

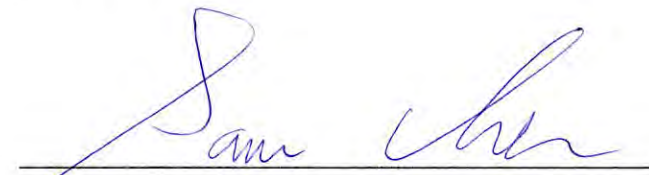


RADIO TEST REPORT

FCC ID : I8803973
Equipment : 802.11ax (WiFi 6) Dual-Radio Wall-Plate Unified Access Point
Brand Name : ZYXEL
Model Name : WAX300H
Applicant : Zyxel Communications Corporation
No.2 Industry East RD. IX, Hsinchu Science Park,
Hsinchu 30075, Taiwan, R.O.C
Manufacturer : Zyxel Communications Corporation
No.2 Industry East RD. IX, Hsinchu Science Park,
Hsinchu 30075, Taiwan, R.O.C
Standard : 47 CFR FCC Part 15.407

The product was received on Jun. 01, 2023, and testing was started from Jun. 05, 2023 and completed on Jun. 16, 2023. We, Sporton International Inc. Hsinchu Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

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


Approved by: Sam Chen

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



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History of this test report

Report No.	Version	Description	Issued Date
FR311613AB	01	Initial issue of report	Jul. 14, 2023
FR311613AB	02	Adding repeater function	Jul. 25, 2023



Summary of Test Result

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

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/matrix 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:

1. 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.
2. The test configuration, test mode and test software were written in this test report are declared by the manufacturer.

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
5150-5250	a, n (HT20), ac (VHT20), ax (HEW20)	5180-5240	36-48 [4]
5250-5350		5260-5320	52-64 [4]
5470-5725		5500-5720	100-144 [12]
5725-5850		5745-5825	149-165 [5]
5150-5250	n (HT40), ac (VHT40), ax (HEW40)	5190-5230	38-46 [2]
5250-5350		5270-5310	54-62 [2]
5470-5725		5510-5710	102-142 [6]
5725-5850		5755-5795	151-159 [2]
5150-5250	ac (VHT80), ax (HEW80)	5210	42 [1]
5250-5350		5290	58 [1]
5470-5725		5530-5690	106-138 [3]
5725-5850		5775	155 [1]
5150-5350	ac (VHT160), ax (HEW160)	5250	50 [1]
5470-5725		5570	114 [1]

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



Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11ax HEW80-BF	80	2TX
5.15-5.25GHz	802.11ac VHT160	160	2TX
5.15-5.25GHz	802.11ac VHT160-BF	160	2TX
5.15-5.25GHz	802.11ax HEW160	160	2TX
5.15-5.25GHz	802.11ax HEW160-BF	160	2TX
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
5.25-5.35GHz	802.11ac VHT160	160	2TX
5.25-5.35GHz	802.11ac VHT160-BF	160	2TX
5.25-5.35GHz	802.11ax HEW160	160	2TX
5.25-5.35GHz	802.11ax HEW160-BF	160	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
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



Band	Mode	BWch (MHz)	Nant
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
5.47-5.725GHz	802.11ac VHT160	160	2TX
5.47-5.725GHz	802.11ac VHT160-BF	160	2TX
5.47-5.725GHz	802.11ax HEW160	160	2TX
5.47-5.725GHz	802.11ax HEW160-BF	160	2TX
5.725-5.85GHz	802.11a	20	2TX
5.725-5.85GHz	802.11n HT20	20	2TX
5.725-5.85GHz	802.11n HT20-BF	20	2TX
5.725-5.85GHz	802.11ac VHT20	20	2TX
5.725-5.85GHz	802.11ac VHT20-BF	20	2TX
5.725-5.85GHz	802.11ax HEW20	20	2TX
5.725-5.85GHz	802.11ax HEW20-BF	20	2TX
5.725-5.85GHz	802.11n HT40	40	2TX
5.725-5.85GHz	802.11n HT40-BF	40	2TX
5.725-5.85GHz	802.11ac VHT40	40	2TX
5.725-5.85GHz	802.11ac VHT40-BF	40	2TX
5.725-5.85GHz	802.11ax HEW40	40	2TX
5.725-5.85GHz	802.11ax HEW40-BF	40	2TX
5.725-5.85GHz	802.11ac VHT80	80	2TX
5.725-5.85GHz	802.11ac VHT80-BF	80	2TX
5.725-5.85GHz	802.11ax HEW80	80	2TX
5.725-5.85GHz	802.11ax HEW80-BF	80	2TX

Note:

- ◆ 11a, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- ◆ VHT20, VHT40, VHT80 and VHT160 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- ◆ HEW20, HEW40, HEW80 and HEW160 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- ◆ BWch is the nominal channel bandwidth.



1.1.2 Antenna Information

Ant.	2.4GHz	5GHz	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	1	1	LYNwave	ALX23M-222AA0	PIFA Antenna	N/A	Note 1
2	2	2	LYNwave	ALX23M-222AA1	PIFA Antenna	N/A	

Note 1:

Ant.	2400~2500 MHz	5150~5250 MHz	5251~5300 MHz	5301~5490 MHz	5491~5725 MHz	5725~5835 MHz
1	1.4	4.2	4.6	4.6	5.1	5.1
2	2.7	3.2	3.5	3.5	3.5	4.3

Note 2: The above information was declared by manufacturer.

Note 3: Directional gain information

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

Ex.

Directional Gain (NSS1) formula :

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

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

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

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

Where ;

2.4G G1= 1.4 dBi ; G2= 2.7 dBi ;DG= 5.08dBi

5G UNII-1 G1= 4.2 dBi ; G2= 3.2 dBi ;DG= 6.72dBi

5G UNII-2A G1= 4.6 dBi ; G2= 3.5 dBi ;DG= 7.08dBi

5G UNII-2C G1= 5.1 dBi ; G2= 3.5 dBi ;DG= 7.35dBi

5G UNII-3 G1= 5.1 dBi ; G2= 4.3 dBi ;DG= 7.72dBi



For 2.4GHz:

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

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

Port 1~Port 2 could transmit/receive simultaneously.

For 5GHz UNII 1~UNII 3:

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

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

Port 1~Port 2 could transmit/receive simultaneously.

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11a	0.965	0.965	1.402m	1k
802.11ax HEW20	0.943	0.943	1.027m	1k
802.11ax HEW20-BF	0.943	0.943	1.027m	1k
802.11ax HEW40	0.909	0.909	547.5u	3k
802.11ax HEW40-BF	0.909	0.909	547.5u	3k
802.11ax HEW80	0.850	0.85	303.75u	10k
802.11ax HEW80-BF	0.850	0.85	303.75u	10k
802.11ax HEW160	0.844	0.844	298.75u	10k
802.11ax HEW160-BF	0.844	0.844	298.75u	10k

Note:

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

1.1.4 EUT Operational Condition

EUT Power Type	From PoE			
Beamforming Function	<input checked="" type="checkbox"/>	With beamforming	<input type="checkbox"/>	Without beamforming
	The product has beamforming function for n/VHT in 2.4GHz and n/ac/ax in 5GHz.			
Weather Band	<input checked="" type="checkbox"/>	With 5600~5650MHz	<input type="checkbox"/>	Without 5600~5650MHz
Function	<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
TPC Function	<input checked="" type="checkbox"/>	With TPC	<input type="checkbox"/>	Without TPC
Channel Puncturing Function	<input type="checkbox"/>	Supported	<input checked="" type="checkbox"/>	Unsupported
Support RU	<input checked="" type="checkbox"/>	Full RU	<input type="checkbox"/>	Partial RU
Test Software Version	QATool Version:0.0.2.78			

Note: The above information was declared by manufacturer.



1.1.5 Table for EUT supports function

Function	Supports Band
AP Router	2.4GHz, 5GHz UNII 1~3
Repeater	2.4GHz, 5GHz UNII 1, 3

Note1: For above table list, only AP Router mode was tested and recorded in this test.

Note2: The above information was declared by manufacturer.



1.2 Applicable Standards

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

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

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

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

1.3 Testing Location Information

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

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
RF Conducted	TH02-CB	Ken Yeh	24.2~25.1 / 62~67	Jun. 07, 2023~Jun. 12, 2023
Radiated below 1GHz	03CH01-CB	Jackson Peng	21.7~22.8 / 56~59	Jun. 12, 2023~Jun. 13, 2023
Radiated above 1GHz (for other test)	03CH01-CB	George Fan	21.2~22.3 / 56~59	Jun. 05, 2023~Jun. 08, 2023
Radiated above 1GHz (for co-location test)	03CH05-CB	George Fan	22~23 / 55~58	Jun. 08, 2023
AC Conduction	CO01-CB	Gray Lee	21~22 / 58~60	Jun. 16, 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
Conducted Emission (150kHz ~ 30MHz)	3.4 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.1 dB	Confidence levels of 95%
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

Mode	Power Setting
802.11a_Nss1,(6Mbps)_2TX	-
5180MHz	20
5200MHz	21
5240MHz	22.5
5260MHz	15.5
5300MHz	16.5
5320MHz	16
5500MHz	16
5580MHz	15.5
5700MHz	16
5720MHz Straddle 5.47-5.725GHz	16
5720MHz Straddle 5.725-5.85GHz	16
5745MHz	24
5785MHz	24
5825MHz	23
802.11ax HEW20_Nss1,(MCS0)_2TX	-
5180MHz	19.5
5200MHz	21
5240MHz	22
5260MHz	16.5
5300MHz	17
5320MHz	17
5500MHz	17
5580MHz	16
5700MHz	17
5720MHz Straddle 5.47-5.725GHz	16.5
5720MHz Straddle 5.725-5.85GHz	16.5
5745MHz	24
5785MHz	24
5825MHz	24
802.11ax HEW40_Nss1,(MCS0)_2TX	-
5190MHz	17
5230MHz	19
5270MHz	18
5310MHz	18.5
5510MHz	18



Mode	Power Setting
5550MHz	18.5
5670MHz	19
5710MHz Straddle 5.47-5.725GHz	18.5
5710MHz Straddle 5.725-5.85GHz	18.5
5755MHz	23
5795MHz	22.5
802.11ax HEW80_Nss1,(MCS0)_2TX	-
5210MHz	15
5290MHz	13
5530MHz	14
5610MHz	18
5690MHz Straddle 5.47-5.725GHz	19.5
5690MHz Straddle 5.725-5.85GHz	19.5
5775MHz	19.5
802.11ax HEW160_Nss1,(MCS0)_2TX	-
5250MHz Straddle 5.15-5.25GHz	13
5250MHz Straddle 5.25-5.35GHz	13
5570MHz	14
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-
5180MHz	19.5
5200MHz	21
5240MHz	22
5260MHz	16.5
5300MHz	17
5320MHz	17
5500MHz	17
5580MHz	16
5700MHz	17
5720MHz Straddle 5.47-5.725GHz	16.5
5720MHz Straddle 5.725-5.85GHz	16.5
5745MHz	23.5
5785MHz	24
5825MHz	23.5
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-
5190MHz	17
5230MHz	19
5270MHz	17.5
5310MHz	17.5
5510MHz	18
5550MHz	17.5



Mode	Power Setting
5670MHz	18
5710MHz Straddle 5.47-5.725GHz	17
5710MHz Straddle 5.725-5.85GHz	17
5755MHz	23
5795MHz	22.5
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-
5210MHz	15
5290MHz	13
5530MHz	14
5610MHz	18
5690MHz Straddle 5.47-5.725GHz	18
5690MHz Straddle 5.725-5.85GHz	18
5775MHz	19.5
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	-
5250MHz Straddle 5.15-5.25GHz	13
5250MHz Straddle 5.25-5.35GHz	13
5570MHz	14

Note:

- ♦ Evaluated HEW20/HEW40/HEW80/HEW160 mode only due to the similar modulation. The power setting of HT20/HT40/VHT20/VHT40/VHT80/VHT160 mode are the same or lower than HEW20/HEW40/HEW80/HEW160.
- ♦ The EUT supports non-beamforming and beamforming modes, after evaluating, the non-beamforming mode has been selected to execute all tests. The beamforming mode evaluates the output power only.



2.2 The Worst Case Measurement Configuration

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

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

The Worst Case Mode for Following Conformance Tests	
Tests Item	Unwanted Emissions
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	Normal Link After evaluating, the worst case was found at Y axis. So the measurement will follow this same test configuration.
1	EUT in Y axis + PoE 1
Operating Mode > 1GHz	CTX After evaluating, the worst case was found at Y axis. So the measurement will follow this same test configuration.
1	EUT in Y axis

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Radiated Emission Co-location
Test Condition	Radiated measurement
Operating Mode	Normal Link After evaluating, the worst case was found at Y axis. So the measurement will follow this same test configuration.
1	EUT in Y axis-WLAN 2.4GHz + WLAN 5GHz
Refer to Appendix F for Radiated Emission Co-location.	



The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	WLAN 2.4GHz + WLAN 5GHz
Refer to Sporton Test Report No.: FA311613 for Co-location RF Exposure Evaluation.	

Note1: The console port is professional usage by manufacturer declaration, and it was performed the test at the load.

Note2: The PoE is for measurement only, would not be marketed.

PoE information as below:

Power	Brand	Model
PoE 1	PHIHONG	POE31U-1AT
PoE 2	BulletPoE	BPI100-GH

2.3 EUT Operation during Test

For CTX Mode:

The EUT was programmed to be in continuously transmitting mode.

For Normal Link:

During the test, the EUT operation to normal function.

2.4 Accessories

Accessories
Wall Bracket*1



2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	PoE 1	PHIHONG	POE31U-1AT	N/A
B	UP link PC	DELL	T3400	N/A
C	LAN PC	DELL	T3400	N/A
D	PoE Load	I-O DATA	TS-NA230WP	N/A
E	2.4G NB	DELL	E6430	N/A
F	5G NB	DELL	E6430	N/A

For Radiated (below 1GHz):

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	NB(UP link)	DELL	E4300	N/A
B	NB(LAN)	DELL	E4300	N/A
C	NB(2.4G)	DELL	E4300	N/A
D	NB(5G)	DELL	E4300	N/A
E	PoE 1	PHIHONG	POE31U-1AT	N/A
F	PoE Load	I-O DATA	TS-NA230WP	N/A

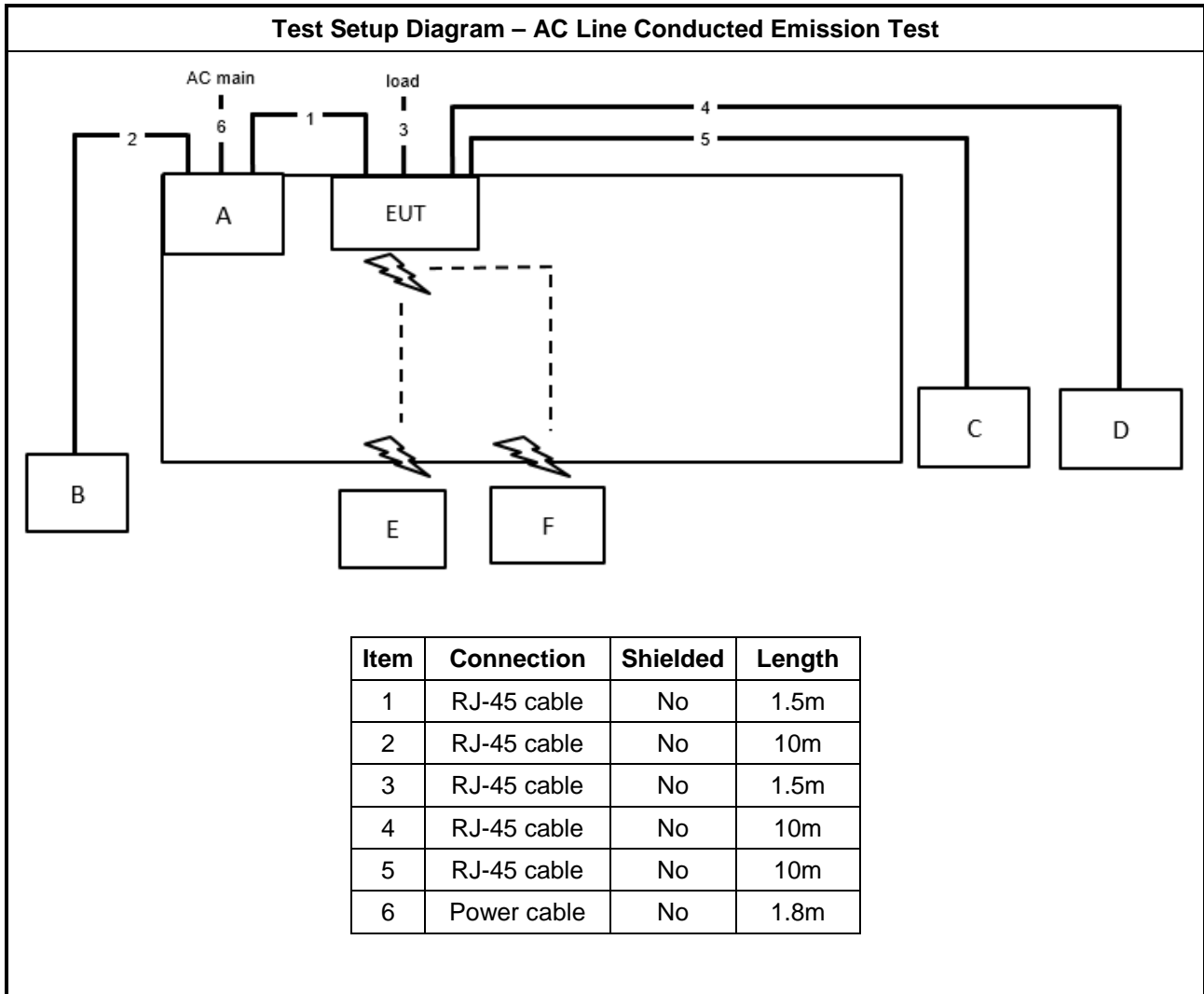
For Radiated (above 1GHz):

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A
B	PoE 2	BulletPoE	BPI100-GH	N/A

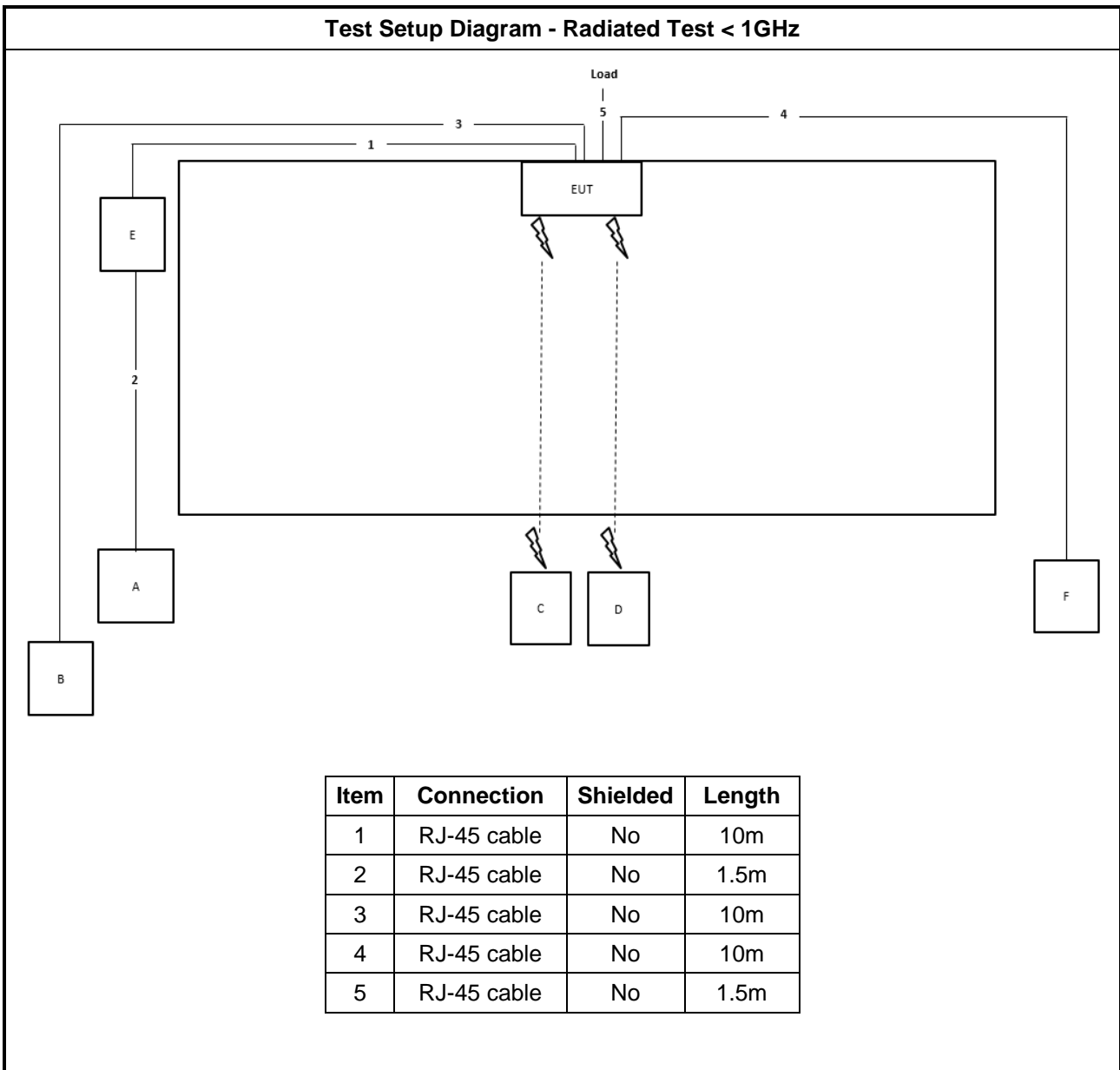
For RF Conducted:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A
B	PoE 2	BulletPoE	BPI100-GH	N/A

2.6 Test Setup Diagram

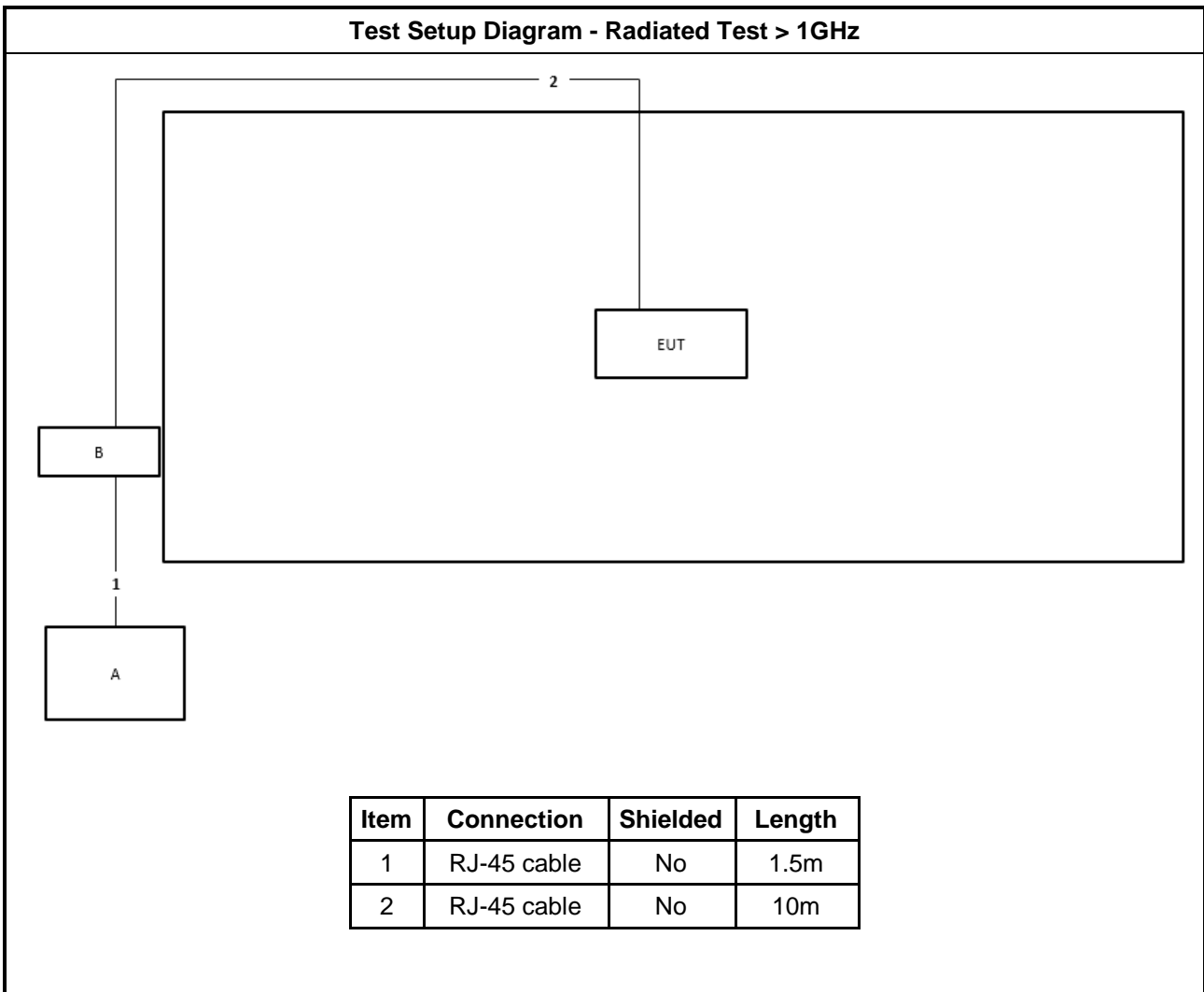


Test Setup Diagram - Radiated Test < 1GHz





Test Setup Diagram - Radiated Test > 1GHz



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



3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

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

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

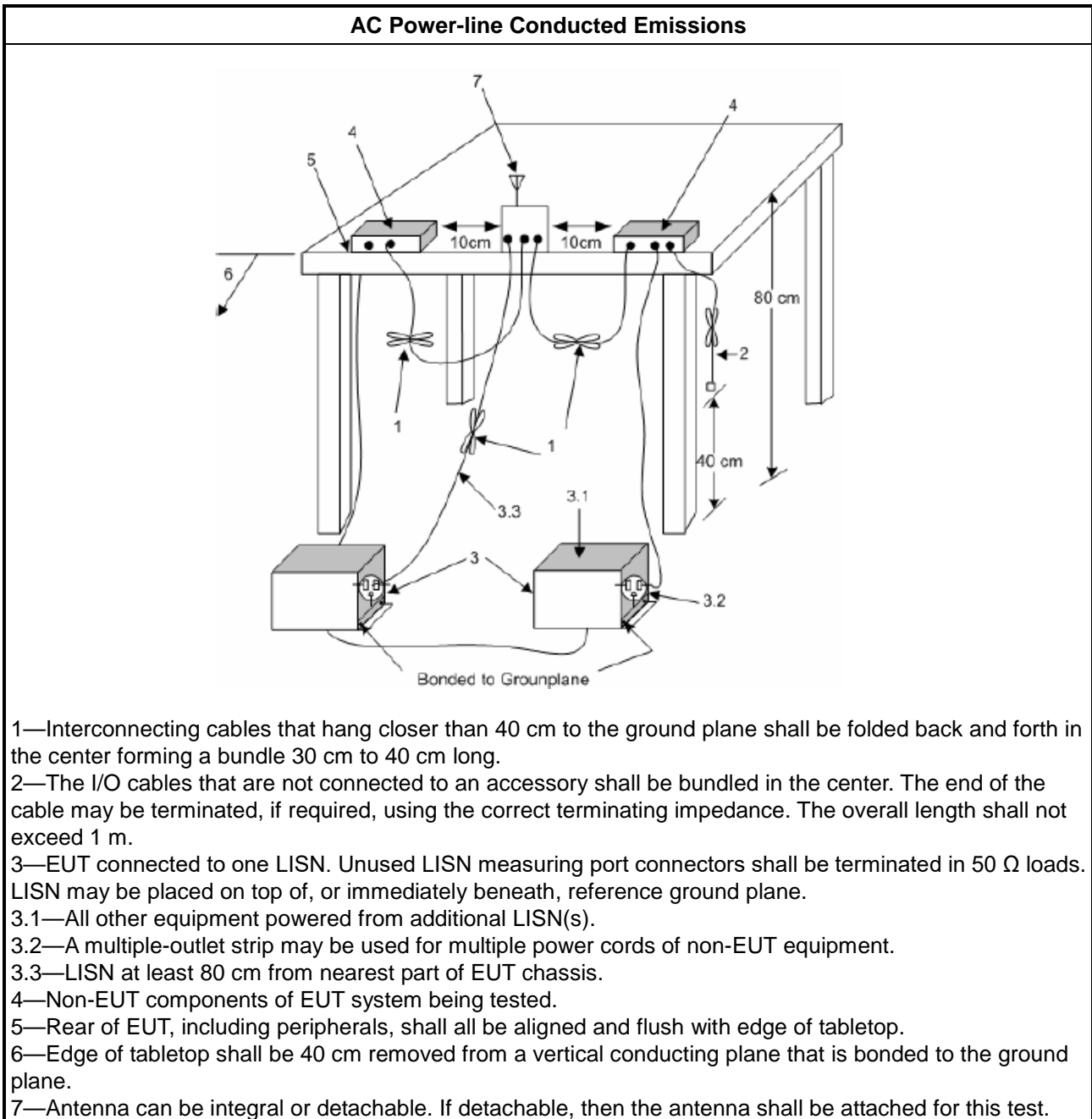
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

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

3.1.4 Test Setup



3.1.5 Measurement Results Calculation

The measured Level is calculated using:

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

3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 Emission Bandwidth

3.2.1 Emission Bandwidth Limit

Emission Bandwidth Limit	
UNII Devices	
<input checked="" 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.
LE-LAN Devices	
<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.

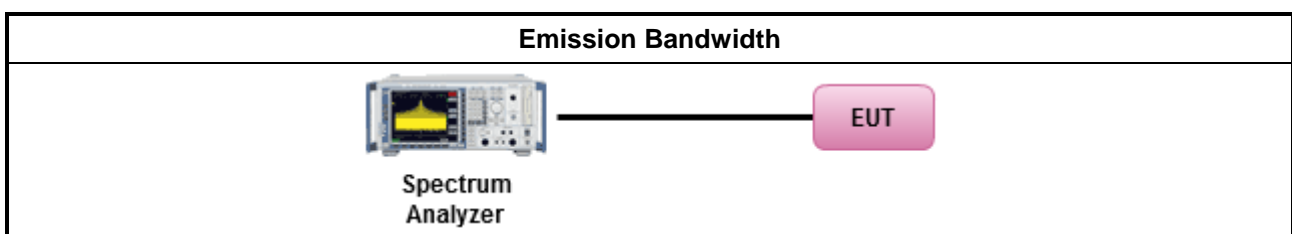
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method							
<ul style="list-style-type: none"> ▪ For the emission bandwidth shall be measured using one of the options below: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20px;"><input checked="" type="checkbox"/></td> <td>Refer as FCC KDB 789033 D02, clause C for EBW and clause D for OBW measurement.</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Refer as IC RSS-Gen, clause 4.6 for bandwidth testing.</td> </tr> </table> 		<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.
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033 D02, clause C for EBW and clause D for OBW measurement.						
<input type="checkbox"/>	Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.						
<input type="checkbox"/>	Refer as IC RSS-Gen, clause 4.6 for bandwidth testing.						

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B



3.3 Maximum Output Power

3.3.1 Limit

Maximum Output Power Limit	
UNII Devices	
<input checked="" type="checkbox"/> For the 5.15-5.25 GHz band:	
	<ul style="list-style-type: none"> ▪ Outdoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$. e.i.r.p. at any elevation angle above 30 degrees $\leq 125mW$ [21dBm] ▪ Indoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ ▪ Point-to-point AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 23$ dBi, then $P_{Out} = 30 - (G_{TX} - 23)$. ▪ Mobile or Portable Client: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.
<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"> ▪ Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$. ▪ Point-to-point systems (P2P): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W.
LE-LAN Devices	
<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"> ▪ Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$. ▪ Point-to-point systems (P2P): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W.
P_{Out} = maximum conducted output power in dBm, G_{TX} = the maximum transmitting antenna directional gain in dBi.	



3.3.2 Measuring Instruments

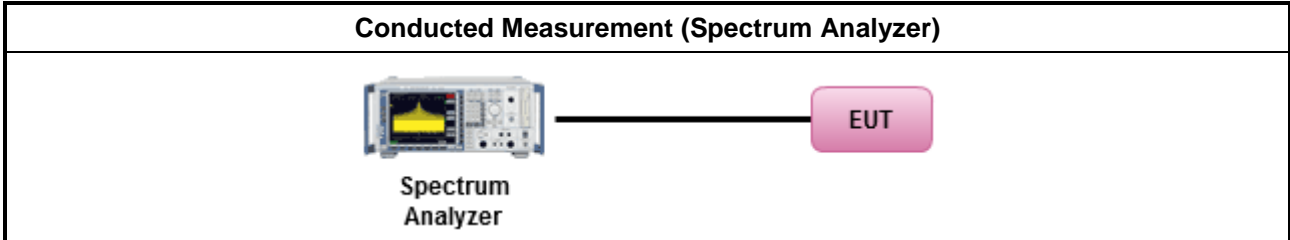
Refer a test equipment and calibration data table in this test report.

3.3.3 Test Procedures

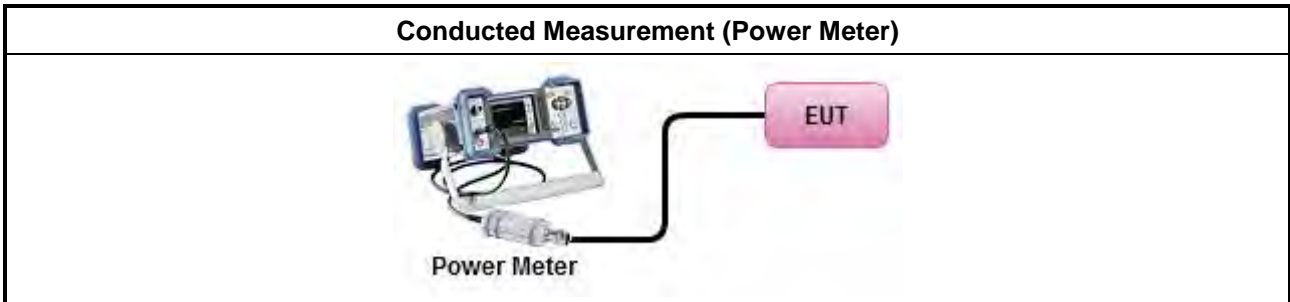
Test Method	
	Average over on/off periods with duty factor
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033 D02, clause E Method SA-2 (spectral trace averaging).
<input type="checkbox"/>	Refer as FCC KDB 789033 D02, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
	Wideband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

3.3.4 Test Setup

For Straddle channel



For Others channel



3.3.5 Test Result of Maximum Output Power

Refer as Appendix C



3.4 Power Spectral Density

3.4.1 Limit

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

3.4.2 Measuring Instruments

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

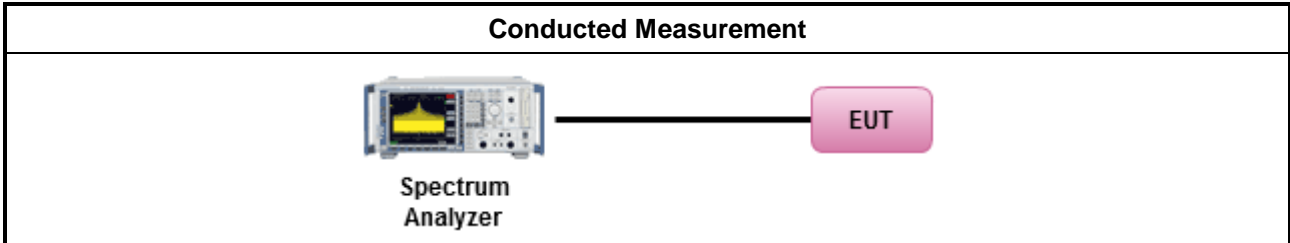


3.4.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> ▪ 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: 	
<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"> ▪ If the EUT supports multiple transmit chains using options given below: 	
<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"> ▪ If multiple transmit chains, EIRP PPSD calculation could be following as methods: $PPSD_{total} = PPSD_1 + PPSD_2 + \dots + PPSD_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = PPSD_{total} + DG$ 	
<input type="checkbox"/> For radiated measurement.	
<ul style="list-style-type: none"> ▪ Refer as FCC KDB 789033 D02 clause II A.1.F "Antenna-port Conducted versus Radiated Testing" 	
<ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz. 	

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

3.4.4 Test Setup



3.4.5 Test Result of Power Spectral Density

Refer as Appendix D



3.5 Unwanted Emissions

3.5.1 Transmitter Unwanted Emissions Limit

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

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

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

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

Un-restricted band emissions above 1GHz Limit	
Operating Band	Limit
<input checked="" type="checkbox"/> 5.15 - 5.25 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m @3m]
<input 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).

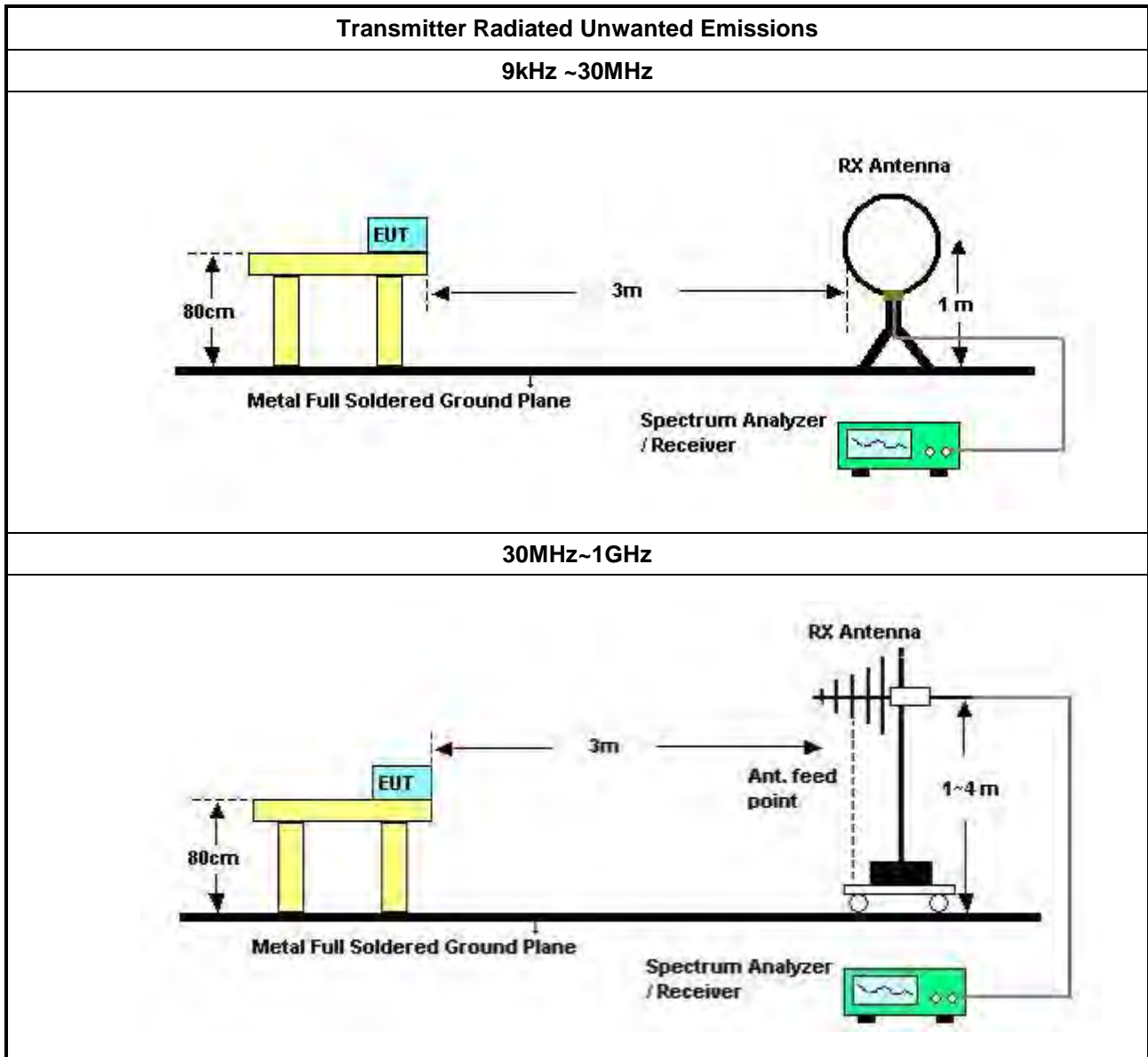
3.5.2 Measuring Instruments

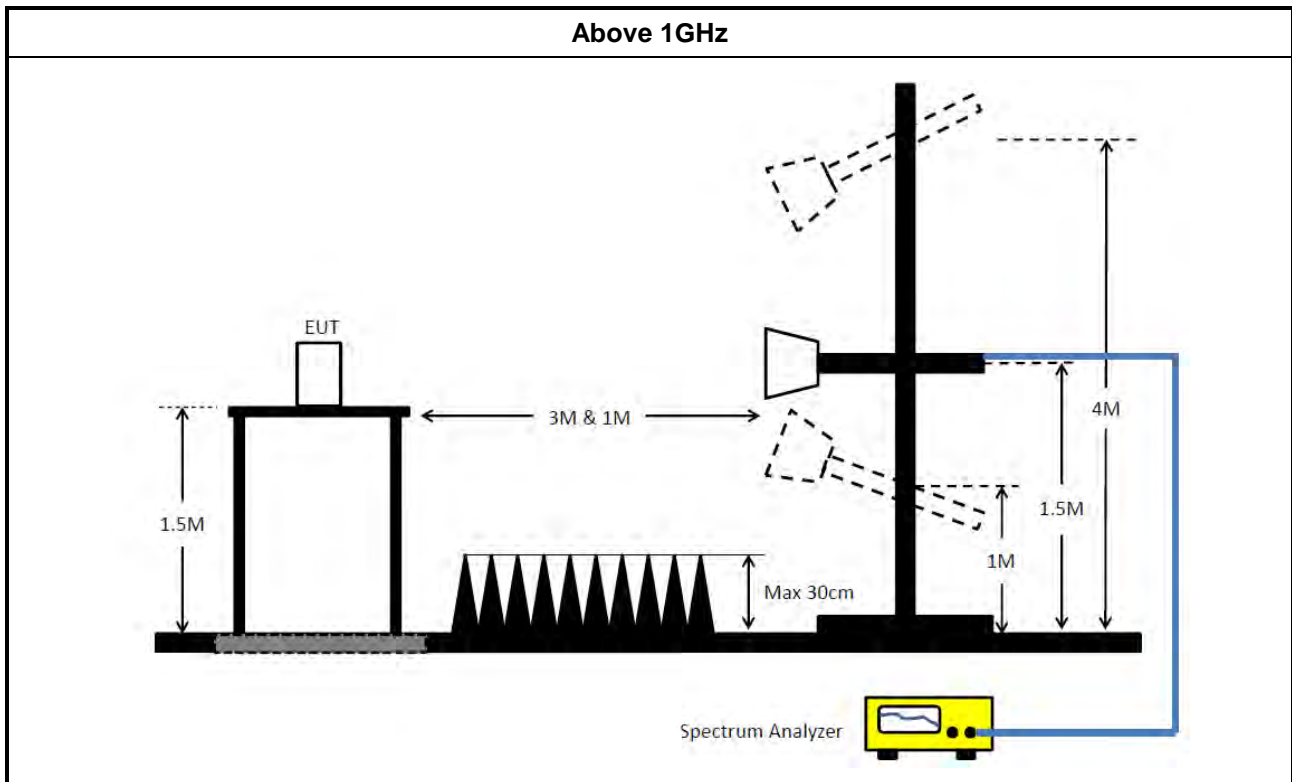
Refer a test equipment and calibration data table in this test report.

3.5.3 Test Procedures

Test Method	
	<ul style="list-style-type: none"> ▪ 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).
	<ul style="list-style-type: none"> ▪ The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].
	<ul style="list-style-type: none"> ▪ For the transmitter unwanted emissions shall be measured using following options below: <ul style="list-style-type: none"> ▪ Refer as FCC KDB 789033 D02, clause G)2) for unwanted emissions into non-restricted bands. ▪ Refer as FCC KDB 789033 D02, clause G)1) for unwanted emissions into restricted bands. <ul style="list-style-type: none"> <input type="checkbox"/> Refer as FCC KDB 789033 D02, G)6) Method AD (Trace Averaging). <input checked="" type="checkbox"/> Refer as FCC KDB 789033 D02, G)6) Method VB (Reduced VBW). <input type="checkbox"/> Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time. <input type="checkbox"/> Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions. <input checked="" type="checkbox"/> Refer as FCC KDB 789033 D02, clause G)5) measurement procedure peak limit. <input type="checkbox"/> Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit.
	<ul style="list-style-type: none"> ▪ For radiated measurement. <ul style="list-style-type: none"> ▪ Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m. ▪ Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m. ▪ Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.
	<ul style="list-style-type: none"> ▪ The any unwanted emissions level shall not exceed the fundamental emission level.
	<ul style="list-style-type: none"> ▪ All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.

3.5.4 Test Setup





3.5.5 Measurement Results Calculation

The measured Level is calculated using:

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

3.5.6 Transmitter Unwanted Emissions (Below 30MHz)

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

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

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

3.5.7 Test Result of Transmitter Unwanted Emissions

Refer as Appendix E



4 Test Equipment and Calibration Data

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.4GHz	Feb. 20, 2023	Feb. 19, 2024	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-5 0-16-2	04083	150kHz~100MHz	Feb. 16, 2023	Feb. 15, 2024	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Apr. 27, 2023	Apr. 26, 2024	Conduction (CO01-CB)
Pulse Limiter	Rohde& Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Feb. 09, 2023	Feb. 08, 2024	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	Oct. 18, 2022	Oct. 17, 2023	Conduction (CO01-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
Loop Antenna	Teseq	HLA 6120	31244	9kHz - 30 MHz	Mar. 23, 2023	Mar. 22, 2024	Radiation (03CH01-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH01-CB	30 MHz ~ 1 GHz	Jan. 16, 2023	Jan. 15, 2024	Radiation (03CH01-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH01-CB	1GHz ~18GHz 3m	May 05, 2023	May 04, 2024	Radiation (03CH01-CB)
BILOG ANTENNA with 6dB Attenuator	TESEQ & EMCI	CBL6112D N-6-06	37880 & AT-N0609	20MHz ~ 2GHz	Feb. 19, 2023	Feb. 18, 2024	Radiation (03CH01-CB)
Horn Antenna	ETS-LINDGREN	3115	00075790	750MHz ~ 18GHz	Nov. 04, 2022	Nov. 03, 2023	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 22, 2022	Aug. 21, 2023	Radiation (03CH01-CB)
Pre-Amplifier	SGH	SGH0301	20230109-2	10M~1GHz	Jan. 13, 2023	Jan. 12, 2024	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02121	1GHz ~ 26.5GHz	May 18, 2023	May 17, 2024	Radiation (03CH01-CB)
Pre-Amplifier	SGH	SGH184	20221107-3	18GHz ~ 40GHz	Nov. 16, 2022	Nov. 15, 2023	Radiation (03CH01-CB)
Signal Analyzer	R&S	FSV3044	101437	10kHz ~ 44GHz	Nov. 29, 2022	Nov. 29, 2023	Radiation (03CH01-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	Jun. 17, 2022	Jun. 16, 2023	Radiation (03CH01-CB)
RF Cable-low	Woken	RG402	Low Cable-16+17	30 MHz ~ 1 GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-16	1 GHz ~ 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH01-CB)
RF Cable-high	Woken	RG402	High Cable-16+17	1 GHz ~ 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH01-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH01-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH01-CB)
High Cable	Woken	WCA0929M	40G#6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH01-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH01-CB)



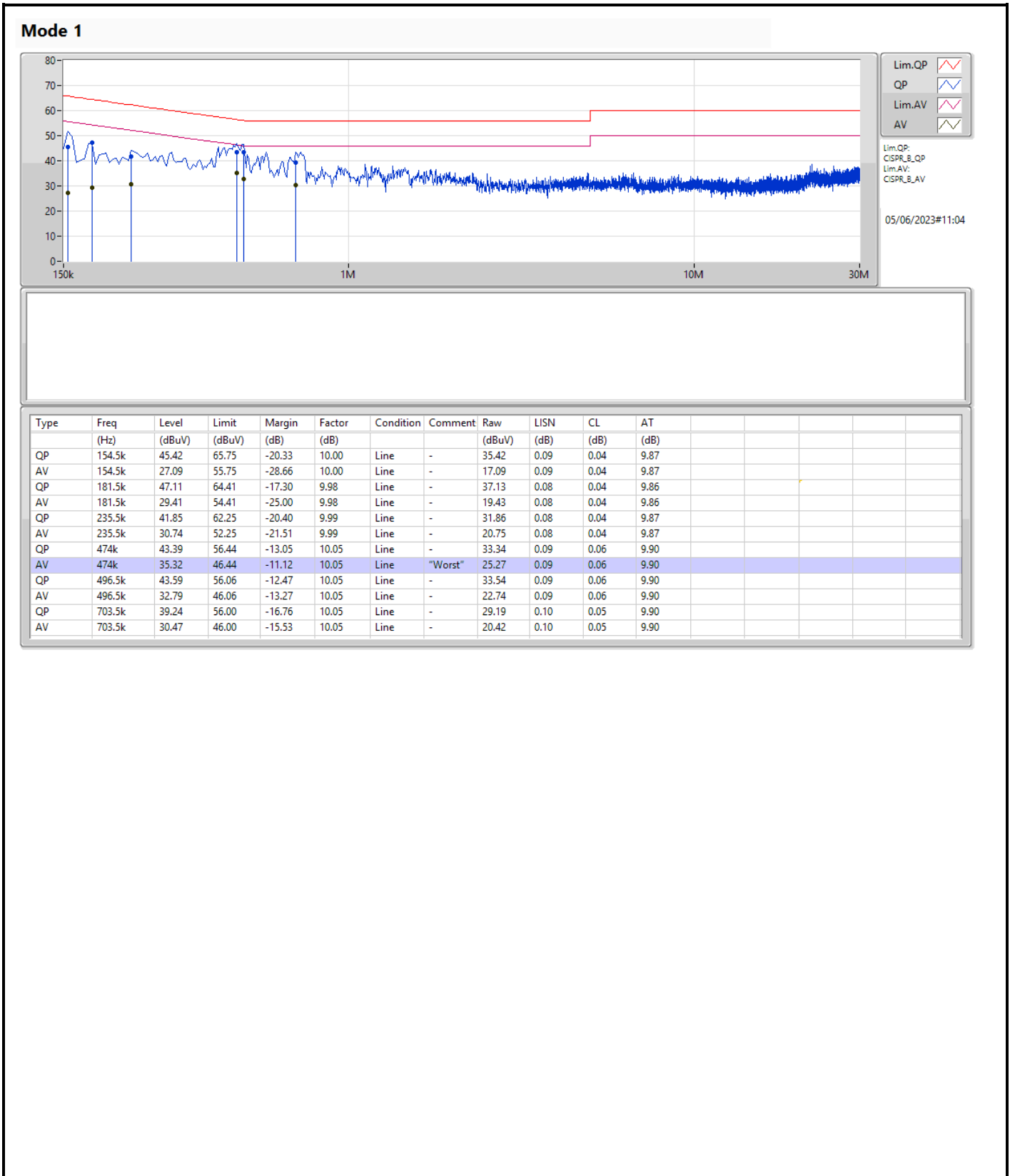
Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH05-CB	1GHz ~18GHz 3m	Nov. 06, 2022	Nov. 05, 2023	Radiation (03CH05-CB)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1370	1GHz~18GHz	Jun. 23, 2022	Jun. 22, 2023	Radiation (03CH05-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 22, 2022	Aug. 21, 2023	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC12630 SE	980287	1GHz – 26.5GHz	Jul. 01, 2022	Jun. 30, 2023	Radiation (03CH05-CB)
Pre-Amplifier	SGH	SGH184	20221107-3	18GHz ~ 40GHz	Nov. 16, 2022	Nov. 15, 2023	Radiation (03CH05-CB)
Spectrum Analyzer	R&S	FSP40	100304	9kHz ~ 40GHz	Apr. 18, 2023	Apr. 17, 2024	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-28	1GHz~18GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH05-CB)
RF Cable-high	Woken	RG402	High Cable-04+28	1GHz~18GHz	Oct. 03, 2022	Oct. 02, 2023	Radiation (03CH05-CB)
High Cable	Woken	WCA0929M	40G#5+6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH05-CB)
High Cable	Woken	WCA0929M	40G#5	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH05-CB)
High Cable	Woken	WCA0929M	40G#6	1GHz ~ 40 GHz	Dec. 07, 2022	Dec. 06, 2023	Radiation (03CH05-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH05-CB)
Spectrum analyzer	R&S	FSV40	101027	9kHz~40GHz	Aug. 15, 2022	Aug. 14, 2023	Conducted (TH02-CB)
Power Sensor	Anritsu	MA2411B	1126203	300MHz~40GHz	Oct. 17, 2022	Oct. 16, 2023	Conducted (TH02-CB)
Power Meter	Anritsu	ML2495A	1210004	300MHz~40GHz	Oct. 17, 2022	Oct. 16, 2023	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-01	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-02	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-03	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-04	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH02-CB)
RF Cable-high	Woken	RG402	High Cable-05	1 GHz – 18 GHz	Oct. 03, 2022	Oct. 02, 2023	Conducted (TH02-CB)
Switch	SPTCB	SP-SWI	SWI-02	1 GHz –26.5 GHz	Oct. 04, 2022	Oct. 03, 2023	Conducted (TH02-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conducted (TH02-CB)

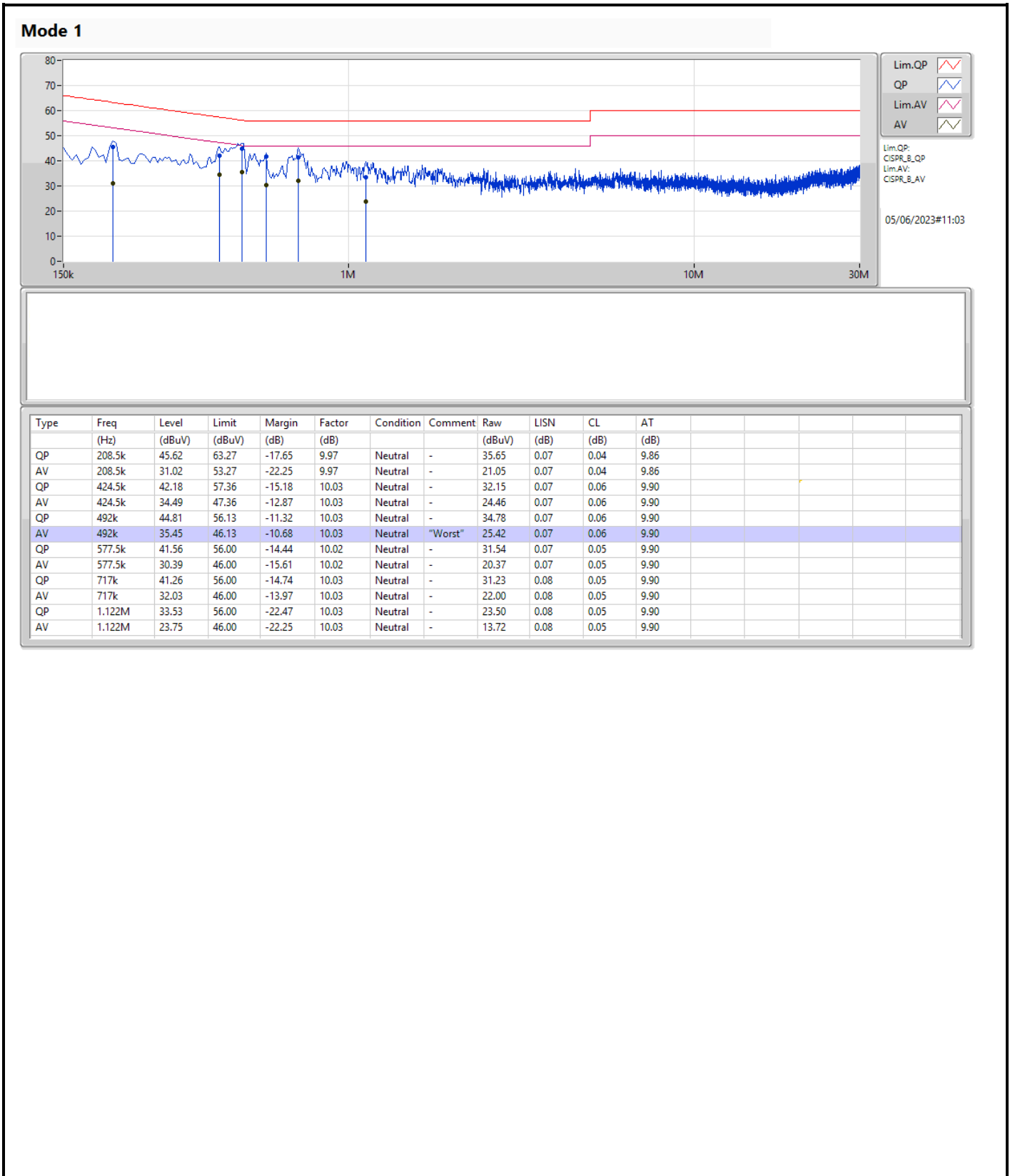
Note: Calibration Interval of instruments listed above is one year.
N.C.R. means Non-Calibration required.



Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	492k	35.45	46.13	-10.68	Neutral





Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	37.73M	18.779M	18M8D1D	20.295M	16.514M
802.11ax HEW20_Nss1,(MCS0)_2TX	42.57M	21.089M	21M1D1D	20.9M	18.941M
802.11ax HEW40_Nss1,(MCS0)_2TX	39.93M	37.631M	37M6D1D	38.83M	37.431M
802.11ax HEW80_Nss1,(MCS0)_2TX	81.18M	77.061M	77M1D1D	79.2M	76.662M
802.11ax HEW160_Nss1,(MCS0)_2TX	79.6M	77.321M	77M3D1D	79.44M	77.321M
5.25-5.35GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	25.3M	16.646M	16M6D1D	19.525M	16.404M
802.11ax HEW20_Nss1,(MCS0)_2TX	22.11M	18.991M	19MOD1D	20.075M	18.891M
802.11ax HEW40_Nss1,(MCS0)_2TX	39.49M	37.631M	37M6D1D	38.94M	37.431M
802.11ax HEW80_Nss1,(MCS0)_2TX	78.54M	76.962M	77MOD1D	78.54M	76.862M
802.11ax HEW160_Nss1,(MCS0)_2TX	79.36M	77.321M	77M3D1D	79.28M	77.241M
5.47-5.725GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	24.2M	16.646M	16M6D1D	14.595M	13.193M
802.11ax HEW20_Nss1,(MCS0)_2TX	25.41M	19.09M	19M1D1D	15.42M	14.453M
802.11ax HEW40_Nss1,(MCS0)_2TX	47.52M	37.731M	37M7D1D	34.545M	33.758M
802.11ax HEW80_Nss1,(MCS0)_2TX	78.98M	76.962M	77MOD1D	74.475M	73.013M
802.11ax HEW160_Nss1,(MCS0)_2TX	158.84M	155.122M	155MD1D	158.84M	155.122M
5.725-5.85GHz	-	-	-	-	-
802.11a_Nss1,(6Mbps)_2TX	16.5M	29.179M	29M2D1D	3.12M	3.698M
802.11ax HEW20_Nss1,(MCS0)_2TX	17.05M	36.957M	37MOD1D	3.94M	4.538M
802.11ax HEW40_Nss1,(MCS0)_2TX	35.09M	53.573M	53M6D1D	3.84M	11.734M
802.11ax HEW80_Nss1,(MCS0)_2TX	75.24M	76.962M	77MOD1D	3.96M	13.933M

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

Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	22.385M	16.668M	20.295M	16.514M
5200MHz	Pass	Inf	28.325M	16.822M	31.02M	17.173M
5240MHz	Pass	Inf	37.73M	18.779M	35.31M	18.735M
5260MHz	Pass	Inf	19.525M	16.404M	19.525M	16.448M
5300MHz	Pass	Inf	22.55M	16.514M	25.3M	16.602M
5320MHz	Pass	Inf	22.715M	16.47M	21.45M	16.646M
5500MHz	Pass	Inf	20.295M	16.602M	23.98M	16.536M
5580MHz	Pass	Inf	19.635M	16.426M	18.37M	16.426M
5700MHz	Pass	Inf	24.2M	16.646M	23.705M	16.58M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	14.595M	13.193M	14.835M	13.253M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.22M	3.738M	3.12M	3.698M
5745MHz	Pass	500k	16.5M	26.739M	16.5M	28.454M
5785MHz	Pass	500k	16.335M	27.024M	16.39M	28.806M
5825MHz	Pass	500k	16.5M	29.179M	16.445M	28.476M
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	Inf	22.935M	18.941M	20.9M	19.015M
5200MHz	Pass	Inf	29.92M	19.065M	32.89M	19.09M
5240MHz	Pass	Inf	41.635M	21.089M	42.57M	19.765M
5260MHz	Pass	Inf	20.075M	18.916M	21.01M	18.991M
5300MHz	Pass	Inf	22.11M	18.991M	21.285M	18.991M
5320MHz	Pass	Inf	22.11M	18.941M	21.45M	18.891M
5500MHz	Pass	Inf	25.41M	18.991M	22.44M	18.966M
5580MHz	Pass	Inf	20.68M	18.891M	20.405M	19.09M
5700MHz	Pass	Inf	21.505M	18.941M	21.175M	18.916M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.42M	14.588M	15.42M	14.453M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.94M	4.538M	4.5M	4.538M
5745MHz	Pass	500k	15.345M	28.586M	15.345M	29.31M
5785MHz	Pass	500k	16.39M	28.386M	15.07M	30.91M
5825MHz	Pass	500k	17.05M	36.482M	14.355M	36.957M
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	Inf	39.93M	37.531M	38.83M	37.581M
5230MHz	Pass	Inf	39.16M	37.431M	39.05M	37.631M
5270MHz	Pass	Inf	39.49M	37.631M	39.27M	37.631M
5310MHz	Pass	Inf	39.05M	37.531M	38.94M	37.431M
5510MHz	Pass	Inf	46.42M	37.431M	46.75M	37.531M
5550MHz	Pass	Inf	39.38M	37.381M	38.94M	37.431M
5670MHz	Pass	Inf	47.52M	37.731M	43.89M	37.731M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	34.545M	33.863M	34.825M	33.758M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.84M	11.734M	4M	17.171M
5755MHz	Pass	500k	35.09M	50.875M	33.88M	53.573M
5795MHz	Pass	500k	23.87M	50.025M	33.88M	50.725M
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	Inf	79.2M	77.061M	81.18M	76.662M
5290MHz	Pass	Inf	78.54M	76.962M	78.54M	76.862M
5530MHz	Pass	Inf	78.54M	76.962M	78.54M	76.662M
5610MHz	Pass	Inf	78.54M	76.762M	78.98M	76.562M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	74.475M	73.013M	74.625M	73.088M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.96M	13.933M	3.98M	17.591M
5775MHz	Pass	500k	62.48M	76.962M	75.24M	76.562M
802.11ax HEW160_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	Inf	79.44M	77.321M	79.6M	77.321M
5250MHz Straddle 5.25-5.35GHz	Pass	Inf	79.36M	77.321M	79.28M	77.241M
5570MHz	Pass	Inf	158.84M	155.122M	158.84M	155.122M

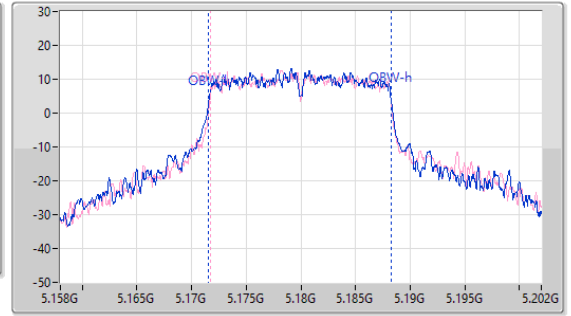
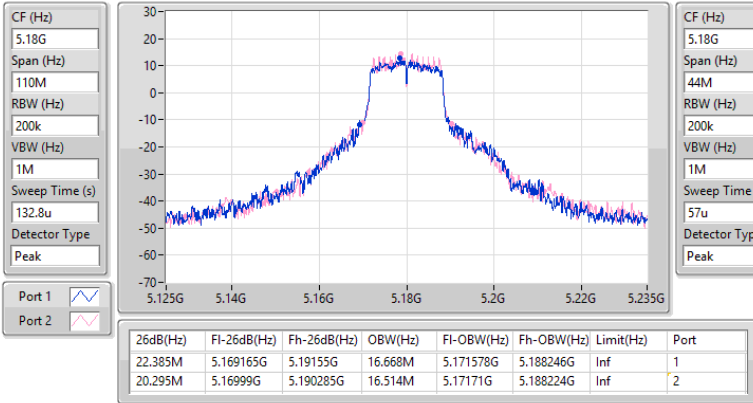
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
 Port X-OBW = Port X 99% occupied bandwidth

5.15-5.25GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5180MHz

07/06/2023

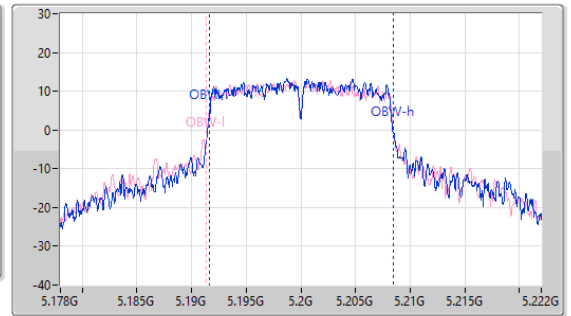
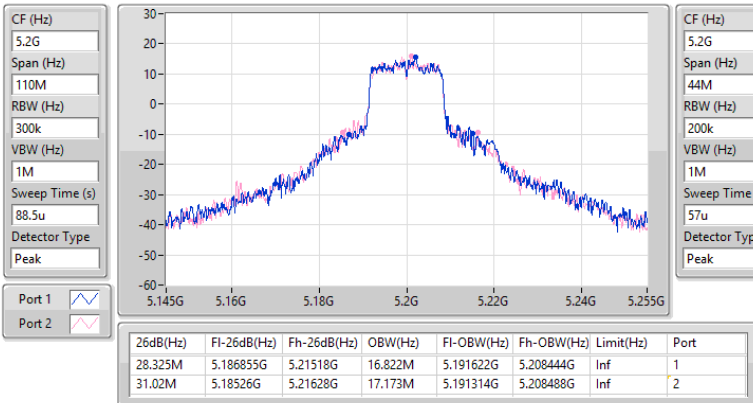


5.15-5.25GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5200MHz

07/06/2023

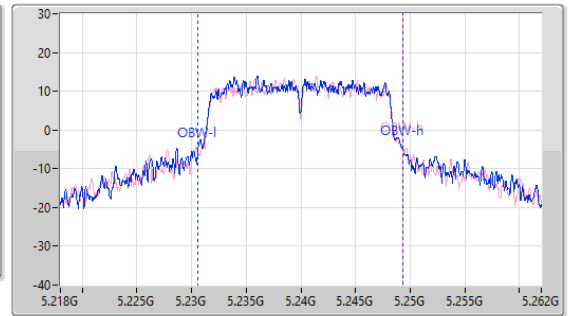
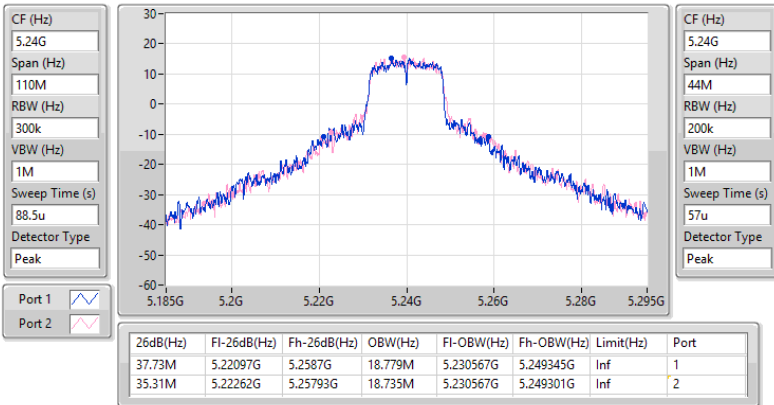


5.15-5.25GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5240MHz

07/06/2023

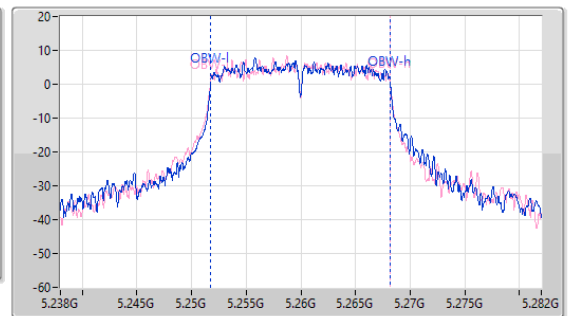
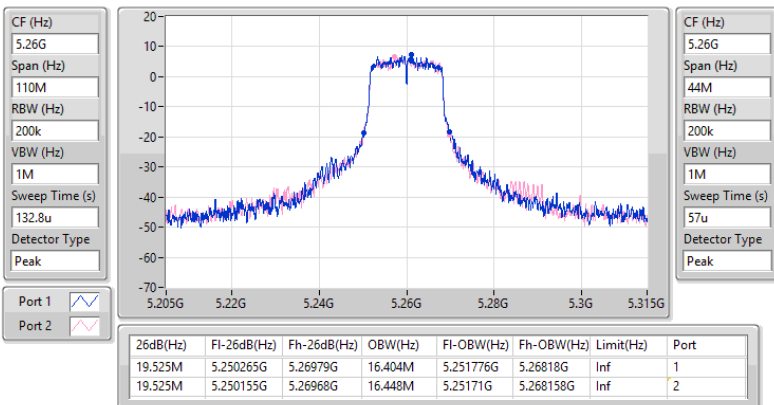


5.25-5.35GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5260MHz

07/06/2023

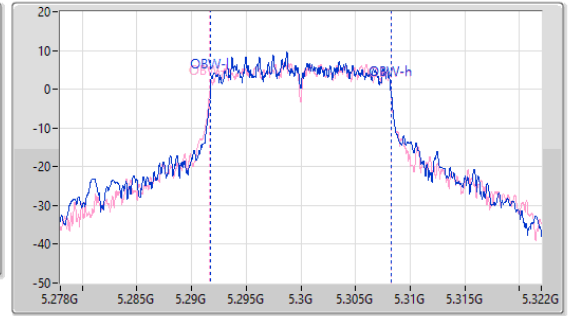
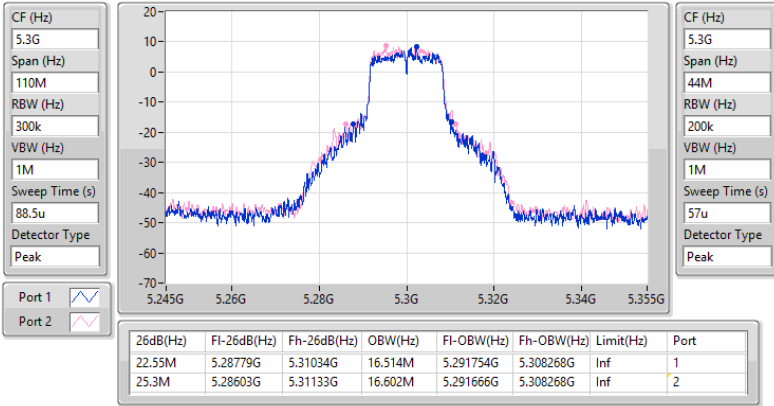


5.25-5.35GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5300MHz

07/06/2023

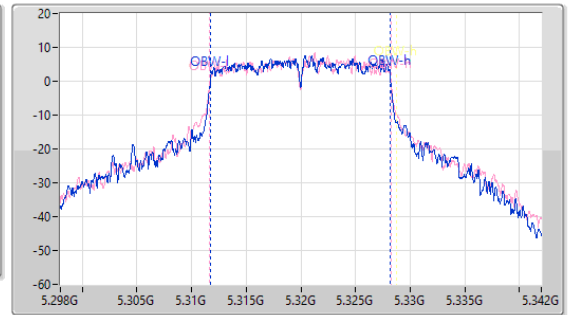
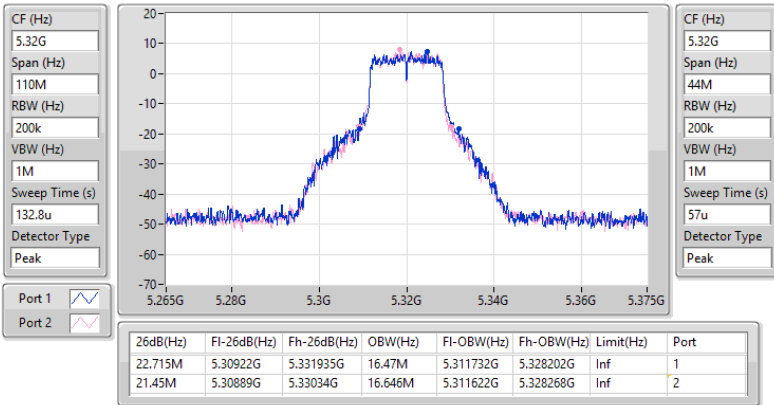


5.25-5.35GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5320MHz

07/06/2023

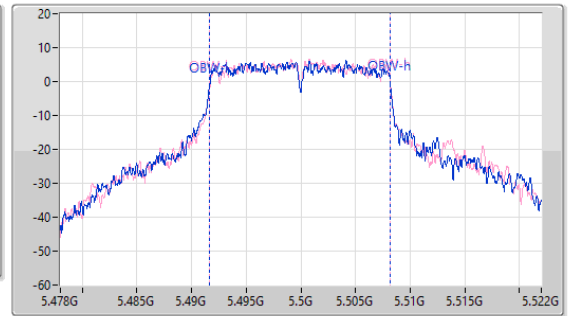
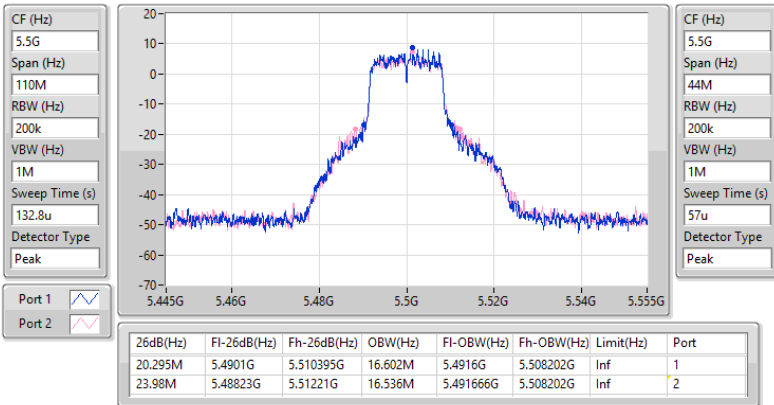


5.47-5.725GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5500MHz

08/06/2023

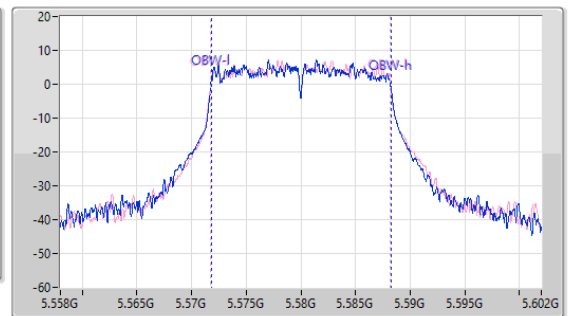
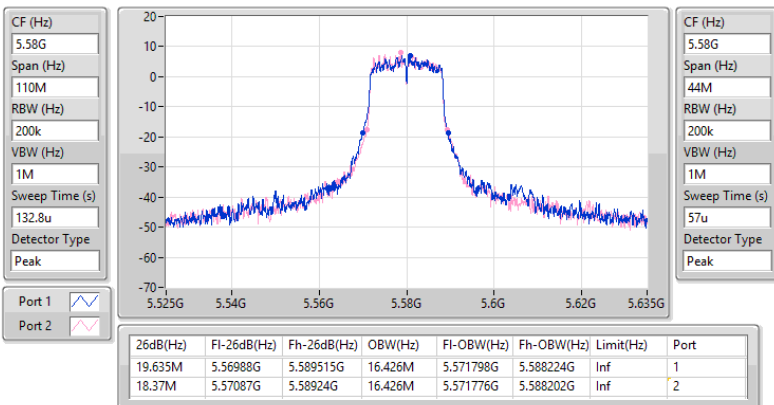


5.47-5.725GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5580MHz

08/06/2023

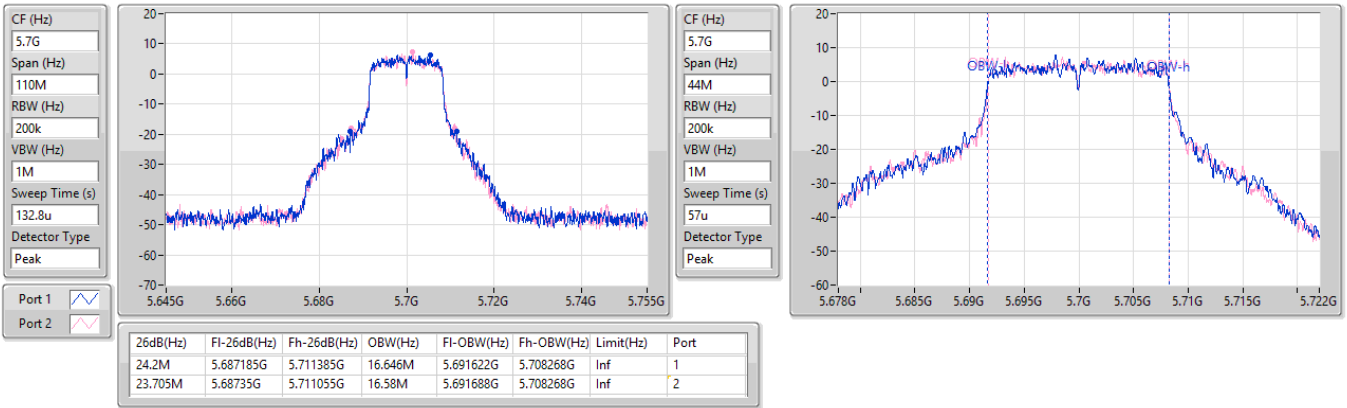


5.47-5.725GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5700MHz

07/06/2023

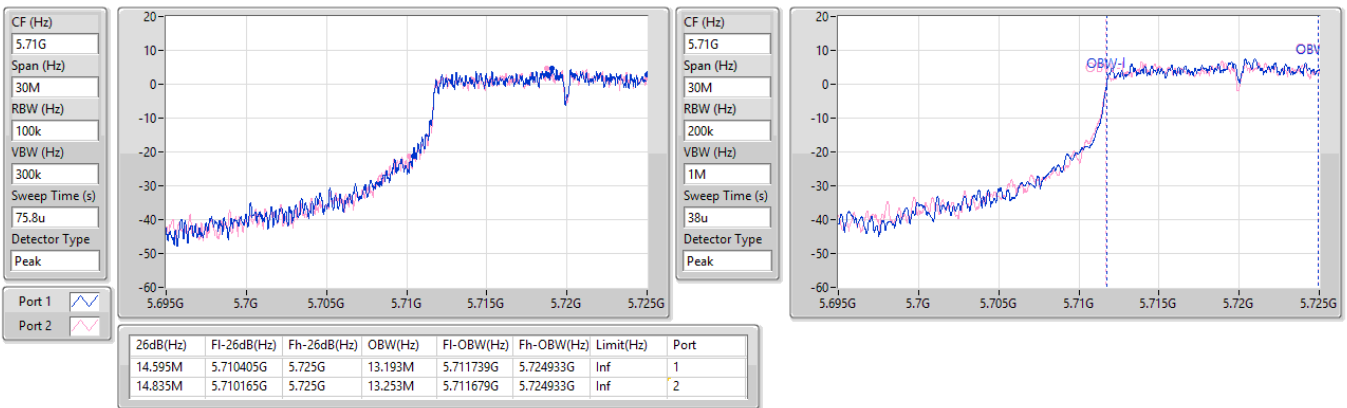


5.47-5.725GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5720MHz Straddle 5.47-5.725GHz

07/06/2023

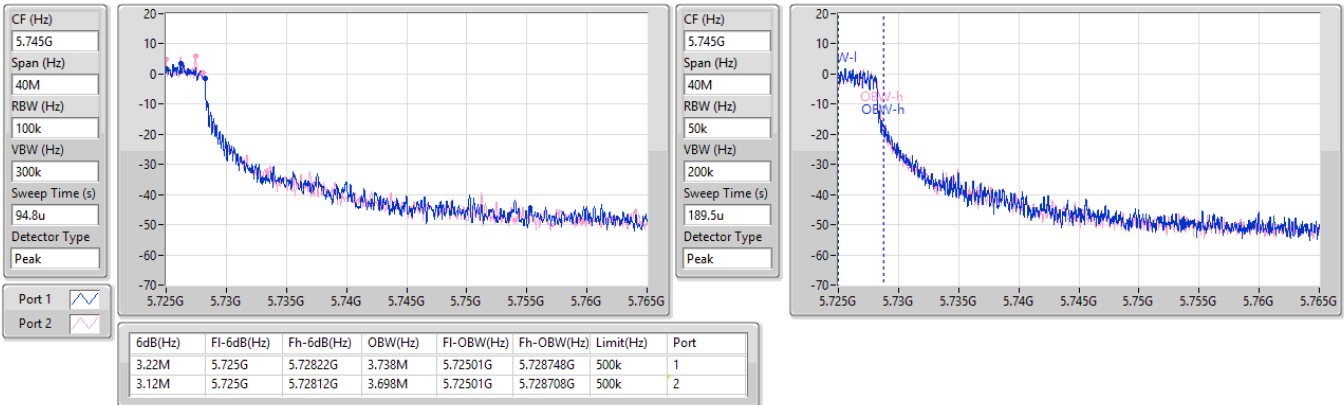


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5720MHz Straddle 5.725-5.85GHz

08/06/2023

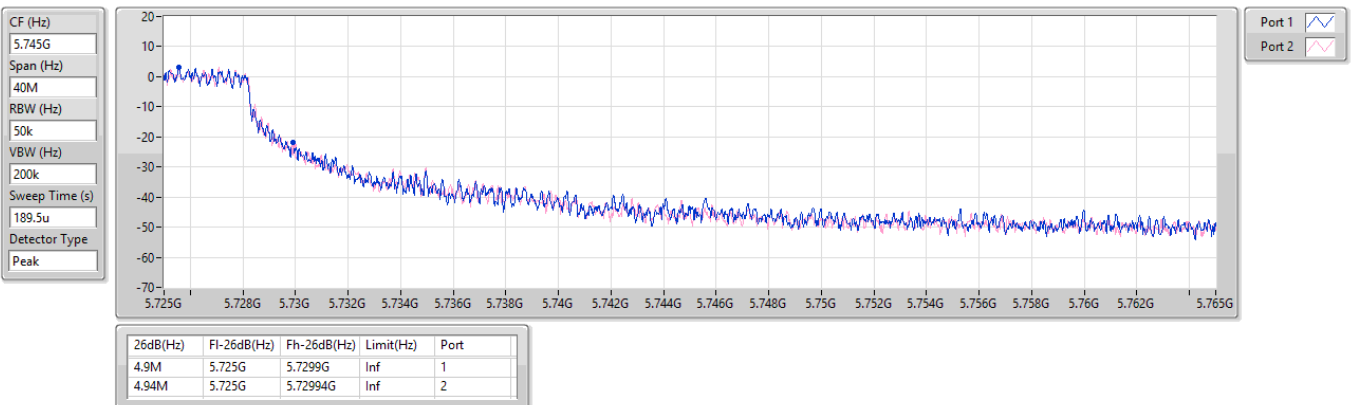


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5720MHz Straddle 5.725-5.85GHz

08/06/2023

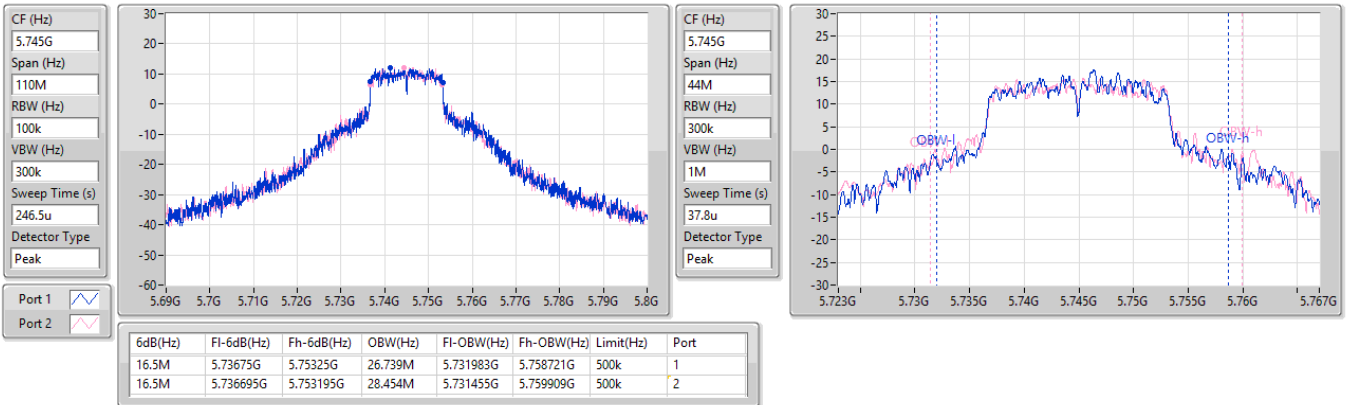


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5745MHz

08/06/2023

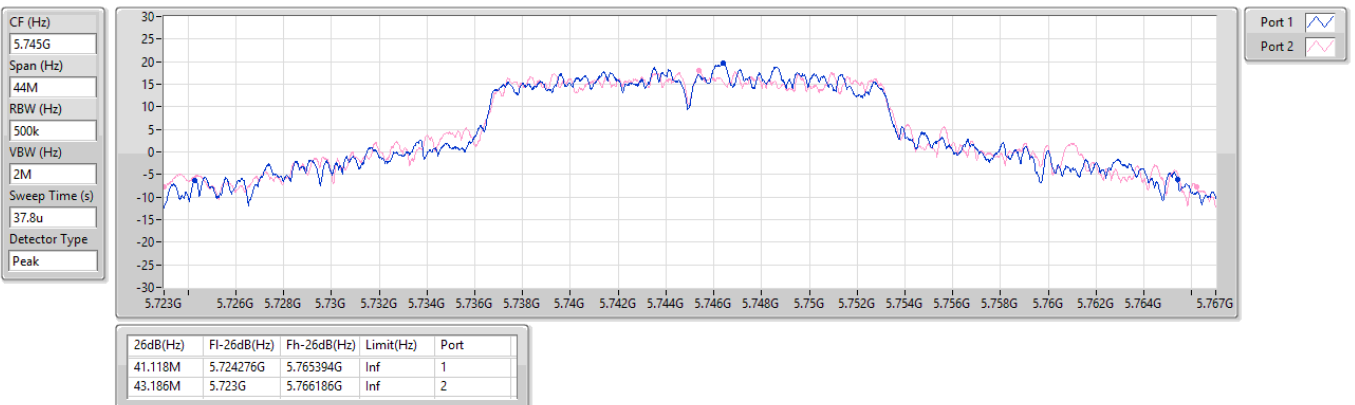


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5745MHz

08/06/2023

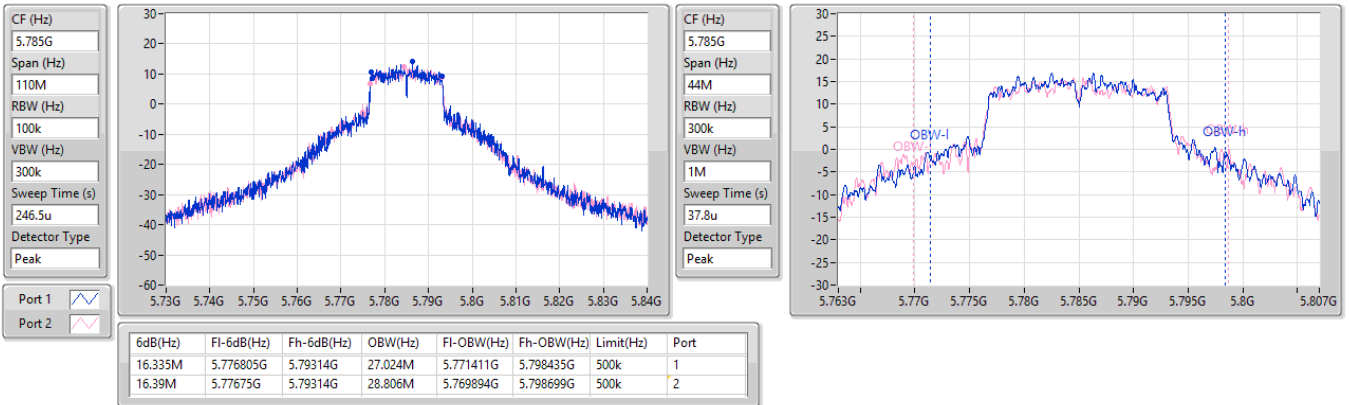


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5785MHz

08/06/2023

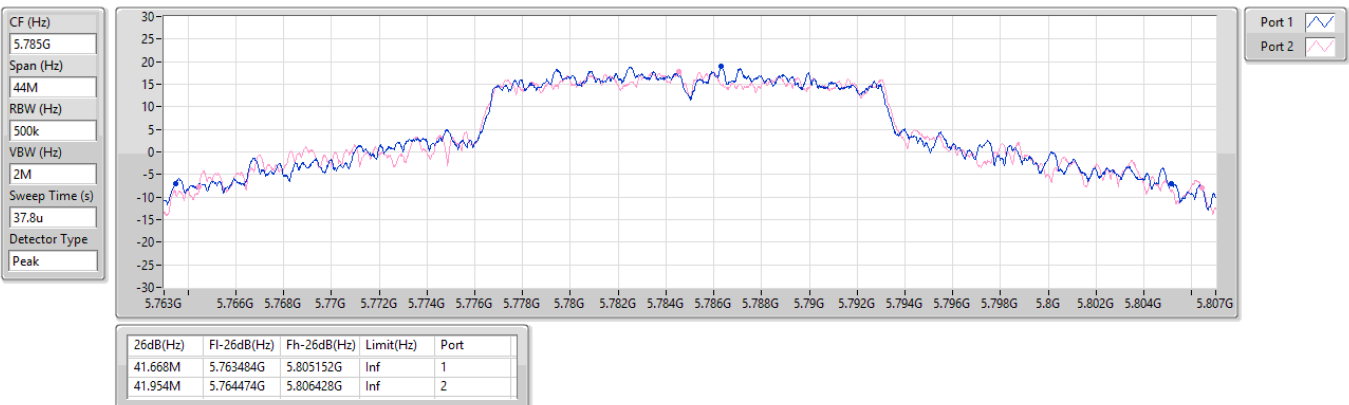


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5785MHz

08/06/2023

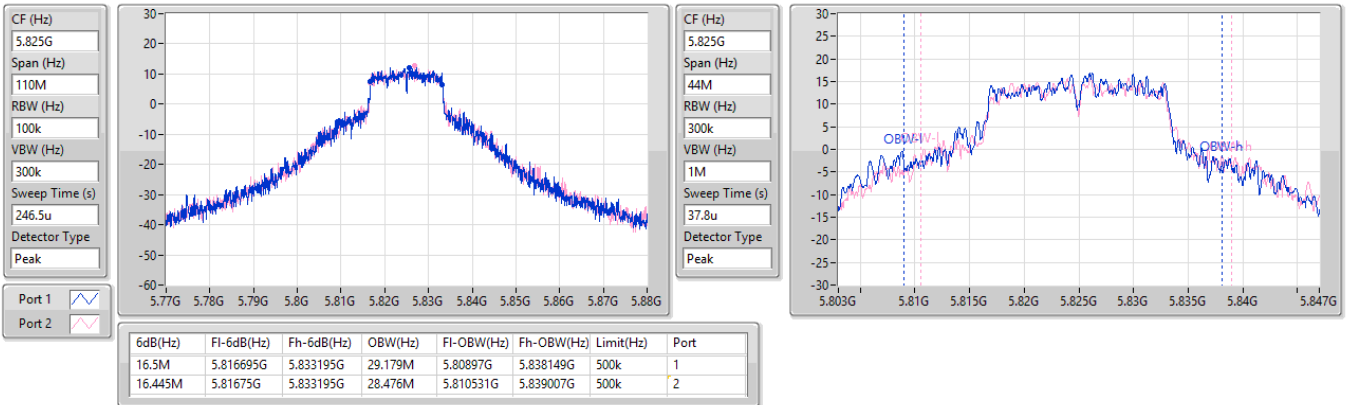


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5825MHz

08/06/2023

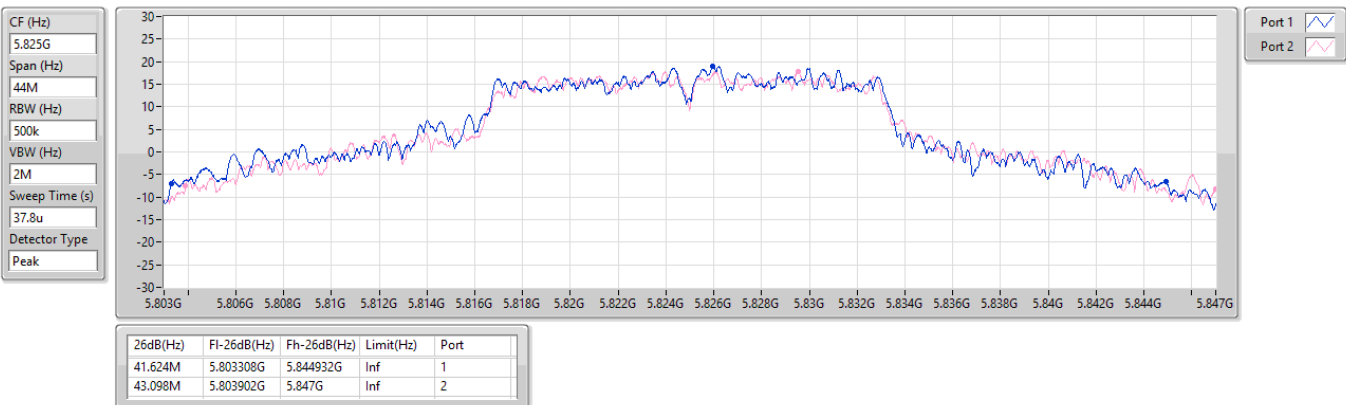


5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX

EBW

5825MHz

08/06/2023



5.15-5.25GHz_802.11ax_HEW20_Nss1,(MCS0)_2TX

EBW

5180MHz

08/06/2023

CF (Hz)
5.18G

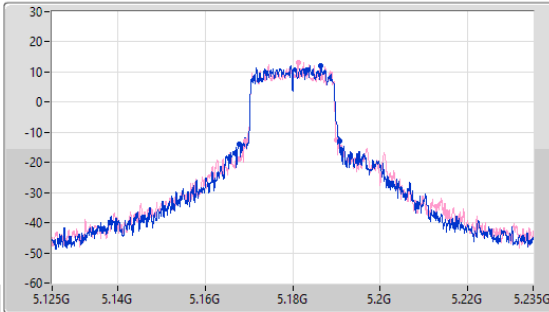
Span (Hz)
110M

RBW (Hz)
200k

VBW (Hz)
1M

Sweep Time (s)
132.8u

Detector Type
Peak



CF (Hz)
5.18G

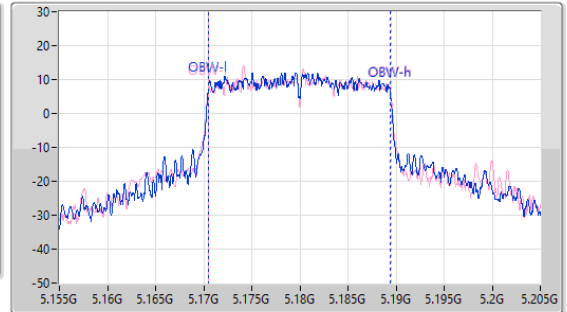
Span (Hz)
50M

RBW (Hz)
200k

VBW (Hz)
1M

Sweep Time (s)
66.2u

Detector Type
Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
22.935M	5.16779G	5.190725G	18.941M	5.17048G	5.18942G	Inf	1
20.9M	5.16922G	5.19012G	19.015M	5.170455G	5.18947G	Inf	2

5.15-5.25GHz_802.11ax_HEW20_Nss1,(MCS0)_2TX

EBW

5200MHz

08/06/2023

CF (Hz)
5.2G

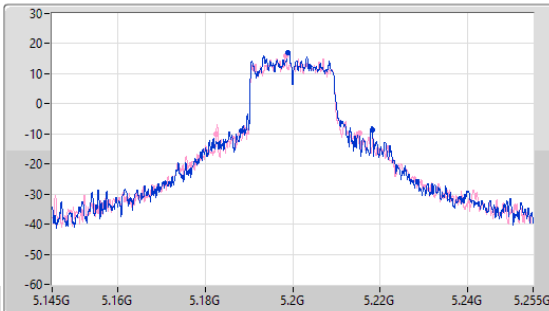
Span (Hz)
110M

RBW (Hz)
300k

VBW (Hz)
1M

Sweep Time (s)
88.5u

Detector Type
Peak



CF (Hz)
5.2G

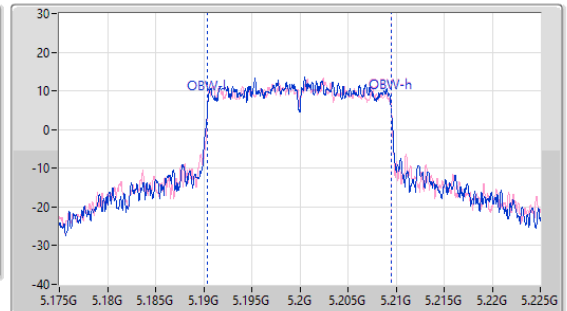
Span (Hz)
50M

RBW (Hz)
200k

VBW (Hz)
1M

Sweep Time (s)
66.2u

Detector Type
Peak



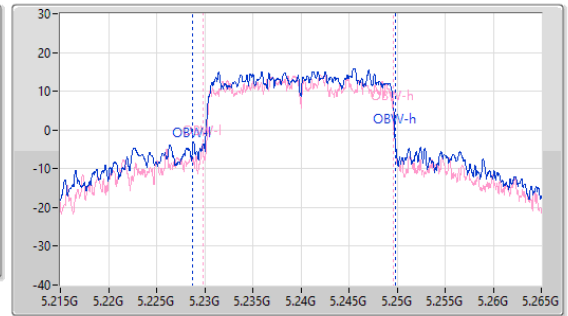
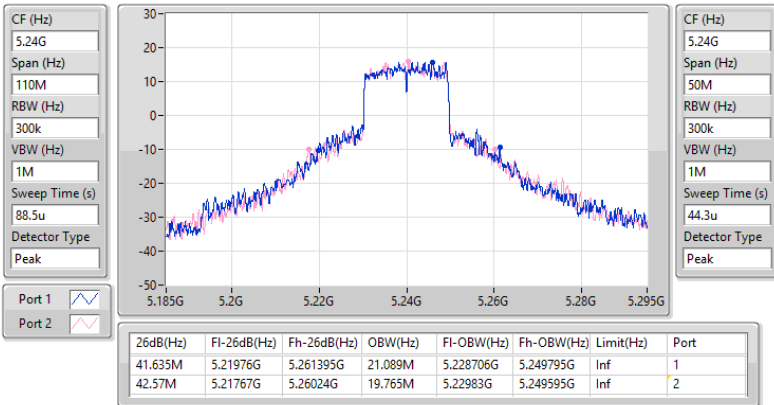
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
29.92M	5.18834G	5.21826G	19.065M	5.190405G	5.20947G	Inf	1
32.89M	5.18251G	5.2154G	19.09M	5.190405G	5.209495G	Inf	2

5.15-5.25GHz_802.11ax_HEW20_Nss1,(MCS0)_2TX

EBW

5240MHz

08/06/2023

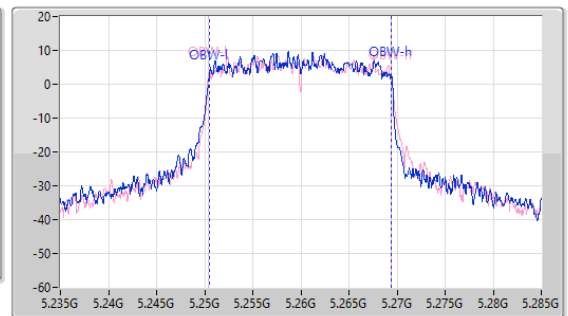
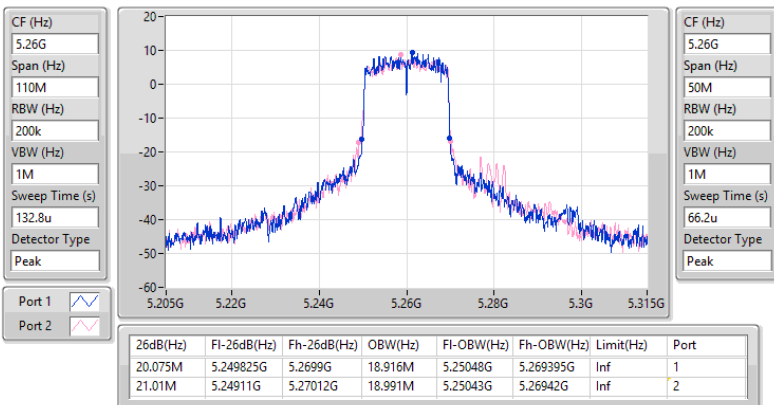


5.25-5.35GHz_802.11ax_HEW20_Nss1,(MCS0)_2TX

EBW

5260MHz

08/06/2023

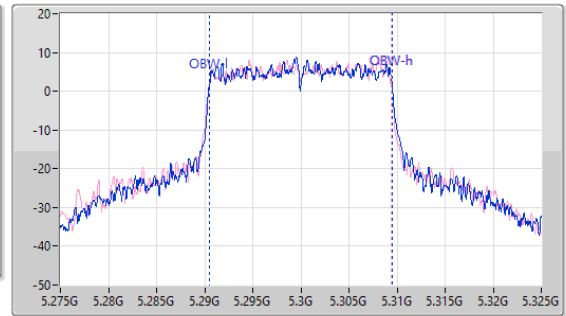
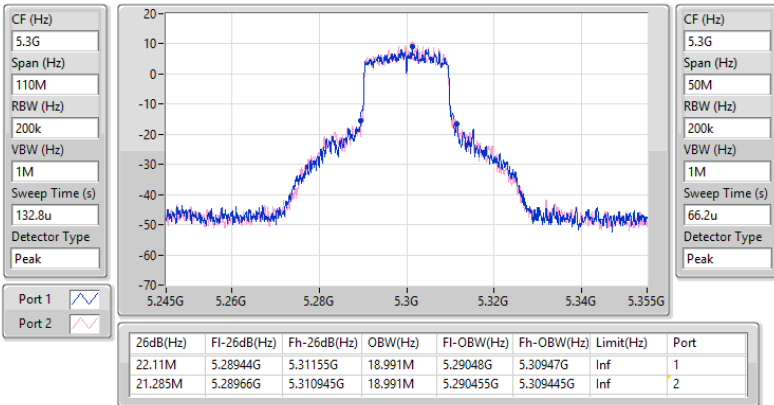


5.25-5.35GHz_802.11ax_HEW20_Nss1,(MCS0)_2TX

EBW

5300MHz

08/06/2023

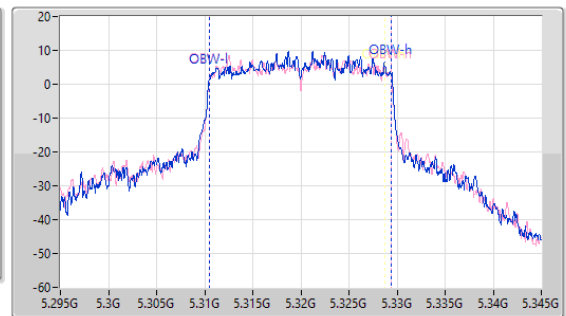
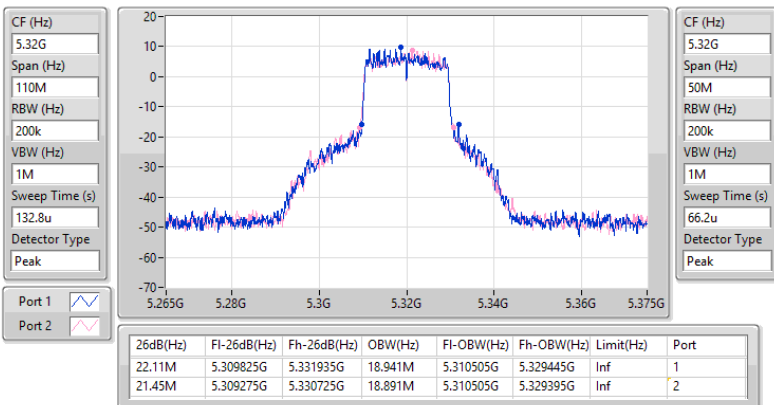


5.25-5.35GHz_802.11ax_HEW20_Nss1,(MCS0)_2TX

EBW

5320MHz

08/06/2023

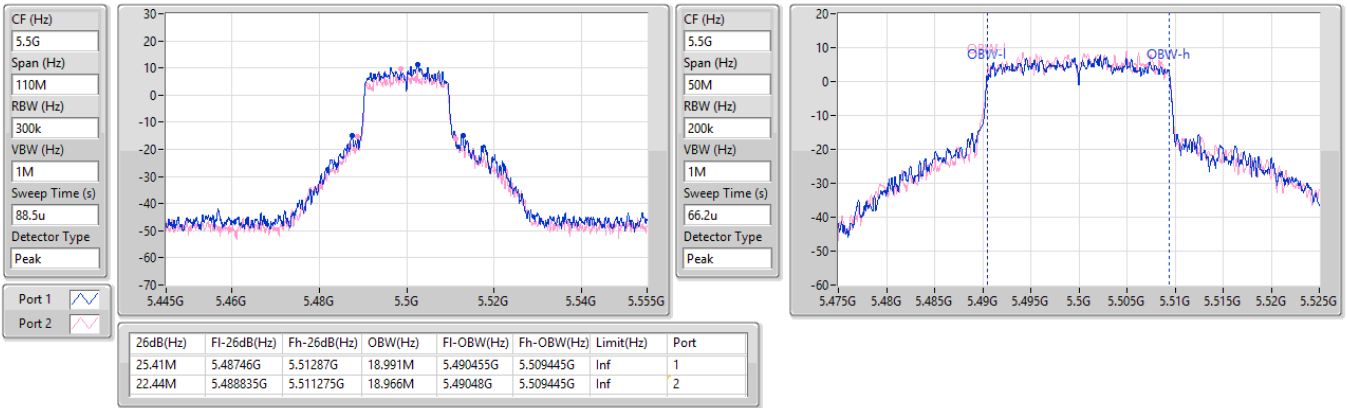


5.47-5.725GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5500MHz

08/06/2023

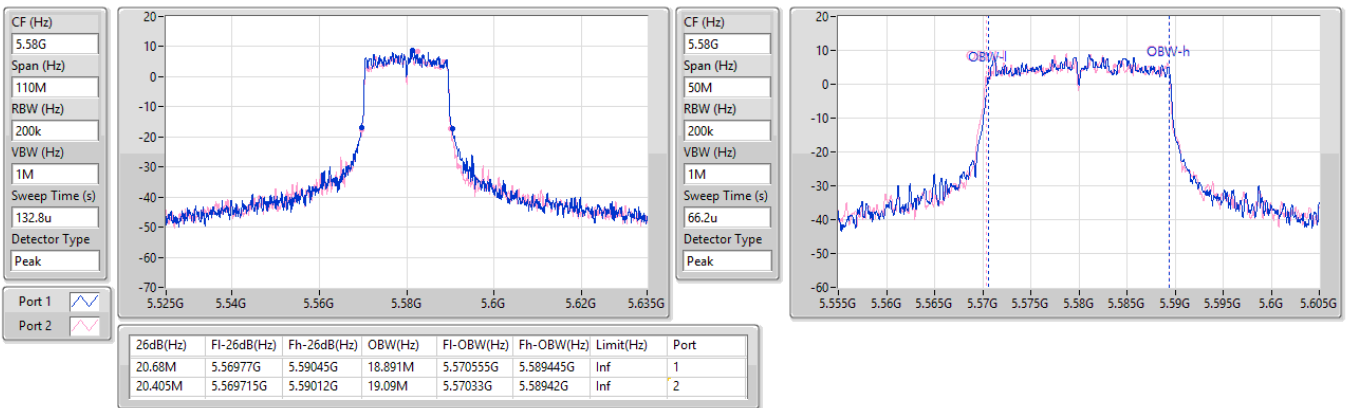


5.47-5.725GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5580MHz

08/06/2023

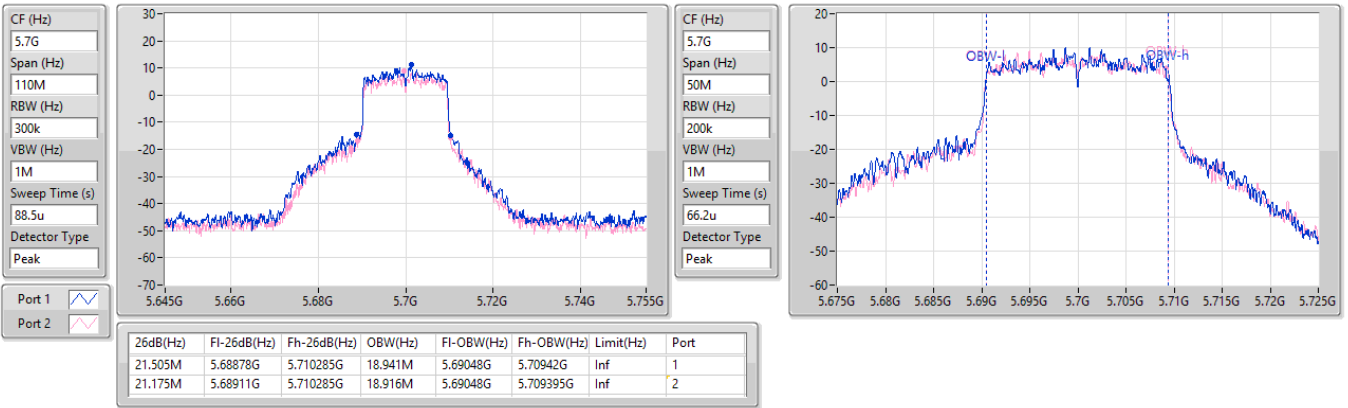


5.47-5.725GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5700MHz

08/06/2023

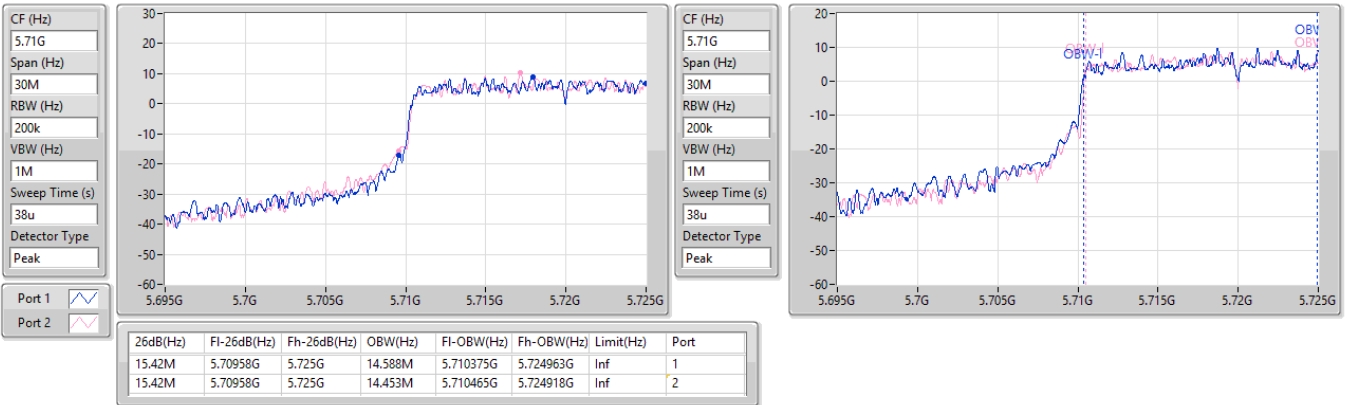


5.47-5.725GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5720MHz Straddle 5.47-5.725GHz

08/06/2023

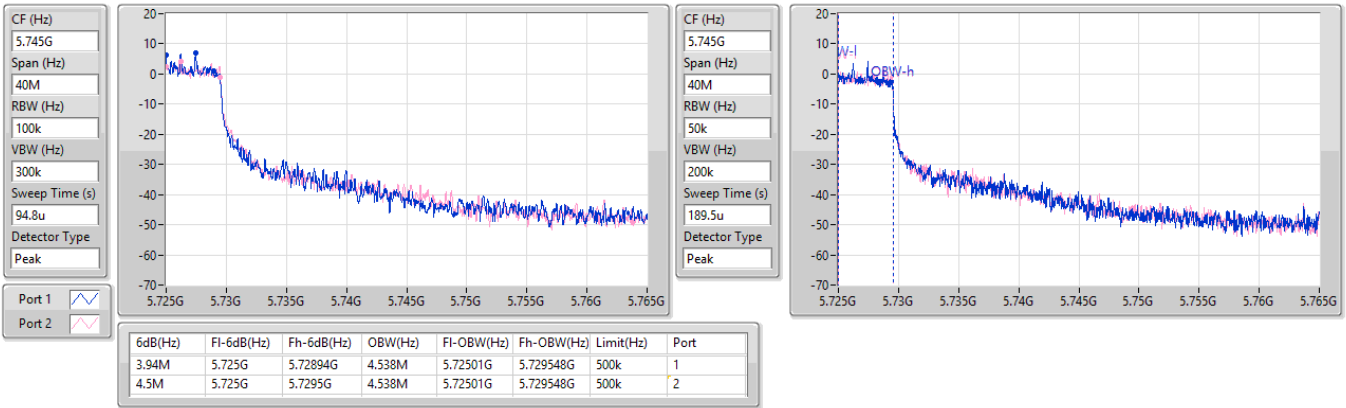


5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5720MHz Straddle 5.725-5.85GHz

