



# RADIO TEST REPORT

FCC ID : MSQ-RTAX5D00  
Equipment : ROG Rapture Quad-band Gaming Router  
Brand Name : ASUS  
Model Name : GT-AXE16000  
Applicant : ASUSTeK COMPUTER INC.  
1F., No. 15, Lide Rd., Beitou Dist., Taipei City 112, Taiwan  
Manufacturer (1) : Datamax Electronics (DongGuan) Co., Ltd.  
Niu Shan Foreign Economic Industrial Park, Dong Cheng District,  
Dong Guan City, Guang Dong, China  
Manufacturer (2) : Lukisen Electronic Corp.  
3F.,No.236,Boai St., Shulin Dist.,New Taipei City 23845, Taiwan  
Manufacturer (3) : Lih Rong Electronic Enterprise Co.,Ltd.  
No. 486, Sec. 1, Wanshou Road, Guishan District, Taoyuan City,  
Taiwan  
Manufacturer (4) : ASKEY COMPUTER CORP.  
5F,NO.119,JIANKANG RD., ZHONGHE DIST.,NEW TAIPEI CITY 23585,  
TAIWAN, R.O.C.  
Manufacturer (5) : ARCADYAN TECHNOLOGY (VIETNAM) CO.,LTD  
NO.4-5-6, Thang long Industrial Park (Vinh Phuc), Thien Ke  
commune,Binh Xuyen district,Vinh Phuc province,Vietnam  
Standard : 47 CFR FCC Part 15.247

The product was received on Nov. 15, 2021, and testing was started from Nov. 15, 2021 and completed on Jan. 27, 2022. 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
FR1N0529AA	01	Initial issue of report	Jan. 28, 2022



## 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: Wendy Pan**



# 1 General Description

## 1.1 Information

### 1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
2400-2483.5	b, g, n (HT20), VHT20, ax (HEW20)	2412-2462	1-11 [11]
2400-2483.5	n (HT40), VHT40, ax (HEW40)	2422-2452	3-9 [7]

Band	Mode	BWch (MHz)	Nant
2.4-2.4835GHz	802.11b	20	4TX
2.4-2.4835GHz	802.11g	20	4TX
2.4-2.4835GHz	802.11n HT20	20	4TX
2.4-2.4835GHz	802.11n HT20-BF	20	4TX
2.4-2.4835GHz	VHT20	20	4TX
2.4-2.4835GHz	VHT20-BF	20	4TX
2.4-2.4835GHz	802.11ax HEW20	20	4TX
2.4-2.4835GHz	802.11ax HEW20-BF	20	4TX
2.4-2.4835GHz	802.11n HT40	40	4TX
2.4-2.4835GHz	802.11n HT40-BF	40	4TX
2.4-2.4835GHz	VHT40	40	4TX
2.4-2.4835GHz	VHT40-BF	40	4TX
2.4-2.4835GHz	802.11ax HEW40	40	4TX
2.4-2.4835GHz	802.11ax HEW40-BF	40	4TX

**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, 1024QAM modulation.
- ♦ HEW20, HEW40 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- ♦ BWch is the nominal channel bandwidth.



**1.1.2 Antenna Information**

Ant.	Port				Brand Name	Model Name	Antenna Type	Connector	Gain (dBi)
	WLAN 2.4GHz	WLAN 5GHz UNII 1& UNII 2A	WLAN 5GHz UNII 2C& UNII 3	WLAN 6GHz					
1	2	2	-	-	WALSIN	RFPCA311406IMLB901	PCB	I-PEX	Note2
2	1	1	-	-	WALSIN	RFDPA181121IMLB901	Dipole	I-PEX	
3	4	4	-	-	WALSIN	RFDPA181121IMLB902	Dipole	I-PEX	
4	3	3	-	-	WALSIN	RFDPA181105IMLB901	Dipole	I-PEX	
5	-	-	4	-	WALSIN	RFPCA191412IM5B901	PCB	I-PEX	
6	-	-	3	-	WALSIN	RFDPA181108IM5B901	Dipole	I-PEX	
7	-	-	2	-	WALSIN	RFDPA181119IM5B901	Dipole	I-PEX	
8	-	-	1	-	WALSIN	RFDPA181125IM5B901	Dipole	I-PEX	
9	-	-	-	4	WALSIN	RFPCA170920IM6B901	PCB	I-PEX	
10	-	-	-	3	WALSIN	RFPCA222024IMLB901	PCB	I-PEX	
11	-	-	-	2	WALSIN	RFDPA181119IM6B901	Dipole	I-PEX	
12	-	-	-	1	WALSIN	RFDPA181110IM6B901	Dipole	I-PEX	

Note1: The above information was declared by manufacturer.

Note2:

Mode 1: 2G5GL-external antenna Vertical

Band (MHz)	2400-2483.5	5150-5250	5250-5350
Frequency (Hz)	2.45G	5.2G	5.3G
Ant. 1 Max Gain (dBi)	2.65	4.07	4.06
Ant. 2 Max Gain (dBi)	2.48	4.53	4.51
Ant. 3 Max Gain (dBi)	3.86	4.4	4.61
Ant. 4 Max Gain (dBi)	2.62	5.3	5.33
DG [1SS] (dBi)	4.65	5.99	6.25

Mode 2: 2G5GL-external antenna Horizontal

Band (MHz)	2400-2483.5	5150-5250	5250-5350
Frequency (Hz)	2.45G	5.2G	5.3G
Ant. 1 Max Gain (dBi)	2.65	4.07	4.06
Ant. 2 Max Gain (dBi)	4.51	5.02	5.28
Ant. 3 Max Gain (dBi)	3.89	3.87	3.47
Ant. 4 Max Gain (dBi)	3.72	5.28	5.32
DG [1SS] (dBi)	6.22	5.64	5.45





Mode 3: 5GH-external antenna Vertical

Band (MHz)	5470-5725	5725-5850
Frequency (Hz)	5.6G	5.785G
Ant. 1 Max Gain (dBi)	2.24	1.85
Ant. 2 Max Gain (dBi)	3.91	4.69
Ant. 3 Max Gain (dBi)	4.67	5.38
Ant. 4 Max Gain (dBi)	3.24	3.84
DG [1SS] (dBi)	6.24	6.26

Mode 4: 5GH-external antenna Horizontal

Band (MHz)	5470-5725	5725-5850
Frequency (Hz)	5.6G	5.785G
Ant. 1 Max Gain (dBi)	2.24	1.85
Ant. 2 Max Gain (dBi)	3.58	4.1
Ant. 3 Max Gain (dBi)	2.6	2.76
Ant. 4 Max Gain (dBi)	2.74	2.54
DG [1SS] (dBi)	3.62	4.12

Mode 5: 6G-external antenna Vertical

Band (MHz)	6175	6475	6695	6995
Frequency (Hz)	6.175G	6.475G	6.695G	6.995G
Ant. 1 Max Gain (dBi)	3.38	2.11	1.82	2.74
Ant. 2 Max Gain (dBi)	1.44	2.37	3.17	4.47
Ant. 3 Max Gain (dBi)	4.13	3.01	3.54	4.44
Ant. 4 Max Gain (dBi)	4.46	4.4	4.49	4.91
DG [1SS] (dBi)	4.52	4.89	4.95	5.58
DG [2SS] (dBi)	4.46	4.4	4.49	4.91

Mode 6: 6G-external antenna Horizontal

Band (MHz)	6175	6475	6695	6995
Frequency (Hz)	6.175G	6.475G	6.695G	6.995G
Ant. 1 Max Gain (dBi)	3.38	2.11	1.82	2.74
Ant. 2 Max Gain (dBi)	1.44	2.37	3.17	4.47
Ant. 3 Max Gain (dBi)	4.56	3.5	4.02	4.63
Ant. 4 Max Gain (dBi)	3.6	3.92	3.54	4.81
DG [1SS] (dBi)	3.84	3.98	2.78	3.35
DG [2SS] (dBi)	-	3.92	-	-

Note3: The directional gain is measured which follows the procedure of KDB 662911 D03.

The antenna report is provided in the operational description for this application.

Only the highest gain antenna was selected from each different antenna mode of antenna to test and record in this report.

**For 2.4GHz function:**

**For IEEE 802.11b/g/n/VHT/ax (4TX/4RX):**

Port 1, Port 2, Port 3 and Port 4 can be used as transmitting/receiving antenna.

Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.

**For 5GHz function:**

**For IEEE 802.11a/n/ac/ax (4TX/4RX):**

Port 1, Port 2, Port 3 and Port 4 can be used as transmitting/receiving antenna.

Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.

**For 6GHz function:**

**For IEEE 802.11ax (4TX/4RX):**

Port 1, Port 2, Port 3 and Port 4 can be used as transmitting/receiving antenna.

Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.

**1.1.3 Mode Test Duty Cycle**

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11b	0.936	0.29	12.42m	100
802.11g	0.954	0.2	2.068m	1k
802.11ax HEW20-BF	0.922	0.35	2.928m	1k
802.11ax HEW40-BF	0.973	0.12	4.359m	300

Note:

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

**1.1.4 EUT Operational Condition**

<b>EUT Power Type</b>	From Power Adapter			
<b>Beamforming Function</b>	<input checked="" type="checkbox"/>	With beamforming	<input type="checkbox"/>	Without beamforming
	The product has beamforming function for n/VHT/ax in 2.4GHz, n/ac/ax in 5GHz and ax in 6GHz.			
<b>Function</b>	<input checked="" type="checkbox"/>	Point-to-multipoint	<input type="checkbox"/>	Point-to-point
<b>Test Software Version</b>	Mtool 3.2.1.4, DOS[10.0.19043.1320] \ LanTest20(version 2.0.0.2)			

Note: The above information was declared by manufacturer.

**1.1.5 Table for Components Source Information**

Component	Main Source	Second Source
5G pre filter	Brand: Qorvo Model: QPQ1904	-
DDR4	Brand: SAMSUNG Model: K4A4G165WF-BCTD	Brand: SAMSUNG Model: K4A8G165WC-BCWE

Note: The above information was declared by manufacturer.

**1.1.6 Table for EUT information**

EUT	5G pre filter	DDR4
EUT 1	N/A	Main Source
EUT 2	V	Main Source
EUT 3	N/A	Second Source

Note: The EUT 1 was performed testing for all items.

The EUT 2 and EUT 3 were performed testing for Radiated Emissions.





**1.1.7 Table for EUT Supports Function**

<b>Function</b>	<b>Support Type</b>	<b>Remark</b>
AP Router	Master	Support 2.4GHz/5GHz/6GHz
Bridge	Slave without radar detection	Support 2.4GHz/5GHz
Repeater	Master	Support 2.4GHz/5GHz
Mesh	Master	Support 2.4GHz/5GHz/6GHz

Note: From the above, AP Router (Master) has been selected to test AC power-line conducted emissions and Emissions in Restricted Frequency Bands below 1GHz.  
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 D03 v01
- ◆ 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	Brian Sun	19.2~20.2 / 63~65	Nov. 15, 2021~ Jan. 27, 2022
Radiated <1GHz	03CH06-CB	Stim Sung	22.7-23.8 / 55-58	Nov. 15, 2021~ Jan. 27, 2022
Radiated >1GHz	03CH03-CB	Stim Sung	23.5-24.6 / 55-59	Nov. 15, 2021~ Jan. 27, 2022
	03CH06-CB	Stim Sung	22.7-23.8 / 55-58	Nov. 15, 2021~ Jan. 27, 2022
Radiated Co-location	03CH05-CB	Stim Sung	23.5-24.6 / 55-59	Nov. 15, 2021~ Jan. 27, 2022
AC Conduction	CO01-CB	Peter Wu	20~21 / 58~60	Jan. 05, 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)	2.0 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	4.2 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.5 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.7 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.2 dB	Confidence levels of 95%
Conducted Emission	2.5 dB	Confidence levels of 95%
Output Power Measurement	1.3 dB	Confidence levels of 95%
Power Density Measurement	2.5 dB	Confidence levels of 95%
Bandwidth Measurement	0.9%	Confidence levels of 95%



## 2 Test Configuration of EUT

### 2.1 Test Channel Mode

Mode
802.11b_Nss1,(1Mbps)_4TX
2412MHz
2437MHz
2462MHz
802.11g_Nss1,(6Mbps)_4TX
2412MHz
2417MHz
2437MHz
2457MHz
2462MHz
802.11ax HEW20-BF_Nss1,(MCS0)_4TX
2412MHz
2417MHz
2437MHz
2457MHz
2462MHz
802.11ax HEW40-BF_Nss1,(MCS0)_4TX
2422MHz
2437MHz
2452MHz

- ♦ Note1: There are two modes of EUT for n/VHT/ax in 2.4GHz and n/ac/ax in 5GHz. One is beamforming mode, and the other is non-beamforming mode, after evaluating, beamforming mode has been evaluated to be the worst case, so it was selected to test and record in this test report.
- ♦ Note2: Evaluated HEW20/HEW40 mode only, due to similar modulation. The power setting of HT20/HT40/VHT20/VHT40 mode are the same or lower than HEW20/HEW40.



## 2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
<b>Tests Item</b>	AC power-line conducted emissions
<b>Condition</b>	AC power-line conducted measurement for line and neutral Test Voltage: 120Vac / 60Hz
<b>Operating Mode</b>	Normal Link
1	EUT 1 + Adapter 1
2	EUT 1 + Adapter 3
3	EUT 1 + Adapter 4

For operating mode 2 is the worst case and it was record in this test report.

The Worst Case Mode for Following Conformance Tests	
<b>Tests Item</b>	DTS Bandwidth Maximum Conducted Output Power Power Spectral Density Emissions in Non-restricted Frequency Bands
<b>Test Condition</b>	Conducted measurement at transmit chains
<b>Test Mode</b>	1   EUT 1



<b>The Worst Case Mode for Following Conformance Tests</b>	
<b>Tests Item</b>	Emissions in Restricted Frequency Bands
<b>Test Condition</b>	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.
<b>Operating Mode &lt; 1GHz</b>	CTX
	<ol style="list-style-type: none"> <li>The EUT was performed at X axis, Y axis and Z axis position for Radiated emission above 1GHz test, and the worst case was found at Z axis for WLAN 2.4GHz, UNII 1 and UNII 2A, WLAN 6GHz and at X axis for UNII 2C and UNII 3. So the measurement will follow this same test configuration.</li> <li>The EUT has two types for setting the antenna. One is antenna in horizontal and the other is antenna in vertical, and the worst case was found at antenna in horizontal for 2.4GHz and antenna in vertical for 5GHz and 6GHz from Radiated emission above 1GHz test. So the measurement will follow this same test configuration.</li> </ol>
1	EUT 1 in Z axis + antenna in horizontal + Adapter 1 + WLAN 2.4GHz
2	EUT 1 in Z axis + antenna in horizontal + Adapter 3 + WLAN 2.4GHz
3	EUT 1 in Z axis + antenna in horizontal + Adapter 4 + WLAN 2.4GHz
Mode 1 has been evaluated to be the worst case among Mode 1~3, thus measurement for Mode 4 ~ 6 will follow this same test mode.	
4	EUT 1 in Z axis + antenna in vertical + Adapter 1 + UNII 1 and UNII 2A
5	EUT 1 in X axis + antenna in vertical + Adapter 1 + UNII 2C and UNII 3
6	EUT 1 in Z axis + antenna in vertical + Adapter 1 + WLAN 6GHz
Mode 1 has been evaluated to be the worst case among Mode 1~6, thus measurement for Mode 7 ~ 8 will follow this same test mode.	
7	EUT 2 in Z axis + antenna in horizontal + Adapter 1 + WLAN 2.4GHz
8	EUT 3 in Z axis + antenna in horizontal + Adapter 1 + WLAN 2.4GHz
For operating mode 1 is the worst case and it was record in this test report.	
<b>Operating Mode &gt; 1GHz</b>	CTX
	<ol style="list-style-type: none"> <li>The EUT was performed at X axis, Y axis and Z axis position, and the worst case was found at Z axis. So the measurement will follow this same test configuration.</li> <li>The EUT has two types for setting the antenna. One is antenna in horizontal and the other is antenna in vertical, and the worst case was found at antenna in horizontal. So the measurement will follow this same test configuration.</li> </ol>
1	EUT 1 in Z axis + antenna in horizontal





<b>The Worst Case Mode for Following Conformance Tests</b>	
<b>Tests Item</b>	Simultaneous Transmission Analysis - Radiated Emission Co-location
<b>Test Condition</b>	Radiated measurement
<b>Operating Mode</b>	Normal Link
	<ol style="list-style-type: none"><li>1. The EUT was performed at X axis, Y axis and Z axis position for Radiated emission above 1GHz test, and the worst case was found at Z axis. So the measurement will follow this same test configuration.</li><li>2. The EUT has two types for setting the antenna. One is antenna in horizontal and the other is antenna in vertical, and the worst case was found at antenna in vertical from Radiated emission above 1GHz test. So the measurement will follow this same test configuration.</li></ol>
1	EUT 1 in Z axis + antenna in vertical + WLAN 2.4GHz + WLAN 5GHz (UNII 1/ UNII 2A)

Refer to Appendix G for Radiated Emission Co-location.

<b>The Worst Case Mode for Following Conformance Tests</b>	
<b>Tests Item</b>	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
<b>Operating Mode</b>	
1	EUT 1 + WLAN 2.4GHz + WLAN 5GHz (UNII 2C/ UNII 3) + WLAN 6GHz
2	EUT 1 + WLAN 5GHz (UNII 1/ UNII 2A) + WLAN 5GHz (UNII 2C/ UNII 3) + WLAN 6GHz

Refer to Sporton Test Report No.: FA1N0529 for Co-location RF Exposure Evaluation.



### 2.3 EUT Operation during Test

For CTX Mode:

non-beamforming mode:

The EUT was programmed to be in continuously transmitting mode.

beamforming mode:

For Conducted Mode:

The EUT was programmed to be in continuously transmitting mode.

For Radiated Mode:

During the test, the following programs under WIN 7 were executed.

The program was executed as follows:

1. During the test, the EUT operation to normal function.
2. Executed command fixed test channel under DOS[10.0.19043.1320]、LanTest20(version 2.0.0.2).
3. Executed "Lantest.exe" to link with the remote workstation to transmit and receive packet by Router and transmit duty cycle no less than 98%.

For Normal Link Mode:

During the test, the EUT operation to normal function.

### 2.4 Accessories

Accessories				
Equipment Name	Brand Name	Model Name	Rating	Remark
Adapter 1	AcBel	ADD011	INPUT: 100-240V~ 1.7A, 50-60Hz OUTPUT: +19.5V, 3.33A, 65.0W MAX.	With the DC cable: Non-shielded, 1.5m
Adapter 2	AcBel	ADD011	INPUT: 100-240V~ 1.7A, 50-60Hz OUTPUT: +19.5V, 3.33A, 65.0W MAX.	With the DC cable: Non-shielded, 1.5m
Adapter 3	DELTA	ADP-65GD	INPUT: AC100-240V ~ 50-60Hz, 1.5A OUTPUT: +19V, 3.42A.	With the DC cable: Non-shielded, 1.8m
Adapter 4	DELTA	ADP-65DE B	INPUT: 100-240V~1.5A, 50-60Hz OUTPUT: 19.0V, 3.42A, 65.0W	With the DC cable: Non-shielded, 1.5m
Adapter 5	DELTA	ADP-65DE B	INPUT: 100-240V ~ 1.5A, 50-60Hz OUTPUT: 19.0V, 3.42A, 65.0W	With the DC cable: Non-shielded, 1.5m
Others				
RJ-45 cable*1: Non-shielded, 1.5m				
Power cord*1: Non-shielded, 0.9m				

Note: Refer to photographs of EUT for the detail information of difference between Adapter 1 & Adapter 2 and Adapter 4 & Adapter 5.



## 2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	10G LAN PC	DELL	T3400	N/A
B	2.5G WAN PC	DELL	T3400	N/A
C	2.4G NB	DELL	E6430	N/A
D	5G Low Band NB	DELL	E6430	N/A
E	Flash disk2.0	ADATA	C103	N/A
F	Flash disk3.0	Transcend	JetFlash-700	N/A
G	5G High Band NB	DELL	E6430	N/A
H	1G LAN NB	DELL	E6430	N/A
I	6G NB	DELL	E6430	N/A
J	6G Client	INTEL	AX210	N/A
K	1G LAN4 NB	DELL	E6430	N/A

For Radiated (below 1GHz) and Radiated (above 1GHz / Non-beamforming mode):

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

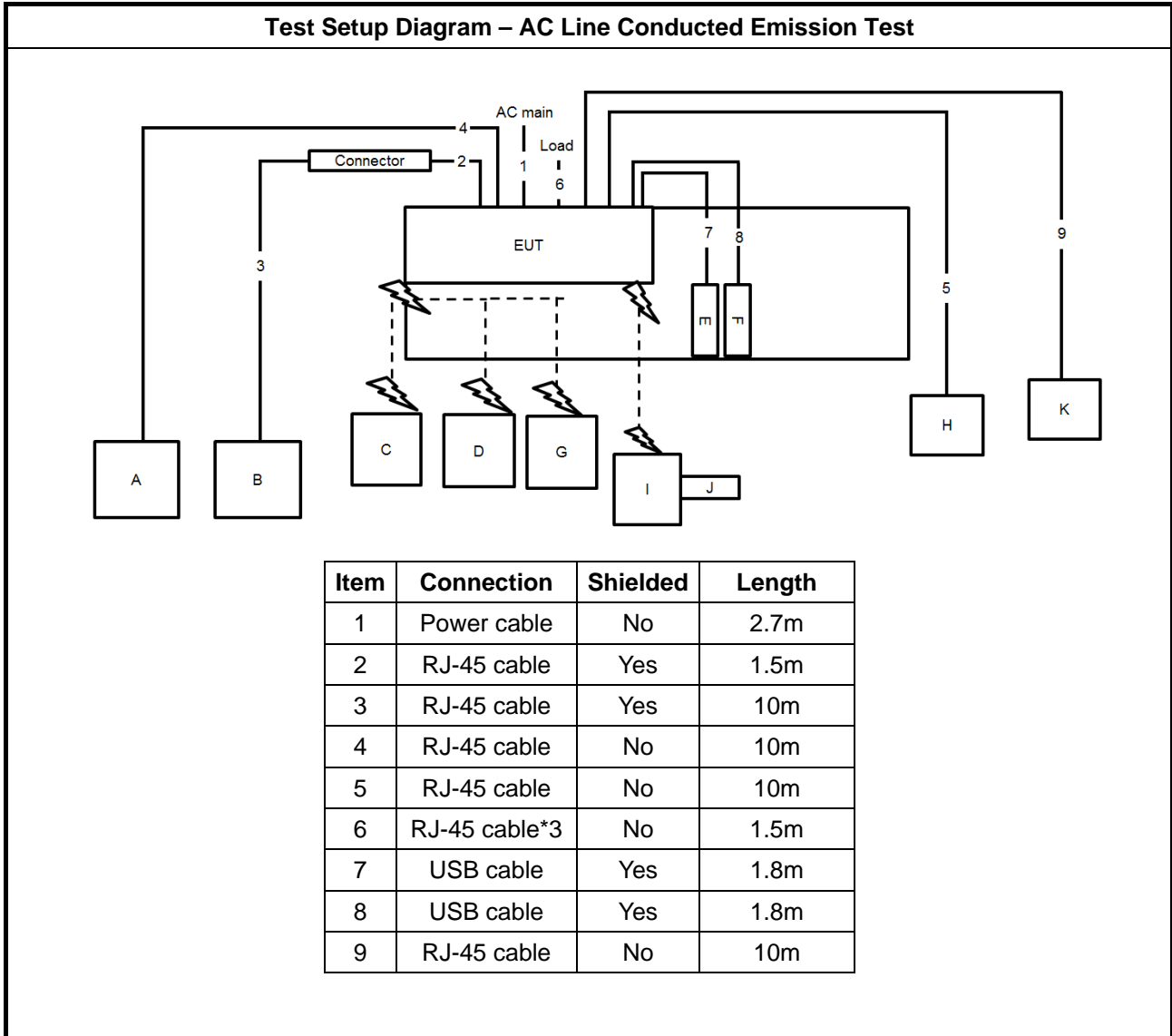
For Radiated (above 1GHz / Beamforming mode):

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A
B	Notebook	DELL	E4300	N/A
C	Router	ASUS	GT-AXE16000	MSQ-RTAX5D00

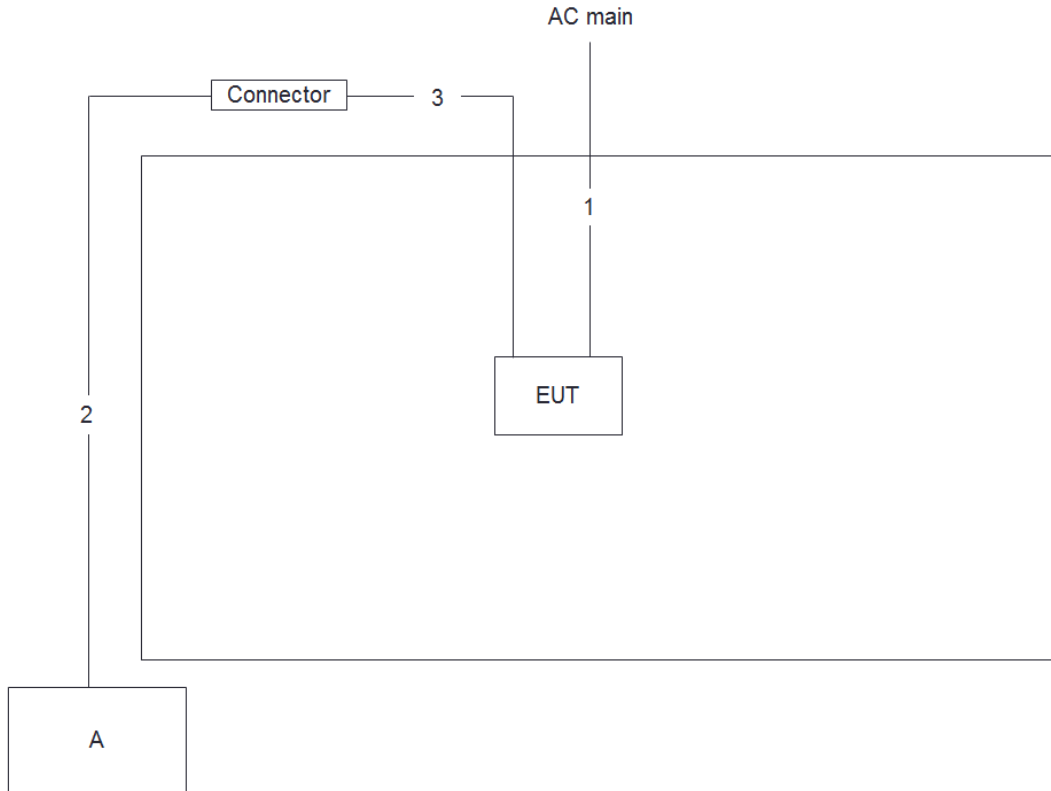
For RF Conducted:

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

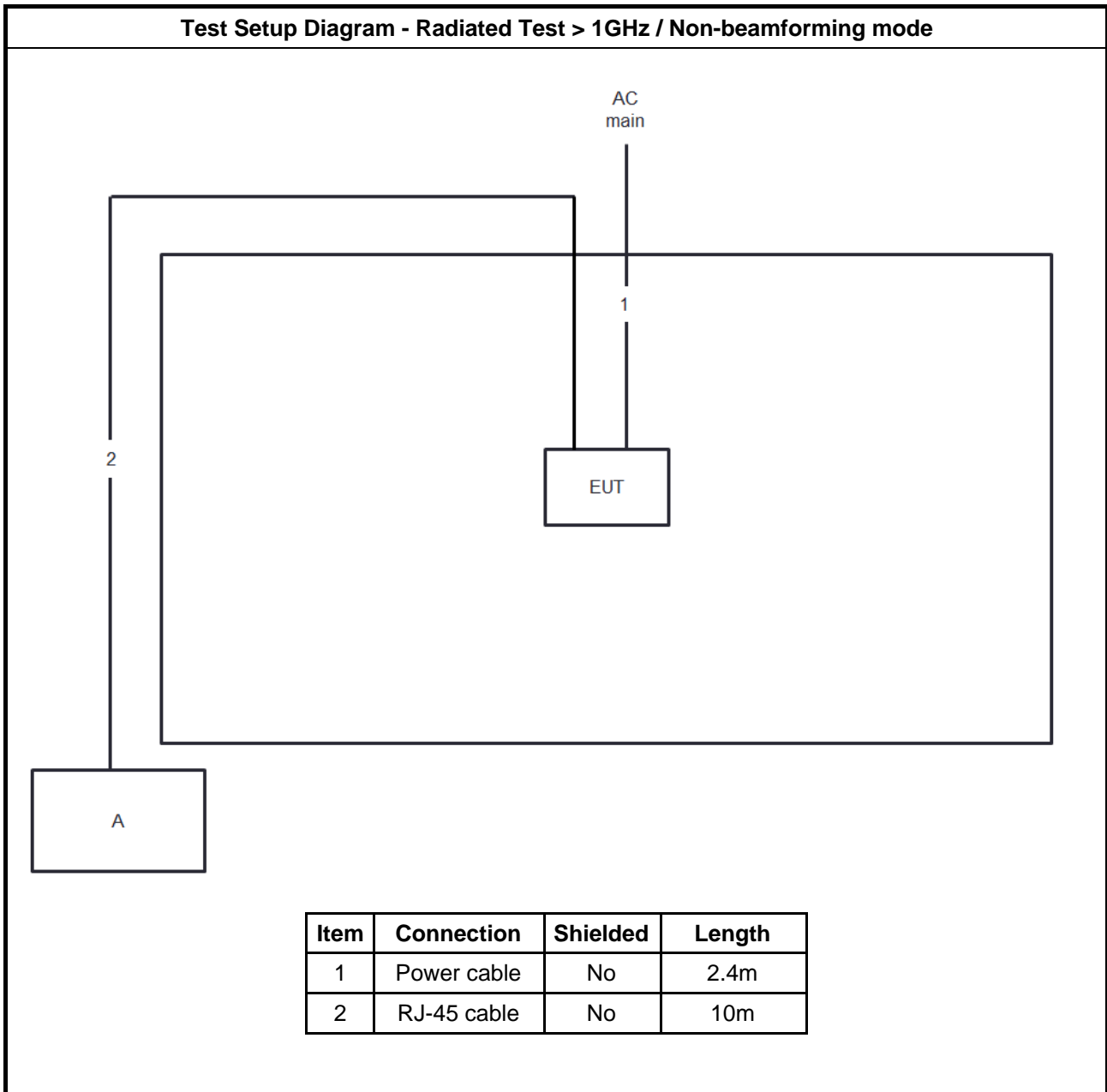
## 2.6 Test Setup Diagram



**Test Setup Diagram - Radiated Test < 1GHz**

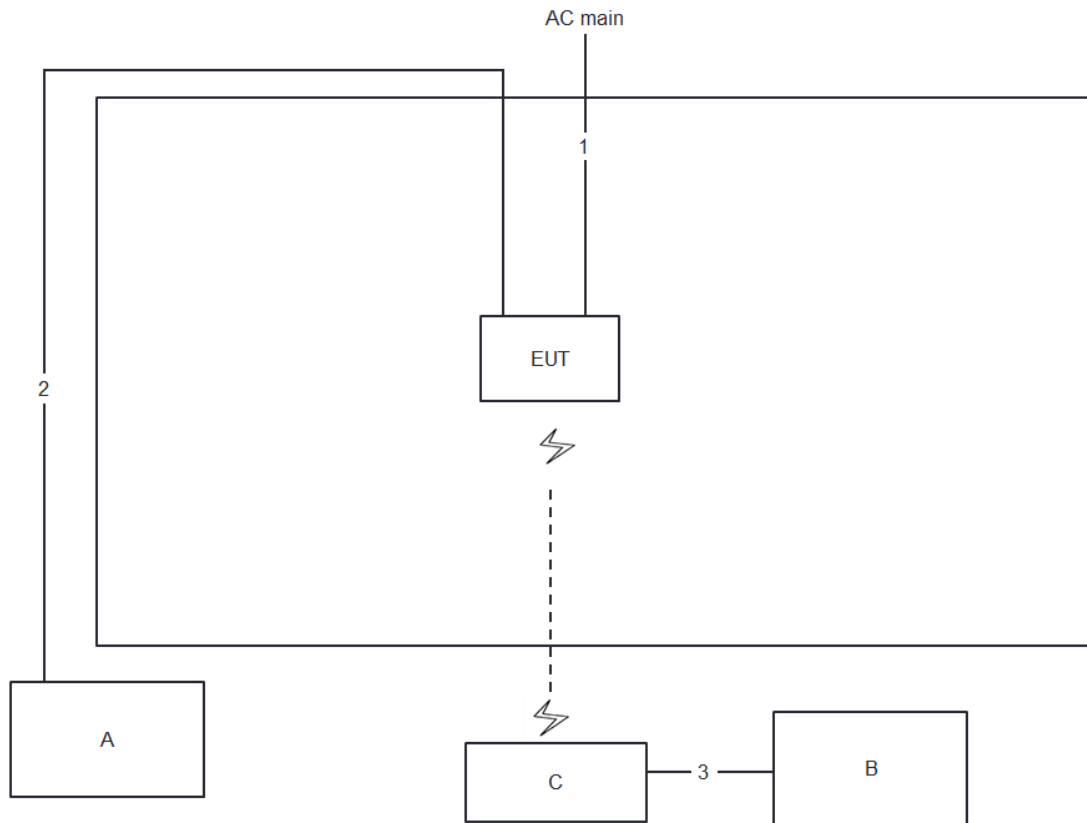


Item	Connection	Shielded	Length
1	Power cable	No	2.4m
2	RJ-45 cable	Yes	10m
3	RJ-45 cable	Yes	1.5m





**Test Setup Diagram - Radiated Test > 1GHz / beamforming mode**



Item	Connection	Shielded	Length
1	Power cable	No	2.4m
2	RJ-45 cable	No	10m
3	RJ-45 cable	No	1.5m



### 3 Transmitter Test Result

#### 3.1 AC Power-line Conducted Emissions

##### 3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

Note 1: \* Decreases with the logarithm of the frequency.

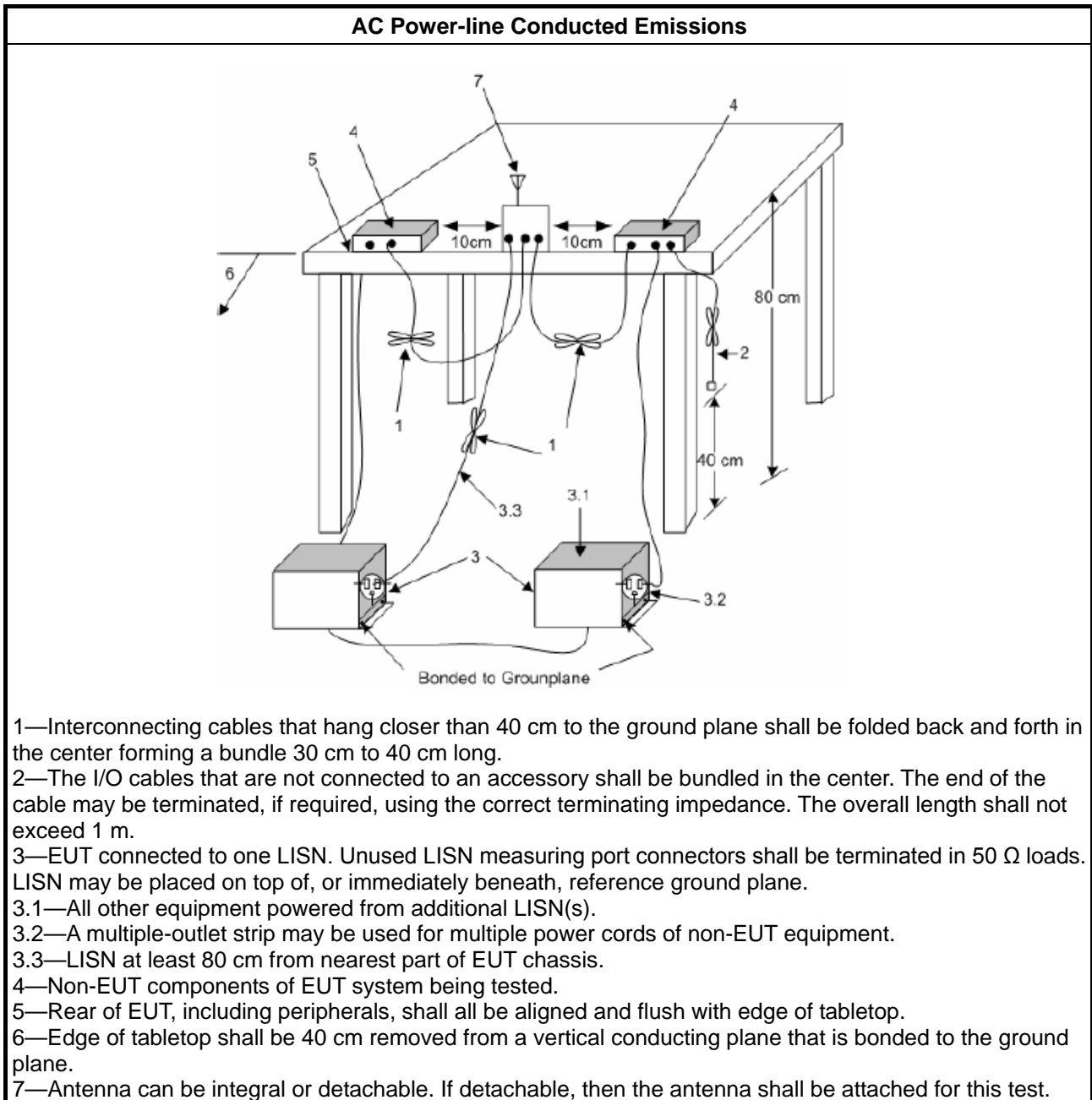
##### 3.1.2 Measuring Instruments

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

##### 3.1.3 Test Procedures

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

### 3.1.4 Test Setup



### 3.1.5 Measurement Results Calculation

The measured Level is calculated using:

- 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
<b>Systems using digital modulation techniques:</b>
<ul style="list-style-type: none"> <li>▪ 6 dB bandwidth <math>\geq</math> 500 kHz.</li> </ul>

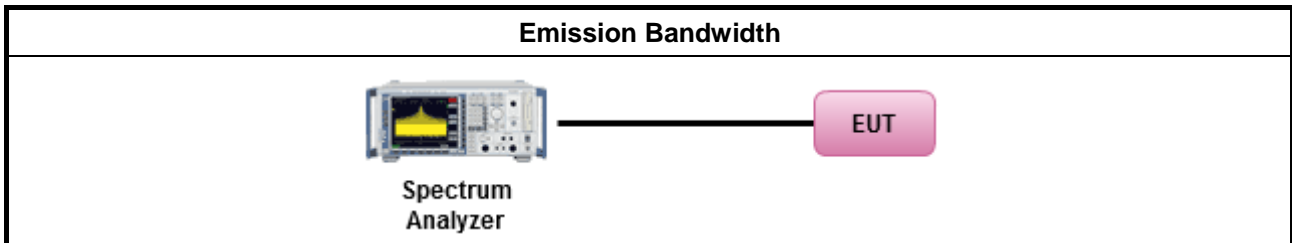
#### 3.2.2 Measuring Instruments

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

#### 3.2.3 Test Procedures

Test Method
<ul style="list-style-type: none"> <li>▪ For the emission bandwidth shall be measured using one of the options below:</li> </ul>
<input checked="" type="checkbox"/> Refer as FCC KDB 558074, clause 8.2 & C63.10 clause 11.8.1 Option 1 for 6 dB bandwidth measurement.
<input type="checkbox"/> Refer as FCC KDB 558074, clause 8.2 & C63.10 clause 11.8.2 Option 2 for 6 dB bandwidth measurement.
<input type="checkbox"/> Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.

