Testing Laboratory 3787

RADIO TEST REPORT

FCC ID	:	2AI5IMTX2
Equipment	:	MEATER PRO XL
Brand Name	:	MEATER
Model Name	:	MT-CX20 / MT-MX201
Applicant	:	Apption Labs Limited 66 Commercial Square, Leicester, LE2 7SR United Kingdom
Manufacturer (1)	:	AboCom Systems, Inc. No. 77, Yu-Yih Rd, Chu-Nan Chen, Miao-Lih Hsuan,Taiwan, R.O.C.
Manufacturer (2)		Jin Yeong Hann Technology CO., LTD No. 6, Lane 187, Sec. 2, Chung Cheng Rd, Hu Kou Hsiang, Hsin Chu Hsieh,Taiwan, R.O.C.
Standard	:	47 CFR FCC Part 15.247

The product was received on Mar. 01, 2024, and testing was started from Apr. 17, 2024 and completed on Jul. 23, 2024. We, Sporton International Inc. Hsinchu Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

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

Approved by: Sam Chen

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

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History of this test report

Report No.	Version	Description	Issued Date
FR422340AA	01	Initial issue of report	Oct. 21, 2024
FR422340AA	02	Revising the Photographs of EUT	Nov. 06, 2024

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
3.1	15.207	AC Power-line Conducted Emissions	PASS	Note
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	-
Note: For Battery Mode: The EUT was powered by battery; it's not necessary to apply to AC Power Port Conducted Emission.				

Conformity Assessment Condition:
1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account. 2. The measurement uncertainty please refer to each test result in the chapter "Measurement Uncertainty".
Disclaimer:
The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity..

Reviewed by: Sam Chen
Report Producer: Sandy Chuang

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, 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)	
	WLAN 2.4GHz	Bluetooth					WLAN 2.4GHz	Bluetooth
1	1	-	ApptionLabs	WIFI-01	PCB	N/A	1.74	-
2	-	1	ApptionLabs	BT-01	PCB	N/A	-	0.55

Note 1: The above information was declared by manufacturer.

Note 2:

For WLAN 2.4GHz function:

For IEEE 802.11 b/g/n (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 functions.

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF (dB)	T (s)	VBW (Hz)_1/T
802.11b_Nss 1,(1D)	0.962	0.17	11.395m	100
802.11g_Nss 1,(6D)	0.854	0.69	957.5u	3k
802.11n HT20_Nss 1,(M0)	0.913	0.4	1.765m	1k

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

1.1.4 EUT Operational Condition

EUT Power Type	From Battery or host system with USB type-C cable			
Beamforming Function	☐	With beamforming	☒	Without beamforming
Function	☒	Point-to-multipoint	☐	Point-to-point
Support RU	☒	Full RU	☐	Partial RU
Test Software Version	Radio Tool GUI v1.0.3.13			

Note: The above information was declared by manufacturer.

1.1.5 Table for Multiple Listing

Model Name	Equipped with probe
MT-CX20	No
MT-MX201	Yes

Note 1: From the above models, model: MT-CX20 as selected to test all items, and the model: MT-MX201 were selected to test the AC Power-line Conducted Emissions and Emissions in Restricted Frequency Bands below 1GHz tests (Charge Mode).

Note 2: The above information was declared by manufacturer.

1.2 Applicable Standards

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

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

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

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

1.3 Testing Location Information

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

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
RF Conducted	TH02-CB	KJ Chang	23.9~25.4 / 63~64	Jun. 24, 2024
Radiated (Below 1GHz)	03CH04-CB	Gordon Hung	22.7-23.8 / 56-59	Apr. 17, 2024
Radiated (Above 1GHz)	03CH03-CB	Viola Huang	21.9-22.4 / 55-58	Jul. 23, 2024
AC Conduction	CO01-CB	Joe Chu	23~24 / 58~60	Apr. 18, 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 Date: Before May 28, 2024

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%

Test Date: After May 27, 2024

Test Items	Uncertainty	Remark
Radiated Emission (1GHz ~ 18GHz)	4.2 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.0 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	2.1 %	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
2437MHz
2462MHz
802.11n HT20_Nss1,(MCS0)_1TX
2412MHz
2437MHz
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	Normal Link
1	Charge Mode: EUT (EUT powered by host system with USB type-C cable)

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	Normal Link
After evaluating, EUT in Z axis was the worst case, so the measurement will follow this same test configuration.	
1	Battery Mode: EUT in Z axis (powered by battery)
2	Charge Mode: EUT in Z axis (powered by host system with USB type-C cable)
For operating mode 1 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX
After evaluating, EUT in Z axis was the worst case, so the measurement will follow this same test configuration.	
1	EUT in Z axis

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	WLAN 2.4GHz + Bluetooth LE
Refer to Sporton Test Report No.: FA422340 for Co-location RF Exposure Evaluation.	

2.3 EUT Operation during Test

For CTX Mode:

The EUT was programmed to be in continuously transmitting mode.

For Normal Link Mode:

During the test, the EUT operation to normal function.

2.4 Accessories

Model Name	Accessories
MT-CX20	USB type-C cable*1: Shielded, 1.0m
MT-MX201	Probe*4
	USB type-C cable*1: Shielded, 1.0m

2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	Adapter	XIAOMI	MDY-09-EA	N/A

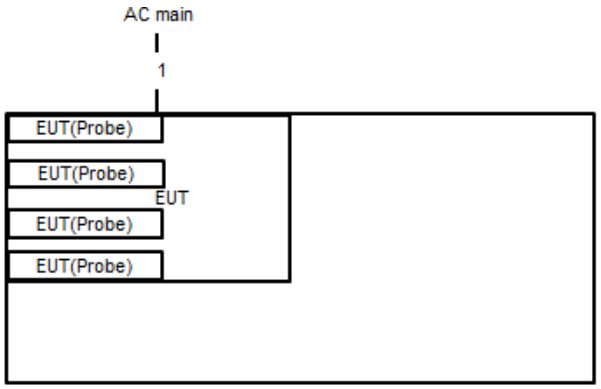
For Radiated (below 1GHz):

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	Phone	OTTERBOX	VQP9MW0Y54	N/A
B	AP	ASUS	AX88U	N/A
C	Notebook	DELL	E4300	N/A

For Radiated (above 1GHz) and RF Conducted: N/A

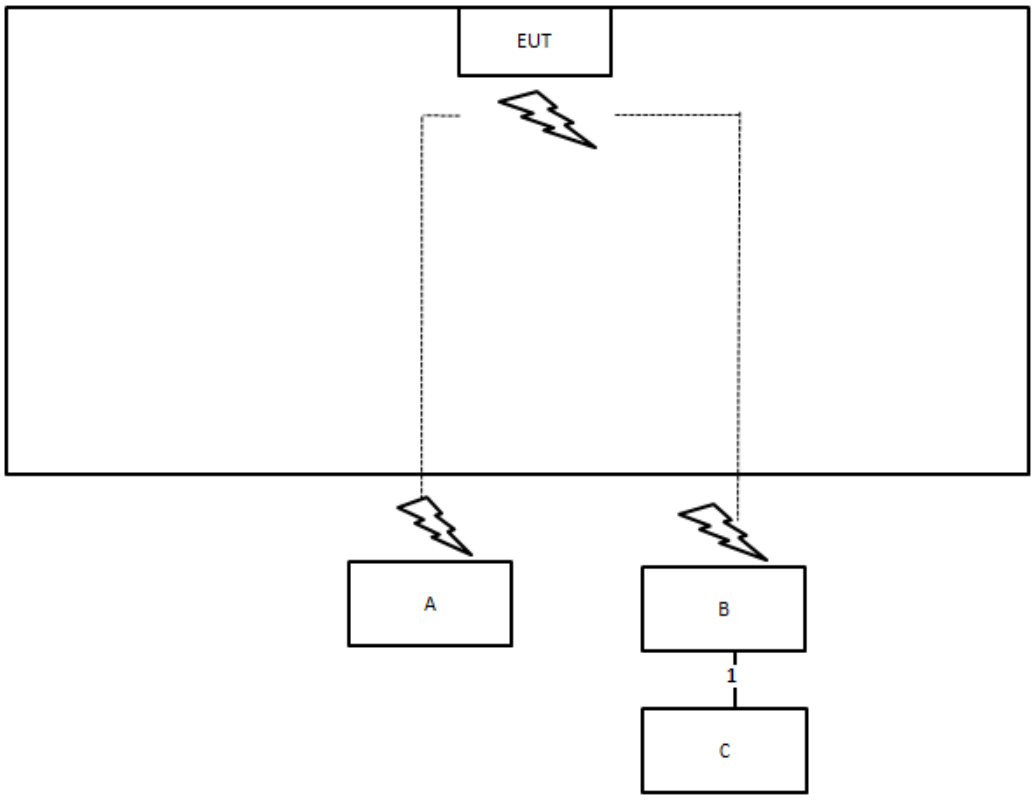
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



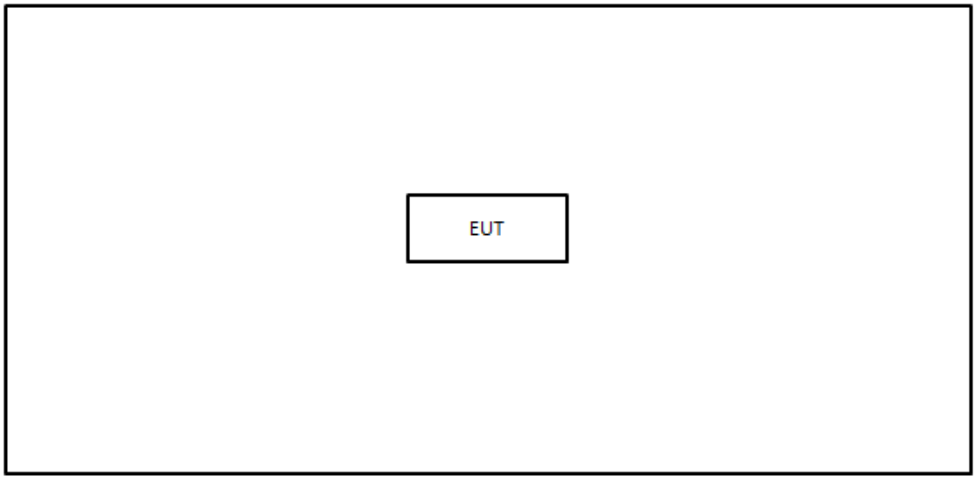
Item	Connection	Shielded	Length
1	Power cable	Yes	1m

Test Setup Diagram - Radiated Test < 1GHz



Item	Connection	Shielded	Length
1	RJ-45 cable	No	10m

Test Setup Diagram - Radiated Test > 1GHz



3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		
Frequency Emission (MHz)	**Quasi-Peak**	**Average**
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50
Note 1: * Decreases with the logarithm of the frequency.		

3.1.2 Measuring Instruments

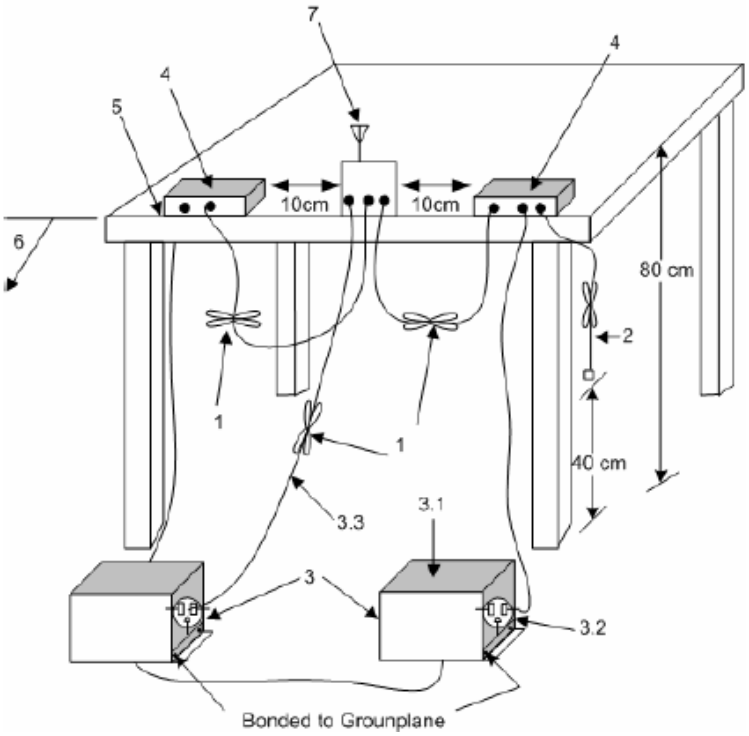
Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

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

3.1.4 Test Setup

AC Power-line Conducted Emissions



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

3.1.5 Measurement Results Calculation

The measured Level is calculated using:

a. Corrected Reading: LISN Factor (LISN) + Attenuator (AT/AUX) + Cable Loss (CL) + Read Level (Raw) = Level

b. Margin = -Limit + Level

3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 DTS Bandwidth

3.2.1 6dB Bandwidth Limit

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

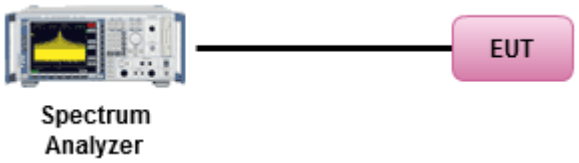
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method	
▪ For the emission bandwidth shall be measured using one of the options below:	
	☒ Refer as FCC KDB 558074, clause 8.2 & C63.10 clause 11.8.1 Option 1 for 6 dB bandwidth measurement.
	☐ Refer as FCC KDB 558074, clause 8.2 & C63.10 clause 11.8.2 Option 2 for 6 dB bandwidth measurement.
	☐ Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.

3.2.4 Test Setup

Emission Bandwidth


3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

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

3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

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

3.3.4 Test Setup

Maximum Conducted Output Power (Power Meter)


3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Power Spectral Density

3.4.1 Power Spectral Density Limit

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

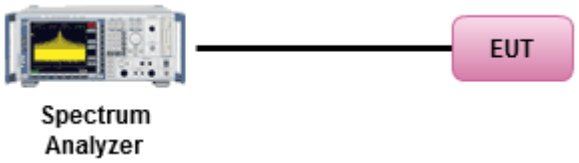
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

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

3.4.4 Test Setup

Power Spectral Density


3.4.5 Test Result of Power Spectral Density

Refer as Appendix D

3.5 Emissions in Non-restricted Frequency Bands

3.5.1 Emissions in Non-restricted Frequency Bands Limit

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

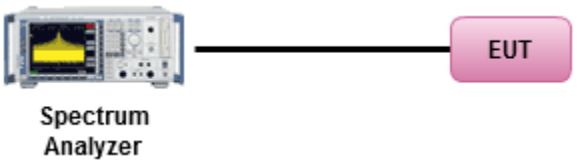
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

Test Method
▪ Refer as FCC KDB 558074, clause 8.5 for unwanted emissions into non-restricted bands.

3.5.4 Test Setup

Emissions in Non-restricted Frequency Bands


3.5.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix E

3.6 Emissions in Restricted Frequency Bands

3.6.1 Emissions in Restricted Frequency Bands Limit

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

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

Note 2: Test distance for frequencies at below 30 MHz, measurements may be performed at a distance closer than the EUT limit distance; however, an attempt should be made to avoid making measurements in the near field. When performing measurements 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.

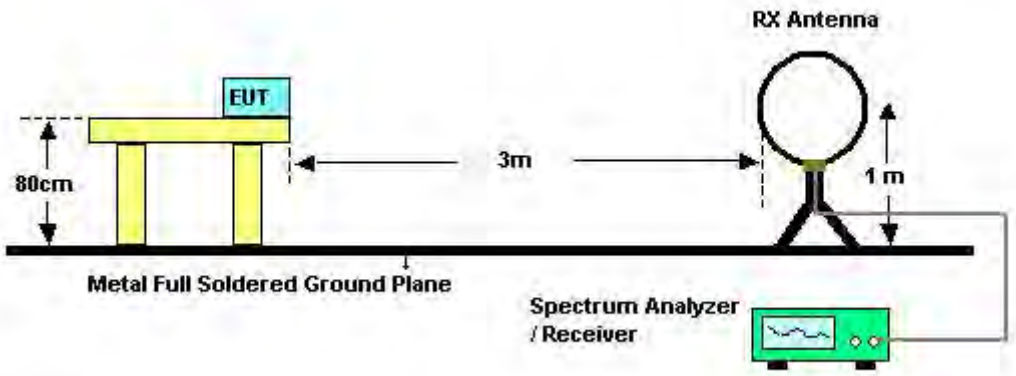
3.6.3 Test Procedures

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

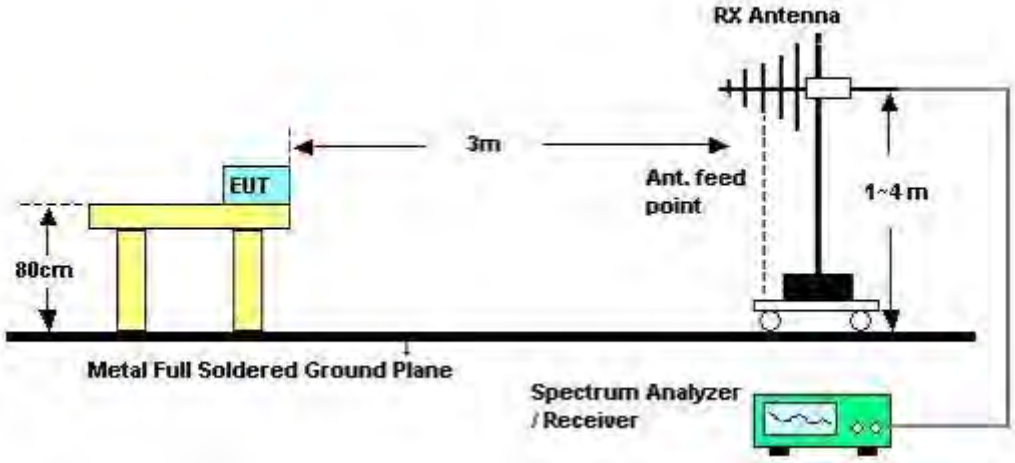
3.6.4 Test Setup

Radiated - Emissions in Restricted Frequency Bands

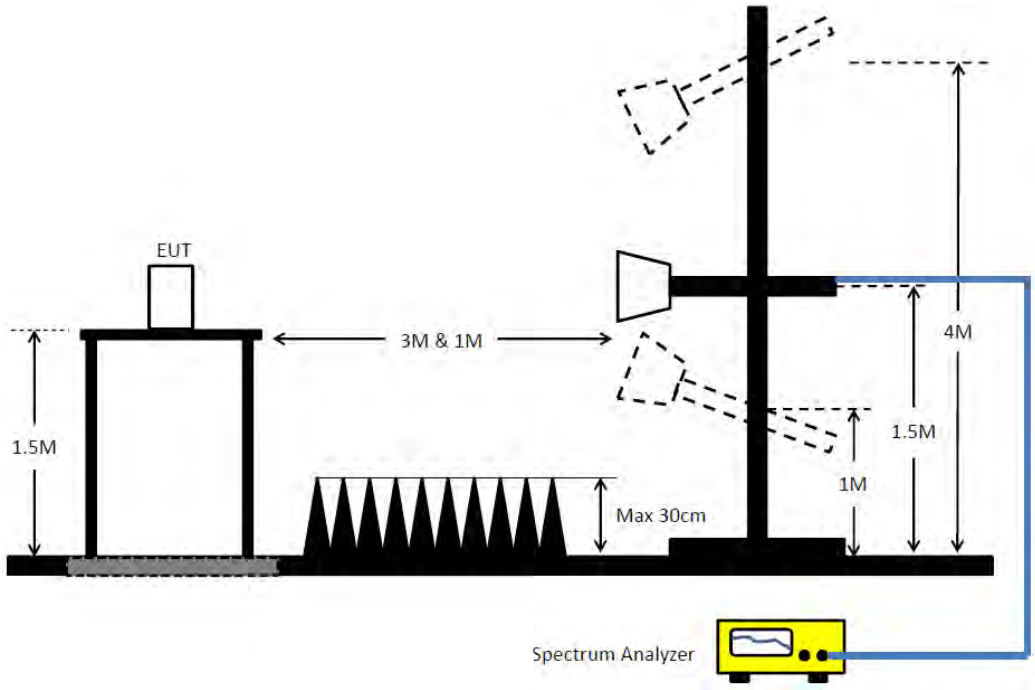
9kHz ~30MHz



30MHz~1GHz



Above 1GHz



3.6.5 Measurement Results Calculation

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

3.6.6 Emissions in Restricted Frequency Bands (Below 30MHz)

There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to KDB414788 Radiated Test Site, and the result came out very similar.
All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.
The radiated emissions were investigated from 9 kHz or the lowest frequency generated within the device, up to the 10th harmonic or 40 GHz, whichever is appropriate.

