Testing Laboratory 3785

FCC Radio Test Report

FCC ID	:	**2ASJ3-ATS**
Equipment	:	**Console module (ATS)**
Brand Name	:	**AVIRON**
Model Name	:	**ATS**
Applicant	:	**Aviron Interactive** **265 Bartley Drive, North York, Ontario, M4A 2N7, Canada**
Manufacturer	:	**Qisda Corporation** **157 , Shan-Ying Road, Gueishan, Taoyuan 333, Taiwan**
Standard	:	**47 CFR FCC Part 15.247**

The product was received on Oct. 24, 2024, and testing was started from Nov. 28, 2024 and completed on Dec. 17, 2024. We, SPORTON INTERNATIONAL INC. Hsinhua Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

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

Approved by: Jackson Tsai

SPORTON INTERNATIONAL INC. Hsinhua Laboratory

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

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History of this test report

Report No.	Version	Description	Issued Date
FR4O2313AC	01	Initial issue of report	Jan. 06, 2025
FR4O2313AC	02	Revised Connector. (This report is the latest version replacing for the report issued on Jan. 06, 2025.)	Jan. 10, 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	-

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and explanations:
None

Reviewed by: Ben Tseng

Report Producer: Amber Chiu

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
2400-2483.5	b, g, n (HT20)	2412-2462	1-11 [11]

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11b	20	2TX
2.4-2.4835GHz	802.11g	20	2TX
2.4-2.4835GHz	802.11n HT20	20	2TX

Note:
- 11b mode uses a combination of DSSS-DBPSK, DQPSK, CCK modulation.
- 11g, HT20 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- BWch is the nominal channel bandwidth.

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector	Support
1	INPAQ	WA-P-LB-02-1095	PCB	I-Pex	2.4G+5G+BT
2	INPAQ	WA-P-LB-01-335	PCB	I-Pex	2.4G+5G

Ant.	Port	Gain (dBi)			
		2.4G	5G		BT
			U-NII-1	U-NII-3	
1	1	2.92	3.21	3.20	2.92
2	2	2.90	3.14	3.12	2.90

Note 1: The EUT has two antennas.

For 2.4GHz function:

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

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

For 5GHz function:

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

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

For BT function:

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

Only Ant. 1 (port 1) can be used as transmitting/receiving antenna.

1.1.3 EUT Information

Operational Condition					
EUT Power Type	From AC Adapter				
EUT Function	☒	Point-to-multipoint	☐	Point-to-point	
Beamforming Function	☐	With beamforming	☒	Without beamforming	
Type of EUT					
☒	Stand-alone				
☐	Combined (EUT where the radio part is fully integrated within another device)				
	Combined Equipment - Brand Name / Model No.:	…			
☐	Plug-in radio (EUT intended for a variety of host systems)				
	Host System - Brand Name / Model No.:	…			
☐	Other:				

1.1.4 Mode Test Duty Cycle

Mode	DC	DCF (dB)	T (s)	VBW (Hz)_1/T
802.11b_Nss1,(1Mbps)_2TX	0.998	0.01	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11g_Nss1,(6Mbps)_2TX	0.991	0.04	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11n HT20_Nss1,(MCS0)_2TX	0.99	0.04	n/a (DC>=0.98)	n/a (DC>=0.98)

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

1.2 Testing Applied Standards

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

- 47 CFR FCC Part 15
- ANSI C63.10-2013

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

- KDB 558074 D01 v05r02
- KDB 662911 D01 v02r01
- KDB 414788 D01 v01r01

1.3 Testing Location Information

Test Lab.：Sporton International Inc. Hsinhua Laboratory				
☒ Hsinhua **(TAF:** 3785**)**	**ADD:** No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)			
	TEL: 886-3-327-3456		**FAX:** 886-3-327-0973	
Test site Designation No. TW3785 with FCC.				
Test Condition	**Test Site No.**	**Test Engineer**	**Test Environment**	**Test Date**
AC Conduction	CO04-HY	Daniel Lin	21.1~22.5°C / 51~54%	17/Dec/2024
RF Conducted	TH01-HY	Sonic Li	23.4~23.6°C / 52~56%	03/Dec/2024~04/Dec/2024
Radiated	03CH02-HY	Vasari Huang	21.1~22.3°C / 53~56%	28/Nov/2024~29/Nov/2024
☒ **Wenhua 3rd.** **(TAF:** 3785**)**	**ADD:** No. 58, Aly. 75, Ln. 564, Wenhua 3rd Rd., Guishan Dist. Taoyuan City 333, Taiwan (R.O.C.)			
	TEL: 886-3-327-0868			
Test site Designation No. TW0036 with FCC.				
Test Condition	**Test Site No.**	**Test Engineer**	**Test Environment**	**Test Date**
Radiated (Co-location)	03CH25-HY	Billy Wang	20.1~20.5°C / 54~55%	17/Dec/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**
AC Power-line Conducted Emissions	4.53 dB	Confidence levels of 95%
Bandwidth	3 MHz	Confidence levels of 95%
Maximum Conducted Output Power	2 dB	Confidence levels of 95%
Power Spectral Density	2 dB	Confidence levels of 95%
Emissions in Non-restricted Frequency Bands	0.14 dB	Confidence levels of 95%
Emissions in Restricted Frequency Bands	4.8 dB	Confidence levels of 95%
Temperature	0.41 °C	Confidence levels of 95%
Humidity	3.4 %	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

Test Software Version	Dos 6.1

Mode	Power Setting
802.11b_Nss1,(1Mbps)_2TX	-
2412MHz	18
2417MHz	17
2437MHz	22
2457MHz	18
2462MHz	19
802.11g_Nss1,(6Mbps)_2TX	-
2412MHz	15
2417MHz	14
2437MHz	19
2457MHz	16
2462MHz	16
802.11n HT20_Nss1,(MCS0)_2TX	-
2412MHz	15
2417MHz	16
2437MHz	19
2457MHz	16
2462MHz	15

2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral Test Voltage: 120Vac / 60Hz
Operating Mode	CTX
1	Adapter Mode

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

The Worst Case Mode for Following Conformance Tests			
Tests Item	Emissions in Restricted Frequency Bands		
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.		
Operating Mode < 1GHz	CTX		
1	Adapter Mode		
Operating Mode > 1GHz	CTX		
Orthogonal Planes of EUT	**X Plane**	**Y Plane**	**Z Plane**
			
Worst Planes of EUT	V		

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Operating Mode	CTX
1	WLAN 2.4GHz + WLAN 5GHz
Refer to Sporton Test Report No.: FA4O2313 for Co-location RF Exposure Evaluation and Appendix G for Radiated Emission Co-location.	

2.3 Support Equipment

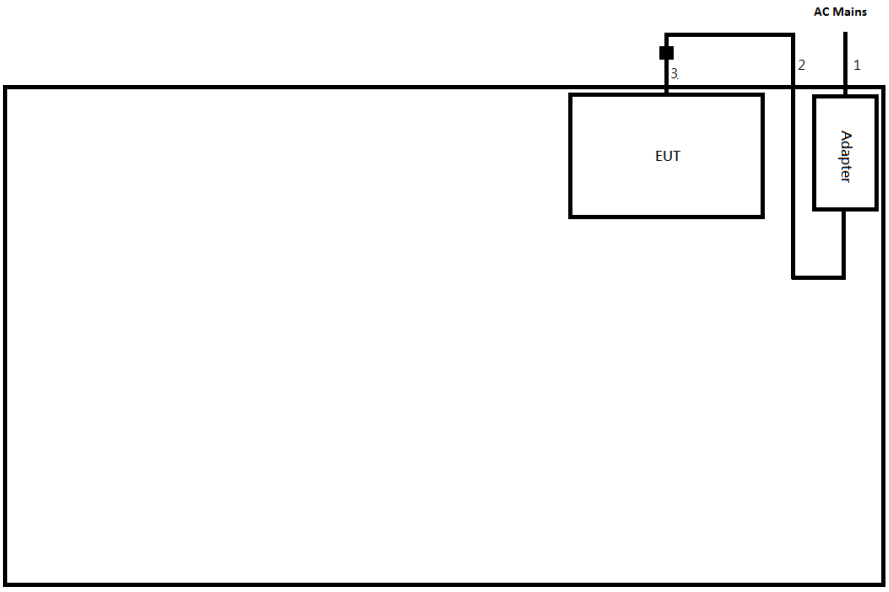
Support Equipment – AC Conduction					
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**	**Remark**
1	Adapter	GVE	GM60-120500-F	-	-
2	Fixture	N/A	N/A	-	Provided by Customer
3	Power Cord	N/A	N/A	-	Provided by Customer

Support Equipment – Conducted					
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**	**Remark**
1	Notebook	DELL	E5410	-	-
2	Adapter for NB	DELL	HA65NM130	-	-

Support Equipment – Radiated					
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**	**Remark**
1	Adapter	GVE	GM60-120500-F	-	-
2	Fixture	N/A	N/A	-	Provided by Customer
3	Power Cord	N/A	N/A	-	Provided by Customer

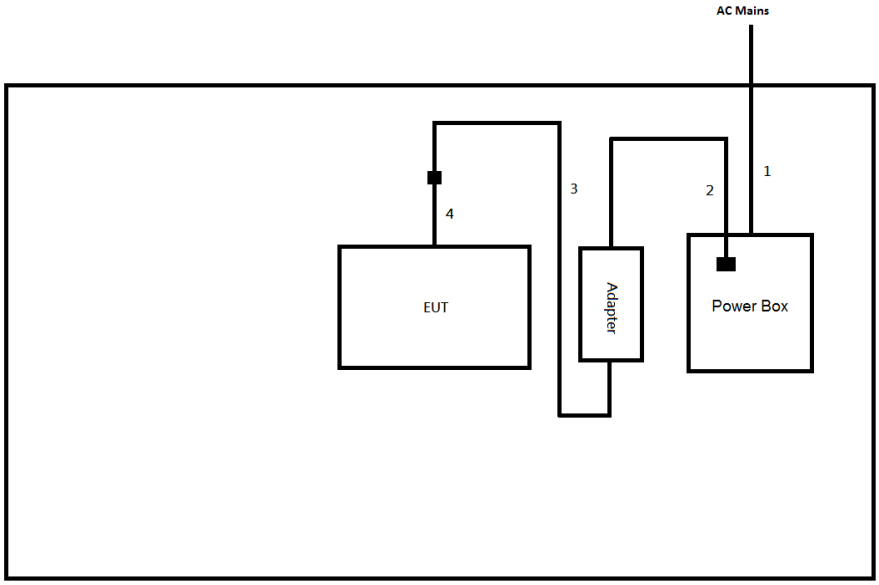
2.4 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



Item	Connection	Shielded	Length(m)	Remark
1	AC Power cable	No	1.5	-
2	DC Power cable	No	1.3	-
3	Fixture cable	No	0.4	-

Test Setup Diagram - Radiated Test



Item	Connection	Shielded	Length(m)	Remark
1	AC Power cable	No	1.8	-
2	AC Power cable	No	1.5	-
3	DC Power cable	No	1.3	-
4	Fixture cable	No	0.4	-

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

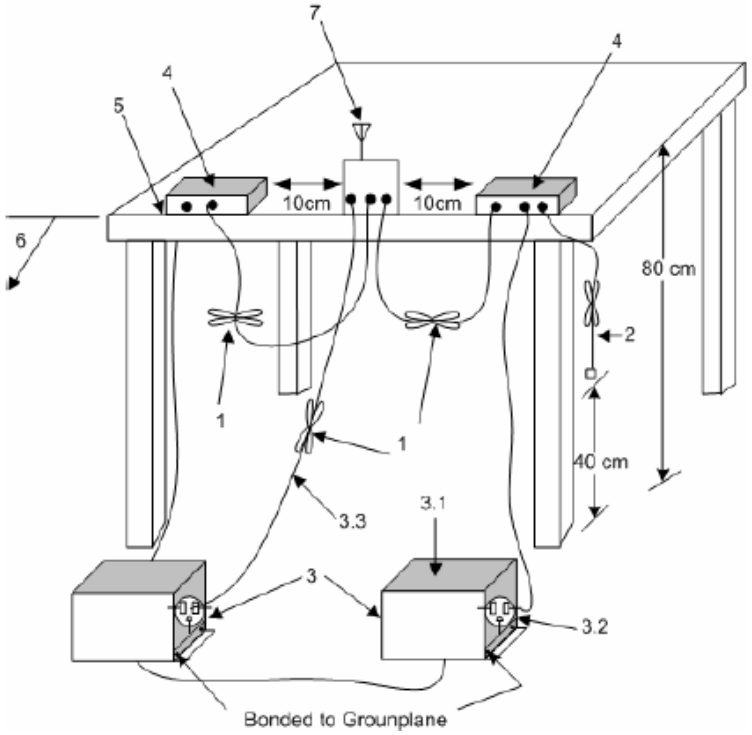
Test Method
☒ Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

3.1.4 Measurement Results Calculation

The measured Level is calculated using:
Corrected Reading: Raw(Read Level) +LISN(LISN Factor) + CL(Cable Loss) + AT(Attenuator).

3.1.5 Test Setup

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 50Ω 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.

3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 DTS Bandwidth

3.2.1 6dB Bandwidth Limit

6dB Bandwidth Limit
Systems using digital modulation techniques:
▪ 6 dB bandwidth ≥ 500 kHz.

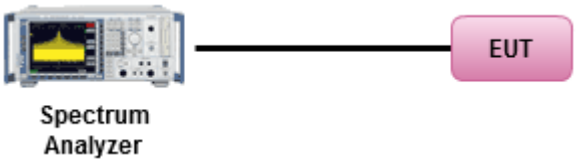
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method	
▪ For the emission bandwidth shall be measured using one of the options below:	
	☒ Refer as KDB 558074. clause 8.2 (11.8 of ANSI C63.10) DTS bandwidth measurement.
	☐ Refer as RSS-Gen, clause 6.7 for occupied bandwidth testing.
	☐ Refer as ANSI C63.10, clause 6.9.3 for occupied bandwidth testing.

3.2.4 Test Setup

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} ≤ 6 dBi, then P_{Out} ≤ 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 + 8dB dBm
e.i.r.p. Power Limit:		
▪ 2400-2483.5 MHz Band		
	▪ Point-to-multipoint systems (P2M): P_{eirp} ≤ 36 dBm (4 W)	
	▪ Point-to-point systems (P2P): P_{eirp} ≤ MAX(36, [P_{Out} + G_{TX}]) dBm	
	▪ Smart antenna system (SAS)	
		- Single beam: P_{eirp} ≤ MAX(36, P_{Out} + G_{TX}) dBm
		- Overlap beam: P_{eirp} ≤ MAX(36, P_{Out} + G_{TX}) dBm
		- Aggregate power on all beams: P_{eirp} ≤ MAX(36, [P_{Out} + G_{TX} + 8]) dBm
P_{Out} = maximum peak conducted output power or maximum conducted output power in dBm, **G_{TX}** = the maximum transmitting antenna directional gain in dBi.		