#### 3.2.4 Test Setup



#### 3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B



### 3.3 Maximum Conducted Output Power

#### 3.3.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit	
	<ul style="list-style-type: none"><li>▪ If <math>G_{TX} \leq 6</math> dBi, then <math>P_{Out} \leq 30</math> dBm (1 W)</li></ul>
	<ul style="list-style-type: none"><li>▪ Point-to-multipoint systems (P2M): If <math>G_{TX} &gt; 6</math> dBi, then <math>P_{Out} = 30 - (G_{TX} - 6)</math> dBm</li></ul>
	<ul style="list-style-type: none"><li>▪ Point-to-point systems (P2P): If <math>G_{TX} &gt; 6</math> dBi, then <math>P_{Out} = 30 - (G_{TX} - 6)/3</math> dBm</li></ul>
	<ul style="list-style-type: none"><li>▪ Smart antenna system (SAS):</li></ul>
	<ul style="list-style-type: none"><li>- Single beam: If <math>G_{TX} &gt; 6</math> dBi, then <math>P_{Out} = 30 - (G_{TX} - 6)/3</math> dBm</li></ul>
	<ul style="list-style-type: none"><li>- Overlap beam: If <math>G_{TX} &gt; 6</math> dBi, then <math>P_{Out} = 30 - (G_{TX} - 6)/3</math> dBm</li></ul>
	<ul style="list-style-type: none"><li>- Aggregate power on all beams: If <math>G_{TX} &gt; 6</math> dBi, then <math>P_{Out} = 30 - (G_{TX} - 6)/3 + 8</math> dB dBm</li></ul>
$P_{Out}$ = 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.

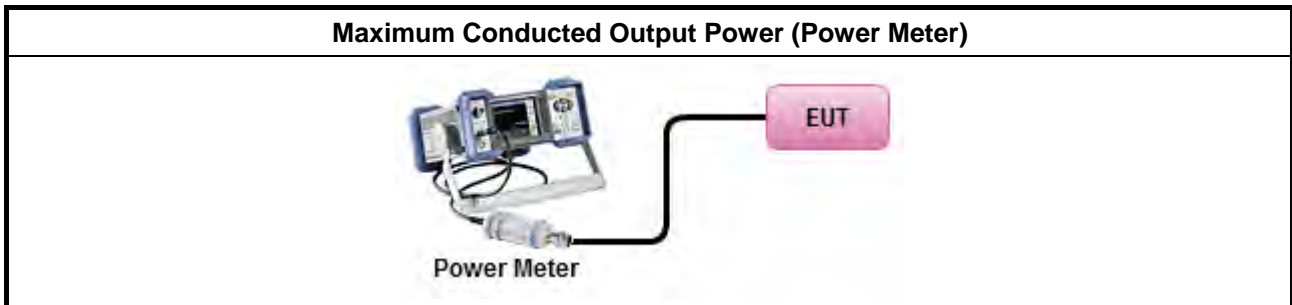


3.3.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> <li>▪ Maximum Peak Conducted Output Power</li> </ul>	
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 8.3.1.1 & C63.10 clause 11.9.1.1 (RBW ≥ EBW method).
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 8.3.1.3 & C63.10 clause 11.9.1.3 (peak power meter).
<ul style="list-style-type: none"> <li>▪ Maximum Conducted Output Power</li> </ul>	
[duty cycle ≥ 98% or external video / power trigger]	
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.2 Method AVGSA-1.
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.3 Method AVGSA-1A. (alternative)
duty cycle < 98% and average over on/off periods with duty factor	
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.4 Method AVGSA-2.
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.5 Method AVGSA-2A (alternative)
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.6 Method AVGSA-3
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 8.3.2.2 & C63.10 clause 11.9.2.2.7 Method AVGSA-3A (alternative)
Measurement using a power meter (PM)	
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 8.3.2.3 & C63.10 clause 11.9.2.3.1 Method AVGPM (using an RF average power meter).
<input checked="" type="checkbox"/>	Refer as FCC KDB 558074, clause 8.3.2.3 & C63.10 clause 11.9.2.3.2 Method AVGPM-G (using an gate RF average power meter).
<ul style="list-style-type: none"> <li>▪ For conducted measurement.</li> </ul>	
<ul style="list-style-type: none"> <li>▪ 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.</li> </ul>	
<ul style="list-style-type: none"> <li>▪ If multiple transmit chains, EIRP calculation could be following as methods:  <math display="block">P_{total} = P_1 + P_2 + \dots + P_n</math> (calculated in linear unit [mW] and transfer to log unit [dBm])  <math display="block">EIRP_{total} = P_{total} + DG</math> </li> </ul>	



### 3.3.4 Test Setup



### 3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C



### 3.4 Power Spectral Density

#### 3.4.1 Power Spectral Density Limit

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

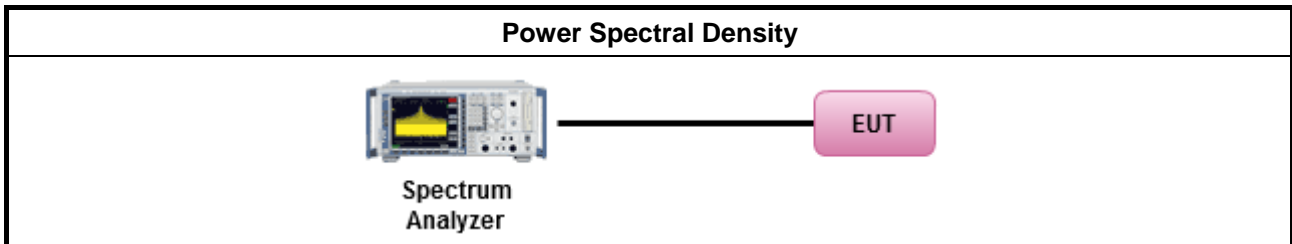
#### 3.4.2 Measuring Instruments

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

#### 3.4.3 Test Procedures

Test Method			
<ul style="list-style-type: none"> <li>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).</li> </ul>			
<input checked="" type="checkbox"/> Refer as FCC KDB 558074, clause 8.4 & C63.10 clause 11.10 Method Max. PSD.			
<ul style="list-style-type: none"> <li>For conducted measurement.             <ul style="list-style-type: none"> <li>If The EUT supports multiple transmit chains using options given below:                 <table border="1"> <tbody> <tr> <td> <input checked="" type="checkbox"/> Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.                 </td> </tr> <tr> <td> <input type="checkbox"/> Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,                 </td> </tr> <tr> <td> <input type="checkbox"/> Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.                 </td> </tr> </tbody> </table> </li> </ul> </li> </ul>	<input checked="" type="checkbox"/> Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.	<input type="checkbox"/> Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,	<input type="checkbox"/> Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.
<input checked="" type="checkbox"/> Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.			
<input type="checkbox"/> Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,			
<input type="checkbox"/> Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.			

### 3.4.4 Test Setup



### 3.4.5 Test Result of Power Spectral Density

Refer as Appendix D

### 3.5 Emissions in Non-restricted Frequency Bands

#### 3.5.1 Emissions in Non-restricted Frequency Bands Limit

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

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.

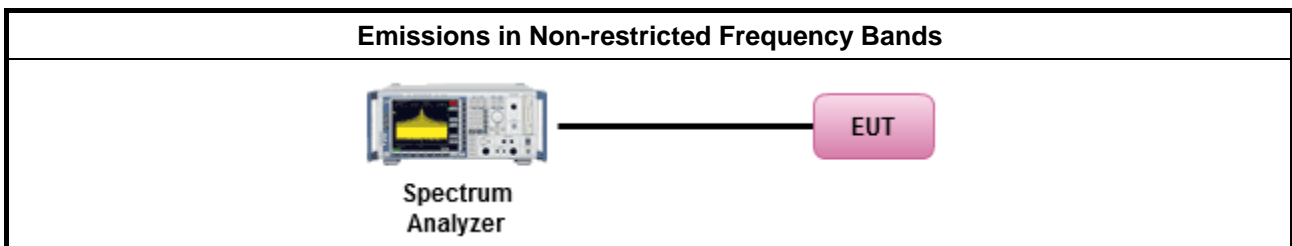
#### 3.5.2 Measuring Instruments

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

#### 3.5.3 Test Procedures

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

#### 3.5.4 Test Setup



#### 3.5.5 Test Result of Emissions in Non-restricted Frequency Bands

Refer as Appendix E



### 3.6 Emissions in Restricted Frequency Bands

#### 3.6.1 Emissions in Restricted Frequency Bands Limit

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

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

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

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

#### 3.6.2 Measuring Instruments

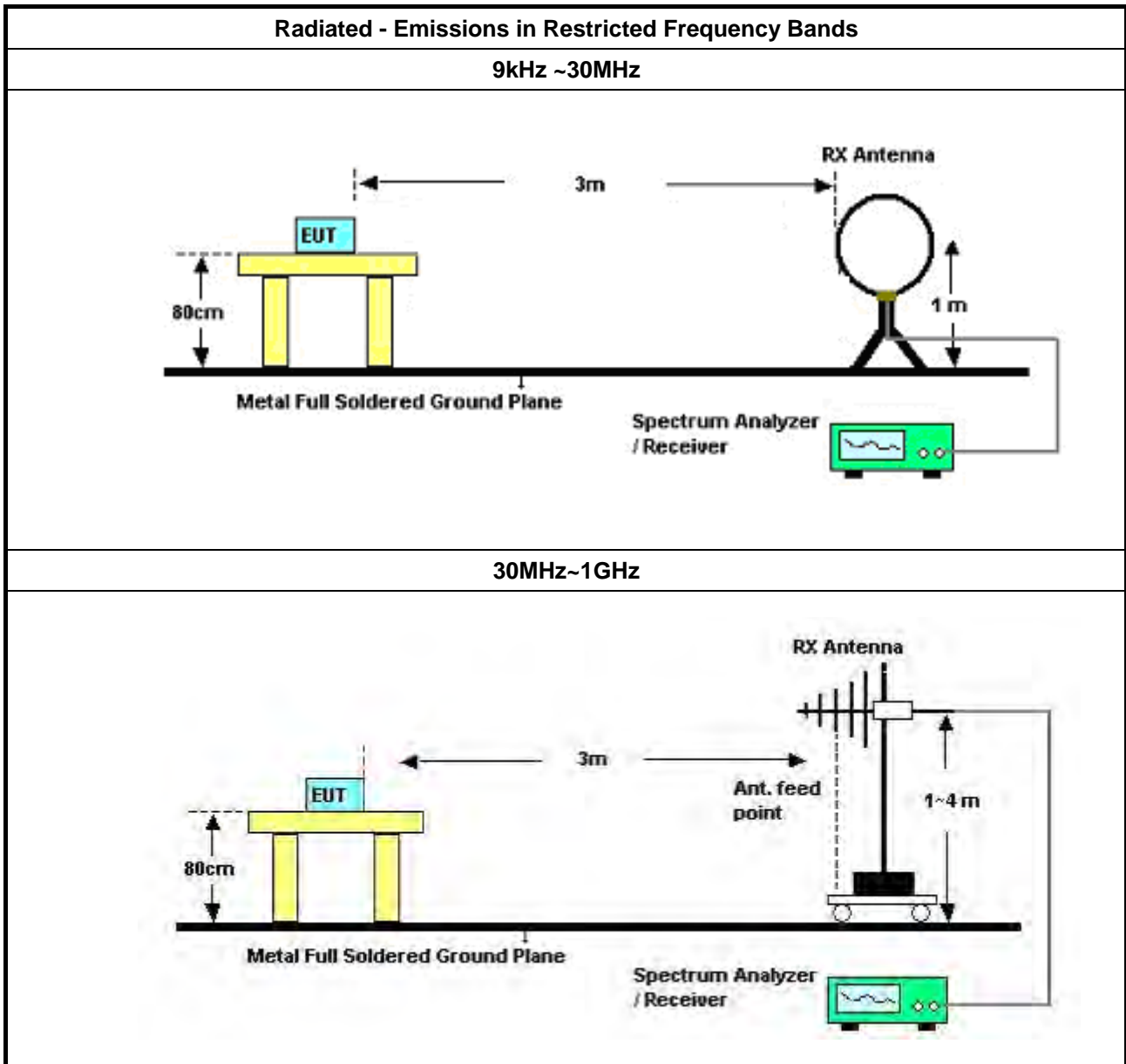
Refer a test equipment and calibration data table in this test report.

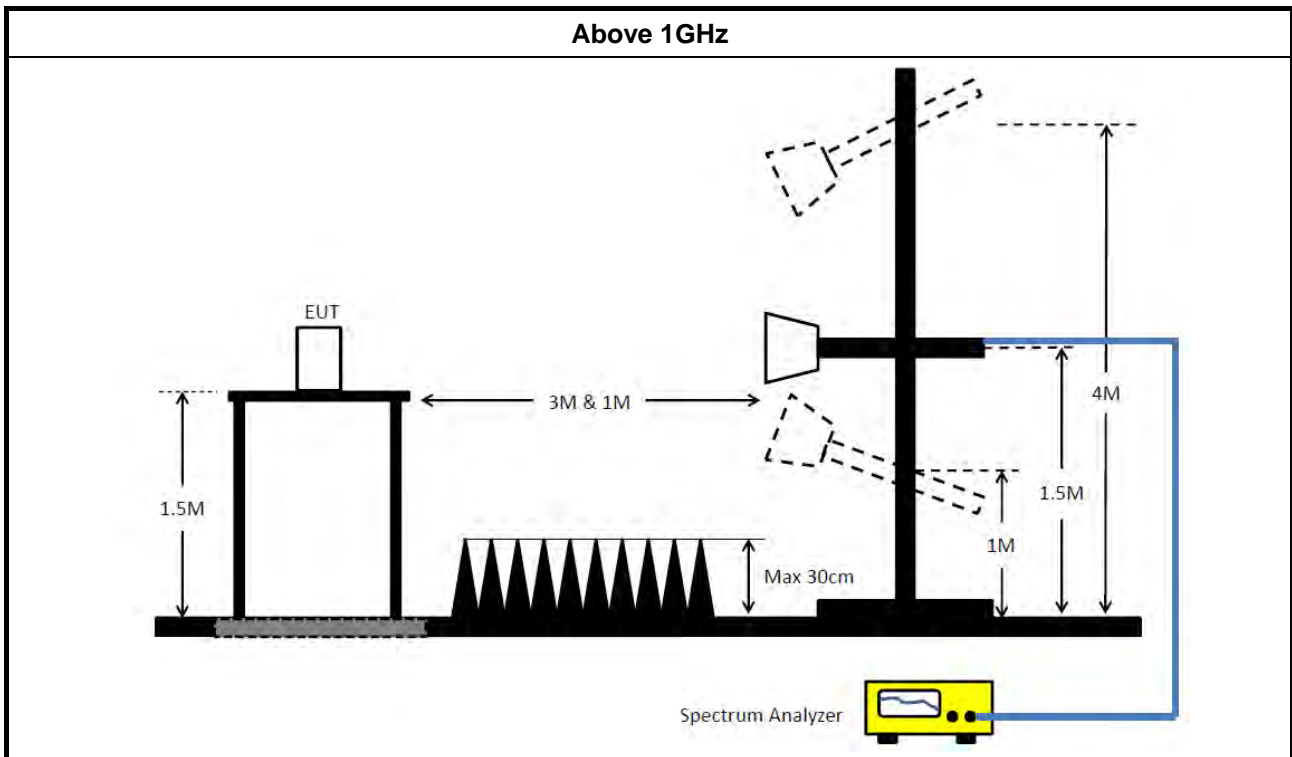


**3.6.3 Test Procedures**

<b>Test Method</b>	
<ul style="list-style-type: none"> <li>▪ The average emission levels shall be measured in [duty cycle <math>\geq</math> 98 or duty factor].</li> </ul>	
<ul style="list-style-type: none"> <li>▪ 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.</li> </ul>	
<ul style="list-style-type: none"> <li>▪ For the transmitter unwanted emissions shall be measured using following options below:</li> </ul>	
	<ul style="list-style-type: none"> <li>▪ Refer as FCC KDB 558074, clause 8.6 for unwanted emissions into restricted bands.</li> </ul>
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.1(trace averaging for duty cycle $\geq$ 98%).
<input type="checkbox"/>	Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.2(trace averaging + duty factor).
<input checked="" type="checkbox"/>	Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.5.3(Reduced VBW $\geq$ 1/T).
<input type="checkbox"/>	Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW $\geq$ 1/T, where T is pulse time.
<input type="checkbox"/>	Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.
<input checked="" type="checkbox"/>	Refer as FCC KDB 558074, clause 8.6 & C63.10 clause 11.12.2.4 measurement procedure peak limit.
<ul style="list-style-type: none"> <li>▪ For the transmitter band-edge emissions shall be measured using following options below:</li> </ul>	
	<ul style="list-style-type: none"> <li>▪ Refer as FCC KDB 558074 clause 8.7 &amp; 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.</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Refer as FCC KDB 558074, clause 8.7 (ANSI C63.10, clause 6.10.6) for marker-delta method for band-edge measurements.</li> </ul>
	<ul style="list-style-type: none"> <li>▪ 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).</li> </ul>
	<ul style="list-style-type: none"> <li>▪ 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</li> </ul>
	<ul style="list-style-type: none"> <li>▪ 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.</li> </ul>

**3.6.4 Test Setup**





### 3.6.5 Measurement Results Calculation

The measured Level is calculated using:

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

### 3.6.6 Emissions in Restricted Frequency Bands (Below 30MHz)

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

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

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

### 3.6.7 Test Result of Emissions in Restricted Frequency Bands

Refer as Appendix F





## 4 Test Equipment and Calibration Data

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.4GHz	Mar. 03, 2021	Mar. 02, 2022	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127478	9kHz ~ 30MHz	Dec. 22, 2021	Dec. 21, 2022	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Mar. 07, 2021	Mar. 06, 2022	Conduction (CO01-CB)
Pulse Limiter	Rohde&Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Jan. 30, 2021	Jan. 29, 2022	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	May 19, 2021	May 18, 2022	Conduction (CO01-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH03-CB	1GHz ~18GHz 3m	May 06, 2021	May 05, 2022	Radiation (03CH03-CB)
Horn Antenna	ETS · Lindgren	3115	6821	750MHz~18GHz	Jan. 26, 2021	Jan. 25, 2022	Radiation (03CH03-CB)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1370	1GHz~18GHz	Sep. 14, 2021	Sep. 13, 2022	Radiation (03CH03-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 05, 2021	Aug. 04, 2022	Radiation (03CH03-CB)
Pre-Amplifier	Agilent	8449B	3008A02097	1GHz ~ 26.5GHz	Jul. 02, 2021	Jul. 01, 2022	Radiation (03CH03-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 13, 2021	Jul. 12, 2022	Radiation (03CH03-CB)
Spectrum Analyzer	R&S	FSP40	100019	9kHz ~ 40GHz	Jun. 04, 2021	Jun. 03, 2022	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-20+29	1GHz ~ 18GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-29	1GHz ~ 18GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH03-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH03-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH05-CB	1GHz ~18GHz 3m	Nov. 07, 2021	Nov. 06, 2022	Radiation (03CH05-CB)
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA 9120 D-1291	1GHz~18GHz	Oct. 14, 2021	Oct. 13, 2022	Radiation (03CH05-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 05, 2021	Aug. 04, 2022	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC12630SE	980287	1GHz ~ 26.5GHz	Jul. 02, 2021	Jul. 01, 2022	Radiation (03CH05-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 13, 2021	Jul. 12, 2022	Radiation (03CH05-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Spectrum Analyzer	R&S	FSP40	100304	9kHz ~ 40GHz	Nov. 10, 2020	Nov. 09, 2021	Radiation (03CH05-CB)
Signal Analyzer	R&S	FSV40	101903	9kHz ~ 40GHz	Mar. 22, 2021	Mar. 21, 2022	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-28	1GHz~18GHz	Oct. 13, 2021	Oct. 12, 2022	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-04+28	1GHz~18GHz	Oct. 13, 2021	Oct. 12, 2022	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH05-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH05-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Apr. 14, 2021	Apr. 13, 2022	Radiation (03CH06-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH06-CB	30 MHz ~ 1 GHz	Aug. 09, 2021	Aug. 08, 2022	Radiation (03CH06-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH06-CB	1GHz ~18GHz 3m	Oct. 01, 2021	Sep. 30, 2022	Radiation (03CH06-CB)
Bilog Antenna with 6 dB attenuator	TESEQ & EMCI	CBL6112D & N-6-06	37878 & AT-N0606	20MHz ~ 2GHz	Jul. 31, 2021	Jul. 30, 2022	Radiation (03CH06-CB)
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA 9120D-1292	1GHz~18GHz	Aug. 04, 2021	Aug. 03, 2022	Radiation (03CH06-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 05, 2021	Aug. 04, 2022	Radiation (03CH06-CB)
Pre-Amplifier	Agilent	310N	187290	0.1MHz ~ 1GHz	Nov. 04, 2021	Nov. 03, 2022	Radiation (03CH06-CB)
Pre-Amplifier	Agilent	83017A	MY53270064	0.5GHz ~ 26.5GHz	May 06, 2021	May 05, 2022	Radiation (03CH06-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 13, 2021	Jul. 12, 2022	Radiation (03CH06-CB)
Spectrum analyzer	R&S	FSP40	100080	9kHz~40GHz	Dec. 24, 2021	Dec. 23, 2022	Radiation (03CH06-CB)
Signal Analyzer	R&S	FSV40	101903	9kHz ~ 40GHz	Mar. 22, 2021	Mar. 21, 2022	Radiation (03CH06-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	Jun. 21, 2021	Jun. 20, 2022	Radiation (03CH06-CB)
RF Cable-low	Woken	RG402	Low Cable-05+24	30MHz~1GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-05	1GHz~18GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-05+24	1GHz~18GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH06-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH06-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH06-CB)
Spectrum analyzer	R&S	FSV40	101028	9kHz~40GHz	Dec. 31, 2020	Dec. 30, 2021	Conducted (TH03-CB)
Signal Analyzer	R&S	FSV40	101904	9kHz ~ 40GHz	Apr. 15, 2021	Apr. 14, 2022	Conducted (TH03-CB)
Power Sensor	Anritsu	MA2411B	1726195	300MHz~40GHz	Aug. 22, 2021	Aug. 21, 2022	Conducted (TH03-CB)
Power Meter	Anritsu	ML2495A	1035008	300MHz~40GHz	Aug. 22, 2021	Aug. 21, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-11	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-12	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-13	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-14	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
RF Cable-high	Woken	RG402	High Cable-15	1 GHz –18 GHz	Oct. 04, 2021	Oct. 03, 2022	Conducted (TH03-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH03-CB)

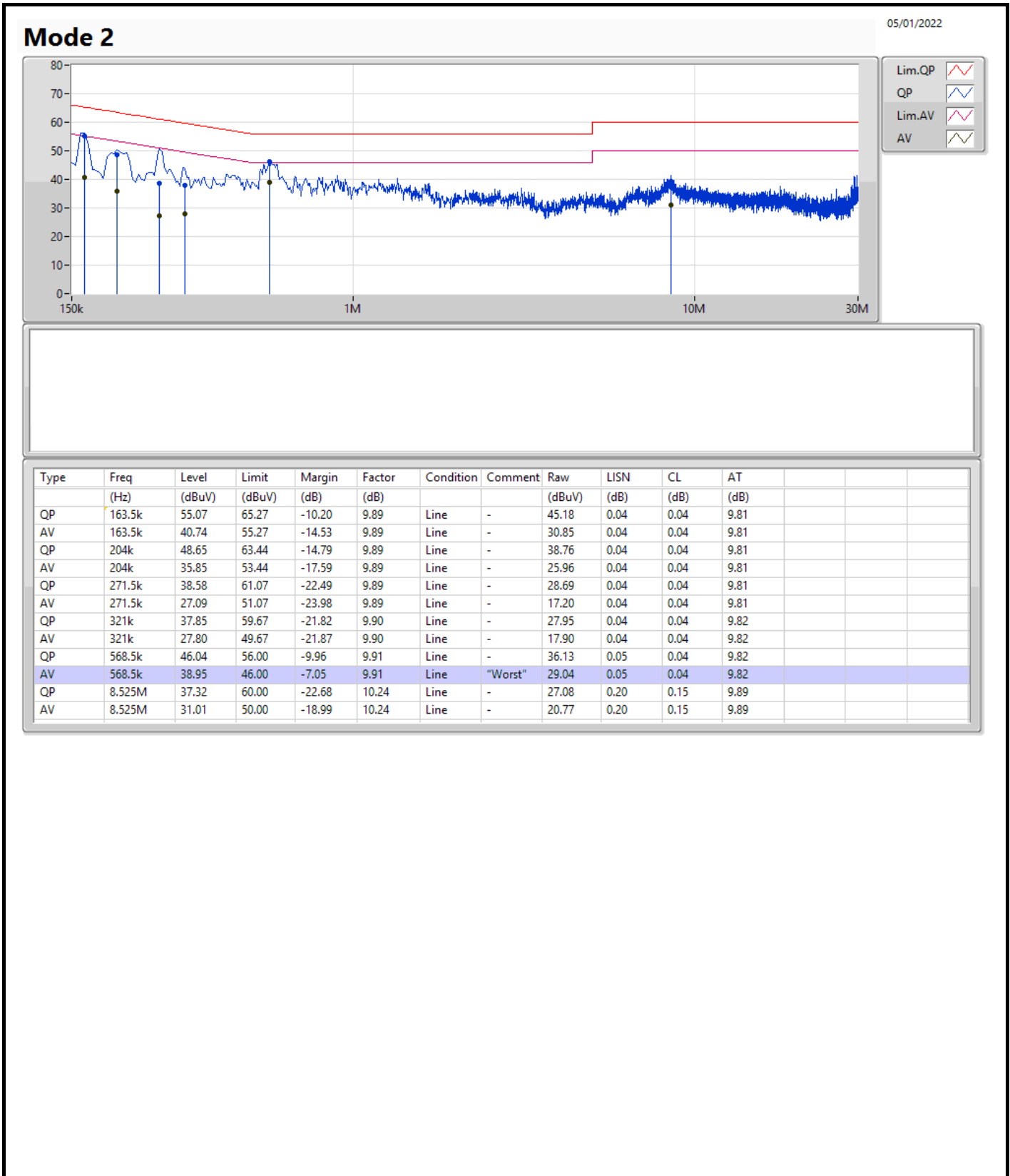
Note: Calibration Interval of instruments listed above is one year.

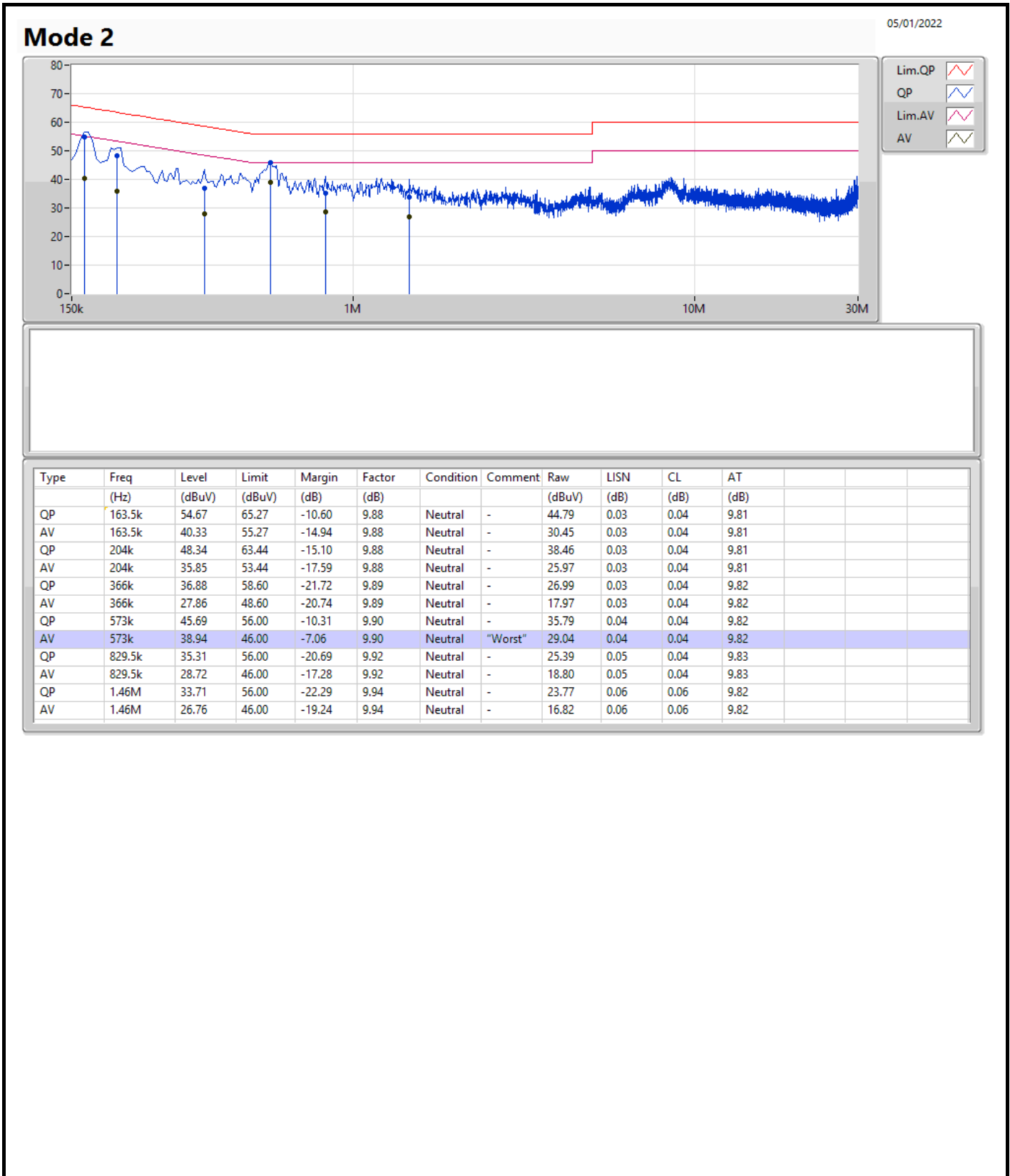
NCR means Non-Calibration required.