08/06/2023

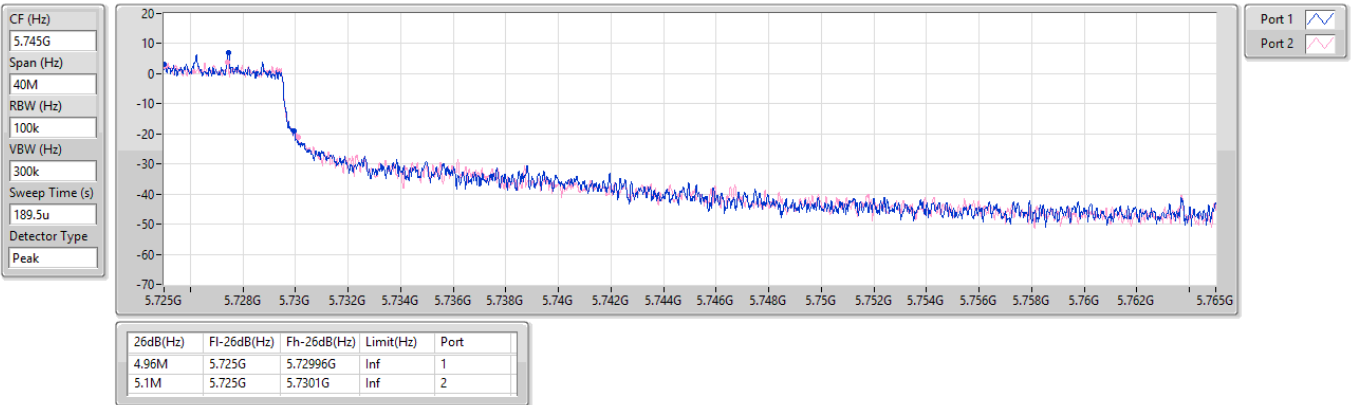


5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5720MHz Straddle 5.725-5.85GHz

08/06/2023

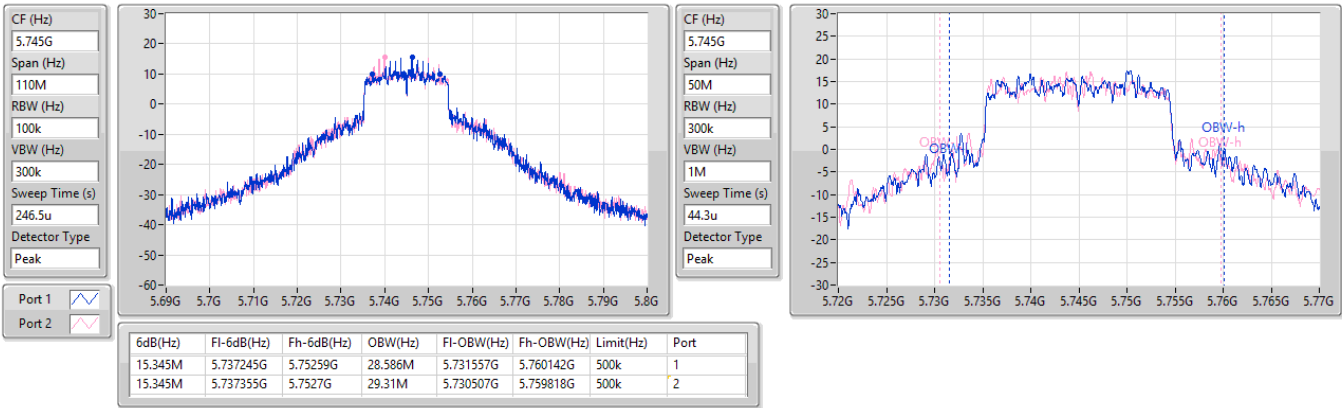


5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5745MHz

08/06/2023

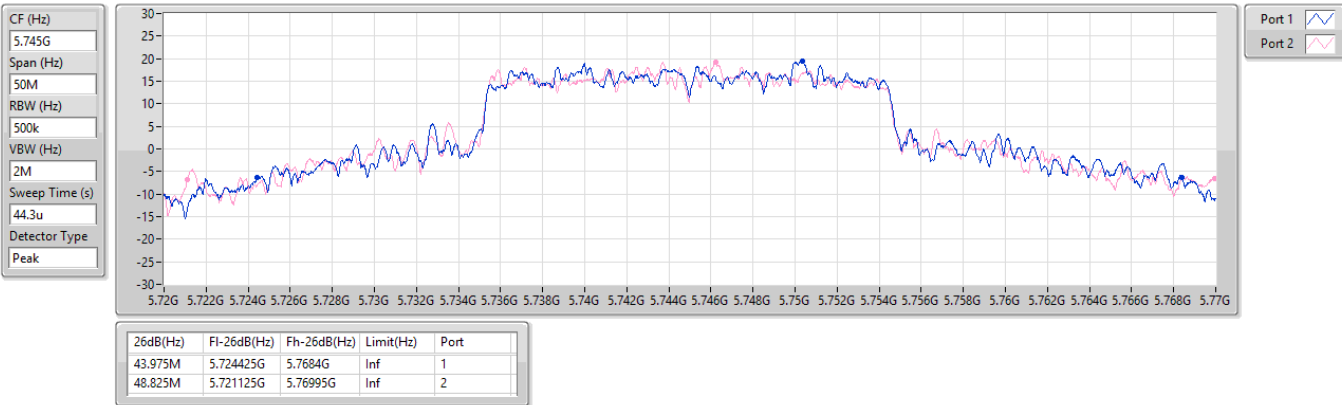


5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5745MHz

08/06/2023



5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5785MHz

08/06/2023

CF (Hz)
5.785G

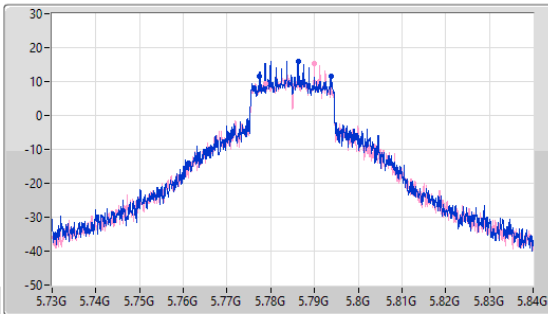
Span (Hz)
110M

RBW (Hz)
100k

VBW (Hz)
300k

Sweep Time (s)
246.5u

Detector Type
Peak



CF (Hz)
5.785G

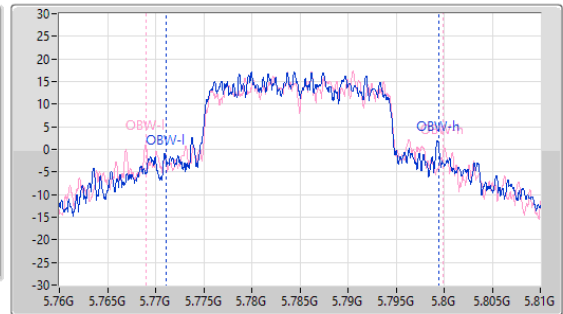
Span (Hz)
50M

RBW (Hz)
300k

VBW (Hz)
1M

Sweep Time (s)
44.3u

Detector Type
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.39M	5.77741G	5.7938G	28.386M	5.771057G	5.799443G	500k	1
15.07M	5.77873G	5.7938G	30.91M	5.769008G	5.799918G	500k	2

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5785MHz

08/06/2023

CF (Hz)
5.785G

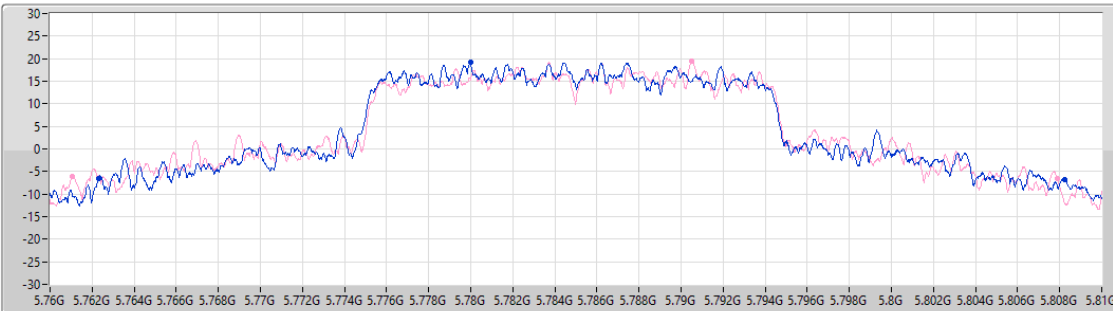
Span (Hz)
50M

RBW (Hz)
500k

VBW (Hz)
2M

Sweep Time (s)
44.3u

Detector Type
Peak



Port 1

Port 2

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
45.925M	5.7623G	5.808225G	Inf	1
46.825M	5.76105G	5.807875G	Inf	2

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5825MHz

08/06/2023

CF (Hz)
5.825G

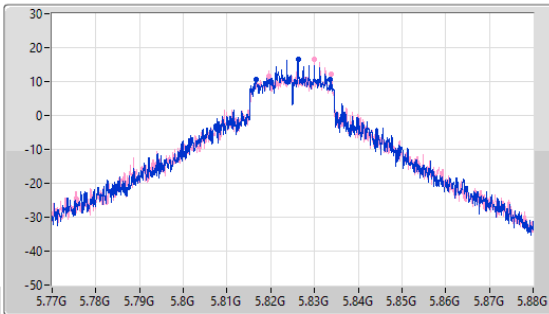
Span (Hz)
110M

RBW (Hz)
100k

VBW (Hz)
300k

Sweep Time (s)
246.5u

Detector Type
Peak



CF (Hz)
5.825G

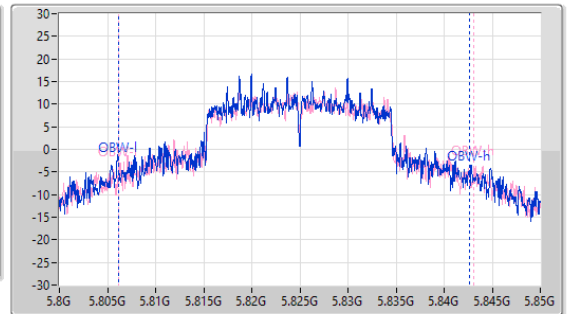
Span (Hz)
50M

RBW (Hz)
100k

VBW (Hz)
2M

Sweep Time (s)
114u

Detector Type
Peak



Port 1

Port 2

6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.05M	5.81664G	5.83369G	36.482M	5.806159G	5.842641G	500k	1
14.355M	5.819445G	5.8338G	36.957M	5.806159G	5.843116G	500k	2

5.725-5.85GHz_802.11ax HEW20_Nss1,(MCS0)_2TX

EBW

5825MHz

08/06/2023

CF (Hz)
5.825G

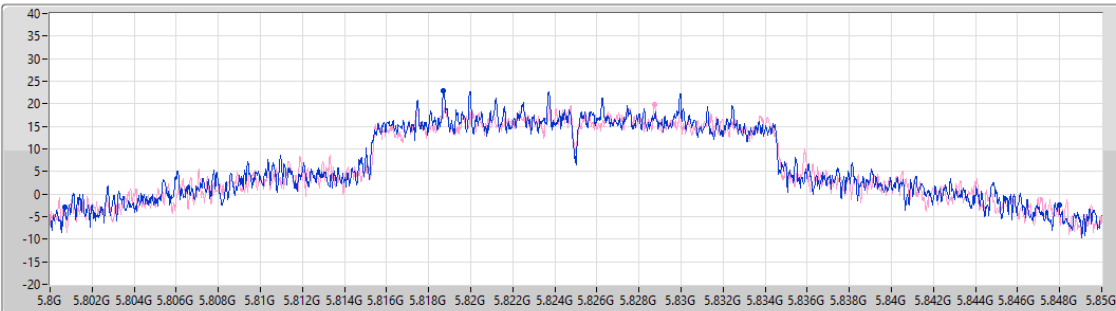
Span (Hz)
50M

RBW (Hz)
500k

VBW (Hz)
2M

Sweep Time (s)
114u

Detector Type
Peak



Port 1

Port 2

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
47.275M	5.8007G	5.847975G	Inf	1
49.95M	5.800025G	5.849975G	Inf	2

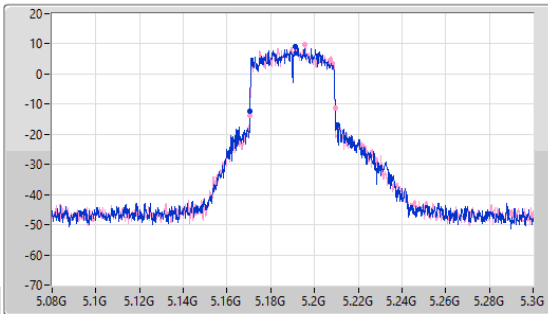
5.15-5.25GHz_802.11ax_HEW40_Nss1,(MCS0)_2TX

EBW

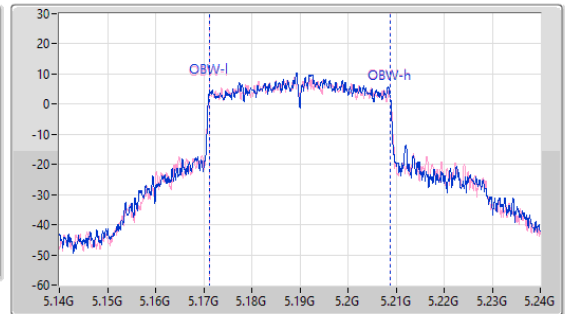
5190MHz

08/06/2023

CF (Hz) 5.19G
 Span (Hz) 220M
 RBW (Hz) 300k
 VBW (Hz) 2M
 Sweep Time (s) 177.6u
 Detector Type Peak



CF (Hz) 5.19G
 Span (Hz) 100M
 RBW (Hz) 300k
 VBW (Hz) 2M
 Sweep Time (s) 82.3u
 Detector Type Peak



26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
39.93M	5.17053G	5.21046G	37.531M	5.171159G	5.208691G	Inf	1
38.83M	5.17053G	5.20936G	37.581M	5.171209G	5.208791G	Inf	2

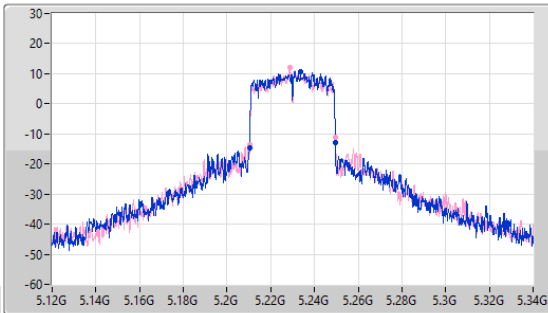
5.15-5.25GHz_802.11ax_HEW40_Nss1,(MCS0)_2TX

EBW

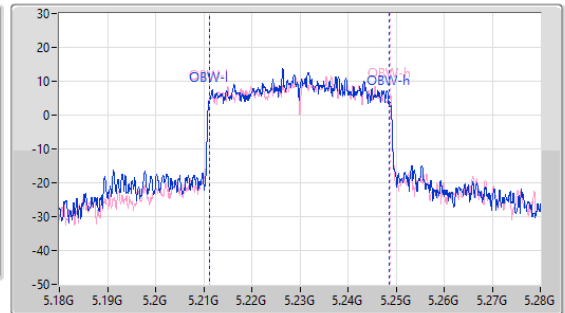
5230MHz

08/06/2023

CF (Hz) 5.23G
 Span (Hz) 220M
 RBW (Hz) 300k
 VBW (Hz) 1M
 Sweep Time (s) 177.6u
 Detector Type Peak



CF (Hz) 5.23G
 Span (Hz) 100M
 RBW (Hz) 300k
 VBW (Hz) 2M
 Sweep Time (s) 82.3u
 Detector Type Peak



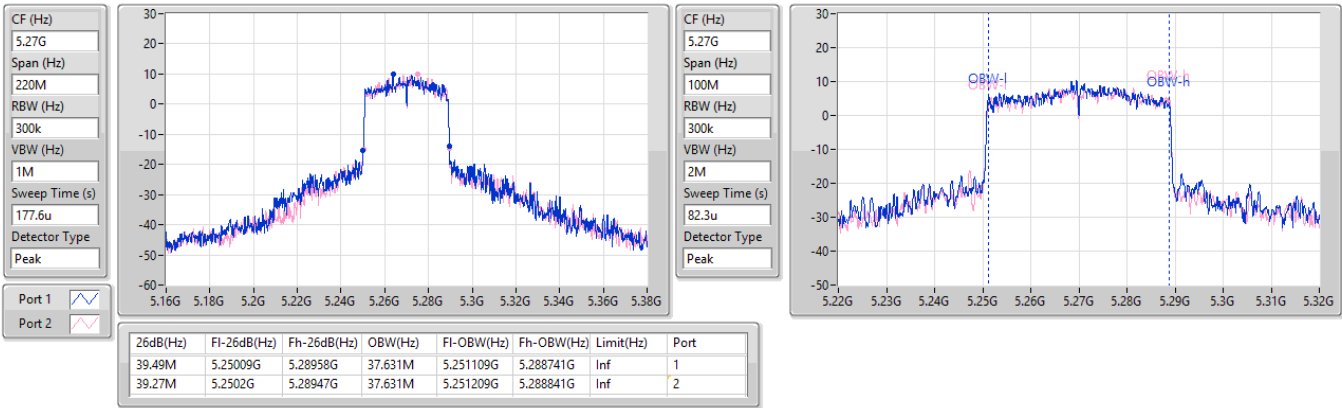
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
39.16M	5.21031G	5.24947G	37.431M	5.211209G	5.248641G	Inf	1
39.05M	5.21042G	5.24947G	37.631M	5.211209G	5.248841G	Inf	2

5.25-5.35GHz_802.11ax_HEW40_Nss1,(MCS0)_2TX

EBW

5270MHz

08/06/2023

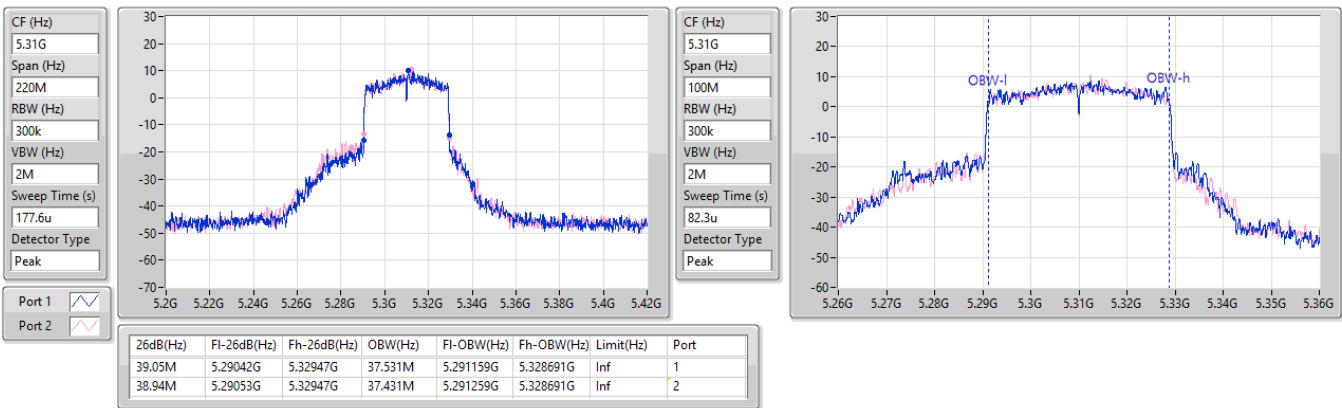


5.25-5.35GHz_802.11ax_HEW40_Nss1,(MCS0)_2TX

EBW

5310MHz

08/06/2023

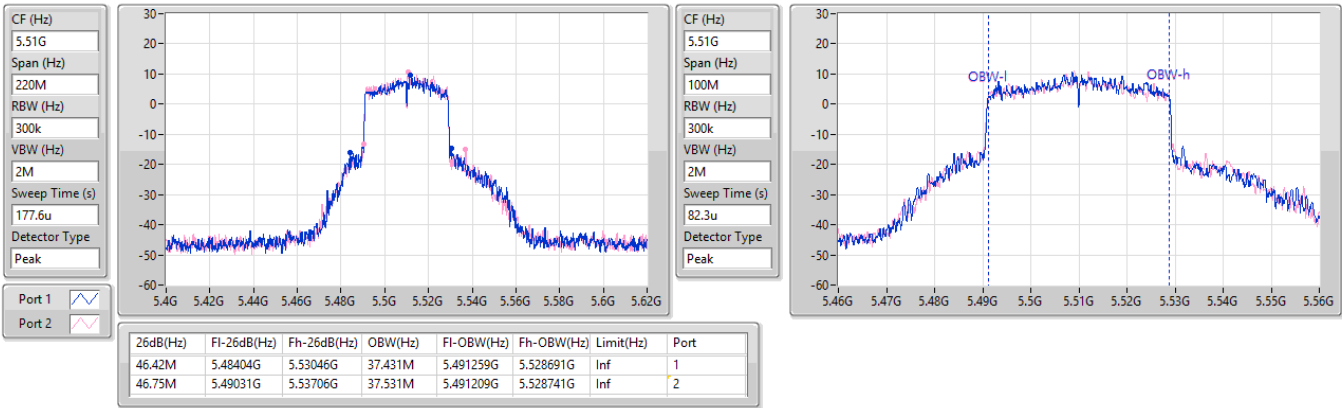


5.47-5.725GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5510MHz

08/06/2023

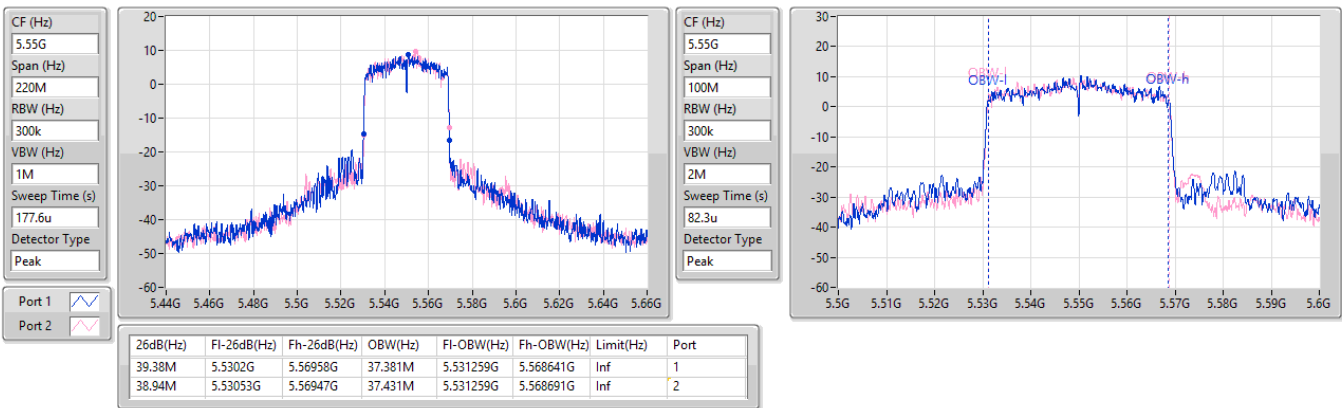


5.47-5.725GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5550MHz

08/06/2023

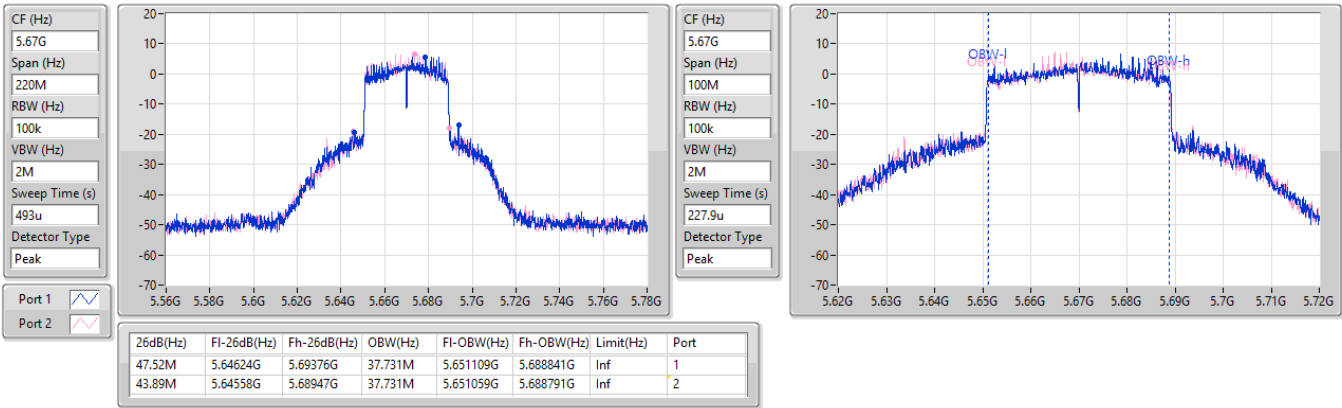


5.47-5.725GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5670MHz

08/06/2023

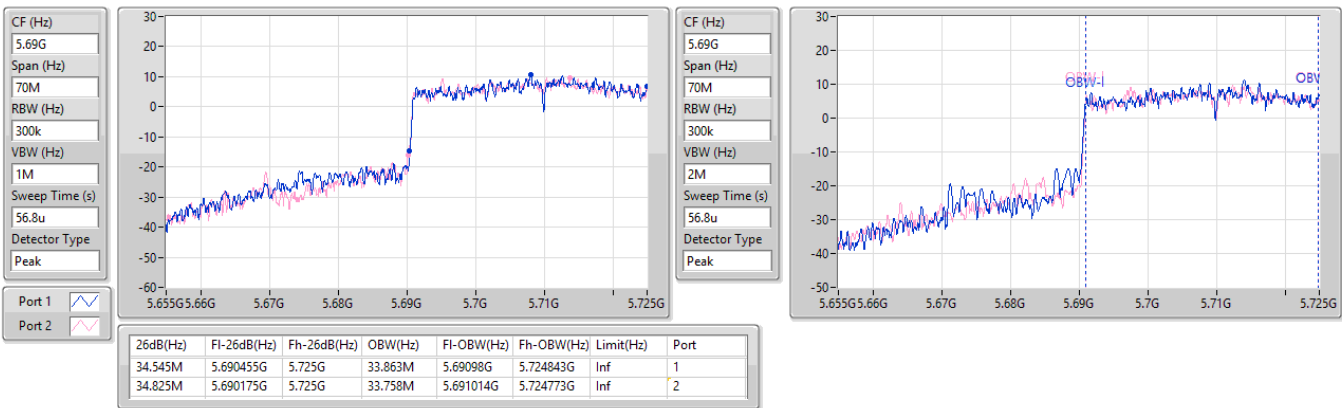


5.47-5.725GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5710MHz Straddle 5.47-5.725GHz

08/06/2023

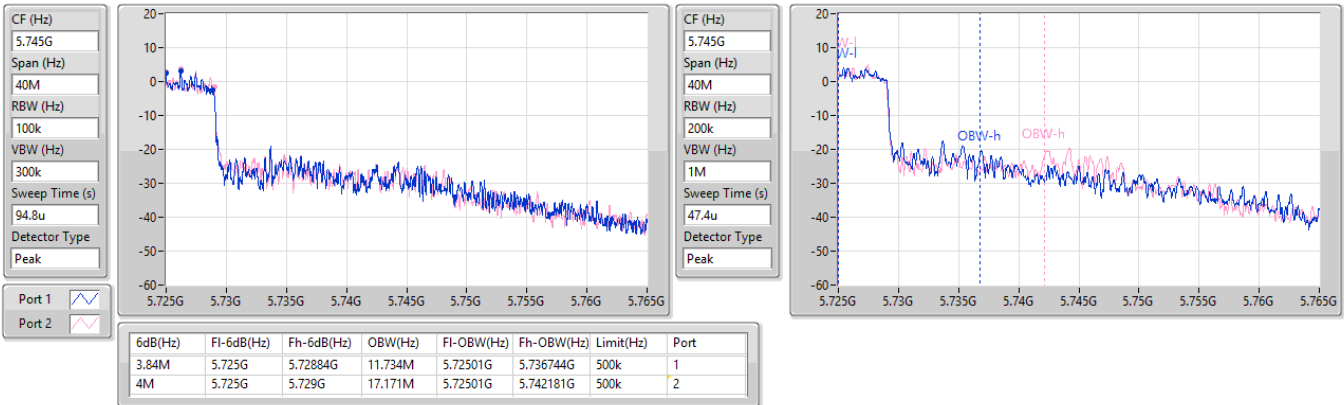


5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5710MHz Straddle 5.725-5.85GHz

08/06/2023

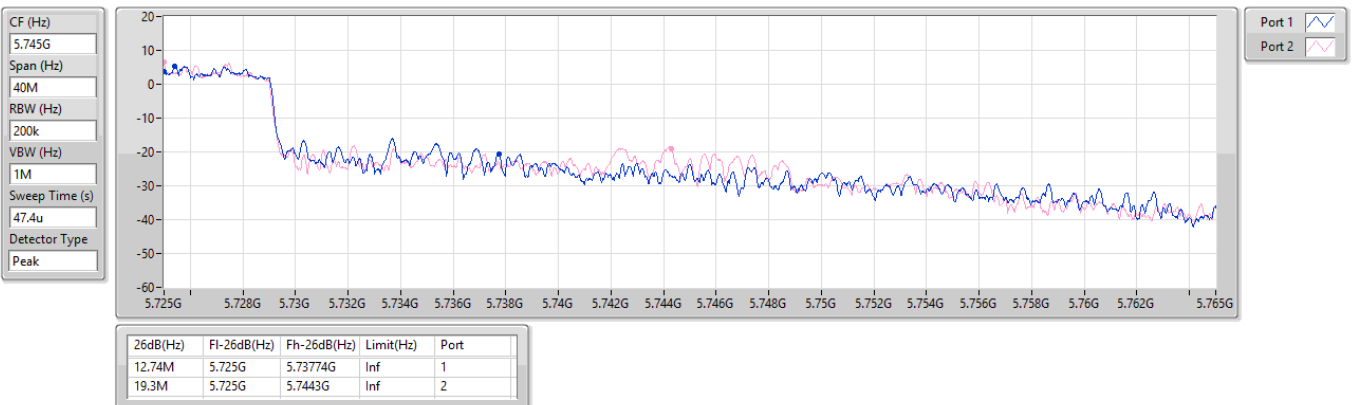


5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5710MHz Straddle 5.725-5.85GHz

08/06/2023

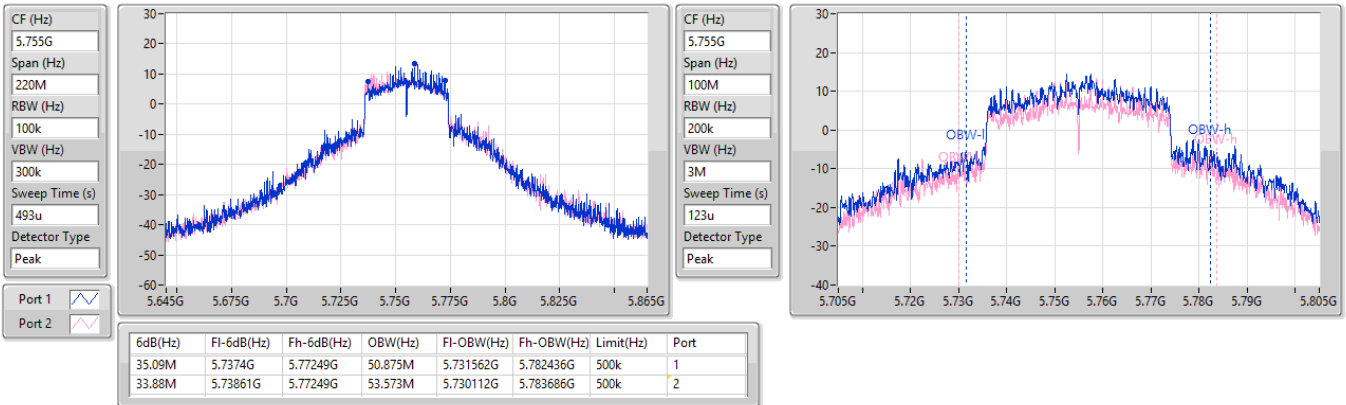


5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5755MHz

08/06/2023

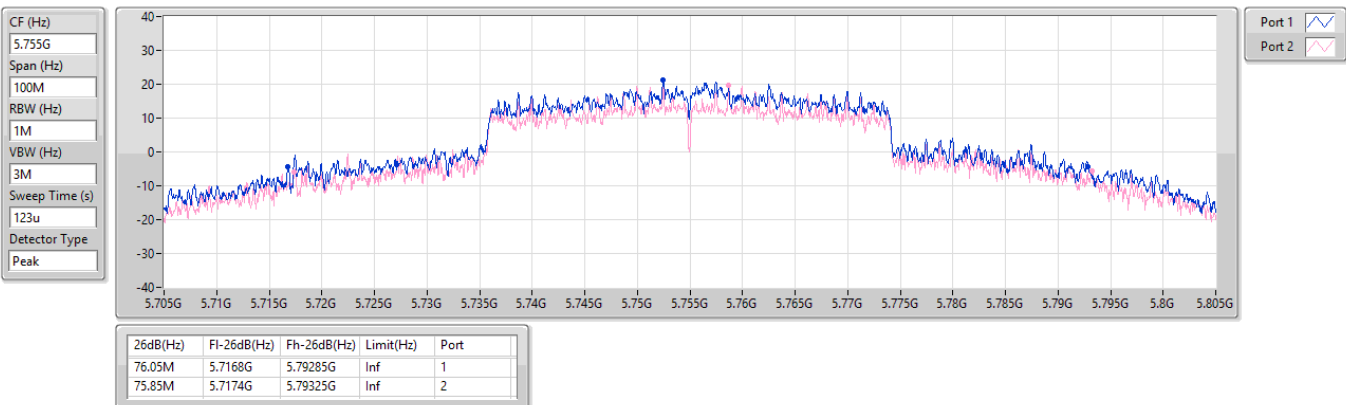


5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5755MHz

08/06/2023

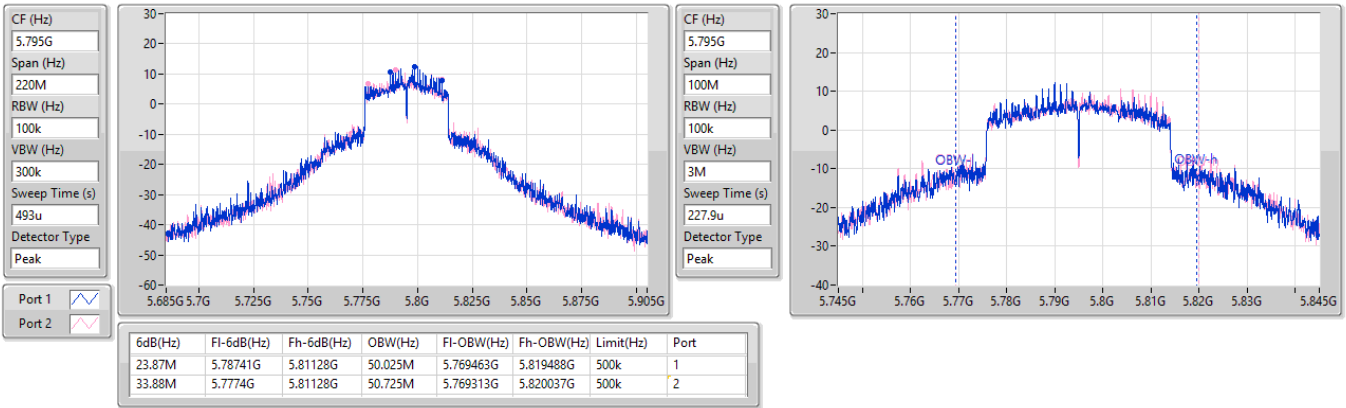


5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5795MHz

08/06/2023

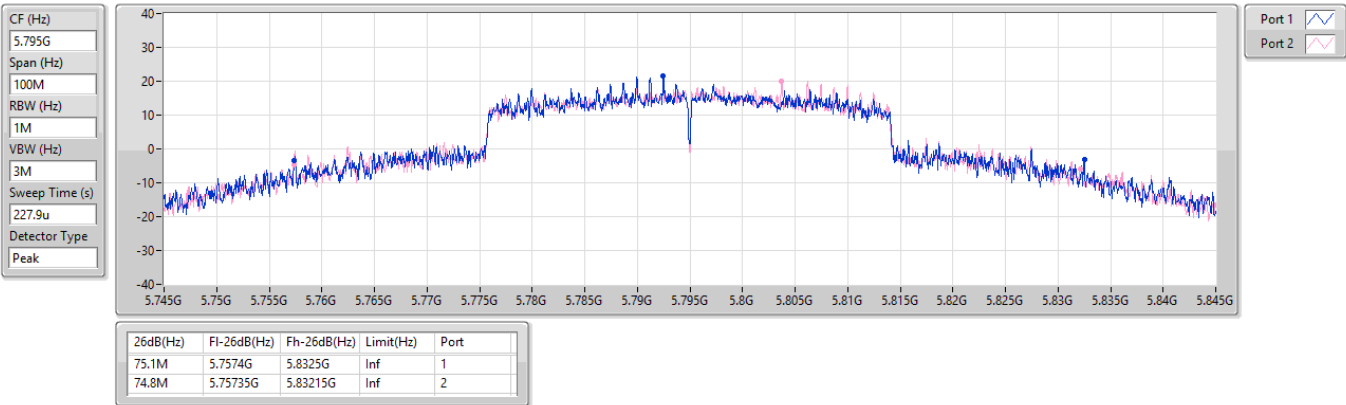


5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

EBW

5795MHz

08/06/2023

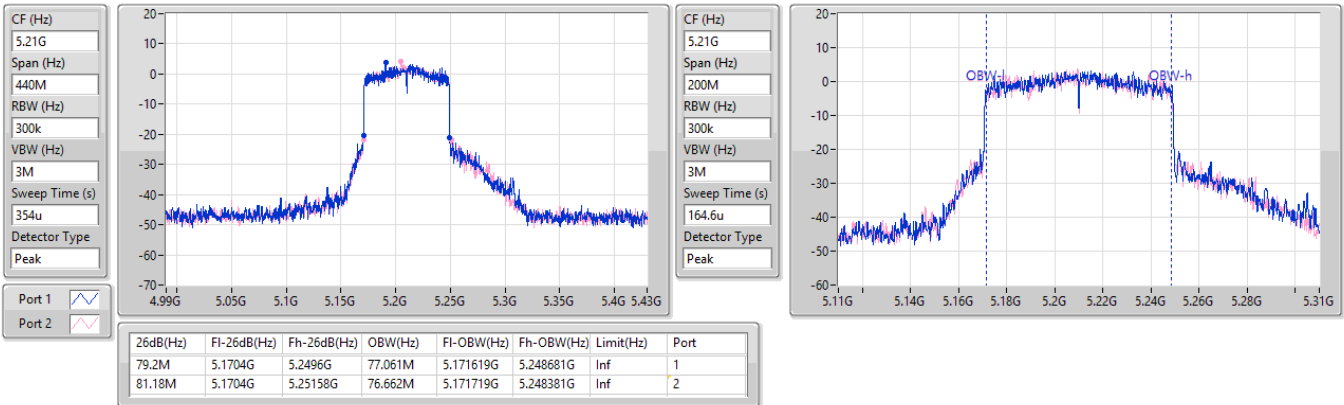


5.15-5.25GHz_802.11ax_HEW80_Nss1,(MCS0)_2TX

EBW

5210MHz

08/06/2023

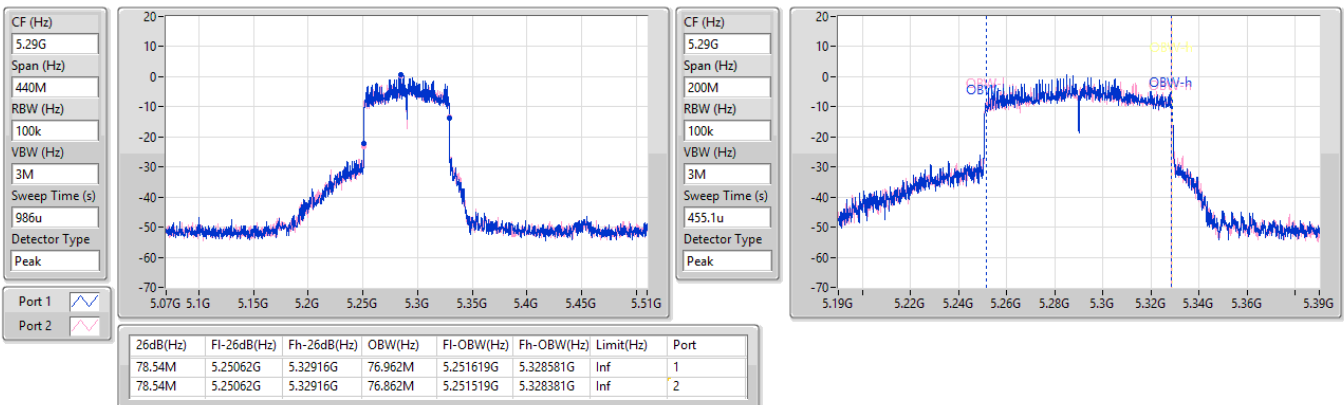


5.25-5.35GHz_802.11ax_HEW80_Nss1,(MCS0)_2TX

EBW

5290MHz

08/06/2023

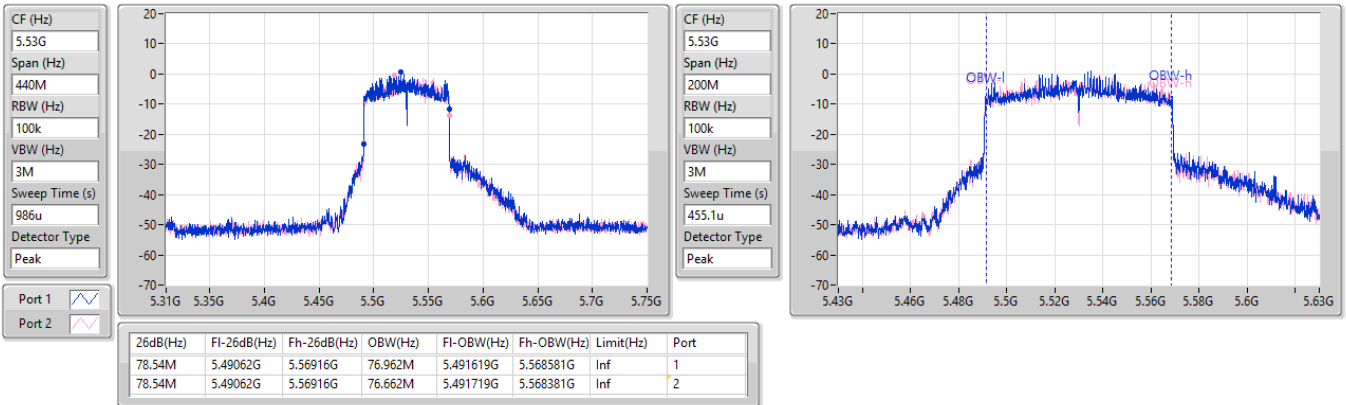


5.47-5.725GHz_802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

5530MHz

08/06/2023

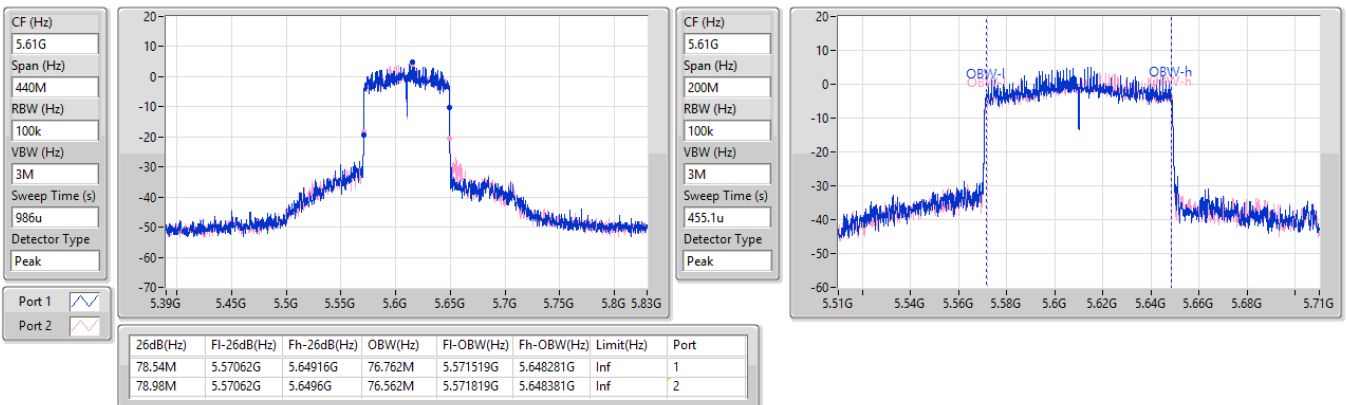


5.47-5.725GHz_802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

5610MHz

08/06/2023

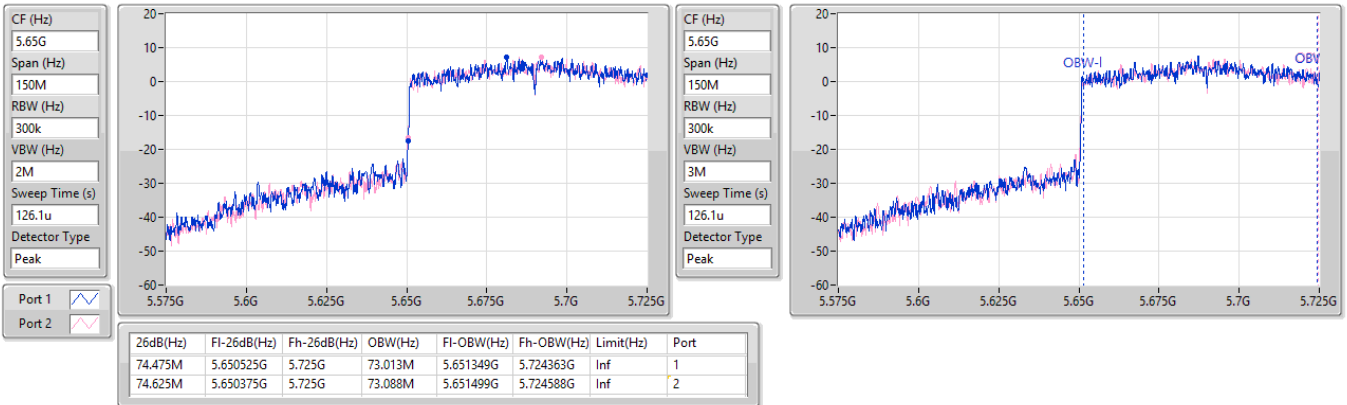


5.47-5.725GHz_802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

5690MHz Straddle 5.47-5.725GHz

08/06/2023

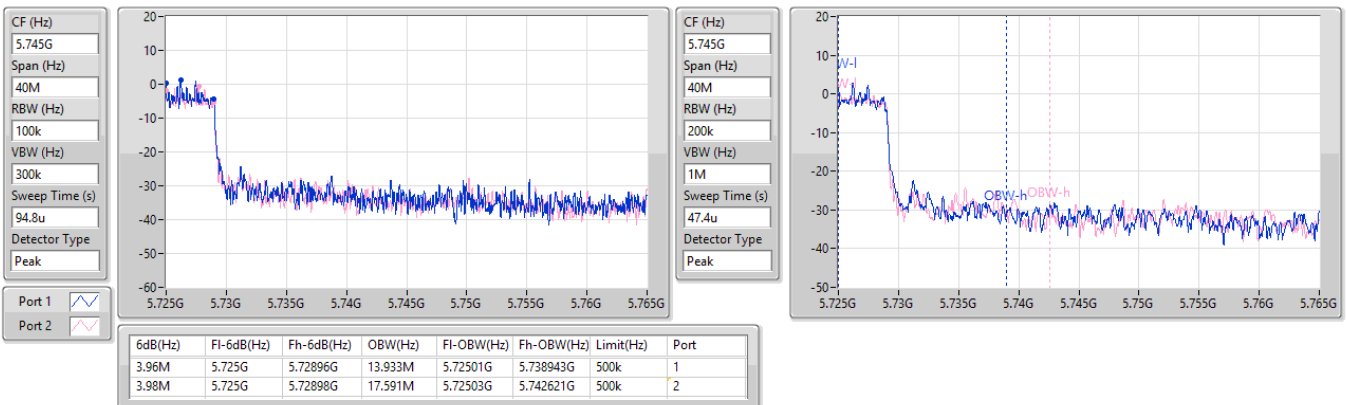


5.725-5.85GHz_802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

5690MHz Straddle 5.725-5.85GHz

08/06/2023



5.725-5.85GHz_802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

5690MHz Straddle 5.725-5.85GHz

08/06/2023

CF (Hz)
5.745G

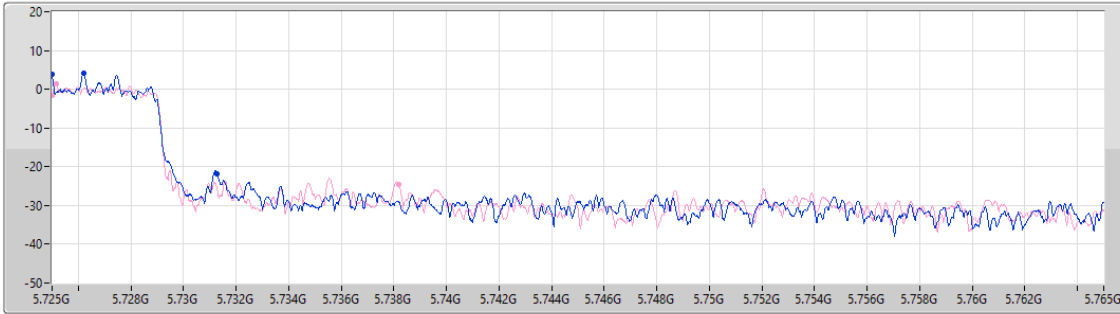
Span (Hz)
40M

RBW (Hz)
200k

VBW (Hz)
1M

Sweep Time (s)
47.4u

Detector Type
Peak



Port 1

Port 2

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
6.28M	5.725G	5.73128G	Inf	1
13.2M	5.725G	5.7382G	Inf	2

5.725-5.85GHz_802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

5775MHz

08/06/2023

CF (Hz)
5.775G

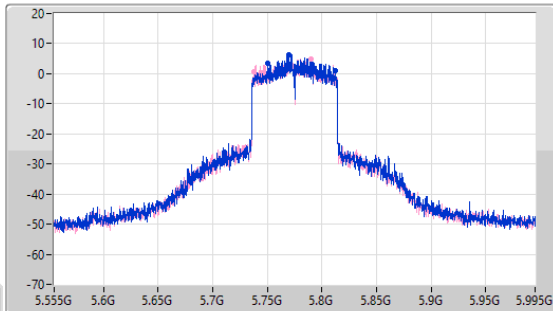
Span (Hz)
440M

RBW (Hz)
100k

VBW (Hz)
300k

Sweep Time (s)
986u

Detector Type
Peak



CF (Hz)
5.775G

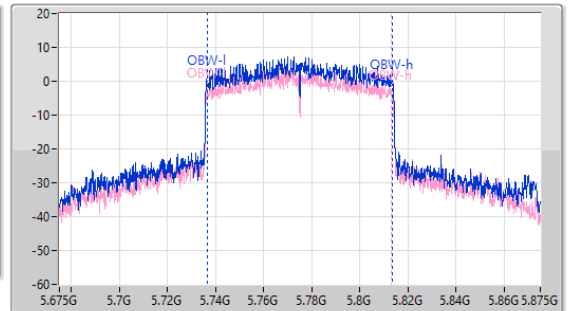
Span (Hz)
200M

RBW (Hz)
200k

VBW (Hz)
3M

Sweep Time (s)
236.4u

Detector Type
Peak



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
62.48M	5.74992G	5.8124G	76.962M	5.736419G	5.813381G	500k	1
75.24M	5.73738G	5.81262G	76.562M	5.736619G	5.813181G	500k	2

5.725-5.85GHz_802.11ax HEW80_Nss1,(MCS0)_2TX

EBW

5775MHz

08/06/2023

CF (Hz)
5.775G

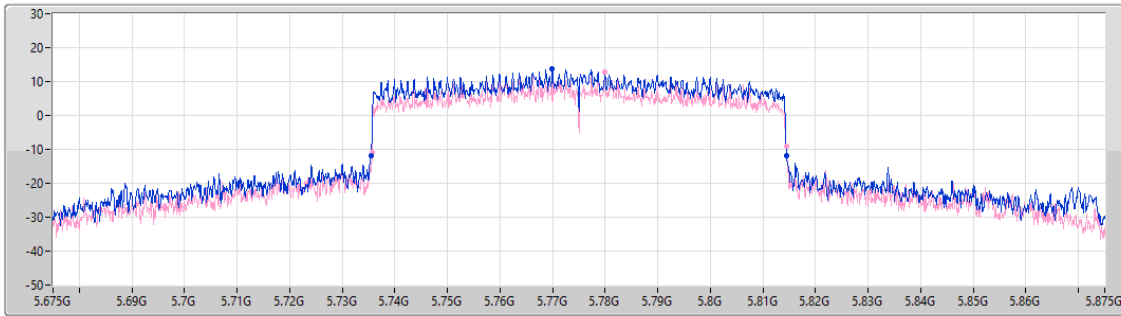
Span (Hz)
200M

RBW (Hz)
1M

VBW (Hz)
3M

Sweep Time (s)
236.4u

Detector Type
Peak



Port 1

Port 2

26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	Limit(Hz)	Port
78.9M	5.7355G	5.8144G	Inf	1
78.8M	5.7357G	5.8145G	Inf	2

5.15-5.25GHz_802.11ax HEW160_Nss1,(MCS0)_2TX

EBW

5250MHz Straddle 5.15-5.25GHz

08/06/2023

CF (Hz)
5.17G

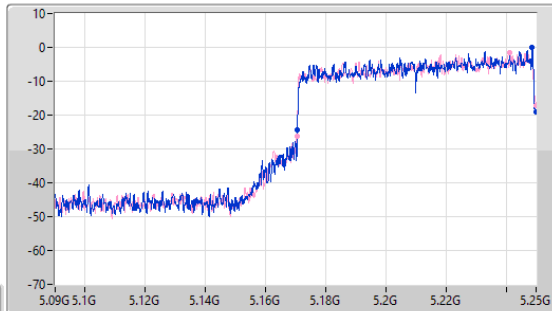
Span (Hz)
160M

RBW (Hz)
300k

VBW (Hz)
3M

Sweep Time (s)
132.3u

Detector Type
Peak



CF (Hz)
5.17G

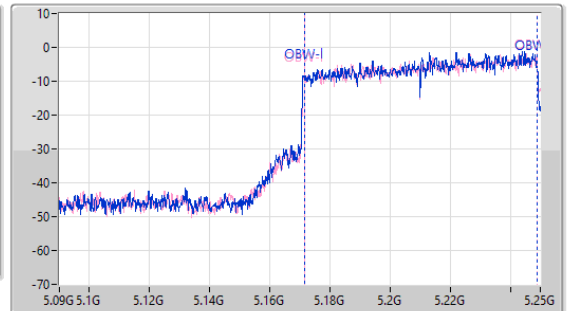
Span (Hz)
160M

RBW (Hz)
300k

VBW (Hz)
3M

Sweep Time (s)
132.3u

Detector Type
Peak



Port 1

Port 2

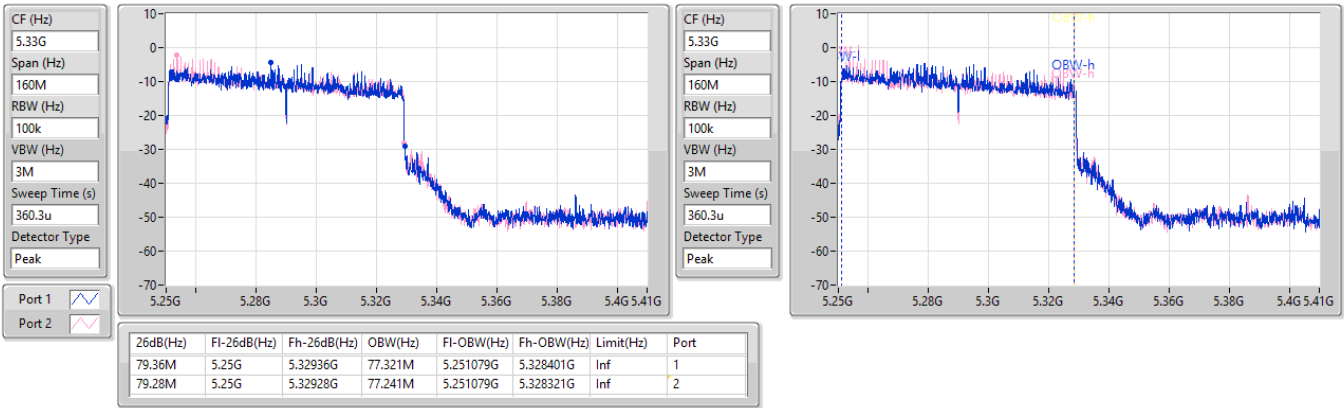
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
79.44M	5.17056G	5.25G	77.321M	5.171519G	5.248841G	Inf	1
79.6M	5.1704G	5.25G	77.321M	5.171599G	5.248921G	Inf	2

