Testing Laboratory 3787

RADIO TEST REPORT

FCC ID	:	2AYRA-08449
Equipment	:	Linksys Velop Micro-Mesh 6
Brand Name	:	Linksys
Model Name	:	LN1200 v2, LN1210 v2, LN1215 v2
Applicant	:	Linksys USA, Inc. 121 Theory, Irvine, CA. 92617, USA
Standard	:	47 CFR FCC Part 15.247

The product was received on Jan. 02, 2024, and testing was started from Jan. 02, 2024 and completed on Feb. 21, 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
FR3D2301AE	01	Initial issue of report	Mar. 27, 2024

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/manufacturer 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 (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)
	2.4GHz	5GHz	Bluetooth					
1	1	1	-	GALTRONICS	02102140-08042C	PCB Antenna	U.FL	Note1
2	2	-	-	GALTRONICS	02036073-07315	Embedded Antenna	N/A	
3	-	2	-	GALTRONICS	02102142-08042C	PCB Antenna	U.FL	
4	-	-	1	GALTRONICS	02036073-07315	Embedded Antenna	N/A	

Note1:

Ant.	Antenna Gain (dBi)						
	WLAN 2.4GHz	WLAN 5GHz UNII 1	WLAN 5GHz UNII 2A	WLAN 5GHz UNII 2C	WLAN 5GHz UNII 3	WLAN 5GHz UNII 4	Bluetooth
1	1.91	2.88	2.97	3.29	3.29	3.29	-
2	2.50	-	-	-	-	-	-
3	-	3.63	3.63	3.12	3.44	3.44	-
4	-	-	-	-	-	-	3.53

Note 2: The above information was declared by manufacturer.

Note 3: Directional gain information

Type	Maximum Output Power	Power Spectral Density
Non-BF	Directional gain = Max.gain + array gain. For power measurements on IEEE 802.11 devices Array Gain = 0 dB (i.e., no array gain) for N ANT ≤ 4	$DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$
BF	$DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$	$DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$

Ex.

Directional Gain (NSS1) formula : $DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$

NSS1(g1,1) = $10^{G1/20}$; NSS1(g1,2)= $10^{G2/20}$; NSS1(g1,2)= $10^{G3/20}$; NSS1(g1,2)= $10^{G4/20}$

gj,k =(Nss1(g1,1) + Nss1(g1,2) + Nss1(g1,3) + Nss1(g1,4))^2

DG = 10 log[(Nss1(g1,1) + Nss1(g1,2) + Nss1(g1,3) + Nss1(g1,4))^2 / N_{ANT}] => 10 log[($10^{G1/20}$ + $10^{G2/20}$ + $10^{G3/20}$ + $10^{G4/20}$)^2 / N_{ANT}]

Where ;

2.4G G1= 1.91 dBi ;G2= 2.50 dBi ;

5G UNII-1 G1 = 2.88 dBi; G2 = 3.63 dBi;

5G UNII-2A G1 = 2.97 dBi; G2 = 3.63 dBi;

5G UNII-2C G1 = 3.29 dBi; G2 = 3.12 dBi;

5G UNII-3 G1 = 3.29 dBi; G2 = 3.44 dBi;

5G UNII-4 G1 = 3.29 dBi; G2 = 3.44 dBi;

2.4G DG = 5.22 dBi

5G UNII-1 DG = 6.27 dBi

5G UNII-2A DG = 6.32 dBi

5G UNII-2C DG = 6.22 dB

5G UNII-3 DG = 6.38 dBi

5G UNII-4 DG = 6.38 dBi

<For 2.4GHz function>

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

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

Port 1 and Port 2 could transmit/receive simultaneously.

<For 5GHz function>

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

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

Port 1 and Port 2 could transmit/receive simultaneously.

<For Bluetooth function> (1TX/1RX):

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

Port 1 could transmit/receive simultaneously.

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz)_1/T
BT-LE(1Mbps)	0.629	2.01	393.125u	3k
BT-LE(2Mbps)	0.334	4.76	209.375u	10k

Note:
- DC is Duty Cycle.
- DCF is Duty Cycle Factor.

1.1.4 EUT Operational Condition

EUT Power Type	From Power Adapter			
Function	☒	Point-to-multipoint	☐	Point-to-point
Test Software Version	QRCT V4.0.00192.0			
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

The model names in the following table are all refer to the identical product.

Model Name	Description
LN1200 v2	For retail
LN1210 v2	For e-commerce
LN1215 v2	For Warehouse

Note 1: From the above models, model: LN1200 v2 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	Description
EUT 1	With Conductive Fabric
EUT 2	Without Conductive Fabric

Note 1: From the above EUTs, EUT 1 was selected as representative EUT for the test and its data was recorded in this report.
Note 2: The above information was declared by manufacturer.

1.1.7 Table for EUT Supports Function

Function
AP
Mesh

Note 1: For above table list, only AP mode was tested and recorded in this test.
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	TH03-CB	Owen Hsu	21.5~22.9 / 65~68	Jan. 11, 2024~ Jan. 29, 2024
Radiated (Below 1GHz)	03CH04-CB	Mark Hsu	22.7-23.8 / 56-59	Feb. 21, 2024
Radiated (Above 1GHz)	03CH01-CB	Mark Hsu	21.6-22.7 / 56-59	Jan. 02, 2024~ Jan. 27, 2024
	03CH05-CB	Mark Hsu	21.9-22.4 / 55-58	Jan. 02, 2024~ Jan. 27, 2024
AC Conduction	CO01-CB	Summer Li	22~23 / 50~51	Jan. 23, 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)	3.4 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.1 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.1 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.2 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	2.2%	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

Mode
BT-LE(1Mbps)
2402MHz
2440MHz
2480MHz
BT-LE(2Mbps)
2402MHz
2440MHz
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 1 + Adapter 1
2	EUT 1 + Adapter 2
3	EUT 1 + Adapter 3 + US Plug
For operating mode 2 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	CTX
After evaluating, and the worst case was found at Z axis, so it was selected to perform test and its test result was written in the report.	
1	EUT 1 in Z axis + WLAN 2.4GHz + Adapter 1
2	EUT 1 in Z axis + WLAN 2.4GHz + Adapter 2
3	EUT 1 in Z axis + WLAN 2.4GHz + Adapter 3 + US Plug
Mode 1 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 Z axis + WLAN 5GHz + Adapter 1
5	EUT 1 in Z axis + Bluetooth + Adapter 1
For operating mode 4 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 Z axis, so it was selected to perform test and its test result was written in the report.	
1	EUT 1 in Z 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.: FA3D2301 for Co-location RF Exposure Evaluation.	

2.3 EUT Operation during Test

For CTX Mode:
The EUT was programmed to be in continuously transmitting mode.

For Normal Link Mode:

During the test, the EUT operation to normal function.

2.4 Accessories

Accessories			
Equipment Name	**Brand Name**	**Model Name**	**Rating**
Adapter 1	Ktec	KSA-18W-050300VU	INPUT: 100-240V~50/60Hz, 0.5A OUTPUT: 5.0V, 3.0A
Adapter 2	MOSO	MSA-C3000IC5.0-18P-US	INPUT: 100-240V~50/60Hz, 0.7A max. OUTPUT: 5.0V, 3A
Adapter 3	Ktec	KSA-18W-050300D5	INPUT: 100-240V ~ 50/60Hz, 0.5A OUTPUT: 5.0V, 3.0A
Other			
US Plug*1 (Equip with Adapter 3 use only)			

2.5 Support Equipment

For AC Conduction:

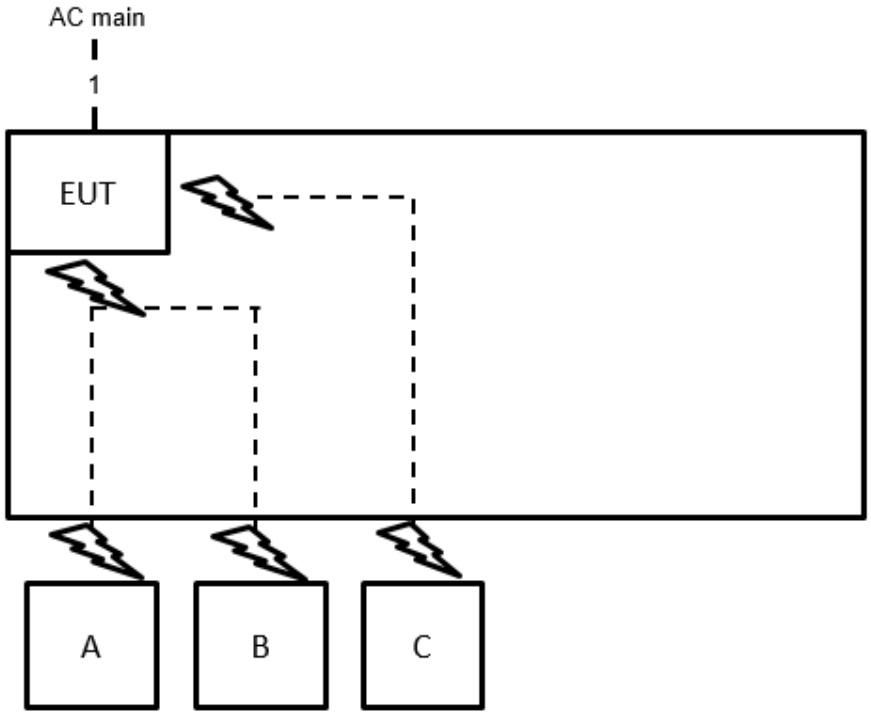
Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	2.4G NB	DELL	E6220	N/A
B	5G NB	DELL	E6220	N/A
C	Smart phone	Samsung	Galaxy J2	N/A

For Radiated and RF Conducted:

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

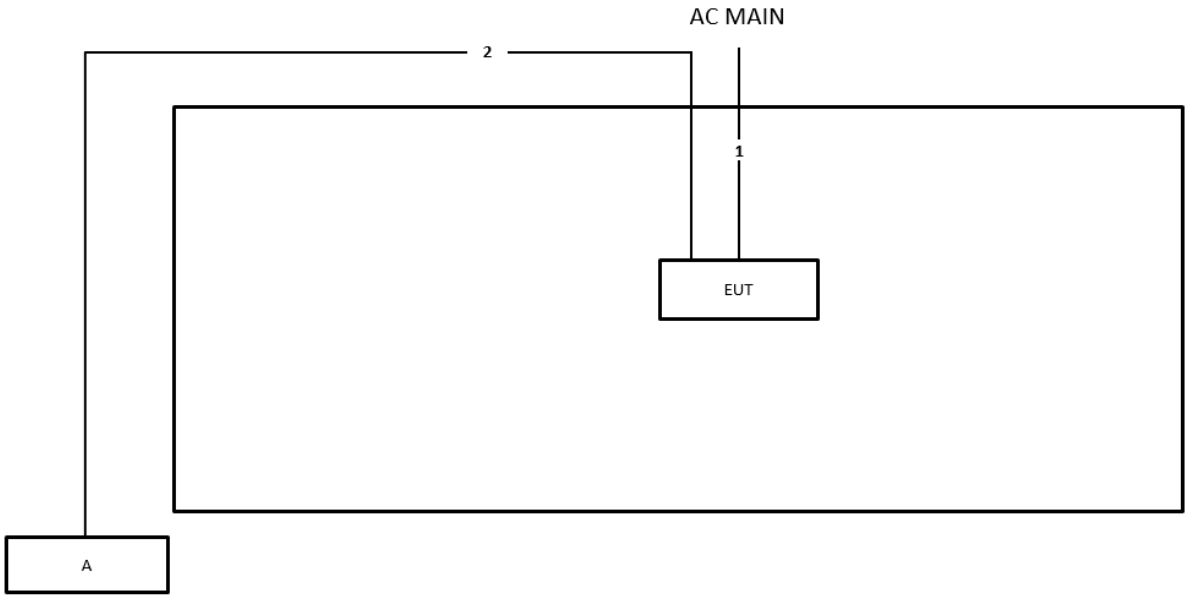
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



Item	Connection	Shielded	Length
1	Power cable	No	1.6m

Test Setup Diagram - Radiated Test



Item	Connection	Shielded	Length
1	Power cable	No	1.6m
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

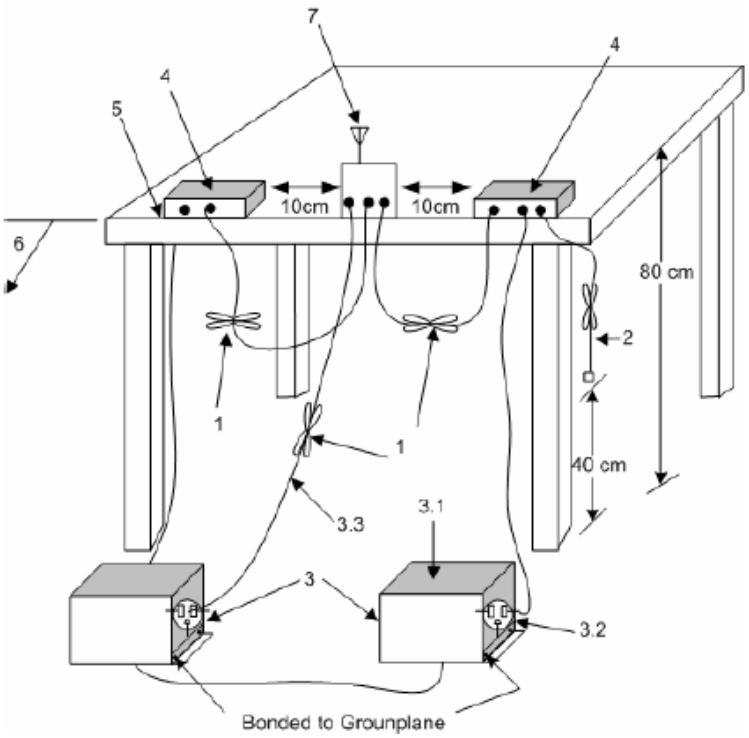
Refer a test equipment and calibration data table in this test report.

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

AC Power-line Conducted Emissions



1—Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 cm to 40 cm long.
2—The I/O cables that are not connected to an accessory shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
3—EUT connected to one LISN. Unused LISN measuring port connectors shall be terminated in 50 Ω loads. LISN may be placed on top of, or immediately beneath, reference ground plane.
3.1—All other equipment powered from additional LISN(s).
3.2—A multiple-outlet strip may be used for multiple power cords of non-EUT equipment.
3.3—LISN at least 80 cm from nearest part of EUT chassis.
4—Non-EUT components of EUT system being tested.
5—Rear of EUT, including peripherals, shall all be aligned and flush with edge of tabletop.
6—Edge of tabletop shall be 40 cm removed from a vertical conducting plane that is bonded to the ground plane.
7—Antenna can be integral or detachable. If detachable, then the antenna shall be attached for this test.

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 ≥ 500 kHz.

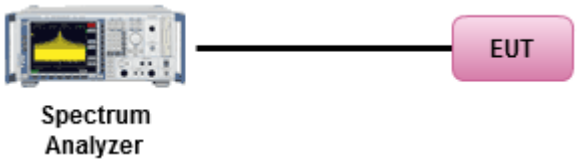
3.2.2 Measuring Instruments

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

Emission Bandwidth


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: $P_{total} = P_1 + P_2 + \ldots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$

3.3.4 Test Setup

Maximum Conducted Output Power (Power Meter)


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

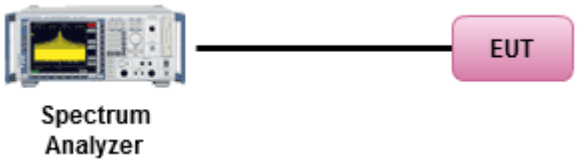
3.4.2 Measuring Instruments

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 ≥ 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

Power Spectral Density


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

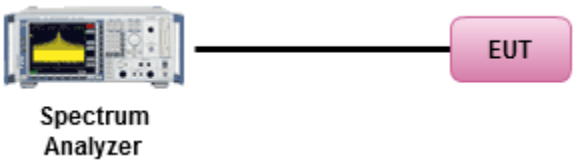
Refer a test equipment and calibration data table in this test report.

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

Emissions in Non-restricted Frequency Bands



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 below30 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.