3.6.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F

4 Test Equipment and Calibration Data

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.4GHz	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 - 30 MHz	Oct. 13, 2023	Oct. 12, 2024	Radiation (03CH04-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH04-CB	30 MHz ~ 1 GHz	Aug. 01, 2023	Jul. 31, 2024	Radiation (03CH04-CB)
BILOG ANTENNA with 6 dB attenuator	Schaffner & EMCI	CBL6112B & N-6-06	22021&AT-N0607	30MHz ~ 1GHz	Oct. 07, 2023	Oct. 06, 2024	Radiation (03CH04-CB)
Horn Antenna	ETS・Lindgren	3115	00143147	750MHz~18GHz	Oct. 04, 2023	Oct. 03, 2024	Radiation (03CH04-CB)
Pre-Amplifier	EMCI	EMC330N	980332	20MHz ~ 3GHz	May 03, 2023	May 02, 2024	Radiation (03CH04-CB)
Spectrum Analyzer	R&S	FSP40	100142	9kHz~40GHz	Mar. 19, 2024	Mar. 18, 2025	Radiation (03CH04-CB
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	Jun. 13, 2023	Jun. 12, 2024	Radiation (03CH04-CB)
RF Cable-low	Woken	RG402	Low Cable-03+67	30MHz – 1GHz	Oct. 02, 2023	Oct. 01, 2024	Radiation (03CH04-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH04-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH03-CB	1GHz ~18GHz 3m	May 03, 2024	May 02, 2025	Radiation (03CH03-CB)
Horn Antenna	ETS・Lindgren	3115	6821	750MHz~18GHz	Jan. 24, 2024	Jan. 23, 2025	Radiation (03CH03-CB)

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Sep. 04, 2023	Sep. 03, 2024	Radiation (03CH03-CB)
Pre-Amplifier	Agilent	8449B	3008A02121	1GHz ~ 26.5GHz	May 17, 2024	May 16, 2025	Radiation (03CH03-CB)
Pre-Amplifier	SGH	SGH184	20221107-3	18GHz ~ 40GHz	Nov. 24, 2023	Nov. 23, 2024	Radiation (03CH03-CB)
Spectrum Analyzer	R&S	FSP40	100019	9kHz ~ 40GHz	Jun. 11, 2024	Jun. 10, 2025	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-20+29	1GHz ~ 18GHz	Feb. 29, 2024	Feb. 28, 2025	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-29	1GHz ~ 18GHz	Feb. 29, 2024	Feb. 28, 2025	Radiation (03CH03-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Jan. 11, 2024	Jan. 10, 2025	Radiation (03CH03-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH03-CB)
Spectrum analyzer	R&S	FSV40	101027	9kHz~40GHz	Aug. 14, 2023	Aug. 13, 2024	Conducted (TH02-CB)
Power Sensor	Anritsu	MA2411B	1126203	300MHz~40GHz	Oct. 19, 2023	Oct. 18, 2024	Conducted (TH02-CB)
Power Meter	Anritsu	ML2495A	1210004	300MHz~40GHz	Oct. 19, 2023	Oct. 18, 2024	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-01	1 GHz – 18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-02	1 GHz – 18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-03	1 GHz – 18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-04	1 GHz – 18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-05	1 GHz – 18 GHz	Oct. 02, 2023	Oct. 01, 2024	Conducted (TH02-CB)
Switch	SPTCB	SP-SWI	SWI-02	1 –26.5 GHz	Oct. 03, 2023	Oct. 02, 2024	Conducted (TH02-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH02-CB)

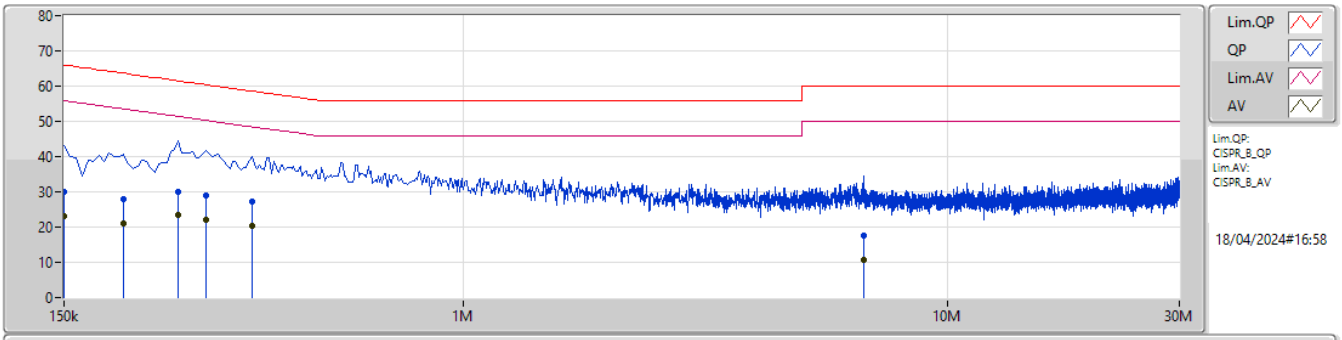
Note: Calibration Interval of instruments listed above is one year.

NCR means Non-Calibration required.

Summary

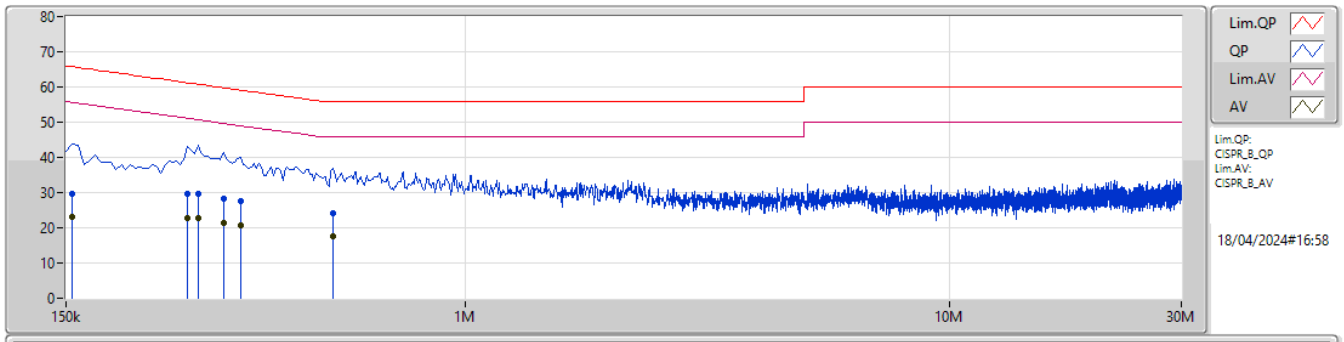
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	280.5k	22.82	50.80	-27.98	Neutral

Mode 1



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	150k	30.08	66.00	-35.92	9.93	Line	-	20.15	0.04	0.02	9.87
AV	150k	23.26	56.00	-32.74	9.93	Line	-	13.33	0.04	0.02	9.87
QP	199.5k	27.84	63.63	-35.79	9.91	Line	-	17.93	0.04	0.02	9.85
AV	199.5k	21.06	53.63	-32.57	9.91	Line	-	11.15	0.04	0.02	9.85
QP	258k	30.11	61.49	-31.38	9.92	Line	-	20.19	0.04	0.02	9.86
AV	258k	23.29	51.49	-28.20	9.92	Line	"Worst"	13.37	0.04	0.02	9.86
QP	294k	28.95	60.42	-31.47	9.94	Line	-	19.01	0.05	0.02	9.87
AV	294k	22.07	50.42	-28.35	9.94	Line	-	12.13	0.05	0.02	9.87
QP	366k	27.10	58.60	-31.50	9.95	Line	-	17.15	0.05	0.02	9.88
AV	366k	20.32	48.60	-28.28	9.95	Line	-	10.37	0.05	0.02	9.88
QP	6.702M	17.55	60.00	-42.45	10.26	Line	-	7.29	0.21	0.14	9.91
AV	6.702M	10.84	50.00	-39.16	10.26	Line	-	0.58	0.21	0.14	9.91

Mode 1



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	154.5k	29.73	65.75	-36.02	9.94	Neutral	-	19.79	0.06	0.02	9.86
AV	154.5k	23.06	55.75	-32.69	9.94	Neutral	-	13.12	0.06	0.02	9.86
QP	267k	29.73	61.20	-31.47	9.95	Neutral	-	19.78	0.06	0.02	9.87
AV	267k	22.93	51.20	-28.27	9.95	Neutral	-	12.98	0.06	0.02	9.87
QP	280.5k	29.67	60.80	-31.13	9.95	Neutral	-	19.72	0.06	0.02	9.87
AV	280.5k	22.82	50.80	-27.98	9.95	Neutral	"Worst"	12.87	0.06	0.02	9.87
QP	316.5k	28.20	59.80	-31.60	9.96	Neutral	-	18.24	0.06	0.02	9.88
AV	316.5k	21.44	49.80	-28.36	9.96	Neutral	-	11.48	0.06	0.02	9.88
QP	343.5k	27.52	59.12	-31.60	9.96	Neutral	-	17.56	0.06	0.02	9.88
AV	343.5k	20.70	49.12	-28.42	9.96	Neutral	-	10.74	0.06	0.02	9.88
QP	532.5k	24.16	56.00	-31.84	9.98	Neutral	-	14.18	0.06	0.02	9.90
AV	532.5k	17.49	46.00	-28.51	9.98	Neutral	-	7.51	0.06	0.02	9.90

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX	9.825M	14.044M	14M0G1D	9.7M	13.991M
802.11g_Nss1,(6Mbps)_1TX	16.325M	19.105M	19M1D1D	15M	16.626M
802.11n HT20_Nss1,(MCS0)_1TX	17.175M	17.772M	17M8D1D	15.025M	17.573M

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

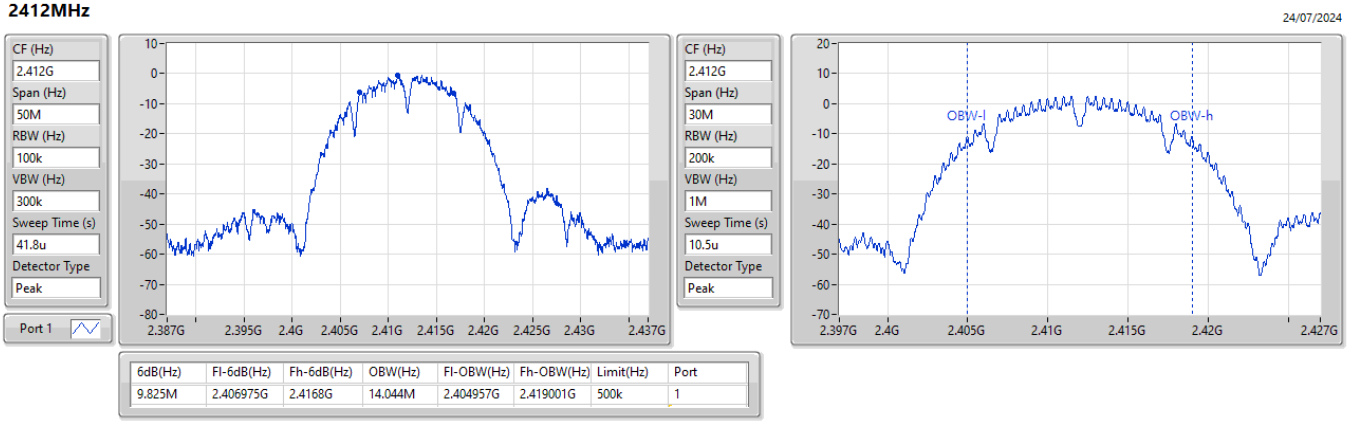
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	9.825M	14.044M
2437MHz	Pass	500k	9.8M	14.033M
2462MHz	Pass	500k	9.7M	13.991M
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-
2412MHz	Pass	500k	15M	16.626M
2437MHz	Pass	500k	16.325M	19.105M
2462MHz	Pass	500k	16.3M	17.182M
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-
2412MHz	Pass	500k	17.175M	17.573M
2437MHz	Pass	500k	15.025M	17.772M
2462MHz	Pass	500k	16.55M	17.748M

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**

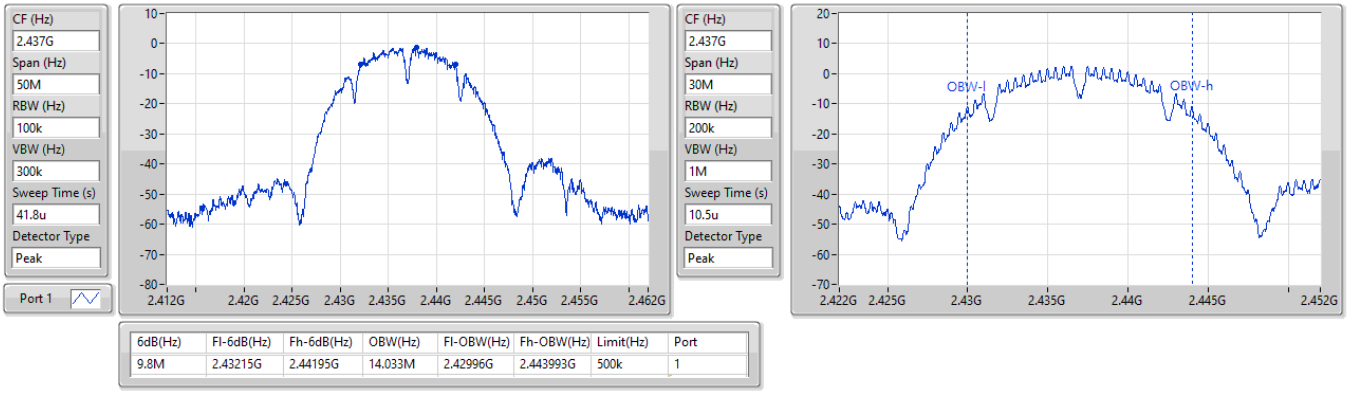
2412MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
9.825M	2.406975G	2.4168G	14.044M	2.404957G	2.419001G	500k	1

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

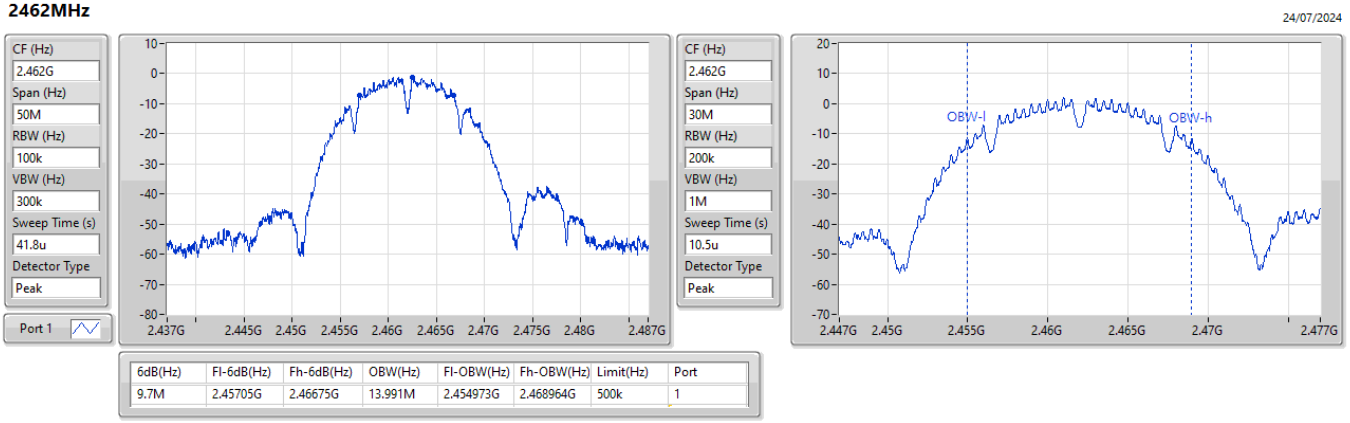
2437MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
9.8M	2.43215G	2.44195G	14.033M	2.42996G	2.443993G	500k	1

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

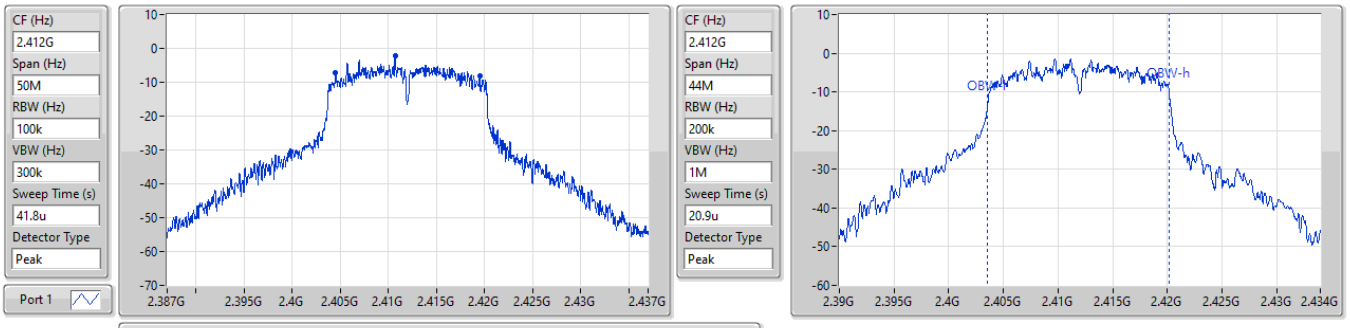
2462MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
9.7M	2.45705G	2.46675G	13.991M	2.454973G	2.468964G	500k	1

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

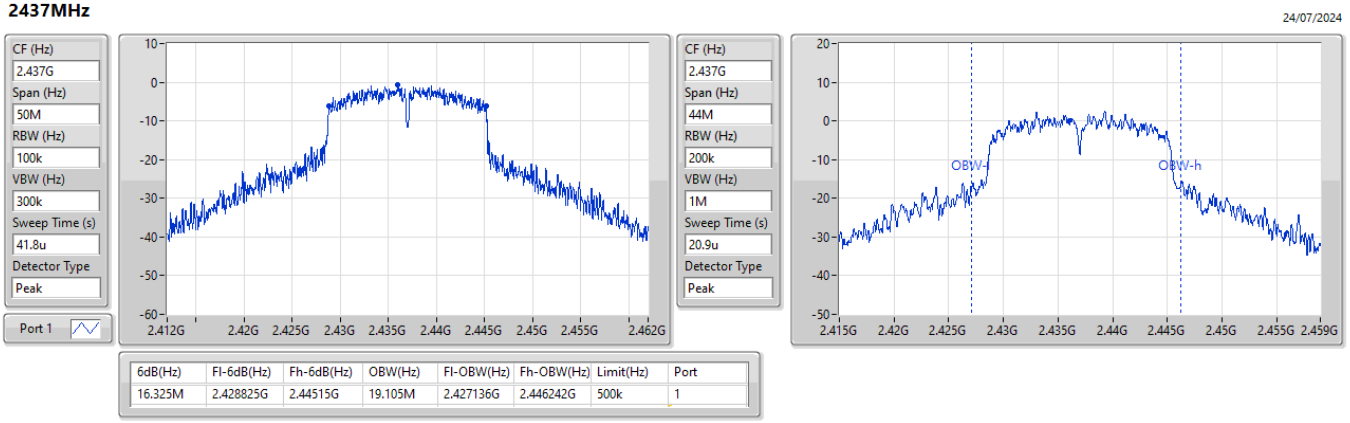
2412MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15M	2.4045G	2.4195G	16.626M	2.403548G	2.420174G	500k	1

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

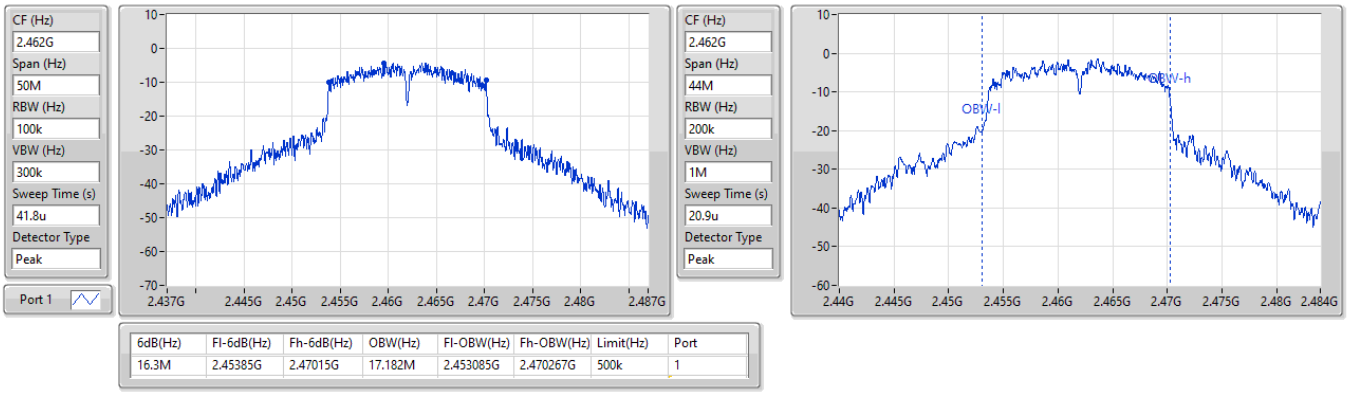
2437MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	2.428825G	2.44515G	19.105M	2.427136G	2.446242G	500k	1

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

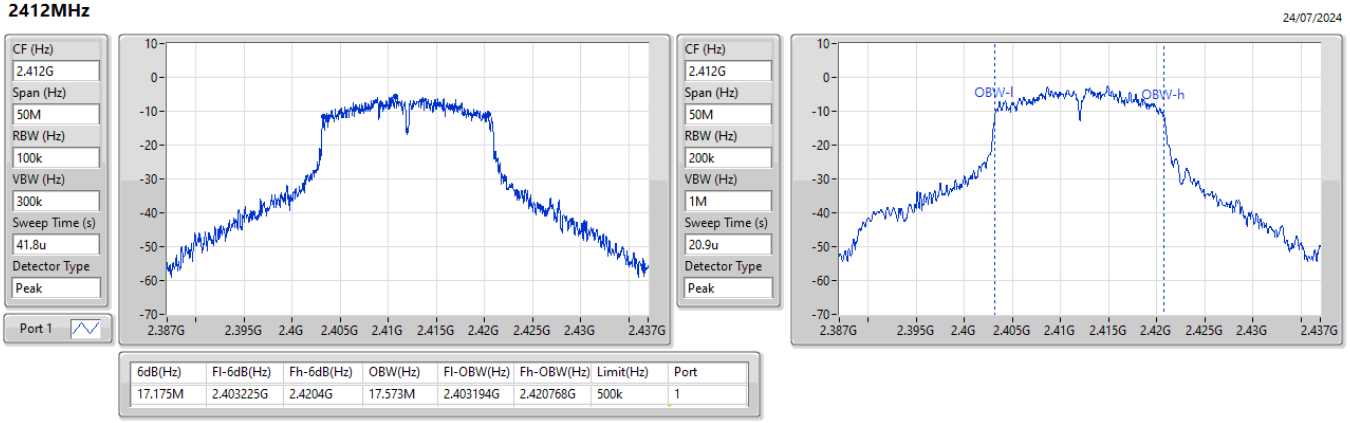
2462MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.3M	2.45385G	2.47015G	17.182M	2.453085G	2.470267G	500k	1