3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
▪ Maximum Peak Conducted Output Power	
	☐ Refer as KDB 558074, clause 8.3.1.1 (11.9.1.1 of ANSI C63.10) RBW ≥ EBW method.
	☐ Refer as KDB 558074, clause 8.3.1.2 (11.9.1.2 of ANSI C63.10) integrated band power method.
	☐ Refer as KDB 558074, clause 8.3.1.3 (11.9.1.3 of ANSI C63.10) peak power meter.
▪ Maximum Average Conducted Output Power	
	☐ Refer as KDB 558074, clause 8.3.2.2 (11.9.2.2 of ANSI C63.10) using a spectrum analyzer.
	☒ Refer as KDB 558074, clause 8.3.2.3 (11.9.2.3 of ANSI C63.10) using a power meter.
▪ For conducted measurement.	
	▪ If the EUT supports multiple transmit chains using options given below: Refer as KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.
	▪ If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \ldots + P_n$ (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

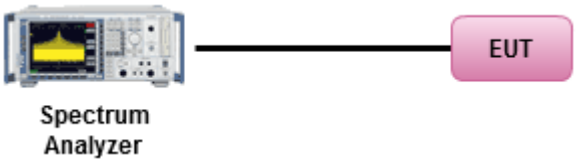
3.4.2 Measuring Instruments

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 KDB 558074, clause 8.4 (11.10 of ANSI C63.10) Max. PSD.
▪ For conducted measurement.
▪ If The EUT supports multiple transmit chains using options given below:
▪ Measure and sum the spectra across the outputs. Refer as KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.

3.4.4 Test Setup

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

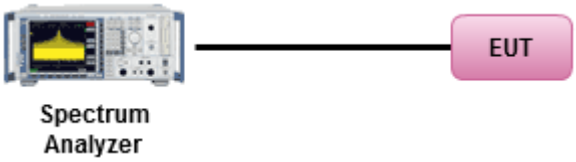
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

Test Method
▪ Refer as KDB 558074, clause 8.5 (11.11 of ANSI C63.10) for non-restricted frequency bands.

3.5.4 Test Setup

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 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

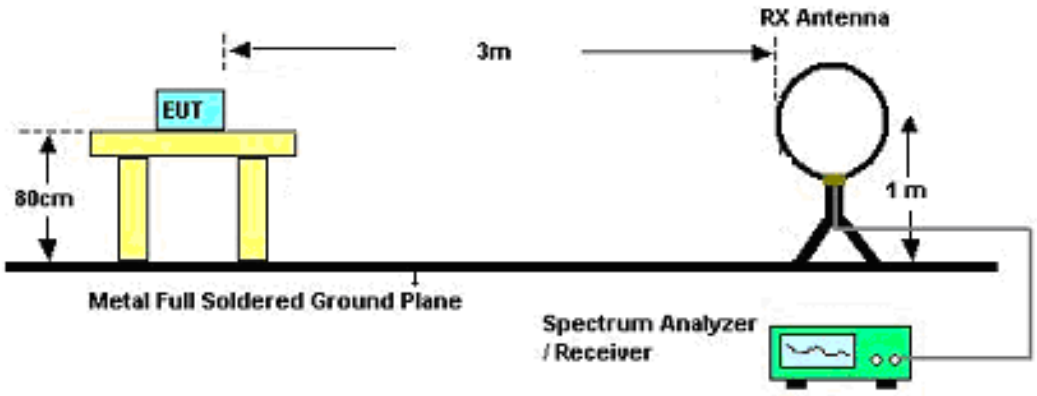
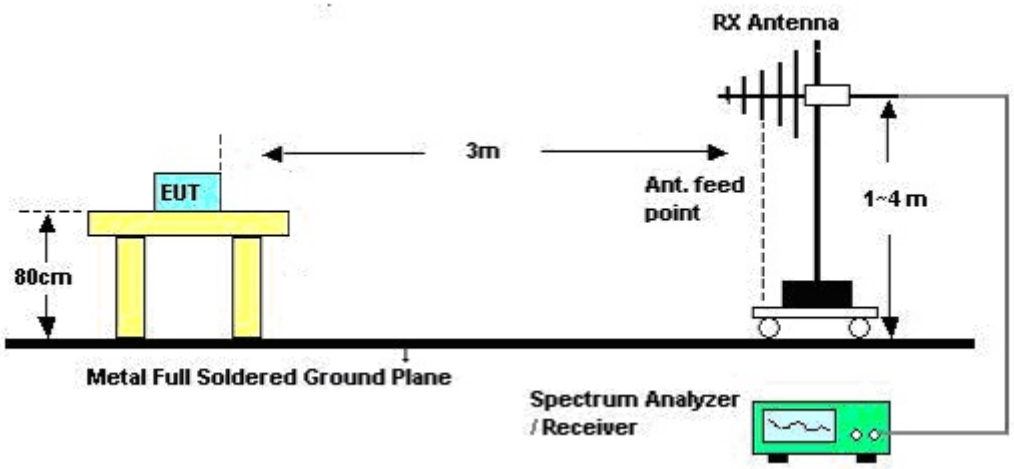
Test Method	
▪	The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].
▪	Refer as ANSI C63.10, clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.
▪	For the transmitter unwanted emissions shall be measured using following options below:
	▪ Refer as KDB 558074, clause 8.6 (11.12 of ANSI C63.10) for restricted frequency bands.
▪	For the transmitter band-edge emissions shall be measured using following options below:
	▪ Refer as KDB 558074 clause 8.7.1, When the performing peak or average radiated measurements, emissions within 2 MHz of the authorized band edge may be measured using the marker-delta method described below.
	▪ Refer as KDB 558074, clause 8.7.2 (6.10.6 of ANSI C63.10) for marker-delta method for band-edge measurements.
	▪ Refer as KDB 558074, clause 8.7.3 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels.
▪	Use the following spectrum analyzer settings:
	▪ Set RBW=100 kHz for f < 1 GHz; VBW=3 * RBW; Sweep = auto; Detector function = peak; Trace = max hold.
	▪ Set RBW = 1 MHz, VBW= 3MHz for f ≥ 1 GHz for peak measurement. For average measurement, refer as 1.1.4.
▪	KDB 414788 Open-Field Test Sites and Chamber Correlation Justification.
	▪ Based on FCC 15.31(f)(2): measurements may be performed at a distance closer than that specified in regulations; however, an attempt should be made to avoid making measurements in the near field.
	▪ Open-field site and chamber correlation testing had been performed and chamber measured test result is the worst case test result.

3.6.4 Measurement Results Calculation

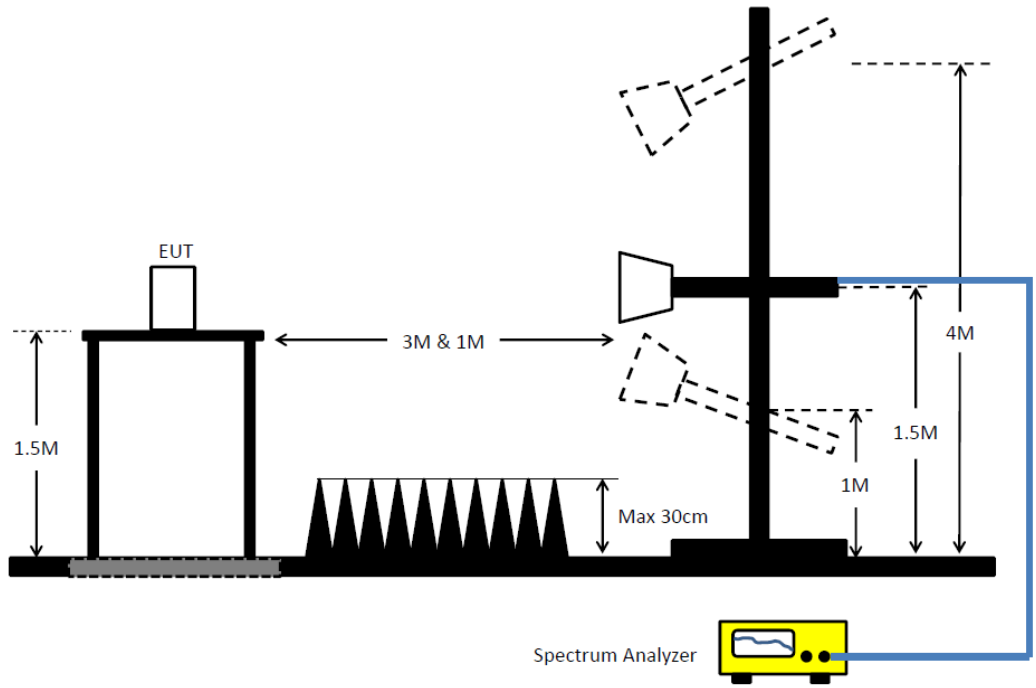
The measured Level is calculated using:

Corrected Reading: Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamp Factor)

3.6.5 Test Setup

Emissions in Restricted Frequency Bands
9kHz ~30MHz

30MHz~1GHz


Above 1GHz



3.6.6 Test Result of Emissions in Restricted Frequency Bands (Below 30MHz)

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

3.6.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F

4 Test Equipment and Calibration Data

Instrument for AC Conduction

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMI Test Receiver	ROHDE & SCHWARZ	ESR3	102051	9kHz ~ 3.6GHz	17/May/2024	16/May/2025
Two-Line V-Network	ROHDE & SCHWARZ	ENV 216	101274	9kHz ~ 30MHz	18/Jun/2024	17/Jun/2025
RF Cable 5m	TITAN	TITAN	CO04-cable-01	9 kHz~200MHz	27/Feb/2024	26/Feb/2025
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9kHz ~ 30MHz	17/Oct/2024	16/Oct/2025
Software	Sporton	SENSE-EMI	V5.11.3	-	NCR	NCR

NCR: No Calibration Required

Instrument for Conducted Test

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Signal Analyzer	R&S	FSV 40	101013	10Hz~40GHz	09/Apr/2024	08/Apr/2025
SMB100A Signal Generator	R&S	SMB100A	181147	100kHz~40GHz	16/Oct/2024	15/Oct/2025
Power Meter	Anritsu	ML2495A	0949003	300MHz~40GHz	17/Feb/2024	16/Feb/2025
Pulse Sensor	Anritsu	MA2411B	0917017	300MHz~40GHz	17/Feb/2024	16/Feb/2025
SENSE-15247_DTS	Sporton	V5.11.21	N/A	N/A	N/A	N/A

Instrument for Radiated Test (03CH02-HY)

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	30MHz~1GHz 3m	14/Jul/2024	13/Jul/2025
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	1GHz~18GHz 3m	14/Jul/2024	13/Jul/2025
EMI Test Receiver	R&S	ESR	102052	9kHz~3.6GHz	03/May/2024	02/May/2025
Signal Analyzer	R&S	FSP 40	100593	9kHz~40GHz	11/Mar/2024	10/Mar/2025
Loop Antenna	TESEQ	HLA 6120	31244	9kHz~30MHz	19/Mar/2024	18/Mar/2025
Bilog Antenna & 5dB Attenuator	SCHAFFNER / MTJ	CBL 6112B / MTJ6102-05	2723/2	30MHz~1GHz	26/Aug/2024	25/Aug/2025
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	02268	1GHz~18GHz	23/Sep/2024	22/Sep/2025
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170154	18GHz~40GHz	04/Jun/2024	03/Jun/2025
RF Cable	MVE	400LL+SN 200207	03CH02-cable-02	9kHz~30MHz	26/Nov/2024	26/Nov/2025
RF Cable	MVE	400LL+SN 200207	03CH02-cable-02	30MHz~1GHz	26/Nov/2024	26/Nov/2025
RF Cable-R03m	HUBER+SUHNER	SUCOFLEX 104	03CH02-cable-01	1GHz~40GHz	15/Feb/2024	14/Feb/2025
Amplifier	Agilent	8447D	2944A11149	100kHz~1.3GHz	29/Jun/2024	28/Jun/2025
Microwave Preamplifier	Agilent	8449B	3008A02373	1GHz~26.5GHz	01/Oct/2024	30/Sep/2025
Microwave Preamplifier	EMC INSTRUMENTS	EM18G40G	060604	18GHz ~40GHz	19/Apr/2024	18/Apr/2025
SENSE-15247-DTS	Sporton	V5.11.21	N/A	N/A	N/A	N/A

Instrument for Radiated Test (Co-location)

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH25-HY	1GHz~18GHz 3m	08/Aug/2024	07/Aug/2025
Signal Analyzer	ROHDE& SCHWARZ	FSV3044	101410	10Hz~44GHz	18/Nov/2024	17/Nov/2025
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	02876	1GHz~18GHz	11/Jul/2024	10/Jul/2025
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170154	18GHz~40GHz	04/Jun/2024	03/Jun/2025
RF Cable	HUBER+SUHNER	SUOFLEX 104	CB007	1GHz~40GHz	23/Apr/2024	22/Apr/2025
Preamplifier	SGH	PRAMP 118-H	20230515-3	1GHz~18GHz	24/May/2024	23/May/2025
Amplifier	EM	EM18G40GA	060874	18GHz ~ 40GHz	21/Sep/2024	22/Sep/2025
SENSE-EMI	Sporton	V5.11.6	N/A	N/A	N/A	N/A

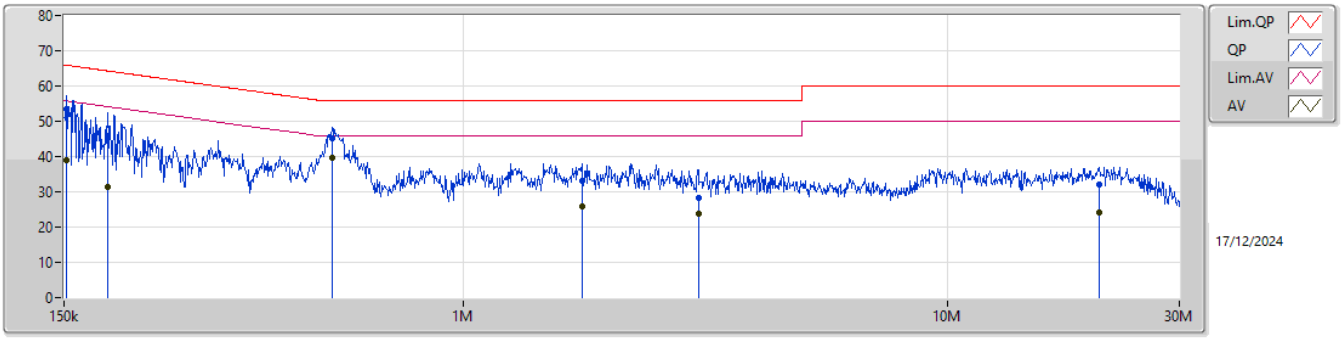
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	535.976k	39.82	46.00	-6.18	Line

