

FCC Radio Test Report

FCC ID : 2AAAS-CM12
Equipment : Vivint Doorbell Camera Pro
Brand Name : Vivint
Model Name : CM12
Applicant : Vivint, Inc.
4931 N. 300W., Provo, UT 84604 USA
Manufacturer : Chicony Electronics Co., Ltd
No.69, Sec. 2, Guangfu Rd., Sanchong Dist.,
New Taipei City 241, Taiwan (R.O.C.)
Standard : 47 CFR FCC Part 15.247

The product was received on Jul. 15, 2024, and testing was started from Jul. 18, 2024 and completed on Aug. 13, 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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PHOTOGRAPHS OF EUT V01



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: Ann Hou

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), VHT20, ax(HEW20)	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	802.11ax HEW20	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.
- ◆ VHT20 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- ◆ HEW20 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- ◆ BWch is the nominal channel bandwidth.
- ◆ Evaluated HEW20 mode only due to the similar modulation. The power setting of HT20/VHT20 mode are the same or lower than HEW20.

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector	Support
1	Amphenol	CY5873-12-001-C	PIFA	I-Pex	2.4G+5G+BT
2	Amphenol	CY5873-12-002-C	PIFA	I-Pex	2.4G+5G

Ant.	Port	Gain (dBi)		
		2.4G	5G	BT
1	1	0.72	2.33	0.72
2	2	0.69	2.56	-

Note 1: The EUT has two antennas.

For 2.4GHz function:

For IEEE 802.11 b/g/n/VHT/ax 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)

Ant. 1 (port 1) could transmit/receive.

For 5GHz function:

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

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

Note 2: Directional gain information

	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	$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{BS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$
BF	$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{BS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$	$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{BS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$

1.1.3 EUT Information

Operational Condition			
EUT Power Type	From Switching power supply		
EUT Function	<input checked="" type="checkbox"/> Point-to-multipoint	<input type="checkbox"/> Point-to-point	
Beamforming Function	<input type="checkbox"/> With beamforming	<input checked="" type="checkbox"/> Without beamforming	
Resource Unit(802.11ax)	<input checked="" type="checkbox"/> Full RU	<input type="checkbox"/> Partial RU	
Type of EUT			
<input checked="" type="checkbox"/>	Stand-alone		
<input type="checkbox"/>	Combined (EUT where the radio part is fully integrated within another device)		
	Combined Equipment - Brand Name / Model No.:	...	
<input type="checkbox"/>	Plug-in radio (EUT intended for a variety of host systems)		
	Host System - Brand Name / Model No.:	...	
<input type="checkbox"/>	Other:		

1.1.4 Mode Test Duty Cycle

Mode	DC	DCF (dB)	T (s)	VBW (Hz)_1/T
802.11b_Nss1,(1Mbps)_2TX	0.988	0.05	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11g_Nss1,(6Mbps)_2TX	0.935	0.29	1.43m	1k
802.11ax HEW20_Nss1,(MCS0)_2TX	0.915	0.39	1.045m	1k

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				
<input checked="" type="checkbox"/> 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	Wayne Chiu	21.5~22.1°C / 54~57%	13/Aug/2024
RF Conducted	TH07-HY	Xun Hsieh	23.9~24.5°C / 55~58%	18/Jul/2024~23/Jul/2024
Radiated above 1G	03CH03-HY	CoCo Shang Kung	23.1~23.5°C / 22.8~57%	20/Jul/2024
<input checked="" type="checkbox"/> 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 below 1G	03CH24-HY	Henry Ho	23.2~24.6°C / 55~57%	10/Aug/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	PuTTY Release 0.62
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Mode	Power Setting
802.11b_Nss1,(1Mbps)_2TX	-
2412MHz	66
2417MHz	72
2437MHz	72
2457MHz	72
2462MHz	70
802.11g_Nss1,(6Mbps)_2TX	-
2412MHz	58
2417MHz	63
2437MHz	69
2457MHz	63
2462MHz	54
802.11ax HEW20_Nss1,(MCS0)_2TX	-
2412MHz	56
2417MHz	62
2437MHz	69
2457MHz	59
2462MHz	49

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	Transformer 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	Transformer mode		
Operating Mode > 1GHz	CTX		
Orthogonal Planes of EUT	X Plane	Y Plane	Z Plane
			
Worst Planes of EUT		V	



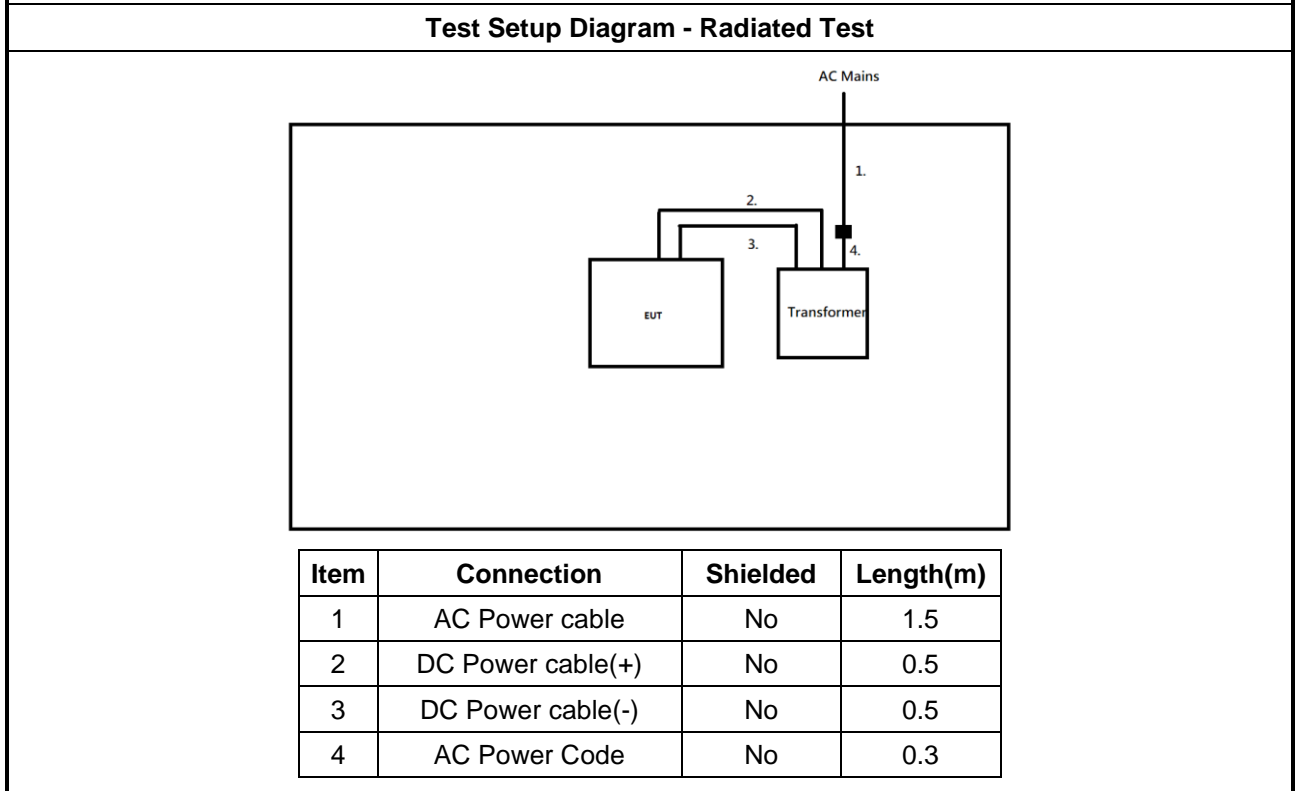
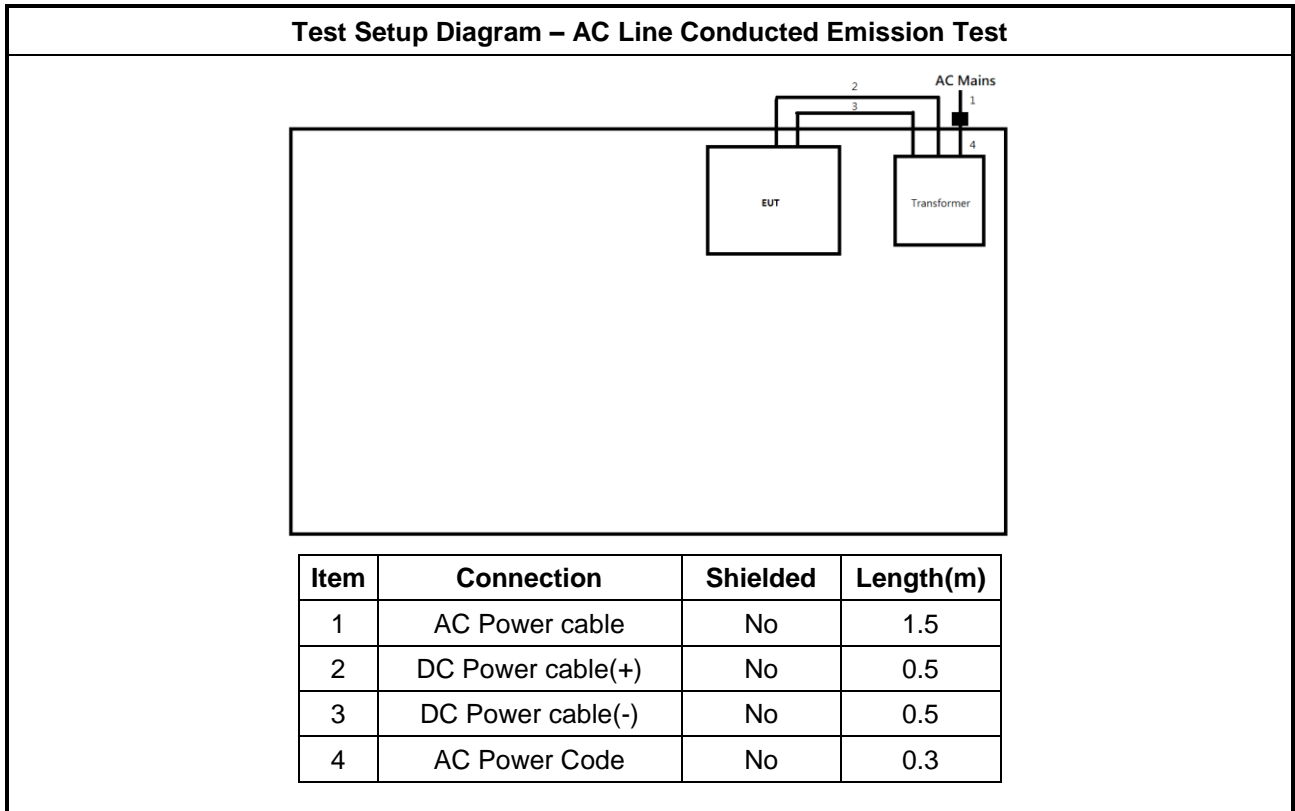
2.3 Support Equipment

Support Equipment – AC Conduction					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Transformer	DONGGUAN	YJH-BYQ482405-F	-	Provided by Customer
2	AC Power cable	I-SHENG	AC CORD 600mm	-	-

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	Transformer	DONGGUAN	YJH-BYQ482405-F	-	Provided by Customer
2	AC Power cable	I-SHENG	AC CORD 600mm	-	-

2.4 Test Setup Diagram





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

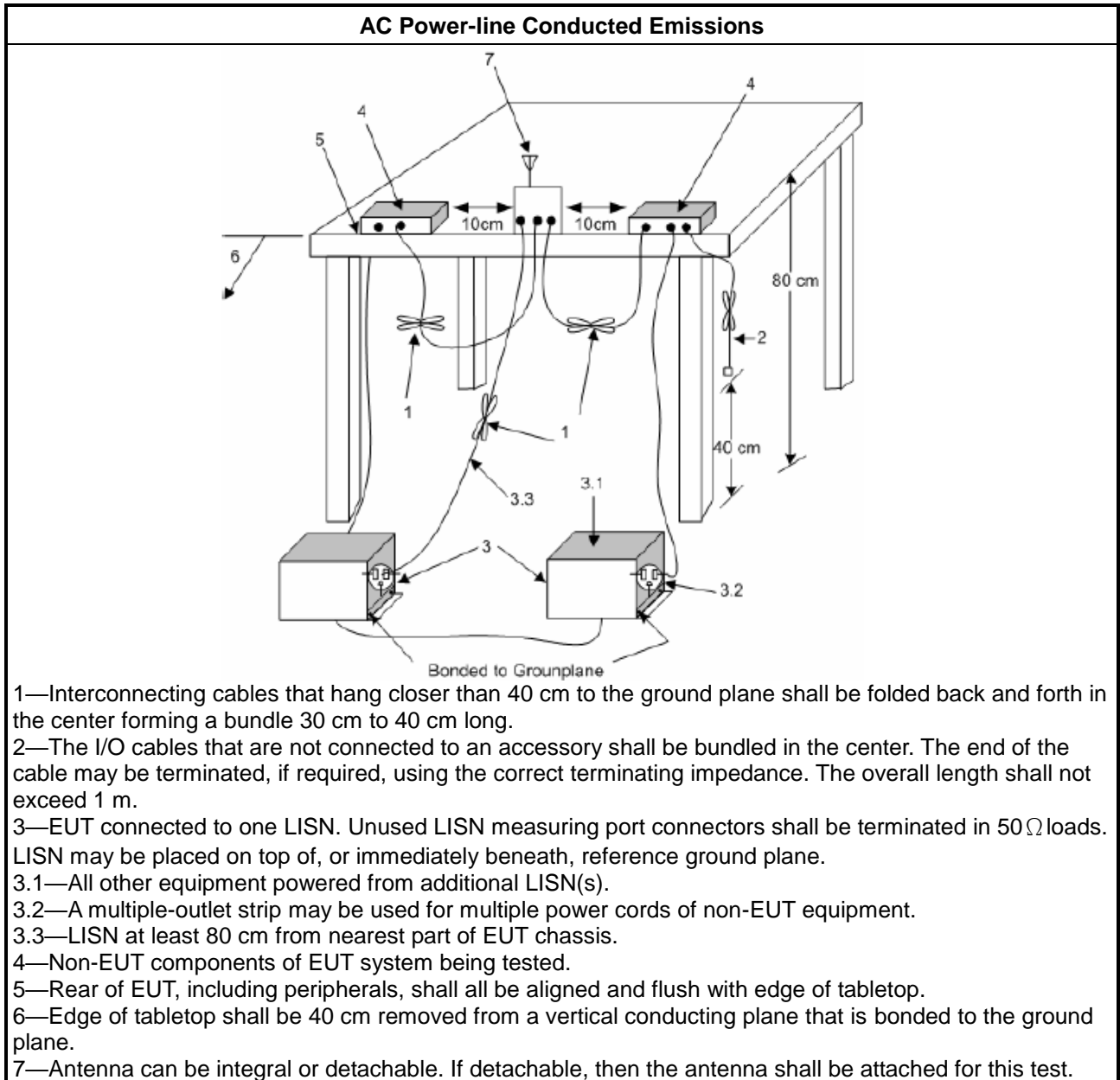
Test Method
<input checked="" type="checkbox"/> Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

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



3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 DTS Bandwidth

3.2.1 6dB Bandwidth Limit

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

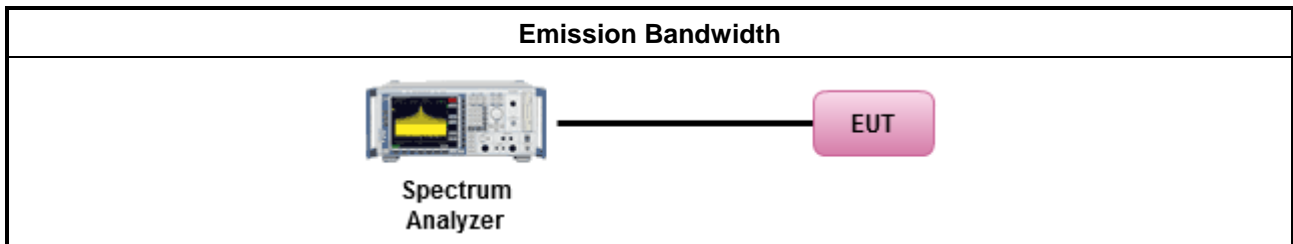
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method	
▪	For the emission bandwidth shall be measured using one of the options below:
<input checked="" type="checkbox"/>	Refer as KDB 558074. clause 8.2 (11.8 of ANSI C63.10) DTS bandwidth measurement.
<input type="checkbox"/>	Refer as RSS-Gen, clause 6.7 for occupied bandwidth testing.
<input type="checkbox"/>	Refer as ANSI C63.10, clause 6.9.3 for occupied bandwidth testing.