5.25-5.35GHz_802.11ax HEW160_Nss1,(MCS0)_2TX

EBW

5250MHz Straddle 5.25-5.35GHz

08/06/2023

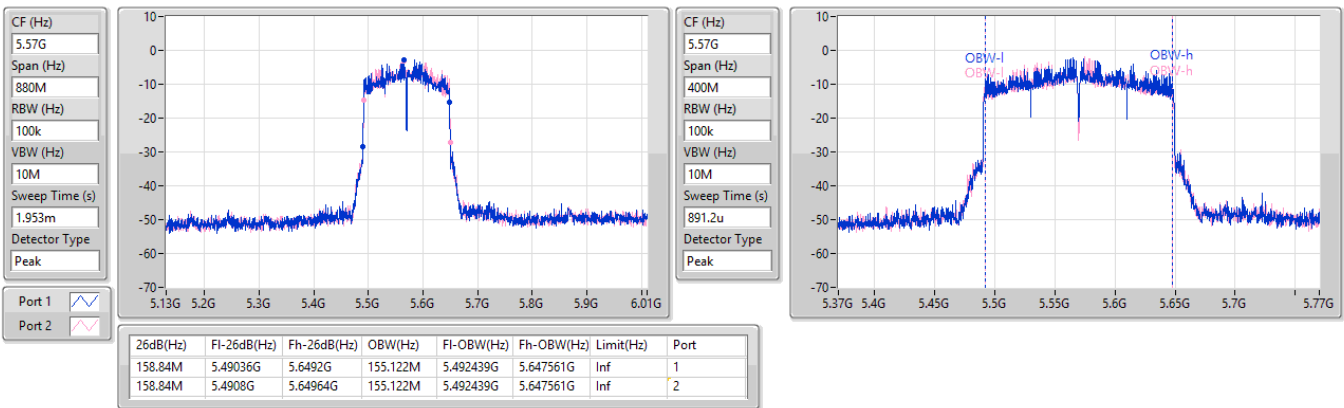


5.47-5.725GHz_802.11ax HEW160_Nss1,(MCS0)_2TX

EBW

5570MHz

08/06/2023





Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	28.03	0.63533
802.11ax HEW20_Nss1,(MCS0)_2TX	26.86	0.48529
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	26.86	0.48529
802.11ax HEW40_Nss1,(MCS0)_2TX	24.00	0.25119
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	24.00	0.25119
802.11ax HEW80_Nss1,(MCS0)_2TX	18.94	0.07834
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	18.94	0.07834
802.11ax HEW160_Nss1,(MCS0)_2TX	13.66	0.02323
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	13.66	0.02323
5.25-5.35GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	21.79	0.15101
802.11ax HEW20_Nss1,(MCS0)_2TX	22.03	0.15959
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	22.03	0.15959
802.11ax HEW40_Nss1,(MCS0)_2TX	23.50	0.22387
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	22.75	0.18836
802.11ax HEW80_Nss1,(MCS0)_2TX	17.06	0.05082
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	17.06	0.05082
802.11ax HEW160_Nss1,(MCS0)_2TX	13.72	0.02355
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	13.72	0.02355
5.47-5.725GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	21.18	0.13122
802.11ax HEW20_Nss1,(MCS0)_2TX	21.72	0.14859
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	21.72	0.14859
802.11ax HEW40_Nss1,(MCS0)_2TX	23.74	0.23659
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	22.61	0.18239
802.11ax HEW80_Nss1,(MCS0)_2TX	23.77	0.23823
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	22.41	0.17418
802.11ax HEW160_Nss1,(MCS0)_2TX	16.74	0.04721
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	16.74	0.04721
5.725-5.85GHz	-	-
802.11a_Nss1,(6Mbps)_2TX	29.20	0.83176
802.11ax HEW20_Nss1,(MCS0)_2TX	28.54	0.71450
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	28.05	0.63826
802.11ax HEW40_Nss1,(MCS0)_2TX	27.64	0.58076
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	27.64	0.58076
802.11ax HEW80_Nss1,(MCS0)_2TX	23.24	0.21086
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	23.24	0.21086



Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	4.20	22.39	22.06	25.24	30.00
5200MHz	Pass	4.20	23.25	23.08	26.18	30.00
5240MHz	Pass	4.20	25.36	24.66	28.03	30.00
5260MHz	Pass	4.60	18.32	18.22	21.28	23.91
5300MHz	Pass	4.60	18.80	18.76	21.79	23.98
5320MHz	Pass	4.60	18.41	18.32	21.38	23.98
5500MHz	Pass	5.10	17.88	17.97	20.94	23.98
5580MHz	Pass	5.10	18.46	17.78	21.14	23.64
5700MHz	Pass	5.10	18.15	18.18	21.18	23.98
5720MHz Straddle 5.47-5.725GHz	Pass	5.10	18.00	18.05	21.04	22.64
5720MHz Straddle 5.725-5.85GHz	Pass	5.10	11.47	11.32	14.41	30.00
5745MHz	Pass	5.10	26.26	26.11	29.20	30.00
5785MHz	Pass	5.10	26.03	25.74	28.90	30.00
5825MHz	Pass	5.10	24.90	24.09	27.52	30.00
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	4.20	21.55	21.27	24.42	30.00
5200MHz	Pass	4.20	23.06	22.86	25.97	30.00
5240MHz	Pass	4.20	24.02	23.67	26.86	30.00
5260MHz	Pass	4.60	19.11	18.80	21.97	23.98
5300MHz	Pass	4.60	19.03	18.98	22.02	23.98
5320MHz	Pass	4.60	19.05	18.98	22.03	23.98
5500MHz	Pass	5.10	18.49	18.55	21.53	23.98
5580MHz	Pass	5.10	18.66	17.94	21.33	23.98
5700MHz	Pass	5.10	18.69	18.73	21.72	23.98
5720MHz Straddle 5.47-5.725GHz	Pass	5.10	18.09	18.12	21.12	22.88
5720MHz Straddle 5.725-5.85GHz	Pass	5.10	12.24	12.33	15.30	30.00
5745MHz	Pass	5.10	25.26	25.35	28.32	30.00
5785MHz	Pass	5.10	25.03	25.04	28.05	30.00
5825MHz	Pass	5.10	26.06	24.92	28.54	30.00
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	4.20	19.00	18.78	21.90	30.00
5230MHz	Pass	4.20	21.08	20.89	24.00	30.00
5270MHz	Pass	4.60	20.28	20.13	23.22	23.98
5310MHz	Pass	4.60	20.54	20.44	23.50	23.98
5510MHz	Pass	5.10	19.55	19.64	22.61	23.98
5550MHz	Pass	5.10	20.24	20.21	23.24	23.98
5670MHz	Pass	5.10	20.78	20.34	23.58	23.98
5710MHz Straddle 5.47-5.725GHz	Pass	5.10	20.65	20.81	23.74	23.98
5710MHz Straddle 5.725-5.85GHz	Pass	5.10	9.74	9.00	12.40	30.00
5755MHz	Pass	5.10	24.52	24.74	27.64	30.00
5795MHz	Pass	5.10	23.87	23.86	26.88	30.00
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	4.20	16.06	15.80	18.94	30.00
5290MHz	Pass	4.60	14.08	14.01	17.06	23.98
5530MHz	Pass	5.10	14.64	14.67	17.67	23.98
5610MHz	Pass	5.10	19.35	18.73	22.06	23.98
5690MHz Straddle 5.47-5.725GHz	Pass	5.10	20.93	20.59	23.77	23.98
5690MHz Straddle 5.725-5.85GHz	Pass	5.10	6.80	6.52	9.67	30.00
5775MHz	Pass	5.10	20.24	20.22	23.24	30.00
802.11ax HEW160_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	4.20	10.77	10.53	13.66	30.00
5250MHz Straddle 5.25-5.35GHz	Pass	4.60	10.70	10.71	13.72	23.98
5570MHz	Pass	5.10	13.75	13.70	16.74	23.98
802.11ax HEW20-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-

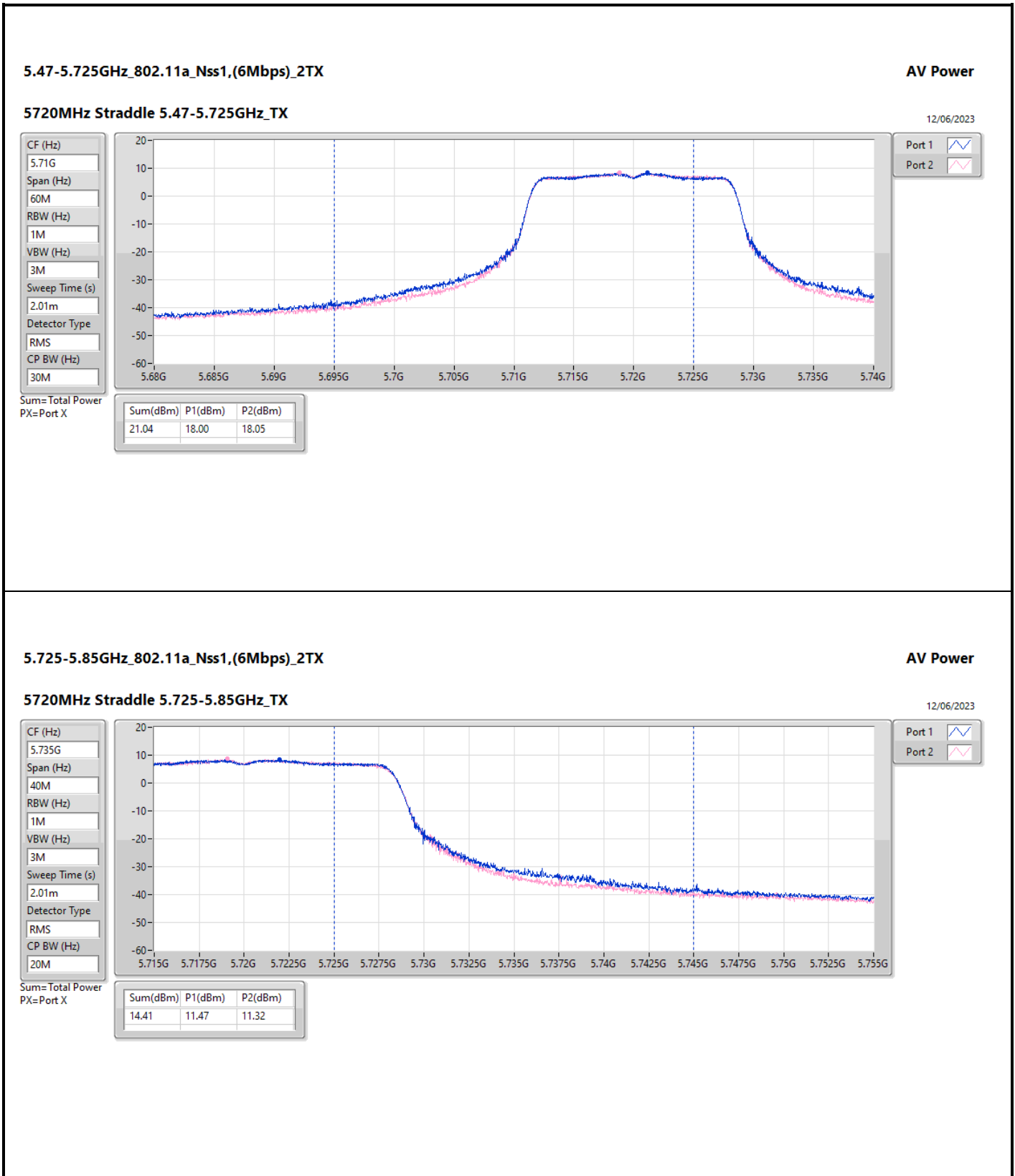


Average Power

Appendix C

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Total Power (dBm)	Power Limit (dBm)
5180MHz	Pass	6.72	21.55	21.27	24.42	29.28
5200MHz	Pass	6.72	23.06	22.86	25.97	29.28
5240MHz	Pass	6.72	24.02	23.67	26.86	29.28
5260MHz	Pass	7.08	19.11	18.80	21.97	22.90
5300MHz	Pass	7.08	19.03	18.98	22.02	22.90
5320MHz	Pass	7.08	19.05	18.98	22.03	22.90
5500MHz	Pass	7.35	18.49	18.55	21.53	22.63
5580MHz	Pass	7.35	18.66	17.94	21.33	22.63
5700MHz	Pass	7.35	18.69	18.73	21.72	22.63
5720MHz Straddle 5.47-5.725GHz	Pass	7.35	18.09	18.12	21.12	22.63
5720MHz Straddle 5.725-5.85GHz	Pass	7.72	12.24	12.33	15.30	28.28
5745MHz	Pass	7.72	24.63	24.77	27.71	28.28
5785MHz	Pass	7.72	25.03	25.04	28.05	28.28
5825MHz	Pass	7.72	25.02	24.40	27.73	28.28
802.11ax HEW40-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	6.72	19.00	18.78	21.90	29.28
5230MHz	Pass	6.72	21.08	20.89	24.00	29.28
5270MHz	Pass	7.08	19.79	19.68	22.75	22.90
5310MHz	Pass	7.08	19.56	19.44	22.51	22.90
5510MHz	Pass	7.35	19.55	19.64	22.61	22.63
5550MHz	Pass	7.35	19.30	19.20	22.26	22.63
5670MHz	Pass	7.35	19.74	19.35	22.56	22.63
5710MHz Straddle 5.47-5.725GHz	Pass	7.35	19.29	19.32	22.32	22.63
5710MHz Straddle 5.725-5.85GHz	Pass	7.72	8.39	7.68	11.06	28.28
5755MHz	Pass	7.72	24.52	24.74	27.64	28.28
5795MHz	Pass	7.72	23.87	23.86	26.88	28.28
802.11ax HEW80-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	6.72	16.06	15.80	18.94	29.28
5290MHz	Pass	7.08	14.08	14.01	17.06	22.90
5530MHz	Pass	7.35	14.64	14.67	17.67	22.63
5610MHz	Pass	7.35	19.35	18.73	22.06	22.63
5690MHz Straddle 5.47-5.725GHz	Pass	7.35	19.63	19.16	22.41	22.63
5690MHz Straddle 5.725-5.85GHz	Pass	7.72	5.49	5.29	8.40	28.28
5775MHz	Pass	7.72	20.24	20.22	23.24	28.28
802.11ax HEW160-BF_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	6.72	10.77	10.53	13.66	29.28
5250MHz Straddle 5.25-5.35GHz	Pass	7.08	10.70	10.71	13.72	22.90
5570MHz	Pass	7.35	13.75	13.70	16.74	22.63

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



5.725-5.85GHz_802.11a_Nss1,(6Mbps)_2TX

AV Power

5720MHz Straddle 5.725-5.85GHz_TX

12/06/2023

CF (Hz)
5.735G

Span (Hz)
40M

RBW (Hz)
1M

VBW (Hz)
3M

Sweep Time (s)
2.01m

Detector Type
RMS

CP BW (Hz)
20M

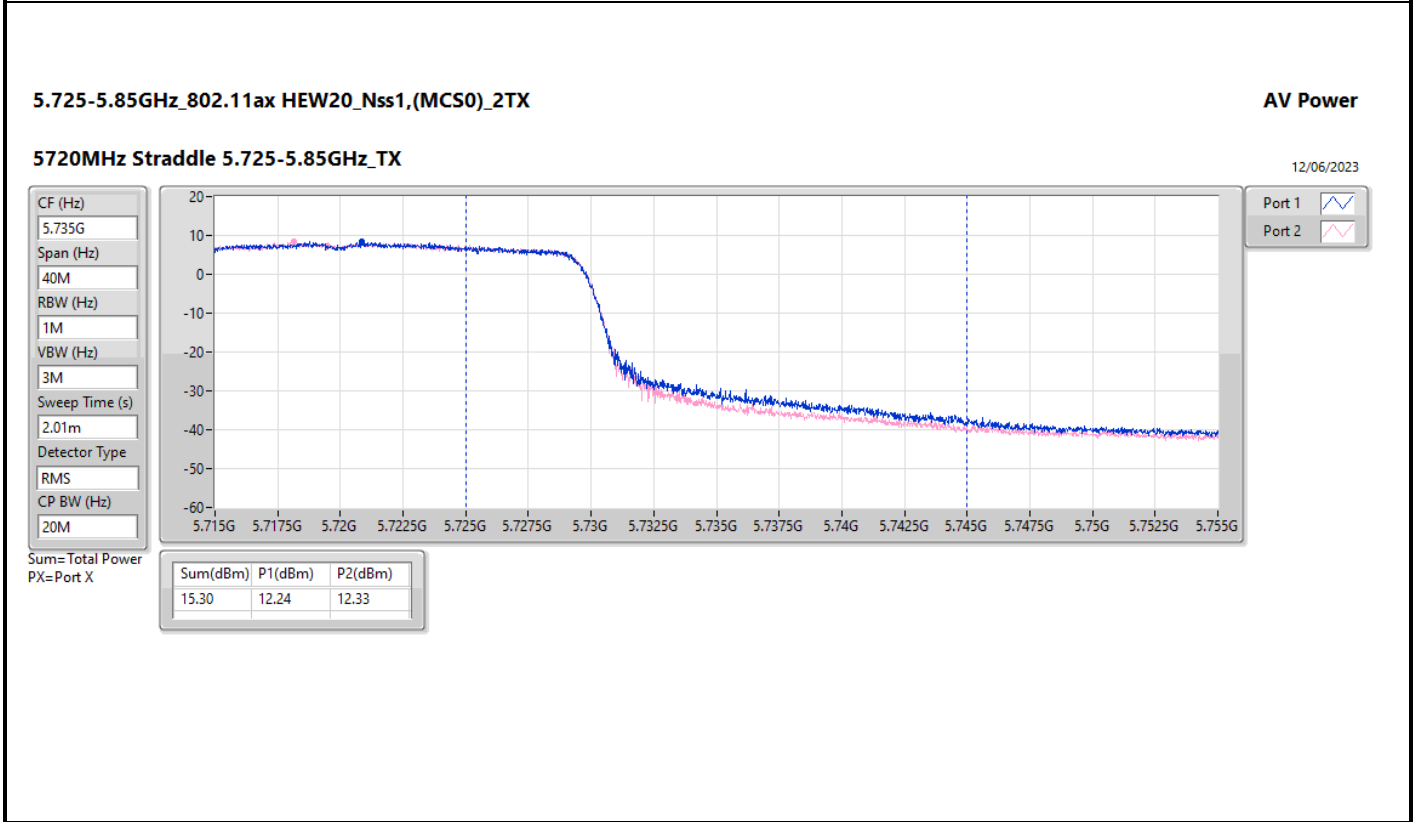
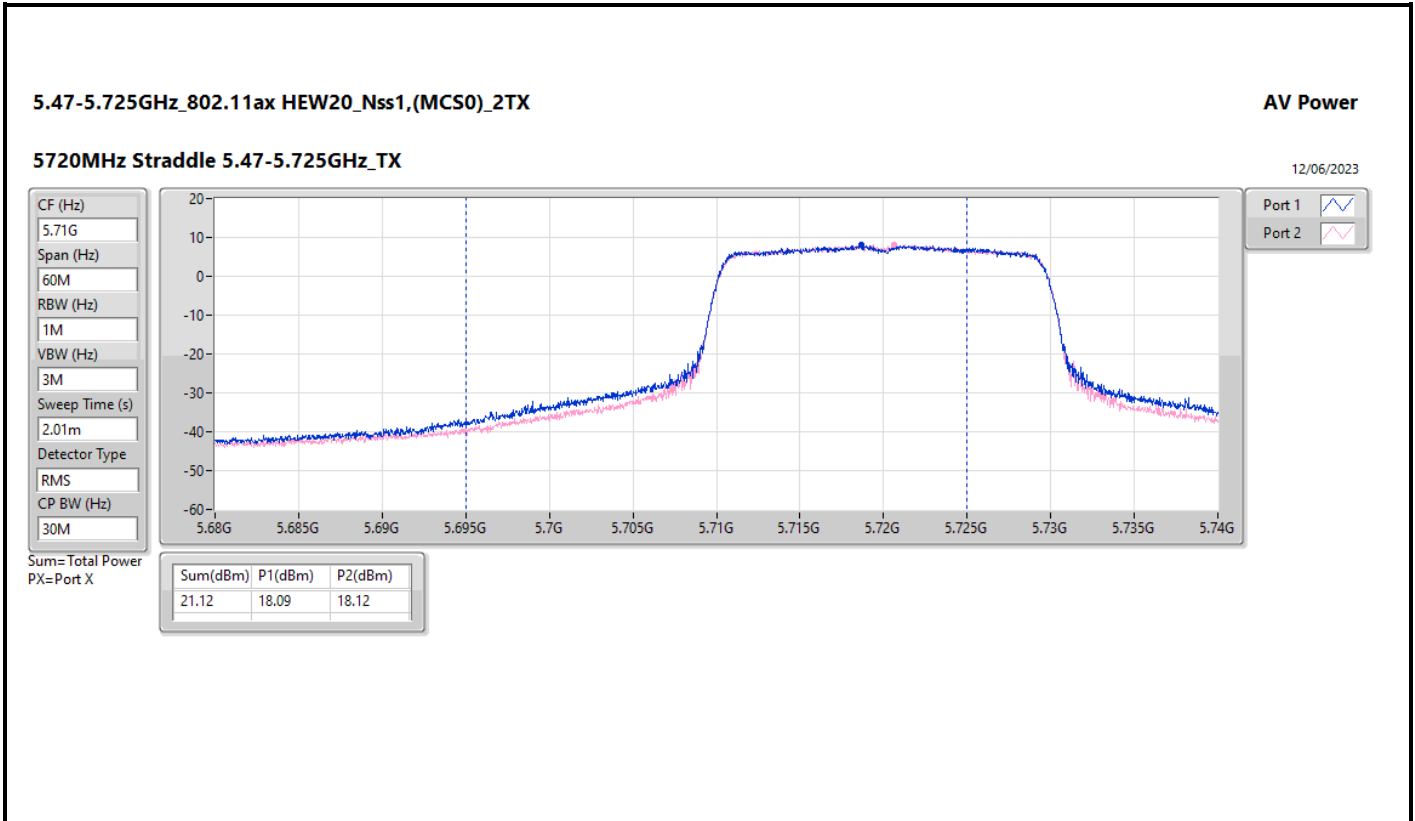


Port 1 

Port 2 

Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)
14.41	11.47	11.32





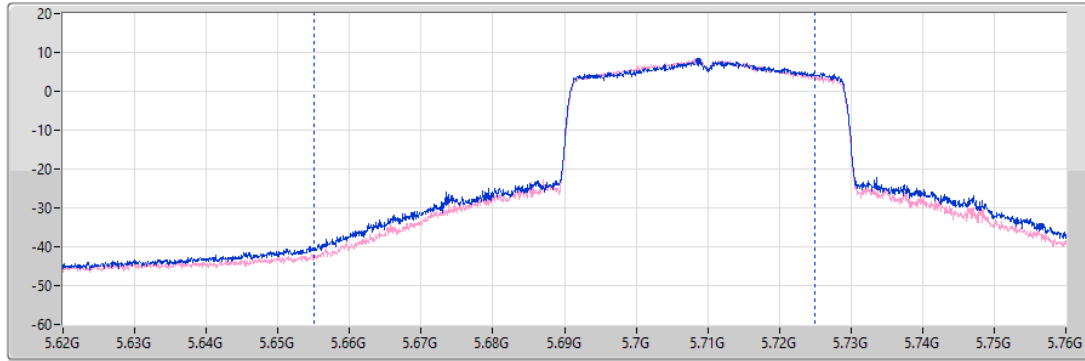
5.47-5.725GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

AV Power

5710MHz Straddle 5.47-5.725GHz_TX

12/06/2023

- CF (Hz)
5.69G
- Span (Hz)
140M
- RBW (Hz)
1M
- VBW (Hz)
3M
- Sweep Time (s)
2.01m
- Detector Type
RMS
- CP BW (Hz)
70M



- Port 1
- Port 2

Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)
23.74	20.65	20.81

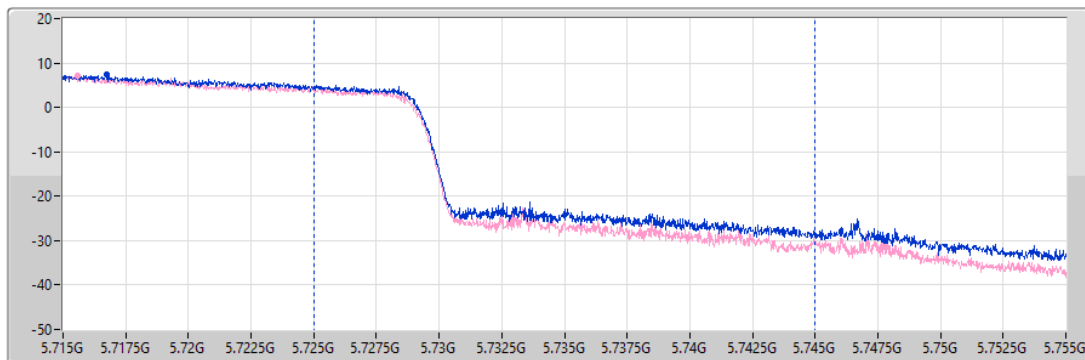
5.725-5.85GHz_802.11ax HEW40_Nss1,(MCS0)_2TX

AV Power

5710MHz Straddle 5.725-5.85GHz_TX

12/06/2023

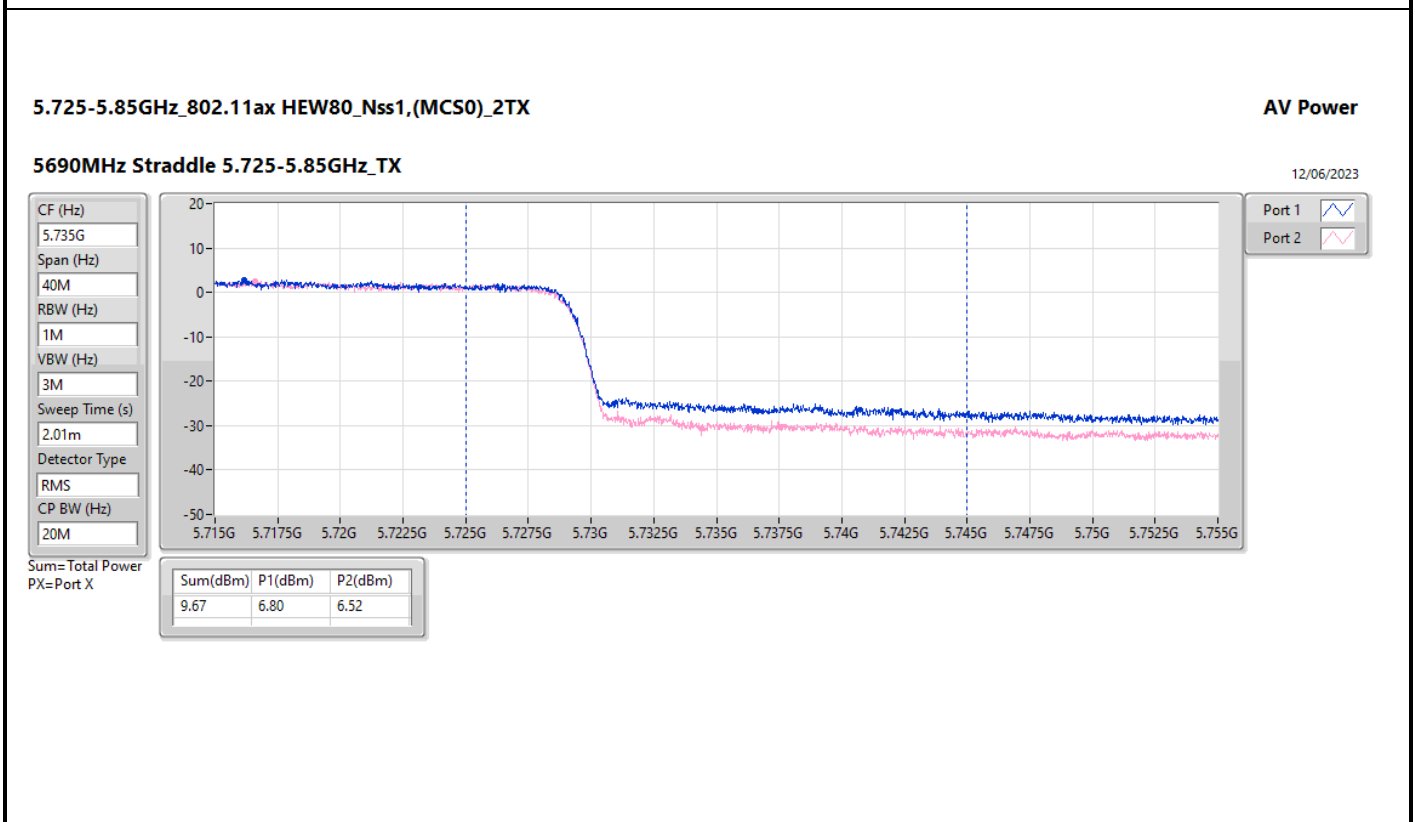
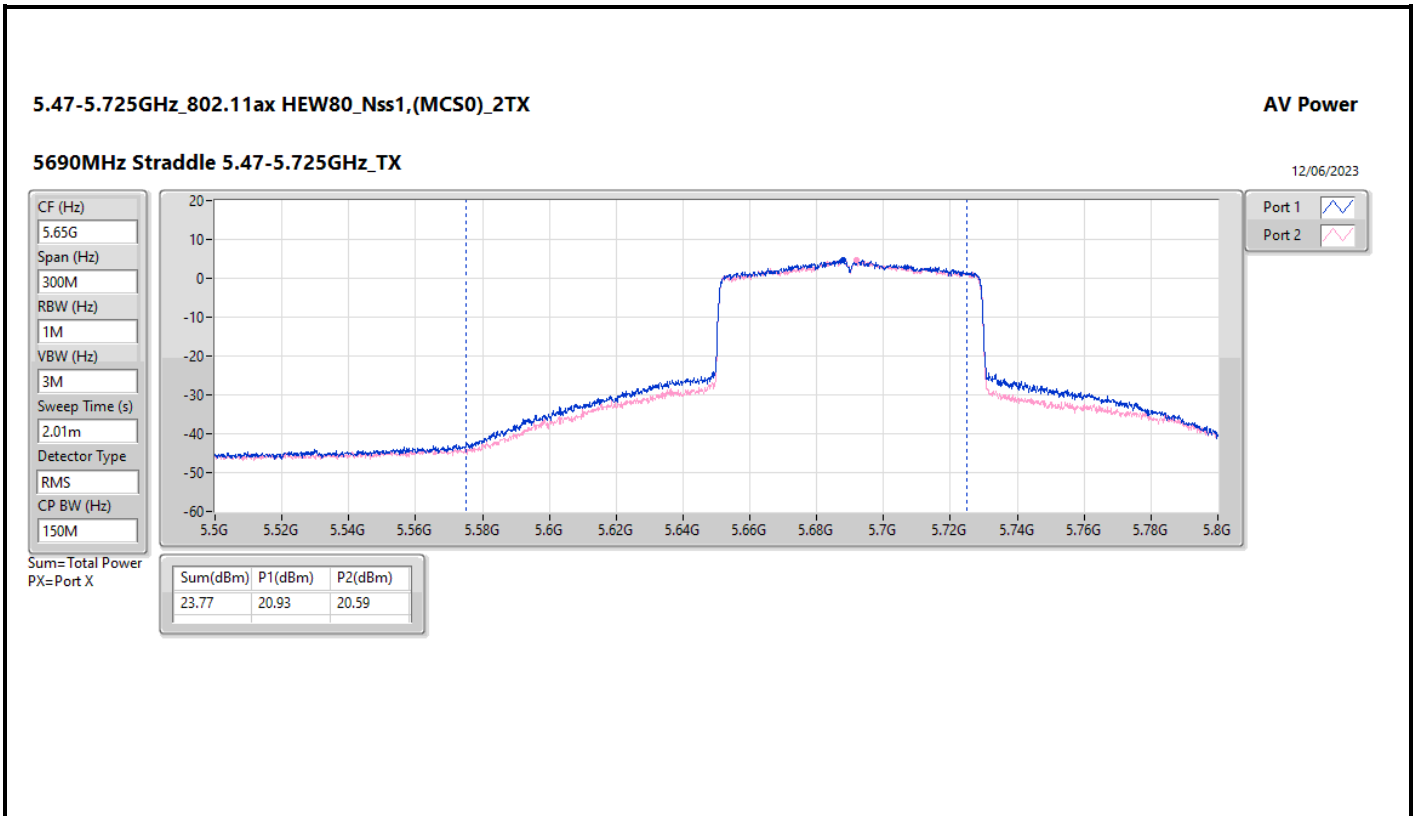
- CF (Hz)
5.735G
- Span (Hz)
40M
- RBW (Hz)
1M
- VBW (Hz)
3M
- Sweep Time (s)
2.01m
- Detector Type
RMS
- CP BW (Hz)
20M

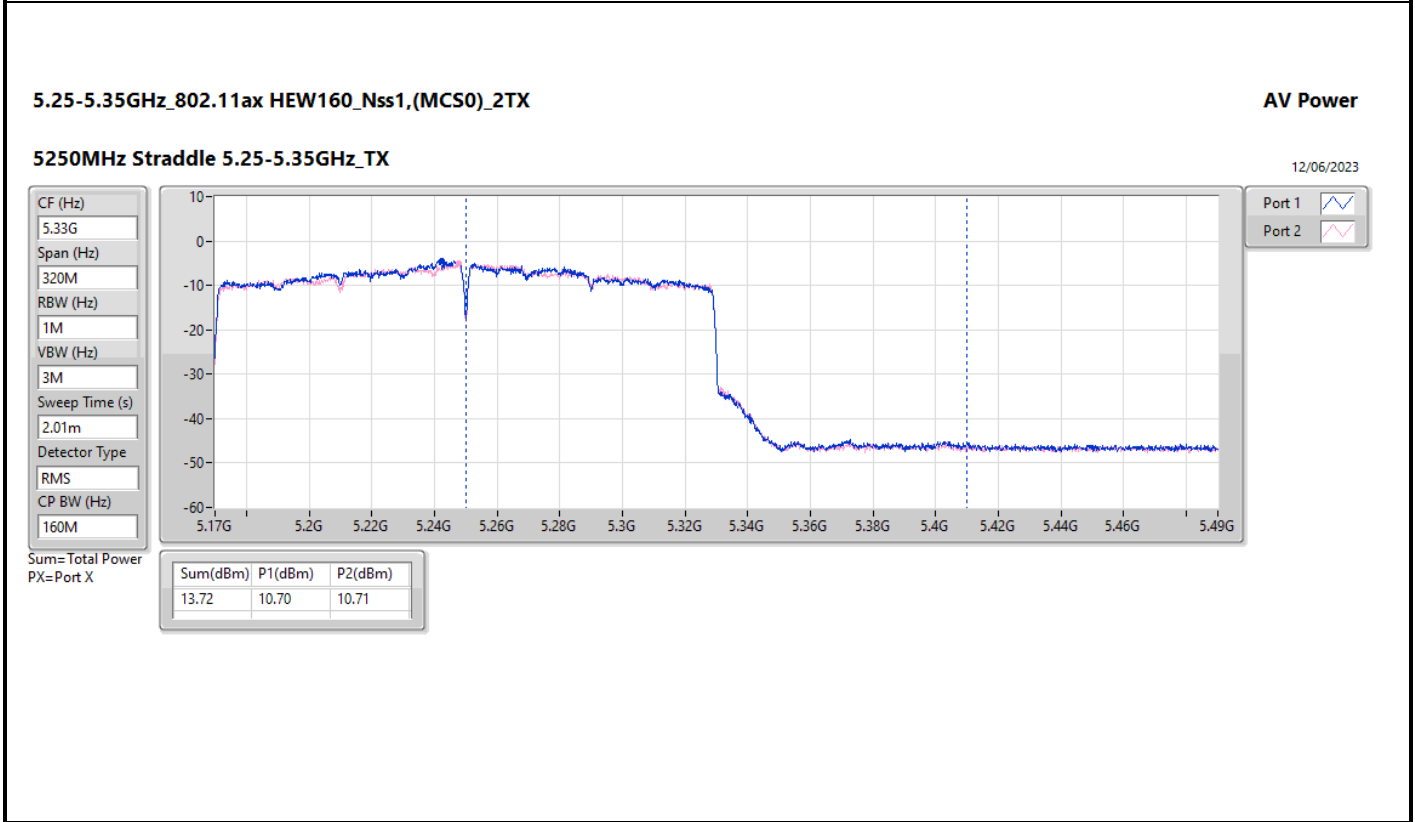
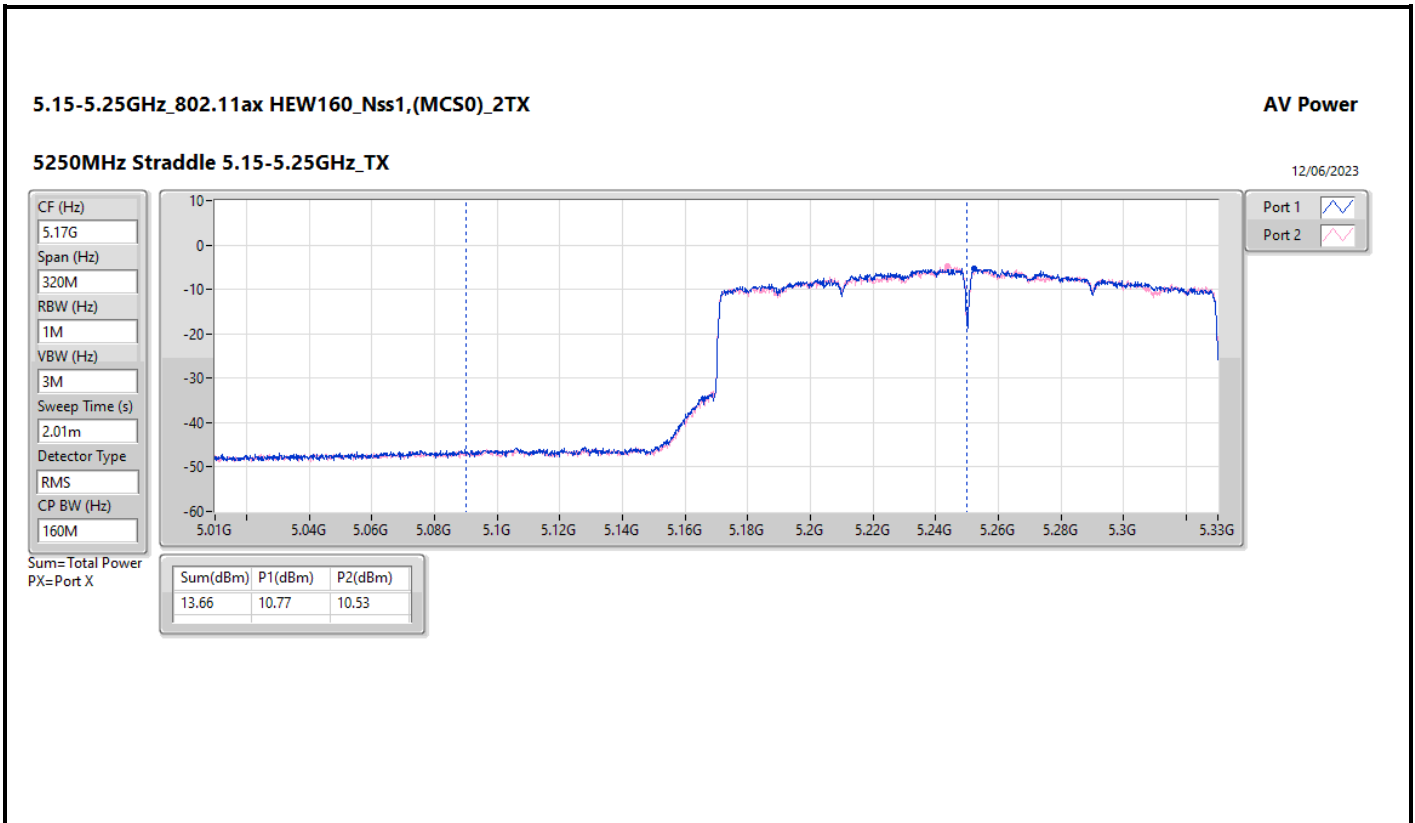


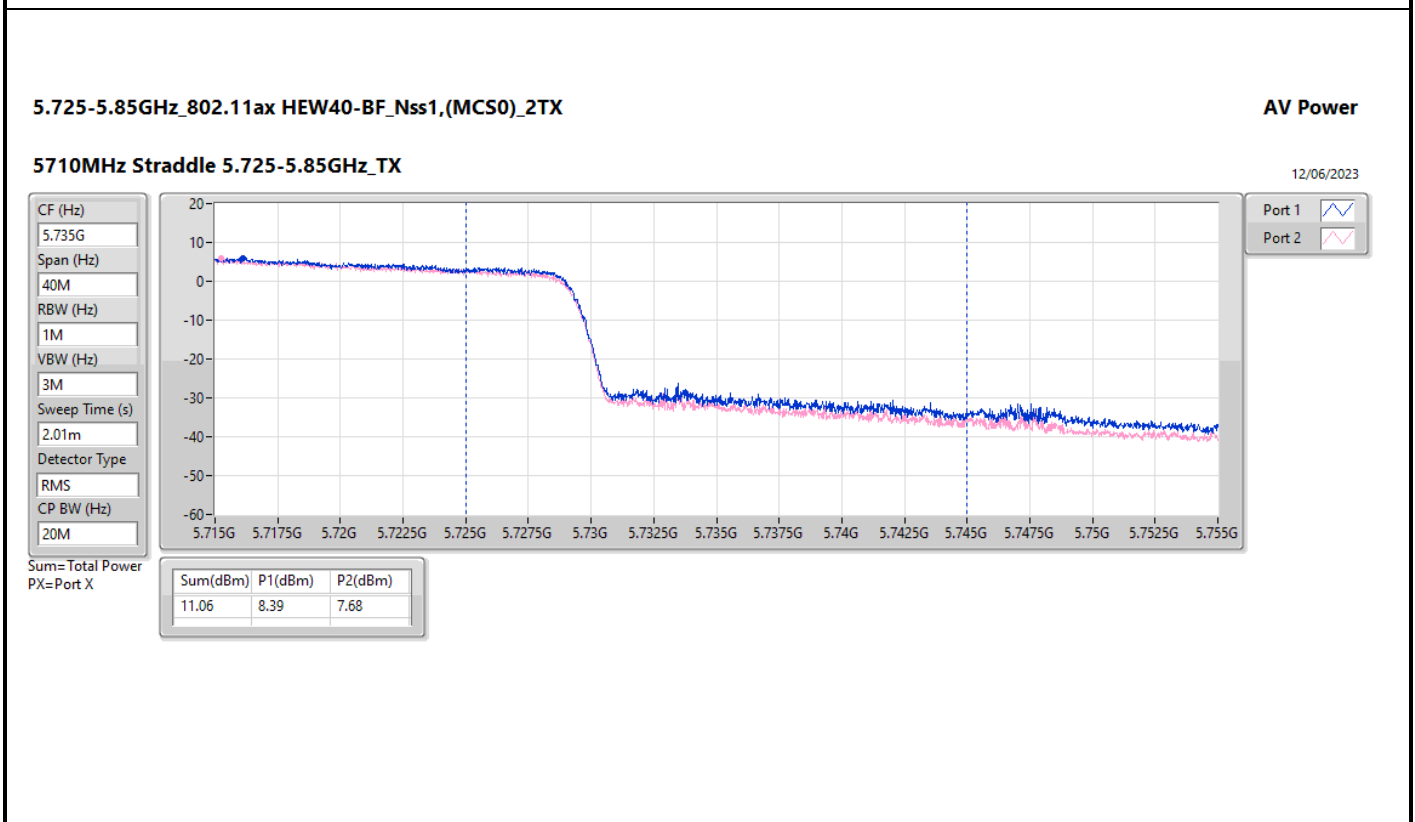
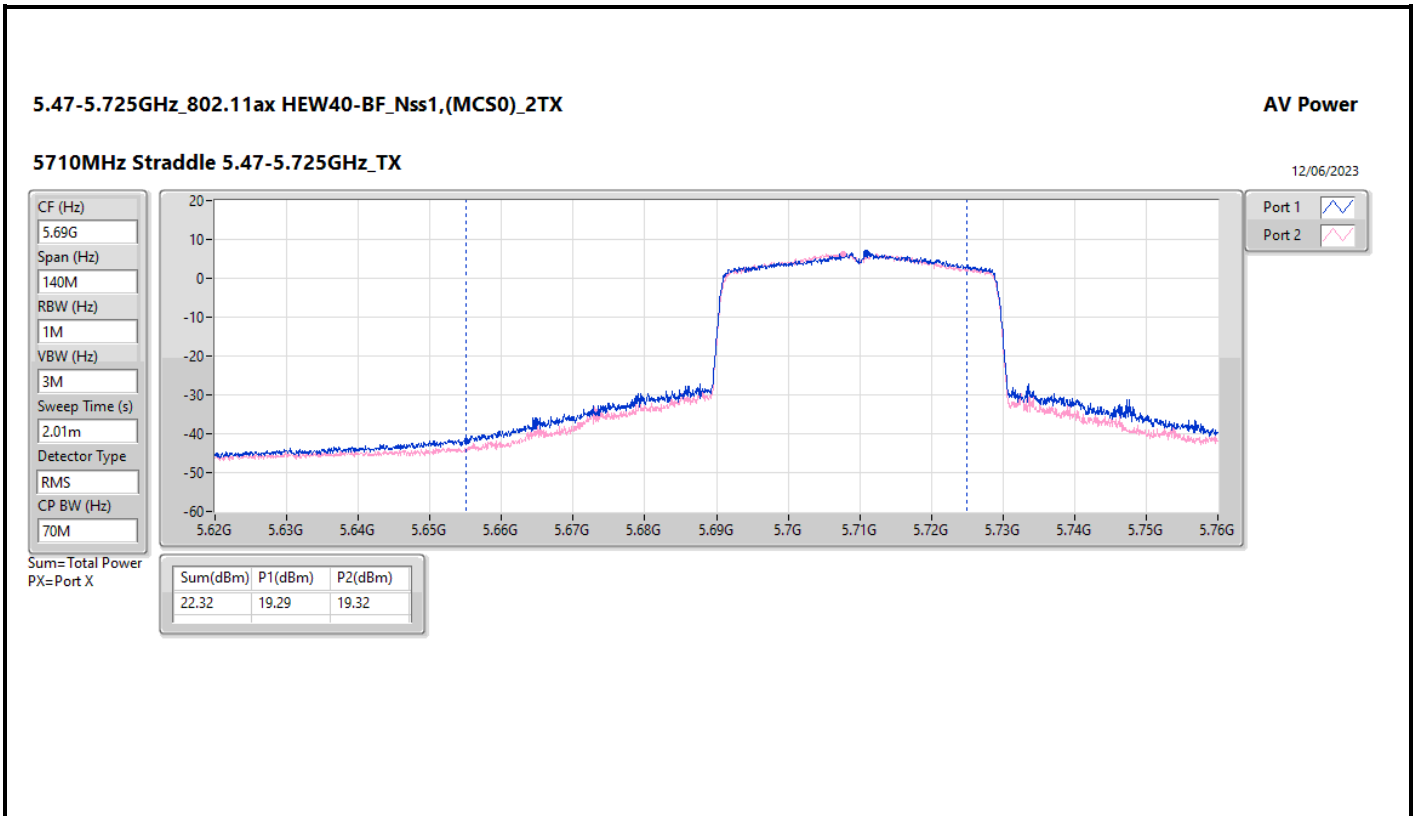
- Port 1
- Port 2

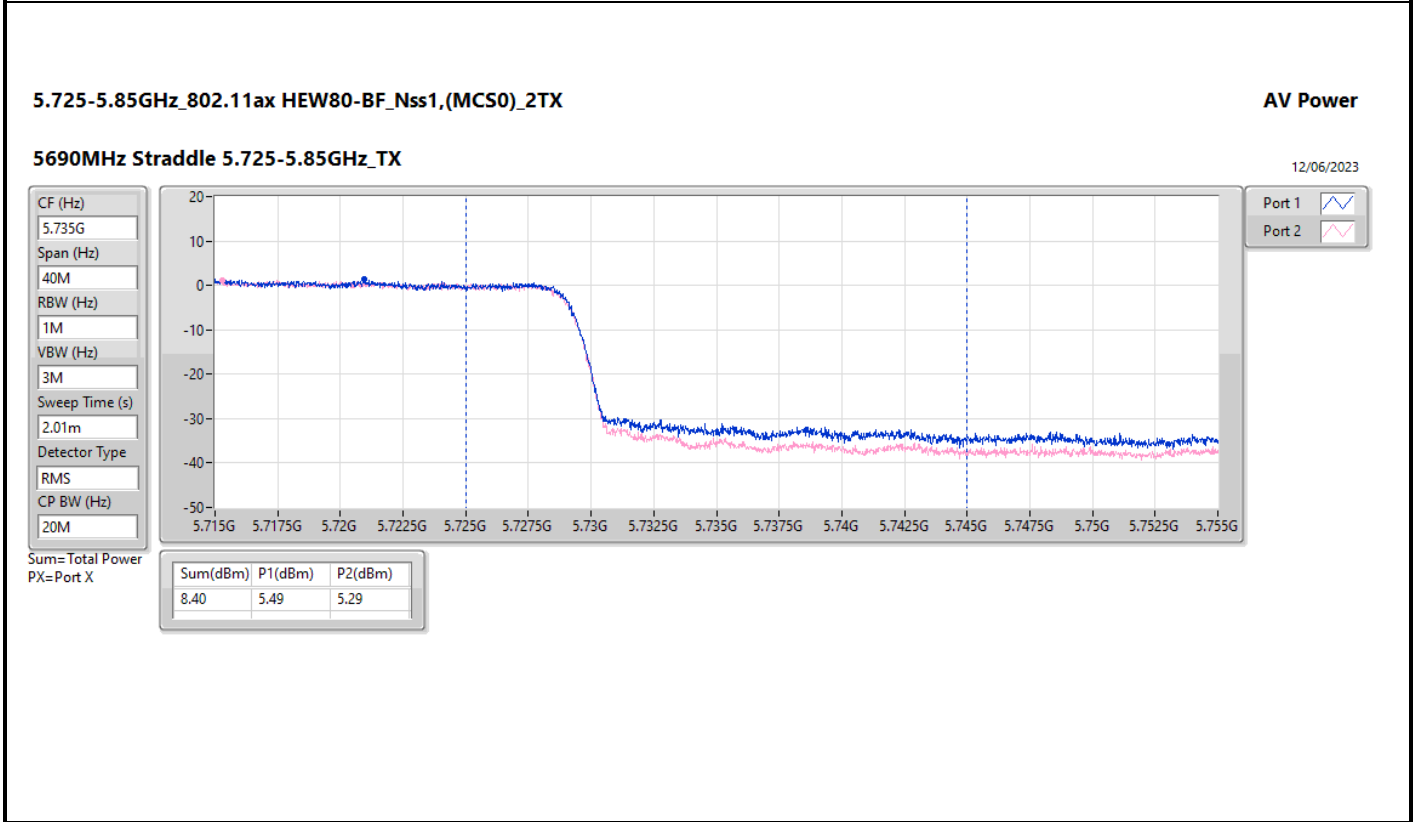
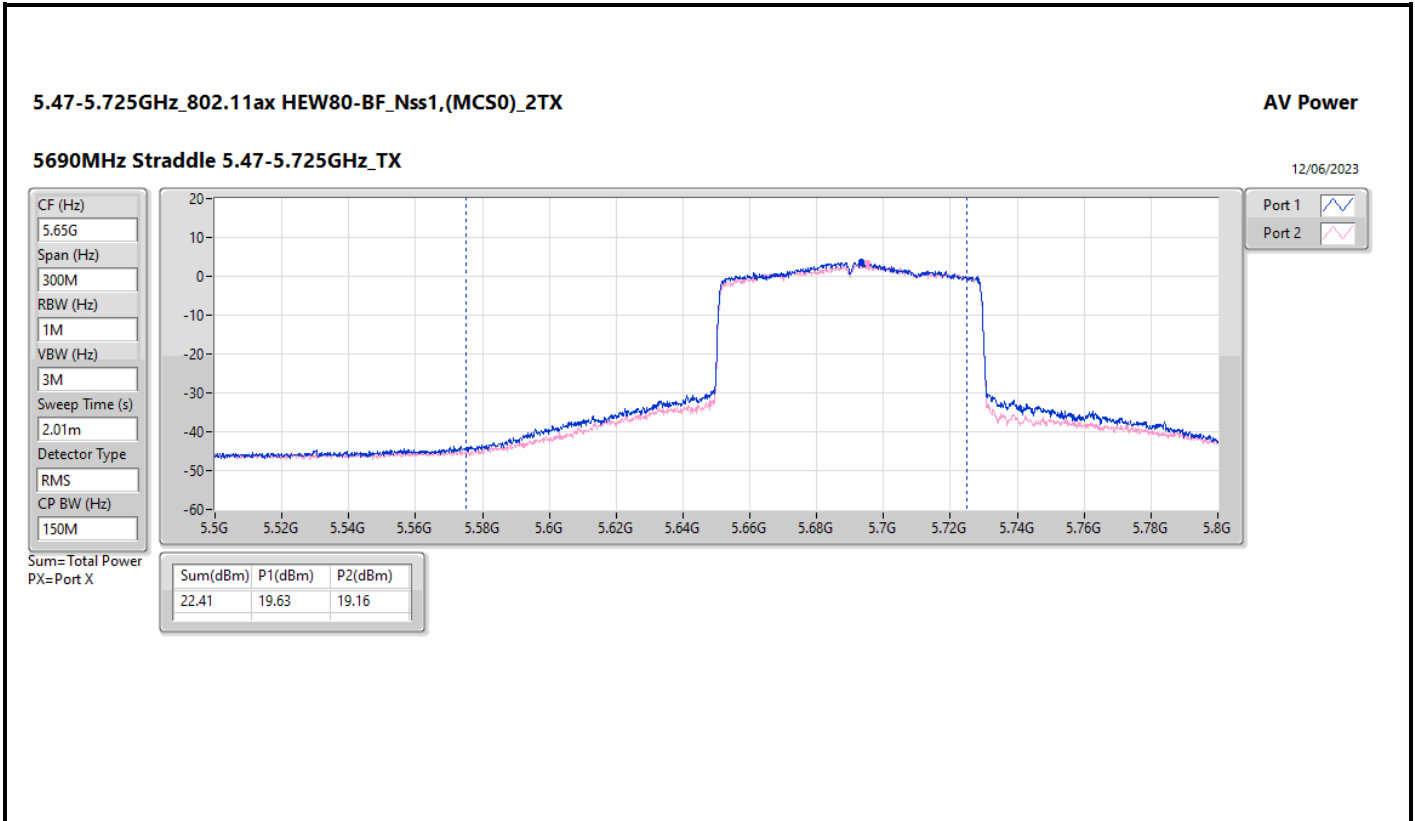
Sum=Total Power
PX=Port X