Result

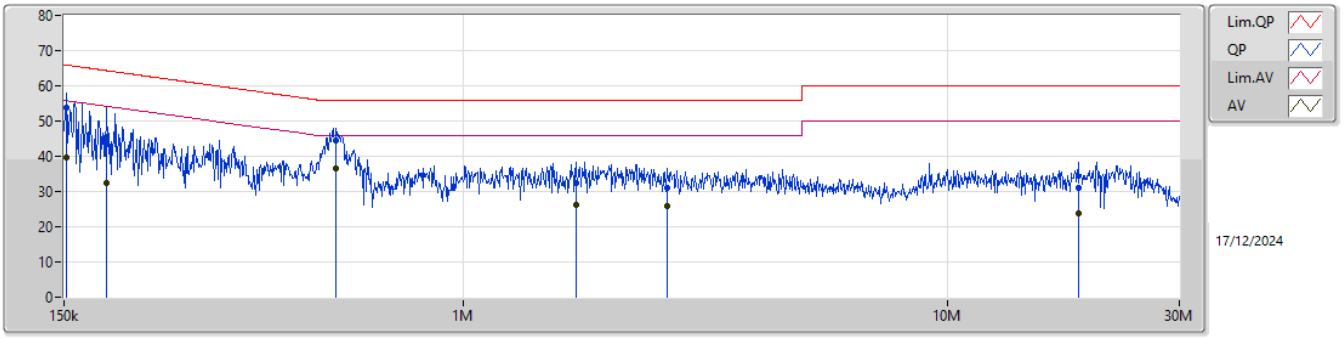
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	151.807k	53.35	65.90	-12.55	Line
Mode 1	Pass	AV	151.807k	39.12	55.90	-16.78	Line
Mode 1	Pass	QP	184.605k	45.93	64.28	-18.35	Line
Mode 1	Pass	AV	184.605k	31.23	54.28	-23.05	Line
Mode 1	Pass	QP	535.976k	45.33	56.00	-10.67	Line
Mode 1	Pass	AV	535.976k	39.82	46.00	-6.18	Line
Mode 1	Pass	QP	1.754M	33.10	56.00	-22.90	Line
Mode 1	Pass	AV	1.754M	26.01	46.00	-19.99	Line
Mode 1	Pass	QP	3.055M	28.42	56.00	-27.58	Line
Mode 1	Pass	AV	3.055M	23.87	46.00	-22.13	Line
Mode 1	Pass	QP	20.513M	32.08	60.00	-27.92	Line
Mode 1	Pass	AV	20.513M	24.18	50.00	-25.82	Line
Mode 1	Pass	QP	151.807k	53.83	65.90	-12.07	Neutral
Mode 1	Pass	AV	151.807k	39.63	55.90	-16.27	Neutral
Mode 1	Pass	QP	183.137k	45.67	64.34	-18.67	Neutral
Mode 1	Pass	AV	183.137k	32.52	54.34	-21.82	Neutral
Mode 1	Pass	QP	546.782k	44.56	56.00	-11.44	Neutral
Mode 1	Pass	AV	546.782k	36.46	46.00	-9.54	Neutral
Mode 1	Pass	QP	1.706M	32.37	56.00	-23.63	Neutral
Mode 1	Pass	AV	1.706M	26.10	46.00	-19.90	Neutral
Mode 1	Pass	QP	2.636M	30.98	56.00	-25.02	Neutral
Mode 1	Pass	AV	2.636M	26.03	46.00	-19.97	Neutral
Mode 1	Pass	QP	18.564M	31.16	60.00	-28.84	Neutral
Mode 1	Pass	AV	18.564M	23.95	50.00	-26.05	Neutral

Conducted Emissions at Powerline_Mode 1



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	151.807k	53.35	65.90	-12.55	19.70	Line	-	33.65	9.66	0.07	9.97
AV	151.807k	39.12	55.90	-16.78	19.70	Line	-	19.42	9.66	0.07	9.97
QP	184.605k	45.93	64.28	-18.35	19.70	Line	-	26.23	9.65	0.08	9.97
AV	184.605k	31.23	54.28	-23.05	19.70	Line	-	11.53	9.65	0.08	9.97
QP	535.976k	45.33	56.00	-10.67	19.74	Line	-	25.59	9.65	0.11	9.98
AV	535.976k	39.82	46.00	-6.18	19.74	Line	-	20.08	9.65	0.11	9.98
QP	1.754M	33.10	56.00	-22.90	19.75	Line	-	13.35	9.67	0.11	9.97
AV	1.754M	26.01	46.00	-19.99	19.75	Line	-	6.26	9.67	0.11	9.97
QP	3.055M	28.42	56.00	-27.58	19.75	Line	-	8.67	9.68	0.09	9.98
AV	3.055M	23.87	46.00	-22.13	19.75	Line	-	4.12	9.68	0.09	9.98
QP	20.513M	32.08	60.00	-27.92	19.77	Line	-	12.31	9.67	0.12	9.98
AV	20.513M	24.18	50.00	-25.82	19.77	Line	-	4.41	9.67	0.12	9.98

Conducted Emissions at Powerline_Mode 1



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	151.807k	53.83	65.90	-12.07	19.64	Neutral	-	34.19	9.60	0.07	9.97
AV	151.807k	39.63	55.90	-16.27	19.64	Neutral	-	19.99	9.60	0.07	9.97
QP	183.137k	45.67	64.34	-18.67	19.65	Neutral	-	26.02	9.60	0.08	9.97
AV	183.137k	32.52	54.34	-21.82	19.65	Neutral	-	12.87	9.60	0.08	9.97
QP	546.782k	44.56	56.00	-11.44	19.69	Neutral	-	24.87	9.60	0.11	9.98
AV	546.782k	36.46	46.00	-9.54	19.69	Neutral	-	16.77	9.60	0.11	9.98
QP	1.706M	32.37	56.00	-23.63	19.69	Neutral	-	12.68	9.61	0.11	9.97
AV	1.706M	26.10	46.00	-19.90	19.69	Neutral	-	6.41	9.61	0.11	9.97
QP	2.636M	30.98	56.00	-25.02	19.67	Neutral	-	11.31	9.61	0.09	9.97
AV	2.636M	26.03	46.00	-19.97	19.67	Neutral	-	6.36	9.61	0.09	9.97
QP	18.564M	31.16	60.00	-28.84	19.76	Neutral	-	11.40	9.67	0.11	9.98
AV	18.564M	23.95	50.00	-26.05	19.76	Neutral	-	4.19	9.67	0.11	9.98

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	7.45M	12.054M	12M1G1D	7.075M	10.42M
802.11g_Nss1,(6Mbps)_2TX	16.35M	17.943M	17M9D1D	16.05M	16.382M
802.11n HT20_Nss1,(MCS0)_2TX	17.625M	20.24M	20M2D1D	16.025M	17.641M

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

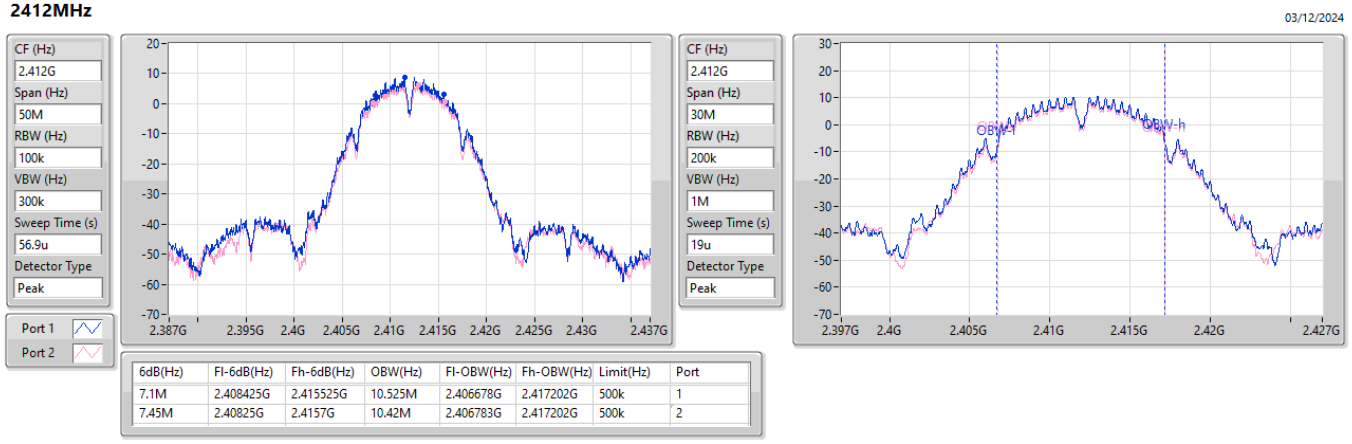
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	7.1M	10.525M	7.45M	10.42M
2437MHz	Pass	500k	7.075M	12.024M	7.1M	10.69M
2462MHz	Pass	500k	7.1M	12.054M	7.35M	10.72M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.3M	16.47M	16.325M	16.602M
2437MHz	Pass	500k	16.325M	17.943M	16.05M	16.602M
2462MHz	Pass	500k	16.325M	16.624M	16.35M	16.382M
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	17.625M	17.916M	17.55M	17.641M
2437MHz	Pass	500k	17.55M	20.24M	16.025M	17.791M
2462MHz	Pass	500k	17.55M	17.816M	17.625M	17.716M

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

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX **EBW**

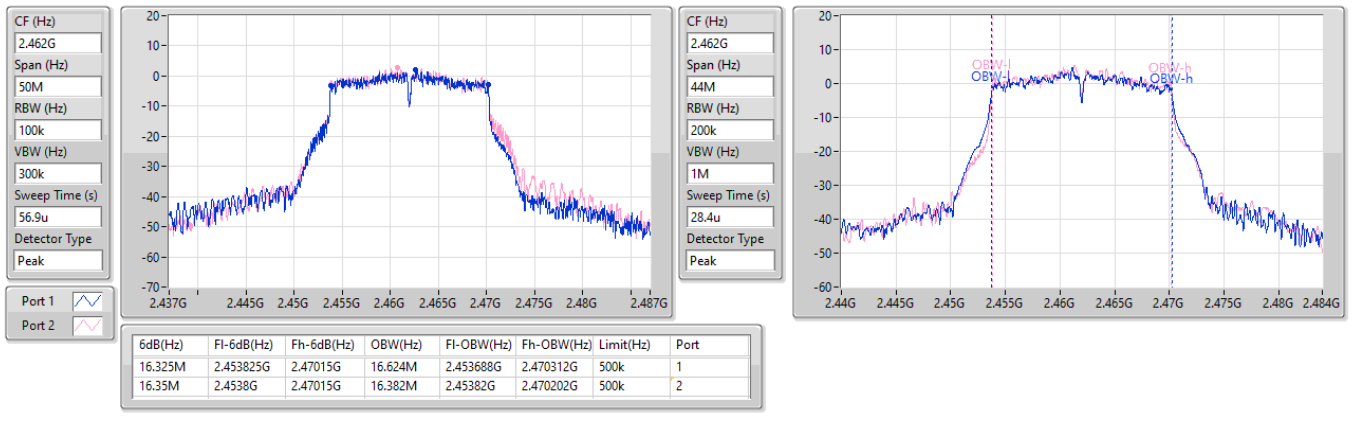
2412MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.1M	2.408425G	2.415525G	10.525M	2.406678G	2.417202G	500k	1
7.45M	2.40825G	2.4157G	10.42M	2.406783G	2.417202G	500k	2

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX **EBW**

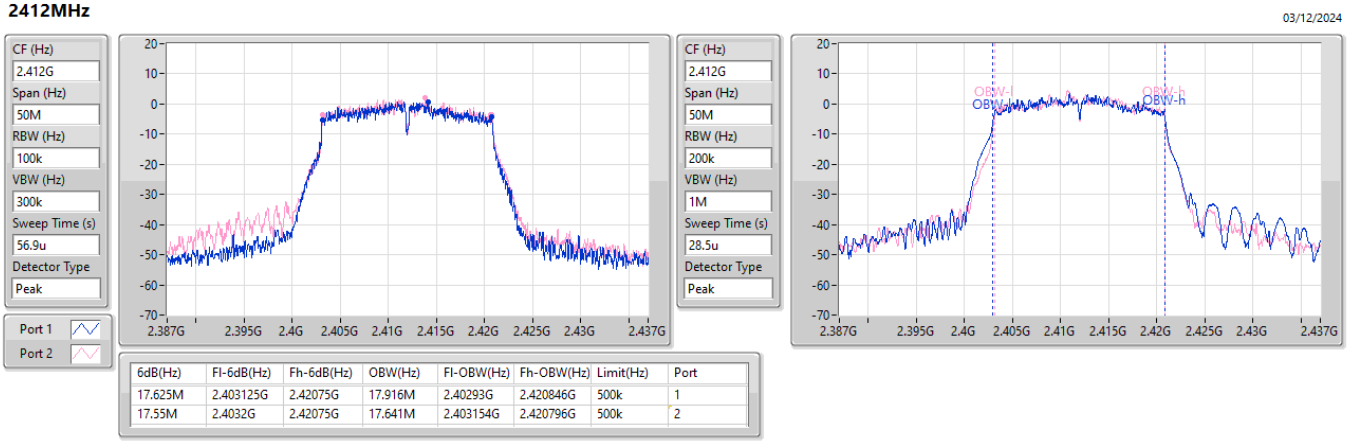
2462MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	2.453825G	2.47015G	16.624M	2.453688G	2.470312G	500k	1
16.35M	2.4538G	2.47015G	16.382M	2.45382G	2.470202G	500k	2

2.4-2.4835GHz_802.11n HT20_Nss1,(MCS0)_2TX **EBW**

2412MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.625M	2.403125G	2.42075G	17.916M	2.40293G	2.420846G	500k	1
17.55M	2.4032G	2.42075G	17.641M	2.403154G	2.420796G	500k	2

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_2TX	21.52	0.14191
802.11g_Nss1,(6Mbps)_2TX	21.89	0.15453
802.11n HT20_Nss1,(MCS0)_2TX	21.81	0.15171

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	2.92	17.83	16.99	20.44	30.00
2417MHz	Pass	2.92	17.67	16.86	20.29	30.00
2437MHz	Pass	2.92	19.67	16.87	21.50	30.00
2457MHz	Pass	2.92	17.41	16.98	20.21	30.00
2462MHz	Pass	2.92	19.64	16.97	21.52	30.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	2.92	14.85	14.98	17.93	30.00
2417MHz	Pass	2.92	13.99	13.92	16.97	30.00
2437MHz	Pass	2.92	19.77	17.76	21.89	30.00
2457MHz	Pass	2.92	15.61	15.95	18.79	30.00
2462MHz	Pass	2.92	15.65	15.88	18.78	30.00
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	2.92	14.77	15.01	17.90	30.00
2417MHz	Pass	2.92	15.99	15.92	18.97	30.00
2437MHz	Pass	2.92	19.61	17.81	21.81	30.00
2457MHz	Pass	2.92	15.66	15.76	18.72	30.00
2462MHz	Pass	2.92	14.38	14.72	17.56	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	-
802.11b_Nss1,(1Mbps)_2TX	-2.82
802.11g_Nss1,(6Mbps)_2TX	-3.69
802.11n HT20_Nss1,(MCS0)_2TX	-4.90

RBW = 3kHz;