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit	
	<ul style="list-style-type: none"> ▪ If $G_{TX} \leq 6$ dBi, then $P_{Out} \leq 30$ dBm (1 W)
	<ul style="list-style-type: none"> ▪ Point-to-multipoint systems (P2M): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ dBm
	<ul style="list-style-type: none"> ▪ Point-to-point systems (P2P): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	<ul style="list-style-type: none"> ▪ Smart antenna system (SAS):
	<ul style="list-style-type: none"> - Single beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	<ul style="list-style-type: none"> - Overlap beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	<ul style="list-style-type: none"> - Aggregate power on all beams: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3 + 8$ dB dBm
e.i.r.p. Power Limit:	
	<ul style="list-style-type: none"> ▪ 2400-2483.5 MHz Band
	<ul style="list-style-type: none"> ▪ Point-to-multipoint systems (P2M): $P_{eirp} \leq 36$ dBm (4 W)
	<ul style="list-style-type: none"> ▪ Point-to-point systems (P2P): $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX}])$ dBm
	<ul style="list-style-type: none"> ▪ Smart antenna system (SAS)
	<ul style="list-style-type: none"> - Single beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm
	<ul style="list-style-type: none"> - Overlap beam: $P_{eirp} \leq \text{MAX}(36, P_{Out} + G_{TX})$ dBm
	<ul style="list-style-type: none"> - Aggregate power on all beams: $P_{eirp} \leq \text{MAX}(36, [P_{Out} + G_{TX} + 8])$ dBm
<p>P_{Out} = maximum peak conducted output power or maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.</p>	

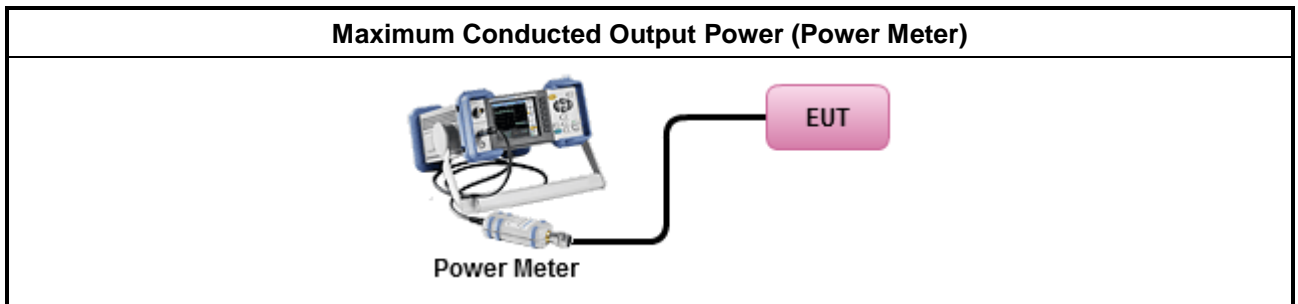
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> ▪ Maximum Peak Conducted Output Power 	
<input type="checkbox"/>	Refer as KDB 558074, clause 8.3.1.1 (11.9.1.1 of ANSI C63.10) RBW ≥ EBW method.
<input type="checkbox"/>	Refer as KDB 558074, clause 8.3.1.2 (11.9.1.2 of ANSI C63.10) integrated band power method.
<input type="checkbox"/>	Refer as KDB 558074, clause 8.3.1.3 (11.9.1.3 of ANSI C63.10) peak power meter.
<ul style="list-style-type: none"> ▪ Maximum Average Conducted Output Power 	
<input type="checkbox"/>	Refer as KDB 558074, clause 8.3.2.2 (11.9.2.2 of ANSI C63.10) using a spectrum analyzer.
<input checked="" type="checkbox"/>	Refer as KDB 558074, clause 8.3.2.3 (11.9.2.3 of ANSI C63.10) using a power meter.
<ul style="list-style-type: none"> ▪ For conducted measurement. 	
<ul style="list-style-type: none"> ▪ If the EUT supports multiple transmit chains using options given below: Refer as KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them. 	
<ul style="list-style-type: none"> ▪ If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$ 	

3.3.4 Test Setup



3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

Power Spectral Density Limit
<ul style="list-style-type: none"> Power Spectral Density (PSD) \leq 8 dBm/3kHz

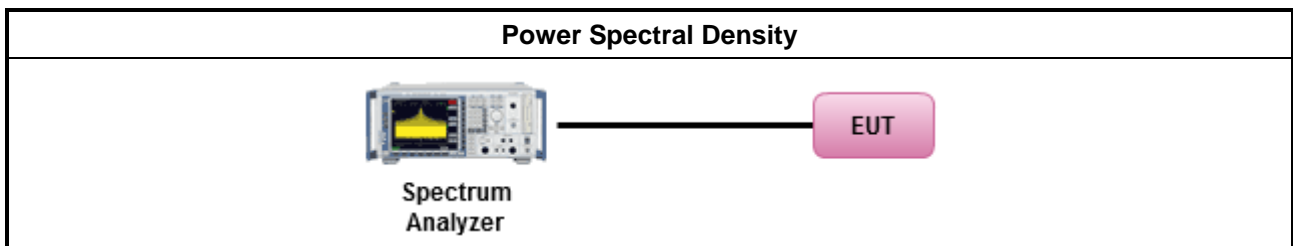
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

Test Method
<ul style="list-style-type: none"> Peak power spectral density procedures that the same method as used to determine the conducted output power. If maximum peak conducted output power was measured to demonstrate compliance to the output power limit, then the peak PSD procedure below (Method PKPSD) shall be used. If maximum conducted output power was measured to demonstrate compliance to the output power limit, then one of the average PSD procedures shall be used, as applicable based on the following criteria (the peak PSD procedure is also an acceptable option).
<input checked="" type="checkbox"/> Refer as KDB 558074, clause 8.4 (11.10 of ANSI C63.10) Max. PSD.
<ul style="list-style-type: none"> For conducted measurement. <ul style="list-style-type: none"> If The EUT supports multiple transmit chains using options given below: <ul style="list-style-type: none"> Measure and sum the spectra across the outputs. Refer as KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.

3.4.4 Test Setup



3.4.5 Test Result of Power Spectral Density

Refer as Appendix D

3.5 Emissions in Non-restricted Frequency Bands

3.5.1 Emissions in Non-restricted Frequency Bands Limit

Un-restricted Band Emissions Limit	
RF output power procedure	Limit (dB)
Peak output power procedure	20
Average output power procedure	30

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

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

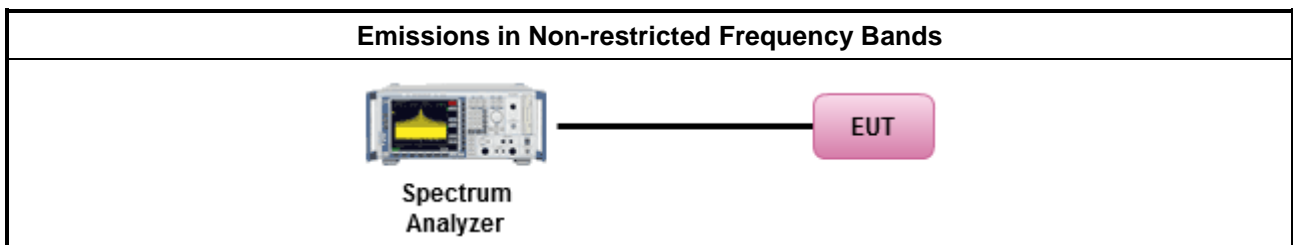
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

Test Method
<ul style="list-style-type: none"> Refer as KDB 558074, clause 8.5 (11.11 of ANSI C63.10) for non-restricted frequency bands.

3.5.4 Test Setup



3.5.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix E

3.6 Emissions in Restricted Frequency Bands

3.6.1 Emissions in Restricted Frequency Bands Limit

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

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

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

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

3.6.2 Measuring Instruments

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

3.6.3 Test Procedures

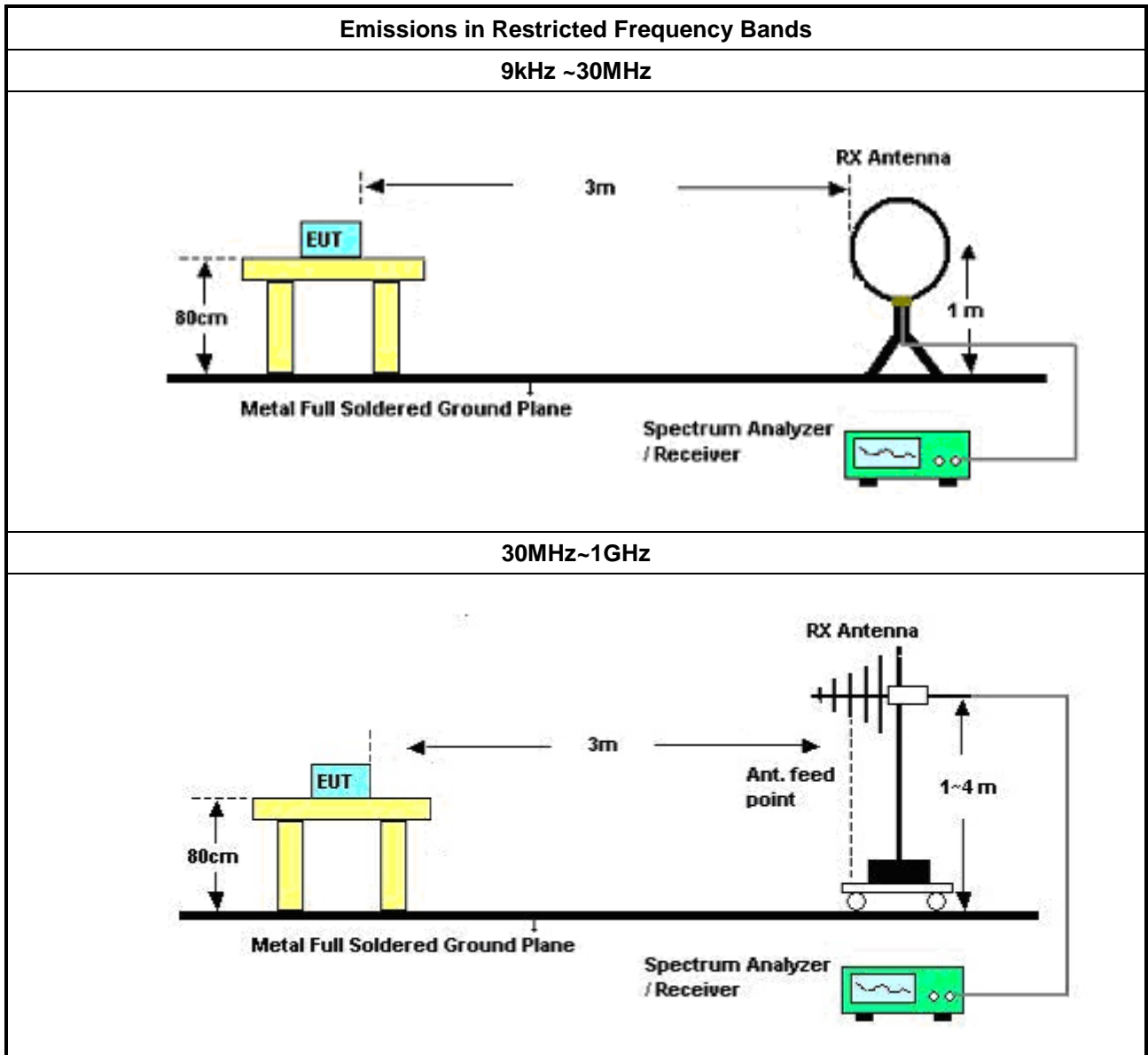
Test Method	
	<ul style="list-style-type: none"> ▪ The average emission levels shall be measured in [duty cycle \geq 98 or duty factor].
	<ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.
	<ul style="list-style-type: none"> ▪ For the transmitter unwanted emissions shall be measured using following options below:
	<ul style="list-style-type: none"> ▪ Refer as KDB 558074, clause 8.6 (11.12 of ANSI C63.10) for restricted frequency bands.
	<ul style="list-style-type: none"> ▪ For the transmitter band-edge emissions shall be measured using following options below:
	<ul style="list-style-type: none"> ▪ 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.
	<ul style="list-style-type: none"> ▪ Refer as KDB 558074, clause 8.7.2 (6.10.6 of ANSI C63.10) for marker-delta method for band-edge measurements.
	<ul style="list-style-type: none"> ▪ Refer as KDB 558074, clause 8.7.3 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels.
	<ul style="list-style-type: none"> ▪ Use the following spectrum analyzer settings:
	<ul style="list-style-type: none"> ▪ Set RBW=100 kHz for $f < 1$ GHz; VBW=3 * RBW; Sweep = auto; Detector function = peak; Trace = max hold.
	<ul style="list-style-type: none"> ▪ Set RBW = 1 MHz, VBW= 3MHz for $f \geq 1$ GHz for peak measurement. For average measurement, refer as 1.1.4.
	<ul style="list-style-type: none"> ▪ KDB 414788 Open-Field Test Sites and Chamber Correlation Justification.
	<ul style="list-style-type: none"> ▪ 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.
	<ul style="list-style-type: none"> ▪ Open-field site and chamber correlation testing had been performed and chamber measured test result is the worst case test result.

