



# RADIO TEST REPORT

**FCC ID** : 2ABLK-GM2037  
**Equipment** : GigaSpire Mesh BLAST u6me  
**Brand Name** : Calix  
**Model Name** : u6me  
**Applicant** : Calix Inc.  
1035 N. McDowell Blvd. Petaluma, CA94954 U.S.A.  
**Manufacturer** : Calix Inc.  
1035 N. McDowell Blvd. Petaluma, CA94954 U.S.A.  
**Standard** : 47 CFR FCC Part 15.407

The product was received on Oct. 14, 2021, and testing was started from Oct. 14, 2021 and completed on Jan. 20, 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.)



## Table of Contents

<b>History of this test report.....</b>	<b>3</b>
<b>Summary of Test Result.....</b>	<b>4</b>
<b>1 General Description .....</b>	<b>5</b>
1.1 Information.....	5
1.2 Applicable Standards .....	10
1.3 Testing Location Information .....	10
1.4 Measurement Uncertainty .....	11
<b>2 Test Configuration of EUT.....</b>	<b>12</b>
2.1 Test Channel Mode .....	12
2.2 The Worst Case Measurement Configuration.....	13
2.3 EUT Operation during Test .....	14
2.4 Accessories .....	14
2.5 Support Equipment.....	15
2.6 Test Setup Diagram .....	16
<b>3 Transmitter Test Result .....</b>	<b>20</b>
3.1 AC Power-line Conducted Emissions .....	20
3.2 Emission Bandwidth .....	22
3.3 Maximum Output Power .....	24
3.4 Power Spectral Density .....	26
3.5 Unwanted Emissions.....	29
<b>4 Test Equipment and Calibration Data .....</b>	<b>33</b>
<b>Appendix A. Test Results of AC Power-line Conducted Emissions</b>	
<b>Appendix B. Test Results of Emission Bandwidth</b>	
<b>Appendix C. Test Results of Maximum Output Power</b>	
<b>Appendix D. Test Results of Power Spectral Density</b>	
<b>Appendix E. Test Results of Unwanted Emissions</b>	
<b>Appendix F. Test Results of Radiated Emission Co-location</b>	
<b>Appendix G. Test Photos</b>	
<b>Photographs of EUT v01</b>	



## History of this test report

TEL : 886-3-656-9065  
FAX : 886-3-656-9085  
Report Template No.: CB-A12\_1 Ver1.4

Page Number : 3 of 35  
Issued Date : Jan. 27, 2022  
Report Version : 01



## Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
3.1	15.207	AC Power-line Conducted Emissions	PASS	-
3.2	15.407(a)	Emission Bandwidth	PASS	-
3.3	15.407(a)	Maximum Output Power	PASS	-
3.4	15.407(a)	Power Spectral Density	PASS	-
3.5	15.407(b)	Unwanted Emissions	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: Penny Kao**

# 1 General Description

## 1.1 Information

### 1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5150-5250	a, n (HT20), ac (VHT20), ax (HEW20)	5180-5240	36-48 [4]
5725-5850		5745-5825	149-165 [5]
5150-5250	n (HT40), ac (VHT40), ax (HEW40)	5190-5230	38-46 [2]
5725-5850		5755-5795	151-159 [2]
5150-5250	ac (VHT80), ax (HEW80)	5210	42 [1]
5725-5850		5775	155 [1]

Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11a	20	2TX
5.15-5.25GHz	802.11n HT20	20	2TX
5.15-5.25GHz	802.11n HT20-BF	20	2TX
5.15-5.25GHz	802.11ac VHT20	20	2TX
5.15-5.25GHz	802.11ac VHT20-BF	20	2TX
5.15-5.25GHz	802.11ax HEW20	20	2TX
5.15-5.25GHz	802.11ax HEW20-BF	20	2TX
5.15-5.25GHz	802.11n HT40	40	2TX
5.15-5.25GHz	802.11n HT40-BF	40	2TX
5.15-5.25GHz	802.11ac VHT40	40	2TX
5.15-5.25GHz	802.11ac VHT40-BF	40	2TX
5.15-5.25GHz	802.11ax HEW40	40	2TX
5.15-5.25GHz	802.11ax HEW40-BF	40	2TX
5.15-5.25GHz	802.11ac VHT80	80	2TX
5.15-5.25GHz	802.11ac VHT80-BF	80	2TX
5.15-5.25GHz	802.11ax HEW80	80	2TX
5.15-5.25GHz	802.11ax HEW80-BF	80	2TX
5.725-5.85GHz	802.11a	20	2TX
5.725-5.85GHz	802.11n HT20	20	2TX
5.725-5.85GHz	802.11n HT20-BF	20	2TX
5.725-5.85GHz	802.11ac VHT20	20	2TX
5.725-5.85GHz	802.11ac VHT20-BF	20	2TX
5.725-5.85GHz	802.11ax HEW20	20	2TX
5.725-5.85GHz	802.11ax HEW20-BF	20	2TX
5.725-5.85GHz	802.11n HT40	40	2TX



Band	Mode	BWch (MHz)	Nant
5.725-5.85GHz	802.11n HT40-BF	40	2TX
5.725-5.85GHz	802.11ac VHT40	40	2TX
5.725-5.85GHz	802.11ac VHT40-BF	40	2TX
5.725-5.85GHz	802.11ax HEW40	40	2TX
5.725-5.85GHz	802.11ax HEW40-BF	40	2TX
5.725-5.85GHz	802.11ac VHT80	80	2TX
5.725-5.85GHz	802.11ac VHT80-BF	80	2TX
5.725-5.85GHz	802.11ax HEW80	80	2TX
5.725-5.85GHz	802.11ax HEW80-BF	80	2TX

**Note:**

- ♦ 11a, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- ♦ VHT20, VHT40, VHT80 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM, modulation.
- ♦ HEW20, HEW40, HEW80 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	Model Name	Antenna Type	Connector	Gain (dBi)
	WLAN 2.4GHz	WLAN 5GHz	WLAN 6GHz					
1	1	1	-	GALTRONICS	02102140-07461-2	Dipole	U.FL	Note1
2	2	2	-	GALTRONICS	02102140-07461-1	Dipole	U.FL	
3	-	-	1	GALTRONICS	02102475-07461-2	Dipole	U.FL	
4	-	-	2	GALTRONICS	02102475-07461-1	Dipole	U.FL	

Note 1:

Ant.	Port			Antenna Gain (dBi)						
	WLAN 2.4GHz	WLAN 5GHz	WLAN 6GHz	WLAN 2.4GHz	WLAN 5GHz		WLAN 6GHz			
					UNII 1	UNII 3	UNII 5	UNII 6	UNII 7	UNII 8
1	1	1	-	2.617	3.761	3.221	-	-	-	-
2	2	2	-	2.626	3.600	3.333	-	-	-	-
3	-	-	1	-	-	-	2.558	2.781	3.076	2.982
4	-	-	2	-	-	-	3.076	3.246	3.429	3.347

Note 2: The above information was declared by manufacturer.

Note 3: Directional gain information

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

Ex.

Directional Gain (NSS1) formula :

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

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

$$g_{j,k} = (NSS1(g_{1,1}) + NSS1(g_{1,2}))^2$$

$$DG = 10 \log[(NSS1(g_{1,1}) + NSS1(g_{1,2}) / N_{ANT}] \Rightarrow 10 \log[(10^{G1/20} + 10^{G2/20})^2 / N_{ANT}]$$

Where ;

G1 = Ant 1 Gain ; G2 = Ant 2 Gain

$$2.4GHz DG = 5.632 dBi$$

$$5 GHz U-NII-1 DG = 6.691 dBi$$

$$5 GHz U-NII-3 DG = 6.287 dBi$$

The EUT has four antennas.

**For 2.4GHz function:**

**For IEEE 802.11 b/g/n/VHT/ax mode (2TX/2RX)**

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

Port 1 and Port 2 could transmit/receive simultaneously.

**For 5GHz function:**

**For IEEE 802.11a/n/ac/ax mode (2TX/2RX)**

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

Port 1 and Port 2 could transmit/receive simultaneously.

**For 6GHz function:**

**For IEEE 802.11ax mode (2TX/2RX)**

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

Port 1 and Port 2 could transmit/receive simultaneously.

### 1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11a	0.976	0.11	1.977m	1k
802.11ax HEW20-BF	0.92	0.36	1.765m	1k
802.11ax HEW40-BF	0.899	0.46	1.765m	1k
802.11ax HEW80-BF	0.905	0.43	1.689m	1k

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 11n/VHT/ax in 2.4GHz, 11n/ac/ax in 5GHz and ax in 6GHz.			
<b>Function</b>	<input type="checkbox"/>	Outdoor P2M	<input checked="" type="checkbox"/>	Indoor P2M
	<input type="checkbox"/>	Fixed P2P	<input type="checkbox"/>	Client
<b>Test Software Version</b>	For non-beamforming: QRCT V 4.0.00192.0 For beamforming: DOS V6.1.7601			

Note: The above information was declared by manufacturer.

**1.1.5 Table for EUT supports functions**

Function
AP Router
Extender

Note 1: After evaluating, AP Router was selected to test and record in the report.

Note 2: The above information was declared by manufacturer.



## 1.2 Applicable Standards

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

- ♦ 47 CFR FCC Part 15
- ♦ ANSI C63.10-2013
- ♦ FCC KDB 789033 D02 v02r01

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

- ♦ FCC KDB 662911 D01 v02r01
- ♦ FCC KDB 412172 D01 v01r01
- ♦ FCC KDB 414788 D01 v01r01

## 1.3 Testing Location Information

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

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
RF Conducted	TH03-CB	Owen Hsu	19.1~20.4 / 51~53	Nov. 17, 2021~ Jan. 20, 2022
Radiated (Below 1 GHz)	03CH04-CB	Paul Chen	19.1~20 / 62~66	Nov. 24, 2021
Radiated (Above 1GHz)	03CH03-CB	Simmon Cheng	23.5-24.6 / 55-59	Oct. 14, 2021~ Jan. 08, 2022
	03CH06-CB		24.5-25.6 / 56-59	
AC Conduction	CO01-CB	Peter Wu	22~24 / 55~57	Nov. 29, 2021

## 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	Power Setting
802.11a_Nss1,(6Mbps)_2TX	-
5180MHz	21.5
5200MHz	25
5240MHz	25
5745MHz	26
5785MHz	25.5
5825MHz	25.5
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
5180MHz	25
5200MHz	27
5240MHz	29
5745MHz	29
5785MHz	29
5825MHz	29
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
5190MHz	24
5230MHz	25
5755MHz	27
5795MHz	27
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-
5210MHz	24
5775MHz	24

**Note:**

- ♦ Evaluated HEW20/HEW40/HEW80 mode only due to the similar modulation. The power setting of HT20/HT40/VHT20/VHT40/VHT80 mode are the same or lower than HEW20/HEW40/HEW80.
- ♦ The EUT supports non-beamforming and beamforming modes for 11n/VHT/ax in 2.4GHz, 11n/ac/ax in 5GHz and ax in 6GHz, after evaluating, the beamforming mode has been selected to test.

## 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: 120V / 60Hz
<b>Operating Mode</b>	Normal Link
1	EUT + Adapter

The Worst Case Mode for Following Conformance Tests	
<b>Tests Item</b>	Emission Bandwidth Maximum Output Power Power Spectral Density
<b>Test Condition</b>	Conducted measurement at transmit chains

The Worst Case Mode for Following Conformance Tests	
<b>Tests Item</b>	Unwanted Emissions
<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>	Normal Link
1	EUT in Z axis + Adapter
2	EUT in Y axis + Adapter
3	EUT in X axis + Adapter
For operating mode 1 is the worst case and it was record in this test report.	
<b>Operating Mode &gt; 1GHz</b>	CTX
	The EUT was performed at X axis, Y axis and Z axis position, and the worst case as below:
1	EUT in Z axis + Adapter



The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Radiated Emission Co-location
Test Condition	Radiated measurement
Operating Mode	Normal Link
	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.
1	EUT in Z axis: WLAN 2.4GHz + WLAN 5GHz
Refer to Appendix F for Radiated Emission Co-location.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	WLAN 2.4GHz + WLAN 5GHz + WLAN 6GHz
Refer to Sporton Test Report No.: FA1O1539 for Co-location RF Exposure Evaluation.	

## 2.3 EUT Operation during Test

For CTX Mode:

The EUT was programmed to be in continuously transmitting mode.

beamforming 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.
3. Executed "Lantest.exe" to link with the remote workstation to transmit and receive packet by WLAN AP and transmit duty cycle no less than 98%.

For Normal Link:

During the test, the EUT operation to normal function.

## 2.4 Accessories

Accessories				
No.	Equipment Name	Brand Name	Model Name	Rating
1	Adapter	Ktec	KSA-24W-120200HU	INPUT: 100-240V~50/60Hz, 0.6A OUTPUT: 12V, 2.0A



## 2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	2.4G NB	DELL	E6430	N/A
B	5G NB	DELL	E6430	N/A
C	6G NB	DELL	E6430	N/A
D	LAN NB	DELL	E6430	N/A
E	WAN NB	DELL	E6430	N/A

For Radiated below 1GHz:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E4300	N/A
B	NB	DELL	E4300	N/A
C	NB	DELL	E4300	N/A
D	NB	DELL	E4300	N/A
E	NB	DELL	E4300	N/A
F	WLAN module	Intel	AX210NGW	N/A

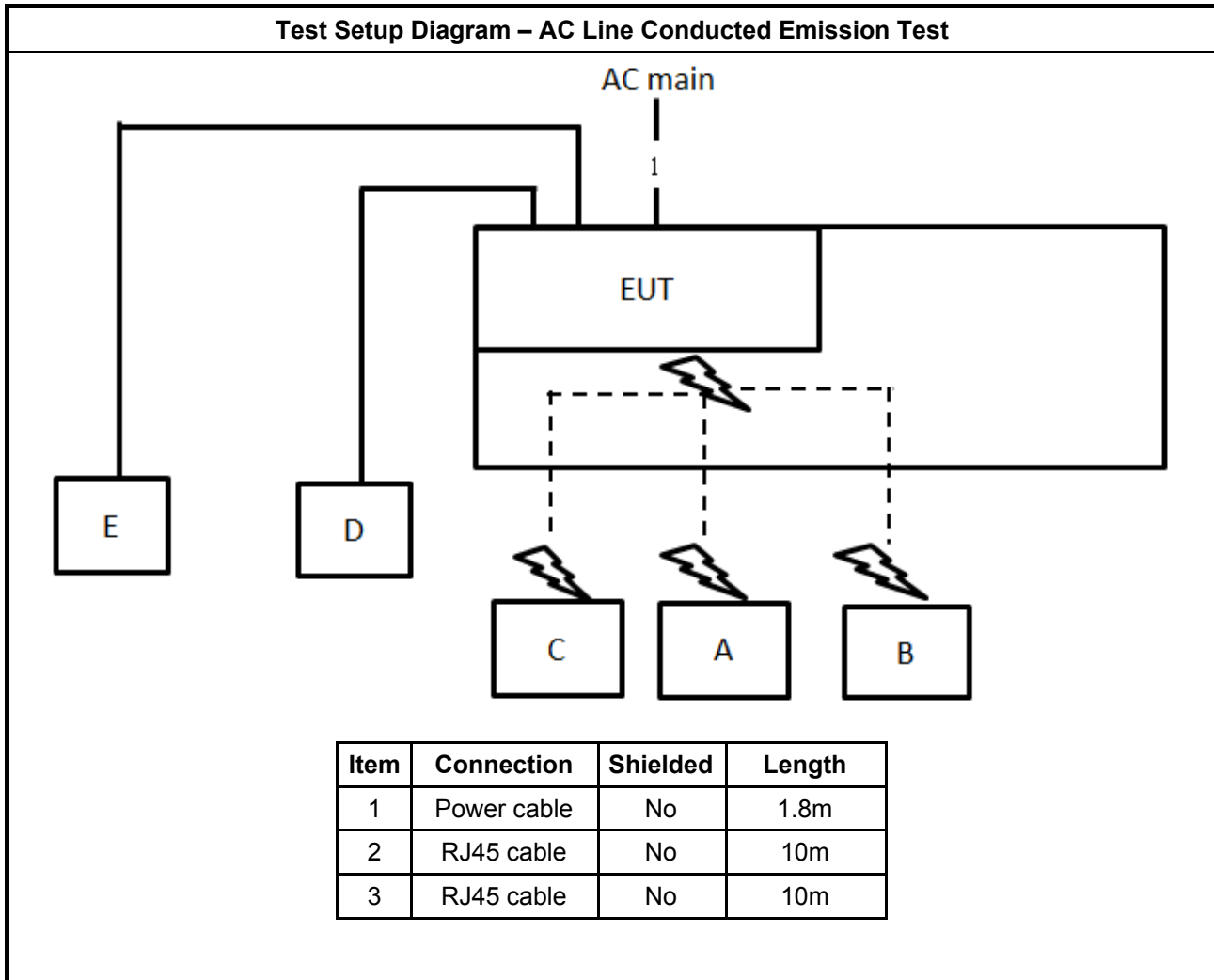
For Radiated above 1GHz and RF Conducted:  
Non-beamforming mode

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

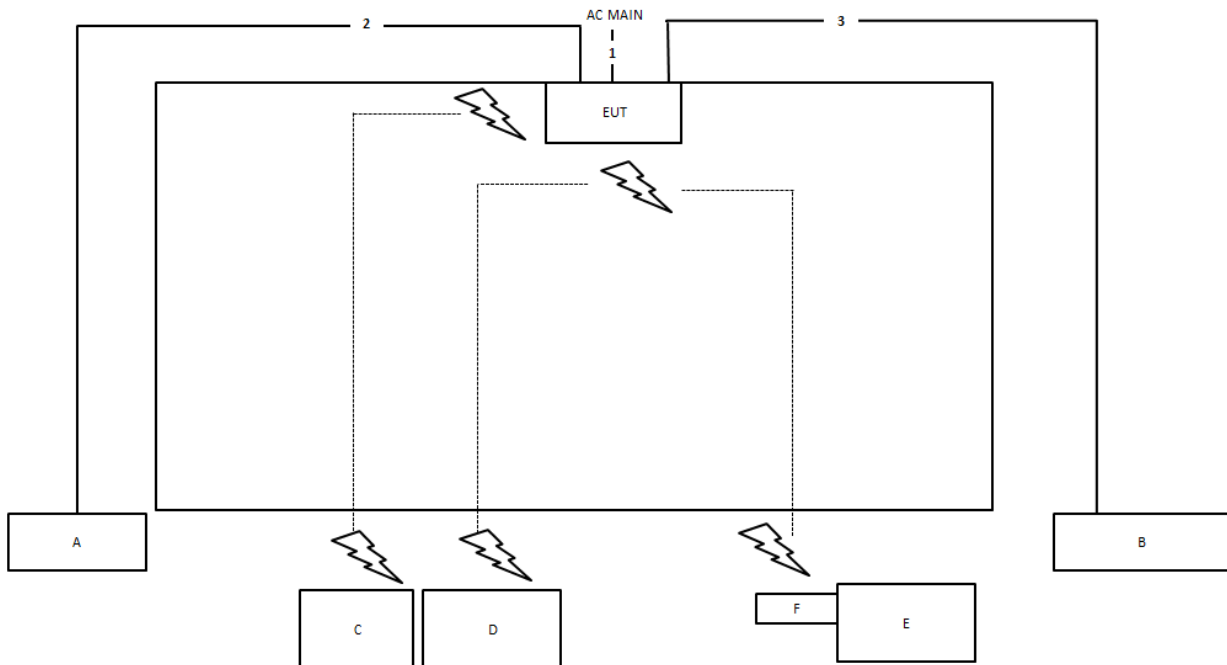
Beamforming mode

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB	DELL	E4300	N/A
B	WLAN AP	CyberTAN	MT1V116	N/A
C	NB	DELL	E4300	N/A

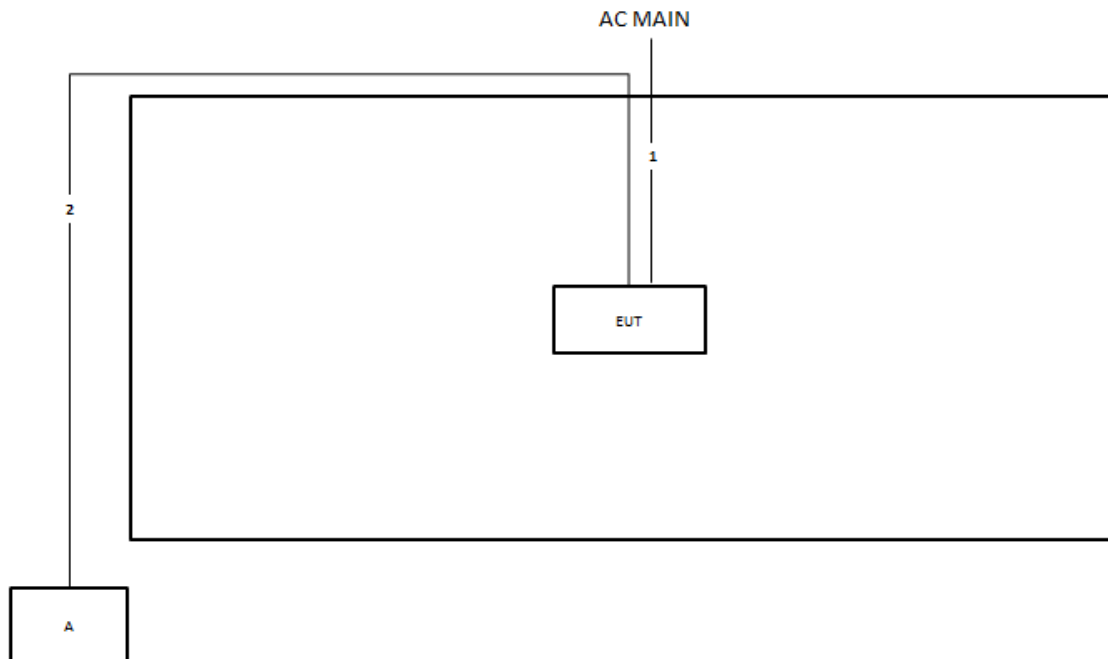
## 2.6 Test Setup Diagram



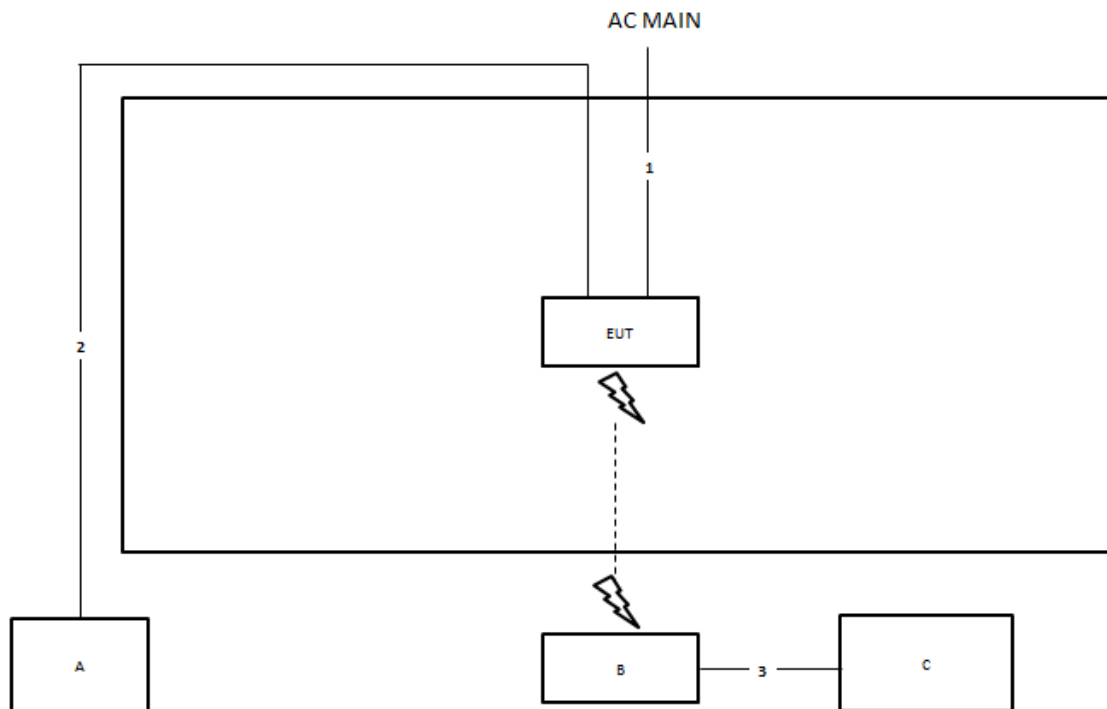


**Test Setup Diagram - Radiated Test < 1GHz**


Item	Connection	Shielded	Length
1	Power cable	No	1.8m
2	RJ-45 cable	No	10m
3	RJ-45 cable	No	10m

**Test Setup Diagram - Radiated Test > 1GHz (Non-beamforming mode)**


Item	Connection	Shielded	Length
1	Power cable	No	1.8m
2	RJ-45 cable	No	10m

**Test Setup Diagram - Radiated Test > 1GHz (Beamforming mode)**


Item	Connection	Shielded	Length
1	Power cable	No	1.8m
2	RJ-45 cable	No	10m
3	RJ-45 cable	No	10m



### 3 Transmitter Test Result

#### 3.1 AC Power-line Conducted Emissions

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

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

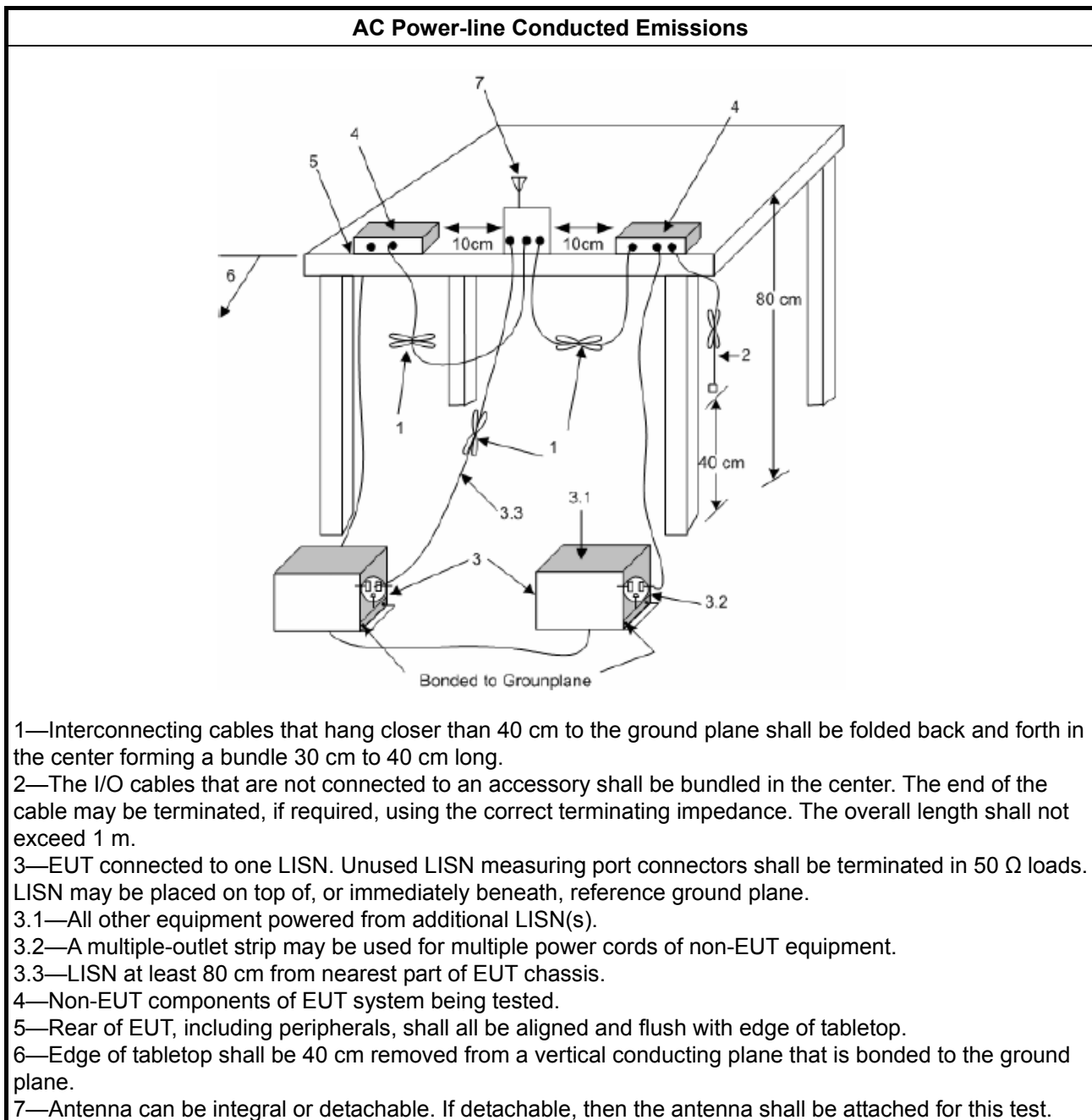
##### 3.1.2 Measuring Instruments

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

##### 3.1.3 Test Procedures

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

### 3.1.4 Test Setup



### 3.1.5 Measurement Results Calculation

The measured Level is calculated using:

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

### 3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

## 3.2 Emission Bandwidth

### 3.2.1 Emission Bandwidth Limit

Emission Bandwidth Limit	
<b>UNII Devices</b>	
<input checked="" type="checkbox"/>	For the 5.15-5.25 GHz band, N/A
<input type="checkbox"/>	For the 5.25-5.35 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz.
<input type="checkbox"/>	For the 5.47-5.725 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz.
<input checked="" type="checkbox"/>	For the 5.725-5.85 GHz band, 26 dB emission bandwidth ,N/A. 6 dB emission bandwidth $\geq$ 500kHz.
<input type="checkbox"/>	For the 5.85-5.895 GHz band, 26 dB emission bandwidth ,N/A. 6 dB emission bandwidth $\geq$ 500kHz.
<b>LE-LAN Devices</b>	
<input type="checkbox"/>	For the band 5.15-5.25 GHz, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.
<input type="checkbox"/>	For the 5.25-5.35 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
<input type="checkbox"/>	For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
<input type="checkbox"/>	For the 5.725-5.85 GHz band, 6 dB emission bandwidth $\geq$ 500kHz.

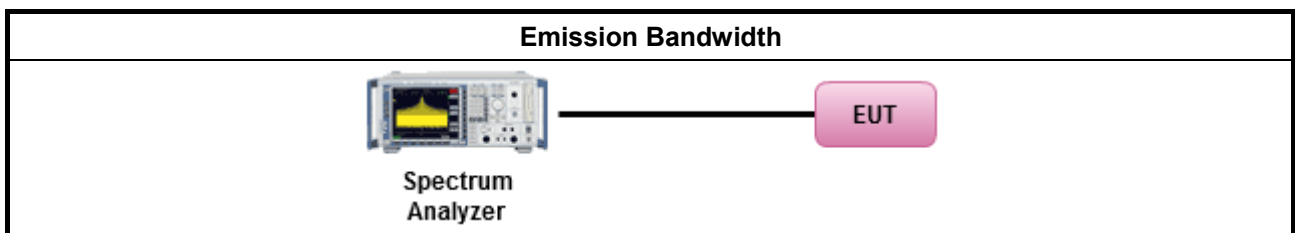
### 3.2.2 Measuring Instruments

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 789033 D02, clause C for EBW and clause D for OBW measurement.
<input type="checkbox"/>	Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.
<input type="checkbox"/>	Refer as IC RSS-Gen, clause 4.6 for bandwidth testing.

### 3.2.4 Test Setup





### **3.2.5 Test Result of Emission Bandwidth**

Refer as Appendix B



### 3.3 Maximum Output Power

#### 3.3.1 Limit

Maximum Output Power Limit	
<b>UNII Devices</b>	
<input checked="" type="checkbox"/> For the 5.15-5.25 GHz band:	
<input type="checkbox"/>	<ul style="list-style-type: none"><li>Outdoor AP: the maximum conducted output power (<math>P_{Out}</math>) shall not exceed the lesser of 1 W. If <math>G_{TX} &gt; 6</math> dBi, then <math>P_{Out} = 30 - (G_{TX} - 6)</math>. e.i.r.p. at any elevation angle above 30 degrees <math>\leq 125</math>mW [21dBm]</li><li>Indoor AP: the maximum conducted output power (<math>P_{Out}</math>) shall not exceed the lesser of 1 W. If <math>G_{TX} &gt; 6</math> dBi, then <math>P_{Out} = 30 - (G_{TX} - 6)</math></li><li>Point-to-point AP: the maximum conducted output power (<math>P_{Out}</math>) shall not exceed the lesser of 1 W. If <math>G_{TX} &gt; 23</math> dBi, then <math>P_{Out} = 30 - (G_{TX} - 23)</math>.</li><li>Mobile or Portable Client: the maximum conducted output power (<math>P_{Out}</math>) shall not exceed the lesser of 250 mW. If <math>G_{TX} &gt; 6</math> dBi, then <math>P_{Out} = 24 - (G_{TX} - 6)</math>.</li></ul>
<input type="checkbox"/>	For the 5.25-5.35 GHz band, the maximum conducted output power ( $P_{Out}$ ) shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$ .
<input type="checkbox"/>	For the 5.47-5.725 GHz band, the maximum conducted output power ( $P_{Out}$ ) shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$ .
<input checked="" type="checkbox"/> For the 5.725-5.85 GHz band:	
<input type="checkbox"/>	<ul style="list-style-type: none"><li>Point-to-multipoint systems (P2M): the maximum conducted output power (<math>P_{Out}</math>) shall not exceed the lesser of 1 W. If <math>G_{TX} &gt; 6</math> dBi, then <math>P_{Out} = 30 - (G_{TX} - 6)</math>.</li><li>Point-to-point systems (P2P): the maximum conducted output power (<math>P_{Out}</math>) shall not exceed the lesser of 1 W.</li></ul>
<b>Maximum EIRP Limit</b>	
<input type="checkbox"/> For the 5.85-5.895 GHz band:	
<input type="checkbox"/>	<ul style="list-style-type: none"><li>Indoor AP &amp; subordinate device &lt; 36 dBm</li><li>Client device &lt; 30 dBm</li></ul>
<b>LE-LAN Devices</b>	
<input type="checkbox"/>	For the 5.15-5.25 GHz band, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.
<input type="checkbox"/>	For the 5.25-5.35 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
<input type="checkbox"/>	For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
<input type="checkbox"/> For the 5.725-5.85 GHz band:	
<input type="checkbox"/>	<ul style="list-style-type: none"><li>Point-to-multipoint systems (P2M): the maximum conducted output power (<math>P_{Out}</math>) shall not exceed the lesser of 1 W. If <math>G_{TX} &gt; 6</math> dBi, then <math>P_{Out} = 30 - (G_{TX} - 6)</math>.</li><li>Point-to-point systems (P2P): the maximum conducted output power (<math>P_{Out}</math>) shall not exceed the</li></ul>



lesser of 1 W.

$P_{Out}$  = maximum conducted output power in dBm,

$G_{TX}$  = the maximum transmitting antenna directional gain in dBi.

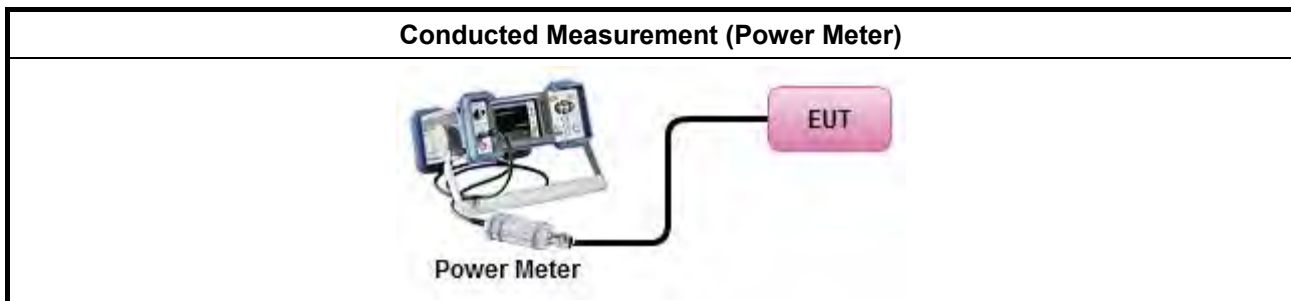
### 3.3.2 Measuring Instruments

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

### 3.3.3 Test Procedures

Test Method	
	Average over on/off periods with duty factor
	<input type="checkbox"/> Refer as FCC KDB 789033 D02, clause E Method SA-2 (spectral trace averaging).
	<input type="checkbox"/> Refer as FCC KDB 789033 D02, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
	Wideband RF power meter and average over on/off periods with duty factor
	<input checked="" type="checkbox"/> Refer as FCC KDB 789033 D02, clause E Method PM-G (using an RF average power meter).
<input checked="" type="checkbox"/> For conducted measurement.	
	<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>P_{total} = P_1 + P_2 + \dots + P_n</math>                      (calculated in linear unit [mW] and transfer to log unit [dBm])  <math>EIRP_{total} = P_{total} + DG</math> </li> </ul>
<input type="checkbox"/> For radiated measurement.	
	<ul style="list-style-type: none"> <li>Refer as FCC KDB 789033 D02 clause II A.1.F "Antenna-port Conducted versus Radiated Testing"</li> </ul>
	<ul style="list-style-type: none"> <li>Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.</li> </ul>
	<ul style="list-style-type: none"> <li>Refer as FCC KDB 412172 D01 clause 2.2 for EIRP calculation.</li> </ul>

### 3.3.4 Test Setup



### 3.3.5 Test Result of Maximum Output Power

Refer as Appendix C



### 3.4 Power Spectral Density

#### 3.4.1 Limit

Peak Power Spectral Density Limit	
<b>UNII Devices</b>	
<input checked="" type="checkbox"/> For the 5.15-5.25 GHz band:	
	<ul style="list-style-type: none"><li>Outdoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If <math>G_{TX} &gt; 6</math> dBi, then <math>P_{Out} = 17 - (G_{TX} - 6)</math>.</li><li>Indoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If <math>G_{TX} &gt; 6</math> dBi, then <math>P_{Out} = 17 - (G_{TX} - 6)</math>.</li><li>Point-to-point AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If <math>G_{TX} &gt; 23</math> dBi, then <math>P_{Out} = 17 - (G_{TX} - 23)</math>.</li><li>Mobile or Portable Client: the peak power spectral density (PPSD) <math>\leq 11</math> dBm/MHz. If <math>G_{TX} &gt; 6</math> dBi, then <math>PPSD = 11 - (G_{TX} - 6)</math>.</li></ul>
<input type="checkbox"/> For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) $\leq 11$ dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$ .	
<input type="checkbox"/> For the 5.47-5.725 GHz band, the peak power spectral density (PPSD) $\leq 11$ dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$ .	
<input checked="" type="checkbox"/> For the 5.725-5.85 GHz band:	
	<ul style="list-style-type: none"><li>Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) <math>\leq 30</math> dBm/500kHz. If <math>G_{TX} &gt; 6</math> dBi, then <math>PPSD = 30 - (G_{TX} - 6)</math>.</li><li>Point-to-point systems (P2P): the peak power spectral density (PPSD) <math>\leq 30</math> dBm/500kHz.</li></ul>
<b>EIRP Power Spectral Density Limit</b>	
<input type="checkbox"/> For the 5.85-5.895 GHz band:	
	<ul style="list-style-type: none"><li>Indoor AP &amp; subordinate device <math>&lt; 20</math>dBm/MHz</li><li>Client device <math>&lt; 14</math>dBm/MHz</li></ul>
<b>LE-LAN Devices</b>	
<input type="checkbox"/> For the 5.15-5.25 GHz band, the e.i.r.p. peak power spectral density (PPSD) $\leq 10$ dBm/MHz.	
<input type="checkbox"/> For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) $\leq 11$ dBm/MHz.	
	<ul style="list-style-type: none"><li>e.i.r.p. greater than 200 mW shall comply with the following e.i.r.p. at different elevations, where <math>\theta</math> is the angle above the local horizontal plane (of the Earth) as shown below: -13 dBW/MHz for <math>0^\circ \leq \theta &lt; 8^\circ</math> ; -13 - 0.716 (<math>\theta</math>-8) dBW/MHz for <math>8^\circ \leq \theta &lt; 40^\circ</math> -35.9 - 1.22 (<math>\theta</math>-40) dBW/MHz for <math>40^\circ \leq \theta \leq 45^\circ</math> ; -42 dBW/MHz for <math>\theta &gt; 45^\circ</math></li></ul>
<input type="checkbox"/> For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the peak power spectral density (PPSD) $\leq 11$ dBm/MHz.	
<input type="checkbox"/> For the 5.725-5.85 GHz band:	
	<ul style="list-style-type: none"><li>Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) <math>\leq 30</math> dBm/500kHz. If <math>G_{TX} &gt; 6</math> dBi, then <math>PPSD = 30 - (G_{TX} - 6)</math>.</li><li>Point-to-point systems (P2P): the peak power spectral density (PPSD) <math>\leq 30</math> dBm/500kHz.</li></ul>
<b>PPSD</b> = peak power spectral density that he same method as used to determine the conducted output	



power shall be used to determine the power spectral density. And power spectral density in dBm/MHz  
 $G_{TX}$  = the maximum transmitting antenna directional gain in dBi.

