

FCC Radio Test Report

FCC ID : YL6VDB770X
Equipment : Video Doorbell
Brand Name : Alarm.com
Model Name : VDB770
Applicant : Alarm.com Incorporated
8281 Greensboro Drive
Suite 100 , Tysons, VA 22102 , USA
Manufacturer : Chicony Electronics Co. Ltd
36F No.69, Sec. 2, Guangfu Rd., Sanchong Dist.,
New Taipei City 24158, Taiwan, R.O.C
Standard : 47 CFR FCC Part 15.247

The product was received on Sep. 23, 2022, and testing was started from Dec. 30, 2022 and completed on Mar. 20, 2023. 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:
The EUT supports beamforming and CDD modes, and the CDD mode is the worst case. Therefore, all test items are evaluated in the report. The beamforming mode only evaluates the output power.

Reviewed by: Ryan Hsiao

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]

Non-Beamforming

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

Beamforming

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11ax HEW20-BF	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
1	Wieson	GY196HT337-027	Dipole	I-PEX
2	Wieson	GY196HT337-028	Dipole	I-PEX

Ant.	Port	Gain (dBi)		
		2.4G	5G	BT
1	1	0.86	1.81	0.86
2	2	1.76	1.6	-

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

1.1.3 EUT Information

Operational Condition			
EUT Power Type	From AC Mains		
EUT Function	<input checked="" type="checkbox"/> Point-to-multipoint	<input type="checkbox"/> Point-to-point	
Beamforming Function	<input checked="" type="checkbox"/> With beamforming	<input 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

Non-Beamforming

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11b_Nss1,(1Mbps)_2TX	0.989	0.05	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11g_Nss1,(6Mbps)_2TX	0.936	0.29	1.43m	1k
802.11ax HEW20_Nss1,(MCS0)_2TX	0.914	0.39	1.047m	1k

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

Beamforming

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	0.914	0.39	1.047m	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	Edward Wang	20.3~21.2°C / 51~53%	10/Feb/2023
RF Conducted	TH07-HY	Yuna Lin	22.1~23.5°C / 48~53%	08/Feb/2023
Radiated	03CH03-HY	Daniel Lin	20.5~25.7°C / 51~57%	30/Dec/2022~20/Mar/2023
<input type="checkbox"/> Wen 33rd.St. (TAF: 3785)	ADD: No.14-1, Ln. 19, Wen 33rd St., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.)			
	TEL: 886-3-318-0787		FAX: 886-3-318-0287	
Test site Designation No. TW0008 with FCC.				

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	Tera term4.76
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Non-Beamforming

Mode	Power Setting
802.11b_Nss1,(1Mbps)_2TX	-
2412MHz	88
2437MHz	88
2462MHz	88
802.11g_Nss1,(6Mbps)_2TX	-
2412MHz	77
2417MHz	84
2437MHz	84
2457MHz	81
2462MHz	75
802.11ax HEW20_Nss1,(MCS0)_2TX	-
2412MHz	79
2417MHz	84
2437MHz	84
2457MHz	78
2462MHz	70




Beamforming

Mode	Power Setting
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
2412MHz	79
2417MHz	84
2437MHz	84
2457MHz	78
2462MHz	70

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

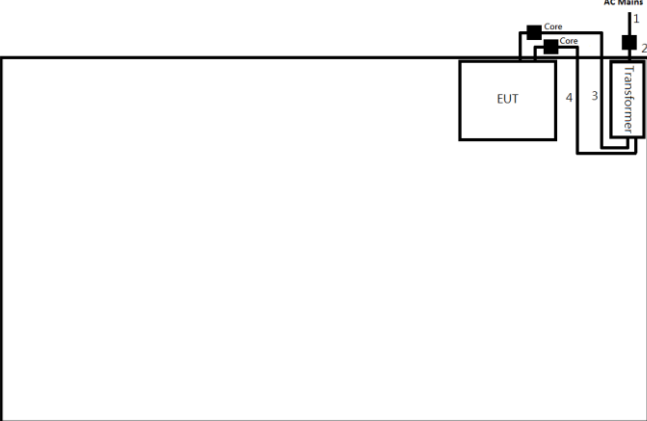
Support Equipment – AC Conduction					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	AC Power Cable	Power sync	PW-GPC180-3	-	-
2	DC Power cable	NA	NA	-	Provided by Customer
3	Transformer	NA	NA	-	Provided by Customer
4	Core	King Core	KCF-50-B	-	-

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	AC Power Cable	Power sync	PW-GPC180-3	-	-
2	DC Power cable	NA	NA	-	Provided by Customer
3	Transformer	NA	NA	-	Provided by Customer
4	Core	King Core	KCF-50-B	-	-

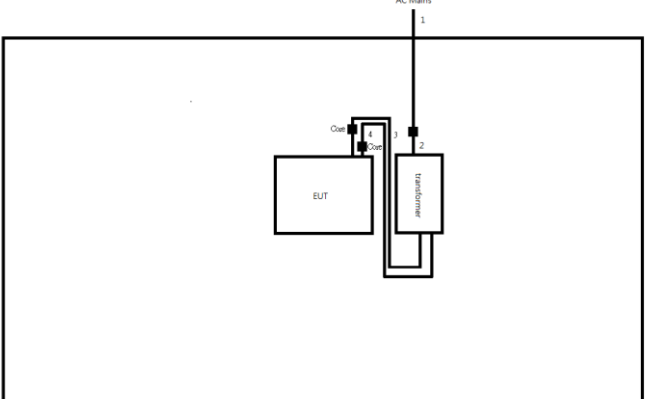
2.4 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



Item	Connection	Shielded	Length(m)
1	AC Power cable	No	1.8
2	AC Power cable	No	0.15
3	DC Power cable(+)	No	0.3
4	DC Power cable(-)	No	0.3

Test Setup Diagram - Radiated Test



Item	Connection	Shielded	Length(m)
1	AC Power cable	No	1.8
2	AC Power cable	No	0.15
3	DC Power cable(+)	No	0.3
4	DC Power cable(-)	No	0.3



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

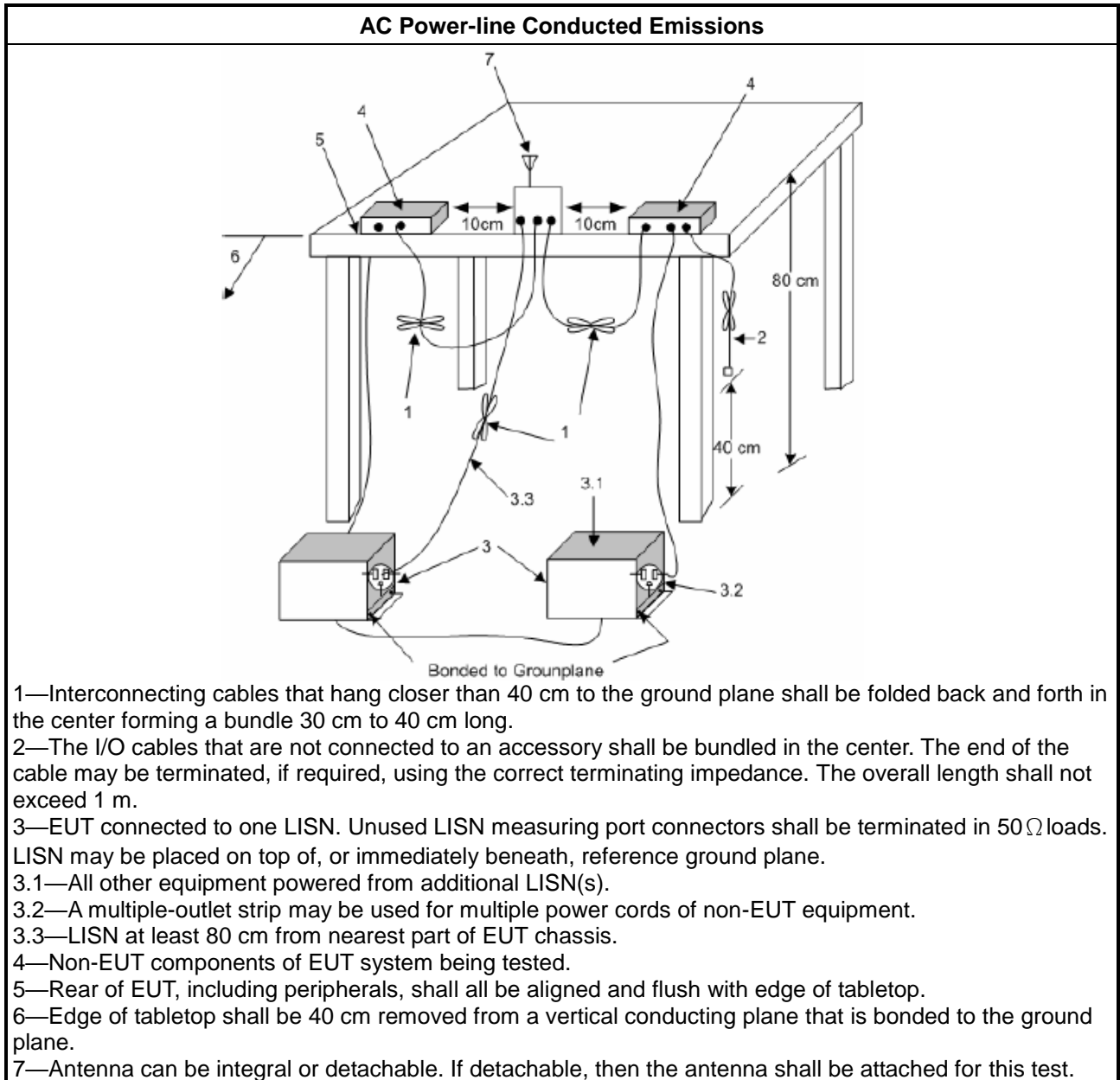
Test Method
<input checked="" type="checkbox"/> Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

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

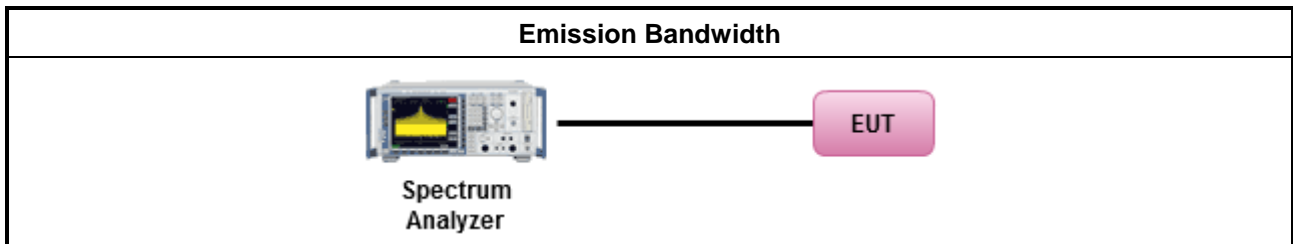
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method
<ul style="list-style-type: none"> ▪ For the emission bandwidth shall be measured using one of the options below:
<input checked="" type="checkbox"/> Refer as 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>	

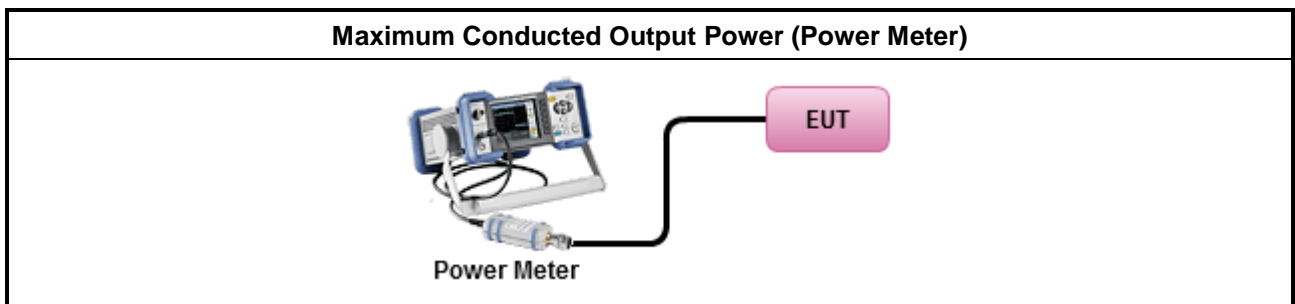
3.3.2 Measuring Instruments

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) ≤ 8 dBm/3kHz

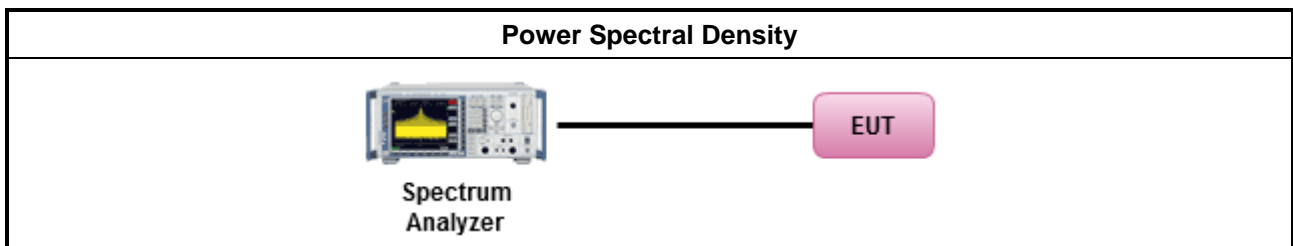
3.4.2 Measuring Instruments

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.

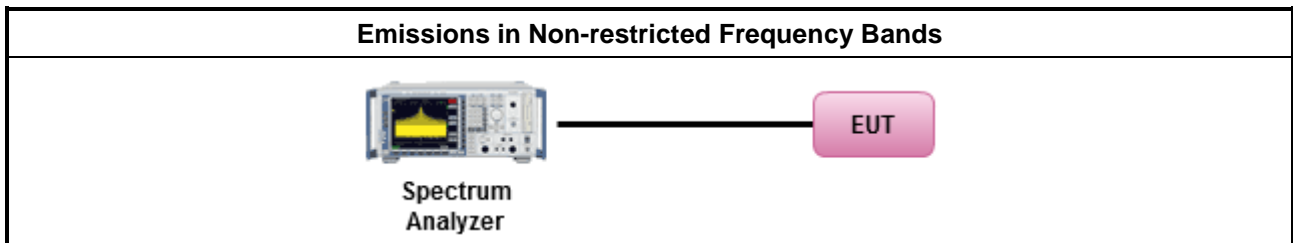
3.5.2 Measuring Instruments

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

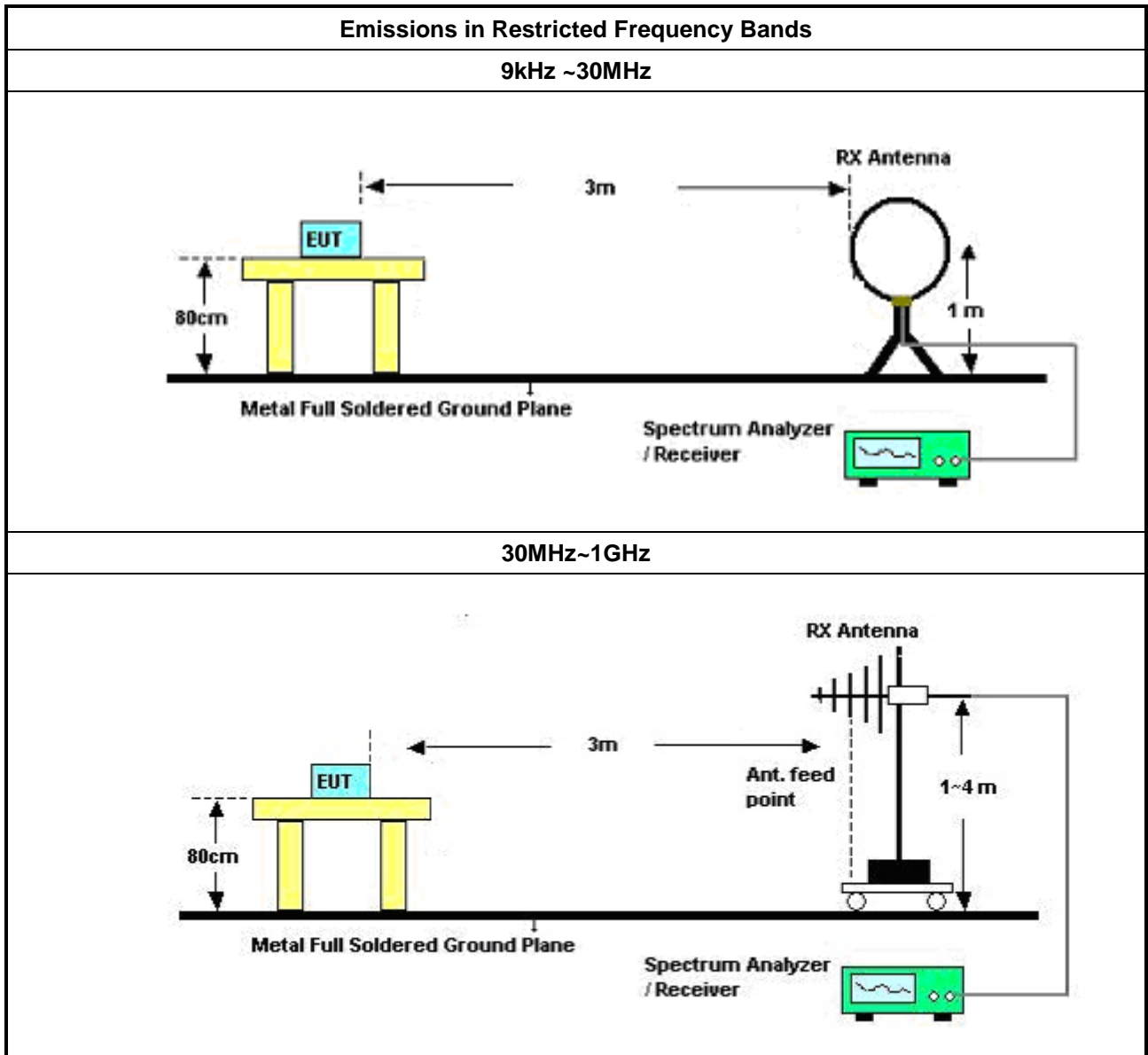
Test Method	
	<ul style="list-style-type: none"> ▪ The average emission levels shall be measured in [duty cycle \geq 98 or duty factor].
	<ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency 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.

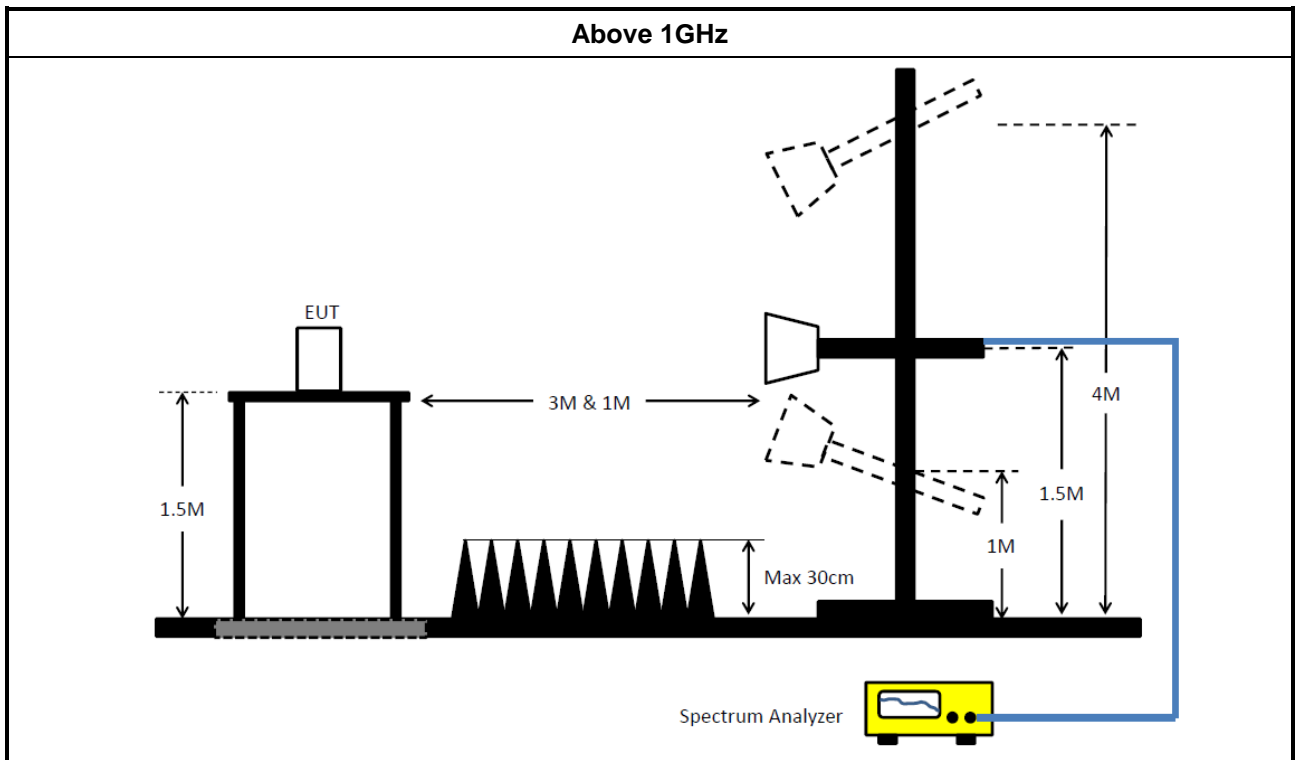
3.6.4 Measurement Results Calculation

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	R&S	ESR	102051	9kHz ~ 3.6GHz	13/May/2022	12/May/2023
Two-Line V-Network	R&S	ENV 216	101295	9kHz ~ 30MHz	31/Jan/2023	30/Jan/2024
RF Cable 5m	TITAN	TITAN	CO04-cable-01	9 kHz~200MHz	01/Mar/2022	28/Feb/2023
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9kHz ~ 30MHz	25/Oct/2022	24/Oct/2023
Software	Sporton	SENSE-EMI	V5.10.8.7	-	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	10Hz~40GHz	14/Feb/2022	13/Feb/2023
SMB100A Signal Generator	R&S	SMB100A	181147	100kHz~40GHz	21/Oct/2022	20/Oct/2023
Pulse Sensor	Anritsu	MA2411B	1339407	300MHz~40GHz	14/Dec/2022	13/Dec/2023
Power Meter	Anritsu	ML2495A	1517010	300MHz~40GHz	14/Dec/2022	13/Dec/2023
SENSE-15247_DTS	Sporton	V5.10.8.7.1	N/A	N/A	N/A	N/A

Instrument for Radiated Test

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30MHz~1GHz 3m	01/Aug/2022	31/Jul/2023
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	1GHz~18GHz 3m	02/Aug/2022	01/Aug/2023
Signal Analyzer	R&S	FSV40	101500	10Hz~40GHz	26/Oct/2022	25/Oct/2023
Amplifier	HP	8447D	2944A08033	10kHz~1.3GHz	08/Apr/2022	07/Apr/2023
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	02267	1GHz ~18GHz	27/Sep/2022	26/Sep/2023
Bilog Antenna & 6dB Attenuator	SCHAFFNER / EMCI	CBL6112B / N-6-05	22237 / AT-N-0603	30MHz~1GHz	16/Oct/2022	15/Oct/2023
RF Cable-R03m	Jye Bao	RG142	CB021	9kHz~30MHz	13/Jun/2022	12/Jun/2023
RF Cable-R03m	Jye Bao	RG142	MY37335/4+CB021-1+CB021-2	30MHz~1GHz	22/Mar/2022	21/Mar/2023
RF CABLE 5+6m	HUBER+SUHNER	SUOFLEX 104	03CH03-cable-01	1GHz~40GHz	27/Jul/2022	26/Jul/2023
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170154	18GHz~40GHz	14/May/2022	13/May/2023
Microwave Prempplier	Agilent	8449B	3008A02326	1GHz~26.5GHz	14/Jul/2022	13/Jul/2023
Amplifier	EM	EM18G40GA	060874	18GHz ~40GHz	23/Aug/2022	22/Aug/2023
Loop Antenna	ROHDE & SCHWARZ	HLA 6120HFH2-Z2	100330	9kHz~30MHz	01/Nov/2022	31/Oct/2023
EMI Test Receiver	R&S	ESR3	102052	9kHz~3.6GHz	30/May/2022	29/May/2023
SENSE-15247_DTS	Sporton	V5.11.3	NA	NA	NA	NA



Summary

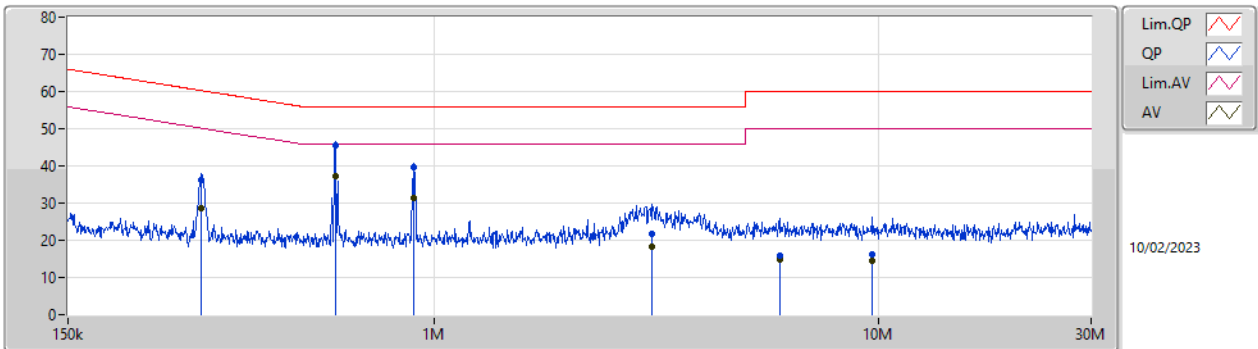
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	599.363k	37.18	46.00	-8.82	Line