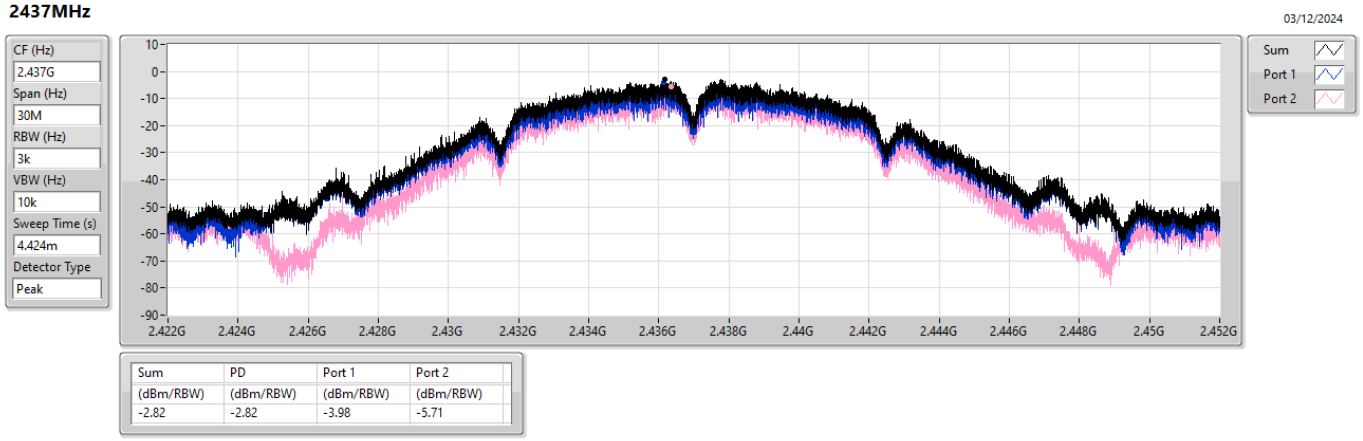
Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	5.92	-3.86	-5.86	-3.11	8.00
2437MHz	Pass	5.92	-3.98	-5.71	-2.82	8.00
2462MHz	Pass	5.92	-3.58	-6.76	-2.94	8.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	5.92	-11.14	-9.07	-8.06	8.00
2437MHz	Pass	5.92	-5.39	-7.25	-3.69	8.00
2462MHz	Pass	5.92	-9.49	-8.73	-6.75	8.00
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	5.92	-10.52	-8.93	-8.15	8.00
2437MHz	Pass	5.92	-6.01	-7.99	-4.90	8.00
2462MHz	Pass	5.92	-10.48	-9.31	-7.79	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_802.11b_Nss1,(1Mbps)_2TX **PSD**

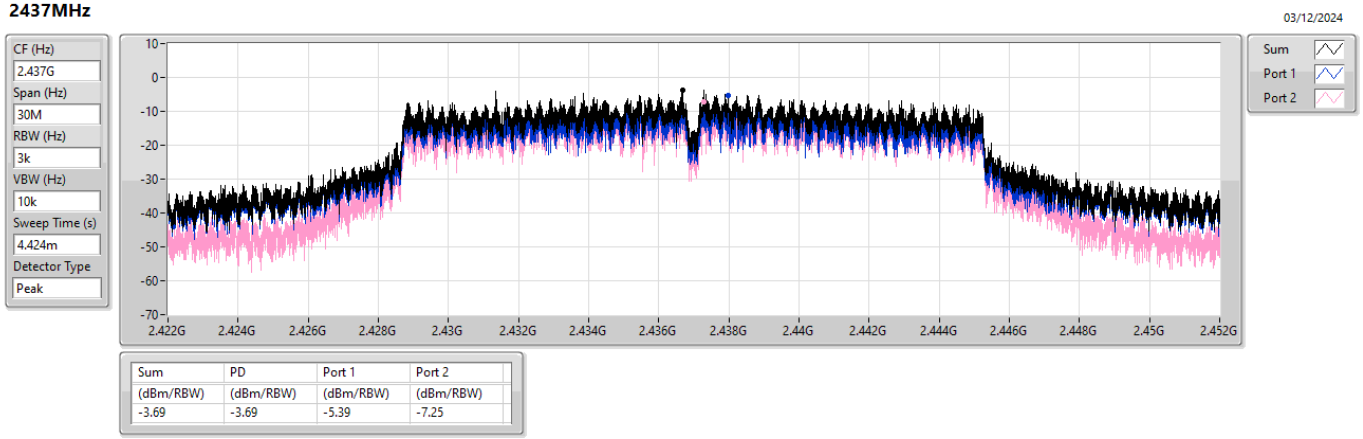
2437MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.82	-2.82	-3.98	-5.71

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX **PSD**

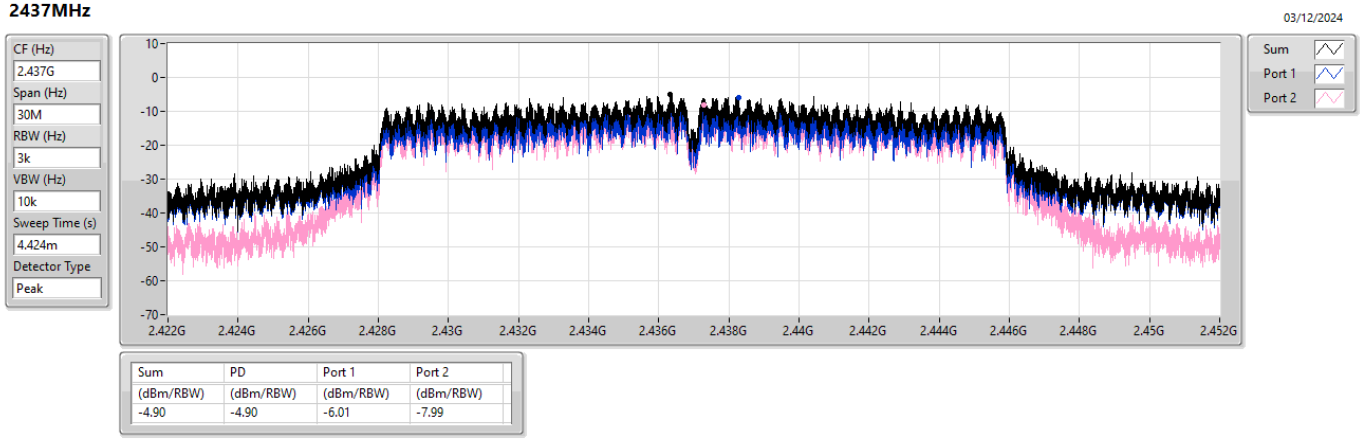
2437MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.69	-3.69	-5.39	-7.25

2.4-2.4835GHz_802.11n HT20_Nss1,(MCS0)_2TX **PSD**

2437MHz



Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.90	-4.90	-6.01	-7.99

Summary

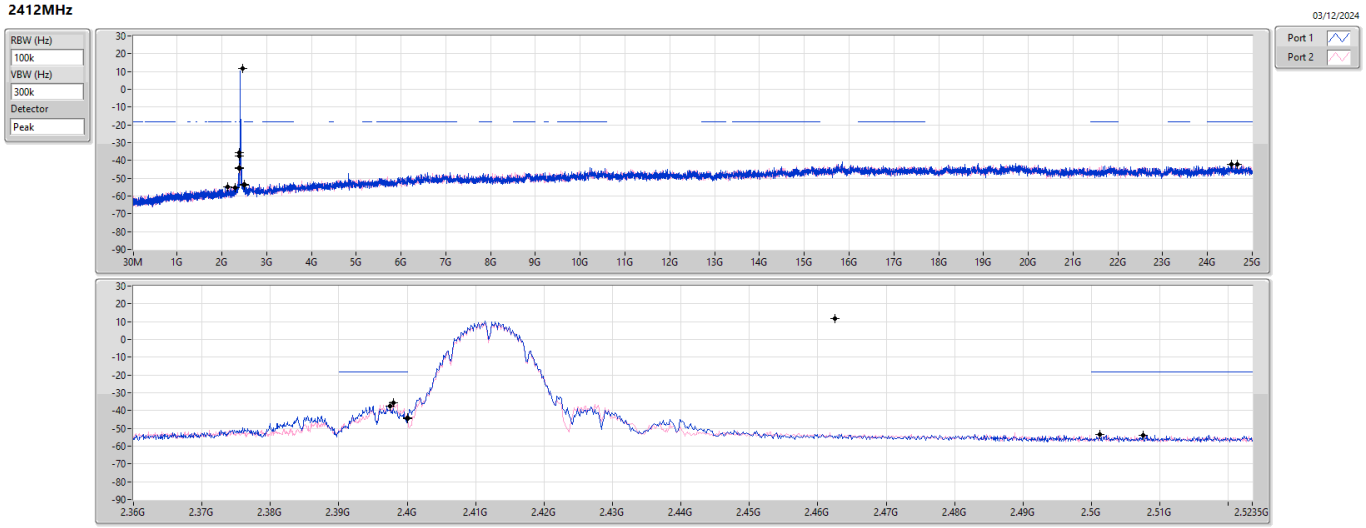
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	Pass	2.46246G	11.75	-18.25	2.12467G	-54.68	2.398G	-35.58	2.4G	-44.62	2.50118G	-53.41	24.66004G	-42.23	2
802.11g_Nss1,(6Mbps)_2TX	Pass	2.43073G	9.07	-20.93	2.18525G	-55.74	2.39928G	-35.74	2.4G	-35.87	2.50494G	-53.64	16.68089G	-42.28	1
802.11n HT20_Nss1,(MCS0)_2TX	Pass	2.43941G	9.19	-20.81	2.30758G	-52.93	2.3996G	-25.39	2.4G	-27.89	2.50142G	-36.84	17.49004G	-42.49	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
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.46246G	11.75	-18.25	2.30758G	-55.19	2.39752G	-37.42	2.4G	-43.83	2.5075G	-53.98	24.5308G	-42.42	1
2412MHz	Pass	2.46246G	11.75	-18.25	2.12467G	-54.68	2.398G	-35.58	2.4G	-44.62	2.50118G	-53.41	24.66004G	-42.23	2
2437MHz	Pass	2.46246G	11.75	-18.25	2.13399G	-55.60	2.39952G	-45.05	2.4G	-46.75	2.51766G	-52.47	24.68814G	-42.26	1
2437MHz	Pass	2.46246G	11.75	-18.25	2.12817G	-55.92	2.39248G	-51.02	2.4G	-52.45	2.50542G	-53.56	24.20489G	-42.23	2
2462MHz	Pass	2.46246G	11.75	-18.25	1.84391G	-54.86	2.398G	-54.13	2.4G	-55.88	2.50102G	-49.20	24.54485G	-41.88	1
2462MHz	Pass	2.46246G	11.75	-18.25	2.0571G	-54.86	2.39808G	-53.96	2.4G	-53.48	2.50006G	-52.68	24.41842G	-41.70	2
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43073G	9.07	-20.93	2.18525G	-55.74	2.39928G	-35.74	2.4G	-35.87	2.50494G	-53.64	16.68089G	-42.28	1
2412MHz	Pass	2.43073G	9.07	-20.93	2.1969G	-55.51	2.39984G	-35.80	2.4G	-38.12	2.50334G	-53.75	24.4999G	-41.58	2
2437MHz	Pass	2.43073G	9.07	-20.93	1.91847G	-54.44	2.39832G	-38.08	2.4G	-40.09	2.50166G	-50.45	24.14308G	-41.87	1
2437MHz	Pass	2.43073G	9.07	-20.93	2.15613G	-55.31	2.39992G	-45.35	2.4G	-45.65	2.50318G	-52.18	24.56171G	-41.86	2
2462MHz	Pass	2.43073G	9.07	-20.93	2.09788G	-55.71	2.39256G	-51.59	2.4G	-52.31	2.50422G	-50.53	14.76757G	-42.08	1
2462MHz	Pass	2.43073G	9.07	-20.93	2.1305G	-54.58	2.396G	-50.40	2.4G	-53.13	2.5019G	-49.44	24.4999G	-41.58	2
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43941G	9.19	-20.81	2.16428G	-55.44	2.39976G	-31.49	2.4G	-33.56	2.51142G	-53.51	21.85329G	-41.66	1
2412MHz	Pass	2.43941G	9.19	-20.81	1.77168G	-55.23	2.39848G	-32.35	2.4G	-36.72	2.50374G	-53.30	24.47461G	-41.70	2
2437MHz	Pass	2.43941G	9.19	-20.81	2.30758G	-52.93	2.3996G	-25.39	2.4G	-27.89	2.50142G	-36.84	17.49004G	-42.49	1
2437MHz	Pass	2.43941G	9.19	-20.81	1.72508G	-55.40	2.39776G	-42.22	2.4G	-41.96	2.50694G	-51.87	24.42123G	-42.80	2
2462MHz	Pass	2.43941G	9.19	-20.81	2.13399G	-54.65	2.39952G	-52.68	2.4G	-53.81	2.5043G	-51.77	15.06258G	-41.21	1
2462MHz	Pass	2.43941G	9.19	-20.81	2.16661G	-55.63	2.39736G	-51.32	2.4G	-53.91	2.50142G	-51.32	15.19463G	-41.68	2

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX CSENdB

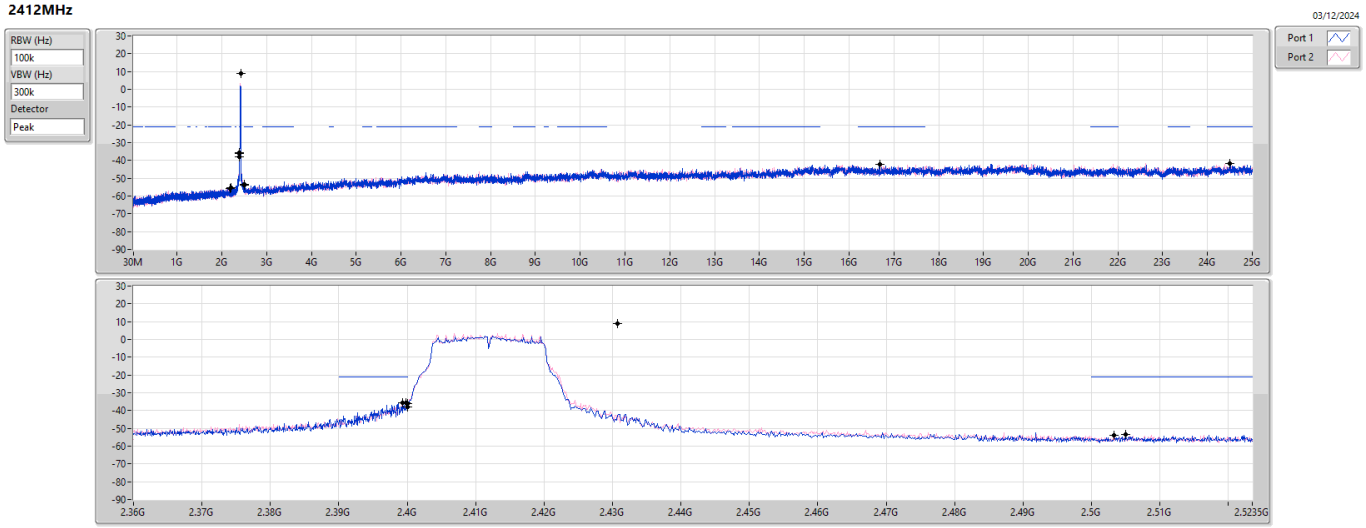
2412MHz



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
2.46246G	11.75	-18.25	2.30758G	-55.19	2.39752G	-37.42	2.4G	-43.83	2.5075G	-53.98	24.5308G	-42.42	1
2.46246G	11.75	-18.25	2.12467G	-54.68	2.398G	-35.58	2.4G	-44.62	2.50118G	-53.41	24.66004G	-42.23	2