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

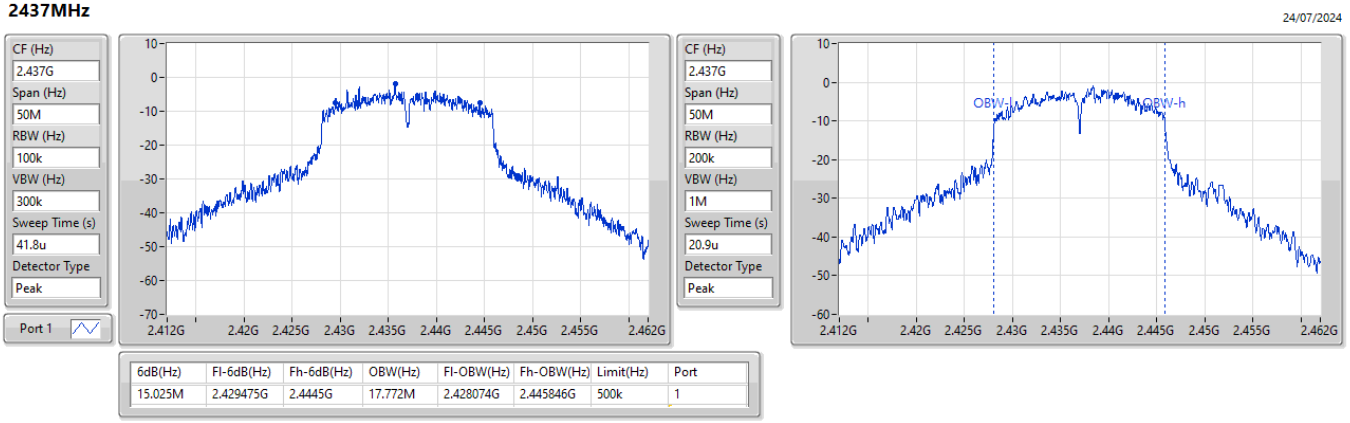
2412MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.175M	2.403225G	2.4204G	17.573M	2.403194G	2.420768G	500k	1

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

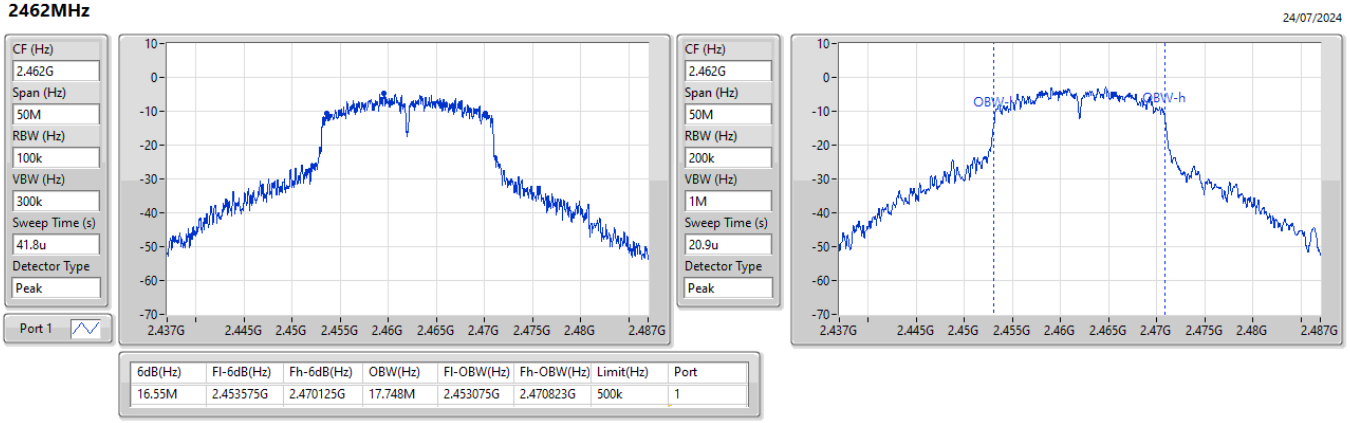
2437MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
15.025M	2.429475G	2.4445G	17.772M	2.428074G	2.445846G	500k	1

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

2462MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.55M	2.453575G	2.470125G	17.748M	2.453075G	2.470823G	500k	1

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_1TX	11.01	0.01262
802.11g_Nss1,(6Mbps)_1TX	13.27	0.02123
802.11n HT20_Nss1,(MCS0)_1TX	10.22	0.01052

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	1.74	11.00	11.00	30.00
2437MHz	Pass	1.74	11.01	11.01	30.00
2462MHz	Pass	1.74	10.50	10.50	30.00
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	1.74	9.29	9.29	30.00
2437MHz	Pass	1.74	13.27	13.27	30.00
2462MHz	Pass	1.74	9.60	9.60	30.00
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-
2412MHz	Pass	1.74	8.41	8.41	30.00
2437MHz	Pass	1.74	10.22	10.22	30.00
2462MHz	Pass	1.74	8.62	8.62	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	-17.49
802.11g_Nss1,(6Mbps)_1TX	-14.48
802.11n HT20_Nss1,(MCS0)_1TX	-16.67

RBW = 3kHz;

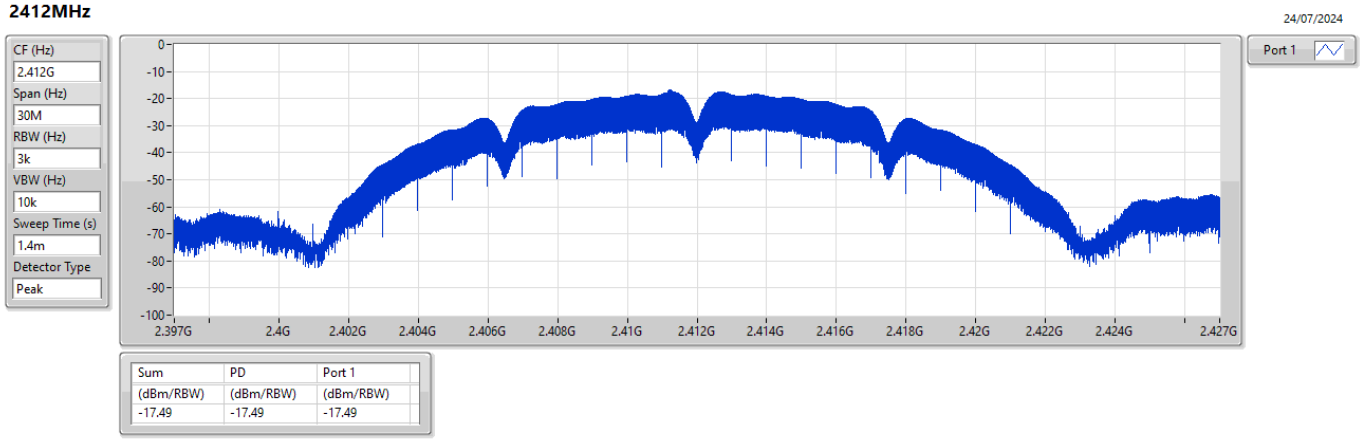
Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	1.74	-17.49	-17.49	8.00
2437MHz	Pass	1.74	-17.63	-17.63	8.00
2462MHz	Pass	1.74	-17.95	-17.95	8.00
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-
2412MHz	Pass	1.74	-18.22	-18.22	8.00
2437MHz	Pass	1.74	-14.48	-14.48	8.00
2462MHz	Pass	1.74	-17.99	-17.99	8.00
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-
2412MHz	Pass	1.74	-19.20	-19.20	8.00
2437MHz	Pass	1.74	-16.67	-16.67	8.00
2462MHz	Pass	1.74	-18.16	-18.16	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;

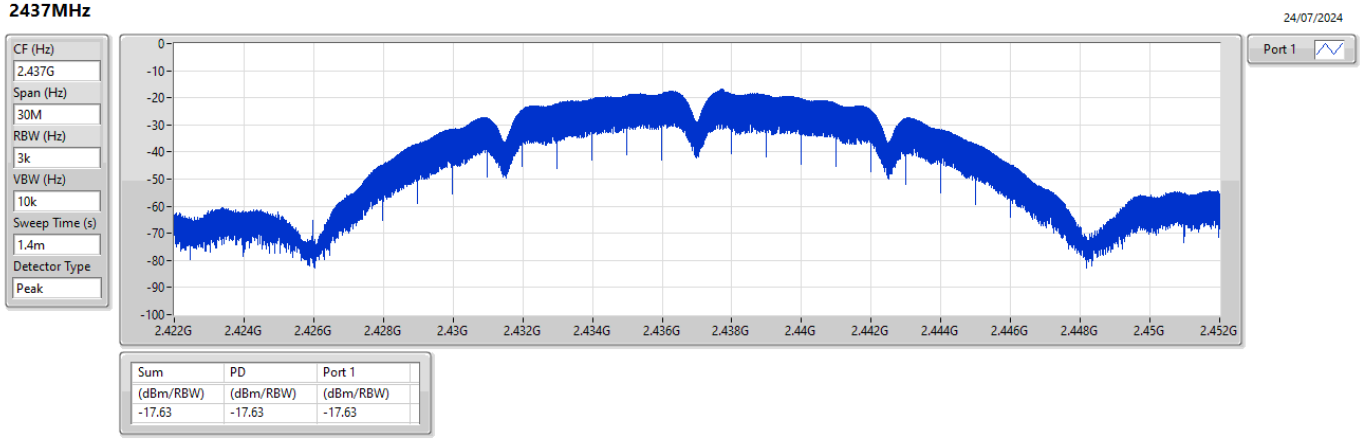
2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX **PSD**

2412MHz



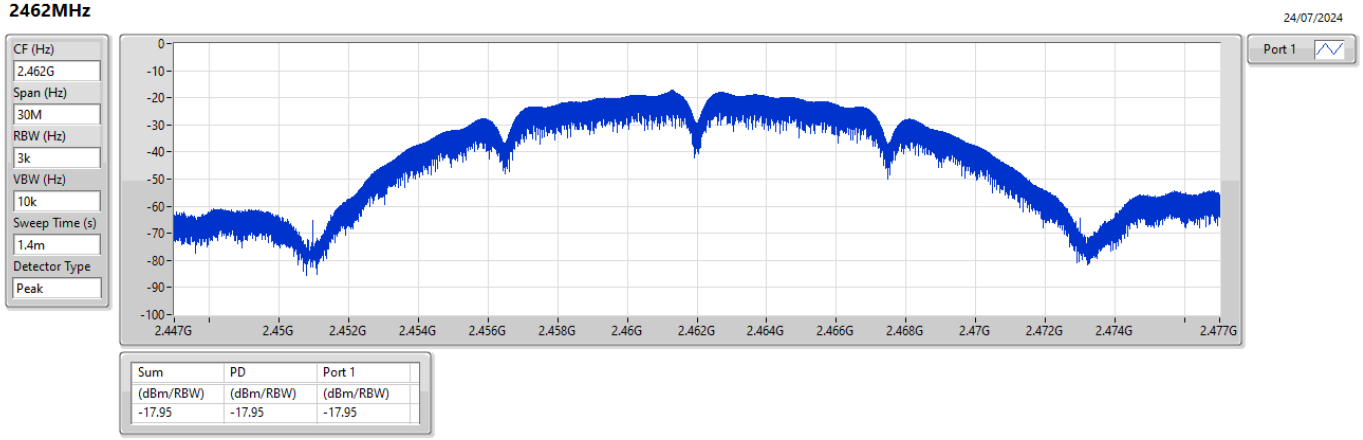
2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_1TX **PSD**

2437MHz



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

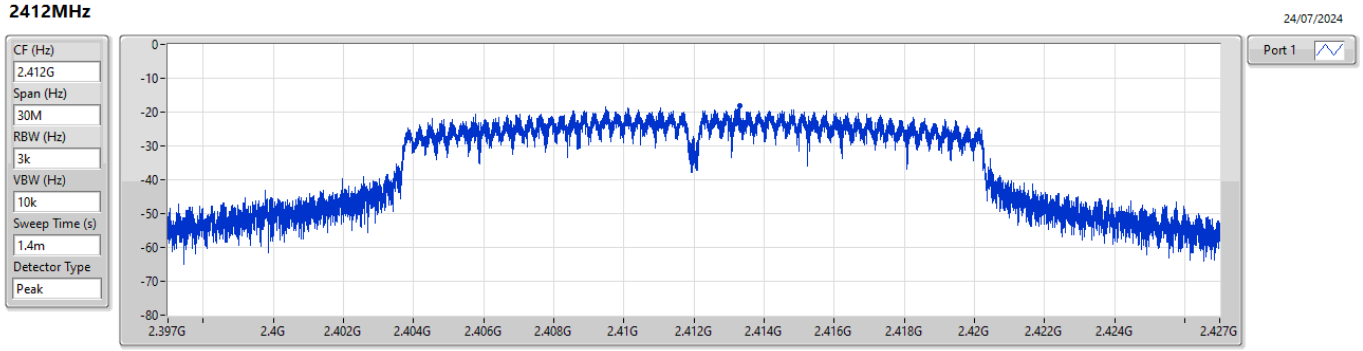
2462MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-17.95	-17.95	-17.95

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

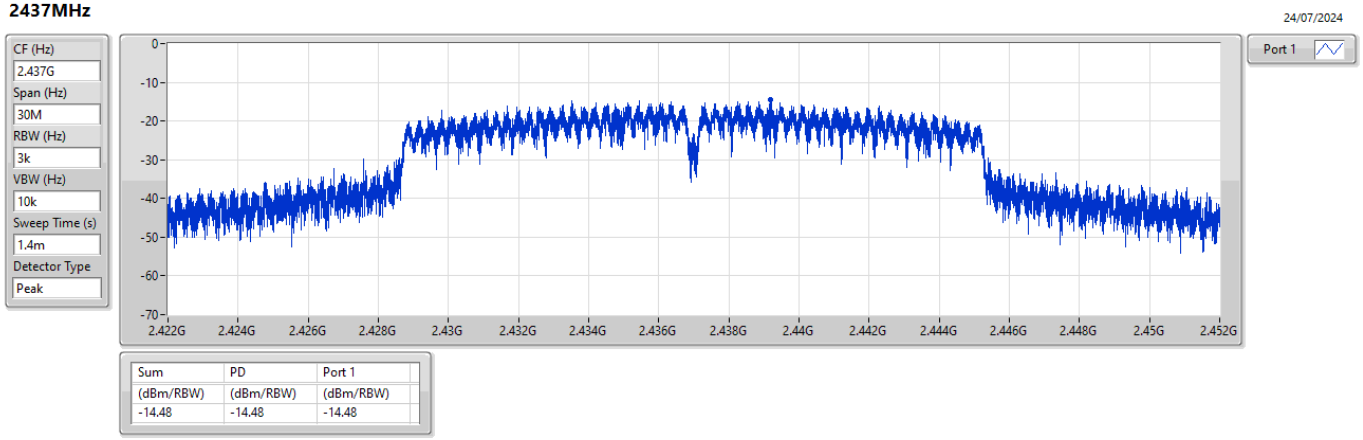
2412MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-18.22	-18.22	-18.22

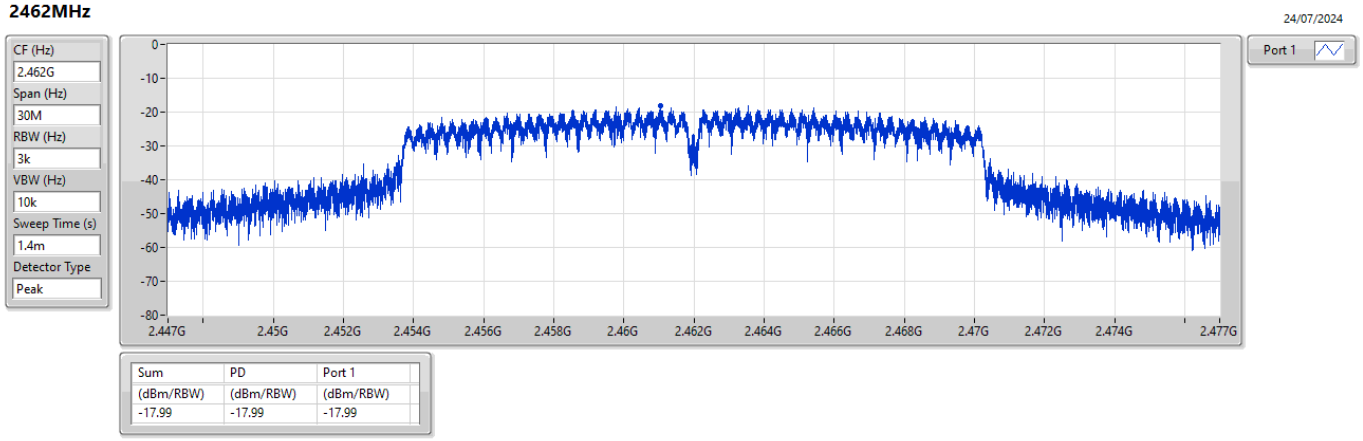
2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX **PSD**

2437MHz



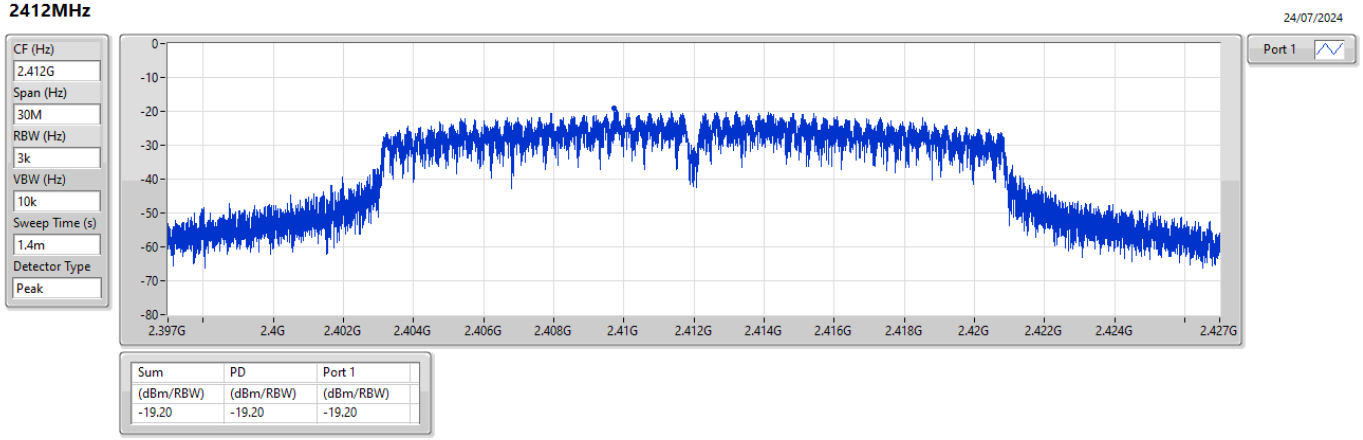
2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_1TX **PSD**

2462MHz



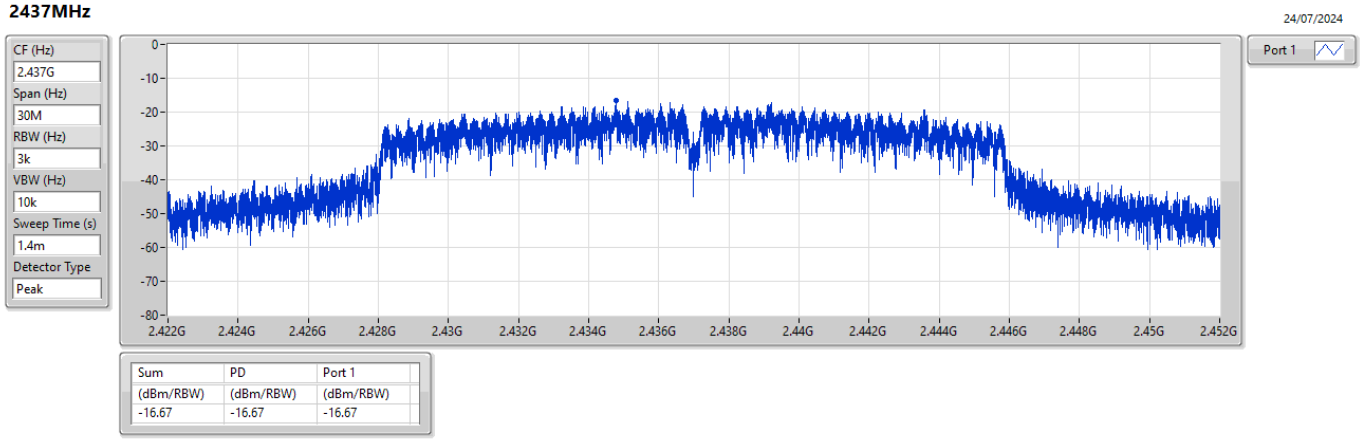
2.4-2.4835GHz_802.11n HT20_Nss1,(MCS0)_1TX **PSD**

