



# RADIO TEST REPORT

**FCC ID** : RSL-TQ7403  
**Equipment** : IEEE802.11ax tri-radio 2.4G/5G/6GHz 2x2+2x2+2x2+  
Bluetooth® Low Energy and ZigBee wireless AP  
**Brand Name** : Allied Telesis  
**Model Name** : AT-TQ7403  
**Applicant** : Allied Telesis K.K.  
2nd. TOC Bldg.7-21-11 Nishi-Gotanda,  
Shinagawa-ku Tokyo 141-0031 Japan  
**Manufacturer** : Allied Telesis K.K.  
2nd. TOC Bldg.7-21-11 Nishi-Gotanda,  
Shinagawa-ku Tokyo 141-0031 Japan  
**Standard** : 47 CFR FCC Part 15.407

The product was received on Jul. 25, 2023, and testing was started from Jul. 25, 2023 and completed on Aug. 23, 2023. We, Sporton International Inc. Hsinchu Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

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

Approved by: Sam Chen

**Sporton International Inc. Hsinchu Laboratory**

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



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**Photographs of EUT v01**



### History of this test report

Report No.	Version	Description	Issued Date
FR372105-01	01	Initial issue of report	Nov. 17, 2023



## Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
3.1	15.407(a)	Emission Bandwidth	PASS	-
3.2	15.407(a)	Maximum Output Power	PASS	-
3.3	15.407(a)	Power Spectral Density	PASS	-
3.4	15.407(b)	Unwanted Emissions	PASS	-

**Conformity Assessment Condition:**

1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. The measurement uncertainty please refer to each test result in the chapter "Measurement Uncertainty".

**Disclaimer:**

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

**Reviewed by: Sam Chen**

**Report Producer: Viola Huang**



# 1 General Description

## 1.1 Information

### 1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5250-5350	a, n (HT20), ac (VHT20), ax (HEW20)	5260-5320	52-64 [4]
5470-5725		5500-5720	100-144 [12]
5250-5350	n (HT40), ac (VHT40), ax (HEW40)	5270-5310	54-62 [2]
5470-5725		5510-5710	102-142 [6]
5250-5350	ac (VHT80), ax (HEW80)	5290	58 [1]
5470-5725		5530-5690	106-138 [3]

#### For Radio 2

Band	Mode	BWch (MHz)	Nant
5.25-5.35GHz	802.11a	20	2TX
5.25-5.35GHz	802.11n HT20	20	2TX
5.25-5.35GHz	802.11n HT20-BF	20	2TX
5.25-5.35GHz	802.11ac VHT20	20	2TX
5.25-5.35GHz	802.11ac VHT20-BF	20	2TX
5.25-5.35GHz	802.11ax HEW20	20	2TX
5.25-5.35GHz	802.11ax HEW20-BF	20	2TX
5.25-5.35GHz	802.11n HT40	40	2TX
5.25-5.35GHz	802.11n HT40-BF	40	2TX
5.25-5.35GHz	802.11ac VHT40	40	2TX
5.25-5.35GHz	802.11ac VHT40-BF	40	2TX
5.25-5.35GHz	802.11ax HEW40	40	2TX
5.25-5.35GHz	802.11ax HEW40-BF	40	2TX
5.25-5.35GHz	802.11ac VHT80	80	2TX
5.25-5.35GHz	802.11ac VHT80-BF	80	2TX
5.25-5.35GHz	802.11ax HEW80	80	2TX
5.25-5.35GHz	802.11ax HEW80-BF	80	2TX
5.47-5.725GHz	802.11a	20	2TX
5.47-5.725GHz	802.11n HT20	20	2TX
5.47-5.725GHz	802.11n HT20-BF	20	2TX
5.47-5.725GHz	802.11ac VHT20	20	2TX
5.47-5.725GHz	802.11ac VHT20-BF	20	2TX
5.47-5.725GHz	802.11ax HEW20	20	2TX
5.47-5.725GHz	802.11ax HEW20-BF	20	2TX
5.47-5.725GHz	802.11n HT40	40	2TX



Band	Mode	BWch (MHz)	Nant
5.47-5.725GHz	802.11n HT40-BF	40	2TX
5.47-5.725GHz	802.11ac VHT40	40	2TX
5.47-5.725GHz	802.11ac VHT40-BF	40	2TX
5.47-5.725GHz	802.11ax HEW40	40	2TX
5.47-5.725GHz	802.11ax HEW40-BF	40	2TX
5.47-5.725GHz	802.11ac VHT80	80	2TX
5.47-5.725GHz	802.11ac VHT80-BF	80	2TX
5.47-5.725GHz	802.11ax HEW80	80	2TX
5.47-5.725GHz	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**

Set	Ant.	2.4GHz Port	5GHz Port	Brand	Model Name	Antenna Type	Connector	Remark	Gain (dBi)
1	1	2	2	WNC	08.22430.001	Dipole	RP-SMA PLUG	External	Note 1
	2	1	1	WNC	08.22430.001	Dipole	RP-SMA PLUG	External	
2	1	2	2	Angeei	EXD24140D01	Patch	N-Type	External	
	2	1	1	Angeei	EXD24140D01	Patch	N-Type	External	

Ant.	6GHz Port	Bluetooth / Zigbee	Brand	Model Name	Antenna Type	Connector	Remark	Gain (dBi)
3	2	1	WNC	95XEAK15.GAU	PIFA	I-PEX	Internal	Note 1
4	1	-	WNC	95XEAK15.GAT	PIFA	I-PEX	Internal	

Note1:

Antenna set 1:

Set	Ant.	2.4GHz Port	5GHz Port	Radio 1 (2.4GHz) and Radio 2 (5GHz)				
				Antenna Gain (dBi)				
				WLAN 2.4GHz	WLAN 5GHz			
					UNII 1	UNII 2A	UNII 2C	UNII 3
1	1	2	2	2.83	2.20	3.16	2.80	3.72
	2	1	1	2.51	2.88	3.85	3.56	3.85

Antenna set 2 with 2M antenna cable:

Set	Ant.	2.4GHz Port	Radio 1 (2.4GHz)				
			Antenna Gain (dBi)	Cable Loss of 2M N-type (dB)	Loss of SMA Connector (dB)	Cable loss of Internal EUT (dB)	Net Gain (dBi)
2	1	2	13	0.75	0.07	0.95	11.23
	2	1	13	0.75	0.07	0.68	11.50

Set	Ant.	5GHz Port	Radio 2 (5GHz)										
			Antenna Gain (dBi)	Cable Loss of 2M N-type (dB)	Loss of SMA Connector (dB)	Cable loss of Internal EUT (dB)				Net Gain (dBi)			
						UNII 1	UNII 2A	UNII 2C	UNII 3	UNII 1	UNII 2A	UNII 2C	UNII 3
2	1	2	16	1.23	0.12	1.48	1.49	1.56	1.58	13.17	13.16	13.09	13.07
	2	1	16	1.23	0.12	1.10	1.17	1.34	1.23	13.55	13.48	13.31	13.42



**Antenna set 2 with 2M and 10M antenna cable:**

Set	Ant.	2.4GHz Port	Radio 1 (2.4GHz)					
			Antenna Gain (dBi)	Cable Loss of 2M N-type (dB)	Cable Loss of 10M N-type (dB)	Loss of SMA Connector (dB)	Cable loss of Internal EUT (dB)	Net Gain (dBi)
2	1	2	13	0.75	3.77	0.07	0.95	7.46
	2	1	13	0.75	3.77	0.07	0.68	7.73

Set	Ant.	5GHz Port	Radio 2 (5GHz)											
			Antenna Gain (dBi)	Cable Loss of 2M N-type (dB)	Cable Loss of 10M N-type (dB)	Loss of SMA Connector (dB)	Cable loss of Internal EUT (dB)				Net Gain (dBi)			
							UNII 1	UNII 2A	UNII 2C	UNII 3	UNII 1	UNII 2A	UNII 2C	UNII 3
2	1	2	16	1.23	6.16	0.12	1.48	1.49	1.56	1.58	7.01	7.00	6.93	6.91
	2	1	16	1.23	6.16	0.12	1.10	1.17	1.34	1.23	7.39	7.32	7.15	7.26

**Antenna 3 and 4:**

Ant.	6GHz Port	Bluetooth / Zigbee	Radio 3 (6GHz) and Radio 4 (Bluetooth / Zigbee)				
			Antenna Gain (dBi)				Bluetooth / Zigbee
			UNII 5	UNII 6	UNII 7	UNII 8	
3	2	1	5.93	5.98	5.98	5.58	2.62
4	1	-	5.93	5.99	5.99	5.98	-

Note2: The above information was declared by manufacturer.

Note3: For antenna set 2: The gain of antenna set 2 with 2M antenna cable was higher than antenna set 2 with 10M antenna cable, thus antenna set 2 with 2M antenna cable was selected to test.

Note4: The EUT has two antenna sets for radio 1 and radio 2.





Note5: Directional gain information

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

Ex.

Directional Gain (NSS1) formula :

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

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

$g_{j,k} = (NSS1(g1,1) + NSS1(g1,2) )^2$

$DG = 10 \log[(NSS1(g1,1) + NSS1(g1,2) )^2 / N_{ANT}] \Rightarrow 10 \log[(10^{G1/20} + 10^{G2/20} )^2 / N_{ANT}]$

Where ;

For Antenna set 1

2.4G G1= 2.83 dBi ; G2= 2.51 dBi ;DG= 5.68dBi

5G UNII-1 G1= 2.2 dBi ; G2= 2.88 dBi ;DG= 5.56dBi

5G UNII-2A G1= 3.16 dBi ; G2= 3.85 dBi ;DG= 6.52dBi

5G UNII-2C G1= 2.8 dBi ; G2= 3.56 dBi ;DG= 6.2dBi

5G UNII-3 G1= 3.72 dBi ; G2= 3.85 dBi ;DG= 6.8dBi

For Antenna set 2 (Cross-Polarized Antenna)

2.4G G1= 11.23 dBi ; G2= 11.5 dBi ;DG= 11.5dBi

5G UNII-1 G1= 13.17 dBi ; G2= 13.55 dBi ;DG= 13.55dBi

5G UNII-2A G1= 13.16 dBi ; G2= 13.48 dBi ;DG= 13.48dBi

5G UNII-2C G1= 13.09 dBi ; G2= 13.31 dBi ;DG= 13.31dBi

5G UNII-3 G1= 13.07 dBi ; G2= 13.42 dBi ;DG= 13.42dBi

For Antenna 3 and Antenna 4

6G UNII-4 G1= 5.93 dBi ; G2= 5.93 dBi ;DG= 8.94dBi

6G UNII-5 G1= 5.98 dBi ; G2= 5.99 dBi ;DG= 9dBi

6G UNII-6 G1= 5.98 dBi ; G2= 5.99 dBi ;DG= 9dBi

6G UNII-7 G1= 5.58 dBi ; G2= 5.98 dBi ;DG= 8.79dBi

**<For Radio 1 (2.4GHz Functions) and Radio 2 (5GHz Functions)>**

**For 2TX/2RX:**

Port 1 and Port 2 can be use as transmitting/receiving antenna

Port 1 and Port 2 could receive simultaneously.

**<For Radio 3 / 6GHz Functions>**

**For 2TX/2RX:**

Port 1 and Port 2 can be use as transmitting/receiving antenna

Port 1 and Port 2 could receive simultaneously.

**<For Radio 4 / Bluetooth / Zigbee Functions>**

**For 1TX/1RX:**

Only Port 1 can be use as transmitting/receiving antenna.



**1.1.3 Table for Antennae Set 2 Configuration**

Set	Configuration	Ant. of EUT	Radio 1 (2.4GHz) and Radio 2 (5GHz)			
			Antenna port of antenna set 2			
2	1	1	1	-	-	-
		2	2	-	-	-
	2	1	-	4	-	-
		2	-	3	-	-
	3	1	-	-	3	-
		2	-	-	4	-
	4	1	-	-	-	2
		2	-	-	-	1

**1.1.4 Mode Test Duty Cycle**

**For Test Mode 1 + antenna set 1**

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a	0.939	0.27	1.977m	1k
802.11ax HEW20	0.817	0.88	5.446m	300
802.11ax HEW20-BF	1,(M0)	0	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW40	0.8	0.97	5.446m	300
802.11ax HEW40-BF	1,(M0)	0	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW80	0.817	0.88	5.446m	300
802.11ax HEW80-BF	1,(M0)	0	n/a (DC>=0.98)	n/a (DC>=0.98)

**For Test Mode 2 + antenna set 2 with 2M antenna cable**

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a	0.943	0.25	1.977m	1k
802.11ax HEW20	0.801	0.96	5.446m	300
802.11ax HEW20-BF	1,(M0)	0	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW40	0.799	0.97	5.446m	300
802.11ax HEW40-BF	1,(M0)	0	n/a (DC>=0.98)	n/a (DC>=0.98)
802.11ax HEW80	0.798	0.98	5.446m	300
802.11ax HEW80-BF	1,(M0)	0	n/a (DC>=0.98)	n/a (DC>=0.98)

**Note:**

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



1.1.5 EUT Operational Condition

<b>EUT Power Type</b>	From Power Adapter or PoE			
<b>Beamforming Function</b>	<input checked="" type="checkbox"/>	With beamforming	<input type="checkbox"/>	Without beamforming
	The product has beamforming function for 11n/VHT/11ax in 2.4GHz, 11n/11ac/11ax in 5GHz and 11ax in 6GHz.			
<b>Weather Band</b>	<input checked="" type="checkbox"/>	With 5600~5650MHz	<input type="checkbox"/>	Without 5600~5650MHz
<b>Function</b>	<input type="checkbox"/>	Outdoor P2M	<input checked="" type="checkbox"/>	Indoor P2M
	<input type="checkbox"/>	Fixed P2P	<input type="checkbox"/>	Client
	<input checked="" type="checkbox"/>	Point-to-multipoint	<input type="checkbox"/>	Point-to-point
<b>TPC Function</b>	<input checked="" type="checkbox"/>	With TPC	<input type="checkbox"/>	Without TPC
<b>Channel Puncturing Function</b>	<input type="checkbox"/>	Supported	<input checked="" type="checkbox"/>	Unsupported
<b>Support RU</b>	<input checked="" type="checkbox"/>	Full RU	<input type="checkbox"/>	Partial RU
<b>Test Software Version</b>	QSPR Version 5.0-00199			

Note: The above information was declared by manufacturer.

1.1.6 Table for Radio Function

Radio	WLAN 2.4GHz	WLAN 5GHz	WLAN 6GHz	Bluetooth / Zigbee
1	V	-	-	-
2	-	V	-	-
3	-	-	V	-
4	-	-	-	V

Note: The above information was declared by manufacturer.

1.1.7 Table for Permissive Change

This product is an extension of original one reported under Sporton project number: FR372105AB

Below is the table for the change of the product with respect to the original one.

Modifications	Performance Checking
Adding Band 2 and Band 3 (5250~5350 MHz, 5470~5725 MHz) for this device.	<ol style="list-style-type: none"> <li>1. Emission Bandwidth.</li> <li>2. Maximum Output Power.</li> <li>3. Power Spectral Density.</li> <li>4. Unwanted Emissions Above 1GHz.</li> </ol>



### 1.2 Applicable Standards

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

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

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

- ◆ FCC KDB 662911 D01 v02r01
- ◆ FCC KDB 412172 D01 v01r01

### 1.3 Testing Location Information

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

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
RF Conducted	TH01-CB	KJ Chang	23.6~24.7 / 62~69	Jul. 31, 2023~Aug. 23, 2023
Radiated above 1GHz	03CH02-CB	Alex Kuo	22~23.9 / 57~63	Jul. 29, 2023~Jul. 30, 2023

### 1.4 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2))

Test Items	Uncertainty	Remark
Radiated Emission (1GHz ~ 18GHz)	4.1 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.2 dB	Confidence levels of 95%
Conducted Emission	3.1 dB	Confidence levels of 95%
Output Power Measurement	0.8 dB	Confidence levels of 95%
Power Density Measurement	3.1 dB	Confidence levels of 95%
Bandwidth Measurement	2.2%	Confidence levels of 95%



## 2 Test Configuration of EUT

### 2.1 Test Channel Mode

For Radio 2

Test Mode 1 + antenna set 1

Mode	Power Setting
802.11a_Nss1,(6Mbps)_2TX	-
5260MHz	20.5
5300MHz	20.5
5320MHz	19.5
5500MHz	19.5
5580MHz	20.5
5700MHz	19.5
5720MHz Straddle 5.47-5.725GHz	20.5
5720MHz Straddle 5.725-5.85GHz	20.5
802.11ax HEW20_Nss1,(MCS0)_2TX	-
5260MHz	21.5
5300MHz	21.5
5320MHz	19.5
5500MHz	19.5
5580MHz	21
5700MHz	19
5720MHz Straddle 5.47-5.725GHz	21
5720MHz Straddle 5.725-5.85GHz	21
802.11ax HEW40_Nss1,(MCS0)_2TX	-
5270MHz	19.5
5310MHz	18.5
5510MHz	18.5
5550MHz	20
5670MHz	18
5710MHz Straddle 5.47-5.725GHz	21
5710MHz Straddle 5.725-5.85GHz	21
802.11ax HEW80_Nss1,(MCS0)_2TX	-
5290MHz	17.5
5530MHz	18
5610MHz	18.5
5690MHz Straddle 5.47-5.725GHz	20
5690MHz Straddle 5.725-5.85GHz	20
5775MHz	18
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-



Mode	Power Setting
5260MHz	21
5300MHz	21
5320MHz	19.5
5500MHz	19.5
5580MHz	21
5700MHz	19
5720MHz Straddle 5.47-5.725GHz	21
5720MHz Straddle 5.725-5.85GHz	21
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
5270MHz	19.5
5310MHz	18.5
5510MHz	18.5
5550MHz	20
5670MHz	18
5710MHz Straddle 5.47-5.725GHz	21
5710MHz Straddle 5.725-5.85GHz	21
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-
5290MHz	17.5
5530MHz	18
5610MHz	18.5
5690MHz Straddle 5.47-5.725GHz	20
5690MHz Straddle 5.725-5.85GHz	20
5775MHz	18

**Test Mode 2 + antenna set 2 with 2M antenna cable + configuration 3 (Port 3 + Port 4)**

Mode	Power Setting
802.11a_Nss1,(6Mbps)_2TX	-
5260MHz	13.5
5300MHz	13.5
5320MHz	13.5
5500MHz	13.5
5580MHz	13.5
5700MHz	13.5
5720MHz Straddle 5.47-5.725GHz	13
5720MHz Straddle 5.725-5.85GHz	13
802.11ax HEW20_Nss1,(MCS0)_2TX	-
5260MHz	14
5300MHz	14
5320MHz	14.5
5500MHz	14



Mode	Power Setting
5580MHz	14
5700MHz	14
5720MHz Straddle 5.47-5.725GHz	14
5720MHz Straddle 5.725-5.85GHz	14
802.11ax HEW40_Nss1,(MCS0)_2TX	-
5270MHz	13.5
5310MHz	13.5
5510MHz	13.5
5550MHz	14
5670MHz	13.5
5710MHz Straddle 5.47-5.725GHz	14
5710MHz Straddle 5.725-5.85GHz	14
802.11ax HEW80_Nss1,(MCS0)_2TX	-
5290MHz	13.5
5530MHz	14
5610MHz	14
5690MHz Straddle 5.47-5.725GHz	14.5
5690MHz Straddle 5.725-5.85GHz	14.5
5775MHz	17
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
5260MHz	14
5300MHz	14
5320MHz	14.5
5500MHz	14
5580MHz	14
5700MHz	14
5720MHz Straddle 5.47-5.725GHz	14
5720MHz Straddle 5.725-5.85GHz	14
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
5270MHz	13.5
5310MHz	13.5
5510MHz	13.5
5550MHz	14
5670MHz	13.5
5710MHz Straddle 5.47-5.725GHz	14
5710MHz Straddle 5.725-5.85GHz	14
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-
5290MHz	13.5
5530MHz	14
5610MHz	14



Mode	Power Setting
5690MHz Straddle 5.47-5.725GHz	14.5
5690MHz Straddle 5.725-5.85GHz	14.5
5775MHz	17

**Note:**

- ◆ Evaluated HEW20/HEW40/HEW80 mode only, due to similar modulation. The power setting of HT20/VHT20/VHT40/VHT80 mode are the same or lower than HEW20/HEW40/HEW80.
- ◆ 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.





## 2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
<b>Tests Item</b>	Emission Bandwidth Maximum Output Power Power Spectral Density
<b>Test Condition</b>	Conducted measurement at transmit chains
1	Radio 2 + antenna set 1
2	Radio 2 + antenna set 2 with 2M antenna cable

The Worst Case Mode for Following Conformance Tests	
<b>Tests Item</b>	Unwanted Emissions
<b>Test Condition</b>	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
<b>Operating Mode &gt; 1GHz</b>	CTX
	1. For antenna set 1: The EUT was performed at X axis, Y axis and Z axis position, and the worst case was found at Y axis. Thus, the measurement will follow this same test configuration.
	2. For antenna set 2: The EUT was performed at X axis, Y axis and Z axis position, and the worst case was found at Z axis. Thus, the measurement will follow this same test configuration.
	3. The EUT was performed with antenna set 2 in four configurations, and the worst case was found at configuration 3 (Port 3 + Port 4). Thus, the measurement will follow this same test configuration.
1	EUT in Y axis + Radio 2 + antenna set 1
2	EUT in Z axis + Radio 2 + antenna set 2 with 2M antenna cable + configuration 3 (Port 3 + Port 4)

The Worst Case Mode for Following Conformance Tests	
<b>Tests Item</b>	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
<b>Operating Mode</b>	
1	Radio 1 (2.4GHz) + Radio 2 (5GHz) with antenna set 1 + Radio 3 (6GHz) + Radio 4 (Bluetooth)
2	Radio 1 (2.4GHz) + Radio 2 (5GHz) with antenna set 1 + Radio 3 (6GHz) + Radio 4 (Zigbee)
3	Radio 1 (2.4GHz) + Radio 2 (5GHz) with antenna set 2 with 2M antenna cable + Radio 3 (6GHz) + Radio 4 (Bluetooth)
4	Radio 1 (2.4GHz) + Radio 2 (5GHz) with antenna set 2 with 2M antenna cable + Radio 3 (6GHz) + Radio 4 (Zigbee)
Refer to Sporton Test Report No.: FA372105-01 for Co-location RF Exposure Evaluation.	



Note: The PoE is for measurement only, would not be marketed.  
PoE information as below:

<b>Power</b>	<b>Brand</b>	<b>Model</b>
PoE	DELTA	ADP-60HR B

### **2.3 EUT Operation during Test**

The EUT was programmed to be in continuously transmitting mode.

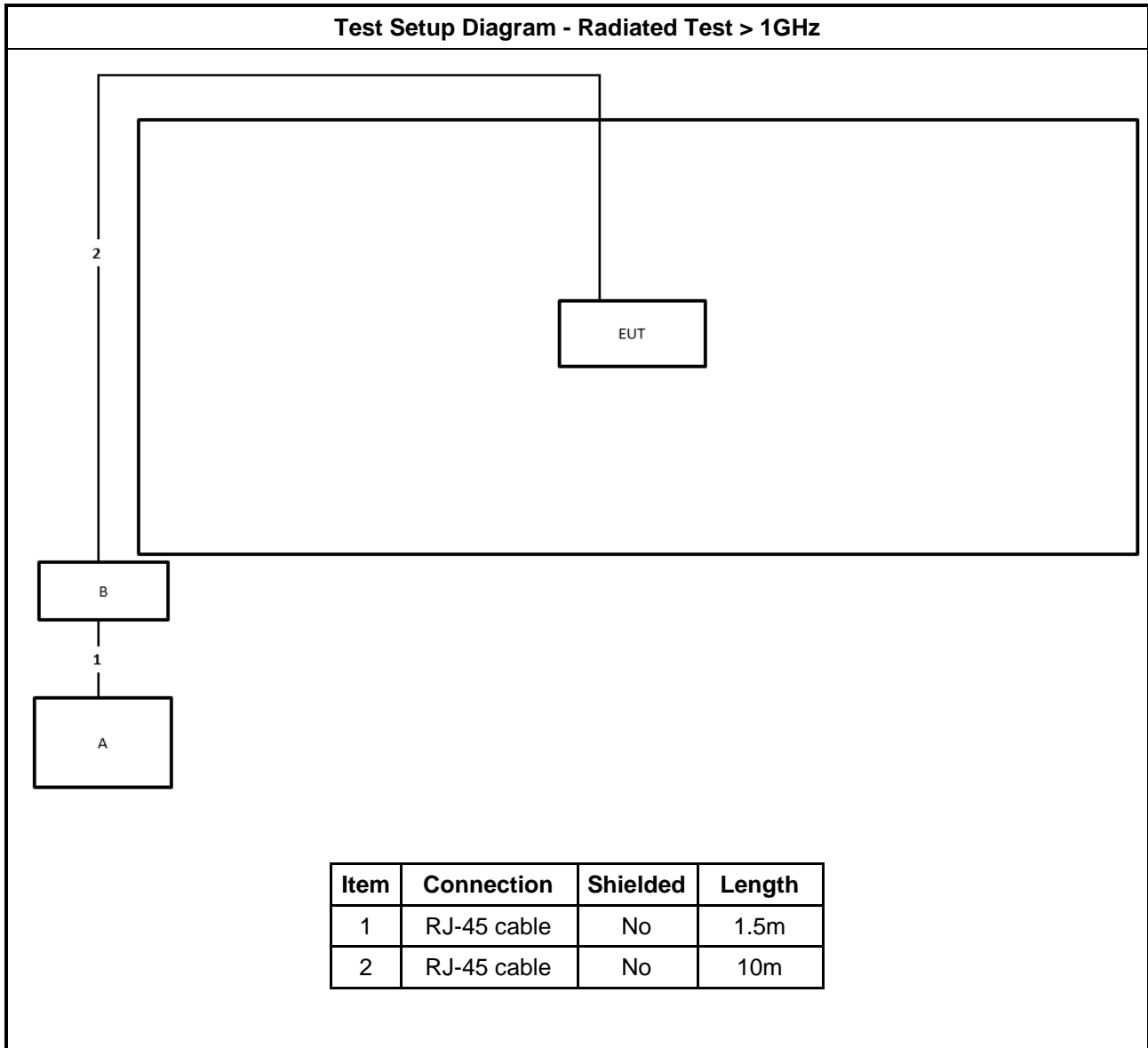
### **2.4 Accessories**

<b>Accessories</b>
Mounting Bracket*1
SMA Connector*2 (Used for Patch Ant.)

### **2.5 Support Equipment**

<b>Support Equipment</b>				
<b>No.</b>	<b>Equipment</b>	<b>Brand Name</b>	<b>Model Name</b>	<b>FCC ID</b>
A	Notebook	DELL	E4300	N/A
B	PoE	DELTA	ADP-60HR B	N/A

## 2.6 Test Setup Diagram





### 3 Transmitter Test Result

#### 3.1 Emission Bandwidth

##### 3.1.1 Emission Bandwidth Limit

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

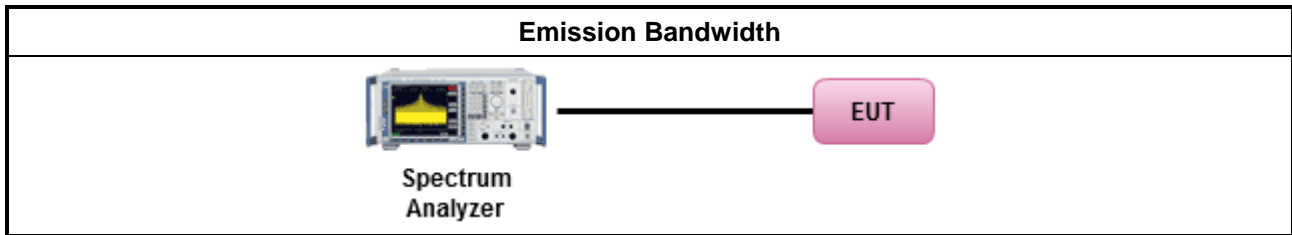
##### 3.1.2 Measuring Instruments

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

##### 3.1.3 Test Procedures

Test Method	
▪ For the emission bandwidth shall be measured using one of the options below:	
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033 D02, clause C for EBW and clause D for OBW measurement.
<input type="checkbox"/>	Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.
<input type="checkbox"/>	Refer as IC RSS-Gen, clause 4.6 for bandwidth testing.

### 3.1.4 Test Setup



### 3.1.5 Test Result of Emission Bandwidth

Refer as Appendix A



### 3.2 Maximum Output Power

#### 3.2.1 Limit

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



3.2.2 Measuring Instruments

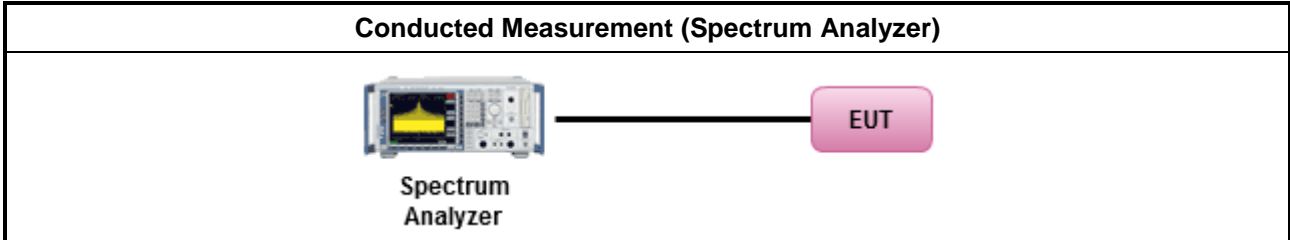
Refer a test equipment and calibration data table in this test report.

3.2.3 Test Procedures

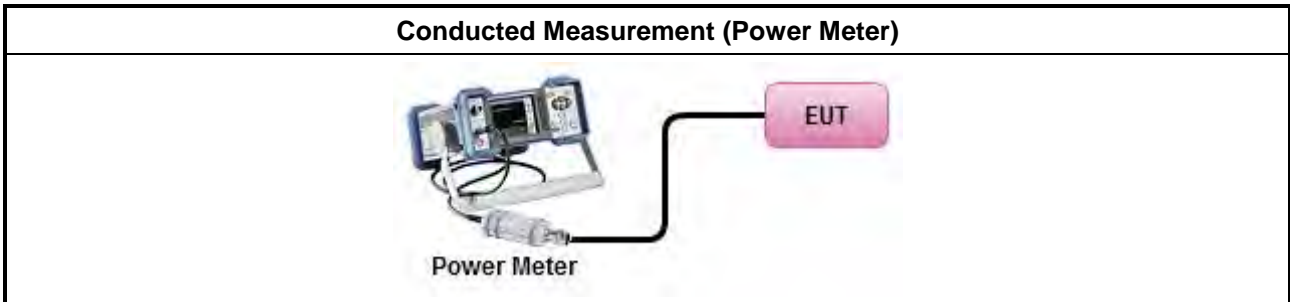
Test Method	
	Average over on/off periods with duty factor
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033 D02, clause E Method SA-2 (spectral trace averaging).
<input type="checkbox"/>	Refer as FCC KDB 789033 D02, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
	Wideband RF power meter and average over on/off periods with duty factor
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033 D02, clause E Method PM-G (using an RF average power meter).
<input checked="" type="checkbox"/>	For conducted measurement.
	<ul style="list-style-type: none"> <li>If the EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.</li> </ul>
	<ul style="list-style-type: none"> <li>If multiple transmit chains, EIRP calculation could be following as methods:  <math>P_{total} = P_1 + P_2 + \dots + P_n</math>  (calculated in linear unit [mW] and transfer to log unit [dBm])  <math>EIRP_{total} = P_{total} + DG</math> </li> </ul>
<input type="checkbox"/>	For radiated measurement.
	<ul style="list-style-type: none"> <li>Refer as FCC KDB 789033 D02 clause II A.1.F "Antenna-port Conducted versus Radiated Testing"</li> <li>Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.</li> <li>Refer as FCC KDB 412172 D01 clause 2.2 for EIRP calculation.</li> </ul>

### 3.2.4 Test Setup

For Straddle channel



For others channel



### 3.2.5 Test Result of Maximum Output Power

Refer as Appendix B





### 3.3 Power Spectral Density

#### 3.3.1 Limit

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

#### 3.3.2 Measuring Instruments

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

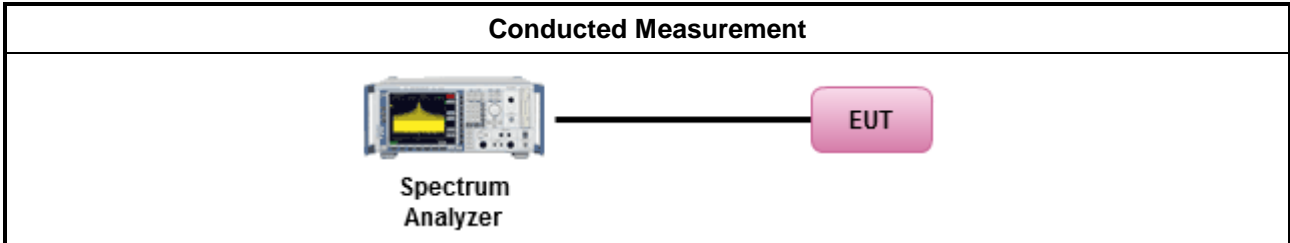


**3.3.3 Test Procedures**

Test Method	
<ul style="list-style-type: none"> <li>▪ Peak power spectral density procedures that the same method as used to determine the conducted output power shall be used to determine the peak power spectral density and use the peak search function on the spectrum analyzer to find the peak of the spectrum. For the peak power spectral density shall be measured using below options:</li> </ul>	
<input type="checkbox"/>	Refer as FCC KDB 789033 D02, F5) power spectral density can be measured using resolution bandwidths < 1 MHz provided that the results are integrated over 1 MHz bandwidth
[duty cycle ≥ 98% or external video / power trigger]	
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033 D02, clause E Method SA-1 (spectral trace averaging).
<input type="checkbox"/>	Refer as FCC KDB 789033 D02, clause E Method SA-1 Alt. (RMS detection with slow sweep speed)
duty cycle < 98% and average over on/off periods with duty factor	
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033 D02, clause E Method SA-2 (spectral trace averaging).
<input type="checkbox"/>	Refer as FCC KDB 789033 D02, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
<input checked="" type="checkbox"/> For conducted measurement.	
<ul style="list-style-type: none"> <li>▪ If the EUT supports multiple transmit chains using options given below:</li> </ul>	
<input checked="" type="checkbox"/>	Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.
<input type="checkbox"/>	Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,
<input type="checkbox"/>	Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.
<ul style="list-style-type: none"> <li>▪ If multiple transmit chains, EIRP PPSD calculation could be following as methods:  <math>PPSD_{total} = PPSD_1 + PPSD_2 + \dots + PPSD_n</math>                      (calculated in linear unit [mW] and transfer to log unit [dBm])  <math>EIRP_{total} = PPSD_{total} + DG</math> </li> </ul>	
<input type="checkbox"/> For radiated measurement.	
<ul style="list-style-type: none"> <li>▪ Refer as FCC KDB 789033 D02 clause II A.1.F "Antenna-port Conducted versus Radiated Testing"</li> <li>▪ Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.</li> </ul>	

Test Method	
	Refer as FCC KDB 412172 D01 clause 2.2 for EIRP calculation.

### 3.3.4 Test Setup



### 3.3.5 Test Result of Power Spectral Density

Refer as Appendix C



### 3.4 Unwanted Emissions

#### 3.4.1 Transmitter Unwanted Emissions Limit

Unwanted emissions below 1 GHz and restricted band emissions above 1GHz limit			
Frequency Range (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m)	Measure Distance (m)
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300
0.490~1.705	24000/F(kHz)	33.8 - 23	30
1.705~30.0	30	29	30
30~88	100	40	3
88~216	150	43.5	3
216~960	200	46	3
Above 960	500	54	3

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

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

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

Un-restricted band emissions above 1GHz Limit	
Operating Band	Limit
<input type="checkbox"/> 5.15 - 5.25 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m @3m]
<input checked="" type="checkbox"/> 5.25 - 5.35 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m @3m]
<input checked="" type="checkbox"/> 5.47 - 5.725 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m @3m]
<input checked="" type="checkbox"/> 5.725 - 5.85 GHz	all emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

Note 1: Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of



linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

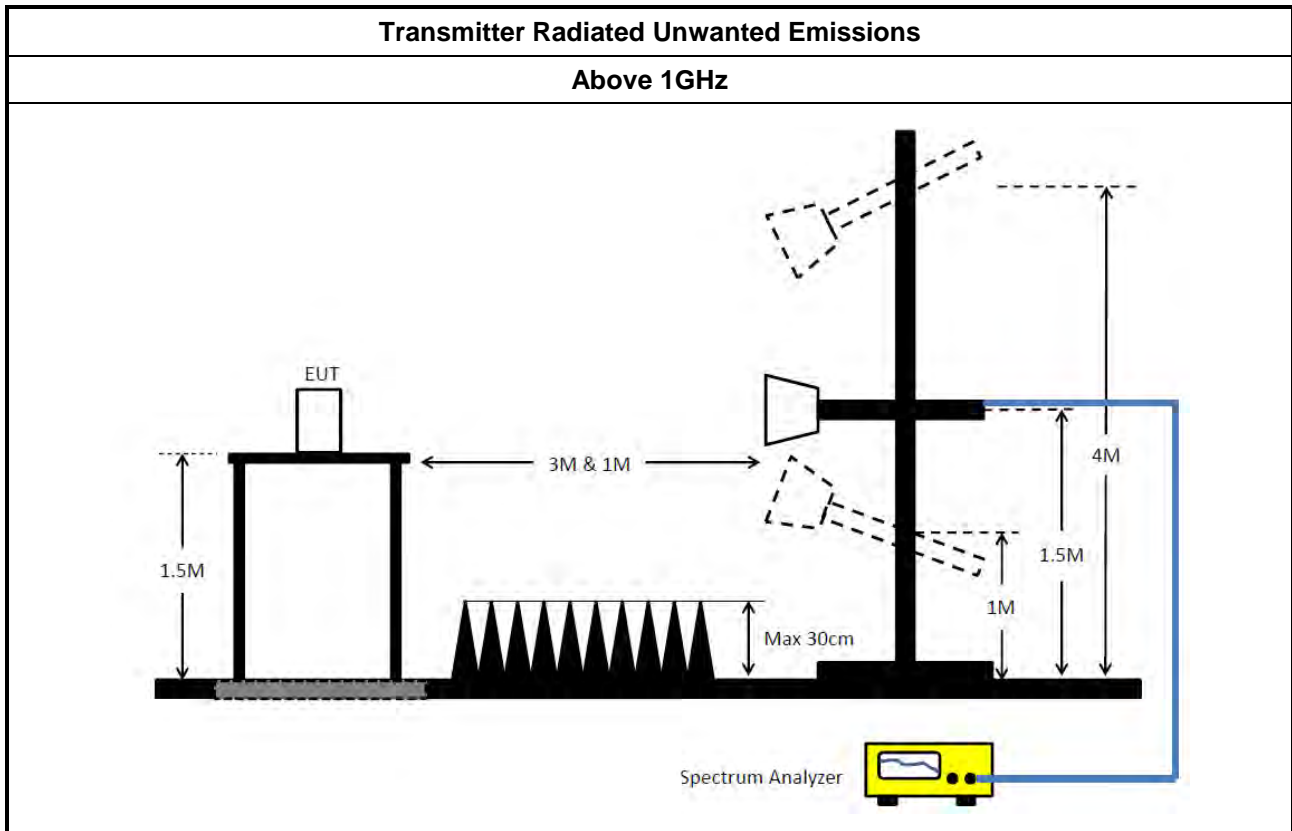
**3.4.2 Measuring Instruments**

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

**3.4.3 Test Procedures**

Test Method	
	<ul style="list-style-type: none"> <li>▪ Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).</li> </ul>
	<ul style="list-style-type: none"> <li>▪ The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].</li> </ul>
	<ul style="list-style-type: none"> <li>▪ For the transmitter unwanted emissions shall be measured using following options below:               <ul style="list-style-type: none"> <li>▪ Refer as FCC KDB 789033 D02, clause G)2) for unwanted emissions into non-restricted bands.</li> <li>▪ Refer as FCC KDB 789033 D02, clause G)1) for unwanted emissions into restricted bands.                   <ul style="list-style-type: none"> <li><input type="checkbox"/> Refer as FCC KDB 789033 D02, G)6) Method AD (Trace Averaging).</li> <li><input checked="" type="checkbox"/> Refer as FCC KDB 789033 D02, G)6) Method VB (Reduced VBW).</li> <li><input type="checkbox"/> Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time.</li> <li><input type="checkbox"/> Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.</li> <li><input checked="" type="checkbox"/> Refer as FCC KDB 789033 D02, clause G)5) measurement procedure peak limit.</li> <li><input type="checkbox"/> Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit.</li> </ul> </li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>▪ For radiated measurement.               <ul style="list-style-type: none"> <li>▪ Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.</li> <li>▪ Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.</li> <li>▪ Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.</li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>▪ The any unwanted emissions level shall not exceed the fundamental emission level.</li> </ul>
	<ul style="list-style-type: none"> <li>▪ All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.</li> </ul>

### 3.4.4 Test Setup



### 3.4.5 Measurement Results Calculation

The measured Level is calculated using:

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

### 3.4.6 Transmitter Unwanted Emissions (Below 30MHz)

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

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

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

### 3.4.7 Test Result of Transmitter Unwanted Emissions

Refer as Appendix D



## 4 Test Equipment and Calibration Data

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
3m Semi Anechoic Chamber VSWR	RIKEN	SAC-3M	03CH02-CB	1GHz ~18GHz	Mar. 25, 2023	Mar. 24, 2024	Radiation (03CH02-CB)
Horn Antenna	EMCO	3115	9610-4976	1GHz ~ 18GHz	Apr. 18, 2023	Apr. 17, 2024	Radiation (03CH02-CB)
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170507	15GHz ~ 40GHz	Jun. 28, 2023	Jun. 27, 2024	Radiation (03CH02-CB)
Pre-Amplifier	Agilent	83017A	MY39501305	1GHz ~ 26.5GHz	Jun. 30, 2023	Jun. 29, 2024	Radiation (03CH02-CB)
Pre-Amplifier	SGH	SGH184	20221107-3	18GHz ~ 40GHz	Nov. 16, 2022	Nov. 15, 2023	Radiation (03CH02-CB)
Spectrum analyzer	R&S	FSU	100015	9kHz~26GHz	Dec. 05, 2022	Dec. 04, 2023	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-18	1GHz ~ 18GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH02-CB)
RF Cable-high	Woken	RG402	High Cable-18+19	1GHz ~ 18GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH02-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH02-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH02-CB)
High Cable	Woken	WCA0929M	40G#6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH02-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH02-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	May 29, 2023	May 28, 2024	Conducted (TH01-CB)
Switch	SPTCB	SP-SWI	SWI-01	1 GHz~26.5 GHz	Oct. 04, 2022	Oct. 03, 2023	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-06	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-07	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-08	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-09	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-30	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH01-CB)
Power Sensor	Agilent	E9327A	US40442088	50MHz~18GHz	Feb. 22, 2023	Feb. 21, 2024	Conducted (TH01-CB)
Power Meter	Agilent	E4416A	GB41291199	50MHz~18GHz	Feb. 22, 2023	Feb. 21, 2024	Conducted (TH01-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH01-CB)

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

N.C.R. means Non-Calibration required.





**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	22.825M	16.514M	16M5D1D	19.25M	16.404M
802.11ax HEW20_Nss1,(MCS0)_2TX	30.25M	19.19M	19M2D1D	20.735M	18.891M
802.11ax HEW40_Nss1,(MCS0)_2TX	39.82M	37.681M	37M7D1D	39.49M	37.531M
802.11ax HEW80_Nss1,(MCS0)_2TX	79.86M	77.361M	77M4D1D	79.86M	76.962M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	19.965M	16.426M	16M4D1D	15.705M	13.193M
802.11ax HEW20_Nss1,(MCS0)_2TX	20.845M	18.941M	18M9D1D	16.035M	14.423M
802.11ax HEW40_Nss1,(MCS0)_2TX	47.88M	37.781M	37M8D1D	37.275M	33.793M
802.11ax HEW80_Nss1,(MCS0)_2TX	79.86M	77.361M	77M4D1D	74.925M	72.564M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	3.24M	4.858M	4M86D1D	3.16M	4.838M
802.11ax HEW20_Nss1,(MCS0)_2TX	4.58M	6.577M	6M58D1D	4.44M	6.477M
802.11ax HEW40_Nss1,(MCS0)_2TX	4.14M	22.849M	22M8D1D	4.06M	17.031M
802.11ax HEW80_Nss1,(MCS0)_2TX	77.66M	76.962M	77M0D1D	2.62M	11.194M

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

**Result**

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5260MHz	Pass	Inf	20.405M	16.514M	22.825M	16.47M
5300MHz	Pass	Inf	21.56M	16.448M	22.715M	16.448M
5320MHz	Pass	Inf	19.25M	16.404M	20.46M	16.404M
5500MHz	Pass	Inf	19.8M	16.426M	19.305M	16.382M
5580MHz	Pass	Inf	19.965M	16.426M	19.58M	16.426M
5700MHz	Pass	Inf	19.415M	16.426M	18.92M	16.382M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.705M	13.193M	16.38M	13.223M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.24M	4.838M	3.16M	4.858M
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5260MHz	Pass	Inf	24.805M	19.065M	30.25M	19.19M
5300MHz	Pass	Inf	22.55M	18.941M	25.795M	19.015M
5320MHz	Pass	Inf	20.735M	18.916M	20.9M	18.891M
5500MHz	Pass	Inf	20.845M	18.891M	20.57M	18.916M
5580MHz	Pass	Inf	20.68M	18.916M	20.295M	18.841M
5700MHz	Pass	Inf	20.46M	18.891M	20.515M	18.941M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	16.035M	14.423M	17.25M	14.513M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.44M	6.477M	4.58M	6.577M
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5270MHz	Pass	Inf	39.71M	37.681M	39.6M	37.531M
5310MHz	Pass	Inf	39.82M	37.631M	39.49M	37.531M
5510MHz	Pass	Inf	39.16M	37.731M	39.82M	37.531M
5550MHz	Pass	Inf	39.05M	37.781M	40.59M	37.531M
5670MHz	Pass	Inf	39.71M	37.731M	39.49M	37.731M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	47.88M	33.863M	37.275M	33.793M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	4.06M	22.849M	4.14M	17.031M
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5290MHz	Pass	Inf	79.86M	76.962M	79.86M	77.361M
5530MHz	Pass	Inf	79.42M	77.161M	79.2M	77.061M
5610MHz	Pass	Inf	79.64M	77.061M	79.86M	77.361M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	74.925M	72.864M	75.75M	72.564M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	4.06M	11.194M	2.62M	20.25M
5775MHz	Pass	500k	77.66M	76.962M	73.92M	76.962M

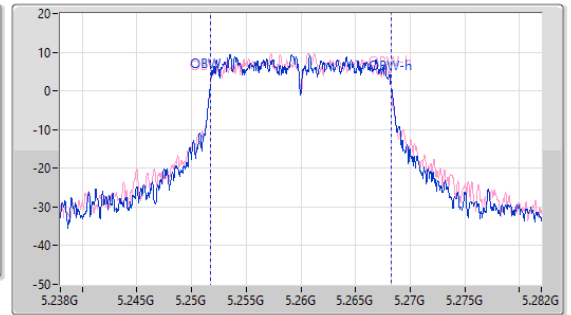
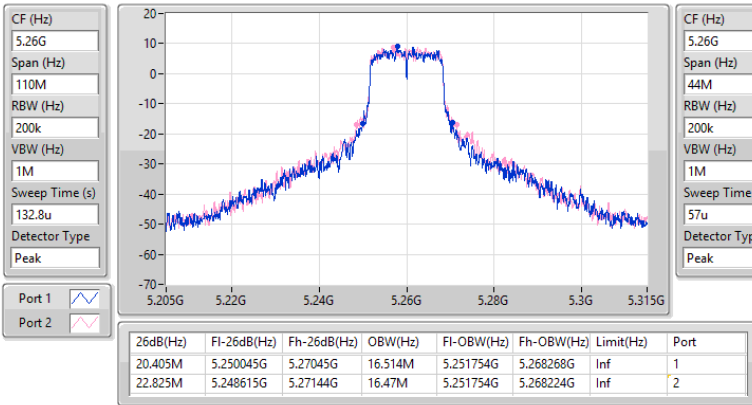
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band  
Port X-OBW = Port X 99% occupied bandwidth

5.25-5.35GHz\_802.11a\_Nss1,(6Mbps)\_2TX

EBW

5260MHz

31/07/2023

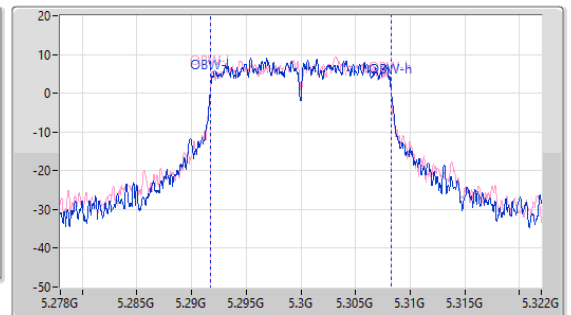
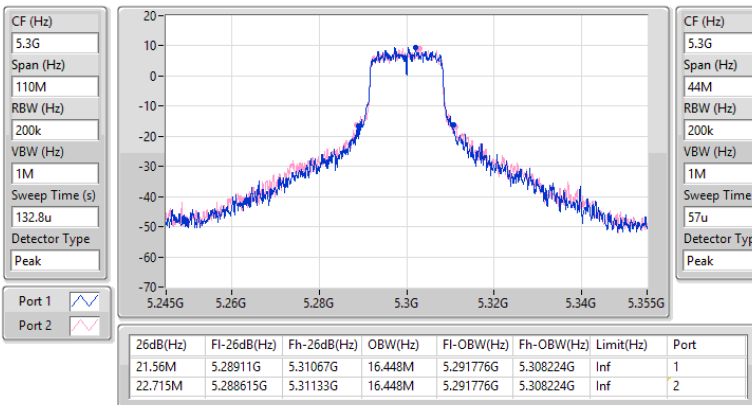


5.25-5.35GHz\_802.11a\_Nss1,(6Mbps)\_2TX

EBW

5300MHz

31/07/2023

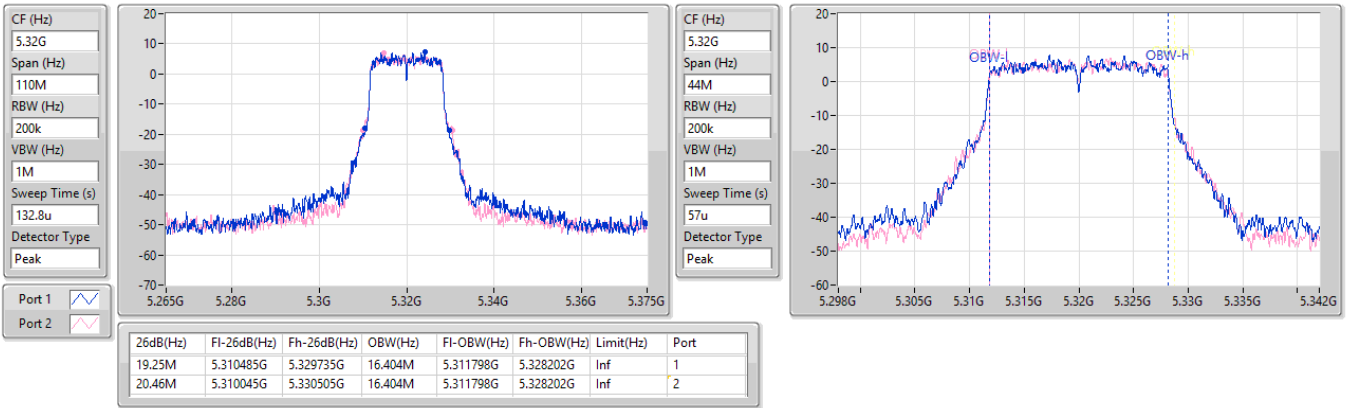


5.25-5.35GHz\_802.11a\_Nss1,(6Mbps)\_2TX

EBW

5320MHz

31/07/2023

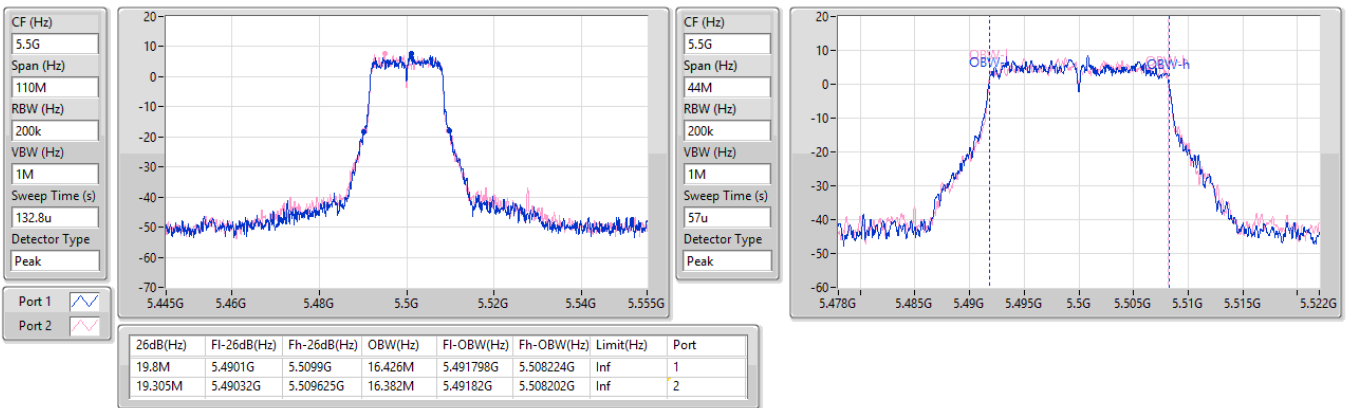


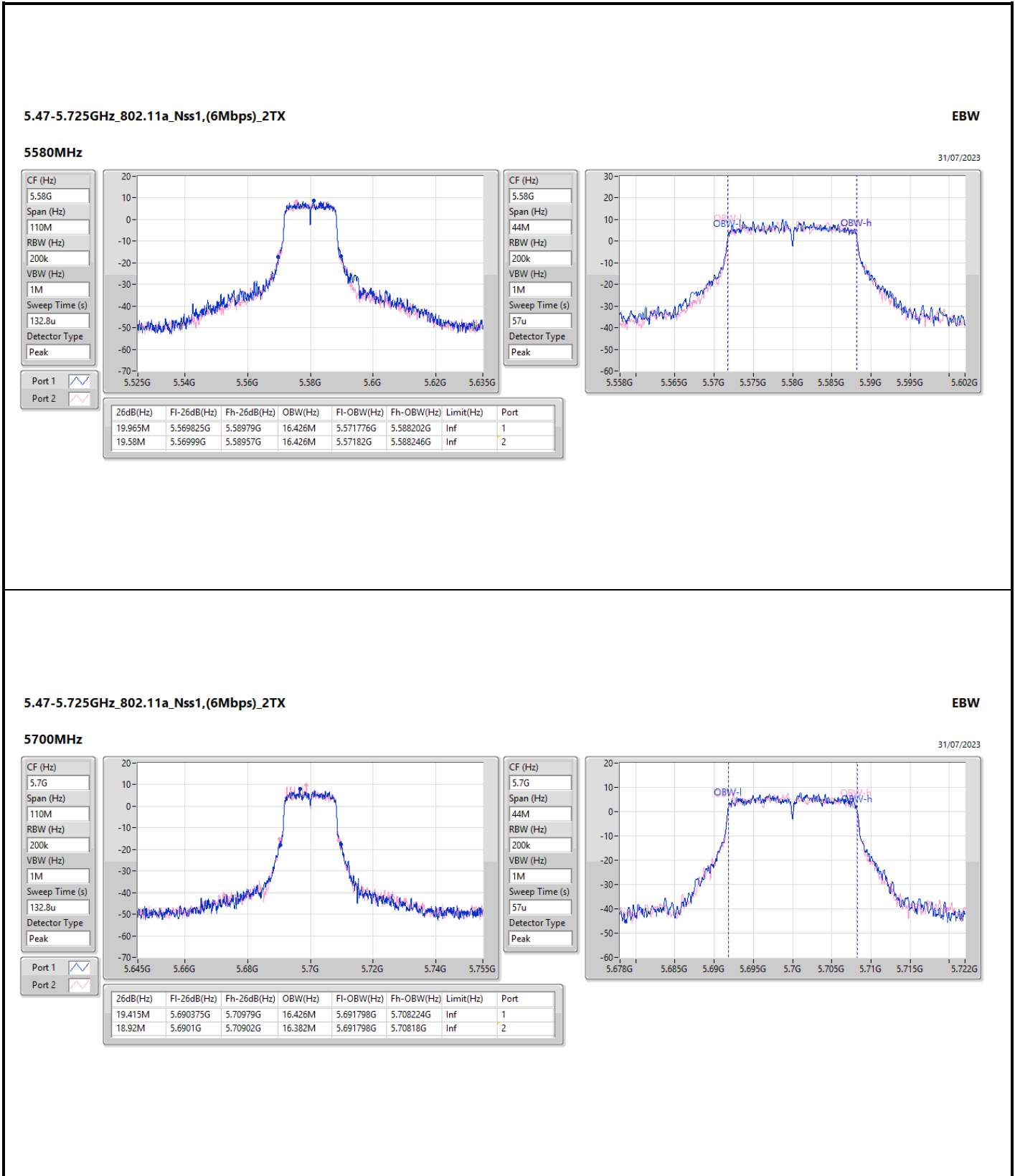
5.47-5.725GHz\_802.11a\_Nss1,(6Mbps)\_2TX

EBW

5500MHz

31/07/2023



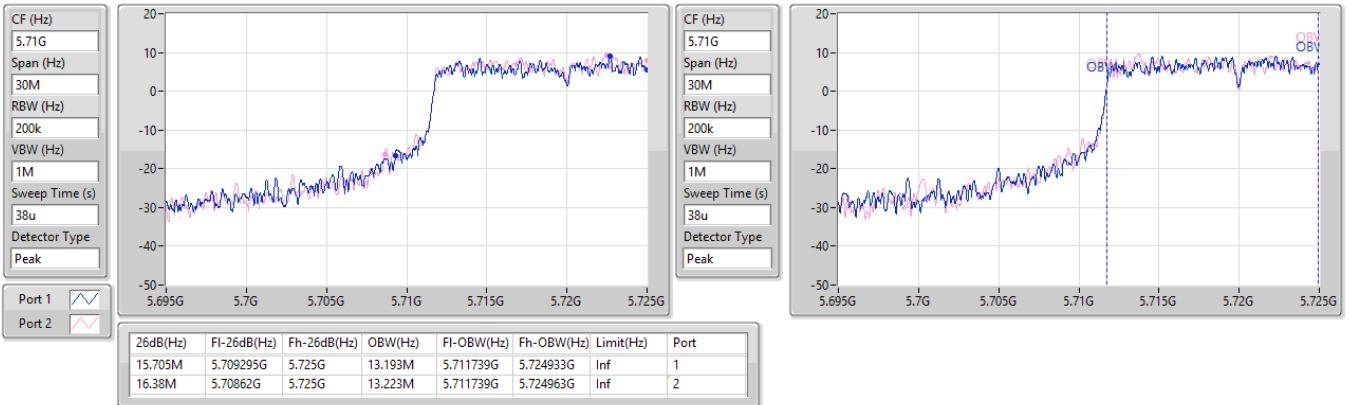


5.47-5.725GHz\_802.11a\_Nss1,(6Mbps)\_2TX

EBW

5720MHz Straddle 5.47-5.725GHz

31/07/2023

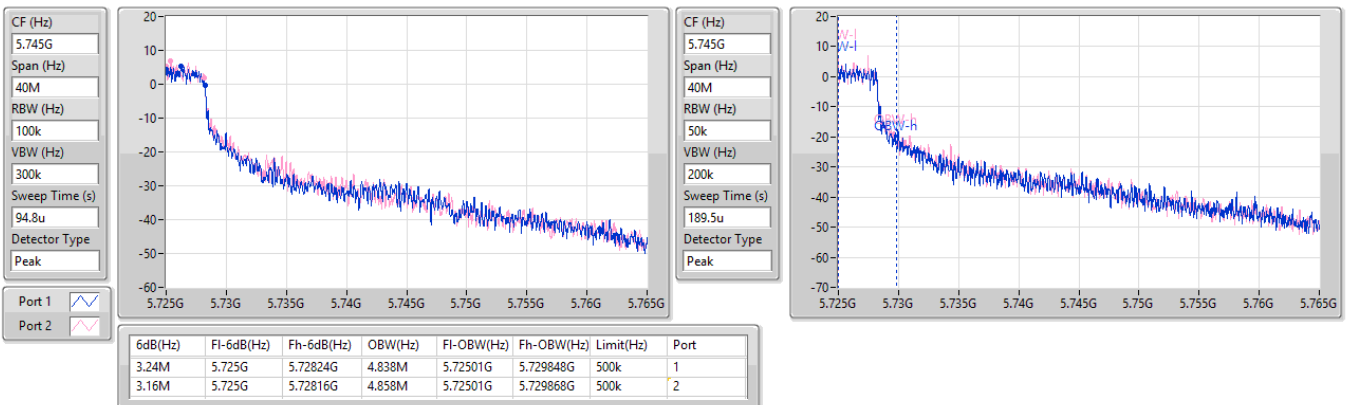


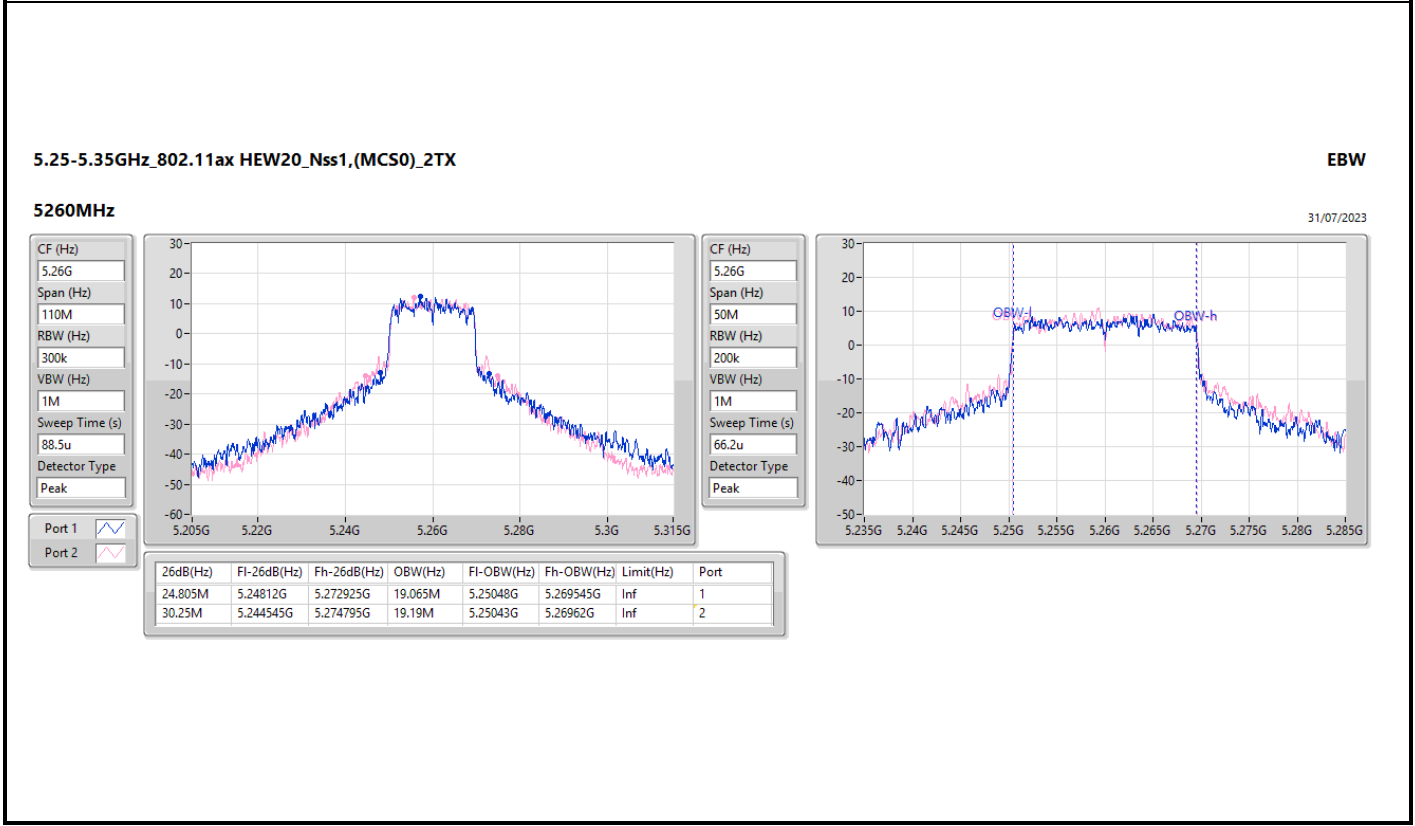
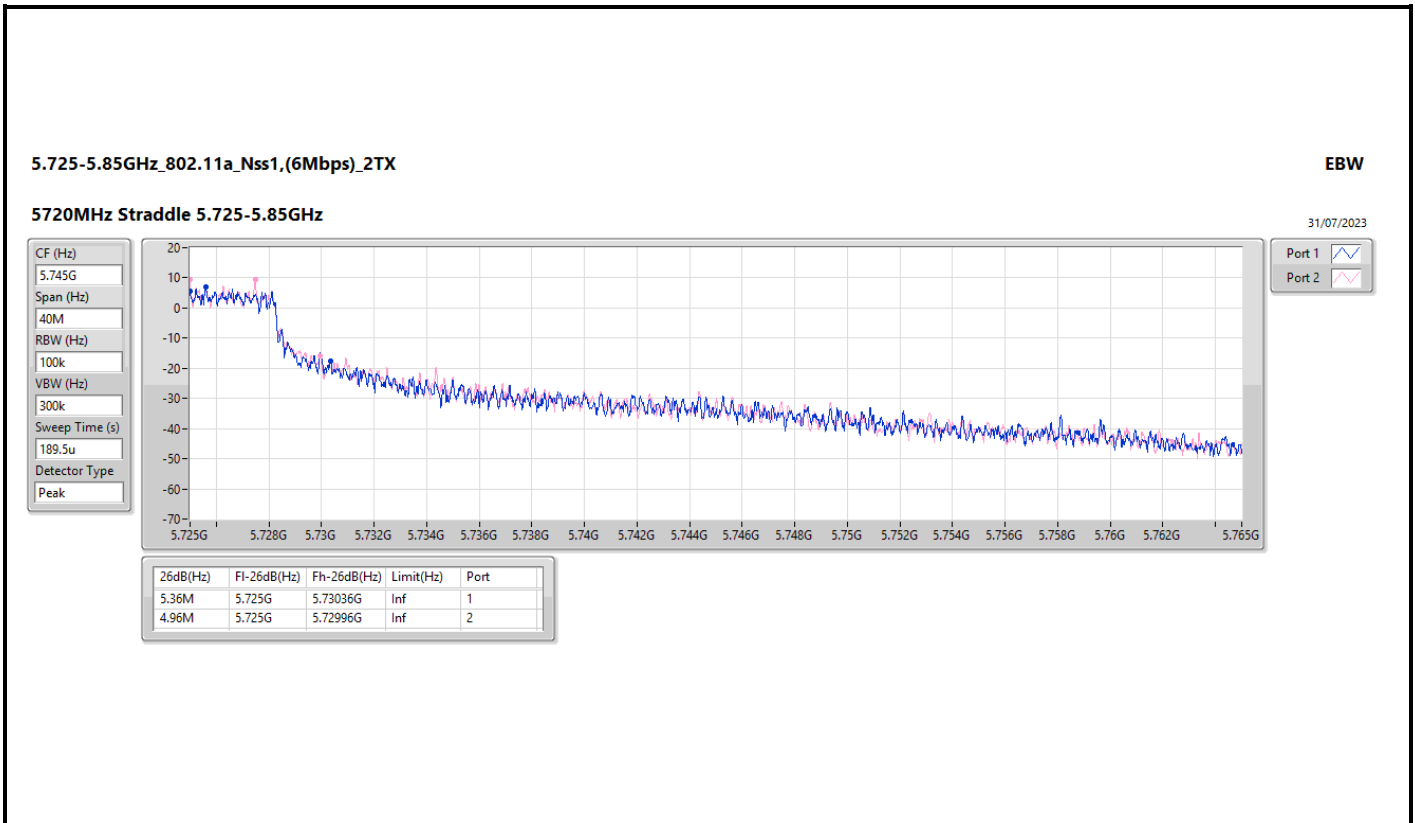
5.725-5.85GHz\_802.11a\_Nss1,(6Mbps)\_2TX