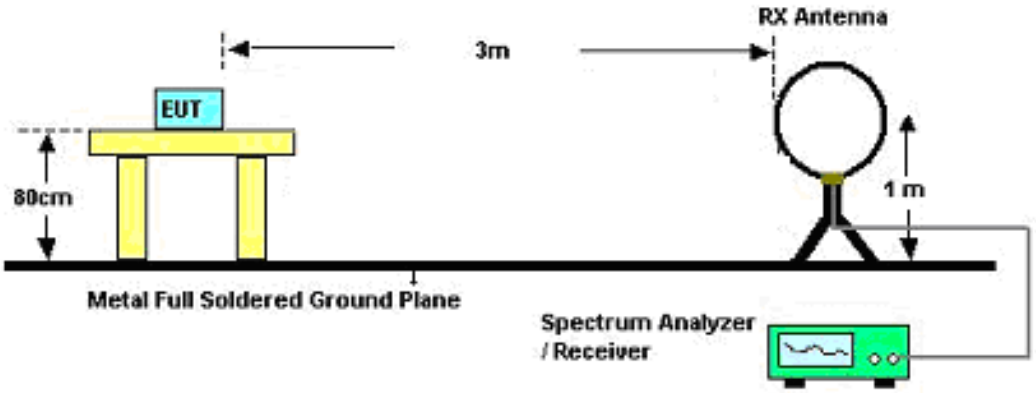
3.6.3 Test Procedures

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 ≥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≥1/T).
		☐	Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW ≥ 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.		

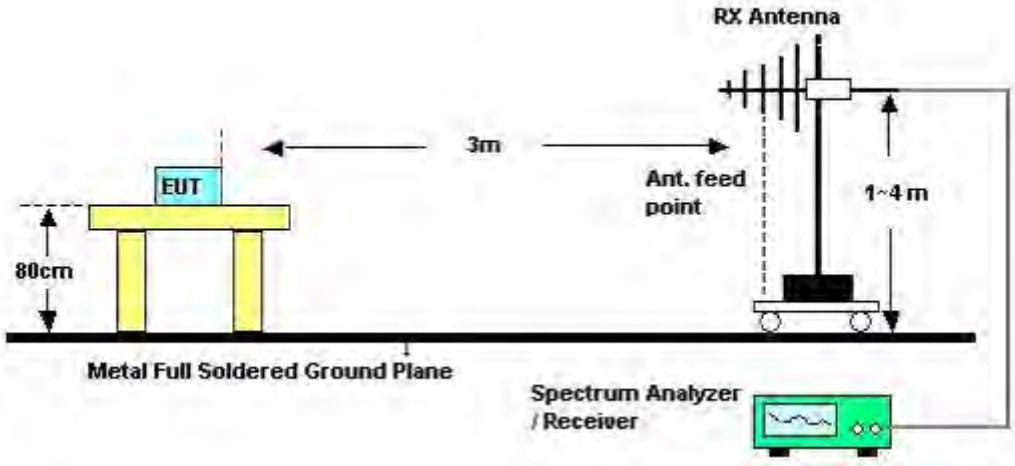
3.6.4 Test Setup

Emissions in Restricted Frequency Bands

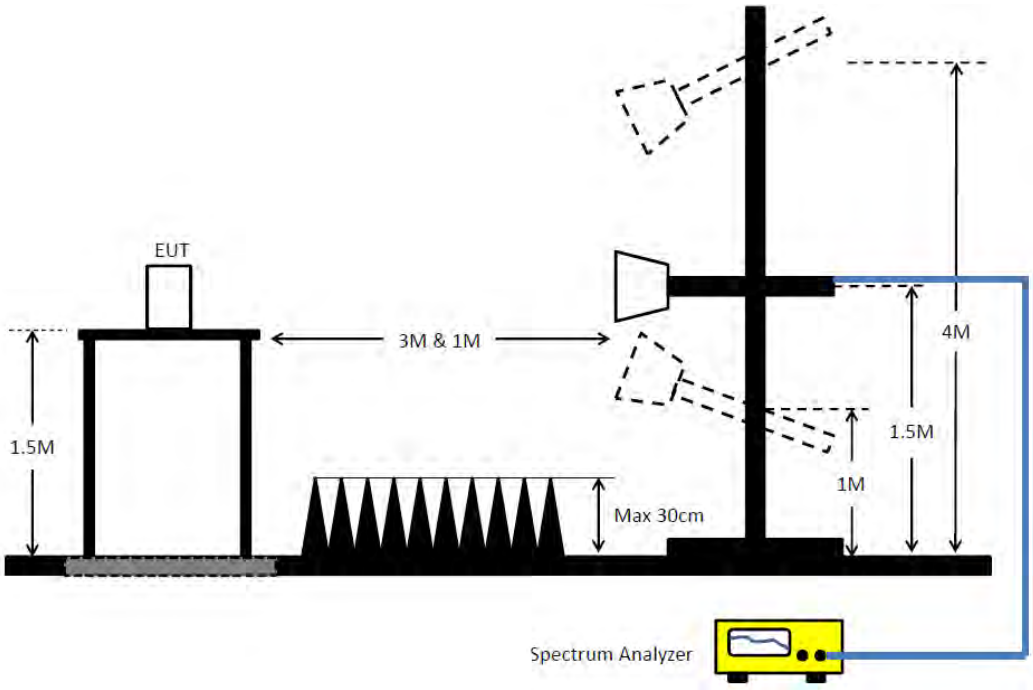
9kHz ~30MHz



30MHz~1GHz



Above 1GHz



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. 20, 2023	Feb. 19, 2024	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Feb. 16, 2023	Feb. 15, 2024	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Apr. 27, 2023	Apr. 26, 2024	Conduction (CO01-CB)
Pulse Limiter	Rohde&Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Feb. 09, 2023	Feb. 08, 2024	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	Oct. 17, 2023	Oct. 16, 2024	Conduction (CO01-CB)
Software	SPORTON	SENSE	V5.10	-	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 (03CH04-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH04-CB	30 MHz ~ 1 GHz	Aug. 01, 2023	Jul. 31, 2024	Radiation (03CH04-CB)
BILOG ANTENNA with 6 dB attenuator	Schaffner & EMCI	CBL6112B & N-6-06	22021&AT-N0607	30MHz ~ 1GHz	Oct. 07, 2023	Oct. 06, 2024	Radiation (03CH04-CB)
Pre-Amplifier	EMCI	EMC330N	980391	20MHz ~ 3GHz	May 23, 2023	May 22, 2024	Radiation (03CH04-CB)
Spectrum Analyzer	R&S	FSP40	100142	9kHz~40GHz	Mar. 21, 2023	Mar. 20, 2024	Radiation (03CH04-CB
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	Jun. 13, 2023	Jun. 12, 2024	Radiation (03CH04-CB)
RF Cable-low	Woken	RG402	Low Cable-03+67	30MHz – 1GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH04-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH04-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH01-CB	1GHz ~18GHz 3m	May 05, 2023	May 04, 2024	Radiation (03CH01-CB)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120D-01816	1GHz~18GHz	Dec. 20, 2023	Dec. 19, 2024	Radiation (05CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Sep. 04, 2023	Sep. 03, 2024	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02121	1GHz ~ 26.5GHz	May 18, 2023	May 17, 2024	Radiation (03CH01-CB)
Signal Analyzer	R&S	FSV3044	101437	10kHz ~ 44GHz	Nov. 28, 2023	Nov. 27, 2024	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-16	1 GHz ~ 18 GHz	Nov. 06, 2023	Nov. 05, 2024	Radiation (03CH01-CB)

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-16+17	1 GHz ~ 18 GHz	Nov. 06, 2023	Nov. 05, 2024	Radiation (03CH01-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Dec. 06, 2023	Dec. 05, 2024	Radiation (03CH01-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH01-CB)
High Cable	Woken	WCA0929M	40G#6	1GHz ~ 40 GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH01-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH01-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH05-CB	1GHz ~18GHz 3m	Sep. 29, 2023	Sep. 28, 2024	Radiation (03CH05-CB)
Horn Antenna	SCHWARZBECK	BBHA9120 D	BBHA 9120 D-1291	1GHz~18GHz	Jun. 08, 2023	Jun. 07, 2024	Radiation (03CH05-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Sep. 04, 2023	Sep. 03, 2024	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC12630 SE	980287	1GHz – 26.5GHz	Jun. 30, 2023	Jun. 29, 2024	Radiation (03CH05-CB)
Spectrum Analyzer	R&S	FSP40	100304	9kHz ~ 40GHz	Apr. 18, 2023	Apr. 17, 2024	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-28	1GHz~18GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-04+28	1GHz~18GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH05-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Dec. 06, 2023	Dec. 05, 2024	Radiation (03CH05-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH05-CB)
High Cable	Woken	WCA0929M	40G#6	1GHz ~ 40 GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH05-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH05-CB)
Spectrum analyzer	R&S	FSV40	101028	9kHz~40GHz	Dec. 22, 2023	Dec. 21, 2024	Conducted (TH03-CB)
Power Sensor	Anritsu	MA2411B	1726195	300MHz~40GHz	Sep. 04, 2023	Sep. 03, 2024	Conducted (TH03-CB)
Power Meter	Anritsu	ML2495A	1035008	300MHz~40GHz	Sep. 04, 2023	Sep. 03, 2024	Conducted (TH03-CB)
RF Cable	Woken	RG402	High Cable-11	30MHz –18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH03-CB)
RF Cable	Woken	RG402	High Cable-12	30MHz –18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH03-CB)
RF Cable	Woken	RG402	High Cable-13	30MHz –18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH03-CB)

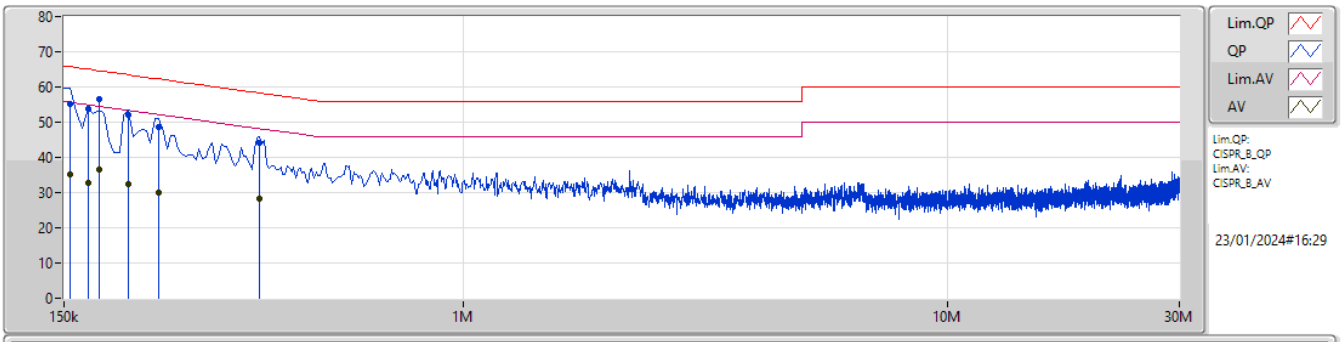
Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-14	1 GHz –18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-15	1 GHz –18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH03-CB)
Switch	SPTCB	SP-SWI	SWI-03	1 ~26.5 GHz	Oct. 03, 2023	Oct. 02, 2024	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.

Summary

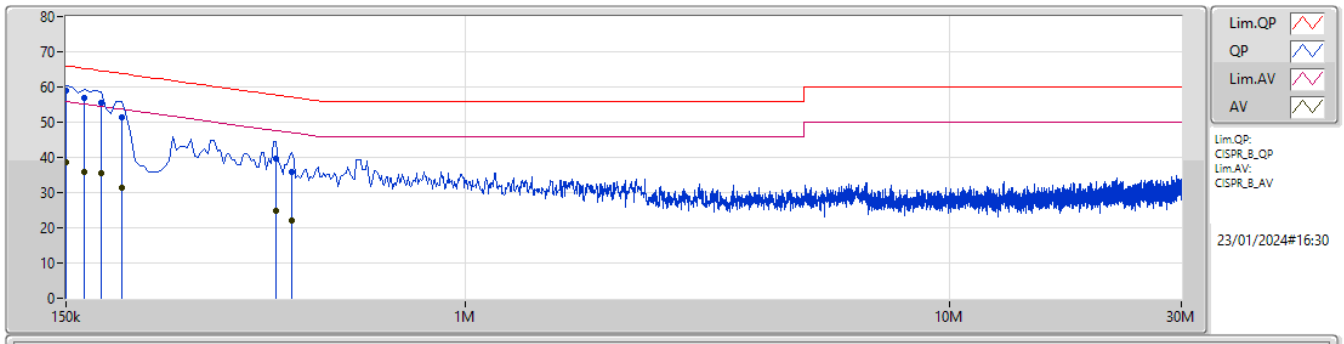
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 2	Pass	QP	150k	59.04	66.00	-6.96	Neutral

Mode 2



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	154.5k	55.34	65.75	-10.41	9.98	Line	-	45.36	0.09	0.02	9.87
AV	154.5k	35.07	55.75	-20.68	9.98	Line	-	25.09	0.09	0.02	9.87
QP	168k	53.88	65.06	-11.18	9.98	Line	-	43.90	0.09	0.02	9.87
AV	168k	32.77	55.06	-22.29	9.98	Line	-	22.79	0.09	0.02	9.87
QP	177k	56.48	64.62	-8.14	9.97	Line	"Worst"	46.51	0.08	0.02	9.87
AV	177k	36.40	54.62	-18.22	9.97	Line	-	26.43	0.08	0.02	9.87
QP	204k	52.03	63.44	-11.41	9.96	Line	-	42.07	0.08	0.02	9.86
AV	204k	32.38	53.44	-21.06	9.96	Line	-	22.42	0.08	0.02	9.86
QP	235.5k	48.72	62.25	-13.53	9.97	Line	-	38.75	0.08	0.02	9.87
AV	235.5k	30.12	52.25	-22.13	9.97	Line	-	20.15	0.08	0.02	9.87
QP	379.5k	44.28	58.29	-14.01	10.01	Line	-	34.27	0.09	0.02	9.90
AV	379.5k	28.37	48.29	-19.92	10.01	Line	-	18.36	0.09	0.02	9.90

Mode 2



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	150k	59.04	66.00	-6.96	9.96	Neutral	"Worst"	49.08	0.07	0.02	9.87
AV	150k	38.53	56.00	-17.47	9.96	Neutral	-	28.57	0.07	0.02	9.87
QP	163.5k	57.02	65.27	-8.25	9.96	Neutral	-	47.06	0.07	0.02	9.87
AV	163.5k	35.72	55.27	-19.55	9.96	Neutral	-	25.76	0.07	0.02	9.87
QP	177k	55.36	64.62	-9.26	9.96	Neutral	-	45.40	0.07	0.02	9.87
AV	177k	35.48	54.62	-19.14	9.96	Neutral	-	25.52	0.07	0.02	9.87
QP	195k	51.29	63.82	-12.53	9.95	Neutral	-	41.34	0.07	0.02	9.86
AV	195k	31.22	53.82	-22.60	9.95	Neutral	-	21.27	0.07	0.02	9.86
QP	406.5k	39.74	57.72	-17.98	9.99	Neutral	-	29.75	0.07	0.02	9.90
AV	406.5k	24.89	47.72	-22.83	9.99	Neutral	-	14.90	0.07	0.02	9.90
QP	438k	35.85	57.11	-21.26	9.99	Neutral	-	25.86	0.07	0.02	9.90
AV	438k	22.16	47.11	-24.95	9.99	Neutral	-	12.17	0.07	0.02	9.90

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)	747.5k	1.026M	1M03F1D	650k	1.021M
BT-LE(2Mbps)	1.118M	2.035M	2M04F1D	937.5k	1.997M