Sum(dBm)	P1(dBm)	P2(dBm)
12.40	9.74	9.00









Summary

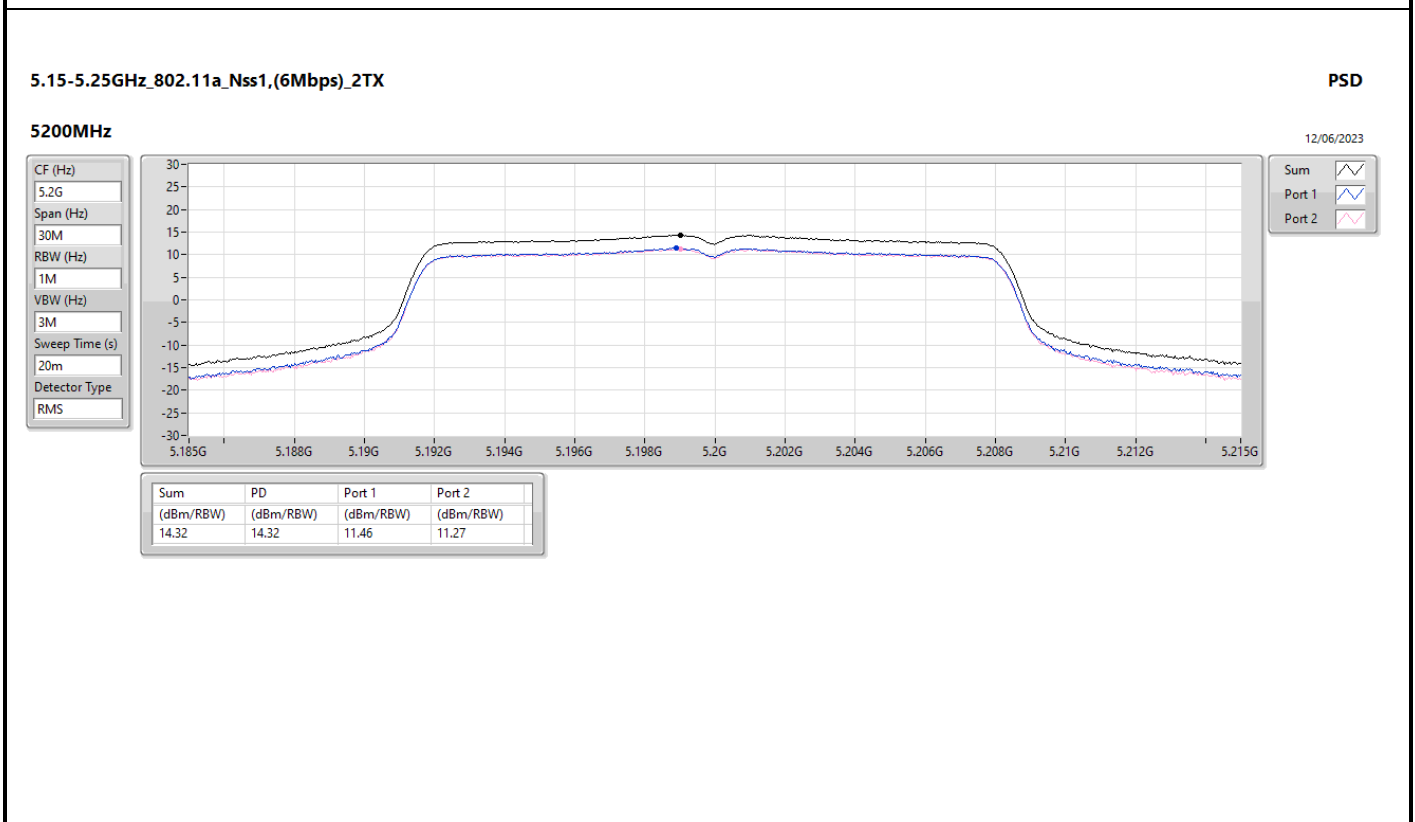
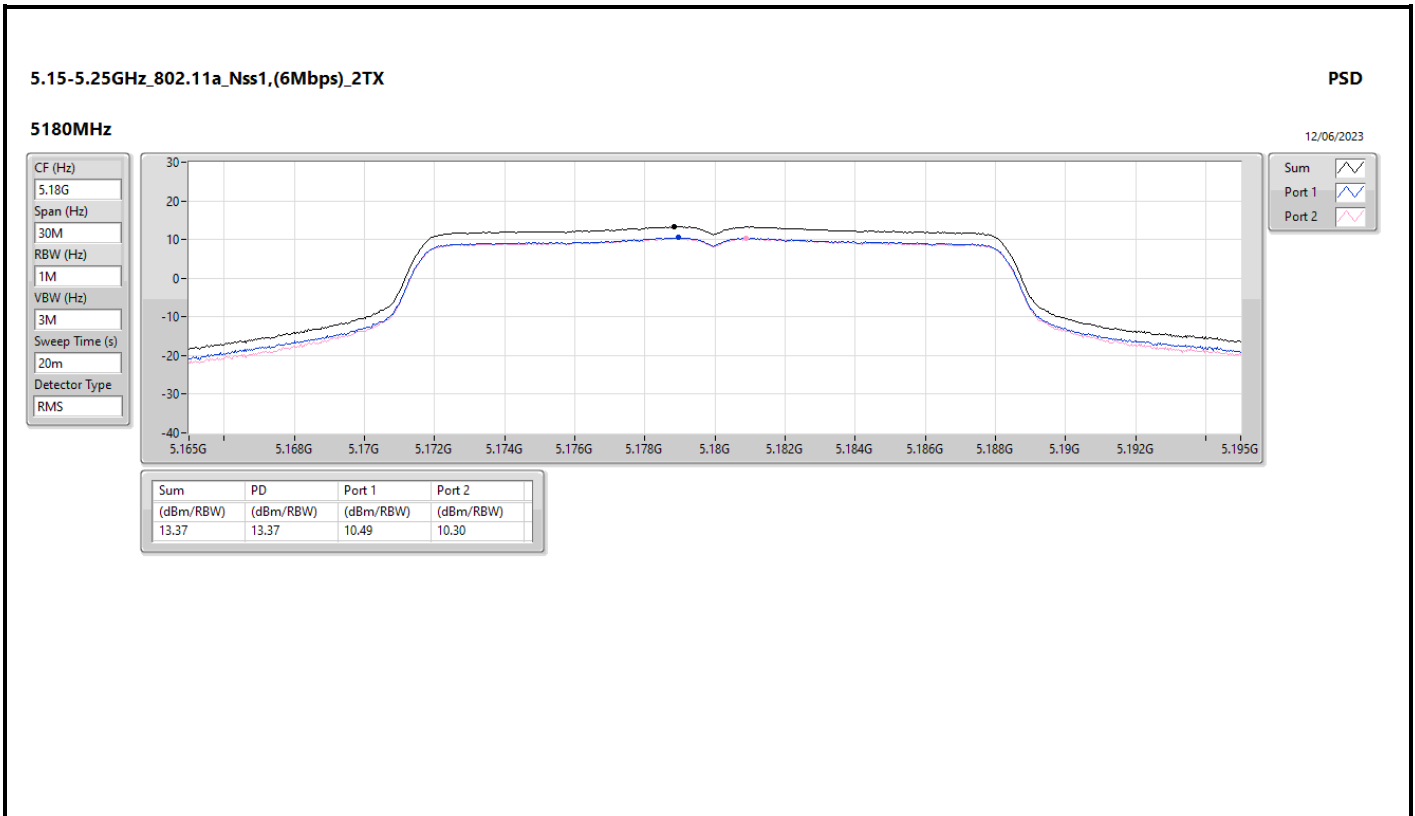
Mode	PD (dBm/RBW)
5.15-5.25GHz	-
802.11a_Nss1,(6Mbps)_2TX	16.08
802.11ax HEW20_Nss1,(MCS0)_2TX	14.48
802.11ax HEW40_Nss1,(MCS0)_2TX	9.92
802.11ax HEW80_Nss1,(MCS0)_2TX	1.79
802.11ax HEW160_Nss1,(MCS0)_2TX	-4.02
5.25-5.35GHz	-
802.11a_Nss1,(6Mbps)_2TX	9.86
802.11ax HEW20_Nss1,(MCS0)_2TX	9.75
802.11ax HEW40_Nss1,(MCS0)_2TX	9.09
802.11ax HEW80_Nss1,(MCS0)_2TX	-0.38
802.11ax HEW160_Nss1,(MCS0)_2TX	-3.51
5.47-5.725GHz	-
802.11a_Nss1,(6Mbps)_2TX	9.58
802.11ax HEW20_Nss1,(MCS0)_2TX	9.42
802.11ax HEW40_Nss1,(MCS0)_2TX	9.50
802.11ax HEW80_Nss1,(MCS0)_2TX	5.86
802.11ax HEW160_Nss1,(MCS0)_2TX	-2.78
5.725-5.85GHz	-
802.11a_Nss1,(6Mbps)_2TX	15.47
802.11ax HEW20_Nss1,(MCS0)_2TX	14.56
802.11ax HEW40_Nss1,(MCS0)_2TX	11.56
802.11ax HEW80_Nss1,(MCS0)_2TX	4.60

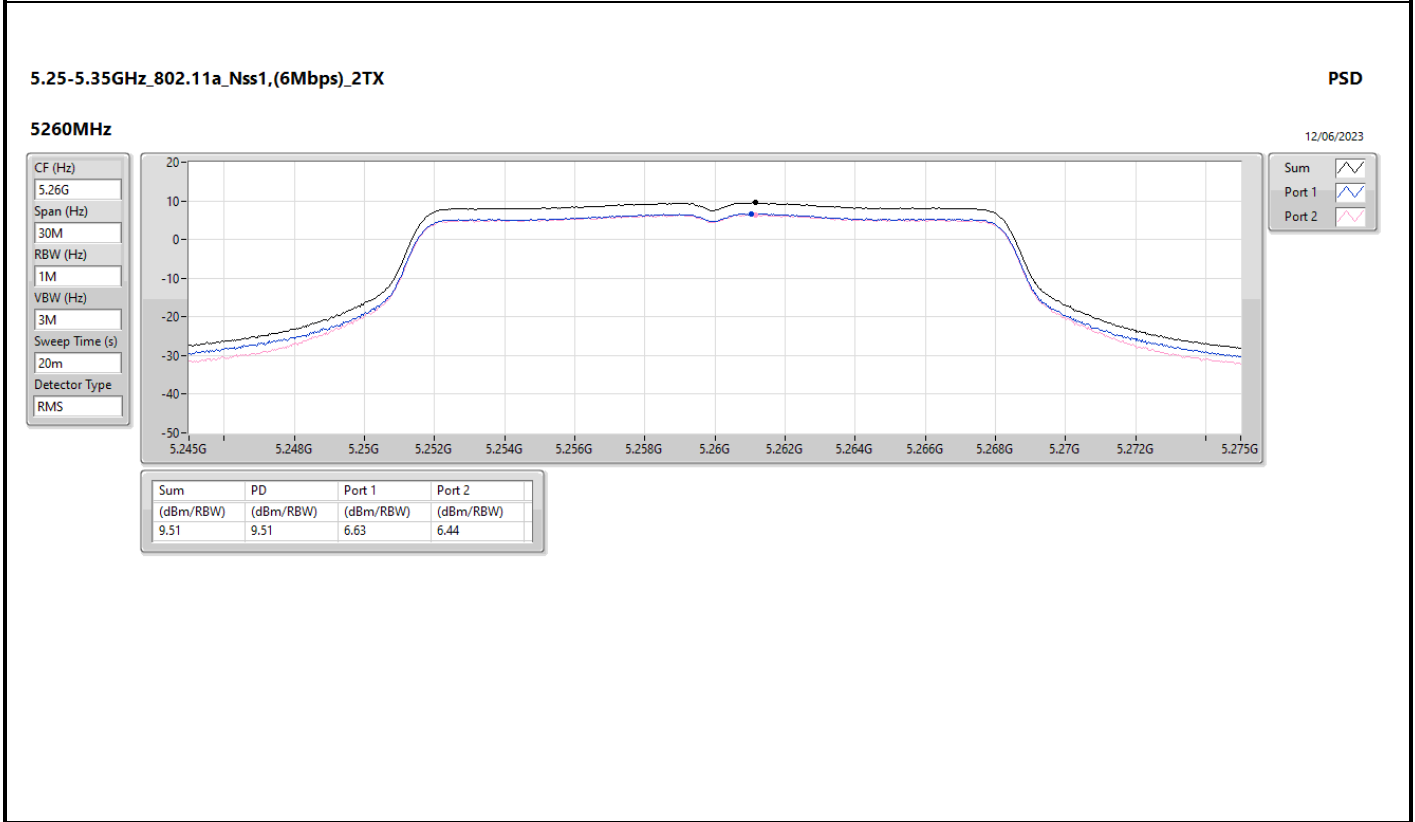
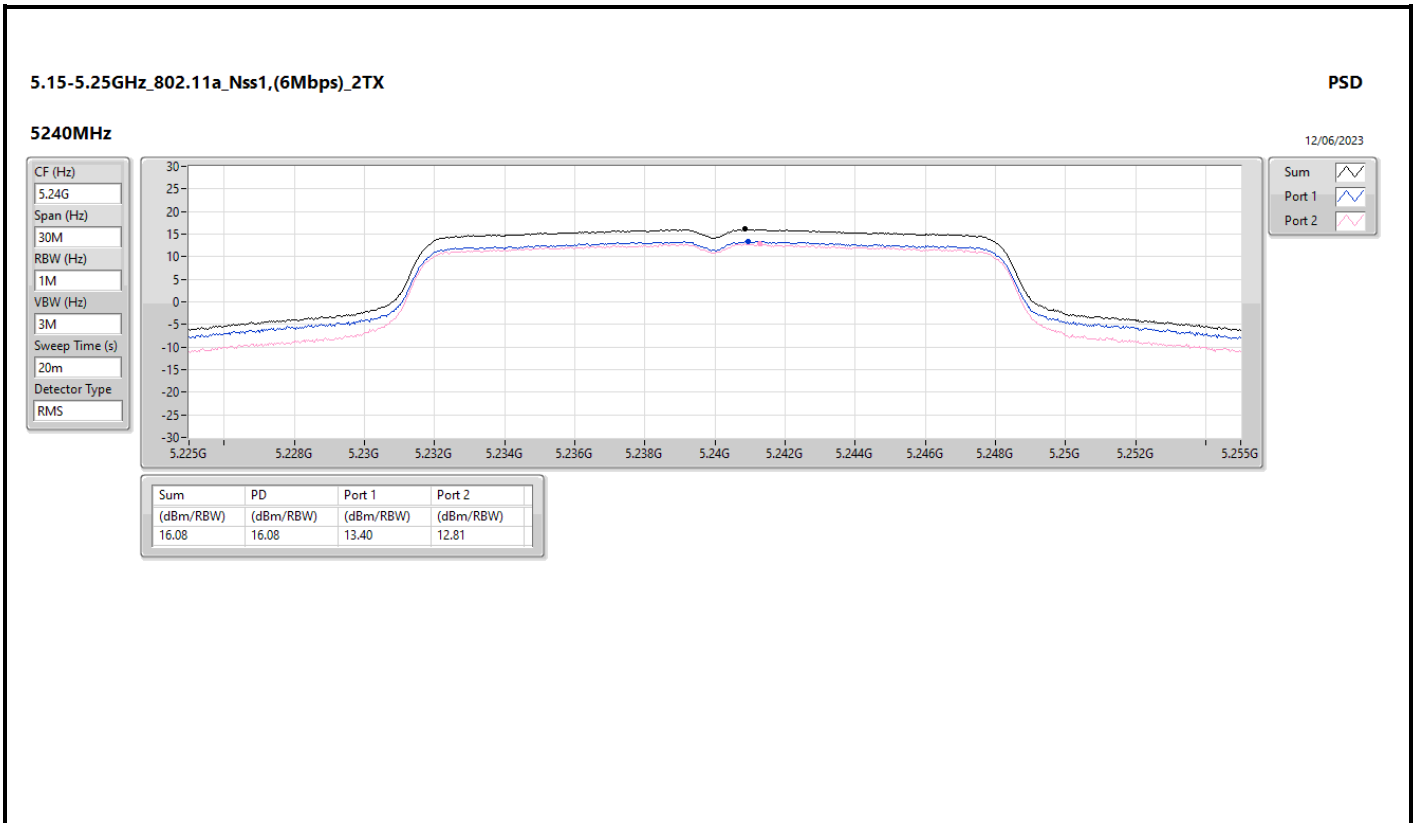
RBW = 500kHz for 5.725-5.85GHz band / 1MHz for other band;

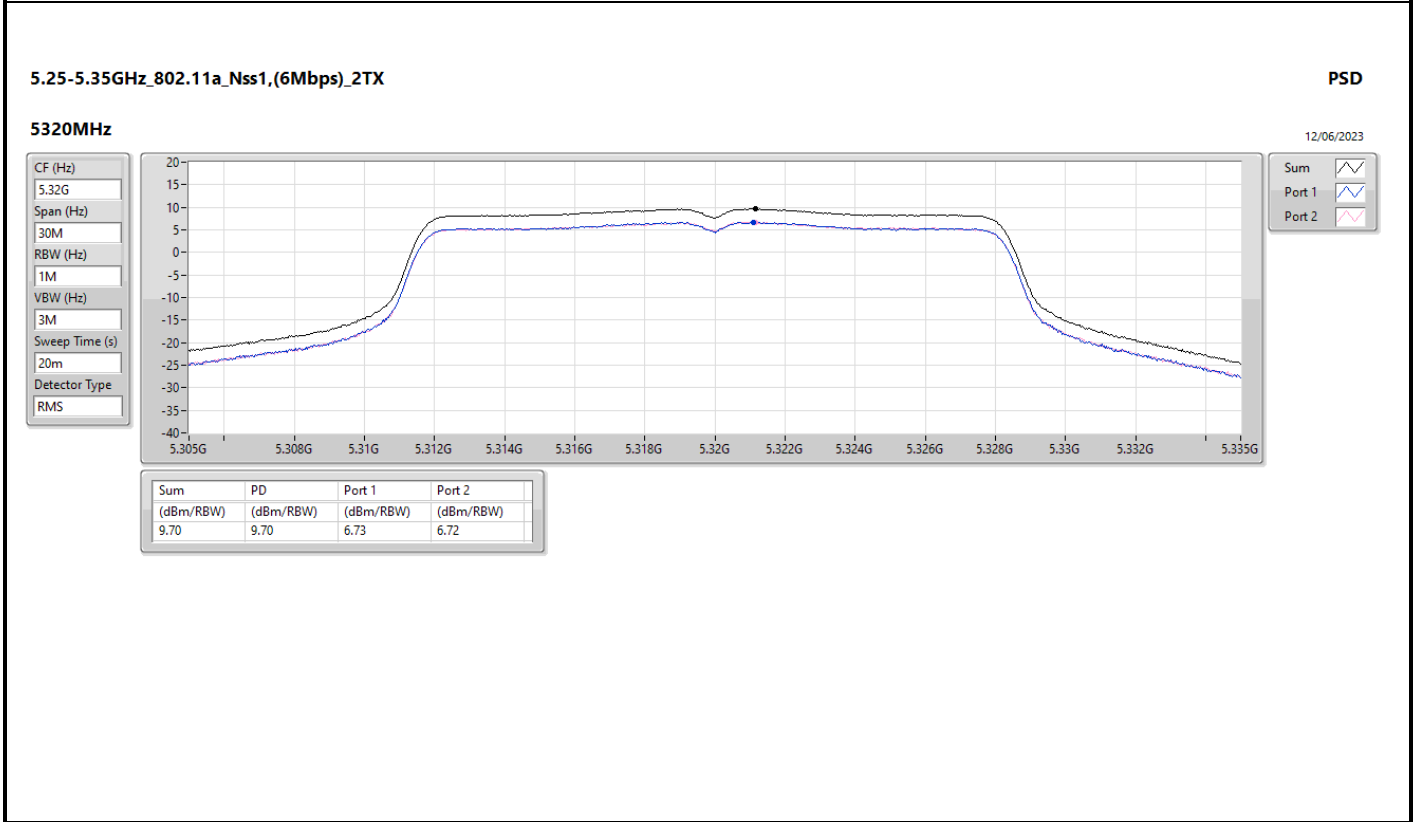
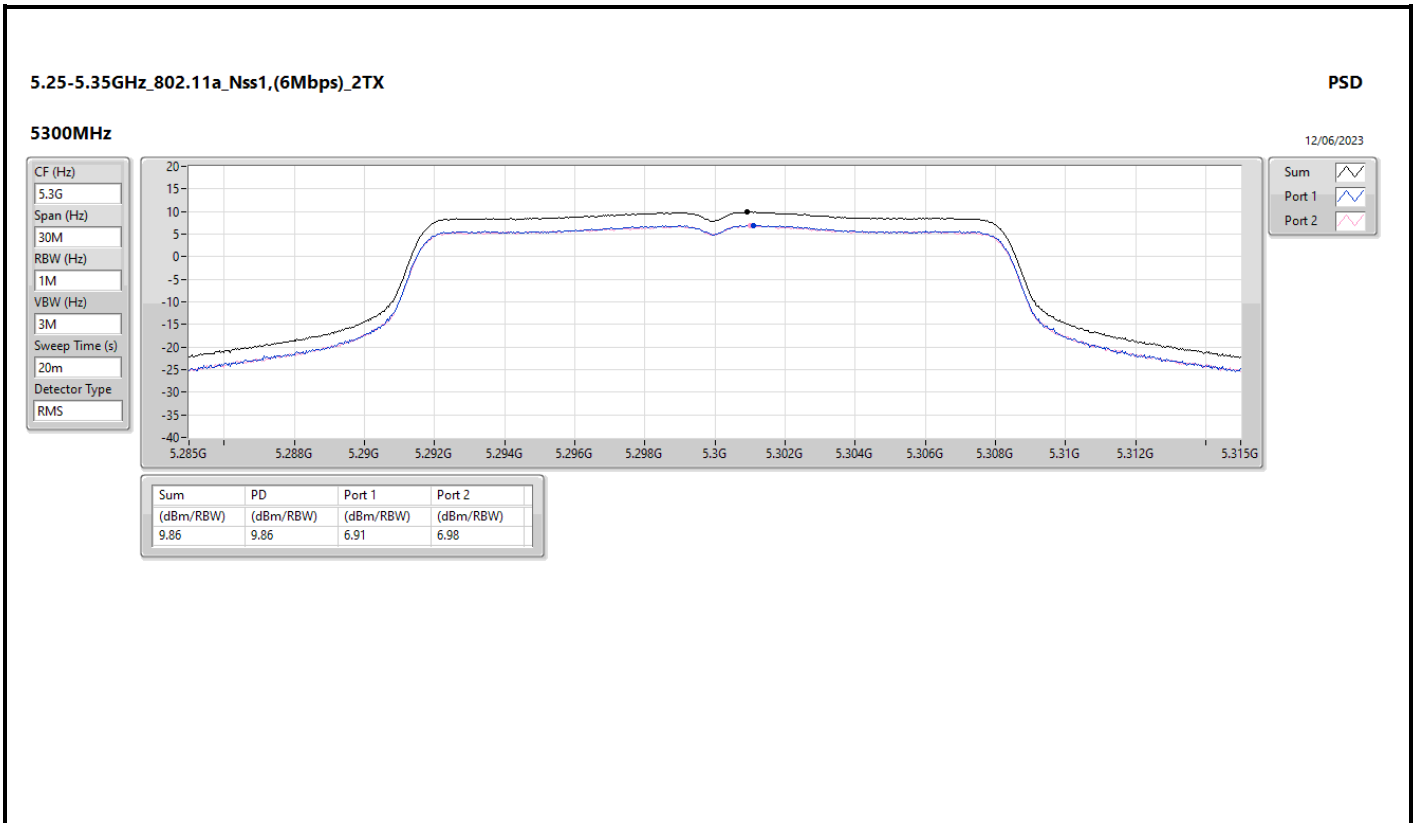
Result

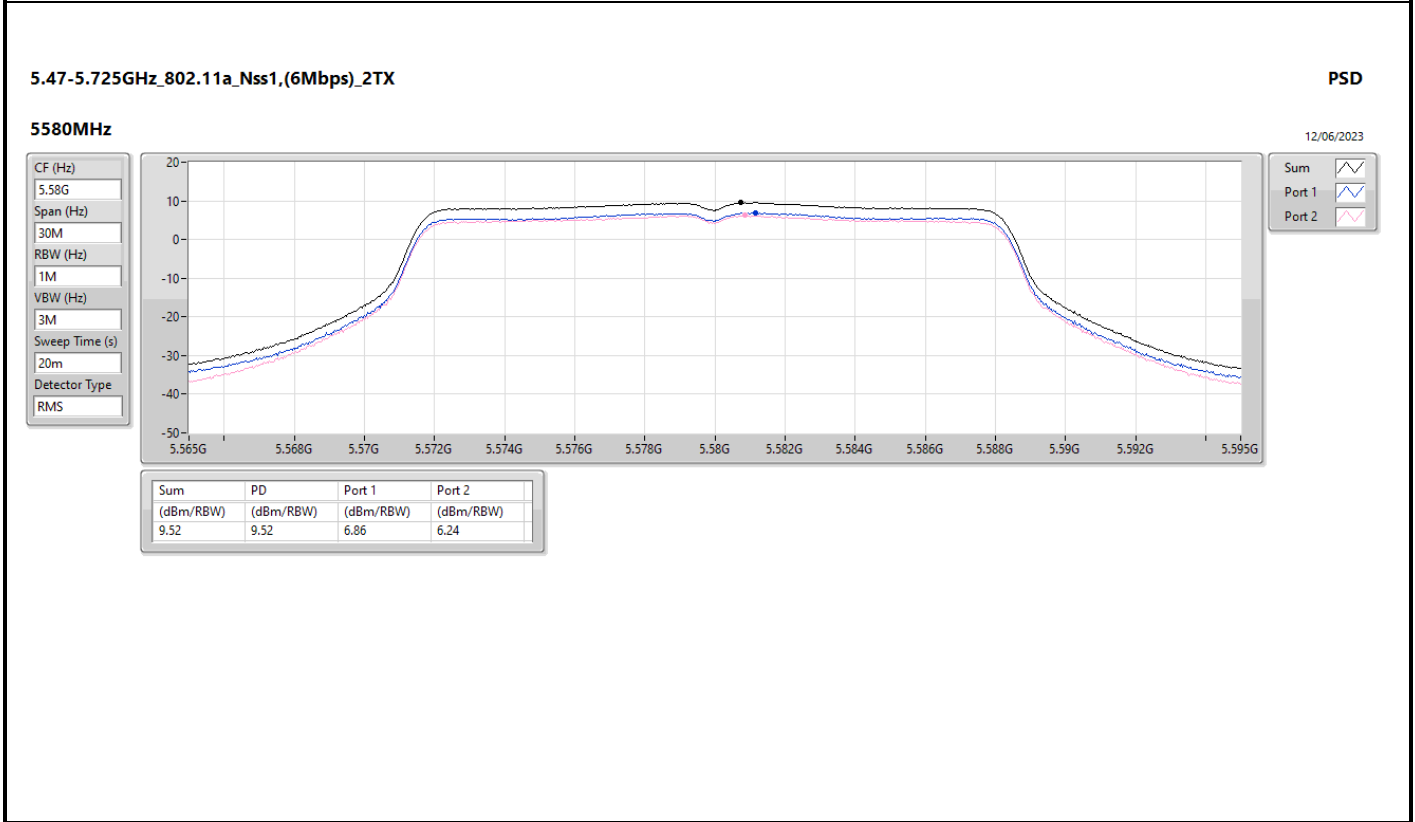
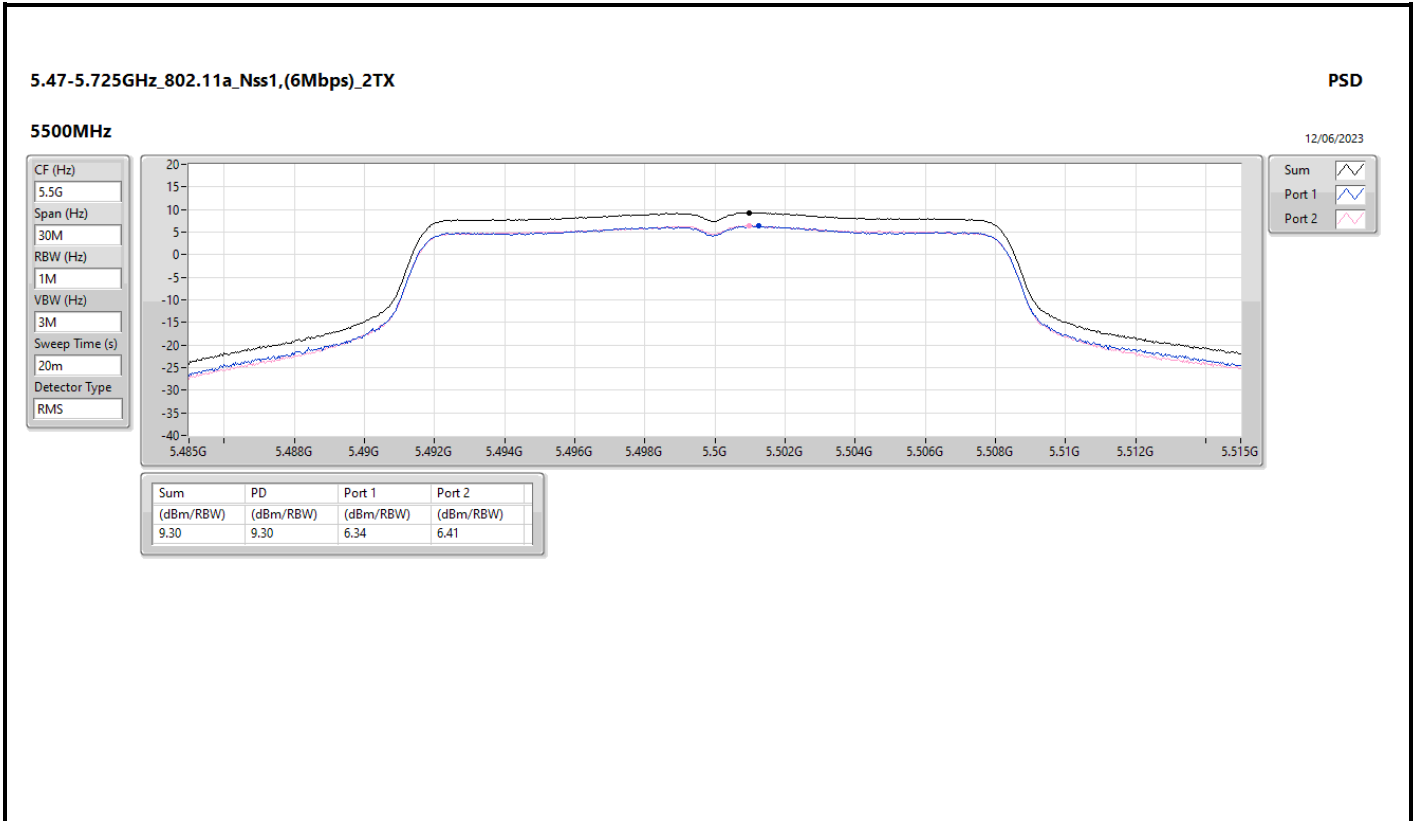
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
802.11a_Nss1,(6Mbps)_2TX	-	-	-	-	-	-
5180MHz	Pass	6.72	10.49	10.30	13.37	16.28
5200MHz	Pass	6.72	11.46	11.27	14.32	16.28
5240MHz	Pass	6.72	13.40	12.81	16.08	16.28
5260MHz	Pass	7.08	6.63	6.44	9.51	9.92
5300MHz	Pass	7.08	6.91	6.98	9.86	9.92
5320MHz	Pass	7.08	6.73	6.72	9.70	9.92
5500MHz	Pass	7.35	6.34	6.41	9.30	9.65
5580MHz	Pass	7.35	6.86	6.24	9.52	9.65
5700MHz	Pass	7.35	6.27	6.33	9.25	9.65
5720MHz Straddle 5.47-5.725GHz	Pass	7.35	6.64	6.69	9.58	9.65
5720MHz Straddle 5.725-5.85GHz	Pass	7.72	3.81	3.99	6.87	28.28
5745MHz	Pass	7.72	12.50	12.54	15.47	28.28
5785MHz	Pass	7.72	12.47	12.31	15.34	28.28
5825MHz	Pass	7.72	8.80	8.49	11.53	28.28
802.11ax HEW20_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5180MHz	Pass	6.72	9.24	8.81	12.03	16.28
5200MHz	Pass	6.72	10.76	10.52	13.65	16.28
5240MHz	Pass	6.72	11.68	11.34	14.48	16.28
5260MHz	Pass	7.08	6.92	6.67	9.75	9.92
5300MHz	Pass	7.08	6.64	6.53	9.57	9.92
5320MHz	Pass	7.08	6.71	6.52	9.61	9.92
5500MHz	Pass	7.35	6.18	6.33	9.24	9.65
5580MHz	Pass	7.35	6.62	5.88	9.23	9.65
5700MHz	Pass	7.35	6.50	6.42	9.42	9.65
5720MHz Straddle 5.47-5.725GHz	Pass	7.35	6.33	6.07	9.21	9.65
5720MHz Straddle 5.725-5.85GHz	Pass	7.72	3.80	3.89	6.72	28.28
5745MHz	Pass	7.72	11.25	11.28	14.23	28.28
5785MHz	Pass	7.72	11.22	11.09	14.09	28.28
5825MHz	Pass	7.72	12.13	11.08	14.56	28.28
802.11ax HEW40_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5190MHz	Pass	6.72	4.83	4.95	7.74	16.28
5230MHz	Pass	6.72	6.97	6.90	9.92	16.28
5270MHz	Pass	7.08	6.15	6.13	9.04	9.92
5310MHz	Pass	7.08	6.24	6.25	9.09	9.92
5510MHz	Pass	7.35	5.35	5.55	8.35	9.65
5550MHz	Pass	7.35	6.07	6.26	9.12	9.65
5670MHz	Pass	7.35	6.82	6.18	9.50	9.65
5710MHz Straddle 5.47-5.725GHz	Pass	7.35	5.98	6.22	9.07	9.65
5710MHz Straddle 5.725-5.85GHz	Pass	7.72	1.59	0.91	4.22	28.28
5755MHz	Pass	7.72	8.46	8.92	11.56	28.28
5795MHz	Pass	7.72	8.19	8.20	11.00	28.28
802.11ax HEW80_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5210MHz	Pass	6.72	-1.08	-1.17	1.79	16.28
5290MHz	Pass	7.08	-3.13	-3.38	-0.38	9.92
5530MHz	Pass	7.35	-2.76	-2.64	0.30	9.65
5610MHz	Pass	7.35	2.13	1.59	4.86	9.65
5690MHz Straddle 5.47-5.725GHz	Pass	7.35	3.20	2.72	5.86	9.65
5690MHz Straddle 5.725-5.85GHz	Pass	7.72	-1.42	-1.33	1.49	28.28
5775MHz	Pass	7.72	1.56	1.78	4.60	28.28
802.11ax HEW160_Nss1,(MCS0)_2TX	-	-	-	-	-	-
5250MHz Straddle 5.15-5.25GHz	Pass	6.72	-6.84	-6.99	-4.02	16.28
5250MHz Straddle 5.25-5.35GHz	Pass	7.08	-6.59	-6.45	-3.51	9.92
5570MHz	Pass	7.35	-5.60	-5.80	-2.78	9.65

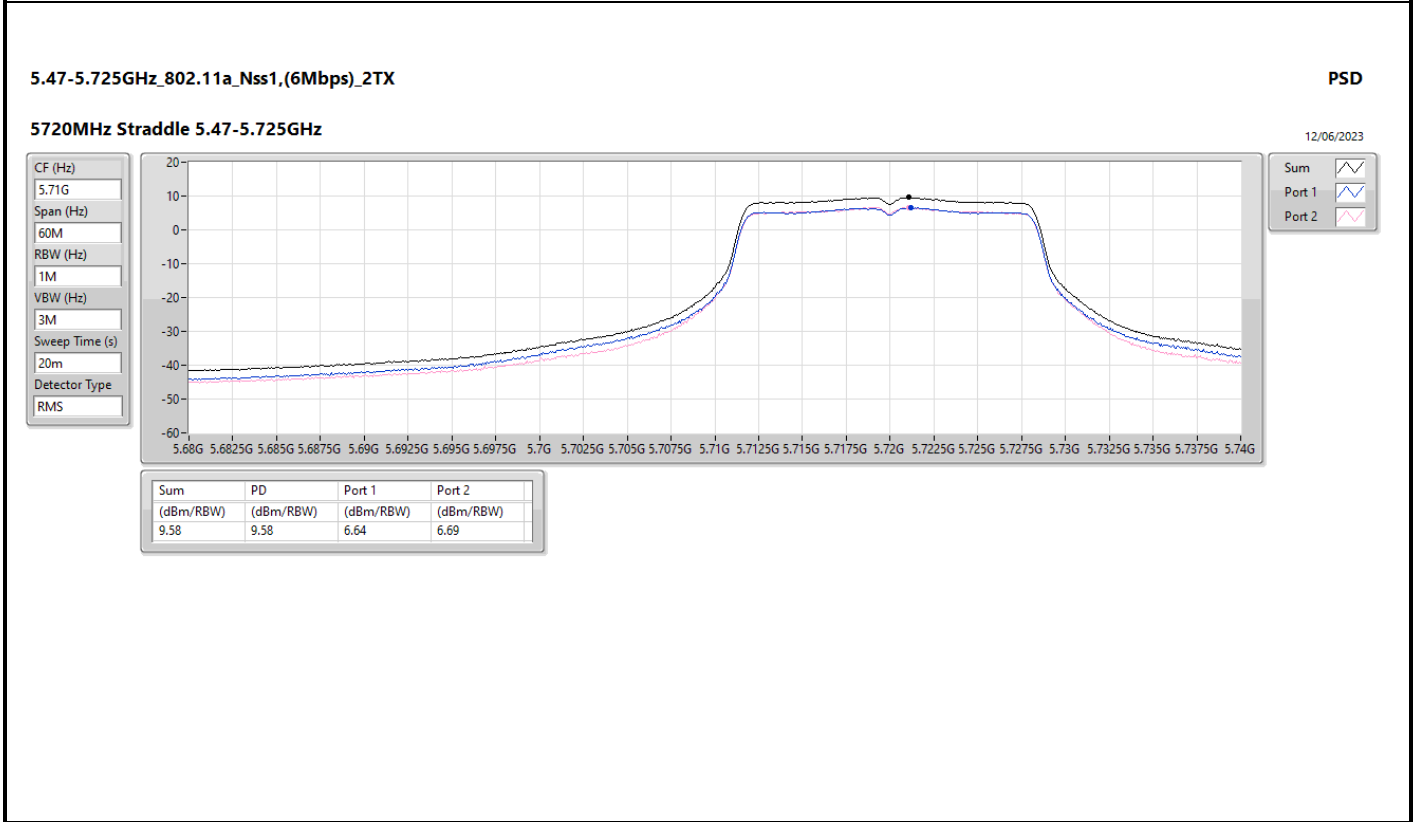
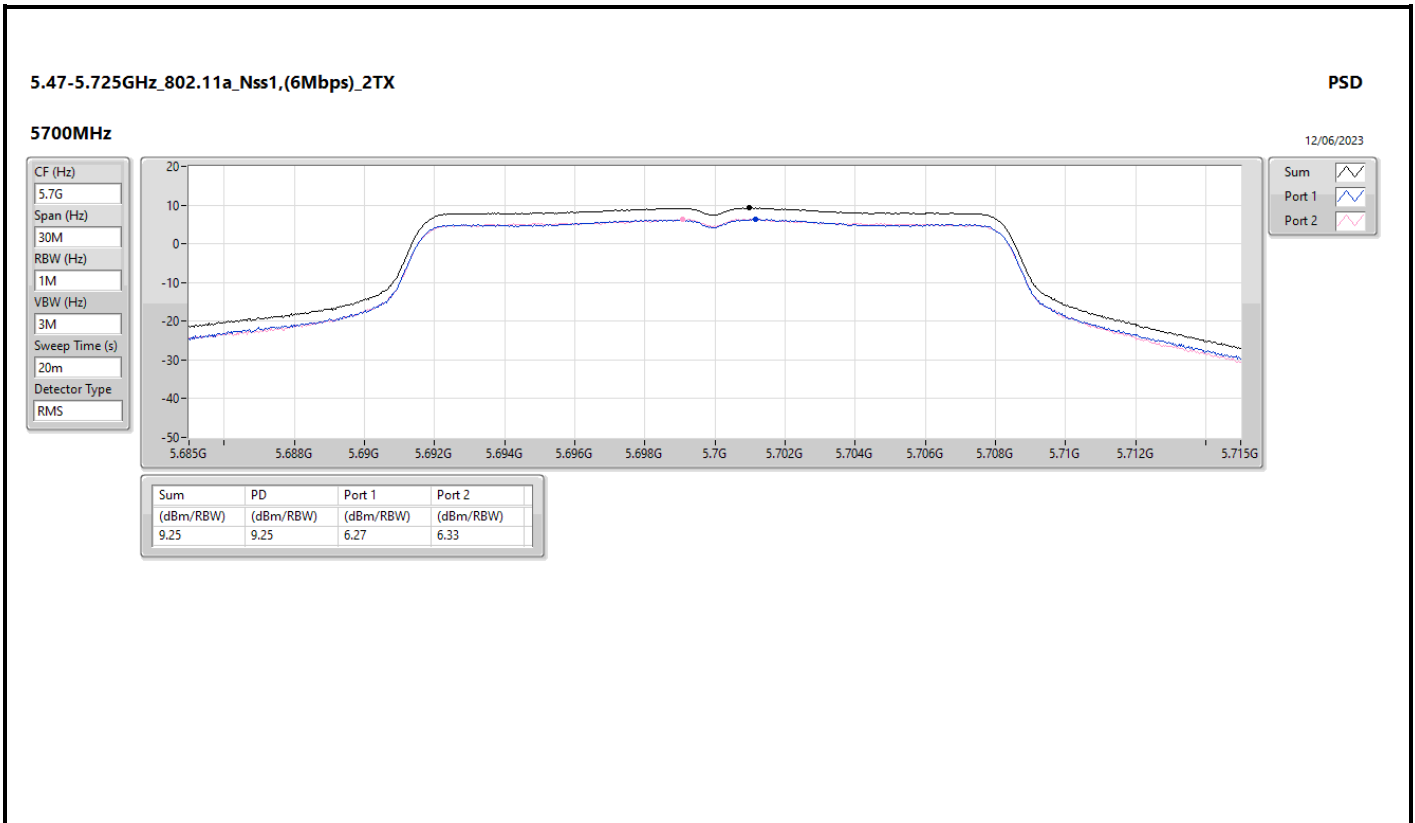
DG = Directional Gain; RBW = 500kHz for 5.725-5.85GHz band / 1MHz for other band;
 PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;

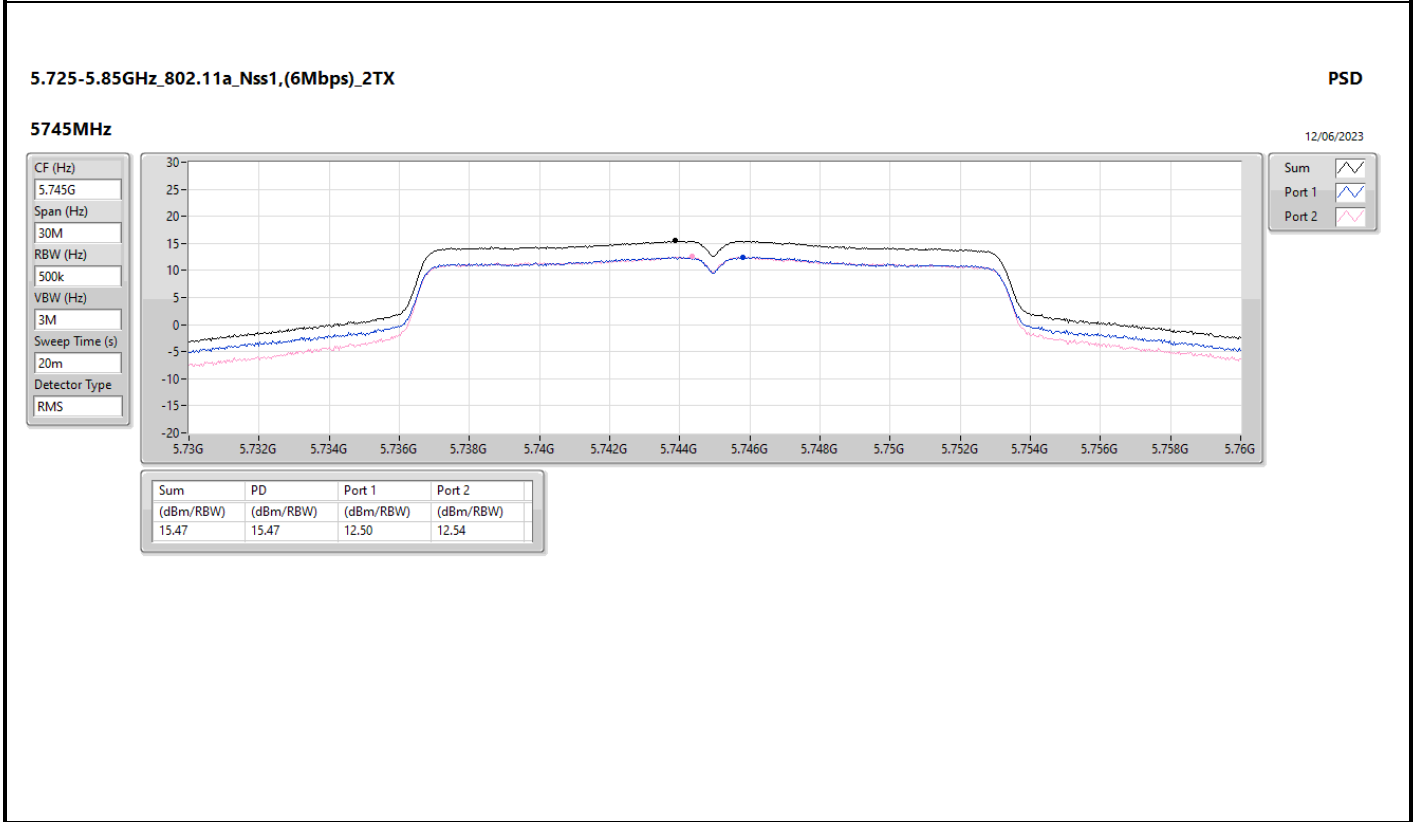
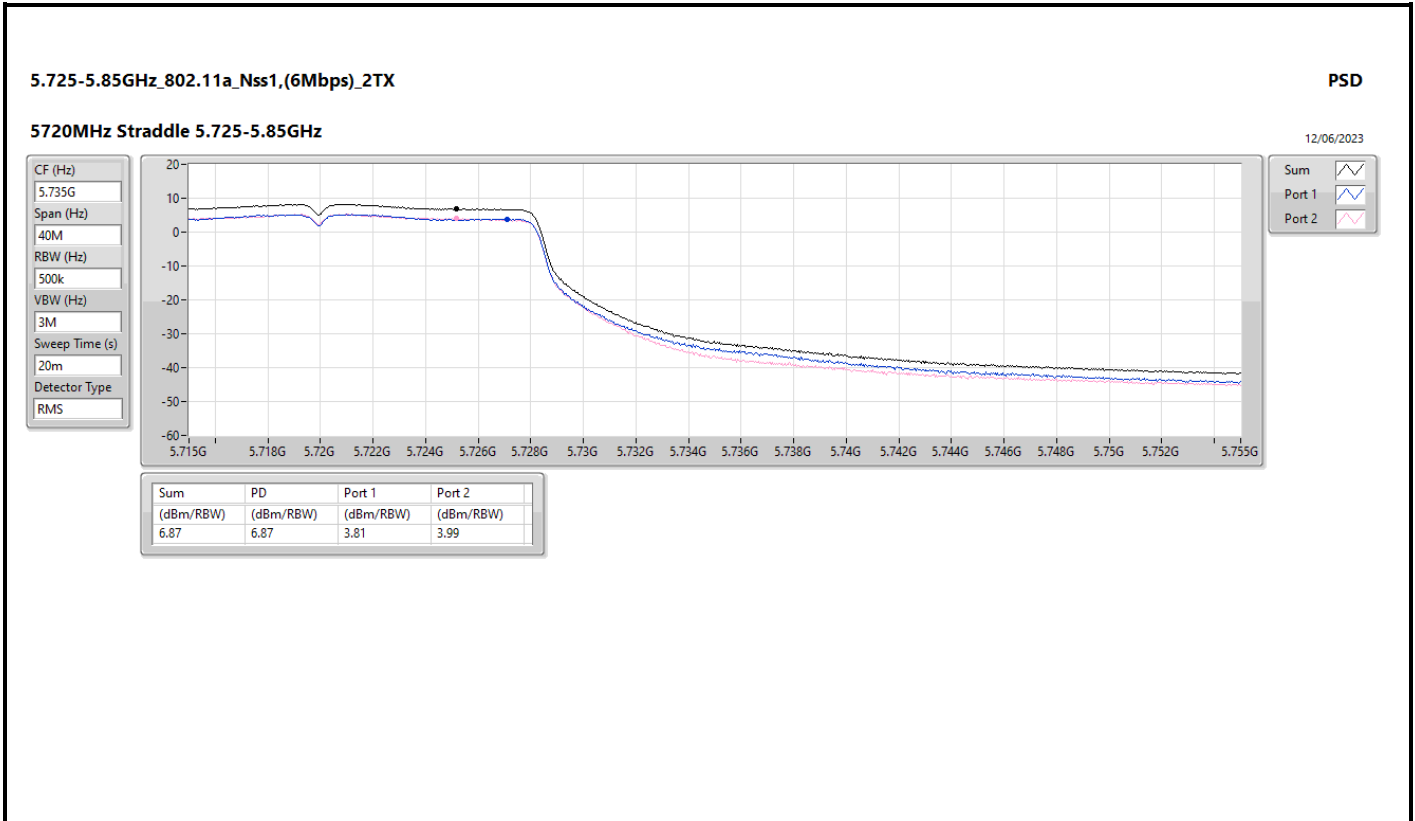


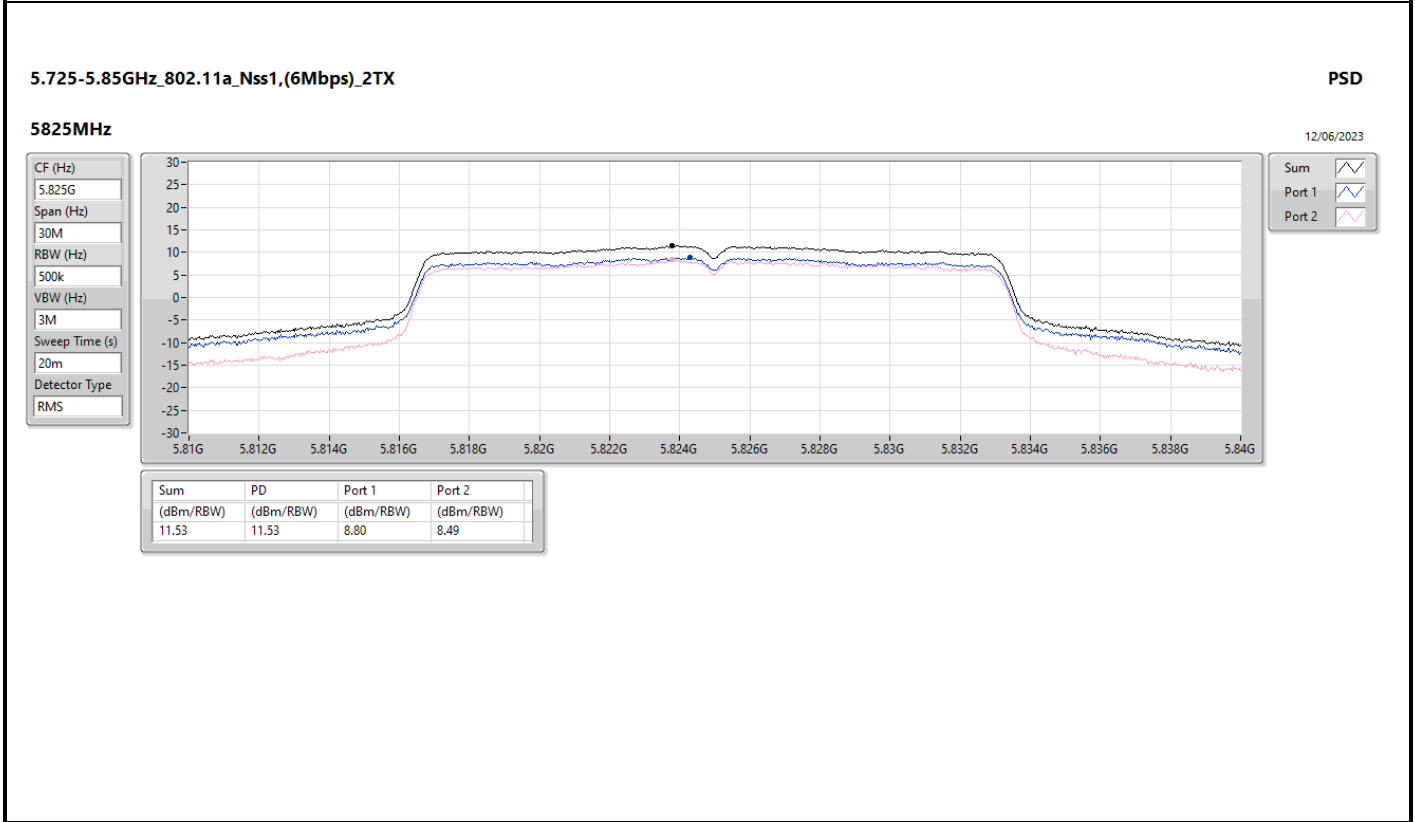
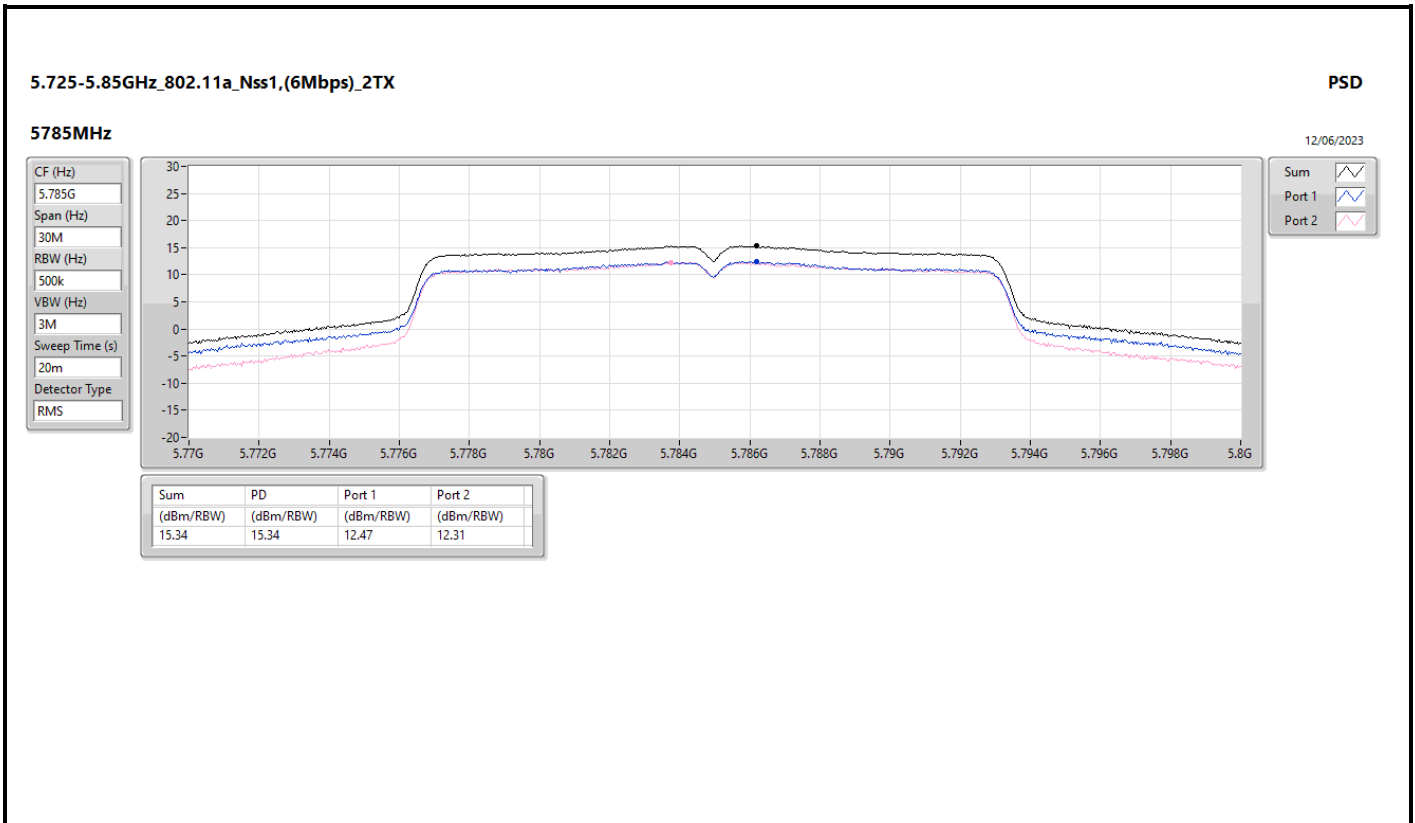