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX CSENdB

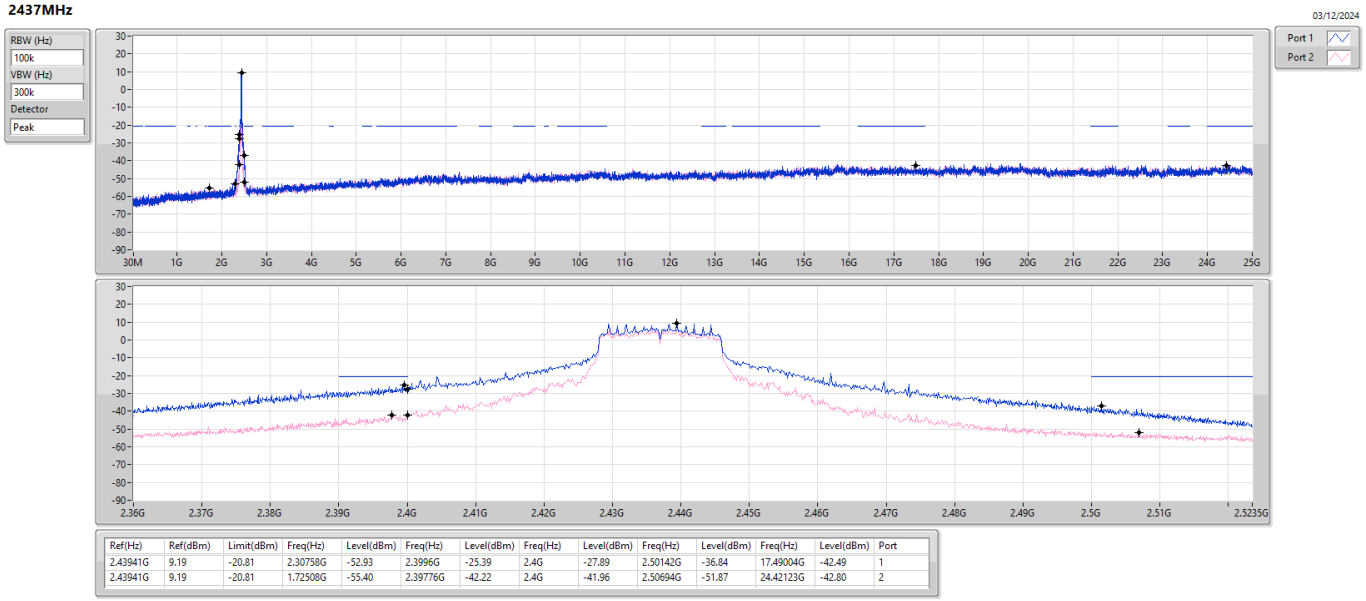
2412MHz



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
2.43073G	9.07	-20.93	2.18525G	-55.74	2.39928G	-35.74	2.4G	-35.87	2.50494G	-53.64	16.68089G	-42.28	1
2.43073G	9.07	-20.93	2.1969G	-55.51	2.39984G	-35.80	2.4G	-38.12	2.50334G	-53.75	24.4999G	-41.58	2

2.4-2.4835GHz_802.11n HT20_Nss1,(MCS0)_2TX CSENdB

2437MHz



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
2.43941G	9.19	-20.81	2.30758G	-52.93	2.3996G	-25.39	2.4G	-27.89	2.50142G	-36.84	17.49004G	-42.49	1
2.43941G	9.19	-20.81	1.72508G	-55.40	2.39776G	-42.22	2.4G	-41.96	2.50694G	-51.87	24.42123G	-42.80	2

Summary

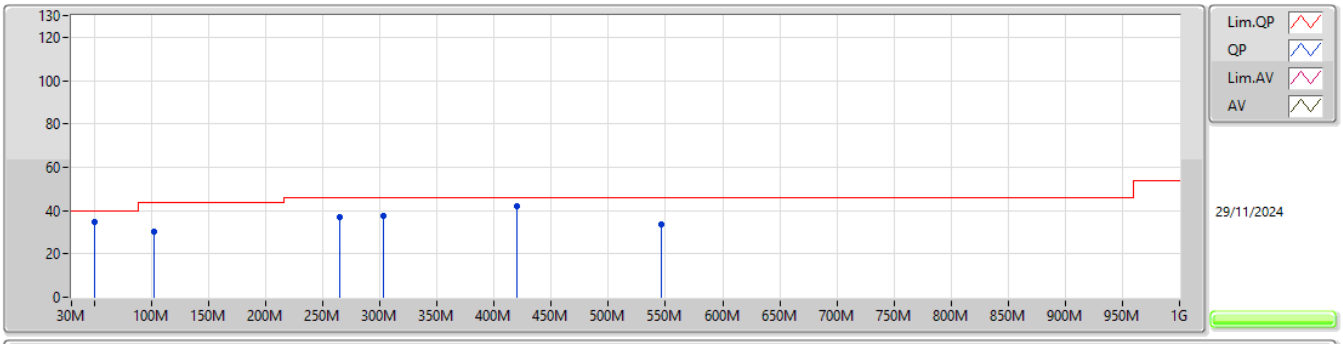
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	Pass	PK	419.94M	42.24	46.00	-3.76	3	Vertical	0	1.00

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-	-	-
2437MHz_Adapter	Pass	PK	101.78M	30.09	43.50	-13.41	3	Vertical	0	1.00
2437MHz_Adapter	Pass	PK	264.74M	36.90	46.00	-9.10	3	Vertical	0	1.00
2437MHz_Adapter	Pass	PK	303.54M	37.44	46.00	-8.56	3	Vertical	0	1.00
2437MHz_Adapter	Pass	PK	419.94M	42.24	46.00	-3.76	3	Vertical	0	1.00
2437MHz_Adapter	Pass	PK	546.04M	33.90	46.00	-12.10	3	Vertical	0	1.00
2437MHz_Adapter	Pass	QP	50.64M	34.65	40.00	-5.35	3	Vertical	122	1.00
2437MHz_Adapter	Pass	PK	30M	35.61	40.00	-4.39	3	Horizontal	360	1.00
2437MHz_Adapter	Pass	PK	49.4M	34.84	40.00	-5.16	3	Horizontal	360	1.00
2437MHz_Adapter	Pass	PK	101.78M	35.90	43.50	-7.60	3	Horizontal	360	1.00
2437MHz_Adapter	Pass	PK	266.68M	41.30	46.00	-4.70	3	Horizontal	360	1.00
2437MHz_Adapter	Pass	PK	404.42M	37.09	46.00	-8.91	3	Horizontal	360	1.00
2437MHz_Adapter	Pass	PK	544.1M	33.37	46.00	-12.63	3	Horizontal	360	1.00

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX

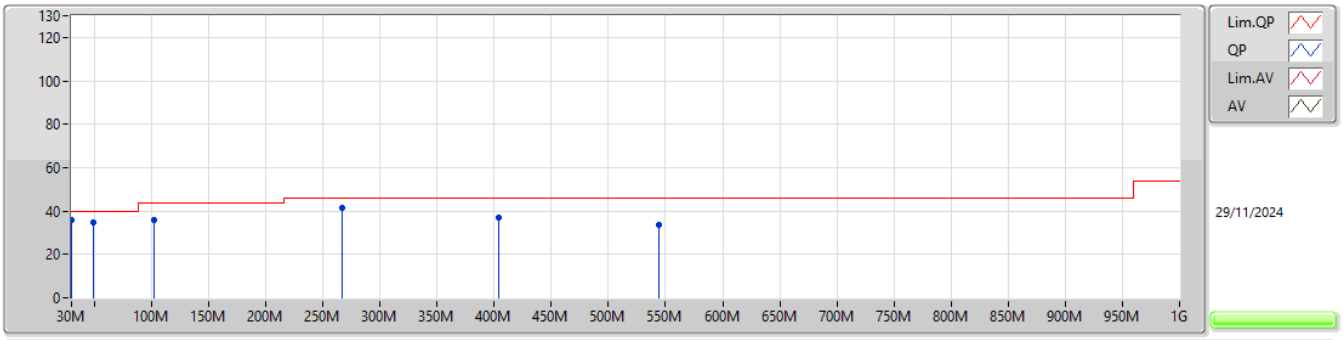
2437MHz_Adapter



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	(dBuV)	(dB)	(dB)	(dB)
PK	101.78M	30.09	43.50	-13.41	-9.87	3	Vertical	0	1.00	39.96	15.74	2.02	27.63
PK	264.74M	36.90	46.00	-9.10	-5.65	3	Vertical	0	1.00	42.55	18.08	3.32	27.05
PK	303.54M	37.44	46.00	-8.56	-5.41	3	Vertical	0	1.00	42.85	18.06	3.57	27.04
PK	419.94M	42.24	46.00	-3.76	-2.35	3	Vertical	0	1.00	44.59	21.31	4.23	27.89
PK	546.04M	33.90	46.00	-12.10	-0.04	3	Vertical	0	1.00	33.94	23.43	4.84	28.31
QP	50.64M	34.65	40.00	-5.35	-11.95	3	Vertical	122	1.00	46.60	12.62	1.41	25.98

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX

2437MHz_Adapter



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	(dBuV)	(dB)	(dB)	(dB)
PK	30M	35.61	40.00	-4.39	-3.12	3	Horizontal	360	1.00	38.73	23.18	1.09	27.39
PK	49.4M	34.84	40.00	-5.16	-11.36	3	Horizontal	360	1.00	46.20	13.17	1.39	25.92
PK	101.78M	35.90	43.50	-7.60	-9.87	3	Horizontal	360	1.00	45.77	15.74	2.02	27.63
PK	266.68M	41.30	46.00	-4.70	-5.88	3	Horizontal	360	1.00	47.18	17.83	3.34	27.05
PK	404.42M	37.09	46.00	-8.91	-2.98	3	Horizontal	360	1.00	40.07	20.67	4.15	27.80
PK	544.1M	33.37	46.00	-12.63	-0.08	3	Horizontal	360	1.00	33.45	23.39	4.84	28.31

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	Pass	AV	2.3876G	52.98	54.00	-1.02	3	Vertical	199	1.55
802.11g_Nss1,(6Mbps)_2TX	Pass	AV	2.3898G	52.85	54.00	-1.15	3	Vertical	195	1.95
802.11n HT20_Nss1,(MCS0)_2TX	Pass	AV	2.3898G	52.73	54.00	-1.27	3	Vertical	200	1.80

Result

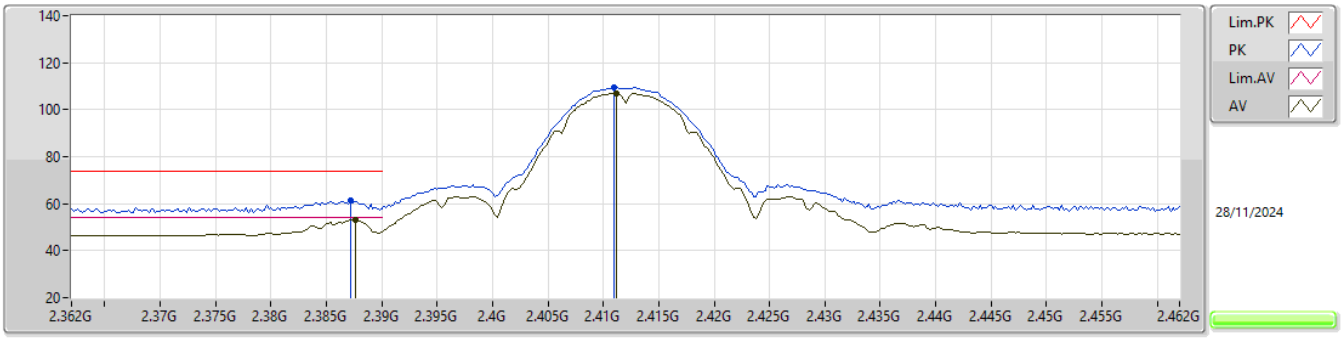
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.3876G	52.98	54.00	-1.02	3	Vertical	199	1.55
2412MHz	Pass	AV	2.4112G	107.10	Inf	-Inf	3	Vertical	199	1.55
2412MHz	Pass	PK	2.3872G	61.29	74.00	-12.71	3	Vertical	199	1.55
2412MHz	Pass	PK	2.411G	109.50	Inf	-Inf	3	Vertical	199	1.55
2412MHz	Pass	AV	2.3876G	49.52	54.00	-4.48	3	Horizontal	287	1.72
2412MHz	Pass	AV	2.4112G	104.84	Inf	-Inf	3	Horizontal	287	1.72
2412MHz	Pass	PK	2.3862G	59.68	74.00	-14.32	3	Horizontal	287	1.72
2412MHz	Pass	PK	2.411G	107.25	Inf	-Inf	3	Horizontal	287	1.72
2412MHz	Pass	AV	4.82392G	34.64	54.00	-19.36	3	Vertical	259	1.50
2412MHz	Pass	PK	4.82388G	43.72	74.00	-30.28	3	Vertical	259	1.50
2412MHz	Pass	AV	4.82396G	34.59	54.00	-19.41	3	Horizontal	157	1.47
2412MHz	Pass	PK	4.824G	42.37	74.00	-31.63	3	Horizontal	157	1.47
2417MHz	Pass	AV	2.39G	52.10	54.00	-1.90	3	Vertical	204	1.87
2417MHz	Pass	AV	2.4162G	102.43	Inf	-Inf	3	Vertical	204	1.87
2417MHz	Pass	PK	2.3882G	60.79	74.00	-13.21	3	Vertical	204	1.87
2417MHz	Pass	PK	2.4178G	104.85	Inf	-Inf	3	Vertical	204	1.87
2417MHz	Pass	AV	2.39G	52.61	54.00	-1.39	3	Horizontal	185	1.40
2417MHz	Pass	AV	2.4162G	107.24	Inf	-Inf	3	Horizontal	185	1.40
2417MHz	Pass	PK	2.389G	62.06	74.00	-11.94	3	Horizontal	185	1.40
2417MHz	Pass	PK	2.416G	109.66	Inf	-Inf	3	Horizontal	185	1.40
2437MHz	Pass	AV	2.3898G	46.83	54.00	-7.17	3	Vertical	222	2.80
2437MHz	Pass	AV	2.4378G	107.06	Inf	-Inf	3	Vertical	222	2.80
2437MHz	Pass	AV	2.4918G	47.45	54.00	-6.55	3	Vertical	222	2.80
2437MHz	Pass	PK	2.3798G	58.52	74.00	-15.48	3	Vertical	222	2.80
2437MHz	Pass	PK	2.4378G	109.46	Inf	-Inf	3	Vertical	222	2.80
2437MHz	Pass	PK	2.4842G	59.16	74.00	-14.84	3	Vertical	222	2.80
2437MHz	Pass	AV	2.3886G	47.29	54.00	-6.71	3	Horizontal	192	1.47
2437MHz	Pass	AV	2.4378G	108.39	Inf	-Inf	3	Horizontal	192	1.47
2437MHz	Pass	AV	2.485G	47.68	54.00	-6.32	3	Horizontal	192	1.47
2437MHz	Pass	PK	2.3886G	58.32	74.00	-15.68	3	Horizontal	192	1.47
2437MHz	Pass	PK	2.4378G	110.75	Inf	-Inf	3	Horizontal	192	1.47
2437MHz	Pass	PK	2.499G	59.29	74.00	-14.71	3	Horizontal	192	1.47
2437MHz	Pass	AV	7.31008G	41.52	54.00	-12.48	3	Vertical	181	1.50
2437MHz	Pass	PK	7.30992G	49.63	74.00	-24.37	3	Vertical	181	1.50
2437MHz	Pass	AV	7.31012G	43.68	54.00	-10.32	3	Horizontal	123	1.38
2437MHz	Pass	PK	7.31188G	50.53	74.00	-23.47	3	Horizontal	123	1.38
2457MHz	Pass	AV	2.4578G	103.81	Inf	-Inf	3	Vertical	202	1.74
2457MHz	Pass	AV	2.4836G	52.20	54.00	-1.80	3	Vertical	202	1.74
2457MHz	Pass	PK	2.4578G	106.23	Inf	-Inf	3	Vertical	202	1.74
2457MHz	Pass	PK	2.4838G	61.86	74.00	-12.14	3	Vertical	202	1.74
2457MHz	Pass	AV	2.4562G	106.63	Inf	-Inf	3	Horizontal	193	1.52
2457MHz	Pass	AV	2.4838G	50.94	54.00	-3.06	3	Horizontal	193	1.52
2457MHz	Pass	PK	2.456G	109.03	Inf	-Inf	3	Horizontal	193	1.52
2457MHz	Pass	PK	2.485G	60.73	74.00	-13.27	3	Horizontal	193	1.52
2462MHz	Pass	AV	2.4628G	107.09	Inf	-Inf	3	Vertical	203	1.73
2462MHz	Pass	AV	2.4912G	52.80	54.00	-1.20	3	Vertical	203	1.73
2462MHz	Pass	PK	2.4628G	109.47	Inf	-Inf	3	Vertical	203	1.73
2462MHz	Pass	PK	2.4902G	61.59	74.00	-12.41	3	Vertical	203	1.73
2462MHz	Pass	AV	2.4628G	108.31	Inf	-Inf	3	Horizontal	192	1.39
2462MHz	Pass	AV	2.4902G	50.97	54.00	-3.03	3	Horizontal	192	1.39
2462MHz	Pass	PK	2.4628G	110.68	Inf	-Inf	3	Horizontal	192	1.39
2462MHz	Pass	PK	2.4886G	61.39	74.00	-12.61	3	Horizontal	192	1.39
2462MHz	Pass	AV	7.38508G	41.49	54.00	-12.51	3	Vertical	172	1.60
2462MHz	Pass	PK	7.3856G	49.56	74.00	-24.44	3	Vertical	172	1.60
2462MHz	Pass	AV	7.38512G	44.58	54.00	-9.42	3	Horizontal	123	1.21
2462MHz	Pass	PK	7.38528G	51.46	74.00	-22.54	3	Horizontal	123	1.21
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.3898G	51.69	54.00	-2.31	3	Vertical	200	1.89
2412MHz	Pass	AV	2.4106G	101.59	Inf	-Inf	3	Vertical	200	1.89
2412MHz	Pass	PK	2.3898G	71.13	74.00	-2.87	3	Vertical	200	1.89