Mode Configure

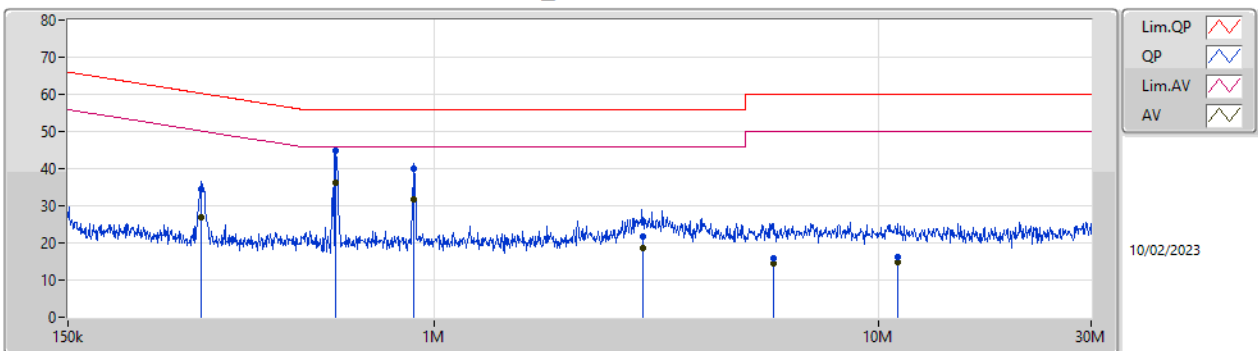
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition	Comments
Mode 1	Pass	QP	299.243k	36.14	60.26	-24.12	Line	-
Mode 1	Pass	AV	299.243k	28.45	50.26	-21.81	Line	-
Mode 1	Pass	QP	599.363k	45.65	56.00	-10.35	Line	-
Mode 1	Pass	AV	599.363k	37.18	46.00	-8.82	Line	-
Mode 1	Pass	QP	897.004k	39.62	56.00	-16.38	Line	-
Mode 1	Pass	AV	897.004k	31.31	46.00	-14.69	Line	-
Mode 1	Pass	QP	3.092M	21.86	56.00	-34.14	Line	-
Mode 1	Pass	AV	3.092M	18.18	46.00	-27.82	Line	-
Mode 1	Pass	QP	5.975M	15.80	60.00	-44.20	Line	-
Mode 1	Pass	AV	5.975M	14.73	50.00	-35.27	Line	-
Mode 1	Pass	QP	9.685M	16.05	60.00	-43.95	Line	-
Mode 1	Pass	AV	9.685M	14.62	50.00	-35.38	Line	-
Mode 1	Pass	QP	299.243k	34.36	60.26	-25.90	Neutral	-
Mode 1	Pass	AV	299.243k	26.98	50.26	-23.28	Neutral	-
Mode 1	Pass	QP	599.363k	44.71	56.00	-11.29	Neutral	-
Mode 1	Pass	AV	599.363k	36.30	46.00	-9.70	Neutral	-
Mode 1	Pass	QP	900.592k	40.14	56.00	-15.86	Neutral	-
Mode 1	Pass	AV	900.592k	31.80	46.00	-14.20	Neutral	-
Mode 1	Pass	QP	2.936M	21.76	56.00	-34.24	Neutral	-
Mode 1	Pass	AV	2.936M	18.71	46.00	-27.29	Neutral	-
Mode 1	Pass	QP	5.787M	15.79	60.00	-44.21	Neutral	-
Mode 1	Pass	AV	5.787M	14.54	50.00	-35.46	Neutral	-
Mode 1	Pass	QP	11.004M	16.25	60.00	-43.75	Neutral	-
Mode 1	Pass	AV	11.004M	14.80	50.00	-35.20	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	299.243k	36.14	60.26	-24.12	19.59	Line	-	16.55	9.60	0.04	9.95
AV	299.243k	28.45	50.26	-21.81	19.59	Line	-	8.86	9.60	0.04	9.95
QP	599.363k	45.65	56.00	-10.35	19.59	Line	-	26.06	9.60	0.04	9.95
AV	599.363k	37.18	46.00	-8.82	19.59	Line	-	17.59	9.60	0.04	9.95
QP	897.004k	39.62	56.00	-16.38	19.60	Line	-	20.02	9.61	0.05	9.94
AV	897.004k	31.31	46.00	-14.69	19.60	Line	-	11.71	9.61	0.05	9.94
QP	3.092M	21.86	56.00	-34.14	19.70	Line	-	2.16	9.66	0.11	9.93
AV	3.092M	18.18	46.00	-27.82	19.70	Line	-	-1.52	9.66	0.11	9.93
QP	5.975M	15.80	60.00	-44.20	19.79	Line	-	-3.99	9.70	0.15	9.94
AV	5.975M	14.73	50.00	-35.27	19.79	Line	-	-5.06	9.70	0.15	9.94
QP	9.685M	16.05	60.00	-43.95	19.87	Line	-	-3.82	9.73	0.18	9.96
AV	9.685M	14.62	50.00	-35.38	19.87	Line	-	-5.25	9.73	0.18	9.96

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	299.243k	34.36	60.26	-25.90	19.59	Neutral	-	14.77	9.60	0.04	9.95
AV	299.243k	26.98	50.26	-23.28	19.59	Neutral	-	7.39	9.60	0.04	9.95
QP	599.363k	44.71	56.00	-11.29	19.59	Neutral	-	25.12	9.60	0.04	9.95
AV	599.363k	36.30	46.00	-9.70	19.59	Neutral	-	16.71	9.60	0.04	9.95
QP	900.592k	40.14	56.00	-15.86	19.60	Neutral	-	20.54	9.61	0.05	9.94
AV	900.592k	31.80	46.00	-14.20	19.60	Neutral	-	12.20	9.61	0.05	9.94
QP	2.936M	21.76	56.00	-34.24	19.67	Neutral	-	2.09	9.63	0.11	9.93
AV	2.936M	18.71	46.00	-27.29	19.67	Neutral	-	-0.96	9.63	0.11	9.93
QP	5.787M	15.79	60.00	-44.21	19.75	Neutral	-	-3.96	9.66	0.15	9.94
AV	5.787M	14.54	50.00	-35.46	19.75	Neutral	-	-5.21	9.66	0.15	9.94
QP	11.004M	16.25	60.00	-43.75	19.85	Neutral	-	-3.60	9.70	0.19	9.96
AV	11.004M	14.80	50.00	-35.20	19.85	Neutral	-	-5.05	9.70	0.19	9.96



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	7.55M	12.807M	12M8G1D	7.05M	12.335M
802.11g_Nss1,(6Mbps)_2TX	16.325M	35.561M	35M6D1D	14.95M	17.221M
802.11ax HEW20_Nss1,(MCS0)_2TX	18.875M	38.242M	38M2D1D	13.9M	18.919M

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	7.05M	12.732M	7.05M	12.644M
2437MHz	Pass	500k	7.5M	12.807M	7.55M	12.703M
2462MHz	Pass	500k	7.05M	12.7M	7.525M	12.335M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	16.275M	17.276M	16.325M	17.951M
2437MHz	Pass	500k	15.65M	35.561M	14.95M	34.294M
2462MHz	Pass	500k	16.05M	17.221M	15.875M	18.235M
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	500k	18.725M	18.972M	16.775M	19.011M
2437MHz	Pass	500k	13.9M	38.242M	15.075M	37.923M
2462MHz	Pass	500k	18.525M	18.919M	18.875M	18.944M

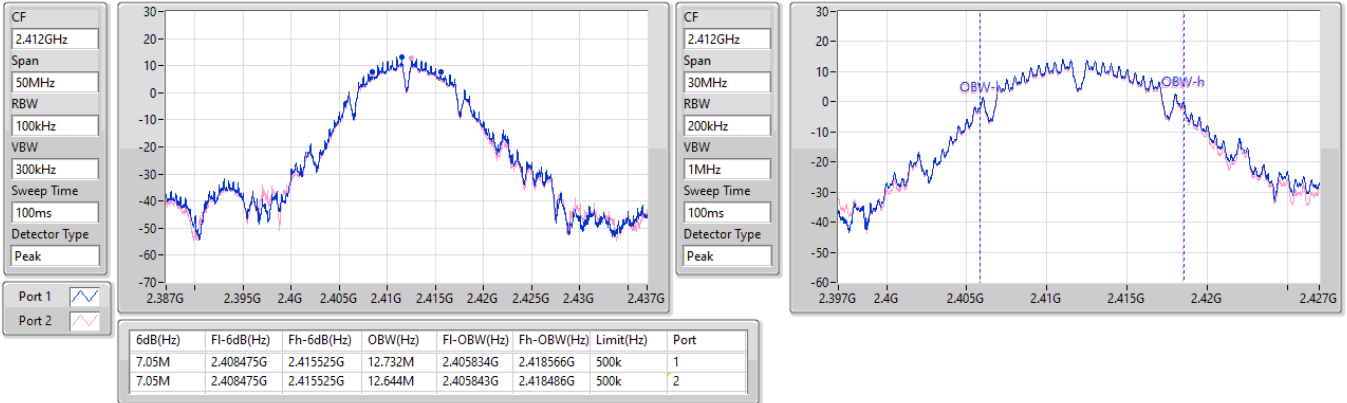
Port X-N dB = Port X 6dB down bandwidth;
 Port X-OBW = Port X 99% occupied bandwidth

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

EBW

2412MHz

08/02/2023

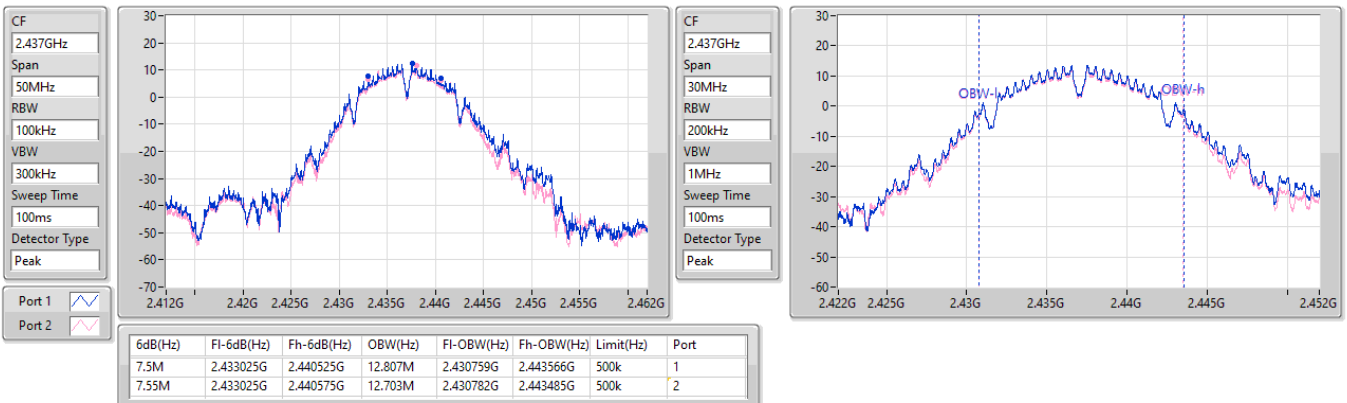


2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX

EBW

2437MHz

08/02/2023



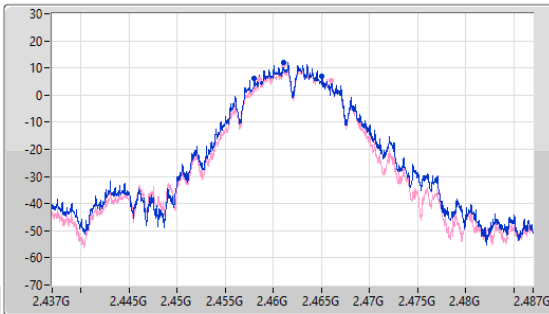
2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_2TX

EBW

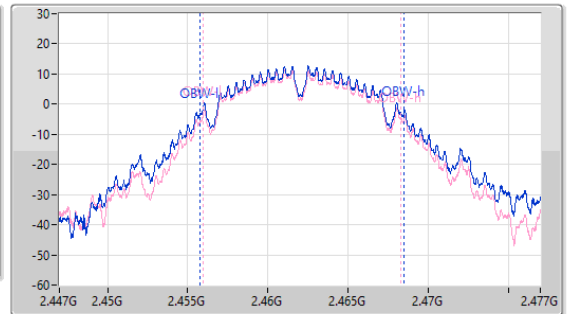
2462MHz

08/02/2023

CF
2.462GHz
Span
50MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak



CF
2.462GHz
Span
30MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.05M	2.458025G	2.465075G	12.7M	2.455781G	2.468481G	500k	1
7.525M	2.458525G	2.46605G	12.335M	2.455987G	2.468322G	500k	2

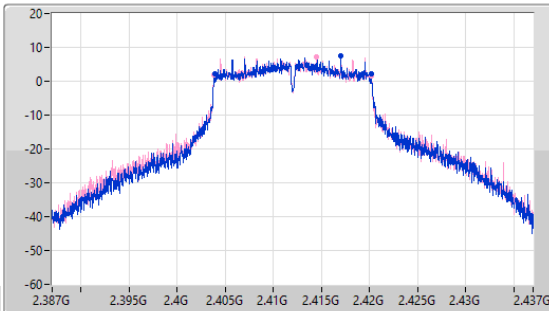
2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX

EBW

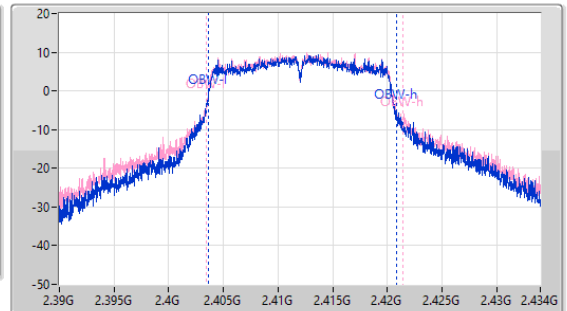
2412MHz

08/02/2023

CF
2.412GHz
Span
50MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak



CF
2.412GHz
Span
44MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.275M	2.4039G	2.420175G	17.276M	2.403608G	2.420883G	500k	1
16.325M	2.40385G	2.420175G	17.951M	2.403471G	2.421422G	500k	2

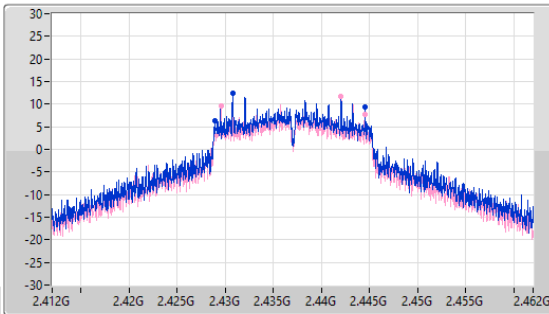
2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX

EBW

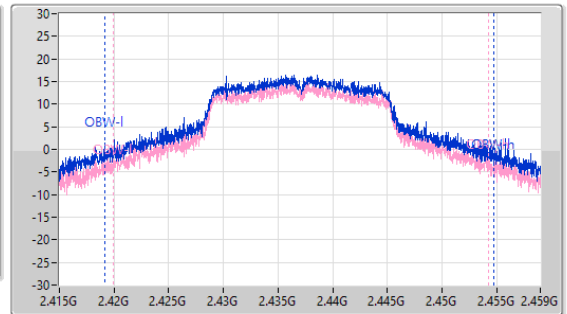
2437MHz

08/02/2023

CF
2.437GHz
Span
50MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak



CF
2.437GHz
Span
44MHz
RBW
500kHz
VBW
2MHz
Sweep Time
100ms
Detector Type
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.65M	2.4289G	2.44455G	35.561M	2.419198G	2.454759G	500k	1
14.95M	2.42955G	2.4445G	34.294M	2.419934G	2.454228G	500k	2

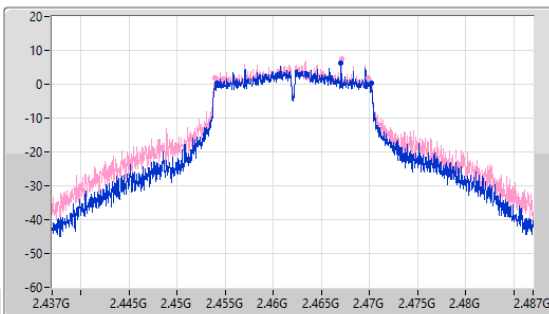
2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_2TX

EBW

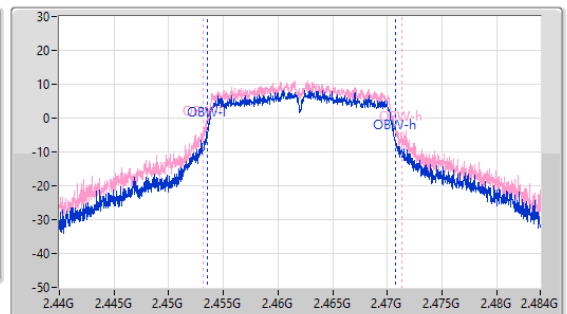
2462MHz

08/02/2023

CF
2.462GHz
Span
50MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak



CF
2.462GHz
Span
44MHz
RBW
300kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



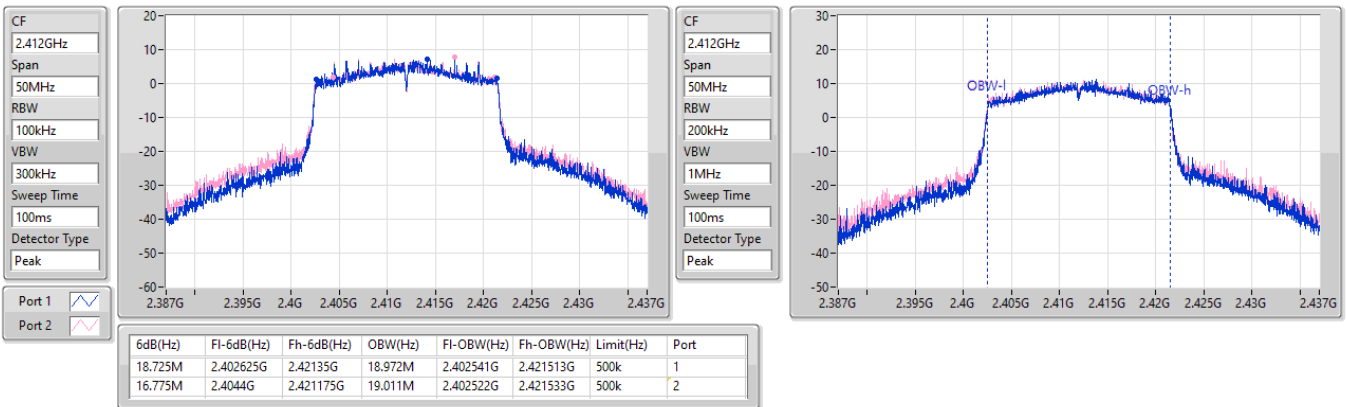
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.05M	2.454125G	2.470175G	17.221M	2.453532G	2.470753G	500k	1
15.875M	2.45395G	2.469825G	18.235M	2.453106G	2.47134G	500k	2

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

EBW

2412MHz

08/02/2023

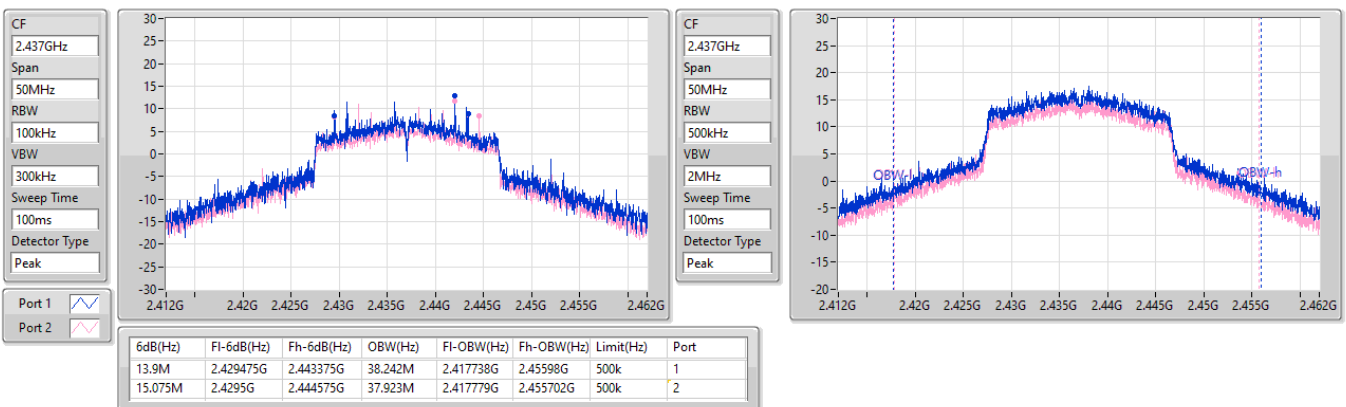


2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

2437MHz

08/02/2023



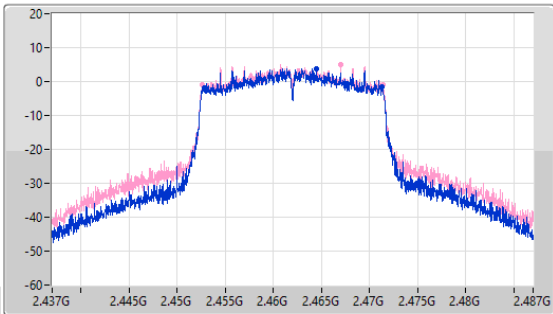
2.4-2.4835GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

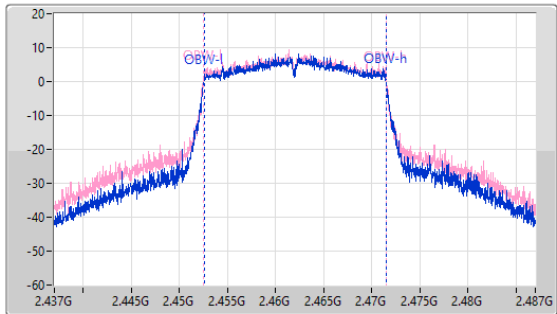
2462MHz

08/02/2023

CF
2.462GHz
Span
50MHz
RBW
100kHz
VBW
300kHz
Sweep Time
100ms
Detector Type
Peak



CF
2.462GHz
Span
50MHz
RBW
200kHz
VBW
1MHz
Sweep Time
100ms
Detector Type
Peak



Port 1
Port 2

6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.525M	2.4528G	2.471325G	18.919M	2.45255G	2.471469G	500k	1
18.875M	2.452575G	2.47145G	18.944M	2.452521G	2.471465G	500k	2



Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_2TX	24.27	0.26730
802.11g_Nss1,(6Mbps)_2TX	24.43	0.27733
802.11ax HEW20_Nss1,(MCS0)_2TX	24.44	0.27797



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	1.76	21.61	20.88	24.27	30.00
2437MHz	Pass	1.76	21.17	20.62	23.91	30.00
2462MHz	Pass	1.76	20.25	19.82	23.05	30.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	1.76	19.19	18.67	21.95	30.00
2417MHz	Pass	1.76	21.60	21.24	24.43	30.00
2437MHz	Pass	1.76	21.38	20.63	24.03	30.00
2457MHz	Pass	1.76	19.47	20.19	22.86	30.00
2462MHz	Pass	1.76	17.89	17.88	20.90	30.00
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	1.76	18.87	19.32	22.11	30.00
2417MHz	Pass	1.76	21.59	21.27	24.44	30.00
2437MHz	Pass	1.76	21.28	20.76	24.04	30.00
2457MHz	Pass	1.76	17.91	18.24	21.09	30.00
2462MHz	Pass	1.76	15.83	16.67	19.28	30.00

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



Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	24.28	0.26792



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.77	18.75	19.20	21.99	30.00
2417MHz	Pass	4.77	21.48	21.05	24.28	30.00
2437MHz	Pass	4.77	21.13	20.66	23.91	30.00
2457MHz	Pass	4.77	17.81	18.13	20.98	30.00
2462MHz	Pass	4.77	15.81	16.53	19.20	30.00

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



Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_2TX	-0.48
802.11g_Nss1,(6Mbps)_2TX	-2.62
802.11ax HEW20_Nss1,(MCS0)_2TX	-3.59

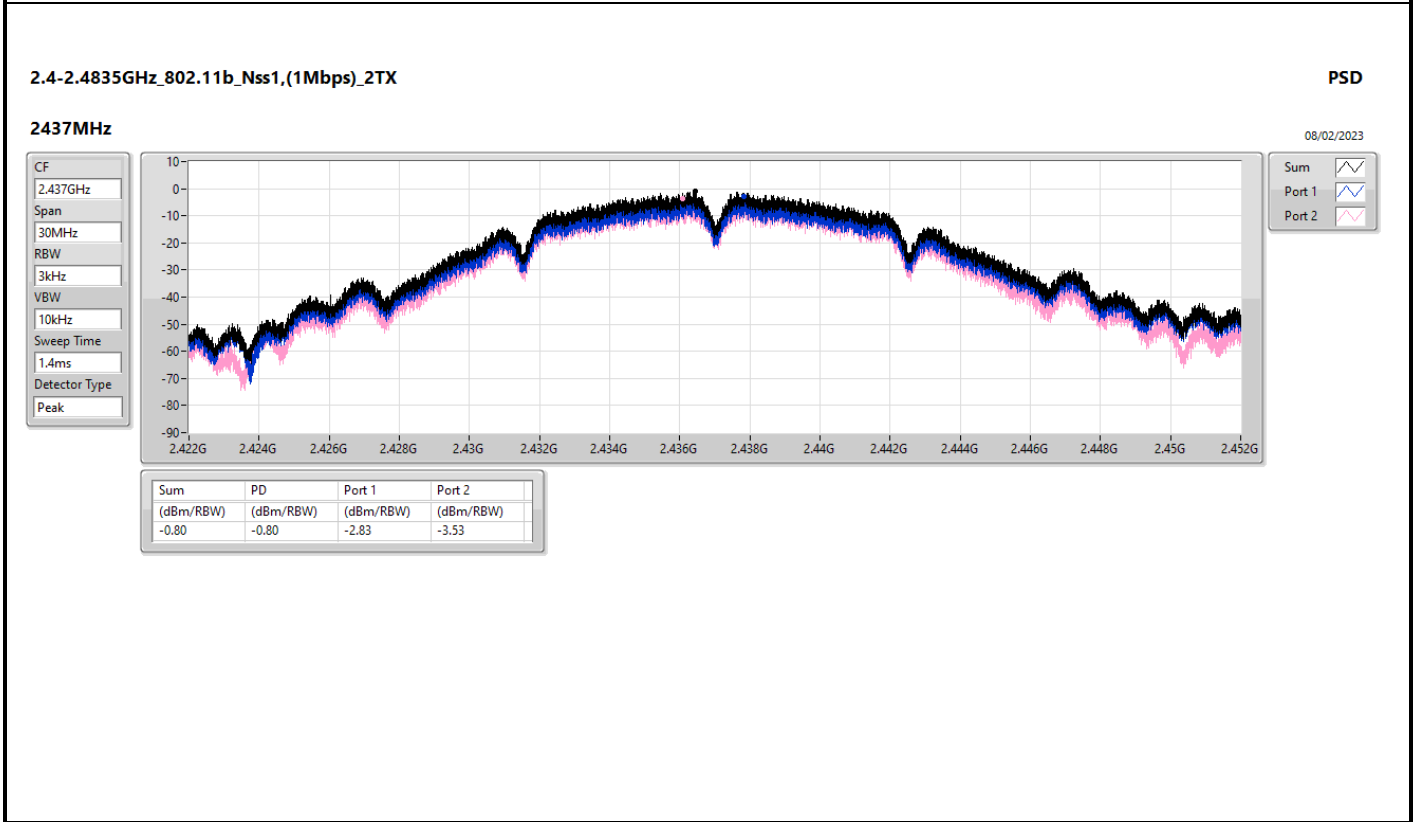
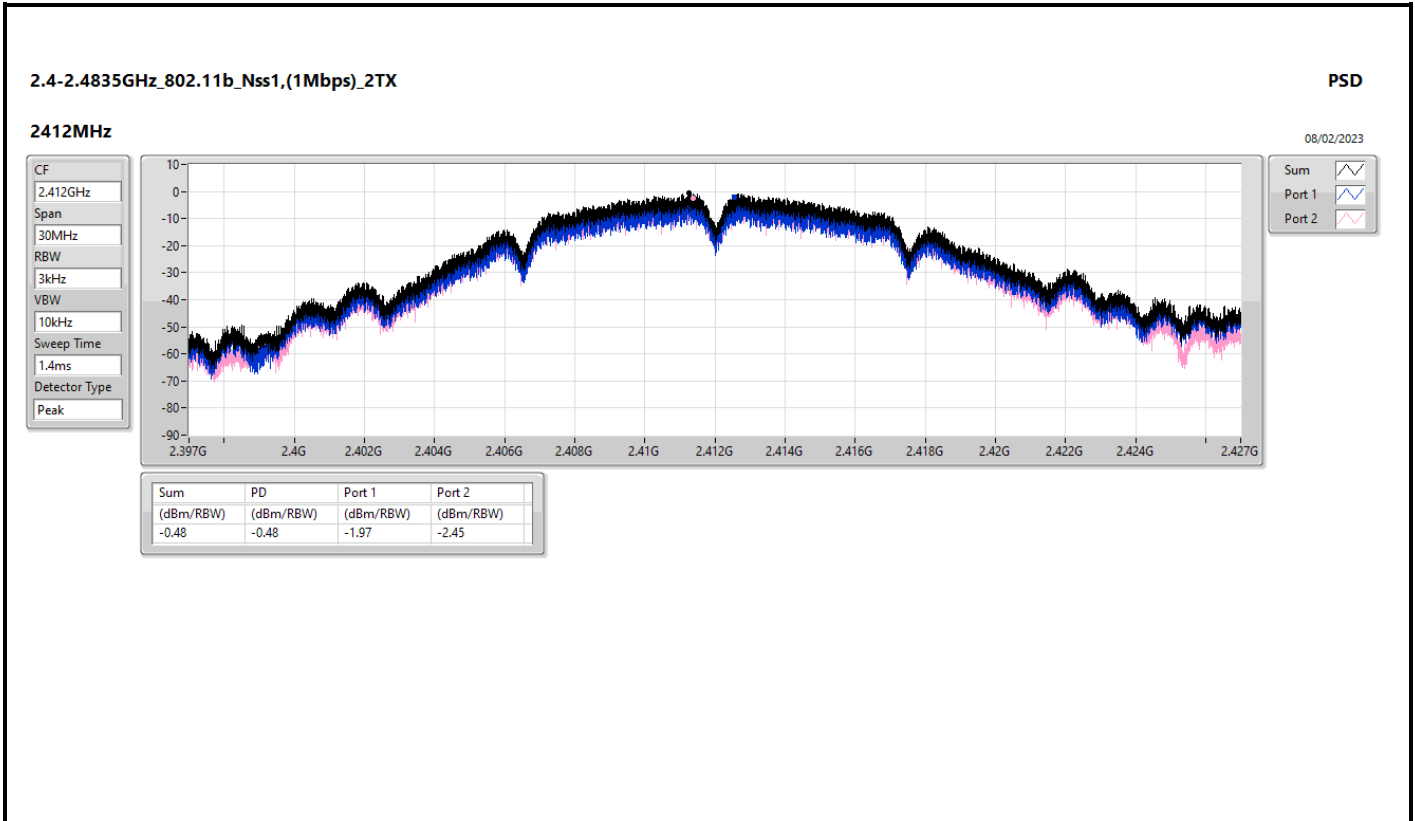
RBW = 3kHz;

