



RADIO TEST REPORT

FCC ID : ZQ6-AP6256
Equipment : Wi-Fi/Bluetooth Module
Brand Name : AMPAK Technology Inc.
Model Name : AP6256
Applicant : AMPAK Technology Inc.
3F, No. 1, Jen Ai Road, Hsinchu Industrial
Park, Hsinchu City 30352 , Taiwan (R.O.C.)
Manufacturer : Billionton Systems Inc
No. 21, Shuili Rd., East Dist., Hsinchu City 300053 ,
Taiwan (R.O.C.)
Standard : 47 CFR FCC Part 15.247

The product was received on Feb. 20, 2024, and testing was started from Feb. 20, 2024 and completed on Apr. 26, 2024. We, Sporton International Inc. Hsinchu Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. Hsinchu Laboratory, the test report shall not be reproduced except in full.



Approved by: Sam Chen

Sporton International Inc. Hsinchu Laboratory

No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County 302010, Taiwan (R.O.C.)



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History of this test report

TEL : 886-3-656-9065
FAX : 886-3-656-9085
Report Template No.: CB-A10_10 Ver1.3

Page Number : 3 of 27
Issued Date : May 13, 2024
Report Version : 01



Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
3.1	15.207	AC Power-line Conducted Emissions	PASS	-
3.2	15.247(a)	DTS Bandwidth	PASS	-
3.3	15.247(b)	Maximum Conducted Output Power	PASS	-
3.4	15.247(e)	Power Spectral Density	PASS	-
3.5	15.247(d)	Emissions in Non-restricted Frequency Bands	PASS	-
3.6	15.247(d)	Emissions in Restricted Frequency Bands	PASS	-

Conformity Assessment Condition:

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

Disclaimer:

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

Reviewed by: Sam Chen**Report Producer: Sophia Shiung**



1 General Description

1.1 Information

1.1.1 RF General Information

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

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11b	20	1TX
2.4-2.4835GHz	802.11g	20	1TX
2.4-2.4835GHz	802.11n HT20	20	1TX

Note:

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

1.1.2 Antenna Information

Ant.	Port	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	1	PULSE ELECTRONICS PTE LTD	TZ2412W	Dipole	Reversed-SMA	Note 1

Note 1:

Ant.	Gain (dBi)		
	WLAN 2.4GHz	WLAN 5GHz	Bluetooth
1	3.68	4.65	3.68

Note 2: The above information was declared by manufacturer.

Note 3: For 2.4GHz function:

For IEEE 802.11 b/g/n (1TX/1RX):

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

For 5GHz function:

For IEEE 802.11a/n/ac (1TX/1RX):

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

For Bluetooth function (1TX/1RX):

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

**1.1.3 Mode Test Duty Cycle**

Mode	DC	DCF (dB)	T (s)	VBW (Hz)_1/T
802.11b_Nss 1,(1D)	0.901	0.45	8.469m	300
802.11g_Nss 1,(6D)	0.934	0.3	1.4m	1k
802.11n HT20_Nss 1,(M0)	0.929	0.32	1.31m	1k

Note:

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

1.1.4 EUT Operational Condition

EUT Power Type	From host system			
Beamforming Function	<input type="checkbox"/>	With beamforming	<input checked="" type="checkbox"/>	Without beamforming
Function	<input checked="" type="checkbox"/>	Point-to-multipoint	<input type="checkbox"/>	Point-to-point
Test Software Version	DOS [ver 6.1.7601]			

Note: The above information was declared by manufacturer.



1.2 Applicable Standards

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

- ♦ 47 CFR FCC Part 15.247
- ♦ ANSI C63.10-2013

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

- ♦ FCC KDB 558074 D01 v05r02
- ♦ FCC KDB 414788 D01 v01r01

1.3 Testing Location Information

Testing Location Information				
Test Lab. : Sporton International Inc. Hsinchu Laboratory				
Hsinchu ADD: No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County 302010, Taiwan (R.O.C.)				
(TAF: 3787) TEL: 886-3-656-9065 FAX: 886-3-656-9085				
Test site Designation No. TW3787 with FCC.				
Conformity Assessment Body Identifier (CABID) TW3787 with ISCED.				

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
RF Conducted	TH03-CB	Nyle Chang	21.5~22.9 / 66~69	Feb. 21, 2024~ Feb. 27, 2024
Radiated < 1GHz	03CH05-CB	Roy Mai	21.9~22.4 / 55~58	Feb. 20, 2024~ Apr. 26, 2024
Radiated > 1GHz	03CH04-CB	Roy Mai	22.7~23.8 / 56~59	Feb. 20, 2024~ Apr. 26, 2024
AC Conduction	CO01-CB	Bob Chang	22~23 / 50~51	Mar. 21, 2024~ Apr. 22, 2024

1.4 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2))

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	3.4 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.1 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.1 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.2 dB	Confidence levels of 95%
Conducted Emission	3.1 dB	Confidence levels of 95%
Output Power Measurement	0.8 dB	Confidence levels of 95%
Power Density Measurement	3.1 dB	Confidence levels of 95%
Bandwidth Measurement	2.2%	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

Mode
802.11b_Nss1,(1Mbps)_1TX
2412MHz
2437MHz
2462MHz
802.11g_Nss1,(6Mbps)_1TX
2412MHz
2417MHz
2437MHz
2457MHz
2462MHz
802.11n HT20_Nss1,(MCS0)_1TX
2412MHz
2417MHz
2437MHz
2457MHz
2462MHz

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	EUT_Bluetooth
2	EUT_WLAN 2.4GHz
3	EUT_WLAN 5GHz
For operating, mode 2 is the worst case and it was recorded in this test report.	

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

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emissions in Restricted Frequency Bands
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	CTX
	The EUT was performed at X axis, Y axis and Z axis positions with each function at Radiated measurement > 1GH, and the worst cases were found at Y axis for WLAN 2.4GHz, X axis for Bluetooth, and Z axis for WLAN 5GHz. Thus, the measurement will follow these same test configurations.
1	EUT in X axis_Bluetooth
2	EUT in Y axis_WLAN 2.4GHz
3	EUT in Z axis_WLAN 5GHz
For operating, mode 2 is the worst case and it was recorded in this test report.	
Operating Mode > 1GHz	CTX
	The EUT was performed at X axis, Y axis and Z axis positions, and the worst case was found at Y axis. Thus, the measurement will follow this same test configuration.
1	EUT in Y axis

2.3 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

2.4 Accessories

N/A



2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	WIFI Fixture	AMPAK Technology Inc.	A113D_EVB_V01	N/A
B	EUT Fixture	AMPAK Technology Inc.	AP6256	N/A
C	Power Supply	MOTECH	LPS-305	N/A
D	AP Router NB	DELL	E6430	N/A
E	AP Router	TP-LINK	Archer C54	N/A

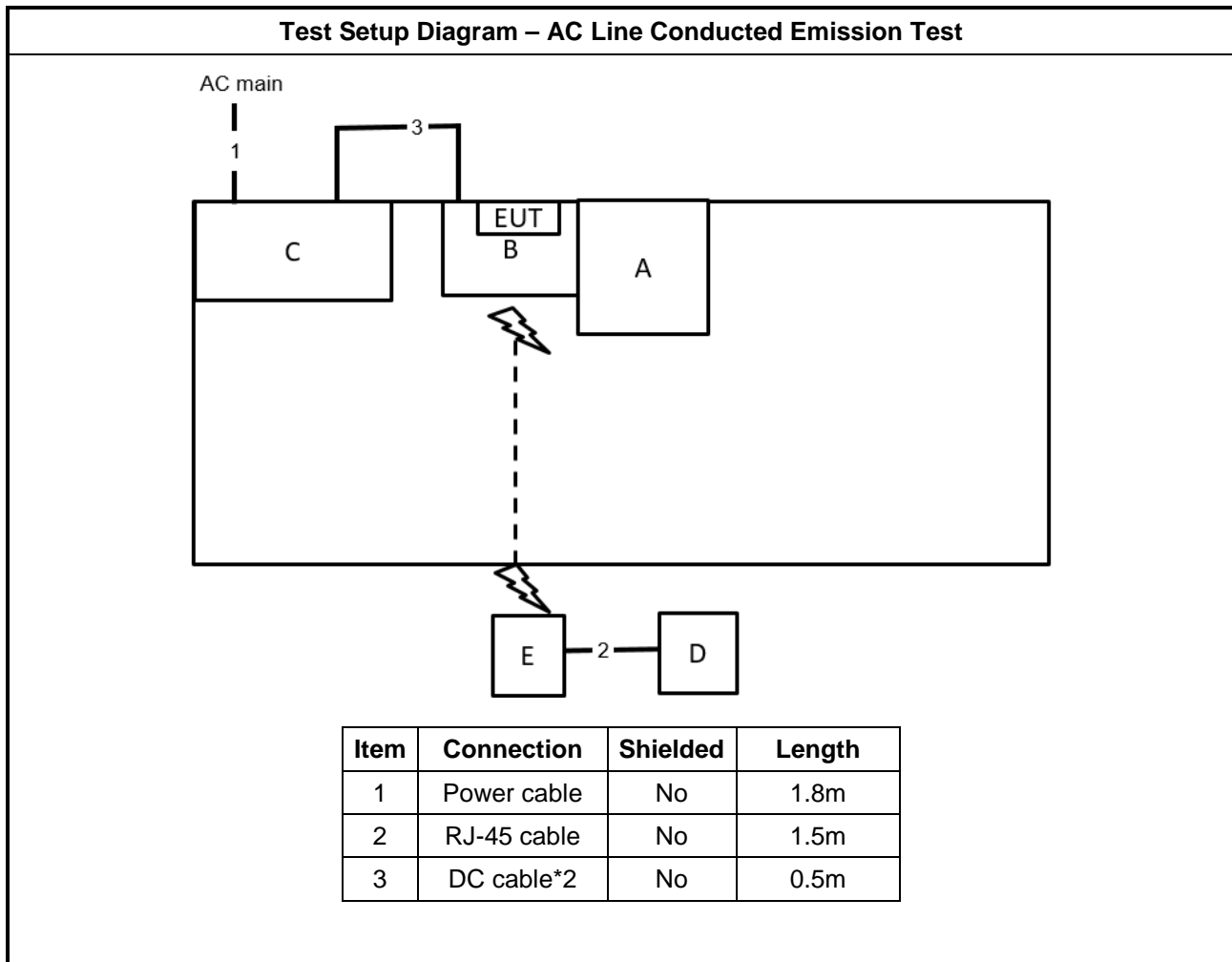
For Radiated:

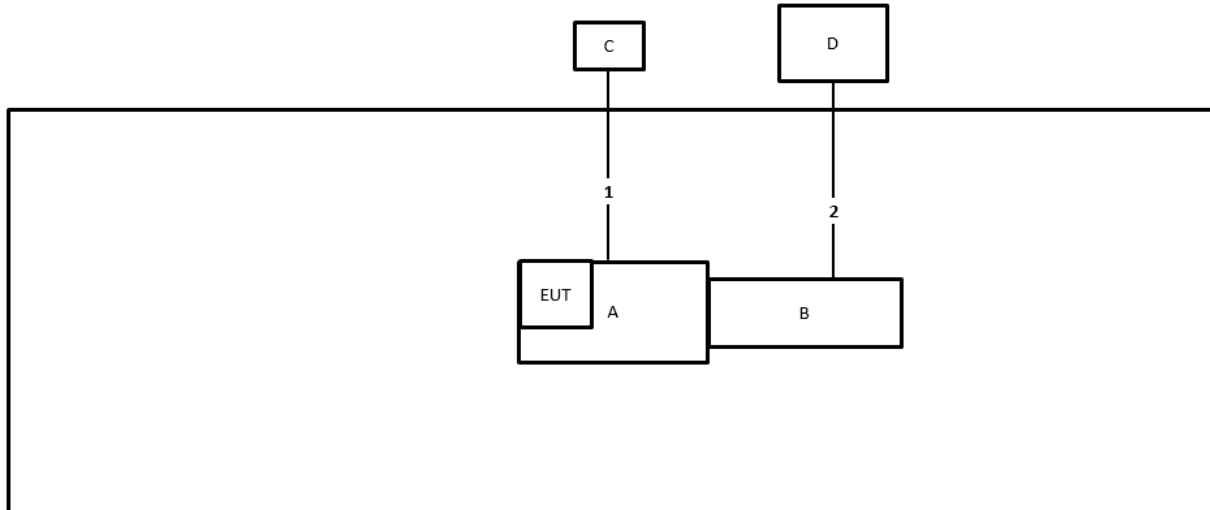
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	EUT Fixture	AMPAK Technology Inc.	AP6256	N/A
B	WIFI Fixture	AMPAK Technology Inc.	A113D_EVB_V01	N/A
C	USB adapter	HANG	C6	N/A
D	DC Power Supply	MOTECH	LPS-305	N/A

For RF Conducted:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	EUT Fixture	AMPAK Technology Inc.	AP6256	N/A
B	WIFI Fixture	AMPAK Technology Inc.	AP6255_EVB_V01	N/A
C	PC	AMPAK Technology Inc.	H81-PLUS	N/A

2.6 Test Setup Diagram



Test Setup Diagram - Radiated Test


Item	Connection	Shielded	Length
1	USB cable	Yes	1.5m
2	DC cable*2	No	0.2m



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.		

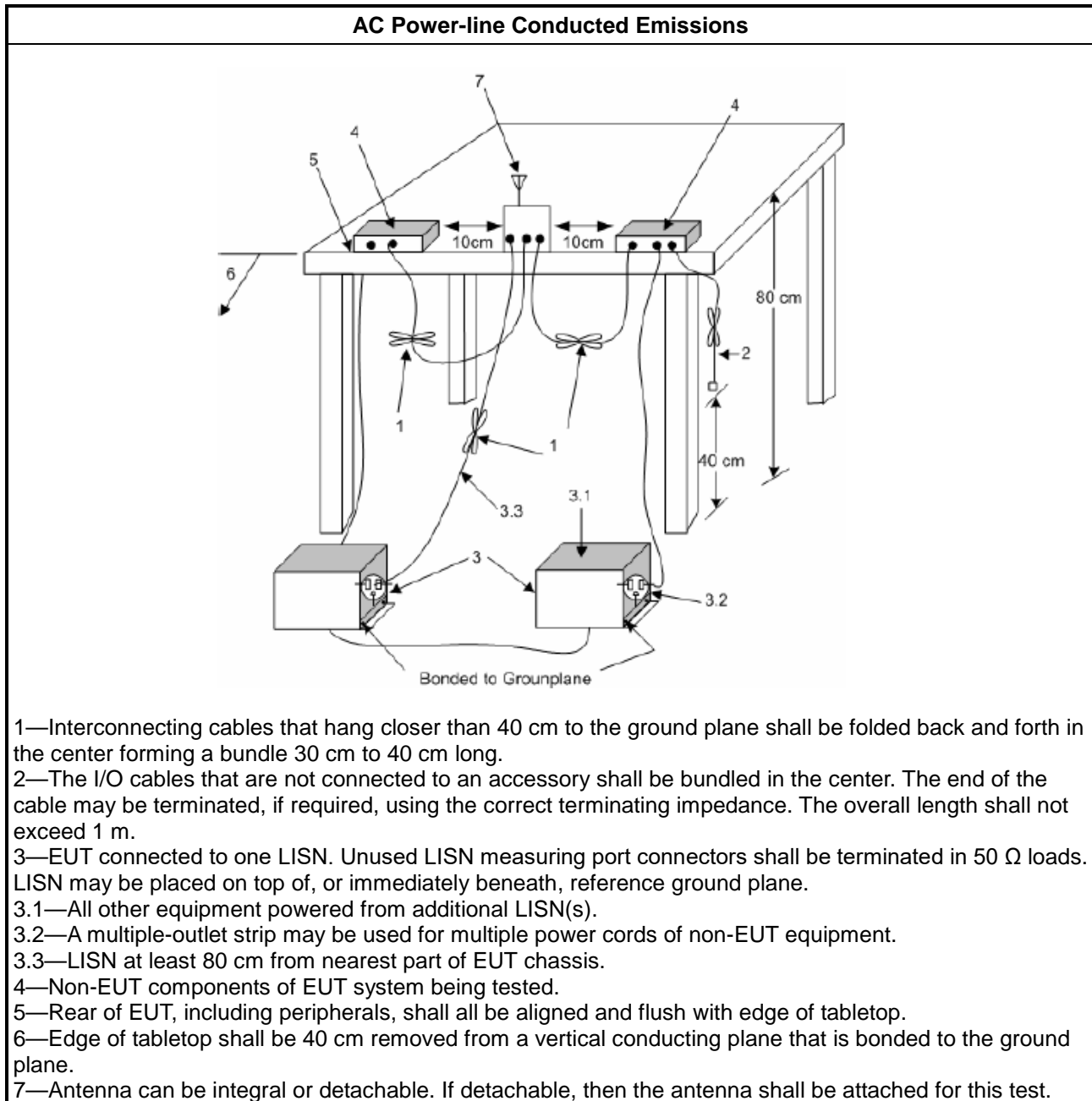
3.1.2 Measuring Instruments

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 Test Setup



3.1.5 Measurement Results Calculation

The measured Level is calculated using:

- Corrected Reading: LISN Factor (LISN) + Attenuator (AT/AUX) + Cable Loss (CL) + Read Level (Raw) = Level
- Margin = -Limit + Level

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.

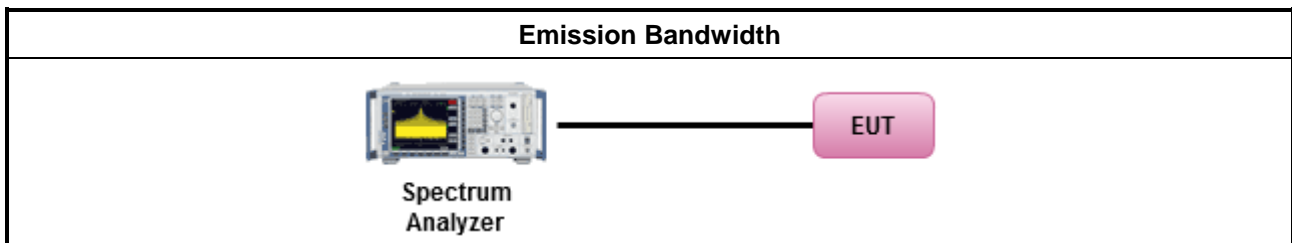
3.2.2 Measuring Instruments

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 FCC KDB 558074, clause 8.2 & C63.10 clause 11.8.1 Option 1 for 6 dB bandwidth measurement.
<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.2 & C63.10 clause 11.8.2 Option 2 for 6 dB bandwidth measurement.
<input type="checkbox"/> Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit	
	▪ If $G_{TX} \leq 6$ dBi, then $P_{Out} \leq 30$ dBm (1 W)
	▪ Point-to-multipoint systems (P2M): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ dBm
	▪ Point-to-point systems (P2P): If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	▪ Smart antenna system (SAS):
	- Single beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	- Overlap beam: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3$ dBm
	- Aggregate power on all beams: If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)/3 + 8$ dB dBm
P_{Out} = maximum peak conducted output power or maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.	

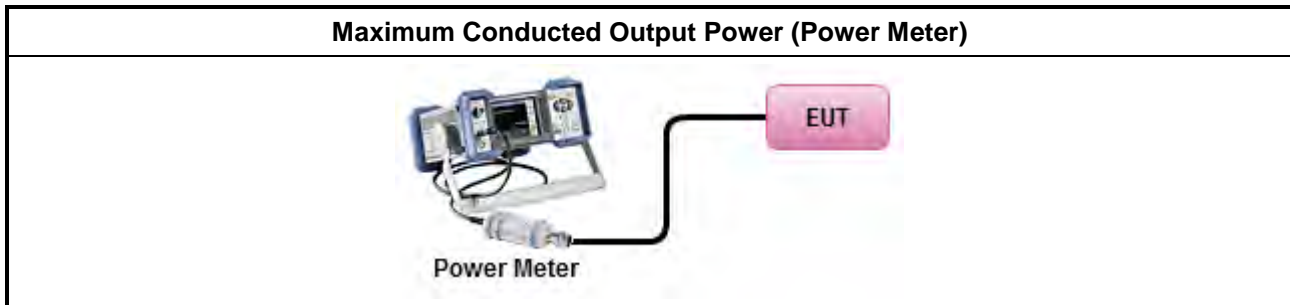
3.3.2 Measuring Instruments

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

**3.3.3 Test Procedures**

Test Method	
▪ Maximum Peak Conducted Output Power	
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 8.3.1.1 & C63.10 clause 11.9.1.1 (RBW ≥ EBW method).
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 8.3.1.3 & C63.10 clause 11.9.1.3 (peak power meter).
▪ Maximum Conducted Output Power	
[duty cycle ≥ 98% or external video / power trigger]	
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.2 Method AVGSA-1.
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.3 Method AVGSA-1A. (alternative)
duty cycle < 98% and average over on/off periods with duty factor	
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.4 Method AVGSA-2.
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.5 Method AVGSA-2A (alternative)
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.6 Method AVGSA-3
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.7 Method AVGSA-3A (alternative)
Measurement using a power meter (PM)	
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 8.3.2.3 & C63.10 clause 11.9.2.3.1 Method AVGPM (using an RF average power meter).
<input checked="" type="checkbox"/>	Refer as FCC KDB 558074, clause 8.3.2.3 & C63.10 clause 11.9.2.3.2 Method AVGPM-G (using an gate RF average power meter).
▪ For conducted measurement.	
▪ If the EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.	
▪ If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$	

3.3.4 Test Setup



3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C



3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

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

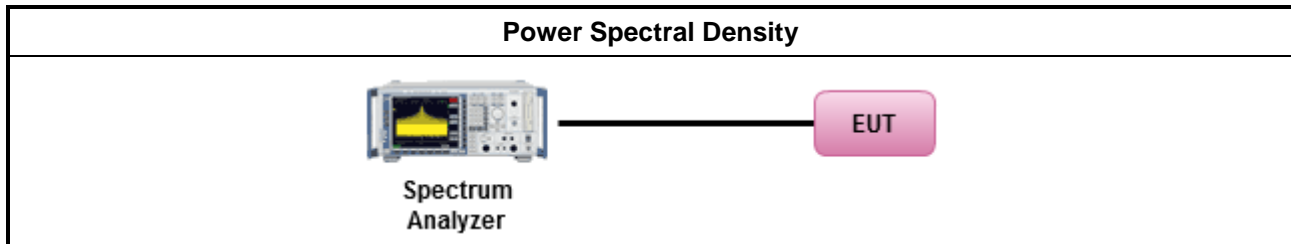
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

Test Method	
▪ Peak power spectral density procedures that the same method as used to determine the conducted output power. If maximum peak conducted output power was measured to demonstrate compliance to the output power limit, then the peak PSD procedure below (Method PKPSD) shall be used. If maximum conducted output power was measured to demonstrate compliance to the output power limit, then one of the average PSD procedures shall be used, as applicable based on the following criteria (the peak PSD procedure is also an acceptable option).	
<input checked="" type="checkbox"/>	Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10 Method Max. PSD.
▪ For conducted measurement.	
▪ If The EUT supports multiple transmit chains using options given below:	
<input type="checkbox"/>	Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.
<input type="checkbox"/>	Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,
<input type="checkbox"/>	Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.