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

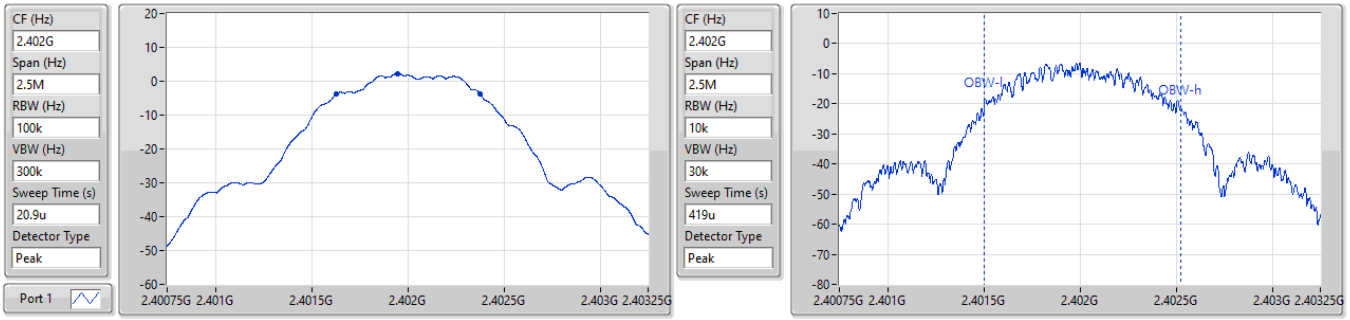
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	500k	747.5k	1.021M
2440MHz	Pass	500k	650k	1.026M
2480MHz	Pass	500k	681.25k	1.022M
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	500k	937.5k	2.022M
2440MHz	Pass	500k	1.118M	1.997M
2480MHz	Pass	500k	952.5k	2.035M

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

29/01/2024

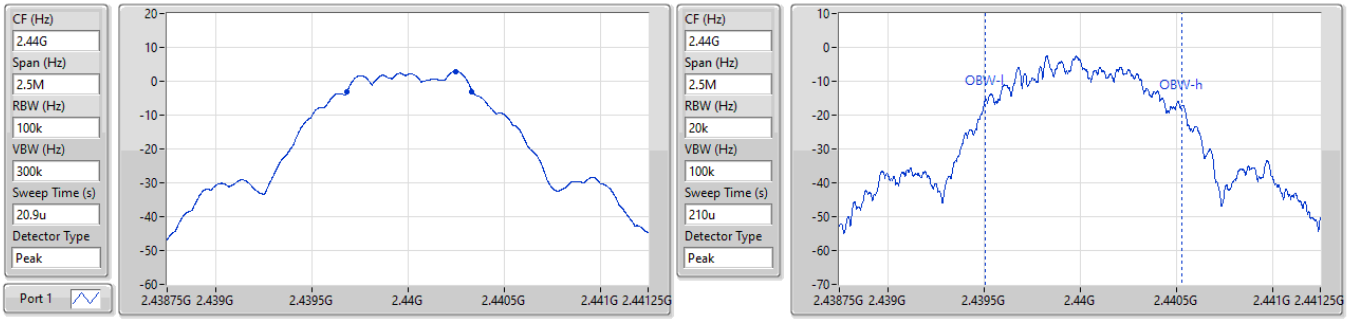


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
747.5k	2.40163G	2.402378G	1.021M	2.401503G	2.402525G	500k	1

2.4-2.4835GHz_BT-LE(1Mbps) **EBW-DTS**

2440MHz

29/01/2024

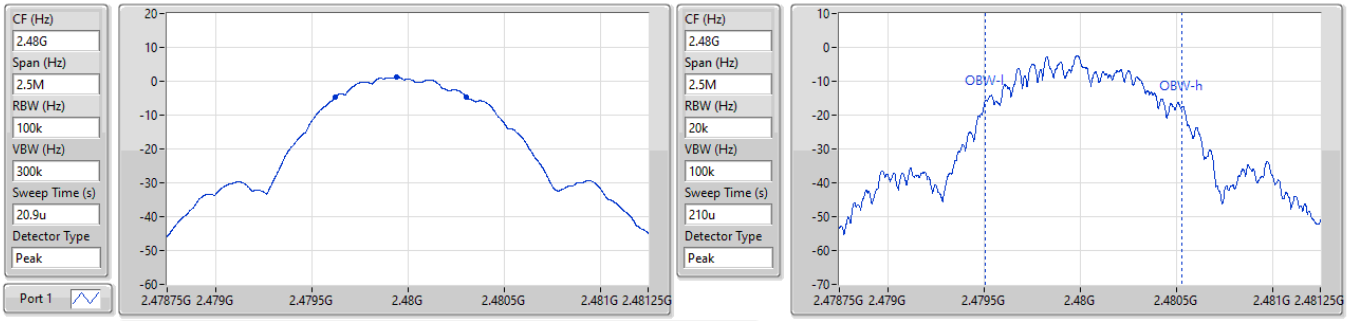


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
650k	2.439685G	2.440335G	1.026M	2.439506G	2.440532G	500k	1

2.4-2.4835GHz_BT-LE(1Mbps) **EBW-DTS**

2480MHz

29/01/2024

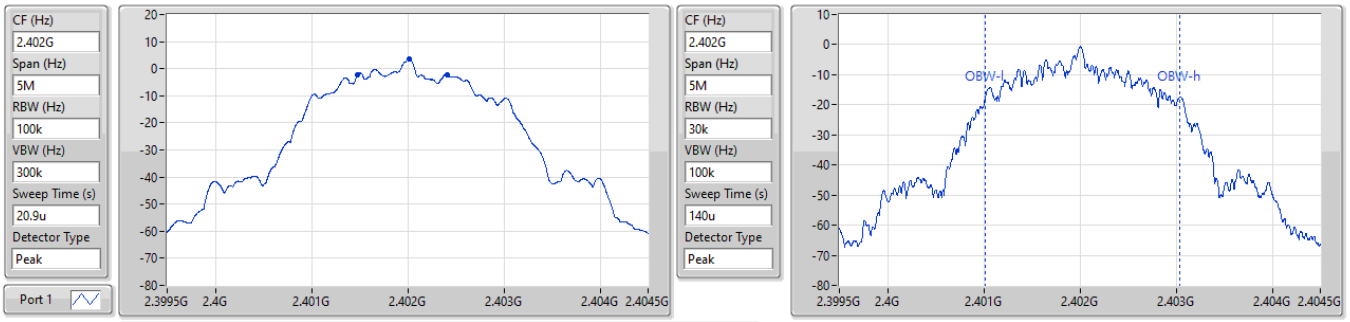


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
681.25k	2.479624G	2.480305G	1.022M	2.479506G	2.480528G	500k	1

2.4-2.4835GHz_BT-LE(2Mbps) **EBW-DTS**

2402MHz

29/01/2024

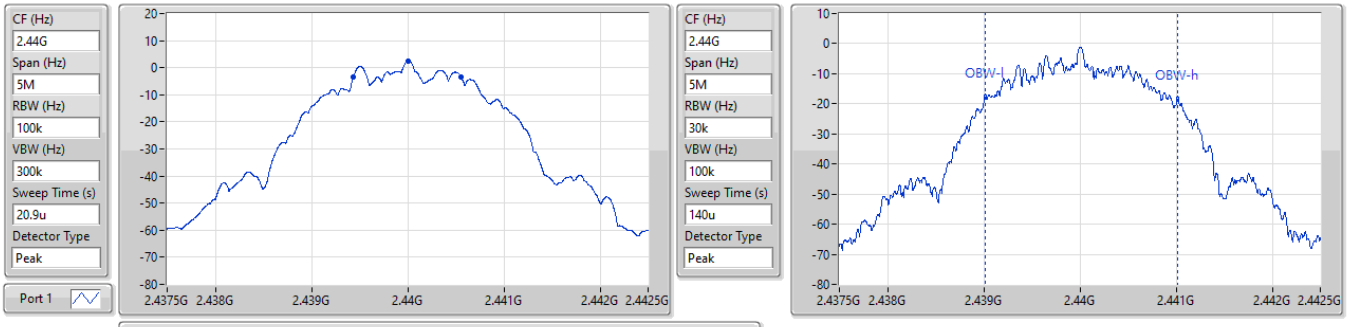


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
937.5k	2.40148G	2.402418G	2.022M	2.401017G	2.403039G	500k	1

2.4-2.4835GHz_BT-LE(2Mbps) **EBW-DTS**

2440MHz

29/01/2024

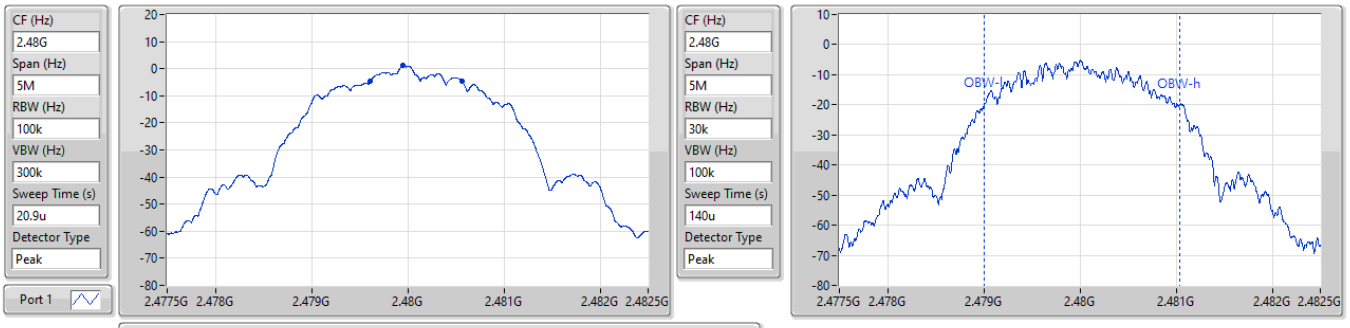


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.118M	2.439438G	2.440555G	1.997M	2.439018G	2.441014G	500k	1

2.4-2.4835GHz_BT-LE(2Mbps) **EBW-DTS**

2480MHz

29/01/2024



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
952.5k	2.479613G	2.480565G	2.035M	2.479005G	2.48104G	500k	1

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
BT-LE(1Mbps)	3.96	0.00249
BT-LE(2Mbps)	3.67	0.00233

Result

Mode	Result	DG (dBi)	Total Power (dBm)	Power Limit (dBm)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	3.53	3.96	30.00
2440MHz	Pass	3.53	3.49	30.00
2480MHz	Pass	3.53	3.17	30.00
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	3.53	3.67	30.00
2440MHz	Pass	3.53	3.25	30.00
2480MHz	Pass	3.53	3.07	30.00

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

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
BT-LE(1Mbps)	-11.10
BT-LE(2Mbps)	-13.96

RBW = 3kHz;

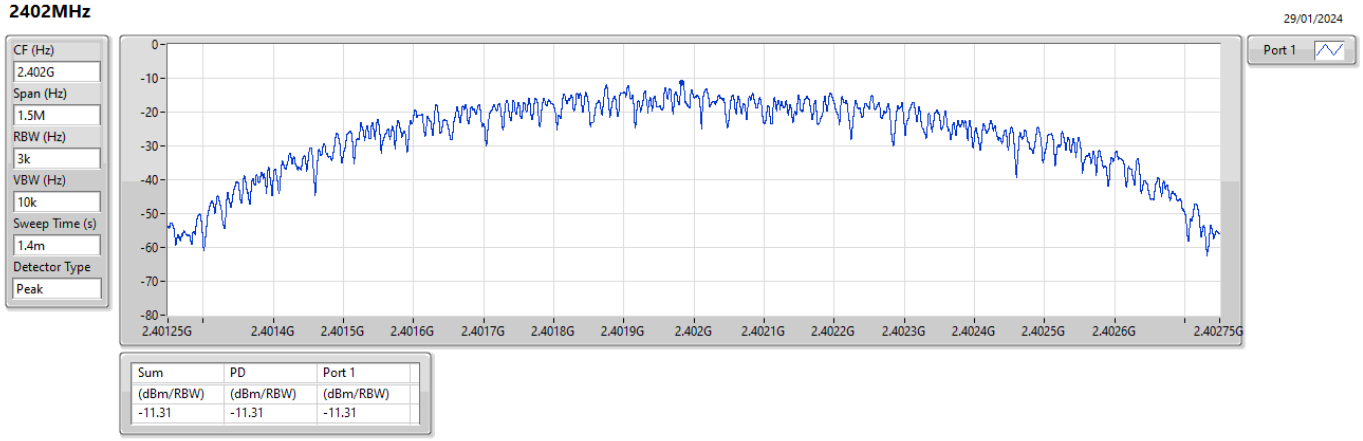
Result

Mode	Result	DG (dBi)	PD (dBm/RBW)	PD Limit (dBm/RBW)
BT-LE(1Mbps)	-	-	-	-
2402MHz	Pass	3.53	-11.31	8.00
2440MHz	Pass	3.53	-11.10	8.00
2480MHz	Pass	3.53	-11.37	8.00
BT-LE(2Mbps)	-	-	-	-
2402MHz	Pass	3.53	-13.96	8.00
2440MHz	Pass	3.53	-14.21	8.00
2480MHz	Pass	3.53	-14.75	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;

2.4-2.4835GHz_BT-LE(1Mbps) **PSD**

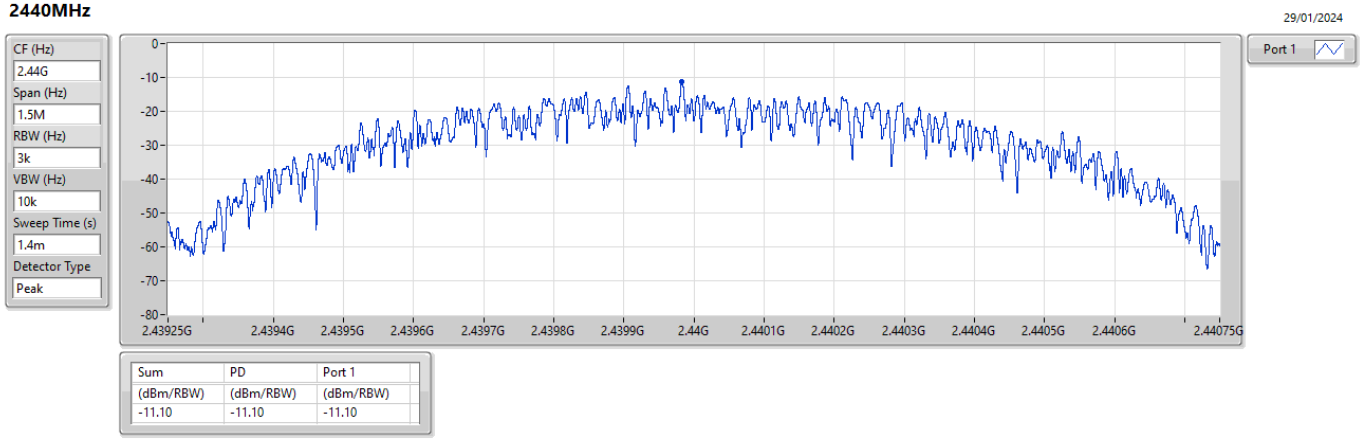
2402MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-11.31	-11.31	-11.31

2.4-2.4835GHz_BT-LE(1Mbps) **PSD**

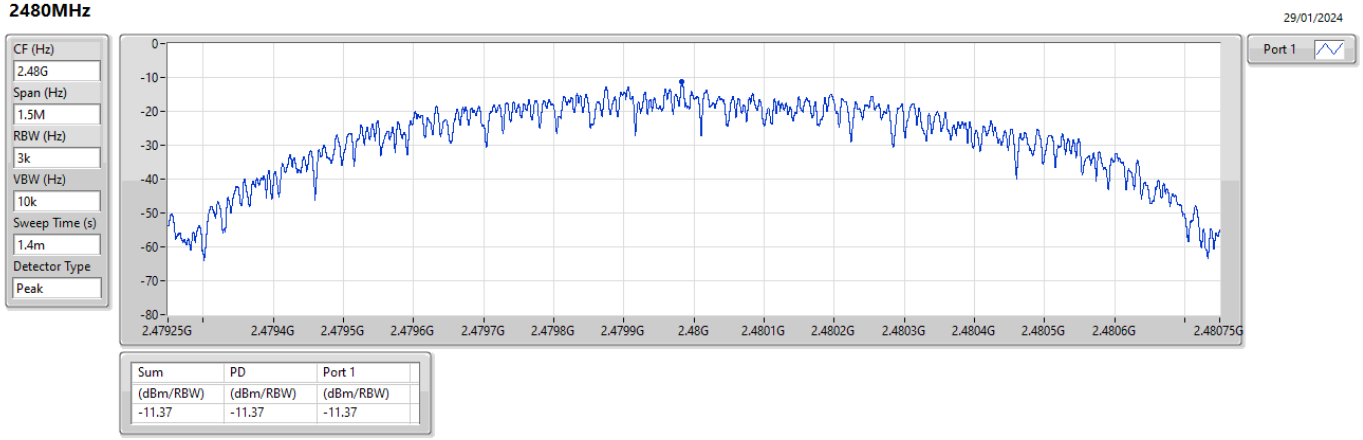
2440MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-11.10	-11.10	-11.10

