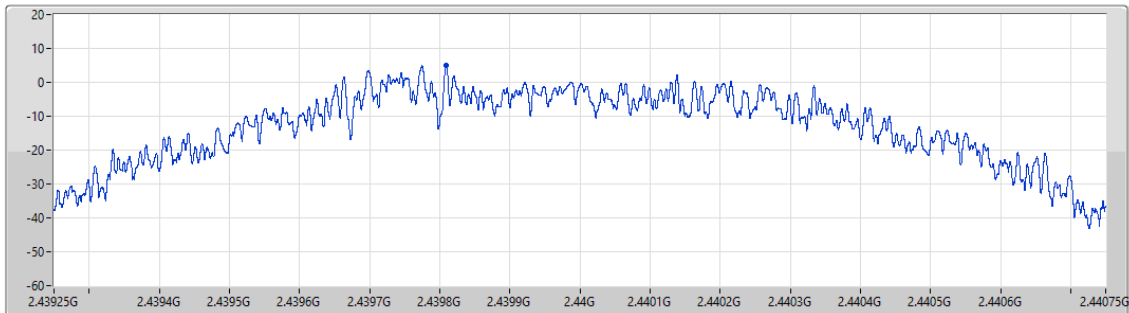
Span (Hz)
1.5M

RBW (Hz)
3k

VBW (Hz)
10k

Sweep Time (s)
1m

Detector Type
Peak



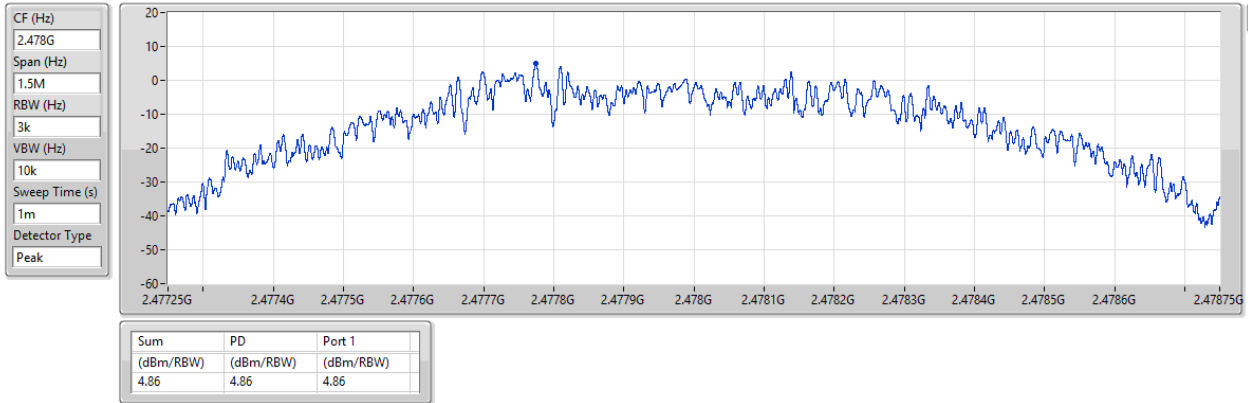
Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.98	4.98	4.98

2.4-2.4835GHz_BT-LE(1Mbps)

PSD

2478MHz

31/08/2024

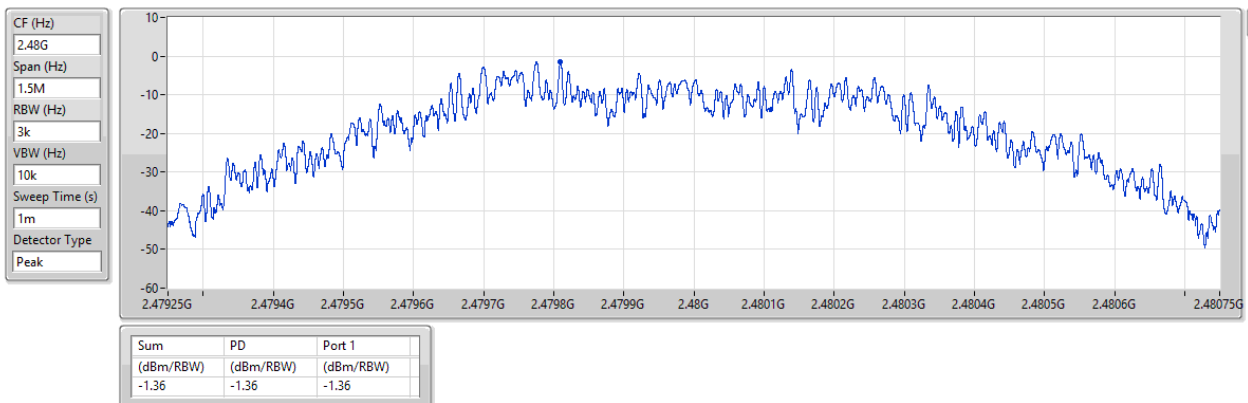


2.4-2.4835GHz_BT-LE(1Mbps)

PSD

2480MHz

31/08/2024

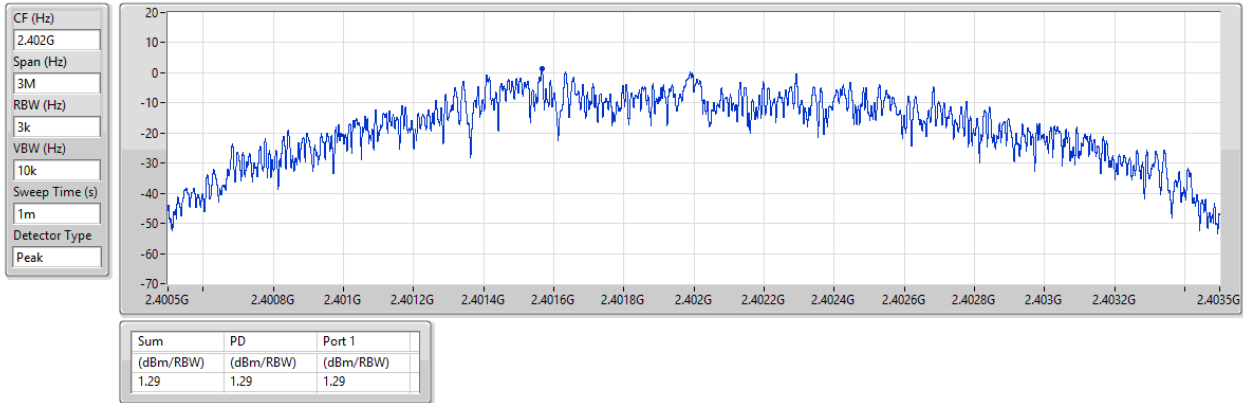


2.4-2.4835GHz_BT-LE(2Mbps)

PSD

2402MHz

31/08/2024

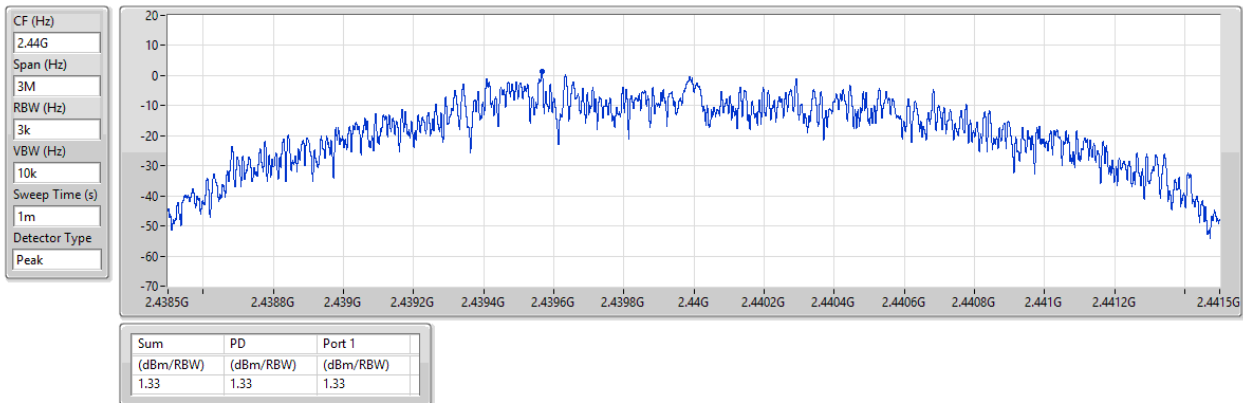


2.4-2.4835GHz_BT-LE(2Mbps)

PSD

2440MHz

31/08/2024

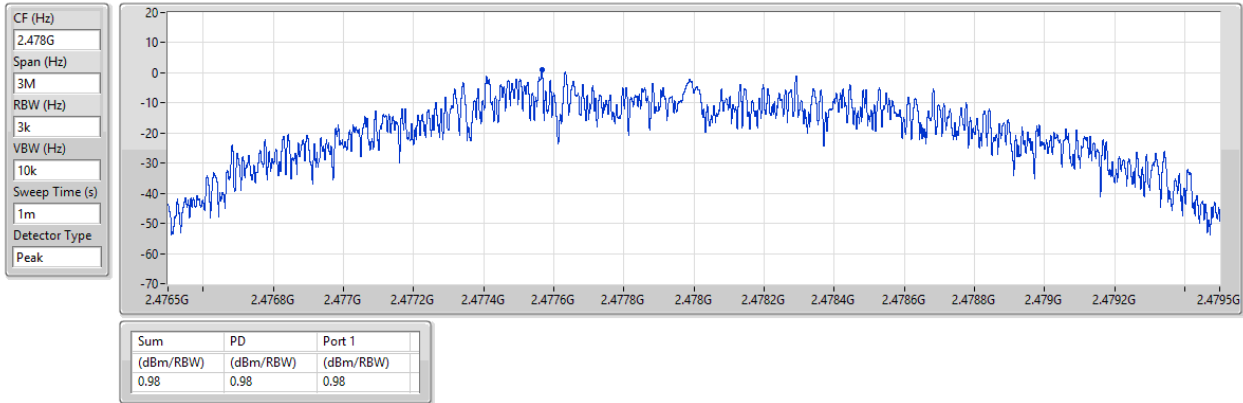


2.4-2.4835GHz_BT-LE(2Mbps)

PSD

2478MHz

31/08/2024

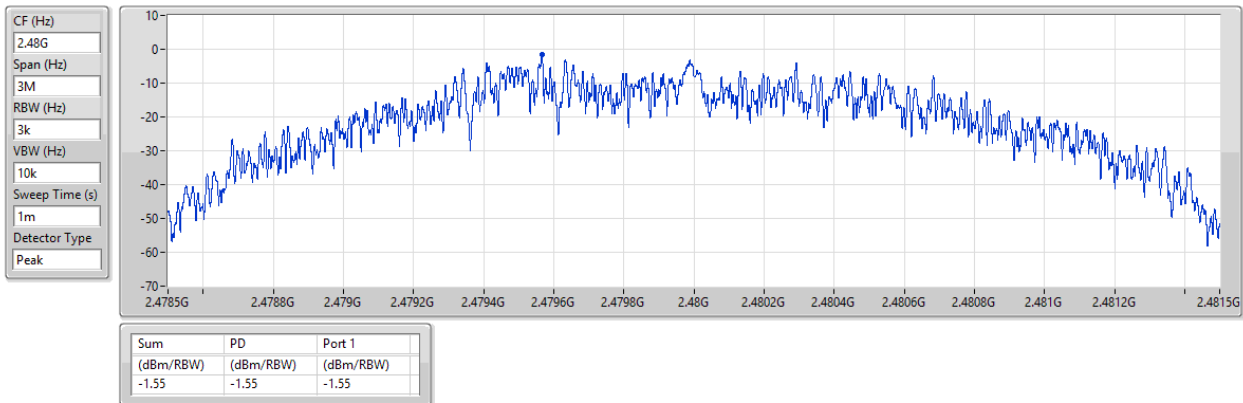


2.4-2.4835GHz_BT-LE(2Mbps)