3.4.4 Test Setup



3.4.5 Test Result of Power Spectral Density

Refer as Appendix D

3.5 Emissions in Non-restricted Frequency Bands

3.5.1 Emissions in Non-restricted Frequency Bands Limit

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

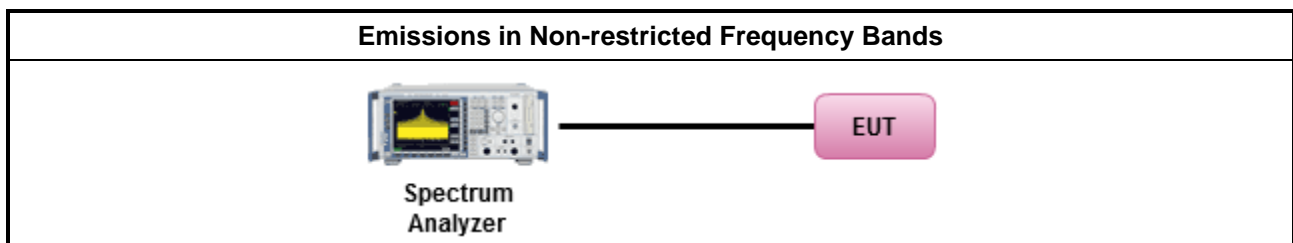
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

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

3.5.4 Test Setup



3.5.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix E



3.6 Emissions in Restricted Frequency Bands

3.6.1 Emissions in Restricted Frequency Bands Limit

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

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

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

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

3.6.2 Measuring Instruments

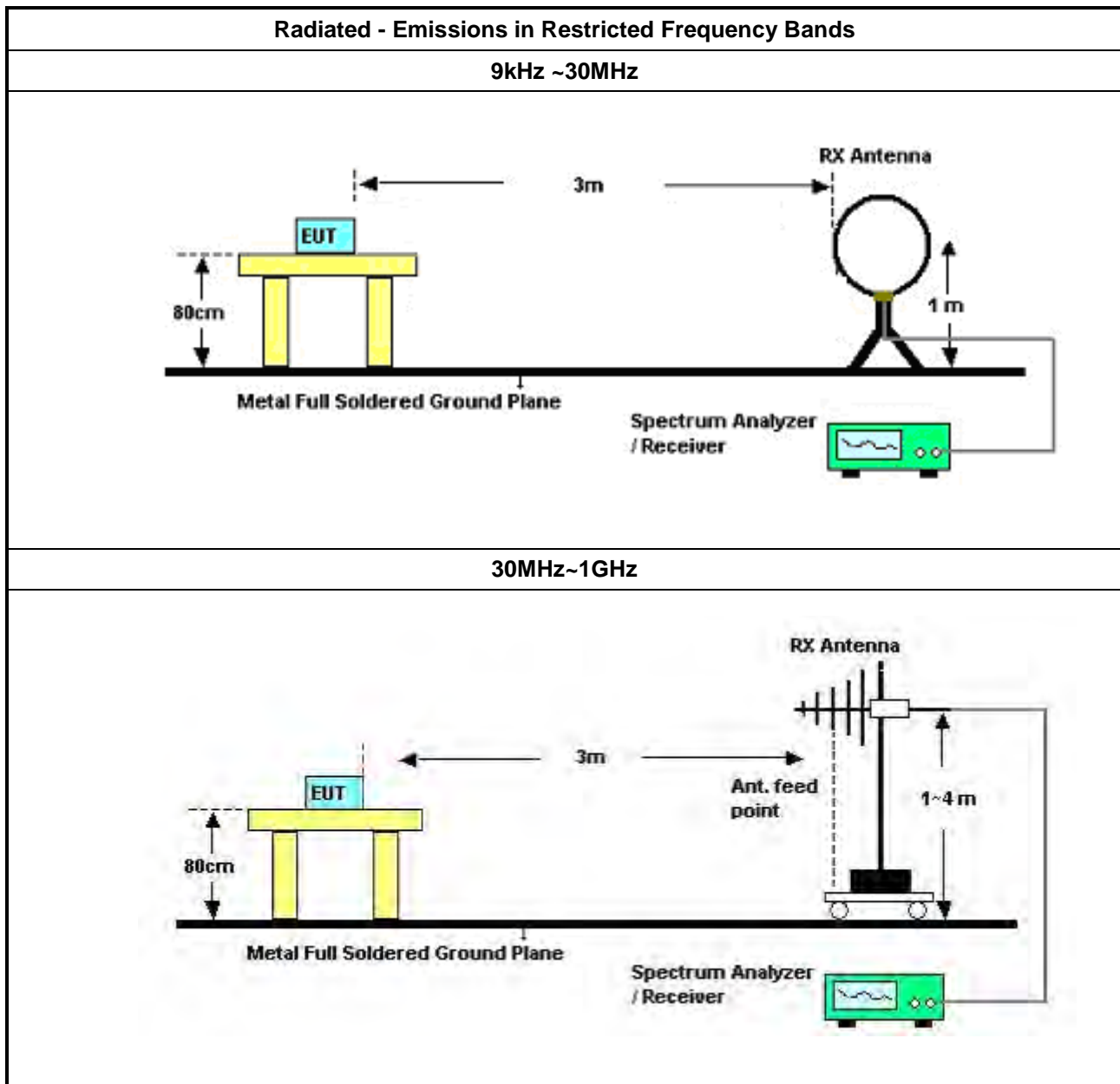
Refer a test equipment and calibration data table in this test report.

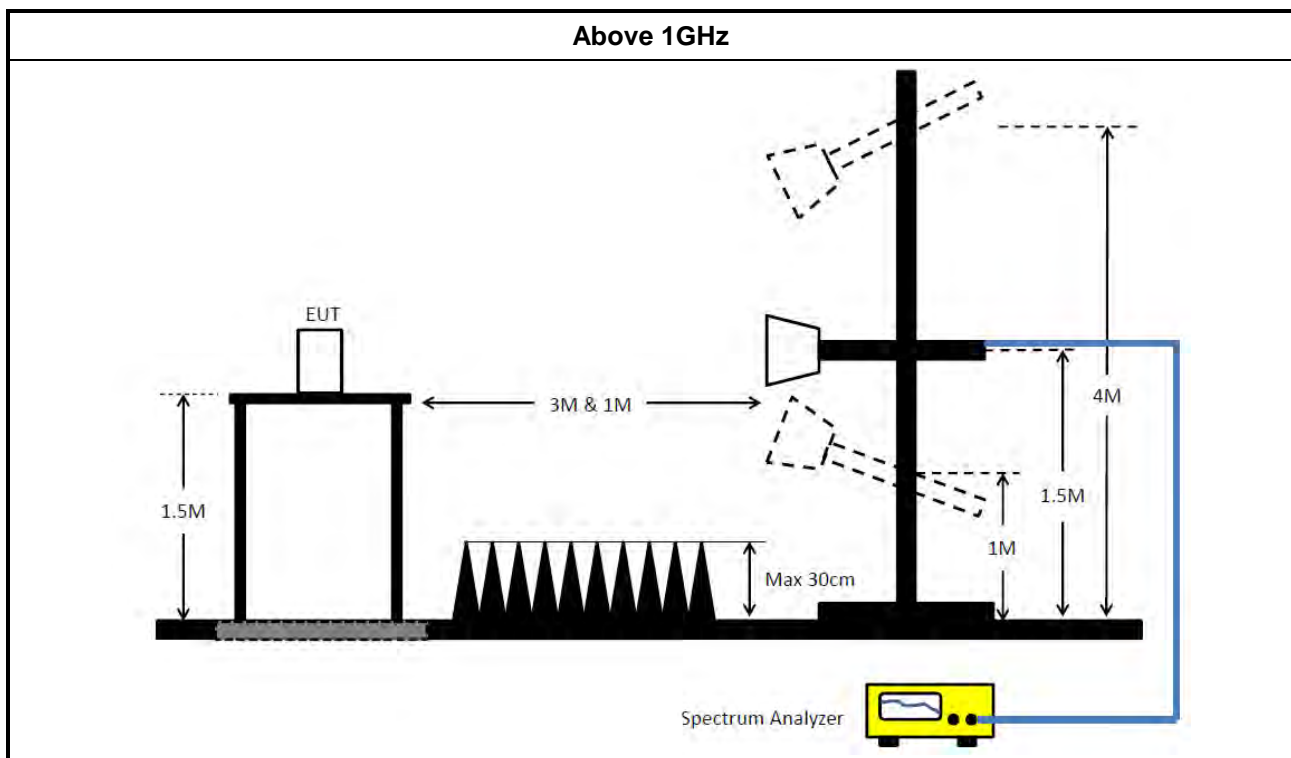


3.6.3 Test Procedures

Test Method	
▪ The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].	
▪ Refer as ANSI C63.10, clause 6.10.3 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.	
▪ For the transmitter unwanted emissions shall be measured using following options below:	
	▪ Refer as FCC KDB 558074, clause 8.6 for unwanted emissions into restricted bands.
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.1(trace averaging for duty cycle $\geq 98\%$).
	<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.2(trace averaging + duty factor).
	<input checked="" type="checkbox"/> Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.3(Reduced VBW $\geq 1/T$).
	<input type="checkbox"/> Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW $\geq 1/T$, where T is pulse time.
	<input type="checkbox"/> Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.
	<input checked="" type="checkbox"/> Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.4 measurement procedure peak limit.
▪ For the transmitter band-edge emissions shall be measured using following options below:	
	▪ Refer as FCC KDB 558074 clause 8.7 & C63.10 clause 11.13.1, When the performing peak or average radiated measurements, emissions within 2 MHz of the authorized band edge may be measured using the marker-delta method described below.
	▪ Refer as FCC KDB 558074, clause 8.7 (ANSI C63.10, clause 6.10.6) for marker-delta method for band-edge measurements.
	▪ Refer as FCC KDB 558074, clause 8.7 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).
	▪ For conducted unwanted emissions into restricted bands (absolute emission limits). Devices with multiple transmit chains using options given below: (1) Measure and sum the spectra across the outputs or (2) Measure and add 10 log(N) dB
	▪ For FCC KDB 662911 The methodology described here may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance may be demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred.

3.6.4 Test Setup





3.6.5 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Antenna factor (AF) + Cable loss (CL) + Read level (Raw) - Preamp factor (PA)(if applicable) = Level.

3.6.6 Emissions in Restricted Frequency Bands (Below 30MHz)

There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to KDB414788 Radiated Test Site, and the result came out very similar.

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

The radiated emissions were investigated from 9 kHz or the lowest frequency generated within the device, up to the 10th harmonic or 40 GHz, whichever is appropriate.

3.6.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F



4 Test Equipment and Calibration Data

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.4GHz	Mar. 01, 2024	Feb. 28, 2025	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Feb. 19, 2024	Feb. 18, 2025	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Apr. 27, 2023	Apr. 26, 2024	Conduction (CO01-CB)
Pulse Limiter	Rohde&Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Feb. 08, 2024	Feb. 07, 2025	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	Oct. 17, 2023	Oct. 16, 2024	Conduction (CO01-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
Loop Antenna	Teseq	HLA 6121	65417	9kHz - 30MHz	Oct. 13, 2023	Oct. 12, 2024	Radiation (03CH05-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH05-CB	30MHz ~ 1GHz	Aug. 02, 2023	Aug. 01, 2024	Radiation (03CH05-CB)
Bilog Antenna with 6dB Attenuator	TESEQ & EMCi	CBL 6112D & N-6-06	35236 & AT-N0610	30MHz ~ 2GHz	Mar. 24, 2023	Mar. 23, 2024	Radiation (03CH05-CB)
Bilog Antenna with 6dB Attenuator	TESEQ & EMCi	CBL 6112D & N-6-06	35236 & AT-N0610	30MHz ~ 2GHz	Mar. 23, 2024	Mar. 22, 2025	Radiation (03CH05-CB)
Amplifier	EMCi	EMC330N	980331	20MHz ~ 3GHz	May 03, 2023	May 02, 2024	Radiation (03CH05-CB)
Spectrum Analyzer	R&S	FSP40	100304	9kHz ~ 40GHz	Apr. 18, 2023	Apr. 17, 2024	Radiation (03CH05-CB)
Spectrum Analyzer	R&S	FSP40	100304	9kHz ~ 40GHz	Apr. 17, 2024	Apr. 16, 2025	Radiation (03CH05-CB)
RF Cable-low	Woken	RG402	Low Cable-04+23	30MHz~1GHz	Dec. 06, 2023	Dec. 05, 2024	Radiation (03CH05-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH05-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH04-CB	1GHz ~18GHz 3m	Feb. 23, 2023	Feb. 22, 2024	Radiation (03CH04-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH04-CB	1GHz ~18GHz 3m	Feb. 22, 2024	Feb. 21, 2025	Radiation (03CH04-CB)
Horn Antenna	ETS-Lindgren	3115	00143147	750MHz~18GHz	Oct. 04, 2023	Oct. 03, 2024	Radiation (03CH04-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Sep. 04, 2023	Sep. 03, 2024	Radiation (03CH04-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Pre-Amplifier	Agilent	83017A	MY53270063	0.5GHz ~ 26.5GHz	Jun. 30, 2023	Jun. 29, 2024	Radiation (03CH04-CB)
Pre-Amplifier	SGH	SGH184	20221107-3	18GHz ~ 40GHz	Nov. 24, 2023	Nov. 23, 2024	Radiation (03CH04-CB)
Spectrum Analyzer	R&S	FSP40	100142	9kHz~40GHz	Mar. 21, 2023	Mar. 20, 2024	Radiation (03CH04-CB)
Spectrum Analyzer	R&S	FSP40	100142	9kHz~40GHz	Mar. 19, 2024	Mar. 18, 2025	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-21	1GHz - 18GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH04-CB)
RF Cable-high	Woken	RG402	High Cable-21+67	1GHz - 18GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH04-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40GHz	Jan. 11, 2024	Jan. 10, 2025	Radiation (03CH04-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH04-CB)
Spectrum analyzer	R&S	FSV40	101028	9kHz~40GHz	Dec. 22, 2023	Dec. 21, 2024	Conducted (TH03-CB)
Power Sensor	Anritsu	MA2411B	1726195	300MHz~40GHz	Sep. 04, 2023	Sep. 03, 2024	Conducted (TH03-CB)
Power Meter	Anritsu	ML2495A	1035008	300MHz~40GHz	Sep. 04, 2023	Sep. 03, 2024	Conducted (TH03-CB)
RF Cable	Woken	RG402	High Cable-11	30MHz ~18GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH03-CB)
RF Cable	Woken	RG402	High Cable-12	30MHz ~18GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH03-CB)
RF Cable	Woken	RG402	High Cable-13	30MHz ~18GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-14	1GHz ~18GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-15	1GHz ~18GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH03-CB)
Switch	SPTCB	SP-SWI	SWI-03	1 ~26.5GHz	Oct. 03, 2023	Oct. 02, 2024	Conducted (TH03-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH03-CB)

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

NCR means Non-Calibration required.



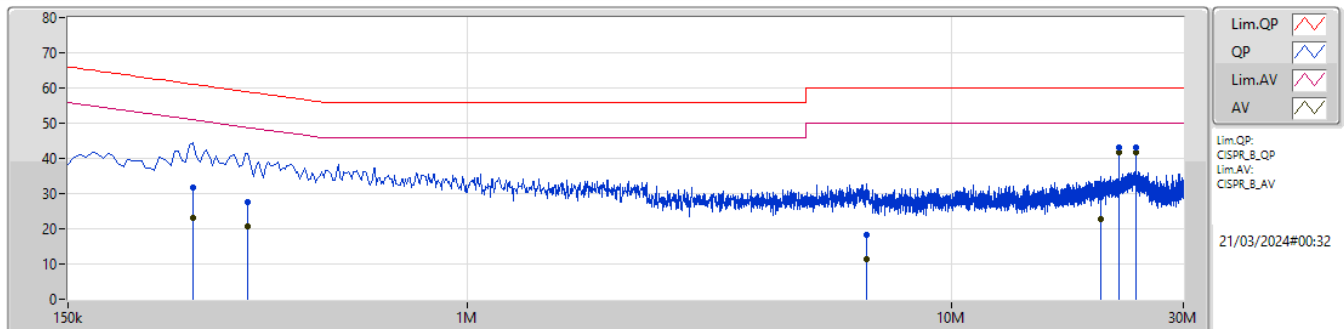
Conducted Emissions at Powerline

Appendix A

Summary

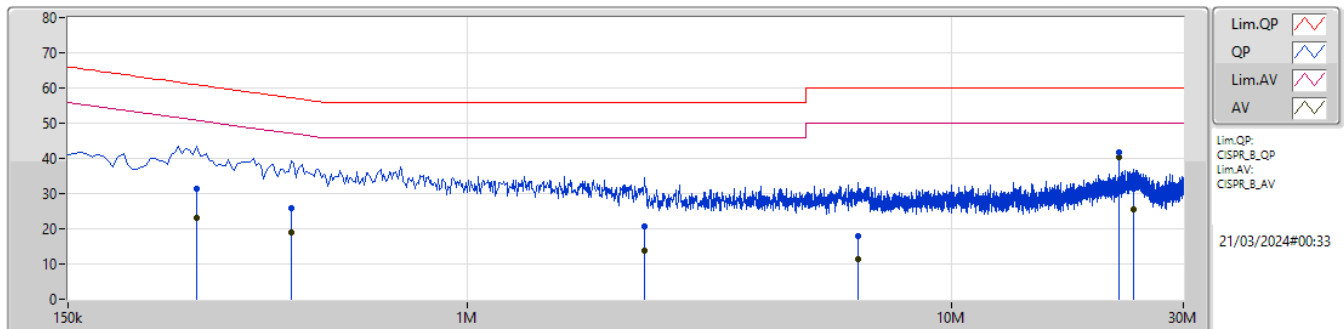
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 2	Pass	AV	24.009M	41.60	50.00	-8.40	Line

Mode 2



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)						
QP	271.5k	31.56	61.07	-29.51	9.97	Line	-	21.59	0.08	0.02	9.87						
AV	271.5k	23.27	51.07	-27.80	9.97	Line	-	13.30	0.08	0.02	9.87						
QP	352.5k	27.58	58.91	-31.33	9.99	Line	-	17.59	0.09	0.02	9.88						
AV	352.5k	20.74	48.91	-28.17	9.99	Line	-	10.75	0.09	0.02	9.88						
QP	6.662M	18.15	60.00	-41.85	10.26	Line	-	7.89	0.21	0.14	9.91						
AV	6.662M	11.44	50.00	-38.56	10.26	Line	-	1.18	0.21	0.14	9.91						
QP	20.274M	28.90	60.00	-31.10	10.55	Line	-	18.35	0.30	0.23	10.02						
AV	20.274M	22.77	50.00	-27.23	10.55	Line	-	12.22	0.30	0.23	10.02						
QP	22.119M	43.03	60.00	-16.97	10.57	Line	-	32.46	0.31	0.23	10.03						
AV	22.119M	41.59	50.00	-8.41	10.57	Line	-	31.02	0.31	0.23	10.03						
QP	24.009M	42.97	60.00	-17.03	10.59	Line	-	32.38	0.31	0.24	10.04						
AV	24.009M	41.60	50.00	-8.40	10.59	Line	"Worst"	31.01	0.31	0.24	10.04						

Mode 2



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)						
QP	276k	31.40	60.93	-29.53	9.96	Neutral	-	21.44	0.07	0.02	9.87						
AV	276k	23.07	50.93	-27.86	9.96	Neutral	-	13.11	0.07	0.02	9.87						
QP	433.5k	25.94	57.19	-31.25	9.98	Neutral	-	15.96	0.07	0.02	9.89						
AV	433.5k	19.11	47.19	-28.08	9.98	Neutral	-	9.13	0.07	0.02	9.89						
QP	2.324M	20.60	56.00	-35.40	10.09	Neutral	-	10.51	0.11	0.09	9.89						
AV	2.324M	13.94	46.00	-32.06	10.09	Neutral	-	3.85	0.11	0.09	9.89						
QP	6.387M	17.98	60.00	-42.02	10.23	Neutral	-	7.75	0.18	0.14	9.91						
AV	6.387M	11.21	50.00	-38.79	10.23	Neutral	-	0.98	0.18	0.14	9.91						
QP	22.119M	41.74	60.00	-18.26	10.57	Neutral	-	31.17	0.31	0.23	10.03						
AV	22.119M	40.22	50.00	-9.78	10.57	Neutral	"Worst"	29.65	0.31	0.23	10.03						
QP	23.735M	31.44	60.00	-28.56	10.61	Neutral	-	20.83	0.33	0.24	10.04						
AV	23.735M	25.64	50.00	-24.36	10.61	Neutral	-	15.03	0.33	0.24	10.04						

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)_1TX	7.95M	12.074M	12M1G1D	7.125M	11.664M
802.11g_Nss1,(6Mbps)_1TX	15.5M	16.747M	16M7D1D	12.375M	16.322M
802.11n HT20_Nss1,(MCS0)_1TX	15.9M	21.357M	21M4D1D	12.225M	17.433M

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)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	7.125M	12.074M
2437MHz	Pass	500k	7.95M	11.692M
2462MHz	Pass	500k	7.925M	11.664M
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	13.8M	16.49M
2437MHz	Pass	500k	15.5M	16.747M
2462MHz	Pass	500k	12.375M	16.322M
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-
2412MHz	Pass	500k	15.9M	17.688M
2437MHz	Pass	500k	15.075M	21.357M
2462MHz	Pass	500k	12.225M	17.433M

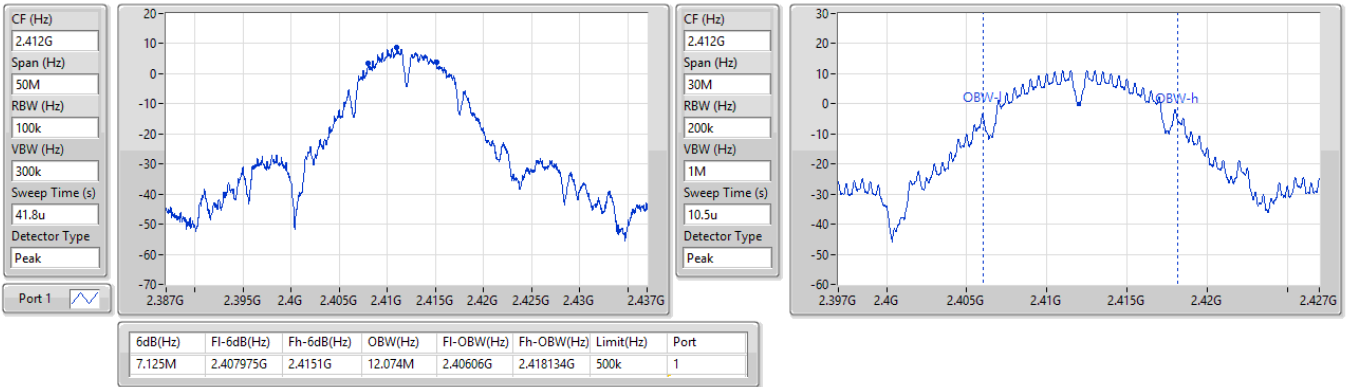
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

EBW

2412MHz

27/02/2024

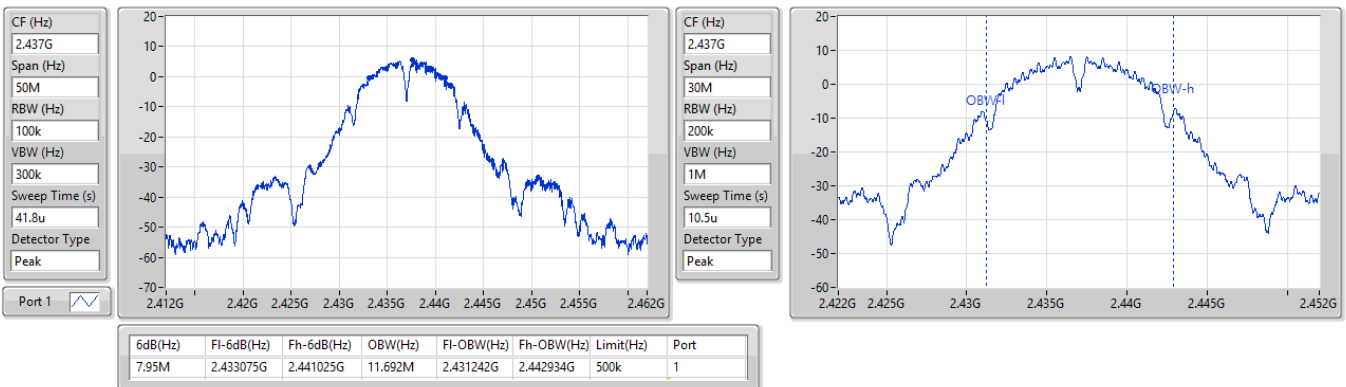


2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

EBW

2437MHz

27/02/2024

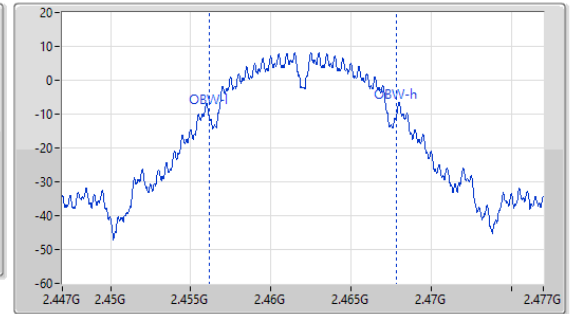
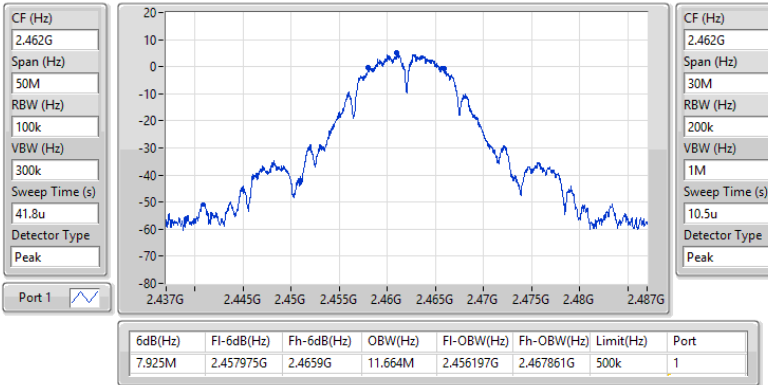