2412MHz



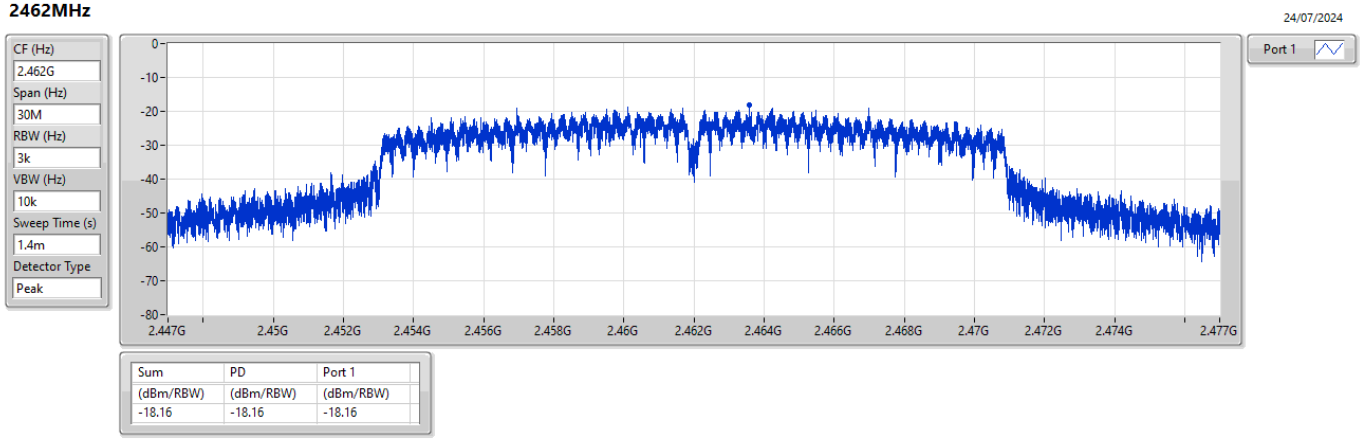
2.4-2.4835GHz_802.11n HT20_Nss1,(MCS0)_1TX **PSD**

2437MHz



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

2462MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-18.16	-18.16	-18.16

Summary

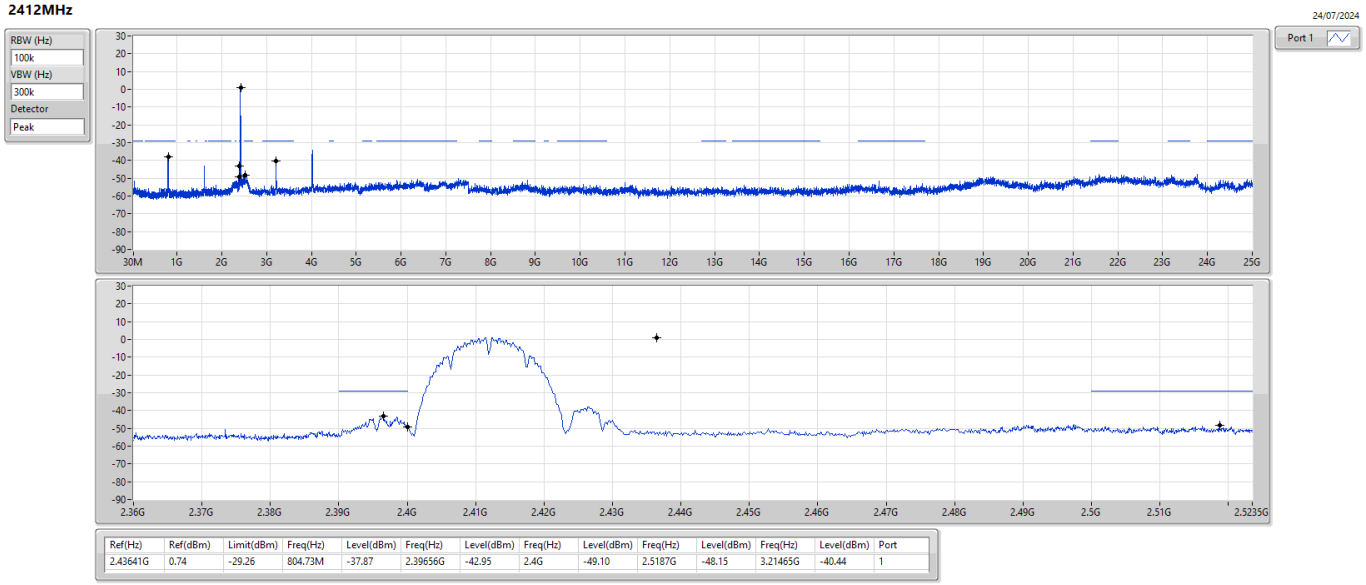
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX	Pass	2.43641G	0.74	-29.26	804.73M	-37.87	2.39656G	-42.95	2.4G	-49.10	2.5187G	-48.15	3.21465G	-40.44	1
802.11g_Nss1,(6Mbps)_1TX	Pass	2.43824G	2.57	-27.43	800.07M	-38.66	2.39976G	-29.02	2.4G	-28.65	2.52126G	-49.28	3.21465G	-38.09	1
802.11n HT20_Nss1,(MCS0)_1TX	Pass	2.43824G	0.06	-29.94	802.4M	-41.12	2.39992G	-30.81	2.4G	-31.09	2.50454G	-49.91	3.21465G	-37.26	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	2.43641G	0.74	-29.26	804.73M	-37.87	2.39656G	-42.95	2.4G	-49.10	2.5187G	-48.15	3.21465G	-40.44	1
2437MHz	Pass	2.43641G	0.74	-29.26	812.88M	-38.05	2.39632G	-52.89	2.4G	-52.71	2.51558G	-48.05	3.24837G	-40.78	1
2462MHz	Pass	2.43641G	0.74	-29.26	821.04M	-39.53	2.39728G	-51.66	2.4G	-53.61	2.50622G	-50.66	3.28208G	-40.02	1
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43824G	2.57	-27.43	800.07M	-38.66	2.39976G	-29.02	2.4G	-28.65	2.52126G	-49.28	3.21465G	-38.09	1
2437MHz	Pass	2.43824G	2.57	-27.43	811.72M	-35.25	2.39984G	-47.64	2.4G	-48.56	2.52094G	-46.79	3.24837G	-27.53	1
2462MHz	Pass	2.43824G	2.57	-27.43	821.04M	-40.44	2.39592G	-52.02	2.4G	-53.89	2.52046G	-50.25	3.28208G	-39.08	1
802.11n HT20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43824G	0.06	-29.94	802.4M	-41.12	2.39992G	-30.81	2.4G	-31.09	2.50454G	-49.91	3.21465G	-37.26	1
2437MHz	Pass	2.43824G	0.06	-29.94	807.06M	-38.19	2.39624G	-52.73	2.4G	-52.97	2.5199G	-48.60	3.24837G	-39.64	1
2462MHz	Pass	2.43824G	0.06	-29.94	818.71M	-40.57	2.39784G	-52.29	2.4G	-54.93	2.51766G	-51.93	3.28208G	-38.11	1

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

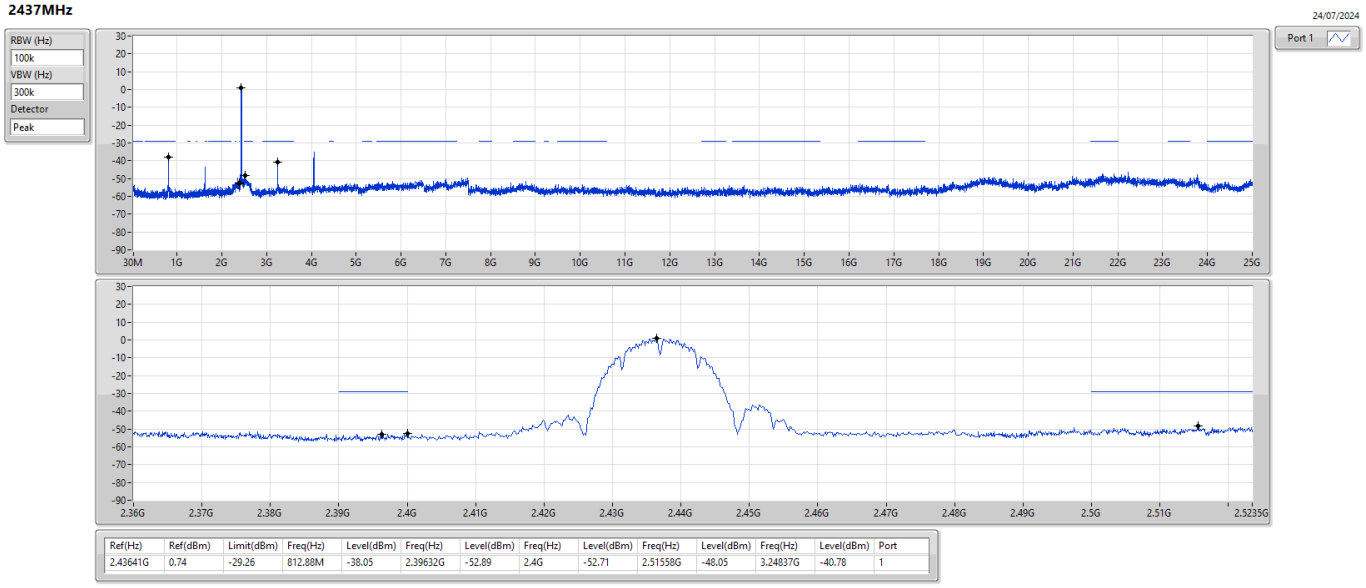
2412MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43641G	0.74	-29.26	804.73M	-37.87	2.39656G	-42.95	2.4G	-49.10	2.5187G	-48.15	3.21465G	-40.44	1

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

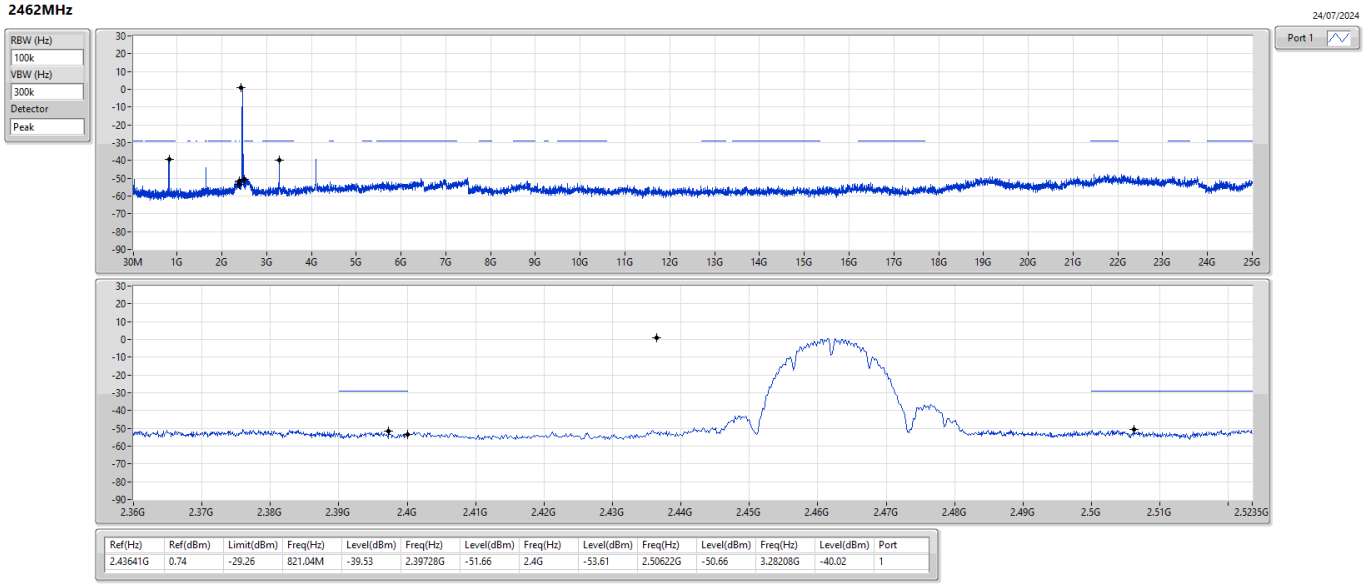
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43641G	0.74	-29.26	812.88M	-38.05	2.39632G	-52.89	2.4G	-52.71	2.51558G	-48.05	3.24837G	-40.78	1

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

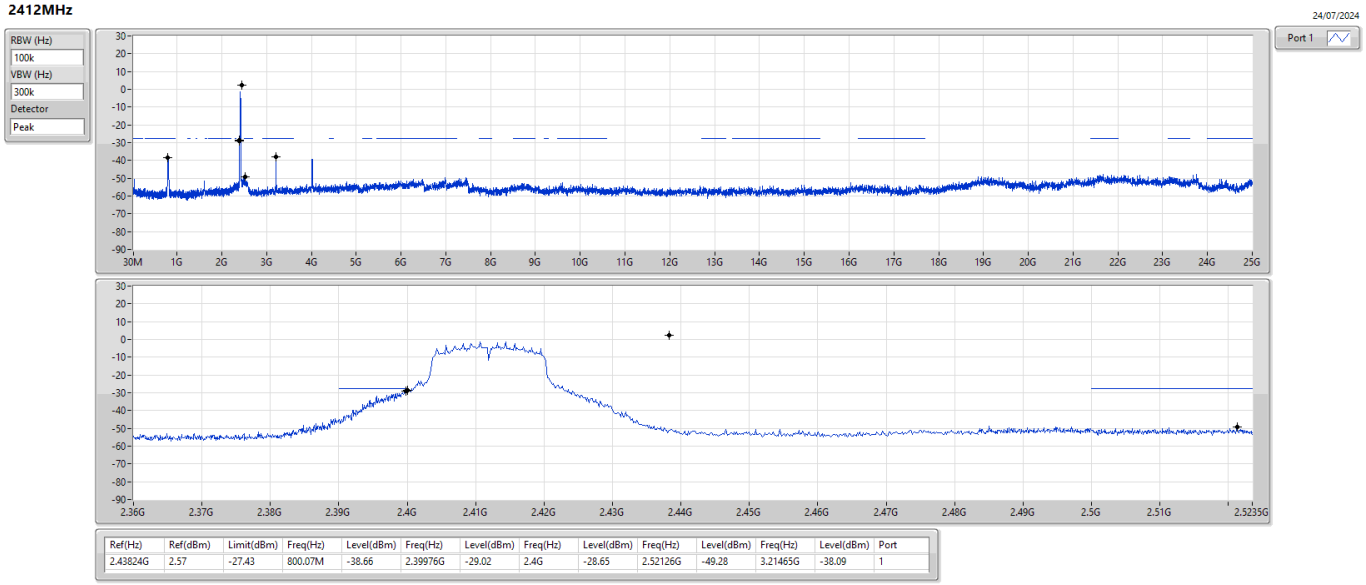
2462MHz



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
2.43641G	0.74	-29.26	821.04M	-39.53	2.39728G	-51.66	2.4G	-53.61	2.50622G	-50.66	3.28208G	-40.02	1

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

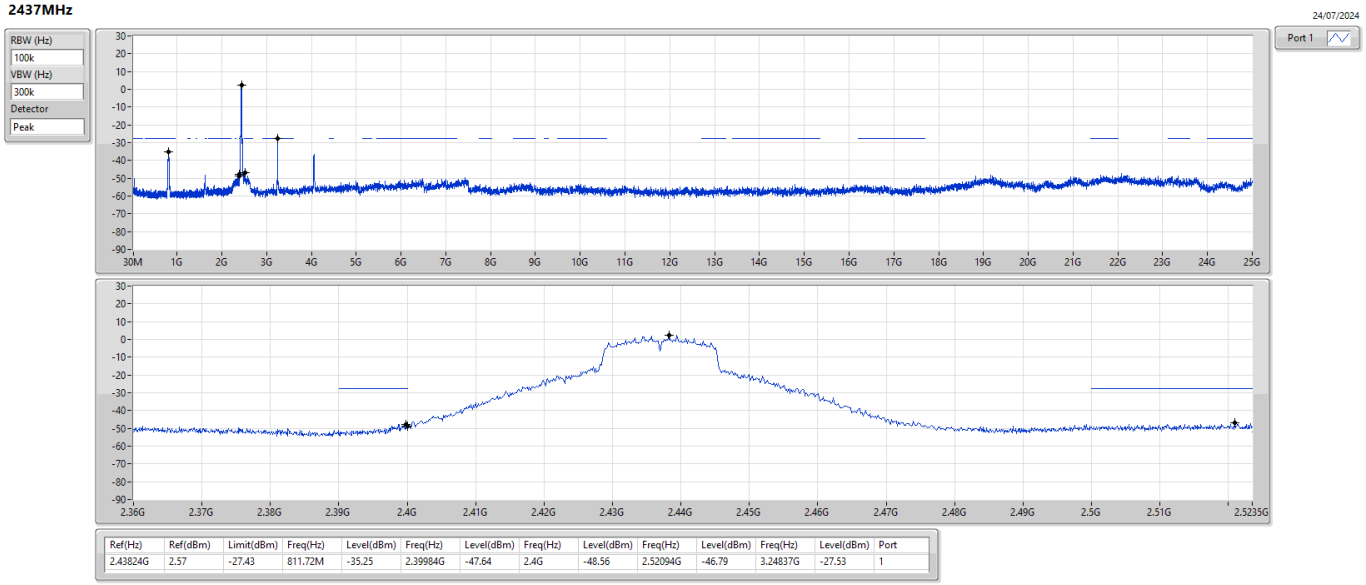
2412MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43824G	2.57	-27.43	800.07M	-38.66	2.39976G	-29.02	2.4G	-28.65	2.52126G	-49.28	3.21465G	-38.09	1

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

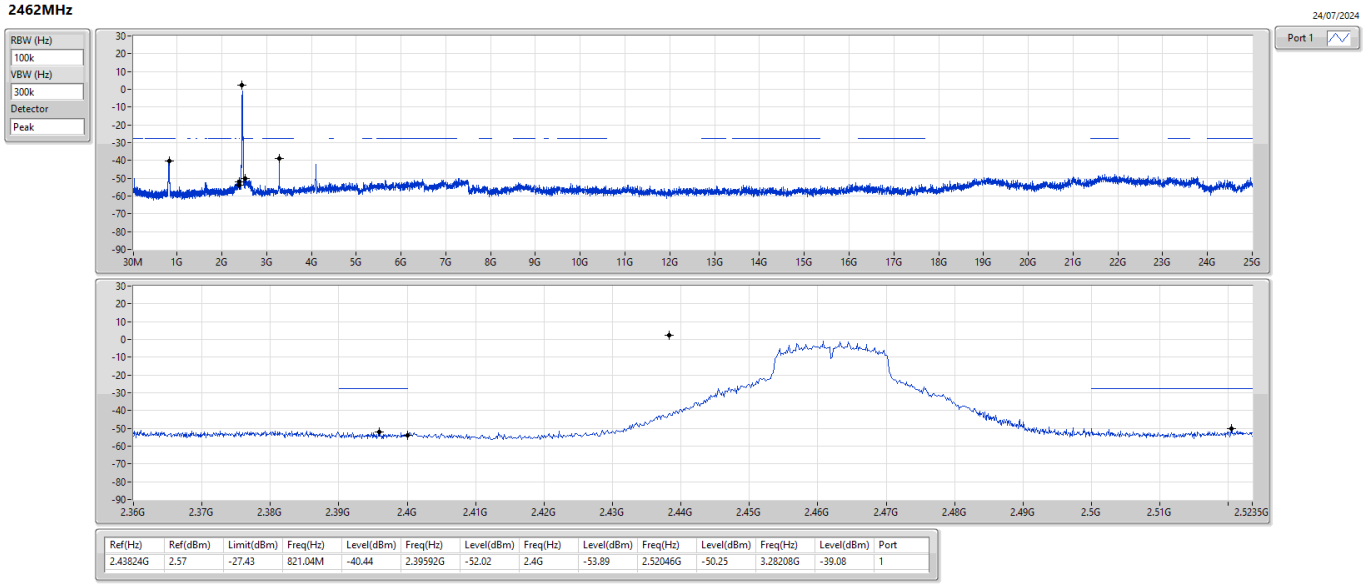
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43824G	2.57	-27.43	811.72M	-35.25	2.39984G	-47.64	2.4G	-48.56	2.52094G	-46.79	3.24837G	-27.53	1

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

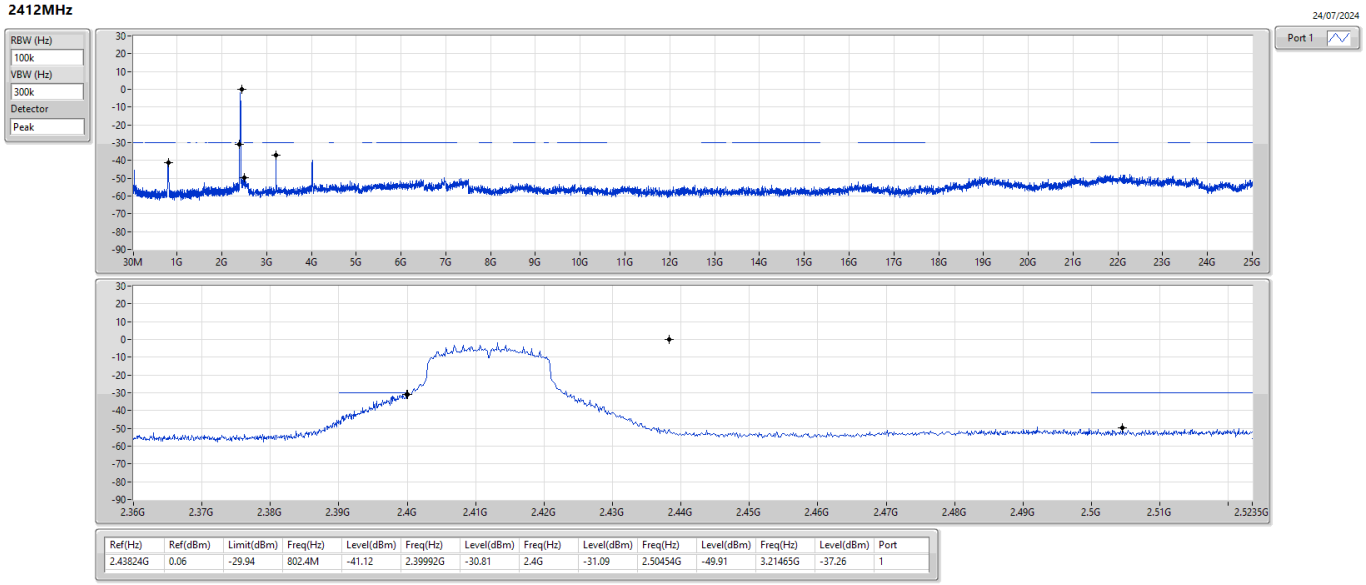
2462MHz



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
2.43824G	2.57	-27.43	821.04M	-40.44	2.39592G	-52.02	2.4G	-53.89	2.52046G	-50.25	3.28208G	-39.08	1