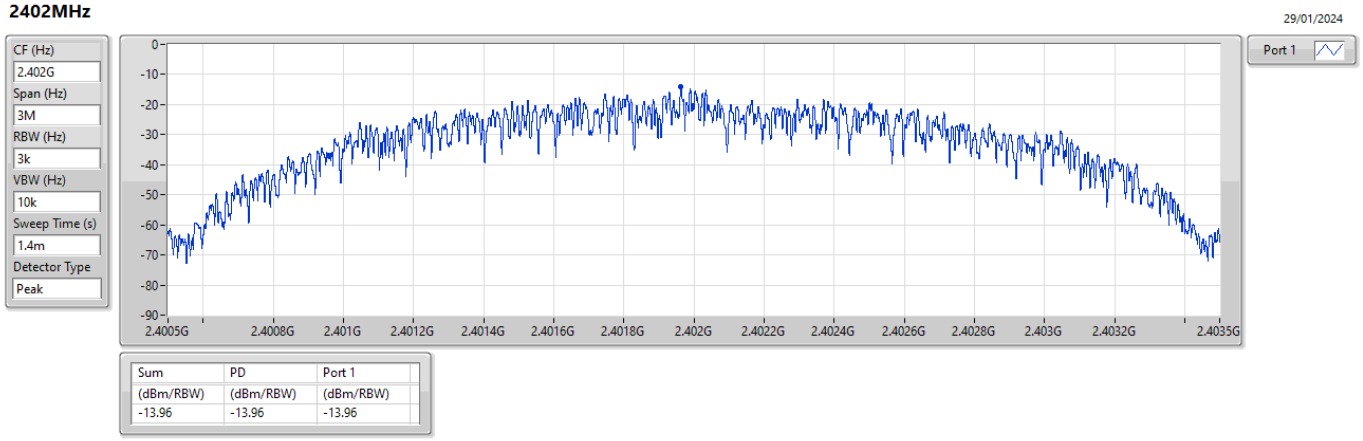
2.4-2.4835GHz_BT-LE(1Mbps) **PSD**

2480MHz



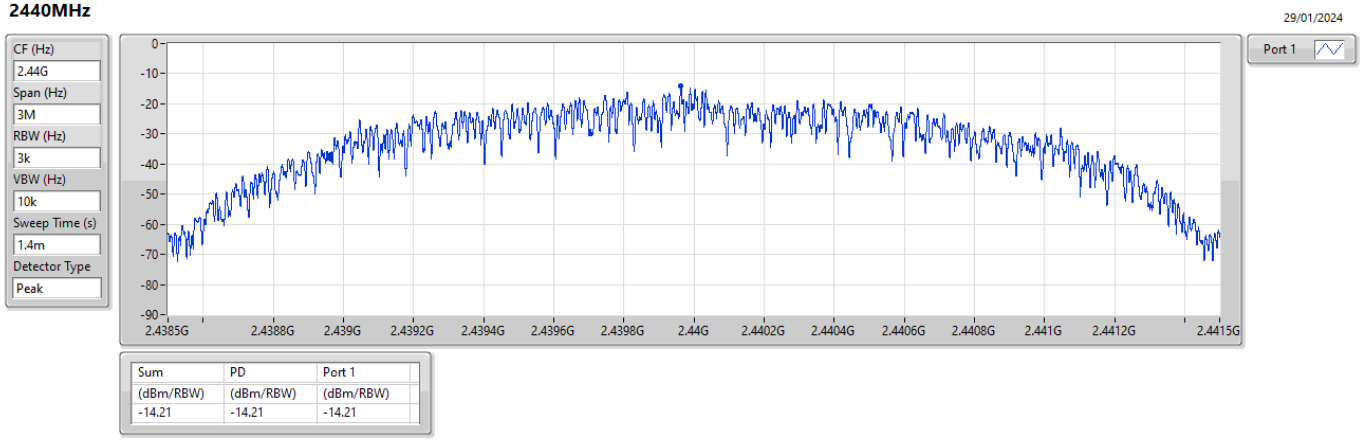
2.4-2.4835GHz_BT-LE(2Mbps) **PSD**

2402MHz



2.4-2.4835GHz_BT-LE(2Mbps) **PSD**

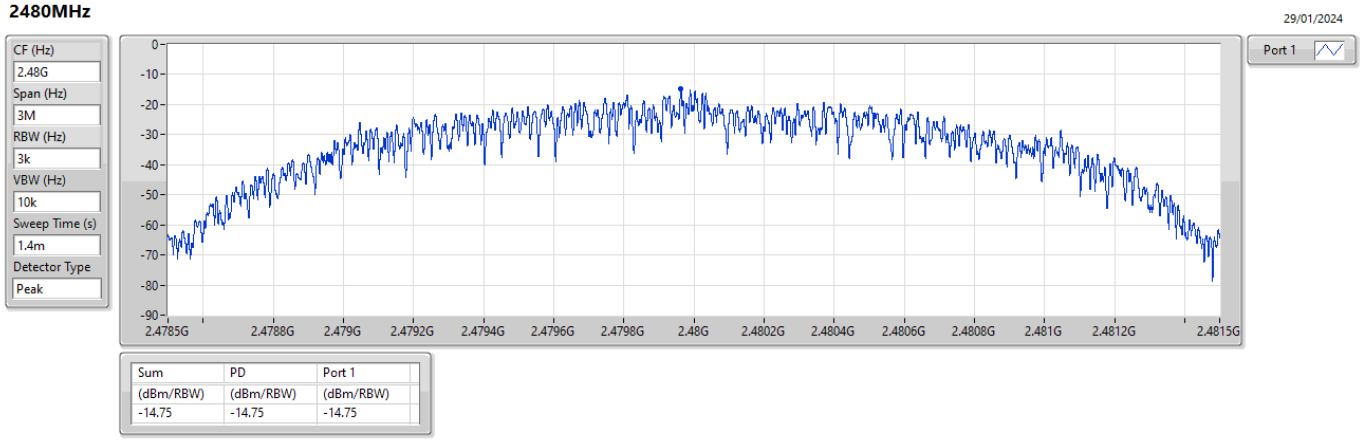
2440MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-14.21	-14.21	-14.21

2.4-2.4835GHz_BT-LE(2Mbps) **PSD**

2480MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-14.75	-14.75	-14.75

Summary

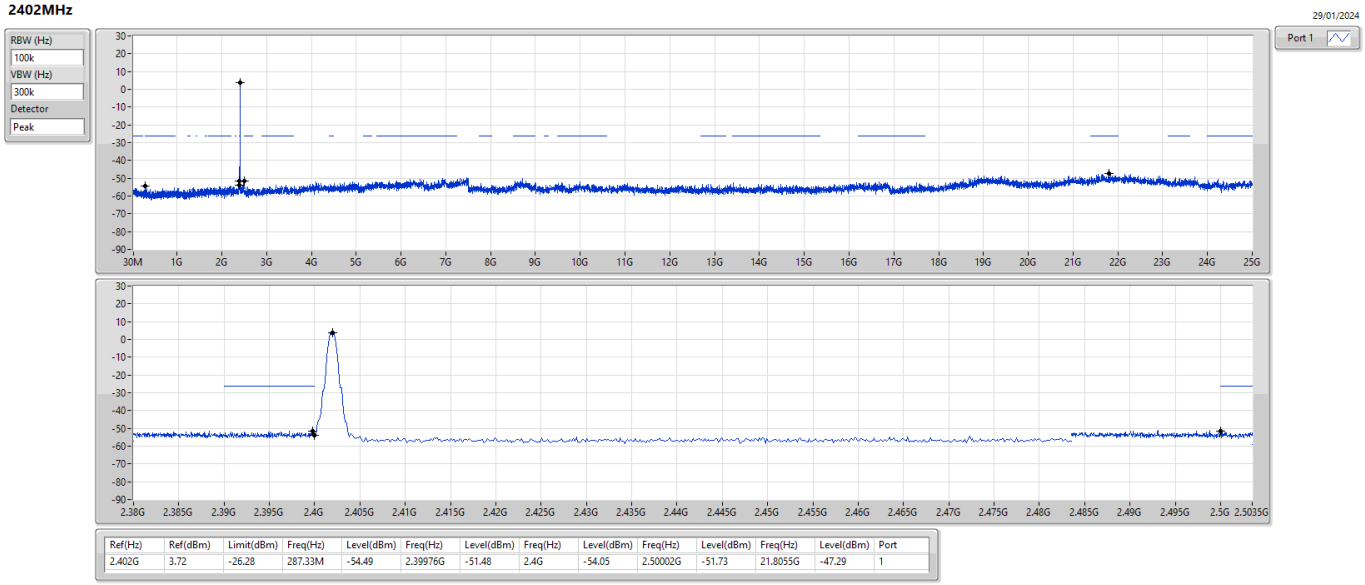
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BT-LE(1Mbps)	Pass	2.402G	3.72	-26.28	287.33M	-54.49	2.39976G	-51.48	2.4G	-54.05	2.50002G	-51.73	21.8055G	-47.29	1
BT-LE(2Mbps)	Pass	2.402G	3.53	-26.47	1.91235G	-54.79	2.4G	-39.80	2.4G	-40.57	2.50002G	-52.33	21.98828G	-46.99	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	2.402G	3.72	-26.28	287.33M	-54.49	2.39976G	-51.48	2.4G	-54.05	2.50002G	-51.73	21.8055G	-47.29	1
2440MHz	Pass	2.402G	3.72	-26.28	2.0087G	-54.66	2.39908G	-51.60	2.4G	-56.06	2.50174G	-52.28	21.93204G	-47.24	1
2480MHz	Pass	2.402G	3.72	-26.28	2.17673G	-53.56	2.39948G	-51.88	2.4G	-56.49	2.5009G	-51.81	21.96016G	-48.16	1
BT-LE(2Mbps)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2402MHz	Pass	2.402G	3.53	-26.47	1.91235G	-54.79	2.4G	-39.80	2.4G	-40.57	2.50002G	-52.33	21.98828G	-46.99	1
2440MHz	Pass	2.402G	3.53	-26.47	1.82893G	-53.93	2.39512G	-51.31	2.4G	-55.13	2.5003G	-52.29	21.82518G	-47.86	1
2480MHz	Pass	2.402G	3.53	-26.47	39.4M	-53.57	2.39084G	-51.64	2.4G	-56.47	2.5009G	-51.80	21.74363G	-46.75	1

2.4-2.4835GHz_BT-LE(1Mbps) CSENdB-DTS

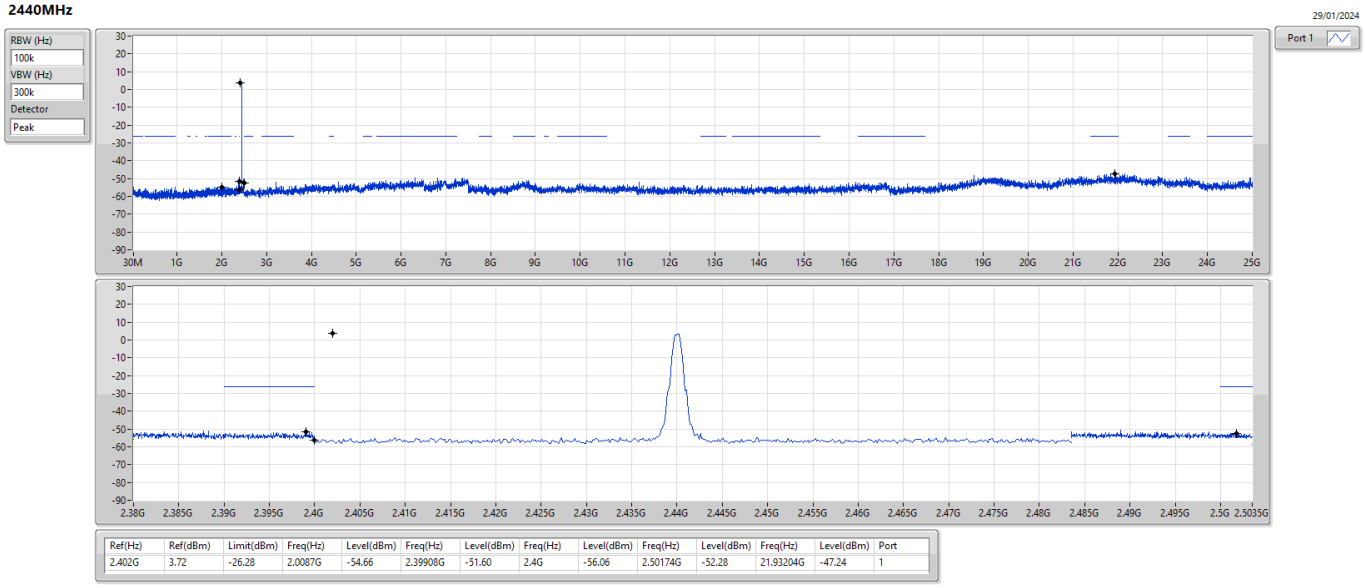
2402MHz



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
2.402G	3.72	-26.28	287.33M	-54.49	2.39976G	-51.48	2.4G	-54.05	2.50002G	-51.73	21.8055G	-47.29	1

2.4-2.4835GHz_BT-LE(1Mbps) CSENdB-DTS

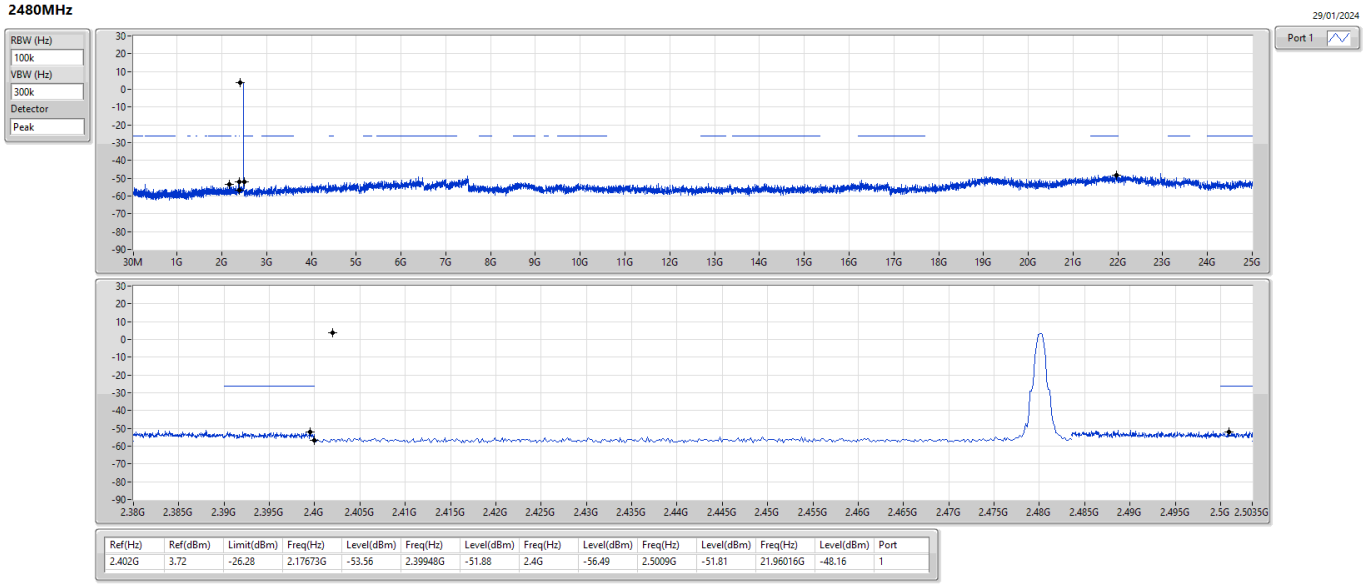
2440MHz



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
2.402G	3.72	-26.28	2.0087G	-54.66	2.39908G	-51.60	2.4G	-56.06	2.50174G	-52.28	21.93204G	-47.24	1

