Testing Laboratory 3787

RADIO TEST REPORT

FCC ID	:	2AHKM-CHITA31
Equipment	:	DOCSIS 3.1 Wireless eMTA Gateway
Brand Name	:	Hitron
Model Name	:	CHITA3.1
Applicant	:	Hitron Technologies Inc. No. 1-8, Li-Hsin 1st Rd. Hsinchu Science Park, Hsinchu 30078, Taiwan
Manufacturer	:	Hitron Technologies Inc. No. 1-8, Li-Hsin 1st Rd. Hsinchu Science Park, Hsinchu 30078, Taiwan
Standard	:	47 CFR FCC Part 15.247

The product was received on Nov. 18, 2022, and testing was started from Nov. 29, 2022 and completed on Feb. 01, 2023. 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
FR2N1823AA	01	Initial issue of report	Mar. 24, 2023

Summary of Test Result

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

Declaration of Conformity:

1. The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers. It's means measurement values may risk exceeding the limit of regulation standards, if measurement uncertainty is include in test results.
2. The measurement uncertainty please refer to report "Measurement Uncertainty".

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Sam Chen
Report Producer: Vicky Huang

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
2400-2483.5	b, g, n (HT20), VHT20	2412-2462	1-11 [11]
2400-2483.5	n (HT40), VHT40	2422-2452	3-9 [7]

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11b	20	3
2.4-2.4835GHz	802.11g	20	3
2.4-2.4835GHz	802.11n HT20	20	3
2.4-2.4835GHz	VHT20	20	3
2.4-2.4835GHz	VHT20-BF	20	3
2.4-2.4835GHz	802.11n HT40	40	3
2.4-2.4835GHz	VHT40	40	3
2.4-2.4835GHz	VHT40-BF	40	3

Note:
- 11b mode uses a combination of DSSS-DBPSK, DQPSK, CCK modulation.
- 11g, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- VHT20, VHT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- BWch is the nominal channel bandwidth.

1.1.2 Antenna Information

Ant.	Port		Brand	Model Name	Antenna Type	Connector	Gain (dBi)	
	2.4GHz	5GHz					2.4GHz	5GHz
1	1	1	WIESON	GY196HC112-018	PCB Antenna	I-PEX	1.99	1.97
2	2	2	WIESON	GY196HC112-019	PCB Antenna	I-PEX	1.58	1.87
3	3	3	WIESON	GY196HC112-020	PCB Antenna	I-PEX	1.96	1.96
4	-	4	WIESON	GY196HC112-021	PCB Antenna	I-PEX	-	1.76

Note1: The above information was declared by manufacturer.
Note2:

For WLAN 2.4GHz function:
For IEEE 802.11b/g/n/VHT mode (3TX/3RX):
Port 1, Port 2 and Port 3 can be use as transmitting/receiving antenna.
Port 1, Port 2 and Port 3 could transmit/receive simultaneously.

For WLAN 5GHz function:
For IEEE 802.11a/n/ac mode (4TX/4RX):
Port 1, Port 2, Port 3 and Port 4 can be use as transmitting/receiving antenna.
Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.

Note3: Directional gain information

Type	Maximum Output Power	Power Spectral Density
Non-BF	Directional gain = Max.gain + array gain. For power measurements on IEEE 802.11 devices Array Gain = 0 dB (i.e., no array gain) for N ANT ≤ 4	$DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$
BF	$DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$	$DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$

Ex.

Directional Gain (NSS1) formula : $DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$

$NSS1(g1,1) = 10^{G1/20}$; $NSS1(g1,2) = 10^{G2/20}$; $NSS1(g1,2) = 10^{G3/20}$; $NSS1(g1,2) = 10^{G4/20}$

$gj,k = (Nss1(g1,1) + Nss1(g1,2) + Nss1(g1,3) + Nss1(g1,4))^2$

$DG = 10 \log[(Nss1(g1,1) + Nss1(g1,2) + Nss1(g1,3) + Nss1(g1,4))^2 / N_{ANT}] => 10 \log[(10^{G1/20} + 10^{G2/20} + 10^{G3/20} + 10^{G4/20})^2 / N_{ANT}]$

Where ;

2.4G G1= 1.99 dBi ;2.4G G2= 1.58 dBi ;2.4G G3= 1.96 dBi ;DG= 6.62dBi

5G G1= 1.97 dBi ;5G G2= 1.87 dBi ;5G G3= 1.96 dBi ;5G G4= 1.76 dBi ;DG= 7.91dBi

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11b	0.995	0.02	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11g	0.967	0.15	2.065m	1k
802.11ac VHT20	0.986	0.06	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ac VHT40	0.972	0.12	2.437m	1k

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

1.1.4 EUT Operational Condition

EUT Power Type	From Power Adapter			
Beamforming Function	☒	With beamforming	☐	Without beamforming
	The product has beamforming function for VHT in 2.4GHz and n/ac in 5GHz.			
Function	☒	Point-to-multipoint	☐	Point-to-point
Test Software Version	QRCT V3.0.295.0			

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 662911 D01 v02r01
- 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	TH03-CB	Owen Hsu	22.4-23.1 / 62-68	Jan. 18, 2023~ Jan. 19, 2023
Radiated (Below 1GHz)	03CH05-CB	Stim Sung	24.4-25.5 / 55-58	Dec. 08, 2022~ Feb. 01, 2023
Radiated (Above 1GHz)	03CH03-CB	Stim Sung	24.4-25.5 / 55-58	Jan. 16, 2023~ Jan. 17, 2023
Radiated (Co-location)	03CH05-CB	Stim Sung	23.8-24.9 / 55-58	Feb. 01, 2023
AC Conduction	CO01-CB	Tim Chen	24~25 / 58~59	Nov. 29, 2022

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)	3.4 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.6 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	5.2 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.7 dB	Confidence levels of 95%
Conducted Emission	3.2 dB	Confidence levels of 95%
Output Power Measurement	0.8 dB	Confidence levels of 95%
Power Density Measurement	3.2 dB	Confidence levels of 95%
Bandwidth Measurement	2.0 %	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

Mode	Power Setting
802.11b_Nss1,(1Mbps)_3TX	-
2412MHz	13.5
2437MHz	16.5
2462MHz	25
802.11g_Nss1,(6Mbps)_3TX	-
2412MHz	20.5
2417MHz	23
2437MHz	26
2457MHz	24.5
2462MHz	22.5
802.11ac VHT20_Nss1,(MCS0)_3TX	-
2412MHz	19.5
2417MHz	22.5
2437MHz	26
2457MHz	25
2462MHz	23
802.11ac VHT40_Nss1,(MCS0)_3TX	-
2422MHz	19.5
2437MHz	22
2452MHz	20.5
802.11ac VHT20-BF_Nss1,(MCS0)_3TX	-
2412MHz	19.5
2417MHz	22.5
2437MHz	26
2457MHz	25
2462MHz	23
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	-
2422MHz	19.5
2437MHz	22
2452MHz	20.5

Note:
- The EUT supports non-beamforming and beamforming modes, after evaluating, the non-beamforming mode has been selected to execute all tests. The beamforming mode evaluates the output power only.
- Evaluated VHT20/VHT40 mode only, due to similar modulation. The power setting of HT20/HT40 mode are the same or lower than VHT20/VHT40.

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	EUT + Adapter

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, and the worst case was found at Y axis, so it was selected to perform test and its test result was written in the report.	
1	EUT in Y axis + Adapter
Operating Mode > 1GHz	CTX
After evaluating, and the worst case was found at Y axis, so it was selected to perform test and its test result was written in the report.	
1	EUT in Y axis

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Radiated Emission Co-location
Test Condition	Radiated measurement
Operating Mode	Normal Link
After evaluating, and the worst case was found at Y axis, so it was selected to perform test and its test result was written in the report.	
1	EUT in Y-WLAN 2.4GHz+WLAN 5GHz
Refer to Appendix G for Radiated Emission Co-location.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	WLAN 2.4GHz+WLAN 5GHz
Refer to Sporton Test Report No.: FA2N1823 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

Accessories			
Equipment Name	**Brand Name**	**Model Name**	**Rating**
Adapter	MOSO	MSS-V3500WR120-042A0-US	Input: 100-240V~50/60Hz, 1.2A max. Output: 12.0V, 3.5A
Other			
RJ-45 cable*1, non-shielded, 1.5m			

2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	Phone 1	PHILIPS	M20	N/A
B	Phone 2	PHILIPS	M20	N/A
C	2.4G NB	DELL	E6430	N/A
D	5G NB	DELL	E6430	N/A
E	LAN NB	DELL	E6430	N/A
F	Terminal system	hitron	RAC-500	N/A
G	Flash disk3.0	Transcend	639205 7755	N/A

For Radiated (below 1GHz):

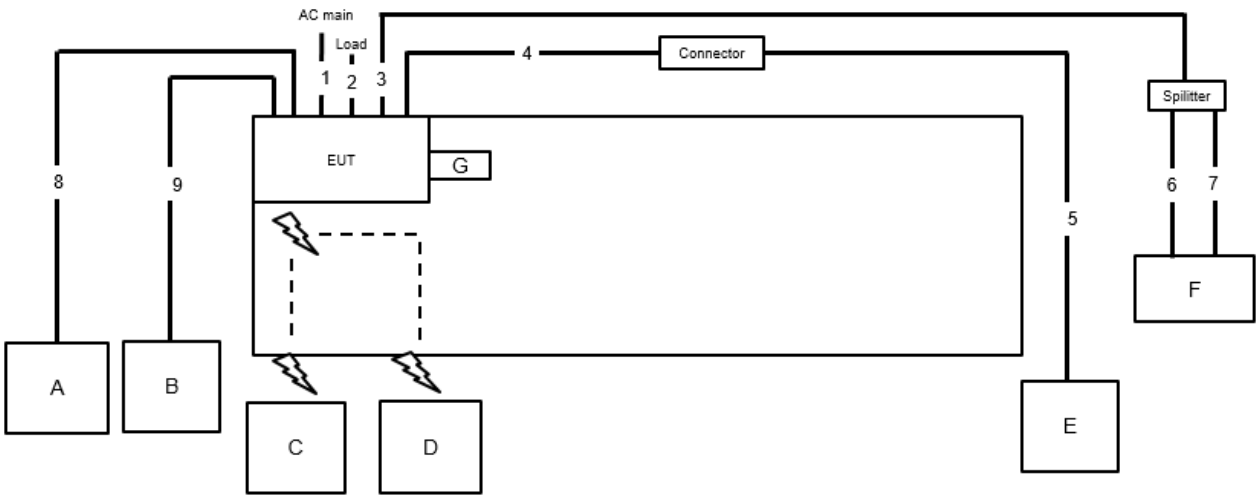
Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	LAN NB	DELL	E4300	N/A
B	Terminal system	Jinghong	JH-HE3416B	N/A
C	2.4G NB	DELL	E4300	N/A
D	5G NB	DELL	E4300	N/A
E	Flash disk3.0	Transcend	JetFlash-700	N/A
F	Phone	H-T-T	F-689	N/A
G	Phone	H-T-T	F-689	N/A

For Radiated (above 1GHz) and RF Conducted:

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
A	NB	DELL	E4300	N/A

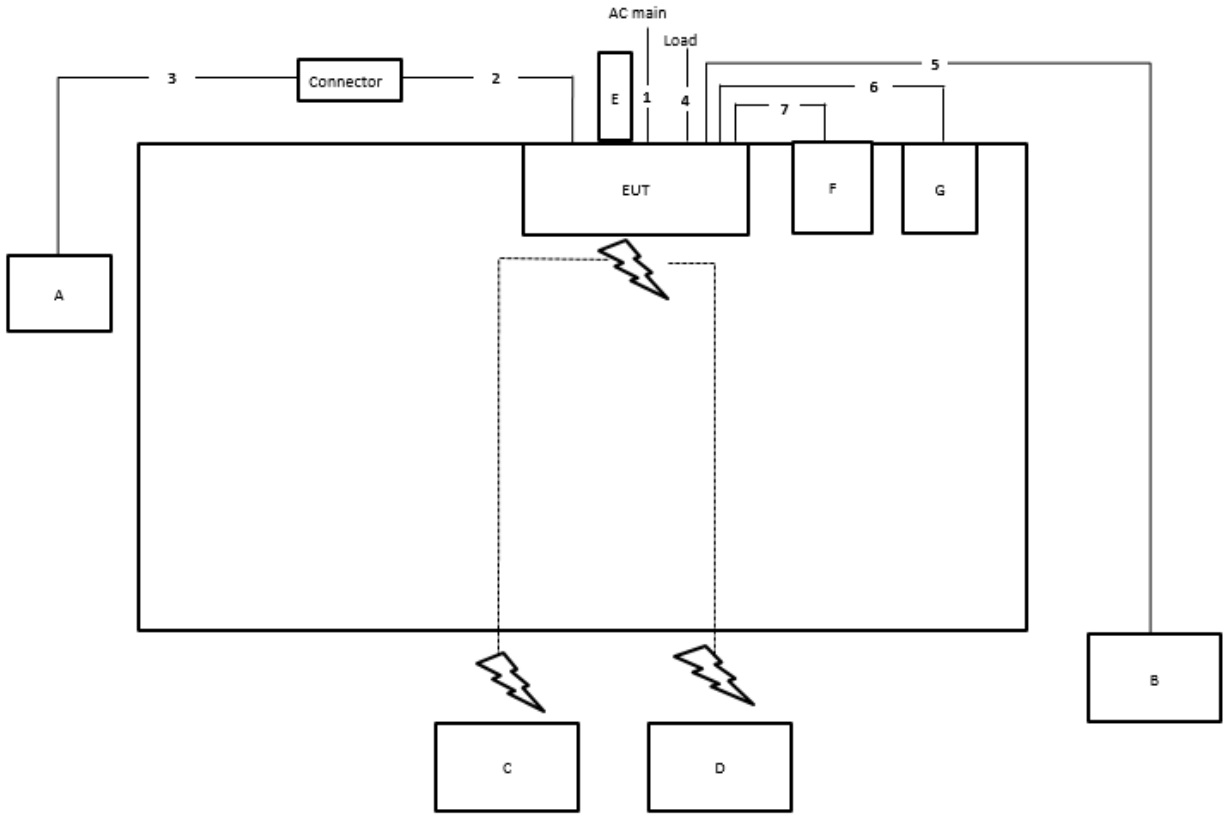
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



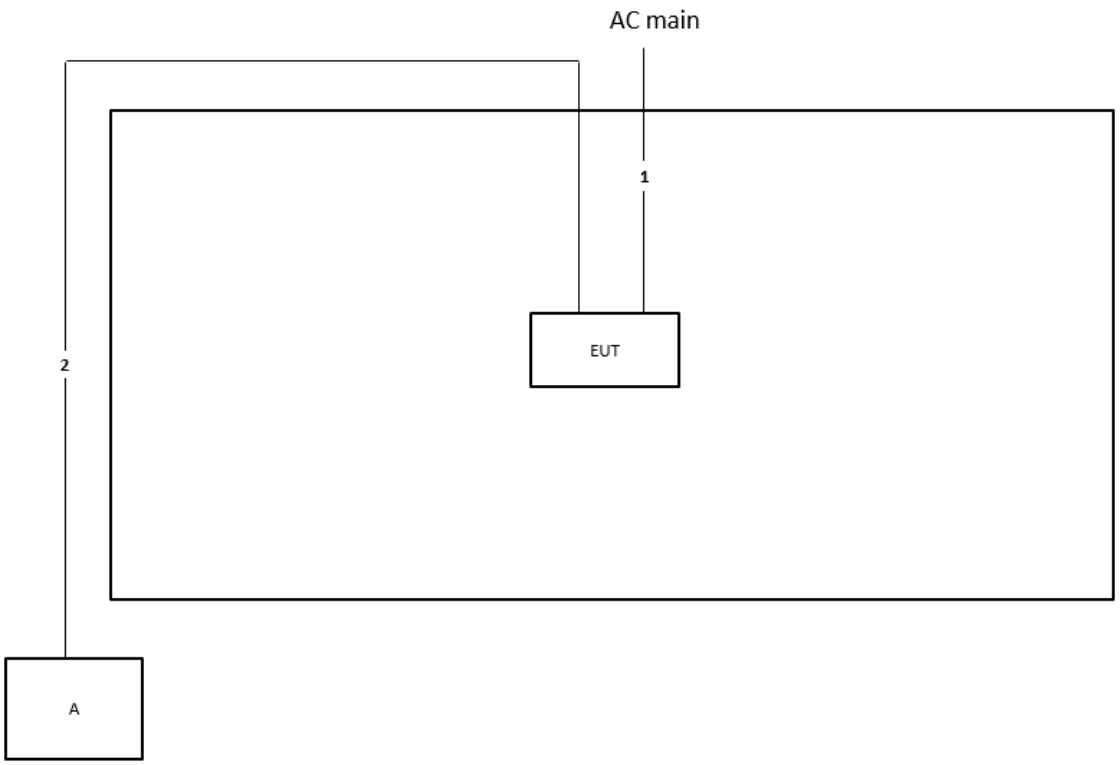
Item	Connection	Shielded	Length
1	Power cable	No	1.5m
2	RJ-45 cable*3	No	1.5m
3	Coaxial cable	Yes	10m
4	RJ-45 cable	No	1.5m
5	RJ-45 cable	No	10m
6	Coaxial cable	Yes	1m
7	Coaxial cable	Yes	1m
8	RJ-11 cable	No	10m
9	RJ-11 cable	No	10m

Test Setup Diagram - Radiated Test < 1GHz



Item	Connection	Shielded	Length
1	Power cable	No	1.5m
2	RJ-45 cable	No	1.5m
3	RJ-45 cable	No	10m
4	RJ-45 cable*3	No	1.5m
5	Coaxial cable	Yes	10m
6	RJ-11 cable	No	1.5m
7	RJ-11 cable	No	1.5m

Test Setup Diagram - Radiated Test > 1GHz



Item	Connection	Shielded	Length
1	Power cable	No	1.5m
2	RJ-45 cable	No	10m

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

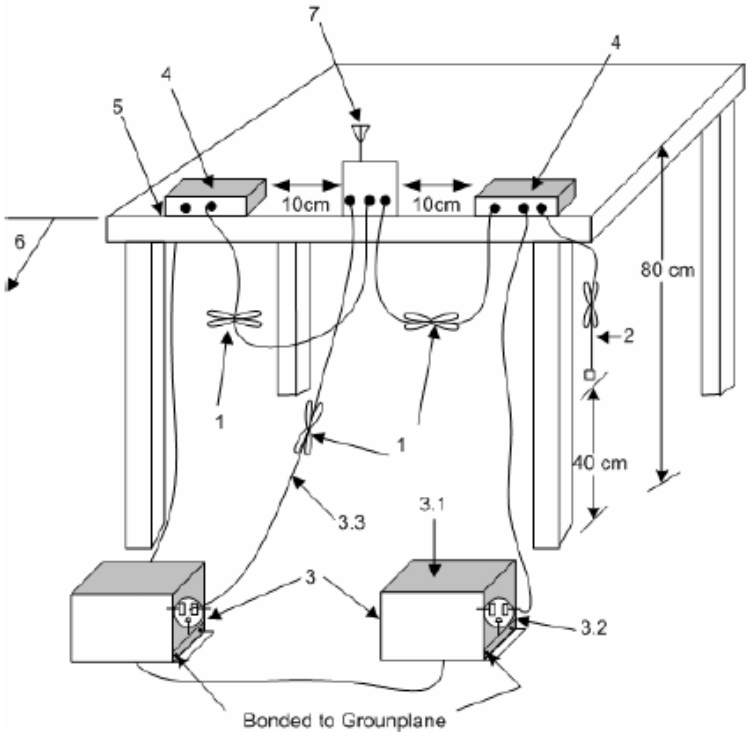
Refer a test equipment and calibration data table in this test report.

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.

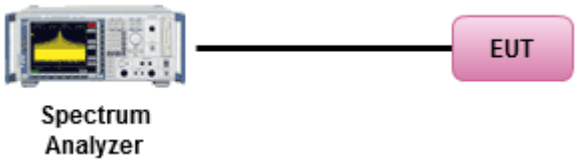
3.2.2 Measuring Instruments

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

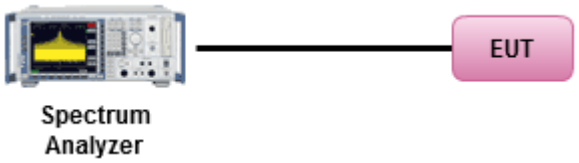
3.4.2 Measuring Instruments

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

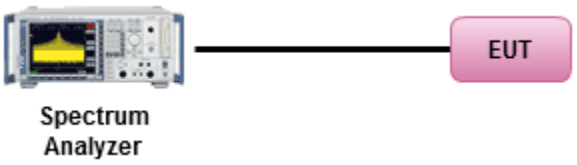
Refer a test equipment and calibration data table in this test report.

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.

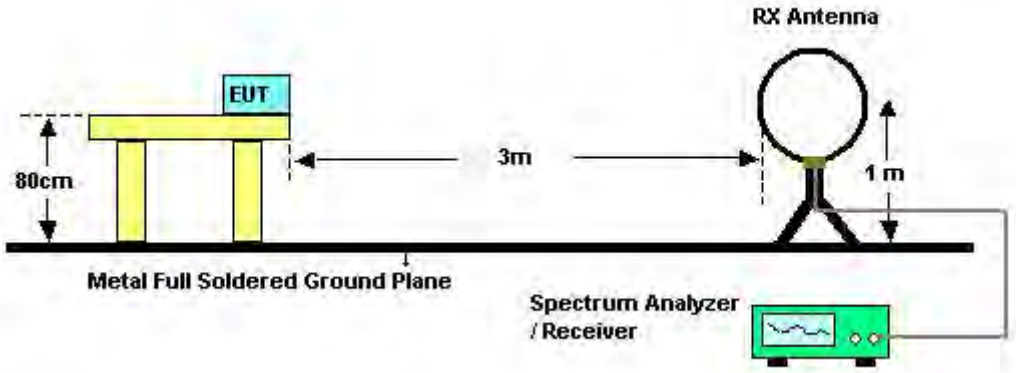
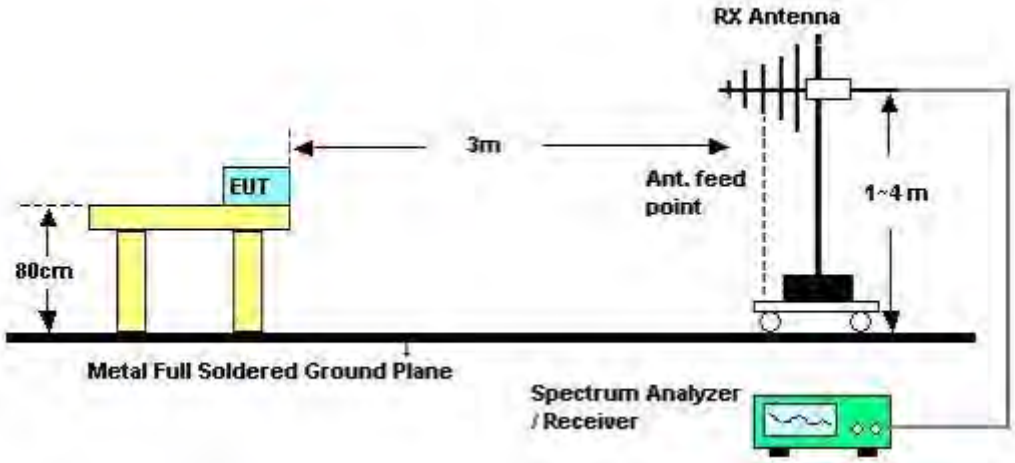
3.6.2 Measuring Instruments

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

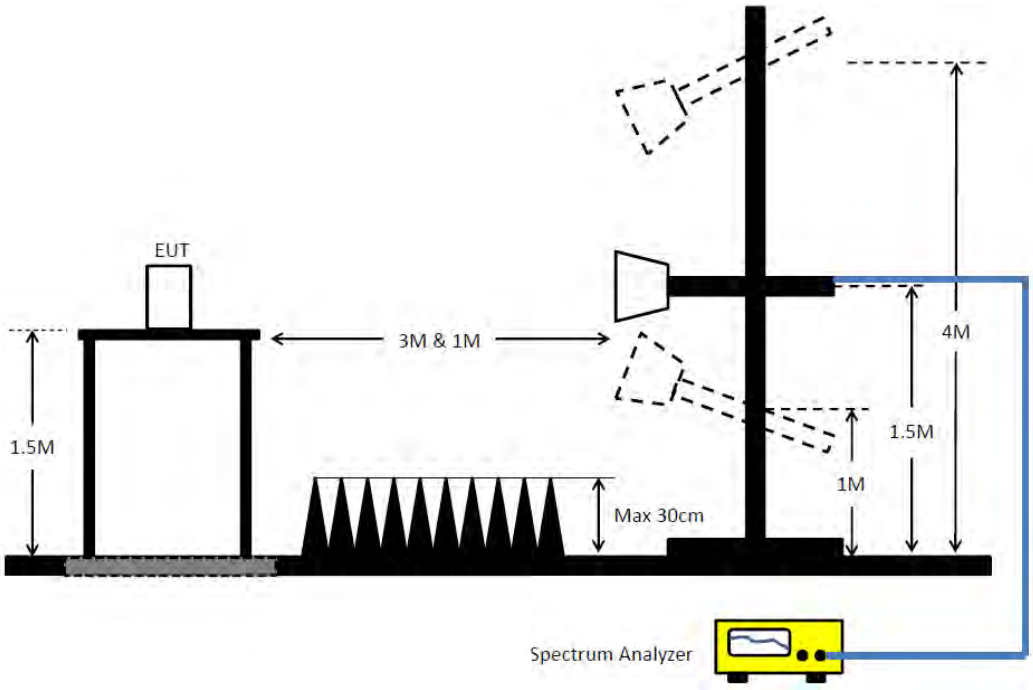
3.6.3 Test Procedures

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	Feb. 22, 2022	Feb. 21, 2023	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Feb. 09, 2022	Feb. 08, 2023	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Apr. 12, 2022	Apr. 11, 2023	Conduction (CO01-CB)
Pulse Limiter	Rohde& Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Feb. 10, 2022	Feb. 09, 2023	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	Oct. 18, 2022	Oct. 17, 2023	Conduction (CO01-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH05-CB	30 MHz ~ 1 GHz	Aug. 03, 2022	Aug. 02, 2023	Radiation (03CH05-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH05-CB	1GHz ~18GHz 3m	Nov. 06, 2022	Nov. 05, 2023	Radiation (03CH05-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	May 14, 2022	May 13, 2023	Radiation (03CH05-CB)
Bilog Antenna with 6dB Attenuator	TESEQ & EMCI	CBL 6112D & N-6-06	35236 & AT-N0610	30MHz ~ 2GHz	Mar. 25, 2022	Mar. 24, 2023	Radiation (03CH05-CB)
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA 9120 D-1291	1GHz~18GHz	Jun. 23, 2022	Jun. 22, 2023	Radiation (03CH05-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 22, 2022	Aug. 21, 2023	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC330N	980331	20MHz ~ 3GHz	Apr. 26, 2022	Apr. 25, 2023	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC12630SE	980287	1GHz – 26.5GHz	Jul. 01, 2022	Jun. 30, 2023	Radiation (03CH05-CB)
Pre-Amplifier	SGH	SGH184	20221107-3	18GHz ~ 40GHz	Nov. 16, 2022	Nov. 15, 2023	Radiation (03CH05-CB)
Spectrum Analyzer	R&S	FSP40	100304	9kHz ~ 40GHz	Mar. 14, 2022	Mar. 13, 2023	Radiation (03CH05-CB)
RF Cable-low	Woken	RG402	Low Cable-04+23	30MHz~1GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-28	1GHz~18GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-04+28	1GHz~18GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH05-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH05-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH05-CB)

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
High Cable	Woken	WCA0929M	40G#6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	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	03CH03-CB	1GHz ~18GHz 3m	May 05, 2022	May 04, 2023	Radiation (03CH03-CB)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1370	1GHz~18GHz	Jun. 23, 2022	Jun. 22, 2023	Radiation (03CH03-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 22, 2022	Aug. 21, 2023	Radiation (03CH03-CB)
Pre-Amplifier	Agilent	8449B	3008A02097	1GHz ~ 26.5GHz	Jul. 01, 2022	Jun. 30, 2023	Radiation (03CH03-CB)
Spectrum Analyzer	R&S	FSP40	100019	9kHz ~ 40GHz	Jun. 10, 2022	Jun. 09, 2023	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-20+29	1GHz ~ 18GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-29	1GHz ~ 18GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH03-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH03-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH03-CB)
High Cable	Woken	WCA0929M	40G#6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH03-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH03-CB)
Spectrum analyzer	R&S	FSV40	101028	9kHz~40GHz	Dec. 30, 2022	Dec. 29, 2023	Conducted (TH03-CB)
Power Sensor	Anritsu	MA2411B	1726195	300MHz~40GHz	Sep. 04, 2022	Sep. 03, 2023	Conducted (TH03-CB)
Power Meter	Anritsu	ML2495A	1035008	300MHz~40GHz	Sep. 04, 2022	Sep. 03, 2023	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-11	1 GHz –18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-12	1 GHz –18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-13	1 GHz –18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-14	1 GHz –18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-15	1 GHz –18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH03-CB)

Switch	SPTCB	SP-SWI	SWI-03	1 GHz –26.5 GHz	Oct. 04, 2022	Oct. 03, 2023	Conducted (TH03-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH03-CB)

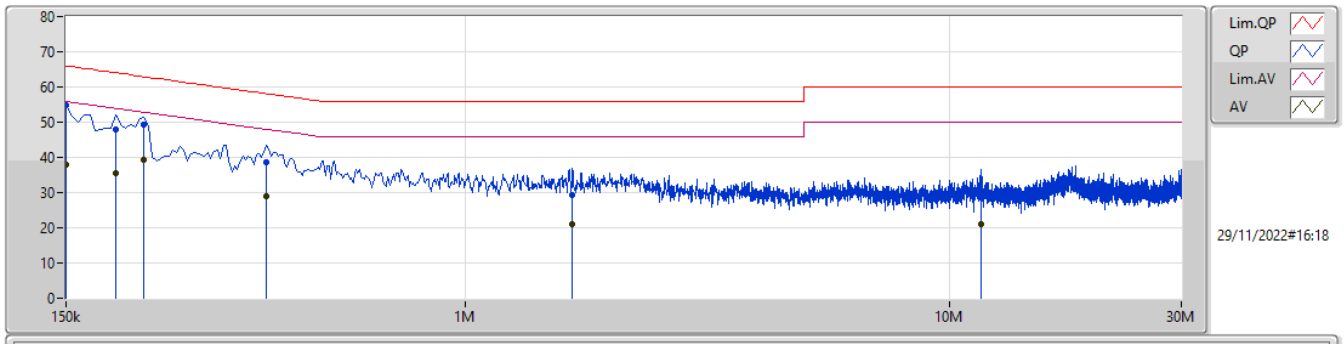
Note: Calibration Interval of instruments listed above is one year.

NCR means Non-Calibration required.