### 3.4.2 Measuring Instruments

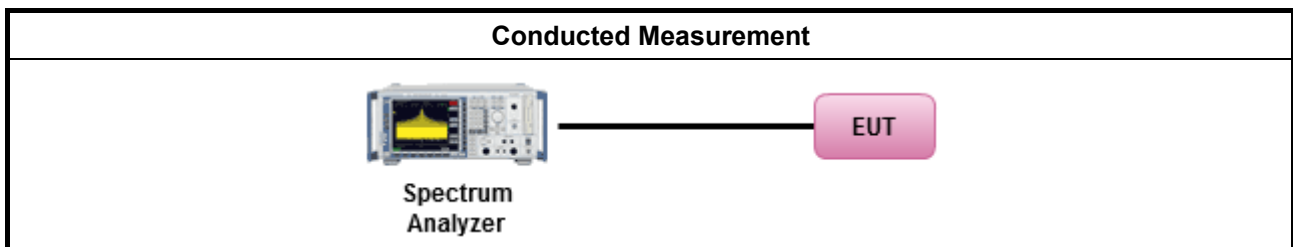
Refer a test equipment and calibration data table in this test report.

### 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 shall be used to determine the peak power spectral density and use the peak search function on the spectrum analyzer to find the peak of the spectrum. For the peak power spectral density shall be measured using below options:</li></ul>	
<input type="checkbox"/>	Refer as FCC KDB 789033 D02, F)5) power spectral density can be measured using resolution bandwidths < 1 MHz provided that the results are integrated over 1 MHz bandwidth
[duty cycle ≥ 98% or external video / power trigger]	
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033 D02, clause E Method SA-1 (spectral trace averaging).
<input type="checkbox"/>	Refer as FCC KDB 789033 D02, clause E Method SA-1 Alt. (RMS detection with slow sweep speed)
duty cycle < 98% and average over on/off periods with duty factor	
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033 D02, clause E Method SA-2 (spectral trace averaging).
<input type="checkbox"/>	Refer as FCC KDB 789033 D02, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
<input checked="" type="checkbox"/> For conducted measurement.	
<ul style="list-style-type: none"><li>If the EUT supports multiple transmit chains using options given below:</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.
<ul style="list-style-type: none"><li>If multiple transmit chains, EIRP PPSD calculation could be following as methods: <math>PPSD_{total} = PPSD_1 + PPSD_2 + \dots + PPSD_n</math> (calculated in linear unit [mW] and transfer to log unit [dBm])</li></ul>	

Test Method	
	$EIRP_{total} = PPSD_{total} + DG$
<input type="checkbox"/>	For radiated measurement.
	<ul style="list-style-type: none"> <li>Refer as FCC KDB 789033 D02 clause II A.1.F "Antenna-port Conducted versus Radiated Testing"</li> </ul>
	<ul style="list-style-type: none"> <li>Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.</li> </ul>
	<ul style="list-style-type: none"> <li>Refer as FCC KDB 412172 D01 clause 2.2 for EIRP calculation.</li> </ul>

### 3.4.4 Test Setup



### 3.4.5 Test Result of Power Spectral Density

Refer as Appendix D



### 3.5 Unwanted Emissions

#### 3.5.1 Transmitter Unwanted Emissions Limit

Unwanted emissions below 1 GHz and restricted band emissions above 1GHz 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.

Un-restricted band emissions above 1GHz Limit	
Operating Band	Limit
<input checked="" type="checkbox"/> 5.15 - 5.25 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
<input type="checkbox"/> 5.25 - 5.35 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
<input type="checkbox"/> 5.47 - 5.725 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
<input checked="" type="checkbox"/> 5.725 - 5.85 GHz	all emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.
<input type="checkbox"/> 5.85 - 5.895 GHz	(i) For an indoor access point or subordinate device, all emissions at or above 5.895 GHz shall not exceed an e.i.r.p. of 15 dBm/MHz and shall decrease linearly to an e.i.r.p. of - 7 dBm/MHz at or above 5.925 GHz. (ii) For a client device, all emissions at or above 5.895 GHz shall not exceed an



	<p>e.i.r.p. of -5 dBm/MHz and shall decrease linearly to an e.i.r.p. of -27 dBm/MHz at or above 5.925 GHz.</p> <p>(iii) For a client device or indoor access point or subordinate device, all emissions below 5.725 GHz shall not exceed an e.i.r.p. of -27 dBm/MHz at 5.65 GHz increasing linearly to 10 dBm/ MHz at 5.7 GHz, and from 5.7 GHz increasing linearly to a level of 15.6 dBm/MHz at 5.72 GHz, and from 5.72 GHz increasing linearly to a level of 27 dBm/MHz at 5.725 GHz.</p>
<p>Note 1: 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).</p>	

### 3.5.2 Measuring Instruments

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

### 3.5.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> <li>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. Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. 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).</li> </ul>	
<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>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 789033 D02, clause G)2) for unwanted emissions into non-restricted bands.</li> </ul>
	<ul style="list-style-type: none"> <li>Refer as FCC KDB 789033 D02, clause G)1) for unwanted emissions into restricted bands.</li> </ul>
	<input type="checkbox"/> Refer as FCC KDB 789033 D02, G)6) Method AD (Trace Averaging).
	<input checked="" type="checkbox"/> Refer as FCC KDB 789033 D02, G)6) Method VB (Reduced VBW).
	<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 789033 D02, clause G)5) measurement procedure peak limit.
<input type="checkbox"/> Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit.	
<ul style="list-style-type: none"> <li>For radiated measurement.</li> </ul>	
	<ul style="list-style-type: none"> <li>Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.</li> </ul>
	<ul style="list-style-type: none"> <li>Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.</li> </ul>
	<ul style="list-style-type: none"> <li>Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.</li> </ul>
<ul style="list-style-type: none"> <li>The any unwanted emissions level shall not exceed the fundamental emission level.</li> </ul>	

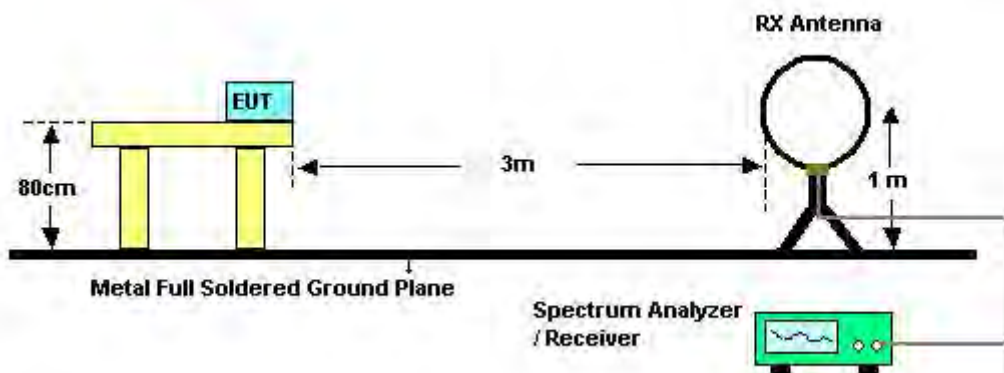
### Test Method

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

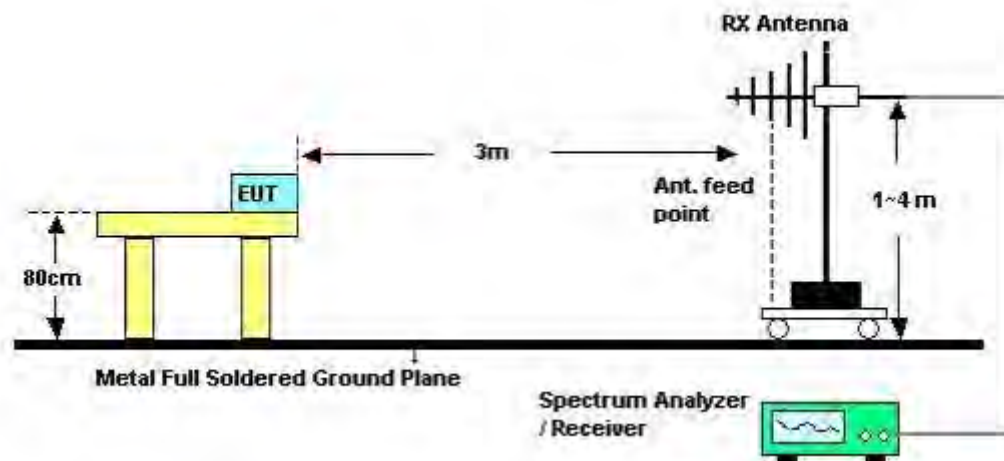
### 3.5.4 Test Setup

#### Transmitter Radiated Unwanted Emissions

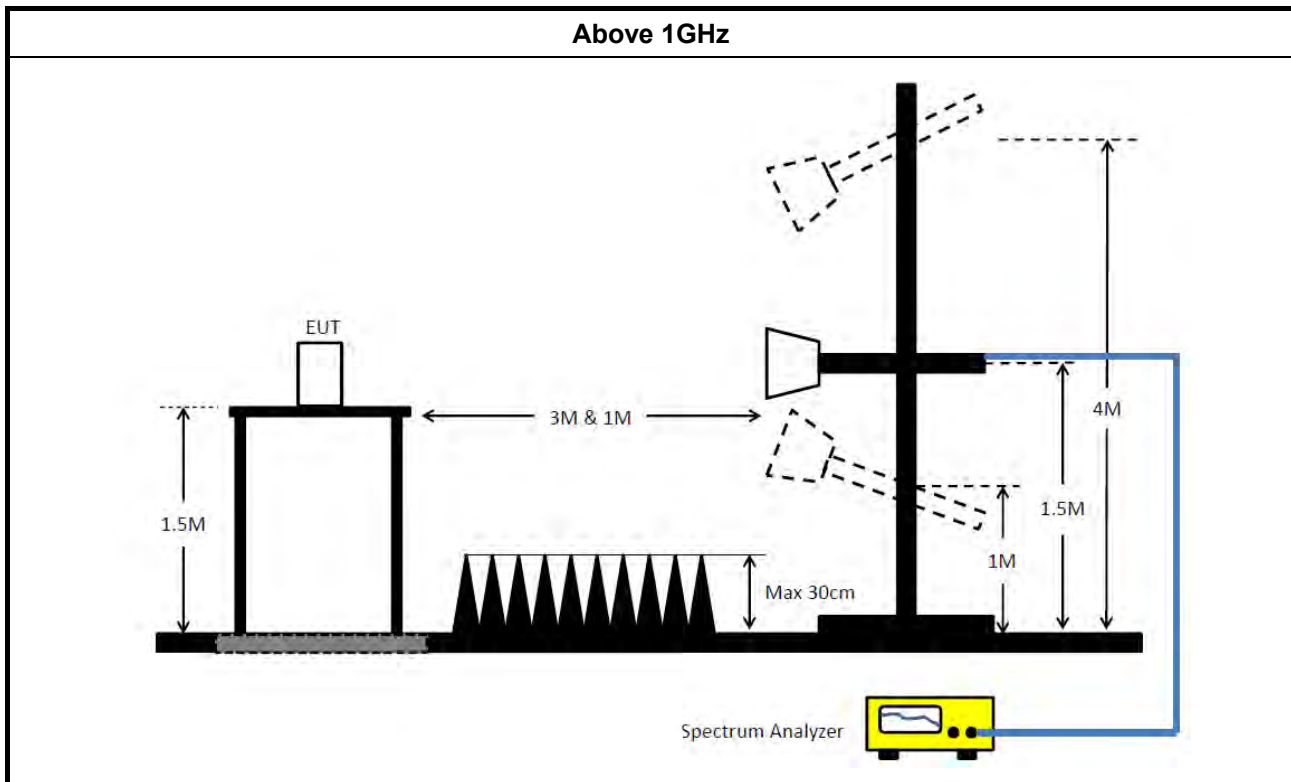
##### 9kHz ~30MHz



##### 30MHz~1GHz







### 3.5.5 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.

### 3.5.6 Transmitter Unwanted Emissions (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.

### 3.5.7 Test Result of Transmitter Unwanted Emissions

Refer as Appendix E





## 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	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Jan. 06, 2021	Jan. 05, 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 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)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH03-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH03-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH03-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Apr. 14, 2021	Apr. 13, 2022	Radiation (03CH04-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH04-CB	30 MHz ~ 1 GHz	Aug. 08, 2021	Aug. 07, 2022	Radiation (03CH04-CB)
BILOG ANTENNA with 6 dB attenuator	Schaffner & EMCI	CBL6112B & N-6-06	22021&AT-N06 07	30MHz ~ 1GHz	Oct. 09, 2021	Oct. 08, 2022	Radiation (03CH04-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Pre-Amplifier	Agilent	310N	187291	0.1MHz ~ 1GHz	Dec. 17, 2020	Dec. 16, 2021	Radiation (03CH04-CB)
Spectrum Analyzer	R&S	FSP40	100142	9kHz~40GHz	Feb. 19, 2021	Feb. 18, 2022	Radiation (03CH04-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	Jun. 21, 2021	Jun. 20, 2022	Radiation (03CH04-CB)
RF Cable-low	Woken	RG402	Low Cable-03+67	30MHz – 1GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH04-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH04-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH06-CB	1GHz ~18GHz 3m	Oct. 01, 2021	Sep. 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	83017A	MY53270064	0.5GHz ~ 26.5GHz	May 06, 2021	May 05, 2022	Radiation (03CH06-CB)
Pre-Amplifier	MITEQ	TTA1840-35-H G	1864479	18GHz ~ 40GHz	Jul. 13, 2021	Jul. 12, 2022	Radiation (03CH06-CB)
Signal Analyzer	R&S	FSV40	101903	9kHz ~ 40GHz	Mar. 22, 2021	Mar. 21, 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)
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)
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)

**RADIO TEST REPORT****Report No. : FR1O1539AB**

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
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.



## Conducted Emissions at Powerline

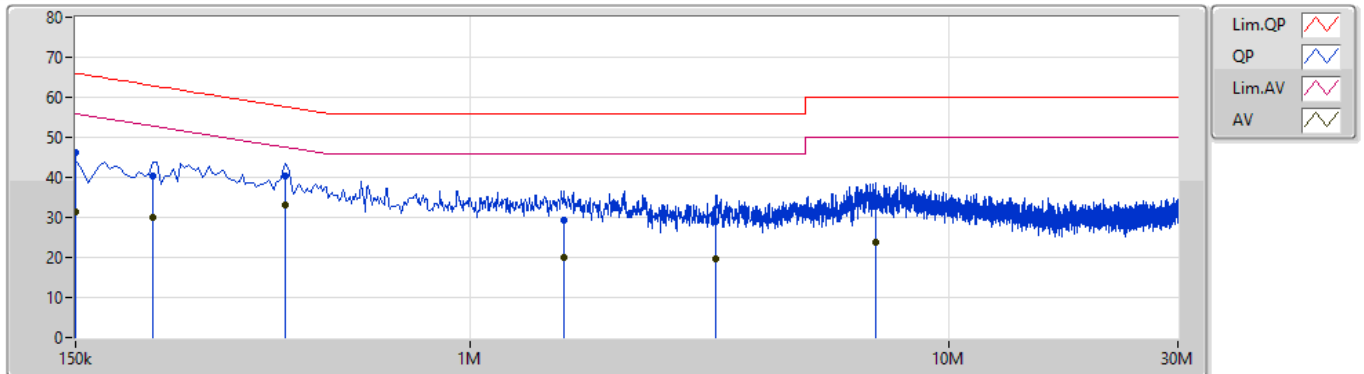
## Appendix A

### Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	411k	32.96	47.63	-14.67	Line

### Mode 1

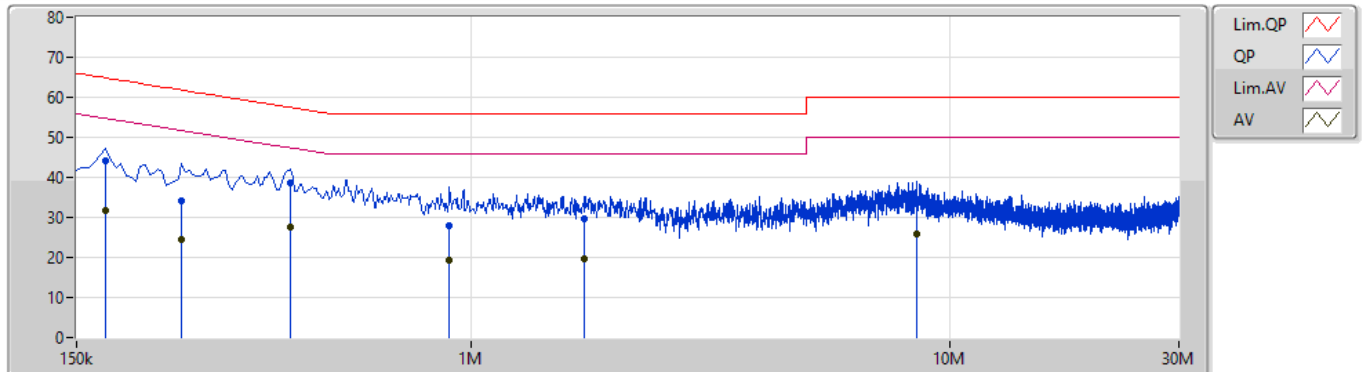
29/11/2021



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	150k	46.30	66.00	-19.70	9.89	Line	-	36.41	0.04	0.04	9.81			
AV	150k	31.33	56.00	-24.67	9.89	Line	-	21.44	0.04	0.04	9.81			
QP	217.5k	40.42	62.92	-22.50	9.89	Line	-	30.53	0.04	0.04	9.81			
AV	217.5k	29.96	52.92	-22.96	9.89	Line	-	20.07	0.04	0.04	9.81			
QP	411k	40.25	57.63	-17.38	9.90	Line	-	30.35	0.04	0.04	9.82			
AV	411k	32.96	47.63	-14.67	9.90	Line	"Worst"	23.06	0.04	0.04	9.82			
QP	1.572M	29.32	56.00	-26.68	9.96	Line	-	19.36	0.08	0.06	9.82			
AV	1.572M	20.10	46.00	-25.90	9.96	Line	-	10.14	0.08	0.06	9.82			
QP	3.264M	29.02	56.00	-26.98	10.09	Line	-	18.93	0.12	0.11	9.86			
AV	3.264M	19.67	46.00	-26.33	10.09	Line	-	9.58	0.12	0.11	9.86			
QP	7.035M	32.69	60.00	-27.31	10.22	Line	-	22.47	0.19	0.14	9.89			
AV	7.035M	23.69	50.00	-26.31	10.22	Line	-	13.47	0.19	0.14	9.89			

## Mode 1

29/11/2021



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	172.5k	44.04	64.83	-20.79	9.88	Neutral	-	34.16	0.03	0.04	9.81			
AV	172.5k	31.75	54.83	-23.08	9.88	Neutral	-	21.87	0.03	0.04	9.81			
QP	249k	34.18	61.79	-27.61	9.88	Neutral	-	24.30	0.03	0.04	9.81			
AV	249k	24.52	51.79	-27.27	9.88	Neutral	-	14.64	0.03	0.04	9.81			
QP	420k	38.79	57.45	-18.66	9.89	Neutral	"Worst"	28.90	0.03	0.04	9.82			
AV	420k	27.62	47.45	-19.83	9.89	Neutral	-	17.73	0.03	0.04	9.82			
QP	901.5k	27.95	56.00	-28.05	9.92	Neutral	-	18.03	0.05	0.04	9.83			
AV	901.5k	19.27	46.00	-26.73	9.92	Neutral	-	9.35	0.05	0.04	9.83			
QP	1.725M	29.75	56.00	-26.25	9.95	Neutral	-	19.80	0.07	0.06	9.82			
AV	1.725M	19.73	46.00	-26.27	9.95	Neutral	-	9.78	0.07	0.06	9.82			
QP	8.498M	33.49	60.00	-26.51	10.22	Neutral	-	23.27	0.18	0.15	9.89			
AV	8.498M	25.71	50.00	-24.29	10.22	Neutral	-	15.49	0.18	0.15	9.89			

**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	34.11M	17.961M	18M0D1D	20.64M	16.432M
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	37.62M	19.85M	19M8D1D	21.66M	18.951M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	41.28M	38.021M	38M0D1D	40.98M	37.961M
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	82.44M	77.241M	77M2D1D	82.32M	77.241M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	16.38M	38.741M	38M7D1D	15.87M	28.696M
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	18.96M	40.66M	40M7D1D	18.15M	20.27M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	37.92M	60.69M	60M7D1D	37.2M	39.58M
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	76.68M	77.481M	77M5D1D	73.44M	77.361M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;  
 Max-OBW = Maximum 99% occupied bandwidth;  
 Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;  
 Min-OBW = Minimum 99% occupied bandwidth

**Result**

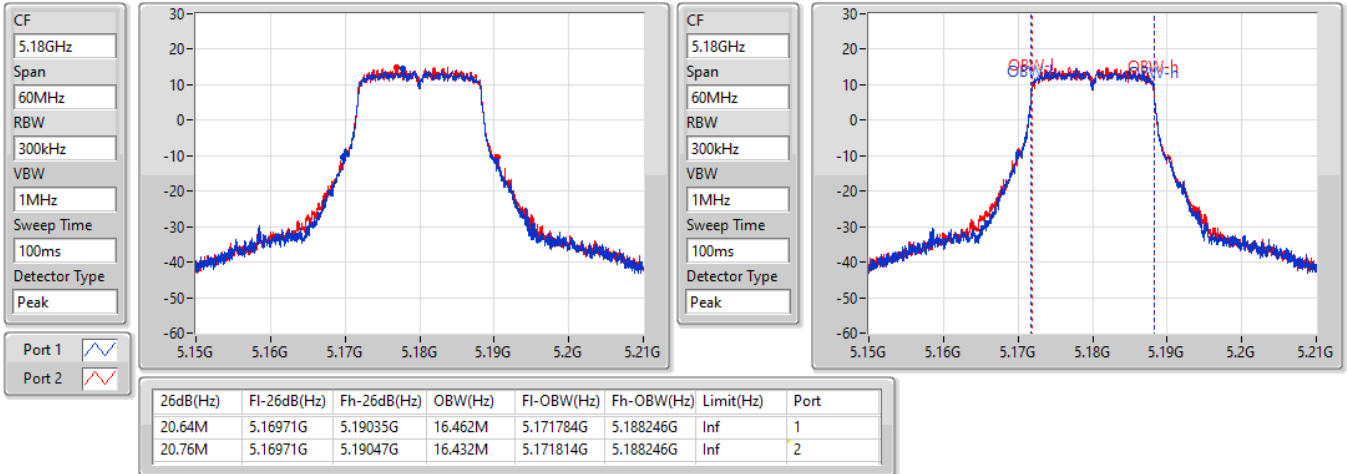
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	20.64M	16.462M	20.76M	16.432M
5200MHz	Pass	Inf	33.6M	17.931M	34.11M	17.841M
5240MHz	Pass	Inf	33.6M	17.601M	34.08M	17.961M
5745MHz	Pass	500k	16.29M	28.696M	15.87M	29.055M
5785MHz	Pass	500k	16.32M	29.625M	16.32M	35.142M
5825MHz	Pass	500k	16.26M	31.634M	16.38M	38.741M
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	21.66M	18.981M	21.93M	18.951M
5200MHz	Pass	Inf	24.15M	19.04M	26.94M	19.04M
5240MHz	Pass	Inf	36.06M	19.52M	37.62M	19.85M
5745MHz	Pass	500k	18.33M	20.27M	18.15M	21.979M
5785MHz	Pass	500k	18.93M	37.901M	18.96M	40.54M
5825MHz	Pass	500k	18.45M	30.855M	18.96M	40.66M
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	41.16M	37.961M	41.28M	38.021M
5230MHz	Pass	Inf	40.98M	37.961M	41.28M	37.961M
5755MHz	Pass	500k	37.86M	39.58M	37.92M	42.279M
5795MHz	Pass	500k	37.2M	44.678M	37.68M	60.69M
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	Inf	82.44M	77.241M	82.32M	77.241M
5775MHz	Pass	500k	76.68M	77.361M	73.44M	77.481M

Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band  
Port X-OBW = Port X 99% occupied bandwidth