EBW

5720MHz Straddle 5.725-5.85GHz

31/07/2023



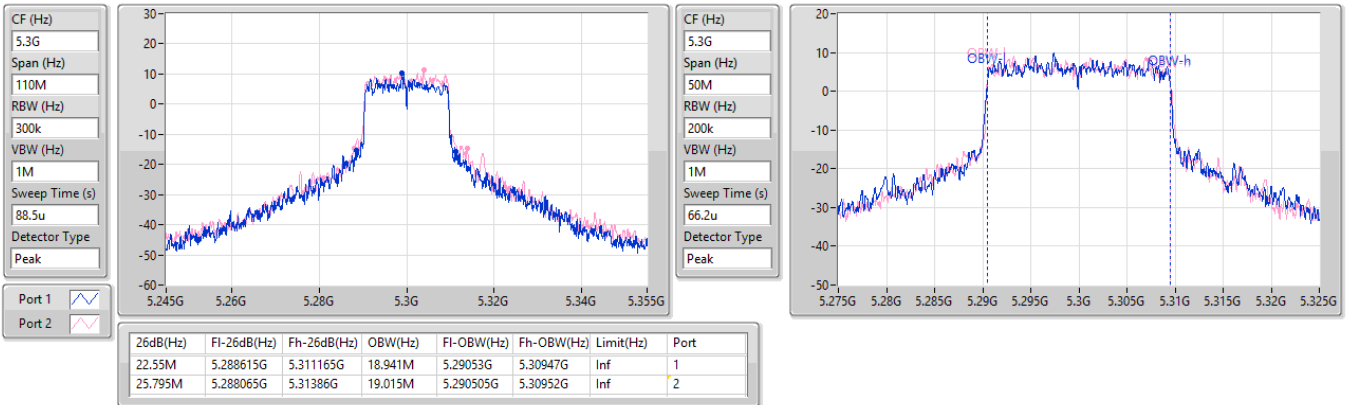


5.25-5.35GHz\_802.11ax\_HEW20\_Nss1,(MCS0)\_2TX

EBW

5300MHz

31/07/2023

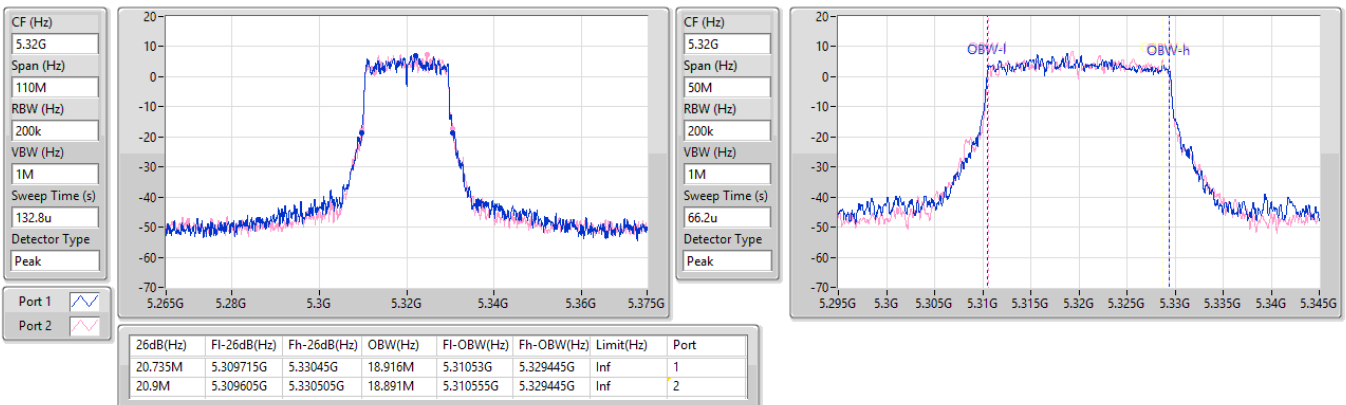


5.25-5.35GHz\_802.11ax\_HEW20\_Nss1,(MCS0)\_2TX

EBW

5320MHz

31/07/2023



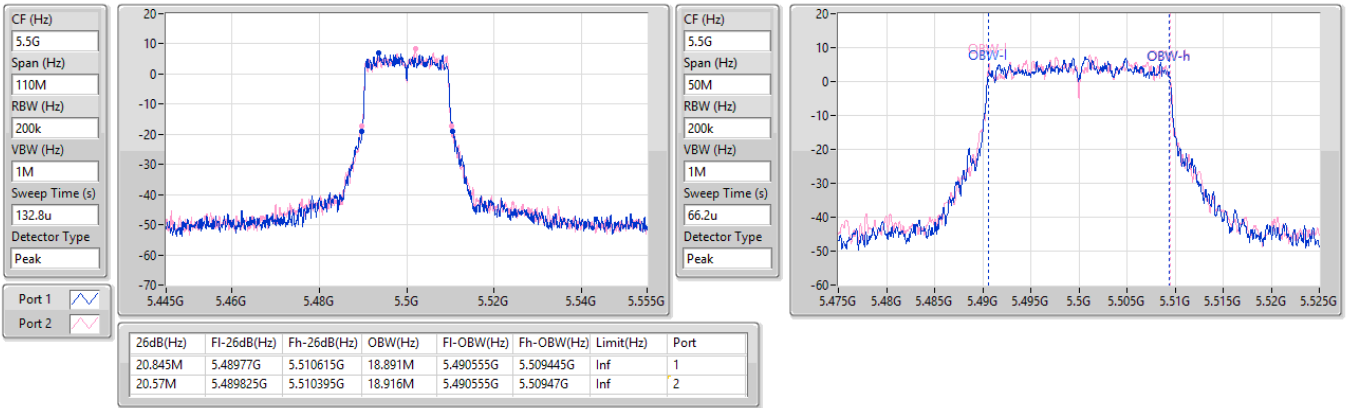


5.47-5.725GHz\_802.11ax HEW20\_Nss1,(MCS0)\_2TX

EBW

5500MHz

31/07/2023

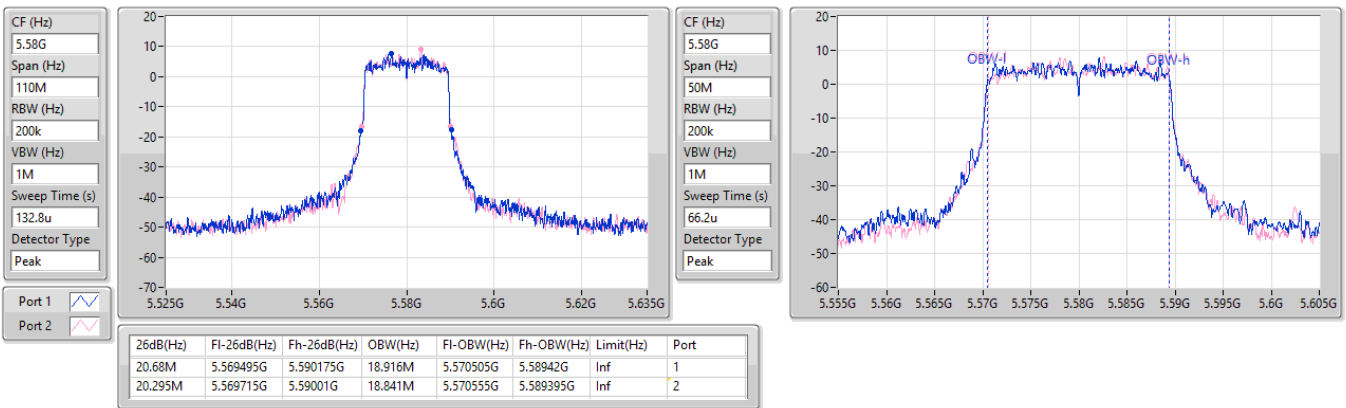


5.47-5.725GHz\_802.11ax HEW20\_Nss1,(MCS0)\_2TX

EBW

5580MHz

31/07/2023

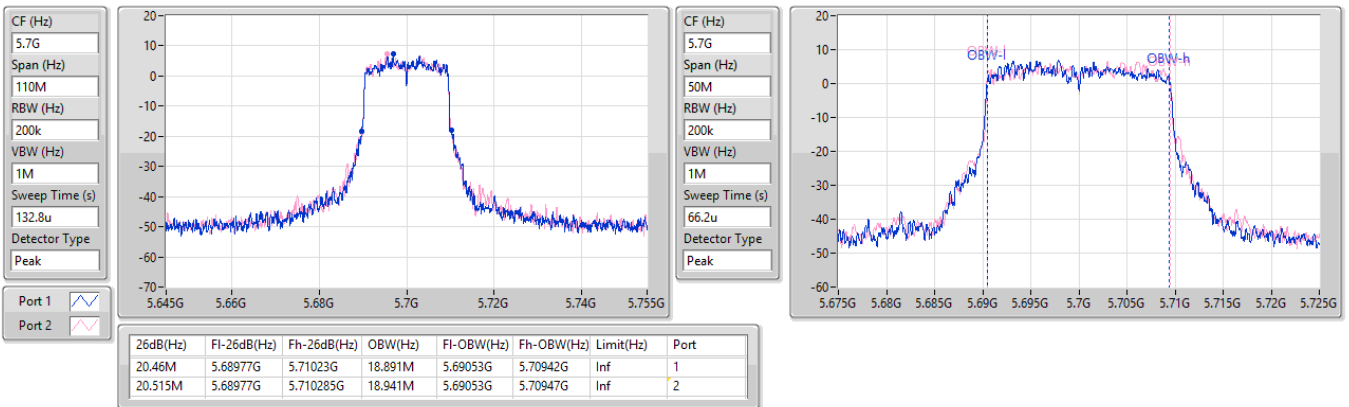


5.47-5.725GHz\_802.11ax HEW20\_Nss1,(MCS0)\_2TX

EBW

5700MHz

31/07/2023

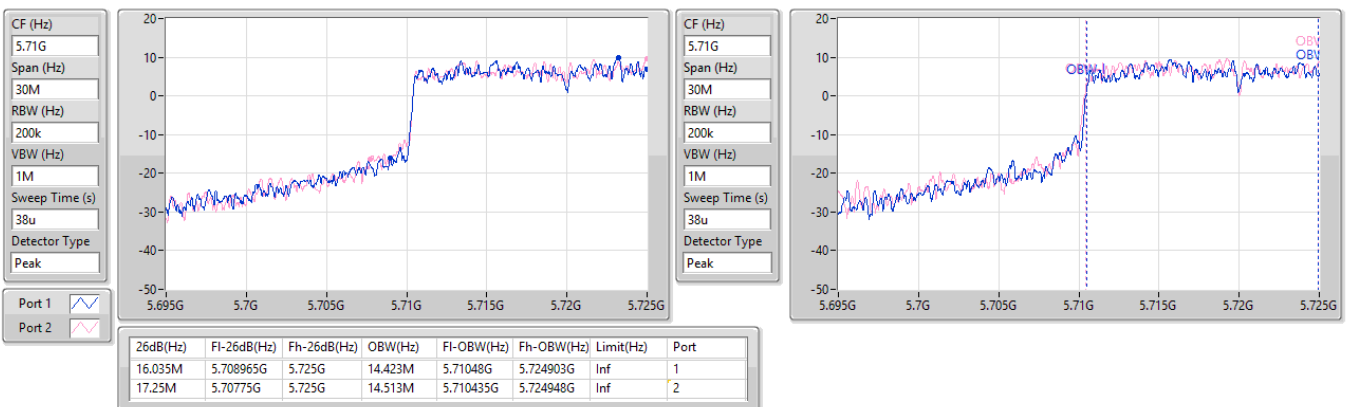


5.47-5.725GHz\_802.11ax HEW20\_Nss1,(MCS0)\_2TX

EBW

5720MHz Straddle 5.47-5.725GHz

31/07/2023

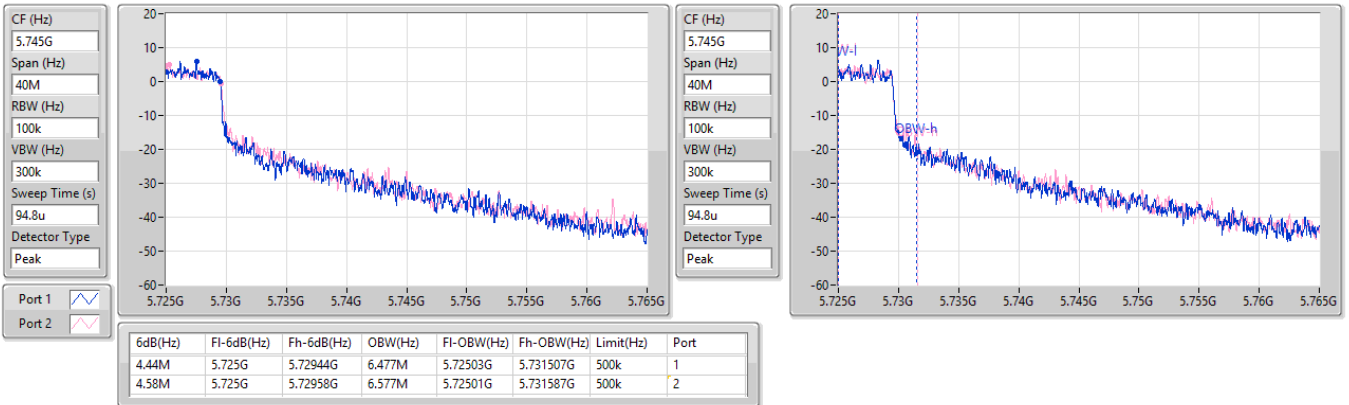


5.725-5.85GHz\_802.11ax HEW20\_Nss1,(MCS0)\_2TX

EBW

5720MHz Straddle 5.725-5.85GHz

31/07/2023

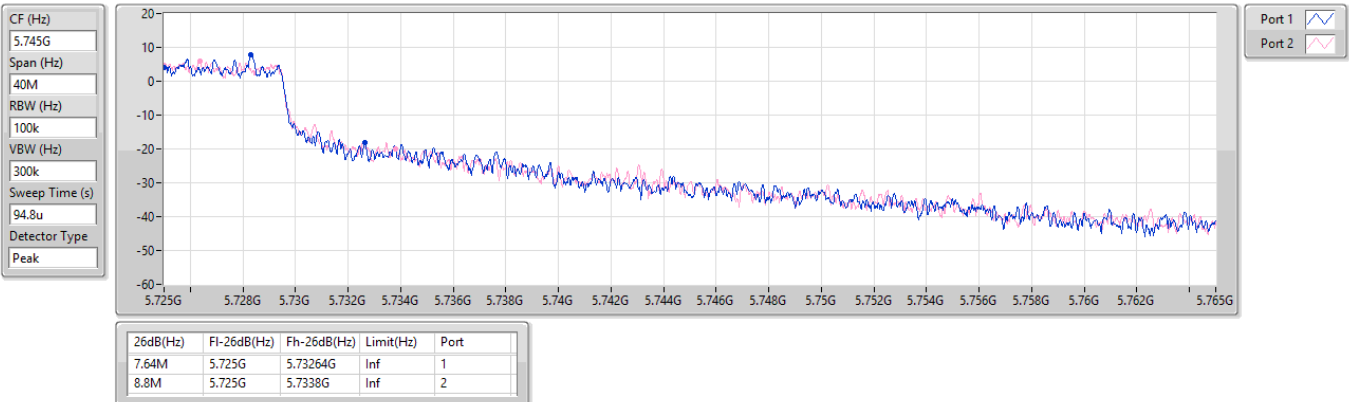


5.725-5.85GHz\_802.11ax HEW20\_Nss1,(MCS0)\_2TX

EBW

5720MHz Straddle 5.725-5.85GHz

31/07/2023

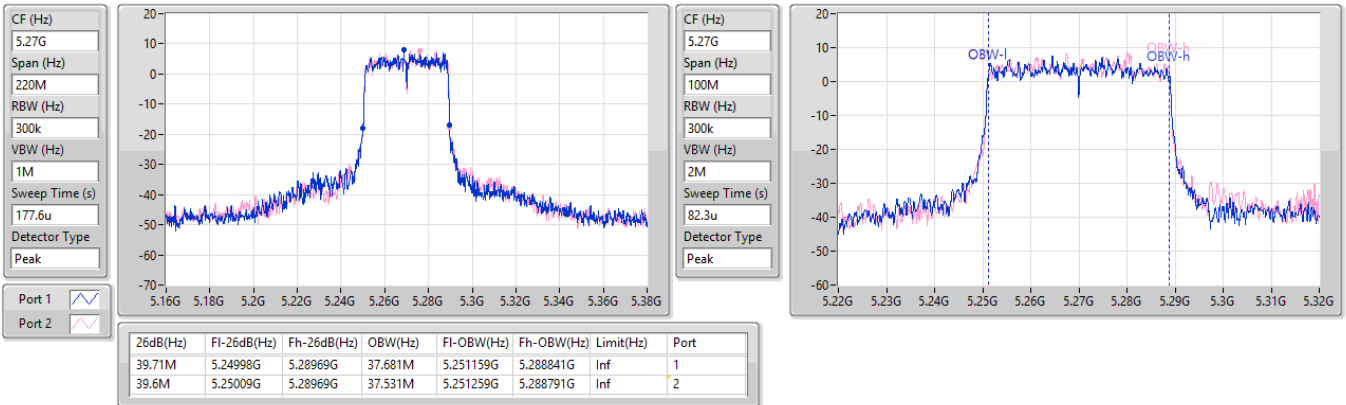


5.25-5.35GHz\_802.11ax\_HEW40\_Nss1,(MCS0)\_2TX

EBW

5270MHz

31/07/2023

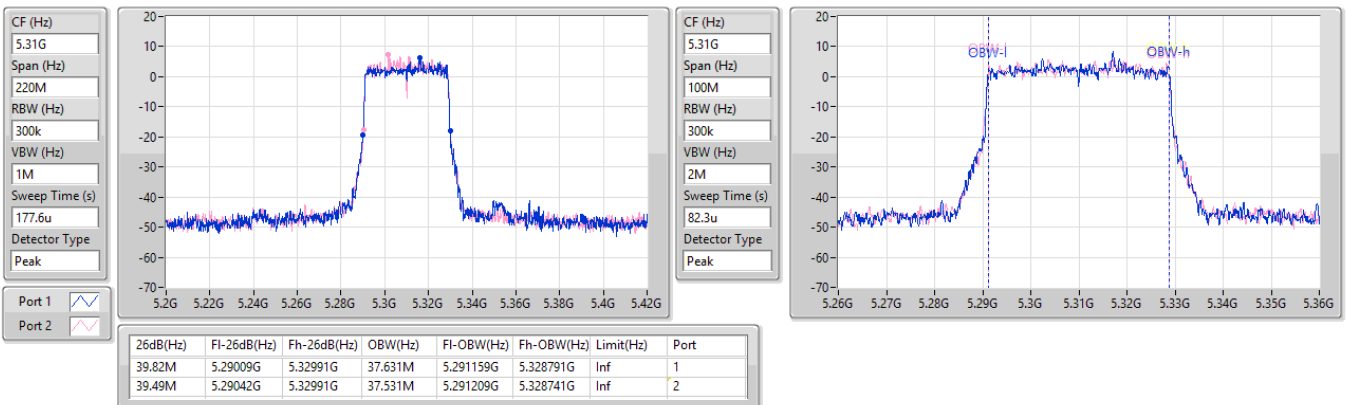


5.25-5.35GHz\_802.11ax\_HEW40\_Nss1,(MCS0)\_2TX

EBW

5310MHz

31/07/2023

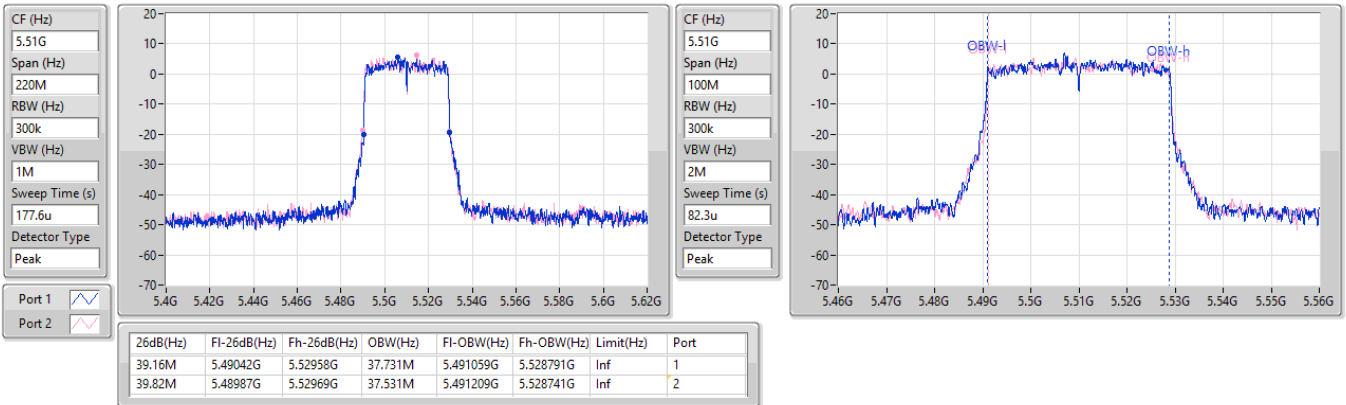


5.47-5.725GHz\_802.11ax HEW40\_Nss1,(MCS0)\_2TX

EBW

5510MHz

31/07/2023

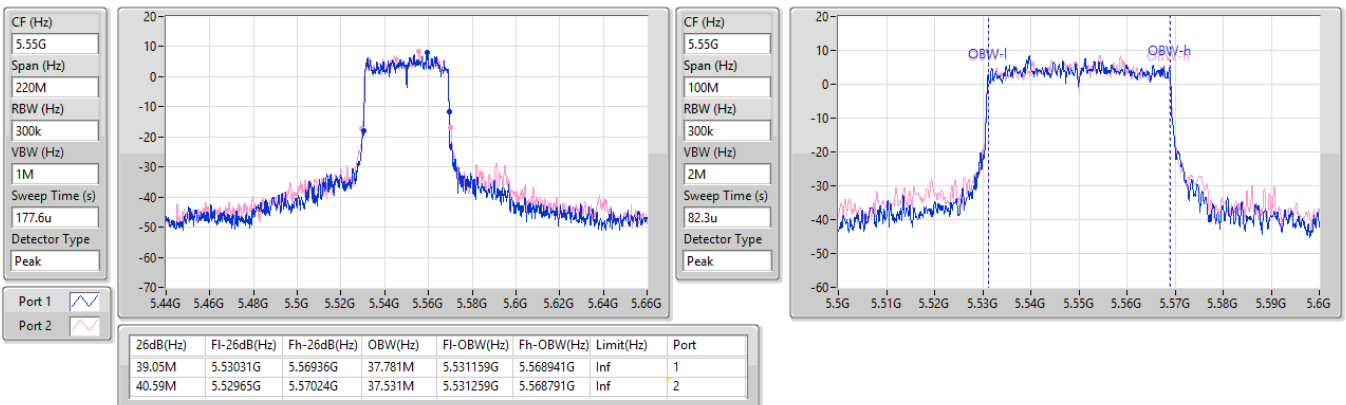


5.47-5.725GHz\_802.11ax HEW40\_Nss1,(MCS0)\_2TX

EBW

5550MHz

31/07/2023

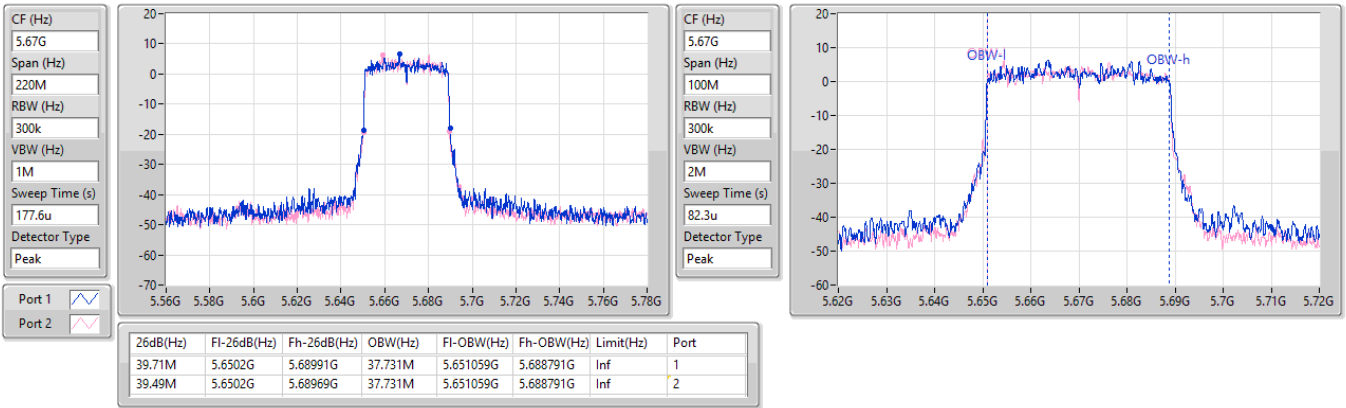


5.47-5.725GHz\_802.11ax HEW40\_Nss1,(MCS0)\_2TX

EBW

5670MHz

31/07/2023

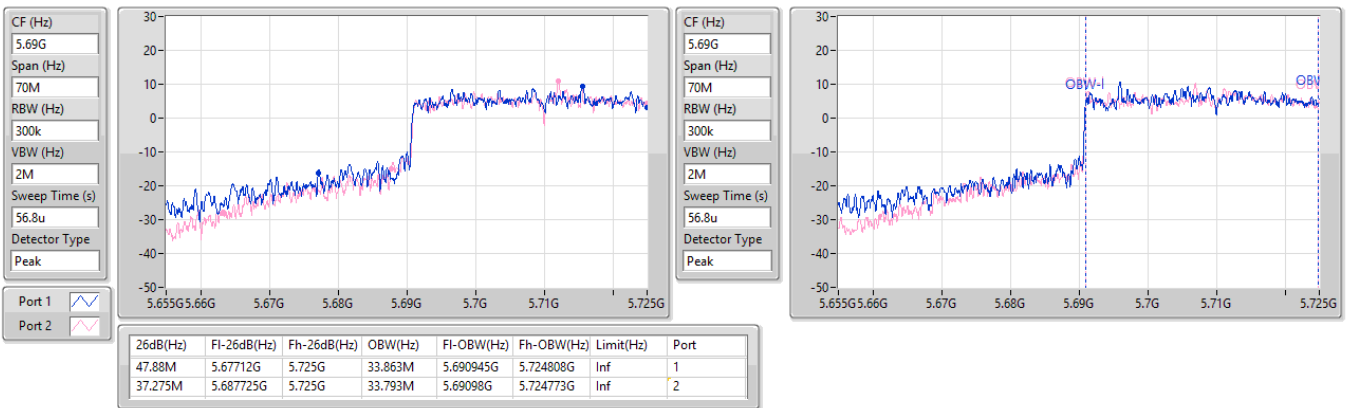


5.47-5.725GHz\_802.11ax HEW40\_Nss1,(MCS0)\_2TX

EBW

5710MHz Straddle 5.47-5.725GHz

31/07/2023

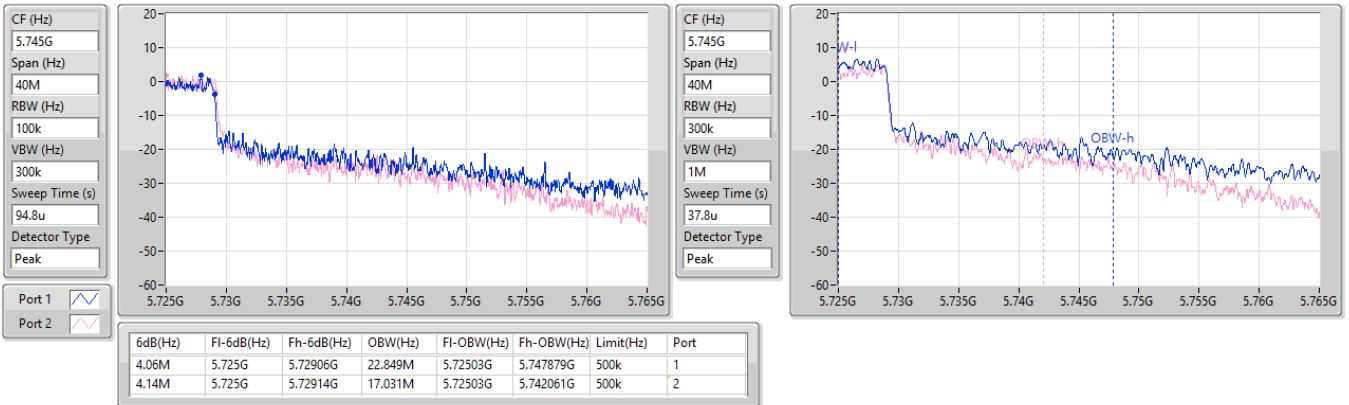


5.725-5.85GHz\_802.11ax HEW40\_Nss1,(MCS0)\_2TX

EBW

5710MHz Straddle 5.725-5.85GHz

31/07/2023

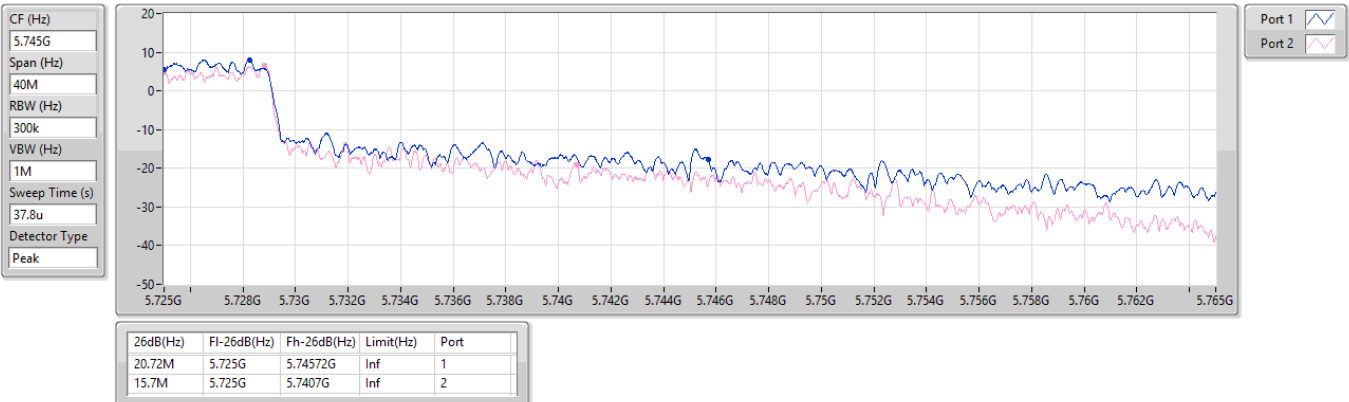


5.725-5.85GHz\_802.11ax HEW40\_Nss1,(MCS0)\_2TX

EBW

5710MHz Straddle 5.725-5.85GHz

31/07/2023

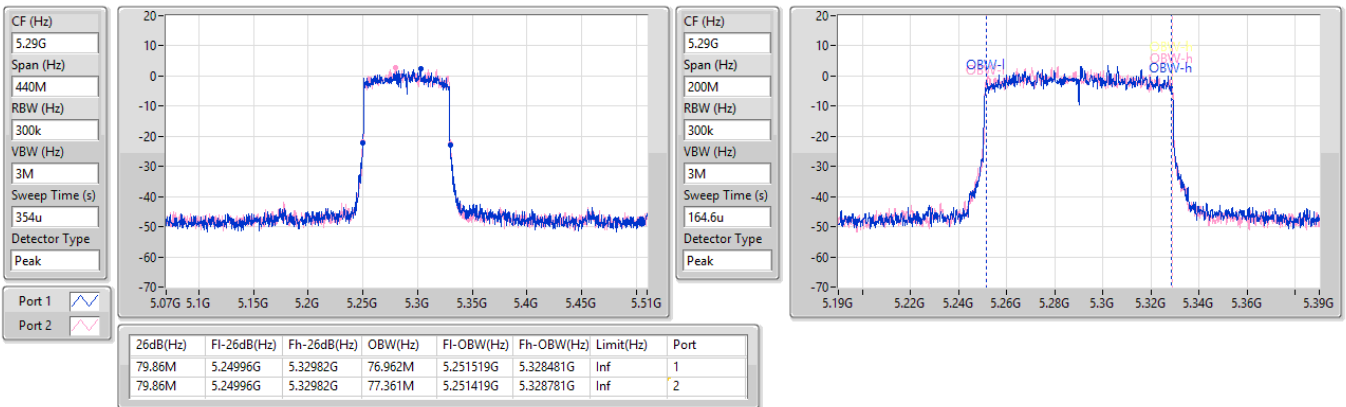


5.25-5.35GHz\_802.11ax\_HEW80\_Nss1,(MCS0)\_2TX

EBW

5290MHz

31/07/2023

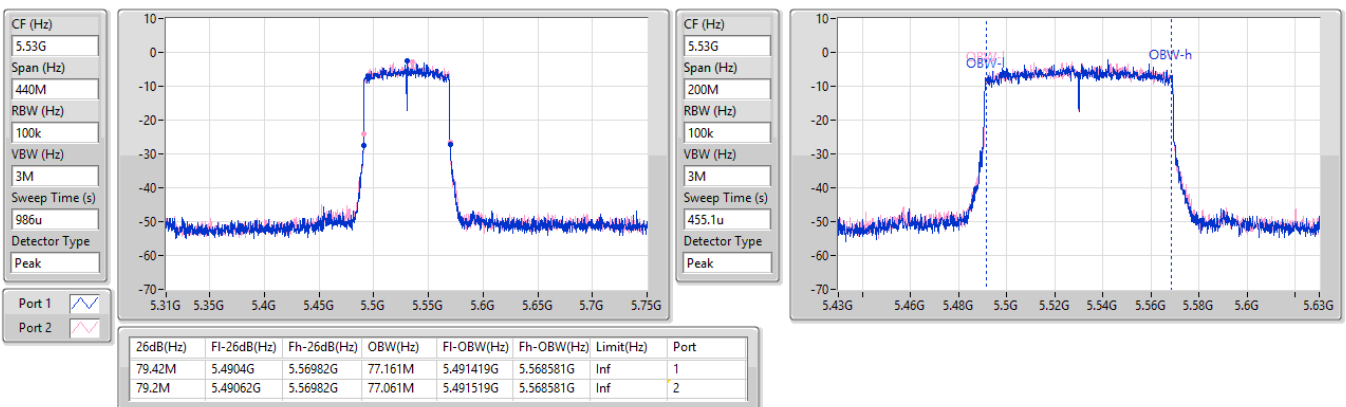


5.47-5.725GHz\_802.11ax\_HEW80\_Nss1,(MCS0)\_2TX

EBW

5530MHz

31/07/2023



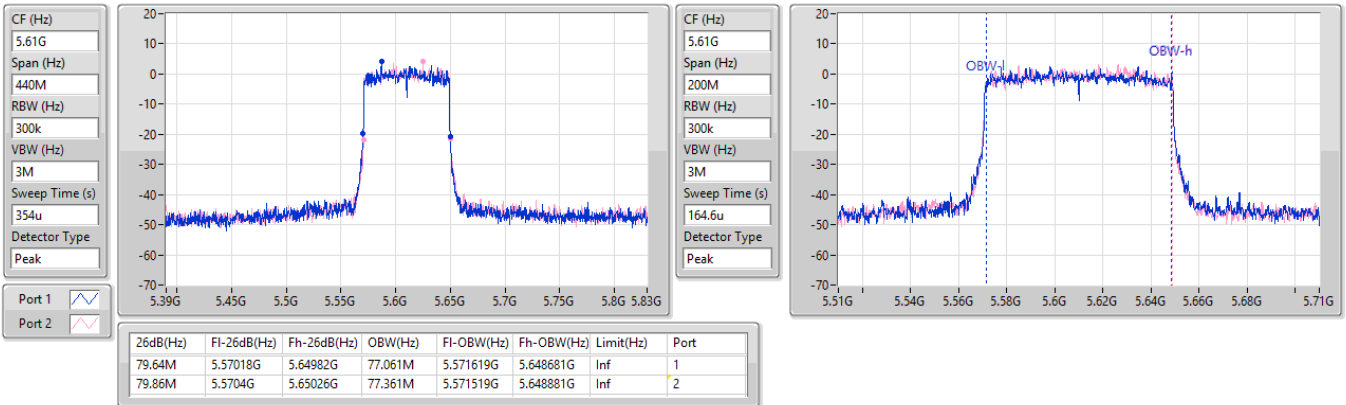


5.47-5.725GHz\_802.11ax HEW80\_Nss1,(MCS0)\_2TX

EBW

5610MHz

31/07/2023

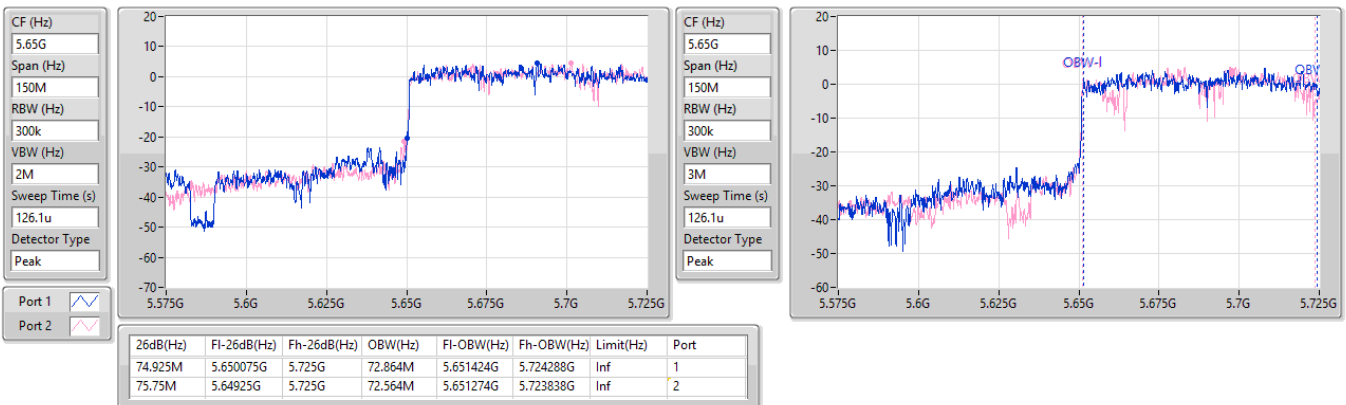


5.47-5.725GHz\_802.11ax HEW80\_Nss1,(MCS0)\_2TX

EBW

5690MHz Straddle 5.47-5.725GHz

31/07/2023

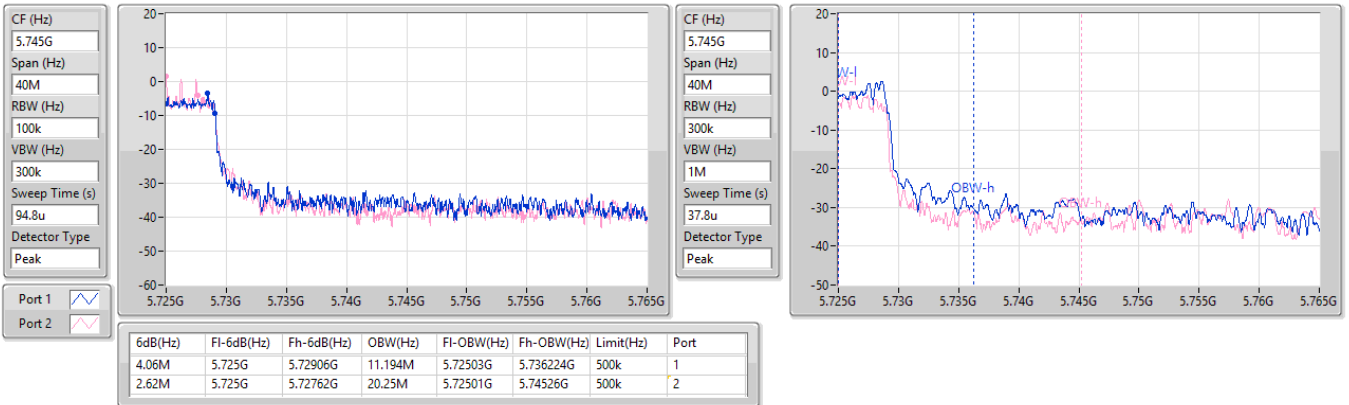


5.725-5.85GHz\_802.11ax HEW80\_Nss1,(MCS0)\_2TX

EBW

5690MHz Straddle 5.725-5.85GHz

31/07/2023

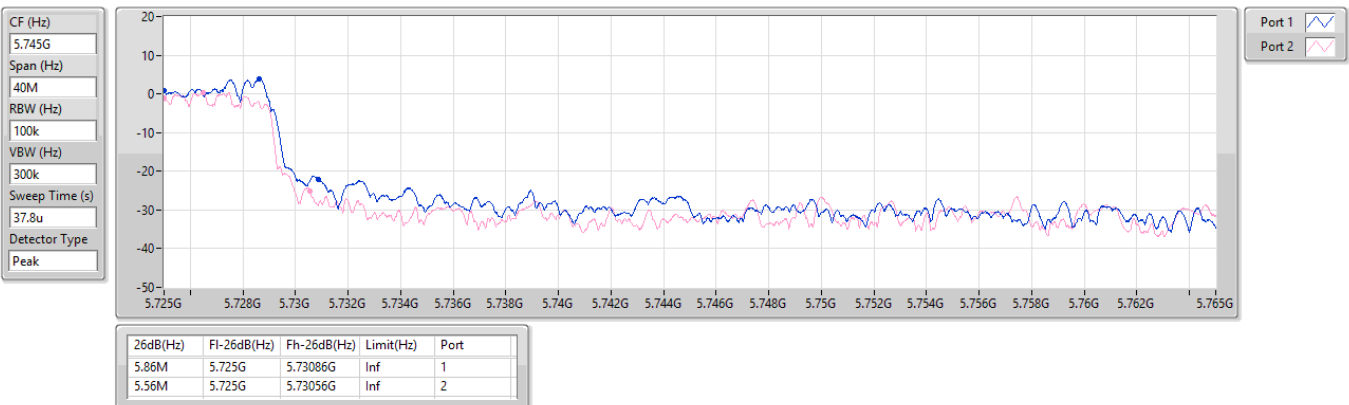


5.725-5.85GHz\_802.11ax HEW80\_Nss1,(MCS0)\_2TX

EBW

5690MHz Straddle 5.725-5.85GHz

31/07/2023







**Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	20.57M	16.536M	16M5D1D	19.085M	16.36M
802.11ax HEW20_Nss1,(MCS0)_2TX	21.01M	18.966M	19M0D1D	19.91M	18.816M
802.11ax HEW40_Nss1,(MCS0)_2TX	39.93M	37.731M	37M7D1D	39.05M	37.531M
802.11ax HEW80_Nss1,(MCS0)_2TX	79.86M	76.962M	77M0D1D	79.2M	76.662M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	20.35M	16.448M	16M4D1D	14.52M	13.163M
802.11ax HEW20_Nss1,(MCS0)_2TX	21.56M	18.941M	18M9D1D	15.39M	14.393M
802.11ax HEW40_Nss1,(MCS0)_2TX	40.26M	37.681M	37M7D1D	34.51M	33.548M
802.11ax HEW80_Nss1,(MCS0)_2TX	79.86M	77.161M	77M2D1D	74.85M	73.088M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	3.24M	3.698M	3M70D1D	3.2M	3.558M
802.11ax HEW20_Nss1,(MCS0)_2TX	4.52M	4.558M	4M56D1D	4.5M	4.538M
802.11ax HEW40_Nss1,(MCS0)_2TX	4.06M	4.098M	4M10D1D	3.86M	4.098M
802.11ax HEW80_Nss1,(MCS0)_2TX	78.1M	77.261M	77M3D1D	4.06M	4.158M

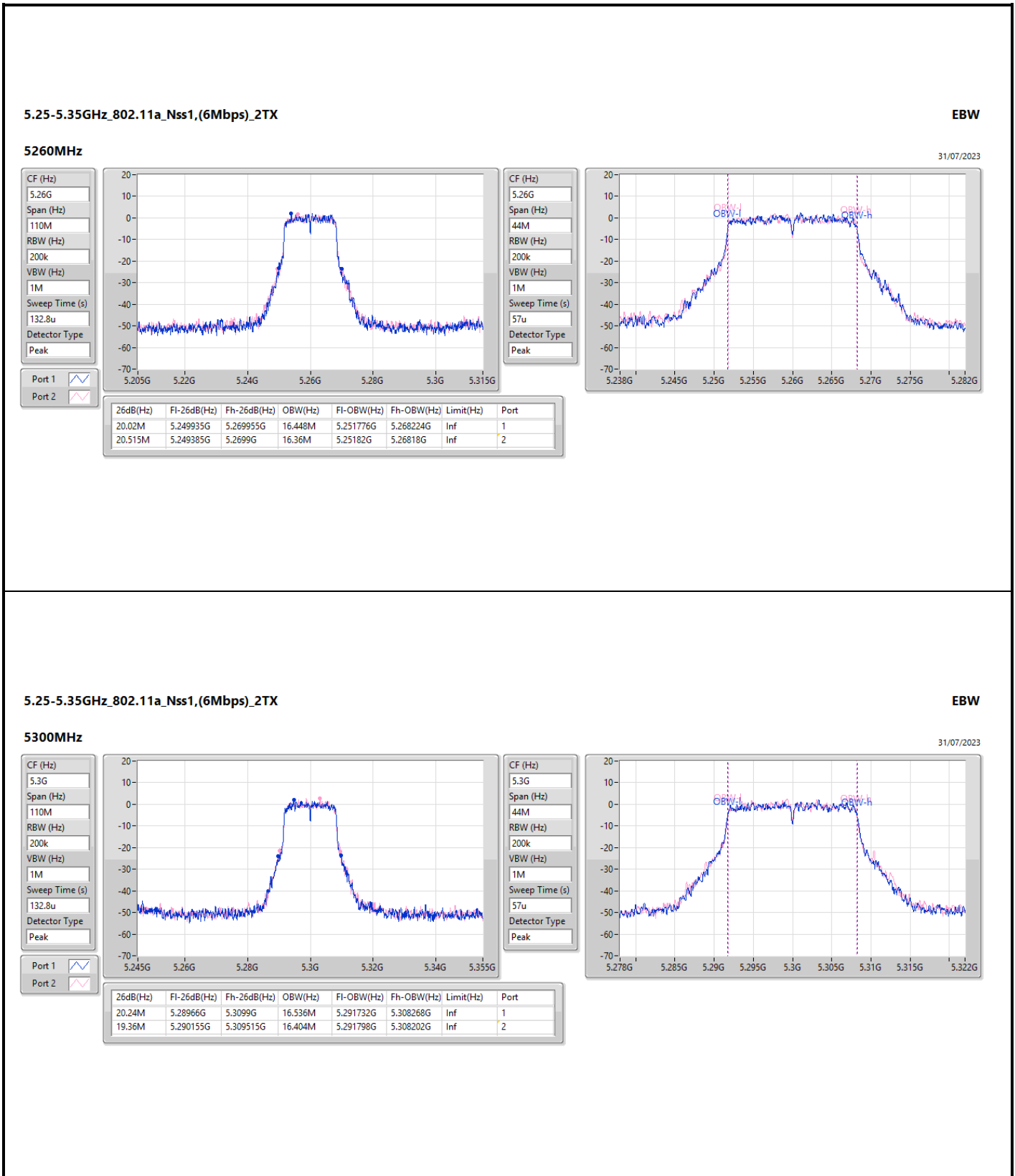
Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;  
 Max-OBW = Maximum 99% occupied bandwidth;  
 Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;  
 Min-OBW = Minimum 99% occupied bandwidth



Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5260MHz	Pass	Inf	20.02M	16.448M	20.515M	16.36M
5300MHz	Pass	Inf	20.24M	16.536M	19.36M	16.404M
5320MHz	Pass	Inf	19.085M	16.382M	20.57M	16.426M
5500MHz	Pass	Inf	18.59M	16.36M	19.855M	16.404M
5580MHz	Pass	Inf	19.305M	16.382M	20.02M	16.426M
5700MHz	Pass	Inf	20.35M	16.448M	19.305M	16.404M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	14.52M	13.223M	14.835M	13.163M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.2M	3.558M	3.24M	3.698M
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5260MHz	Pass	Inf	21.01M	18.966M	20.405M	18.816M
5300MHz	Pass	Inf	20.295M	18.841M	20.57M	18.941M
5320MHz	Pass	Inf	19.91M	18.841M	20.24M	18.841M
5500MHz	Pass	Inf	21.56M	18.891M	20.35M	18.916M
5580MHz	Pass	Inf	20.46M	18.916M	20.68M	18.941M
5700MHz	Pass	Inf	20.9M	18.816M	20.46M	18.891M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.39M	14.393M	15.735M	14.453M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	4.52M	4.538M	4.5M	4.558M
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5270MHz	Pass	Inf	39.93M	37.731M	39.05M	37.581M
5310MHz	Pass	Inf	39.6M	37.731M	39.49M	37.531M
5510MHz	Pass	Inf	39.27M	37.631M	39.93M	37.431M
5550MHz	Pass	Inf	38.83M	37.431M	39.27M	37.681M
5670MHz	Pass	Inf	40.26M	37.681M	40.26M	37.681M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	34.72M	33.548M	34.51M	33.653M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.86M	4.098M	4.06M	4.098M
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5290MHz	Pass	Inf	79.86M	76.662M	79.2M	76.962M
5530MHz	Pass	Inf	79.42M	76.962M	79.86M	76.962M
5610MHz	Pass	Inf	79.64M	77.061M	79.2M	77.161M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	75.375M	73.088M	74.85M	73.313M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	4.06M	4.178M	4.06M	4.158M
5775MHz	Pass	500k	78.1M	76.862M	78.1M	77.261M

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

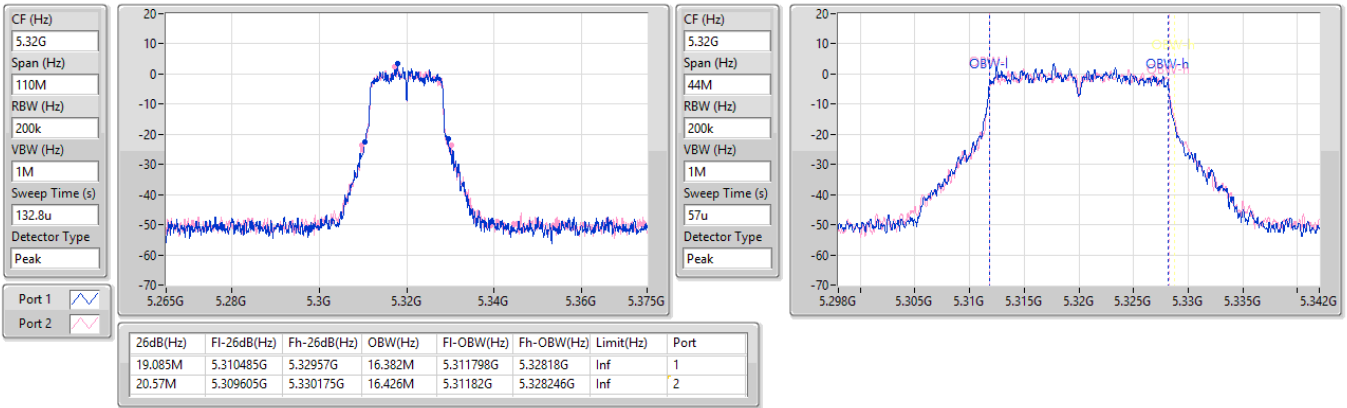


5.25-5.35GHz\_802.11a\_Nss1,(6Mbps)\_2TX

EBW

5320MHz

31/07/2023

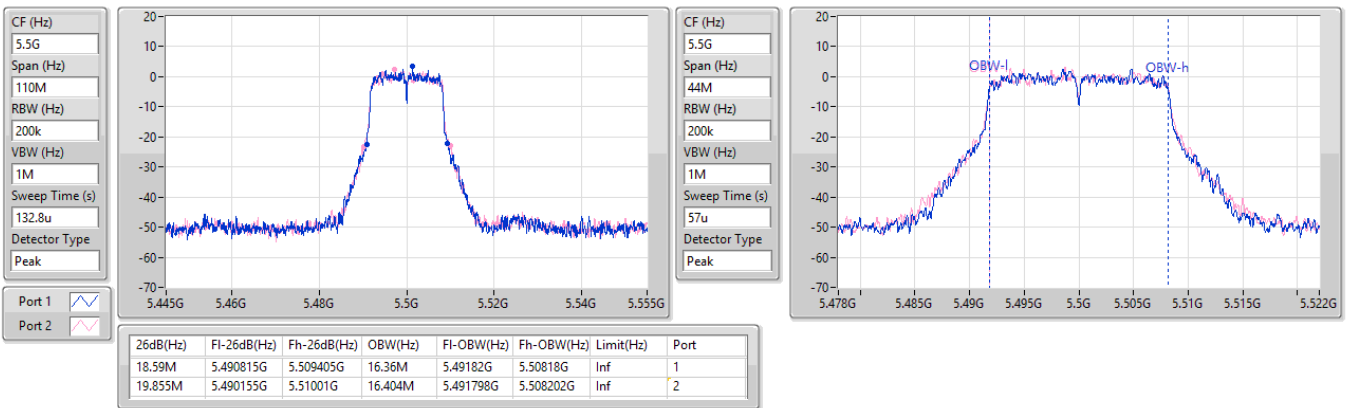


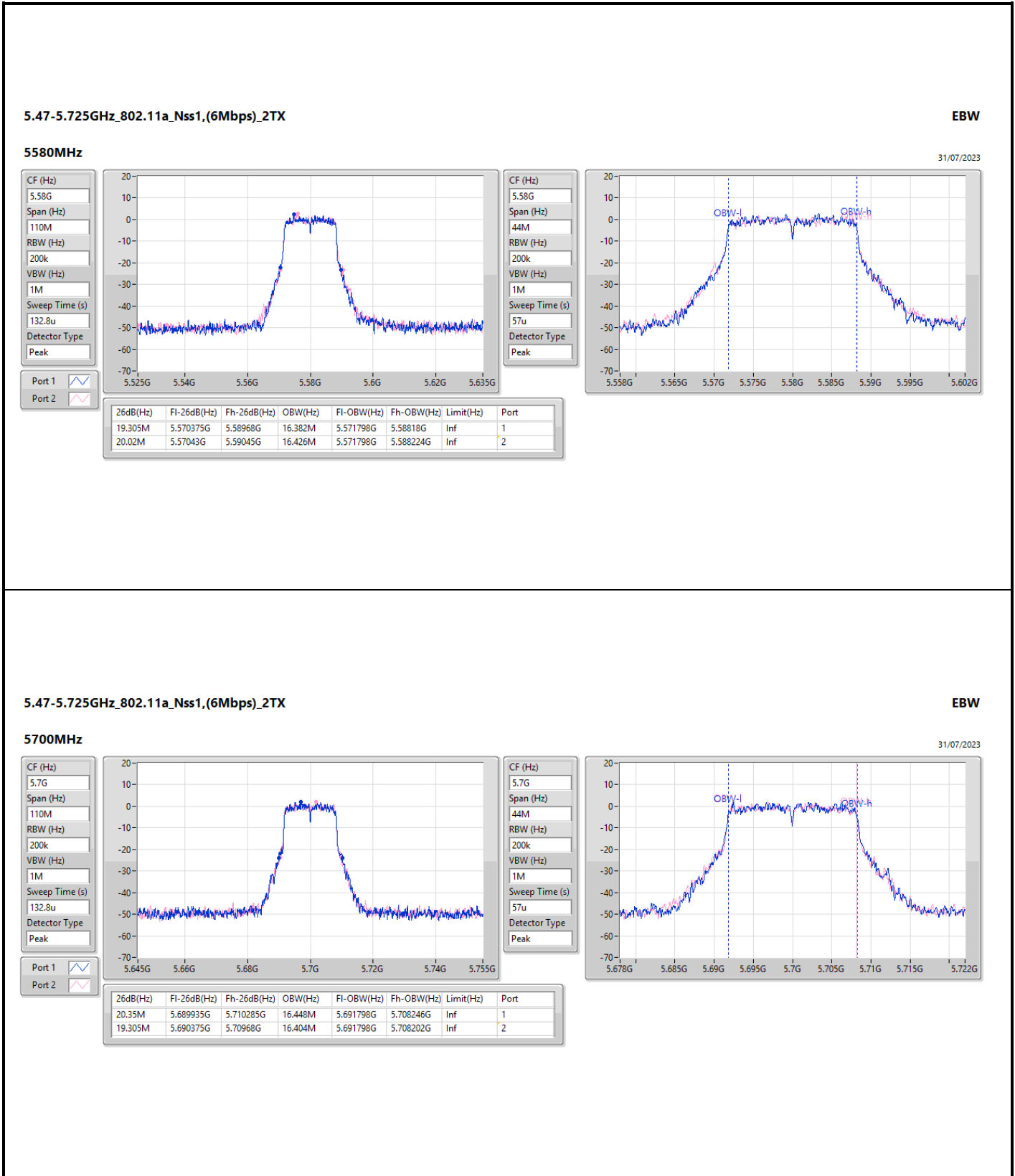
5.47-5.725GHz\_802.11a\_Nss1,(6Mbps)\_2TX