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
2412MHz	Pass	PK	2.4106G	110.09	Inf	-Inf	3	Vertical	200	1.89
2412MHz	Pass	AV	2.39G	50.03	54.00	-3.97	3	Horizontal	184	1.00
2412MHz	Pass	AV	2.4108G	101.29	Inf	-Inf	3	Horizontal	184	1.00
2412MHz	Pass	PK	2.39G	68.87	74.00	-5.13	3	Horizontal	184	1.00
2412MHz	Pass	PK	2.4106G	109.97	Inf	-Inf	3	Horizontal	184	1.00
2412MHz	Pass	AV	4.82012G	29.24	54.00	-24.76	3	Vertical	258	2.33
2412MHz	Pass	PK	4.821G	41.40	74.00	-32.60	3	Vertical	258	2.33
2412MHz	Pass	AV	4.81876G	28.92	54.00	-25.08	3	Horizontal	166	1.24
2412MHz	Pass	PK	4.81964G	41.79	74.00	-32.21	3	Horizontal	166	1.24
2417MHz	Pass	AV	2.3896G	48.77	54.00	-5.23	3	Vertical	202	1.90
2417MHz	Pass	AV	2.4178G	100.57	Inf	-Inf	3	Vertical	202	1.90
2417MHz	Pass	PK	2.3878G	60.65	74.00	-13.35	3	Vertical	202	1.90
2417MHz	Pass	PK	2.4176G	108.88	Inf	-Inf	3	Vertical	202	1.90
2417MHz	Pass	AV	2.3896G	47.75	54.00	-6.25	3	Horizontal	184	1.00
2417MHz	Pass	AV	2.418G	100.28	Inf	-Inf	3	Horizontal	184	1.00
2417MHz	Pass	PK	2.3858G	59.30	74.00	-14.70	3	Horizontal	184	1.00
2417MHz	Pass	PK	2.418G	108.24	Inf	-Inf	3	Horizontal	184	1.00
2437MHz	Pass	AV	2.3898G	52.85	54.00	-1.15	3	Vertical	195	1.95
2437MHz	Pass	AV	2.4362G	106.76	Inf	-Inf	3	Vertical	195	1.95
2437MHz	Pass	AV	2.4835G	51.44	54.00	-2.56	3	Vertical	195	1.95
2437MHz	Pass	PK	2.3886G	64.84	74.00	-9.16	3	Vertical	195	1.95
2437MHz	Pass	PK	2.4358G	115.13	Inf	-Inf	3	Vertical	195	1.95
2437MHz	Pass	PK	2.485G	64.33	74.00	-9.67	3	Vertical	195	1.95
2437MHz	Pass	AV	2.3898G	50.36	54.00	-3.64	3	Horizontal	186	1.11
2437MHz	Pass	AV	2.4386G	104.19	Inf	-Inf	3	Horizontal	186	1.11
2437MHz	Pass	AV	2.4835G	49.25	54.00	-4.75	3	Horizontal	186	1.11
2437MHz	Pass	PK	2.3894G	62.74	74.00	-11.26	3	Horizontal	186	1.11
2437MHz	Pass	PK	2.4386G	112.35	Inf	-Inf	3	Horizontal	186	1.11
2437MHz	Pass	PK	2.4858G	61.37	74.00	-12.63	3	Horizontal	186	1.11
2437MHz	Pass	AV	7.31G	41.65	54.00	-12.35	3	Vertical	175	1.16
2437MHz	Pass	PK	7.31476G	56.65	74.00	-17.35	3	Vertical	175	1.16
2437MHz	Pass	AV	7.3146G	44.15	54.00	-9.85	3	Horizontal	121	1.17
2437MHz	Pass	PK	7.31452G	58.54	74.00	-15.46	3	Horizontal	121	1.17
2457MHz	Pass	AV	2.4576G	103.57	Inf	-Inf	3	Vertical	197	1.73
2457MHz	Pass	AV	2.4835G	51.27	54.00	-2.73	3	Vertical	197	1.73
2457MHz	Pass	PK	2.4576G	111.88	Inf	-Inf	3	Vertical	197	1.73
2457MHz	Pass	PK	2.4835G	68.50	74.00	-5.50	3	Vertical	197	1.73
2457MHz	Pass	AV	2.4554G	100.76	Inf	-Inf	3	Horizontal	192	1.56
2457MHz	Pass	AV	2.4835G	49.25	54.00	-4.75	3	Horizontal	192	1.56
2457MHz	Pass	PK	2.4552G	109.20	Inf	-Inf	3	Horizontal	192	1.56
2457MHz	Pass	PK	2.4838G	63.87	74.00	-10.13	3	Horizontal	192	1.56
2462MHz	Pass	AV	2.4602G	103.13	Inf	-Inf	3	Vertical	197	1.72
2462MHz	Pass	AV	2.484G	52.63	54.00	-1.37	3	Vertical	197	1.72
2462MHz	Pass	PK	2.4602G	111.54	Inf	-Inf	3	Vertical	197	1.72
2462MHz	Pass	PK	2.4835G	69.99	74.00	-4.01	3	Vertical	197	1.72
2462MHz	Pass	AV	2.4628G	101.34	Inf	-Inf	3	Horizontal	192	1.56
2462MHz	Pass	AV	2.4835G	51.11	54.00	-2.89	3	Horizontal	192	1.56
2462MHz	Pass	PK	2.4628G	109.36	Inf	-Inf	3	Horizontal	192	1.56
2462MHz	Pass	PK	2.4836G	70.32	74.00	-3.68	3	Horizontal	192	1.56
2462MHz	Pass	AV	7.38608G	34.48	54.00	-19.52	3	Vertical	210	1.58
2462MHz	Pass	PK	7.38224G	47.05	74.00	-26.95	3	Vertical	210	1.58
2462MHz	Pass	AV	7.38616G	36.11	54.00	-17.89	3	Horizontal	118	1.61
2462MHz	Pass	PK	7.38076G	48.74	74.00	-25.26	3	Horizontal	118	1.61
802.11n HT20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.39G	51.69	54.00	-2.31	3	Vertical	202	1.93
2412MHz	Pass	AV	2.411G	101.03	Inf	-Inf	3	Vertical	202	1.93
2412MHz	Pass	PK	2.389G	70.37	74.00	-3.63	3	Vertical	202	1.93
2412MHz	Pass	PK	2.4108G	109.79	Inf	-Inf	3	Vertical	202	1.93
2412MHz	Pass	AV	2.39G	50.03	54.00	-3.97	3	Horizontal	184	1.00
2412MHz	Pass	AV	2.4112G	100.67	Inf	-Inf	3	Horizontal	184	1.00
2412MHz	Pass	PK	2.389G	66.10	74.00	-7.90	3	Horizontal	184	1.00
2412MHz	Pass	PK	2.4112G	108.67	Inf	-Inf	3	Horizontal	184	1.00

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
2412MHz	Pass	AV	4.8188G	28.60	54.00	-25.40	3	Vertical	77	1.50
2412MHz	Pass	PK	4.82064G	41.75	74.00	-32.25	3	Vertical	77	1.50
2412MHz	Pass	AV	4.81972G	28.93	54.00	-25.07	3	Horizontal	205	3.00
2412MHz	Pass	PK	4.8196G	41.65	74.00	-32.35	3	Horizontal	205	3.00
2417MHz	Pass	AV	2.3896G	51.27	54.00	-2.73	3	Vertical	203	1.91
2417MHz	Pass	AV	2.4174G	101.62	Inf	-Inf	3	Vertical	203	1.91
2417MHz	Pass	PK	2.389G	68.38	74.00	-5.62	3	Vertical	203	1.91
2417MHz	Pass	PK	2.4174G	109.86	Inf	-Inf	3	Vertical	203	1.91
2417MHz	Pass	AV	2.3896G	49.51	54.00	-4.49	3	Horizontal	184	1.00
2417MHz	Pass	AV	2.4176G	101.70	Inf	-Inf	3	Horizontal	184	1.00
2417MHz	Pass	PK	2.3888G	63.61	74.00	-10.39	3	Horizontal	184	1.00
2417MHz	Pass	PK	2.4176G	109.80	Inf	-Inf	3	Horizontal	184	1.00
2437MHz	Pass	AV	2.3898G	52.73	54.00	-1.27	3	Vertical	200	1.80
2437MHz	Pass	AV	2.4374G	105.39	Inf	-Inf	3	Vertical	200	1.80
2437MHz	Pass	AV	2.4835G	52.64	54.00	-1.36	3	Vertical	200	1.80
2437MHz	Pass	PK	2.3862G	64.55	74.00	-9.45	3	Vertical	200	1.80
2437MHz	Pass	PK	2.435G	114.88	Inf	-Inf	3	Vertical	200	1.80
2437MHz	Pass	PK	2.4835G	66.49	74.00	-7.51	3	Vertical	200	1.80
2437MHz	Pass	AV	2.3894G	52.60	54.00	-1.40	3	Horizontal	192	1.31
2437MHz	Pass	AV	2.4366G	104.36	Inf	-Inf	3	Horizontal	192	1.31
2437MHz	Pass	AV	2.4835G	51.75	54.00	-2.25	3	Horizontal	192	1.31
2437MHz	Pass	PK	2.3898G	64.43	74.00	-9.57	3	Horizontal	192	1.31
2437MHz	Pass	PK	2.4366G	112.42	Inf	-Inf	3	Horizontal	192	1.31
2437MHz	Pass	PK	2.4854G	64.03	74.00	-9.97	3	Horizontal	192	1.31
2437MHz	Pass	AV	7.3106G	41.60	54.00	-12.40	3	Vertical	173	1.12
2437MHz	Pass	PK	7.31112G	57.91	74.00	-16.09	3	Vertical	173	1.12
2437MHz	Pass	AV	7.30812G	43.72	54.00	-10.28	3	Horizontal	132	1.01
2437MHz	Pass	PK	7.30836G	59.60	74.00	-14.40	3	Horizontal	132	1.01
2457MHz	Pass	AV	2.4574G	102.44	Inf	-Inf	3	Vertical	194	1.74
2457MHz	Pass	AV	2.4835G	50.59	54.00	-3.41	3	Vertical	194	1.74
2457MHz	Pass	PK	2.4564G	111.23	Inf	-Inf	3	Vertical	194	1.74
2457MHz	Pass	PK	2.4836G	67.68	74.00	-6.32	3	Vertical	194	1.74
2457MHz	Pass	AV	2.456G	100.54	Inf	-Inf	3	Horizontal	193	1.53
2457MHz	Pass	AV	2.4835G	49.25	54.00	-4.75	3	Horizontal	193	1.53
2457MHz	Pass	PK	2.4552G	108.78	Inf	-Inf	3	Horizontal	193	1.53
2457MHz	Pass	PK	2.4844G	64.91	74.00	-9.09	3	Horizontal	193	1.53
2462MHz	Pass	AV	2.4624G	101.70	Inf	-Inf	3	Vertical	197	1.73
2462MHz	Pass	AV	2.4848G	50.77	54.00	-3.23	3	Vertical	197	1.73
2462MHz	Pass	PK	2.4636G	109.91	Inf	-Inf	3	Vertical	197	1.73
2462MHz	Pass	PK	2.4848G	70.49	74.00	-3.51	3	Vertical	197	1.73
2462MHz	Pass	AV	2.461G	99.45	Inf	-Inf	3	Horizontal	192	1.55
2462MHz	Pass	AV	2.4835G	49.25	54.00	-4.75	3	Horizontal	192	1.55
2462MHz	Pass	PK	2.4614G	108.14	Inf	-Inf	3	Horizontal	192	1.55
2462MHz	Pass	PK	2.4835G	65.35	74.00	-8.65	3	Horizontal	192	1.55
2462MHz	Pass	AV	7.38608G	33.79	54.00	-20.21	3	Vertical	206	1.50
2462MHz	Pass	PK	7.384G	47.21	74.00	-26.79	3	Vertical	206	1.50
2462MHz	Pass	AV	7.38584G	35.20	54.00	-18.80	3	Horizontal	118	1.70
2462MHz	Pass	PK	7.38848G	47.99	74.00	-26.01	3	Horizontal	118	1.70