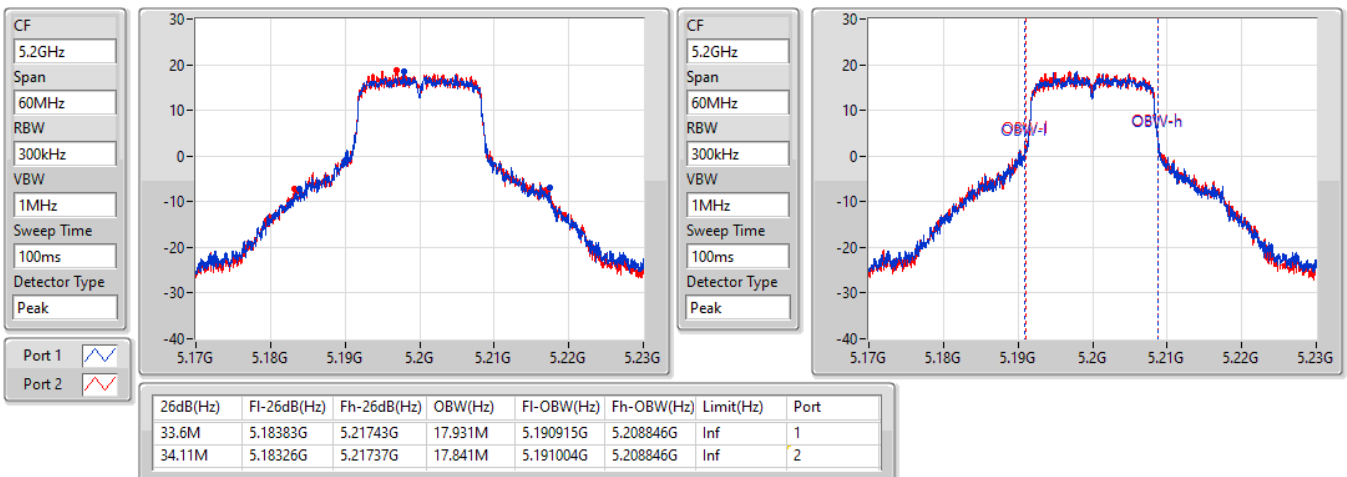


**802.11a\_Nss1,(6Mbps)\_2TX**
**EBW**
**5180MHz**

23/12/2021

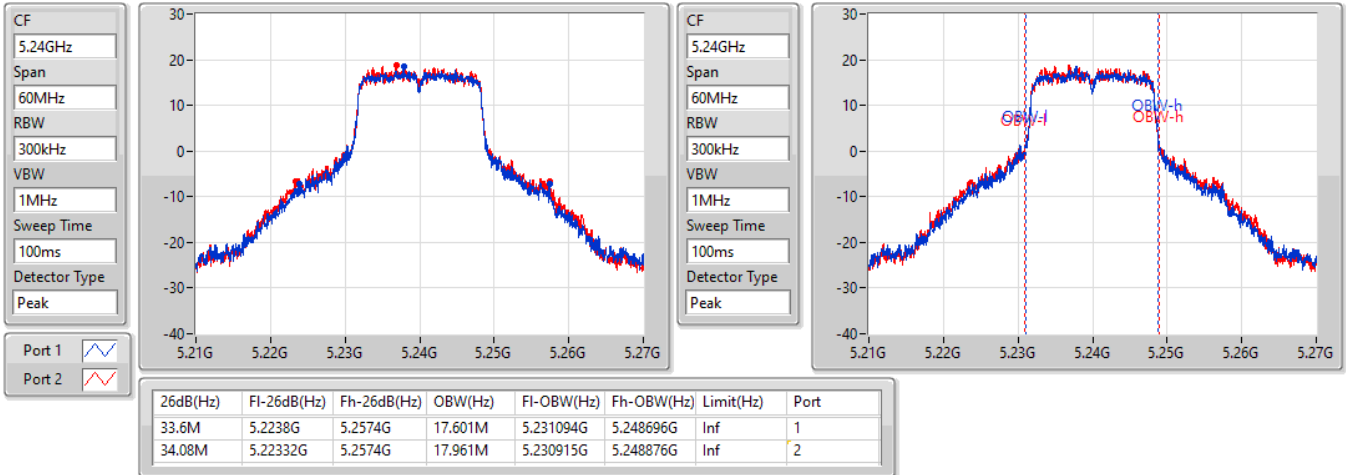

**802.11a\_Nss1,(6Mbps)\_2TX**
**EBW**
**5200MHz**

23/12/2021

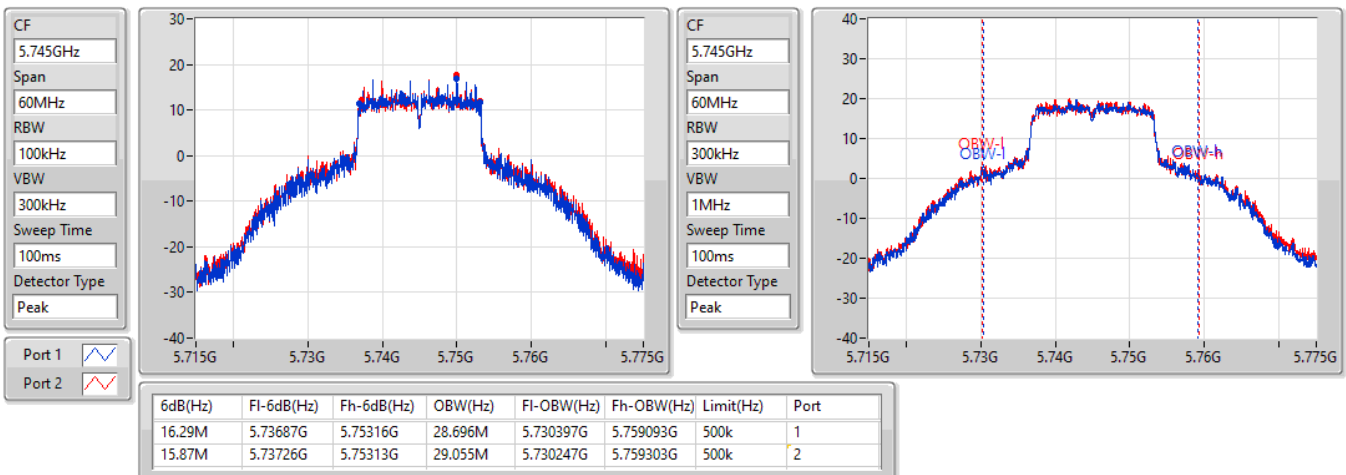


**802.11a\_Nss1,(6Mbps)\_2TX**
**EBW**
**5240MHz**

23/12/2021

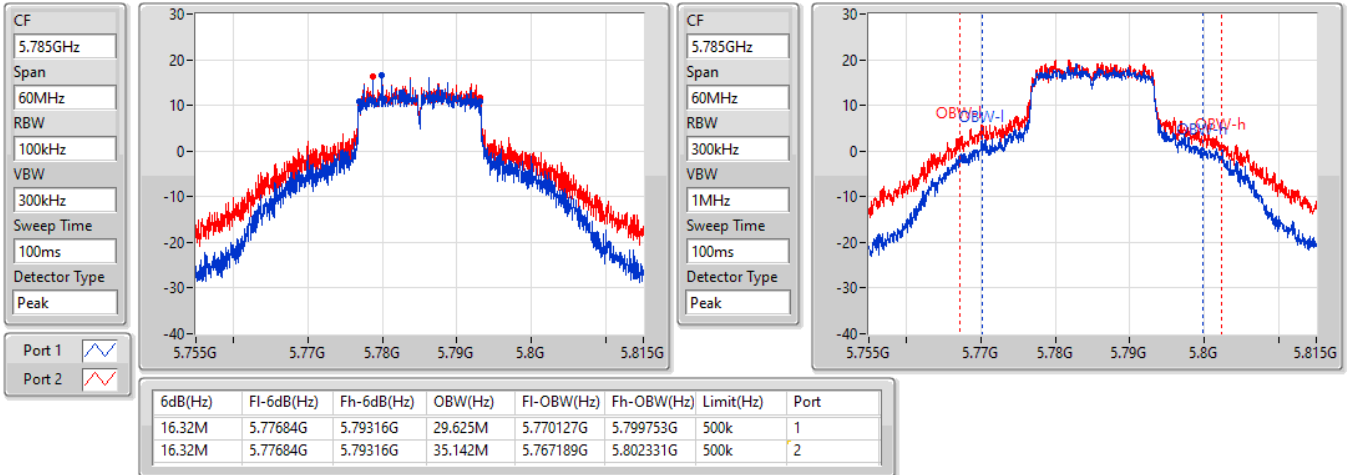

**802.11a\_Nss1,(6Mbps)\_2TX**
**EBW**
**5745MHz**

23/12/2021

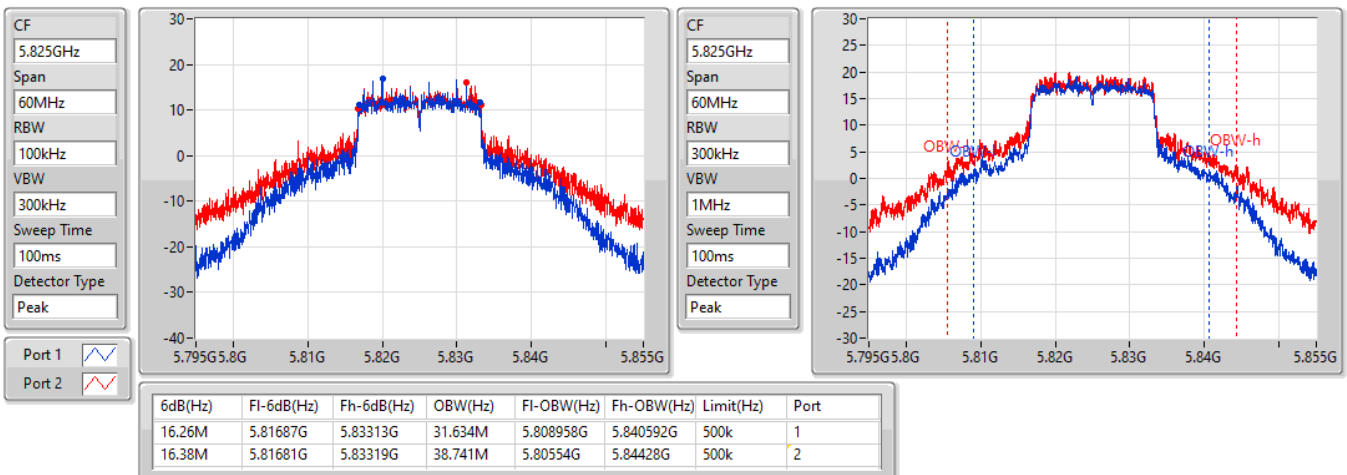


**802.11a\_Nss1,(6Mbps)\_2TX**
**EBW**
**5785MHz**

23/12/2021

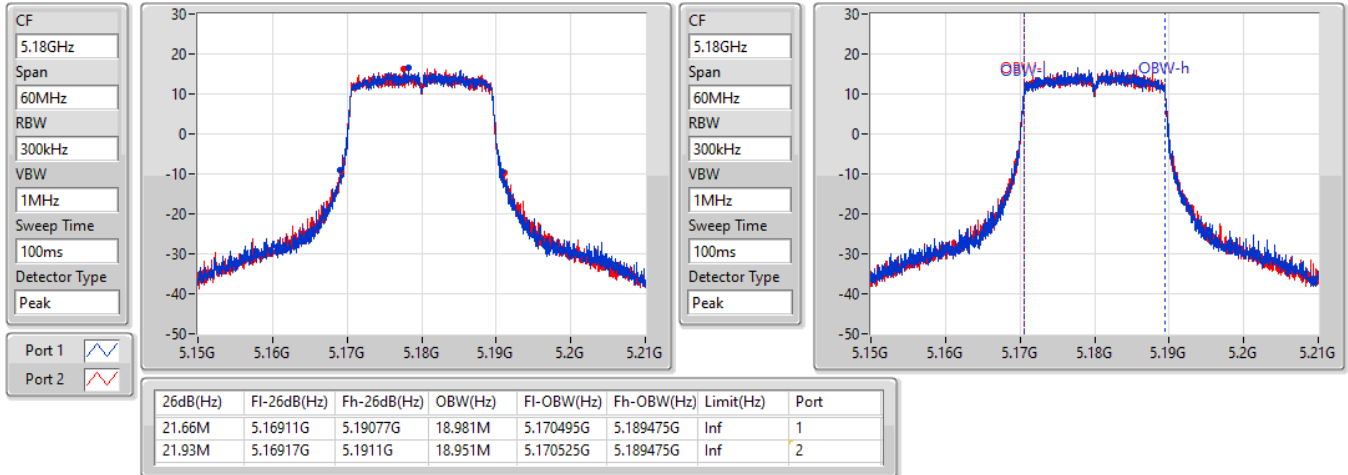

**802.11a\_Nss1,(6Mbps)\_2TX**
**EBW**
**5825MHz**

23/12/2021

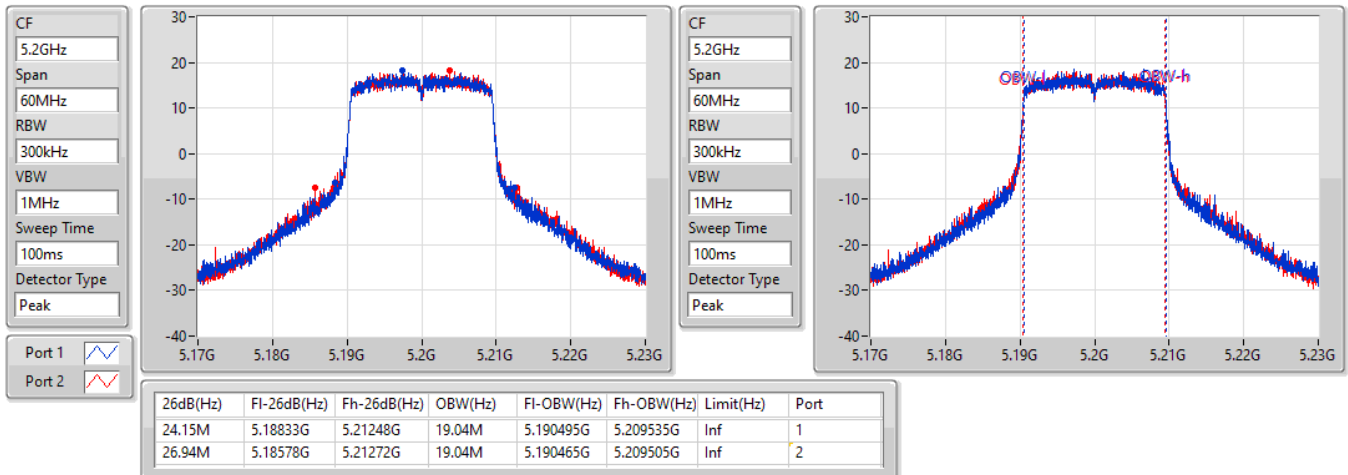


**802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX**
**EBW**
**5180MHz**

23/12/2021

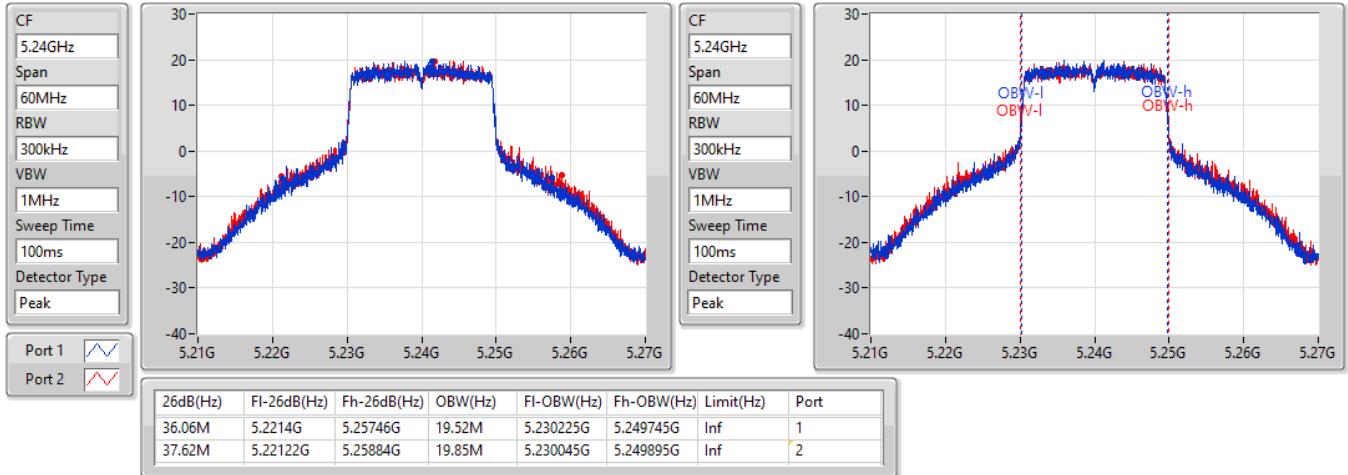

**802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX**
**EBW**
**5200MHz**

23/12/2021

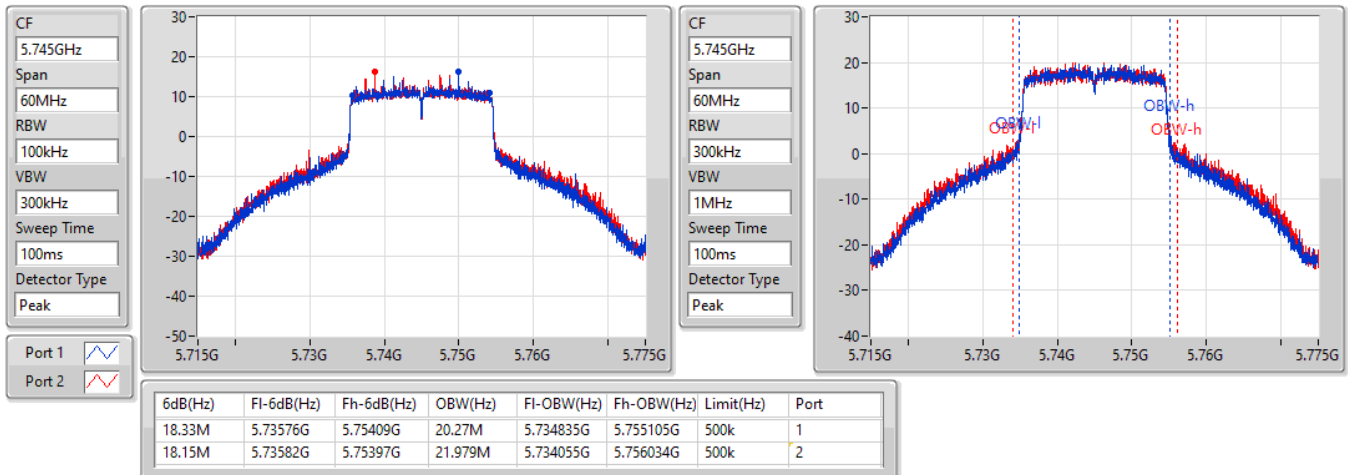


**802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX**
**EBW**
**5240MHz**

23/12/2021

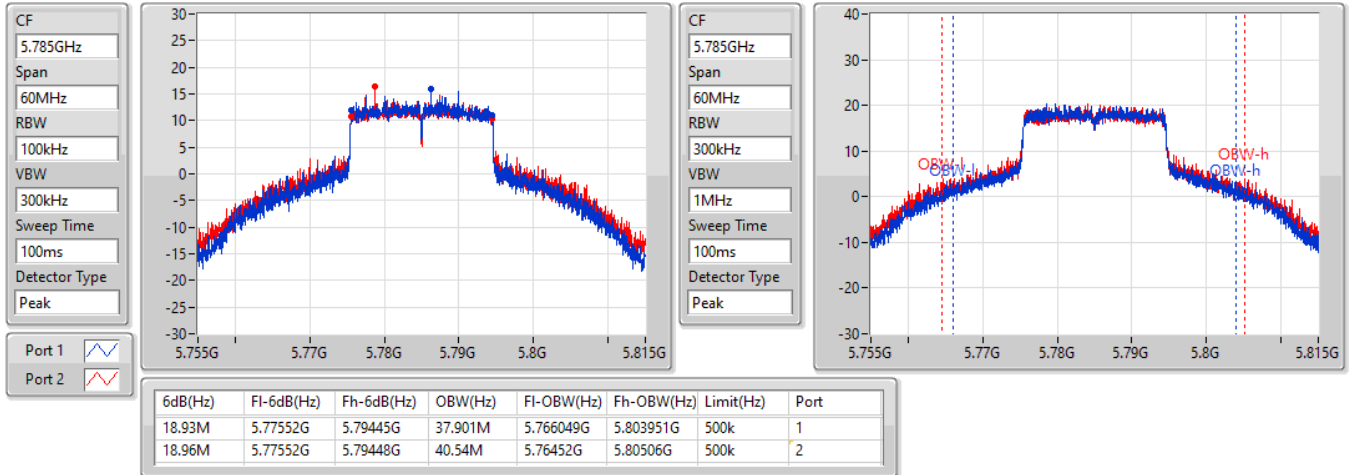

**802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX**
**EBW**
**5745MHz**

23/12/2021

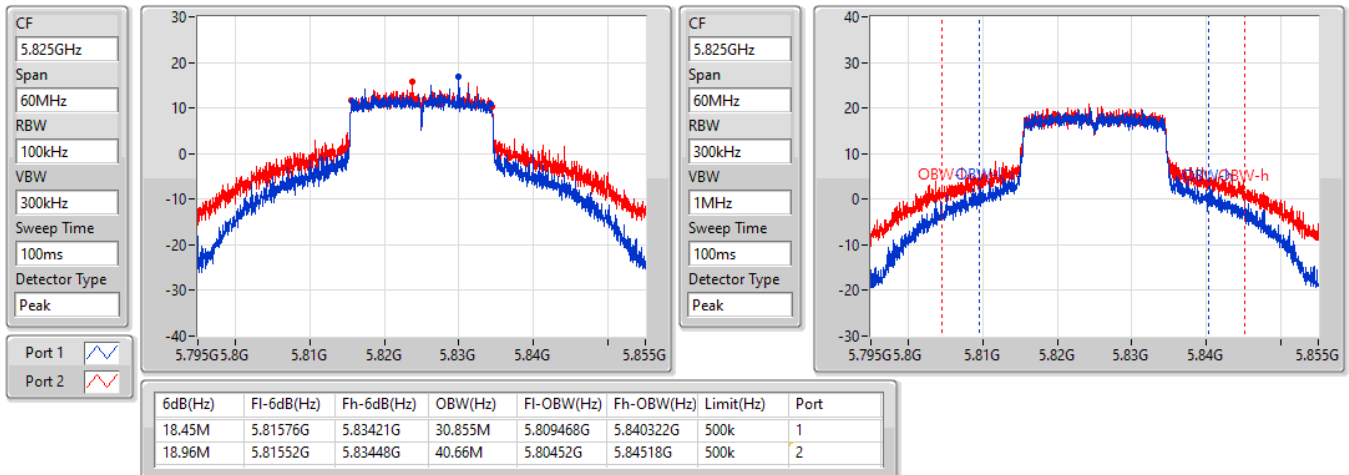


**802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX**
**EBW**
**5785MHz**

23/12/2021

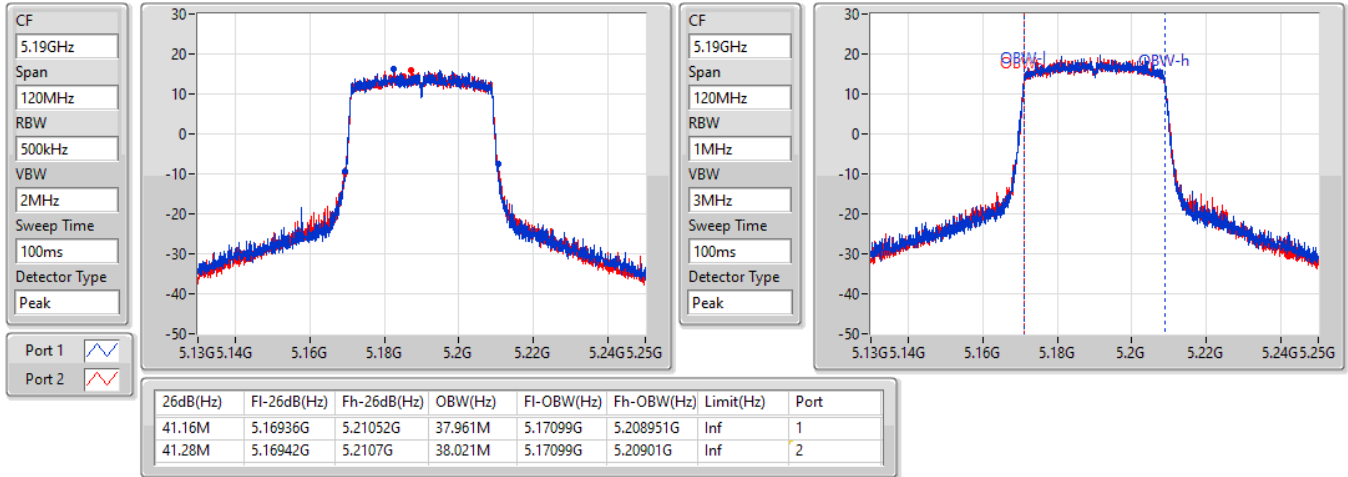

**802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX**
**EBW**
**5825MHz**

23/12/2021

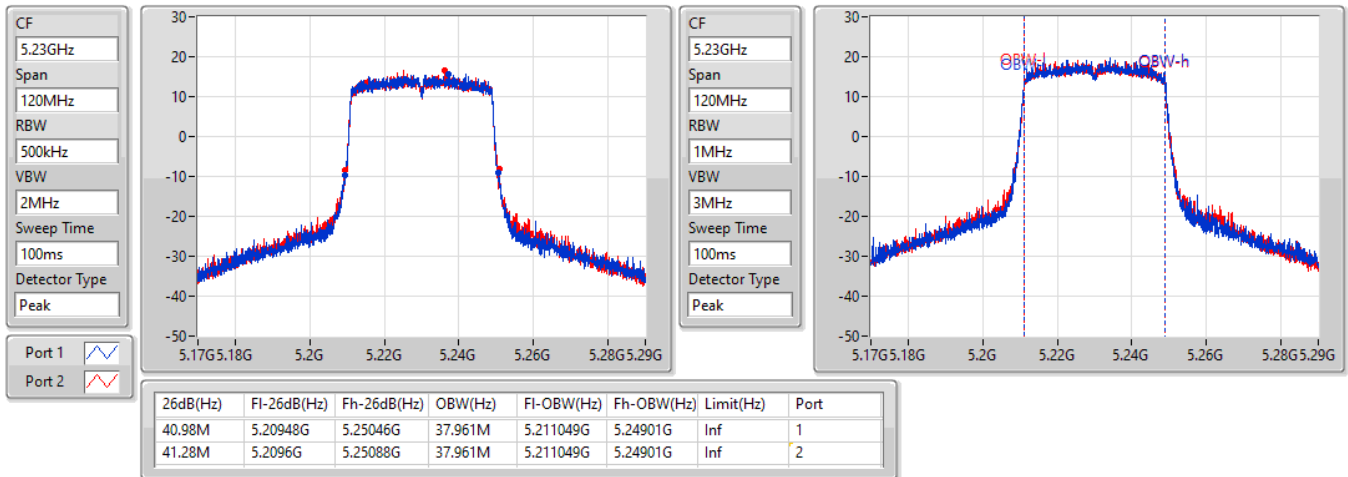


**802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX**
**EBW**
**5190MHz**

23/12/2021

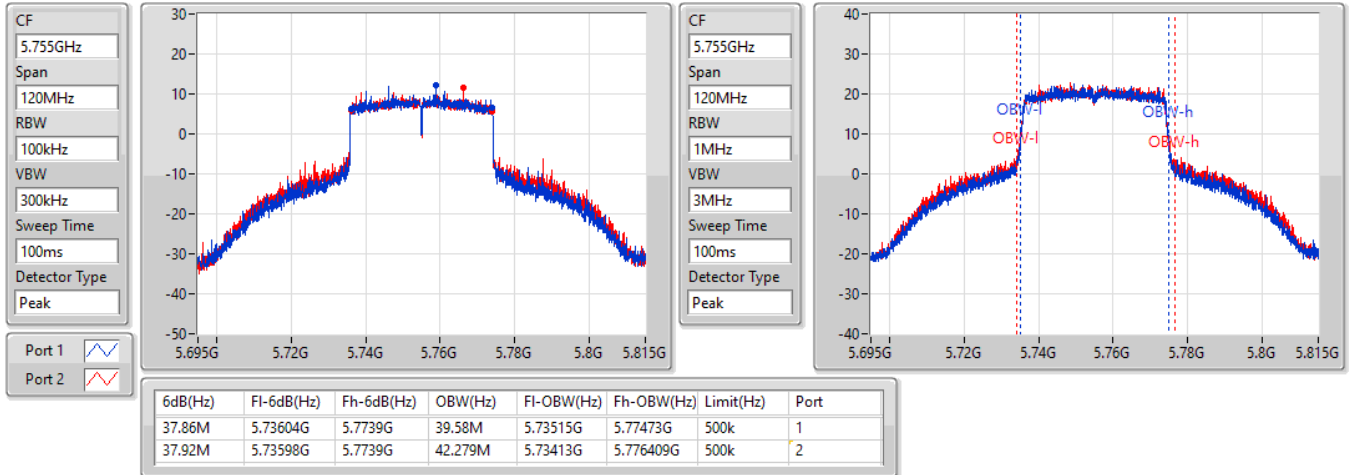

**802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX**
**EBW**
**5230MHz**

23/12/2021

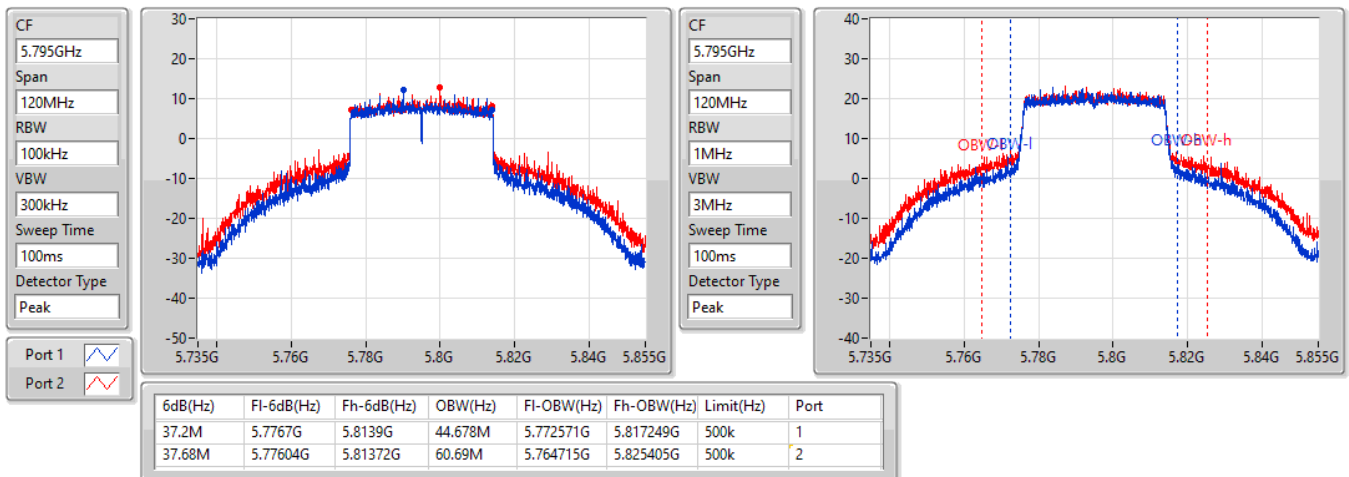


**802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX**
**EBW**
**5755MHz**

23/12/2021


**802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX**
**EBW**
**5795MHz**

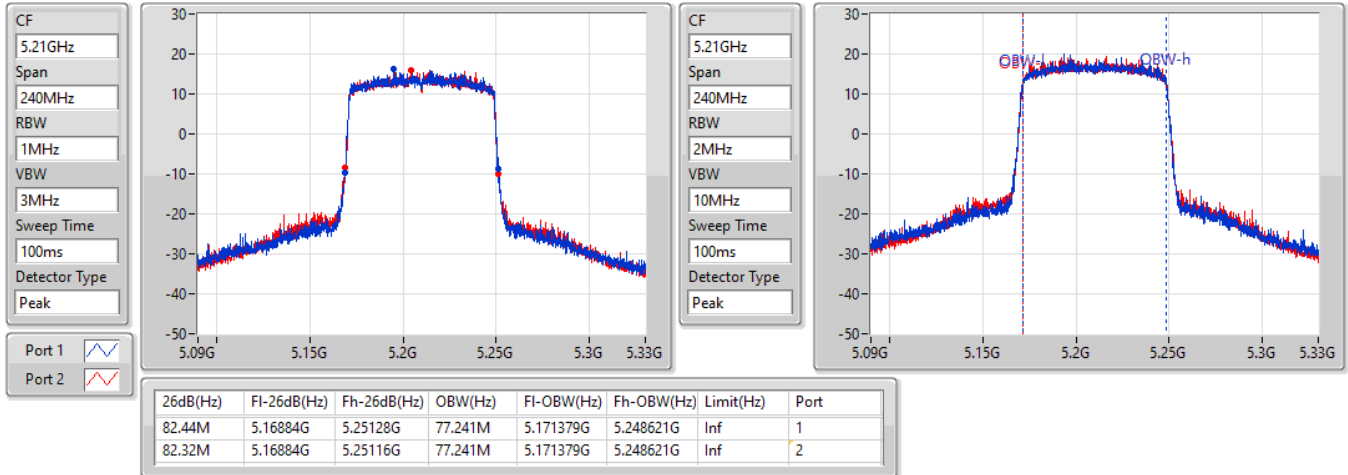
23/12/2021



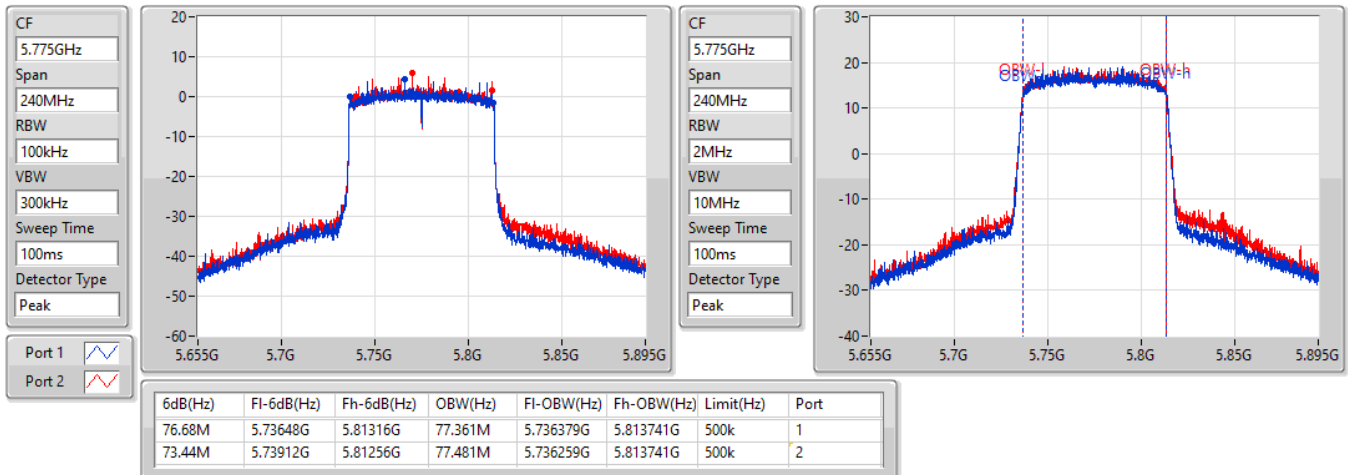


**802.11ax HEW80-BF\_Nss1,(MCS0)\_2TX**
**EBW**
**5210MHz**

23/12/2021


**802.11ax HEW80-BF\_Nss1,(MCS0)\_2TX**
**EBW**
**5775MHz**

23/12/2021



**Summary**

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	28.53	0.71285
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	29.29	0.84918
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	25.61	0.36392
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	24.43	0.27733
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	29.91	0.97949
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	29.69	0.93111
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	28.26	0.66988
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	24.78	0.30061

## Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	3.761	21.75	21.91	24.84	30.00
5200MHz	Pass	3.761	25.43	25.59	28.52	30.00
5240MHz	Pass	3.761	25.51	25.52	28.53	30.00
5745MHz	Pass	3.333	26.86	26.93	29.91	30.00
5785MHz	Pass	3.333	26.34	26.90	29.64	30.00
5825MHz	Pass	3.333	26.93	26.83	29.89	30.00
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	6.691	22.57	22.42	25.51	29.31
5200MHz	Pass	6.691	24.54	24.33	27.45	29.31
5240MHz	Pass	6.691	26.04	26.50	29.29	29.31
5745MHz	Pass	6.287	26.60	26.59	29.61	29.71
5785MHz	Pass	6.287	26.92	26.42	29.69	29.71
5825MHz	Pass	6.287	26.76	26.52	29.65	29.71
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	6.691	22.07	21.63	24.87	29.31
5230MHz	Pass	6.691	22.73	22.47	25.61	29.31
5755MHz	Pass	6.287	25.20	24.90	28.06	29.71
5795MHz	Pass	6.287	25.45	25.03	28.26	29.71
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	6.691	21.48	21.35	24.43	29.31
5775MHz	Pass	6.287	21.95	21.59	24.78	29.71

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

**Summary**

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11a_Nss1,(6Mbps)_2TX	16.20
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	16.09
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	9.83
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	5.55
5.725-5.85GHz	-
802.11a_Nss1,(6Mbps)_2TX	15.85
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	14.91
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	11.44
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	4.36

RBW = 500kHz for 5.725-5.85GHz band / 1MHz for other band;

**Result**

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	6.691	9.55	9.64	12.50	16.31
5200MHz	Pass	6.691	13.12	13.23	16.09	16.31
5240MHz	Pass	6.691	13.15	13.38	16.20	16.31
5745MHz	Pass	6.287	12.85	12.89	15.85	29.71
5785MHz	Pass	6.287	12.40	12.76	15.54	29.71
5825MHz	Pass	6.287	12.45	12.76	15.48	29.71
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	6.691	9.43	9.54	12.45	16.31
5200MHz	Pass	6.691	11.57	11.75	14.51	16.31
5240MHz	Pass	6.691	13.12	13.17	16.09	16.31
5745MHz	Pass	6.287	11.73	11.64	14.60	29.71
5785MHz	Pass	6.287	11.64	11.99	14.77	29.71
5825MHz	Pass	6.287	11.80	12.18	14.91	29.71
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	6.691	6.15	6.24	9.18	16.31
5230MHz	Pass	6.691	6.85	6.89	9.83	16.31
5755MHz	Pass	6.287	8.55	8.56	11.44	29.71
5795MHz	Pass	6.287	8.29	8.74	11.43	29.71
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	6.691	2.50	2.63	5.55	16.31
5775MHz	Pass	6.287	1.22	1.66	4.36	29.71

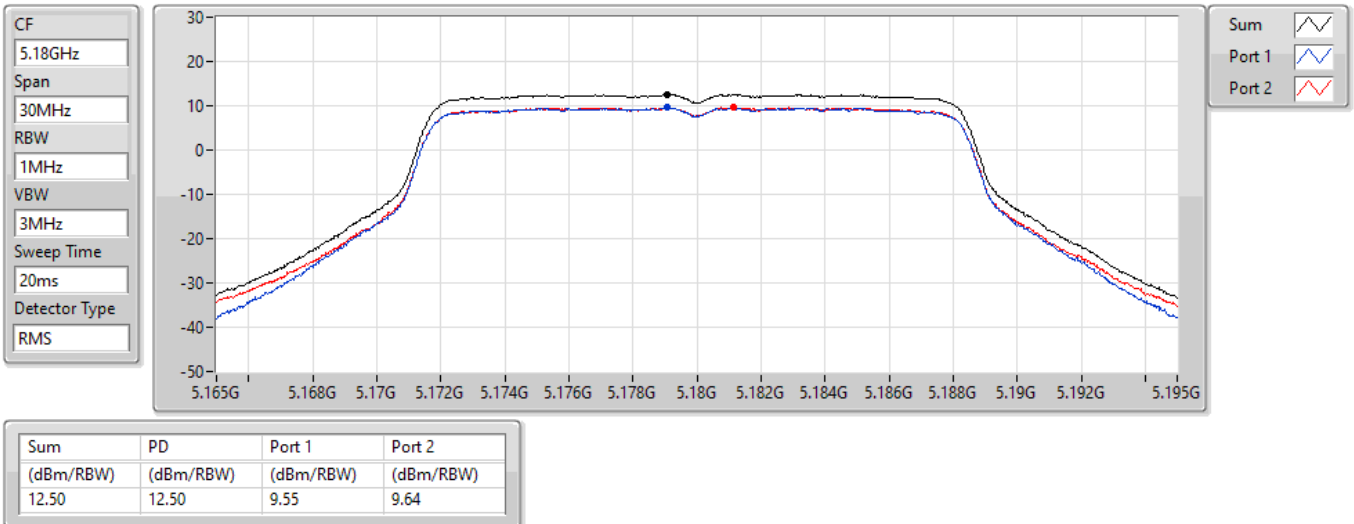
DG = Directional Gain; RBW = 500kHz for 5.725-5.85GHz band / 1MHz for other band;  
 PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