PSD

2480MHz

31/08/2024



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	2.40217G	18.54	-11.46	2.30598G	-50.50	2.39956G	-35.47	2.4G	-34.46	2.50178G	-50.33	7.20527G	-29.73	1
BT-LE(2Mbps)	Pass	2.40184G	18.42	-11.58	934.75M	-53.68	2.4G	-13.24	2.4G	-13.25	2.50214G	-50.37	16.41196G	-44.14	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	2.40217G	18.54	-11.46	2.30598G	-50.50	2.39956G	-35.47	2.4G	-34.46	2.50178G	-50.33	7.20527G	-29.73	1
2440MHz	Pass	2.40217G	18.54	-11.46	2.3001G	-53.94	2.39992G	-46.03	2.4G	-46.68	2.5035G	-47.77	17.08686G	-44.39	1
2480MHz	Pass	2.40217G	18.54	-11.46	1.96523G	-54.28	2.3902G	-50.88	2.4G	-56.09	2.5023G	-51.49	16.47101G	-44.69	1
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.40184G	18.42	-11.58	934.75M	-53.68	2.4G	-13.24	2.4G	-13.25	2.50214G	-50.37	16.41196G	-44.14	1
2440MHz	Pass	2.40184G	18.42	-11.58	854.85M	-53.79	2.39996G	-46.56	2.4G	-46.90	2.50346G	-47.24	17.07561G	-43.94	1
2480MHz	Pass	2.40184G	18.42	-11.58	1.80895G	-52.86	2.39248G	-49.31	2.4G	-52.64	2.50318G	-52.30	16.78315G	-44.12	1

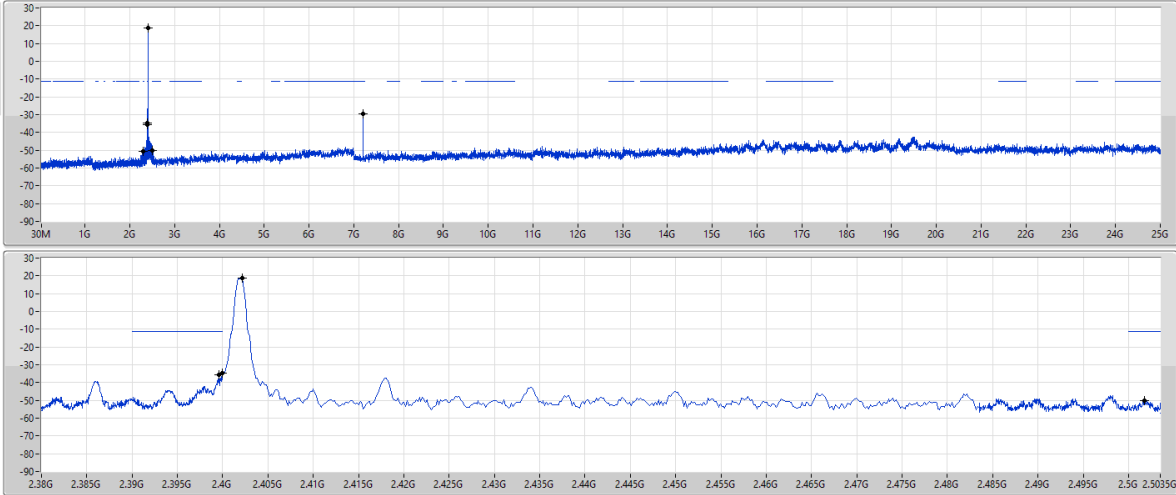
2.4-2.4835GHz_BT-LE(1Mbps)

CSEndB-DTS

2402MHz

31/08/2024

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
2.40217G	18.54	-11.46	2.30598G	-50.50	2.39956G	-35.47	2.4G	-34.46	2.50178G	-50.33	7.20527G	-29.73	1

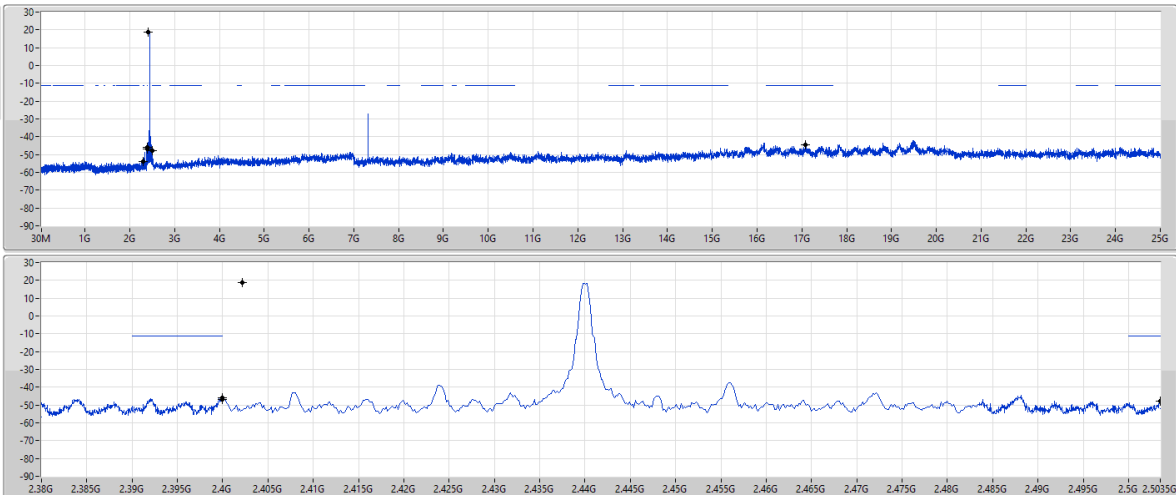
2.4-2.4835GHz_BT-LE(1Mbps)

CSEndB-DTS

2440MHz

31/08/2024

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

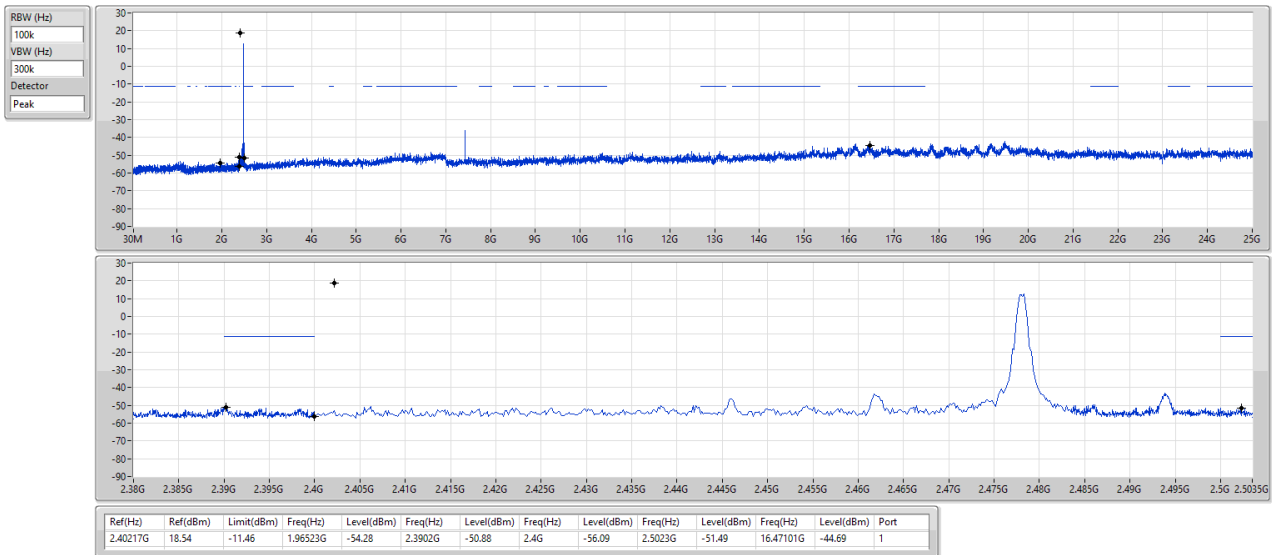


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.40217G	18.54	-11.46	2.3001G	-53.94	2.39992G	-46.03	2.4G	-46.68	2.5035G	-47.77	17.08886G	-44.39	1

2.4-2.4835GHz_BT-LE(1Mbps)

CSEndB-DTS

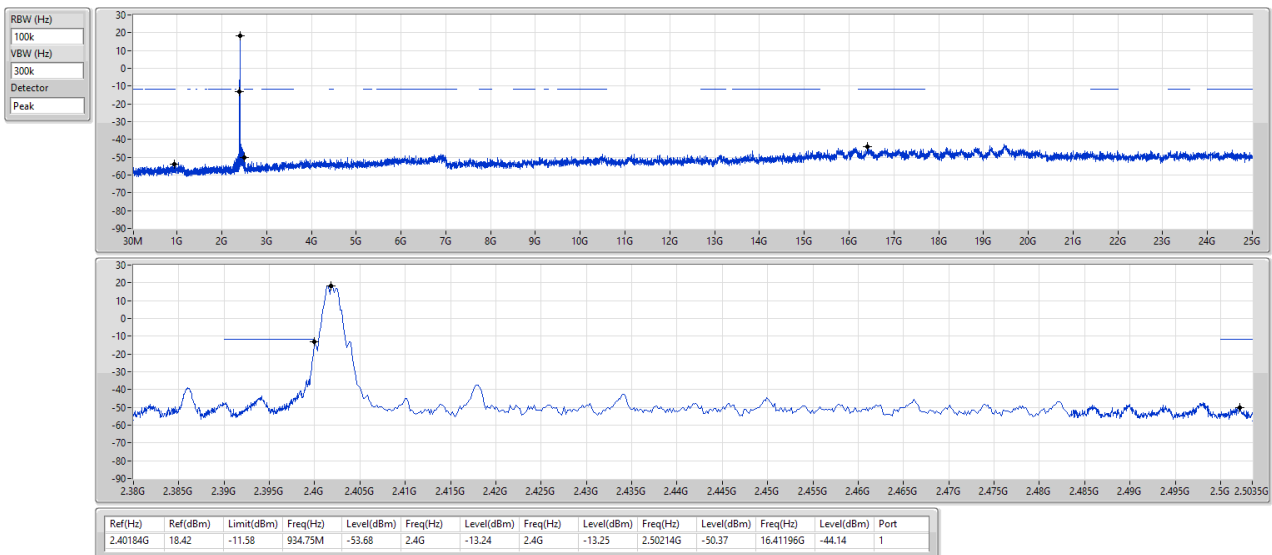
2480MHz



2.4-2.4835GHz_BT-LE(2Mbps)