**Summary**

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 2	Pass	AV	568.5k	38.95	46.00	-7.05	Line





**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)_4TX	7.55M	10.445M	10M4G1D	6.55M	10.345M
802.11g_Nss1,(6Mbps)_4TX	16.375M	17.016M	17M0D1D	16.325M	16.767M

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)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11b_Nss1,(1Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	7.075M	10.395M	7.025M	10.345M	7.025M	10.42M	7.05M	10.395M
2437MHz	Pass	500k	7.025M	10.42M	7.05M	10.37M	7.025M	10.445M	7.55M	10.395M
2462MHz	Pass	500k	7.025M	10.395M	7.075M	10.37M	6.55M	10.42M	7M	10.395M
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	16.325M	16.892M	16.325M	17.016M	16.325M	16.892M	16.325M	16.992M
2437MHz	Pass	500k	16.325M	16.767M	16.35M	16.842M	16.325M	16.792M	16.35M	16.792M
2462MHz	Pass	500k	16.325M	16.967M	16.375M	16.967M	16.325M	16.942M	16.35M	16.967M

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

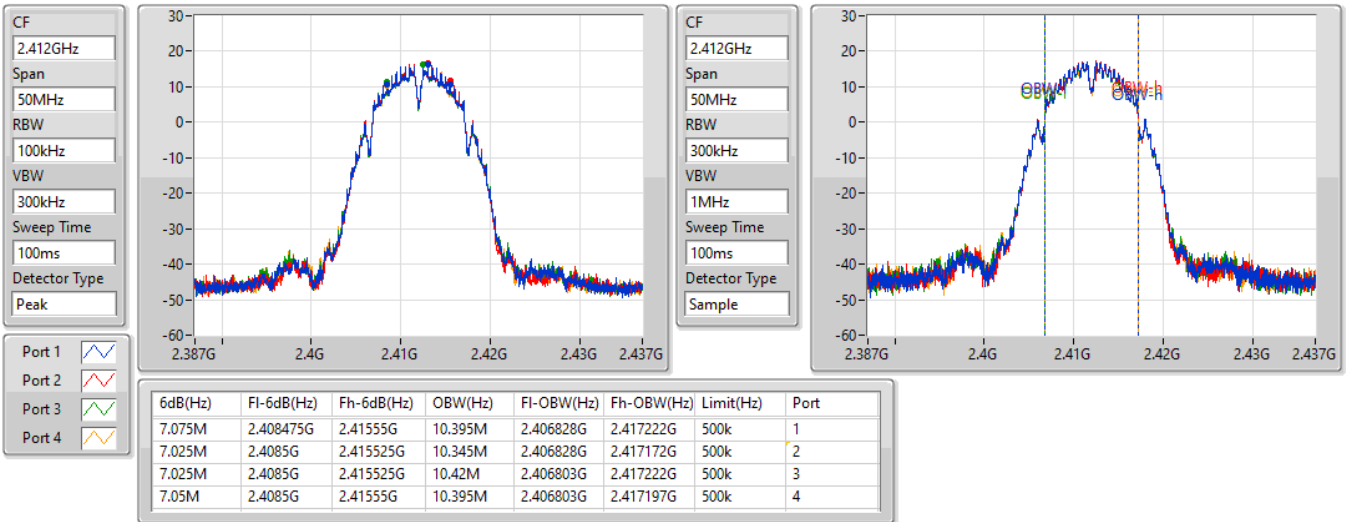


### 802.11b\_Nss1,(1Mbps)\_4TX

EBW

2412MHz

29/12/2021

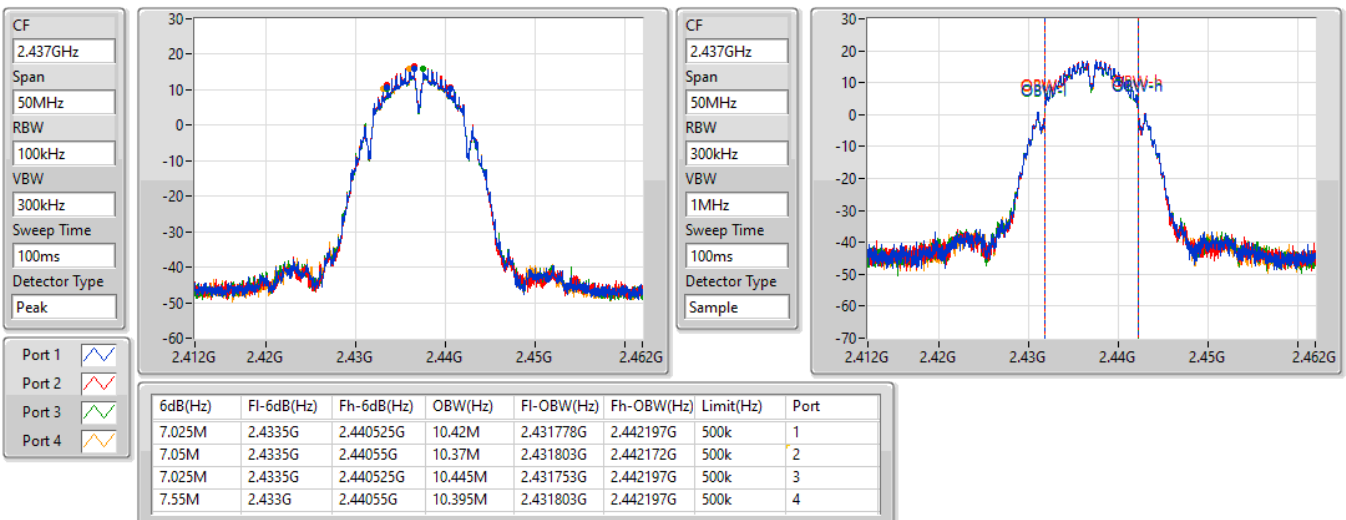


### 802.11b\_Nss1,(1Mbps)\_4TX

EBW

2437MHz

29/12/2021

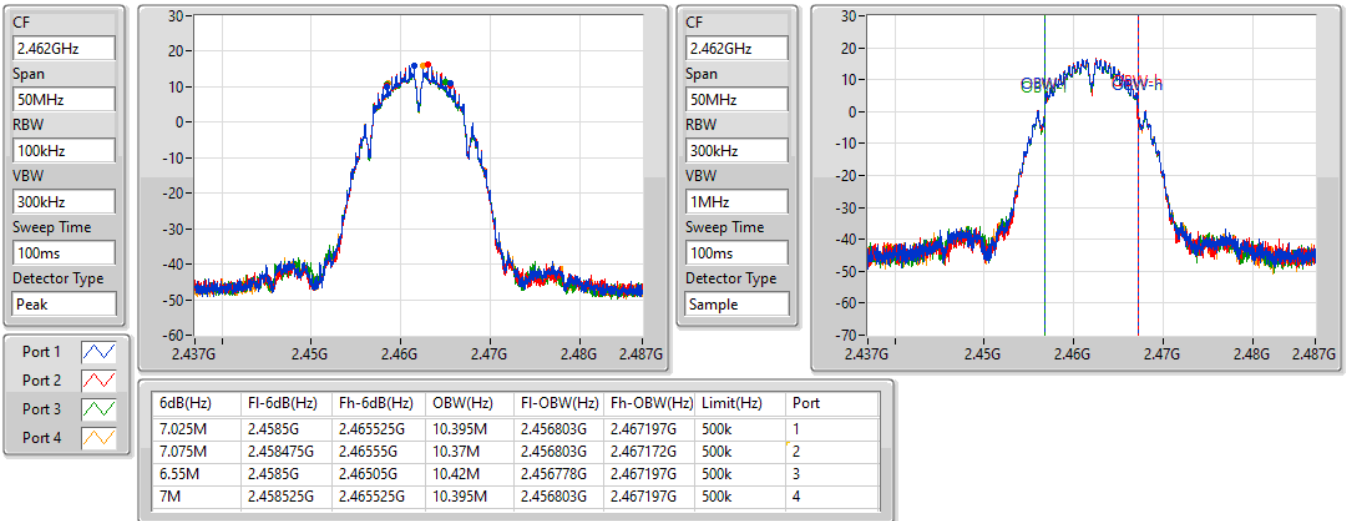


### 802.11b\_Nss1,(1Mbps)\_4TX

EBW

2462MHz

29/12/2021

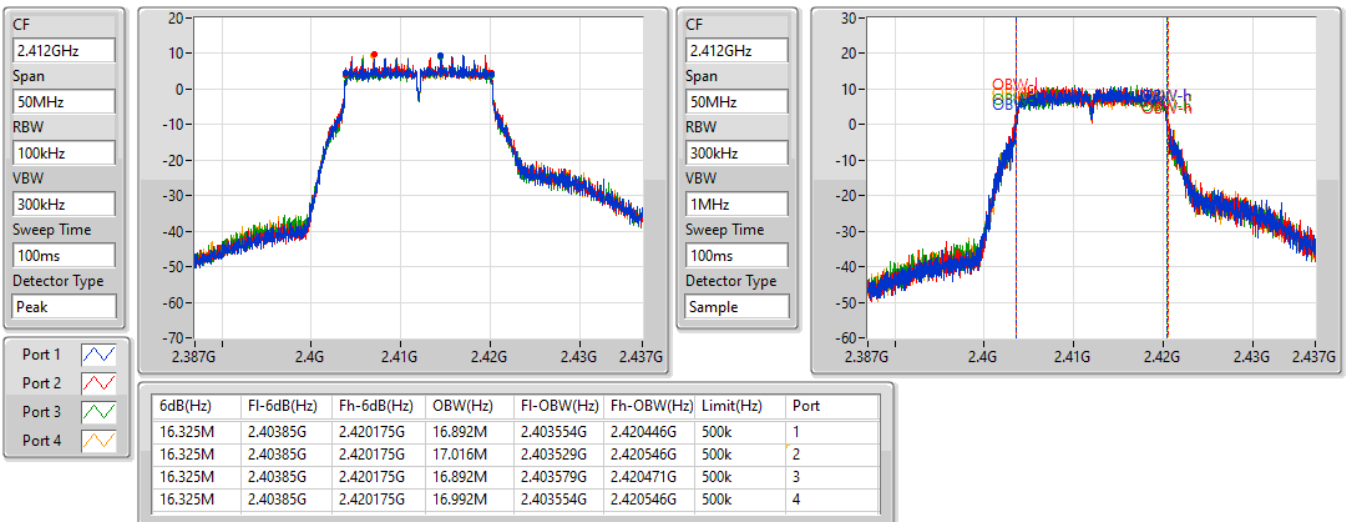


### 802.11g\_Nss1,(6Mbps)\_4TX

EBW

2412MHz

29/12/2021

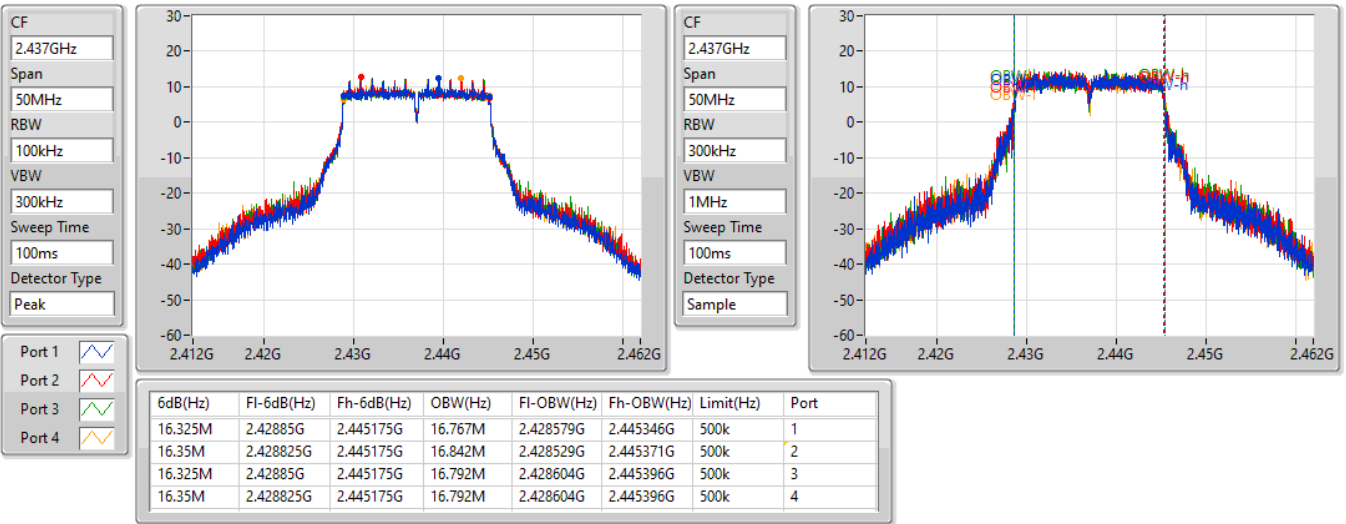


### 802.11g\_Nss1,(6Mbps)\_4TX

EBW

2437MHz

29/12/2021

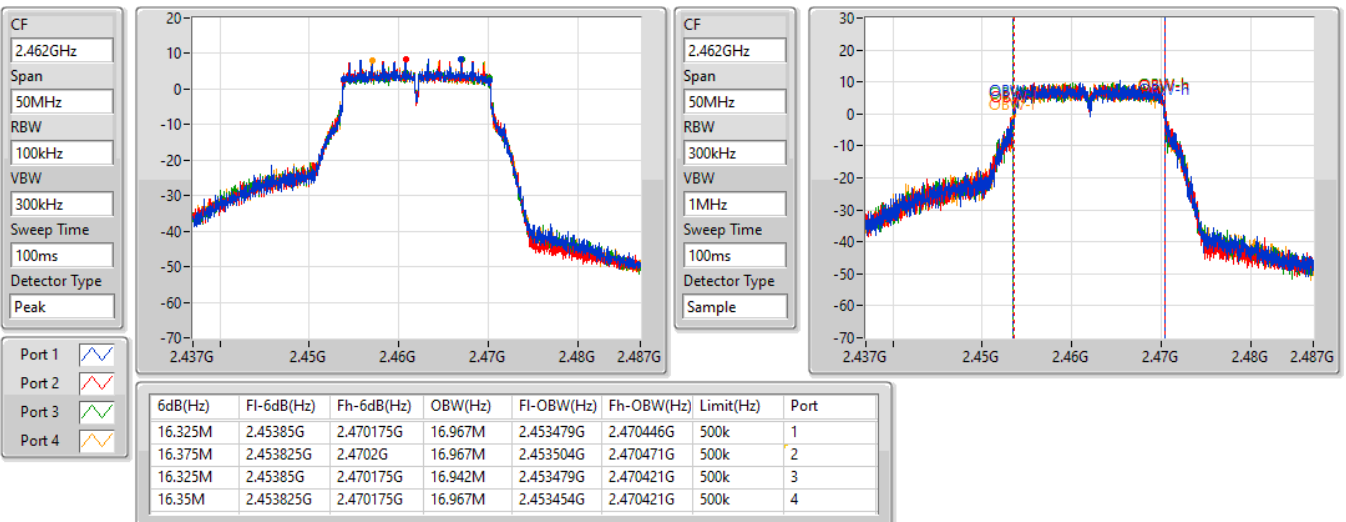


### 802.11g\_Nss1,(6Mbps)\_4TX

EBW

2462MHz

29/12/2021



**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
2.4-2.4835GHz	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	18.975M	19.115M	19M1D1D	18.675M	18.991M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	37.75M	38.081M	38M1D1D	37.3M	37.831M

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)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	500k	18.925M	19.09M	18.9M	19.04M	18.95M	19.115M	18.775M	19.04M
2437MHz	Pass	500k	18.95M	18.991M	18.9M	19.015M	18.975M	19.015M	18.925M	19.015M
2462MHz	Pass	500k	18.9M	19.015M	18.75M	19.065M	18.675M	19.065M	18.825M	19.09M
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	500k	37.6M	37.981M	37.75M	38.031M	37.55M	37.931M	37.75M	37.981M
2437MHz	Pass	500k	37.75M	37.931M	37.6M	37.831M	37.65M	37.981M	37.45M	38.031M
2452MHz	Pass	500k	37.5M	37.981M	37.55M	38.081M	37.6M	38.031M	37.3M	37.981M

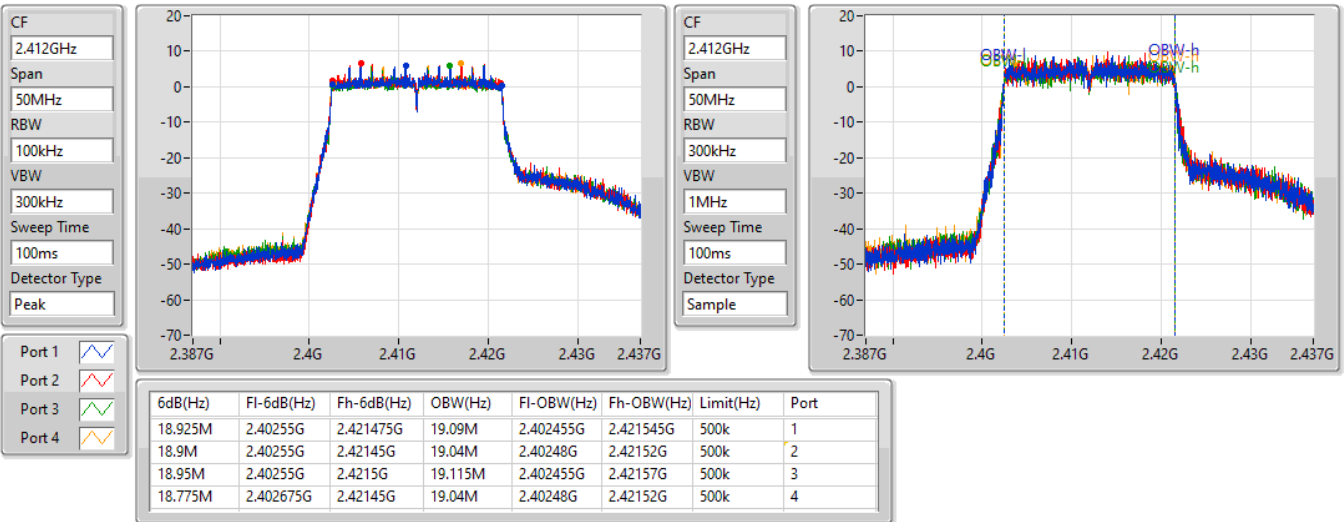
Port X-N dB = Port X 6dB down bandwidth;  
 Port X-OBW = Port X 99% occupied bandwidth

802.11ax HEW20-BF\_Nss1,(MCS0)\_4TX

EBW

2412MHz

29/12/2021

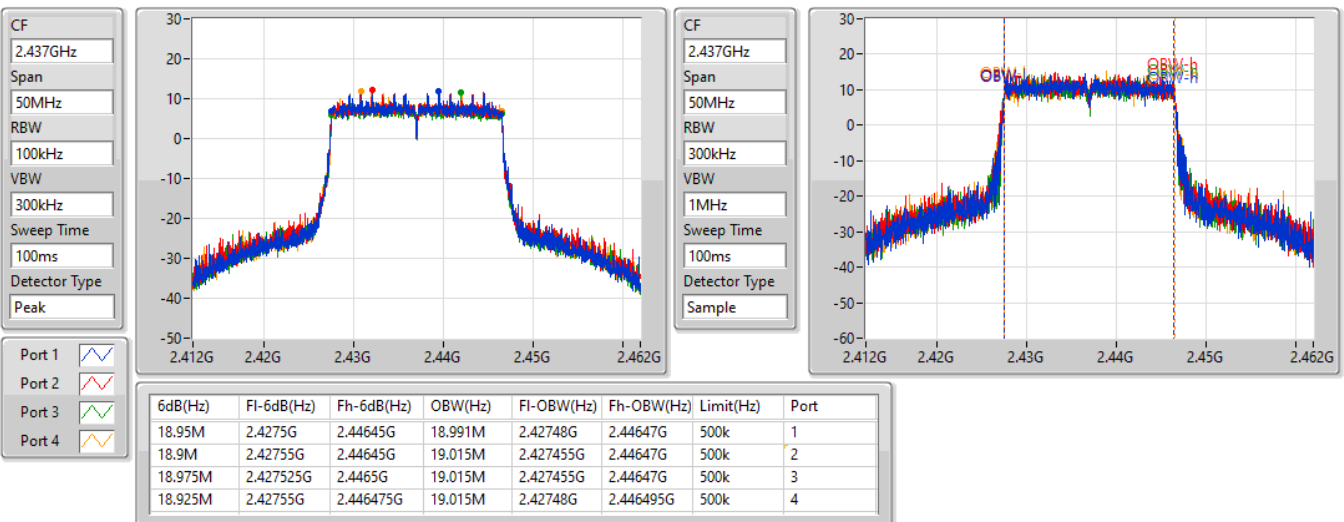


802.11ax HEW20-BF\_Nss1,(MCS0)\_4TX

EBW

2437MHz

29/12/2021

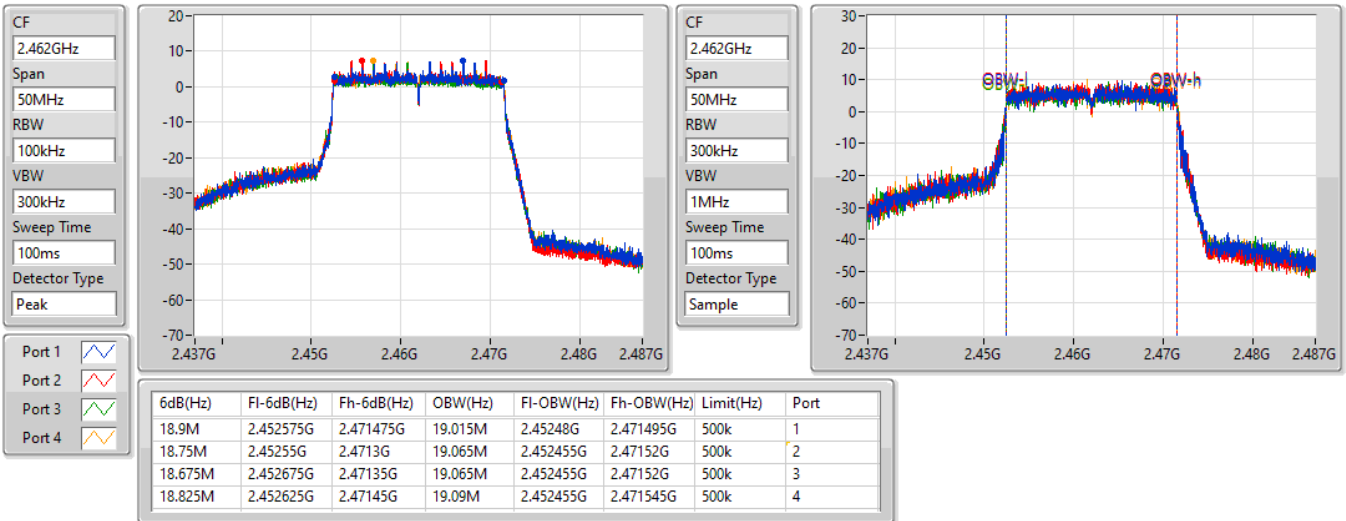


802.11ax HEW20-BF\_Nss1,(MCS0)\_4TX

EBW

2462MHz

29/12/2021

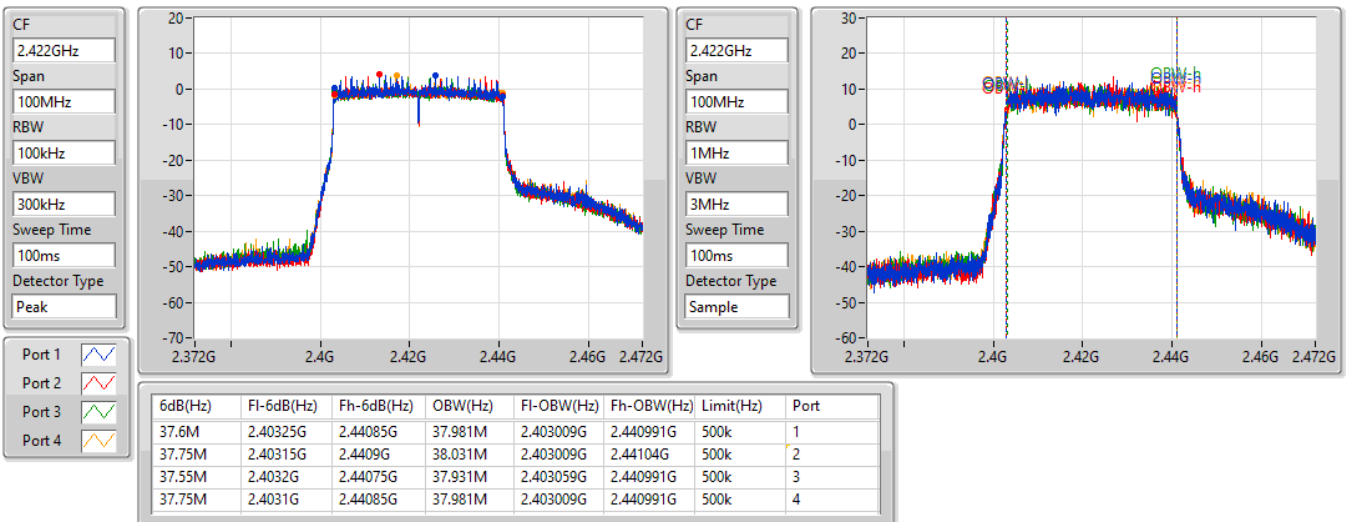


802.11ax HEW40-BF\_Nss1,(MCS0)\_4TX

EBW

2422MHz

29/12/2021

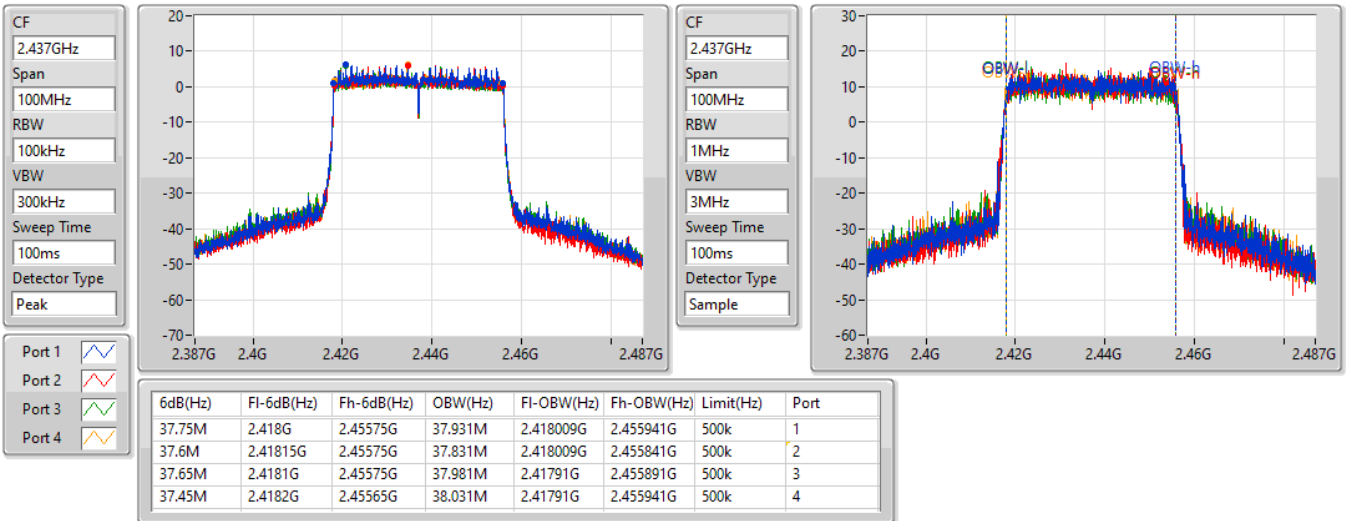


802.11ax HEW40-BF\_Nss1,(MCS0)\_4TX

EBW

2437MHz

29/12/2021

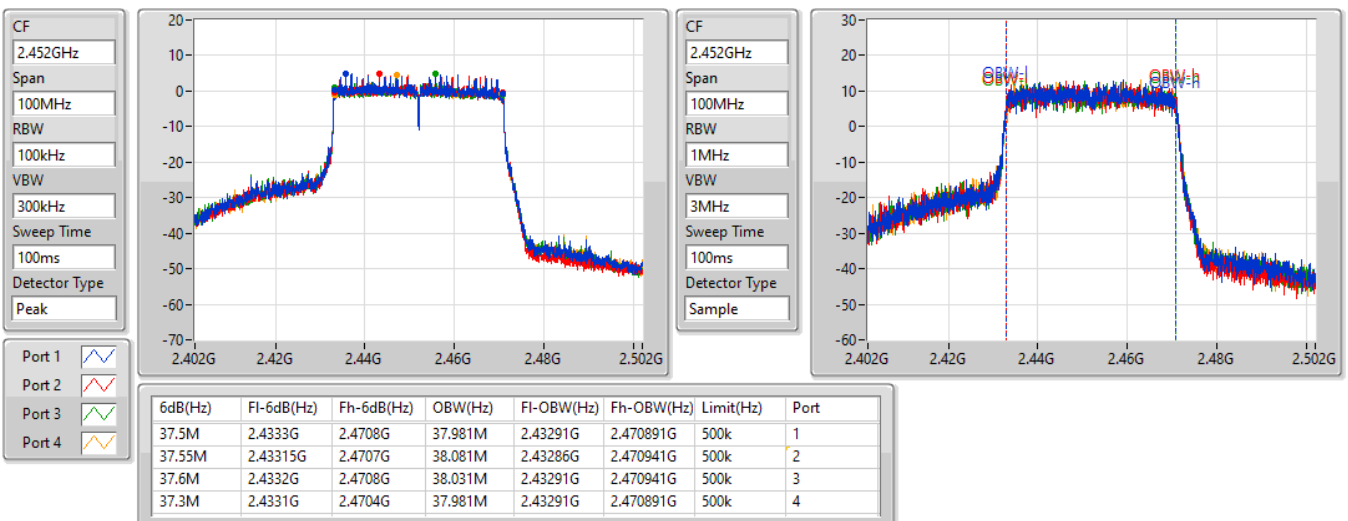


802.11ax HEW40-BF\_Nss1,(MCS0)\_4TX

EBW

2452MHz

29/12/2021







**Summary**

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_4TX	29.87	0.97051
802.11g_Nss1,(6Mbps)_4TX	29.95	0.98855



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11b_Nss1,(1Mbps)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	4.51	23.77	23.98	23.65	23.93	29.86	30.00
2437MHz	Pass	4.51	23.76	24.01	23.64	23.97	29.87	30.00
2462MHz	Pass	4.51	23.73	24.03	23.61	23.90	29.84	30.00
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	4.51	20.11	20.38	20.04	20.12	26.19	30.00
2417MHz	Pass	4.51	23.43	23.46	23.08	23.33	29.35	30.00
2437MHz	Pass	4.51	23.84	24.06	23.97	23.83	29.95	30.00
2457MHz	Pass	4.51	23.91	24.12	23.67	23.87	29.92	30.00
2462MHz	Pass	4.51	19.43	19.48	19.31	19.39	25.42	30.00

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



**Summary**

Mode	Total Power (dBm)	Total Power (W)
2.4-2.4835GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	29.75	0.94406
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	26.80	0.47863



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	6.22	17.46	17.58	17.07	17.25	23.36	29.78
2417MHz	Pass	6.22	21.81	22.10	21.69	21.84	27.88	29.78
2437MHz	Pass	6.22	23.77	23.96	23.41	23.74	29.75	29.78
2457MHz	Pass	6.22	21.74	21.92	21.43	21.79	27.74	29.78
2462MHz	Pass	6.22	18.37	18.77	17.92	18.47	24.41	29.78
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2422MHz	Pass	6.22	18.36	18.25	17.95	18.27	24.23	29.78
2437MHz	Pass	6.22	20.99	20.85	20.54	20.74	26.80	29.78
2452MHz	Pass	6.22	19.39	19.19	18.88	19.17	25.18	29.78

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



Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11b_Nss1,(1Mbps)_4TX	5.80
802.11g_Nss1,(6Mbps)_4TX	2.06

RBW = 3kHz;

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11b_Nss1,(1Mbps)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	6.22	1.47	1.72	2.73	1.64	5.80	7.78
2437MHz	Pass	6.22	2.71	2.61	1.61	0.16	5.47	7.78
2462MHz	Pass	6.22	-0.11	2.44	0.46	2.22	5.07	7.78
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	6.22	-6.43	-5.11	-5.67	-5.60	-0.89	7.78
2437MHz	Pass	6.22	-0.95	-1.07	-1.66	-0.62	2.06	7.78
2462MHz	Pass	6.22	-6.63	-5.40	-5.78	-7.22	-2.77	7.78

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;

### 802.11b\_Nss1,(1Mbps)\_4TX

### PSD

#### 2412MHz

29/12/2021

CF  
2.412GHz

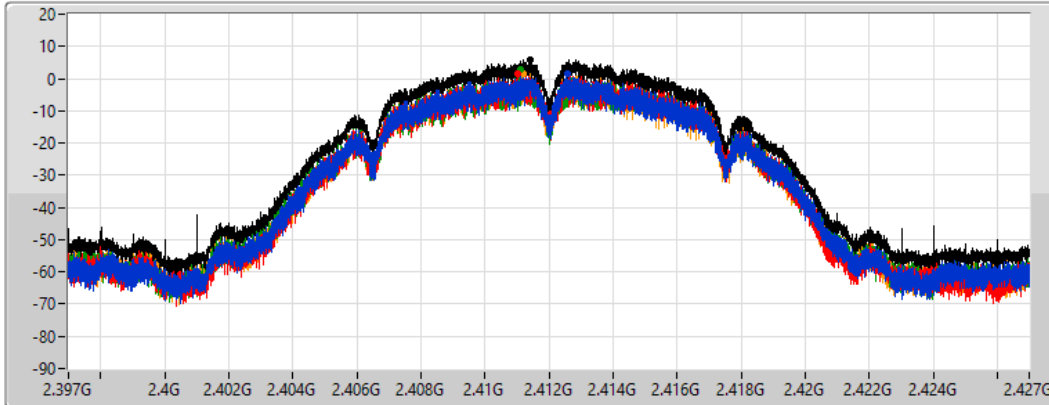
Span  
30MHz


RBW  
3kHz


VBW  
10kHz


Sweep Time  
4.424357ms


Detector Type  
Peak




Sum 

Port 1 

Port 2 

Port 3 

Port 4 

Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.80	5.80	1.47	1.72	2.73	1.64

### 802.11b\_Nss1,(1Mbps)\_4TX

### PSD

#### 2437MHz

29/12/2021

CF  
2.437GHz

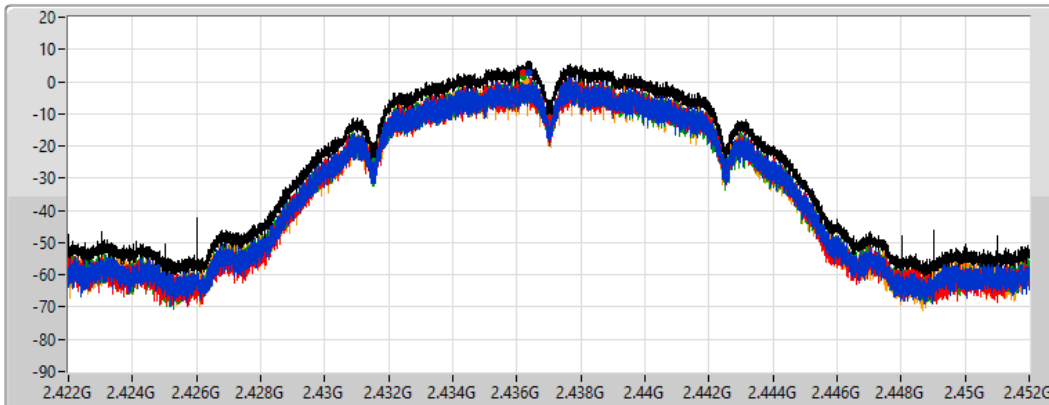
Span  
30MHz


RBW  
3kHz


VBW  
10kHz


Sweep Time  
4.424357ms


Detector Type  
Peak




Sum 

Port 1 

Port 2 

Port 3 

Port 4 

Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.47	5.47	2.71	2.61	1.61	0.16

### 802.11b\_Nss1,(1Mbps)\_4TX

### PSD

2462MHz

29/12/2021

CF  
2.462GHz

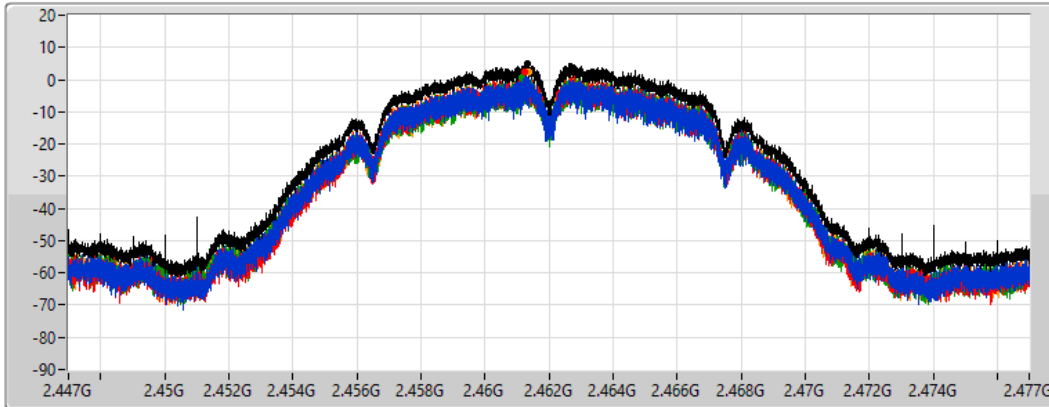
Span  
30MHz


RBW  
3kHz


VBW  
10kHz


Sweep Time  
4.424357ms


Detector Type  
Peak




Sum 

Port 1 

Port 2 

Port 3 

Port 4 

Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
5.07	5.07	-0.11	2.44	0.46	2.22

### 802.11g\_Nss1,(6Mbps)\_4TX

### PSD

2412MHz

29/12/2021

CF  
2.412GHz

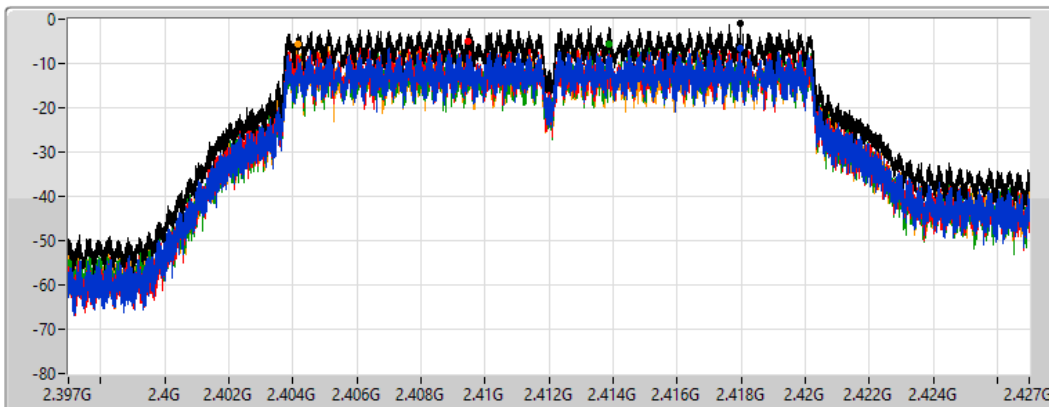
Span  
30MHz


RBW  
3kHz


VBW  
10kHz


Sweep Time  
4.424357ms


Detector Type  
Peak




Sum 

Port 1 

Port 2 

Port 3 

Port 4 

Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.89	-0.89	-6.43	-5.11	-5.67	-5.60

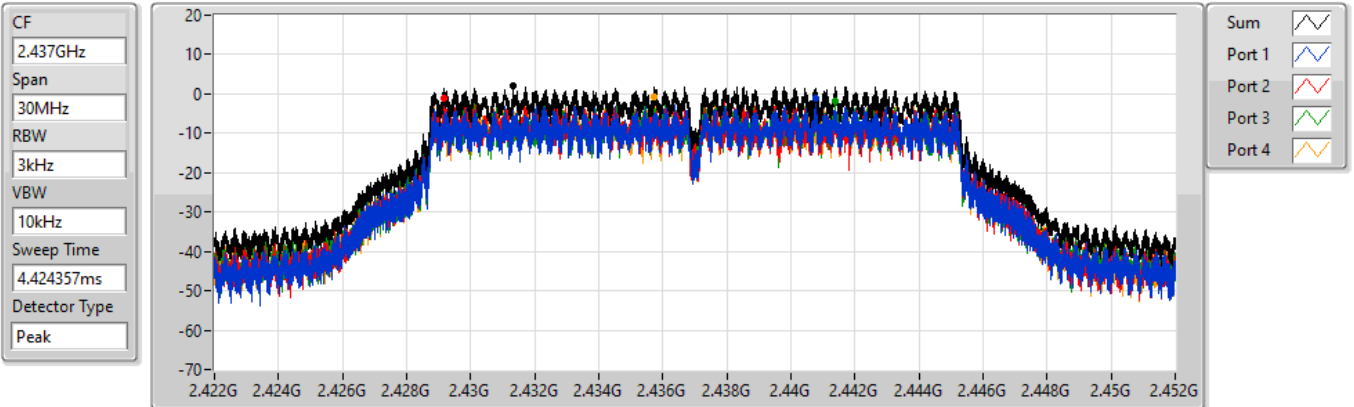


### 802.11g\_Nss1,(6Mbps)\_4TX

### PSD

2437MHz

29/12/2021



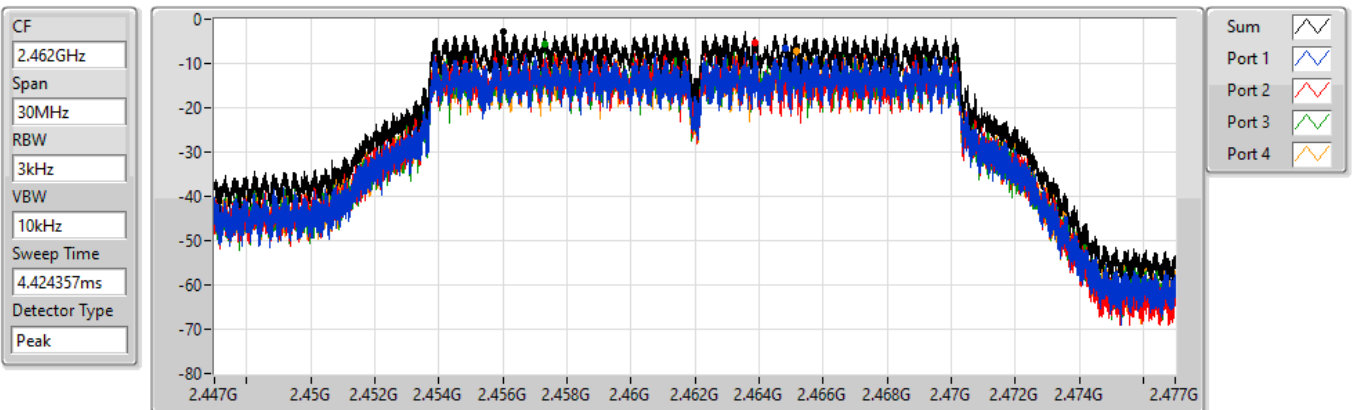
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
2.06	2.06	-0.95	-1.07	-1.66	-0.62