## 802.11a\_Nss1,(6Mbps)\_2TX

## PSD

5180MHz

23/12/2021

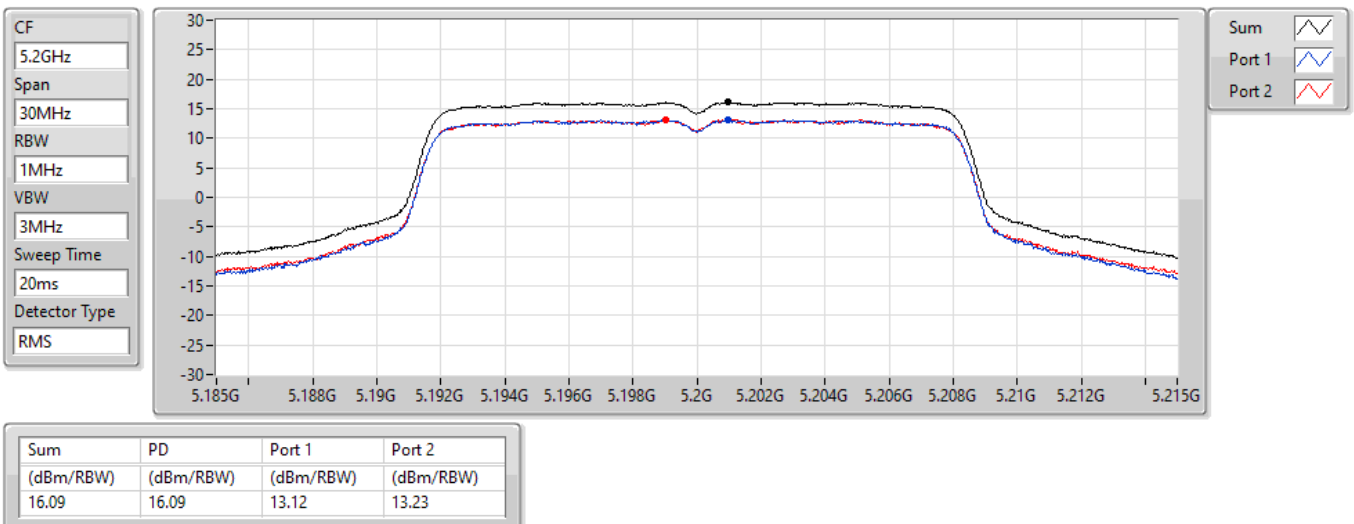


## 802.11a\_Nss1,(6Mbps)\_2TX

## PSD

5200MHz

23/12/2021

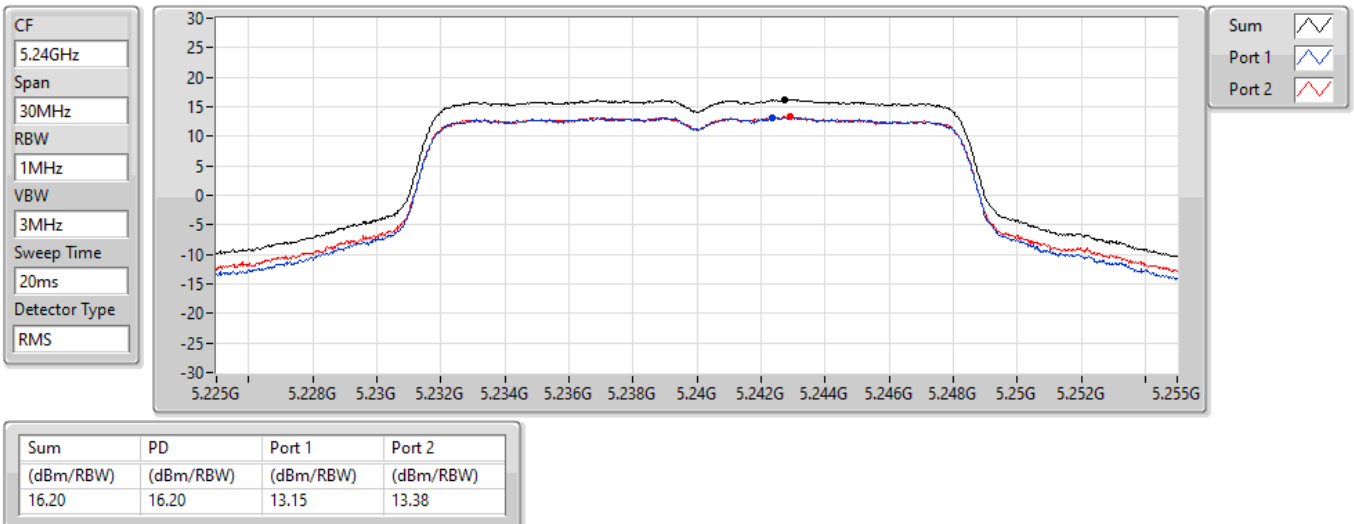


## 802.11a\_Nss1,(6Mbps)\_2TX

## PSD

5240MHz

23/12/2021

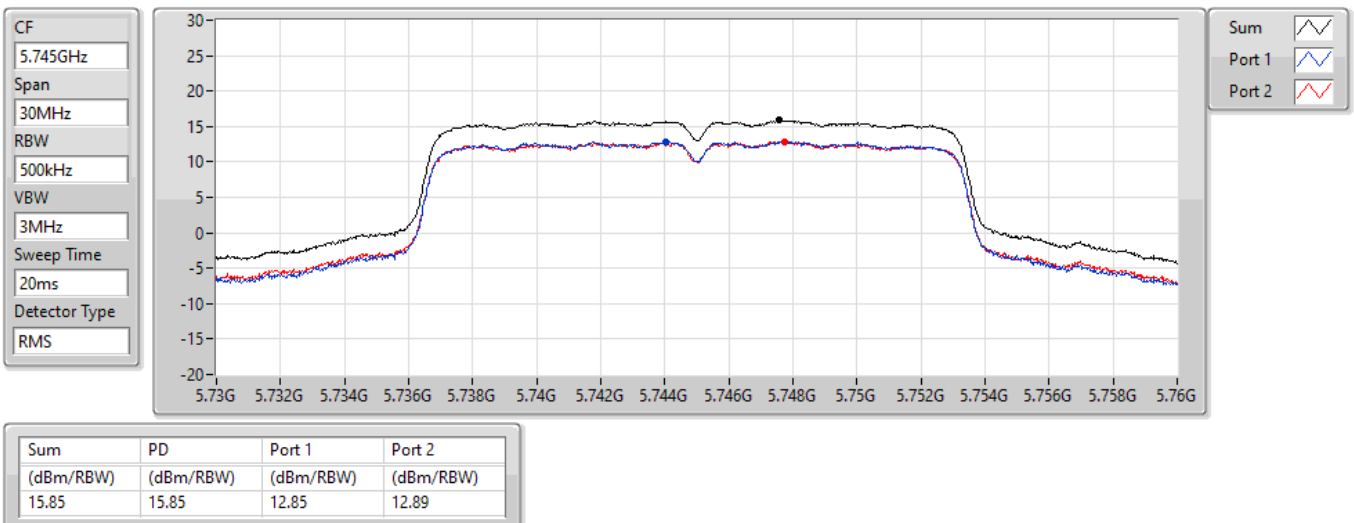


## 802.11a\_Nss1,(6Mbps)\_2TX

## PSD

5745MHz

23/12/2021

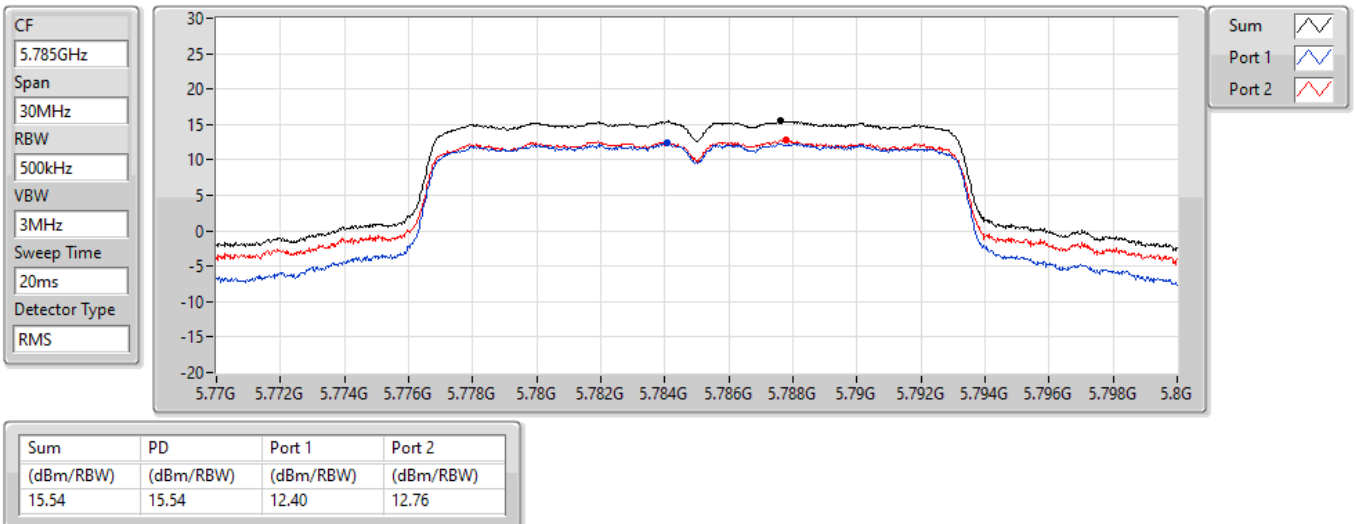


## 802.11a\_Nss1,(6Mbps)\_2TX

## PSD

5785MHz

23/12/2021

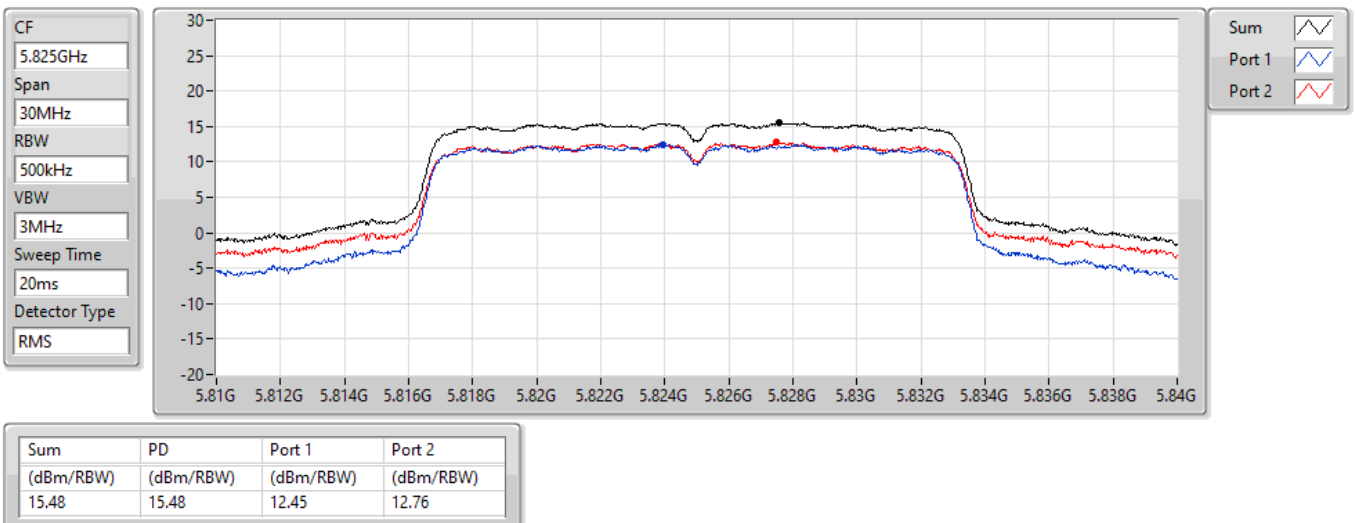


## 802.11a\_Nss1,(6Mbps)\_2TX

## PSD

5825MHz

23/12/2021



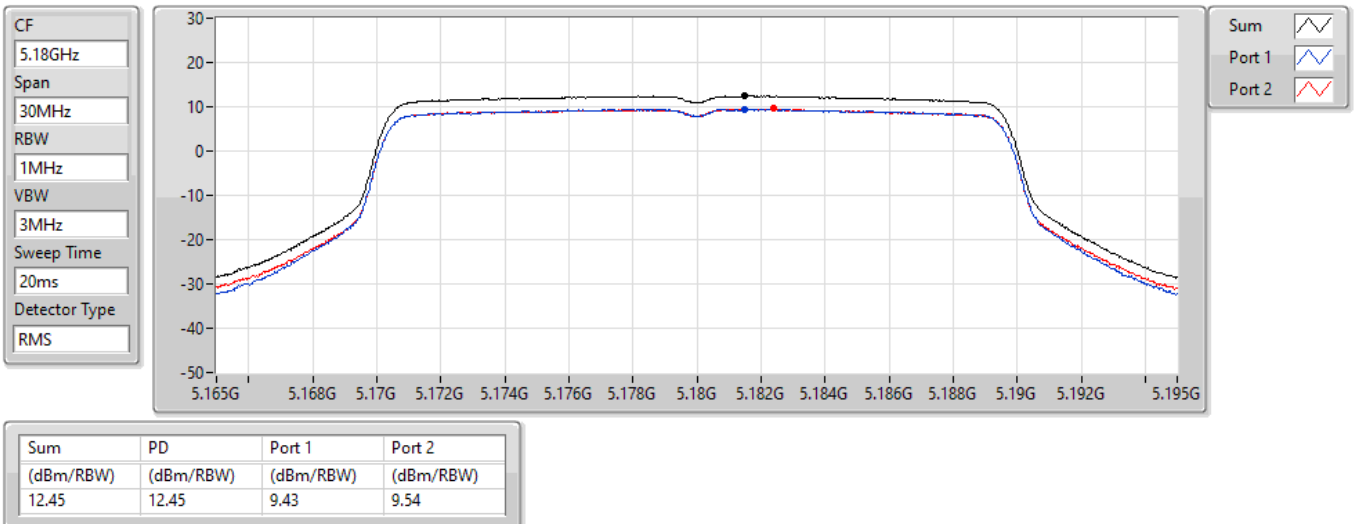


## 802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

## PSD

5180MHz

23/12/2021

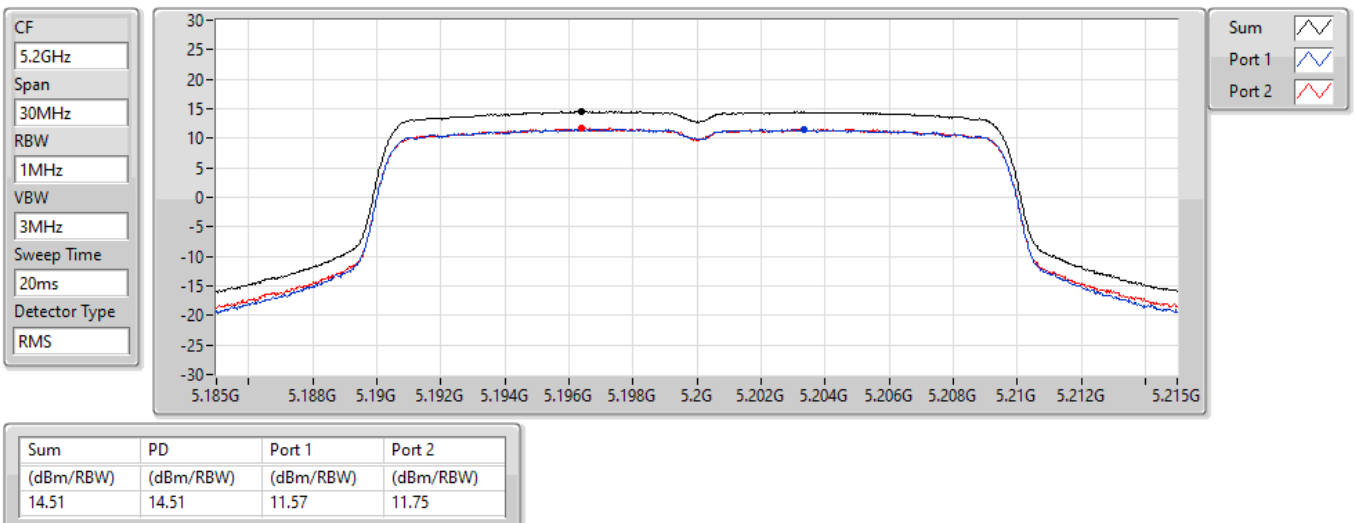


## 802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

## PSD

5200MHz

23/12/2021

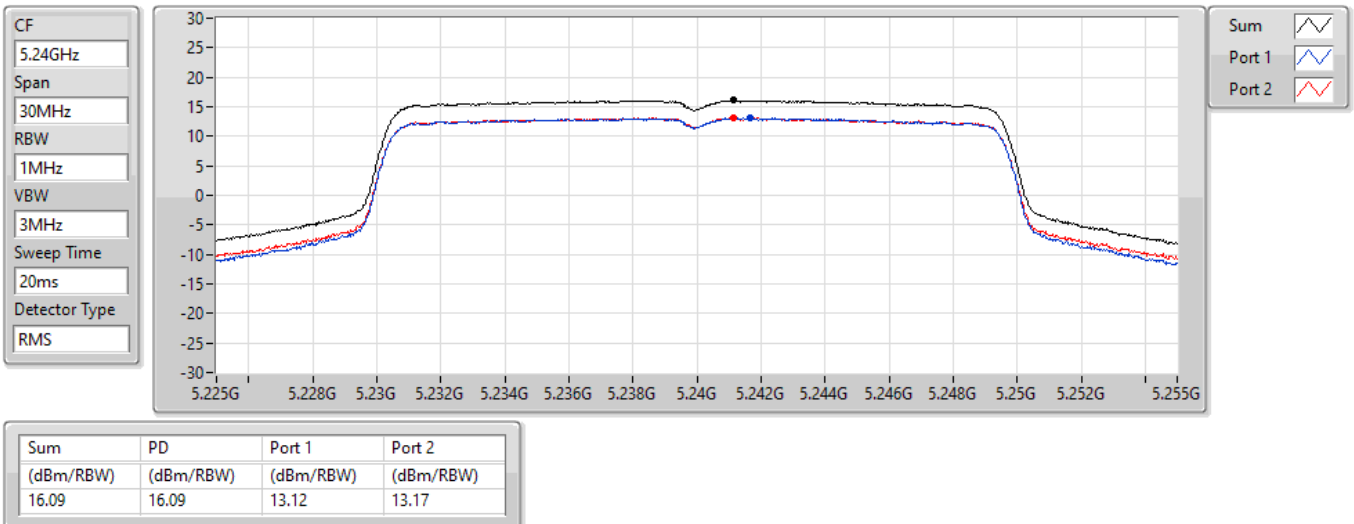


## 802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

## PSD

5240MHz

23/12/2021

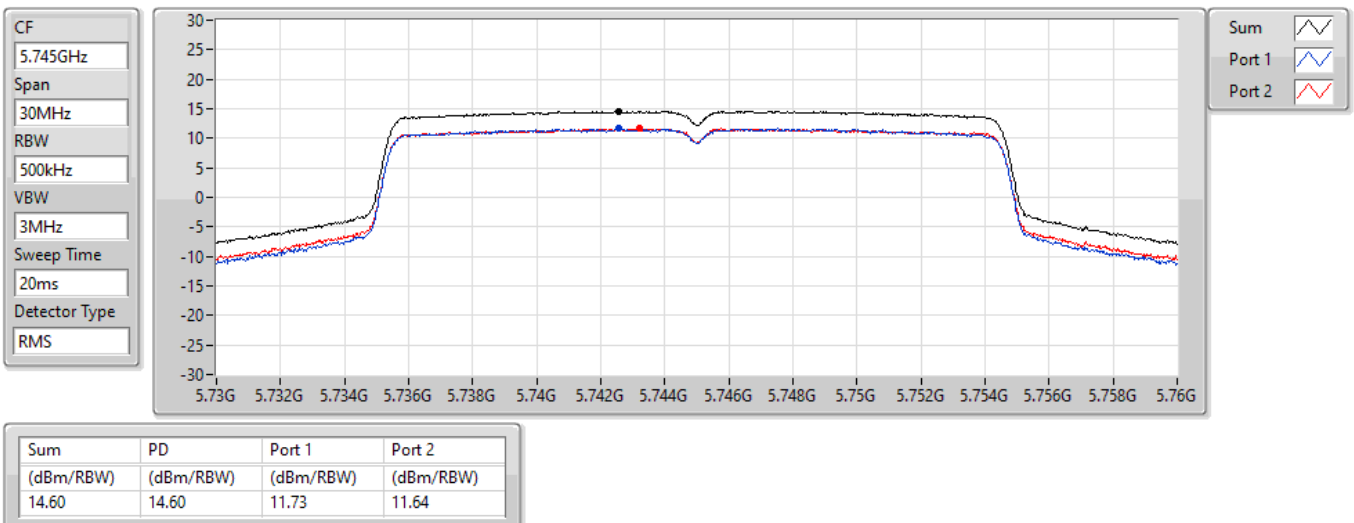


## 802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

## PSD

5745MHz

23/12/2021

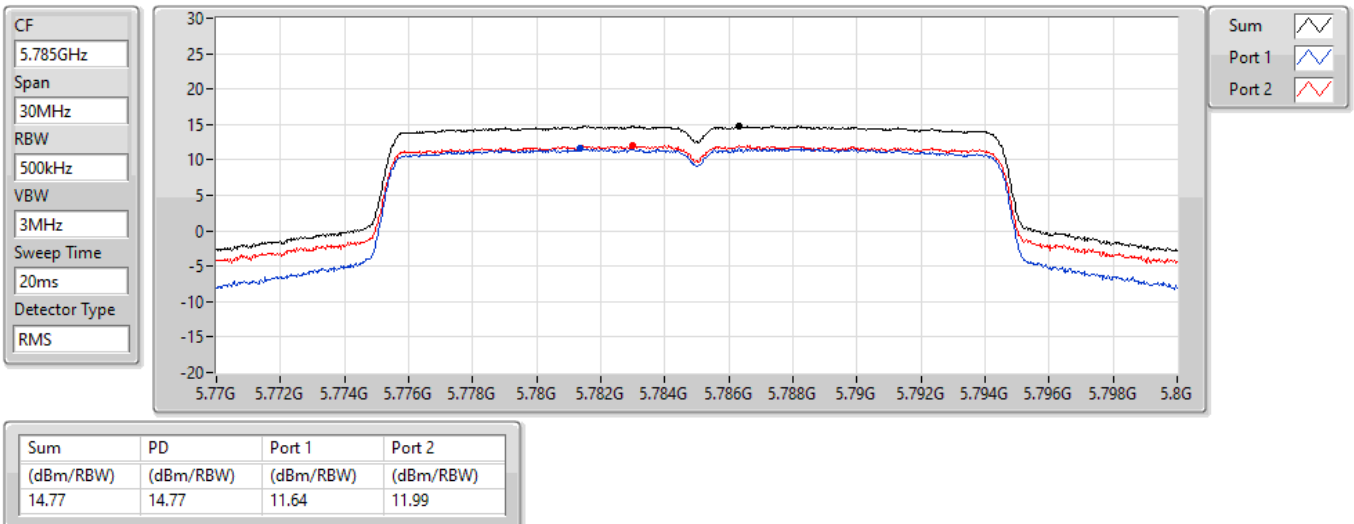


## 802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

## PSD

5785MHz

23/12/2021

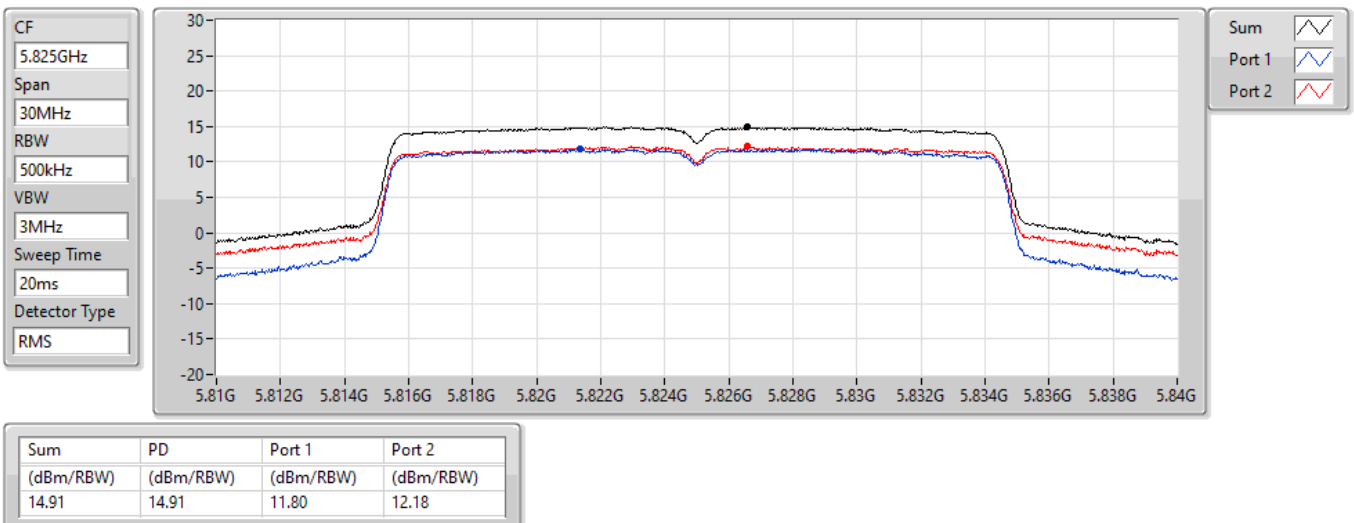


## 802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

## PSD

5825MHz

23/12/2021

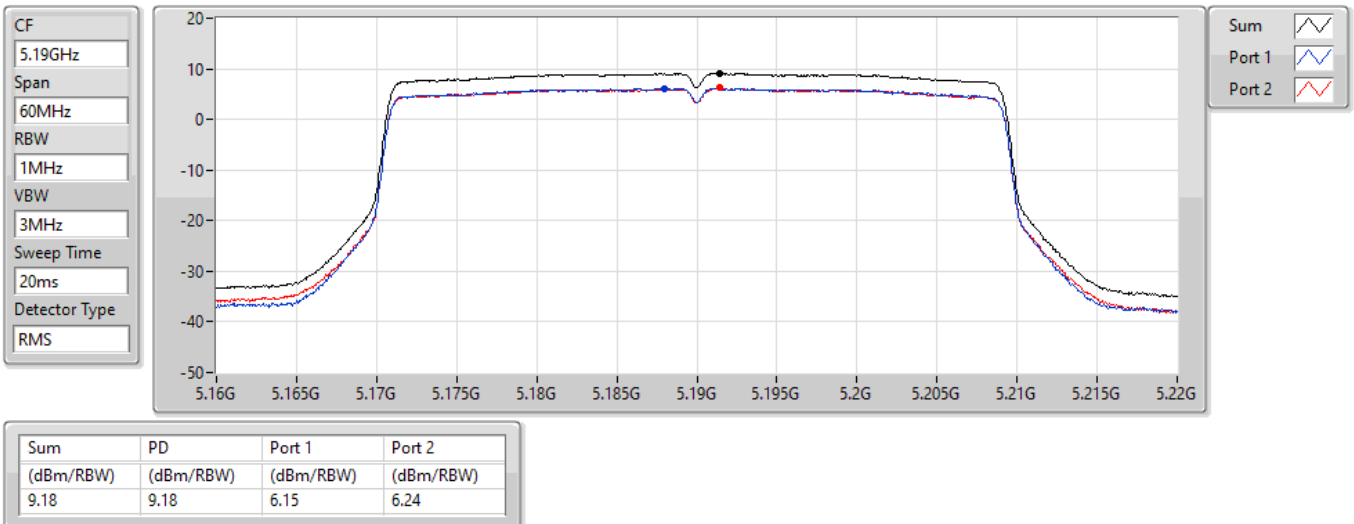


## 802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX

## PSD

5190MHz

23/12/2021

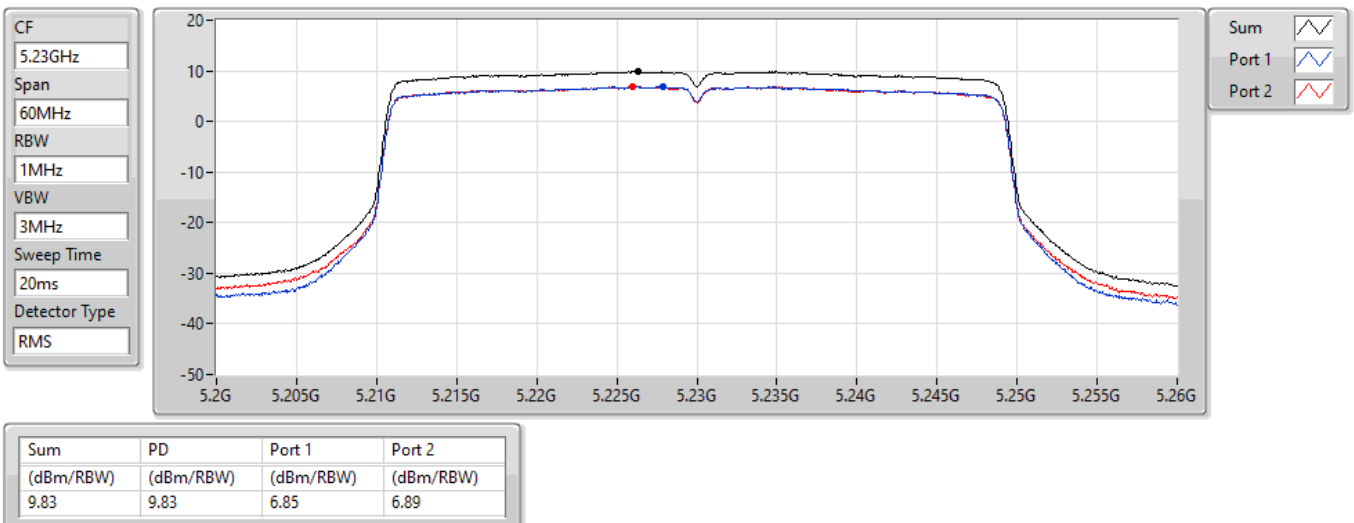


## 802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX

## PSD

5230MHz

23/12/2021

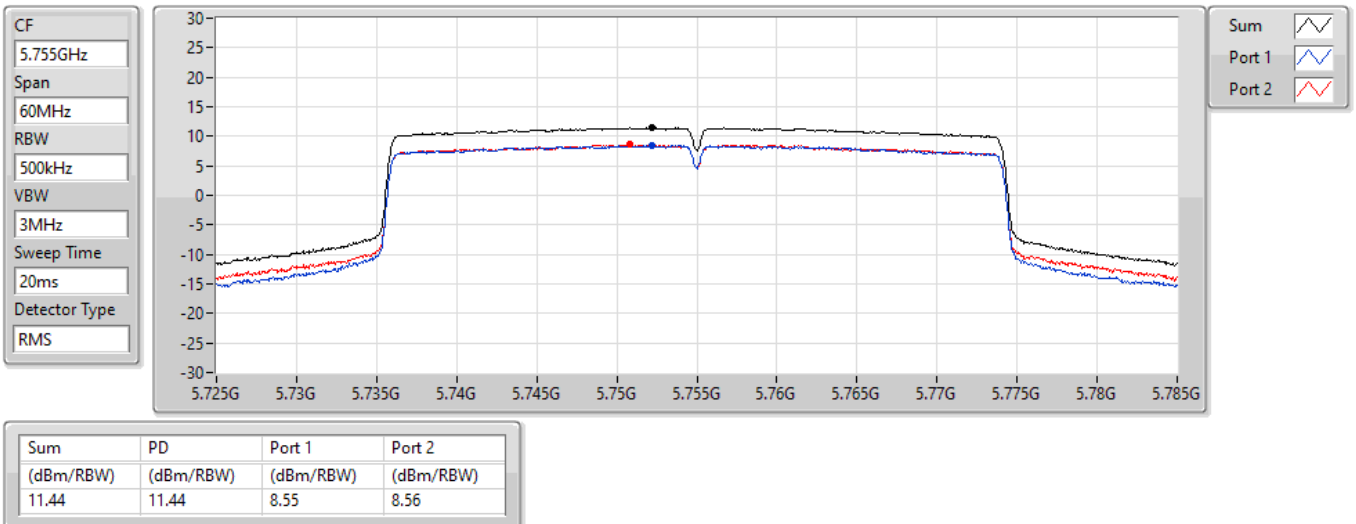


## 802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX

## PSD

5755MHz

23/12/2021

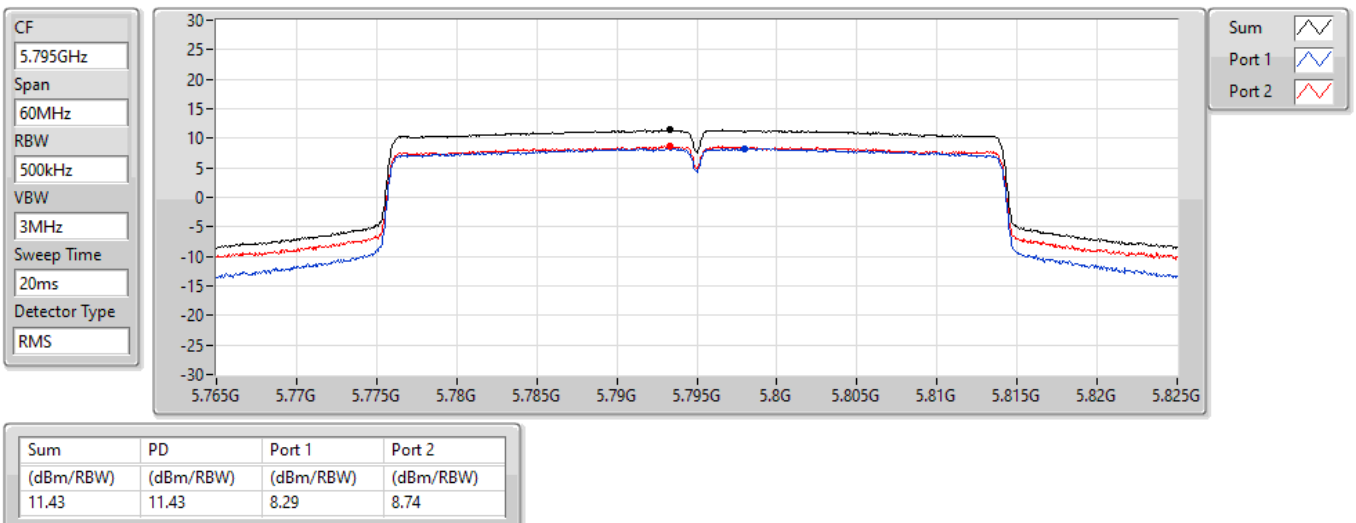


## 802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX

## PSD

5795MHz

23/12/2021

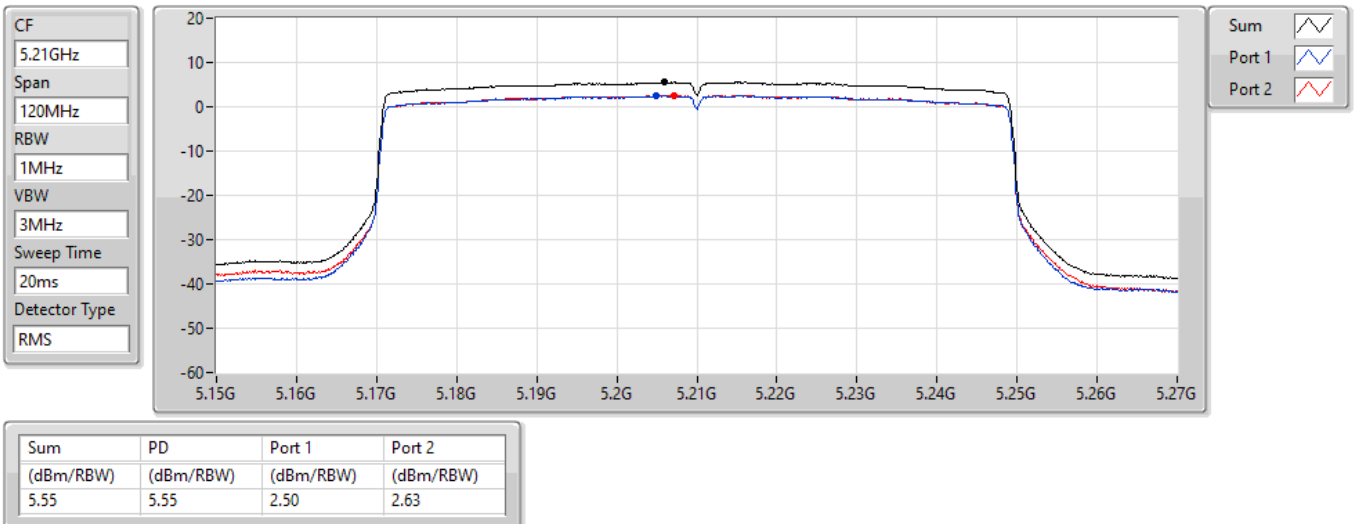


## 802.11ax HEW80-BF\_Nss1,(MCS0)\_2TX

## PSD

5210MHz

23/12/2021

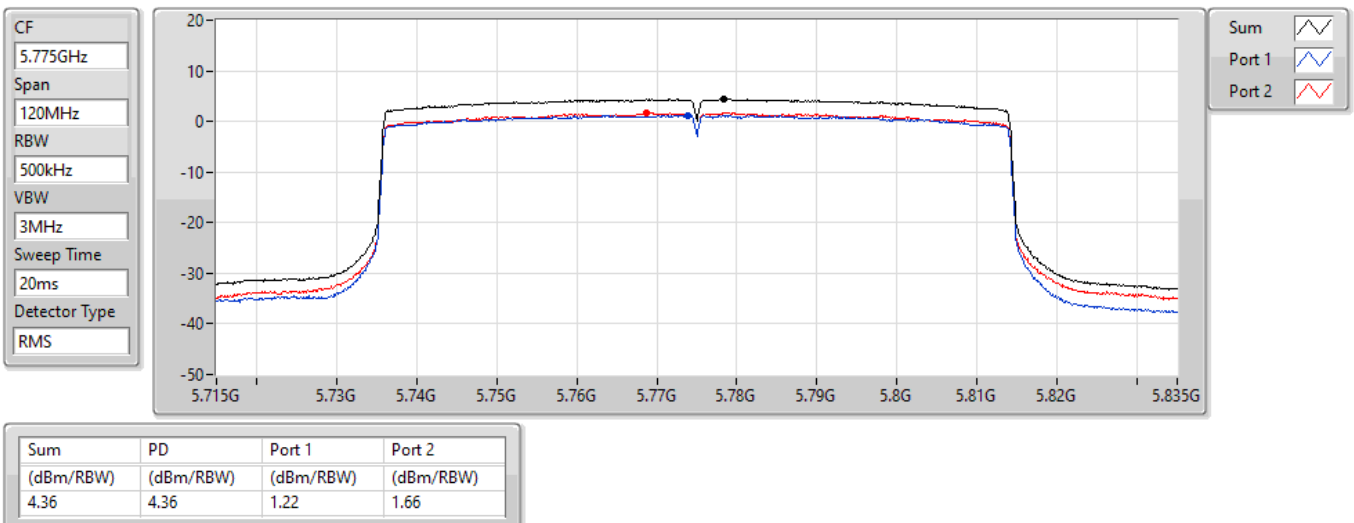


## 802.11ax HEW80-BF\_Nss1,(MCS0)\_2TX

## PSD

5775MHz

23/12/2021





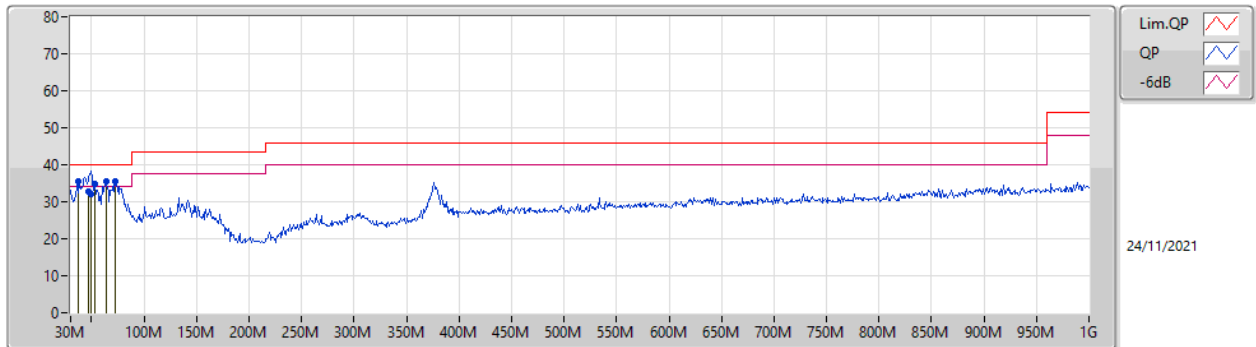
## ***Radiated Emissions below 1GHz***

## ***Appendix E.1***

### **Summary**

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	PK	63.95M	35.57	40.00	-4.43	Vertical

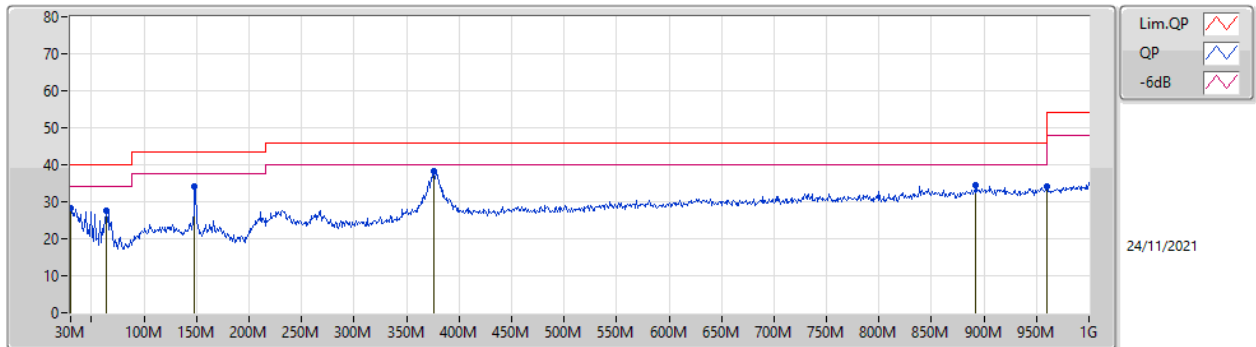
### Mode 1



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	35.36	40.00	-4.64	-10.49	3	Vertical	253	1.25	-	45.85	20.01	1.60	32.10
QP	47.46M	32.77	40.00	-7.23	-15.91	3	Vertical	18	1.00	-	48.68	14.56	1.60	32.07
QP	49.4M	32.00	40.00	-8.00	-16.55	3	Vertical	11	1.00	-	48.55	13.93	1.60	32.08
PK	53.28M	34.79	40.00	-5.21	-17.61	3	Vertical	180	1.25	-	52.40	12.91	1.60	32.12
PK	63.95M	35.57	40.00	-4.43	-18.01	3	Vertical	0	2.00	"Worst"	53.58	12.49	1.70	32.20
PK	72.68M	35.46	40.00	-4.54	-18.17	3	Vertical	252	2.00	-	53.63	12.22	1.75	32.14



### 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	30M	28.40	40.00	-11.60	-7.09	3	Horizontal	130	1.25	-	35.49	23.55	1.50	32.14
PK	63.95M	27.60	40.00	-12.40	-18.01	3	Horizontal	0	1.25	-	45.61	12.49	1.70	32.20
PK	148.34M	34.26	43.50	-9.24	-13.64	3	Horizontal	180	2.00	-	47.90	16.55	2.00	32.19
PK	376.29M	38.43	46.00	-7.57	-9.03	3	Horizontal	10	1.25	"Worst"	47.46	20.80	2.71	32.54
PK	892.33M	34.37	46.00	-11.63	-1.74	3	Horizontal	120	1.50	-	36.11	27.20	3.85	32.79
PK	960M	34.17	54.00	-19.83	-0.96	3	Horizontal	89	1.25	-	35.13	27.06	3.90	31.92

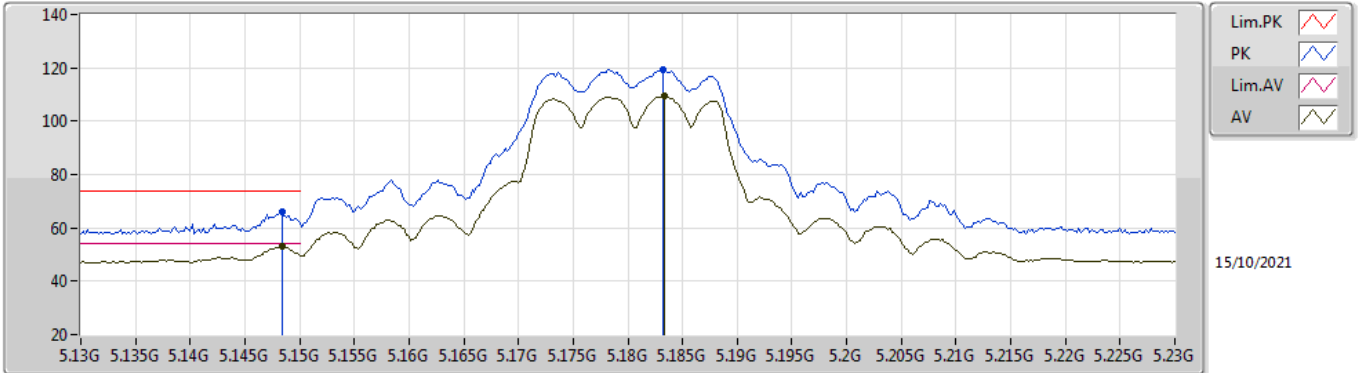


**Summary**

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.15-5.25GHz	-	-	-	-	-	-	-	-	-	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	Pass	AV	5.1496G	53.49	54.00	-0.51	3	Vertical	86	2.13	-

## 802.11a\_Nss1,(6Mbps)\_2TX

### 5180MHz\_TnomVnom

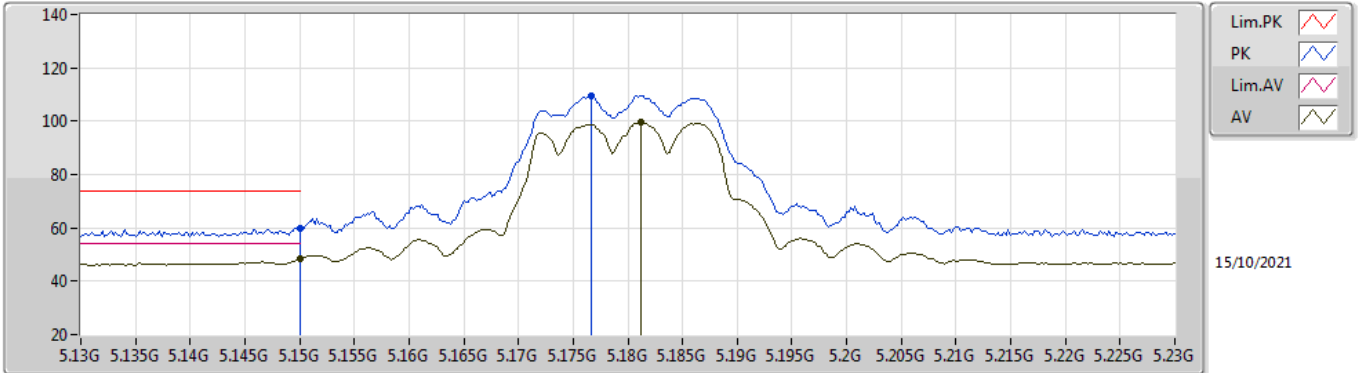


EUT\_Z\_2TX  
Setting 21.5  
03-D-C-5-10

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	5.1484G	65.86	74.00	-8.14	59.89	3	Vertical	174	1.12	-	34.09	7.22	35.34	
AV	5.1484G	52.99	54.00	-1.01	47.02	3	Vertical	174	1.12	-	34.09	7.22	35.34	
PK	5.1832G	119.24	Inf	-Inf	113.28	3	Vertical	174	1.12	-	34.03	7.27	35.34	
AV	5.1834G	109.59	Inf	-Inf	103.62	3	Vertical	174	1.12	-	34.03	7.28	35.34	

## 802.11a\_Nss1,(6Mbps)\_2TX

### 5180MHz\_TnomVnom

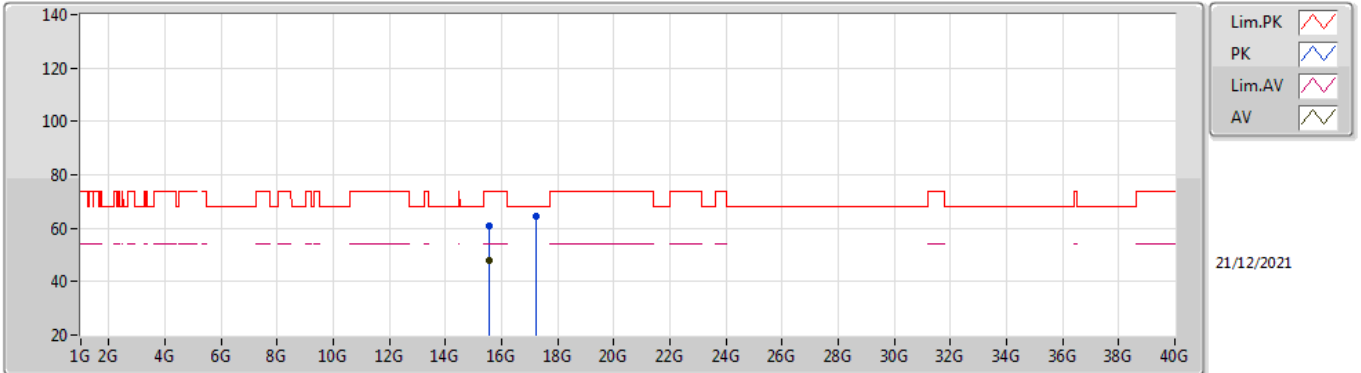


EUT\_Z\_2TX  
Setting 21.5  
03-D-C-5-10

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	5.15G	59.71	74.00	-14.29	53.73	3	Horizontal	266	2.20	-	34.10	7.22	35.34
AV	5.15G	48.34	54.00	-5.66	42.36	3	Horizontal	266	2.20	-	34.10	7.22	35.34
PK	5.1766G	109.41	Inf	-Inf	103.44	3	Horizontal	266	2.20	-	34.05	7.26	35.34
AV	5.1812G	99.62	Inf	-Inf	93.65	3	Horizontal	266	2.20	-	34.04	7.27	35.34