CSEndB-DTS

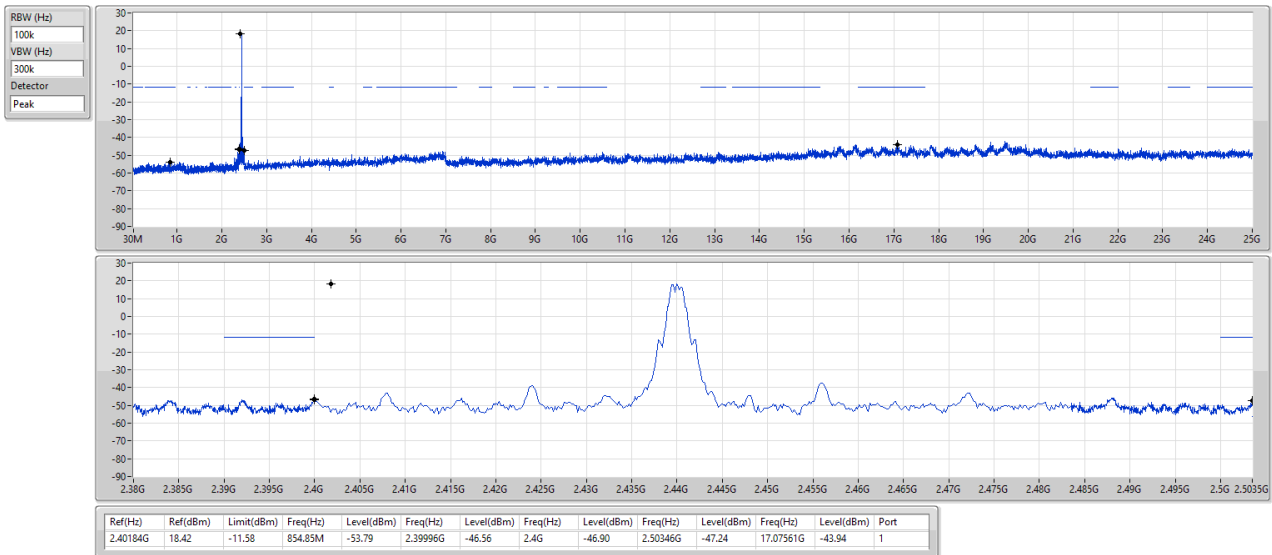
2402MHz



2.4-2.4835GHz_BT-LE(2Mbps)

CSEndB-DTS

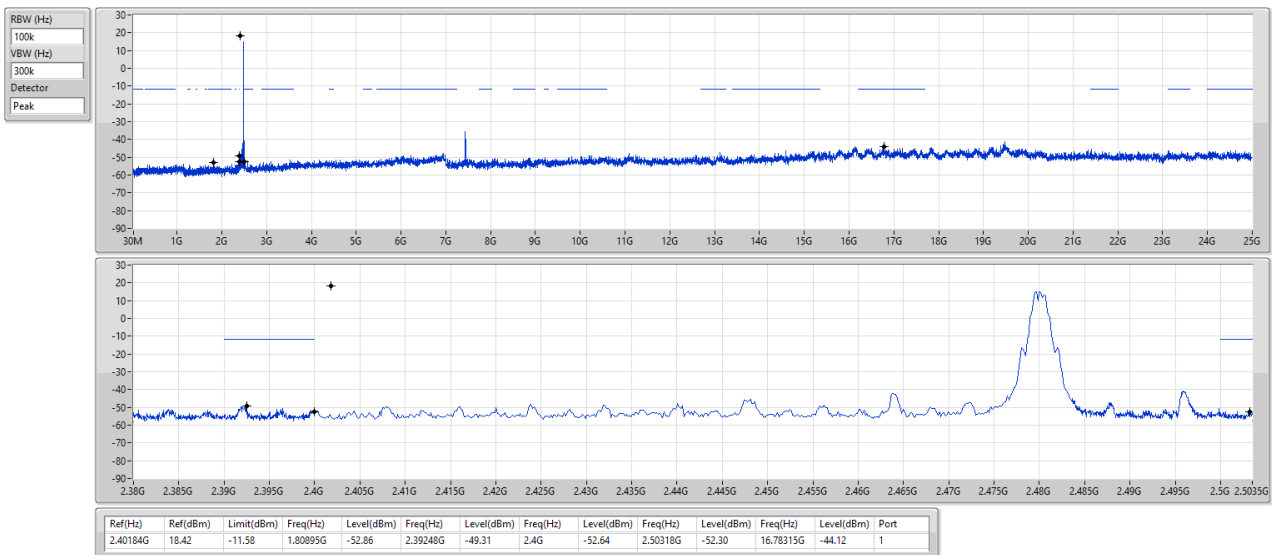
2440MHz



2.4-2.4835GHz_BT-LE(2Mbps)

CSEndB-DTS

2480MHz





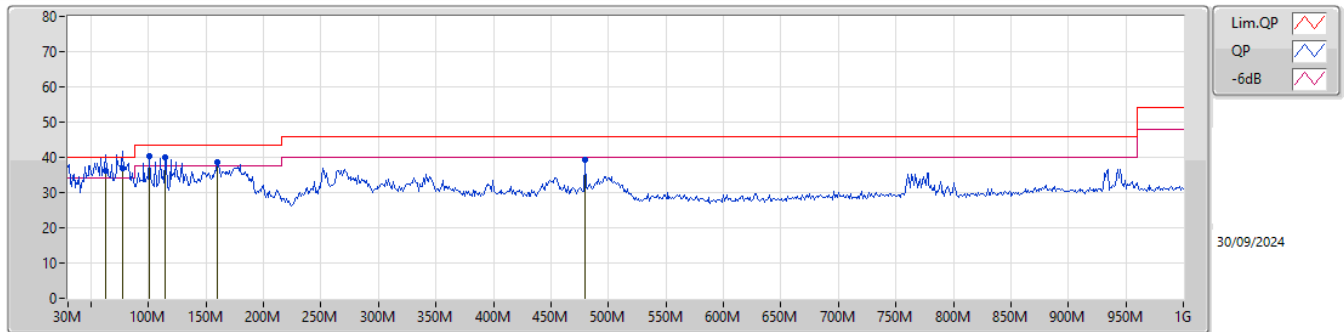
Radiated Emissions below 1GHz

Appendix F.1

Summary

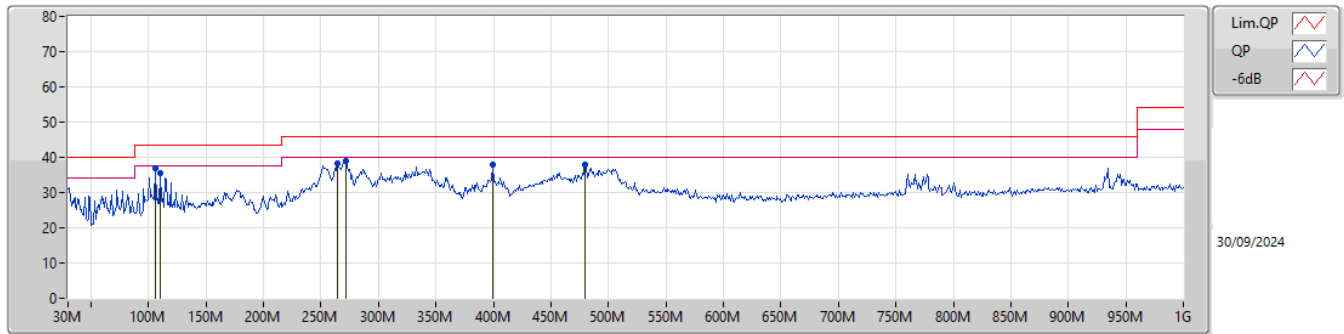
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	QP	77.53M	36.83	40.00	-3.17	Vertical

Mode 1



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB/m)	CL (dB)	PA (dB)		
QP	62.98M	36.18	40.00	-3.82	-17.79	3	Vertical	359	1.00	-	53.97	12.57	1.32	31.68		
QP	77.53M	36.83	40.00	-3.17	-17.31	3	Vertical	80	1.00	"Worst"	54.14	12.94	1.47	31.72		
PK	100.81M	40.19	43.50	-3.31	-13.16	3	Vertical	14	1.00	-	53.35	16.92	1.66	31.74		
PK	114.39M	39.92	43.50	-3.58	-12.00	3	Vertical	216	1.00	-	51.92	17.98	1.77	31.75		
PK	159.98M	38.64	43.50	-4.86	-13.59	3	Vertical	360	1.00	-	52.23	16.05	2.12	31.76		
PK	480.08M	39.40	46.00	-6.60	-5.02	3	Vertical	219	1.00	-	44.42	23.15	3.91	32.08		

Mode 1



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB/m)	CL (dB)	PA (dB)		
PK	105.66M	36.89	43.50	-6.61	-12.77	3	Horizontal	0	1.50	"Worst"	49.66	17.27	1.70	31.74		
PK	110.51M	35.40	43.50	-8.10	-12.17	3	Horizontal	18	1.50	-	47.57	17.84	1.74	31.75		
PK	264.74M	38.29	46.00	-7.71	-9.84	3	Horizontal	206	1.25	-	48.13	19.18	2.81	31.83		
PK	271.53M	38.84	46.00	-7.16	-10.25	3	Horizontal	216	1.50	-	49.09	18.74	2.84	31.83		
PK	399.57M	38.07	46.00	-7.93	-6.97	3	Horizontal	157	1.00	-	45.04	21.49	3.53	31.99		
PK	480.08M	37.80	46.00	-8.20	-5.02	3	Horizontal	111	3.00	-	42.82	23.15	3.91	32.08		

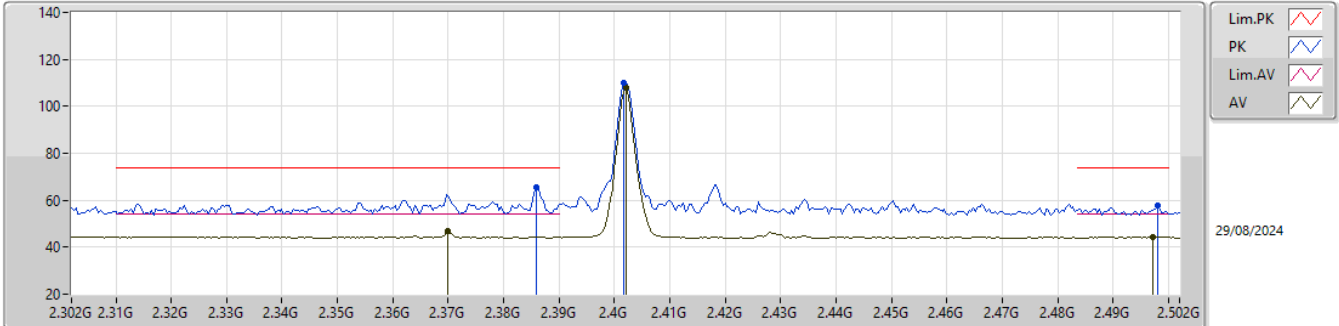


Summary

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	AV	2.4835G	53.46	54.00	-0.54	3	Horizontal	341	2.31	-

2.4-2.4835GHz_BT-LE(1Mbps)

2402MHz_TX

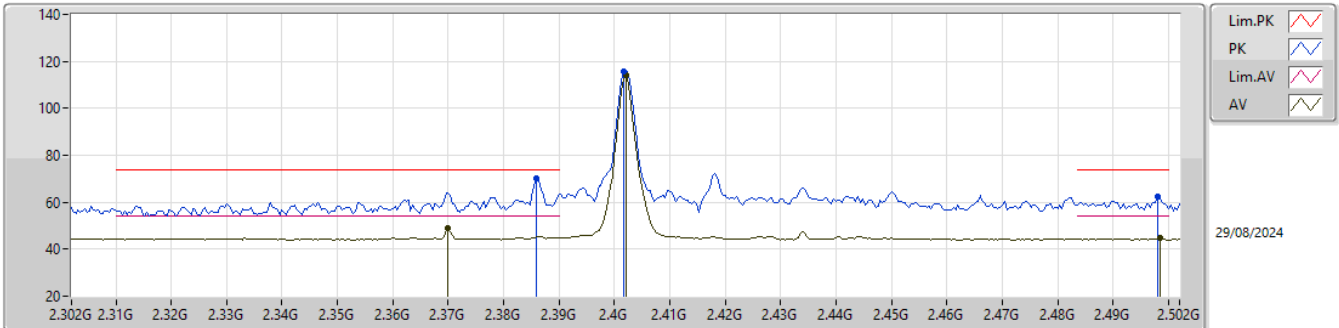


EUT_Y_1TX
Setting 20
04-D-P-5

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	2.386G	65.63	74.00	-8.37	34.89	3	Vertical	288	1.51	-	27.40	3.34	-			
AV	2.37G	46.96	54.00	-7.04	16.12	3	Vertical	288	1.51	-	27.50	3.34	-			
PK	2.4016G	109.75	Inf	-Inf	78.90	3	Vertical	288	1.51	-	27.50	3.35	-			
AV	2.402G	108.17	Inf	-Inf	77.32	3	Vertical	288	1.51	-	27.50	3.35	-			
PK	2.498G	57.83	74.00	-16.17	26.73	3	Vertical	288	1.51	-	27.70	3.40	-			
AV	2.4972G	44.44	54.00	-9.56	13.34	3	Vertical	288	1.51	-	27.70	3.40	-			