### 802.11g\_Nss1,(6Mbps)\_4TX

### PSD

2462MHz

29/12/2021



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-2.77	-2.77	-6.63	-5.40	-5.78	-7.22



Summary

Mode	PD (dBm/RBW)
2.4-2.4835GHz	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	1.70
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-4.06

RBW = 3kHz;

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2412MHz	Pass	6.22	-9.61	-8.40	-8.77	-9.49	-4.63	7.78
2437MHz	Pass	6.22	-3.28	-2.91	-1.28	-2.82	1.70	7.78
2462MHz	Pass	6.22	-7.76	-8.73	-7.99	-8.22	-3.69	7.78
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
2422MHz	Pass	6.22	-10.60	-11.29	-11.82	-11.42	-6.74	7.78
2437MHz	Pass	6.22	-8.83	-8.12	-8.92	-8.32	-4.06	7.78
2452MHz	Pass	6.22	-9.54	-10.17	-9.95	-10.17	-5.78	7.78

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;

### 802.11ax HEW20-BF\_Nss1,(MCS0)\_4TX

### PSD

#### 2412MHz

29/12/2021

CF  
2.412GHz

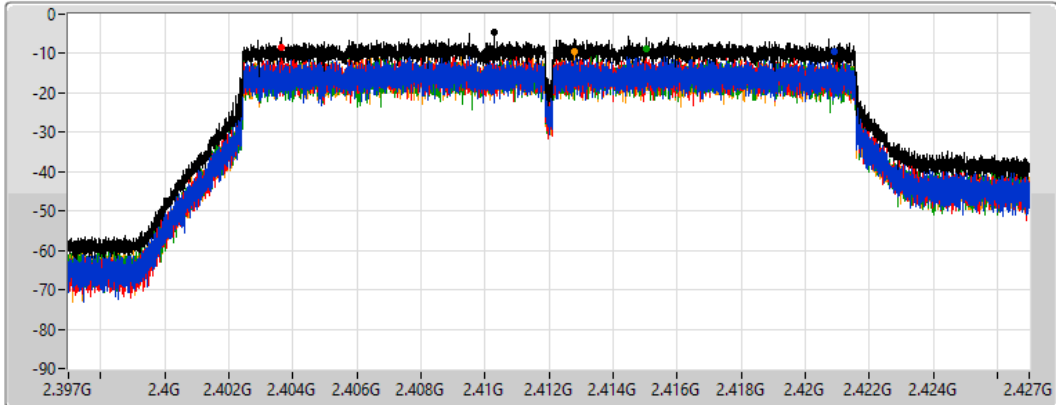
Span  
30MHz


RBW  
3kHz


VBW  
10kHz


Sweep Time  
4.424357ms


Detector Type  
Peak




Sum 

Port 1 

Port 2 

Port 3 

Port 4 

Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.63	-4.63	-9.61	-8.40	-8.77	-9.49

### 802.11ax HEW20-BF\_Nss1,(MCS0)\_4TX

### PSD

#### 2437MHz

29/12/2021

CF  
2.437GHz

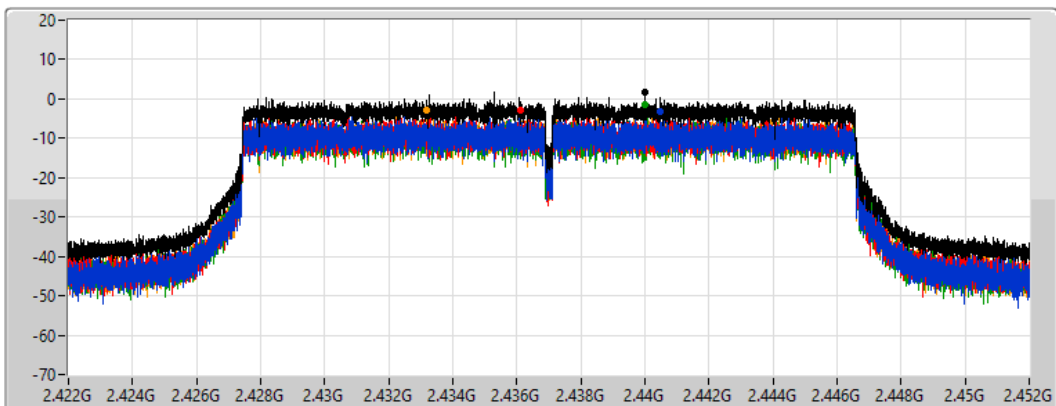
Span  
30MHz


RBW  
3kHz


VBW  
10kHz


Sweep Time  
4.424357ms


Detector Type  
Peak




Sum 

Port 1 

Port 2 

Port 3 

Port 4 

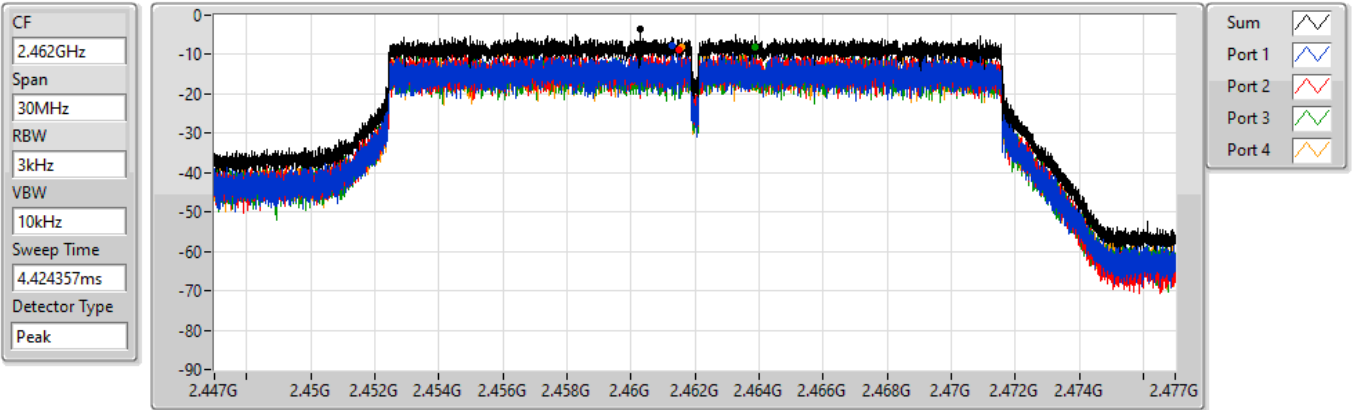
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.70	1.70	-3.28	-2.91	-1.28	-2.82

### 802.11ax HEW20-BF\_Nss1,(MCS0)\_4TX

### PSD

2462MHz

29/12/2021



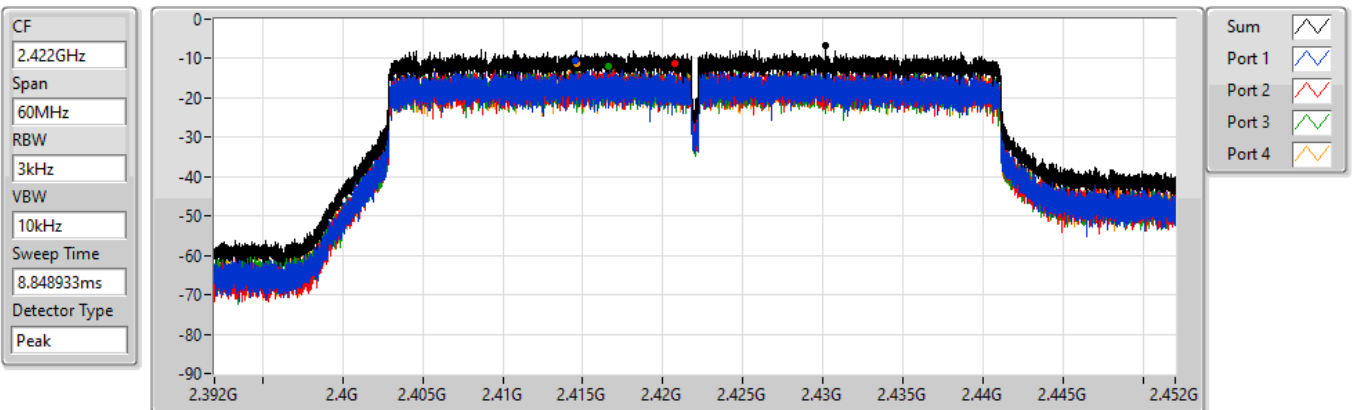
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.69	-3.69	-7.76	-8.73	-7.99	-8.22

### 802.11ax HEW40-BF\_Nss1,(MCS0)\_4TX

### PSD

2422MHz

29/12/2021



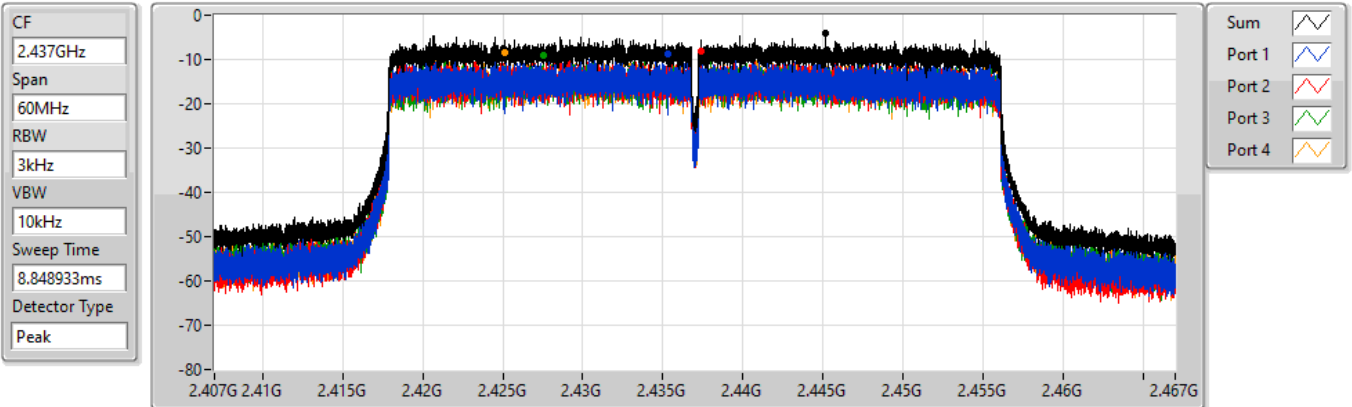
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-6.74	-6.74	-10.60	-11.29	-11.82	-11.42

### 802.11ax HEW40-BF\_Nss1,(MCS0)\_4TX

### PSD

#### 2437MHz

29/12/2021



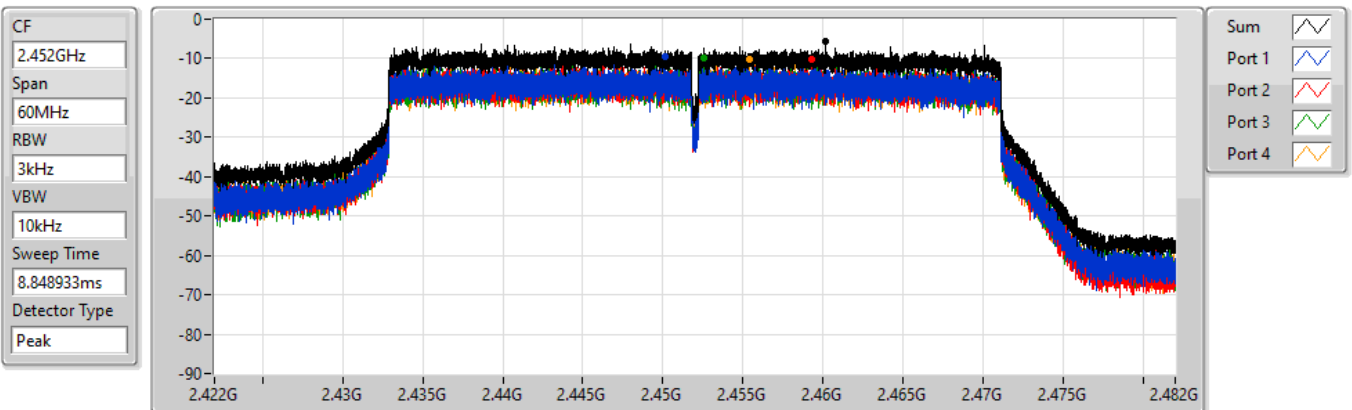
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.06	-4.06	-8.83	-8.12	-8.92	-8.32

### 802.11ax HEW40-BF\_Nss1,(MCS0)\_4TX

### PSD

#### 2452MHz

29/12/2021



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-5.78	-5.78	-9.54	-10.17	-9.95	-10.17



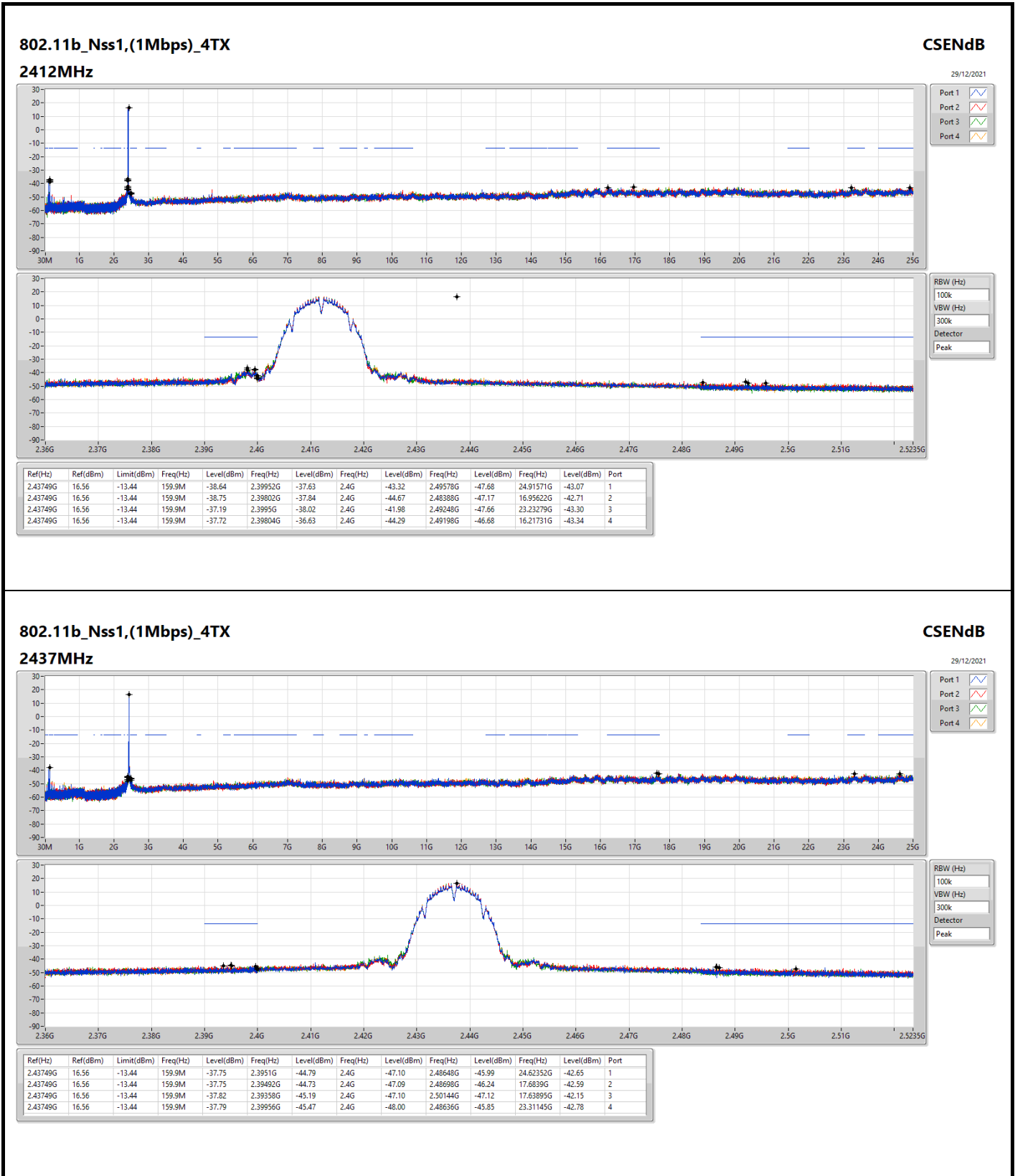
Summary

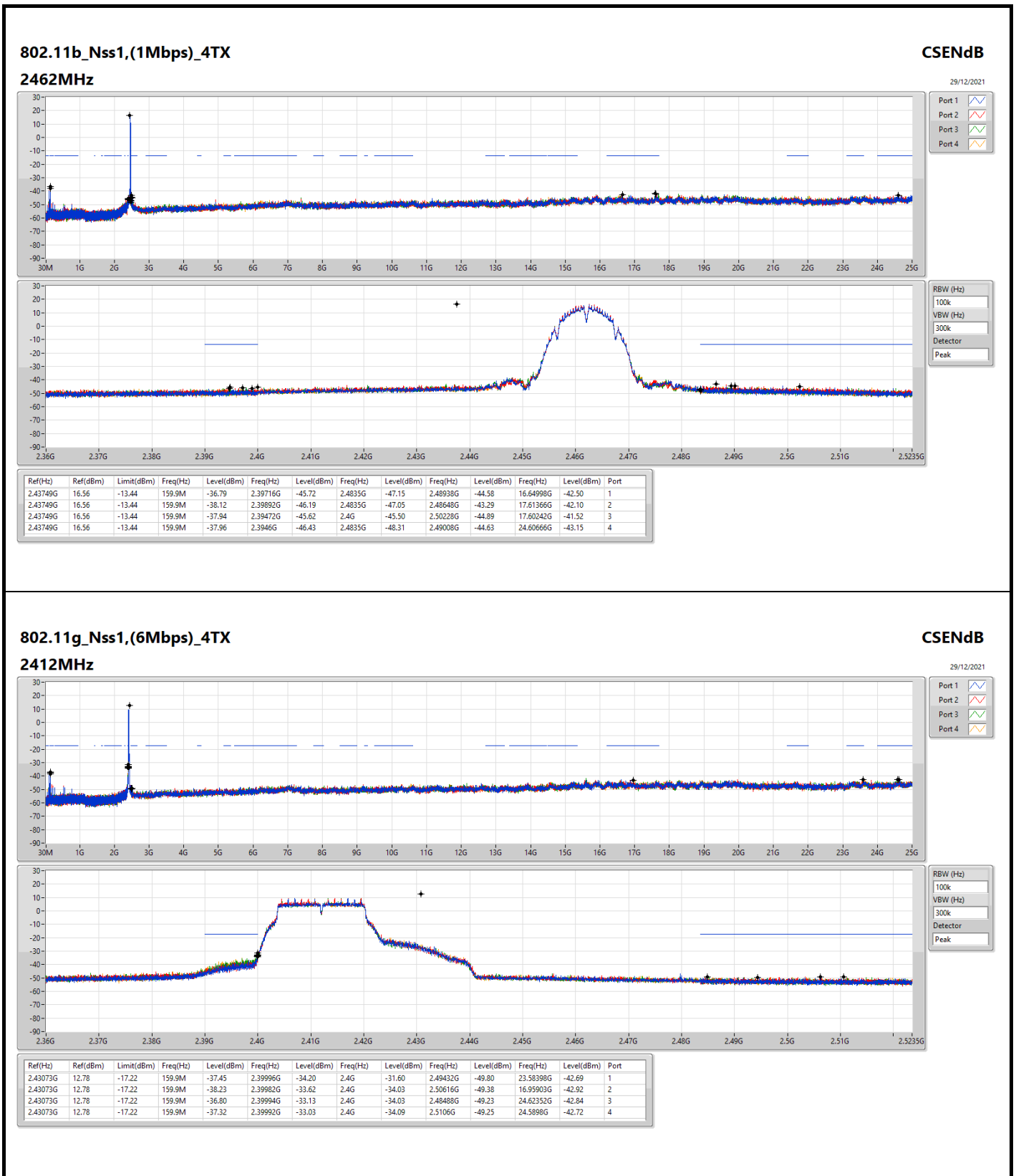
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11b_Nss1,(1Mbps)_4TX	Pass	2.43749G	16.56	-13.44	159.9M	-37.72	2.39804G	-36.63	2.4G	-44.29	2.49198G	-46.68	16.21731G	-43.34	4
802.11g_Nss1,(6Mbps)_4TX	Pass	2.43073G	12.78	-17.22	159.9M	-37.45	2.39996G	-34.20	2.4G	-31.60	2.49432G	-49.80	23.58398G	-42.69	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)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43749G	16.56	-13.44	159.9M	-38.64	2.39952G	-37.63	2.4G	-43.32	2.49578G	-47.68	24.91571G	-43.07	1
2412MHz	Pass	2.43749G	16.56	-13.44	159.9M	-38.75	2.39802G	-37.84	2.4G	-44.67	2.48388G	-47.17	16.95622G	-42.71	2
2412MHz	Pass	2.43749G	16.56	-13.44	159.9M	-37.19	2.3995G	-38.02	2.4G	-41.98	2.49248G	-47.66	23.23279G	-43.30	3
2412MHz	Pass	2.43749G	16.56	-13.44	159.9M	-37.72	2.39804G	-36.63	2.4G	-44.29	2.49198G	-46.68	16.21731G	-43.34	4
2437MHz	Pass	2.43749G	16.56	-13.44	159.9M	-37.75	2.3951G	-44.79	2.4G	-47.10	2.48648G	-45.99	24.62352G	-42.65	1
2437MHz	Pass	2.43749G	16.56	-13.44	159.9M	-37.75	2.39492G	-44.73	2.4G	-47.09	2.48698G	-46.24	17.6839G	-42.59	2
2437MHz	Pass	2.43749G	16.56	-13.44	159.9M	-37.82	2.39358G	-45.19	2.4G	-47.10	2.50144G	-47.12	17.63895G	-42.15	3
2437MHz	Pass	2.43749G	16.56	-13.44	159.9M	-37.79	2.39956G	-45.47	2.4G	-48.00	2.48636G	-45.85	23.31145G	-42.78	4
2457MHz															
2462MHz	Pass	2.43749G	16.56	-13.44	159.9M	-36.79	2.39716G	-45.72	2.4835G	-47.15	2.48938G	-44.58	16.64998G	-42.50	1
2462MHz	Pass	2.43749G	16.56	-13.44	159.9M	-38.12	2.39892G	-46.19	2.4835G	-47.05	2.48648G	-43.29	17.61366G	-42.10	2
2462MHz	Pass	2.43749G	16.56	-13.44	159.9M	-37.94	2.39472G	-45.62	2.4G	-45.50	2.50228G	-44.89	17.60242G	-41.52	3
2462MHz	Pass	2.43749G	16.56	-13.44	159.9M	-37.96	2.3946G	-46.43	2.4835G	-48.31	2.49008G	-44.63	24.60666G	-43.15	4
802.11g_Nss1,(6Mbps)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43073G	12.78	-17.22	159.9M	-37.45	2.39996G	-34.20	2.4G	-31.60	2.49432G	-49.80	23.58398G	-42.69	1
2412MHz	Pass	2.43073G	12.78	-17.22	159.9M	-38.23	2.39982G	-33.62	2.4G	-34.03	2.50616G	-49.38	16.95903G	-42.92	2
2412MHz	Pass	2.43073G	12.78	-17.22	159.9M	-36.80	2.39994G	-33.13	2.4G	-34.03	2.48488G	-49.23	24.62352G	-42.84	3
2412MHz	Pass	2.43073G	12.78	-17.22	159.9M	-37.32	2.39992G	-33.03	2.4G	-34.09	2.5106G	-49.25	24.5898G	-42.72	4
2437MHz	Pass	2.43073G	12.78	-17.22	159.9M	-39.22	2.39568G	-44.82	2.4G	-46.89	2.49174G	-46.26	16.62188G	-43.19	1
2437MHz	Pass	2.43073G	12.78	-17.22	159.9M	-37.32	2.39734G	-43.66	2.4G	-46.25	2.4878G	-45.67	17.48723G	-43.06	2
2437MHz	Pass	2.43073G	12.78	-17.22	159.9M	-37.72	2.3996G	-44.14	2.4G	-47.96	2.4882G	-45.99	24.61228G	-43.16	3
2437MHz	Pass	2.43073G	12.78	-17.22	159.9M	-36.96	2.39972G	-43.72	2.4G	-45.96	2.48368G	-46.42	24.95224G	-42.47	4
2462MHz	Pass	2.43073G	12.78	-17.22	159.9M	-37.90	2.39398G	-47.95	2.4835G	-48.68	2.48386G	-45.96	23.59522G	-43.61	1
2462MHz	Pass	2.43073G	12.78	-17.22	159.9M	-37.84	2.39586G	-48.86	2.4835G	-47.27	2.48512G	-46.79	16.55165G	-43.17	2
2462MHz	Pass	2.43073G	12.78	-17.22	159.9M	-37.10	2.39962G	-49.17	2.4835G	-46.78	2.48354G	-45.85	16.55446G	-43.18	3
2462MHz	Pass	2.43073G	12.78	-17.22	159.9M	-37.49	2.3938G	-48.54	2.4835G	-47.16	2.48366G	-45.58	24.6179G	-42.95	4





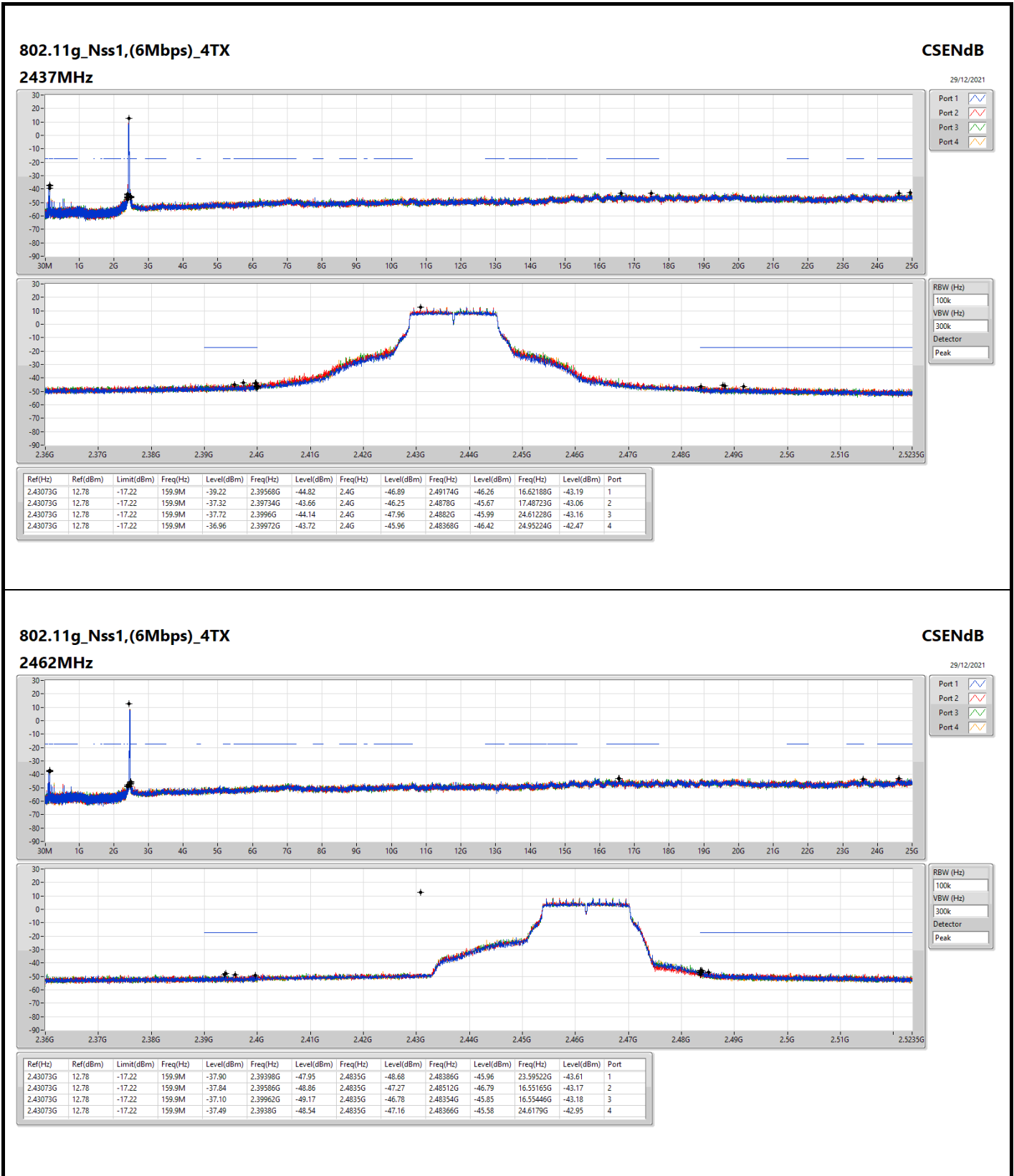


### 802.11g\_Nss1,(6Mbps)\_4TX

#### 2412MHz

CSEndB

29/12/2021





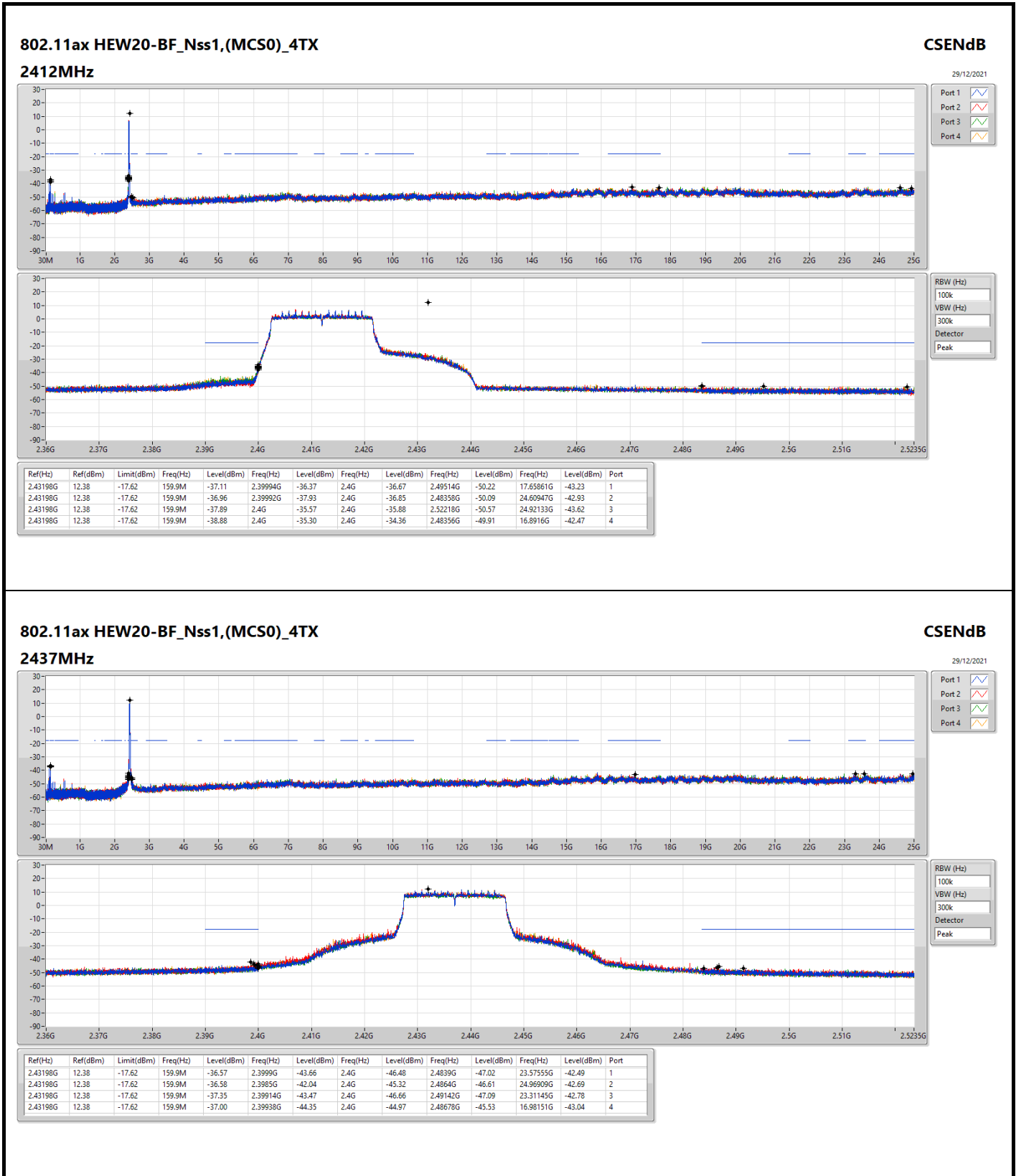
Summary

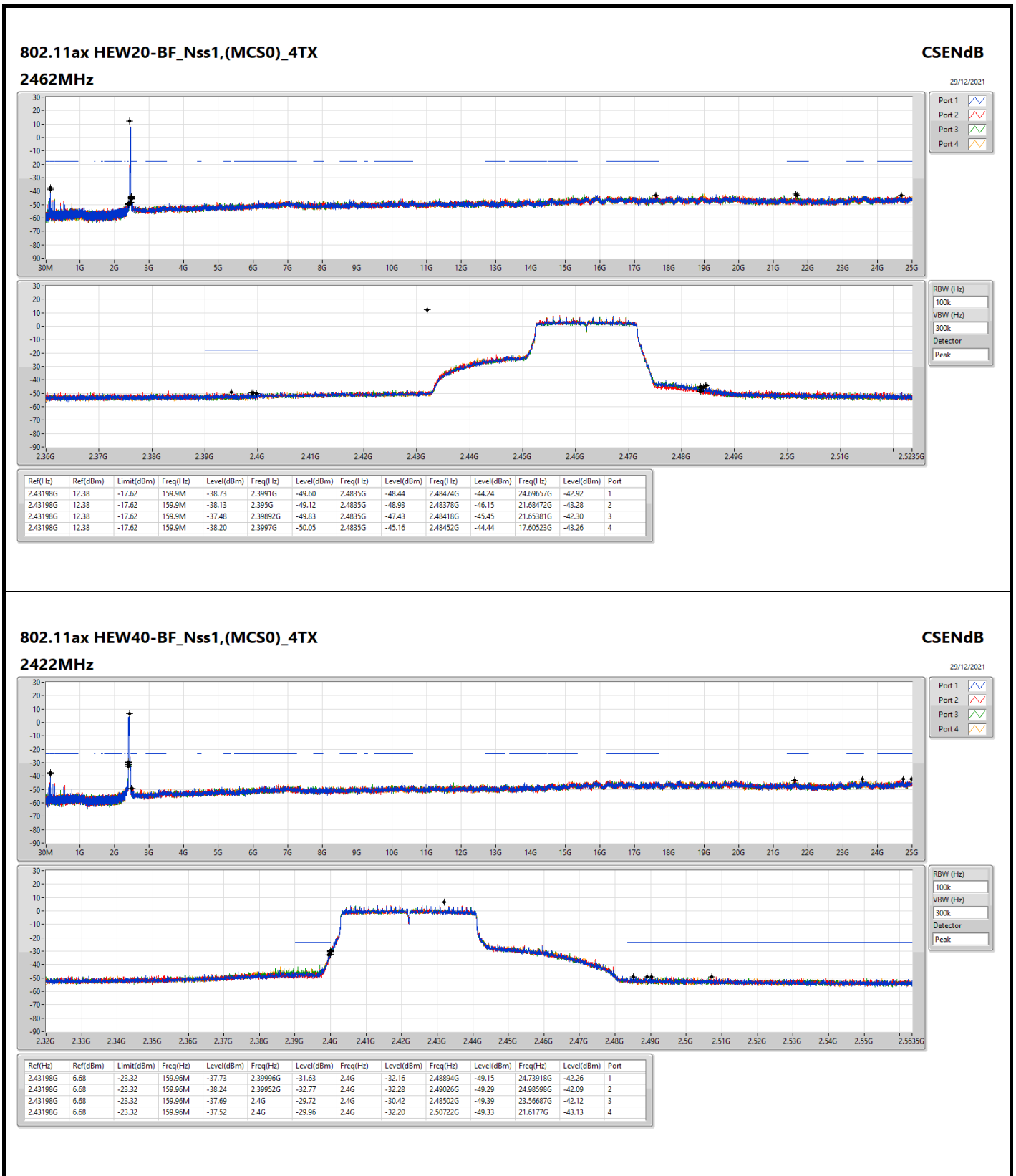
Mode	Result	Ref (Hz)	Ref (dBm)	Limit (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Freq (Hz)	Level (dBm)	Port
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	Pass	2.43198G	12.38	-17.62	159.9M	-38.88	2.4G	-35.30	2.4G	-34.36	2.48356G	-49.91	16.8916G	-42.47	4
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	Pass	2.43198G	6.68	-23.32	159.96M	-37.69	2.4G	-29.72	2.4G	-30.42	2.48502G	-49.39	23.56687G	-42.12	3