## 802.11a\_Nss1,(6Mbps)\_2TX

### 5180MHz\_TnomVnom

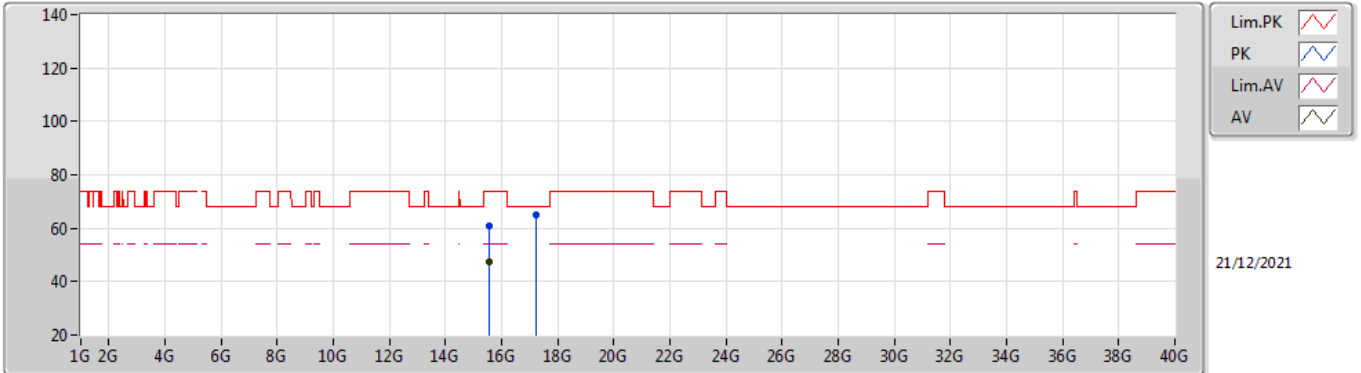


EUT\_Z\_2TX  
Setting 21.5  
03-C-S-8

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	15.53812G	60.63	74.00	-13.37	44.50	3	Vertical	329	1.14	-	38.36	13.17	35.40
AV	15.53788G	47.68	54.00	-6.32	31.55	3	Vertical	329	1.14	-	38.36	13.17	35.40
PK	17.23452G	64.40	68.20	-3.80	44.22	3	Vertical	19	1.17	-	40.80	14.26	34.88

## 802.11a\_Nss1,(6Mbps)\_2TX

### 5180MHz\_TnomVnom

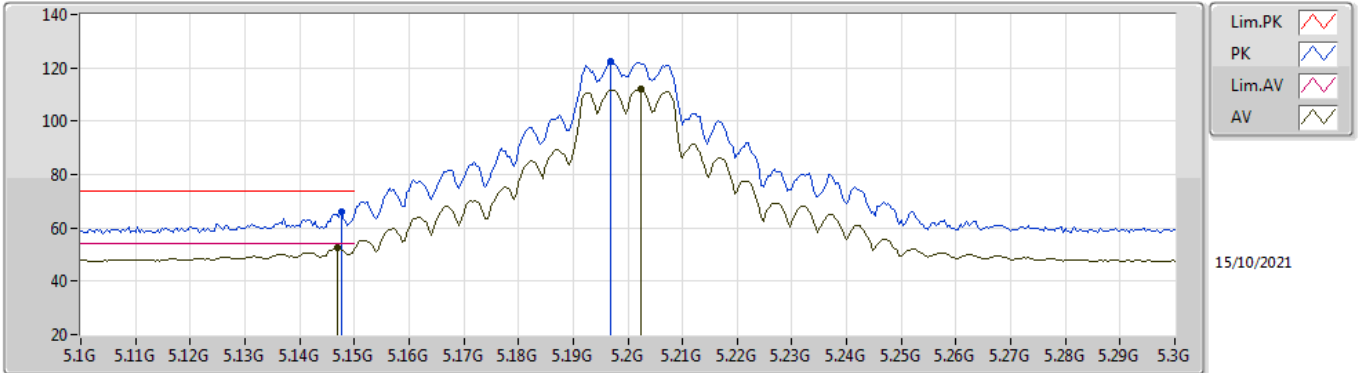


EUT\_Z\_2TX  
Setting 21.5  
03-C-S-8

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	15.54004G	60.73	74.00	-13.27	44.62	3	Horizontal	130	2.96	-	38.34	13.17	35.40
AV	15.53548G	47.55	54.00	-6.45	31.40	3	Horizontal	130	2.96	-	38.38	13.17	35.40
PK	17.23746G	64.85	68.20	-3.35	44.65	3	Horizontal	349	1.02	-	40.81	14.27	34.88

## 802.11a\_Nss1,(6Mbps)\_2TX

### 5200MHz\_TnomVnom

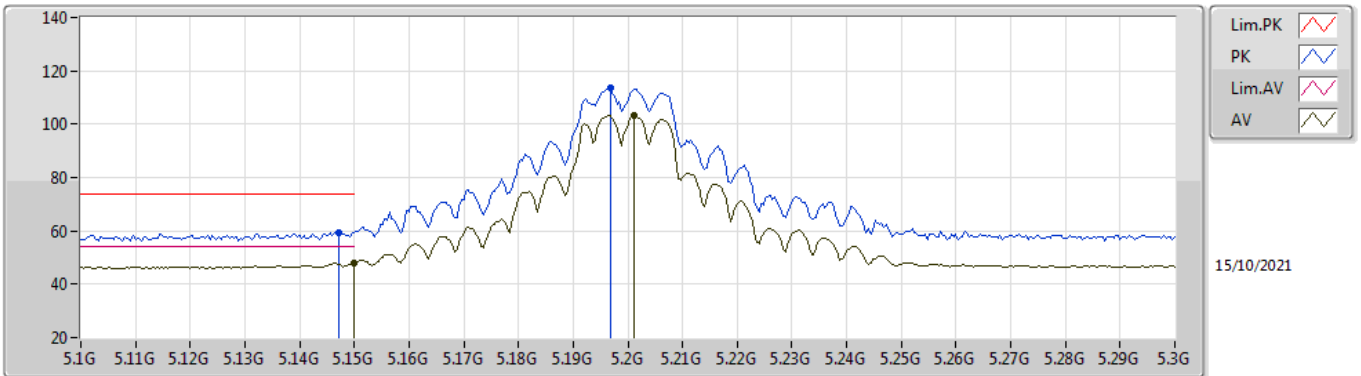


EUT\_Z\_2TX  
Setting 25  
03-D-C-5-10

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	5.1476G	65.81	74.00	-8.19	59.84	3	Vertical	196	2.28	-	34.09	7.22	35.34	
AV	5.1468G	52.39	54.00	-1.61	46.42	3	Vertical	196	2.28	-	34.09	7.22	35.34	
PK	5.1968G	122.65	Inf	-Inf	116.68	3	Vertical	196	2.28	-	34.01	7.30	35.34	
AV	5.2024G	111.83	Inf	-Inf	105.86	3	Vertical	196	2.28	-	34.01	7.30	35.34	

## 802.11a\_Nss1,(6Mbps)\_2TX

### 5200MHz\_TnomVnom



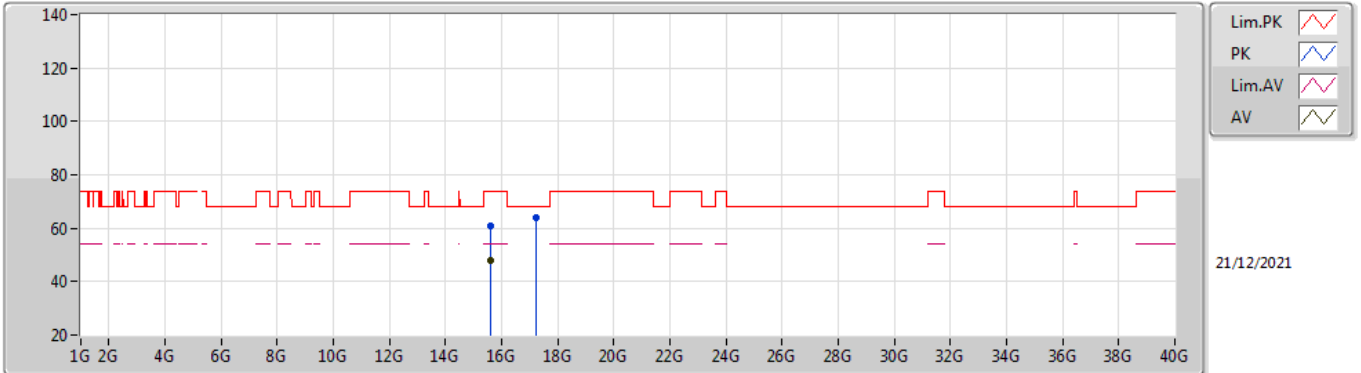
EUT\_Z\_2TX  
Setting 25  
03-D-C-5-10

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	5.1472G	59.32	74.00	-14.68	53.35	3	Horizontal	266	2.20	-	34.09	7.22	35.34	
AV	5.15G	48.15	54.00	-5.85	42.17	3	Horizontal	266	2.20	-	34.10	7.22	35.34	
PK	5.1968G	113.67	Inf	-Inf	107.70	3	Horizontal	266	2.20	-	34.01	7.30	35.34	
AV	5.2012G	103.37	Inf	-Inf	97.41	3	Horizontal	266	2.20	-	34.00	7.30	35.34	



## 802.11a\_Nss1,(6Mbps)\_2TX

### 5200MHz\_TnomVnom

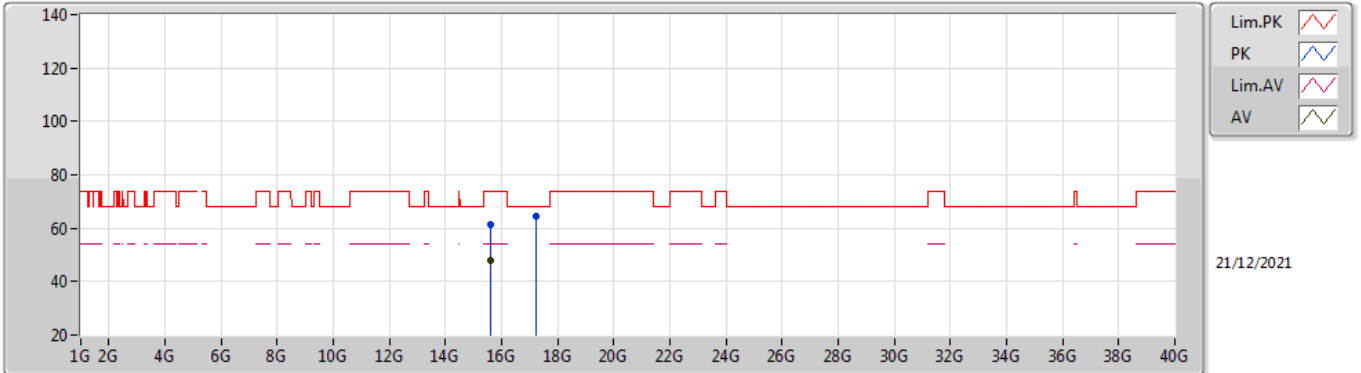


EUT\_Z\_2TX  
Setting 25  
03-C-S-8

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	15.5986G	61.04	74.00	-12.96	45.48	3	Vertical	254	1.47	-	37.81	13.20	35.45
AV	15.60156G	48.00	54.00	-6.00	32.46	3	Vertical	254	1.47	-	37.80	13.20	35.46
PK	17.223G	63.89	68.20	-4.31	43.74	3	Vertical	192	1.03	-	40.77	14.26	34.88

## 802.11a\_Nss1,(6Mbps)\_2TX

### 5200MHz\_TnomVnom

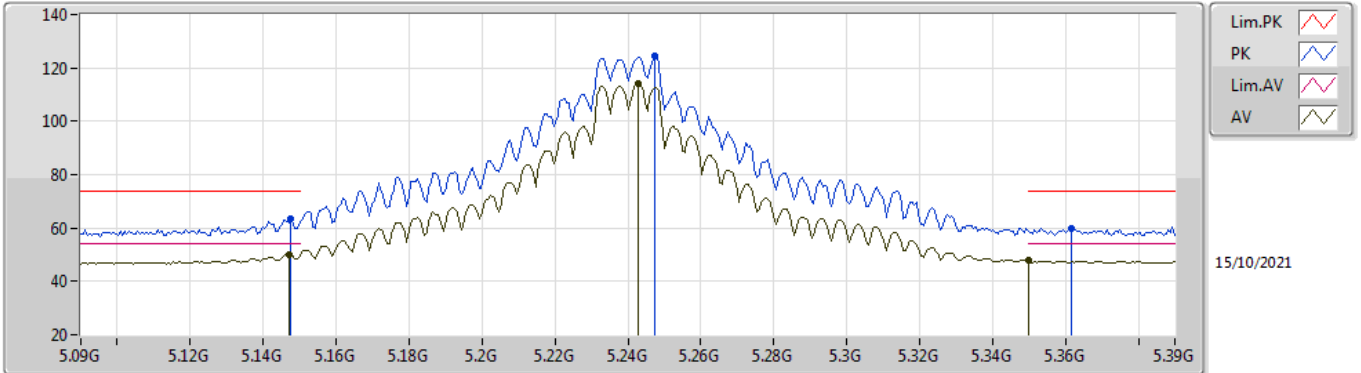


EUT\_Z\_2TX  
Setting 25  
03-C-S-8

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	15.604G	61.37	74.00	-12.63	45.82	3	Horizontal	348	2.72	-	37.81	13.20	35.46
AV	15.59688G	47.91	54.00	-6.09	32.33	3	Horizontal	348	2.72	-	37.83	13.20	35.45
PK	17.22072G	64.58	68.20	-3.62	44.45	3	Horizontal	161	2.45	-	40.76	14.25	34.88

## 802.11a\_Nss1,(6Mbps)\_2TX

### 5240MHz\_TnomVnom

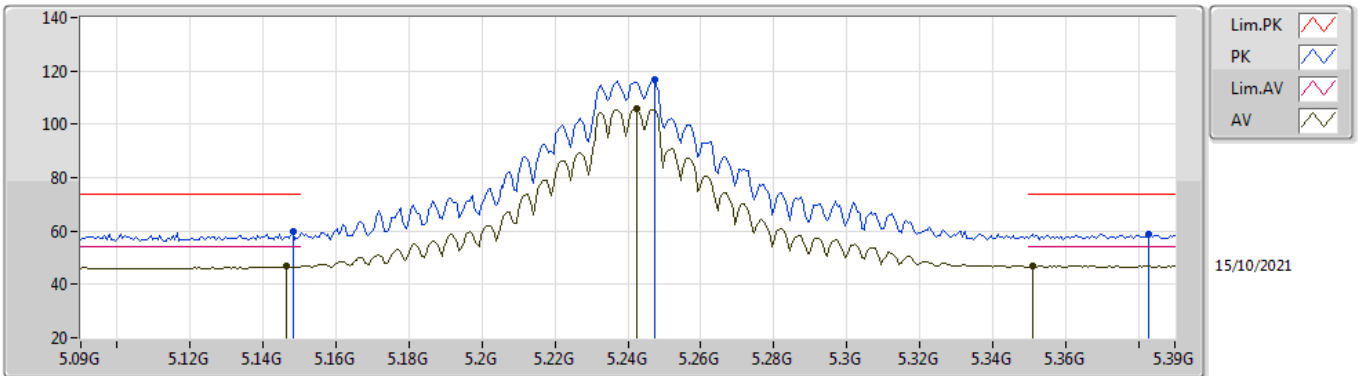


EUT\_Z\_2TX  
Setting 27  
03-D-C-5-10

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	5.1476G	63.25	74.00	-10.75	57.28	3	Vertical	88	2.21	-	34.09	7.22	35.34
AV	5.147G	50.16	54.00	-3.84	44.19	3	Vertical	88	2.21	-	34.09	7.22	35.34
PK	5.2472G	124.47	Inf	-Inf	118.34	3	Vertical	88	2.21	-	34.19	7.28	35.34
AV	5.243G	114.00	Inf	-Inf	107.89	3	Vertical	88	2.21	-	34.17	7.28	35.34
PK	5.3618G	59.92	74.00	-14.08	53.46	3	Vertical	88	2.21	-	34.58	7.22	35.34
AV	5.35G	47.70	54.00	-6.30	41.22	3	Vertical	88	2.21	-	34.60	7.22	35.34

## 802.11a\_Nss1,(6Mbps)\_2TX

### 5240MHz\_TnomVnom

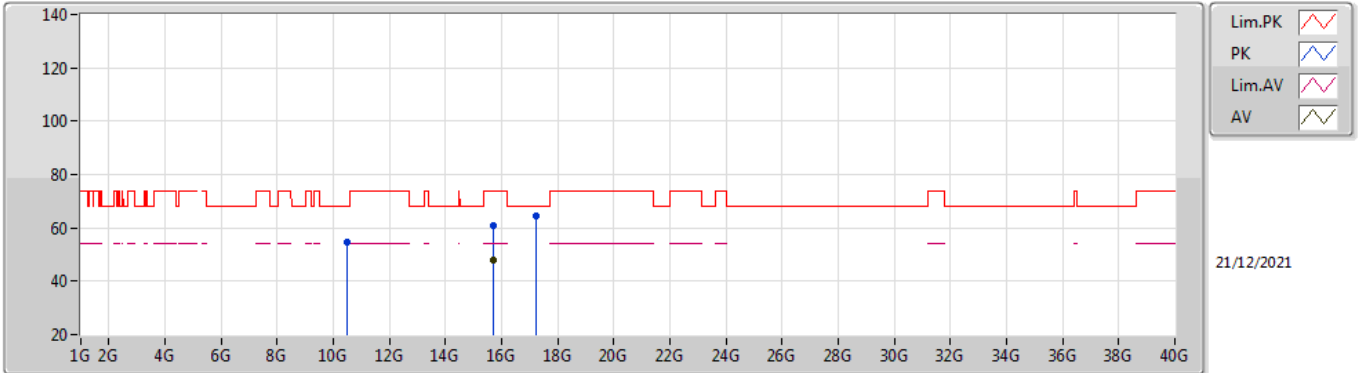


EUT\_Z\_2TX  
Setting 27  
03-D-C-5-10

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	5.1482G	59.67	74.00	-14.33	53.70	3	Horizontal	263	2.28	-	34.09	7.22	35.34
AV	5.1464G	46.76	54.00	-7.24	40.79	3	Horizontal	263	2.28	-	34.09	7.22	35.34
PK	5.2472G	116.97	Inf	-Inf	110.84	3	Horizontal	263	2.28	-	34.19	7.28	35.34
AV	5.2424G	105.89	Inf	-Inf	99.78	3	Horizontal	263	2.28	-	34.17	7.28	35.34
PK	5.3828G	58.85	74.00	-15.15	52.46	3	Horizontal	263	2.28	-	34.53	7.21	35.35
AV	5.351G	46.99	54.00	-7.01	40.51	3	Horizontal	263	2.28	-	34.60	7.22	35.34

## 802.11a\_Nss1,(6Mbps)\_2TX

### 5240MHz\_TnomVnom

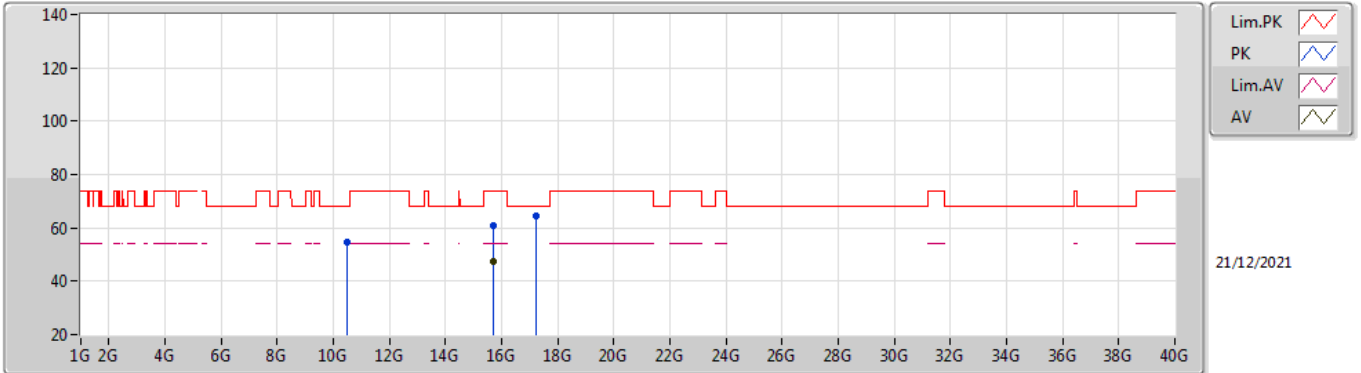


EUT\_Z\_2TX  
Setting 27  
03-D-C-5

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	10.502G	54.81	68.20	-13.39	41.53	3	Vertical	228	1.80	-	38.40	10.35	35.47	
PK	15.7271G	61.01	74.00	-12.99	45.34	3	Vertical	57	1.02	-	37.97	13.26	35.56	
AV	15.7119G	47.87	54.00	-6.13	32.17	3	Vertical	57	1.02	-	37.99	13.26	35.55	
PK	17.22444G	64.68	68.20	-3.52	44.53	3	Vertical	281	1.85	-	40.77	14.26	34.88	

## 802.11a\_Nss1,(6Mbps)\_2TX

### 5240MHz\_TnomVnom

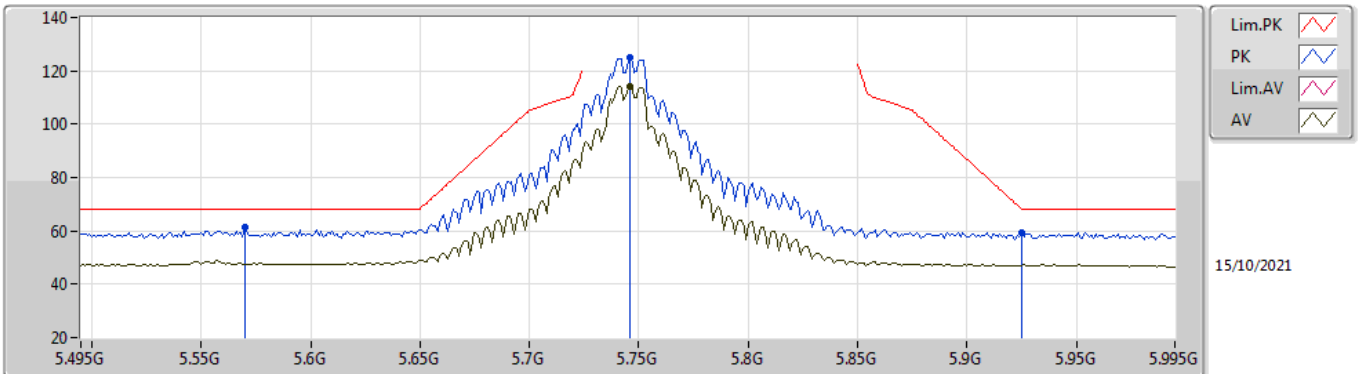


EUT\_Z\_2TX  
Setting 27  
03-D-C-5

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	10.5049G	54.66	68.20	-13.54	41.38	3	Horizontal	72	1.99	-	38.40	10.35	35.47	
PK	15.7029G	60.86	74.00	-13.14	45.15	3	Horizontal	0	1.00	-	38.00	13.25	35.54	
AV	15.7167G	47.41	54.00	-6.59	31.72	3	Horizontal	0	1.00	-	37.98	13.26	35.55	
PK	17.2251G	64.45	68.20	-3.75	44.29	3	Horizontal	24	1.89	-	40.78	14.26	34.88	

## 802.11a\_Nss1,(6Mbps)\_2TX

### 5745MHz\_TnomVnom

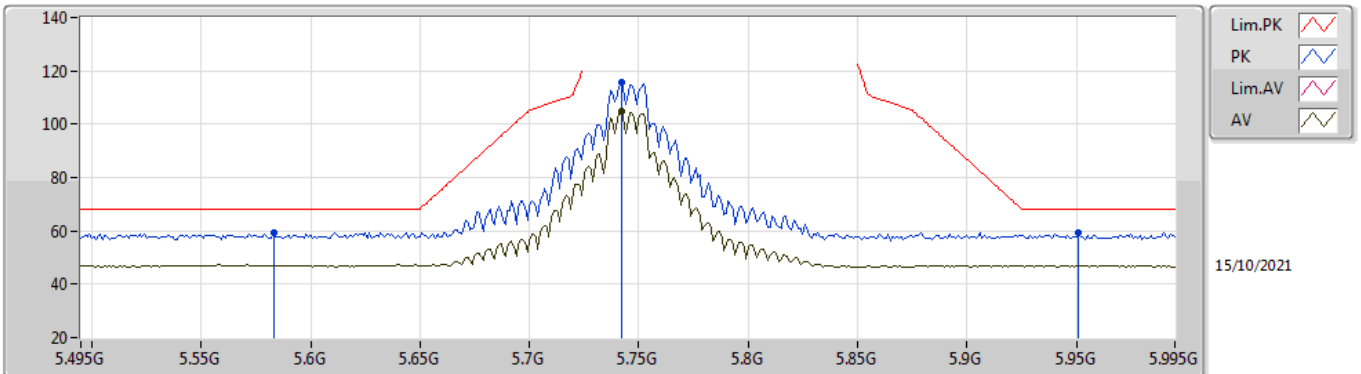


EUT\_Z\_2TX  
Setting 27  
03-D-C-5-10

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	5.57G	61.25	68.20	-6.95	54.58	3	Vertical	58	1.00	-	34.52	7.54	35.39	
PK	5.746G	124.87	Inf	-Inf	118.49	3	Vertical	58	1.00	-	34.40	7.45	35.47	
AV	5.746G	114.16	Inf	-Inf	107.78	3	Vertical	58	1.00	-	34.40	7.45	35.47	
PK	5.925G	59.37	68.20	-8.83	52.75	3	Vertical	58	1.00	-	34.65	7.53	35.56	

## 802.11a\_Nss1,(6Mbps)\_2TX

### 5745MHz\_TnomVnom



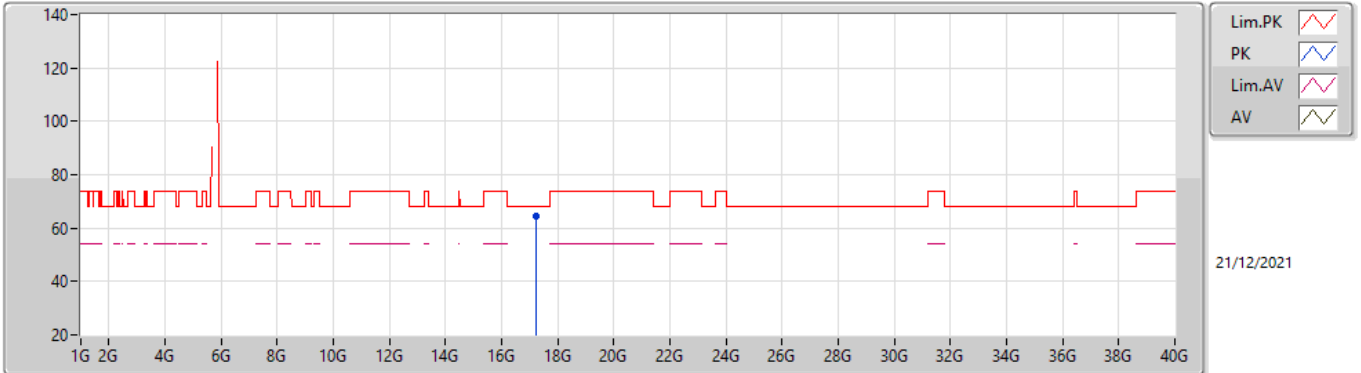
EUT\_Z\_2TX  
Setting 27  
03-D-C-5-10

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	5.583G	59.35	68.20	-8.85	52.70	3	Horizontal	288	2.02	-	34.47	7.57	35.39	
PK	5.742G	115.52	Inf	-Inf	109.13	3	Horizontal	288	2.02	-	34.40	7.46	35.47	
AV	5.742G	104.72	Inf	-Inf	98.33	3	Horizontal	288	2.02	-	34.40	7.46	35.47	
PK	5.951G	59.18	68.20	-9.02	52.61	3	Horizontal	288	2.02	-	34.60	7.55	35.58	



## 802.11a\_Nss1,(6Mbps)\_2TX

### 5745MHz\_TnomVnom

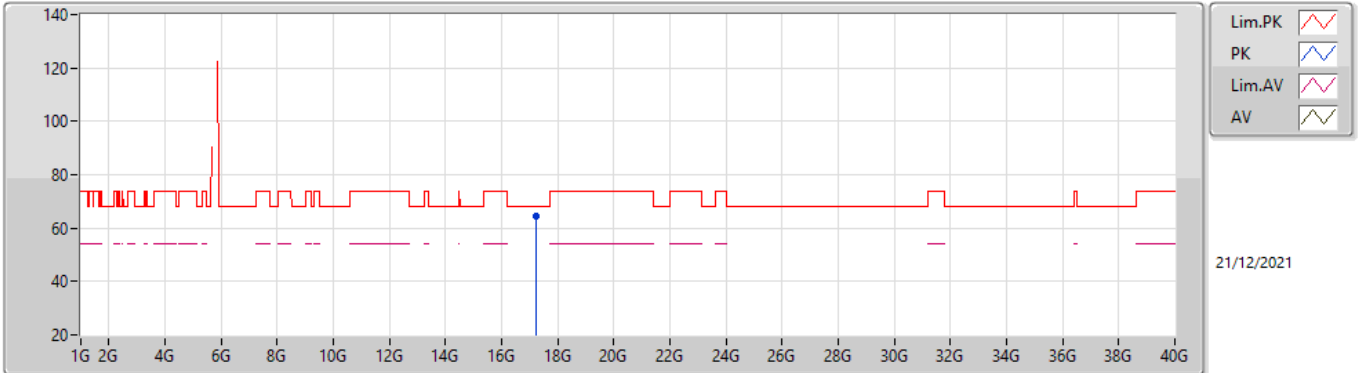


EUT\_Z\_2TX  
Setting 27  
03-C-S-8

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA	
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)	
PK	17.22792G	64.32	68.20	-3.88	44.16	3	Vertical	233	1.80	-	40.78	14.26	34.88	

## 802.11a\_Nss1,(6Mbps)\_2TX

### 5745MHz\_TnomVnom

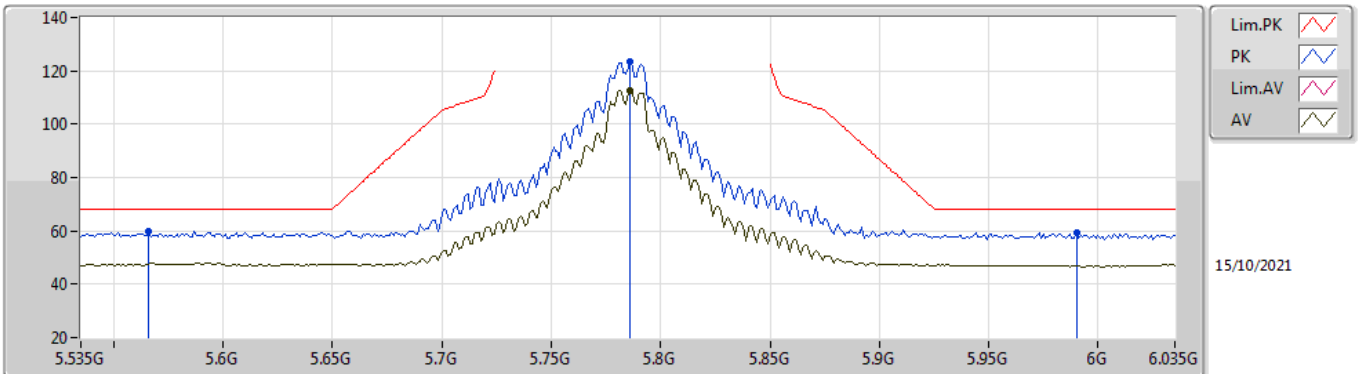


EUT\_Z\_2TX  
Setting 27  
03-C-S-8

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA	
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)	
PK	17.23352G	64.69	68.20	-3.51	44.51	3	Horizontal	79	1.78	-	40.80	14.26	34.88	

## 802.11a\_Nss1,(6Mbps)\_2TX

### 5785MHz\_TnomVnom

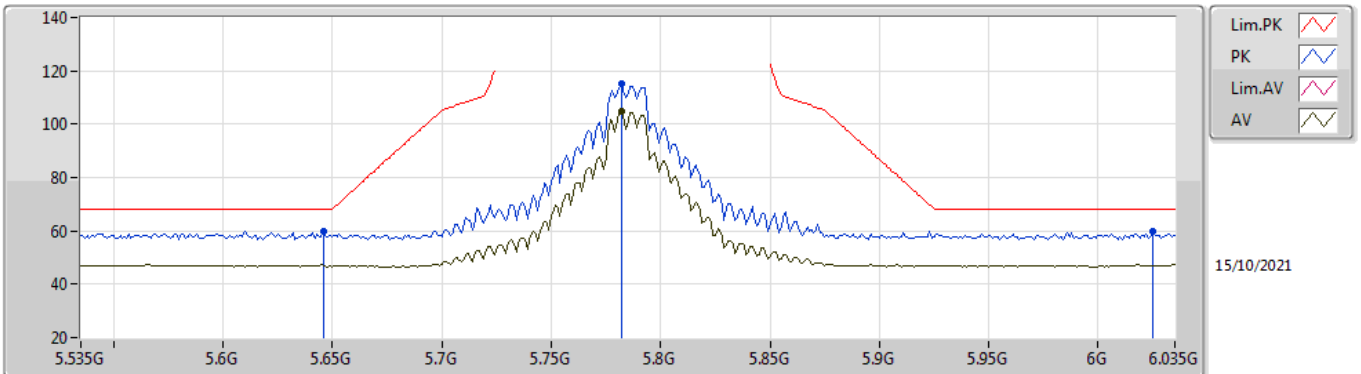


EUT\_Z\_2TX  
Setting 27  
03-D-C-5-10

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	5.566G	59.83	68.20	-8.37	53.14	3	Vertical	246	2.25	-	34.54	7.53	35.38	
PK	5.786G	123.30	Inf	-Inf	116.98	3	Vertical	246	2.25	-	34.40	7.41	35.49	
AV	5.786G	112.83	Inf	-Inf	106.51	3	Vertical	246	2.25	-	34.40	7.41	35.49	
PK	5.99G	59.43	68.20	-8.77	52.75	3	Vertical	246	2.25	-	34.68	7.59	35.59	

## 802.11a\_Nss1,(6Mbps)\_2TX

### 5785MHz\_TnomVnom

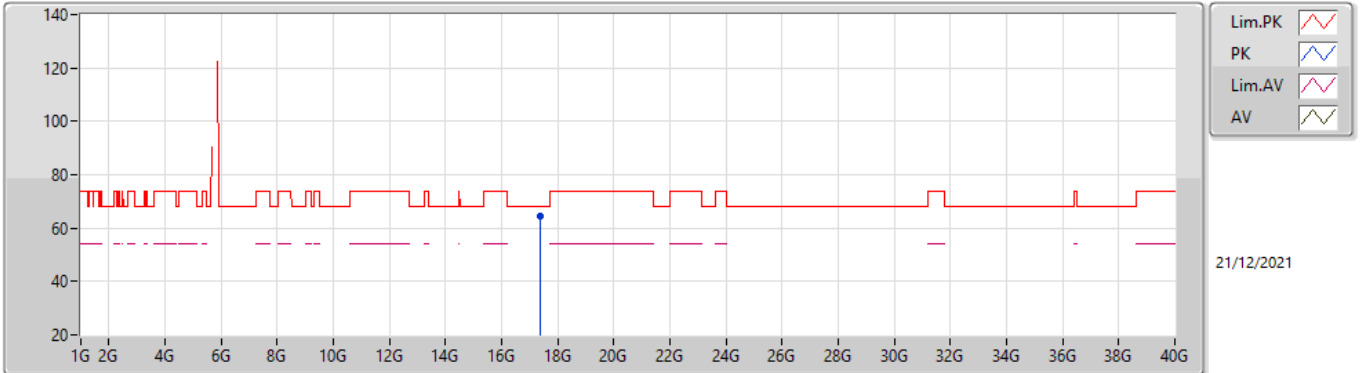


EUT\_Z\_2TX  
Setting 27  
03-D-C-5-10

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	5.646G	59.82	68.20	-8.38	53.29	3	Horizontal	285	2.07	-	34.40	7.55	35.42	
PK	5.782G	115.27	Inf	-Inf	108.94	3	Horizontal	285	2.07	-	34.40	7.42	35.49	
AV	5.782G	104.74	Inf	-Inf	98.41	3	Horizontal	285	2.07	-	34.40	7.42	35.49	
PK	6.025G	59.57	68.20	-8.63	52.77	3	Horizontal	285	2.07	-	34.75	7.64	35.59	

## 802.11a\_Nss1,(6Mbps)\_2TX

### 5785MHz\_TnomVnom

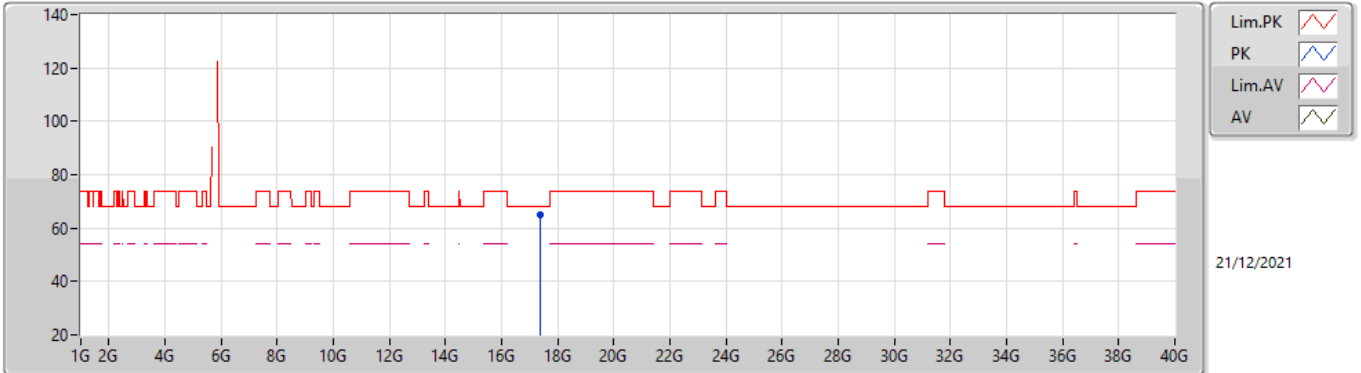


EUT\_Z\_2TX  
Setting 27  
03-C-S-8

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	17.35594G	64.24	68.20	-3.96	43.34	3	Vertical	184	1.80	-	41.45	14.35	34.90	

## 802.11a\_Nss1,(6Mbps)\_2TX

### 5785MHz\_TnomVnom

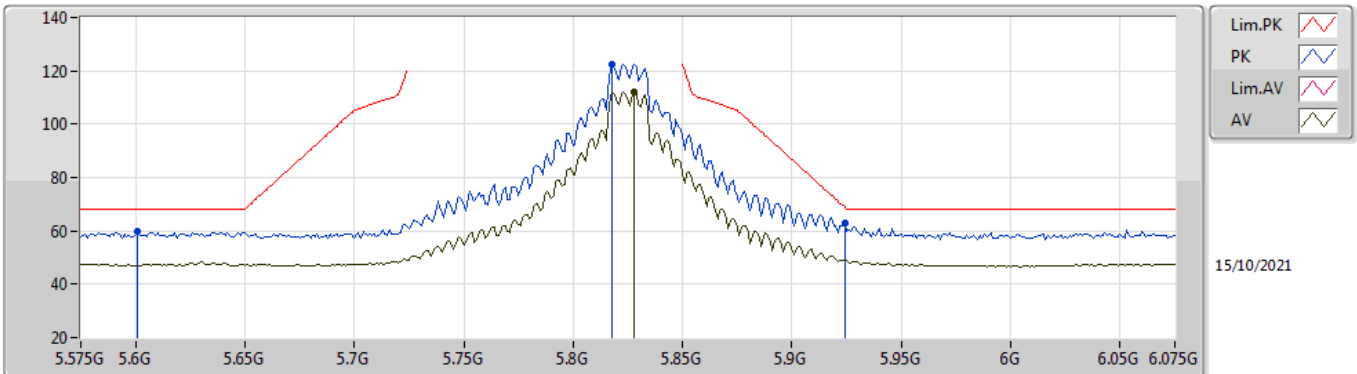


EUT\_Z\_2TX  
Setting 27  
03-C-S-8

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	17.35256G	64.79	68.20	-3.41	43.92	3	Horizontal	193	2.08	-	41.42	14.35	34.90	