EBW

5500MHz

31/07/2023





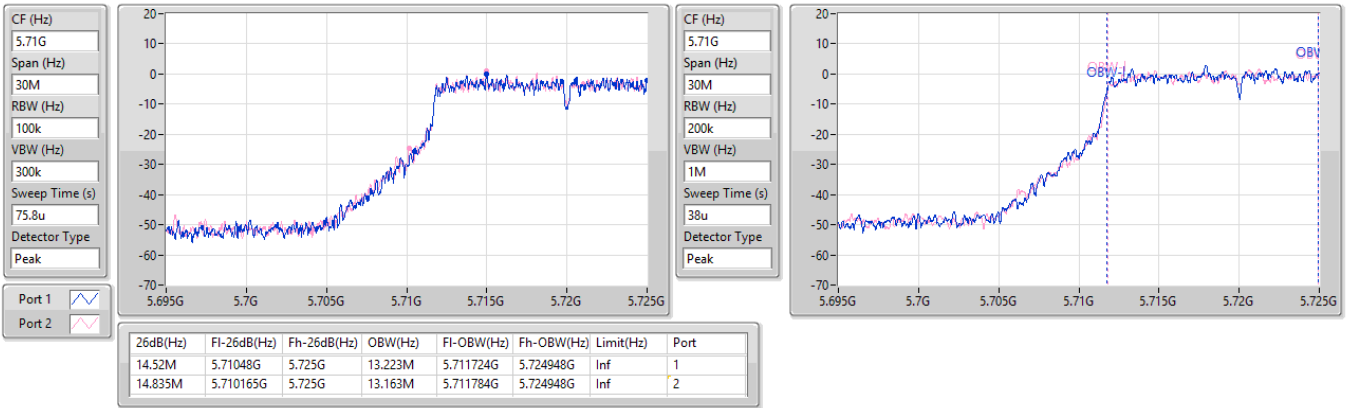


5.47-5.725GHz\_802.11a\_Nss1,(6Mbps)\_2TX

EBW

5720MHz Straddle 5.47-5.725GHz

31/07/2023

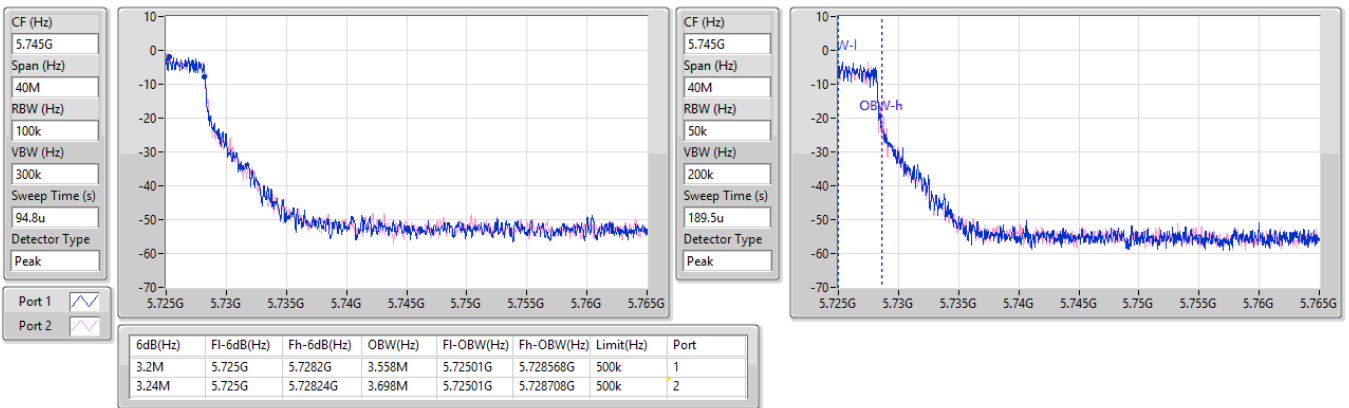


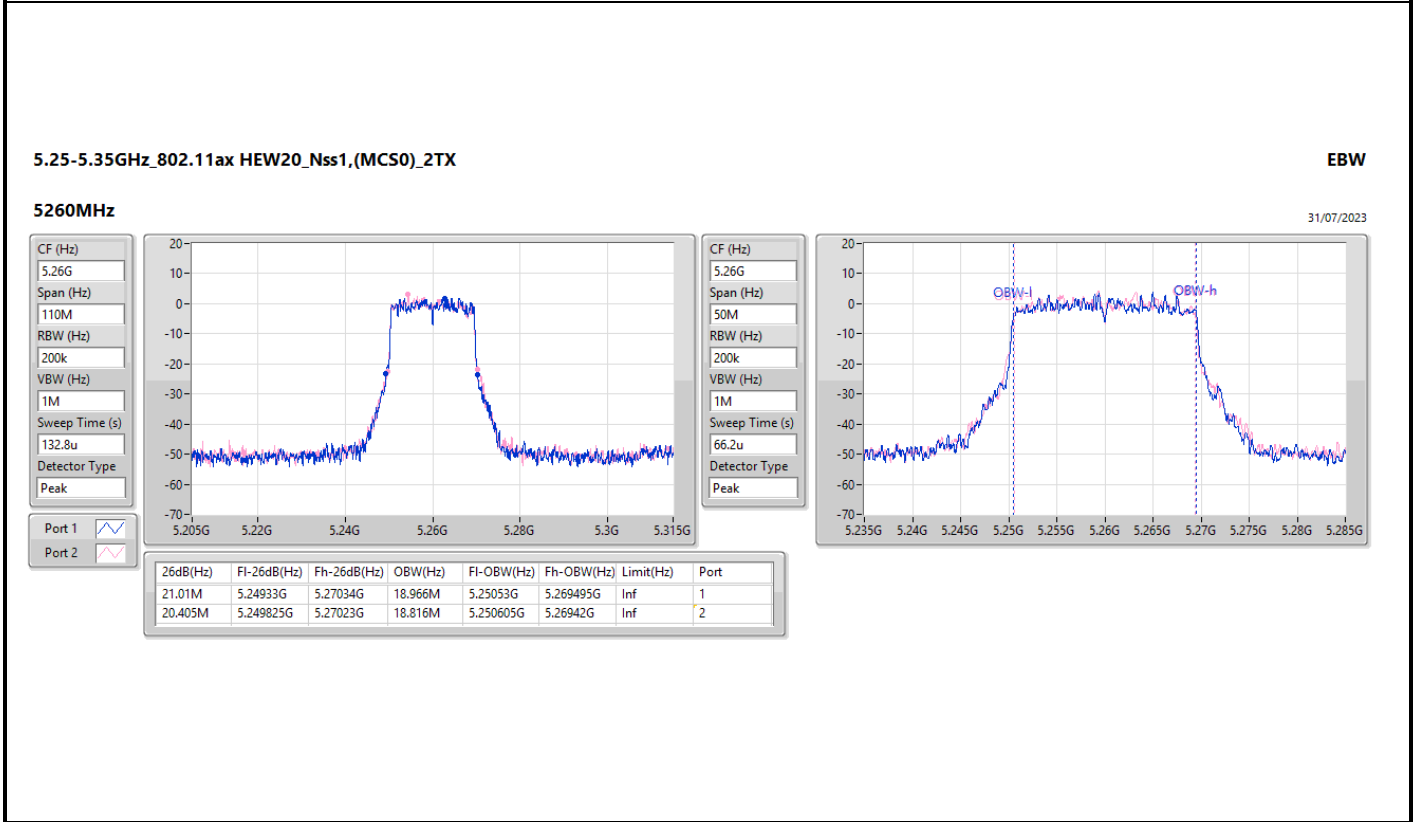
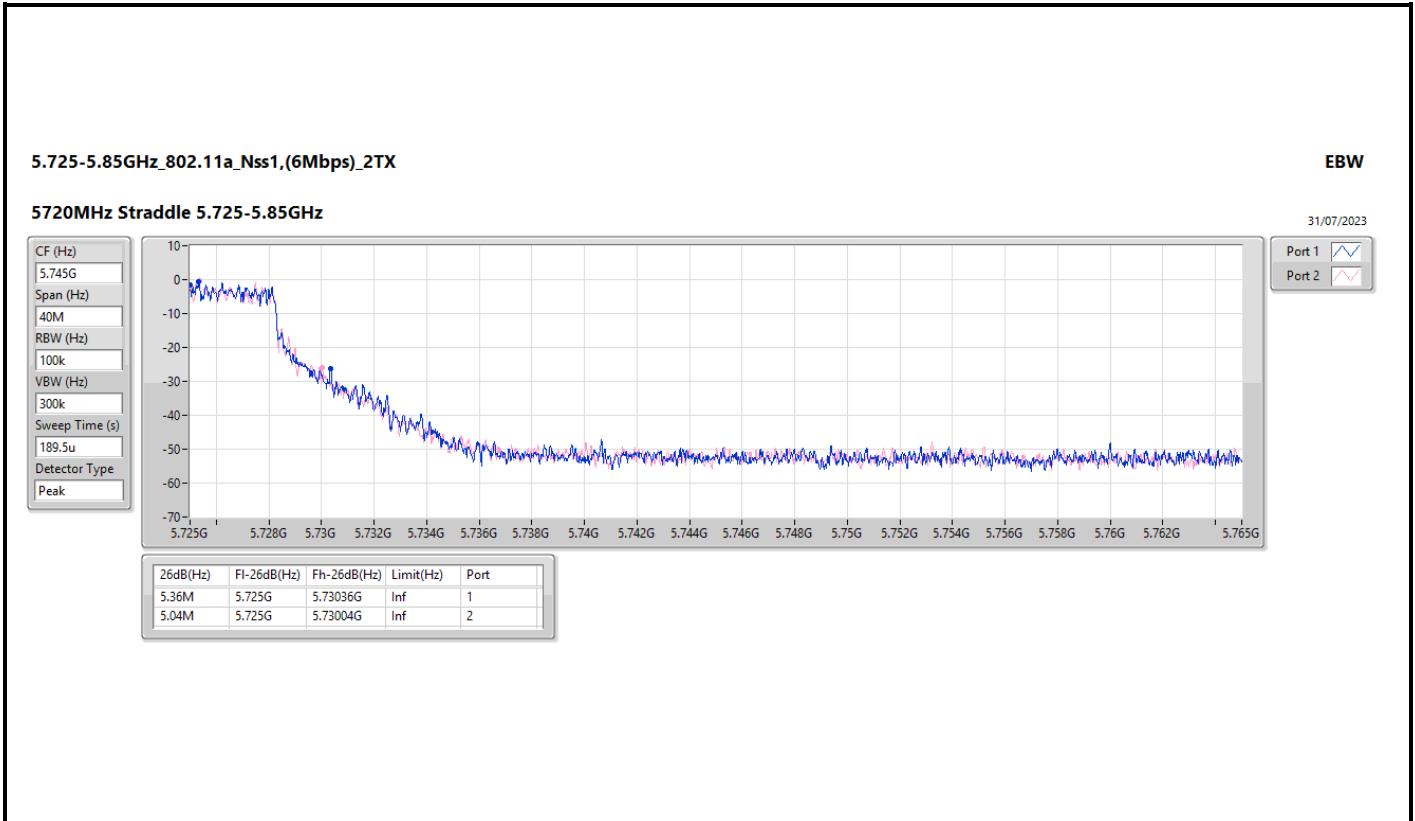
5.725-5.85GHz\_802.11a\_Nss1,(6Mbps)\_2TX

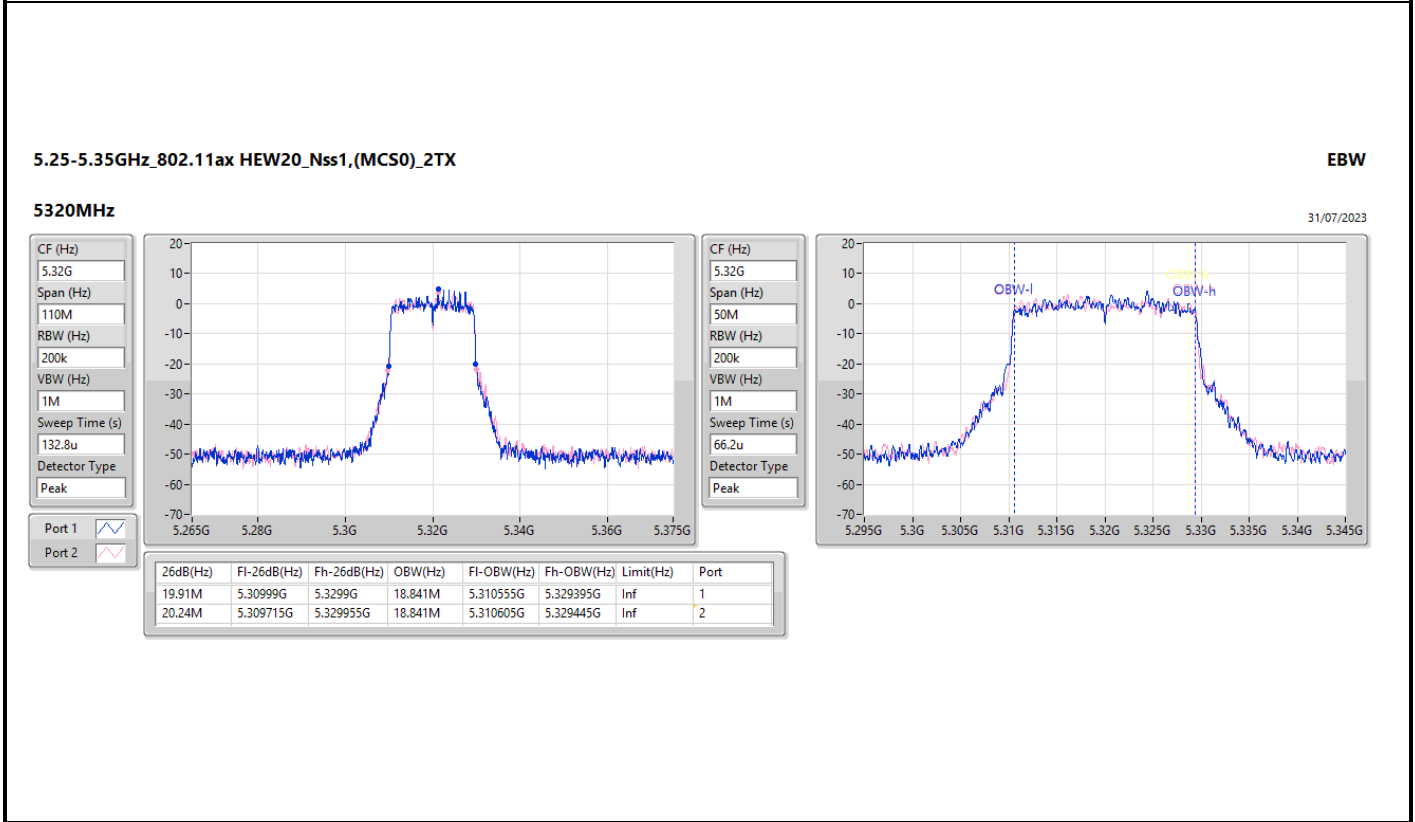
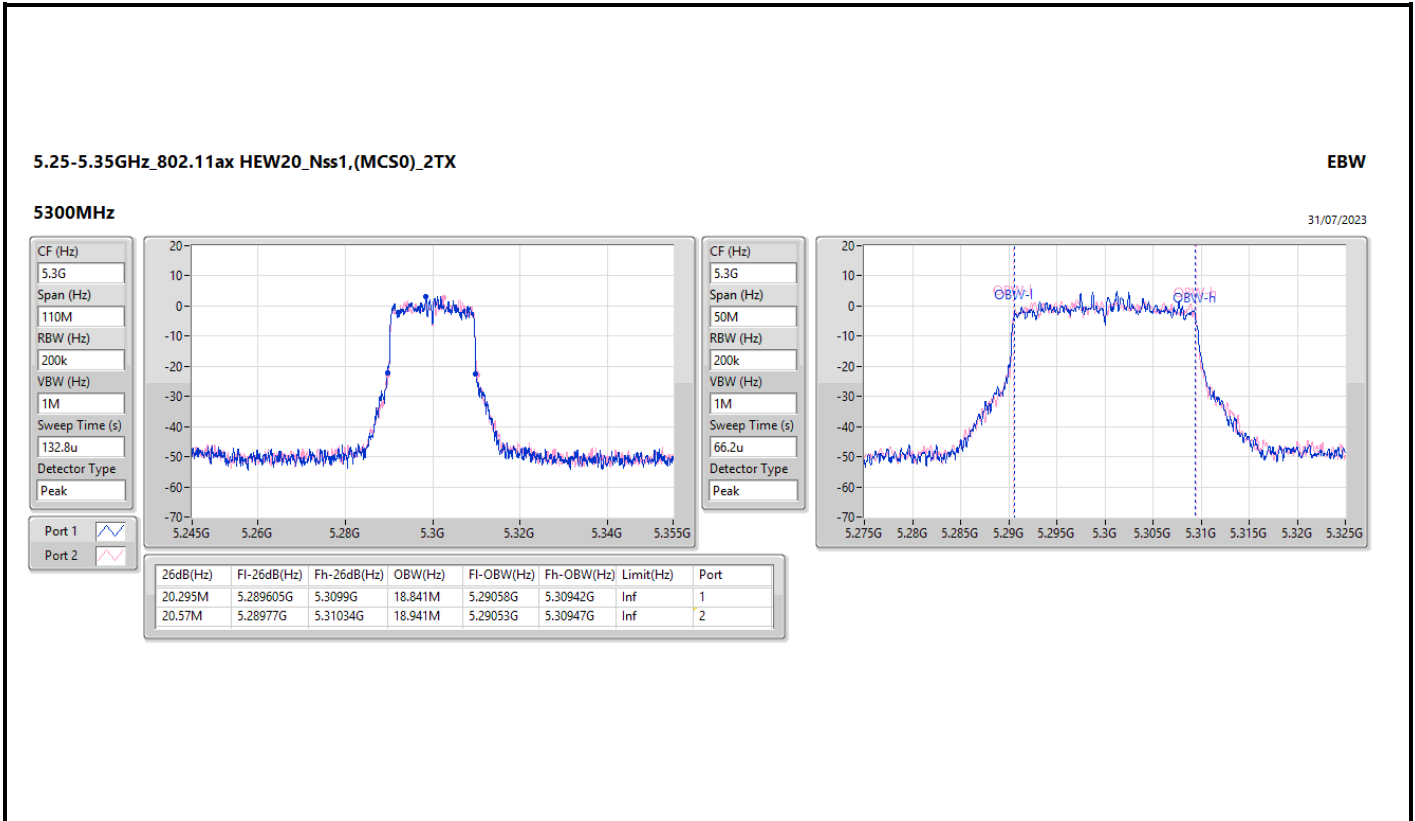
EBW

5720MHz Straddle 5.725-5.85GHz

31/07/2023





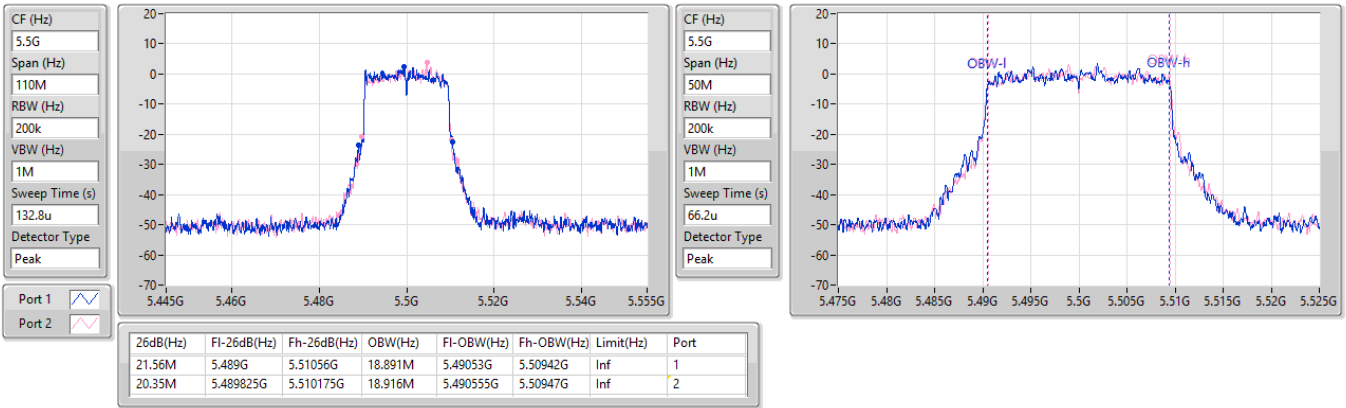


5.47-5.725GHz\_802.11ax HEW20\_Nss1,(MCS0)\_2TX

EBW

5500MHz

31/07/2023

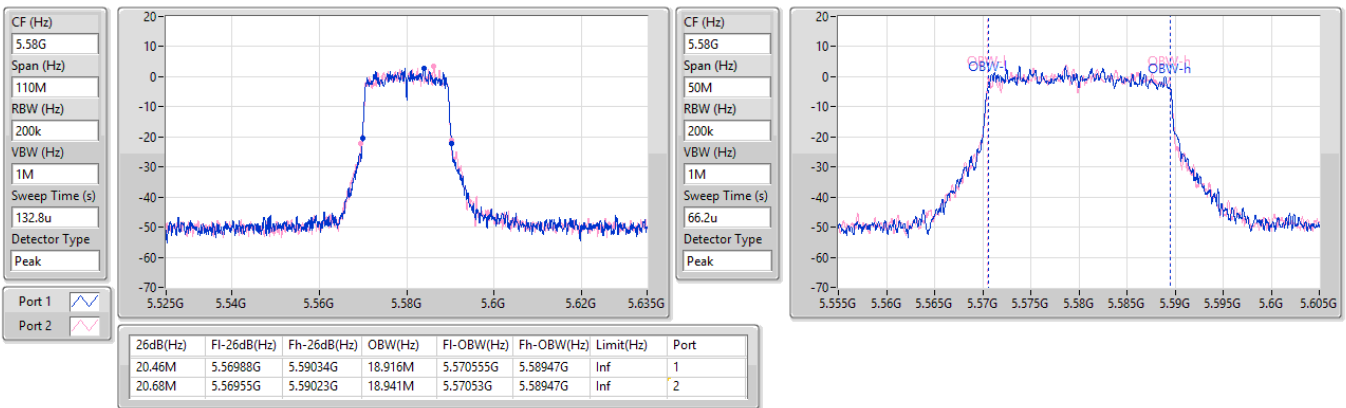


5.47-5.725GHz\_802.11ax HEW20\_Nss1,(MCS0)\_2TX

EBW

5580MHz

31/07/2023

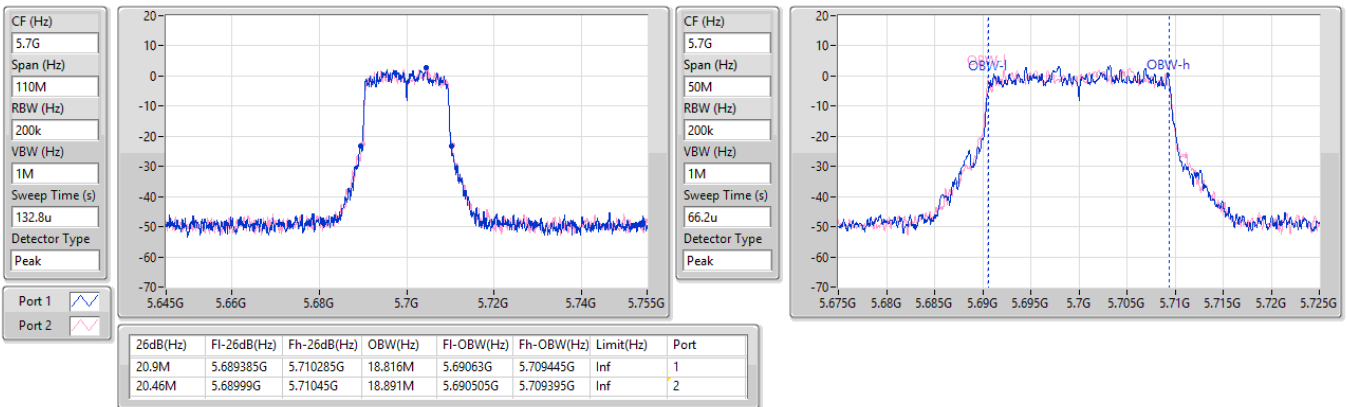


5.47-5.725GHz\_802.11ax HEW20\_Nss1,(MCS0)\_2TX

EBW

5700MHz

31/07/2023

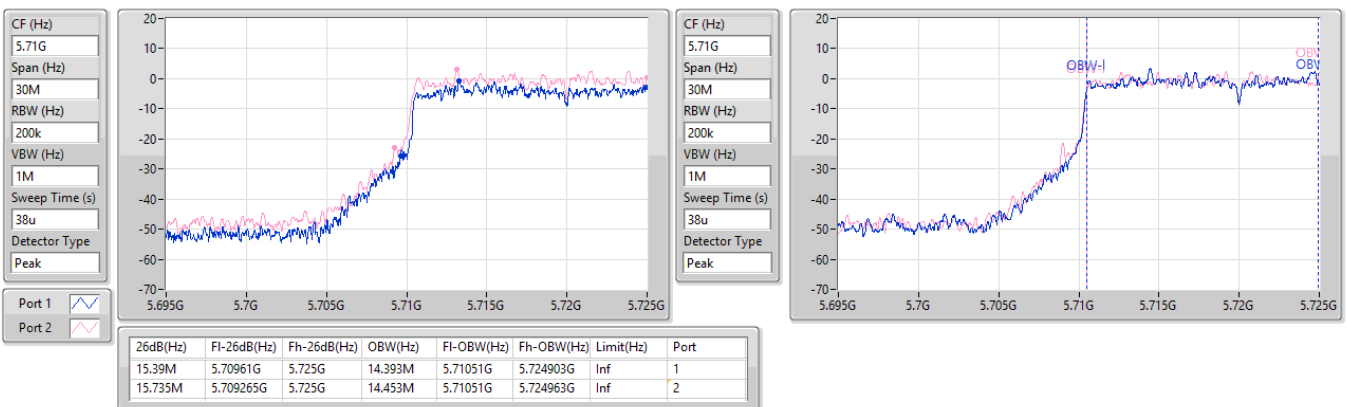


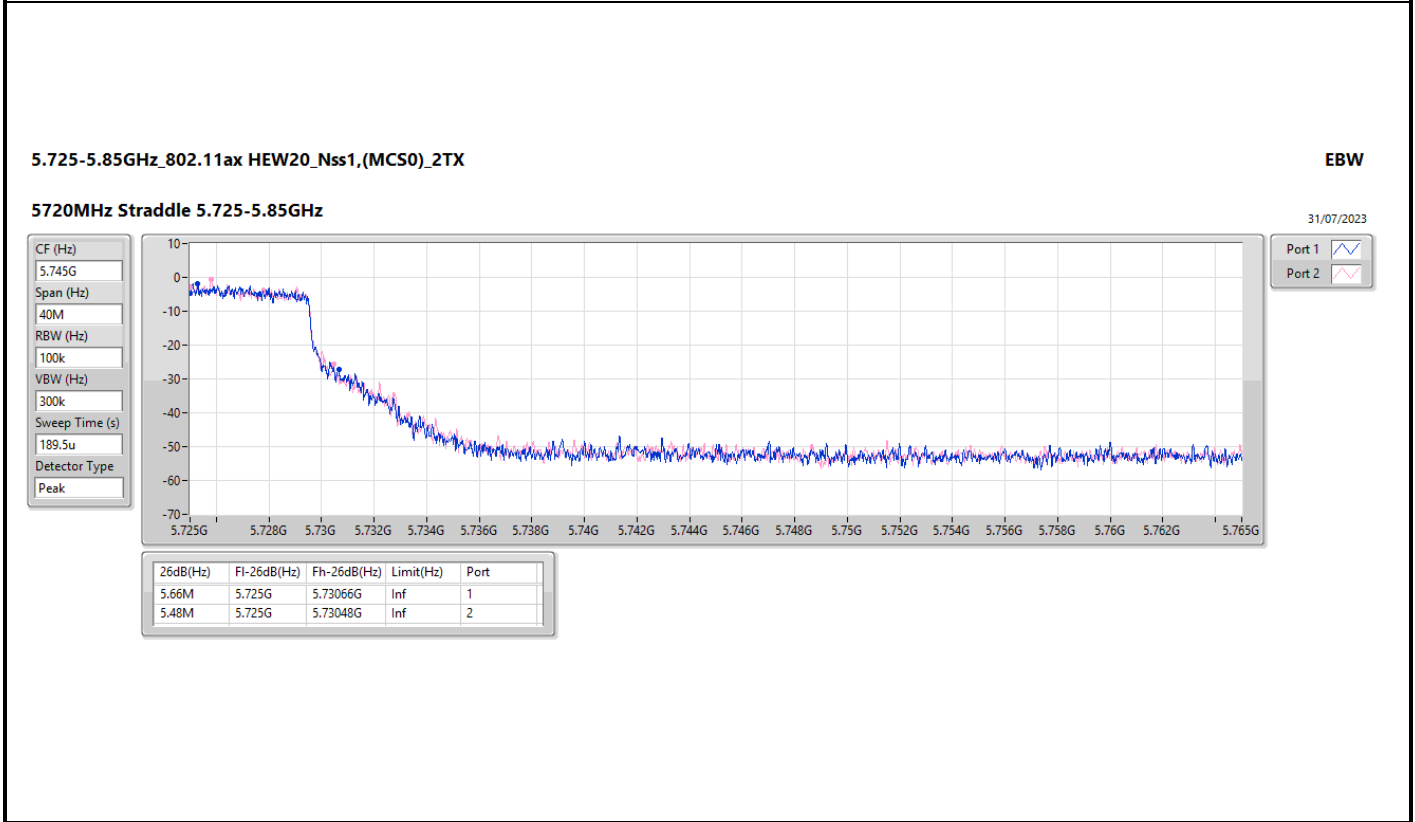
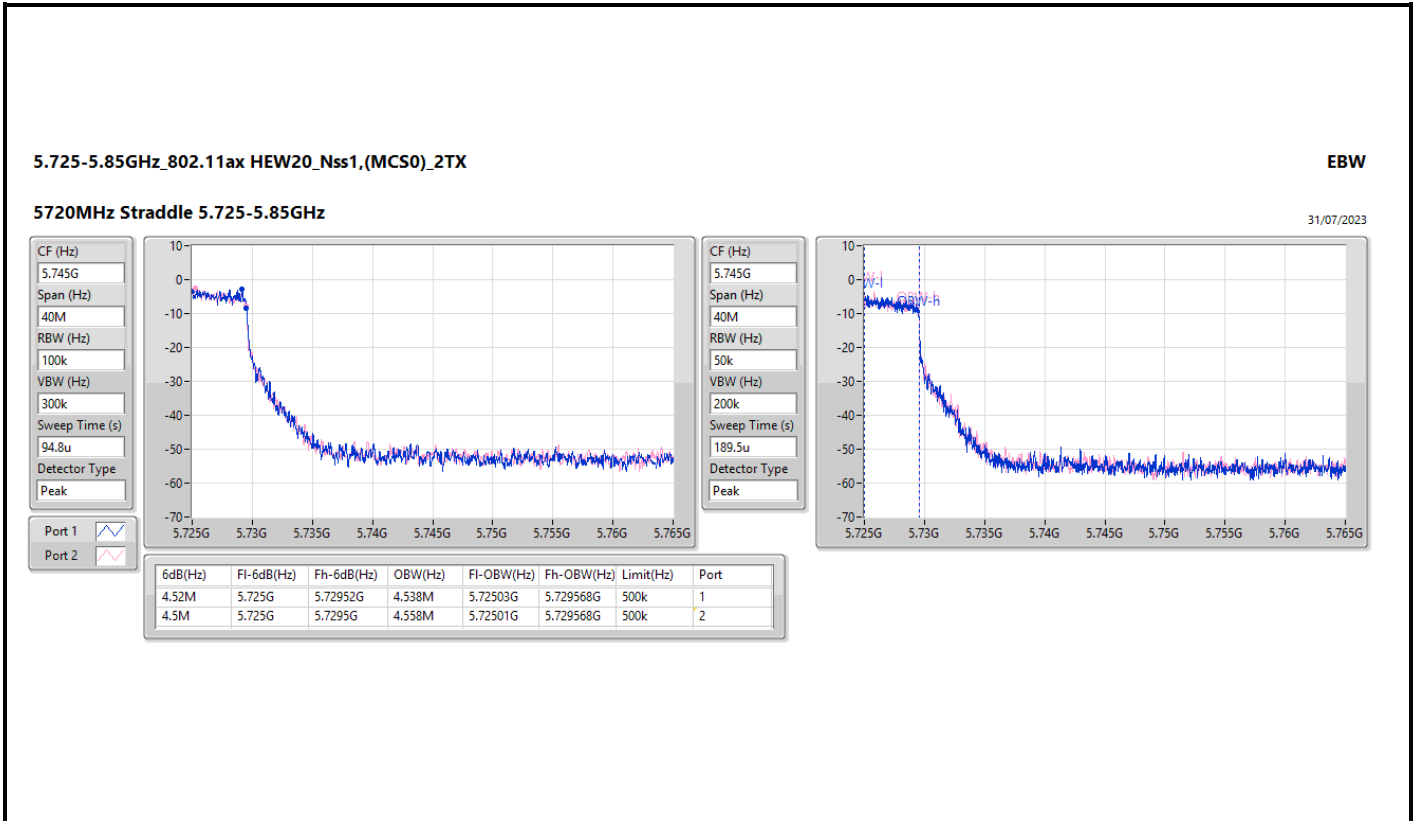
5.47-5.725GHz\_802.11ax HEW20\_Nss1,(MCS0)\_2TX

EBW

5720MHz Straddle 5.47-5.725GHz

31/07/2023



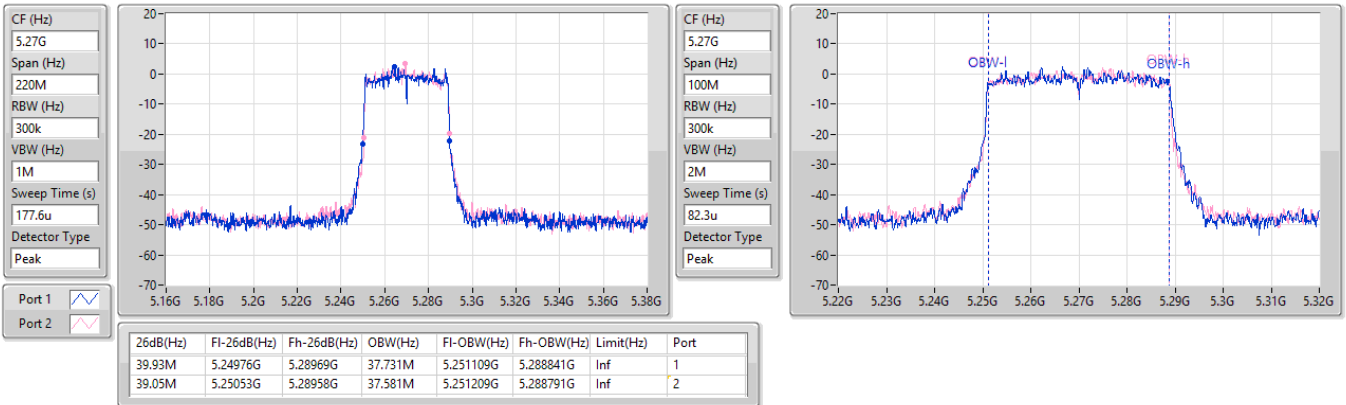


5.25-5.35GHz\_802.11ax\_HEW40\_Nss1,(MCS0)\_2TX

EBW

5270MHz

31/07/2023

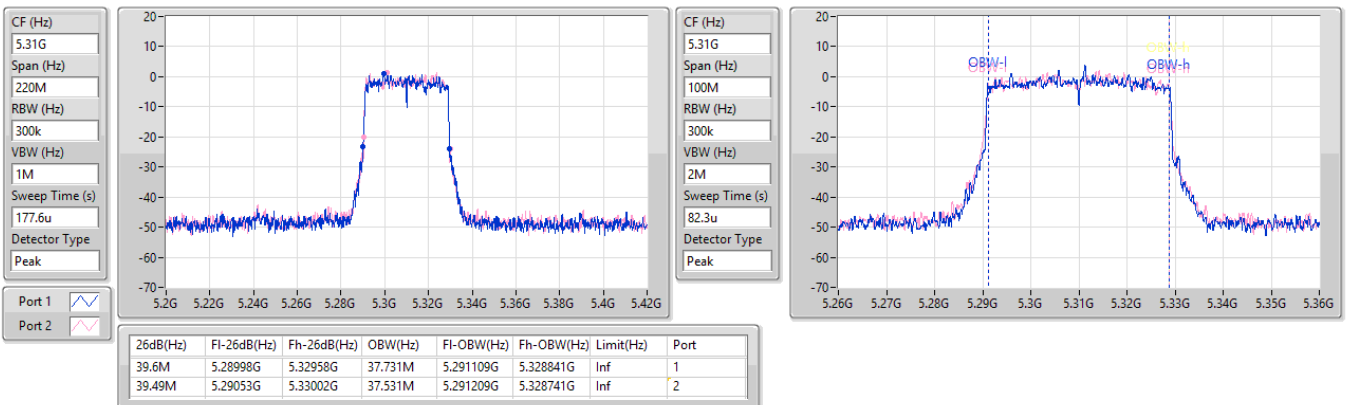


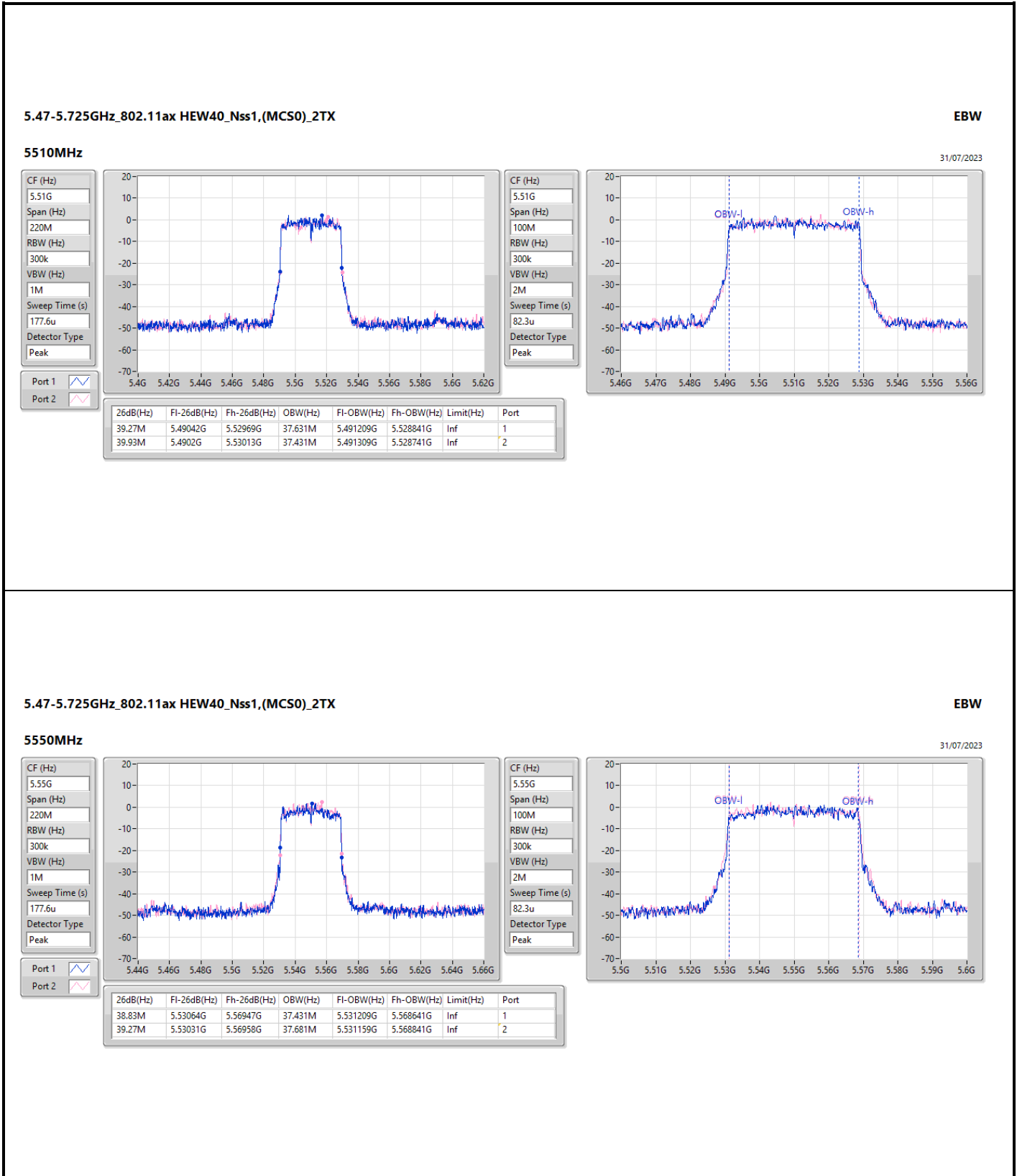
5.25-5.35GHz\_802.11ax\_HEW40\_Nss1,(MCS0)\_2TX

EBW

5310MHz

31/07/2023





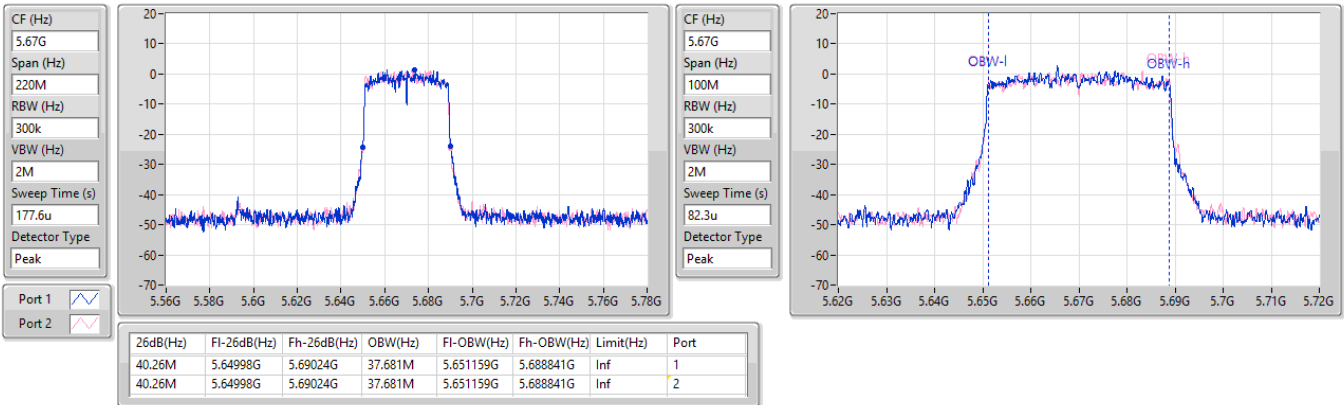


5.47-5.725GHz\_802.11ax HEW40\_Nss1,(MCS0)\_2TX

EBW

5670MHz

31/07/2023

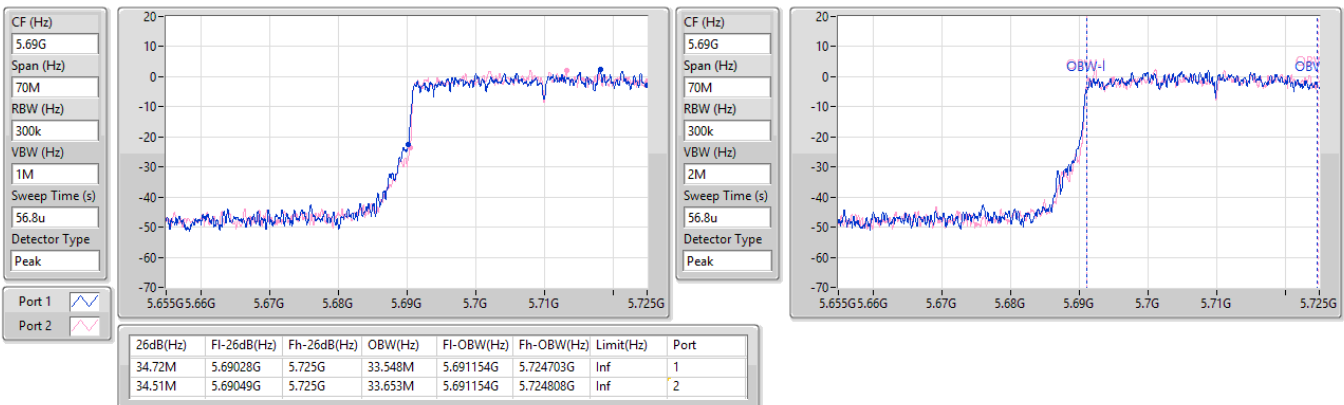


5.47-5.725GHz\_802.11ax HEW40\_Nss1,(MCS0)\_2TX

EBW

5710MHz Straddle 5.47-5.725GHz

31/07/2023

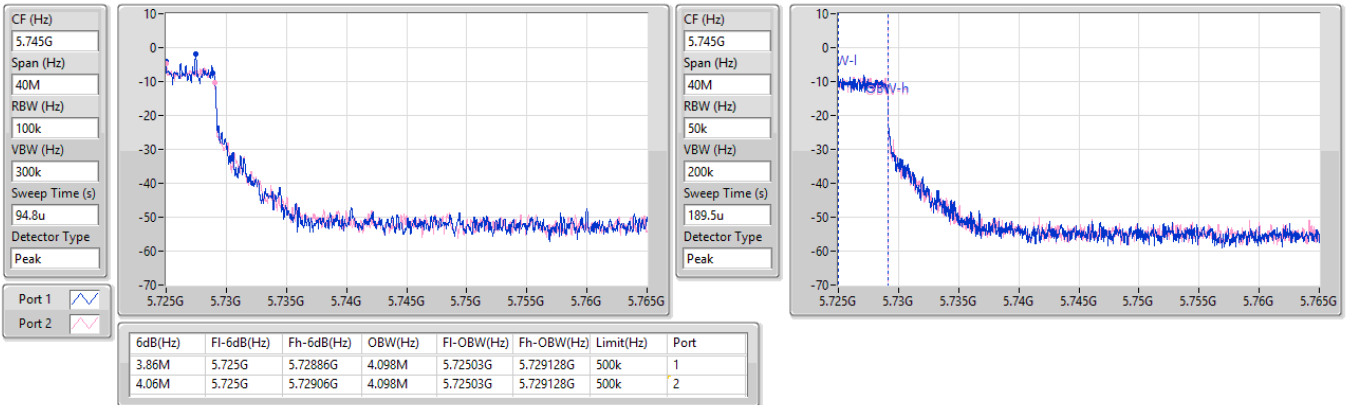


5.725-5.85GHz\_802.11ax HEW40\_Nss1,(MCS0)\_2TX

EBW

5710MHz Straddle 5.725-5.85GHz

31/07/2023

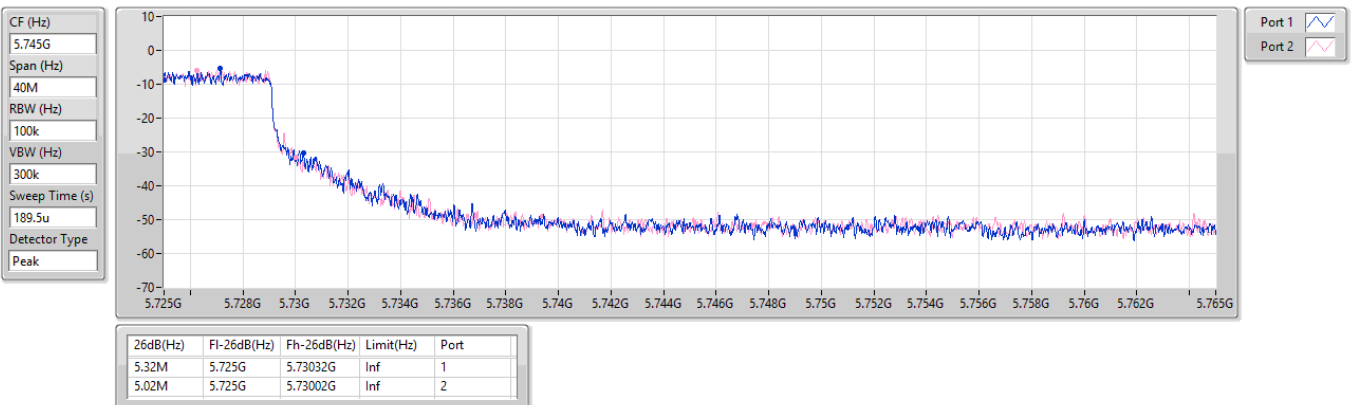


5.725-5.85GHz\_802.11ax HEW40\_Nss1,(MCS0)\_2TX

EBW

5710MHz Straddle 5.725-5.85GHz

31/07/2023

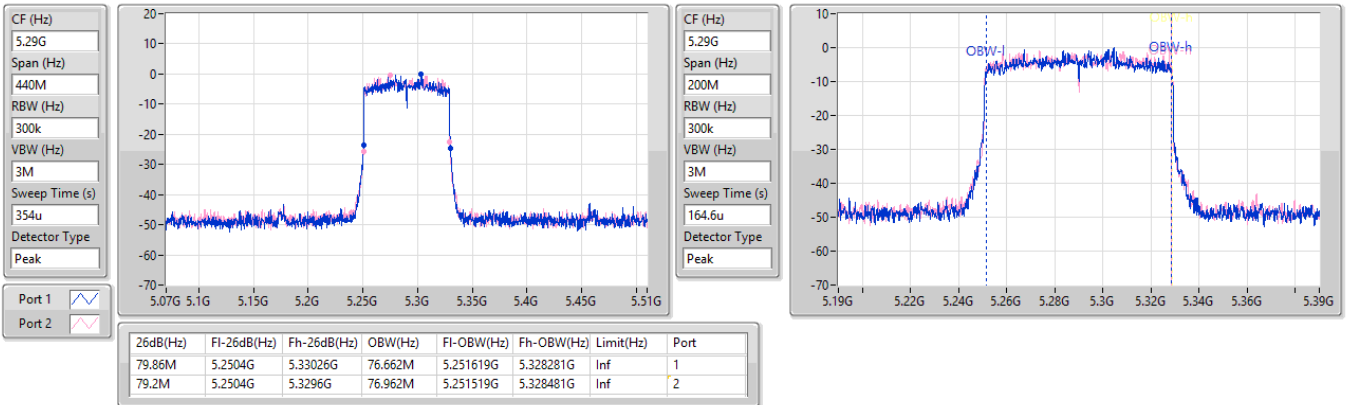


5.25-5.35GHz\_802.11ax HEW80\_Nss1,(MCS0)\_2TX

EBW

5290MHz

31/07/2023

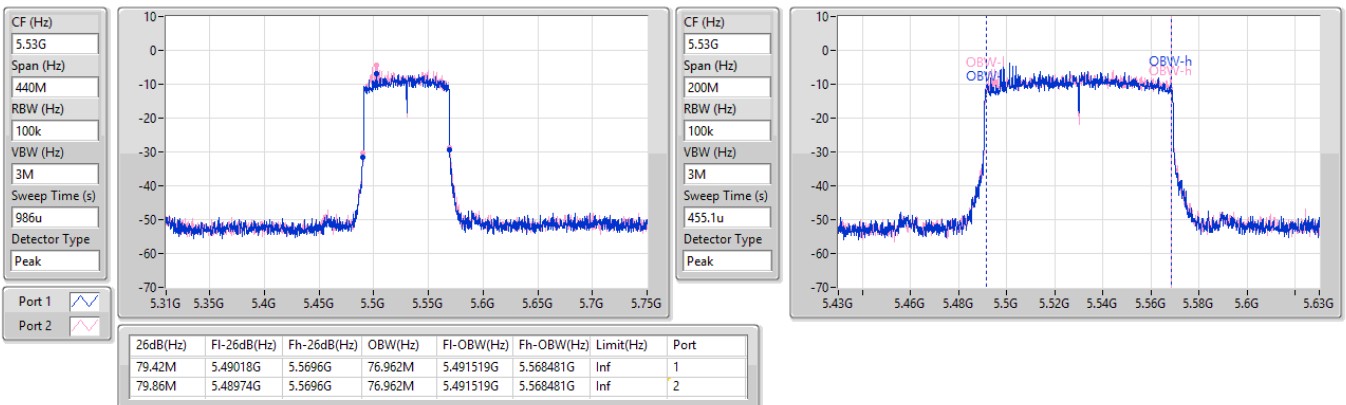


5.47-5.725GHz\_802.11ax HEW80\_Nss1,(MCS0)\_2TX

EBW

5530MHz

31/07/2023

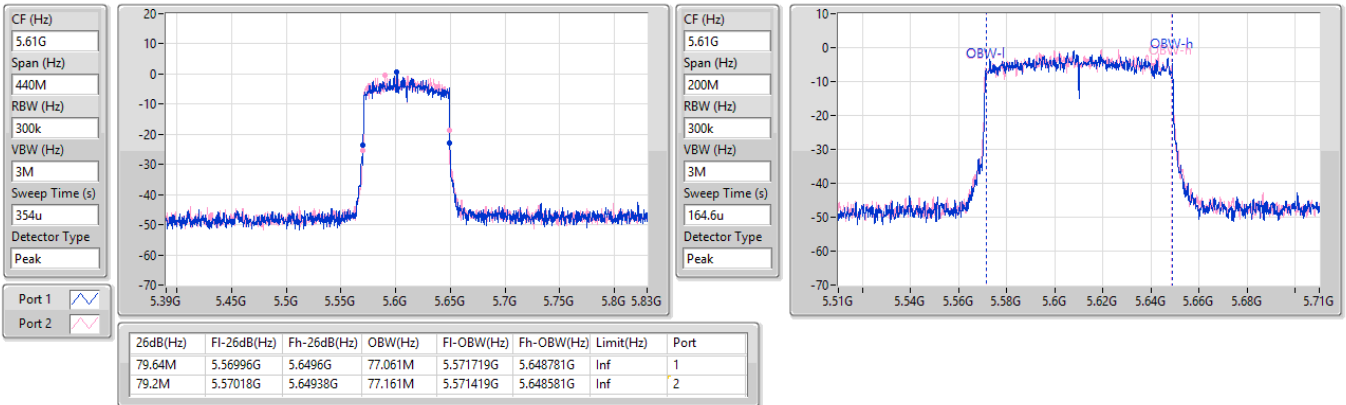


5.47-5.725GHz\_802.11ax HEW80\_Nss1,(MCS0)\_2TX

EBW

5610MHz

31/07/2023

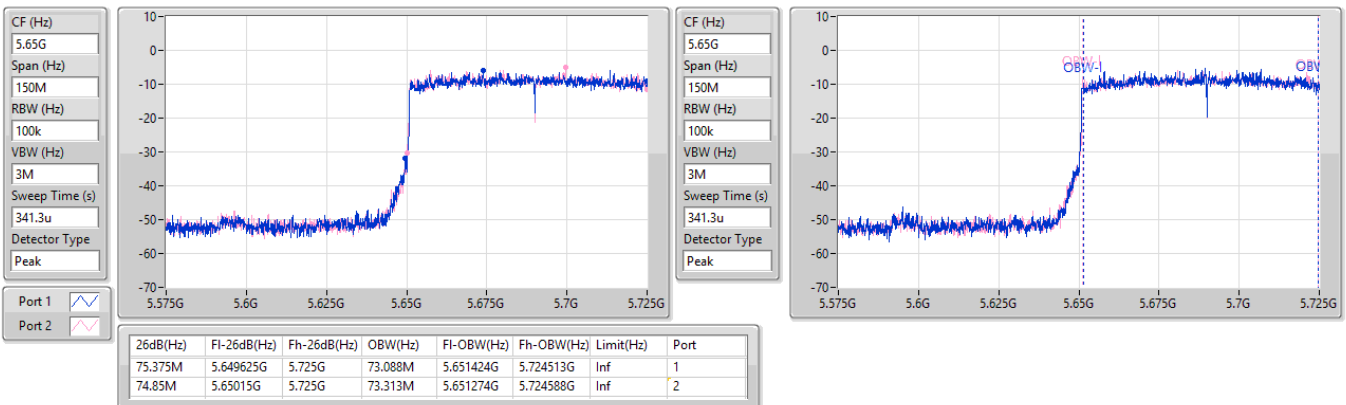


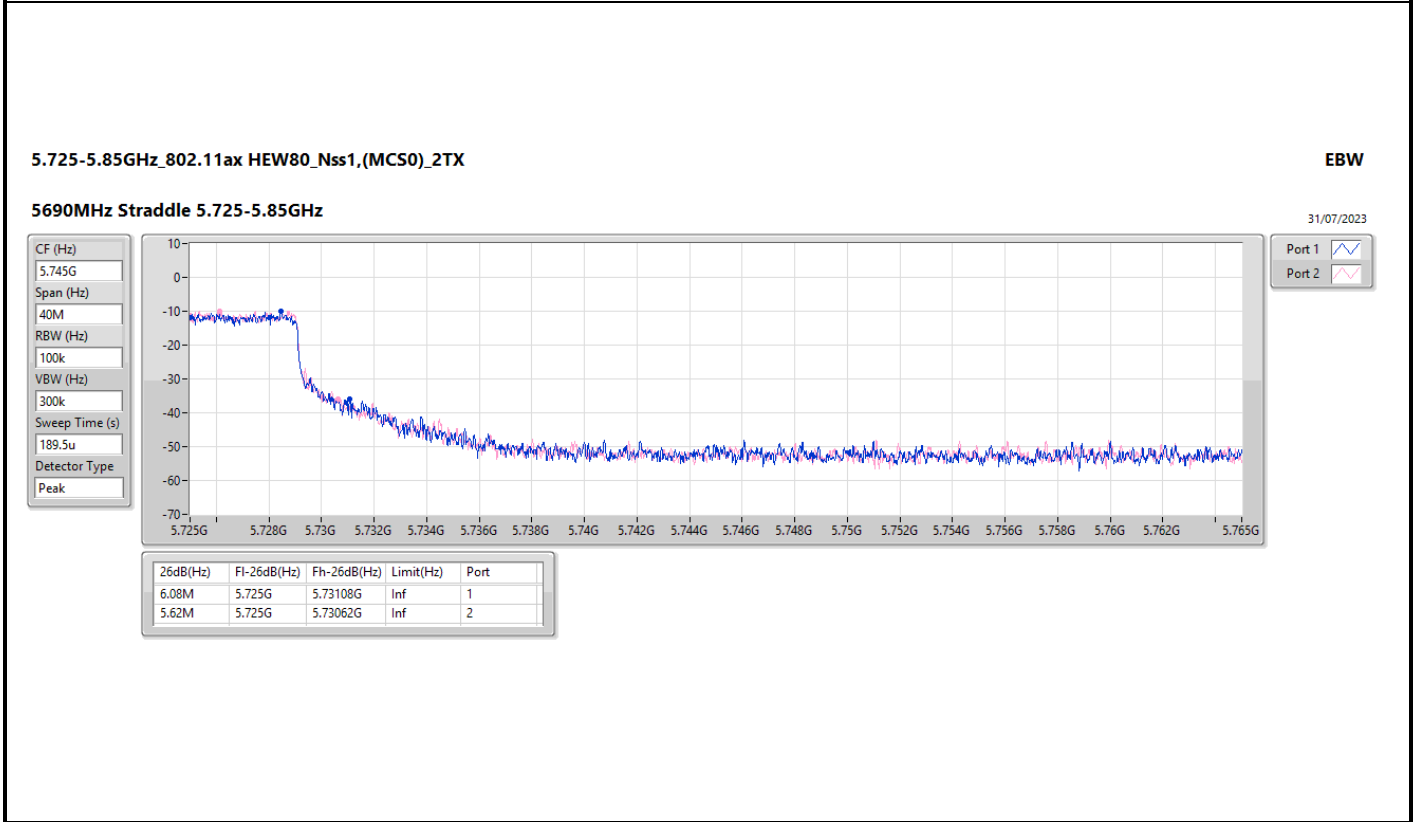
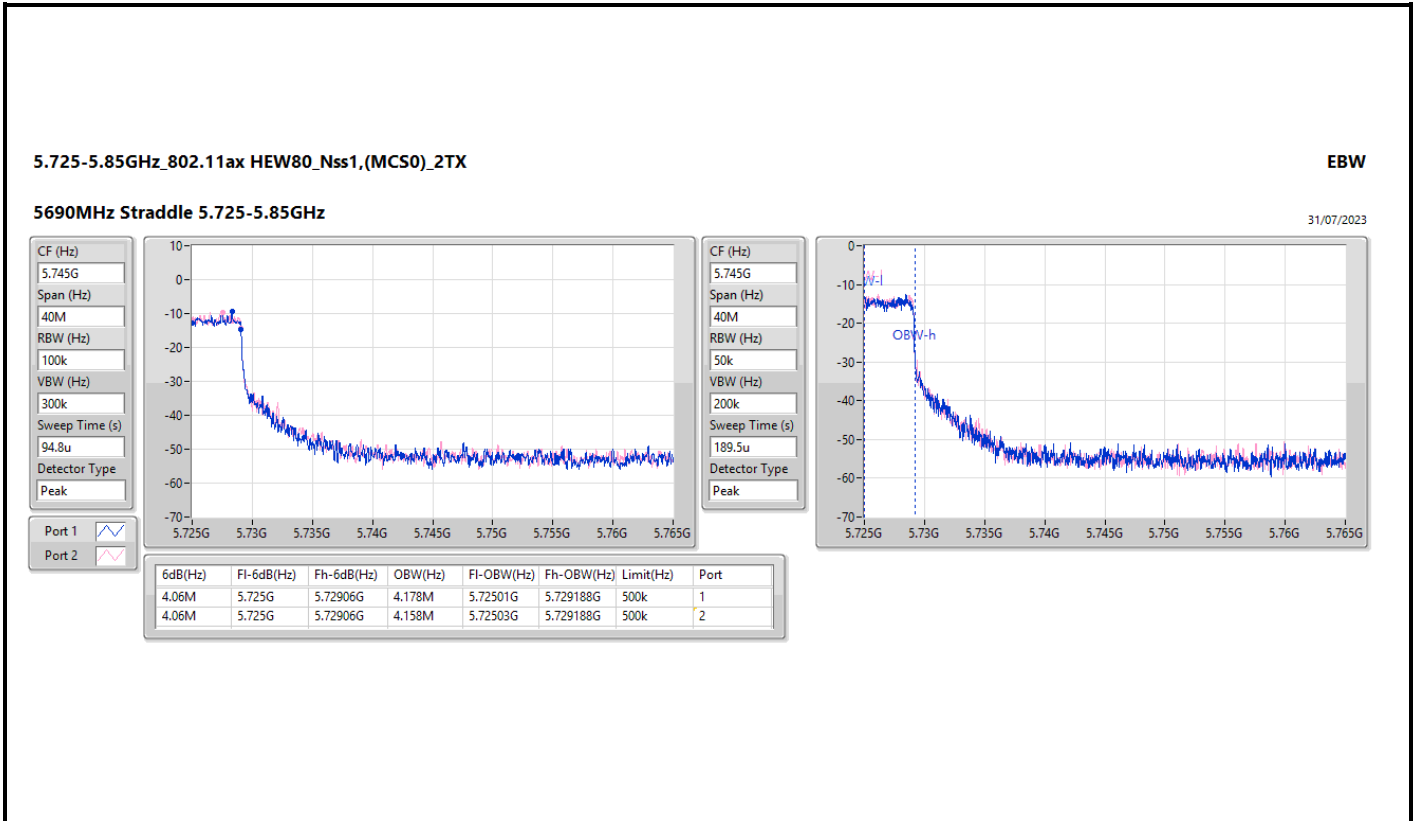
5.47-5.725GHz\_802.11ax HEW80\_Nss1,(MCS0)\_2TX

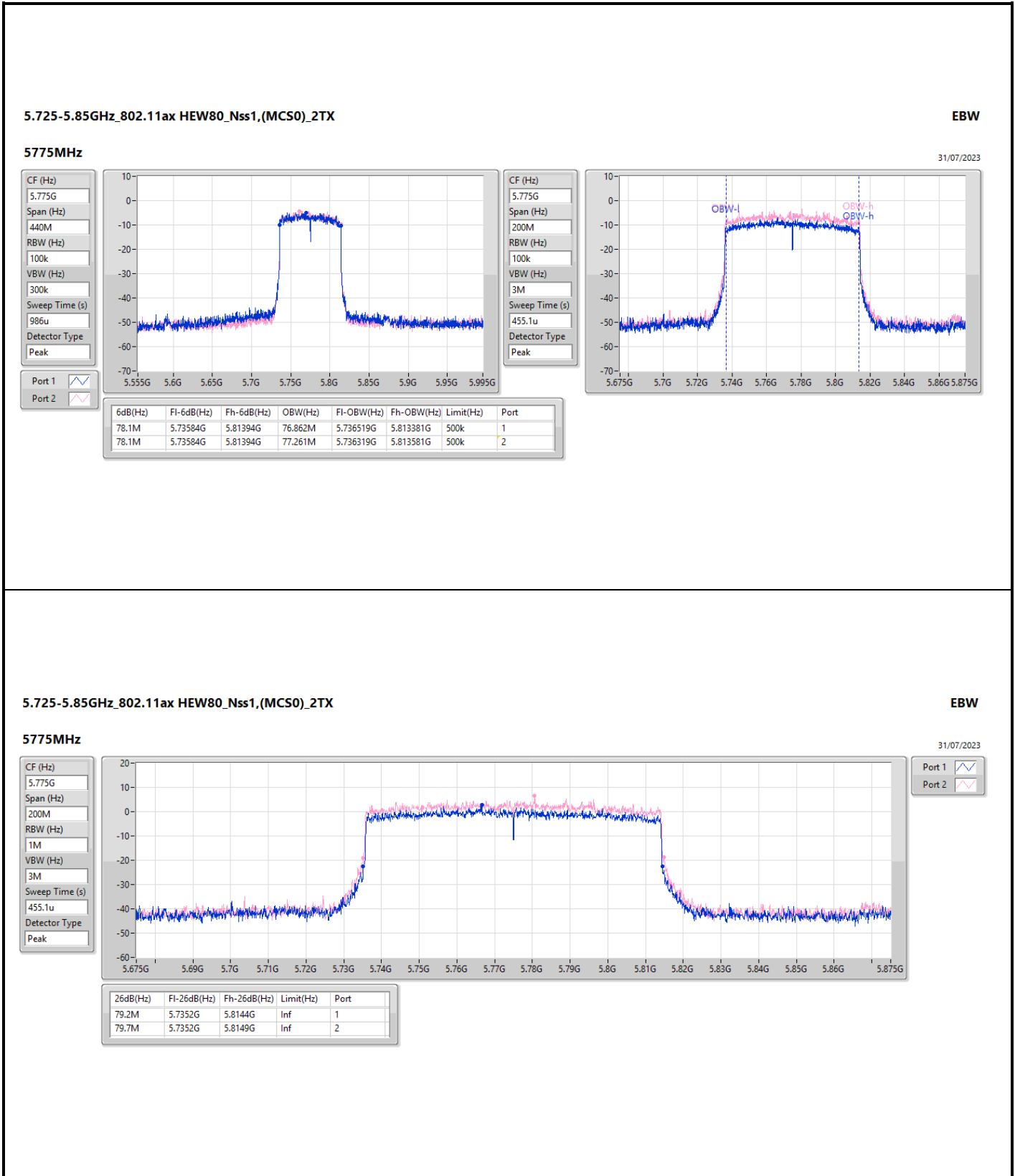
EBW

5690MHz Straddle 5.47-5.725GHz

31/07/2023









Summary

Mode	Total Power (dBm)	Total Power (W)
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	23.17	0.20749
802.11ax HEW20_Nss1,(MCS0)_2TX	23.59	0.22856
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	23.07	0.20277
802.11ax HEW40_Nss1,(MCS0)_2TX	22.16	0.16444
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	22.16	0.16444
802.11ax HEW80_Nss1,(MCS0)_2TX	19.95	0.09886
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	19.95	0.09886
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	23.26	0.21184
802.11ax HEW20_Nss1,(MCS0)_2TX	23.53	0.22542
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	23.53	0.22542
802.11ax HEW40_Nss1,(MCS0)_2TX	23.68	0.23335
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	23.68	0.23335
802.11ax HEW80_Nss1,(MCS0)_2TX	22.21	0.16634
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	22.21	0.16634
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	16.14	0.04111
802.11ax HEW20_Nss1,(MCS0)_2TX	16.71	0.04688
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	16.71	0.04688
802.11ax HEW40_Nss1,(MCS0)_2TX	13.71	0.02350
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	13.71	0.02350
802.11ax HEW80_Nss1,(MCS0)_2TX	19.91	0.09795
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	19.91	0.09795



