

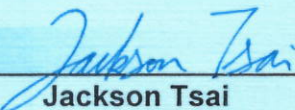
# VERIFICATION OF COMPLIANCE

● Equipment : WiFi6 11ax 2T2R module 1800Mbps  
Model No. : AW7915-NPD  
Applicant : AsiaRF Co., Ltd.  
1F, 7, Houde Street, Yonghe Dist. New Taipei City Taiwan  
23455

**I HEREBY****DECLARE THAT :**

The equipment was **Passed** the test performed according to  
**EN 301 893 V2.1.1 (2017-05)**

The test was carried out on **May 13, 2022** at **SPORTON INTERNATIONAL INC. Hsinhua**  
**Laboratory.**

  
Jackson Tsai

**SPORTON INTERNATIONAL INC. Hsinhua Laboratory**

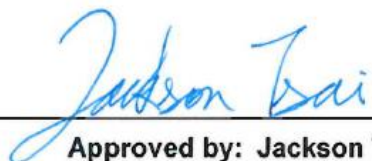
No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)

# Radio Test Report

**Equipment** : WiFi6 11ax 2T2R module 1800Mbps  
**Brand Name** : AsiaRF Co., Ltd.  
**Model Name** : AW7915-NPD  
**Applicant** : AsiaRF Co., Ltd.  
1F, 7, Houde Street, Yonghe Dist. New Taipei  
City Taiwan 23455  
**Manufacturer** : AsiaRF Co., Ltd.  
1F, 7, Houde Street, Yonghe Dist. New Taipei  
City Taiwan 23455  
**Standard** : EN 301 893 V2.1.1 (2017-05)

The product was received on Mar. 28, 2022, and testing was started from Apr. 21, 2022 and completed on May 13, 2022. We, SPORTON INTERNATIONAL INC. Hsinhua Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in EN 301 893 V2.1.1 (2017-05) 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. Hsinhua Laboratory, the test report shall not be reproduced except in full.



Approved by: Jackson Tsai

**SPORTON INTERNATIONAL INC. Hsinhua Laboratory**

No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)

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**PHOTOGRAPHS OF EUT V01**

## History of this test report

[illegible]

## Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	4.2.1	Nominal Centre Frequency	PASS	-
3.2	4.2.2	Nominal Channel Bandwidth (NCB) and Occupied Channel Bandwidth (OCB)	PASS	-
3.3	4.2.3	RF Output Power	PASS	-
-	4.2.3	Transmit Power Control (TPC)	Not Required	-
3.4	4.2.3	Power Density	PASS	-
3.6	4.2.4	Transmitter Unwanted Emissions outside the 5 GHz RLAN Bands	PASS	-
3.5	4.2.4	Transmitter Unwanted Emissions within the 5 GHz RLAN Bands	PASS	-
4.1	4.2.5	Receiver Spurious Emissions	PASS	-
5.1	4.2.7	Adaptivity (Channel Access Mechanism)	PASS	-
6.1	4.2.8	Receiver Blocking	PASS	-
1.1.7	4.2.10	Geo-location capability	N/A	-

**Declaration of Conformity:**

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

**Comments and explanations:**

The EUT supports beamforming and CDD modes, and the CDD mode is the worst case. Therefore, all test items are evaluated in the report. The beamforming mode only evaluates the output power.

**Reviewed by: Ben Tseng**

**Report Producer: Jenny Yang**

# 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]
5150-5250	n (HT40), ac (VHT40), ax (HEW40)	5190-5230	38-46 [2]
5150-5250	ac (VHT80), ax (HEW80)	5210	42 [1]

#### <Non-Beamforming>

Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11a	20	2TX
5.15-5.25GHz	802.11ax HEW20	20	2TX
5.15-5.25GHz	802.11ax HEW40	40	2TX
5.15-5.25GHz	802.11ax HEW80	80	2TX

#### <Beamforming>

Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11ax HEW20-BF	20	2TX
5.15-5.25GHz	802.11ax HEW40-BF	40	2TX
5.15-5.25GHz	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**

Group	Ant.	Brand	Model Name	Antenna Type	Connector	Support	Cable Loss (dBi)
1	1-2	Asiarf	ANT010-DAU	PCB	I-PEX / MMCX	2.4G+5G	0.3
2	3-4	Asiarf	ANT003	PCB	I-PEX / MMCX	2.4G+5G	0.3
3	5-6	Asiarf	A245005N	PCB	I-PEX / MMCX	2.4G+5G	0.3
4	7-8	Asiarf	A2405N	PCB	I-PEX / MMCX	2.4G	0.3
5	9-10	Asiarf	A5005N	PCB	I-PEX / MMCX	5G	0.3
6	11-12	Asiarf	A245004	Dipole	I-PEX / MMCX	2.4G+5G	0.3
7	13-14	Asiarf	A245002	Dipole	I-PEX / MMCX	2.4G+5G	0.3

Group	Ant.	Gain (dBi)	
		2.4G	5G
1	1-2	5.2	5.5
2	3-4	2.5	2.5
3	5-6	4	5.1
4	7-8	5.2	-
5	9-10	-	5
6	11-12	4	5.1
7	13-14	2	2

Note 1: EUT can match with above antennas for using. The higher gain (Ant. 1/6) were used to perform the worst configuration and result of that was recorded as the final test result.

Note 2: The antenna mentioned above will not be sold with the EUT in the market.

**For 2.4GHz function:**

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

Group 1, 2, 3, 4, 6, 7 could transmit/receive simultaneously.

**For 5GHz function:**

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

Group 1, 2, 3, 5, 6, 7 could transmit/receive simultaneously.



### 1.1.3 Duty Cycle

#### <Non-Beamforming>

Mode	DC	DCF (dB)
802.11a_Nss1,(6Mbps)_2TX	0.959	0.18
802.11ax HEW20_Nss1,(MCS0)_2TX	0.845	0.73
802.11ax HEW40_Nss1,(MCS0)_2TX	0.845	0.73
802.11ax HEW80_Nss1,(MCS0)_2TX	0.84	0.76

#### <Beamforming>

Mode	DC	DCF (dB)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	0.845	0.73
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	0.845	0.73
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	0.84	0.76

### 1.1.4 EUT Information

<b>EUT Power Type</b>	From Test Fixture	
<b>DFS Operating Mode</b>	<input type="checkbox"/>	Master
	<input type="checkbox"/>	Slave with radar detection
	<input checked="" type="checkbox"/>	Slave without radar detection
<b>Device Types (Adaptivity)</b>	<input checked="" type="checkbox"/>	Initiating Device
	<input checked="" type="checkbox"/>	Responding Device
	<input checked="" type="checkbox"/>	Supervised Device, which implements:
	<input checked="" type="checkbox"/>	Priority class 1
	<input checked="" type="checkbox"/>	Priority class 2
	<input type="checkbox"/>	Priority class 1 implements EN 301 893 Table 7 Note 1
	<input type="checkbox"/>	Priority class 2 implements EN 301 893 Table 7 Note 1
	<input checked="" type="checkbox"/>	Priority class 3
	<input checked="" type="checkbox"/>	Priority class 4
	<input type="checkbox"/>	Supervising Device, which implements:
	<input type="checkbox"/>	Priority class 1
	<input type="checkbox"/>	Priority class 2
<input type="checkbox"/>	Priority class 1 implements EN 301 893 Table 8 Note 1	
<input type="checkbox"/>	Priority class 2 implements EN 301 893 Table 8 Note 1	
<input type="checkbox"/>	Priority class 2 implements EN 301 893 Table 8 Note 2	
<input type="checkbox"/>	Priority class 3	
<input type="checkbox"/>	Priority class 4	
<b>Communication Mode</b>	<input checked="" type="checkbox"/> IP Based (Load Based)	<input type="checkbox"/> Frame Based
<b>EUT Function</b>	<input type="checkbox"/> Outdoor	<input checked="" type="checkbox"/> Indoor
<b>Beamforming Function</b>	<input checked="" type="checkbox"/> With beamforming	<input type="checkbox"/> Without beamforming
<b>Resource Unit(802.11ax)</b>	<input checked="" type="checkbox"/> Full RU	<input type="checkbox"/> Partial RU
<b>Software / Firmware Version for Adaptivity &amp; Receiver Blocking</b>		LEDE Reboot 17.01-SNAPSHOT unknown / LuCI (unknown)

### 1.1.5 Table for Multiple Listing

SKU	Ant. Connector	Description
1	I-PEX	There are two SKUs for EUT. The only difference between SKU 1 and SKU 2 is Ant. Connector, but the gain is same. Therefore, SKU 1 configuration was measured during the test.
2	MMCX	

### 1.1.6 Adaptive Equipment

Adaptive Equipment	
Medium Access Mechanism:	
<input checked="" type="checkbox"/>	Option A: Procedure to verify the Medium Access Mechanism The test procedure which defined in clause 5.4.9.3.2.4.1 should be verified.
<input type="checkbox"/>	Option B: Compliance by declaration for the Medium Access Mechanism. The requirements contained in clause 4.2.7.3.2.6 and 4.2.7.3.2.7 should be declared compliance with by the manufacturer.
<input type="checkbox"/>	The related parameters are identical to EN 301 893 Table 7 for Supervised Device
<input type="checkbox"/>	The related parameters are identical to EN 301 893 Table 8 for Supervising Device
<input type="checkbox"/>	Other parameters
Maximum Channel Occupancy Time(s):	
<input checked="" type="checkbox"/>	Option A: Procedure to verify the maximum Channel Occupancy Time(s) The test procedure which defined in clause 5.4.9.3.2.5.1 should be verified.
<input type="checkbox"/>	Option B: Compliance by declaration for the maximum Channel Occupancy Time(s) The maximum Channel Occupancy Times which defined in clause 4.2.7.3.2.4 should be declared by the manufacturer.
<input type="checkbox"/>	The related parameters are identical to EN 301 893 Table 7 for Supervised Device
<input type="checkbox"/>	The related parameters are identical to EN 301 893 Table 8 for Supervising Device
<input type="checkbox"/>	Other parameters
Channel Operation Mode:	
<input checked="" type="checkbox"/>	Single Channel Operation
<input checked="" type="checkbox"/>	Multi-channel Operation
<input type="checkbox"/>	Option 1: Load Based Equipment may use any combination/grouping of 20 MHz Operating Channels out of the list of channels (Nominal Centre Frequencies) provided in clause 4.2.1, if it satisfies the channel access requirements (Channel Access Mechanism) for an Initiating Device as described in clause 4.2.7.3.2.6 on each such 20 MHz Operating Channel.
<input checked="" type="checkbox"/>	Option 2: EN 301 893 figure 3 defines bonded 40 MHz, 80 MHz or 160 MHz channels. Load Based Equipment that uses a combination/grouping of 20 MHz Operating Channels that is a subset of bonded 40 MHz, 80 MHz or 160 MHz channels, may transmit on any of the 20 MHz Operating Channels.

### 1.1.7 Geo-location capability supported by the equipment

Geo-location capability supported by the equipment	
<input type="checkbox"/>	Yes
<input type="checkbox"/>	The geographical location determined by the equipment as defined in EN 301 893, clause 4.2.10.3 is not accessible to the user.
<input checked="" type="checkbox"/>	No

## 1.2 Testing Applied Standards

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

- ♦ EN 301 893 V2.1.1 (2017-05)

## 1.3 Testing Location Information

Test Lab. : Sporton International Inc. Hsinhua Laboratory				
<input checked="" type="checkbox"/> Hsinhua (TAF: 3785)	ADD: No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)			
	TEL: 886-3-327-3456	FAX: 886-3-327-0973		
Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH07-HY	Alan Chien	20.1~26.9°C / 50~60%	11/May/2022~13/May/2022
Radiated	05CH01-HY	Wayne Chiu	21.6~22.1°C / 57~59%	22/Apr/2022~29/Apr/2022
Adaptivity	DFS01-HY	Peng Huang	23.6~25.8°C / 52~63%	25/Apr/2022
Receiver Blocking	DFS03-HY	Tony Chang	21.7~25.9°C / 53~62%	21/Apr/2022
<input type="checkbox"/> Wen 33rd.St. (TAF: 3785)	ADD: No.14-1, Ln. 19, Wen 33rd St., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.)			
	TEL: 886-3-318-0787	FAX: 886-3-318-0287		

## 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))

Parameter	Uncertainty	Limit
Radio frequency	± 0.58 ppm	± 10 ppm
RF power, conducted	± 1.3 dB	± 1.5 dB
RF power, Radiated	± 3.7 dB	± 6 dB
Spurious emissions, conducted	±1.3 dB	± 3 dB
Spurious emissions, radiated	± 3.7dB	± 6 dB
Humidity	± 0.9 %	± 5 %
Temperature	± 0.4 °C	± 2 °C
Time	± 1 %	± 10 %

## 2 Test Configuration of EUT

### 2.1 Test Condition

Condition Item	Abbreviation/Remark	Remark
Tnom	Tnom	20°C
Tmin	Tmin	0°C
Tmax	Tmax	70°C
-	Vnom	230V

### 2.2 Test Channel Mode

Test Software Version	QATool_Dbg 0.0.2.33
-----------------------	---------------------

#### <Non-Beamforming>

Mode	PowerSetting
802.11a_Nss1,(6Mbps)_2TX	-
5180MHz	12.5
5240MHz	11.5
802.11ax HEW20_Nss1,(MCS0)_2TX	-
5180MHz	13.5
5240MHz	12.5
802.11ax HEW40_Nss1,(MCS0)_2TX	-
5190MHz	13.5
5230MHz	13
802.11ax HEW80_Nss1,(MCS0)_2TX	-
5210MHz	14.5

#### <Beamforming>


Mode	PowerSetting
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
5180MHz	11
5240MHz	10
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
5190MHz	11
5230MHz	10
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-
5210MHz	11.5

## 2.3 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
<b>Test Item</b>	Nominal Centre Frequencies
<b>Test Condition</b>	Conducted measurement at transmit chains. One channel out of the declared channels for each sub-band. In case of more than 1 channel plan has been declared, testing of these specific requirements need only be performed using one of the declared channel plans.

The Worst Case Mode for Following Conformance Tests	
<b>Test Item</b>	Nominal Channel Bandwidth (NCB) and Occupied Channel Bandwidth (OCB)
<b>Test Condition</b>	Conducted measurement at transmit chains. One channel out of the declared channels for each sub-band. For Occupied Channel Bandwidth, testing has been repeated for every declared nominal channel bandwidth within this sub-band.

The Worst Case Mode for Following Conformance Tests	
<b>Test Items</b>	RF Output Power Power Density Transmitter Unwanted Emissions within the 5 GHz RLAN Bands
<b>Test Condition</b>	Conducted measurement at transmit chains.

The Worst Case Mode for Following Conformance Tests	
<b>Test Item</b>	Transmitter Unwanted Emissions outside the 5 GHz RLAN Bands Receiver Spurious Emissions
<b>Test Condition</b>	Radiated measurement One channel out of the declared channels for each sub-band. In case of more than 1 channel plan has been declared, testing of these specific requirements need only be performed using one of the declared channel plans. 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</b>	Transmit / Receive
<b>1</b>	Test Fixture mode; PCB Antenna
<b>2</b>	Test Fixture mode; Dipole Antenna
<b>Orthogonal Planes of EUT</b>	<b>Z Plane</b>
	

**The Worst Case Mode for Following Conformance Tests**

<b>Test Item</b>	Adaptivity
<b>Test Condition</b>	Conducted measurement at transmit chains. One channel out of the declared channels

**The Worst Case Mode for Following Conformance Tests**

<b>Test Item</b>	Receiver Blocking
<b>Test Condition</b>	Conducted measurement at one receiver chain. One channel with the lowest data rate out of the declared channels for each sub-band.

## 2.4 Support Equipment

**Support Equipment - RF Conducted**

No.	Equipment	Brand Name	Model Name	Remark
1	Notebook	DELL	E5410	-
2	Adapter for NB	DELL	HA65NM130	-

**Support Equipment - Radiated**

No.	Equipment	Brand Name	Model Name	Remark
1	Fixture	Sinovoip	Banana Pi BPI-R64	-
2	Adapter	SHENZHEN YINGHUIYUAN ELECTRONICS CO.,LTD	YHY-12004000	-

**Support Equipment - Adaptivity**

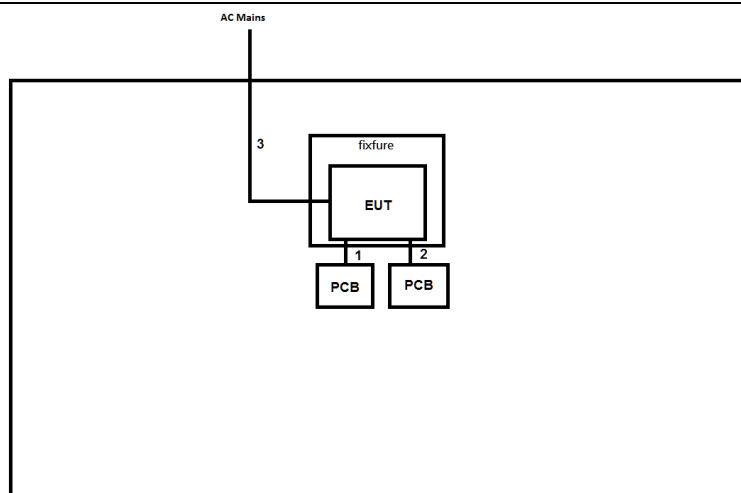
No.	Equipment	Brand Name	Model Name	Remark
1	AP (Master)	ADTRAN	834-V6	-
2	Notebook	DELL	Latitude E5540	-
3	Notebook	DELL	Latitude E5550	-

**Support Equipment - Receiver Blocking**

No.	Equipment	Brand Name	Model Name	Remark
1	Notebook	DELL	Latitude E5540	-

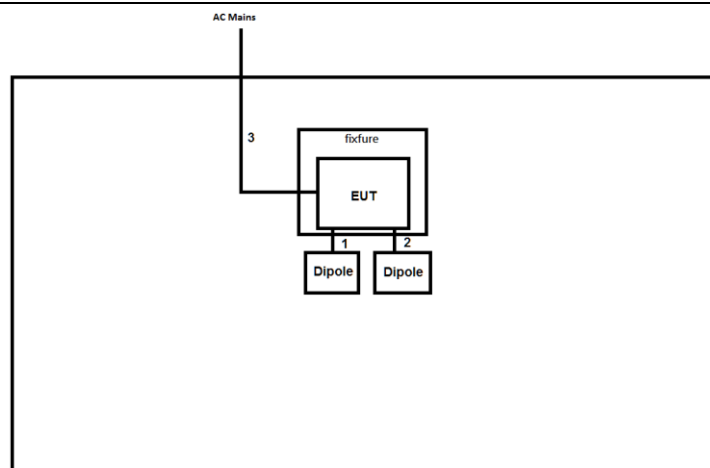
## 2.5 Test Setup Diagram

**Test Setup Diagram - Radiated Test for Mode 1**



Item	Connection	Shielded	Length(m)	Remark
1	RF Cable	No	0.1	-
2	RF Cable	No	0.1	-
3	Power cable	No	1.2	-

**Test Setup Diagram - Radiated Test for Mode 2**



Item	Connection	Shielded	Length(m)	Remark
1	RF Cable	No	0.1	-
2	RF Cable	No	0.1	-
3	Power cable	No	1.2	-



### 3 Transmitter Test Result

#### 3.1 Nominal Centre Frequency

##### 3.1.1 Nominal Centre Frequencies Limit

Nominal Centre Frequency Limit
The actual centre frequency for any given channel declared by the manufacturer shall be maintained within the range $f_c \pm 20$ ppm.

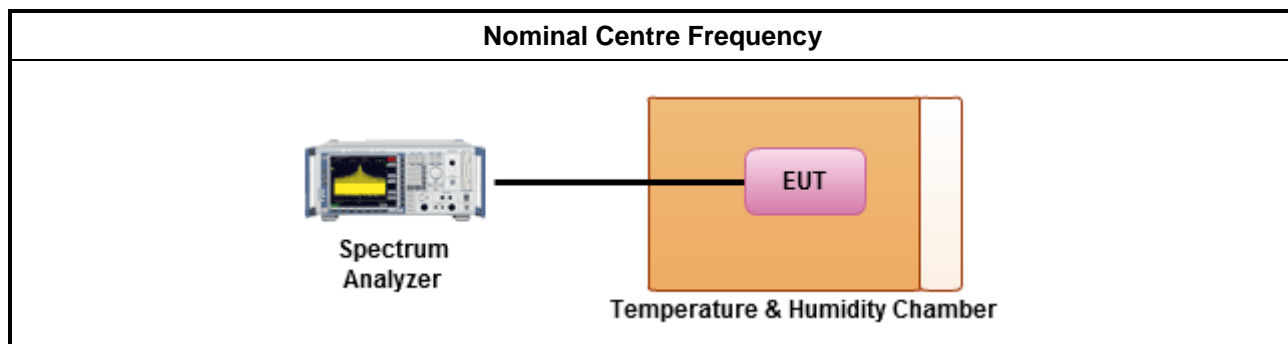
##### 3.1.2 Measuring Instruments

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 EN 301 893, clause 5.3.2 for test channel. In case of more than 1 channel plan has been declared, testing of these specific requirements need only be performed using one of the declared channel plans.
<input checked="" type="checkbox"/> Refer as EN 301 893, clause 5.4.2 for the carrier frequencies shall be measured using one of the options below.
<input checked="" type="checkbox"/> Refer as EN 301 893, clause 5.4.2.2.1.1 for equipment operating without modulation method <input type="checkbox"/> Refer as EN 301 893, clause 5.4.2.2.1.2 for equipment operating with modulation method
<input checked="" type="checkbox"/> Refer as EN 301 893, clause 5.4.2.2.1 for conducted measurement.
<input checked="" type="checkbox"/> Refer as EN 301 893, clause 5.4.2.1 for conducted measurements on smart antenna systems (equipment with multiple transmit chains) measurements need only to be performed on one of the active transmit chains (antenna outputs).
<input type="checkbox"/> Refer as EN 301 893, clause 5.4.2.2.2 for radiated measurement.

##### 3.1.4 Test Setup



##### 3.1.5 Test Result of Nominal Centre Frequency

Refer as Appendix A

## 3.2 Nominal Channel Bandwidth and Occupied Channel Bandwidth

### 3.2.1 Nominal Channel Bandwidth and Occupied Channel Bandwidth Limit

Nominal Channel Bandwidth and Occupied Channel Bandwidth Limit	
The Nominal Channel Bandwidth for a single Operating Channel shall be 20 MHz. Alternatively, equipment may implement a lower Nominal Channel Bandwidth with a minimum of 5 MHz, providing they still comply with the Nominal Centre Frequencies. The Occupied Channel Bandwidth shall be between 80 % and 100 % of the declared Nominal Channel Bandwidth. During an established communication, the device is allowed to operate temporarily with an Occupied Channel Bandwidth below 80 % of its Nominal Channel Bandwidth with a minimum of 2 MHz.	
Nominal Channel Bandwidth (MHz)	Occupied Channel Bandwidth (MHz)
20	16 – 20
40	32 – 40
80	64 – 80
160	128 – 160

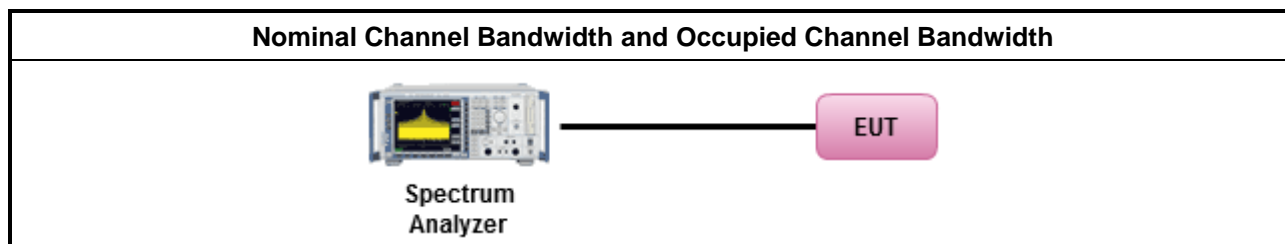
### 3.2.2 Measuring Instruments

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

### 3.2.3 Test Procedures

Test Method	
<input checked="" type="checkbox"/>	Refer as EN 301 893, clause 5.3.2 for test channel. One channel out of the declared channels for each sub-band. For Occupied Channel Bandwidth, testing shall be repeated for every declared nominal channel bandwidth within this sub-band.
<input checked="" type="checkbox"/>	Refer as EN 301 893, clause 5.4.3.2.1 for conducted measurement.
<input checked="" type="checkbox"/>	Refer as EN 301 893, clause 5.4.3.2.1 for conducted measurements on smart antenna systems (equipment with multiple transmit chains) measurements need only to be performed on one of the active transmit chains (antenna outputs).
<input type="checkbox"/>	Refer as EN 301 893, clause 5.4.3.2.2 for radiated measurement.

### 3.2.4 Test Setup



### 3.2.5 Test Result of NCB and OCB

Refer as Appendix B

### 3.3 RF Output Power

#### 3.3.1 RF Output Power Limit

Frequency Range (MHz)	Mean e.i.r.p. Limit (dBm)	
	with TPC	w/o TPC
5150-5350	23	20/23 <small>(note1)</small>
5470-5725	30 <small>(note2)</small>	27 <small>(note2)</small>

Note 1: The applicable limit is 20 dBm, except for transmissions whose nominal bandwidth falls completely within the band 5150 MHz to 5250 MHz, in which case the applicable limit is 23 dBm.

Note 2: Slave devices without a Radar Interference Detection function shall comply with limits for frequency range 5250 MHz to 5350 MHz.

Note 3: TPC is not required for channels whose nominal bandwidth falls completely within the band 5150 MHz to 5250 MHz.

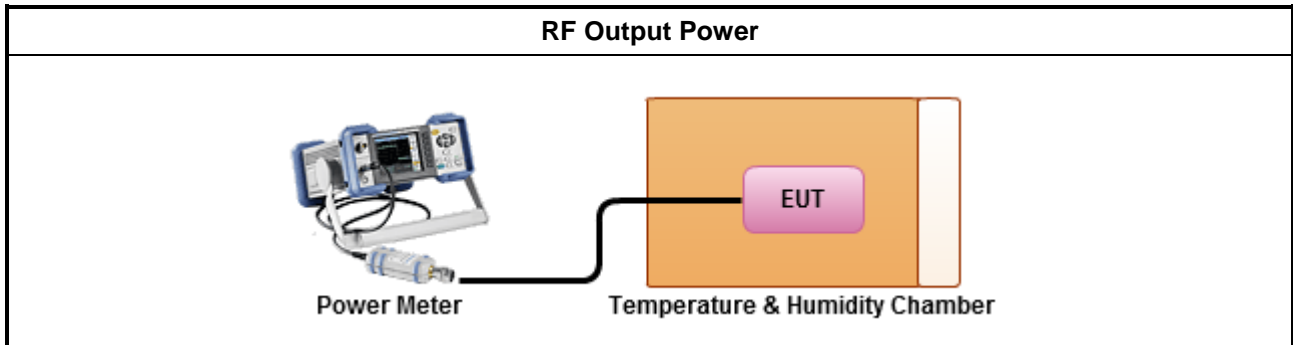
#### 3.3.2 Measuring Instruments

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

#### 3.3.3 Test Procedures

Test Method	
<input checked="" type="checkbox"/>	The measurements shall be performed at both normal environmental conditions and at the extremes of the operating temperature range.
<input checked="" type="checkbox"/>	The EUT shall be configured to operate at the maximum stated transmitter output power level.
<input checked="" type="checkbox"/>	Refer as EN 301 893, clause 5.4.4 for the RF output power shall be measured using below options:
<input checked="" type="checkbox"/>	Option 1: For equipment with continuous transmission capability or for equipment operating (or with the capability to operate) with a constant duty cycle (e.g. Frame Based equipment). Refer as EN 301 893, clause 5.4.4.2.1.1.2.
<input type="checkbox"/>	Option 2: For equipment without continuous transmission capability and operating (or with the capability to operate) in only one sub-band. Refer as EN 301 893, clause 5.4.4.2.1.1.3.
<input type="checkbox"/>	Option 3: For equipment without continuous transmission capability and having simultaneous transmissions in both sub-bands. Refer as EN 301 893, clause 5.4.4.2.1.1.4.
<input checked="" type="checkbox"/>	Refer as EN 301 893, clause 5.4.4.2.1 for conducted measurement.
<input checked="" type="checkbox"/>	In case of conducted measurements on smart antenna systems operating in a mode with multiple transmit chains active simultaneously, the output power of each transmit chain shall be measured separately to calculate the total power (value "A" in dBm) for the EUT.
<input checked="" type="checkbox"/>	If multiple transmit chains, EIRP calculation could be following as methods:
<input checked="" type="checkbox"/>	$EIRP_{total} = P_{total} + G$ If more than one antenna assembly is intended for this power setting, the maximum overall antenna gain (G or G + Y) shall be used for EIRP.
<input type="checkbox"/>	Refer as EN 301 893, clause 5.4.4.2.2 for radiated measurement.

### 3.3.4 Test Setup



### 3.3.5 Test Result of RF Output Power

Refer as Appendix C

### 3.4 Power Density

#### 3.4.1 Power Density Limit

Frequency Range (MHz)	Mean e.i.r.p. Density Limit (dBm/MHz)	
	with TPC	w/o TPC
5150-5350	10	7/10 <small>(note1)</small>
5470-5725	17 <small>(note2)</small>	14 <small>(note2)</small>

Note 1: The applicable limit is 7 dBm/MHz, except for transmissions whose nominal bandwidth falls completely within the band 5150 MHz to 5250 MHz, in which case the applicable limit is 10 dBm/MHz.

Note 2: Slave devices without a Radar Interference Detection function shall comply with limits for frequency range 5250 MHz to 5350 MHz.

#### 3.4.2 Measuring Instruments

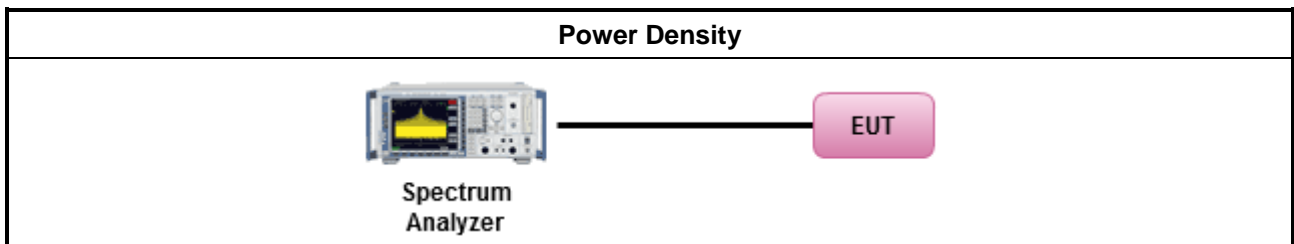
Refer a test equipment and calibration data table in this test report.

#### 3.4.3 Test Procedures

Test Method	
<input checked="" type="checkbox"/>	The measurements shall be performed at normal environmental conditions.
<input checked="" type="checkbox"/>	The EUT shall be configured to operate at the maximum stated transmitter output power level.
<input checked="" type="checkbox"/>	Power density shall be measured using one of the options below.
<input checked="" type="checkbox"/>	Option 1: For equipment with continuous transmission capability or for equipment operating (or with the capability to operate) with a constant duty cycle (e.g. Frame Based equipment). Refer as EN 301 893, clause 5.4.4.2.1.3.2.
<input type="checkbox"/>	Option 2: For equipment without continuous transmission capability and without the capability to transmit with a constant duty cycle. Refer as EN 301 893, clause 5.4.4.2.1.3.3.
<input checked="" type="checkbox"/>	Refer as EN 301 893, clause 5.4.4.2.1 for conducted measurement.
<input checked="" type="checkbox"/>	The EUT supports multiple transmit chains using options given below:
<input checked="" type="checkbox"/>	Option 1: connect the UUT to the spectrum analyzer and use the following 5.4.4.2.1.3.2 settings, find the peak value of the trace and place the analyzer marker on this peak. This level is recorded as the highest mean power (power density) D in a 1 MHz band. In case of conducted measurements on smart antenna systems operating in a mode with multiple transmit chains active simultaneously, the power density of each transmit chain shall be measured separately to calculate the total power density (value "D" in dBm/MHz) for the UUT. The maximum spectral power density is calculated from the measured power density (D), the observed duty cycle x , the applicable antenna assembly gain "G" in dBi and if applicable the beamforming gain "Y" in dB, according to the formula below. $PD = D + G + Y + 10 \log (1/x)$ (dBm/MHz).

<input type="checkbox"/>	<p>Option 2: connect the UUT to the spectrum analyzer and use the 5.4.4.2.1.3.3 settings, Add up the values of power for all the samples in the file using the formula below.</p> $P_{\text{Sum}} = \sum_{n=1}^k P_{\text{sample}}(n)$ <p>Normalize the individual values for power (in dBm) so that the sum is equal to the EIRP(PH) measured for this sub-band. The following formulas can be used:</p> $C_{\text{Corr}} = P_{\text{Sum}} - P_{\text{H e.i.r.p}}$ $P_{\text{Samplecorr}}(n) = P_{\text{Sample}}(n) - C_{\text{Corr}}$ <p>with 'n' being the actual sample number</p> <p>Starting from the first sample <math>P_{\text{Samplecorr}}(n)</math> in the file, add up the power (in mW) of the following samples representing a 1 MHz segment and record the results for power and position (i.e. sample #1 to sample #100). This is the Power Density (e.i.r.p.) for the first 1 MHz segment which shall be saved.</p> <p>Shift the start point of the samples added up in step (i.e. sample #2 to sample #101). Repeat step until the end of the data set and save the radiated power density values for each of the 1 MHz segments.</p> <p>From all the saved results, the highest value is the maximum Power Density (e.i.r.p.) for the UUT.</p>
<input checked="" type="checkbox"/>	<p>If more than one antenna assembly is intended for this power setting, the maximum overall antenna gain (G or G + Y) shall be used for EIRP PSD.</p>
<input type="checkbox"/> Refer as EN 301 893, clause 5.4.4.2.2 for radiated measurement.	