## 802.11a\_Nss1,(6Mbps)\_2TX

### 5825MHz\_TnomVnom

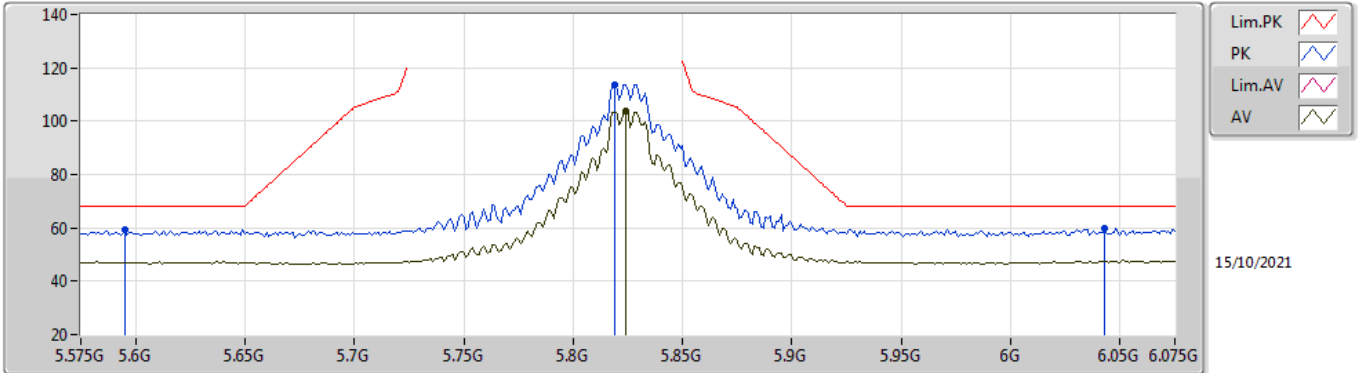


EUT\_Z\_2TX  
Setting 27  
03-D-C-5-10

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	5.601G	59.82	68.20	-8.38	53.22	3	Vertical	249	2.31	-	34.40	7.60	35.40	
PK	5.818G	122.64	Inf	-Inf	116.33	3	Vertical	249	2.31	-	34.40	7.42	35.51	
AV	5.828G	112.26	Inf	-Inf	105.94	3	Vertical	249	2.31	-	34.40	7.43	35.51	
PK	5.924G	63.00	68.94	-5.94	56.39	3	Vertical	249	2.31	-	34.65	7.52	35.56	

## 802.11a\_Nss1,(6Mbps)\_2TX

### 5825MHz\_TnomVnom



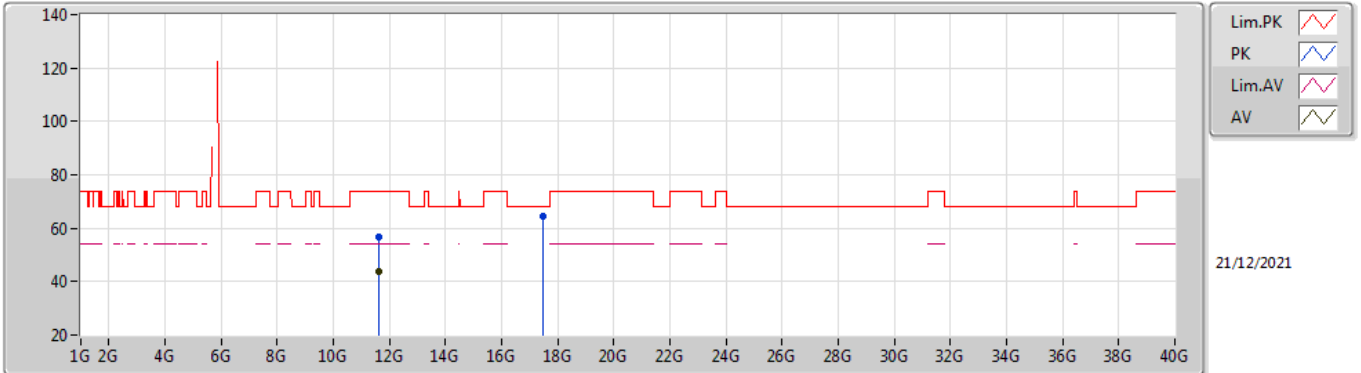
EUT\_Z\_2TX  
Setting 27  
03-D-C-5-10

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	5.595G	59.17	68.20	-9.03	52.56	3	Horizontal	287	1.75	-	34.42	7.59	35.40	
PK	5.819G	113.73	Inf	-Inf	107.42	3	Horizontal	287	1.75	-	34.40	7.42	35.51	
AV	5.824G	103.69	Inf	-Inf	97.38	3	Horizontal	287	1.75	-	34.40	7.42	35.51	
PK	6.043G	59.76	68.20	-8.44	52.89	3	Horizontal	287	1.75	-	34.79	7.66	35.58	



## 802.11a\_Nss1,(6Mbps)\_2TX

### 5825MHz\_TnomVnom

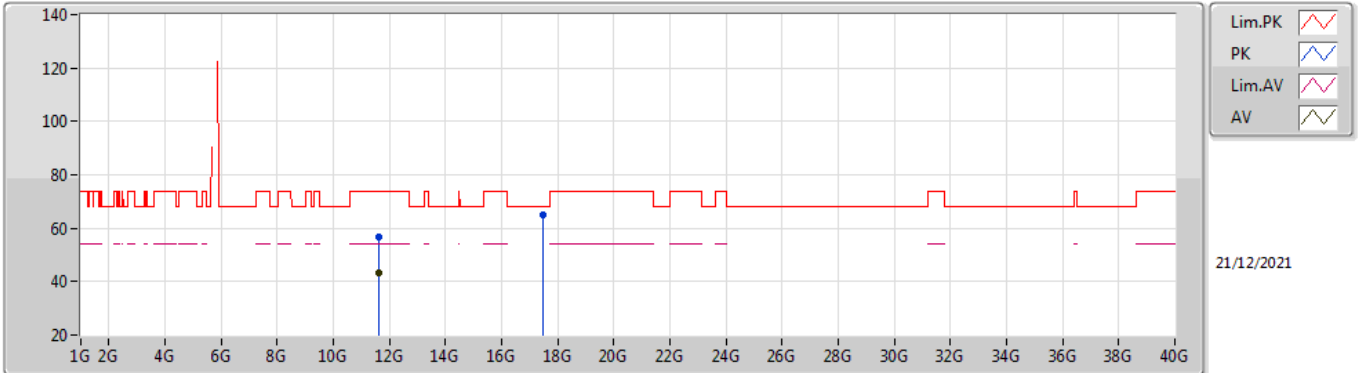


EUT\_Z\_2TX  
Setting 27  
06-F-S-5

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	11.64728G	56.60	74.00	-17.40	41.93	3	Vertical	37	1.06	-	39.36	9.59	34.28
AV	11.64732G	43.69	54.00	-10.31	29.02	3	Vertical	37	1.06	-	39.36	9.59	34.28
PK	17.47696G	64.47	68.20	-3.73	41.95	3	Vertical	1	1.80	-	42.92	14.30	34.70

## 802.11a\_Nss1,(6Mbps)\_2TX

### 5825MHz\_TnomVnom

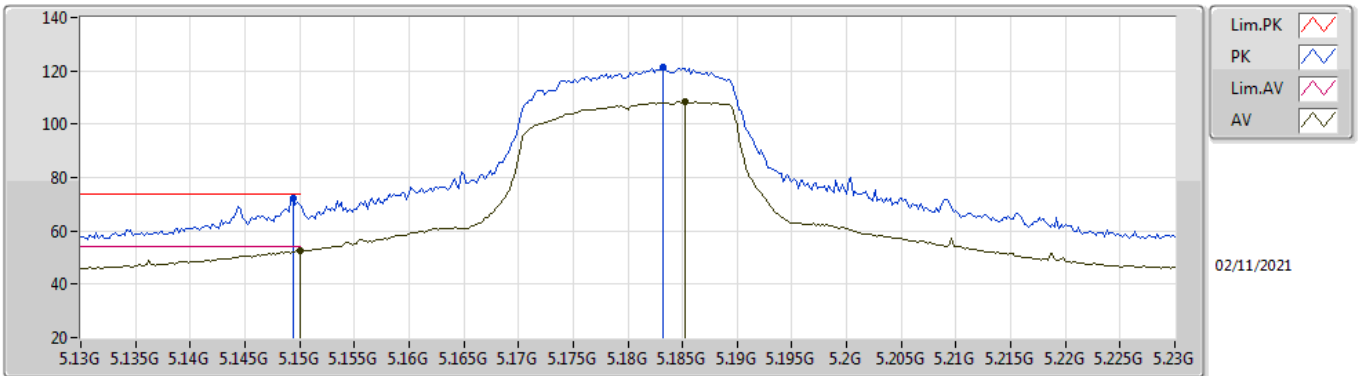


EUT\_Z\_2TX  
Setting 27  
06-F-S-5

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	11.64384G	56.56	74.00	-17.44	41.88	3	Horizontal	224	1.00	-	39.37	9.59	34.28
AV	11.64148G	43.07	54.00	-10.93	28.39	3	Horizontal	224	1.00	-	39.38	9.58	34.28
PK	17.47868G	64.83	68.20	-3.37	42.30	3	Horizontal	33	1.80	-	42.93	14.30	34.70

## 802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

### 5180MHz\_TnomVnom

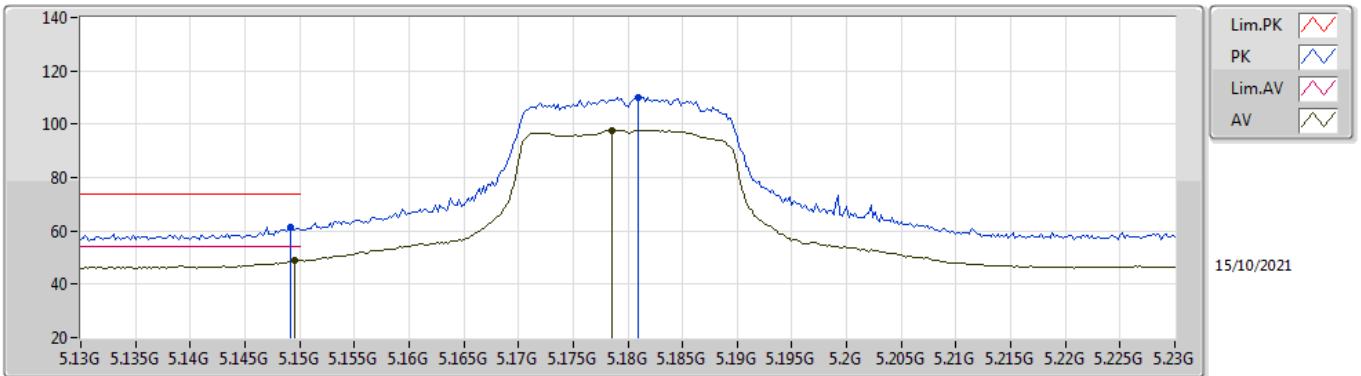


EUT\_Z\_2TX  
Setting 25  
06-F-S-5-10

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	5.1494G	72.46	74.00	-1.54	66.99	3	Vertical	201.7	1.00	-	31.70	5.75	31.98	
AV	5.15G	52.55	54.00	-1.45	47.08	3	Vertical	201.7	1.00	-	31.70	5.75	31.98	
PK	5.1832G	121.40	Inf	-Inf	116.11	3	Vertical	201.7	1.00	-	31.50	5.78	31.99	
AV	5.1852G	108.35	Inf	-Inf	103.06	3	Vertical	201.7	1.00	-	31.49	5.79	31.99	

## 802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

### 5180MHz\_TnomVnom

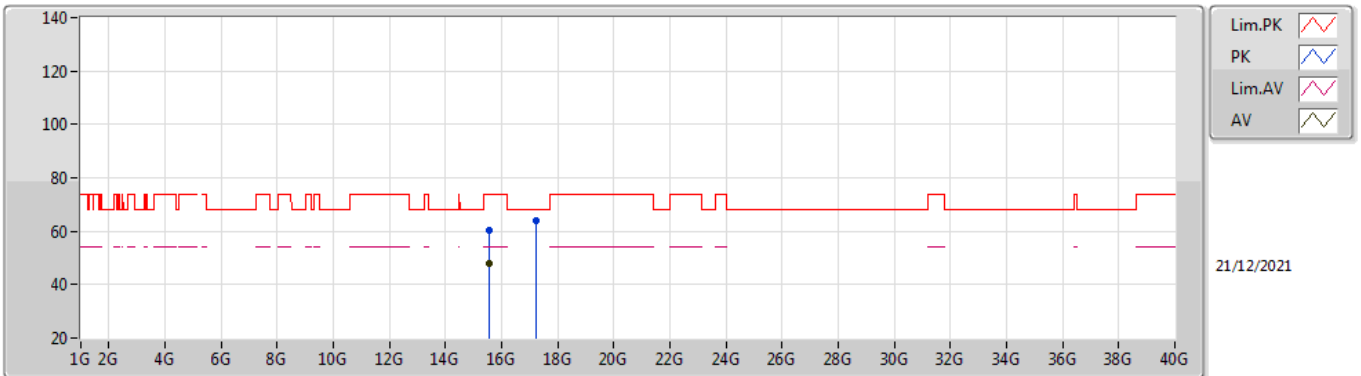


EUT\_Z\_2TX  
Setting 25  
03-D-C-5-10

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	5.1492G	61.61	74.00	-12.39	55.63	3	Horizontal	313	2.17	-	34.10	7.22	35.34	
AV	5.1496G	48.86	54.00	-5.14	42.88	3	Horizontal	313	2.17	-	34.10	7.22	35.34	
PK	5.181G	110.24	Inf	-Inf	104.27	3	Horizontal	313	2.17	-	34.04	7.27	35.34	
AV	5.1786G	97.78	Inf	-Inf	91.81	3	Horizontal	313	2.17	-	34.04	7.27	35.34	

## 802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

### 5180MHz\_TnomVnom

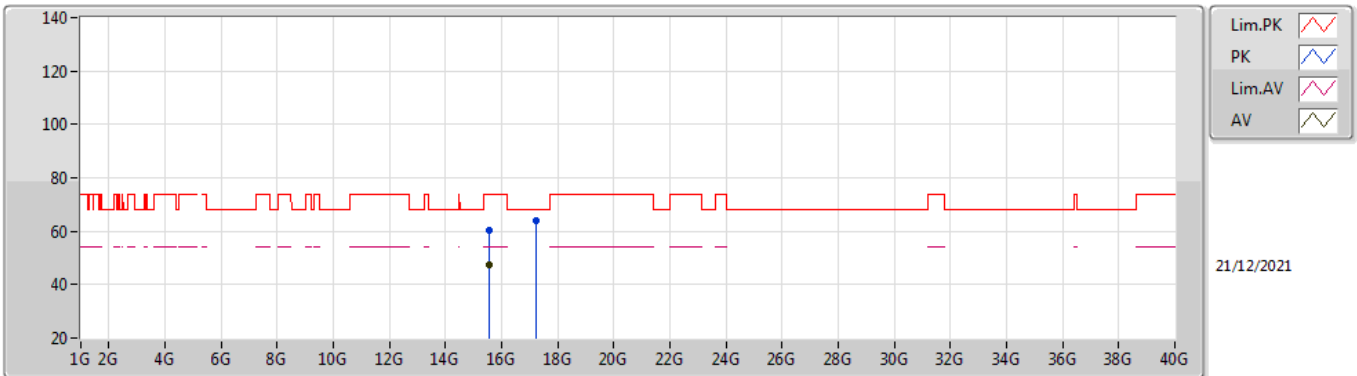


EUT\_Z\_2TX  
Setting 25  
03-C-S-8

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	15.54488G	60.23	74.00	-13.77	44.17	3	Vertical	192	1.41	-	38.30	13.17	35.41
AV	15.53804G	47.75	54.00	-6.25	31.62	3	Vertical	192	1.41	-	38.36	13.17	35.40
PK	17.22594G	63.83	68.20	-4.37	43.67	3	Vertical	340	3.00	-	40.78	14.26	34.88

## 802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

### 5180MHz\_TnomVnom

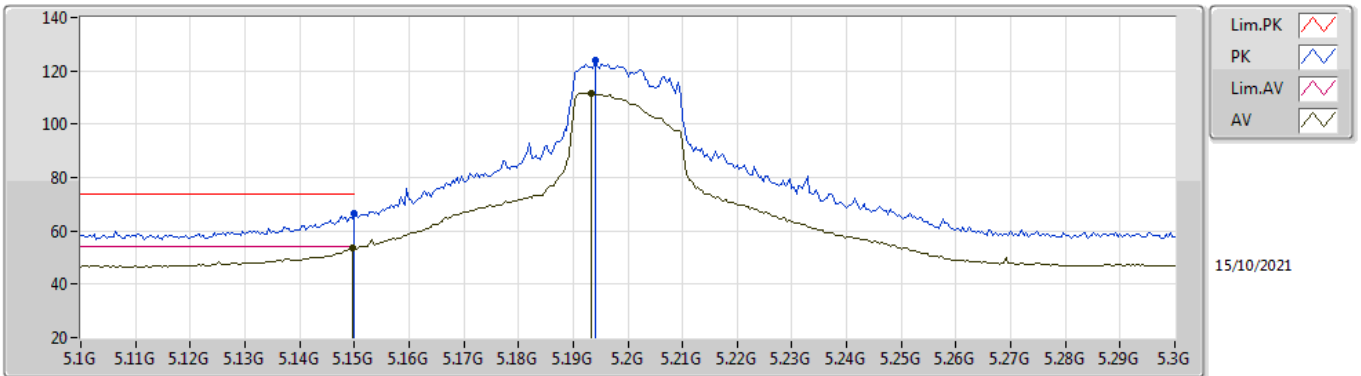


EUT\_Z\_2TX  
Setting 25  
03-C-S-8

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	15.54136G	60.57	74.00	-13.43	44.47	3	Horizontal	39	2.26	-	38.33	13.17	35.40
AV	15.53662G	47.61	54.00	-6.39	31.47	3	Horizontal	39	2.26	-	38.37	13.17	35.40
PK	17.23608G	63.86	68.20	-4.34	43.66	3	Horizontal	323	1.57	-	40.81	14.27	34.88

# 802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

## 5200MHz\_TnomVnom

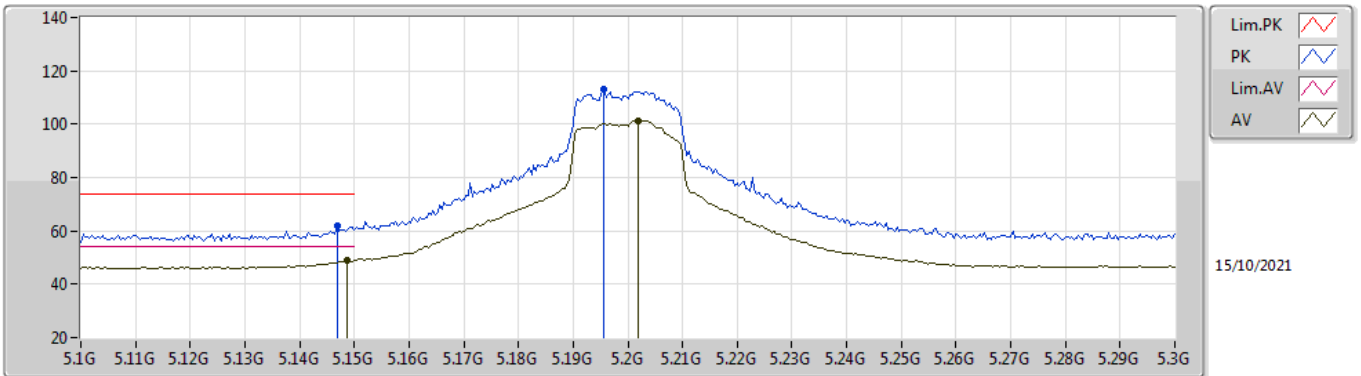


EUT\_Z\_2TX  
Setting 27  
03-D-C-5-10

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	5.15G	66.59	74.00	-7.41	60.61	3	Vertical	86	2.13	-	34.10	7.22	35.34	
AV	5.1496G	53.49	54.00	-0.51	47.51	3	Vertical	86	2.13	-	34.10	7.22	35.34	
PK	5.194G	123.86	Inf	-Inf	117.90	3	Vertical	86	2.13	-	34.01	7.29	35.34	
AV	5.1932G	111.78	Inf	-Inf	105.82	3	Vertical	86	2.13	-	34.01	7.29	35.34	

## 802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

### 5200MHz\_TnomVnom



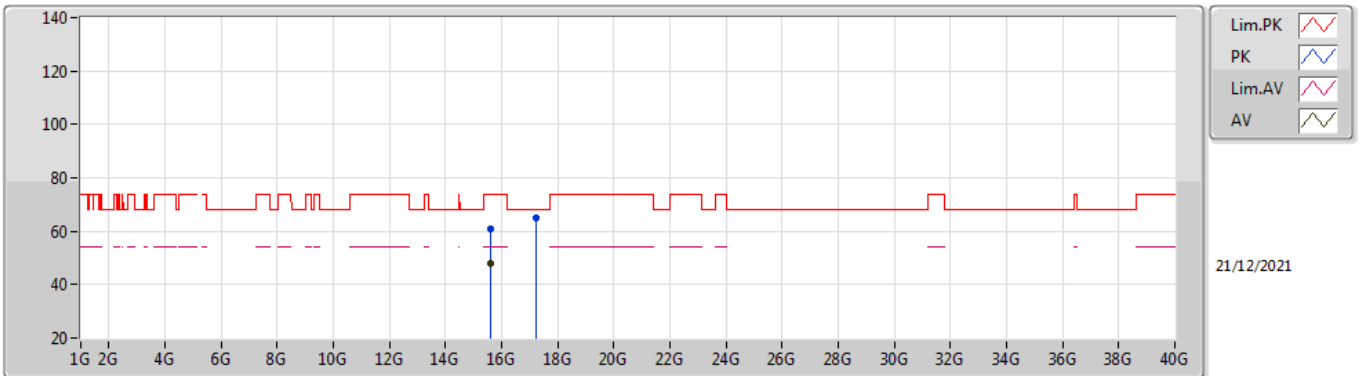
EUT\_Z\_2TX  
Setting 27  
03-D-C-5-10

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	5.1468G	61.72	74.00	-12.28	55.75	3	Horizontal	97	2.44	-	34.09	7.22	35.34	
AV	5.1488G	48.90	54.00	-5.10	42.92	3	Horizontal	97	2.44	-	34.10	7.22	35.34	
PK	5.1956G	112.91	Inf	-Inf	106.95	3	Horizontal	97	2.44	-	34.01	7.29	35.34	
AV	5.202G	101.41	Inf	-Inf	95.44	3	Horizontal	97	2.44	-	34.01	7.30	35.34	



## 802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

### 5200MHz\_TnomVnom

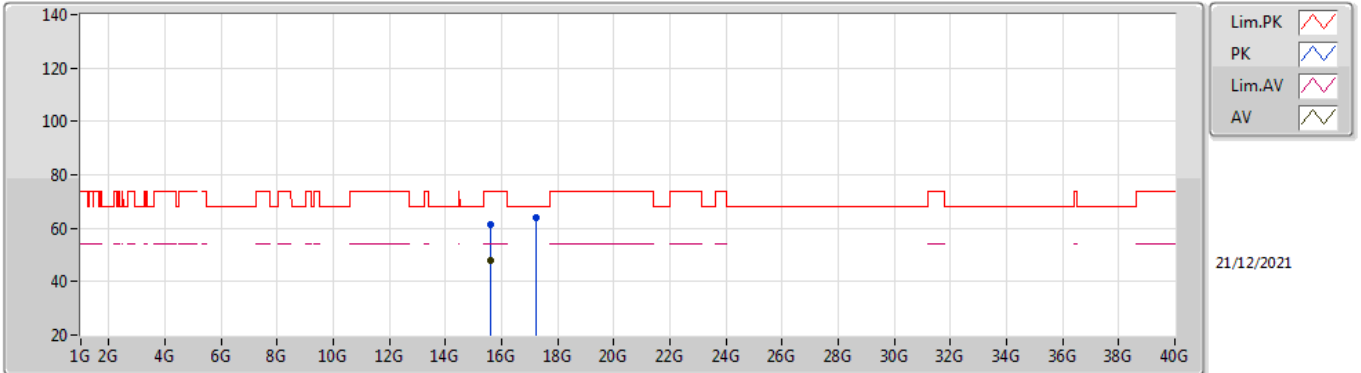


EUT\_Z\_2TX  
Setting 27  
03-C-S-8

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	15.5999G	60.62	74.00	-13.38	45.07	3	Vertical	74	2.35	-	37.80	13.20	35.45
AV	15.60316G	47.89	54.00	-6.11	32.34	3	Vertical	74	2.35	-	37.81	13.20	35.46
PK	17.22276G	64.76	68.20	-3.44	44.61	3	Vertical	213	1.93	-	40.77	14.26	34.88

## 802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

### 5200MHz\_TnomVnom

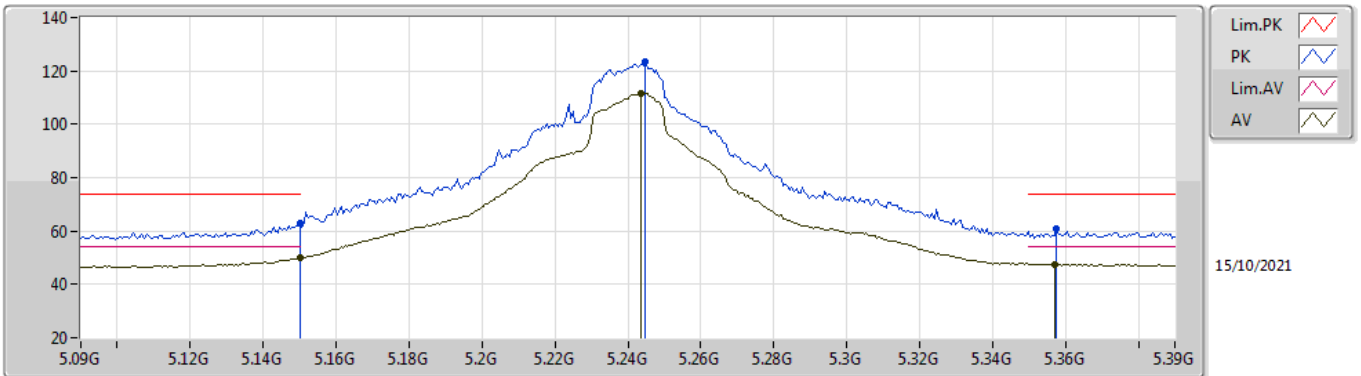


EUT\_Z\_2TX  
Setting 27  
03-C-S-8

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	15.60334G	61.51	74.00	-12.49	45.96	3	Horizontal	69	1.81	-	37.81	13.20	35.46
AV	15.60084G	47.85	54.00	-6.15	32.30	3	Horizontal	69	1.81	-	37.80	13.20	35.45
PK	17.229G	63.93	68.20	-4.27	43.76	3	Horizontal	59	2.13	-	40.79	14.26	34.88

## 802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

### 5240MHz\_TnomVnom

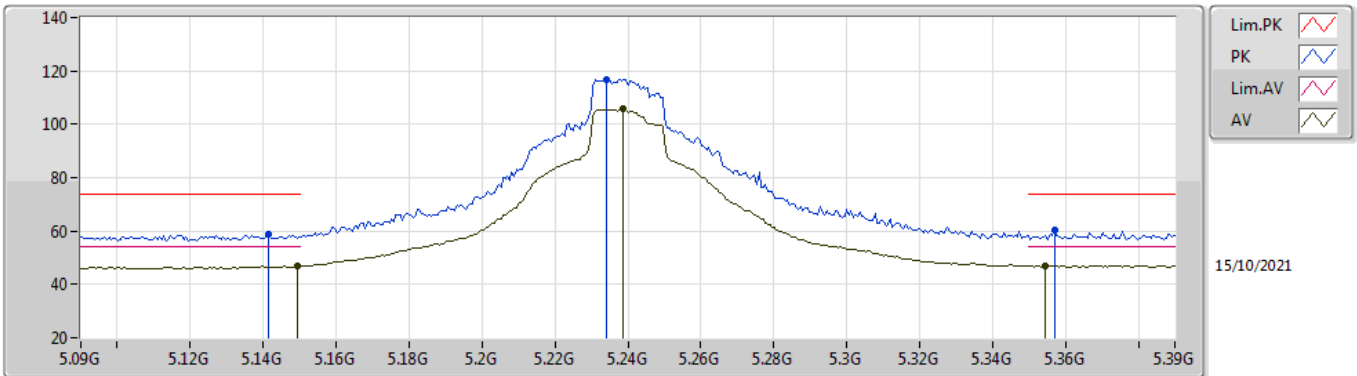


EUT\_Z\_2TX  
Setting 30  
03-D-C-5-10

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	5.15G	62.79	74.00	-11.21	56.81	3	Vertical	84	1.80	-	34.10	7.22	35.34
AV	5.15G	49.88	54.00	-4.12	43.90	3	Vertical	84	1.80	-	34.10	7.22	35.34
PK	5.2448G	123.23	Inf	-Inf	117.11	3	Vertical	84	1.80	-	34.18	7.28	35.34
AV	5.2436G	111.65	Inf	-Inf	105.54	3	Vertical	84	1.80	-	34.17	7.28	35.34
PK	5.3576G	60.90	74.00	-13.10	54.44	3	Vertical	84	1.80	-	34.58	7.22	35.34
AV	5.357G	47.52	54.00	-6.48	41.05	3	Vertical	84	1.80	-	34.59	7.22	35.34

## 802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

### 5240MHz\_TnomVnom

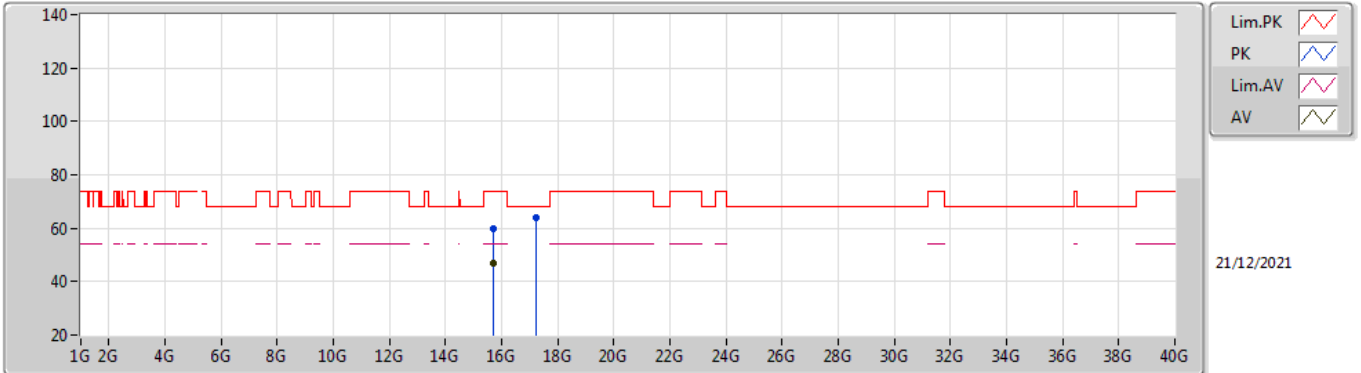


EUT\_Z\_2TX  
Setting 30  
03-D-C-5-10

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	5.1416G	58.90	74.00	-15.10	52.96	3	Horizontal	262	2.30	-	34.07	7.21	35.34
AV	5.1494G	46.82	54.00	-7.18	40.84	3	Horizontal	262	2.30	-	34.10	7.22	35.34
PK	5.234G	116.87	Inf	-Inf	110.79	3	Horizontal	262	2.30	-	34.14	7.28	35.34
AV	5.2388G	105.63	Inf	-Inf	99.53	3	Horizontal	262	2.30	-	34.16	7.28	35.34
PK	5.357G	60.20	74.00	-13.80	53.73	3	Horizontal	262	2.30	-	34.59	7.22	35.34
AV	5.3546G	47.02	54.00	-6.98	40.55	3	Horizontal	262	2.30	-	34.59	7.22	35.34

## 802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

### 5240MHz\_TnomVnom

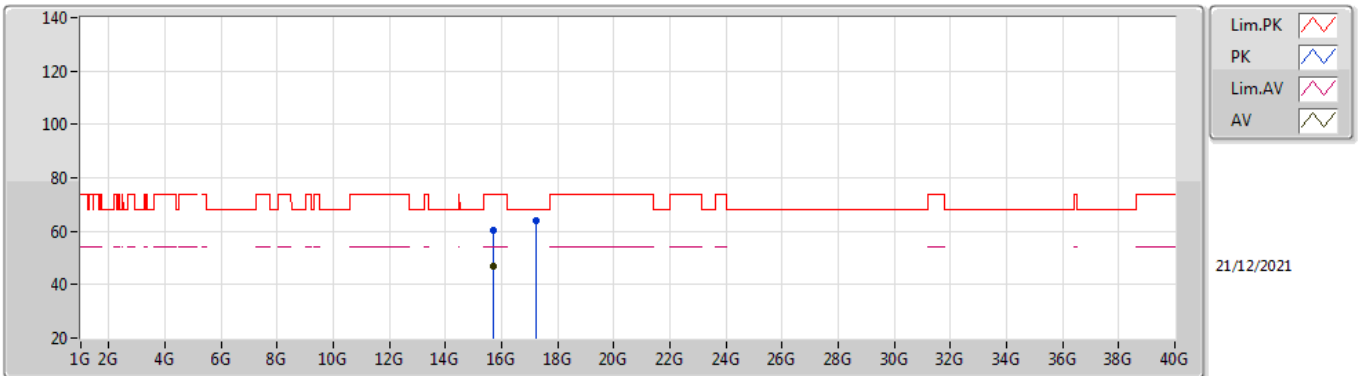


EUT\_Z\_2TX  
Setting 30  
03-C-S-8

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	15.71872G	59.93	74.00	-14.07	44.24	3	Vertical	271	1.19	-	37.98	13.26	35.55
AV	15.72032G	46.94	54.00	-7.06	31.26	3	Vertical	271	1.19	-	37.98	13.26	35.56
PK	17.23398G	64.07	68.20	-4.13	43.89	3	Vertical	306	2.49	-	40.80	14.26	34.88

## 802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

### 5240MHz\_TnomVnom

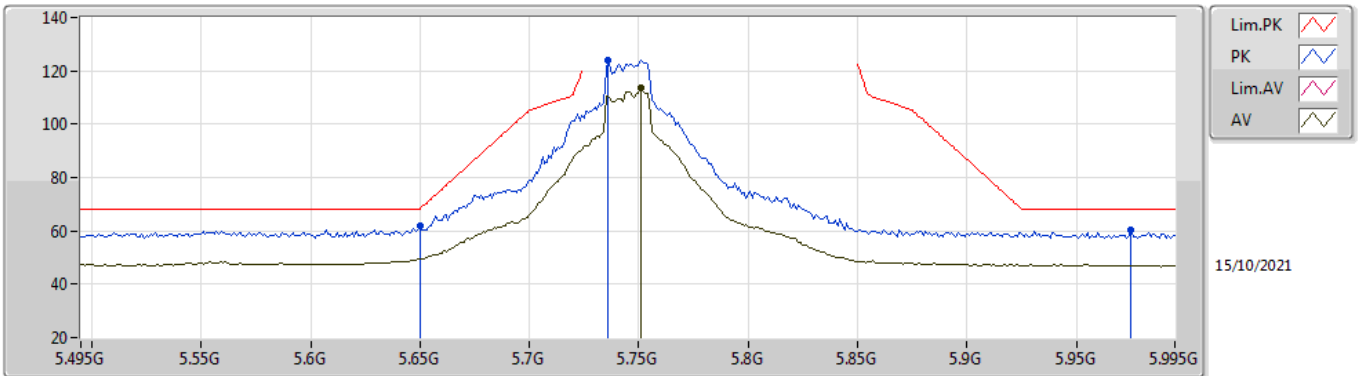


EUT\_Z\_2TX  
Setting 30  
03-C-S-8

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	15.71872G	60.19	74.00	-13.81	44.50	3	Horizontal	326	1.99	-	37.98	13.26	35.55
AV	15.72482G	47.14	54.00	-6.86	31.46	3	Horizontal	326	1.99	-	37.98	13.26	35.56
PK	17.23416G	63.88	68.20	-4.32	43.70	3	Horizontal	258	2.12	-	40.80	14.26	34.88

# 802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

## 5745MHz\_TnomVnom

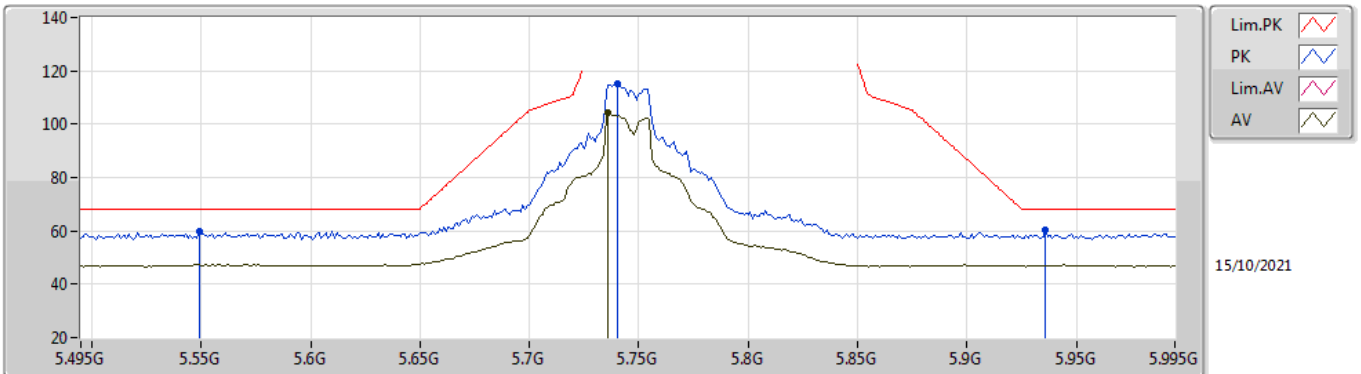


EUT\_Z\_2TX  
Setting 30  
03-D-C-5-10

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	5.65G	61.68	68.20	-6.52	55.16	3	Vertical	359	1.04	-	34.40	7.55	35.43	
PK	5.736G	124.07	Inf	-Inf	117.68	3	Vertical	359	1.04	-	34.40	7.46	35.47	
AV	5.751G	113.52	Inf	-Inf	107.15	3	Vertical	359	1.04	-	34.40	7.45	35.48	
PK	5.975G	60.37	68.20	-7.83	53.74	3	Vertical	359	1.04	-	34.65	7.57	35.59	