2.4-2.4835GHz_BT-LE(1Mbps)

2402MHz_TX

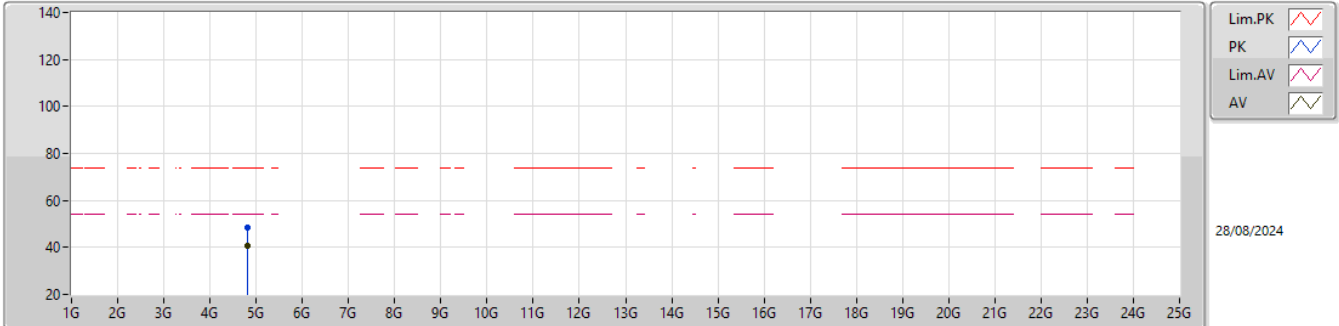


EUT_Y_1TX
Setting 20
04-D-P-5

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	2.386G	70.43	74.00	-3.57	39.69	3	Horizontal	322	2.12	-	27.40	3.34	-				
AV	2.37G	48.81	54.00	-5.19	17.97	3	Horizontal	322	2.12	-	27.50	3.34	-				
PK	2.4016G	115.85	Inf	-Inf	85.00	3	Horizontal	322	2.12	-	27.50	3.35	-				
AV	2.402G	114.26	Inf	-Inf	83.41	3	Horizontal	322	2.12	-	27.50	3.35	-				
PK	2.498G	62.43	74.00	-11.57	31.33	3	Horizontal	322	2.12	-	27.70	3.40	-				
AV	2.4984G	44.57	54.00	-9.43	13.47	3	Horizontal	322	2.12	-	27.70	3.40	-				

2.4-2.4835GHz_BT-LE(1Mbps)

2402MHz_TX

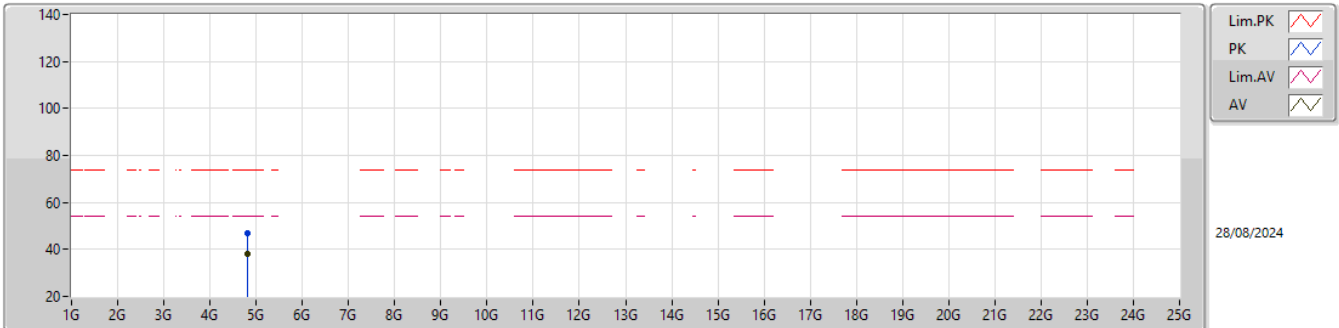


EUT_Y_1TX
Setting 20
04-D-P-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA			
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)			
PK	4.80351G	48.59	74.00	-25.41	54.57	3	Vertical	279	1.80	-	32.31	5.65	43.94			
AV	4.80364G	40.74	54.00	-13.26	46.72	3	Vertical	279	1.80	-	32.31	5.65	43.94			

2.4-2.4835GHz_BT-LE(1Mbps)

2402MHz_TX

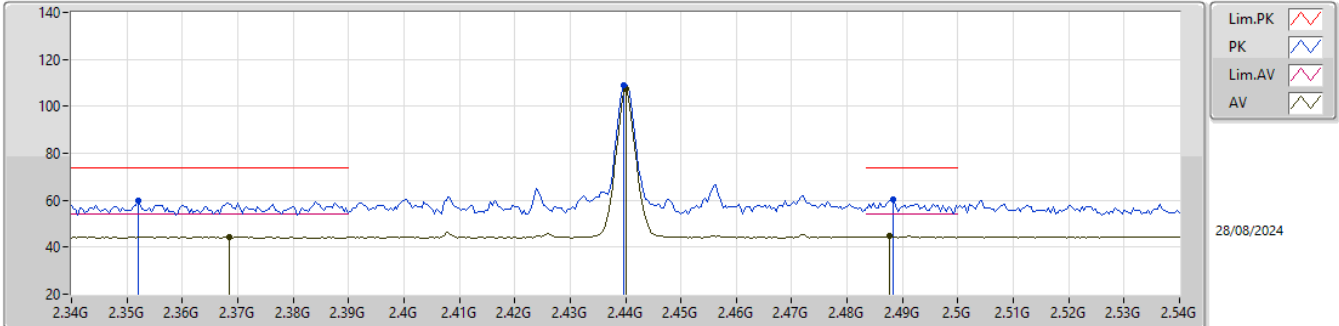


EUT_V_1TX
Setting 20
04-D-P-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA			
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)			
PK	4.80459G	46.99	74.00	-27.01	52.97	3	Horizontal	351	1.41	-	32.31	5.65	43.94			
AV	4.80357G	37.89	54.00	-16.11	43.87	3	Horizontal	351	1.41	-	32.31	5.65	43.94			

2.4-2.4835GHz_BT-LE(1Mbps)

2440MHz_TX

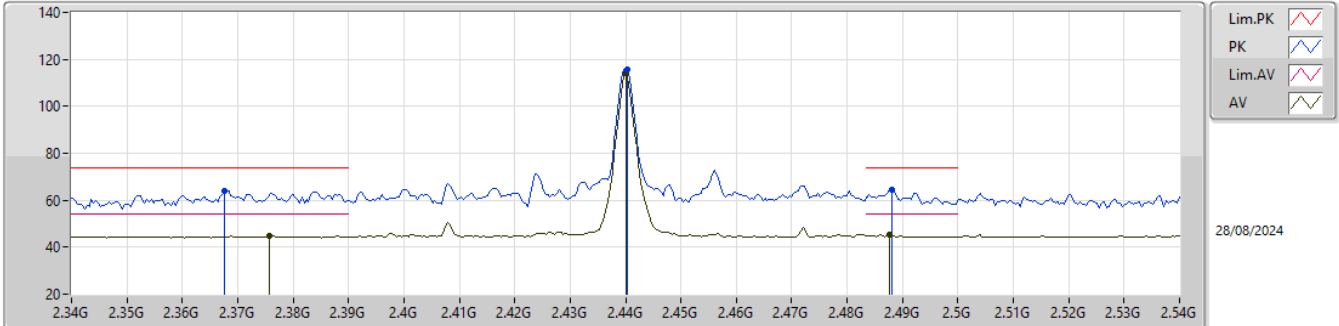


EUT_Y_1TX
Setting 20
04-D-P-5

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	2.352G	59.57	74.00	-14.43	28.84	3	Vertical	206	1.73	-	27.40	3.33	-			
AV	2.3684G	44.32	54.00	-9.68	13.50	3	Vertical	206	1.73	-	27.48	3.34	-			
PK	2.4396G	109.02	Inf	-Inf	78.05	3	Vertical	206	1.73	-	27.60	3.37	-			
AV	2.44G	107.44	Inf	-Inf	76.47	3	Vertical	206	1.73	-	27.60	3.37	-			
PK	2.4884G	60.55	74.00	-13.45	29.47	3	Vertical	206	1.73	-	27.68	3.40	-			
AV	2.4876G	44.57	54.00	-9.43	13.49	3	Vertical	206	1.73	-	27.68	3.40	-			

2.4-2.4835GHz_BT-LE(1Mbps)

2440MHz_TX

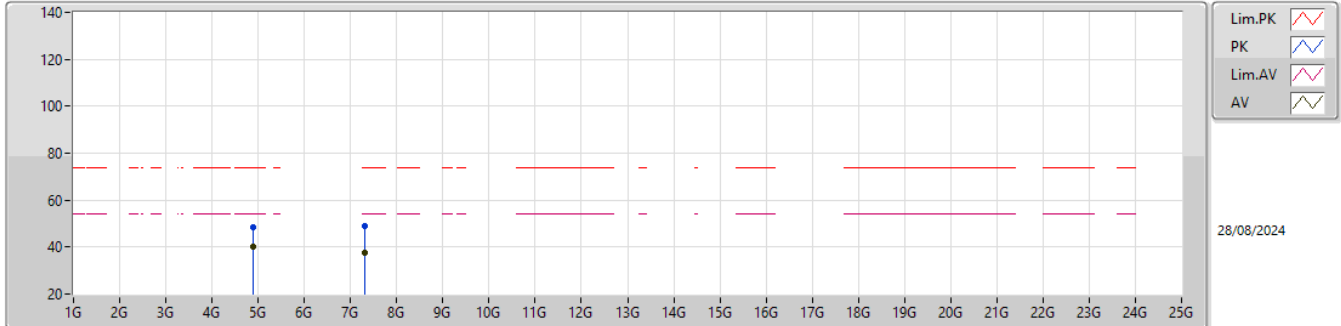


EUT_Y_1TX
Setting 20
04-D-P-5

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	2.3676G	63.86	74.00	-10.14	33.04	3	Horizontal	328	1.65	-	27.48	3.34	-			
AV	2.3756G	44.99	54.00	-9.01	14.21	3	Horizontal	328	1.65	-	27.44	3.34	-			
PK	2.4404G	115.55	Inf	-Inf	84.58	3	Horizontal	328	1.65	-	27.60	3.37	-			
AV	2.44G	113.95	Inf	-Inf	82.98	3	Horizontal	328	1.65	-	27.60	3.37	-			
PK	2.488G	64.73	74.00	-9.27	33.65	3	Horizontal	328	1.65	-	27.68	3.40	-			
AV	2.4876G	45.26	54.00	-8.74	14.18	3	Horizontal	328	1.65	-	27.68	3.40	-			

2.4-2.4835GHz_BT-LE(1Mbps)