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5260MHz	Pass	3.85	20.03	20.28	23.17	23.98
5300MHz	Pass	3.85	19.95	19.85	22.91	23.98
5320MHz	Pass	3.85	18.75	18.71	21.74	23.84
5500MHz	Pass	3.56	19.01	19.06	22.05	23.86
5580MHz	Pass	3.56	20.22	20.27	23.26	23.92
5700MHz	Pass	3.56	19.10	19.16	22.14	23.77
5720MHz Straddle 5.47-5.725GHz	Pass	3.56	19.38	19.54	22.47	22.96
5720MHz Straddle 5.725-5.85GHz	Pass	3.85	13.11	13.15	16.14	30.00
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5260MHz	Pass	3.85	20.34	20.73	23.55	23.98
5300MHz	Pass	3.85	20.49	20.67	23.59	23.98
5320MHz	Pass	3.85	18.17	18.39	21.29	23.98
5500MHz	Pass	3.56	18.51	18.55	21.54	23.98
5580MHz	Pass	3.56	20.41	20.63	23.53	23.98
5700MHz	Pass	3.56	18.12	18.23	21.19	23.98
5720MHz Straddle 5.47-5.725GHz	Pass	3.56	18.98	19.25	22.13	23.05
5720MHz Straddle 5.725-5.85GHz	Pass	3.85	13.74	13.66	16.71	30.00
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5270MHz	Pass	3.85	19.00	19.29	22.16	23.98
5310MHz	Pass	3.85	17.74	18.04	20.90	23.98
5510MHz	Pass	3.56	17.73	17.90	20.83	23.98
5550MHz	Pass	3.56	19.23	19.57	22.41	23.98
5670MHz	Pass	3.56	17.80	17.83	20.83	23.98
5710MHz Straddle 5.47-5.725GHz	Pass	3.56	20.52	20.82	23.68	23.98
5710MHz Straddle 5.725-5.85GHz	Pass	3.85	10.57	10.82	13.71	30.00
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5290MHz	Pass	3.85	16.83	17.04	19.95	23.98
5530MHz	Pass	3.56	16.86	17.07	19.98	23.98
5610MHz	Pass	3.56	17.09	17.62	20.37	23.98
5690MHz Straddle 5.47-5.725GHz	Pass	3.56	19.20	19.19	22.21	23.98
5690MHz Straddle 5.725-5.85GHz	Pass	3.85	4.86	5.21	8.05	30.00
5775MHz	Pass	3.85	16.79	17.00	19.91	30.00
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5260MHz	Pass	6.52	19.81	20.21	23.02	23.46
5300MHz	Pass	6.52	19.96	20.15	23.07	23.46
5320MHz	Pass	6.52	18.17	18.39	21.29	23.46
5500MHz	Pass	6.20	18.51	18.55	21.54	23.78
5580MHz	Pass	6.20	20.41	20.63	23.53	23.78
5700MHz	Pass	6.20	18.12	18.23	21.19	23.78
5720MHz Straddle 5.47-5.725GHz	Pass	6.20	18.98	19.25	22.13	23.78
5720MHz Straddle 5.725-5.85GHz	Pass	6.80	13.74	13.66	16.71	29.20
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5270MHz	Pass	6.52	19.00	19.29	22.16	23.46
5310MHz	Pass	6.52	17.74	18.04	20.90	23.46
5510MHz	Pass	6.20	17.73	17.90	20.83	23.78
5550MHz	Pass	6.20	19.23	19.57	22.41	23.78
5670MHz	Pass	6.20	17.80	17.83	20.83	23.78
5710MHz Straddle 5.47-5.725GHz	Pass	6.20	20.52	20.82	23.68	23.78
5710MHz Straddle 5.725-5.85GHz	Pass	6.80	10.57	10.82	13.71	29.20
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5290MHz	Pass	6.52	16.83	17.04	19.95	23.46
5530MHz	Pass	6.20	16.86	17.07	19.98	23.78
5610MHz	Pass	6.20	17.09	17.62	20.37	23.78
5690MHz Straddle 5.47-5.725GHz	Pass	6.20	19.20	19.19	22.21	23.78



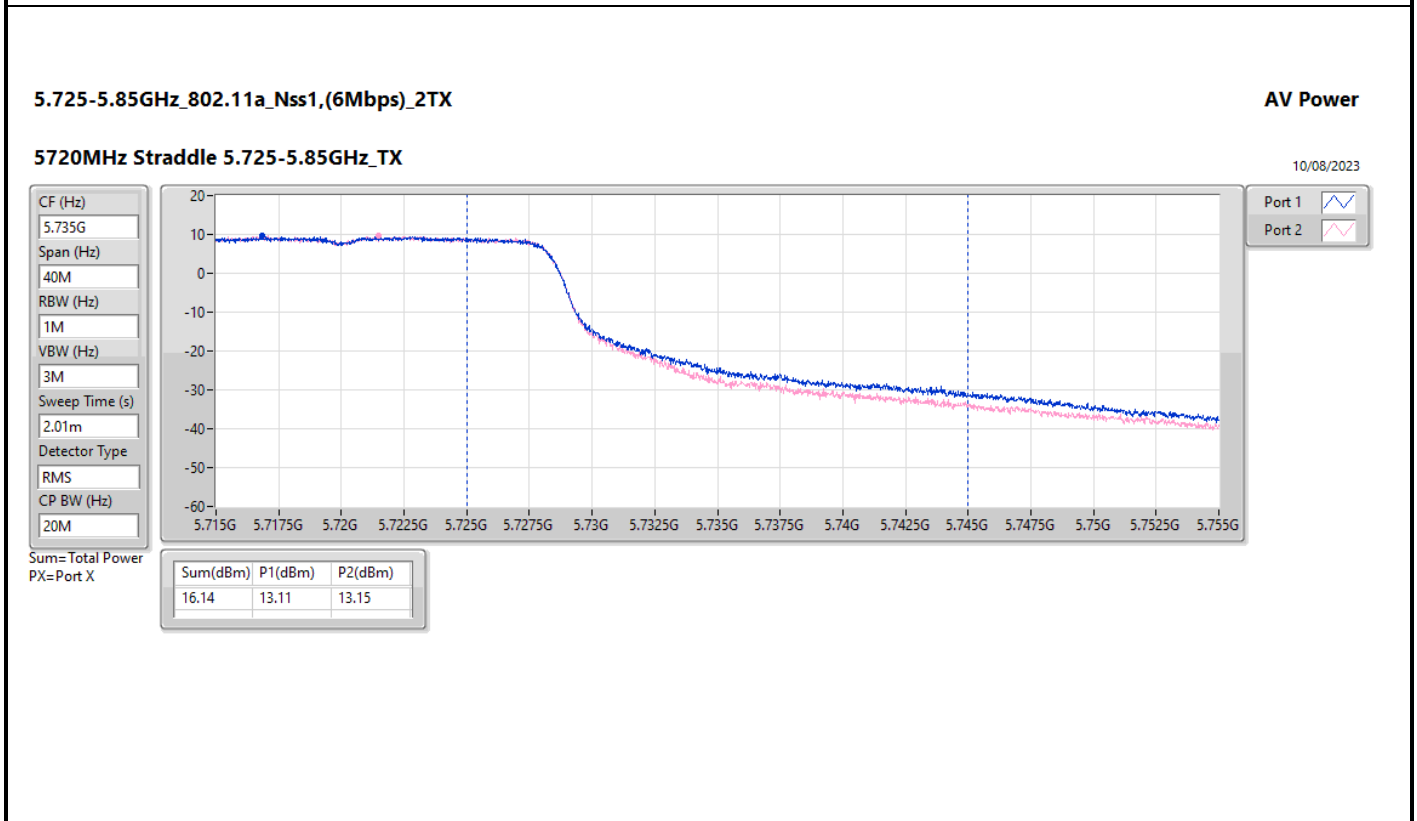
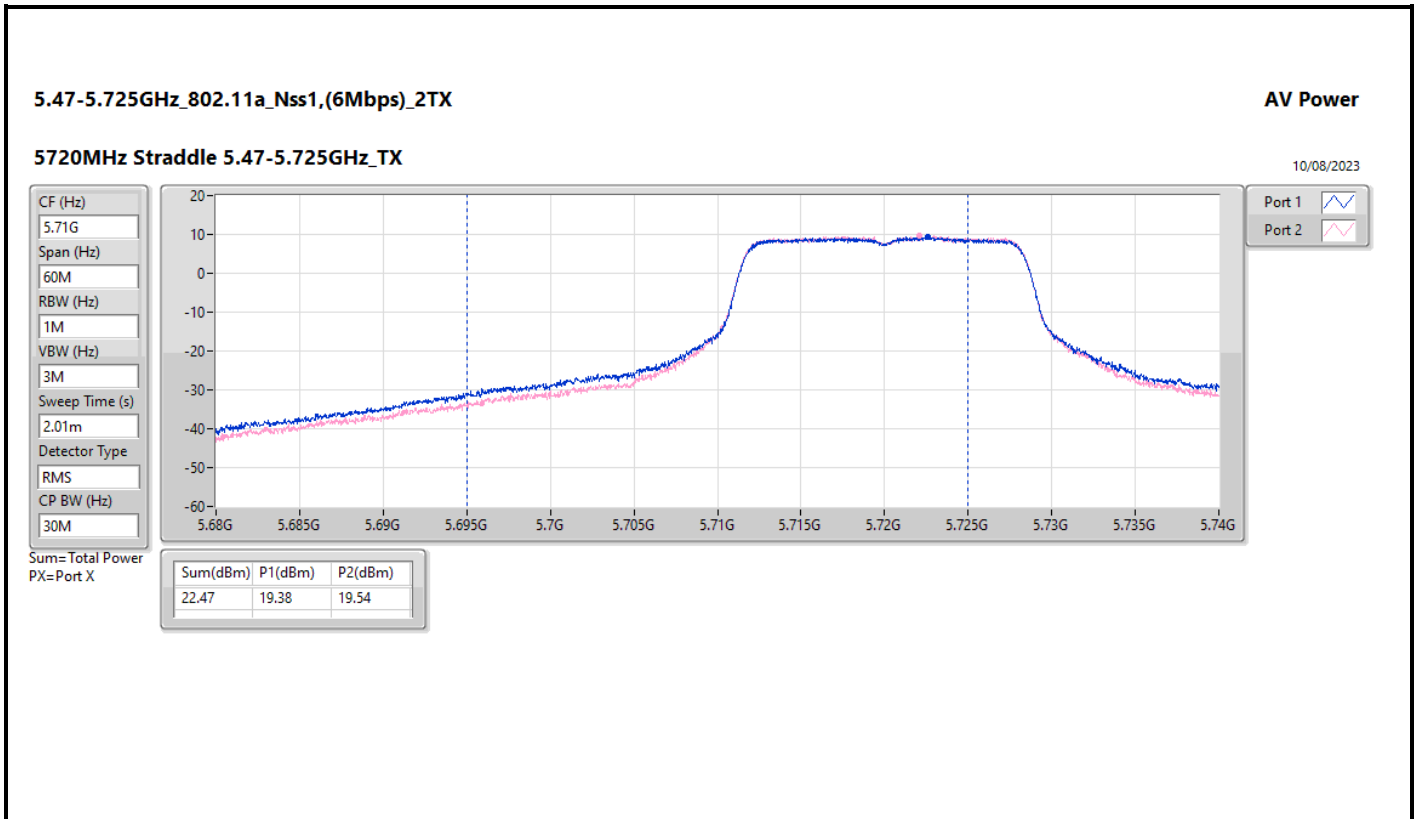


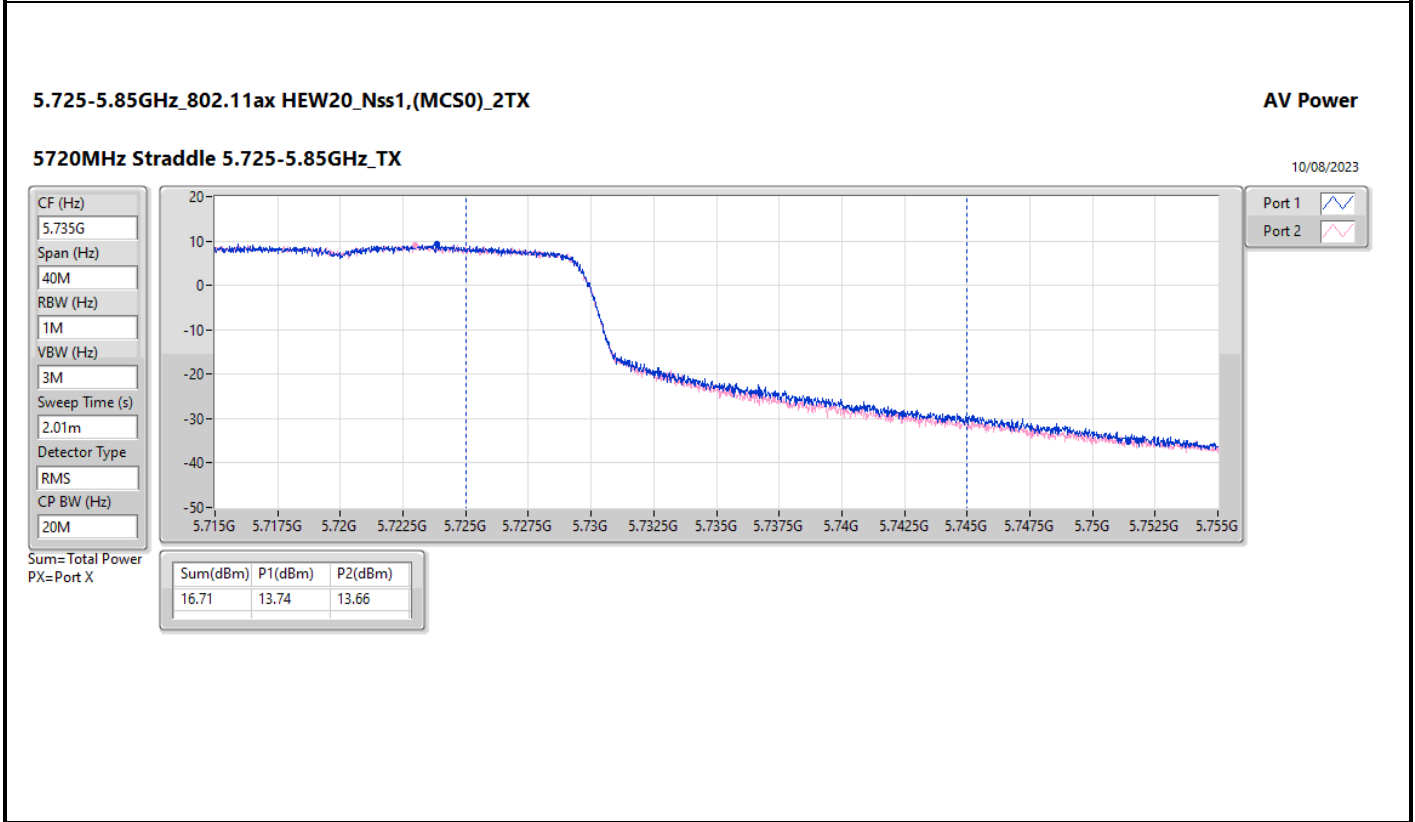
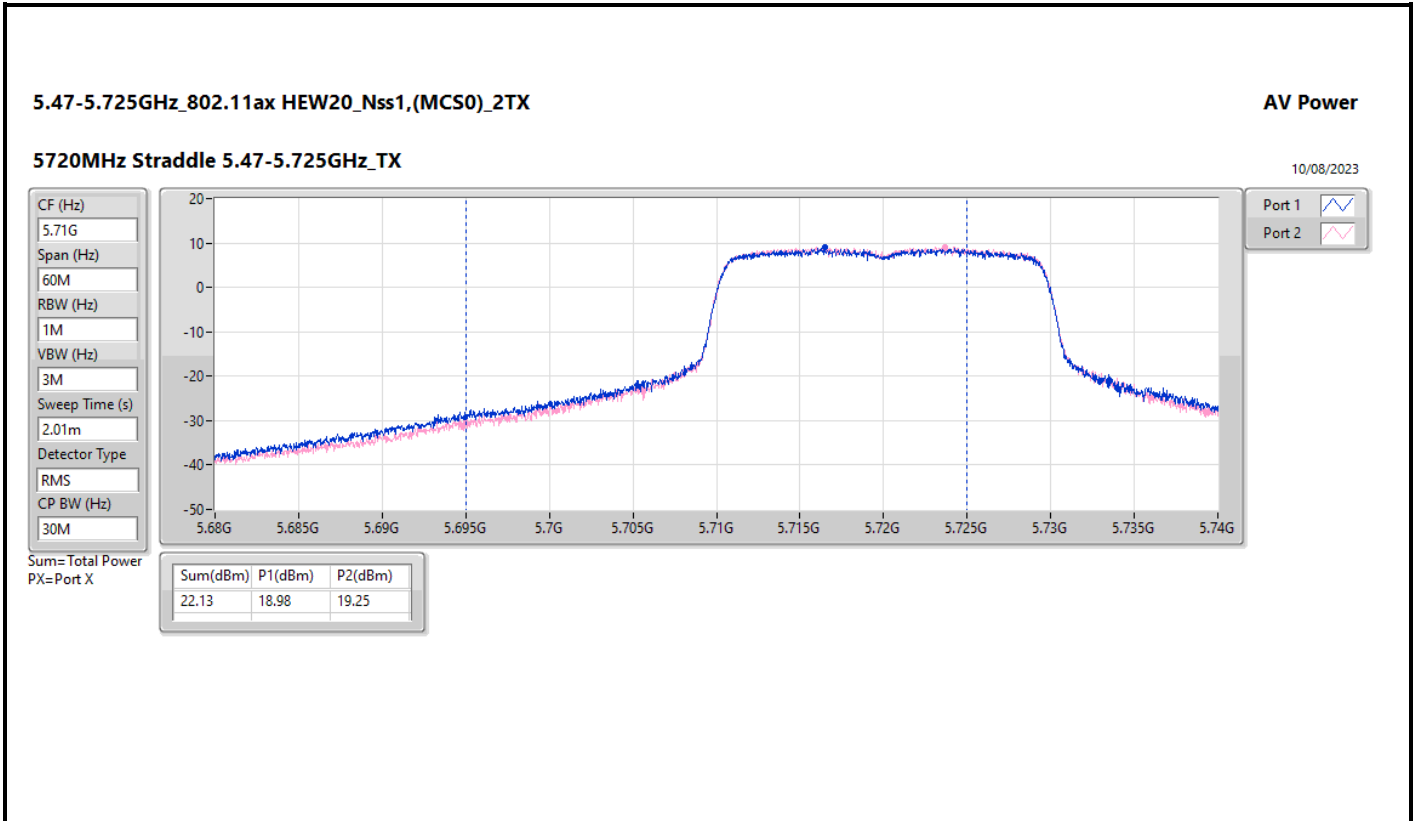
## Average Power\_Radio 2\_Antenna set 1

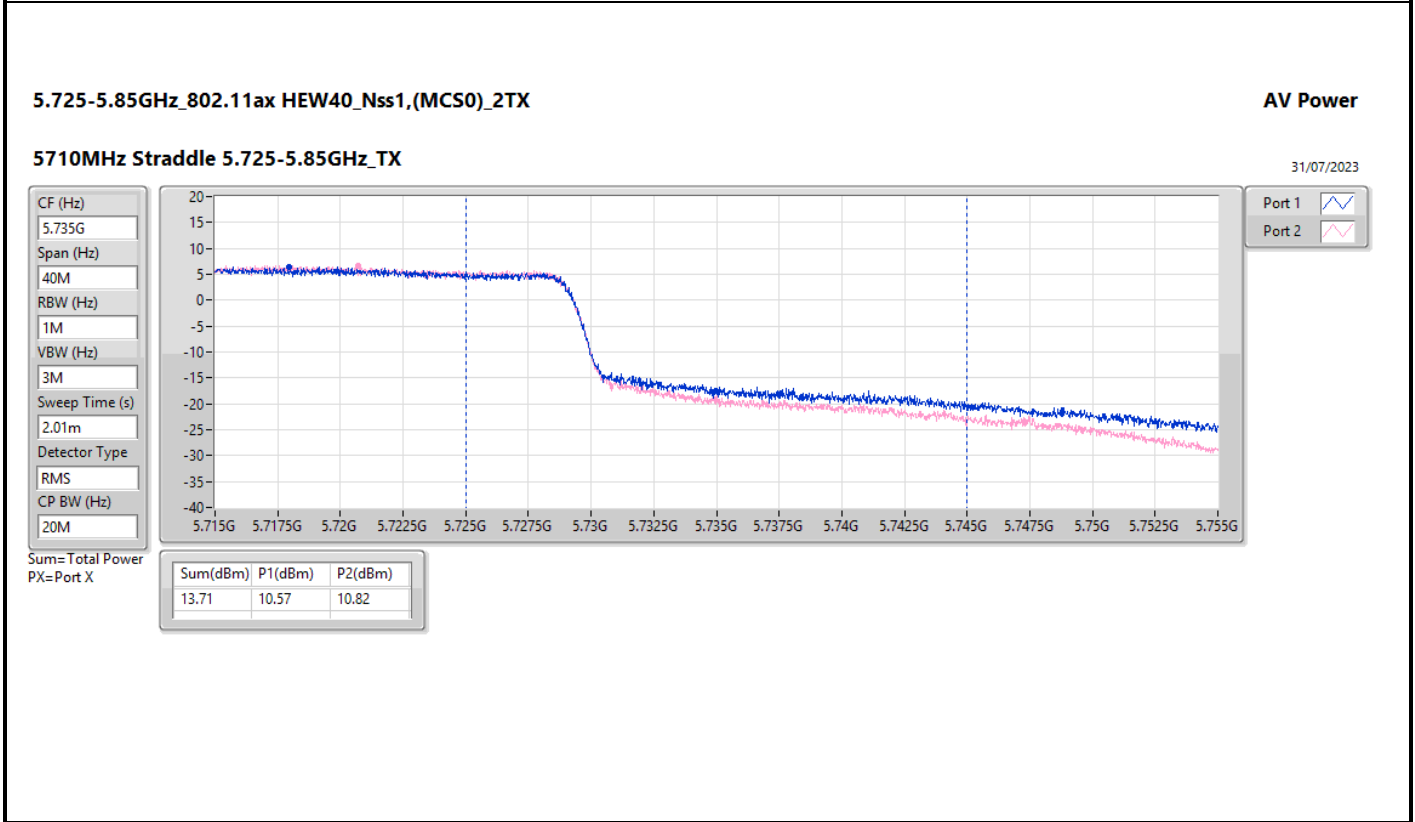
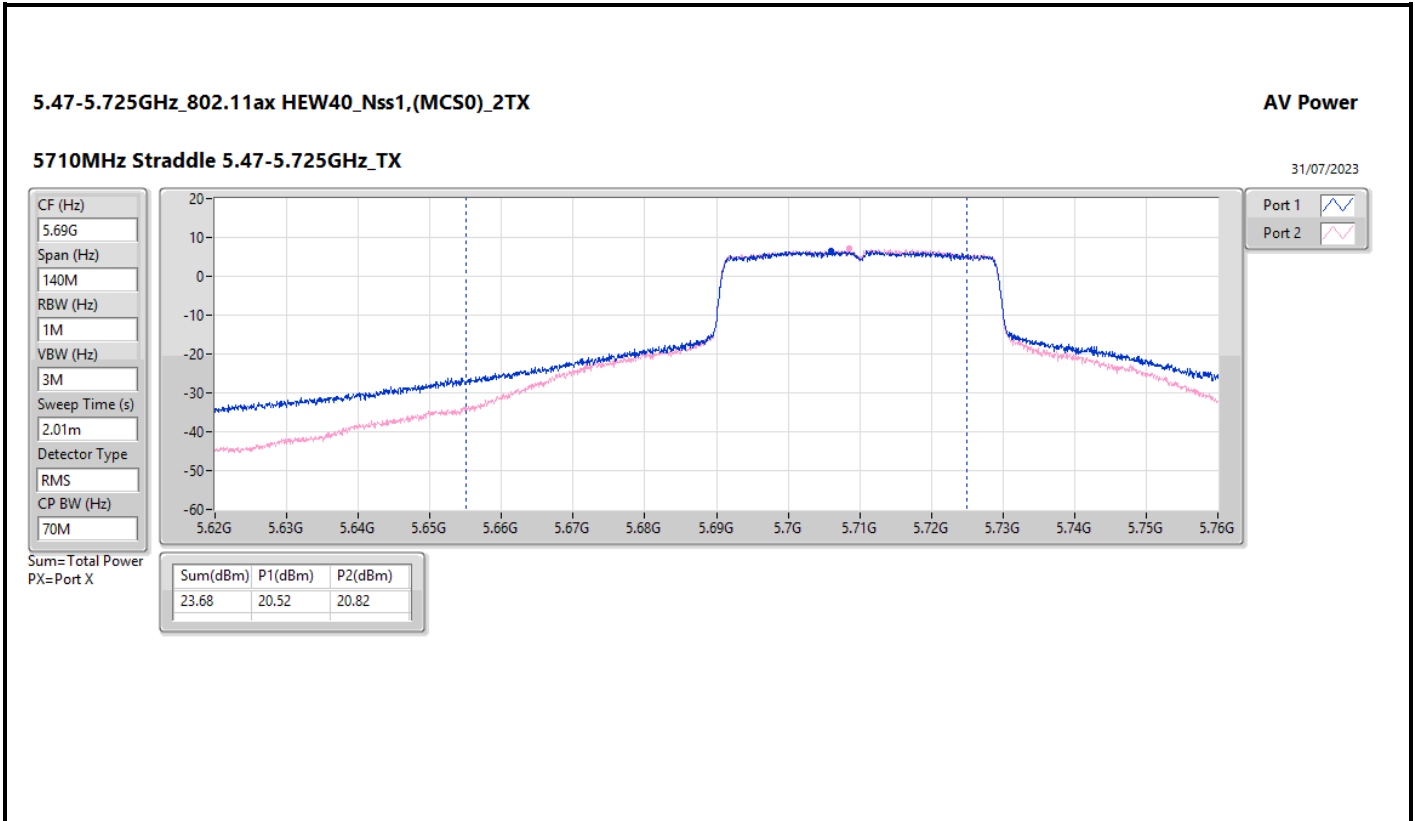
## Appendix B.1

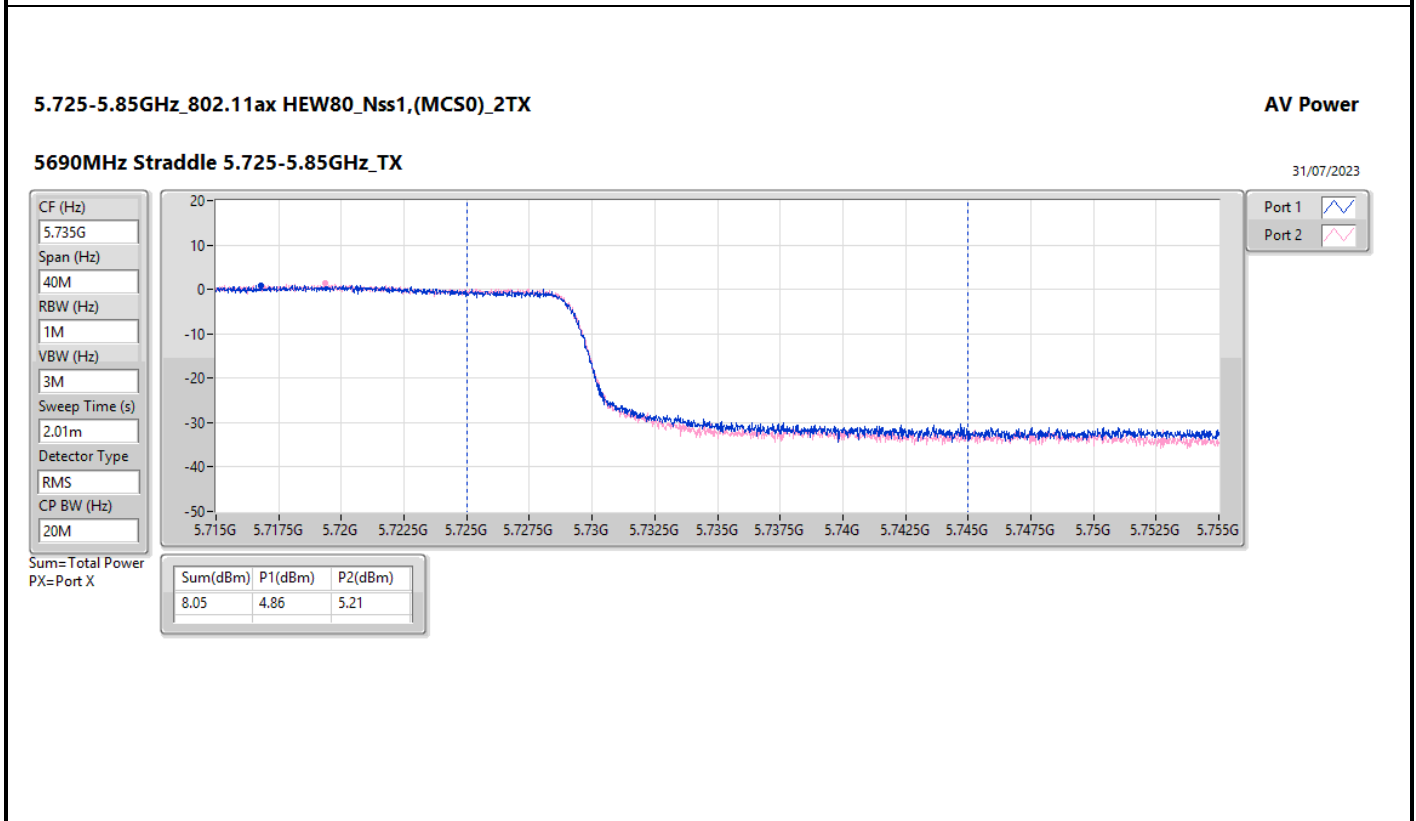
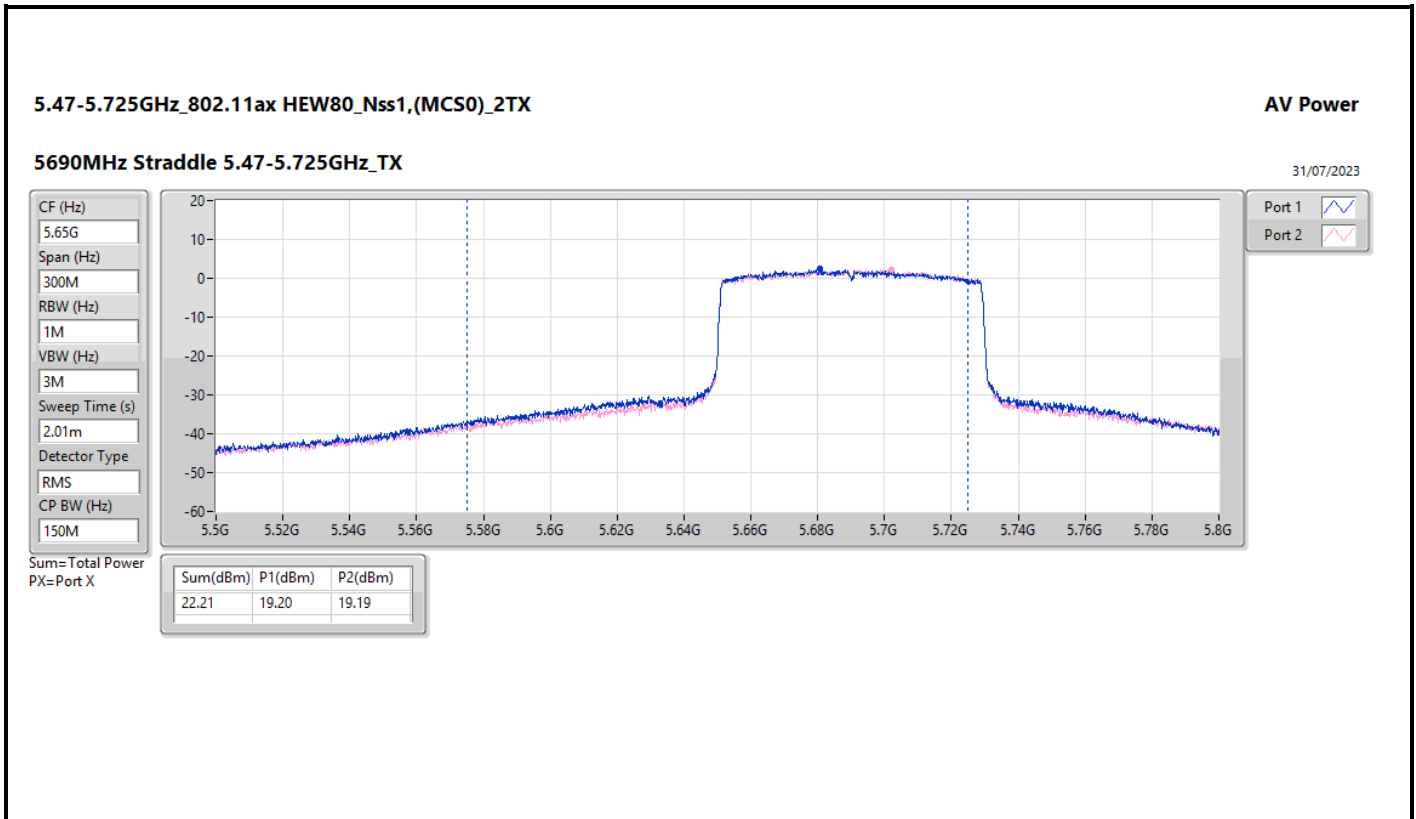
Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
5690MHz Straddle 5.725-5.85GHz	Pass	6.80	4.86	5.21	8.05	29.20
5775MHz	Pass	6.80	16.79	17.00	19.91	29.20

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











Summary

Mode	Total Power (dBm)	Total Power (W)
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	16.36	0.04325
802.11ax HEW20_Nss1,(MCS0)_2TX	16.45	0.04416
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	16.45	0.04416
802.11ax HEW40_Nss1,(MCS0)_2TX	16.49	0.04457
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	16.49	0.04457
802.11ax HEW80_Nss1,(MCS0)_2TX	16.35	0.04315
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	16.35	0.04315
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	16.41	0.04375
802.11ax HEW20_Nss1,(MCS0)_2TX	16.33	0.04295
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	16.33	0.04295
802.11ax HEW40_Nss1,(MCS0)_2TX	16.65	0.04624
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	16.65	0.04624
802.11ax HEW80_Nss1,(MCS0)_2TX	16.59	0.04560
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	16.59	0.04560
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	8.71	0.00743
802.11ax HEW20_Nss1,(MCS0)_2TX	9.70	0.00933
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	9.70	0.00933
802.11ax HEW40_Nss1,(MCS0)_2TX	6.45	0.00442
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	6.45	0.00442
802.11ax HEW80_Nss1,(MCS0)_2TX	19.01	0.07962
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	19.01	0.07962



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5260MHz	Pass	13.48	13.24	13.45	16.36	16.50
5300MHz	Pass	13.48	13.14	13.03	16.10	16.39
5320MHz	Pass	13.48	13.02	13.00	16.02	16.33
5500MHz	Pass	13.31	12.98	13.17	16.09	16.38
5580MHz	Pass	13.31	13.12	13.21	16.18	16.55
5700MHz	Pass	13.31	13.48	13.32	16.41	16.55
5720MHz Straddle 5.47-5.725GHz	Pass	13.31	11.98	11.94	14.97	15.31
5720MHz Straddle 5.725-5.85GHz	Pass	13.42	5.82	5.58	8.71	22.58
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5260MHz	Pass	13.48	13.19	13.67	16.45	16.50
5300MHz	Pass	13.48	13.07	13.13	16.11	16.50
5320MHz	Pass	13.48	13.00	13.15	16.09	16.50
5500MHz	Pass	13.31	12.97	13.37	16.18	16.67
5580MHz	Pass	13.31	13.17	13.31	16.25	16.67
5700MHz	Pass	13.31	13.27	13.37	16.33	16.67
5720MHz Straddle 5.47-5.725GHz	Pass	13.31	12.23	12.25	15.25	15.56
5720MHz Straddle 5.725-5.85GHz	Pass	13.42	6.71	6.67	9.70	22.58
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5270MHz	Pass	13.48	13.37	13.58	16.49	16.50
5310MHz	Pass	13.48	13.26	13.20	16.24	16.50
5510MHz	Pass	13.31	13.16	13.27	16.23	16.67
5550MHz	Pass	13.31	13.40	13.71	16.57	16.67
5670MHz	Pass	13.31	13.60	13.68	16.65	16.67
5710MHz Straddle 5.47-5.725GHz	Pass	13.31	13.44	13.53	16.50	16.67
5710MHz Straddle 5.725-5.85GHz	Pass	13.42	3.59	3.29	6.45	22.58
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5290MHz	Pass	13.48	13.37	13.31	16.35	16.50
5530MHz	Pass	13.31	13.33	13.50	16.43	16.67
5610MHz	Pass	13.31	13.28	13.27	16.29	16.67
5690MHz Straddle 5.47-5.725GHz	Pass	13.31	13.87	13.27	16.59	16.67
5690MHz Straddle 5.725-5.85GHz	Pass	13.42	-0.47	-0.34	2.61	22.58
5775MHz	Pass	13.42	15.83	16.16	19.01	22.58
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5260MHz	Pass	13.48	13.19	13.67	16.45	16.50
5300MHz	Pass	13.48	13.07	13.13	16.11	16.50
5320MHz	Pass	13.48	13.00	13.15	16.09	16.50
5500MHz	Pass	13.31	12.97	13.37	16.18	16.67
5580MHz	Pass	13.31	13.17	13.31	16.25	16.67
5700MHz	Pass	13.31	13.27	13.37	16.33	16.67
5720MHz Straddle 5.47-5.725GHz	Pass	13.31	12.23	12.25	15.25	16.67
5720MHz Straddle 5.725-5.85GHz	Pass	13.42	6.71	6.67	9.70	22.58
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5270MHz	Pass	13.48	13.37	13.58	16.49	16.50
5310MHz	Pass	13.48	13.26	13.20	16.24	16.50
5510MHz	Pass	13.31	13.16	13.27	16.23	16.67
5550MHz	Pass	13.31	13.40	13.71	16.57	16.67
5670MHz	Pass	13.31	13.60	13.68	16.65	16.67
5710MHz Straddle 5.47-5.725GHz	Pass	13.31	13.44	13.53	16.50	16.67
5710MHz Straddle 5.725-5.85GHz	Pass	13.42	3.59	3.29	6.45	22.58
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5290MHz	Pass	13.48	13.37	13.31	16.35	16.50
5530MHz	Pass	13.31	13.33	13.50	16.43	16.67
5610MHz	Pass	13.31	13.28	13.27	16.29	16.67
5690MHz Straddle 5.47-5.725GHz	Pass	13.31	13.87	13.27	16.59	16.67



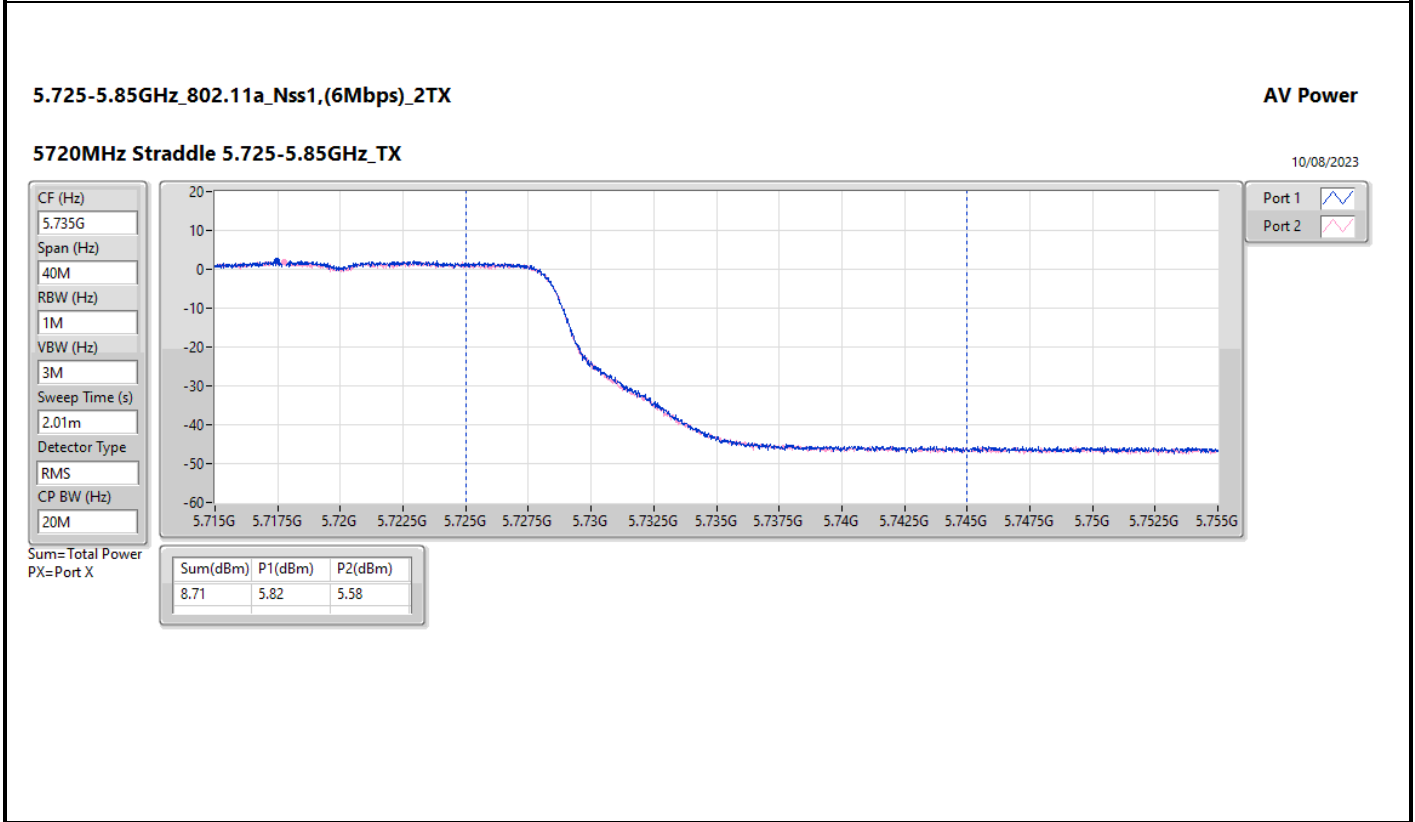
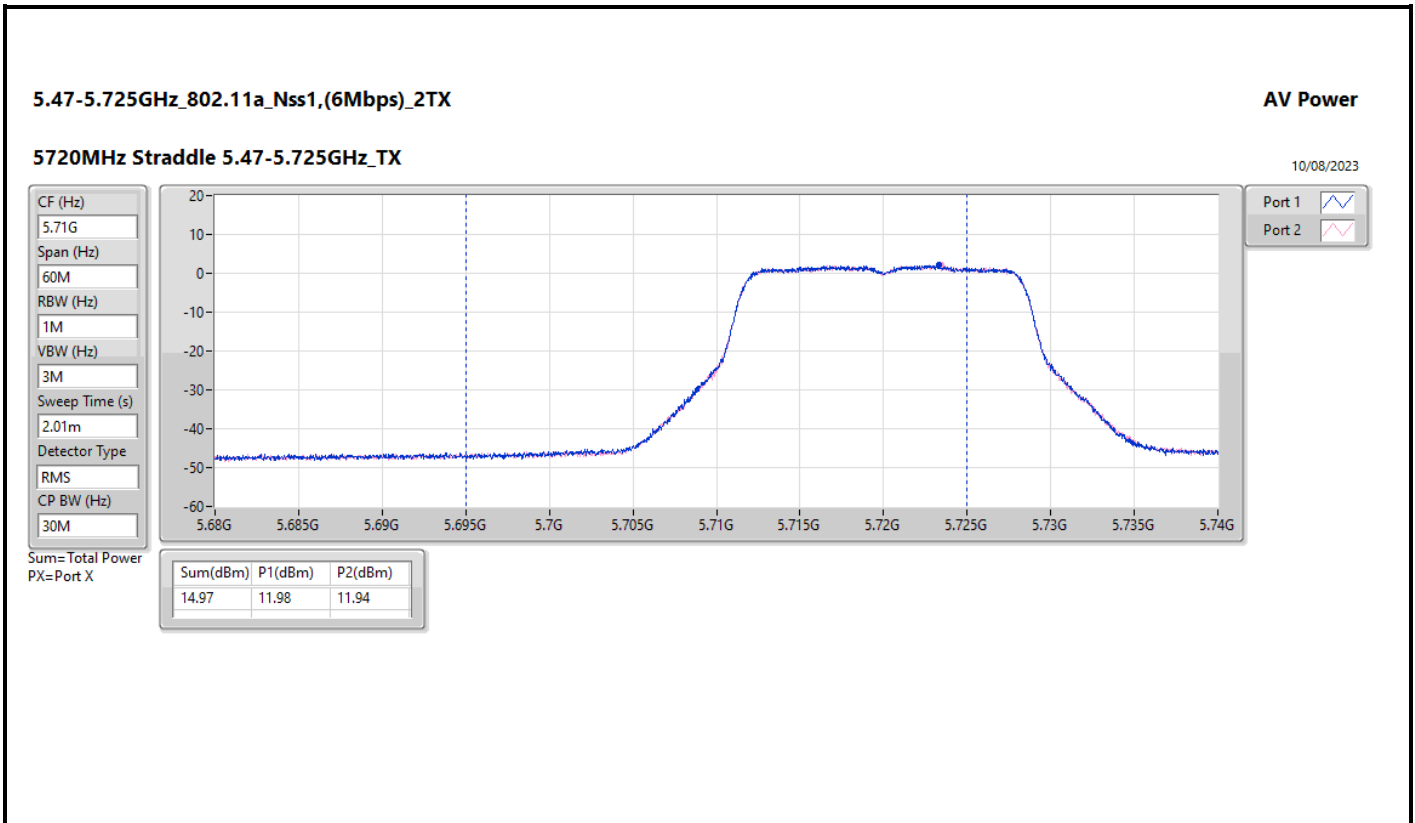
## Average Power\_Radio 2\_Antenna set 2

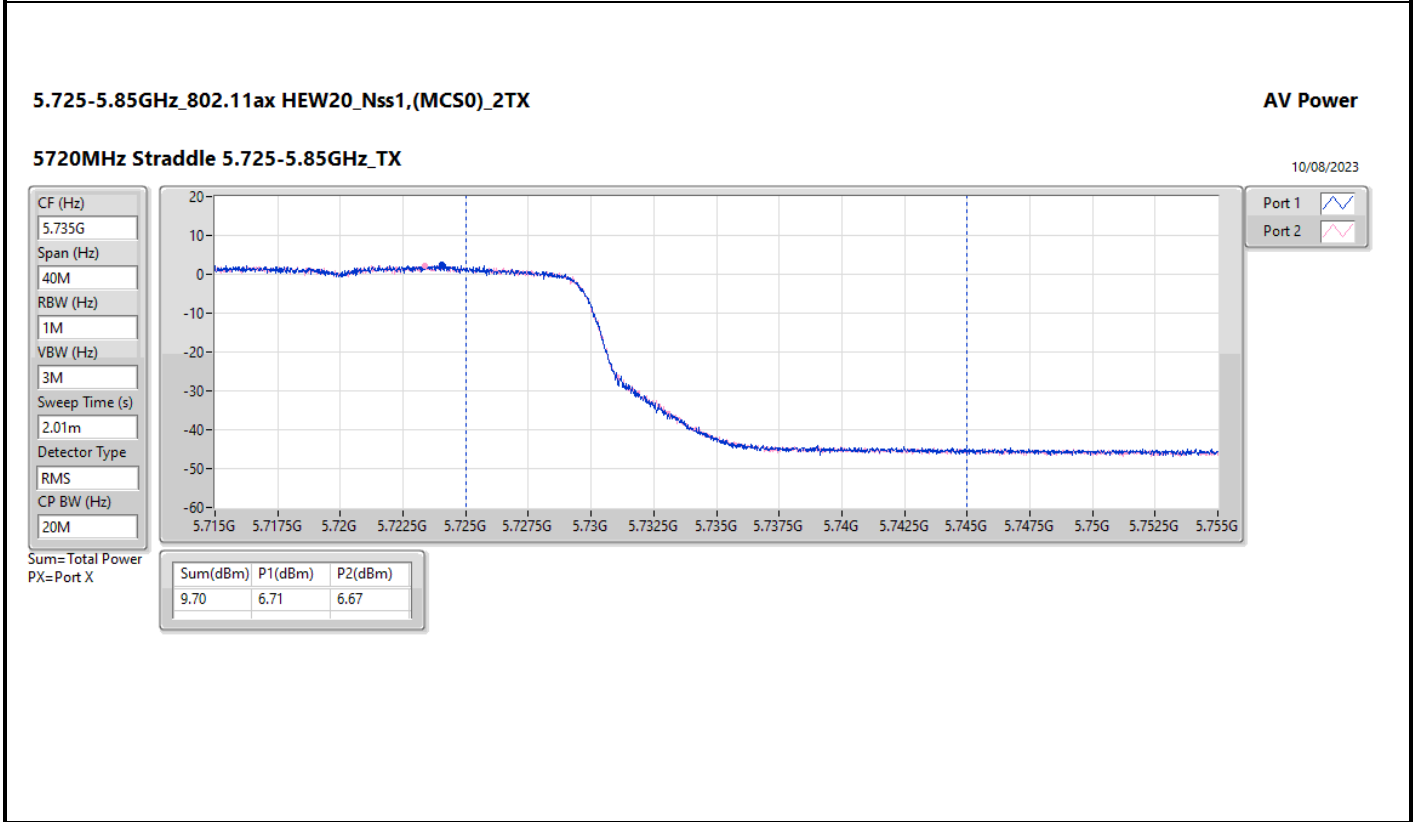
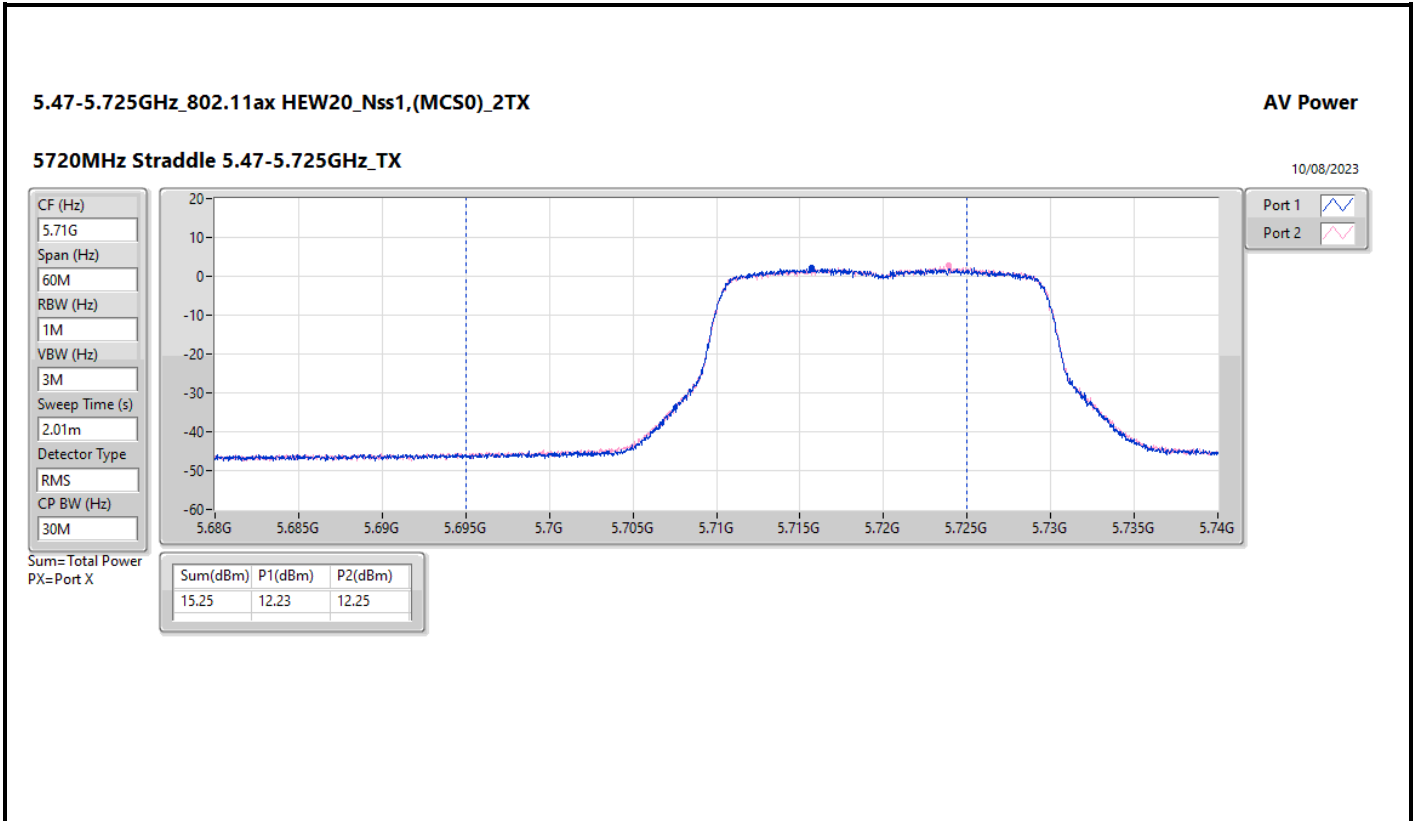
## Appendix B.2

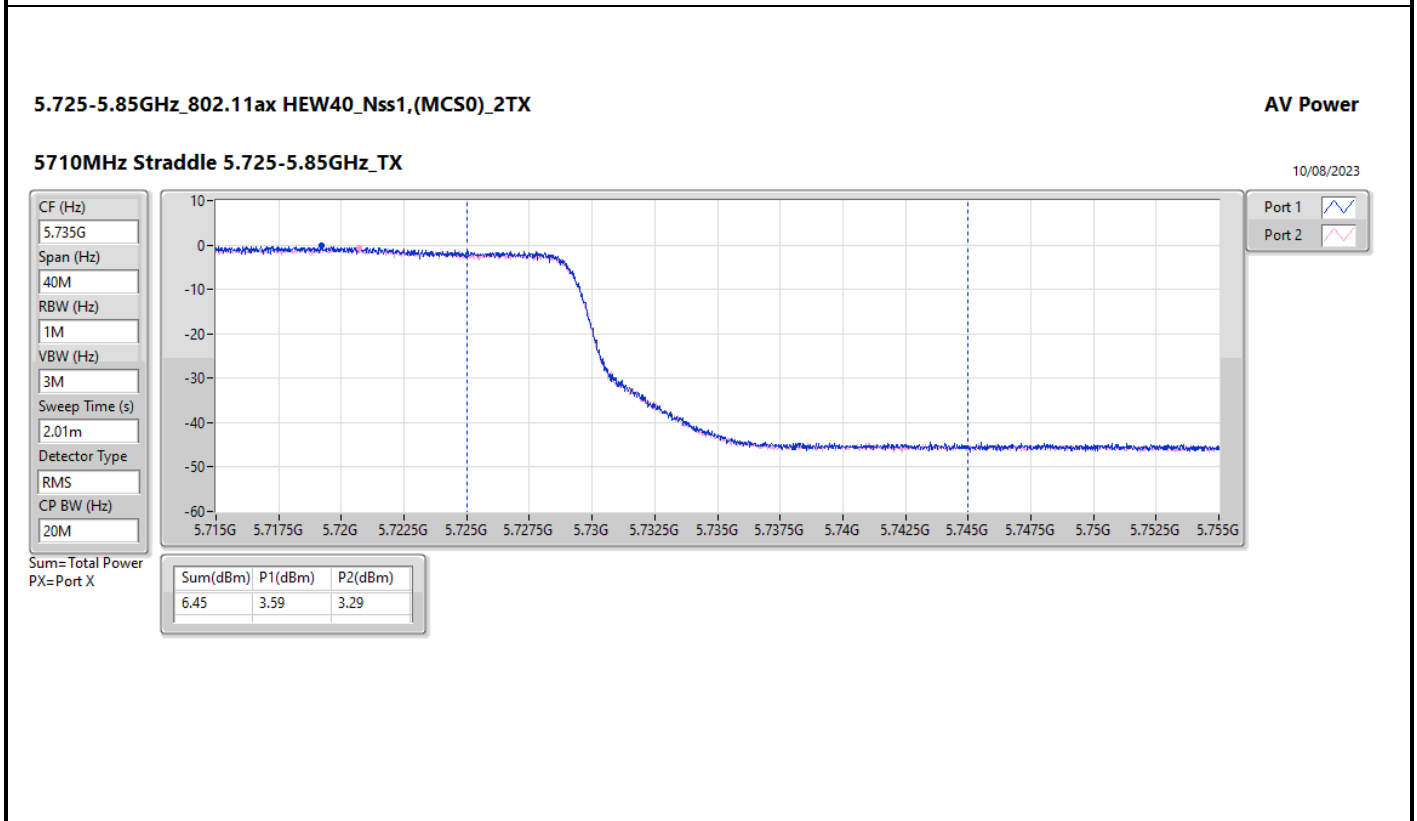
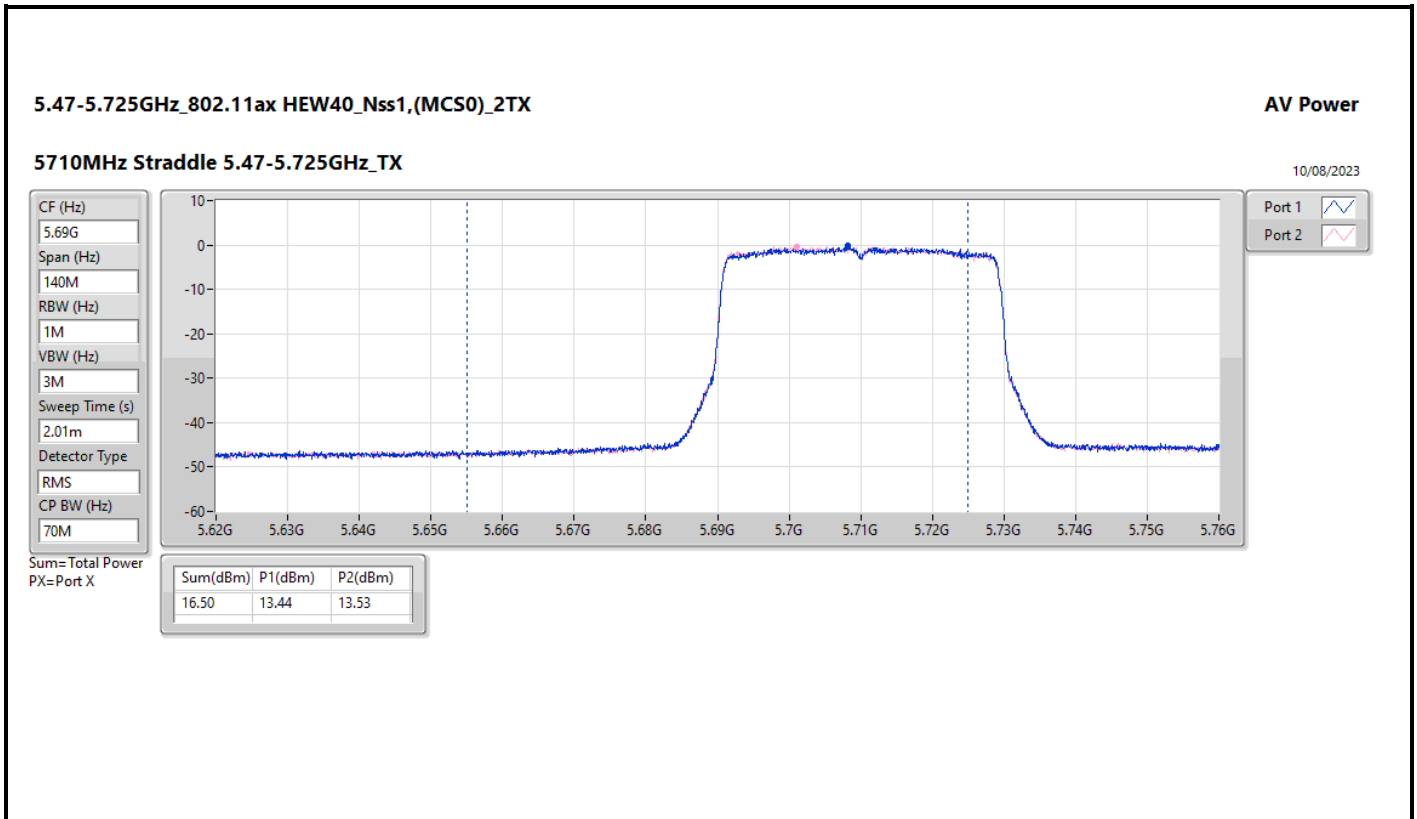
Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
5690MHz Straddle 5.725-5.85GHz	Pass	13.42	-0.47	-0.34	2.61	22.58
5775MHz	Pass	13.42	15.83	16.16	19.01	22.58

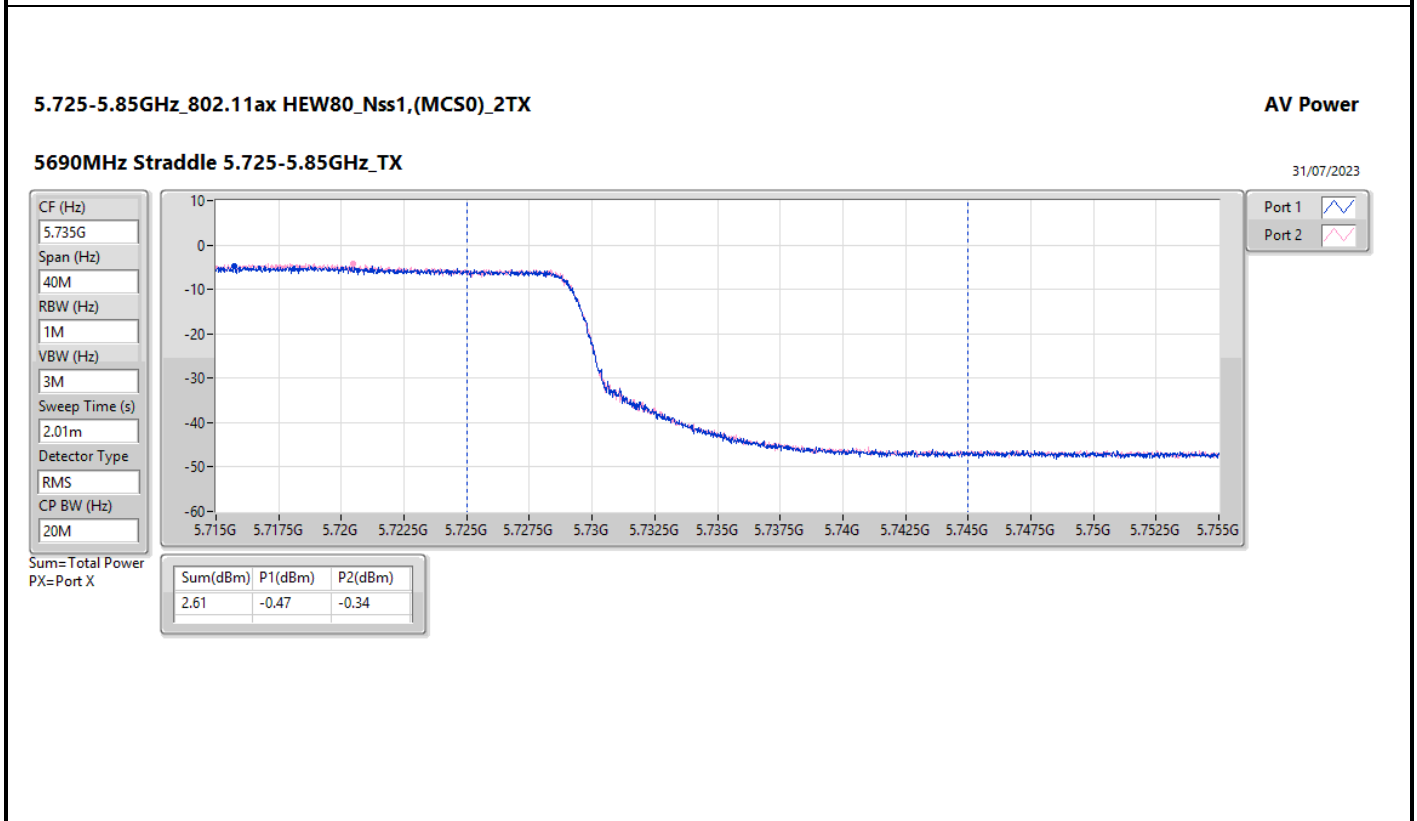
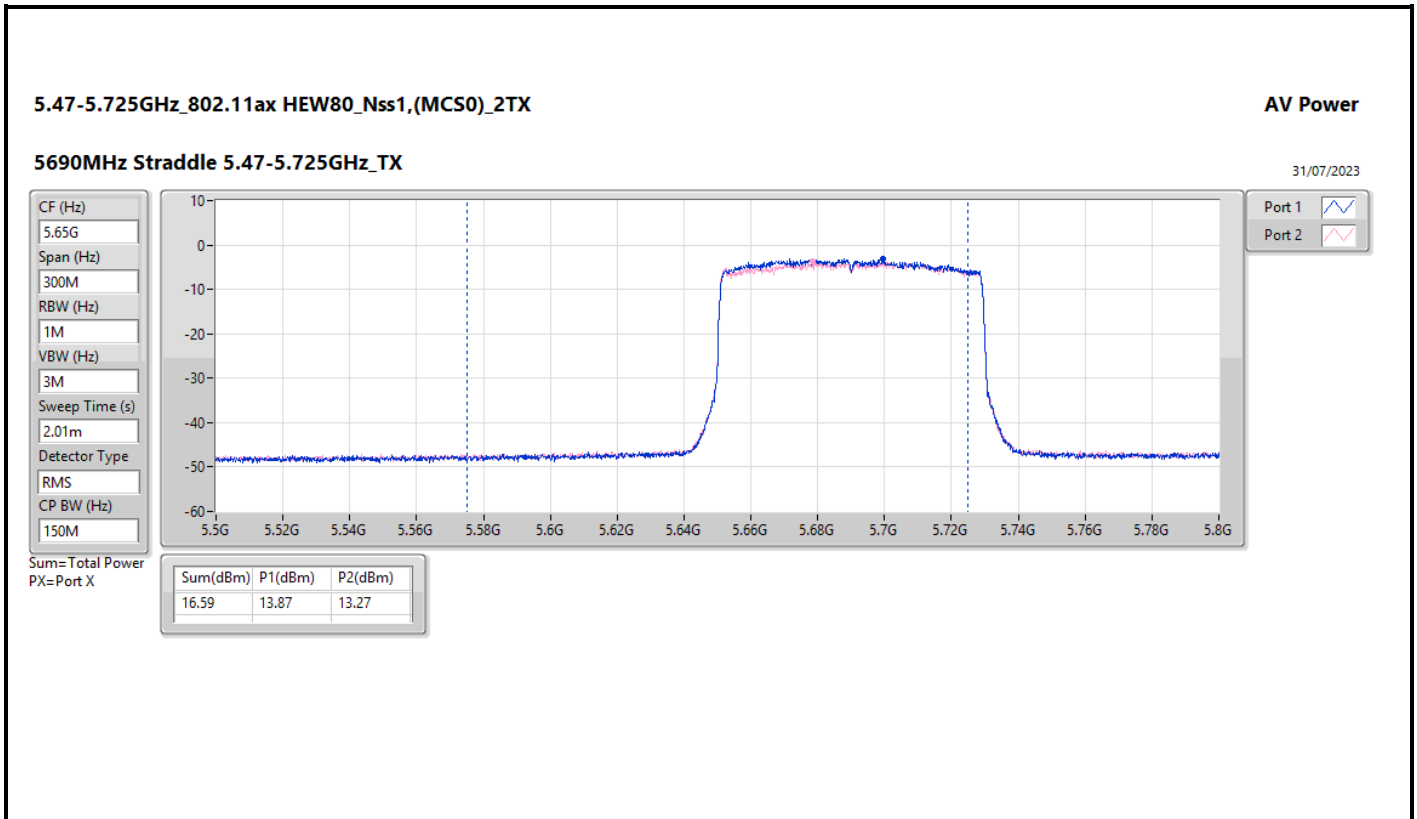
DG = Directional Gain; Port X = Port X output power