## 802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

### 5745MHz\_TnomVnom



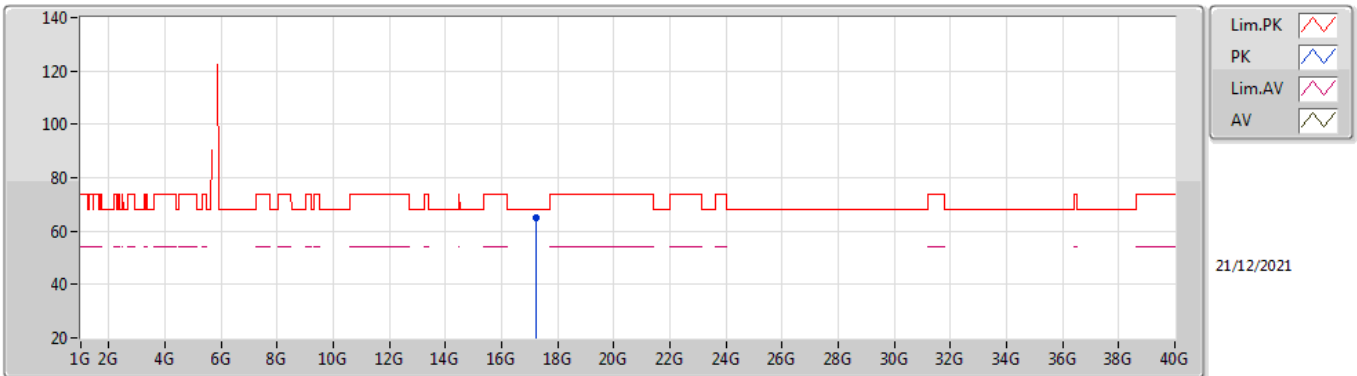
EUT\_Z\_2TX  
Setting 30  
03-D-C-5-10

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	5.549G	59.98	68.20	-8.22	53.25	3	Horizontal	282	1.56	-	34.60	7.50	35.37	
PK	5.74G	115.42	Inf	-Inf	109.03	3	Horizontal	282	1.56	-	34.40	7.46	35.47	
AV	5.736G	104.40	Inf	-Inf	98.01	3	Horizontal	282	1.56	-	34.40	7.46	35.47	
PK	5.936G	60.43	68.20	-7.77	53.83	3	Horizontal	282	1.56	-	34.63	7.54	35.57	



## 802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

### 5745MHz\_TnomVnom

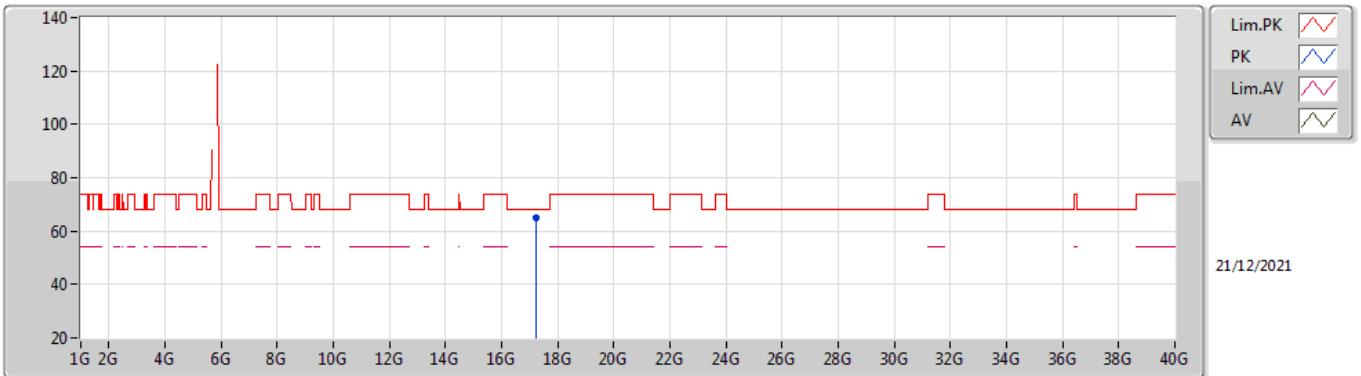


EUT\_Z\_2TX  
Setting 30  
03-C-S-8

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA	
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)	
PK	17.23646G	64.75	68.20	-3.45	44.55	3	Vertical	0	1.95	-	40.81	14.27	34.88	

## 802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

### 5745MHz\_TnomVnom

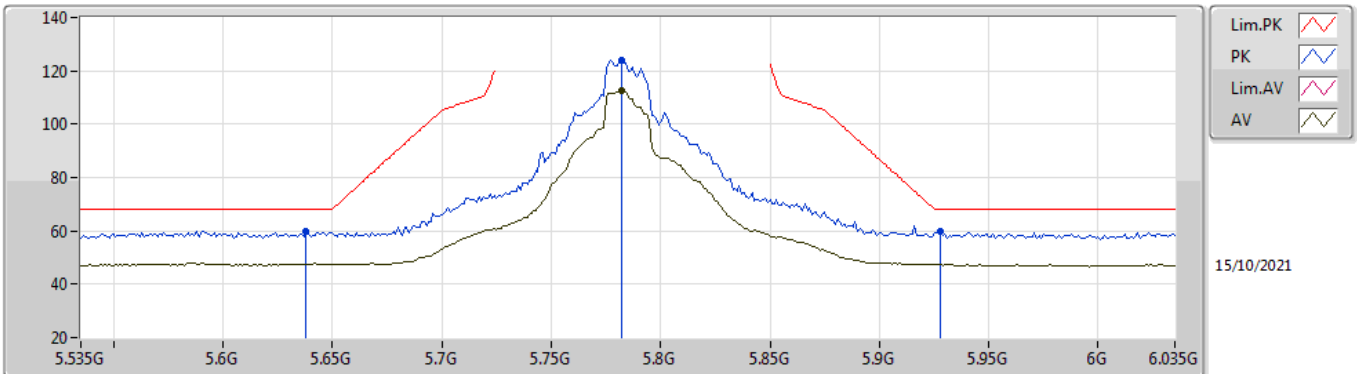


EUT\_Z\_2TX  
Setting 30  
03-C-S-8

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA	
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)	
PK	17.2363G	64.78	68.20	-3.42	44.58	3	Horizontal	187	2.86	-	40.81	14.27	34.88	

## 802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

### 5785MHz\_TnomVnom

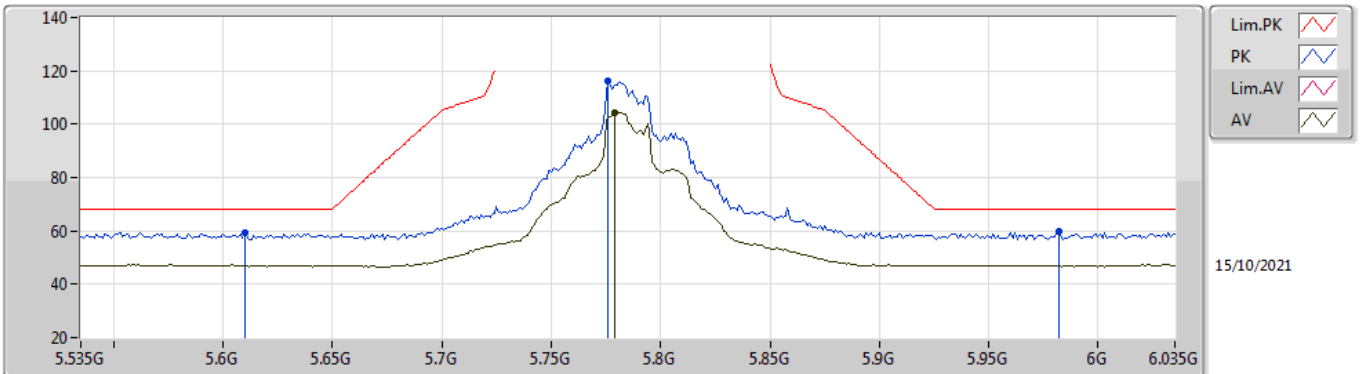


EUT\_Z\_2TX  
Setting 30  
03-D-C-5-10

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	5.638G	59.89	68.20	-8.31	53.35	3	Vertical	360	2.25	-	34.40	7.56	35.42	
PK	5.782G	124.14	Inf	-Inf	117.81	3	Vertical	360	2.25	-	34.40	7.42	35.49	
AV	5.782G	112.71	Inf	-Inf	106.38	3	Vertical	360	2.25	-	34.40	7.42	35.49	
PK	5.928G	59.63	68.20	-8.57	53.02	3	Vertical	360	2.25	-	34.64	7.53	35.56	

## 802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

### 5785MHz\_TnomVnom

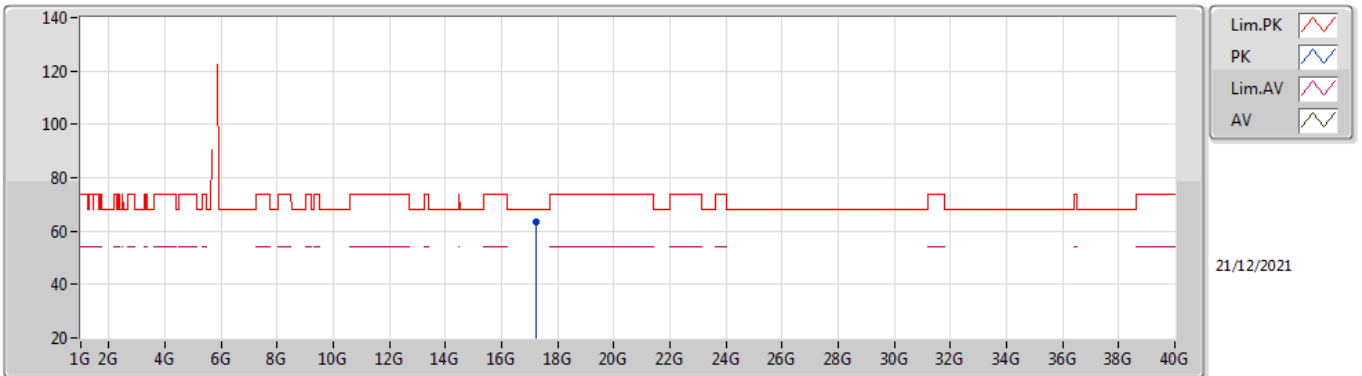


EUT\_Z\_2TX  
Setting 30  
03-D-C-5-10

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	5.61G	59.34	68.20	-8.86	52.76	3	Horizontal	280	1.62	-	34.40	7.59	35.41	
PK	5.776G	116.21	Inf	-Inf	109.88	3	Horizontal	280	1.62	-	34.40	7.42	35.49	
AV	5.779G	104.40	Inf	-Inf	98.07	3	Horizontal	280	1.62	-	34.40	7.42	35.49	
PK	5.982G	59.96	68.20	-8.24	53.31	3	Horizontal	280	1.62	-	34.66	7.58	35.59	

## 802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

### 5785MHz\_TnomVnom

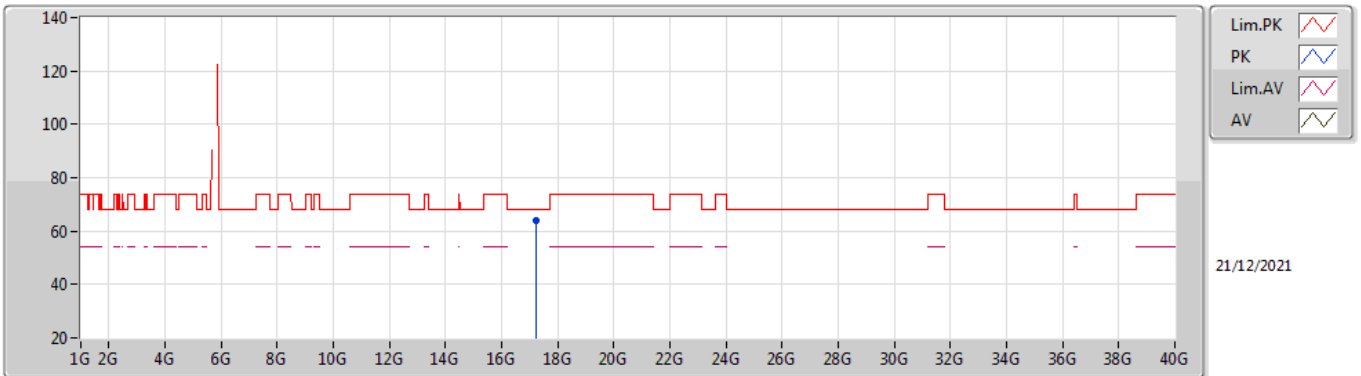


EUT\_Z\_2TX  
Setting 30  
03-C-S-8

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	17.2335G	63.55	68.20	-4.65	43.37	3	Vertical	281	2.52	-	40.80	14.26	34.88	

## 802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

### 5785MHz\_TnomVnom

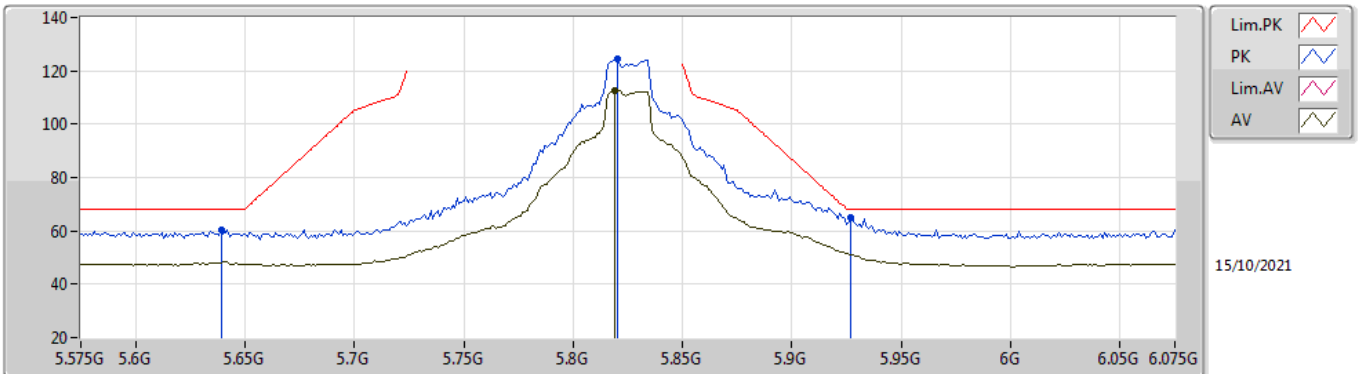


EUT\_Z\_2TX  
Setting 30  
03-C-S-8

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	17.23896G	63.97	68.20	-4.23	43.76	3	Horizontal	114	2.91	-	40.82	14.27	34.88	

## 802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

### 5825MHz\_TnomVnom

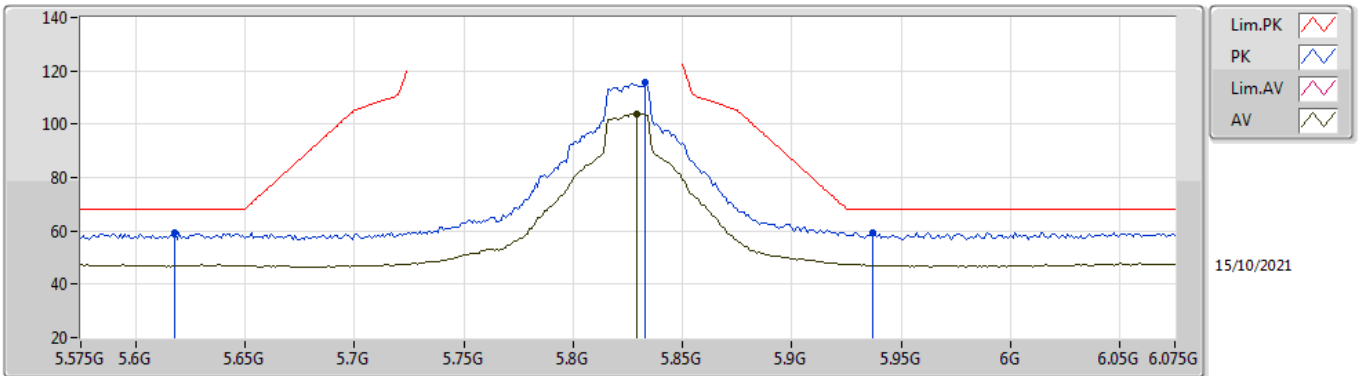


EUT\_Z\_2TX  
Setting 30  
03-D-C-5-10

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	5.639G	60.25	68.20	-7.95	53.71	3	Vertical	72.2	1.00	-	34.40	7.56	35.42
PK	5.82G	124.67	Inf	-Inf	118.36	3	Vertical	72.2	1.00	-	34.40	7.42	35.51
AV	5.819G	112.38	Inf	-Inf	106.07	3	Vertical	72.2	1.00	-	34.40	7.42	35.51
PK	5.927G	65.08	68.20	-3.12	58.46	3	Vertical	72.2	1.00	-	34.65	7.53	35.56

## 802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

### 5825MHz\_TnomVnom



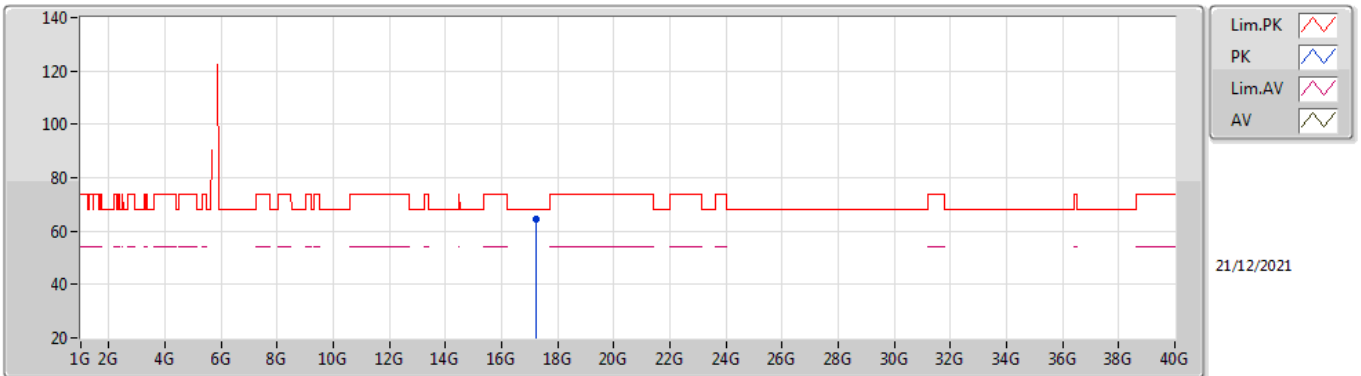
EUT\_Z\_2TX  
Setting 30  
03-D-C-5-10

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	5.618G	59.22	68.20	-8.98	52.65	3	Horizontal	286	2.04	-	34.40	7.58	35.41	
PK	5.833G	115.92	Inf	-Inf	109.61	3	Horizontal	286	2.04	-	34.40	7.43	35.52	
AV	5.829G	104.01	Inf	-Inf	97.69	3	Horizontal	286	2.04	-	34.40	7.43	35.51	
PK	5.937G	59.34	68.20	-8.86	52.74	3	Horizontal	286	2.04	-	34.63	7.54	35.57	



## 802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

### 5825MHz\_TnomVnom

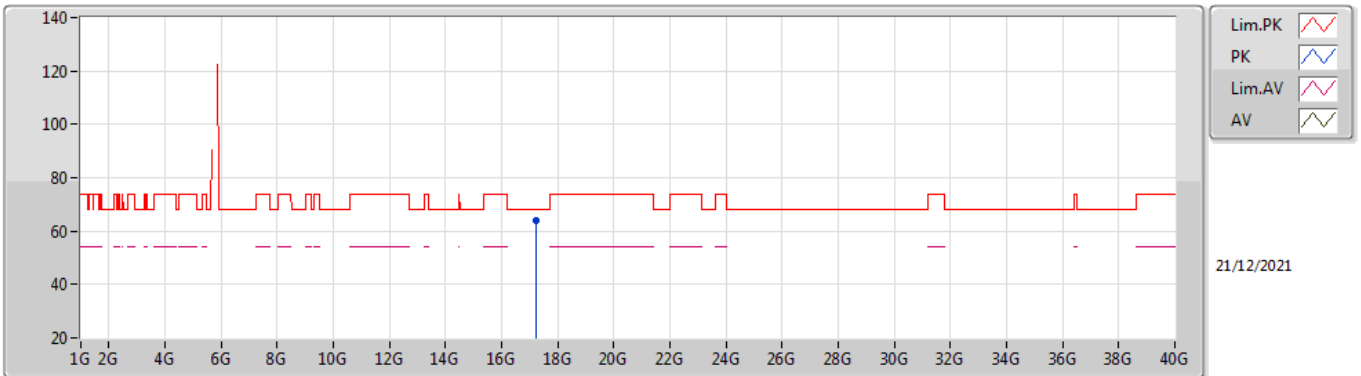


EUT\_Z\_2TX  
Setting 30  
03-C-S-8

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	17.23392G	64.23	68.20	-3.97	44.05	3	Vertical	266	1.87	-	40.80	14.26	34.88	

## 802.11ax HEW20-BF\_Nss1,(MCS0)\_2TX

### 5825MHz\_TnomVnom

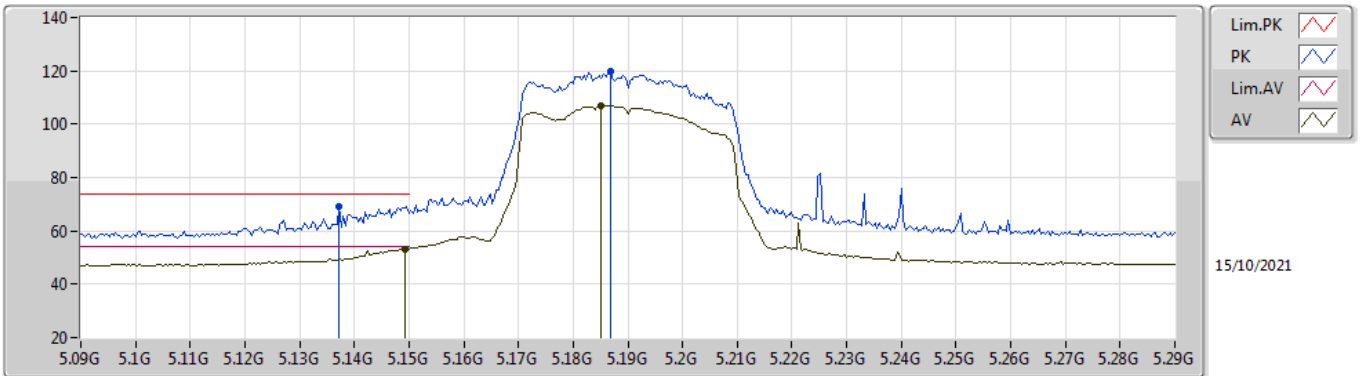


EUT\_Z\_2TX  
Setting 30  
03-C-S-8

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA	
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)	
PK	17.23692G	64.16	68.20	-4.04	43.96	3	Horizontal	258	1.88	-	40.81	14.27	34.88	

# 802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX

## 5190MHz\_TnomVnom

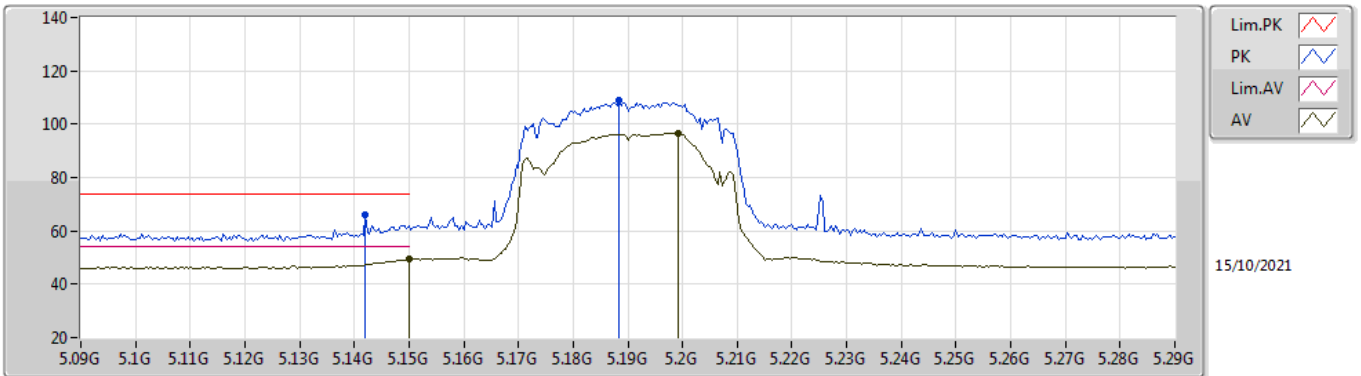


EUT\_Z\_2TX  
Setting 24  
03-D-C-5-10

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	5.1372G	69.34	74.00	-4.66	63.42	3	Vertical	86	2.34	-	34.05	7.21	35.34	
AV	5.1492G	53.21	54.00	-0.79	47.23	3	Vertical	86	2.34	-	34.10	7.22	35.34	
PK	5.1868G	119.72	Inf	-Inf	113.75	3	Vertical	86	2.34	-	34.03	7.28	35.34	
AV	5.1852G	107.13	Inf	-Inf	101.16	3	Vertical	86	2.34	-	34.03	7.28	35.34	

# 802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX

## 5190MHz\_TnomVnom

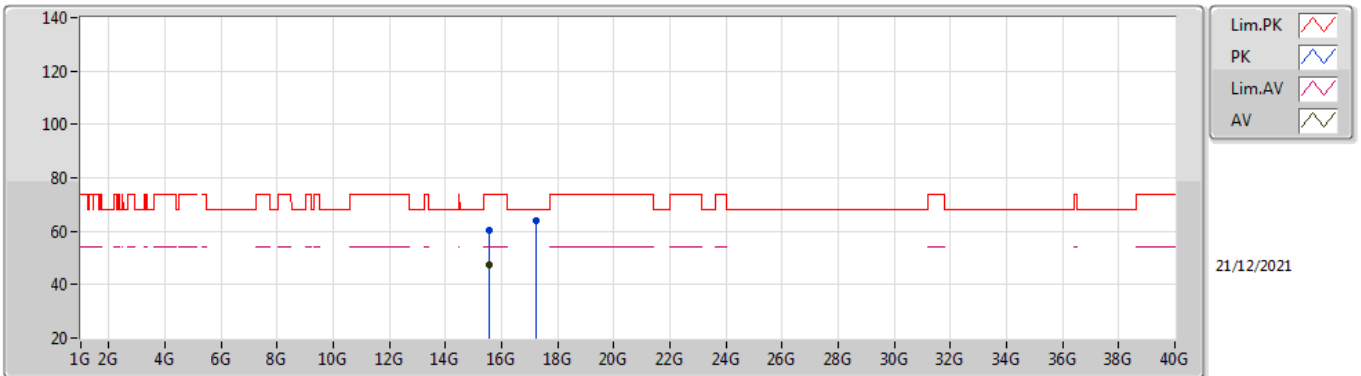


EUT\_Z\_2TX  
Setting 24  
03-D-C-5-10

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	5.142G	66.14	74.00	-7.86	60.20	3	Horizontal	100	2.72	-	34.07	7.21	35.34	
AV	5.15G	49.23	54.00	-4.77	43.25	3	Horizontal	100	2.72	-	34.10	7.22	35.34	
PK	5.1884G	108.75	Inf	-Inf	102.79	3	Horizontal	100	2.72	-	34.02	7.28	35.34	
AV	5.1992G	96.70	Inf	-Inf	90.74	3	Horizontal	100	2.72	-	34.00	7.30	35.34	

## 802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX

### 5190MHz\_TnomVnom

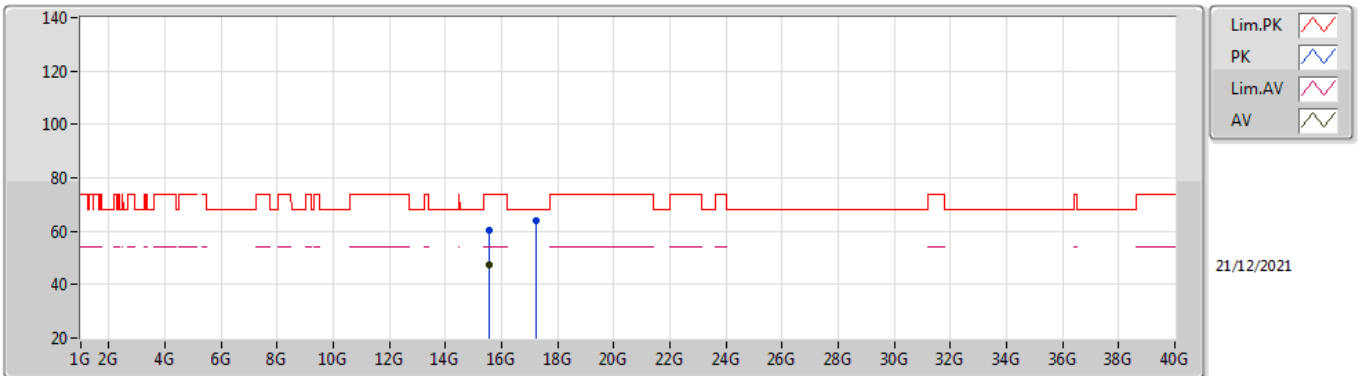


EUT\_Z\_2TX  
Setting 24  
03-C-S-8

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	15.57476G	60.34	74.00	-13.66	44.55	3	Vertical	307	2.54	-	38.03	13.19	35.43
AV	15.5725G	47.39	54.00	-6.61	31.58	3	Vertical	307	2.54	-	38.05	13.19	35.43
PK	17.229G	64.06	68.20	-4.14	43.89	3	Vertical	36	2.20	-	40.79	14.26	34.88

## 802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX

### 5190MHz\_TnomVnom

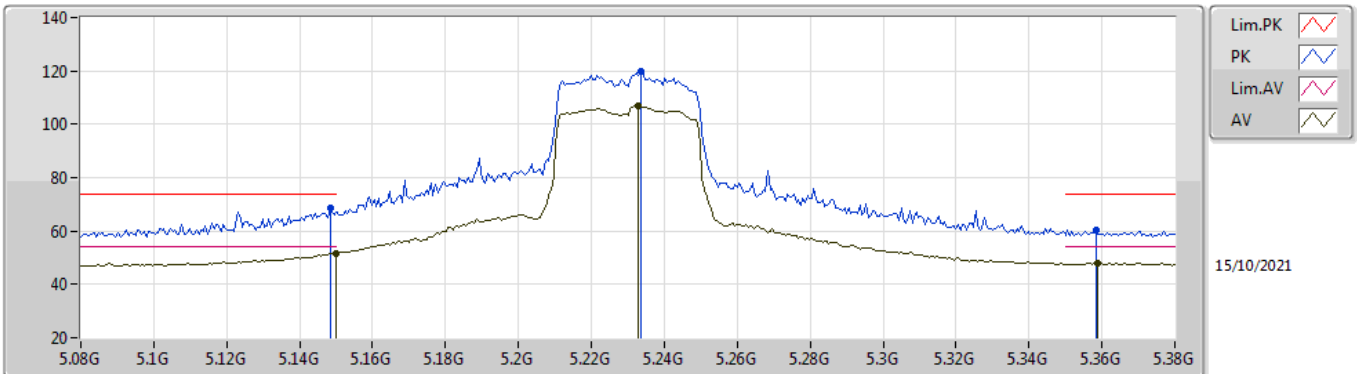


EUT\_Z\_2TX  
Setting 24  
03-C-S-8

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	15.57022G	60.52	74.00	-13.48	44.69	3	Horizontal	343	1.74	-	38.07	13.19	35.43
AV	15.56594G	47.32	54.00	-6.68	31.46	3	Horizontal	343	1.74	-	38.11	13.18	35.43
PK	17.22822G	64.06	68.20	-4.14	43.90	3	Horizontal	182	2.12	-	40.78	14.26	34.88

## 802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX

### 5230MHz\_TnomVnom

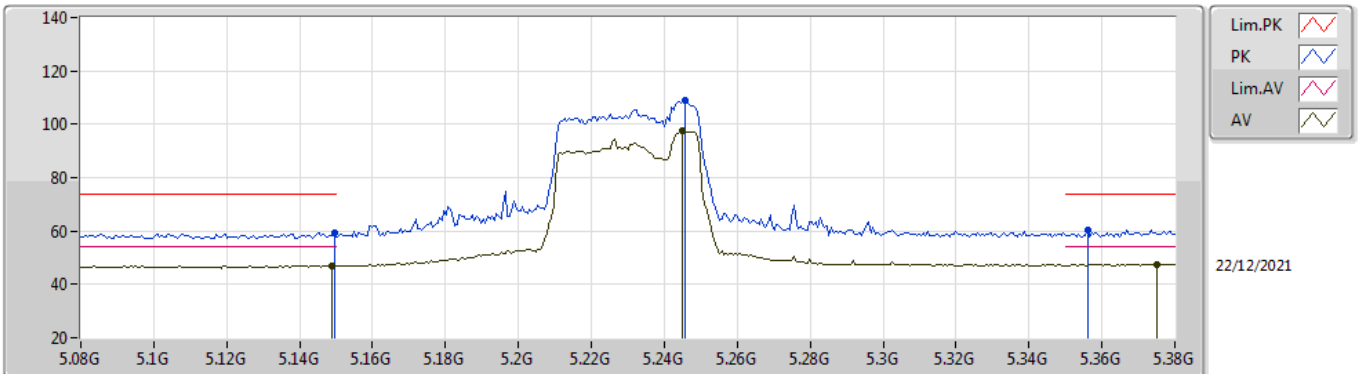


EUT\_Z\_2TX  
Setting 25  
03-D-C-5-10

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	5.1484G	68.77	74.00	-5.23	62.80	3	Vertical	7	1.09	-	34.09	7.22	35.34
AV	5.15G	51.64	54.00	-2.36	45.66	3	Vertical	7	1.09	-	34.10	7.22	35.34
PK	5.2336G	119.61	Inf	-Inf	113.54	3	Vertical	7	1.09	-	34.13	7.28	35.34
AV	5.233G	106.86	Inf	-Inf	100.79	3	Vertical	7	1.09	-	34.13	7.28	35.34
PK	5.3584G	60.21	74.00	-13.79	53.75	3	Vertical	7	1.09	-	34.58	7.22	35.34
AV	5.359G	48.02	54.00	-5.98	41.56	3	Vertical	7	1.09	-	34.58	7.22	35.34

## 802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX

### 5230MHz\_TnomVnom



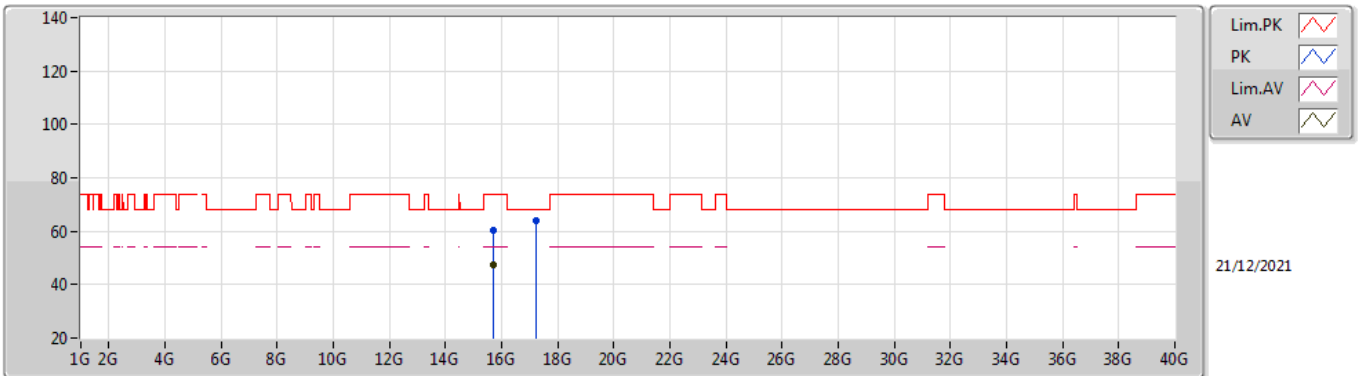
EUT\_Z\_2TX  
Setting 25  
03-C-K-4-10

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	5.1496G	59.52	74.00	-14.48	53.54	3	Horizontal	166	1.73	-	34.10	7.22	35.34
AV	5.149G	47.08	54.00	-6.92	41.10	3	Horizontal	166	1.73	-	34.10	7.22	35.34
PK	5.2456G	108.88	Inf	-Inf	102.76	3	Horizontal	166	1.73	-	34.18	7.28	35.34
AV	5.245G	97.54	Inf	-Inf	91.42	3	Horizontal	166	1.73	-	34.18	7.28	35.34
PK	5.356G	60.23	74.00	-13.77	53.76	3	Horizontal	166	1.73	-	34.59	7.22	35.34
AV	5.3752G	47.66	54.00	-6.34	41.25	3	Horizontal	166	1.73	-	34.55	7.21	35.35



## 802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX

### 5230MHz\_TnomVnom

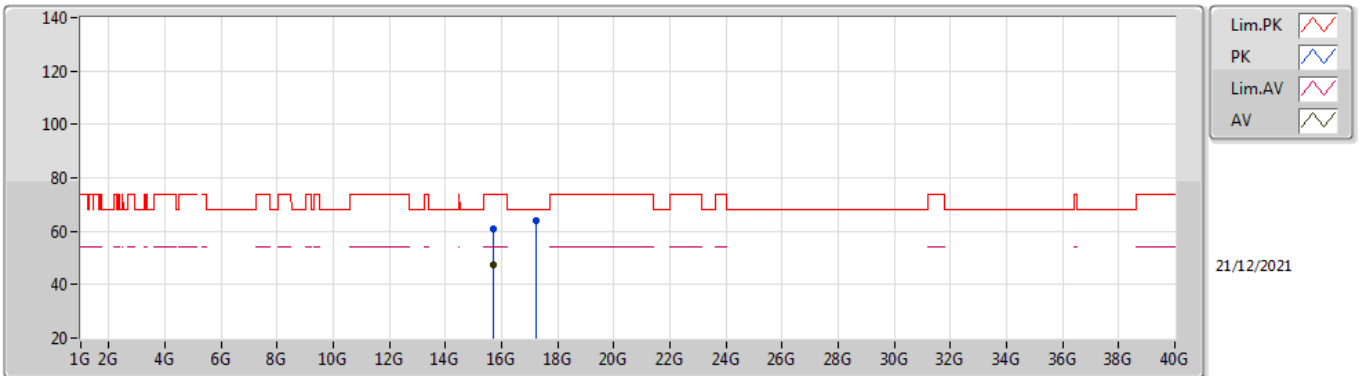


EUT\_Z\_2TX  
Setting 25  
03-C-S-8

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	15.69064G	60.55	74.00	-13.45	44.85	3	Vertical	337	2.67	-	37.98	13.25	35.53
AV	15.69482G	47.30	54.00	-6.70	31.59	3	Vertical	337	2.67	-	37.99	13.25	35.53
PK	17.235G	64.20	68.20	-4.00	44.02	3	Vertical	117	2.65	-	40.80	14.26	34.88