2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

EBW

2462MHz

27/02/2024

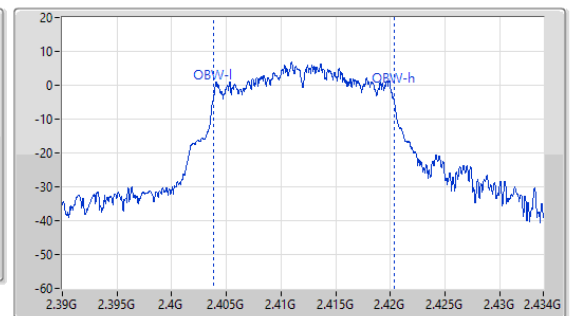
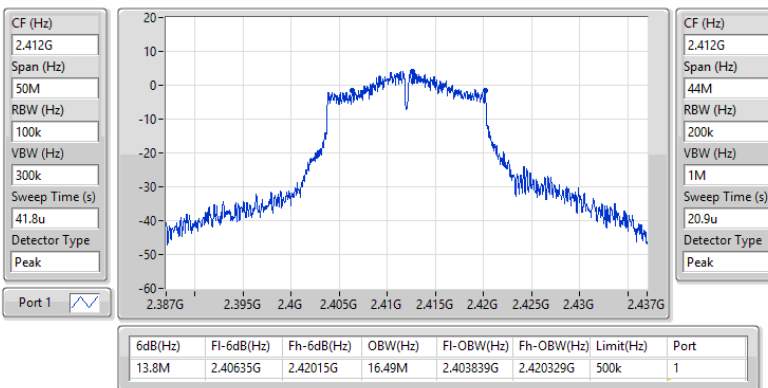


2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

EBW

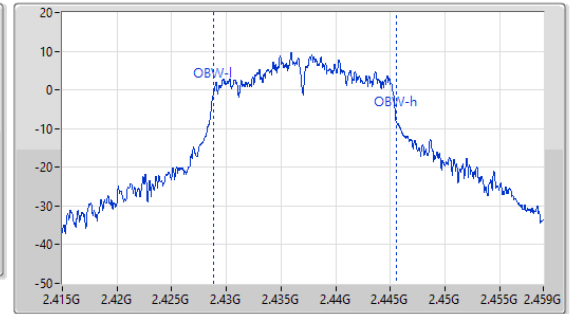
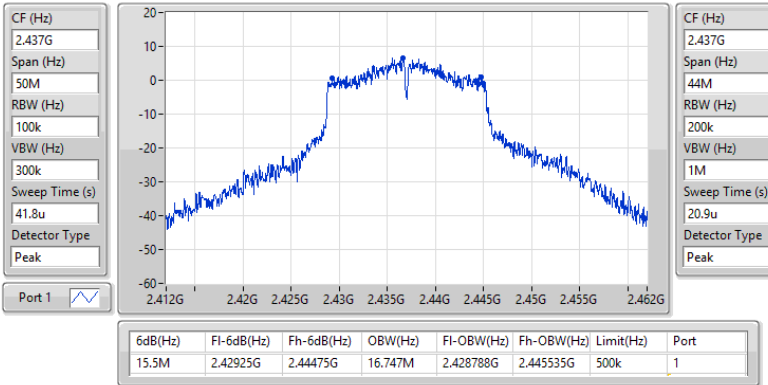
2412MHz

27/02/2024

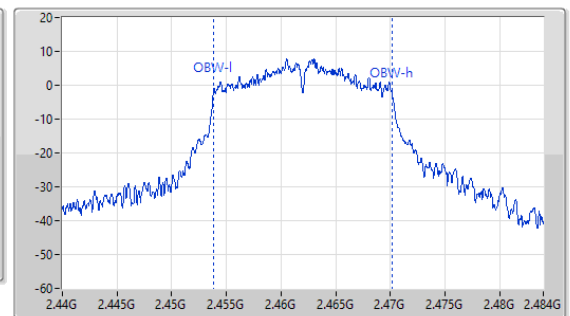
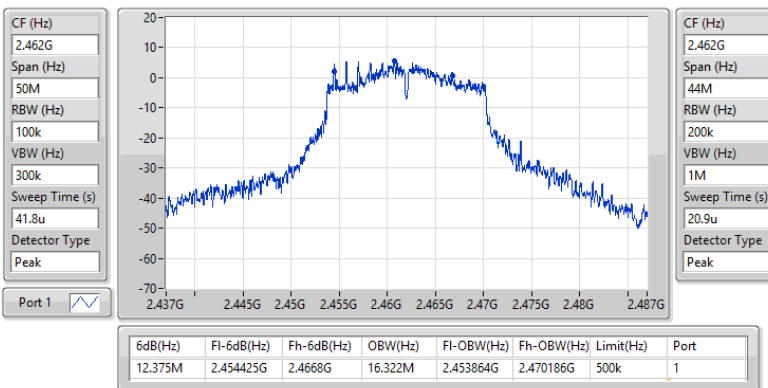


2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX
EBW
2437MHz

27/02/2024


2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX
EBW
2462MHz

27/02/2024

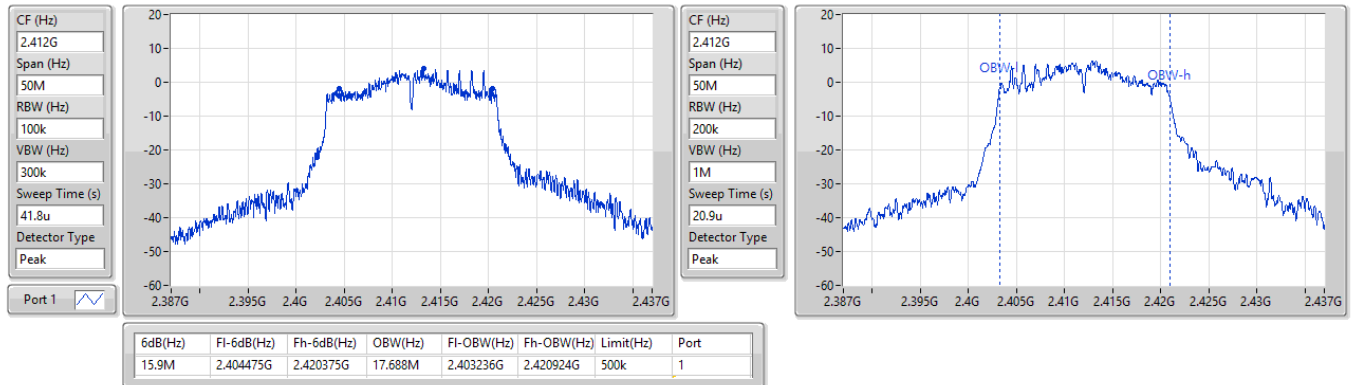


2.4-2.4835GHz_802.11n HT20_Nss1,(MCS0)_1TX

EBW

2412MHz

27/02/2024

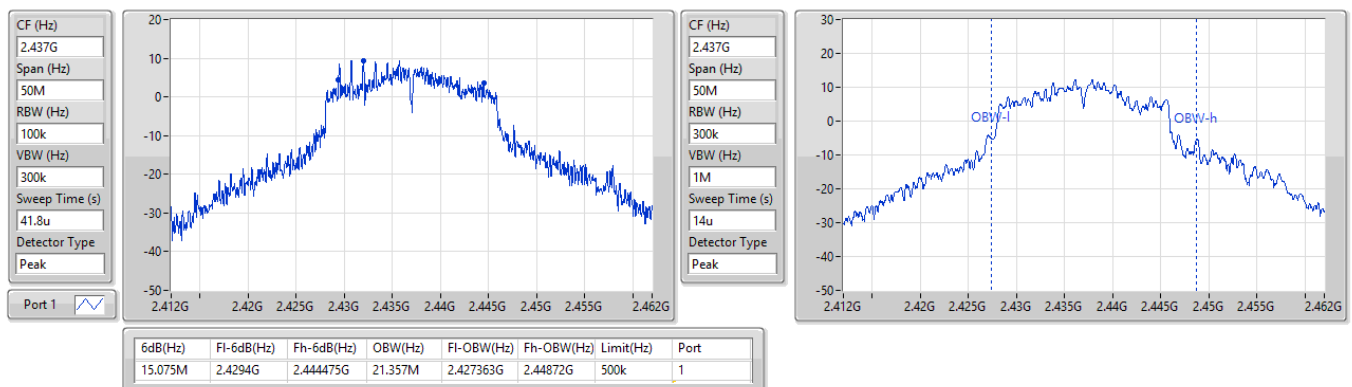


2.4-2.4835GHz_802.11n HT20_Nss1,(MCS0)_1TX

EBW

2437MHz

27/02/2024

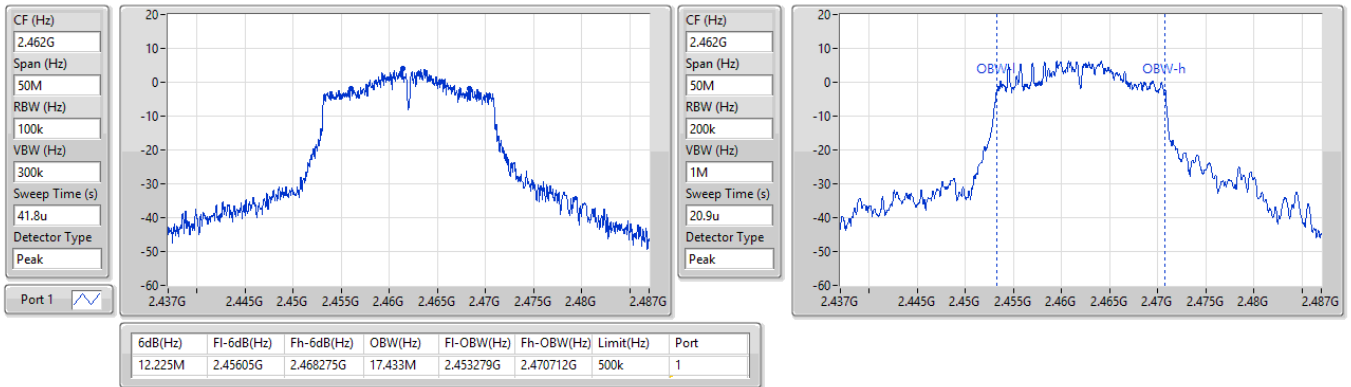


2.4-2.4835GHz_802.11n HT20_Nss1,(MCS0)_1TX

EBW

2462MHz

27/02/2024





Average Power

Appendix C

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_1TX	18.91	0.07780
802.11g_Nss1,(6Mbps)_1TX	19.05	0.08035
802.11n HT20_Nss1,(MCS0)_1TX	20.97	0.12503

**Result**

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	3.68	18.91	18.91	30.00
2437MHz	Pass	3.68	17.00	17.00	30.00
2462MHz	Pass	3.68	16.11	16.11	30.00
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	3.68	16.86	16.86	30.00
2417MHz	Pass	3.68	17.66	17.66	30.00
2437MHz	Pass	3.68	19.05	19.05	30.00
2457MHz	Pass	3.68	18.46	18.46	30.00
2462MHz	Pass	3.68	17.35	17.35	30.00
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-
2412MHz	Pass	3.68	16.54	16.54	30.00
2417MHz	Pass	3.68	17.69	17.69	30.00
2437MHz	Pass	3.68	20.97	20.97	30.00
2457MHz	Pass	3.68	18.24	18.24	30.00
2462MHz	Pass	3.68	16.78	16.78	30.00

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

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_1TX	-4.52
802.11g_Nss1,(6Mbps)_1TX	-5.10
802.11n HT20_Nss1,(MCS0)_1TX	-3.89

RBW = 3kHz;

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	3.68	-4.52	-4.52	8.00
2437MHz	Pass	3.68	-6.95	-6.95	8.00
2462MHz	Pass	3.68	-7.21	-7.21	8.00
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	3.68	-7.20	-7.20	8.00
2437MHz	Pass	3.68	-5.10	-5.10	8.00
2462MHz	Pass	3.68	-7.33	-7.33	8.00
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-
2412MHz	Pass	3.68	-8.19	-8.19	8.00
2437MHz	Pass	3.68	-3.89	-3.89	8.00
2462MHz	Pass	3.68	-7.64	-7.64	8.00

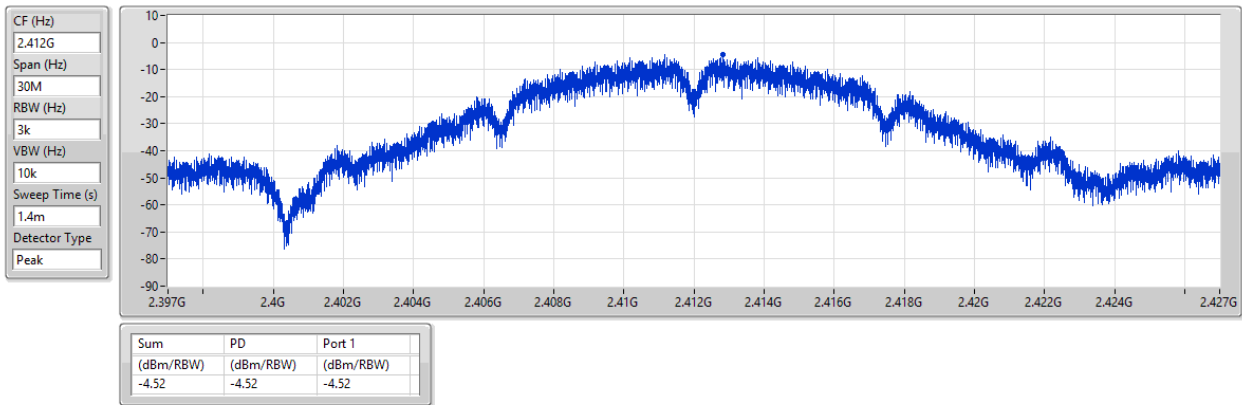
DG = Directional Gain; RBW = 3kHz;
 PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