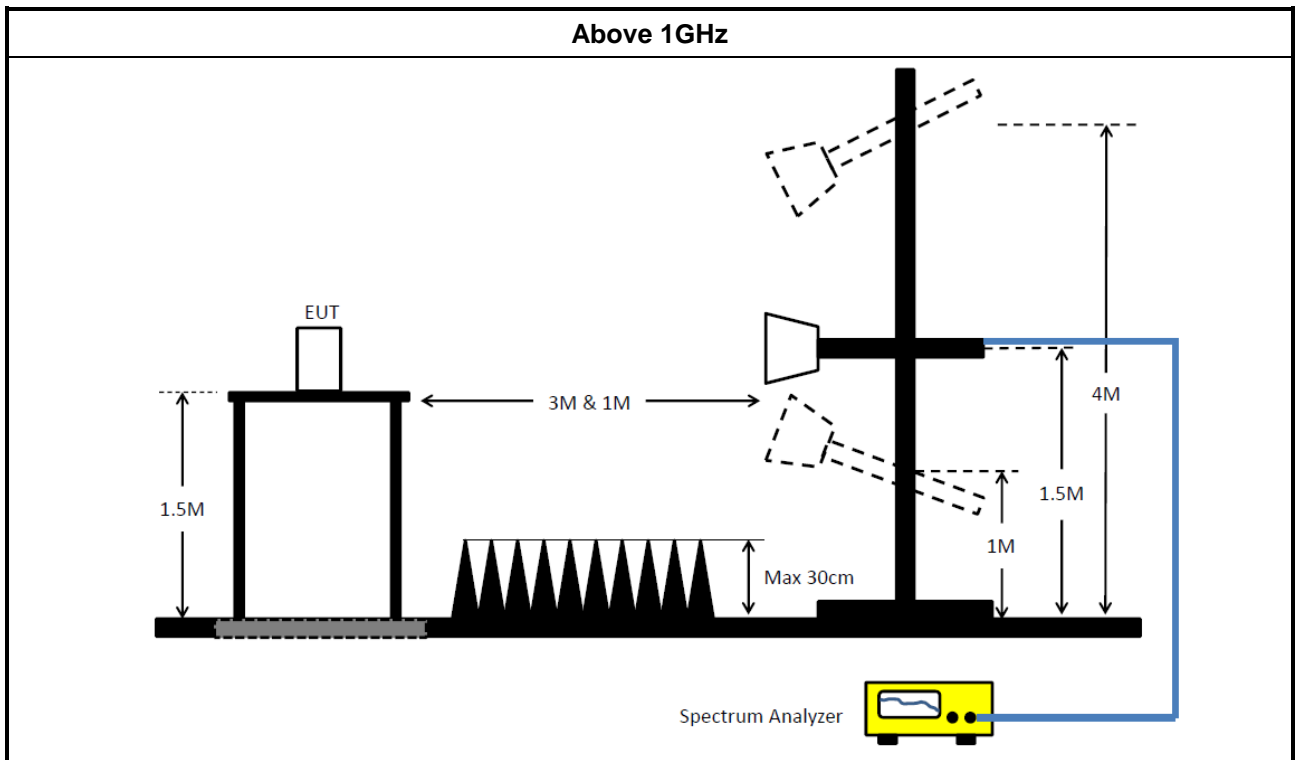
3.6.4 Measurement Results Calculation

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





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	18/Oct/2023	17/Oct/2024
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	101515	9kHz~40GHz	02/Feb/2024	01/Feb/2025
SMB100A Signal Generator	R&S	SMB100A	181147	100kHz~40GHz	20/Oct/2023	19/Oct/2024
Power Meter	Anritsu	ML2495A	1517010	300MHz~40GHz	15/Dec/2023	14/Dec/2024
Pulse Sensor	Anritsu	MA2411B	1339407	300MHz~40GHz	15/Dec/2023	14/Dec/2024
SENSE-15247_DTS	Sporton	V5.11.18	N/A	N/A	N/A	N/A

Instrument for Radiated Test (03CH03-HY)

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	1GHz~18GHz 3m	14/Jul/2024	13/Jul/2025
Signal Analyzer	R&S	FSV40	101500	10Hz~40GHz	26/Oct/2023	25/Oct/2024
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	02267	1GHz~18GHz	04/Oct/2023	03/Oct/2024
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170154	18GHz ~ 40GHz	04/Jun/2024	03/Jun/2025
Microwave Prempplier	Agilent	8449B	3008A02326	1GHz~26.5GHz	26/Jul/2023	25/Jul/2024
Microwave Prempplier	EMC INSTRUMENTS	EM18G40G	60604	18GHz ~ 40GHz	19/Apr/2024	18/Apr/2025
RF CABLE 5+8m	HUBER+SUHNE R	SUOFLEX 104	03CH03-cable-03	1GHz~40GHz	20/Feb/2024	19/Feb/2025
SENSE-15407_DTS	Sporton	V5.11.18	NA	NA	NA	NA



Instrument for Radiated Test (03CH24-HY)

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH24-HY	30MHz~1GHz 3m	17/Aug/2023	16/Aug/2024
Signal Analyzer	ROHDE&SCHWARZ	FSV40	101029	10Hz~44GHz	29/Oct/2023	28/Oct/2024
Loop Antenna	TESEQ	HLA 6120	31244	9kHz~30MHz	19/Mar/2024	18/Mar/2025
Bilog Antenna & 6dB Attenuator	TESEQ / Woken	CBL 6112D / 00800N1D01N-06	35376 / 02	30MHz~1GHz	14/Apr/2024	13/Apr/2025
Pre-Amplifier	Aglient	8447D	2944A06292	30MHz~1GHz	18/Apr/2024	17/Apr/2025
RF Cable	HUBER+SUHNER	SUOFLEX 104	CB002	9kHz~1GHz	31/Jul/2024	30/Jul/2025
SENSE-15407_DTS	Sporton	V5.11.18	NA	NA	NA	NA



Summary

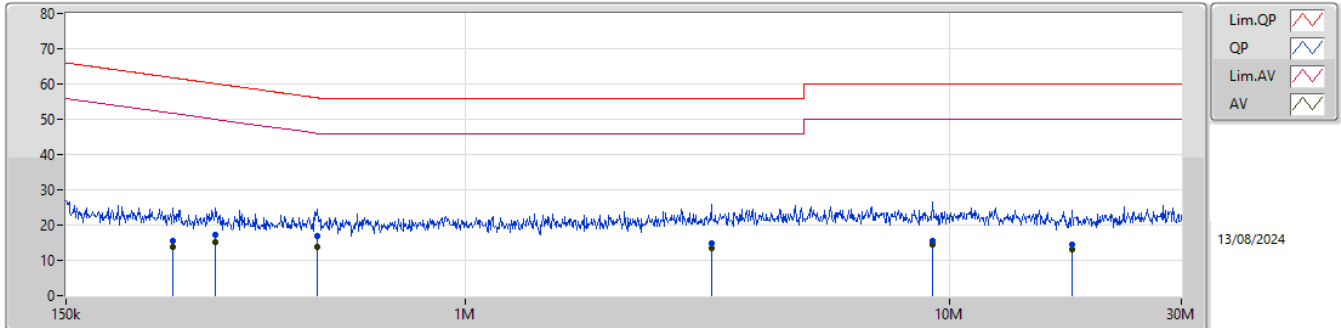
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	494.848k	13.64	46.10	-32.46	Line



Result

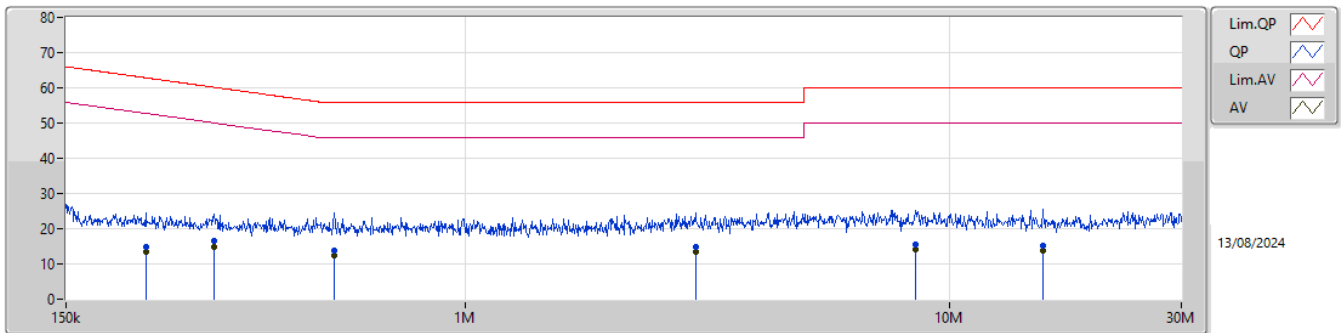
Mode	Result	Type	Freq (Hz)	Level (dBUV)	Limit (dBUV)	Margin (dB)	Condition	Comments
Mode 1	Pass	QP	249.042k	15.43	61.79	-46.36	Line	-
Mode 1	Pass	AV	249.042k	13.70	51.79	-38.09	Line	-
Mode 1	Pass	QP	305.276k	17.33	60.09	-42.76	Line	-
Mode 1	Pass	AV	305.276k	15.23	50.09	-34.86	Line	-
Mode 1	Pass	QP	494.848k	16.81	56.10	-39.29	Line	-
Mode 1	Pass	AV	494.848k	13.64	46.10	-32.46	Line	-
Mode 1	Pass	QP	3.218M	14.95	56.00	-41.05	Line	-
Mode 1	Pass	AV	3.218M	13.52	46.00	-32.48	Line	-
Mode 1	Pass	QP	9.195M	15.62	60.00	-44.38	Line	-
Mode 1	Pass	AV	9.195M	14.36	50.00	-35.64	Line	-
Mode 1	Pass	QP	17.838M	14.50	60.00	-45.50	Line	-
Mode 1	Pass	AV	17.838M	13.22	50.00	-36.78	Line	-
Mode 1	Pass	QP	219.176k	14.66	62.85	-48.19	Neutral	-
Mode 1	Pass	AV	219.176k	13.51	52.85	-39.34	Neutral	-
Mode 1	Pass	QP	302.848k	16.53	60.17	-43.64	Neutral	-
Mode 1	Pass	AV	302.848k	14.66	50.17	-35.51	Neutral	-
Mode 1	Pass	QP	535.976k	13.83	56.00	-42.17	Neutral	-
Mode 1	Pass	AV	535.976k	12.25	46.00	-33.75	Neutral	-
Mode 1	Pass	QP	2.983M	14.86	56.00	-41.14	Neutral	-
Mode 1	Pass	AV	2.983M	13.39	46.00	-32.61	Neutral	-
Mode 1	Pass	QP	8.489M	15.60	60.00	-44.40	Neutral	-
Mode 1	Pass	AV	8.489M	14.31	50.00	-35.69	Neutral	-
Mode 1	Pass	QP	15.512M	15.30	60.00	-44.70	Neutral	-
Mode 1	Pass	AV	15.512M	13.64	50.00	-36.36	Neutral	-

Conducted Emissions at Powerline_Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	249.042k	15.43	61.79	-46.36	19.46	Line	-	-4.03	9.65	0.10	9.71
AV	249.042k	13.70	51.79	-38.09	19.46	Line	-	-5.76	9.65	0.10	9.71
QP	305.276k	17.33	60.09	-42.76	19.49	Line	-	-2.16	9.65	0.11	9.73
AV	305.276k	15.23	50.09	-34.86	19.49	Line	-	-4.26	9.65	0.11	9.73
QP	494.848k	16.81	56.10	-39.29	19.53	Line	-	-2.72	9.65	0.11	9.77
AV	494.848k	13.64	46.10	-32.46	19.53	Line	-	-5.89	9.65	0.11	9.77
QP	3.218M	14.95	56.00	-41.05	19.55	Line	-	-4.60	9.68	0.08	9.79
AV	3.218M	13.52	46.00	-32.48	19.55	Line	-	-6.03	9.68	0.08	9.79
QP	9.195M	15.62	60.00	-44.38	19.55	Line	-	-3.93	9.71	0.05	9.79
AV	9.195M	14.36	50.00	-35.64	19.55	Line	-	-5.19	9.71	0.05	9.79
QP	17.838M	14.50	60.00	-45.50	19.62	Line	-	-5.12	9.68	0.11	9.83
AV	17.838M	13.22	50.00	-36.78	19.62	Line	-	-6.40	9.68	0.11	9.83

Conducted Emissions at Powerline_Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)
QP	219.176k	14.66	62.85	-48.19	19.38	Neutral	-	-4.72	9.60	0.09	9.69
AV	219.176k	13.51	52.85	-39.34	19.38	Neutral	-	-5.87	9.60	0.09	9.69
QP	302.848k	16.53	60.17	-43.64	19.44	Neutral	-	-2.91	9.60	0.11	9.73
AV	302.848k	14.66	50.17	-35.51	19.44	Neutral	-	-4.78	9.60	0.11	9.73
QP	535.976k	13.83	56.00	-42.17	19.48	Neutral	-	-5.65	9.60	0.11	9.77
AV	535.976k	12.25	46.00	-33.75	19.48	Neutral	-	-7.23	9.60	0.11	9.77
QP	2.983M	14.86	56.00	-41.14	19.50	Neutral	-	-4.64	9.62	0.09	9.79
AV	2.983M	13.39	46.00	-32.61	19.50	Neutral	-	-6.11	9.62	0.09	9.79
QP	8.489M	15.60	60.00	-44.40	19.49	Neutral	-	-3.89	9.65	0.05	9.79
AV	8.489M	14.31	50.00	-35.69	19.49	Neutral	-	-5.18	9.65	0.05	9.79
QP	15.512M	15.30	60.00	-44.70	19.59	Neutral	-	-4.29	9.67	0.09	9.83
AV	15.512M	13.64	50.00	-36.36	19.59	Neutral	-	-5.95	9.67	0.09	9.83



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	11.629M	11M6G1D	6.6M	11.104M
802.11g_Nss1,(6Mbps)_2TX	16.475M	16.556M	16M6D1D	16.325M	16.437M
802.11ax HEW20_Nss1,(MCS0)_2TX	18.65M	19.013M	19M0D1D	16.325M	18.807M

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	7.45M	11.104M	7.1M	11.285M
2437MHz	Pass	500k	7.25M	11.604M	7.3M	11.33M
2462MHz	Pass	500k	6.6M	11.529M	7.025M	11.629M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.375M	16.491M	16.375M	16.534M
2437MHz	Pass	500k	16.325M	16.556M	16.375M	16.437M
2462MHz	Pass	500k	16.475M	16.491M	16.375M	16.484M
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	18.65M	18.969M	17.975M	18.807M
2437MHz	Pass	500k	17.7M	19.013M	16.325M	18.823M
2462MHz	Pass	500k	17.925M	18.838M	17.95M	18.843M

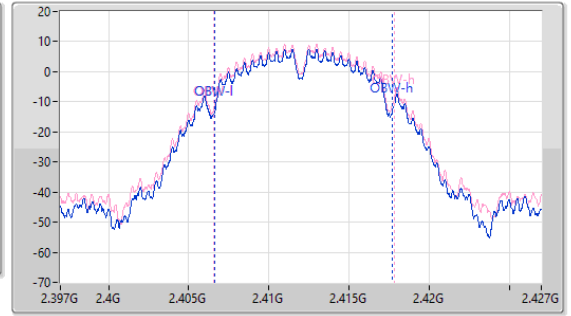
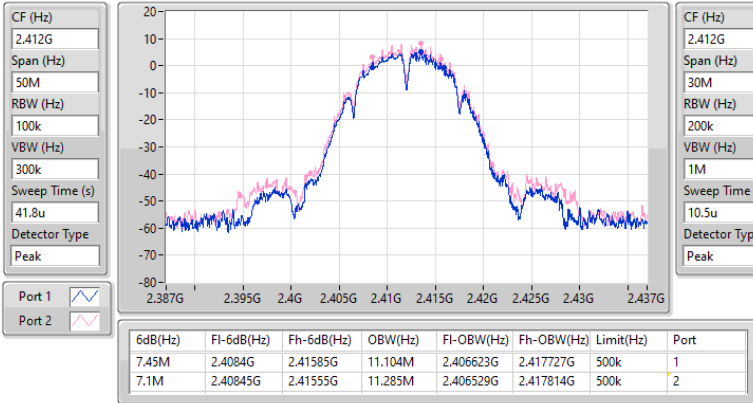
Port X-N dB = Port X 6dB down bandwidth;
 Port X-OBW = Port X 99% occupied bandwidth