Summary

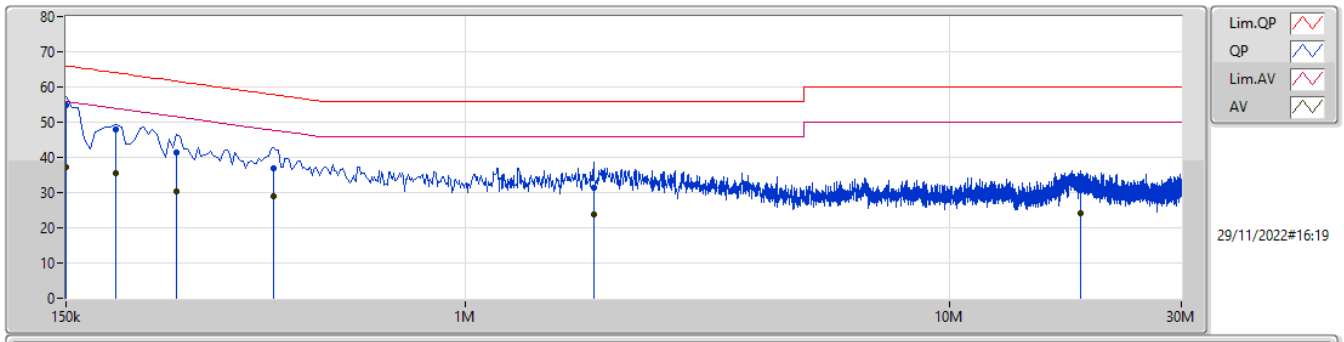
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	150k	54.81	66.00	-11.19	Line

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	54.81	66.00	-11.19	9.99	Line	"Worst"	44.82	0.06	0.04	9.89
AV	150k	37.96	56.00	-18.04	9.99	Line	-	27.97	0.06	0.04	9.89
QP	190.5k	47.85	64.01	-16.16	9.99	Line	-	37.86	0.06	0.04	9.89
AV	190.5k	35.36	54.01	-18.65	9.99	Line	-	25.37	0.06	0.04	9.89
QP	217.5k	49.27	62.92	-13.65	9.99	Line	-	39.28	0.06	0.04	9.89
AV	217.5k	39.44	52.92	-13.48	9.99	Line	-	29.45	0.06	0.04	9.89
QP	388.5k	38.72	58.10	-19.38	10.01	Line	-	28.71	0.06	0.06	9.89
AV	388.5k	29.10	48.10	-19.00	10.01	Line	-	19.09	0.06	0.06	9.89
QP	1.662M	29.38	56.00	-26.62	10.05	Line	-	19.33	0.08	0.08	9.89
AV	1.662M	21.05	46.00	-24.95	10.05	Line	-	11.00	0.08	0.08	9.89
QP	11.612M	29.12	60.00	-30.88	10.32	Line	-	18.80	0.24	0.16	9.92
AV	11.612M	20.98	50.00	-29.02	10.32	Line	-	10.66	0.24	0.16	9.92

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	54.66	66.00	-11.34	10.00	Neutral	"Worst"	44.66	0.07	0.04	9.89
AV	150k	37.27	56.00	-18.73	10.00	Neutral	-	27.27	0.07	0.04	9.89
QP	190.5k	48.02	64.01	-15.99	10.00	Neutral	-	38.02	0.07	0.04	9.89
AV	190.5k	35.46	54.01	-18.55	10.00	Neutral	-	25.46	0.07	0.04	9.89
QP	253.5k	41.34	61.64	-20.30	10.01	Neutral	-	31.33	0.07	0.05	9.89
AV	253.5k	30.32	51.64	-21.32	10.01	Neutral	-	20.31	0.07	0.05	9.89
QP	402k	36.78	57.82	-21.04	10.02	Neutral	-	26.76	0.07	0.06	9.89
AV	402k	29.00	47.82	-18.82	10.02	Neutral	-	18.98	0.07	0.06	9.89
QP	1.838M	31.30	56.00	-24.70	10.07	Neutral	-	21.23	0.10	0.08	9.89
AV	1.838M	23.75	46.00	-22.25	10.07	Neutral	-	13.68	0.10	0.08	9.89
QP	18.623M	30.60	60.00	-29.40	10.46	Neutral	-	20.14	0.29	0.21	9.96
AV	18.623M	24.03	50.00	-25.97	10.46	Neutral	-	13.57	0.29	0.21	9.96

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11b_Nss1,(1Mbps)_3TX	8.6M	13.063M	13M1G1D	6.6M	12.719M
802.11g_Nss1,(6Mbps)_3TX	16.325M	16.695M	16M7D1D	16M	16.375M
802.11ac VHT20_Nss1,(MCS0)_3TX	17.525M	17.738M	17M7D1D	16.5M	17.565M
802.11ac VHT40_Nss1,(MCS0)_3TX	36.3M	35.979M	36M0D1D	32.5M	35.814M

Max-N dB = Maximum 6dB down bandwidth; Max-OBW = Maximum 99% occupied bandwidth;
Min-N dB = Minimum 6dB down bandwidth; Min-OBW = Minimum 99% occupied bandwidth

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)
802.11b_Nss1,(1Mbps)_3TX	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	8.05M	12.856M	6.6M	12.74M	7.025M	12.753M
2437MHz	Pass	500k	7.075M	12.868M	6.6M	12.719M	8.6M	12.831M
2462MHz	Pass	500k	8.575M	12.947M	8.075M	13.063M	8.1M	12.971M
802.11g_Nss1,(6Mbps)_3TX	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	16.325M	16.408M	16.275M	16.375M	16.3M	16.405M
2437MHz	Pass	500k	16.275M	16.533M	16.275M	16.695M	16M	16.478M
2462MHz	Pass	500k	16.3M	16.398M	16.3M	16.424M	16.275M	16.393M
802.11ac VHT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	16.775M	17.596M	16.5M	17.595M	16.8M	17.565M
2437MHz	Pass	500k	16.55M	17.708M	17.125M	17.738M	17.175M	17.662M
2462MHz	Pass	500k	17.525M	17.6M	16.925M	17.594M	17.175M	17.606M
802.11ac VHT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-
2422MHz	Pass	500k	35.65M	35.857M	33.2M	35.933M	35M	35.921M
2437MHz	Pass	500k	32.55M	35.821M	35M	35.979M	35.65M	35.903M
2452MHz	Pass	500k	32.5M	35.814M	36.3M	35.93M	35.65M	35.923M

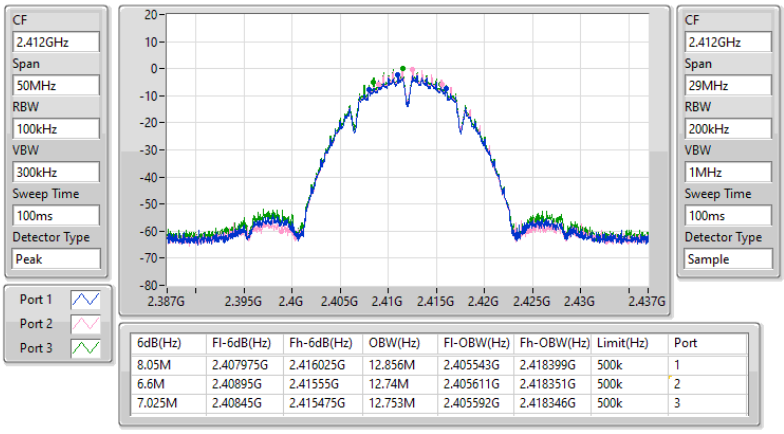
Port X-N dB = Port X 6dB down bandwidth;
Port X-OBW = Port X 99% occupied bandwidth

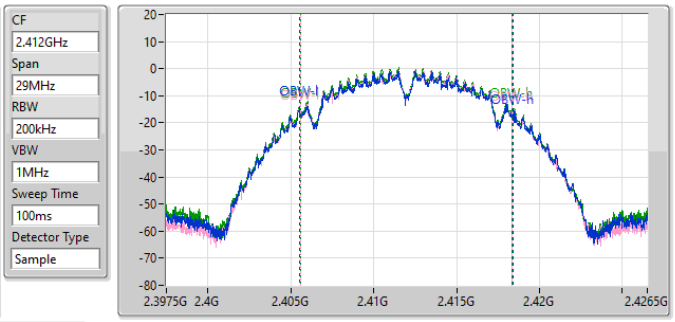
2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_3TX

EBW

2412MHz

18/01/2023





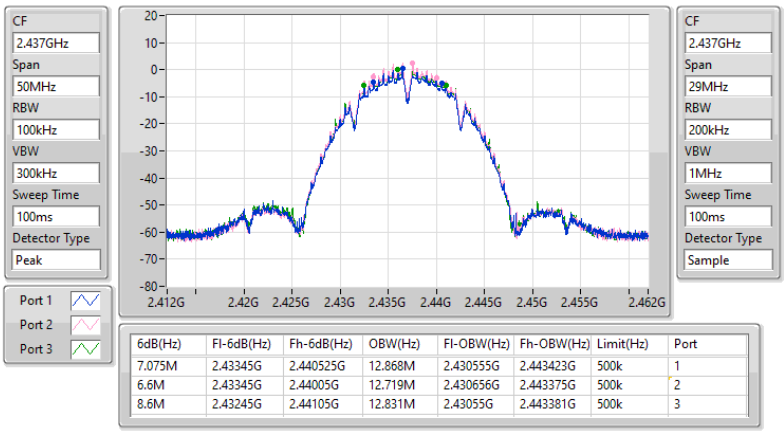
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
8.05M	2.407975G	2.416025G	12.856M	2.405543G	2.418399G	500k	1
6.6M	2.40895G	2.41555G	12.74M	2.405611G	2.418351G	500k	2
7.025M	2.40845G	2.415475G	12.753M	2.405592G	2.418346G	500k	3

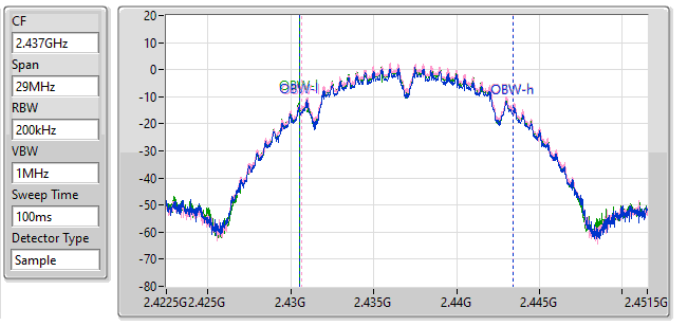
2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_3TX

EBW

2437MHz

18/01/2023

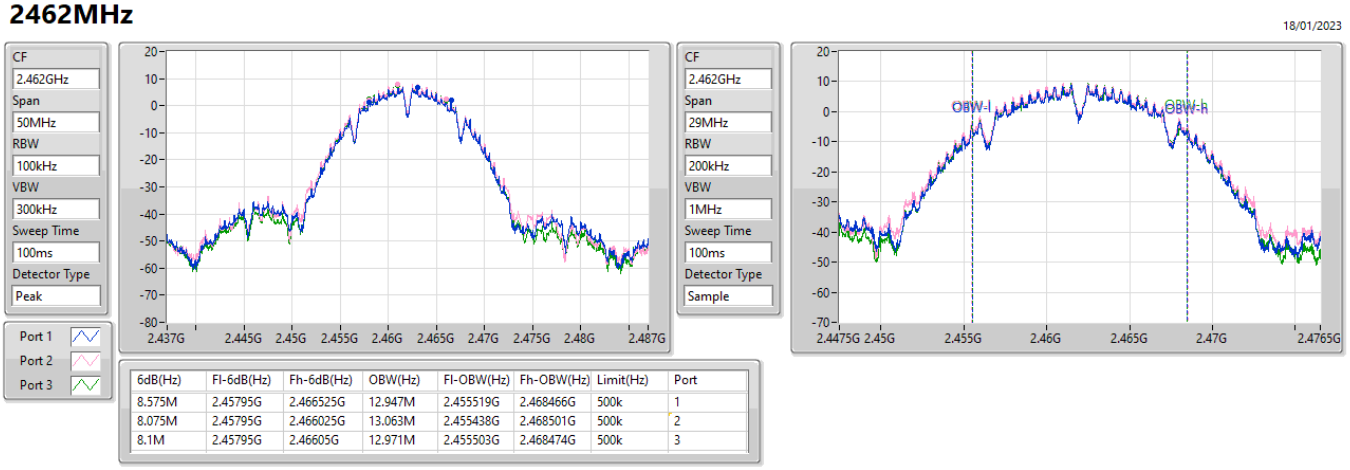




6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.075M	2.43345G	2.440525G	12.868M	2.430555G	2.443423G	500k	1
6.6M	2.43345G	2.44005G	12.719M	2.430656G	2.443375G	500k	2
8.6M	2.43245G	2.44105G	12.831M	2.43055G	2.443381G	500k	3

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_3TX EBW

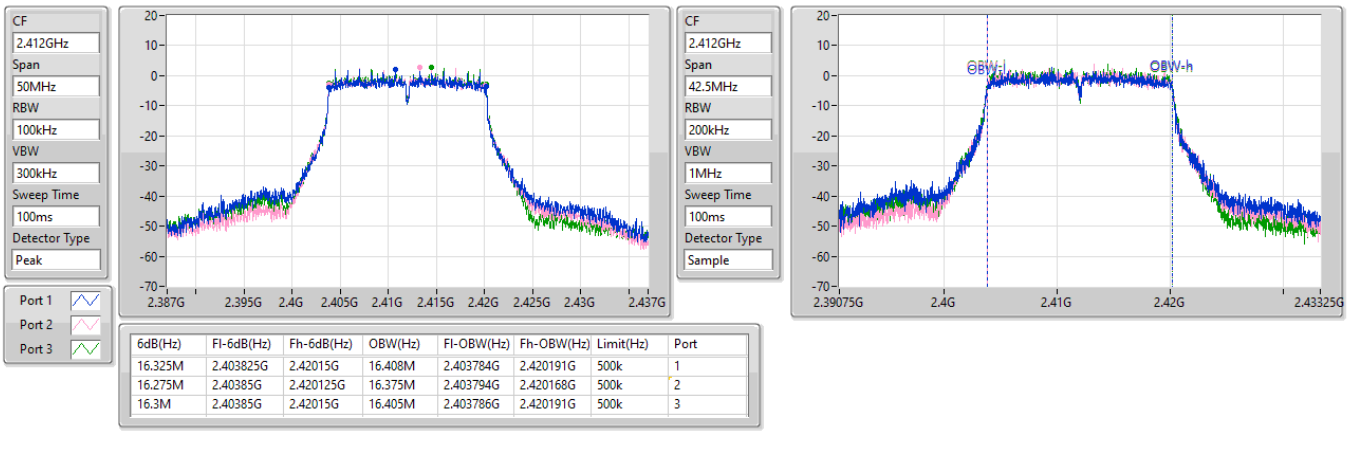
2462MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
8.575M	2.45795G	2.466525G	12.947M	2.455519G	2.468466G	500k	1
8.075M	2.45795G	2.466025G	13.063M	2.455438G	2.468501G	500k	2
8.1M	2.45795G	2.46605G	12.971M	2.455503G	2.468474G	500k	3

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_3TX EBW

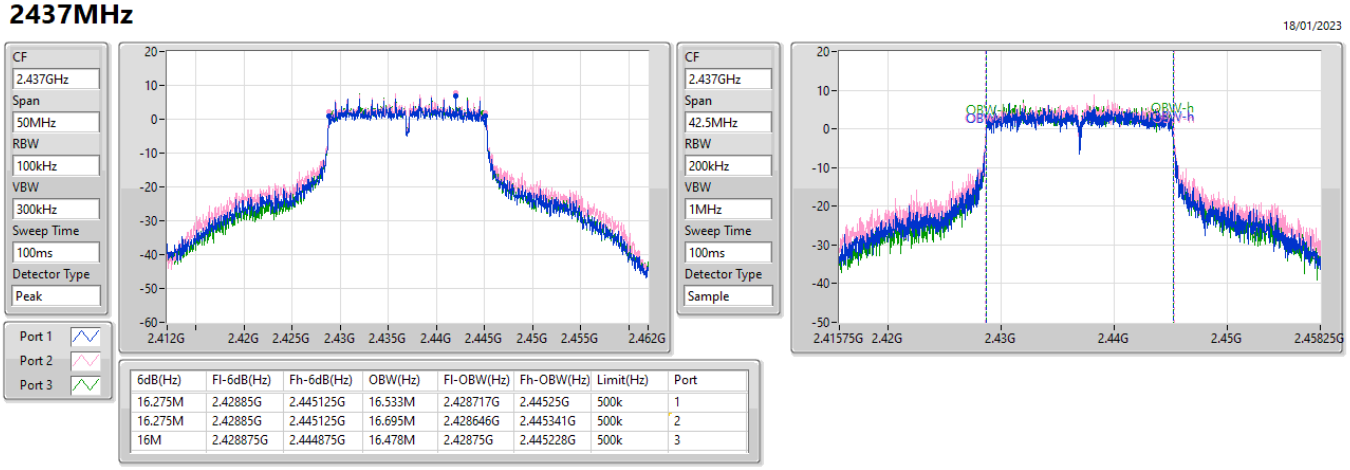
2412MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.325M	2.403825G	2.42015G	16.408M	2.403784G	2.420191G	500k	1
16.275M	2.40385G	2.420125G	16.375M	2.403794G	2.420168G	500k	2
16.3M	2.40385G	2.42015G	16.405M	2.403786G	2.420191G	500k	3

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_3TX EBW

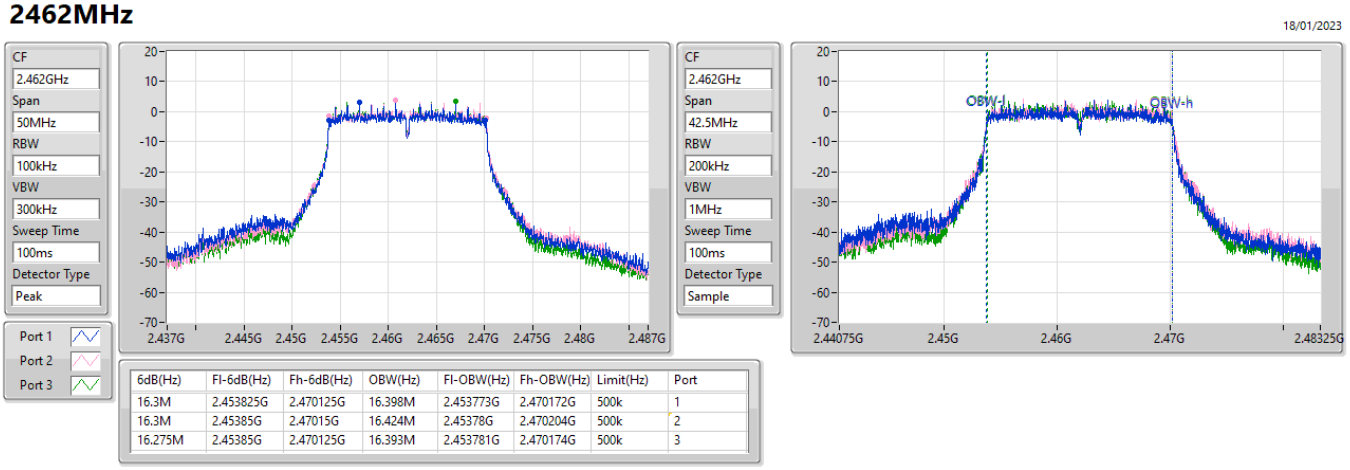
2437MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.275M	2.42885G	2.445125G	16.533M	2.428717G	2.44525G	500k	1
16.275M	2.42885G	2.445125G	16.695M	2.428646G	2.445341G	500k	2
16M	2.428875G	2.444875G	16.478M	2.42875G	2.445228G	500k	3

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_3TX EBW

2462MHz

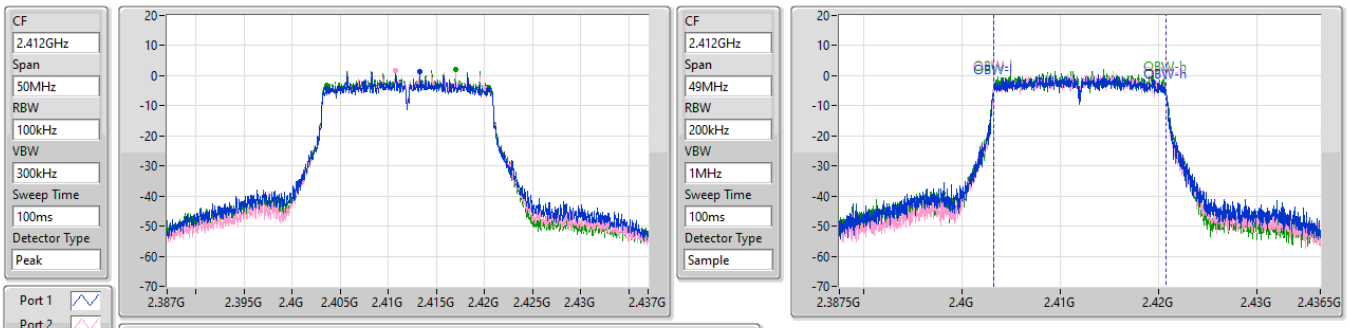


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.3M	2.453825G	2.470125G	16.398M	2.453773G	2.470172G	500k	1
16.3M	2.45385G	2.47015G	16.424M	2.45378G	2.470204G	500k	2
16.275M	2.45385G	2.470125G	16.393M	2.453781G	2.470174G	500k	3

2.4-2.4835GHz_802.11ac VHT20_Nss1,(MCS0)_3TX EBW

2412MHz

18/01/2023

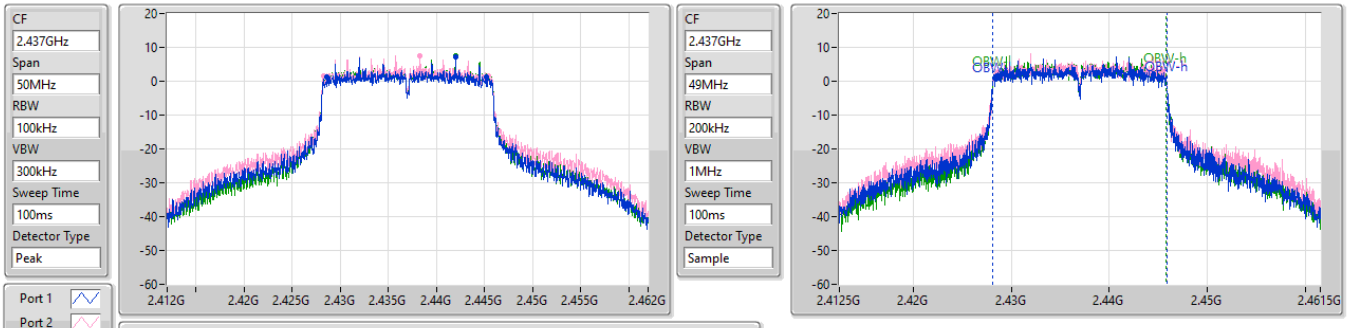


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.775M	2.4036G	2.420375G	17.596M	2.403187G	2.420783G	500k	1
16.5M	2.4036G	2.4201G	17.595M	2.403192G	2.420787G	500k	2
16.8M	2.4036G	2.4204G	17.565M	2.403203G	2.420768G	500k	3

2.4-2.4835GHz_802.11ac VHT20_Nss1,(MCS0)_3TX EBW

2437MHz

18/01/2023



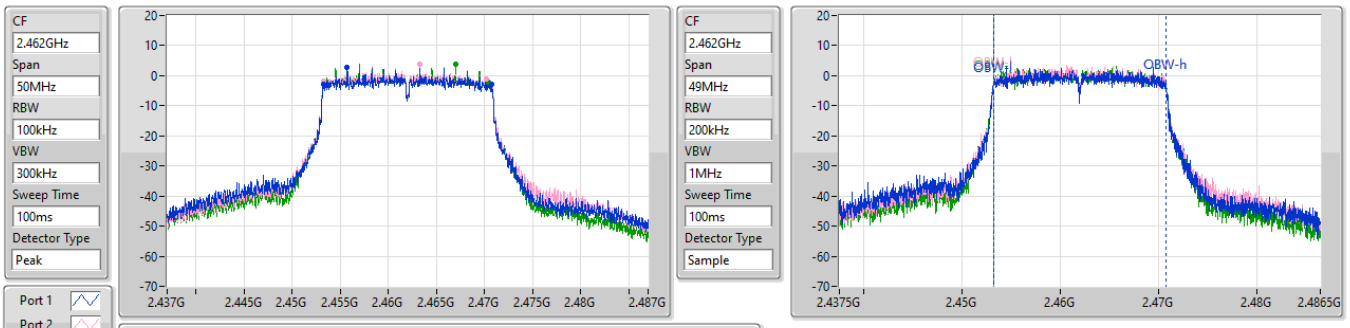
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.55M	2.4286G	2.44515G	17.708M	2.428138G	2.445845G	500k	1
17.125M	2.42825G	2.445375G	17.738M	2.428114G	2.445852G	500k	2
17.175M	2.42825G	2.445425G	17.662M	2.428165G	2.445826G	500k	3

2.4-2.4835GHz_802.11ac VHT20_Nss1,(MCS0)_3TX

EBW

2462MHz

18/01/2023



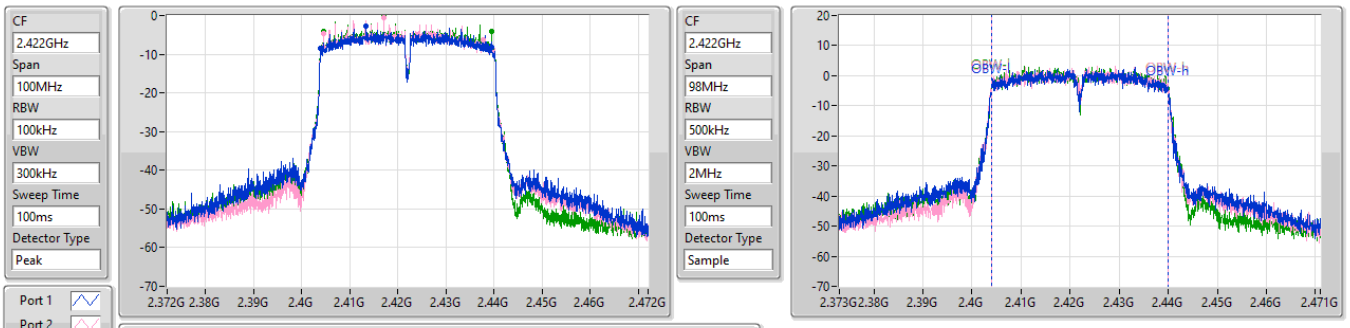
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.525M	2.453225G	2.47075G	17.6M	2.453179G	2.470779G	500k	1
16.925M	2.453225G	2.47015G	17.594M	2.453182G	2.470776G	500k	2
17.175M	2.453225G	2.4704G	17.606M	2.453177G	2.470783G	500k	3

2.4-2.4835GHz_802.11ac VHT40_Nss1,(MCS0)_3TX

EBW

2422MHz

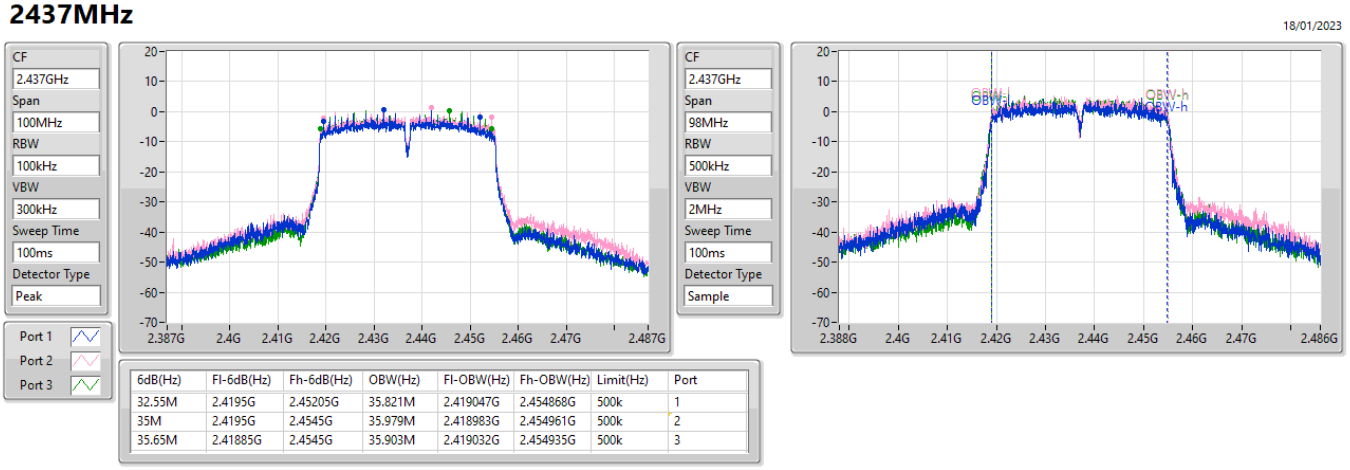
18/01/2023



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.65M	2.40385G	2.4395G	35.857M	2.404041G	2.439898G	500k	1
33.2M	2.40445G	2.43765G	35.933M	2.403984G	2.439917G	500k	2
35M	2.4045G	2.4395G	35.921M	2.404008G	2.439929G	500k	3

2.4-2.4835GHz_802.11ac VHT40_Nss1,(MCS0)_3TX EBW

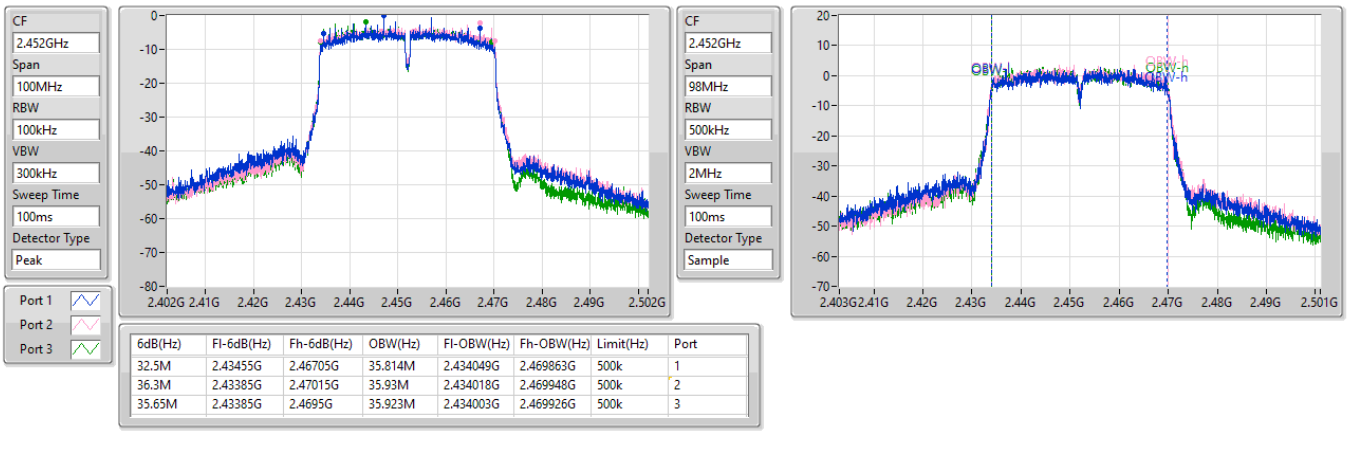
2437MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
32.55M	2.4195G	2.45205G	35.821M	2.419047G	2.454868G	500k	1
35M	2.4195G	2.4545G	35.979M	2.418983G	2.454961G	500k	2
35.65M	2.41885G	2.4545G	35.903M	2.419032G	2.454935G	500k	3

2.4-2.4835GHz_802.11ac VHT40_Nss1,(MCS0)_3TX EBW

2452MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
32.5M	2.43455G	2.46705G	35.814M	2.434049G	2.469863G	500k	1
36.3M	2.43385G	2.47015G	35.93M	2.434018G	2.469948G	500k	2
35.65M	2.43385G	2.4695G	35.923M	2.434003G	2.469926G	500k	3

Summary

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_3TX	23.32	0.21478
802.11g_Nss1,(6Mbps)_3TX	23.81	0.24044
802.11ac VHT20_Nss1,(MCS0)_3TX	23.71	0.23496
802.11ac VHT20-BF_Nss1,(MCS0)_3TX	23.71	0.23496
802.11ac VHT40_Nss1,(MCS0)_3TX	20.72	0.11803
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	20.72	0.11803

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	1.99	8.14	8.51	9.51	13.53	30.00
2437MHz	Pass	1.99	9.86	11.57	11.21	15.71	30.00
2462MHz	Pass	1.99	17.94	18.97	18.68	23.32	30.00
802.11g_Nss1,(6Mbps)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	1.99	14.59	14.89	15.08	19.63	30.00
2417MHz	Pass	1.99	16.80	16.88	17.29	21.77	30.00
2437MHz	Pass	1.99	18.60	19.30	19.19	23.81	30.00
2457MHz	Pass	1.99	16.84	17.69	17.33	22.07	30.00
2462MHz	Pass	1.99	15.04	15.57	15.53	20.16	30.00
802.11ac VHT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	1.99	13.44	13.61	14.09	18.49	30.00
2417MHz	Pass	1.99	16.03	16.45	16.58	21.13	30.00
2437MHz	Pass	1.99	18.43	19.30	19.04	23.71	30.00
2457MHz	Pass	1.99	17.32	17.82	17.50	22.32	30.00
2462MHz	Pass	1.99	15.23	15.80	15.72	20.36	30.00
802.11ac VHT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2422MHz	Pass	1.99	13.78	14.17	14.46	18.92	30.00
2437MHz	Pass	1.99	15.28	16.22	16.29	20.72	30.00
2452MHz	Pass	1.99	13.75	14.57	14.38	19.02	30.00
802.11ac VHT20-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	6.62	13.44	13.61	14.09	18.49	29.38
2417MHz	Pass	6.62	16.03	16.45	16.58	21.13	29.38
2437MHz	Pass	6.62	18.43	19.30	19.04	23.71	29.38
2457MHz	Pass	6.62	17.32	17.82	17.50	22.32	29.38
2462MHz	Pass	6.62	15.23	15.80	15.72	20.36	29.38
802.11ac VHT40-BF_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2422MHz	Pass	6.62	13.78	14.17	14.46	18.92	29.38
2437MHz	Pass	6.62	15.28	16.22	16.29	20.72	29.38
2452MHz	Pass	6.62	13.75	14.57	14.38	19.02	29.38

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

Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_3TX	-6.00
802.11g_Nss1,(6Mbps)_3TX	-6.66
802.11ac VHT20_Nss1,(MCS0)_3TX	-6.31
802.11ac VHT40_Nss1,(MCS0)_3TX	-10.94

RBW = 3kHz;

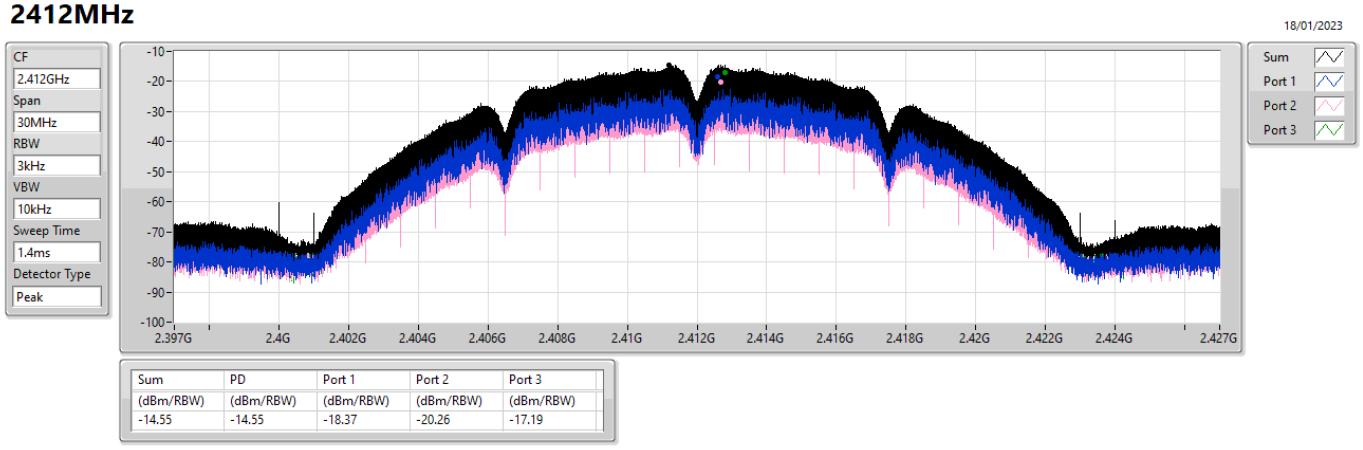
Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	6.62	-18.37	-20.26	-17.19	-14.55	7.38
2437MHz	Pass	6.62	-19.49	-13.93	-13.77	-10.53	7.38
2462MHz	Pass	6.62	-11.33	-10.45	-10.40	-6.00	7.38
802.11g_Nss1,(6Mbps)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	6.62	-15.05	-14.84	-13.67	-10.44	7.38
2437MHz	Pass	6.62	-10.84	-9.37	-9.46	-6.66	7.38
2462MHz	Pass	6.62	-13.35	-14.03	-12.34	-9.94	7.38
802.11ac VHT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2412MHz	Pass	6.62	-15.71	-15.37	-13.16	-11.67	7.38
2437MHz	Pass	6.62	-10.31	-10.20	-9.74	-6.31	7.38
2462MHz	Pass	6.62	-13.40	-12.53	-14.10	-8.88	7.38
802.11ac VHT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-
2422MHz	Pass	6.62	-16.67	-16.48	-16.47	-12.39	7.38
2437MHz	Pass	6.62	-15.49	-15.15	-14.96	-10.94	7.38
2452MHz	Pass	6.62	-17.58	-16.38	-16.45	-12.56	7.38