2.4-2.4835GHz_BT-LE(1Mbps) CSENdB-DTS

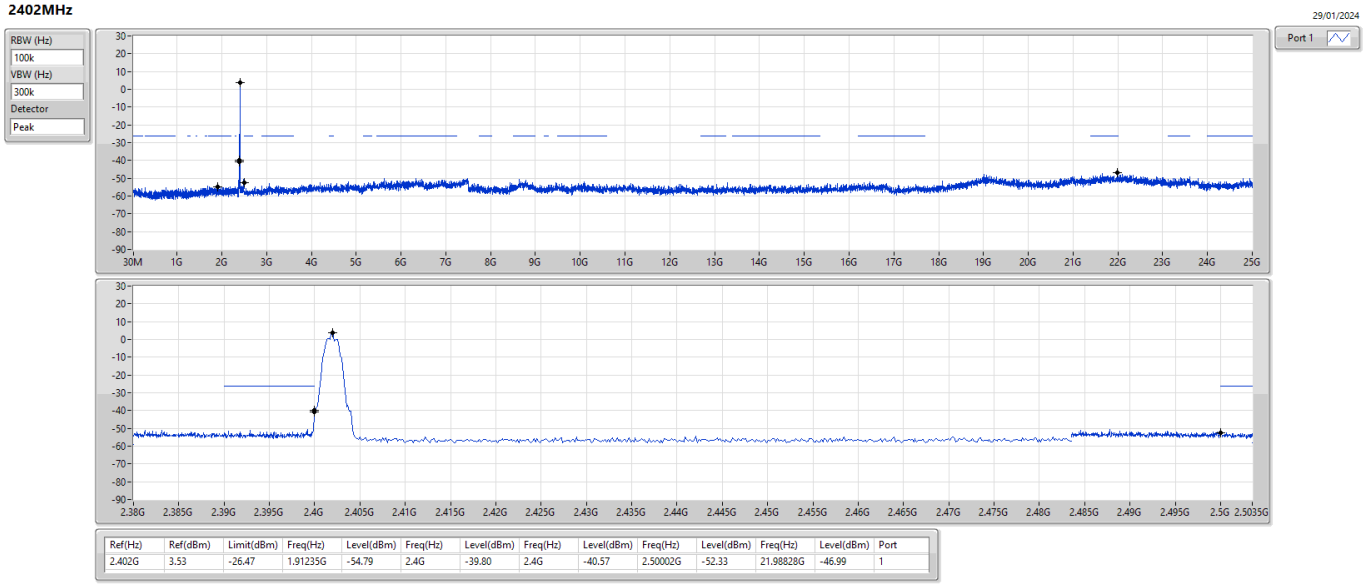
2480MHz



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
2.402G	3.72	-26.28	2.17673G	-53.56	2.39948G	-51.88	2.4G	-56.49	2.5009G	-51.81	21.96016G	-48.16	1

2.4-2.4835GHz_BT-LE(2Mbps) CSENdB-DTS

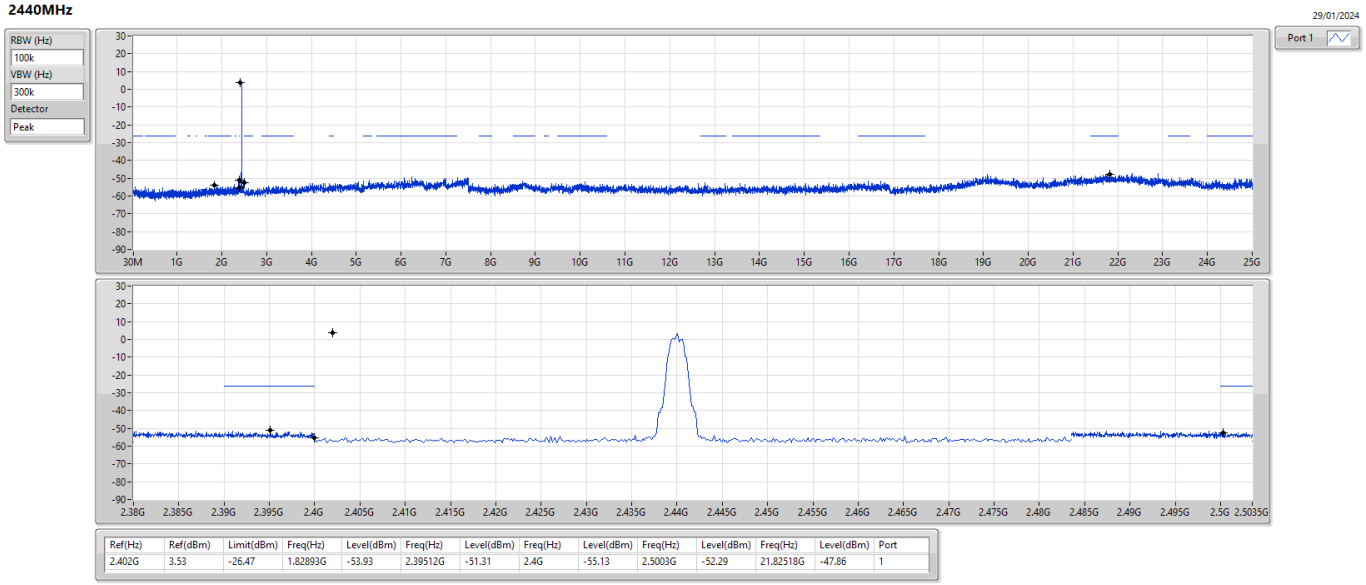
2402MHz



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
2.402G	3.53	-26.47	1.91235G	-54.79	2.4G	-39.80	2.4G	-40.57	2.50002G	-52.33	21.98828G	-46.99	1

2.4-2.4835GHz_BT-LE(2Mbps) CSENdB-DTS

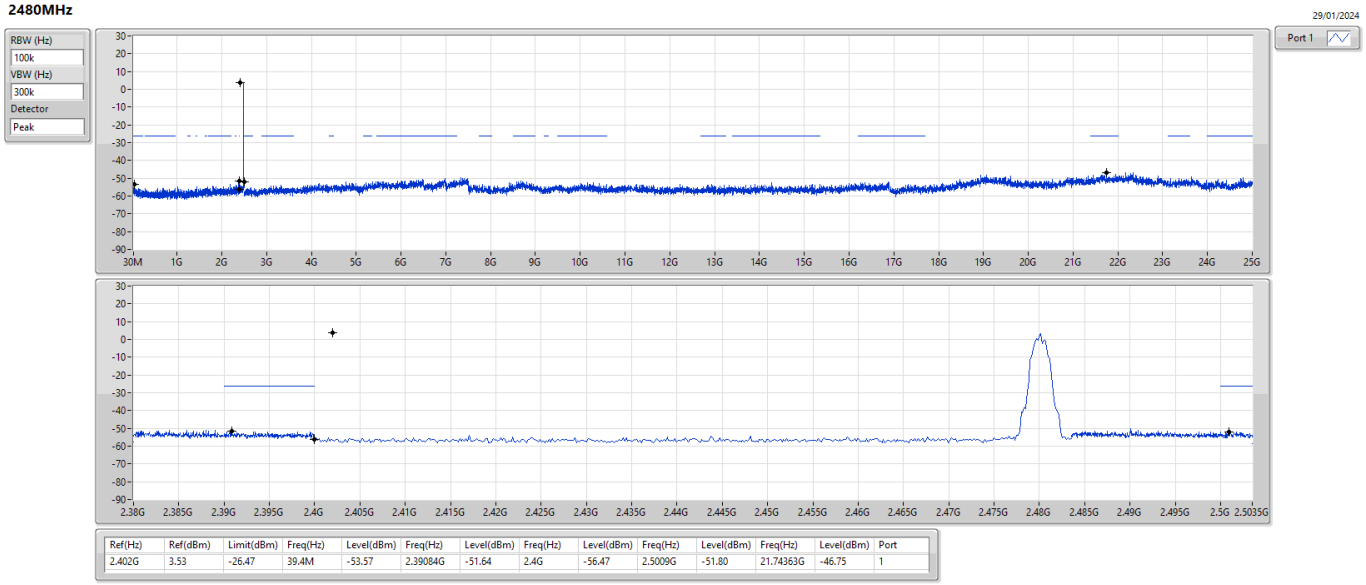
2440MHz



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
2.402G	3.53	-26.47	1.82893G	-53.93	2.39512G	-51.31	2.4G	-55.13	2.5003G	-52.29	21.82518G	-47.86	1

2.4-2.4835GHz_BT-LE(2Mbps) CSENdB-DTS

2480MHz

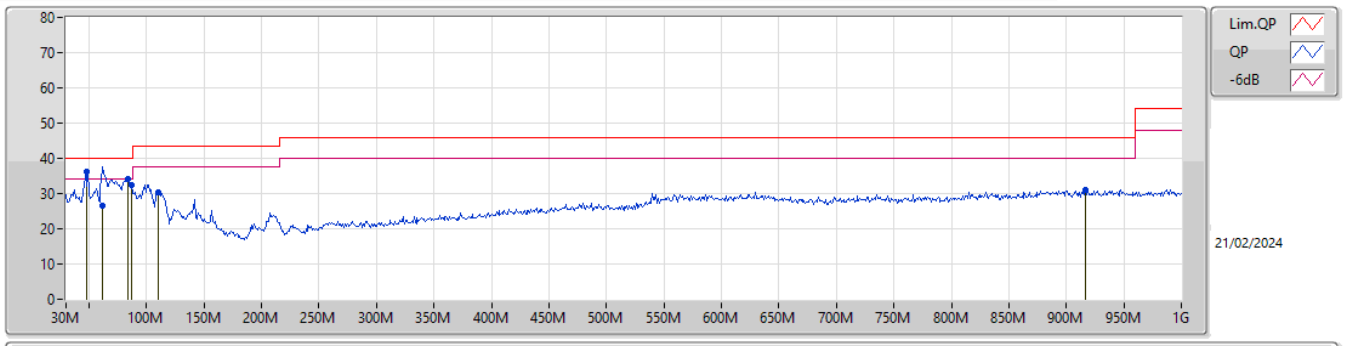


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.402G	3.53	-26.47	39.4M	-53.57	2.39084G	-51.64	2.4G	-56.47	2.5009G	-51.80	21.74363G	-46.75	1

Summary

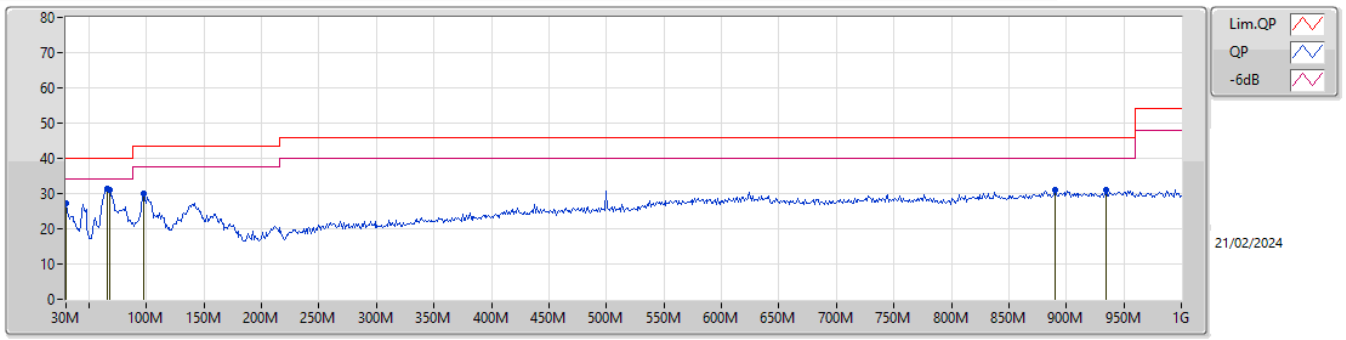
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 4	Pass	PK	47.46M	36.29	40.00	-3.71	Vertical

Mode 4



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	47.46M	36.29	40.00	-3.71	-16.16	3	Vertical	0	3.00	-	52.45	14.86	0.50	31.52
QP	62.01M	26.70	40.00	-13.30	-18.62	3	Vertical	0	3.00	"Worst"	45.32	12.53	0.60	31.75
PK	84.32M	34.01	40.00	-5.99	-17.04	3	Vertical	228	1.25	-	51.05	13.91	0.76	31.71
PK	87.23M	32.58	40.00	-7.42	-16.29	3	Vertical	284	1.00	-	48.87	14.62	0.78	31.69
PK	110.51M	30.30	43.50	-13.20	-12.60	3	Vertical	170	1.00	-	42.90	18.11	0.88	31.59
PK	916.58M	31.03	46.00	-14.97	-2.31	3	Vertical	0	3.00	-	33.34	26.79	3.12	32.22

Mode 4



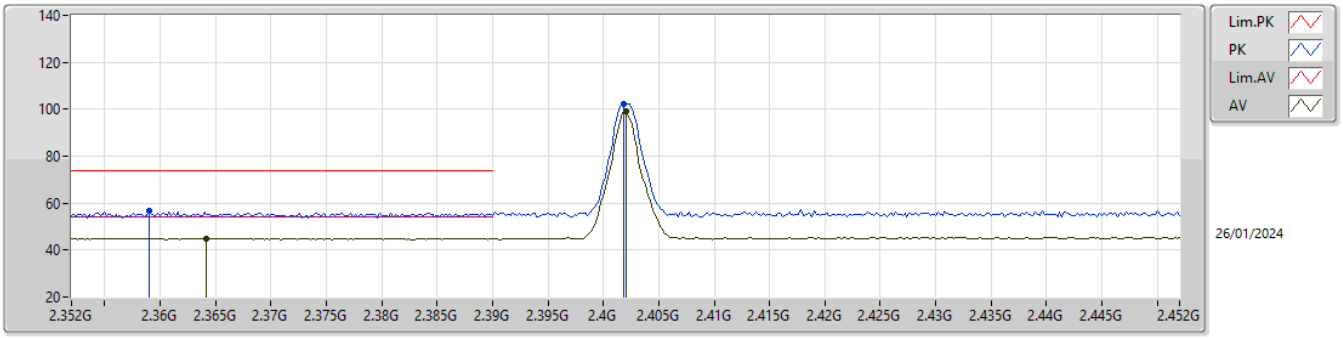
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	30M	27.16	40.00	-12.84	-7.26	3	Horizontal	360	1.00	-	34.42	23.56	0.33	31.15
PK	65.89M	31.23	40.00	-8.77	-18.78	3	Horizontal	0	2.00	"Worst"	50.01	12.34	0.63	31.75
PK	67.83M	30.93	40.00	-9.07	-18.72	3	Horizontal	0	2.00	-	49.65	12.38	0.64	31.74
PK	97.9M	29.86	43.50	-13.64	-14.01	3	Horizontal	285	2.00	-	43.87	16.75	0.81	31.57
PK	890.39M	30.99	46.00	-15.01	-2.57	3	Horizontal	41	1.00	-	33.56	26.61	3.04	32.22
PK	935.01M	30.89	46.00	-15.11	-2.45	3	Horizontal	144	1.50	-	33.34	26.64	3.17	32.26

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	50.32	54.00	-3.68	3	Vertical	125	1.02	-

2.4-2.4835GHz_BT-LE(1Mbps)

2402MHz_TX

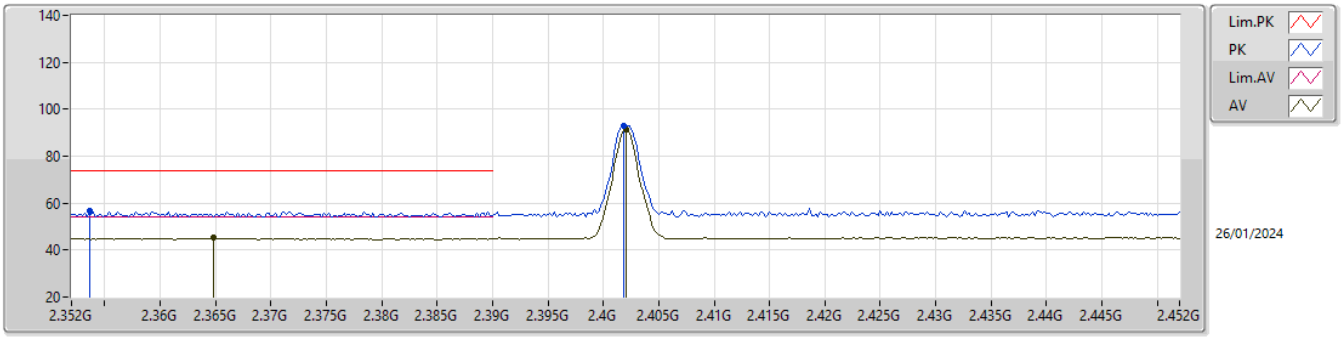


EUT Z_1TX
Setting Default
05-C-G-4

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	2.359G	56.93	74.00	-17.07	24.97	3	Vertical	121	1.22	-	27.29	4.67	-
AV	2.3642G	45.06	54.00	-8.94	13.09	3	Vertical	121	1.22	-	27.30	4.67	-
PK	2.4018G	102.38	Inf	-Inf	70.17	3	Vertical	121	1.22	-	27.50	4.71	-
AV	2.402G	99.32	Inf	-Inf	67.11	3	Vertical	121	1.22	-	27.50	4.71	-