2440MHz_TX

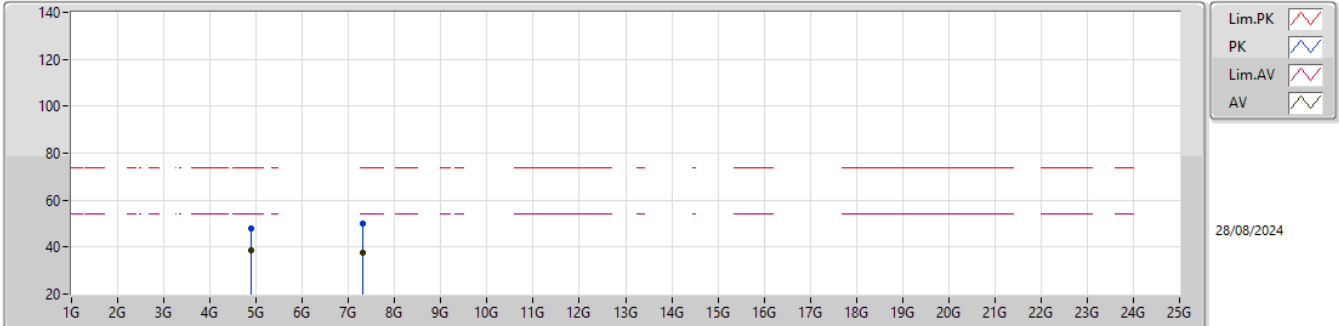


EUT_Y_1TX
Setting 20
04-D-P-5

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	4.8795G	48.66	74.00	-25.34	54.34	3	Vertical	310	1.30	-	32.52	5.72	43.92			
AV	4.87954G	40.37	54.00	-13.63	46.05	3	Vertical	310	1.30	-	32.52	5.72	43.92			
PK	7.32105G	49.18	74.00	-24.82	47.63	3	Vertical	53	2.70	-	37.20	7.13	42.78			
AV	7.3177G	37.34	54.00	-16.66	35.79	3	Vertical	53	2.70	-	37.20	7.12	42.77			

2.4-2.4835GHz_BT-LE(1Mbps)

2440MHz_TX

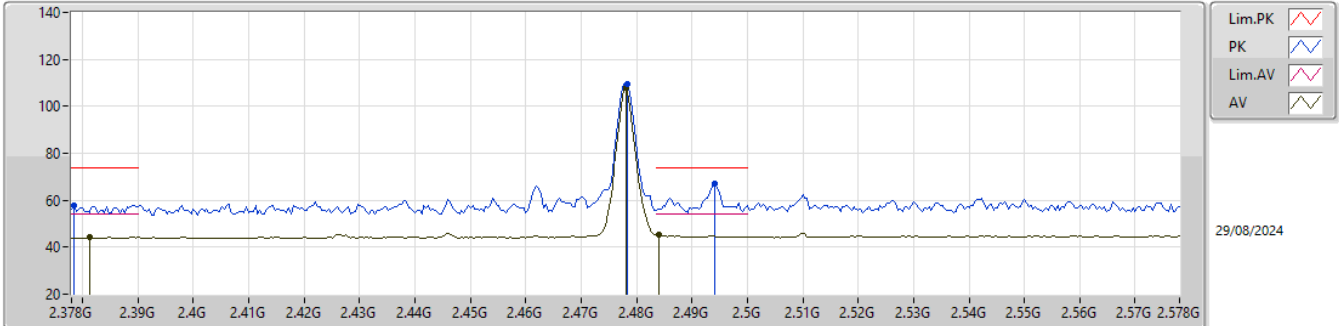


EUT_Y_1TX
Setting 20
04-D-P-5

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	4.87952G	47.99	74.00	-26.01	53.67	3	Horizontal	358	1.29	-	32.52	5.72	43.92			
AV	4.87959G	38.68	54.00	-15.32	44.36	3	Horizontal	358	1.29	-	32.52	5.72	43.92			
PK	7.31805G	49.90	74.00	-24.10	48.35	3	Horizontal	298	2.65	-	37.20	7.12	42.77			
AV	7.31847G	37.40	54.00	-16.60	35.84	3	Horizontal	298	2.65	-	37.20	7.13	42.77			

2.4-2.4835GHz_BT-LE(1Mbps)

2478MHz_TX

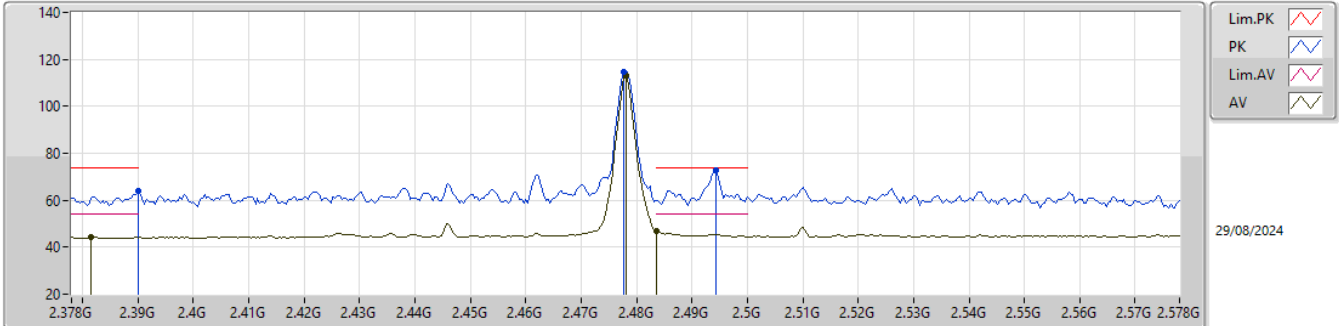


EUT_Y_1TX
Setting 20
04-D-P-5

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	2.3784G	57.88	74.00	-16.12	27.12	3	Vertical	279	2.04	-	27.42	3.34	-			
AV	2.3812G	44.16	54.00	-9.84	13.42	3	Vertical	279	2.04	-	27.40	3.34	-			
PK	2.4784G	109.63	Inf	-Inf	78.64	3	Vertical	279	2.04	-	27.60	3.39	-			
AV	2.478G	108.06	Inf	-Inf	77.07	3	Vertical	279	2.04	-	27.60	3.39	-			
PK	2.494G	66.92	74.00	-7.08	35.82	3	Vertical	279	2.04	-	27.70	3.40	-			
AV	2.484G	45.24	54.00	-8.76	14.20	3	Vertical	279	2.04	-	27.64	3.40	-			

2.4-2.4835GHz_BT-LE(1Mbps)

2478MHz_TX

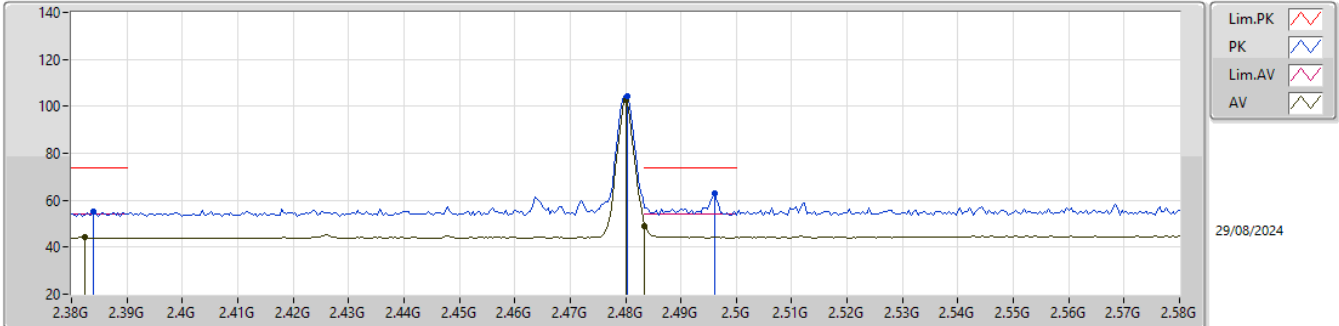


EUT_Y_1TX
Setting 20
04-D-P-5

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	63.79	74.00	-10.21	33.04	3	Horizontal	328	1.34	-	27.40	3.35	-			
AV	2.3816G	44.29	54.00	-9.71	13.55	3	Horizontal	328	1.34	-	27.40	3.34	-			
PK	2.4776G	114.86	Inf	-Inf	83.87	3	Horizontal	328	1.34	-	27.60	3.39	-			
AV	2.478G	113.30	Inf	-Inf	82.31	3	Horizontal	328	1.34	-	27.60	3.39	-			
PK	2.4944G	72.64	74.00	-1.36	41.54	3	Horizontal	328	1.34	-	27.70	3.40	-			
AV	2.4835G	46.99	54.00	-7.01	15.95	3	Horizontal	328	1.34	-	27.64	3.40	-			

2.4-2.4835GHz_BT-LE(1Mbps)

2480MHz_TX

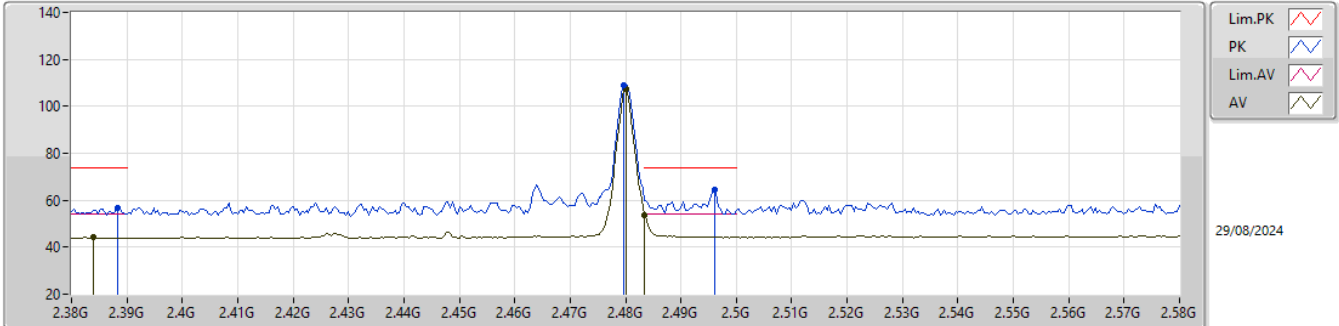


EUT Y_1TX
Setting 14
04-D-P-5

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	2.384G	55.00	74.00	-19.00	24.26	3	Vertical	277	2.03	-	27.40	3.34	-			
AV	2.3824G	44.23	54.00	-9.77	13.49	3	Vertical	277	2.03	-	27.40	3.34	-			
PK	2.4804G	104.25	Inf	-Inf	73.26	3	Vertical	277	2.03	-	27.60	3.39	-			
AV	2.48G	102.64	Inf	-Inf	71.65	3	Vertical	277	2.03	-	27.60	3.39	-			
PK	2.496G	63.16	74.00	-10.84	32.06	3	Vertical	277	2.03	-	27.70	3.40	-			
AV	2.4835G	49.07	54.00	-4.93	18.03	3	Vertical	277	2.03	-	27.64	3.40	-			

2.4-2.4835GHz_BT-LE(1Mbps)