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)_3TX PSD

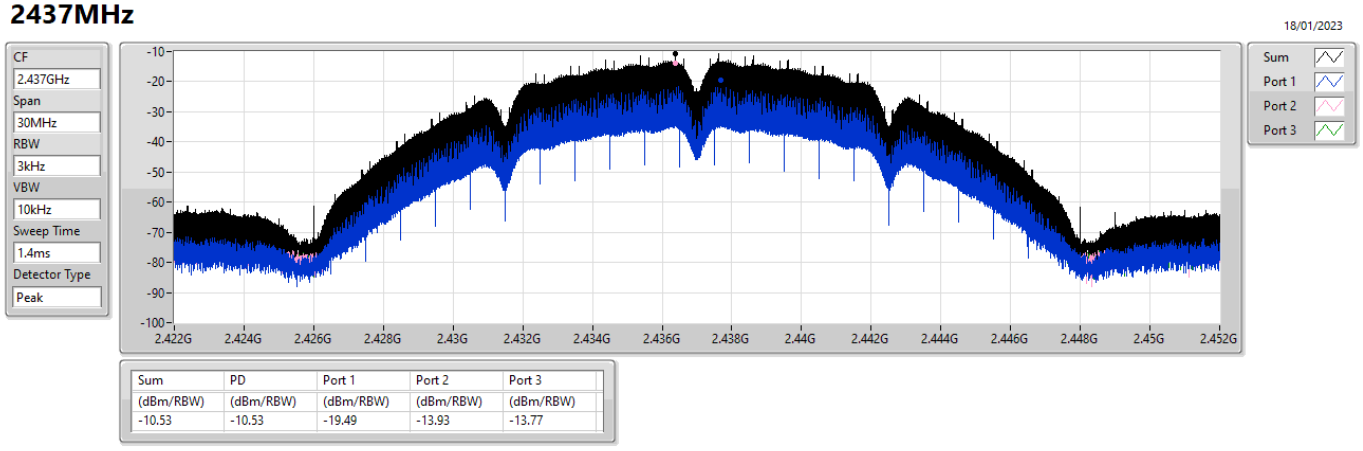
2412MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-14.55	-14.55	-18.37	-20.26	-17.19

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_3TX PSD

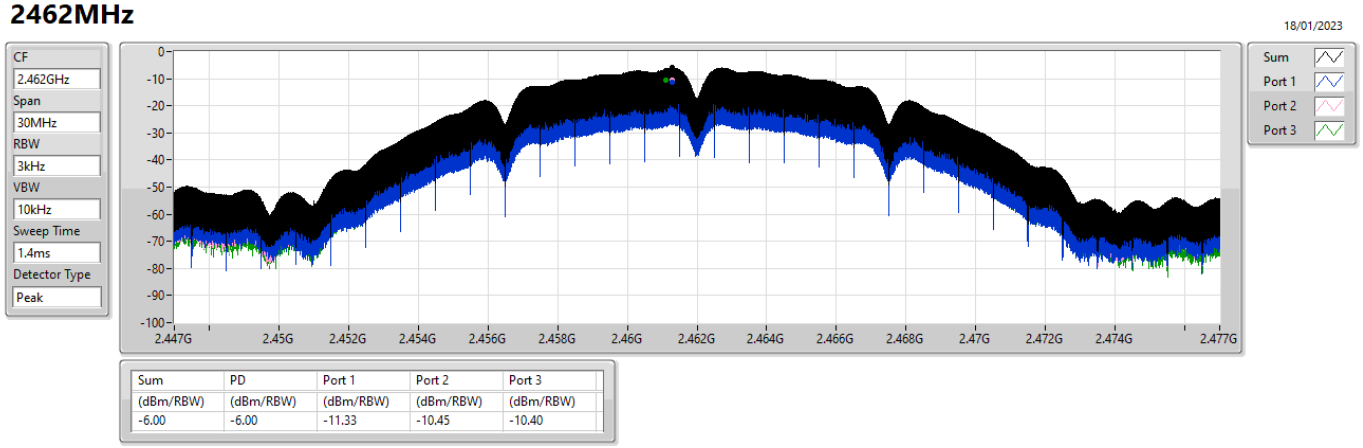
2437MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-10.53	-10.53	-19.49	-13.93	-13.77

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_3TX PSD

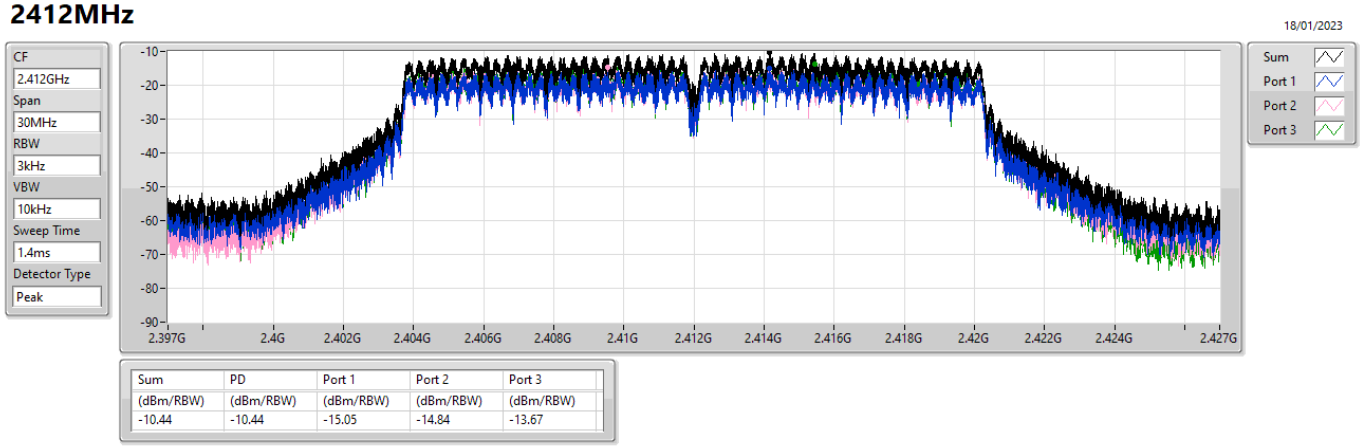
2462MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.00	-6.00	-11.33	-10.45	-10.40

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_3TX PSD

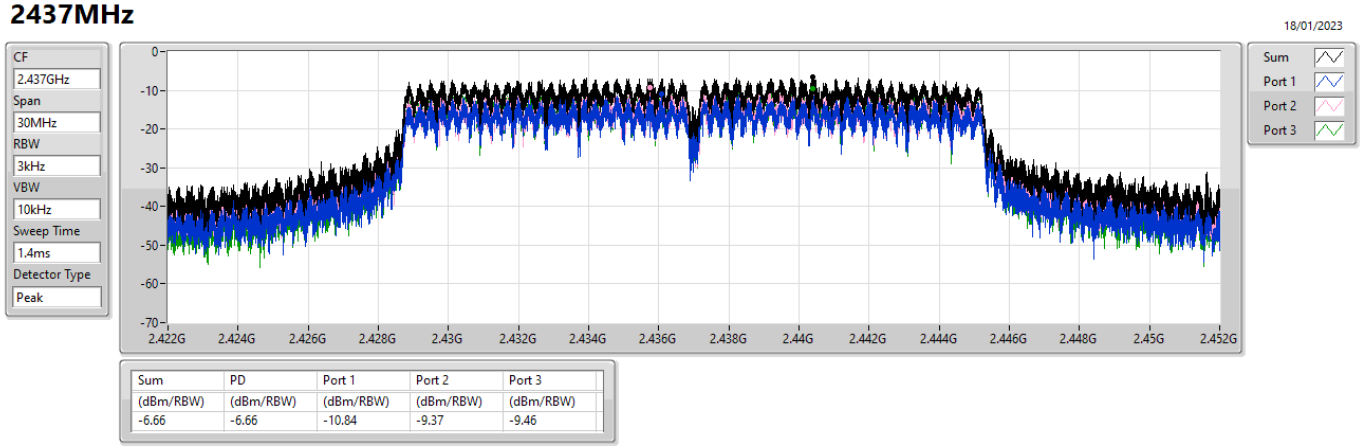
2412MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-10.44	-10.44	-15.05	-14.84	-13.67

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_3TX PSD

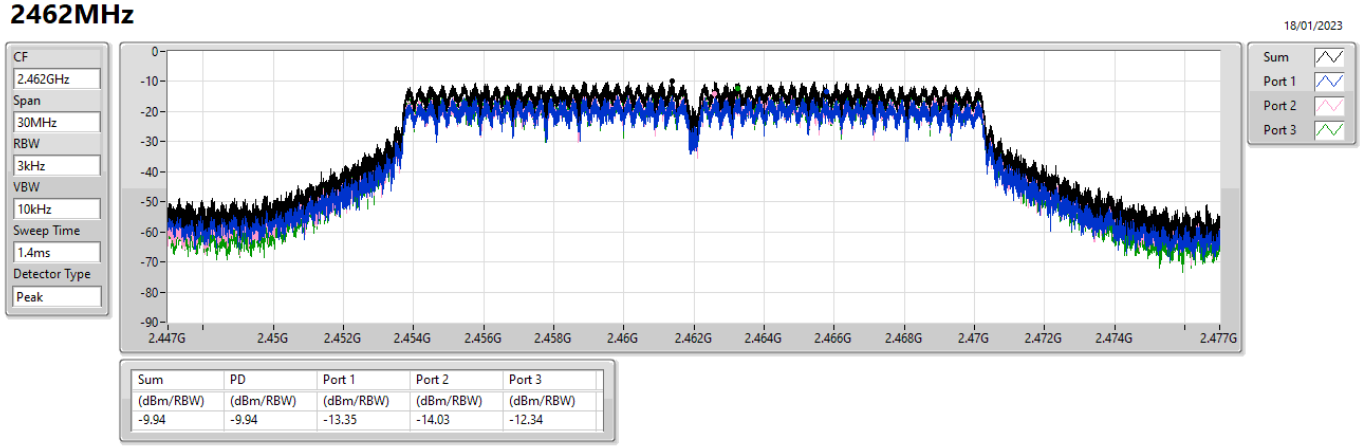
2437MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.66	-6.66	-10.84	-9.37	-9.46

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_3TX PSD

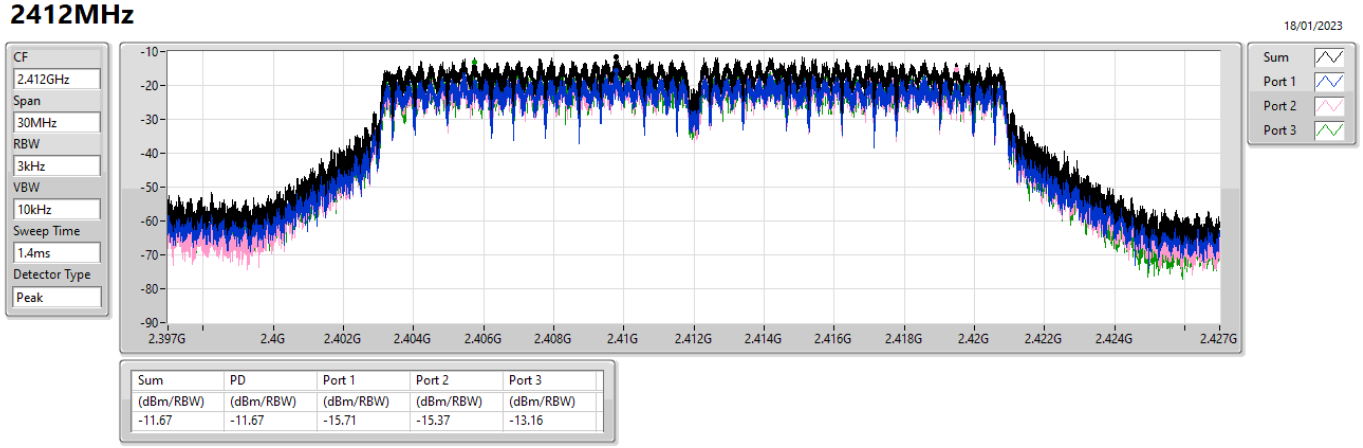
2462MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-9.94	-9.94	-13.35	-14.03	-12.34

2.4-2.4835GHz_802.11ac VHT20_Nss1,(MCS0)_3TX PSD

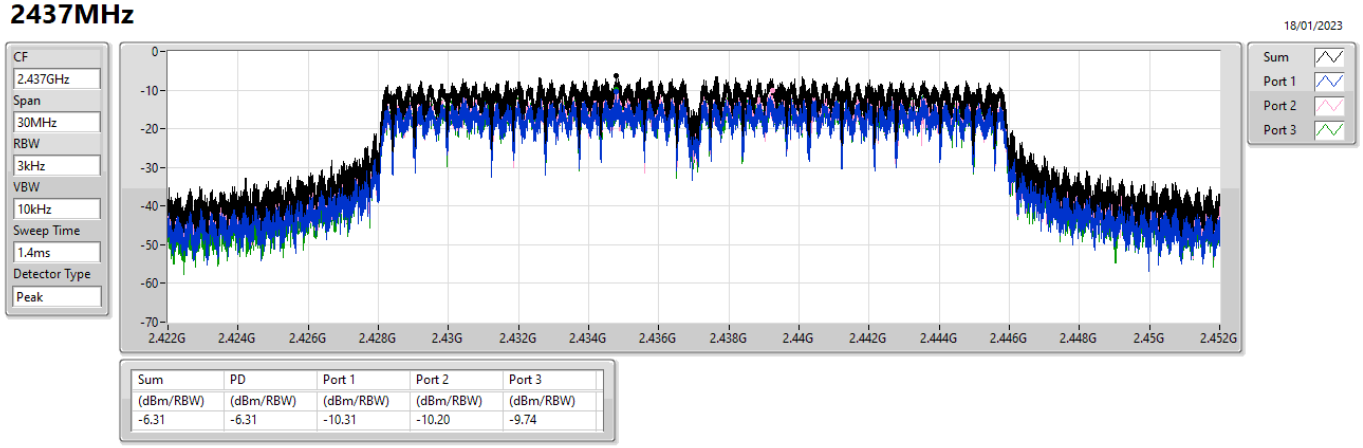
2412MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-11.67	-11.67	-15.71	-15.37	-13.16

2.4-2.4835GHz_802.11ac VHT20_Nss1,(MCS0)_3TX PSD

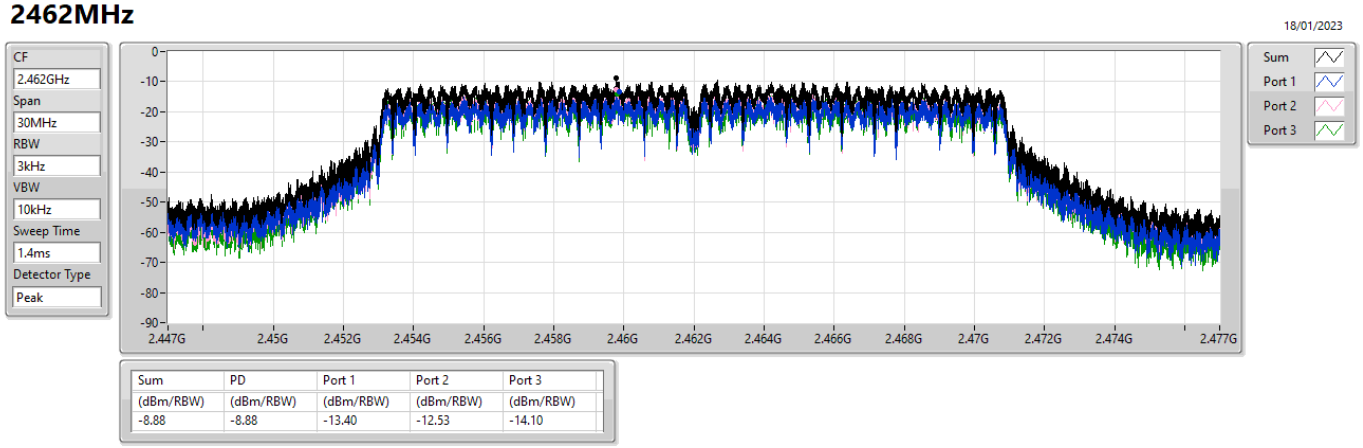
2437MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.31	-6.31	-10.31	-10.20	-9.74

2.4-2.4835GHz_802.11ac VHT20_Nss1,(MCS0)_3TX PSD

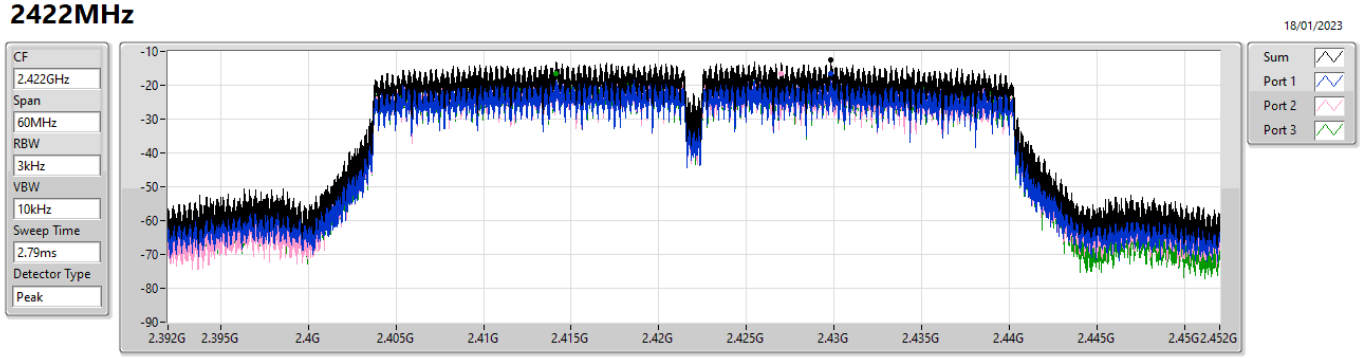
2462MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-8.88	-8.88	-13.40	-12.53	-14.10

2.4-2.4835GHz_802.11ac VHT40_Nss1,(MCS0)_3TX PSD

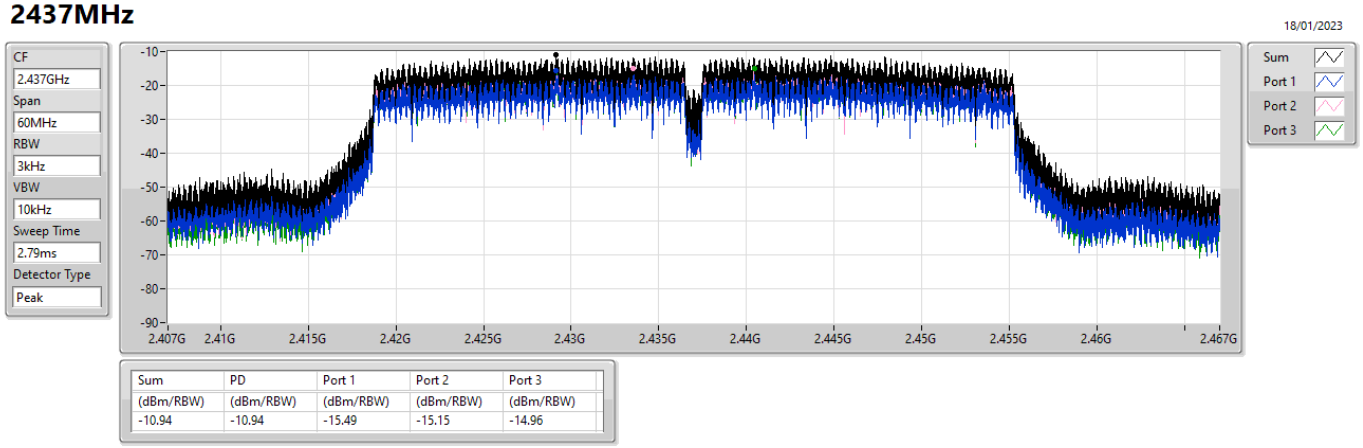
2422MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-12.39	-12.39	-16.67	-16.48	-16.47

2.4-2.4835GHz_802.11ac VHT40_Nss1,(MCS0)_3TX PSD

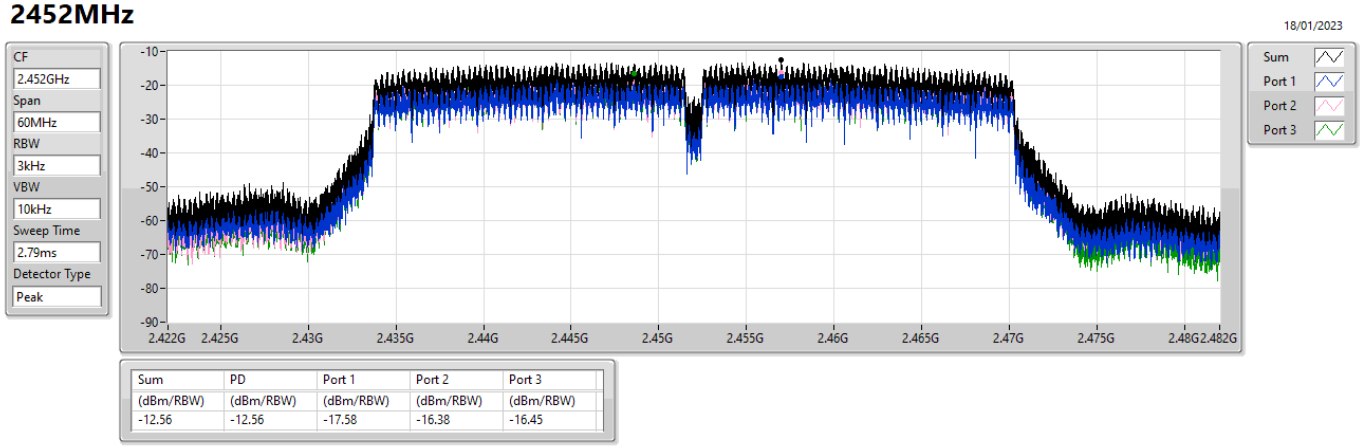
2437MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-10.94	-10.94	-15.49	-15.15	-14.96

2.4-2.4835GHz_802.11ac VHT40_Nss1,(MCS0)_3TX PSD

2452MHz



Sum	PD	Port 1	Port 2	Port 3
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-12.56	-12.56	-17.58	-16.38	-16.45

Summary

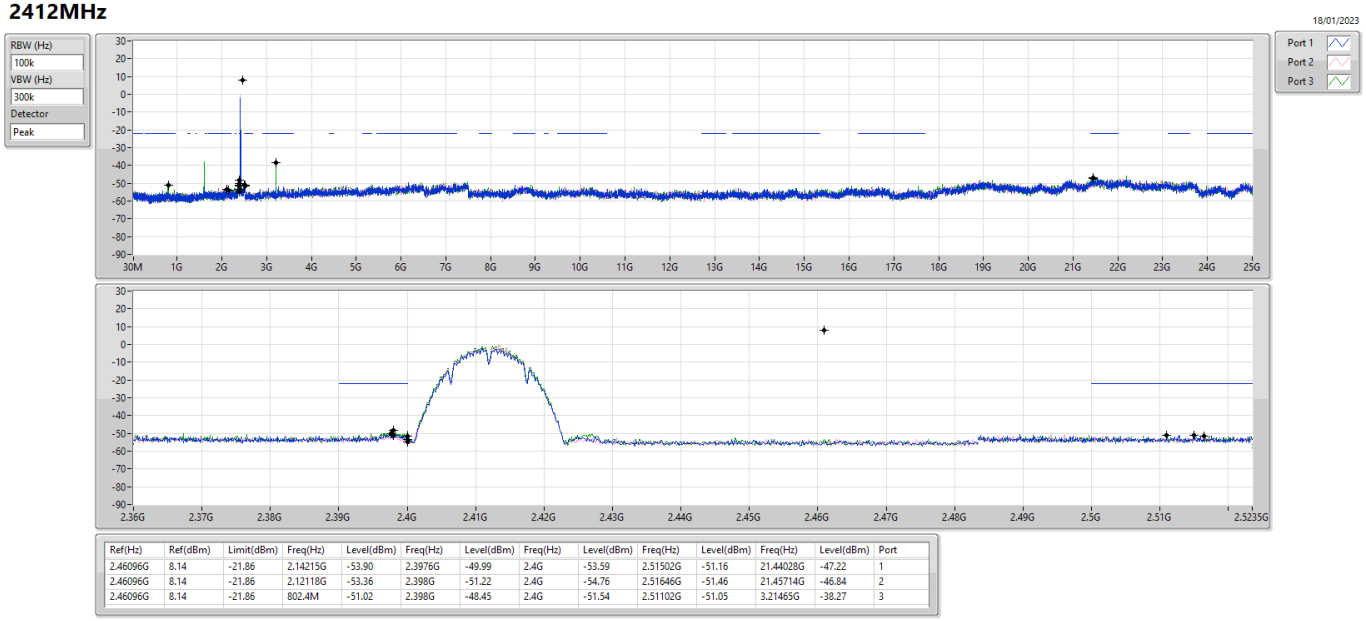
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_3TX	Pass	2.46096G	8.14	-21.86	1.6412G	-31.38	2.39992G	-51.25	2.4G	-54.35	2.50942G	-50.86	3.28208G	-40.96	3
802.11g_Nss1,(6Mbps)_3TX	Pass	2.44208G	8.02	-21.98	70.78M	-53.65	2.39704G	-35.57	2.4G	-37.83	2.5051G	-51.80	21.49086G	-46.61	1
802.11ac VHT20_Nss1,(MCS0)_3TX	Pass	2.44208G	7.93	-22.07	2.15846G	-53.16	2.39704G	-37.37	2.4G	-38.12	2.5175G	-51.61	21.61448G	-47.34	1
802.11ac VHT40_Nss1,(MCS0)_3TX	Pass	2.44192G	2.18	-27.82	2.06467G	-53.08	2.39888G	-37.46	2.4G	-41.65	2.50094G	-52.46	21.556G	-46.51	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)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.46096G	8.14	-21.86	2.14215G	-53.90	2.3976G	-49.99	2.4G	-53.59	2.51502G	-51.16	21.44028G	-47.22	1
2412MHz	Pass	2.46096G	8.14	-21.86	2.12118G	-53.36	2.398G	-51.22	2.4G	-54.76	2.51646G	-51.46	21.45714G	-46.84	2
2412MHz	Pass	2.46096G	8.14	-21.86	802.4M	-51.02	2.398G	-48.45	2.4G	-51.54	2.51102G	-51.05	3.21465G	-38.27	3
2437MHz	Pass	2.46096G	8.14	-21.86	2.18059G	-53.68	2.396G	-51.61	2.4G	-56.53	2.50806G	-51.71	21.50209G	-47.07	1
2437MHz	Pass	2.46096G	8.14	-21.86	1.84973G	-53.99	2.3984G	-51.84	2.4G	-56.41	2.5203G	-50.56	21.5049G	-46.72	2
2437MHz	Pass	2.46096G	8.14	-21.86	811.72M	-46.31	2.39152G	-51.20	2.4G	-52.56	2.50582G	-51.47	3.24837G	-40.28	3
2462MHz	Pass	2.46096G	8.14	-21.86	1.6412G	-45.69	2.396G	-50.86	2.4G	-54.55	2.51262G	-50.47	21.56671G	-47.57	1
2462MHz	Pass	2.46096G	8.14	-21.86	1.6412G	-44.74	2.39744G	-51.86	2.4G	-56.37	2.50702G	-50.84	21.53581G	-47.53	2
2462MHz	Pass	2.46096G	8.14	-21.86	1.6412G	-31.38	2.39992G	-51.25	2.4G	-54.35	2.50942G	-50.86	3.28208G	-40.96	3
802.11g_Nss1,(6Mbps)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.44208G	8.02	-21.98	70.78M	-53.65	2.39704G	-35.57	2.4G	-37.83	2.5051G	-51.80	21.49086G	-46.61	1
2412MHz	Pass	2.44208G	8.02	-21.98	2.11302G	-52.43	2.39736G	-40.49	2.4G	-40.21	2.51254G	-51.05	21.77462G	-46.41	2
2412MHz	Pass	2.44208G	8.02	-21.98	802.4M	-47.93	2.39704G	-38.14	2.4G	-40.08	2.5235G	-51.59	3.21465G	-37.72	3
2437MHz	Pass	2.44208G	8.02	-21.98	1.62955G	-53.53	2.39992G	-45.66	2.4G	-46.18	2.50238G	-49.91	21.95724G	-46.15	1
2437MHz	Pass	2.44208G	8.02	-21.98	34.66M	-52.42	2.39824G	-42.95	2.4G	-44.68	2.51054G	-51.11	21.62291G	-46.98	2
2437MHz	Pass	2.44208G	8.02	-21.98	1.62722G	-42.19	2.39968G	-45.54	2.4G	-45.59	2.50118G	-51.49	3.24837G	-41.72	3
2462MHz	Pass	2.44208G	8.02	-21.98	2.1305G	-53.25	2.39032G	-51.11	2.4G	-55.94	2.5055G	-50.78	21.69314G	-47.05	1
2462MHz	Pass	2.44208G	8.02	-21.98	1.94526G	-53.73	2.39912G	-51.16	2.4G	-55.24	2.5067G	-49.42	21.52176G	-46.33	2
2462MHz	Pass	2.44208G	8.02	-21.98	814.05M	-42.97	2.4G	-51.61	2.4G	-53.15	2.52198G	-51.29	3.28208G	-41.52	3
802.11ac VHT20_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.44208G	7.93	-22.07	2.15846G	-53.16	2.39704G	-37.37	2.4G	-38.12	2.5175G	-51.61	21.61448G	-47.34	1
2412MHz	Pass	2.44208G	7.93	-22.07	2.30408G	-51.87	2.39704G	-41.07	2.4G	-40.67	2.50462G	-50.51	21.81677G	-48.05	2
2412MHz	Pass	2.44208G	7.93	-22.07	809.39M	-48.28	2.39712G	-38.40	2.4G	-38.98	2.51158G	-51.09	3.21465G	-38.67	3
2437MHz	Pass	2.44208G	7.93	-22.07	2.02215G	-53.34	2.39864G	-45.37	2.4G	-46.39	2.51086G	-50.79	23.58679G	-47.94	1
2437MHz	Pass	2.44208G	7.93	-22.07	2.30175G	-52.75	2.39896G	-43.28	2.4G	-42.98	2.51214G	-51.01	22.0022G	-47.74	2
2437MHz	Pass	2.44208G	7.93	-22.07	810.55M	-42.88	2.39792G	-45.11	2.4G	-45.26	2.52318G	-50.87	3.24837G	-40.97	3
2462MHz	Pass	2.44208G	7.93	-22.07	1.64935G	-53.64	2.39504G	-51.56	2.4G	-55.57	2.5039G	-49.97	21.57514G	-46.93	1
2462MHz	Pass	2.44208G	7.93	-22.07	2.11652G	-53.97	2.39176G	-51.59	2.4G	-56.37	2.50206G	-50.35	21.50771G	-47.07	2
2462MHz	Pass	2.44208G	7.93	-22.07	823.37M	-44.15	2.39488G	-51.68	2.4G	-53.61	2.50046G	-49.98	3.28208G	-41.24	3
802.11ac VHT40_Nss1,(MCS0)_3TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.44192G	2.18	-27.82	2.06467G	-53.08	2.39888G	-37.46	2.4G	-41.65	2.50094G	-52.46	21.556G	-46.51	1
2422MHz	Pass	2.44192G	2.18	-27.82	2.07612G	-53.38	2.39888G	-38.97	2.4G	-44.27	2.51726G	-53.48	21.99351G	-46.38	2
2422MHz	Pass	2.44192G	2.18	-27.82	1.633G	-48.17	2.39712G	-38.64	2.4G	-42.43	2.56014G	-52.36	3.22818G	-38.16	3
2437MHz	Pass	2.44192G	2.18	-27.82	1.63873G	-53.98	2.39984G	-42.27	2.4G	-40.86	2.5003G	-52.00	21.59526G	-46.72	1
2437MHz	Pass	2.44192G	2.18	-27.82	2.12879G	-53.09	2.39776G	-40.00	2.4G	-39.13	2.5003G	-51.04	21.55039G	-46.89	2
2437MHz	Pass	2.44192G	2.18	-27.82	1.62842G	-47.36	2.39984G	-41.85	2.4G	-41.19	2.5299G	-51.59	3.24781G	-40.41	3
2452MHz	Pass	2.44192G	2.18	-27.82	91.83M	-53.39	2.39952G	-50.10	2.4G	-49.34	2.50078G	-49.80	21.55319G	-47.09	1
2452MHz	Pass	2.44192G	2.18	-27.82	1.65476G	-54.12	2.39824G	-48.45	2.4G	-51.20	2.50174G	-51.39	21.51954G	-47.65	2
2452MHz	Pass	2.44192G	2.18	-27.82	1.63415G	-47.78	2.39776G	-49.44	2.4G	-50.03	2.50126G	-51.89	3.26745G	-40.88	3

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_3TX **CSENdB**

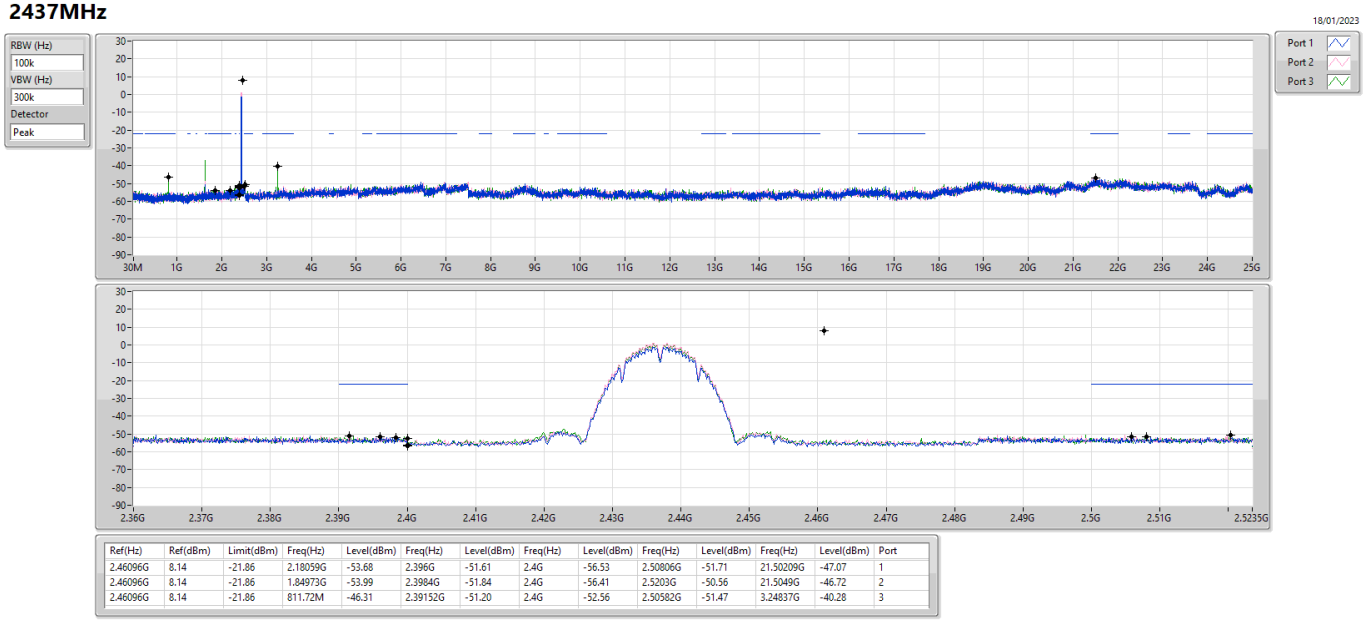
2412MHz



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
2.46096G	8.14	-21.86	2.14215G	-53.90	2.3976G	-49.99	2.4G	-53.59	2.51502G	-51.16	21.44028G	-47.22	1
2.46096G	8.14	-21.86	2.12118G	-53.36	2.398G	-51.22	2.4G	-54.76	2.51646G	-51.46	21.45714G	-46.84	2
2.46096G	8.14	-21.86	802.4M	-51.02	2.398G	-48.45	2.4G	-51.54	2.51102G	-51.05	3.21465G	-38.27	3