### 3.4.4 Test Setup

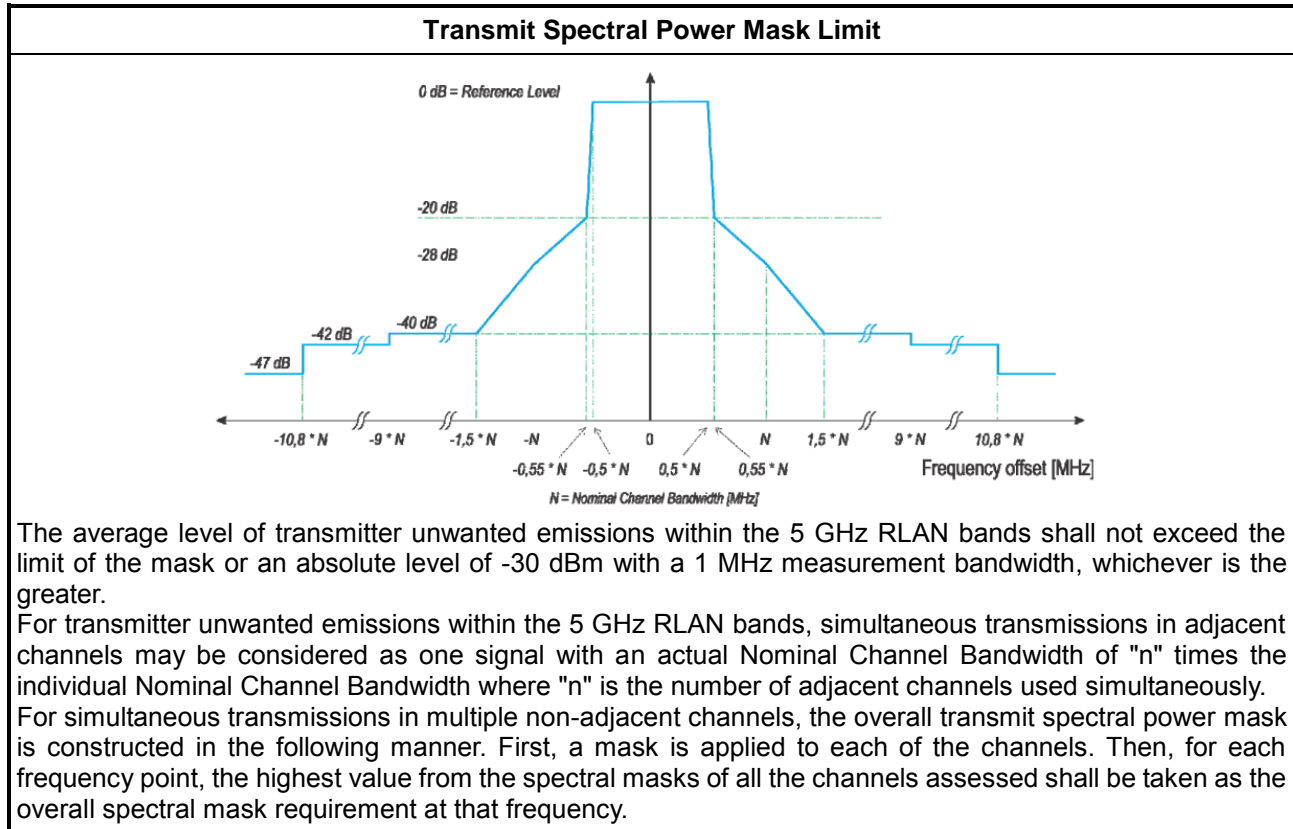


### 3.4.5 Test Result of Power Density

Refer as Appendix D

### 3.5 Transmitter Unwanted Emissions within the 5 GHz RLAN Band

#### 3.5.1 Transmitter Unwanted Emissions within the 5 GHz RLAN Band Limit



#### 3.5.2 Measuring Instruments

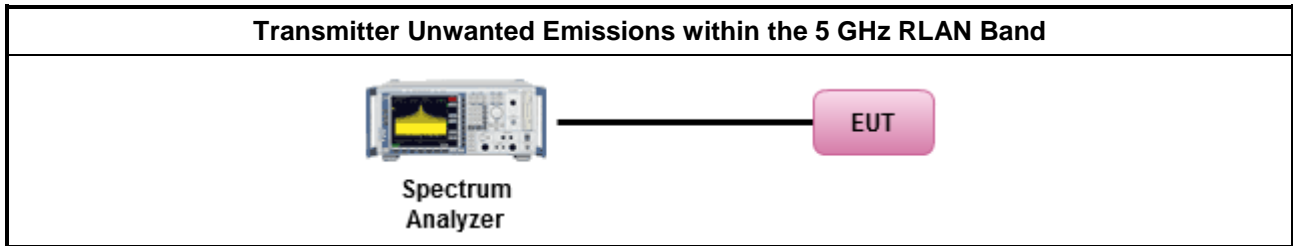
Refer a test equipment and calibration data table in this test report.

#### 3.5.3 Test Procedures

Test Method	
<input checked="" type="checkbox"/>	The measurements shall be performed at both normal environmental conditions.
<input checked="" type="checkbox"/>	Refer as EN 301 893, clause 5.4.6 for the transmit spectral power mask shall be measured using one of the options below:
<input type="checkbox"/>	Option 1: For equipment with continuous transmission capability (duty cycle equal to 100 %)
<input checked="" type="checkbox"/>	Option 2: For equipment without continuous transmission capability (duty cycle < 100 %)
<input checked="" type="checkbox"/>	Refer as EN 301 893, clause 5.4.6.2.1 for conducted measurement.
<input checked="" type="checkbox"/>	Refer as EN 301 893, clause 5.4.6.1 for conducted measurements on smart antenna systems (equipment with multiple transmit chains) measurements need only to be performed on one of the active transmit chains (antenna outputs).
<input type="checkbox"/>	Refer as EN 301 893, clause 5.4.6.2.2 for radiated measurement.



### 3.5.4 Test Setup



### 3.5.5 Test Result of Transmitter Unwanted Emissions within the 5 GHz RLAN Band

Refer as Appendix E

### 3.6 Transmitter Unwanted Emissions outside the 5 GHz RLAN Bands

#### 3.6.1 Transmitter Unwanted Emissions outside the 5 GHz RLAN Bands Limit

Frequency Range	Maximum Power	Bandwidth
30 MHz to 47 MHz	-36 dBm	100 kHz
47 MHz to 74 MHz	-54 dBm	100 kHz
74 MHz to 87,5 MHz	-36 dBm	100 kHz
87,5 MHz to 118 MHz	-54 dBm	100 kHz
118 MHz to 174 MHz	-36 dBm	100 kHz
174 MHz to 230 MHz	-54 dBm	100 kHz
230 MHz to 470 MHz	-36 dBm	100 kHz
470 MHz to 862 MHz	-54 dBm	100 kHz
862 MHz to 1 GHz	-36 dBm	100 kHz
1 GHz to 26 GHz	-30 dBm	1 MHz

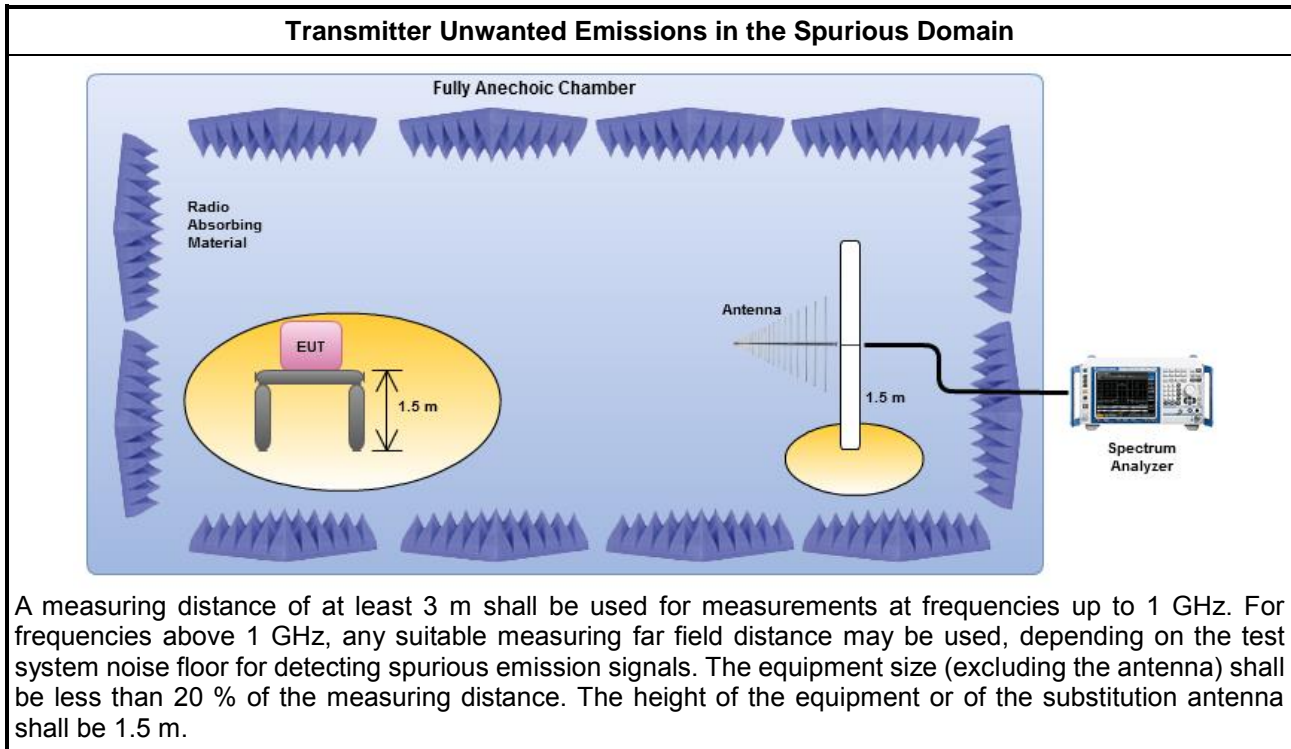
#### 3.6.2 Measuring Instruments

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

#### 3.6.3 Test Procedures

Test Method	
<input checked="" type="checkbox"/>	Refer as EN 301 893, clause 5.3.2 for test channel. One channel out of the declared channels for each sub-band. In case of more than 1 channel plan has been declared, testing of these specific requirements need only be performed using one of the declared channel plans.
<input type="checkbox"/>	Refer as EN 301 893, clause 5.4.5.2.1 for conducted measurement. Conducted spurious emissions and radiated by the cabinet with the antenna connector(s) terminated by a specified load (cabinet radiation).
<input type="checkbox"/>	The EUT supports multiple transmit chains using options given below:
<input type="checkbox"/>	Option 1: The results for each of the transmit chains for the corresponding 1 MHz segments shall be added and compared with the transmitter spurious emissions limit.
<input type="checkbox"/>	Option 2: the results for each of the transmit chains shall be individually compared with the transmitter spurious emissions limit. After that these limits have been reduced with $10 \times \log_{10}(T_{ch})$ . (Number of active transmit chains).
<input checked="" type="checkbox"/>	Refer as EN 301 893, clause 5.4.5.2.2 for radiated measurement.

### 3.6.4 Test Setup



### 3.6.5 Transmitter Radiated Unwanted Emissions

Refer as Appendix F

## 4 Receiver Test Result

### 4.1 Receiver Spurious Emissions

#### 4.1.1 Receiver Spurious Emissions Limit

Frequency Range	Maximum Power	Measurement Bandwidth
30 MHz to 1 GHz	-57 dBm	100 kHz
1 GHz to 26 GHz	-47 dBm	1 MHz

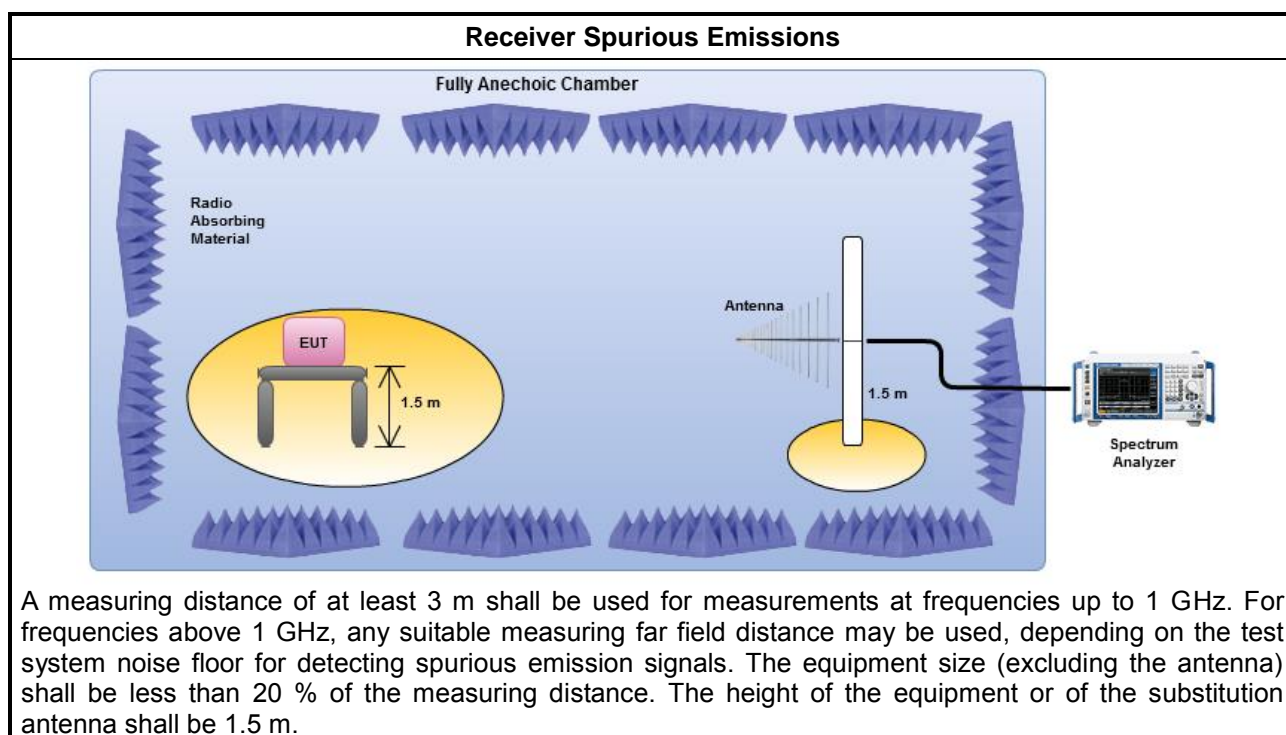
#### 4.1.2 Measuring Instruments

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

#### 4.1.3 Test Procedures

Test Method	
<input checked="" type="checkbox"/>	Refer as EN 301 893, clause 5.3.2 for test channel. One channel out of the declared channels for each sub-band. In case of more than 1 channel plan has been declared, testing of these specific requirements need only be performed using one of the declared channel plans.
<input type="checkbox"/>	Refer as EN 301 893, clause 5.4.7.2.1 for conducted measurement. Conducted spurious emissions and radiated by the cabinet with the antenna connector(s) terminated by a specified load (cabinet radiation).
<input type="checkbox"/>	The EUT supports multiple receive chains, EN 301 893 clause 5.4.7.2.1 step 2 shall be repeated for each of the active receive chains, then sum the measured power (within the observed window) for each of the active receive chains.
<input checked="" type="checkbox"/>	Refer as EN 301 893, clause 5.4.7.2.2 for radiated measurement.

#### 4.1.4 Test Setup





#### **4.1.5 Receiver Radiated Spurious Emissions**

Refer as Appendix G

## 5 Adaptivity Test Result

### 5.1 Adaptivity

#### 5.1.1 Adaptivity Limit

<b>Adaptivity Limit</b>				
<input checked="" type="checkbox"/> Priority Class dependent Channel Access parameters for Supervised Devices:				
<b>Class #</b>	<b>p<sub>0</sub></b>	<b>CW<sub>min</sub></b>	<b>CW<sub>max</sub></b>	<b>Maximum Channel Occupancy Time (COT)</b>
<input checked="" type="checkbox"/> 4	2	3	7	2 ms
<input checked="" type="checkbox"/> 3	2	7	15	4 ms
<input checked="" type="checkbox"/> 2	3	15	1 023	6 ms (see note 1)
<input checked="" type="checkbox"/> 1	7	15	1 023	6 ms (see note 1)
NOTE 1: The maximum <i>Channel Occupancy Time</i> (COT) of 6 ms may be increased to 8 ms by inserting one or more pauses. The minimum duration of a pause shall be 100 µs. The maximum duration (Channel Occupancy) before including any such pause shall be 6 ms. Pause duration is not included in the channel occupancy time. NOTE 2: the values for p <sub>0</sub> , CW <sub>min</sub> , CW <sub>max</sub> are minimum values. Greater values are allowed.				
<input type="checkbox"/> Priority Class dependent Channel Access parameters for Supervising Devices:				
<b>Class #</b>	<b>p<sub>0</sub></b>	<b>CW<sub>min</sub></b>	<b>CW<sub>max</sub></b>	<b>maximum Channel Occupancy Time (COT)</b>
<input type="checkbox"/> 4	1	3	7	2 ms
<input type="checkbox"/> 3	1	7	15	4 ms
<input type="checkbox"/> 2	3	15	63	6 ms (see note 1 and note 2)
<input type="checkbox"/> 1	7	15	1 023	6 ms (see note 1)
NOTE 1: The maximum <i>Channel Occupancy Time</i> (COT) of 6 ms may be increased to 8 ms by inserting one or more pauses. The minimum duration of a pause shall be 100 µs. The maximum duration (Channel Occupancy) before including any such pause shall be 6 ms. Pause duration is not included in the channel occupancy time. NOTE 2: The maximum Channel Occupancy Time (COT) of 6 ms may be increased to 10 ms by extending CW to CW × 2 + 1 when selecting the random number q for any backoff(s) that precede the Channel Occupancy that may exceed 6 ms or which follow the Channel Occupancy that exceeded 6 ms. The choice between preceding or following a Channel Occupancy shall remain unchanged during the operation time of the device. NOTE 3: The values for p <sub>0</sub> , CW <sub>min</sub> , CW <sub>max</sub> are minimum values. Greater values are allowed.				
<b>Energy Detect Threshold (ED Threshold):</b>				
<input checked="" type="checkbox"/> Option 1: For equipment that for its operation in the 5 GHz bands is conforming to IEEE 802.11™-2016 [9], clause 17, clause 19 or clause 21, or any combination of these clauses, the ED Threshold Level (TL) is independent of the equipment's maximum transmit power (P <sub>H</sub> ). Assuming a 0 dBi receive antenna the ED Threshold Level (TL) shall be:				
$TL = -75 \text{ dBm/MHz}$				
<input type="checkbox"/> Option 2: For equipment conforming to one or more of the clauses listed in Option 1, and to at least one other operating mode, and for equipment conforming to none of the clauses listed in Option 1, the Energy Detect Threshold (ED Threshold) shall be proportional to the equipment's maximum transmit power (P <sub>H</sub> ). Assuming a 0 dBi receive antenna the Energy Detect Threshold (ED Threshold) shall be:				
For PH ≤ 13 dBm: TL= -75 dBm/MHz For 13 dBm < PH < 23 dBm: TL= -85 dBm/MHz + (23 dBm - PH) For PH ≥ 23 dBm: TL= -85 dBm/MHz				
<input checked="" type="checkbox"/> Short Control Signalling Transmissions:				

- ♦ Within an observation period of 50 ms, the number of Short Control Signalling Transmissions by the equipment shall be equal to or less than 50.
- ♦ The total duration of the equipment's Short Control Signalling Transmissions shall be less than 2 500  $\mu$ s within said observation period.

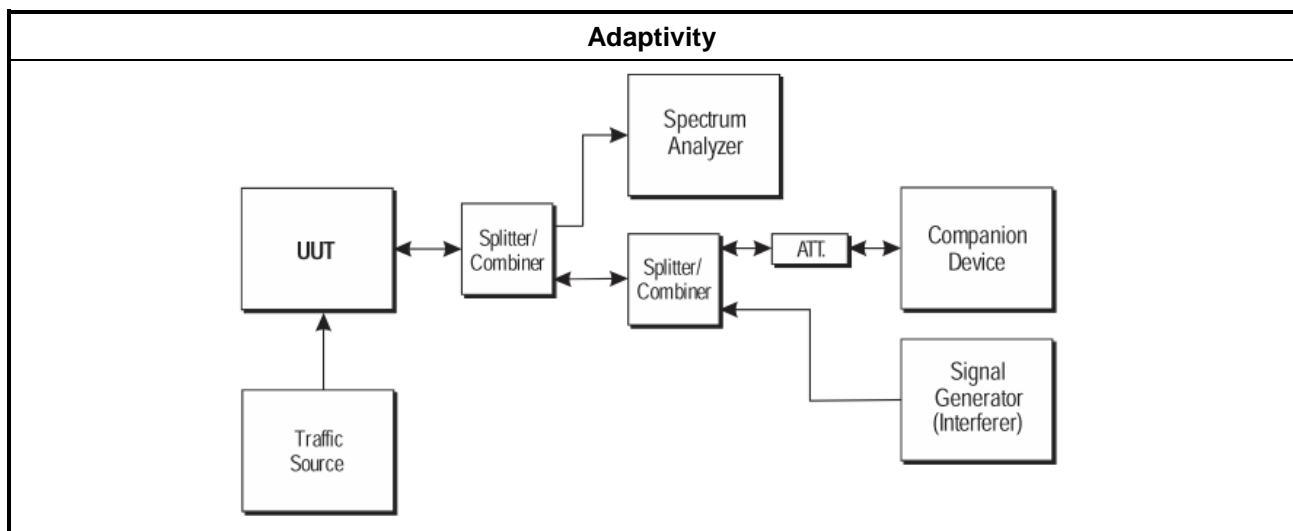
### 5.1.2 Measuring Instruments

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

### 5.1.3 Test Procedures

Test Method	
<input checked="" type="checkbox"/>	Refer as EN 301 893, clause 5.3.2 for test channel: One channel out of the declared channels.
<input checked="" type="checkbox"/>	Refer as EN 301 893, clause 5.4.9.3.2 for conducted measurement.
<input checked="" type="checkbox"/>	For conducted measurements on devices with multiple transmit chains and receive chains. The power splitter/combiner shall be used to combine all the transmit/receive chains (antenna outputs) into a single test point. The insertion loss of the power splitter/combiner shall be taken into account.
<input type="checkbox"/>	Refer as EN 301 893, clause 5.4.9.3.4 for radiated measurement.

### 5.1.4 Test Setup



### 5.1.5 Test Result of Adaptivity

Refer as Appendix H



## 6 Receiver Blocking Test Result

### 6.1 Receiver Blocking

#### 6.1.1 Receiver Blocking Limit

Receiver Blocking Limit				
Receiver Blocking Parameters				
Wanted signal mean power from companion device (dBm)	Blocking signal frequency (MHz)	Blocking signal power (dBm) (see note2)		Type of blocking signal
		Master or Slave with radar detection	Slave without radar detection	
$P_{min} + 6 \text{ dB}$	5 100	-53	-59	CW
$P_{min} + 6 \text{ dB}$	4 900 5 000 5 975	-47	-53	CW
NOTE 1: $P_{min}$ is the minimum level of the wanted signal (in dBm) required to meet the minimum performance criteria as defined clause 4.2.8.3 in the absence of any blocking signal.				
NOTE 2: The levels specified are levels in front of the UUT antenna. In case of conducted measurements, the same levels should be used at the antenna connector irrespective of antenna gain.				

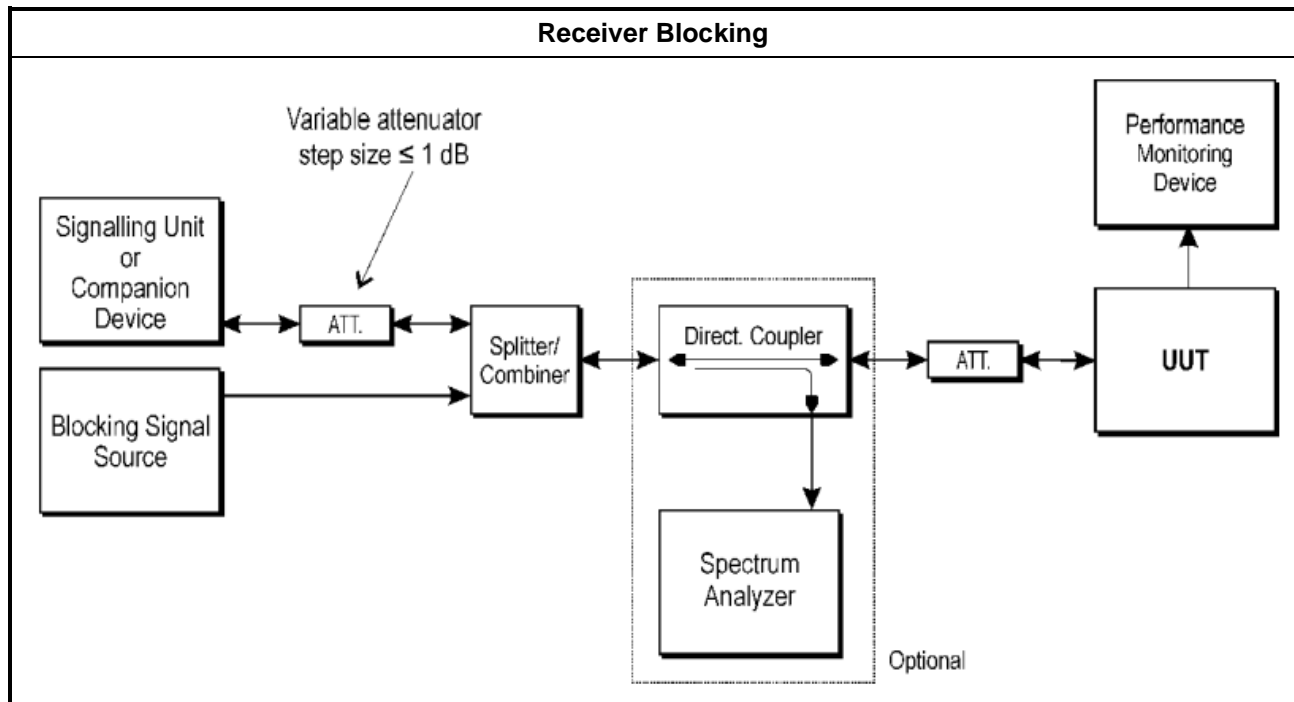
#### 6.1.2 Measuring Instruments

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

#### 6.1.3 Test Procedures

Test Method	
<input checked="" type="checkbox"/>	Refer as EN 301 893, clause 5.4.10.2.1 for conducted measurement.
<input checked="" type="checkbox"/>	For systems using multiple receive chains only one chain (antenna port) need to be tested. All other receiver inputs shall be terminated.
<input type="checkbox"/>	Refer as EN 301 893, clause 5.4.10.2.2 for radiated measurement.

### 6.1.4 Test Setup



### 6.1.5 Test Result of Receiver Blocking

Refer as Appendix I

## 7 Test Equipment and Calibration Data

### Instrument for Conducted Test

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Signal Analyzer	R&S	FSV 40	101515	10Hz~40GHz	14/Feb/2022	13/Feb/2023
Programmable Temp. & Humi. Chamber	Giant Force	GTH-225-40-CP-AR	MAA1311-008	-40~100℃	08/Jun/2021	07/Jun/2022
SMB100A Signal Generator	R&S	SMB100A	181147	100kHz~40GHz	21/Oct/2021	20/Oct/2022
USB Wideband Power Sensor	Agilent	U2021XA	MY54320011	50MHz~18GHz	15/Aug/2021	14/Aug/2022
USB Wideband Power Sensor	Agilent	U2021XA	MY54320013	50MHz~18GHz	15/Aug/2021	14/Aug/2022
SENSE-301893_NII	Sporton	V5.10.7.16	N/A	N/A	N/A	N/A

### Instrument for Radiated Test

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Signal Analyzer	R&S	FSV40	101514	10Hz~40GHz	30/Apr/2021	29/Apr/2022
Signal Analyzer	R&S	FSV 40	101515	10Hz~40GHz	14/Feb/2022	13/Feb/2023
Amplifier	Agilent	8447D	2944A11146	100kHz~1.3GHz	02/Sep/2021	01/Sep/2022
Microwave Preamplifier	EMC INSTRUMENT	EMC051845BE	980241	1GHz~18GHz	17/May/2021	16/May/2022
Bilog Antenna & 6dB Attenuator	SCHAFFNER	CBL6111C & N-6-06	2737 & AT-N0603	30MHz~1GHz	04/Sep/2021	03/Sep/2022
Double Ridged Guide Horn Antenna	ETS · LINDGREN	3117	00091920	1GHz~18GHz	25/Nov/2021	24/Nov/2022
RF Cable	Jye Bao	SUOFLEX 104	CB001+F1403+S N329367/4	30MHz~1GHz	16/Mar/2022	15/Mar/2023
RF Cable	HUBER+SUHNER	SUOFLEX 104	SN345669/4+MY 34919/4	1GHz~40GHz	16/Mar/2022	15/Mar/2023
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170221	18GHz~40GHz	18/Mar/2022	17/Mar/2023
Microwave Premplifier	EMC INSTRUMENTS	EM18G40G	060604	18GHz ~ 40GHz	08/Mar/2022	07/Mar/2023
Signal Analyzer	R&S	FSV40	101514	10Hz~40GHz	30/Apr/2021	29/Apr/2022
SENSE-301893_NII	Sporton	V5.10.7.15	N/A	N/A	N/A	N/A

**Instrument for Adaptivity Test**

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Spectrum Analyzer	R&S	FSP30	100793	9 kHz ~ 30GHz	30/Jun/2021	29/Jun/2022
Vector Signal Generator	Keysight	N5182B	MY53051912	9kHz~6GHz	21/Mar/2022	20/Mar/2023
DFS-Adaptivity	Sporton	Ver 2.7	N/A	N/A	N/A	N/A
Adaptivity Analysis-5G	Sporton	Ver 2.8	N/A	N/A	N/A	N/A

**Instrument for Receiver Blocking Test**

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Wireless connectivity tester	R&S	CMW270	100855	70MHz ~6GHz	24/Nov/2021	23/Nov/2022
SMB100A Signal Generator	R&S	SMB100A	181147	100kHz~40GHz	21/Oct/2021	20/Oct/2022



**Summary**

Mode	Result	Ch (Hz)	Center (Hz)	ppm	Limit (ppm)	Port
5.15-5.25GHz	-	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	Pass	5.18G	5.18003G	5.7908	20	1

**Result**

Mode	Result	Ch (Hz)	Center (Hz)	ppm	Limit (ppm)	Port
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz_Tnom	Pass	5.18G	5.179981G	3.6192	20	1
5180MHz_Tmin	Pass	5.18G	5.180004G	0.7238	20	1
5180MHz_Tmax	Pass	5.18G	5.18003G	5.7908	20	1



**Summary**

Mode	OBW (Hz)	ITU-Code
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	16.366M	16M4D1D
802.11ax HEW20_Nss1,(MCS0)_2TX	18.915M	18M9D1D
802.11ax HEW40_Nss1,(MCS0)_2TX	37.511M	37M5D1D
802.11ax HEW80_Nss1,(MCS0)_2TX	76.581M	76M6D1D

OBW = 99% occupied bandwidth



**Result**

Mode	Result	Limit (Hz)	fl-OBW (Hz)	fh-OBW (Hz)	OBW (Hz)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-
5180MHz_Tnom	Pass	16M~20M	5.171792G	5.188158G	16.366M
5240MHz_Tnom	Pass	16M~20M	5.231802G	5.248168G	16.366M
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-
5180MHz_Tnom	Pass	16M~20M	5.170522G	5.189448G	18.915M
5240MHz_Tnom	Pass	16M~20M	5.230532G	5.249428G	18.885M
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-
5190MHz_Tnom	Pass	32M~40M	5.171225G	5.208715G	37.491M
5230MHz_Tnom	Pass	32M~40M	5.211225G	5.248735G	37.511M
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-
5210MHz_Tnom	Pass	64M~80M	5.17157G	5.24815G	76.581M

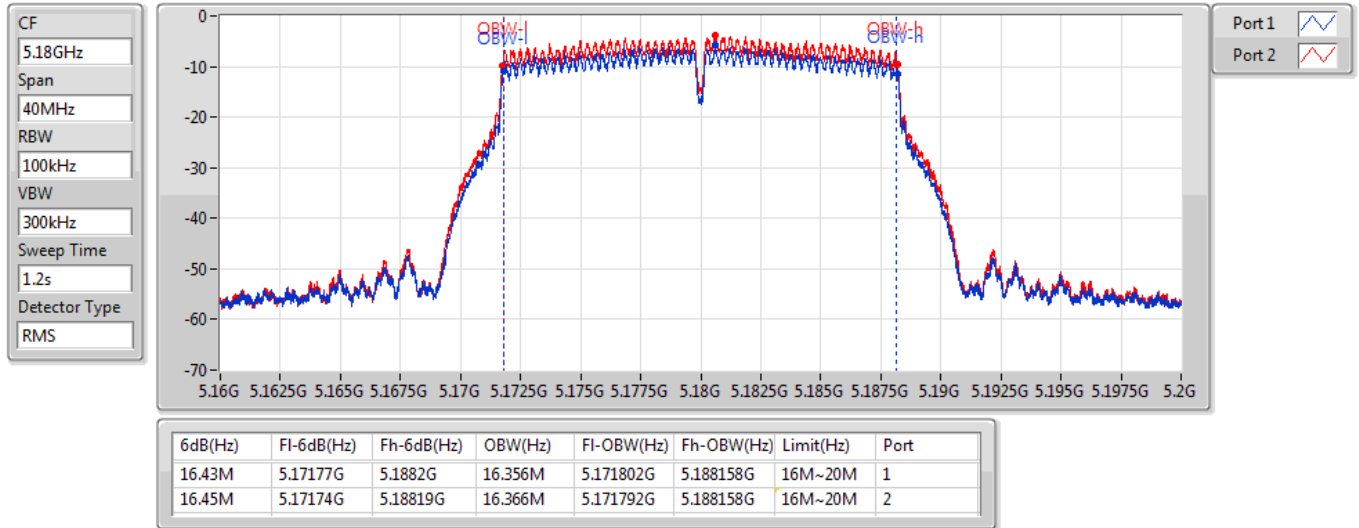
fl-OBW = fl lower edge 99% occupied bandwidth; fh-OBW = fh higher edge 99% occupied bandwidth; OBW = 99% occupied bandwidth;  
N dB = 6dB down bandwidth