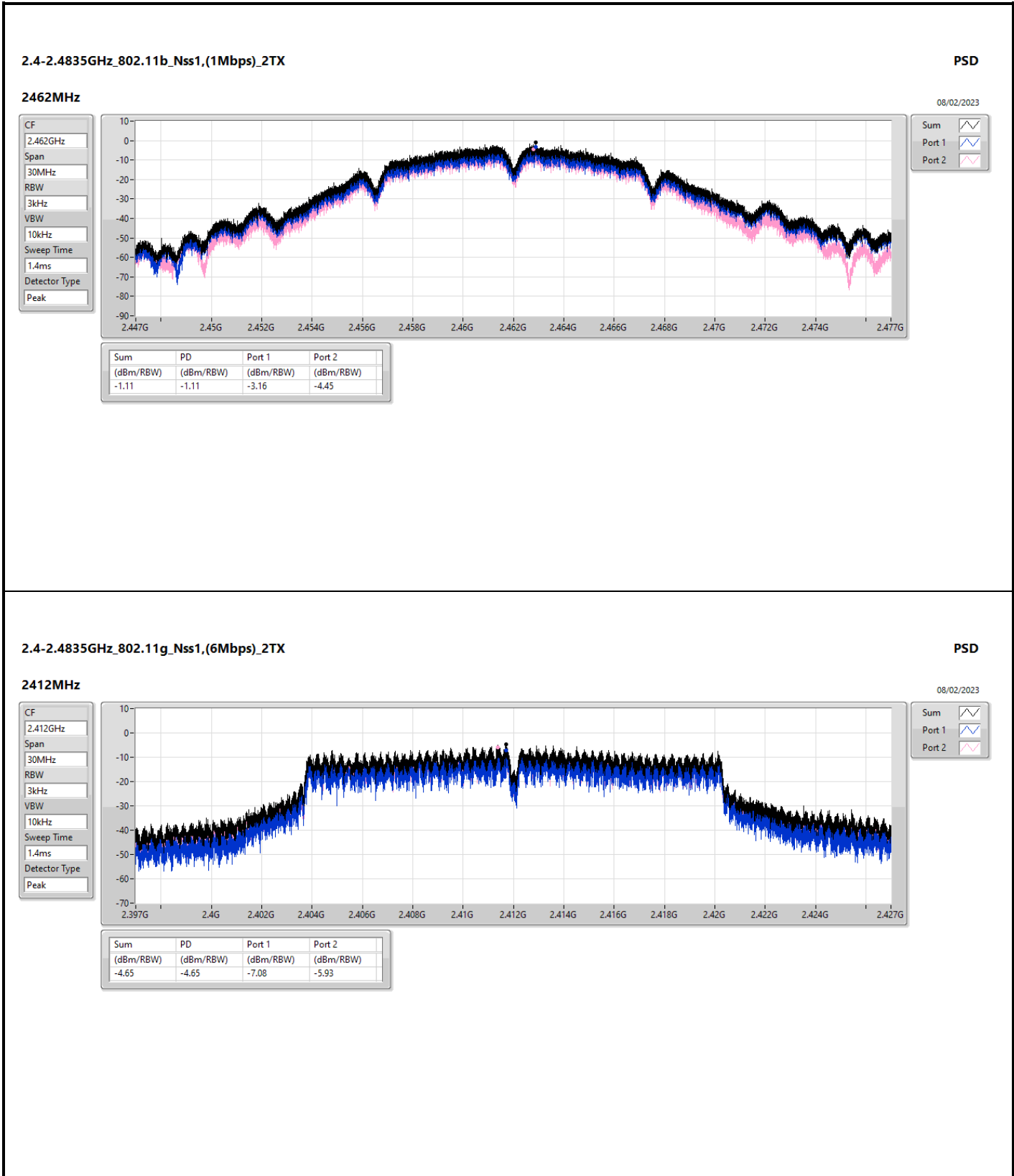


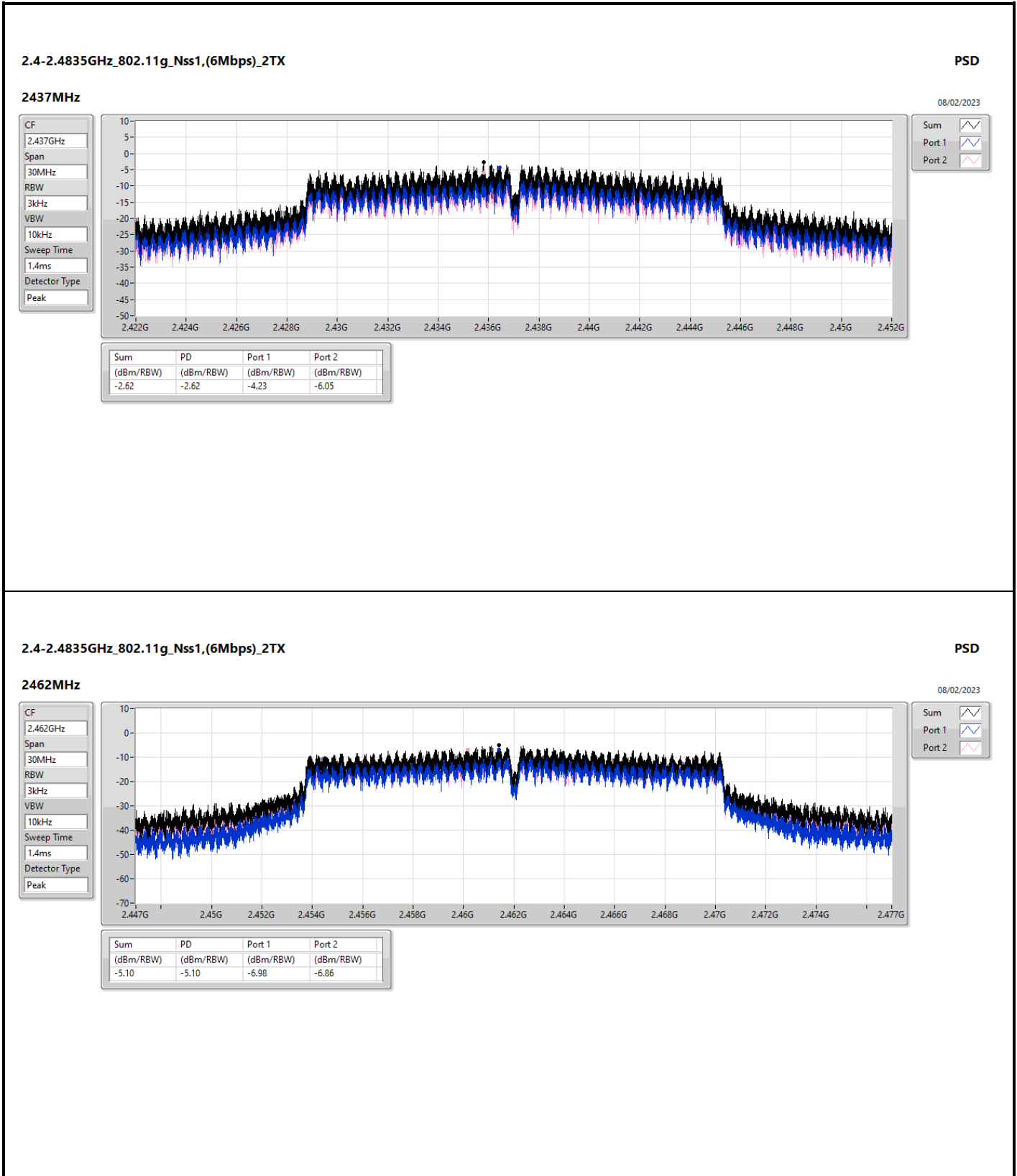
Result

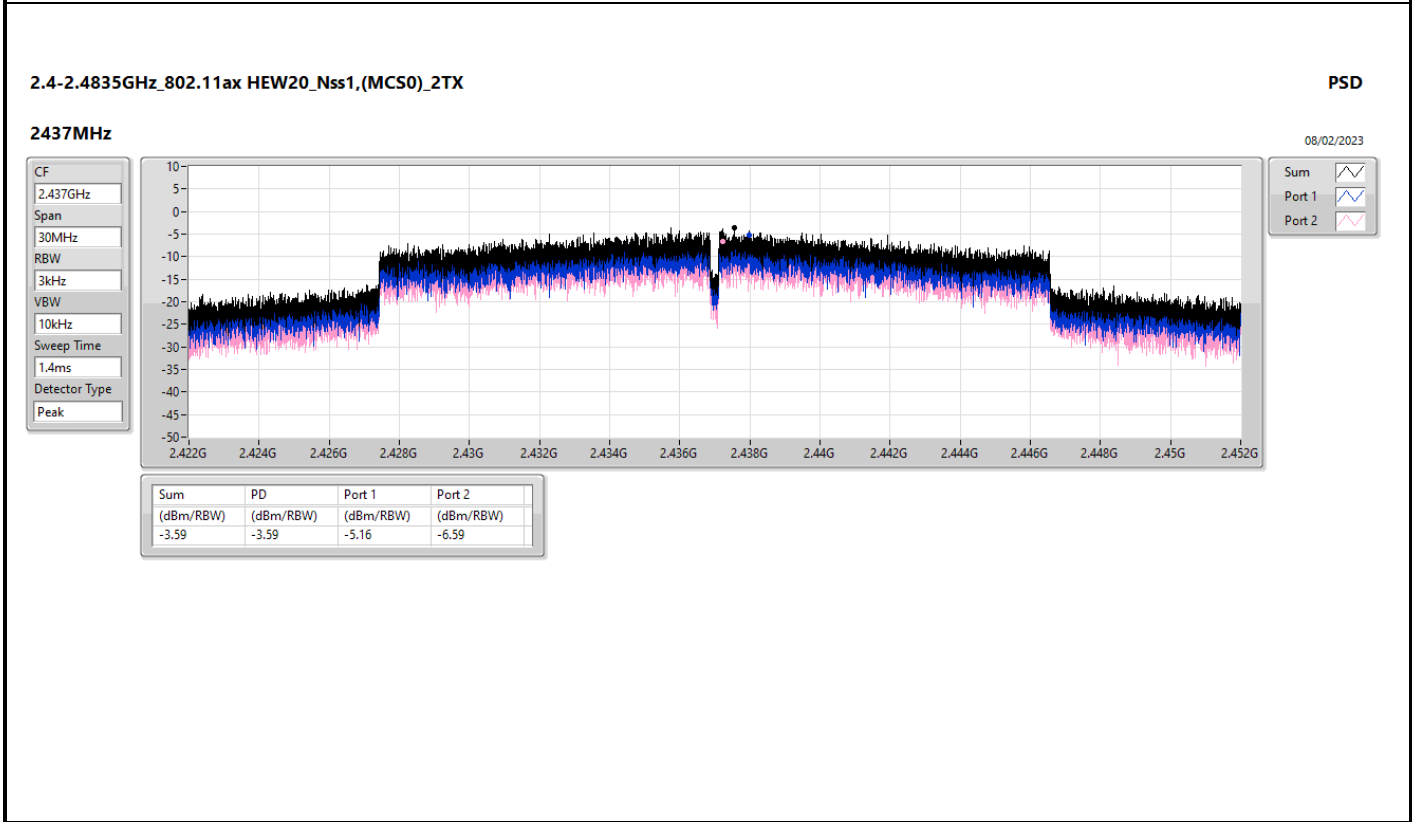
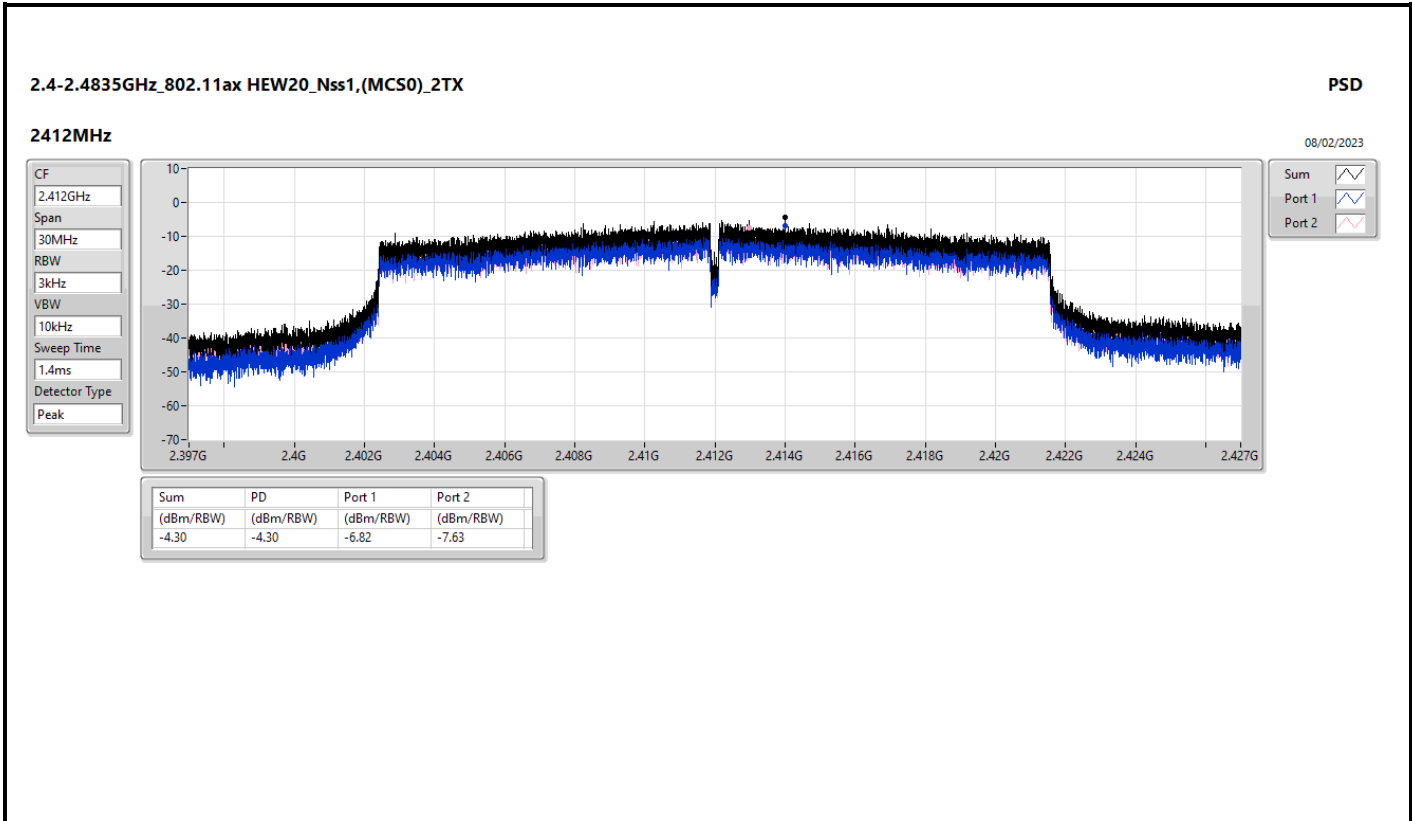
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.77	-1.97	-2.45	-0.48	8.00
2437MHz	Pass	4.77	-2.83	-3.53	-0.80	8.00
2462MHz	Pass	4.77	-3.16	-4.45	-1.11	8.00
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.77	-7.08	-5.93	-4.65	8.00
2437MHz	Pass	4.77	-4.23	-6.05	-2.62	8.00
2462MHz	Pass	4.77	-6.98	-6.86	-5.10	8.00
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
2412MHz	Pass	4.77	-6.82	-7.63	-4.30	8.00
2437MHz	Pass	4.77	-5.16	-6.59	-3.59	8.00
2462MHz	Pass	4.77	-10.58	-9.06	-7.54	8.00

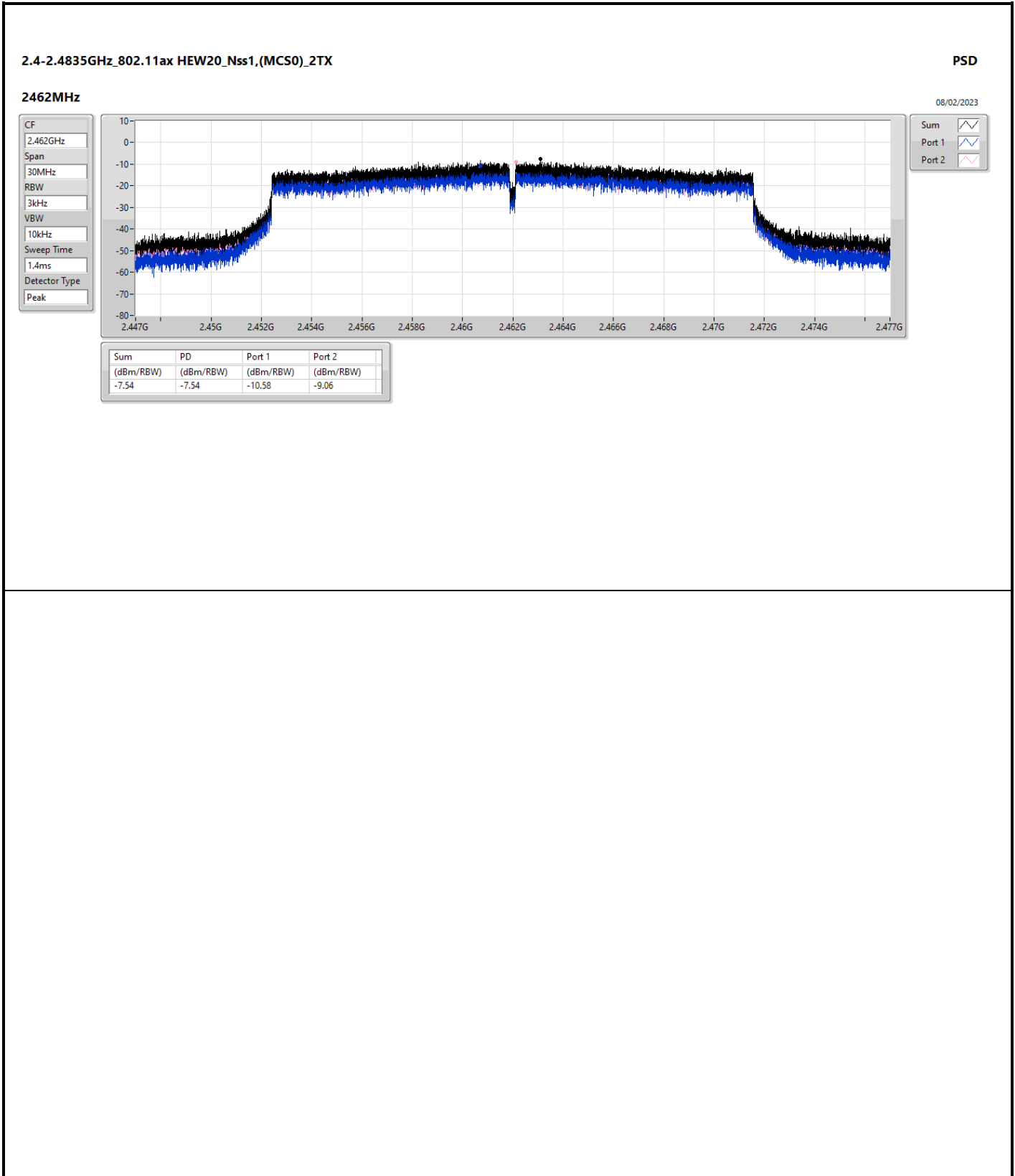
DG = Directional Gain; RBW = 3kHz;
PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;













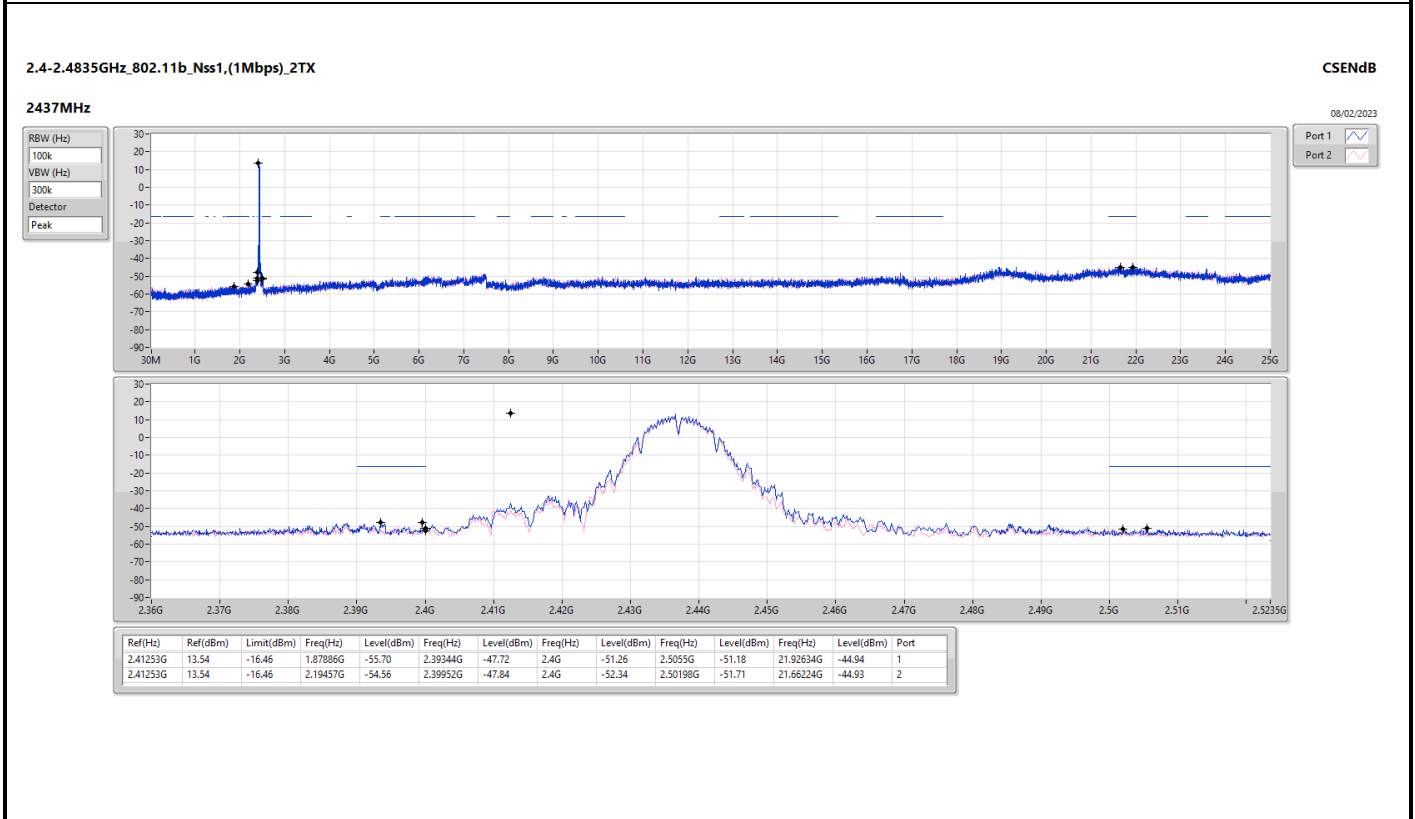
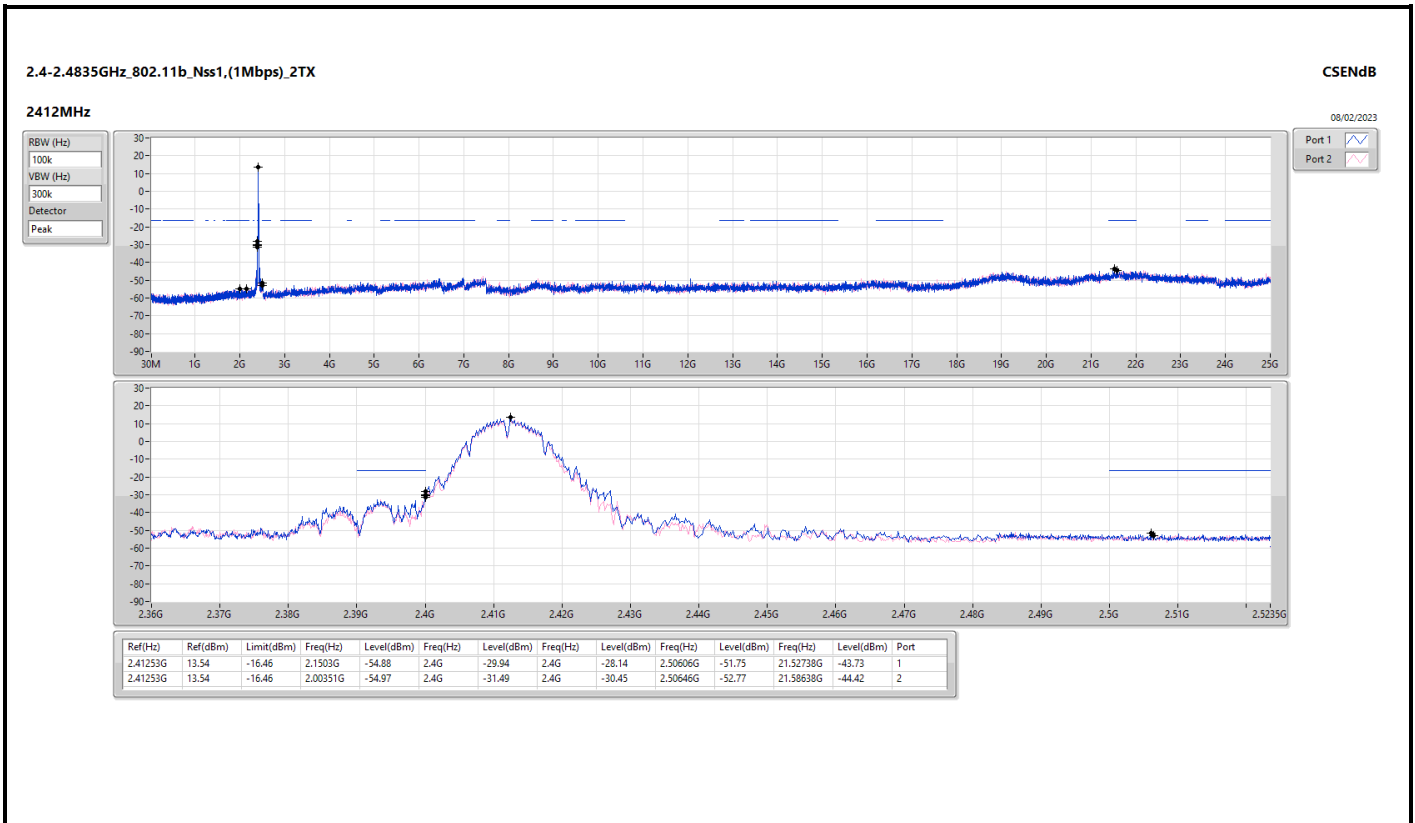
Summary