2.4-2.4835GHz_BT-LE(1Mbps)

2402MHz_TX

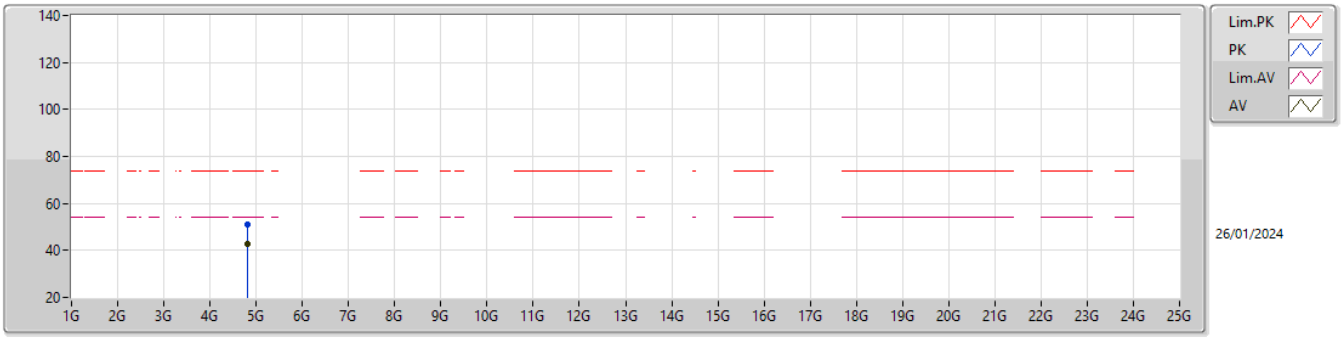


EUT Z_1TX
Setting Default
05-C-G-4

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	2.3536G	56.58	74.00	-17.42	24.68	3	Horizontal	133	1.80	-	27.24	4.66	-
AV	2.3648G	45.14	54.00	-8.86	13.17	3	Horizontal	133	1.80	-	27.30	4.67	-
PK	2.4018G	92.87	Inf	-Inf	60.66	3	Horizontal	133	1.80	-	27.50	4.71	-
AV	2.402G	91.51	Inf	-Inf	59.30	3	Horizontal	133	1.80	-	27.50	4.71	-

2.4-2.4835GHz_BT-LE(1Mbps)

2402MHz_TX

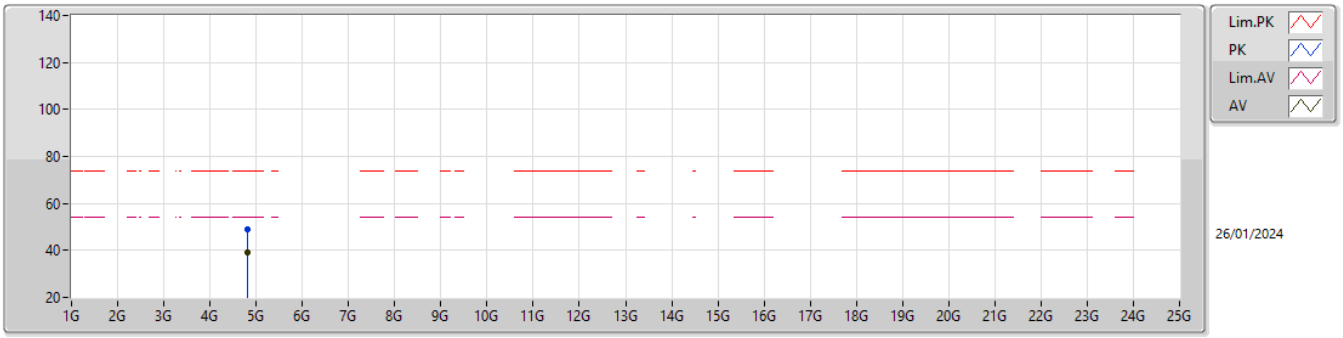


EUT Z_1TX
Setting Default
05-C-G-4

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	4.80376G	50.94	74.00	-23.06	46.99	3	Vertical	124	2.23	-	32.42	7.14	35.61
AV	4.80396G	42.98	54.00	-11.02	39.03	3	Vertical	124	2.23	-	32.42	7.14	35.61

2.4-2.4835GHz_BT-LE(1Mbps)

2402MHz_TX

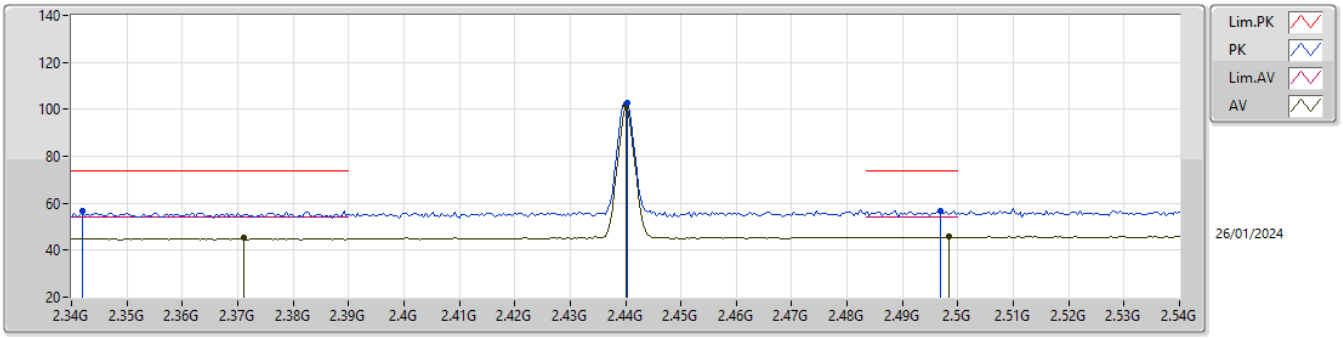


EUT Z_1TX
Setting Default
05-C-G-4

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	4.80448G	49.10	74.00	-24.90	45.14	3	Horizontal	146	1.80	-	32.43	7.14	35.61
AV	4.80404G	39.31	54.00	-14.69	35.36	3	Horizontal	146	1.80	-	32.42	7.14	35.61

2.4-2.4835GHz_BT-LE(1Mbps)

2440MHz_TX

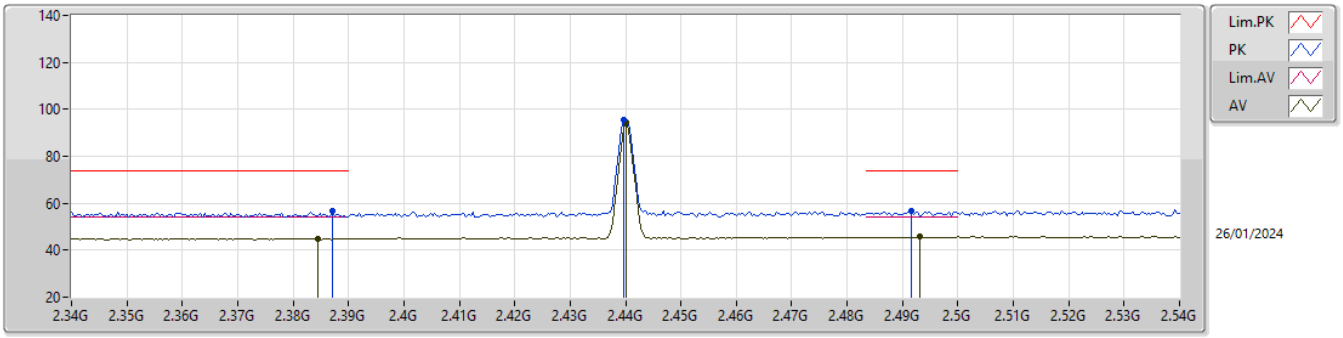


EUT Z_1TX
Setting Default
05-C-G-4

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	2.342G	56.57	74.00	-17.43	24.72	3	Vertical	122	1.02	-	27.20	4.65	-
AV	2.3712G	45.09	54.00	-8.91	13.11	3	Vertical	122	1.02	-	27.30	4.68	-
PK	2.4404G	102.85	Inf	-Inf	70.39	3	Vertical	122	1.02	-	27.70	4.76	-
AV	2.44G	101.48	Inf	-Inf	69.02	3	Vertical	122	1.02	-	27.70	4.76	-
PK	2.4968G	56.81	74.00	-17.19	24.08	3	Vertical	122	1.02	-	27.90	4.83	-
AV	2.4984G	45.67	54.00	-8.33	12.94	3	Vertical	122	1.02	-	27.90	4.83	-

2.4-2.4835GHz_BT-LE(1Mbps)

2440MHz_TX

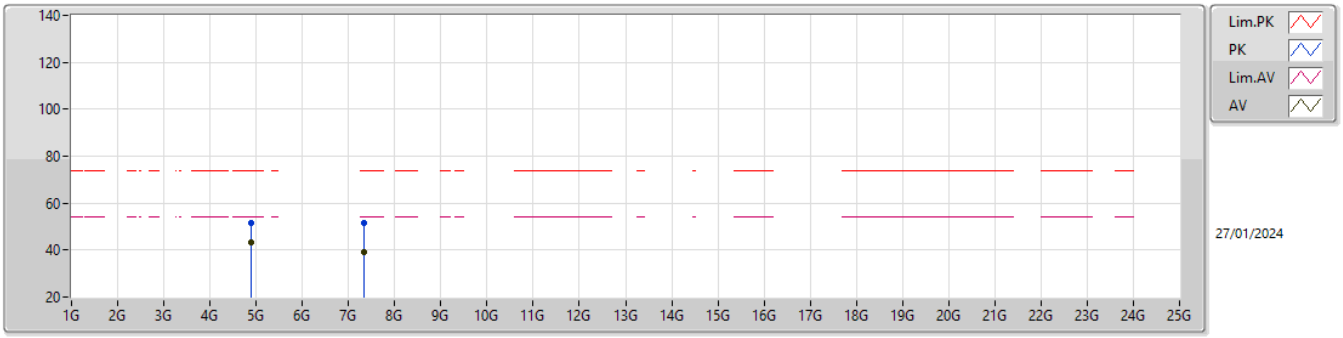


EUT Z_1TX
Setting Default
05-C-G-4

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	2.3872G	56.55	74.00	-17.45	24.48	3	Horizontal	261	1.67	-	27.37	4.70	-
AV	2.3844G	45.06	54.00	-8.94	13.03	3	Horizontal	261	1.67	-	27.34	4.69	-
PK	2.4396G	95.67	Inf	-Inf	63.21	3	Horizontal	261	1.67	-	27.70	4.76	-
AV	2.44G	94.31	Inf	-Inf	61.85	3	Horizontal	261	1.67	-	27.70	4.76	-
PK	2.4916G	56.76	74.00	-17.24	24.04	3	Horizontal	261	1.67	-	27.90	4.82	-
AV	2.4932G	45.66	54.00	-8.34	12.93	3	Horizontal	261	1.67	-	27.90	4.83	-

2.4-2.4835GHz_BT-LE(1Mbps)

2440MHz_TX

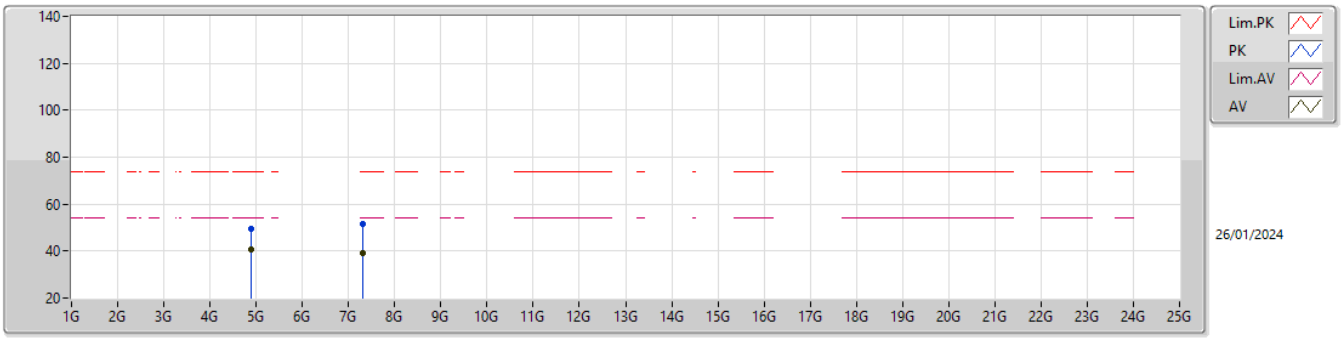


EUT Z_1TX
Setting Default
05-C-G-4

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	4.87944G	51.51	74.00	-22.49	47.21	3	Vertical	115	2.20	-	32.70	7.19	35.59
AV	4.87996G	43.34	54.00	-10.66	39.04	3	Vertical	115	2.20	-	32.70	7.19	35.59
PK	7.32552G	51.68	74.00	-22.32	41.02	3	Vertical	269	2.30	-	36.80	8.61	34.75
AV	7.32672G	39.04	54.00	-14.96	28.39	3	Vertical	269	2.30	-	36.79	8.61	34.75

2.4-2.4835GHz_BT-LE(1Mbps)

2440MHz_TX

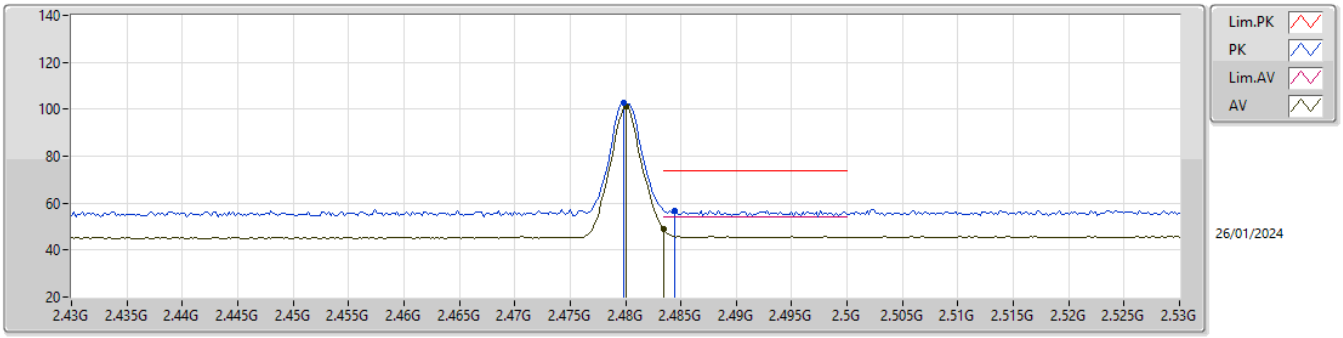


EUT Z_1TX
Setting Default
05-C-G-4

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	4.8794G	49.67	74.00	-24.33	45.37	3	Horizontal	147	1.80	-	32.70	7.19	35.59
AV	4.88004G	40.44	54.00	-13.56	36.14	3	Horizontal	147	1.80	-	32.70	7.19	35.59
PK	7.31824G	51.67	74.00	-22.33	40.99	3	Horizontal	200	2.97	-	36.83	8.61	34.76
AV	7.31836G	38.92	54.00	-15.08	28.24	3	Horizontal	200	2.97	-	36.83	8.61	34.76

2.4-2.4835GHz_BT-LE(1Mbps)