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

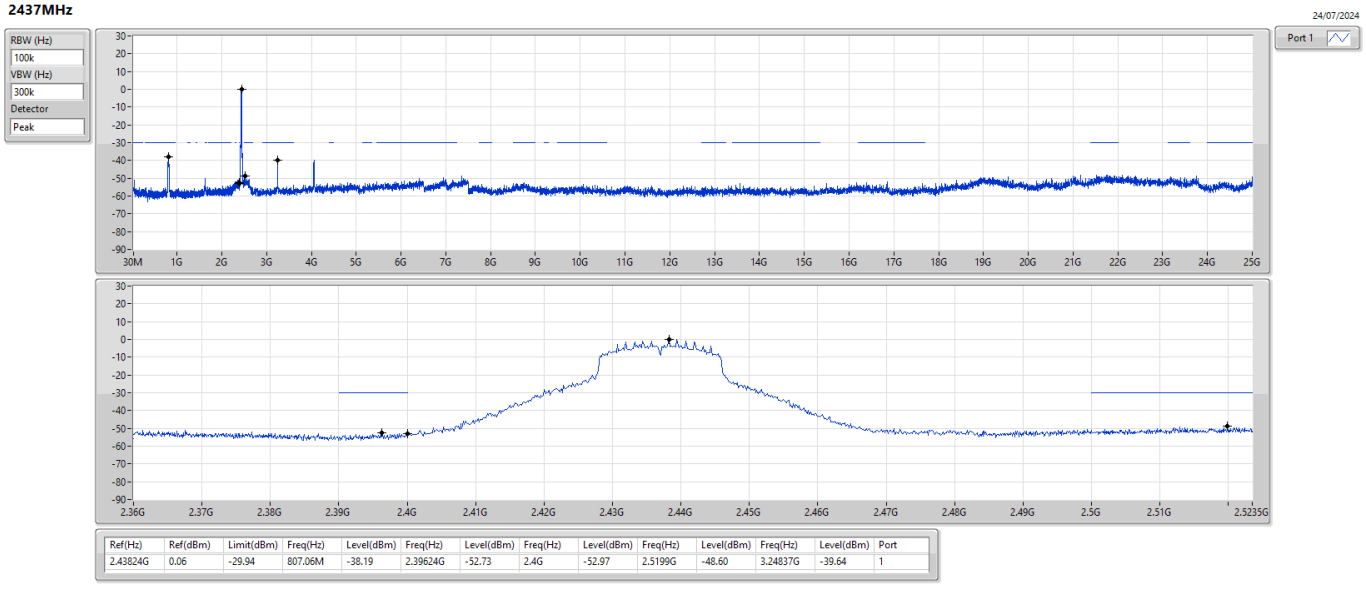
2412MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43824G	0.06	-29.94	802.4M	-41.12	2.39992G	-30.81	2.4G	-31.09	2.50454G	-49.91	3.21465G	-37.26	1

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

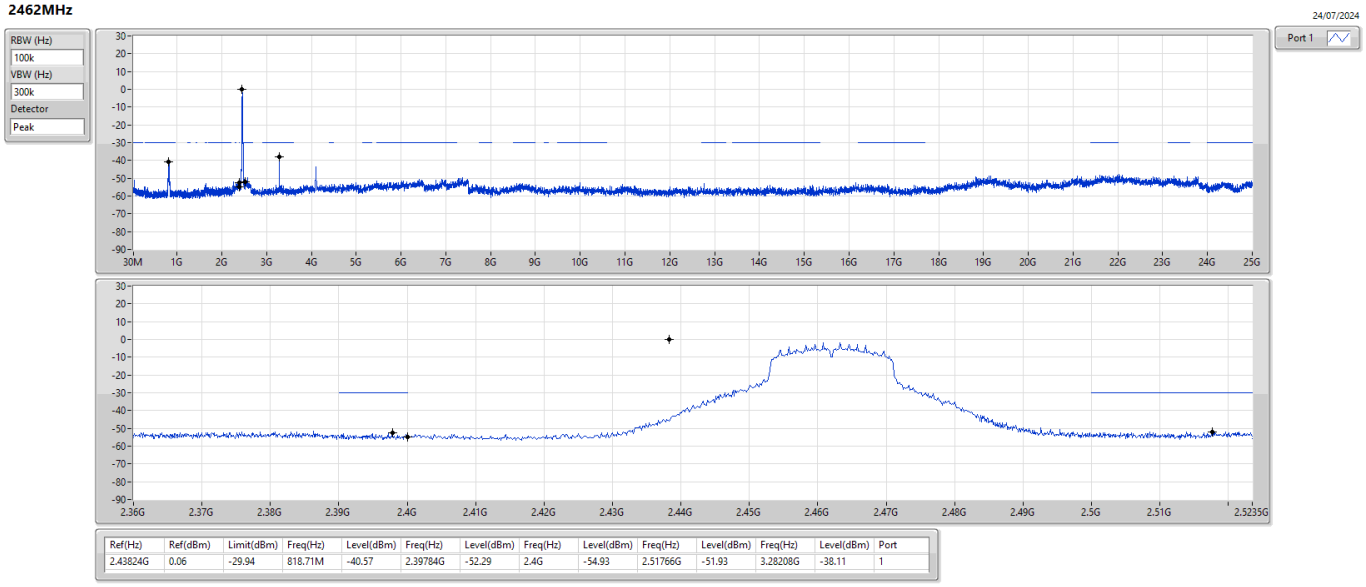
2437MHz



Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43824G	0.06	-29.94	807.06M	-38.19	2.39624G	-52.73	2.4G	-52.97	2.5199G	-48.60	3.24837G	-39.64	1

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

2462MHz

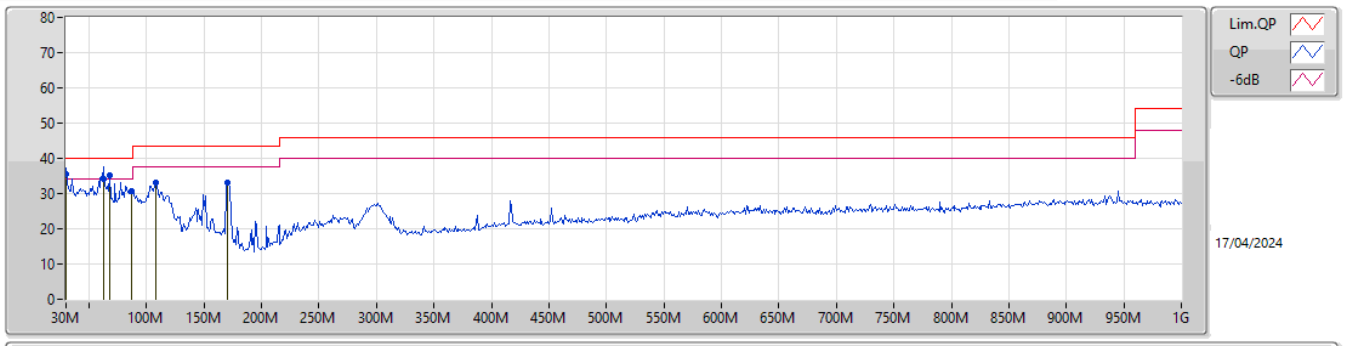


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.43824G	0.06	-29.94	818.71M	-40.57	2.39784G	-52.29	2.4G	-54.93	2.51766G	-51.93	3.28208G	-38.11	1

Summary

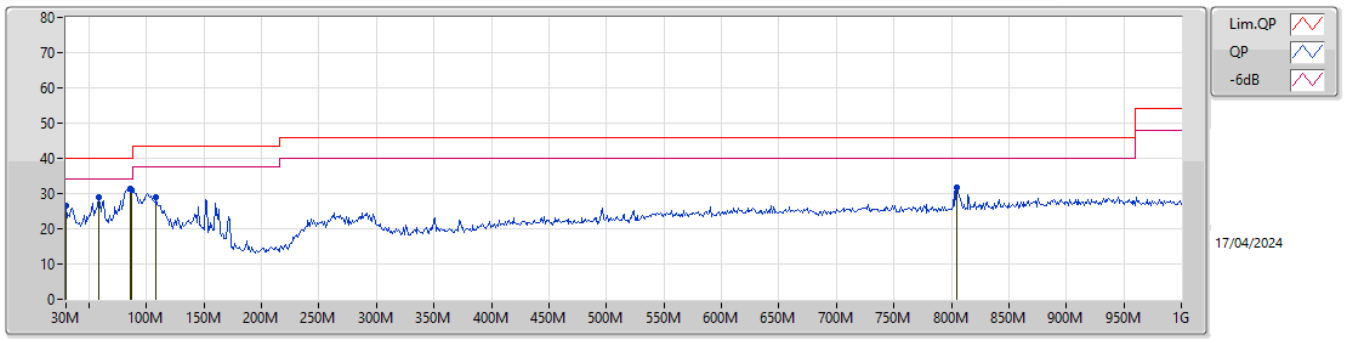
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	QP	30M	35.54	40.00	-4.46	Vertical

Mode 1



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
QP	30M	35.54	40.00	-4.46	-7.26	3	Vertical	107	1.25	"Worst"	42.80	23.56	0.33	31.15
QP	62.98M	34.06	40.00	-5.94	-18.74	3	Vertical	339	1.00	-	52.80	12.41	0.61	31.76
PK	67.83M	35.29	40.00	-4.71	-18.72	3	Vertical	306	1.00	-	54.01	12.38	0.64	31.74
PK	87.23M	30.65	40.00	-9.35	-16.29	3	Vertical	200	1.00	-	46.94	14.62	0.78	31.69
PK	107.6M	32.99	43.50	-10.51	-12.87	3	Vertical	292	1.00	-	45.86	17.84	0.87	31.58
PK	170.65M	32.99	43.50	-10.51	-14.59	3	Vertical	352	1.00	-	47.58	15.94	1.16	31.69

Mode 1



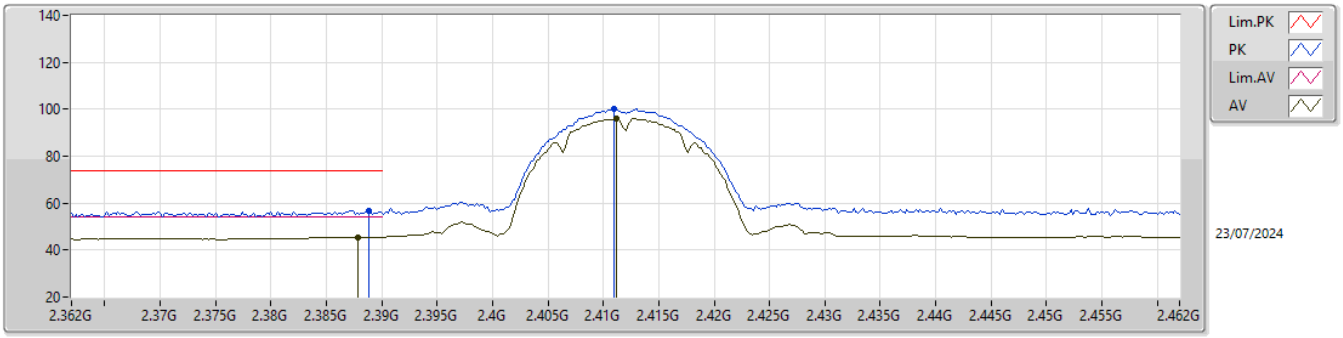
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
PK	30M	26.68	40.00	-13.32	-7.26	3	Horizontal	213	3.00	-	33.94	23.56	0.33	31.15
PK	58.13M	29.01	40.00	-10.99	-18.42	3	Horizontal	339	1.25	-	47.43	12.72	0.58	31.72
PK	86.26M	31.54	40.00	-8.46	-16.51	3	Horizontal	220	2.00	"Worst"	48.05	14.41	0.78	31.70
PK	87.23M	31.00	40.00	-9.00	-16.29	3	Horizontal	101	2.00	-	47.29	14.62	0.78	31.69
PK	108.57M	28.85	43.50	-14.65	-12.77	3	Horizontal	48	1.50	-	41.62	17.94	0.87	31.58
PK	805.03M	31.64	46.00	-14.36	-3.43	3	Horizontal	67	1.25	-	35.07	25.95	2.92	32.30

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	-	-	-	-	-	-	-	-	-	-	-
802.11g_Nss1,(6Mbps)_1TX	Pass	AV	2.4835G	47.95	54.00	-6.05	3	Horizontal	314	2.80	-

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

2412MHz_TX

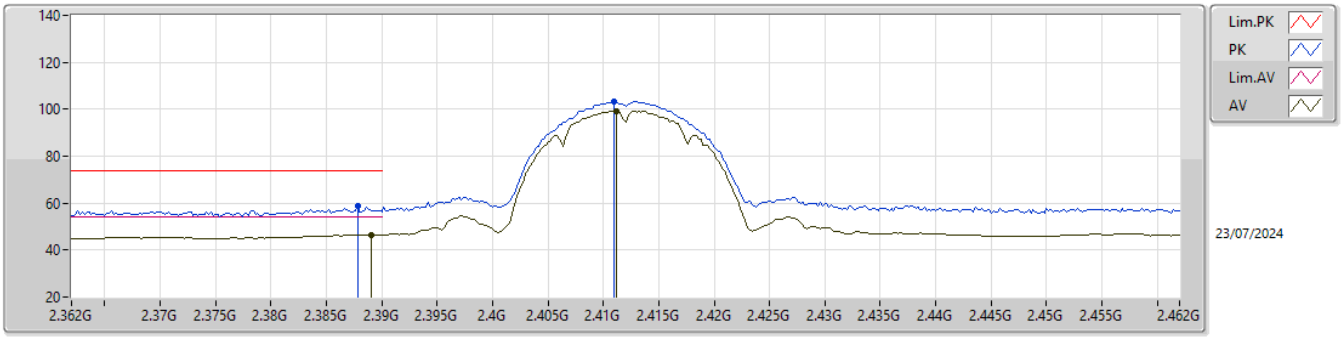


EUT Z_1TX
Setting 0
03-E-A-4

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3888G	56.73	74.00	-17.27	24.07	3	Vertical	304	2.66	-	28.29	4.37	-
AV	2.3878G	45.57	54.00	-8.43	12.92	3	Vertical	304	2.66	-	28.28	4.37	-
PK	2.411G	100.00	Inf	-Inf	67.31	3	Vertical	304	2.66	-	28.30	4.39	-
AV	2.4112G	96.03	Inf	-Inf	63.34	3	Vertical	304	2.66	-	28.30	4.39	-

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

2412MHz_TX

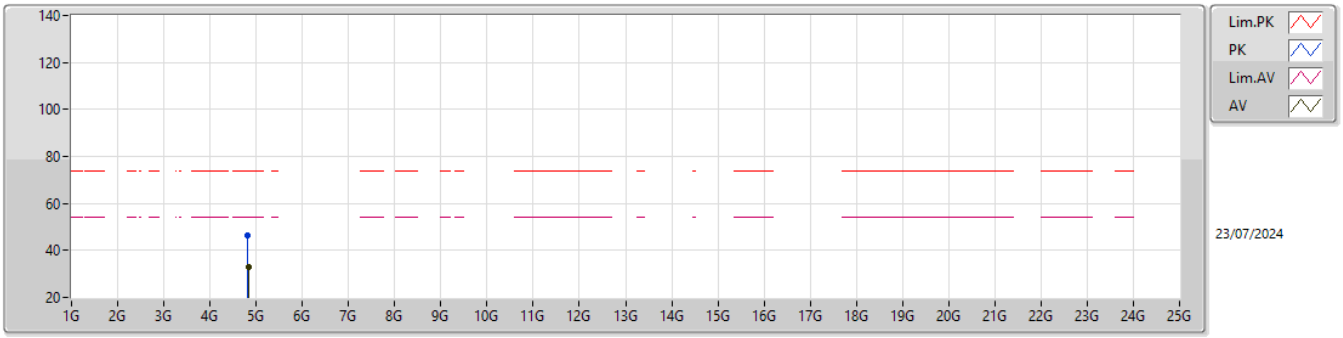


EUT Z_1TX
Setting 0
03-E-A-4

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3878G	58.56	74.00	-15.44	25.91	3	Horizontal	311	1.13	-	28.28	4.37	-
AV	2.389G	46.51	54.00	-7.49	13.85	3	Horizontal	311	1.13	-	28.29	4.37	-
PK	2.411G	103.32	Inf	-Inf	70.63	3	Horizontal	311	1.13	-	28.30	4.39	-
AV	2.4112G	99.34	Inf	-Inf	66.65	3	Horizontal	311	1.13	-	28.30	4.39	-

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

2412MHz_TX

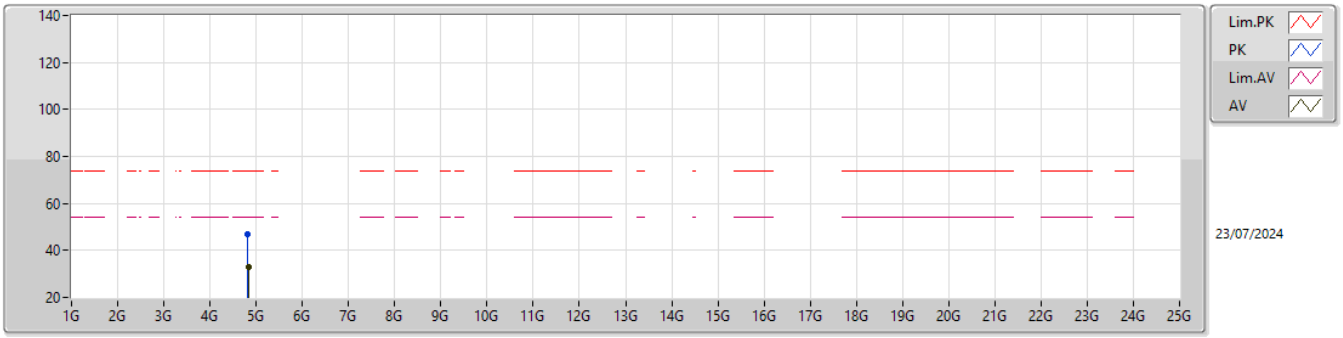


EUT Z_1TX
Setting 0
03-E-A-4

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.81856G	46.44	74.00	-27.56	42.24	3	Vertical	-0	1.80	-	33.24	6.29	35.33
AV	4.82532G	32.93	54.00	-21.07	28.71	3	Vertical	-0	1.80	-	33.25	6.30	35.33

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

2412MHz_TX

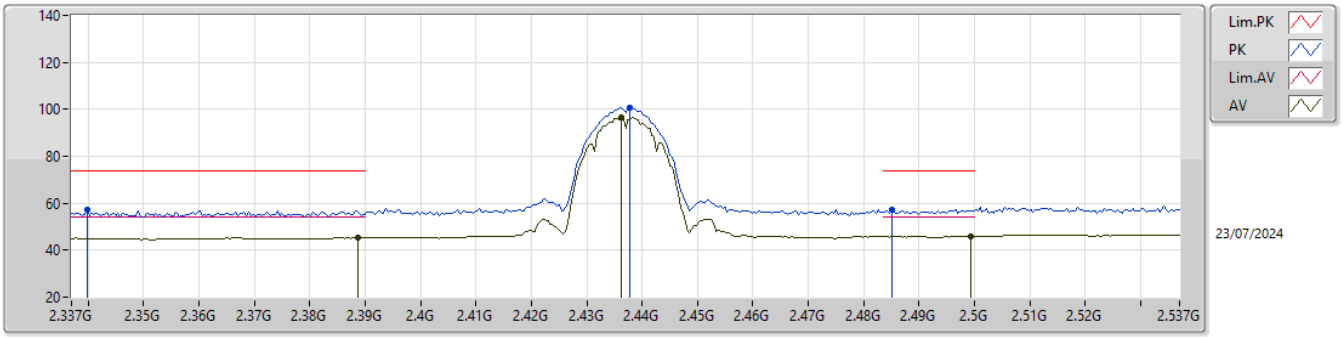


EUT Z_1TX
Setting 0
03-E-A-4

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.81744G	46.92	74.00	-27.08	42.74	3	Horizontal	75	2.69	-	33.23	6.28	35.33
AV	4.82572G	32.85	54.00	-21.15	28.63	3	Horizontal	75	2.69	-	33.25	6.30	35.33