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

EBW

5180MHz

12/05/2022

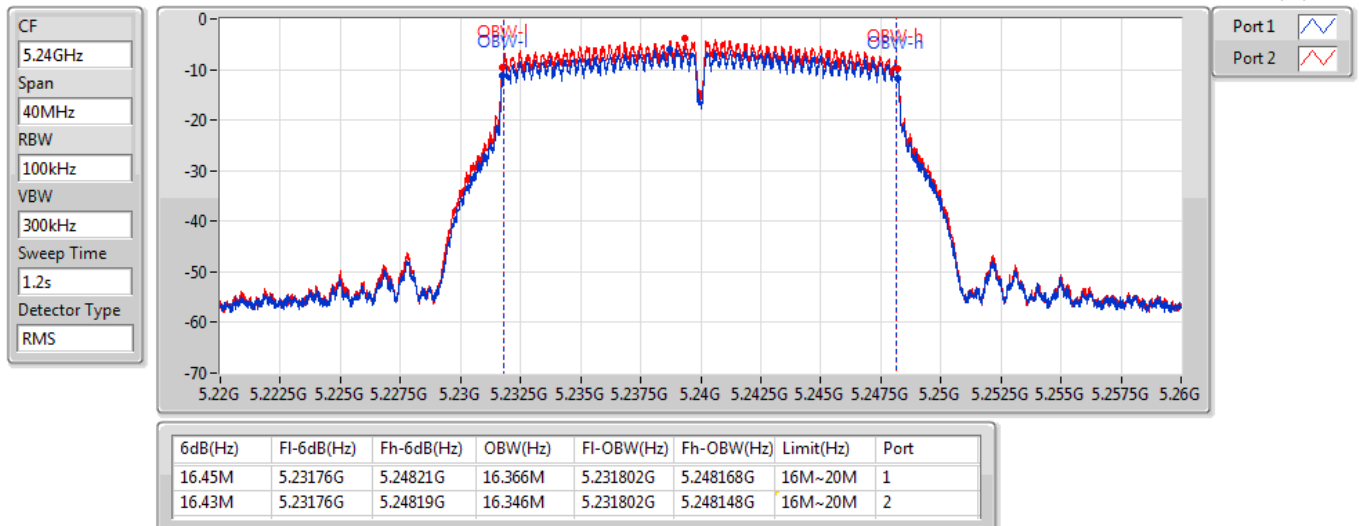


## 802.11a\_Nss1,(6Mbps)\_2TX

EBW

5240MHz

12/05/2022

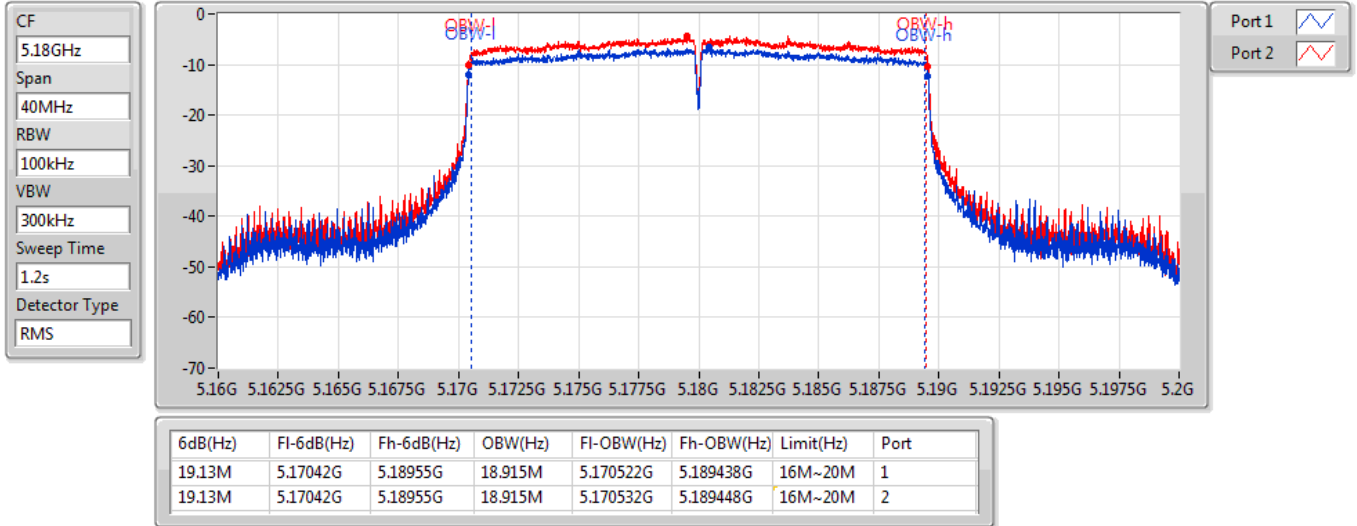


## 802.11ax HEW20\_Nss1,(MCS0)\_2TX

EBW

5180MHz

12/05/2022

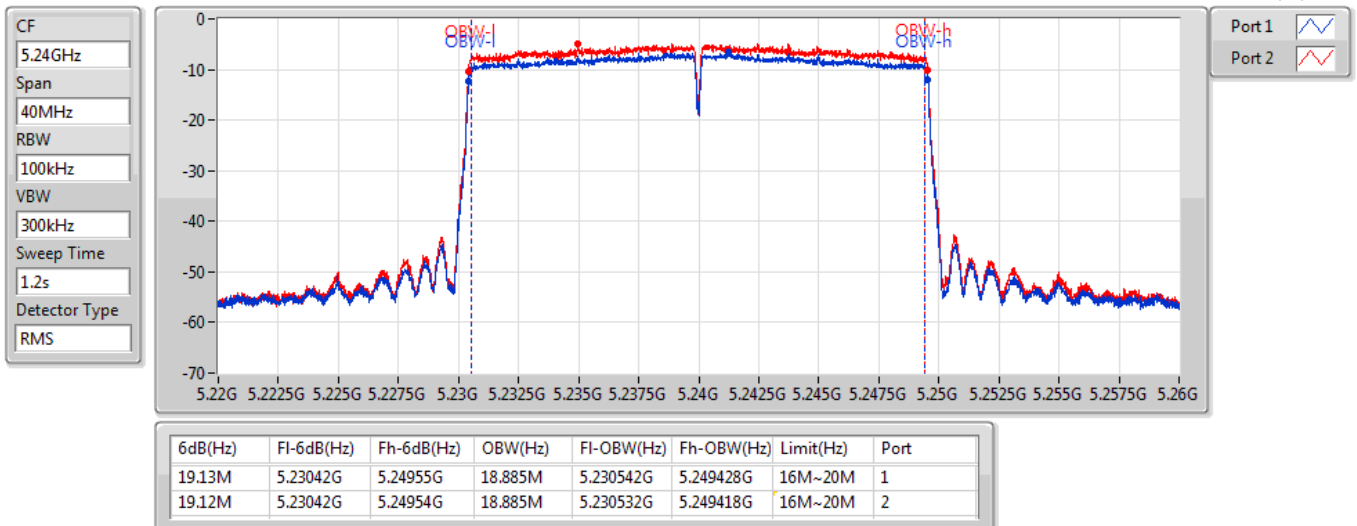


## 802.11ax HEW20\_Nss1,(MCS0)\_2TX

EBW

5240MHz

12/05/2022

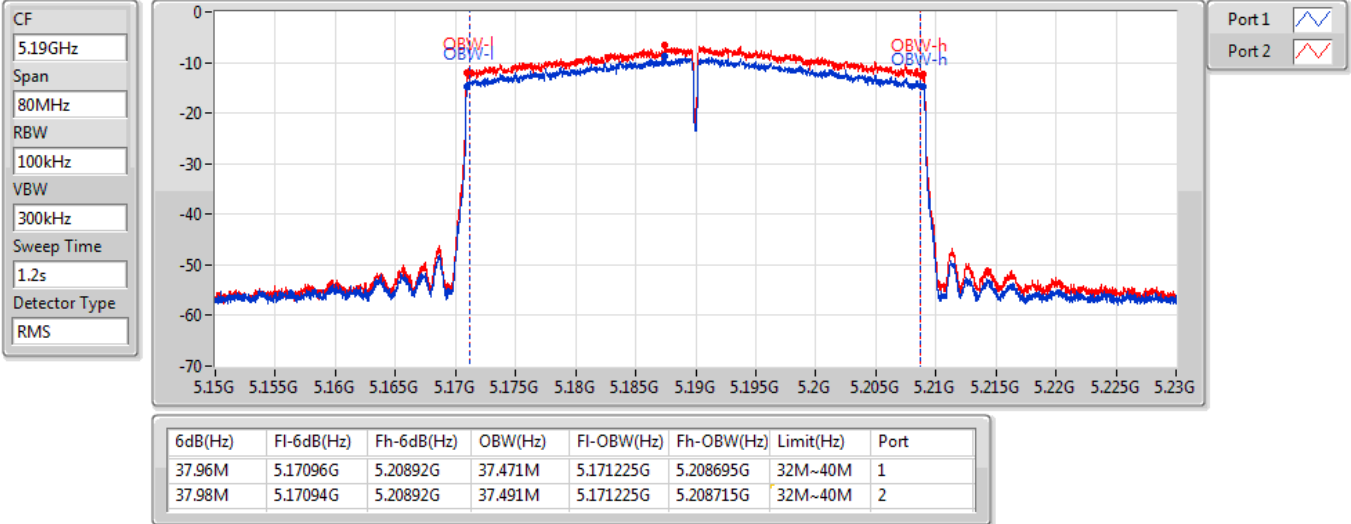


## 802.11ax HEW40\_Nss1,(MCS0)\_2TX

EBW

5190MHz

12/05/2022

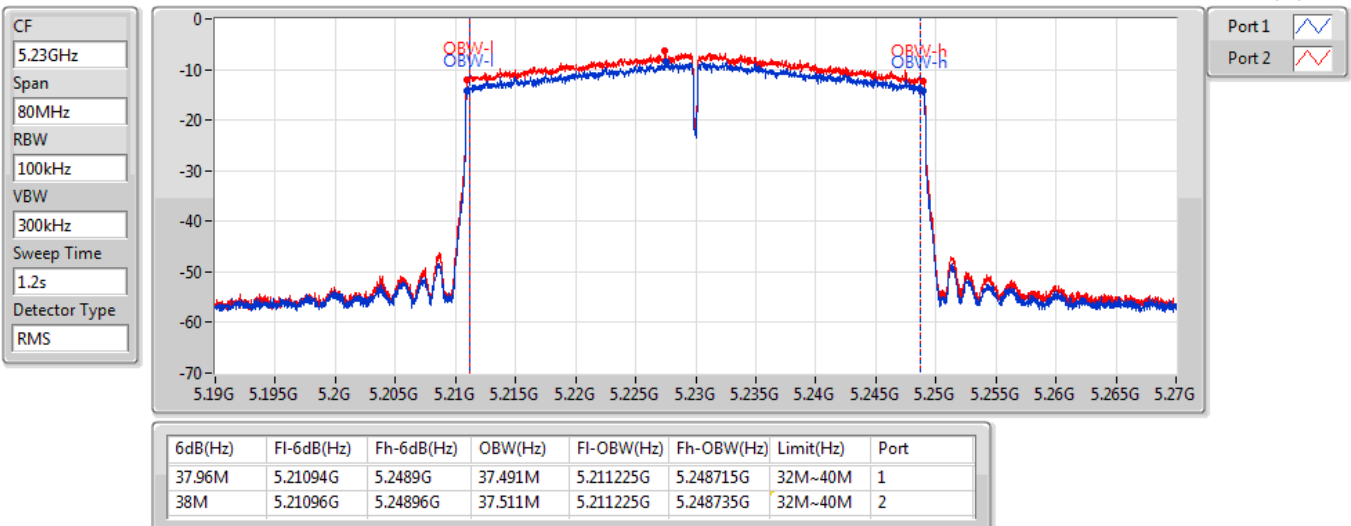


## 802.11ax HEW40\_Nss1,(MCS0)\_2TX

EBW

5230MHz

12/05/2022

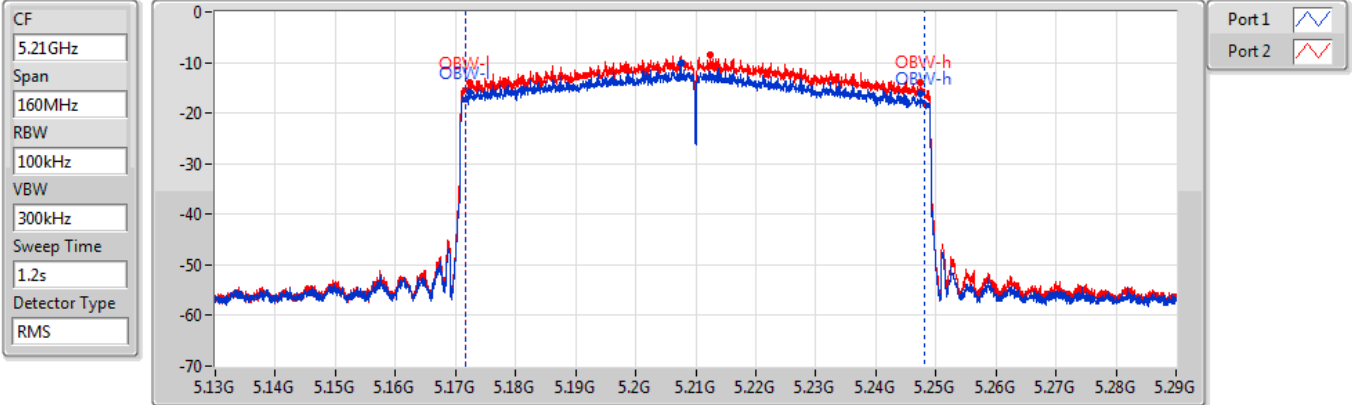


# 802.11ax HEW80\_Nss1,(MCS0)\_2TX

EBW

5210MHz

12/05/2022



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
75.04M	5.17244G	5.24748G	76.581M	5.17157G	5.24815G	64M~80M	1
75.08M	5.17244G	5.24752G	76.501M	5.17165G	5.24815G	64M~80M	2



**Summary**

Mode	EIRP (dBm)	EIRP (W)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	22.12	0.16293
802.11ax HEW20_Nss1,(MCS0)_2TX	22.54	0.17947
802.11ax HEW40_Nss1,(MCS0)_2TX	22.71	0.18664
802.11ax HEW80_Nss1,(MCS0)_2TX	22.91	0.19543



Result

Mode	Result	Gain (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-
5180MHz_Tnom	Pass	5.20	12.37	14.51	16.58	21.78	23.00
5180MHz_Tmin	Pass	5.20	12.43	14.32	16.49	21.69	23.00
5180MHz_Tmax	Pass	5.20	12.92	14.71	16.92	22.12	23.00
5240MHz_Tnom	Pass	5.20	12.56	14.19	16.46	21.66	23.00
5240MHz_Tmin	Pass	5.20	12.49	14.11	16.39	21.59	23.00
5240MHz_Tmax	Pass	5.20	12.65	14.40	16.62	21.82	23.00
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
5180MHz_Tnom	Pass	5.20	12.99	15.11	17.19	22.39	23.00
5180MHz_Tmin	Pass	5.20	12.86	14.81	16.95	22.15	23.00
5180MHz_Tmax	Pass	5.20	13.43	15.08	17.34	22.54	23.00
5240MHz_Tnom	Pass	5.20	13.18	14.71	17.02	22.22	23.00
5240MHz_Tmin	Pass	5.20	13.02	14.58	16.88	22.08	23.00
5240MHz_Tmax	Pass	5.20	13.20	14.78	17.07	22.27	23.00
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
5190MHz_Tnom	Pass	5.20	12.93	15.01	17.10	22.30	23.00
5190MHz_Tmin	Pass	5.20	12.95	14.86	17.02	22.22	23.00
5190MHz_Tmax	Pass	5.20	13.42	15.10	17.35	22.55	23.00
5230MHz_Tnom	Pass	5.20	13.76	15.10	17.49	22.69	23.00
5230MHz_Tmin	Pass	5.20	13.30	14.95	17.21	22.41	23.00
5230MHz_Tmax	Pass	5.20	13.80	15.11	17.51	22.71	23.00
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
5210MHz_Tnom	Pass	5.20	13.22	15.35	17.42	22.62	23.00
5210MHz_Tmin	Pass	5.20	13.15	15.27	17.35	22.55	23.00
5210MHz_Tmax	Pass	5.20	13.75	15.48	17.71	22.91	23.00

Port X = Port X output power; Total Power = Total power measure all transmit ports simultaneously.



**Summary**

Mode	EIRP (dBm)	EIRP (W)
5.15-5.25GHz	-	-
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	22.95	0.19724
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	22.97	0.19815
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	22.99	0.19907





Result

Mode	Result	Gain (dBi)	Total Power (dBm)	EIRP (dBm)	EIRP Limit (dBm)	Port 1 (dBm)	Port 2 (dBm)
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
5180MHz_Tnom	Pass	8.21	14.66	22.87	23.00	10.27	12.70
5180MHz_Tmin	Pass	8.21	14.35	22.56	23.00	10.46	12.07
5180MHz_Tmax	Pass	8.21	14.74	22.95	23.00	10.82	12.48
5240MHz_Tnom	Pass	8.21	14.67	22.88	23.00	10.77	12.40
5240MHz_Tmin	Pass	8.21	14.28	22.49	23.00	10.31	12.06
5240MHz_Tmax	Pass	8.21	14.60	22.81	23.00	10.65	12.37
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
5190MHz_Tnom	Pass	8.21	14.48	22.69	23.00	10.51	12.26
5190MHz_Tmin	Pass	8.21	14.58	22.79	23.00	10.33	12.54
5190MHz_Tmax	Pass	8.21	14.76	22.97	23.00	10.71	12.58
5230MHz_Tnom	Pass	8.21	14.25	22.46	23.00	10.52	11.85
5230MHz_Tmin	Pass	8.21	14.11	22.32	23.00	10.40	11.71
5230MHz_Tmax	Pass	8.21	14.39	22.60	23.00	10.80	11.89
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
5210MHz_Tnom	Pass	8.21	14.42	22.63	23.00	10.28	12.31
5210MHz_Tmin	Pass	8.21	14.08	22.29	23.00	9.84	12.03
5210MHz_Tmax	Pass	8.21	14.78	22.99	23.00	10.80	12.56

Port X = Port X output power; Total Power = Total power measure all transmit ports simultaneously.



**Summary**

Mode	EIRP PD (dBm/MHz)
5.15-5.25GHz	-
802.11a_Nss1,(6Mbps)_2TX	9.63
802.11ax HEW20_Nss1,(MCS0)_2TX	9.86

RBW=1MHz



**Result**

Mode	Result	Gain (dBi)	PD (dBm/MHz)	EIRP PD (dBm/MHz)	EIRP PD Limit (dBm/MHz)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-
5180MHz_Tnom	Pass	5.20	4.43	9.63	10.00
5240MHz_Tnom	Pass	5.20	4.29	9.49	10.00
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-
5180MHz_Tnom	Pass	5.20	4.66	9.86	10.00
5240MHz_Tnom	Pass	5.20	4.60	9.80	10.00

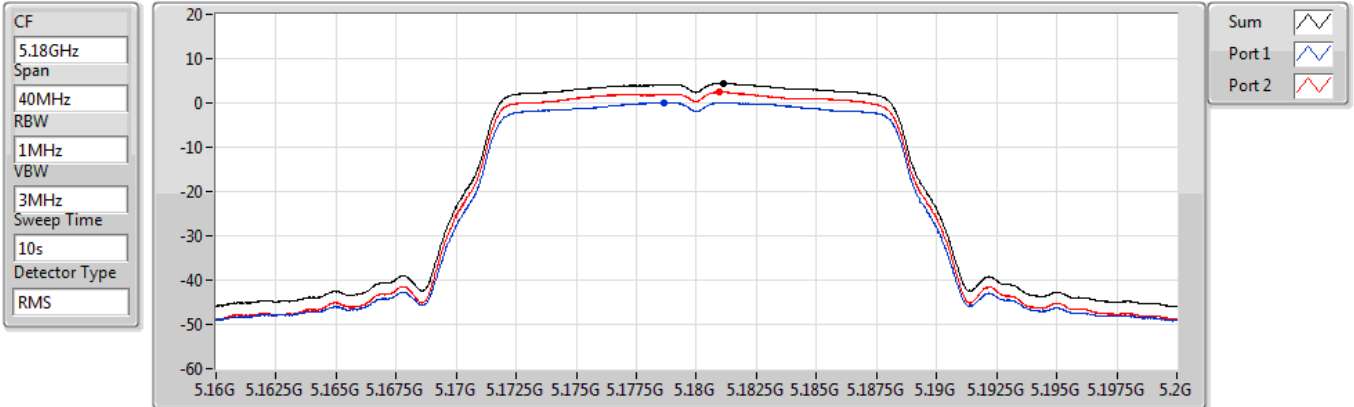
RBW=1MHz;  
Port X = Port X power density;

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

## PSD

5180MHz

12/05/2022

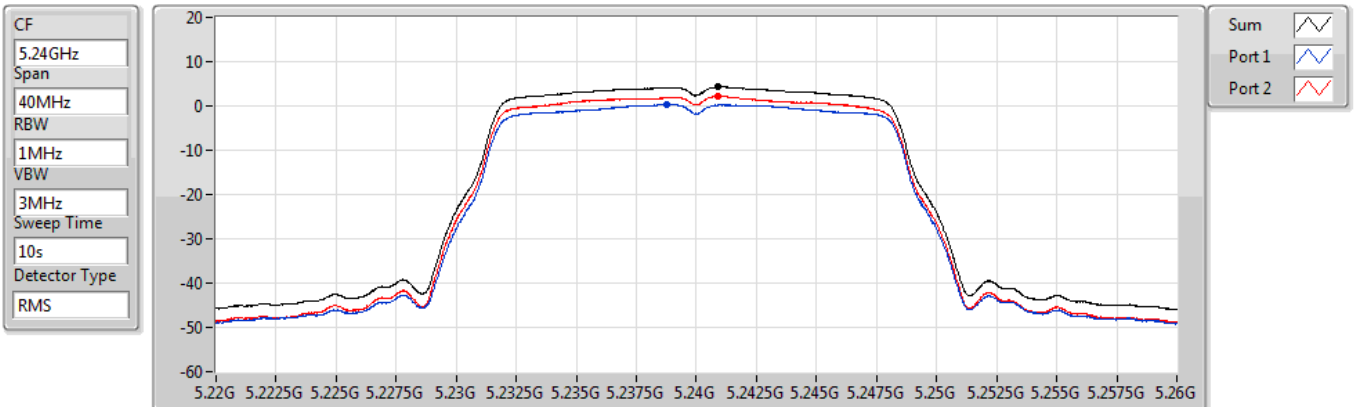


## 802.11a\_Nss1,(6Mbps)\_2TX

## PSD

5240MHz

12/05/2022



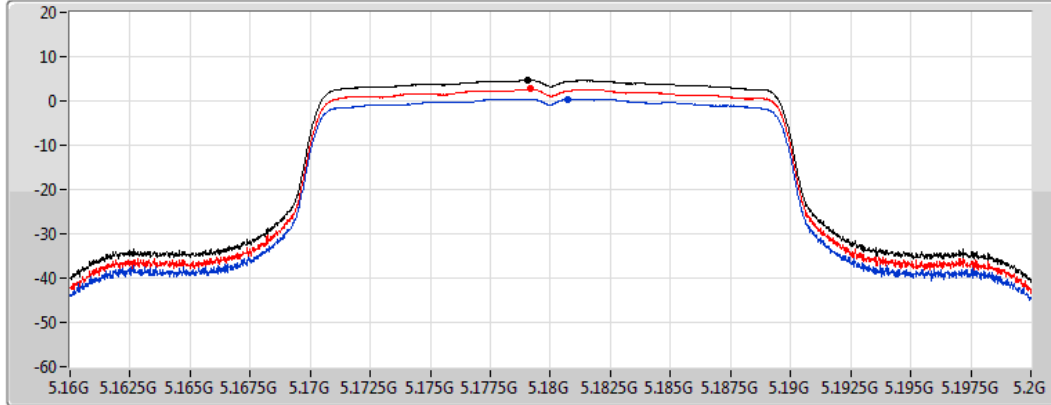
## 802.11ax HEW20\_Nss1,(MCS0)\_2TX

## PSD

5180MHz

12/05/2022

CF  
5.18GHz  
Span  
40MHz  
RBW  
1MHz  
VBW  
3MHz  
Sweep Time  
10s  
Detector Type  
RMS



Sum  
Port 1  
Port 2

PD	Port 1	Port 2
(dBm/MHz)	(dBm/MHz)	(dBm/MHz)
4.66	0.43	2.67

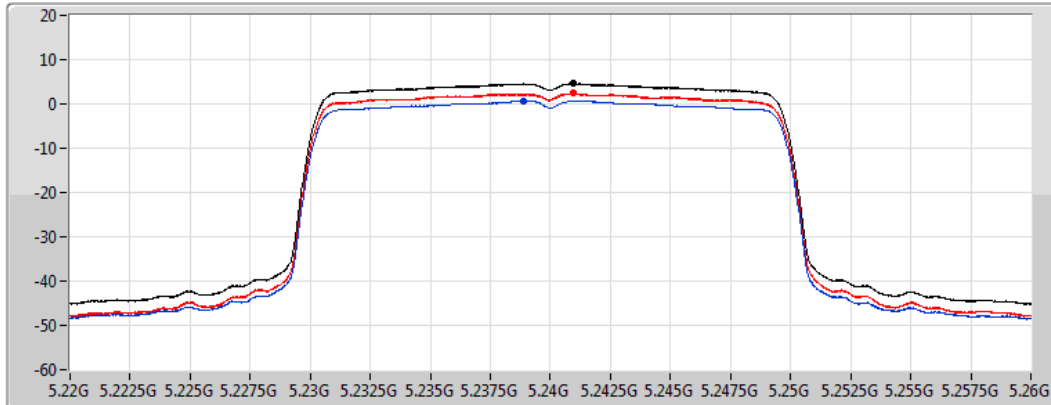
## 802.11ax HEW20\_Nss1,(MCS0)\_2TX

## PSD

5240MHz

12/05/2022

CF  
5.24GHz  
Span  
40MHz  
RBW  
1MHz  
VBW  
3MHz  
Sweep Time  
10s  
Detector Type  
RMS



Sum  
Port 1  
Port 2

PD	Port 1	Port 2
(dBm/MHz)	(dBm/MHz)	(dBm/MHz)
4.60	0.73	2.37

**Summary**

Mode	Result	Ref (Hz)	Ref (dBm)	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Port
5.15-5.25GHz	-	-	-	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	Pass	5.181298G	3.96	5.700563G	-47.52	-30.00	-17.52	2
802.11ax HEW20_Nss1,(MCS0)_2TX	Pass	5.181657G	4.09	5.168975G	-24.29	-15.93	-8.36	2
802.11ax HEW40_Nss1,(MCS0)_2TX	Pass	5.188197G	1.94	5.708469G	-46.99	-30.00	-16.99	2
802.11ax HEW80_Nss1,(MCS0)_2TX	Pass	5.207385G	-0.68	5.702575G	-46.98	-30.00	-16.98	2

**Result**

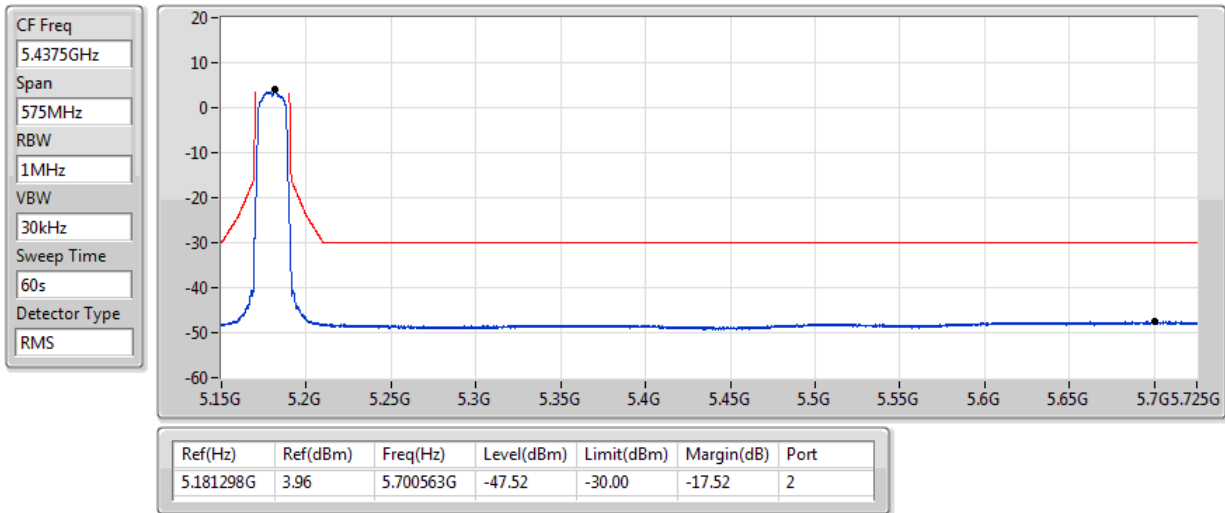
Mode	Result	Ref (Hz)	Ref (dBm)	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Port
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-
5180MHz_Tnom	Pass	5.181298G	3.96	5.700563G	-47.52	-30.00	-17.52	2
5240MHz_Tnom	Pass	5.24109G	3.53	5.695963G	-47.56	-30.00	-17.56	2
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5180MHz_Tnom	Pass	5.181657G	4.09	5.168975G	-24.29	-15.93	-8.36	2
5240MHz_Tnom	Pass	5.238359G	3.88	5.229709G	-10.47	-1.93	-8.54	2
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5190MHz_Tnom	Pass	5.188197G	1.94	5.708469G	-46.99	-30.00	-16.99	2
5230MHz_Tnom	Pass	5.23146G	1.96	5.709475G	-47.00	-30.00	-17.00	2
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-
5210MHz_Tnom	Pass	5.207385G	-0.68	5.702575G	-46.98	-30.00	-16.98	2