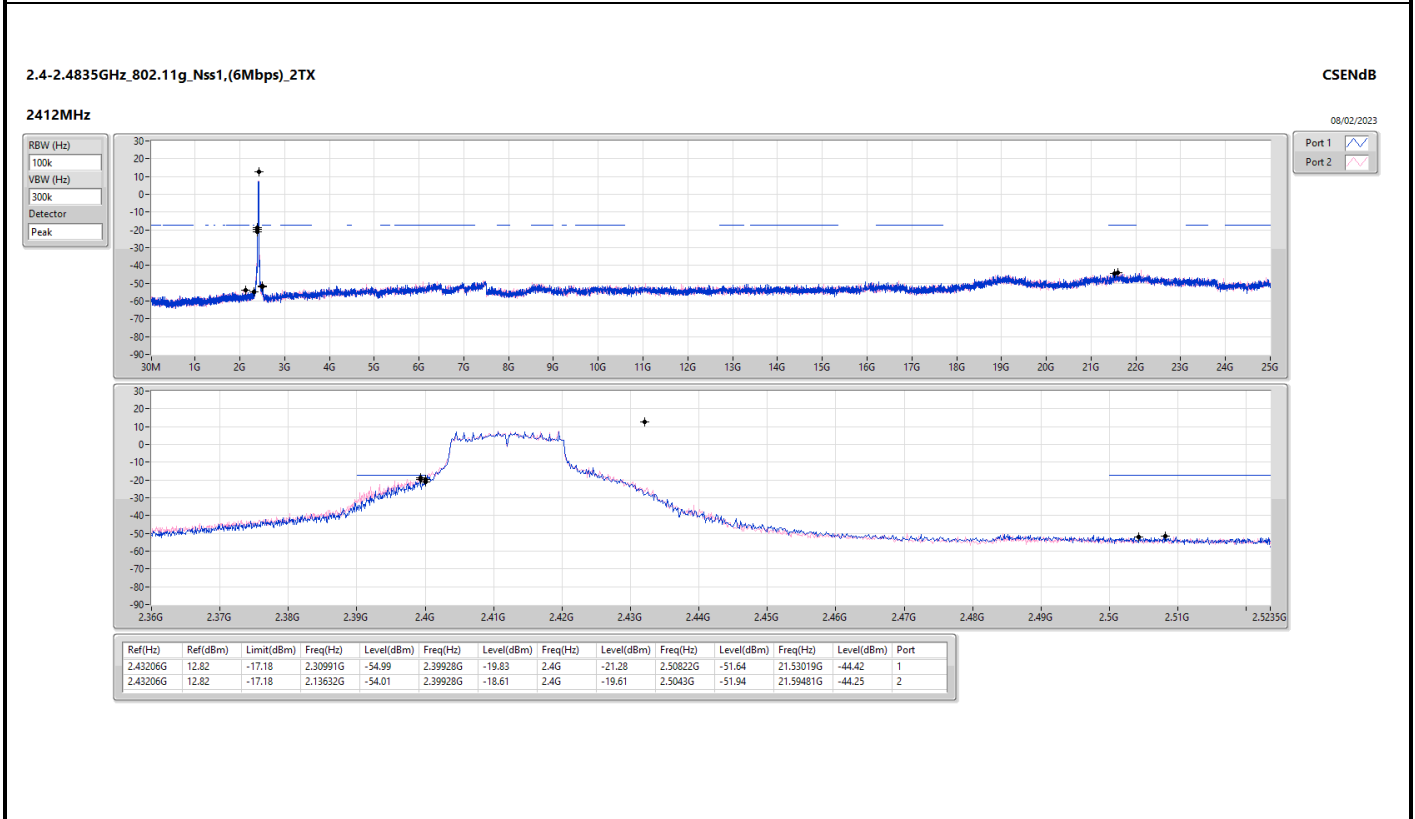
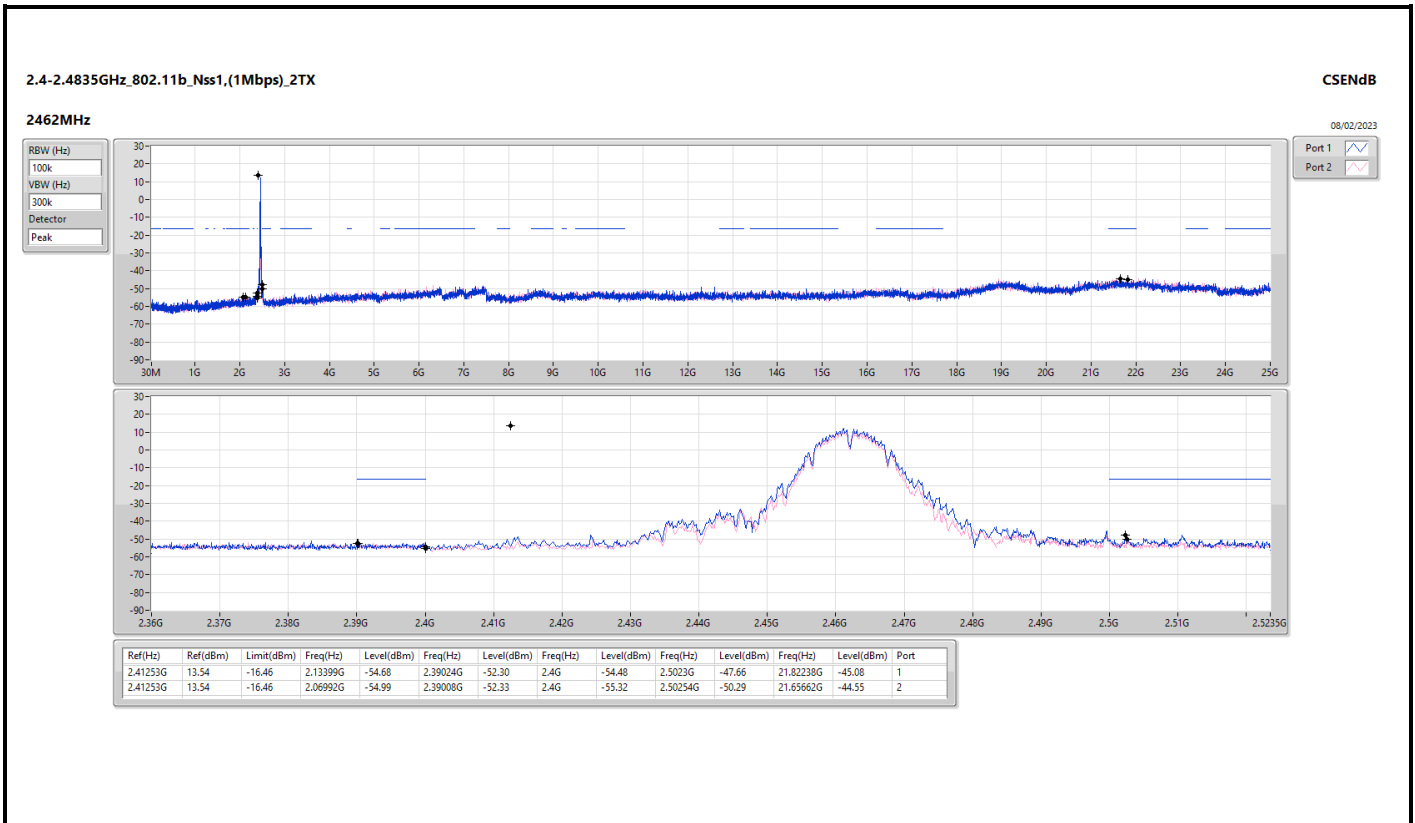
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	Pass	2.41253G	13.54	-16.46	2.1503G	-54.88	2.4G	-29.94	2.4G	-28.14	2.50606G	-51.75	21.52738G	-43.73	1
802.11g_Nss1,(6Mbps)_2TX	Pass	2.43206G	12.82	-17.18	2.13632G	-54.01	2.39928G	-18.61	2.4G	-19.61	2.5043G	-51.94	21.59481G	-44.25	2
802.11ax HEW20_Nss1,(MCS0)_2TX	Pass	2.43073G	11.71	-18.29	2.30641G	-54.15	2.39952G	-18.42	2.4G	-19.52	2.50054G	-51.77	21.95162G	-44.68	2

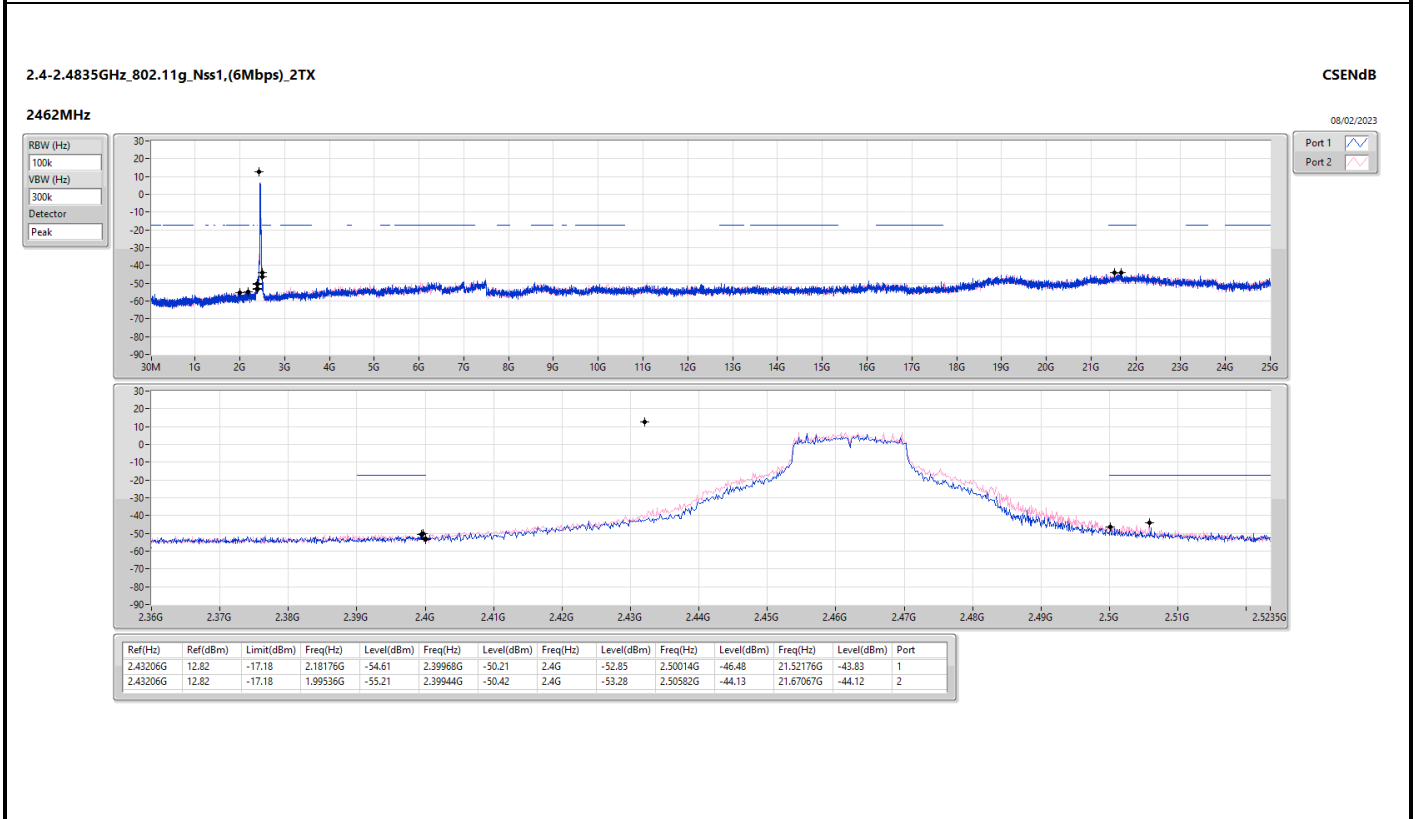
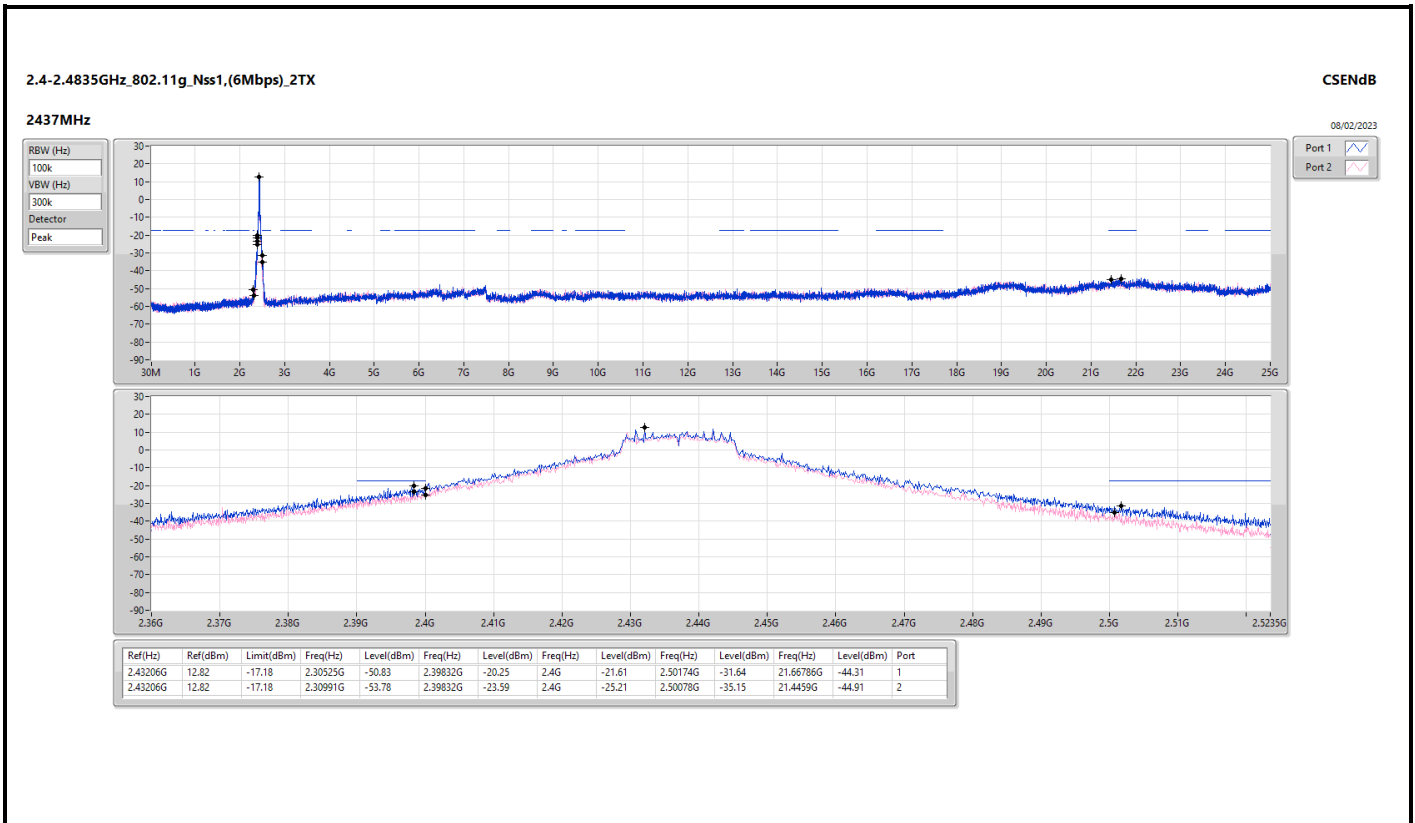


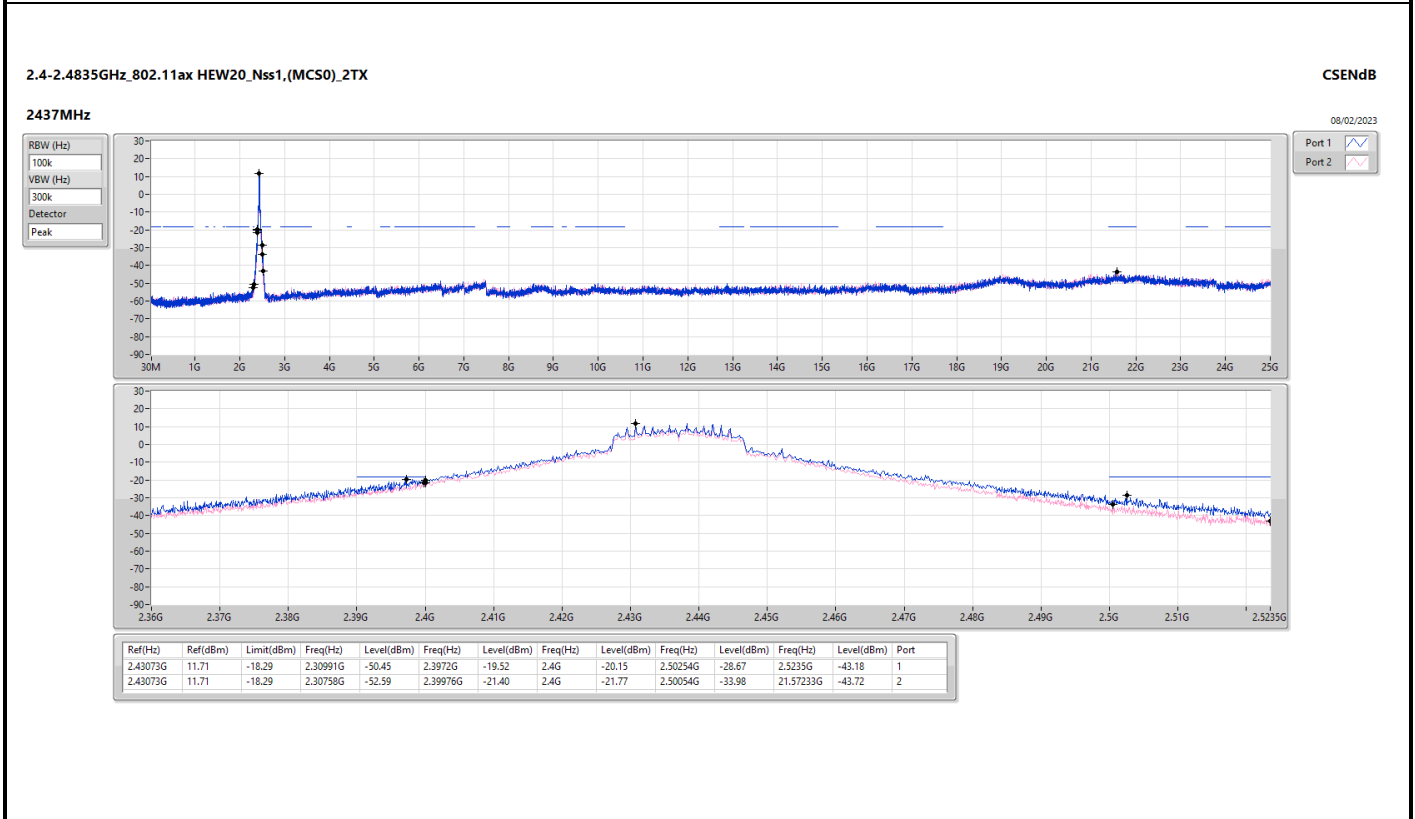
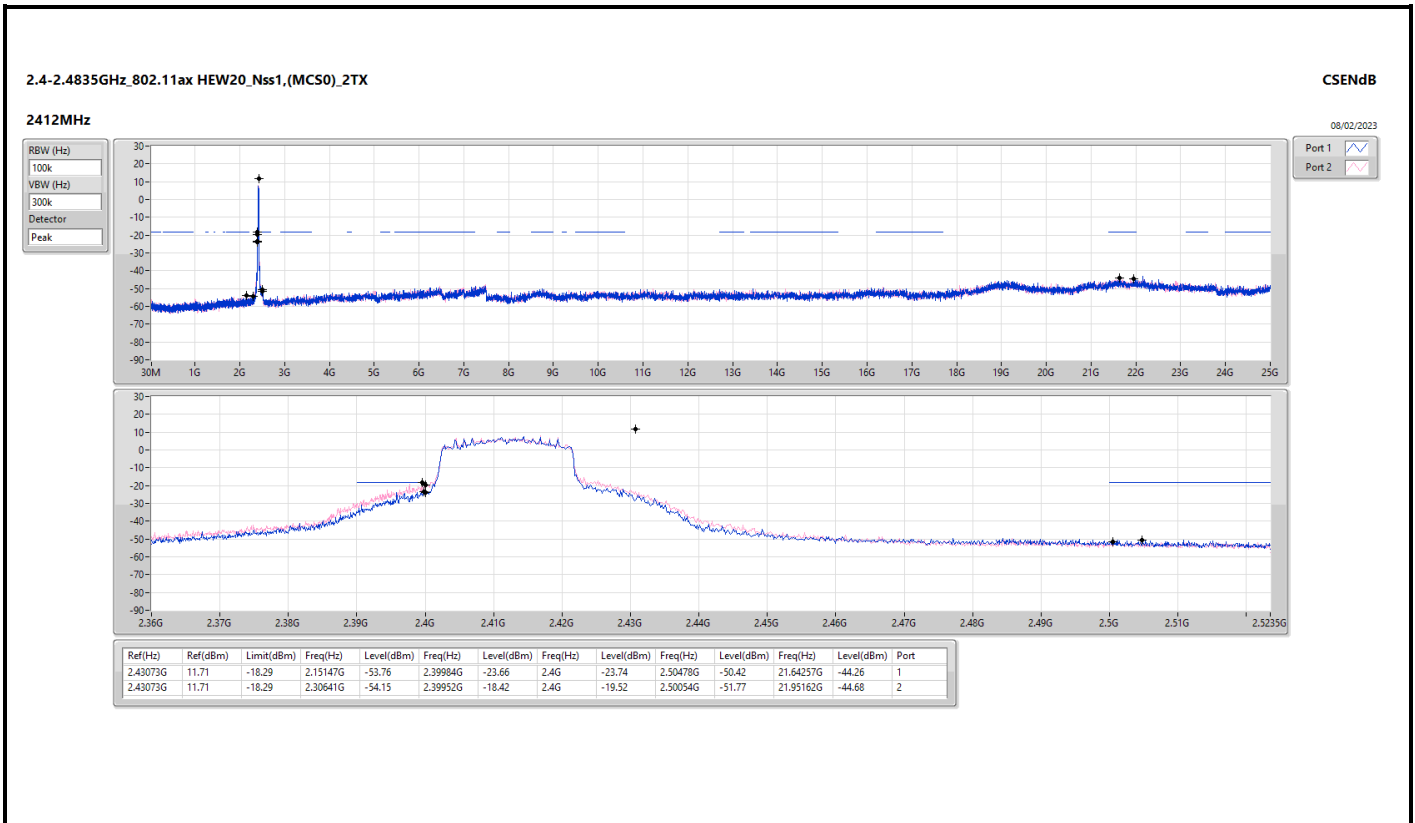
Result