PSD

2412MHz

27/02/2024

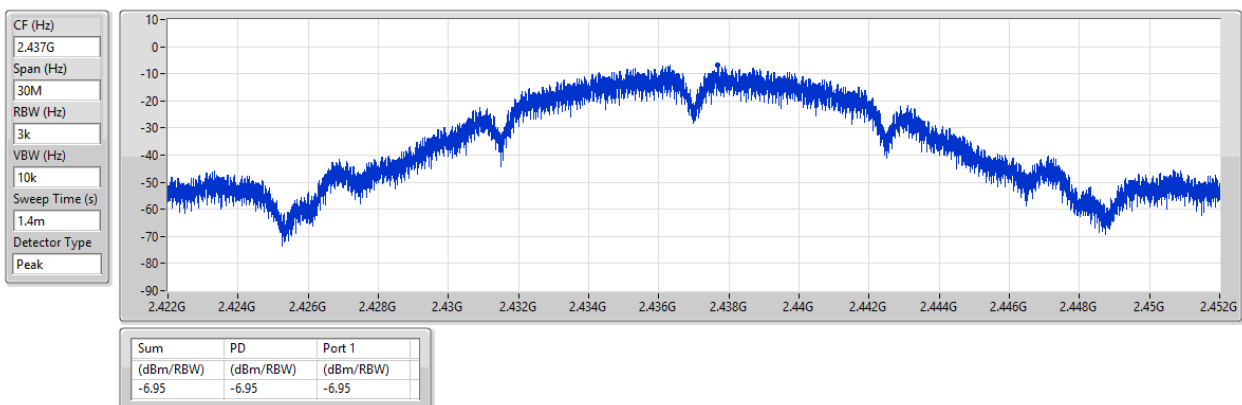


2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

PSD

2437MHz

27/02/2024

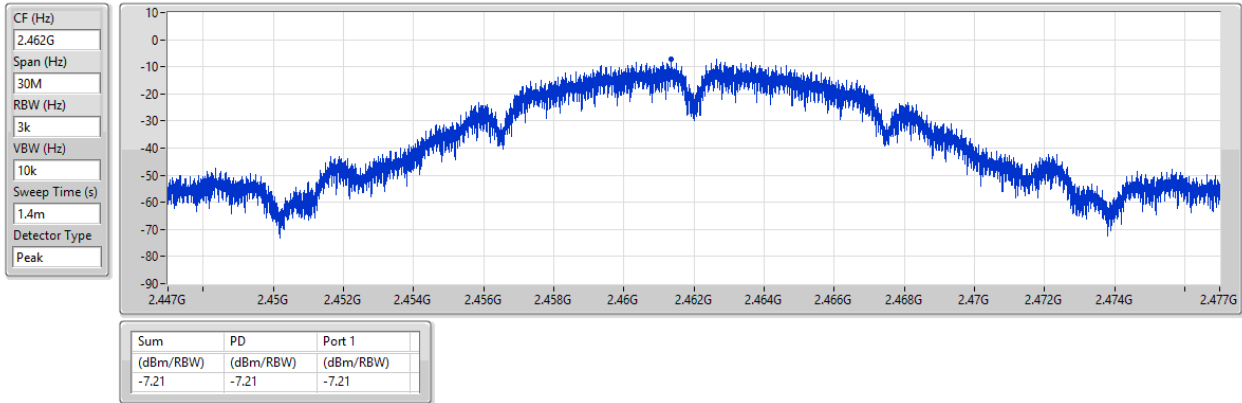


2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

PSD

2462MHz

27/02/2024

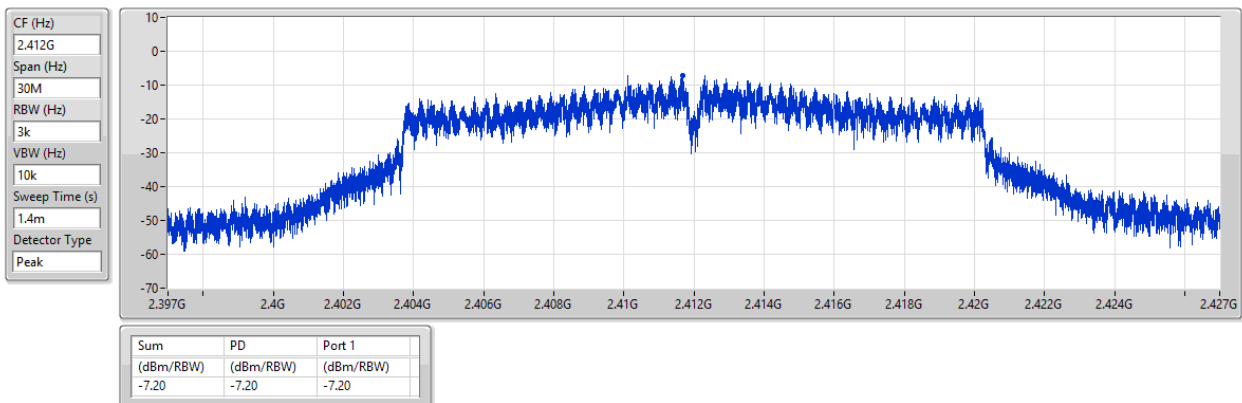


2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

PSD

2412MHz

27/02/2024

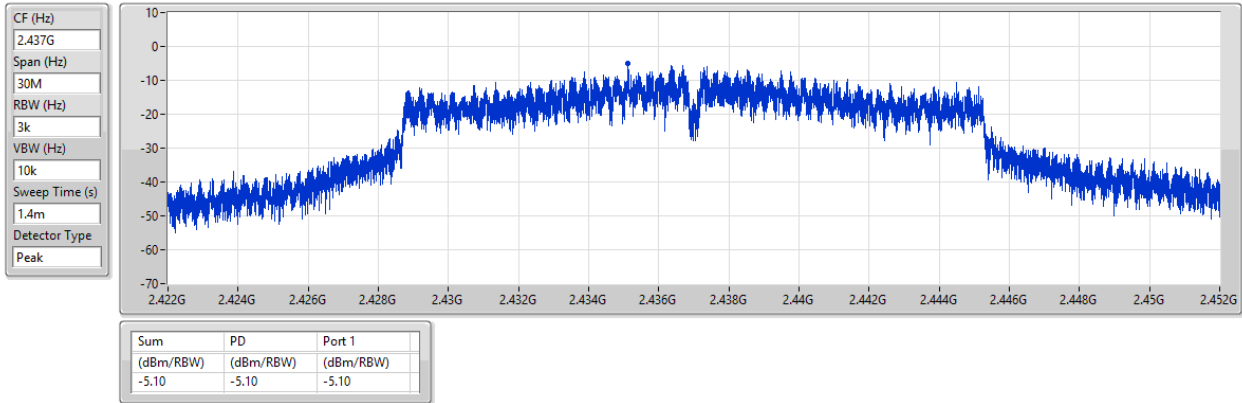


2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

PSD

2437MHz

27/02/2024

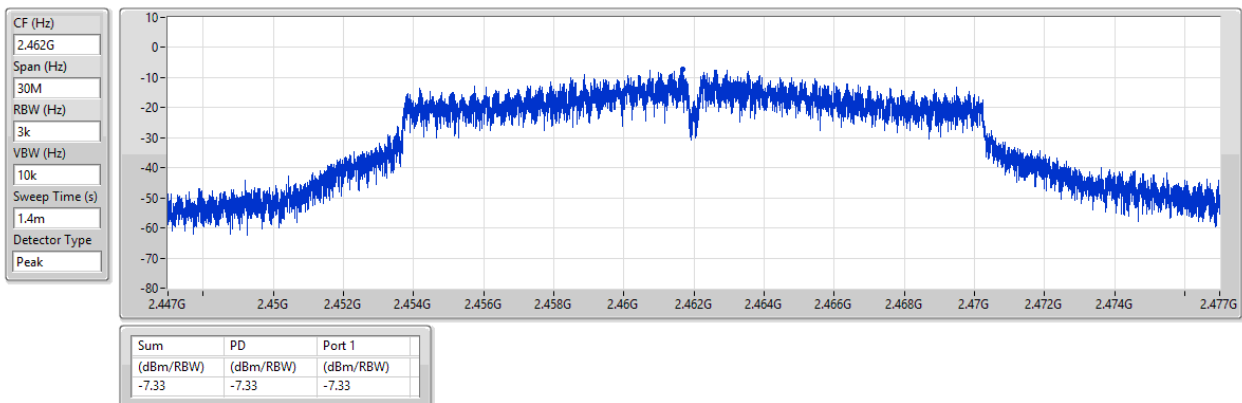


2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

PSD

2462MHz

27/02/2024

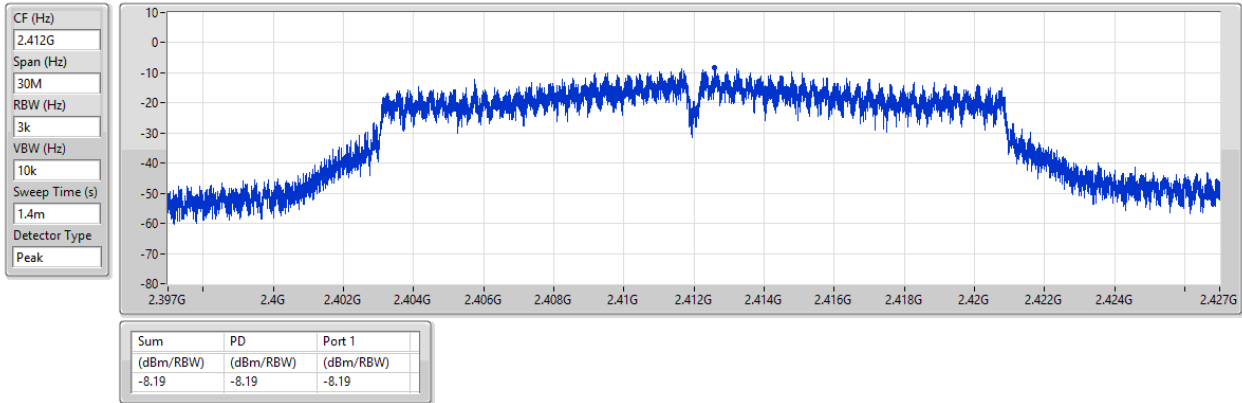


2.4-2.4835GHz_802.11n HT20_Nss1,(MCS0)_1TX

PSD

2412MHz

27/02/2024

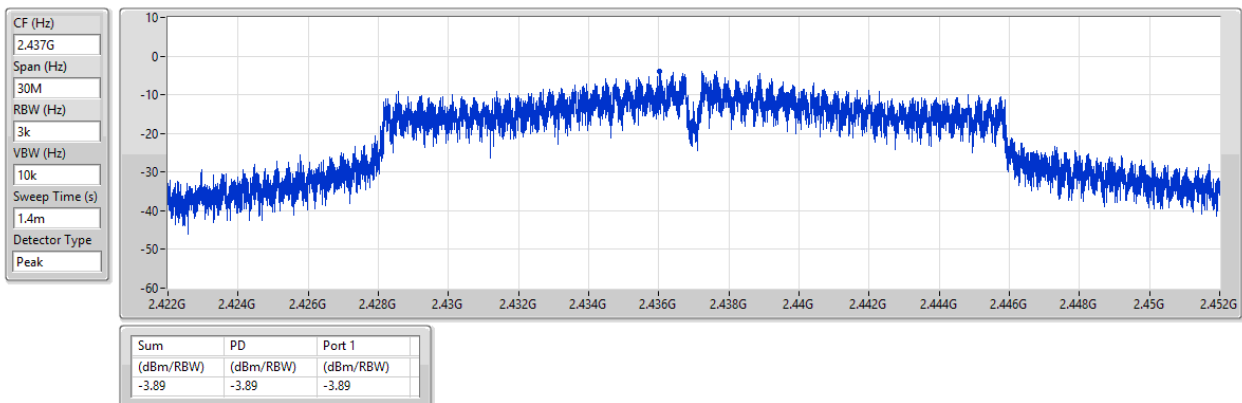


2.4-2.4835GHz_802.11n HT20_Nss1,(MCS0)_1TX

PSD

2437MHz

27/02/2024

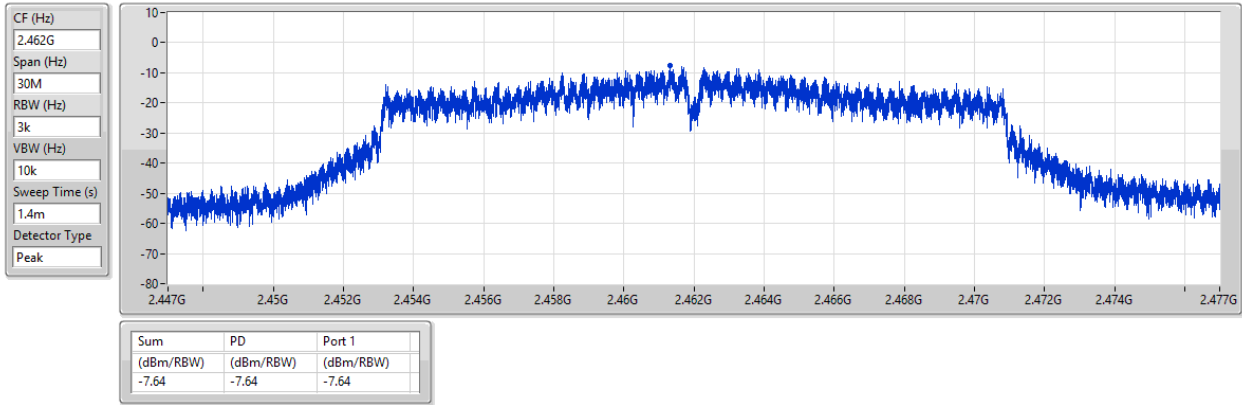


2.4-2.4835GHz_802.11n HT20_Nss1,(MCS0)_1TX

PSD

2462MHz

27/02/2024





Summary

Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX	Pass	2.41102G	10.26	-19.74	2.13516G	-54.01	2.39856G	-25.21	2.4G	-35.01	2.51126G	-51.81	7.23514G	-36.73	1
802.11g_Nss1,(6Mbps)_1TX	Pass	2.43591G	7.39	-22.61	48.64M	-55.41	2.39608G	-27.33	2.4G	-28.63	2.50134G	-51.49	7.23233G	-44.42	1
802.11n HT20_Nss1,(MCS0)_1TX	Pass	2.44192G	10.17	-19.83	2.00701G	-55.36	2.39984G	-26.80	2.4G	-28.29	2.51566G	-51.68	7.23514G	-45.92	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)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.41102G	10.26	-19.74	2.13516G	-54.01	2.39856G	-25.21	2.4G	-35.01	2.51126G	-51.81	7.23514G	-36.73	1
2437MHz	Pass	2.41102G	10.26	-19.74	1.90915G	-54.97	2.39368G	-49.78	2.4G	-55.38	2.50982G	-51.31	21.72124G	-48.52	1
2462MHz	Pass	2.41102G	10.26	-19.74	1.64469G	-55.59	2.39736G	-52.15	2.4G	-56.46	2.5187G	-51.37	21.71843G	-47.94	1
802.11g_Nss1.(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43591G	7.39	-22.61	48.64M	-55.41	2.39608G	-27.33	2.4G	-28.63	2.50134G	-51.49	7.23233G	-44.42	1
2437MHz	Pass	2.43591G	7.39	-22.61	1.65518G	-55.00	2.39864G	-45.16	2.4G	-45.02	2.50286G	-50.76	21.95443G	-48.84	1
2462MHz	Pass	2.43591G	7.39	-22.61	1.80663G	-55.58	2.39136G	-51.96	2.4G	-56.42	2.50038G	-50.60	21.75496G	-47.46	1
802.11n HT20_Nss1.(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.44192G	10.17	-19.83	2.00701G	-55.36	2.39984G	-26.80	2.4G	-28.29	2.51566G	-51.68	7.23514G	-45.92	1
2437MHz	Pass	2.44192G	10.17	-19.83	2.03497G	-55.14	2.39992G	-39.71	2.4G	-39.98	2.50382G	-49.74	21.9741G	-48.76	1
2462MHz	Pass	2.44192G	10.17	-19.83	2.18176G	-55.48	2.39904G	-52.39	2.4G	-56.74	2.50062G	-50.11	21.72124G	-49.18	1

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

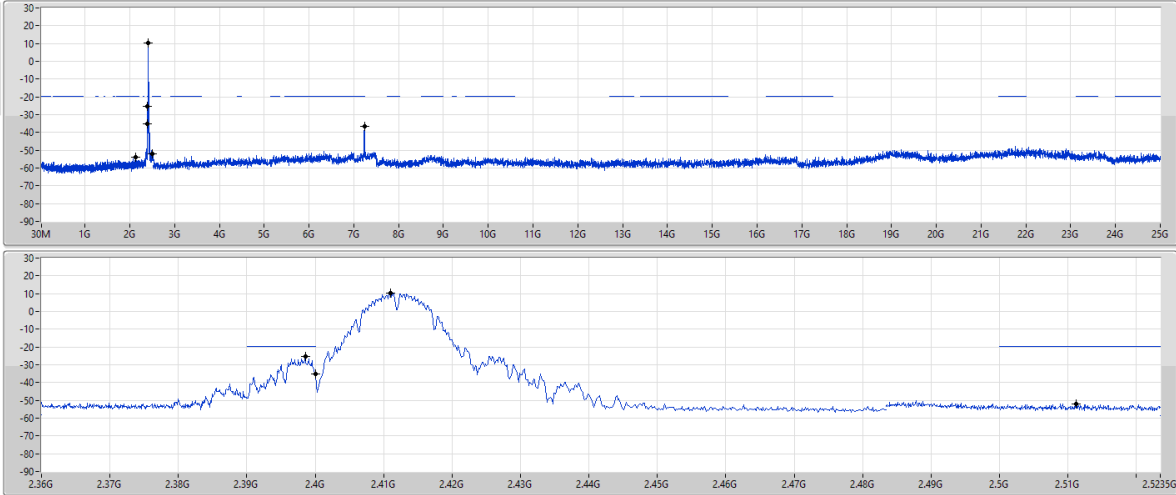
CSEndB

2412MHz

27/02/2024

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

Port 1



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
2.41102G	10.26	-19.74	2.13516G	-54.01	2.39856G	-25.21	2.4G	-35.01	2.51126G	-51.81	7.23514G	-36.73	1

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

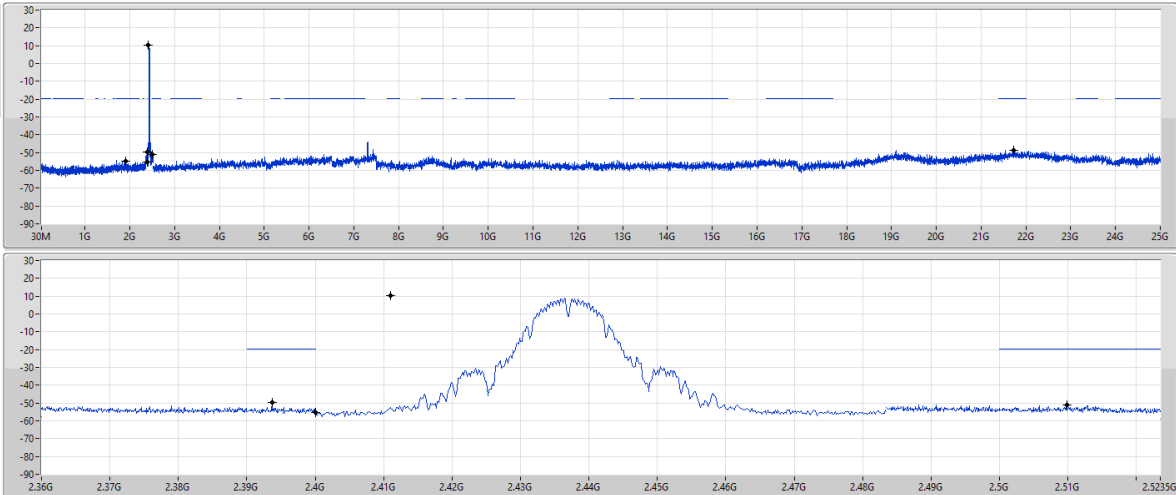
CSEndB

2437MHz

27/02/2024

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

Port 1



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
2.41102G	10.26	-19.74	1.90915G	-54.97	2.39368G	-49.78	2.4G	-55.38	2.50982G	-51.31	21.72124G	-48.52	1

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

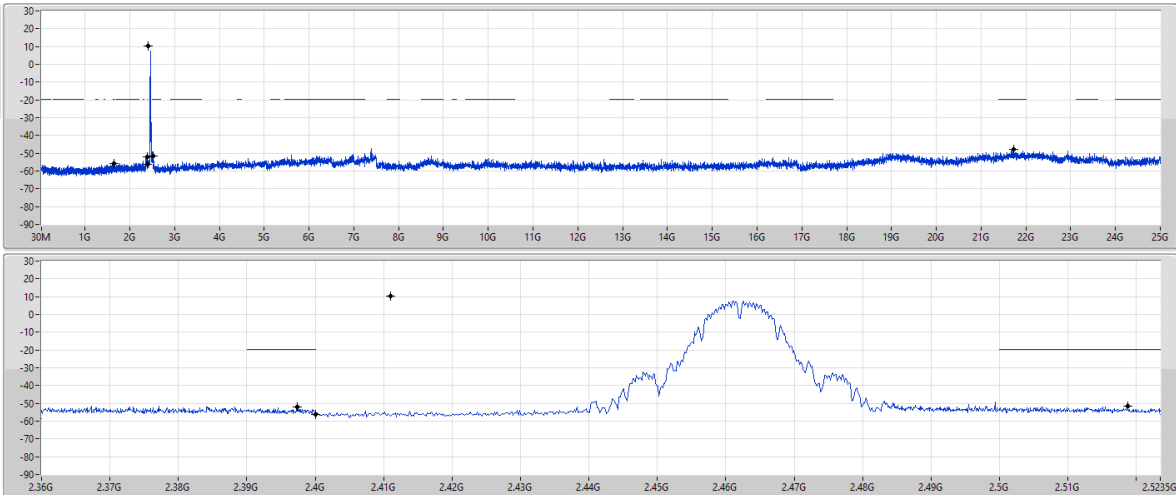
CSEndB

2462MHz

27/02/2024

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

Port 1



2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

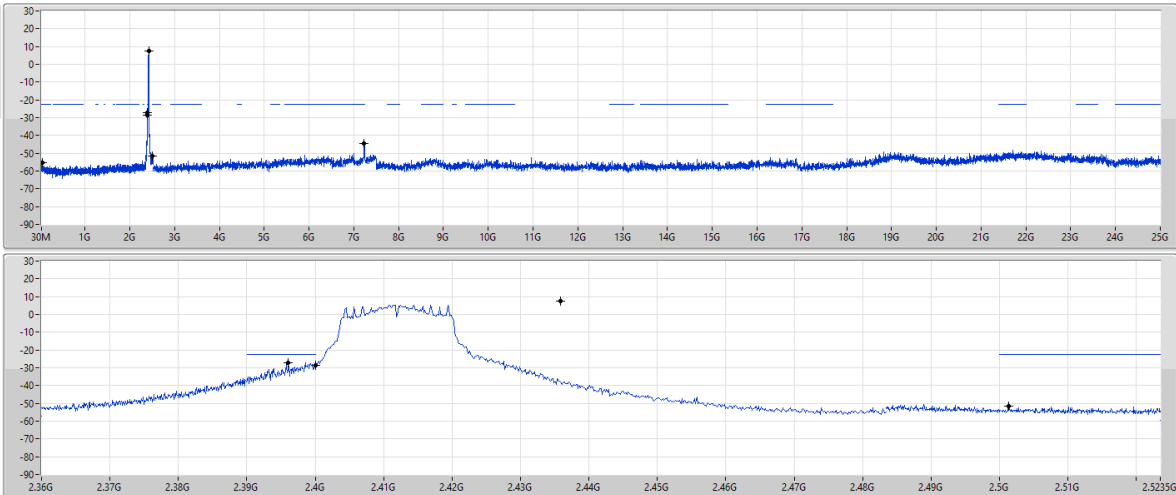
CSEndB

2412MHz

27/02/2024

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

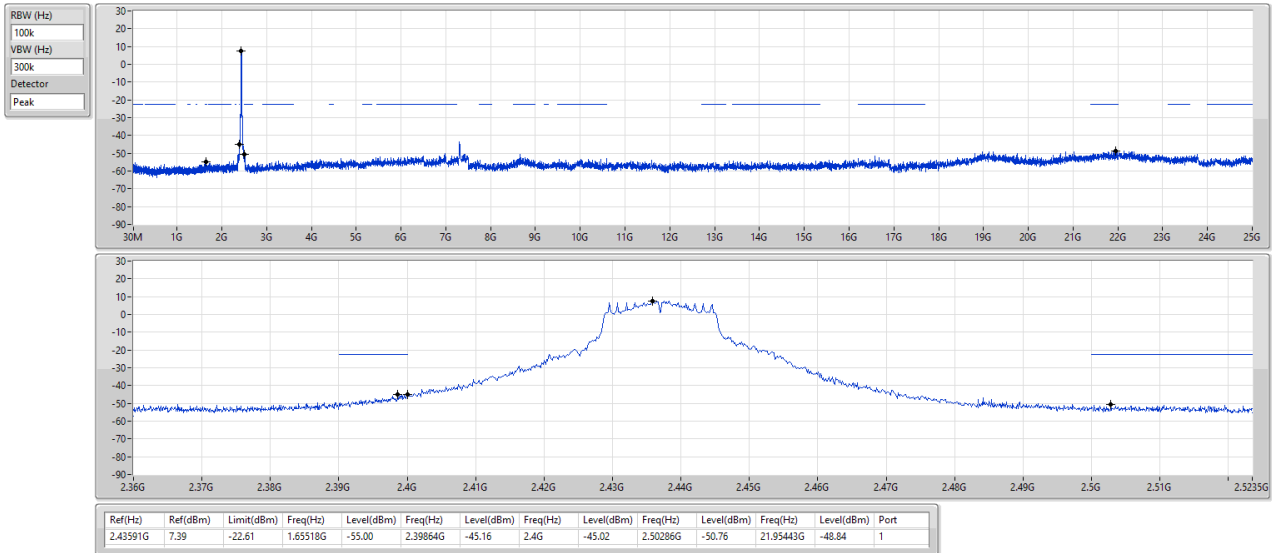
Port 1



2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

CSEndB

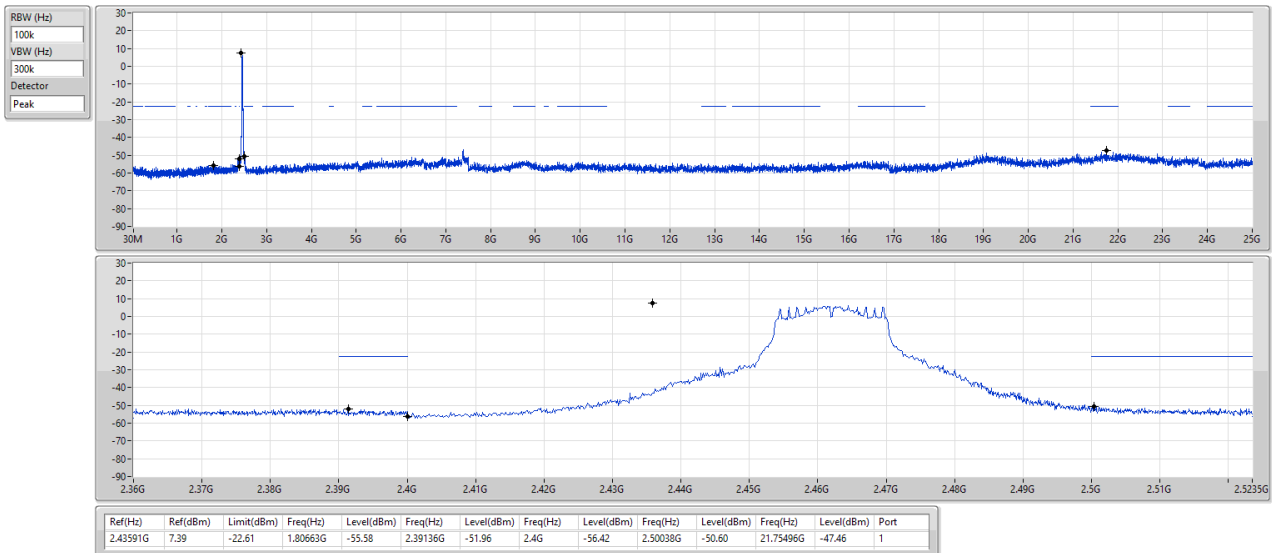
2437MHz



2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

CSEndB

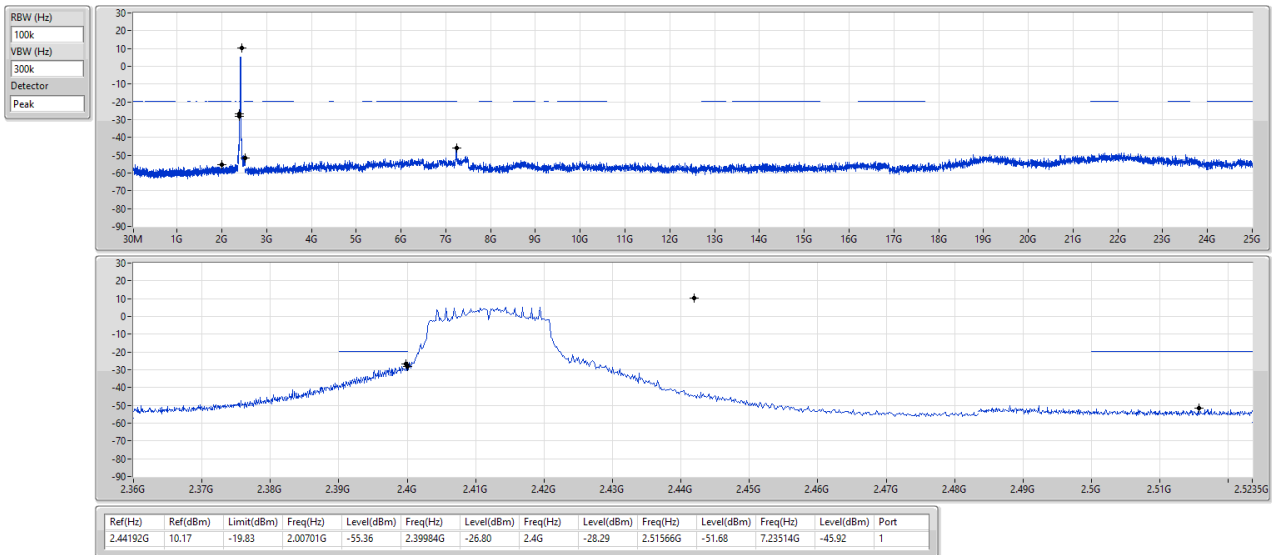
2462MHz



2.4-2.4835GHz_802.11n HT20_Nss1,(MCS0)_1TX

CSEndB

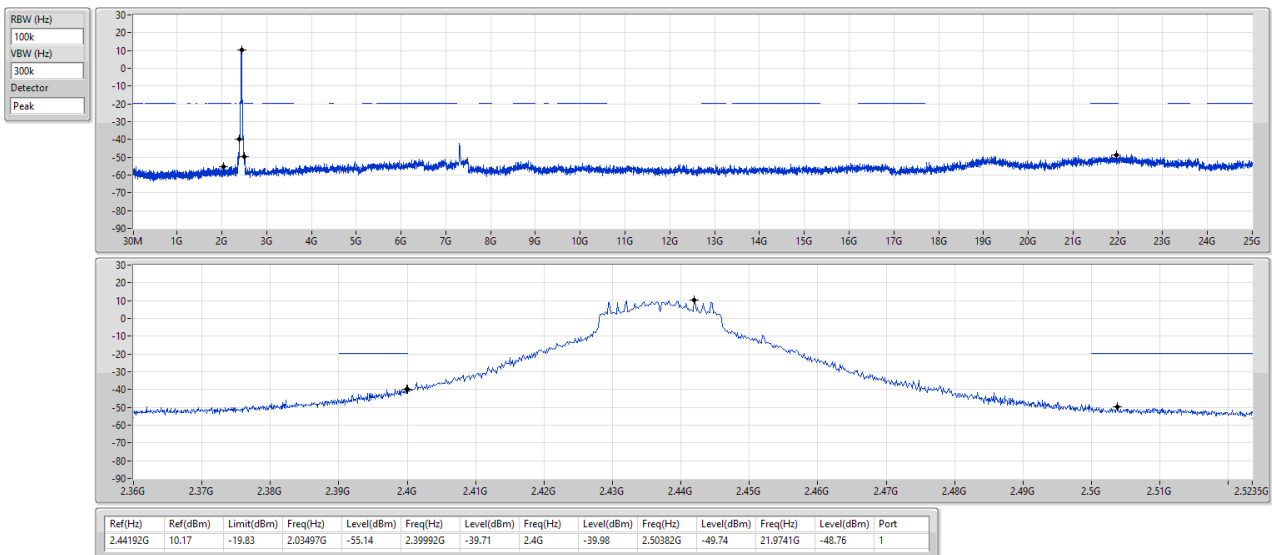
2412MHz



2.4-2.4835GHz_802.11n HT20_Nss1,(MCS0)_1TX

CSEndB

2437MHz



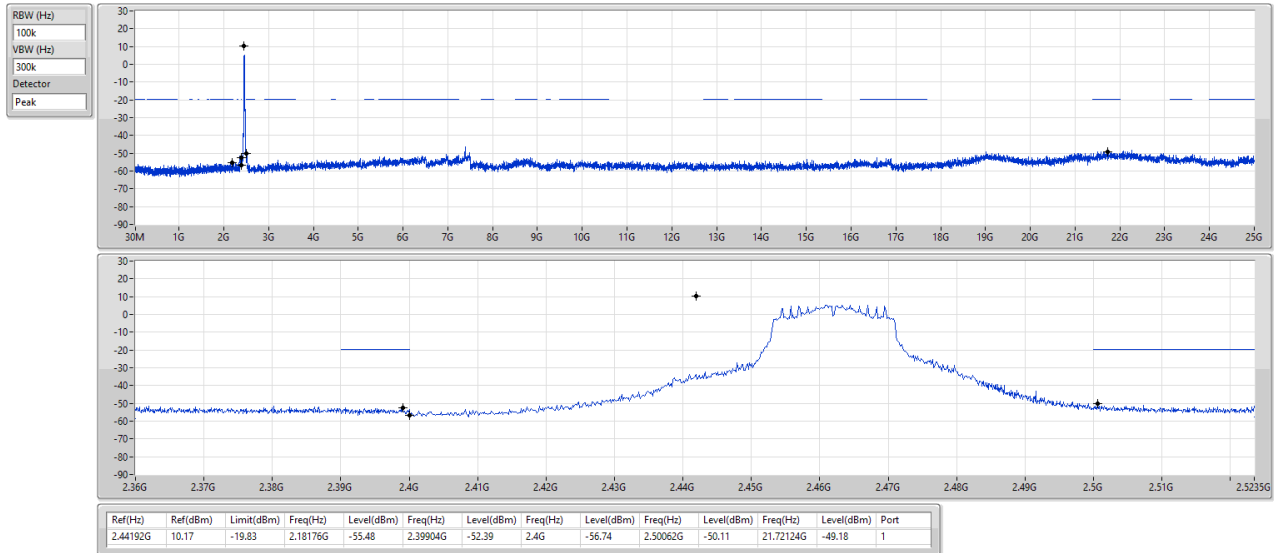
2.4-2.4835GHz_802.11n_HT20_Nss1,(MCS0)_1TX