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

## MASK

### 5180MHz\_Tnom

12/05/2022

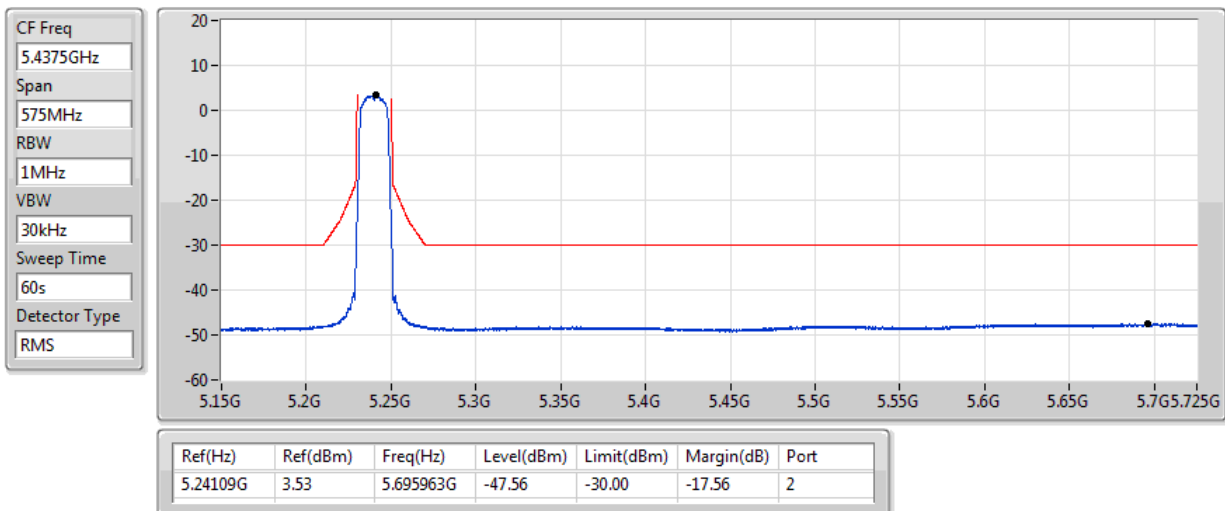


## 802.11a\_Nss1,(6Mbps)\_2TX

## MASK

### 5240MHz\_Tnom

12/05/2022



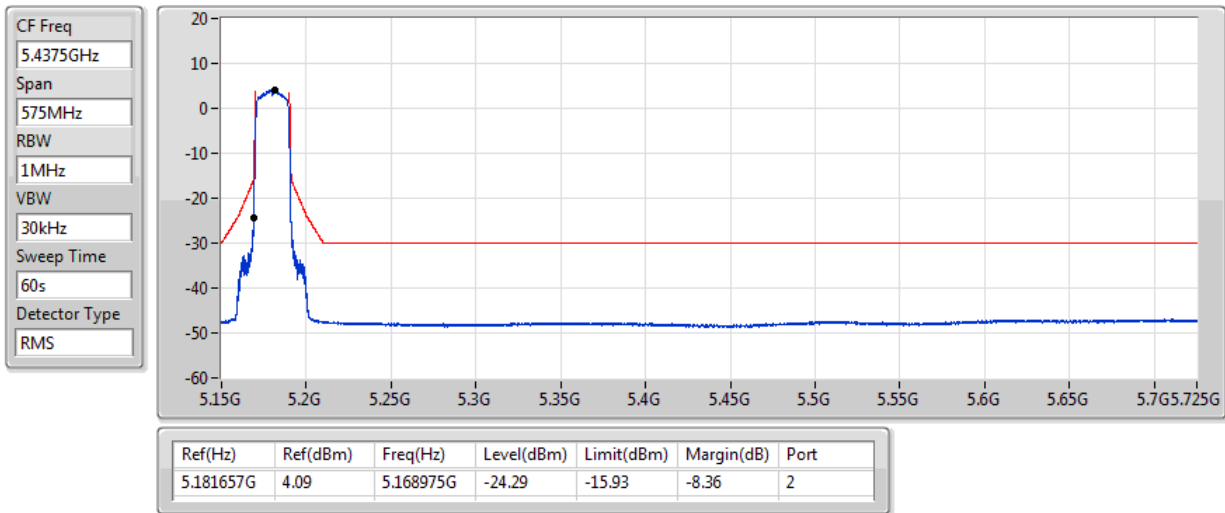


## 802.11ax HEW20\_Nss1,(MCS0)\_2TX

## MASK

### 5180MHz\_Tnom

12/05/2022

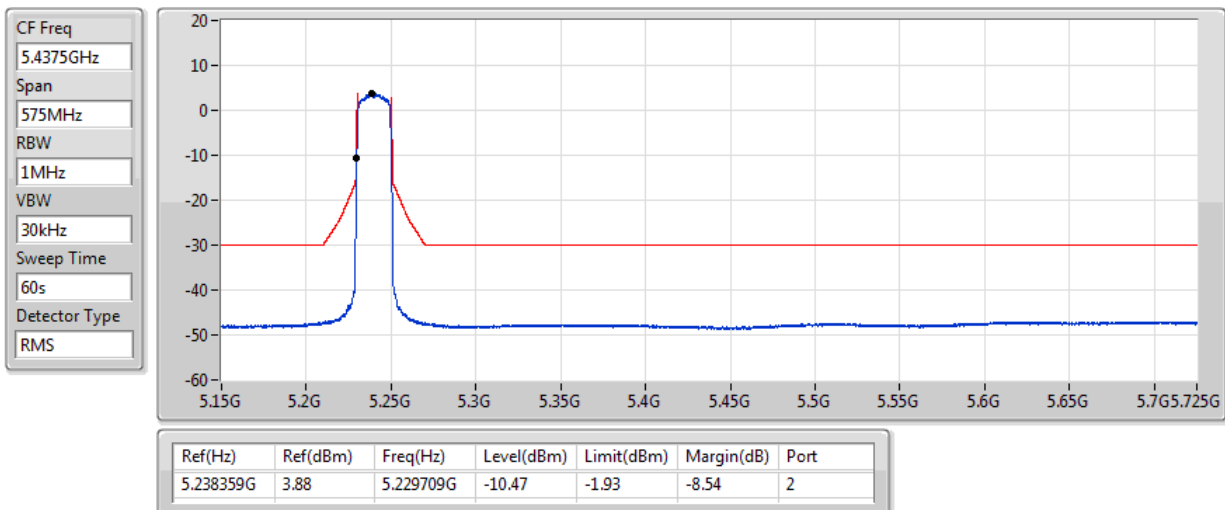


## 802.11ax HEW20\_Nss1,(MCS0)\_2TX

## MASK

### 5240MHz\_Tnom

12/05/2022

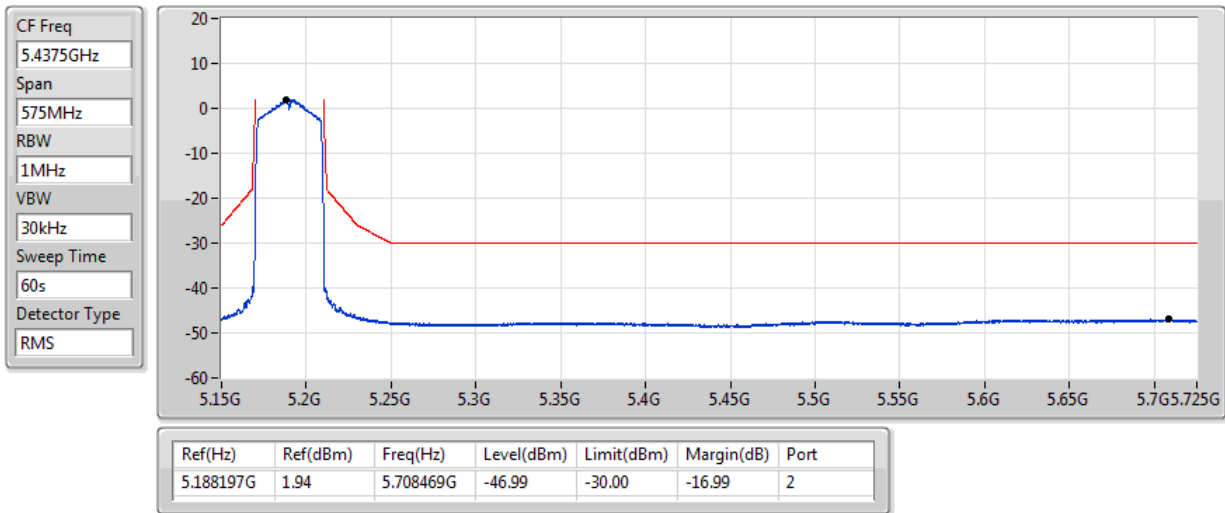


## 802.11ax HEW40\_Nss1,(MCS0)\_2TX

## MASK

### 5190MHz\_Tnom

12/05/2022

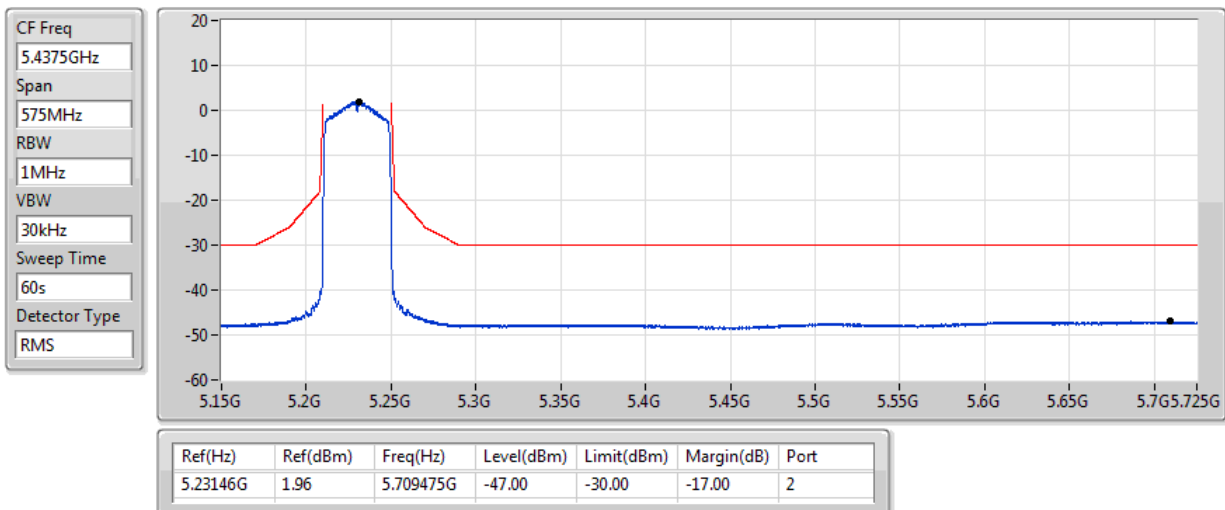


## 802.11ax HEW40\_Nss1,(MCS0)\_2TX

## MASK

### 5230MHz\_Tnom

12/05/2022

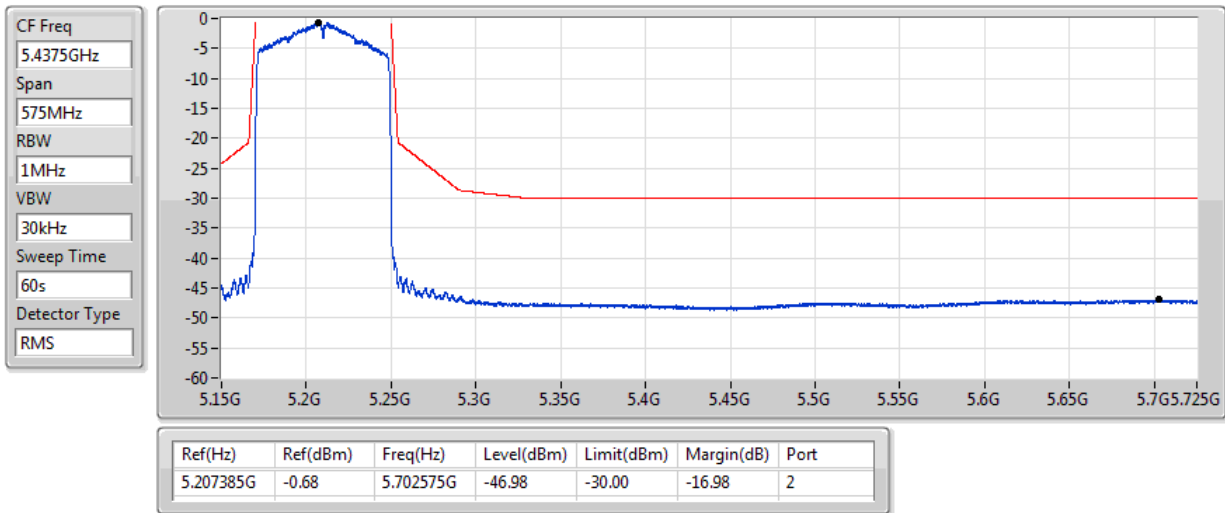


# 802.11ax HEW80\_Nss1,(MCS0)\_2TX

## MASK

### 5210MHz\_Tnom

12/05/2022





**Summary**

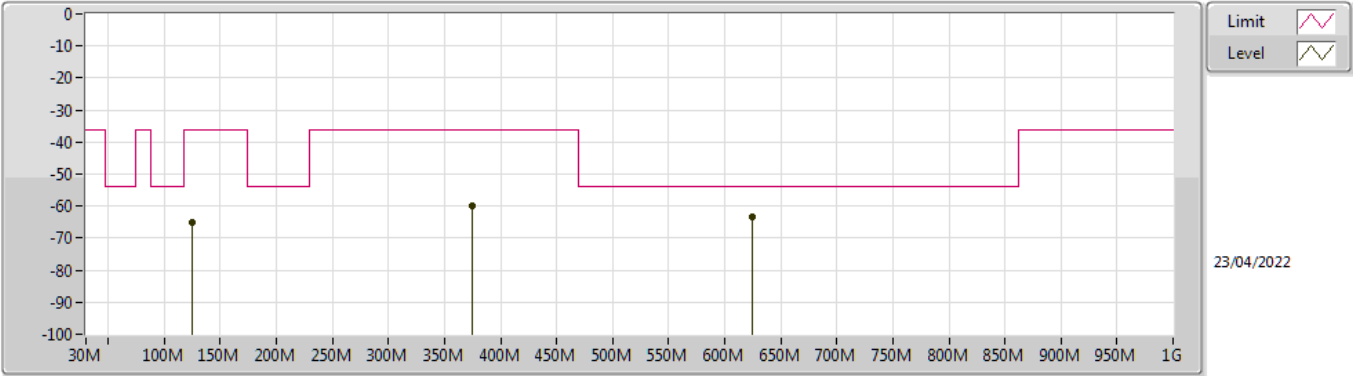
Mode	Result	Type	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.15-5.35GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11ax HEW80_Nss1,(MCS0)_2TX	Pass	AV	624.96M	-63.52	-54.00	-9.52	8.01	3	Vertical	0	1.5	-

**Result**

Mode	Result	Type	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
5210MHz_TX	Pass	AV	125.01M	-65.11	-36.00	-29.11	1.52	3	Vertical	0	1.5	-
5210MHz_TX	Pass	AV	374.94M	-59.86	-36.00	-23.86	3.55	3	Vertical	0	1.5	-
5210MHz_TX	Pass	AV	624.96M	-63.52	-54.00	-9.52	8.01	3	Vertical	0	1.5	-
5210MHz_TX	Pass	AV	250.02M	-62.74	-36.00	-26.74	1.66	3	Horizontal	360	1.5	-
5210MHz_TX	Pass	AV	375.04M	-56.48	-36.00	-20.48	2.75	3	Horizontal	360	1.5	-
5210MHz_TX	Pass	AV	624.96M	-64.93	-54.00	-10.93	8.25	3	Horizontal	360	1.5	-

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

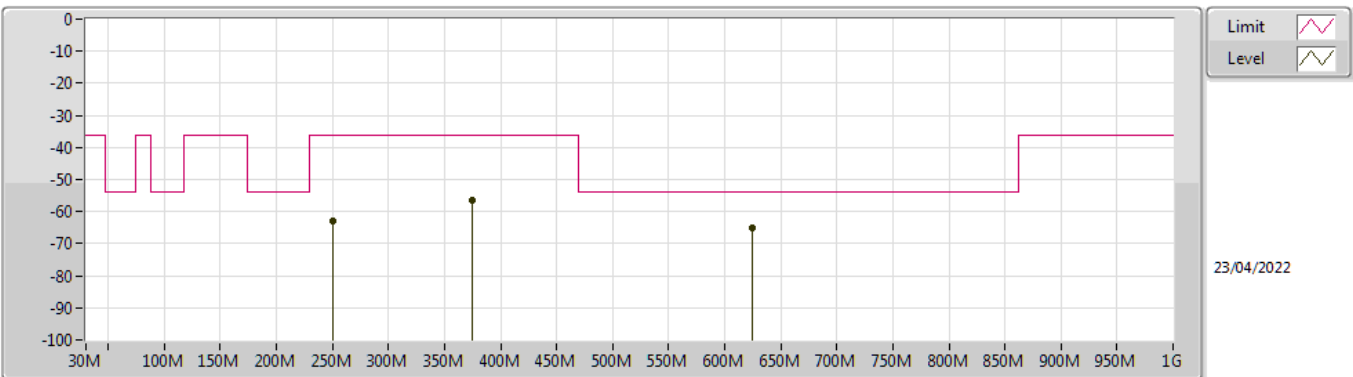
### 5210MHz\_TX



Type	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBm)	AF (dB)	CL (dB)	PA (dB)
AV	125.01M	-65.11	-36.00	-29.11	1.52	3	Vertical	0	1.5	-	-66.63	27.71	1.60	27.79
AV	374.94M	-59.86	-36.00	-23.86	3.55	3	Vertical	0	1.5	-	-63.41	28.49	2.71	27.65
AV	624.96M	-63.52	-54.00	-9.52	8.01	3	Vertical	0	1.5	-	-71.53	33.03	3.45	28.47

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

### 5210MHz\_TX



Type	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBm)	AF (dB)	CL (dB)	PA (dB)
AV	250.02M	-62.74	-36.00	-26.74	1.66	3	Horizontal	360	1.5	-	-64.40	26.50	2.24	27.08
AV	375.04M	-56.48	-36.00	-20.48	2.75	3	Horizontal	360	1.5	-	-59.23	27.69	2.71	27.65
AV	624.96M	-64.93	-54.00	-10.93	8.25	3	Horizontal	360	1.5	-	-73.18	33.27	3.45	28.47

**Summary**

Mode	Result	Type	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.15-5.35GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	Pass	AV	5.14664G	-31.45	-30.00	-1.45	1.63	3	Horizontal	359	1.5	TDP
802.11ax HEW20_Nss1,(MCS0)_2TX	Pass	AV	5.1484G	-32.84	-30.00	-2.84	1.65	3	Horizontal	359	1.5	TDP
802.11ax HEW40_Nss1,(MCS0)_2TX	Pass	AV	5.1484G	-30.18	-30.00	-0.18	1.65	3	Horizontal	1	1.5	TDP
802.11ax HEW80_Nss1,(MCS0)_2TX	Pass	AV	5.14808G	-31.78	-30.00	-1.78	1.64	3	Horizontal	1	1.5	TDP

**Result**

Mode	Result	Type	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
5180MHz_TX	Pass	AV	5.1492G	-42.84	-30.00	-12.84	0.40	3	Vertical	0	1.5	-
5180MHz_TX	Pass	AV	5.14664G	-31.45	-30.00	-1.45	1.63	3	Horizontal	359	1.5	TDP
5180MHz_TX	Pass	AV	10.36261G	-45.72	-30.00	-15.72	3.29	3	Vertical	0	1.5	-
5180MHz_TX	Pass	AV	15.53942G	-53.70	-30.00	-23.70	8.39	3	Vertical	0	1.5	-
5180MHz_TX	Pass	AV	10.35865G	-48.57	-30.00	-18.57	1.10	3	Horizontal	360	1.5	-
5180MHz_TX	Pass	AV	15.5447G	-52.87	-30.00	-22.87	8.60	3	Horizontal	360	1.5	-
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
5180MHz_TX	Pass	AV	5.14912G	-42.84	-30.00	-12.84	0.40	3	Vertical	0	1.5	-
5180MHz_TX	Pass	AV	5.1484G	-32.84	-30.00	-2.84	1.65	3	Horizontal	359	1.5	TDP
5180MHz_TX	Pass	AV	10.35689G	-44.34	-30.00	-14.34	3.32	3	Vertical	0	1.5	-
5180MHz_TX	Pass	AV	15.53986G	-53.05	-30.00	-23.05	8.39	3	Vertical	0	1.5	-
5180MHz_TX	Pass	AV	10.35513G	-50.25	-30.00	-20.25	1.11	3	Horizontal	360	1.5	-
5180MHz_TX	Pass	AV	15.54338G	-52.98	-30.00	-22.98	8.60	3	Horizontal	360	1.5	-
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
5190MHz_TX	Pass	AV	5.14952G	-43.36	-30.00	-13.36	0.41	3	Vertical	360	1.5	-
5190MHz_TX	Pass	AV	5.1484G	-30.18	-30.00	-0.18	1.65	3	Horizontal	1	1.5	TDP
5190MHz_TX	Pass	AV	10.36789G	-47.82	-30.00	-17.82	3.28	3	Vertical	360	1.5	-
5190MHz_TX	Pass	AV	15.5623G	-52.87	-30.00	-22.87	8.42	3	Vertical	360	1.5	-
5190MHz_TX	Pass	AV	10.38726G	-52.26	-30.00	-22.26	1.02	3	Horizontal	0	1.5	-
5190MHz_TX	Pass	AV	15.56846G	-53.06	-30.00	-23.06	8.68	3	Horizontal	0	1.5	-
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
5210MHz_TX	Pass	AV	5.0459G	-43.28	-30.00	-13.28	0.63	3	Vertical	360	1.5	-
5210MHz_TX	Pass	AV	5.14808G	-31.78	-30.00	-1.78	1.64	3	Horizontal	1	1.5	TDP
5210MHz_TX	Pass	AV	10.42906G	-49.53	-30.00	-19.53	3.24	3	Vertical	0	1.5	-
5210MHz_TX	Pass	AV	15.62567G	-52.82	-30.00	-22.82	8.70	3	Vertical	0	1.5	-
5210MHz_TX	Pass	AV	10.43478G	-56.78	-30.00	-26.78	1.12	3	Horizontal	360	1.5	-
5210MHz_TX	Pass	AV	15.64943G	-52.75	-30.00	-22.75	9.06	3	Horizontal	360	1.5	-



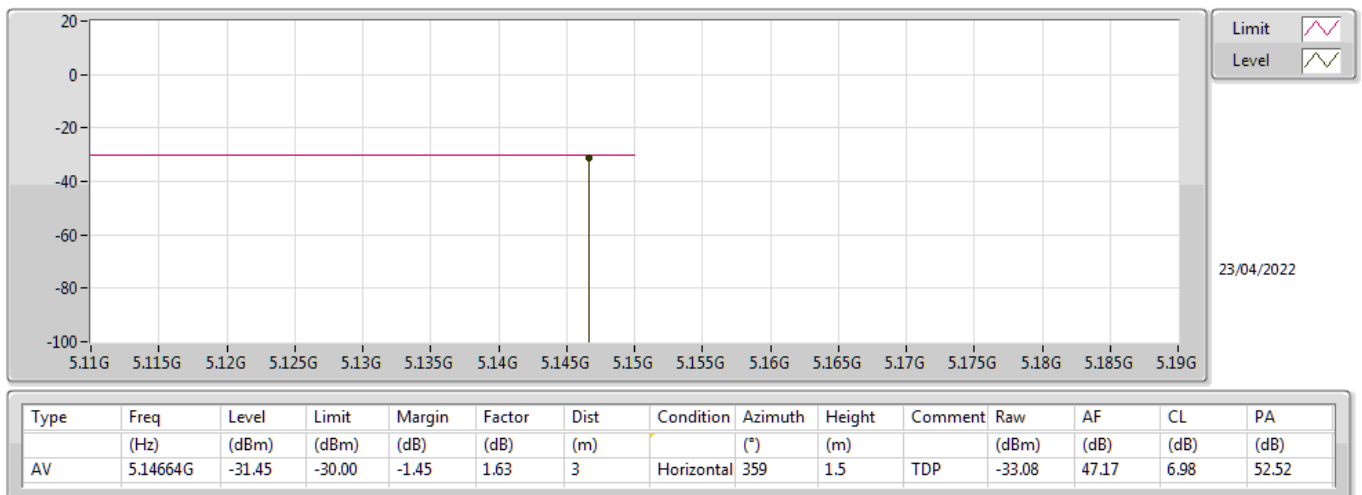
## 802.11a\_Nss1,(6Mbps)\_2TX

### 5180MHz\_TX



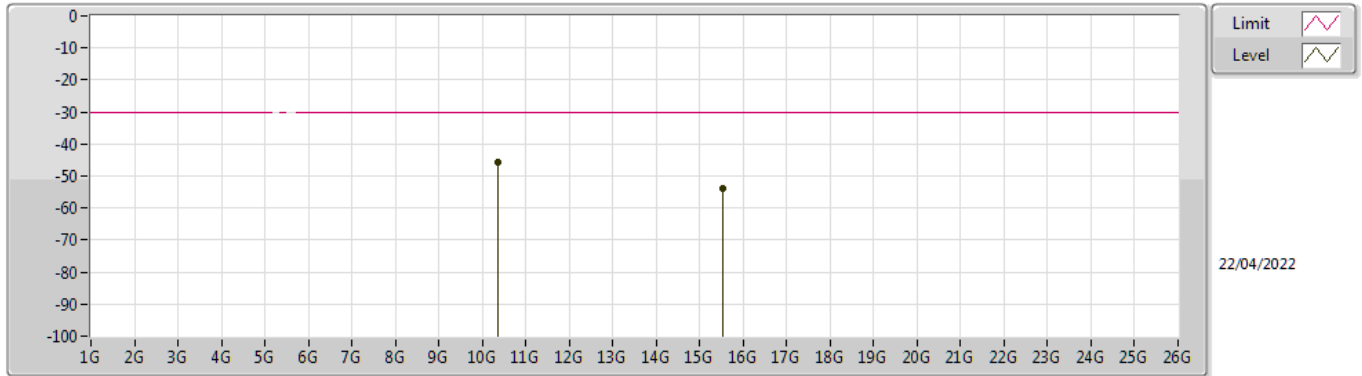
## 802.11a\_Nss1,(6Mbps)\_2TX

### 5180MHz\_TX



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

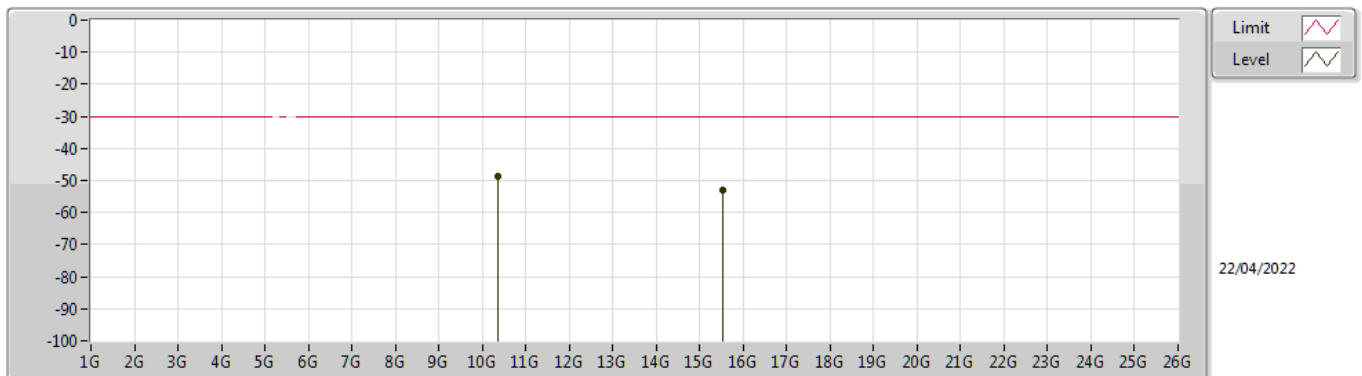
### 5180MHz\_TX



Type	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBm)	AF (dB)	CL (dB)	PA (dB)
AV	10.36261G	-45.72	-30.00	-15.72	3.29	3	Vertical	0	1.5	-	-49.01	48.98	9.89	55.58
AV	15.53942G	-53.70	-30.00	-23.70	8.39	3	Vertical	0	1.5	-	-62.09	49.54	12.40	53.55

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

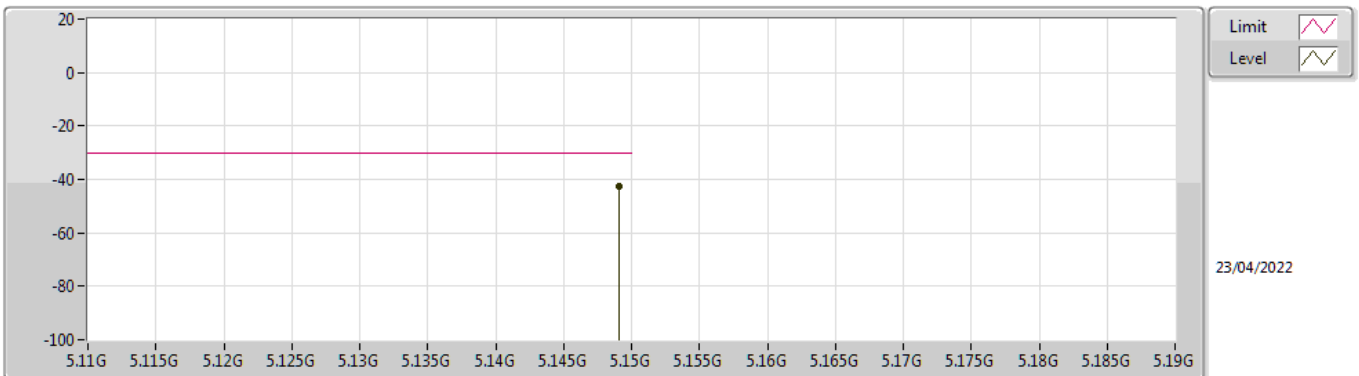
### 5180MHz\_TX



Type	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBm)	AF (dB)	CL (dB)	PA (dB)
AV	10.35865G	-48.57	-30.00	-18.57	1.10	3	Horizontal	360	1.5	-	-49.67	46.78	9.89	55.57
AV	15.5447G	-52.87	-30.00	-22.87	8.60	3	Horizontal	360	1.5	-	-61.47	49.74	12.41	53.55

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

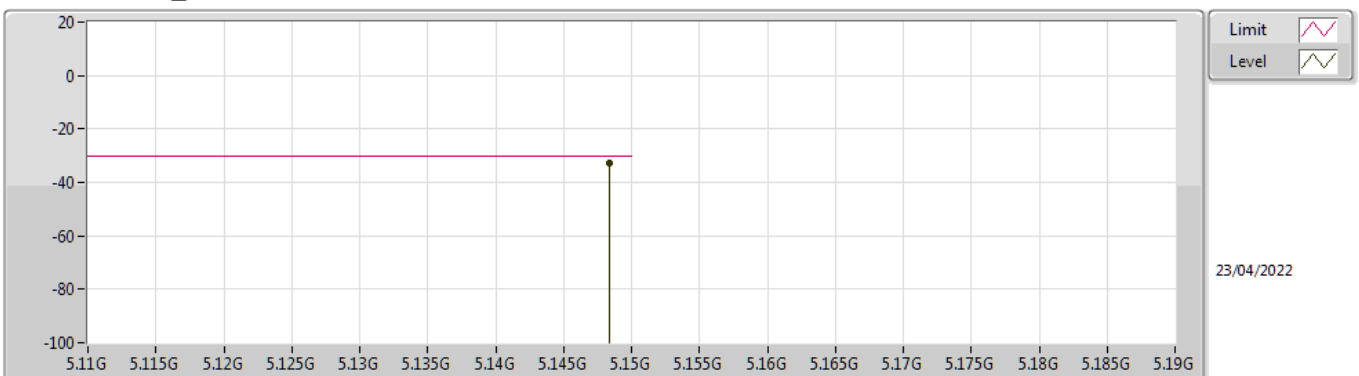
## 5180MHz\_TX



Type	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBm)	AF (dB)	CL (dB)	PA (dB)
AV	5.14912G	-42.84	-30.00	-12.84	0.40	3	Vertical	0	1.5	-	-43.24	45.94	6.98	52.52

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

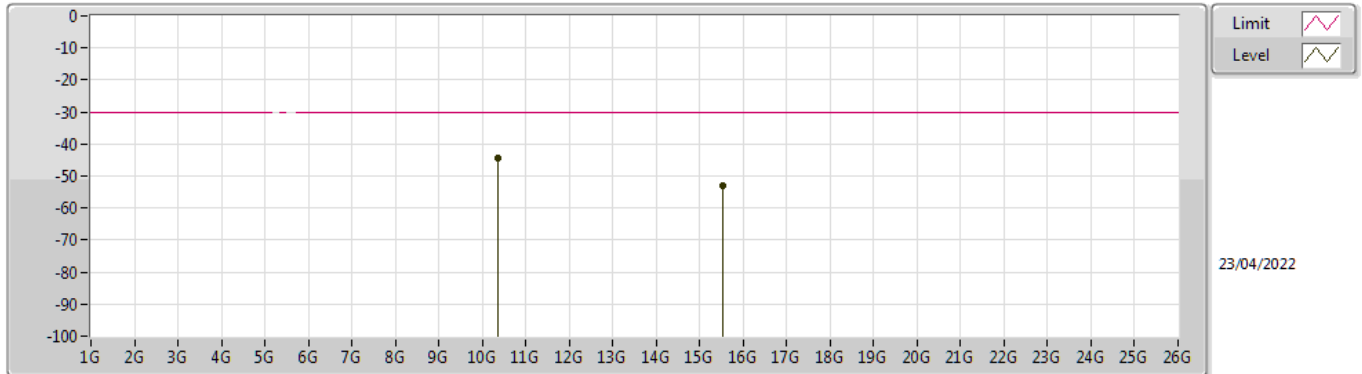
## 5180MHz\_TX



Type	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBm)	AF (dB)	CL (dB)	PA (dB)
AV	5.1484G	-32.84	-30.00	-2.84	1.65	3	Horizontal	359	1.5	TDP	-34.49	47.19	6.98	52.52

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

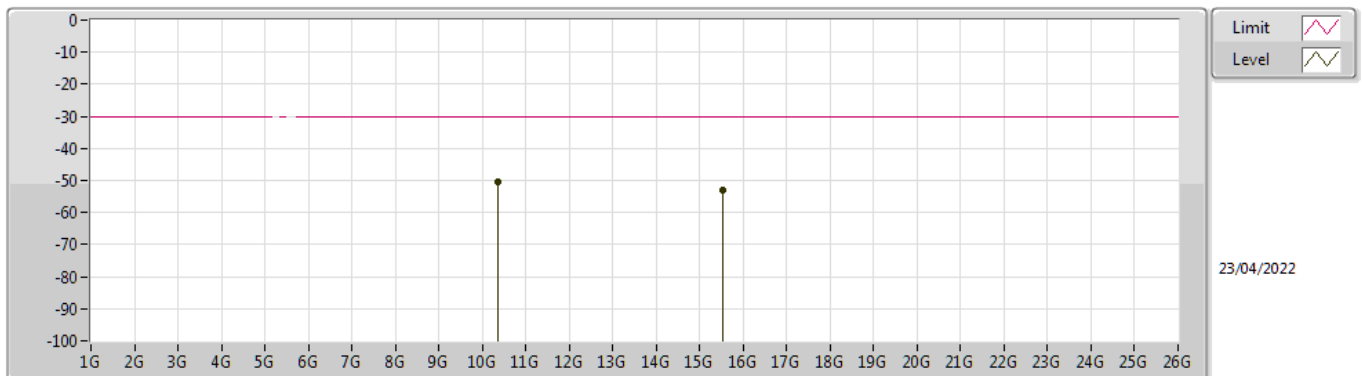
## 5180MHz\_TX



Type	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBm)	AF (dB)	CL (dB)	PA (dB)
AV	10.35689G	-44.34	-30.00	-14.34	3.32	3	Vertical	0	1.5	-	-47.66	49.00	9.89	55.57
AV	15.53986G	-53.05	-30.00	-23.05	8.39	3	Vertical	0	1.5	-	-61.44	49.54	12.40	53.55