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

EBW

2412MHz

23/07/2024

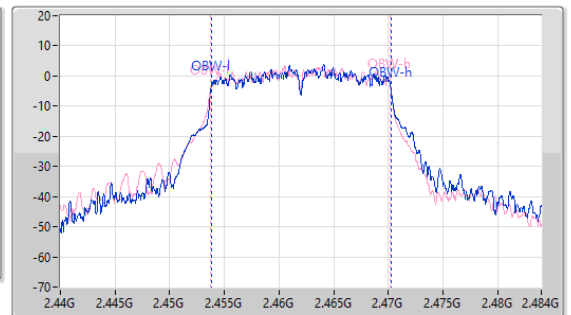
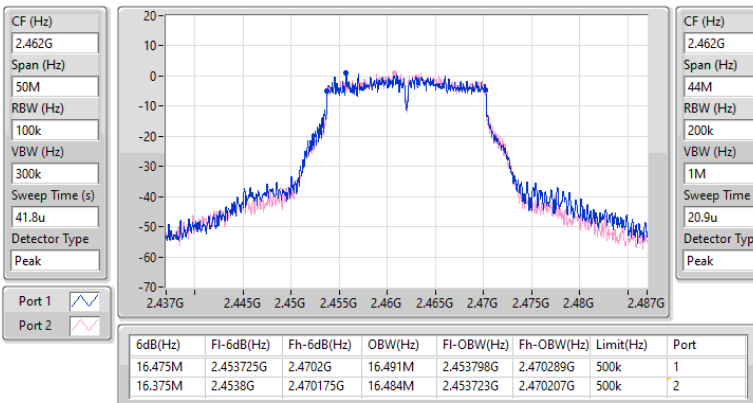


2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX

EBW

2462MHz

23/07/2024

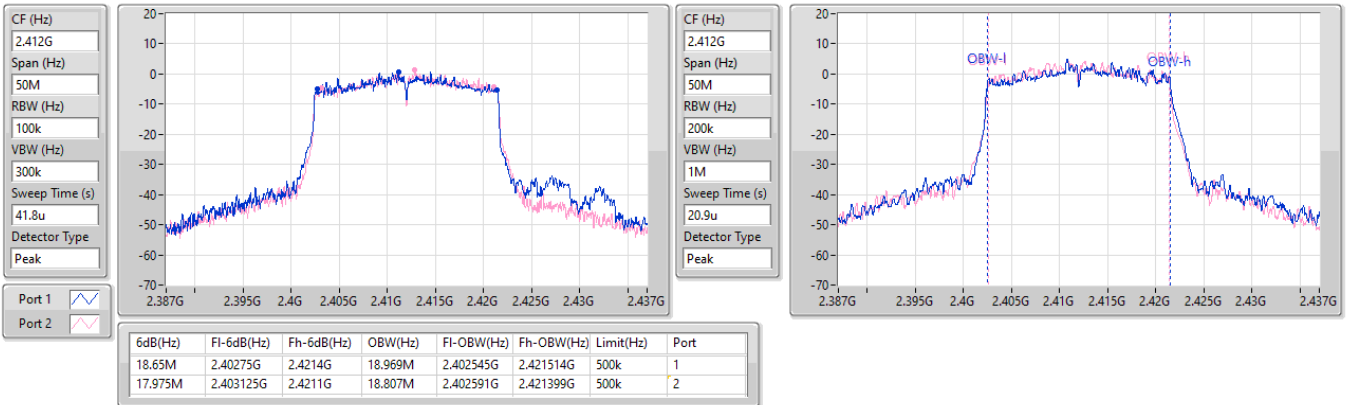


2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

2412MHz

23/07/2024





Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_2TX	21.92	0.15560
802.11g_Nss1,(6Mbps)_2TX	20.92	0.12359
802.11ax HEW20_Nss1,(MCS0)_2TX	20.97	0.12503



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	0.72	15.56	17.00	19.35	30.00
2417MHz	Pass	0.72	17.52	19.16	21.43	30.00
2437MHz	Pass	0.72	18.34	19.42	21.92	30.00
2457MHz	Pass	0.72	17.53	19.15	21.43	30.00
2462MHz	Pass	0.72	16.67	18.77	20.86	30.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	0.72	14.94	15.31	18.14	30.00
2417MHz	Pass	0.72	15.93	16.25	19.10	30.00
2437MHz	Pass	0.72	18.01	17.80	20.92	30.00
2457MHz	Pass	0.72	15.92	16.10	19.02	30.00
2462MHz	Pass	0.72	13.86	14.53	17.22	30.00
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	0.72	14.54	14.78	17.67	30.00
2417MHz	Pass	0.72	15.57	15.91	18.75	30.00
2437MHz	Pass	0.72	18.10	17.81	20.97	30.00
2457MHz	Pass	0.72	14.86	15.36	18.13	30.00
2462MHz	Pass	0.72	12.82	13.58	16.23	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	-2.77
802.11g_Nss1,(6Mbps)_2TX	-5.64
802.11ax HEW20_Nss1,(MCS0)_2TX	-6.08

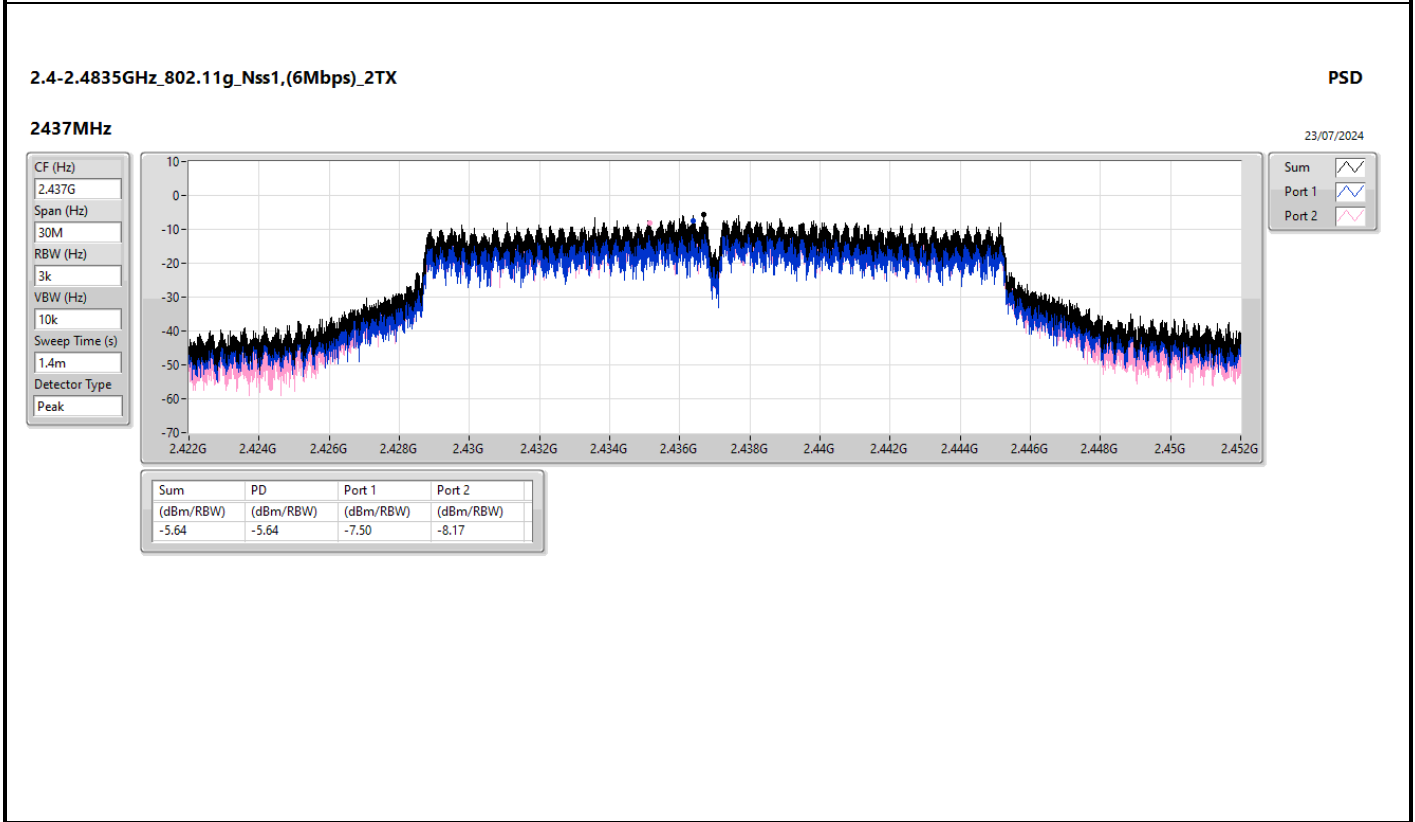
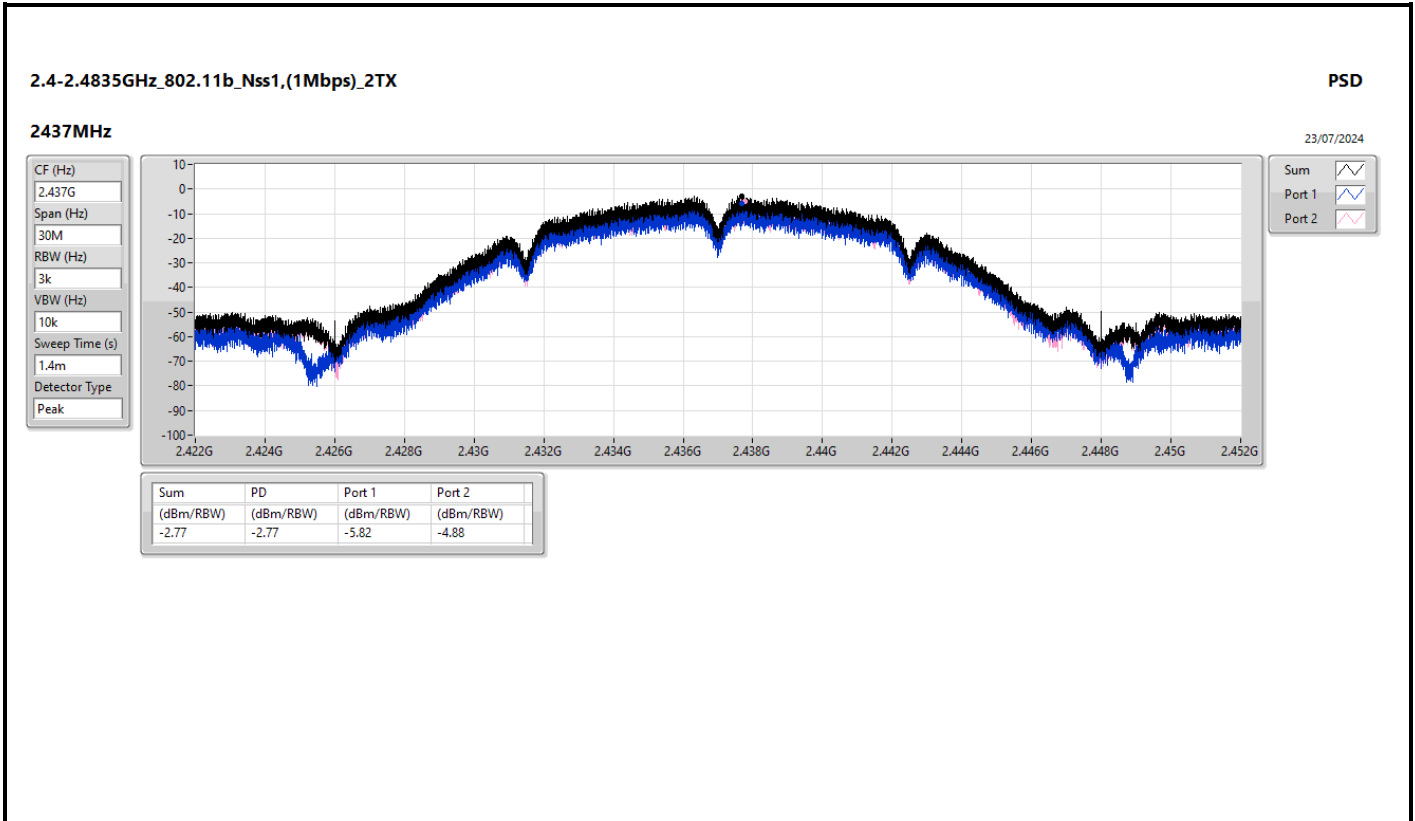
RBW = 3kHz;



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	3.72	-7.61	-6.31	-5.17	8.00
2437MHz	Pass	3.72	-5.82	-4.88	-2.77	8.00
2462MHz	Pass	3.72	-5.29	-4.01	-3.31	8.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	3.72	-9.41	-10.51	-8.59	8.00
2437MHz	Pass	3.72	-7.50	-8.17	-5.64	8.00
2462MHz	Pass	3.72	-10.79	-10.56	-8.88	8.00
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	3.72	-11.95	-11.47	-10.20	8.00
2437MHz	Pass	3.72	-8.49	-8.83	-6.08	8.00
2462MHz	Pass	3.72	-14.01	-12.73	-11.79	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_802.11ax_HEW20_Nss1,(MCS0)_2TX