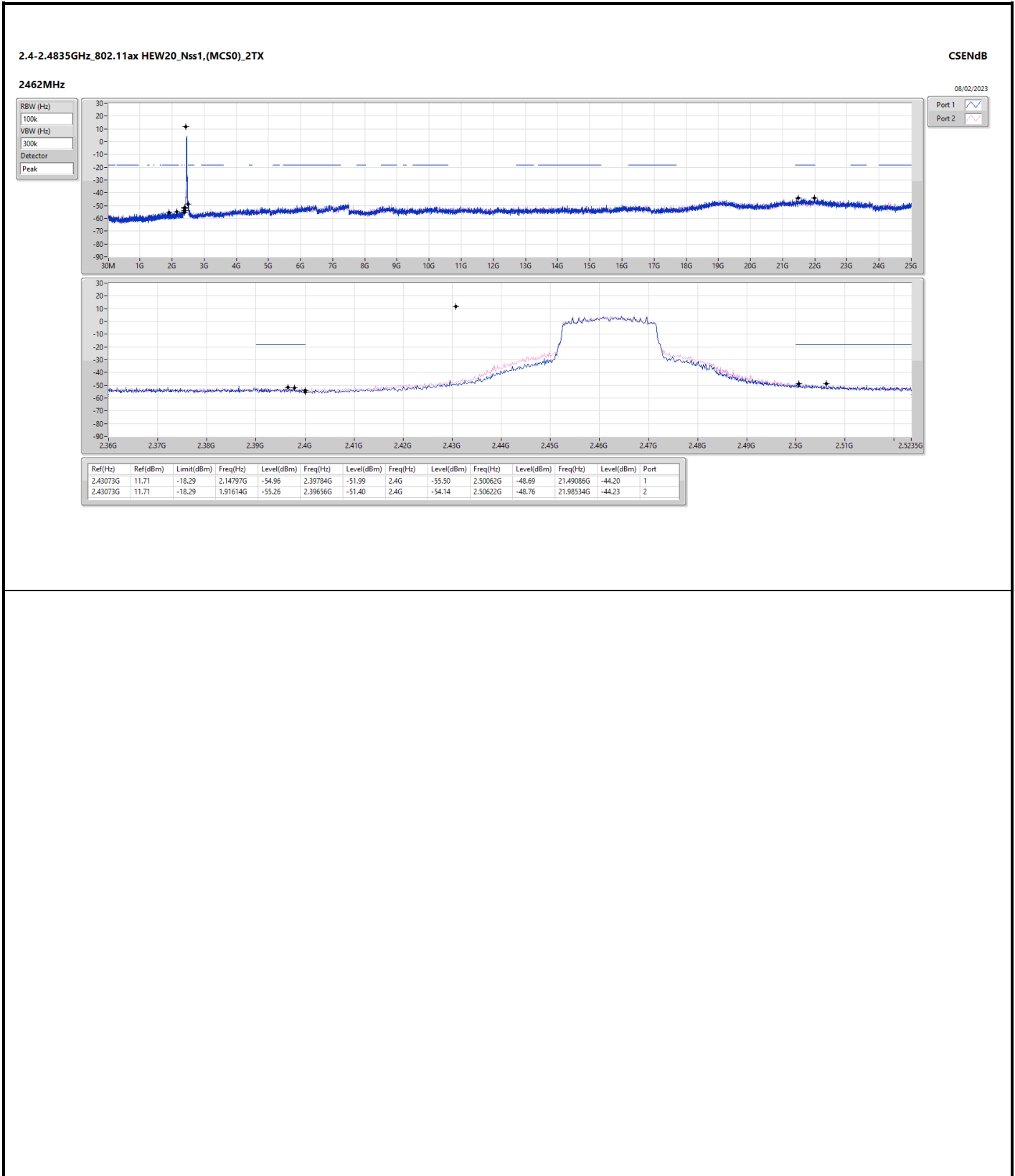
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.41253G	13.54	-16.46	2.1503G	-54.88	2.4G	-29.94	2.4G	-28.14	2.50606G	-51.75	21.52738G	-43.73	1
2412MHz	Pass	2.41253G	13.54	-16.46	2.00351G	-54.97	2.4G	-31.49	2.4G	-30.45	2.50646G	-52.77	21.58638G	-44.42	2
2437MHz	Pass	2.41253G	13.54	-16.46	1.87886G	-55.70	2.39344G	-47.72	2.4G	-51.26	2.5055G	-51.18	21.92634G	-44.94	1
2437MHz	Pass	2.41253G	13.54	-16.46	2.19457G	-54.56	2.39952G	-47.84	2.4G	-52.34	2.50198G	-51.71	21.66224G	-44.93	2
2462MHz	Pass	2.41253G	13.54	-16.46	2.13399G	-54.68	2.39024G	-52.30	2.4G	-54.48	2.5023G	-47.66	21.82238G	-45.08	1
2462MHz	Pass	2.41253G	13.54	-16.46	2.06992G	-54.99	2.39008G	-52.33	2.4G	-55.32	2.50254G	-50.29	21.65662G	-44.55	2
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43206G	12.82	-17.18	2.30991G	-54.99	2.39928G	-19.83	2.4G	-21.28	2.50822G	-51.64	21.53019G	-44.42	1
2412MHz	Pass	2.43206G	12.82	-17.18	2.13632G	-54.01	2.39928G	-18.61	2.4G	-19.61	2.5043G	-51.94	21.59481G	-44.25	2
2437MHz	Pass	2.43206G	12.82	-17.18	2.30525G	-50.83	2.39832G	-20.25	2.4G	-21.61	2.50174G	-31.64	21.66786G	-44.31	1
2437MHz	Pass	2.43206G	12.82	-17.18	2.30991G	-53.78	2.39832G	-23.59	2.4G	-25.21	2.50078G	-35.15	21.4459G	-44.91	2
2462MHz	Pass	2.43206G	12.82	-17.18	2.18176G	-54.61	2.39968G	-50.21	2.4G	-52.85	2.50014G	-46.48	21.52176G	-43.83	1
2462MHz	Pass	2.43206G	12.82	-17.18	1.99536G	-55.21	2.39944G	-50.42	2.4G	-53.28	2.50582G	-44.13	21.67067G	-44.12	2
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43073G	11.71	-18.29	2.15147G	-53.76	2.39984G	-23.66	2.4G	-23.74	2.50478G	-50.42	21.64257G	-44.26	1
2412MHz	Pass	2.43073G	11.71	-18.29	2.30641G	-54.15	2.39952G	-18.42	2.4G	-19.52	2.50054G	-51.77	21.95162G	-44.68	2
2437MHz	Pass	2.43073G	11.71	-18.29	2.30991G	-50.45	2.3972G	-19.52	2.4G	-20.15	2.50254G	-28.67	2.5235G	-43.18	1
2437MHz	Pass	2.43073G	11.71	-18.29	2.30758G	-52.59	2.39976G	-21.40	2.4G	-21.77	2.50054G	-33.98	21.57233G	-43.72	2
2462MHz	Pass	2.43073G	11.71	-18.29	2.14797G	-54.96	2.39784G	-51.99	2.4G	-55.50	2.50062G	-48.69	21.49086G	-44.20	1
2462MHz	Pass	2.43073G	11.71	-18.29	1.91614G	-55.26	2.39656G	-51.40	2.4G	-54.14	2.50622G	-48.76	21.98534G	-44.23	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	289.96M	41.49	46.00	-4.51	3	Horizontal	360	1.00

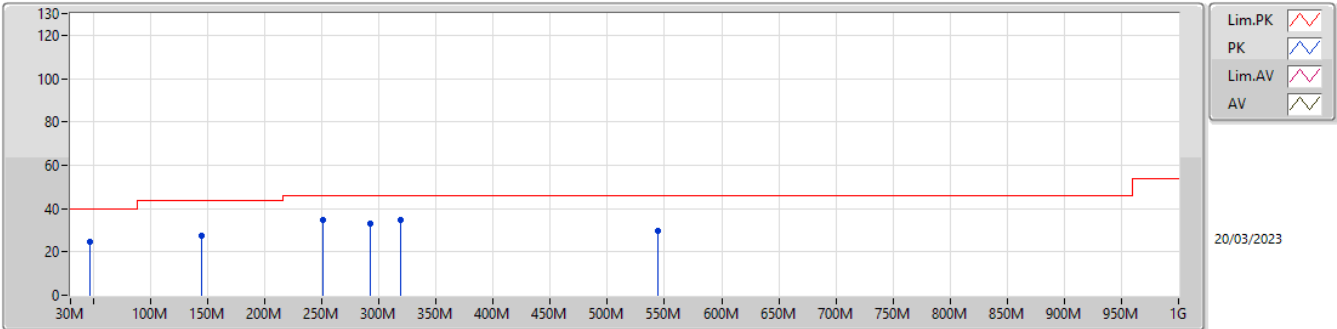


Result

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	Pass	PK	47.46M	24.84	40.00	-15.16	3	Vertical	0	1.00
2437MHz	Pass	PK	144.46M	27.57	43.50	-15.93	3	Vertical	0	1.00
2437MHz	Pass	PK	251.16M	34.97	46.00	-11.03	3	Vertical	0	1.00
2437MHz	Pass	PK	291.9M	32.96	46.00	-13.04	3	Vertical	0	1.00
2437MHz	Pass	PK	319.06M	34.82	46.00	-11.18	3	Vertical	0	1.00
2437MHz	Pass	PK	544.1M	29.53	46.00	-16.47	3	Vertical	0	1.00
2437MHz	Pass	PK	35.82M	22.55	40.00	-17.45	3	Horizontal	360	1.00
2437MHz	Pass	PK	183.26M	27.86	43.50	-15.64	3	Horizontal	360	1.00
2437MHz	Pass	PK	251.16M	37.90	46.00	-8.10	3	Horizontal	360	1.00
2437MHz	Pass	PK	289.96M	41.49	46.00	-4.51	3	Horizontal	360	1.00
2437MHz	Pass	PK	421.88M	33.61	46.00	-12.39	3	Horizontal	360	1.00
2437MHz	Pass	PK	538.28M	30.30	46.00	-15.70	3	Horizontal	360	1.00

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

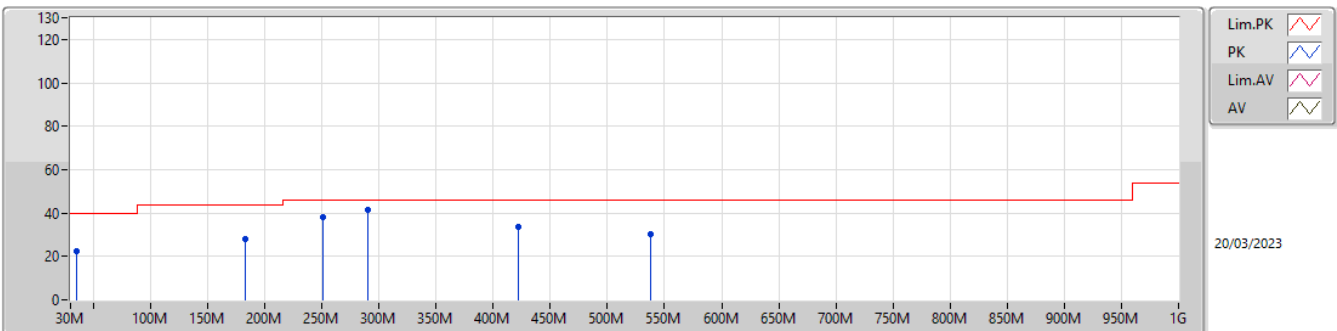
2437MHz_Transformer



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	47.46M	24.84	40.00	-15.16	-12.34	3	Vertical	0	1.00	37.18	14.07	1.10	27.51
PK	144.46M	27.57	43.50	-15.93	-9.17	3	Vertical	0	1.00	36.74	16.03	1.97	27.17
PK	251.16M	34.97	46.00	-11.03	-6.28	3	Vertical	0	1.00	41.25	17.76	2.64	26.68
PK	291.9M	32.96	46.00	-13.04	-5.62	3	Vertical	0	1.00	38.58	18.13	2.87	26.62
PK	319.06M	34.82	46.00	-11.18	-5.03	3	Vertical	0	1.00	39.85	18.68	3.00	26.71
PK	544.1M	29.53	46.00	-16.47	0.51	3	Vertical	0	1.00	29.02	24.52	3.95	27.96

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

2437MHz_Transformer



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	35.82M	22.55	40.00	-17.45	-6.48	3	Horizontal	360	1.00	29.03	20.08	0.96	27.52
PK	183.26M	27.86	43.50	-15.64	-10.37	3	Horizontal	360	1.00	38.23	14.36	2.24	26.97
PK	251.16M	37.90	46.00	-8.10	-6.28	3	Horizontal	360	1.00	44.18	17.76	2.64	26.68
PK	289.96M	41.49	46.00	-4.51	-5.68	3	Horizontal	360	1.00	47.17	18.08	2.86	26.62
PK	421.88M	33.61	46.00	-12.39	-2.19	3	Horizontal	360	1.00	35.80	21.69	3.47	27.35
PK	538.28M	30.30	46.00	-15.70	0.16	3	Horizontal	360	1.00	30.14	24.17	3.93	27.94



Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	Pass	AV	2.4862G	53.73	54.00	-0.27	3	Vertical	6	2.41	-
802.11g_Nss1,(6Mbps)_2TX	Pass	AV	2.4835G	53.29	54.00	-0.71	3	Vertical	5	2.34	-
802.11ax HEW20_Nss1,(MCS0)_2TX	Pass	PK	2.4838G	73.84	74.00	-0.16	3	Vertical	5	2.29	-



Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.3852G	49.81	54.00	-4.19	3	Vertical	57	1.10	-
2412MHz	Pass	AV	2.4128G	108.57	Inf	-Inf	3	Vertical	57	1.10	-
2412MHz	Pass	PK	2.388G	59.94	74.00	-14.06	3	Vertical	57	1.10	-
2412MHz	Pass	PK	2.4128G	111.43	Inf	-Inf	3	Vertical	57	1.10	-
2412MHz	Pass	AV	2.3852G	48.61	54.00	-5.39	3	Horizontal	323	1.50	-
2412MHz	Pass	AV	2.4128G	106.28	Inf	-Inf	3	Horizontal	323	1.50	-
2412MHz	Pass	PK	2.3876G	59.68	74.00	-14.32	3	Horizontal	323	1.50	-
2412MHz	Pass	PK	2.4128G	108.86	Inf	-Inf	3	Horizontal	323	1.50	-
2412MHz	Pass	AV	4.824G	45.26	54.00	-8.74	3	Vertical	91	1.00	-
2412MHz	Pass	PK	4.824G	49.93	74.00	-24.07	3	Vertical	91	1.00	-
2412MHz	Pass	AV	4.824G	41.63	54.00	-12.37	3	Horizontal	97	1.92	-
2412MHz	Pass	PK	4.82382G	48.81	74.00	-25.19	3	Horizontal	97	1.92	-
2437MHz	Pass	AV	2.3882G	45.59	54.00	-8.41	3	Vertical	6	1.58	-
2437MHz	Pass	AV	2.4362G	110.16	Inf	-Inf	3	Vertical	6	1.58	-
2437MHz	Pass	AV	2.4858G	46.62	54.00	-7.38	3	Vertical	6	1.58	-
2437MHz	Pass	PK	2.387G	58.53	74.00	-15.47	3	Vertical	6	1.58	-
2437MHz	Pass	PK	2.4362G	112.90	Inf	-Inf	3	Vertical	6	1.58	-
2437MHz	Pass	PK	2.4862G	59.25	74.00	-14.75	3	Vertical	6	1.58	-
2437MHz	Pass	AV	2.3882G	45.40	54.00	-8.60	3	Horizontal	320	2.46	-
2437MHz	Pass	AV	2.4362G	107.64	Inf	-Inf	3	Horizontal	320	2.46	-
2437MHz	Pass	AV	2.4858G	45.23	54.00	-8.77	3	Horizontal	320	2.46	-
2437MHz	Pass	PK	2.3866G	58.35	74.00	-15.65	3	Horizontal	320	2.46	-
2437MHz	Pass	PK	2.4362G	110.60	Inf	-Inf	3	Horizontal	320	2.46	-
2437MHz	Pass	PK	2.491G	58.54	74.00	-15.46	3	Horizontal	320	2.46	-
2437MHz	Pass	AV	4.874G	40.60	54.00	-13.40	3	Vertical	308	2.25	-
2437MHz	Pass	PK	4.87406G	47.83	74.00	-26.17	3	Vertical	308	2.25	-
2437MHz	Pass	AV	4.87406G	37.94	54.00	-16.06	3	Horizontal	112	2.15	-
2437MHz	Pass	PK	4.87394G	47.30	74.00	-26.70	3	Horizontal	112	2.15	-
2462MHz	Pass	AV	2.4628G	109.70	Inf	-Inf	3	Vertical	6	2.41	-
2462MHz	Pass	AV	2.4862G	53.73	54.00	-0.27	3	Vertical	6	2.41	-
2462MHz	Pass	PK	2.4612G	112.69	Inf	-Inf	3	Vertical	6	2.41	-
2462MHz	Pass	PK	2.4864G	62.64	74.00	-11.36	3	Vertical	6	2.41	-
2462MHz	Pass	AV	2.4612G	106.64	Inf	-Inf	3	Horizontal	320	1.94	-
2462MHz	Pass	AV	2.4862G	50.97	54.00	-3.03	3	Horizontal	320	1.94	-
2462MHz	Pass	PK	2.4628G	109.62	Inf	-Inf	3	Horizontal	320	1.94	-
2462MHz	Pass	PK	2.4916G	60.35	74.00	-13.65	3	Horizontal	320	1.94	-
2462MHz	Pass	AV	4.92394G	41.64	54.00	-12.36	3	Vertical	96	2.09	-
2462MHz	Pass	PK	4.924G	48.60	74.00	-25.40	3	Vertical	96	2.09	-
2462MHz	Pass	AV	4.92394G	35.57	54.00	-18.43	3	Horizontal	124	1.02	-
2462MHz	Pass	PK	4.92394G	46.20	74.00	-27.80	3	Horizontal	124	1.02	-
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.39G	52.89	54.00	-1.11	3	Vertical	49	1.50	-
2412MHz	Pass	AV	2.4112G	101.76	Inf	-Inf	3	Vertical	49	1.50	-
2412MHz	Pass	PK	2.39G	73.10	74.00	-0.90	3	Vertical	49	1.50	-
2412MHz	Pass	PK	2.412G	112.09	Inf	-Inf	3	Vertical	49	1.50	-
2412MHz	Pass	AV	2.39G	52.15	54.00	-1.85	3	Horizontal	319	2.50	-
2412MHz	Pass	AV	2.4126G	99.94	Inf	-Inf	3	Horizontal	319	2.50	-
2412MHz	Pass	PK	2.39G	71.98	74.00	-2.02	3	Horizontal	319	2.50	-
2412MHz	Pass	PK	2.4122G	109.28	Inf	-Inf	3	Horizontal	319	2.50	-
2412MHz	Pass	AV	4.82478G	34.44	54.00	-19.56	3	Vertical	93	1.98	-
2412MHz	Pass	PK	4.82418G	47.71	74.00	-26.29	3	Vertical	93	1.98	-
2412MHz	Pass	AV	4.82466G	32.06	54.00	-21.94	3	Horizontal	99	1.91	-
2412MHz	Pass	PK	4.81932G	45.00	74.00	-29.00	3	Horizontal	99	1.91	-
2417MHz	Pass	AV	2.3898G	49.93	54.00	-4.07	3	Vertical	50	1.50	-
2417MHz	Pass	AV	2.4162G	102.33	Inf	-Inf	3	Vertical	50	1.50	-
2417MHz	Pass	PK	2.3862G	65.85	74.00	-8.15	3	Vertical	50	1.50	-
2417MHz	Pass	PK	2.416G	111.47	Inf	-Inf	3	Vertical	50	1.50	-
2417MHz	Pass	AV	2.389G	48.94	54.00	-5.06	3	Horizontal	323	1.50	-
2417MHz	Pass	AV	2.4162G	100.23	Inf	-Inf	3	Horizontal	323	1.50	-
2417MHz	Pass	PK	2.3892G	64.91	74.00	-9.09	3	Horizontal	323	1.50	-



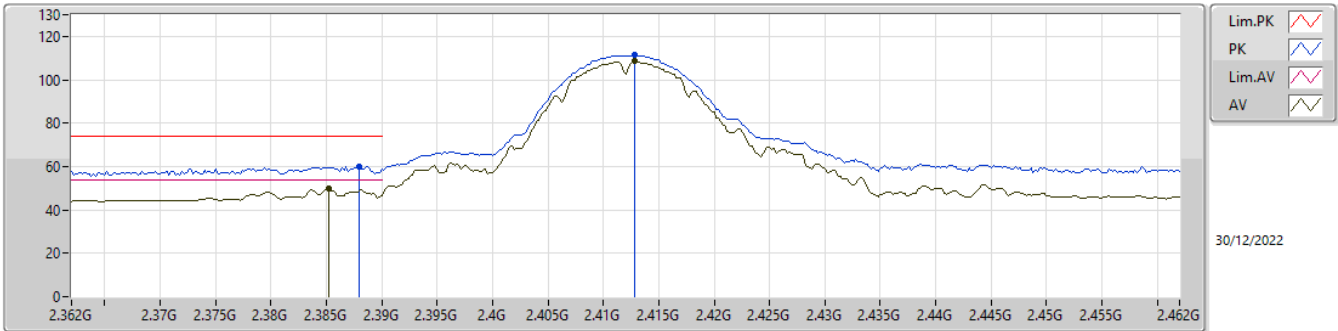
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2417MHz	Pass	PK	2.4166G	110.88	Inf	-Inf	3	Horizontal	323	1.50	-
2437MHz	Pass	AV	2.3898G	49.43	54.00	-4.57	3	Vertical	8	1.57	-
2437MHz	Pass	AV	2.4354G	105.18	Inf	-Inf	3	Vertical	8	1.57	-
2437MHz	Pass	AV	2.4835G	50.61	54.00	-3.39	3	Vertical	8	1.57	-
2437MHz	Pass	PK	2.3846G	62.75	74.00	-11.25	3	Vertical	8	1.57	-
2437MHz	Pass	PK	2.4358G	115.44	Inf	-Inf	3	Vertical	8	1.57	-
2437MHz	Pass	PK	2.4838G	67.21	74.00	-6.79	3	Vertical	8	1.57	-
2437MHz	Pass	AV	2.3898G	49.51	54.00	-4.49	3	Horizontal	319	2.49	-
2437MHz	Pass	AV	2.4354G	103.29	Inf	-Inf	3	Horizontal	319	2.49	-
2437MHz	Pass	AV	2.4835G	48.53	54.00	-5.47	3	Horizontal	319	2.49	-
2437MHz	Pass	PK	2.3854G	62.75	74.00	-11.25	3	Horizontal	319	2.49	-
2437MHz	Pass	PK	2.4342G	113.26	Inf	-Inf	3	Horizontal	319	2.49	-
2437MHz	Pass	PK	2.4835G	66.49	74.00	-7.51	3	Horizontal	319	2.49	-
2437MHz	Pass	AV	4.87472G	34.00	54.00	-20.00	3	Vertical	100	1.98	-
2437MHz	Pass	PK	4.87592G	47.02	74.00	-26.98	3	Vertical	100	1.98	-
2437MHz	Pass	AV	4.86968G	32.02	54.00	-21.98	3	Horizontal	96	1.29	-
2437MHz	Pass	PK	4.86548G	46.10	74.00	-27.90	3	Horizontal	96	1.29	-
2457MHz	Pass	AV	2.4576G	102.88	Inf	-Inf	3	Vertical	5	1.92	-
2457MHz	Pass	AV	2.4836G	51.83	54.00	-2.17	3	Vertical	5	1.92	-
2457MHz	Pass	PK	2.457G	112.23	Inf	-Inf	3	Vertical	5	1.92	-
2457MHz	Pass	PK	2.4874G	72.77	74.00	-1.23	3	Vertical	5	1.92	-
2457MHz	Pass	AV	2.4564G	100.17	Inf	-Inf	3	Horizontal	319	2.18	-
2457MHz	Pass	AV	2.4835G	49.08	54.00	-4.92	3	Horizontal	319	2.18	-
2457MHz	Pass	PK	2.4554G	109.67	Inf	-Inf	3	Horizontal	319	2.18	-
2457MHz	Pass	PK	2.4846G	69.10	74.00	-4.90	3	Horizontal	319	2.18	-
2462MHz	Pass	AV	2.4626G	101.43	Inf	-Inf	3	Vertical	5	2.34	-
2462MHz	Pass	AV	2.4835G	53.29	54.00	-0.71	3	Vertical	5	2.34	-
2462MHz	Pass	PK	2.4618G	112.07	Inf	-Inf	3	Vertical	5	2.34	-
2462MHz	Pass	PK	2.484G	72.71	74.00	-1.29	3	Vertical	5	2.34	-
2462MHz	Pass	AV	2.4614G	98.71	Inf	-Inf	3	Horizontal	320	1.94	-
2462MHz	Pass	AV	2.4835G	49.59	54.00	-4.41	3	Horizontal	320	1.94	-
2462MHz	Pass	PK	2.462G	108.32	Inf	-Inf	3	Horizontal	320	1.94	-
2462MHz	Pass	PK	2.4838G	69.01	74.00	-4.99	3	Horizontal	320	1.94	-
2462MHz	Pass	AV	4.91986G	32.22	54.00	-21.78	3	Vertical	68	1.30	-
2462MHz	Pass	PK	4.92562G	45.25	74.00	-28.75	3	Vertical	68	1.30	-
2462MHz	Pass	AV	4.91974G	31.48	54.00	-22.52	3	Horizontal	289	1.39	-
2462MHz	Pass	PK	4.93078G	44.60	74.00	-29.40	3	Horizontal	289	1.39	-
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	AV	2.39G	53.52	54.00	-0.48	3	Vertical	48	1.50	-
2412MHz	Pass	AV	2.4126G	100.87	Inf	-Inf	3	Vertical	48	1.50	-
2412MHz	Pass	PK	2.3896G	71.77	74.00	-2.23	3	Vertical	48	1.50	-
2412MHz	Pass	PK	2.4106G	112.95	Inf	-Inf	3	Vertical	48	1.50	-
2412MHz	Pass	AV	2.39G	52.07	54.00	-1.93	3	Horizontal	321	1.50	-
2412MHz	Pass	AV	2.413G	98.15	Inf	-Inf	3	Horizontal	321	1.50	-
2412MHz	Pass	PK	2.3884G	70.49	74.00	-3.51	3	Horizontal	321	1.50	-
2412MHz	Pass	PK	2.4104G	110.65	Inf	-Inf	3	Horizontal	321	1.50	-
2412MHz	Pass	AV	4.82454G	33.61	54.00	-20.39	3	Vertical	91	1.00	-
2412MHz	Pass	PK	4.82664G	46.63	74.00	-27.37	3	Vertical	91	1.00	-
2412MHz	Pass	AV	4.8198G	31.22	54.00	-22.78	3	Horizontal	99	1.50	-
2412MHz	Pass	PK	4.81848G	45.14	74.00	-28.86	3	Horizontal	99	1.50	-
2417MHz	Pass	AV	2.39G	51.78	54.00	-2.22	3	Vertical	63	1.35	-
2417MHz	Pass	AV	2.4158G	102.60	Inf	-Inf	3	Vertical	63	1.35	-
2417MHz	Pass	PK	2.3898G	68.48	74.00	-5.52	3	Vertical	63	1.35	-
2417MHz	Pass	PK	2.418G	115.49	Inf	-Inf	3	Vertical	63	1.35	-
2417MHz	Pass	AV	2.39G	49.61	54.00	-4.39	3	Horizontal	321	1.50	-
2417MHz	Pass	AV	2.4156G	99.84	Inf	-Inf	3	Horizontal	321	1.50	-
2417MHz	Pass	PK	2.386G	67.44	74.00	-6.56	3	Horizontal	321	1.50	-
2417MHz	Pass	PK	2.4156G	111.83	Inf	-Inf	3	Horizontal	321	1.50	-
2437MHz	Pass	AV	2.389G	50.47	54.00	-3.53	3	Vertical	7	1.59	-
2437MHz	Pass	AV	2.4358G	105.69	Inf	-Inf	3	Vertical	7	1.59	-
2437MHz	Pass	AV	2.4835G	52.78	54.00	-1.22	3	Vertical	7	1.59	-
2437MHz	Pass	PK	2.3898G	63.52	74.00	-10.48	3	Vertical	7	1.59	-



Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2437MHz	Pass	PK	2.4386G	116.59	Inf	-Inf	3	Vertical	7	1.59	-
2437MHz	Pass	PK	2.4854G	69.34	74.00	-4.66	3	Vertical	7	1.59	-
2437MHz	Pass	AV	2.3894G	49.93	54.00	-4.07	3	Horizontal	318	2.46	-
2437MHz	Pass	AV	2.4362G	103.51	Inf	-Inf	3	Horizontal	318	2.46	-
2437MHz	Pass	AV	2.4835G	49.20	54.00	-4.80	3	Horizontal	318	2.46	-
2437MHz	Pass	PK	2.3834G	63.07	74.00	-10.93	3	Horizontal	318	2.46	-
2437MHz	Pass	PK	2.4358G	116.06	Inf	-Inf	3	Horizontal	318	2.46	-
2437MHz	Pass	PK	2.4838G	64.56	74.00	-9.44	3	Horizontal	318	2.46	-
2437MHz	Pass	AV	4.87214G	33.17	54.00	-20.83	3	Vertical	119	1.01	-
2437MHz	Pass	PK	4.86944G	46.62	74.00	-27.38	3	Vertical	119	1.01	-
2437MHz	Pass	AV	4.87442G	31.87	54.00	-22.13	3	Horizontal	99	2.01	-
2437MHz	Pass	PK	4.8695G	44.91	74.00	-29.09	3	Horizontal	99	2.01	-
2457MHz	Pass	AV	2.456G	101.75	Inf	-Inf	3	Vertical	5	2.29	-
2457MHz	Pass	AV	2.4835G	53.13	54.00	-0.87	3	Vertical	5	2.29	-
2457MHz	Pass	PK	2.4586G	114.01	Inf	-Inf	3	Vertical	5	2.29	-
2457MHz	Pass	PK	2.4838G	73.84	74.00	-0.16	3	Vertical	5	2.29	-
2457MHz	Pass	AV	2.456G	98.73	Inf	-Inf	3	Horizontal	320	2.18	-
2457MHz	Pass	AV	2.4835G	49.81	54.00	-4.19	3	Horizontal	320	2.18	-
2457MHz	Pass	PK	2.4556G	111.16	Inf	-Inf	3	Horizontal	320	2.18	-
2457MHz	Pass	PK	2.4835G	70.89	74.00	-3.11	3	Horizontal	320	2.18	-
2462MHz	Pass	AV	2.3852G	49.81	54.00	-4.19	3	Vertical	57	1.10	-
2462MHz	Pass	AV	2.4128G	108.57	Inf	-Inf	3	Vertical	57	1.10	-
2462MHz	Pass	PK	2.388G	59.94	74.00	-14.06	3	Vertical	57	1.10	-
2462MHz	Pass	PK	2.4128G	111.43	Inf	-Inf	3	Vertical	57	1.10	-
2462MHz	Pass	AV	2.3852G	48.61	54.00	-5.39	3	Horizontal	323	1.50	-
2462MHz	Pass	AV	2.4128G	106.28	Inf	-Inf	3	Horizontal	323	1.50	-
2462MHz	Pass	PK	2.3876G	59.68	74.00	-14.32	3	Horizontal	323	1.50	-
2462MHz	Pass	PK	2.4128G	108.86	Inf	-Inf	3	Horizontal	323	1.50	-
2462MHz	Pass	AV	4.824G	45.26	54.00	-8.74	3	Vertical	91	1.00	-
2462MHz	Pass	PK	4.824G	49.93	74.00	-24.07	3	Vertical	91	1.00	-
2462MHz	Pass	AV	4.824G	41.63	54.00	-12.37	3	Horizontal	97	1.92	-
2462MHz	Pass	PK	4.82382G	48.81	74.00	-25.19	3	Horizontal	97	1.92	-