Summary

Mode	PD (dBm/RBW)
5.25-5.35GHz	-
802.11a_Nss1,(6Mbps)_2TX	10.44
802.11ax HEW20_Nss1,(MCS0)_2TX	10.30
802.11ax HEW40_Nss1,(MCS0)_2TX	5.96
802.11ax HEW80_Nss1,(MCS0)_2TX	0.89
5.47-5.725GHz	-
802.11a_Nss1,(6Mbps)_2TX	10.70
802.11ax HEW20_Nss1,(MCS0)_2TX	10.61
802.11ax HEW40_Nss1,(MCS0)_2TX	8.57
802.11ax HEW80_Nss1,(MCS0)_2TX	3.02
5.725-5.85GHz	-
802.11a_Nss1,(6Mbps)_2TX	8.74
802.11ax HEW20_Nss1,(MCS0)_2TX	8.14
802.11ax HEW40_Nss1,(MCS0)_2TX	5.04
802.11ax HEW80_Nss1,(MCS0)_2TX	-0.38

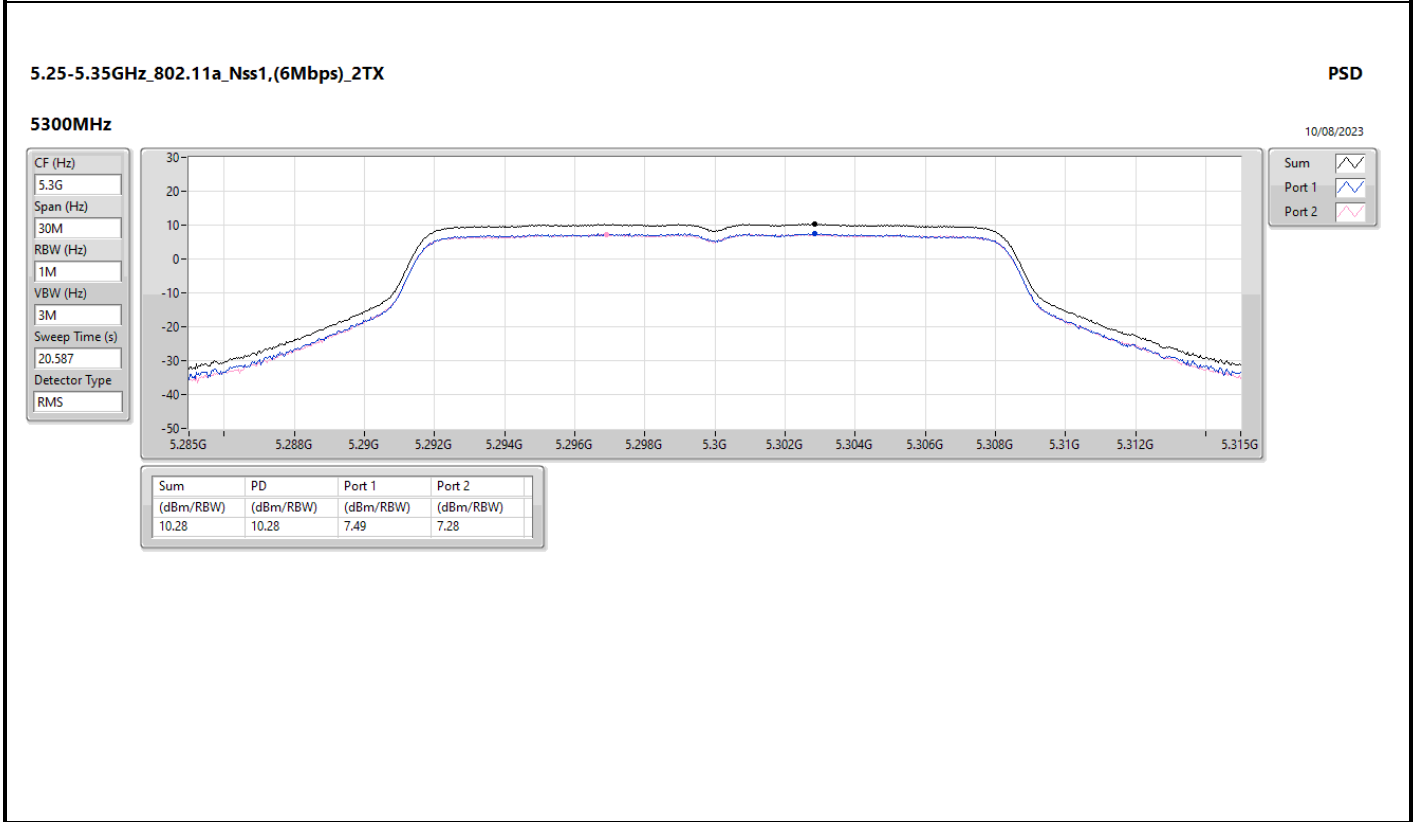
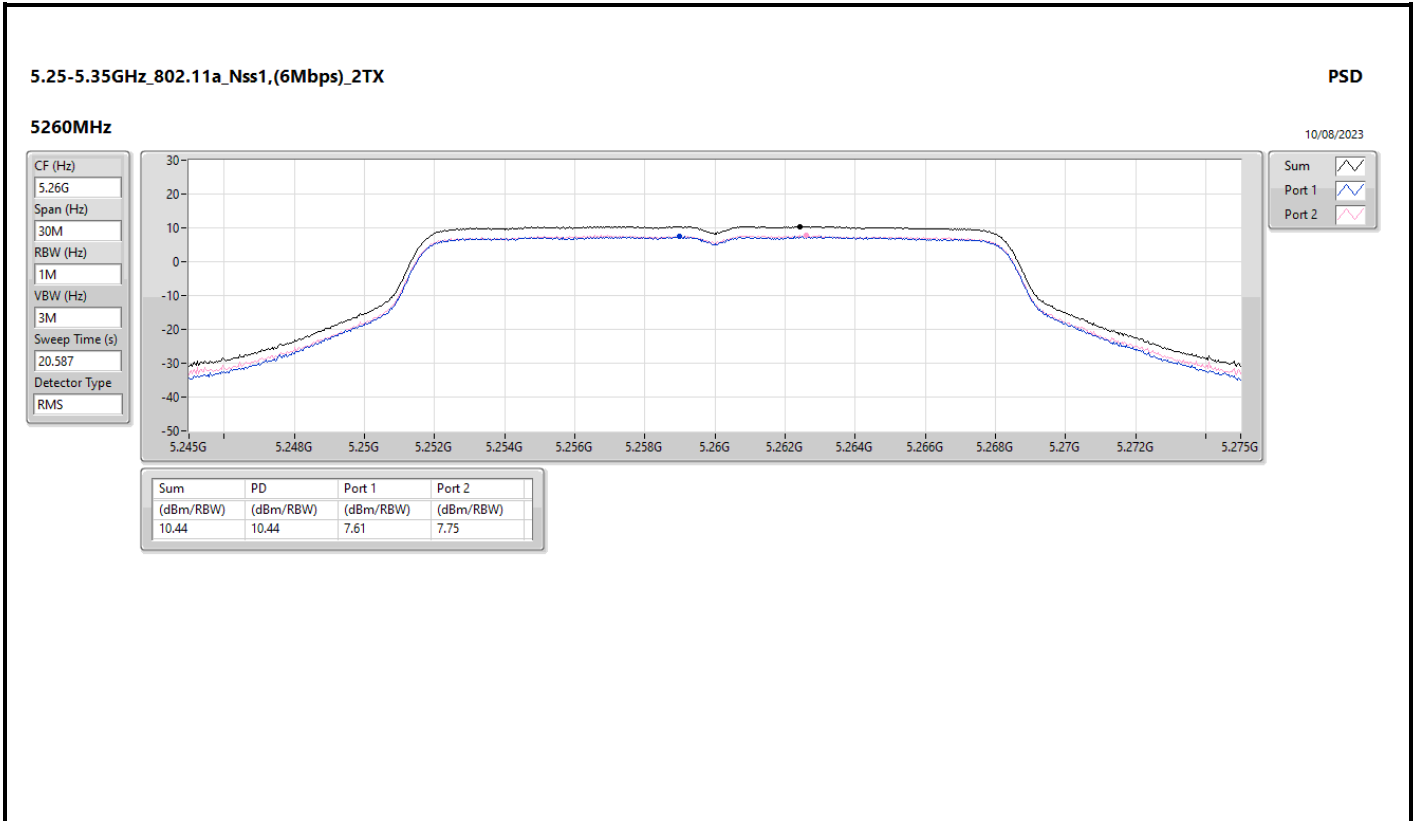
RBW = 500kHz for 5.725-5.85GHz band / 1MHz for other band;

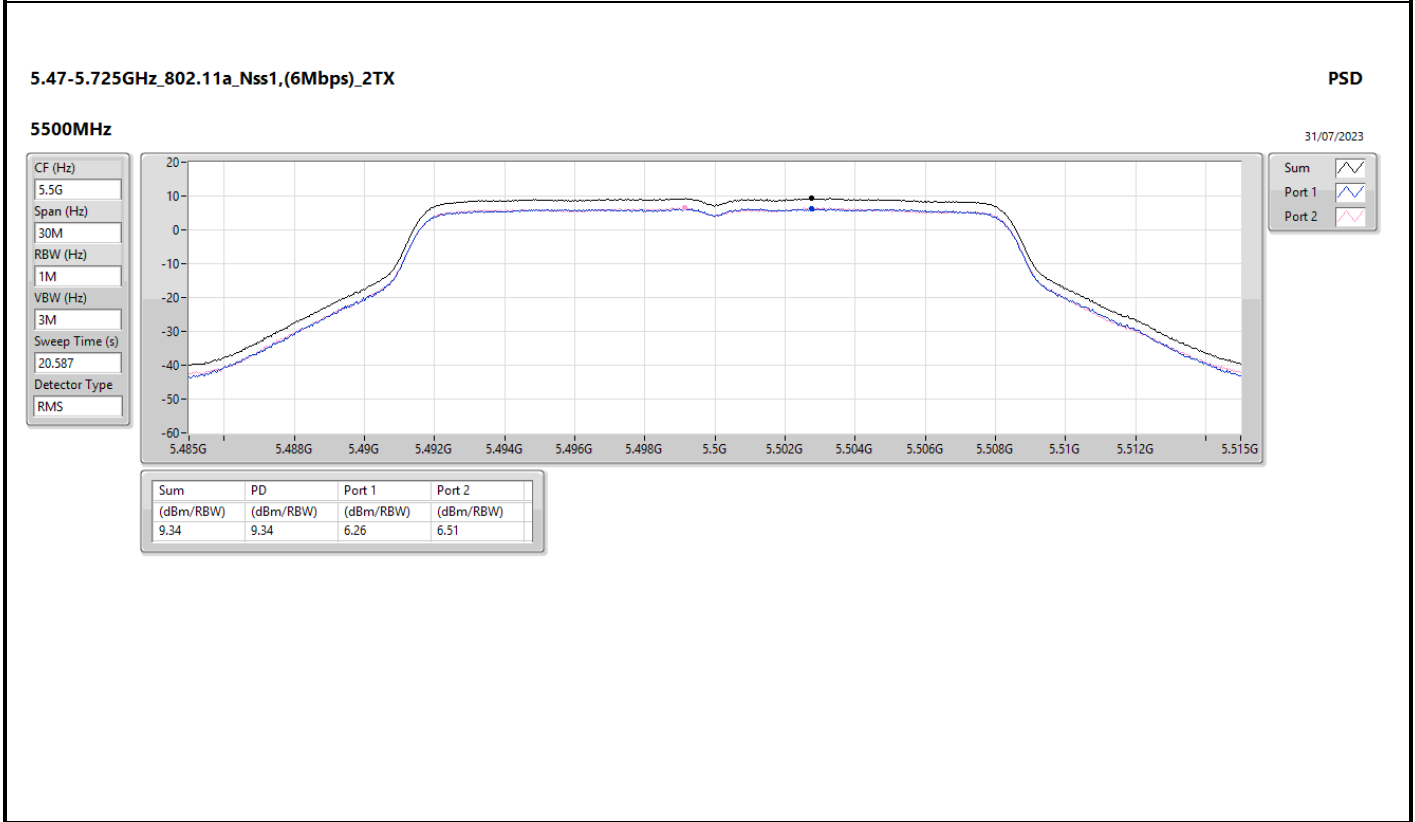
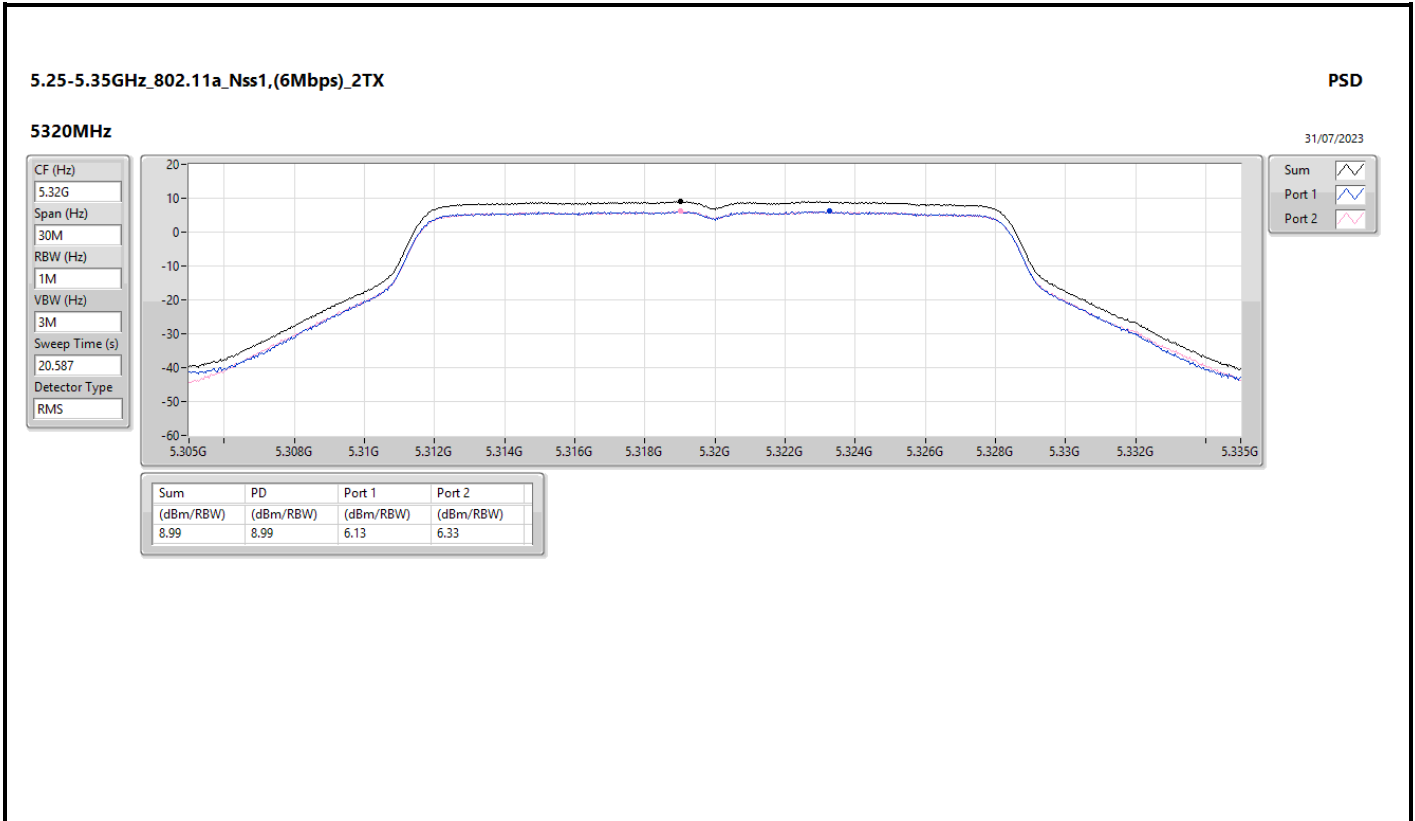


Result

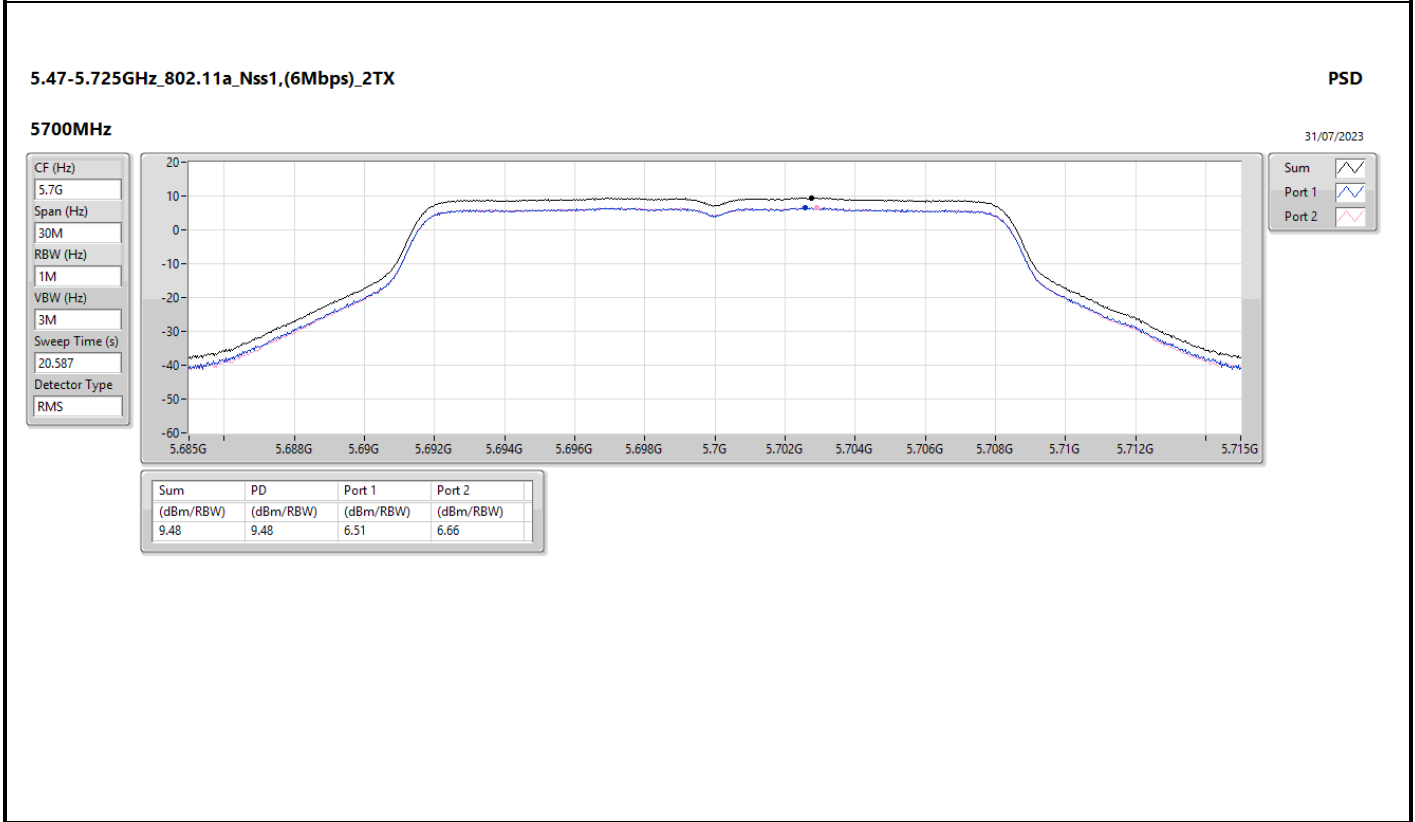
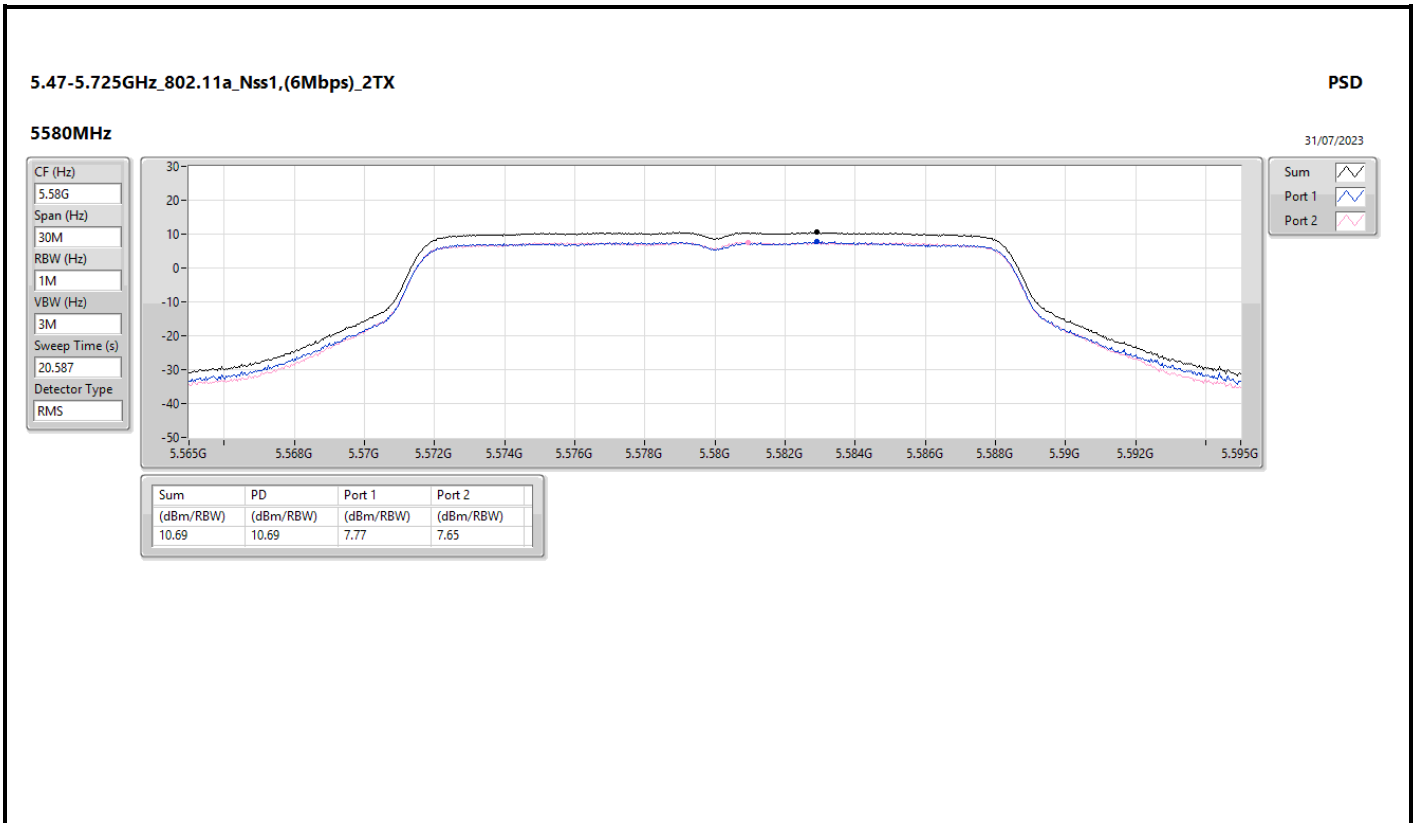
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5260MHz	Pass	6.52	7.61	7.75	10.44	10.48
5300MHz	Pass	6.52	7.49	7.28	10.28	10.48
5320MHz	Pass	6.52	6.13	6.33	8.99	10.48
5500MHz	Pass	6.20	6.26	6.51	9.34	10.80
5580MHz	Pass	6.20	7.77	7.65	10.69	10.80
5700MHz	Pass	6.20	6.51	6.66	9.48	10.80
5720MHz Straddle 5.47-5.725GHz	Pass	6.20	7.66	7.89	10.70	10.80
5720MHz Straddle 5.725-5.85GHz	Pass	6.80	5.80	5.77	8.74	29.20
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5260MHz	Pass	6.52	7.14	7.61	10.30	10.48
5300MHz	Pass	6.52	7.05	7.44	10.17	10.48
5320MHz	Pass	6.52	4.87	4.97	7.86	10.48
5500MHz	Pass	6.20	5.21	5.44	8.23	10.80
5580MHz	Pass	6.20	7.45	7.81	10.44	10.80
5700MHz	Pass	6.20	4.88	5.04	7.84	10.80
5720MHz Straddle 5.47-5.725GHz	Pass	6.20	7.34	7.86	10.61	10.80
5720MHz Straddle 5.725-5.85GHz	Pass	6.80	5.08	5.27	8.14	29.20
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5270MHz	Pass	6.52	2.76	3.29	5.96	10.48
5310MHz	Pass	6.52	1.44	1.76	4.55	10.48
5510MHz	Pass	6.20	1.83	2.02	4.72	10.80
5550MHz	Pass	6.20	3.29	3.70	6.29	10.80
5670MHz	Pass	6.20	2.31	1.94	5.14	10.80
5710MHz Straddle 5.47-5.725GHz	Pass	6.20	5.31	5.83	8.57	10.80
5710MHz Straddle 5.725-5.85GHz	Pass	6.80	2.45	2.46	5.04	29.20
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5290MHz	Pass	6.52	-2.33	-1.88	0.89	10.48
5530MHz	Pass	6.20	-2.36	-1.77	0.77	10.80
5610MHz	Pass	6.20	-1.62	-1.30	1.29	10.80
5690MHz Straddle 5.47-5.725GHz	Pass	6.20	-0.08	0.23	3.02	10.80
5690MHz Straddle 5.725-5.85GHz	Pass	6.80	-3.09	-3.35	-0.48	29.20
5775MHz	Pass	6.80	-3.24	-3.34	-0.38	29.20

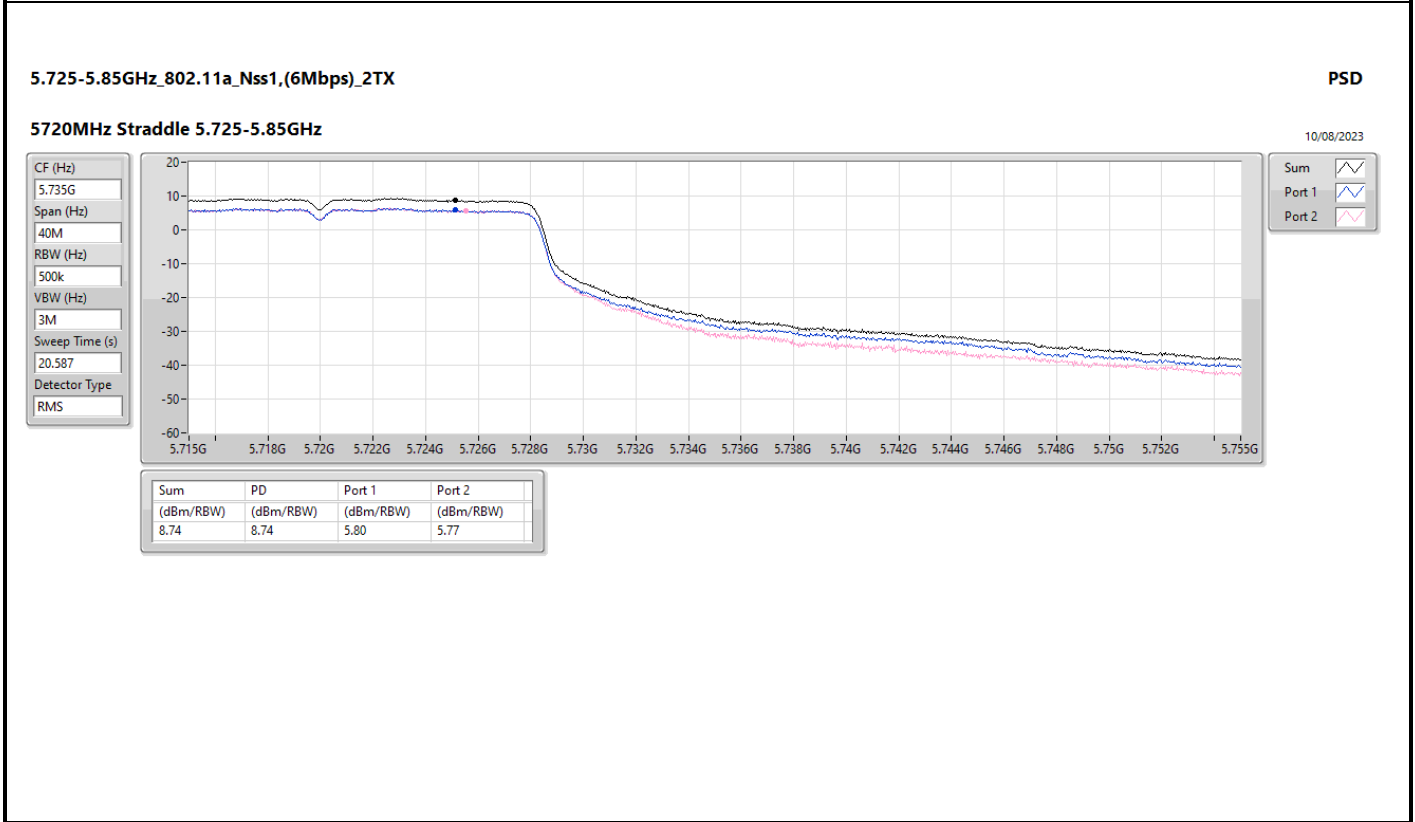
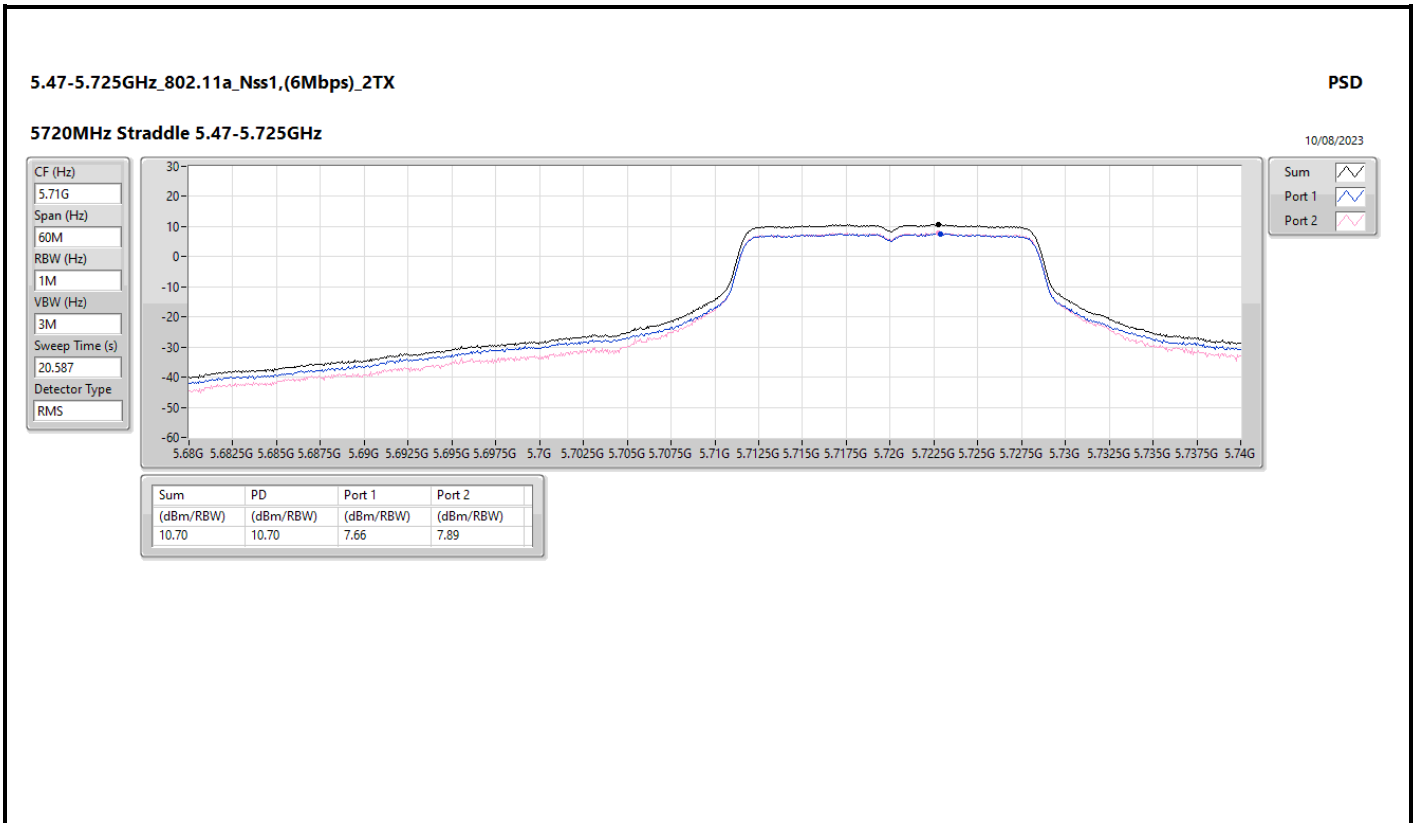
DG = Directional Gain; RBW = 500kHz for 5.725-5.85GHz band / 1MHz for other band;  
 PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;





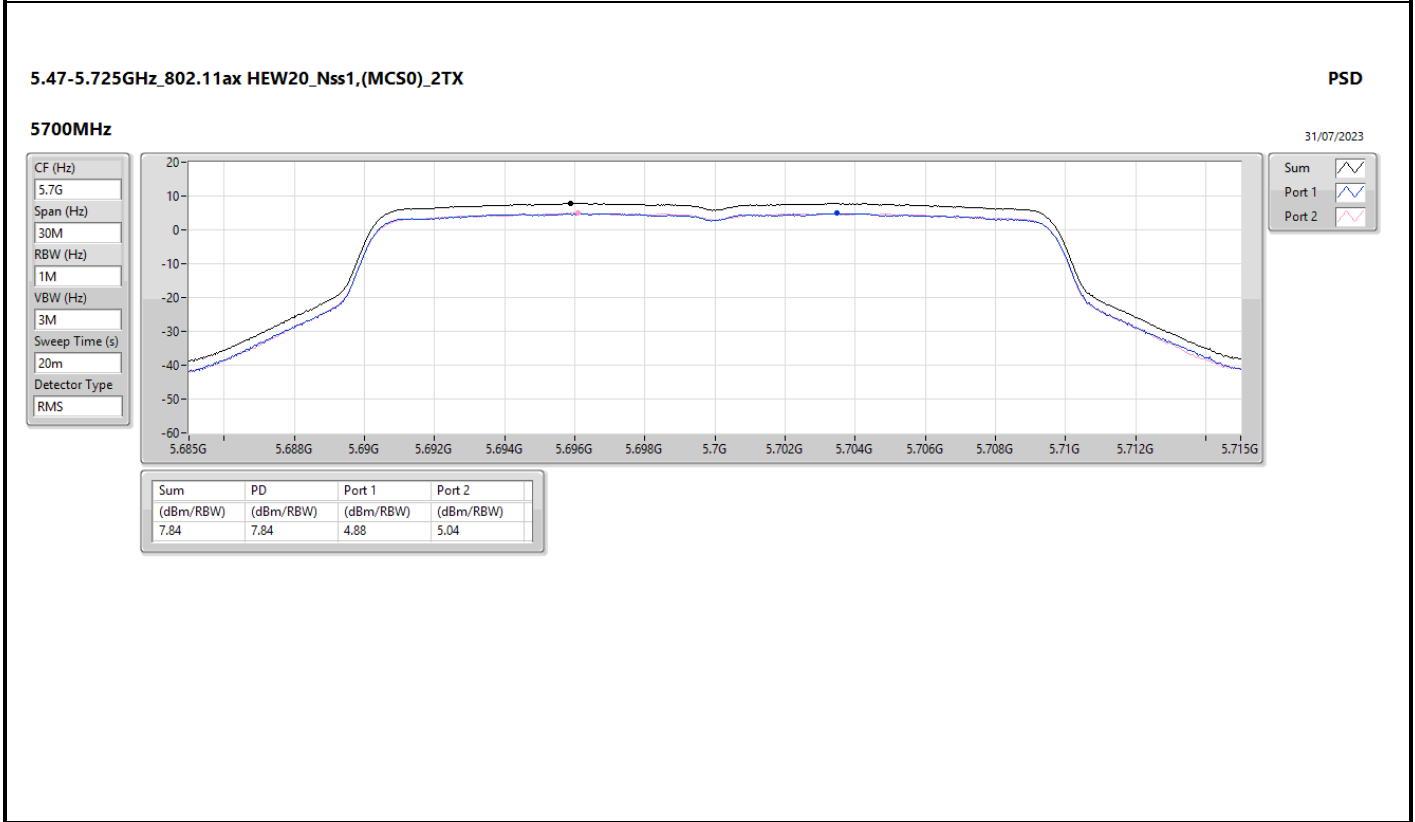
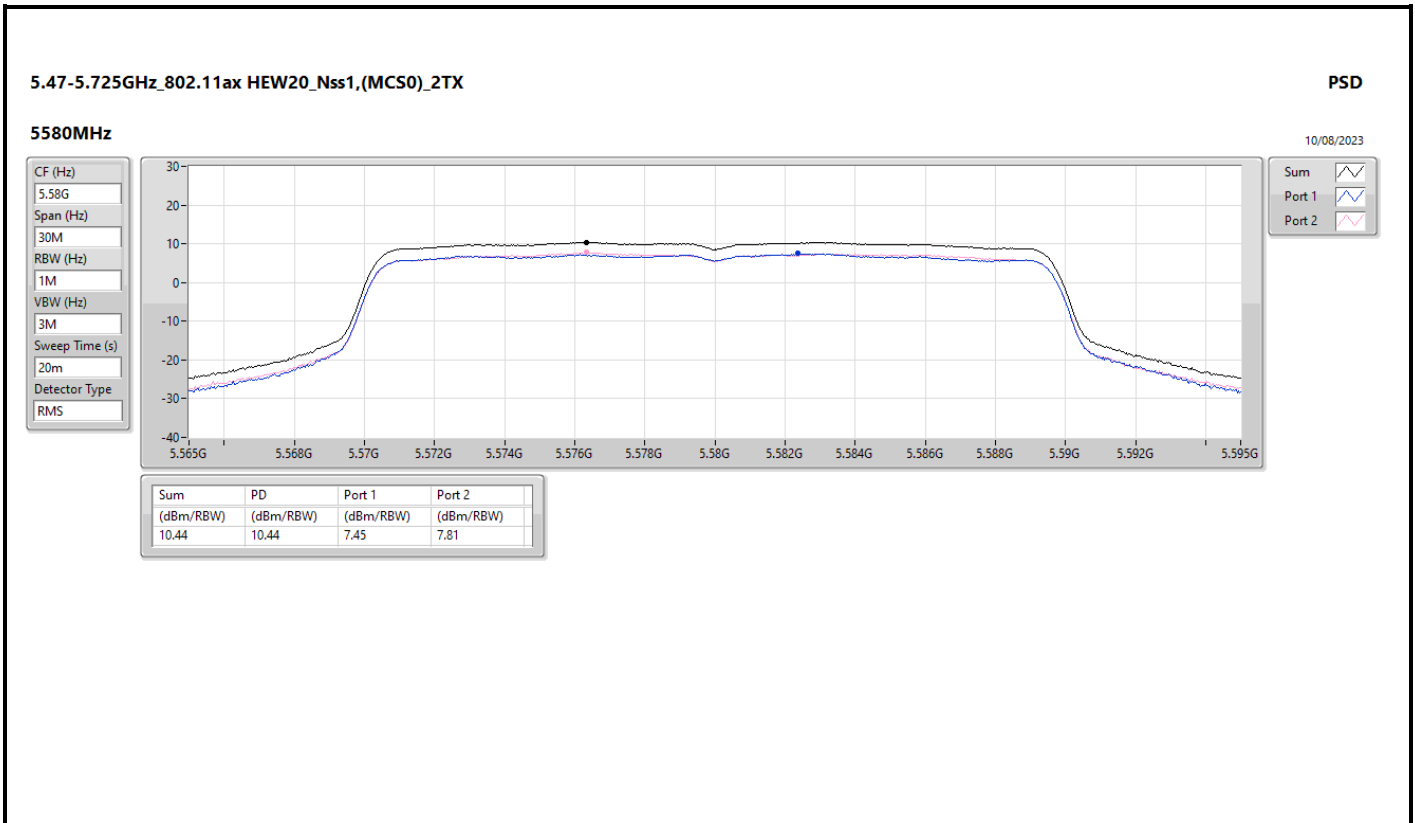


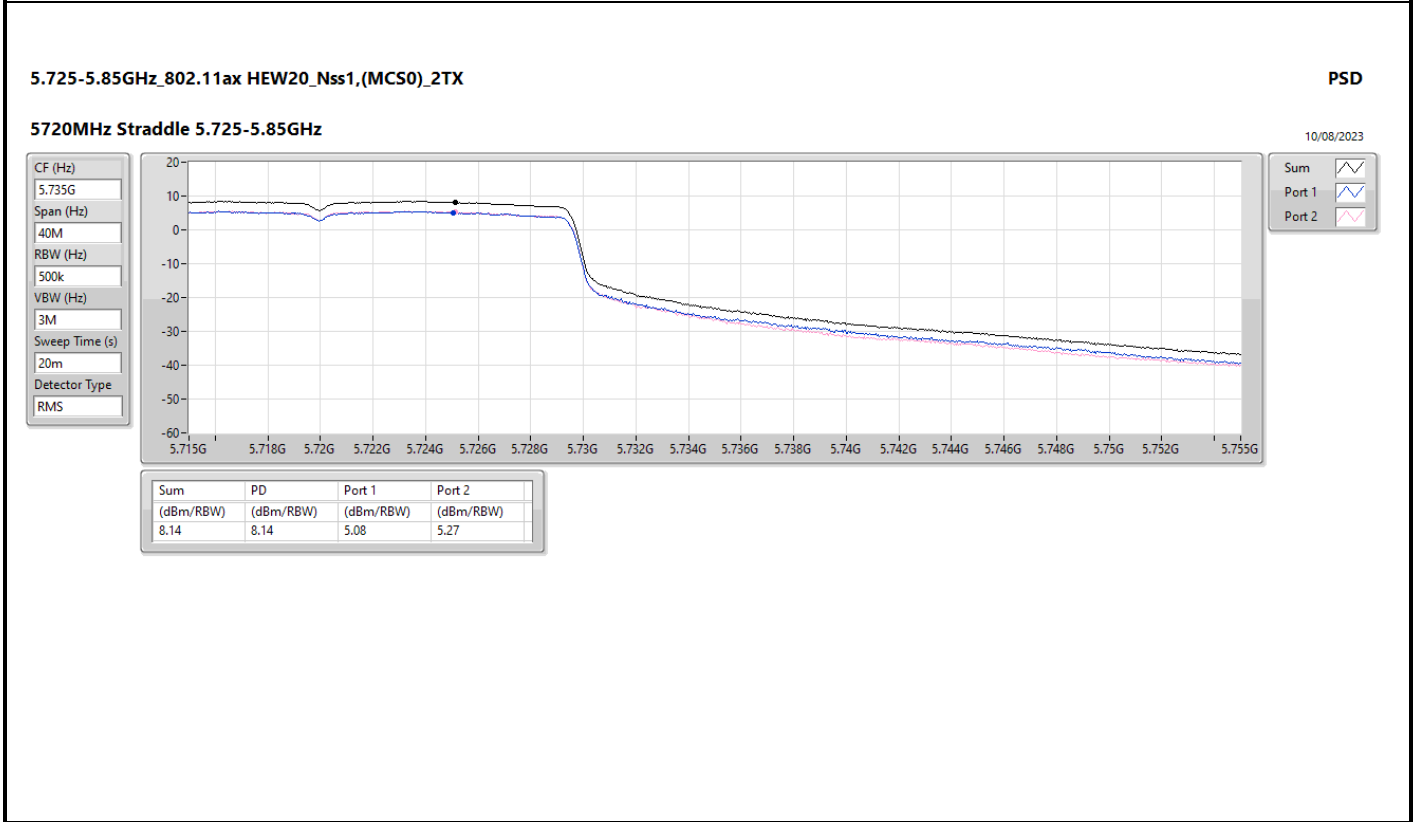
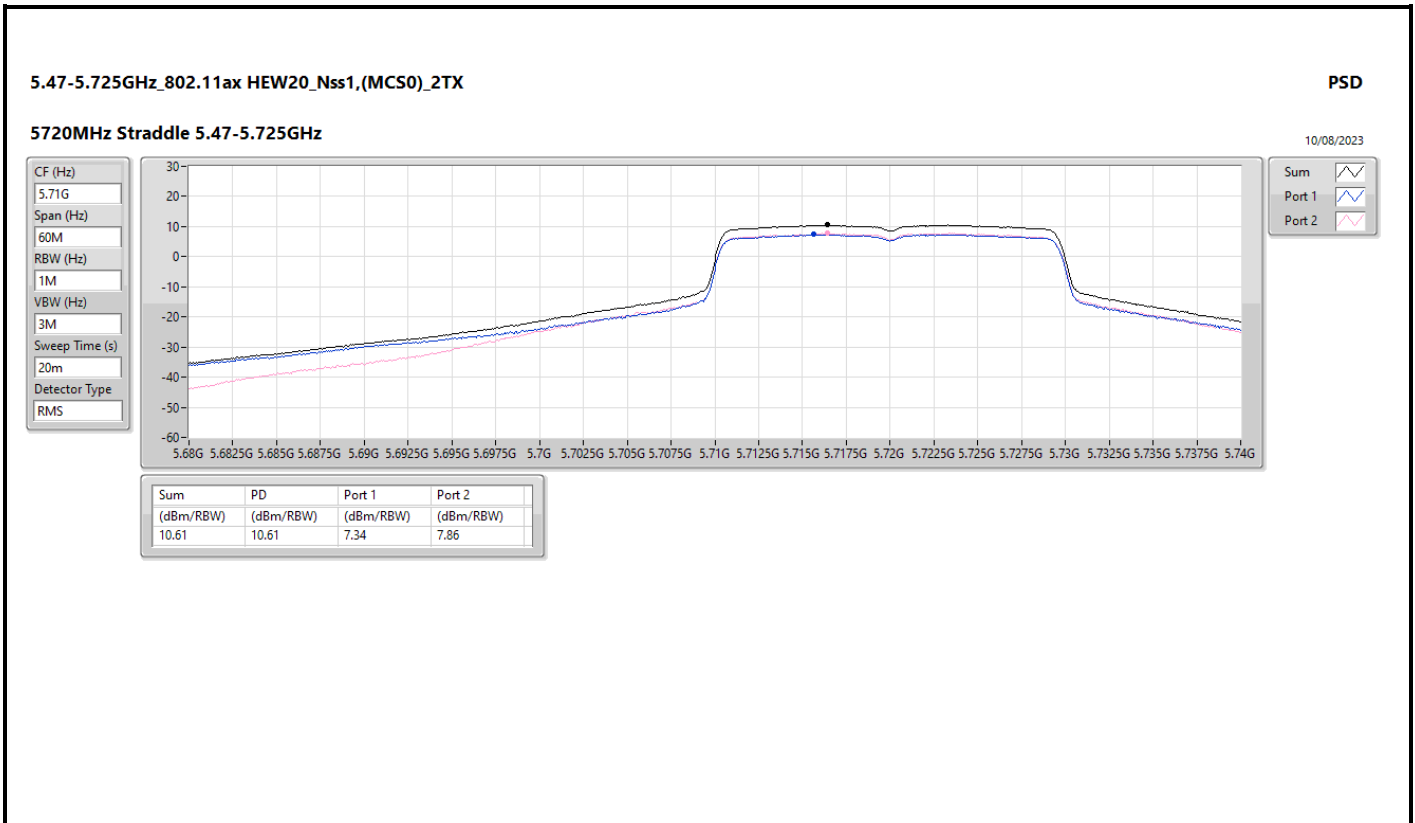


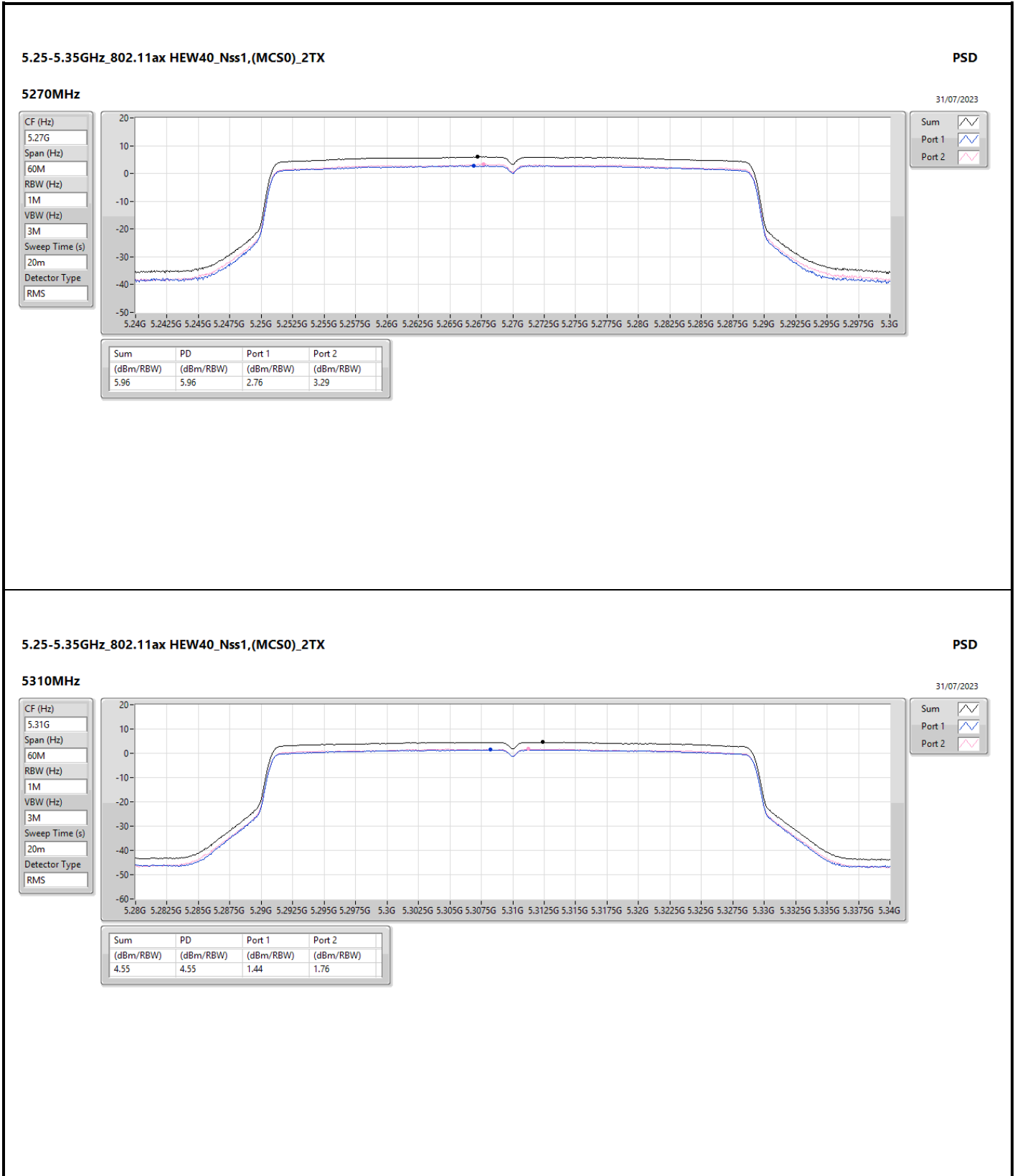


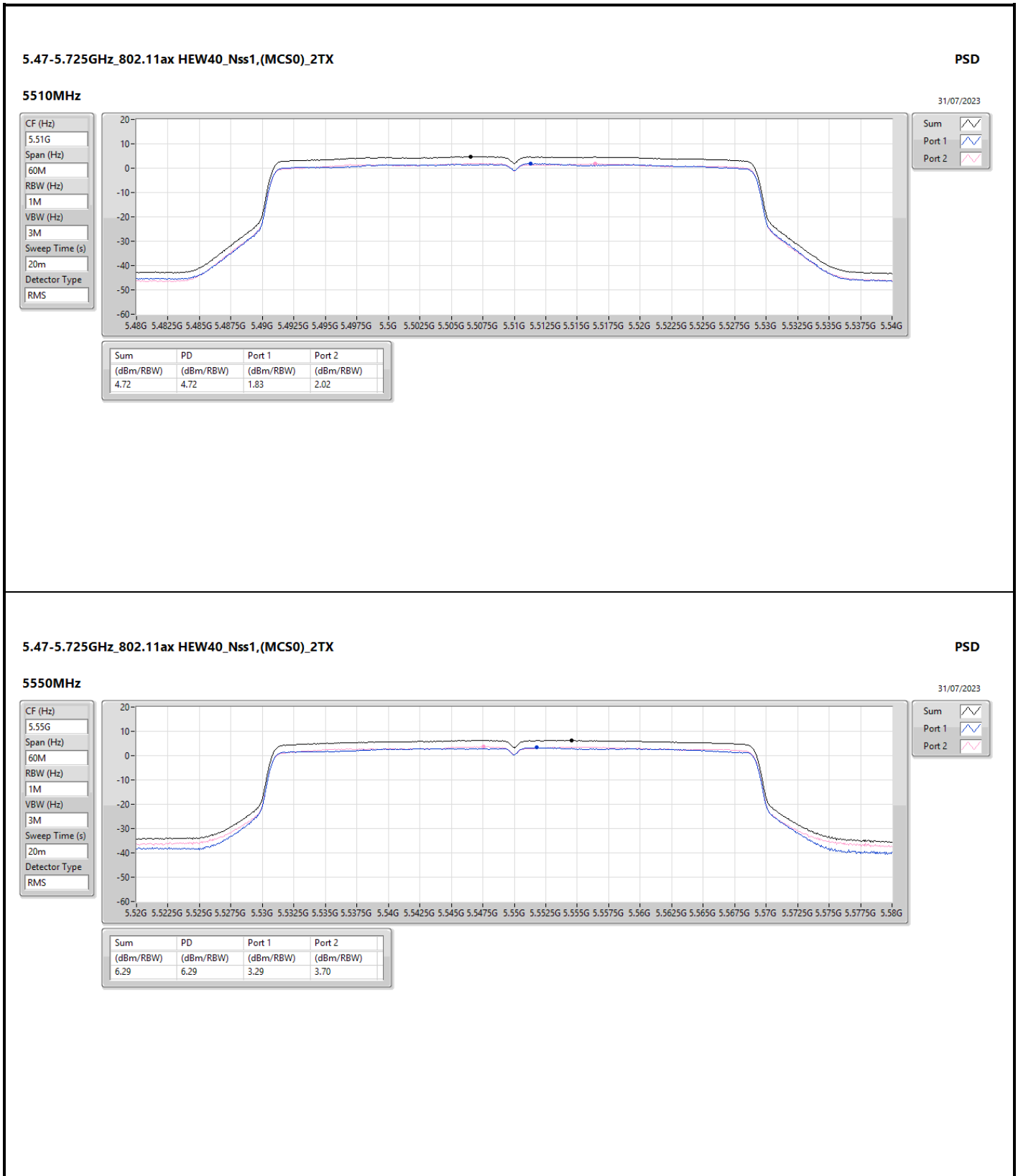




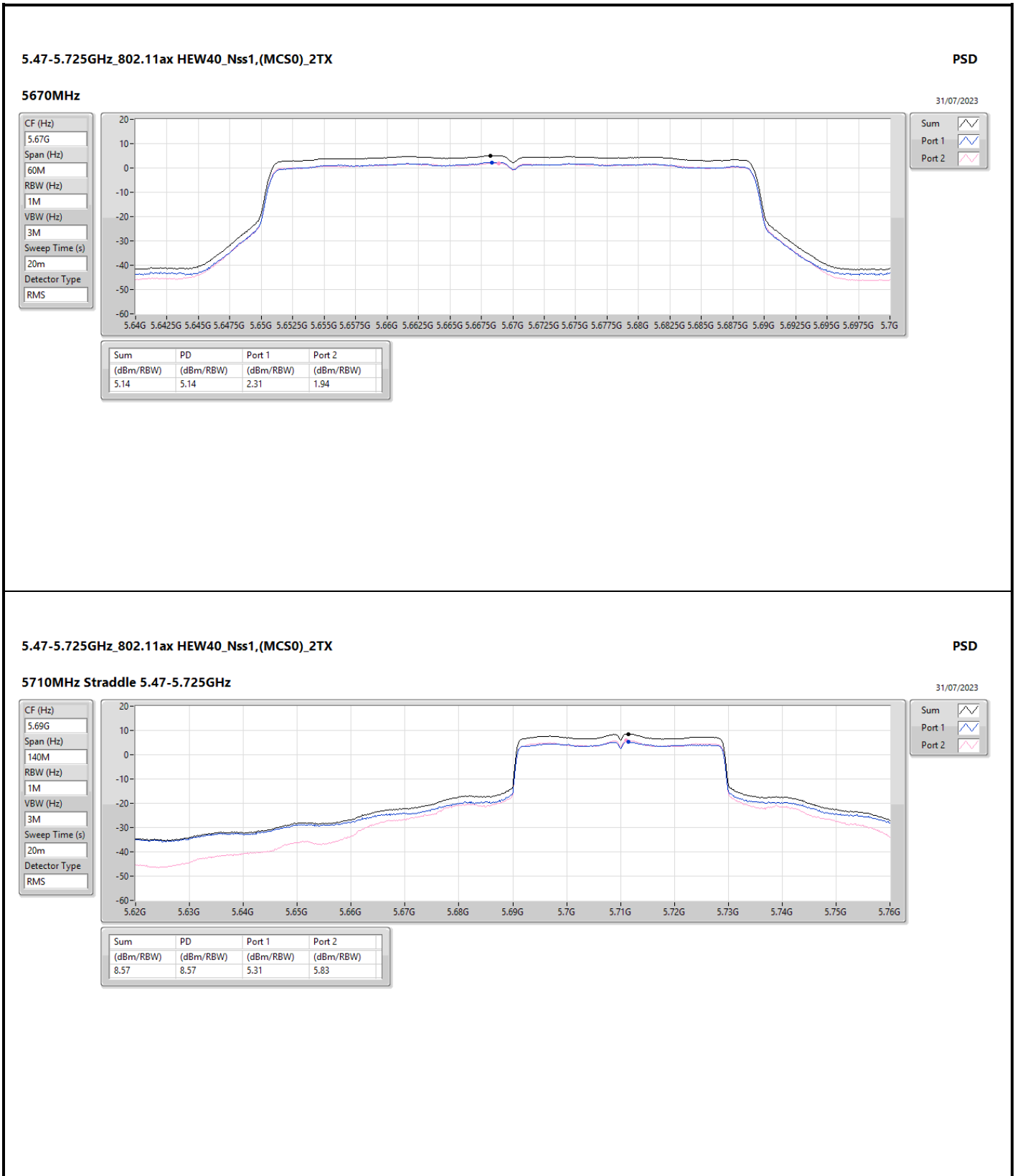


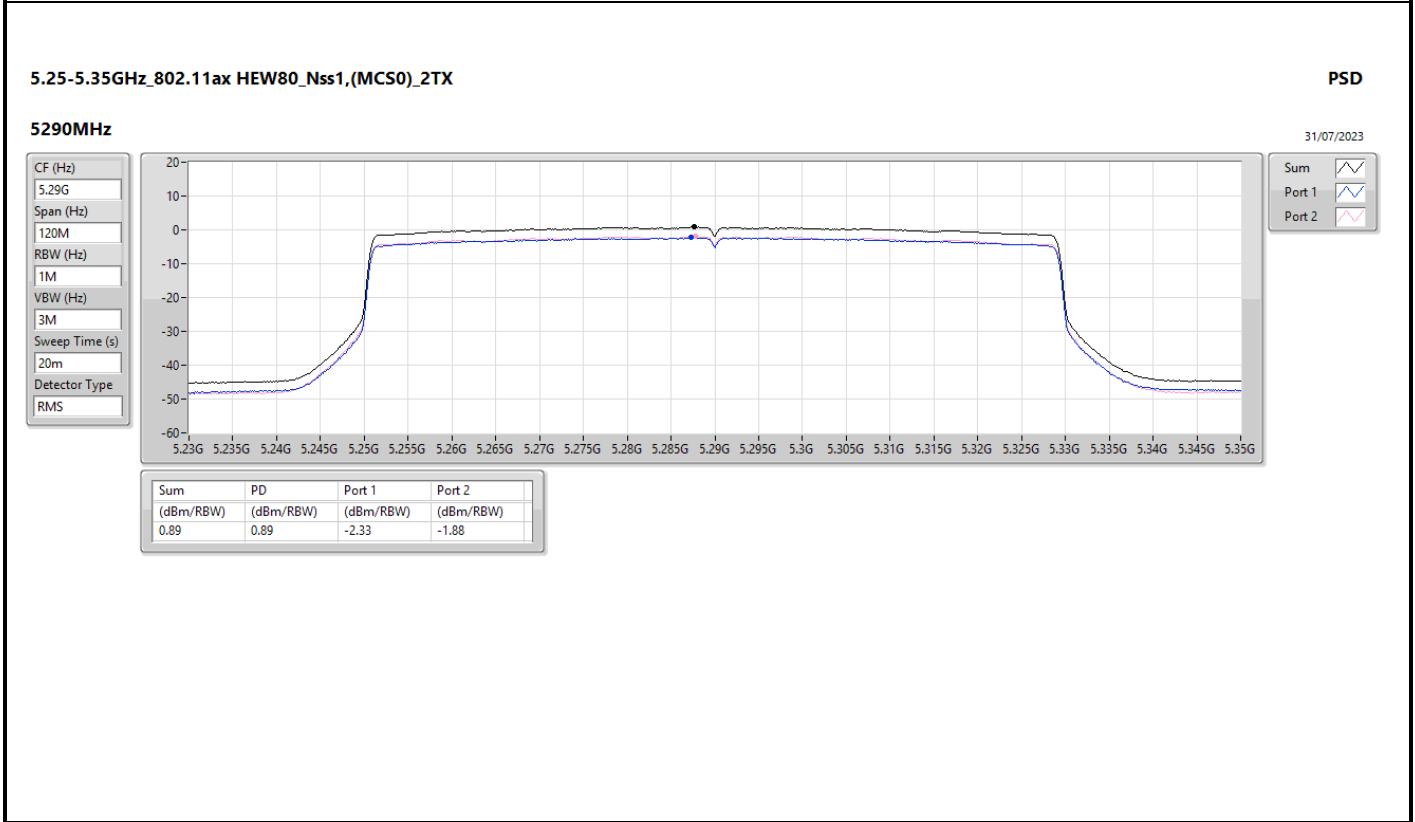
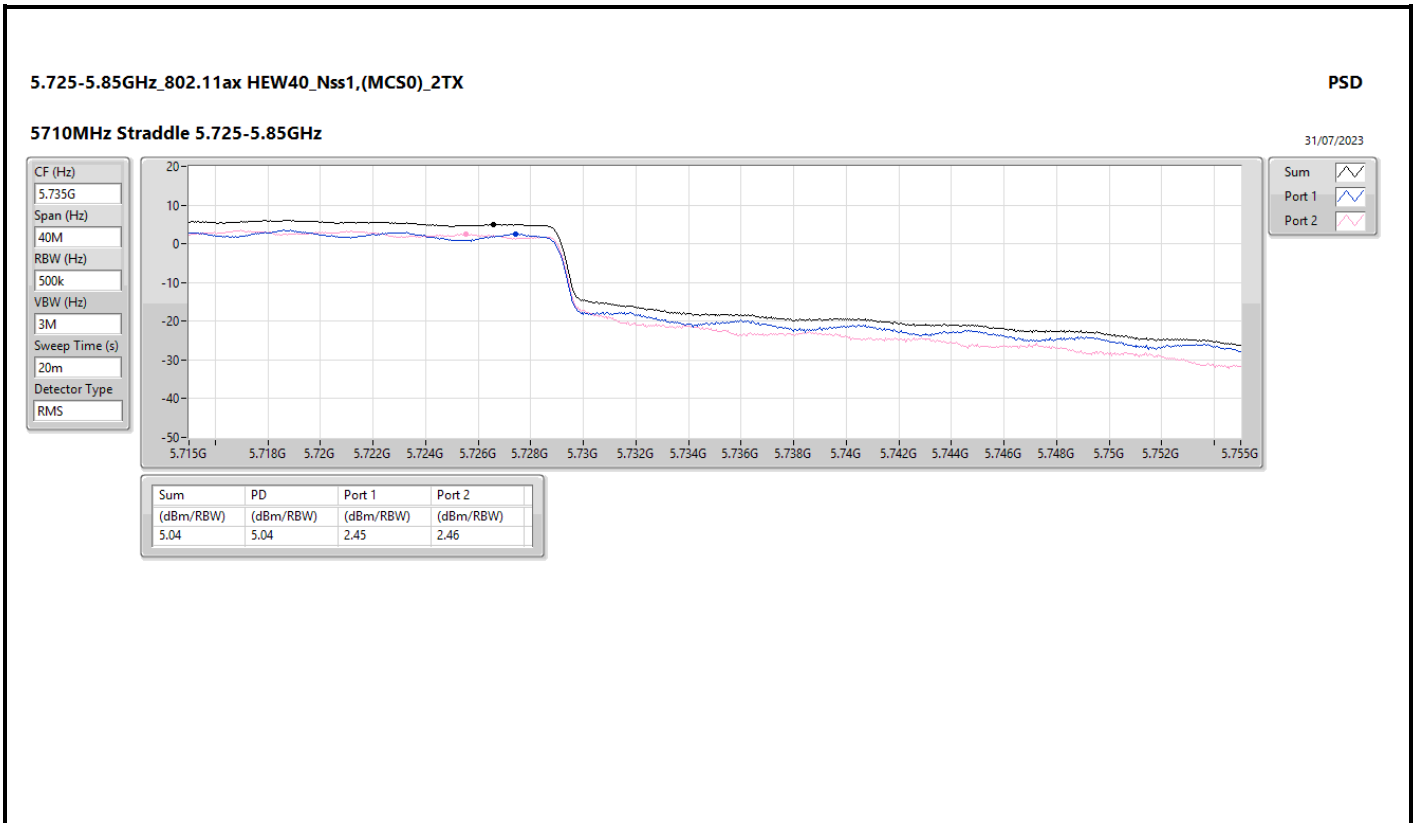