PSD

2437MHz

23/07/2024

CF (Hz)
2.437G

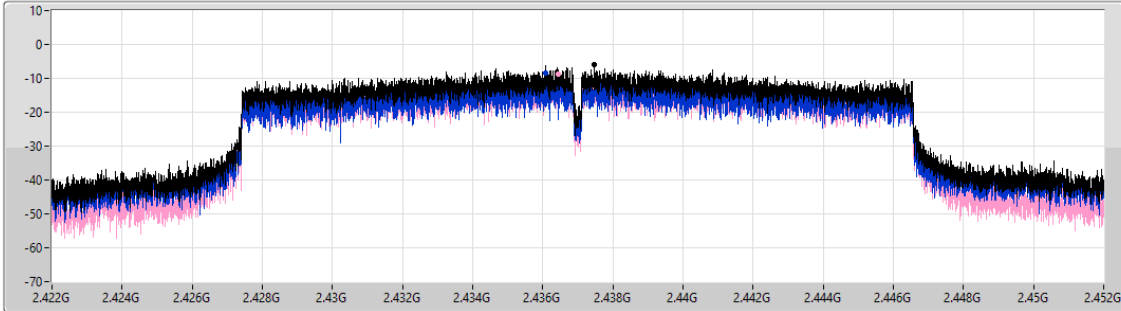
Span (Hz)
30M


RBW (Hz)
3k


VBW (Hz)
10k


Sweep Time (s)
1.4m

Detector Type
Peak



Sum 

Port 1 

Port 2 

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.08	-6.08	-8.49	-8.83



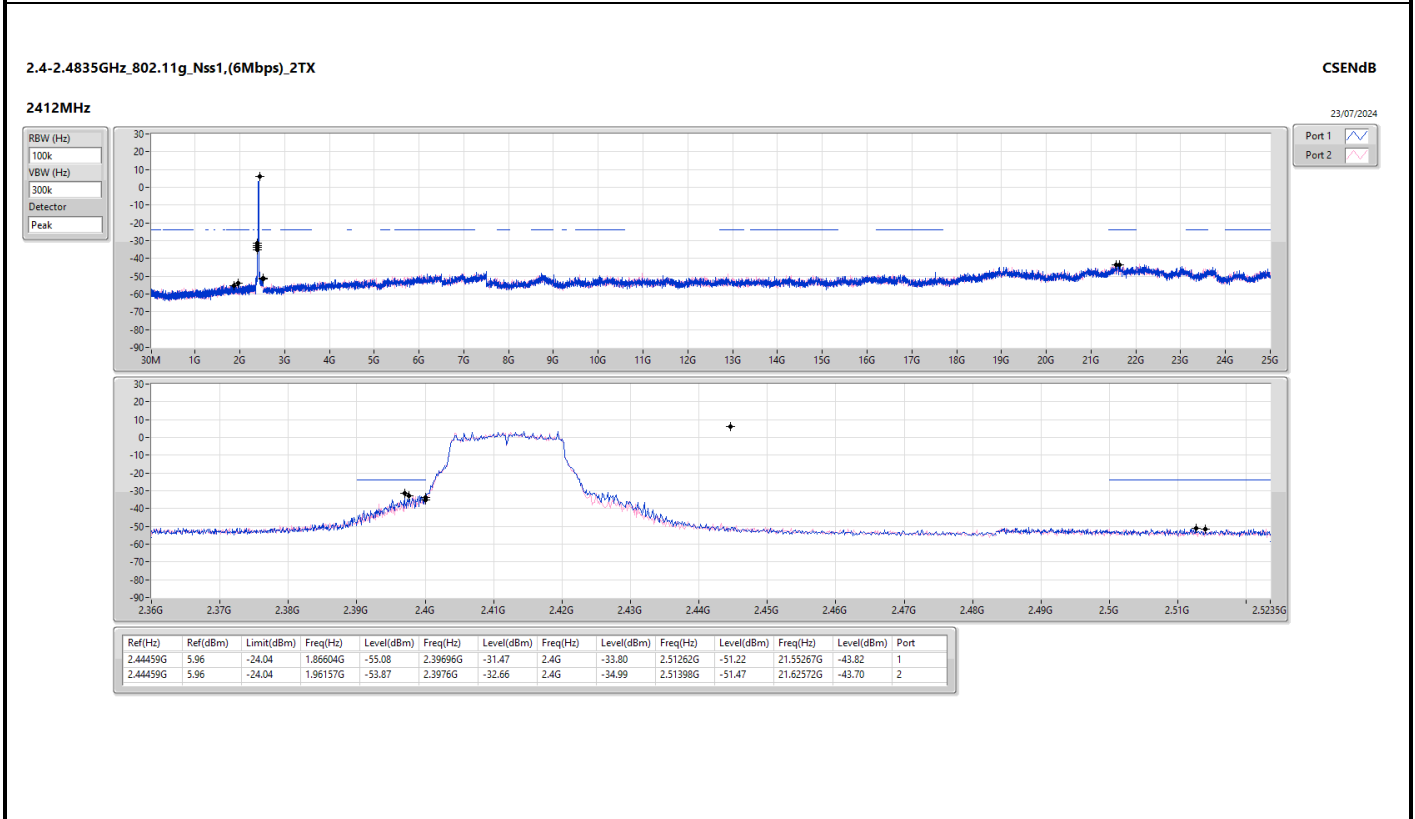
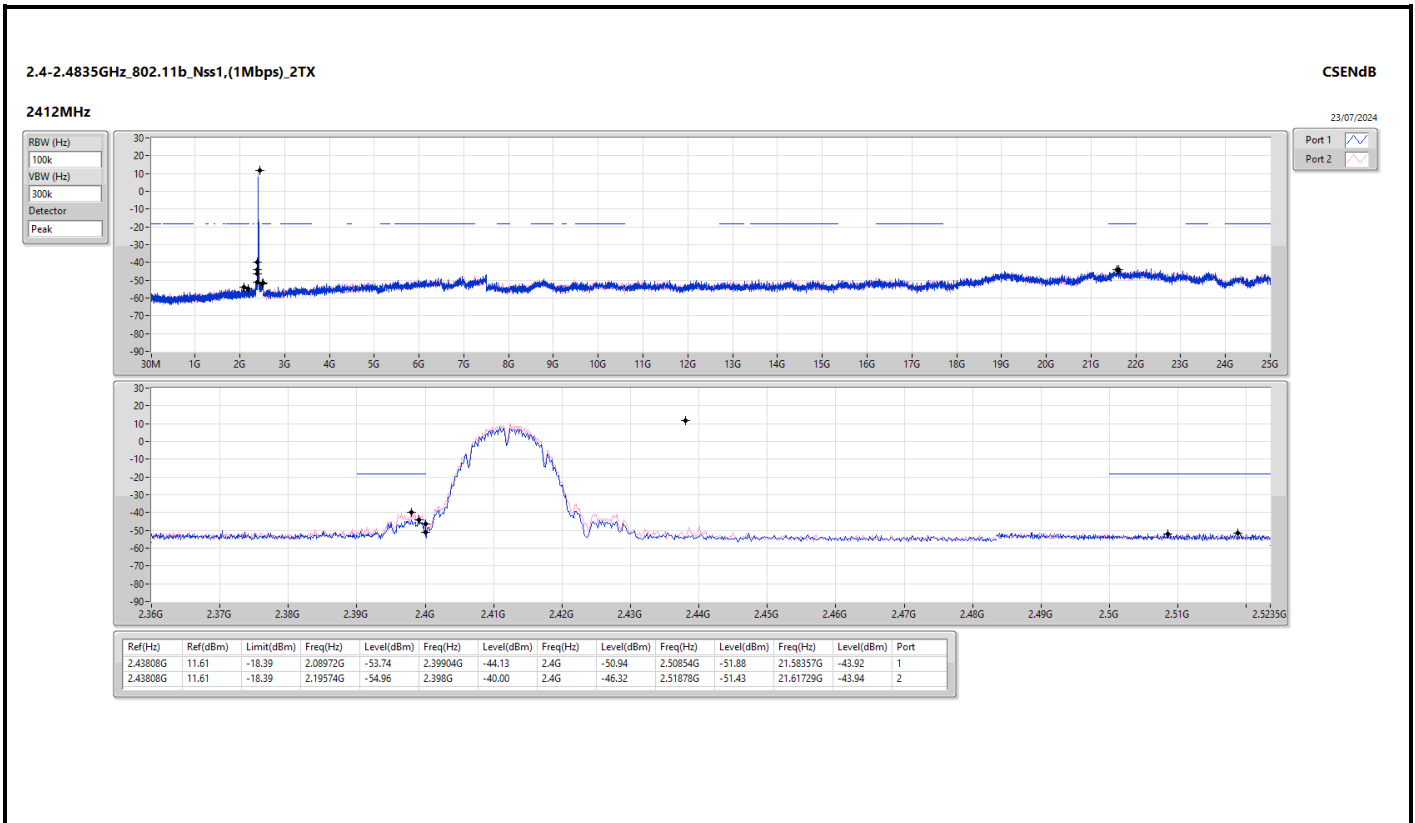
Summary

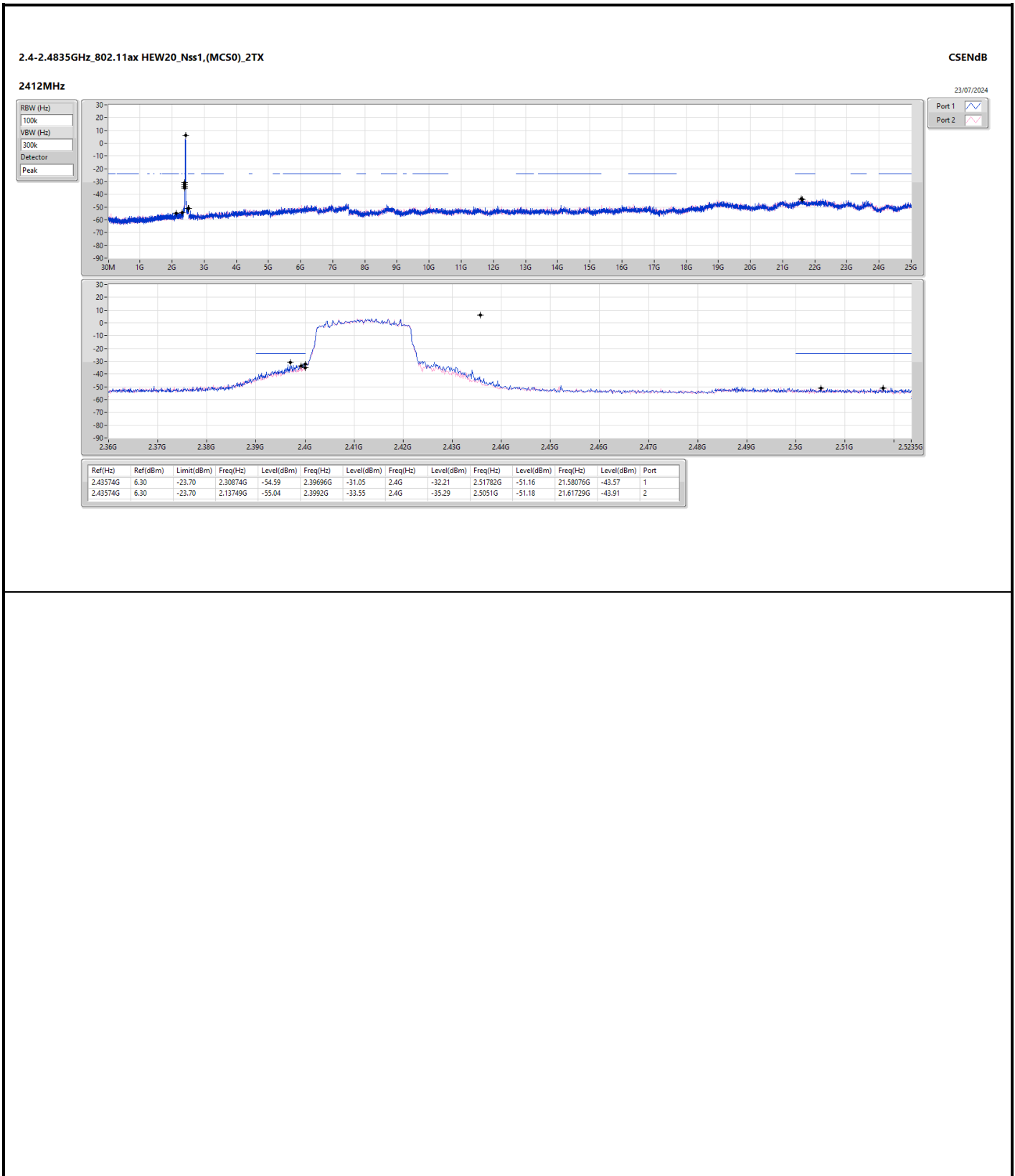
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	Pass	2.43808G	11.61	-18.39	2.19574G	-54.96	2.398G	-40.00	2.4G	-46.32	2.51878G	-51.43	21.61729G	-43.94	2
802.11g_Nss1,(6Mbps)_2TX	Pass	2.44459G	5.96	-24.04	1.86604G	-55.08	2.39696G	-31.47	2.4G	-33.80	2.51262G	-51.22	21.55267G	-43.82	1
802.11ax HEW20_Nss1,(MCS0)_2TX	Pass	2.43574G	6.30	-23.70	2.30874G	-54.59	2.39696G	-31.05	2.4G	-32.21	2.51782G	-51.16	21.58076G	-43.57	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	2.43808G	11.61	-18.39	2.08972G	-53.74	2.39904G	-44.13	2.4G	-50.94	2.50854G	-51.88	21.58357G	-43.92	1
2412MHz	Pass	2.43808G	11.61	-18.39	2.19574G	-54.96	2.398G	-40.00	2.4G	-46.32	2.51878G	-51.43	21.61729G	-43.94	2
2437MHz	Pass	2.43808G	11.61	-18.39	2.1969G	-53.90	2.3996G	-50.75	2.4G	-53.60	2.5127G	-50.58	21.60886G	-44.09	1
2437MHz	Pass	2.43808G	11.61	-18.39	2.13283G	-55.05	2.39952G	-49.40	2.4G	-50.43	2.50478G	-50.47	21.49086G	-44.24	2
2462MHz	Pass	2.43808G	11.61	-18.39	1.88934G	-54.78	2.3932G	-51.45	2.4G	-56.45	2.5127G	-50.37	21.61729G	-44.01	1
2462MHz	Pass	2.43808G	11.61	-18.39	2.09904G	-54.32	2.39304G	-51.80	2.4G	-54.37	2.5023G	-48.95	21.58076G	-44.03	2
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.44459G	5.96	-24.04	1.86604G	-55.08	2.39696G	-31.47	2.4G	-33.80	2.51262G	-51.22	21.55267G	-43.82	1
2412MHz	Pass	2.44459G	5.96	-24.04	1.96157G	-53.87	2.3976G	-32.66	2.4G	-34.99	2.51398G	-51.47	21.62572G	-43.70	2
2437MHz	Pass	2.44459G	5.96	-24.04	1.93128G	-54.62	2.3996G	-48.05	2.4G	-48.39	2.51038G	-49.65	21.58638G	-43.23	1
2437MHz	Pass	2.44459G	5.96	-24.04	1.88934G	-54.47	2.39984G	-46.84	2.4G	-49.42	2.50606G	-49.36	21.59762G	-42.54	2
2462MHz	Pass	2.44459G	5.96	-24.04	1.98837G	-54.58	2.39488G	-51.17	2.4G	-56.15	2.5031G	-50.00	21.58357G	-44.74	1
2462MHz	Pass	2.44459G	5.96	-24.04	2.05244G	-54.45	2.39976G	-51.75	2.4G	-54.82	2.5039G	-49.55	21.592G	-43.24	2
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43574G	6.30	-23.70	2.30874G	-54.59	2.39696G	-31.05	2.4G	-32.21	2.51782G	-51.16	21.58076G	-43.57	1
2412MHz	Pass	2.43574G	6.30	-23.70	2.13749G	-55.04	2.3992G	-33.55	2.4G	-35.29	2.5051G	-51.18	21.61729G	-43.91	2
2437MHz	Pass	2.43574G	6.30	-23.70	1.96041G	-54.80	2.39968G	-47.12	2.4G	-48.95	2.50662G	-50.48	21.52457G	-43.48	1
2437MHz	Pass	2.43574G	6.30	-23.70	2.04662G	-53.93	2.39872G	-46.33	2.4G	-47.93	2.5107G	-50.16	21.59481G	-43.47	2
2462MHz	Pass	2.43574G	6.30	-23.70	2.16545G	-54.45	2.39808G	-51.66	2.4G	-55.72	2.52054G	-51.17	21.51052G	-44.27	1
2462MHz	Pass	2.43574G	6.30	-23.70	2.08157G	-54.96	2.3992G	-51.59	2.4G	-56.00	2.5079G	-50.14	21.61448G	-42.56	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	-	-	-	-	-	-	-	-	-	-
802.11ax.HEW40_Nss1,(MCS0)_2TX	Pass	PK	33.88M	27.69	40.00	-12.31	3	Vertical	0	1.00