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_3TX **CSENdB**

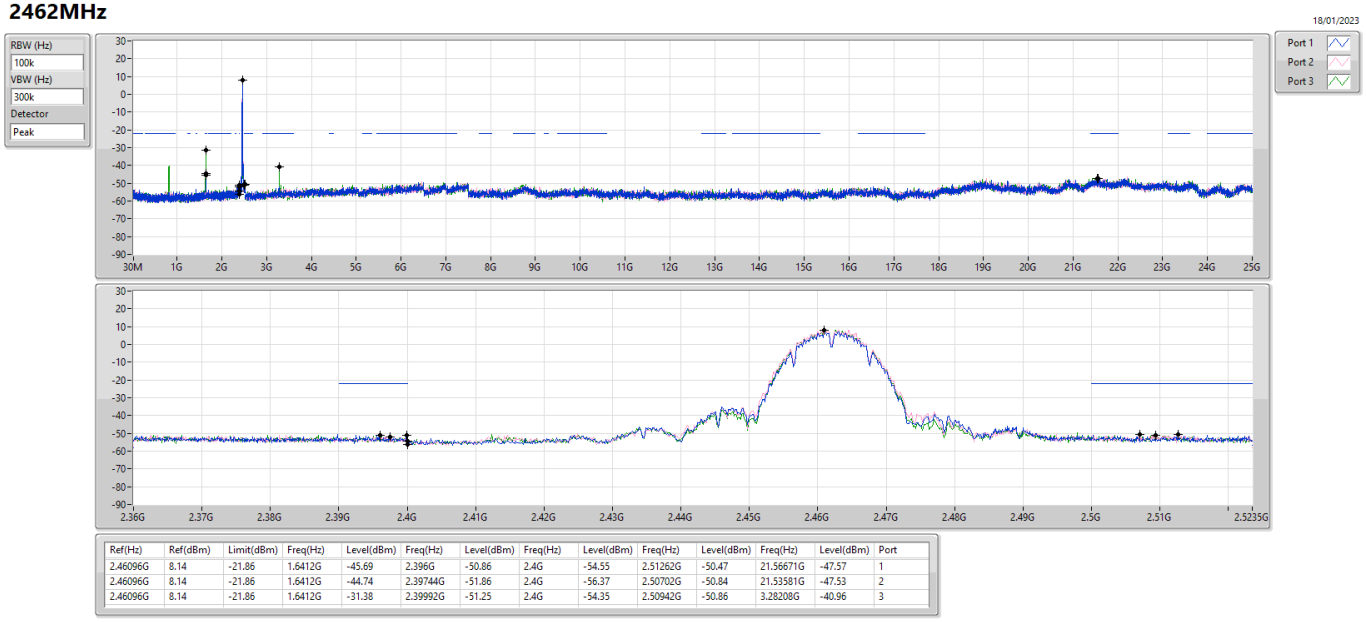
2437MHz



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
2.46096G	8.14	-21.86	2.18059G	-53.68	2.396G	-51.61	2.4G	-56.53	2.50806G	-51.71	21.50209G	-47.07	1
2.46096G	8.14	-21.86	1.84973G	-53.99	2.3984G	-51.84	2.4G	-56.41	2.5203G	-50.56	21.5049G	-46.72	2
2.46096G	8.14	-21.86	811.72M	-46.31	2.39152G	-51.20	2.4G	-52.56	2.50582G	-51.47	3.24837G	-40.28	3

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_3TX **CSENdB**

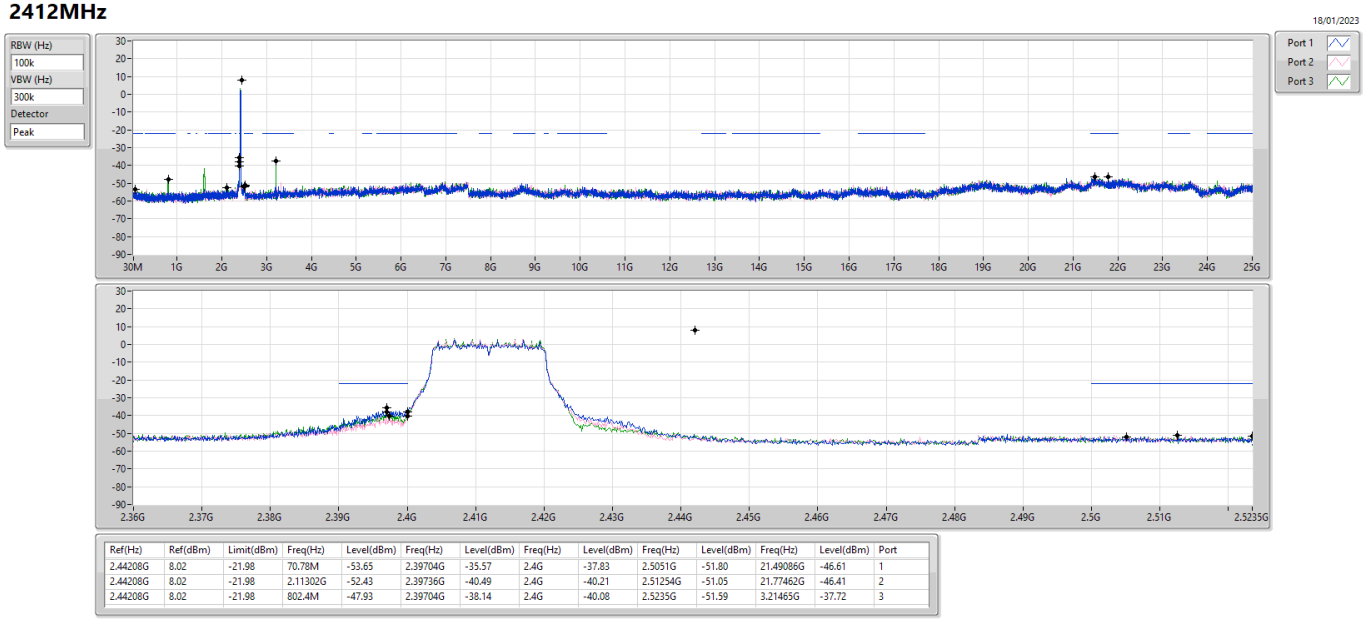
2462MHz



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
2.46096G	8.14	-21.86	1.6412G	-45.69	2.396G	-50.86	2.4G	-54.55	2.51262G	-50.47	21.56671G	-47.57	1
2.46096G	8.14	-21.86	1.6412G	-44.74	2.39744G	-51.86	2.4G	-56.37	2.50702G	-50.84	21.53581G	-47.53	2
2.46096G	8.14	-21.86	1.6412G	-31.38	2.39992G	-51.25	2.4G	-54.35	2.50942G	-50.86	3.28208G	-40.96	3

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_3TX **CSENdB**

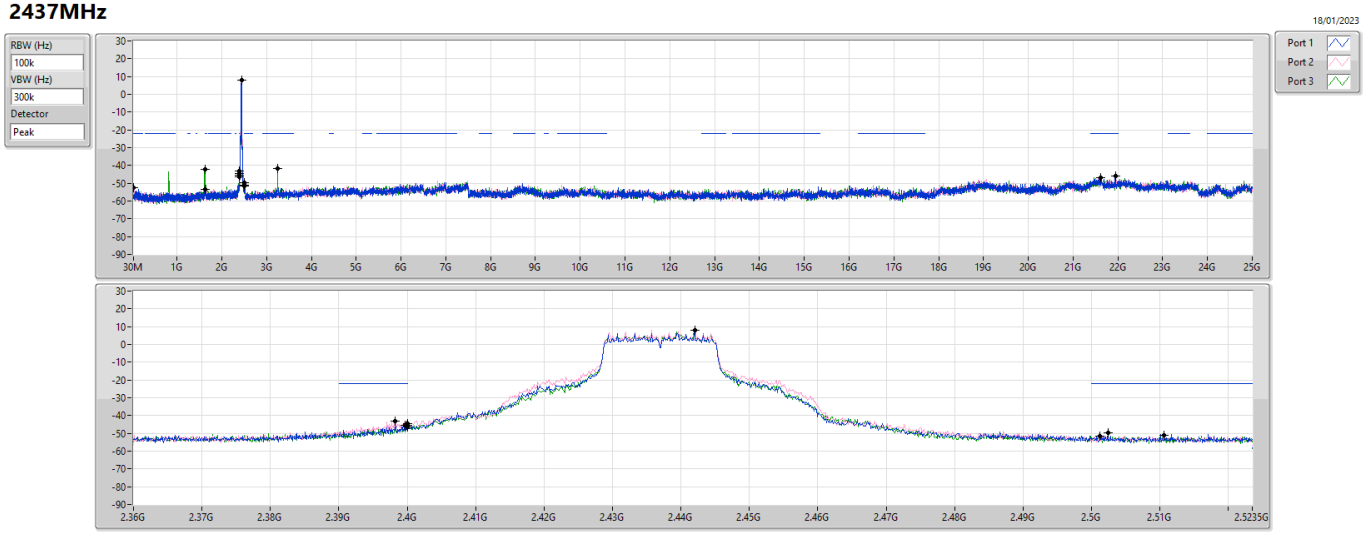
2412MHz



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
2.44208G	8.02	-21.98	70.78M	-53.65	2.39704G	-35.57	2.4G	-37.83	2.5051G	-51.80	21.49086G	-46.61	1
2.44208G	8.02	-21.98	2.11302G	-52.43	2.39736G	-40.49	2.4G	-40.21	2.51254G	-51.05	21.77462G	-46.41	2
2.44208G	8.02	-21.98	802.4M	-47.93	2.39704G	-38.14	2.4G	-40.08	2.5235G	-51.59	3.21465G	-37.72	3

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_3TX **CSENdB**

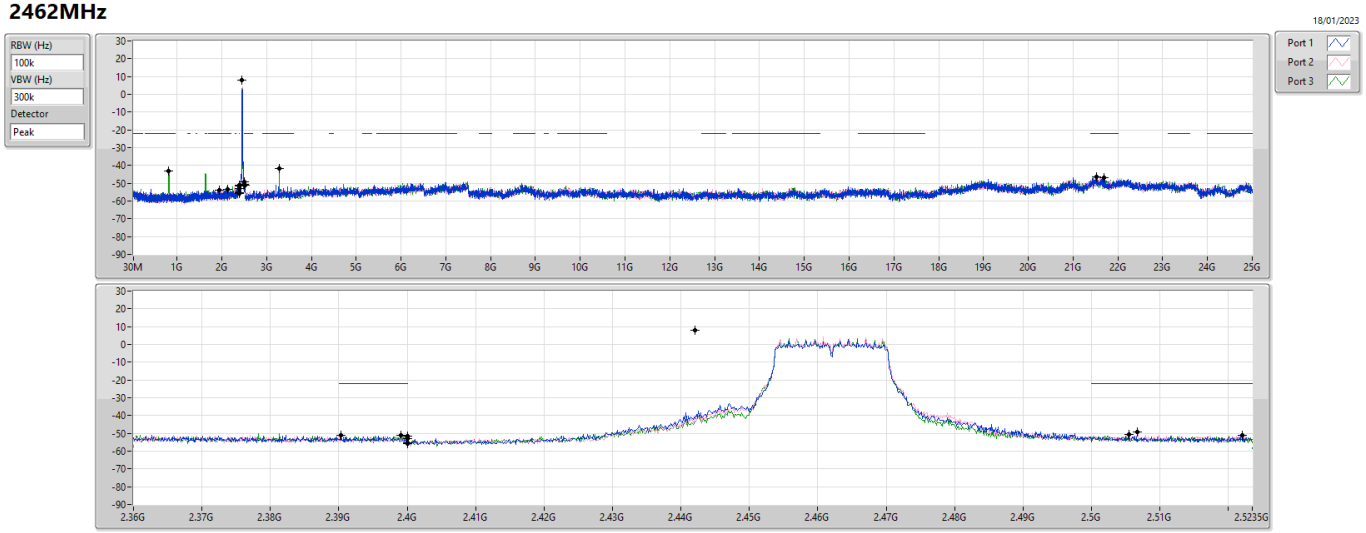
2437MHz



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
2.44208G	8.02	-21.98	1.62955G	-53.53	2.39992G	-45.66	2.4G	-46.18	2.50238G	-49.91	21.95724G	-46.15	1
2.44208G	8.02	-21.98	34.66M	-52.42	2.39824G	-42.95	2.4G	-44.68	2.51054G	-51.11	21.62291G	-46.98	2
2.44208G	8.02	-21.98	1.62722G	-42.19	2.39968G	-45.54	2.4G	-45.59	2.50118G	-51.49	3.24837G	-41.72	3

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_3TX **CSENdB**

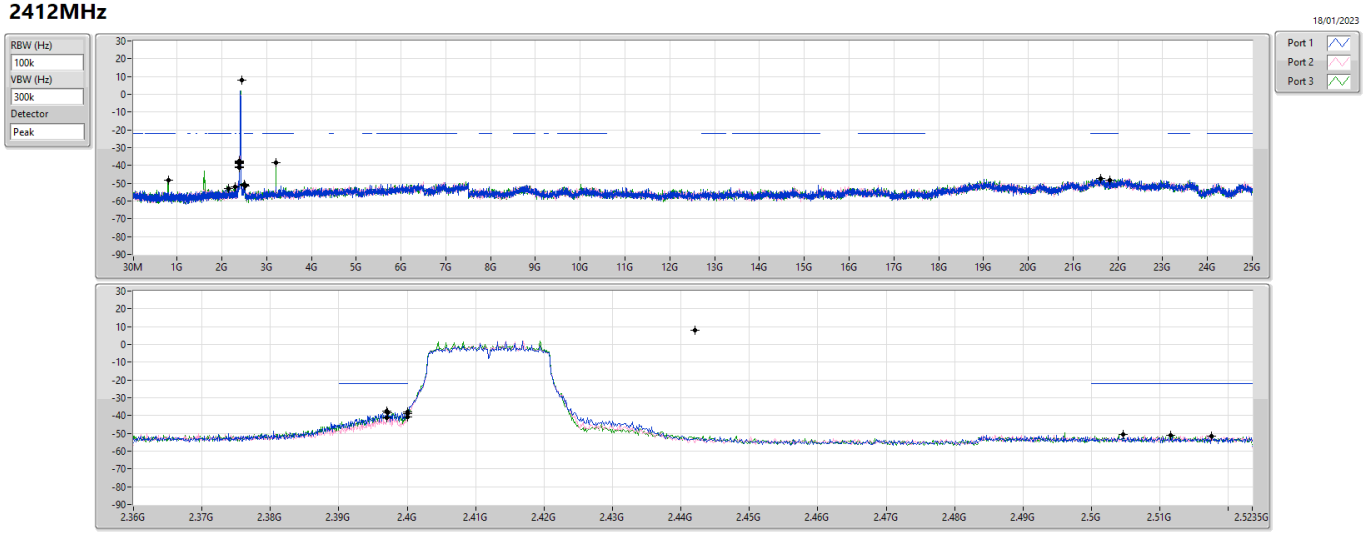
2462MHz



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
2.44208G	8.02	-21.98	2.1305G	-53.25	2.39032G	-51.11	2.4G	-55.94	2.5055G	-50.78	21.69314G	-47.05	1
2.44208G	8.02	-21.98	1.94526G	-53.73	2.39912G	-51.16	2.4G	-55.24	2.5067G	-49.42	21.52176G	-46.33	2
2.44208G	8.02	-21.98	814.05M	-42.97	2.4G	-51.61	2.4G	-53.15	2.52198G	-51.29	3.28208G	-41.52	3

2.4-2.4835GHz_802.11ac VHT20_Nss1,(MCS0)_3TX **CSENdB**

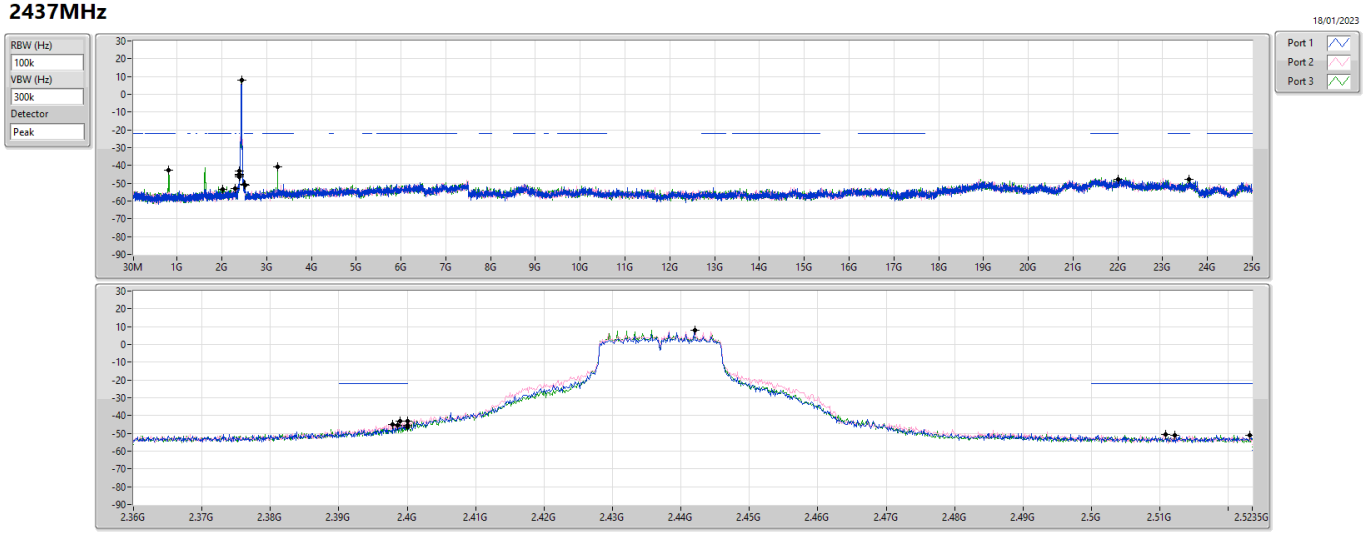
2412MHz



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
2.44208G	7.93	-22.07	2.15846G	-53.16	2.39704G	-37.37	2.4G	-38.12	2.5175G	-51.61	21.61448G	-47.34	1
2.44208G	7.93	-22.07	2.30408G	-51.87	2.39704G	-41.07	2.4G	-40.67	2.50462G	-50.51	21.81677G	-48.05	2
2.44208G	7.93	-22.07	809.39M	-48.28	2.39712G	-38.40	2.4G	-38.98	2.51158G	-51.09	3.21465G	-38.67	3

2.4-2.4835GHz_802.11ac VHT20_Nss1,(MCS0)_3TX **CSENdB**

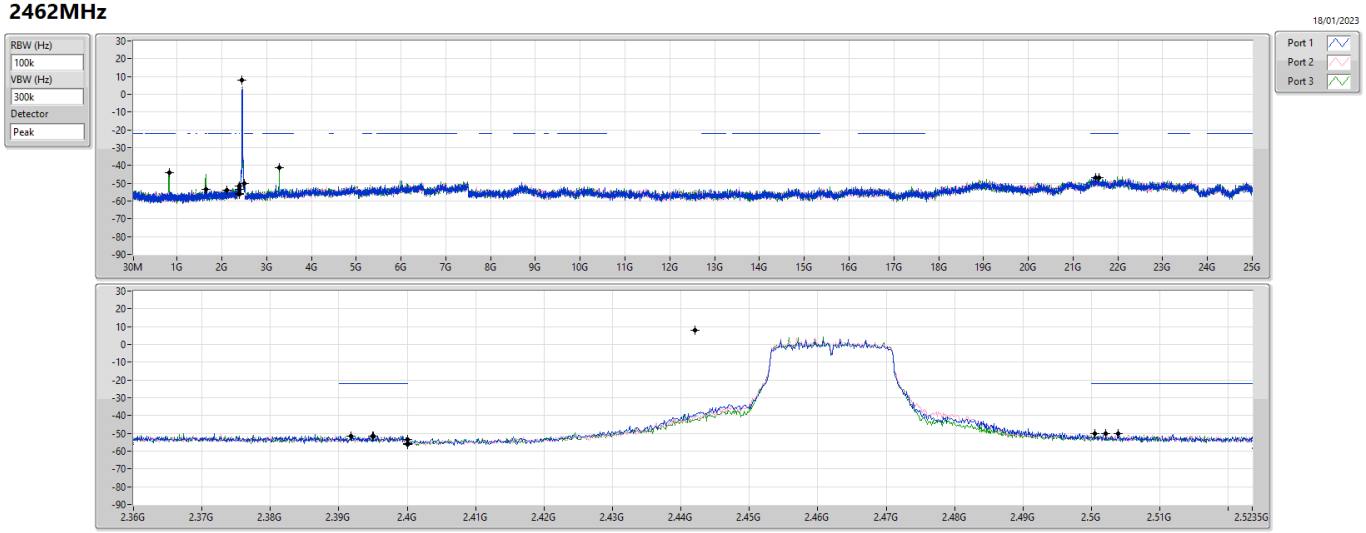
2437MHz



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
2.44208G	7.93	-22.07	2.02215G	-53.34	2.39864G	-45.37	2.4G	-46.39	2.51086G	-50.79	23.58679G	-47.94	1
2.44208G	7.93	-22.07	2.30175G	-52.75	2.39896G	-43.28	2.4G	-42.98	2.51214G	-51.01	22.0022G	-47.74	2
2.44208G	7.93	-22.07	810.55M	-42.88	2.39792G	-45.11	2.4G	-45.26	2.52318G	-50.87	3.24837G	-40.97	3

2.4-2.4835GHz_802.11ac VHT20_Nss1,(MCS0)_3TX **CSENdB**

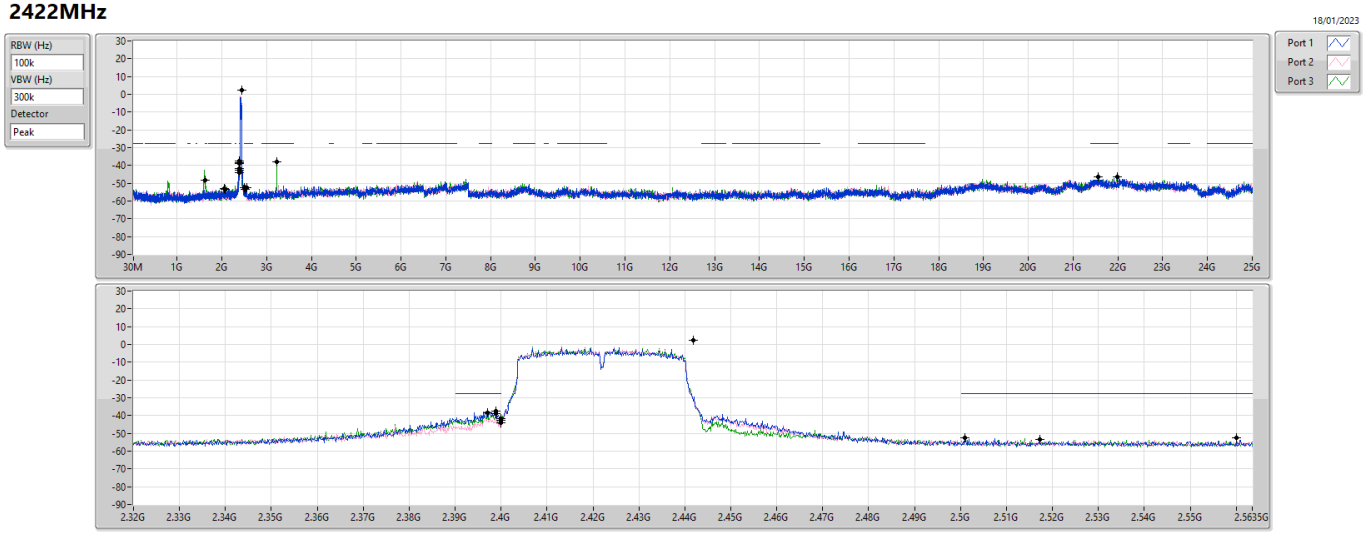
2462MHz



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
2.44208G	7.93	-22.07	1.64935G	-53.64	2.39504G	-51.56	2.4G	-55.57	2.5039G	-49.97	21.57514G	-46.93	1
2.44208G	7.93	-22.07	2.11652G	-53.97	2.39176G	-51.59	2.4G	-56.37	2.50206G	-50.35	21.50771G	-47.07	2
2.44208G	7.93	-22.07	823.37M	-44.15	2.39488G	-51.68	2.4G	-53.61	2.50046G	-49.98	3.28208G	-41.24	3

2.4-2.4835GHz_802.11ac VHT40_Nss1,(MCS0)_3TX **CSENdB**

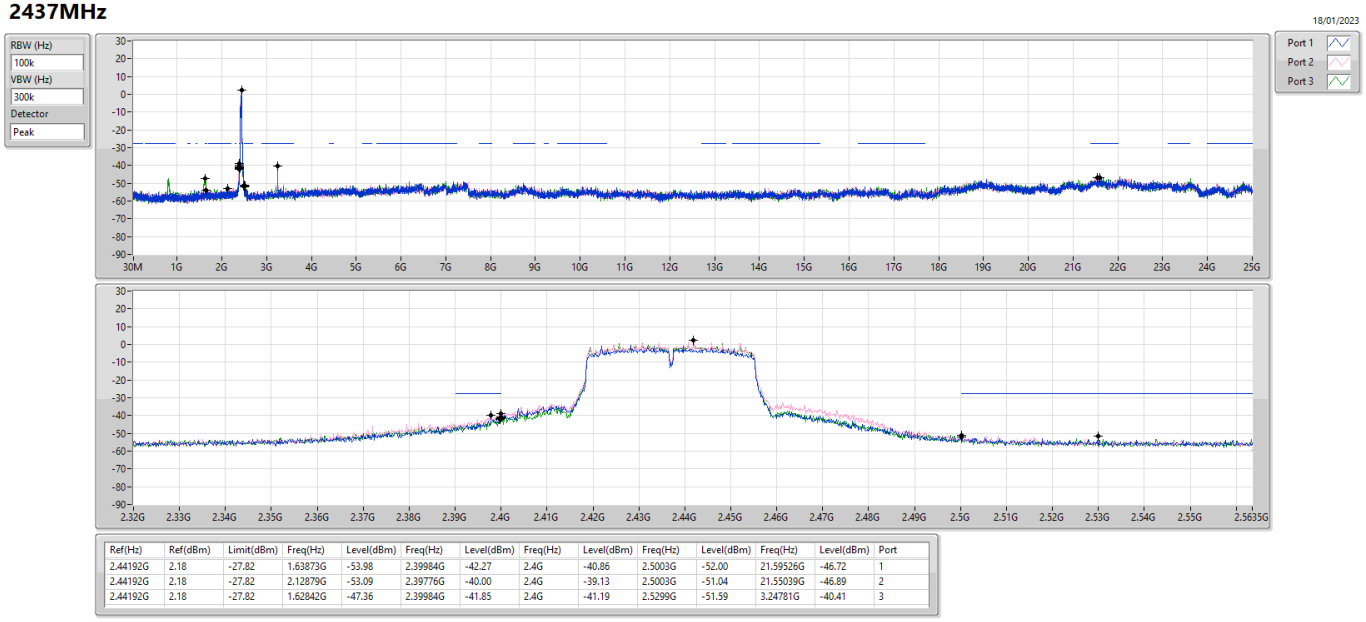
2422MHz



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
2.44192G	2.18	-27.82	2.06467G	-53.08	2.39888G	-37.46	2.4G	-41.65	2.50094G	-52.46	21.556G	-46.51	1
2.44192G	2.18	-27.82	2.07612G	-53.38	2.39888G	-38.97	2.4G	-44.27	2.51726G	-53.48	21.99351G	-46.38	2
2.44192G	2.18	-27.82	1.633G	-48.17	2.39712G	-38.64	2.4G	-42.43	2.56014G	-52.36	3.22818G	-38.16	3

2.4-2.4835GHz_802.11ac VHT40_Nss1,(MCS0)_3TX **CSENdB**

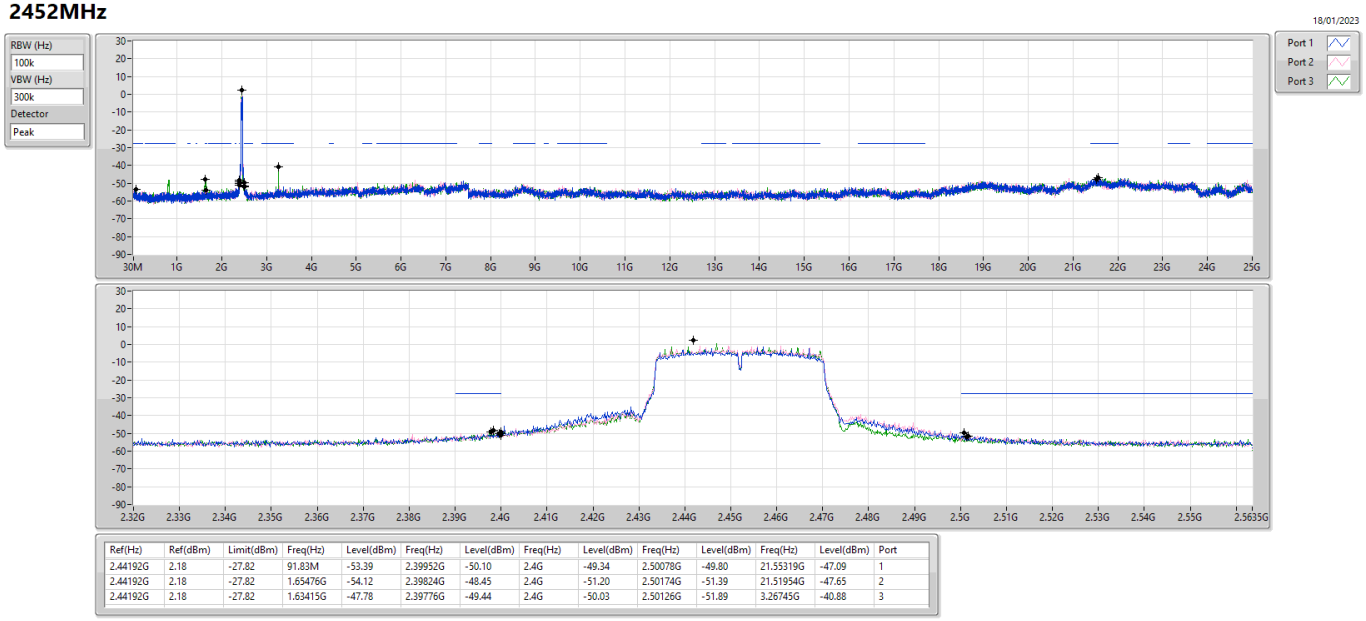
2437MHz



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
2.44192G	2.18	-27.82	1.63873G	-53.98	2.39984G	-42.27	2.4G	-40.86	2.5003G	-52.00	21.59526G	-46.72	1
2.44192G	2.18	-27.82	2.12879G	-53.09	2.39776G	-40.00	2.4G	-39.13	2.5003G	-51.04	21.55039G	-46.89	2
2.44192G	2.18	-27.82	1.62842G	-47.36	2.39984G	-41.85	2.4G	-41.19	2.5299G	-51.59	3.24781G	-40.41	3

2.4-2.4835GHz_802.11ac VHT40_Nss1,(MCS0)_3TX **CSENdB**

2452MHz

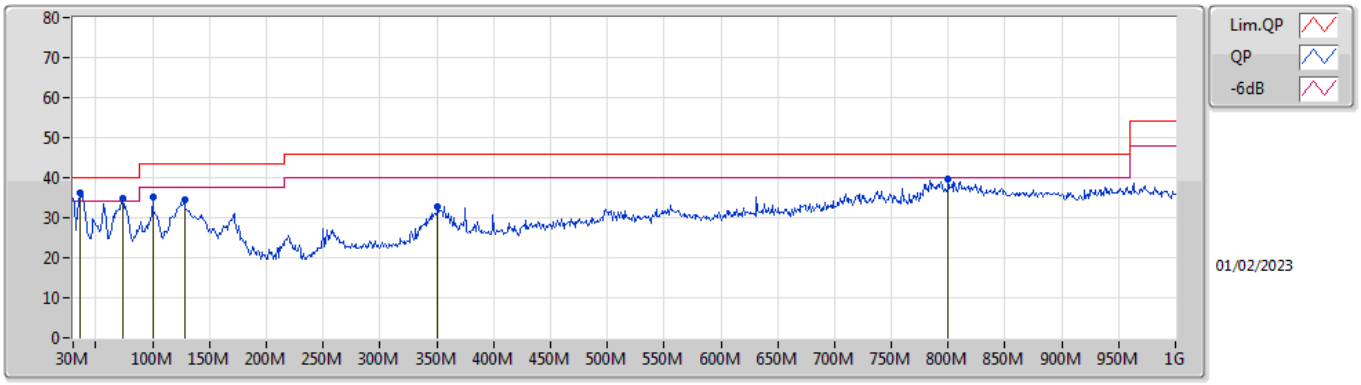


Ref(Hz)	Ref(dBm)	Limit(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Freq(Hz)	Level(dBm)	Port
2.44192G	2.18	-27.82	91.83M	-53.39	2.39952G	-50.10	2.4G	-49.34	2.50078G	-49.80	21.55319G	-47.09	1
2.44192G	2.18	-27.82	1.65476G	-54.12	2.39824G	-48.45	2.4G	-51.20	2.50174G	-51.39	21.51954G	-47.65	2
2.44192G	2.18	-27.82	1.63415G	-47.78	2.39776G	-49.44	2.4G	-50.03	2.50126G	-51.89	3.26745G	-40.88	3