CSEndB

2462MHz

27/02/2024

Port 1





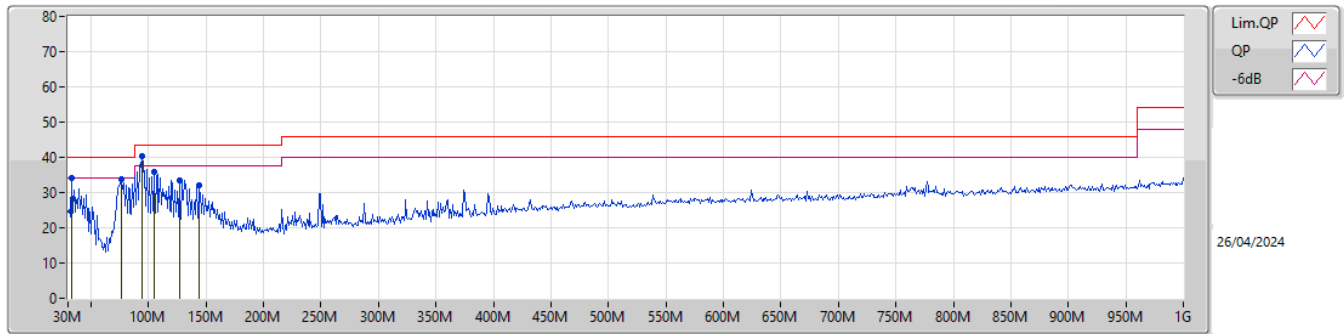
Radiated Emissions below 1GHz

Appendix F.1

Summary

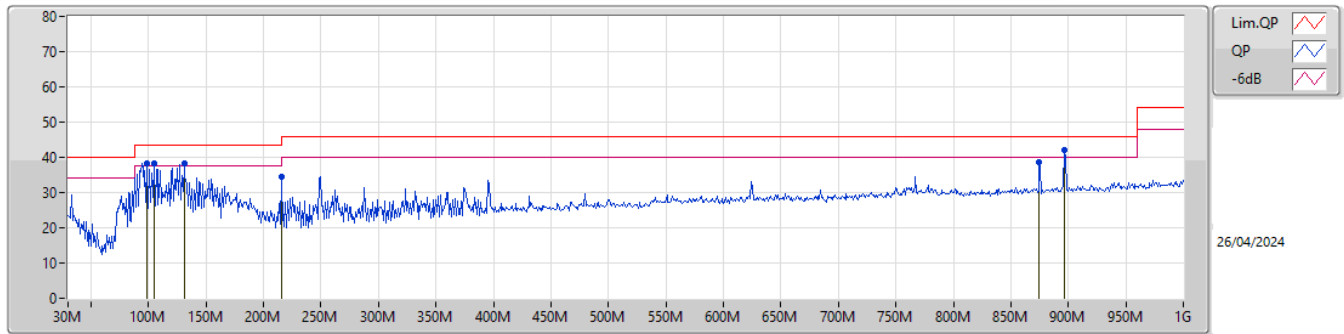
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 2	Pass	PK	94.02M	40.22	43.50	-3.28	Vertical

Mode 2



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)		
PK	32.91M	34.27	40.00	-5.73	-8.12	3	Vertical	232	1.00	-	42.39	22.55	0.95	31.62		
PK	76.56M	33.77	40.00	-6.23	-17.86	3	Vertical	120	1.50	-	51.63	12.54	1.55	31.95		
PK	94.02M	40.22	43.50	-3.28	-14.47	3	Vertical	58	1.00	"Worst"	54.69	15.82	1.71	32.00		
PK	104.69M	36.00	43.50	-7.50	-12.71	3	Vertical	172	1.00	-	48.71	17.45	1.79	31.95		
PK	127M	33.56	43.50	-9.94	-11.98	3	Vertical	111	1.00	-	45.54	18.02	1.98	31.98		
PK	143.49M	32.19	43.50	-11.31	-12.96	3	Vertical	129	1.00	-	45.15	16.92	2.10	31.98		

Mode 2



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)		
PK	98.87M	38.36	43.50	-5.14	-13.65	3	Horizontal	352	3.00	-	52.01	16.56	1.74	31.95		
PK	104.69M	38.16	43.50	-5.34	-12.71	3	Horizontal	345	2.00	-	50.87	17.45	1.79	31.95		
PK	130.88M	38.24	43.50	-5.26	-12.07	3	Horizontal	180	2.00	-	50.31	17.89	2.01	31.97		
PK	215.27M	34.45	43.50	-9.05	-14.43	3	Horizontal	104	2.00	-	48.88	14.99	2.60	32.02		
PK	874.87M	38.68	46.00	-7.32	-0.68	3	Horizontal	0	1.00	-	39.36	26.14	5.72	32.54		
PK	896.21M	42.04	46.00	-3.96	-0.24	3	Horizontal	360	1.50	"Worst"	42.28	26.40	5.82	32.46		

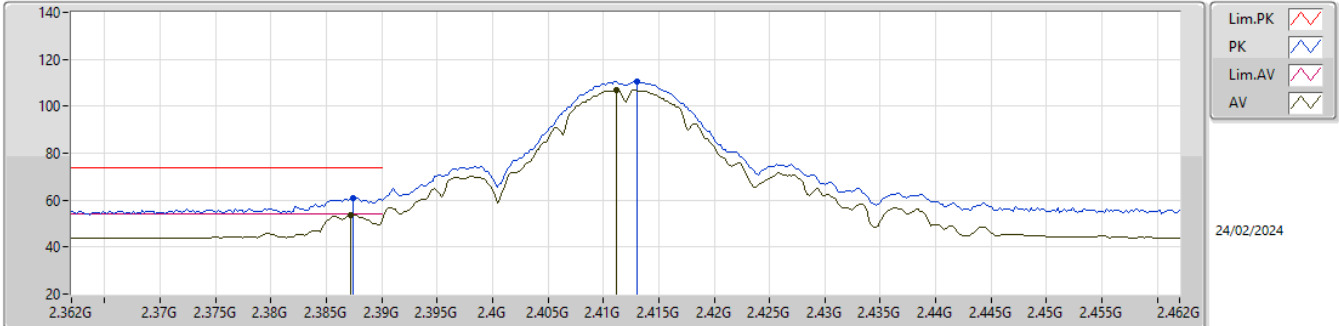


Summary

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)_1TX	Pass	AV	2.4838G	53.95	54.00	-0.05	3	Vertical	196	1.76	-

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

2412MHz_TX

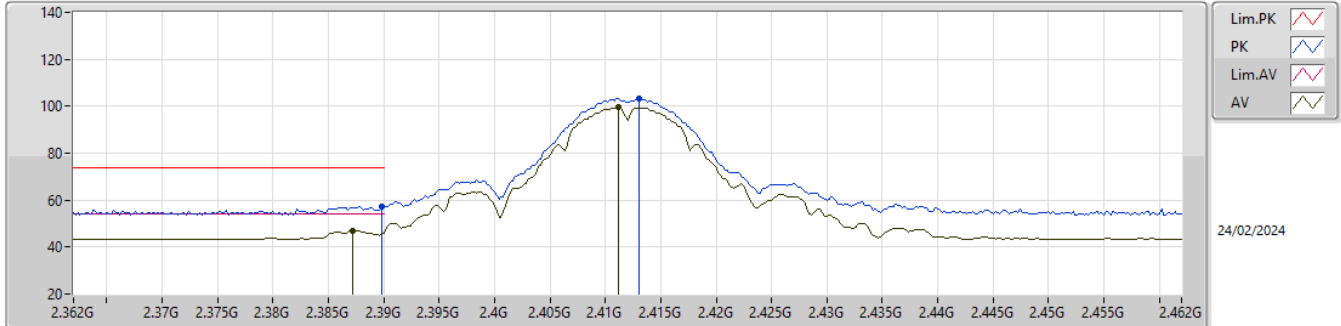


EUT_Y_1TX
Setting 68
04-C-C-6

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.3874G	60.98	74.00	-13.02	30.24	3	Vertical	53	1.80	-	27.40	3.34	-			
AV	2.3872G	53.87	54.00	-0.13	23.13	3	Vertical	53	1.80	-	27.40	3.34	-			
PK	2.413G	110.74	Inf	-Inf	79.88	3	Vertical	53	1.80	-	27.50	3.36	-			
AV	2.4112G	106.86	Inf	-Inf	76.00	3	Vertical	53	1.80	-	27.50	3.36	-			

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

2412MHz_TX

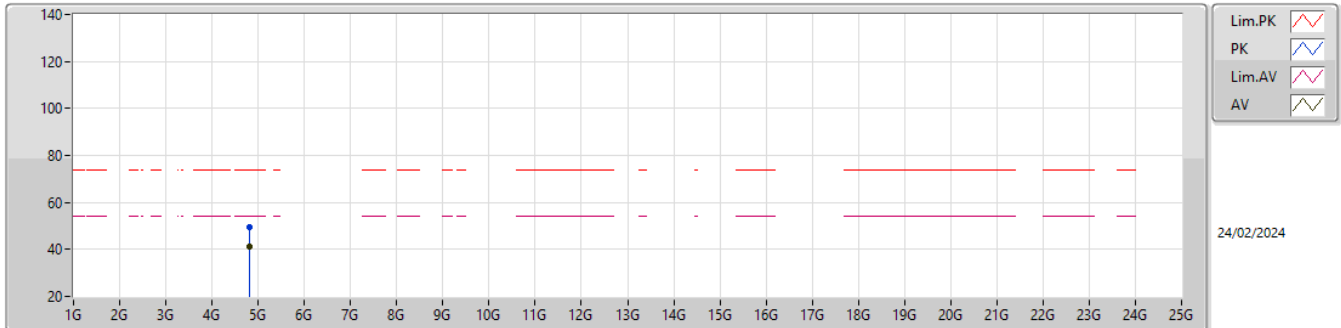


EUT Y_1TX
Setting 68
04-C-C-6

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.3898G	57.23	74.00	-16.77	26.48	3	Horizontal	136	1.80	-	27.40	3.35	-			
AV	2.3872G	47.07	54.00	-6.93	16.33	3	Horizontal	136	1.80	-	27.40	3.34	-			
PK	2.413G	103.33	Inf	-Inf	72.47	3	Horizontal	136	1.80	-	27.50	3.36	-			
AV	2.4112G	99.44	Inf	-Inf	68.58	3	Horizontal	136	1.80	-	27.50	3.36	-			

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

2412MHz_TX

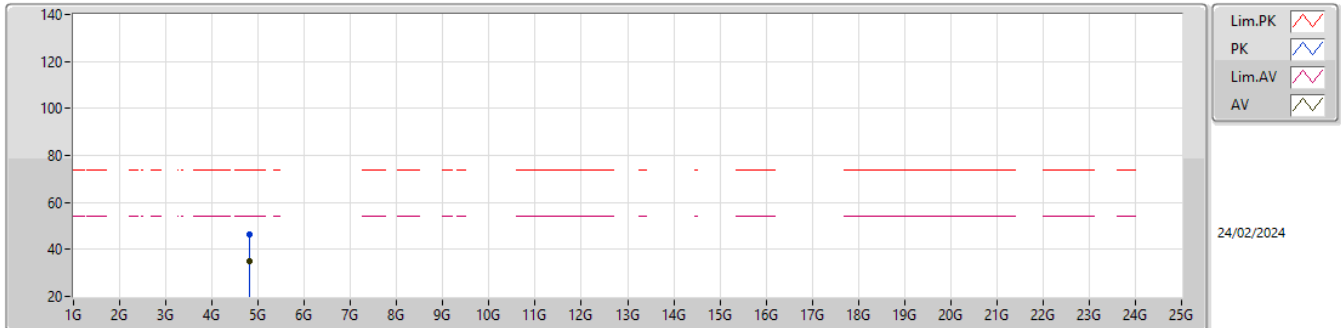


EUT_V_1TX
Setting 68
04-C-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA			
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)			
PK	4.82394G	49.34	74.00	-24.66	44.59	3	Vertical	241	1.80	-	32.35	5.67	33.27			
AV	4.82395G	41.24	54.00	-12.76	36.49	3	Vertical	241	1.80	-	32.35	5.67	33.27			

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

2412MHz_TX

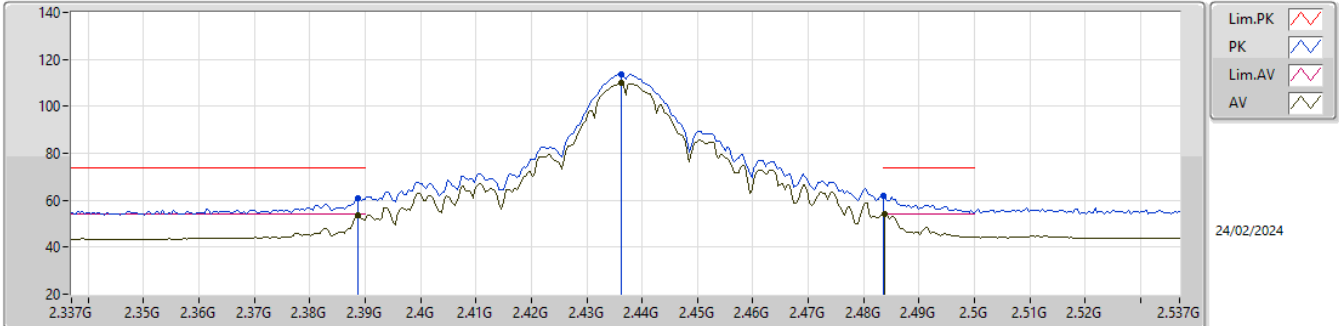


EUT_V_1TX
Setting 68
04-C-C-6

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.82407G	46.62	74.00	-27.38	41.87	3	Horizontal	153	1.80	-	32.35	5.67	33.27			
AV	4.82391G	35.16	54.00	-18.84	30.41	3	Horizontal	153	1.80	-	32.35	5.67	33.27			

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

2437MHz_TX

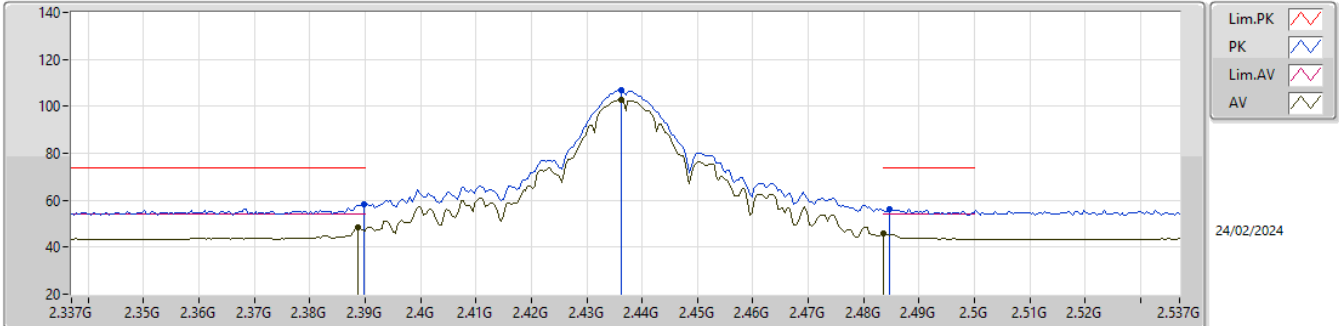


EUT_Y_1TX
Setting 75
04-C-C-6

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.3886G	60.98	74.00	-13.02	30.23	3	Vertical	196	1.76	-	27.40	3.35	-			
AV	2.3886G	53.67	54.00	-0.33	22.92	3	Vertical	196	1.76	-	27.40	3.35	-			
PK	2.4362G	113.58	Inf	-Inf	82.65	3	Vertical	196	1.76	-	27.56	3.37	-			
AV	2.4362G	109.75	Inf	-Inf	78.82	3	Vertical	196	1.76	-	27.56	3.37	-			
PK	2.4835G	61.71	74.00	-12.29	30.67	3	Vertical	196	1.76	-	27.64	3.40	-			
AV	2.4838G	53.95	54.00	-0.05	22.91	3	Vertical	196	1.76	-	27.64	3.40	-			

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

2437MHz_TX

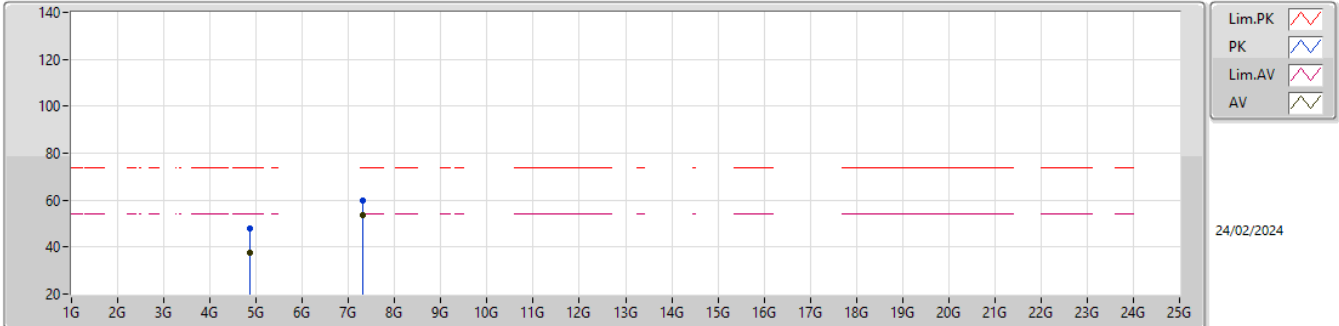


EUT Y_1TX
Setting 75
04-C-C-6

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.3898G	58.24	74.00	-15.76	27.49	3	Horizontal	48	2.09	-	27.40	3.35	-			
AV	2.3886G	48.59	54.00	-5.41	17.84	3	Horizontal	48	2.09	-	27.40	3.35	-			
PK	2.4362G	106.77	Inf	-Inf	75.84	3	Horizontal	48	2.09	-	27.56	3.37	-			
AV	2.4362G	102.96	Inf	-Inf	72.03	3	Horizontal	48	2.09	-	27.56	3.37	-			
PK	2.4846G	56.02	74.00	-17.98	24.97	3	Horizontal	48	2.09	-	27.65	3.40	-			
AV	2.4835G	45.82	54.00	-8.18	14.78	3	Horizontal	48	2.09	-	27.64	3.40	-			

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

2437MHz_TX

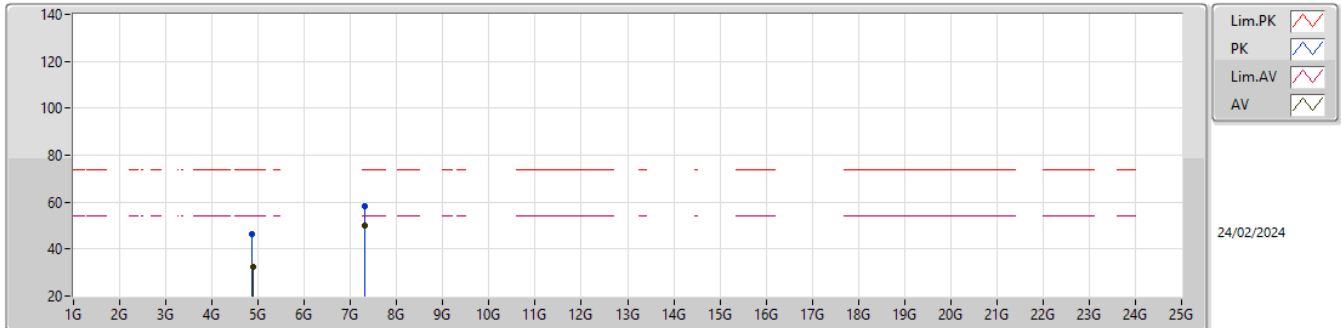


EUT_Y_1TX
Setting 62
04-C-C-6

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.87396G	47.70	74.00	-26.30	42.74	3	Vertical	18	1.84	-	32.50	5.72	33.26			
AV	4.874G	37.61	54.00	-16.39	32.65	3	Vertical	18	1.84	-	32.50	5.72	33.26			
PK	7.31196G	60.04	74.00	-13.96	49.81	3	Vertical	313	2.43	-	37.20	7.12	34.09			
AV	7.31024G	53.60	54.00	-0.40	43.37	3	Vertical	313	2.43	-	37.20	7.12	34.09			

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

2437MHz_TX

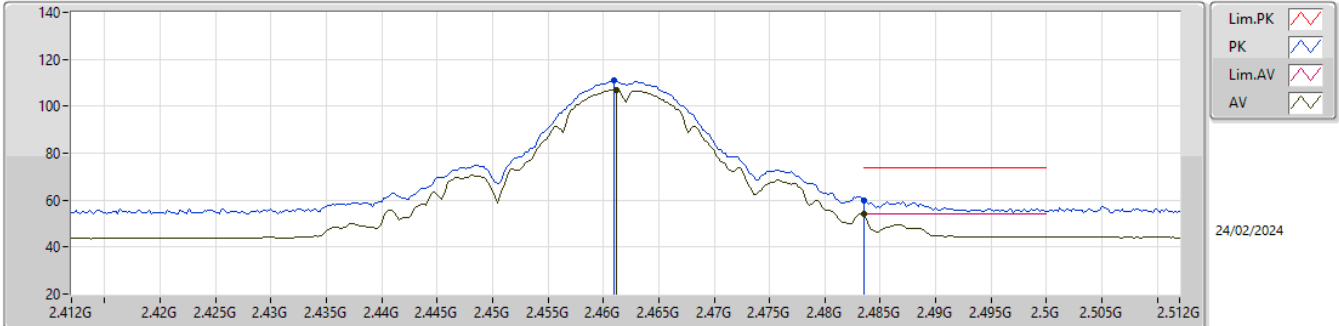


EUT Y_1TX
Setting 62
04-C-C-6

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.87388G	46.50	74.00	-27.50	41.54	3	Horizontal	24	1.06	-	32.50	5.72	33.26			
AV	4.87916G	32.41	54.00	-21.59	27.42	3	Horizontal	24	1.06	-	32.52	5.72	33.25			
PK	7.31008G	58.22	74.00	-15.78	47.99	3	Horizontal	114	1.80	-	37.20	7.12	34.09			
AV	7.31172G	50.04	54.00	-3.96	39.81	3	Horizontal	114	1.80	-	37.20	7.12	34.09			