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

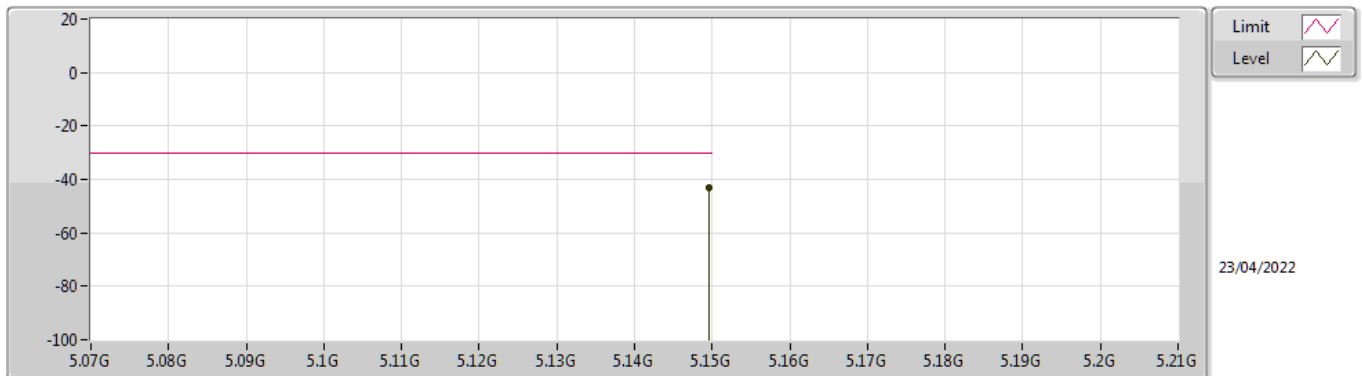
## 5180MHz\_TX



Type	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBm)	AF (dB)	CL (dB)	PA (dB)
AV	10.35513G	-50.25	-30.00	-20.25	1.11	3	Horizontal	360	1.5	-	-51.36	46.79	9.89	55.57
AV	15.54338G	-52.98	-30.00	-22.98	8.60	3	Horizontal	360	1.5	-	-61.58	49.74	12.41	53.55

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

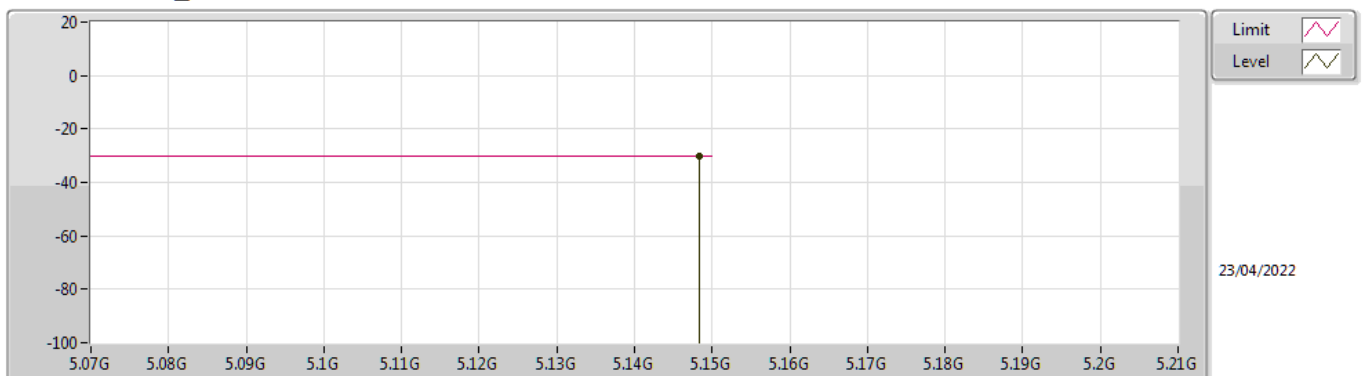
## 5190MHz\_TX



Type	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBm)	AF (dB)	CL (dB)	PA (dB)
AV	5.14952G	-43.36	-30.00	-13.36	0.41	3	Vertical	360	1.5	-	-43.77	45.95	6.98	52.52

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

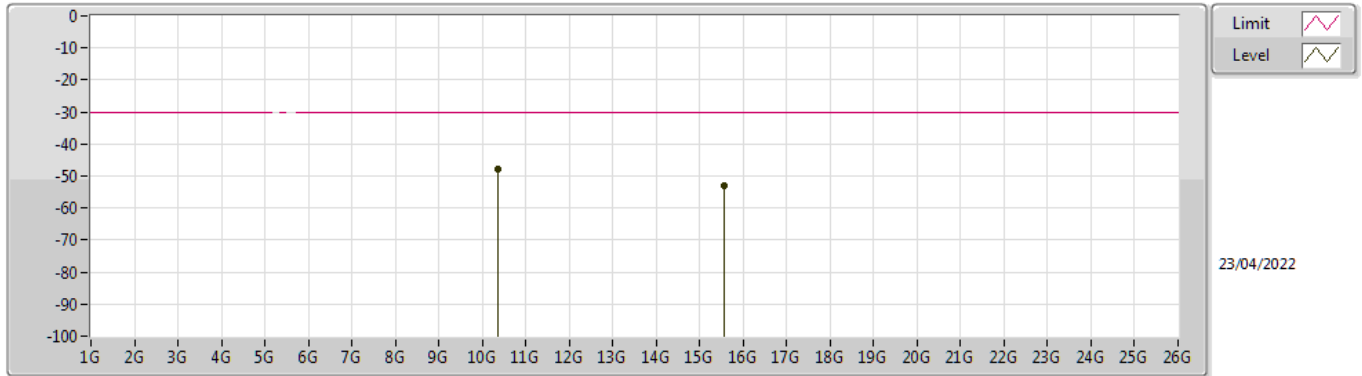
## 5190MHz\_TX



Type	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBm)	AF (dB)	CL (dB)	PA (dB)
AV	5.1484G	-31.83	-30.00	-0.18	1.65	3	Horizontal	1	1.5	TDP	-31.83	47.19	6.98	52.52

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

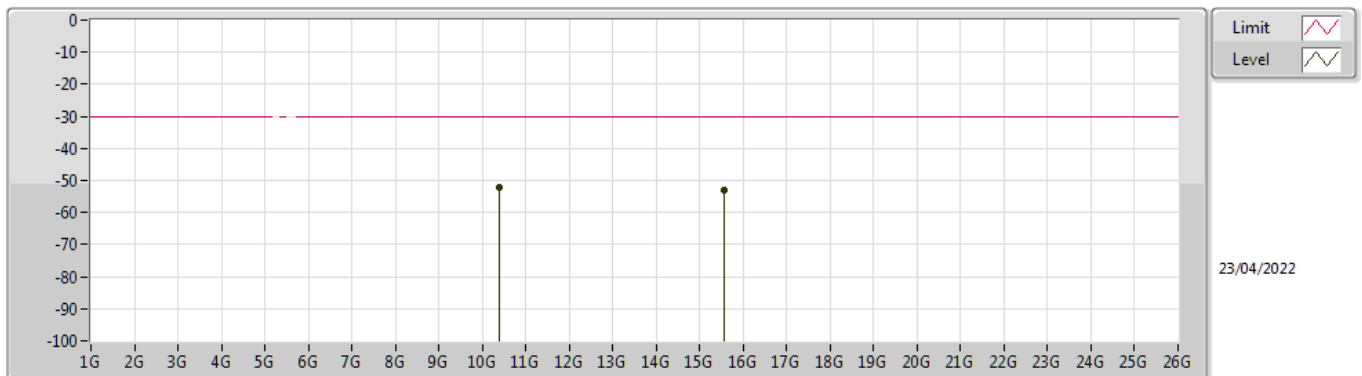
## 5190MHz\_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBm)	(dBm)	(dB)	(dB)	(m)		(°)	(m)		(dBm)	(dB)	(dB)	(dB)
AV	10.36789G	-47.82	-30.00	-17.82	3.28	3	Vertical	360	1.5	-	-51.10	48.97	9.89	55.58
AV	15.5623G	-52.87	-30.00	-22.87	8.42	3	Vertical	360	1.5	-	-61.29	49.54	12.41	53.53

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

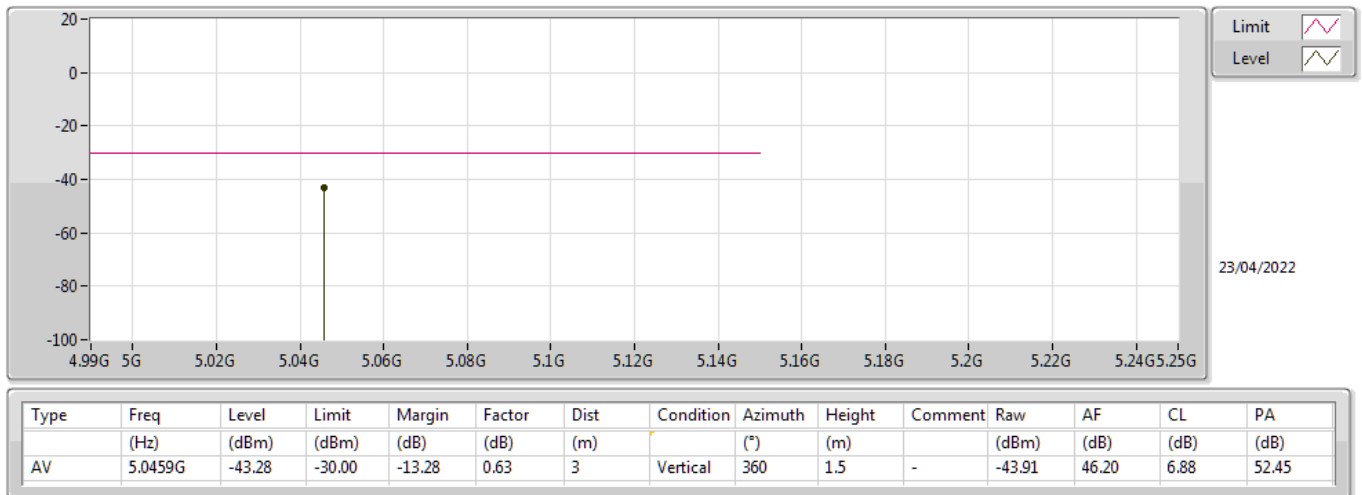
## 5190MHz\_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBm)	(dBm)	(dB)	(dB)	(m)		(°)	(m)		(dBm)	(dB)	(dB)	(dB)
AV	10.38726G	-52.26	-30.00	-22.26	1.02	3	Horizontal	0	1.5	-	-53.28	46.71	9.91	55.60
AV	15.56846G	-53.06	-30.00	-23.06	8.68	3	Horizontal	0	1.5	-	-61.74	49.78	12.42	53.52

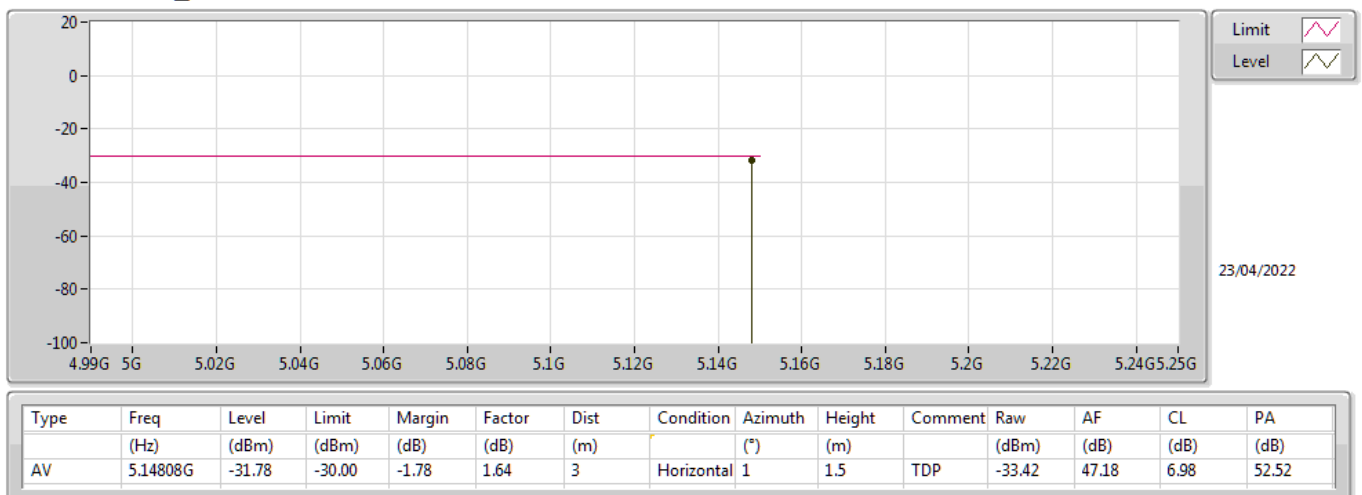
# 802.11ax HEW80\_Nss1,(MCS0)\_2TX

## 5210MHz\_TX



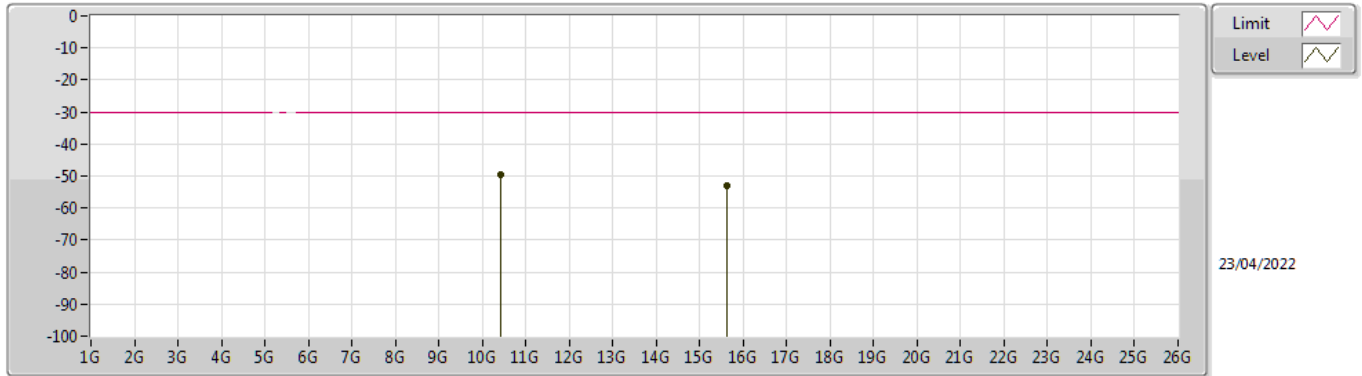
# 802.11ax HEW80\_Nss1,(MCS0)\_2TX

## 5210MHz\_TX



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

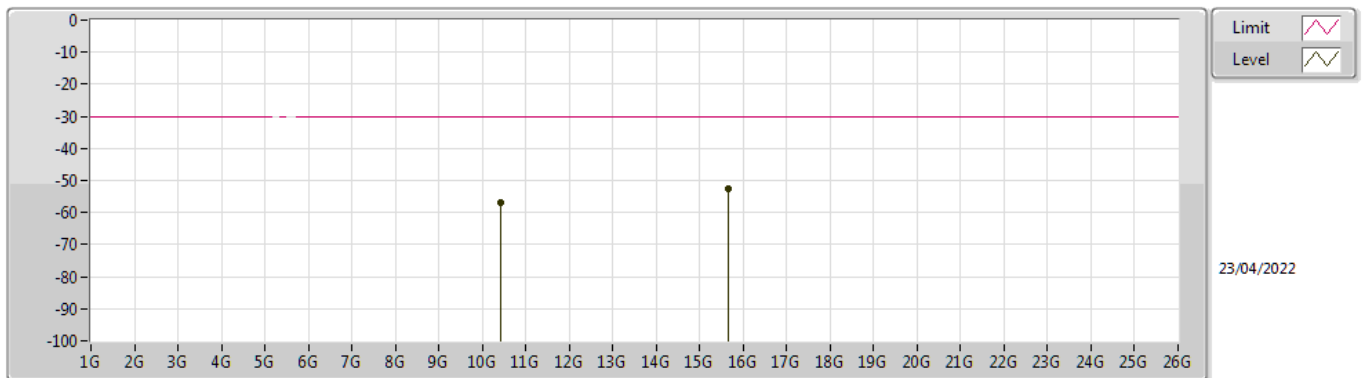
### 5210MHz\_TX



Type	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBm)	AF (dB)	CL (dB)	PA (dB)
AV	10.42906G	-49.53	-30.00	-19.53	3.24	3	Vertical	0	1.5	-	-52.77	48.95	9.93	55.64
AV	15.62567G	-52.82	-30.00	-22.82	8.70	3	Vertical	0	1.5	-	-61.52	49.71	12.44	53.45

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

### 5210MHz\_TX



Type	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBm)	AF (dB)	CL (dB)	PA (dB)
AV	10.43478G	-56.78	-30.00	-26.78	1.12	3	Horizontal	360	1.5	-	-57.90	46.82	9.94	55.64
AV	15.64943G	-52.75	-30.00	-22.75	9.06	3	Horizontal	360	1.5	-	-61.81	50.02	12.46	53.42



**Summary**

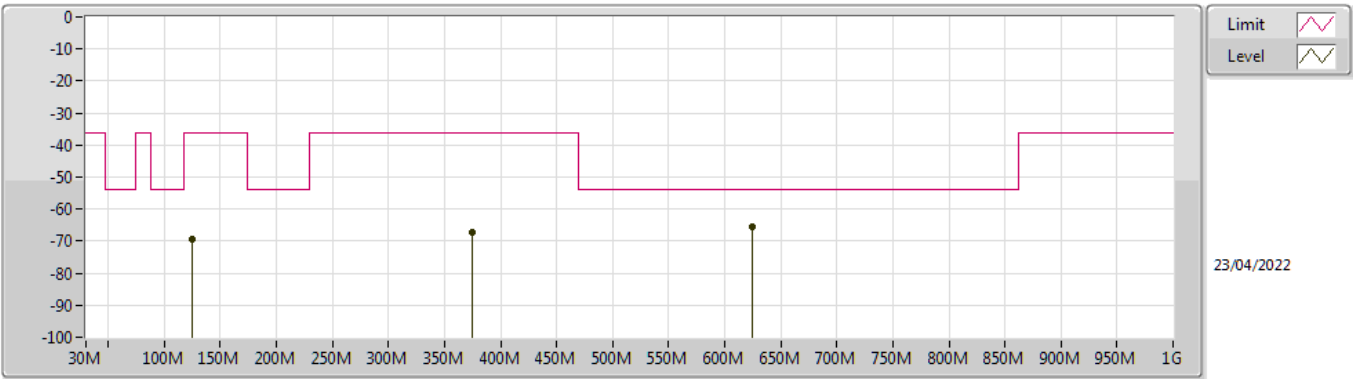
Mode	Result	Type	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.15-5.35GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11ax HEW80_Nss1,(MCS0)_2TX	Pass	AV	699.97M	-63.95	-54.00	-9.95	8.69	3	Horizontal	0	1.5	-

**Result**

Mode	Result	Type	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
5210MHz_TX	Pass	AV	124.91M	-69.34	-36.00	-33.34	1.53	3	Vertical	360	1.5	-
5210MHz_TX	Pass	AV	375.04M	-67.24	-36.00	-31.24	3.55	3	Vertical	360	1.5	-
5210MHz_TX	Pass	AV	624.96M	-65.72	-54.00	-11.72	8.01	3	Vertical	360	1.5	-
5210MHz_TX	Pass	AV	250.02M	-66.39	-36.00	-30.39	1.66	3	Horizontal	0	1.5	-
5210MHz_TX	Pass	AV	374.94M	-65.43	-36.00	-29.43	2.75	3	Horizontal	0	1.5	-
5210MHz_TX	Pass	AV	699.97M	-63.95	-54.00	-9.95	8.69	3	Horizontal	0	1.5	-

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

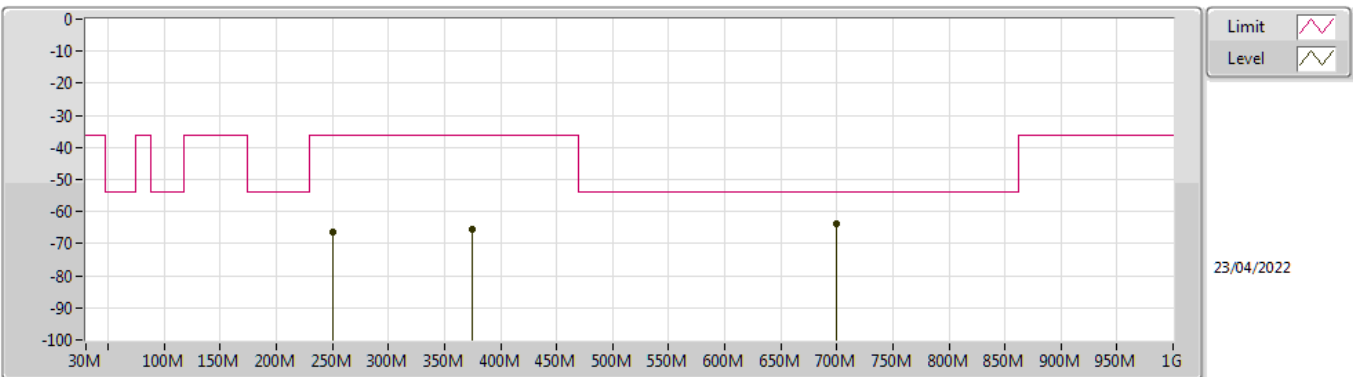
### 5210MHz\_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBm)	(dBm)	(dB)	(dB)	(m)		(°)	(m)		(dBm)	(dB)	(dB)	(dB)
AV	124.91M	-69.34	-36.00	-33.34	1.53	3	Vertical	360	1.5	-	-70.87	27.72	1.60	27.79
AV	375.04M	-67.24	-36.00	-31.24	3.55	3	Vertical	360	1.5	-	-70.79	28.49	2.71	27.65
AV	624.96M	-65.72	-54.00	-11.72	8.01	3	Vertical	360	1.5	-	-73.73	33.03	3.45	28.47

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

### 5210MHz\_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBm)	(dBm)	(dB)	(dB)	(m)		(°)	(m)		(dBm)	(dB)	(dB)	(dB)
AV	250.02M	-66.39	-36.00	-30.39	1.66	3	Horizontal	0	1.5	-	-68.05	26.50	2.24	27.08
AV	374.94M	-65.43	-36.00	-29.43	2.75	3	Horizontal	0	1.5	-	-68.18	27.69	2.71	27.65
AV	699.97M	-63.95	-54.00	-9.95	8.69	3	Horizontal	0	1.5	-	-72.64	33.41	3.63	28.35

**Summary**

Mode	Result	Type	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.15-5.35GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	Pass	AV	5.14896G	-30.96	-30.00	-0.96	1.65	3	Horizontal	84	1.5	TDP
802.11ax HEW20_Nss1,(MCS0)_2TX	Pass	AV	5.14928G	-30.07	-30.00	-0.07	1.65	3	Horizontal	82	1.5	TDP
802.11ax HEW40_Nss1,(MCS0)_2TX	Pass	AV	5.14966G	-30.39	-30.00	-0.39	1.66	3	Horizontal	275	1.5	TDP
802.11ax HEW80_Nss1,(MCS0)_2TX	Pass	AV	5.14912G	-31.70	-30.00	-1.70	1.65	3	Horizontal	84	1.5	TDP

Result

Mode	Result	Type	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
5180MHz_TX	Pass	AV	5.14928G	-40.57	-30.00	-10.57	0.40	3	Vertical	360	1.5	-
5180MHz_TX	Pass	AV	5.14896G	-30.96	-30.00	-0.96	1.65	3	Horizontal	84	1.5	TDP
5180MHz_TX	Pass	AV	10.36393G	-40.88	-30.00	-10.88	3.29	3	Vertical	360	1.5	-
5180MHz_TX	Pass	AV	15.53942G	-46.00	-30.00	-16.00	8.39	3	Vertical	360	1.5	-
5180MHz_TX	Pass	AV	10.36217G	-48.94	-30.00	-18.94	1.08	3	Horizontal	0	1.5	-
5180MHz_TX	Pass	AV	15.53898G	-51.57	-30.00	-21.57	8.58	3	Horizontal	0	1.5	-
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
5180MHz_TX	Pass	AV	5.14984G	-39.15	-30.00	-9.15	0.41	3	Vertical	360	1.5	-
5180MHz_TX	Pass	AV	5.14928G	-30.07	-30.00	-0.07	1.65	3	Horizontal	82	1.5	TDP
5180MHz_TX	Pass	AV	10.35909G	-42.25	-30.00	-12.25	3.31	3	Vertical	360	1.5	-
5180MHz_TX	Pass	AV	15.53986G	-47.69	-30.00	-17.69	8.39	3	Vertical	360	1.5	-
5180MHz_TX	Pass	AV	10.35865G	-50.48	-30.00	-20.48	1.10	3	Horizontal	0	1.5	-
5180MHz_TX	Pass	AV	15.53678G	-52.31	-30.00	-22.31	8.57	3	Horizontal	0	1.5	-
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
5190MHz_TX	Pass	AV	5.14588G	-41.90	-30.00	-11.90	0.37	3	Vertical	0	1.5	-
5190MHz_TX	Pass	AV	5.14966G	-30.39	-30.00	-0.39	1.66	3	Horizontal	275	1.5	TDP
5190MHz_TX	Pass	AV	10.38022G	-45.30	-30.00	-15.30	3.24	3	Vertical	0	1.5	-
5190MHz_TX	Pass	AV	15.55922G	-51.24	-30.00	-21.24	8.42	3	Vertical	0	1.5	-
5190MHz_TX	Pass	AV	10.37361G	-53.77	-30.00	-23.77	1.06	3	Horizontal	360	1.5	-
5190MHz_TX	Pass	AV	15.56538G	-54.03	-30.00	-24.03	8.67	3	Horizontal	360	1.5	-
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-	-	-	-	-	-
5210MHz_TX	Pass	AV	5.1499G	-42.21	-30.00	-12.21	0.41	3	Vertical	360	1.5	-
5210MHz_TX	Pass	AV	5.14912G	-31.70	-30.00	-1.70	1.65	3	Horizontal	84	1.5	TDP
5210MHz_TX	Pass	AV	10.4383G	-50.59	-30.00	-20.59	3.27	3	Vertical	0	1.5	-
5210MHz_TX	Pass	AV	15.60454G	-52.99	-30.00	-22.99	8.54	3	Vertical	0	1.5	-
5210MHz_TX	Pass	AV	10.43478G	-55.66	-30.00	-25.66	1.12	3	Horizontal	360	1.5	-
5210MHz_TX	Pass	AV	15.61686G	-52.90	-30.00	-22.90	8.88	3	Horizontal	360	1.5	-

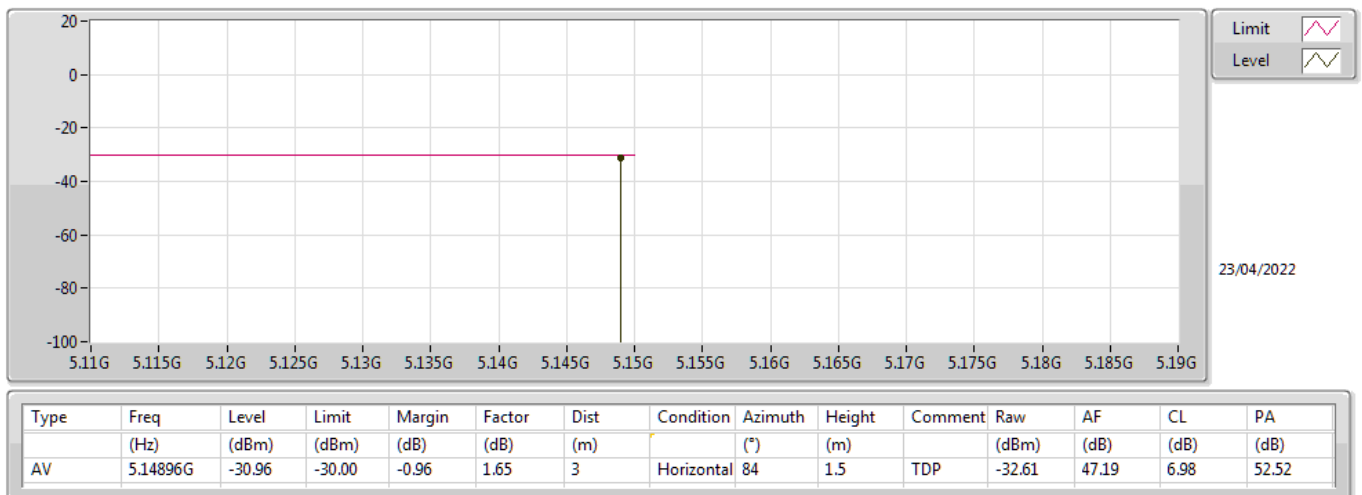
## 802.11a\_Nss1,(6Mbps)\_2TX

### 5180MHz\_TX



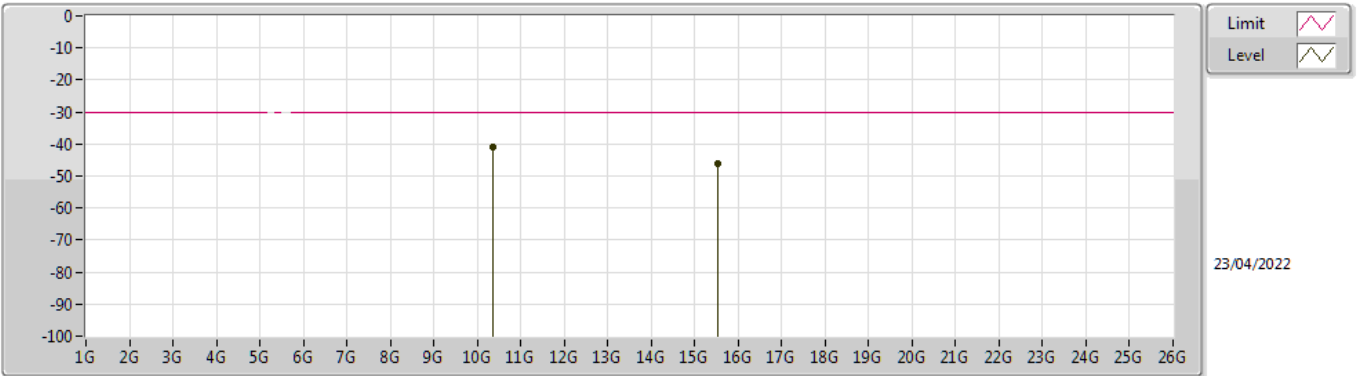
## 802.11a\_Nss1,(6Mbps)\_2TX

### 5180MHz\_TX



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

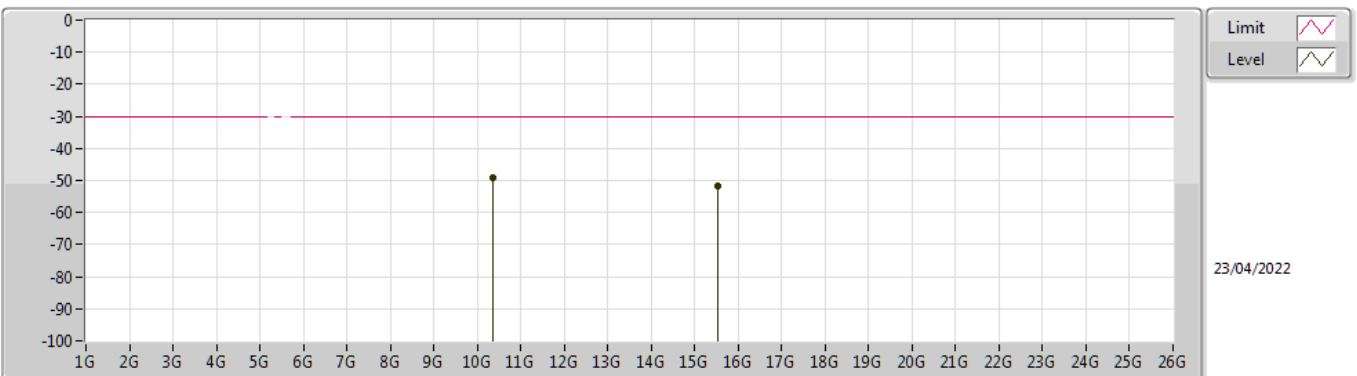
### 5180MHz\_TX



Type	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBm)	AF (dB)	CL (dB)	PA (dB)
AV	10.36393G	-40.88	-30.00	-10.88	3.29	3	Vertical	360	1.5	-	-44.17	48.98	9.89	55.58
AV	15.53942G	-46.00	-30.00	-16.00	8.39	3	Vertical	360	1.5	-	-54.39	49.54	12.40	53.55

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

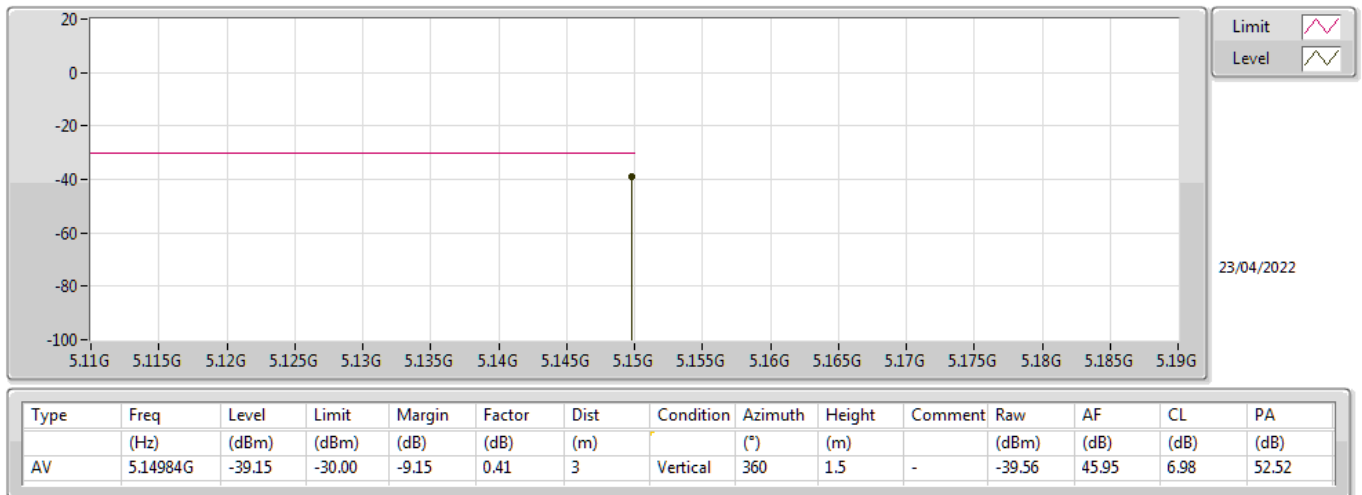
### 5180MHz\_TX



Type	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBm)	AF (dB)	CL (dB)	PA (dB)
AV	10.36217G	-48.94	-30.00	-18.94	1.08	3	Horizontal	0	1.5	-	-50.02	46.77	9.89	55.58
AV	15.53898G	-51.57	-30.00	-21.57	8.58	3	Horizontal	0	1.5	-	-60.15	49.73	12.40	53.55