Summary

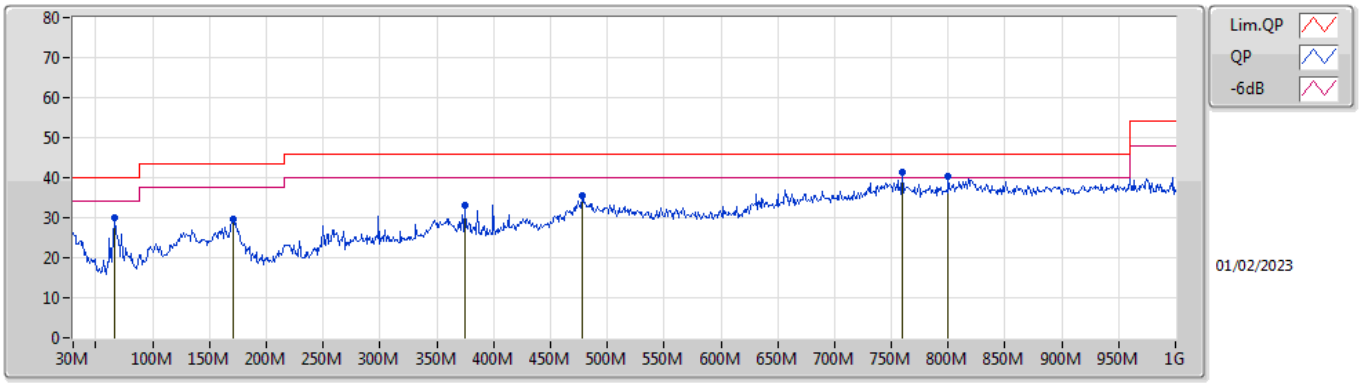
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	PK	35.82M	36.13	40.00	-3.87	Vertical

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)
PK	35.82M	36.13	40.00	-3.87	-9.69	3	Vertical	203	1.25	"Worst"	45.82	20.92	1.09	31.70
PK	73.65M	34.84	40.00	-5.16	-18.26	3	Vertical	95	1.00	-	53.10	12.22	1.49	31.97
PK	99.84M	35.13	43.50	-8.37	-13.70	3	Vertical	359	1.25	-	48.83	16.56	1.71	31.97
PK	127.97M	34.34	43.50	-9.16	-12.33	3	Vertical	205	1.00	-	46.67	17.74	1.92	31.99
PK	351.07M	32.78	46.00	-13.22	-8.56	3	Vertical	169	1.25	-	41.34	20.31	3.31	32.18
PK	800.18M	39.54	46.00	-6.46	-1.70	3	Vertical	41	1.25	-	41.24	25.61	5.20	32.51

Mode 1



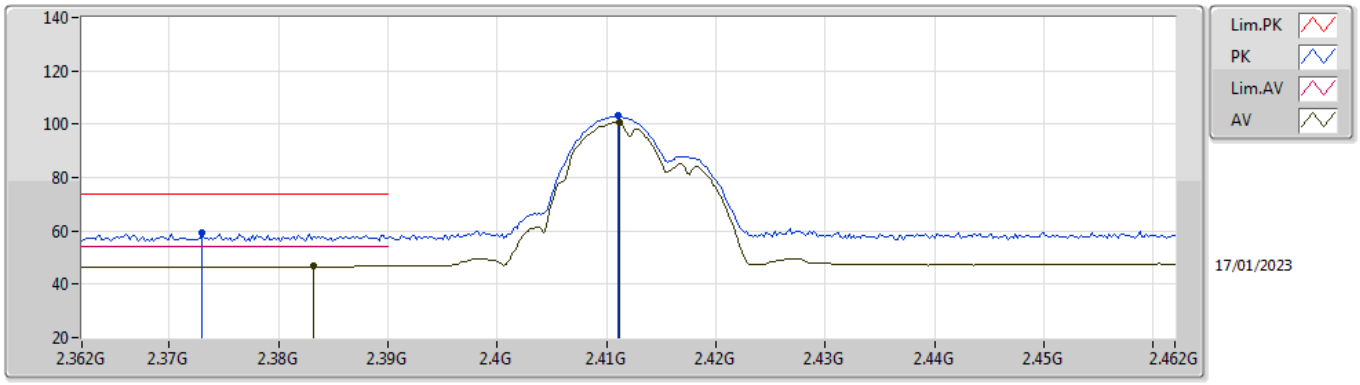
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB/m)	(m)		(°)	(m)		(dBuV/m)	(dB/m)	(dB)	(dB)
PK	66.86M	29.94	40.00	-10.06	-18.36	3	Horizontal	292	2.00	-	48.30	12.16	1.42	31.94
PK	170.65M	29.69	43.50	-13.81	-14.32	3	Horizontal	124	1.25	-	44.01	15.45	2.22	31.99
PK	374.35M	33.06	46.00	-12.94	-7.93	3	Horizontal	104	1.00	-	40.99	20.82	3.42	32.17
PK	478.14M	35.65	46.00	-10.35	-5.37	3	Horizontal	332	1.00	-	41.02	23.08	3.89	32.34
PK	759.44M	41.33	46.00	-4.67	-2.22	3	Horizontal	187	2.00	"Worst"	43.55	25.32	5.05	32.59
PK	800.18M	40.48	46.00	-5.52	-1.70	3	Horizontal	67	1.25	-	42.18	25.61	5.20	32.51

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	-	-	-	-	-	-	-	-	-	-	-
802.11ac VHT40_Nss1,(MCS0)_3TX	Pass	AV	2.3872G	53.99	54.00	-0.01	3	Vertical	232	2.20	-

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_3TX

2412MHz_TX

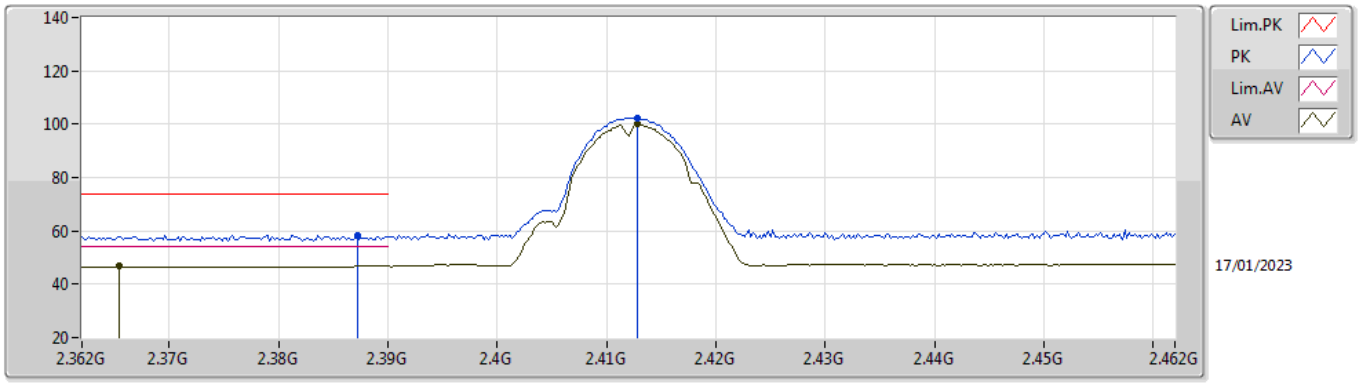


EUT Y_3TX
Setting 13.5
03-K-E-5

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	2.373G	59.38	74.00	-14.62	28.17	3	Vertical	280	1.80	-	27.24	3.97	-
AV	2.3832G	46.87	54.00	-7.13	15.59	3	Vertical	280	1.80	-	27.30	3.98	-
PK	2.411G	103.11	Inf	-Inf	71.66	3	Vertical	280	1.80	-	27.44	4.01	-
AV	2.4112G	100.54	Inf	-Inf	69.09	3	Vertical	280	1.80	-	27.44	4.01	-

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_3TX

2412MHz_TX

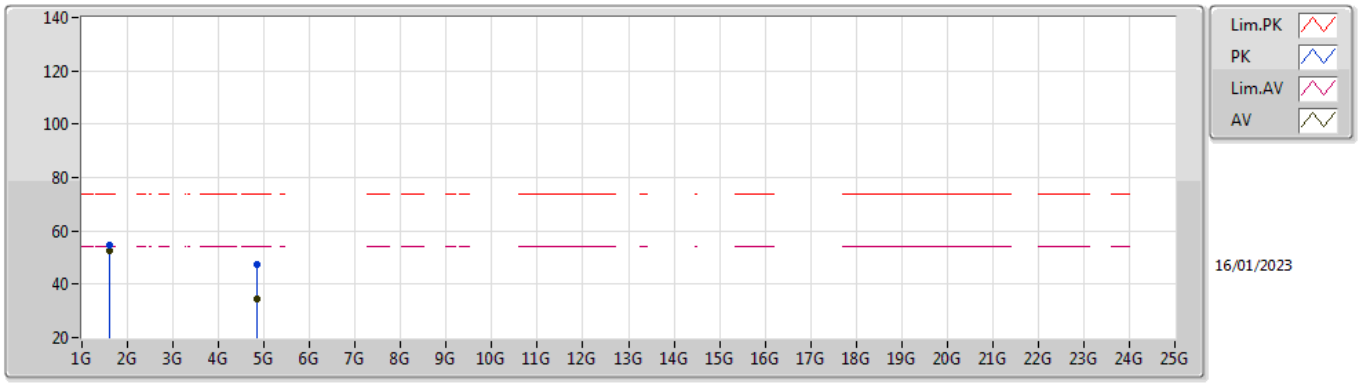


EUT Y_3TX
Setting 13.5
03-K-E-5

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	2.3872G	58.30	74.00	-15.70	26.99	3	Horizontal	141	1.80	-	27.32	3.99	-
AV	2.3654G	46.76	54.00	-7.24	15.60	3	Horizontal	141	1.80	-	27.19	3.97	-
PK	2.4128G	102.47	Inf	-Inf	71.01	3	Horizontal	141	1.80	-	27.45	4.01	-
AV	2.4128G	99.92	Inf	-Inf	68.46	3	Horizontal	141	1.80	-	27.45	4.01	-

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_3TX

2412MHz_TX

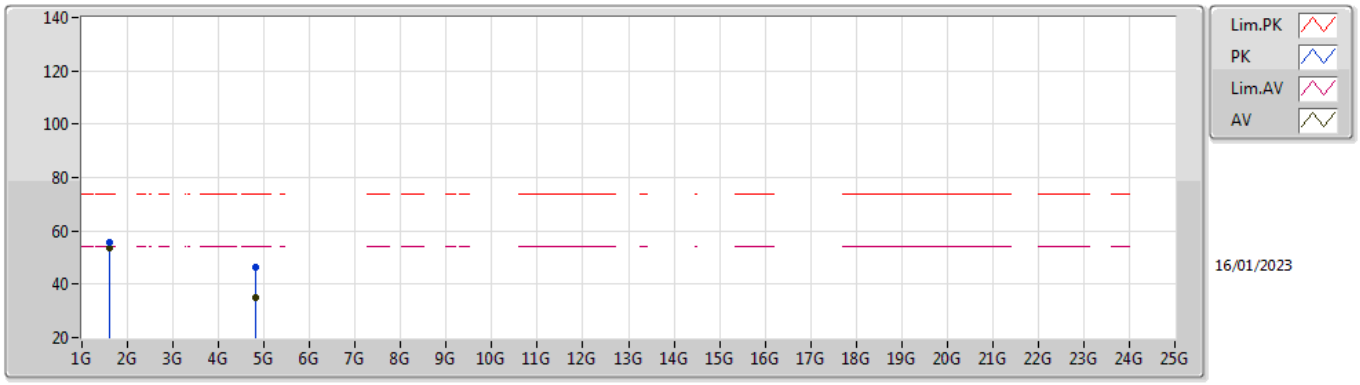


EUT Y_3TX
Setting 13.5
03-K-E-5

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	1.60806G	54.45	74.00	-19.55	59.87	3	Vertical	107	1.46	-	25.44	3.71	34.57
AV	1.60798G	52.78	54.00	-1.22	58.20	3	Vertical	107	1.46	-	25.44	3.71	34.57
PK	4.83456G	47.28	74.00	-26.72	43.22	3	Vertical	360	1.48	-	32.44	6.52	34.90
AV	4.83876G	34.54	54.00	-19.46	30.46	3	Vertical	360	1.48	-	32.46	6.52	34.90

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_3TX

2412MHz_TX

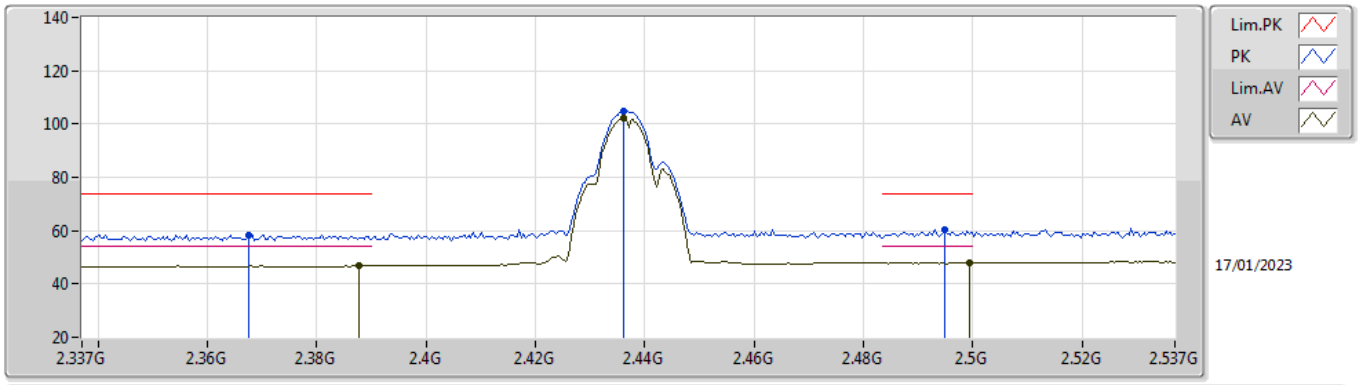


EUT Y_3TX
Setting 13.5
03-K-E-5

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	1.60806G	55.48	74.00	-18.52	60.90	3	Horizontal	48	1.76	-	25.44	3.71	34.57
AV	1.60798G	53.70	54.00	-0.30	59.12	3	Horizontal	48	1.76	-	25.44	3.71	34.57
PK	4.82442G	46.38	74.00	-27.62	42.37	3	Horizontal	137	1.00	-	32.40	6.51	34.90
AV	4.824G	34.95	54.00	-19.05	30.94	3	Horizontal	137	1.00	-	32.40	6.51	34.90

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_3TX

2437MHz_TX

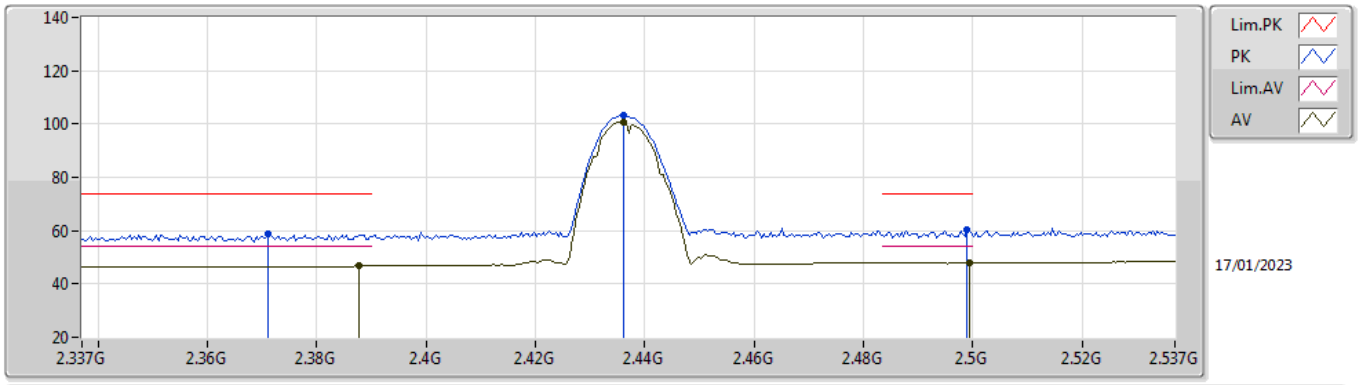


EUT Y_3TX
Setting 16.5
03-K-E-5

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	2.3674G	58.51	74.00	-15.49	27.34	3	Vertical	246	1.80	-	27.20	3.97	-
AV	2.3878G	46.92	54.00	-7.08	15.60	3	Vertical	246	1.80	-	27.33	3.99	-
PK	2.4362G	105.04	Inf	-Inf	73.46	3	Vertical	246	1.80	-	27.54	4.04	-
AV	2.4362G	102.41	Inf	-Inf	70.83	3	Vertical	246	1.80	-	27.54	4.04	-
PK	2.495G	60.20	74.00	-13.80	28.24	3	Vertical	246	1.80	-	27.87	4.09	-
AV	2.4994G	47.98	54.00	-6.02	15.98	3	Vertical	246	1.80	-	27.90	4.10	-

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_3TX

2437MHz_TX

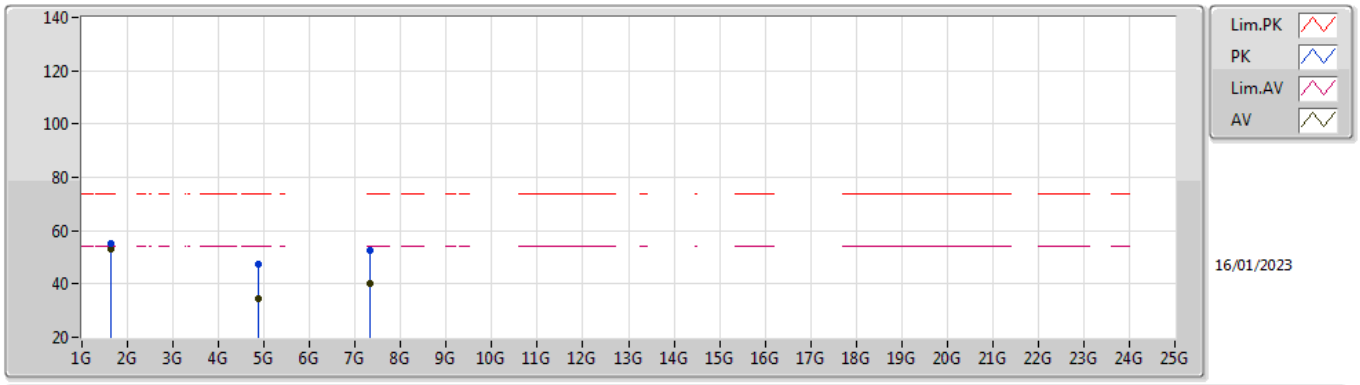


EUT Y_3TX
Setting 16.5
03-K-E-5

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	2.371G	58.67	74.00	-15.33	27.47	3	Horizontal	212	2.24	-	27.23	3.97	-
AV	2.3878G	46.92	54.00	-7.08	15.60	3	Horizontal	212	2.24	-	27.33	3.99	-
PK	2.4362G	103.43	Inf	-Inf	71.85	3	Horizontal	212	2.24	-	27.54	4.04	-
AV	2.4362G	100.57	Inf	-Inf	68.99	3	Horizontal	212	2.24	-	27.54	4.04	-
PK	2.499G	60.56	74.00	-13.44	28.57	3	Horizontal	212	2.24	-	27.89	4.10	-
AV	2.4994G	47.98	54.00	-6.02	15.98	3	Horizontal	212	2.24	-	27.90	4.10	-

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_3TX

2437MHz_TX

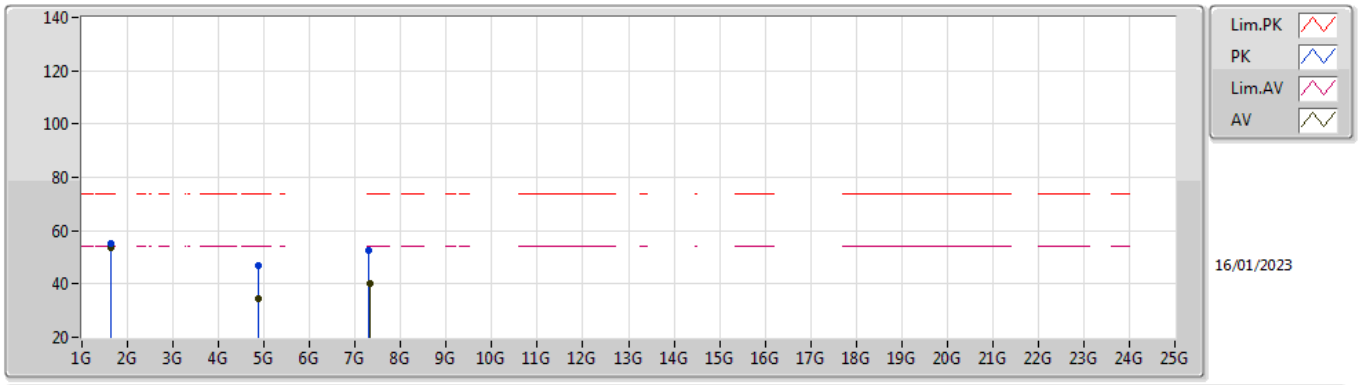


EUT Y_3TX
Setting 16.5
03-K-E-5

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	1.62462G	55.02	74.00	-18.98	60.57	3	Vertical	115	1.44	-	25.30	3.72	34.57
AV	1.6247G	53.35	54.00	-0.65	58.90	3	Vertical	115	1.44	-	25.30	3.72	34.57
PK	4.8653G	47.27	74.00	-26.73	43.11	3	Vertical	48	1.61	-	32.53	6.53	34.90
AV	4.88222G	34.38	54.00	-19.62	30.17	3	Vertical	48	1.61	-	32.56	6.54	34.89
PK	7.31394G	52.40	74.00	-21.60	42.10	3	Vertical	248	3.00	-	36.74	8.70	35.14
AV	7.31154G	40.12	54.00	-13.88	29.81	3	Vertical	248	3.00	-	36.75	8.70	35.14

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_3TX

2437MHz_TX

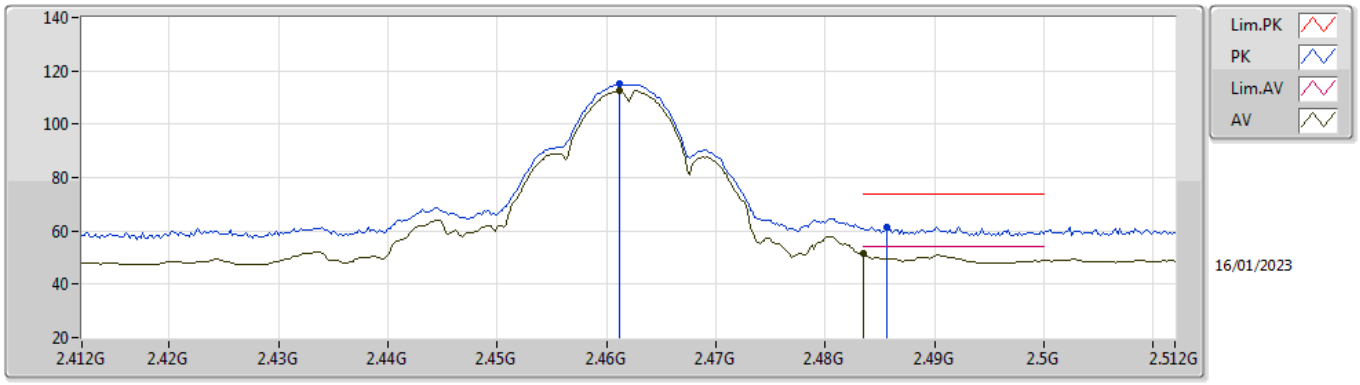


EUT Y_3TX
Setting 16.5
03-K-E-5

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	1.62458G	55.43	74.00	-18.57	60.98	3	Horizontal	48	1.60	-	25.30	3.72	34.57
AV	1.62466G	53.74	54.00	-0.26	59.29	3	Horizontal	48	1.60	-	25.30	3.72	34.57
PK	4.88882G	46.78	74.00	-27.22	42.55	3	Horizontal	135	1.15	-	32.58	6.54	34.89
AV	4.87394G	34.66	54.00	-19.34	30.47	3	Horizontal	135	1.15	-	32.55	6.54	34.90
PK	7.29876G	52.60	74.00	-21.40	42.24	3	Horizontal	224	1.55	-	36.80	8.70	35.14
AV	7.3116G	40.00	54.00	-14.00	29.69	3	Horizontal	224	1.55	-	36.75	8.70	35.14

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_3TX

2462MHz_TX

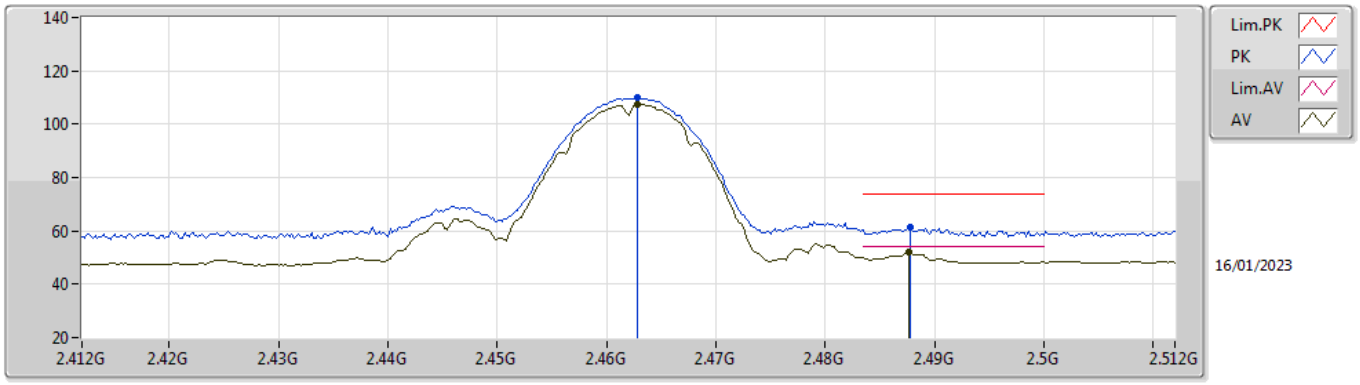


EUT Y_3TX
Setting 25
03-K-E-5

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	2.4612G	115.17	Inf	-Inf	83.44	3	Vertical	232	1.93	-	27.67	4.06	-
AV	2.4612G	112.84	Inf	-Inf	81.11	3	Vertical	232	1.93	-	27.67	4.06	-
PK	2.4856G	61.59	74.00	-12.41	29.69	3	Vertical	232	1.93	-	27.81	4.09	-
AV	2.4835G	51.30	54.00	-2.70	19.42	3	Vertical	232	1.93	-	27.80	4.08	-

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_3TX

2462MHz_TX

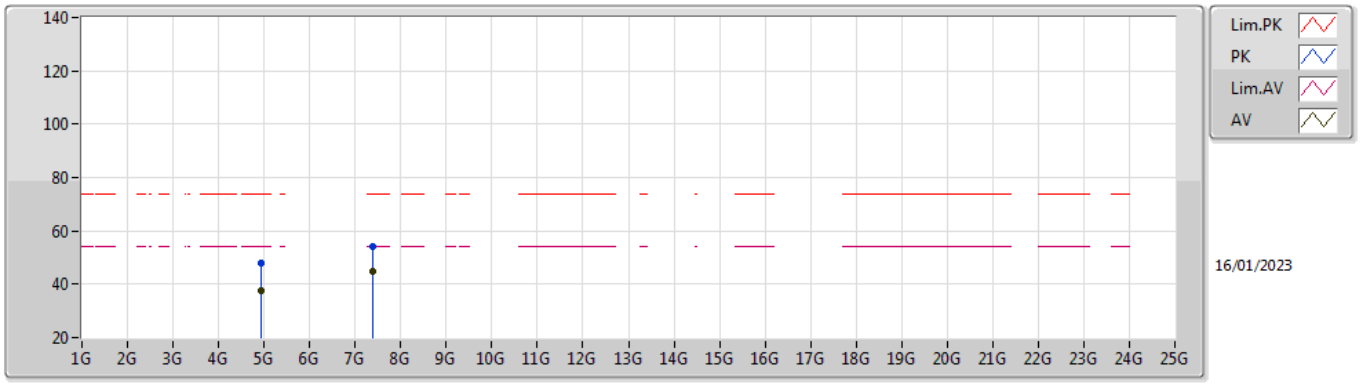


EUT Y_3TX
Setting 25
03-K-E-5

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	2.4628G	110.04	Inf	-Inf	78.30	3	Horizontal	331	1.80	-	27.68	4.06	-
AV	2.4628G	107.57	Inf	-Inf	75.83	3	Horizontal	331	1.80	-	27.68	4.06	-
PK	2.4878G	61.33	74.00	-12.67	29.41	3	Horizontal	331	1.80	-	27.83	4.09	-
AV	2.4876G	52.05	54.00	-1.95	20.13	3	Horizontal	331	1.80	-	27.83	4.09	-

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_3TX

2462MHz_TX

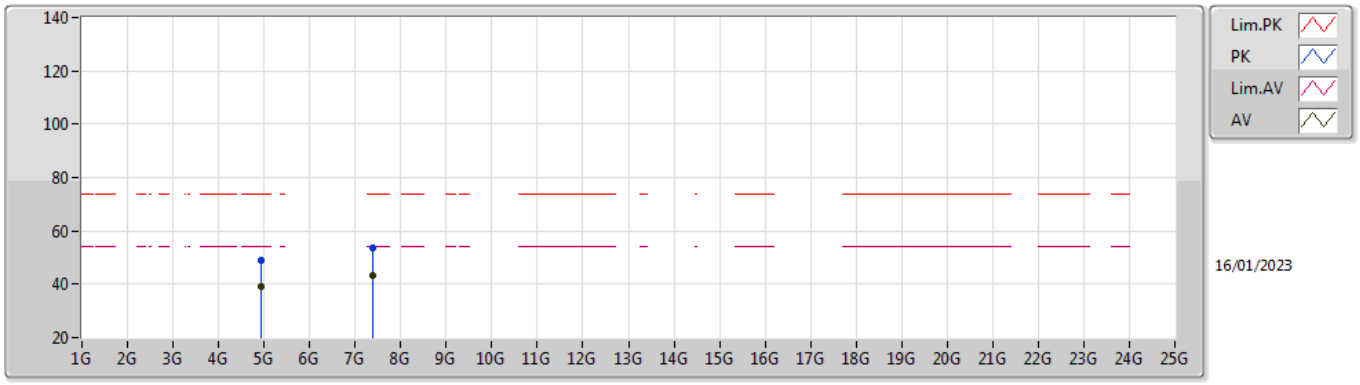


EUT Y_3TX
Setting 25
03-K-E-5

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	4.92424G	47.70	74.00	-26.30	43.28	3	Vertical	61	1.87	-	32.75	6.56	34.89
AV	4.92394G	37.63	54.00	-16.37	33.22	3	Vertical	61	1.87	-	32.74	6.56	34.89
PK	7.38444G	54.27	74.00	-19.73	44.15	3	Vertical	264	3.00	-	36.60	8.70	35.18
AV	7.3851G	44.91	54.00	-9.09	34.79	3	Vertical	264	3.00	-	36.60	8.70	35.18

2.4-2.4835GHz_802.11b_Nss1,(1Mbps)_3TX

2462MHz_TX

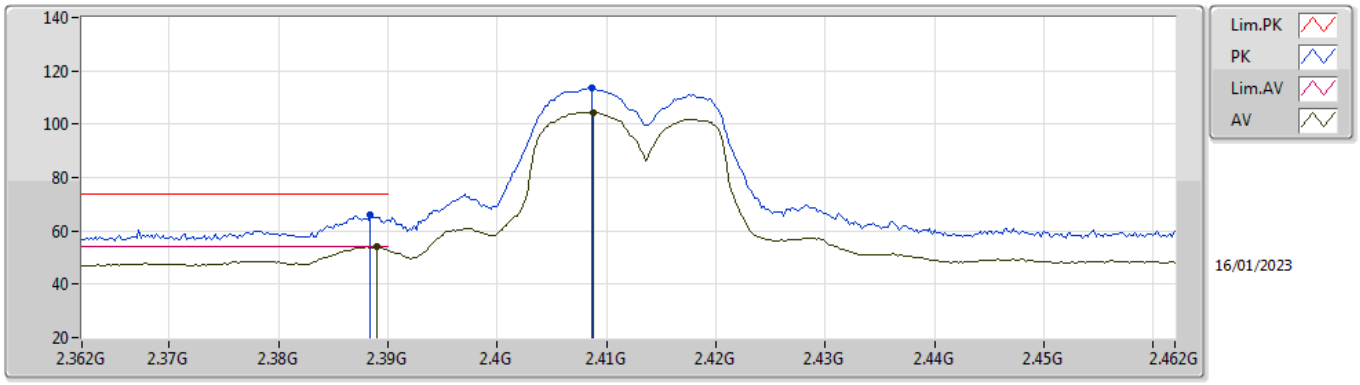


EUT Y_3TX
Setting 25
03-K-E-5

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	4.92424G	48.81	74.00	-25.19	44.39	3	Horizontal	137	1.34	-	32.75	6.56	34.89
AV	4.92394G	39.26	54.00	-14.74	34.85	3	Horizontal	137	1.34	-	32.74	6.56	34.89
PK	7.3875G	53.56	74.00	-20.44	43.44	3	Horizontal	291	1.39	-	36.60	8.70	35.18
AV	7.38666G	43.45	54.00	-10.55	33.33	3	Horizontal	291	1.39	-	36.60	8.70	35.18