2480MHz_TX

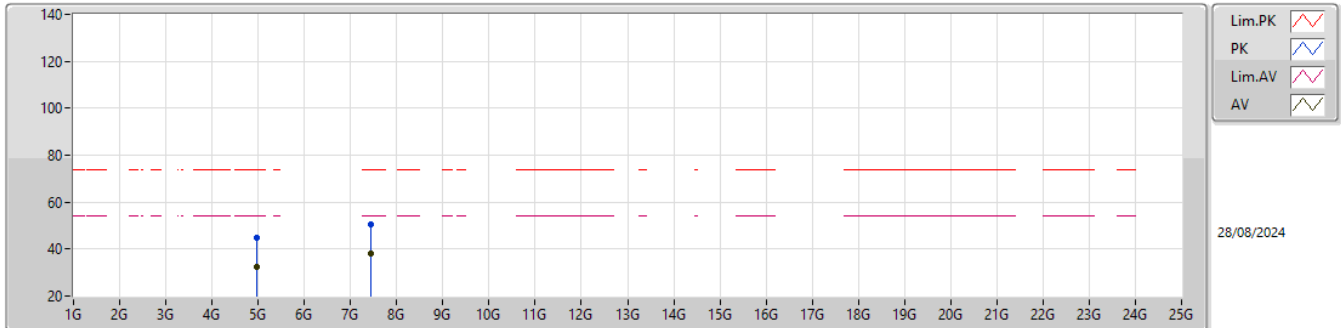


EUT_Y_1TX
Setting 14
04-D-P-5

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	2.3884G	56.66	74.00	-17.34	25.91	3	Horizontal	354	2.29	-	27.40	3.35	-			
AV	2.384G	44.12	54.00	-9.88	13.38	3	Horizontal	354	2.29	-	27.40	3.34	-			
PK	2.4796G	109.13	Inf	-Inf	78.14	3	Horizontal	354	2.29	-	27.60	3.39	-			
AV	2.48G	107.61	Inf	-Inf	76.62	3	Horizontal	354	2.29	-	27.60	3.39	-			
PK	2.496G	64.61	74.00	-9.39	33.51	3	Horizontal	354	2.29	-	27.70	3.40	-			
AV	2.4835G	53.45	54.00	-0.55	22.41	3	Horizontal	354	2.29	-	27.64	3.40	-			

2.4-2.4835GHz_BT-LE(1Mbps)

2480MHz_TX

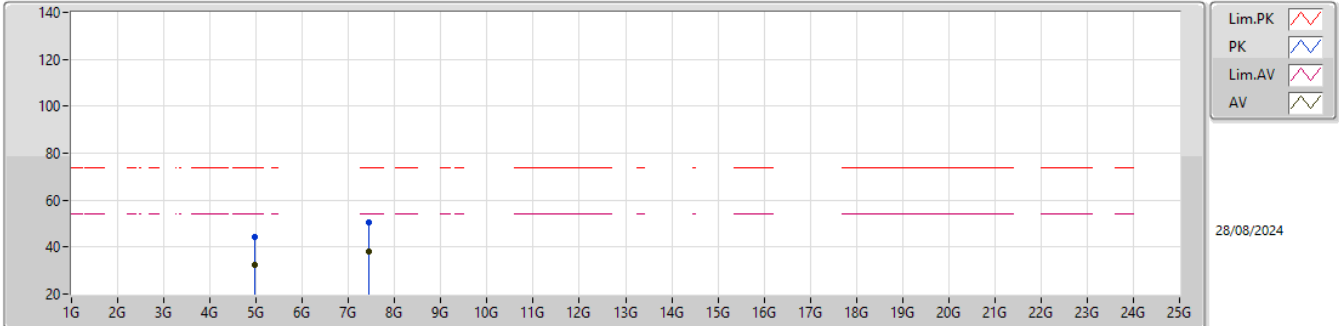


EUT_Y_1TX
Setting 14
04-D-P-5

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	4.96178G	44.72	74.00	-29.28	50.12	3	Vertical	248	1.80	-	32.70	5.80	43.90			
AV	4.95946G	32.43	54.00	-21.57	37.84	3	Vertical	248	1.80	-	32.70	5.79	43.90			
PK	7.43807G	50.38	74.00	-23.62	48.92	3	Vertical	5	1.89	-	37.20	7.21	42.95			
AV	7.44012G	38.16	54.00	-15.84	36.70	3	Vertical	5	1.89	-	37.20	7.21	42.95			

2.4-2.4835GHz_BT-LE(1Mbps)

2480MHz_TX

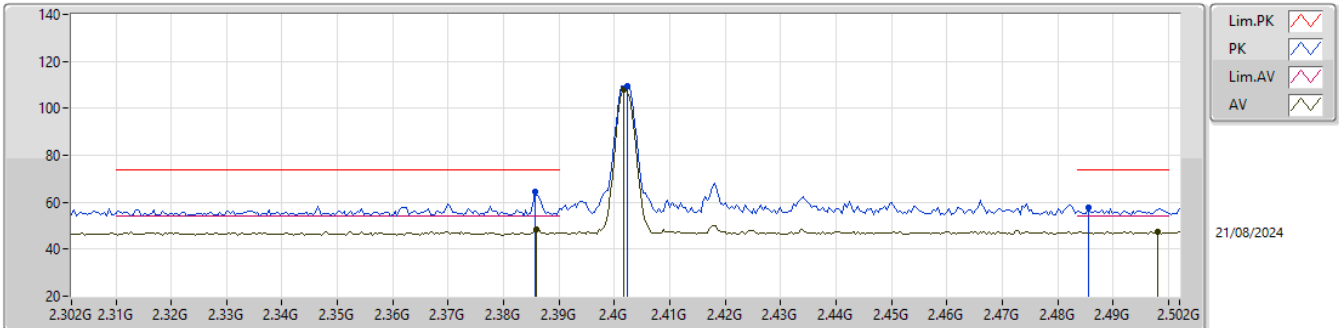


EUT_Y_1TX
Setting 14
04-D-P-5

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	4.96242G	44.39	74.00	-29.61	49.79	3	Horizontal	305	1.47	-	32.70	5.80	43.90			
AV	4.95974G	32.41	54.00	-21.59	37.82	3	Horizontal	305	1.47	-	32.70	5.79	43.90			
PK	7.43794G	50.28	74.00	-23.72	48.82	3	Horizontal	175	2.80	-	37.20	7.21	42.95			
AV	7.4377G	38.17	54.00	-15.83	36.71	3	Horizontal	175	2.80	-	37.20	7.21	42.95			

2.4-2.4835GHz_BT-LE(2Mbps)

2402MHz_TX

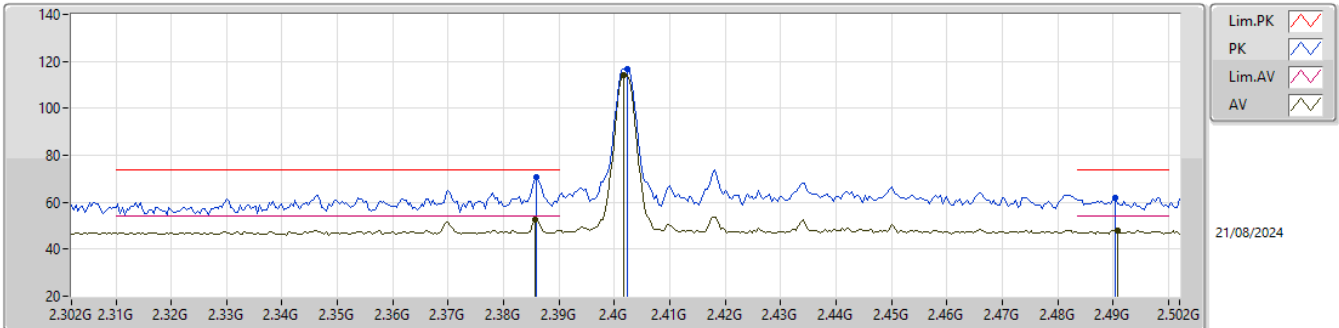


EUT_Y_1TX
Setting 20
04-V-G-5

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	2.3856G	64.41	74.00	-9.59	33.67	3	Vertical	197	2.57	-	27.40	3.34	-			
AV	2.386G	48.50	54.00	-5.50	17.76	3	Vertical	197	2.57	-	27.40	3.34	-			
PK	2.4024G	109.67	Inf	-Inf	78.82	3	Vertical	197	2.57	-	27.50	3.35	-			
AV	2.4016G	107.68	Inf	-Inf	76.83	3	Vertical	197	2.57	-	27.50	3.35	-			
PK	2.4856G	57.64	74.00	-16.36	26.58	3	Vertical	197	2.57	-	27.66	3.40	-			
AV	2.498G	47.53	54.00	-6.47	16.43	3	Vertical	197	2.57	-	27.70	3.40	-			

2.4-2.4835GHz_BT-LE(2Mbps)

2402MHz_TX

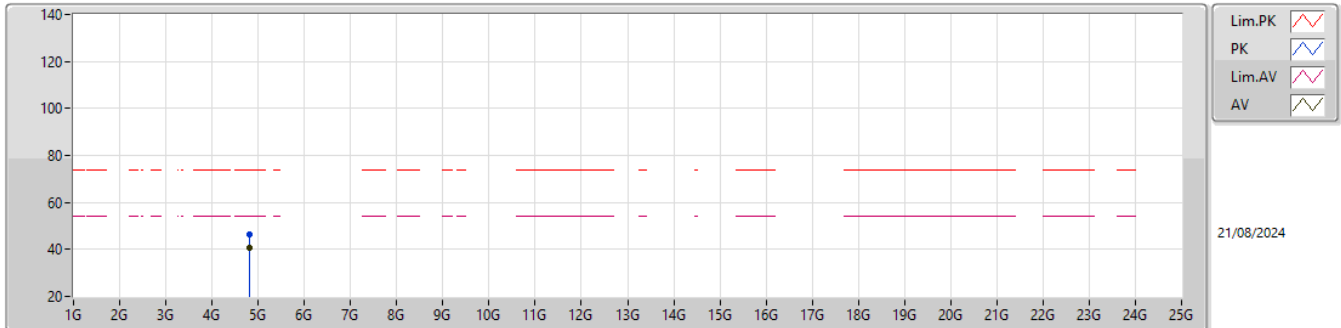


EUT_Y_1TX
Setting 20
04-V-G-5

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	2.386G	70.56	74.00	-3.44	39.82	3	Horizontal	342	2.13	-	27.40	3.34	-			
AV	2.3856G	52.51	54.00	-1.49	21.77	3	Horizontal	342	2.13	-	27.40	3.34	-			
PK	2.4024G	116.53	Inf	-Inf	85.68	3	Horizontal	342	2.13	-	27.50	3.35	-			
AV	2.4016G	114.38	Inf	-Inf	83.53	3	Horizontal	342	2.13	-	27.50	3.35	-			
PK	2.4904G	61.90	74.00	-12.10	30.80	3	Horizontal	342	2.13	-	27.70	3.40	-			
AV	2.4908G	47.87	54.00	-6.13	16.77	3	Horizontal	342	2.13	-	27.70	3.40	-			

2.4-2.4835GHz_BT-LE(2Mbps)

2402MHz_TX

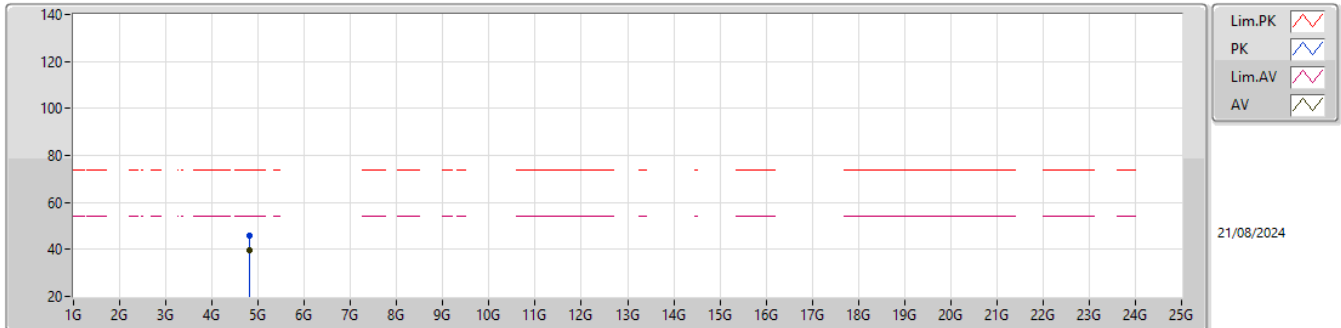


EUT_V_1TX
Setting 20
04-V-G-5

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	4.80318G	46.61	74.00	-27.39	52.59	3	Vertical	285	1.60	-	32.31	5.65	43.94			
AV	4.80298G	40.44	54.00	-13.56	46.42	3	Vertical	285	1.60	-	32.31	5.65	43.94			