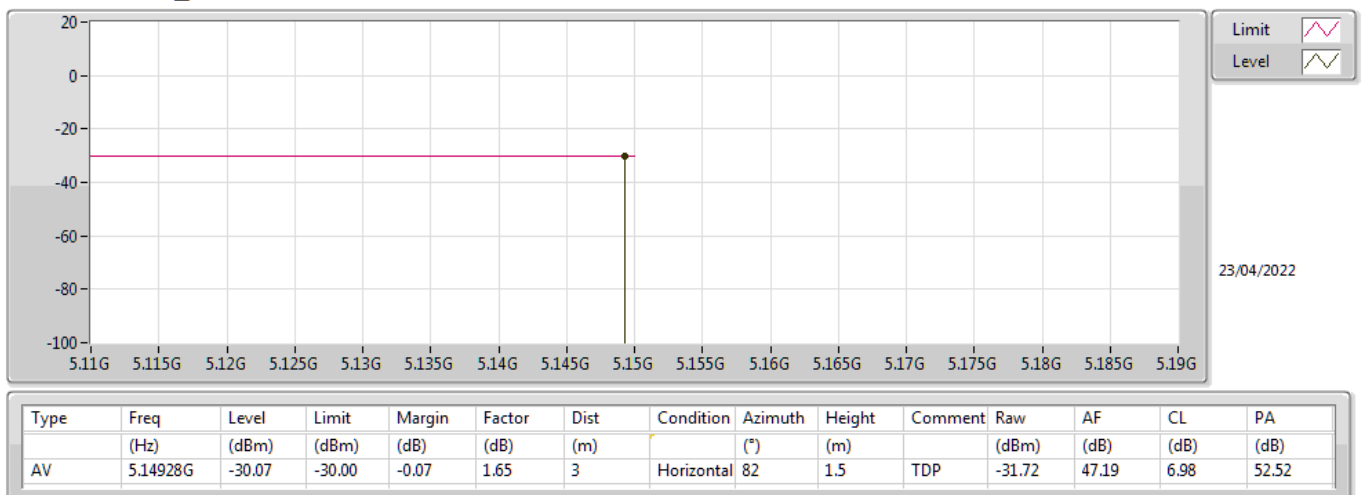
# 802.11ax HEW20\_Nss1,(MCS0)\_2TX

## 5180MHz\_TX



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

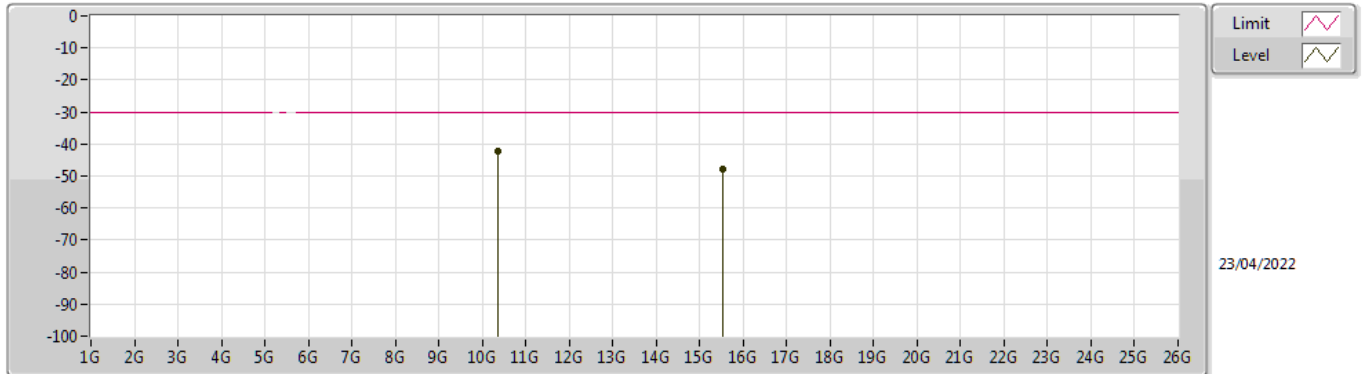
## 5180MHz\_TX





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

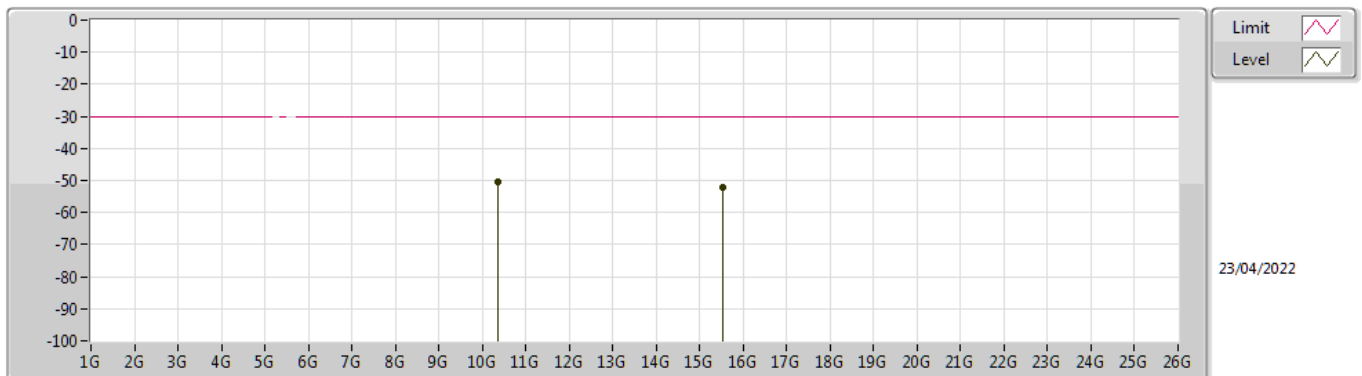
### 5180MHz\_TX



Type	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBm)	AF (dB)	CL (dB)	PA (dB)
AV	10.35909G	-42.25	-30.00	-12.25	3.31	3	Vertical	360	1.5	-	-45.56	48.99	9.89	55.57
AV	15.53986G	-47.69	-30.00	-17.69	8.39	3	Vertical	360	1.5	-	-56.08	49.54	12.40	53.55

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

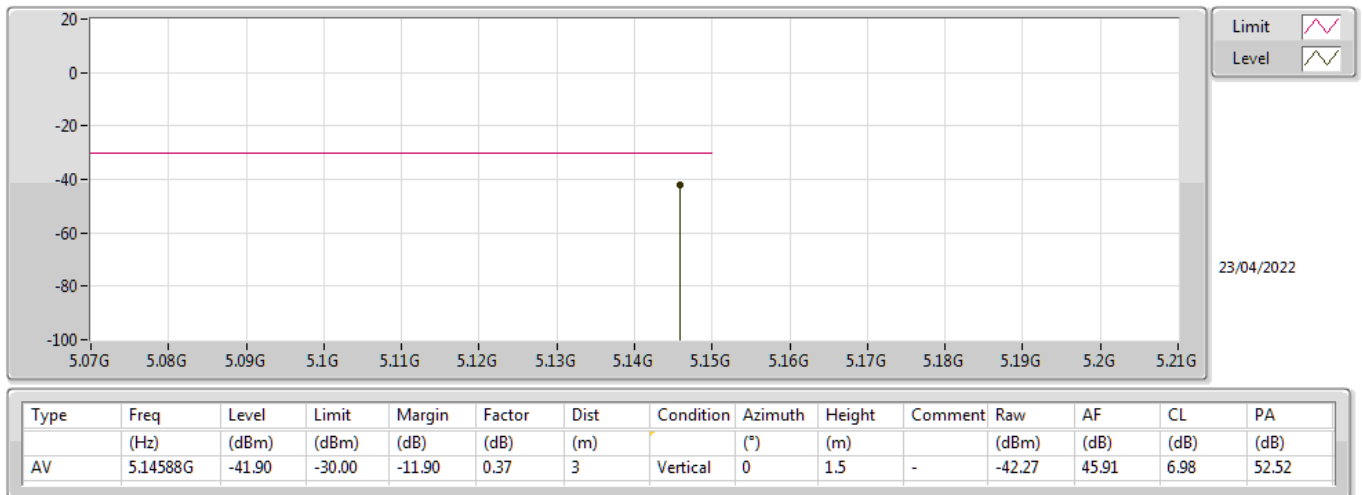
### 5180MHz\_TX



Type	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBm)	AF (dB)	CL (dB)	PA (dB)
AV	10.35865G	-50.48	-30.00	-20.48	1.10	3	Horizontal	0	1.5	-	-51.58	46.78	9.89	55.57
AV	15.53678G	-52.31	-30.00	-22.31	8.57	3	Horizontal	0	1.5	-	-60.88	49.73	12.40	53.56

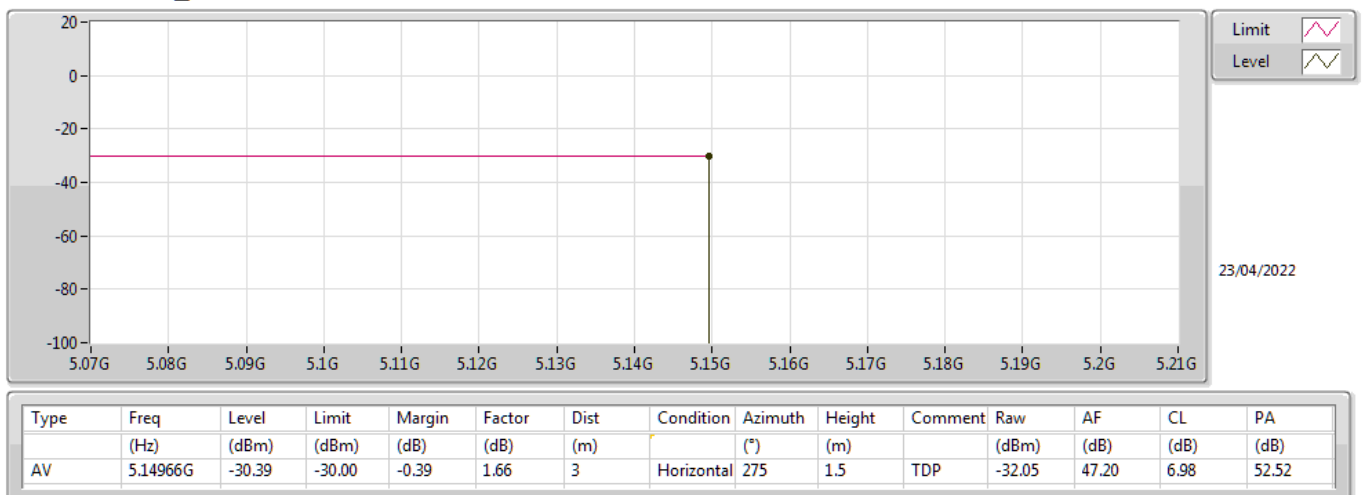
## 802.11ax HEW40\_Nss1,(MCS0)\_2TX

### 5190MHz\_TX



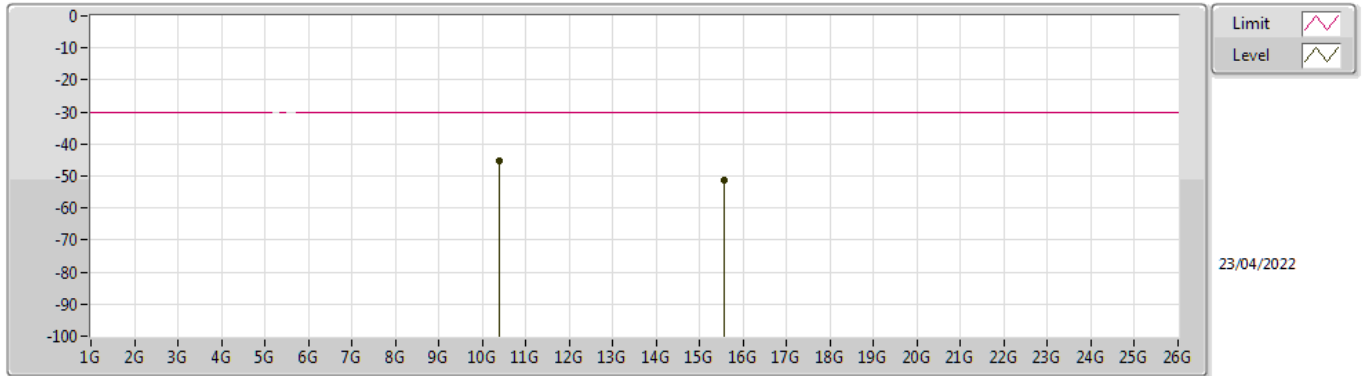
## 802.11ax HEW40\_Nss1,(MCS0)\_2TX

### 5190MHz\_TX



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

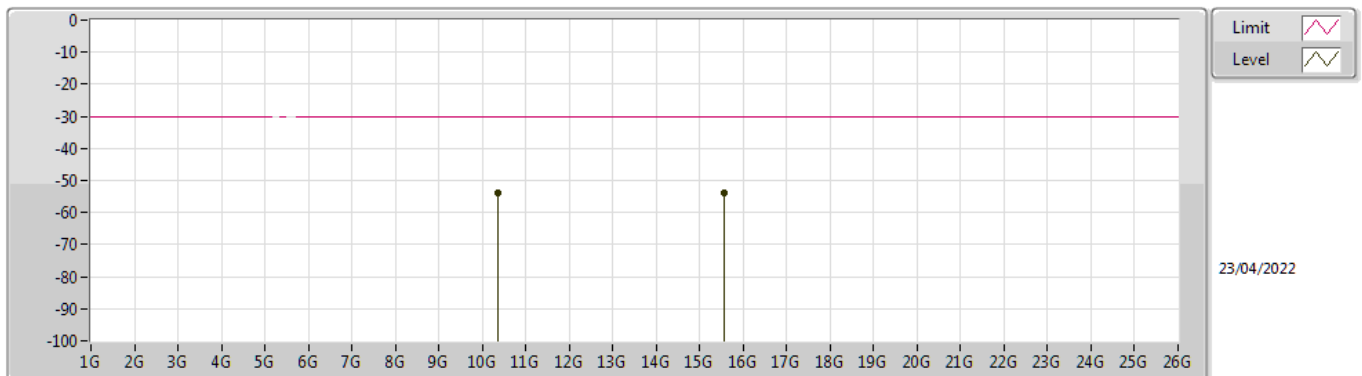
## 5190MHz\_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBm)	(dBm)	(dB)	(dB)	(m)		(°)	(m)		(dBm)	(dB)	(dB)	(dB)
AV	10.38022G	-45.30	-30.00	-15.30	3.24	3	Vertical	0	1.5	-	-48.54	48.93	9.90	55.59
AV	15.55922G	-51.24	-30.00	-21.24	8.42	3	Vertical	0	1.5	-	-59.66	49.54	12.41	53.53

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

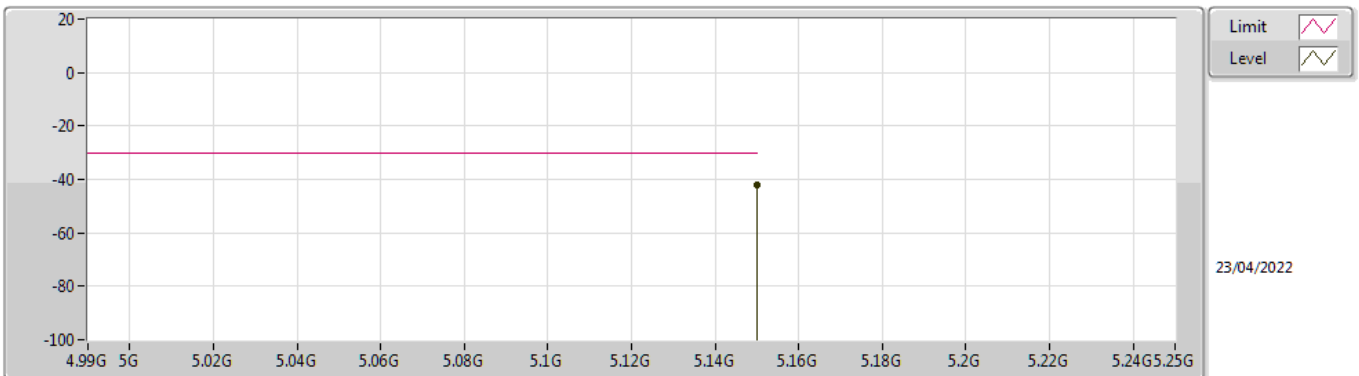
## 5190MHz\_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBm)	(dBm)	(dB)	(dB)	(m)		(°)	(m)		(dBm)	(dB)	(dB)	(dB)
AV	10.37361G	-53.77	-30.00	-23.77	1.06	3	Horizontal	360	1.5	-	-54.83	46.75	9.90	55.59
AV	15.56538G	-54.03	-30.00	-24.03	8.67	3	Horizontal	360	1.5	-	-62.70	49.77	12.42	53.52

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

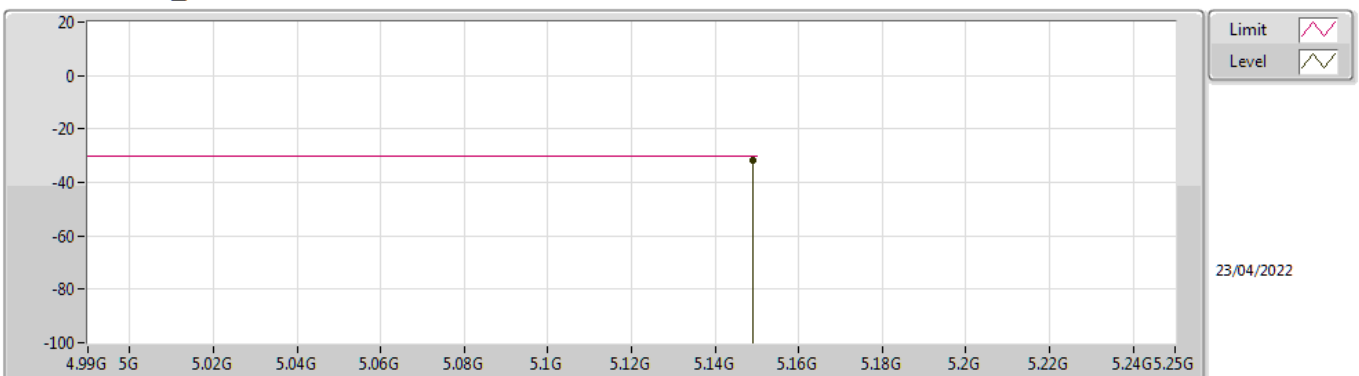
## 5210MHz\_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBm)	(dBm)	(dB)	(dB)	(m)		(°)	(m)		(dBm)	(dB)	(dB)	(dB)
AV	5.1499G	-42.21	-30.00	-12.21	0.41	3	Vertical	360	1.5	-	-42.62	45.95	6.98	52.52

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

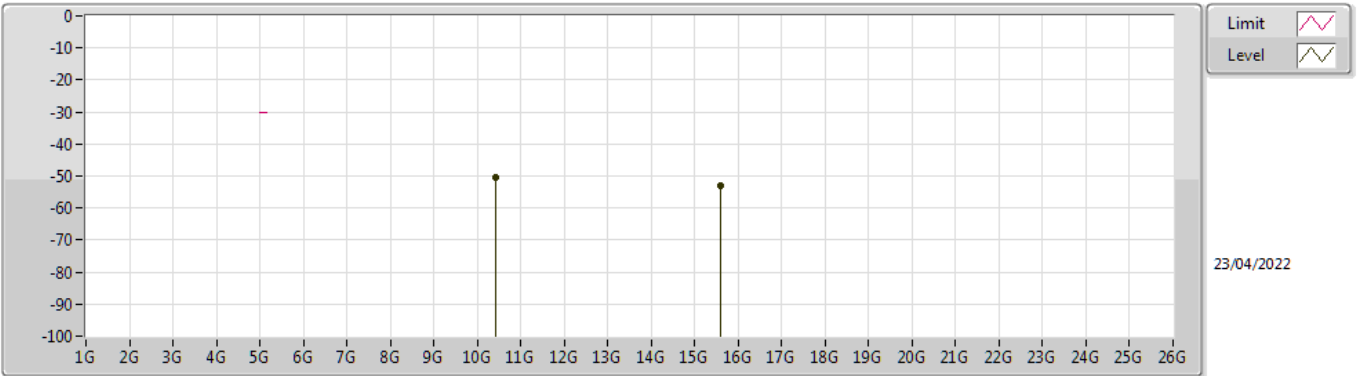
## 5210MHz\_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBm)	(dBm)	(dB)	(dB)	(m)		(°)	(m)		(dBm)	(dB)	(dB)	(dB)
AV	5.14912G	-31.70	-30.00	-1.70	1.65	3	Horizontal	84	1.5	TDP	-33.35	47.19	6.98	52.52

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

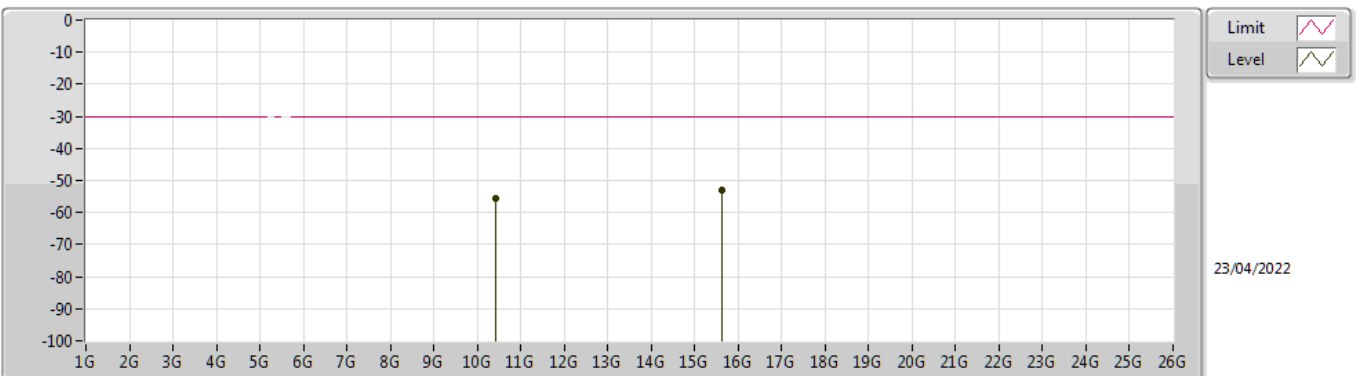
### 5210MHz\_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBm)	(dBm)	(dB)	(dB)	(m)		(°)	(m)		(dBm)	(dB)	(dB)	(dB)
AV	10.4383G	-50.59	-30.00	-20.59	3.27	3	Vertical	0	1.5	-	-53.86	48.97	9.94	55.64
AV	15.60454G	-52.99	-30.00	-22.99	8.54	3	Vertical	0	1.5	-	-61.53	49.58	12.43	53.47

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

### 5210MHz\_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBm)	(dBm)	(dB)	(dB)	(m)		(°)	(m)		(dBm)	(dB)	(dB)	(dB)
AV	10.43478G	-55.66	-30.00	-25.66	1.12	3	Horizontal	360	1.5	-	-56.78	46.82	9.94	55.64
AV	15.61686G	-52.90	-30.00	-22.90	8.88	3	Horizontal	360	1.5	-	-61.78	49.90	12.44	53.46



**Summary**

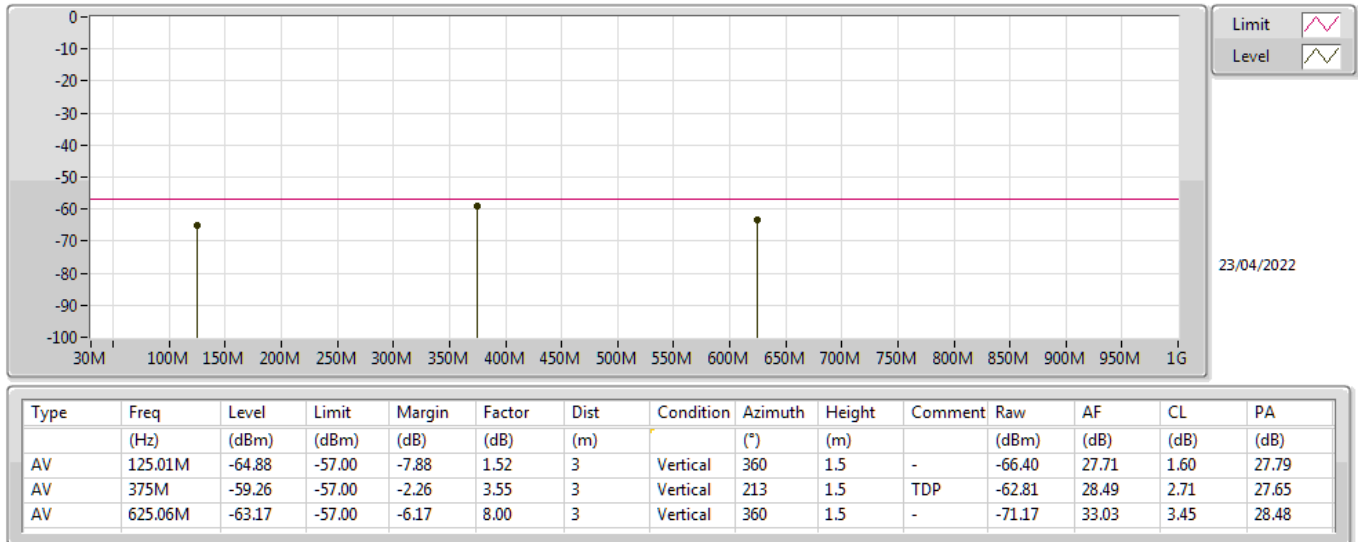
Mode	Result	Type	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.15-5.35GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11ax HEW80_(MCS0)_RX	Pass	AV	375M	-59.26	-57.00	-2.26	3.55	3	Vertical	213	1.5	TDP

**Result**

Mode	Result	Type	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11ax HEW80_(MCS0)_RX	-	-	-	-	-	-	-	-	-	-	-	-
5210MHz_RX	Pass	AV	125.01M	-64.88	-57.00	-7.88	1.52	3	Vertical	360	1.5	-
5210MHz_RX	Pass	AV	375M	-59.26	-57.00	-2.26	3.55	3	Vertical	213	1.5	TDP
5210MHz_RX	Pass	AV	625.06M	-63.17	-57.00	-6.17	8.00	3	Vertical	360	1.5	-
5210MHz_RX	Pass	AV	250.02M	-66.01	-57.00	-9.01	1.66	3	Horizontal	0	1.5	-
5210MHz_RX	Pass	AV	99.81M	-69.17	-57.00	-12.17	-0.93	3	Horizontal	0	1.5	-
5210MHz_RX	Pass	AV	624.96M	-67.62	-57.00	-10.62	8.25	3	Horizontal	0	1.5	-

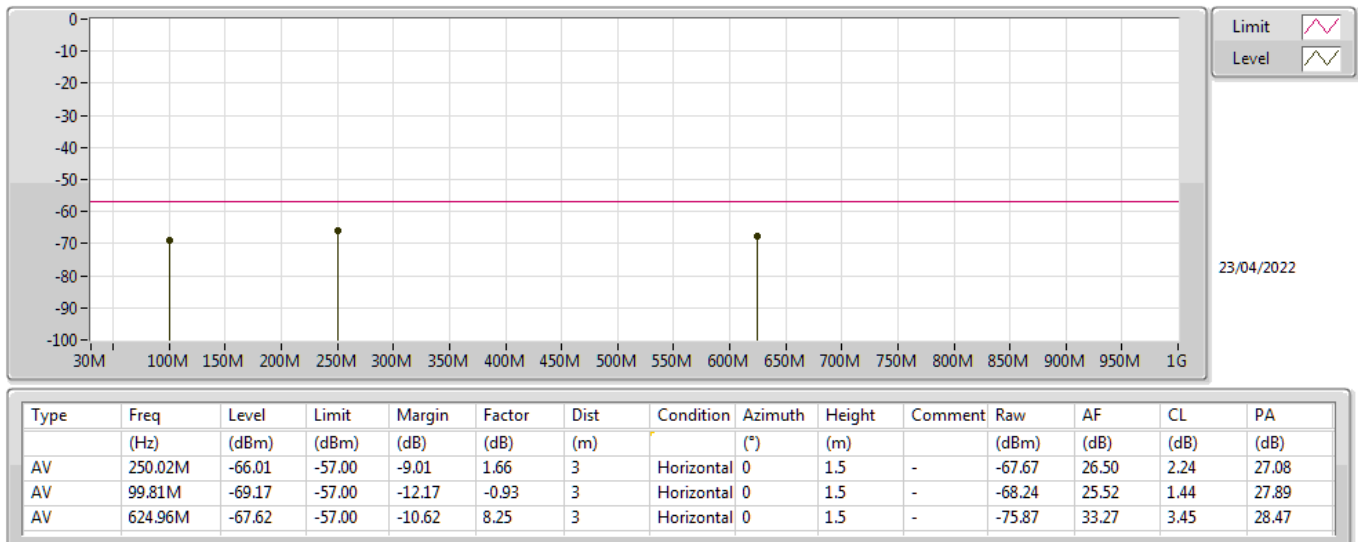
## 802.11ax HEW80\_(MCS0)\_RX

### 5210MHz\_RX



## 802.11ax HEW80\_(MCS0)\_RX

### 5210MHz\_RX







**Summary**

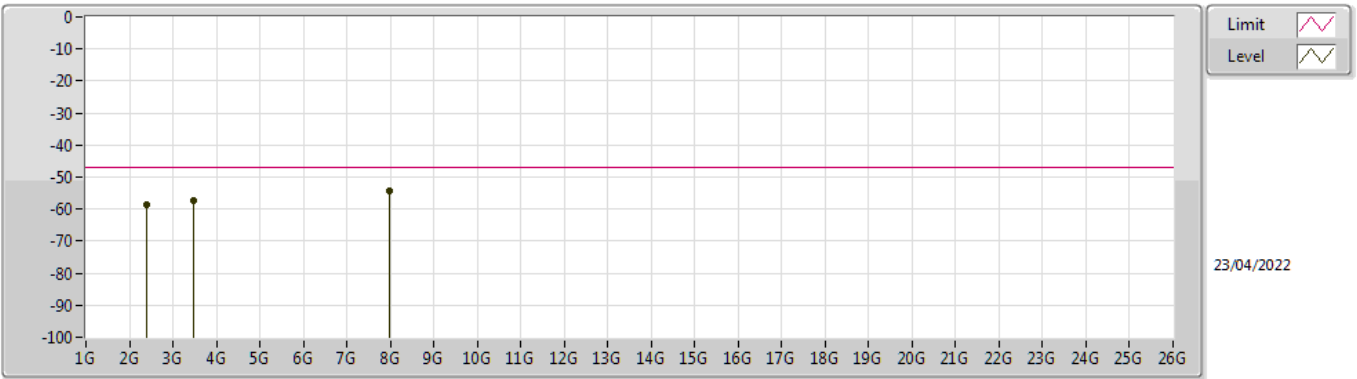
Mode	Result	Type	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.15-5.35GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11ax HEW80_(MCS0)_RX	Pass	AV	7.96688G	-54.24	-47.00	-7.24	1.94	3	Vertical	360	1.5	-

**Result**

Mode	Result	Type	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11ax HEW80_(MCS0)_RX	-	-	-	-	-	-	-	-	-	-	-	-
5210MHz_RX	Pass	AV	2.40018G	-58.75	-47.00	-11.75	-3.42	3	Vertical	360	1.5	-
5210MHz_RX	Pass	AV	3.46986G	-57.33	-47.00	-10.33	-1.68	3	Vertical	360	1.5	-
5210MHz_RX	Pass	AV	7.96688G	-54.24	-47.00	-7.24	1.94	3	Vertical	360	1.5	-
5210MHz_RX	Pass	AV	2.44778G	-56.71	-47.00	-9.71	-1.27	3	Horizontal	0	1.5	-
5210MHz_RX	Pass	AV	3.46986G	-55.83	-47.00	-8.83	0.20	3	Horizontal	0	1.5	-
5210MHz_RX	Pass	AV	6.56398G	-55.11	-47.00	-8.11	2.57	3	Horizontal	0	1.5	-

## 802.11ax HEW80\_(MCS0)\_RX

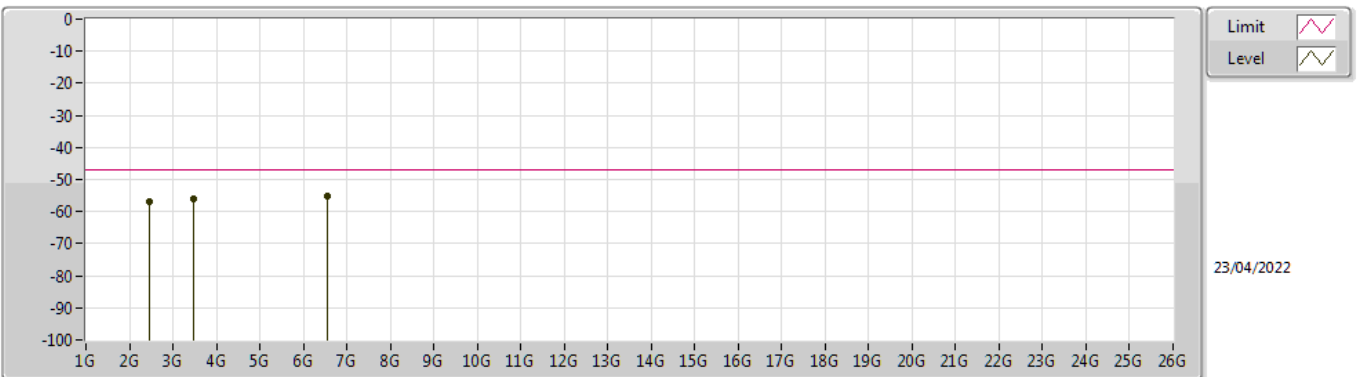
### 5210MHz\_RX



Type	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBm)	AF (dB)	CL (dB)	PA (dB)
AV	2.40018G	-58.75	-47.00	-11.75	-3.42	3	Vertical	360	1.5	-	-55.33	43.59	4.85	51.86
AV	3.46986G	-57.33	-47.00	-10.33	-1.68	3	Vertical	360	1.5	-	-55.65	44.41	5.83	51.92
AV	7.96688G	-54.24	-47.00	-7.24	1.94	3	Vertical	360	1.5	-	-56.18	47.78	8.39	54.23