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_3TX

2412MHz_TX

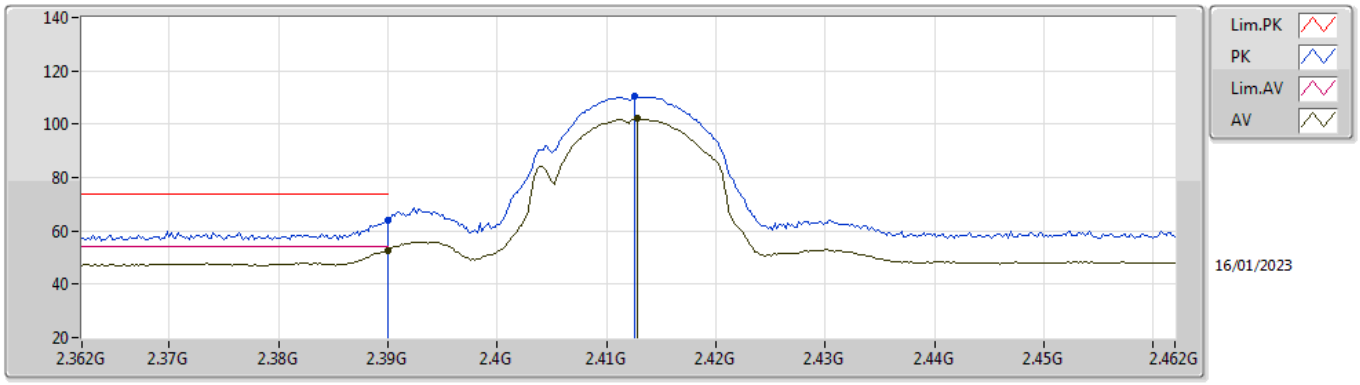


EUT Y_3TX
Setting 20.5
03-K-E-5

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	2.3884G	65.87	74.00	-8.13	34.55	3	Vertical	270	1.66	-	27.33	3.99	-
AV	2.389G	53.90	54.00	-0.10	22.58	3	Vertical	270	1.66	-	27.33	3.99	-
PK	2.4086G	113.71	Inf	-Inf	82.27	3	Vertical	270	1.66	-	27.43	4.01	-
AV	2.4088G	104.44	Inf	-Inf	72.99	3	Vertical	270	1.66	-	27.44	4.01	-

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_3TX

2412MHz_TX

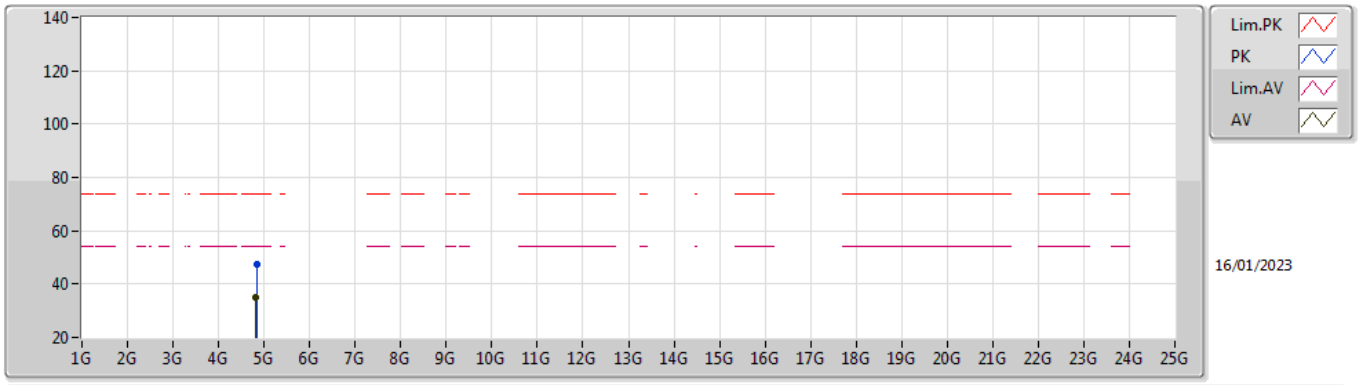


EUT Y_3TX
Setting 20.5
03-K-E-5

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	2.39G	64.17	74.00	-9.83	32.84	3	Horizontal	146	1.80	-	27.34	3.99	-
AV	2.39G	52.79	54.00	-1.21	21.46	3	Horizontal	146	1.80	-	27.34	3.99	-
PK	2.4126G	110.49	Inf	-Inf	79.03	3	Horizontal	146	1.80	-	27.45	4.01	-
AV	2.4128G	102.01	Inf	-Inf	70.55	3	Horizontal	146	1.80	-	27.45	4.01	-

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_3TX

2412MHz_TX

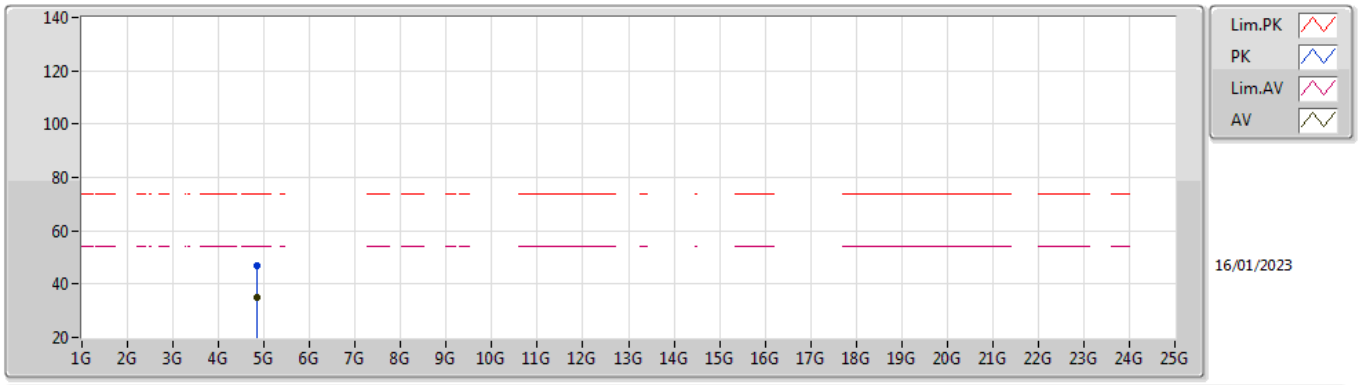


EUT Y_3TX
Setting 20.5
03-K-E-5

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	4.82982G	47.17	74.00	-26.83	43.14	3	Vertical	-0	2.81	-	32.42	6.51	34.90
AV	4.82838G	35.22	54.00	-18.78	31.20	3	Vertical	-0	2.81	-	32.41	6.51	34.90

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_3TX

2412MHz_TX

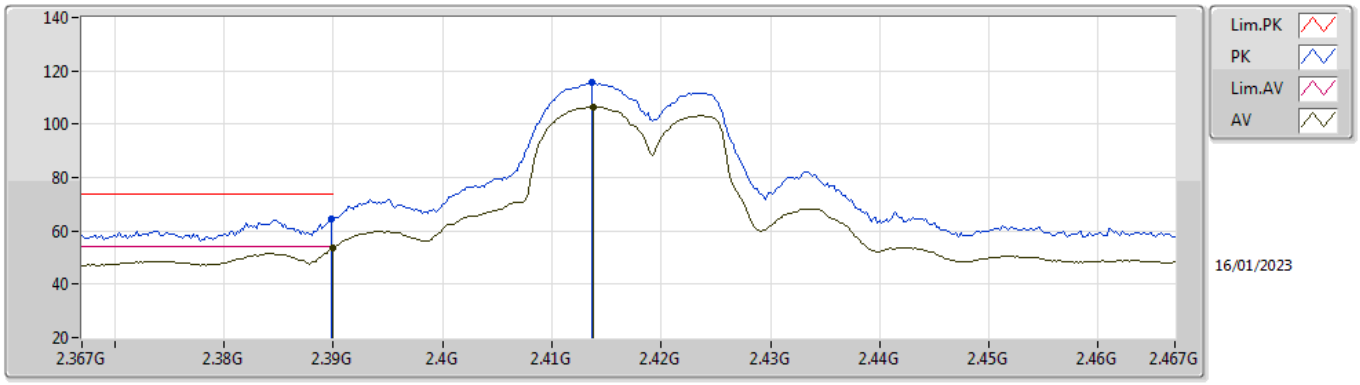


EUT Y_3TX
Setting 20.5
03-K-E-5

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	4.83792G	46.96	74.00	-27.04	42.89	3	Horizontal	261	1.80	-	32.45	6.52	34.90
AV	4.83024G	35.24	54.00	-18.76	31.20	3	Horizontal	261	1.80	-	32.42	6.52	34.90

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_3TX

2417MHz_TX

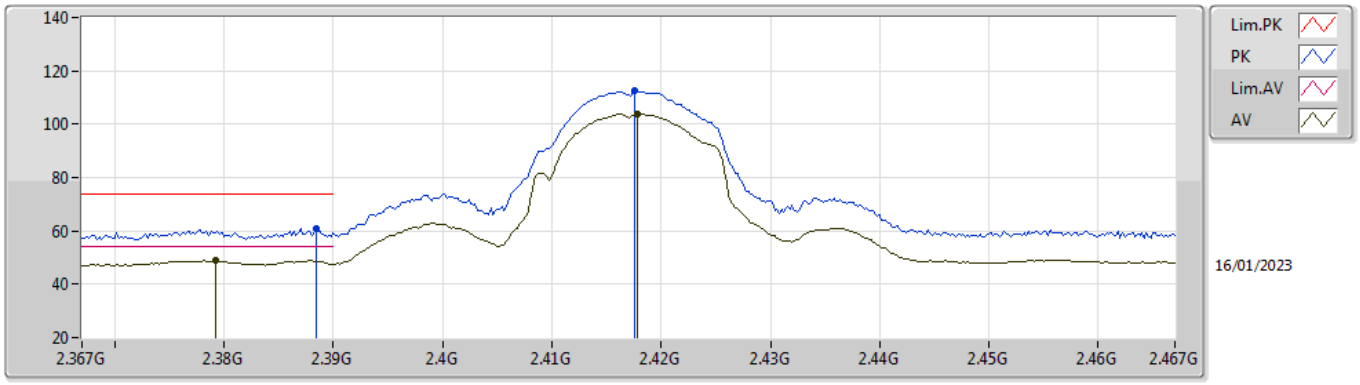


EUT Y_3TX
Setting 23
03-K-E-5

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	64.34	74.00	-9.66	33.01	3	Vertical	273	1.66	-	27.34	3.99	-
AV	2.39G	53.55	54.00	-0.45	22.22	3	Vertical	273	1.66	-	27.34	3.99	-
PK	2.4136G	115.61	Inf	-Inf	84.15	3	Vertical	273	1.66	-	27.45	4.01	-
AV	2.4138G	106.58	Inf	-Inf	75.11	3	Vertical	273	1.66	-	27.46	4.01	-

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_3TX

2417MHz_TX

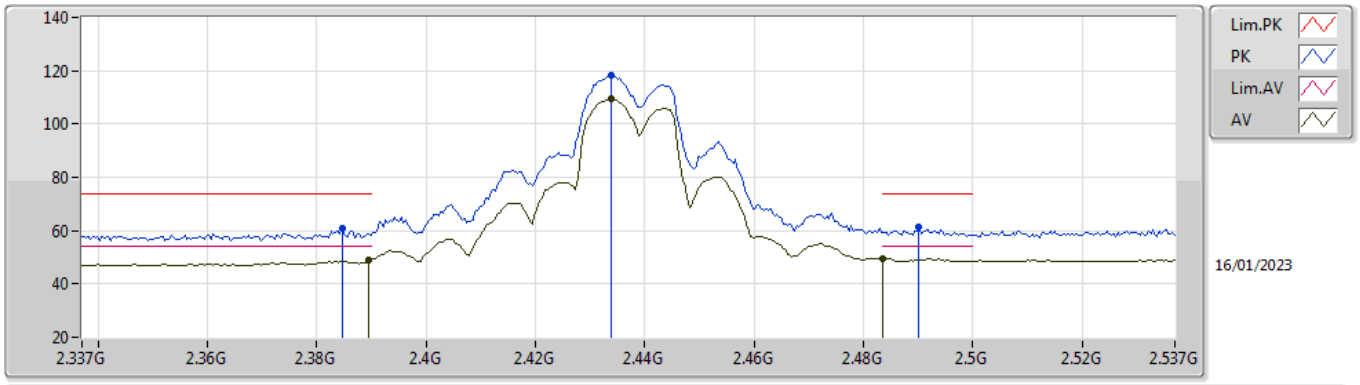


EUT Y_3TX
Setting 23
03-K-E-5

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	2.3884G	61.03	74.00	-12.97	29.71	3	Horizontal	146	1.70	-	27.33	3.99	-
AV	2.3792G	48.90	54.00	-5.10	17.64	3	Horizontal	146	1.70	-	27.28	3.98	-
PK	2.4176G	112.35	Inf	-Inf	80.86	3	Horizontal	146	1.70	-	27.47	4.02	-
AV	2.4178G	103.85	Inf	-Inf	72.36	3	Horizontal	146	1.70	-	27.47	4.02	-

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_3TX

2437MHz_TX

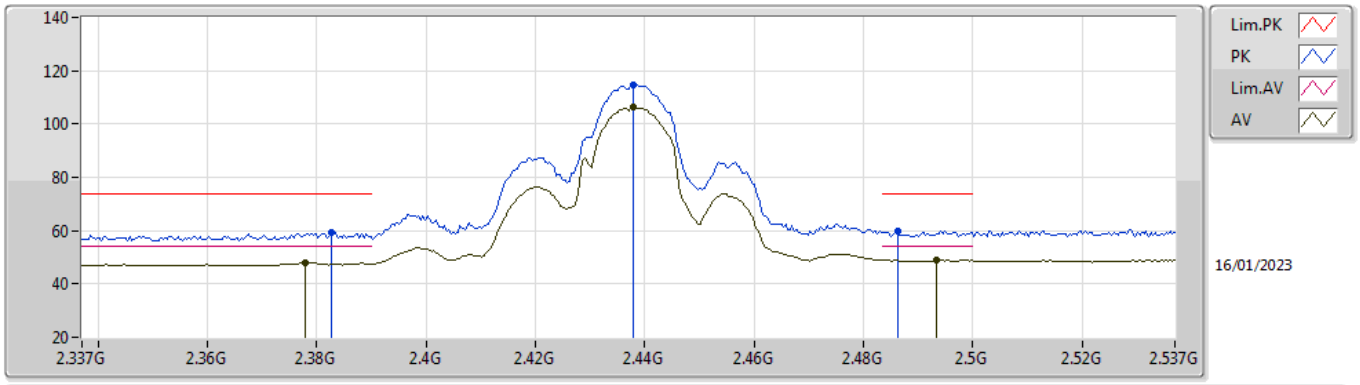


EUT Y_3TX
Setting 26
03-K-E-5

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	2.3846G	60.62	74.00	-13.38	29.33	3	Vertical	271	1.89	-	27.31	3.98	-
AV	2.3894G	48.78	54.00	-5.22	17.45	3	Vertical	271	1.89	-	27.34	3.99	-
PK	2.4338G	118.31	Inf	-Inf	86.74	3	Vertical	271	1.89	-	27.54	4.03	-
AV	2.4338G	109.27	Inf	-Inf	77.70	3	Vertical	271	1.89	-	27.54	4.03	-
PK	2.4902G	61.29	74.00	-12.71	29.36	3	Vertical	271	1.89	-	27.84	4.09	-
AV	2.4835G	49.50	54.00	-4.50	17.62	3	Vertical	271	1.89	-	27.80	4.08	-

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_3TX

2437MHz_TX

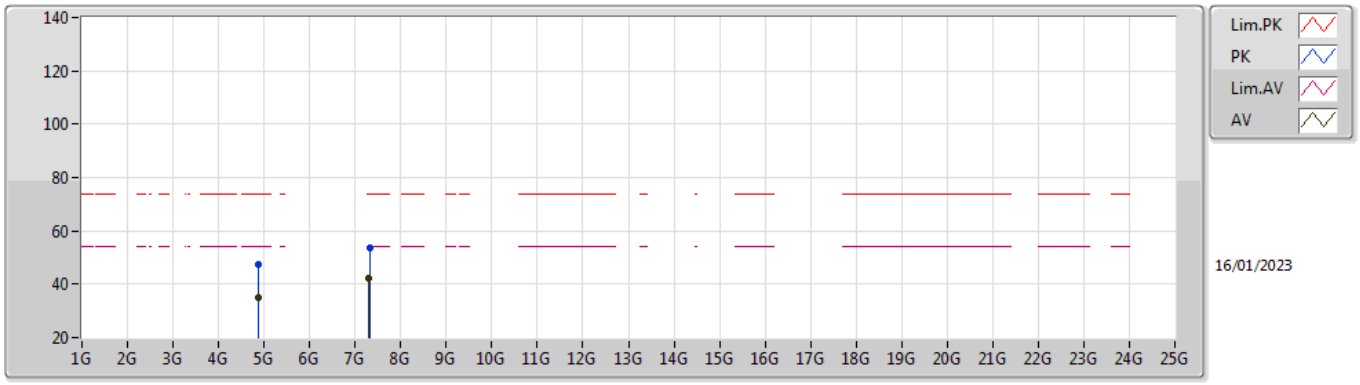


EUT Y_3TX
Setting 26
03-K-E-5

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	2.3826G	59.40	74.00	-14.60	28.12	3	Horizontal	148	1.57	-	27.30	3.98	-
AV	2.3778G	48.03	54.00	-5.97	16.78	3	Horizontal	148	1.57	-	27.27	3.98	-
PK	2.4378G	114.86	Inf	-Inf	83.27	3	Horizontal	148	1.57	-	27.55	4.04	-
AV	2.4378G	106.39	Inf	-Inf	74.80	3	Horizontal	148	1.57	-	27.55	4.04	-
PK	2.4862G	59.76	74.00	-14.24	27.85	3	Horizontal	148	1.57	-	27.82	4.09	-
AV	2.4934G	49.14	54.00	-4.86	17.19	3	Horizontal	148	1.57	-	27.86	4.09	-

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_3TX

2437MHz_TX

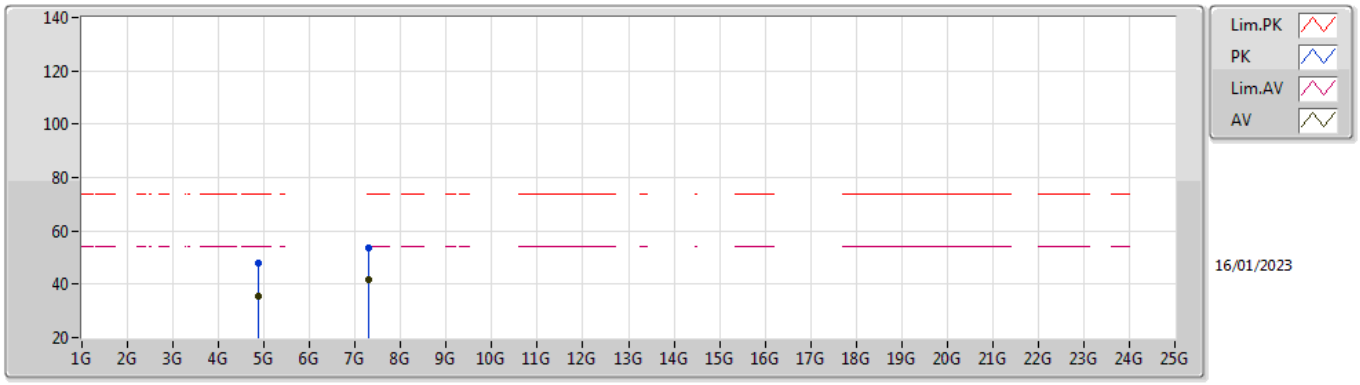


EUT Y_3TX
Setting 26
03-K-E-5

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	4.86602G	47.43	74.00	-26.57	43.27	3	Vertical	129	3.00	-	32.53	6.53	34.90
AV	4.87766G	35.15	54.00	-18.85	30.94	3	Vertical	129	3.00	-	32.56	6.54	34.89
PK	7.32228G	53.68	74.00	-20.32	43.42	3	Vertical	260	1.27	-	36.71	8.70	35.15
AV	7.30428G	42.08	54.00	-11.92	31.74	3	Vertical	260	1.27	-	36.78	8.70	35.14

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_3TX

2437MHz_TX

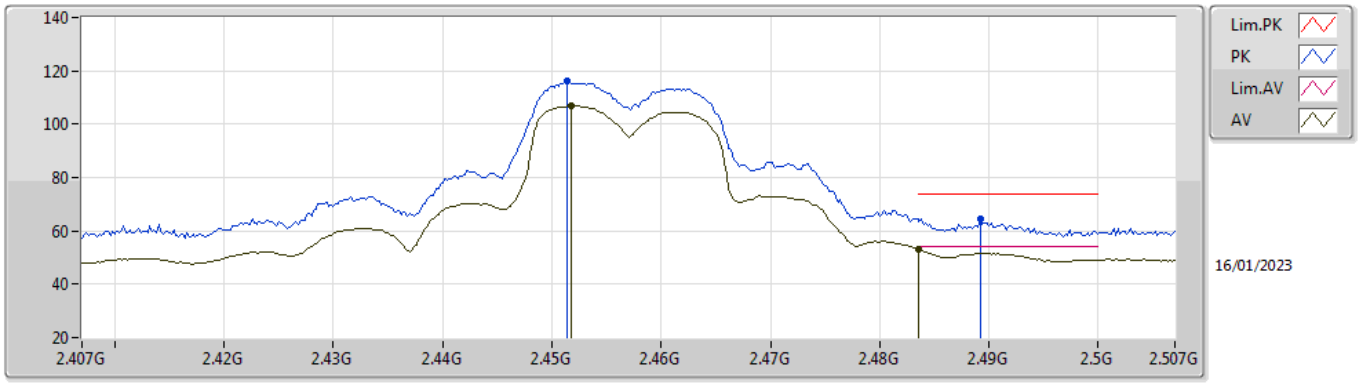


EUT Y_3TX
Setting 26
03-K-E-5

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	4.88342G	48.02	74.00	-25.98	43.80	3	Horizontal	111	1.00	-	32.57	6.54	34.89
AV	4.87388G	35.65	54.00	-18.35	31.46	3	Horizontal	111	1.00	-	32.55	6.54	34.90
PK	7.30968G	53.43	74.00	-20.57	43.11	3	Horizontal	304	1.95	-	36.76	8.70	35.14
AV	7.30866G	41.72	54.00	-12.28	31.39	3	Horizontal	304	1.95	-	36.77	8.70	35.14

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_3TX

2457MHz_TX

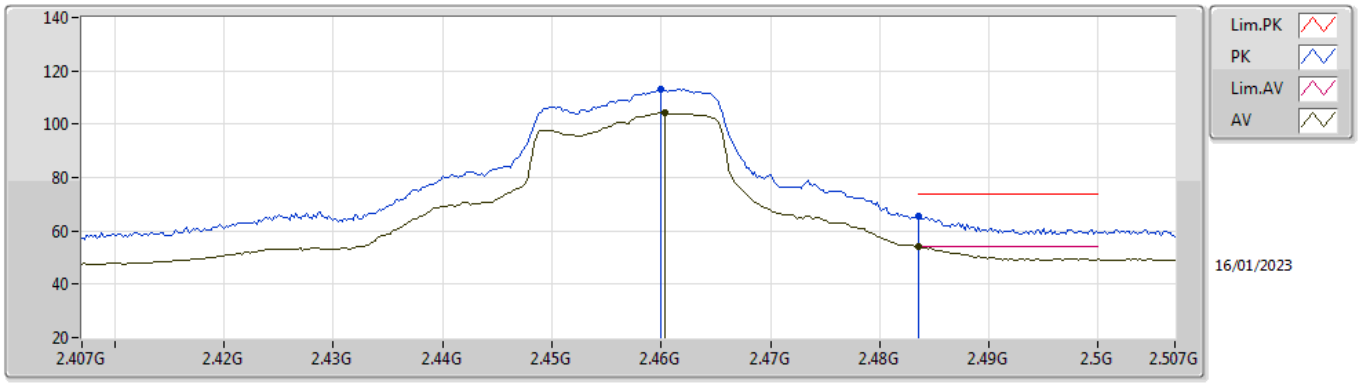


EUT Y_3TX
Setting 24.5
03-K-E-5

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	2.4514G	116.08	Inf	-Inf	84.42	3	Vertical	231	1.95	-	27.61	4.05	-
AV	2.4518G	106.95	Inf	-Inf	75.29	3	Vertical	231	1.95	-	27.61	4.05	-
PK	2.4892G	64.60	74.00	-9.40	32.67	3	Vertical	231	1.95	-	27.84	4.09	-
AV	2.4835G	53.10	54.00	-0.90	21.22	3	Vertical	231	1.95	-	27.80	4.08	-

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_3TX

2457MHz_TX

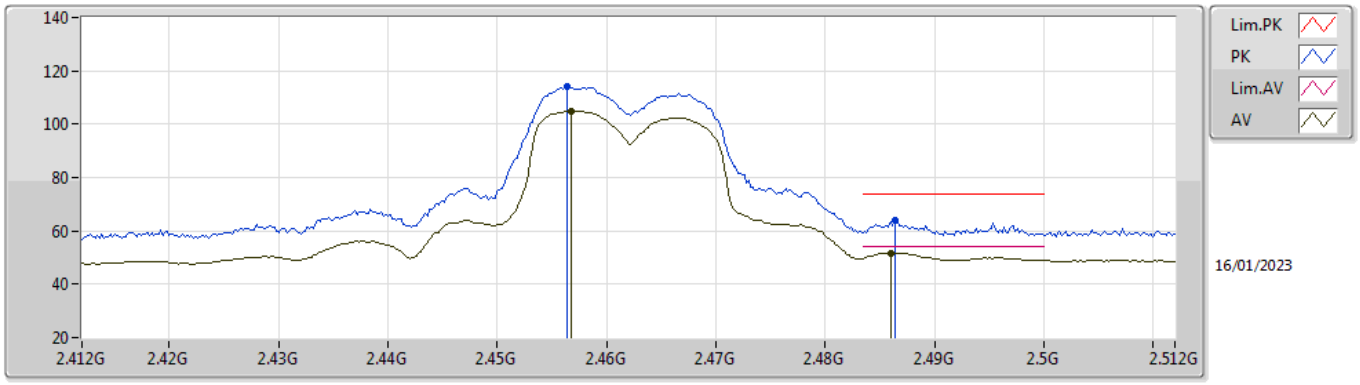


EUT Y_3TX
Setting 24.5
03-K-E-5

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	2.46G	112.99	Inf	-Inf	81.27	3	Horizontal	210	2.07	-	27.66	4.06	-
AV	2.4604G	104.33	Inf	-Inf	72.61	3	Horizontal	210	2.07	-	27.66	4.06	-
PK	2.4835G	65.70	74.00	-8.30	33.82	3	Horizontal	210	2.07	-	27.80	4.08	-
AV	2.4836G	53.94	54.00	-0.06	22.06	3	Horizontal	210	2.07	-	27.80	4.08	-

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_3TX

2462MHz_TX

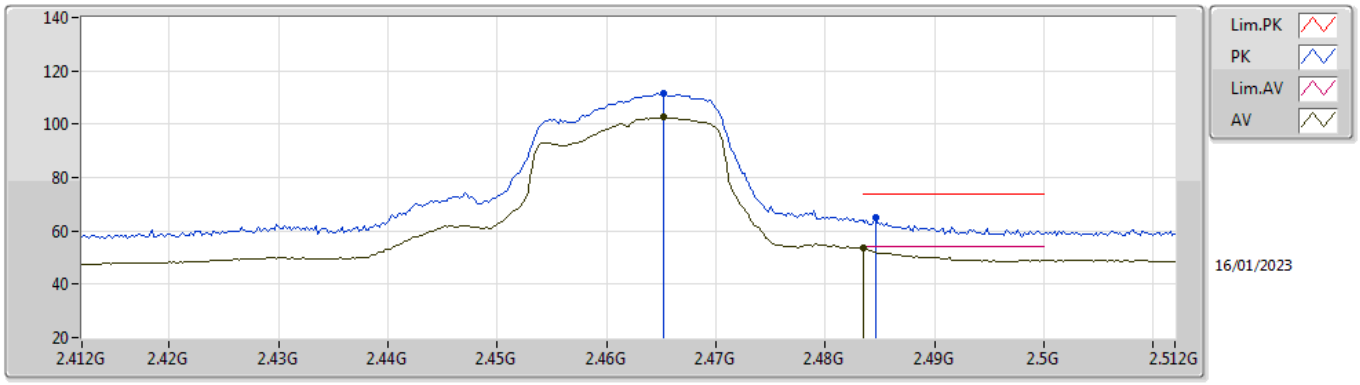


EUT Y_3TX
Setting 22.5
03-K-E-5

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	2.4564G	113.96	Inf	-Inf	82.26	3	Vertical	232	1.90	-	27.64	4.06	-
AV	2.4568G	105.08	Inf	-Inf	73.38	3	Vertical	232	1.90	-	27.64	4.06	-
PK	2.4864G	63.96	74.00	-10.04	32.05	3	Vertical	232	1.90	-	27.82	4.09	-
AV	2.486G	51.70	54.00	-2.30	19.79	3	Vertical	232	1.90	-	27.82	4.09	-

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_3TX

2462MHz_TX

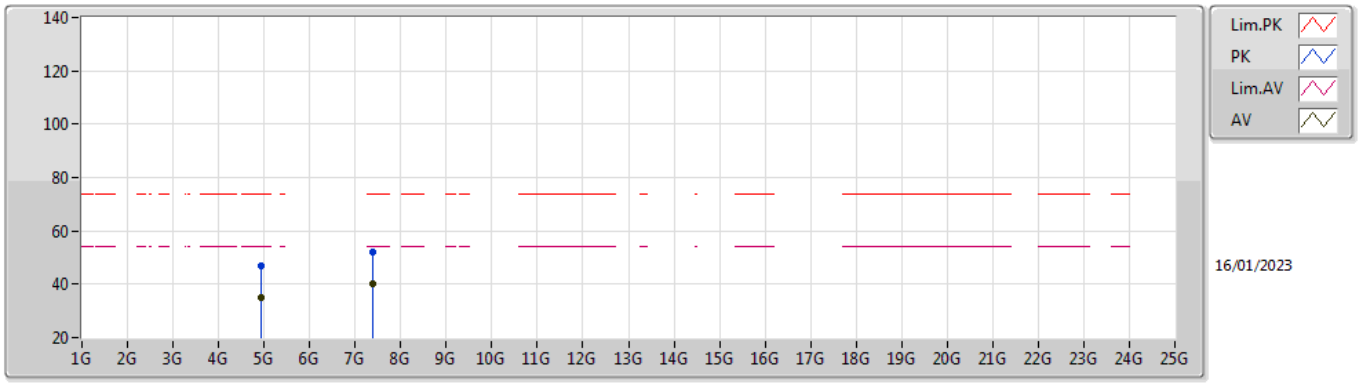


EUT Y_3TX
Setting 22.5
03-K-E-5

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	2.4652G	111.48	Inf	-Inf	79.72	3	Horizontal	208	1.92	-	27.69	4.07	-
AV	2.4652G	102.60	Inf	-Inf	70.84	3	Horizontal	208	1.92	-	27.69	4.07	-
PK	2.4846G	65.12	74.00	-8.88	33.23	3	Horizontal	208	1.92	-	27.81	4.08	-
AV	2.4835G	53.39	54.00	-0.61	21.51	3	Horizontal	208	1.92	-	27.80	4.08	-

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_3TX

2462MHz_TX

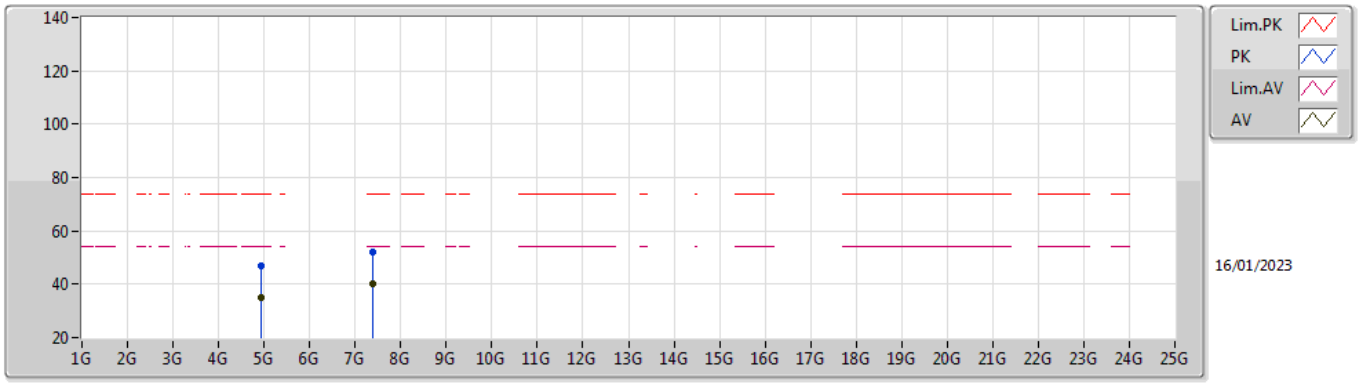


EUT Y_3TX
Setting 22.5
03-K-E-5

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	4.92632G	47.01	74.00	-26.99	42.58	3	Vertical	152	1.02	-	32.76	6.56	34.89
AV	4.92874G	35.00	54.00	-19.00	30.56	3	Vertical	152	1.02	-	32.77	6.56	34.89
PK	7.39044G	52.21	74.00	-21.79	42.09	3	Vertical	342	2.52	-	36.60	8.70	35.18
AV	7.38794G	40.38	54.00	-13.62	30.26	3	Vertical	342	2.52	-	36.60	8.70	35.18

2.4-2.4835GHz_802.11g_Nss1,(6Mbps)_3TX

2462MHz_TX

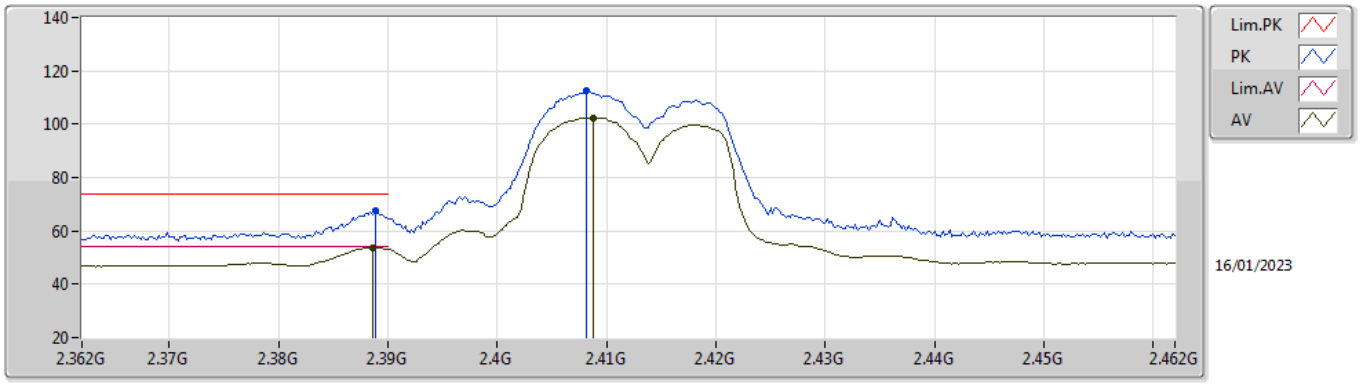


EUT Y_3TX
Setting 22.5
03-K-E-5

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	4.92706G	46.96	74.00	-27.04	42.53	3	Horizontal	294	2.96	-	32.76	6.56	34.89
AV	4.92522G	35.18	54.00	-18.82	30.76	3	Horizontal	294	2.96	-	32.75	6.56	34.89
PK	7.38798G	51.86	74.00	-22.14	41.74	3	Horizontal	163	1.93	-	36.60	8.70	35.18
AV	7.3899G	40.29	54.00	-13.71	30.17	3	Horizontal	163	1.93	-	36.60	8.70	35.18