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

2437MHz_TX

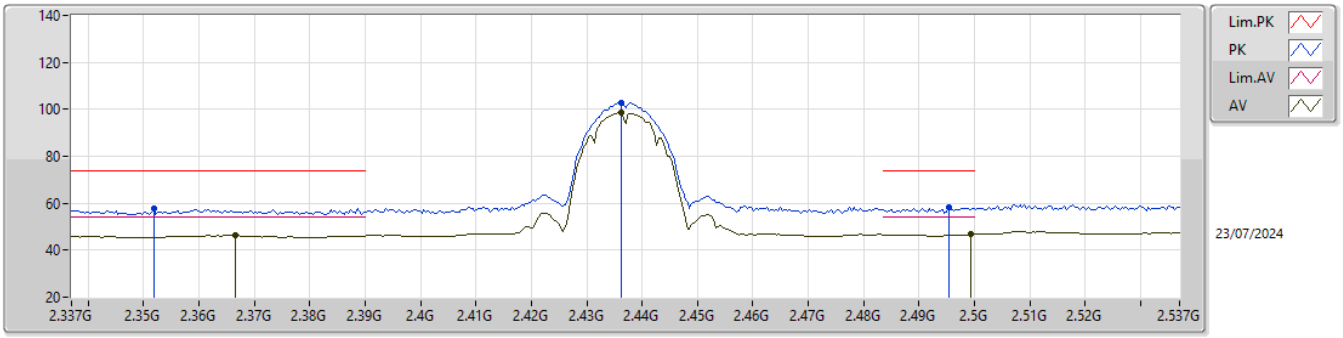


EUT Z_1TX
Setting 0
03-E-A-4

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3398G	57.09	74.00	-16.91	24.68	3	Vertical	303	2.85	-	28.10	4.31	-
AV	2.3886G	45.25	54.00	-8.75	12.59	3	Vertical	303	2.85	-	28.29	4.37	-
PK	2.4378G	100.60	Inf	-Inf	67.90	3	Vertical	303	2.85	-	28.30	4.40	-
AV	2.4362G	96.56	Inf	-Inf	63.86	3	Vertical	303	2.85	-	28.30	4.40	-
PK	2.485G	57.43	74.00	-16.57	24.64	3	Vertical	303	2.85	-	28.35	4.44	-
AV	2.4994G	45.91	54.00	-8.09	13.07	3	Vertical	303	2.85	-	28.40	4.44	-

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

2437MHz_TX

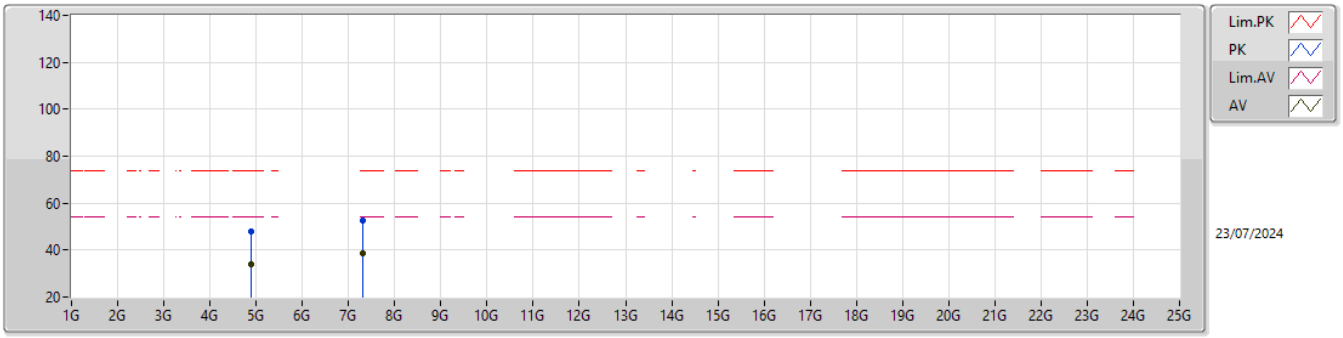


EUT Z_1TX
Setting 0
03-E-A-4

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3518G	57.67	74.00	-16.33	25.22	3	Horizontal	311	1.00	-	28.12	4.33	-
AV	2.3666G	46.33	54.00	-7.67	13.79	3	Horizontal	311	1.00	-	28.20	4.34	-
PK	2.4362G	102.69	Inf	-Inf	69.99	3	Horizontal	311	1.00	-	28.30	4.40	-
AV	2.4362G	98.69	Inf	-Inf	65.99	3	Horizontal	311	1.00	-	28.30	4.40	-
PK	2.4954G	58.14	74.00	-15.86	25.30	3	Horizontal	311	1.00	-	28.40	4.44	-
AV	2.4994G	46.74	54.00	-7.26	13.90	3	Horizontal	311	1.00	-	28.40	4.44	-

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

2437MHz_TX

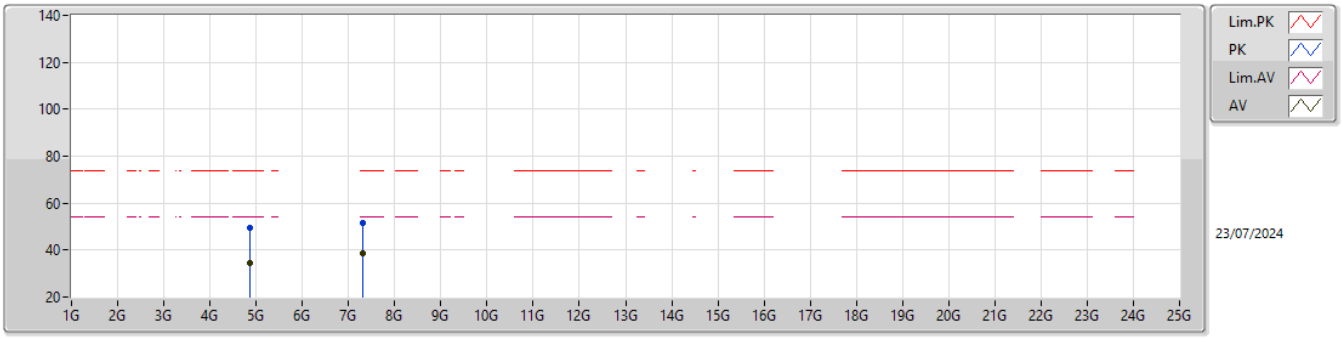


EUT Z_1TX
Setting 0
03-E-A-4

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.8808G	48.07	74.00	-25.93	43.67	3	Vertical	318	1.00	-	33.36	6.37	35.33
AV	4.88032G	34.18	54.00	-19.82	29.78	3	Vertical	318	1.00	-	33.36	6.37	35.33
PK	7.3084G	52.57	74.00	-21.43	42.51	3	Vertical	81	2.33	-	36.73	8.48	35.15
AV	7.30312G	38.54	54.00	-15.46	28.50	3	Vertical	81	2.33	-	36.71	8.48	35.15

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

2437MHz_TX

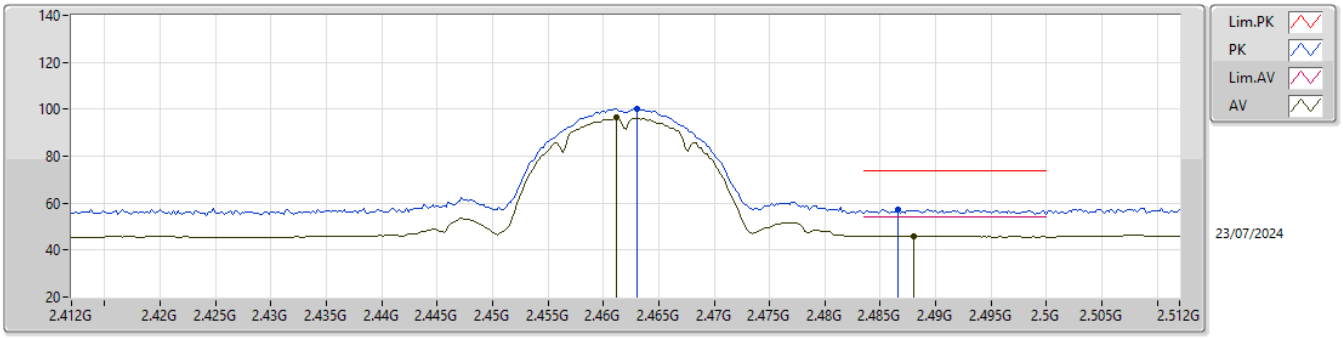


EUT Z_1TX
Setting 0
03-E-A-4

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.86764G	49.30	74.00	-24.70	44.94	3	Horizontal	56	2.34	-	33.34	6.35	35.33
AV	4.86524G	34.53	54.00	-19.47	30.18	3	Horizontal	56	2.34	-	33.33	6.35	35.33
PK	7.3146G	51.75	74.00	-22.25	41.67	3	Horizontal	18	1.80	-	36.76	8.48	35.16
AV	7.30168G	38.58	54.00	-15.42	28.54	3	Horizontal	18	1.80	-	36.71	8.48	35.15

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

2462MHz_TX

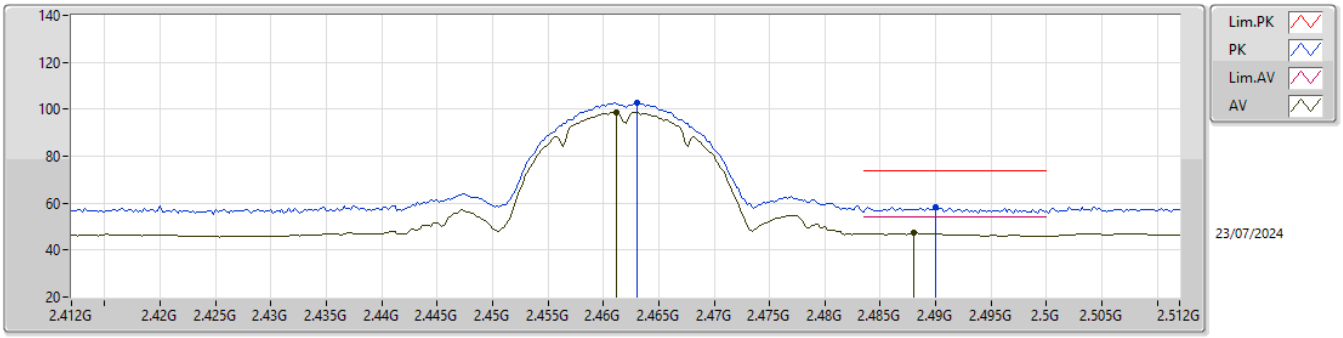


EUT Z_1TX
Setting 0
03-E-A-4

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.463G	100.41	Inf	-Inf	67.76	3	Vertical	308	2.79	-	28.23	4.42	-
AV	2.4612G	96.32	Inf	-Inf	63.69	3	Vertical	308	2.79	-	28.21	4.42	-
PK	2.4866G	57.50	74.00	-16.50	24.69	3	Vertical	308	2.79	-	28.37	4.44	-
AV	2.488G	46.07	54.00	-7.93	13.25	3	Vertical	308	2.79	-	28.38	4.44	-

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

2462MHz_TX

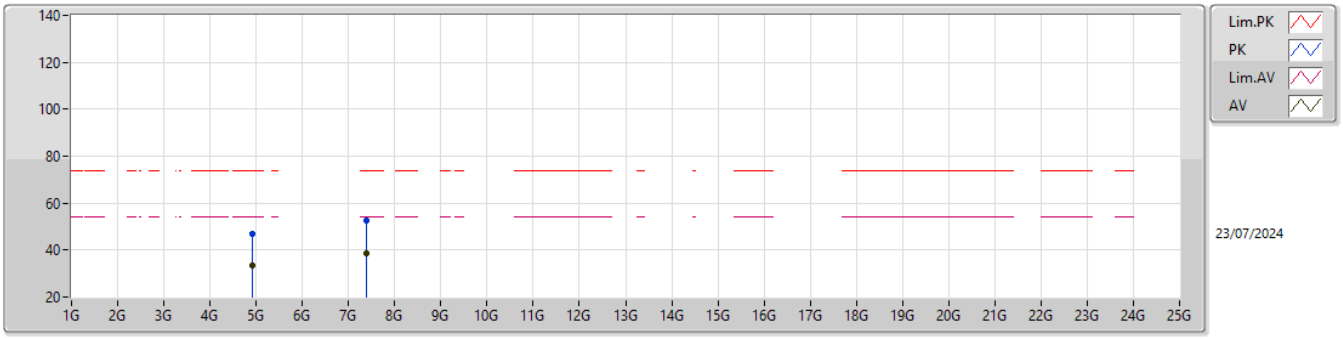


EUT Z_1TX
Setting 0
03-E-A-4

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.463G	102.75	Inf	-Inf	70.10	3	Horizontal	317	2.78	-	28.23	4.42	-
AV	2.4612G	98.67	Inf	-Inf	66.04	3	Horizontal	317	2.78	-	28.21	4.42	-
PK	2.49G	58.34	74.00	-15.66	25.50	3	Horizontal	317	2.78	-	28.40	4.44	-
AV	2.488G	47.20	54.00	-6.80	14.38	3	Horizontal	317	2.78	-	28.38	4.44	-

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

2462MHz_TX

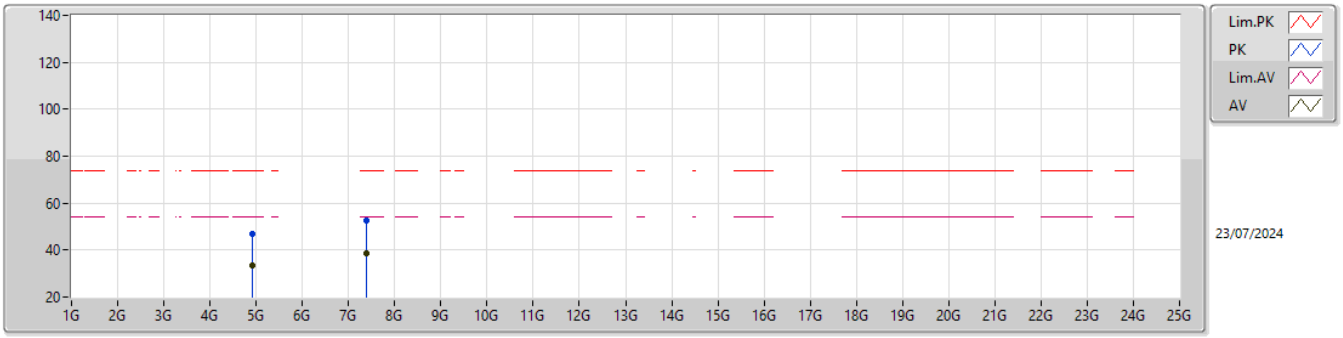


EUT Z_1TX
Setting 0
03-E-A-4

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.9292G	46.97	74.00	-27.03	42.34	3	Vertical	18	1.10	-	33.52	6.44	35.33
AV	4.92844G	33.20	54.00	-20.80	28.58	3	Vertical	18	1.10	-	33.51	6.44	35.33
PK	7.37728G	52.62	74.00	-21.38	42.39	3	Vertical	129	1.01	-	36.90	8.49	35.16
AV	7.37904G	38.58	54.00	-15.42	28.35	3	Vertical	129	1.01	-	36.90	8.49	35.16

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

2462MHz_TX

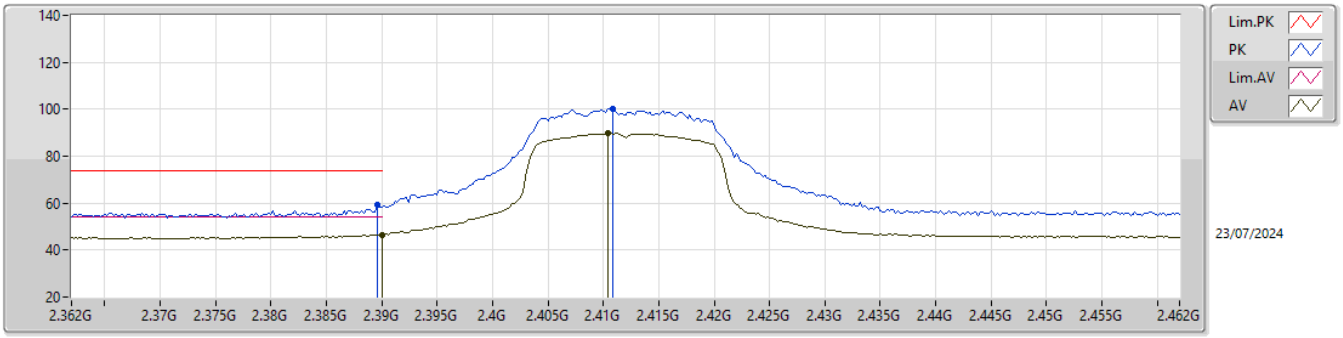


EUT Z_1TX
Setting 0
03-E-A-4

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.91772G	47.07	74.00	-26.93	42.51	3	Horizontal	129	2.36	-	33.47	6.42	35.33
AV	4.92536G	33.52	54.00	-20.48	28.91	3	Horizontal	129	2.36	-	33.50	6.44	35.33
PK	7.38196G	52.55	74.00	-21.45	42.31	3	Horizontal	359	1.80	-	36.90	8.50	35.16
AV	7.37696G	38.57	54.00	-15.43	28.34	3	Horizontal	359	1.80	-	36.90	8.49	35.16

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

2412MHz_TX

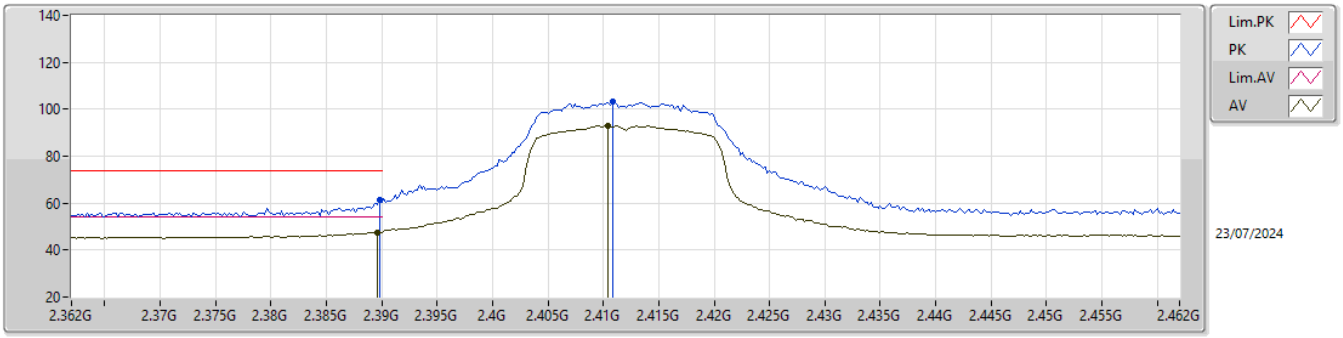


EUT Z_1TX
Setting 0
03-E-A-4

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3896G	59.19	74.00	-14.81	26.52	3	Vertical	308	2.65	-	28.30	4.37	-
AV	2.39G	46.59	54.00	-7.41	13.92	3	Vertical	308	2.65	-	28.30	4.37	-
PK	2.4108G	100.26	Inf	-Inf	67.57	3	Vertical	308	2.65	-	28.30	4.39	-
AV	2.4104G	89.68	Inf	-Inf	56.99	3	Vertical	308	2.65	-	28.30	4.39	-

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

2412MHz_TX

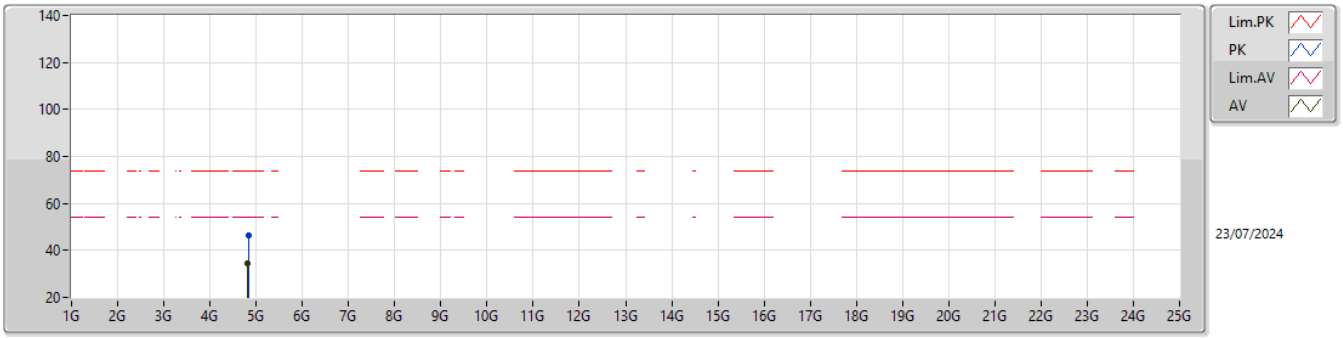


EUT Z_1TX
Setting 0
03-E-A-4

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3898G	61.23	74.00	-12.77	28.56	3	Horizontal	312	1.12	-	28.30	4.37	-
AV	2.3896G	47.55	54.00	-6.45	14.88	3	Horizontal	312	1.12	-	28.30	4.37	-
PK	2.4108G	103.48	Inf	-Inf	70.79	3	Horizontal	312	1.12	-	28.30	4.39	-
AV	2.4104G	92.81	Inf	-Inf	60.12	3	Horizontal	312	1.12	-	28.30	4.39	-

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

2412MHz_TX

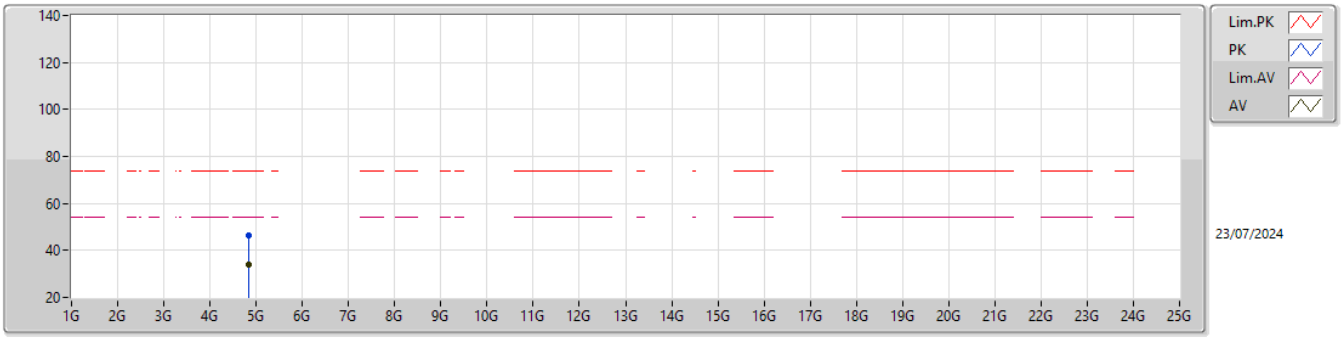


EUT Z_1TX
Setting 0
03-E-A-4

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.83188G	46.58	74.00	-27.42	42.35	3	Vertical	24	2.62	-	33.26	6.30	35.33
AV	4.81696G	34.28	54.00	-19.72	30.10	3	Vertical	24	2.62	-	33.23	6.28	35.33