2.4-2.4835GHz_BT-LE(2Mbps)

2402MHz_TX

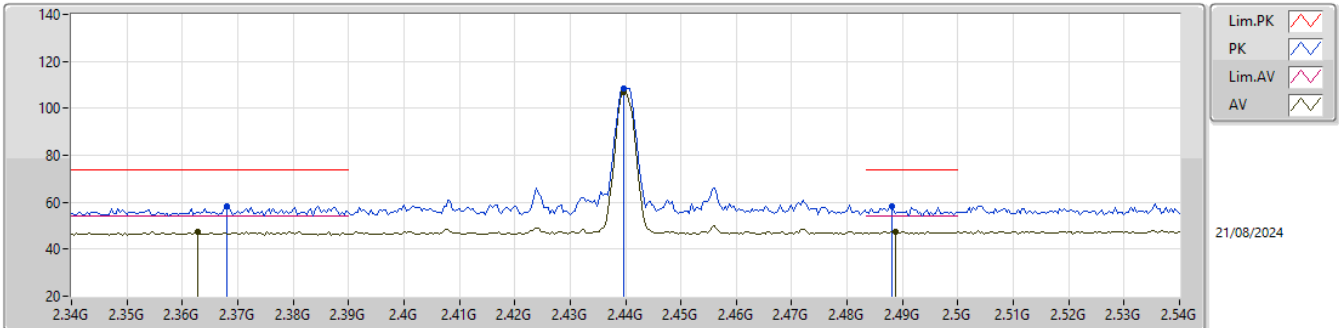


EUT_V_1TX
Setting 20
04-V-G-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA			
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)			
PK	4.80398G	46.03	74.00	-27.97	52.01	3	Horizontal	360	1.24	-	32.31	5.65	43.94			
AV	4.80302G	39.70	54.00	-14.30	45.68	3	Horizontal	360	1.24	-	32.31	5.65	43.94			

2.4-2.4835GHz_BT-LE(2Mbps)

2440MHz_TX

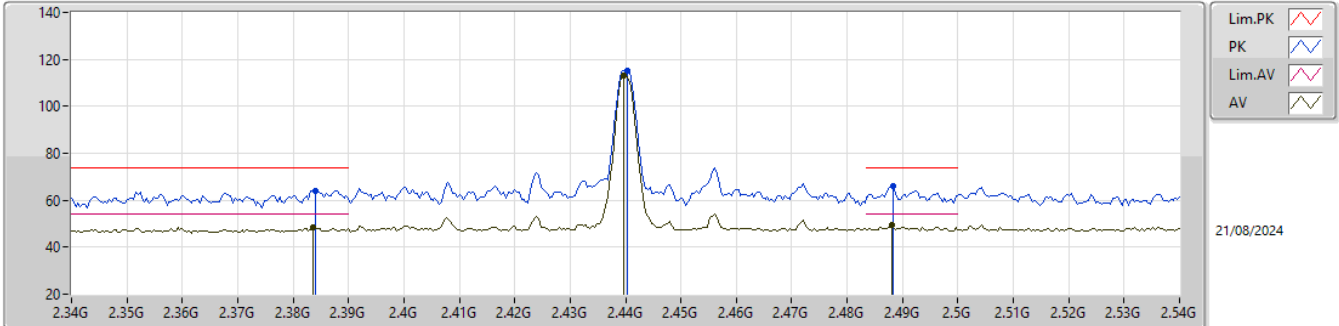


EUT_Y_1TX
Setting 20
04-V-G-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.368G	58.49	74.00	-15.51	27.67	3	Vertical	188	2.30	-	27.48	3.34	-			
AV	2.3628G	47.59	54.00	-6.41	16.82	3	Vertical	188	2.30	-	27.43	3.34	-			
PK	2.4396G	108.51	Inf	-Inf	77.54	3	Vertical	188	2.30	-	27.60	3.37	-			
AV	2.4396G	106.72	Inf	-Inf	75.75	3	Vertical	188	2.30	-	27.60	3.37	-			
PK	2.488G	58.42	74.00	-15.58	27.34	3	Vertical	188	2.30	-	27.68	3.40	-			
AV	2.4888G	47.39	54.00	-6.61	16.30	3	Vertical	188	2.30	-	27.69	3.40	-			

2.4-2.4835GHz_BT-LE(2Mbps)

2440MHz_TX

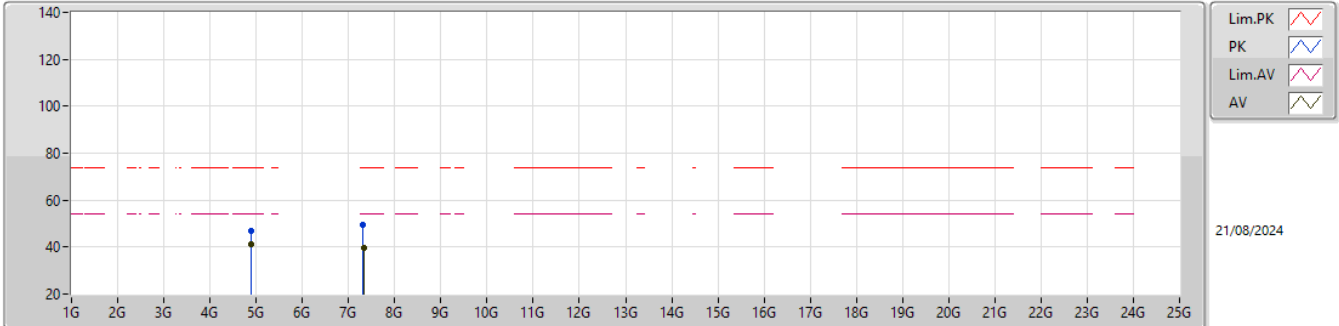


EUT_Y_1TX
Setting 20
04-V-G-5

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	2.384G	64.19	74.00	-9.81	33.45	3	Horizontal	339	1.23	-	27.40	3.34	-			
AV	2.3836G	48.59	54.00	-5.41	17.85	3	Horizontal	339	1.23	-	27.40	3.34	-			
PK	2.4404G	115.15	Inf	-Inf	84.18	3	Horizontal	339	1.23	-	27.60	3.37	-			
AV	2.4396G	113.15	Inf	-Inf	82.18	3	Horizontal	339	1.23	-	27.60	3.37	-			
PK	2.4884G	66.23	74.00	-7.77	35.15	3	Horizontal	339	1.23	-	27.68	3.40	-			
AV	2.488G	49.57	54.00	-4.43	18.49	3	Horizontal	339	1.23	-	27.68	3.40	-			

2.4-2.4835GHz_BT-LE(2Mbps)

2440MHz_TX

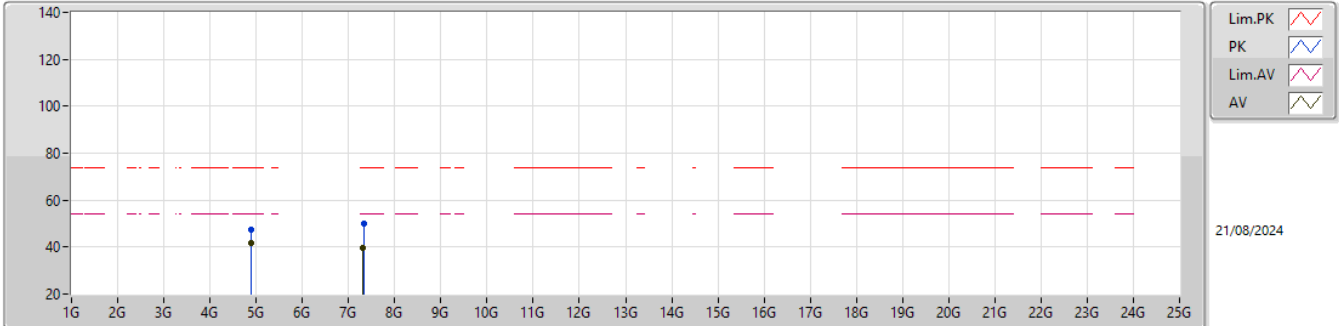


EUT_Y_1TX
Setting 20
04-V-G-5

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	4.879G	47.02	74.00	-26.98	52.70	3	Vertical	293	1.80	-	32.52	5.72	43.92			
AV	4.87896G	40.99	54.00	-13.01	46.67	3	Vertical	293	1.80	-	32.52	5.72	43.92			
PK	7.31674G	49.64	74.00	-24.36	48.09	3	Vertical	245	2.84	-	37.20	7.12	42.77			
AV	7.32232G	39.70	54.00	-14.30	38.15	3	Vertical	245	2.84	-	37.20	7.13	42.78			

2.4-2.4835GHz_BT-LE(2Mbps)

2440MHz_TX

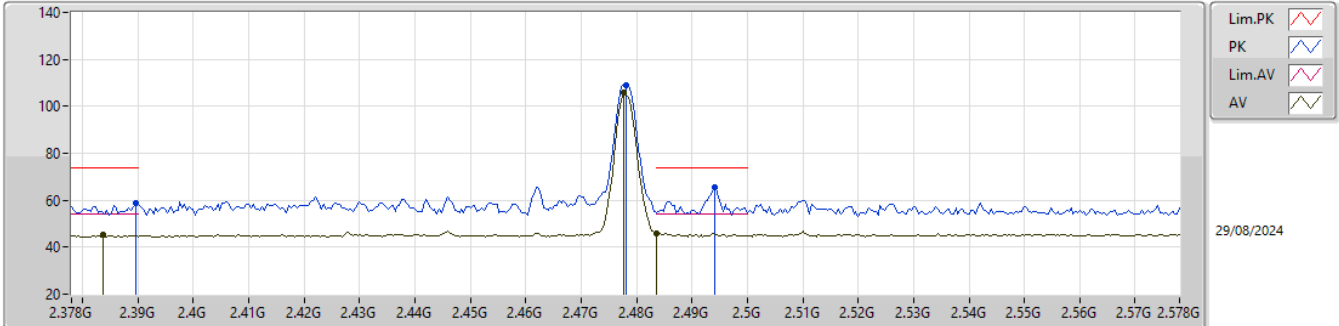


EUT_Y_1TX
Setting 20
04-V-G-5

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	4.879G	47.24	74.00	-26.76	52.92	3	Horizontal	10	1.05	-	32.52	5.72	43.92			
AV	4.87908G	41.53	54.00	-12.47	47.21	3	Horizontal	10	1.05	-	32.52	5.72	43.92			
PK	7.32208G	50.22	74.00	-23.78	48.67	3	Horizontal	8	1.80	-	37.20	7.13	42.78			
AV	7.31964G	39.62	54.00	-14.38	38.07	3	Horizontal	8	1.80	-	37.20	7.13	42.78			

2.4-2.4835GHz_BT-LE(2Mbps)