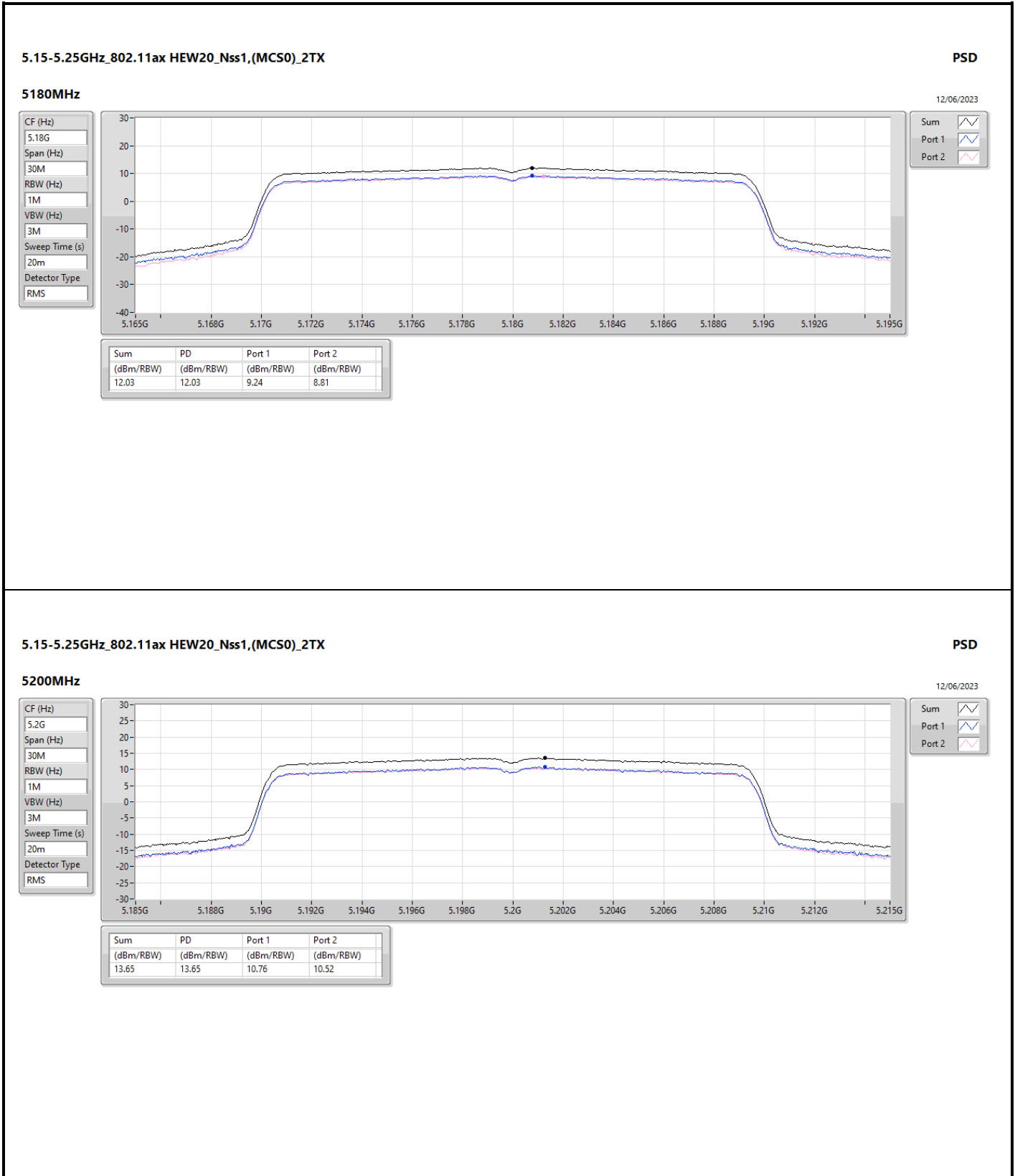


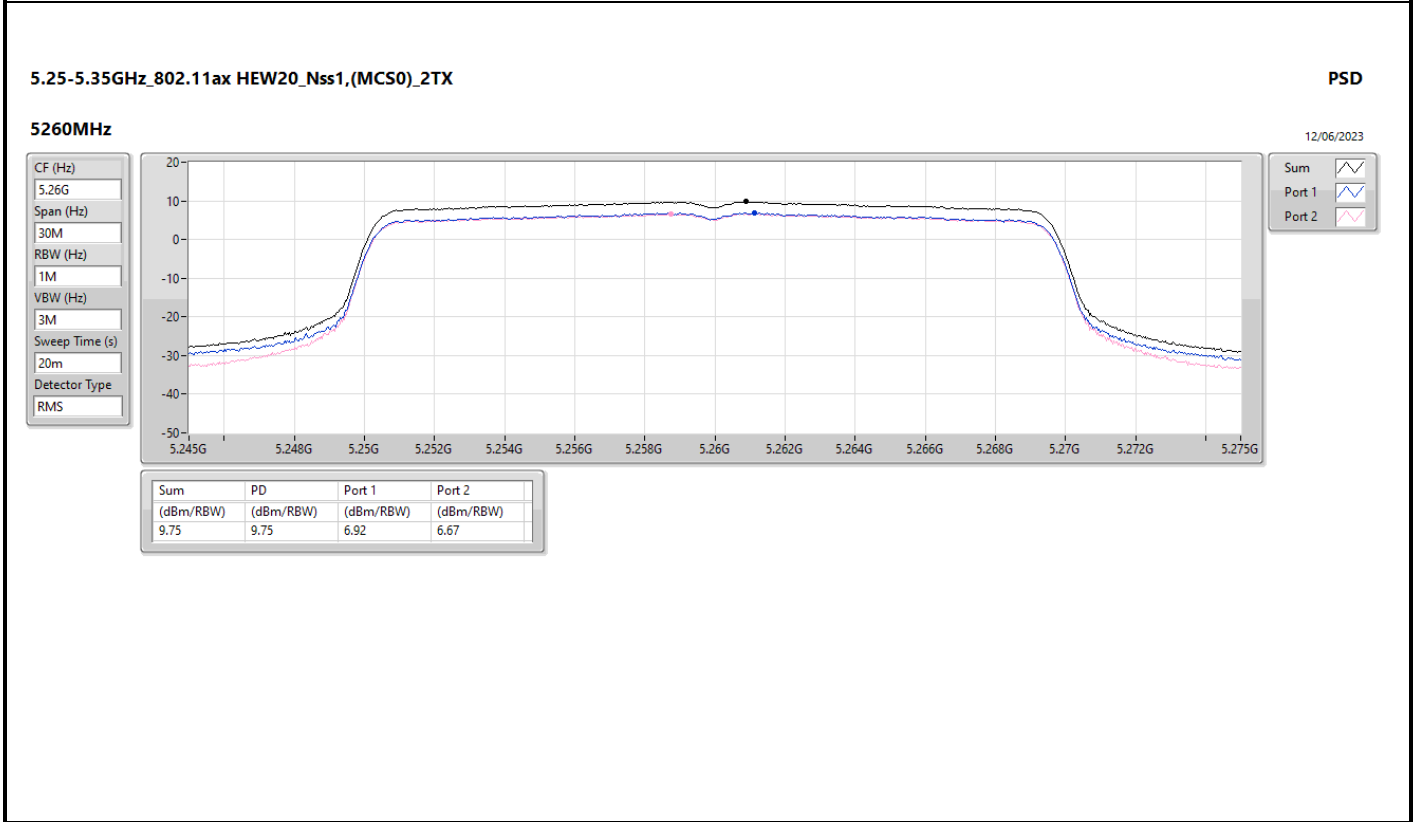
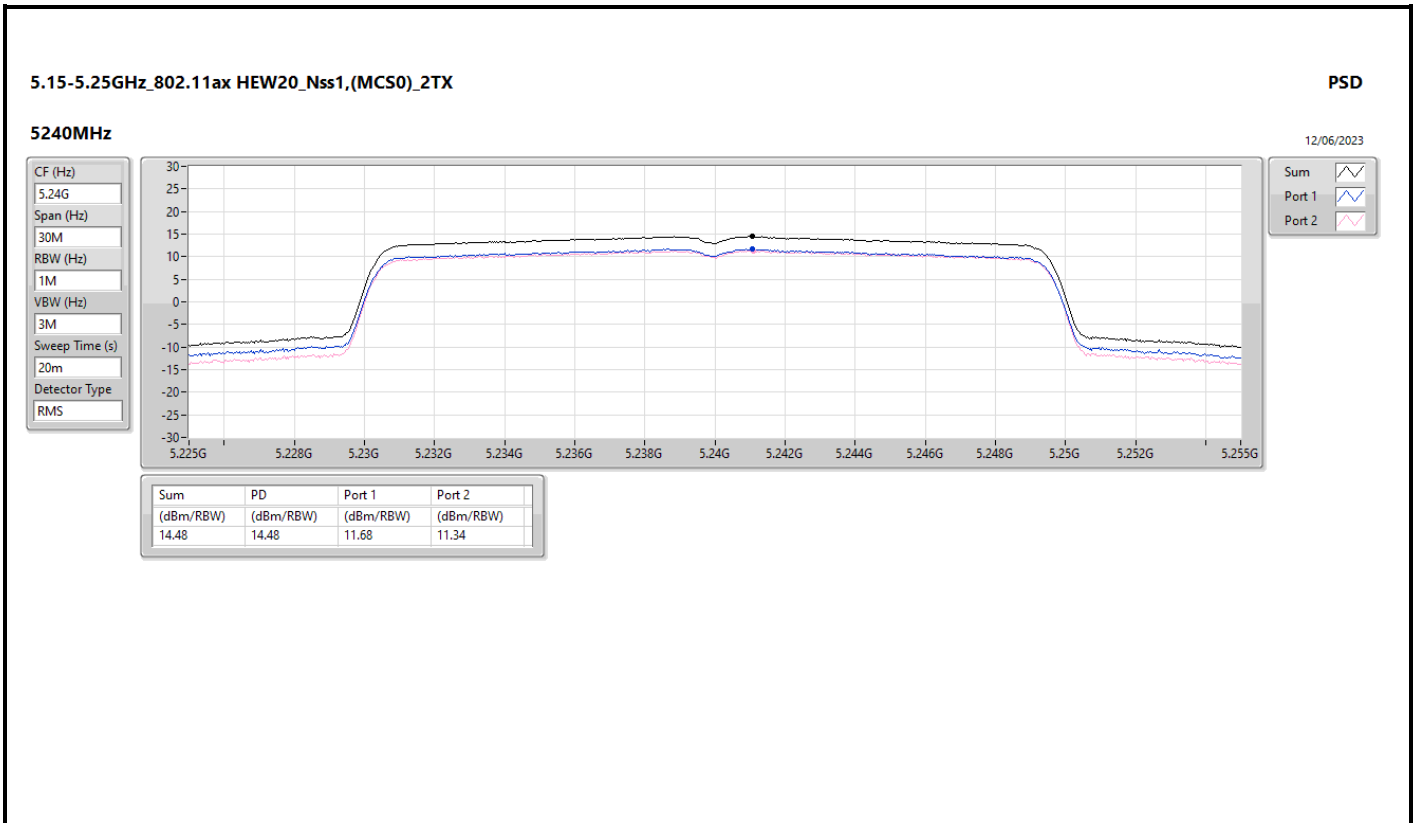


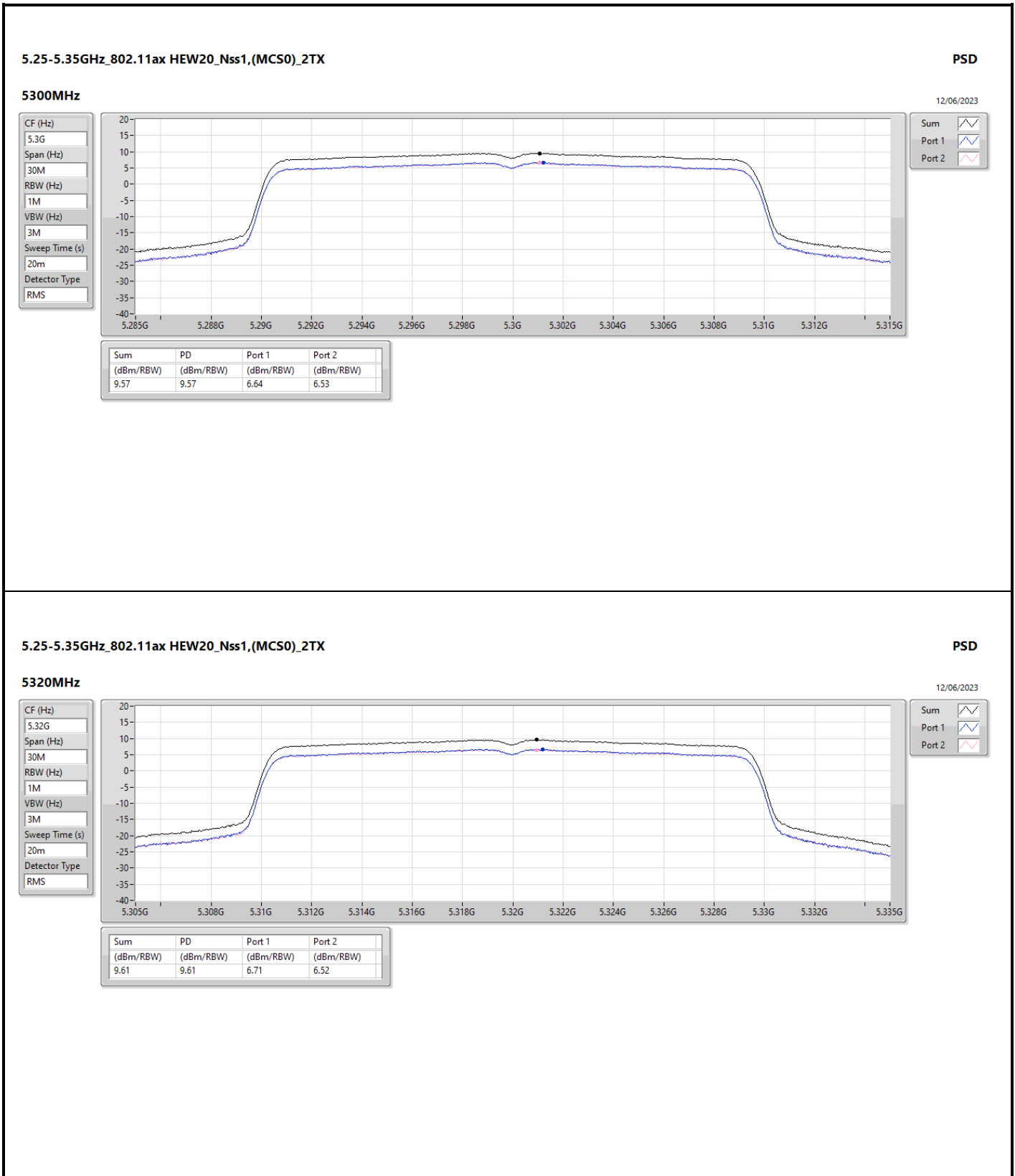


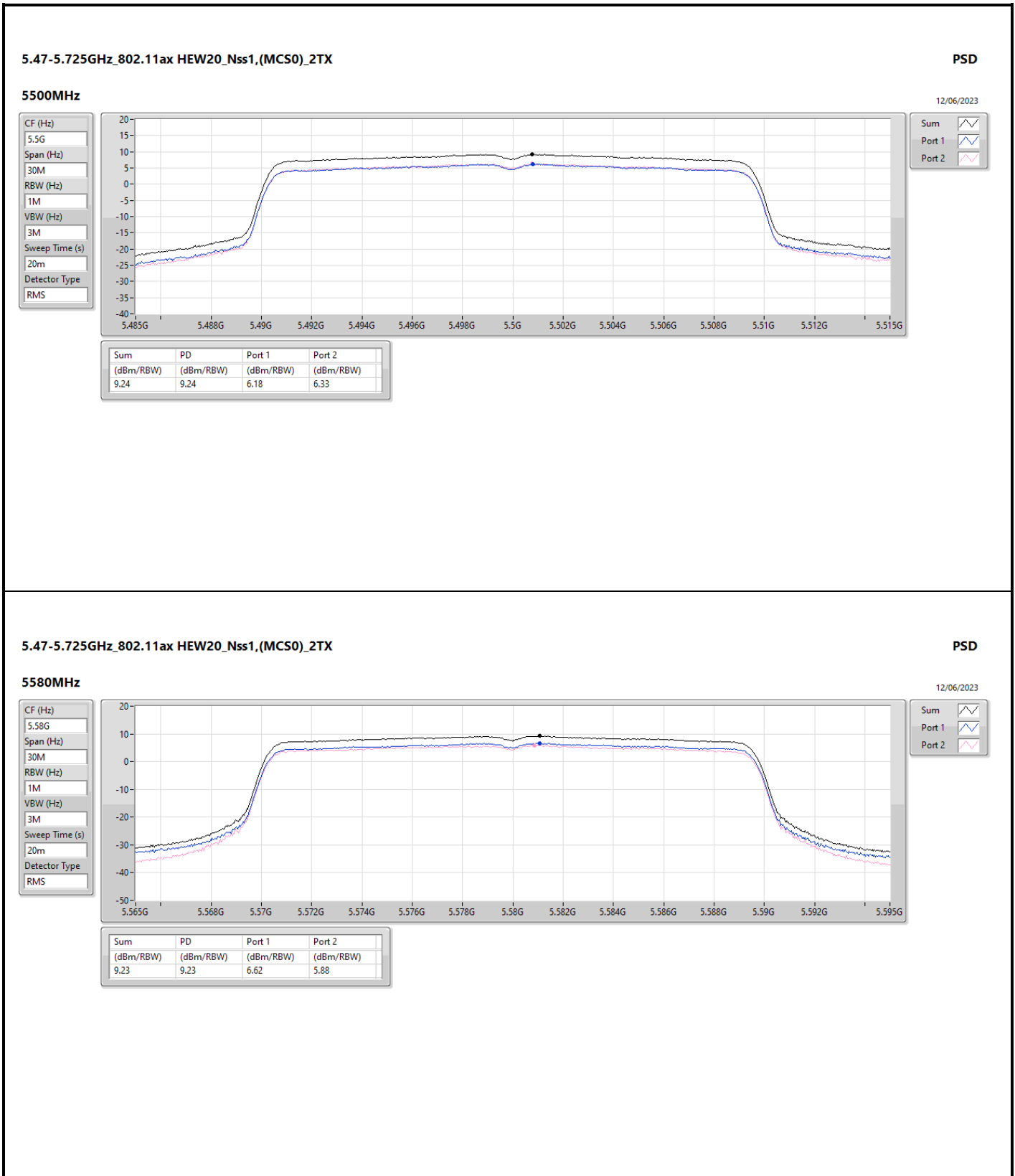


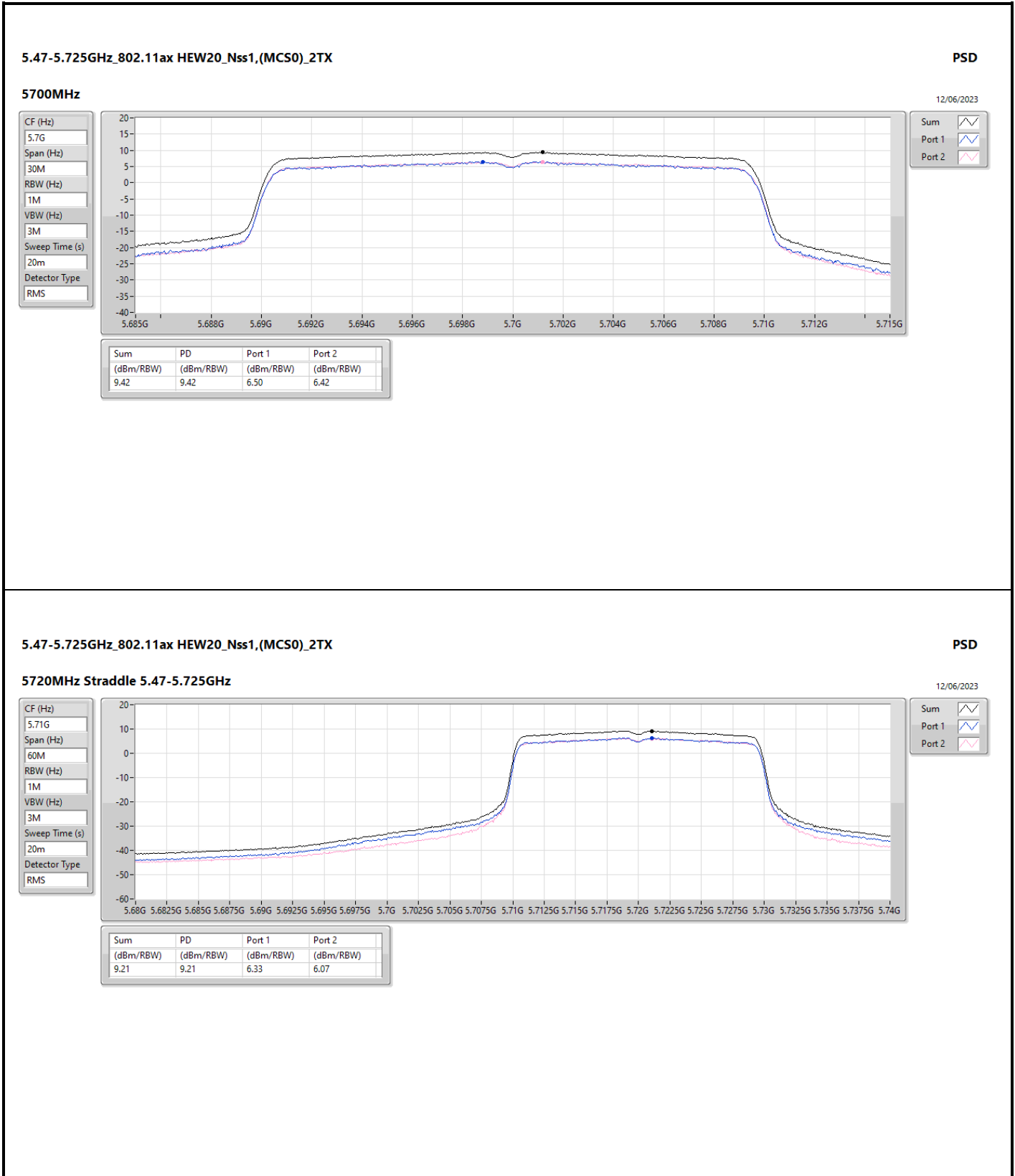


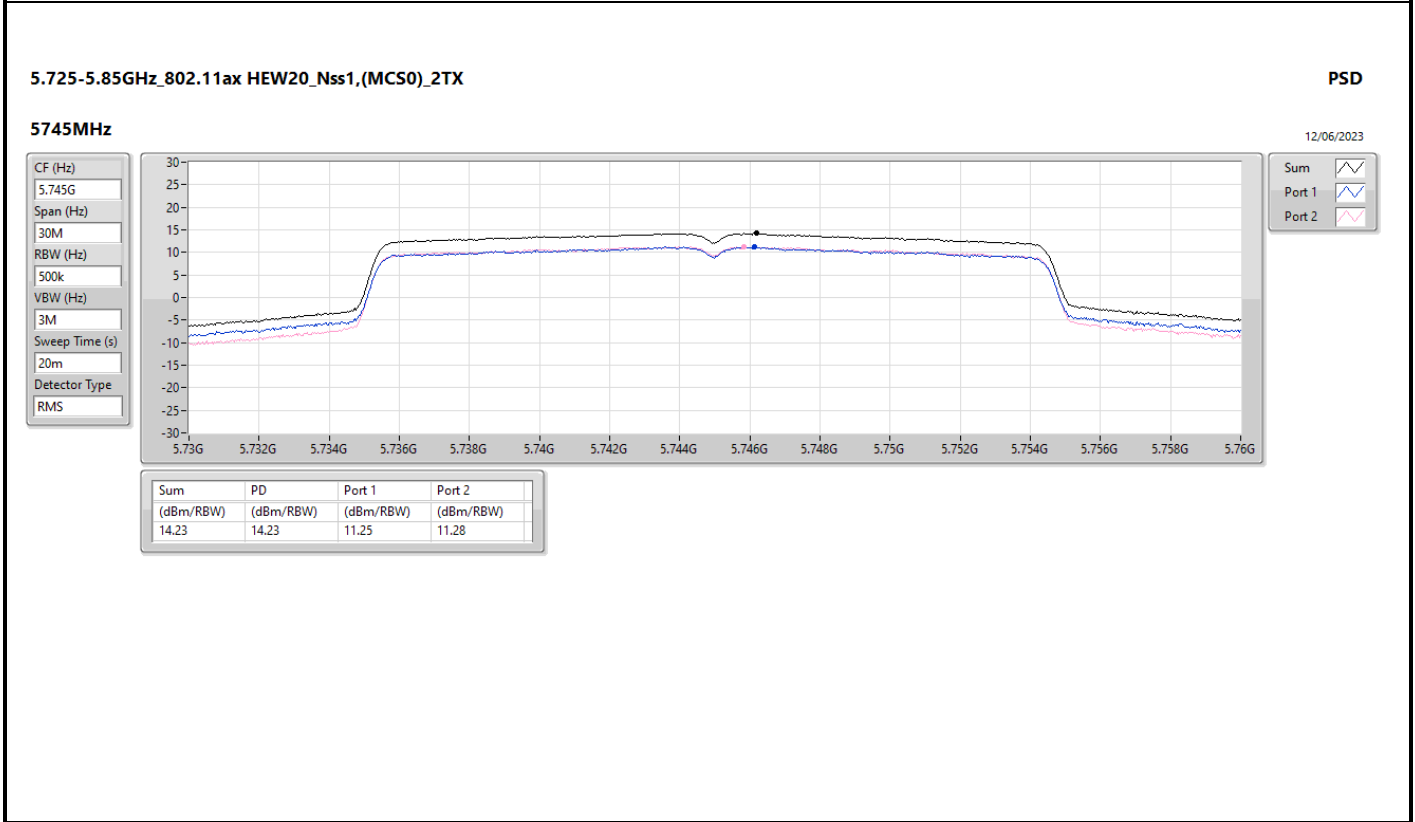
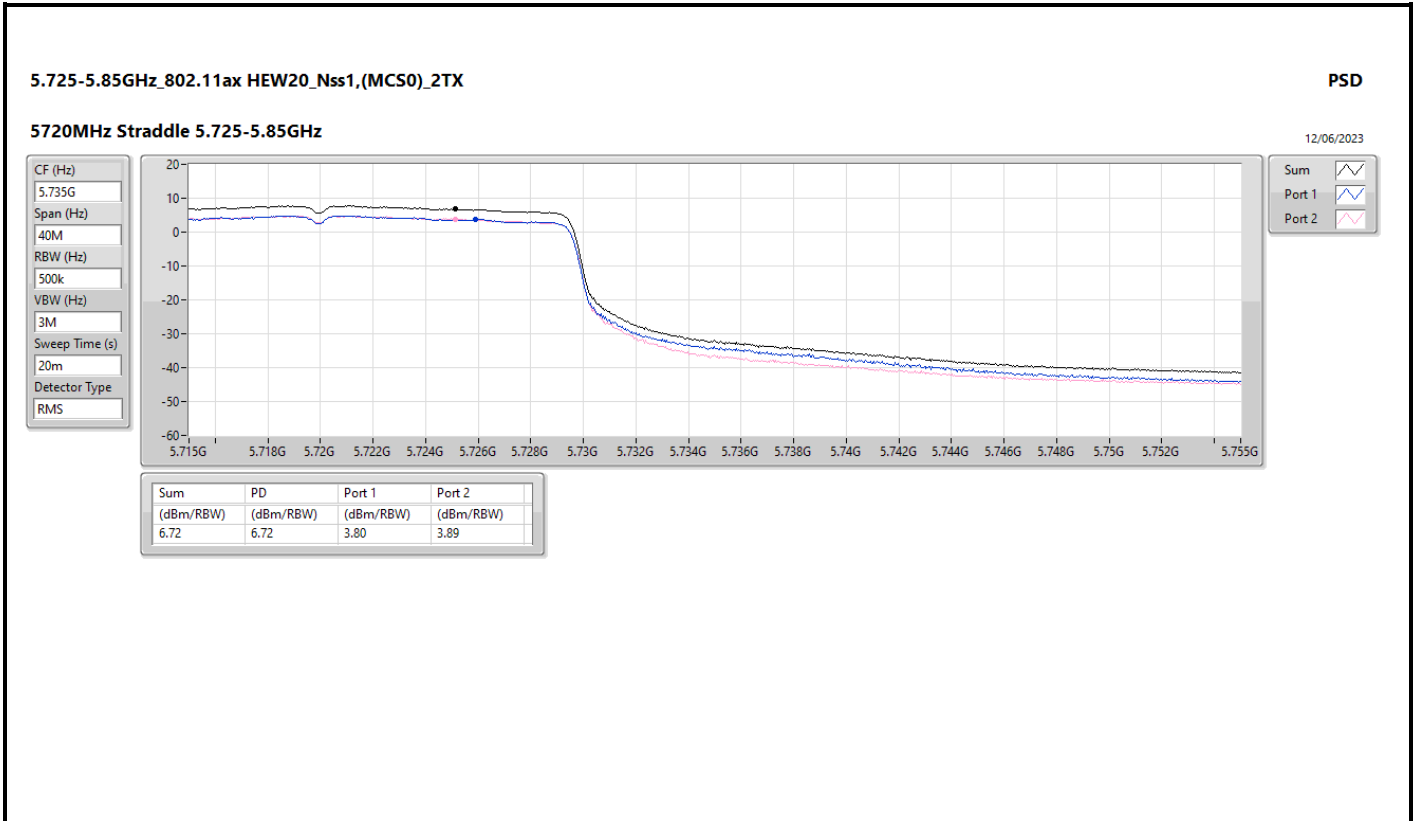


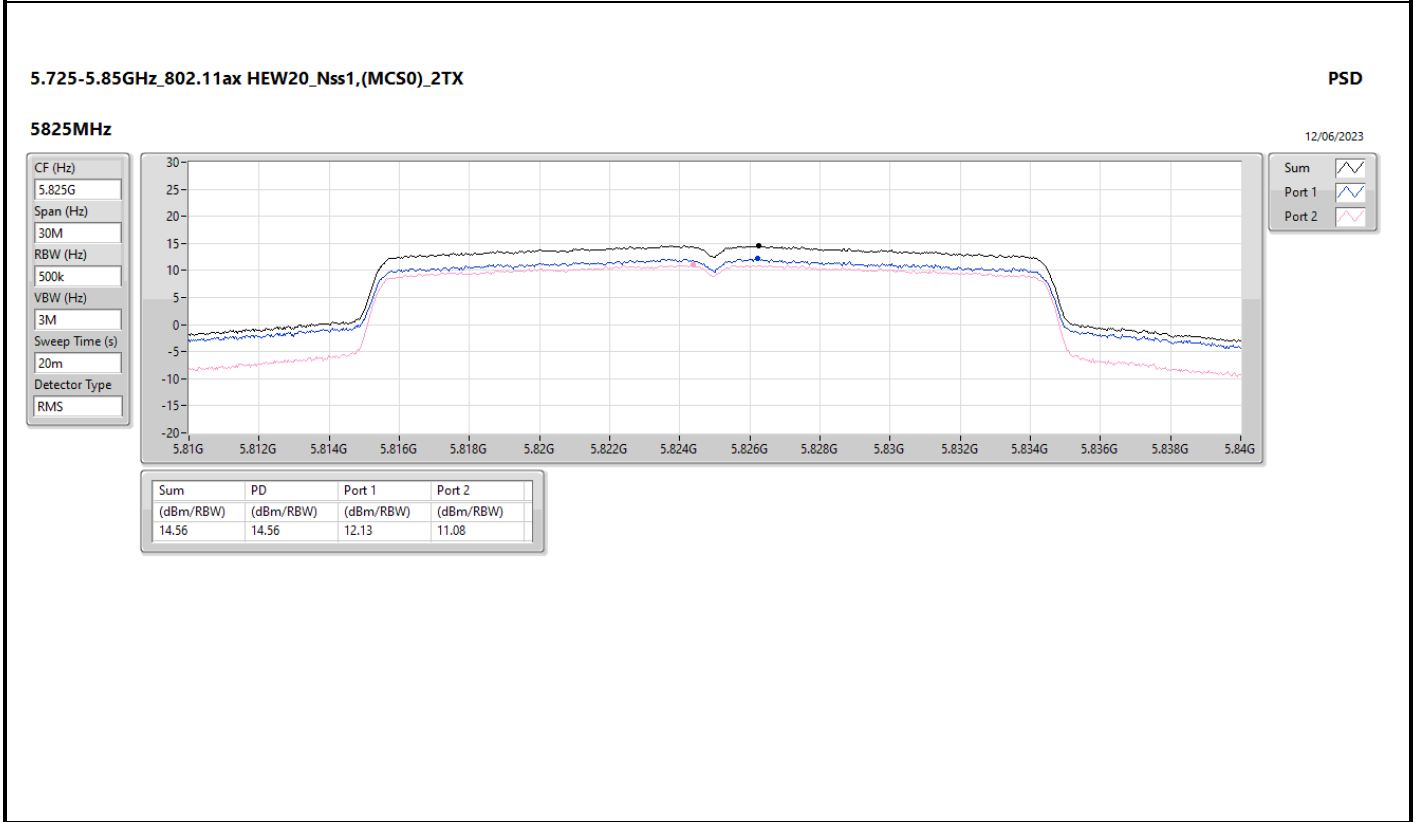
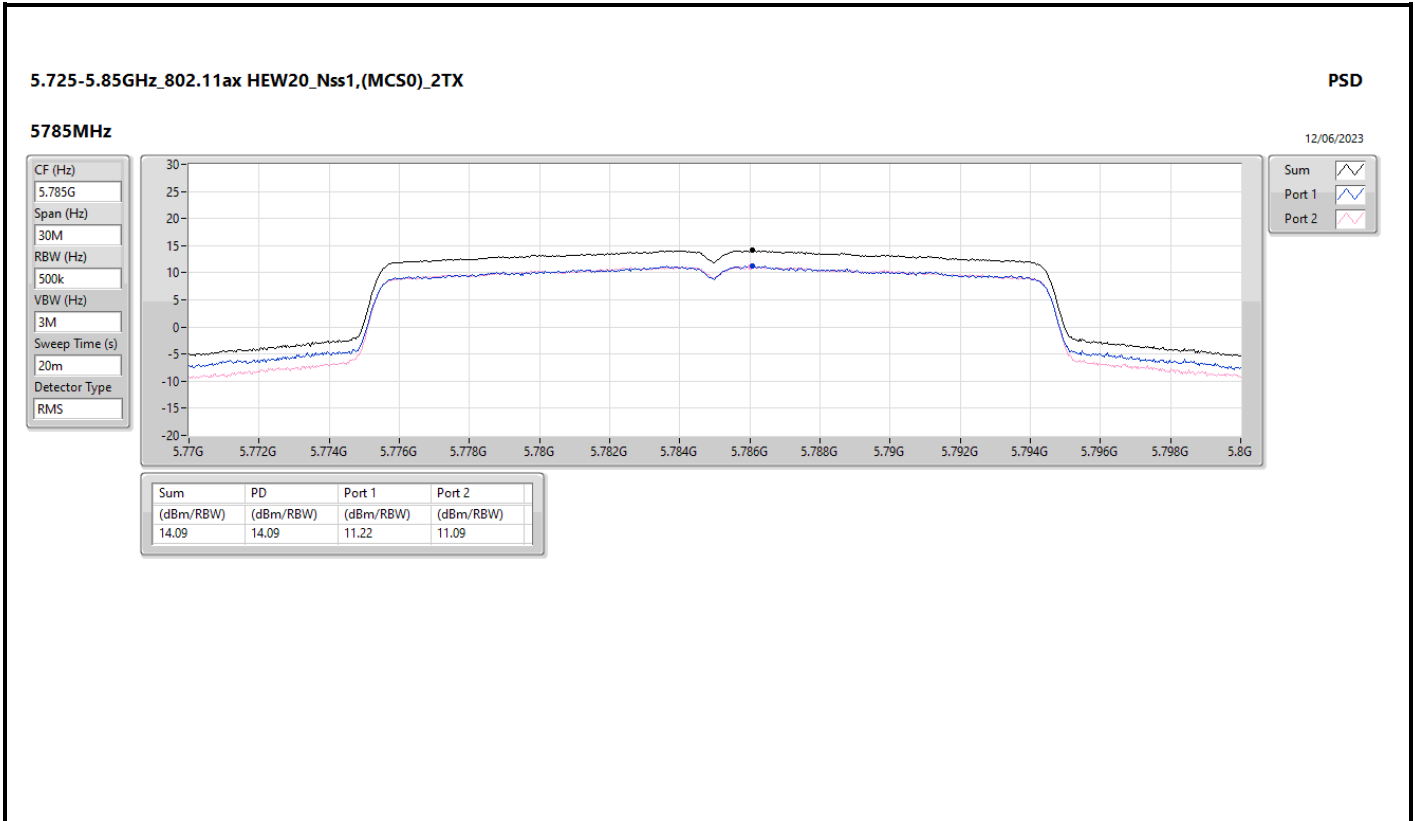


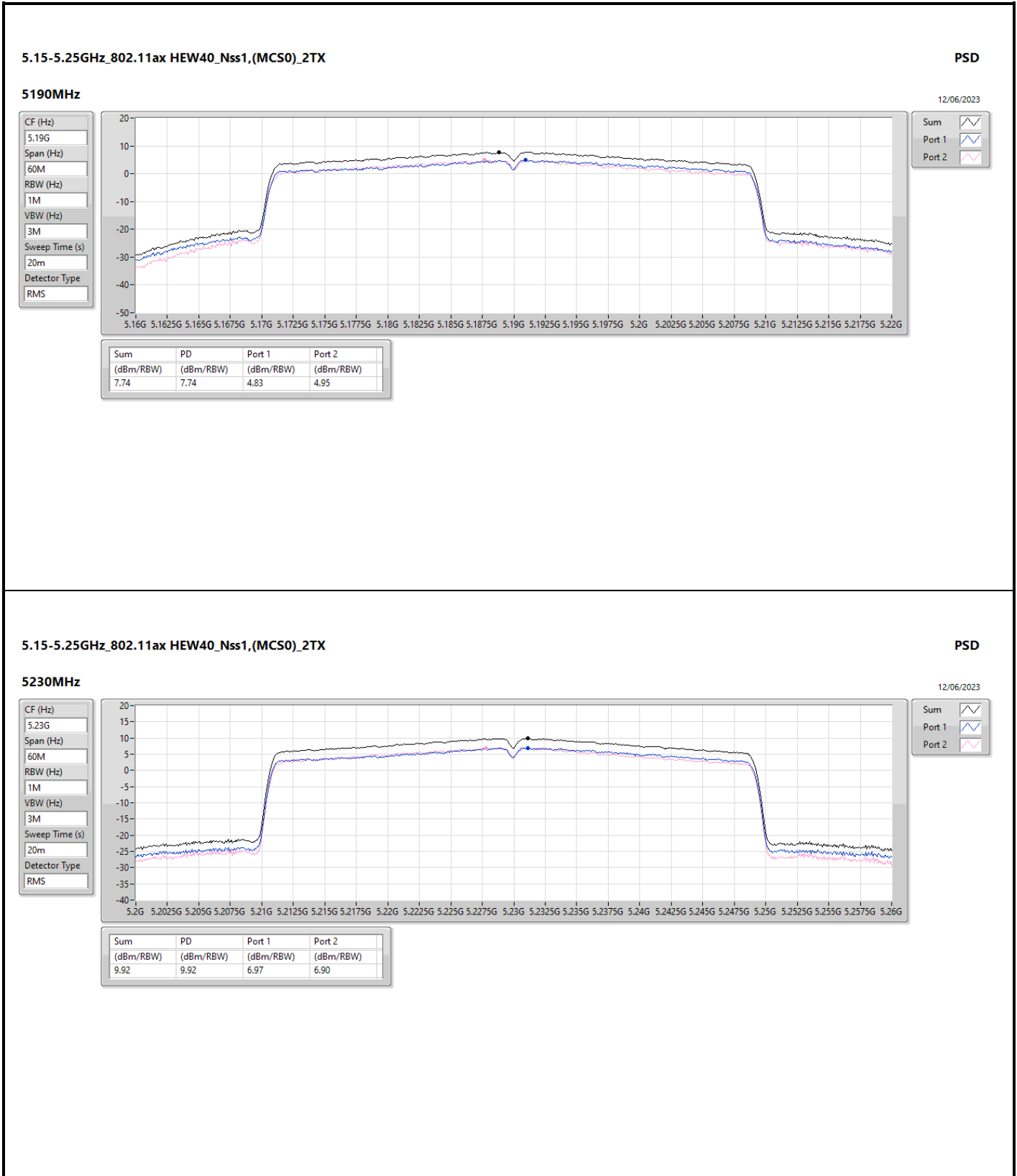




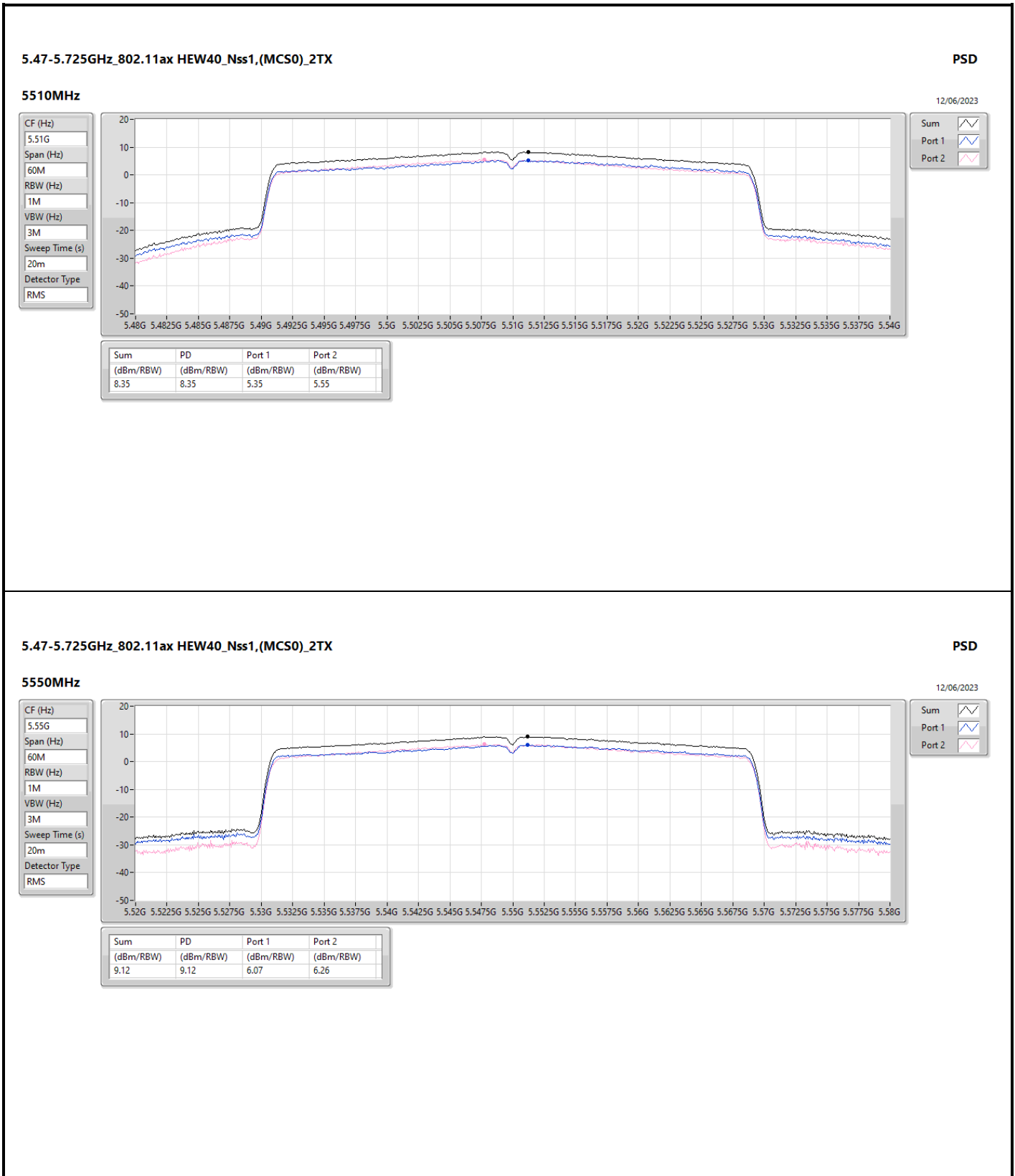


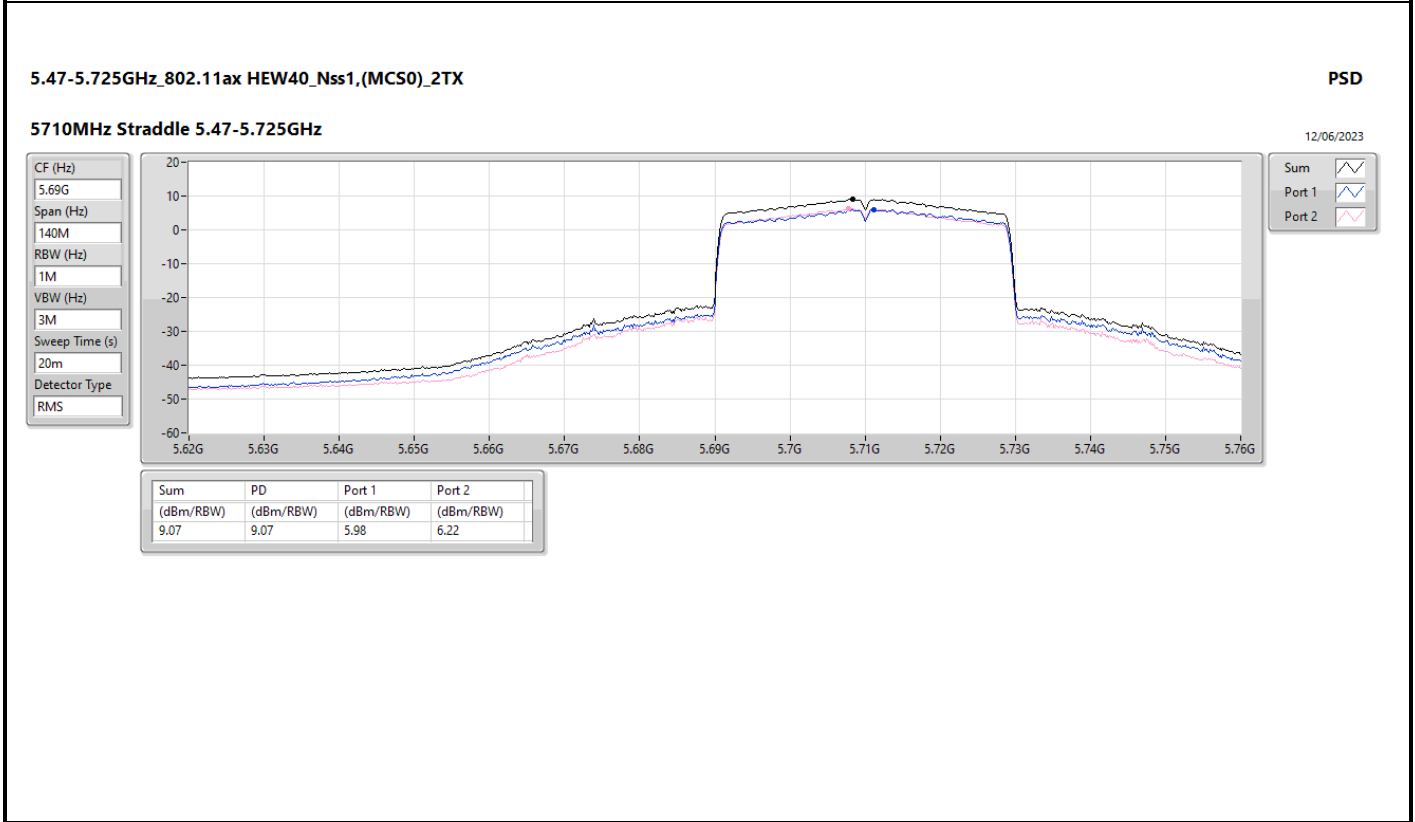
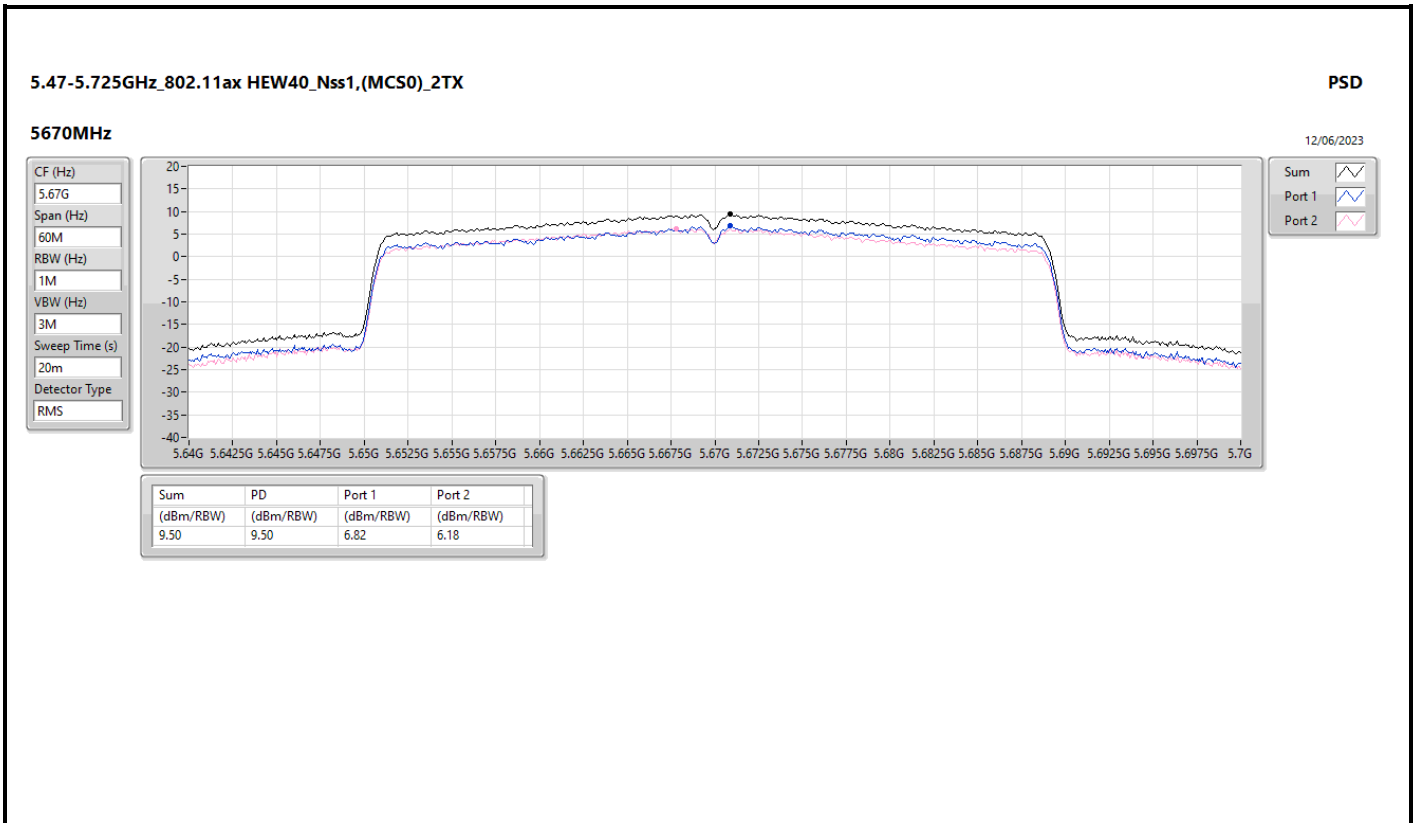


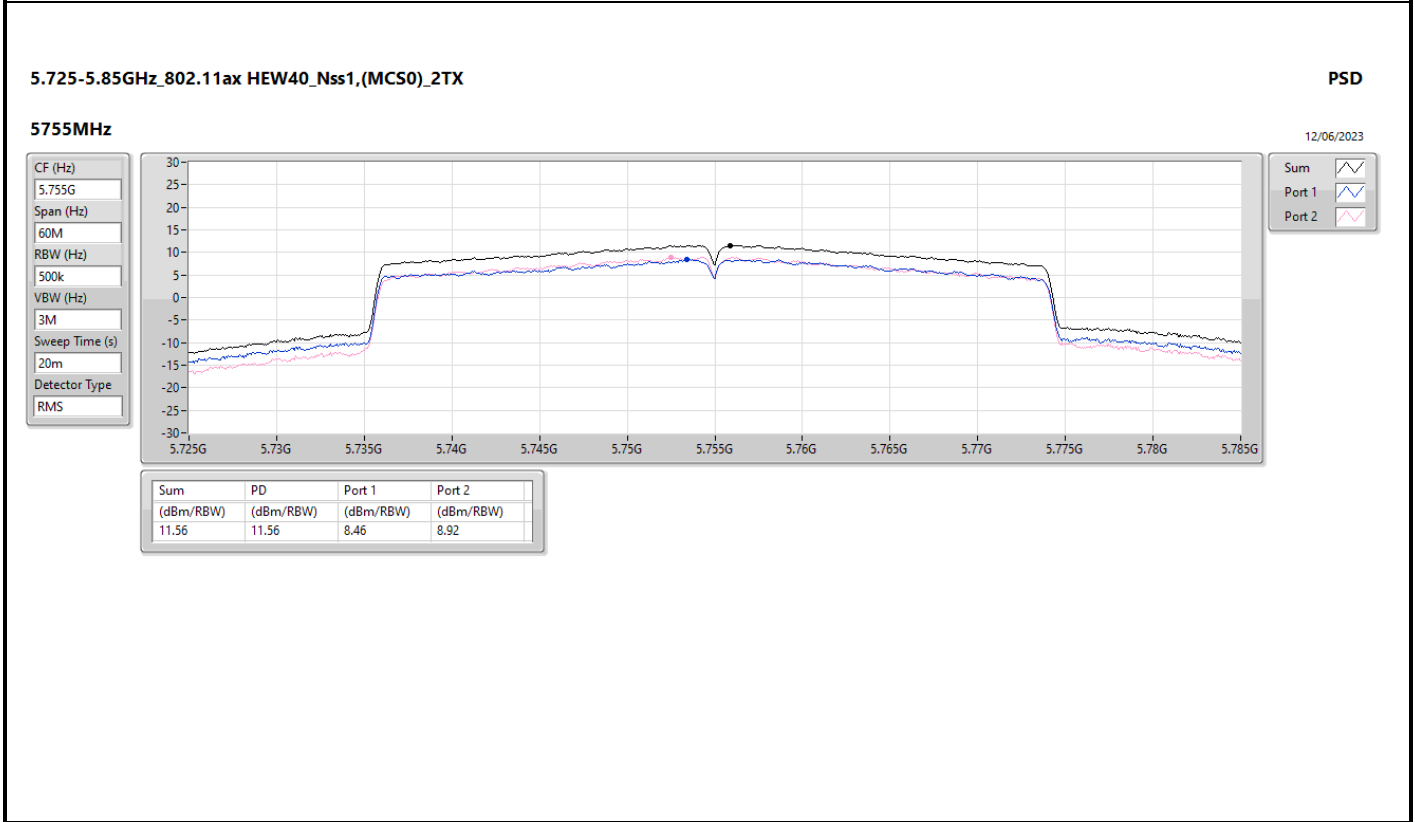
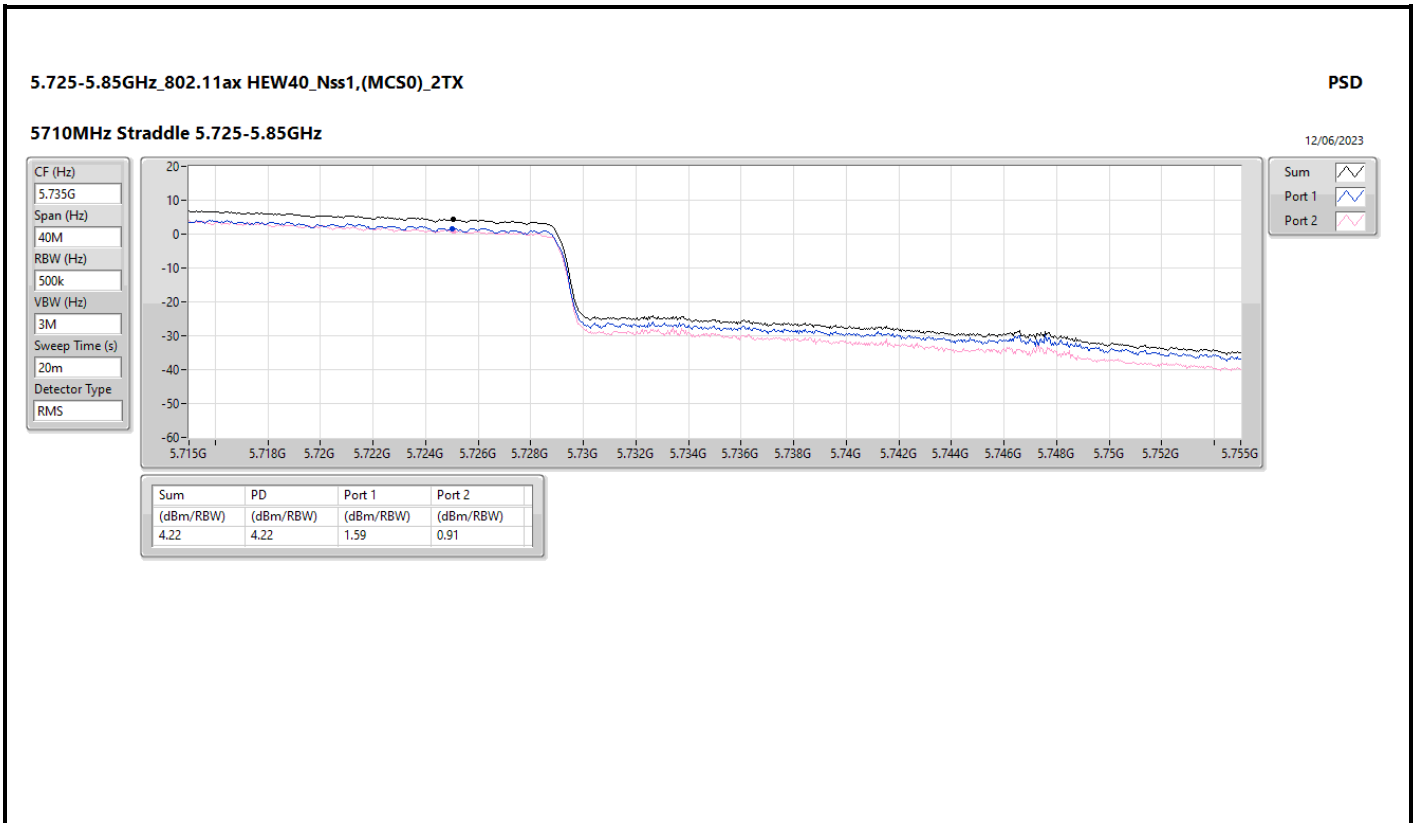