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

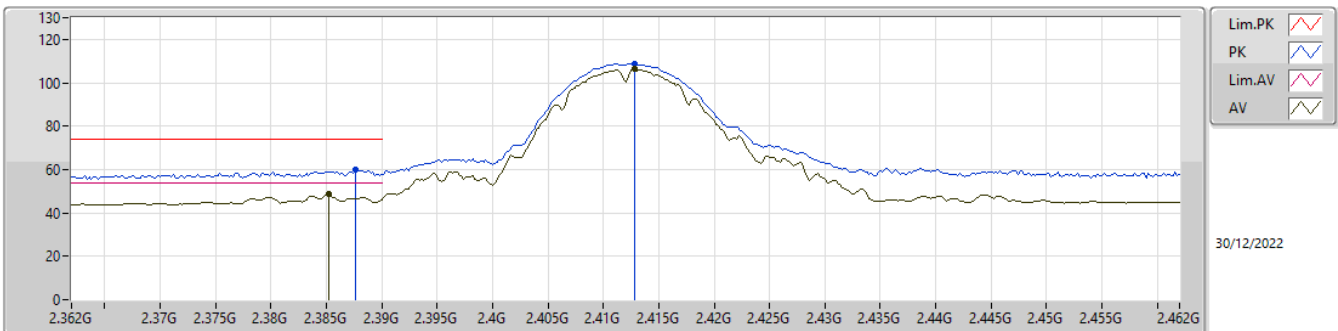
2412MHz_TX



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	2.3852G	49.81	54.00	-4.19	31.99	3	Vertical	57	1.10	17.82	27.51	4.48	-
AV	2.4128G	108.57	Inf	-Inf	32.10	3	Vertical	57	1.10	76.47	27.63	4.47	-
PK	2.388G	59.94	74.00	-14.06	32.01	3	Vertical	57	1.10	27.93	27.53	4.48	-
PK	2.4128G	111.43	Inf	-Inf	32.10	3	Vertical	57	1.10	79.33	27.63	4.47	-

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

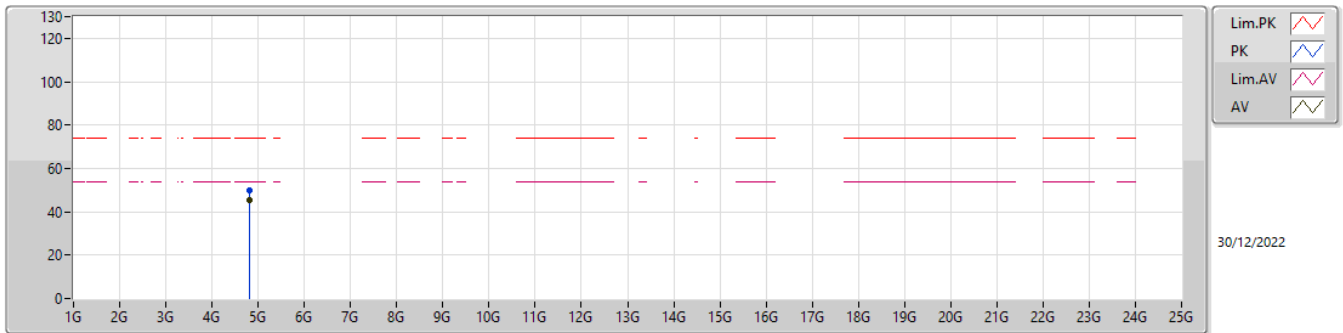
2412MHz_TX



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	2.3852G	48.61	54.00	-5.39	31.99	3	Horizontal	323	1.50	16.62	27.51	4.48	-
AV	2.4128G	106.28	Inf	-Inf	32.10	3	Horizontal	323	1.50	74.18	27.63	4.47	-
PK	2.3876G	59.68	74.00	-14.32	32.01	3	Horizontal	323	1.50	27.67	27.53	4.48	-
PK	2.4128G	108.86	Inf	-Inf	32.10	3	Horizontal	323	1.50	76.76	27.63	4.47	-

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

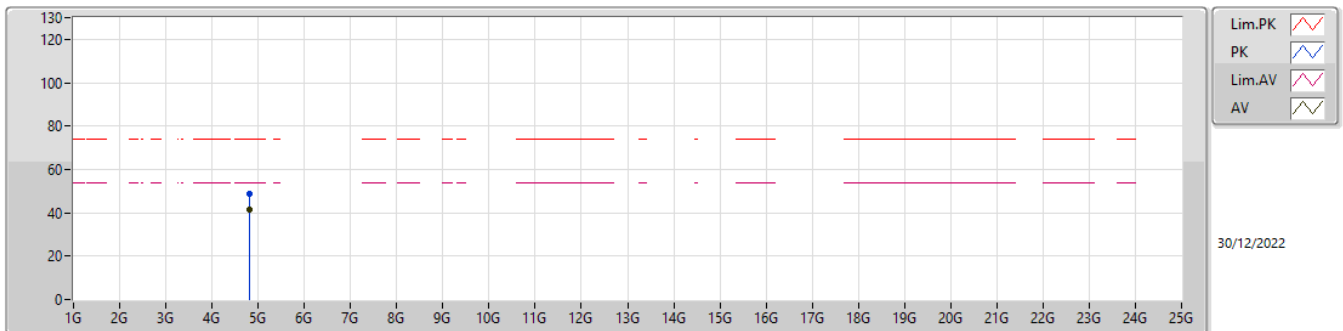
2412MHz_TX



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	4.824G	45.26	54.00	-8.74	5.05	3	Vertical	91	1.00	40.21	32.44	6.90	34.29
PK	4.824G	49.93	74.00	-24.07	5.05	3	Vertical	91	1.00	44.88	32.44	6.90	34.29

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

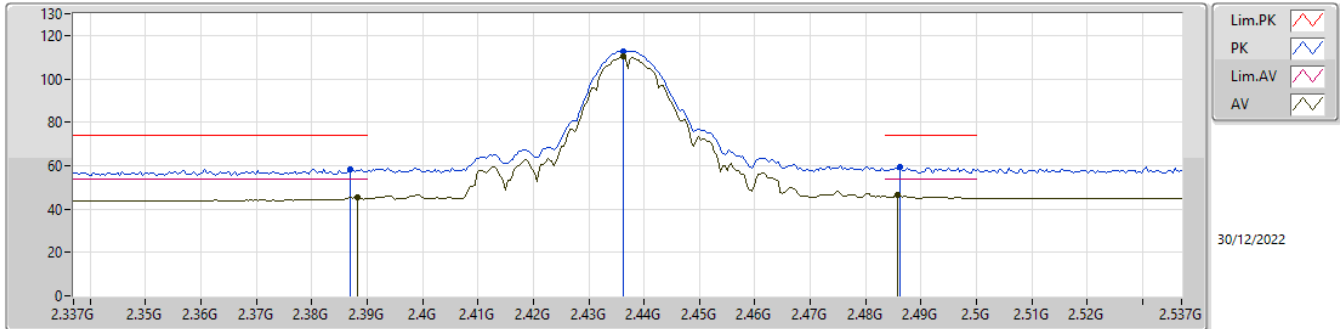
2412MHz_TX



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	4.824G	41.63	54.00	-12.37	5.05	3	Horizontal	97	1.92	36.58	32.44	6.90	34.29
PK	4.82382G	48.81	74.00	-25.19	5.05	3	Horizontal	97	1.92	43.76	32.44	6.90	34.29

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

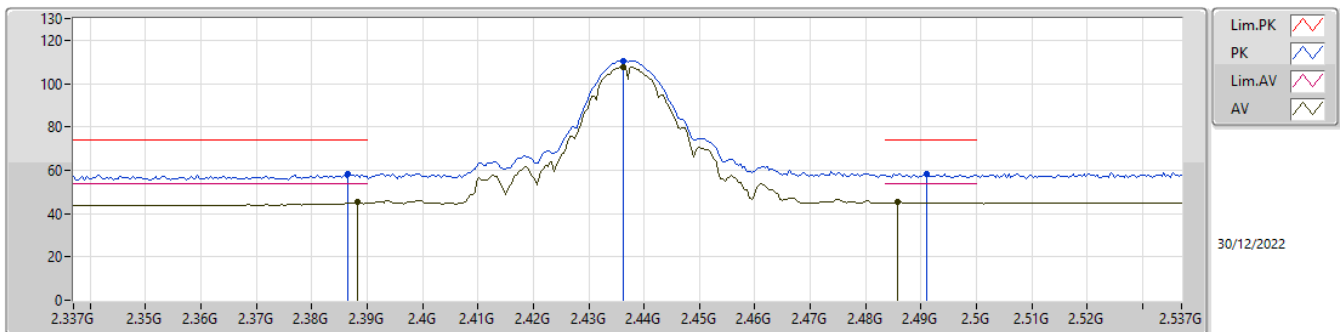
2437MHz_TX



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)
AV	2.3882G	45.59	54.00	-8.41	32.01	3	Vertical	6	1.58	13.58	27.53	4.48	-
AV	2.4362G	110.16	Inf	-Inf	32.15	3	Vertical	6	1.58	78.01	27.67	4.48	-
AV	2.4858G	46.62	54.00	-7.38	32.39	3	Vertical	6	1.58	14.23	27.91	4.48	-
PK	2.387G	58.53	74.00	-15.47	32.00	3	Vertical	6	1.58	26.53	27.52	4.48	-
PK	2.4362G	112.90	Inf	-Inf	32.15	3	Vertical	6	1.58	80.75	27.67	4.48	-
PK	2.4862G	59.25	74.00	-14.75	32.40	3	Vertical	6	1.58	26.85	27.92	4.48	-

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

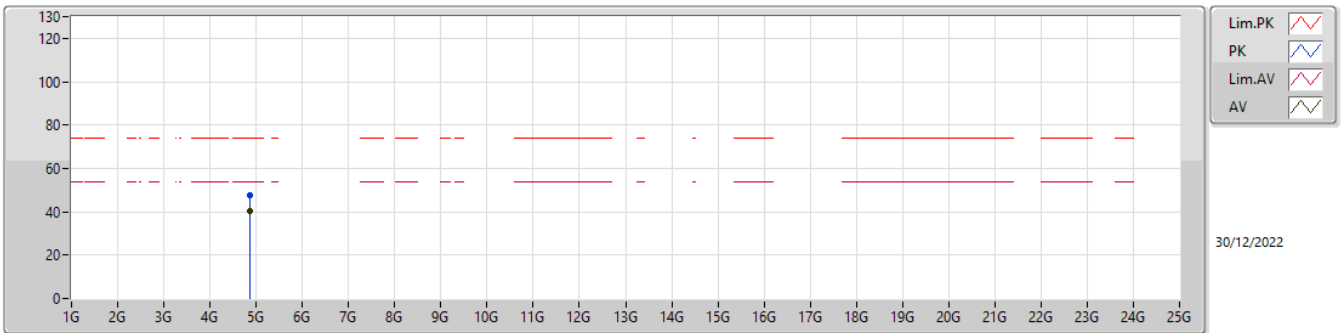
2437MHz_TX



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)
AV	2.3882G	45.40	54.00	-8.60	32.01	3	Horizontal	320	2.46	13.39	27.53	4.48	-
AV	2.4362G	107.64	Inf	-Inf	32.15	3	Horizontal	320	2.46	75.49	27.67	4.48	-
AV	2.4858G	45.23	54.00	-8.77	32.39	3	Horizontal	320	2.46	12.84	27.91	4.48	-
PK	2.3866G	58.35	74.00	-15.65	32.00	3	Horizontal	320	2.46	26.35	27.52	4.48	-
PK	2.4362G	110.60	Inf	-Inf	32.15	3	Horizontal	320	2.46	78.45	27.67	4.48	-
PK	2.491G	58.54	74.00	-15.46	32.43	3	Horizontal	320	2.46	26.11	27.95	4.48	-

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

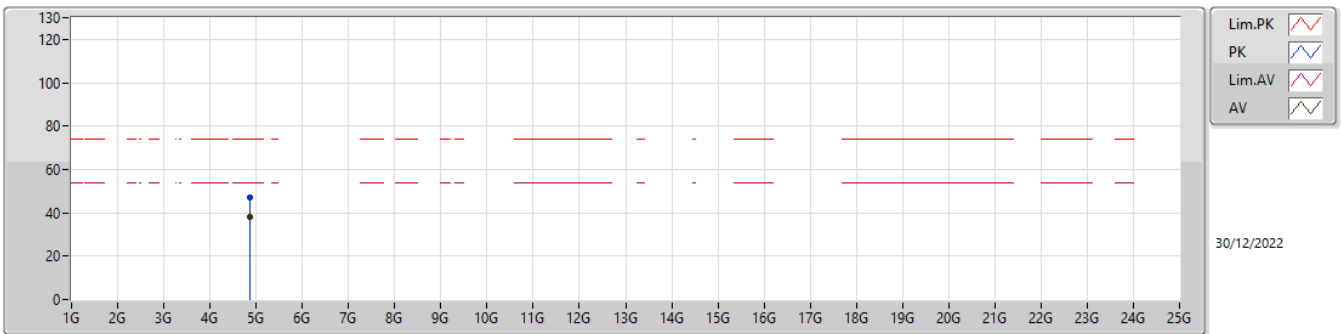
2437MHz_TX



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)
AV	4.874G	40.60	54.00	-13.40	5.31	3	Vertical	308	2.25	35.29	32.70	6.90	34.29
PK	4.87406G	47.83	74.00	-26.17	5.31	3	Vertical	308	2.25	42.52	32.70	6.90	34.29

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

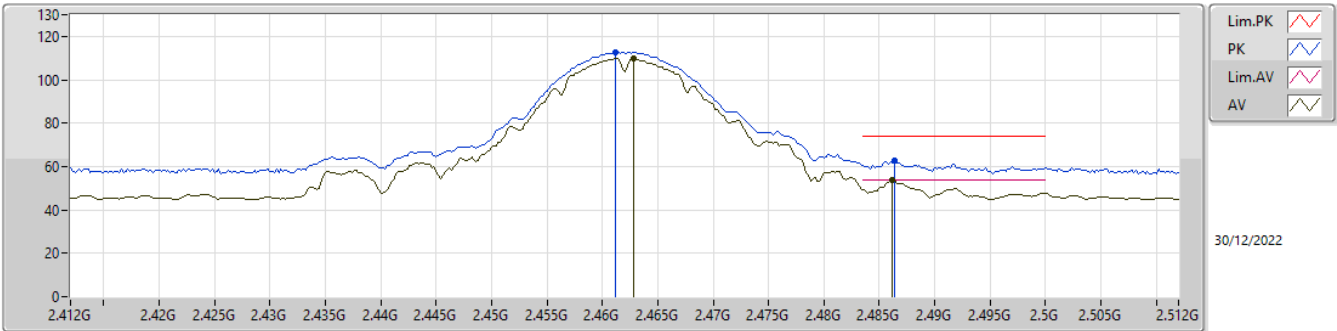
2437MHz_TX



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)
AV	4.87406G	37.94	54.00	-16.06	5.31	3	Horizontal	112	2.15	32.63	32.70	6.90	34.29
PK	4.87394G	47.30	74.00	-26.70	5.31	3	Horizontal	112	2.15	41.99	32.70	6.90	34.29

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

2462MHz_TX

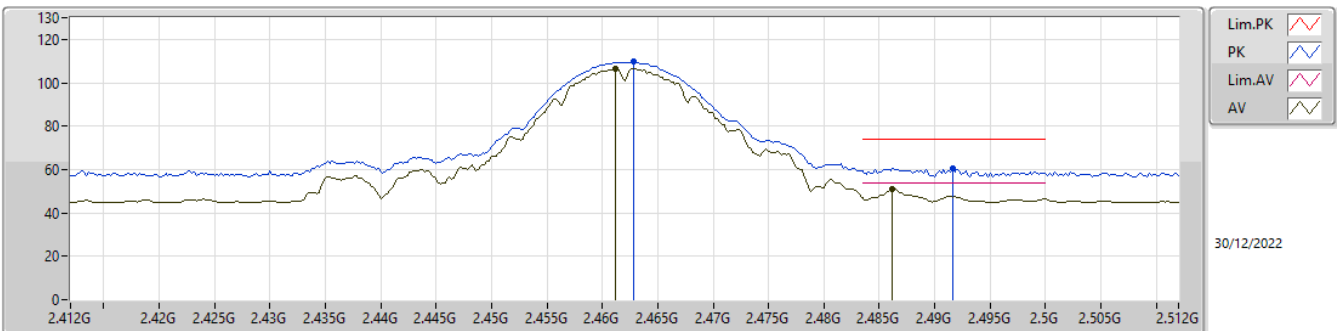


30/12/2022

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	2.4628G	109.70	Inf	-Inf	32.26	3	Vertical	6	2.41	77.44	27.78	4.48	-
AV	2.4862G	53.73	54.00	-0.27	32.40	3	Vertical	6	2.41	21.33	27.92	4.48	-
PK	2.4612G	112.69	Inf	-Inf	32.25	3	Vertical	6	2.41	80.44	27.77	4.48	-
PK	2.4864G	62.64	74.00	-11.36	32.40	3	Vertical	6	2.41	30.24	27.92	4.48	-

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

2462MHz_TX

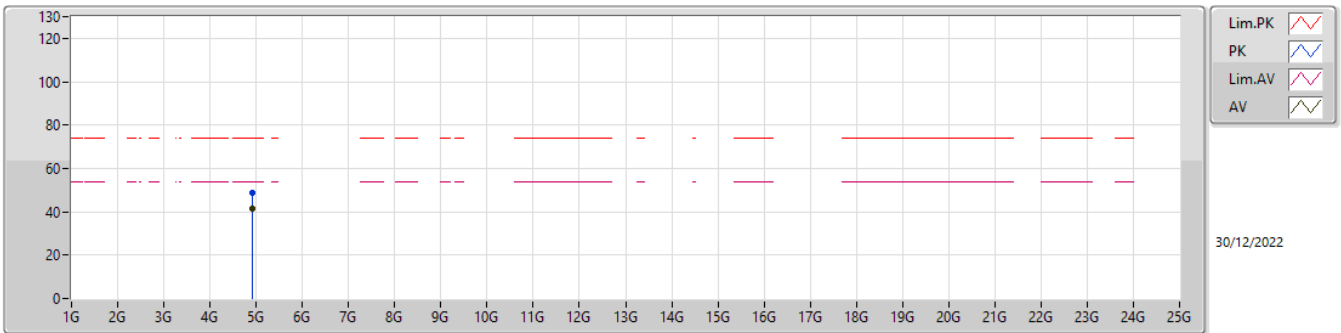


30/12/2022

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	2.4612G	106.64	Inf	-Inf	32.25	3	Horizontal	320	1.94	74.39	27.77	4.48	-
AV	2.4862G	50.97	54.00	-3.03	32.40	3	Horizontal	320	1.94	18.57	27.92	4.48	-
PK	2.4628G	109.62	Inf	-Inf	32.26	3	Horizontal	320	1.94	77.36	27.78	4.48	-
PK	2.4916G	60.35	74.00	-13.65	32.43	3	Horizontal	320	1.94	27.92	27.95	4.48	-

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

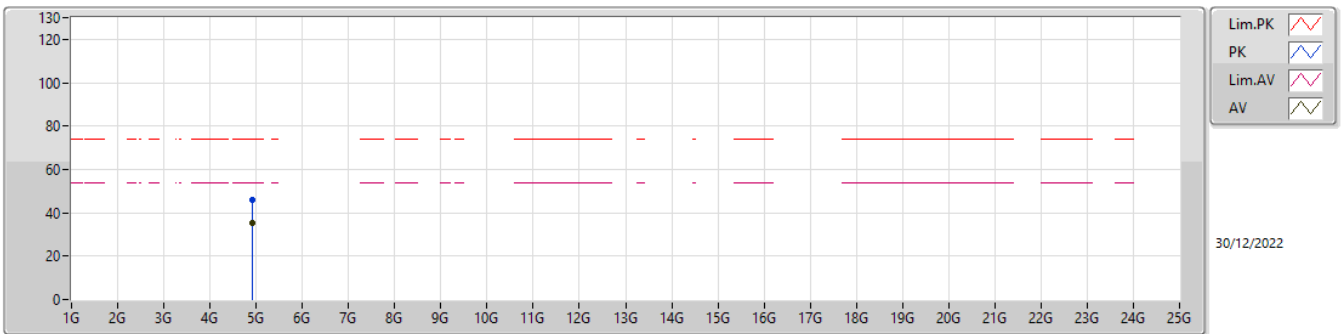
2462MHz_TX



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	4.92394G	41.64	54.00	-12.36	5.57	3	Vertical	96	2.09	36.07	32.94	6.91	34.28
PK	4.924G	48.60	74.00	-25.40	5.57	3	Vertical	96	2.09	43.03	32.94	6.91	34.28

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

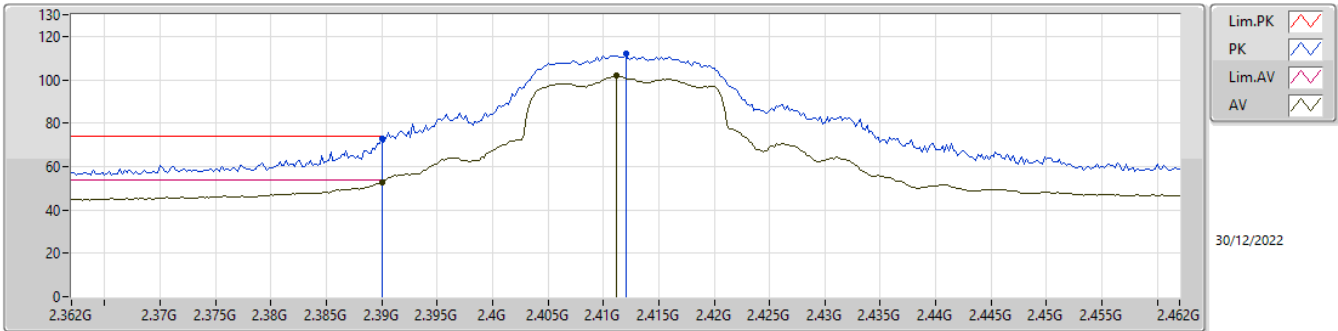
2462MHz_TX



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	4.92394G	35.57	54.00	-18.43	5.57	3	Horizontal	124	1.02	30.00	32.94	6.91	34.28
PK	4.92394G	46.20	74.00	-27.80	5.57	3	Horizontal	124	1.02	40.63	32.94	6.91	34.28

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

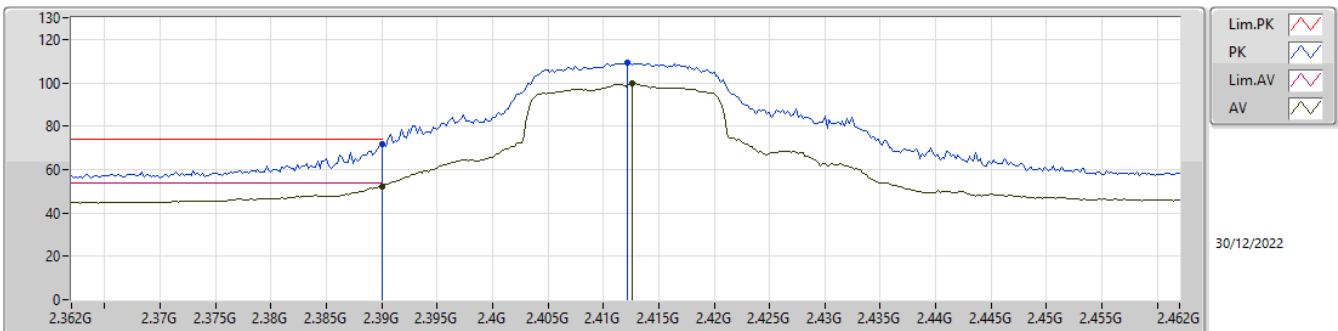
2412MHz_TX



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	52.89	54.00	-1.11	32.02	3	Vertical	49	1.50	20.87	27.54	4.48	-
AV	2.4112G	101.76	Inf	-Inf	32.09	3	Vertical	49	1.50	69.67	27.62	4.47	-
PK	2.39G	73.10	74.00	-0.90	32.02	3	Vertical	49	1.50	41.08	27.54	4.48	-
PK	2.412G	112.09	Inf	-Inf	32.09	3	Vertical	49	1.50	80.00	27.62	4.47	-

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

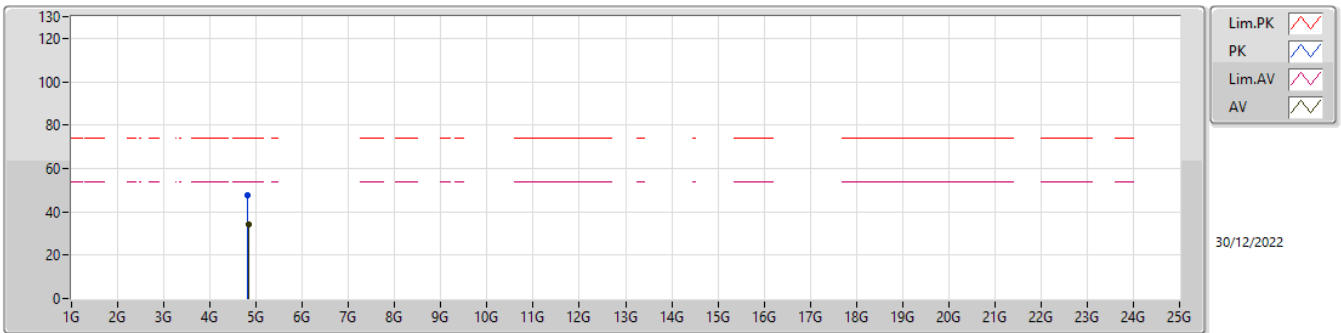
2412MHz_TX



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	52.15	54.00	-1.85	32.02	3	Horizontal	319	2.50	20.13	27.54	4.48	-
AV	2.4126G	99.94	Inf	-Inf	32.10	3	Horizontal	319	2.50	67.84	27.63	4.47	-
PK	2.39G	71.98	74.00	-2.02	32.02	3	Horizontal	319	2.50	39.96	27.54	4.48	-
PK	2.4122G	109.28	Inf	-Inf	32.09	3	Horizontal	319	2.50	77.19	27.62	4.47	-