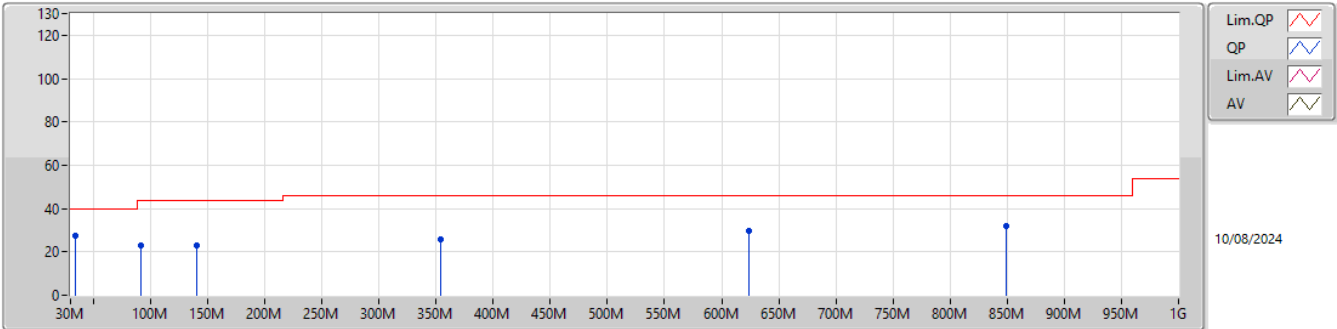


Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
2437MHz	Pass	PK	33.88M	27.69	40.00	-12.31	3	Vertical	0	1.00
2437MHz	Pass	PK	92.08M	22.79	43.50	-20.71	3	Vertical	0	1.00
2437MHz	Pass	PK	140.58M	22.88	43.50	-20.62	3	Vertical	0	1.00
2437MHz	Pass	PK	353.98M	25.73	46.00	-20.27	3	Vertical	0	1.00
2437MHz	Pass	PK	623.64M	29.87	46.00	-16.13	3	Vertical	0	1.00
2437MHz	Pass	PK	848.68M	31.85	46.00	-14.15	3	Vertical	0	1.00
2437MHz	Pass	PK	30M	24.28	40.00	-15.72	3	Horizontal	360	1.00
2437MHz	Pass	PK	138.64M	27.19	43.50	-16.31	3	Horizontal	360	1.00
2437MHz	Pass	PK	350.1M	27.08	46.00	-18.92	3	Horizontal	360	1.00
2437MHz	Pass	PK	480.08M	31.32	46.00	-14.68	3	Horizontal	360	1.00
2437MHz	Pass	PK	503.36M	30.06	46.00	-15.94	3	Horizontal	360	1.00
2437MHz	Pass	PK	528.58M	30.11	46.00	-15.89	3	Horizontal	360	1.00

2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

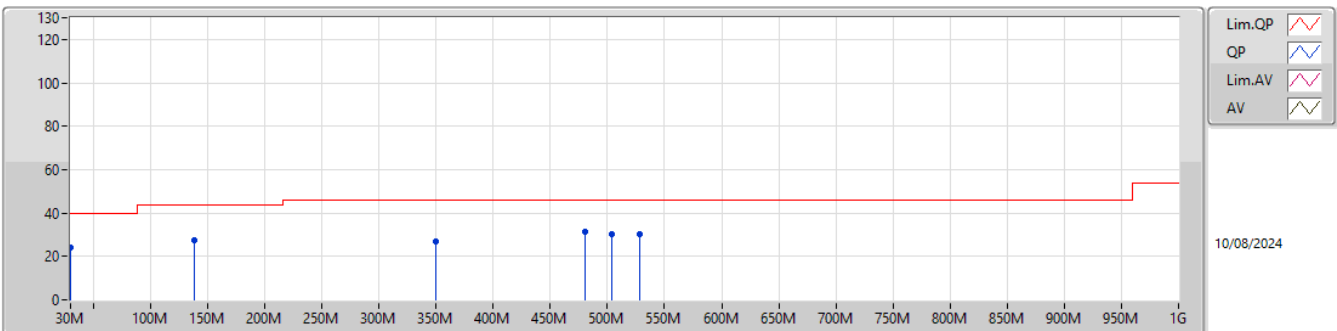
2437MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	33.88M	27.69	40.00	-12.31	-5.17	3	Vertical	0	1.00	32.86	21.52	0.69	27.38
PK	92.08M	22.79	43.50	-20.71	-11.66	3	Vertical	0	1.00	34.45	14.46	1.13	27.25
PK	140.58M	22.88	43.50	-20.62	-9.66	3	Vertical	0	1.00	32.54	16.08	1.36	27.10
PK	353.98M	25.73	46.00	-20.27	-5.35	3	Vertical	0	1.00	31.08	19.56	2.15	27.06
PK	623.64M	29.87	46.00	-16.13	-1.58	3	Vertical	0	1.00	31.45	24.02	2.72	28.32
PK	848.68M	31.85	46.00	-14.15	0.70	3	Vertical	0	1.00	31.15	25.42	3.26	27.98

2.4-2.4835GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

2437MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	30M	24.28	40.00	-15.72	-3.45	3	Horizontal	360	1.00	27.73	23.36	0.57	27.38
PK	138.64M	27.19	43.50	-16.31	-9.49	3	Horizontal	360	1.00	36.68	16.26	1.36	27.11
PK	350.1M	27.08	46.00	-18.92	-5.53	3	Horizontal	360	1.00	32.61	19.37	2.13	27.03
PK	480.08M	31.32	46.00	-14.68	-3.16	3	Horizontal	360	1.00	34.48	22.38	2.46	28.00
PK	503.36M	30.06	46.00	-15.94	-3.02	3	Horizontal	360	1.00	33.08	22.58	2.47	28.07
PK	528.58M	30.11	46.00	-15.89	-3.19	3	Horizontal	360	1.00	33.30	22.56	2.51	28.26



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	2.4862G	50.72	54.00	-3.28	3	Vertical	308	1.81
802.11g_Nss1,(6Mbps)_2TX	Pass	AV	2.39G	50.98	54.00	-3.02	3	Vertical	280	2.63
802.11ax HEW20_Nss1,(MCS0)_2TX	Pass	AV	2.3896G	50.99	54.00	-3.01	3	Vertical	265	2.65



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	2.39G	49.39	54.00	-4.61	3	Vertical	296	2.07
2412MHz	Pass	AV	2.4112G	108.99	Inf	-Inf	3	Vertical	296	2.07
2412MHz	Pass	PK	2.3894G	60.40	74.00	-13.60	3	Vertical	296	2.07
2412MHz	Pass	PK	2.413G	112.77	Inf	-Inf	3	Vertical	296	2.07
2412MHz	Pass	AV	2.3896G	48.33	54.00	-5.67	3	Horizontal	65	2.08
2412MHz	Pass	AV	2.4112G	106.16	Inf	-Inf	3	Horizontal	65	2.08
2412MHz	Pass	PK	2.3894G	58.93	74.00	-15.07	3	Horizontal	65	2.08
2412MHz	Pass	PK	2.413G	109.88	Inf	-Inf	3	Horizontal	65	2.08
2412MHz	Pass	AV	4.824G	41.67	54.00	-12.33	3	Vertical	346	2.03
2412MHz	Pass	PK	4.82392G	49.32	74.00	-24.68	3	Vertical	346	2.03
2412MHz	Pass	AV	4.824G	43.91	54.00	-10.09	3	Horizontal	257	1.75
2412MHz	Pass	PK	4.824G	50.13	74.00	-23.87	3	Horizontal	257	1.75
2417MHz	Pass	AV	2.39G	49.90	54.00	-4.10	3	Vertical	33	1.23
2417MHz	Pass	AV	2.4162G	108.95	Inf	-Inf	3	Vertical	33	1.23
2417MHz	Pass	PK	2.376G	58.52	74.00	-15.48	3	Vertical	33	1.23
2417MHz	Pass	PK	2.416G	112.83	Inf	-Inf	3	Vertical	33	1.23
2417MHz	Pass	AV	2.39G	50.11	54.00	-3.89	3	Horizontal	324	2.55
2417MHz	Pass	AV	2.4164G	111.08	Inf	-Inf	3	Horizontal	324	2.55
2417MHz	Pass	PK	2.3878G	59.81	74.00	-14.19	3	Horizontal	324	2.55
2417MHz	Pass	PK	2.416G	115.20	Inf	-Inf	3	Horizontal	324	2.55
2437MHz	Pass	AV	2.3882G	47.45	54.00	-6.55	3	Vertical	36	1.38
2437MHz	Pass	AV	2.4362G	107.94	Inf	-Inf	3	Vertical	36	1.38
2437MHz	Pass	AV	2.4858G	48.23	54.00	-5.77	3	Vertical	36	1.38
2437MHz	Pass	PK	2.3882G	57.94	74.00	-16.06	3	Vertical	36	1.38
2437MHz	Pass	PK	2.4378G	112.10	Inf	-Inf	3	Vertical	36	1.38
2437MHz	Pass	PK	2.4862G	59.14	74.00	-14.86	3	Vertical	36	1.38
2437MHz	Pass	AV	2.3882G	48.62	54.00	-5.38	3	Horizontal	297	1.97
2437MHz	Pass	AV	2.4362G	109.64	Inf	-Inf	3	Horizontal	297	1.97
2437MHz	Pass	AV	2.4858G	48.18	54.00	-5.82	3	Horizontal	297	1.97
2437MHz	Pass	PK	2.3886G	58.45	74.00	-15.55	3	Horizontal	297	1.97
2437MHz	Pass	PK	2.4362G	113.59	Inf	-Inf	3	Horizontal	297	1.97
2437MHz	Pass	PK	2.4858G	58.91	74.00	-15.09	3	Horizontal	297	1.97
2437MHz	Pass	AV	4.87406G	42.73	54.00	-11.27	3	Vertical	343	1.93
2437MHz	Pass	AV	7.30986G	39.38	54.00	-14.62	3	Vertical	301	2.98
2437MHz	Pass	PK	4.87418G	49.83	74.00	-24.17	3	Vertical	343	1.93
2437MHz	Pass	PK	7.32228G	52.53	74.00	-21.47	3	Vertical	301	2.98
2437MHz	Pass	AV	4.874G	44.88	54.00	-9.12	3	Horizontal	276	2.46
2437MHz	Pass	AV	7.31022G	43.30	54.00	-10.70	3	Horizontal	244	2.36
2437MHz	Pass	PK	4.87388G	51.07	74.00	-22.93	3	Horizontal	276	2.46
2437MHz	Pass	PK	7.30998G	53.77	74.00	-20.23	3	Horizontal	244	2.36
2457MHz	Pass	AV	2.4582G	110.59	Inf	-Inf	3	Vertical	308	1.81
2457MHz	Pass	AV	2.4862G	50.72	54.00	-3.28	3	Vertical	308	1.81
2457MHz	Pass	PK	2.458G	115.05	Inf	-Inf	3	Vertical	308	1.81
2457MHz	Pass	PK	2.4868G	61.39	74.00	-12.61	3	Vertical	308	1.81
2457MHz	Pass	AV	2.4562G	107.89	Inf	-Inf	3	Horizontal	69	2.21
2457MHz	Pass	AV	2.4835G	50.57	54.00	-3.43	3	Horizontal	69	2.21
2457MHz	Pass	PK	2.458G	111.77	Inf	-Inf	3	Horizontal	69	2.21
2457MHz	Pass	PK	2.4846G	59.39	74.00	-14.61	3	Horizontal	69	2.21
2462MHz	Pass	AV	2.4612G	105.31	Inf	-Inf	3	Vertical	54	1.28
2462MHz	Pass	AV	2.4835G	49.15	54.00	-4.85	3	Vertical	54	1.28
2462MHz	Pass	PK	2.461G	109.00	Inf	-Inf	3	Vertical	54	1.28
2462MHz	Pass	PK	2.4908G	60.01	74.00	-13.99	3	Vertical	54	1.28
2462MHz	Pass	AV	2.4612G	108.16	Inf	-Inf	3	Horizontal	84	2.33
2462MHz	Pass	AV	2.4835G	48.88	54.00	-5.12	3	Horizontal	84	2.33
2462MHz	Pass	PK	2.463G	112.55	Inf	-Inf	3	Horizontal	84	2.33
2462MHz	Pass	PK	2.4876G	60.12	74.00	-13.88	3	Horizontal	84	2.33
2462MHz	Pass	AV	4.924G	43.77	54.00	-10.23	3	Vertical	343	1.60
2462MHz	Pass	AV	7.3851G	40.23	54.00	-13.77	3	Vertical	136	1.50
2462MHz	Pass	PK	4.92406G	50.17	74.00	-23.83	3	Vertical	343	1.60
2462MHz	Pass	PK	7.38426G	53.05	74.00	-20.95	3	Vertical	136	1.50



Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
2462MHz	Pass	AV	4.924G	45.45	54.00	-8.55	3	Horizontal	297	1.86
2462MHz	Pass	AV	7.38522G	47.21	54.00	-6.79	3	Horizontal	257	2.37
2462MHz	Pass	PK	4.92418G	51.49	74.00	-22.51	3	Horizontal	297	1.86
2462MHz	Pass	PK	7.38504G	55.96	74.00	-18.04	3	Horizontal	257	2.37
802.11g_Nss1_(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.39G	50.98	54.00	-3.02	3	Vertical	280	2.63
2412MHz	Pass	AV	2.4112G	102.68	Inf	-Inf	3	Vertical	280	2.63
2412MHz	Pass	PK	2.3894G	68.08	74.00	-5.92	3	Vertical	280	2.63
2412MHz	Pass	PK	2.4106G	112.24	Inf	-Inf	3	Vertical	280	2.63
2412MHz	Pass	AV	2.3898G	49.33	54.00	-4.67	3	Horizontal	299	2.08
2412MHz	Pass	AV	2.4146G	100.12	Inf	-Inf	3	Horizontal	299	2.08
2412MHz	Pass	PK	2.3894G	65.26	74.00	-8.74	3	Horizontal	299	2.08
2412MHz	Pass	PK	2.4144G	109.39	Inf	-Inf	3	Horizontal	299	2.08
2412MHz	Pass	AV	4.82628G	34.28	54.00	-19.72	3	Vertical	55	2.65
2412MHz	Pass	PK	4.82576G	47.80	74.00	-26.20	3	Vertical	55	2.65
2412MHz	Pass	AV	4.83052G	34.41	54.00	-19.59	3	Horizontal	273	1.84
2412MHz	Pass	PK	4.8204G	47.44	74.00	-26.56	3	Horizontal	273	1.84
2417MHz	Pass	AV	2.3892G	50.37	54.00	-3.63	3	Vertical	300	2.47
2417MHz	Pass	AV	2.4184G	103.14	Inf	-Inf	3	Vertical	300	2.47
2417MHz	Pass	PK	2.3888G	65.76	74.00	-8.24	3	Vertical	300	2.47
2417MHz	Pass	PK	2.4186G	112.53	Inf	-Inf	3	Vertical	300	2.47
2417MHz	Pass	AV	2.387G	47.91	54.00	-6.09	3	Horizontal	299	2.54
2417MHz	Pass	AV	2.4166G	102.62	Inf	-Inf	3	Horizontal	299	2.54
2417MHz	Pass	PK	2.3864G	61.73	74.00	-12.27	3	Horizontal	299	2.54
2417MHz	Pass	PK	2.4176G	111.89	Inf	-Inf	3	Horizontal	299	2.54
2437MHz	Pass	AV	2.3898G	49.14	54.00	-4.86	3	Vertical	264	2.34
2437MHz	Pass	AV	2.4366G	104.18	Inf	-Inf	3	Vertical	264	2.34
2437MHz	Pass	AV	2.4846G	48.38	54.00	-5.62	3	Vertical	264	2.34
2437MHz	Pass	PK	2.3826G	63.21	74.00	-10.79	3	Vertical	264	2.34
2437MHz	Pass	PK	2.4358G	113.64	Inf	-Inf	3	Vertical	264	2.34
2437MHz	Pass	PK	2.4842G	61.21	74.00	-12.79	3	Vertical	264	2.34
2437MHz	Pass	AV	2.3898G	49.95	54.00	-4.05	3	Horizontal	47	2.29
2437MHz	Pass	AV	2.4362G	103.88	Inf	-Inf	3	Horizontal	47	2.29
2437MHz	Pass	AV	2.4878G	47.80	54.00	-6.20	3	Horizontal	47	2.29
2437MHz	Pass	PK	2.385G	63.64	74.00	-10.36	3	Horizontal	47	2.29
2437MHz	Pass	PK	2.4358G	113.33	Inf	-Inf	3	Horizontal	47	2.29
2437MHz	Pass	PK	2.489G	60.01	74.00	-13.99	3	Horizontal	47	2.29
2437MHz	Pass	AV	4.87424G	34.64	54.00	-19.36	3	Vertical	346	1.74
2437MHz	Pass	AV	7.3218G	38.96	54.00	-15.04	3	Vertical	360	1.50
2437MHz	Pass	PK	4.87084G	47.73	74.00	-26.27	3	Vertical	346	1.74
2437MHz	Pass	PK	7.30512G	52.35	74.00	-21.65	3	Vertical	360	1.50
2437MHz	Pass	AV	4.8752G	35.96	54.00	-18.04	3	Horizontal	273	1.80
2437MHz	Pass	AV	7.31178G	42.95	54.00	-11.05	3	Horizontal	257	2.28
2437MHz	Pass	PK	4.87544G	49.39	74.00	-24.61	3	Horizontal	273	1.80
2437MHz	Pass	PK	7.3059G	56.37	74.00	-17.63	3	Horizontal	257	2.28
2457MHz	Pass	AV	2.4564G	103.76	Inf	-Inf	3	Vertical	315	1.89
2457MHz	Pass	AV	2.4835G	50.61	54.00	-3.39	3	Vertical	315	1.89
2457MHz	Pass	PK	2.4562G	113.04	Inf	-Inf	3	Vertical	315	1.89
2457MHz	Pass	PK	2.4876G	68.39	74.00	-5.61	3	Vertical	315	1.89
2457MHz	Pass	AV	2.4554G	101.04	Inf	-Inf	3	Horizontal	312	1.78
2457MHz	Pass	AV	2.486G	48.02	54.00	-5.98	3	Horizontal	312	1.78
2457MHz	Pass	PK	2.4552G	110.58	Inf	-Inf	3	Horizontal	312	1.78
2457MHz	Pass	PK	2.4858G	61.70	74.00	-12.30	3	Horizontal	312	1.78
2462MHz	Pass	AV	2.4616G	101.46	Inf	-Inf	3	Vertical	305	2.08
2462MHz	Pass	AV	2.4835G	50.37	54.00	-3.63	3	Vertical	305	2.08
2462MHz	Pass	PK	2.4616G	110.91	Inf	-Inf	3	Vertical	305	2.08
2462MHz	Pass	PK	2.4835G	69.26	74.00	-4.74	3	Vertical	305	2.08
2462MHz	Pass	AV	2.4602G	98.17	Inf	-Inf	3	Horizontal	312	1.77
2462MHz	Pass	AV	2.4852G	47.77	54.00	-6.23	3	Horizontal	312	1.77
2462MHz	Pass	PK	2.4606G	107.83	Inf	-Inf	3	Horizontal	312	1.77
2462MHz	Pass	PK	2.4838G	62.35	74.00	-11.65	3	Horizontal	312	1.77
2462MHz	Pass	AV	4.92572G	35.13	54.00	-18.87	3	Vertical	50	2.20



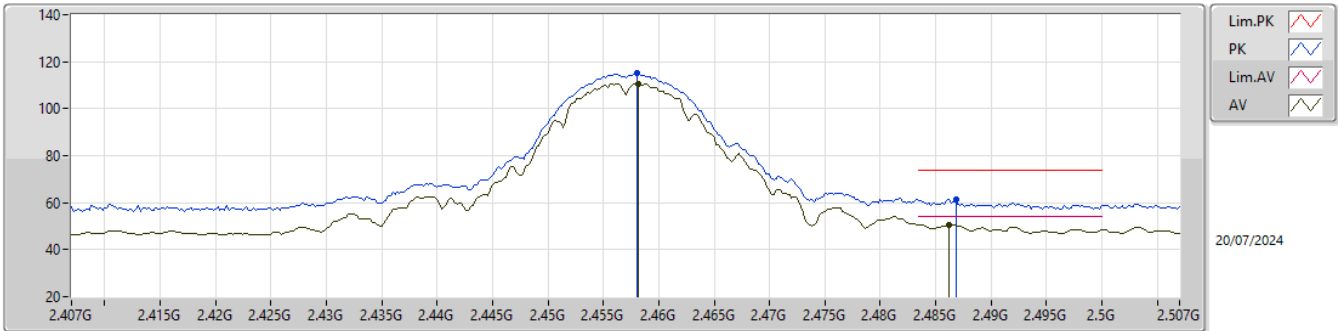
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
2462MHz	Pass	AV	7.38546G	38.21	54.00	-15.79	3	Vertical	34	1.87
2462MHz	Pass	PK	4.92096G	48.07	74.00	-25.93	3	Vertical	50	2.20
2462MHz	Pass	PK	7.38324G	51.65	74.00	-22.35	3	Vertical	34	1.87
2462MHz	Pass	AV	4.92576G	35.52	54.00	-18.48	3	Horizontal	262	1.82
2462MHz	Pass	AV	7.38972G	38.41	54.00	-15.59	3	Horizontal	42	1.50
2462MHz	Pass	PK	4.92512G	49.34	74.00	-24.66	3	Horizontal	262	1.82
2462MHz	Pass	PK	7.39896G	51.39	74.00	-22.61	3	Horizontal	42	1.50
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.3896G	50.99	54.00	-3.01	3	Vertical	265	2.65
2412MHz	Pass	AV	2.4116G	100.16	Inf	-Inf	3	Vertical	265	2.65
2412MHz	Pass	PK	2.3888G	65.94	74.00	-8.06	3	Vertical	265	2.65
2412MHz	Pass	PK	2.414G	112.16	Inf	-Inf	3	Vertical	265	2.65
2412MHz	Pass	AV	2.39G	49.25	54.00	-4.75	3	Horizontal	298	2.09
2412MHz	Pass	AV	2.4134G	99.33	Inf	-Inf	3	Horizontal	298	2.09
2412MHz	Pass	PK	2.389G	64.89	74.00	-9.11	3	Horizontal	298	2.09
2412MHz	Pass	PK	2.4136G	111.65	Inf	-Inf	3	Horizontal	298	2.09
2412MHz	Pass	AV	4.83216G	33.50	54.00	-20.50	3	Vertical	326	1.37
2412MHz	Pass	PK	4.82992G	46.81	74.00	-27.19	3	Vertical	326	1.37
2412MHz	Pass	AV	4.82416G	34.16	54.00	-19.84	3	Horizontal	269	1.94
2412MHz	Pass	PK	4.8288G	47.61	74.00	-26.39	3	Horizontal	269	1.94
2417MHz	Pass	AV	2.3894G	50.73	54.00	-3.27	3	Vertical	269	2.57
2417MHz	Pass	AV	2.4166G	101.58	Inf	-Inf	3	Vertical	269	2.57
2417MHz	Pass	PK	2.3868G	65.81	74.00	-8.19	3	Vertical	269	2.57
2417MHz	Pass	PK	2.4166G	113.19	Inf	-Inf	3	Vertical	269	2.57
2417MHz	Pass	AV	2.3888G	49.77	54.00	-4.23	3	Horizontal	312	2.07
2417MHz	Pass	AV	2.4158G	102.56	Inf	-Inf	3	Horizontal	312	2.07
2417MHz	Pass	PK	2.3898G	65.81	74.00	-8.19	3	Horizontal	312	2.07
2417MHz	Pass	PK	2.416G	115.78	Inf	-Inf	3	Horizontal	312	2.07
2437MHz	Pass	AV	2.3894G	49.82	54.00	-4.18	3	Vertical	329	1.88
2437MHz	Pass	AV	2.4366G	103.00	Inf	-Inf	3	Vertical	329	1.88
2437MHz	Pass	AV	2.485G	48.69	54.00	-5.31	3	Vertical	329	1.88
2437MHz	Pass	PK	2.3842G	64.99	74.00	-9.01	3	Vertical	329	1.88
2437MHz	Pass	PK	2.4366G	115.83	Inf	-Inf	3	Vertical	329	1.88
2437MHz	Pass	PK	2.4835G	61.15	74.00	-12.85	3	Vertical	329	1.88
2437MHz	Pass	AV	2.3886G	48.86	54.00	-5.14	3	Horizontal	298	1.96
2437MHz	Pass	AV	2.4358G	103.10	Inf	-Inf	3	Horizontal	298	1.96
2437MHz	Pass	AV	2.4846G	47.68	54.00	-6.32	3	Horizontal	298	1.96
2437MHz	Pass	PK	2.383G	62.81	74.00	-11.19	3	Horizontal	298	1.96
2437MHz	Pass	PK	2.4382G	115.87	Inf	-Inf	3	Horizontal	298	1.96
2437MHz	Pass	PK	2.4842G	59.37	74.00	-14.63	3	Horizontal	298	1.96
2437MHz	Pass	AV	4.87484G	35.22	54.00	-18.78	3	Vertical	47	2.45
2437MHz	Pass	AV	7.32594G	38.95	54.00	-15.05	3	Vertical	63	1.50
2437MHz	Pass	PK	4.8724G	49.53	74.00	-24.47	3	Vertical	47	2.45
2437MHz	Pass	PK	7.32294G	52.41	74.00	-21.59	3	Vertical	63	1.50
2437MHz	Pass	AV	4.87436G	36.08	54.00	-17.92	3	Horizontal	274	2.51
2437MHz	Pass	AV	7.30752G	41.04	54.00	-12.96	3	Horizontal	265	2.76
2437MHz	Pass	PK	4.87172G	49.11	74.00	-24.89	3	Horizontal	274	2.51
2437MHz	Pass	PK	7.31286G	54.64	74.00	-19.36	3	Horizontal	265	2.76
2457MHz	Pass	AV	2.4558G	101.91	Inf	-Inf	3	Vertical	317	1.88
2457MHz	Pass	AV	2.4836G	50.16	54.00	-3.84	3	Vertical	317	1.88
2457MHz	Pass	PK	2.458G	114.89	Inf	-Inf	3	Vertical	317	1.88
2457MHz	Pass	PK	2.4835G	69.74	74.00	-4.26	3	Vertical	317	1.88
2457MHz	Pass	AV	2.458G	100.04	Inf	-Inf	3	Horizontal	47	2.21
2457MHz	Pass	AV	2.4836G	48.84	54.00	-5.16	3	Horizontal	47	2.21
2457MHz	Pass	PK	2.4556G	112.53	Inf	-Inf	3	Horizontal	47	2.21
2457MHz	Pass	PK	2.4835G	63.76	74.00	-10.24	3	Horizontal	47	2.21
2462MHz	Pass	AV	2.4632G	99.47	Inf	-Inf	3	Vertical	279	2.09
2462MHz	Pass	AV	2.4835G	50.63	54.00	-3.37	3	Vertical	279	2.09
2462MHz	Pass	PK	2.4634G	111.37	Inf	-Inf	3	Vertical	279	2.09
2462MHz	Pass	PK	2.4836G	68.45	74.00	-5.55	3	Vertical	279	2.09
2462MHz	Pass	AV	2.463G	97.41	Inf	-Inf	3	Horizontal	49	2.23
2462MHz	Pass	AV	2.4835G	48.93	54.00	-5.07	3	Horizontal	49	2.23



Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
2462MHz	Pass	PK	2.4632G	110.83	Inf	-Inf	3	Horizontal	49	2.23
2462MHz	Pass	PK	2.4836G	66.09	74.00	-7.91	3	Horizontal	49	2.23
2462MHz	Pass	AV	4.9196G	34.21	54.00	-19.79	3	Vertical	321	1.84
2462MHz	Pass	AV	7.38978G	38.25	54.00	-15.75	3	Vertical	303	2.96
2462MHz	Pass	PK	4.93G	47.24	74.00	-26.76	3	Vertical	321	1.84
2462MHz	Pass	PK	7.38852G	51.48	74.00	-22.52	3	Vertical	303	2.96
2462MHz	Pass	AV	4.92208G	34.75	54.00	-19.25	3	Horizontal	275	2.59
2462MHz	Pass	AV	7.38714G	38.18	54.00	-15.82	3	Horizontal	182	1.50
2462MHz	Pass	PK	4.9246G	48.47	74.00	-25.53	3	Horizontal	275	2.59
2462MHz	Pass	PK	7.37256G	51.43	74.00	-22.57	3	Horizontal	182	1.50

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

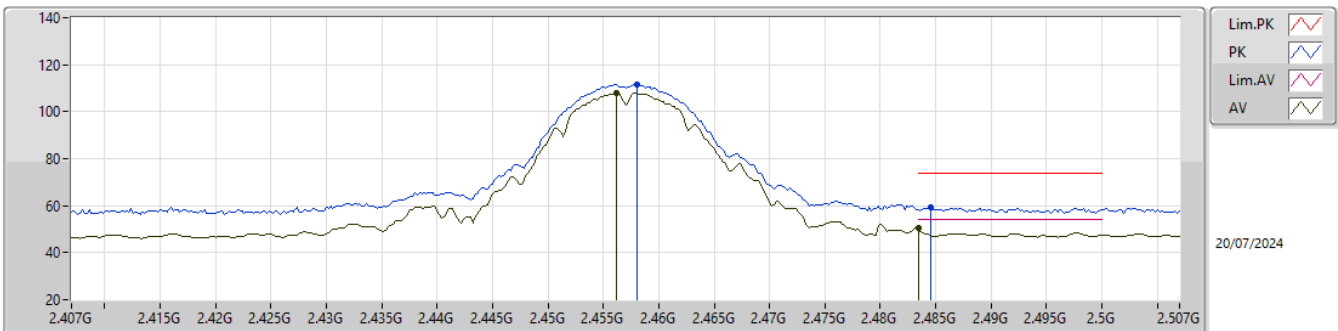
2457MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.4582G	110.59	Inf	-Inf	33.08	3	Vertical	308	1.81	77.51	27.60	5.48	-
AV	2.4862G	50.72	54.00	-3.28	33.28	3	Vertical	308	1.81	17.44	27.76	5.52	-
PK	2.458G	115.05	Inf	-Inf	33.08	3	Vertical	308	1.81	81.97	27.60	5.48	-
PK	2.4868G	61.39	74.00	-12.61	33.29	3	Vertical	308	1.81	28.10	27.77	5.52	-