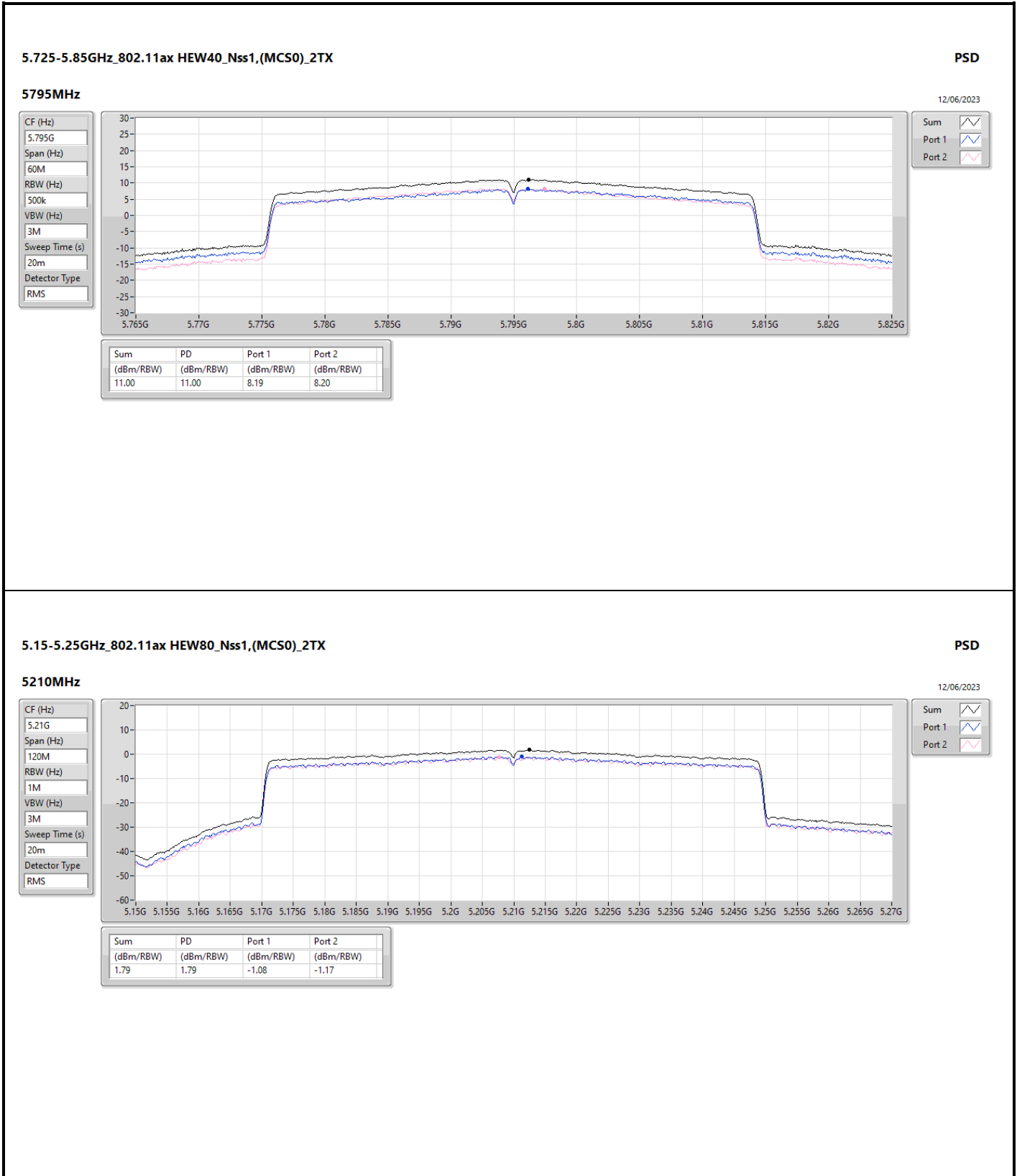


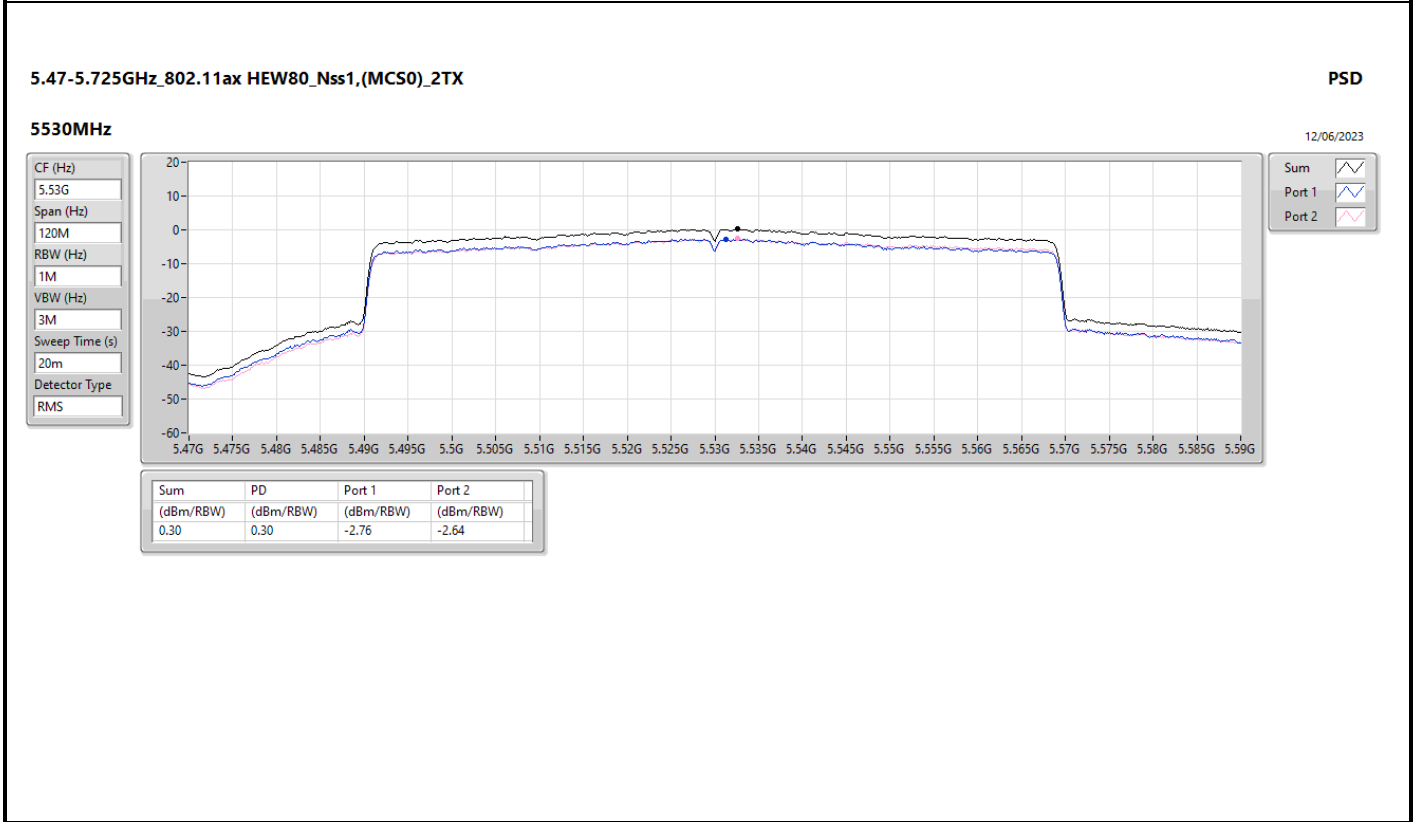
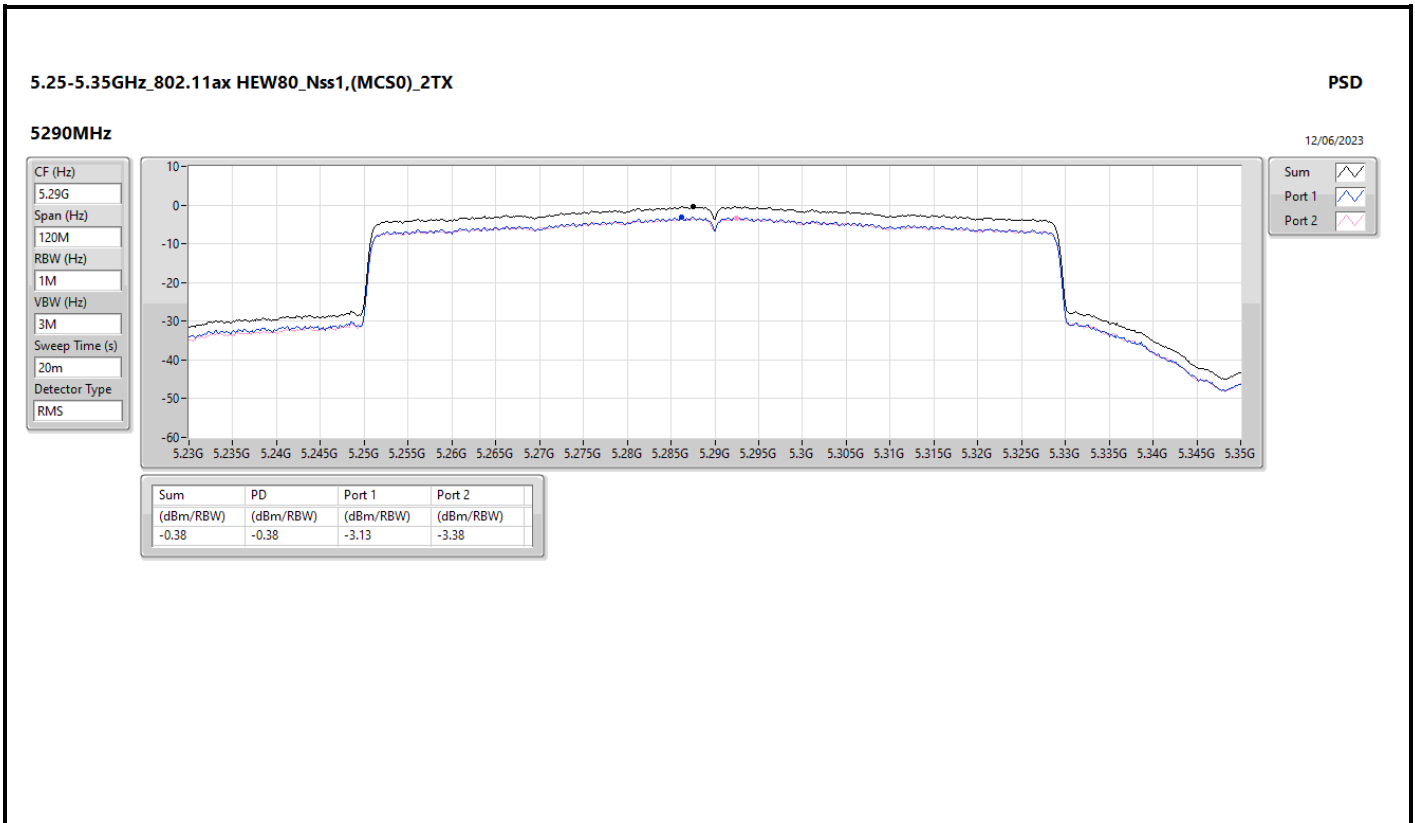


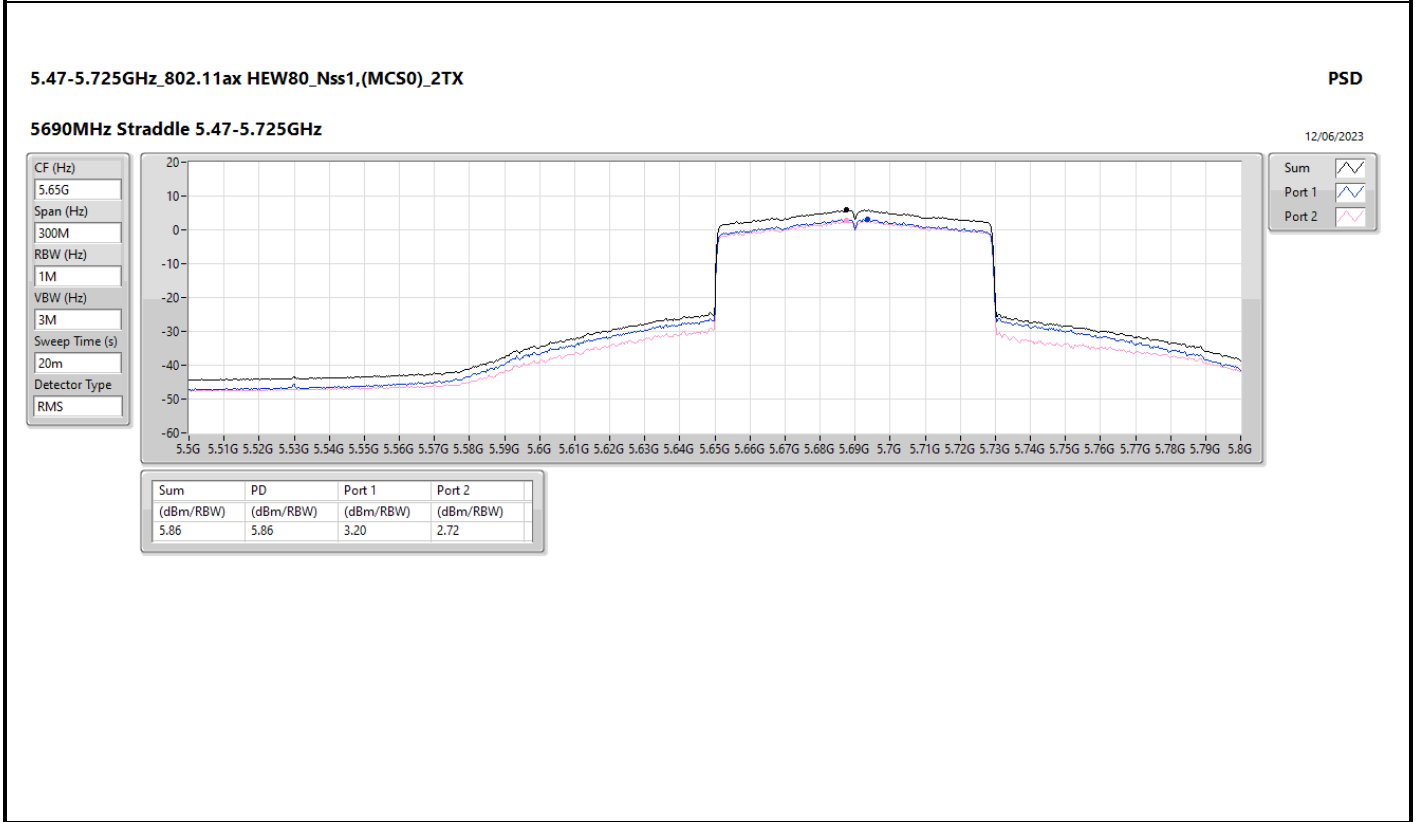
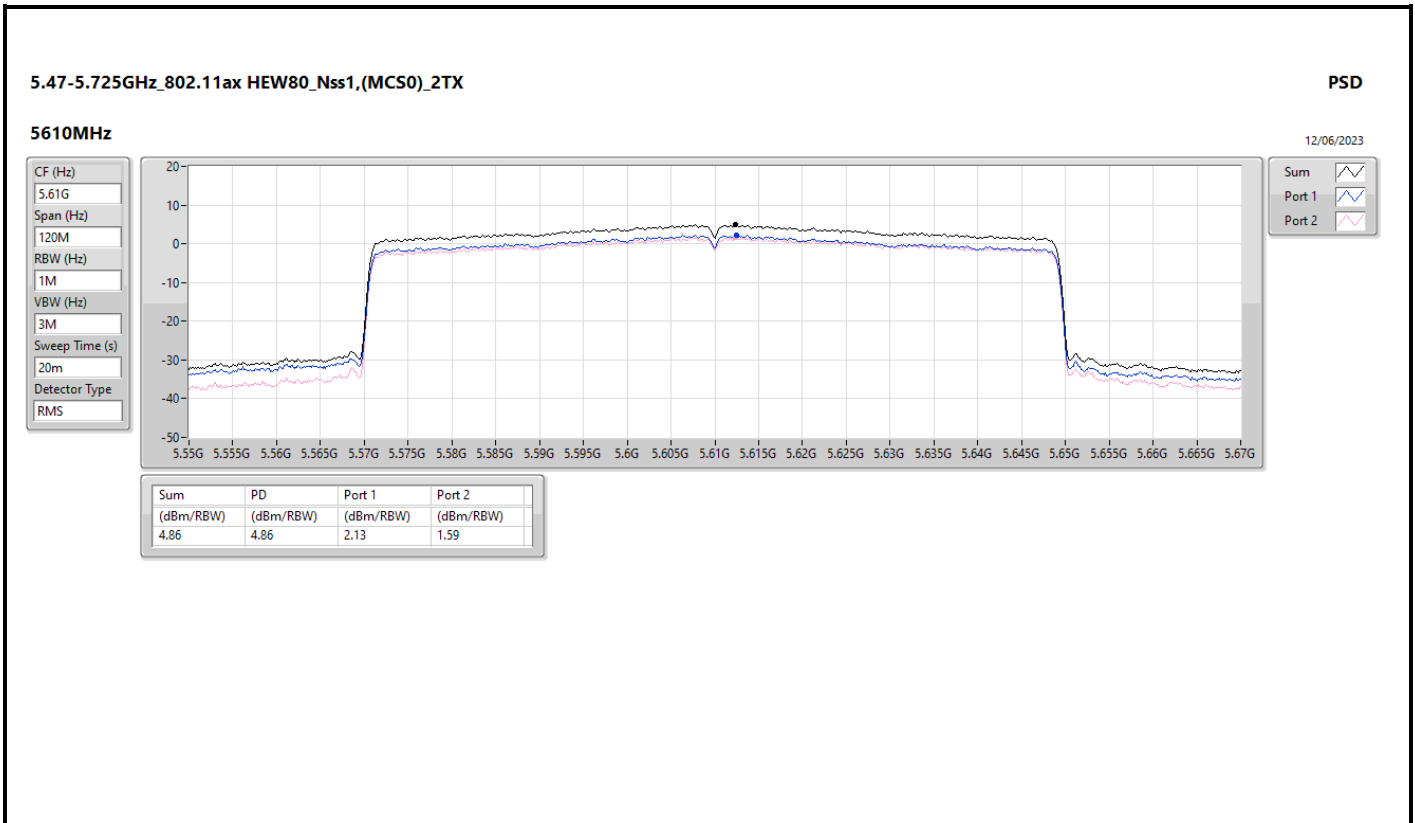


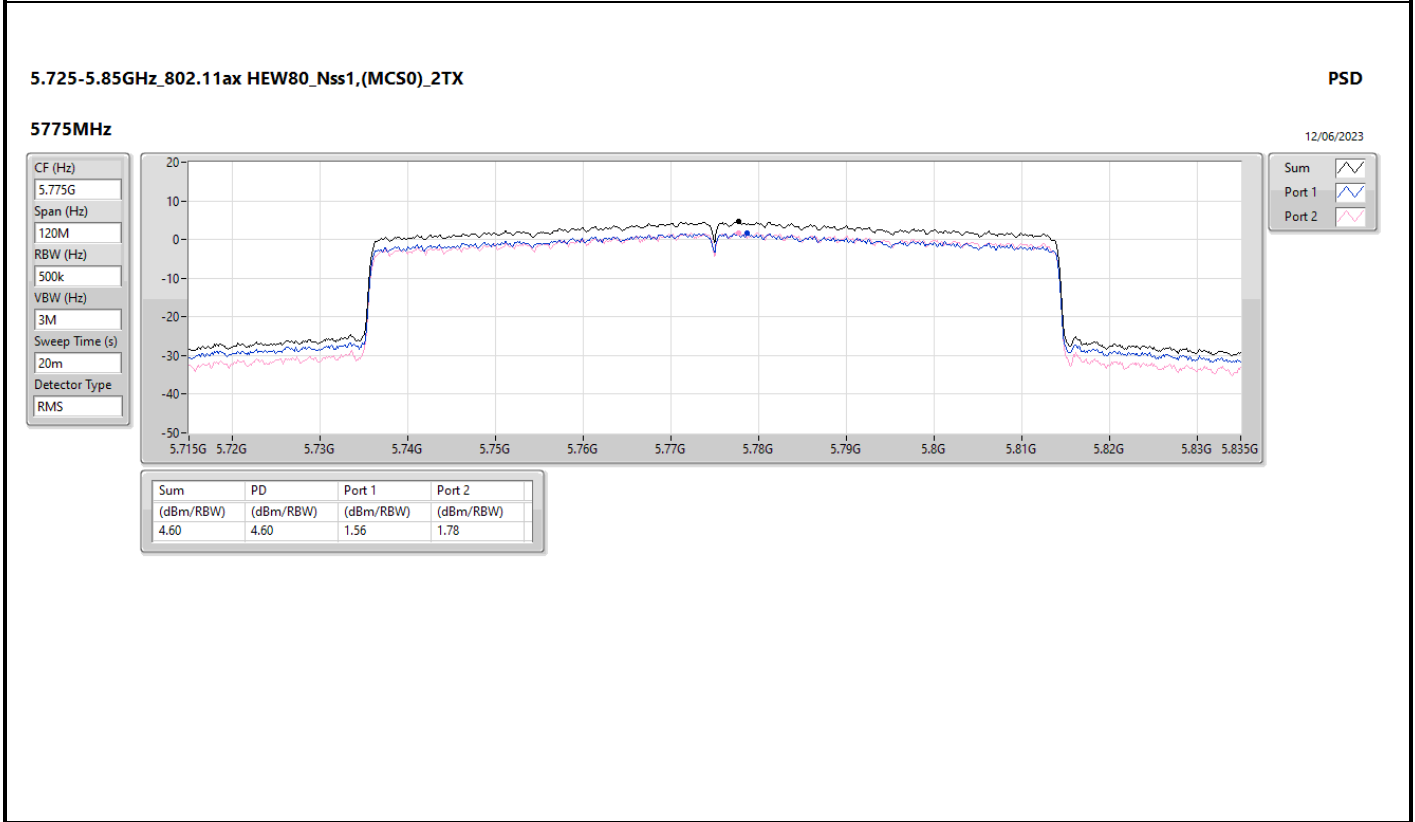
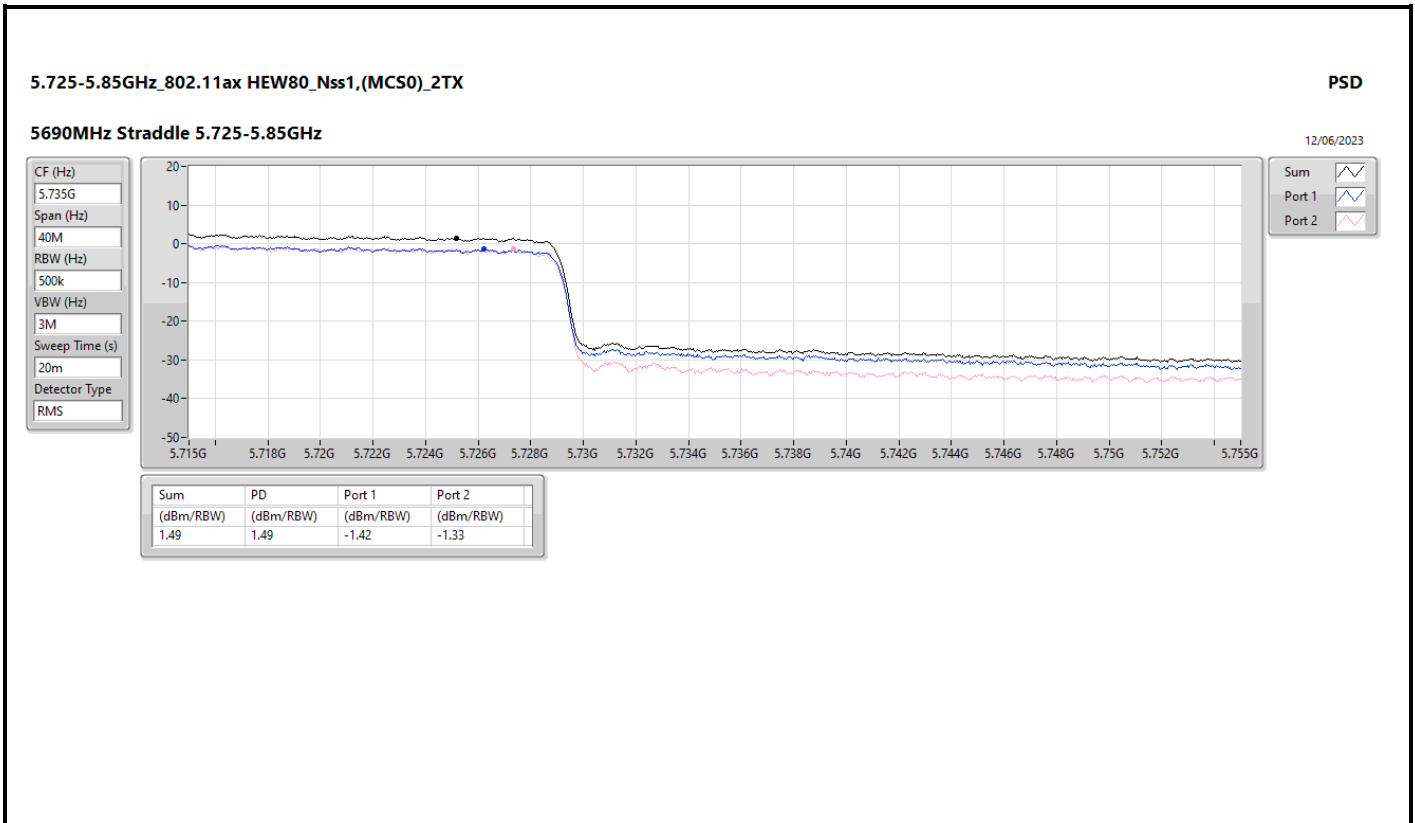


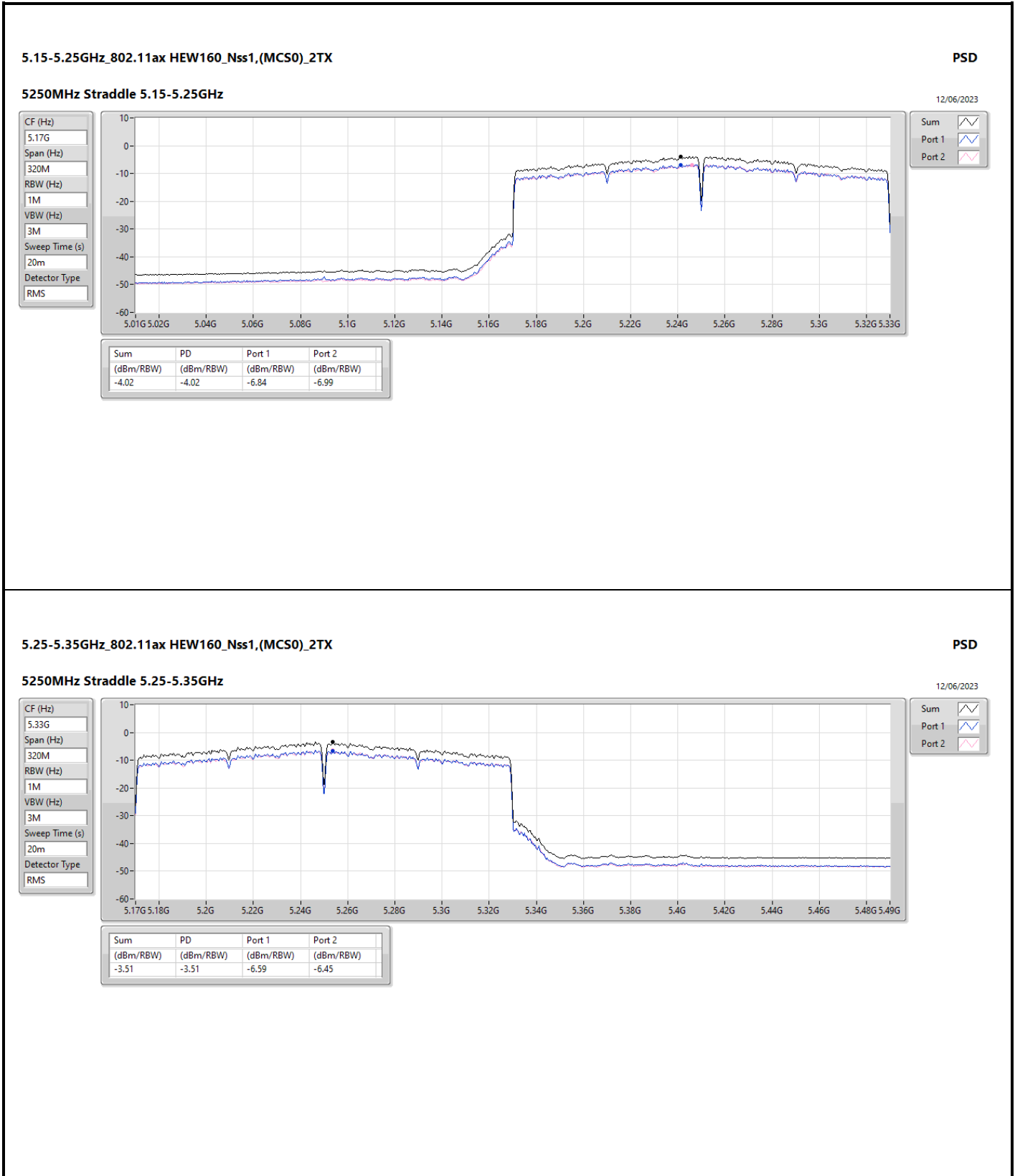












5.25-5.35GHz_802.11ax HEW160_Nss1,(MCS0)_2TX

PSD

5250MHz Straddle 5.25-5.35GHz

12/06/2023

CF (Hz)
5.33G

Span (Hz)
320M

RBW (Hz)
1M

VBW (Hz)
3M

Sweep Time (s)
20m

Detector Type
RMS

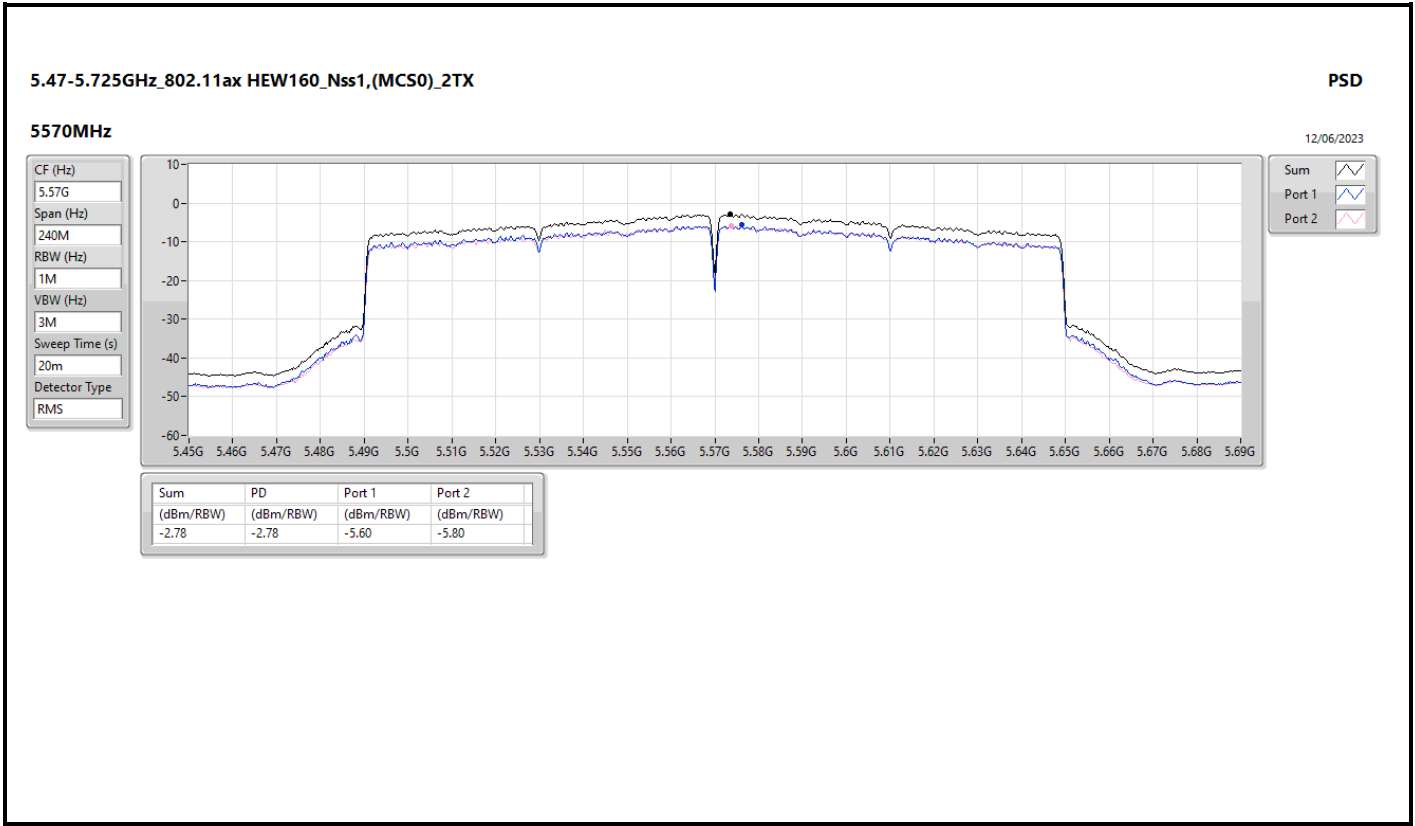


Sum

Port 1

Port 2

Sum	PD	Port 1	Port 2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-3.51	-3.51	-6.59	-6.45

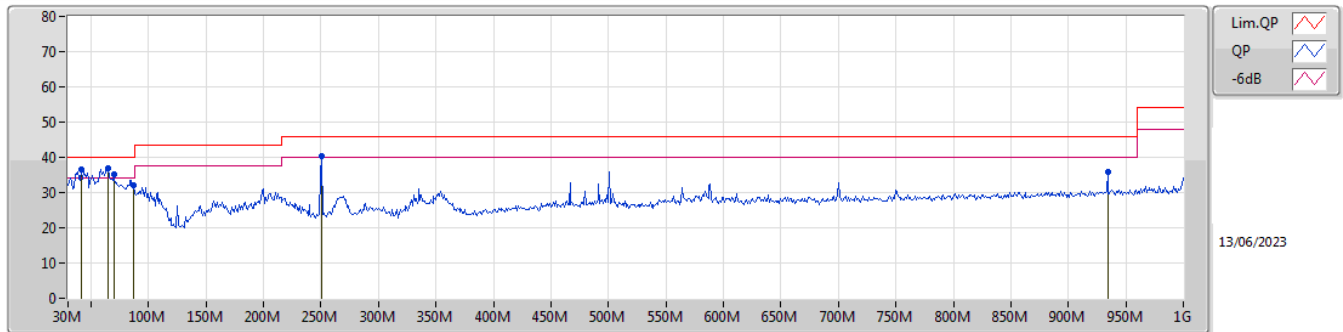




Summary

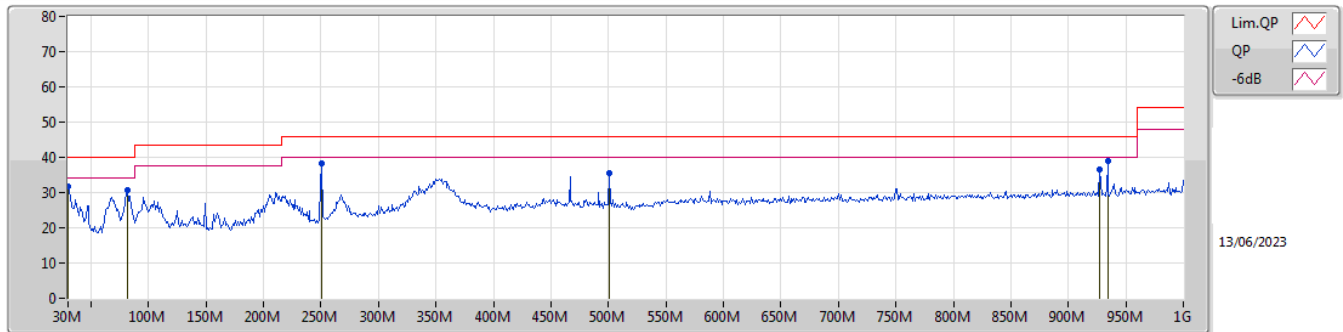
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	PK	64.92M	36.85	40.00	-3.15	Vertical

Mode 1



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	41.64M	36.42	40.00	-3.58	-26.09	3	Vertical	218	1.00	-	62.51	17.40	0.59	44.08
PK	64.92M	36.85	40.00	-3.15	-32.02	3	Vertical	68	1.25	"Worst"	68.87	11.38	0.72	44.12
PK	69.77M	35.03	40.00	-4.97	-31.91	3	Vertical	288	1.50	-	66.94	11.50	0.74	44.15
PK	87.23M	31.94	40.00	-8.06	-30.04	3	Vertical	269	1.25	-	61.98	13.38	0.81	44.23
PK	250.19M	40.40	46.00	-5.60	-25.07	3	Vertical	188	1.00	-	65.47	17.47	1.35	43.89
PK	934.04M	35.76	46.00	-10.24	-14.50	3	Vertical	192	1.50	-	50.26	25.87	2.52	42.89

Mode 1



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)
PK	30M	31.86	40.00	-8.14	-19.41	3	Horizontal	307	2.00	-	51.27	24.08	0.50	43.99
PK	81.41M	30.82	40.00	-9.18	-31.06	3	Horizontal	160	1.50	-	61.88	12.35	0.79	44.20
PK	250.19M	38.20	46.00	-7.80	-25.07	3	Horizontal	244	1.50	-	63.27	17.47	1.35	43.89
PK	500.45M	35.50	46.00	-10.50	-19.09	3	Horizontal	334	1.25	-	54.59	22.45	1.88	43.42
PK	927.25M	36.44	46.00	-9.56	-14.63	3	Horizontal	155	1.00	-	51.07	25.75	2.51	42.89
PK	934.04M	39.03	46.00	-6.97	-14.50	3	Horizontal	204	1.00	"Worst"	53.53	25.87	2.52	42.89

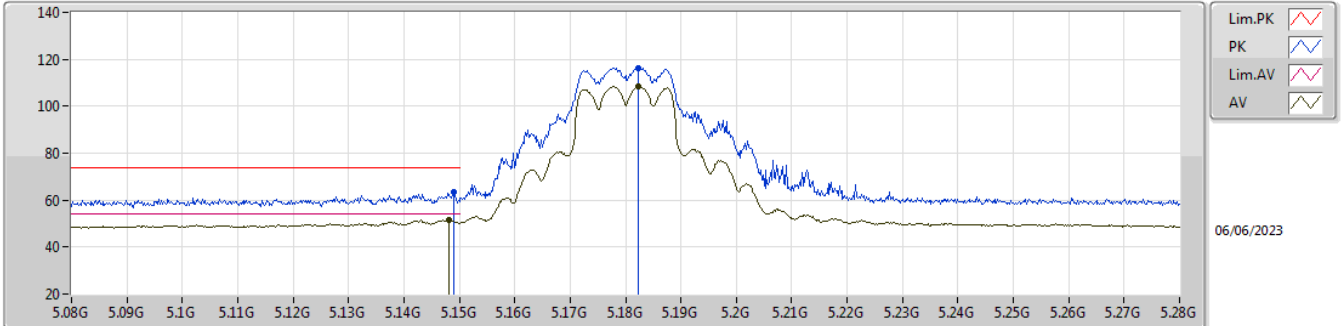


Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.25-5.35GHz	-	-	-	-	-	-	-	-	-	-	-
802.11ax HEW80_Nss1,(MCS0)_2TX	Pass	AV	5.351G	53.96	54.00	-0.04	3	Horizontal	30	1.79	-

5.15-5.25GHz_802.11a_Nss1,(6Mbps)_2TX

5180MHz_TX

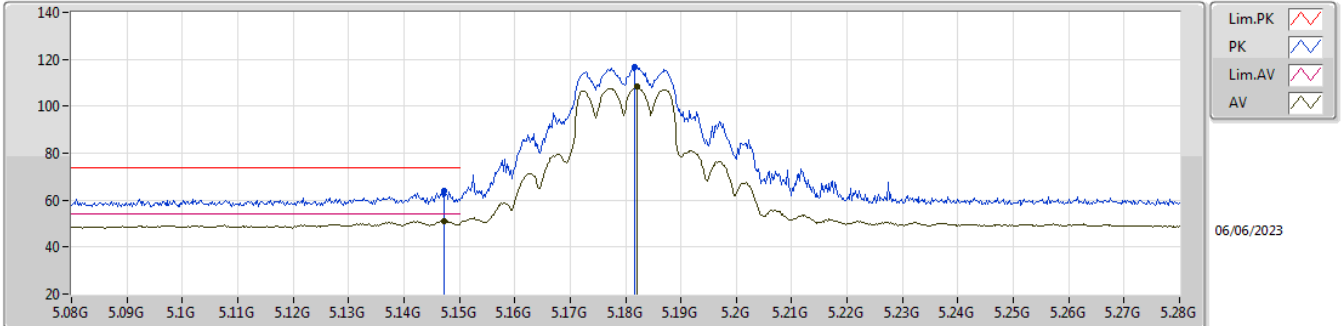


EUT Y_2TX
Setting 20
01-1-G-5-10

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	5.149G	63.25	74.00	-10.75	57.08	3	Vertical	347	1.80	-	33.10	5.97	32.90
AV	5.1482G	51.52	54.00	-2.48	45.35	3	Vertical	347	1.80	-	33.10	5.97	32.90
PK	5.1824G	116.40	Inf	-Inf	110.14	3	Vertical	347	1.80	-	33.16	5.99	32.89
AV	5.1824G	108.51	Inf	-Inf	102.25	3	Vertical	347	1.80	-	33.16	5.99	32.89

5.15-5.25GHz_802.11a_Nss1,(6Mbps)_2TX

5180MHz_TX

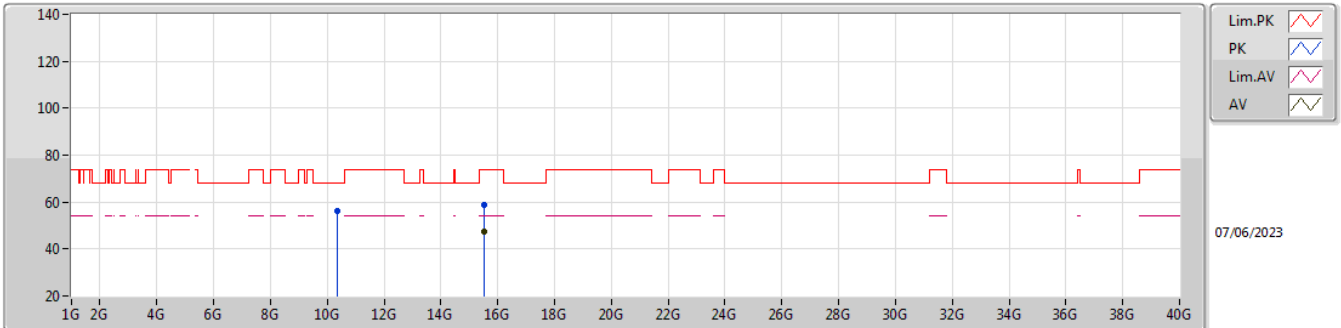


EUT Y_2TX
Setting 20
01-1-G-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1472G	63.75	74.00	-10.25	57.58	3	Horizontal	30	1.80	-	33.10	5.97	32.90
AV	5.1472G	51.23	54.00	-2.77	45.06	3	Horizontal	30	1.80	-	33.10	5.97	32.90
PK	5.1816G	116.66	Inf	-Inf	110.40	3	Horizontal	30	1.80	-	33.16	5.99	32.89
AV	5.182G	108.19	Inf	-Inf	101.93	3	Horizontal	30	1.80	-	33.16	5.99	32.89

5.15-5.25GHz_802.11a_Nss1,(6Mbps)_2TX

5180MHz_TX

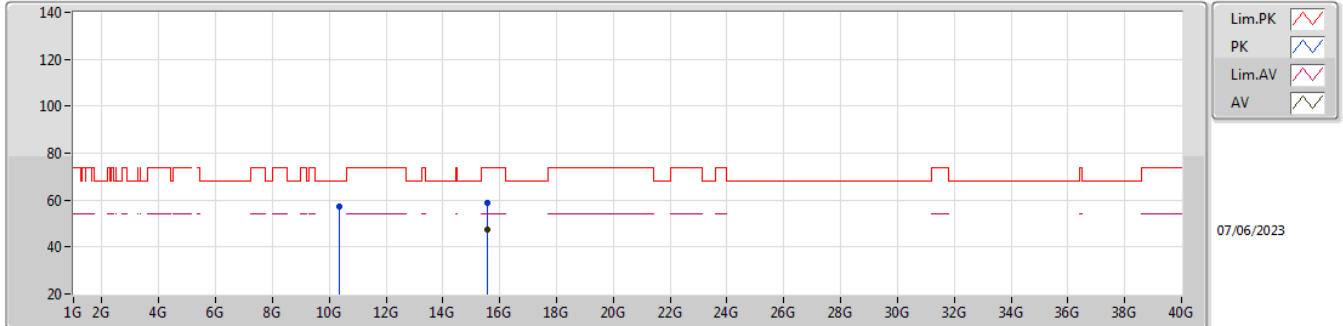


EUT_Y_2TX
Setting 20
01-1-G-5

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	10.35415G	56.00	68.20	-12.20	41.57	3	Vertical	6	1.34	-	38.71	8.44	32.72
PK	15.52569G	58.60	74.00	-15.40	41.62	3	Vertical	306	1.93	-	38.55	10.51	32.08
AV	15.5283G	47.23	54.00	-6.77	30.26	3	Vertical	306	1.93	-	38.54	10.51	32.08

5.15-5.25GHz_802.11a_Nss1,(6Mbps)_2TX

5180MHz_TX

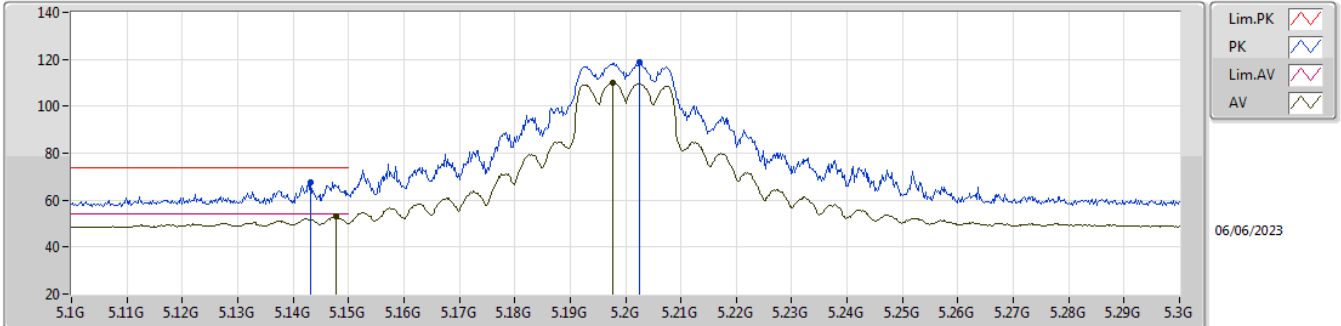


EUT_Y_2TX
Setting 20
01-1-G-5

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	10.34848G	57.01	68.20	-11.19	42.59	3	Horizontal	83	1.80	-	38.70	8.44	32.72
PK	15.55485G	58.62	74.00	-15.38	41.71	3	Horizontal	250	1.97	-	38.49	10.52	32.10
AV	15.55353G	47.25	54.00	-6.75	30.33	3	Horizontal	250	1.97	-	38.49	10.52	32.09

5.15-5.25GHz_802.11a_Nss1,(6Mbps)_2TX

5200MHz_TX

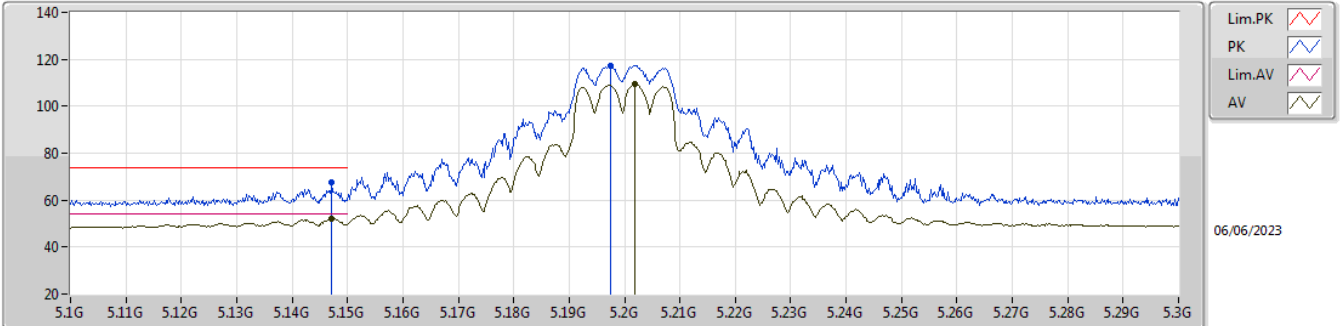


EUT Y_2TX
Setting 21
01-1-G-5-10

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	5.1432G	67.55	74.00	-6.45	61.38	3	Vertical	347	1.80	-	33.10	5.97	32.90
AV	5.1478G	52.91	54.00	-1.09	46.74	3	Vertical	347	1.80	-	33.10	5.97	32.90
PK	5.2026G	118.58	Inf	-Inf	112.26	3	Vertical	347	1.80	-	33.21	6.00	32.89
AV	5.1976G	110.02	Inf	-Inf	103.71	3	Vertical	347	1.80	-	33.20	6.00	32.89

5.15-5.25GHz_802.11a_Nss1,(6Mbps)_2TX

5200MHz_TX

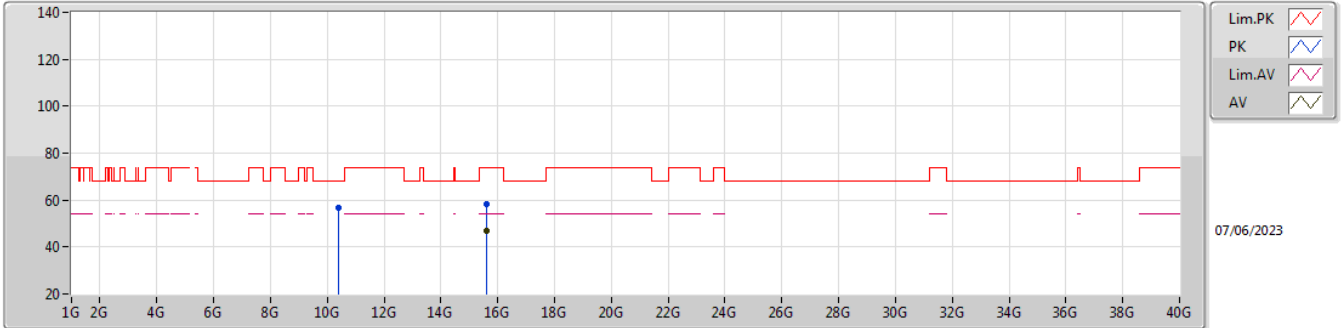


EUT Y_2TX
Setting 21
01-1-G-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1472G	67.33	74.00	-6.67	61.16	3	Horizontal	31	1.80	-	33.10	5.97	32.90
AV	5.147G	52.29	54.00	-1.71	46.12	3	Horizontal	31	1.80	-	33.10	5.97	32.90
PK	5.1974G	117.44	Inf	-Inf	111.14	3	Horizontal	31	1.80	-	33.19	6.00	32.89
AV	5.2018G	109.42	Inf	-Inf	103.11	3	Horizontal	31	1.80	-	33.20	6.00	32.89

5.15-5.25GHz_802.11a_Nss1,(6Mbps)_2TX

5200MHz_TX

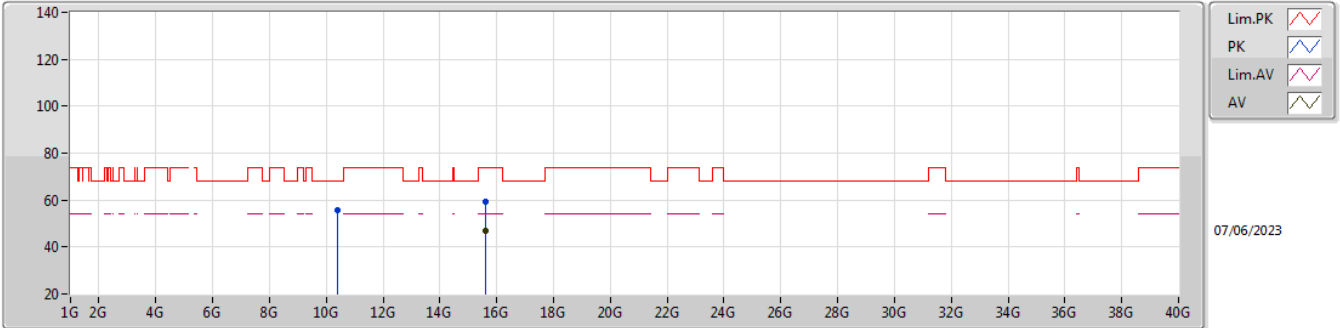


EUT_Y_2TX
Setting 21
01-1-G-5

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	10.39793G	56.77	68.20	-11.43	42.17	3	Vertical	307	1.88	-	38.80	8.46	32.66
PK	15.60114G	58.39	74.00	-15.61	41.57	3	Vertical	343	1.81	-	38.40	10.54	32.12
AV	15.61035G	47.15	54.00	-6.85	30.35	3	Vertical	343	1.81	-	38.39	10.54	32.13

5.15-5.25GHz_802.11a_Nss1,(6Mbps)_2TX

5200MHz_TX

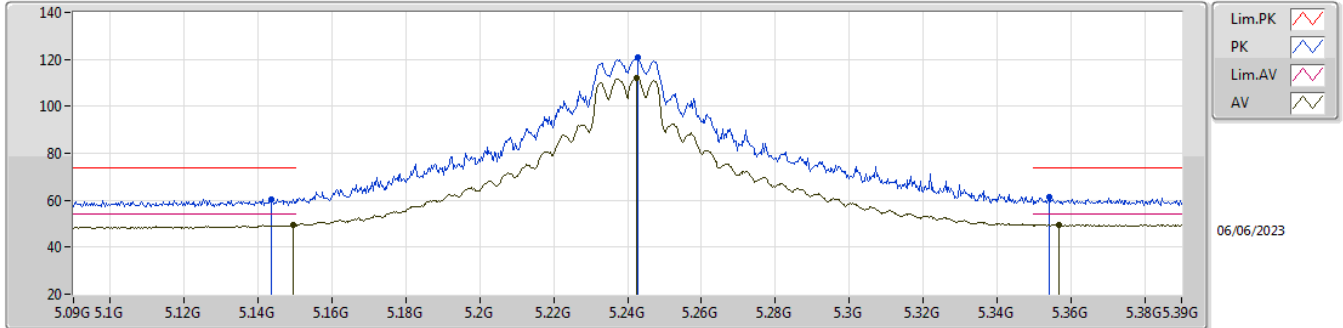


EUT_Y_2TX
Setting 21
01-1-G-5

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	10.40195G	55.59	68.20	-12.61	40.99	3	Horizontal	22	1.95	-	38.80	8.46	32.66
PK	15.60744G	59.13	74.00	-14.87	42.33	3	Horizontal	72	1.47	-	38.39	10.54	32.13
AV	15.61242G	47.06	54.00	-6.94	30.26	3	Horizontal	72	1.47	-	38.39	10.54	32.13

5.15-5.25GHz_802.11a_Nss1,(6Mbps)_2TX

5240MHz_TX

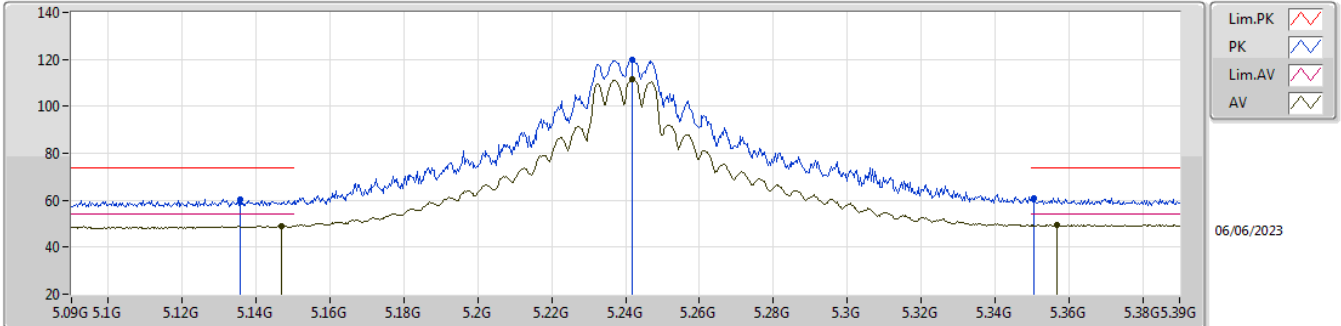


EUT_Y_2TX
Setting 22.5
01-1-G-5-10

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	5.1434G	60.50	74.00	-13.50	54.33	3	Vertical	350	1.78	-	33.10	5.97	32.90
AV	5.1494G	49.35	54.00	-4.65	43.18	3	Vertical	350	1.78	-	33.10	5.97	32.90
PK	5.2427G	120.61	Inf	-Inf	114.18	3	Vertical	350	1.78	-	33.29	6.02	32.88
AV	5.2424G	112.06	Inf	-Inf	105.64	3	Vertical	350	1.78	-	33.28	6.02	32.88
PK	5.3543G	61.30	74.00	-12.70	54.56	3	Vertical	350	1.78	-	33.52	6.08	32.86
AV	5.3567G	49.56	54.00	-4.44	42.81	3	Vertical	350	1.78	-	33.53	6.08	32.86

5.15-5.25GHz_802.11a_Nss1,(6Mbps)_2TX

5240MHz_TX

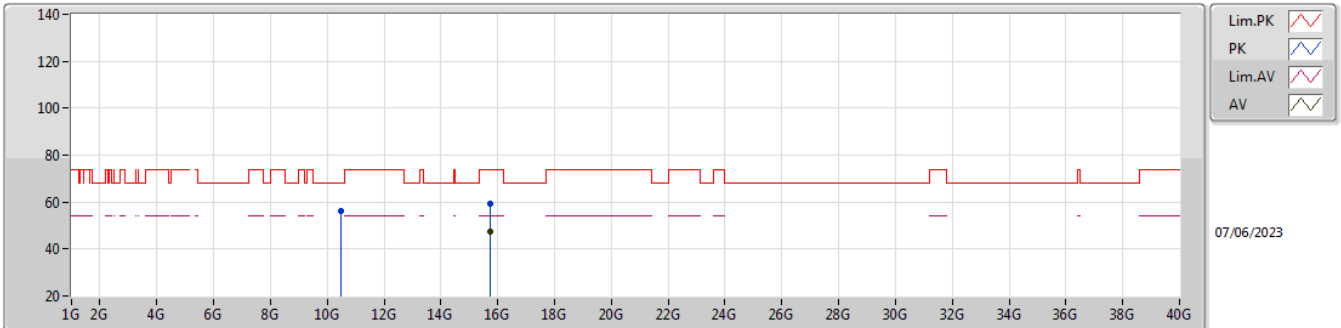


EUT Y_2TX
 Setting 22.5
 01-1-G-5-10

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	5.1356G	60.52	74.00	-13.48	54.35	3	Horizontal	33	1.79	-	33.10	5.97	32.90
AV	5.147G	48.96	54.00	-5.04	42.79	3	Horizontal	33	1.79	-	33.10	5.97	32.90
PK	5.2418G	120.07	Inf	-Inf	113.65	3	Horizontal	33	1.79	-	33.28	6.02	32.88
AV	5.2418G	111.45	Inf	-Inf	105.03	3	Horizontal	33	1.79	-	33.28	6.02	32.88
PK	5.3507G	61.11	74.00	-12.89	54.39	3	Horizontal	33	1.79	-	33.50	6.08	32.86
AV	5.3567G	49.56	54.00	-4.44	42.81	3	Horizontal	33	1.79	-	33.53	6.08	32.86