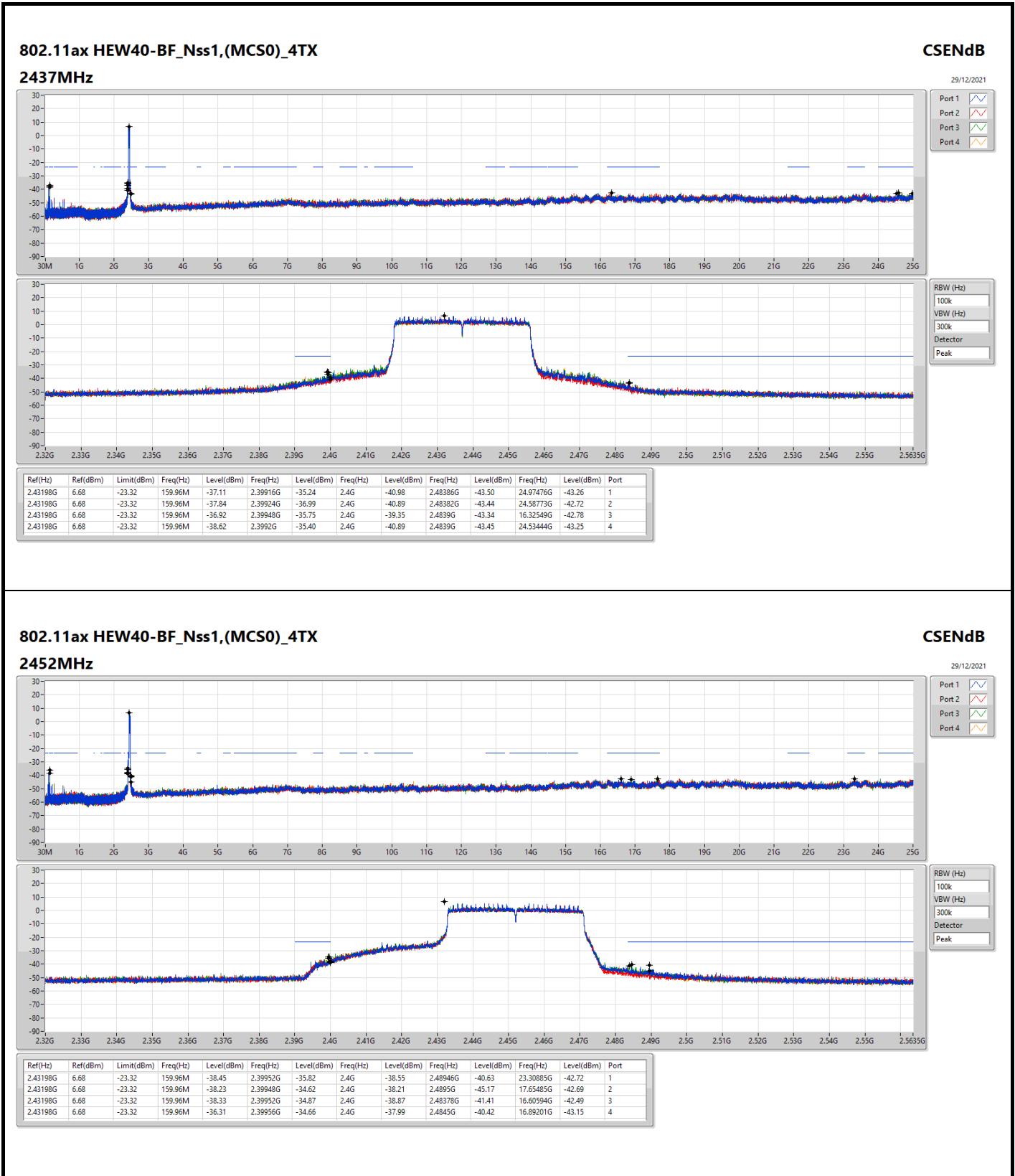


Result

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
802.11ax HEW20-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2412MHz	Pass	2.43198G	12.38	-17.62	159.9M	-37.11	2.39994G	-36.37	2.4G	-36.67	2.49514G	-50.22	17.65861G	-43.23	1
2412MHz	Pass	2.43198G	12.38	-17.62	159.9M	-36.96	2.39992G	-37.93	2.4G	-36.85	2.48358G	-50.09	24.60947G	-42.93	2
2412MHz	Pass	2.43198G	12.38	-17.62	159.9M	-37.89	2.4G	-35.57	2.4G	-35.88	2.52218G	-50.57	24.92133G	-43.62	3
2412MHz	Pass	2.43198G	12.38	-17.62	159.9M	-38.88	2.4G	-35.30	2.4G	-34.36	2.48356G	-49.91	16.8916G	-42.47	4
2437MHz	Pass	2.43198G	12.38	-17.62	159.9M	-36.57	2.3999G	-43.66	2.4G	-46.48	2.4839G	-47.02	23.57555G	-42.49	1
2437MHz	Pass	2.43198G	12.38	-17.62	159.9M	-36.58	2.3985G	-42.04	2.4G	-45.32	2.4864G	-46.61	24.96909G	-42.69	2
2437MHz	Pass	2.43198G	12.38	-17.62	159.9M	-37.35	2.39914G	-43.47	2.4G	-46.66	2.49142G	-47.09	23.31145G	-42.78	3
2437MHz	Pass	2.43198G	12.38	-17.62	159.9M	-37.00	2.39938G	-44.35	2.4G	-44.97	2.48678G	-45.53	16.98151G	-43.04	4
2462MHz	Pass	2.43198G	12.38	-17.62	159.9M	-38.73	2.3991G	-49.60	2.4835G	-48.44	2.48474G	-44.24	24.69657G	-42.92	1
2462MHz	Pass	2.43198G	12.38	-17.62	159.9M	-38.13	2.395G	-49.12	2.4835G	-48.93	2.48378G	-46.15	21.68472G	-43.28	2
2462MHz	Pass	2.43198G	12.38	-17.62	159.9M	-37.48	2.39892G	-49.83	2.4835G	-47.43	2.48418G	-45.45	21.65381G	-42.30	3
2462MHz	Pass	2.43198G	12.38	-17.62	159.9M	-38.20	2.3997G	-50.05	2.4835G	-45.16	2.48452G	-44.44	17.60523G	-43.26	4
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2422MHz	Pass	2.43198G	6.68	-23.32	159.96M	-37.73	2.39996G	-31.63	2.4G	-32.16	2.48894G	-49.15	24.73918G	-42.26	1
2422MHz	Pass	2.43198G	6.68	-23.32	159.96M	-38.24	2.39952G	-32.77	2.4G	-32.28	2.49026G	-49.29	24.98598G	-42.09	2
2422MHz	Pass	2.43198G	6.68	-23.32	159.96M	-37.69	2.4G	-29.72	2.4G	-30.42	2.48502G	-49.39	23.56687G	-42.12	3
2422MHz	Pass	2.43198G	6.68	-23.32	159.96M	-37.52	2.4G	-29.96	2.4G	-32.20	2.50722G	-49.33	21.6177G	-43.13	4
2437MHz	Pass	2.43198G	6.68	-23.32	159.96M	-37.11	2.39916G	-35.24	2.4G	-40.98	2.48386G	-43.50	24.97476G	-43.26	1
2437MHz	Pass	2.43198G	6.68	-23.32	159.96M	-37.84	2.39924G	-36.99	2.4G	-40.89	2.48382G	-43.44	24.58773G	-42.72	2
2437MHz	Pass	2.43198G	6.68	-23.32	159.96M	-36.92	2.39948G	-35.75	2.4G	-39.35	2.4839G	-43.34	16.32549G	-42.78	3
2437MHz	Pass	2.43198G	6.68	-23.32	159.96M	-38.62	2.3992G	-35.40	2.4G	-40.89	2.4839G	-43.45	24.53444G	-43.25	4
2452MHz	Pass	2.43198G	6.68	-23.32	159.96M	-38.45	2.39952G	-35.82	2.4G	-38.55	2.48946G	-40.63	23.30885G	-42.72	1
2452MHz	Pass	2.43198G	6.68	-23.32	159.96M	-38.23	2.39948G	-34.62	2.4G	-38.21	2.4895G	-45.17	17.65485G	-42.69	2
2452MHz	Pass	2.43198G	6.68	-23.32	159.96M	-38.33	2.39952G	-34.87	2.4G	-38.87	2.48378G	-41.41	16.60594G	-42.49	3
2452MHz	Pass	2.43198G	6.68	-23.32	159.96M	-36.31	2.39956G	-34.66	2.4G	-37.99	2.4845G	-40.42	16.89201G	-43.15	4







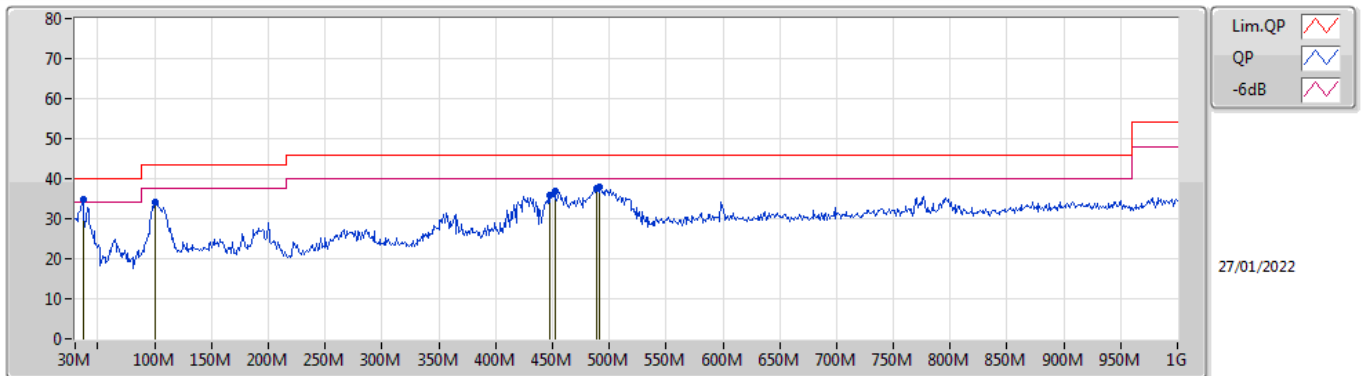




**Summary**

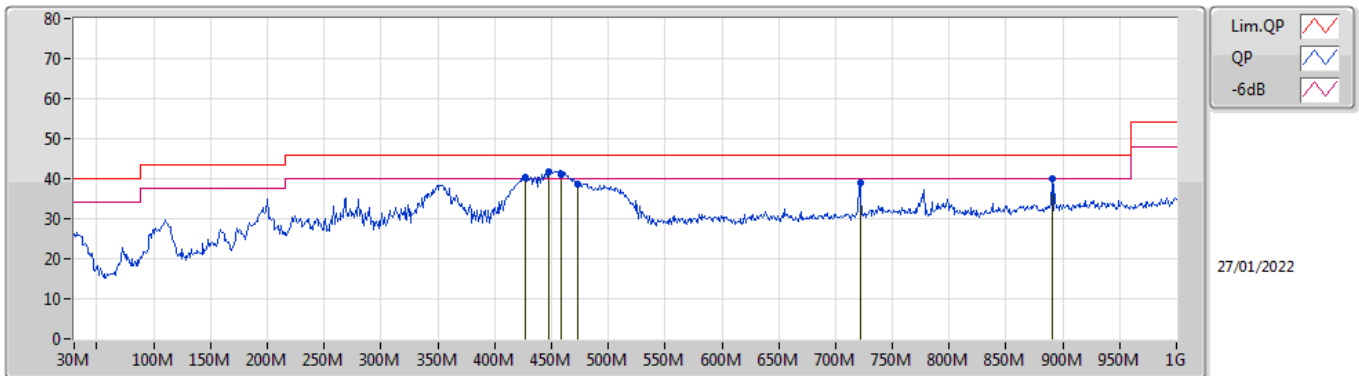
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	PK	447.1M	41.86	46.00	-4.14	Horizontal

Mode 1



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)
PK	36.79M	34.77	40.00	-5.23	-9.81	3	Vertical	89	1.00	"Worst"	44.58	20.84	1.80	32.45
PK	100.81M	34.11	43.50	-9.39	-13.14	3	Vertical	243	1.00	-	47.25	16.80	2.40	32.34
PK	447.1M	35.96	46.00	-10.04	-5.11	3	Vertical	180	1.00	-	41.07	22.46	4.59	32.16
PK	451.95M	36.86	46.00	-9.14	-5.01	3	Vertical	164	1.00	-	41.87	22.53	4.61	32.15
PK	488.81M	37.65	46.00	-8.35	-4.13	3	Vertical	248	1.00	-	41.78	23.29	4.76	32.18
PK	491.72M	37.81	46.00	-8.19	-4.10	3	Vertical	232	1.00	-	41.91	23.31	4.77	32.18

Mode 1



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)
PK	426.73M	40.40	46.00	-5.60	-5.38	3	Horizontal	308	1.00	-	45.78	22.35	4.51	32.24
PK	447.1M	41.86	46.00	-4.14	-5.11	3	Horizontal	308	1.00	"Worst"	46.97	22.46	4.59	32.16
QP	458.74M	41.09	46.00	-4.91	-4.87	3	Horizontal	0	1.00	-	45.96	22.66	4.63	32.16
PK	473.29M	38.79	46.00	-7.21	-4.47	3	Horizontal	0	1.00	-	43.26	23.01	4.69	32.17
PK	721.61M	38.98	46.00	-7.02	-1.22	3	Horizontal	4	1.00	-	40.20	25.13	5.69	32.04
PK	890.39M	39.87	46.00	-6.13	1.16	3	Horizontal	26	1.00	-	38.71	26.26	6.44	31.54

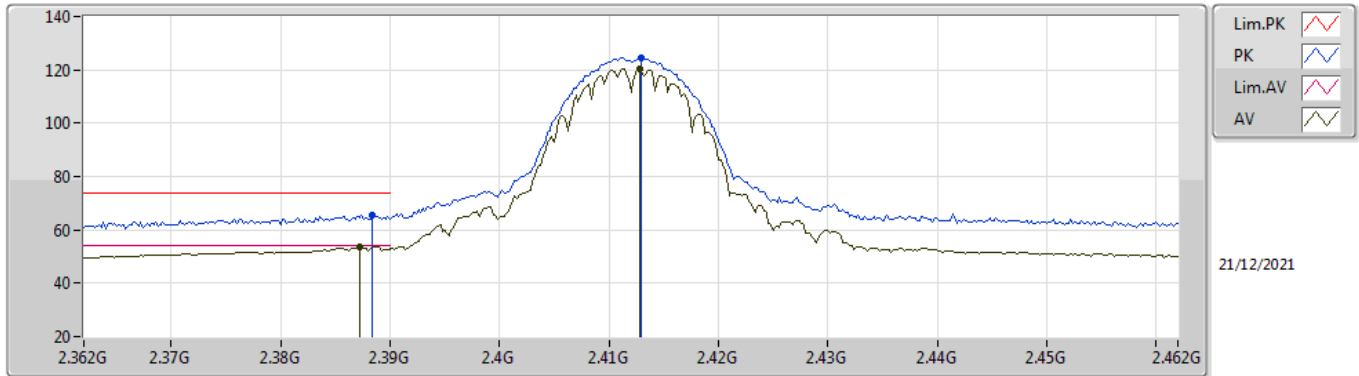


Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
802.11g_Nss1_(6Mbps)_4TX	Pass	AV	2.4835G	53.96	54.00	-0.04	3	Vertical	348	1.95	-

### 802.11b\_Nss1,(1Mbps)\_4TX

### 2412MHz\_TX

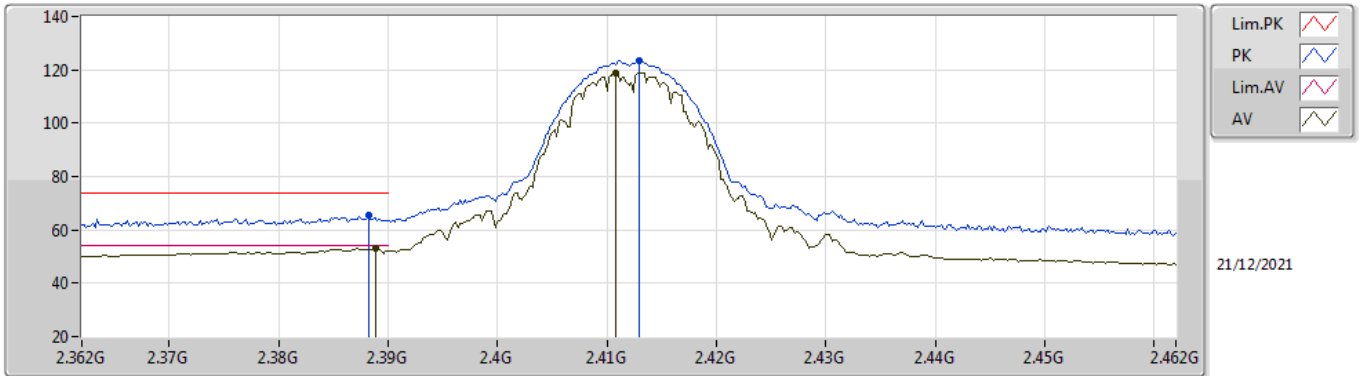


EUT Z\_4TX  
Setting 102  
06-D-S-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3884G	65.53	74.00	-8.47	34.25	3	Vertical	338	2.65	-	27.49	3.79	-
AV	2.3872G	53.70	54.00	-0.30	22.41	3	Vertical	338	2.65	-	27.50	3.79	-
PK	2.413G	124.70	Inf	-Inf	93.54	3	Vertical	338	2.65	-	27.35	3.81	-
AV	2.4128G	120.60	Inf	-Inf	89.44	3	Vertical	338	2.65	-	27.35	3.81	-

### 802.11b\_Nss1,(1Mbps)\_4TX

### 2412MHz\_TX

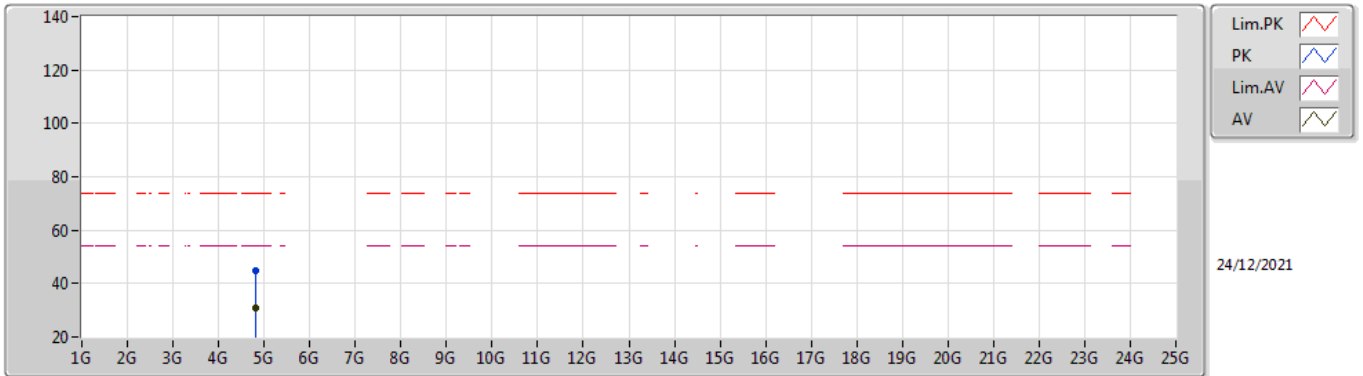


EUT\_Z\_4TX  
Setting 102  
06-D-S-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3882G	65.41	74.00	-8.59	34.13	3	Horizontal	326	2.06	-	27.49	3.79	-
AV	2.3888G	52.88	54.00	-1.12	21.60	3	Horizontal	326	2.06	-	27.49	3.79	-
PK	2.413G	123.24	Inf	-Inf	92.08	3	Horizontal	326	2.06	-	27.35	3.81	-
AV	2.4108G	118.92	Inf	-Inf	87.75	3	Horizontal	326	2.06	-	27.36	3.81	-

### 802.11b\_Nss1,(1Mbps)\_4TX

### 2412MHz\_TX

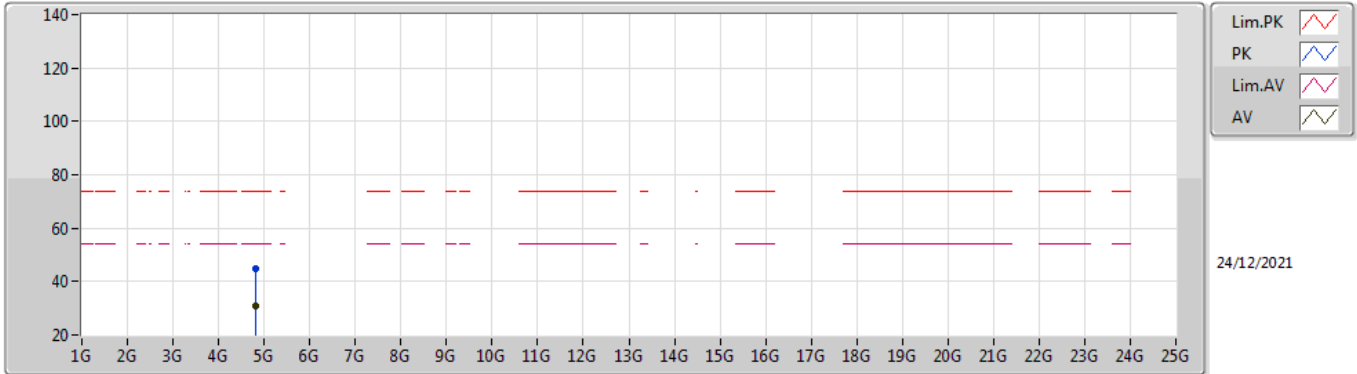


EUT Z\_4TX  
Setting 102  
06-D-S-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.81986G	44.89	74.00	-29.11	40.29	3	Vertical	356	1.11	-	31.06	5.60	32.06
AV	4.8208G	30.85	54.00	-23.15	26.25	3	Vertical	356	1.11	-	31.06	5.60	32.06

### 802.11b\_Nss1,(1Mbps)\_4TX

### 2412MHz\_TX



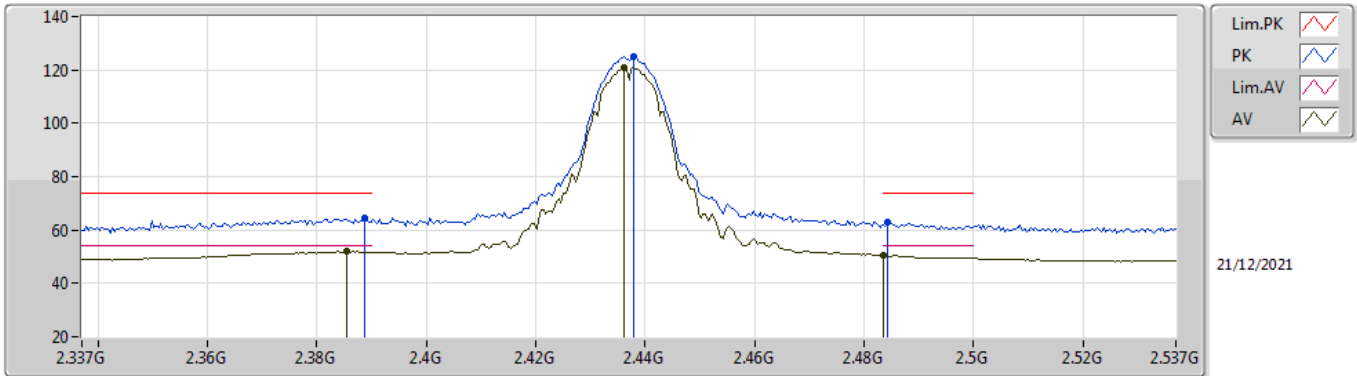
EUT Z\_4TX  
Setting 102  
06-D-S-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.82222G	44.82	74.00	-29.18	40.22	3	Horizontal	6	2.85	-	31.06	5.60	32.06
AV	4.8282G	30.89	54.00	-23.11	26.30	3	Horizontal	6	2.85	-	31.04	5.60	32.05



### 802.11b\_Nss1,(1Mbps)\_4TX

### 2437MHz\_TX

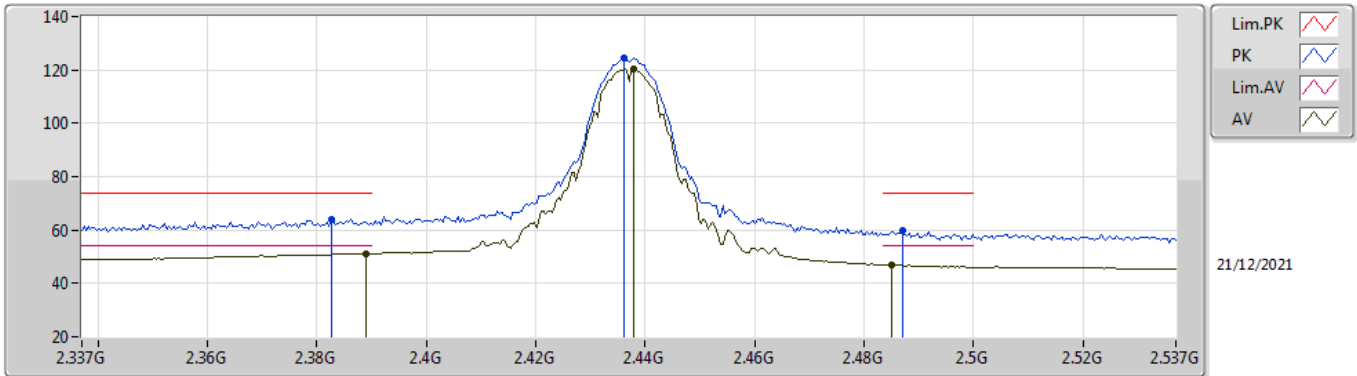


EUT\_Z\_4TX  
Setting 108  
06-D-S-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3886G	64.24	74.00	-9.76	32.96	3	Vertical	259	1.77	-	27.49	3.79	-
AV	2.3854G	51.99	54.00	-2.01	20.68	3	Vertical	259	1.77	-	27.52	3.79	-
PK	2.4378G	124.86	Inf	-Inf	93.77	3	Vertical	259	1.77	-	27.25	3.84	-
AV	2.4362G	120.96	Inf	-Inf	89.86	3	Vertical	259	1.77	-	27.26	3.84	-
PK	2.4842G	62.96	74.00	-11.04	31.81	3	Vertical	259	1.77	-	27.27	3.88	-
AV	2.4835G	50.36	54.00	-3.64	19.21	3	Vertical	259	1.77	-	27.27	3.88	-

### 802.11b\_Nss1,(1Mbps)\_4TX

### 2437MHz\_TX

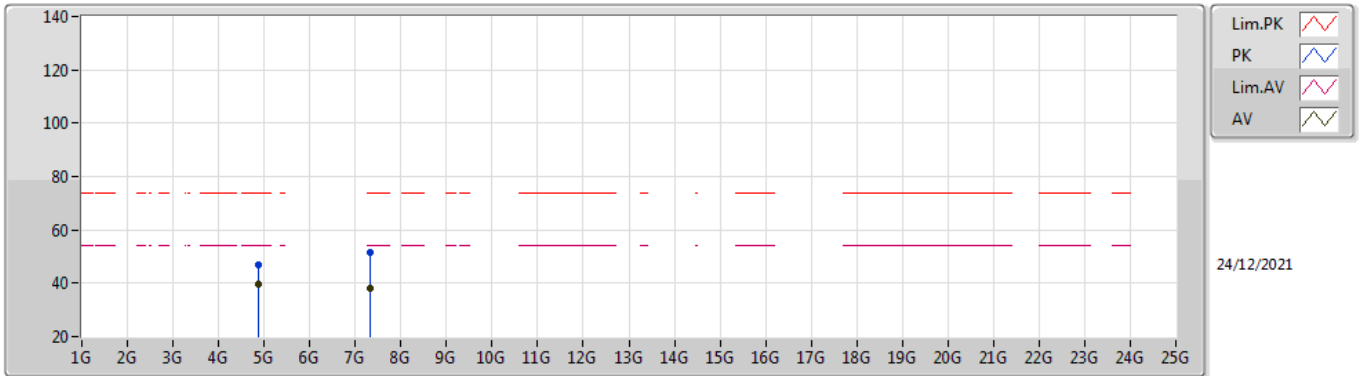


EUT\_Z\_4TX  
Setting 108  
06-D-S-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3826G	64.03	74.00	-9.97	32.70	3	Horizontal	327	2.33	-	27.54	3.79	-
AV	2.389G	51.19	54.00	-2.81	19.91	3	Horizontal	327	2.33	-	27.49	3.79	-
PK	2.4362G	124.33	Inf	-Inf	93.23	3	Horizontal	327	2.33	-	27.26	3.84	-
AV	2.4378G	120.29	Inf	-Inf	89.20	3	Horizontal	327	2.33	-	27.25	3.84	-
PK	2.487G	59.59	74.00	-14.41	28.43	3	Horizontal	327	2.33	-	27.27	3.89	-
AV	2.485G	46.94	54.00	-7.06	15.78	3	Horizontal	327	2.33	-	27.27	3.89	-

### 802.11b\_Nss1,(1Mbps)\_4TX

### 2437MHz\_TX

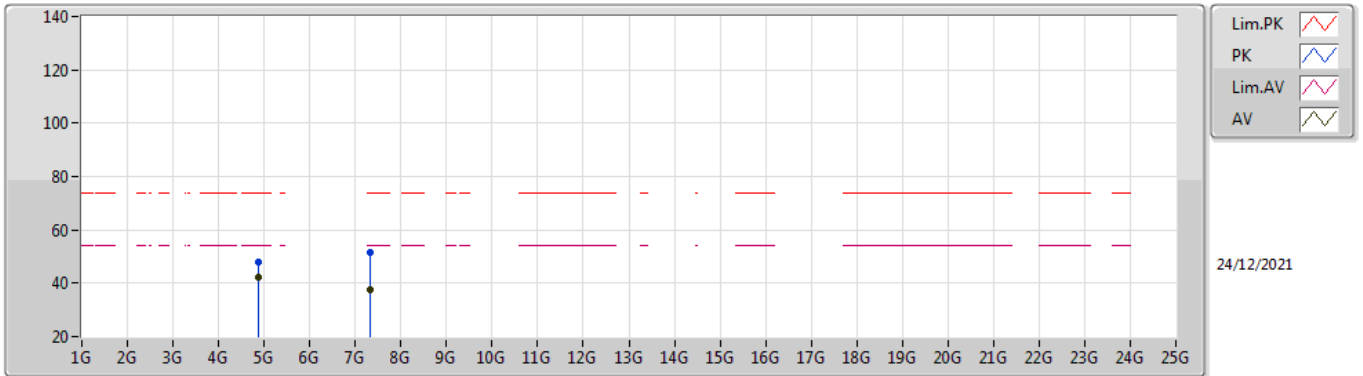


EUT Z\_4TX  
Setting 108  
06-D-S-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.87406G	47.06	74.00	-26.94	42.43	3	Vertical	288	1.58	-	31.05	5.60	32.02
AV	4.874G	39.74	54.00	-14.26	35.11	3	Vertical	288	1.58	-	31.05	5.60	32.02
PK	7.31202G	51.59	74.00	-22.41	41.81	3	Vertical	227	1.80	-	36.35	6.90	33.47
AV	7.32192G	37.90	54.00	-16.10	28.16	3	Vertical	227	1.80	-	36.31	6.90	33.47

### 802.11b\_Nss1,(1Mbps)\_4TX

### 2437MHz\_TX

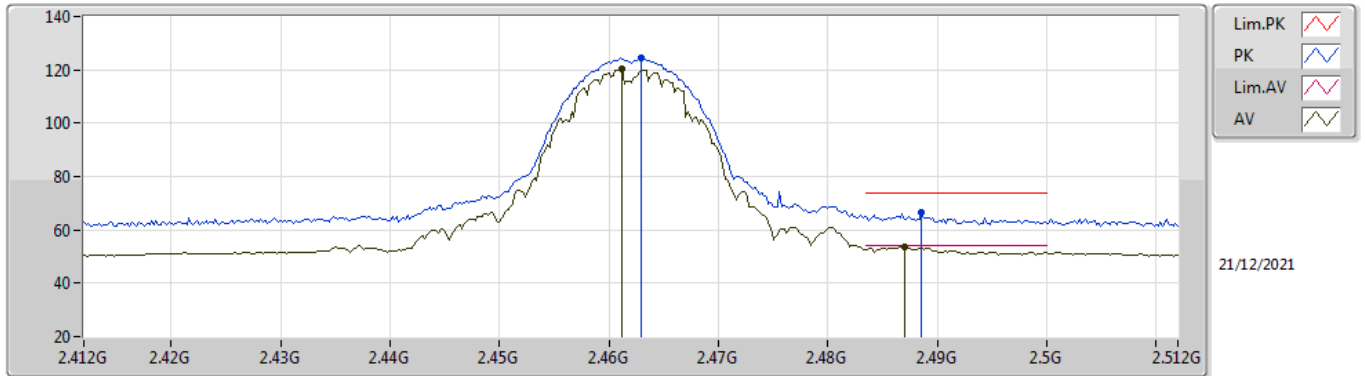


EUT Z\_4TX  
Setting 108  
06-D-S-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.874G	48.07	74.00	-25.93	43.44	3	Horizontal	298	2.76	-	31.05	5.60	32.02
AV	4.874G	42.19	54.00	-11.81	37.56	3	Horizontal	298	2.76	-	31.05	5.60	32.02
PK	7.31946G	51.60	74.00	-22.40	41.85	3	Horizontal	201	1.80	-	36.32	6.90	33.47
AV	7.31748G	37.77	54.00	-16.23	28.01	3	Horizontal	201	1.80	-	36.33	6.90	33.47

### 802.11b\_Nss1,(1Mbps)\_4TX

### 2462MHz\_TX

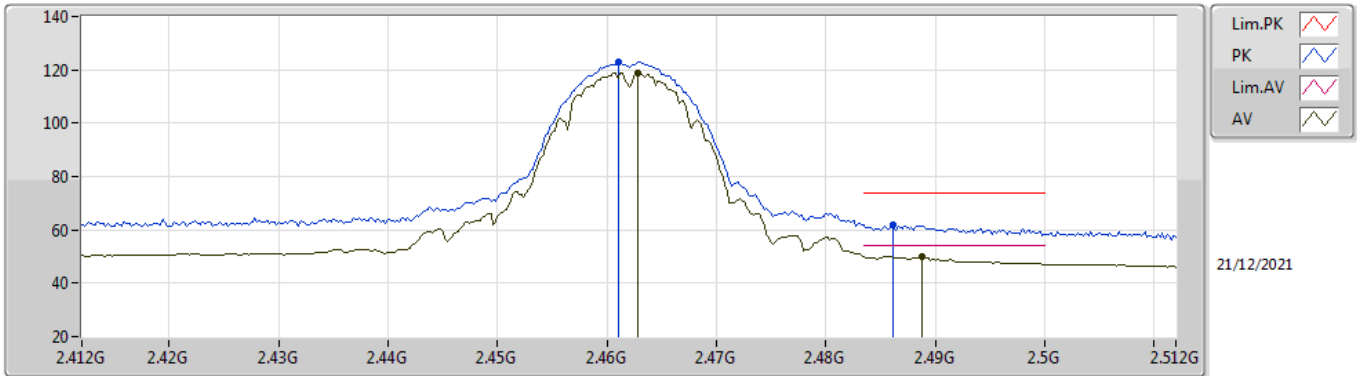


EUT Z\_4TX  
Setting 104  
06-D-S-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.463G	124.41	Inf	-Inf	93.32	3	Vertical	313	1.46	-	27.23	3.86	-
AV	2.4612G	120.45	Inf	-Inf	89.37	3	Vertical	313	1.46	-	27.22	3.86	-
PK	2.4886G	66.47	74.00	-7.53	35.30	3	Vertical	313	1.46	-	27.28	3.89	-
AV	2.487G	53.87	54.00	-0.13	22.71	3	Vertical	313	1.46	-	27.27	3.89	-