## 802.11ax HEW80\_(MCS0)\_RX

### 5210MHz\_RX



Type	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBm)	AF (dB)	CL (dB)	PA (dB)
AV	2.44778G	-56.71	-47.00	-9.71	-1.27	3	Horizontal	0	1.5	-	-55.44	45.67	4.90	51.84
AV	3.46986G	-55.83	-47.00	-8.83	0.20	3	Horizontal	0	1.5	-	-56.03	46.29	5.83	51.92
AV	6.56398G	-55.11	-47.00	-8.11	2.57	3	Horizontal	0	1.5	-	-57.68	48.58	7.66	53.67



**Summary**

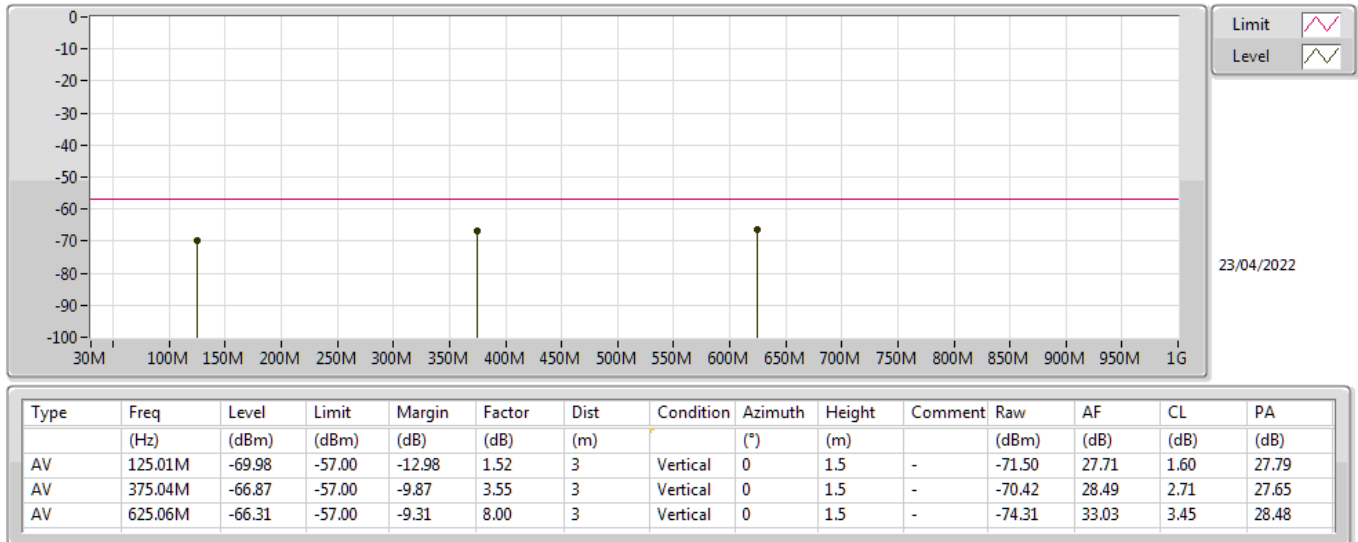
Mode	Result	Type	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.15-5.35GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11ax HEW80_(MCS0)_RX	Pass	AV	375.04M	-65.95	-57.00	-8.95	2.75	3	Horizontal	360	1.5	-

**Result**

Mode	Result	Type	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11ax HEW80_(MCS0)_RX	-	-	-	-	-	-	-	-	-	-	-	-
5210MHz_RX	Pass	AV	125.01M	-69.98	-57.00	-12.98	1.52	3	Vertical	0	1.5	-
5210MHz_RX	Pass	AV	375.04M	-66.87	-57.00	-9.87	3.55	3	Vertical	0	1.5	-
5210MHz_RX	Pass	AV	625.06M	-66.31	-57.00	-9.31	8.00	3	Vertical	0	1.5	-
5210MHz_RX	Pass	AV	250.02M	-66.87	-57.00	-9.87	1.66	3	Horizontal	360	1.5	-
5210MHz_RX	Pass	AV	375.04M	-65.95	-57.00	-8.95	2.75	3	Horizontal	360	1.5	-
5210MHz_RX	Pass	AV	625.06M	-68.39	-57.00	-11.39	8.24	3	Horizontal	360	1.5	-

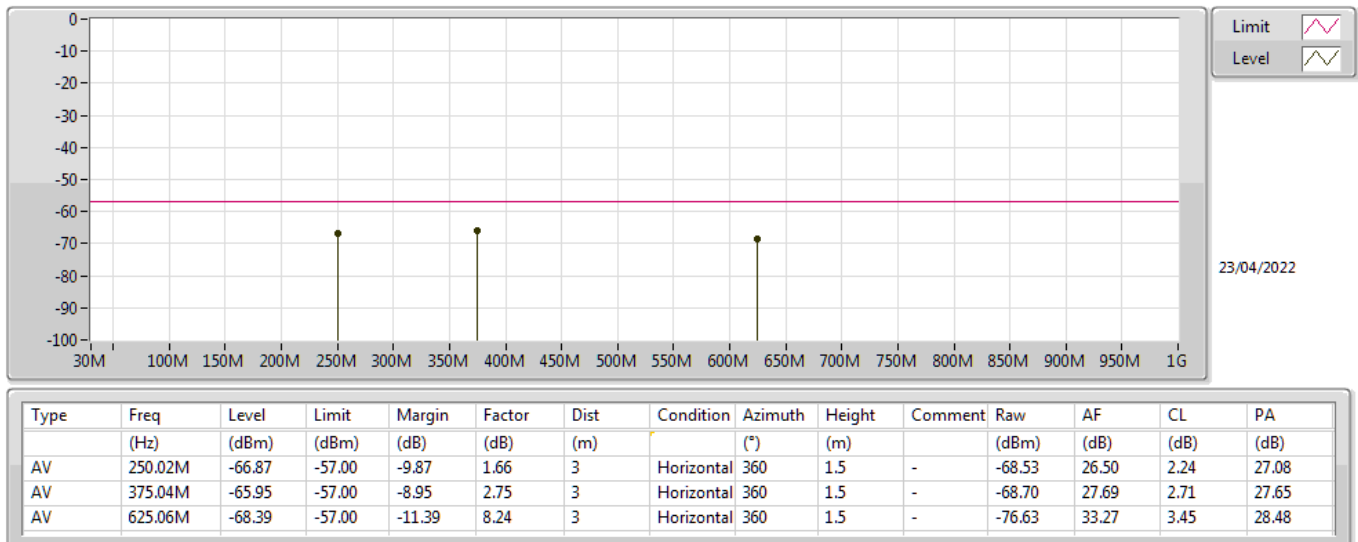
## 802.11ax HEW80\_(MCS0)\_RX

### 5210MHz\_RX



## 802.11ax HEW80\_(MCS0)\_RX

### 5210MHz\_RX





**Summary**

Mode	Result	Type	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.15-5.35GHz	-	-	-	-	-	-	-	-	-	-	-	-
802.11ax HEW80_(MCS0)_RX	Pass	AV	7.96484G	-53.53	-47.00	-6.53	1.93	3	Vertical	360	1.5	-

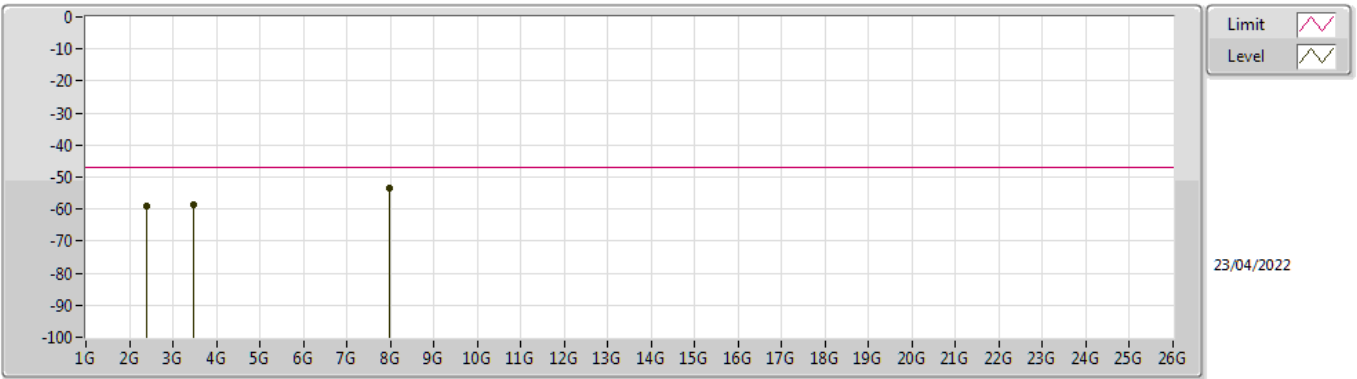
**Result**

Mode	Result	Type	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
802.11ax HEW80_(MCS0)_RX	-	-	-	-	-	-	-	-	-	-	-	-
5210MHz_RX	Pass	AV	2.40018G	-59.26	-47.00	-12.26	-3.42	3	Vertical	360	1.5	-
5210MHz_RX	Pass	AV	3.46986G	-58.71	-47.00	-11.71	-1.68	3	Vertical	360	1.5	-
5210MHz_RX	Pass	AV	7.96484G	-53.53	-47.00	-6.53	1.93	3	Vertical	360	1.5	-
5210MHz_RX	Pass	AV	1.12445G	-55.77	-47.00	-8.77	-7.61	3	Horizontal	0	1.5	-
5210MHz_RX	Pass	AV	3.23729G	-56.97	-47.00	-9.97	0.77	3	Horizontal	0	1.5	-
5210MHz_RX	Pass	AV	8.71355G	-55.46	-47.00	-8.46	2.64	3	Horizontal	0	1.5	-



## 802.11ax HEW80\_(MCS0)\_RX

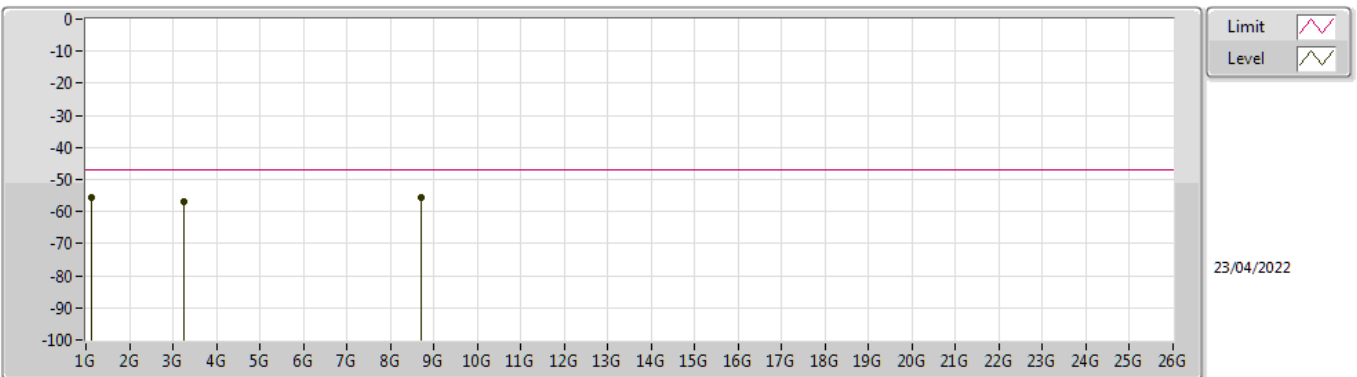
### 5210MHz\_RX



Type	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBm)	AF (dB)	CL (dB)	PA (dB)
AV	2.40018G	-59.26	-47.00	-12.26	-3.42	3	Vertical	360	1.5	-	-55.84	43.59	4.85	51.86
AV	3.46986G	-58.71	-47.00	-11.71	-1.68	3	Vertical	360	1.5	-	-57.03	44.41	5.83	51.92
AV	7.96484G	-53.53	-47.00	-6.53	1.93	3	Vertical	360	1.5	-	-55.46	47.77	8.39	54.23

## 802.11ax HEW80\_(MCS0)\_RX

### 5210MHz\_RX



Type	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBm)	AF (dB)	CL (dB)	PA (dB)
AV	1.12445G	-55.77	-47.00	-8.77	-7.61	3	Horizontal	0	1.5	-	-48.16	40.92	3.30	51.83
AV	3.23729G	-56.97	-47.00	-9.97	0.77	3	Horizontal	0	1.5	-	-57.74	46.96	5.61	51.80
AV	8.71355G	-55.46	-47.00	-8.46	2.64	3	Horizontal	0	1.5	-	-58.10	48.38	8.84	54.58

Adaptivity Result				
Detection Threshold Level		-73 dBm/MHz		
Modulation Mode	Freq. (MHz)	Adaptivity Interference Signals		
		AWGN	LTE	OFDM
802.11ax 20M	5180	Pass	Pass	Pass
802.11ax 40M	5190	Pass	-	-
Result		Complied		

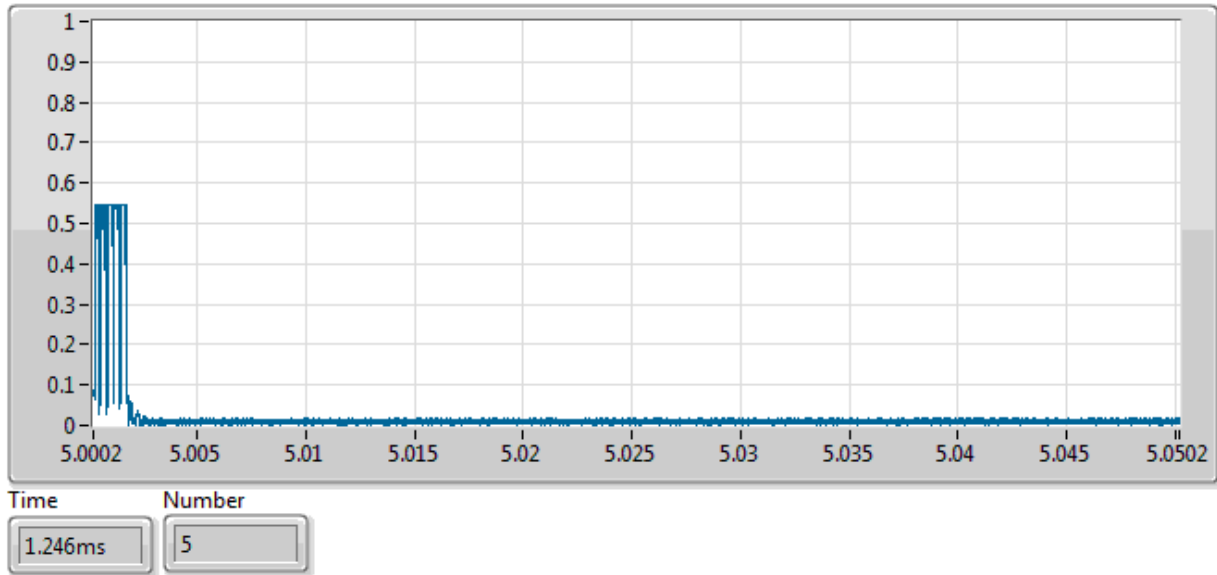
Short Control Signal Transmissions Result									
Modulation Mode	Freq. (MHz)	Adaptivity Interference Signals							
		AWGN	LTE	OFDM	Limit (ms)	AWGN	LTE	OFDM	Limit
		SCST (ms)				Number of SCST			
802.11ax 20M	5180	1.246	0.000	1.964	2.5	5	0	8	50
802.11ax 40M	5190	0.044	-	-	2.5	1	-	-	50
Result	Complied								

Medium Access Mechanism & Maximum Channel Occupancy Time(s) Result					
Modulation Mode	Freq. (MHz)	Measured Data			
		Max. Value within 10000 Channel Occupancy Time(s)		Cumulative Probabilities p(n)	
		Result (ms)	Limit	Result	Limit
802.11ax 20M	5180	5.783	Class 2	Pass	Class 2
802.11ax 40M	5190	4.801	Class 2	Pass	Class 2
Result		Complied			

## 802.11ax 20M – 5180MHz

### Adaptivity Result - AWGN

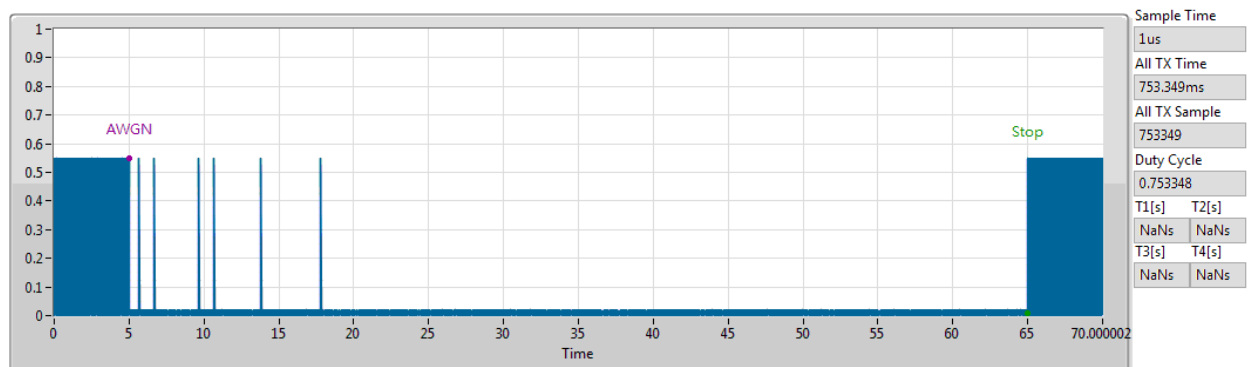
#### Short Control Signalling Transmissions



AWGN: Adding the interference signal.

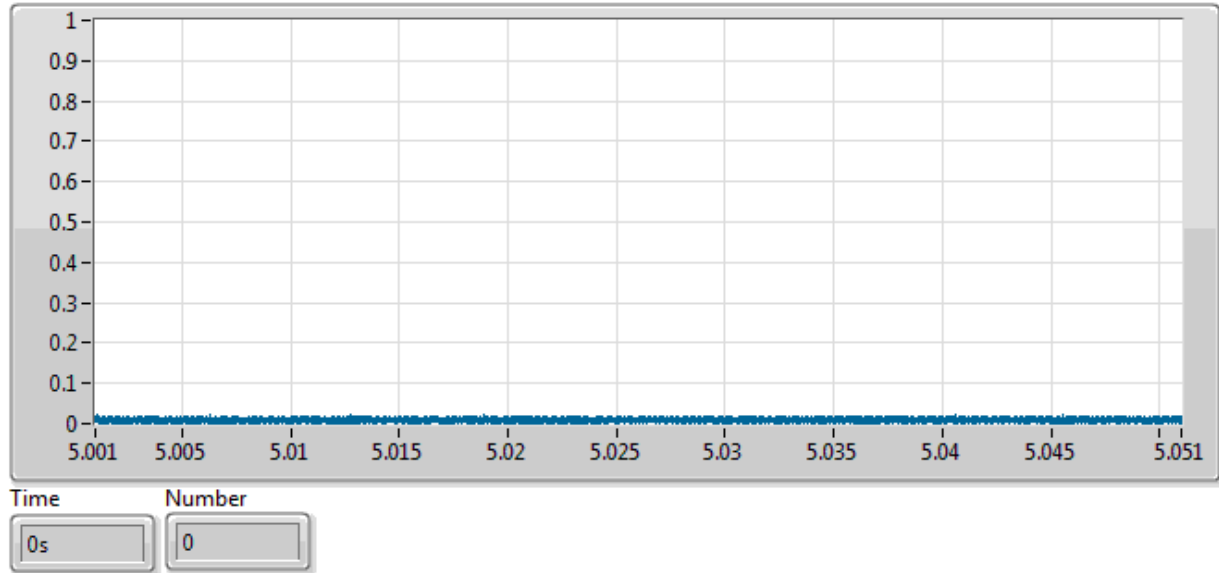
#### Short Control Signalling Transmissions - AWGN

#### Time Analysis



### Adaptivity Result - LTE

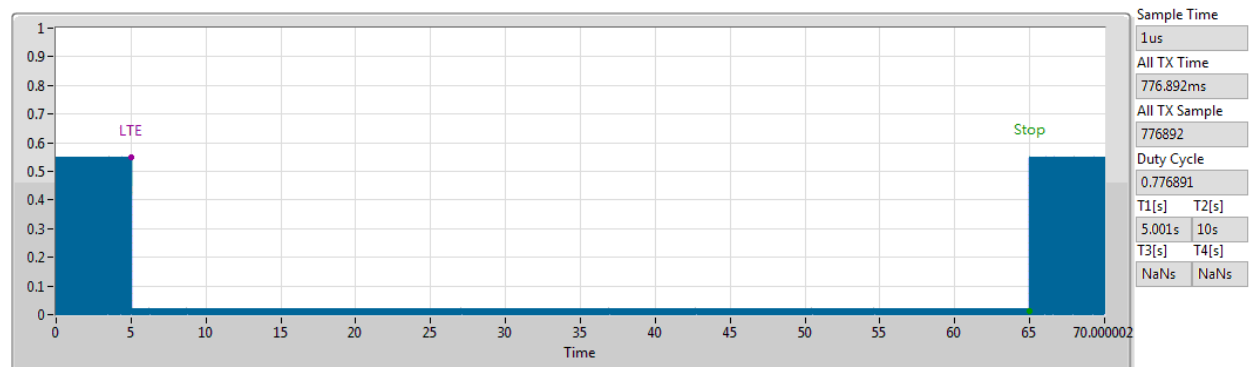
#### Short Control Signalling Transmissions



LTE: Adding the interference signal.

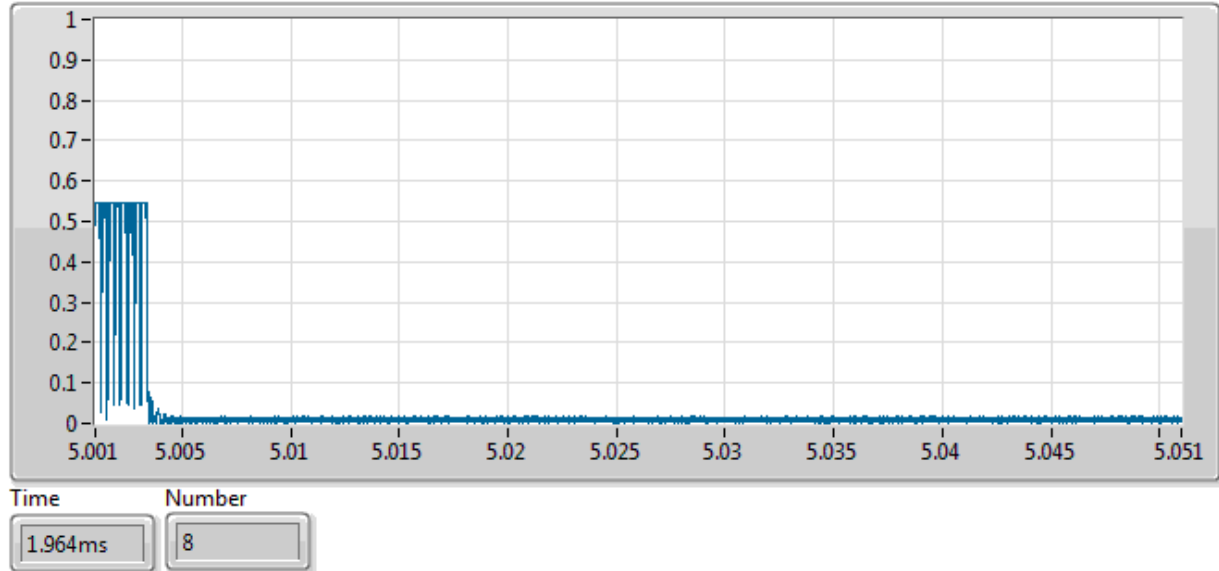
### Short Control Signalling Transmissions - LTE

#### Time Analysis



## Adaptivity Result - OFDM

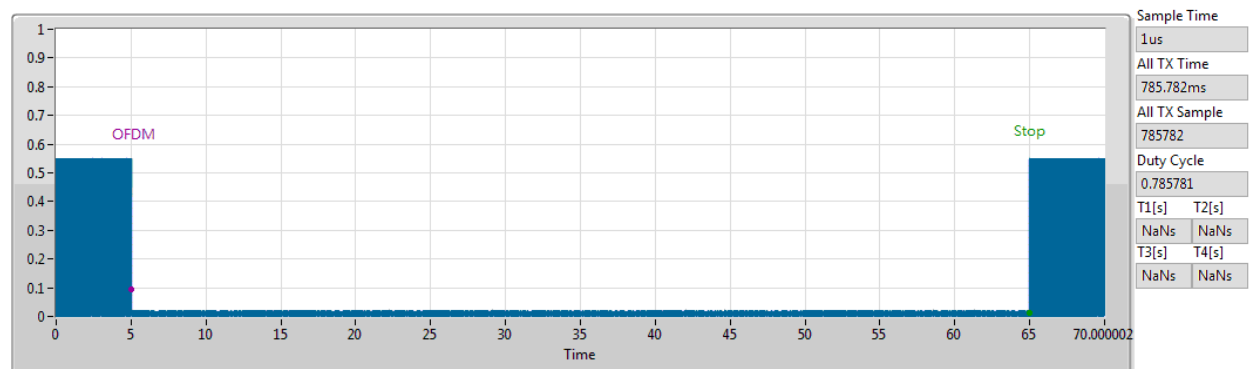
### Short Control Signalling Transmissions



OFDM: Adding the interference signal.

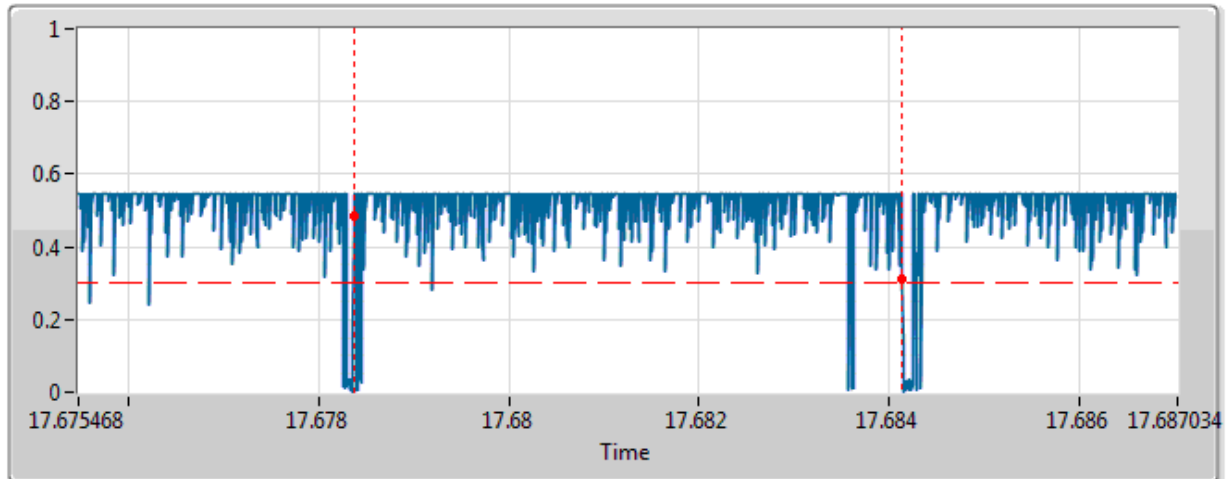
### Short Control Signalling Transmissions - OFDM

#### Time Analysis



Max. Channel Occupancy Time

Max On Time



5.783ms

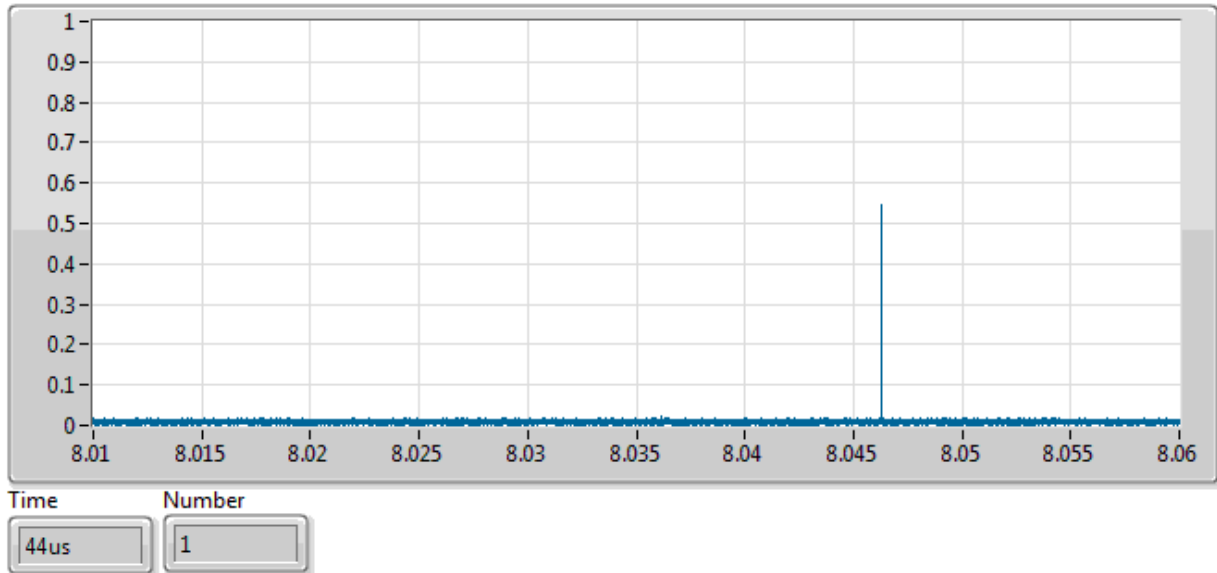
<b>Priority Class</b>	Class 2
<b>Operating Type</b>	Supervised Device

<b>n</b>	<b>H(Bn)</b>	<b>Pn</b>	<b>Pn Limit</b>	<b>Result</b>
0	90	0.00883	0.05000	Pass
1	314	0.03963	0.12000	Pass
2	520	0.09063	0.18250	Pass
3	487	0.13840	0.24500	Pass
4	521	0.18950	0.30750	Pass
5	540	0.24247	0.37000	Pass
6	555	0.29691	0.43250	Pass
7	555	0.35135	0.49500	Pass
8	548	0.40510	0.55750	Pass
9	507	0.45483	0.62000	Pass
10	531	0.50692	0.68250	Pass
11	500	0.55596	0.74500	Pass
12	506	0.60559	0.80750	Pass
13	525	0.65709	0.87000	Pass
14	438	0.70005	0.93250	Pass
15	469	0.74605	0.99500	Pass
16	2589	1.00000	1.00000	Pass

802.11ax 40M -5190MHz

Adaptivity Result - AWGN

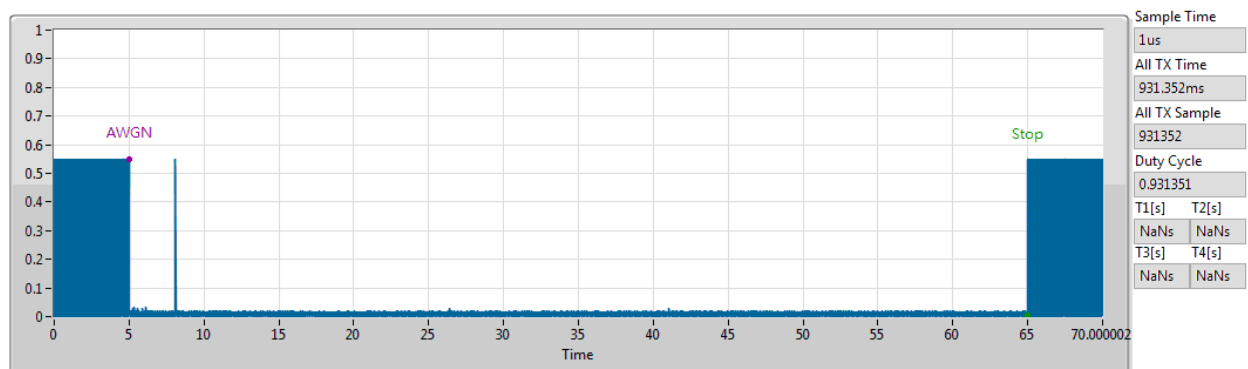
Short Control Signalling Transmissions



AWGN: Adding the interference signal.