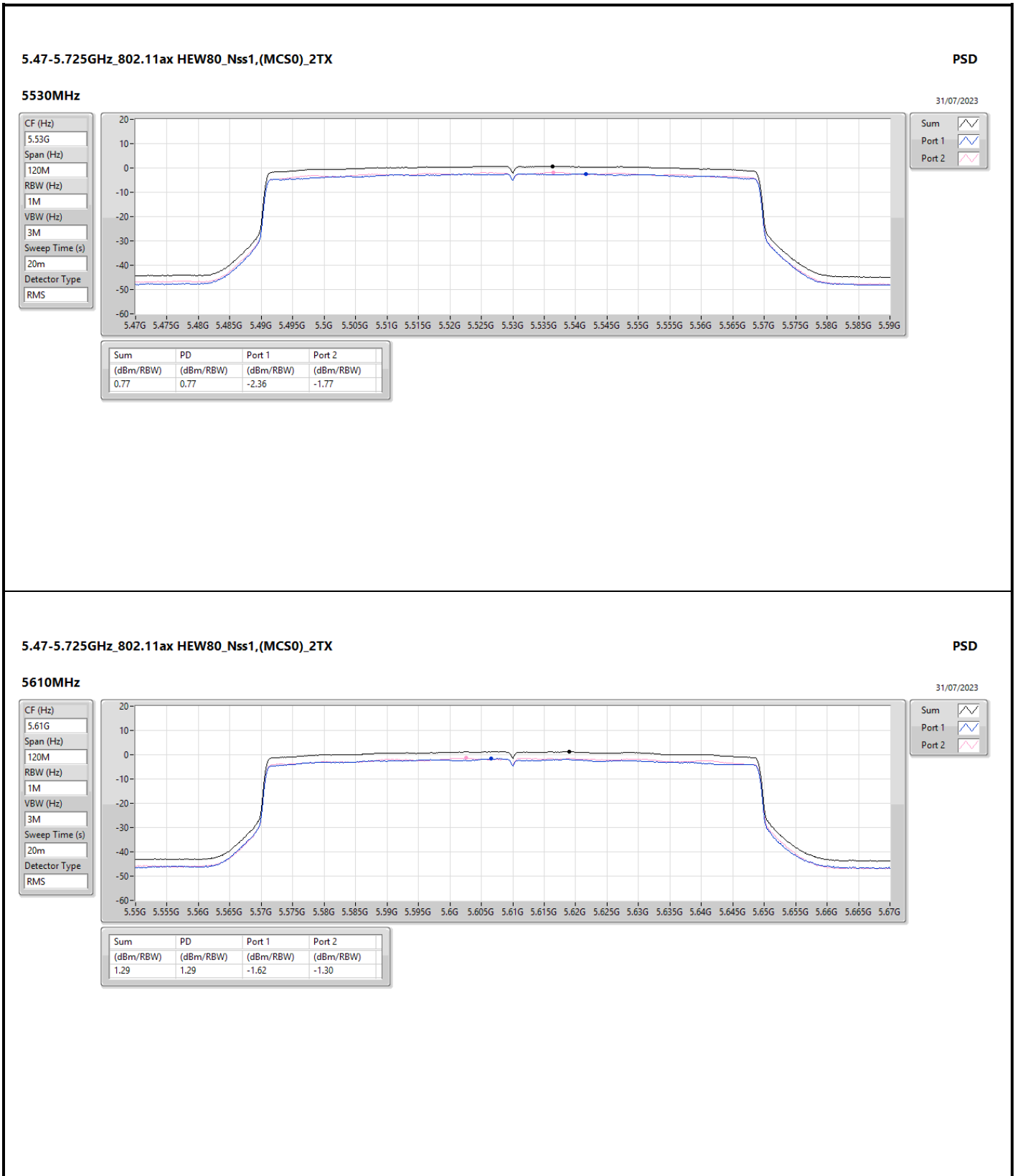


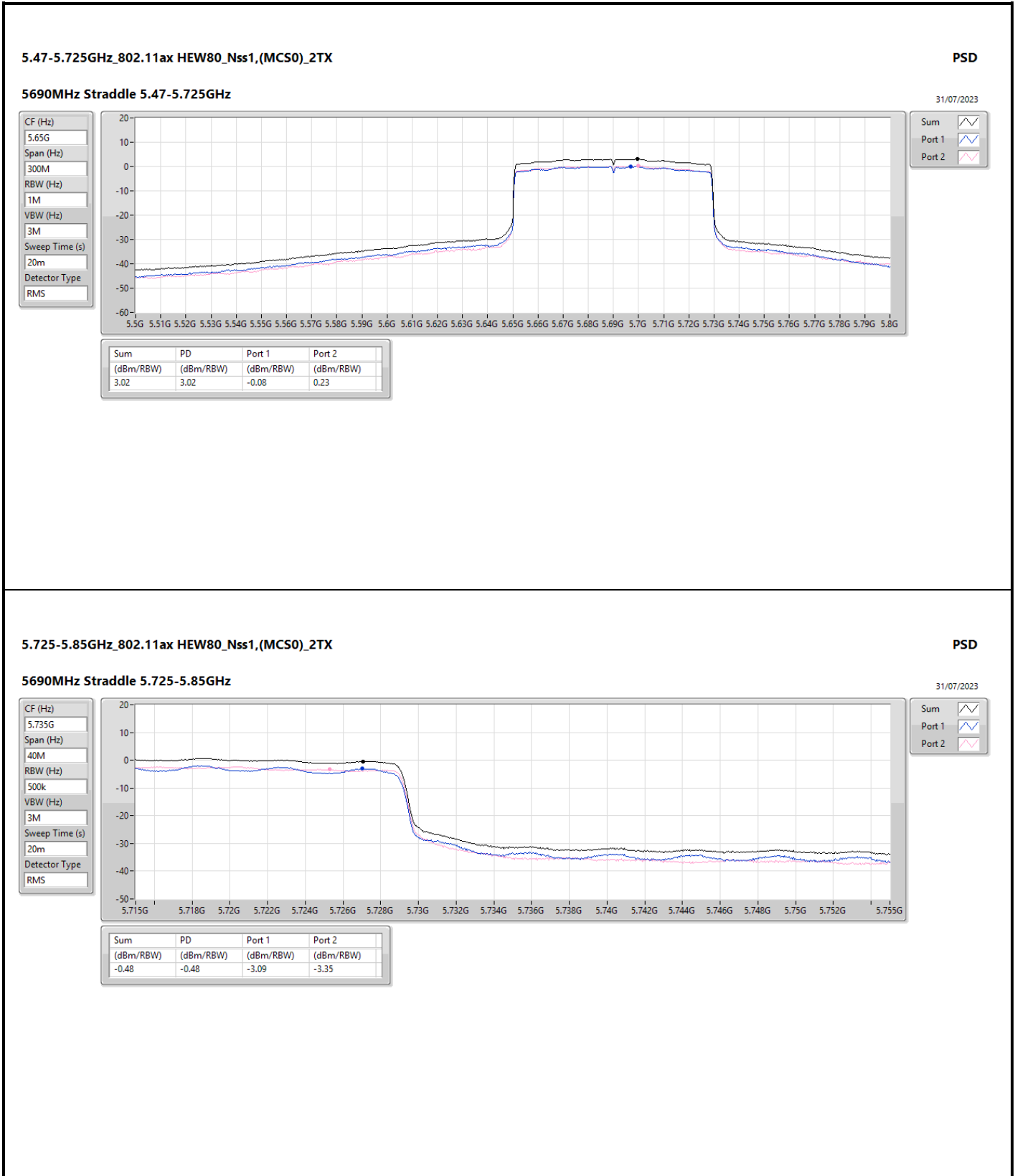


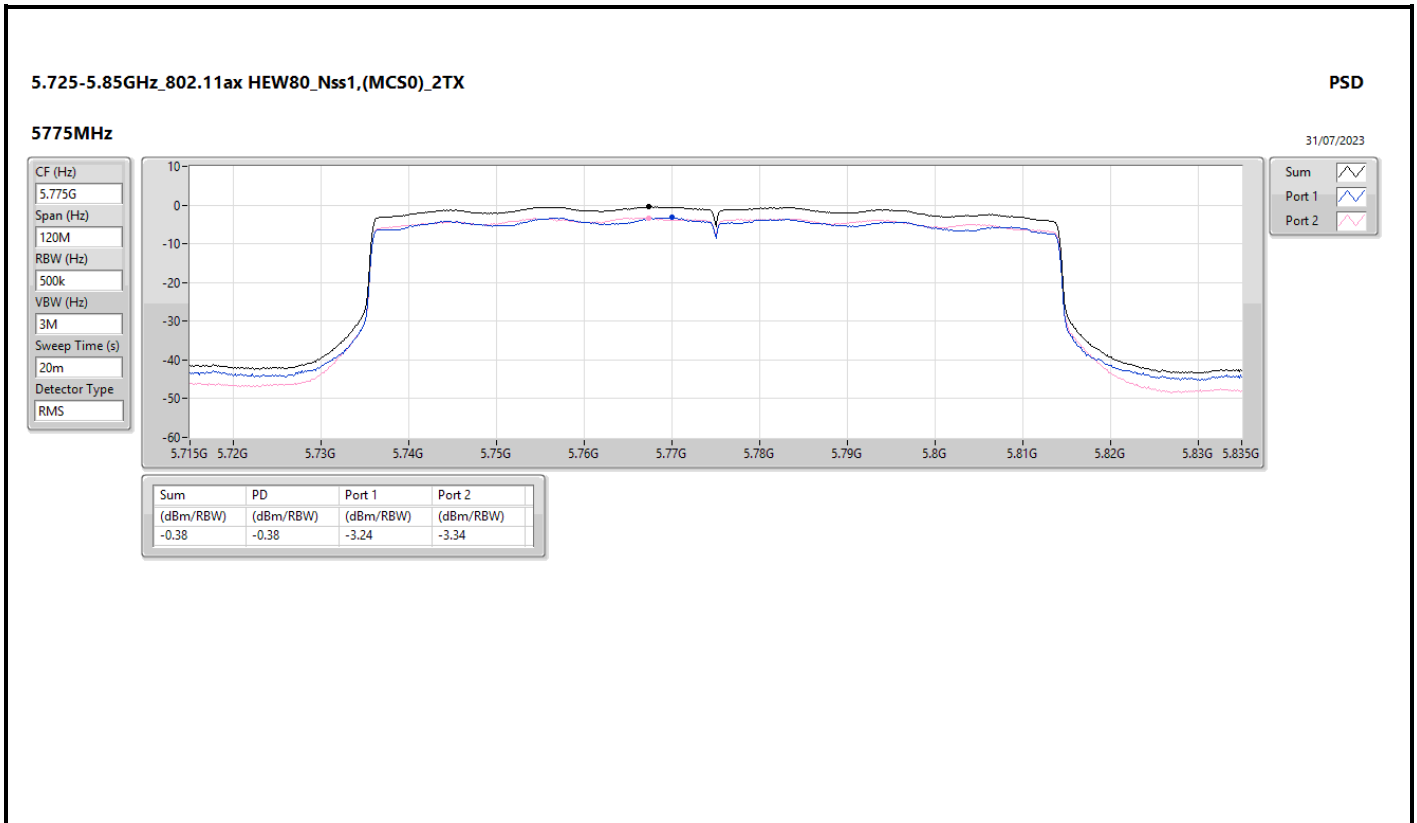














Summary

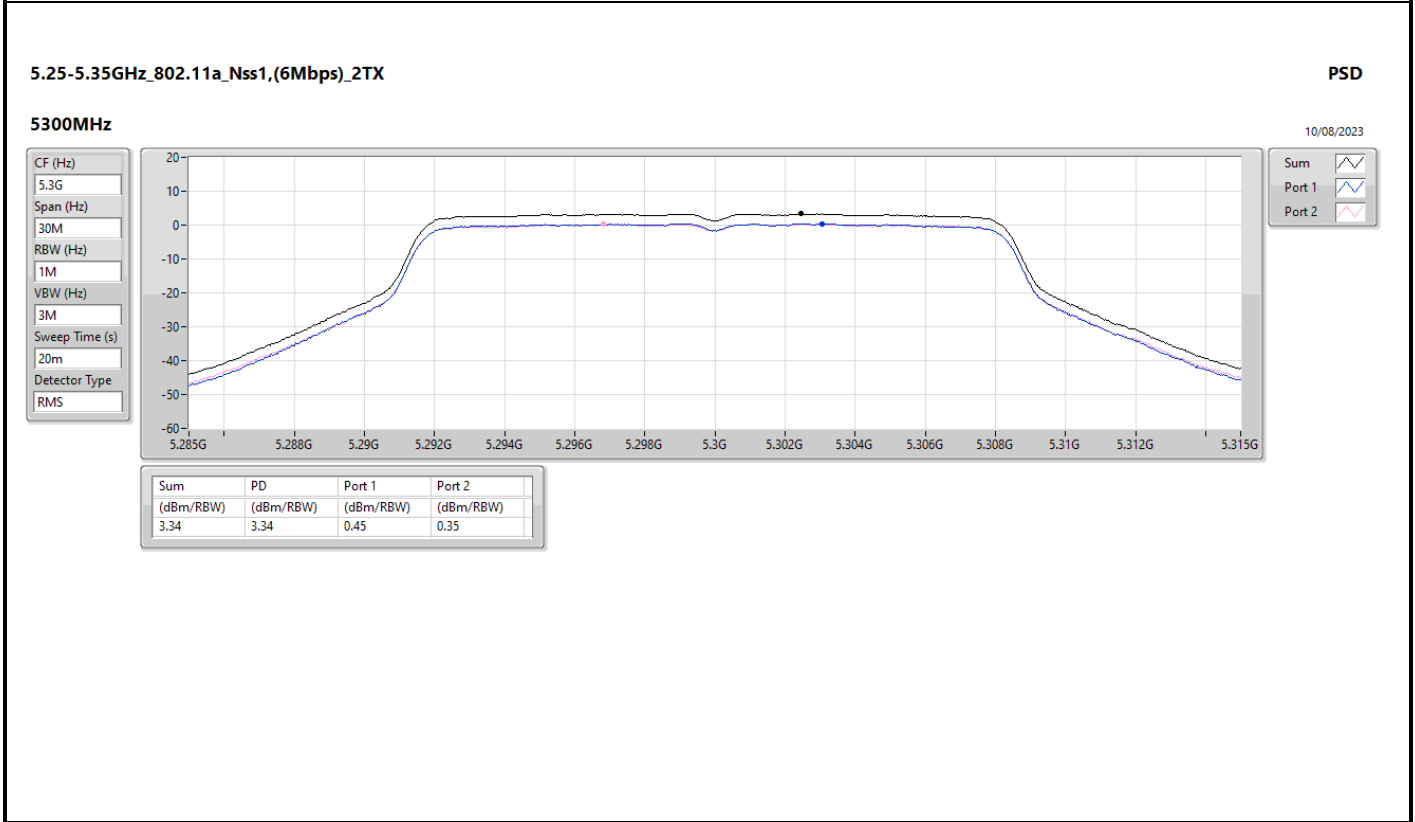
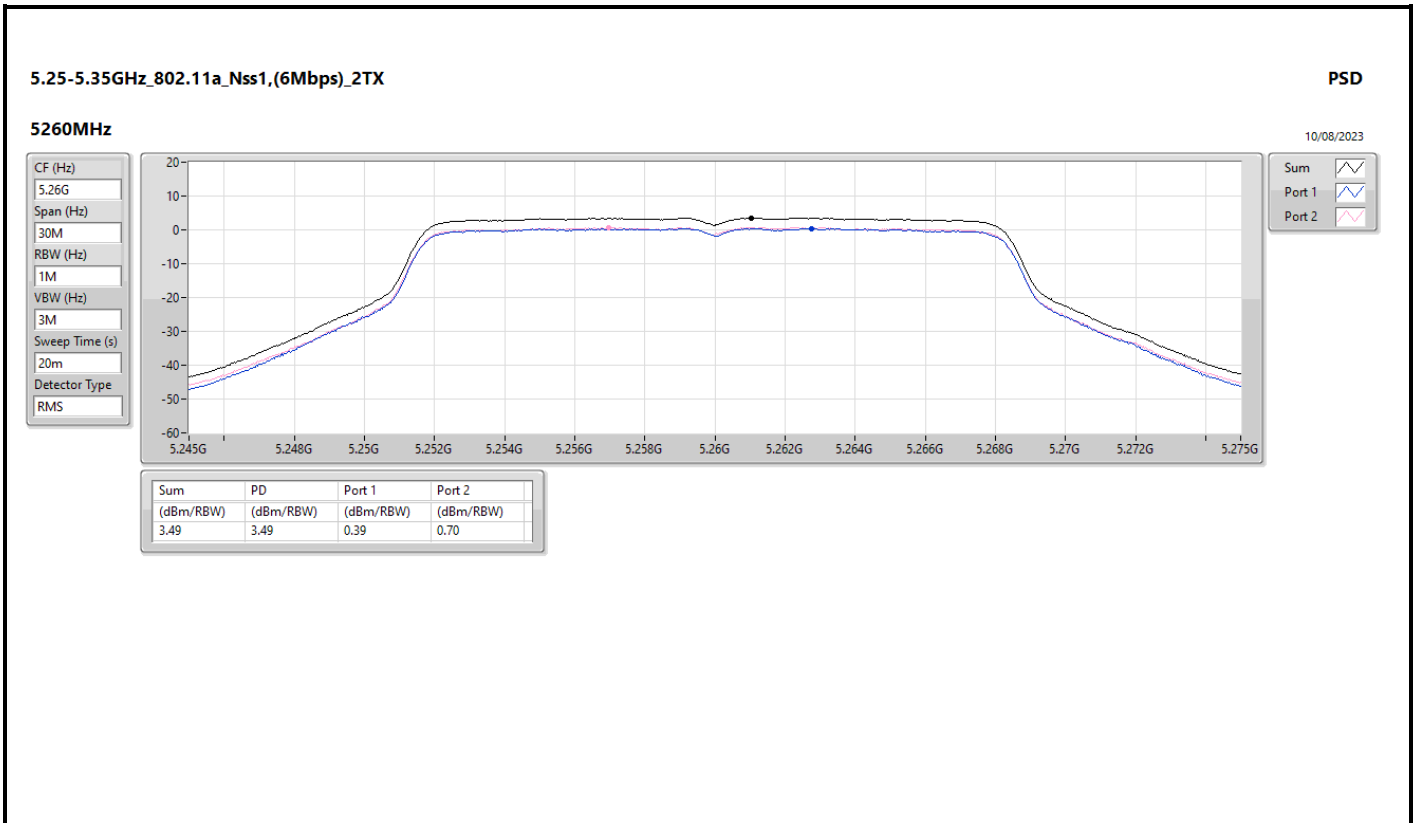
Mode	PD (dBm/RBW)
5.25-5.35GHz	-
802.11a_Nss1,(6Mbps)_2TX	3.49
802.11ax HEW20_Nss1,(MCS0)_2TX	3.11
802.11ax HEW40_Nss1,(MCS0)_2TX	0.23
802.11ax HEW80_Nss1,(MCS0)_2TX	-2.78
5.47-5.725GHz	-
802.11a_Nss1,(6Mbps)_2TX	3.60
802.11ax HEW20_Nss1,(MCS0)_2TX	3.06
802.11ax HEW40_Nss1,(MCS0)_2TX	0.83
802.11ax HEW80_Nss1,(MCS0)_2TX	-2.23
5.725-5.85GHz	-
802.11a_Nss1,(6Mbps)_2TX	1.22
802.11ax HEW20_Nss1,(MCS0)_2TX	1.33
802.11ax HEW40_Nss1,(MCS0)_2TX	-2.13
802.11ax HEW80_Nss1,(MCS0)_2TX	-1.32

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

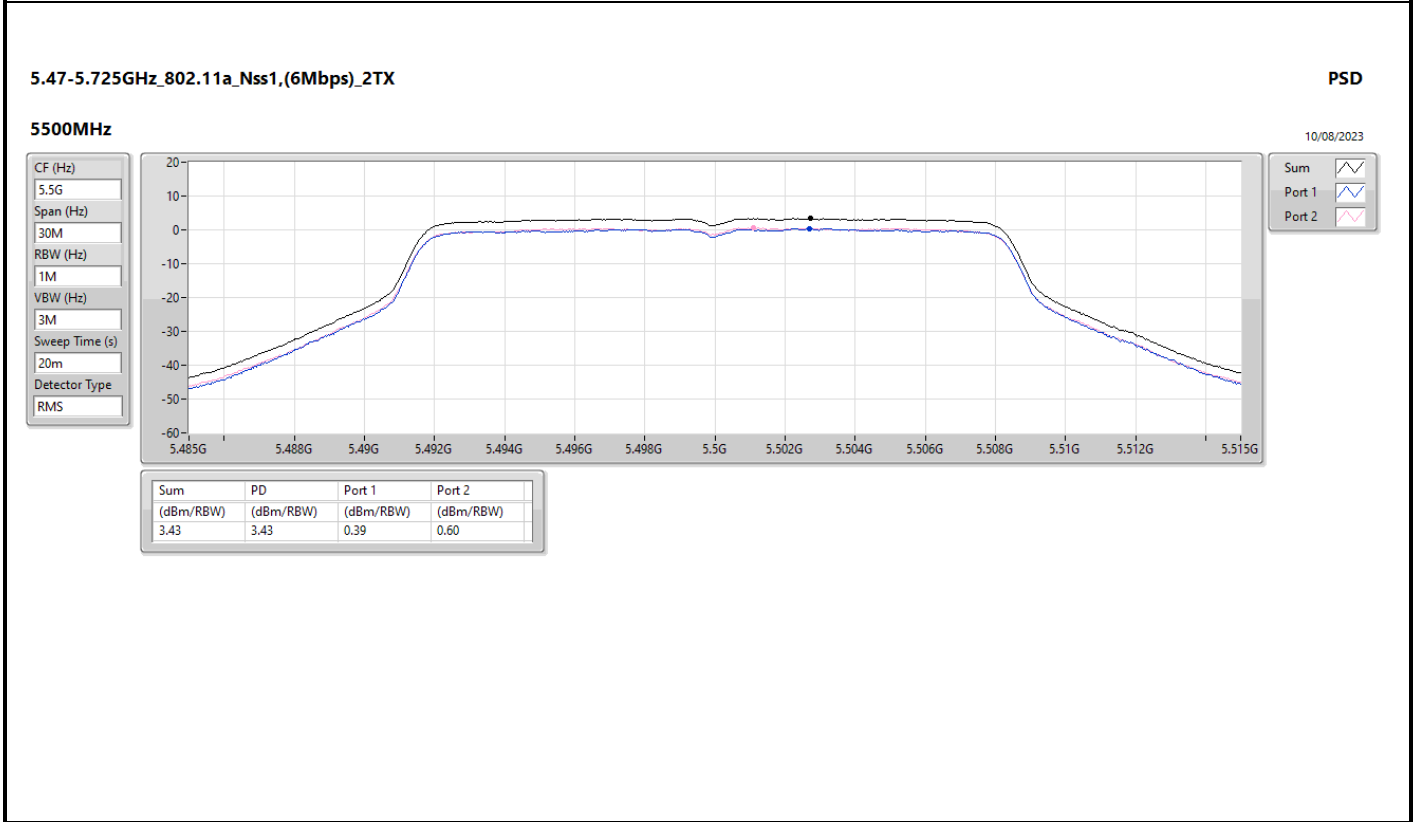
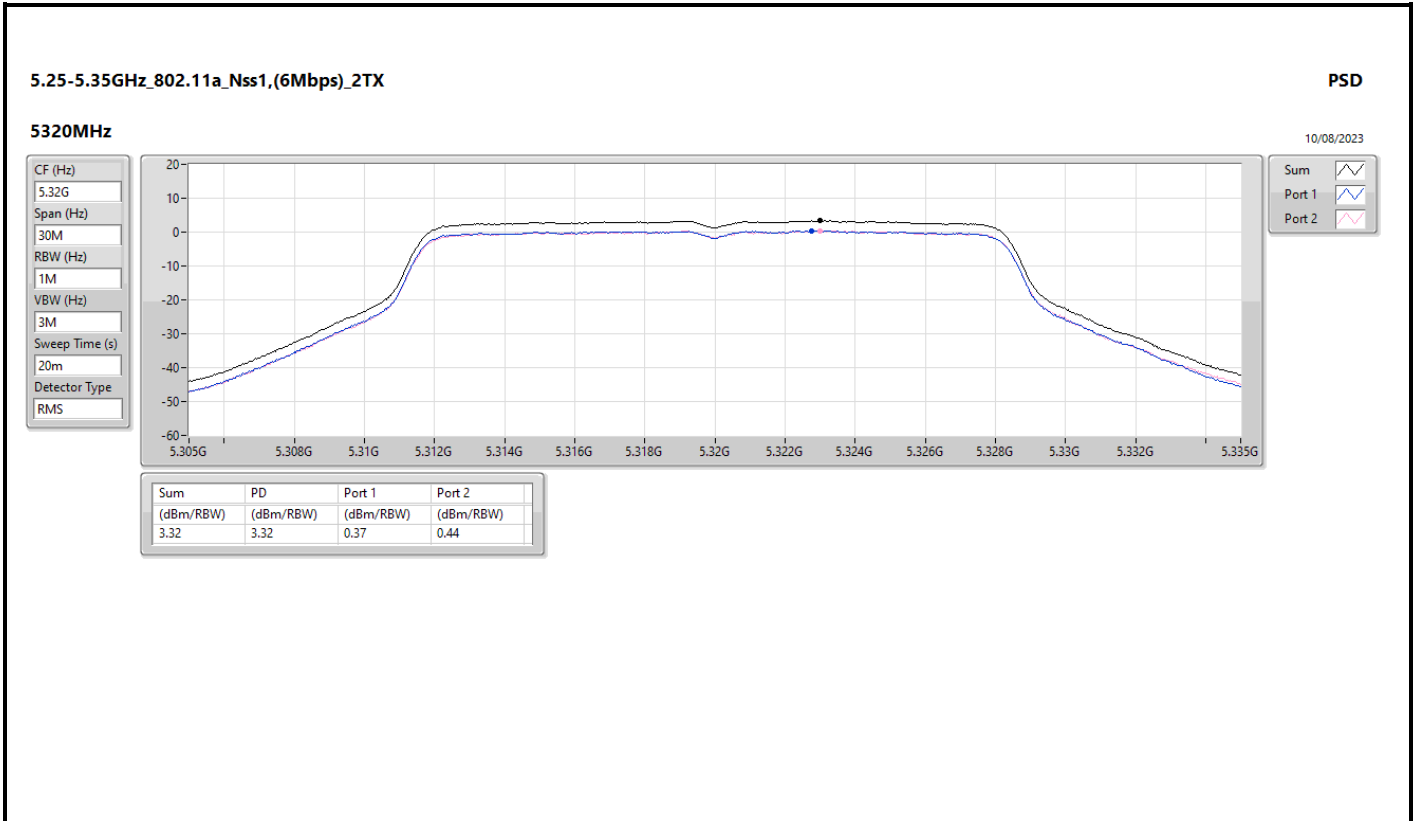
Result

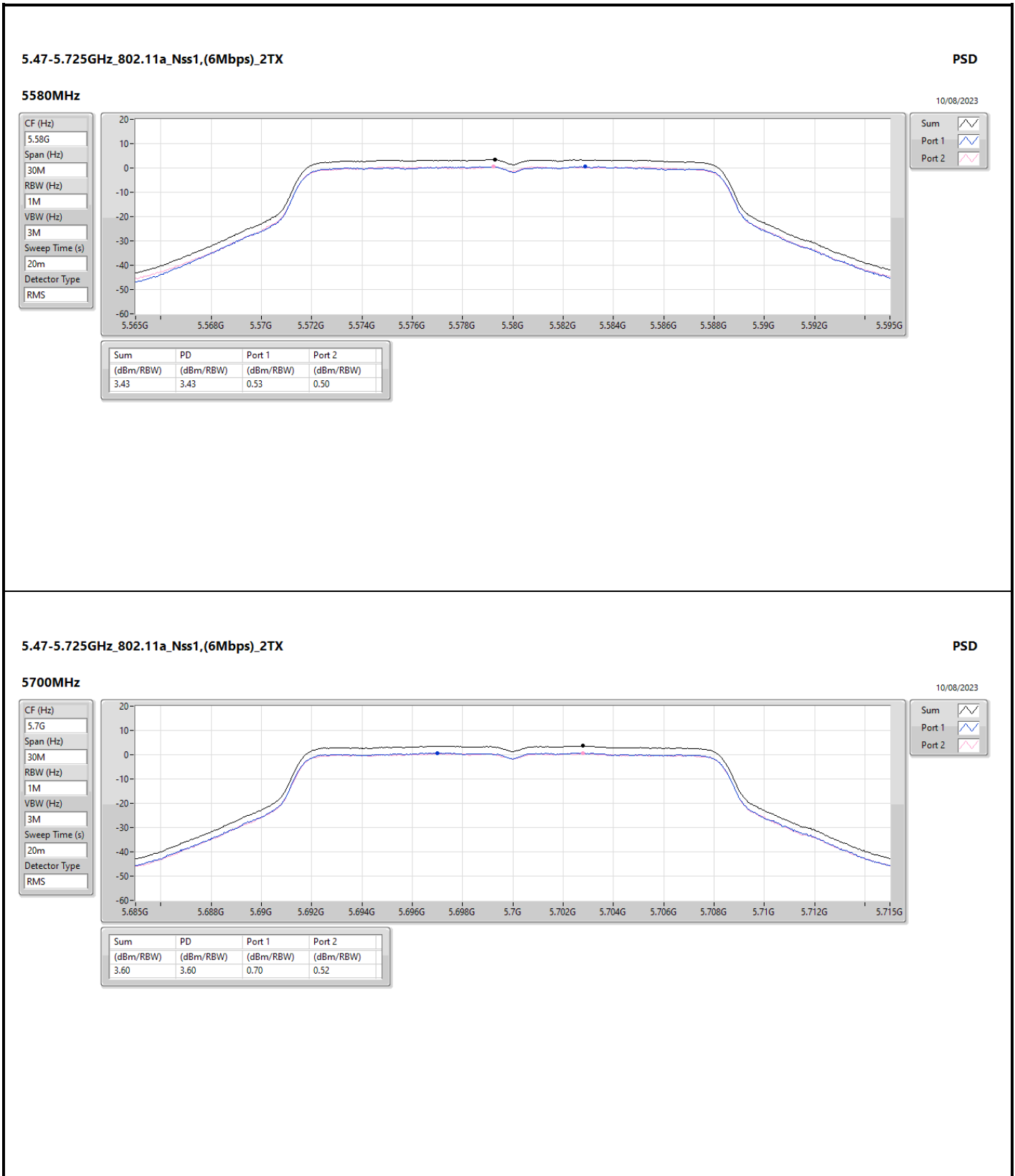
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5260MHz	Pass	13.48	0.39	0.70	3.49	3.52
5300MHz	Pass	13.48	0.45	0.35	3.34	3.52
5320MHz	Pass	13.48	0.37	0.44	3.32	3.52
5500MHz	Pass	13.31	0.39	0.60	3.43	3.69
5580MHz	Pass	13.31	0.53	0.50	3.43	3.69
5700MHz	Pass	13.31	0.70	0.52	3.60	3.69
5720MHz Straddle 5.47-5.725GHz	Pass	13.31	0.24	0.33	3.20	3.69
5720MHz Straddle 5.725-5.85GHz	Pass	13.42	-1.70	-1.73	1.22	22.58
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5260MHz	Pass	13.48	-0.04	0.41	3.11	3.52
5300MHz	Pass	13.48	-0.16	0.01	2.90	3.52
5320MHz	Pass	13.48	-0.20	-0.12	2.78	3.52
5500MHz	Pass	13.31	-0.23	0.32	2.87	3.69
5580MHz	Pass	13.31	0.38	0.41	3.02	3.69
5700MHz	Pass	13.31	0.02	0.08	3.02	3.69
5720MHz Straddle 5.47-5.725GHz	Pass	13.31	0.09	0.25	3.06	3.69
5720MHz Straddle 5.725-5.85GHz	Pass	13.42	-1.56	-1.62	1.33	22.58
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5270MHz	Pass	13.48	-2.70	-2.55	0.23	3.52
5310MHz	Pass	13.48	-2.84	-2.77	0.19	3.52
5510MHz	Pass	13.31	-2.87	-2.58	0.14	3.69
5550MHz	Pass	13.31	-2.69	-2.41	0.31	3.69
5670MHz	Pass	13.31	-2.45	-2.43	0.40	3.69
5710MHz Straddle 5.47-5.725GHz	Pass	13.31	-2.05	-2.27	0.83	3.69
5710MHz Straddle 5.725-5.85GHz	Pass	13.42	-4.96	-5.19	-2.13	22.58
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5290MHz	Pass	13.48	-5.62	-5.72	-2.78	3.52
5530MHz	Pass	13.31	-5.45	-5.57	-2.63	3.69
5610MHz	Pass	13.31	-5.55	-5.72	-2.77	3.69
5690MHz Straddle 5.47-5.725GHz	Pass	13.31	-5.27	-5.19	-2.23	3.69
5690MHz Straddle 5.725-5.85GHz	Pass	13.42	-9.16	-8.80	-6.14	22.58
5775MHz	Pass	13.42	-4.22	-3.75	-1.32	22.58

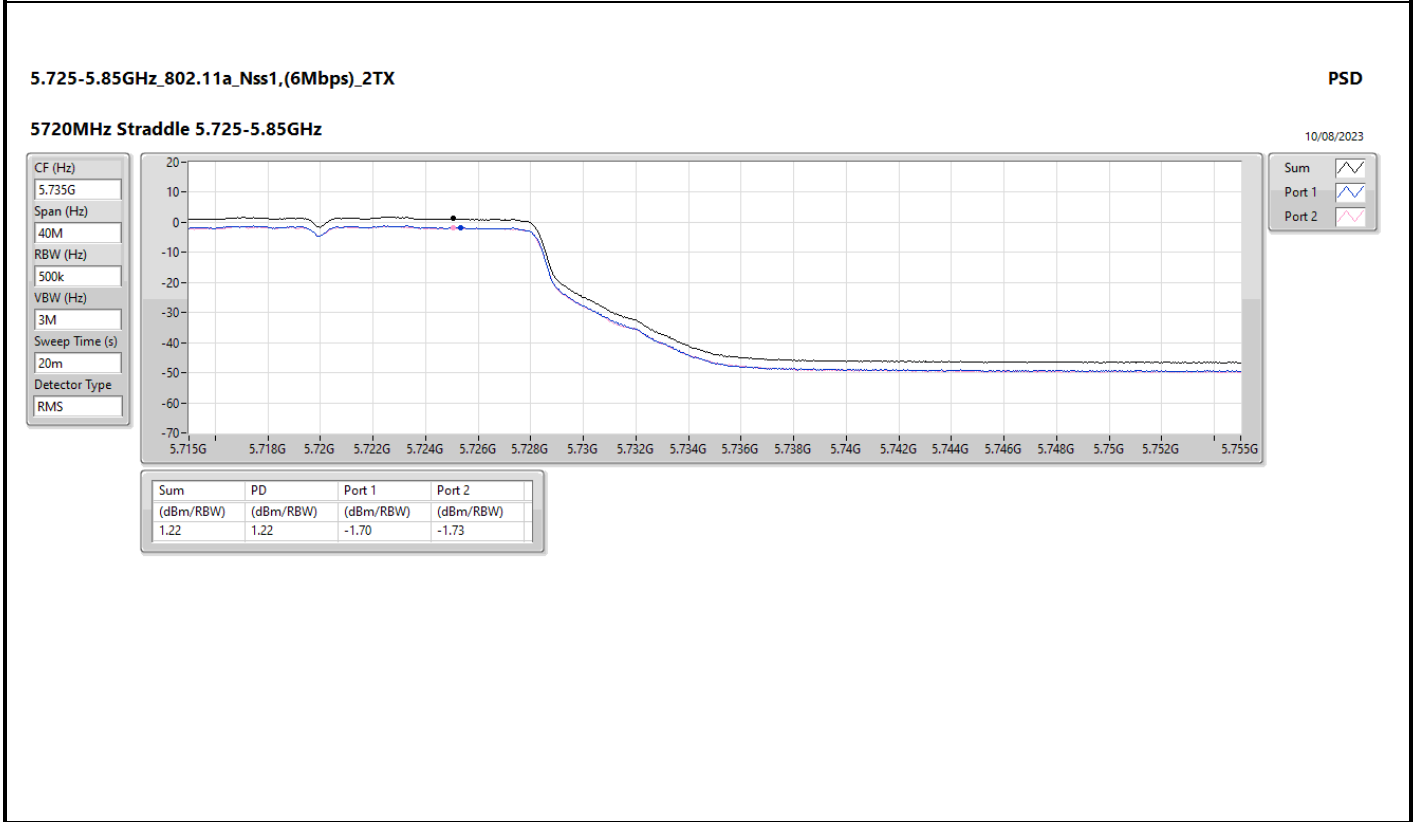
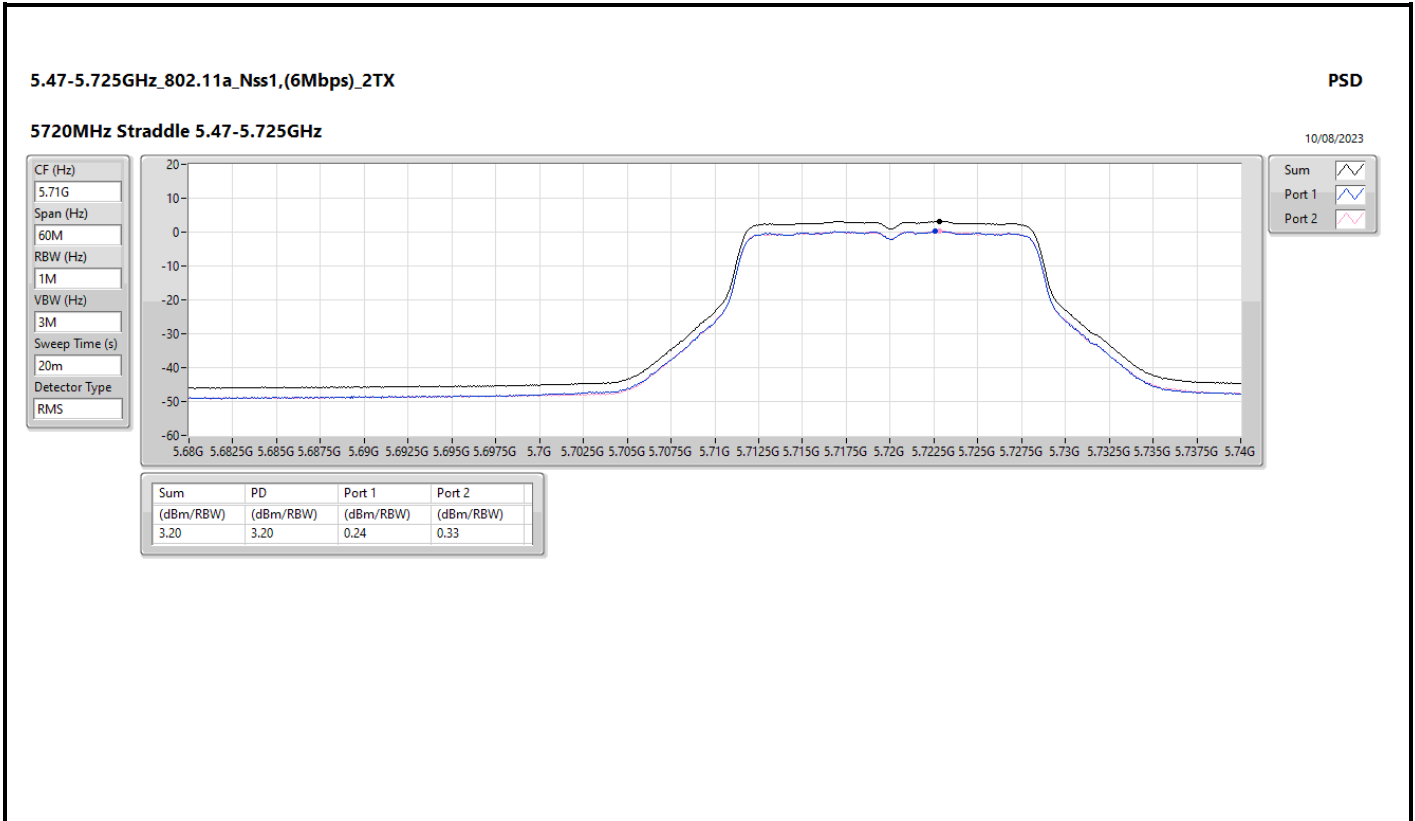
DG = Directional Gain; RBW = 500kHz for 5.725-5.85GHz band / 1MHz for other band;  
 PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

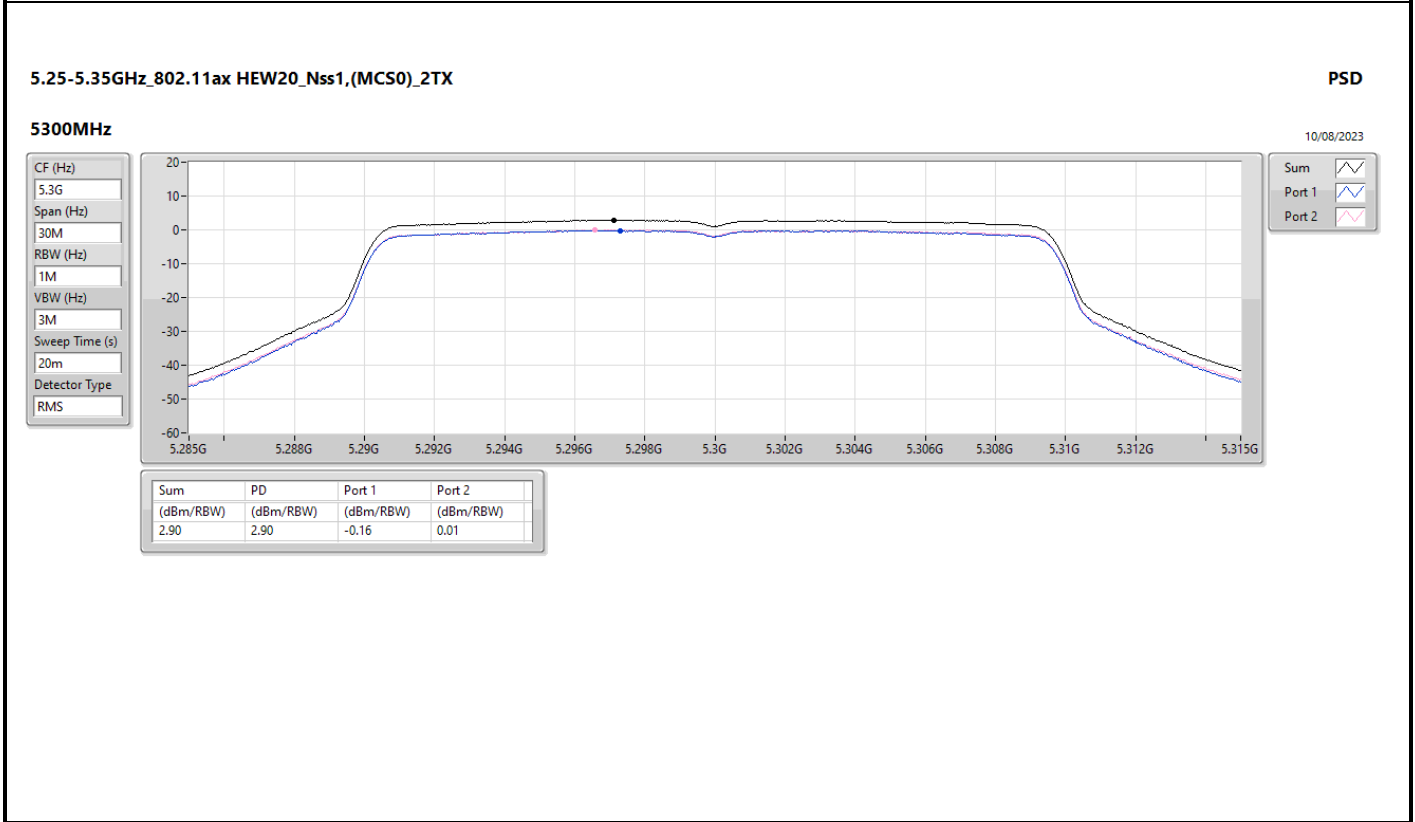
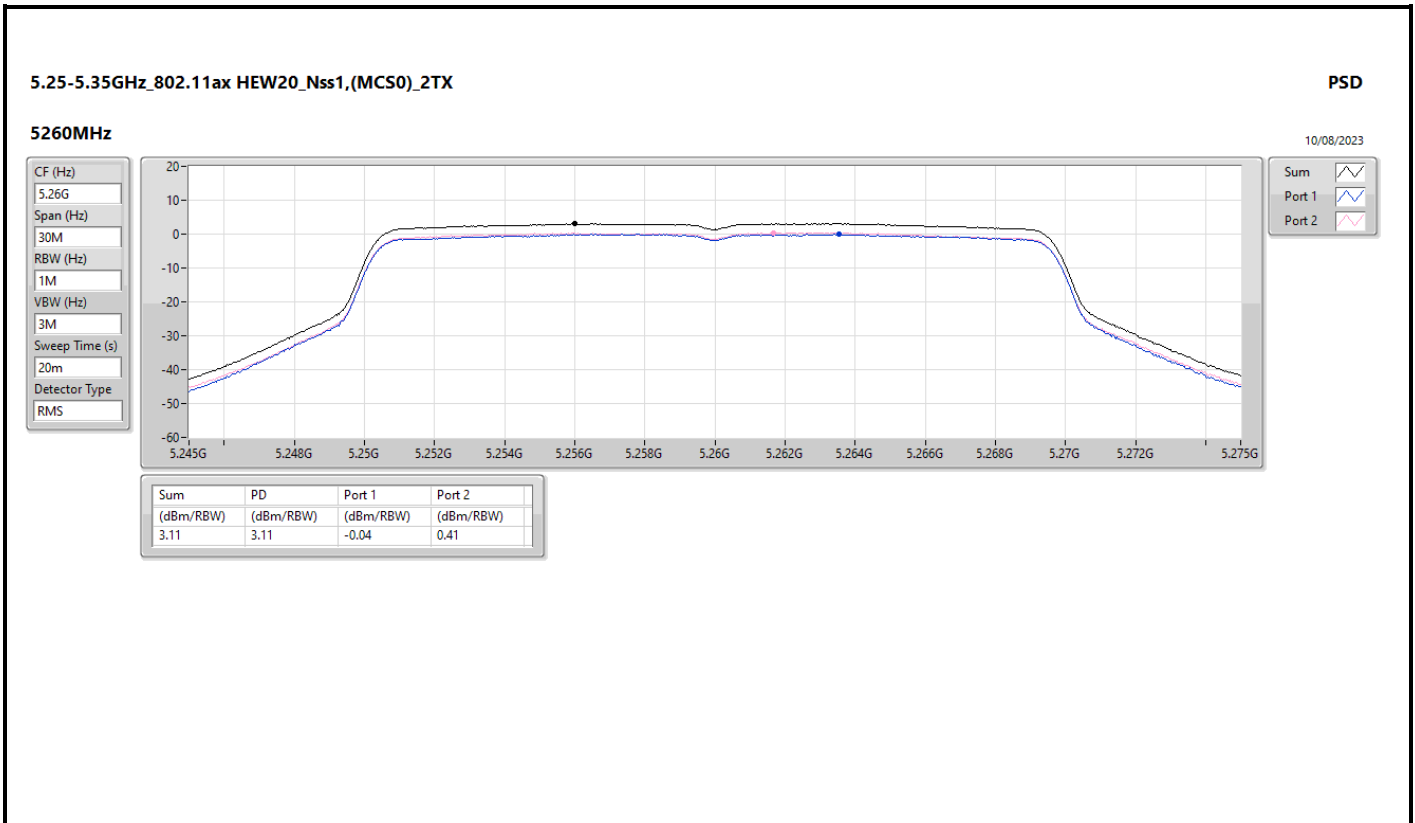


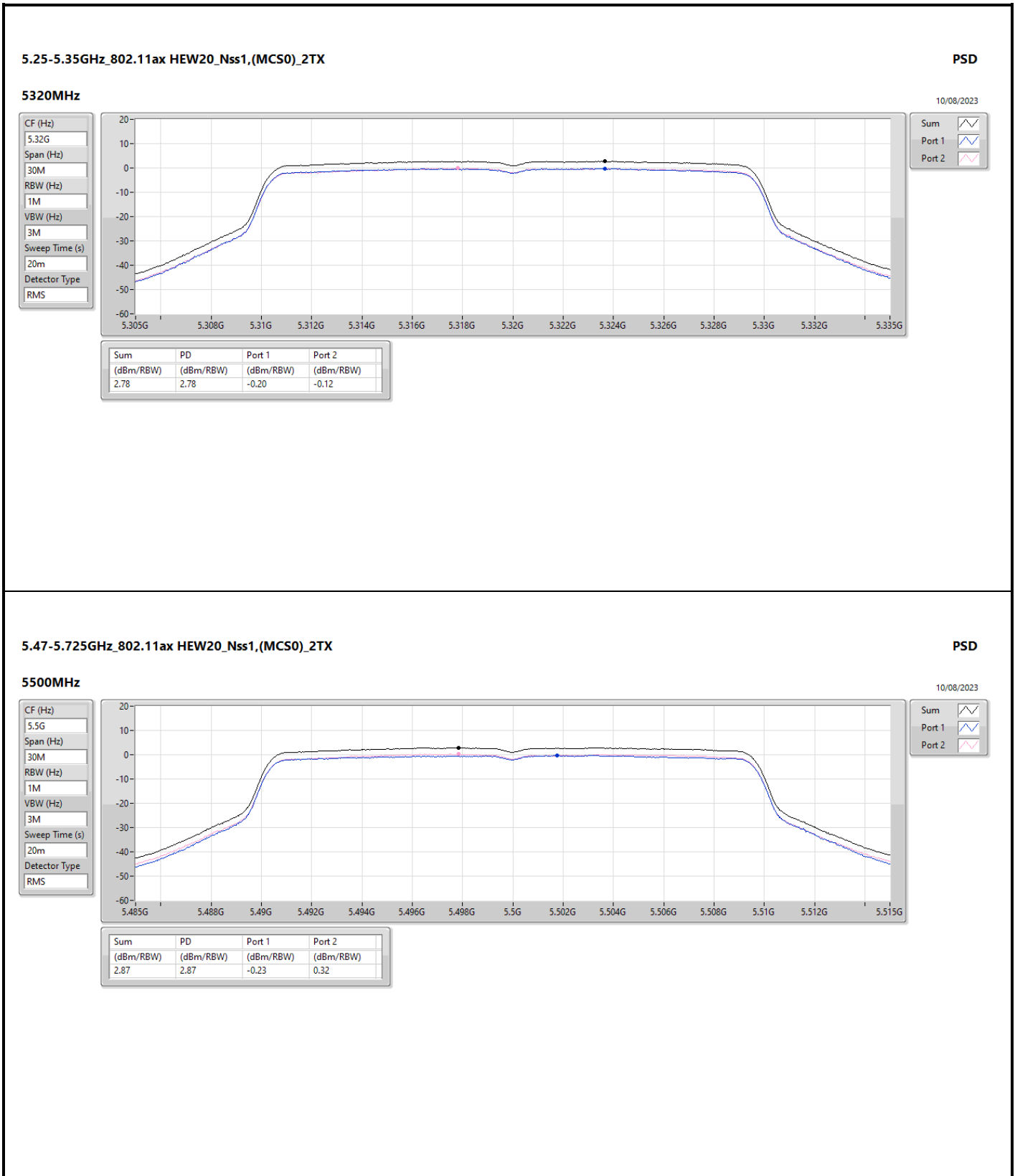


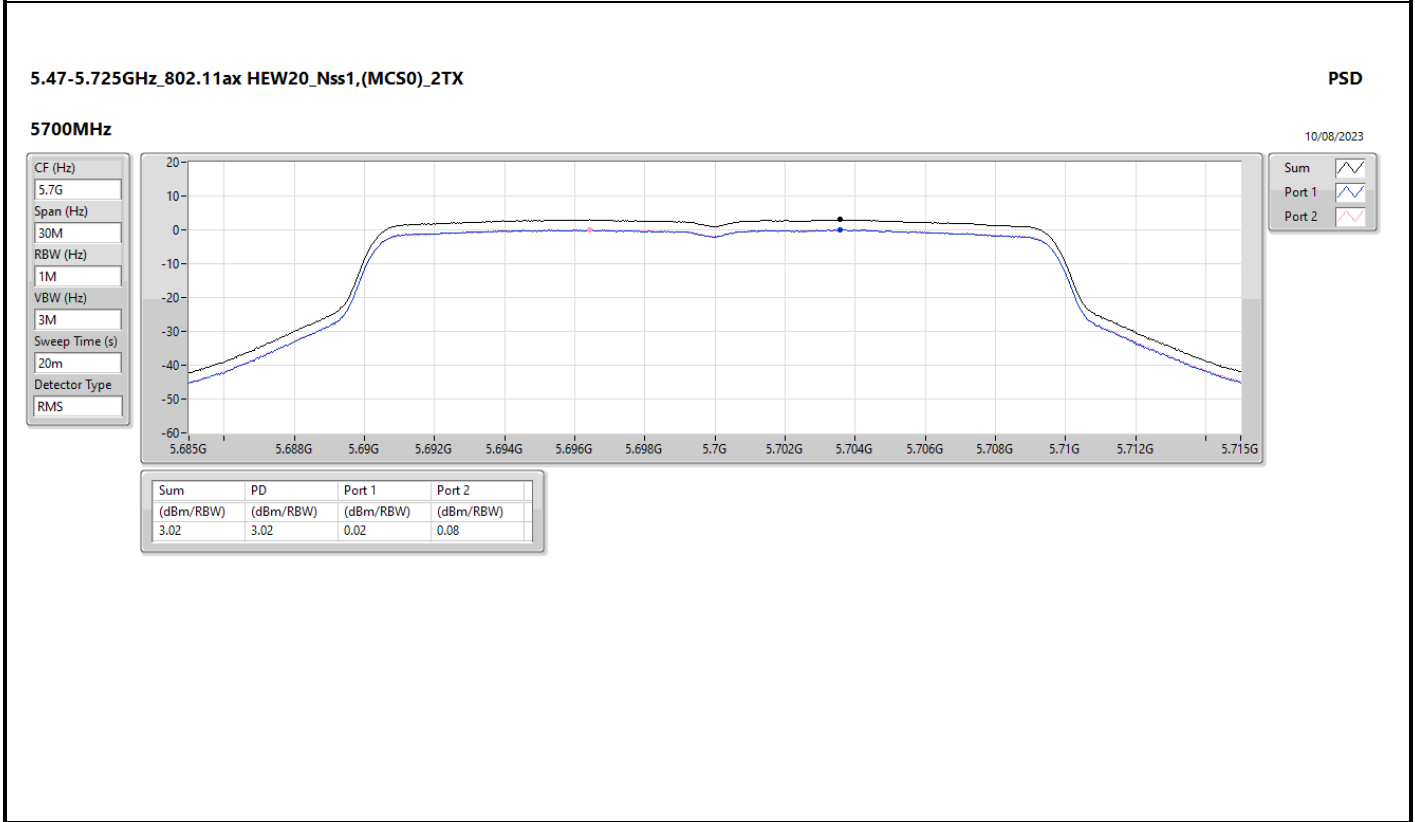
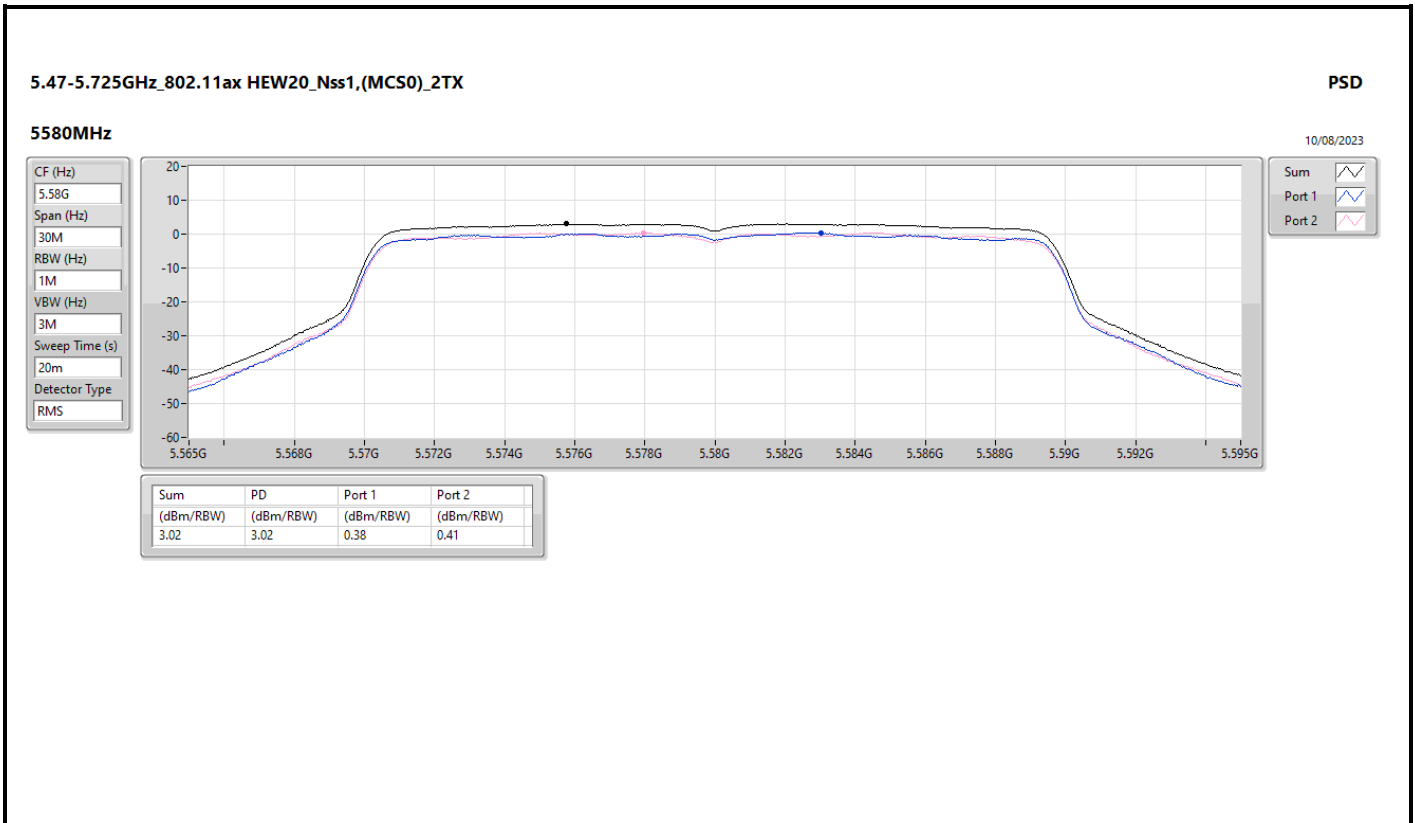