## 802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX

### 5230MHz\_TnomVnom

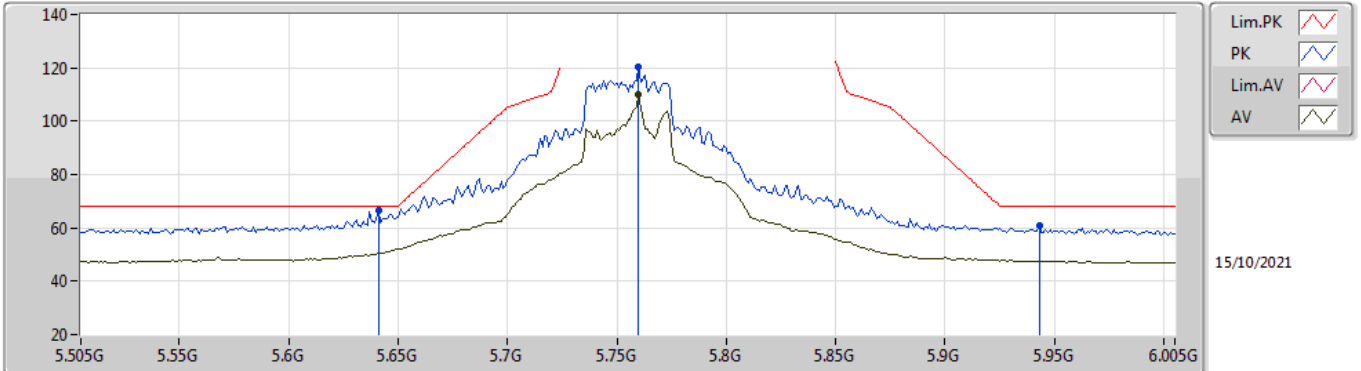


EUT\_Z\_2TX  
Setting 25  
03-C-S-8

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	15.69392G	61.07	74.00	-12.93	45.36	3	Horizontal	217	2.15	-	37.99	13.25	35.53
AV	15.69346G	47.31	54.00	-6.69	31.60	3	Horizontal	217	2.15	-	37.99	13.25	35.53
PK	17.2356G	63.94	68.20	-4.26	43.75	3	Horizontal	74	2.95	-	40.81	14.26	34.88

# 802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX

## 5755MHz\_TnomVnom

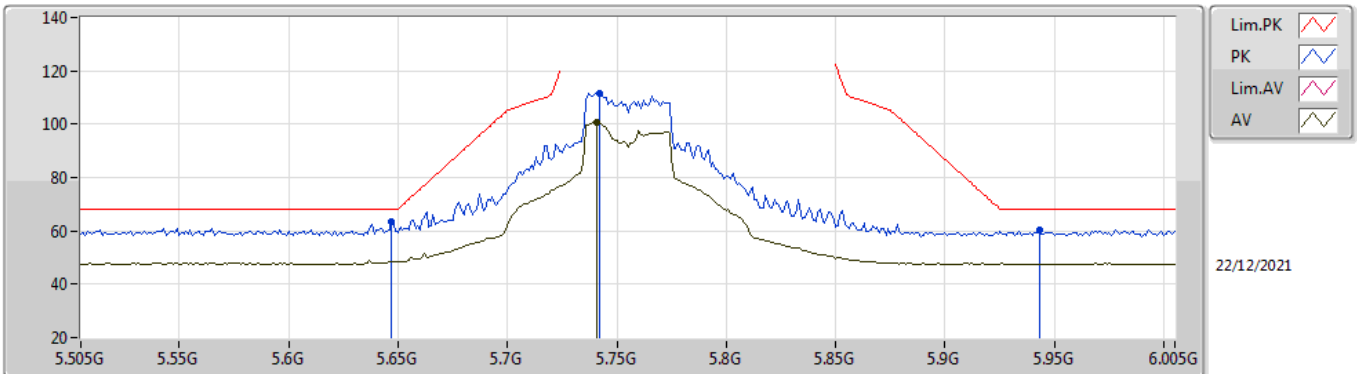


EUT\_Z\_2TX  
Setting 27  
03-D-C-5-10

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	5.641G	66.72	68.20	-1.48	60.18	3	Vertical	1.8	1.83	-	34.40	7.56	35.42	
PK	5.76G	120.09	Inf	-Inf	113.73	3	Vertical	1.8	1.83	-	34.40	7.44	35.48	
AV	5.76G	109.93	Inf	-Inf	103.57	3	Vertical	1.8	1.83	-	34.40	7.44	35.48	
PK	5.943G	60.93	68.20	-7.27	54.35	3	Vertical	1.8	1.83	-	34.61	7.54	35.57	

## 802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX

### 5755MHz\_TnomVnom

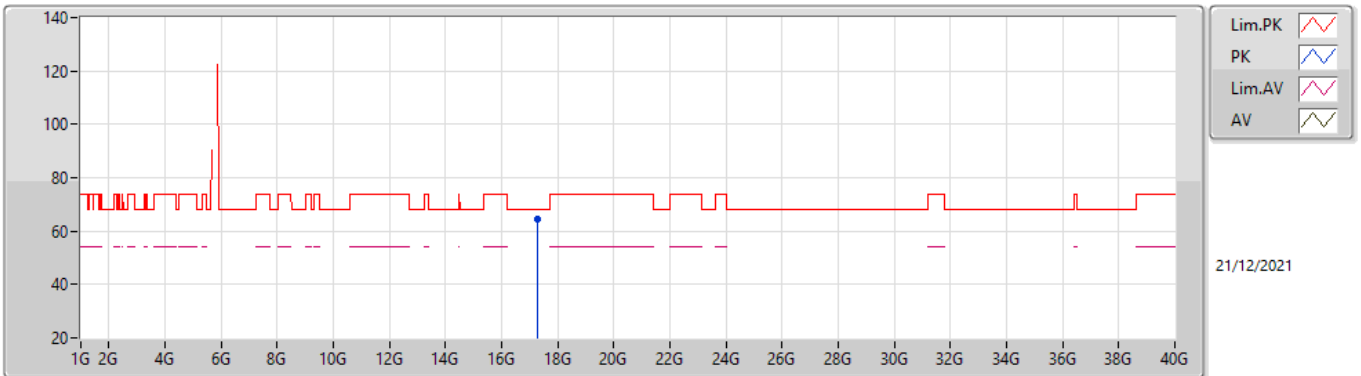


EUT\_Z\_2TX  
Setting 27  
03-C-K-4-10

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	5.647G	63.45	68.20	-4.75	56.92	3	Horizontal	82.2	2.30	-	34.40	7.55	35.42	
PK	5.742G	111.69	Inf	-Inf	105.30	3	Horizontal	82.2	2.30	-	34.40	7.46	35.47	
AV	5.741G	100.74	Inf	-Inf	94.35	3	Horizontal	82.2	2.30	-	34.40	7.46	35.47	
PK	5.943G	60.25	68.20	-7.95	53.67	3	Horizontal	82.2	2.30	-	34.61	7.54	35.57	

## 802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX

### 5755MHz\_TnomVnom

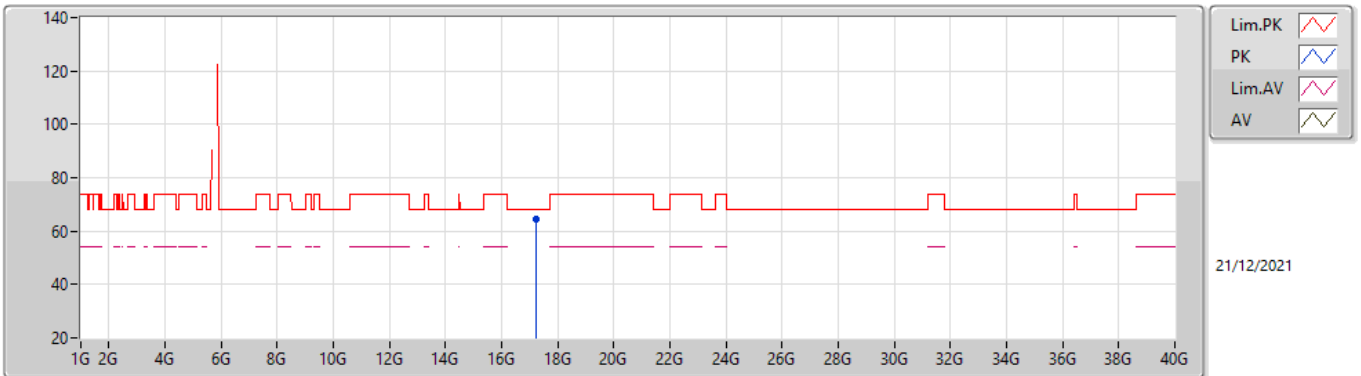


EUT\_Z\_2TX  
Setting 27  
03-C-S-8

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA	
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)	
PK	17.26954G	64.26	68.20	-3.94	43.95	3	Vertical	350	3.00	-	40.91	14.29	34.89	

## 802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX

### 5755MHz\_TnomVnom

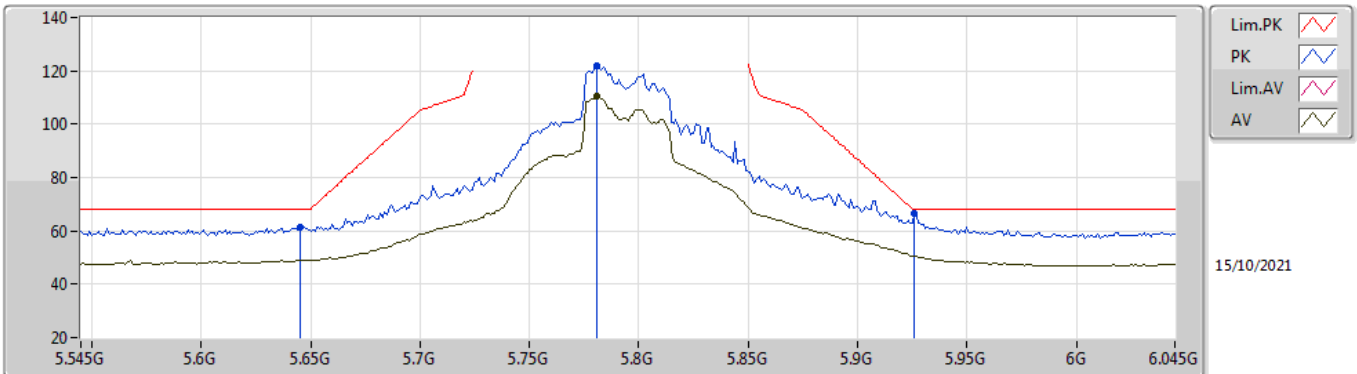


EUT\_Z\_2TX  
Setting 27  
03-C-S-8

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	17.23338G	64.27	68.20	-3.93	44.09	3	Horizontal	172	2.33	-	40.80	14.26	34.88	

## 802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX

### 5795MHz\_TnomVnom

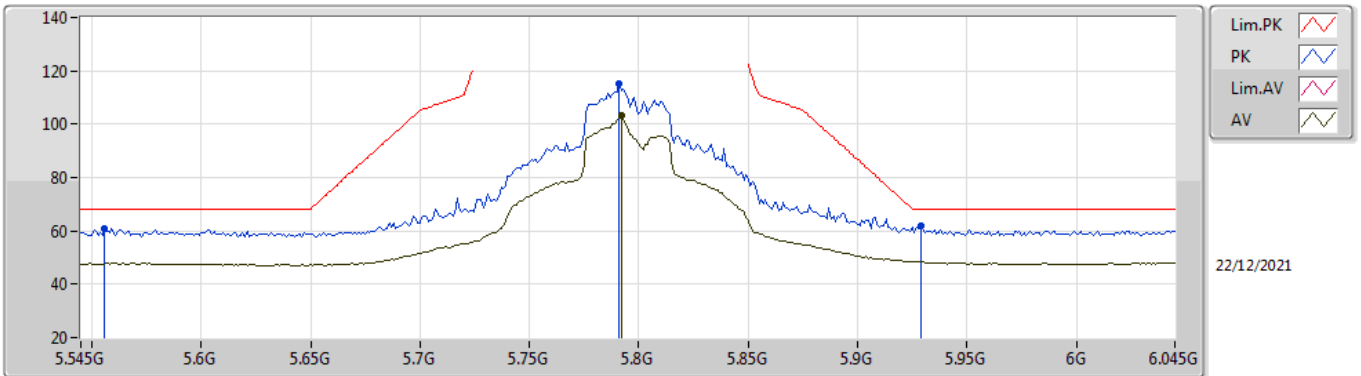


EUT\_Z\_2TX  
Setting 27  
03-D-C-5-10

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	5.645G	61.41	68.20	-6.79	54.88	3	Vertical	0	2.25	-	34.40	7.55	35.42	
PK	5.781G	121.89	Inf	-Inf	115.56	3	Vertical	0	2.25	-	34.40	7.42	35.49	
AV	5.781G	110.56	Inf	-Inf	104.23	3	Vertical	0	2.25	-	34.40	7.42	35.49	
PK	5.926G	66.44	68.20	-1.76	59.82	3	Vertical	0	2.25	-	34.65	7.53	35.56	

## 802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX

### 5795MHz\_TnomVnom



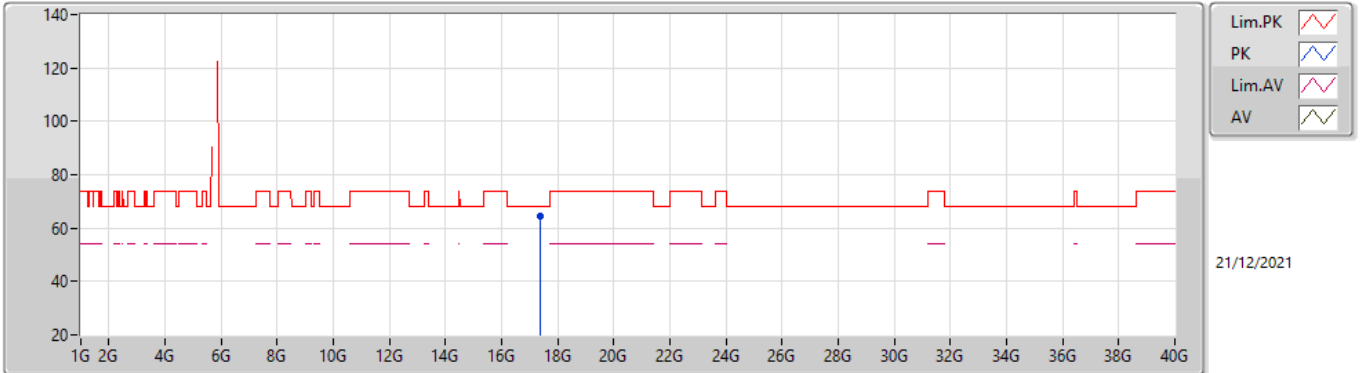
EUT\_Z\_2TX  
Setting 27  
03-C-K-4-10

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	5.556G	61.02	68.20	-7.18	54.31	3	Horizontal	252.3	2.13	-	34.58	7.51	35.38	
PK	5.791G	114.93	Inf	-Inf	108.62	3	Horizontal	252.3	2.13	-	34.40	7.41	35.50	
AV	5.792G	103.06	Inf	-Inf	96.75	3	Horizontal	252.3	2.13	-	34.40	7.41	35.50	
PK	5.929G	61.64	68.20	-6.56	55.03	3	Horizontal	252.3	2.13	-	34.64	7.53	35.56	



## 802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX

### 5795MHz\_TnomVnom

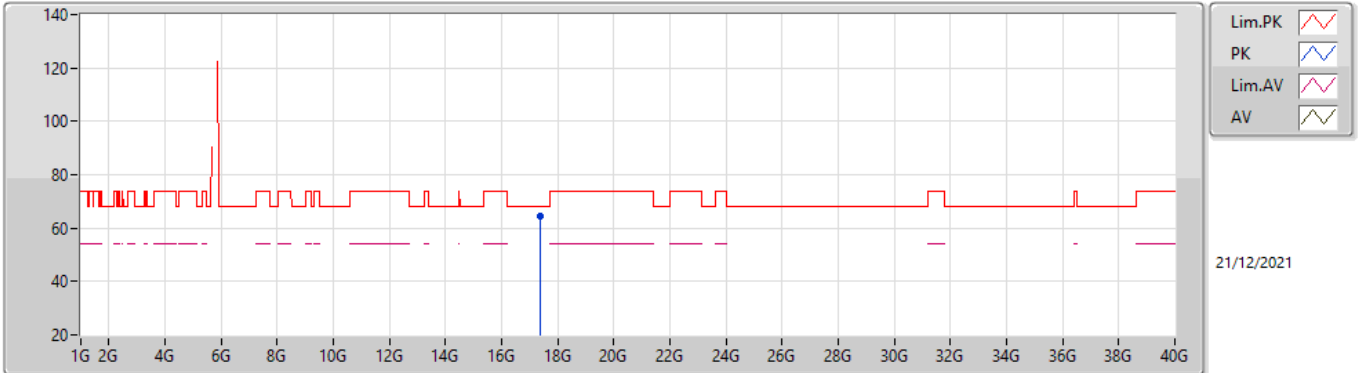


EUT\_Z\_2TX  
Setting 27  
03-C-S-8

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA	
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)	
PK	17.38516G	64.74	68.20	-3.46	43.59	3	Vertical	63	1.30	-	41.68	14.37	34.90	

## 802.11ax HEW40-BF\_Nss1,(MCS0)\_2TX

### 5795MHz\_TnomVnom

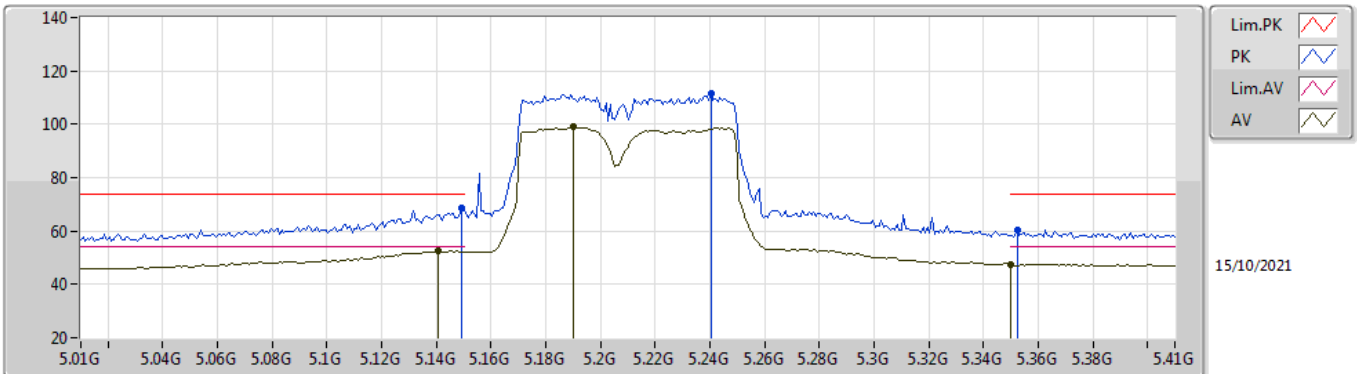


EUT\_Z\_2TX  
Setting 27  
03-C-S-8

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	17.38836G	64.34	68.20	-3.86	43.16	3	Horizontal	203	2.08	-	41.71	14.37	34.90	

## 802.11ax HEW80-BF\_Nss1,(MCS0)\_2TX

### 5210MHz\_TnomVnom

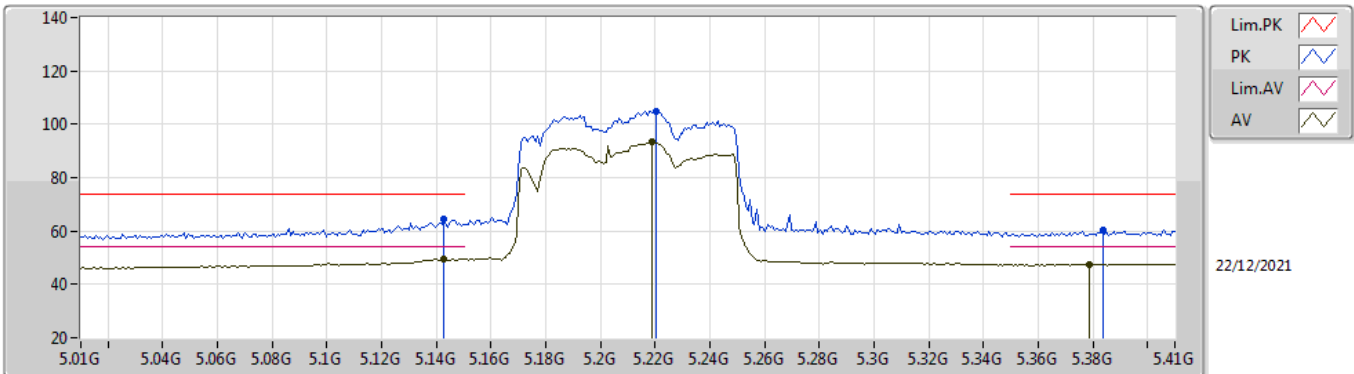


EUT\_Z\_2TX  
Setting 24  
03-D-C-5-10

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	5.1492G	68.37	74.00	-5.63	62.39	3	Vertical	350.5	1.80	-	34.10	7.22	35.34
AV	5.1404G	52.49	54.00	-1.51	46.56	3	Vertical	350.5	1.80	-	34.06	7.21	35.34
PK	5.2404G	111.80	Inf	-Inf	105.70	3	Vertical	350.5	1.80	-	34.16	7.28	35.34
AV	5.19G	98.90	Inf	-Inf	92.94	3	Vertical	350.5	1.80	-	34.02	7.28	35.34
PK	5.3524G	60.49	74.00	-13.51	54.01	3	Vertical	350.5	1.80	-	34.60	7.22	35.34
AV	5.35G	47.52	54.00	-6.48	41.04	3	Vertical	350.5	1.80	-	34.60	7.22	35.34

## 802.11ax HEW80-BF\_Nss1,(MCS0)\_2TX

### 5210MHz\_TnomVnom

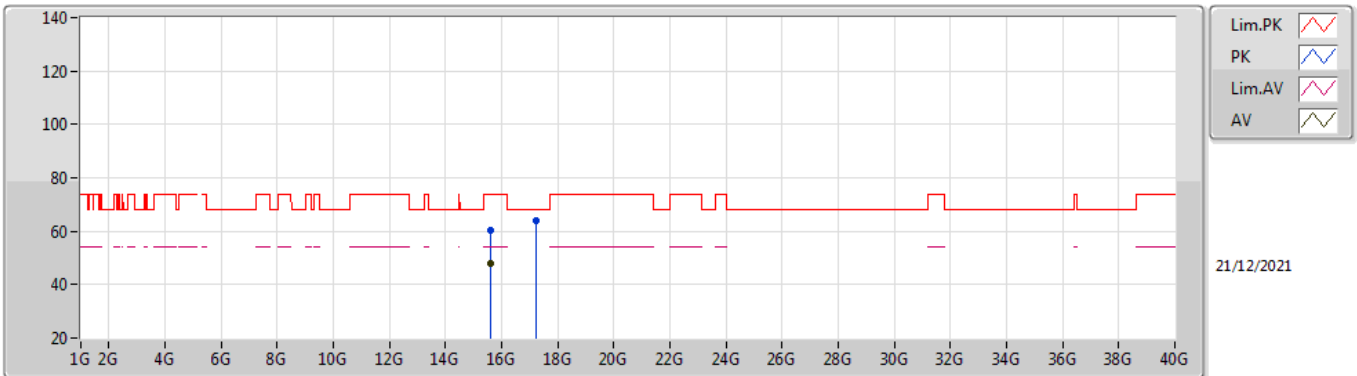


EUT\_Z\_2TX  
Setting 24  
03-C-K-4-10

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	5.1428G	64.61	74.00	-9.39	58.67	3	Horizontal	314	2.22	-	34.07	7.21	35.34
AV	5.1428G	49.58	54.00	-4.42	43.64	3	Horizontal	314	2.22	-	34.07	7.21	35.34
PK	5.2204G	104.72	Inf	-Inf	98.69	3	Horizontal	314	2.22	-	34.08	7.29	35.34
AV	5.2188G	93.63	Inf	-Inf	87.60	3	Horizontal	314	2.22	-	34.08	7.29	35.34
PK	5.3836G	60.50	74.00	-13.50	54.11	3	Horizontal	314	2.22	-	34.53	7.21	35.35
AV	5.3788G	47.60	54.00	-6.40	41.20	3	Horizontal	314	2.22	-	34.54	7.21	35.35

## 802.11ax HEW80-BF\_Nss1,(MCS0)\_2TX

### 5210MHz\_TnomVnom

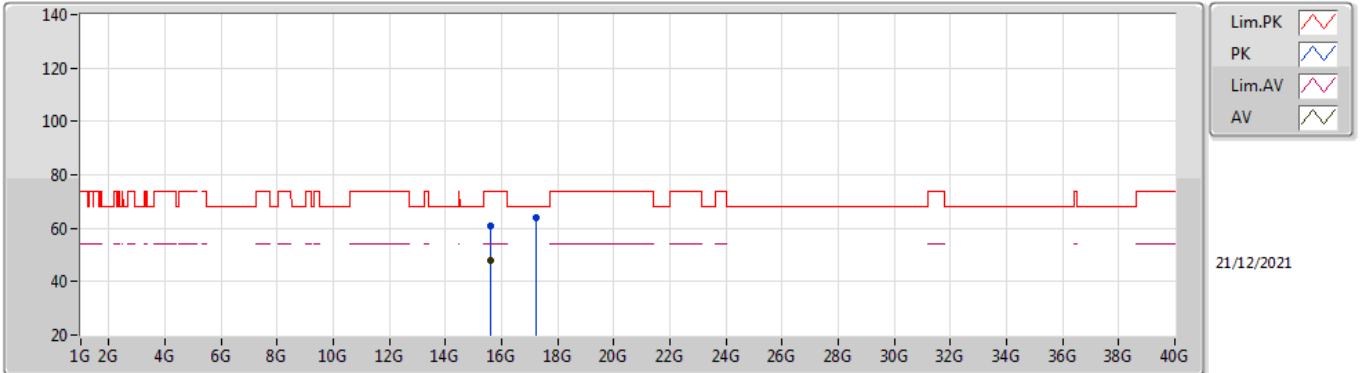


EUT\_Z\_2TX  
Setting 24  
03-C-S-8

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	15.62594G	60.59	74.00	-13.41	45.01	3	Vertical	202	1.71	-	37.85	13.21	35.48
AV	15.6257G	47.80	54.00	-6.20	32.22	3	Vertical	202	1.71	-	37.85	13.21	35.48
PK	17.24184G	64.02	68.20	-4.18	43.80	3	Vertical	166	1.25	-	40.83	14.27	34.88

## 802.11ax HEW80-BF\_Nss1,(MCS0)\_2TX

### 5210MHz\_TnomVnom

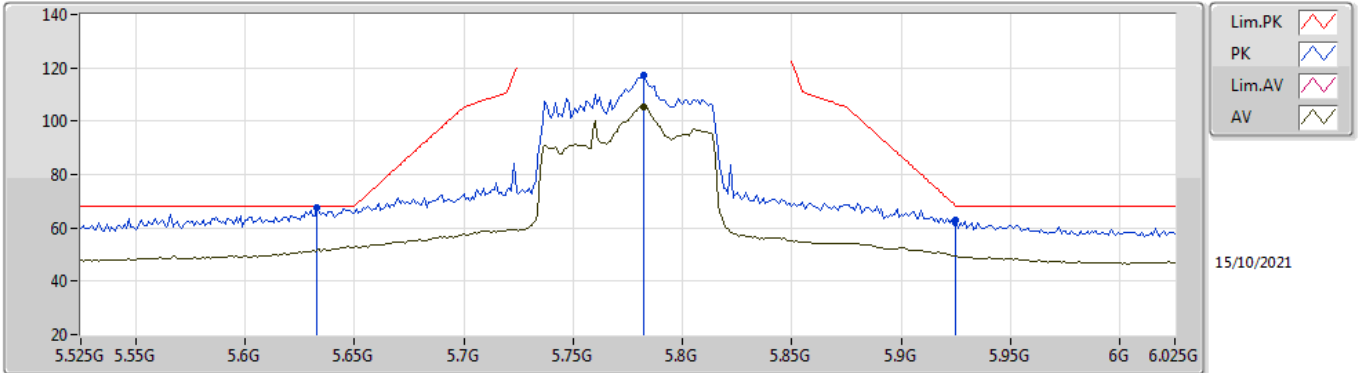


EUT\_Z\_2TX  
Setting 24  
03-C-S-8

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	15.62772G	60.83	74.00	-13.17	45.24	3	Horizontal	222	2.33	-	37.86	13.21	35.48
AV	15.6265G	47.70	54.00	-6.30	32.12	3	Horizontal	222	2.33	-	37.85	13.21	35.48
PK	17.2404G	63.97	68.20	-4.23	43.76	3	Horizontal	119	2.96	-	40.82	14.27	34.88

# 802.11ax HEW80-BF\_Nss1,(MCS0)\_2TX

## 5775MHz\_TnomVnom

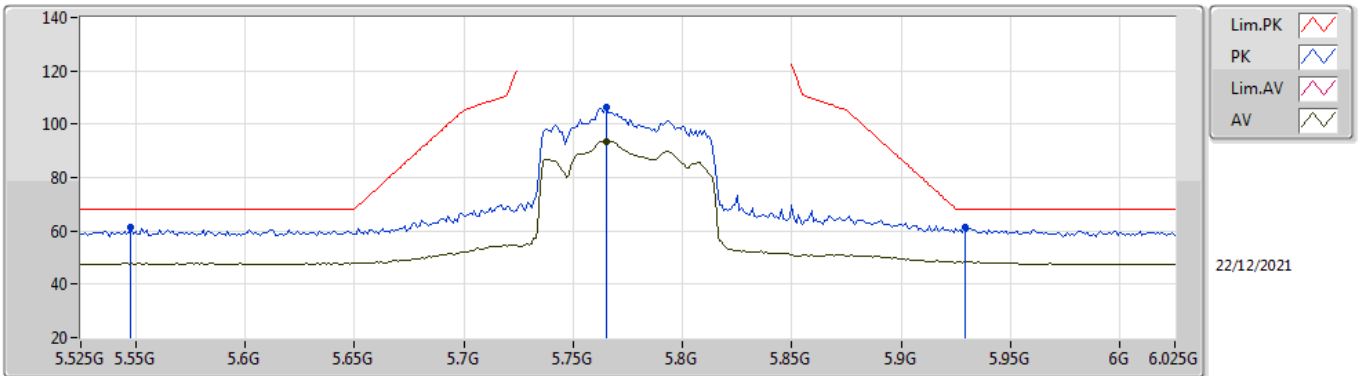


EUT\_Z\_2TX  
Setting 24  
03-D-C-5-10

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	5.633G	67.59	68.20	-0.61	61.04	3	Vertical	3	1.80	-	34.40	7.57	35.42	
PK	5.782G	117.47	Inf	-Inf	111.14	3	Vertical	3	1.80	-	34.40	7.42	35.49	
AV	5.782G	105.44	Inf	-Inf	99.11	3	Vertical	3	1.80	-	34.40	7.42	35.49	
PK	5.925G	62.74	68.20	-5.46	56.12	3	Vertical	3	1.80	-	34.65	7.53	35.56	

## 802.11ax HEW80-BF\_Nss1,(MCS0)\_2TX

### 5775MHz\_TnomVnom



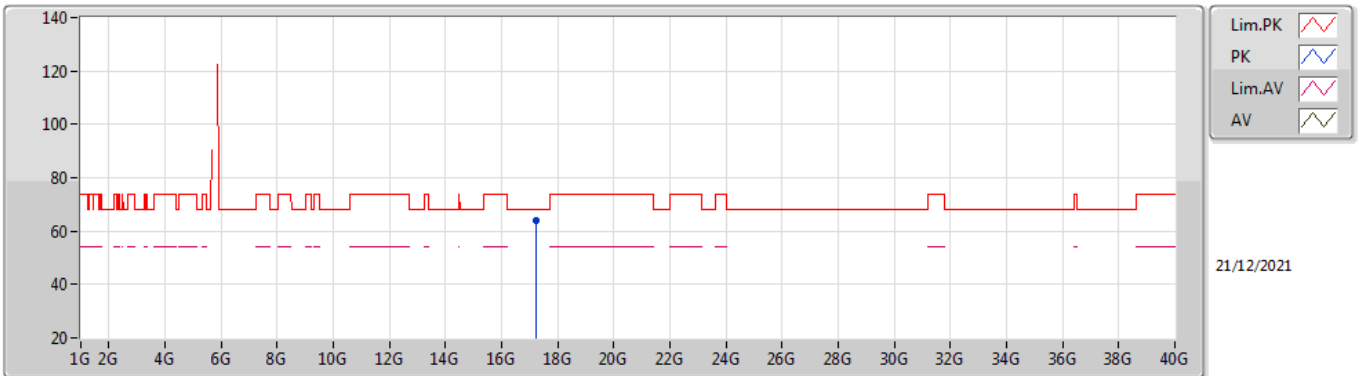
EUT\_Z\_2TX  
Setting 24  
03-C-K-4-10

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	5.548G	61.29	68.20	-6.91	54.56	3	Horizontal	64	2.24	-	34.60	7.50	35.37	
PK	5.765G	106.49	Inf	-Inf	100.13	3	Horizontal	64	2.24	-	34.40	7.44	35.48	
AV	5.765G	93.59	Inf	-Inf	87.23	3	Horizontal	64	2.24	-	34.40	7.44	35.48	
PK	5.929G	61.29	68.20	-6.91	54.68	3	Horizontal	64	2.24	-	34.64	7.53	35.56	



## 802.11ax HEW80-BF\_Nss1,(MCS0)\_2TX

### 5775MHz\_TnomVnom

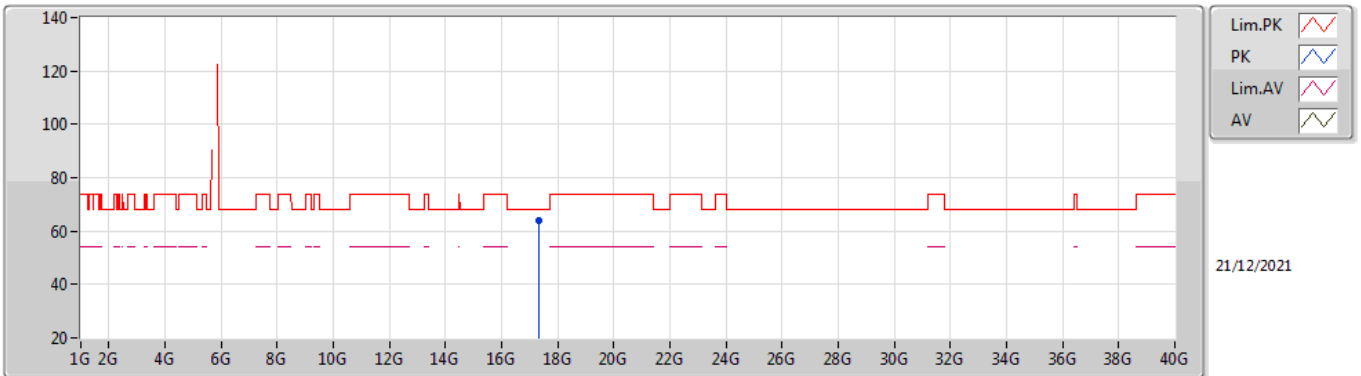


EUT\_Z\_2TX  
Setting 24  
03-C-S-8

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	17.22984G	64.08	68.20	-4.12	43.91	3	Vertical	89	1.77	-	40.79	14.26	34.88	

## 802.11ax HEW80-BF\_Nss1,(MCS0)\_2TX

### 5775MHz\_TnomVnom



EUT\_Z\_2TX  
Setting 24  
03-C-S-8

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA	
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)	
PK	17.32602G	64.21	68.20	-3.99	43.56	3	Horizontal	304	2.04	-	41.21	14.33	34.89	



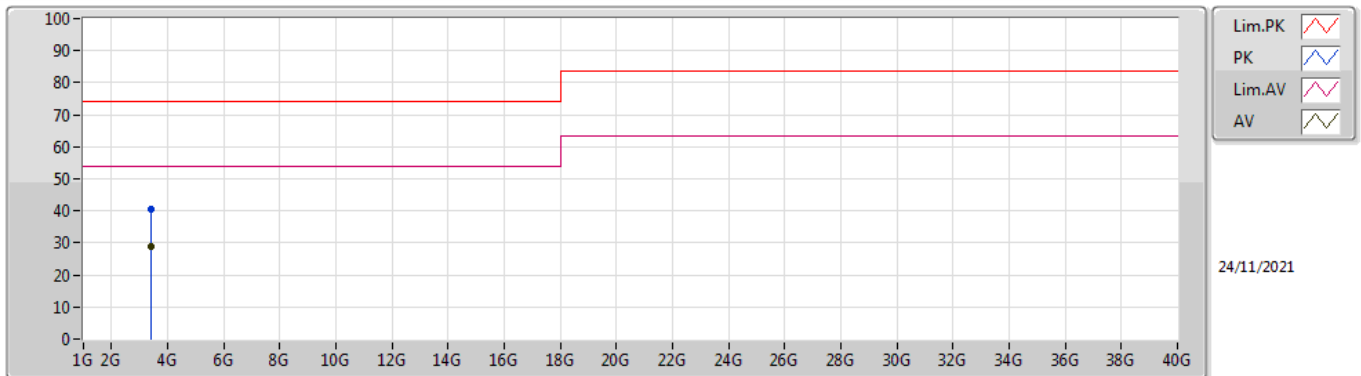
## ***Radiated Emissions above 1GHz\_Co-location***

## ***Appendix F***

### **Summary**

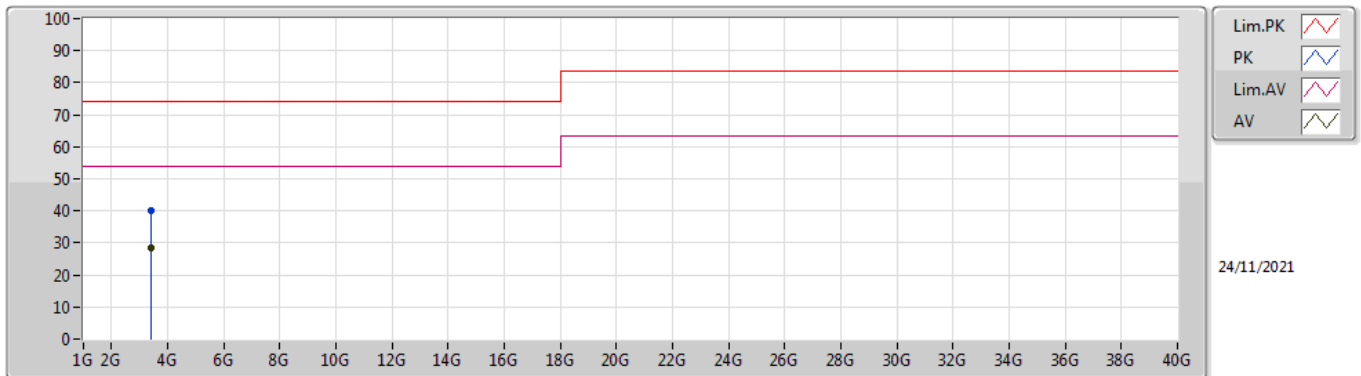
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	AV	3.4166G	28.70	54.00	-25.30	Vertical

### 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	3.41684G	40.40	74.00	-33.60	-2.26	3	Vertical	265	1.60	-	42.66	28.50	5.90	36.66
AV	3.41666G	28.70	54.00	-25.30	-2.26	3	Vertical	265	1.60	"Worst"	30.96	28.50	5.90	36.66

### 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	3.41674G	40.28	74.00	-33.72	-2.26	3	Horizontal	241	1.00	-	42.54	28.50	5.90	36.66
AV	3.41652G	28.55	54.00	-25.45	-2.26	3	Horizontal	241	1.00	"Worst"	30.81	28.50	5.90	36.66