Short Control Signalling Transmissions - AWGN

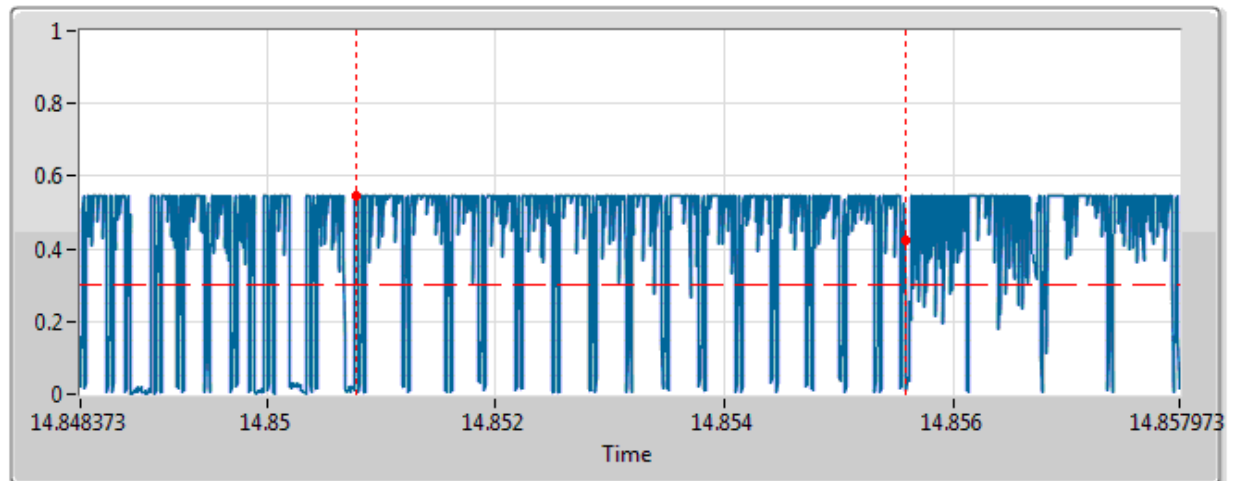
Time Analysis





Max. Channel Occupancy Time

Max On Time



4.801ms

<b>Priority Class</b>	Class 2
<b>Operating Type</b>	Supervised Device

<b>n</b>	<b>H(Bn)</b>	<b>Pn</b>	<b>Pn Limit</b>	<b>Result</b>
0	37	0.00231	0.05000	Pass
1	63	0.00625	0.12000	Pass
2	863	0.06023	0.18250	Pass
3	865	0.11434	0.24500	Pass
4	844	0.16713	0.30750	Pass
5	851	0.22035	0.37000	Pass
6	837	0.27270	0.43250	Pass
7	867	0.32693	0.49500	Pass
8	802	0.37710	0.55750	Pass
9	817	0.42820	0.62000	Pass
10	810	0.47886	0.68250	Pass
11	781	0.52771	0.74500	Pass
12	854	0.58112	0.80750	Pass
13	768	0.62916	0.87000	Pass
14	752	0.67619	0.93250	Pass
15	763	0.72392	0.99500	Pass
16	4414	1.00000	1.00000	Pass

Receiver Blocking Result							
<b>P<sub>min</sub>(dBm)</b>	-91						
Modulation Mode	Operation Frequency (MHz)	Wanted Signal Mean Power from Companion Device (dBm) P <sub>min</sub> + 6 dB	Receiver Blocking Power (dBm)	Blocking Signal Frequency (MHz)	Type of Blocking Signal	Test Result	Blocking Signal Level at which the Performance Criteria is no longer met (dBm)
802.11a	5180	-85	-53	5100	CW	Pass	-17
	5180	-85	-47	4900	CW	Pass	-15
	5180	-85	-47	5000	CW	Pass	-18
	5180	-85	-47	5975	CW	Pass	-18
<b>Limit</b>	PER(Packet Error Rate) ≤ 10%						
<b>Result</b>	<b>Complied</b>						

## 1. Photographs of Radiated Emissions Test Configuration

PCB Antenna

**Front view**



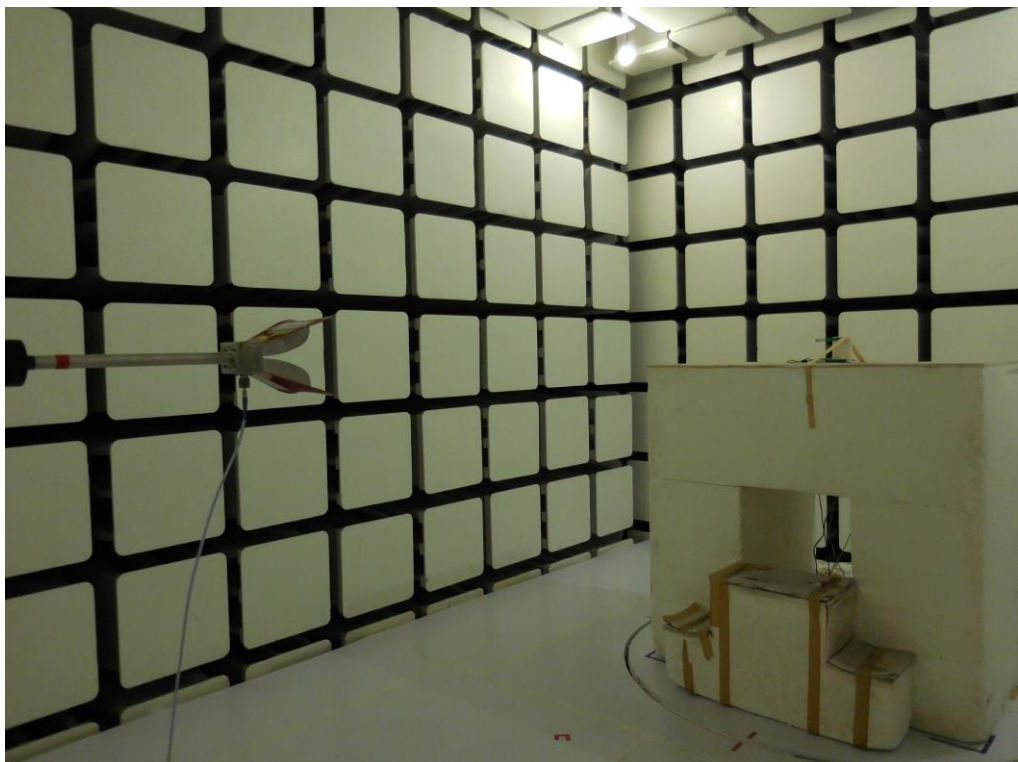
**Rear view**



**Bilog Antenna**

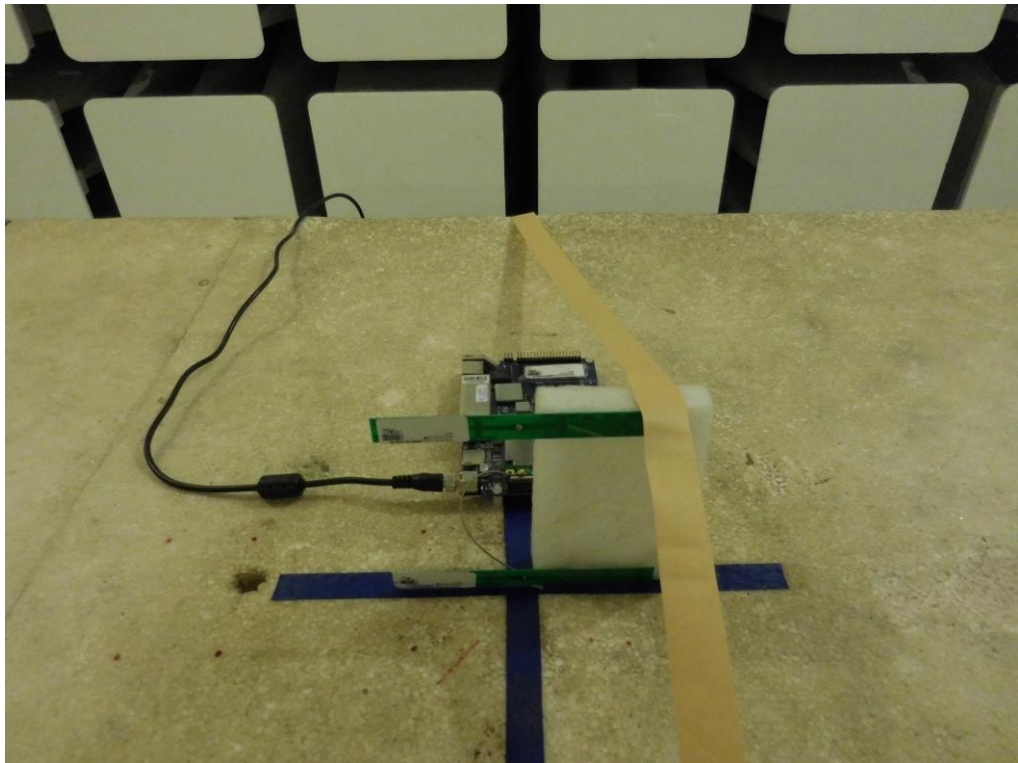


**Horn Antenna**

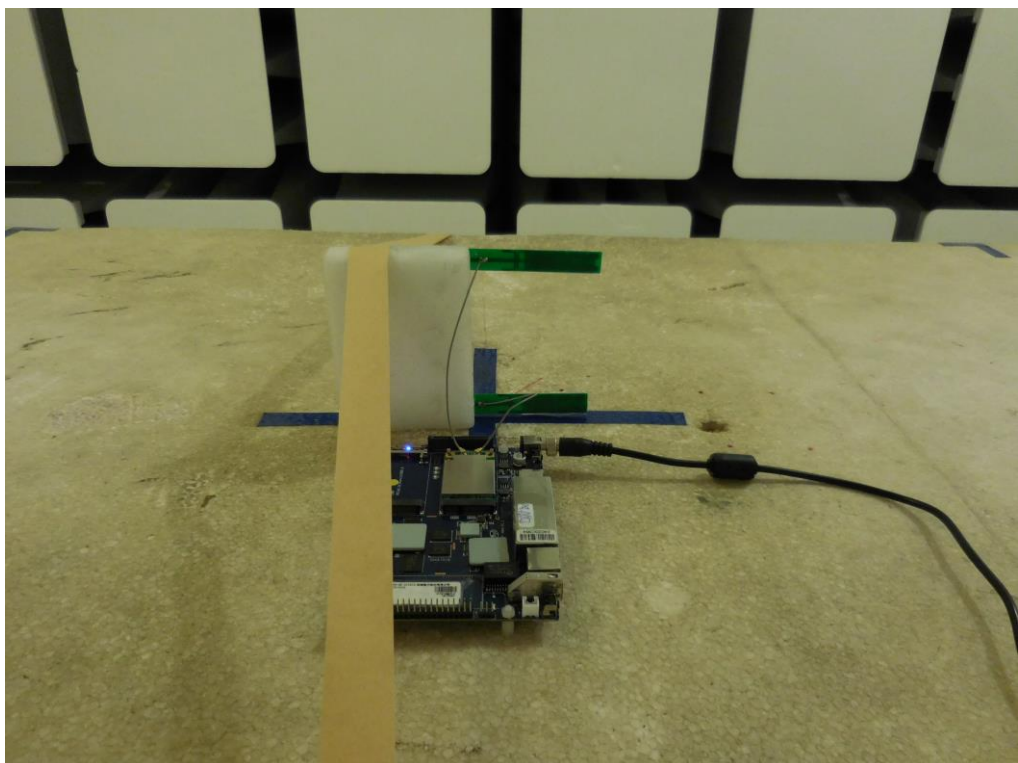




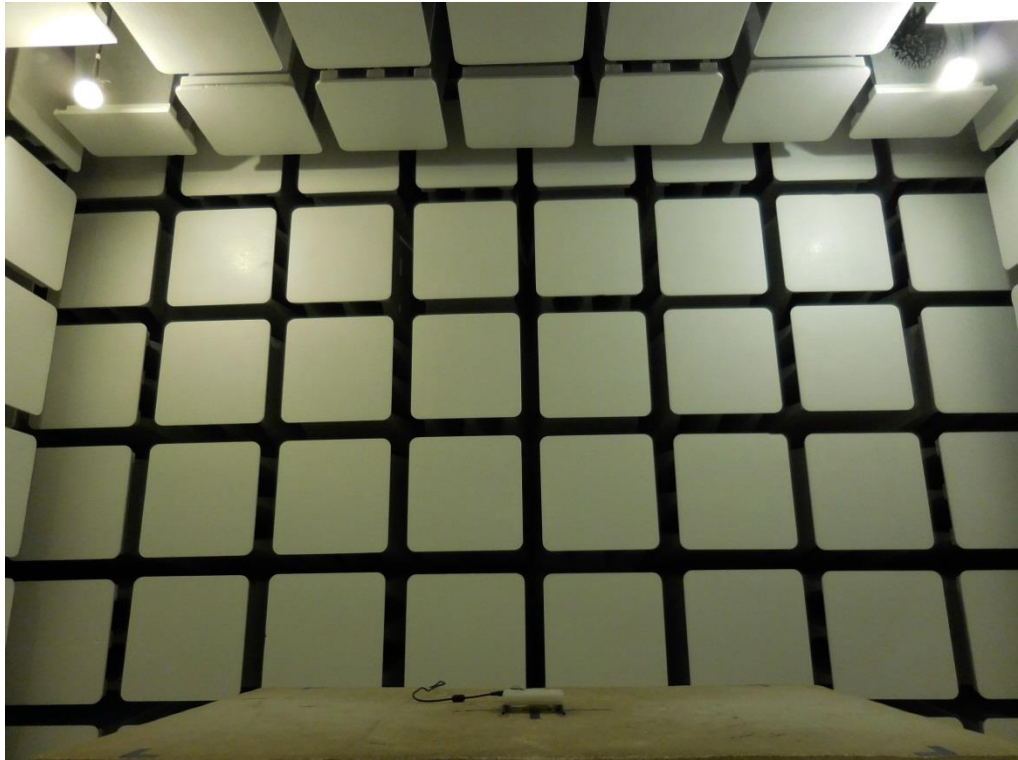
**EUT take a close-up**



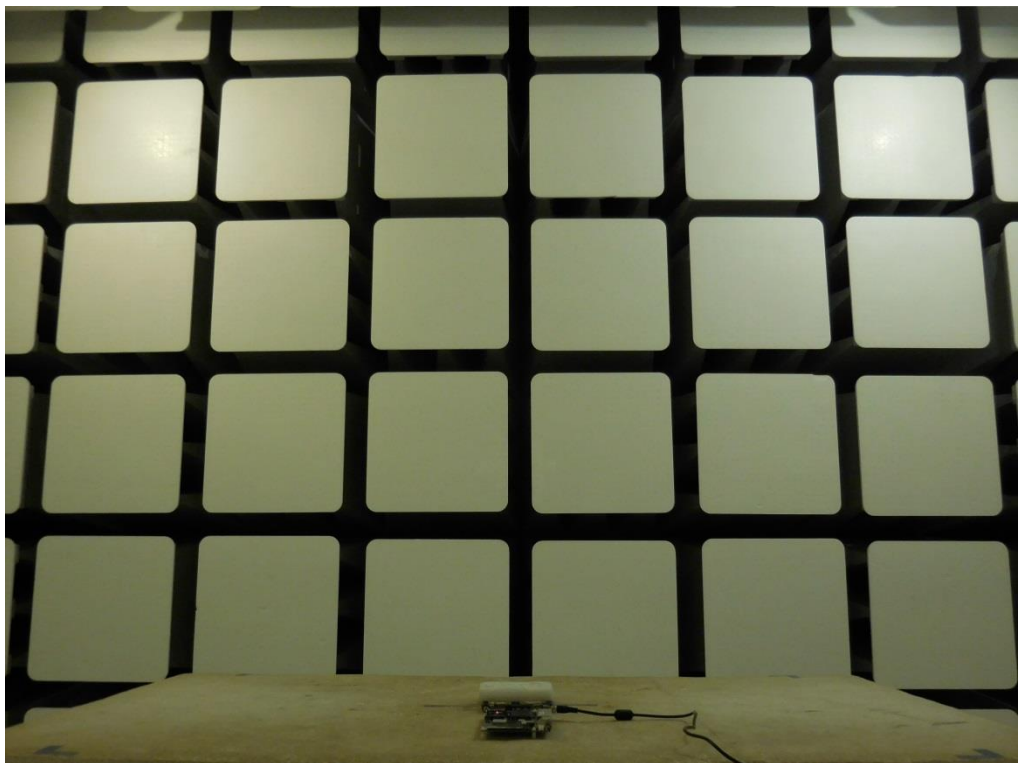
**EUT take a close-up**



**Dipole Antenna**

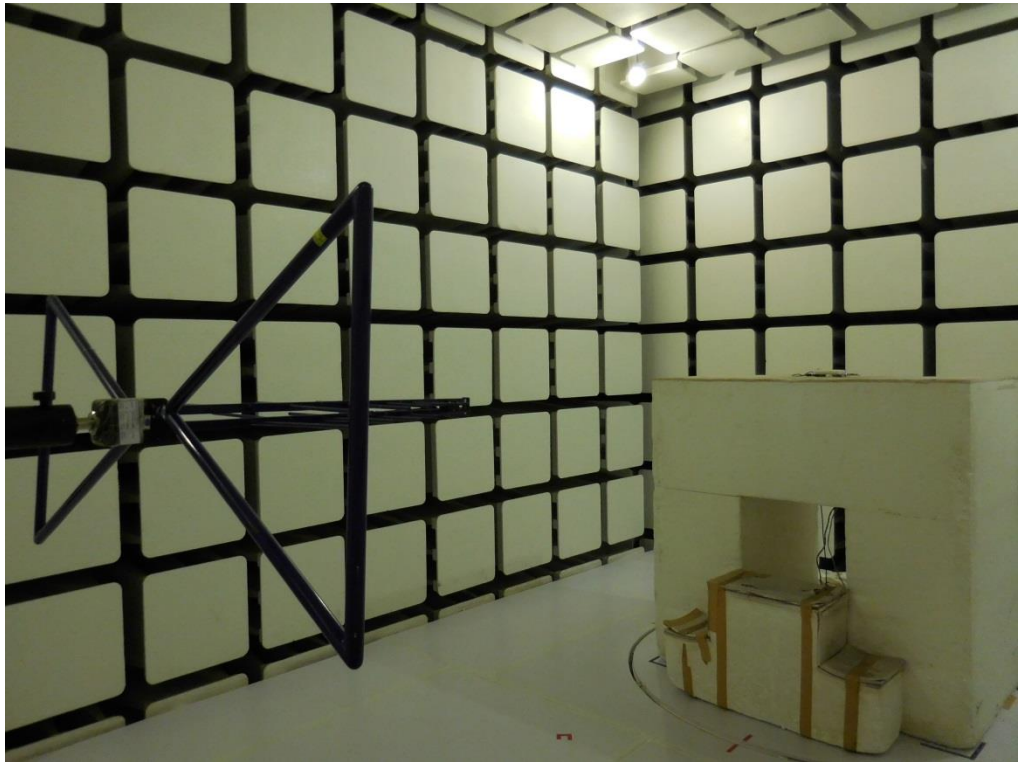


**Front view**

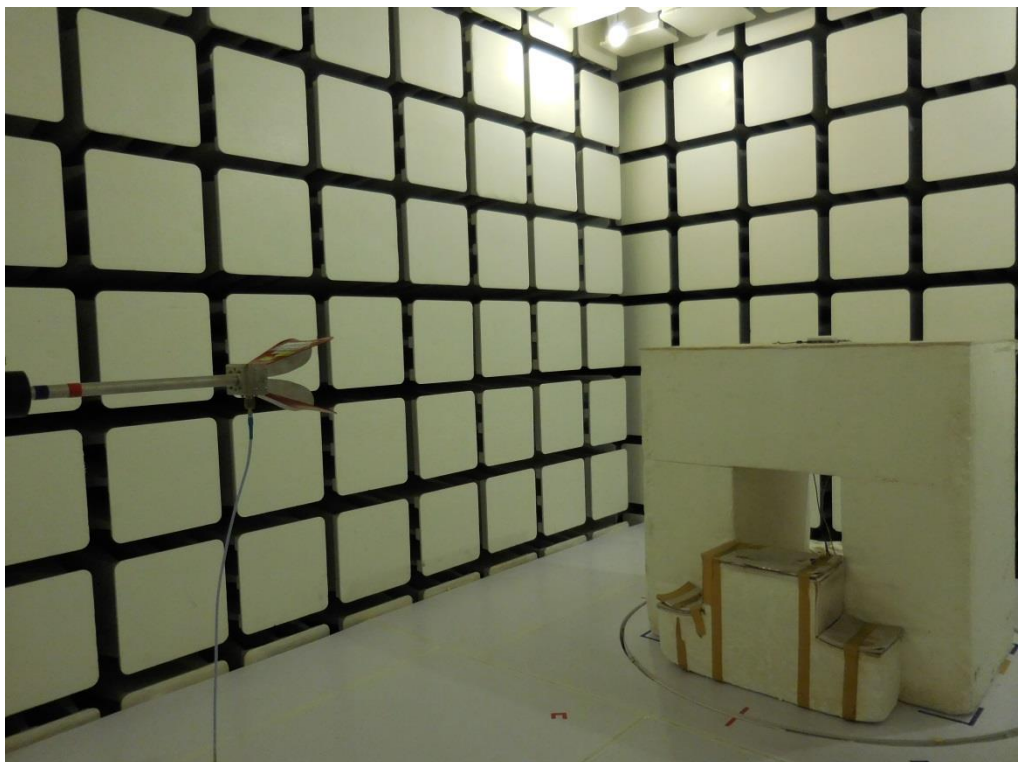


**Rear view**

**Bilog Antenna**

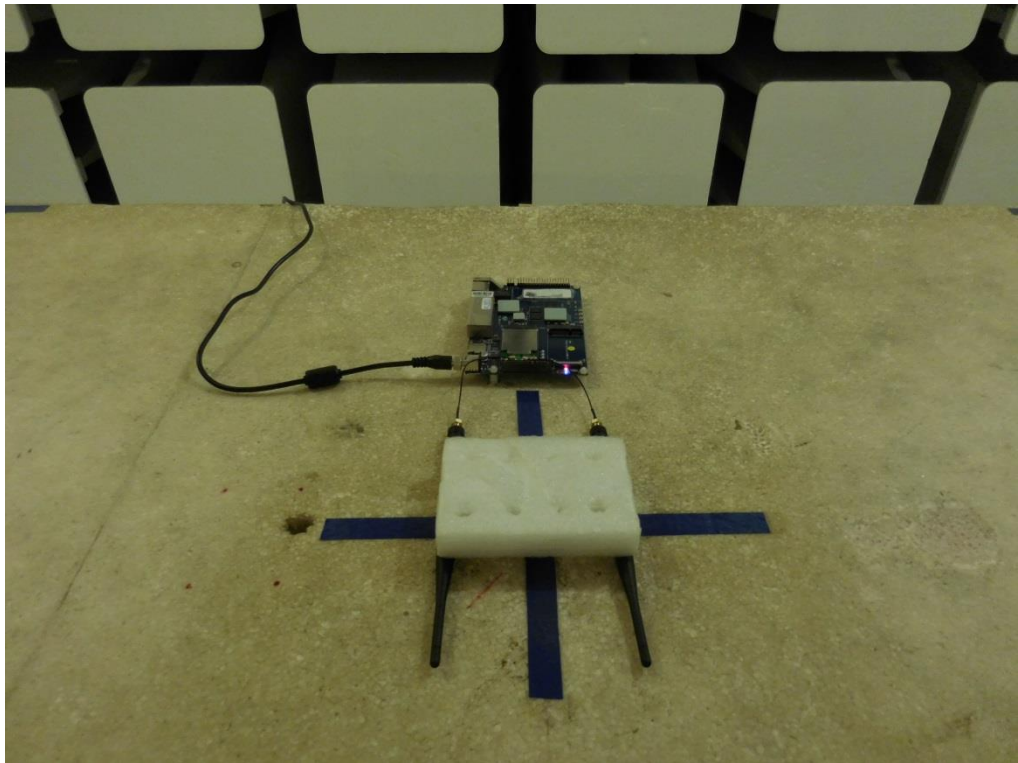


**Horn Antenna**

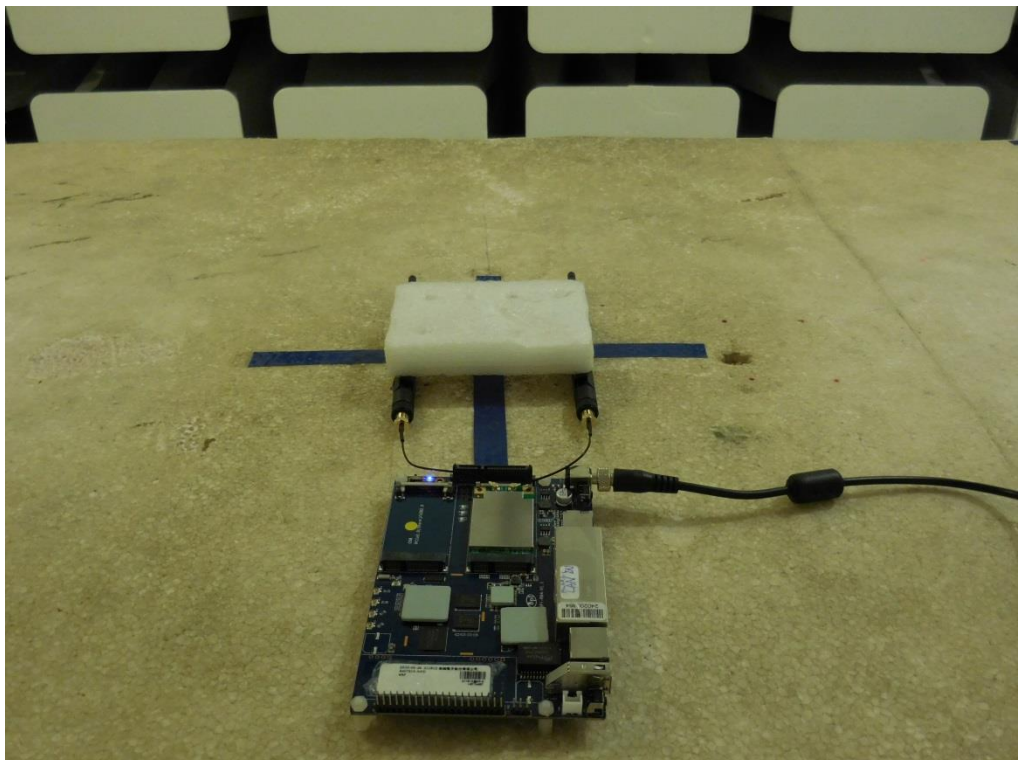




EUT take a close-up

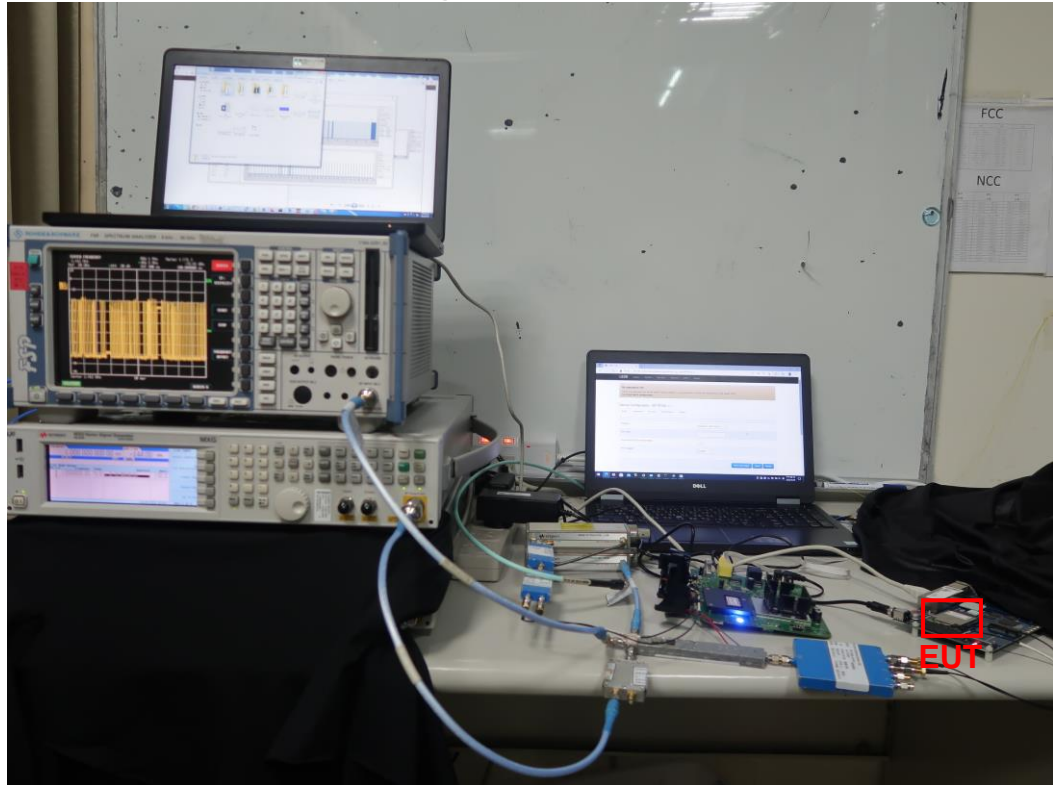


EUT take a close-up



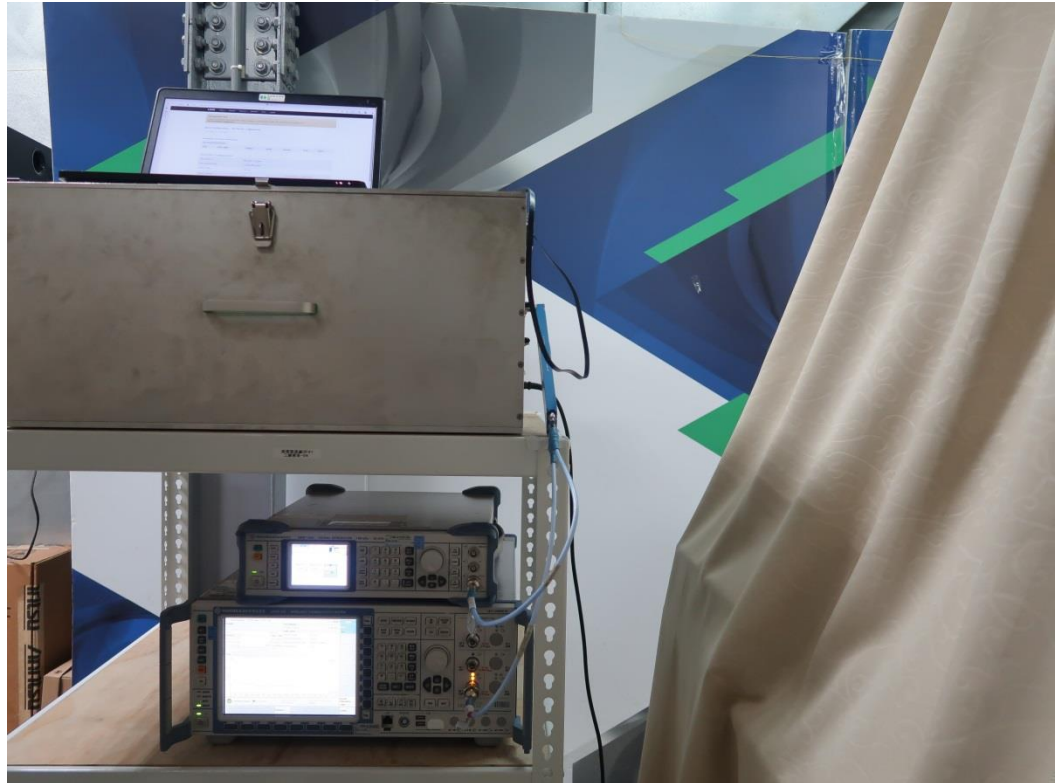
## 2. Photographs of Adaptivity Test Configuration

Front view

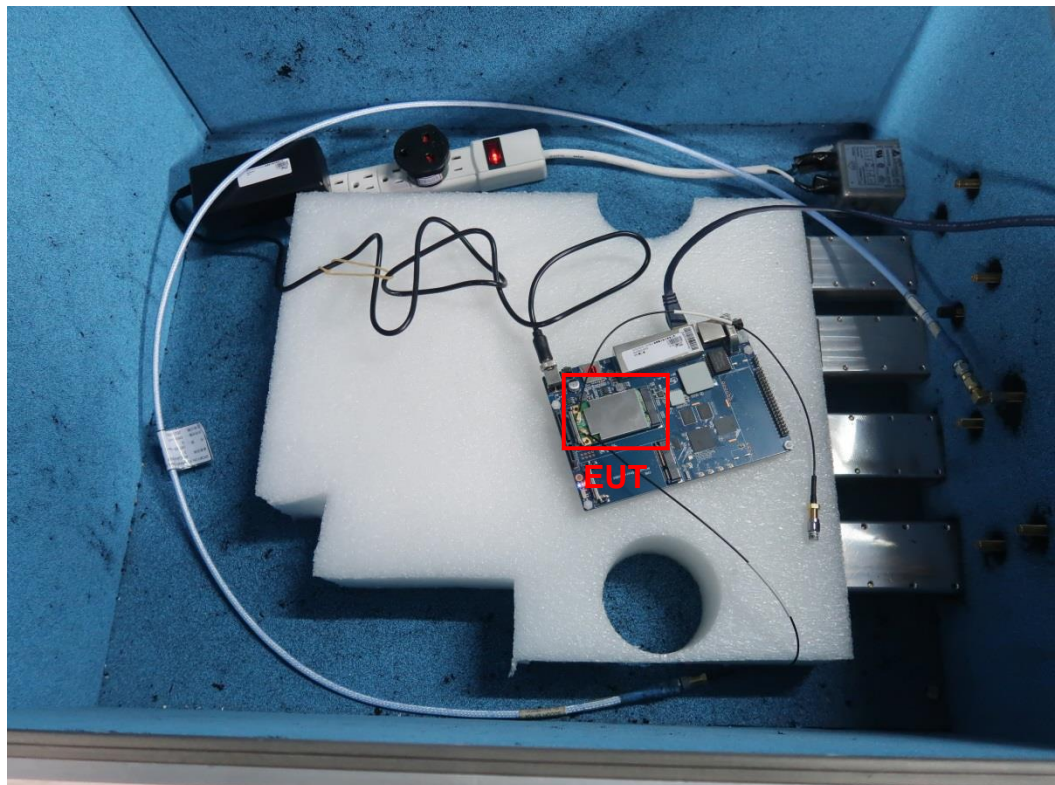


### 3. Photographs of Receiver Blocking Test Configuration

Front view



EUT close-up photo



————THE END————