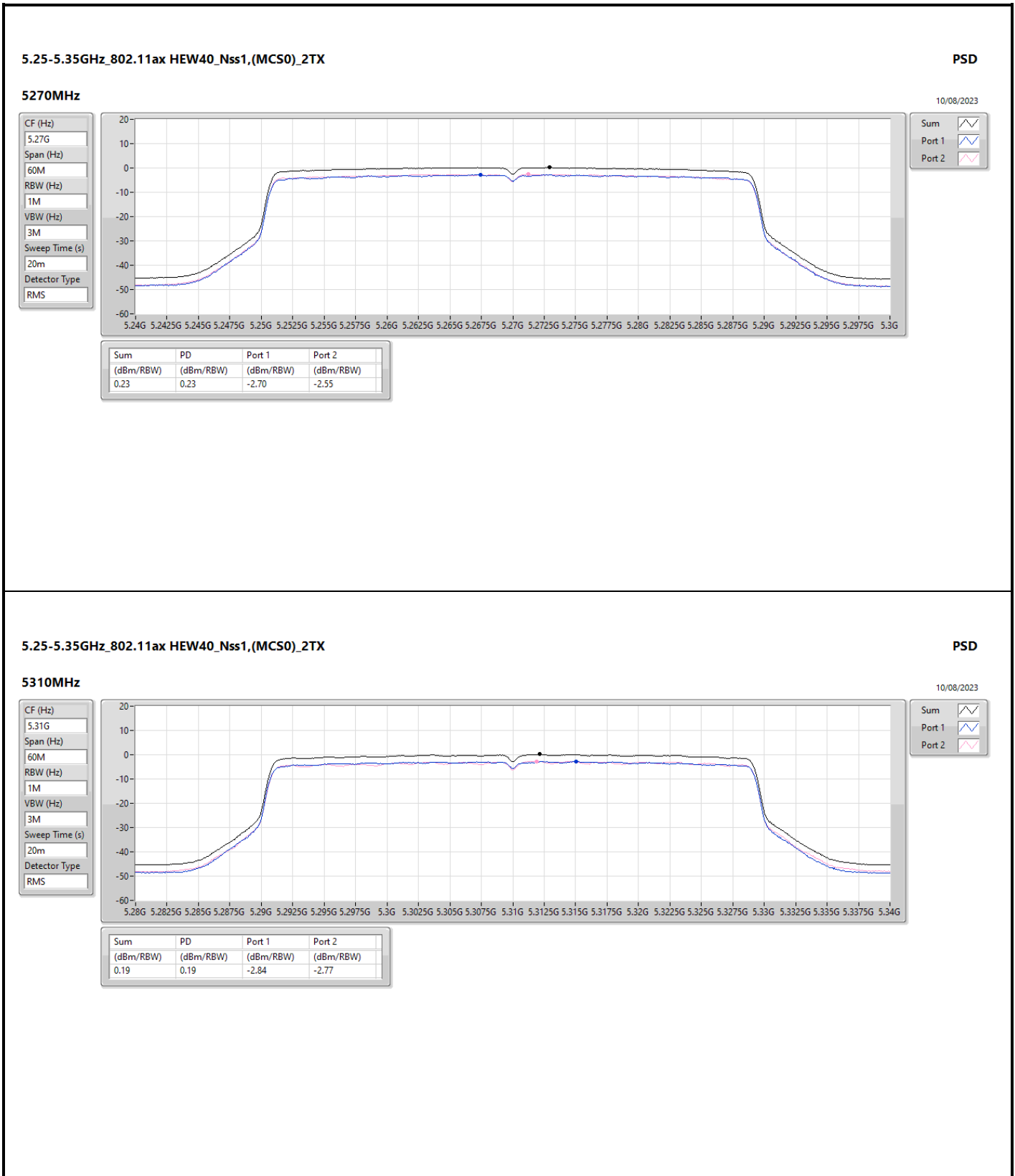




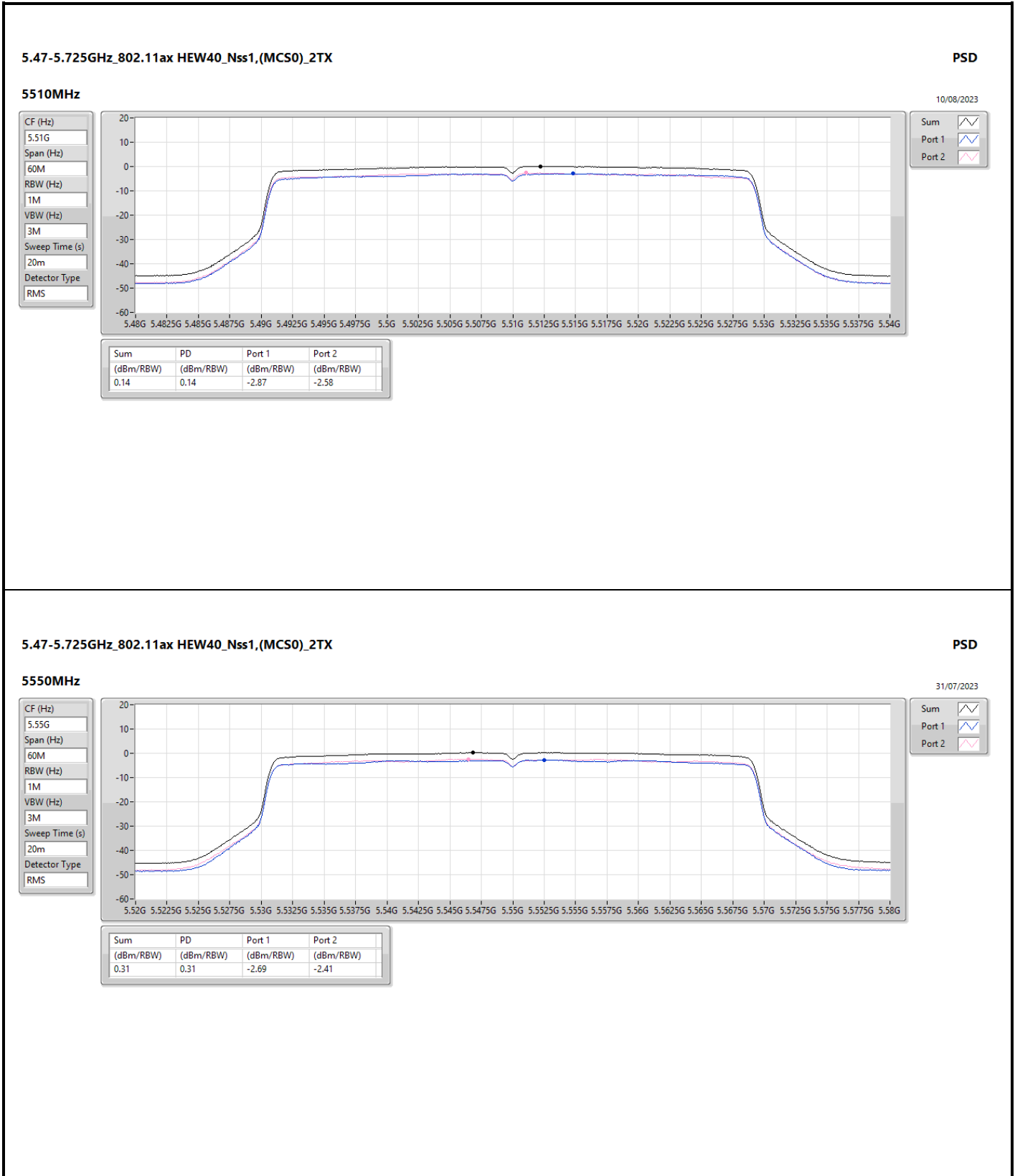


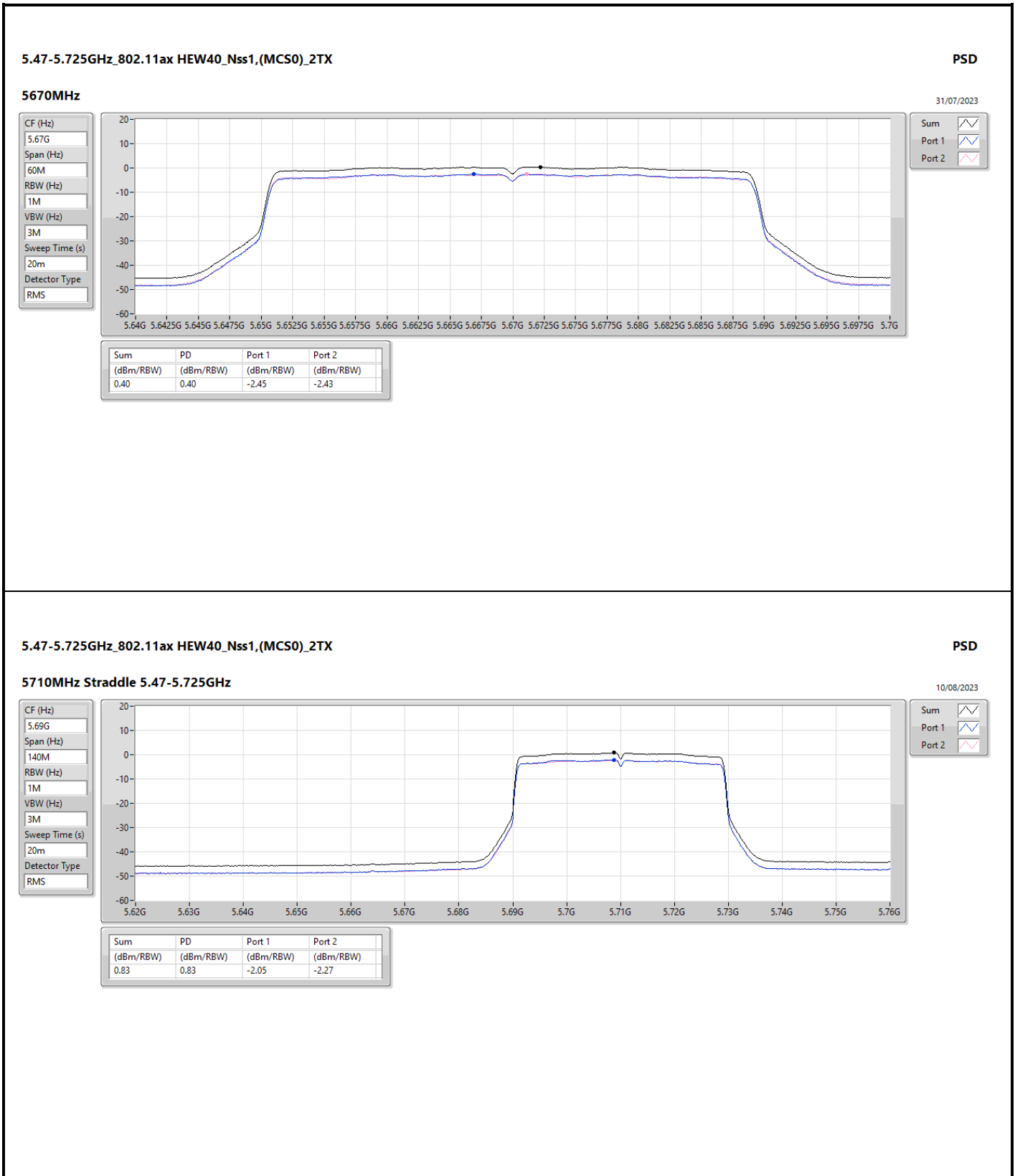


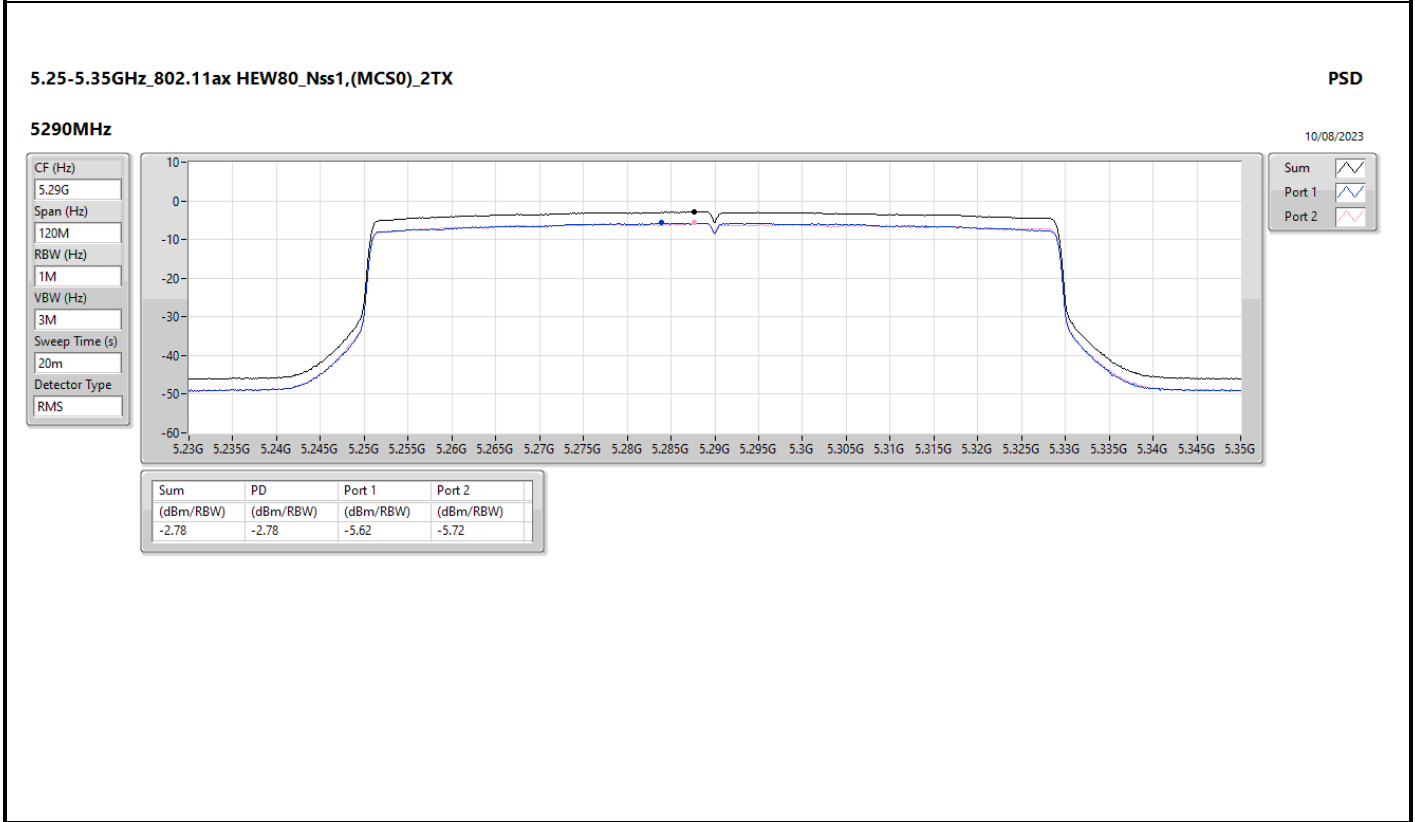
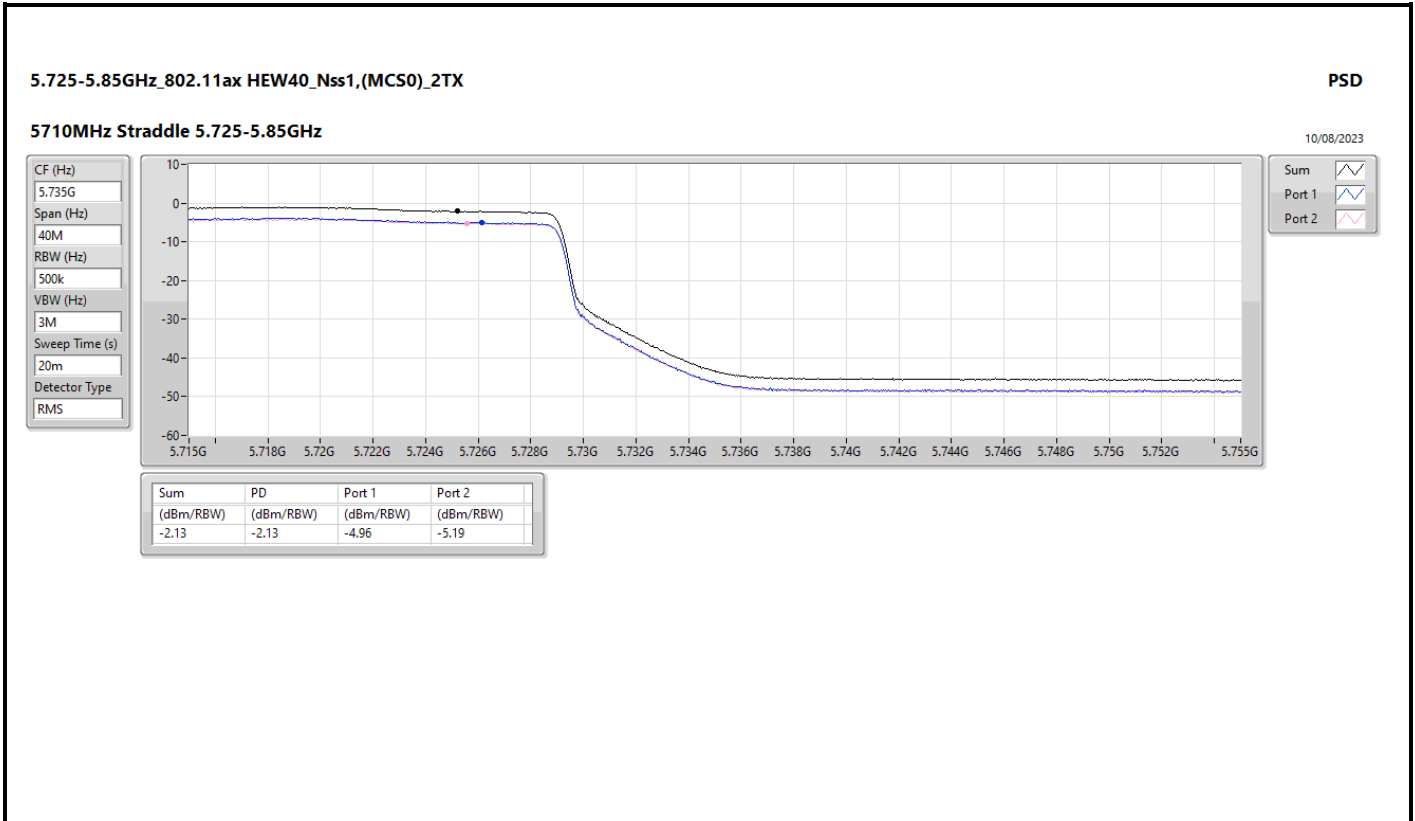


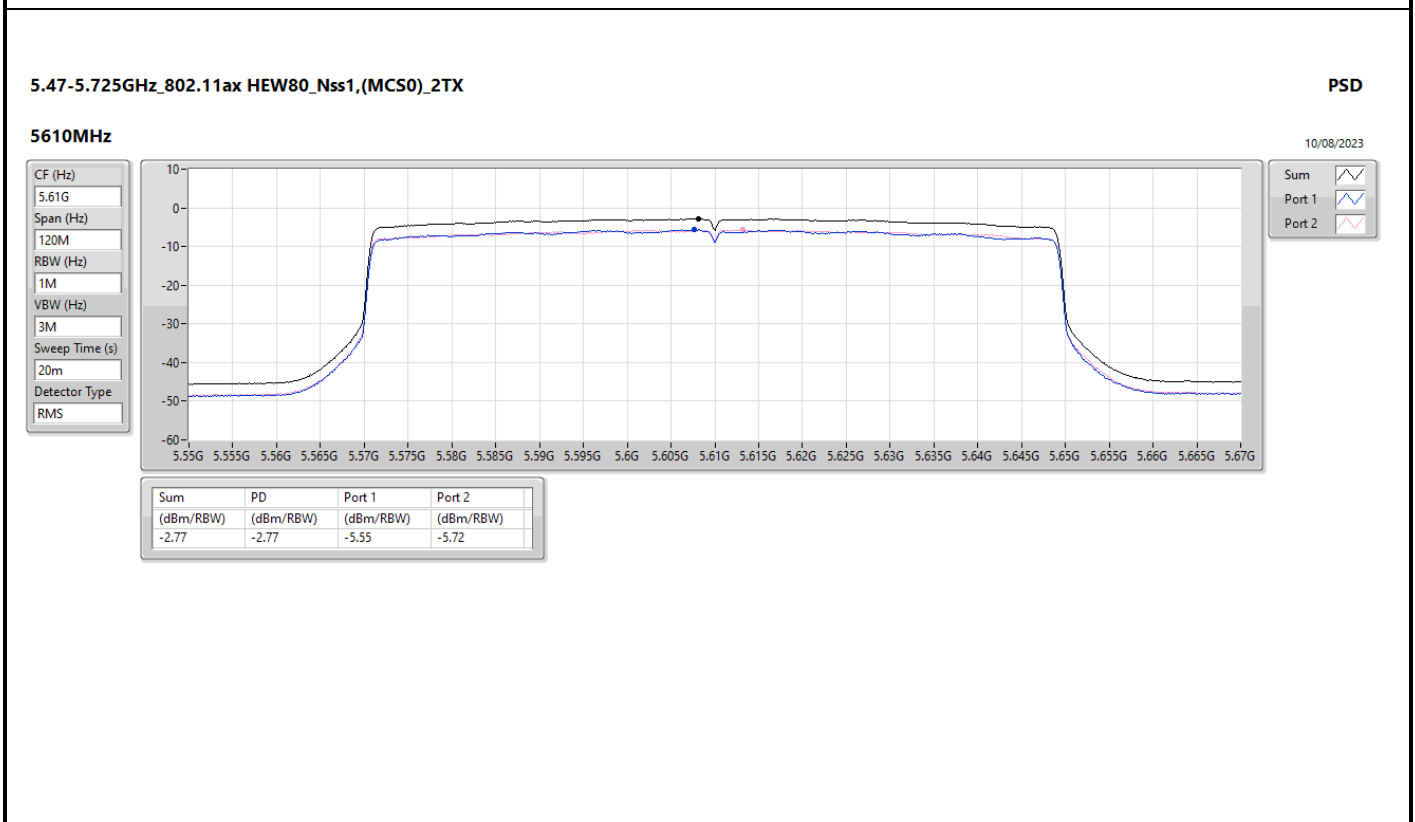
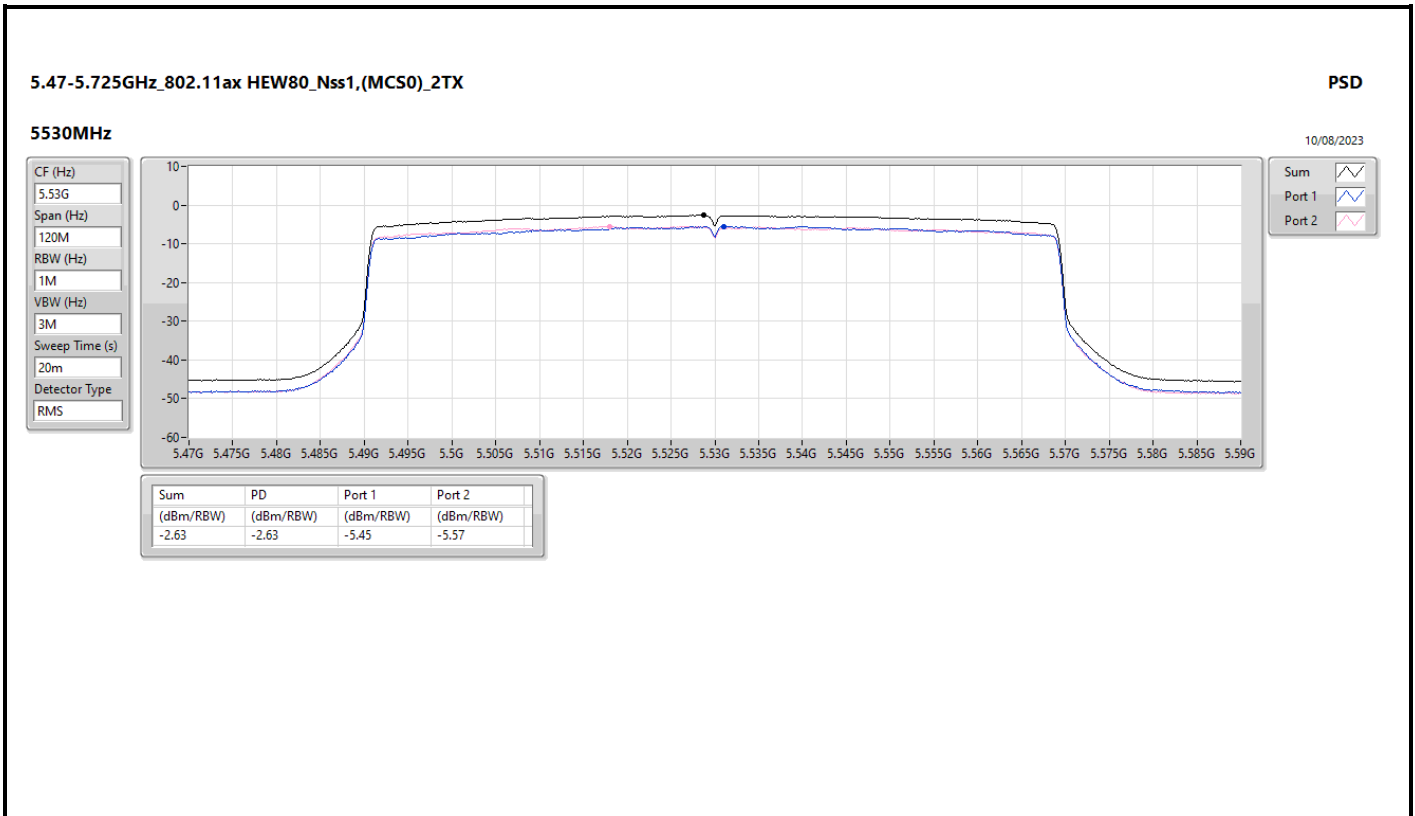


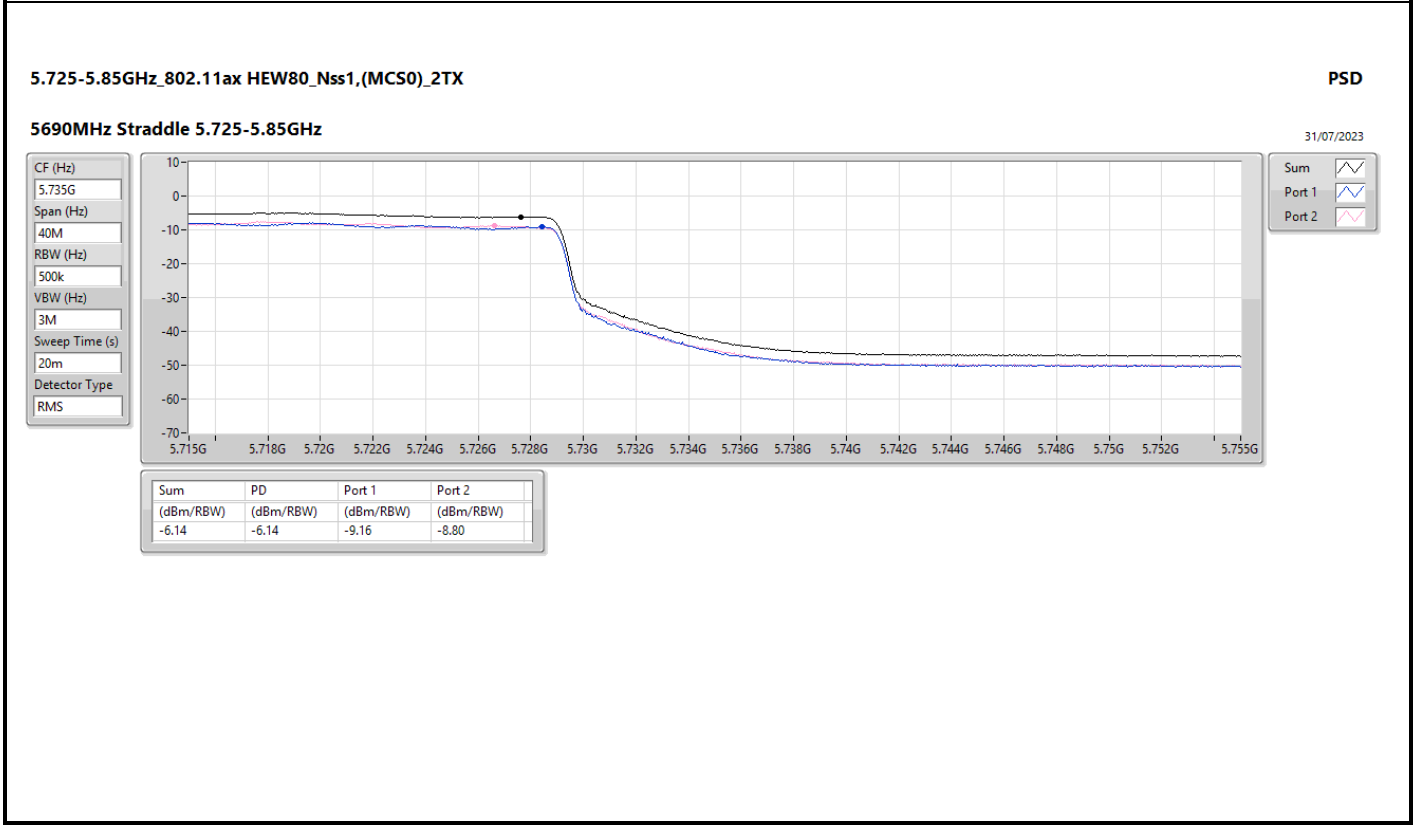
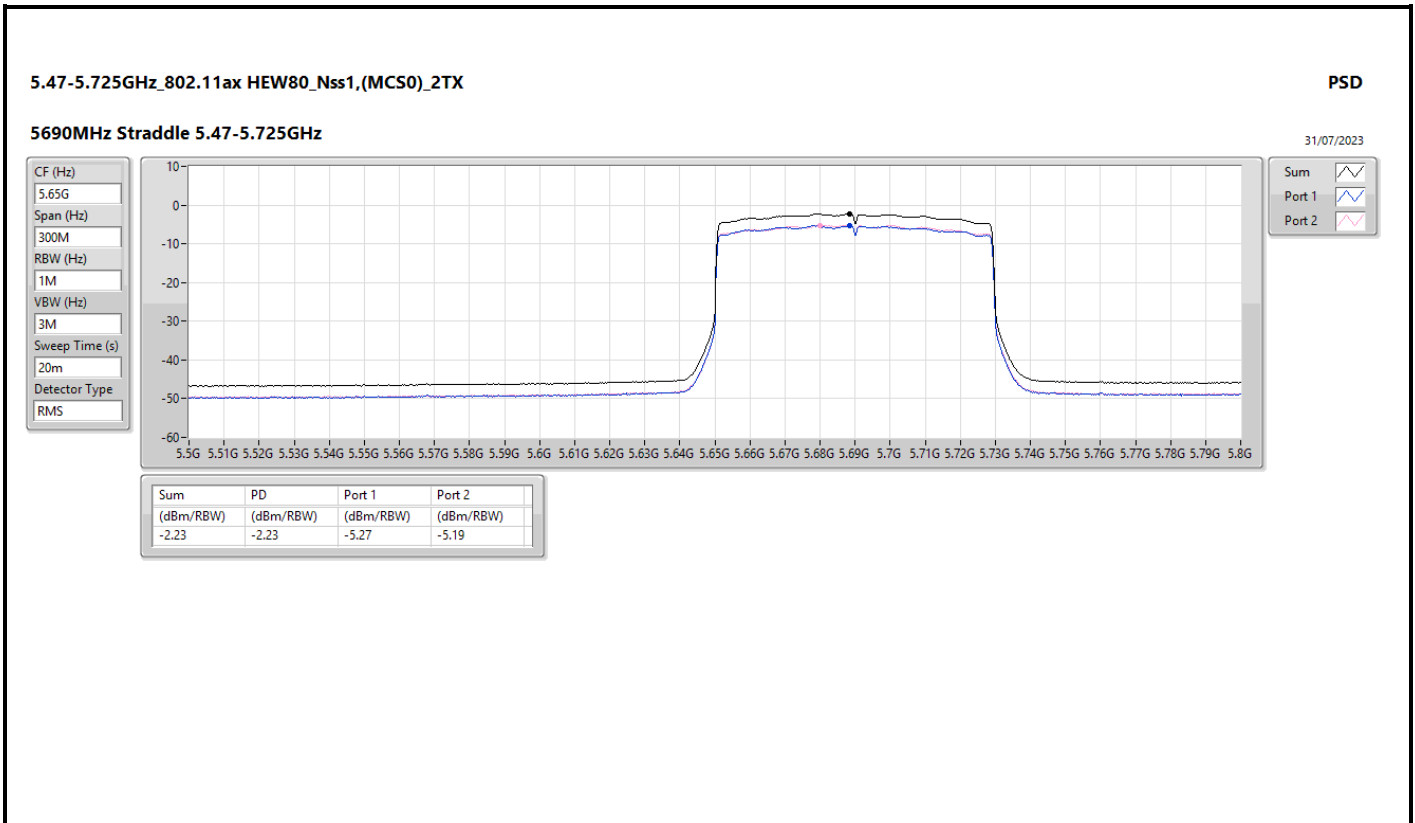


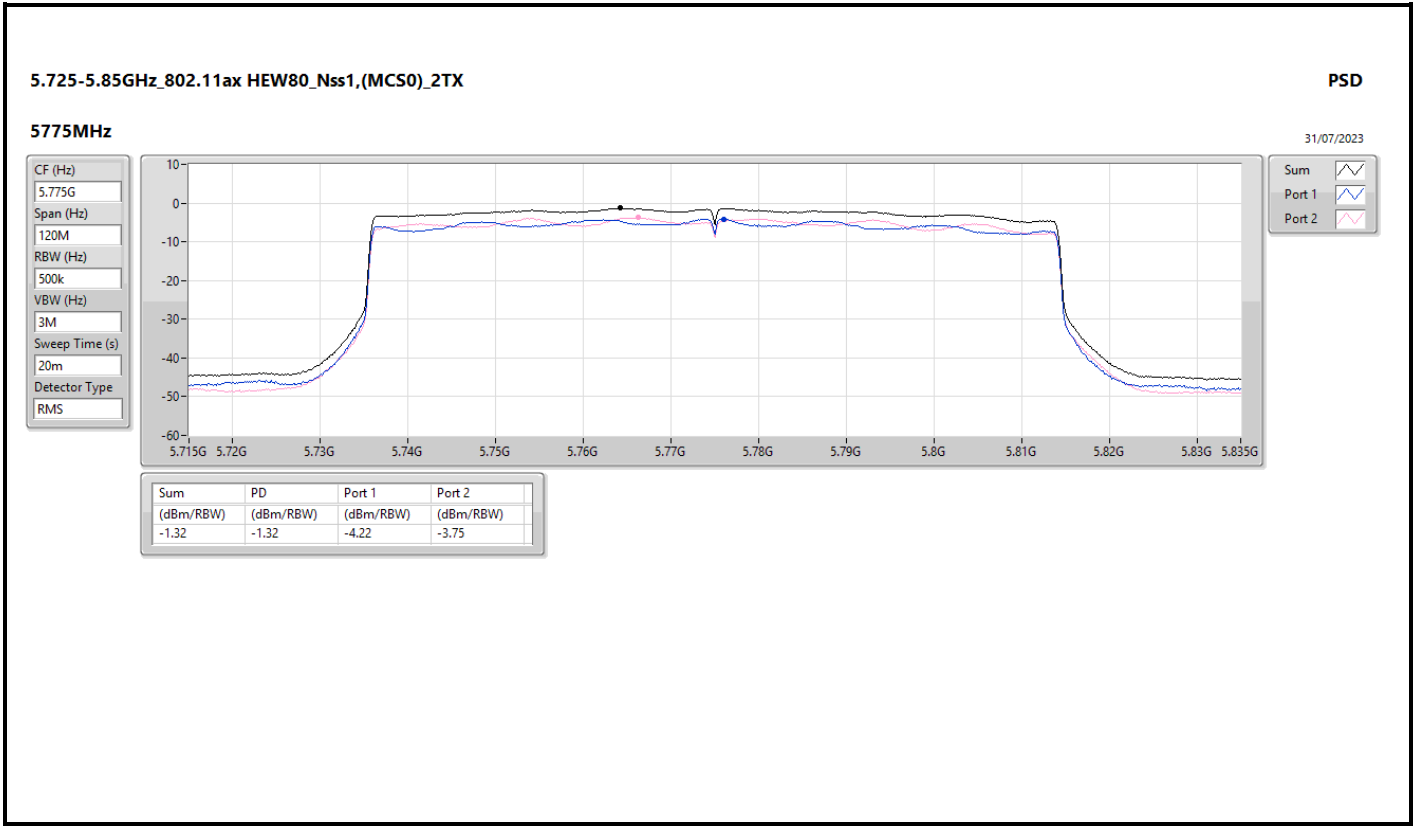












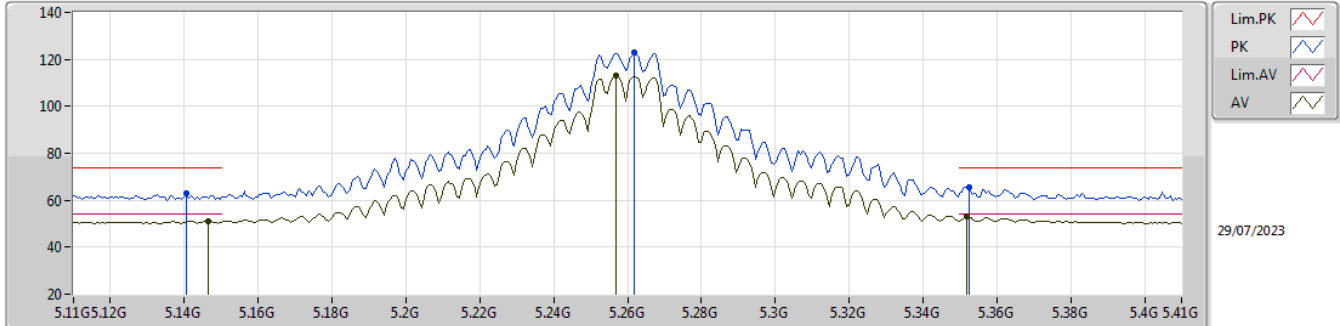


Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.25-5.35GHz	-	-	-	-	-	-	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	Pass	AV	5.3534G	53.75	54.00	-0.25	3	Vertical	358	1.80	-

5.25-5.35GHz\_802.11a\_Nss1,(6Mbps)\_2TX

5260MHz\_TX



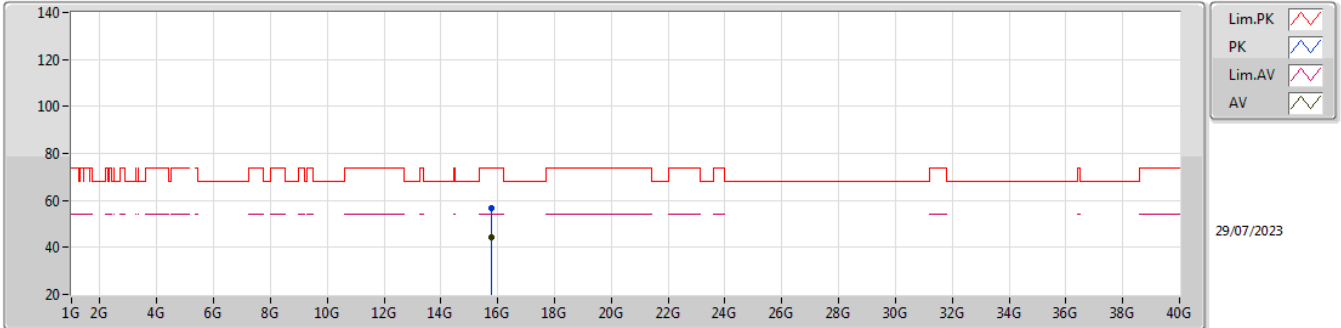
EUT\_Y\_2TX  
Setting 23  
02-L-5-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1406G	63.01	74.00	-10.99	54.33	3	Vertical	356	1.95	-	33.58	5.77	30.67
AV	5.1466G	50.99	54.00	-3.01	42.31	3	Vertical	356	1.95	-	33.59	5.77	30.68
PK	5.2618G	122.98	Inf	-Inf	114.10	3	Vertical	356	1.95	-	33.82	5.83	30.77
AV	5.257G	113.29	Inf	-Inf	104.42	3	Vertical	356	1.95	-	33.81	5.83	30.77
PK	5.3524G	65.77	74.00	-8.23	56.73	3	Vertical	356	1.95	-	34.00	5.88	30.84
AV	5.3518G	52.88	54.00	-1.12	43.84	3	Vertical	356	1.95	-	34.00	5.88	30.84



5.25-5.35GHz\_802.11a\_Nss1,(6Mbps)\_2TX

5260MHz\_TX

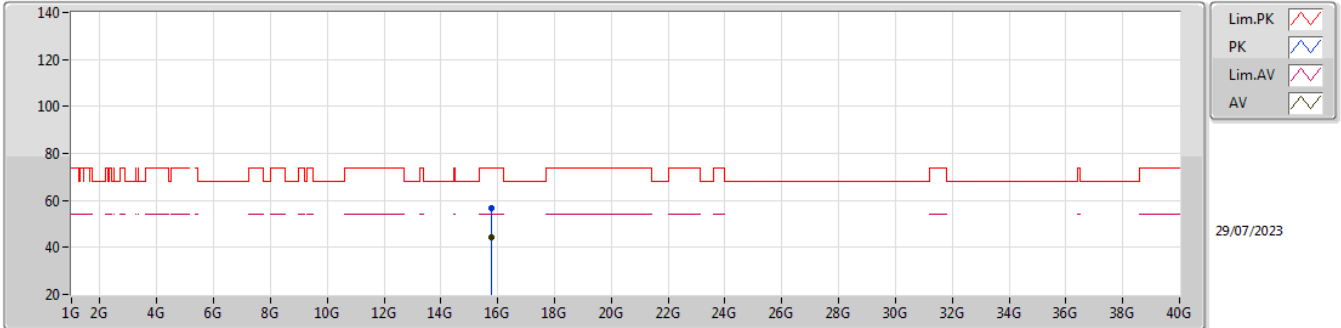


EUT Y\_2TX  
Setting 23  
02-L-S-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA			
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)			
PK	15.778G	56.70	74.00	-17.30	40.77	3	Vertical	359	1.05	-	37.49	10.41	31.97			
AV	15.78136G	44.55	54.00	-9.45	28.64	3	Vertical	359	1.05	-	37.47	10.41	31.97			

5.25-5.35GHz\_802.11a\_Nss1,(6Mbps)\_2TX

5260MHz\_TX

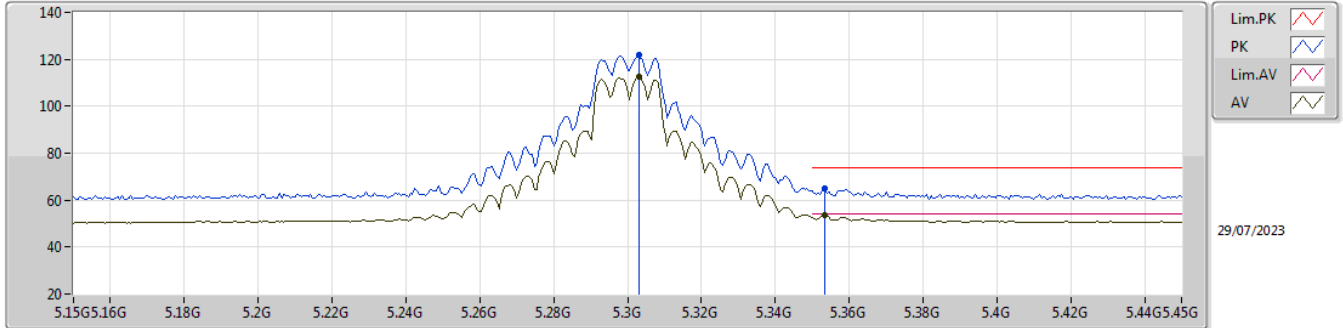


EUT Y\_2TX  
Setting 23  
02-L-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.77998G	56.65	74.00	-17.35	40.73	3	Horizontal	41	1.08	-	37.48	10.41	31.97
AV	15.77636G	44.48	54.00	-9.52	28.55	3	Horizontal	41	1.08	-	37.49	10.41	31.97

5.25-5.35GHz\_802.11a\_Nss1,(6Mbps)\_2TX

5300MHz\_TX

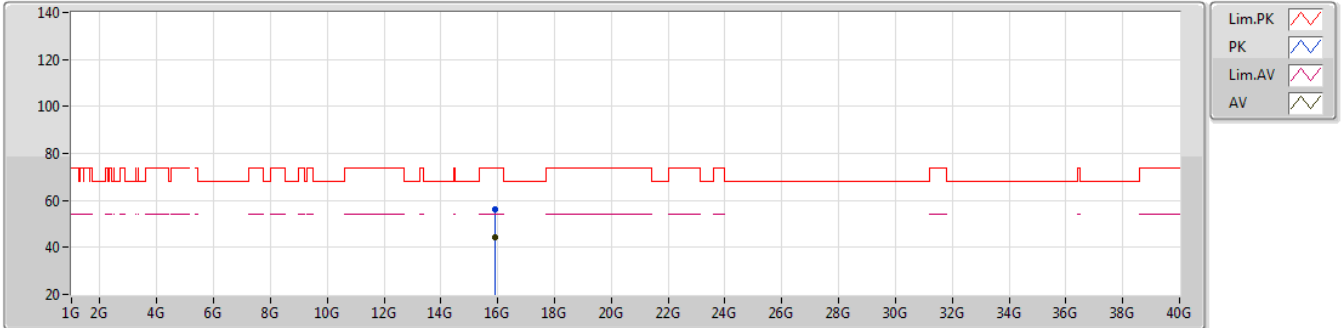


EUT Y\_2TX  
Setting 22  
02-L-5-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.303G	121.69	Inf	-Inf	112.73	3	Vertical	358	1.80	-	33.91	5.85	30.80
AV	5.303G	112.49	Inf	-Inf	103.53	3	Vertical	358	1.80	-	33.91	5.85	30.80
PK	5.3534G	65.22	74.00	-8.78	56.18	3	Vertical	358	1.80	-	34.00	5.88	30.84
AV	5.3534G	53.75	54.00	-0.25	44.71	3	Vertical	358	1.80	-	34.00	5.88	30.84

5.25-5.35GHz\_802.11a\_Nss1,(6Mbps)\_2TX

5300MHz\_TX

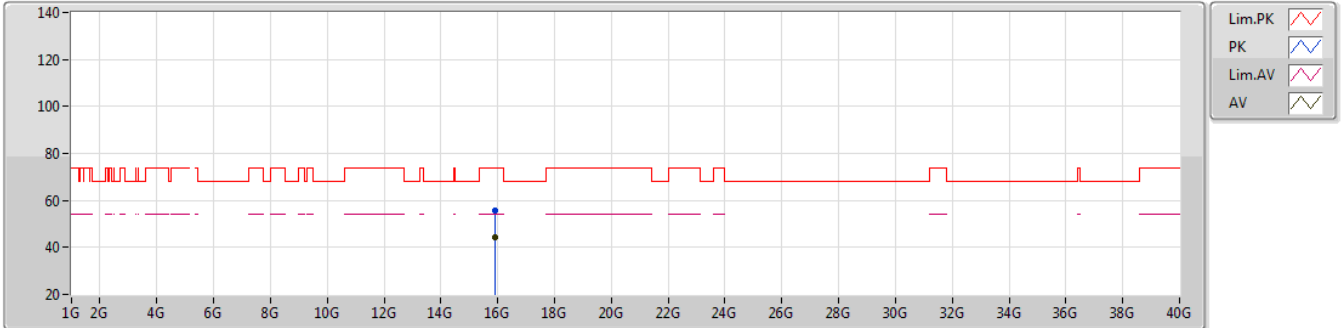


EUT Y\_2TX  
Setting 22  
02-L-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.89912G	56.26	74.00	-17.74	40.48	3	Vertical	152	1.17	-	37.30	10.46	31.98
AV	15.90108G	44.25	54.00	-9.75	28.47	3	Vertical	152	1.17	-	37.30	10.46	31.98

5.25-5.35GHz\_802.11a\_Nss1,(6Mbps)\_2TX

5300MHz\_TX

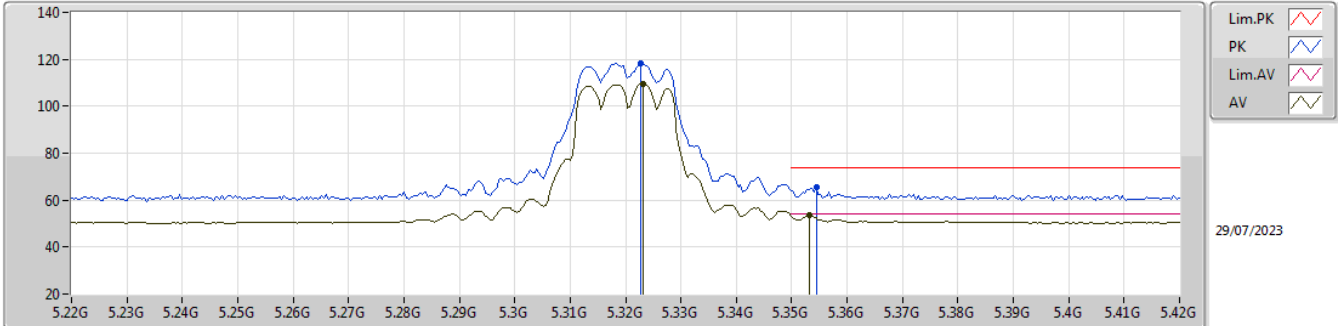


EUT\_V\_2TX  
Setting 22  
02-L-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.89662G	55.78	74.00	-18.22	40.00	3	Horizontal	42	2.37	-	37.30	10.46	31.98
AV	15.90432G	44.38	54.00	-9.62	28.59	3	Horizontal	42	2.37	-	37.31	10.46	31.98

5.25-5.35GHz\_802.11a\_Nss1,(6Mbps)\_2TX

5320MHz\_TX

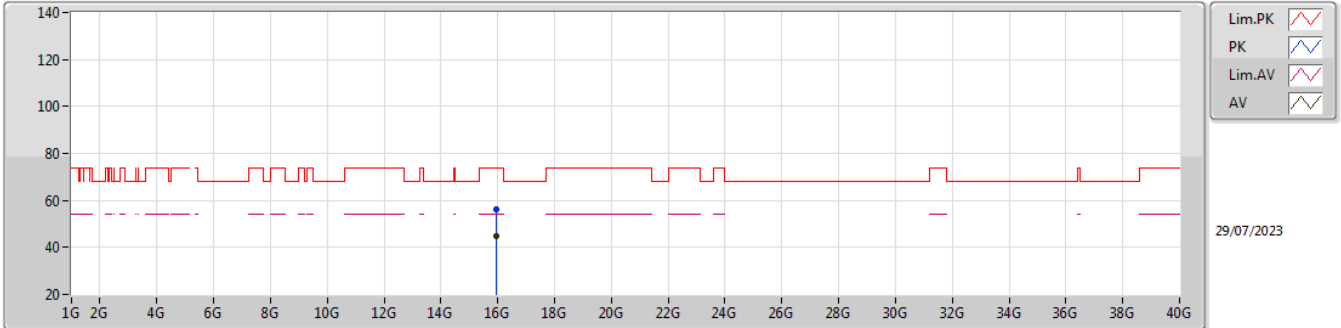


EUT\_V\_2TX  
 Setting 19.5  
 02-L-5-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.3228G	118.25	Inf	-Inf	109.26	3	Vertical	174	1.86	-	33.95	5.86	30.82
AV	5.3232G	109.38	Inf	-Inf	100.39	3	Vertical	174	1.86	-	33.95	5.86	30.82
PK	5.3544G	65.26	74.00	-8.74	56.22	3	Vertical	174	1.86	-	34.00	5.88	30.84
AV	5.3532G	53.71	54.00	-0.29	44.67	3	Vertical	174	1.86	-	34.00	5.88	30.84

5.25-5.35GHz\_802.11a\_Nss1,(6Mbps)\_2TX

5320MHz\_TX

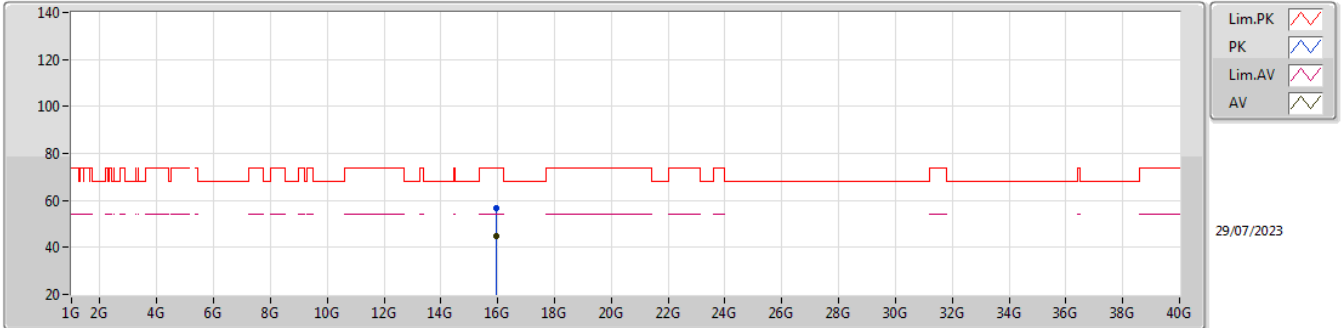


EUT\_V\_2TX  
Setting 19.5  
02-L-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.96146G	56.07	74.00	-17.93	40.13	3	Vertical	81	2.47	-	37.45	10.48	31.99
AV	15.9622G	44.61	54.00	-9.39	28.67	3	Vertical	81	2.47	-	37.45	10.48	31.99

5.25-5.35GHz\_802.11a\_Nss1,(6Mbps)\_2TX

5320MHz\_TX



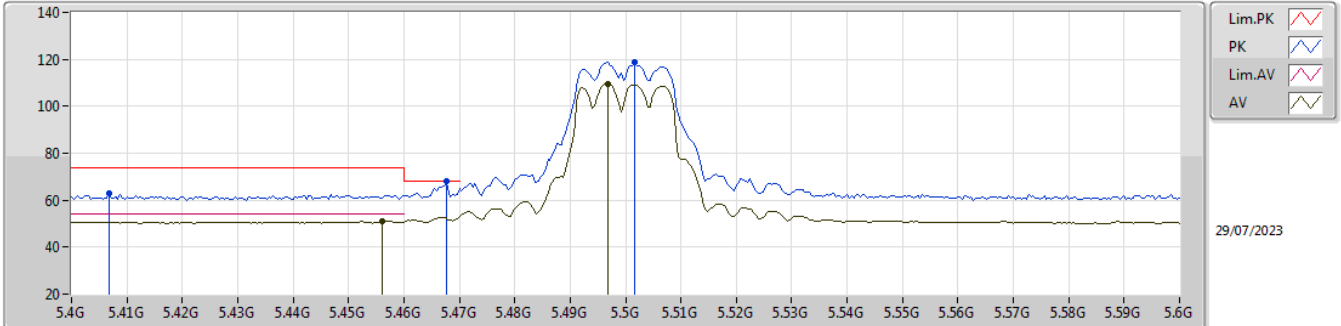
EUT\_V\_2TX  
Setting 19.5  
02-L-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.95988G	56.73	74.00	-17.27	40.80	3	Horizontal	3	2.99	-	37.44	10.48	31.99
AV	15.96282G	44.73	54.00	-9.27	28.78	3	Horizontal	3	2.99	-	37.45	10.49	31.99



5.47-5.725GHz\_802.11a\_Nss1,(6Mbps)\_2TX

5500MHz\_TX

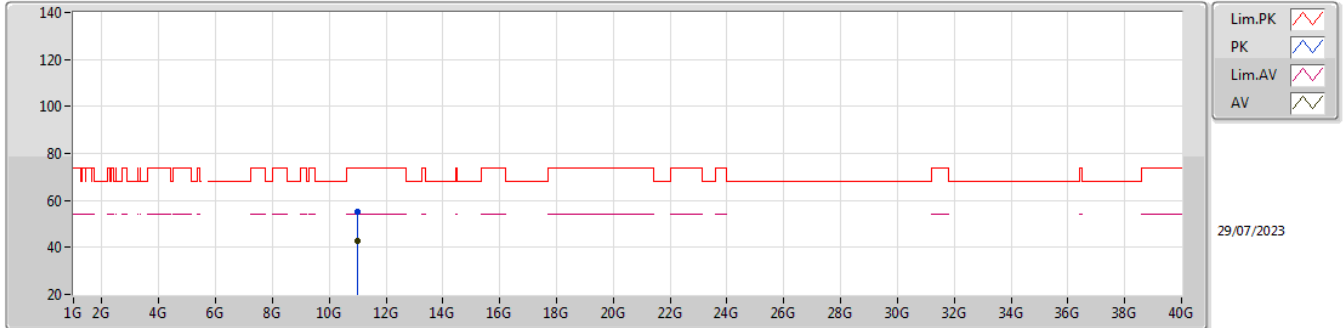


EUT\_V\_2TX  
 Setting 19.5  
 02-L-5-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.4068G	62.93	74.00	-11.07	53.90	3	Vertical	185	1.92	-	34.01	5.91	30.89
AV	5.456G	50.90	54.00	-3.10	41.76	3	Vertical	185	1.92	-	34.10	5.96	30.92
PK	5.5016G	118.69	Inf	-Inf	109.55	3	Vertical	185	1.92	-	34.10	6.00	30.96
AV	5.4968G	109.47	Inf	-Inf	100.33	3	Vertical	185	1.92	-	34.10	6.00	30.96
PK	5.4676G	67.89	68.20	-0.31	58.75	3	Vertical	185	1.92	-	34.10	5.97	30.93

5.47-5.725GHz\_802.11a\_Nss1,(6Mbps)\_2TX

5500MHz\_TX

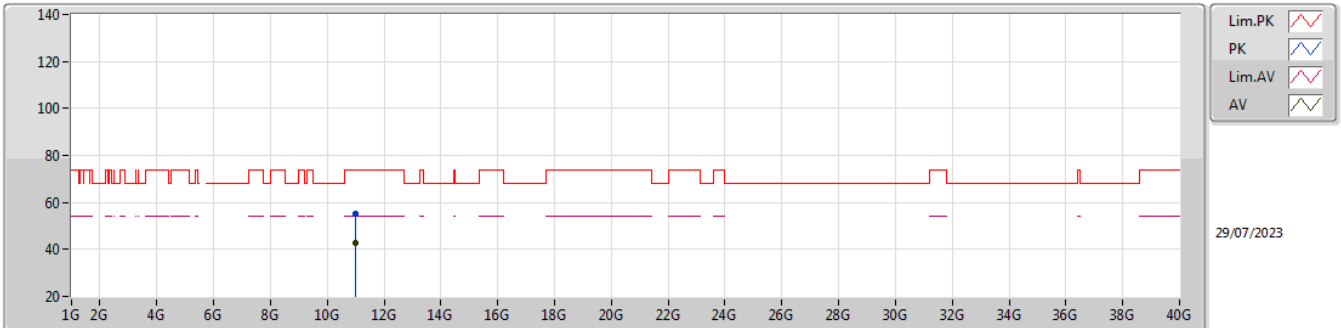


EUT Y\_2TX  
Setting 19.5  
02-L-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	10.99562G	55.17	74.00	-18.83	40.01	3	Vertical	17	1.29	-	38.50	8.65	31.99
AV	10.99892G	42.75	54.00	-11.25	27.59	3	Vertical	17	1.29	-	38.50	8.65	31.99

5.47-5.725GHz\_802.11a\_Nss1,(6Mbps)\_2TX

5500MHz\_TX

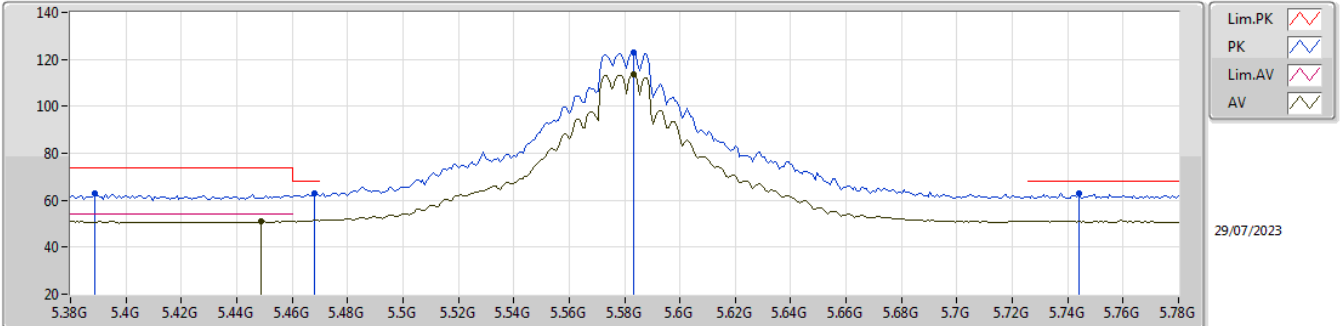


EUT Y\_2TX  
Setting 19.5  
02-L-S-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA			
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)			
PK	11.00104G	55.16	74.00	-18.84	40.00	3	Horizontal	22	1.69	-	38.50	8.65	31.99			
AV	11.00034G	42.75	54.00	-11.25	27.59	3	Horizontal	22	1.69	-	38.50	8.65	31.99			

5.47-5.725GHz\_802.11a\_Nss1,(6Mbps)\_2TX

5580MHz\_TX

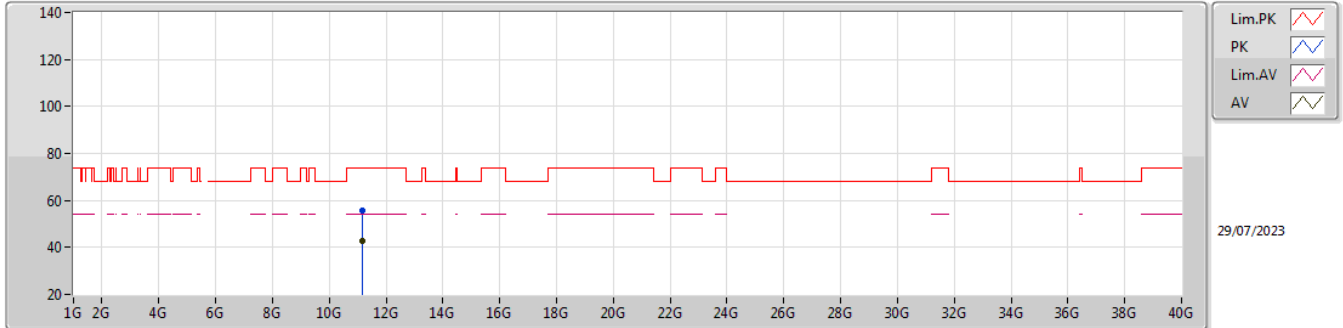


EUT\_Y\_2TX  
Setting 23  
02-L-5-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.3888G	62.76	74.00	-11.24	53.74	3	Vertical	182	2.13	-	34.00	5.89	30.87
PK	5.468G	62.78	68.20	-5.42	53.64	3	Vertical	182	2.13	-	34.10	5.97	30.93
AV	5.4488G	51.09	54.00	-2.91	41.96	3	Vertical	182	2.13	-	34.10	5.95	30.92
PK	5.5832G	123.17	Inf	-Inf	114.06	3	Vertical	182	2.13	-	34.03	6.08	31.00
AV	5.5832G	113.66	Inf	-Inf	104.55	3	Vertical	182	2.13	-	34.03	6.08	31.00
PK	5.744G	62.92	68.20	-5.28	53.89	3	Vertical	182	2.13	-	34.00	6.10	31.07

5.47-5.725GHz\_802.11a\_Nss1,(6Mbps)\_2TX

5580MHz\_TX

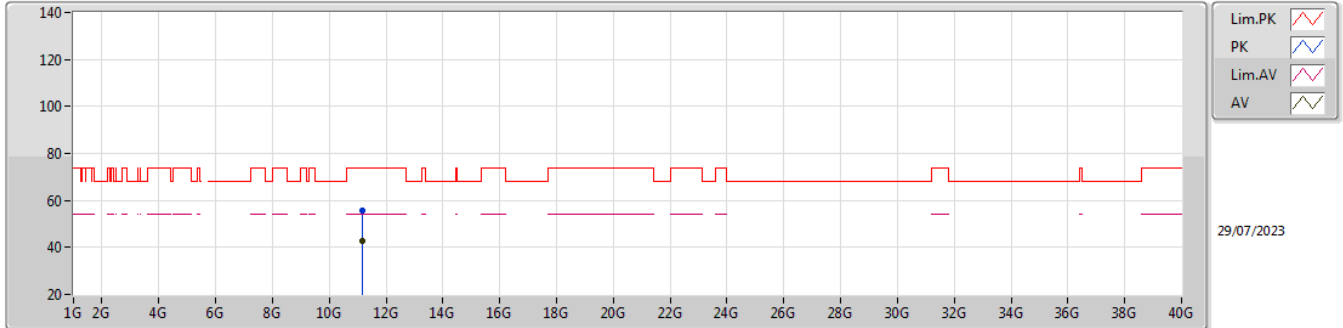


EUT\_V\_2TX  
Setting 23  
02-L-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.156G	55.50	74.00	-18.50	40.24	3	Vertical	217	2.67	-	38.60	8.70	32.04
AV	11.16074G	42.94	54.00	-11.06	27.67	3	Vertical	217	2.67	-	38.60	8.71	32.04

5.47-5.725GHz\_802.11a\_Nss1,(6Mbps)\_2TX

5580MHz\_TX

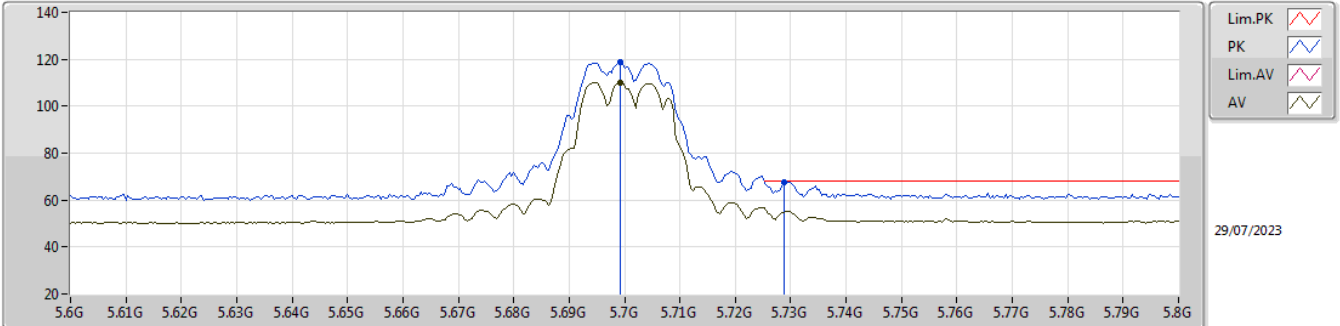


EUT\_V\_2TX  
Setting 23  
02-L-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.15678G	55.45	74.00	-18.55	40.19	3	Horizontal	128	2.73	-	38.60	8.70	32.04
AV	11.1647G	42.97	54.00	-11.03	27.71	3	Horizontal	128	2.73	-	38.60	8.71	32.05

5.47-5.725GHz\_802.11a\_Nss1,(6Mbps)\_2TX

5700MHz\_TX

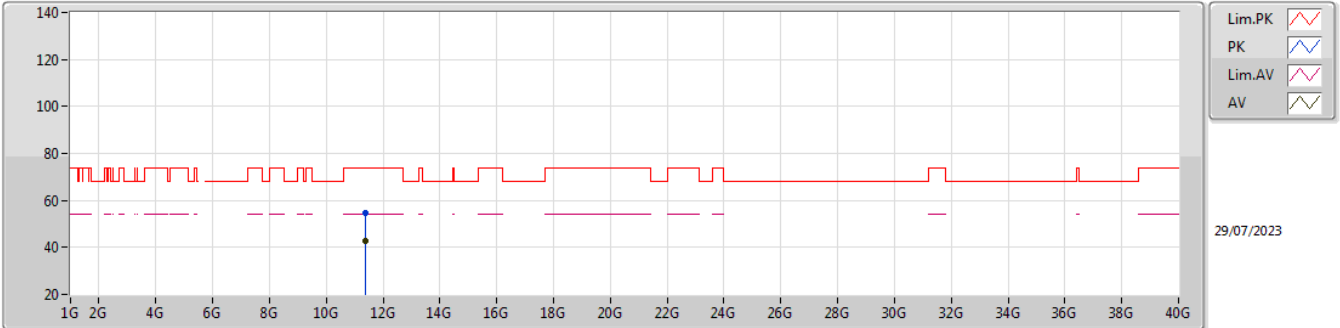


EUT Y\_2TX  
 Setting 19.5  
 02-L-5-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.6992G	118.68	Inf	-Inf	109.63	3	Vertical	179	2.17	-	34.00	6.10	31.05
AV	5.6992G	110.07	Inf	-Inf	101.02	3	Vertical	179	2.17	-	34.00	6.10	31.05
PK	5.7288G	67.82	68.20	-0.38	58.79	3	Vertical	179	2.17	-	34.00	6.10	31.07