### 802.11b\_Nss1,(1Mbps)\_4TX

### 2462MHz\_TX

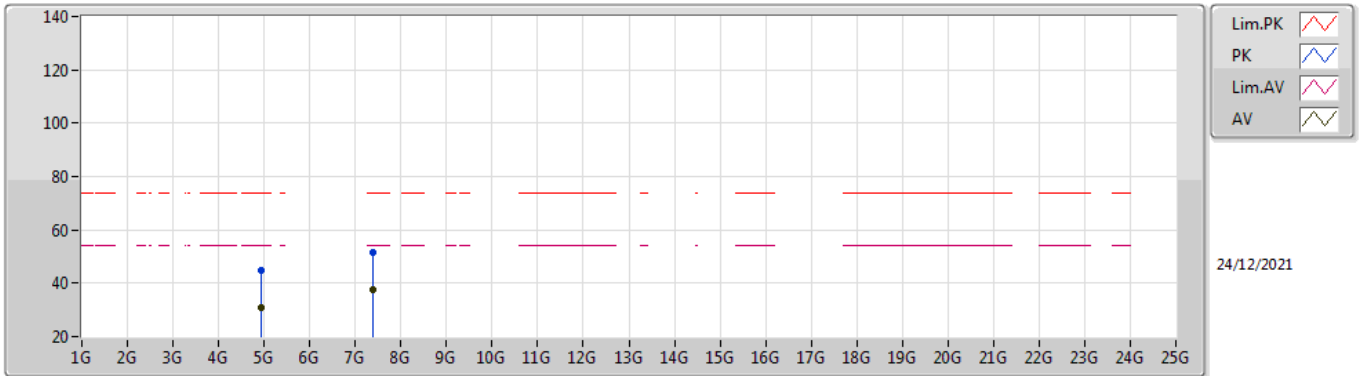


EUT\_Z\_4TX  
Setting 104  
06-D-S-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.461G	122.86	Inf	-Inf	91.78	3	Horizontal	326	2.56	-	27.22	3.86	-
AV	2.4628G	118.85	Inf	-Inf	87.76	3	Horizontal	326	2.56	-	27.23	3.86	-
PK	2.4862G	61.91	74.00	-12.09	30.75	3	Horizontal	326	2.56	-	27.27	3.89	-
AV	2.4888G	50.17	54.00	-3.83	19.00	3	Horizontal	326	2.56	-	27.28	3.89	-

### 802.11b\_Nss1,(1Mbps)\_4TX

### 2462MHz\_TX

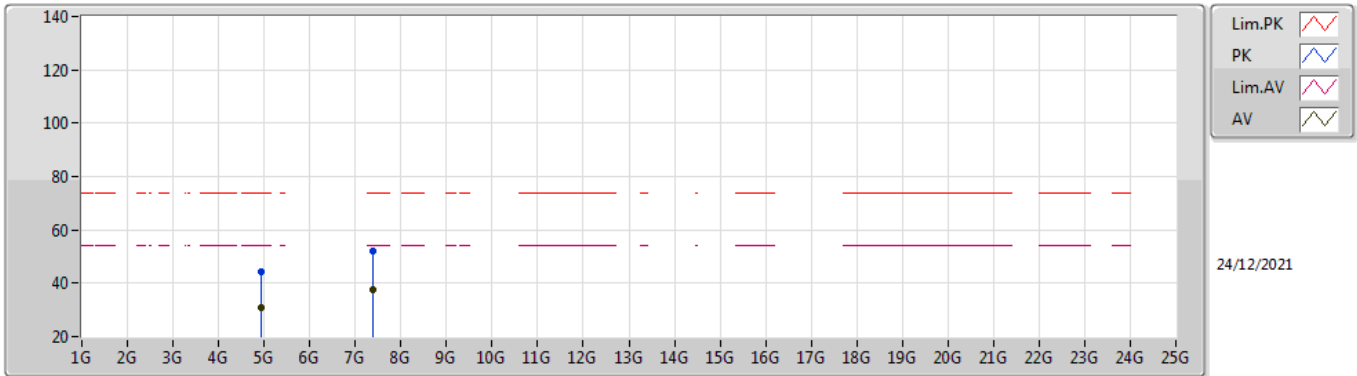


EUT\_Z\_4TX  
Setting 104  
06-D-S-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.92016G	44.74	74.00	-29.26	39.94	3	Vertical	281	2.82	-	31.18	5.60	31.98
AV	4.9204G	30.66	54.00	-23.34	25.86	3	Vertical	281	2.82	-	31.18	5.60	31.98
PK	7.38416G	51.62	74.00	-22.38	42.16	3	Vertical	46	2.59	-	36.06	6.90	33.50
AV	7.39024G	37.78	54.00	-16.22	28.35	3	Vertical	46	2.59	-	36.04	6.90	33.51

### 802.11b\_Nss1,(1Mbps)\_4TX

### 2462MHz\_TX



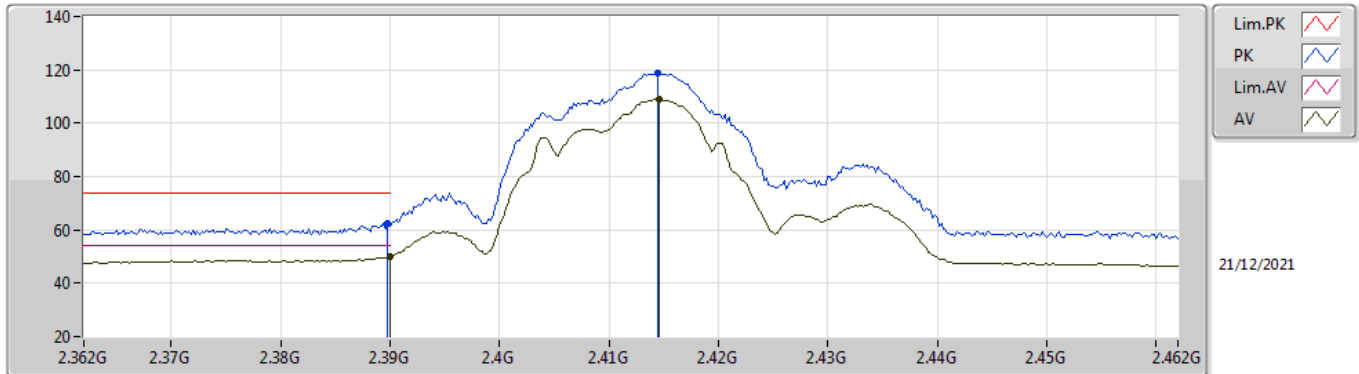
EUT Z\_4TX  
Setting 104  
06-D-S-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.92154G	44.14	74.00	-29.86	39.33	3	Horizontal	96	1.78	-	31.19	5.60	31.98
AV	4.92188G	30.62	54.00	-23.38	25.81	3	Horizontal	96	1.78	-	31.19	5.60	31.98
PK	7.38744G	52.10	74.00	-21.90	42.65	3	Horizontal	31	1.05	-	36.05	6.90	33.50
AV	7.38872G	37.75	54.00	-16.25	28.30	3	Horizontal	31	1.05	-	36.05	6.90	33.50



### 802.11g\_Nss1,(6Mbps)\_4TX

### 2412MHz\_TX

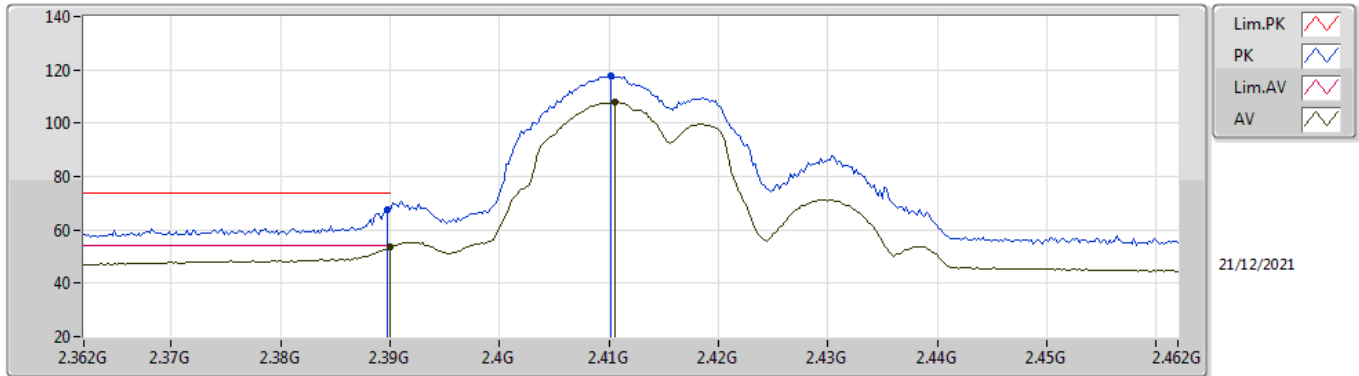


EUT Z\_4TX  
Setting 81  
06-D-S-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3898G	62.54	74.00	-11.46	31.27	3	Vertical	266	2.14	-	27.48	3.79	-
AV	2.39G	50.21	54.00	-3.79	18.94	3	Vertical	266	2.14	-	27.48	3.79	-
PK	2.4144G	118.67	Inf	-Inf	87.52	3	Vertical	266	2.14	-	27.34	3.81	-
AV	2.4146G	108.81	Inf	-Inf	77.66	3	Vertical	266	2.14	-	27.34	3.81	-

### 802.11g\_Nss1,(6Mbps)\_4TX

### 2412MHz\_TX

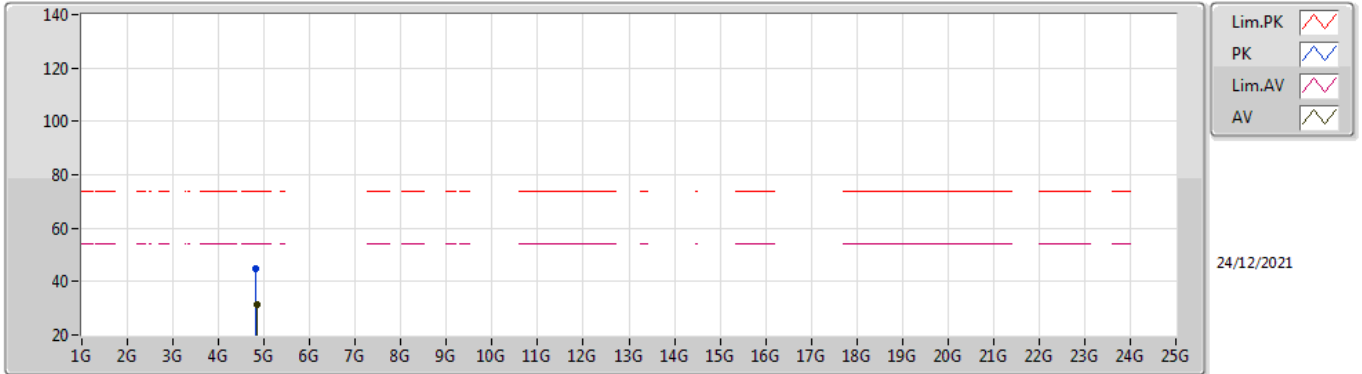


EUT\_Z\_4TX  
Setting 81  
06-D-S-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3898G	67.55	74.00	-6.45	36.28	3	Horizontal	320	2.62	-	27.48	3.79	-
AV	2.39G	53.61	54.00	-0.39	22.34	3	Horizontal	320	2.62	-	27.48	3.79	-
PK	2.4102G	117.55	Inf	-Inf	86.38	3	Horizontal	320	2.62	-	27.36	3.81	-
AV	2.4106G	107.83	Inf	-Inf	76.66	3	Horizontal	320	2.62	-	27.36	3.81	-

### 802.11g\_Nss1,(6Mbps)\_4TX

### 2412MHz\_TX

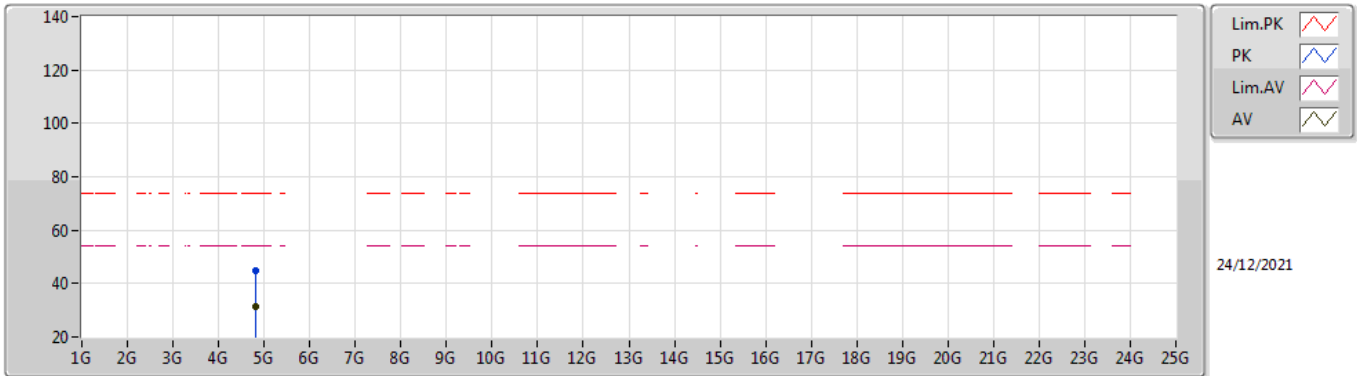


EUT Z\_4TX  
Setting 81  
06-D-S-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.82254G	44.83	74.00	-29.17	40.24	3	Vertical	68	2.24	-	31.05	5.60	32.06
AV	4.82892G	31.54	54.00	-22.46	26.95	3	Vertical	68	2.24	-	31.04	5.60	32.05

### 802.11g\_Nss1,(6Mbps)\_4TX

### 2412MHz\_TX

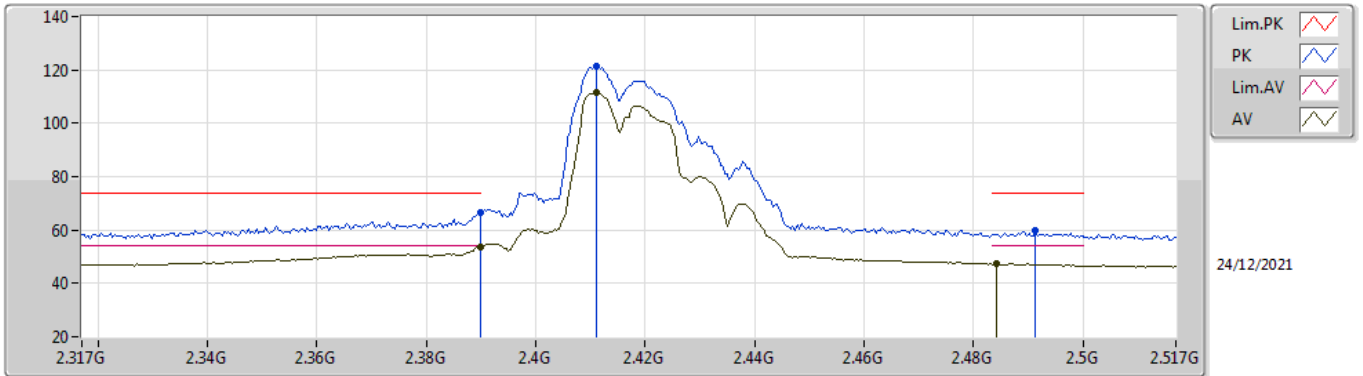


EUT Z\_4TX  
Setting 81  
06-D-S-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.82748G	45.08	74.00	-28.92	40.48	3	Horizontal	207	2.81	-	31.05	5.60	32.05
AV	4.82784G	31.56	54.00	-22.44	26.97	3	Horizontal	207	2.81	-	31.04	5.60	32.05

### 802.11g\_Nss1,(6Mbps)\_4TX

### 2417MHz\_TX

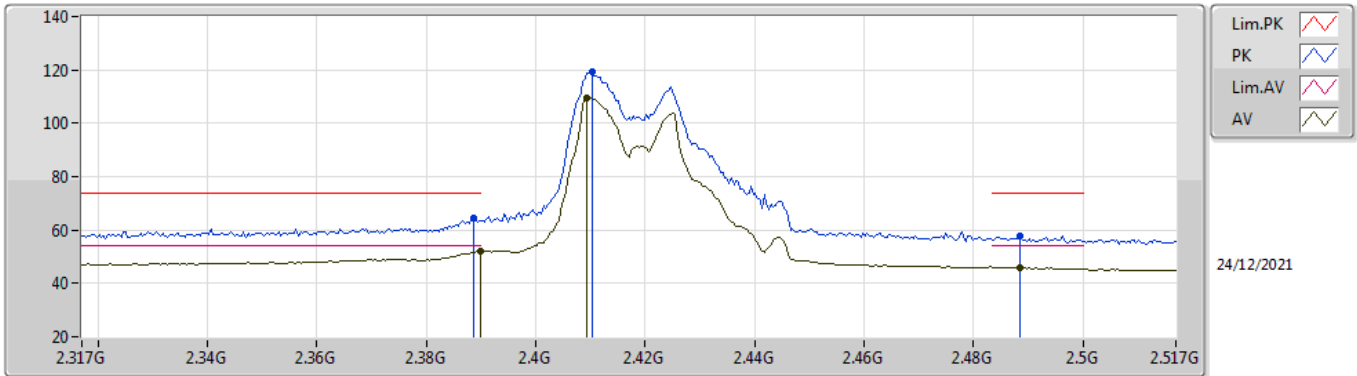


EUT\_Z\_4TX  
Setting 93  
06-D-S-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3898G	66.53	74.00	-7.47	35.26	3	Vertical	11	1.80	-	27.48	3.79	-
AV	2.3898G	53.73	54.00	-0.27	22.46	3	Vertical	11	1.80	-	27.48	3.79	-
PK	2.411G	121.49	Inf	-Inf	90.32	3	Vertical	11	1.80	-	27.36	3.81	-
AV	2.411G	111.53	Inf	-Inf	80.36	3	Vertical	11	1.80	-	27.36	3.81	-
PK	2.4914G	59.67	74.00	-14.33	28.50	3	Vertical	11	1.80	-	27.28	3.89	-
AV	2.4842G	47.37	54.00	-6.63	16.22	3	Vertical	11	1.80	-	27.27	3.88	-

### 802.11g\_Nss1,(6Mbps)\_4TX

### 2417MHz\_TX

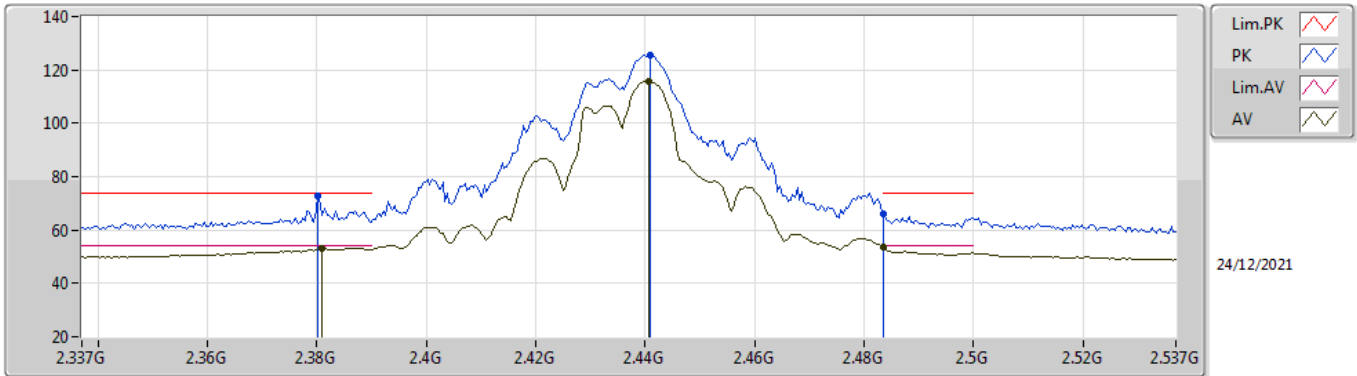


EUT\_Z\_4TX  
Setting 93  
06-D-S-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3886G	64.46	74.00	-9.54	33.18	3	Horizontal	42	1.55	-	27.49	3.79	-
AV	2.3898G	51.86	54.00	-2.14	20.59	3	Horizontal	42	1.55	-	27.48	3.79	-
PK	2.4102G	119.17	Inf	-Inf	88.00	3	Horizontal	42	1.55	-	27.36	3.81	-
AV	2.4094G	109.27	Inf	-Inf	78.10	3	Horizontal	42	1.55	-	27.36	3.81	-
PK	2.4886G	57.94	74.00	-16.06	26.77	3	Horizontal	42	1.55	-	27.28	3.89	-
AV	2.4886G	46.10	54.00	-7.90	14.93	3	Horizontal	42	1.55	-	27.28	3.89	-

### 802.11g\_Nss1,(6Mbps)\_4TX

### 2437MHz\_TX

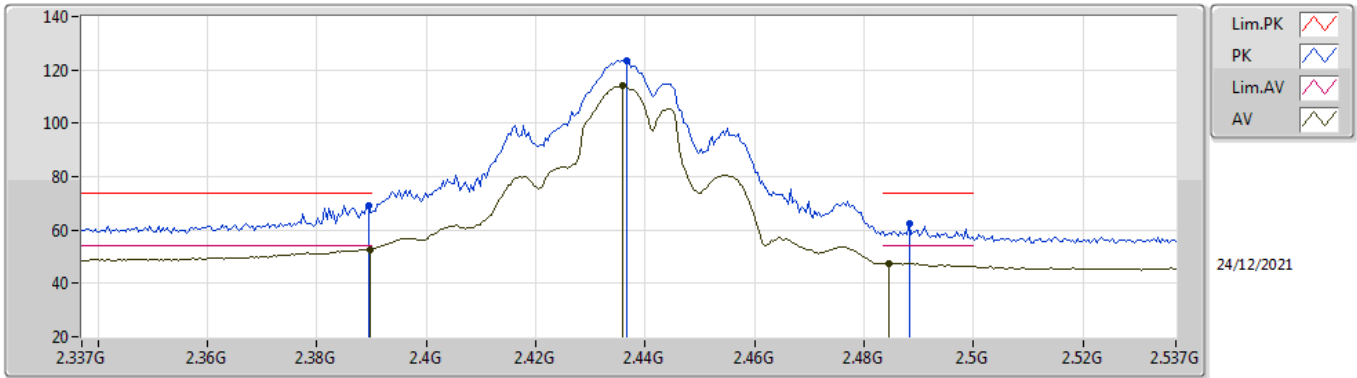


EUT\_Z\_4TX  
Setting 108  
06-D-S-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3802G	72.64	74.00	-1.36	41.29	3	Vertical	350	1.94	-	27.56	3.79	-
AV	2.381G	53.15	54.00	-0.85	21.81	3	Vertical	350	1.94	-	27.55	3.79	-
PK	2.441G	125.36	Inf	-Inf	94.28	3	Vertical	350	1.94	-	27.24	3.84	-
AV	2.4406G	115.92	Inf	-Inf	84.84	3	Vertical	350	1.94	-	27.24	3.84	-
PK	2.4835G	66.08	74.00	-7.92	34.93	3	Vertical	350	1.94	-	27.27	3.88	-
AV	2.4835G	53.44	54.00	-0.56	22.29	3	Vertical	350	1.94	-	27.27	3.88	-

### 802.11g\_Nss1,(6Mbps)\_4TX

### 2437MHz\_TX



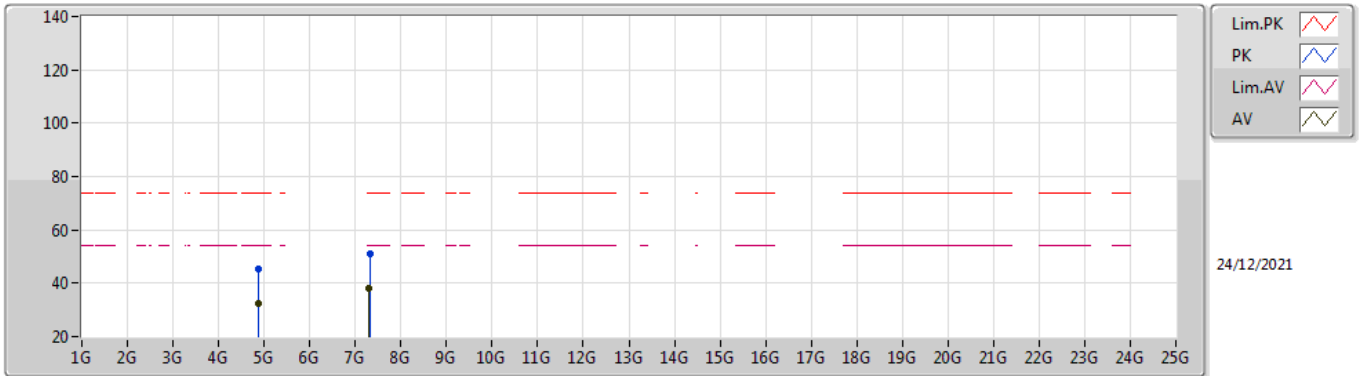
EUT\_Z\_4TX  
Setting 108  
06-D-S-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3894G	69.11	74.00	-4.89	37.84	3	Horizontal	322	2.91	-	27.48	3.79	-
AV	2.3898G	52.78	54.00	-1.22	21.51	3	Horizontal	322	2.91	-	27.48	3.79	-
PK	2.4366G	123.61	Inf	-Inf	92.52	3	Horizontal	322	2.91	-	27.25	3.84	-
AV	2.4358G	114.13	Inf	-Inf	83.03	3	Horizontal	322	2.91	-	27.26	3.84	-
PK	2.4882G	62.19	74.00	-11.81	31.02	3	Horizontal	322	2.91	-	27.28	3.89	-
AV	2.4846G	47.54	54.00	-6.46	16.39	3	Horizontal	322	2.91	-	27.27	3.88	-



### 802.11g\_Nss1,(6Mbps)\_4TX

### 2437MHz\_TX

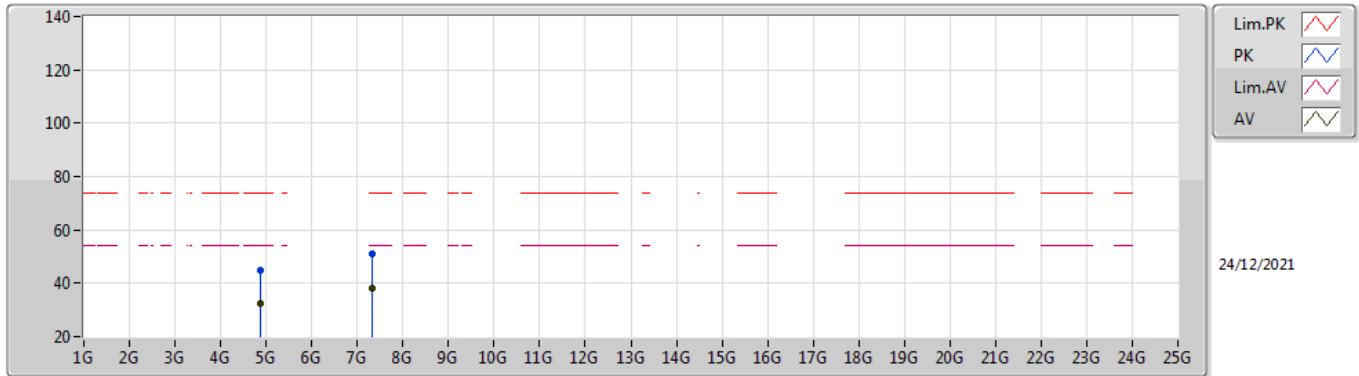


EUT Z\_4TX  
Setting 108  
06-D-S-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.87392G	45.29	74.00	-28.71	40.66	3	Vertical	344	2.39	-	31.05	5.60	32.02
AV	4.8741G	32.47	54.00	-21.53	27.84	3	Vertical	344	2.39	-	31.05	5.60	32.02
PK	7.31042G	51.09	74.00	-22.91	41.30	3	Vertical	113	2.25	-	36.36	6.90	33.47
AV	7.30996G	38.15	54.00	-15.85	28.35	3	Vertical	113	2.25	-	36.36	6.90	33.46

### 802.11g\_Nss1,(6Mbps)\_4TX

### 2437MHz\_TX

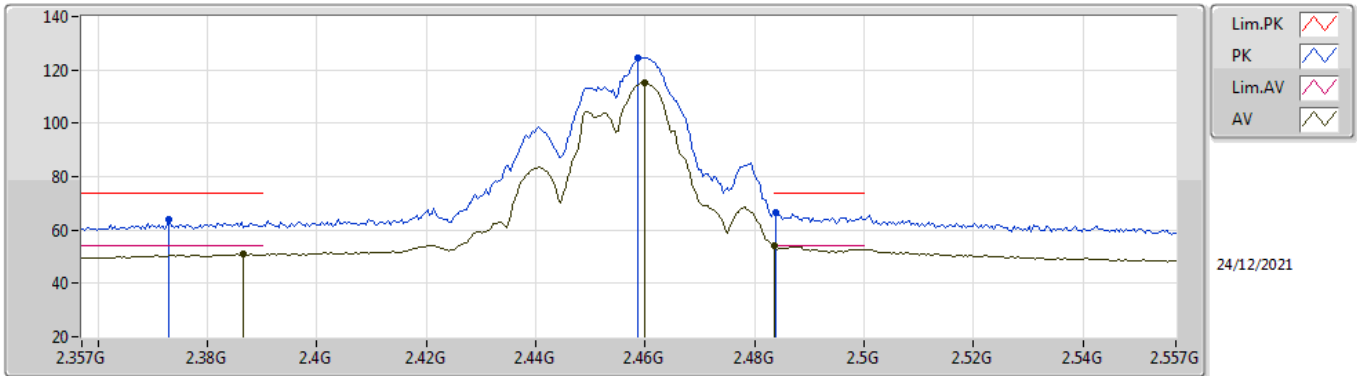


EUT\_Z\_4TX  
Setting 108  
06-D-S-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.8725G	45.00	74.00	-29.00	40.37	3	Horizontal	88	1.80	-	31.05	5.60	32.02
AV	4.874G	32.48	54.00	-21.52	27.85	3	Horizontal	88	1.80	-	31.05	5.60	32.02
PK	7.3154G	51.29	74.00	-22.71	41.52	3	Horizontal	269	2.76	-	36.34	6.90	33.47
AV	7.3124G	38.14	54.00	-15.86	28.36	3	Horizontal	269	2.76	-	36.35	6.90	33.47

### 802.11g\_Nss1,(6Mbps)\_4TX

### 2457MHz\_TX

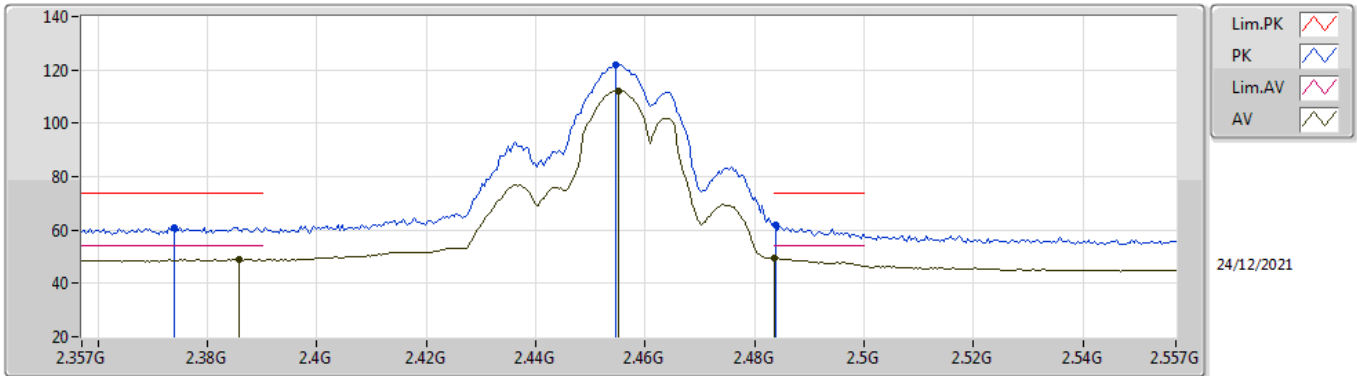


EUT\_Z\_4TX  
Setting 104  
06-D-S-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.373G	63.76	74.00	-10.24	32.35	3	Vertical	348	1.95	-	27.62	3.79	-
AV	2.3866G	50.85	54.00	-3.15	19.55	3	Vertical	348	1.95	-	27.51	3.79	-
PK	2.4586G	124.45	Inf	-Inf	93.37	3	Vertical	348	1.95	-	27.22	3.86	-
AV	2.4598G	115.16	Inf	-Inf	84.08	3	Vertical	348	1.95	-	27.22	3.86	-
PK	2.4838G	66.59	74.00	-7.41	35.44	3	Vertical	348	1.95	-	27.27	3.88	-
AV	2.4835G	53.96	54.00	-0.04	22.81	3	Vertical	348	1.95	-	27.27	3.88	-

### 802.11g\_Nss1,(6Mbps)\_4TX

### 2457MHz\_TX

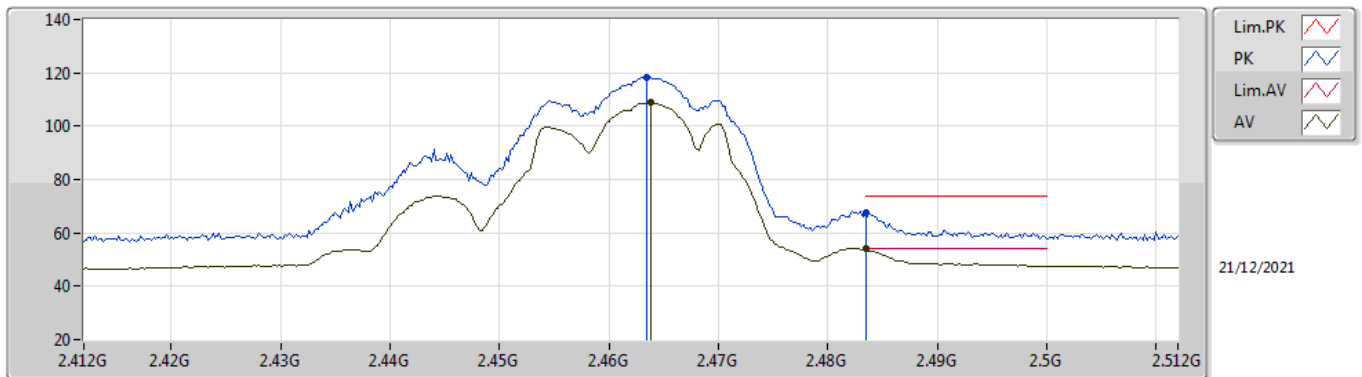


EUT\_Z\_4TX  
Setting 104  
06-D-S-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3738G	61.10	74.00	-12.90	29.70	3	Horizontal	319	2.85	-	27.61	3.79	-
AV	2.3858G	48.83	54.00	-5.17	17.53	3	Horizontal	319	2.85	-	27.51	3.79	-
PK	2.4546G	122.10	Inf	-Inf	91.04	3	Horizontal	319	2.85	-	27.21	3.85	-
AV	2.455G	112.30	Inf	-Inf	81.24	3	Horizontal	319	2.85	-	27.21	3.85	-
PK	2.4838G	61.66	74.00	-12.34	30.51	3	Horizontal	319	2.85	-	27.27	3.88	-
AV	2.4835G	49.42	54.00	-4.58	18.27	3	Horizontal	319	2.85	-	27.27	3.88	-

### 802.11g\_Nss1,(6Mbps)\_4TX

### 2462MHz\_TX

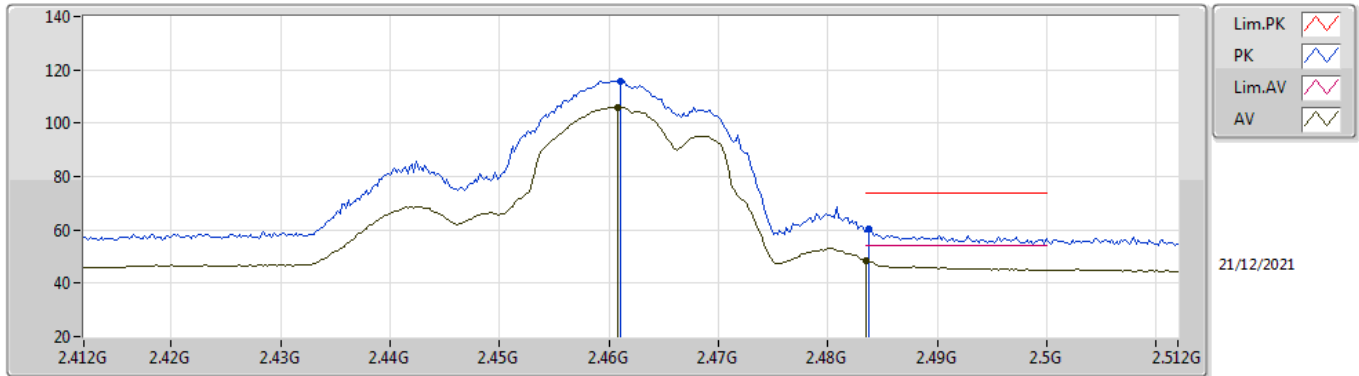


EUT Z\_4TX  
Setting 79  
06-D-S-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.4634G	118.39	Inf	-Inf	87.30	3	Vertical	344	2.24	-	27.23	3.86	-
AV	2.4638G	108.77	Inf	-Inf	77.68	3	Vertical	344	2.24	-	27.23	3.86	-
PK	2.4835G	67.55	74.00	-6.45	36.40	3	Vertical	344	2.24	-	27.27	3.88	-
AV	2.4835G	53.89	54.00	-0.11	22.74	3	Vertical	344	2.24	-	27.27	3.88	-