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX

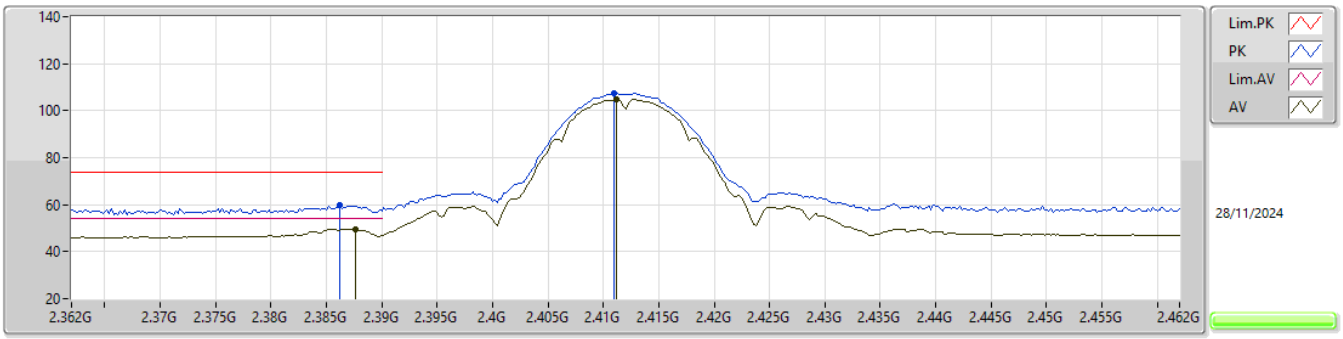
2412MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	(dBuV)	(dB)	(dB)	(dB)
AV	2.3876G	52.98	54.00	-1.02	31.81	3	Vertical	199	1.55	21.17	27.28	4.53	-
AV	2.4112G	107.10	Inf	-Inf	32.06	3	Vertical	199	1.55	75.04	27.51	4.55	-
PK	2.3872G	61.29	74.00	-12.71	31.80	3	Vertical	199	1.55	29.49	27.27	4.53	-
PK	2.411G	109.50	Inf	-Inf	32.06	3	Vertical	199	1.55	77.44	27.51	4.55	-

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX

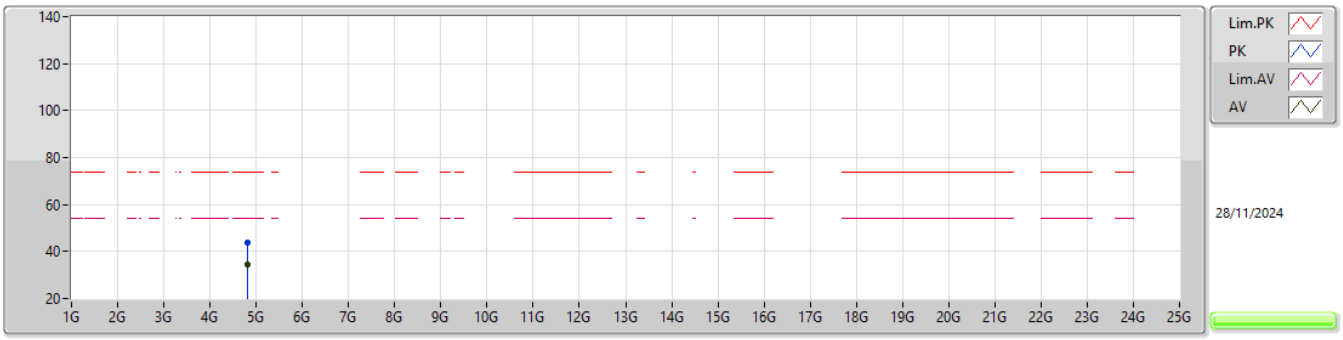
2412MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	(dBuV)	(dB)	(dB)	(dB)
AV	2.3876G	49.52	54.00	-4.48	31.81	3	Horizontal	287	1.72	17.71	27.28	4.53	-
AV	2.4112G	104.84	Inf	-Inf	32.06	3	Horizontal	287	1.72	72.78	27.51	4.55	-
PK	2.3862G	59.68	74.00	-14.32	31.79	3	Horizontal	287	1.72	27.89	27.26	4.53	-
PK	2.411G	107.25	Inf	-Inf	32.06	3	Horizontal	287	1.72	75.19	27.51	4.55	-

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX

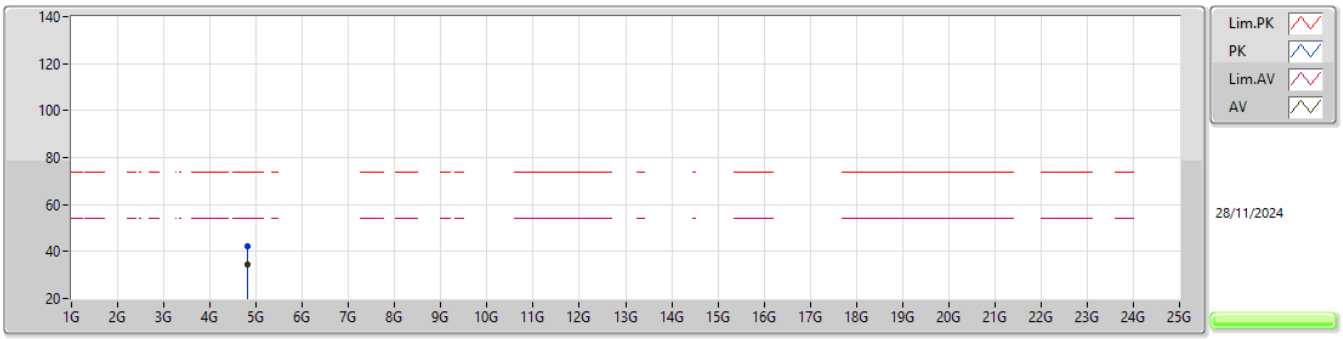
2412MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	(dBuV)	(dB)	(dB)	(dB)
AV	4.82392G	34.64	54.00	-19.36	3.88	3	Vertical	259	1.50	30.76	32.40	6.54	35.06
PK	4.82388G	43.72	74.00	-30.28	3.88	3	Vertical	259	1.50	39.84	32.40	6.54	35.06

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX

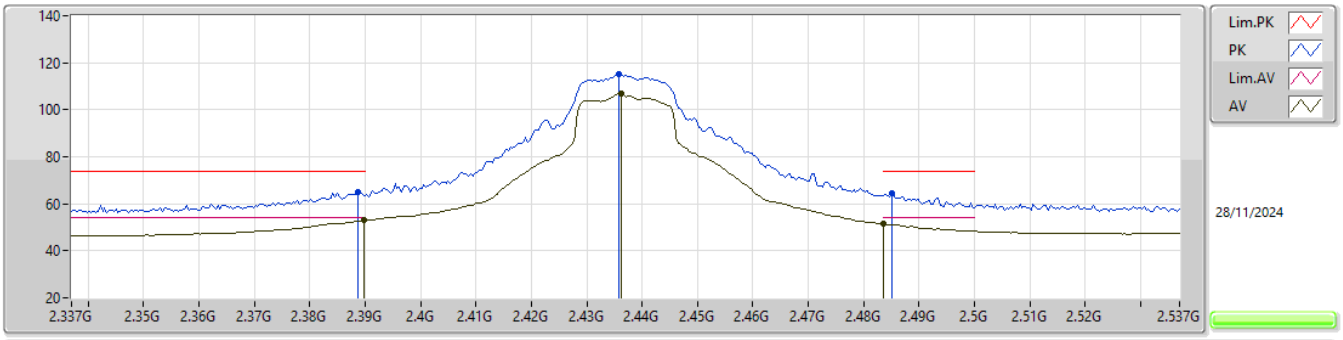
2412MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	(dBuV)	(dB)	(dB)	(dB)
AV	4.82396G	34.59	54.00	-19.41	3.88	3	Horizontal	157	1.47	30.71	32.40	6.54	35.06
PK	4.824G	42.37	74.00	-31.63	3.88	3	Horizontal	157	1.47	38.49	32.40	6.54	35.06

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX

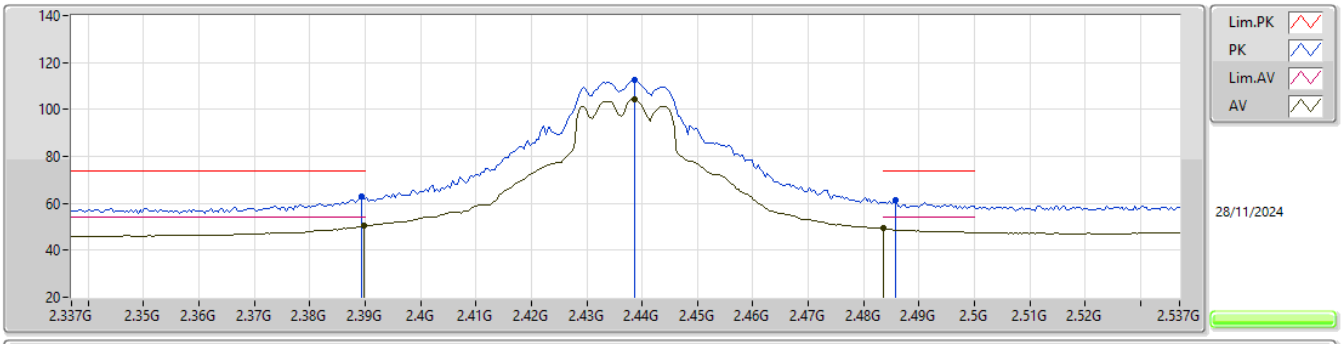
2437MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	(dBuV)	(dB)	(dB)	(dB)
AV	2.3898G	52.85	54.00	-1.15	31.83	3	Vertical	195	1.95	21.02	27.30	4.53	-
AV	2.4362G	106.76	Inf	-Inf	32.18	3	Vertical	195	1.95	74.58	27.60	4.58	-
AV	2.4835G	51.44	54.00	-2.56	32.48	3	Vertical	195	1.95	18.96	27.84	4.64	-
PK	2.3886G	64.84	74.00	-9.16	31.82	3	Vertical	195	1.95	33.02	27.29	4.53	-
PK	2.4358G	115.13	Inf	-Inf	32.18	3	Vertical	195	1.95	82.95	27.60	4.58	-
PK	2.485G	64.33	74.00	-9.67	32.49	3	Vertical	195	1.95	31.84	27.85	4.64	-

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX

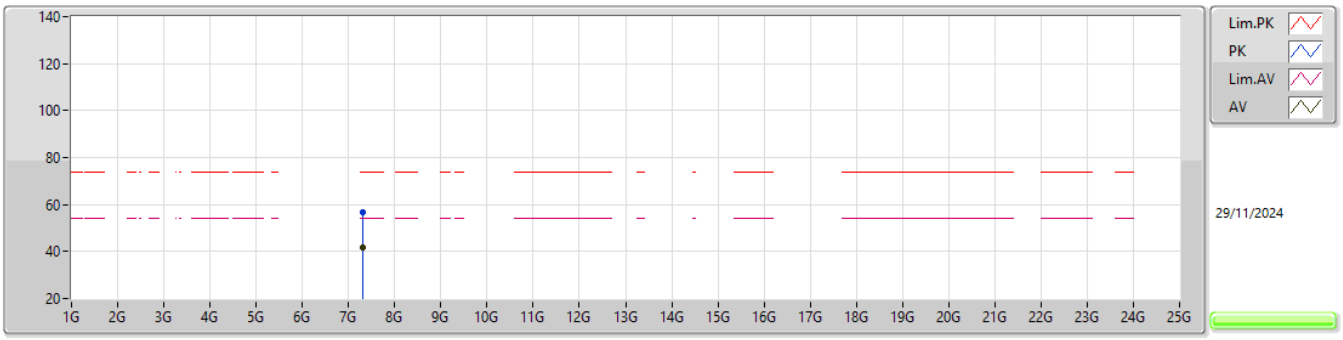
2437MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	(dBuV)	(dB)	(dB)	(dB)
AV	2.3898G	50.36	54.00	-3.64	31.83	3	Horizontal	186	1.11	18.53	27.30	4.53	-
AV	2.4386G	104.19	Inf	-Inf	32.18	3	Horizontal	186	1.11	72.01	27.60	4.58	-
AV	2.4835G	49.25	54.00	-4.75	32.48	3	Horizontal	186	1.11	16.77	27.84	4.64	-
PK	2.3894G	62.74	74.00	-11.26	31.82	3	Horizontal	186	1.11	30.92	27.29	4.53	-
PK	2.4386G	112.35	Inf	-Inf	32.18	3	Horizontal	186	1.11	80.17	27.60	4.58	-
PK	2.4858G	61.37	74.00	-12.63	32.50	3	Horizontal	186	1.11	28.87	27.86	4.64	-

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX

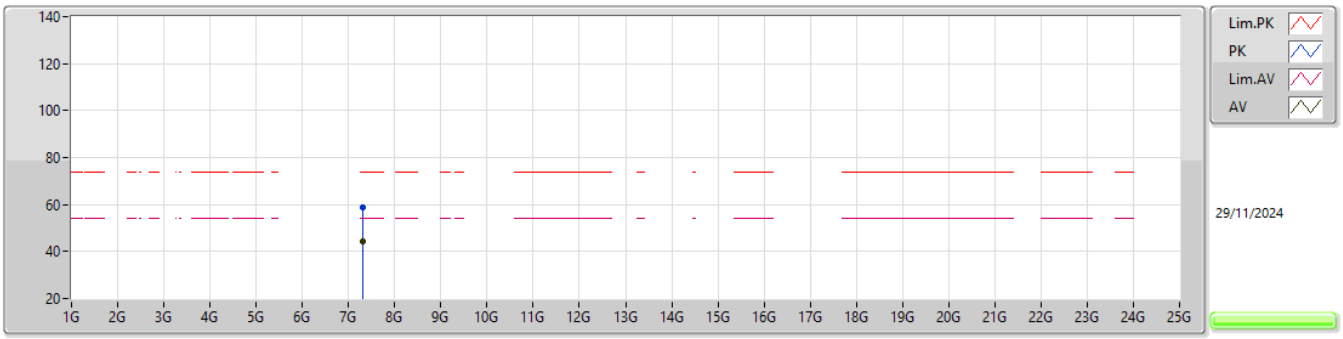
2437MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	(dBuV)	(dB)	(dB)	(dB)
AV	7.31G	41.65	54.00	-12.35	9.83	3	Vertical	175	1.16	31.82	36.76	8.29	35.22
PK	7.31476G	56.65	74.00	-17.35	9.83	3	Vertical	175	1.16	46.82	36.74	8.30	35.21