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

2412MHz_TX

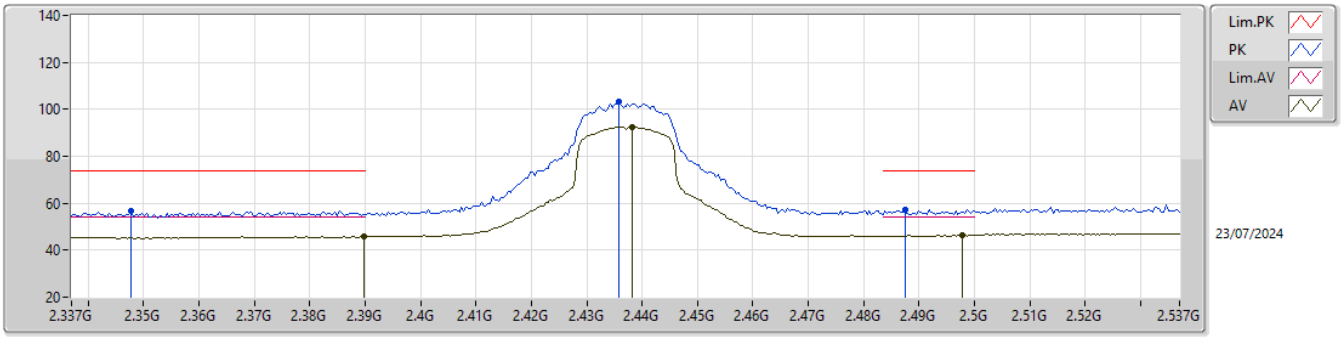


EUT Z_1TX
Setting 0
03-E-A-4

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.82592G	46.50	74.00	-27.50	42.28	3	Horizontal	343	1.65	-	33.25	6.30	35.33
AV	4.82988G	34.19	54.00	-19.81	29.96	3	Horizontal	343	1.65	-	33.26	6.30	35.33

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

2437MHz_TX

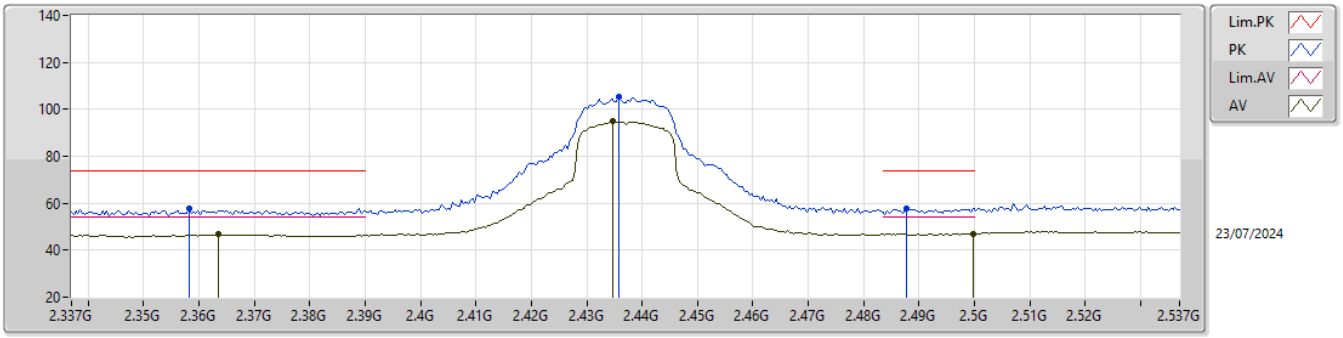


EUT Z_1TX
Setting 0
03-E-A-4

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3478G	56.61	74.00	-17.39	24.19	3	Vertical	309	2.93	-	28.10	4.32	-
AV	2.3898G	45.87	54.00	-8.13	13.20	3	Vertical	309	2.93	-	28.30	4.37	-
PK	2.4358G	103.14	Inf	-Inf	70.44	3	Vertical	309	2.93	-	28.30	4.40	-
AV	2.4382G	92.64	Inf	-Inf	59.94	3	Vertical	309	2.93	-	28.30	4.40	-
PK	2.4874G	57.16	74.00	-16.84	24.35	3	Vertical	309	2.93	-	28.37	4.44	-
AV	2.4978G	46.34	54.00	-7.66	13.50	3	Vertical	309	2.93	-	28.40	4.44	-

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

2437MHz_TX

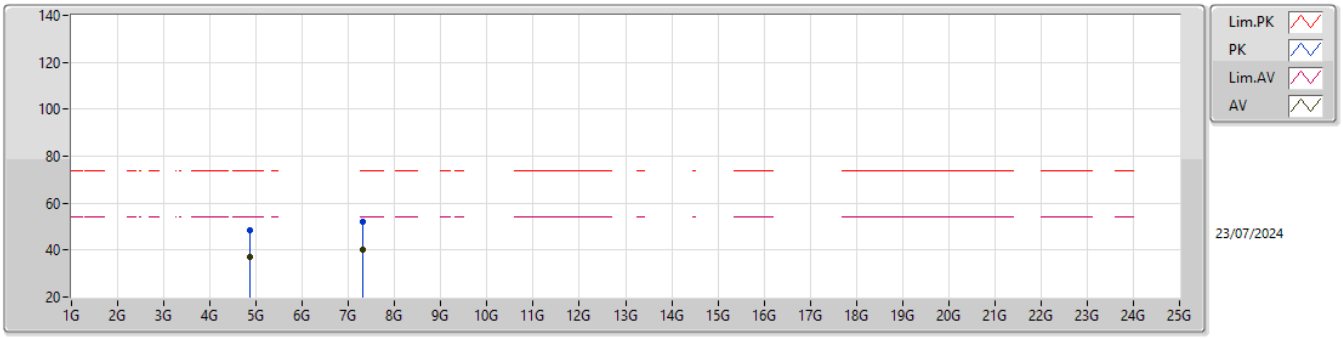


EUT Z_1TX
Setting 0
03-E-A-4

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3582G	57.62	74.00	-16.38	25.11	3	Horizontal	311	1.05	-	28.18	4.33	-
AV	2.3634G	46.67	54.00	-7.33	14.13	3	Horizontal	311	1.05	-	28.20	4.34	-
PK	2.4358G	105.52	Inf	-Inf	72.82	3	Horizontal	311	1.05	-	28.30	4.40	-
AV	2.4346G	94.86	Inf	-Inf	62.16	3	Horizontal	311	1.05	-	28.30	4.40	-
PK	2.4878G	57.84	74.00	-16.16	25.02	3	Horizontal	311	1.05	-	28.38	4.44	-
AV	2.4998G	47.15	54.00	-6.85	14.31	3	Horizontal	311	1.05	-	28.40	4.44	-

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

2437MHz_TX

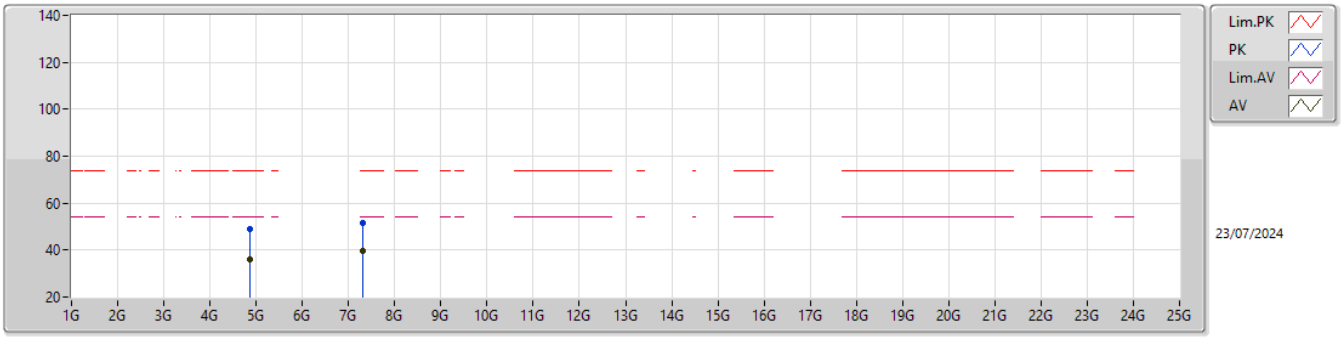


EUT Z_1TX
Setting 0
03-E-A-4

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.87492G	48.61	74.00	-25.39	44.23	3	Vertical	342	3.00	-	33.35	6.36	35.33
AV	4.8716G	37.04	54.00	-16.96	32.67	3	Vertical	342	3.00	-	33.34	6.36	35.33
PK	7.31908G	51.94	74.00	-22.06	41.84	3	Vertical	87	1.80	-	36.78	8.48	35.16
AV	7.30452G	39.99	54.00	-14.01	29.94	3	Vertical	87	1.80	-	36.72	8.48	35.15

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

2437MHz_TX

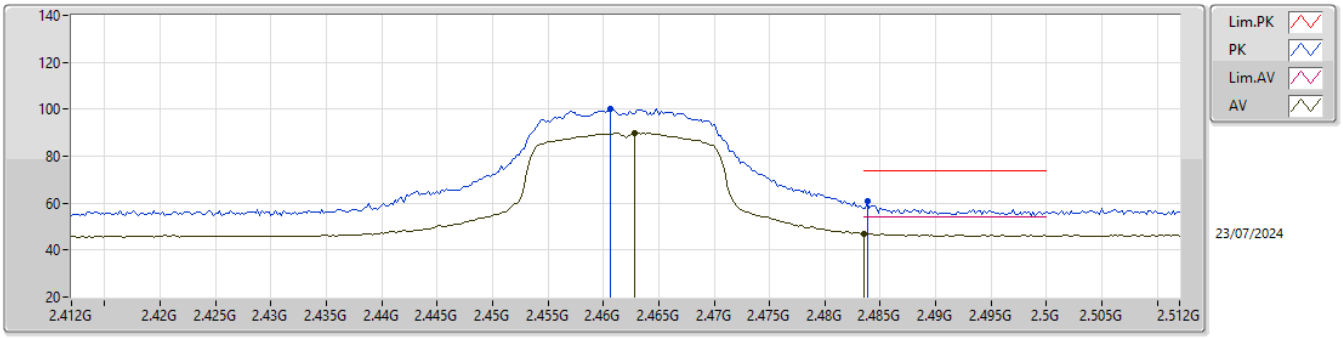


EUT Z_1TX
Setting 0
03-E-A-4

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.86804G	48.86	74.00	-25.14	44.49	3	Horizontal	58	2.27	-	33.34	6.36	35.33
AV	4.86688G	35.79	54.00	-18.21	31.44	3	Horizontal	58	2.27	-	33.33	6.35	35.33
PK	7.31788G	51.80	74.00	-22.20	41.71	3	Horizontal	354	1.80	-	36.77	8.48	35.16
AV	7.30512G	39.73	54.00	-14.27	29.68	3	Horizontal	354	1.80	-	36.72	8.48	35.15

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

2462MHz_TX

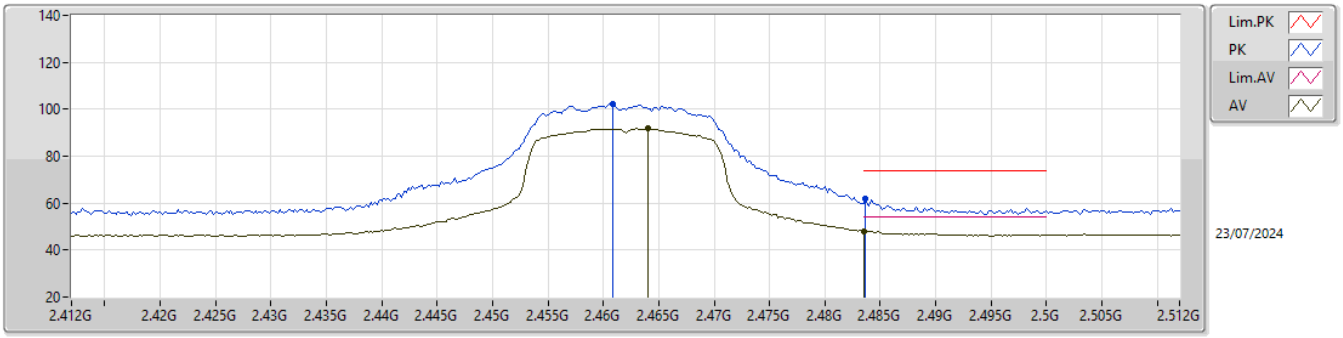


EUT Z_1TX
Setting 0
03-E-A-4

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.4606G	100.24	Inf	-Inf	67.61	3	Vertical	306	2.79	-	28.21	4.42	-
AV	2.4628G	89.73	Inf	-Inf	57.08	3	Vertical	306	2.79	-	28.23	4.42	-
PK	2.4838G	61.00	74.00	-13.00	28.23	3	Vertical	306	2.79	-	28.34	4.43	-
AV	2.4835G	47.06	54.00	-6.94	14.29	3	Vertical	306	2.79	-	28.34	4.43	-

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

2462MHz_TX

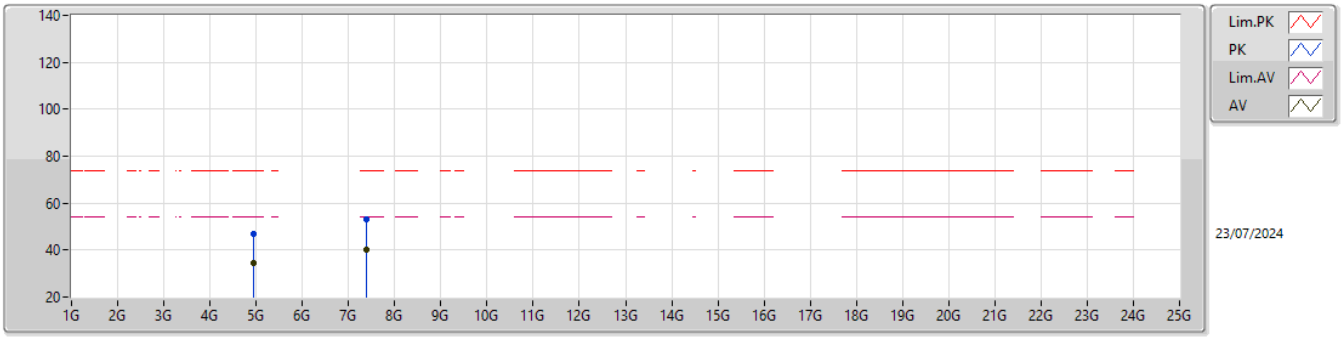


EUT Z_1TX
Setting 0
03-E-A-4

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.4608G	102.37	Inf	-Inf	69.74	3	Horizontal	314	2.80	-	28.21	4.42	-
AV	2.464G	91.83	Inf	-Inf	59.17	3	Horizontal	314	2.80	-	28.24	4.42	-
PK	2.4836G	62.04	74.00	-11.96	29.27	3	Horizontal	314	2.80	-	28.34	4.43	-
AV	2.4835G	47.95	54.00	-6.05	15.18	3	Horizontal	314	2.80	-	28.34	4.43	-

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

2462MHz_TX

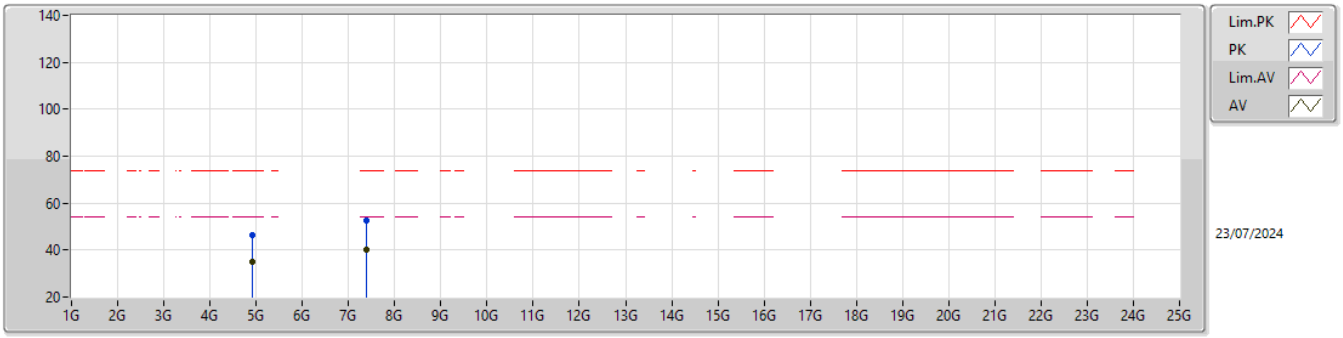


EUT Z_1TX
Setting 0
03-E-A-4

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.93232G	46.80	74.00	-27.20	42.15	3	Vertical	20	2.45	-	33.53	6.45	35.33
AV	4.93336G	34.60	54.00	-19.40	29.95	3	Vertical	20	2.45	-	33.53	6.45	35.33
PK	7.39468G	52.87	74.00	-21.13	42.63	3	Vertical	266	1.80	-	36.90	8.50	35.16
AV	7.38244G	40.12	54.00	-13.88	29.88	3	Vertical	266	1.80	-	36.90	8.50	35.16

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

2462MHz_TX

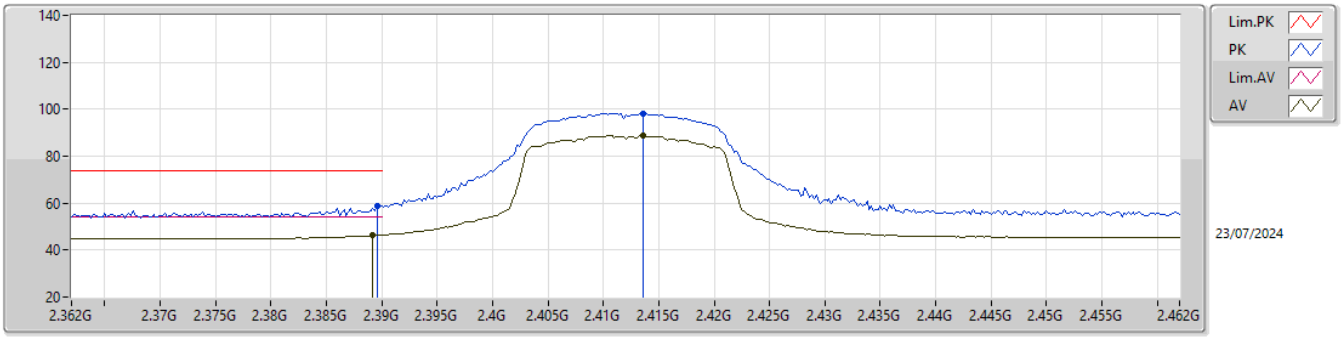


EUT Z_1TX
Setting 0
03-E-A-4

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.9284G	46.62	74.00	-27.38	42.00	3	Horizontal	56	1.80	-	33.51	6.44	35.33
AV	4.92592G	35.15	54.00	-18.85	30.54	3	Horizontal	56	1.80	-	33.50	6.44	35.33
PK	7.39092G	52.39	74.00	-21.61	42.15	3	Horizontal	215	1.80	-	36.90	8.50	35.16
AV	7.3846G	40.04	54.00	-13.96	29.80	3	Horizontal	215	1.80	-	36.90	8.50	35.16

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

2412MHz_TX

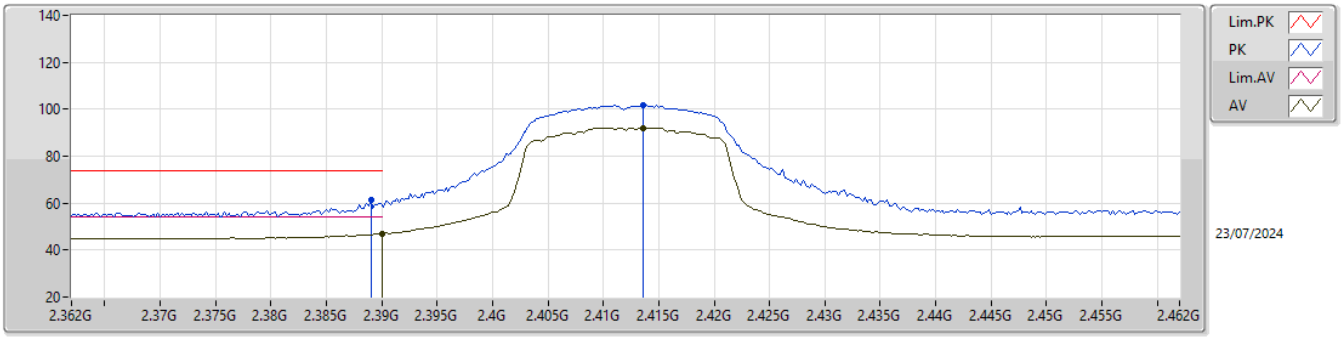


EUT Z_1TX
Setting 0
03-E-A-4

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3896G	58.90	74.00	-15.10	26.23	3	Vertical	309	2.96	-	28.30	4.37	-
AV	2.3892G	46.54	54.00	-7.46	13.88	3	Vertical	309	2.96	-	28.29	4.37	-
PK	2.4136G	98.24	Inf	-Inf	65.55	3	Vertical	309	2.96	-	28.30	4.39	-
AV	2.4136G	88.66	Inf	-Inf	55.97	3	Vertical	309	2.96	-	28.30	4.39	-