2480MHz_TX

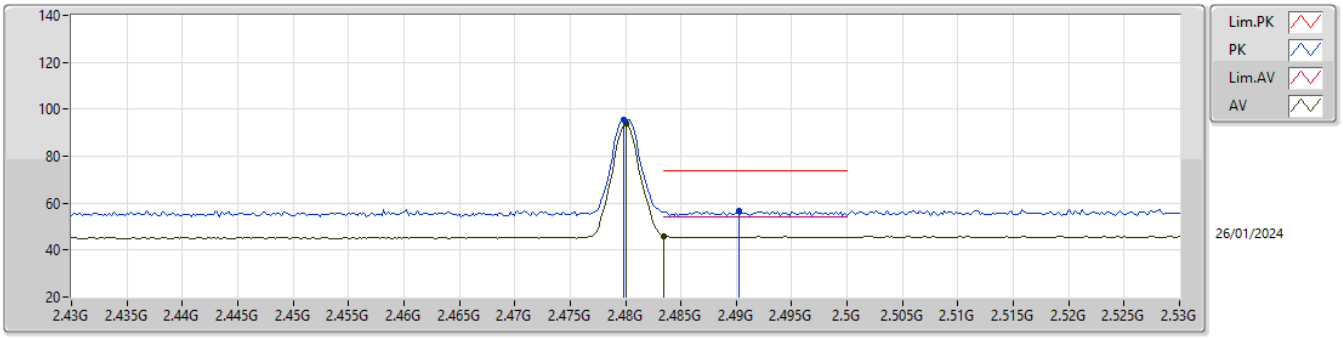


EUT Z_1TX
Setting Default
05-C-G-4

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	2.4798G	102.51	Inf	-Inf	69.80	3	Vertical	123	1.01	-	27.90	4.81	-
AV	2.48G	101.15	Inf	-Inf	68.44	3	Vertical	123	1.01	-	27.90	4.81	-
PK	2.4844G	56.98	74.00	-17.02	24.26	3	Vertical	123	1.01	-	27.90	4.82	-
AV	2.4835G	48.99	54.00	-5.01	16.28	3	Vertical	123	1.01	-	27.90	4.81	-

2.4-2.4835GHz_BT-LE(1Mbps)

2480MHz_TX

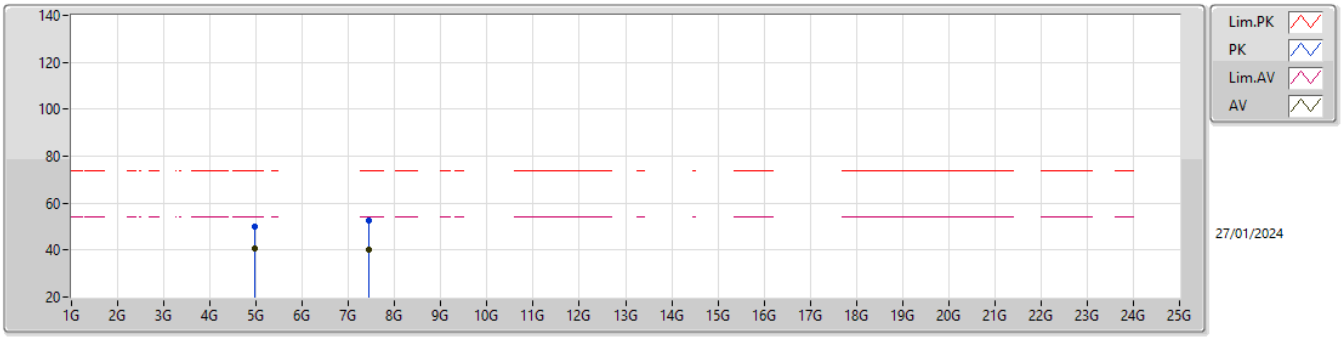


EUT Z_1TX
Setting Default
05-C-G-4

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	2.4798G	95.37	Inf	-Inf	62.66	3	Horizontal	259	1.68	-	27.90	4.81	-
AV	2.48G	94.08	Inf	-Inf	61.37	3	Horizontal	259	1.68	-	27.90	4.81	-
PK	2.4902G	56.66	74.00	-17.34	23.94	3	Horizontal	259	1.68	-	27.90	4.82	-
AV	2.4835G	46.01	54.00	-7.99	13.30	3	Horizontal	259	1.68	-	27.90	4.81	-

2.4-2.4835GHz_BT-LE(1Mbps)

2480MHz_TX

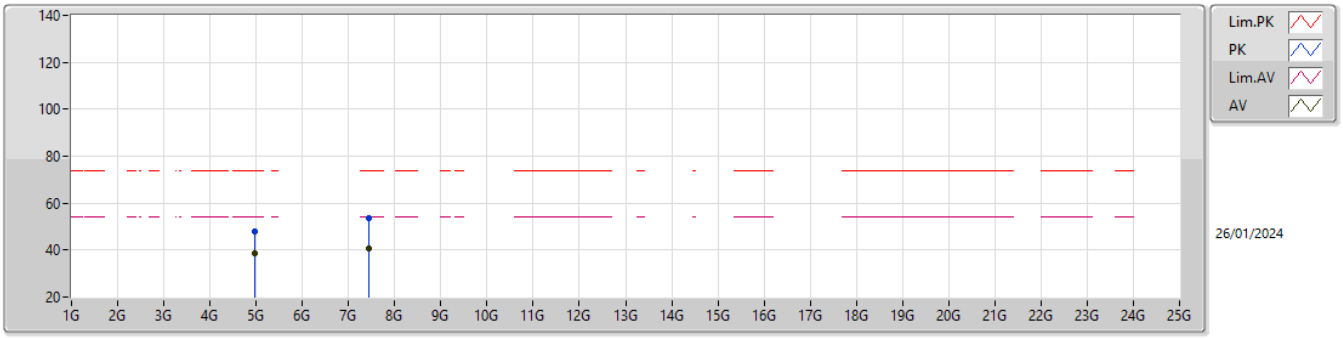


EUT Z_1TX
Setting Default
05-C-G-4

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	4.959448G	50.06	74.00	-23.94	45.47	3	Vertical	74	2.64	-	32.92	7.24	35.57
AV	4.96008G	40.75	54.00	-13.25	36.16	3	Vertical	74	2.64	-	32.92	7.24	35.57
PK	7.43272G	52.69	74.00	-21.31	42.01	3	Vertical	205	2.13	-	36.53	8.70	34.55
AV	7.43656G	40.42	54.00	-13.58	29.73	3	Vertical	205	2.13	-	36.53	8.71	34.55

2.4-2.4835GHz_BT-LE(1Mbps)

2480MHz_TX

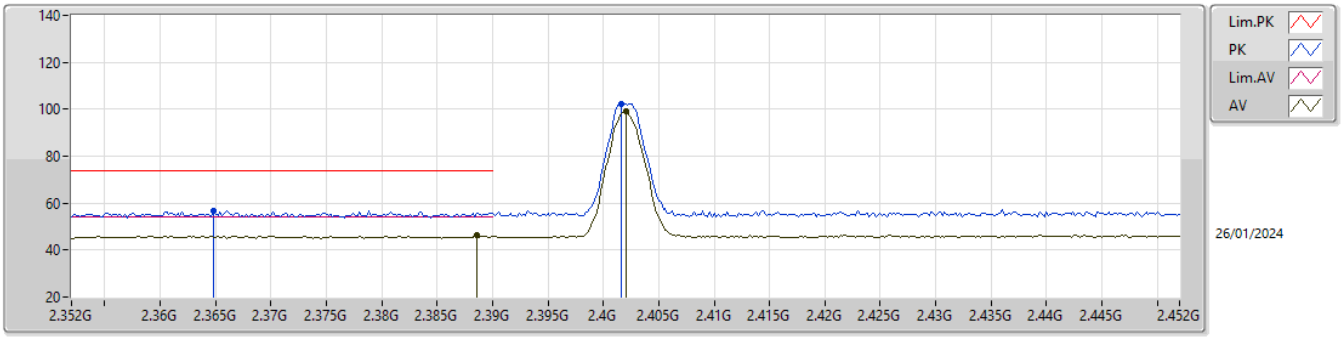


EUT Z_1TX
Setting Default
05-C-G-4

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	4.96G	48.13	74.00	-25.87	43.54	3	Horizontal	305	1.43	-	32.92	7.24	35.57
AV	4.96008G	38.53	54.00	-15.47	33.94	3	Horizontal	305	1.43	-	32.92	7.24	35.57
PK	7.44968G	53.78	74.00	-20.22	43.07	3	Horizontal	116	2.51	-	36.50	8.73	34.52
AV	7.44808G	40.47	54.00	-13.53	29.76	3	Horizontal	116	2.51	-	36.50	8.73	34.52

2.4-2.4835GHz_BT-LE(2Mbps)

2402MHz_TX

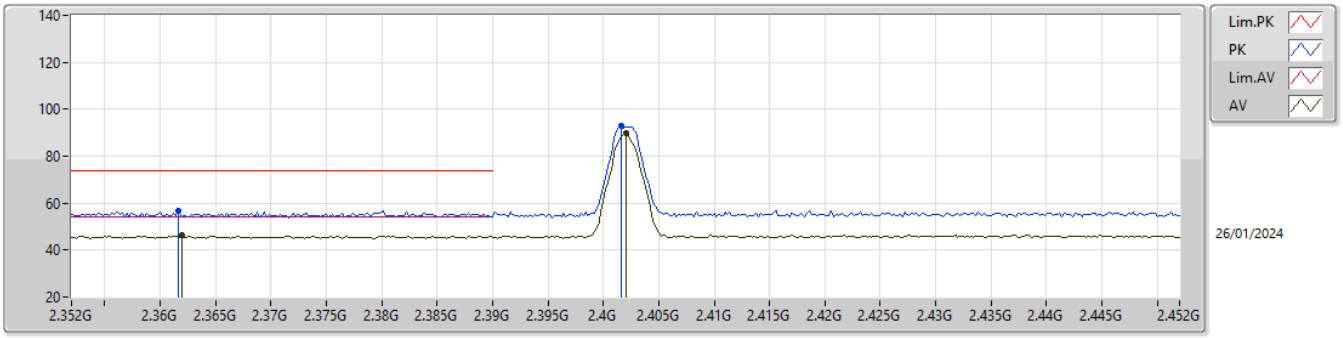


EUT Z_1TX
Setting Default
05-C-G-4

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	2.3648G	56.86	74.00	-17.14	24.89	3	Vertical	120	1.20	-	27.30	4.67	-
AV	2.3886G	46.44	54.00	-7.56	14.35	3	Vertical	120	1.20	-	27.39	4.70	-
PK	2.4016G	102.23	Inf	-Inf	70.02	3	Vertical	120	1.20	-	27.50	4.71	-
AV	2.402G	99.31	Inf	-Inf	67.10	3	Vertical	120	1.20	-	27.50	4.71	-

2.4-2.4835GHz_BT-LE(2Mbps)

2402MHz_TX

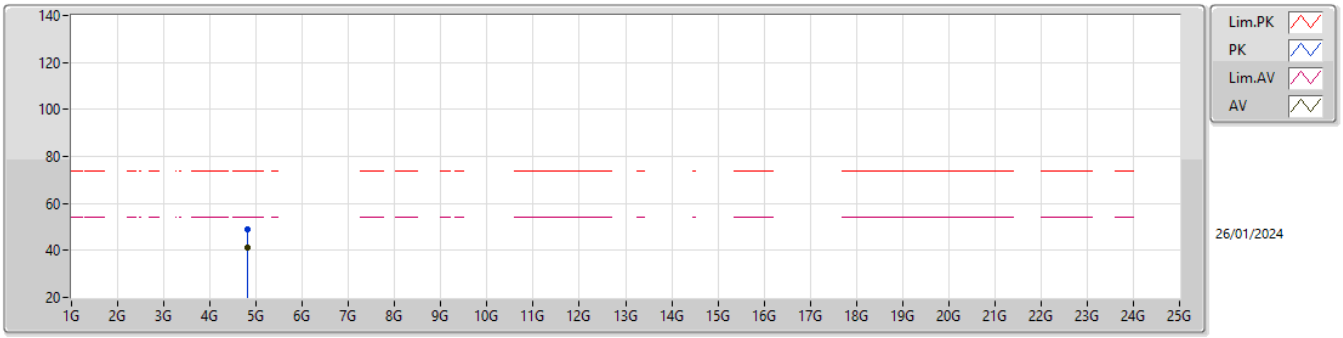


EUT Z_1TX
Setting Default
05-C-G-4

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	2.3616G	56.57	74.00	-17.43	24.60	3	Horizontal	132	1.80	-	27.30	4.67	-
AV	2.362G	46.17	54.00	-7.83	14.20	3	Horizontal	132	1.80	-	27.30	4.67	-
PK	2.4016G	92.68	Inf	-Inf	60.47	3	Horizontal	132	1.80	-	27.50	4.71	-
AV	2.402G	89.81	Inf	-Inf	57.60	3	Horizontal	132	1.80	-	27.50	4.71	-

2.4-2.4835GHz_BT-LE(2Mbps)

2402MHz_TX

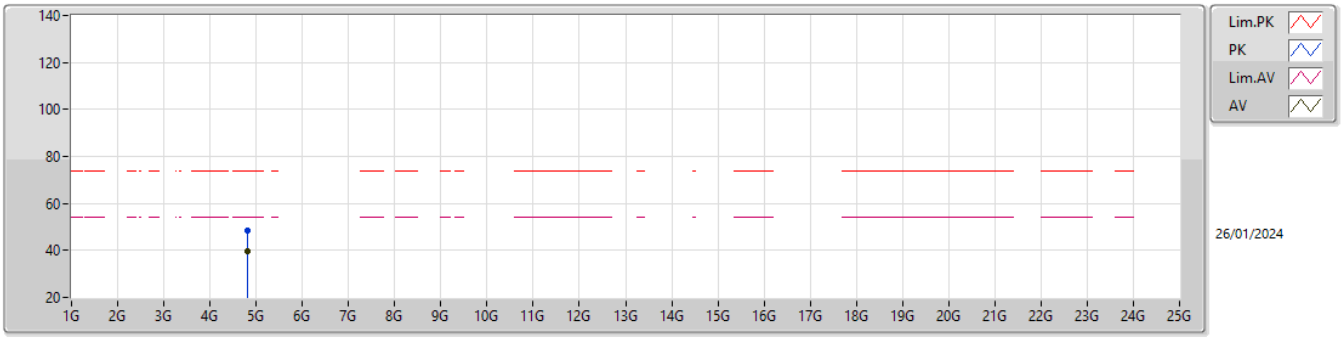


EUT Z_1TX
Setting Default
05-C-G-4

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	4.80396G	49.01	74.00	-24.99	45.06	3	Vertical	133	1.80	-	32.42	7.14	35.61
AV	4.80296G	41.15	54.00	-12.85	37.20	3	Vertical	133	1.80	-	32.42	7.14	35.61

2.4-2.4835GHz_BT-LE(2Mbps)

2402MHz_TX

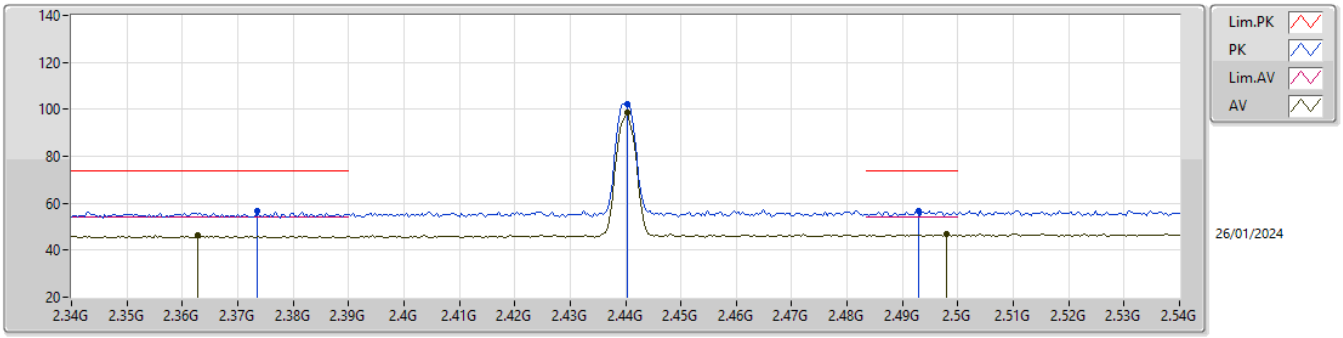


EUT Z_1TX
Setting Default
05-C-G-4

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	4.804G	48.64	74.00	-25.36	44.69	3	Horizontal	145	1.80	-	32.42	7.14	35.61
AV	4.80308G	39.44	54.00	-14.56	35.49	3	Horizontal	145	1.80	-	32.42	7.14	35.61