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

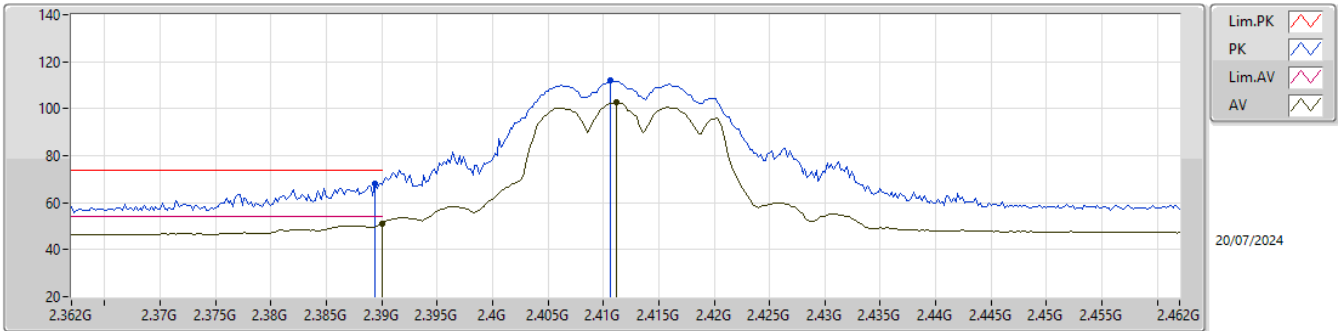
2457MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.4562G	107.89	Inf	-Inf	33.08	3	Horizontal	69	2.21	74.81	27.60	5.48	-
AV	2.4835G	50.57	54.00	-3.43	33.25	3	Horizontal	69	2.21	17.32	27.74	5.51	-
PK	2.458G	111.77	Inf	-Inf	33.08	3	Horizontal	69	2.21	78.69	27.60	5.48	-
PK	2.4846G	59.39	74.00	-14.61	33.27	3	Horizontal	69	2.21	26.12	27.75	5.52	-

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

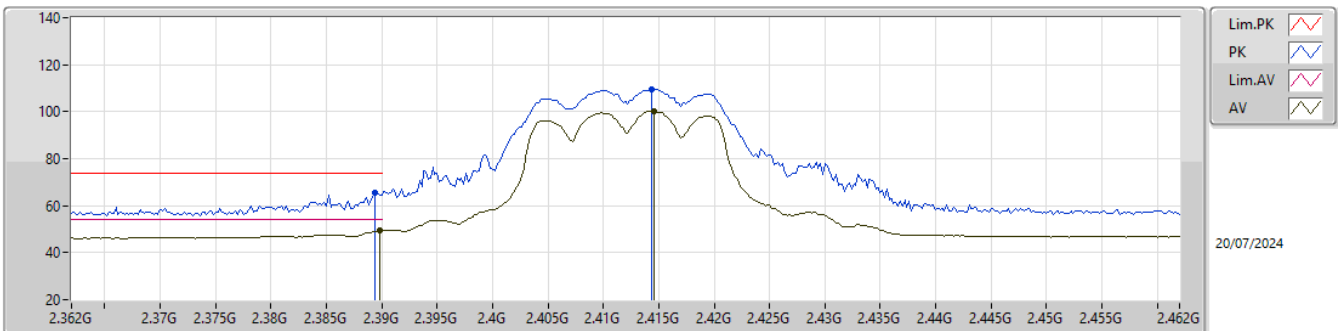
2412MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.39G	50.98	54.00	-3.02	32.60	3	Vertical	280	2.63	18.38	27.20	5.40	-
AV	2.4112G	102.68	Inf	-Inf	32.82	3	Vertical	280	2.63	69.86	27.40	5.42	-
PK	2.3894G	68.08	74.00	-5.92	32.59	3	Vertical	280	2.63	35.49	27.19	5.40	-
PK	2.4106G	112.24	Inf	-Inf	32.82	3	Vertical	280	2.63	79.42	27.40	5.42	-

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

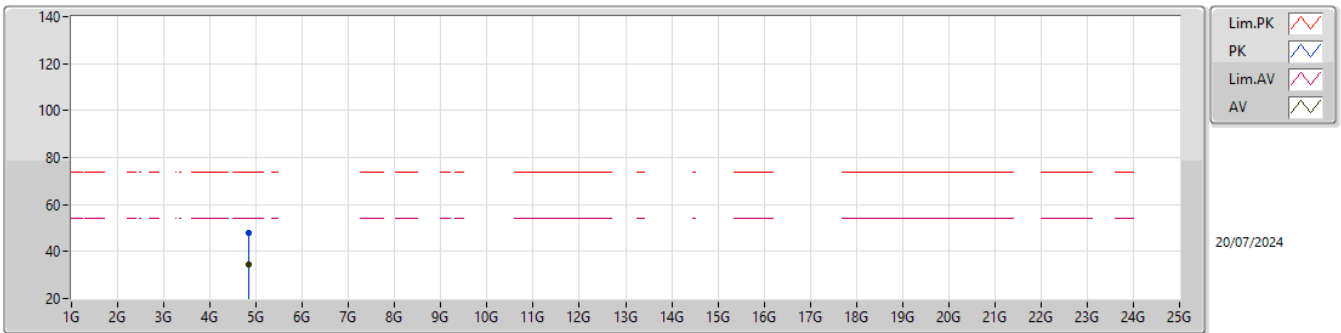
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Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3898G	49.33	54.00	-4.67	32.60	3	Horizontal	299	2.08	16.73	27.20	5.40	-
AV	2.4146G	100.12	Inf	-Inf	32.83	3	Horizontal	299	2.08	67.29	27.40	5.43	-
PK	2.3894G	65.26	74.00	-8.74	32.59	3	Horizontal	299	2.08	32.67	27.19	5.40	-
PK	2.4144G	109.39	Inf	-Inf	32.83	3	Horizontal	299	2.08	76.56	27.40	5.43	-

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

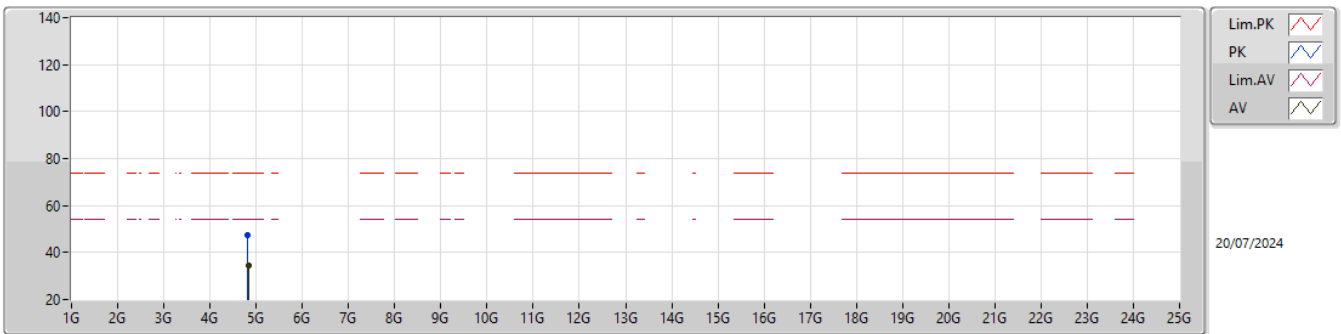
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Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.82628G	34.28	54.00	-19.72	6.11	3	Vertical	55	2.65	28.17	32.16	7.96	34.01
PK	4.82576G	47.80	74.00	-26.20	6.10	3	Vertical	55	2.65	41.70	32.15	7.96	34.01

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

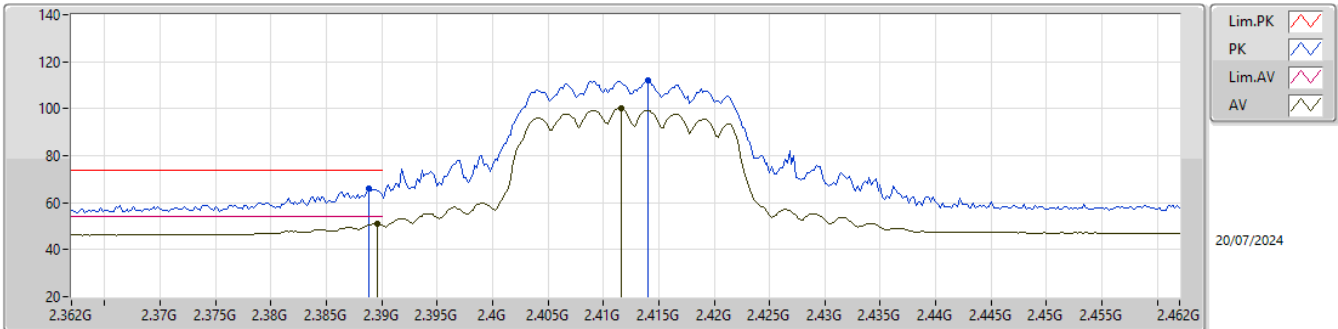
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Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.83052G	34.41	54.00	-19.59	6.13	3	Horizontal	273	1.84	28.28	32.18	7.96	34.01
PK	4.8204G	47.44	74.00	-26.56	6.07	3	Horizontal	273	1.84	41.37	32.12	7.96	34.01

2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

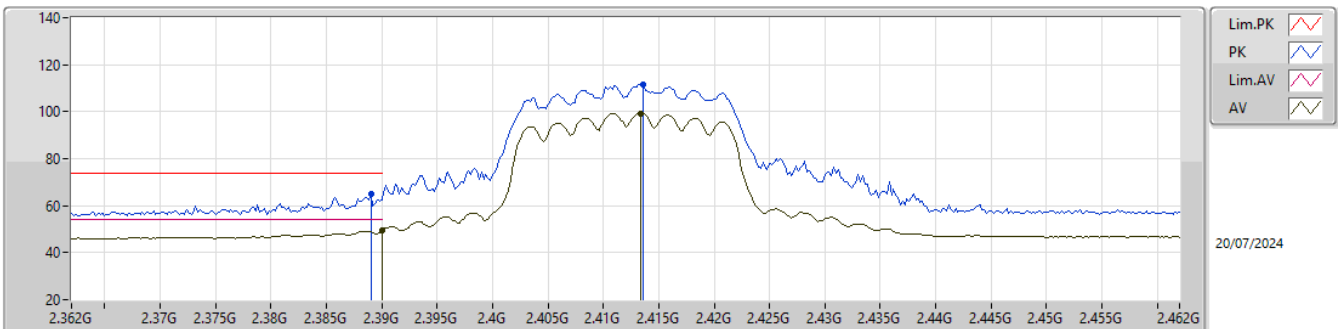
2412MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.3896G	50.99	54.00	-3.01	32.60	3	Vertical	265	2.65	18.39	27.20	5.40	-
AV	2.4116G	100.16	Inf	-Inf	32.82	3	Vertical	265	2.65	67.34	27.40	5.42	-
PK	2.3888G	65.94	74.00	-8.06	32.59	3	Vertical	265	2.65	33.35	27.19	5.40	-
PK	2.414G	112.16	Inf	-Inf	32.83	3	Vertical	265	2.65	79.33	27.40	5.43	-

2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

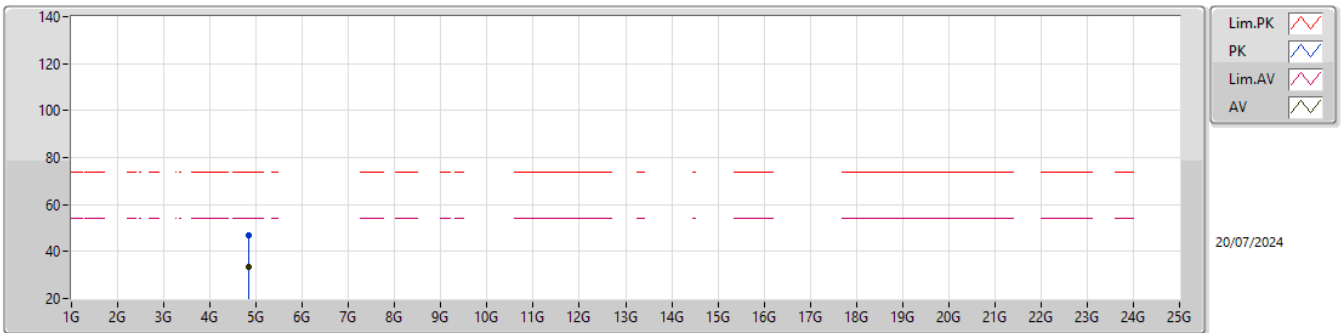
2412MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	2.39G	49.25	54.00	-4.75	32.60	3	Horizontal	298	2.09	16.65	27.20	5.40	-
AV	2.4134G	99.33	Inf	-Inf	32.83	3	Horizontal	298	2.09	66.50	27.40	5.43	-
PK	2.389G	64.89	74.00	-9.11	32.59	3	Horizontal	298	2.09	32.30	27.19	5.40	-
PK	2.4136G	111.65	Inf	-Inf	32.83	3	Horizontal	298	2.09	78.82	27.40	5.43	-

2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

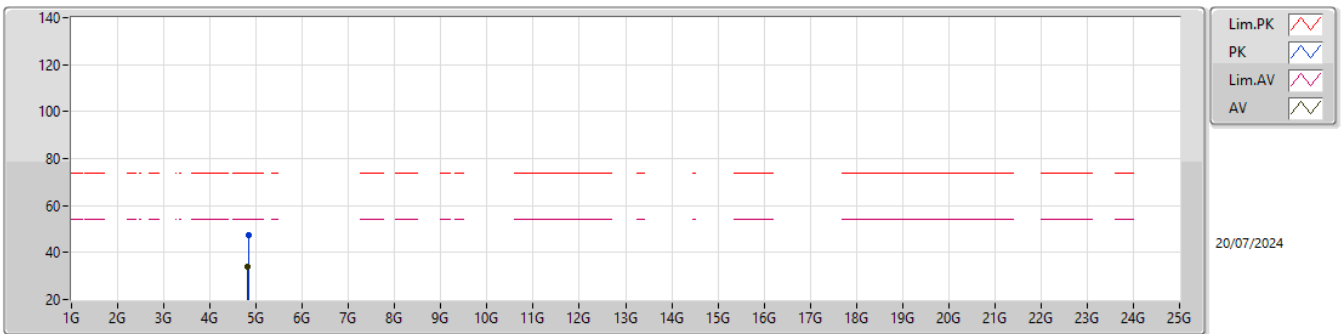
2412MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.83216G	33.50	54.00	-20.50	6.14	3	Vertical	326	1.37	27.36	32.19	7.96	34.01
PK	4.82992G	46.81	74.00	-27.19	6.13	3	Vertical	326	1.37	40.68	32.18	7.96	34.01

2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

2412MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
AV	4.82416G	34.16	54.00	-19.84	6.09	3	Horizontal	269	1.94	28.07	32.14	7.96	34.01
PK	4.8288G	47.61	74.00	-26.39	6.12	3	Horizontal	269	1.94	41.49	32.17	7.96	34.01