2.4-2.4835GHz_802.11ac VHT20_Nss1,(MCS0)_3TX

2412MHz_TX

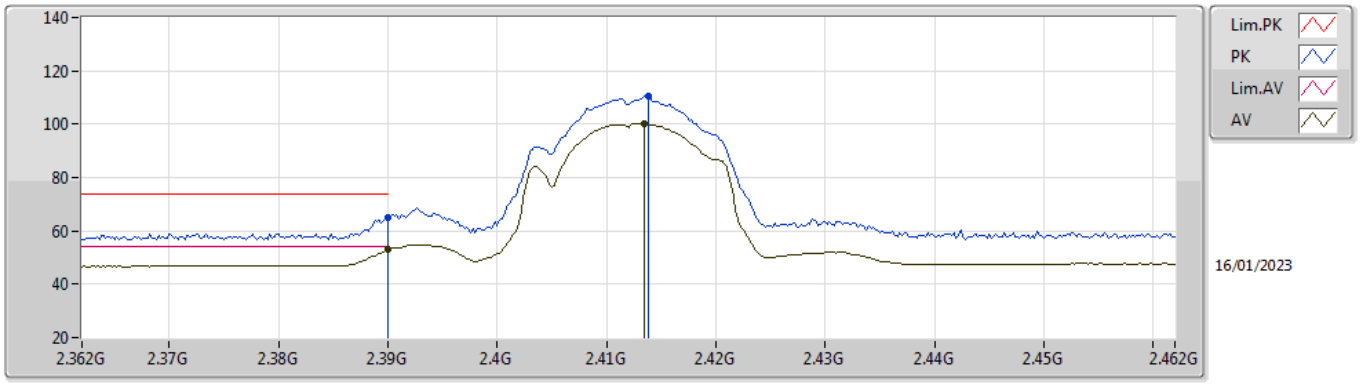


EUT Y_3TX
Setting 19.5
03-K-E-5

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	67.77	74.00	-6.23	36.45	3	Vertical	271	1.71	-	27.33	3.99	-
AV	2.3886G	53.78	54.00	-0.22	22.46	3	Vertical	271	1.71	-	27.33	3.99	-
PK	2.4082G	112.59	Inf	-Inf	81.15	3	Vertical	271	1.71	-	27.43	4.01	-
AV	2.4088G	102.49	Inf	-Inf	71.04	3	Vertical	271	1.71	-	27.44	4.01	-

2.4-2.4835GHz_802.11ac VHT20_Nss1,(MCS0)_3TX

2412MHz_TX

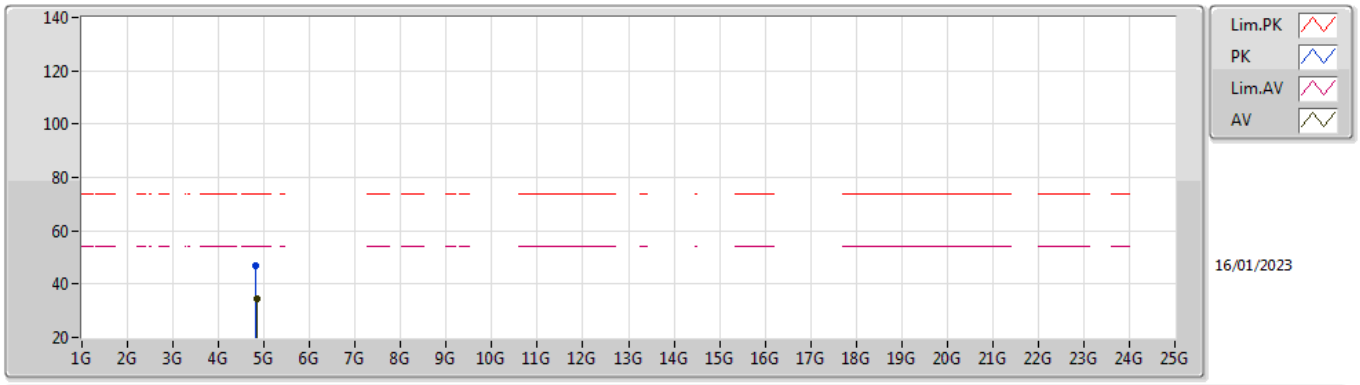


EUT Y_3TX
Setting 19.5
03-K-E-5

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	2.39G	65.02	74.00	-8.98	33.69	3	Horizontal	146	1.77	-	27.34	3.99	-
AV	2.39G	53.05	54.00	-0.95	21.72	3	Horizontal	146	1.77	-	27.34	3.99	-
PK	2.4138G	110.74	Inf	-Inf	79.27	3	Horizontal	146	1.77	-	27.46	4.01	-
AV	2.4134G	100.23	Inf	-Inf	68.77	3	Horizontal	146	1.77	-	27.45	4.01	-

2.4-2.4835GHz_802.11ac VHT20_Nss1,(MCS0)_3TX

2412MHz_TX

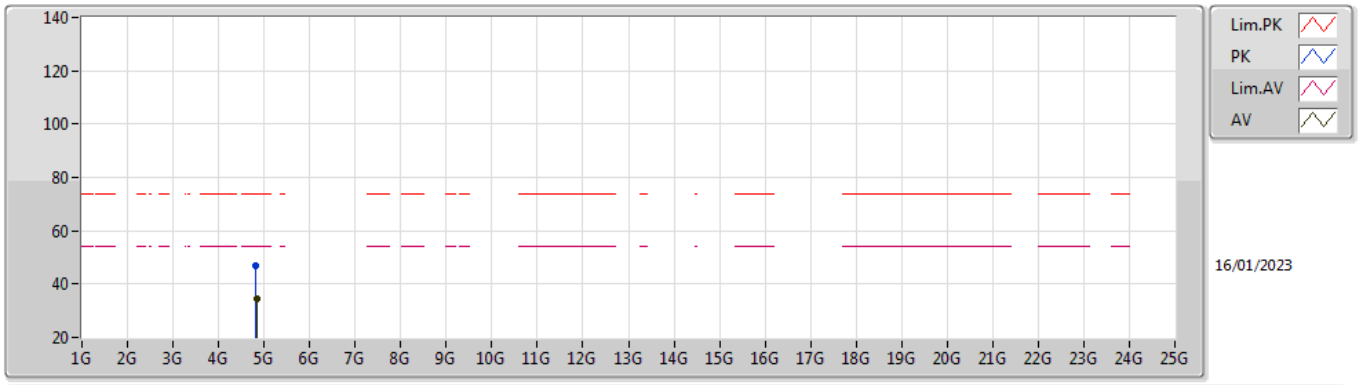


EUT Y_3TX
Setting 19.5
03-K-E-5

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	4.82734G	46.69	74.00	-27.31	42.67	3	Vertical	332	2.67	-	32.41	6.51	34.90
AV	4.82894G	34.41	54.00	-19.59	30.38	3	Vertical	332	2.67	-	32.42	6.51	34.90

2.4-2.4835GHz_802.11ac VHT20_Nss1,(MCS0)_3TX

2412MHz_TX

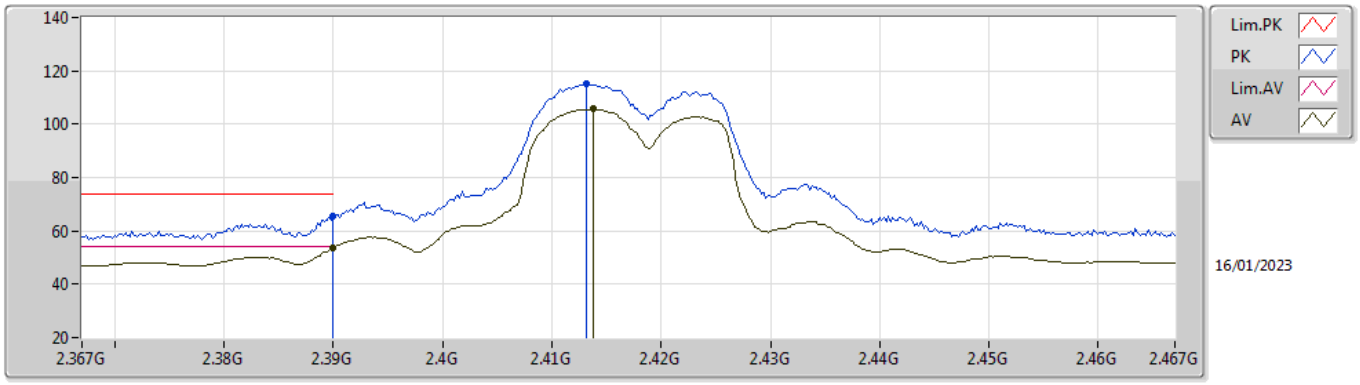


EUT Y_3TX
Setting 19.5
03-K-E-5

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	4.82612G	47.02	74.00	-26.98	43.01	3	Horizontal	131	1.72	-	32.40	6.51	34.90
AV	4.82888G	34.34	54.00	-19.66	30.31	3	Horizontal	131	1.72	-	32.42	6.51	34.90

2.4-2.4835GHz_802.11ac VHT20_Nss1,(MCS0)_3TX

2417MHz_TX

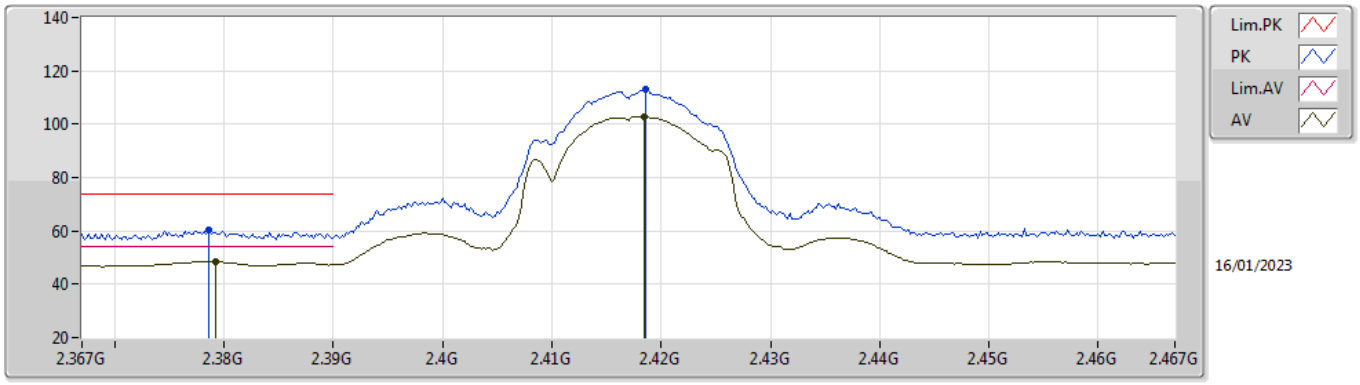


EUT Y_3TX
Setting 22.5
03-K-E-5

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	2.39G	65.65	74.00	-8.35	34.32	3	Vertical	271	2.08	-	27.34	3.99	-
AV	2.39G	53.67	54.00	-0.33	22.34	3	Vertical	271	2.08	-	27.34	3.99	-
PK	2.4132G	115.17	Inf	-Inf	83.71	3	Vertical	271	2.08	-	27.45	4.01	-
AV	2.4138G	105.76	Inf	-Inf	74.29	3	Vertical	271	2.08	-	27.46	4.01	-

2.4-2.4835GHz_802.11ac VHT20_Nss1,(MCS0)_3TX

2417MHz_TX

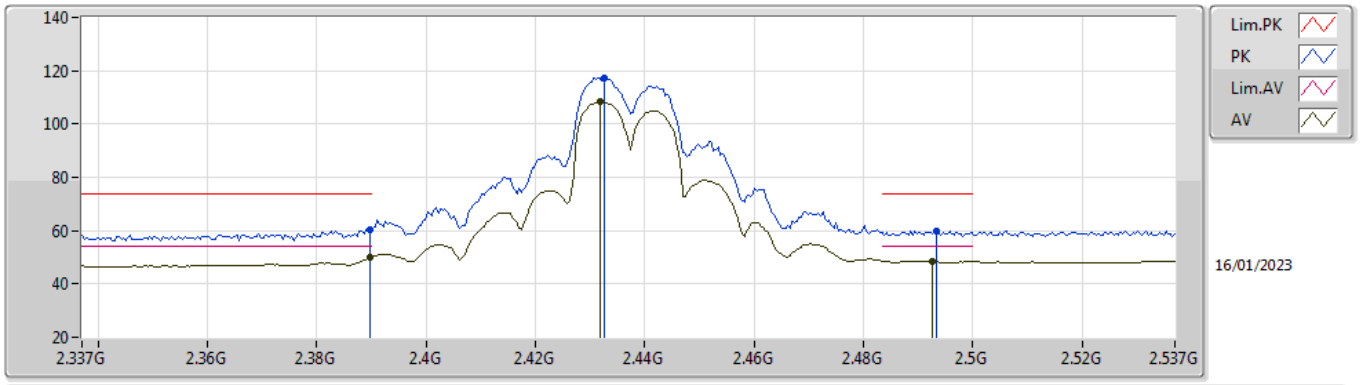


EUT Y_3TX
Setting 22.5
03-K-E-5

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	2.3786G	60.31	74.00	-13.69	29.06	3	Horizontal	145	1.76	-	27.27	3.98	-
AV	2.3792G	48.26	54.00	-5.74	17.00	3	Horizontal	145	1.76	-	27.28	3.98	-
PK	2.4186G	113.28	Inf	-Inf	81.79	3	Horizontal	145	1.76	-	27.47	4.02	-
AV	2.4184G	102.97	Inf	-Inf	71.48	3	Horizontal	145	1.76	-	27.47	4.02	-

2.4-2.4835GHz_802.11ac VHT20_Nss1,(MCS0)_3TX

2437MHz_TX

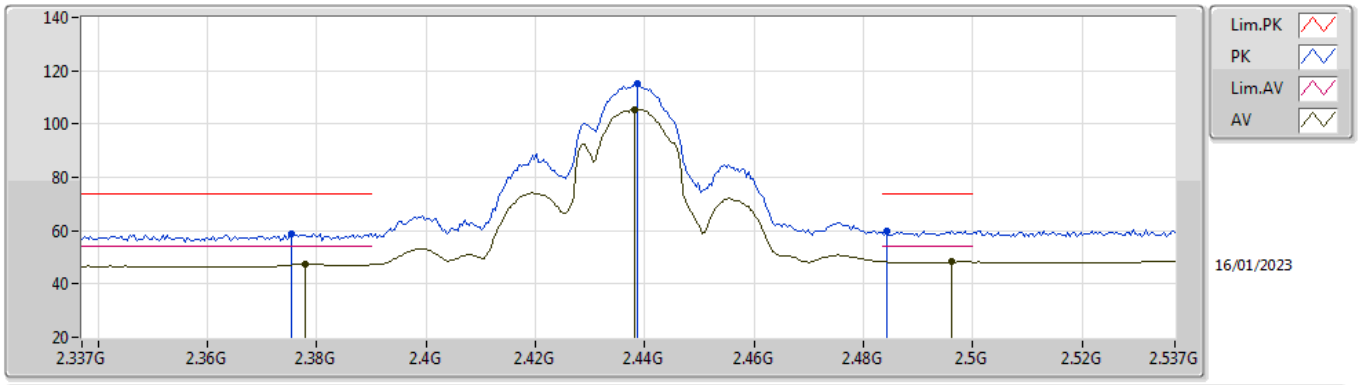


EUT Y_3TX
Setting 26
03-K-E-5

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	60.52	74.00	-13.48	29.19	3	Vertical	264	1.80	-	27.34	3.99	-
AV	2.3898G	49.97	54.00	-4.03	18.64	3	Vertical	264	1.80	-	27.34	3.99	-
PK	2.4326G	117.46	Inf	-Inf	85.90	3	Vertical	264	1.80	-	27.53	4.03	-
AV	2.4318G	108.31	Inf	-Inf	76.75	3	Vertical	264	1.80	-	27.53	4.03	-
PK	2.4934G	60.08	74.00	-13.92	28.13	3	Vertical	264	1.80	-	27.86	4.09	-
AV	2.4926G	48.65	54.00	-5.35	16.70	3	Vertical	264	1.80	-	27.86	4.09	-

2.4-2.4835GHz_802.11ac VHT20_Nss1,(MCS0)_3TX

2437MHz_TX

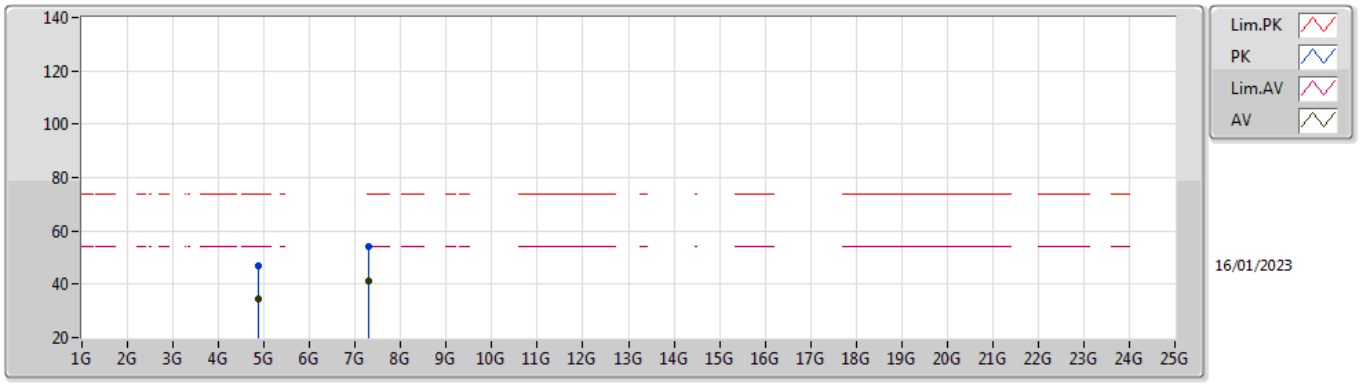


EUT Y_3TX
Setting 26
03-K-E-5

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	2.3754G	59.05	74.00	-14.95	27.82	3	Horizontal	144	1.59	-	27.25	3.98	-
AV	2.3778G	47.56	54.00	-6.44	16.31	3	Horizontal	144	1.59	-	27.27	3.98	-
PK	2.4386G	115.33	Inf	-Inf	83.74	3	Horizontal	144	1.59	-	27.55	4.04	-
AV	2.4382G	105.54	Inf	-Inf	73.95	3	Horizontal	144	1.59	-	27.55	4.04	-
PK	2.4842G	60.07	74.00	-13.93	28.18	3	Horizontal	144	1.59	-	27.81	4.08	-
AV	2.4962G	48.44	54.00	-5.56	16.46	3	Horizontal	144	1.59	-	27.88	4.10	-

2.4-2.4835GHz_802.11ac VHT20_Nss1,(MCS0)_3TX

2437MHz_TX

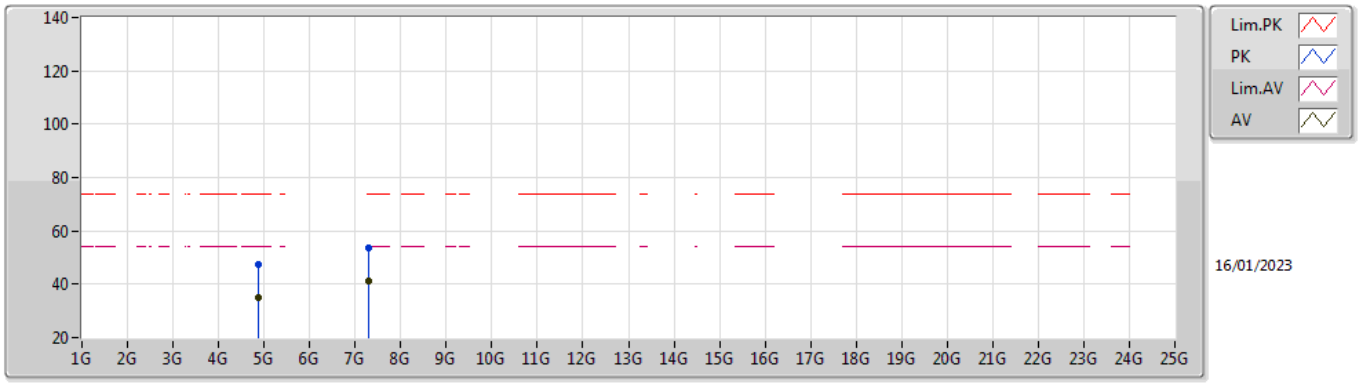


EUT Y_3TX
Setting 26
03-K-E-5

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	4.865G	47.04	74.00	-26.96	42.88	3	Vertical	27	2.97	-	32.53	6.53	34.90
AV	4.88864G	34.40	54.00	-19.60	30.17	3	Vertical	27	2.97	-	32.58	6.54	34.89
PK	7.30656G	53.95	74.00	-20.05	43.62	3	Vertical	278	1.78	-	36.77	8.70	35.14
AV	7.30518G	41.36	54.00	-12.64	31.02	3	Vertical	278	1.78	-	36.78	8.70	35.14

2.4-2.4835GHz_802.11ac VHT20_Nss1,(MCS0)_3TX

2437MHz_TX

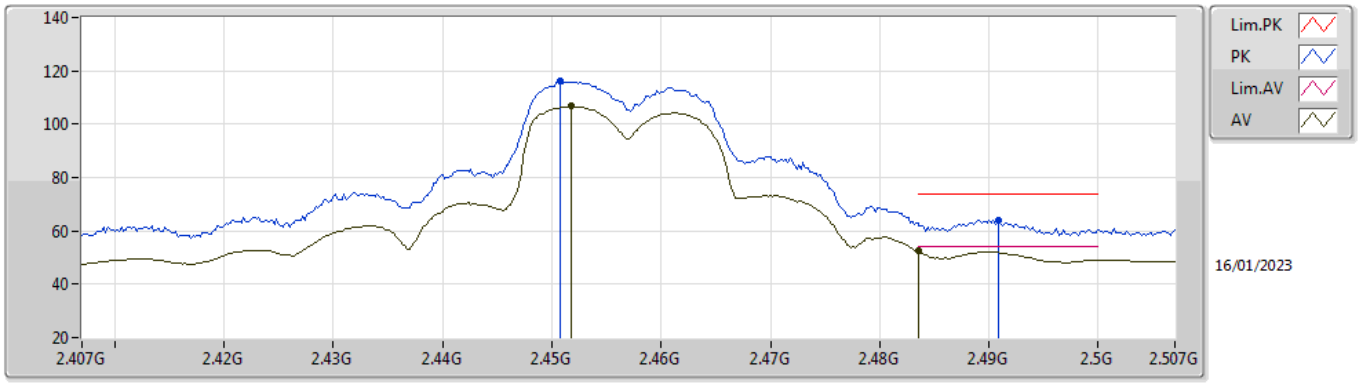


EUT Y_3TX
Setting 26
03-K-E-5

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	4.87628G	47.23	74.00	-26.77	43.03	3	Horizontal	133	1.15	-	32.55	6.54	34.89
AV	4.874G	35.20	54.00	-18.80	31.01	3	Horizontal	133	1.15	-	32.55	6.54	34.90
PK	7.30158G	53.82	74.00	-20.18	43.47	3	Horizontal	232	1.43	-	36.79	8.70	35.14
AV	7.30146G	41.24	54.00	-12.76	30.89	3	Horizontal	232	1.43	-	36.79	8.70	35.14

2.4-2.4835GHz_802.11ac VHT20_Nss1,(MCS0)_3TX

2457MHz_TX

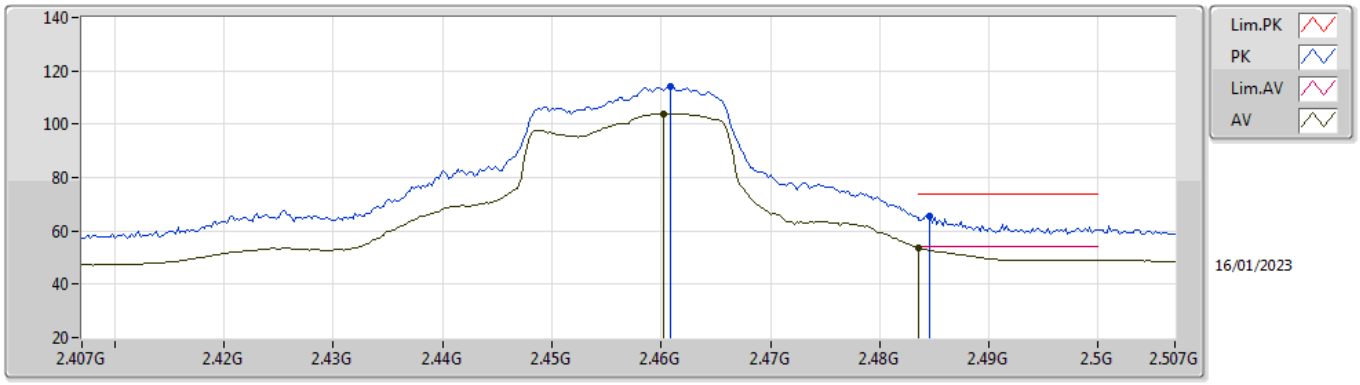


EUT Y_3TX
Setting 25
03-K-E-5

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	2.4508G	116.26	Inf	-Inf	84.61	3	Vertical	230	1.93	-	27.60	4.05	-
AV	2.4518G	106.69	Inf	-Inf	75.03	3	Vertical	230	1.93	-	27.61	4.05	-
PK	2.4908G	63.86	74.00	-10.14	31.93	3	Vertical	230	1.93	-	27.84	4.09	-
AV	2.4835G	52.49	54.00	-1.51	20.61	3	Vertical	230	1.93	-	27.80	4.08	-

2.4-2.4835GHz_802.11ac VHT20_Nss1,(MCS0)_3TX

2457MHz_TX

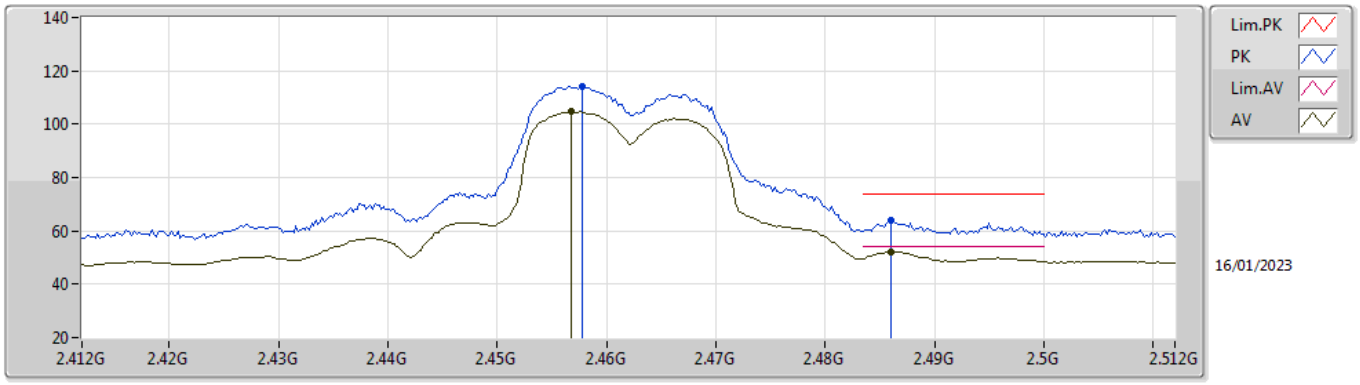


EUT Y_3TX
Setting 25
03-K-E-5

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	114.00	Inf	-Inf	82.28	3	Horizontal	209	2.06	-	27.66	4.06	-
AV	2.4602G	104.05	Inf	-Inf	72.33	3	Horizontal	209	2.06	-	27.66	4.06	-
PK	2.4846G	65.51	74.00	-8.49	33.62	3	Horizontal	209	2.06	-	27.81	4.08	-
AV	2.4835G	53.67	54.00	-0.33	21.79	3	Horizontal	209	2.06	-	27.80	4.08	-

2.4-2.4835GHz_802.11ac VHT20_Nss1,(MCS0)_3TX

2462MHz_TX

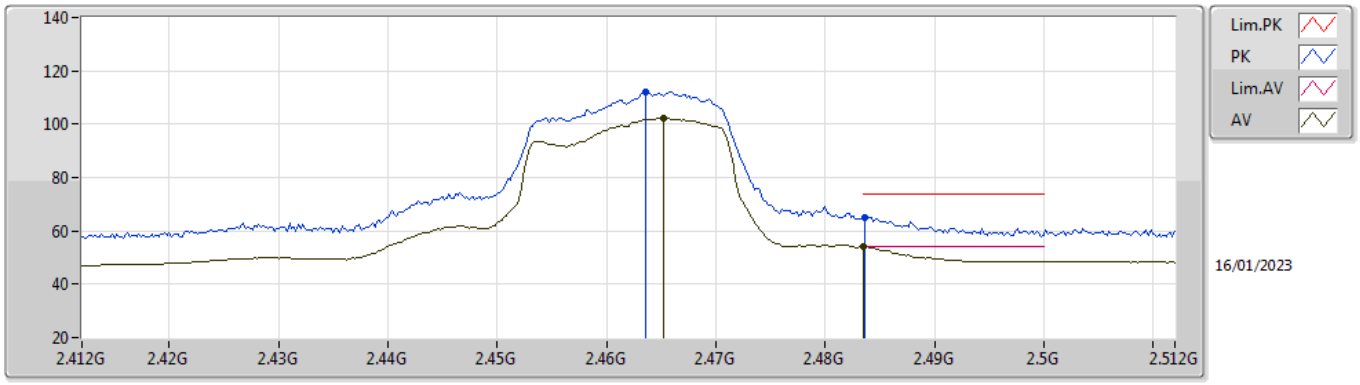


EUT Y_3TX
Setting 23
03-K-E-5

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	2.4578G	114.16	Inf	-Inf	82.45	3	Vertical	232	1.94	-	27.65	4.06	-
AV	2.4568G	104.66	Inf	-Inf	72.96	3	Vertical	232	1.94	-	27.64	4.06	-
PK	2.486G	63.79	74.00	-10.21	31.88	3	Vertical	232	1.94	-	27.82	4.09	-
AV	2.486G	52.04	54.00	-1.96	20.13	3	Vertical	232	1.94	-	27.82	4.09	-

2.4-2.4835GHz_802.11ac VHT20_Nss1,(MCS0)_3TX

2462MHz_TX

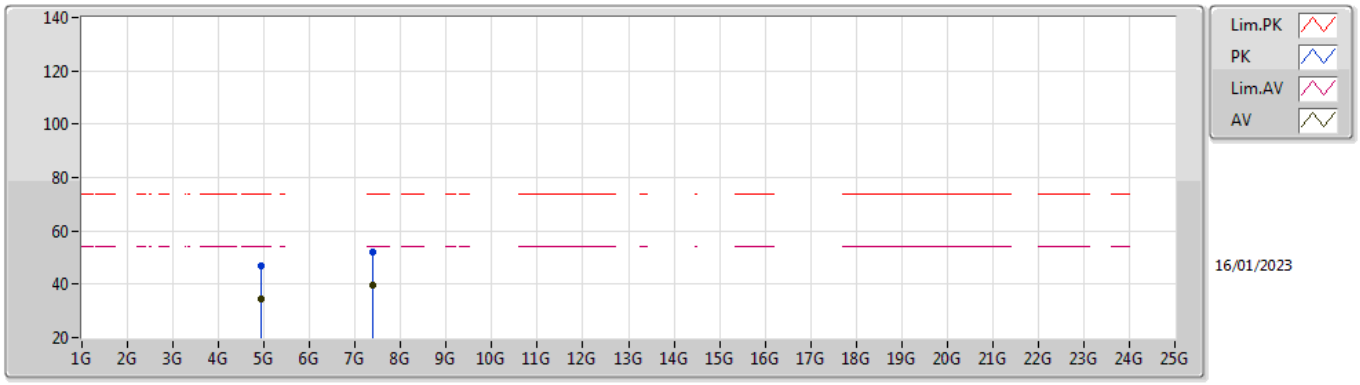


EUT Y_3TX
Setting 23
03-K-E-5

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	112.18	Inf	-Inf	80.44	3	Horizontal	208	1.92	-	27.68	4.06	-
AV	2.4652G	102.16	Inf	-Inf	70.40	3	Horizontal	208	1.92	-	27.69	4.07	-
PK	2.4836G	64.95	74.00	-9.05	33.07	3	Horizontal	208	1.92	-	27.80	4.08	-
AV	2.4835G	53.94	54.00	-0.06	22.06	3	Horizontal	208	1.92	-	27.80	4.08	-

2.4-2.4835GHz_802.11ac VHT20_Nss1,(MCS0)_3TX

2462MHz_TX

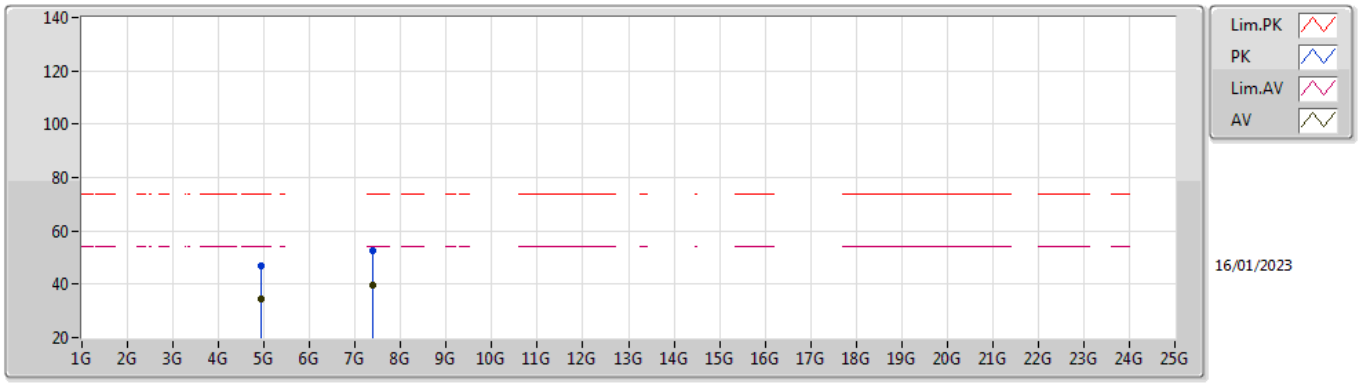


EUT Y_3TX
Setting 23
03-K-E-5

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	4.92722G	46.90	74.00	-27.10	42.47	3	Vertical	100	2.27	-	32.76	6.56	34.89
AV	4.92388G	34.54	54.00	-19.46	30.13	3	Vertical	100	2.27	-	32.74	6.56	34.89
PK	7.38626G	51.82	74.00	-22.18	41.70	3	Vertical	309	1.95	-	36.60	8.70	35.18
AV	7.3902G	39.54	54.00	-14.46	29.42	3	Vertical	309	1.95	-	36.60	8.70	35.18