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX

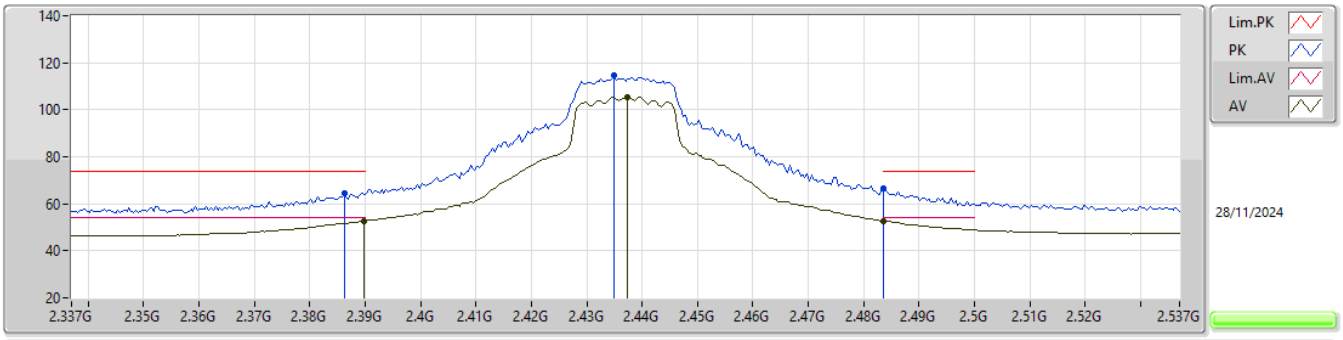
2437MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	(dBuV)	(dB)	(dB)	(dB)
AV	7.3146G	44.15	54.00	-9.85	9.83	3	Horizontal	121	1.17	34.32	36.74	8.30	35.21
PK	7.31452G	58.54	74.00	-15.46	9.83	3	Horizontal	121	1.17	48.71	36.74	8.30	35.21

2.4-2.4835GHz_802.11n HT20_Nss1,(MCS0)_2TX

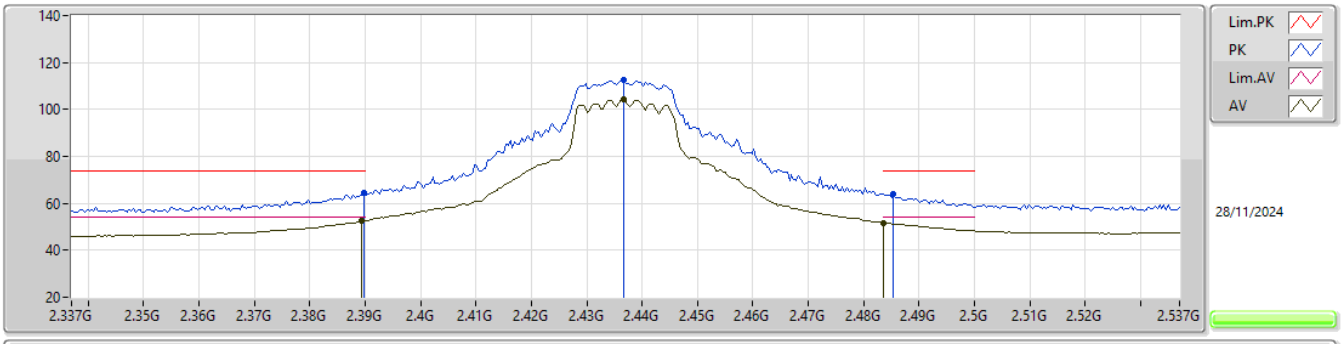
2437MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	(dBuV)	(dB)	(dB)	(dB)
AV	2.3898G	52.73	54.00	-1.27	31.83	3	Vertical	200	1.80	20.90	27.30	4.53	-
AV	2.4374G	105.39	Inf	-Inf	32.18	3	Vertical	200	1.80	73.21	27.60	4.58	-
AV	2.4835G	52.64	54.00	-1.36	32.48	3	Vertical	200	1.80	20.16	27.84	4.64	-
PK	2.3862G	64.55	74.00	-9.45	31.79	3	Vertical	200	1.80	32.76	27.26	4.53	-
PK	2.435G	114.88	Inf	-Inf	32.18	3	Vertical	200	1.80	82.70	27.60	4.58	-
PK	2.4835G	66.49	74.00	-7.51	32.48	3	Vertical	200	1.80	34.01	27.84	4.64	-

2.4-2.4835GHz_802.11n HT20_Nss1,(MCS0)_2TX

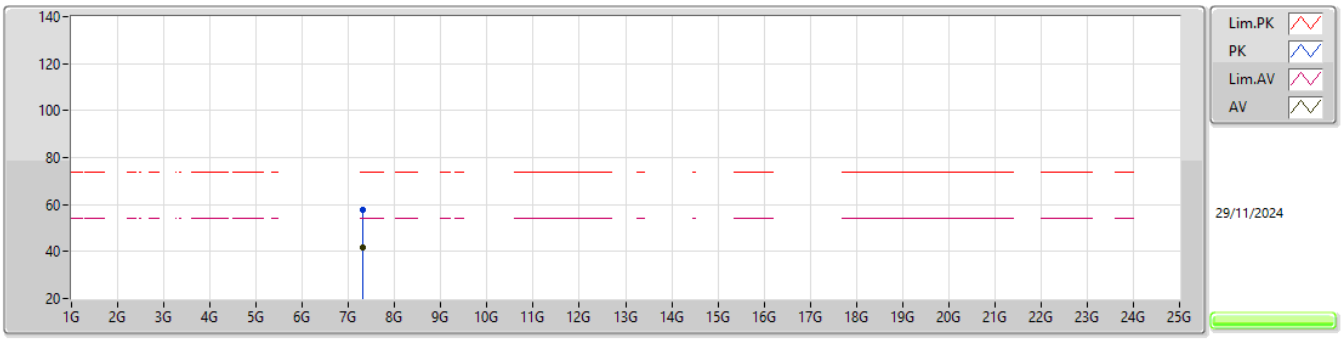
2437MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	(dBuV)	(dB)	(dB)	(dB)
AV	2.3894G	52.60	54.00	-1.40	31.82	3	Horizontal	192	1.31	20.78	27.29	4.53	-
AV	2.4366G	104.36	Inf	-Inf	32.18	3	Horizontal	192	1.31	72.18	27.60	4.58	-
AV	2.4835G	51.75	54.00	-2.25	32.48	3	Horizontal	192	1.31	19.27	27.84	4.64	-
PK	2.3898G	64.43	74.00	-9.57	31.83	3	Horizontal	192	1.31	32.60	27.30	4.53	-
PK	2.4366G	112.42	Inf	-Inf	32.18	3	Horizontal	192	1.31	80.24	27.60	4.58	-
PK	2.4854G	64.03	74.00	-9.97	32.49	3	Horizontal	192	1.31	31.54	27.85	4.64	-

2.4-2.4835GHz_802.11n HT20_Nss1,(MCS0)_2TX

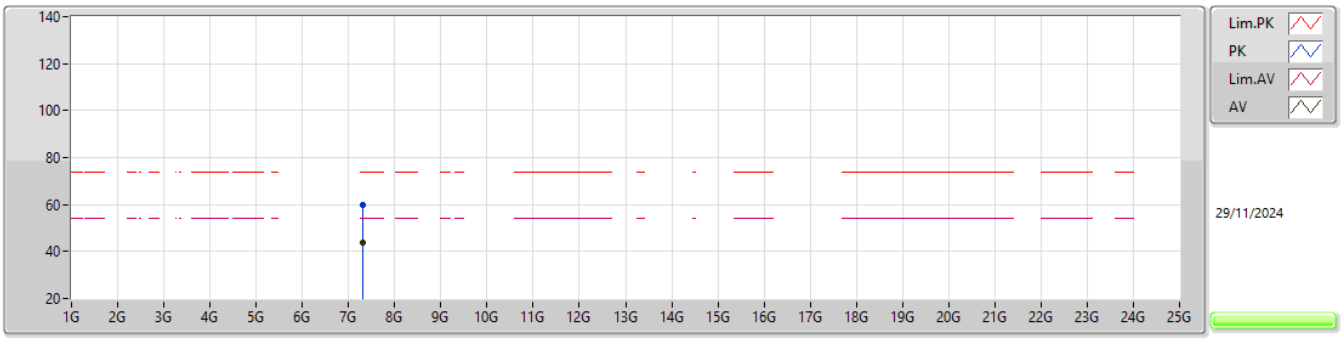
2437MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	(dBuV)	(dB)	(dB)	(dB)
AV	7.3106G	41.60	54.00	-12.40	9.83	3	Vertical	173	1.12	31.77	36.76	8.29	35.22
PK	7.31112G	57.91	74.00	-16.09	9.83	3	Vertical	173	1.12	48.08	36.76	8.29	35.22

2.4-2.4835GHz_802.11n HT20_Nss1,(MCS0)_2TX

2437MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	(dBuV)	(dB)	(dB)	(dB)
AV	7.30812G	43.72	54.00	-10.28	9.84	3	Horizontal	132	1.01	33.88	36.77	8.29	35.22
PK	7.30836G	59.60	74.00	-14.40	9.84	3	Horizontal	132	1.01	49.76	36.77	8.29	35.22

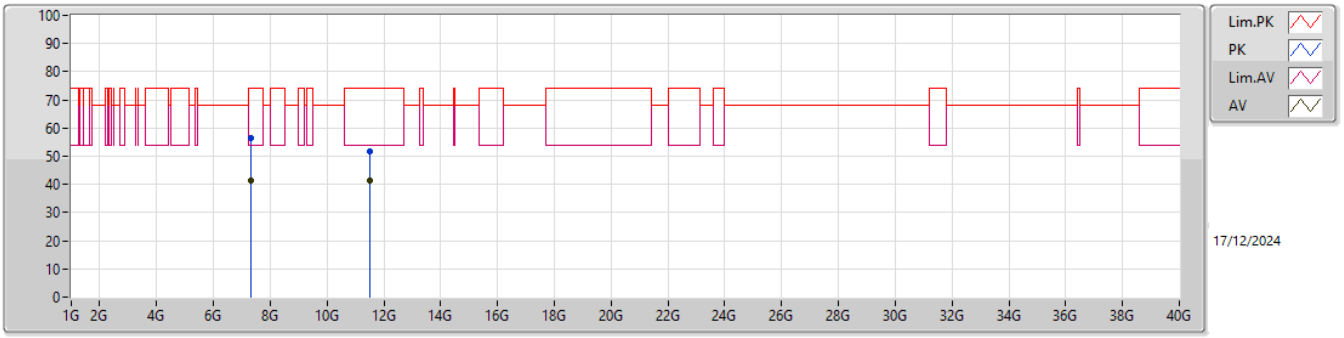
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	AV	7.31264G	43.57	54.00	-10.43	Horizontal

Result

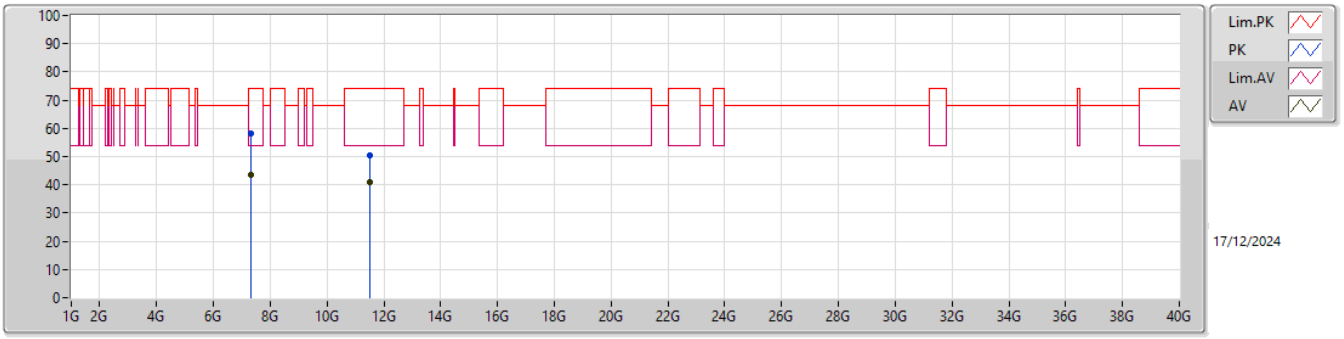
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
Mode 1	Pass	AV	7.31238G	41.59	54.00	-12.41	3	Vertical	0	0.00	-
Mode 1	Pass	AV	11.48983G	41.39	54.00	-12.61	3	Vertical	54	1.50	-
Mode 1	Pass	PK	7.31479G	56.54	74.00	-17.46	3	Vertical	0	0.00	-
Mode 1	Pass	PK	11.48888G	51.87	74.00	-22.13	3	Vertical	54	1.50	-
Mode 1	Pass	AV	7.31264G	43.57	54.00	-10.43	3	Horizontal	162	1.12	-
Mode 1	Pass	AV	11.48974G	40.85	54.00	-13.15	3	Horizontal	156	1.54	-
Mode 1	Pass	PK	7.31396G	58.24	74.00	-15.76	3	Horizontal	162	1.12	-
Mode 1	Pass	PK	11.49025G	50.62	74.00	-23.38	3	Horizontal	156	1.54	-

Radiated Emissions above 1GHz_Mode 1



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(m)		(°)	(m)	(dBuV/m)	(dB/m)	(dB)	(dB)
AV	7.31238G	41.59	54.00	-12.41	-0.60	3	Vertical	0	0.00	42.19	37.15	5.99	43.74
AV	11.48983G	41.39	54.00	-12.61	5.26	3	Vertical	54	1.50	36.13	39.28	7.78	41.80
PK	7.31479G	56.54	74.00	-17.46	-0.61	3	Vertical	0	0.00	57.15	37.14	5.99	43.74
PK	11.48888G	51.87	74.00	-22.13	5.26	3	Vertical	54	1.50	46.61	39.28	7.78	41.80

Radiated Emissions above 1GHz_Mode 1



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(m)		(°)	(m)	(dBuV/m)	(dB/m)	(dB)	(dB)
AV	7.31264G	43.57	54.00	-10.43	-0.60	3	Horizontal	162	1.12	44.17	37.15	5.99	43.74
AV	11.48974G	40.85	54.00	-13.15	5.26	3	Horizontal	156	1.54	35.59	39.28	7.78	41.80
PK	7.31396G	58.24	74.00	-15.76	-0.61	3	Horizontal	162	1.12	58.85	37.14	5.99	43.74
PK	11.49025G	50.62	74.00	-23.38	5.26	3	Horizontal	156	1.54	45.36	39.28	7.78	41.80