5.15-5.25GHz_802.11a_Nss1,(6Mbps)_2TX

5240MHz_TX

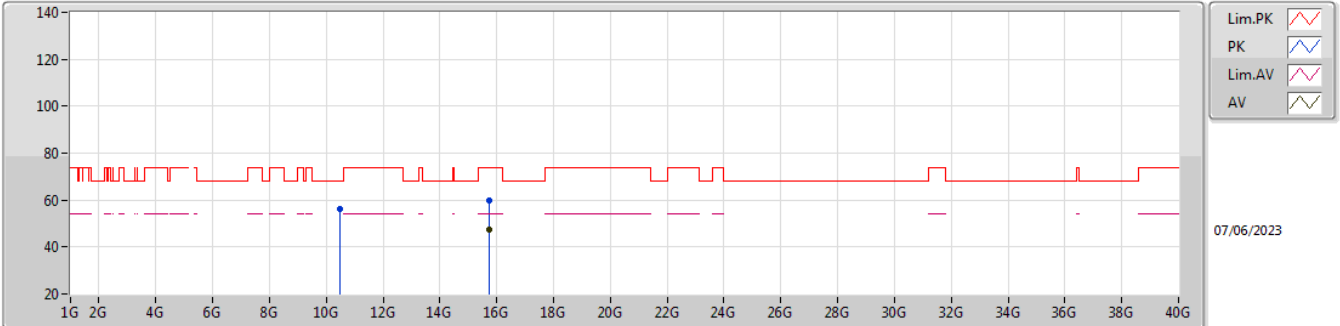


EUT Y_2TX
Setting 22.5
01-1-G-5

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	10.47103G	56.41	68.20	-11.79	41.70	3	Vertical	207	1.36	-	38.80	8.49	32.58
PK	15.7275G	59.50	74.00	-14.50	42.74	3	Vertical	240	1.48	-	38.38	10.59	32.21
AV	15.72432G	47.63	54.00	-6.37	30.87	3	Vertical	240	1.48	-	38.37	10.59	32.20

5.15-5.25GHz_802.11a_Nss1,(6Mbps)_2TX

5240MHz_TX

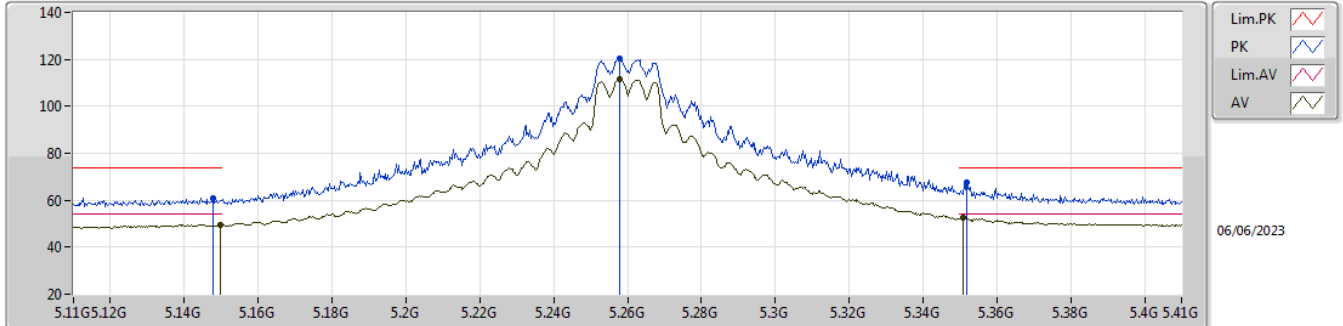


EUT Y_2TX
Setting 22.5
01-1-G-5

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	10.47253G	56.46	68.20	-11.74	41.74	3	Horizontal	120	1.95	-	38.80	8.49	32.57
PK	15.72639G	59.72	74.00	-14.28	42.95	3	Horizontal	130	1.39	-	38.38	10.59	32.20
AV	15.72612G	47.57	54.00	-6.43	30.80	3	Horizontal	130	1.39	-	38.38	10.59	32.20

5.25-5.35GHz_802.11a_Nss1,(6Mbps)_2TX

5260MHz_TX

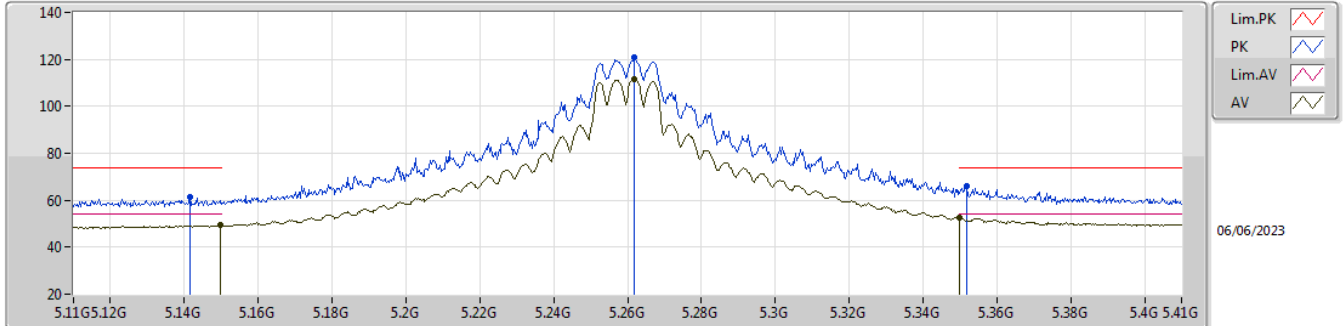


EUT_Y_2TX
Setting 22.5
01-1-G-5-10

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	5.1478G	61.06	74.00	-12.94	54.89	3	Vertical	346	1.76	-	33.10	5.97	32.90
AV	5.1499G	49.53	54.00	-4.47	43.36	3	Vertical	346	1.76	-	33.10	5.97	32.90
PK	5.2579G	120.42	Inf	-Inf	113.95	3	Vertical	346	1.76	-	33.32	6.03	32.88
AV	5.2579G	111.50	Inf	-Inf	105.03	3	Vertical	346	1.76	-	33.32	6.03	32.88
PK	5.3518G	67.37	74.00	-6.63	60.64	3	Vertical	346	1.76	-	33.51	6.08	32.86
AV	5.3509G	52.63	54.00	-1.37	45.91	3	Vertical	346	1.76	-	33.50	6.08	32.86

5.25-5.35GHz_802.11a_Nss1,(6Mbps)_2TX

5260MHz_TX

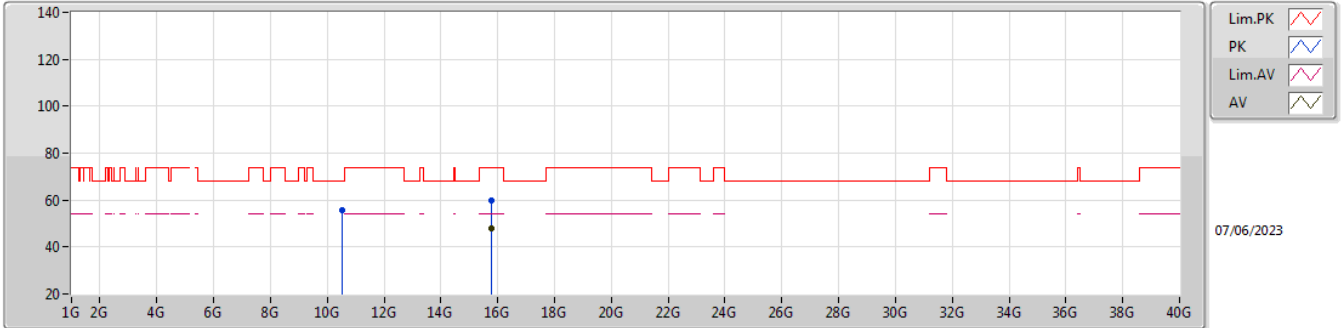


EUT Y_2TX
Setting 22.5
01-1-G-5-10

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	5.1415G	61.32	74.00	-12.68	55.15	3	Horizontal	31	1.80	-	33.10	5.97	32.90
AV	5.1499G	49.35	54.00	-4.65	43.18	3	Horizontal	31	1.80	-	33.10	5.97	32.90
PK	5.2618G	120.64	Inf	-Inf	114.17	3	Horizontal	31	1.80	-	33.32	6.03	32.88
AV	5.2618G	111.47	Inf	-Inf	105.00	3	Horizontal	31	1.80	-	33.32	6.03	32.88
PK	5.3518G	66.21	74.00	-7.79	59.48	3	Horizontal	31	1.80	-	33.51	6.08	32.86
AV	5.35G	52.36	54.00	-1.64	45.64	3	Horizontal	31	1.80	-	33.50	6.08	32.86

5.25-5.35GHz_802.11a_Nss1,(6Mbps)_2TX

5260MHz_TX

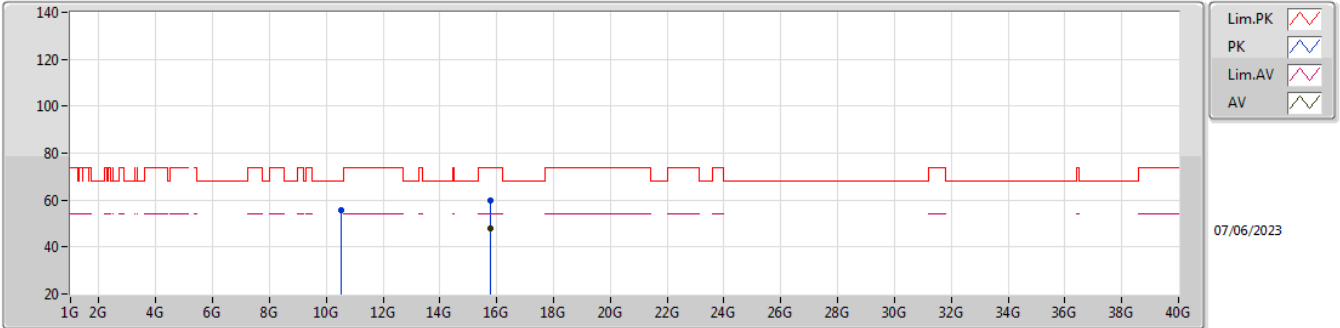


EUT Y_2TX
 Setting 22.5
 01-1-G-5

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	10.51907G	55.77	68.20	-12.43	41.00	3	Vertical	340	1.35	-	38.80	8.51	32.54
PK	15.77535G	59.74	74.00	-14.26	42.84	3	Vertical	333	1.63	-	38.53	10.61	32.24
AV	15.77595G	48.03	54.00	-5.97	31.13	3	Vertical	333	1.63	-	38.53	10.61	32.24

5.25-5.35GHz_802.11a_Nss1,(6Mbps)_2TX

5260MHz_TX

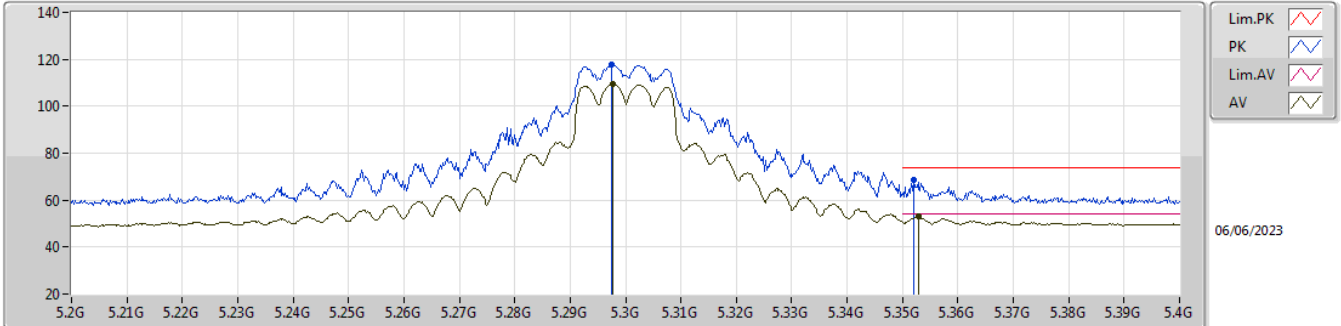


EUT Y_2TX
Setting 22.5
01-1-G-5

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	10.52594G	55.52	68.20	-12.68	40.75	3	Horizontal	113	1.83	-	38.80	8.51	32.54
PK	15.78999G	60.02	74.00	-13.98	43.08	3	Horizontal	284	1.48	-	38.57	10.62	32.25
AV	15.77604G	48.03	54.00	-5.97	31.13	3	Horizontal	284	1.48	-	38.53	10.61	32.24

5.25-5.35GHz_802.11a_Nss1,(6Mbps)_2TX

5300MHz_TX

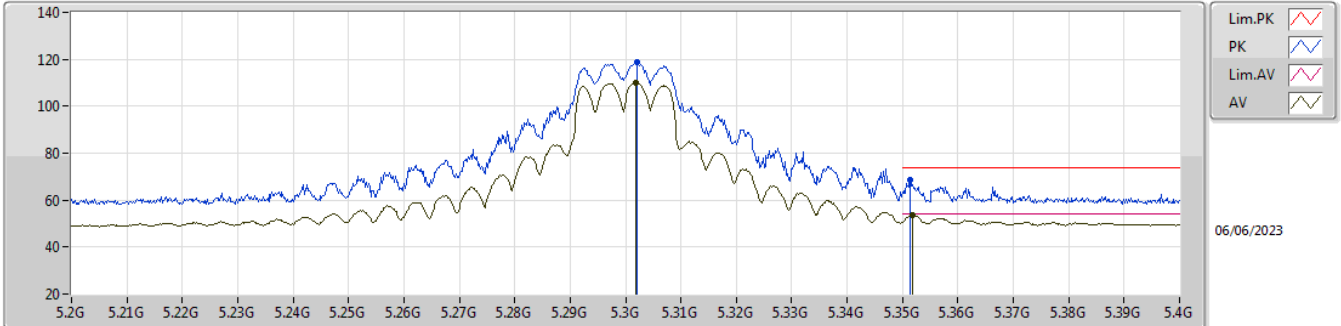


EUT_V_2TX
 Setting 20.5
 01-1-G-5-10

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	5.2974G	117.63	Inf	-Inf	111.06	3	Vertical	348	1.73	-	33.39	6.05	32.87
AV	5.2978G	109.70	Inf	-Inf	103.12	3	Vertical	348	1.73	-	33.40	6.05	32.87
PK	5.352G	68.41	74.00	-5.59	61.68	3	Vertical	348	1.73	-	33.51	6.08	32.86
AV	5.353G	52.91	54.00	-1.09	46.18	3	Vertical	348	1.73	-	33.51	6.08	32.86

5.25-5.35GHz_802.11a_Nss1,(6Mbps)_2TX

5300MHz_TX

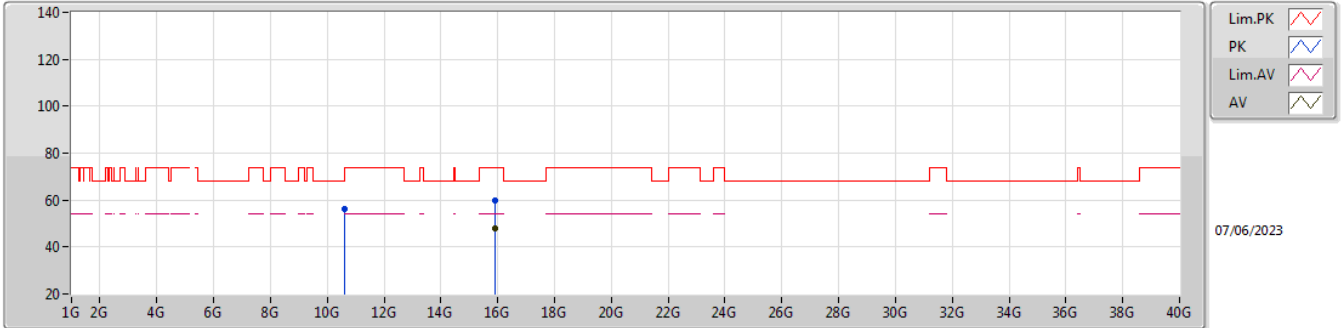


EUT_V_2TX
 Setting 20.5
 01-1-G-5-10

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	5.302G	118.56	Inf	-Inf	111.98	3	Horizontal	35	1.73	-	33.40	6.05	32.87
AV	5.3018G	110.20	Inf	-Inf	103.62	3	Horizontal	35	1.73	-	33.40	6.05	32.87
PK	5.3514G	68.70	74.00	-5.30	61.97	3	Horizontal	35	1.73	-	33.51	6.08	32.86
AV	5.3518G	53.52	54.00	-0.48	46.79	3	Horizontal	35	1.73	-	33.51	6.08	32.86

5.25-5.35GHz_802.11a_Nss1,(6Mbps)_2TX

5300MHz_TX

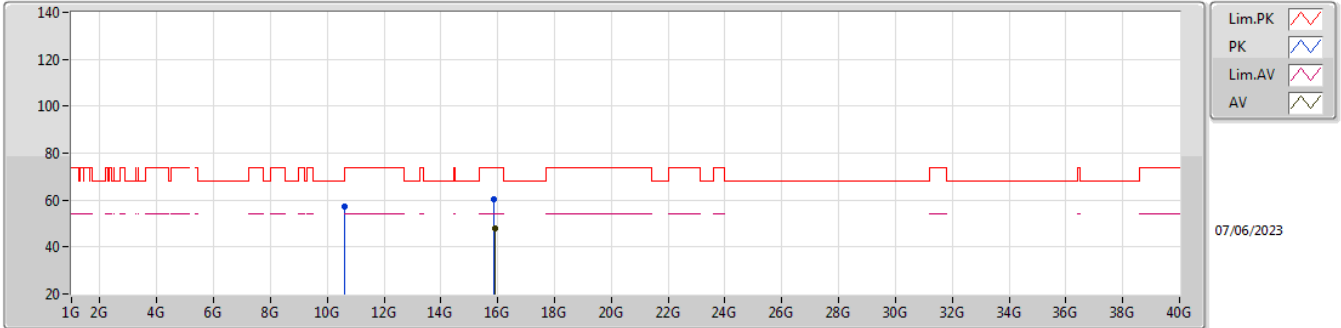


EUT Y_2TX
 Setting 20.5
 01-1-G-5

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	10.59417G	56.27	68.20	-11.93	41.47	3	Vertical	259	1.50	-	38.80	8.54	32.54
PK	15.91179G	59.74	74.00	-14.26	42.58	3	Vertical	223	1.31	-	38.82	10.66	32.32
AV	15.91353G	48.01	54.00	-5.99	30.83	3	Vertical	223	1.31	-	38.83	10.67	32.32

5.25-5.35GHz_802.11a_Nss1,(6Mbps)_2TX

5300MHz_TX

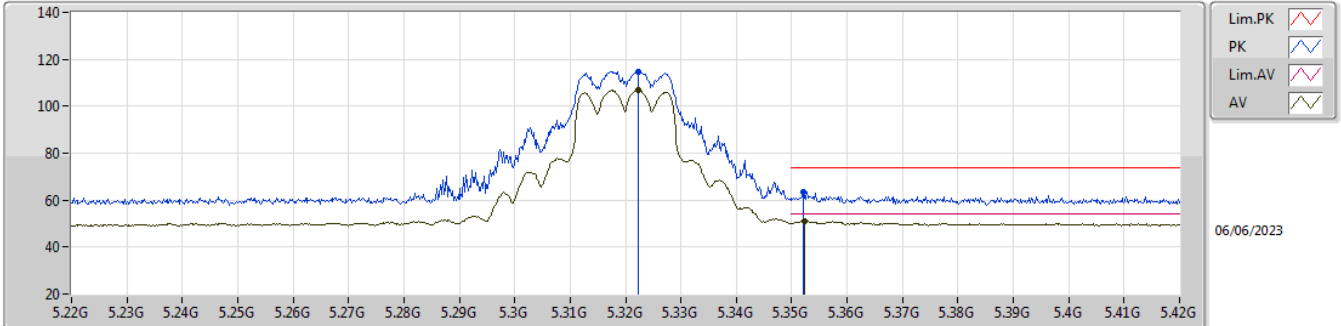


EUT Y_2TX
Setting 20.5
01-1-G-5

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	10.59276G	57.19	68.20	-11.01	42.39	3	Horizontal	316	2.97	-	38.80	8.54	32.54
PK	15.88572G	60.22	74.00	-13.78	43.11	3	Horizontal	322	1.82	-	38.77	10.65	32.31
AV	15.89115G	48.11	54.00	-5.89	30.98	3	Horizontal	322	1.82	-	38.78	10.66	32.31

5.25-5.35GHz_802.11a_Nss1,(6Mbps)_2TX

5320MHz_TX

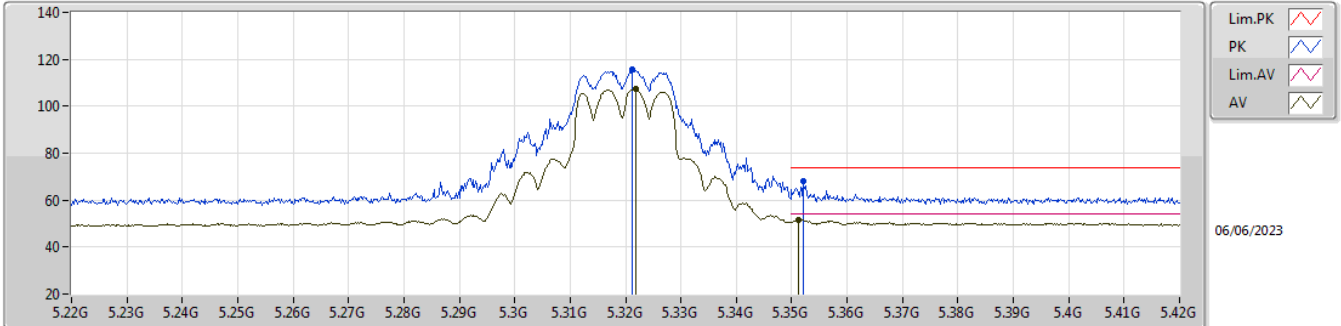


EUT_Y_2TX
Setting 18
01-1-G-5-10

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	114.76	Inf	-Inf	108.13	3	Vertical	353	1.80	-	33.44	6.06	32.87
AV	5.3224G	106.91	Inf	-Inf	100.28	3	Vertical	353	1.80	-	33.44	6.06	32.87
PK	5.3522G	63.26	74.00	-10.74	56.53	3	Vertical	353	1.80	-	33.51	6.08	32.86
AV	5.3524G	51.07	54.00	-2.93	44.34	3	Vertical	353	1.80	-	33.51	6.08	32.86

5.25-5.35GHz_802.11a_Nss1,(6Mbps)_2TX

5320MHz_TX

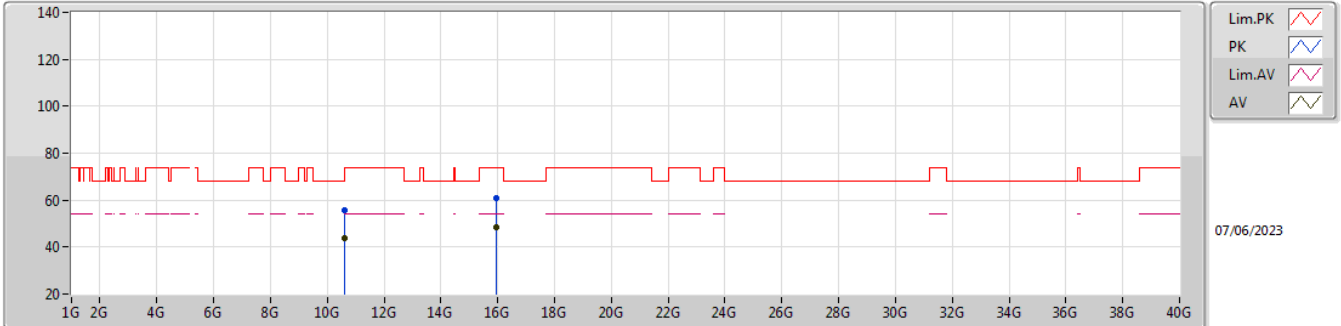


EUT Y_2TX
Setting 18
01-1-G-5-10

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	5.3212G	115.73	Inf	-Inf	109.10	3	Horizontal	28	1.76	-	33.44	6.06	32.87
AV	5.3218G	107.30	Inf	-Inf	100.67	3	Horizontal	28	1.76	-	33.44	6.06	32.87
PK	5.352G	68.28	74.00	-5.72	61.55	3	Horizontal	28	1.76	-	33.51	6.08	32.86
AV	5.3512G	51.66	54.00	-2.34	44.94	3	Horizontal	28	1.76	-	33.50	6.08	32.86

5.25-5.35GHz_802.11a_Nss1,(6Mbps)_2TX

5320MHz_TX

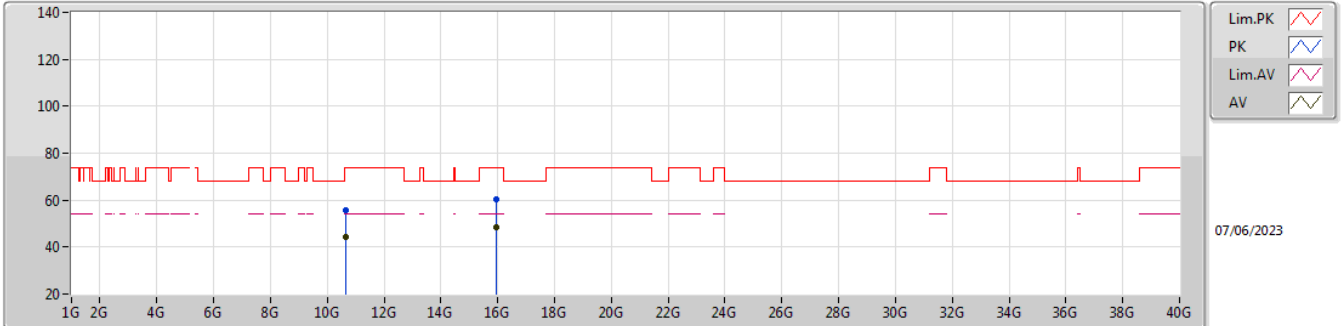


EUT_Y_2TX
Setting 18
01-1-G-5

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	10.62719G	55.57	74.00	-18.43	40.76	3	Vertical	162	1.34	-	38.80	8.55	32.54
AV	10.63055G	43.96	54.00	-10.04	29.15	3	Vertical	162	1.34	-	38.80	8.55	32.54
PK	15.96819G	60.76	74.00	-13.24	43.49	3	Vertical	12	1.55	-	38.94	10.69	32.36
AV	15.96279G	48.45	54.00	-5.55	31.19	3	Vertical	12	1.55	-	38.93	10.69	32.36

5.25-5.35GHz_802.11a_Nss1,(6Mbps)_2TX

5320MHz_TX

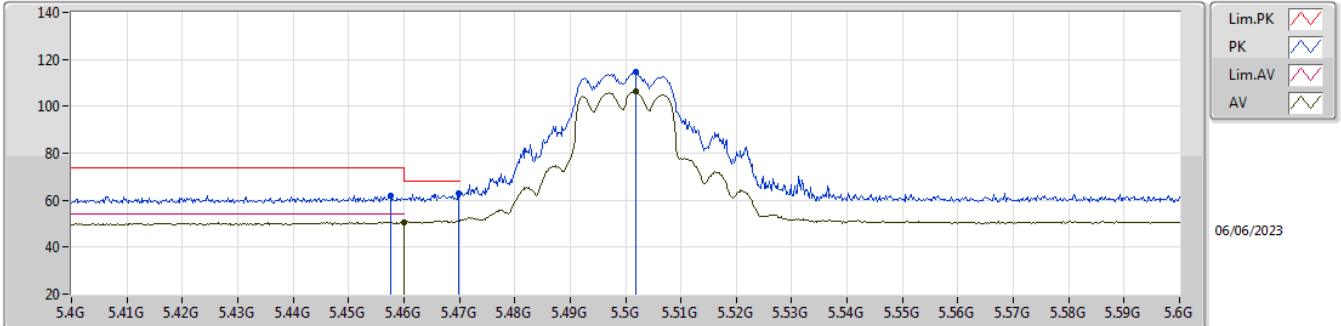


EUT Y_2TX
Setting 18
01-1-G-5

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	10.65401G	55.75	74.00	-18.25	40.93	3	Horizontal	229	2.76	-	38.80	8.56	32.54
AV	10.63706G	44.06	54.00	-9.94	29.25	3	Horizontal	229	2.76	-	38.80	8.55	32.54
PK	15.96051G	60.14	74.00	-13.86	42.89	3	Horizontal	39	1.79	-	38.92	10.68	32.35
AV	15.96255G	48.59	54.00	-5.41	31.33	3	Horizontal	39	1.79	-	38.93	10.69	32.36

5.47-5.725GHz_802.11a_Nss1,(6Mbps)_2TX

5500MHz_TX

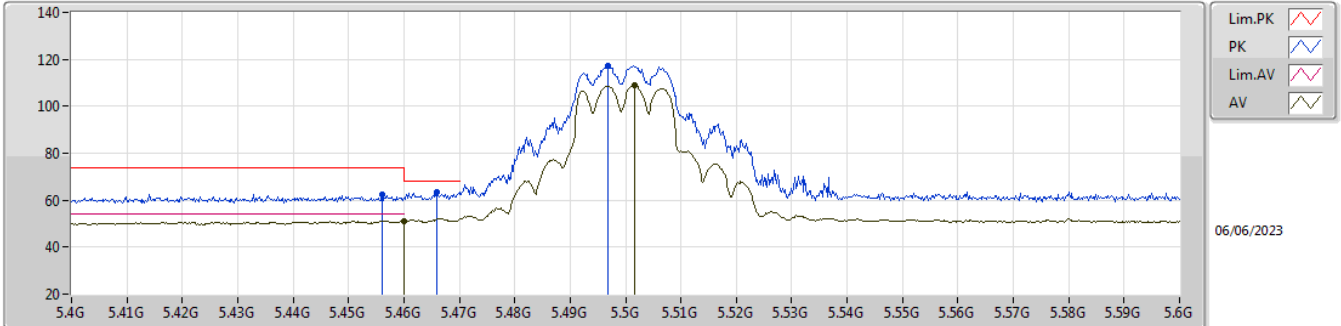


EUT Y_2TX
 Setting 18.5
 01-1-G-5-10

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	5.4576G	61.90	74.00	-12.10	54.68	3	Vertical	360	1.80	-	33.93	6.13	32.84
AV	5.46G	50.50	54.00	-3.50	43.27	3	Vertical	360	1.80	-	33.94	6.13	32.84
PK	5.4698G	62.80	68.20	-5.40	55.53	3	Vertical	360	1.80	-	33.98	6.13	32.84
PK	5.5018G	114.75	Inf	-Inf	107.33	3	Vertical	360	1.80	-	34.10	6.15	32.83
AV	5.5018G	106.28	Inf	-Inf	98.86	3	Vertical	360	1.80	-	34.10	6.15	32.83

5.47-5.725GHz_802.11a_Nss1,(6Mbps)_2TX

5500MHz_TX

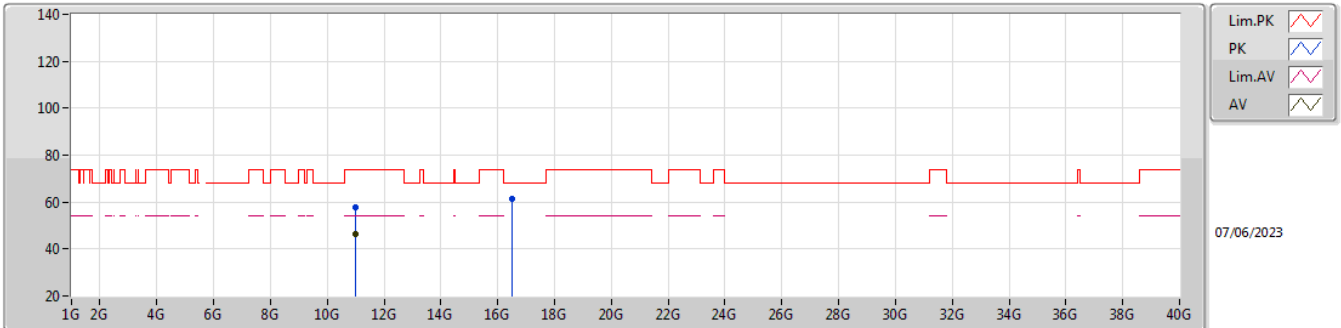


EUT Y_2TX
Setting 18.5
01-1-G-5-10

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	5.456G	62.62	74.00	-11.38	55.41	3	Horizontal	26	1.80	-	33.92	6.13	32.84
AV	5.46G	51.18	54.00	-2.82	43.95	3	Horizontal	26	1.80	-	33.94	6.13	32.84
PK	5.466G	63.51	68.20	-4.69	56.26	3	Horizontal	26	1.80	-	33.96	6.13	32.84
PK	5.4968G	117.42	Inf	-Inf	110.01	3	Horizontal	26	1.80	-	34.09	6.15	32.83
AV	5.5016G	109.01	Inf	-Inf	101.59	3	Horizontal	26	1.80	-	34.10	6.15	32.83

5.47-5.725GHz_802.11a_Nss1,(6Mbps)_2TX

5500MHz_TX

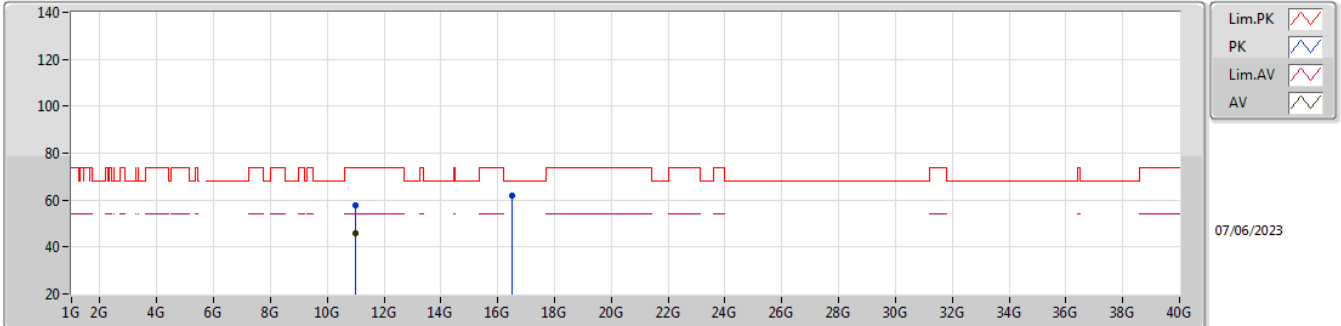


EUT Y_2TX
 Setting 18.5
 01-1-G-5

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	10.99421G	57.54	74.00	-16.46	42.68	3	Vertical	343	1.86	-	38.70	8.70	32.54
AV	10.99979G	46.29	54.00	-7.71	31.43	3	Vertical	343	1.86	-	38.70	8.70	32.54
PK	16.49226G	61.51	68.20	-6.69	42.18	3	Vertical	203	1.55	-	40.46	10.90	32.03

5.47-5.725GHz_802.11a_Nss1,(6Mbps)_2TX

5500MHz_TX

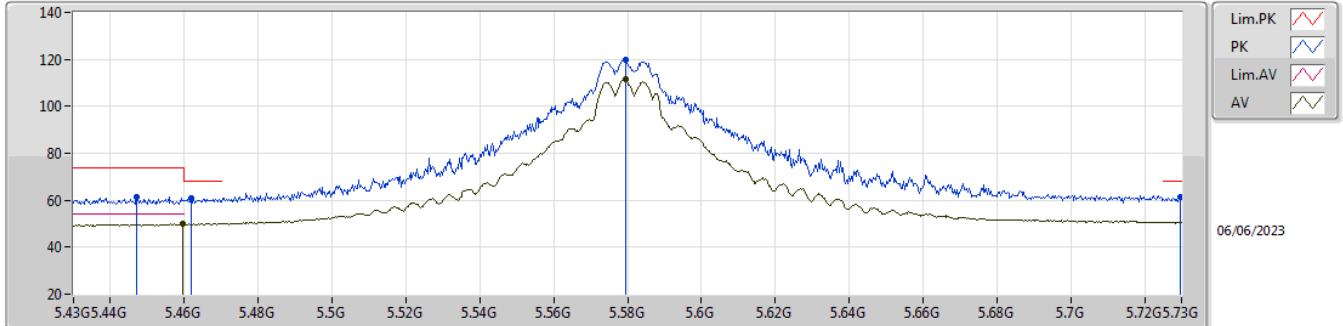


EUT Y_2TX
 Setting 18.5
 01-1-G-5

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	11.00444G	57.95	74.00	-16.05	43.09	3	Horizontal	58	1.42	-	38.70	8.70	32.54
AV	10.99937G	46.05	54.00	-7.95	31.19	3	Horizontal	58	1.42	-	38.70	8.70	32.54
PK	16.49544G	61.88	68.20	-6.32	42.52	3	Horizontal	110	1.86	-	40.48	10.90	32.02

5.47-5.725GHz_802.11a_Nss1,(6Mbps)_2TX

5580MHz_TX

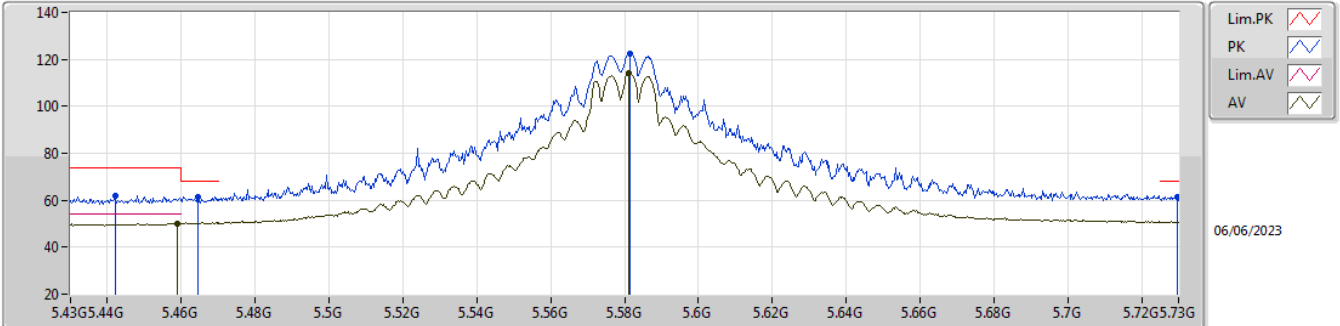


EUT_Y_2TX
Setting 23
01-1-G-5-10

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	5.4471G	61.28	74.00	-12.72	54.11	3	Vertical	286	1.79	-	33.89	6.12	32.84
PK	5.4618G	60.65	68.20	-7.55	53.41	3	Vertical	286	1.79	-	33.95	6.13	32.84
AV	5.4597G	49.95	54.00	-4.05	42.72	3	Vertical	286	1.79	-	33.94	6.13	32.84
PK	5.5794G	119.77	Inf	-Inf	112.22	3	Vertical	286	1.79	-	34.22	6.19	32.86
AV	5.5794G	111.62	Inf	-Inf	104.07	3	Vertical	286	1.79	-	34.22	6.19	32.86
PK	5.7297G	61.35	68.20	-6.85	53.50	3	Vertical	286	1.79	-	34.50	6.26	32.91

5.47-5.725GHz_802.11a_Nss1,(6Mbps)_2TX

5580MHz_TX

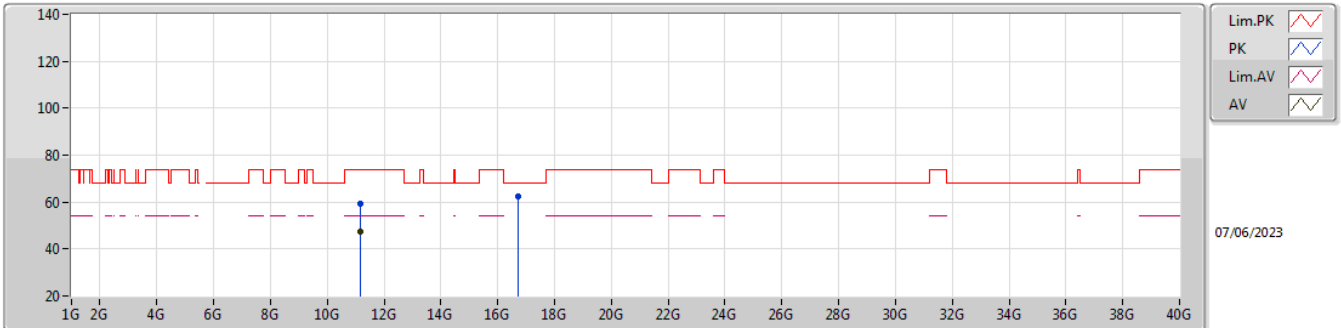


EUT Y_2TX
Setting 23
01-1-G-5-10

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	5.442G	61.96	74.00	-12.04	54.81	3	Horizontal	31	1.80	-	33.87	6.12	32.84
PK	5.4645G	61.25	68.20	-6.95	54.00	3	Horizontal	31	1.80	-	33.96	6.13	32.84
AV	5.4588G	49.95	54.00	-4.05	42.72	3	Horizontal	31	1.80	-	33.94	6.13	32.84
PK	5.5815G	122.59	Inf	-Inf	115.03	3	Horizontal	31	1.80	-	34.23	6.19	32.86
AV	5.5812G	113.89	Inf	-Inf	106.34	3	Horizontal	31	1.80	-	34.22	6.19	32.86
PK	5.7297G	61.53	68.20	-6.67	53.68	3	Horizontal	31	1.80	-	34.50	6.26	32.91

5.47-5.725GHz_802.11a_Nss1,(6Mbps)_2TX

5580MHz_TX

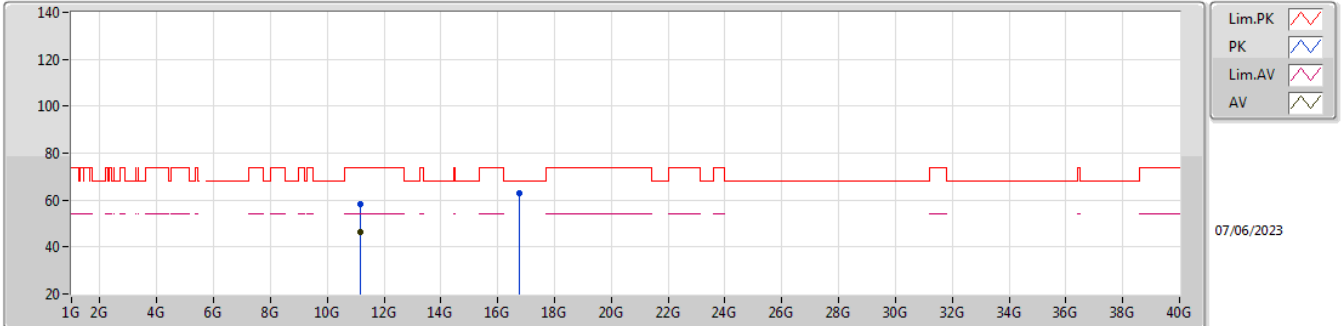


EUT_Y_2TX
Setting 23
01-1-G-5

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	11.1594G	59.06	74.00	-14.94	44.19	3	Vertical	189	1.95	-	38.64	8.76	32.53
AV	11.15988G	47.56	54.00	-6.44	32.69	3	Vertical	189	1.95	-	38.64	8.76	32.53
PK	16.73298G	62.63	68.20	-5.57	42.66	3	Vertical	295	1.74	-	40.73	10.99	31.75

5.47-5.725GHz_802.11a_Nss1,(6Mbps)_2TX

5580MHz_TX

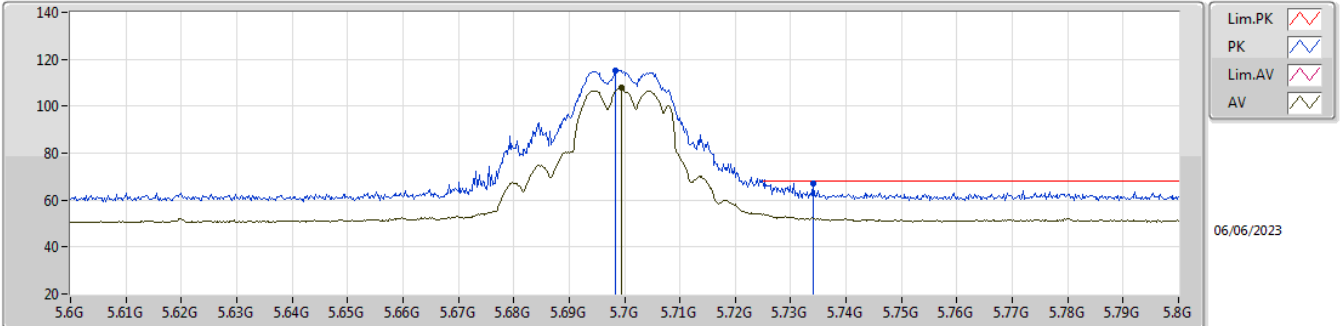


EUT_Y_2TX
Setting 23
01-1-G-5

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	11.15514G	58.31	74.00	-15.69	43.44	3	Horizontal	58	1.42	-	38.64	8.76	32.53
AV	11.15976G	46.31	54.00	-7.69	31.44	3	Horizontal	58	1.42	-	38.64	8.76	32.53
PK	16.74525G	62.97	68.20	-5.23	42.92	3	Horizontal	276	1.98	-	40.78	11.00	31.73

5.47-5.725GHz_802.11a_Nss1,(6Mbps)_2TX

5700MHz_TX

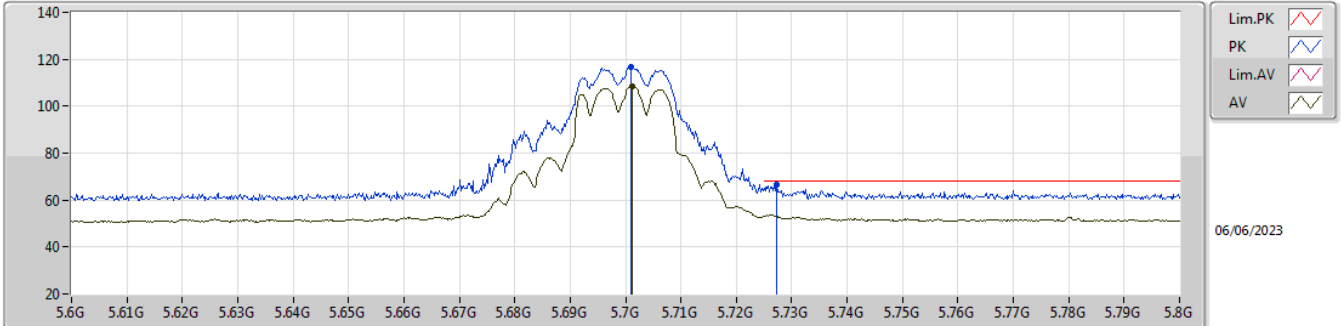


EUT Y_2TX
Setting 18
01-1-G-5-10

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	5.6984G	115.28	Inf	-Inf	107.44	3	Vertical	283	1.65	-	34.49	6.25	32.90
AV	5.6994G	107.70	Inf	-Inf	99.85	3	Vertical	283	1.65	-	34.50	6.25	32.90
PK	5.734G	67.13	68.20	-1.07	59.27	3	Vertical	283	1.65	-	34.50	6.27	32.91

5.47-5.725GHz_802.11a_Nss1,(6Mbps)_2TX

5700MHz_TX

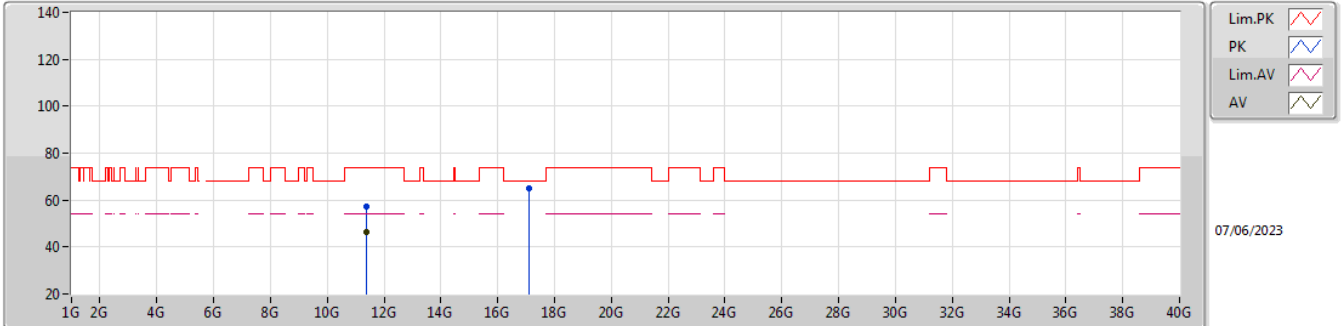


EUT Y_2TX
 Setting 18
 01-1-G-5-10

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	5.701G	116.95	Inf	-Inf	109.10	3	Horizontal	36	1.79	-	34.50	6.25	32.90
AV	5.7012G	108.55	Inf	-Inf	100.70	3	Horizontal	36	1.79	-	34.50	6.25	32.90
PK	5.7272G	66.35	68.20	-1.85	58.50	3	Horizontal	36	1.79	-	34.50	6.26	32.91

5.47-5.725GHz_802.11a_Nss1,(6Mbps)_2TX

5700MHz_TX

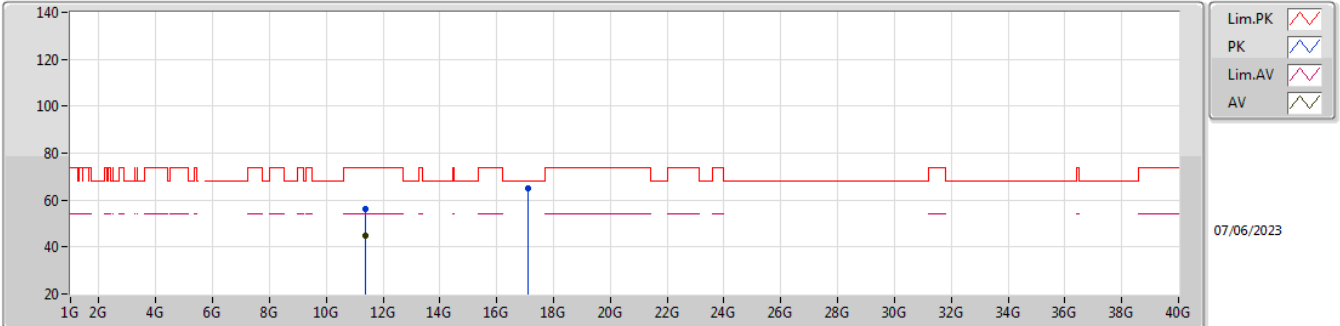


EUT Y_2TX
Setting 18
01-1-G-5

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	11.40078G	57.41	74.00	-16.59	42.27	3	Vertical	6	1.77	-	38.80	8.86	32.52
AV	11.39892G	46.23	54.00	-7.77	31.09	3	Vertical	6	1.77	-	38.80	8.86	32.52
PK	17.11452G	64.77	68.20	-3.43	43.17	3	Vertical	7	1.40	-	41.81	11.15	31.36

5.47-5.725GHz_802.11a_Nss1,(6Mbps)_2TX

5700MHz_TX

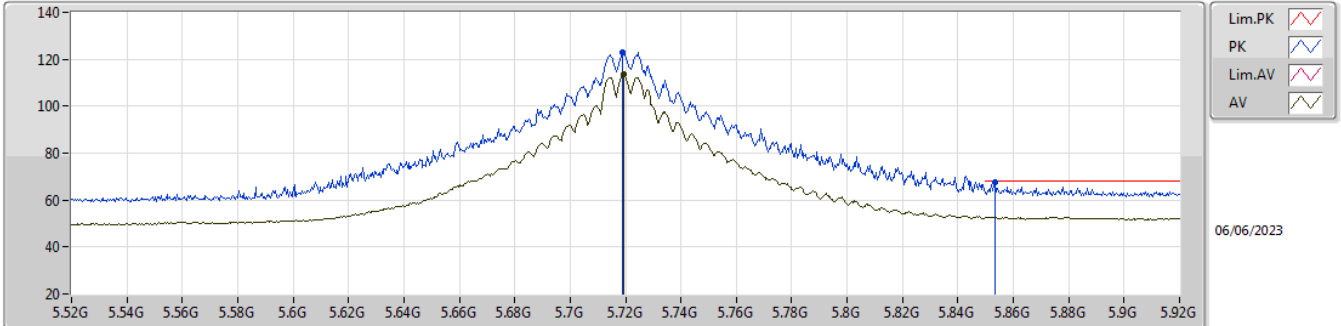


EUT Y_2TX
Setting 18
01-1-G-5

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	11.38665G	56.45	74.00	-17.55	41.33	3	Horizontal	346	1.92	-	38.79	8.85	32.52
AV	11.40015G	44.88	54.00	-9.12	29.74	3	Horizontal	346	1.92	-	38.80	8.86	32.52
PK	17.09376G	64.86	68.20	-3.34	43.33	3	Horizontal	308	1.61	-	41.77	11.14	31.38

5.47-5.725GHz_802.11a_Nss1,(6Mbps)_2TX

5720MHz Straddle 5.47-5.725GHz_TX

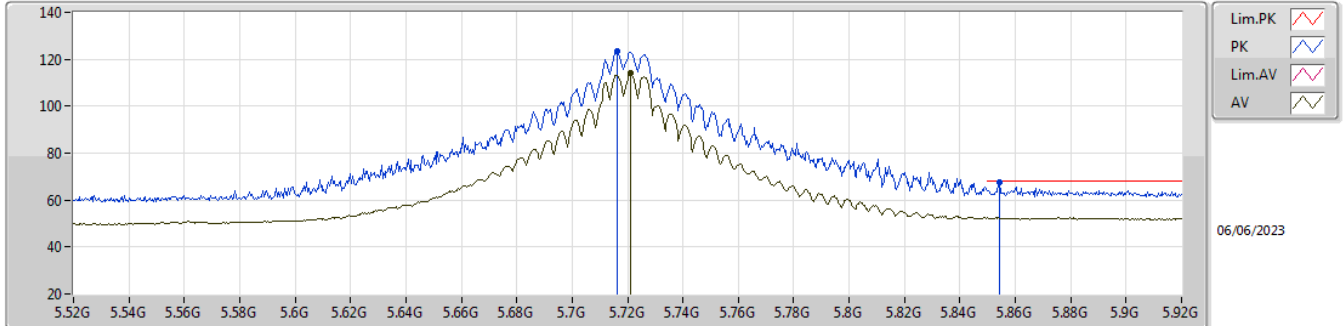


EUT Y_2TX
 Setting 24
 01-I-C-6-10

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	5.7188G	123.12	Inf	-Inf	115.26	3	Vertical	285	1.74	-	34.50	6.26	32.90
AV	5.7192G	113.55	Inf	-Inf	105.69	3	Vertical	285	1.74	-	34.50	6.26	32.90
PK	5.8536G	67.73	68.20	-0.47	59.42	3	Vertical	285	1.74	-	34.93	6.33	32.95

5.47-5.725GHz_802.11a_Nss1,(6Mbps)_2TX

5720MHz Straddle 5.47-5.725GHz_TX

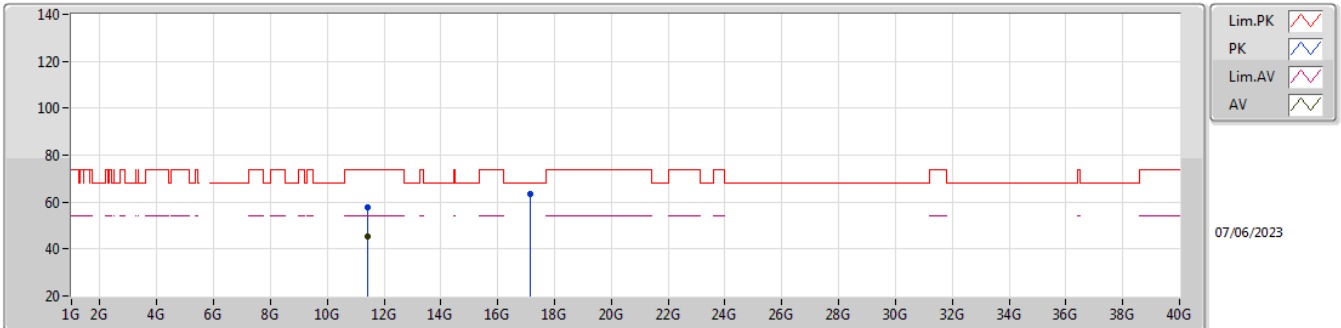


EUT Y_2TX
Setting 24
01-I-C-6-10

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	5.7164G	123.32	Inf	-Inf	115.46	3	Horizontal	35	1.80	-	34.50	6.26	32.90
AV	5.7212G	114.13	Inf	-Inf	106.28	3	Horizontal	35	1.80	-	34.50	6.26	32.91
PK	5.8544G	67.61	68.20	-0.59	59.29	3	Horizontal	35	1.80	-	34.94	6.33	32.95

5.47-5.725GHz_802.11a_Nss1,(6Mbps)_2TX

5720MHz Straddle 5.47-5.725GHz_TX



EUT_Y_2TX
Setting 24
01-1-G-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	11.43952G	57.89	74.00	-16.11	42.73	3	Vertical	8	3.00	-	38.80	8.88	32.52
AV	11.43952G	45.49	54.00	-8.51	30.33	3	Vertical	8	3.00	-	38.80	8.88	32.52
PK	17.15172G	63.55	68.20	-4.65	41.88	3	Vertical	123	1.78	-	41.85	11.16	31.34