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

2412MHz_TX

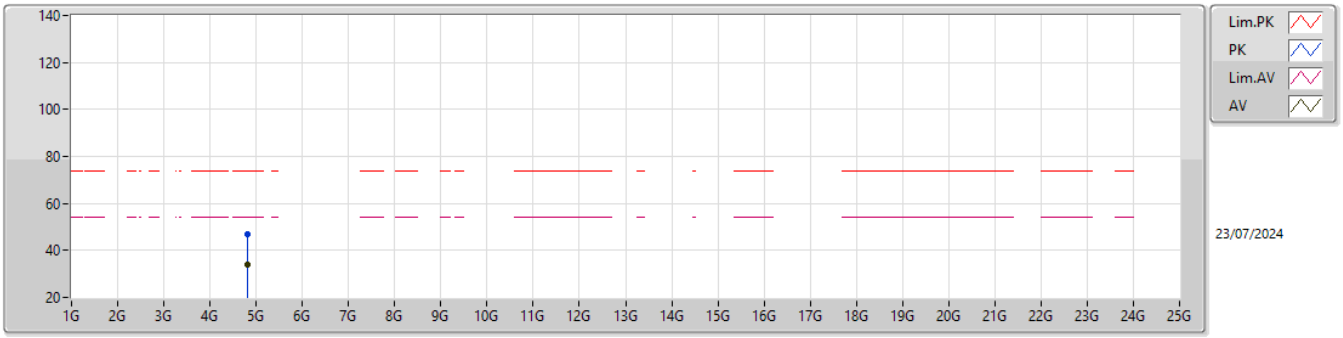


EUT Z_1TX
Setting 0
03-E-A-4

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.389G	61.15	74.00	-12.85	28.49	3	Horizontal	314	2.54	-	28.29	4.37	-
AV	2.39G	46.92	54.00	-7.08	14.25	3	Horizontal	314	2.54	-	28.30	4.37	-
PK	2.4136G	101.61	Inf	-Inf	68.92	3	Horizontal	314	2.54	-	28.30	4.39	-
AV	2.4136G	92.04	Inf	-Inf	59.35	3	Horizontal	314	2.54	-	28.30	4.39	-

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

2412MHz_TX

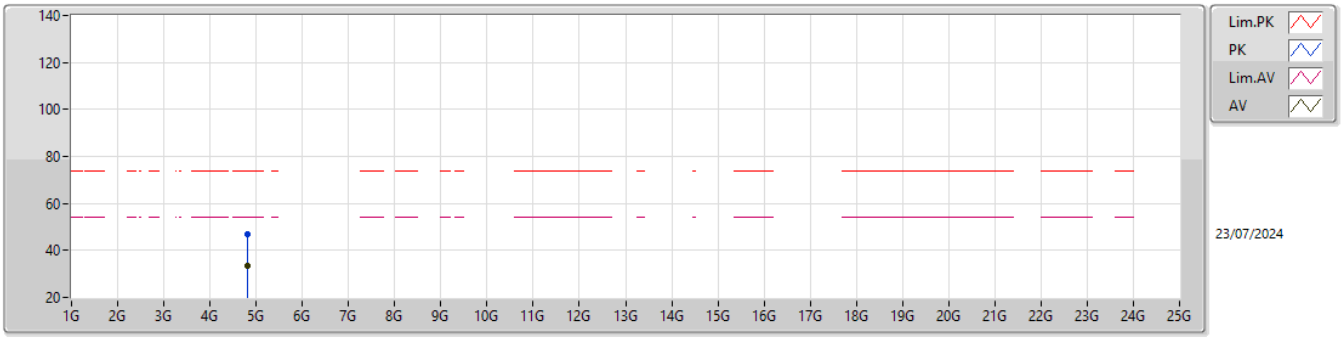


EUT Z_1TX
Setting 0
03-E-A-4

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.81528G	46.67	74.00	-27.33	42.49	3	Vertical	260	1.80	-	33.23	6.28	35.33
AV	4.81456G	33.95	54.00	-20.05	29.77	3	Vertical	260	1.80	-	33.23	6.28	35.33

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

2412MHz_TX

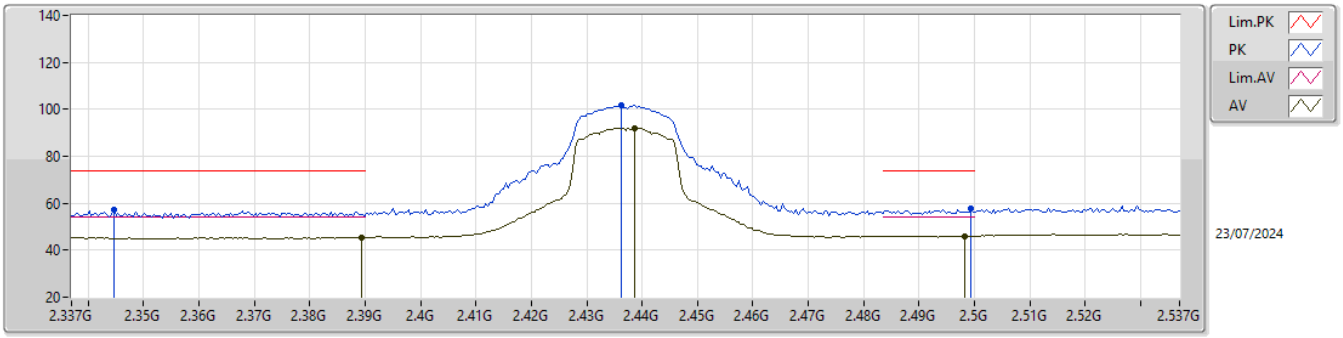


EUT Z_1TX
Setting 0
03-E-A-4

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.817776G	46.85	74.00	-27.15	42.66	3	Horizontal	25	2.40	-	33.24	6.28	35.33
AV	4.818G	33.67	54.00	-20.33	29.47	3	Horizontal	25	2.40	-	33.24	6.29	35.33

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

2437MHz_TX

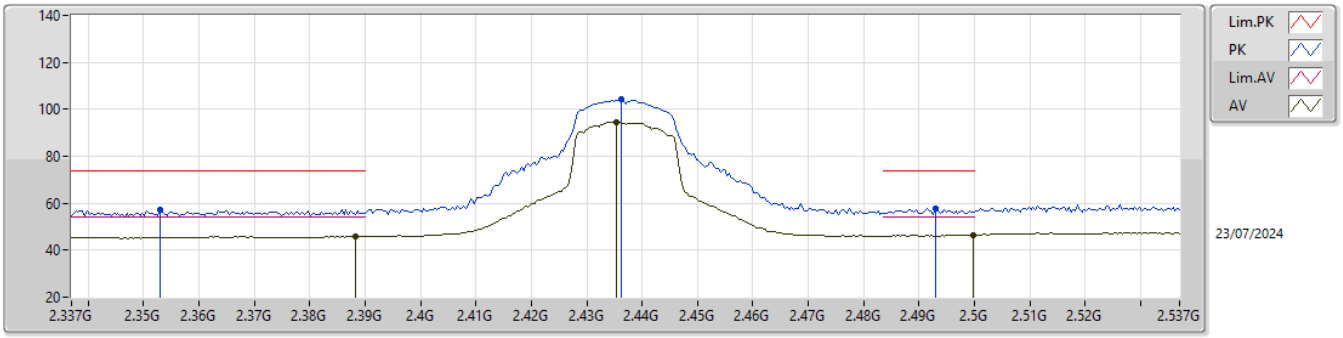


EUT Z_1TX
Setting 0
03-E-A-4

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.3446G	57.16	74.00	-16.84	24.74	3	Vertical	300	2.84	-	28.10	4.32	-
AV	2.3894G	45.50	54.00	-8.50	12.84	3	Vertical	300	2.84	-	28.29	4.37	-
PK	2.4362G	101.54	Inf	-Inf	68.84	3	Vertical	300	2.84	-	28.30	4.40	-
AV	2.4386G	91.98	Inf	-Inf	59.27	3	Vertical	300	2.84	-	28.30	4.41	-
PK	2.4994G	57.95	74.00	-16.05	25.11	3	Vertical	300	2.84	-	28.40	4.44	-
AV	2.4982G	46.07	54.00	-7.93	13.23	3	Vertical	300	2.84	-	28.40	4.44	-

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

2437MHz_TX

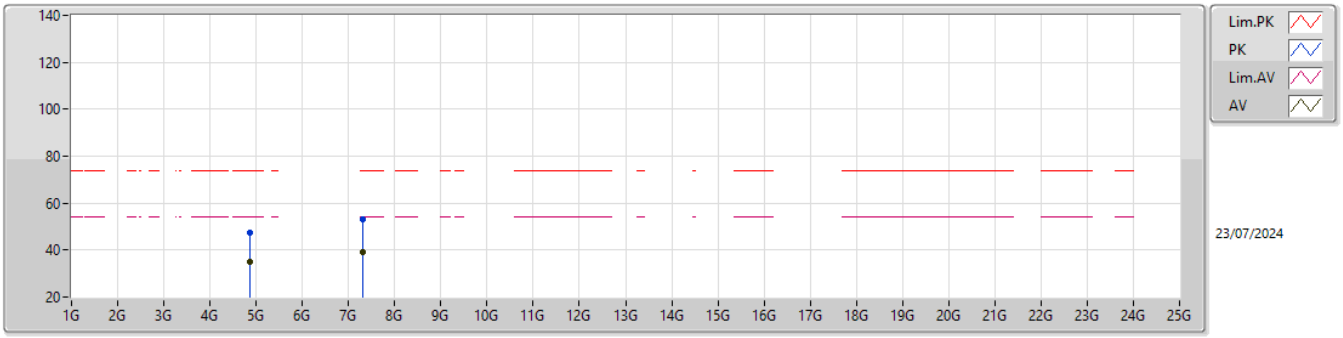


EUT Z_1TX
Setting 0
03-E-A-4

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.353G	57.17	74.00	-16.83	24.71	3	Horizontal	319	2.88	-	28.13	4.33	-
AV	2.3882G	45.92	54.00	-8.08	13.27	3	Horizontal	319	2.88	-	28.28	4.37	-
PK	2.4362G	104.51	Inf	-Inf	71.81	3	Horizontal	319	2.88	-	28.30	4.40	-
AV	2.4354G	94.44	Inf	-Inf	61.74	3	Horizontal	319	2.88	-	28.30	4.40	-
PK	2.493G	57.70	74.00	-16.30	24.86	3	Horizontal	319	2.88	-	28.40	4.44	-
AV	2.4998G	46.48	54.00	-7.52	13.64	3	Horizontal	319	2.88	-	28.40	4.44	-

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

2437MHz_TX

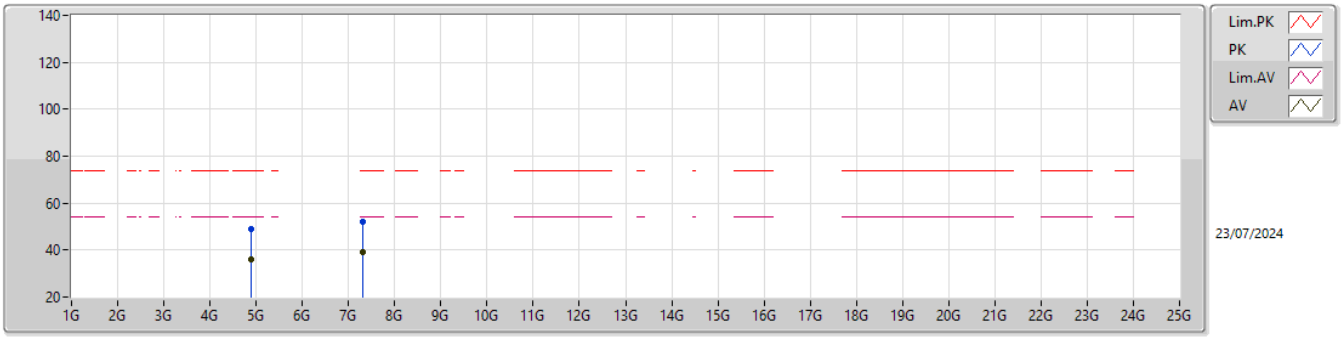


EUT Z_1TX
Setting 0
03-E-A-4

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.86808G	47.35	74.00	-26.65	42.98	3	Vertical	22	2.97	-	33.34	6.36	35.33
AV	4.87168G	34.96	54.00	-19.04	30.59	3	Vertical	22	2.97	-	33.34	6.36	35.33
PK	7.30104G	52.95	74.00	-21.05	42.92	3	Vertical	-0	1.80	-	36.70	8.48	35.15
AV	7.301G	39.31	54.00	-14.69	29.28	3	Vertical	-0	1.80	-	36.70	8.48	35.15

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

2437MHz_TX

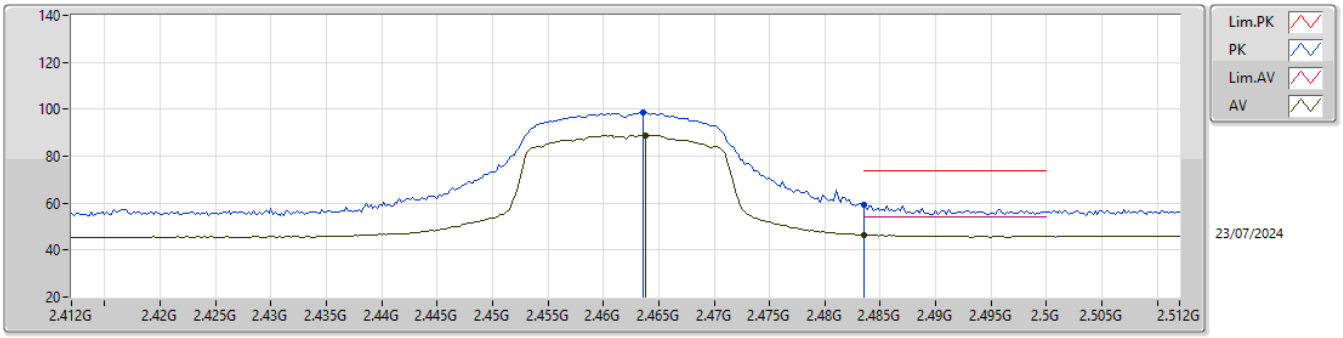


EUT Z_1TX
Setting 0
03-E-A-4

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.8796G	48.73	74.00	-25.27	44.33	3	Horizontal	52	2.20	-	33.36	6.37	35.33
AV	4.8786G	35.96	54.00	-18.04	31.56	3	Horizontal	52	2.20	-	33.36	6.37	35.33
PK	7.30284G	51.91	74.00	-22.09	41.87	3	Horizontal	357	1.34	-	36.71	8.48	35.15
AV	7.30752G	39.16	54.00	-14.84	29.10	3	Horizontal	357	1.34	-	36.73	8.48	35.15

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

2462MHz_TX

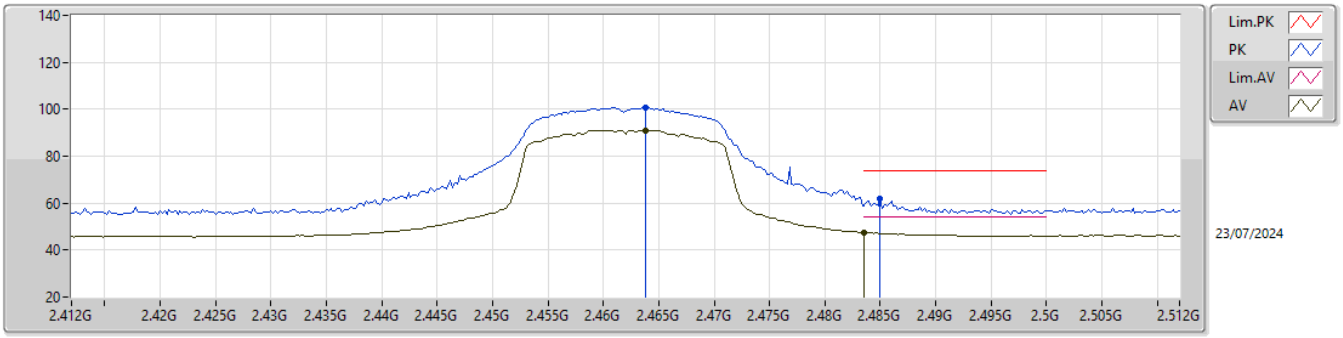


EUT Z_1TX
Setting 0
03-E-A-4

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.4636G	98.54	Inf	-Inf	65.88	3	Vertical	305	2.79	-	28.24	4.42	-
AV	2.4638G	88.90	Inf	-Inf	56.24	3	Vertical	305	2.79	-	28.24	4.42	-
PK	2.4835G	59.34	74.00	-14.66	26.57	3	Vertical	305	2.79	-	28.34	4.43	-
AV	2.4835G	46.62	54.00	-7.38	13.85	3	Vertical	305	2.79	-	28.34	4.43	-

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

2462MHz_TX

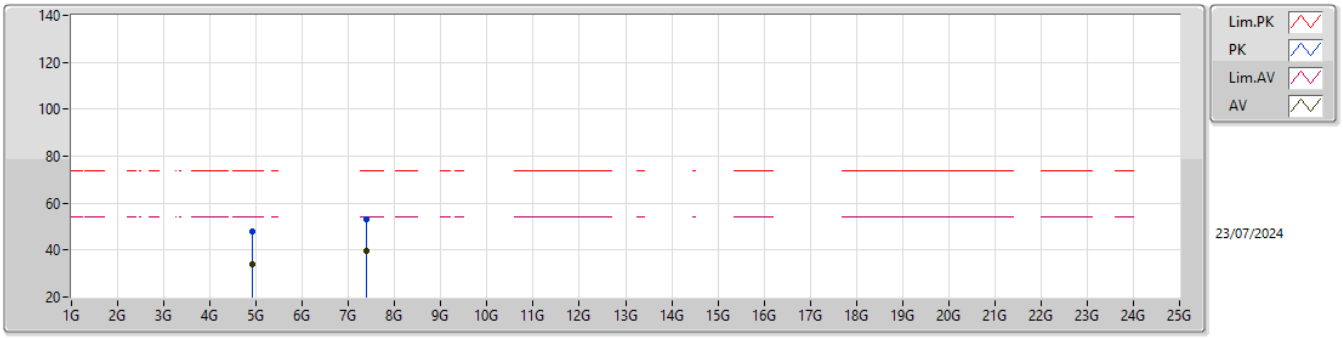


EUT Z_1TX
Setting 0
03-E-A-4

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	2.4638G	100.67	Inf	-Inf	68.01	3	Horizontal	316	2.77	-	28.24	4.42	-
AV	2.4638G	91.06	Inf	-Inf	58.40	3	Horizontal	316	2.77	-	28.24	4.42	-
PK	2.485G	62.01	74.00	-11.99	29.22	3	Horizontal	316	2.77	-	28.35	4.44	-
AV	2.4835G	47.50	54.00	-6.50	14.73	3	Horizontal	316	2.77	-	28.34	4.43	-

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

2462MHz_TX

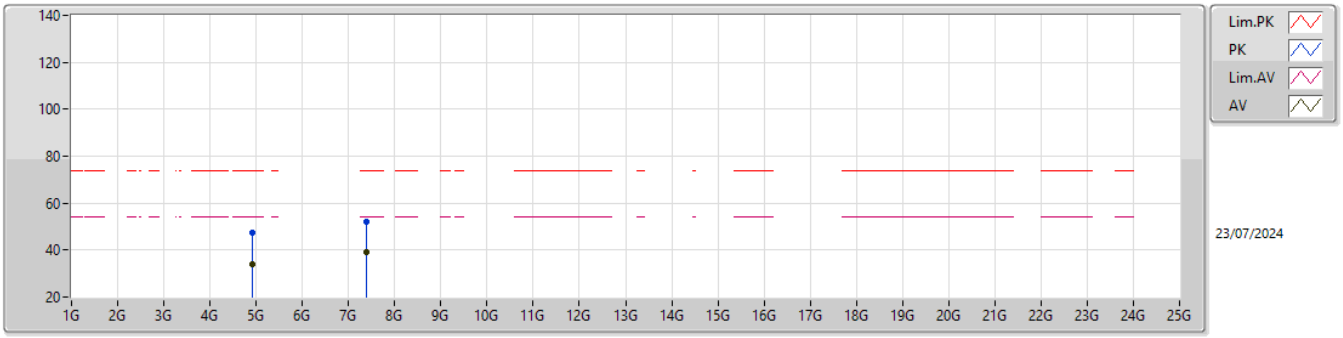


EUT Z_1TX
Setting 0
03-E-A-4

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.92764G	47.78	74.00	-26.22	43.16	3	Vertical	89	1.80	-	33.51	6.44	35.33
AV	4.92624G	34.19	54.00	-19.81	29.58	3	Vertical	89	1.80	-	33.50	6.44	35.33
PK	7.39104G	53.13	74.00	-20.87	42.89	3	Vertical	279	1.80	-	36.90	8.50	35.16
AV	7.37768G	39.79	54.00	-14.21	29.56	3	Vertical	279	1.80	-	36.90	8.49	35.16

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

2462MHz_TX



EUT Z_1TX
Setting 0
03-E-A-4

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	4.92796G	47.58	74.00	-26.42	42.96	3	Horizontal	340	1.80	-	33.51	6.44	35.33
AV	4.92688G	34.06	54.00	-19.94	29.44	3	Horizontal	340	1.80	-	33.51	6.44	35.33
PK	7.38568G	52.09	74.00	-21.91	41.85	3	Horizontal	317	1.80	-	36.90	8.50	35.16
AV	7.37632G	39.27	54.00	-14.73	29.04	3	Horizontal	317	1.80	-	36.90	8.49	35.16