### 802.11g\_Nss1,(6Mbps)\_4TX

### 2462MHz\_TX

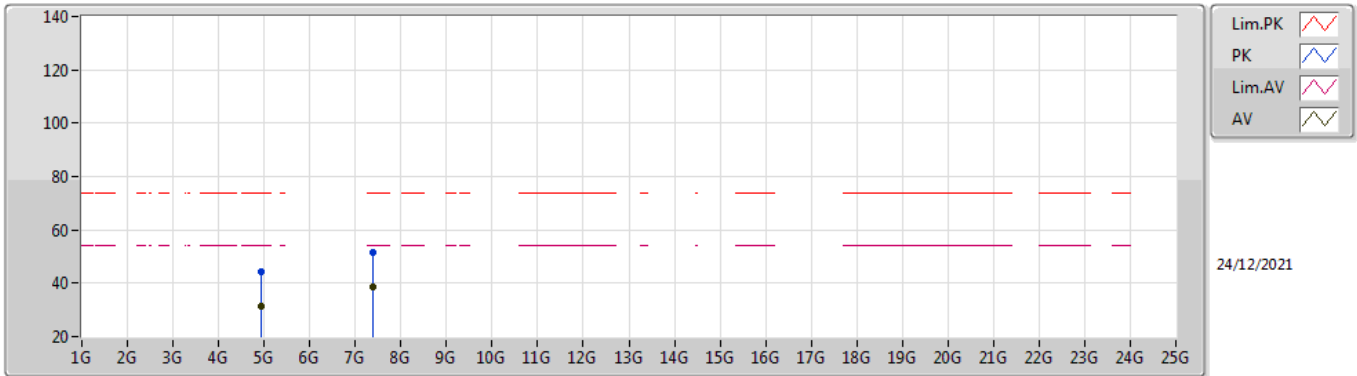


EUT\_Z\_4TX  
Setting 79  
06-D-S-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.461G	115.81	Inf	-Inf	84.73	3	Horizontal	321	2.79	-	27.22	3.86	-
AV	2.4608G	105.95	Inf	-Inf	74.87	3	Horizontal	321	2.79	-	27.22	3.86	-
PK	2.4838G	60.49	74.00	-13.51	29.34	3	Horizontal	321	2.79	-	27.27	3.88	-
AV	2.4835G	48.38	54.00	-5.62	17.23	3	Horizontal	321	2.79	-	27.27	3.88	-

### 802.11g\_Nss1,(6Mbps)\_4TX

### 2462MHz\_TX

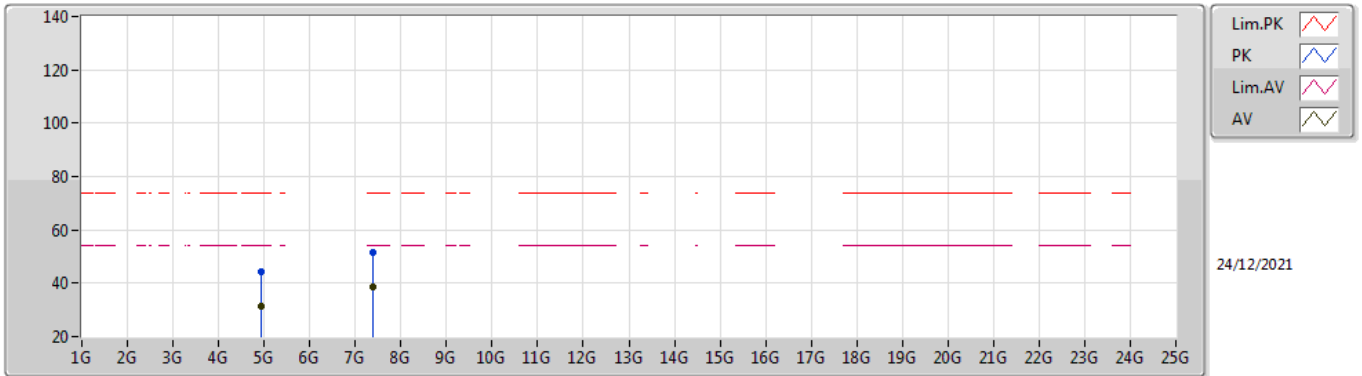


EUT Z\_4TX  
Setting 79  
06-D-S-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.92632G	44.37	74.00	-29.63	39.53	3	Vertical	289	2.07	-	31.21	5.60	31.97
AV	4.9225G	31.34	54.00	-22.66	26.53	3	Vertical	289	2.07	-	31.19	5.60	31.98
PK	7.39032G	51.76	74.00	-22.24	42.33	3	Vertical	359	1.90	-	36.04	6.90	33.51
AV	7.38484G	38.49	54.00	-15.51	29.03	3	Vertical	359	1.90	-	36.06	6.90	33.50

### 802.11g\_Nss1,(6Mbps)\_4TX

### 2462MHz\_TX



EUT\_Z\_4TX  
Setting 79  
06-D-S-8

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.9241G	44.24	74.00	-29.76	39.41	3	Horizontal	40	2.34	-	31.20	5.60	31.97
AV	4.92324G	31.40	54.00	-22.60	26.58	3	Horizontal	40	2.34	-	31.19	5.60	31.97
PK	7.38332G	51.65	74.00	-22.35	42.18	3	Horizontal	253	1.47	-	36.07	6.90	33.50
AV	7.38916G	38.70	54.00	-15.30	29.26	3	Horizontal	253	1.47	-	36.04	6.90	33.50



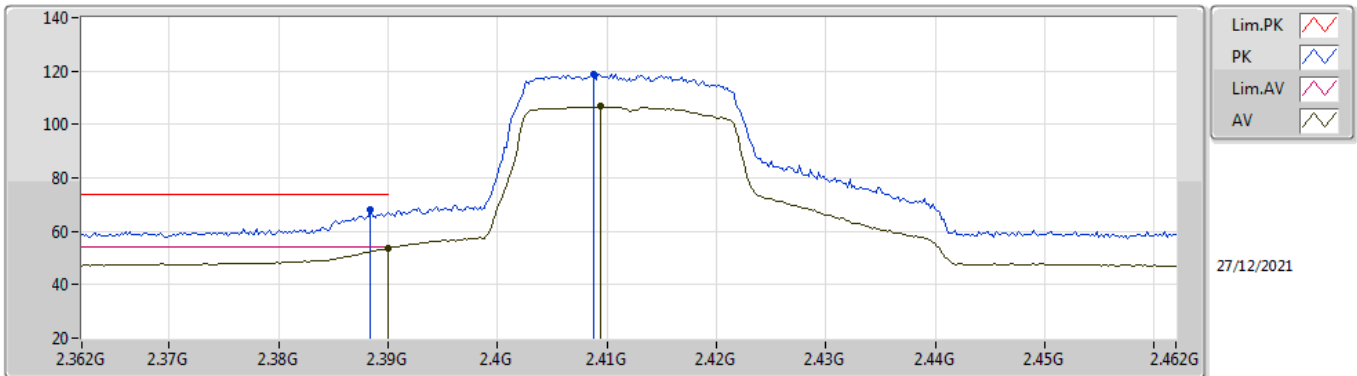


Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-
802.11ax HEW40-BF_Nss1,(MCS0)_4TX	Pass	AV	2.3898G	53.94	54.00	-0.06	3	Vertical	334	2.00	-

### 802.11ax HEW20-BF\_Nss1,(MCS0)\_4TX

### 2412MHz\_TX

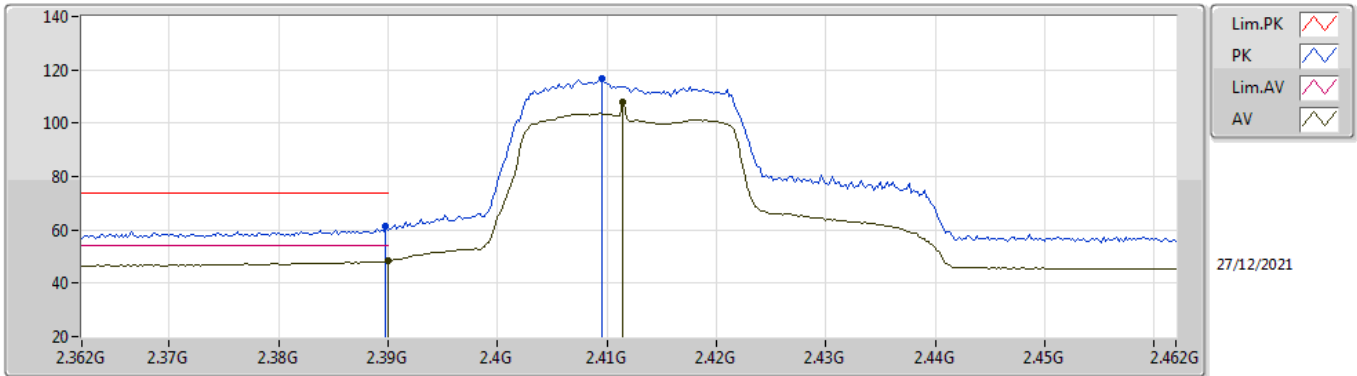


EUT\_Z\_4TX  
Setting 70  
03-C-K-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3884G	68.36	74.00	-5.64	35.65	3	Vertical	70.4	1.48	-	28.32	4.39	-
AV	2.39G	53.59	54.00	-0.41	20.88	3	Vertical	70.4	1.48	-	28.32	4.39	-
PK	2.4088G	118.88	Inf	-Inf	86.16	3	Vertical	70.4	1.48	-	28.32	4.40	-
AV	2.4094G	106.68	Inf	-Inf	73.96	3	Vertical	70.4	1.48	-	28.32	4.40	-

802.11ax HEW20-BF\_Nss1,(MCS0)\_4TX

2412MHz\_TX

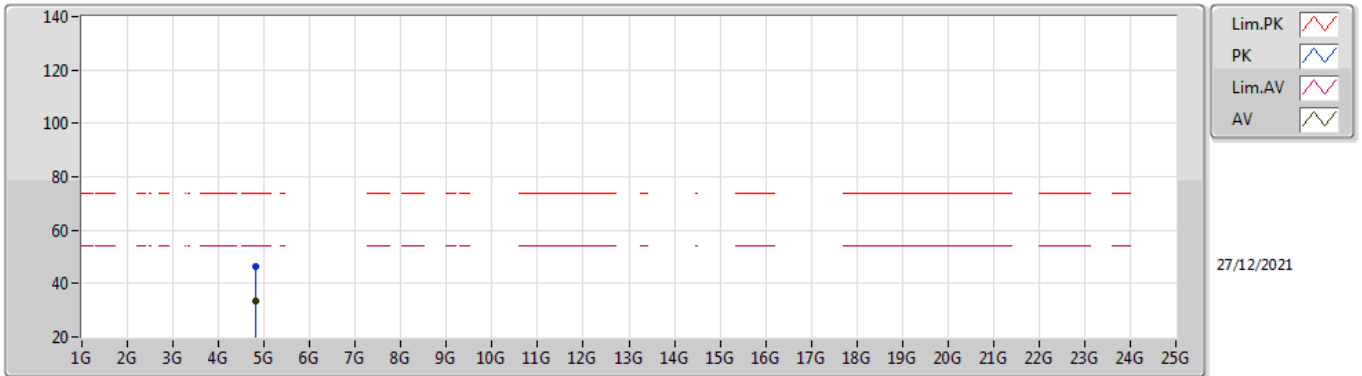


EUT Z\_4TX  
Setting 70  
03-C-K-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3898G	61.35	74.00	-12.65	28.64	3	Horizontal	8.2	2.62	-	28.32	4.39	-
AV	2.39G	48.61	54.00	-5.39	15.90	3	Horizontal	8.2	2.62	-	28.32	4.39	-
PK	2.4096G	116.88	Inf	-Inf	84.16	3	Horizontal	8.2	2.62	-	28.32	4.40	-
AV	2.4114G	108.18	Inf	-Inf	75.45	3	Horizontal	8.2	2.62	-	28.32	4.41	-

### 802.11ax HEW20-BF\_Nss1,(MCS0)\_4TX

### 2412MHz\_TX

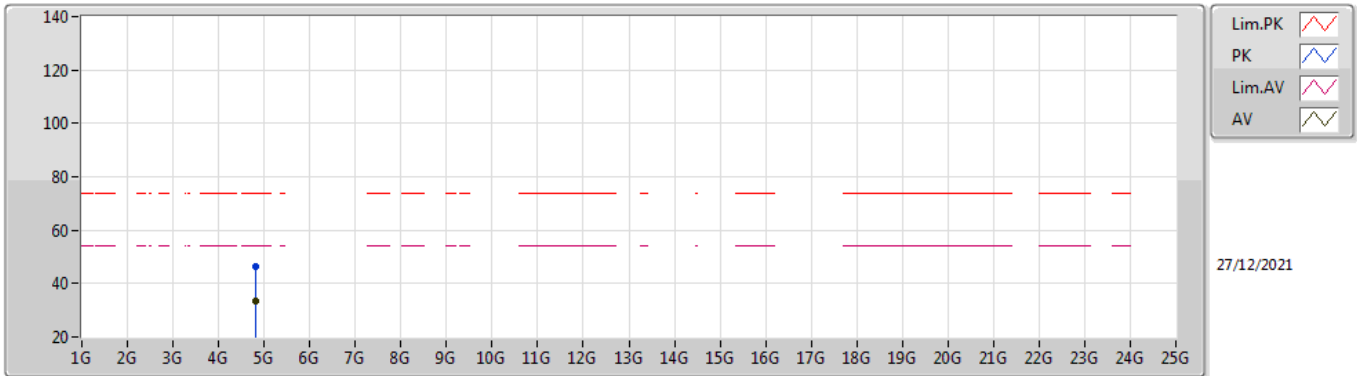


EUT Z\_4TX  
Setting 70  
03-C-K-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.82632G	46.50	74.00	-27.50	41.43	3	Vertical	41	1.87	-	33.40	7.09	35.42
AV	4.82246G	33.35	54.00	-20.65	28.28	3	Vertical	41	1.87	-	33.40	7.09	35.42

### 802.11ax HEW20-BF\_Nss1,(MCS0)\_4TX

### 2412MHz\_TX

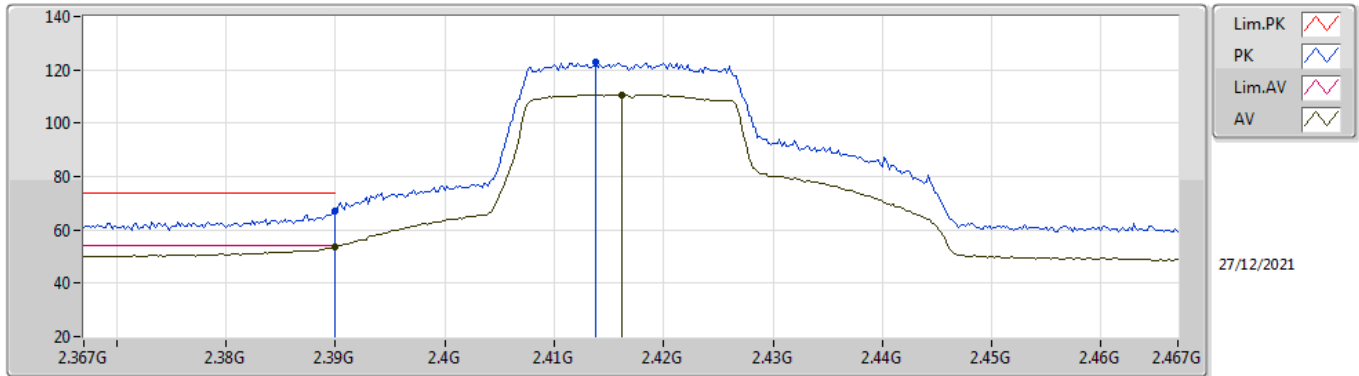


EUT\_Z\_4TX  
Setting 70  
03-C-K-4

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.821G	46.31	74.00	-27.69	41.24	3	Horizontal	30	1.72	-	33.40	7.09	35.42
AV	4.8239G	33.49	54.00	-20.51	28.42	3	Horizontal	30	1.72	-	33.40	7.09	35.42

### 802.11ax HEW20-BF\_Nss1,(MCS0)\_4TX

### 2417MHz\_TX

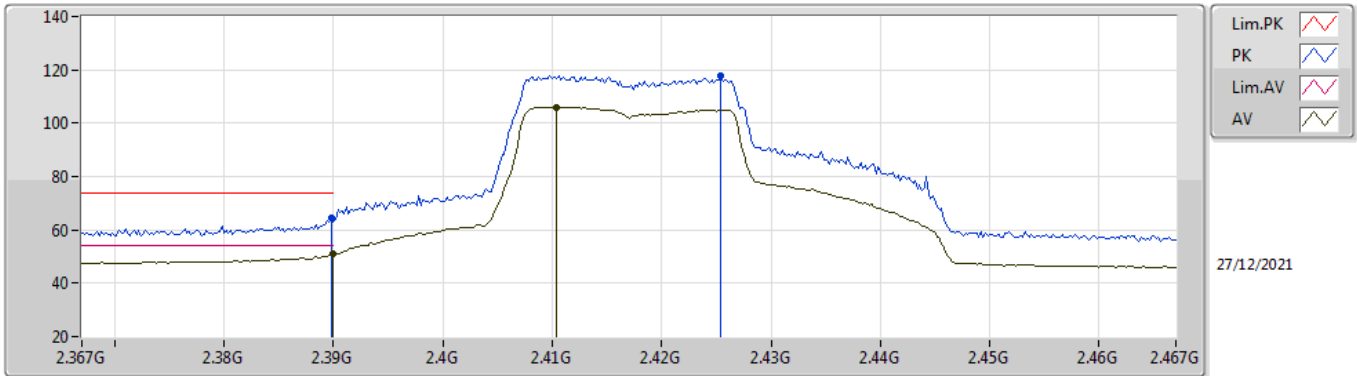


EUT Z\_4TX  
Setting 88  
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.39G	67.24	74.00	-6.76	35.97	3	Vertical	28.4	2.02	-	27.48	3.79	-
AV	2.39G	53.80	54.00	-0.20	22.53	3	Vertical	28.4	2.02	-	27.48	3.79	-
PK	2.4138G	123.00	Inf	-Inf	91.85	3	Vertical	28.4	2.02	-	27.34	3.81	-
AV	2.4162G	110.75	Inf	-Inf	79.59	3	Vertical	28.4	2.02	-	27.34	3.82	-

### 802.11ax HEW20-BF\_Nss1,(MCS0)\_4TX

### 2417MHz\_TX

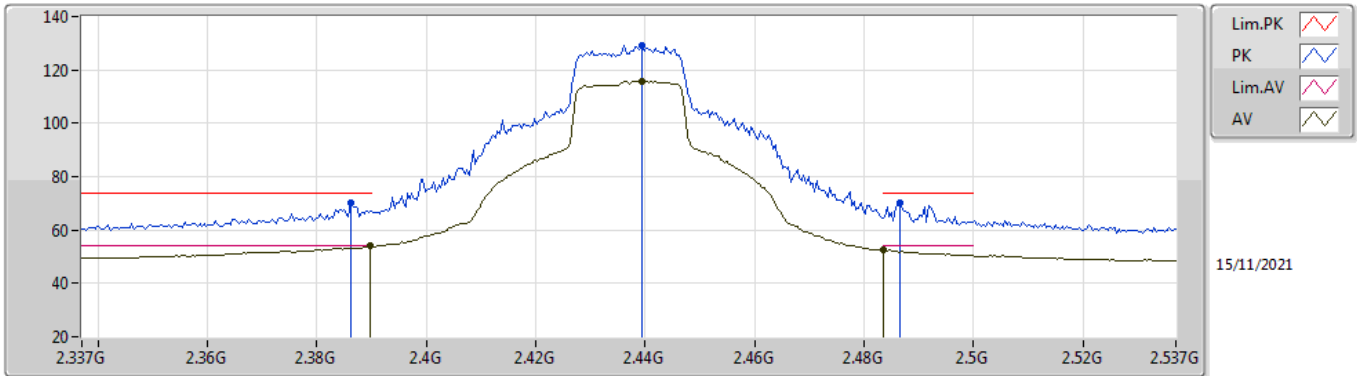


EUT Z\_4TX  
Setting 88  
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3898G	64.40	74.00	-9.60	33.13	3	Horizontal	49.1	2.40	-	27.48	3.79	-
AV	2.39G	51.00	54.00	-3.00	19.73	3	Horizontal	49.1	2.40	-	27.48	3.79	-
PK	2.4254G	117.62	Inf	-Inf	86.49	3	Horizontal	49.1	2.40	-	27.30	3.83	-
AV	2.4104G	106.05	Inf	-Inf	74.88	3	Horizontal	49.1	2.40	-	27.36	3.81	-

### 802.11ax HEW20-BF\_Nss1,(MCS0)\_4TX

### 2437MHz\_TX



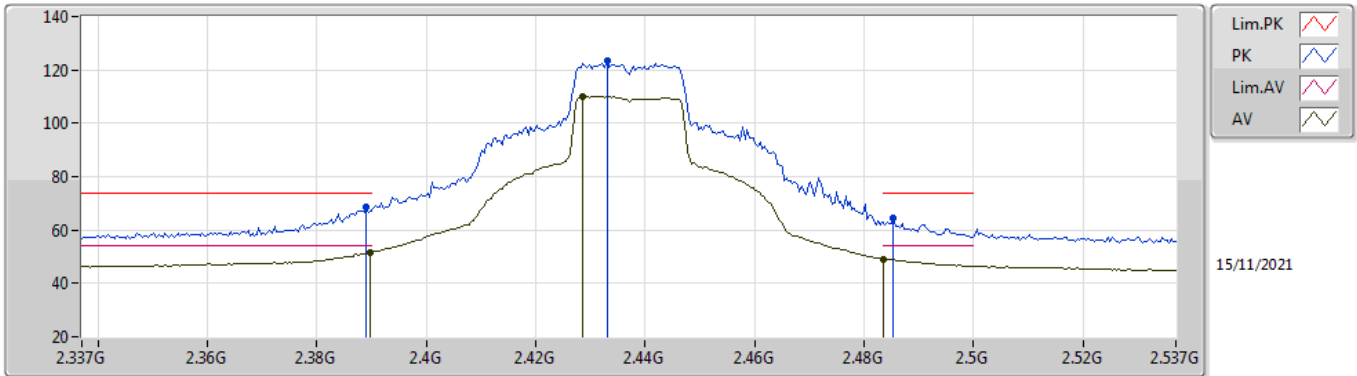
EUT\_Z\_4TX  
Setting 108  
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3862G	70.05	74.00	-3.95	38.75	3	Vertical	20.3	1.80	-	27.51	3.79	-
AV	2.3898G	53.93	54.00	-0.07	22.66	3	Vertical	20.3	1.80	-	27.48	3.79	-
PK	2.4394G	128.91	Inf	-Inf	97.83	3	Vertical	20.3	1.80	-	27.24	3.84	-
AV	2.4394G	115.91	Inf	-Inf	84.83	3	Vertical	20.3	1.80	-	27.24	3.84	-
PK	2.4866G	70.23	74.00	-3.77	39.07	3	Vertical	20.3	1.80	-	27.27	3.89	-
AV	2.4835G	52.40	54.00	-1.60	21.25	3	Vertical	20.3	1.80	-	27.27	3.88	-



### 802.11ax HEW20-BF\_Nss1,(MCS0)\_4TX

### 2437MHz\_TX

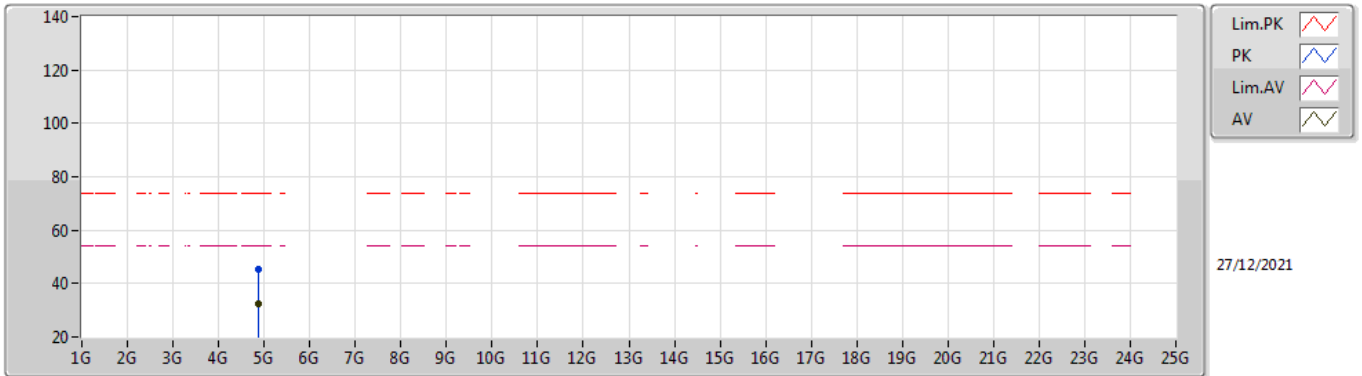


EUT\_Z\_4TX  
Setting 108  
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.389G	68.69	74.00	-5.31	37.41	3	Horizontal	52.3	1.80	-	27.49	3.79	-
AV	2.3898G	51.62	54.00	-2.38	20.35	3	Horizontal	52.3	1.80	-	27.48	3.79	-
PK	2.433G	123.25	Inf	-Inf	92.15	3	Horizontal	52.3	1.80	-	27.27	3.83	-
AV	2.4286G	109.90	Inf	-Inf	78.78	3	Horizontal	52.3	1.80	-	27.29	3.83	-
PK	2.4854G	64.27	74.00	-9.73	33.11	3	Horizontal	52.3	1.80	-	27.27	3.89	-
AV	2.4835G	48.99	54.00	-5.01	17.84	3	Horizontal	52.3	1.80	-	27.27	3.88	-

### 802.11ax HEW20-BF\_Nss1,(MCS0)\_4TX

### 2437MHz\_TX

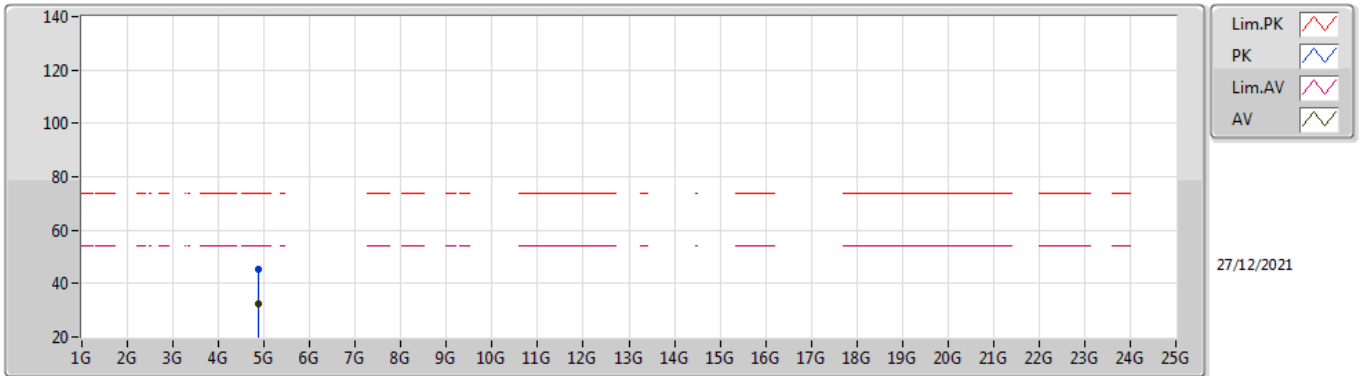


EUT Z\_4TX  
Setting 108  
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.87668G	45.55	74.00	-28.45	40.91	3	Vertical	234	2.85	-	31.05	5.60	32.01
AV	4.87026G	32.25	54.00	-21.75	27.63	3	Vertical	234	2.85	-	31.04	5.60	32.02

802.11ax HEW20-BF\_Nss1,(MCS0)\_4TX

2437MHz\_TX

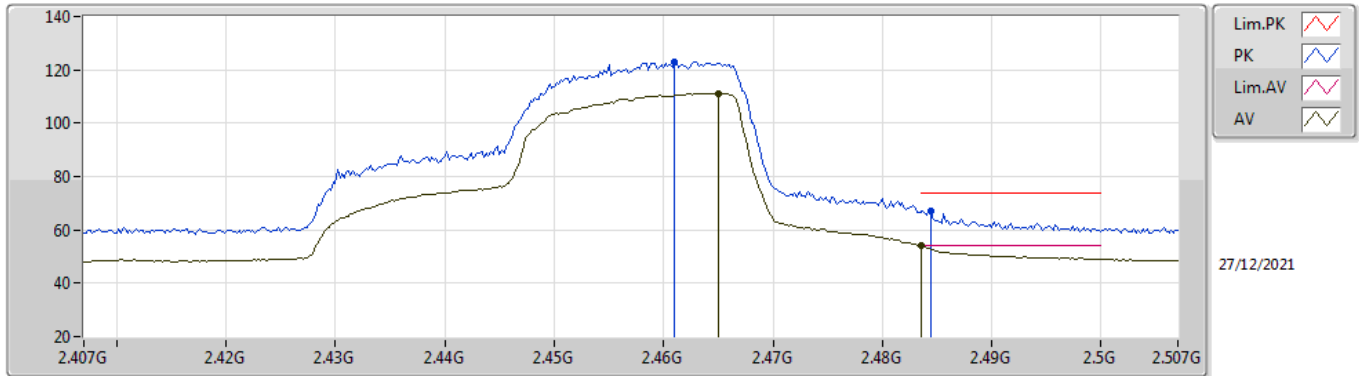


EUT Z\_4TX  
Setting 108  
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.87328G	45.60	74.00	-28.40	40.97	3	Horizontal	184	1.97	-	31.05	5.60	32.02
AV	4.87468G	32.30	54.00	-21.70	27.67	3	Horizontal	184	1.97	-	31.05	5.60	32.02

### 802.11ax HEW20-BF\_Nss1,(MCS0)\_4TX

### 2457MHz\_TX

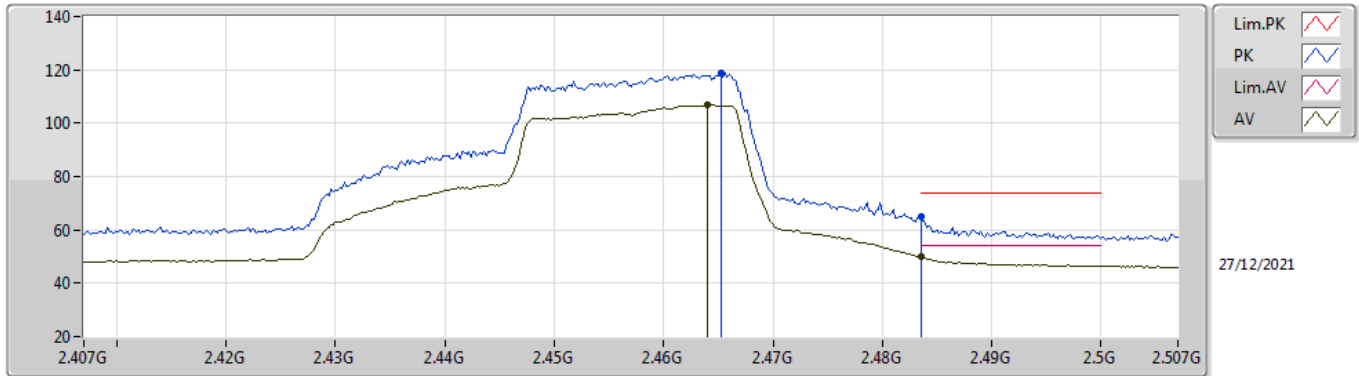


EUT\_Z\_4TX  
Setting 89  
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.461G	122.93	Inf	-Inf	91.85	3	Vertical	20.1	3.00	-	27.22	3.86	-
AV	2.465G	111.28	Inf	-Inf	80.19	3	Vertical	20.1	3.00	-	27.23	3.86	-
PK	2.4844G	66.99	74.00	-7.01	35.84	3	Vertical	20.1	3.00	-	27.27	3.88	-
AV	2.4835G	53.92	54.00	-0.08	22.77	3	Vertical	20.1	3.00	-	27.27	3.88	-

### 802.11ax HEW20-BF\_Nss1,(MCS0)\_4TX

### 2457MHz\_TX

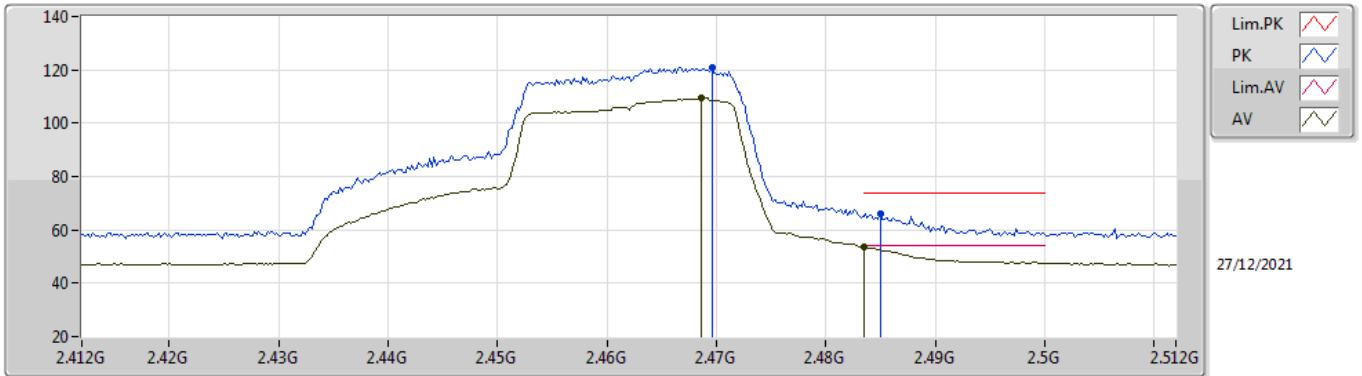


EUT Z\_4TX  
Setting 89  
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.4652G	118.87	Inf	-Inf	87.77	3	Horizontal	328	2.50	-	27.23	3.87	-
AV	2.464G	106.73	Inf	-Inf	75.64	3	Horizontal	328	2.50	-	27.23	3.86	-
PK	2.4835G	65.19	74.00	-8.81	34.04	3	Horizontal	328	2.50	-	27.27	3.88	-
AV	2.4835G	50.00	54.00	-4.00	18.85	3	Horizontal	328	2.50	-	27.27	3.88	-

### 802.11ax HEW20-BF\_Nss1,(MCS0)\_4TX

### 2462MHz\_TX

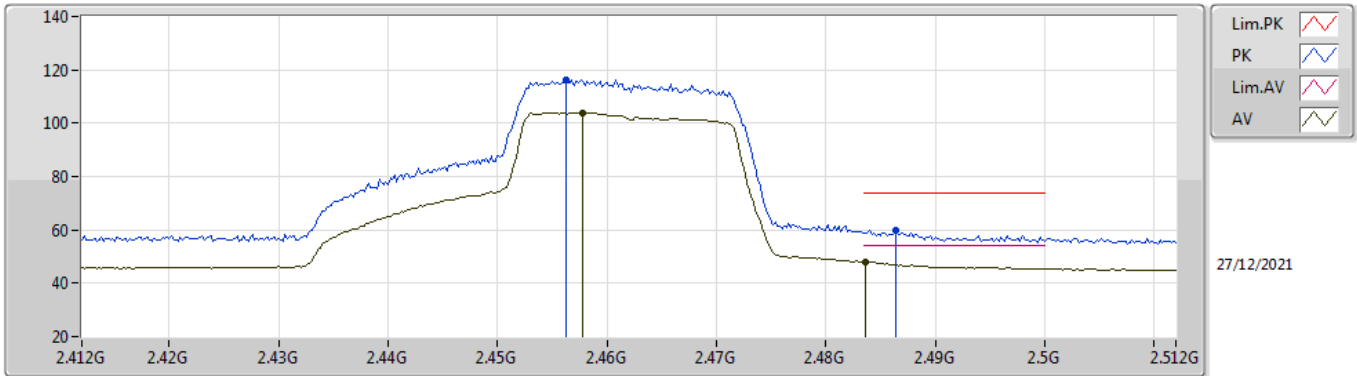


EUT Z\_4TX  
Setting 76  
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.4696G	120.66	Inf	-Inf	89.55	3	Vertical	111.1	2.72	-	27.24	3.87	-
AV	2.4686G	109.33	Inf	-Inf	78.22	3	Vertical	111.1	2.72	-	27.24	3.87	-
PK	2.485G	65.96	74.00	-8.04	34.80	3	Vertical	111.1	2.72	-	27.27	3.89	-
AV	2.4835G	53.87	54.00	-0.13	22.72	3	Vertical	111.1	2.72	-	27.27	3.88	-