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

2462MHz_TX

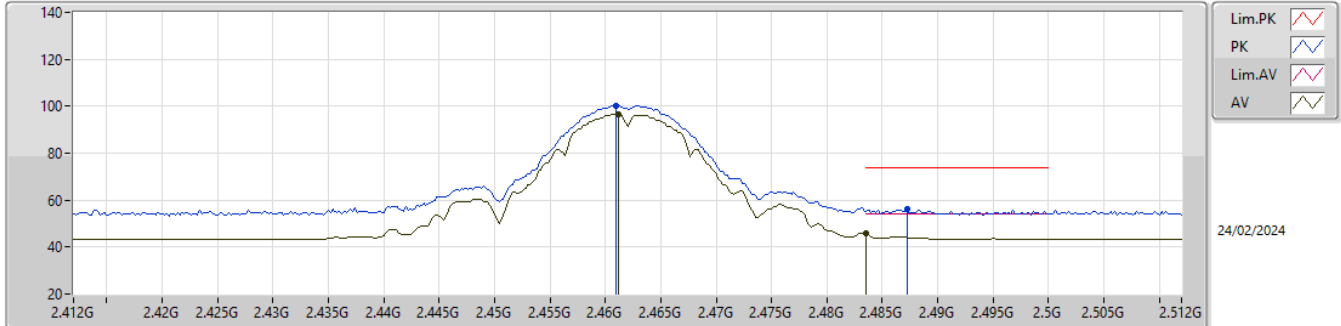


EUT_Y_1TX
Setting 66
04-C-C-6

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.461G	110.82	Inf	-Inf	79.84	3	Vertical	201	1.57	-	27.60	3.38	-			
AV	2.4612G	106.99	Inf	-Inf	76.01	3	Vertical	201	1.57	-	27.60	3.38	-			
PK	2.4835G	60.00	74.00	-14.00	28.96	3	Vertical	201	1.57	-	27.64	3.40	-			
AV	2.4835G	53.93	54.00	-0.07	22.89	3	Vertical	201	1.57	-	27.64	3.40	-			

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

2462MHz_TX

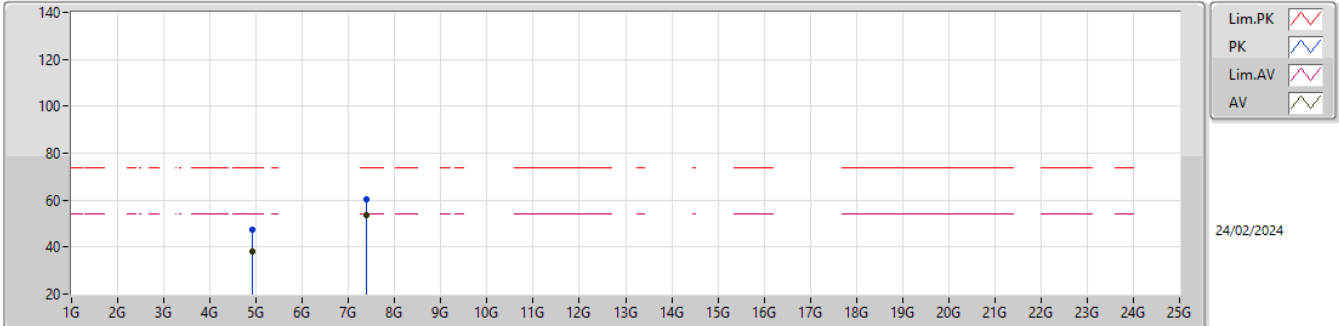


EUT_Y_1TX
Setting 66
04-C-C-6

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.461G	100.40	Inf	-Inf	69.42	3	Horizontal	134	1.83	-	27.60	3.38	-			
AV	2.4612G	96.57	Inf	-Inf	65.59	3	Horizontal	134	1.83	-	27.60	3.38	-			
PK	2.4872G	56.26	74.00	-17.74	25.19	3	Horizontal	134	1.83	-	27.67	3.40	-			
AV	2.4835G	45.83	54.00	-8.17	14.79	3	Horizontal	134	1.83	-	27.64	3.40	-			

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

2462MHz_TX

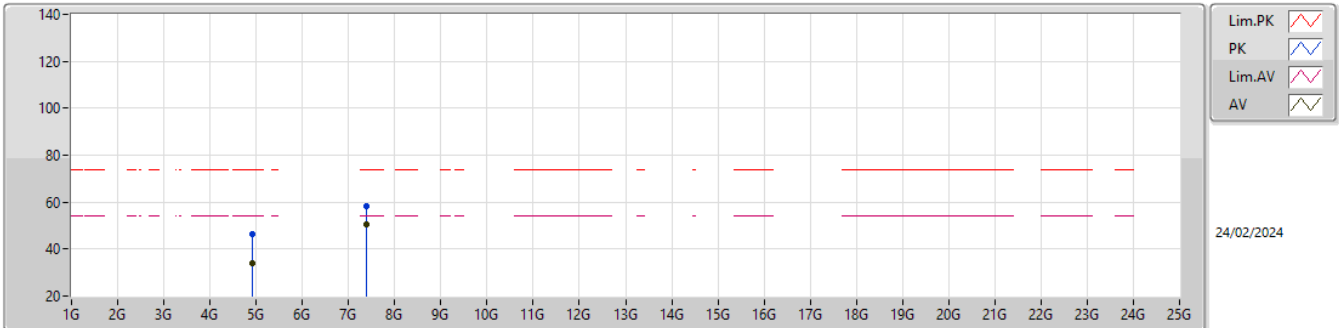


EUT_Y_1TX
Setting 60
04-C-C-6

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.92398G	47.65	74.00	-26.35	42.48	3	Vertical	153	1.80	-	32.65	5.76	33.24			
AV	4.92398G	37.96	54.00	-16.04	32.79	3	Vertical	153	1.80	-	32.65	5.76	33.24			
PK	7.38516G	60.11	74.00	-13.89	49.87	3	Vertical	268.4	2.70	-	37.20	7.16	34.12			
AV	7.38526G	53.45	54.00	-0.55	43.21	3	Vertical	268.4	2.70	-	37.20	7.16	34.12			

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX

2462MHz_TX

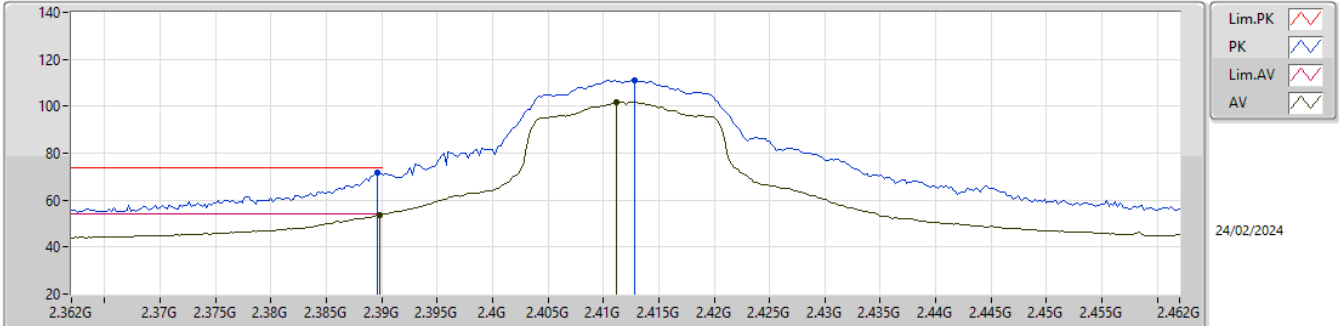


EUT_Y_1TX
Setting 60
04-C-C-6

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.92356G	46.28	74.00	-27.72	41.11	3	Horizontal	342	1.93	-	32.65	5.76	33.24			
AV	4.924G	33.83	54.00	-20.17	28.66	3	Horizontal	342	1.93	-	32.65	5.76	33.24			
PK	7.3851G	58.11	74.00	-15.89	47.87	3	Horizontal	111	2.95	-	37.20	7.16	34.12			
AV	7.38528G	50.28	54.00	-3.72	40.04	3	Horizontal	111	2.95	-	37.20	7.16	34.12			

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

2412MHz_TX

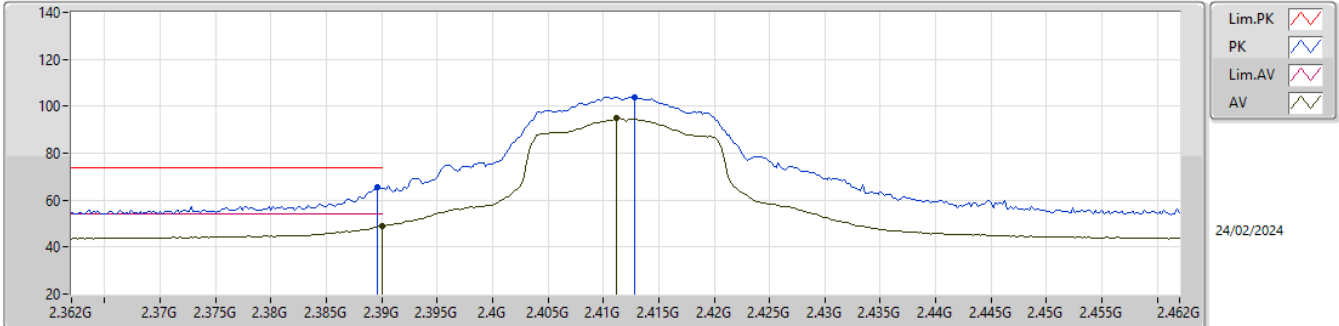


EUT_Y_1TX
Setting 65
04-C-C-6

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)				
PK	2.3896G	71.62	74.00	-2.38	40.87	3	Vertical	57.4	1.80	-	27.40	3.35	-				
AV	2.3898G	53.80	54.00	-0.20	23.05	3	Vertical	57.4	1.80	-	27.40	3.35	-				
PK	2.4128G	111.13	Inf	-Inf	80.27	3	Vertical	57.4	1.80	-	27.50	3.36	-				
AV	2.4112G	101.92	Inf	-Inf	71.06	3	Vertical	57.4	1.80	-	27.50	3.36	-				

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

2412MHz_TX

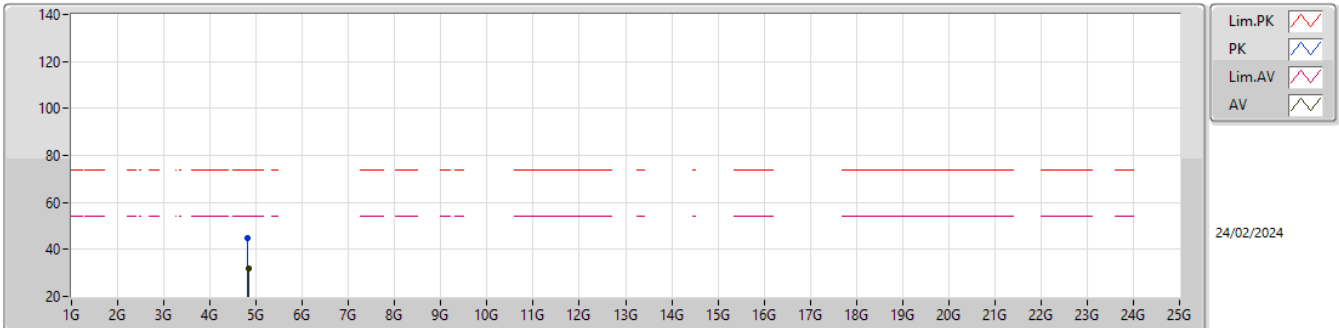


EUT Y_1TX
Setting 65
04-C-C-6

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)				
PK	2.3896G	65.43	74.00	-8.57	34.68	3	Horizontal	133	1.80	-	27.40	3.35	-				
AV	2.39G	48.81	54.00	-5.19	18.06	3	Horizontal	133	1.80	-	27.40	3.35	-				
PK	2.4128G	103.97	Inf	-Inf	73.11	3	Horizontal	133	1.80	-	27.50	3.36	-				
AV	2.4112G	94.84	Inf	-Inf	63.98	3	Horizontal	133	1.80	-	27.50	3.36	-				

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

2412MHz_TX

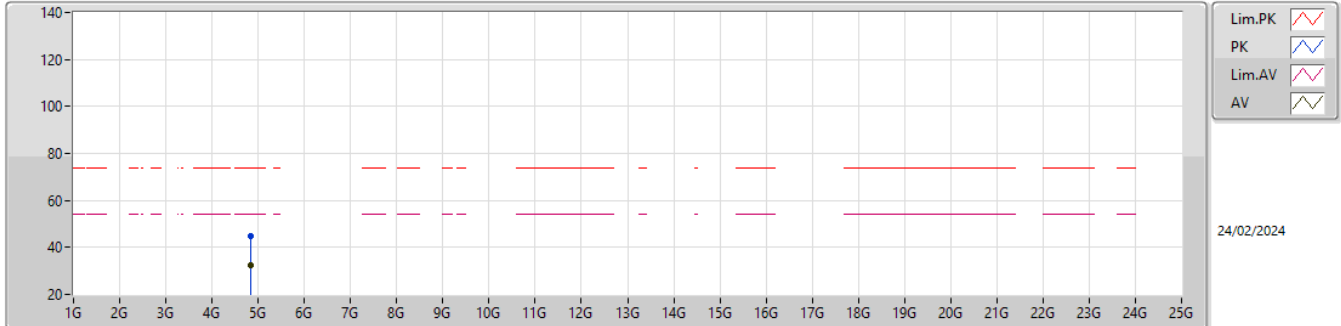


EUT_Y_1TX
Setting 65
04-C-C-6

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.81736G	44.93	74.00	-29.07	40.21	3	Vertical	103	1.58	-	32.33	5.67	33.28			
AV	4.82628G	32.14	54.00	-21.86	27.39	3	Vertical	103	1.58	-	32.35	5.67	33.27			

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

2412MHz_TX

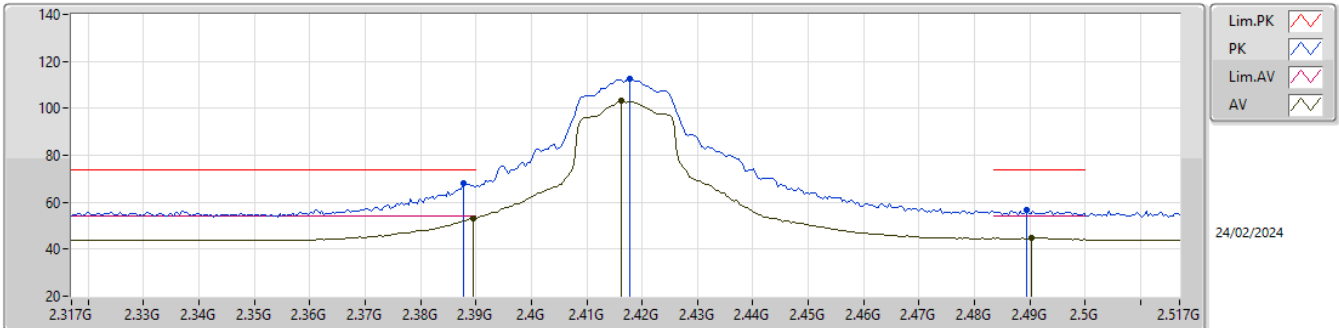


EUT_Y_1TX
Setting 65
04-C-C-6

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.82912G	44.99	74.00	-29.01	40.22	3	Horizontal	115	2.59	-	32.36	5.68	33.27			
AV	4.827G	32.33	54.00	-21.67	27.58	3	Horizontal	115	2.59	-	32.35	5.67	33.27			

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

2417MHz_TX

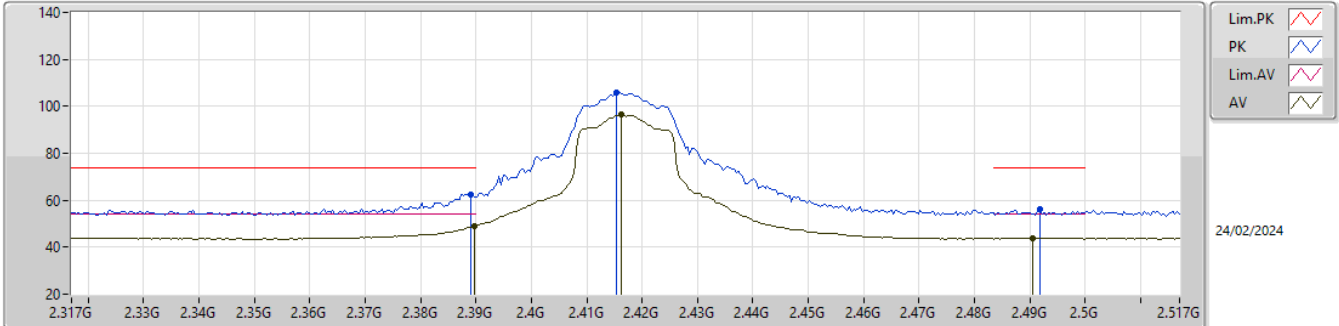


EUT_Y_1TX
Setting 68
04-C-C-6

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.3878G	68.14	74.00	-5.86	37.39	3	Vertical	53	1.69	-	27.40	3.35	-			
AV	2.3894G	53.33	54.00	-0.67	22.58	3	Vertical	53	1.69	-	27.40	3.35	-			
PK	2.4178G	112.44	Inf	-Inf	81.58	3	Vertical	53	1.69	-	27.50	3.36	-			
AV	2.4162G	103.11	Inf	-Inf	72.25	3	Vertical	53	1.69	-	27.50	3.36	-			
PK	2.4894G	56.86	74.00	-17.14	25.77	3	Vertical	53	1.69	-	27.69	3.40	-			
AV	2.4902G	44.86	54.00	-9.14	13.76	3	Vertical	53	1.69	-	27.70	3.40	-			

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

2417MHz_TX

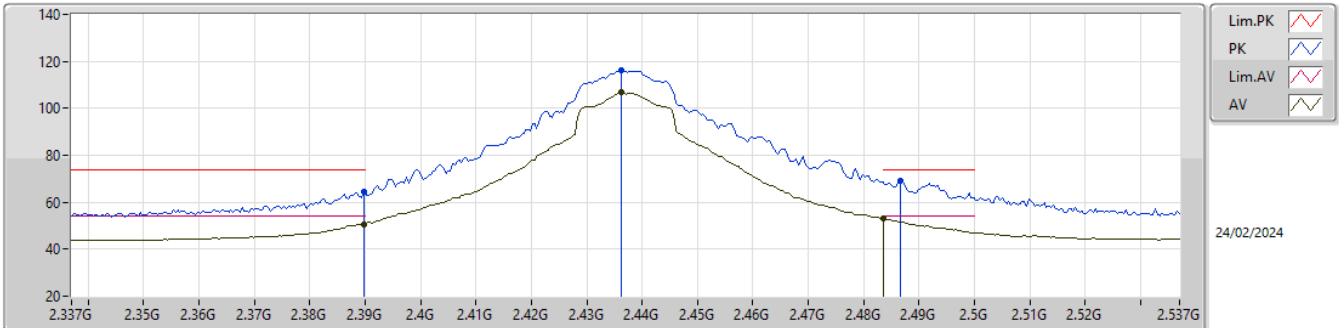


EUT_Y_1TX
Setting 68
04-C-C-6

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.389G	62.50	74.00	-11.50	31.75	3	Horizontal	50	2.52	-	27.40	3.35	-			
AV	2.3898G	48.78	54.00	-5.22	18.03	3	Horizontal	50	2.52	-	27.40	3.35	-			
PK	2.4154G	105.64	Inf	-Inf	74.78	3	Horizontal	50	2.52	-	27.50	3.36	-			
AV	2.4162G	96.74	Inf	-Inf	65.88	3	Horizontal	50	2.52	-	27.50	3.36	-			
PK	2.4918G	56.06	74.00	-17.94	24.96	3	Horizontal	50	2.52	-	27.70	3.40	-			
AV	2.4906G	43.86	54.00	-10.14	12.76	3	Horizontal	50	2.52	-	27.70	3.40	-			

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

2437MHz_TX

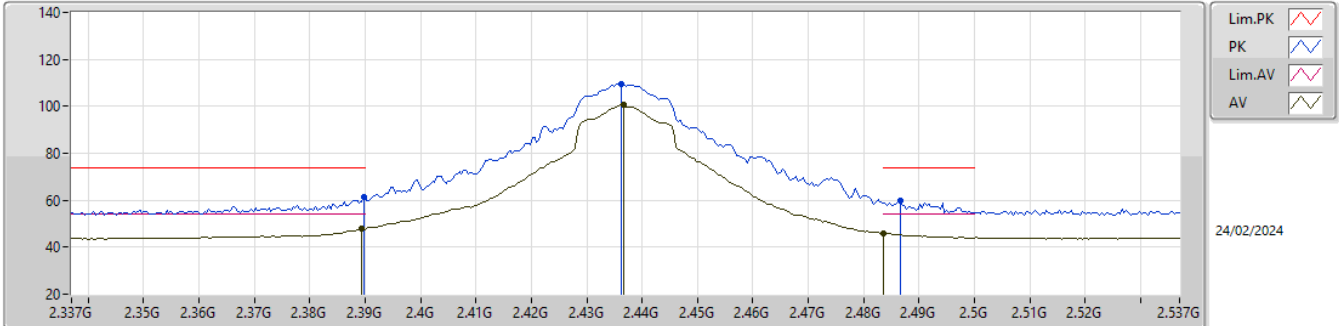


EUT Y_1TX
Setting 78
04-C-C-6

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.3898G	64.36	74.00	-9.64	33.61	3	Vertical	356	1.80	-	27.40	3.35	-			
AV	2.3898G	50.72	54.00	-3.28	19.97	3	Vertical	356	1.80	-	27.40	3.35	-			
PK	2.4362G	115.97	Inf	-Inf	85.04	3	Vertical	356	1.80	-	27.56	3.37	-			
AV	2.4362G	106.87	Inf	-Inf	75.94	3	Vertical	356	1.80	-	27.56	3.37	-			
PK	2.4866G	69.39	74.00	-4.61	38.32	3	Vertical	356	1.80	-	27.67	3.40	-			
AV	2.4835G	53.10	54.00	-0.90	22.06	3	Vertical	356	1.80	-	27.64	3.40	-			

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

2437MHz_TX

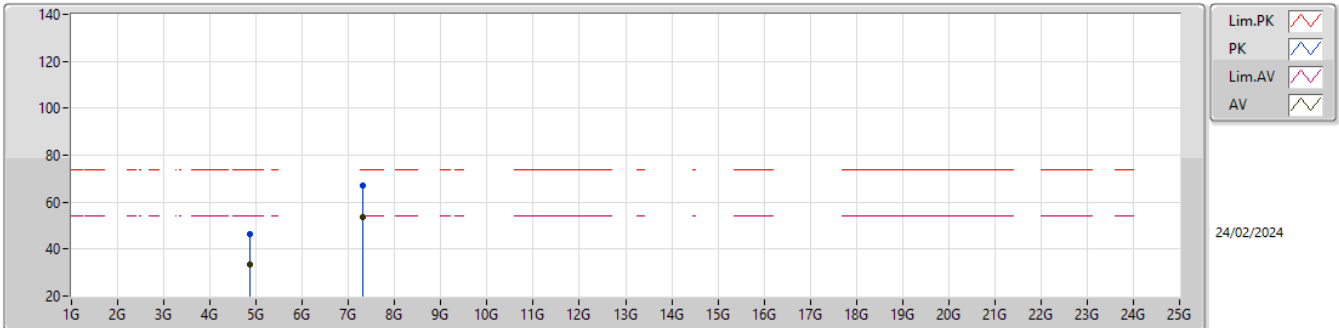


EUT_Y_1TX
Setting 78
04-C-C-6

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.3898G	61.33	74.00	-12.67	30.58	3	Horizontal	45	2.07	-	27.40	3.35	-			
AV	2.3894G	47.70	54.00	-6.30	16.95	3	Horizontal	45	2.07	-	27.40	3.35	-			
PK	2.4362G	109.57	Inf	-Inf	78.64	3	Horizontal	45	2.07	-	27.56	3.37	-			
AV	2.4366G	100.49	Inf	-Inf	69.55	3	Horizontal	45	2.07	-	27.57	3.37	-			
PK	2.4866G	59.64	74.00	-14.36	28.57	3	Horizontal	45	2.07	-	27.67	3.40	-			
AV	2.4835G	45.74	54.00	-8.26	14.70	3	Horizontal	45	2.07	-	27.64	3.40	-			