2478MHz_TX

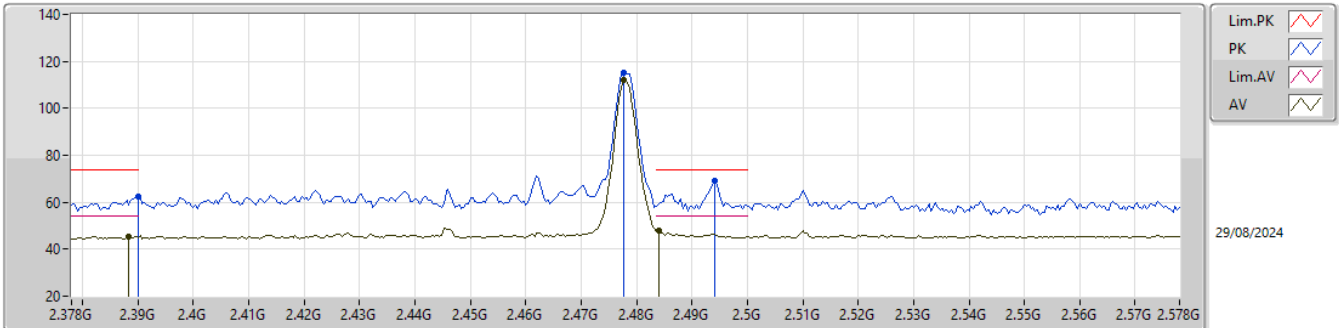


EUT Y_1TX
Setting 20
04-D-P-5

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	2.3896G	59.01	74.00	-14.99	28.26	3	Vertical	205	1.95	-	27.40	3.35	-			
AV	2.3836G	45.32	54.00	-8.68	14.58	3	Vertical	205	1.95	-	27.40	3.34	-			
PK	2.478G	108.77	Inf	-Inf	77.78	3	Vertical	205	1.95	-	27.60	3.39	-			
AV	2.4776G	105.67	Inf	-Inf	74.68	3	Vertical	205	1.95	-	27.60	3.39	-			
PK	2.494G	65.26	74.00	-8.74	34.16	3	Vertical	205	1.95	-	27.70	3.40	-			
AV	2.4835G	46.02	54.00	-7.98	14.98	3	Vertical	205	1.95	-	27.64	3.40	-			

2.4-2.4835GHz_BT-LE(2Mbps)

2478MHz_TX

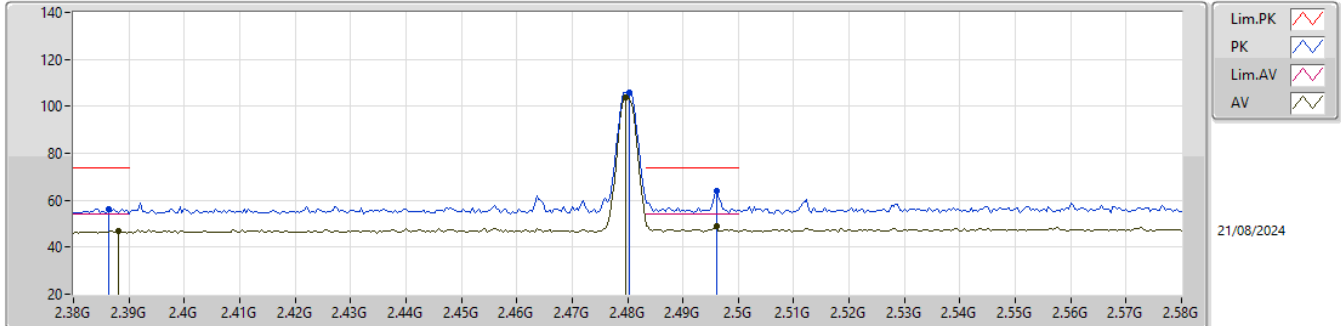


EUT_Y_1TX
Setting 20
04-D-P-5

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	62.35	74.00	-11.65	31.60	3	Horizontal	340	2.33	-	27.40	3.35	-			
AV	2.3884G	45.54	54.00	-8.46	14.79	3	Horizontal	340	2.33	-	27.40	3.35	-			
PK	2.4776G	114.95	Inf	-Inf	83.96	3	Horizontal	340	2.33	-	27.60	3.39	-			
AV	2.4776G	111.95	Inf	-Inf	80.96	3	Horizontal	340	2.33	-	27.60	3.39	-			
PK	2.494G	68.98	74.00	-5.02	37.88	3	Horizontal	340	2.33	-	27.70	3.40	-			
AV	2.484G	48.14	54.00	-5.86	17.10	3	Horizontal	340	2.33	-	27.64	3.40	-			

2.4-2.4835GHz_BT-LE(2Mbps)

2480MHz_TX

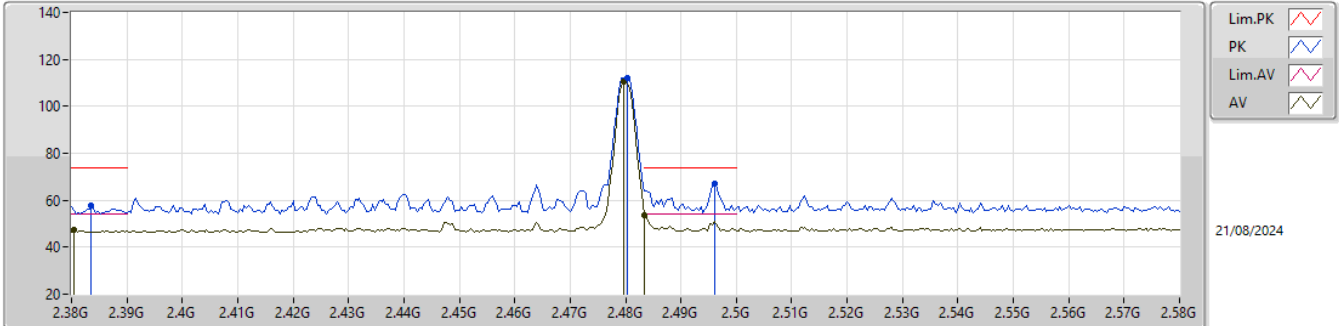


EUT_Y_1TX
Setting 17
04-V-G-5

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	2.3864G	56.36	74.00	-17.64	25.62	3	Vertical	289	1.83	-	27.40	3.34	-			
AV	2.388G	46.89	54.00	-7.11	16.14	3	Vertical	289	1.83	-	27.40	3.35	-			
PK	2.4804G	105.88	Inf	-Inf	74.89	3	Vertical	289	1.83	-	27.60	3.39	-			
AV	2.4796G	104.01	Inf	-Inf	73.02	3	Vertical	289	1.83	-	27.60	3.39	-			
PK	2.496G	63.76	74.00	-10.24	32.66	3	Vertical	289	1.83	-	27.70	3.40	-			
AV	2.496G	49.16	54.00	-4.84	18.06	3	Vertical	289	1.83	-	27.70	3.40	-			

2.4-2.4835GHz_BT-LE(2Mbps)

2480MHz_TX

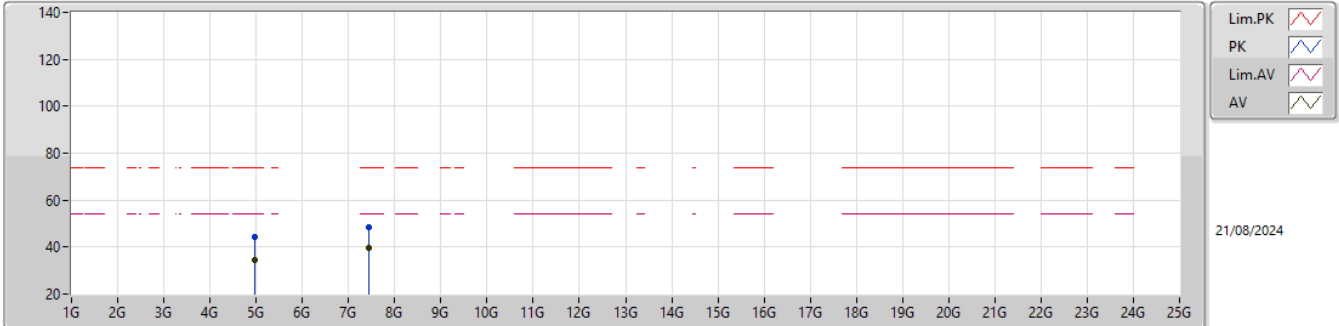


EUT_Y_1TX
Setting 17
04-V-G-5

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	2.3836G	57.94	74.00	-16.06	27.20	3	Horizontal	341	2.31	-	27.40	3.34	-			
AV	2.3804G	47.30	54.00	-6.70	16.56	3	Horizontal	341	2.31	-	27.40	3.34	-			
PK	2.4804G	112.30	Inf	-Inf	81.31	3	Horizontal	341	2.31	-	27.60	3.39	-			
AV	2.4796G	110.43	Inf	-Inf	79.44	3	Horizontal	341	2.31	-	27.60	3.39	-			
PK	2.496G	66.82	74.00	-7.18	35.72	3	Horizontal	341	2.31	-	27.70	3.40	-			
AV	2.4835G	53.46	54.00	-0.54	22.42	3	Horizontal	341	2.31	-	27.64	3.40	-			

2.4-2.4835GHz_BT-LE(2Mbps)

2480MHz_TX

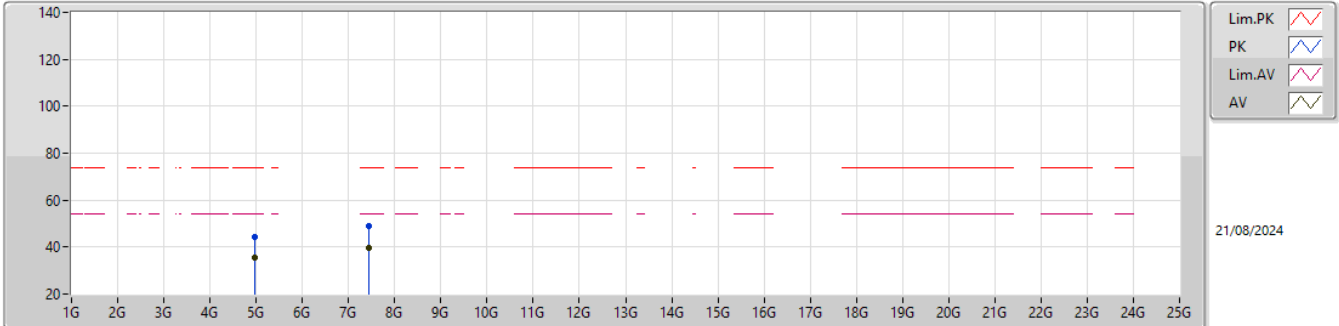


EUT_Y_1TX
Setting 17
04-V-G-5

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	4.96728G	44.36	74.00	-29.64	49.76	3	Vertical	44	1.80	-	32.70	5.80	43.90			
AV	4.96204G	34.70	54.00	-19.30	40.10	3	Vertical	44	1.80	-	32.70	5.80	43.90			
PK	7.43176G	48.50	74.00	-25.50	47.04	3	Vertical	54	1.00	-	37.20	7.20	42.94			
AV	7.44524G	39.59	54.00	-14.41	38.13	3	Vertical	54	1.00	-	37.20	7.22	42.96			

2.4-2.4835GHz_BT-LE(2Mbps)

2480MHz_TX



EUT_Y_1TX
Setting 17
04-V-G-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	4.96744G	44.12	74.00	-29.88	49.52	3	Horizontal	10	1.13	-	32.70	5.80	43.90			
AV	4.95936G	35.40	54.00	-18.60	40.81	3	Horizontal	10	1.13	-	32.70	5.79	43.90			
PK	7.43548G	48.86	74.00	-25.14	47.40	3	Horizontal	73	2.80	-	37.20	7.21	42.95			
AV	7.4324G	39.49	54.00	-14.51	38.03	3	Horizontal	73	2.80	-	37.20	7.20	42.94			