5.47-5.725GHz\_802.11a\_Nss1,(6Mbps)\_2TX

5700MHz\_TX



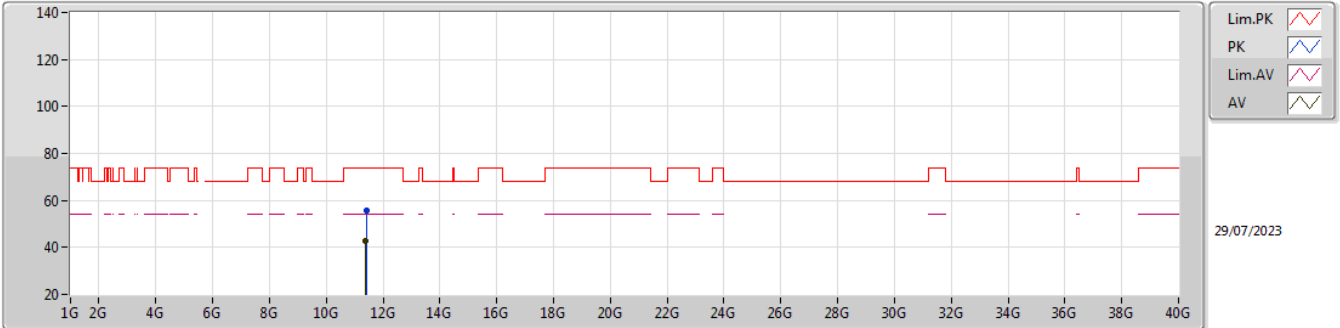
EUT Y\_2TX  
Setting 19.5  
02-L-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.40044G	54.86	74.00	-19.14	39.50	3	Vertical	123	1.22	-	38.70	8.79	32.13
AV	11.39732G	42.91	54.00	-11.09	27.56	3	Vertical	123	1.22	-	38.69	8.79	32.13



5.47-5.725GHz\_802.11a\_Nss1,(6Mbps)\_2TX

5700MHz\_TX

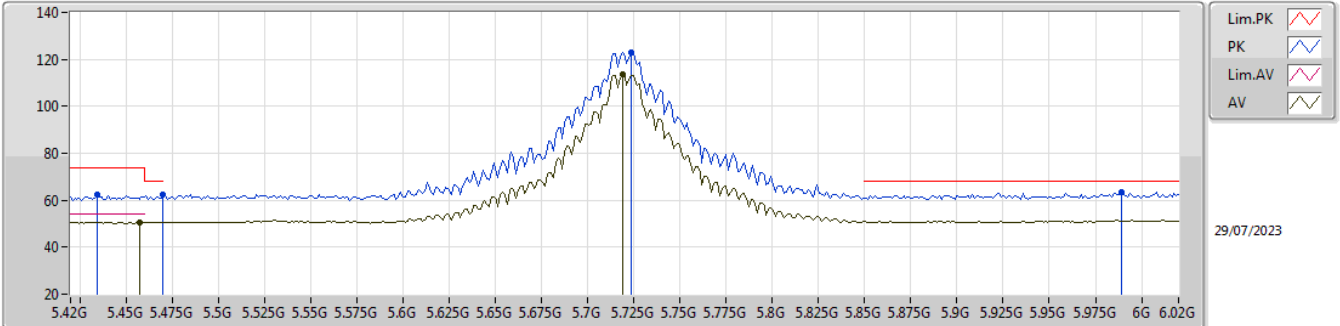


EUT Y\_2TX  
Setting 19.5  
02-L-S-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)
PK	11.4017G	55.47	74.00	-18.53	40.11	3	Horizontal	240	2.34	-	38.70	8.79	32.13
AV	11.39868G	42.92	54.00	-11.08	27.56	3	Horizontal	240	2.34	-	38.70	8.79	32.13

5.47-5.725GHz\_802.11a\_Nss1,(6Mbps)\_2TX

5720MHz Straddle 5.47-5.725GHz\_TX

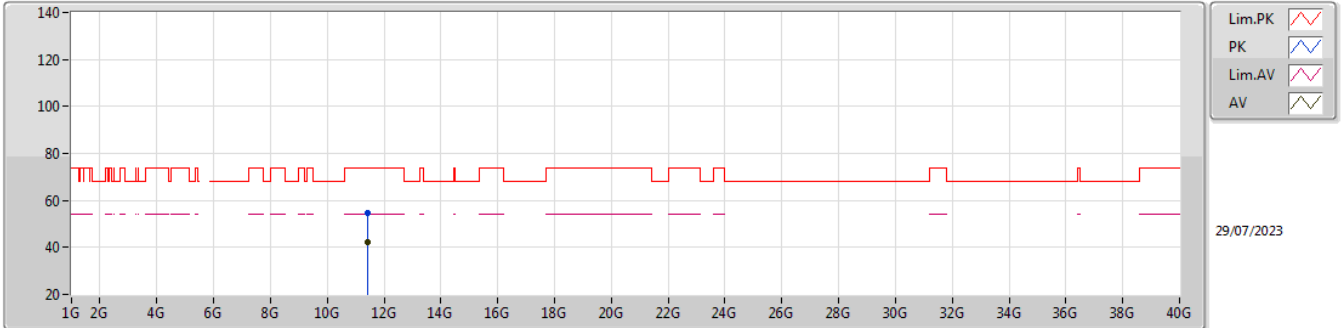


EUT Y\_2TX  
Setting 23  
02-L-5-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.4344G	62.34	74.00	-11.66	53.25	3	Vertical	180	2.05	-	34.07	5.93	30.91
PK	5.47G	62.51	68.20	-5.69	53.38	3	Vertical	180	2.05	-	34.10	5.97	30.94
AV	5.4572G	50.47	54.00	-3.53	41.34	3	Vertical	180	2.05	-	34.10	5.96	30.93
PK	5.7236G	122.96	Inf	-Inf	113.92	3	Vertical	180	2.05	-	34.00	6.10	31.06
AV	5.7188G	113.69	Inf	-Inf	104.65	3	Vertical	180	2.05	-	34.00	6.10	31.06
PK	5.9888G	63.30	68.20	-4.90	53.89	3	Vertical	180	2.05	-	34.30	6.29	31.18

5.47-5.725GHz\_802.11a\_Nss1,(6Mbps)\_2TX

5720MHz Straddle 5.47-5.725GHz\_TX

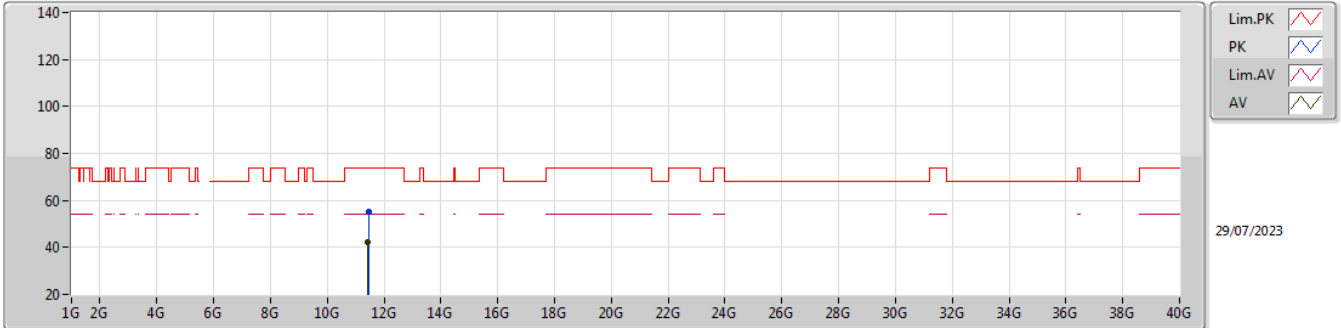


EUT Y\_2TX  
Setting 23  
02-L-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.43816G	54.69	74.00	-19.31	39.25	3	Vertical	250	1.39	-	38.78	8.80	32.14
AV	11.43832G	42.48	54.00	-11.52	27.04	3	Vertical	250	1.39	-	38.78	8.80	32.14

5.47-5.725GHz\_802.11a\_Nss1,(6Mbps)\_2TX

5720MHz Straddle 5.47-5.725GHz\_TX

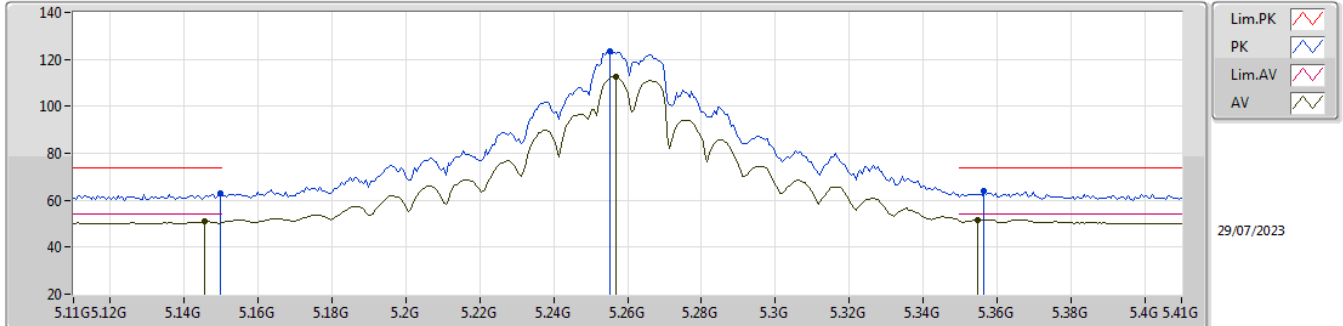


EUT\_V\_2TX  
Setting 23  
02-L-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.44458G	54.95	74.00	-19.05	39.49	3	Horizontal	170	2.72	-	38.79	8.81	32.14
AV	11.44396G	42.46	54.00	-11.54	27.00	3	Horizontal	170	2.72	-	38.79	8.81	32.14

5.25-5.35GHz\_802.11ax\_HEW20\_Nss1,(MCS0)\_2TX

5260MHz\_TX

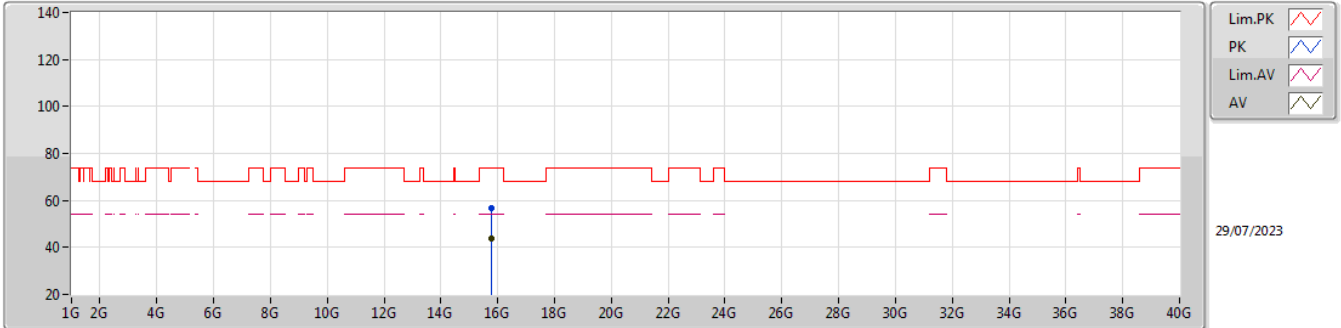


EUT\_Y\_2TX  
Setting 23  
02-L-5-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1496G	62.79	74.00	-11.21	54.10	3	Vertical	353	2.16	-	33.60	5.77	30.68
AV	5.1454G	50.99	54.00	-3.01	42.31	3	Vertical	353	2.16	-	33.59	5.77	30.68
PK	5.2552G	123.24	Inf	-Inf	114.36	3	Vertical	353	2.16	-	33.81	5.83	30.76
AV	5.257G	112.45	Inf	-Inf	103.58	3	Vertical	353	2.16	-	33.81	5.83	30.77
PK	5.3566G	63.98	74.00	-10.02	54.95	3	Vertical	353	2.16	-	34.00	5.88	30.85
AV	5.3548G	51.79	54.00	-2.21	42.75	3	Vertical	353	2.16	-	34.00	5.88	30.84

5.25-5.35GHz\_802.11ax\_HEW20\_Nss1,(MCS0)\_2TX

5260MHz\_TX

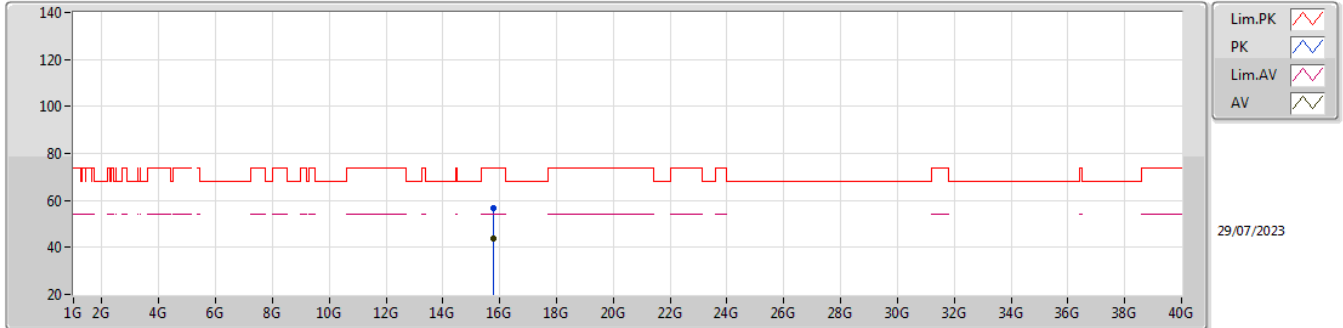


EUT Y\_2TX  
Setting 23  
02-L-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.78278G	56.63	74.00	-17.37	40.72	3	Vertical	200	1.64	-	37.47	10.41	31.97
AV	15.77668G	44.03	54.00	-9.97	28.10	3	Vertical	200	1.64	-	37.49	10.41	31.97

5.25-5.35GHz\_802.11ax\_HEW20\_Nss1,(MCS0)\_2TX

5260MHz\_TX

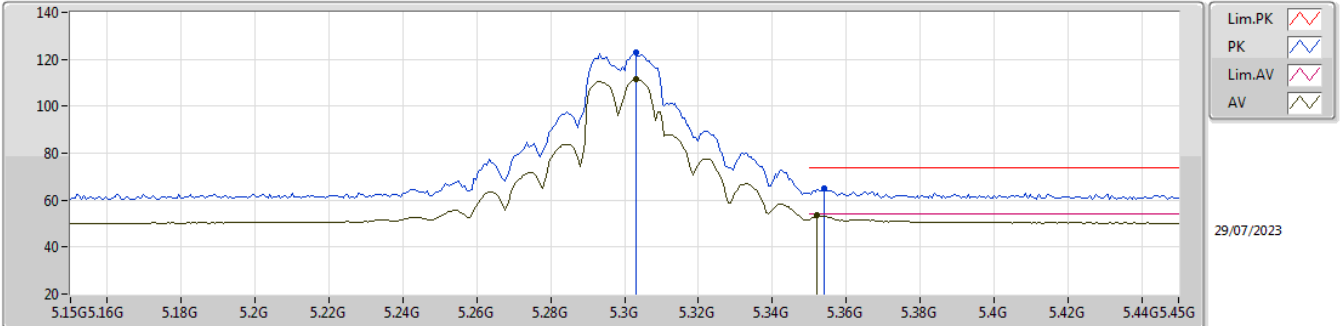


EUT Y\_2TX  
Setting 23  
02-L-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.78218G	56.50	74.00	-17.50	40.59	3	Horizontal	321	1.54	-	37.47	10.41	31.97
AV	15.77556G	44.04	54.00	-9.96	28.10	3	Horizontal	321	1.54	-	37.50	10.41	31.97

5.25-5.35GHz\_802.11ax\_HEW20\_Nss1,(MCS0)\_2TX

5300MHz\_TX



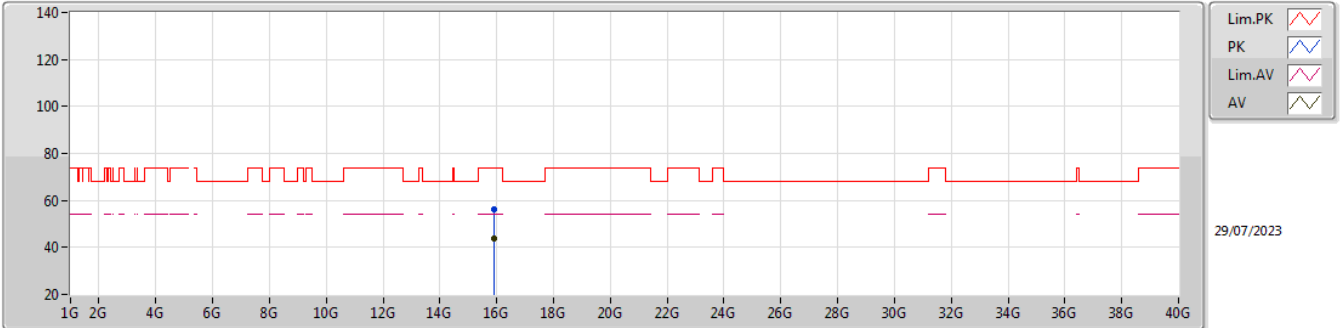
EUT\_V\_2TX  
Setting 22  
02-L-5-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.303G	123.13	Inf	-Inf	114.17	3	Vertical	355	1.80	-	33.91	5.85	30.80
AV	5.303G	111.37	Inf	-Inf	102.41	3	Vertical	355	1.80	-	33.91	5.85	30.80
PK	5.354G	64.84	74.00	-9.16	55.80	3	Vertical	355	1.80	-	34.00	5.88	30.84
AV	5.3522G	53.65	54.00	-0.35	44.61	3	Vertical	355	1.80	-	34.00	5.88	30.84



5.25-5.35GHz\_802.11ax\_HEW20\_Nss1,(MCS0)\_2TX

5300MHz\_TX

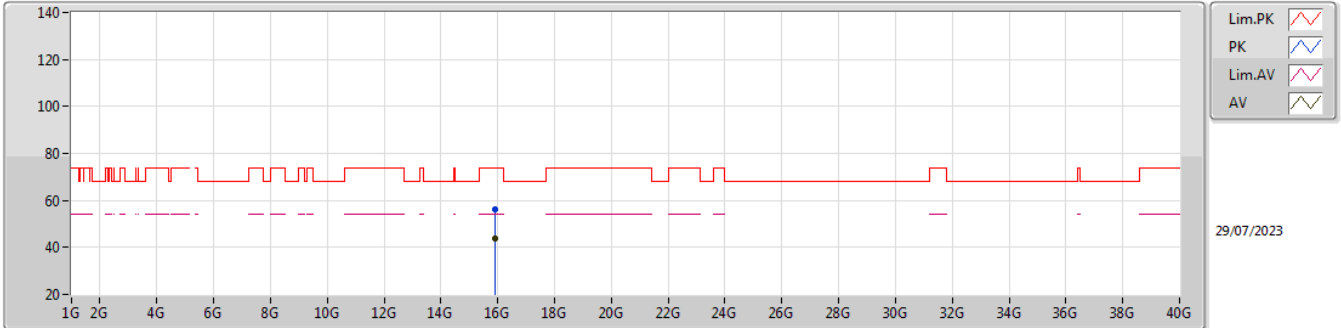


EUT Y\_2TX  
Setting 22  
02-L-S-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA			
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)			
PK	15.90328G	56.16	74.00	-17.84	40.37	3	Vertical	30	2.16	-	37.31	10.46	31.98			
AV	15.90362G	43.82	54.00	-10.18	28.03	3	Vertical	30	2.16	-	37.31	10.46	31.98			

5.25-5.35GHz\_802.11ax\_HEW20\_Nss1,(MCS0)\_2TX

5300MHz\_TX

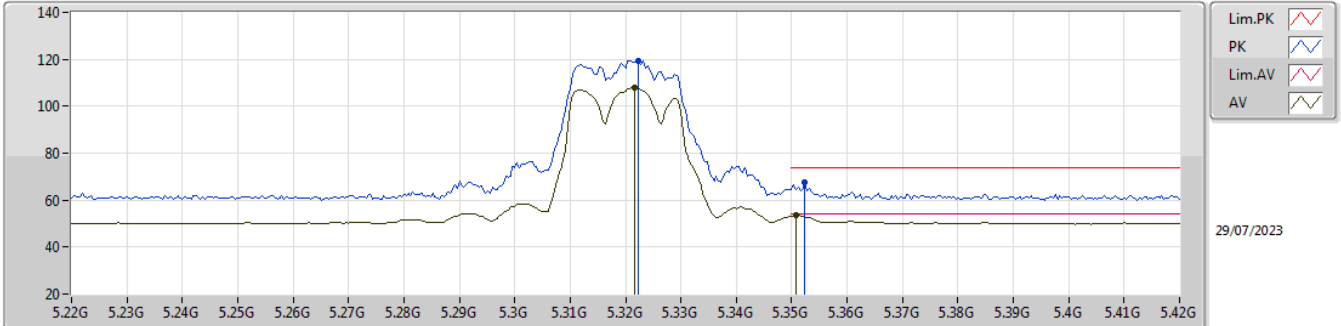


EUT\_V\_2TX  
Setting 22  
02-L-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.90252G	56.33	74.00	-17.67	40.54	3	Horizontal	359	1.94	-	37.31	10.46	31.98
AV	15.90368G	43.82	54.00	-10.18	28.03	3	Horizontal	359	1.94	-	37.31	10.46	31.98

5.25-5.35GHz\_802.11ax\_HEW20\_Nss1,(MCS0)\_2TX

5320MHz\_TX

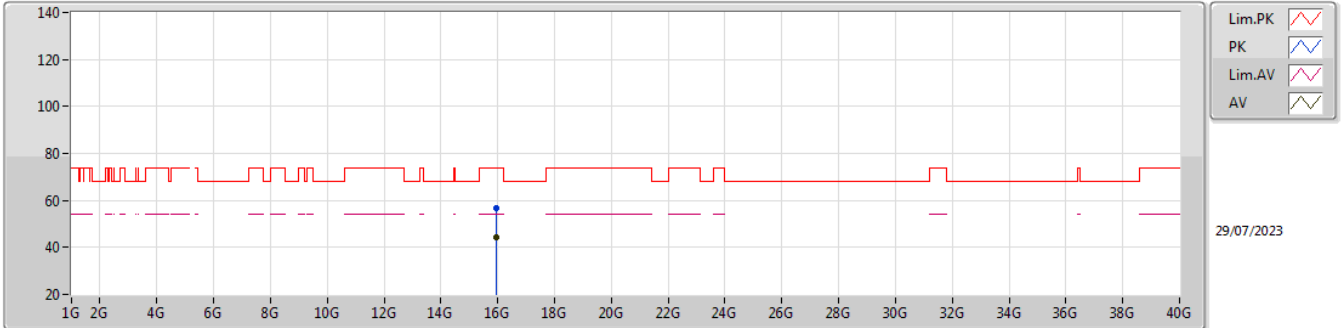


EUT\_V\_2TX  
Setting 19.5  
02-L-5-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.3224G	119.56	Inf	-Inf	110.58	3	Vertical	352	1.84	-	33.94	5.86	30.82
AV	5.3216G	107.94	Inf	-Inf	98.96	3	Vertical	352	1.84	-	33.94	5.86	30.82
PK	5.3524G	67.48	74.00	-6.52	58.44	3	Vertical	352	1.84	-	34.00	5.88	30.84
AV	5.3508G	53.68	54.00	-0.32	44.64	3	Vertical	352	1.84	-	34.00	5.88	30.84

5.25-5.35GHz\_802.11ax\_HEW20\_Nss1,(MCS0)\_2TX

5320MHz\_TX

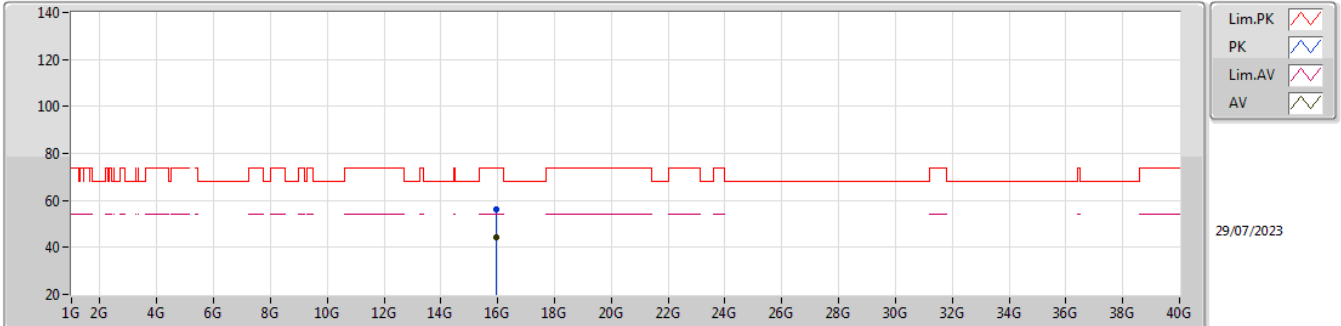


EUT Y\_2TX  
Setting 19.5  
02-L-S-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA			
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)			
PK	15.96298G	56.57	74.00	-17.43	40.62	3	Vertical	136	1.50	-	37.45	10.49	31.99			
AV	15.96162G	44.27	54.00	-9.73	28.33	3	Vertical	136	1.50	-	37.45	10.48	31.99			

5.25-5.35GHz\_802.11ax\_HEW20\_Nss1,(MCS0)\_2TX

5320MHz\_TX

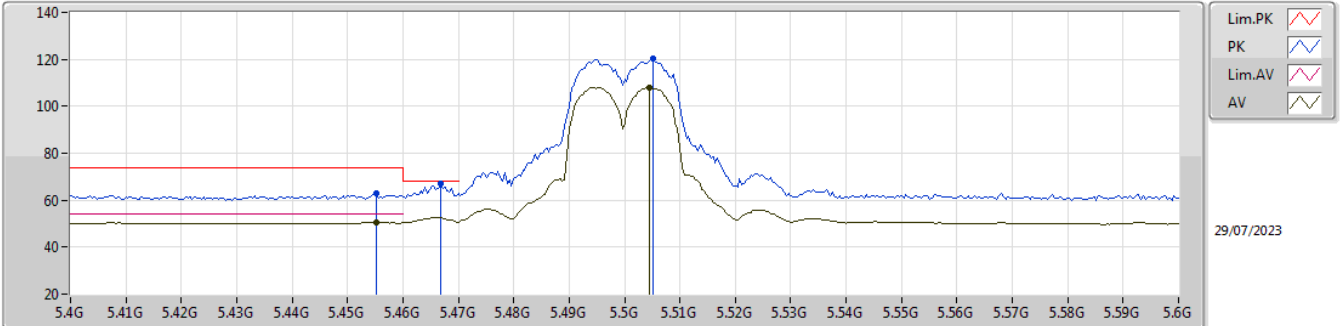


EUT\_V\_2TX  
 Setting 19.5  
 02-L-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.96162G	56.22	74.00	-17.78	40.28	3	Horizontal	153	2.58	-	37.45	10.48	31.99
AV	15.96342G	44.17	54.00	-9.83	28.22	3	Horizontal	153	2.58	-	37.45	10.49	31.99

5.47-5.725GHz\_802.11ax HEW20\_Nss1,(MCS0)\_2TX

5500MHz\_TX

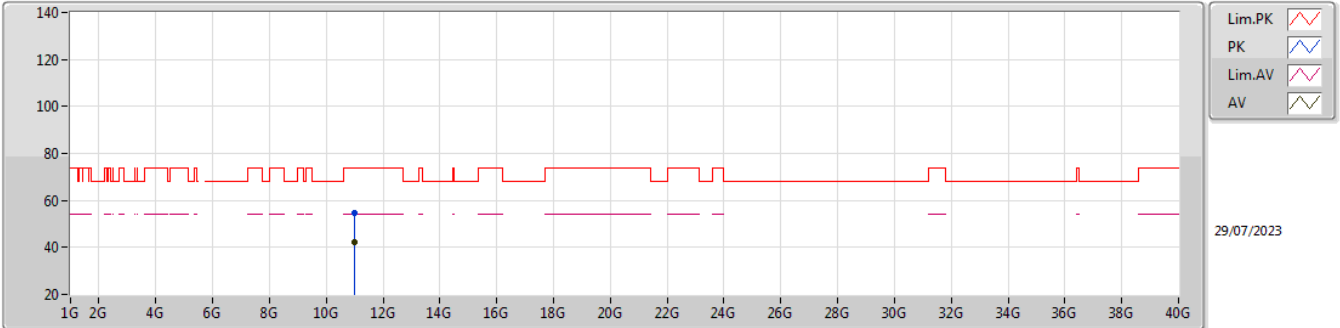


EUT\_V\_2TX  
Setting 19.5  
02-L-5-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.4552G	62.85	74.00	-11.15	53.71	3	Vertical	183	2.11	-	34.10	5.96	30.92
AV	5.4552G	50.69	54.00	-3.31	41.55	3	Vertical	183	2.11	-	34.10	5.96	30.92
PK	5.4668G	66.92	68.20	-1.28	57.78	3	Vertical	183	2.11	-	34.10	5.97	30.93
PK	5.5052G	120.29	Inf	-Inf	111.14	3	Vertical	183	2.11	-	34.10	6.01	30.96
AV	5.5044G	107.86	Inf	-Inf	98.72	3	Vertical	183	2.11	-	34.10	6.00	30.96

5.47-5.725GHz\_802.11ax HEW20\_Nss1,(MCS0)\_2TX

5500MHz\_TX

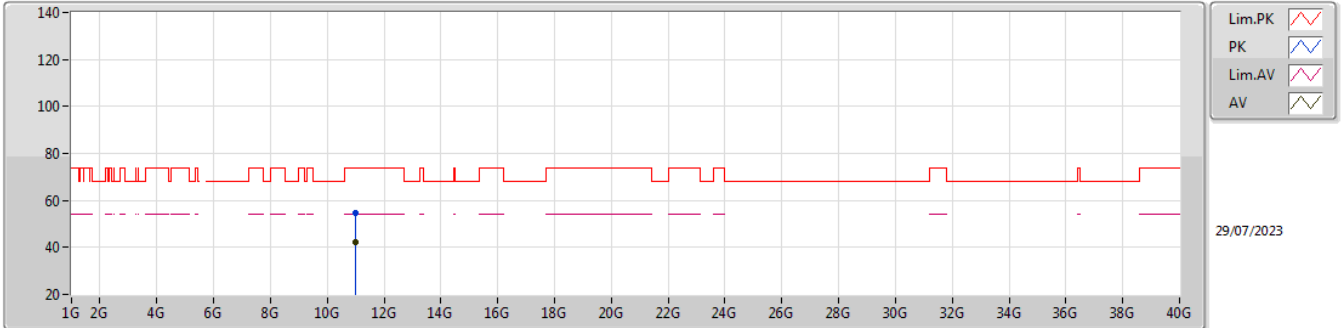


EUT\_V\_2TX  
Setting 19.5  
02-L-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	10.99764G	54.79	74.00	-19.21	39.63	3	Vertical	306	1.60	-	38.50	8.65	31.99
AV	10.9968G	42.19	54.00	-11.81	27.03	3	Vertical	306	1.60	-	38.50	8.65	31.99

5.47-5.725GHz\_802.11ax HEW20\_Nss1,(MCS0)\_2TX

5500MHz\_TX



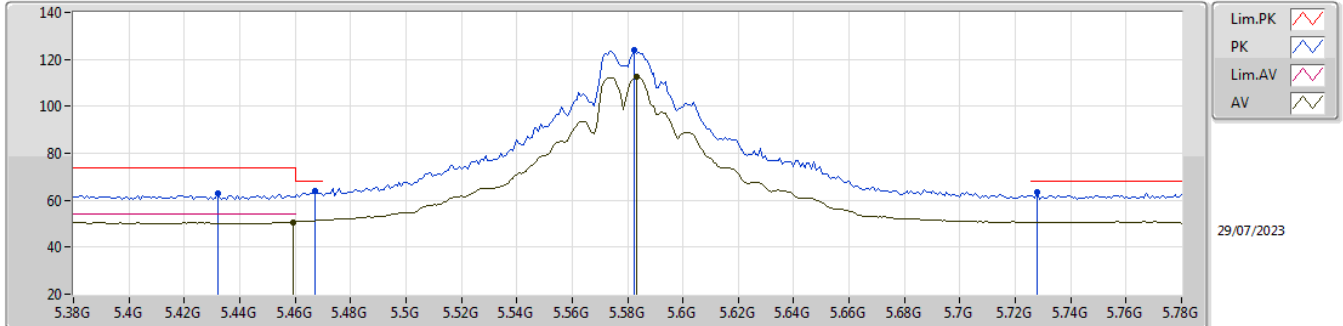
EUT\_V\_2TX  
Setting 19.5  
02-L-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.00278G	54.89	74.00	-19.11	39.73	3	Horizontal	286	1.85	-	38.50	8.65	31.99
AV	10.99552G	42.20	54.00	-11.80	27.04	3	Horizontal	286	1.85	-	38.50	8.65	31.99



5.47-5.725GHz\_802.11ax\_HEW20\_Nss1,(MCS0)\_2TX

5580MHz\_TX

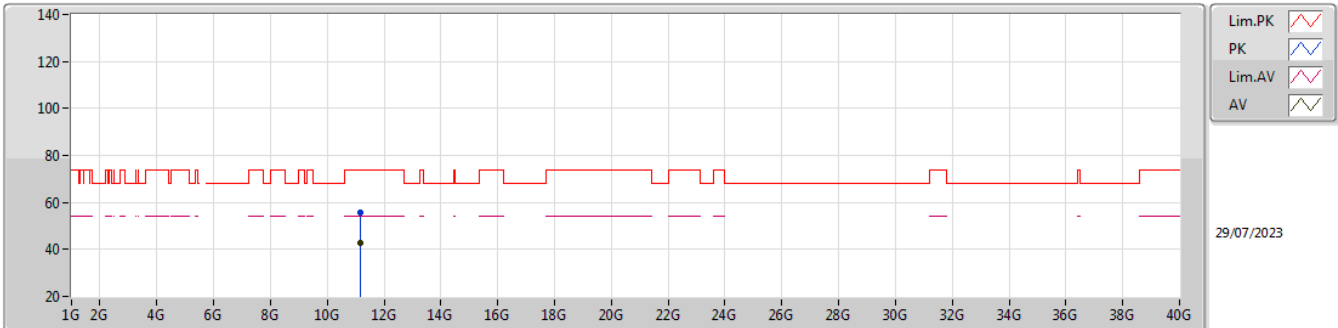


EUT\_Y\_2TX  
Setting 23  
02-L-5-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.432G	62.96	74.00	-11.04	53.88	3	Vertical	179	2.22	-	34.06	5.93	30.91
PK	5.4672G	64.04	68.20	-4.16	54.90	3	Vertical	179	2.22	-	34.10	5.97	30.93
AV	5.4592G	50.69	54.00	-3.31	41.56	3	Vertical	179	2.22	-	34.10	5.96	30.93
PK	5.5824G	123.92	Inf	-Inf	114.80	3	Vertical	179	2.22	-	34.04	6.08	31.00
AV	5.5832G	112.78	Inf	-Inf	103.67	3	Vertical	179	2.22	-	34.03	6.08	31.00
PK	5.728G	63.21	68.20	-4.99	54.17	3	Vertical	179	2.22	-	34.00	6.10	31.06

5.47-5.725GHz\_802.11ax HEW20\_Nss1,(MCS0)\_2TX

5580MHz\_TX

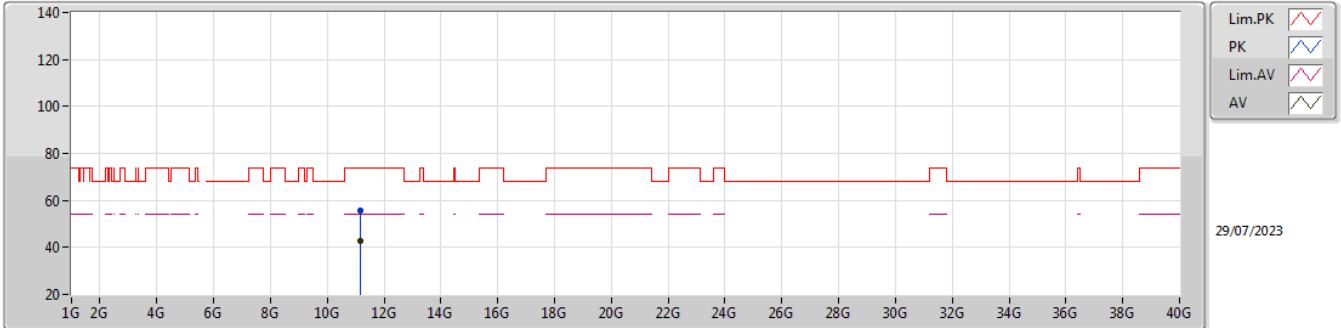


EUT Y\_2TX  
Setting 23  
02-L-S-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA			
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)			
PK	11.1598G	55.47	74.00	-18.53	40.20	3	Vertical	268	1.48	-	38.60	8.71	32.04			
AV	11.1639G	42.51	54.00	-11.49	27.25	3	Vertical	268	1.48	-	38.60	8.71	32.05			

5.47-5.725GHz\_802.11ax HEW20\_Nss1,(MCS0)\_2TX

5580MHz\_TX

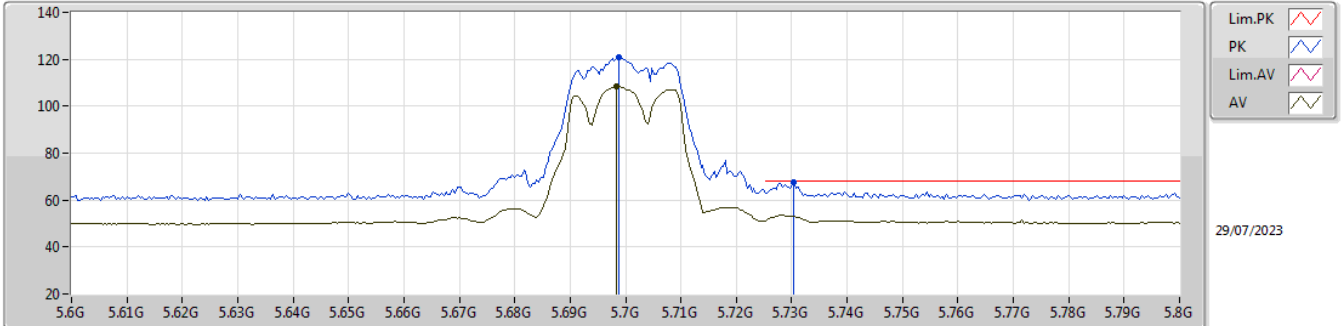


EUT Y\_2TX  
Setting 23  
02-L-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.15958G	55.62	74.00	-18.38	40.35	3	Horizontal	328	2.18	-	38.60	8.71	32.04
AV	11.16396G	42.51	54.00	-11.49	27.25	3	Horizontal	328	2.18	-	38.60	8.71	32.05

5.47-5.725GHz\_802.11ax HEW20\_Nss1,(MCS0)\_2TX

5700MHz\_TX

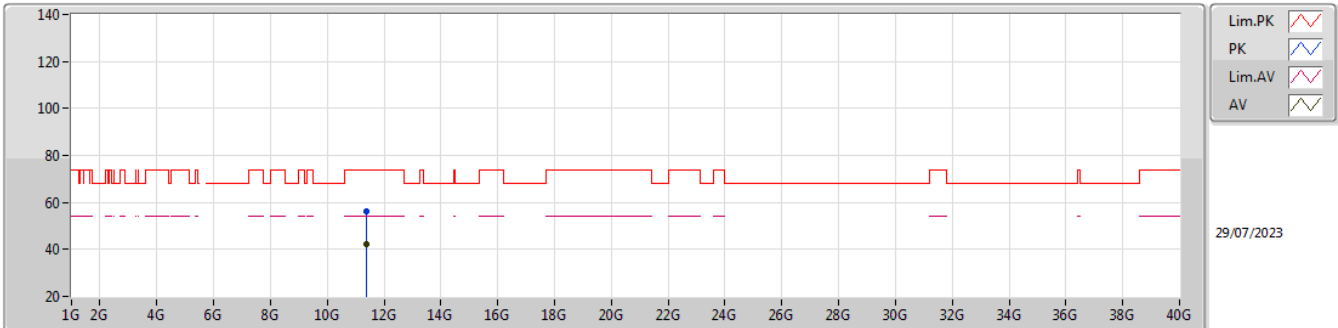


EUT Y\_2TX  
Setting 19  
02-L-5-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.6988G	120.91	Inf	-Inf	111.86	3	Vertical	179	2.17	-	34.00	6.10	31.05
AV	5.6984G	108.53	Inf	-Inf	99.48	3	Vertical	179	2.17	-	34.00	6.10	31.05
PK	5.7304G	67.39	68.20	-0.81	58.36	3	Vertical	179	2.17	-	34.00	6.10	31.07

5.47-5.725GHz\_802.11ax HEW20\_Nss1,(MCS0)\_2TX

5700MHz\_TX

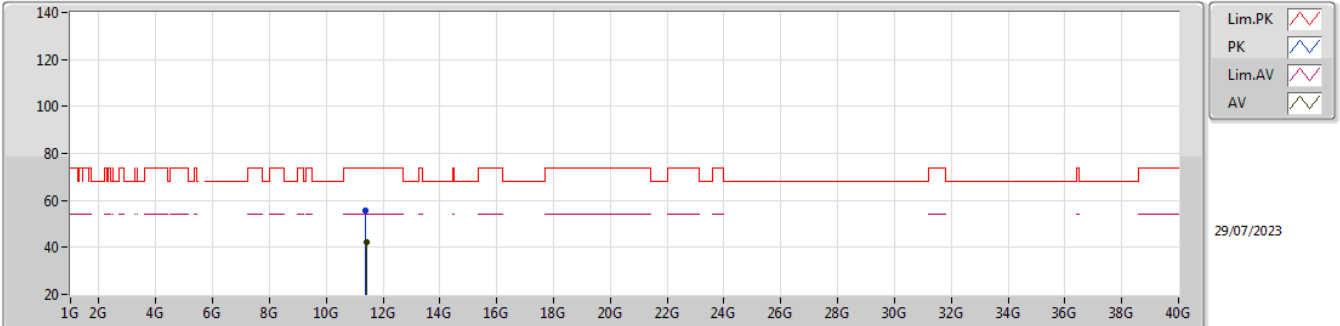


EUT\_V\_2TX  
Setting 19  
02-L-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.3969G	56.31	74.00	-17.69	40.95	3	Vertical	128	2.25	-	38.69	8.79	32.12
AV	11.39992G	42.44	54.00	-11.56	27.08	3	Vertical	128	2.25	-	38.70	8.79	32.13

5.47-5.725GHz\_802.11ax HEW20\_Nss1,(MCS0)\_2TX

5700MHz\_TX

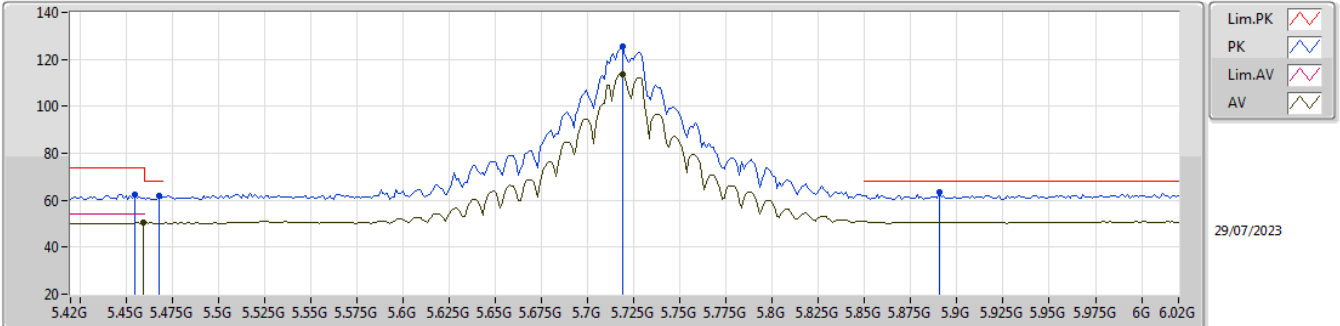


EUT\_V\_2TX  
Setting 19  
02-L-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.40016G	55.72	74.00	-18.28	40.36	3	Horizontal	27	2.94	-	38.70	8.79	32.13
AV	11.40304G	42.42	54.00	-11.58	27.05	3	Horizontal	27	2.94	-	38.71	8.79	32.13

5.47-5.725GHz\_802.11ax HEW20\_Nss1,(MCS0)\_2TX

5720MHz Straddle 5.47-5.725GHz\_TX

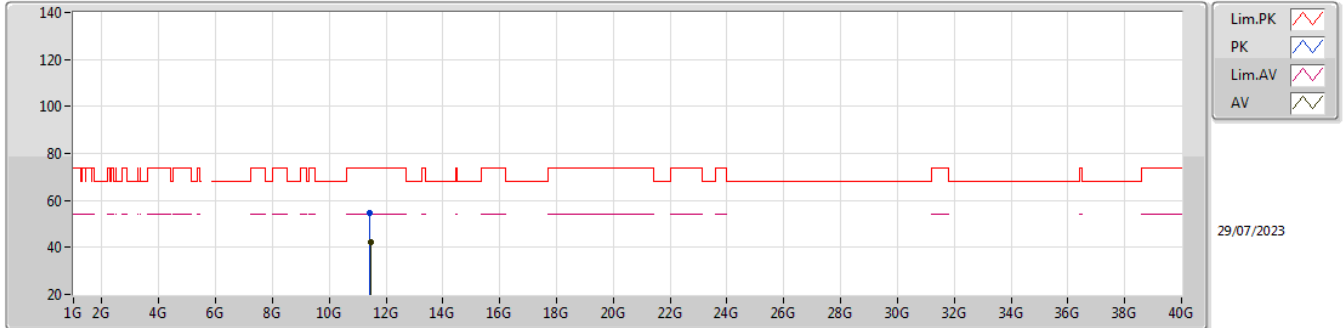


EUT Y\_2TX  
Setting 23  
02-L-5-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.4548G	62.42	74.00	-11.58	53.29	3	Vertical	180	2.07	-	34.10	5.95	30.92
AV	5.4596G	50.26	54.00	-3.74	41.13	3	Vertical	180	2.07	-	34.10	5.96	30.93
PK	5.468G	61.83	68.20	-6.37	52.69	3	Vertical	180	2.07	-	34.10	5.97	30.93
PK	5.7188G	125.61	Inf	-Inf	116.57	3	Vertical	180	2.07	-	34.00	6.10	31.06
AV	5.7188G	113.50	Inf	-Inf	104.46	3	Vertical	180	2.07	-	34.00	6.10	31.06
PK	5.8904G	63.39	68.20	-4.81	54.19	3	Vertical	180	2.07	-	34.16	6.18	31.14

5.47-5.725GHz\_802.11ax HEW20\_Nss1,(MCS0)\_2TX

5720MHz Straddle 5.47-5.725GHz\_TX



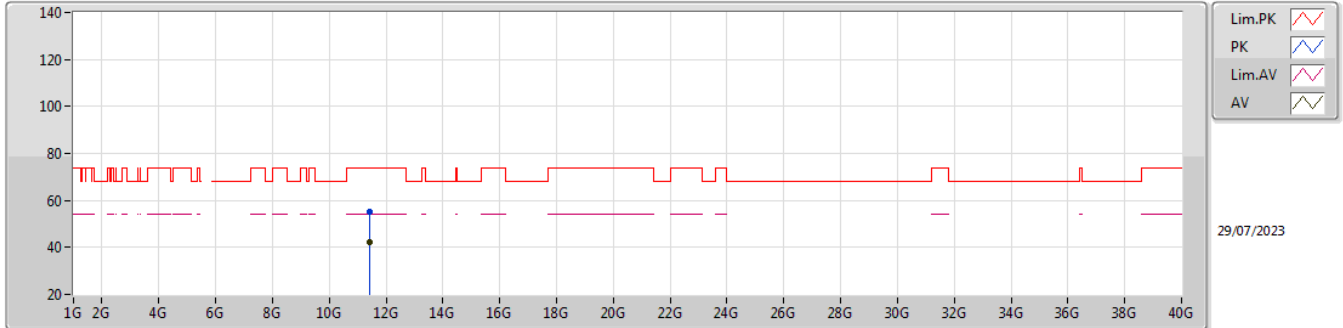
EUT\_V\_2TX  
Setting 23  
02-L-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.43554G	54.58	74.00	-19.42	39.15	3	Vertical	195	1.73	-	38.77	8.80	32.14
AV	11.44474G	42.09	54.00	-11.91	26.63	3	Vertical	195	1.73	-	38.79	8.81	32.14



5.47-5.725GHz\_802.11ax HEW20\_Nss1,(MCS0)\_2TX

5720MHz Straddle 5.47-5.725GHz\_TX

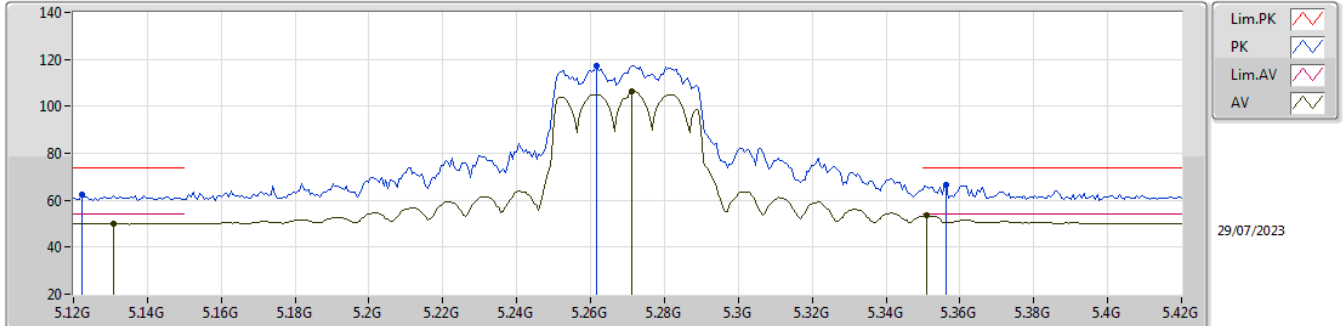


EUT\_V\_2TX  
Setting 23  
02-L-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.43626G	55.18	74.00	-18.82	39.75	3	Horizontal	263	1.77	-	38.77	8.80	32.14
AV	11.441G	42.10	54.00	-11.90	26.66	3	Horizontal	263	1.77	-	38.78	8.80	32.14

5.25-5.35GHz\_802.11ax\_HEW40\_Nss1,(MCS0)\_2TX

5270MHz\_TX

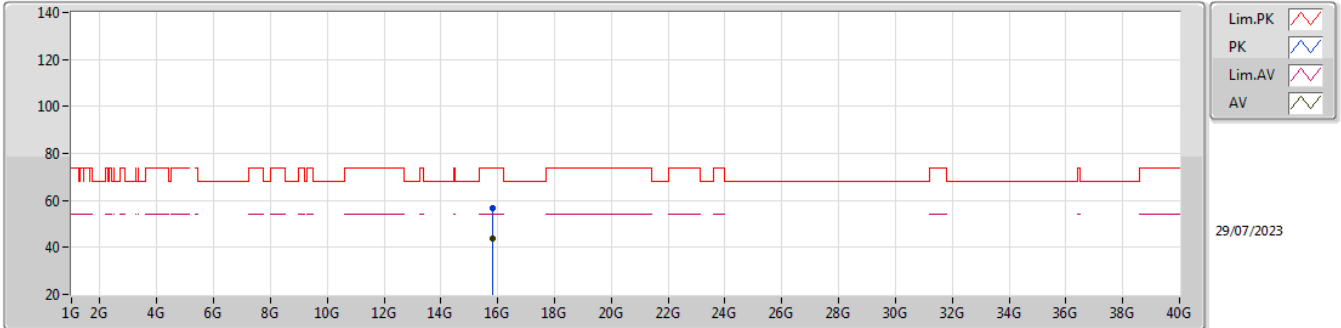


EUT\_Y\_2TX  
Setting 19.5  
02-L-5-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1224G	62.22	74.00	-11.78	53.58	3	Vertical	346	1.90	-	33.54	5.76	30.66
AV	5.1308G	50.22	54.00	-3.78	41.55	3	Vertical	346	1.90	-	33.56	5.77	30.66
PK	5.2616G	117.46	Inf	-Inf	108.58	3	Vertical	346	1.90	-	33.82	5.83	30.77
AV	5.2712G	106.17	Inf	-Inf	97.27	3	Vertical	346	1.90	-	33.84	5.84	30.78
PK	5.3564G	66.61	74.00	-7.39	57.58	3	Vertical	346	1.90	-	34.00	5.88	30.85
AV	5.351G	53.61	54.00	-0.39	44.57	3	Vertical	346	1.90	-	34.00	5.88	30.84

5.25-5.35GHz\_802.11ax\_HEW40\_Nss1,(MCS0)\_2TX

5270MHz\_TX

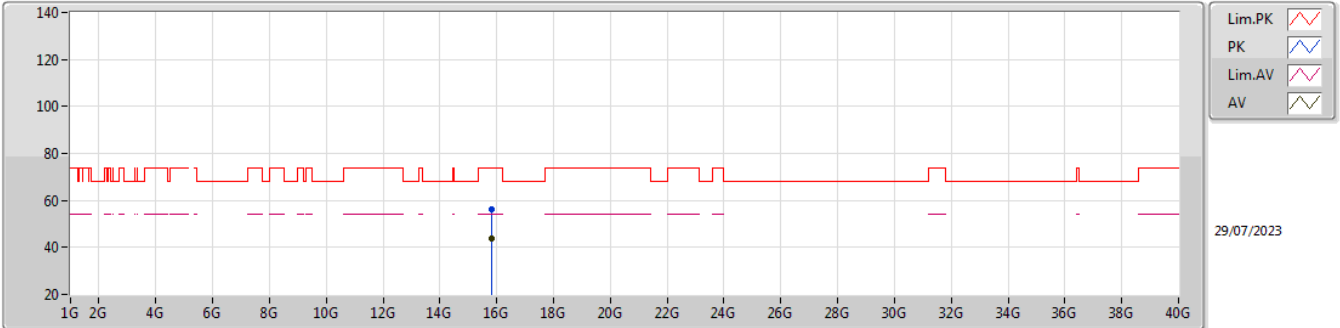


EUT Y\_2TX  
Setting 19.5  
02-L-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.81492G	56.70	74.00	-17.30	40.88	3	Vertical	199	1.17	-	37.37	10.43	31.98
AV	15.80616G	43.71	54.00	-10.29	27.87	3	Vertical	199	1.17	-	37.39	10.42	31.97

5.25-5.35GHz\_802.11ax\_HEW40\_Nss1,(MCS0)\_2TX

5270MHz\_TX

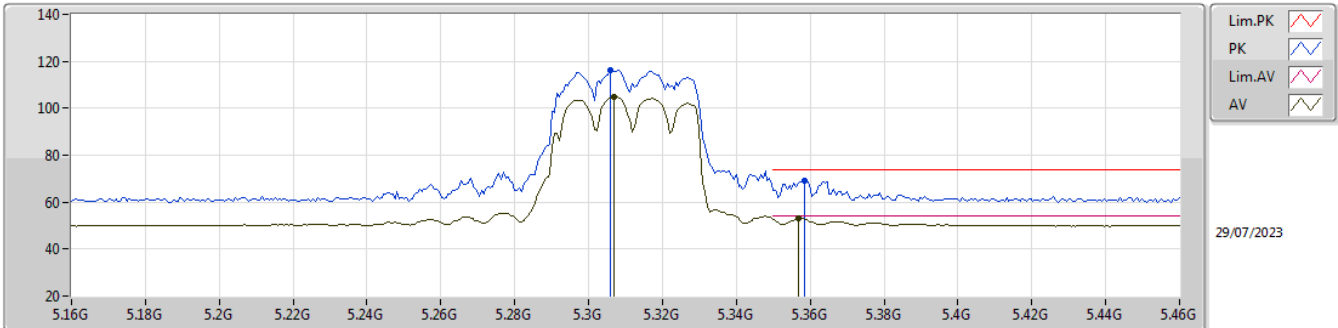


EUT\_V\_2TX  
Setting 19.5  
02-L-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.81436G	56.04	74.00	-17.96	40.22	3	Horizontal	297	2.78	-	37.37	10.43	31.98
AV	15.8058G	43.71	54.00	-10.29	27.87	3	Horizontal	297	2.78	-	37.39	10.42	31.97

5.25-5.35GHz\_802.11ax\_HEW40\_Nss1,(MCS0)\_2TX

5310MHz\_TX

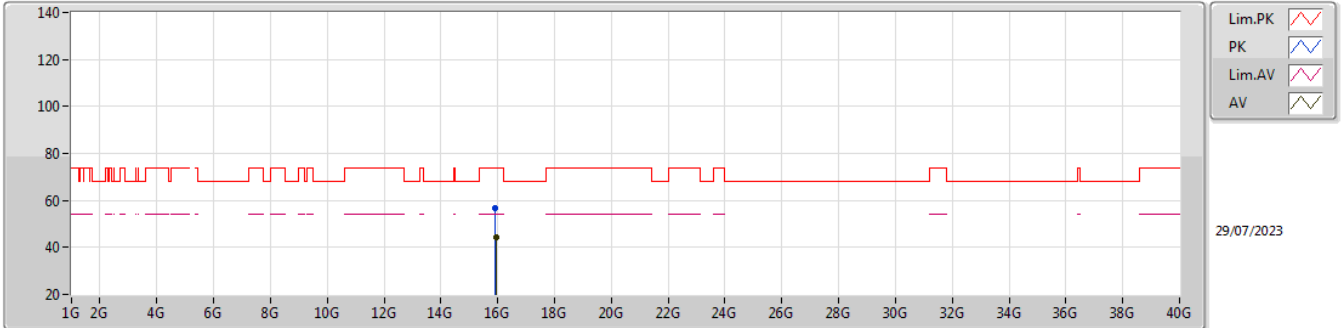


EUT\_V\_2TX  
Setting 18.5  
02-L-5-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.3058G	116.16	Inf	-Inf	107.20	3	Vertical	359	1.82	-	33.91	5.85	30.80
AV	5.307G	104.91	Inf	-Inf	95.96	3	Vertical	359	1.82	-	33.91	5.85	30.81
PK	5.3586G	69.24	74.00	-4.76	60.21	3	Vertical	359	1.82	-	34.00	5.88	30.85
AV	5.3568G	53.20	54.00	-0.80	44.17	3	Vertical	359	1.82	-	34.00	5.88	30.85

5.25-5.35GHz\_802.11ax\_HEW40\_Nss1,(MCS0)\_2TX

5310MHz\_TX

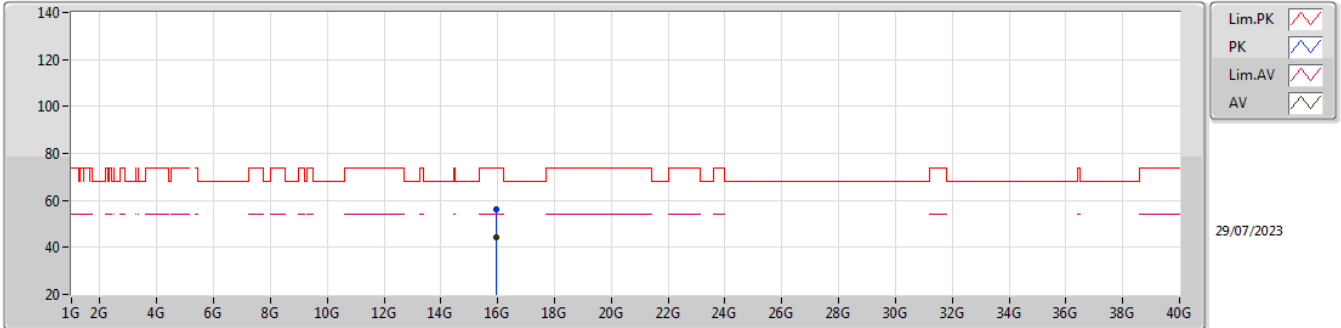


EUT Y\_2TX  
 Setting 18.5  
 02-L-S-5

Type	Freq	Level	Limit	Margin	Raw	Dist	Condition	Azimuth	Height	Comment	AF	CL	PA			
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dBuV)	(m)		(°)	(m)		(dB)	(dB)	(dB)			
PK	15.92758G	56.82	74.00	-17.18	40.97	3	Vertical	213	1.05	-	37.36	10.47	31.98			
AV	15.93026G	44.08	54.00	-9.92	28.23	3	Vertical	213	1.05	-	37.36	10.47	31.98			

5.25-5.35GHz\_802.11ax\_HEW40\_Nss1,(MCS0)\_2TX

5310MHz\_TX

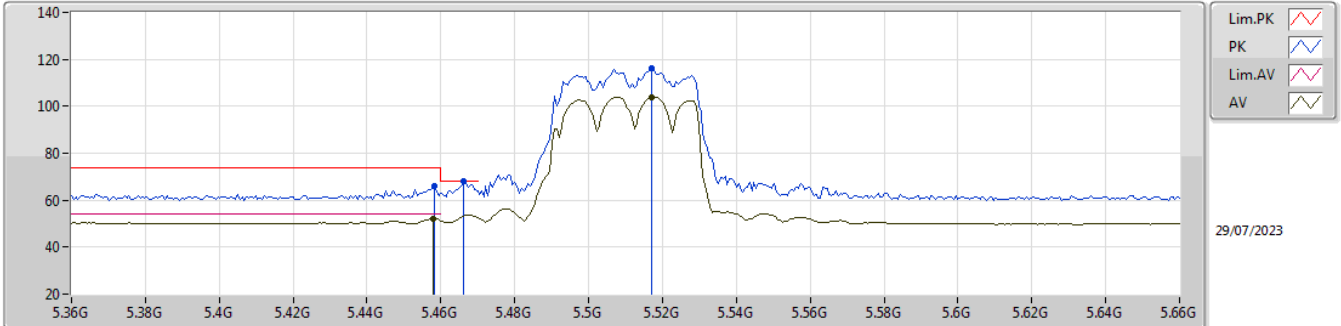


EUT\_V\_2TX  
 Setting 18.5  
 02-L-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.93244G	56.40	74.00	-17.60	40.55	3	Horizontal	190	2.96	-	37.36	10.47	31.98
AV	15.93434G	44.10	54.00	-9.90	28.24	3	Horizontal	190	2.96	-	37.37	10.47	31.98

5.47-5.725GHz\_802.11ax HEW40\_Nss1,(MCS0)\_2TX

5510MHz\_TX



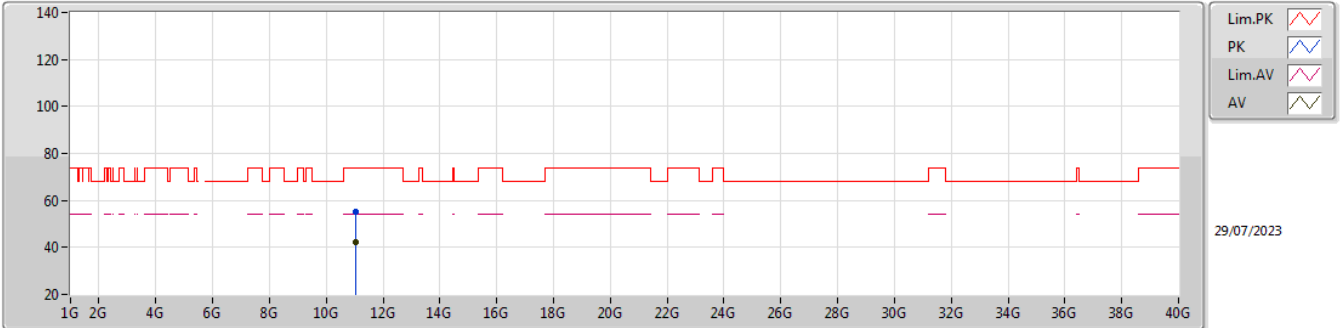
EUT Y\_2TX  
Setting 18.5  
02-L-5-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.4584G	65.78	74.00	-8.22	56.65	3	Vertical	180	1.81	-	34.10	5.96	30.93
AV	5.4578G	52.06	54.00	-1.94	42.93	3	Vertical	180	1.81	-	34.10	5.96	30.93
PK	5.4662G	67.85	68.20	-0.35	58.71	3	Vertical	180	1.81	-	34.10	5.97	30.93
PK	5.5172G	116.30	Inf	-Inf	107.15	3	Vertical	180	1.81	-	34.10	6.02	30.97
AV	5.5172G	104.00	Inf	-Inf	94.85	3	Vertical	180	1.81	-	34.10	6.02	30.97



5.47-5.725GHz\_802.11ax HEW40\_Nss1,(MCS0)\_2TX

5510MHz\_TX



EUT Y\_2TX  
Setting 18.5  
02-L-S-5

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.01862G	55.09	74.00	-18.91	39.93	3	Vertical	290	1.14	-	38.50	8.66	32.00
AV	11.01874G	42.40	54.00	-11.60	27.24	3	Vertical	290	1.14	-	38.50	8.66	32.00