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

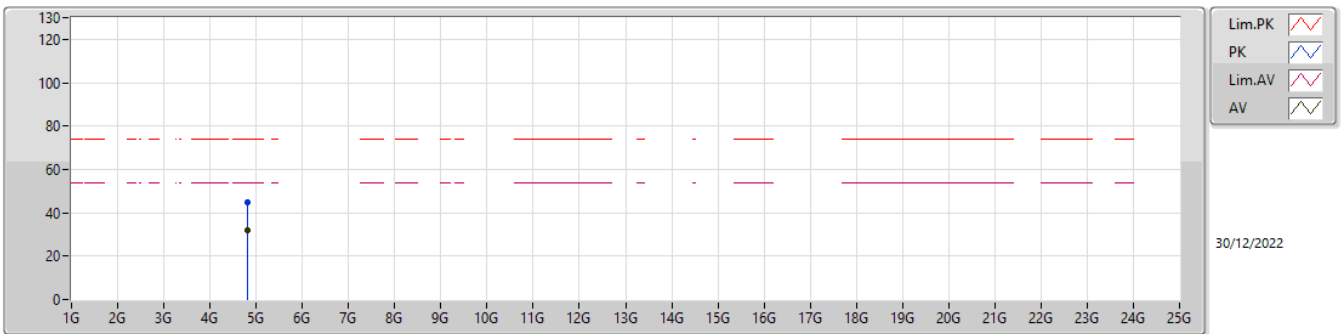
2412MHz_TX



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	4.82478G	34.44	54.00	-19.56	5.06	3	Vertical	93	1.98	29.38	32.45	6.90	34.29
PK	4.82418G	47.71	74.00	-26.29	5.06	3	Vertical	93	1.98	42.65	32.45	6.90	34.29

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

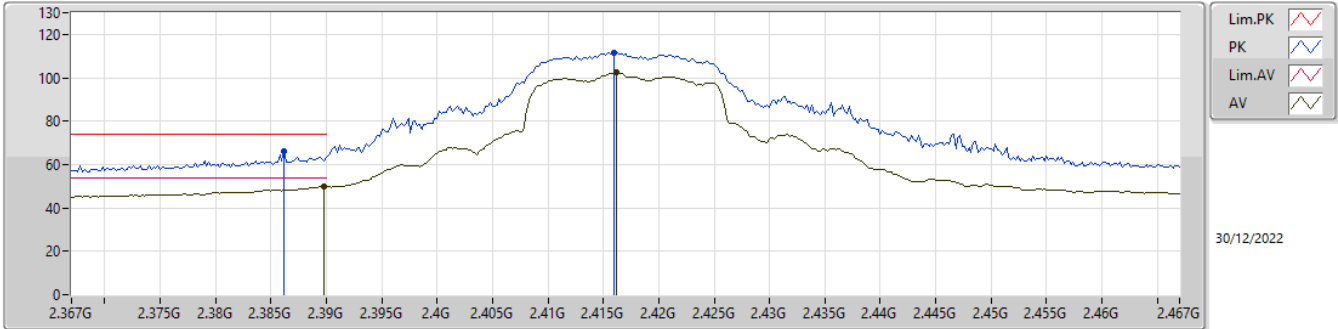
2412MHz_TX



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	4.82466G	32.06	54.00	-21.94	5.06	3	Horizontal	99	1.91	27.00	32.45	6.90	34.29
PK	4.81932G	45.00	74.00	-29.00	5.03	3	Horizontal	99	1.91	39.97	32.42	6.90	34.29

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

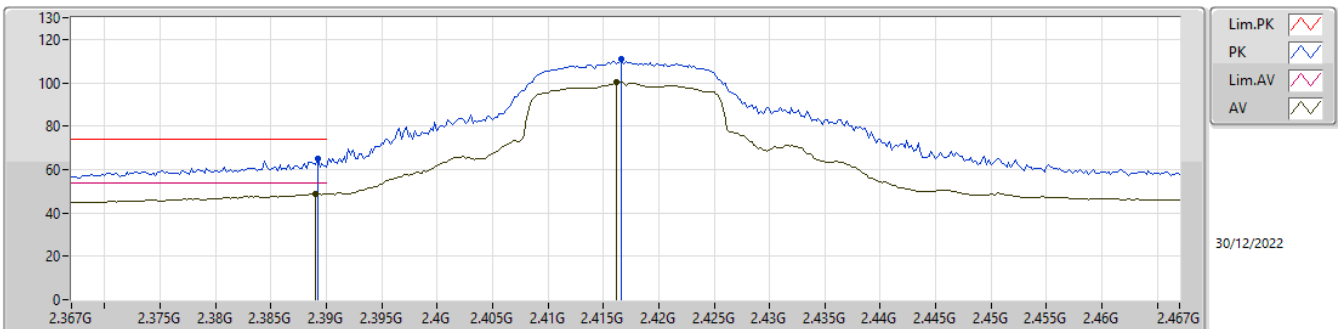
2417MHz_TX



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	2.3898G	49.93	54.00	-4.07	32.02	3	Vertical	50	1.50	17.91	27.54	4.48	-
AV	2.4162G	102.33	Inf	-Inf	32.10	3	Vertical	50	1.50	70.23	27.63	4.47	-
PK	2.3862G	65.85	74.00	-8.15	32.00	3	Vertical	50	1.50	33.85	27.52	4.48	-
PK	2.416G	111.47	Inf	-Inf	32.10	3	Vertical	50	1.50	79.37	27.63	4.47	-

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

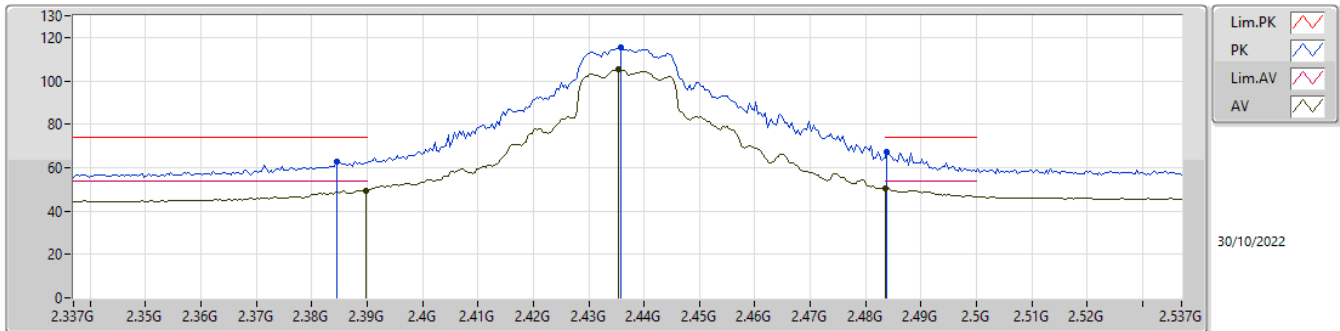
2417MHz_TX



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	2.389G	48.94	54.00	-5.06	32.01	3	Horizontal	323	1.50	16.93	27.53	4.48	-
AV	2.4162G	100.23	Inf	-Inf	32.10	3	Horizontal	323	1.50	68.13	27.63	4.47	-
PK	2.3892G	64.91	74.00	-9.09	32.02	3	Horizontal	323	1.50	32.89	27.54	4.48	-
PK	2.4166G	110.88	Inf	-Inf	32.10	3	Horizontal	323	1.50	78.78	27.63	4.47	-

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

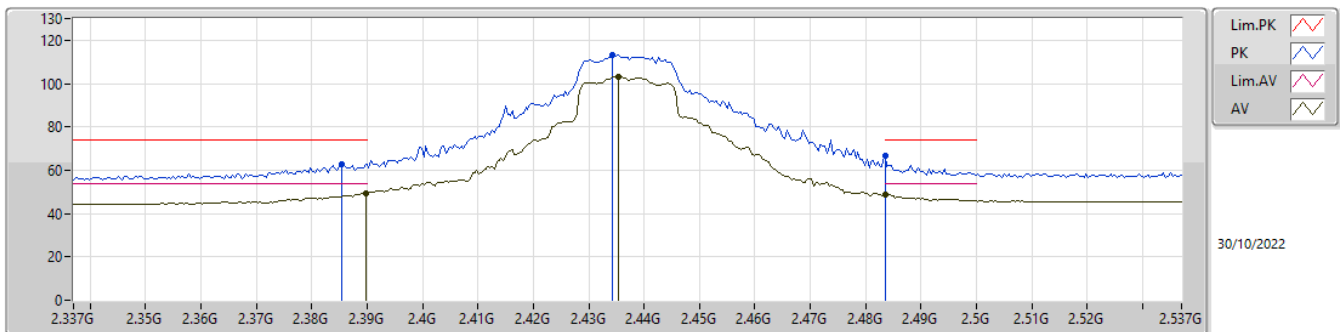
2437MHz_TX



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)
AV	2.3898G	49.43	54.00	-4.57	32.02	3	Vertical	8	1.57	17.41	27.54	4.48	-
AV	2.4354G	105.18	Inf	-Inf	32.15	3	Vertical	8	1.57	73.03	27.67	4.48	-
AV	2.4835G	50.61	54.00	-3.39	32.38	3	Vertical	8	1.57	18.23	27.90	4.48	-
PK	2.3846G	62.75	74.00	-11.25	31.99	3	Vertical	8	1.57	30.76	27.51	4.48	-
PK	2.4358G	115.44	Inf	-Inf	32.15	3	Vertical	8	1.57	83.29	27.67	4.48	-
PK	2.4838G	67.21	74.00	-6.79	32.38	3	Vertical	8	1.57	34.83	27.90	4.48	-

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

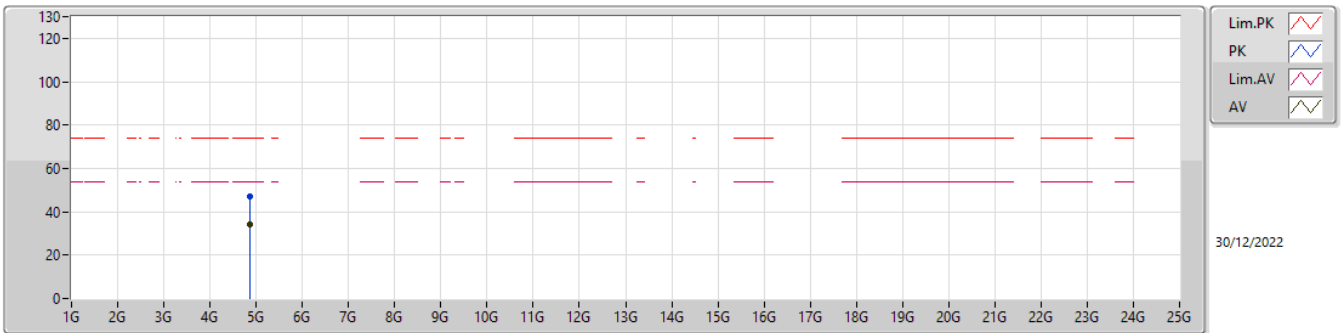
2437MHz_TX



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)
AV	2.3898G	49.51	54.00	-4.49	32.02	3	Horizontal	319	2.49	17.49	27.54	4.48	-
AV	2.4354G	103.29	Inf	-Inf	32.15	3	Horizontal	319	2.49	71.14	27.67	4.48	-
AV	2.4835G	48.53	54.00	-5.47	32.38	3	Horizontal	319	2.49	16.15	27.90	4.48	-
PK	2.3854G	62.75	74.00	-11.25	31.99	3	Horizontal	319	2.49	30.76	27.51	4.48	-
PK	2.4342G	113.26	Inf	-Inf	32.15	3	Horizontal	319	2.49	81.11	27.67	4.48	-
PK	2.4835G	66.49	74.00	-7.51	32.38	3	Horizontal	319	2.49	34.11	27.90	4.48	-

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

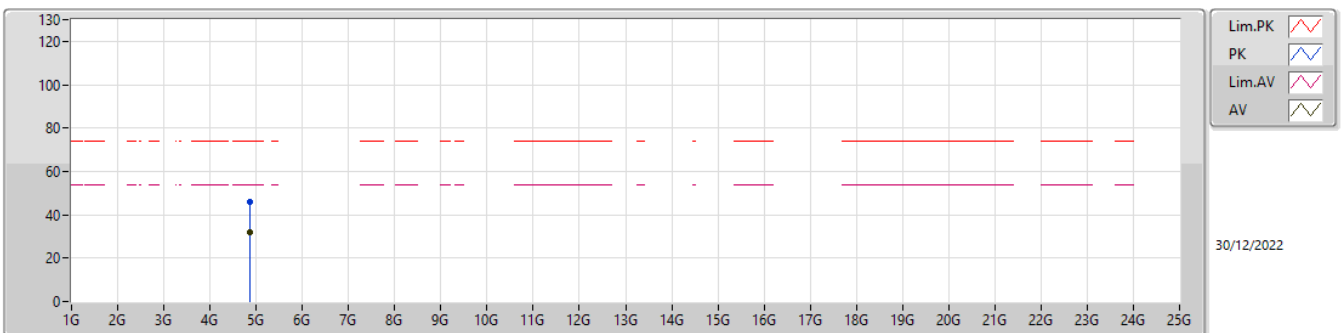
2437MHz_TX



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)
AV	4.87472G	34.00	54.00	-20.00	5.31	3	Vertical	100	1.98	28.69	32.70	6.90	34.29
PK	4.87592G	47.02	74.00	-26.98	5.32	3	Vertical	100	1.98	41.70	32.70	6.90	34.28

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

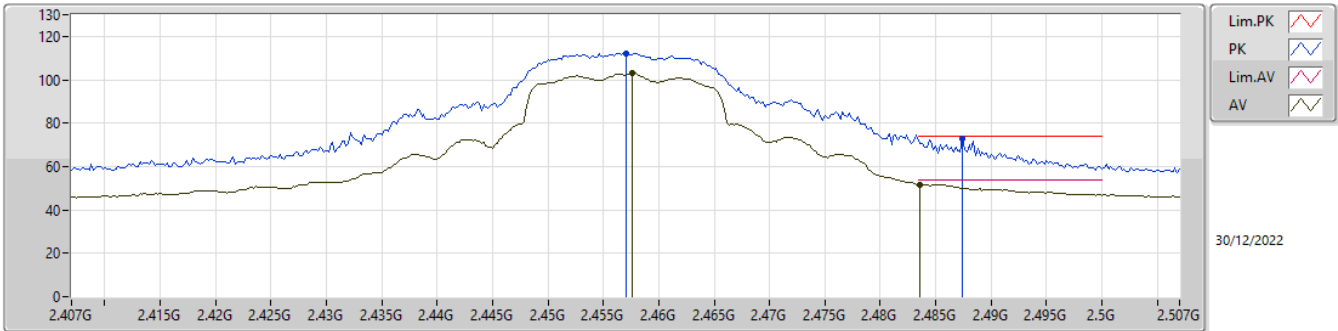
2437MHz_TX



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)
AV	4.86968G	32.02	54.00	-21.98	5.29	3	Horizontal	96	1.29	26.73	32.68	6.90	34.29
PK	4.86548G	46.10	74.00	-27.90	5.27	3	Horizontal	96	1.29	40.83	32.66	6.90	34.29

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

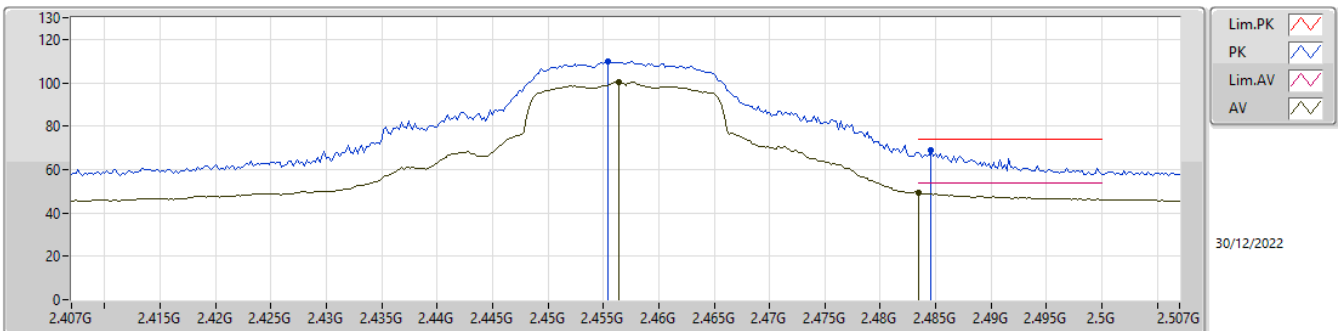
2457MHz_TX



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	2.4576G	102.88	Inf	-Inf	32.23	3	Vertical	5	1.92	70.65	27.75	4.48	-
AV	2.4836G	51.83	54.00	-2.17	32.38	3	Vertical	5	1.92	19.45	27.90	4.48	-
PK	2.457G	112.23	Inf	-Inf	32.22	3	Vertical	5	1.92	80.01	27.74	4.48	-
PK	2.4874G	72.77	74.00	-1.23	32.40	3	Vertical	5	1.92	40.37	27.92	4.48	-

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

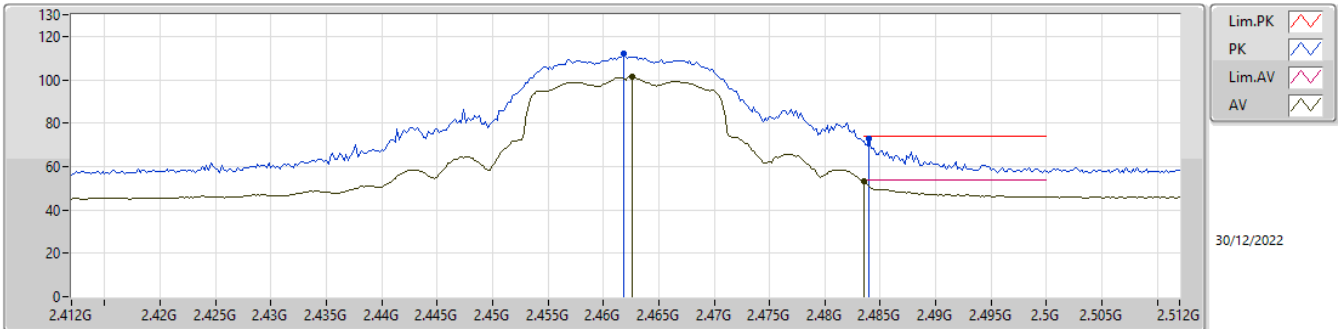
2457MHz_TX



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	2.4564G	100.17	Inf	-Inf	32.22	3	Horizontal	319	2.18	67.95	27.74	4.48	-
AV	2.4835G	49.08	54.00	-4.92	32.38	3	Horizontal	319	2.18	16.70	27.90	4.48	-
PK	2.4554G	109.67	Inf	-Inf	32.21	3	Horizontal	319	2.18	77.46	27.73	4.48	-
PK	2.4846G	69.10	74.00	-4.90	32.39	3	Horizontal	319	2.18	36.71	27.91	4.48	-

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

2462MHz_TX

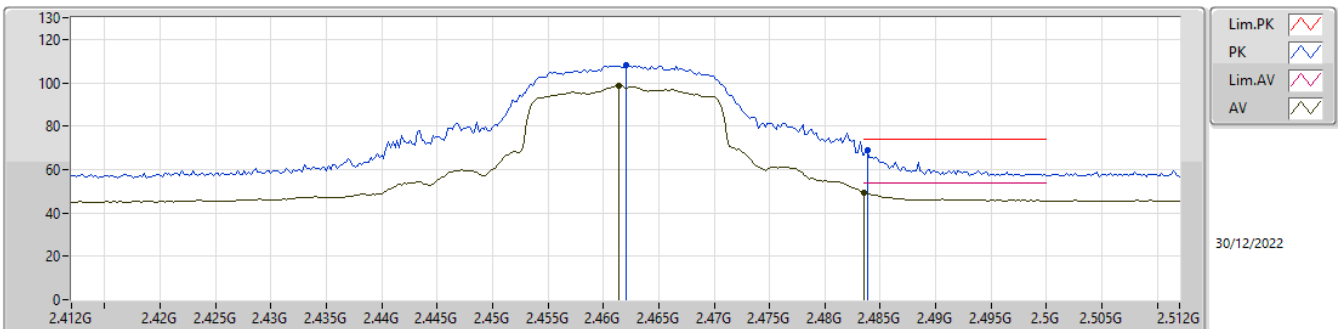


30/12/2022

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	2.4626G	101.43	Inf	-Inf	32.26	3	Vertical	5	2.34	69.17	27.78	4.48	-
AV	2.4835G	53.29	54.00	-0.71	32.38	3	Vertical	5	2.34	20.91	27.90	4.48	-
PK	2.4618G	112.07	Inf	-Inf	32.25	3	Vertical	5	2.34	79.82	27.77	4.48	-
PK	2.484G	72.71	74.00	-1.29	32.38	3	Vertical	5	2.34	40.33	27.90	4.48	-

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

2462MHz_TX

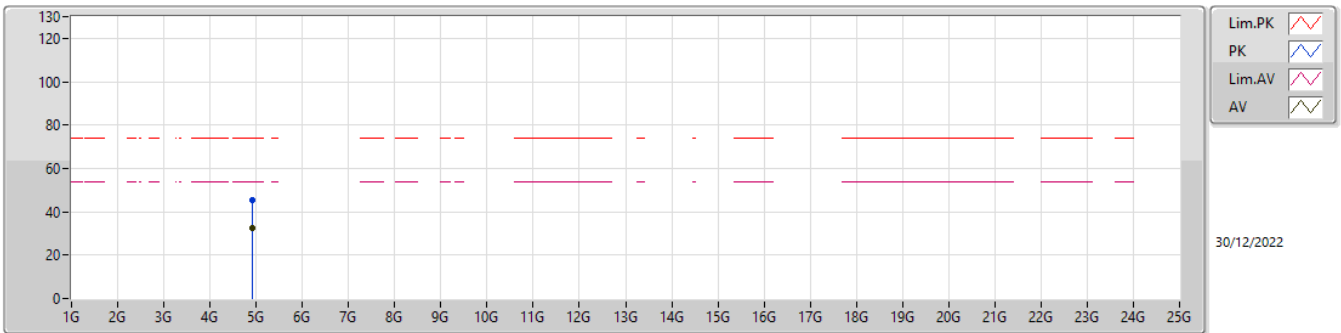


30/12/2022

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	2.4614G	98.71	Inf	-Inf	32.25	3	Horizontal	320	1.94	66.46	27.77	4.48	-
AV	2.4835G	49.59	54.00	-4.41	32.38	3	Horizontal	320	1.94	17.21	27.90	4.48	-
PK	2.462G	108.32	Inf	-Inf	32.25	3	Horizontal	320	1.94	76.07	27.77	4.48	-
PK	2.4838G	69.01	74.00	-4.99	32.38	3	Horizontal	320	1.94	36.63	27.90	4.48	-

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

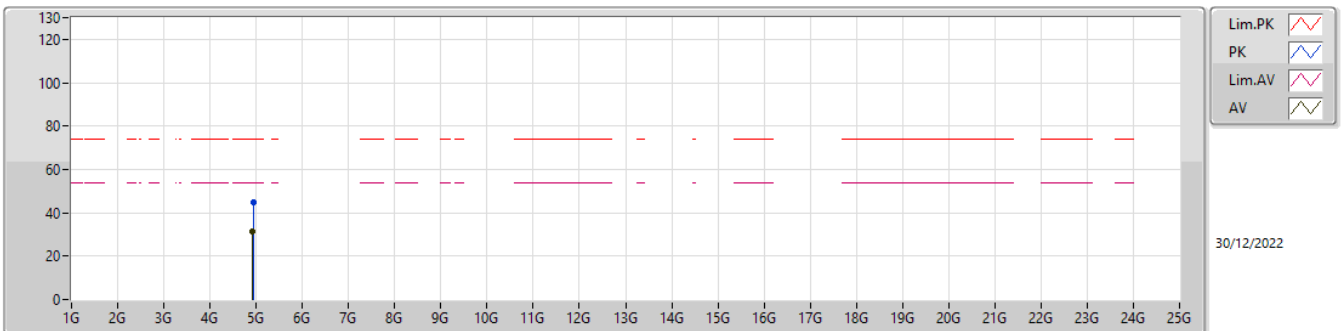
2462MHz_TX



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	4.91986G	32.22	54.00	-21.78	5.55	3	Vertical	68	1.30	26.67	32.92	6.91	34.28
PK	4.92562G	45.25	74.00	-28.75	5.58	3	Vertical	68	1.30	39.67	32.95	6.91	34.28

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

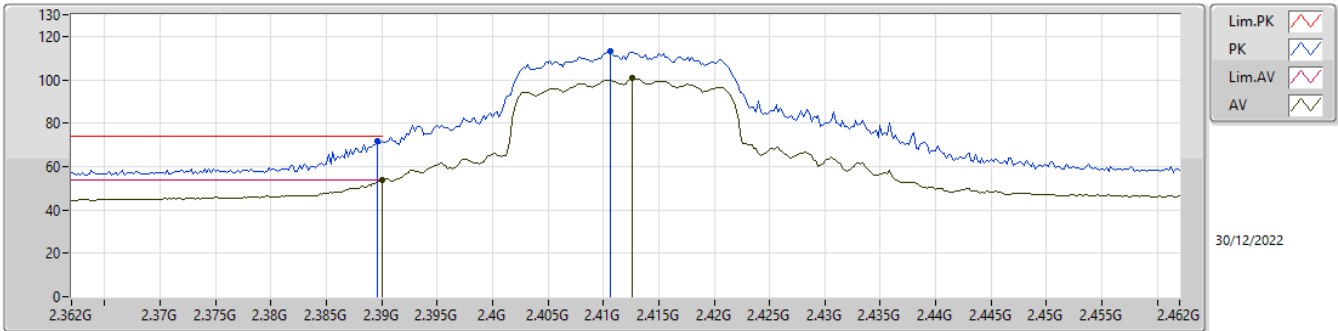
2462MHz_TX



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	4.91974G	31.48	54.00	-22.52	5.55	3	Horizontal	289	1.39	25.93	32.92	6.91	34.28
PK	4.93078G	44.60	74.00	-29.40	5.61	3	Horizontal	289	1.39	38.99	32.98	6.91	34.28

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

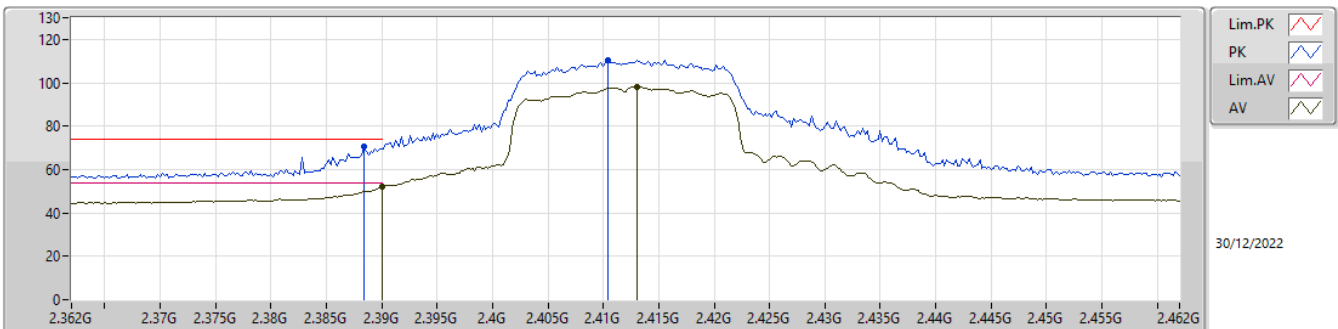
2412MHz_TX



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	53.52	54.00	-0.48	32.02	3	Vertical	48	1.50	21.50	27.54	4.48	-
AV	2.4126G	100.87	Inf	-Inf	32.10	3	Vertical	48	1.50	68.77	27.63	4.47	-
PK	2.3896G	71.77	74.00	-2.23	32.02	3	Vertical	48	1.50	39.75	27.54	4.48	-
PK	2.4106G	112.95	Inf	-Inf	32.09	3	Vertical	48	1.50	80.86	27.62	4.47	-