2.4-2.4835GHz_BT-LE(2Mbps)

2440MHz_TX

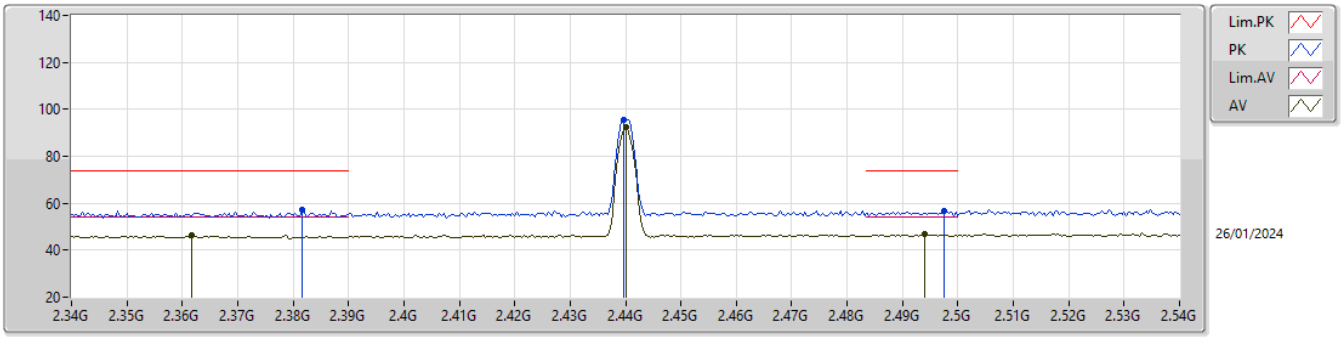


EUT Z_1TX
Setting Default
05-C-G-4

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	2.3736G	56.77	74.00	-17.23	24.79	3	Vertical	124	1.00	-	27.30	4.68	-
AV	2.3628G	46.19	54.00	-7.81	14.22	3	Vertical	124	1.00	-	27.30	4.67	-
PK	2.4404G	102.50	Inf	-Inf	70.04	3	Vertical	124	1.00	-	27.70	4.76	-
AV	2.4404G	98.39	Inf	-Inf	65.93	3	Vertical	124	1.00	-	27.70	4.76	-
PK	2.4928G	56.56	74.00	-17.44	23.83	3	Vertical	124	1.00	-	27.90	4.83	-
AV	2.498G	46.64	54.00	-7.36	13.91	3	Vertical	124	1.00	-	27.90	4.83	-

2.4-2.4835GHz_BT-LE(2Mbps)

2440MHz_TX

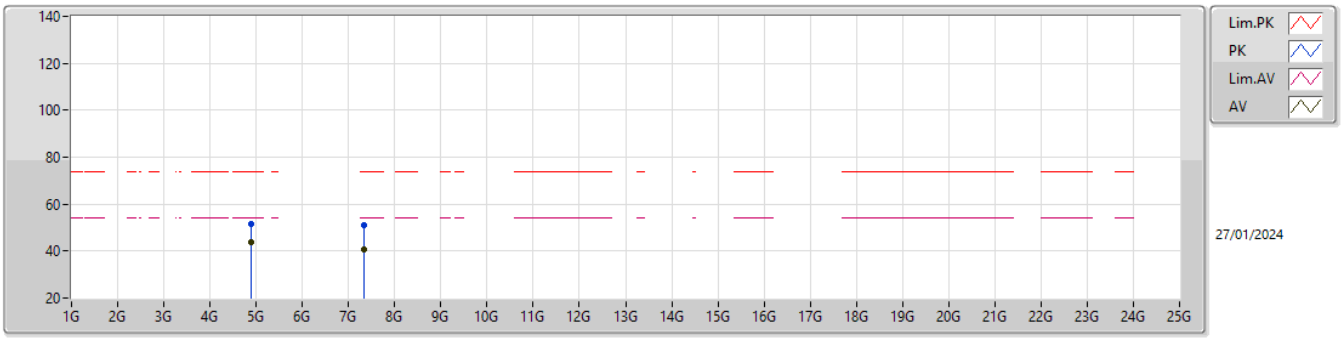


EUT Z_1TX
Setting Default
05-C-G-4

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	2.3816G	57.29	74.00	-16.71	25.28	3	Horizontal	261	1.68	-	27.32	4.69	-
AV	2.3616G	46.32	54.00	-7.68	14.35	3	Horizontal	261	1.68	-	27.30	4.67	-
PK	2.4396G	95.62	Inf	-Inf	63.16	3	Horizontal	261	1.68	-	27.70	4.76	-
AV	2.44G	92.66	Inf	-Inf	60.20	3	Horizontal	261	1.68	-	27.70	4.76	-
PK	2.4976G	56.61	74.00	-17.39	23.88	3	Horizontal	261	1.68	-	27.90	4.83	-
AV	2.494G	46.81	54.00	-7.19	14.08	3	Horizontal	261	1.68	-	27.90	4.83	-

2.4-2.4835GHz_BT-LE(2Mbps)

2440MHz_TX

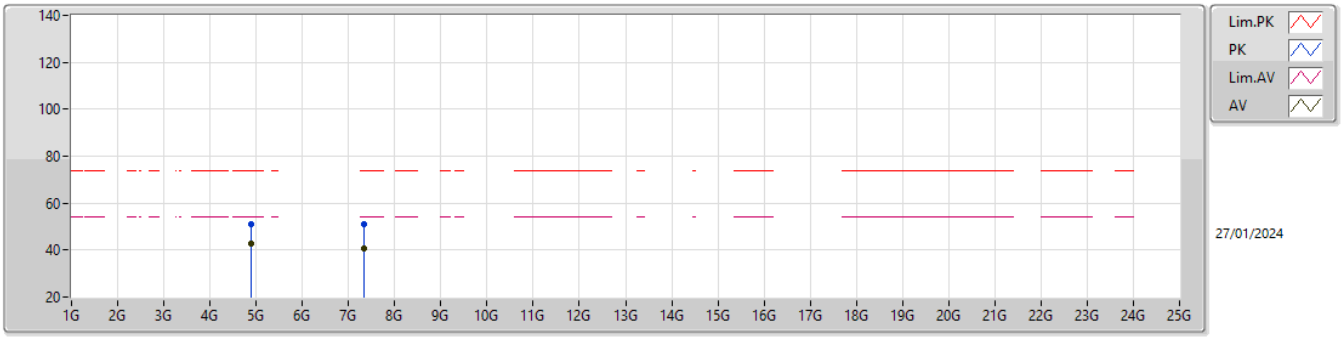


EUT Z_1TX
Setting Default
05-C-G-4

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	4.87912G	51.60	74.00	-22.40	47.30	3	Vertical	105	2.44	-	32.70	7.19	35.59
AV	4.87908G	43.54	54.00	-10.46	39.24	3	Vertical	105	2.44	-	32.70	7.19	35.59
PK	7.32844G	51.10	74.00	-22.90	40.44	3	Vertical	70	1.61	-	36.79	8.61	34.74
AV	7.32548G	40.86	54.00	-13.14	30.20	3	Vertical	70	1.61	-	36.80	8.61	34.75

2.4-2.4835GHz_BT-LE(2Mbps)

2440MHz_TX

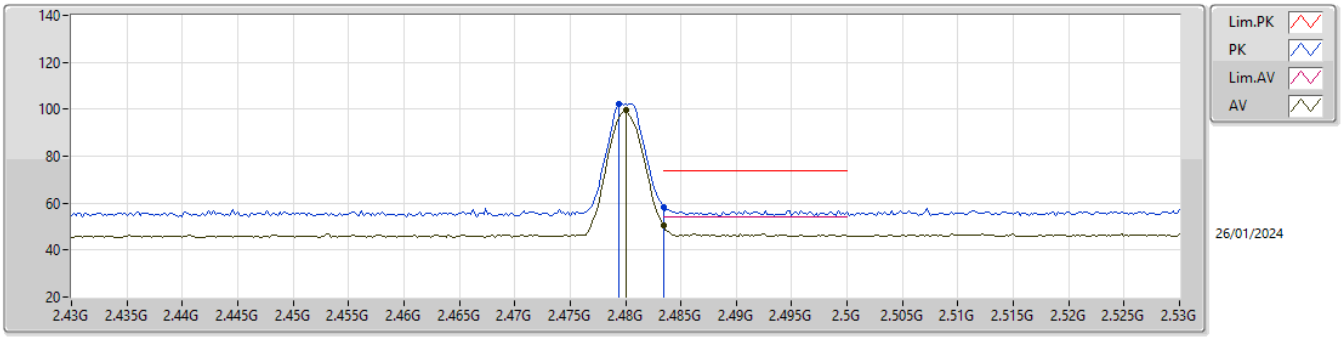


EUT Z_1TX
Setting Default
05-C-G-4

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	4.87912G	50.78	74.00	-23.22	46.48	3	Horizontal	138	1.00	-	32.70	7.19	35.59
AV	4.87896G	42.76	54.00	-11.24	38.46	3	Horizontal	138	1.00	-	32.70	7.19	35.59
PK	7.32588G	51.10	74.00	-22.90	40.44	3	Horizontal	66	1.87	-	36.80	8.61	34.75
AV	7.32596G	40.57	54.00	-13.43	29.91	3	Horizontal	66	1.87	-	36.80	8.61	34.75

2.4-2.4835GHz_BT-LE(2Mbps)

2480MHz_TX

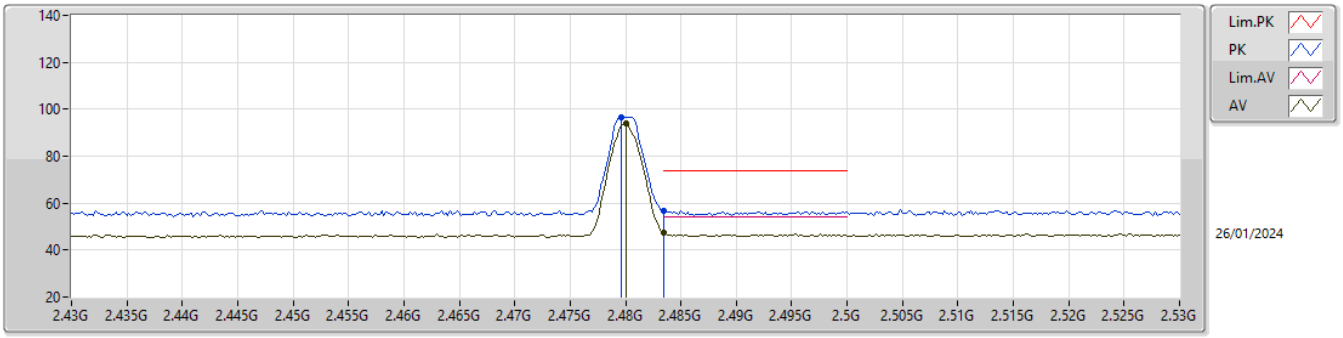


EUT Z_1TX
Setting Default
05-C-G-4

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	2.4794G	102.34	Inf	-Inf	69.64	3	Vertical	125	1.02	-	27.89	4.81	-
AV	2.48G	99.43	Inf	-Inf	66.72	3	Vertical	125	1.02	-	27.90	4.81	-
PK	2.4835G	58.12	74.00	-15.88	25.41	3	Vertical	125	1.02	-	27.90	4.81	-
AV	2.4835G	50.32	54.00	-3.68	17.61	3	Vertical	125	1.02	-	27.90	4.81	-

2.4-2.4835GHz_BT-LE(2Mbps)

2480MHz_TX

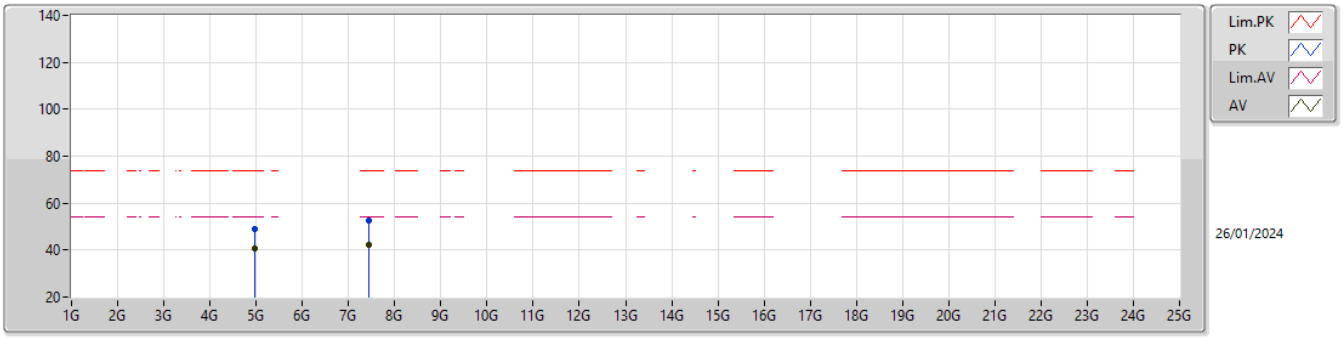


EUT Z_1TX
Setting Default
05-C-G-4

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	2.4796G	96.75	Inf	-Inf	64.04	3	Horizontal	250	2.26	-	27.90	4.81	-
AV	2.48G	93.84	Inf	-Inf	61.13	3	Horizontal	250	2.26	-	27.90	4.81	-
PK	2.4835G	56.90	74.00	-17.10	24.19	3	Horizontal	250	2.26	-	27.90	4.81	-
AV	2.4835G	47.39	54.00	-6.61	14.68	3	Horizontal	250	2.26	-	27.90	4.81	-

2.4-2.4835GHz_BT-LE(2Mbps)

2480MHz_TX

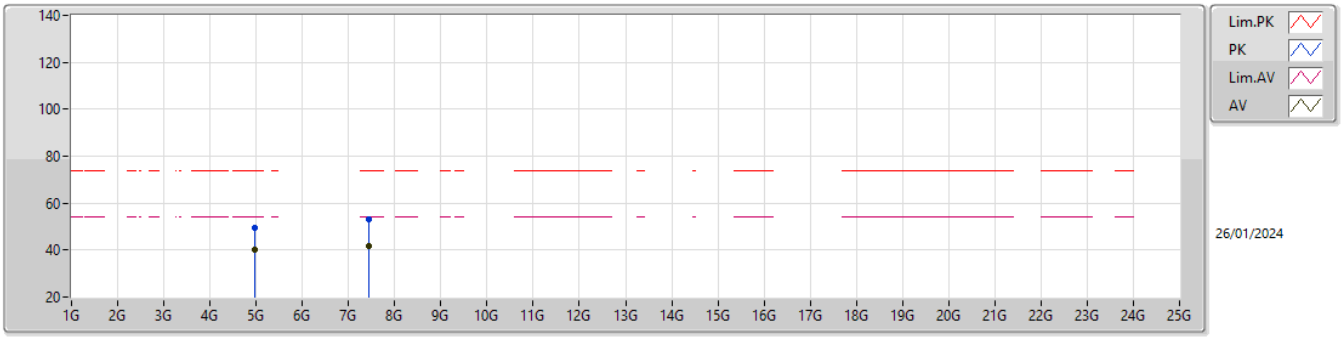


EUT Z_1TX
Setting Default
05-C-G-4

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	4.95988G	49.02	74.00	-24.98	44.43	3	Vertical	64	2.23	-	32.92	7.24	35.57
AV	4.95912G	40.59	54.00	-13.41	36.00	3	Vertical	64	2.23	-	32.92	7.24	35.57
PK	7.44684G	52.43	74.00	-21.57	41.72	3	Vertical	360	3.00	-	36.51	8.73	34.53
AV	7.44872G	42.03	54.00	-11.97	31.32	3	Vertical	360	3.00	-	36.50	8.73	34.52

2.4-2.4835GHz_BT-LE(2Mbps)

2480MHz_TX



EUT Z_1TX
Setting Default
05-C-G-4

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	4.95996G	49.44	74.00	-24.56	44.85	3	Horizontal	146	1.92	-	32.92	7.24	35.57
AV	4.95896G	40.06	54.00	-13.94	35.47	3	Horizontal	146	1.92	-	32.92	7.24	35.57
PK	7.44596G	53.07	74.00	-20.93	42.36	3	Horizontal	204	2.68	-	36.51	8.73	34.53
AV	7.44708G	41.85	54.00	-12.15	31.14	3	Horizontal	204	2.68	-	36.51	8.73	34.53