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

2437MHz_TX

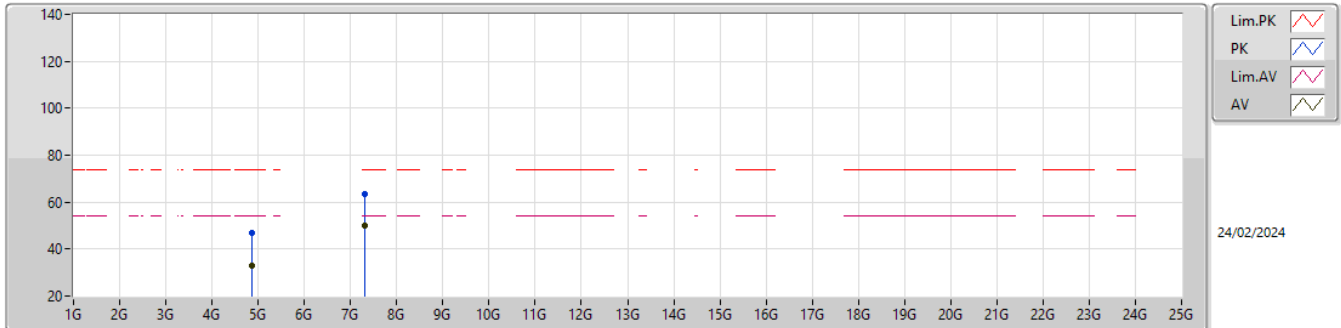


EUT Y_1TX
Setting 72
04-C-C-6

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.86674G	46.34	74.00	-27.66	41.42	3	Vertical	116	2.46	-	32.47	5.71	33.26			
AV	4.8755G	33.22	54.00	-20.78	28.25	3	Vertical	116	2.46	-	32.50	5.72	33.25			
PK	7.30488G	67.32	74.00	-6.68	57.09	3	Vertical	258	2.82	-	37.20	7.12	34.09			
AV	7.31142G	53.71	54.00	-0.29	43.48	3	Vertical	258	2.82	-	37.20	7.12	34.09			

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

2437MHz_TX

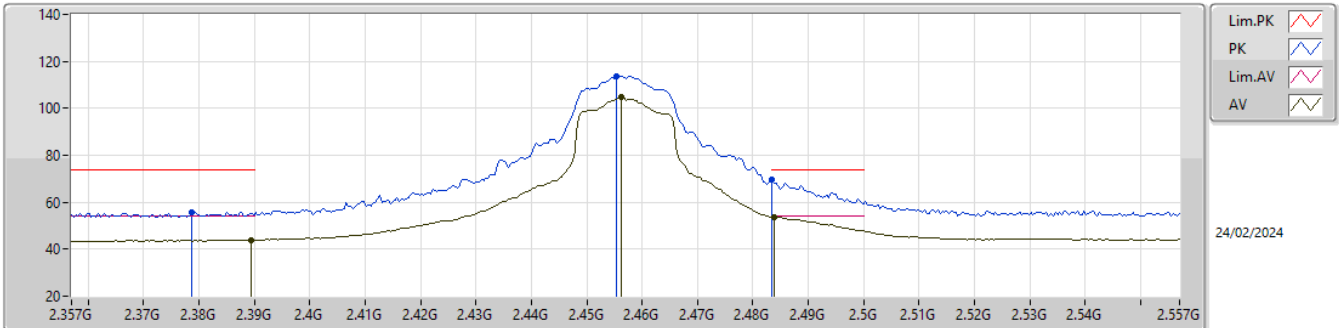


EUT Y_1TX
Setting 72
04-C-C-6

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.8659G	46.70	74.00	-27.30	41.79	3	Horizontal	224	1.02	-	32.46	5.71	33.26			
AV	4.87616G	32.98	54.00	-21.02	28.01	3	Horizontal	224	1.02	-	32.50	5.72	33.25			
PK	7.30494G	63.57	74.00	-10.43	53.34	3	Horizontal	113	3.00	-	37.20	7.12	34.09			
AV	7.31286G	50.07	54.00	-3.93	39.85	3	Horizontal	113	3.00	-	37.20	7.12	34.10			

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

2457MHz_TX

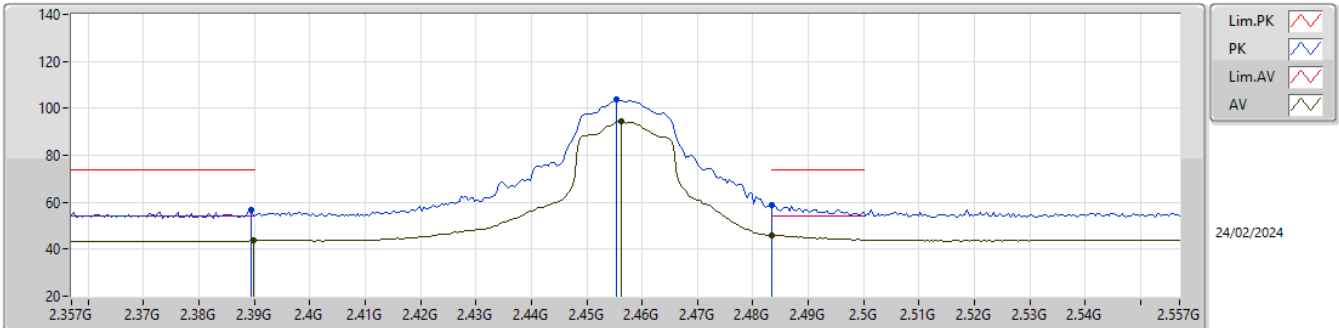


EUT Y_1TX
Setting 69
04-C-C-6

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.3786G	55.80	74.00	-18.20	25.05	3	Vertical	195	2.01	-	27.41	3.34	-			
AV	2.3894G	44.01	54.00	-9.99	13.26	3	Vertical	195	2.01	-	27.40	3.35	-			
PK	2.4554G	113.87	Inf	-Inf	82.89	3	Vertical	195	2.01	-	27.60	3.38	-			
AV	2.4562G	104.73	Inf	-Inf	73.75	3	Vertical	195	2.01	-	27.60	3.38	-			
PK	2.4835G	69.75	74.00	-4.25	38.71	3	Vertical	195	2.01	-	27.64	3.40	-			
AV	2.4838G	53.83	54.00	-0.17	22.79	3	Vertical	195	2.01	-	27.64	3.40	-			

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

2457MHz_TX

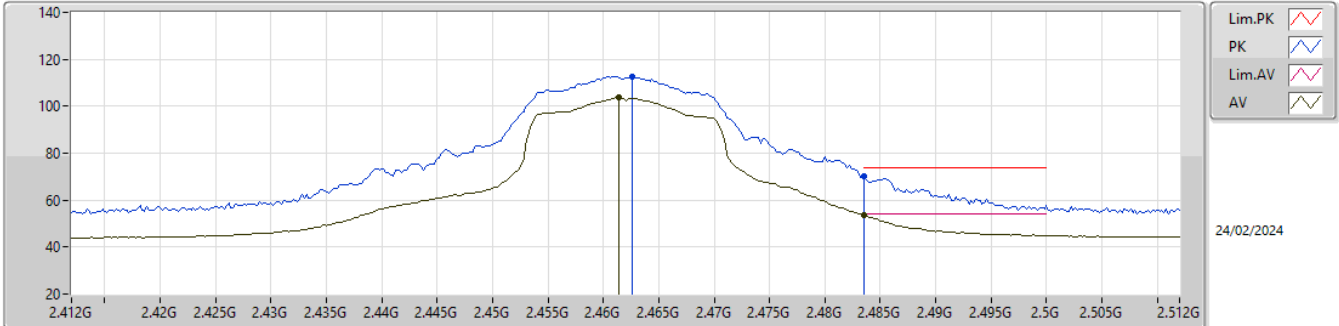


EUT_Y_1TX
Setting 69
04-C-C-6

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.3894G	56.62	74.00	-17.38	25.87	3	Horizontal	130	1.84	-	27.40	3.35	-			
AV	2.3898G	43.68	54.00	-10.32	12.93	3	Horizontal	130	1.84	-	27.40	3.35	-			
PK	2.4554G	103.73	Inf	-Inf	72.75	3	Horizontal	130	1.84	-	27.60	3.38	-			
AV	2.4562G	94.68	Inf	-Inf	63.70	3	Horizontal	130	1.84	-	27.60	3.38	-			
PK	2.4835G	58.86	74.00	-15.14	27.82	3	Horizontal	130	1.84	-	27.64	3.40	-			
AV	2.4835G	45.99	54.00	-8.01	14.95	3	Horizontal	130	1.84	-	27.64	3.40	-			

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

2462MHz_TX

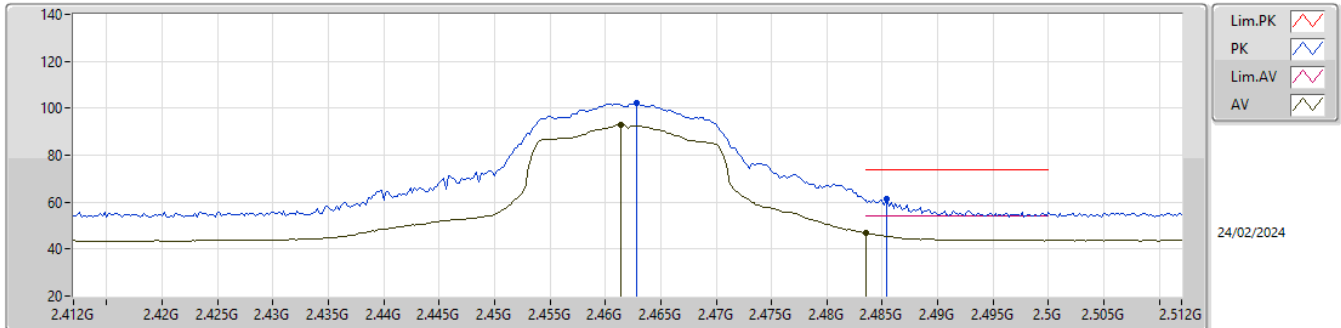


EUT_Y_1TX
Setting 65
04-C-C-6

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.4626G	112.59	Inf	-Inf	81.61	3	Vertical	198	1.94	-	27.60	3.38	-			
AV	2.4614G	103.70	Inf	-Inf	72.72	3	Vertical	198	1.94	-	27.60	3.38	-			
PK	2.4835G	70.32	74.00	-3.68	39.28	3	Vertical	198	1.94	-	27.64	3.40	-			
AV	2.4835G	53.66	54.00	-0.34	22.62	3	Vertical	198	1.94	-	27.64	3.40	-			

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

2462MHz_TX

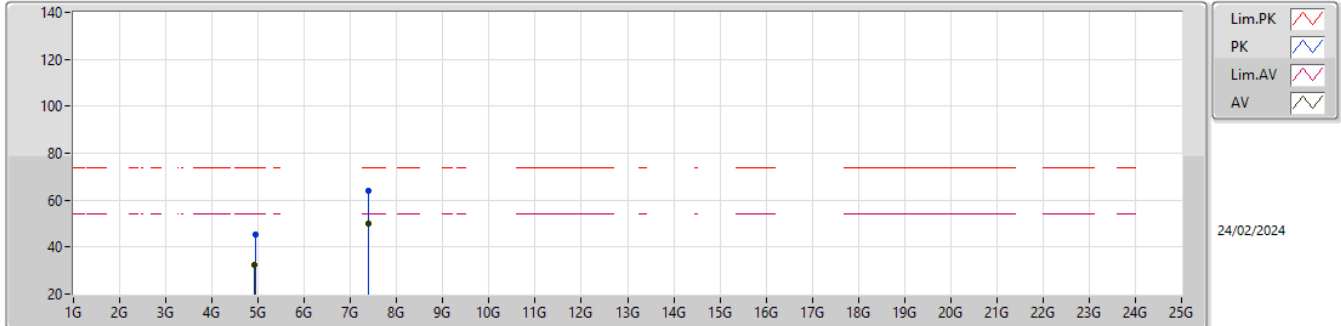


EUT_Y_1TX
Setting 65
04-C-C-6

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.4628G	102.04	Inf	-Inf	71.06	3	Horizontal	148	1.80	-	27.60	3.38	-			
AV	2.4614G	92.90	Inf	-Inf	61.92	3	Horizontal	148	1.80	-	27.60	3.38	-			
PK	2.4854G	61.59	74.00	-12.41	30.54	3	Horizontal	148	1.80	-	27.65	3.40	-			
AV	2.4835G	47.01	54.00	-6.99	15.97	3	Horizontal	148	1.80	-	27.64	3.40	-			

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

2462MHz_TX

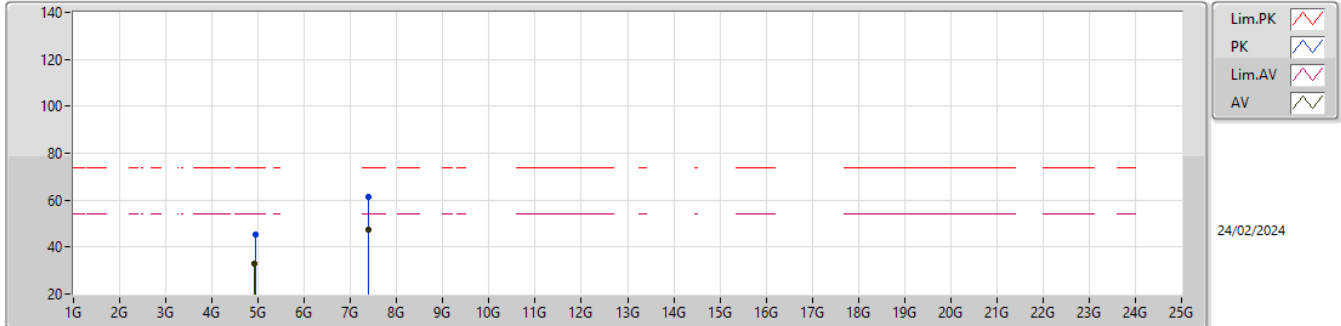


EUT_Y_1TX
Setting 65
04-C-C-6

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)				
PK	4.93672G	45.20	74.00	-28.80	39.99	3	Vertical	285	2.74	-	32.67	5.77	33.23				
AV	4.92172G	32.64	54.00	-21.36	27.48	3	Vertical	285	2.74	-	32.64	5.76	33.24				
PK	7.3893G	63.74	74.00	-10.26	53.51	3	Vertical	294	2.63	-	37.20	7.16	34.13				
AV	7.38864G	49.80	54.00	-4.20	39.57	3	Vertical	294	2.63	-	37.20	7.16	34.13				

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX

2462MHz_TX

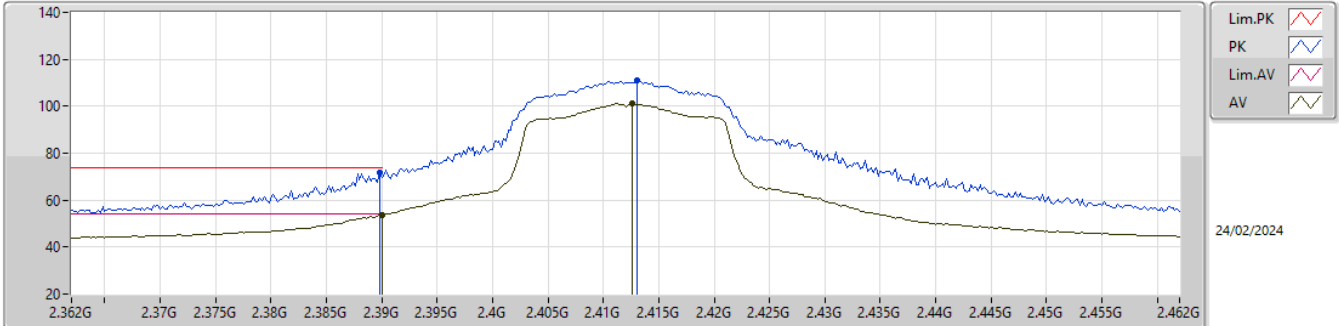


EUT_Y_1TX
Setting 65
04-C-C-6

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.93282G	45.20	74.00	-28.80	39.99	3	Horizontal	319	1.29	-	32.67	5.77	33.23			
AV	4.9207G	32.73	54.00	-21.27	27.57	3	Horizontal	319	1.29	-	32.64	5.76	33.24			
PK	7.38918G	61.36	74.00	-12.64	51.13	3	Horizontal	114	2.94	-	37.20	7.16	34.13			
AV	7.38786G	47.35	54.00	-6.65	37.12	3	Horizontal	114	2.94	-	37.20	7.16	34.13			

2.4-2.4835GHz_802.11n_HT20_Nss1,(MCS0)_1TX

2412MHz_TX

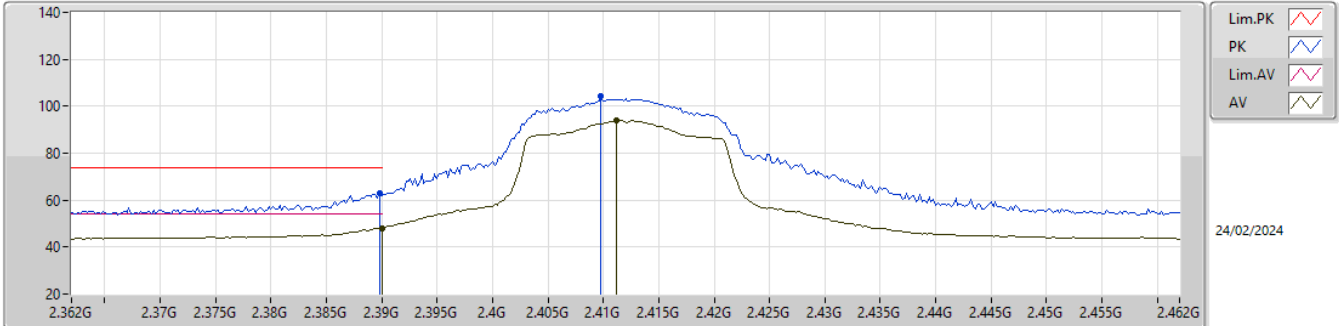


EUT_Y_1TX
Setting 65
04-C-C-6

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.3898G	71.74	74.00	-2.26	40.99	3	Vertical	53	1.80	-	27.40	3.35	-			
AV	2.39G	53.61	54.00	-0.39	22.86	3	Vertical	53	1.80	-	27.40	3.35	-			
PK	2.413G	110.95	Inf	-Inf	80.09	3	Vertical	53	1.80	-	27.50	3.36	-			
AV	2.4126G	101.12	Inf	-Inf	70.26	3	Vertical	53	1.80	-	27.50	3.36	-			

2.4-2.4835GHz_802.11n_HT20_Nss1,(MCS0)_1TX

2412MHz_TX

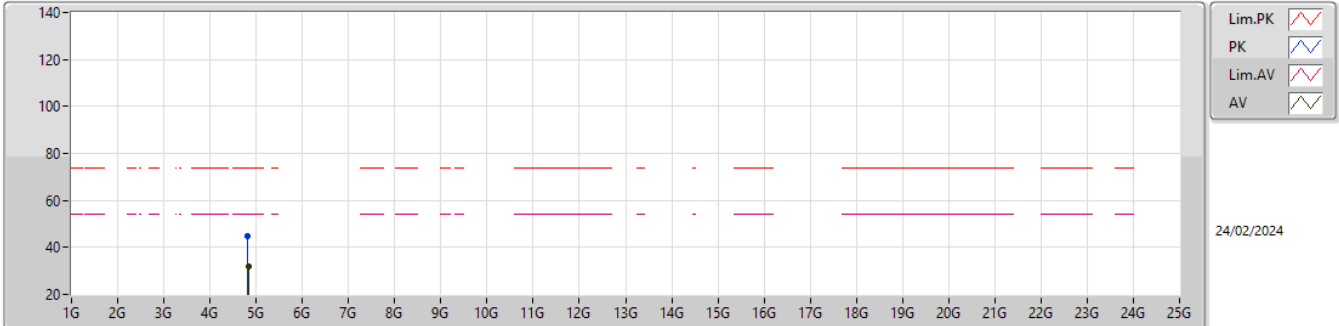


EUT_Y_1TX
Setting 65
04-C-C-6

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.3898G	63.03	74.00	-10.97	32.28	3	Horizontal	136	1.78	-	27.40	3.35	-			
AV	2.39G	48.17	54.00	-5.83	17.42	3	Horizontal	136	1.78	-	27.40	3.35	-			
PK	2.4098G	104.24	Inf	-Inf	73.38	3	Horizontal	136	1.78	-	27.50	3.36	-			
AV	2.4112G	93.95	Inf	-Inf	63.09	3	Horizontal	136	1.78	-	27.50	3.36	-			

2.4-2.4835GHz_802.11n_HT20_Nss1,(MCS0)_1TX

2412MHz_TX

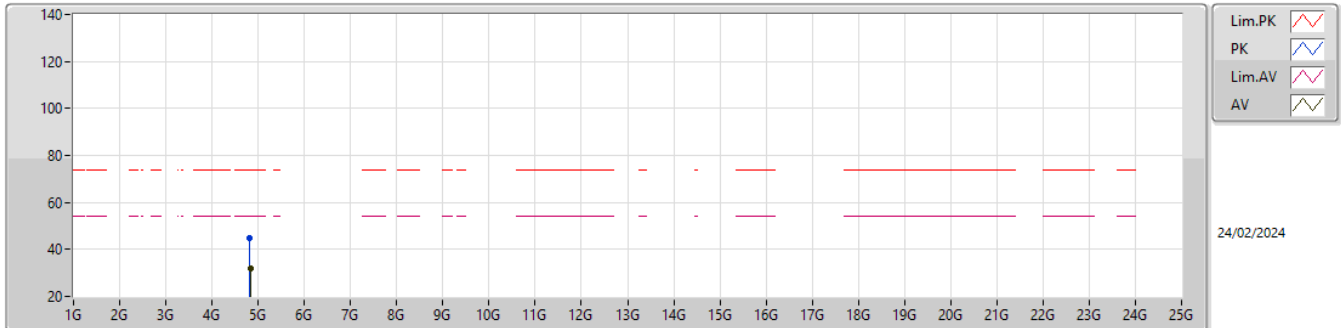


EUT_Y_1TX
Setting 65
04-C-C-6

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA			
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)			
PK	4.81314G	44.72	74.00	-29.28	40.01	3	Vertical	308	1.22	-	32.33	5.66	33.28			
AV	4.82712G	32.01	54.00	-21.99	27.26	3	Vertical	308	1.22	-	32.35	5.67	33.27			

2.4-2.4835GHz_802.11n_HT20_Nss1,(MCS0)_1TX

2412MHz_TX

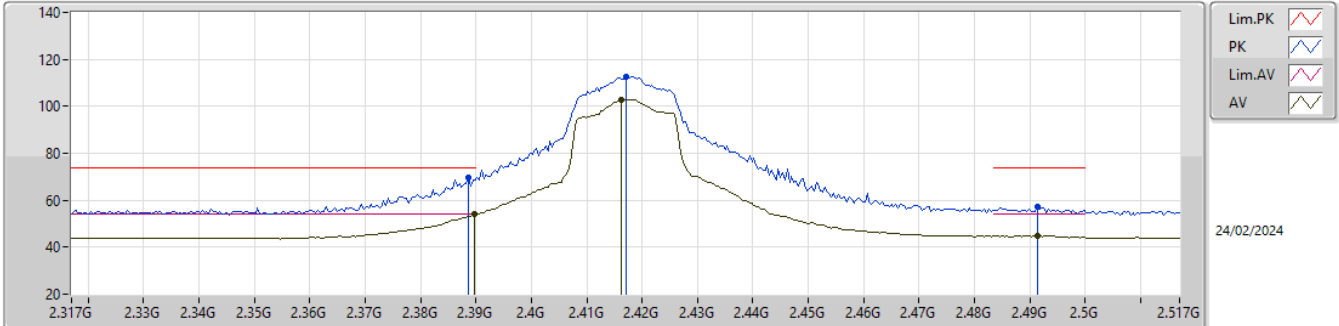


EUT_V_1TX
Setting 65
04-C-C-6

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.82268G	45.08	74.00	-28.92	40.33	3	Horizontal	53	1.66	-	32.35	5.67	33.27			
AV	4.82544G	31.96	54.00	-22.04	27.21	3	Horizontal	53	1.66	-	32.35	5.67	33.27			