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

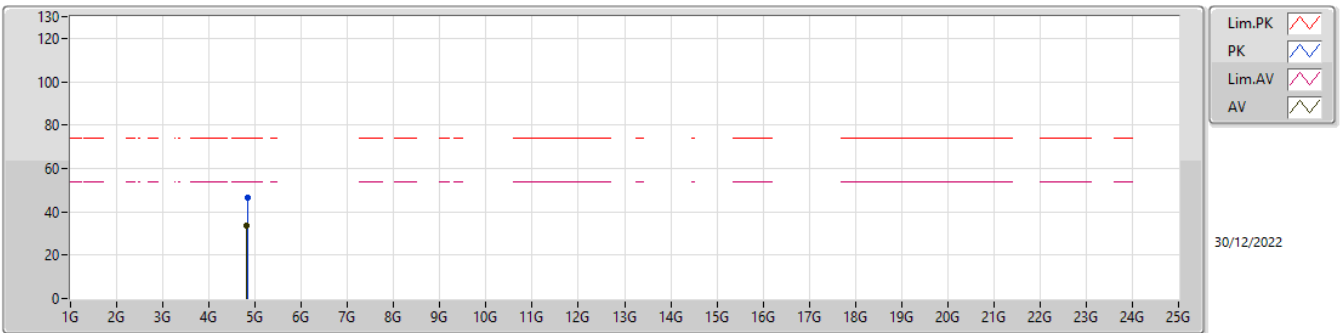
2412MHz_TX



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	52.07	54.00	-1.93	32.02	3	Horizontal	321	1.50	20.05	27.54	4.48	-
AV	2.413G	98.15	Inf	-Inf	32.10	3	Horizontal	321	1.50	66.05	27.63	4.47	-
PK	2.3884G	70.49	74.00	-3.51	32.01	3	Horizontal	321	1.50	38.48	27.53	4.48	-
PK	2.4104G	110.65	Inf	-Inf	32.09	3	Horizontal	321	1.50	78.56	27.62	4.47	-

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

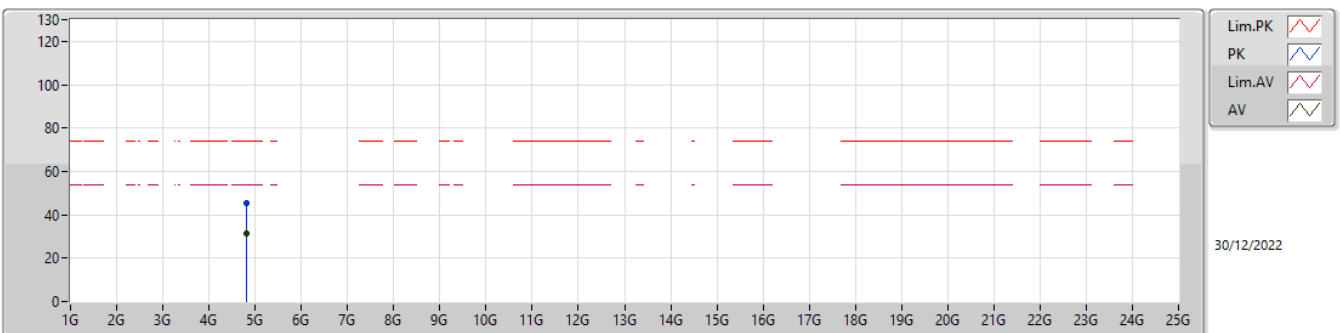
2412MHz_TX



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	4.82454G	33.61	54.00	-20.39	5.06	3	Vertical	91	1.00	28.55	32.45	6.90	34.29
PK	4.82664G	46.63	74.00	-27.37	5.07	3	Vertical	91	1.00	41.56	32.46	6.90	34.29

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

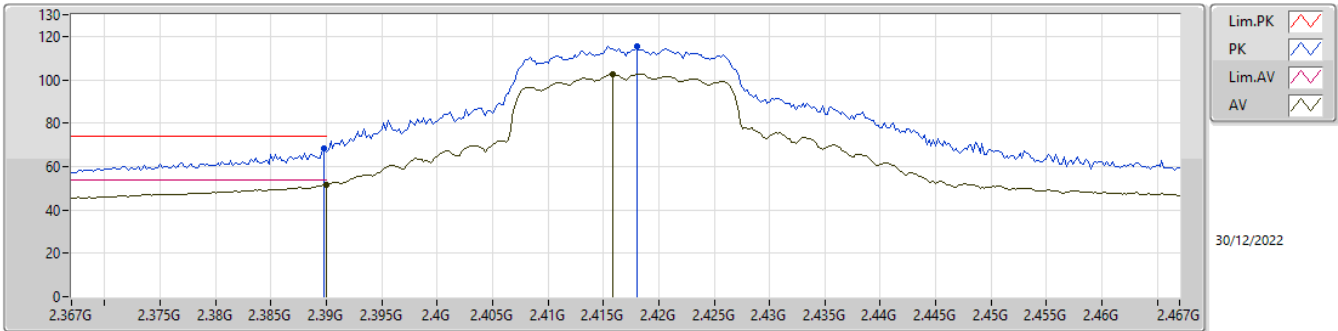
2412MHz_TX



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	4.8198G	31.22	54.00	-22.78	5.03	3	Horizontal	99	1.50	26.19	32.42	6.90	34.29
PK	4.81848G	45.14	74.00	-28.86	5.02	3	Horizontal	99	1.50	40.12	32.41	6.90	34.29

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

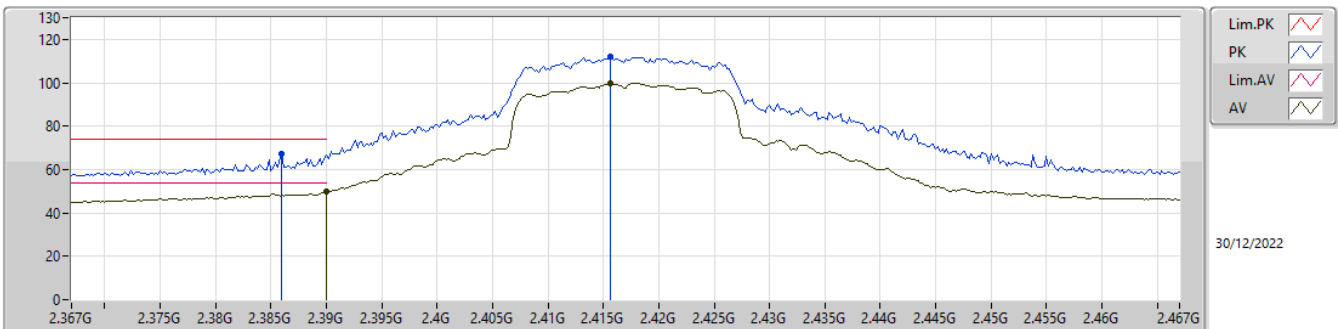
2417MHz_TX



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	51.78	54.00	-2.22	32.02	3	Vertical	63	1.35	19.76	27.54	4.48	-
AV	2.4158G	102.60	Inf	-Inf	32.10	3	Vertical	63	1.35	70.50	27.63	4.47	-
PK	2.3898G	68.48	74.00	-5.52	32.02	3	Vertical	63	1.35	36.46	27.54	4.48	-
PK	2.418G	115.49	Inf	-Inf	32.11	3	Vertical	63	1.35	83.38	27.64	4.47	-

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

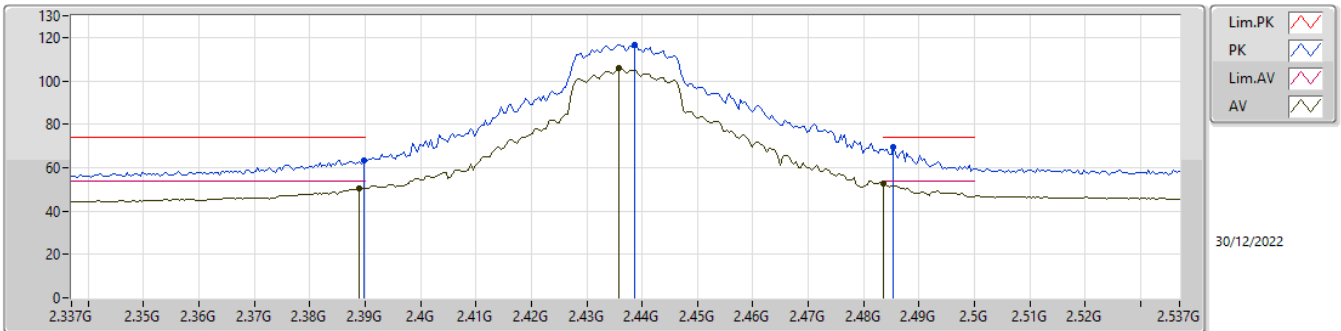
2417MHz_TX



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	49.61	54.00	-4.39	32.02	3	Horizontal	321	1.50	17.59	27.54	4.48	-
AV	2.4156G	99.84	Inf	-Inf	32.10	3	Horizontal	321	1.50	67.74	27.63	4.47	-
PK	2.386G	67.44	74.00	-6.56	32.00	3	Horizontal	321	1.50	35.44	27.52	4.48	-
PK	2.4156G	111.83	Inf	-Inf	32.10	3	Horizontal	321	1.50	79.73	27.63	4.47	-

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

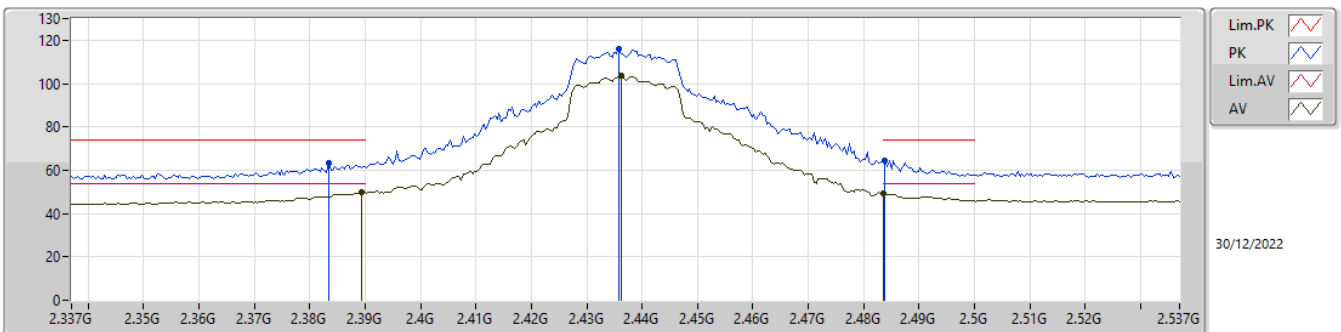
2437MHz_TX



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)
AV	2.389G	50.47	54.00	-3.53	32.01	3	Vertical	7	1.59	18.46	27.53	4.48	-
AV	2.4358G	105.69	Inf	-Inf	32.15	3	Vertical	7	1.59	73.54	27.67	4.48	-
AV	2.4835G	52.78	54.00	-1.22	32.38	3	Vertical	7	1.59	20.40	27.90	4.48	-
PK	2.3898G	63.52	74.00	-10.48	32.02	3	Vertical	7	1.59	31.50	27.54	4.48	-
PK	2.4386G	116.59	Inf	-Inf	32.16	3	Vertical	7	1.59	84.43	27.68	4.48	-
PK	2.4854G	69.34	74.00	-4.66	32.39	3	Vertical	7	1.59	36.95	27.91	4.48	-

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

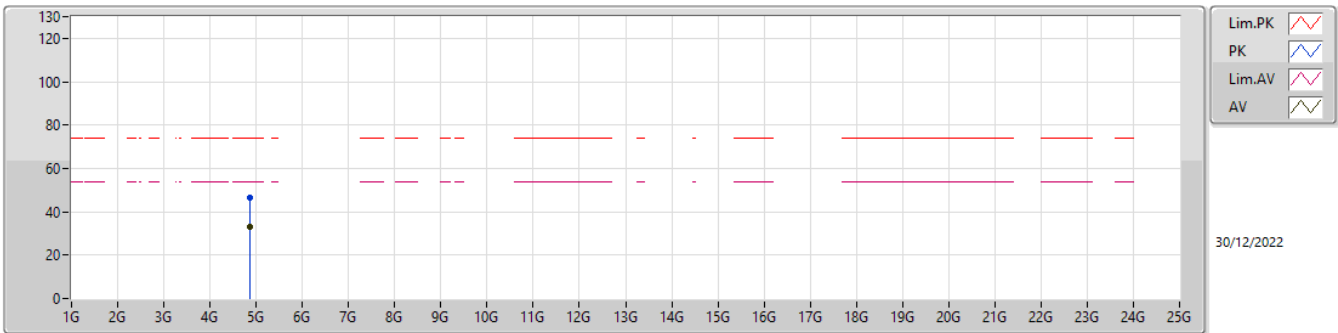
2437MHz_TX



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)
AV	2.3894G	49.93	54.00	-4.07	32.02	3	Horizontal	318	2.46	17.91	27.54	4.48	-
AV	2.4362G	103.51	Inf	-Inf	32.15	3	Horizontal	318	2.46	71.36	27.67	4.48	-
AV	2.4835G	49.20	54.00	-4.80	32.38	3	Horizontal	318	2.46	16.82	27.90	4.48	-
PK	2.3834G	63.07	74.00	-10.93	31.98	3	Horizontal	318	2.46	31.09	27.50	4.48	-
PK	2.4358G	116.06	Inf	-Inf	32.15	3	Horizontal	318	2.46	83.91	27.67	4.48	-
PK	2.4838G	64.56	74.00	-9.44	32.38	3	Horizontal	318	2.46	32.18	27.90	4.48	-

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

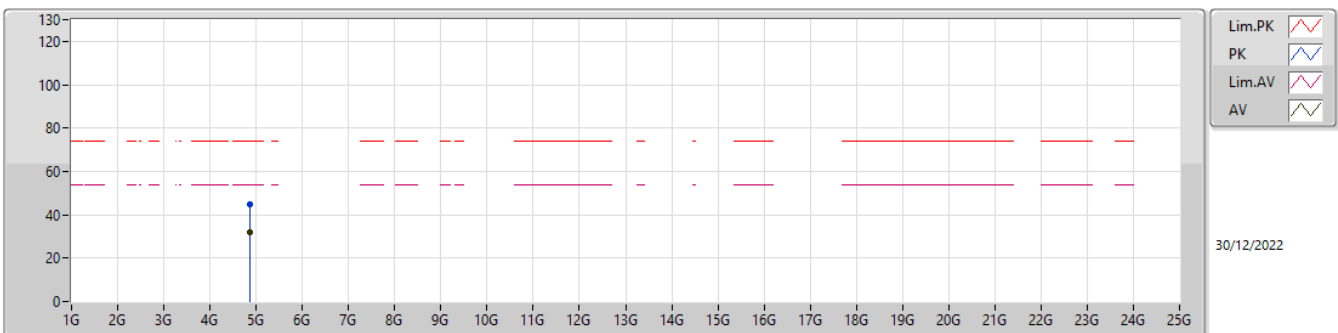
2437MHz_TX



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)
AV	4.87214G	33.17	54.00	-20.83	5.30	3	Vertical	119	1.01	27.87	32.69	6.90	34.29
PK	4.86944G	46.62	74.00	-27.38	5.29	3	Vertical	119	1.01	41.33	32.68	6.90	34.29

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

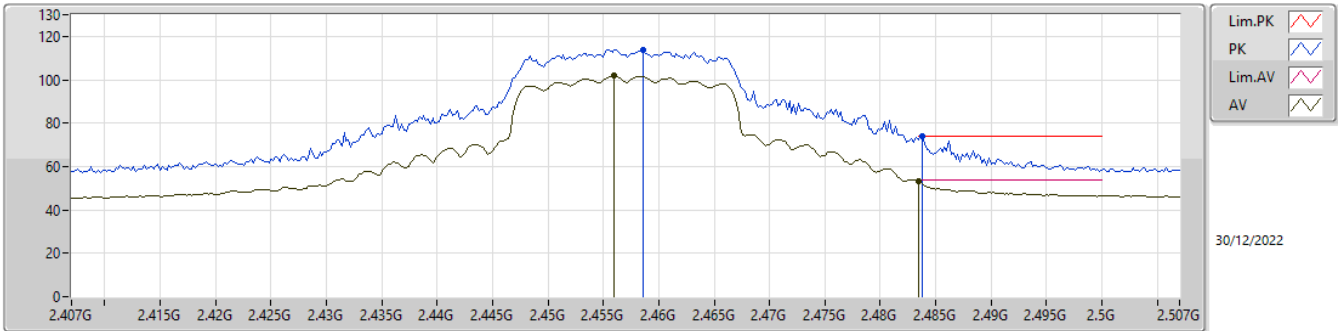
2437MHz_TX



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)
AV	4.87442G	31.87	54.00	-22.13	5.31	3	Horizontal	99	2.01	26.56	32.70	6.90	34.29
PK	4.8695G	44.91	74.00	-29.09	5.29	3	Horizontal	99	2.01	39.62	32.68	6.90	34.29

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

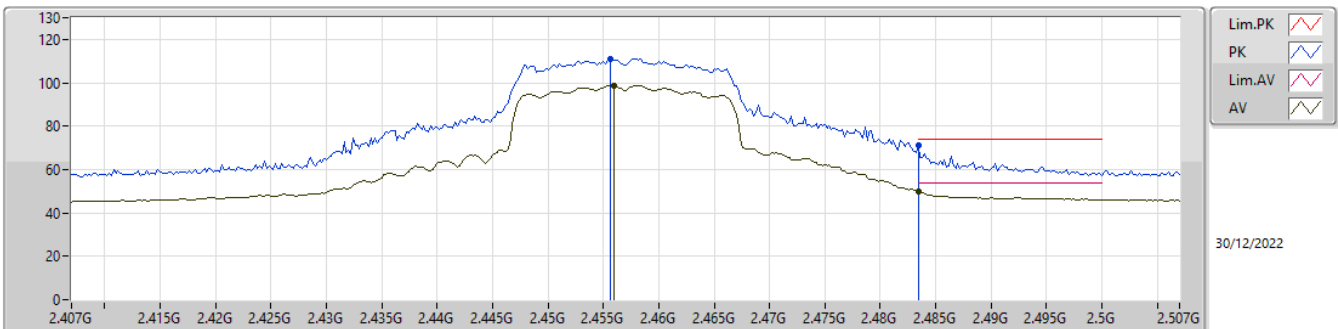
2457MHz_TX



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	2.456G	101.75	Inf	-Inf	32.22	3	Vertical	5	2.29	69.53	27.74	4.48	-
AV	2.4835G	53.13	54.00	-0.87	32.38	3	Vertical	5	2.29	20.75	27.90	4.48	-
PK	2.4586G	114.01	Inf	-Inf	32.23	3	Vertical	5	2.29	81.78	27.75	4.48	-
PK	2.4838G	73.84	74.00	-0.16	32.38	3	Vertical	5	2.29	41.46	27.90	4.48	-

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

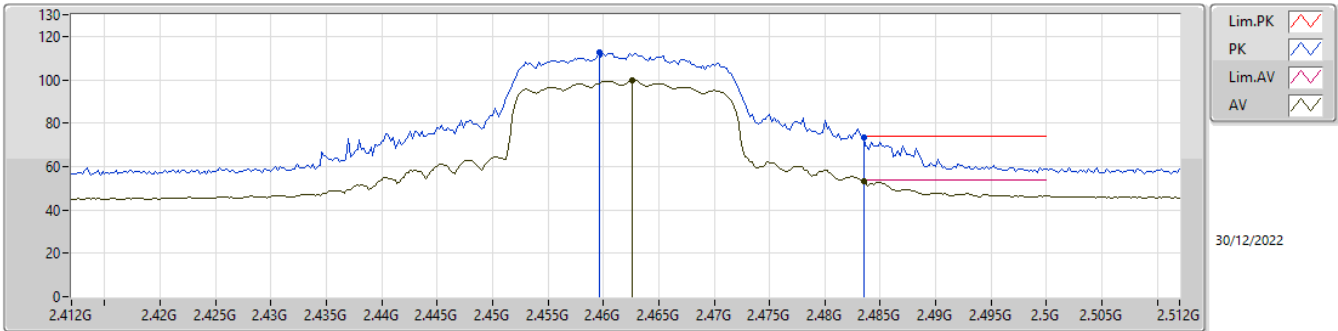
2457MHz_TX



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	2.456G	98.73	Inf	-Inf	32.22	3	Horizontal	320	2.18	66.51	27.74	4.48	-
AV	2.4835G	49.81	54.00	-4.19	32.38	3	Horizontal	320	2.18	17.43	27.90	4.48	-
PK	2.4556G	111.16	Inf	-Inf	32.21	3	Horizontal	320	2.18	78.95	27.73	4.48	-
PK	2.4835G	70.89	74.00	-3.11	32.38	3	Horizontal	320	2.18	38.51	27.90	4.48	-

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

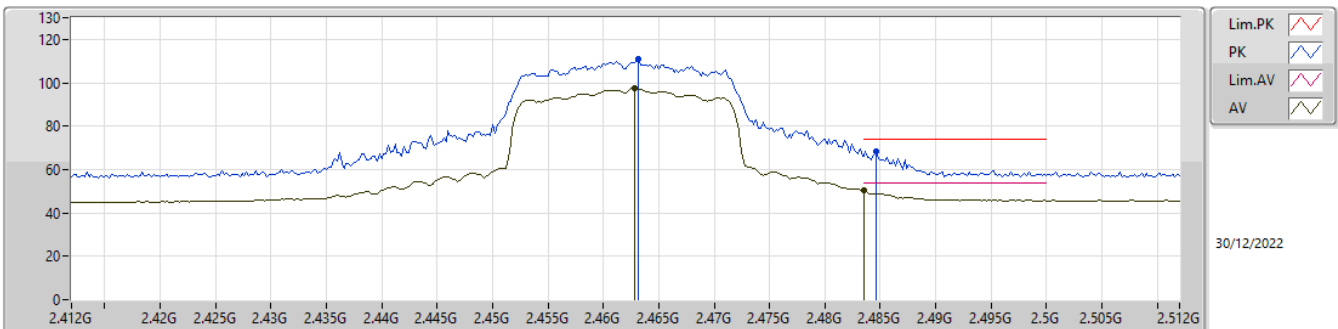
2462MHz_TX



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	2.4626G	99.80	Inf	-Inf	32.26	3	Vertical	44	1.95	67.54	27.78	4.48	-
AV	2.4835G	53.03	54.00	-0.97	32.38	3	Vertical	44	1.95	20.65	27.90	4.48	-
PK	2.4596G	112.35	Inf	-Inf	32.24	3	Vertical	44	1.95	80.11	27.76	4.48	-
PK	2.4835G	73.51	74.00	-0.49	32.38	3	Vertical	44	1.95	41.13	27.90	4.48	-

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

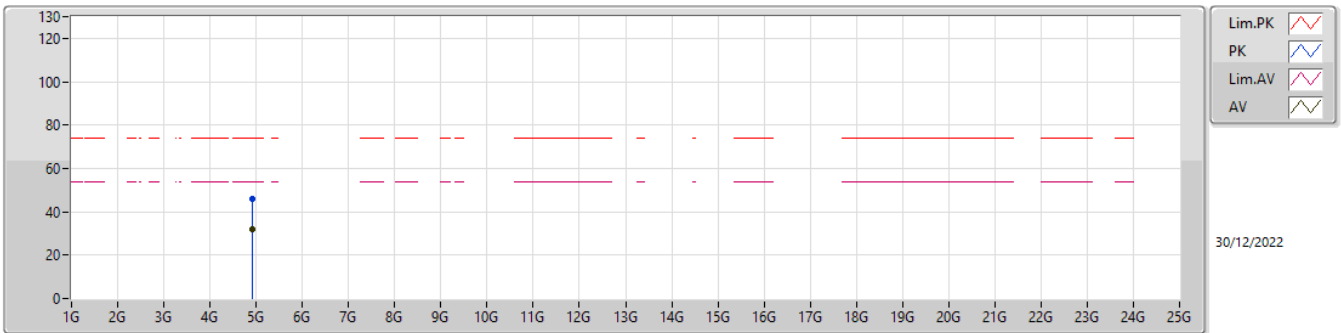
2462MHz_TX



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	2.4628G	97.43	Inf	-Inf	32.26	3	Horizontal	319	1.94	65.17	27.78	4.48	-
AV	2.4835G	50.28	54.00	-3.72	32.38	3	Horizontal	319	1.94	17.90	27.90	4.48	-
PK	2.4632G	110.95	Inf	-Inf	32.26	3	Horizontal	319	1.94	78.69	27.78	4.48	-
PK	2.4846G	68.24	74.00	-5.76	32.39	3	Horizontal	319	1.94	35.85	27.91	4.48	-

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

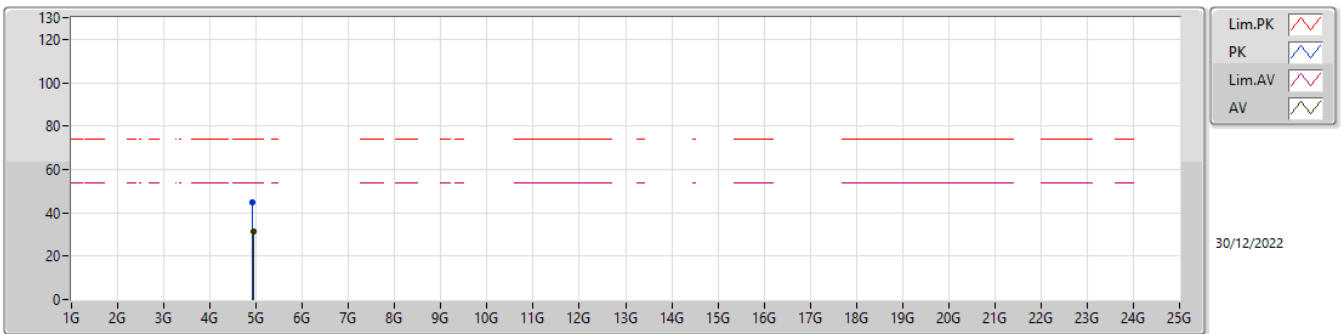
2462MHz_TX



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	4.92202G	31.71	54.00	-22.29	5.56	3	Vertical	109	2.08	26.15	32.93	6.91	34.28
PK	4.92622G	45.68	74.00	-28.32	5.59	3	Vertical	109	2.08	40.09	32.96	6.91	34.28

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

2462MHz_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	4.93858G	31.24	54.00	-22.76	5.66	3	Horizontal	269	1.50	25.58	33.03	6.91	34.28
PK	4.91716G	44.58	74.00	-29.42	5.53	3	Horizontal	269	1.50	39.05	32.90	6.91	34.28