### 802.11ax HEW20-BF\_Nss1,(MCS0)\_4TX

### 2462MHz\_TX

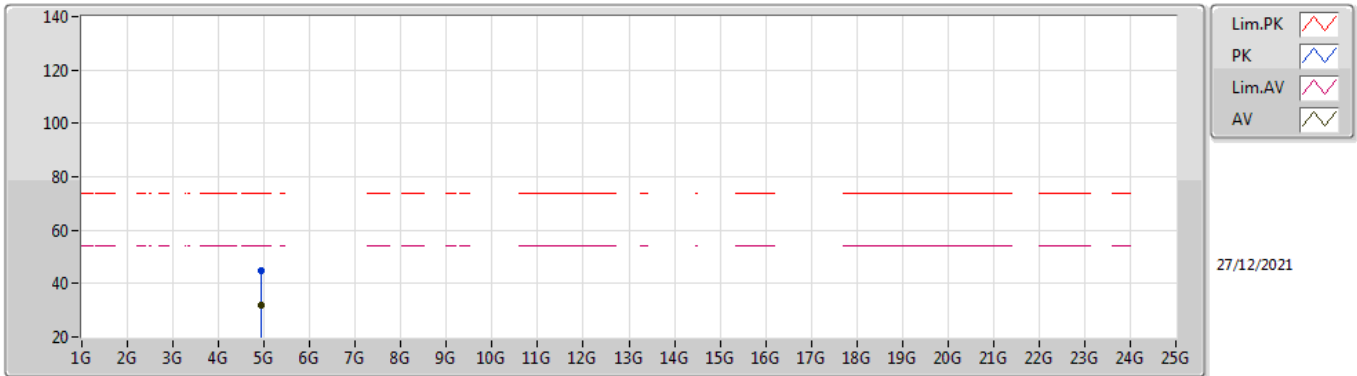


EUT\_Z\_4TX  
Setting 76  
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.4562G	116.32	Inf	-Inf	85.25	3	Horizontal	357.4	2.60	-	27.21	3.86	-
AV	2.4578G	104.05	Inf	-Inf	72.97	3	Horizontal	357.4	2.60	-	27.22	3.86	-
PK	2.4864G	59.60	74.00	-14.40	28.44	3	Horizontal	357.4	2.60	-	27.27	3.89	-
AV	2.4836G	48.16	54.00	-5.84	17.01	3	Horizontal	357.4	2.60	-	27.27	3.88	-

### 802.11ax HEW20-BF\_Nss1,(MCS0)\_4TX

### 2462MHz\_TX



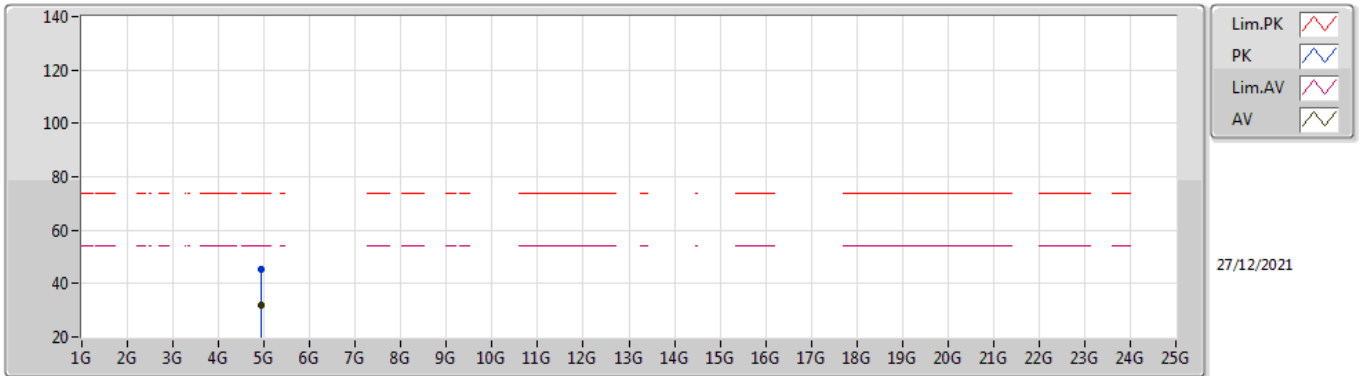
EUT Z\_4TX  
Setting 76  
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.92796G	44.93	74.00	-29.07	40.09	3	Vertical	47	1.21	-	31.21	5.60	31.97
AV	4.92178G	31.99	54.00	-22.01	27.18	3	Vertical	47	1.21	-	31.19	5.60	31.98



### 802.11ax HEW20-BF\_Nss1,(MCS0)\_4TX

### 2462MHz\_TX

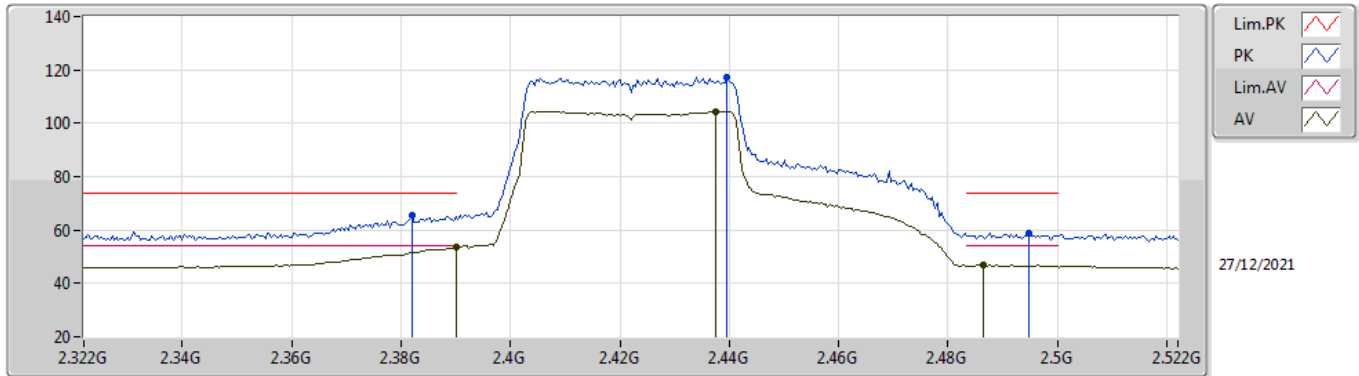


EUT\_Z\_4TX  
Setting 76  
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.92404G	45.36	74.00	-28.64	40.53	3	Horizontal	120	1.42	-	31.20	5.60	31.97
AV	4.92188G	31.93	54.00	-22.07	27.12	3	Horizontal	120	1.42	-	31.19	5.60	31.98

### 802.11ax HEW40-BF\_Nss1,(MCS0)\_4TX

### 2422MHz\_TX

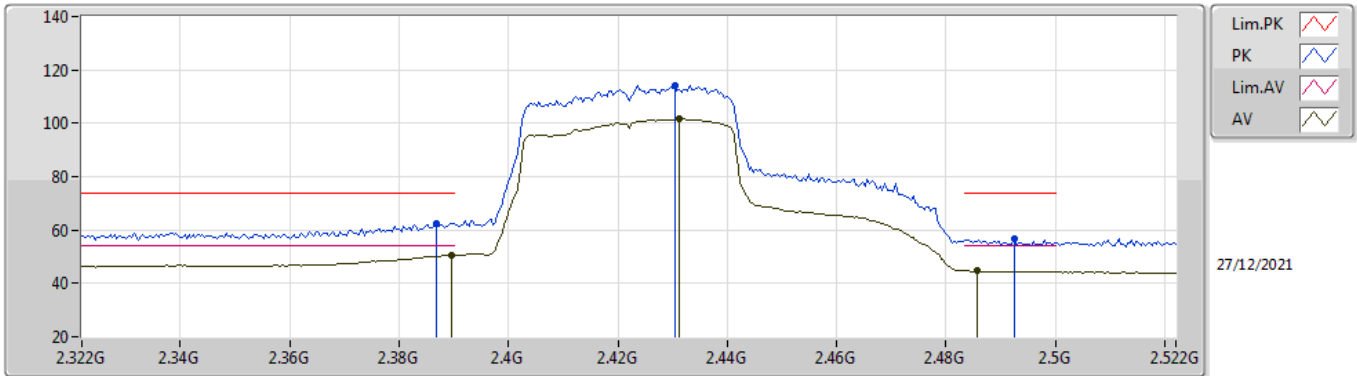


EUT\_Z\_4TX  
Setting 72  
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.382G	65.33	74.00	-8.67	34.00	3	Vertical	334	2.57	-	27.54	3.79	-
AV	2.39G	53.86	54.00	-0.14	22.59	3	Vertical	334	2.57	-	27.48	3.79	-
PK	2.4396G	117.14	Inf	-Inf	86.06	3	Vertical	334	2.57	-	27.24	3.84	-
AV	2.4376G	104.47	Inf	-Inf	73.38	3	Vertical	334	2.57	-	27.25	3.84	-
PK	2.4948G	58.98	74.00	-15.02	27.80	3	Vertical	334	2.57	-	27.29	3.89	-
AV	2.4864G	46.72	54.00	-7.28	15.56	3	Vertical	334	2.57	-	27.27	3.89	-

### 802.11ax HEW40-BF\_Nss1,(MCS0)\_4TX

### 2422MHz\_TX

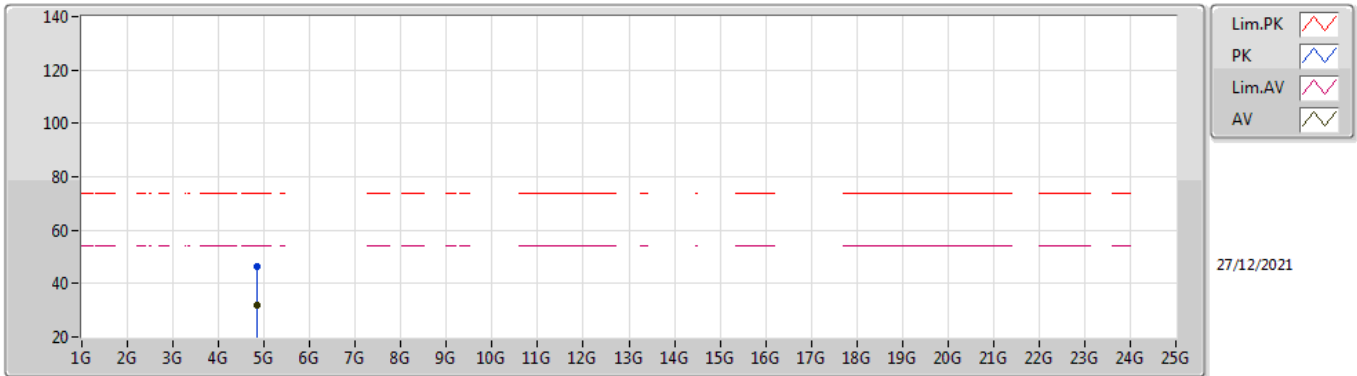


EUT\_Z\_4TX  
Setting 72  
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3868G	62.54	74.00	-11.46	31.24	3	Horizontal	325	2.56	-	27.51	3.79	-
AV	2.3896G	50.54	54.00	-3.46	19.27	3	Horizontal	325	2.56	-	27.48	3.79	-
PK	2.4304G	114.17	Inf	-Inf	83.06	3	Horizontal	325	2.56	-	27.28	3.83	-
AV	2.4312G	101.61	Inf	-Inf	70.50	3	Horizontal	325	2.56	-	27.28	3.83	-
PK	2.4924G	56.72	74.00	-17.28	25.55	3	Horizontal	325	2.56	-	27.28	3.89	-
AV	2.4856G	44.64	54.00	-9.36	13.48	3	Horizontal	325	2.56	-	27.27	3.89	-

### 802.11ax HEW40-BF\_Nss1,(MCS0)\_4TX

### 2422MHz\_TX

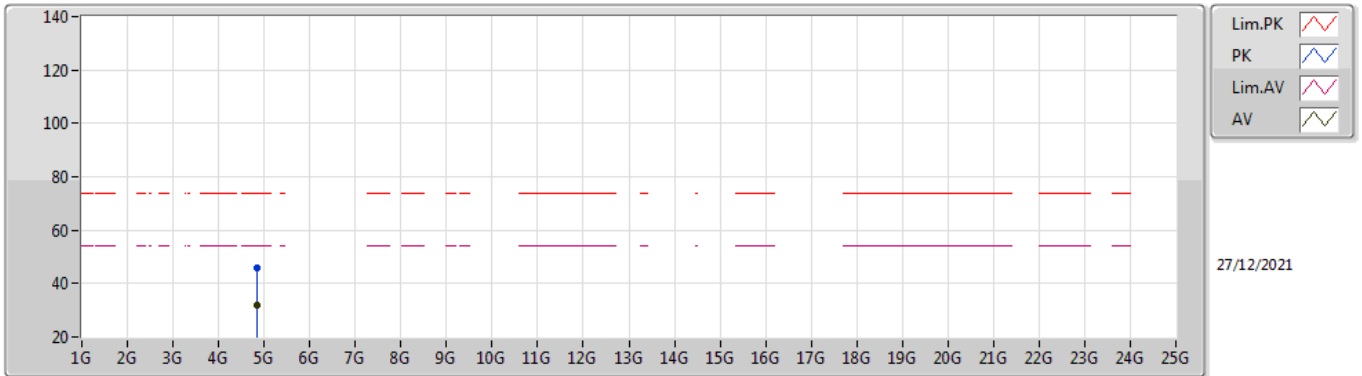


EUT Z\_4TX  
Setting 72  
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.84072G	46.62	74.00	-27.38	42.04	3	Vertical	267	1.24	-	31.02	5.60	32.04
AV	4.84052G	31.67	54.00	-22.33	27.09	3	Vertical	267	1.24	-	31.02	5.60	32.04

### 802.11ax HEW40-BF\_Nss1,(MCS0)\_4TX

### 2422MHz\_TX

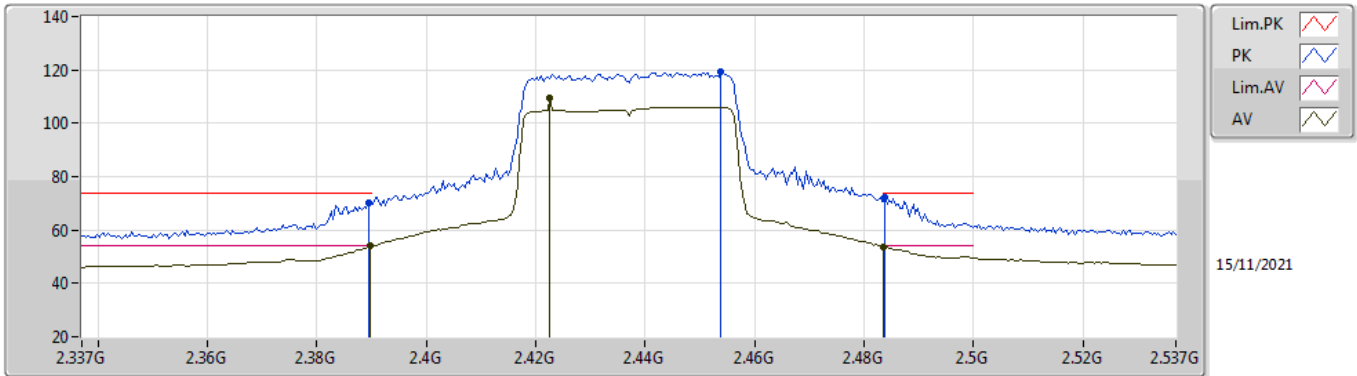


EUT Z\_4TX  
Setting 72  
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.83906G	45.78	74.00	-28.22	41.21	3	Horizontal	119	1.30	-	31.02	5.60	32.05
AV	4.84052G	31.70	54.00	-22.30	27.12	3	Horizontal	119	1.30	-	31.02	5.60	32.04

### 802.11ax HEW40-BF\_Nss1,(MCS0)\_4TX

### 2437MHz\_TX

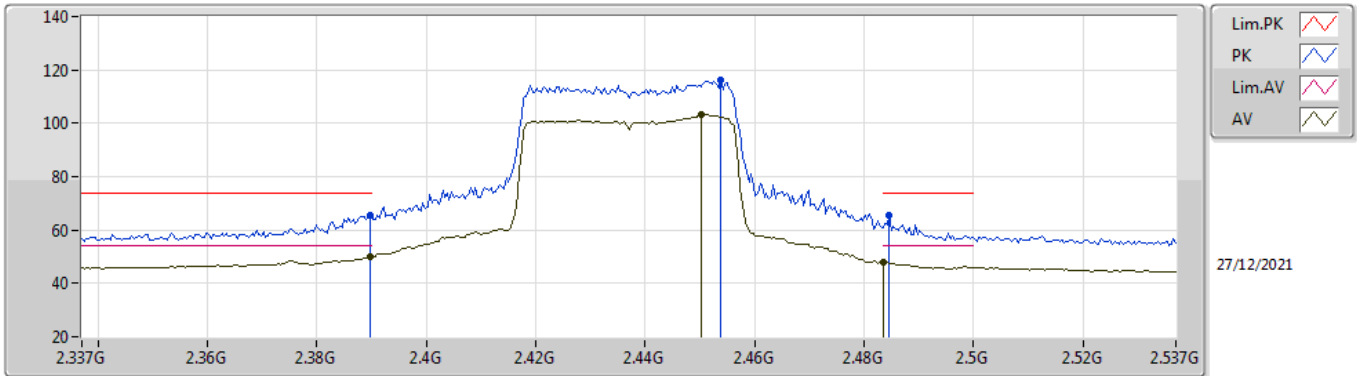


EUT\_Z\_4TX  
Setting 80  
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3894G	70.03	74.00	-3.97	38.76	3	Vertical	334	2.00	-	27.48	3.79	-
AV	2.3898G	53.94	54.00	-0.06	22.67	3	Vertical	334	2.00	-	27.48	3.79	-
PK	2.4538G	119.19	Inf	-Inf	88.13	3	Vertical	334	2.00	-	27.21	3.85	-
AV	2.4226G	109.59	Inf	-Inf	78.46	3	Vertical	334	2.00	-	27.31	3.82	-
PK	2.4838G	72.49	74.00	-1.51	41.34	3	Vertical	334	2.00	-	27.27	3.88	-
AV	2.4835G	53.83	54.00	-0.17	22.68	3	Vertical	334	2.00	-	27.27	3.88	-

### 802.11ax HEW40-BF\_Nss1,(MCS0)\_4TX

### 2437MHz\_TX

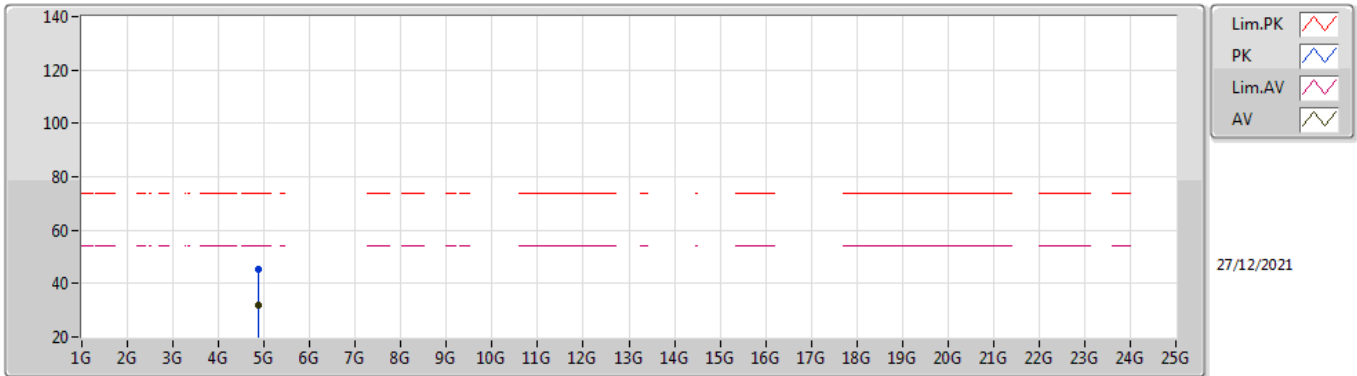


EUT\_Z\_4TX  
Setting 80  
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3898G	65.35	74.00	-8.65	34.08	3	Horizontal	56.7	3.00	-	27.48	3.79	-
AV	2.3898G	50.06	54.00	-3.94	18.79	3	Horizontal	56.7	3.00	-	27.48	3.79	-
PK	2.4538G	115.96	Inf	-Inf	84.90	3	Horizontal	56.7	3.00	-	27.21	3.85	-
AV	2.4502G	103.44	Inf	-Inf	72.39	3	Horizontal	56.7	3.00	-	27.20	3.85	-
PK	2.4846G	65.67	74.00	-8.33	34.52	3	Horizontal	56.7	3.00	-	27.27	3.88	-
AV	2.4835G	48.12	54.00	-5.88	16.97	3	Horizontal	56.7	3.00	-	27.27	3.88	-

### 802.11ax HEW40-BF\_Nss1,(MCS0)\_4TX

### 2437MHz\_TX



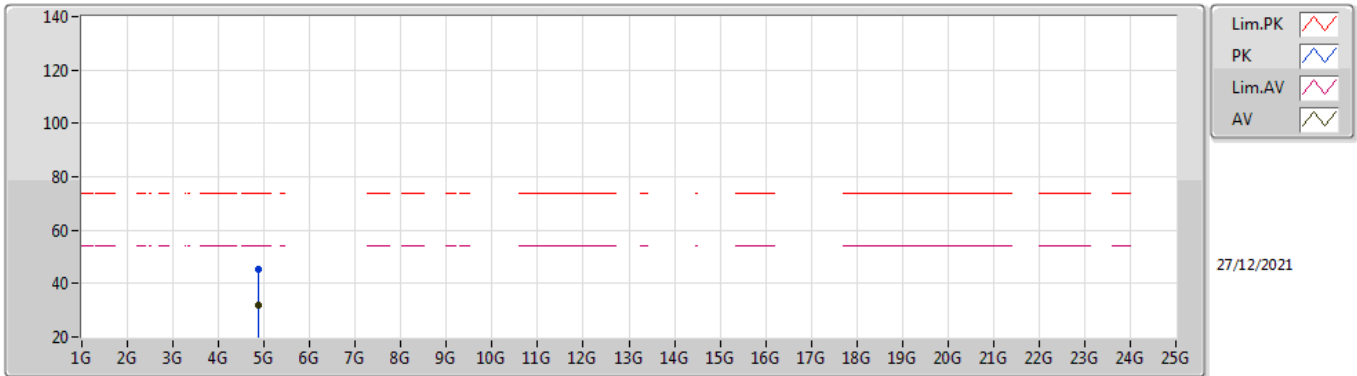
EUT Z\_4TX  
Setting 80  
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.8751G	45.44	74.00	-28.56	40.80	3	Vertical	206	1.40	-	31.05	5.60	32.01
AV	4.8766G	31.89	54.00	-22.11	27.25	3	Vertical	206	1.40	-	31.05	5.60	32.01



### 802.11ax HEW40-BF\_Nss1,(MCS0)\_4TX

### 2437MHz\_TX

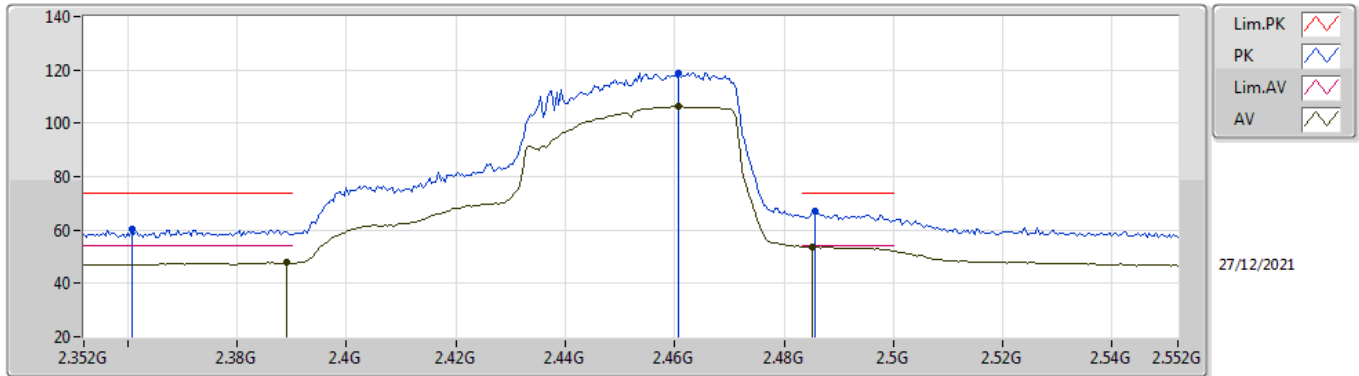


EUT Z\_4TX  
Setting 80  
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.879G	45.30	74.00	-28.70	40.65	3	Horizontal	232	1.91	-	31.06	5.60	32.01
AV	4.8774G	31.84	54.00	-22.16	27.20	3	Horizontal	232	1.91	-	31.05	5.60	32.01

### 802.11ax HEW40-BF\_Nss1,(MCS0)\_4TX

### 2452MHz\_TX

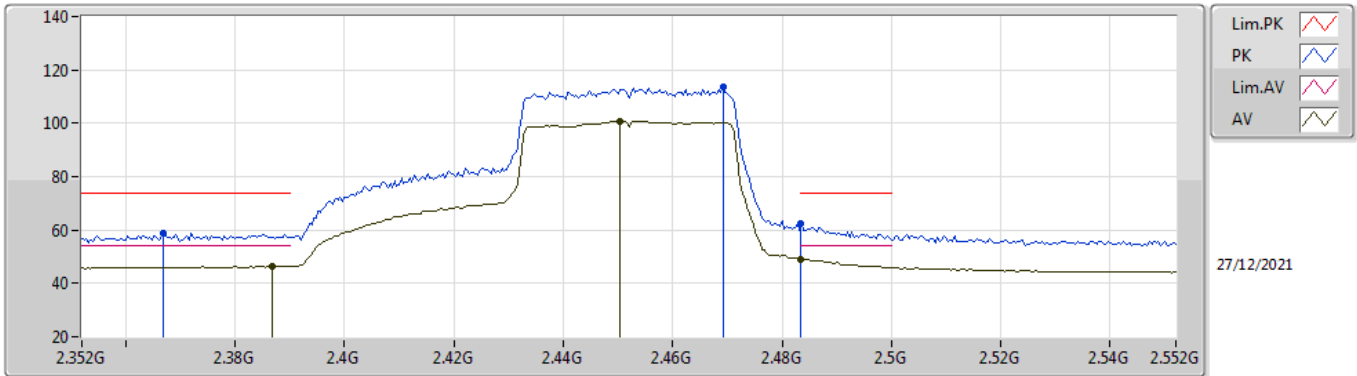


EUT Z\_4TX  
Setting 76  
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3608G	60.11	74.00	-13.89	28.62	3	Vertical	247	2.37	-	27.71	3.78	-
AV	2.3892G	47.71	54.00	-6.29	16.43	3	Vertical	247	2.37	-	27.49	3.79	-
PK	2.4608G	118.92	Inf	-Inf	87.84	3	Vertical	247	2.37	-	27.22	3.86	-
AV	2.4608G	106.43	Inf	-Inf	75.35	3	Vertical	247	2.37	-	27.22	3.86	-
PK	2.4856G	67.30	74.00	-6.70	36.14	3	Vertical	247	2.37	-	27.27	3.89	-
AV	2.4852G	53.81	54.00	-0.19	22.65	3	Vertical	247	2.37	-	27.27	3.89	-

### 802.11ax HEW40-BF\_Nss1,(MCS0)\_4TX

### 2452MHz\_TX

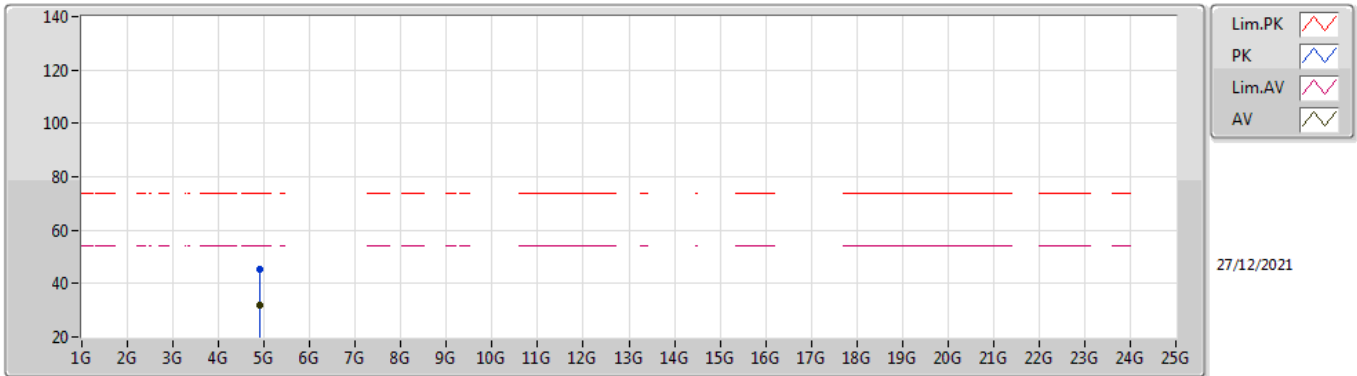


EUT\_Z\_4TX  
Setting 76  
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	2.3668G	58.84	74.00	-15.16	27.39	3	Horizontal	57.2	3.00	-	27.67	3.78	-
AV	2.3868G	46.44	54.00	-7.56	15.14	3	Horizontal	57.2	3.00	-	27.51	3.79	-
PK	2.4692G	113.61	Inf	-Inf	82.50	3	Horizontal	57.2	3.00	-	27.24	3.87	-
AV	2.4504G	100.83	Inf	-Inf	69.78	3	Horizontal	57.2	3.00	-	27.20	3.85	-
PK	2.4835G	62.16	74.00	-11.84	31.01	3	Horizontal	57.2	3.00	-	27.27	3.88	-
AV	2.4835G	49.19	54.00	-4.81	18.04	3	Horizontal	57.2	3.00	-	27.27	3.88	-

### 802.11ax HEW40-BF\_Nss1,(MCS0)\_4TX

### 2452MHz\_TX

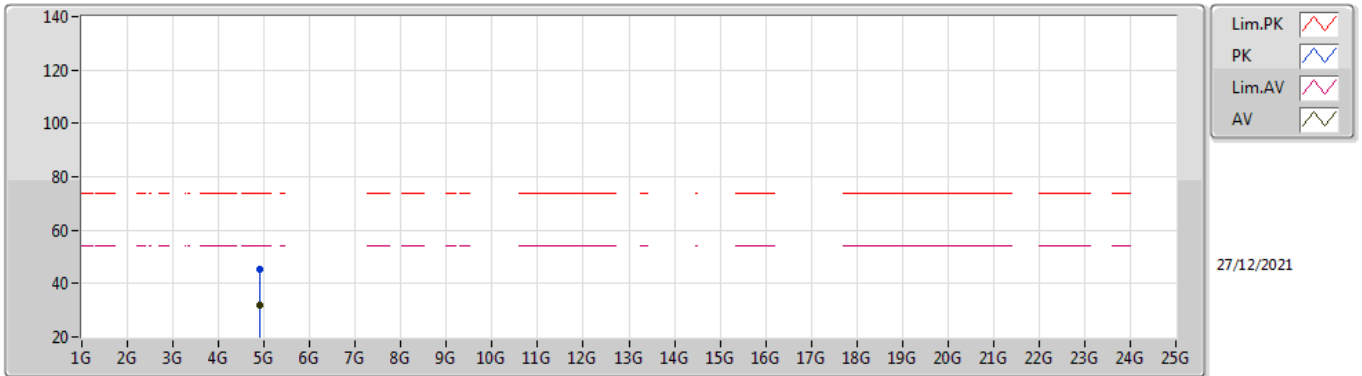


EUT\_Z\_4TX  
Setting 76  
06-F-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.90864G	45.47	74.00	-28.53	40.73	3	Vertical	8	2.96	-	31.13	5.60	31.99
AV	4.9015G	31.78	54.00	-22.22	27.06	3	Vertical	8	2.96	-	31.11	5.60	31.99

### 802.11ax HEW40-BF\_Nss1,(MCS0)\_4TX

### 2452MHz\_TX



EUT\_Z\_4TX  
Setting 76  
06-F-S-5

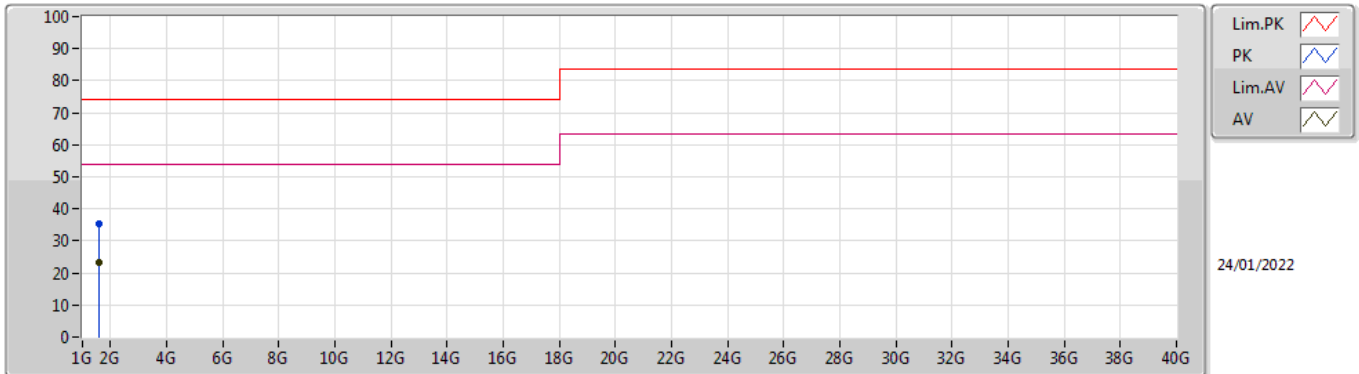
Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	4.90488G	45.23	74.00	-28.77	40.50	3	Horizontal	94	1.21	-	31.12	5.60	31.99
AV	4.90096G	31.70	54.00	-22.30	26.99	3	Horizontal	94	1.21	-	31.10	5.60	31.99



**Summary**

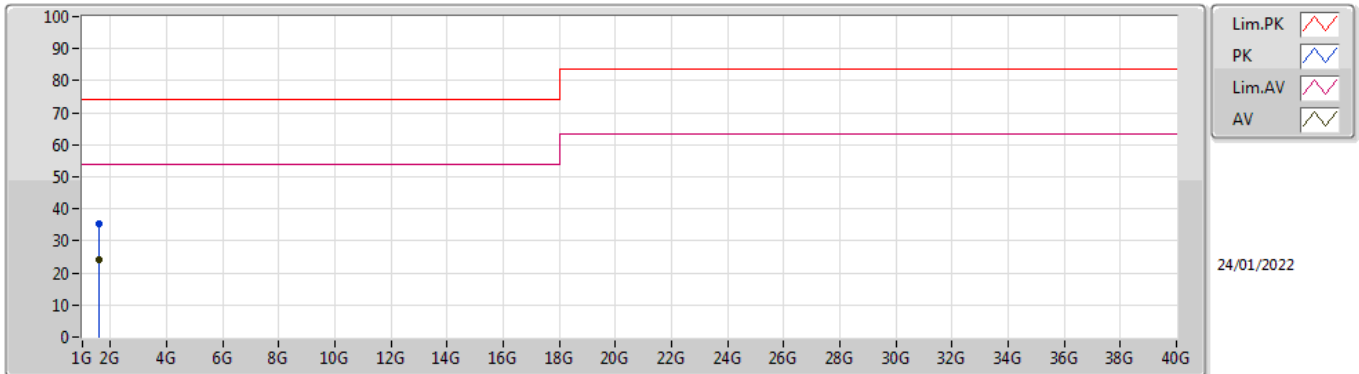
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	AV	1.59945G	24.28	54.00	-29.72	Horizontal

### Mode 1



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)
PK	1.59941G	35.56	74.00	-38.44	-7.98	3	Vertical	255	1.13	-	43.54	25.40	4.00	37.38
AV	1.59948G	23.13	54.00	-30.87	-7.98	3	Vertical	255	1.13	"Worst"	31.11	25.40	4.00	37.38

### Mode 1



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)
PK	1.5997G	35.51	74.00	-38.49	-7.98	3	Horizontal	111	1.00	-	43.49	25.40	4.00	37.38
AV	1.59945G	24.28	54.00	-29.72	-7.98	3	Horizontal	111	1.00	"Worst"	32.26	25.40	4.00	37.38