2.4-2.4835GHz_802.11ac VHT20_Nss1,(MCS0)_3TX

2462MHz_TX

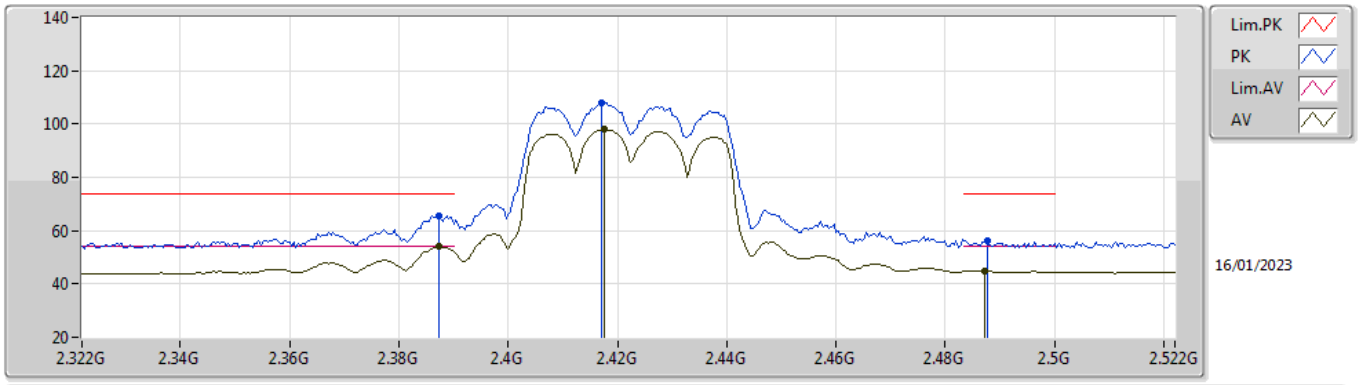


EUT Y_3TX
Setting 23
03-K-E-5

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	4.92792G	46.97	74.00	-27.03	42.53	3	Horizontal	57	2.67	-	32.77	6.56	34.89
AV	4.92452G	34.47	54.00	-19.53	30.05	3	Horizontal	57	2.67	-	32.75	6.56	34.89
PK	7.3863G	52.76	74.00	-21.24	42.64	3	Horizontal	110	2.00	-	36.60	8.70	35.18
AV	7.3902G	39.48	54.00	-14.52	29.36	3	Horizontal	110	2.00	-	36.60	8.70	35.18

2.4-2.4835GHz_802.11ac VHT40_Nss1,(MCS0)_3TX

2422MHz_TX

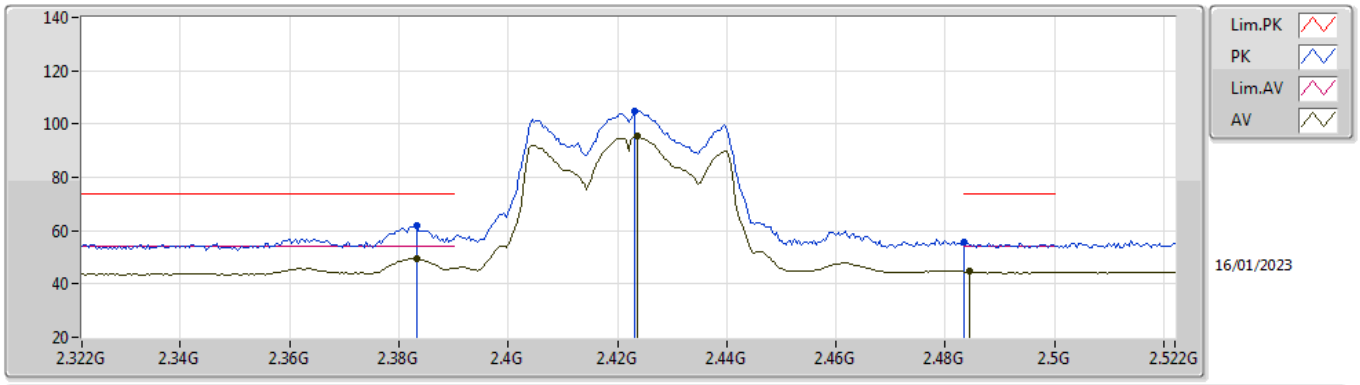


EUT Y_3TX
Setting 19.5
03-D-J-8

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	2.3872G	65.61	74.00	-8.39	34.30	3	Vertical	232	2.20	-	27.32	3.99	-
AV	2.3872G	53.99	54.00	-0.01	22.68	3	Vertical	232	2.20	-	27.32	3.99	-
PK	2.4172G	108.00	Inf	-Inf	76.51	3	Vertical	232	2.20	-	27.47	4.02	-
AV	2.4176G	98.18	Inf	-Inf	66.69	3	Vertical	232	2.20	-	27.47	4.02	-
PK	2.4876G	56.33	74.00	-17.67	24.41	3	Vertical	232	2.20	-	27.83	4.09	-
AV	2.4872G	44.81	54.00	-9.19	12.90	3	Vertical	232	2.20	-	27.82	4.09	-

2.4-2.4835GHz_802.11ac VHT40_Nss1,(MCS0)_3TX

2422MHz_TX

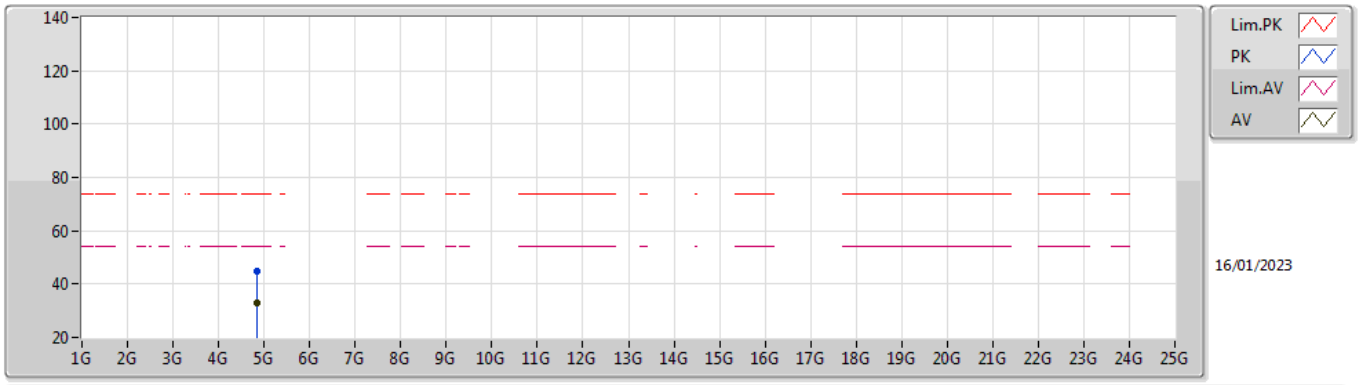


EUT Y_3TX
Setting 19.5
03-D-J-8

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	2.3832G	61.87	74.00	-12.13	30.59	3	Horizontal	147	1.67	-	27.30	3.98	-
AV	2.3832G	49.68	54.00	-4.32	18.40	3	Horizontal	147	1.67	-	27.30	3.98	-
PK	2.4232G	104.95	Inf	-Inf	73.44	3	Horizontal	147	1.67	-	27.49	4.02	-
AV	2.4236G	95.30	Inf	-Inf	63.79	3	Horizontal	147	1.67	-	27.49	4.02	-
PK	2.4835G	55.66	74.00	-18.34	23.78	3	Horizontal	147	1.67	-	27.80	4.08	-
AV	2.4844G	44.62	54.00	-9.38	12.73	3	Horizontal	147	1.67	-	27.81	4.08	-

2.4-2.4835GHz_802.11ac VHT40_Nss1,(MCS0)_3TX

2422MHz_TX

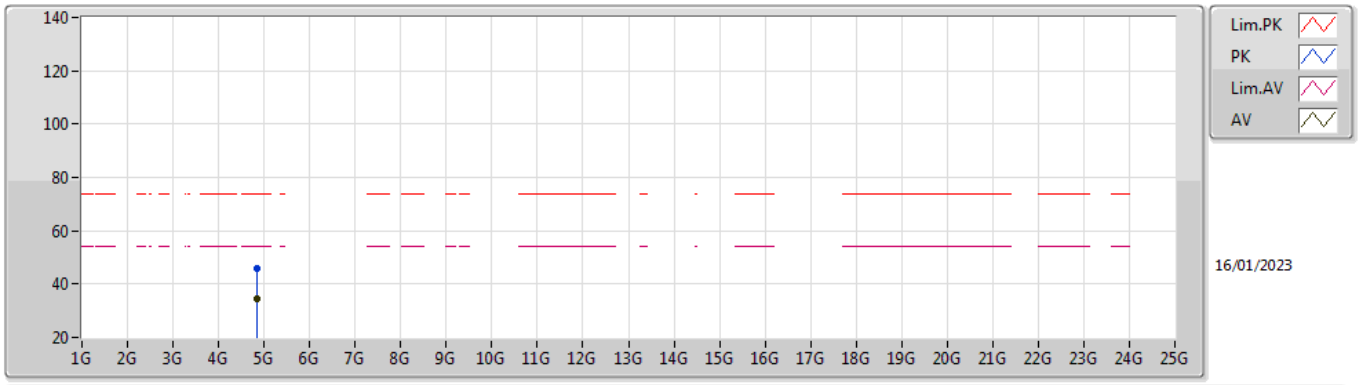


EUT Y_3TX
Setting 19.5
03-D-J-8

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	4.8329G	44.83	74.00	-29.17	40.78	3	Vertical	253	1.80	-	32.43	6.52	34.90
AV	4.84376G	32.90	54.00	-21.10	28.80	3	Vertical	253	1.80	-	32.48	6.52	34.90

2.4-2.4835GHz_802.11ac VHT40_Nss1,(MCS0)_3TX

2422MHz_TX

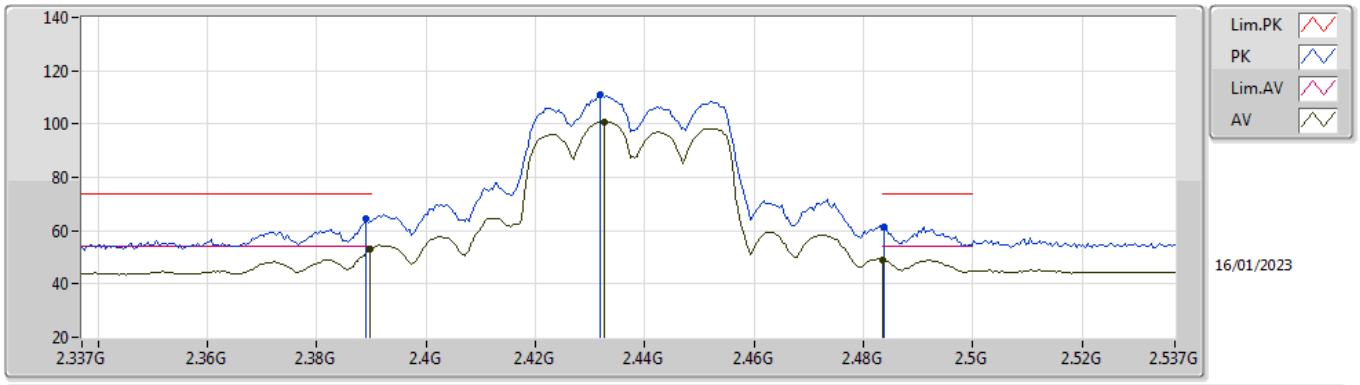


EUT Y_3TX
Setting 19.5
03-D-J-8

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	4.84364G	45.90	74.00	-28.10	41.81	3	Horizontal	294	1.73	-	32.47	6.52	34.90
AV	4.8437G	34.52	54.00	-19.48	30.43	3	Horizontal	294	1.73	-	32.47	6.52	34.90

2.4-2.4835GHz_802.11ac VHT40_Nss1,(MCS0)_3TX

2437MHz_TX

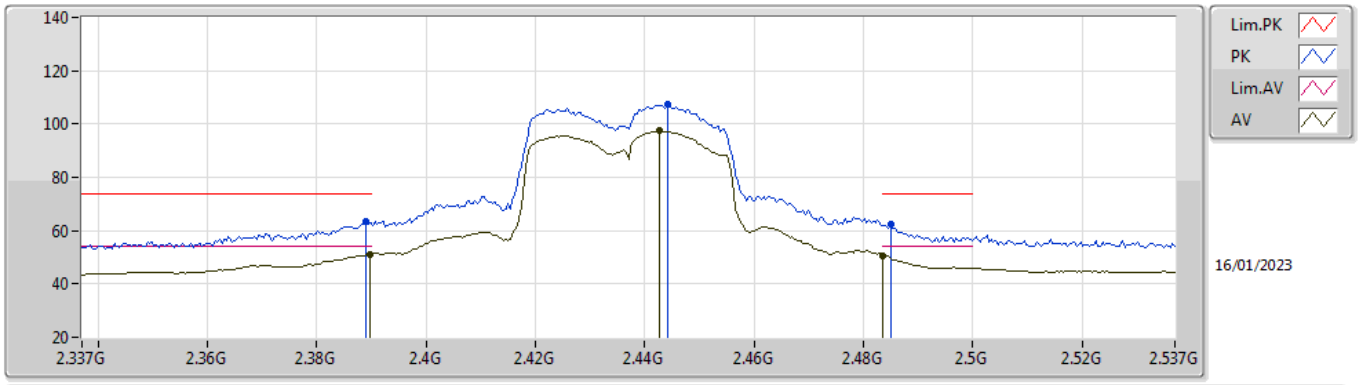


EUT Y_3TX
Setting 22
03-D-J-8

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	64.30	74.00	-9.70	32.98	3	Vertical	271	1.86	-	27.33	3.99	-
AV	2.3898G	52.91	54.00	-1.09	21.58	3	Vertical	271	1.86	-	27.34	3.99	-
PK	2.4318G	111.07	Inf	-Inf	79.51	3	Vertical	271	1.86	-	27.53	4.03	-
AV	2.4326G	100.90	Inf	-Inf	69.34	3	Vertical	271	1.86	-	27.53	4.03	-
PK	2.4838G	61.43	74.00	-12.57	29.55	3	Vertical	271	1.86	-	27.80	4.08	-
AV	2.4835G	49.06	54.00	-4.94	17.18	3	Vertical	271	1.86	-	27.80	4.08	-

2.4-2.4835GHz_802.11ac VHT40_Nss1,(MCS0)_3TX

2437MHz_TX

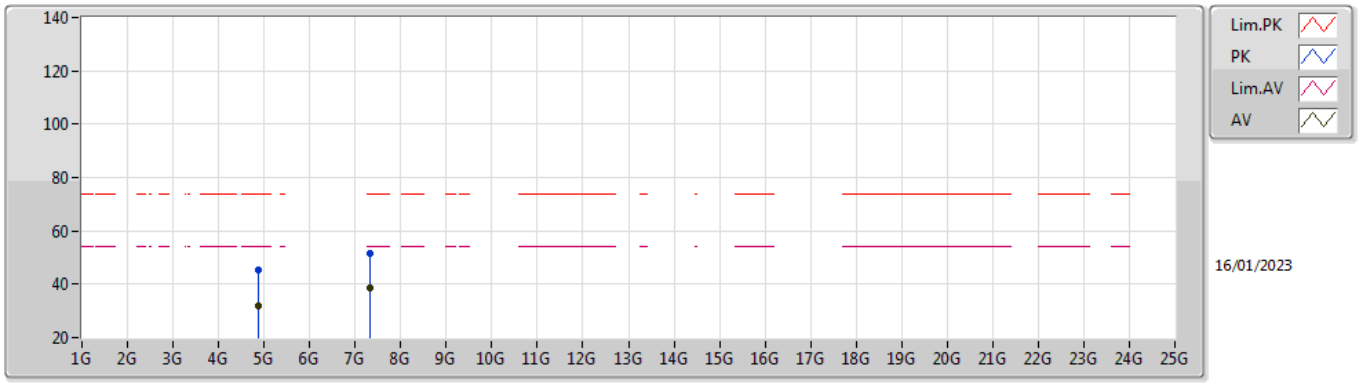


EUT Y_3TX
Setting 22
03-D-J-8

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	63.20	74.00	-10.80	31.88	3	Horizontal	214	1.84	-	27.33	3.99	-
AV	2.3898G	51.10	54.00	-2.90	19.77	3	Horizontal	214	1.84	-	27.34	3.99	-
PK	2.4442G	107.25	Inf	-Inf	75.63	3	Horizontal	214	1.84	-	27.58	4.04	-
AV	2.4426G	97.48	Inf	-Inf	65.87	3	Horizontal	214	1.84	-	27.57	4.04	-
PK	2.485G	62.58	74.00	-11.42	30.69	3	Horizontal	214	1.84	-	27.81	4.08	-
AV	2.4835G	50.69	54.00	-3.31	18.81	3	Horizontal	214	1.84	-	27.80	4.08	-

2.4-2.4835GHz_802.11ac VHT40_Nss1,(MCS0)_3TX

2437MHz_TX

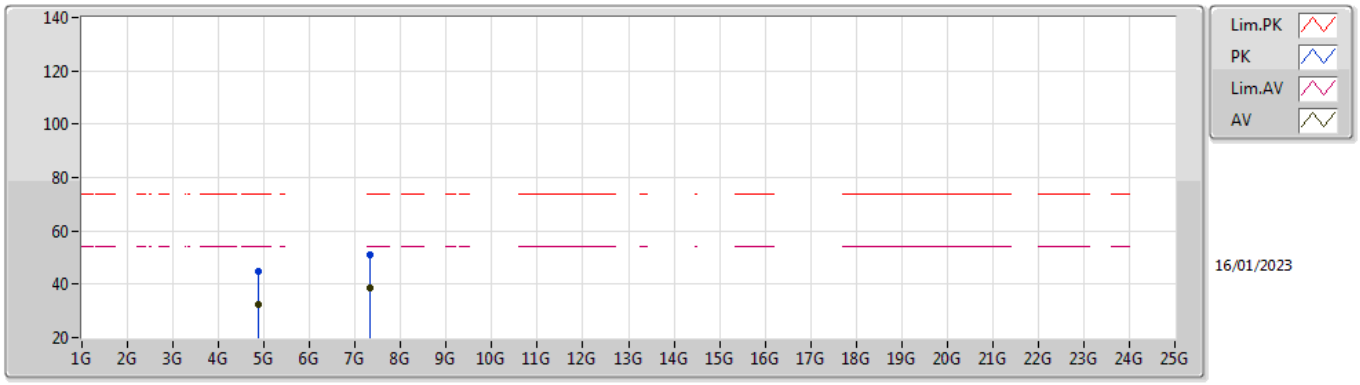


EUT Y_3TX
Setting 22
03-D-J-8

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	4.88156G	45.53	74.00	-28.47	41.32	3	Vertical	88	2.16	-	32.56	6.54	34.89
AV	4.87394G	31.93	54.00	-22.07	27.74	3	Vertical	88	2.16	-	32.55	6.54	34.90
PK	7.31472G	51.32	74.00	-22.68	41.02	3	Vertical	130	1.80	-	36.74	8.70	35.14
AV	7.3206G	38.60	54.00	-15.40	28.33	3	Vertical	130	1.80	-	36.72	8.70	35.15

2.4-2.4835GHz_802.11ac VHT40_Nss1,(MCS0)_3TX

2437MHz_TX

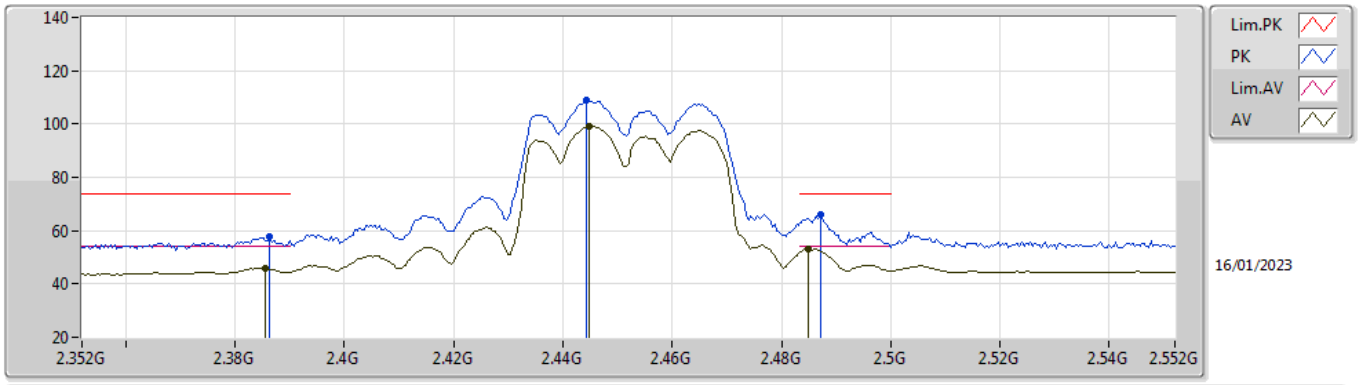


EUT Y_3TX
Setting 22
03-D-J-8

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	4.87388G	44.89	74.00	-29.11	40.70	3	Horizontal	136	1.04	-	32.55	6.54	34.90
AV	4.87406G	32.35	54.00	-21.65	28.16	3	Horizontal	136	1.04	-	32.55	6.54	34.90
PK	7.32336G	51.19	74.00	-22.81	40.93	3	Horizontal	324	1.80	-	36.71	8.70	35.15
AV	7.32054G	38.48	54.00	-15.52	28.21	3	Horizontal	324	1.80	-	36.72	8.70	35.15

2.4-2.4835GHz_802.11ac VHT40_Nss1,(MCS0)_3TX

2452MHz_TX

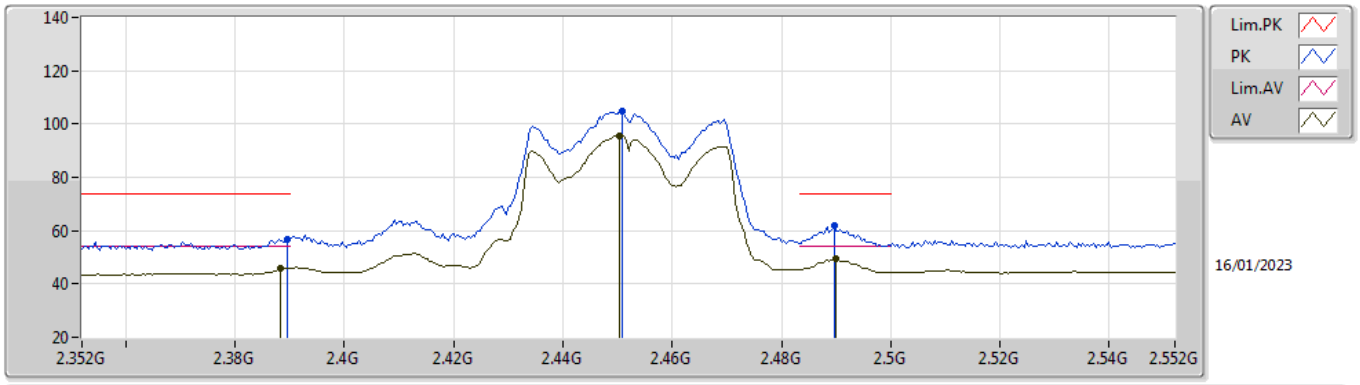


EUT Y_3TX
Setting 20.5
03-D-J-8

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	2.3864G	57.63	74.00	-16.37	26.32	3	Vertical	268	1.88	-	27.32	3.99	-
AV	2.3856G	46.08	54.00	-7.92	14.78	3	Vertical	268	1.88	-	27.31	3.99	-
PK	2.4444G	109.14	Inf	-Inf	77.52	3	Vertical	268	1.88	-	27.58	4.04	-
AV	2.4448G	99.17	Inf	-Inf	67.55	3	Vertical	268	1.88	-	27.58	4.04	-
PK	2.4872G	65.98	74.00	-8.02	34.07	3	Vertical	268	1.88	-	27.82	4.09	-
AV	2.4848G	53.15	54.00	-0.85	21.26	3	Vertical	268	1.88	-	27.81	4.08	-

2.4-2.4835GHz_802.11ac VHT40_Nss1,(MCS0)_3TX

2452MHz_TX

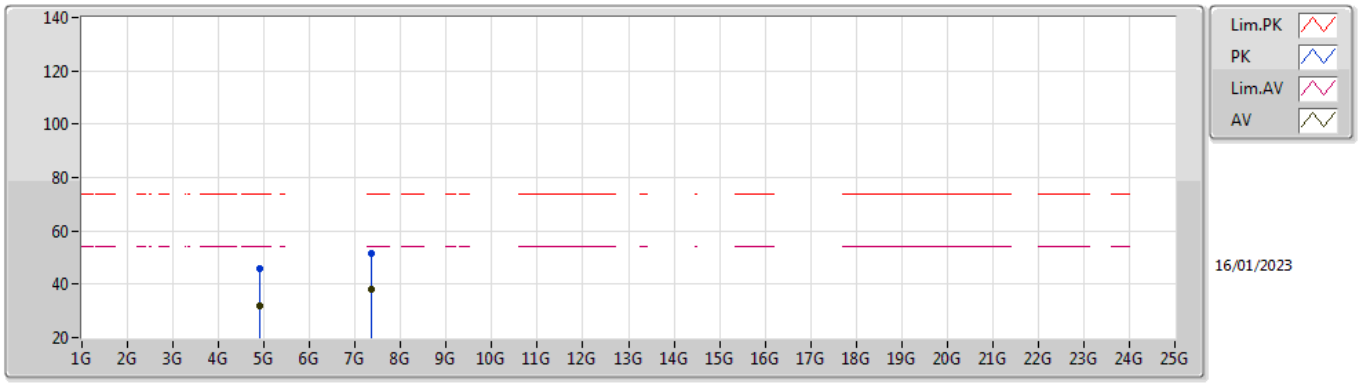


EUT Y_3TX
Setting 20.5
03-D-J-8

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	56.64	74.00	-17.36	25.31	3	Horizontal	146	1.71	-	27.34	3.99	-
AV	2.3884G	45.81	54.00	-8.19	14.49	3	Horizontal	146	1.71	-	27.33	3.99	-
PK	2.4508G	104.87	Inf	-Inf	73.22	3	Horizontal	146	1.71	-	27.60	4.05	-
AV	2.4504G	95.60	Inf	-Inf	63.95	3	Horizontal	146	1.71	-	27.60	4.05	-
PK	2.4896G	62.06	74.00	-11.94	30.13	3	Horizontal	146	1.71	-	27.84	4.09	-
AV	2.49G	49.54	54.00	-4.46	17.61	3	Horizontal	146	1.71	-	27.84	4.09	-

2.4-2.4835GHz_802.11ac VHT40_Nss1,(MCS0)_3TX

2452MHz_TX

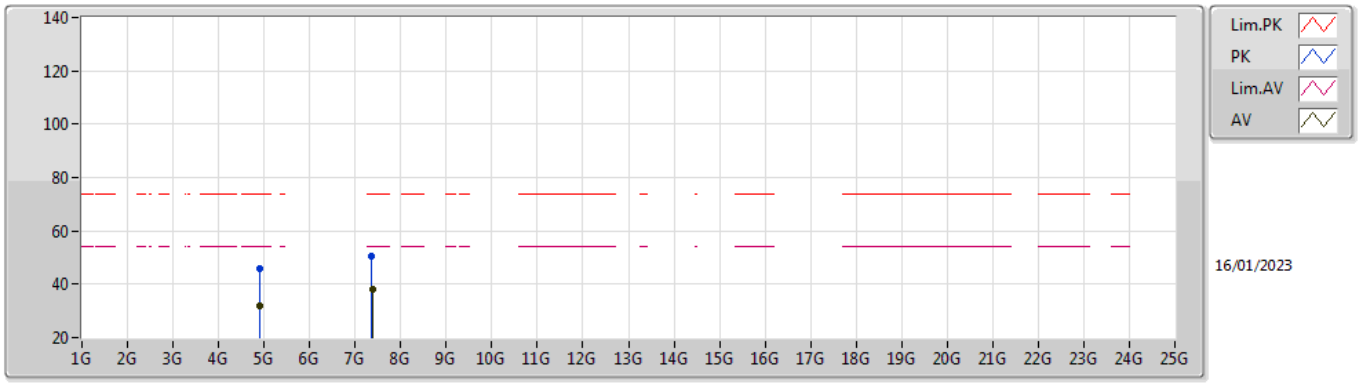


EUT Y_3TX
Setting 20.5
03-D-J-8

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	4.8905G	46.06	74.00	-27.94	41.82	3	Vertical	174	1.07	-	32.58	6.55	34.89
AV	4.91456G	31.99	54.00	-22.01	27.63	3	Vertical	174	1.07	-	32.69	6.56	34.89
PK	7.36986G	51.51	74.00	-22.49	41.38	3	Vertical	261	1.80	-	36.60	8.70	35.17
AV	7.36794G	38.18	54.00	-15.82	28.05	3	Vertical	261	1.80	-	36.60	8.70	35.17

2.4-2.4835GHz_802.11ac VHT40_Nss1,(MCS0)_3TX

2452MHz_TX



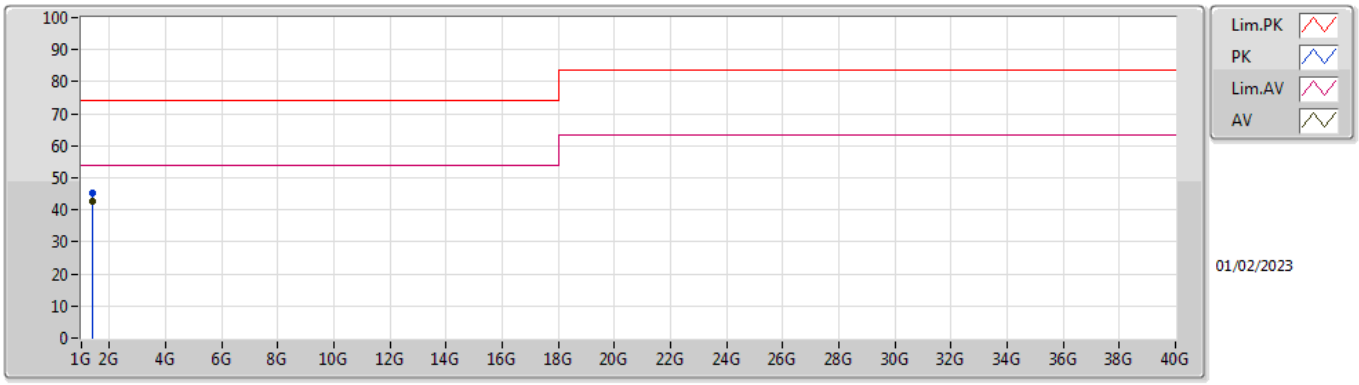
EUT Y_3TX
Setting 20.5
03-D-J-8

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	4.91378G	45.71	74.00	-28.29	41.36	3	Horizontal	82	1.63	-	32.68	6.56	34.89
AV	4.9175G	31.84	54.00	-22.16	27.47	3	Horizontal	82	1.63	-	32.70	6.56	34.89
PK	7.36482G	50.40	74.00	-23.60	40.27	3	Horizontal	59	1.73	-	36.60	8.70	35.17
AV	7.37088G	38.18	54.00	-15.82	28.05	3	Horizontal	59	1.73	-	36.60	8.70	35.17

Summary

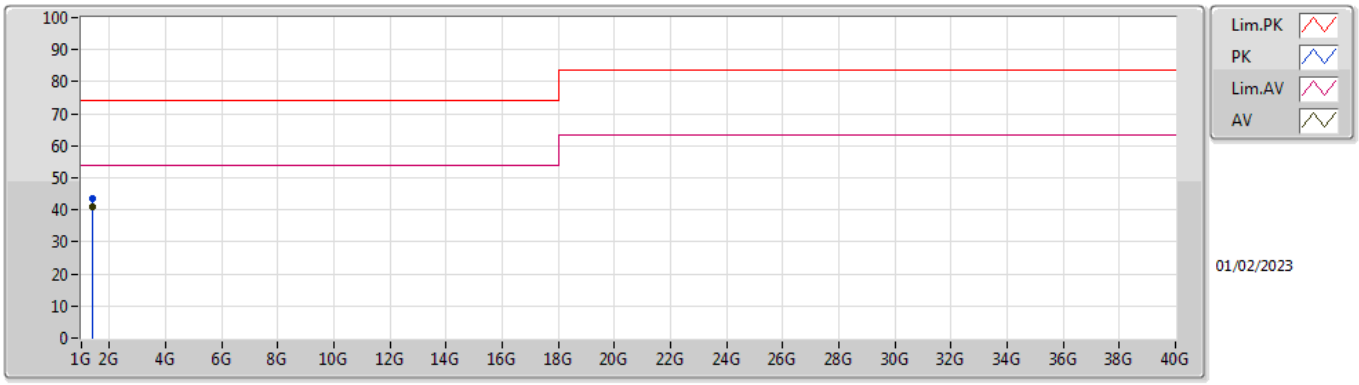
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	AV	1.40603G	42.84	54.00	-11.16	Vertical

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)
PK	1.40629G	45.37	74.00	-28.63	-7.40	3	Vertical	45	2.50	-	52.77	25.71	3.31	36.42
AV	1.40603G	42.84	54.00	-11.16	-7.40	3	Vertical	45	2.50	"Worst"	50.24	25.71	3.31	36.42

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	1.40627G	43.66	74.00	-30.34	-7.40	3	Horizontal	333	1.00	-	51.06	25.71	3.31	36.42
AV	1.40599G	40.83	54.00	-13.17	-7.40	3	Horizontal	333	1.00	"Worst"	48.23	25.71	3.31	36.42