2.4-2.4835GHz_802.11n_HT20_Nss1,(MCS0)_1TX

2417MHz_TX

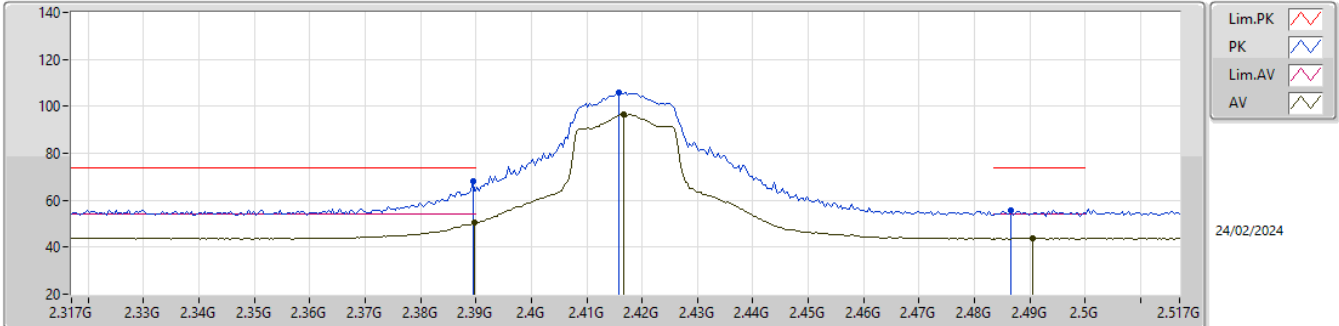


EUT Y_1TX
Setting 69
04-C-C-6

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.3886G	69.43	74.00	-4.57	38.68	3	Vertical	54	1.66	-	27.40	3.35	-			
AV	2.3898G	53.89	54.00	-0.11	23.14	3	Vertical	54	1.66	-	27.40	3.35	-			
PK	2.417G	112.75	Inf	-Inf	81.89	3	Vertical	54	1.66	-	27.50	3.36	-			
AV	2.4162G	102.96	Inf	-Inf	72.10	3	Vertical	54	1.66	-	27.50	3.36	-			
PK	2.4914G	57.30	74.00	-16.70	26.20	3	Vertical	54	1.66	-	27.70	3.40	-			
AV	2.4914G	44.86	54.00	-9.14	13.76	3	Vertical	54	1.66	-	27.70	3.40	-			

2.4-2.4835GHz_802.11n_HT20_Nss1,(MCS0)_1TX

2417MHz_TX

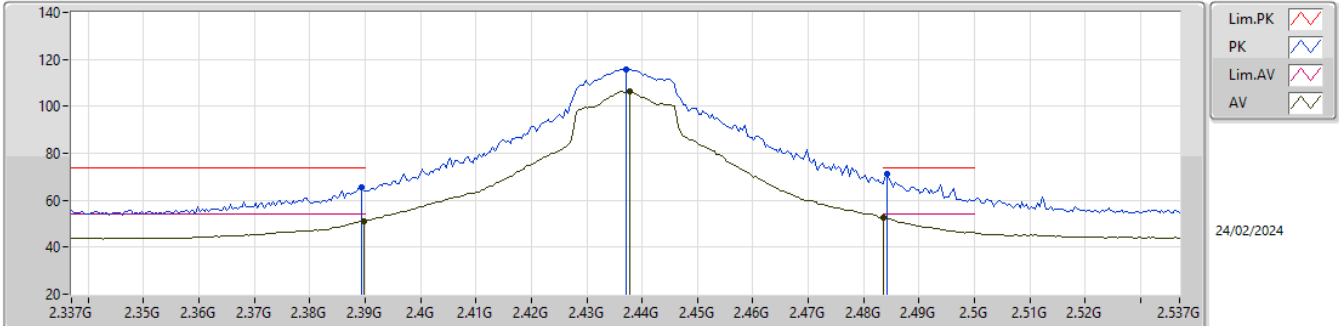


EUT Y_1TX
Setting 69
04-C-C-6

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)				
PK	2.3894G	68.06	74.00	-5.94	37.31	3	Horizontal	47	2.30	-	27.40	3.35	-				
AV	2.3898G	50.38	54.00	-3.62	19.63	3	Horizontal	47	2.30	-	27.40	3.35	-				
PK	2.4158G	105.87	Inf	-Inf	75.01	3	Horizontal	47	2.30	-	27.50	3.36	-				
AV	2.4166G	96.46	Inf	-Inf	65.60	3	Horizontal	47	2.30	-	27.50	3.36	-				
PK	2.4866G	55.62	74.00	-18.38	24.55	3	Horizontal	47	2.30	-	27.67	3.40	-				
AV	2.4906G	43.70	54.00	-10.30	12.60	3	Horizontal	47	2.30	-	27.70	3.40	-				

2.4-2.4835GHz_802.11n HT20_Nss1,(MCS0)_1TX

2437MHz_TX

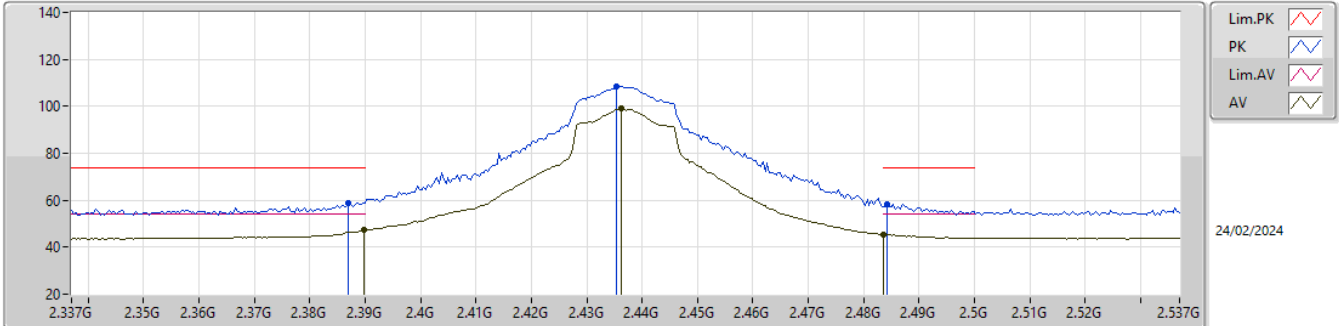


EUT_Y_1TX
Setting 77
04-C-C-6

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.3894G	65.54	74.00	-8.46	34.79	3	Vertical	198	1.76	-	27.40	3.35	-			
AV	2.3898G	50.97	54.00	-3.03	20.22	3	Vertical	198	1.76	-	27.40	3.35	-			
PK	2.437G	115.73	Inf	-Inf	84.79	3	Vertical	198	1.76	-	27.57	3.37	-			
AV	2.4378G	106.21	Inf	-Inf	75.26	3	Vertical	198	1.76	-	27.58	3.37	-			
PK	2.4842G	71.21	74.00	-2.79	40.17	3	Vertical	198	1.76	-	27.64	3.40	-			
AV	2.4835G	52.54	54.00	-1.46	21.50	3	Vertical	198	1.76	-	27.64	3.40	-			

2.4-2.4835GHz_802.11n HT20_Nss1,(MCS0)_1TX

2437MHz_TX

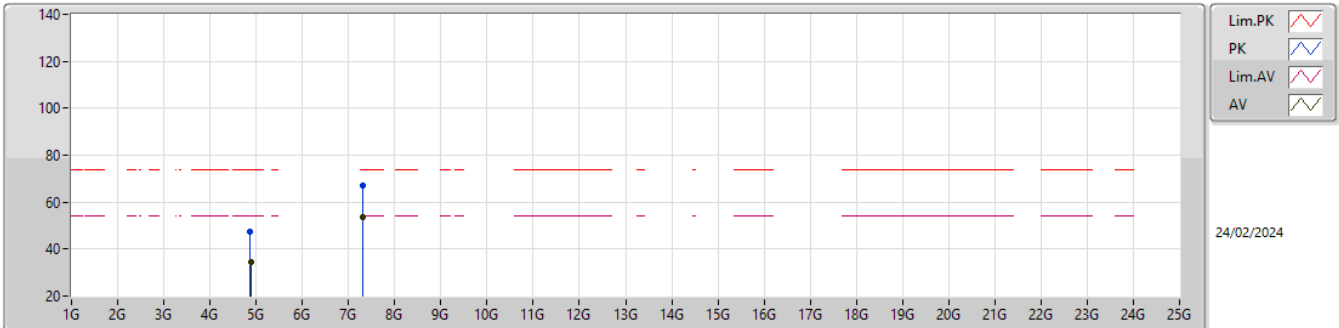


EUT_Y_1TX
Setting 77
04-C-C-6

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.387G	58.98	74.00	-15.02	28.24	3	Horizontal	50	2.08	-	27.40	3.34	-			
AV	2.3898G	47.28	54.00	-6.72	16.53	3	Horizontal	50	2.08	-	27.40	3.35	-			
PK	2.4354G	108.69	Inf	-Inf	77.77	3	Horizontal	50	2.08	-	27.55	3.37	-			
AV	2.4362G	99.14	Inf	-Inf	68.21	3	Horizontal	50	2.08	-	27.56	3.37	-			
PK	2.4842G	58.46	74.00	-15.54	27.42	3	Horizontal	50	2.08	-	27.64	3.40	-			
AV	2.4835G	45.27	54.00	-8.73	14.23	3	Horizontal	50	2.08	-	27.64	3.40	-			

2.4-2.4835GHz_802.11n_HT20_Nss1,(MCS0)_1TX

2437MHz_TX

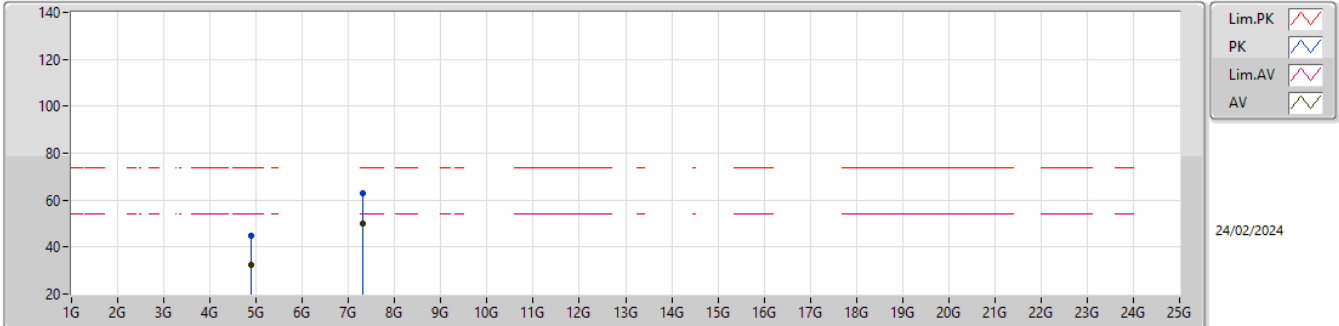


EUT_Y_1TX
Setting 77
04-C-C-6

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)				
PK	4.87688G	47.40	74.00	-26.60	42.42	3	Vertical	264	1.84	-	32.51	5.72	33.25				
AV	4.8788G	34.33	54.00	-19.67	29.34	3	Vertical	264	1.84	-	32.52	5.72	33.25				
PK	7.3119G	67.22	74.00	-6.78	56.99	3	Vertical	302	2.44	-	37.20	7.12	34.09				
AV	7.31112G	53.61	54.00	-0.39	43.38	3	Vertical	302	2.44	-	37.20	7.12	34.09				

2.4-2.4835GHz_802.11n_HT20_Nss1,(MCS0)_1TX

2437MHz_TX

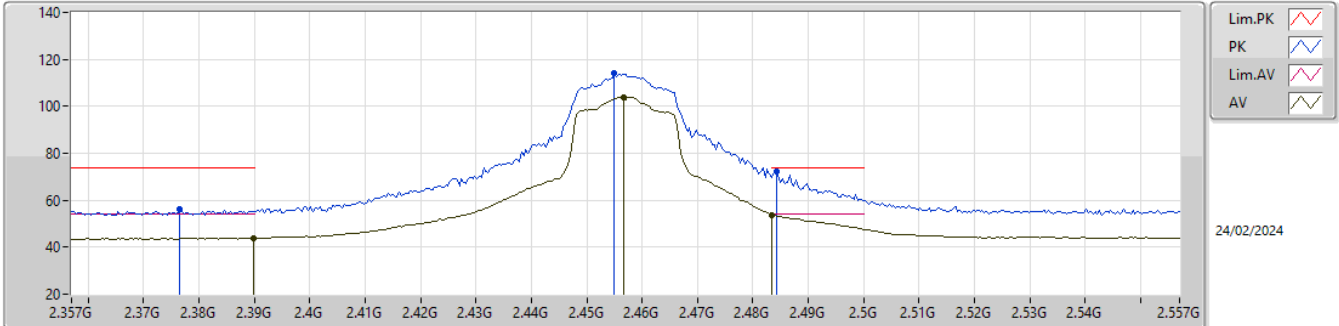


EUT Y_1TX
Setting 77
04-C-C-6

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)				
PK	4.88138G	44.90	74.00	-29.10	39.90	3	Horizontal	52	1.18	-	32.53	5.72	33.25				
AV	4.88858G	32.52	54.00	-21.48	27.49	3	Horizontal	52	1.18	-	32.55	5.73	33.25				
PK	7.31214G	62.73	74.00	-11.27	52.50	3	Horizontal	120	1.85	-	37.20	7.12	34.09				
AV	7.31088G	49.83	54.00	-4.17	39.60	3	Horizontal	120	1.85	-	37.20	7.12	34.09				

2.4-2.4835GHz_802.11n HT20_Nss1,(MCS0)_1TX

2457MHz_TX

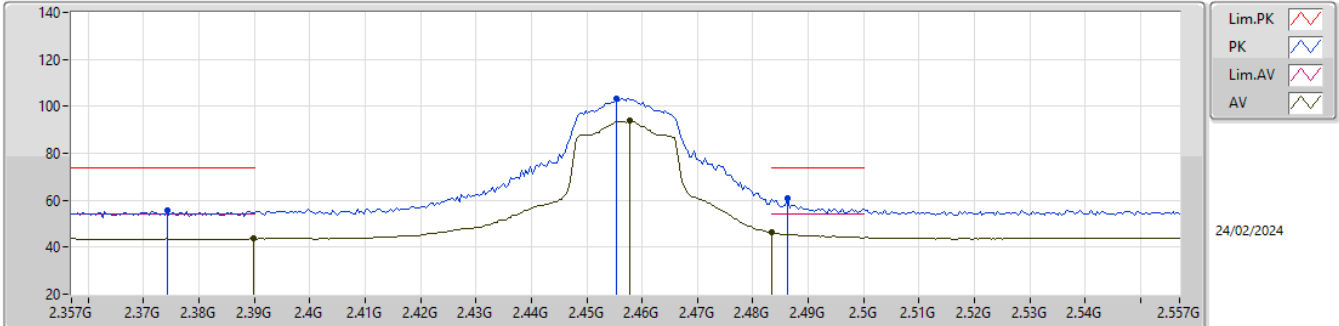


EUT_Y_1TX
Setting 69
04-C-C-6

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.3766G	56.45	74.00	-17.55	25.68	3	Vertical	197	2.00	-	27.43	3.34	-			
AV	2.3898G	44.03	54.00	-9.97	13.28	3	Vertical	197	2.00	-	27.40	3.35	-			
PK	2.455G	114.21	Inf	-Inf	83.23	3	Vertical	197	2.00	-	27.60	3.38	-			
AV	2.4566G	103.94	Inf	-Inf	72.96	3	Vertical	197	2.00	-	27.60	3.38	-			
PK	2.4842G	72.05	74.00	-1.95	41.01	3	Vertical	197	2.00	-	27.64	3.40	-			
AV	2.4835G	53.72	54.00	-0.28	22.68	3	Vertical	197	2.00	-	27.64	3.40	-			

2.4-2.4835GHz_802.11n_HT20_Nss1,(MCS0)_1TX

2457MHz_TX

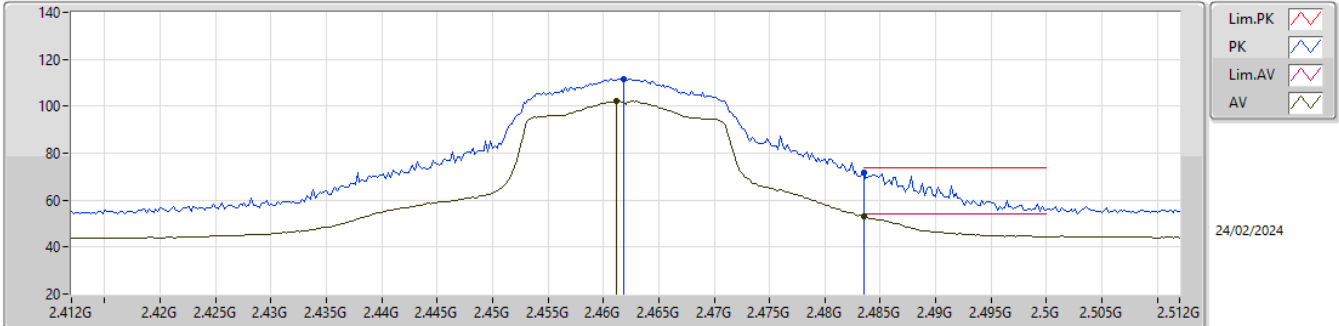


EUT_Y_1TX
Setting 69
04-C-C-6

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.3742G	55.45	74.00	-18.55	24.65	3	Horizontal	131	1.85	-	27.46	3.34	-			
AV	2.3898G	43.71	54.00	-10.29	12.96	3	Horizontal	131	1.85	-	27.40	3.35	-			
PK	2.4554G	103.21	Inf	-Inf	72.23	3	Horizontal	131	1.85	-	27.60	3.38	-			
AV	2.4578G	93.72	Inf	-Inf	62.74	3	Horizontal	131	1.85	-	27.60	3.38	-			
PK	2.4862G	60.66	74.00	-13.34	29.60	3	Horizontal	131	1.85	-	27.66	3.40	-			
AV	2.4835G	46.18	54.00	-7.82	15.14	3	Horizontal	131	1.85	-	27.64	3.40	-			

2.4-2.4835GHz_802.11n HT20_Nss1,(MCS0)_1TX

2462MHz_TX

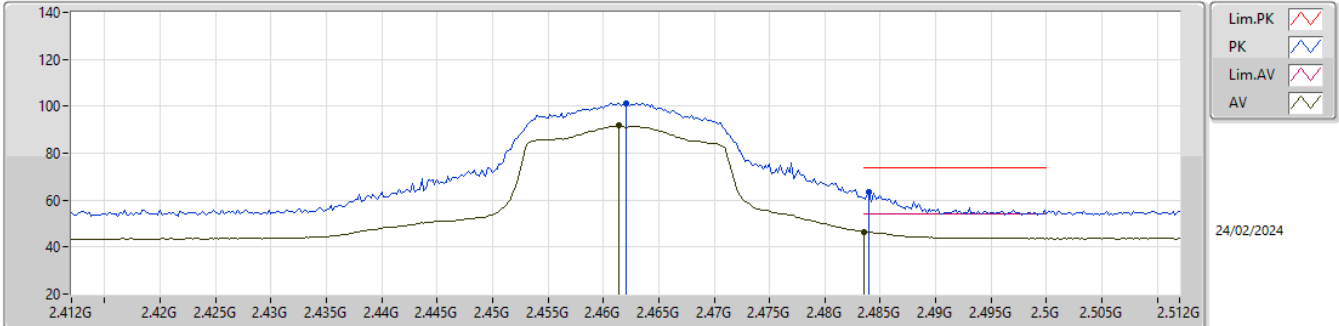


EUT_Y_1TX
Setting 64
04-C-C-6

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.4618G	111.51	Inf	-Inf	80.53	3	Vertical	200	1.53	-	27.60	3.38	-			
AV	2.4612G	102.09	Inf	-Inf	71.11	3	Vertical	200	1.53	-	27.60	3.38	-			
PK	2.4835G	71.74	74.00	-2.26	40.70	3	Vertical	200	1.53	-	27.64	3.40	-			
AV	2.4835G	53.03	54.00	-0.97	21.99	3	Vertical	200	1.53	-	27.64	3.40	-			

2.4-2.4835GHz_802.11n_HT20_Nss1,(MCS0)_1TX

2462MHz_TX

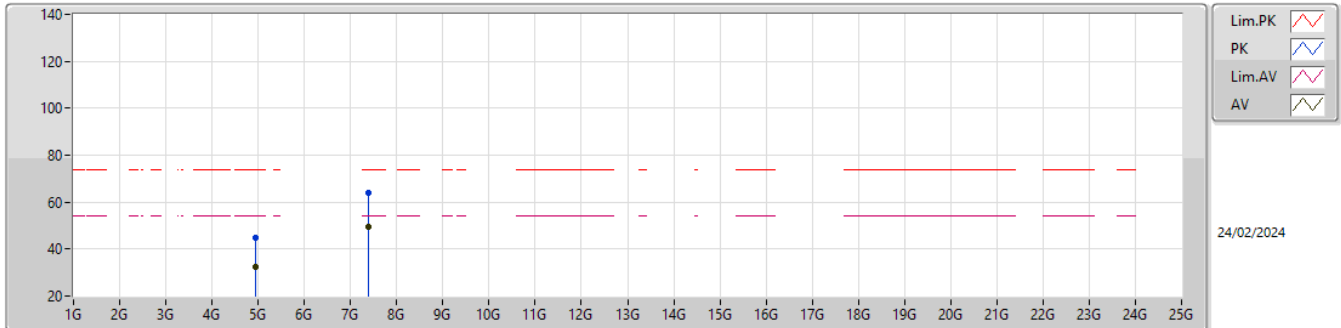


EUT Y_1TX
Setting 64
04-C-C-6

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	2.462G	101.30	Inf	-Inf	70.32	3	Horizontal	147	1.80	-	27.60	3.38	-			
AV	2.4614G	91.66	Inf	-Inf	60.68	3	Horizontal	147	1.80	-	27.60	3.38	-			
PK	2.484G	63.56	74.00	-10.44	32.52	3	Horizontal	147	1.80	-	27.64	3.40	-			
AV	2.4835G	46.58	54.00	-7.42	15.54	3	Horizontal	147	1.80	-	27.64	3.40	-			

2.4-2.4835GHz_802.11n_HT20_Nss1,(MCS0)_1TX

2462MHz_TX

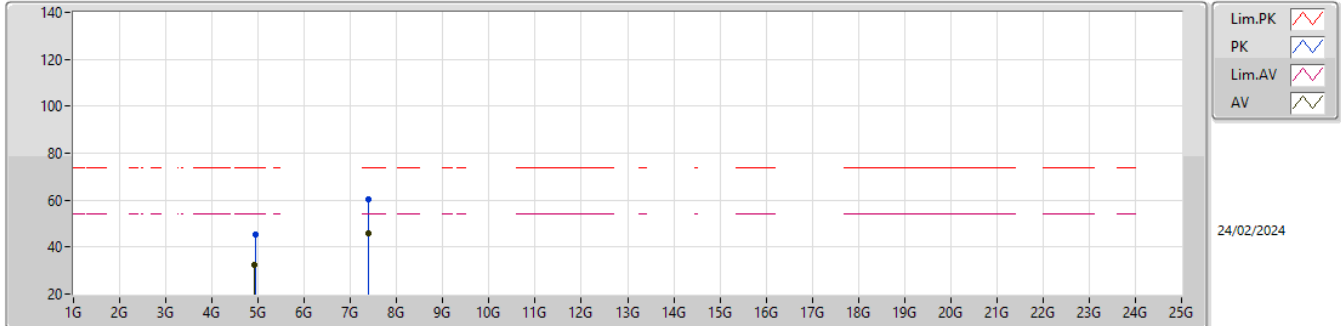


EUT Y_1TX
Setting 64
04-C-C-6

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.93528G	45.04	74.00	-28.96	39.83	3	Vertical	19	1.99	-	32.67	5.77	33.23			
AV	4.93498G	32.25	54.00	-21.75	27.04	3	Vertical	19	1.99	-	32.67	5.77	33.23			
PK	7.38948G	64.12	74.00	-9.88	53.89	3	Vertical	295	2.62	-	37.20	7.16	34.13			
AV	7.38624G	49.36	54.00	-4.64	39.12	3	Vertical	295	2.62	-	37.20	7.16	34.12			

2.4-2.4835GHz_802.11n_HT20_Nss1,(MCS0)_1TX

2462MHz_TX



EUT Y_1TX
Setting 64
04-C-C-6

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)			
PK	4.93522G	45.50	74.00	-28.50	40.29	3	Horizontal	152	2.55	-	32.67	5.77	33.23			
AV	4.92424G	32.34	54.00	-21.66	27.17	3	Horizontal	152	2.55	-	32.65	5.76	33.24			
PK	7.38252G	60.12	74.00	-13.88	49.88	3	Horizontal	118.4	1.80	-	37.20	7.16	34.12			
AV	7.38774G	45.72	54.00	-8.28	35.49	3	Horizontal	118.4	1.80	-	37.20	7.16	34.13			